



# wwPDB X-ray Structure Validation Summary Report ⓘ

May 13, 2020 – 06:59 am BST

PDB ID : 4V8I  
Title : Crystal structure of YfiA bound to the 70S ribosome.  
Authors : Polikanov, Y.S.; Blaha, G.M.; Steitz, T.A.  
Deposited on : 2011-12-12  
Resolution : 2.70 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

---

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

MolProbity : 4.02b-467  
Xtriage (Phenix) : 1.13  
EDS : 2.11  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.11

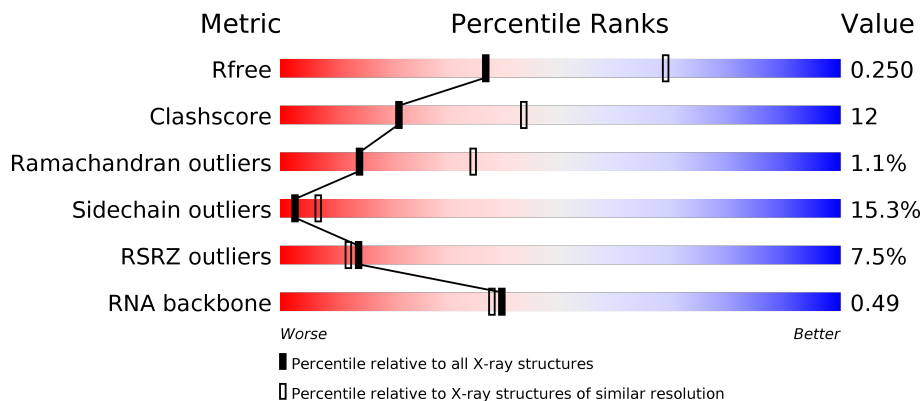
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.70 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.



| Metric                | Whole archive<br>(#Entries) | Similar resolution<br>(#Entries, resolution range(Å)) |
|-----------------------|-----------------------------|---|
| $R_{free}$            | 130704                      | 2808 (2.70-2.70)                                      |
| Clashscore            | 141614                      | 3122 (2.70-2.70)                                      |
| Ramachandran outliers | 138981                      | 3069 (2.70-2.70)                                      |
| Sidechain outliers    | 138945                      | 3069 (2.70-2.70)                                      |
| RSRZ outliers         | 127900                      | 2737 (2.70-2.70)                                      |
| RNA backbone          | 3102                        | 1159 (3.00-2.40)                                      |

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

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1   | AA    | 1522   |                  |
| 1   | CA    | 1522   |                  |
| 2   | AB    | 256    |                  |
| 2   | CB    | 256    |                  |

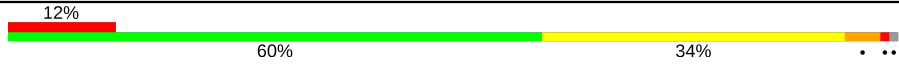

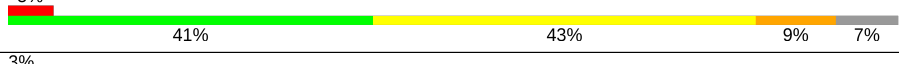
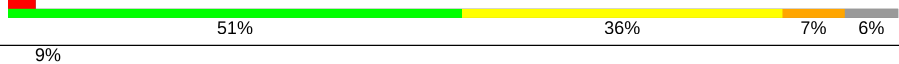


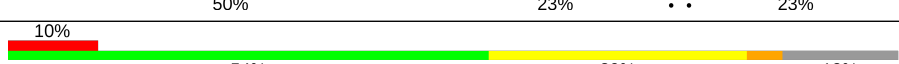

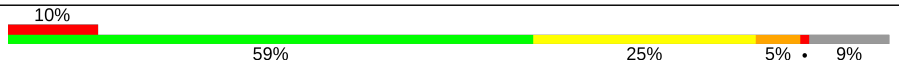


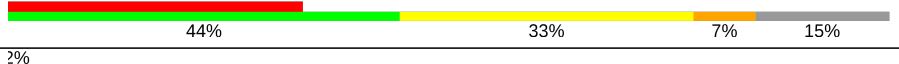

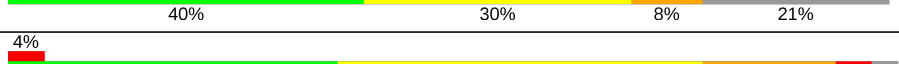
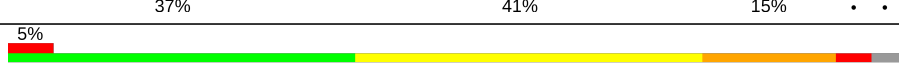

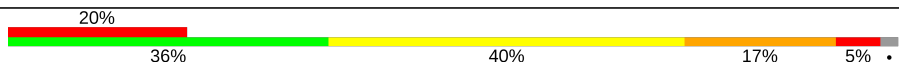








*Continued on next page...*

Continued from previous page...

| Mol | Chain | Length | Quality of chain                     |
|-----|-------|--------|--------------------------------------|
| 3   | AC    | 239    | 5%<br>63%<br>19%<br>•<br>14%         |
| 3   | CC    | 239    | 21%<br>41%<br>36%<br>8%<br>•<br>14%  |
| 4   | AD    | 209    | 15%<br>70%<br>23%<br>7%              |
| 4   | CD    | 209    | 14%<br>61%<br>31%<br>8%              |
| 5   | AE    | 162    | 56%<br>31%<br>•<br>9%                |
| 5   | CE    | 162    | 8%<br>54%<br>32%<br>6%<br>9%         |
| 6   | AF    | 101    | 3%<br>70%<br>23%<br>6%<br>•          |
| 6   | CF    | 101    | 3%<br>70%<br>21%<br>7%<br>•          |
| 7   | AG    | 156    | 4%<br>71%<br>24%<br>•<br>•           |
| 7   | CG    | 156    | 26%<br>56%<br>37%<br>6%<br>•         |
| 8   | AH    | 138    | 4%<br>64%<br>30%<br>6%               |
| 8   | CH    | 138    | 10%<br>64%<br>29%<br>7%              |
| 9   | AI    | 128    | 11%<br>52%<br>40%<br>5%<br>••        |
| 9   | CI    | 128    | 35%<br>48%<br>41%<br>9%<br>•         |
| 10  | AJ    | 105    | 19%<br>42%<br>40%<br>9%<br>•<br>9%   |
| 10  | CJ    | 105    | 39%<br>54%<br>27%<br>10%<br>•<br>9%  |
| 11  | AK    | 129    | 7%<br>67%<br>19%<br>•<br>12%         |
| 11  | CK    | 129    | 11%<br>62%<br>23%<br>•<br>12%        |
| 12  | AL    | 132    | 4%<br>65%<br>23%<br>•<br>8%          |
| 12  | CL    | 132    | 14%<br>64%<br>25%<br>••<br>8%        |
| 13  | AM    | 126    | 6%<br>50%<br>26%<br>13%<br>•<br>10%  |
| 13  | CM    | 126    | 31%<br>47%<br>32%<br>10%<br>•<br>11% |
| 14  | AN    | 61     | 7%<br>52%<br>39%<br>7%<br>•          |
| 14  | CN    | 61     | 31%<br>41%<br>38%<br>16%<br>••       |
| 15  | AO    | 89     | 3%<br>63%<br>30%<br>•<br>••          |





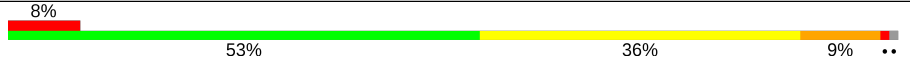
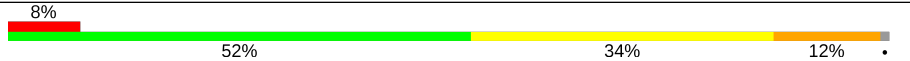
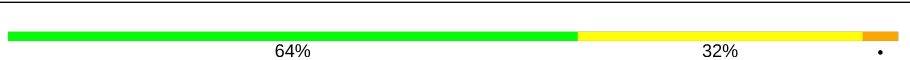
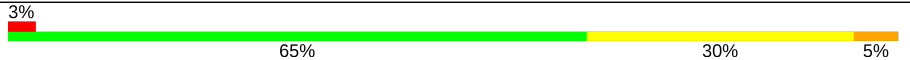
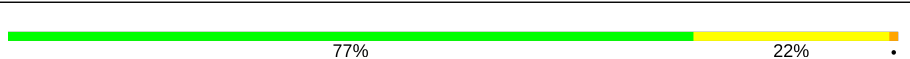
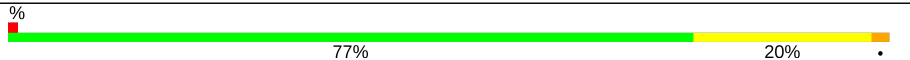
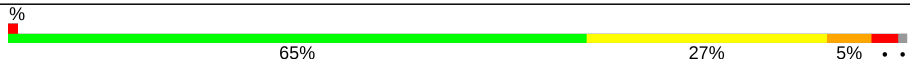
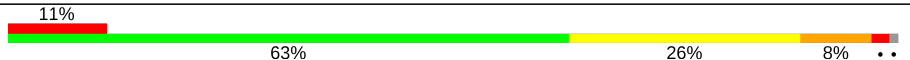
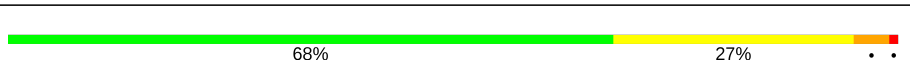
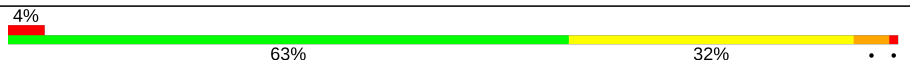


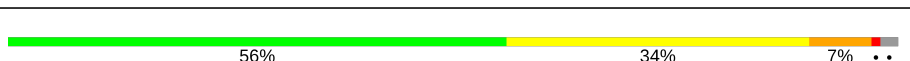
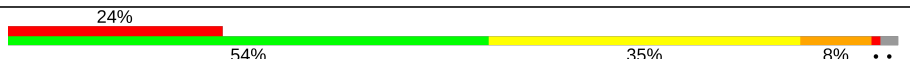
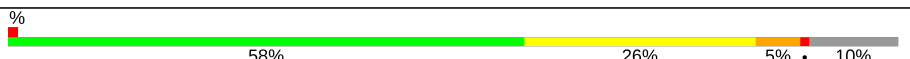

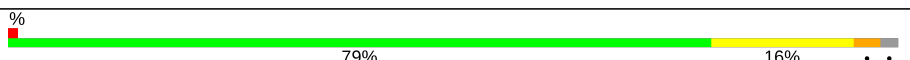
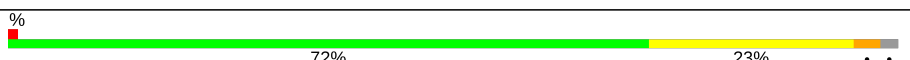
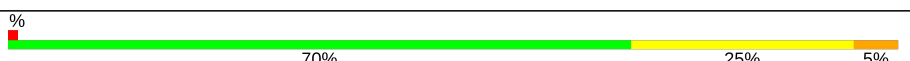
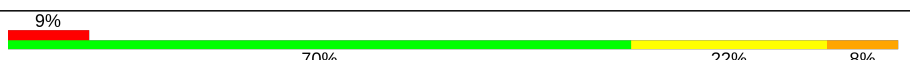
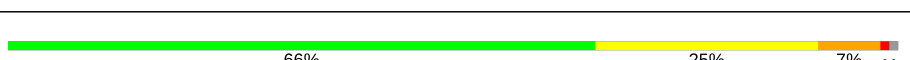
Continued on next page...

Continued from previous page...

| Mol | Chain | Length | Quality of chain   |
|-----|-------|--------|--|
| 15  | CO    | 89     |    |
| 16  | AP    | 88     |    |
| 16  | CP    | 88     |    |
| 17  | AQ    | 105    |    |
| 17  | CQ    | 105    |    |
| 18  | AR    | 88     |    |
| 18  | CR    | 88     |    |
| 19  | AS    | 93     |    |
| 19  | CS    | 93     |    |
| 20  | AT    | 106    |    |
| 20  | CT    | 106    |   |
| 21  | AU    | 27     |  |
| 21  | CU    | 27     |  |
| 22  | AY    | 119    |  |
| 22  | CY    | 119    |  |
| 23  | BA    | 2915   |  |
| 23  | DA    | 2915   |  |
| 24  | BB    | 122    |  |
| 24  | DB    | 122    |  |
| 25  | BD    | 276    |  |
| 25  | DD    | 276    |  |
| 26  | BE    | 206    |  |
| 26  | DE    | 206    |  |
| 27  | BF    | 210    |  |
| 27  | DF    | 210    |  |

Continued on next page...

Continued from previous page...

| Mol | Chain | Length | Quality of chain   |
|-----|-------|--------|--|
| 28  | BG    | 182    |    |
| 28  | DG    | 182    |    |
| 29  | BH    | 180    |    |
| 29  | DH    | 180    |    |
| 30  | BI    | 148    |    |
| 30  | DI    | 148    |    |
| 31  | BN    | 140    |    |
| 31  | DN    | 140    |    |
| 32  | BO    | 122    |    |
| 32  | DO    | 122    |    |
| 33  | BP    | 150    |    |
| 33  | DP    | 150    |   |
| 34  | BQ    | 141    |  |
| 34  | DQ    | 141    |  |
| 35  | BR    | 118    |  |
| 35  | DR    | 118    |  |
| 36  | BS    | 112    |  |
| 36  | DS    | 112    |  |
| 37  | BT    | 146    |  |
| 37  | DT    | 146    |  |
| 38  | BU    | 118    |  |
| 38  | DU    | 118    |  |
| 39  | BV    | 101    |  |
| 39  | DV    | 101    |  |
| 40  | BW    | 113    |  |

Continued on next page...

Continued from previous page...

| Mol | Chain | Length | Quality of chain   |
|-----|-------|--------|--------------------|
| 40  | DW    | 113    | 67% 25% 6% .       |
| 41  | BX    | 96     | 76% 19% . .        |
| 41  | DX    | 96     | 2% 74% 21% . .     |
| 42  | BY    | 110    | 69% 25% . .        |
| 42  | DY    | 110    | 13% 65% 27% 5% .   |
| 43  | BZ    | 206    | 64% 25% 7% . .     |
| 43  | DZ    | 206    | 18% 60% 31% 7% .   |
| 44  | B0    | 85     | 67% 20% . 11%      |
| 44  | D0    | 85     | 8% 62% 24% 5% 9%   |
| 45  | B1    | 98     | 2% 68% 24% . . .   |
| 45  | D1    | 98     | 3% 67% 24% 5% . .  |
| 46  | B2    | 72     | 65% 28% . .        |
| 46  | D2    | 72     | 10% 65% 29% . .    |
| 47  | B3    | 60     | 2% 82% 10% 7% .    |
| 47  | D3    | 60     | 10% 77% 17% 5% .   |
| 48  | B4    | 71     | 3% 41% 18% . . 35% |
| 48  | D4    | 71     | 17% 46% 13% 6% 35% |
| 49  | B5    | 60     | 75% 17% 5% . .     |
| 49  | D5    | 60     | 3% 75% 17% 7% .    |
| 50  | B6    | 54     | 56% 30% 13% .      |
| 50  | D6    | 54     | 56% 31% 11% .      |
| 51  | B7    | 49     | 61% 29% 6% . .     |
| 51  | D7    | 49     | 78% 12% 8% .       |
| 52  | B8    | 65     | 57% 35% 6% .       |
| 52  | D8    | 65     | 2% 51% 40% 5% . .  |

Continued on next page...

*Continued from previous page...*

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 53  | B9    | 37     |                  |
| 53  | D9    | 37     |                  |

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:

| Mol | Type | Chain | Res  | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|------|-----------|----------|---------|------------------|
| 54  | MG   | BA    | 3111 | -         | -        | -       | X                |
| 54  | MG   | BA    | 3605 | -         | -        | -       | X                |
| 54  | MG   | CA    | 1604 | -         | -        | -       | X                |
| 54  | MG   | CA    | 1607 | -         | -        | -       | X                |
| 54  | MG   | CA    | 1612 | -         | -        | -       | X                |
| 54  | MG   | CA    | 1630 | -         | -        | -       | X                |
| 54  | MG   | DA    | 3014 | -         | -        | -       | X                |
| 54  | MG   | DA    | 3130 | -         | -        | -       | X                |
| 54  | MG   | DA    | 3547 | -         | -        | -       | X                |
| 54  | MG   | DA    | 3614 | -         | -        | -       | X                |
| 54  | MG   | DB    | 206  | -         | -        | -       | X                |

## 2 Entry composition [i](#)

There are 56 unique types of molecules in this entry. The entry contains 287173 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 RNA chain called 16S Ribosomal RNA.

| Mol | Chain | Residues | Atoms          |            |           |            |           | ZeroOcc | AltConf | Trace |
|-----|-------|----------|----------------|------------|-----------|------------|-----------|---------|---------|-------|
|     |       |          | Total          | C          | N         | O          | P         |         |         |       |
| 1   | AA    | 1493     | Total<br>32102 | C<br>14287 | N<br>5955 | O<br>10367 | P<br>1493 | 0       | 0       | 0     |
| 1   | CA    | 1491     | Total<br>32056 | C<br>14267 | N<br>5945 | O<br>10353 | P<br>1491 | 0       | 0       | 0     |

- Molecule 2 is a protein called 30S Ribosomal Protein S2.

| Mol | Chain | Residues | Atoms         |           |          |          |        | ZeroOcc | AltConf | Trace |
|-----|-------|----------|---------------|-----------|----------|----------|--------|---------|---------|-------|
|     |       |          | Total         | C         | N        | O        | S      |         |         |       |
| 2   | AB    | 229      | Total<br>1777 | C<br>1134 | N<br>318 | O<br>320 | S<br>5 | 0       | 0       | 0     |
| 2   | CB    | 235      | Total<br>1817 | C<br>1160 | N<br>325 | O<br>327 | S<br>5 | 0       | 0       | 1     |

- Molecule 3 is a protein called 30S Ribosomal Protein S3.

| Mol | Chain | Residues | Atoms         |          |          |          |        | ZeroOcc | AltConf | Trace |
|-----|-------|----------|---------------|----------|----------|----------|--------|---------|---------|-------|
|     |       |          | Total         | C        | N        | O        | S      |         |         |       |
| 3   | AC    | 206      | Total<br>1450 | C<br>906 | N<br>279 | O<br>264 | S<br>1 | 0       | 0       | 0     |
| 3   | CC    | 206      | Total<br>1453 | C<br>908 | N<br>280 | O<br>264 | S<br>1 | 0       | 0       | 0     |

- Molecule 4 is a protein called 30S Ribosomal Protein S4.

| Mol | Chain | Residues | Atoms         |          |          |          |        | ZeroOcc | AltConf | Trace |
|-----|-------|----------|---------------|----------|----------|----------|--------|---------|---------|-------|
|     |       |          | Total         | C        | N        | O        | S      |         |         |       |
| 4   | AD    | 208      | Total<br>1520 | C<br>960 | N<br>283 | O<br>272 | S<br>5 | 0       | 0       | 0     |
| 4   | CD    | 208      | Total<br>1537 | C<br>968 | N<br>287 | O<br>276 | S<br>6 | 0       | 0       | 0     |

- Molecule 5 is a protein called 30S Ribosomal Protein S5.



| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 5   | AE    | 148      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1105  | 699 | 204 | 198 | 4 |         |         |       |
| 5   | CE    | 148      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1106  | 700 | 204 | 198 | 4 |         |         |       |

- Molecule 6 is a protein called 30S Ribosomal Protein S6.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 6   | AF    | 100      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 781   | 495 | 137 | 146 | 3 |         |         |       |
| 6   | CF    | 99       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 776   | 492 | 135 | 146 | 3 |         |         |       |

- Molecule 7 is a protein called 30S Ribosomal Protein S7.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 7   | AG    | 155      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1167  | 727 | 224 | 210 | 6 |         |         |       |
| 7   | CG    | 155      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1164  | 726 | 224 | 208 | 6 |         |         |       |

- Molecule 8 is a protein called 30S Ribosomal Protein S8.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 8   | AH    | 138      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1045  | 665 | 188 | 190 | 2 |         |         |       |
| 8   | CH    | 138      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1049  | 667 | 188 | 192 | 2 |         |         |       |

- Molecule 9 is a protein called 30S Ribosomal Protein S9.

| Mol | Chain | Residues | Atoms |     |     |     | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 9   | AI    | 125      | Total | C   | N   | O   | 0       | 0       | 0     |
|     |       |          | 852   | 533 | 163 | 156 |         |         |       |
| 9   | CI    | 125      | Total | C   | N   | O   | 0       | 0       | 0     |
|     |       |          | 849   | 531 | 161 | 157 |         |         |       |

- Molecule 10 is a protein called 30S Ribosomal Protein S10.

| Mol | Chain | Residues | Atoms |     |     |     | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 10  | AJ    | 96       | Total | C   | N   | O   | 0       | 0       | 0     |
|     |       |          | 659   | 408 | 131 | 120 |         |         |       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms |     |     |     | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
|     |       |          | Total | C   | N   | O   |         |         |       |
| 10  | CJ    | 96       | 657   | 407 | 129 | 121 | 0       | 0       | 0     |

- Molecule 11 is a protein called 30S Ribosomal Protein S11.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 11  | AK    | 114      | 828   | 516 | 155 | 154 | 3 | 0       | 0       | 0     |
| 11  | CK    | 114      | 828   | 516 | 155 | 154 | 3 | 0       | 0       | 0     |

- Molecule 12 is a protein called 30S Ribosomal Protein S12.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 12  | AL    | 122      | 909   | 570 | 179 | 159 | 1 | 0       | 0       | 0     |
| 12  | CL    | 122      | 905   | 567 | 178 | 159 | 1 | 0       | 0       | 0     |

- Molecule 13 is a protein called 30S Ribosomal Protein S13.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 13  | AM    | 114      | 801   | 494 | 164 | 142 | 1 | 0       | 0       | 0     |
| 13  | CM    | 112      | 784   | 486 | 159 | 138 | 1 | 0       | 0       | 0     |

- Molecule 14 is a protein called 30S Ribosomal Protein S14.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
|     |       |          | Total | C   | N  | O  | S |         |         |       |
| 14  | AN    | 60       | 478   | 303 | 99 | 72 | 4 | 0       | 0       | 0     |
| 14  | CN    | 60       | 474   | 300 | 98 | 72 | 4 | 0       | 0       | 0     |

- Molecule 15 is a protein called 30S Ribosomal Protein S15.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 15  | AO    | 88       | 724   | 453 | 143 | 126 | 2 | 0       | 0       | 0     |
| 15  | CO    | 88       | 724   | 453 | 143 | 126 | 2 | 0       | 0       | 0     |

- Molecule 16 is a protein called 30S Ribosomal Protein S16.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 16  | AP    | 82       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 651   | 416 | 123 | 111 | 1 |         |         |       |
| 16  | CP    | 82       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 661   | 421 | 126 | 113 | 1 |         |         |       |

- Molecule 17 is a protein called 30S Ribosomal Protein S17.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 17  | AQ    | 99       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 823   | 528 | 151 | 142 | 2 |         |         |       |
| 17  | CQ    | 99       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 819   | 525 | 150 | 142 | 2 |         |         |       |

- Molecule 18 is a protein called 30S Ribosomal Protein S18.

| Mol | Chain | Residues | Atoms |     |    |    | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---------|---------|-------|
| 18  | AR    | 68       | Total | C   | N  | O  | 0       | 0       | 0     |
|     |       |          | 514   | 329 | 98 | 87 |         |         |       |
| 18  | CR    | 68       | Total | C   | N  | O  | 0       | 0       | 0     |
|     |       |          | 514   | 329 | 98 | 87 |         |         |       |

- Molecule 19 is a protein called 30S Ribosomal Protein S19.

| Mol | Chain | Residues | Atoms |     |     |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---|---------|---------|-------|
| 19  | AS    | 81       | Total | C   | N   | O  | S | 0       | 0       | 0     |
|     |       |          | 560   | 351 | 108 | 99 | 2 |         |         |       |
| 19  | CS    | 78       | Total | C   | N   | O  | S | 0       | 0       | 0     |
|     |       |          | 549   | 345 | 106 | 96 | 2 |         |         |       |

- Molecule 20 is a protein called 30S Ribosomal Protein S20.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 20  | AT    | 96       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 699   | 430 | 150 | 117 | 2 |         |         |       |
| 20  | CT    | 104      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 773   | 476 | 162 | 133 | 2 |         |         |       |

- Molecule 21 is a protein called 30S Ribosomal Protein THX.

| Mol | Chain | Residues | Atoms |     |    |    | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---------|---------|-------|
|     |       |          | Total | C   | N  | O  |         |         |       |
| 21  | AU    | 23       | 199   | 122 | 48 | 29 | 0       | 0       | 0     |
| 21  | CU    | 23       | 180   | 112 | 41 | 27 | 0       | 0       | 0     |

- Molecule 22 is a protein called Ribosome-associated inhibitor A.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 22  | AY    | 95       | 754   | 472 | 142 | 137 | 3 | 0       | 0       | 0     |
| 22  | CY    | 94       | 739   | 461 | 138 | 137 | 3 | 0       | 0       | 0     |

There are 12 discrepancies between the modelled and reference sequences:

| Chain | Residue | Modelled | Actual | Comment        | Reference  |
|-------|---------|----------|--------|----------------|------------|
| AY    | 114     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| AY    | 115     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| AY    | 116     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| AY    | 117     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| AY    | 118     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| AY    | 119     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 114     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 115     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 116     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 117     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 118     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |
| CY    | 119     | HIS      | -      | EXPRESSION TAG | UNP P0AD49 |

- Molecule 23 is a RNA chain called 23S Ribosomal RNA.

| Mol | Chain | Residues | Atoms |       |       |       |      | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-------|-------|-------|------|---------|---------|-------|
|     |       |          | Total | C     | N     | O     | P    |         |         |       |
| 23  | BA    | 2827     | 60898 | 27101 | 11400 | 19571 | 2826 | 0       | 0       | 0     |
| 23  | DA    | 2798     | 60264 | 26820 | 11274 | 19374 | 2796 | 0       | 0       | 0     |

- Molecule 24 is a RNA chain called 5S Ribosomal RNA.

| Mol | Chain | Residues | Atoms |      |     |     |     | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|-----|---------|---------|-------|
|     |       |          | Total | C    | N   | O   | P   |         |         |       |
| 24  | BB    | 120      | 2573  | 1146 | 476 | 832 | 119 | 0       | 0       | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms |      |     |     |     | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|-----|---------|---------|-------|
|     |       |          | Total | C    | N   | O   | P   |         |         |       |
| 24  | DB    | 120      | 2573  | 1146 | 476 | 832 | 119 | 0       | 0       | 0     |

- Molecule 25 is a protein called 50S Ribosomal Protein L2.

| Mol | Chain | Residues | Atoms |      |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C    | N   | O   | S |         |         |       |
| 25  | BD    | 275      | 2136  | 1349 | 423 | 361 | 3 | 0       | 0       | 0     |
| 25  | DD    | 275      | 2136  | 1349 | 423 | 361 | 3 | 0       | 0       | 0     |

- Molecule 26 is a protein called 50S Ribosomal Protein L3.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 26  | BE    | 204      | 1555  | 982 | 297 | 270 | 6 | 0       | 0       | 0     |
| 26  | DE    | 204      | 1555  | 982 | 297 | 270 | 6 | 0       | 0       | 0     |

- Molecule 27 is a protein called 50S Ribosomal Protein L4.

| Mol | Chain | Residues | Atoms |      |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C    | N   | O   | S |         |         |       |
| 27  | BF    | 203      | 1577  | 1004 | 298 | 273 | 2 | 0       | 0       | 1     |
| 27  | DF    | 203      | 1572  | 1003 | 298 | 269 | 2 | 0       | 0       | 1     |

- Molecule 28 is a protein called 50S Ribosomal Protein L5.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 28  | BG    | 181      | 1368  | 879 | 242 | 244 | 3 | 0       | 0       | 0     |
| 28  | DG    | 181      | 1368  | 879 | 242 | 244 | 3 | 0       | 0       | 0     |

- Molecule 29 is a protein called 50S Ribosomal Protein L6.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 29  | BH    | 174      | 1317  | 837 | 243 | 236 | 1 | 0       | 0       | 0     |
| 29  | DH    | 174      | 1317  | 837 | 243 | 236 | 1 | 0       | 0       | 0     |

- Molecule 30 is a protein called 50S Ribosomal Protein L9.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 30  | BI    | 146      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1043  | 672 | 180 | 190 | 1 |         |         |       |
| 30  | DI    | 146      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1043  | 672 | 180 | 190 | 1 |         |         |       |

- Molecule 31 is a protein called 50S Ribosomal Protein L13.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 31  | BN    | 140      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1112  | 717 | 207 | 184 | 4 |         |         |       |
| 31  | DN    | 140      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1112  | 717 | 207 | 184 | 4 |         |         |       |

- Molecule 32 is a protein called 50S Ribosomal Protein L14.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 32  | BO    | 122      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 923   | 583 | 168 | 168 | 4 |         |         |       |
| 32  | DO    | 122      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 923   | 583 | 168 | 168 | 4 |         |         |       |

- Molecule 33 is a protein called 50S Ribosomal Protein L15.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 33  | BP    | 149      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1131  | 703 | 229 | 196 | 3 |         |         |       |
| 33  | DP    | 149      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1131  | 703 | 229 | 196 | 3 |         |         |       |

- Molecule 34 is a protein called 50S Ribosomal Protein L16.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 34  | BQ    | 141      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1122  | 715 | 212 | 188 | 7 |         |         |       |
| 34  | DQ    | 141      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1122  | 715 | 212 | 188 | 7 |         |         |       |

- Molecule 35 is a protein called 50S Ribosomal Protein L17.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 35  | BR    | 118      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 968   | 604 | 203 | 160 | 1 |         |         |       |
| 35  | DR    | 118      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 968   | 604 | 203 | 160 | 1 |         |         |       |

- Molecule 36 is a protein called 50S Ribosomal Protein L18.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 36  | BS    | 110      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 865   | 544 | 172 | 149 |   |         |         |       |
| 36  | DS    | 110      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 873   | 550 | 174 | 149 |   |         |         |       |

- Molecule 37 is a protein called 50S Ribosomal Protein L19.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 37  | BT    | 131      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1063  | 666 | 213 | 183 | 1 |         |         |       |
| 37  | DT    | 130      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 1058  | 663 | 212 | 182 | 1 |         |         |       |

- Molecule 38 is a protein called 50S Ribosomal Protein L20.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 38  | BU    | 116      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 959   | 608 | 201 | 149 | 1 |         |         |       |
| 38  | DU    | 116      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 959   | 608 | 201 | 149 | 1 |         |         |       |

- Molecule 39 is a protein called 50S Ribosomal Protein L21.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 39  | BV    | 101      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 771   | 495 | 140 | 135 | 1 |         |         |       |
| 39  | DV    | 101      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 775   | 498 | 141 | 135 | 1 |         |         |       |

- Molecule 40 is a protein called 50S Ribosomal Protein L22.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 40  | BW    | 112      | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 881   | 554 | 172 | 153 | 2 |         |         |       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 40  | DW    | 111      | 877   | 552 | 171 | 152 | 2 | 0       | 0       | 0     |

- Molecule 41 is a protein called 50S Ribosomal Protein L23.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 41  | BX    | 95       | 742   | 483 | 134 | 124 | 1 | 0       | 0       | 0     |
| 41  | DX    | 95       | 732   | 477 | 130 | 124 | 1 | 0       | 0       | 0     |

- Molecule 42 is a protein called 50S Ribosomal Protein L24.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 42  | BY    | 107      | 785   | 503 | 145 | 131 | 6 | 0       | 0       | 0     |
| 42  | DY    | 107      | 781   | 502 | 145 | 128 | 6 | 0       | 0       | 0     |

- Molecule 43 is a protein called 50S Ribosomal Protein L25.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 43  | BZ    | 198      | 1522  | 972 | 269 | 279 | 2 | 0       | 0       | 0     |
| 43  | DZ    | 203      | 1528  | 973 | 268 | 284 | 3 | 0       | 0       | 0     |

- Molecule 44 is a protein called 50S Ribosomal Protein L27.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 44  | B0    | 76       | 594   | 368 | 125 | 100 | 1 | 0       | 0       | 0     |
| 44  | D0    | 77       | 607   | 376 | 126 | 104 | 1 | 0       | 0       | 0     |

- Molecule 45 is a protein called 50S Ribosomal Protein L28.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
|     |       |          | Total | C   | N   | O   | S |         |         |       |
| 45  | B1    | 97       | 745   | 469 | 144 | 131 | 1 | 0       | 0       | 0     |
| 45  | D1    | 97       | 745   | 469 | 144 | 131 | 1 | 0       | 0       | 0     |



- Molecule 46 is a protein called 50S Ribosomal Protein L29.

| Mol | Chain | Residues | Atoms |     |     |     |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 46  | B2    | 70       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 588   | 365 | 118 | 103 | 2 |         |         |       |
| 46  | D2    | 71       | Total | C   | N   | O   | S | 0       | 0       | 0     |
|     |       |          | 584   | 361 | 118 | 103 | 2 |         |         |       |

- Molecule 47 is a protein called 50S Ribosomal Protein L30.

| Mol | Chain | Residues | Atoms |     |    |    | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---------|---------|-------|
| 47  | B3    | 59       | Total | C   | N  | O  | 0       | 0       | 0     |
|     |       |          | 458   | 293 | 87 | 78 |         |         |       |
| 47  | D3    | 59       | Total | C   | N  | O  | 0       | 0       | 0     |
|     |       |          | 463   | 295 | 87 | 81 |         |         |       |

- Molecule 48 is a protein called 50S Ribosomal Protein L31.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 48  | B4    | 46       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 349   | 223 | 57 | 64 | 5 |         |         |       |
| 48  | D4    | 46       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 349   | 223 | 57 | 64 | 5 |         |         |       |

- Molecule 49 is a protein called 50S Ribosomal Protein L32.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 49  | B5    | 59       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 455   | 286 | 90 | 74 | 5 |         |         |       |
| 49  | D5    | 59       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 451   | 283 | 89 | 74 | 5 |         |         |       |

- Molecule 50 is a protein called 50S Ribosomal Protein L33.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 50  | B6    | 53       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 449   | 278 | 90 | 77 | 4 |         |         |       |
| 50  | D6    | 53       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 437   | 272 | 84 | 77 | 4 |         |         |       |

- Molecule 51 is a protein called 50S Ribosomal Protein L34.

| Mol | Chain | Residues | Atoms |     |     |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---|---------|---------|-------|
| 51  | B7    | 48       | Total | C   | N   | O  | S | 0       | 0       | 0     |
|     |       |          | 418   | 257 | 104 | 55 | 2 |         |         |       |
| 51  | D7    | 48       | Total | C   | N   | O  | S | 0       | 0       | 0     |
|     |       |          | 402   | 248 | 97  | 55 | 2 |         |         |       |

- Molecule 52 is a protein called 50S Ribosomal Protein L35.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 52  | B8    | 64       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 509   | 326 | 99 | 82 | 2 |         |         |       |
| 52  | D8    | 64       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 509   | 326 | 99 | 82 | 2 |         |         |       |

- Molecule 53 is a protein called 50S ribosomal protein L36.

| Mol | Chain | Residues | Atoms |     |    |    |   | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 53  | B9    | 36       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 297   | 182 | 66 | 46 | 3 |         |         |       |
| 53  | D9    | 36       | Total | C   | N  | O  | S | 0       | 0       | 0     |
|     |       |          | 297   | 182 | 66 | 46 | 3 |         |         |       |

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

| Mol | Chain | Residues | Atoms |     | ZeroOcc | AltConf |
|-----|-------|----------|-------|-----|---------|---------|
| 54  | AP    | 1        | Total | Mg  | 0       | 0       |
|     |       |          | 1     | 1   |         |         |
| 54  | BA    | 729      | Total | Mg  | 0       | 0       |
|     |       |          | 729   | 729 |         |         |
| 54  | CA    | 203      | Total | Mg  | 0       | 0       |
|     |       |          | 203   | 203 |         |         |
| 54  | DQ    | 4        | Total | Mg  | 0       | 0       |
|     |       |          | 4     | 4   |         |         |
| 54  | DF    | 5        | Total | Mg  | 0       | 0       |
|     |       |          | 5     | 5   |         |         |
| 54  | B8    | 1        | Total | Mg  | 0       | 0       |
|     |       |          | 1     | 1   |         |         |
| 54  | BE    | 6        | Total | Mg  | 0       | 0       |
|     |       |          | 6     | 6   |         |         |
| 54  | B1    | 1        | Total | Mg  | 0       | 0       |
|     |       |          | 1     | 1   |         |         |
| 54  | BP    | 2        | Total | Mg  | 0       | 0       |
|     |       |          | 2     | 2   |         |         |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms               | ZeroOcc | AltConf |
|-----|-------|----------|---------------------|---------|---------|
| 54  | DD    | 5        | Total Mg<br>5 5     | 0       | 0       |
| 54  | B5    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | BB    | 19       | Total Mg<br>19 19   | 0       | 0       |
| 54  | BT    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | D8    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | AE    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | B9    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | BF    | 6        | Total Mg<br>6 6     | 0       | 0       |
| 54  | DR    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | B2    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | AA    | 217      | Total Mg<br>217 217 | 0       | 0       |
| 54  | BQ    | 5        | Total Mg<br>5 5     | 0       | 0       |
| 54  | CQ    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | D7    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | B6    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | AM    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | BU    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | AD    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | BN    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | D0    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | BG    | 1        | Total Mg<br>1 1     | 0       | 0       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms               | ZeroOcc | AltConf |
|-----|-------|----------|---------------------|---------|---------|
| 54  | AI    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | BY    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | DE    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | B3    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | BR    | 5        | Total Mg<br>5 5     | 0       | 0       |
| 54  | D9    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | DA    | 637      | Total Mg<br>637 637 | 0       | 0       |
| 54  | DP    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | DW    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | B7    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | AL    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | BV    | 4        | Total Mg<br>4 4     | 0       | 0       |
| 54  | DO    | 3        | Total Mg<br>3 3     | 0       | 0       |
| 54  | BO    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | D1    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | BZ    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | BS    | 1        | Total Mg<br>1 1     | 0       | 0       |
| 54  | D5    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | BD    | 7        | Total Mg<br>7 7     | 0       | 0       |
| 54  | DT    | 2        | Total Mg<br>2 2     | 0       | 0       |
| 54  | B0    | 4        | Total Mg<br>4 4     | 0       | 0       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms             | ZeroOcc | AltConf |
|-----|-------|----------|-------------------|---------|---------|
| 54  | CE    | 1        | Total Mg<br>1 1   | 0       | 0       |
| 54  | BW    | 1        | Total Mg<br>1 1   | 0       | 0       |
| 54  | DB    | 10       | Total Mg<br>10 10 | 0       | 0       |
| 54  | AF    | 1        | Total Mg<br>1 1   | 0       | 0       |
| 54  | BH    | 1        | Total Mg<br>1 1   | 0       | 0       |

- Molecule 55 is ZINC ION (three-letter code: ZN) (formula: Zn).

| Mol | Chain | Residues | Atoms           | ZeroOcc | AltConf |
|-----|-------|----------|-----------------|---------|---------|
| 55  | B5    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | B4    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | AD    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | CD    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | B9    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | BY    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | DY    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | D5    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | D4    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | AN    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | CN    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | D6    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | D9    | 1        | Total Zn<br>1 1 | 0       | 0       |
| 55  | B6    | 1        | Total Zn<br>1 1 | 0       | 0       |

- Molecule 56 is water.

| Mol | Chain | Residues | Atoms                | ZeroOcc | AltConf |
|-----|-------|----------|----------------------|---------|---------|
| 56  | AA    | 443      | Total O<br>443 443   | 0       | 0       |
| 56  | AD    | 3        | Total O<br>3 3       | 0       | 0       |
| 56  | AE    | 2        | Total O<br>2 2       | 0       | 0       |
| 56  | AF    | 2        | Total O<br>2 2       | 0       | 0       |
| 56  | AG    | 2        | Total O<br>2 2       | 0       | 0       |
| 56  | AJ    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | AK    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | AL    | 3        | Total O<br>3 3       | 0       | 0       |
| 56  | AM    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | AO    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | AP    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | AQ    | 3        | Total O<br>3 3       | 0       | 0       |
| 56  | AY    | 1        | Total O<br>1 1       | 0       | 0       |
| 56  | BA    | 1988     | Total O<br>1988 1988 | 0       | 0       |
| 56  | BB    | 43       | Total O<br>43 43     | 0       | 0       |
| 56  | BD    | 21       | Total O<br>21 21     | 0       | 0       |
| 56  | BE    | 18       | Total O<br>18 18     | 0       | 0       |
| 56  | BF    | 18       | Total O<br>18 18     | 0       | 0       |
| 56  | BG    | 2        | Total O<br>2 2       | 0       | 0       |
| 56  | BH    | 2        | Total O<br>2 2       | 0       | 0       |
| 56  | BN    | 7        | Total O<br>7 7       | 0       | 0       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms              | ZeroOcc | AltConf |
|-----|-------|----------|--------------------|---------|---------|
| 56  | BO    | 3        | Total O<br>3 3     | 0       | 0       |
| 56  | BP    | 20       | Total O<br>20 20   | 0       | 0       |
| 56  | BQ    | 9        | Total O<br>9 9     | 0       | 0       |
| 56  | BR    | 8        | Total O<br>8 8     | 0       | 0       |
| 56  | BS    | 2        | Total O<br>2 2     | 0       | 0       |
| 56  | BT    | 5        | Total O<br>5 5     | 0       | 0       |
| 56  | BU    | 9        | Total O<br>9 9     | 0       | 0       |
| 56  | BV    | 13       | Total O<br>13 13   | 0       | 0       |
| 56  | BW    | 6        | Total O<br>6 6     | 0       | 0       |
| 56  | BX    | 2        | Total O<br>2 2     | 0       | 0       |
| 56  | BY    | 2        | Total O<br>2 2     | 0       | 0       |
| 56  | BZ    | 2        | Total O<br>2 2     | 0       | 0       |
| 56  | B0    | 4        | Total O<br>4 4     | 0       | 0       |
| 56  | B1    | 5        | Total O<br>5 5     | 0       | 0       |
| 56  | B3    | 4        | Total O<br>4 4     | 0       | 0       |
| 56  | B5    | 5        | Total O<br>5 5     | 0       | 0       |
| 56  | B6    | 2        | Total O<br>2 2     | 0       | 0       |
| 56  | B7    | 5        | Total O<br>5 5     | 0       | 0       |
| 56  | B8    | 11       | Total O<br>11 11   | 0       | 0       |
| 56  | B9    | 1        | Total O<br>1 1     | 0       | 0       |
| 56  | CA    | 400      | Total O<br>400 400 | 0       | 0       |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Residues | Atoms         |           | ZeroOcc | AltConf |
|-----|-------|----------|---------------|-----------|---------|---------|
| 56  | CD    | 2        | Total<br>2    | O<br>2    | 0       | 0       |
| 56  | CE    | 4        | Total<br>4    | O<br>4    | 0       | 0       |
| 56  | CF    | 1        | Total<br>1    | O<br>1    | 0       | 0       |
| 56  | CK    | 1        | Total<br>1    | O<br>1    | 0       | 0       |
| 56  | CL    | 2        | Total<br>2    | O<br>2    | 0       | 0       |
| 56  | CP    | 3        | Total<br>3    | O<br>3    | 0       | 0       |
| 56  | CQ    | 3        | Total<br>3    | O<br>3    | 0       | 0       |
| 56  | CR    | 1        | Total<br>1    | O<br>1    | 0       | 0       |
| 56  | CT    | 2        | Total<br>2    | O<br>2    | 0       | 0       |
| 56  | CU    | 1        | Total<br>1    | O<br>1    | 0       | 0       |
| 56  | DA    | 1496     | Total<br>1496 | O<br>1496 | 0       | 0       |
| 56  | DB    | 33       | Total<br>33   | O<br>33   | 0       | 0       |
| 56  | DD    | 17       | Total<br>17   | O<br>17   | 0       | 0       |
| 56  | DE    | 12       | Total<br>12   | O<br>12   | 0       | 0       |
| 56  | DF    | 10       | Total<br>10   | O<br>10   | 0       | 0       |
| 56  | DN    | 2        | Total<br>2    | O<br>2    | 0       | 0       |
| 56  | DO    | 7        | Total<br>7    | O<br>7    | 0       | 0       |
| 56  | DP    | 11       | Total<br>11   | O<br>11   | 0       | 0       |
| 56  | DQ    | 2        | Total<br>2    | O<br>2    | 0       | 0       |
| 56  | DR    | 5        | Total<br>5    | O<br>5    | 0       | 0       |
| 56  | DT    | 3        | Total<br>3    | O<br>3    | 0       | 0       |

*Continued on next page...*



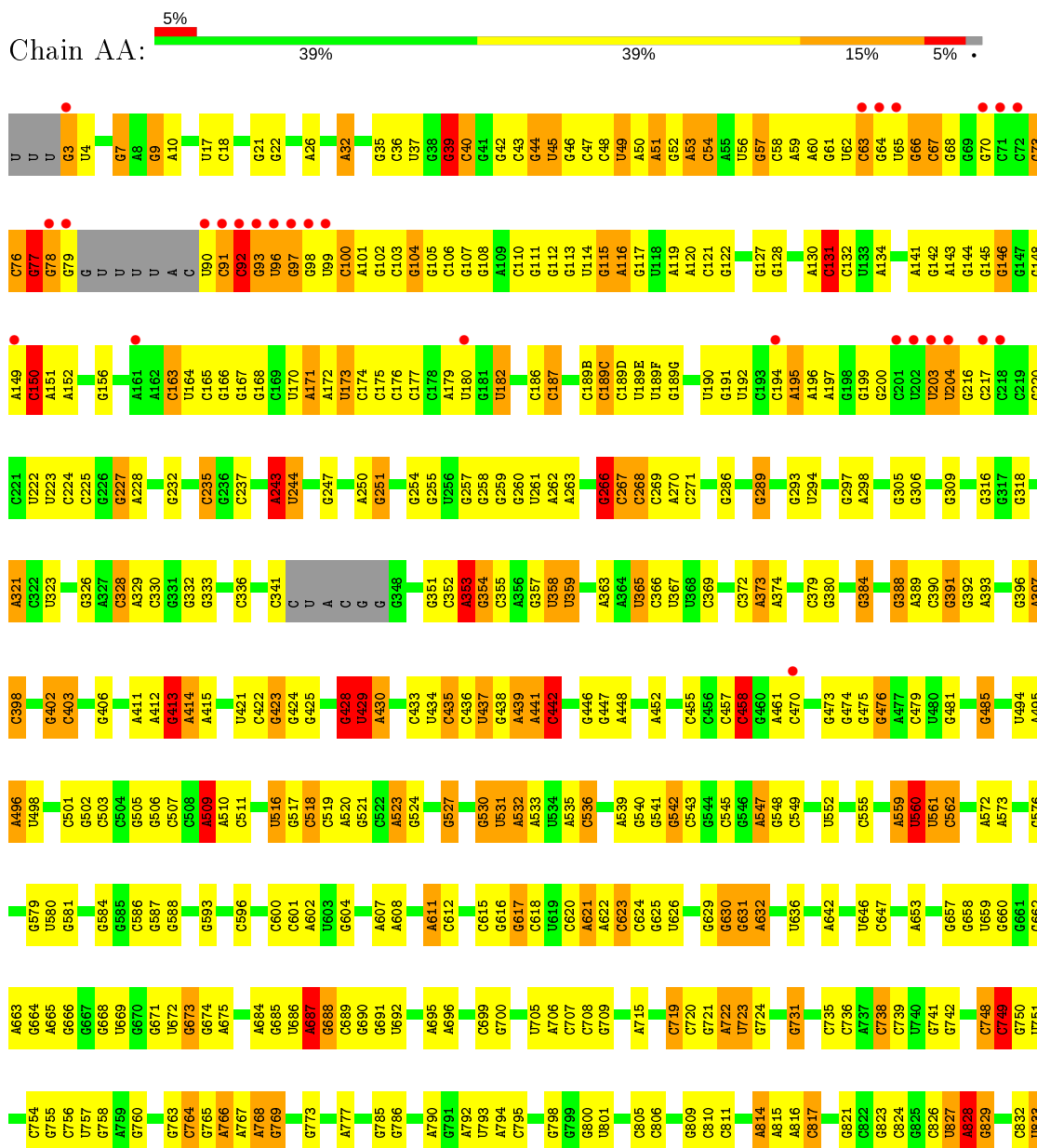
*Continued from previous page...*

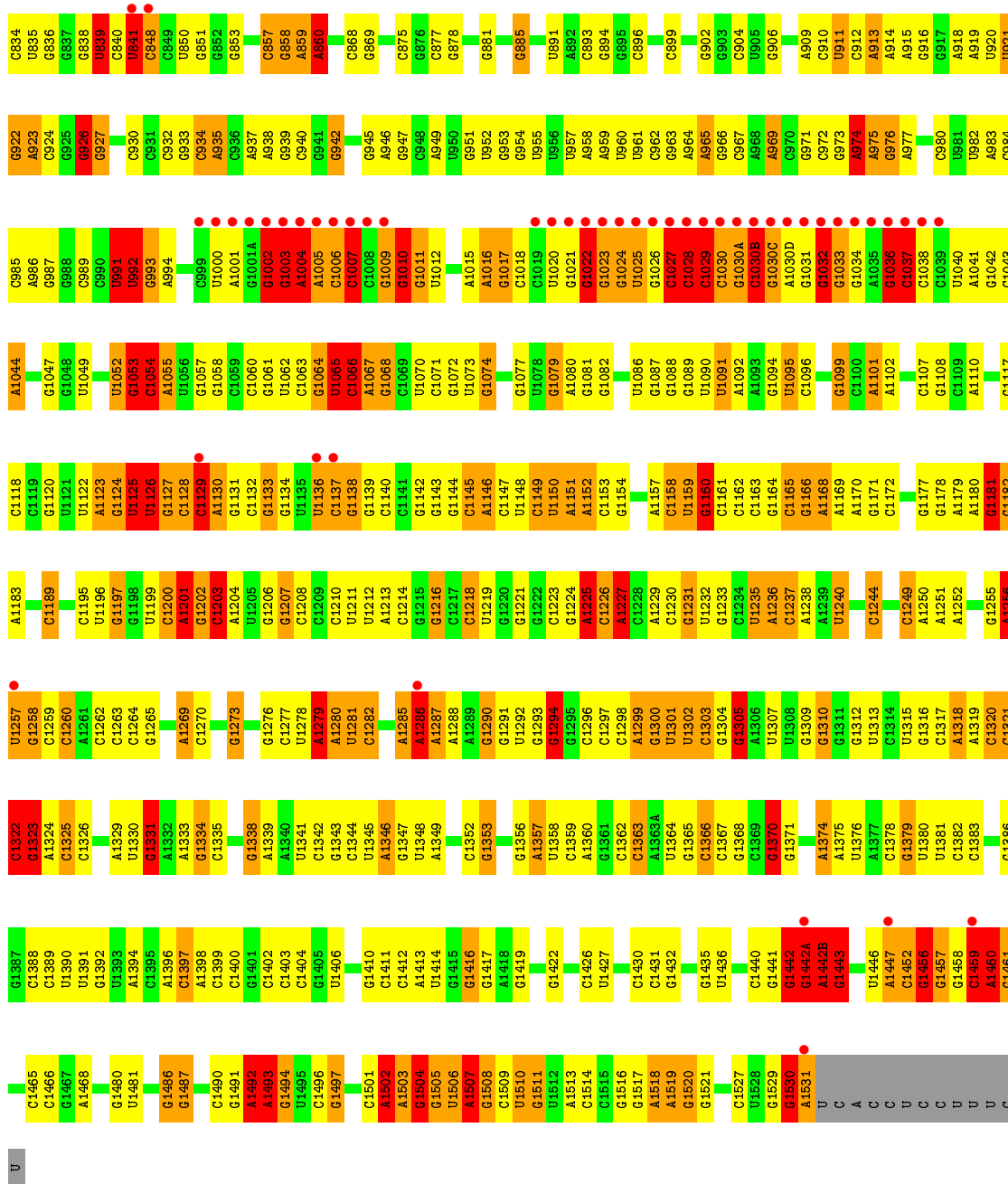
| <b>Mol</b> | <b>Chain</b> | <b>Residues</b> | <b>Atoms</b> |        | <b>ZeroOcc</b> | <b>AltConf</b> |
|------------|--------------|-----------------|--------------|--------|----------------|----------------|
| 56         | DU           | 1               | Total<br>1   | O<br>1 | 0              | 0              |
| 56         | DV           | 1               | Total<br>1   | O<br>1 | 0              | 0              |
| 56         | DW           | 4               | Total<br>4   | O<br>4 | 0              | 0              |
| 56         | DX           | 2               | Total<br>2   | O<br>2 | 0              | 0              |
| 56         | DY           | 2               | Total<br>2   | O<br>2 | 0              | 0              |
| 56         | D0           | 2               | Total<br>2   | O<br>2 | 0              | 0              |
| 56         | D1           | 3               | Total<br>3   | O<br>3 | 0              | 0              |
| 56         | D2           | 1               | Total<br>1   | O<br>1 | 0              | 0              |
| 56         | D3           | 1               | Total<br>1   | O<br>1 | 0              | 0              |
| 56         | D5           | 3               | Total<br>3   | O<br>3 | 0              | 0              |
| 56         | D6           | 3               | Total<br>3   | O<br>3 | 0              | 0              |
| 56         | D7           | 3               | Total<br>3   | O<br>3 | 0              | 0              |
| 56         | D8           | 6               | Total<br>6   | O<br>6 | 0              | 0              |
| 56         | D9           | 1               | Total<br>1   | O<br>1 | 0              | 0              |

### 3 Residue-property plots [i](#)

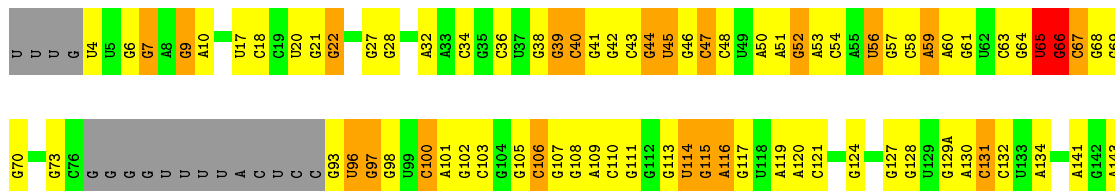
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are 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.

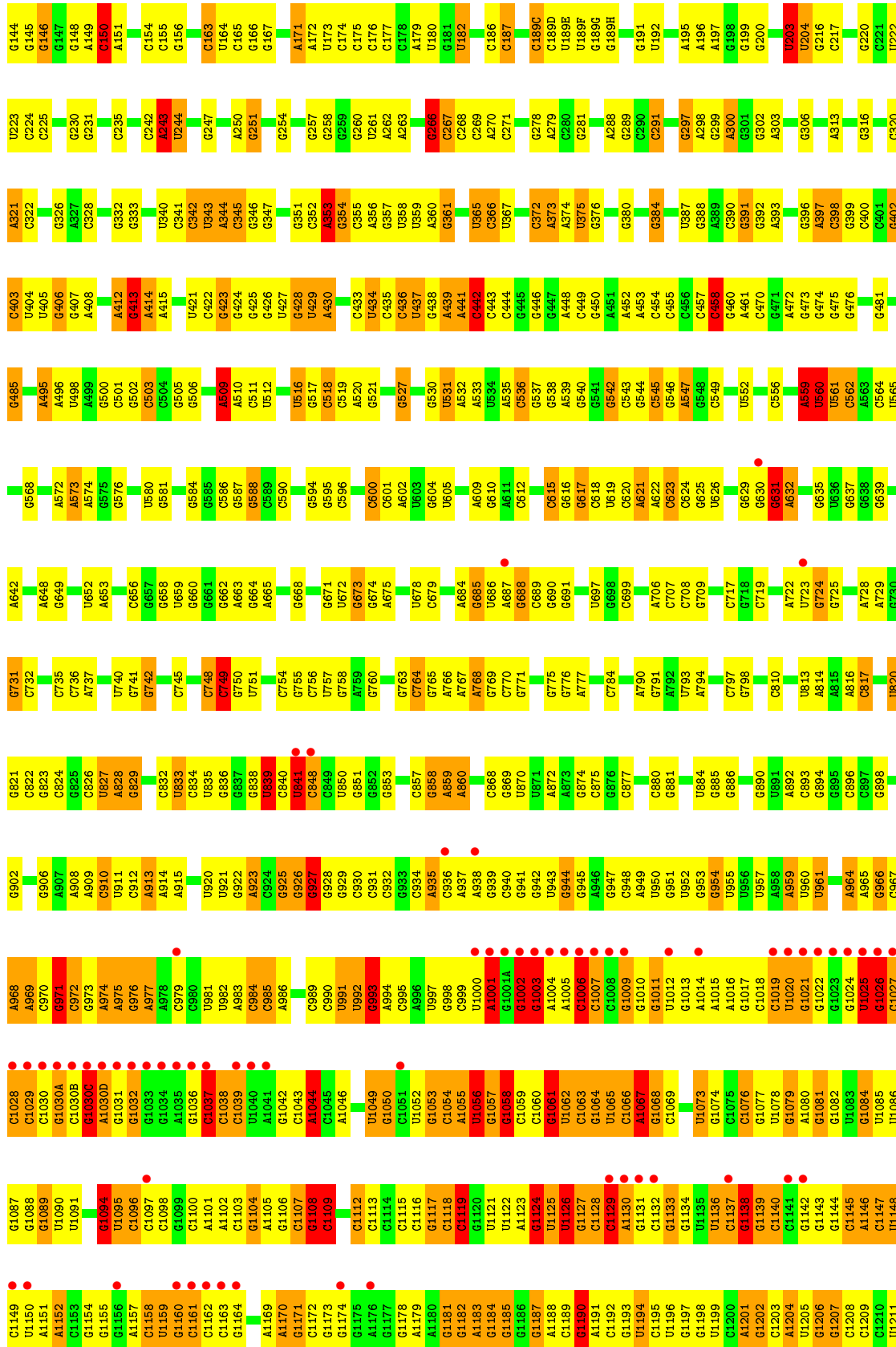
- Molecule 1: 16S Ribosomal RNA

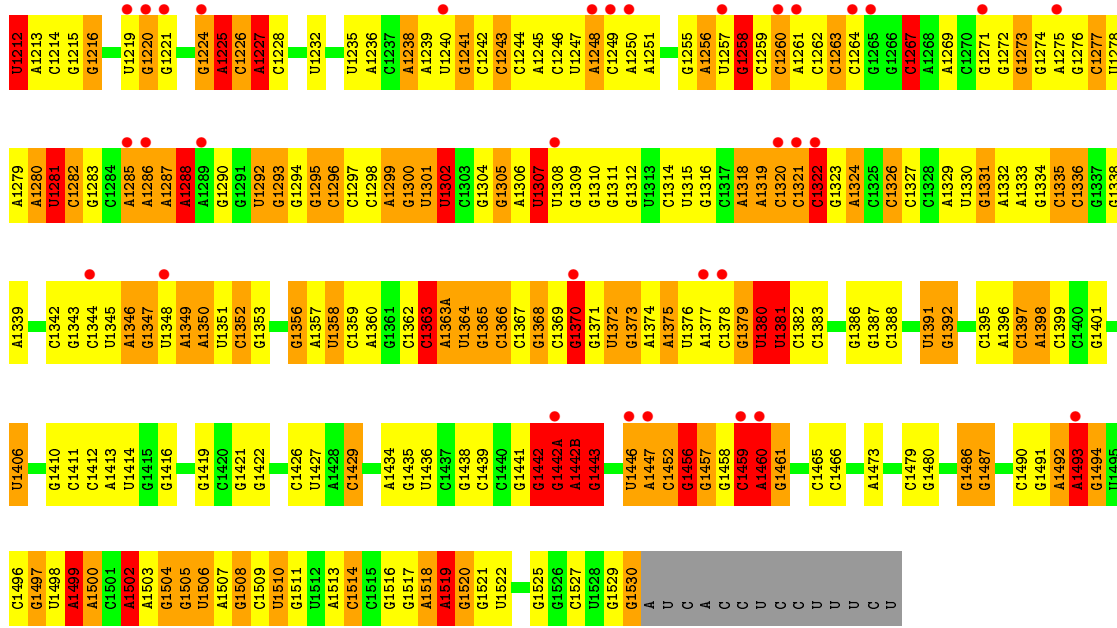




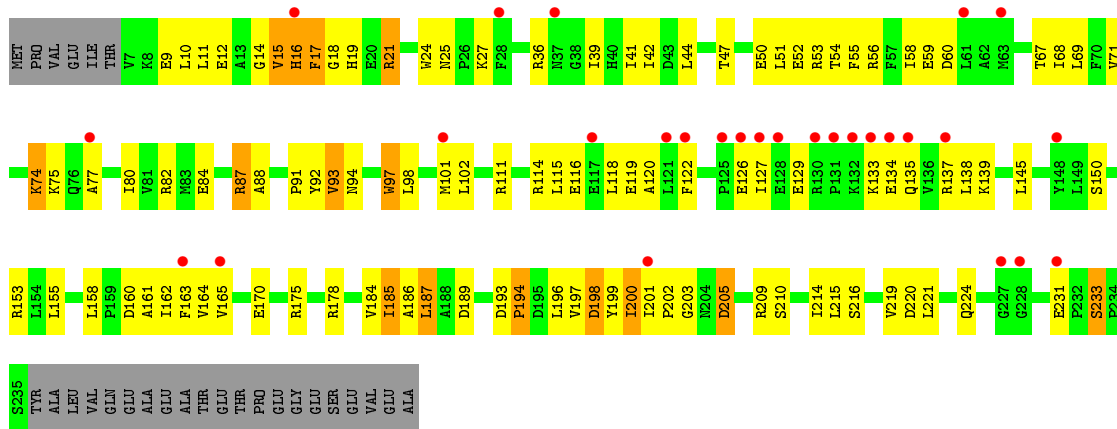
• Molecule 1: 16S Ribosomal RNA



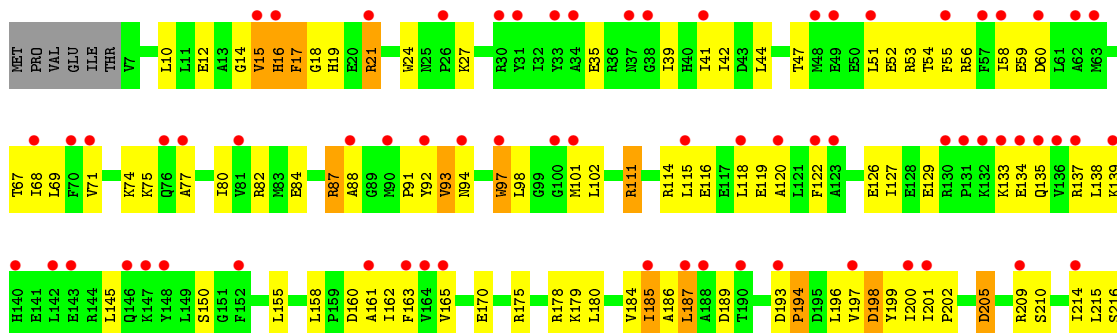


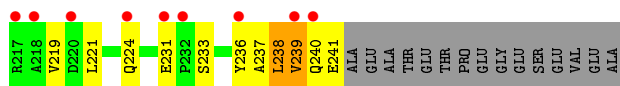


• Molecule 2: 30S Ribosomal Protein S2

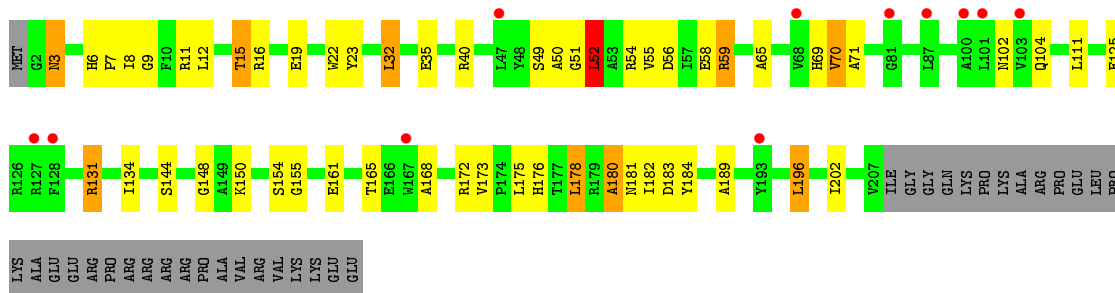


• Molecule 2: 30S Ribosomal Protein S2

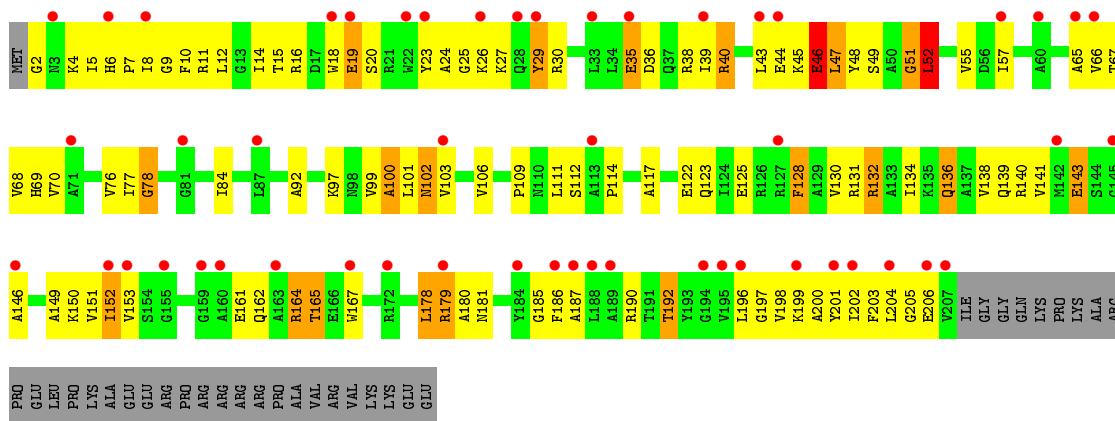




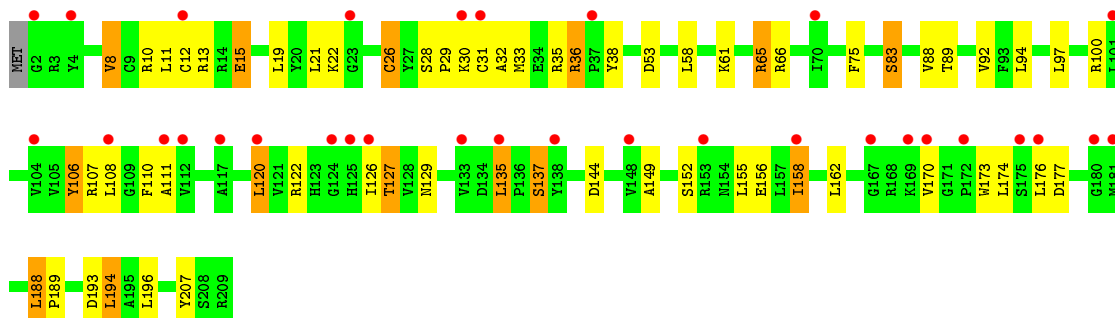
• Molecule 3: 30S Ribosomal Protein S3



• Molecule 3: 30S Ribosomal Protein S3

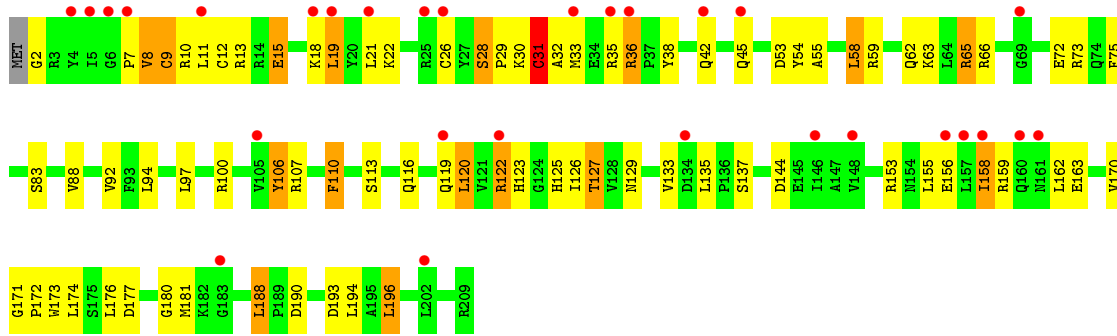


• Molecule 4: 30S Ribosomal Protein S4

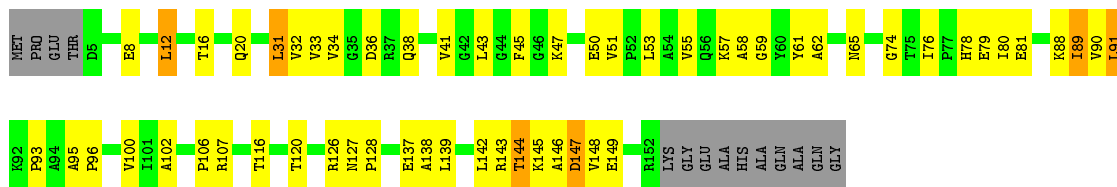


• Molecule 4: 30S Ribosomal Protein S4

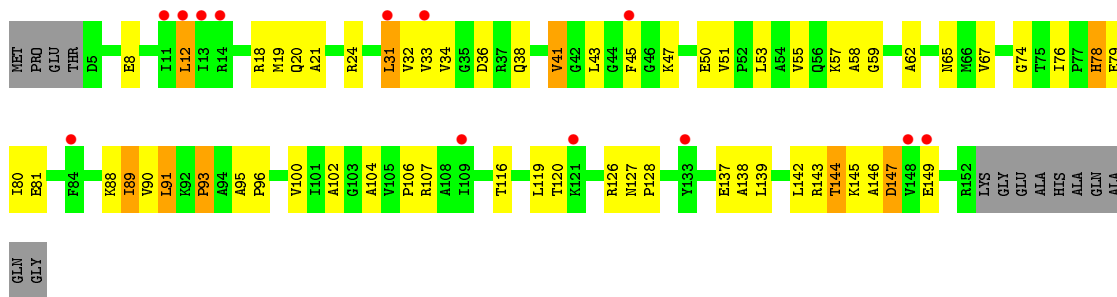




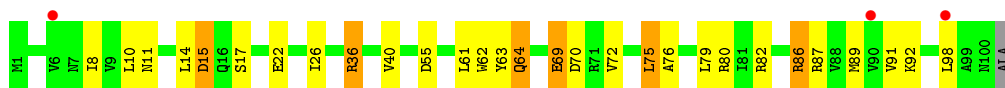
• Molecule 5: 30S Ribosomal Protein S5



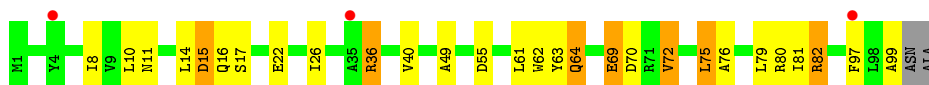
• Molecule 5: 30S Ribosomal Protein S5



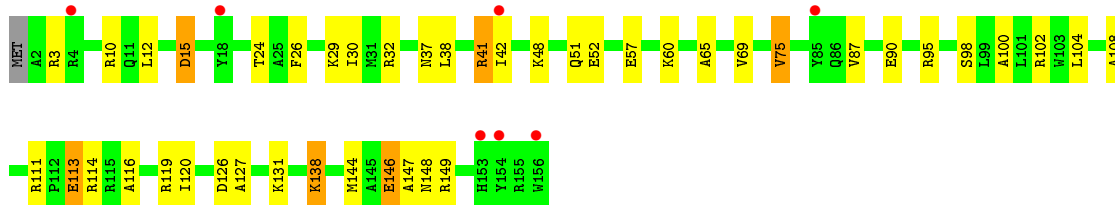
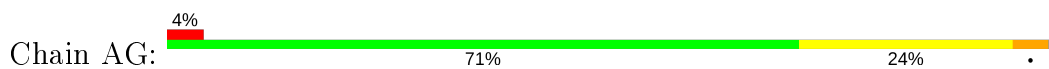
• Molecule 6: 30S Ribosomal Protein S6



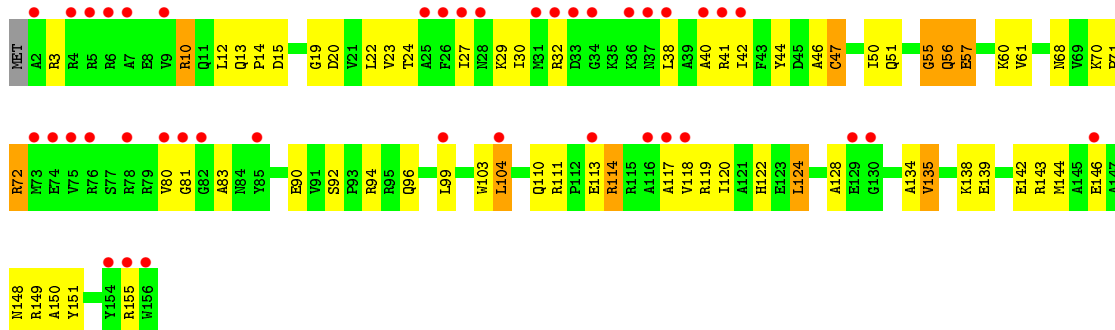
• Molecule 6: 30S Ribosomal Protein S6



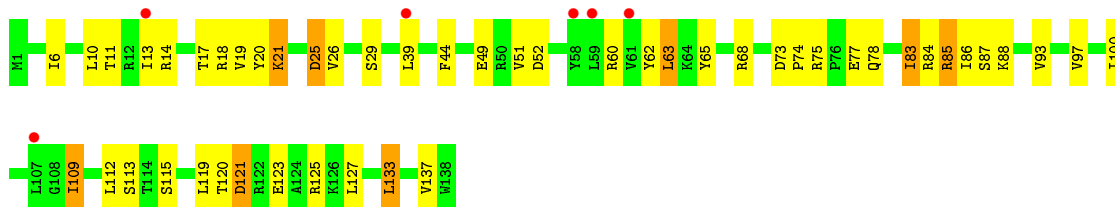
• Molecule 7: 30S Ribosomal Protein S7



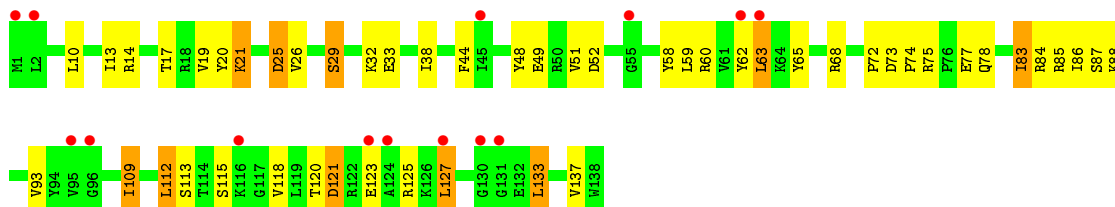
- Molecule 7: 30S Ribosomal Protein S7



- Molecule 8: 30S Ribosomal Protein S8



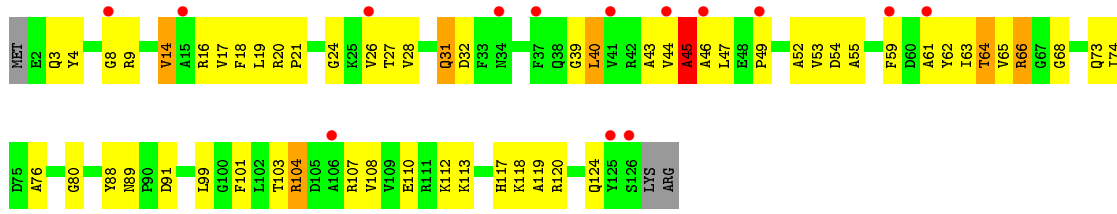
- Molecule 8: 30S Ribosomal Protein S8



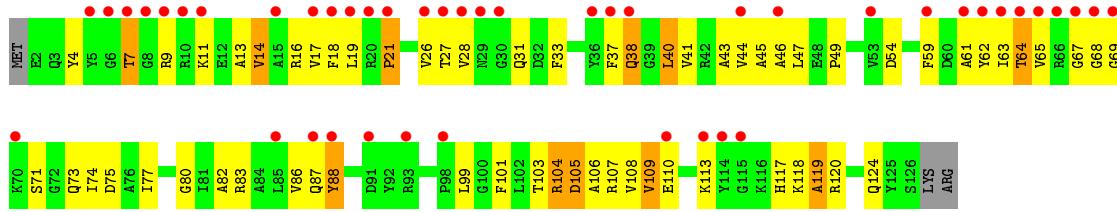
- Molecule 9: 30S Ribosomal Protein S9



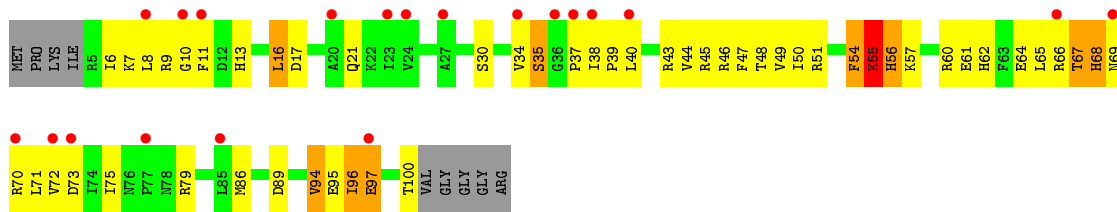




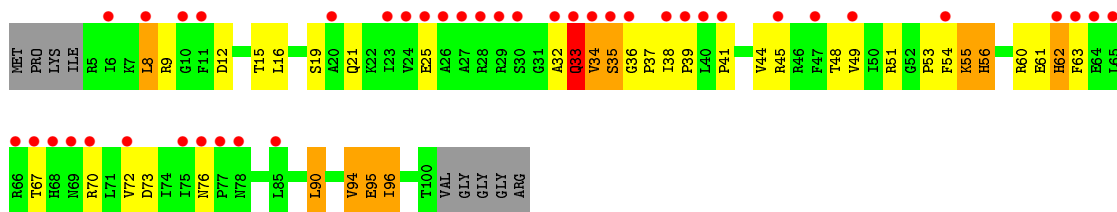
● Molecule 9: 30S Ribosomal Protein S9



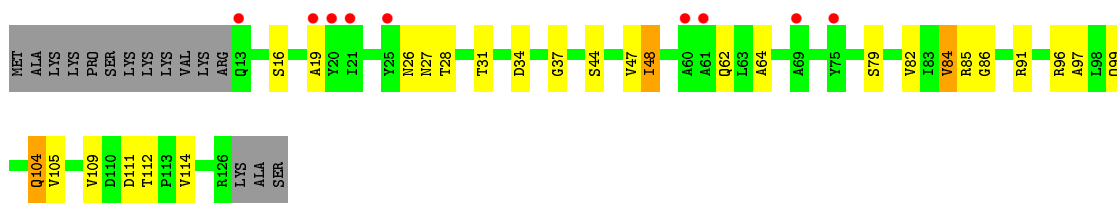
● Molecule 10: 30S Ribosomal Protein S10



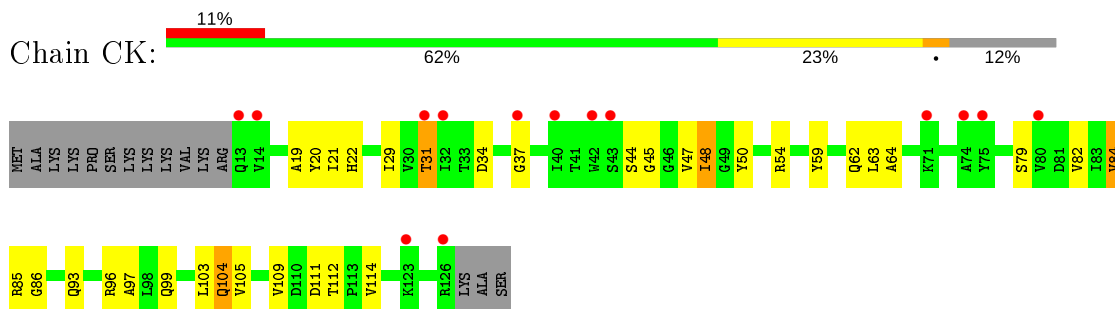
● Molecule 10: 30S Ribosomal Protein S10



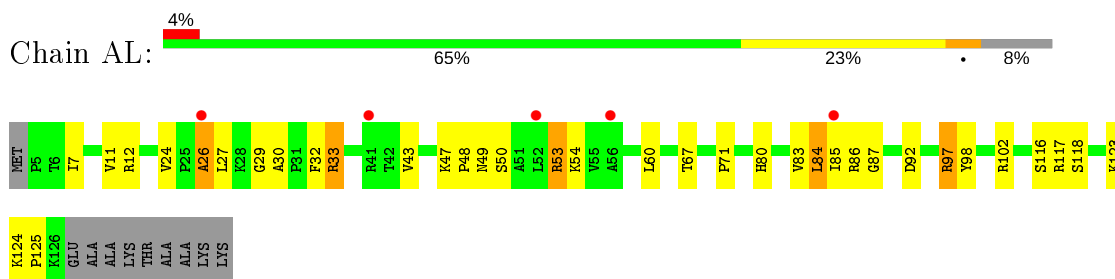
● Molecule 11: 30S Ribosomal Protein S11



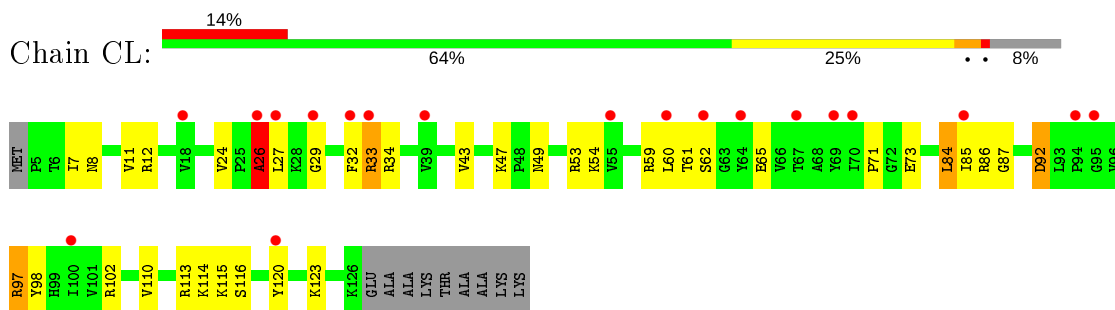
## ● Molecule 11: 30S Ribosomal Protein S11



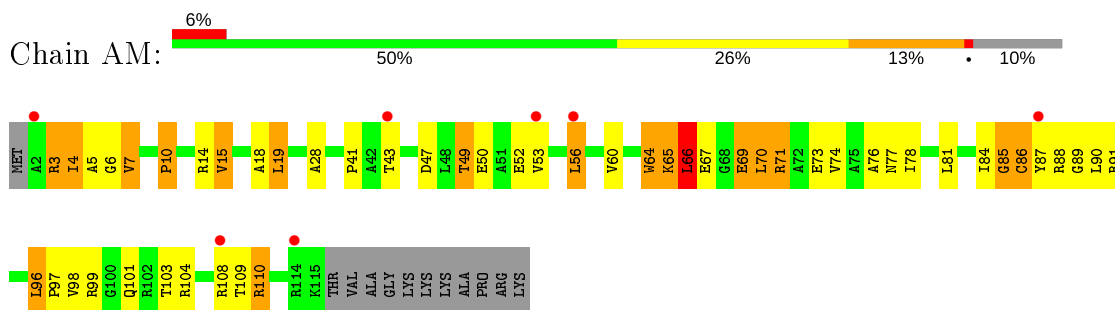
## ● Molecule 12: 30S Ribosomal Protein S12



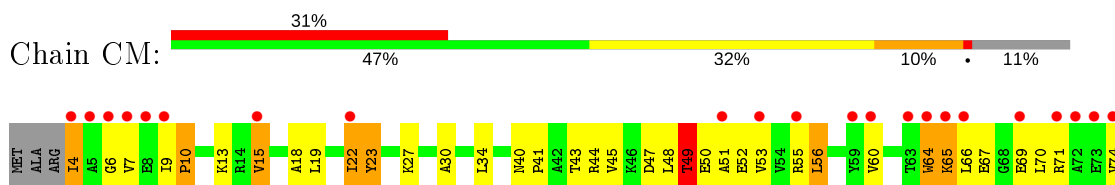
## ● Molecule 12: 30S Ribosomal Protein S12

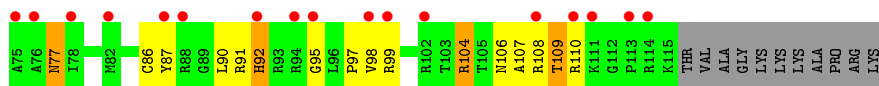


## ● Molecule 13: 30S Ribosomal Protein S13



## ● Molecule 13: 30S Ribosomal Protein S13

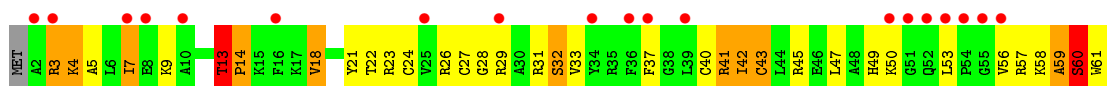




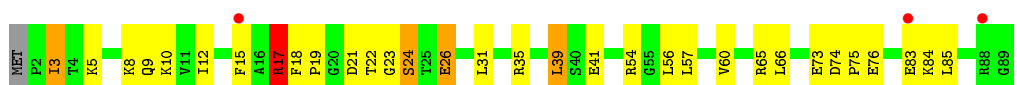
• Molecule 14: 30S Ribosomal Protein S14



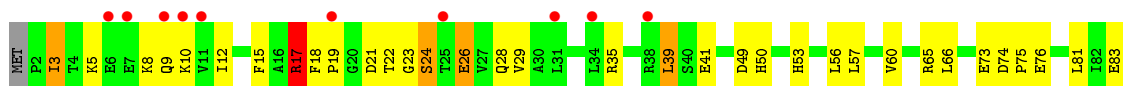
• Molecule 14: 30S Ribosomal Protein S14



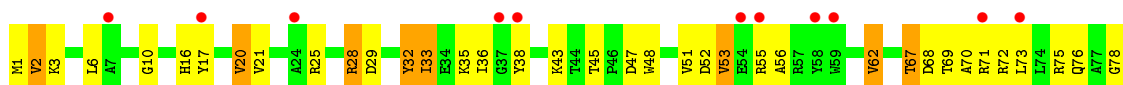
• Molecule 15: 30S Ribosomal Protein S15



• Molecule 15: 30S Ribosomal Protein S15

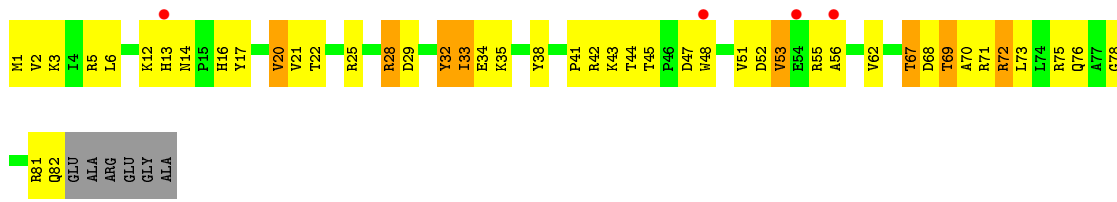


• Molecule 16: 30S Ribosomal Protein S16

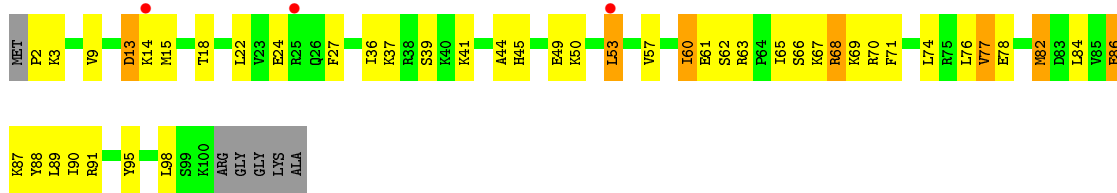


• Molecule 16: 30S Ribosomal Protein S16

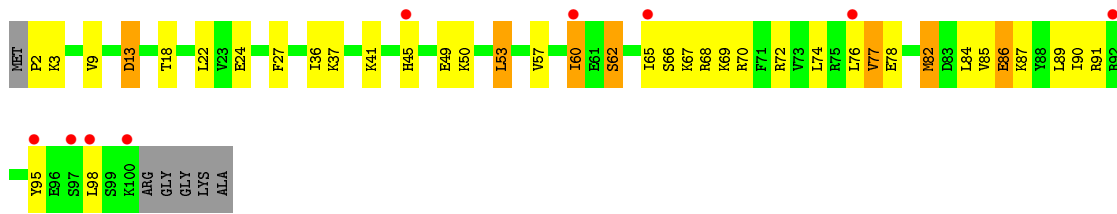




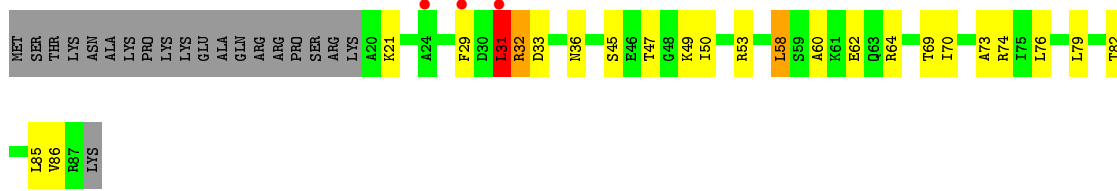
• Molecule 17: 30S Ribosomal Protein S17



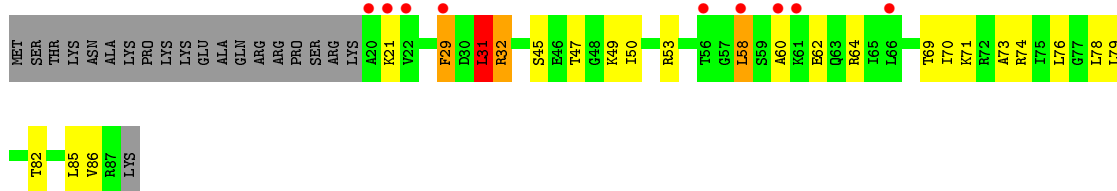
• Molecule 17: 30S Ribosomal Protein S17



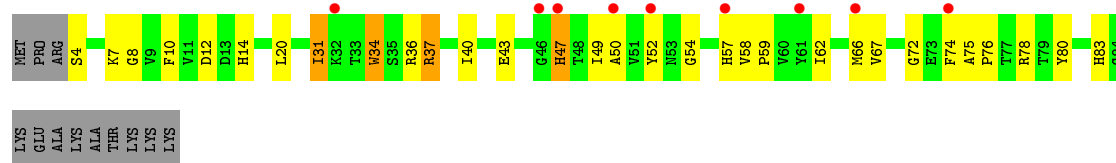
• Molecule 18: 30S Ribosomal Protein S18



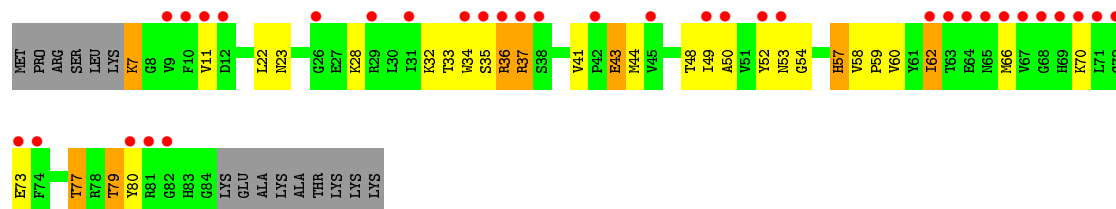
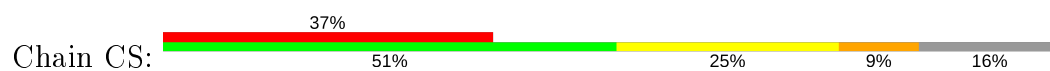
• Molecule 18: 30S Ribosomal Protein S18



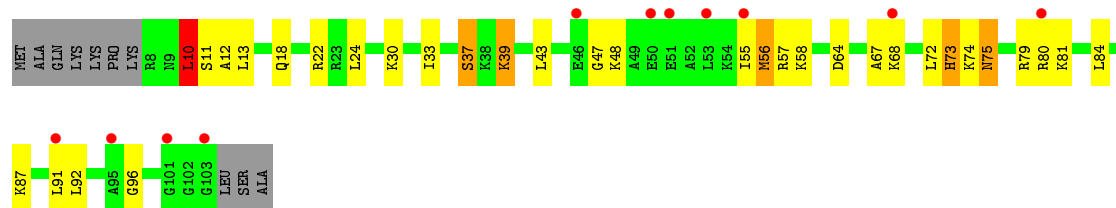
• Molecule 19: 30S Ribosomal Protein S19



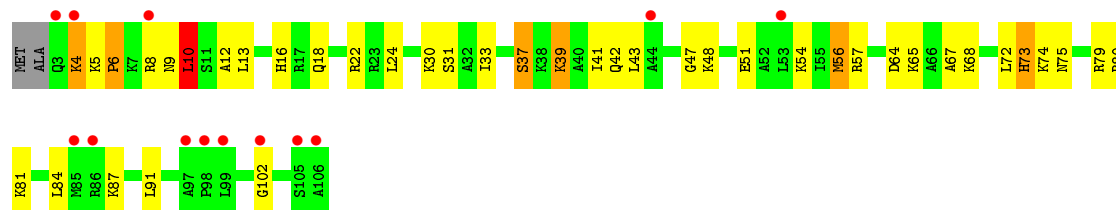
- Molecule 19: 30S Ribosomal Protein S19



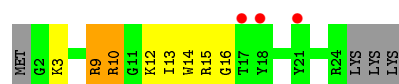
- Molecule 20: 30S Ribosomal Protein S20



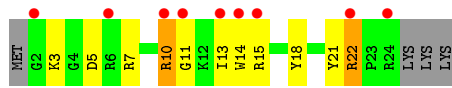
- Molecule 20: 30S Ribosomal Protein S20



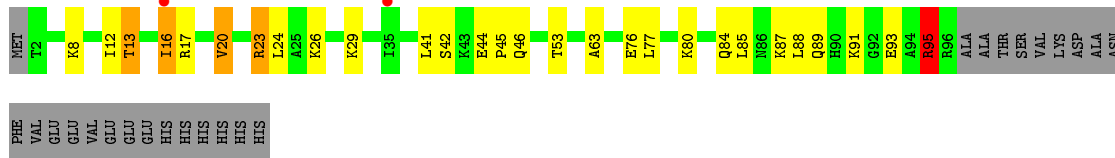
- Molecule 21: 30S Ribosomal Protein THX



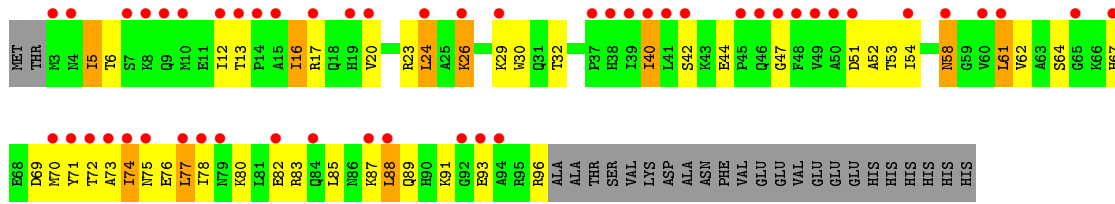
- Molecule 21: 30S Ribosomal Protein THX



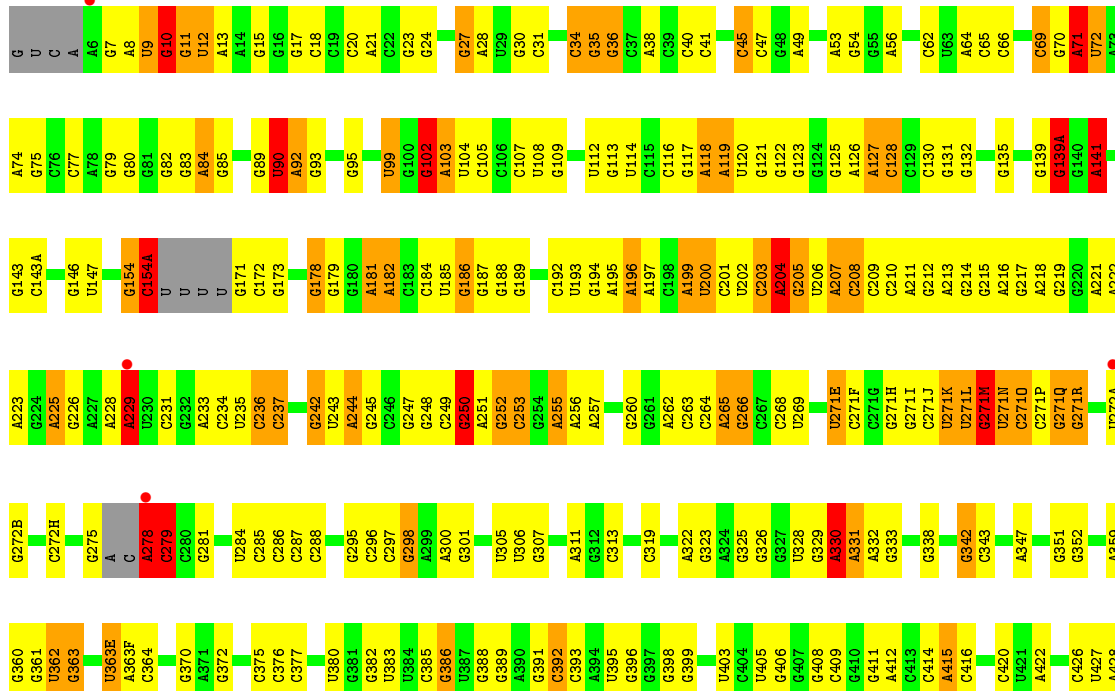
• Molecule 22: Ribosome-associated inhibitor A



• Molecule 22: Ribosome-associated inhibitor A



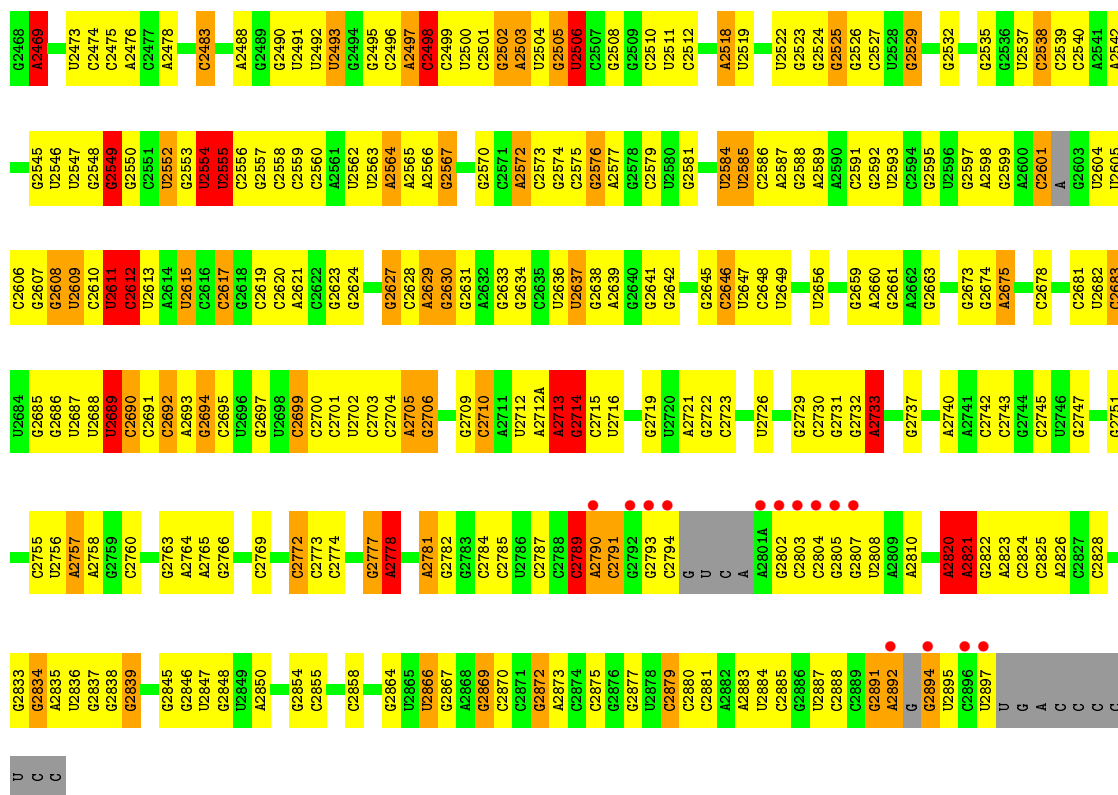
• Molecule 23: 23S Ribosomal RNA



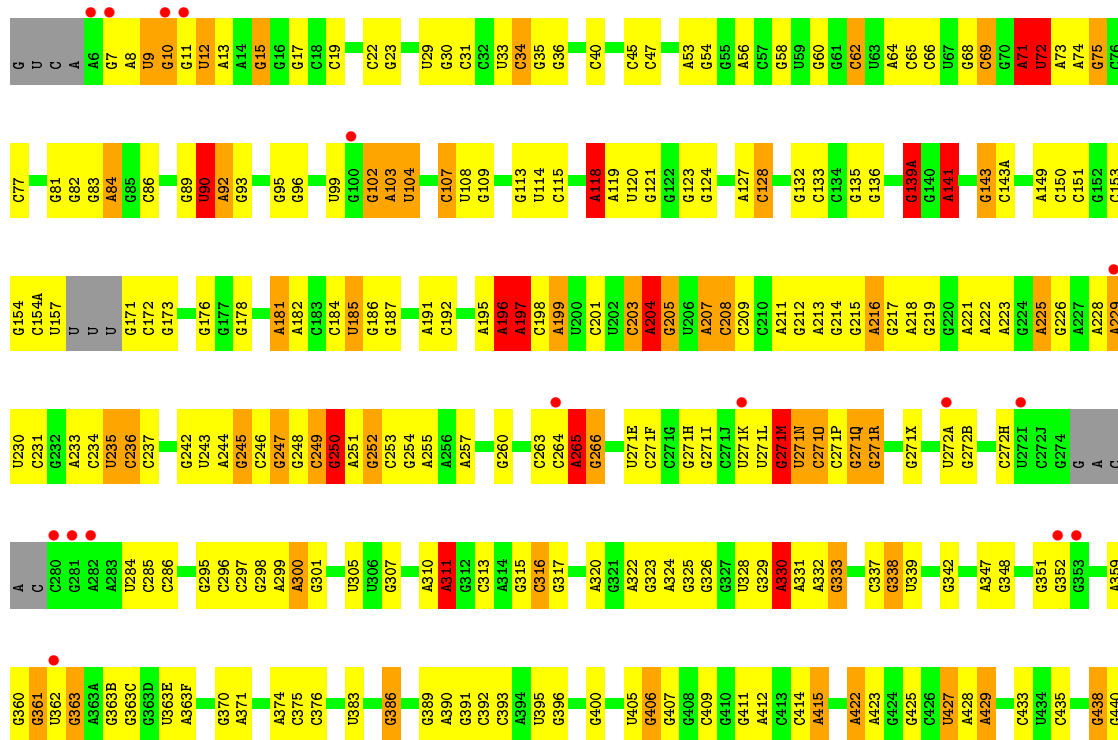
|       |       |        |        |   |      |      |       |      |      |      |       |      |      |      |      |      |       |       |      |      |      |  |
|-------|-------|--------|--------|---|------|------|-------|------|------|------|-------|------|------|------|------|------|-------|-------|------|------|------|--|
| U1329 | G1260 | G1192  | G1121  | G | 6832 | G771 | 6695  | 6919 | 6832 | 6932 | G1008 | 6938 | 6919 | 6832 | 6919 | 6832 | G771  | 6695  | C580 | A505 | A429 |  |
| C1330 | C1261 | G1193  | G1122  | U | U633 | G772 | G994  | G919 | U633 | 6932 | G1003 | 6938 | G919 | U633 | 6832 | 6919 | C772  | 6652B | G580 | G506 | G430 |  |
| A1331 | A1262 | A1194  | C1123  | G | C834 | U773 | C995  | U922 | C834 | U922 | C1004 | 6934 | U922 | C834 | 6919 | C773 | 6652C | G582  | G507 | A507 | U431 |  |
| C1332 | U1263 | G1195  | C1124  | U | 6939 | U774 | A996  | C923 | C838 | C923 | G1005 | 6935 | C923 | U638 | 6919 | U775 | 6652D | G583  | G508 | G508 | U432 |  |
| C1333 | G1264 | G1196  | G1125  | C | U639 | A775 | G997  | C927 | U639 | 6927 | C1006 | 6936 | C927 | C840 | 6919 | U776 | 6652E | G584  | G509 | C509 | U433 |  |
| G1334 | A1265 | U1198  | A1126  | G | U640 | U776 | C998  | 6927 | C840 | 6927 | C1007 | 6937 | 6927 | C841 | 6919 | U777 | 6652F | G585  | G510 | C510 | U434 |  |
| U1335 | G1266 | U1199  | A1127  | U | A841 | U777 | U999  | 6927 | C841 | 6927 | C1008 | 6938 | 6927 | A842 | 6919 | U778 | 6652G | G511  | G512 | C511 | U435 |  |
| G1338 | U1267 | C1200  | A1128  | U | 6855 | U778 | G1008 | 6932 | 6855 | 6932 | G1009 | 6939 | 6932 | A843 | 6919 | U779 | 6652H | G512  | G513 | G438 | G438 |  |
| U1339 | A1268 | A1129  | A1129  | A | C856 | U779 | G1003 | A933 | C846 | 6932 | G1004 | 6939 | A933 | C846 | 6919 | U780 | 6652I | G513  | A513 | G440 | G440 |  |
| G1339 | A1269 | G1203  | U1130  | G | C857 | U780 | C1004 | 6934 | U847 | 6934 | C1005 | 6934 | 6934 | U848 | 6919 | U781 | 6652J | G514  | A514 | A443 | A443 |  |
| U1340 | C1270 | G1203  | G1131  | A | U858 | U781 | G1005 | 6935 | 6848 | 6935 | C1006 | 6935 | 6935 | 6849 | 6919 | U782 | 6652K | G515  | A515 | C444 | C444 |  |
| A1341 | A1271 | A1204  | A1132  | C | 6859 | U782 | G1006 | 6936 | A849 | 6936 | C1007 | 6936 | 6936 | A849 | 6919 | U783 | 6652L | G516  | A516 | U448 | U448 |  |
| U1342 | G1272 | U1133  | U1133  | C | 6860 | U783 | G1007 | 6937 | 6860 | 6937 | C1008 | 6937 | 6937 | 6861 | 6919 | U784 | 6652M | G517  | A517 | A449 | A449 |  |
| G1343 | U1273 | C1208  | C1135  | C | G865 | U784 | U1012 | 6938 | G865 | 6938 | U1013 | 6938 | 6938 | G866 | 6919 | U785 | 6652N | G518  | A518 | G450 | G450 |  |
| U1344 | A1274 | G1209  | G1136  | G | C866 | U785 | U1013 | 6938 | C866 | 6938 | U1014 | 6938 | 6938 | C867 | 6919 | U786 | 6652O | U524  | U524 | A451 | A451 |  |
| C1345 | A1275 | A1210  | G1137  | A | C867 | U786 | U1014 | 6939 | C867 | 6939 | U1015 | 6939 | 6939 | C868 | 6919 | U787 | 6652P | U525  | U525 | C452 | C452 |  |
| G1346 | U1276 | G1211  | G1138  | C | U858 | U787 | C1013 | 6942 | U858 | 6942 | U1016 | 6942 | 6942 | U859 | 6919 | U788 | 6652Q | U526  | U526 | A454 | A454 |  |
| U1347 | G1279 | G1212  | G1139  | C | 6869 | U788 | U1017 | 6943 | 6869 | 6943 | U1018 | 6943 | 6943 | 6870 | 6919 | U789 | 6652R | C527  | C527 | C455 | C455 |  |
| G1348 | A1284 | C1140  | C1140  | A | U860 | U789 | U1018 | 6944 | U860 | 6944 | U1019 | 6944 | 6944 | U871 | 6919 | U790 | 6652S | U528  | U528 | C456 | C456 |  |
| U1352 | U1284 | U1141  | U1141  | U | 6861 | U790 | C1018 | 6945 | 6861 | 6945 | U1020 | 6945 | 6945 | U872 | 6919 | U791 | 6652T | U529  | U529 | U459 | U459 |  |
| A1353 | A1287 | U1142  | U1142  | C | U862 | U791 | U1019 | 6946 | U862 | 6946 | U1021 | 6946 | 6946 | U873 | 6919 | U792 | 6652U | G530  | G530 | A460 | A460 |  |
| A1354 | U1288 | A1149A | A1149A | U | 6863 | U792 | A1020 | 6947 | 6863 | 6947 | U1022 | 6947 | 6947 | U874 | 6919 | U793 | 6652V | G531  | G531 | C461 | C461 |  |
| G1355 | G1289 | G1143  | G1143  | U | 6864 | U793 | A1021 | 6948 | 6864 | 6948 | U1023 | 6948 | 6948 | U875 | 6919 | U794 | 6652W | G532  | G532 | C462 | C462 |  |
| U1358 | C1290 | C1221A | G1144  | U | C865 | U794 | U1022 | 6948 | C865 | 6948 | U1024 | 6948 | 6948 | U876 | 6919 | U795 | 6652X | G533  | G533 | G463 | G463 |  |
| G1358 | C1291 | C1222  | G1144  | U | 6866 | U795 | U1023 | 6950 | 6866 | 6950 | U1025 | 6950 | 6950 | U877 | 6919 | U796 | 6652Y | U534  | U534 | U464 | U464 |  |
| A1359 | C1292 | G1223  | G1149  | A | U866 | U796 | U1024 | 6950 | U866 | 6950 | U1026 | 6952 | 6952 | U878 | 6919 | U797 | 6652Z | G535  | G535 | G465 | G465 |  |
| A1360 | U1292 | C1224  | C1150  | A | C867 | U796 | U1025 | 6952 | C867 | 6952 | U1027 | 6952 | 6952 | U879 | 6919 | U798 | 6652Z | G536  | G536 | G469 | G469 |  |
| G1361 | C1293 | G1227  | C1153  | G | U870 | U798 | U1026 | 6952 | U870 | 6952 | U1028 | 6955 | 6955 | U880 | 6919 | U799 | 6652Z | G537  | G537 | A471 | A471 |  |
| U1362 | U1294 | G1228  | G1154  | A | A870 | U799 | A1027 | 6955 | A870 | 6955 | U1029 | 6956 | 6956 | U881 | 6919 | U800 | 6652Z | G538  | G538 | A472 | A472 |  |
| G1363 | C1295 | G1229  | G1155  | U | 6878 | U800 | A1028 | 6956 | 6878 | 6956 | U1030 | 6957 | 6957 | U801 | 6919 | U801 | 6652Z | G539  | G539 | G473 | G473 |  |
| C1364 | C1297 | A1156  | A1156  | G | 6879 | U801 | A1029 | 6957 | 6879 | 6957 | U1031 | 6958 | 6958 | U802 | 6919 | U802 | 6652Z | G540  | G540 | U475 | U475 |  |
| A1365 | C1298 | G1157  | G1157  | G | 6880 | U802 | U1030 | 6958 | 6880 | 6958 | U1032 | 6959 | 6959 | U803 | 6919 | U803 | 6652Z | G541  | G541 | G476 | G476 |  |
| G1366 | U1299 | G1160  | G1160  | C | 6883 | U803 | A1032 | 6959 | 6883 | 6959 | U1033 | 6960 | 6960 | U804 | 6919 | U804 | 6652Z | G542  | G542 | A477 | A477 |  |
| A1367 | U1300 | C1161  | C1161  | C | C884 | U804 | U1033 | 6960 | C884 | 6960 | U1034 | 6961 | 6961 | U805 | 6919 | U805 | 6652Z | G543  | G543 | A478 | A478 |  |
| G1368 | A1301 | G1162  | G1162  | U | C885 | U805 | U1034 | 6962 | C885 | 6962 | U1035 | 6963 | 6963 | U806 | 6919 | U806 | 6652Z | G544  | G544 | G479 | G479 |  |
| G1369 | A1302 | G1163  | G1163  | A | C886 | U806 | U1035 | 6963 | C886 | 6963 | U1036 | 6964 | 6964 | U807 | 6919 | U807 | 6652Z | G545  | G545 | A480 | A480 |  |
| C1370 | C1303 | G1164  | G1164  | A | U887 | U807 | G1336 | 6964 | U887 | 6964 | U1037 | 6965 | 6965 | U808 | 6919 | U808 | 6652Z | G546  | G546 | G481 | G481 |  |
| G1371 | C1304 | U1165  | U1165  | U | C888 | U808 | U1037 | 6965 | C888 | 6965 | U1038 | 6966 | 6966 | U809 | 6919 | U809 | 6652Z | G547  | G547 | A482 | A482 |  |
| U1372 | C1305 | G1238  | G1165  | A | C889 | U809 | U1038 | 6966 | C889 | 6966 | U1039 | 6967 | 6967 | U810 | 6919 | U810 | 6652Z | G548  | G548 | G483 | G483 |  |
| A1373 | A1306 | U1239  | G1166  | G | U890 | U810 | U1039 | 6967 | U890 | 6967 | U1040 | 6968 | 6968 | U811 | 6919 | U811 | 6652Z | G549  | G549 | C484 | C484 |  |
| G1377 | G1308 | A1241  | C1166  | U | 6892 | U811 | C1041 | 6970 | 6892 | 6970 | U1041 | 6970 | 6970 | U812 | 6919 | U812 | 6652Z | G550  | G550 | C485 | C485 |  |
| A1378 | A1309 | G1170  | G1170  | C | C893 | U812 | U1042 | 6970 | C893 | 6970 | U1042 | 6971 | 6971 | U813 | 6919 | U813 | 6652Z | G551  | G551 | C486 | C486 |  |
| A1379 | G1310 | G1171  | G1171  | A | U896 | U813 | C1043 | 6971 | U896 | 6971 | U1043 | 6972 | 6972 | U814 | 6919 | U814 | 6652Z | G552  | G552 | G489 | G489 |  |
| G1380 | G1311 | A1174  | A1174  | U | 6897 | U814 | U1044 | 6972 | 6897 | 6972 | U1044 | 6973 | 6973 | U815 | 6919 | U815 | 6652Z | G553  | G553 | G494 | G494 |  |
| G1381 | U1312 | G1176  | G1176  | C | C897 | U815 | G1045 | 6973 | C897 | 6973 | U1045 | 6974 | 6974 | U816 | 6919 | U816 | 6652Z | G554  | G554 | G495 | G495 |  |
| G1382 | U1313 | U1175  | U1175  | U | C898 | U816 | A1046 | 6974 | C898 | 6974 | U1046 | 6975 | 6975 | U817 | 6919 | U817 | 6652Z | G555  | G555 | G496 | G496 |  |
| C1383 | G1314 | G1248  | G1177  | G | 6975 | U817 | G1047 | 6975 | 6975 | 6975 | U1047 | 6976 | 6976 | U818 | 6919 | U818 | 6652Z | G556  | G556 | C486 | C486 |  |
| A1384 | C1315 | U1249  | A1177  | U | U900 | U818 | U1048 | 6976 | U900 | 6976 | U1048 | 6977 | 6977 | U819 | 6919 | U819 | 6652Z | G557  | G557 | G497 | G497 |  |
| G1385 | C1315 | U1249  | C1178  | U | 6901 | U819 | U1048 | 6977 | 6901 | 6977 | U1049 | 6978 | 6978 | U820 | 6919 | U820 | 6652Z | G558  | G558 | G500 | G500 |  |
| C1386 | C1320 | G1250  | G1179  | C | U901 | U820 | C1049 | 6978 | U901 | 6978 | U1049 | 6979 | 6979 | U821 | 6919 | U821 | 6652Z | G559  | G559 | A501 | A501 |  |
| U1391 | A1321 | C1251  | C1180  | U | G910 | U821 | A1050 | 6979 | G910 | 6979 | U1050 | 6980 | 6980 | U822 | 6919 | U822 | 6652Z | G560  | G560 | A502 | A502 |  |
| A1392 | A1322 | G1252  | G1185  | C | U911 | U822 | G1051 | 6981 | U911 | 6981 | U1051 | 6982 | 6982 | U823 | 6919 | U823 | 6652Z | G561  | G561 | A503 | A503 |  |
| A1393 | U1323 | A1253  | C1186  | A | C982 | U823 | C1052 | 6982 | C982 | 6982 | U1052 | 6983 | 6983 | U824 | 6919 | U824 | 6652Z | G562  | G562 | U504 | U504 |  |
| U1394 | G1324 | G1254  | G1187  | C | U983 | U824 | C     | 6983 | U983 | 6983 | C     | 6984 | 6984 | U825 | 6919 | U825 | 6652Z | G563  | G563 |      |      |  |
| U1395 | U1325 | U1255  | G1188  | G | U984 | U825 | U     | 6984 | U984 | 6984 | U     | 6985 | 6985 | U826 | 6919 | U826 | 6652Z | G564  | G564 |      |      |  |
| A1396 | C1326 | G1256  | U1188  | G | 6985 | U826 | G     | 6985 | 6985 | 6985 | G     | 6986 | 6986 | U827 | 6919 | U827 | 6652Z | G565  | G565 |      |      |  |
| U1397 | U1327 | C1257  | A1189  | G | C986 | U827 | A     | 6986 | C986 | 6986 | A     | 6987 | 6987 | U828 | 6919 | U828 | 6652Z | G566  | G566 |      |      |  |
|       |       | U1258  | G1190  | A | U987 | U828 | U     | 6987 | U987 | 6987 | U     | 6988 | 6988 | U829 | 6919 | U829 | 6652Z | G567  | G567 |      |      |  |
|       |       | G1259  | G1191  | G | U988 | U829 | G     | 6988 | U988 | 6988 | G     | 6989 | 6989 | U830 | 6919 | U830 | 6652Z | G568  | G568 |      |      |  |
|       |       |        |        |   |      |      |       |      |      |      |       |      |      |      |      |      |       |       |      |      |      |  |



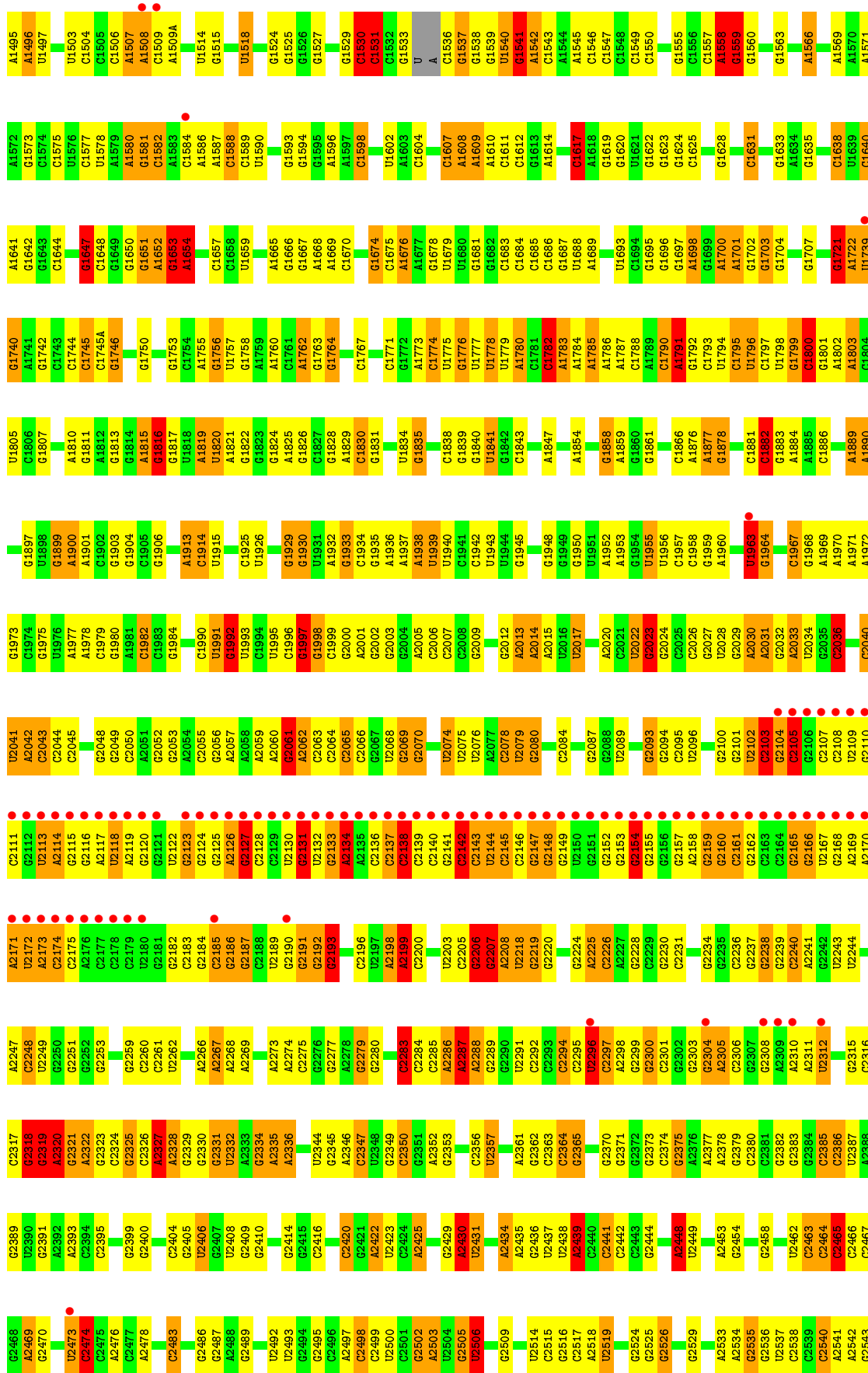


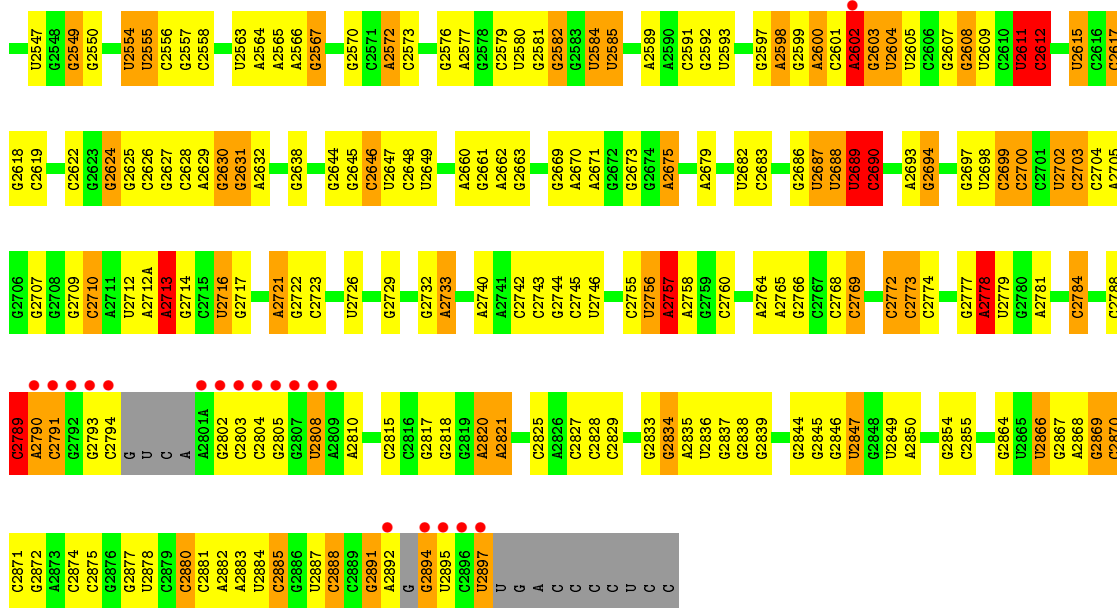


• Molecule 23: 23S Ribosomal RNA

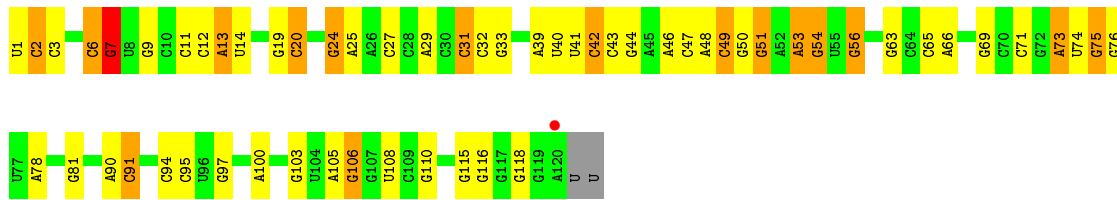


|       |       |        |       |   |       |      |      |       |      |      |      |
|-------|-------|--------|-------|---|-------|------|------|-------|------|------|------|
| C1407 | A1331 | G1264  | C1185 | G | C986  | G770 | C697 | G6647 | C580 | G506 | A443 |
| C1408 | G1332 | A1265  | G1186 | A | G987  | G771 | C696 | G6647 | C581 | A507 | A444 |
| G1416 | G1338 | U1267  | G1187 | C | C988  | C772 | A699 | A652B | G582 | G508 | C445 |
| C1417 | A1268 | U1188  | U1113 | C | U839  | U773 | G915 | G652C | G583 | C509 | C446 |
| G1418 | A1269 | A1189  | G1115 | A | C840  | A774 | G701 | C652D | C584 | G512 | G447 |
| A1419 | U1340 | A1190  | A917  | G | C841  | G775 | G704 | G652E | G585 | G512 | U448 |
| U1420 | U1341 | G1191  | A918  | A | A918  | G776 | A705 | G     | A586 | C517 | A449 |
| G1421 | G1343 | G1192  | G919  | G | G994  | A777 | A706 | G     | C587 | G518 | G450 |
| A1427 | A1344 | C1201  | U922  | G | C995  | G778 | A707 | C     | U588 | G519 | C451 |
| C1428 | U1273 | G1125  | U923  | U | A996  | U779 | G707 | C     | C589 | U520 | G452 |
| G1429 | A1274 | G1126  | C923  | U | G848  | G780 | C708 | C     | A590 | G520 | C453 |
| C1430 | A1275 | U1126  | A849  | A | A849  | A781 | U709 | C     | C591 | G521 | C454 |
| U1431 | G1277 | A1127  | G855  | G | U999  | A782 | U709 | A     | C592 | G521 | A454 |
| C1351 | C1278 | A1128  | G856  | C | A1000 | A783 | C720 | C     | G593 | U525 | C455 |
| U1352 | A1278 | A1129  | C957  | C | G1001 | A784 | C721 | G     | G596 | A526 | C456 |
| G1355 | A1284 | U1130  | U858  | U | G1002 | A785 | A722 | G     | C527 | C527 | A457 |
| G1358 | U1287 | C1135  | G932  | A | G1003 | C786 | G723 | G     | U528 | G458 | C461 |
| U1359 | U1288 | G1136  | A933  | A | U1004 | U787 | G726 | C     | G530 | U459 | C462 |
| C1360 | A1289 | U1137  | C934  | G | C1005 | A788 | A726 | C     | C531 | C461 | C462 |
| A1361 | C1290 | G1138  | C935  | A | C1006 | A789 | A727 | C     | C532 | C461 | C462 |
| G1362 | A1291 | A1139  | U937  | G | C1008 | C790 | G728 | C652T | A533 | G463 | C463 |
| C1363 | U1292 | G1140  | U937  | G | A1009 | C791 | C730 | G652U | G602 | U534 | U464 |
| G1364 | C1293 | U1141  | G948  | C | A1010 | G792 | C731 | G     | G604 | C535 | G465 |
| A1365 | U1294 | U1142  | A941  | A | A865  | C795 | C732 | G     | C605 | A536 | A466 |
| A1366 | C1295 | A1142A | G942  | C | C867  | C796 | G733 | G656  | U506 | C537 | G467 |
| A1367 | C1296 | A1143  | U943  | C | A870  | C797 | A734 | U657  | U607 | G538 | G468 |
| C1297 | U1225 | G1144  | G944  | A | A870  | A735 | A736 | C658  | A608 | G539 | G469 |
| C1298 | A1226 | G1149  | A945  | U | G873  | U803 | C736 | C659  | C540 | C540 | A470 |
| U1299 | G1222 | C1150  | G946  | C | G873  | G737 | G738 | G660  | G545 | A471 | A472 |
| U1300 | G1222 | C1150  | G947  | U | A878  | U804 | C739 | G662  | C546 | G473 | G473 |
| A1301 | U1230 | C1151  | G948  | U | G879  | A804 | U740 | G663  | A    | G474 | G474 |
| A1302 | G1231 | C1153  | G952  | U | G880  | G805 | G741 | C664  | A548 | U475 | U475 |
| A1303 | G1231 | C1154  | G956  | A | U1022 | G809 | G742 | G665  | G549 | G476 | G476 |
| C1304 | G1238 | A1155  | A957  | A | G1024 | U810 | C742 | G666  | U555 | A477 | A477 |
| C1305 | G1239 | U1159  | U958  | A | G1025 | U811 | G745 | G667  | G619 | A478 | A478 |
| C1306 | U1240 | G1160  | A959  | G | U1026 | C812 | A746 | G668  | G620 | A479 | A479 |
| A1307 | A1241 | G1161  | A960  | A | A1027 | U813 | U747 | G669  | A621 | G480 | A480 |
| G1308 | U1242 | G1162  | A961  | U | A1028 | C814 | C747 | A670  | G222 | G481 | G481 |
| C1310 | G1243 | G1163  | C962  | G | A1029 | C817 | A750 | C671  | G623 | C482 | A483 |
| U1311 | A1246 | U1164  | G963  | C | G1030 | G818 | A752 | C672  | C624 | C483 | C483 |
| U1312 | A1247 | U1165  | C964  | C | G1031 | A818 | C753 | C673  | G627 | U562 | U562 |
| U1313 | G1248 | C1166  | C965  | U | A1032 | A819 | C754 | G674  | G627 | C563 | C485 |
| C1314 | G1249 | U1167  | G966  | A | U1033 | A820 | C755 | A675  | A627 | C564 | C486 |
| C1315 | U1249 | U1167  | G966  | A | G1034 | A821 | C755 | A676  | A631 | C565 | C487 |
| C1316 | U1250 | U1168  | C971  | U | G1037 | U822 | C756 | A676  | A631 | C565 | C487 |
| C1318 | A1253 | G1170  | G972  | A | C1038 | G823 | U757 | G680  | C634 | U566 | G488 |
| A1321 | A1254 | G1171  | A973  | U | G1039 | A824 | C758 | G681  | G635 | A567 | G489 |
| A1322 | U1255 | A      | A901  | U | C1040 | C825 | G759 | G684  | G636 | G491 | G491 |
| A1323 | G1256 | A      | A901  | U | U1041 | U826 | G760 | G684  | A637 | U569 | U569 |
| G1324 | C1257 | G      | C975  | C | C1042 | U827 | A762 | G685  | A571 | G493 | G493 |
| G1325 | U1258 | A      | G977  | C | G1043 | A829 | U762 | C686  | A572 | A572 | G494 |
| G1327 | G1259 | C1178  | G978  | U | G     | G830 | A764 | C687  | G573 | G573 | G573 |
| C1328 | U1260 | C1179  | U905  | U | A     | G831 | G641 | U688  | C641 | C574 | G574 |
| U1329 | G1261 | C1180  | A890  | G | A     | G832 | G642 | G     | A575 | A575 | A575 |
| C1330 | U1263 | U1181  | A891  | G | A     | G833 | G643 | G     | U576 | U576 | A576 |
|       |       | A1182  | A909  | U | A     | C834 | G644 | C692  | G577 | G577 | U577 |
|       |       |        | A910  | U | C     | C835 | C645 | C693  | A646 | A646 | A646 |
|       |       |        | A911  | C |       | A835 | G646 | C693  | A646 | A646 | A646 |

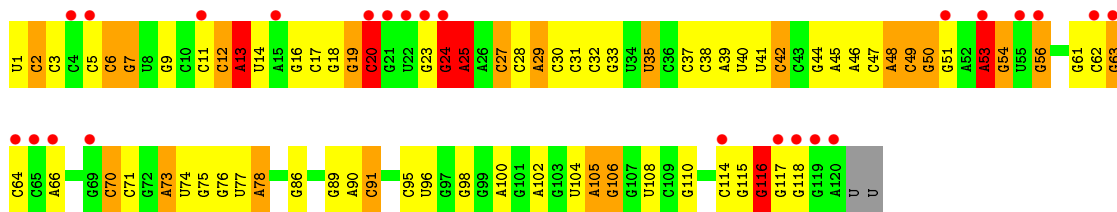




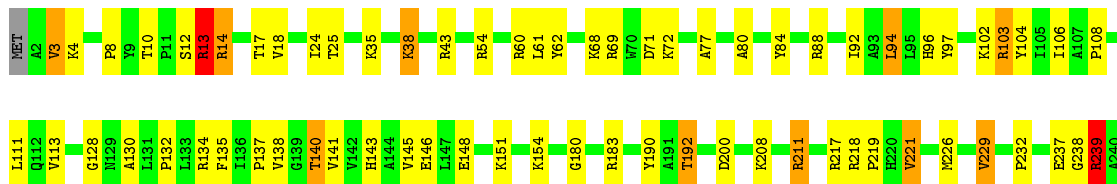
• Molecule 24: 5S Ribosomal RNA

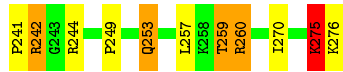


• Molecule 24: 5S Ribosomal RNA

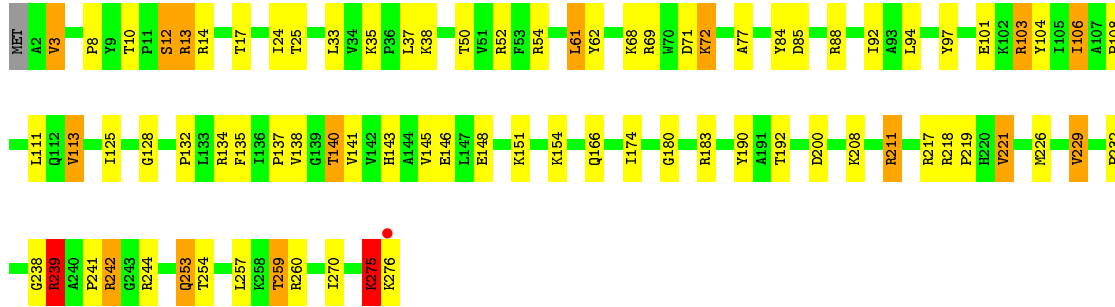


• Molecule 25: 50S Ribosomal Protein L2

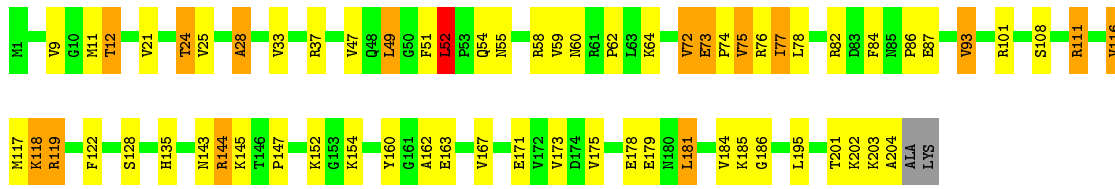




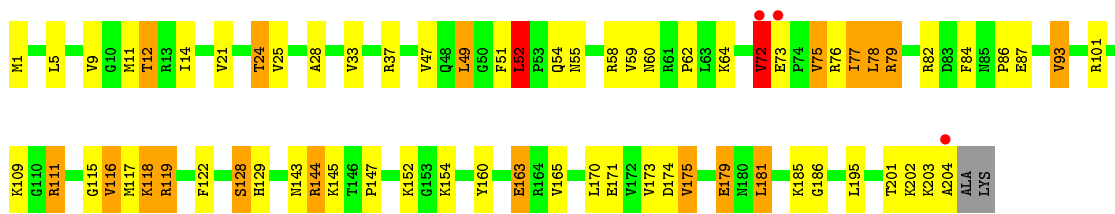
• Molecule 25: 50S Ribosomal Protein L2



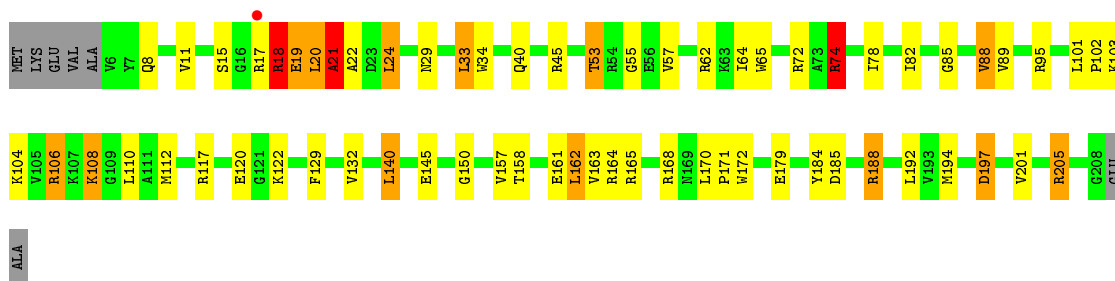
• Molecule 26: 50S Ribosomal Protein L3



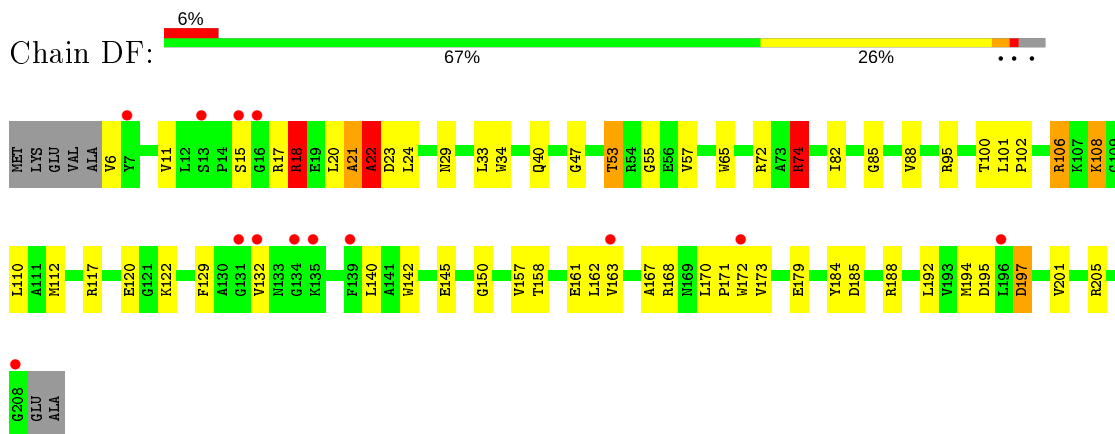
• Molecule 26: 50S Ribosomal Protein L3



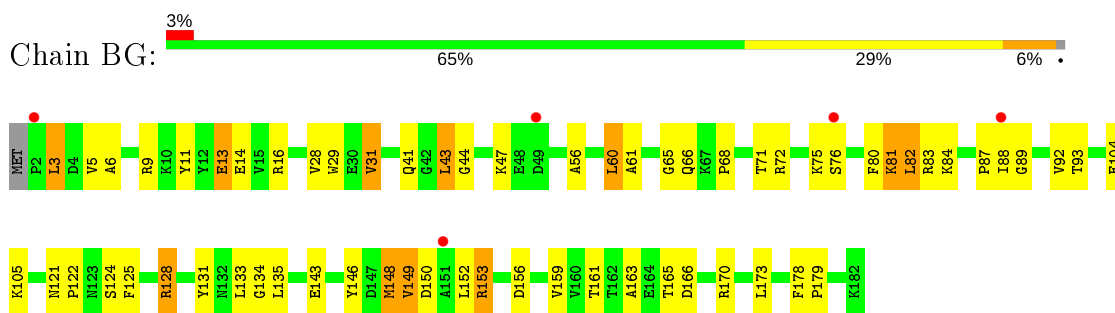
• Molecule 27: 50S Ribosomal Protein L4



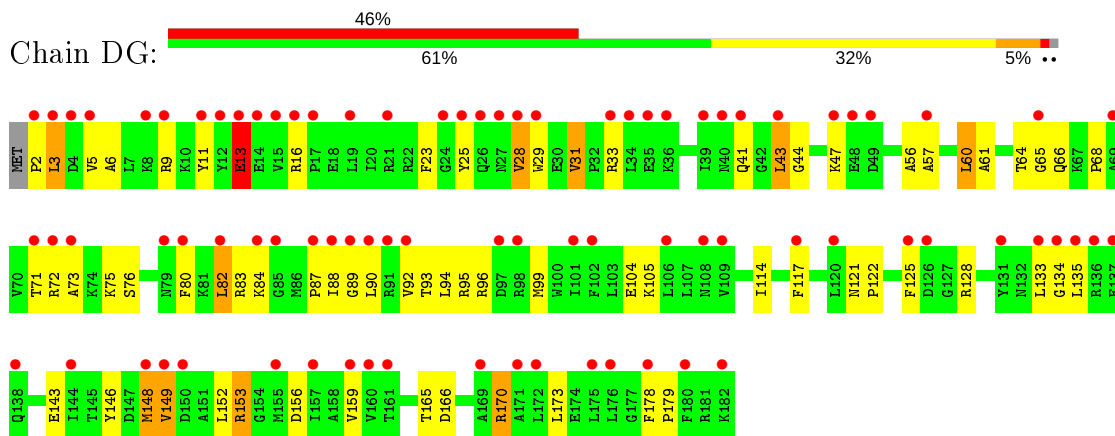
• Molecule 27: 50S Ribosomal Protein L4



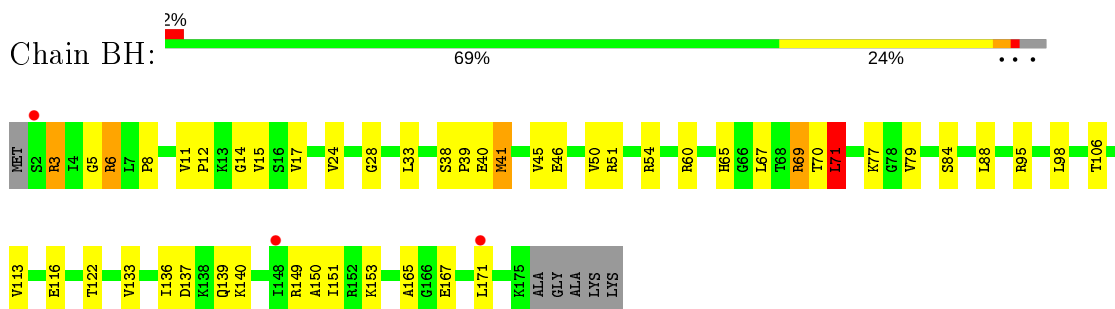
• Molecule 28: 50S Ribosomal Protein L5



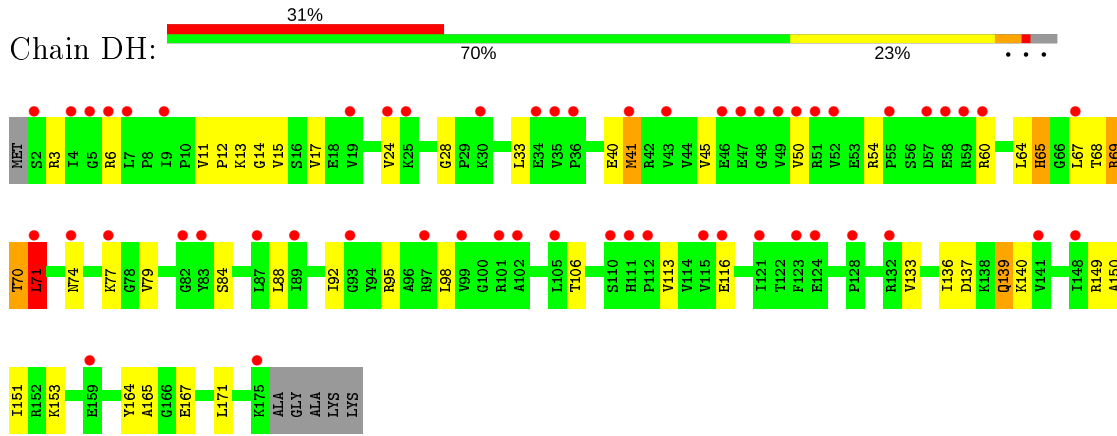
• Molecule 28: 50S Ribosomal Protein L5



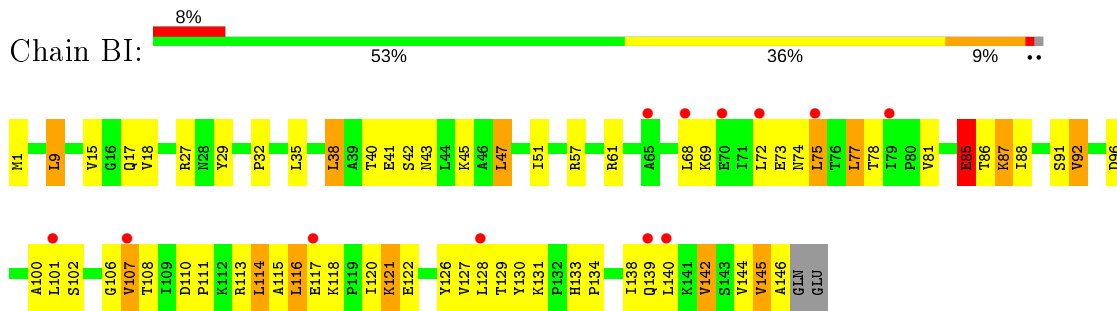
• Molecule 29: 50S Ribosomal Protein L6



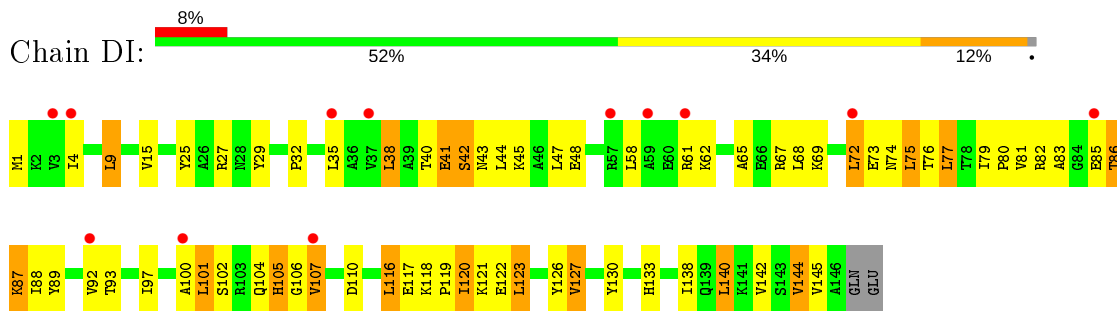
• Molecule 29: 50S Ribosomal Protein L6



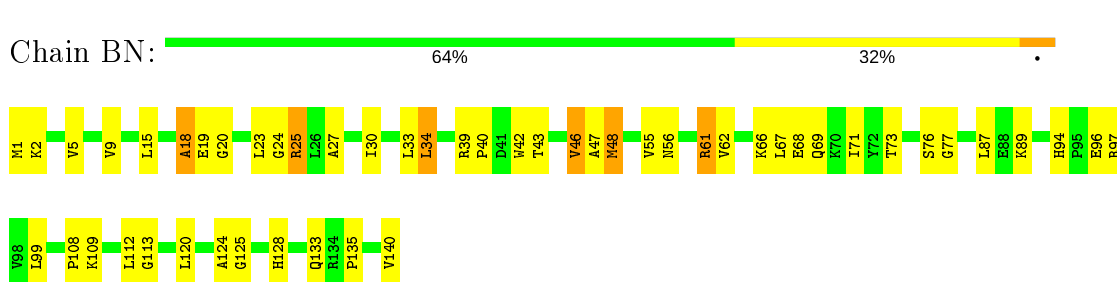
• Molecule 30: 50S Ribosomal Protein L9



• Molecule 30: 50S Ribosomal Protein L9



• Molecule 31: 50S Ribosomal Protein L13

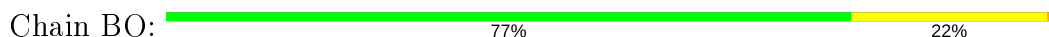


• Molecule 31: 50S Ribosomal Protein L13

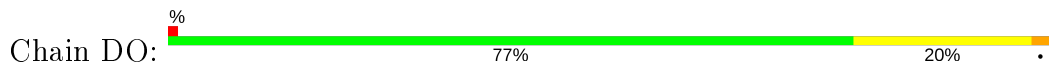




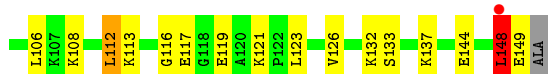
• Molecule 32: 50S Ribosomal Protein L14



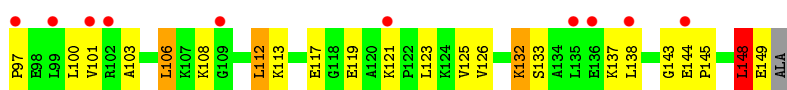
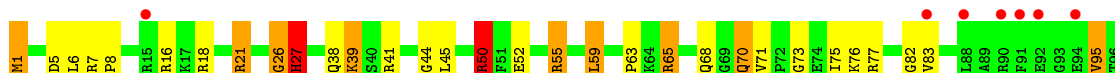
• Molecule 32: 50S Ribosomal Protein L14



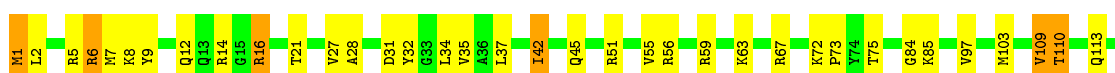
• Molecule 33: 50S Ribosomal Protein L15



• Molecule 33: 50S Ribosomal Protein L15



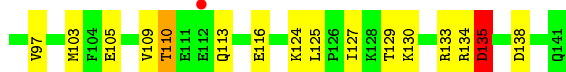
• Molecule 34: 50S Ribosomal Protein L16







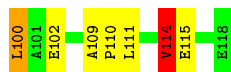
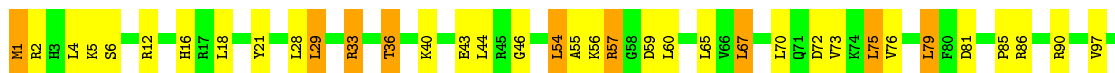
- Molecule 34: 50S Ribosomal Protein L16



- Molecule 35: 50S Ribosomal Protein L17



- Molecule 35: 50S Ribosomal Protein L17

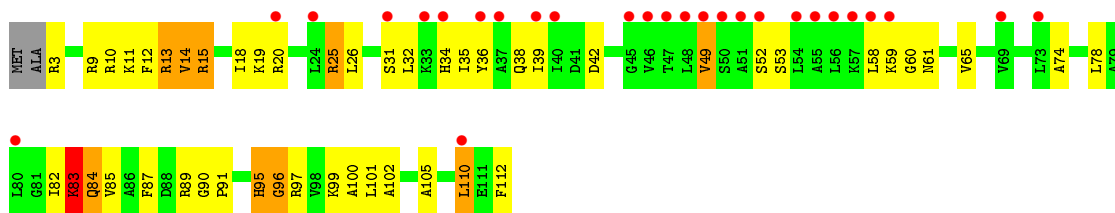


- Molecule 36: 50S Ribosomal Protein L18

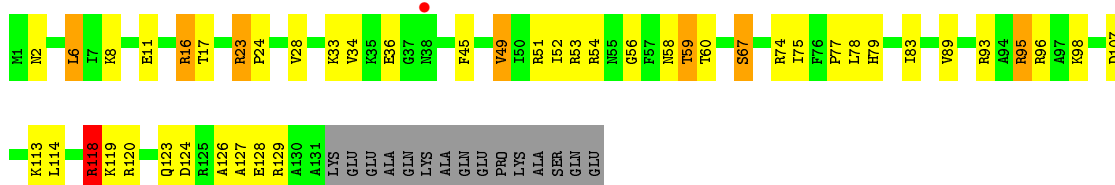


- Molecule 36: 50S Ribosomal Protein L18

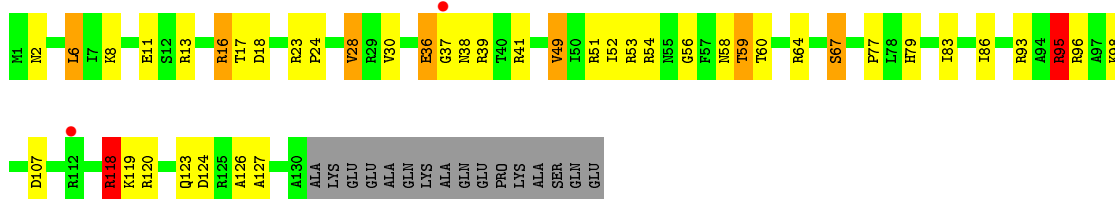




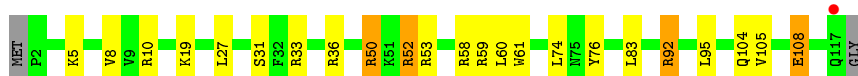
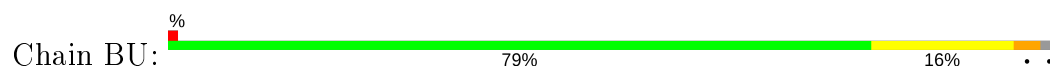
- Molecule 37: 50S Ribosomal Protein L19



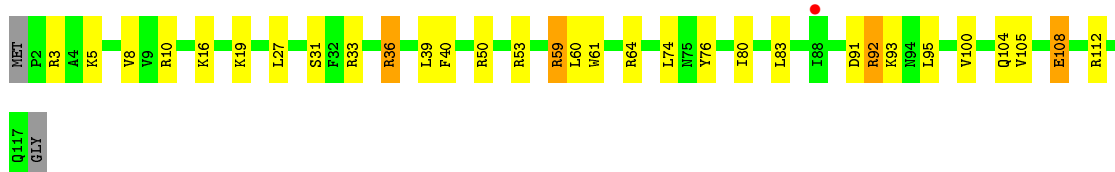
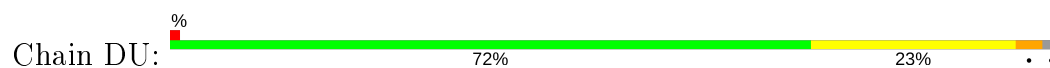
- Molecule 37: 50S Ribosomal Protein L19



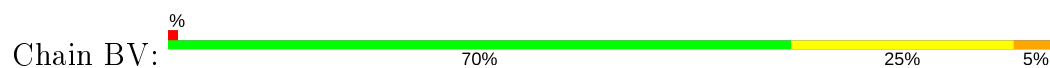
- Molecule 38: 50S Ribosomal Protein L20

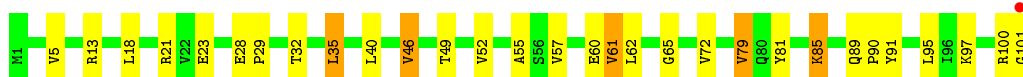


- Molecule 38: 50S Ribosomal Protein L20

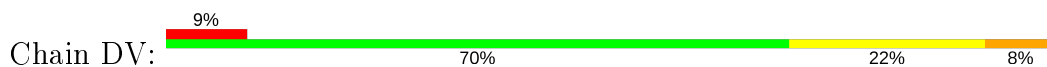


- Molecule 39: 50S Ribosomal Protein L21





- Molecule 39: 50S Ribosomal Protein L21



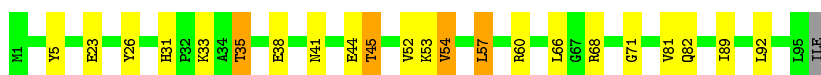
- Molecule 40: 50S Ribosomal Protein L22



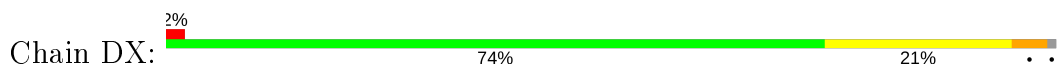
- Molecule 40: 50S Ribosomal Protein L22



- Molecule 41: 50S Ribosomal Protein L23



- Molecule 41: 50S Ribosomal Protein L23



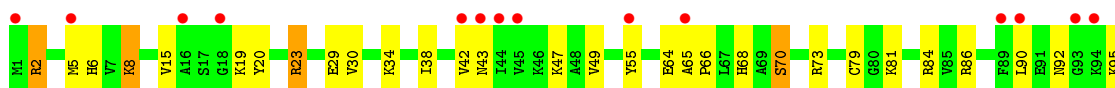
- Molecule 42: 50S Ribosomal Protein L24

Chain BY: 



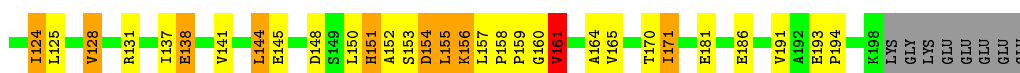
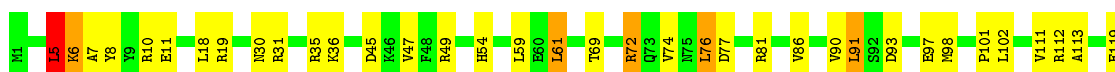
• Molecule 42: 50S Ribosomal Protein L24

Chain DY: 



• Molecule 43: 50S Ribosomal Protein L25

Chain BZ: 



• Molecule 43: 50S Ribosomal Protein L25

Chain DZ: 



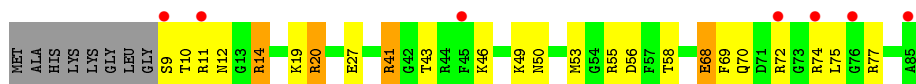
• Molecule 44: 50S Ribosomal Protein L27

Chain B0: 

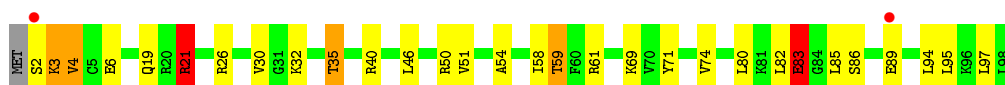


• Molecule 44: 50S Ribosomal Protein L27

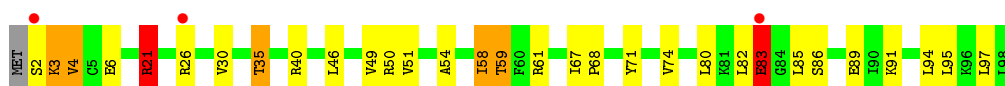
Chain D0: 



- Molecule 45: 50S Ribosomal Protein L28



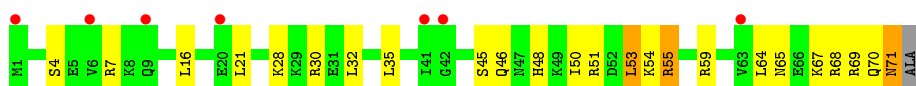
- Molecule 45: 50S Ribosomal Protein L28



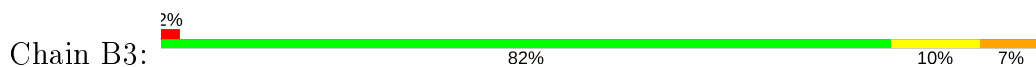
- Molecule 46: 50S Ribosomal Protein L29



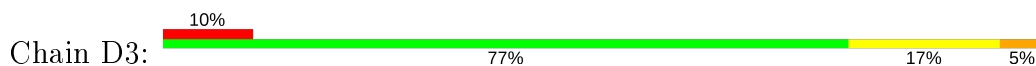
- Molecule 46: 50S Ribosomal Protein L29



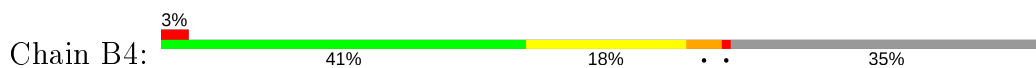
- Molecule 47: 50S Ribosomal Protein L30

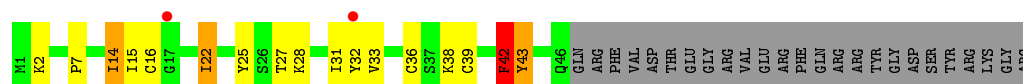


- Molecule 47: 50S Ribosomal Protein L30

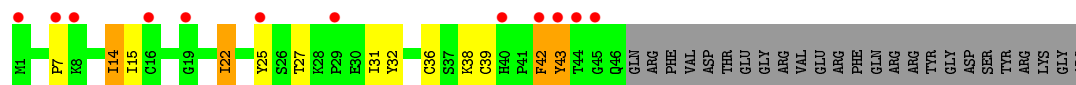


- Molecule 48: 50S Ribosomal Protein L31

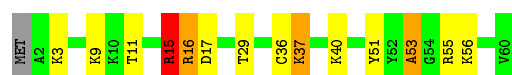
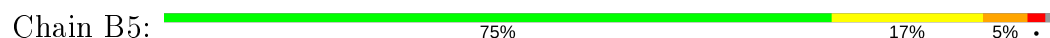




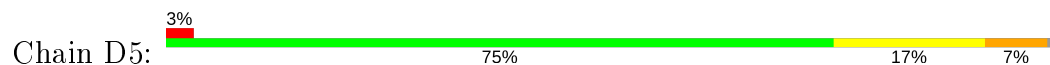
- Molecule 48: 50S Ribosomal Protein L31



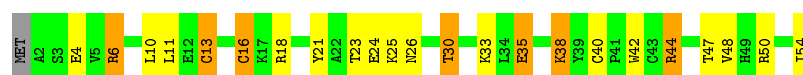
- Molecule 49: 50S Ribosomal Protein L32



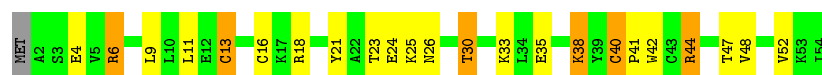
- Molecule 49: 50S Ribosomal Protein L32



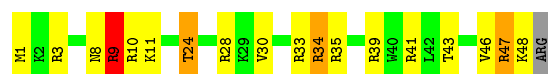
- Molecule 50: 50S Ribosomal Protein L33



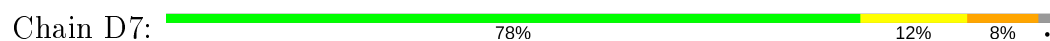
- Molecule 50: 50S Ribosomal Protein L33



- Molecule 51: 50S Ribosomal Protein L34

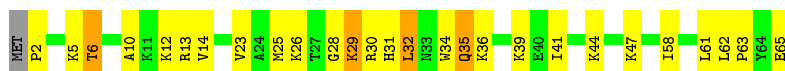


- Molecule 51: 50S Ribosomal Protein L34

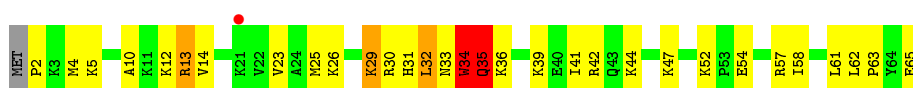




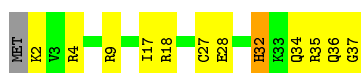
- Molecule 52: 50S Ribosomal Protein L35



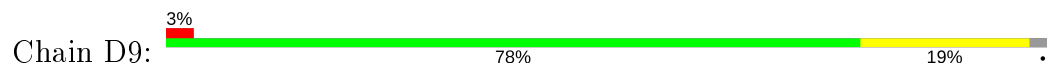
- Molecule 52: 50S Ribosomal Protein L35



- Molecule 53: 50S ribosomal protein L36



- Molecule 53: 50S ribosomal protein L36



## 4 Data and refinement statistics

| Property  | Value   | Source           |
|---|---|------------------|
| Space group   | P 21 21 21  | Depositor        |
| Cell constants<br>a, b, c, $\alpha$ , $\beta$ , $\gamma$                | 209.63Å 449.30Å 620.90Å<br>90.00° 90.00° 90.00°             | Depositor        |
| Resolution (Å)  | 49.71 – 2.70<br>49.71 – 2.70                                | Depositor<br>EDS |
| % Data completeness<br>(in resolution range)                            | 98.4 (49.71-2.70)<br>98.4 (49.71-2.70)                      | Depositor<br>EDS |
| $R_{merge}$   | 0.17  | Depositor        |
| $R_{sym}$   | (Not available)   | Depositor        |
| $\langle I/\sigma(I) \rangle$ <sup>1</sup>                              | 1.20 (at 2.69Å)   | Xtrriage         |
| Refinement program  | PHENIX 1.7.2_869  | Depositor        |
| R, $R_{free}$   | 0.217 , 0.254<br>0.213 , 0.250                              | Depositor<br>DCC |
| $R_{free}$ test set   | 78243 reflections (5.02%)                                   | wwPDB-VP         |
| Wilson B-factor (Å <sup>2</sup> )                                       | 55.6  | Xtrriage         |
| Anisotropy  | 0.155   | Xtrriage         |
| Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> ) | 0.28 , 46.3   | EDS              |
| L-test for twinning <sup>2</sup>  | $\langle  L  \rangle = 0.45$ , $\langle L^2 \rangle = 0.27$ | Xtrriage         |
| Estimated twinning fraction   | No twinning to report.                                      | Xtrriage         |
| $F_o, F_c$ correlation  | 0.93  | EDS              |
| Total number of atoms   | 287173  | wwPDB-VP         |
| Average B, all atoms (Å <sup>2</sup> )                                  | 64.0  | wwPDB-VP         |

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.42% 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  $\langle |L| \rangle$ ,  $\langle L^2 \rangle$  for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.



## 5 Model quality i

### 5.1 Standard geometry i

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

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

| Mol | Chain | Bond lengths |                 | Bond angles |                  |
|-----|-------|--------------|-----------------|-------------|------------------|
|     |       | RMSZ         | $\# Z  > 5$     | RMSZ        | $\# Z  > 5$      |
| 1   | AA    | 1.00         | 41/35935 (0.1%) | 1.48        | 589/56084 (1.1%) |
| 1   | CA    | 0.97         | 39/35884 (0.1%) | 1.44        | 557/56006 (1.0%) |
| 2   | AB    | 0.57         | 0/1811          | 0.74        | 0/2452           |
| 2   | CB    | 0.62         | 0/1852          | 0.75        | 0/2510           |
| 3   | AC    | 0.63         | 1/1474 (0.1%)   | 0.84        | 1/2003 (0.0%)    |
| 3   | CC    | 0.67         | 0/1477          | 0.90        | 4/2006 (0.2%)    |
| 4   | AD    | 0.73         | 2/1550 (0.1%)   | 0.87        | 1/2106 (0.0%)    |
| 4   | CD    | 0.68         | 3/1567 (0.2%)   | 0.85        | 1/2125 (0.0%)    |
| 5   | AE    | 0.60         | 0/1121          | 0.78        | 0/1517           |
| 5   | CE    | 0.64         | 0/1122          | 0.81        | 0/1518           |
| 6   | AF    | 0.61         | 0/794           | 0.79        | 0/1082           |
| 6   | CF    | 0.58         | 0/789           | 0.78        | 0/1074           |
| 7   | AG    | 0.59         | 0/1186          | 0.74        | 0/1603           |
| 7   | CG    | 0.63         | 0/1183          | 0.74        | 0/1599           |
| 8   | AH    | 0.52         | 0/1065          | 0.71        | 0/1445           |
| 8   | CH    | 0.53         | 0/1069          | 0.69        | 0/1450           |
| 9   | AI    | 0.60         | 0/867           | 0.85        | 0/1180           |
| 9   | CI    | 0.70         | 0/864           | 0.84        | 0/1177           |
| 10  | AJ    | 0.65         | 0/672           | 0.83        | 0/919            |
| 10  | CJ    | 0.73         | 0/670           | 0.86        | 0/917            |
| 11  | AK    | 0.59         | 0/843           | 0.74        | 0/1144           |
| 11  | CK    | 0.60         | 0/843           | 0.75        | 0/1144           |
| 12  | AL    | 0.67         | 0/925           | 0.83        | 0/1251           |
| 12  | CL    | 0.65         | 0/921           | 0.87        | 2/1247 (0.2%)    |
| 13  | AM    | 0.66         | 0/811           | 0.91        | 0/1103           |
| 13  | CM    | 0.72         | 0/794           | 0.92        | 0/1081           |
| 14  | AN    | 0.62         | 0/487           | 0.83        | 0/649            |
| 14  | CN    | 0.68         | 0/483           | 0.91        | 1/645 (0.2%)     |
| 15  | AO    | 0.59         | 0/735           | 0.84        | 2/981 (0.2%)     |
| 15  | CO    | 0.57         | 0/735           | 0.79        | 1/981 (0.1%)     |
| 16  | AP    | 0.60         | 0/667           | 0.83        | 0/905            |
| 16  | CP    | 0.57         | 0/677           | 0.83        | 0/917            |

| Mol | Chain | Bond lengths |                  | Bond angles |                    |
|-----|-------|--------------|------------------|-------------|--------------------|
|     |       | RMSZ         | # Z  >5          | RMSZ        | # Z  >5            |
| 17  | AQ    | 0.59         | 0/836            | 0.76        | 0/1117             |
| 17  | CQ    | 0.62         | 0/832            | 0.77        | 0/1113             |
| 18  | AR    | 0.51         | 0/519            | 0.82        | 1/699 (0.1%)       |
| 18  | CR    | 0.52         | 0/519            | 0.81        | 0/699              |
| 19  | AS    | 0.58         | 0/574            | 0.85        | 1/781 (0.1%)       |
| 19  | CS    | 0.64         | 0/563            | 0.82        | 0/766              |
| 20  | AT    | 0.59         | 0/701            | 0.86        | 2/930 (0.2%)       |
| 20  | CT    | 0.60         | 0/776            | 0.83        | 2/1026 (0.2%)      |
| 21  | AU    | 0.57         | 0/203            | 0.73        | 0/266              |
| 21  | CU    | 0.71         | 0/184            | 0.85        | 0/244              |
| 22  | AY    | 0.67         | 0/766            | 0.87        | 0/1034             |
| 22  | CY    | 0.67         | 0/751            | 0.76        | 0/1017             |
| 23  | BA    | 1.46         | 435/68200 (0.6%) | 1.72        | 2119/106454 (2.0%) |
| 23  | DA    | 1.17         | 125/67486 (0.2%) | 1.62        | 1697/105338 (1.6%) |
| 24  | BB    | 1.09         | 2/2878 (0.1%)    | 1.48        | 44/4490 (1.0%)     |
| 24  | DB    | 1.27         | 9/2878 (0.3%)    | 1.51        | 51/4490 (1.1%)     |
| 25  | BD    | 0.90         | 1/2186 (0.0%)    | 1.02        | 8/2944 (0.3%)      |
| 25  | DD    | 0.79         | 0/2186           | 0.96        | 2/2944 (0.1%)      |
| 26  | BE    | 0.89         | 0/1588           | 0.98        | 2/2145 (0.1%)      |
| 26  | DE    | 0.79         | 1/1588 (0.1%)    | 0.96        | 1/2145 (0.0%)      |
| 27  | BF    | 0.84         | 1/1612 (0.1%)    | 0.94        | 5/2184 (0.2%)      |
| 27  | DF    | 0.71         | 0/1607           | 0.91        | 4/2178 (0.2%)      |
| 28  | BG    | 0.55         | 0/1393           | 0.78        | 0/1892             |
| 28  | DG    | 0.69         | 0/1393           | 0.80        | 0/1892             |
| 29  | BH    | 0.68         | 0/1343           | 0.80        | 0/1820             |
| 29  | DH    | 0.63         | 0/1343           | 0.75        | 0/1820             |
| 30  | BI    | 0.63         | 0/1058           | 0.84        | 0/1449             |
| 30  | DI    | 0.64         | 0/1058           | 0.90        | 1/1449 (0.1%)      |
| 31  | BN    | 0.84         | 0/1139           | 0.96        | 4/1538 (0.3%)      |
| 31  | DN    | 0.71         | 0/1139           | 0.89        | 1/1538 (0.1%)      |
| 32  | BO    | 0.86         | 0/933            | 0.92        | 2/1257 (0.2%)      |
| 32  | DO    | 0.77         | 0/933            | 0.91        | 1/1257 (0.1%)      |
| 33  | BP    | 0.85         | 0/1148           | 1.02        | 7/1529 (0.5%)      |
| 33  | DP    | 0.72         | 0/1148           | 0.97        | 5/1529 (0.3%)      |
| 34  | BQ    | 0.85         | 0/1143           | 0.89        | 2/1527 (0.1%)      |
| 34  | DQ    | 0.76         | 0/1143           | 0.90        | 2/1527 (0.1%)      |
| 35  | BR    | 0.85         | 0/982            | 0.98        | 2/1312 (0.2%)      |
| 35  | DR    | 0.71         | 0/982            | 0.92        | 1/1312 (0.1%)      |
| 36  | BS    | 0.71         | 0/875            | 0.91        | 1/1168 (0.1%)      |
| 36  | DS    | 0.78         | 0/883            | 0.89        | 1/1176 (0.1%)      |
| 37  | BT    | 0.79         | 0/1077           | 0.98        | 2/1444 (0.1%)      |
| 37  | DT    | 0.73         | 0/1072           | 0.97        | 4/1437 (0.3%)      |
| 38  | BU    | 0.89         | 0/977            | 0.95        | 4/1301 (0.3%)      |

| Mol | Chain | Bond lengths |                   | Bond angles |                    |
|-----|-------|--------------|-------------------|-------------|--------------------|
|     |       | RMSZ         | # Z  >5           | RMSZ        | # Z  >5            |
| 38  | DU    | 0.78         | 0/977             | 0.83        | 0/1301             |
| 39  | BV    | 0.85         | 0/782             | 0.92        | 0/1049             |
| 39  | DV    | 0.77         | 0/786             | 0.89        | 0/1053             |
| 40  | BW    | 0.97         | 2/891 (0.2%)      | 0.97        | 3/1197 (0.3%)      |
| 40  | DW    | 0.85         | 0/887             | 0.91        | 1/1192 (0.1%)      |
| 41  | BX    | 0.88         | 0/756             | 0.90        | 1/1016 (0.1%)      |
| 41  | DX    | 0.78         | 0/746             | 0.88        | 1/1005 (0.1%)      |
| 42  | BY    | 0.76         | 1/798 (0.1%)      | 1.04        | 4/1073 (0.4%)      |
| 42  | DY    | 0.73         | 0/794             | 1.03        | 3/1067 (0.3%)      |
| 43  | BZ    | 0.67         | 0/1555            | 0.85        | 4/2118 (0.2%)      |
| 43  | DZ    | 0.71         | 0/1561            | 0.84        | 3/2131 (0.1%)      |
| 44  | B0    | 0.78         | 0/602             | 0.94        | 3/804 (0.4%)       |
| 44  | D0    | 0.76         | 0/615             | 0.90        | 0/820              |
| 45  | B1    | 0.85         | 0/752             | 0.91        | 2/1003 (0.2%)      |
| 45  | D1    | 0.76         | 0/752             | 0.92        | 2/1003 (0.2%)      |
| 46  | B2    | 0.77         | 0/590             | 0.80        | 0/781              |
| 46  | D2    | 0.73         | 0/586             | 0.78        | 0/779              |
| 47  | B3    | 0.76         | 0/463             | 0.77        | 0/623              |
| 47  | D3    | 0.74         | 0/468             | 0.75        | 0/628              |
| 48  | B4    | 0.65         | 1/358 (0.3%)      | 0.82        | 1/487 (0.2%)       |
| 48  | D4    | 0.73         | 0/358             | 0.80        | 0/487              |
| 49  | B5    | 0.93         | 0/469             | 1.07        | 2/634 (0.3%)       |
| 49  | D5    | 0.85         | 1/465 (0.2%)      | 0.99        | 1/630 (0.2%)       |
| 50  | B6    | 0.89         | 1/456 (0.2%)      | 0.90        | 0/609              |
| 50  | D6    | 0.81         | 0/444             | 0.86        | 0/595              |
| 51  | B7    | 1.02         | 0/426             | 1.17        | 5/561 (0.9%)       |
| 51  | D7    | 0.81         | 0/410             | 0.99        | 1/543 (0.2%)       |
| 52  | B8    | 0.92         | 0/516             | 0.98        | 1/679 (0.1%)       |
| 52  | D8    | 0.82         | 0/516             | 1.06        | 5/679 (0.7%)       |
| 53  | B9    | 0.98         | 0/300             | 1.11        | 3/395 (0.8%)       |
| 53  | D9    | 0.77         | 0/300             | 1.02        | 0/395              |
| All | All   | 1.09         | 666/304847 (0.2%) | 1.44        | 5184/456336 (1.1%) |

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.

| Mol | Chain | #Chirality outliers | #Planarity outliers |
|-----|-------|---------------------|---------------------|
| 2   | AB    | 0                   | 1                   |
| 2   | CB    | 0                   | 2                   |
| 3   | AC    | 0                   | 2                   |

*Continued on next page...*

*Continued from previous page...*

| <b>Mol</b> | <b>Chain</b> | <b>#Chirality outliers</b> | <b>#Planarity outliers</b> |
|------------|--------------|----------------------------|----------------------------|
| 3          | CC           | 0                          | 3                          |
| 4          | AD           | 0                          | 1                          |
| 4          | CD           | 0                          | 1                          |
| 9          | AI           | 0                          | 3                          |
| 9          | CI           | 0                          | 1                          |
| 10         | AJ           | 0                          | 3                          |
| 10         | CJ           | 0                          | 2                          |
| 12         | CL           | 0                          | 2                          |
| 13         | AM           | 0                          | 2                          |
| 13         | CM           | 0                          | 1                          |
| 14         | CN           | 0                          | 2                          |
| 18         | AR           | 0                          | 1                          |
| 18         | CR           | 0                          | 1                          |
| 23         | BA           | 0                          | 4                          |
| 23         | DA           | 0                          | 1                          |
| 25         | BD           | 0                          | 1                          |
| 25         | DD           | 0                          | 1                          |
| 26         | BE           | 0                          | 1                          |
| 26         | DE           | 0                          | 1                          |
| 27         | BF           | 0                          | 3                          |
| 27         | DF           | 0                          | 2                          |
| 28         | BG           | 0                          | 1                          |
| 28         | DG           | 0                          | 1                          |
| 29         | BH           | 0                          | 1                          |
| 29         | DH           | 0                          | 1                          |
| 30         | BI           | 0                          | 1                          |
| 31         | BN           | 0                          | 1                          |
| 31         | DN           | 0                          | 1                          |
| 33         | BP           | 0                          | 2                          |
| 33         | DP           | 0                          | 2                          |
| 36         | BS           | 0                          | 1                          |
| 36         | DS           | 0                          | 1                          |
| 37         | BT           | 0                          | 1                          |
| 37         | DT           | 0                          | 1                          |
| 41         | BX           | 0                          | 1                          |
| 41         | DX           | 0                          | 1                          |
| 43         | BZ           | 0                          | 1                          |
| 43         | DZ           | 0                          | 1                          |
| 45         | B1           | 0                          | 1                          |
| 45         | D1           | 0                          | 1                          |
| 48         | B4           | 0                          | 1                          |
| 48         | D4           | 0                          | 1                          |

*Continued on next page...*

Continued from previous page...

| Mol | Chain | #Chirality outliers | #Planarity outliers |
|-----|-------|---------------------|---------------------|
| 49  | B5    | 0                   | 1                   |
| 49  | D5    | 0                   | 1                   |
| 52  | D8    | 0                   | 1                   |
| All | All   | 0                   | 68                  |

The worst 5 of 666 bond length outliers are listed below:

| Mol | Chain | Res     | Type | Atoms | Z      | Observed(Å) | Ideal(Å) |
|-----|-------|---------|------|-------|--------|-------------|----------|
| 1   | AA    | 1459    | C    | N1-C2 | 18.78  | 1.58        | 1.40     |
| 1   | CA    | 1459    | C    | N1-C2 | 17.97  | 1.58        | 1.40     |
| 1   | CA    | 1442(A) | G    | N9-C4 | 15.13  | 1.50        | 1.38     |
| 23  | BA    | 1021    | A    | N9-C4 | -14.91 | 1.28        | 1.37     |
| 23  | BA    | 2287    | A    | N9-C4 | -14.79 | 1.28        | 1.37     |

The worst 5 of 5184 bond angle outliers are listed below:

| Mol | Chain | Res     | Type | Atoms    | Z      | Observed(°) | Ideal(°) |
|-----|-------|---------|------|----------|--------|-------------|----------|
| 1   | AA    | 1459    | C    | C6-N1-C2 | -31.41 | 107.74      | 120.30   |
| 1   | CA    | 1459    | C    | C6-N1-C2 | -31.40 | 107.74      | 120.30   |
| 1   | CA    | 1459    | C    | N3-C2-O2 | -28.90 | 101.67      | 121.90   |
| 1   | AA    | 1459    | C    | N3-C2-O2 | -28.10 | 102.23      | 121.90   |
| 1   | CA    | 1442(A) | G    | N3-C4-C5 | -25.05 | 116.07      | 128.60   |

There are no chirality outliers.

5 of 68 planarity outliers are listed below:

| Mol | Chain | Res | Type | Group   |
|-----|-------|-----|------|---------|
| 2   | AB    | 14  | GLY  | Peptide |
| 3   | AC    | 180 | ALA  | Peptide |
| 3   | AC    | 50  | ALA  | Peptide |
| 4   | AD    | 29  | PRO  | Peptide |
| 9   | AI    | 39  | GLY  | Peptide |

## 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.

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 1   | AA    | 32102 | 0        | 16201    | 703     | 0            |
| 1   | CA    | 32056 | 0        | 16179    | 905     | 0            |
| 2   | AB    | 1777  | 0        | 1747     | 75      | 0            |
| 2   | CB    | 1817  | 0        | 1785     | 78      | 0            |
| 3   | AC    | 1450  | 0        | 1314     | 42      | 0            |
| 3   | CC    | 1453  | 0        | 1320     | 78      | 0            |
| 4   | AD    | 1520  | 0        | 1406     | 44      | 0            |
| 4   | CD    | 1537  | 0        | 1430     | 89      | 0            |
| 5   | AE    | 1105  | 0        | 1130     | 37      | 0            |
| 5   | CE    | 1106  | 0        | 1132     | 39      | 0            |
| 6   | AF    | 781   | 0        | 741      | 17      | 0            |
| 6   | CF    | 776   | 0        | 733      | 20      | 0            |
| 7   | AG    | 1167  | 0        | 1108     | 34      | 0            |
| 7   | CG    | 1164  | 0        | 1106     | 47      | 0            |
| 8   | AH    | 1045  | 0        | 1033     | 31      | 0            |
| 8   | CH    | 1049  | 0        | 1037     | 33      | 0            |
| 9   | AI    | 852   | 0        | 742      | 47      | 0            |
| 9   | CI    | 849   | 0        | 735      | 56      | 0            |
| 10  | AJ    | 659   | 0        | 552      | 40      | 0            |
| 10  | CJ    | 657   | 0        | 547      | 38      | 0            |
| 11  | AK    | 828   | 0        | 822      | 15      | 0            |
| 11  | CK    | 828   | 0        | 822      | 23      | 0            |
| 12  | AL    | 909   | 0        | 927      | 29      | 0            |
| 12  | CL    | 905   | 0        | 916      | 29      | 0            |
| 13  | AM    | 801   | 0        | 743      | 42      | 0            |
| 13  | CM    | 784   | 0        | 730      | 40      | 0            |
| 14  | AN    | 478   | 0        | 496      | 25      | 0            |
| 14  | CN    | 474   | 0        | 485      | 35      | 0            |
| 15  | AO    | 724   | 0        | 749      | 23      | 0            |
| 15  | CO    | 724   | 0        | 749      | 28      | 0            |
| 16  | AP    | 651   | 0        | 638      | 34      | 0            |
| 16  | CP    | 661   | 0        | 653      | 47      | 0            |
| 17  | AQ    | 823   | 0        | 891      | 29      | 0            |
| 17  | CQ    | 819   | 0        | 880      | 27      | 0            |
| 18  | AR    | 514   | 0        | 530      | 13      | 0            |
| 18  | CR    | 514   | 0        | 530      | 18      | 0            |
| 19  | AS    | 560   | 0        | 466      | 31      | 0            |
| 19  | CS    | 549   | 0        | 468      | 25      | 0            |
| 20  | AT    | 699   | 0        | 746      | 24      | 0            |
| 20  | CT    | 773   | 0        | 836      | 32      | 0            |
| 21  | AU    | 199   | 0        | 208      | 6       | 0            |
| 21  | CU    | 180   | 0        | 173      | 9       | 0            |
| 22  | AY    | 754   | 0        | 776      | 24      | 0            |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 22  | CY    | 739   | 0        | 740      | 38      | 0            |
| 23  | BA    | 60898 | 0        | 30697    | 759     | 0            |
| 23  | DA    | 60264 | 0        | 30391    | 909     | 0            |
| 24  | BB    | 2573  | 0        | 1306     | 27      | 0            |
| 24  | DB    | 2573  | 0        | 1306     | 51      | 0            |
| 25  | BD    | 2136  | 0        | 2218     | 55      | 0            |
| 25  | DD    | 2136  | 0        | 2218     | 62      | 0            |
| 26  | BE    | 1555  | 0        | 1607     | 41      | 0            |
| 26  | DE    | 1555  | 0        | 1607     | 46      | 0            |
| 27  | BF    | 1577  | 0        | 1612     | 44      | 0            |
| 27  | DF    | 1572  | 0        | 1613     | 43      | 0            |
| 28  | BG    | 1368  | 0        | 1324     | 37      | 0            |
| 28  | DG    | 1368  | 0        | 1324     | 49      | 0            |
| 29  | BH    | 1317  | 0        | 1376     | 23      | 0            |
| 29  | DH    | 1317  | 0        | 1376     | 24      | 0            |
| 30  | BI    | 1043  | 0        | 1054     | 39      | 0            |
| 30  | DI    | 1043  | 0        | 1054     | 51      | 0            |
| 31  | BN    | 1112  | 0        | 1180     | 25      | 0            |
| 31  | DN    | 1112  | 0        | 1180     | 28      | 0            |
| 32  | BO    | 923   | 0        | 981      | 12      | 0            |
| 32  | DO    | 923   | 0        | 981      | 16      | 0            |
| 33  | BP    | 1131  | 0        | 1201     | 39      | 0            |
| 33  | DP    | 1131  | 0        | 1201     | 45      | 0            |
| 34  | BQ    | 1122  | 0        | 1179     | 26      | 0            |
| 34  | DQ    | 1122  | 0        | 1179     | 30      | 0            |
| 35  | BR    | 968   | 0        | 1033     | 24      | 0            |
| 35  | DR    | 968   | 0        | 1033     | 30      | 0            |
| 36  | BS    | 865   | 0        | 905      | 38      | 0            |
| 36  | DS    | 873   | 0        | 927      | 49      | 0            |
| 37  | BT    | 1063  | 0        | 1103     | 29      | 0            |
| 37  | DT    | 1058  | 0        | 1098     | 31      | 0            |
| 38  | BU    | 959   | 0        | 1019     | 12      | 0            |
| 38  | DU    | 959   | 0        | 1019     | 23      | 0            |
| 39  | BV    | 771   | 0        | 830      | 14      | 1            |
| 39  | DV    | 775   | 0        | 841      | 16      | 0            |
| 40  | BW    | 881   | 0        | 935      | 22      | 0            |
| 40  | DW    | 877   | 0        | 932      | 18      | 0            |
| 41  | BX    | 742   | 0        | 799      | 14      | 0            |
| 41  | DX    | 732   | 0        | 777      | 16      | 0            |
| 42  | BY    | 785   | 0        | 828      | 16      | 0            |
| 42  | DY    | 781   | 0        | 829      | 22      | 0            |
| 43  | BZ    | 1522  | 0        | 1511     | 54      | 0            |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 43  | DZ    | 1528  | 0        | 1476     | 59      | 0            |
| 44  | B0    | 594   | 0        | 604      | 7       | 0            |
| 44  | D0    | 607   | 0        | 622      | 18      | 0            |
| 45  | B1    | 745   | 0        | 804      | 20      | 0            |
| 45  | D1    | 745   | 0        | 804      | 22      | 0            |
| 46  | B2    | 588   | 0        | 643      | 13      | 0            |
| 46  | D2    | 584   | 0        | 623      | 16      | 0            |
| 47  | B3    | 458   | 0        | 503      | 6       | 0            |
| 47  | D3    | 463   | 0        | 507      | 8       | 0            |
| 48  | B4    | 349   | 0        | 336      | 11      | 0            |
| 48  | D4    | 349   | 0        | 336      | 12      | 0            |
| 49  | B5    | 455   | 0        | 472      | 10      | 0            |
| 49  | D5    | 451   | 0        | 461      | 11      | 0            |
| 50  | B6    | 449   | 0        | 462      | 15      | 0            |
| 50  | D6    | 437   | 0        | 440      | 16      | 0            |
| 51  | B7    | 418   | 0        | 467      | 10      | 0            |
| 51  | D7    | 402   | 0        | 434      | 5       | 0            |
| 52  | B8    | 509   | 0        | 565      | 19      | 0            |
| 52  | D8    | 509   | 0        | 565      | 26      | 0            |
| 53  | B9    | 297   | 0        | 316      | 6       | 0            |
| 53  | D9    | 297   | 0        | 316      | 6       | 0            |
| 54  | AA    | 217   | 0        | 0        | 0       | 0            |
| 54  | AD    | 2     | 0        | 0        | 0       | 0            |
| 54  | AE    | 1     | 0        | 0        | 0       | 0            |
| 54  | AF    | 1     | 0        | 0        | 0       | 0            |
| 54  | AI    | 1     | 0        | 0        | 0       | 0            |
| 54  | AL    | 1     | 0        | 0        | 0       | 0            |
| 54  | AM    | 2     | 0        | 0        | 0       | 0            |
| 54  | AP    | 1     | 0        | 0        | 0       | 0            |
| 54  | B0    | 4     | 0        | 0        | 0       | 0            |
| 54  | B1    | 1     | 0        | 0        | 0       | 0            |
| 54  | B2    | 2     | 0        | 0        | 0       | 0            |
| 54  | B3    | 3     | 0        | 0        | 0       | 0            |
| 54  | B5    | 1     | 0        | 0        | 0       | 0            |
| 54  | B6    | 1     | 0        | 0        | 0       | 0            |
| 54  | B7    | 1     | 0        | 0        | 0       | 0            |
| 54  | B8    | 1     | 0        | 0        | 0       | 0            |
| 54  | B9    | 3     | 0        | 0        | 0       | 0            |
| 54  | BA    | 729   | 0        | 0        | 0       | 0            |
| 54  | BB    | 19    | 0        | 0        | 0       | 0            |
| 54  | BD    | 7     | 0        | 0        | 0       | 0            |
| 54  | BE    | 6     | 0        | 0        | 0       | 0            |

*Continued on next page...*



*Continued from previous page...*

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 54  | BF    | 6     | 0        | 0        | 0       | 0            |
| 54  | BG    | 1     | 0        | 0        | 0       | 0            |
| 54  | BH    | 1     | 0        | 0        | 0       | 0            |
| 54  | BN    | 2     | 0        | 0        | 0       | 0            |
| 54  | BO    | 1     | 0        | 0        | 0       | 0            |
| 54  | BP    | 2     | 0        | 0        | 0       | 0            |
| 54  | BQ    | 5     | 0        | 0        | 0       | 0            |
| 54  | BR    | 5     | 0        | 0        | 0       | 0            |
| 54  | BS    | 1     | 0        | 0        | 0       | 0            |
| 54  | BT    | 3     | 0        | 0        | 0       | 0            |
| 54  | BU    | 3     | 0        | 0        | 0       | 0            |
| 54  | BV    | 4     | 0        | 0        | 0       | 0            |
| 54  | BW    | 1     | 0        | 0        | 0       | 0            |
| 54  | BY    | 1     | 0        | 0        | 0       | 0            |
| 54  | BZ    | 2     | 0        | 0        | 0       | 0            |
| 54  | CA    | 203   | 0        | 0        | 0       | 0            |
| 54  | CE    | 1     | 0        | 0        | 0       | 0            |
| 54  | CQ    | 1     | 0        | 0        | 0       | 0            |
| 54  | D0    | 1     | 0        | 0        | 0       | 0            |
| 54  | D1    | 1     | 0        | 0        | 0       | 0            |
| 54  | D5    | 2     | 0        | 0        | 0       | 0            |
| 54  | D7    | 2     | 0        | 0        | 0       | 0            |
| 54  | D8    | 2     | 0        | 0        | 0       | 0            |
| 54  | D9    | 1     | 0        | 0        | 0       | 0            |
| 54  | DA    | 637   | 0        | 0        | 0       | 0            |
| 54  | DB    | 10    | 0        | 0        | 0       | 0            |
| 54  | DD    | 5     | 0        | 0        | 0       | 0            |
| 54  | DE    | 3     | 0        | 0        | 0       | 0            |
| 54  | DF    | 5     | 0        | 0        | 0       | 0            |
| 54  | DO    | 3     | 0        | 0        | 0       | 0            |
| 54  | DP    | 3     | 0        | 0        | 0       | 0            |
| 54  | DQ    | 4     | 0        | 0        | 0       | 0            |
| 54  | DR    | 2     | 0        | 0        | 0       | 0            |
| 54  | DT    | 2     | 0        | 0        | 0       | 0            |
| 54  | DW    | 1     | 0        | 0        | 0       | 0            |
| 55  | AD    | 1     | 0        | 0        | 0       | 0            |
| 55  | AN    | 1     | 0        | 0        | 0       | 0            |
| 55  | B4    | 1     | 0        | 0        | 0       | 0            |
| 55  | B5    | 1     | 0        | 0        | 0       | 0            |
| 55  | B6    | 1     | 0        | 0        | 0       | 0            |
| 55  | B9    | 1     | 0        | 0        | 0       | 0            |
| 55  | BY    | 1     | 0        | 0        | 0       | 0            |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 55  | CD    | 1     | 0        | 0        | 0       | 0            |
| 55  | CN    | 1     | 0        | 0        | 0       | 0            |
| 55  | D4    | 1     | 0        | 0        | 0       | 0            |
| 55  | D5    | 1     | 0        | 0        | 0       | 0            |
| 55  | D6    | 1     | 0        | 0        | 0       | 0            |
| 55  | D9    | 1     | 0        | 0        | 0       | 0            |
| 55  | DY    | 1     | 0        | 0        | 0       | 0            |
| 56  | AA    | 443   | 0        | 0        | 25      | 0            |
| 56  | AD    | 3     | 0        | 0        | 2       | 0            |
| 56  | AE    | 2     | 0        | 0        | 0       | 0            |
| 56  | AF    | 2     | 0        | 0        | 0       | 0            |
| 56  | AG    | 2     | 0        | 0        | 0       | 0            |
| 56  | AJ    | 1     | 0        | 0        | 0       | 0            |
| 56  | AK    | 1     | 0        | 0        | 0       | 0            |
| 56  | AL    | 3     | 0        | 0        | 0       | 0            |
| 56  | AM    | 1     | 0        | 0        | 0       | 0            |
| 56  | AO    | 1     | 0        | 0        | 0       | 0            |
| 56  | AP    | 1     | 0        | 0        | 0       | 0            |
| 56  | AQ    | 3     | 0        | 0        | 0       | 0            |
| 56  | AY    | 1     | 0        | 0        | 0       | 0            |
| 56  | B0    | 4     | 0        | 0        | 0       | 0            |
| 56  | B1    | 5     | 0        | 0        | 0       | 0            |
| 56  | B3    | 4     | 0        | 0        | 0       | 0            |
| 56  | B5    | 5     | 0        | 0        | 0       | 0            |
| 56  | B6    | 2     | 0        | 0        | 0       | 0            |
| 56  | B7    | 5     | 0        | 0        | 2       | 0            |
| 56  | B8    | 11    | 0        | 0        | 0       | 0            |
| 56  | B9    | 1     | 0        | 0        | 0       | 0            |
| 56  | BA    | 1988  | 0        | 0        | 66      | 1            |
| 56  | BB    | 43    | 0        | 0        | 1       | 0            |
| 56  | BD    | 21    | 0        | 0        | 2       | 0            |
| 56  | BE    | 18    | 0        | 0        | 1       | 0            |
| 56  | BF    | 18    | 0        | 0        | 0       | 0            |
| 56  | BG    | 2     | 0        | 0        | 0       | 0            |
| 56  | BH    | 2     | 0        | 0        | 0       | 0            |
| 56  | BN    | 7     | 0        | 0        | 0       | 0            |
| 56  | BO    | 3     | 0        | 0        | 0       | 0            |
| 56  | BP    | 20    | 0        | 0        | 0       | 0            |
| 56  | BQ    | 9     | 0        | 0        | 0       | 0            |
| 56  | BR    | 8     | 0        | 0        | 0       | 1            |
| 56  | BS    | 2     | 0        | 0        | 0       | 0            |
| 56  | BT    | 5     | 0        | 0        | 0       | 0            |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 56  | BU    | 9     | 0        | 0        | 0       | 0            |
| 56  | BV    | 13    | 0        | 0        | 1       | 1            |
| 56  | BW    | 6     | 0        | 0        | 0       | 0            |
| 56  | BX    | 2     | 0        | 0        | 0       | 0            |
| 56  | BY    | 2     | 0        | 0        | 0       | 0            |
| 56  | BZ    | 2     | 0        | 0        | 0       | 0            |
| 56  | CA    | 400   | 0        | 0        | 32      | 0            |
| 56  | CD    | 2     | 0        | 0        | 1       | 0            |
| 56  | CE    | 4     | 0        | 0        | 0       | 0            |
| 56  | CF    | 1     | 0        | 0        | 0       | 0            |
| 56  | CK    | 1     | 0        | 0        | 0       | 0            |
| 56  | CL    | 2     | 0        | 0        | 0       | 0            |
| 56  | CP    | 3     | 0        | 0        | 0       | 0            |
| 56  | CQ    | 3     | 0        | 0        | 0       | 0            |
| 56  | CR    | 1     | 0        | 0        | 1       | 0            |
| 56  | CT    | 2     | 0        | 0        | 0       | 0            |
| 56  | CU    | 1     | 0        | 0        | 1       | 0            |
| 56  | D0    | 2     | 0        | 0        | 0       | 0            |
| 56  | D1    | 3     | 0        | 0        | 0       | 0            |
| 56  | D2    | 1     | 0        | 0        | 0       | 0            |
| 56  | D3    | 1     | 0        | 0        | 1       | 0            |
| 56  | D5    | 3     | 0        | 0        | 0       | 0            |
| 56  | D6    | 3     | 0        | 0        | 0       | 0            |
| 56  | D7    | 3     | 0        | 0        | 0       | 0            |
| 56  | D8    | 6     | 0        | 0        | 0       | 0            |
| 56  | D9    | 1     | 0        | 0        | 0       | 0            |
| 56  | DA    | 1496  | 0        | 0        | 107     | 0            |
| 56  | DB    | 33    | 0        | 0        | 6       | 0            |
| 56  | DD    | 17    | 0        | 0        | 2       | 0            |
| 56  | DE    | 12    | 0        | 0        | 0       | 0            |
| 56  | DF    | 10    | 0        | 0        | 0       | 0            |
| 56  | DN    | 2     | 0        | 0        | 0       | 0            |
| 56  | DO    | 7     | 0        | 0        | 0       | 0            |
| 56  | DP    | 11    | 0        | 0        | 0       | 0            |
| 56  | DQ    | 2     | 0        | 0        | 1       | 0            |
| 56  | DR    | 5     | 0        | 0        | 0       | 0            |
| 56  | DT    | 3     | 0        | 0        | 0       | 0            |
| 56  | DU    | 1     | 0        | 0        | 0       | 0            |
| 56  | DV    | 1     | 0        | 0        | 0       | 0            |
| 56  | DW    | 4     | 0        | 0        | 0       | 0            |
| 56  | DX    | 2     | 0        | 0        | 0       | 0            |
| 56  | DY    | 2     | 0        | 0        | 0       | 0            |

*Continued on next page...*

Continued from previous page...

| Mol | Chain | Non-H  | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|--------|----------|----------|---------|--------------|
| All | All   | 287173 | 0        | 187292   | 5583    | 2            |

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 12.

The worst 5 of 5583 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

| Atom-1          | Atom-2          | Interatomic distance (Å) | Clash overlap (Å) |
|-----------------|-----------------|--------------------------|-------------------|
| 23:BA:2296:U:O4 | 23:BA:2335:A:N6 | 1.59                     | 1.34              |
| 23:DA:2296:U:O4 | 23:DA:2335:A:N6 | 1.59                     | 1.33              |
| 1:CA:1164:G:H1  | 1:CA:1172:C:N4  | 1.45                     | 1.15              |
| 23:BA:885:C:N4  | 23:BA:890:A:N6  | 1.97                     | 1.13              |
| 1:AA:40:C:N4    | 1:AA:402:G:H1   | 1.47                     | 1.12              |

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

| Atom-1          | Atom-2                  | Interatomic distance (Å) | Clash overlap (Å) |
|-----------------|-------------------------|--------------------------|-------------------|
| 56:BR:308:HOH:O | 56:BV:310:HOH:O[4_445]  | 2.03                     | 0.17              |
| 39:BV:101:GLY:O | 56:BA:5729:HOH:O[4_545] | 2.17                     | 0.03              |

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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.

| Mol | Chain | Analysed      | Favoured  | Allowed  | Outliers | Percentiles |     |
|-----|-------|---------------|-----------|----------|----------|-------------|-----|
| 2   | AB    | 227/256 (89%) | 185 (82%) | 40 (18%) | 2 (1%)   | 17          | 40  |
| 2   | CB    | 233/256 (91%) | 187 (80%) | 43 (18%) | 3 (1%)   | 12          | 30  |
| 3   | AC    | 204/239 (85%) | 176 (86%) | 28 (14%) | 0        | 100         | 100 |
| 3   | CC    | 204/239 (85%) | 169 (83%) | 31 (15%) | 4 (2%)   | 7           | 19  |
| 4   | AD    | 206/209 (99%) | 186 (90%) | 20 (10%) | 0        | 100         | 100 |

Continued on next page...

*Continued from previous page...*

| Mol | Chain | Analysed      | Favoured  | Allowed  | Outliers | Percentiles |     |
|-----|-------|---------------|-----------|----------|----------|-------------|-----|
| 4   | CD    | 206/209 (99%) | 182 (88%) | 23 (11%) | 1 (0%)   | 29          | 54  |
| 5   | AE    | 146/162 (90%) | 128 (88%) | 17 (12%) | 1 (1%)   | 22          | 46  |
| 5   | CE    | 146/162 (90%) | 130 (89%) | 15 (10%) | 1 (1%)   | 22          | 46  |
| 6   | AF    | 98/101 (97%)  | 96 (98%)  | 2 (2%)   | 0        | 100         | 100 |
| 6   | CF    | 97/101 (96%)  | 95 (98%)  | 2 (2%)   | 0        | 100         | 100 |
| 7   | AG    | 153/156 (98%) | 132 (86%) | 20 (13%) | 1 (1%)   | 22          | 46  |
| 7   | CG    | 153/156 (98%) | 130 (85%) | 22 (14%) | 1 (1%)   | 22          | 46  |
| 8   | AH    | 136/138 (99%) | 129 (95%) | 7 (5%)   | 0        | 100         | 100 |
| 8   | CH    | 136/138 (99%) | 128 (94%) | 8 (6%)   | 0        | 100         | 100 |
| 9   | AI    | 123/128 (96%) | 108 (88%) | 13 (11%) | 2 (2%)   | 9           | 24  |
| 9   | CI    | 123/128 (96%) | 104 (85%) | 14 (11%) | 5 (4%)   | 3           | 6   |
| 10  | AJ    | 94/105 (90%)  | 72 (77%)  | 15 (16%) | 7 (7%)   | 1           | 1   |
| 10  | CJ    | 94/105 (90%)  | 72 (77%)  | 18 (19%) | 4 (4%)   | 2           | 5   |
| 11  | AK    | 112/129 (87%) | 103 (92%) | 9 (8%)   | 0        | 100         | 100 |
| 11  | CK    | 112/129 (87%) | 104 (93%) | 8 (7%)   | 0        | 100         | 100 |
| 12  | AL    | 120/132 (91%) | 109 (91%) | 10 (8%)  | 1 (1%)   | 19          | 43  |
| 12  | CL    | 120/132 (91%) | 109 (91%) | 10 (8%)  | 1 (1%)   | 19          | 43  |
| 13  | AM    | 112/126 (89%) | 86 (77%)  | 22 (20%) | 4 (4%)   | 3           | 7   |
| 13  | CM    | 110/126 (87%) | 86 (78%)  | 18 (16%) | 6 (6%)   | 2           | 3   |
| 14  | AN    | 58/61 (95%)   | 50 (86%)  | 7 (12%)  | 1 (2%)   | 9           | 23  |
| 14  | CN    | 58/61 (95%)   | 49 (84%)  | 5 (9%)   | 4 (7%)   | 1           | 1   |
| 15  | AO    | 86/89 (97%)   | 81 (94%)  | 5 (6%)   | 0        | 100         | 100 |
| 15  | CO    | 86/89 (97%)   | 79 (92%)  | 7 (8%)   | 0        | 100         | 100 |
| 16  | AP    | 80/88 (91%)   | 74 (92%)  | 5 (6%)   | 1 (1%)   | 12          | 30  |
| 16  | CP    | 80/88 (91%)   | 74 (92%)  | 5 (6%)   | 1 (1%)   | 12          | 30  |
| 17  | AQ    | 97/105 (92%)  | 88 (91%)  | 8 (8%)   | 1 (1%)   | 15          | 37  |
| 17  | CQ    | 97/105 (92%)  | 89 (92%)  | 8 (8%)   | 0        | 100         | 100 |
| 18  | AR    | 66/88 (75%)   | 55 (83%)  | 11 (17%) | 0        | 100         | 100 |
| 18  | CR    | 66/88 (75%)   | 56 (85%)  | 10 (15%) | 0        | 100         | 100 |
| 19  | AS    | 79/93 (85%)   | 67 (85%)  | 11 (14%) | 1 (1%)   | 12          | 30  |
| 19  | CS    | 76/93 (82%)   | 57 (75%)  | 18 (24%) | 1 (1%)   | 12          | 30  |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Analysed      | Favoured  | Allowed  | Outliers | Percentiles |     |
|-----|-------|---------------|-----------|----------|----------|-------------|-----|
| 20  | AT    | 94/106 (89%)  | 77 (82%)  | 17 (18%) | 0        | 100         | 100 |
| 20  | CT    | 102/106 (96%) | 79 (78%)  | 20 (20%) | 3 (3%)   | 4           | 10  |
| 21  | AU    | 21/27 (78%)   | 20 (95%)  | 1 (5%)   | 0        | 100         | 100 |
| 21  | CU    | 21/27 (78%)   | 16 (76%)  | 5 (24%)  | 0        | 100         | 100 |
| 22  | AY    | 93/119 (78%)  | 85 (91%)  | 7 (8%)   | 1 (1%)   | 14          | 34  |
| 22  | CY    | 92/119 (77%)  | 87 (95%)  | 5 (5%)   | 0        | 100         | 100 |
| 25  | BD    | 273/276 (99%) | 262 (96%) | 8 (3%)   | 3 (1%)   | 14          | 34  |
| 25  | DD    | 273/276 (99%) | 262 (96%) | 8 (3%)   | 3 (1%)   | 14          | 34  |
| 26  | BE    | 202/206 (98%) | 191 (95%) | 8 (4%)   | 3 (2%)   | 10          | 26  |
| 26  | DE    | 202/206 (98%) | 187 (93%) | 12 (6%)  | 3 (2%)   | 10          | 26  |
| 27  | BF    | 201/210 (96%) | 189 (94%) | 10 (5%)  | 2 (1%)   | 15          | 37  |
| 27  | DF    | 201/210 (96%) | 191 (95%) | 8 (4%)   | 2 (1%)   | 15          | 37  |
| 28  | BG    | 179/182 (98%) | 149 (83%) | 26 (14%) | 4 (2%)   | 6           | 17  |
| 28  | DG    | 179/182 (98%) | 148 (83%) | 29 (16%) | 2 (1%)   | 14          | 34  |
| 29  | BH    | 172/180 (96%) | 161 (94%) | 10 (6%)  | 1 (1%)   | 25          | 50  |
| 29  | DH    | 172/180 (96%) | 160 (93%) | 9 (5%)   | 3 (2%)   | 9           | 23  |
| 30  | BI    | 144/148 (97%) | 116 (81%) | 24 (17%) | 4 (3%)   | 5           | 11  |
| 30  | DI    | 144/148 (97%) | 119 (83%) | 22 (15%) | 3 (2%)   | 7           | 18  |
| 31  | BN    | 138/140 (99%) | 125 (91%) | 11 (8%)  | 2 (1%)   | 11          | 28  |
| 31  | DN    | 138/140 (99%) | 125 (91%) | 11 (8%)  | 2 (1%)   | 11          | 28  |
| 32  | BO    | 120/122 (98%) | 118 (98%) | 2 (2%)   | 0        | 100         | 100 |
| 32  | DO    | 120/122 (98%) | 118 (98%) | 2 (2%)   | 0        | 100         | 100 |
| 33  | BP    | 147/150 (98%) | 132 (90%) | 13 (9%)  | 2 (1%)   | 11          | 28  |
| 33  | DP    | 147/150 (98%) | 130 (88%) | 15 (10%) | 2 (1%)   | 11          | 28  |
| 34  | BQ    | 139/141 (99%) | 132 (95%) | 6 (4%)   | 1 (1%)   | 22          | 46  |
| 34  | DQ    | 139/141 (99%) | 131 (94%) | 6 (4%)   | 2 (1%)   | 11          | 28  |
| 35  | BR    | 116/118 (98%) | 114 (98%) | 2 (2%)   | 0        | 100         | 100 |
| 35  | DR    | 116/118 (98%) | 115 (99%) | 1 (1%)   | 0        | 100         | 100 |
| 36  | BS    | 108/112 (96%) | 99 (92%)  | 8 (7%)   | 1 (1%)   | 17          | 40  |
| 36  | DS    | 108/112 (96%) | 98 (91%)  | 9 (8%)   | 1 (1%)   | 17          | 40  |
| 37  | BT    | 129/146 (88%) | 125 (97%) | 4 (3%)   | 0        | 100         | 100 |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Analysed      | Favoured   | Allowed  | Outliers | Percentiles |     |
|-----|-------|---------------|------------|----------|----------|-------------|-----|
| 37  | DT    | 128/146 (88%) | 124 (97%)  | 3 (2%)   | 1 (1%)   | 19          | 43  |
| 38  | BU    | 114/118 (97%) | 114 (100%) | 0        | 0        | 100         | 100 |
| 38  | DU    | 114/118 (97%) | 114 (100%) | 0        | 0        | 100         | 100 |
| 39  | BV    | 99/101 (98%)  | 93 (94%)   | 6 (6%)   | 0        | 100         | 100 |
| 39  | DV    | 99/101 (98%)  | 93 (94%)   | 6 (6%)   | 0        | 100         | 100 |
| 40  | BW    | 110/113 (97%) | 109 (99%)  | 1 (1%)   | 0        | 100         | 100 |
| 40  | DW    | 109/113 (96%) | 108 (99%)  | 1 (1%)   | 0        | 100         | 100 |
| 41  | BX    | 93/96 (97%)   | 85 (91%)   | 8 (9%)   | 0        | 100         | 100 |
| 41  | DX    | 93/96 (97%)   | 88 (95%)   | 4 (4%)   | 1 (1%)   | 14          | 34  |
| 42  | BY    | 105/110 (96%) | 93 (89%)   | 12 (11%) | 0        | 100         | 100 |
| 42  | DY    | 105/110 (96%) | 97 (92%)   | 8 (8%)   | 0        | 100         | 100 |
| 43  | BZ    | 196/206 (95%) | 178 (91%)  | 14 (7%)  | 4 (2%)   | 7           | 19  |
| 43  | DZ    | 201/206 (98%) | 181 (90%)  | 15 (8%)  | 5 (2%)   | 5           | 14  |
| 44  | B0    | 74/85 (87%)   | 72 (97%)   | 2 (3%)   | 0        | 100         | 100 |
| 44  | D0    | 75/85 (88%)   | 71 (95%)   | 4 (5%)   | 0        | 100         | 100 |
| 45  | B1    | 95/98 (97%)   | 92 (97%)   | 1 (1%)   | 2 (2%)   | 7           | 18  |
| 45  | D1    | 95/98 (97%)   | 92 (97%)   | 1 (1%)   | 2 (2%)   | 7           | 18  |
| 46  | B2    | 68/72 (94%)   | 64 (94%)   | 4 (6%)   | 0        | 100         | 100 |
| 46  | D2    | 69/72 (96%)   | 65 (94%)   | 4 (6%)   | 0        | 100         | 100 |
| 47  | B3    | 57/60 (95%)   | 56 (98%)   | 1 (2%)   | 0        | 100         | 100 |
| 47  | D3    | 57/60 (95%)   | 55 (96%)   | 2 (4%)   | 0        | 100         | 100 |
| 48  | B4    | 44/71 (62%)   | 35 (80%)   | 8 (18%)  | 1 (2%)   | 6           | 16  |
| 48  | D4    | 44/71 (62%)   | 34 (77%)   | 10 (23%) | 0        | 100         | 100 |
| 49  | B5    | 57/60 (95%)   | 53 (93%)   | 4 (7%)   | 0        | 100         | 100 |
| 49  | D5    | 57/60 (95%)   | 53 (93%)   | 4 (7%)   | 0        | 100         | 100 |
| 50  | B6    | 51/54 (94%)   | 49 (96%)   | 2 (4%)   | 0        | 100         | 100 |
| 50  | D6    | 51/54 (94%)   | 49 (96%)   | 2 (4%)   | 0        | 100         | 100 |
| 51  | B7    | 46/49 (94%)   | 44 (96%)   | 1 (2%)   | 1 (2%)   | 6           | 17  |
| 51  | D7    | 46/49 (94%)   | 44 (96%)   | 1 (2%)   | 1 (2%)   | 6           | 17  |
| 52  | B8    | 62/65 (95%)   | 60 (97%)   | 1 (2%)   | 1 (2%)   | 9           | 24  |
| 52  | D8    | 62/65 (95%)   | 59 (95%)   | 1 (2%)   | 2 (3%)   | 4           | 9   |

*Continued on next page...*

Continued from previous page...

| Mol | Chain | Analysed          | Favoured    | Allowed  | Outliers | Percentiles |     |
|-----|-------|-------------------|-------------|----------|----------|-------------|-----|
| 53  | B9    | 34/37 (92%)       | 34 (100%)   | 0        | 0        | 100         | 100 |
| 53  | D9    | 34/37 (92%)       | 34 (100%)   | 0        | 0        | 100         | 100 |
| All | All   | 11568/12366 (94%) | 10478 (91%) | 965 (8%) | 125 (1%) | 14          | 34  |

5 of 125 Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 10  | AJ    | 56  | HIS  |
| 13  | AM    | 84  | ILE  |
| 27  | BF    | 21  | ALA  |
| 28  | BG    | 82  | LEU  |
| 30  | BI    | 107 | VAL  |

### 5.3.2 Protein sidechains [i](#)

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.

| Mol | Chain | Analysed      | Rotameric | Outliers | Percentiles |    |
|-----|-------|---------------|-----------|----------|-------------|----|
| 2   | AB    | 177/220 (80%) | 148 (84%) | 29 (16%) | 2           | 6  |
| 2   | CB    | 181/220 (82%) | 151 (83%) | 30 (17%) | 2           | 5  |
| 3   | AC    | 114/188 (61%) | 97 (85%)  | 17 (15%) | 3           | 7  |
| 3   | CC    | 114/188 (61%) | 86 (75%)  | 28 (25%) | 0           | 2  |
| 4   | AD    | 139/181 (77%) | 119 (86%) | 20 (14%) | 3           | 8  |
| 4   | CD    | 142/181 (78%) | 120 (84%) | 22 (16%) | 2           | 7  |
| 5   | AE    | 108/123 (88%) | 95 (88%)  | 13 (12%) | 5           | 11 |
| 5   | CE    | 108/123 (88%) | 94 (87%)  | 14 (13%) | 4           | 10 |
| 6   | AF    | 77/90 (86%)   | 66 (86%)  | 11 (14%) | 3           | 8  |
| 6   | CF    | 75/90 (83%)   | 65 (87%)  | 10 (13%) | 4           | 9  |
| 7   | AG    | 104/127 (82%) | 91 (88%)  | 13 (12%) | 4           | 10 |
| 7   | CG    | 103/127 (81%) | 83 (81%)  | 20 (19%) | 1           | 3  |
| 8   | AH    | 103/119 (87%) | 87 (84%)  | 16 (16%) | 2           | 7  |
| 8   | CH    | 104/119 (87%) | 88 (85%)  | 16 (15%) | 2           | 7  |

Continued on next page...



*Continued from previous page...*

| Mol | Chain | Analysed      | Rotameric | Outliers | Percentiles |    |
|-----|-------|---------------|-----------|----------|-------------|----|
| 9   | AI    | 62/99 (63%)   | 53 (86%)  | 9 (14%)  | 3           | 8  |
| 9   | CI    | 62/99 (63%)   | 53 (86%)  | 9 (14%)  | 3           | 8  |
| 10  | AJ    | 52/92 (56%)   | 41 (79%)  | 11 (21%) | 1           | 3  |
| 10  | CJ    | 52/92 (56%)   | 40 (77%)  | 12 (23%) | 1           | 2  |
| 11  | AK    | 81/99 (82%)   | 73 (90%)  | 8 (10%)  | 8           | 18 |
| 11  | CK    | 81/99 (82%)   | 73 (90%)  | 8 (10%)  | 8           | 18 |
| 12  | AL    | 92/109 (84%)  | 83 (90%)  | 9 (10%)  | 8           | 18 |
| 12  | CL    | 91/109 (84%)  | 85 (93%)  | 6 (7%)   | 16          | 38 |
| 13  | AM    | 63/101 (62%)  | 46 (73%)  | 17 (27%) | 0           | 1  |
| 13  | CM    | 62/101 (61%)  | 45 (73%)  | 17 (27%) | 0           | 1  |
| 14  | AN    | 46/50 (92%)   | 38 (83%)  | 8 (17%)  | 2           | 5  |
| 14  | CN    | 45/50 (90%)   | 33 (73%)  | 12 (27%) | 0           | 1  |
| 15  | AO    | 77/80 (96%)   | 64 (83%)  | 13 (17%) | 2           | 5  |
| 15  | CO    | 77/80 (96%)   | 64 (83%)  | 13 (17%) | 2           | 5  |
| 16  | AP    | 63/74 (85%)   | 50 (79%)  | 13 (21%) | 1           | 3  |
| 16  | CP    | 65/74 (88%)   | 51 (78%)  | 14 (22%) | 1           | 3  |
| 17  | AQ    | 94/97 (97%)   | 82 (87%)  | 12 (13%) | 4           | 10 |
| 17  | CQ    | 93/97 (96%)   | 81 (87%)  | 12 (13%) | 4           | 10 |
| 18  | AR    | 49/77 (64%)   | 40 (82%)  | 9 (18%)  | 1           | 4  |
| 18  | CR    | 49/77 (64%)   | 40 (82%)  | 9 (18%)  | 1           | 4  |
| 19  | AS    | 43/80 (54%)   | 37 (86%)  | 6 (14%)  | 3           | 8  |
| 19  | CS    | 44/80 (55%)   | 32 (73%)  | 12 (27%) | 0           | 1  |
| 20  | AT    | 62/82 (76%)   | 53 (86%)  | 9 (14%)  | 3           | 8  |
| 20  | CT    | 72/82 (88%)   | 61 (85%)  | 11 (15%) | 2           | 7  |
| 21  | AU    | 18/22 (82%)   | 15 (83%)  | 3 (17%)  | 2           | 5  |
| 21  | CU    | 14/22 (64%)   | 11 (79%)  | 3 (21%)  | 1           | 3  |
| 22  | AY    | 82/104 (79%)  | 70 (85%)  | 12 (15%) | 3           | 7  |
| 22  | CY    | 79/104 (76%)  | 63 (80%)  | 16 (20%) | 1           | 3  |
| 25  | BD    | 215/218 (99%) | 191 (89%) | 24 (11%) | 6           | 13 |
| 25  | DD    | 215/218 (99%) | 190 (88%) | 25 (12%) | 5           | 12 |
| 26  | BE    | 163/166 (98%) | 140 (86%) | 23 (14%) | 3           | 8  |

*Continued on next page...*

*Continued from previous page...*

| Mol | Chain | Analysed       | Rotameric | Outliers | Percentiles |    |
|-----|-------|----------------|-----------|----------|-------------|----|
| 26  | DE    | 163/166 (98%)  | 139 (85%) | 24 (15%) | 3           | 7  |
| 27  | BF    | 158/166 (95%)  | 134 (85%) | 24 (15%) | 3           | 7  |
| 27  | DF    | 157/166 (95%)  | 135 (86%) | 22 (14%) | 3           | 8  |
| 28  | BG    | 128/156 (82%)  | 107 (84%) | 21 (16%) | 2           | 6  |
| 28  | DG    | 128/156 (82%)  | 107 (84%) | 21 (16%) | 2           | 6  |
| 29  | BH    | 141/148 (95%)  | 125 (89%) | 16 (11%) | 6           | 13 |
| 29  | DH    | 141/148 (95%)  | 128 (91%) | 13 (9%)  | 9           | 21 |
| 30  | BI    | 100/124 (81%)  | 73 (73%)  | 27 (27%) | 0           | 1  |
| 30  | DI    | 100/124 (81%)  | 75 (75%)  | 25 (25%) | 0           | 1  |
| 31  | BN    | 117/119 (98%)  | 99 (85%)  | 18 (15%) | 2           | 7  |
| 31  | DN    | 117/119 (98%)  | 99 (85%)  | 18 (15%) | 2           | 7  |
| 32  | BO    | 98/100 (98%)   | 89 (91%)  | 9 (9%)   | 9           | 21 |
| 32  | DO    | 98/100 (98%)   | 91 (93%)  | 7 (7%)   | 14          | 34 |
| 33  | BP    | 114/116 (98%)  | 94 (82%)  | 20 (18%) | 2           | 4  |
| 33  | DP    | 114/116 (98%)  | 95 (83%)  | 19 (17%) | 2           | 5  |
| 34  | BQ    | 111/111 (100%) | 94 (85%)  | 17 (15%) | 2           | 7  |
| 34  | DQ    | 111/111 (100%) | 95 (86%)  | 16 (14%) | 3           | 8  |
| 35  | BR    | 101/101 (100%) | 81 (80%)  | 20 (20%) | 1           | 3  |
| 35  | DR    | 101/101 (100%) | 81 (80%)  | 20 (20%) | 1           | 3  |
| 36  | BS    | 84/88 (96%)    | 70 (83%)  | 14 (17%) | 2           | 5  |
| 36  | DS    | 86/88 (98%)    | 70 (81%)  | 16 (19%) | 1           | 4  |
| 37  | BT    | 110/127 (87%)  | 90 (82%)  | 20 (18%) | 1           | 4  |
| 37  | DT    | 110/127 (87%)  | 93 (84%)  | 17 (16%) | 2           | 7  |
| 38  | BU    | 93/94 (99%)    | 80 (86%)  | 13 (14%) | 3           | 8  |
| 38  | DU    | 93/94 (99%)    | 81 (87%)  | 12 (13%) | 4           | 10 |
| 39  | BV    | 80/82 (98%)    | 65 (81%)  | 15 (19%) | 1           | 4  |
| 39  | DV    | 81/82 (99%)    | 65 (80%)  | 16 (20%) | 1           | 3  |
| 40  | BW    | 89/92 (97%)    | 77 (86%)  | 12 (14%) | 4           | 9  |
| 40  | DW    | 89/92 (97%)    | 78 (88%)  | 11 (12%) | 4           | 11 |
| 41  | BX    | 75/78 (96%)    | 66 (88%)  | 9 (12%)  | 5           | 11 |
| 41  | DX    | 73/78 (94%)    | 66 (90%)  | 7 (10%)  | 8           | 19 |

*Continued on next page...*

Continued from previous page...

| Mol | Chain | Analysed         | Rotameric  | Outliers   | Percentiles |    |
|-----|-------|------------------|------------|------------|-------------|----|
| 42  | BY    | 80/91 (88%)      | 66 (82%)   | 14 (18%)   | 2           | 4  |
| 42  | DY    | 79/91 (87%)      | 64 (81%)   | 15 (19%)   | 1           | 4  |
| 43  | BZ    | 159/179 (89%)    | 137 (86%)  | 22 (14%)   | 3           | 8  |
| 43  | DZ    | 155/179 (87%)    | 136 (88%)  | 19 (12%)   | 4           | 11 |
| 44  | B0    | 59/67 (88%)      | 52 (88%)   | 7 (12%)    | 5           | 12 |
| 44  | D0    | 61/67 (91%)      | 51 (84%)   | 10 (16%)   | 2           | 6  |
| 45  | B1    | 78/83 (94%)      | 65 (83%)   | 13 (17%)   | 2           | 5  |
| 45  | D1    | 78/83 (94%)      | 66 (85%)   | 12 (15%)   | 2           | 7  |
| 46  | B2    | 65/67 (97%)      | 57 (88%)   | 8 (12%)    | 4           | 11 |
| 46  | D2    | 63/67 (94%)      | 55 (87%)   | 8 (13%)    | 4           | 10 |
| 47  | B3    | 49/52 (94%)      | 44 (90%)   | 5 (10%)    | 7           | 17 |
| 47  | D3    | 50/52 (96%)      | 44 (88%)   | 6 (12%)    | 5           | 11 |
| 48  | B4    | 39/63 (62%)      | 34 (87%)   | 5 (13%)    | 4           | 10 |
| 48  | D4    | 39/63 (62%)      | 35 (90%)   | 4 (10%)    | 7           | 16 |
| 49  | B5    | 50/52 (96%)      | 43 (86%)   | 7 (14%)    | 3           | 8  |
| 49  | D5    | 49/52 (94%)      | 44 (90%)   | 5 (10%)    | 7           | 17 |
| 50  | B6    | 50/52 (96%)      | 40 (80%)   | 10 (20%)   | 1           | 3  |
| 50  | D6    | 48/52 (92%)      | 37 (77%)   | 11 (23%)   | 1           | 2  |
| 51  | B7    | 41/42 (98%)      | 35 (85%)   | 6 (15%)    | 3           | 7  |
| 51  | D7    | 38/42 (90%)      | 32 (84%)   | 6 (16%)    | 2           | 6  |
| 52  | B8    | 52/55 (94%)      | 45 (86%)   | 7 (14%)    | 4           | 9  |
| 52  | D8    | 52/55 (94%)      | 45 (86%)   | 7 (14%)    | 4           | 9  |
| 53  | B9    | 32/34 (94%)      | 30 (94%)   | 2 (6%)     | 18          | 40 |
| 53  | D9    | 32/34 (94%)      | 31 (97%)   | 1 (3%)     | 40          | 69 |
| All | All   | 8871/10274 (86%) | 7518 (85%) | 1353 (15%) | 2           | 7  |

5 of 1353 residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 45  | B1    | 59  | THR  |
| 5   | CE    | 137 | GLU  |
| 42  | DY    | 6   | HIS  |
| 48  | B4    | 22  | ILE  |
| 2   | CB    | 187 | LEU  |

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 69 such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 4   | CD    | 42  | GLN  |
| 9   | CI    | 3   | GLN  |
| 33  | DP    | 38  | GLN  |
| 4   | CD    | 45  | GLN  |
| 7   | CG    | 56  | GLN  |

### 5.3.3 RNA [i](#)

| Mol | Chain | Analysed        | Backbone Outliers | Pucker Outliers |
|-----|-------|-----------------|-------------------|-----------------|
| 1   | AA    | 1490/1522 (97%) | 306 (20%)         | 32 (2%)         |
| 1   | CA    | 1490/1522 (97%) | 328 (22%)         | 34 (2%)         |
| 23  | BA    | 2819/2915 (96%) | 514 (18%)         | 72 (2%)         |
| 23  | DA    | 2788/2915 (95%) | 485 (17%)         | 64 (2%)         |
| 24  | BB    | 119/122 (97%)   | 19 (15%)          | 0               |
| 24  | DB    | 119/122 (97%)   | 21 (17%)          | 0               |
| All | All   | 8825/9118 (96%) | 1673 (18%)        | 202 (2%)        |

5 of 1673 RNA backbone outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1   | AA    | 4   | U    |
| 1   | AA    | 7   | G    |
| 1   | AA    | 9   | G    |
| 1   | AA    | 32  | A    |
| 1   | AA    | 39  | G    |

5 of 202 RNA pucker outliers are listed below:

| Mol | Chain | Res  | Type |
|-----|-------|------|------|
| 23  | BA    | 2275 | C    |
| 1   | CA    | 428  | G    |
| 23  | DA    | 2172 | U    |
| 23  | BA    | 2406 | U    |
| 23  | BA    | 2789 | C    |

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 1945 ligands modelled in this entry, 1945 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 [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data i

### 6.1 Protein, DNA and RNA chains i

In the following table, the column labelled '#RSRZ > 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> 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.

| Mol | Chain | Analysed        | <RSRZ> | #RSRZ > 2 |         | OWAB(Å <sup>2</sup> ) | Q < 0.9 |
|-----|-------|-----------------|--------|-----------|---------|-----------------------|---------|
| 1   | AA    | 1493/1522 (98%) | 0.01   | 76 (5%)   | 28 26   | 37, 73, 129, 165      | 0       |
| 1   | CA    | 1491/1522 (97%) | 0.16   | 99 (6%)   | 18 16   | 40, 84, 135, 175      | 0       |
| 2   | AB    | 229/256 (89%)   | 0.66   | 28 (12%)  | 4 3     | 76, 103, 123, 135     | 0       |
| 2   | CB    | 235/256 (91%)   | 1.48   | 77 (32%)  | 0 0     | 80, 108, 127, 135     | 0       |
| 3   | AC    | 206/239 (86%)   | 0.23   | 11 (5%)   | 26 25   | 62, 81, 98, 105       | 0       |
| 3   | CC    | 206/239 (86%)   | 1.19   | 51 (24%)  | 0 0     | 85, 109, 122, 130     | 0       |
| 4   | AD    | 208/209 (99%)   | 0.91   | 32 (15%)  | 2 1     | 64, 85, 105, 113      | 0       |
| 4   | CD    | 208/209 (99%)   | 0.71   | 29 (13%)  | 2 2     | 68, 85, 103, 111      | 0       |
| 5   | AE    | 148/162 (91%)   | 0.03   | 0         | 100 100 | 59, 73, 86, 101       | 0       |
| 5   | CE    | 148/162 (91%)   | 0.52   | 13 (8%)   | 10 8    | 62, 77, 91, 105       | 0       |
| 6   | AF    | 100/101 (99%)   | 0.01   | 3 (3%)    | 50 51   | 61, 72, 85, 100       | 0       |
| 6   | CF    | 99/101 (98%)    | 0.16   | 3 (3%)    | 50 51   | 62, 74, 86, 95        | 0       |
| 7   | AG    | 155/156 (99%)   | -0.05  | 7 (4%)    | 33 31   | 64, 76, 91, 100       | 0       |
| 7   | CG    | 155/156 (99%)   | 1.17   | 41 (26%)  | 0 0     | 86, 102, 111, 118     | 0       |
| 8   | AH    | 138/138 (100%)  | 0.44   | 6 (4%)    | 35 33   | 61, 75, 83, 94        | 0       |
| 8   | CH    | 138/138 (100%)  | 0.57   | 14 (10%)  | 7 5     | 64, 79, 87, 95        | 0       |
| 9   | AI    | 125/128 (97%)   | 0.57   | 14 (11%)  | 5 4     | 64, 93, 106, 114      | 0       |
| 9   | CI    | 125/128 (97%)   | 1.97   | 45 (36%)  | 0 0     | 89, 118, 126, 133     | 0       |
| 10  | AJ    | 96/105 (91%)    | 1.22   | 20 (20%)  | 1 0     | 63, 96, 120, 124      | 0       |
| 10  | CJ    | 96/105 (91%)    | 2.18   | 41 (42%)  | 0 0     | 95, 118, 135, 144     | 0       |
| 11  | AK    | 114/129 (88%)   | 0.43   | 9 (7%)    | 12 10   | 50, 72, 91, 107       | 0       |
| 11  | CK    | 114/129 (88%)   | 0.75   | 14 (12%)  | 4 3     | 54, 77, 95, 109       | 0       |
| 12  | AL    | 122/132 (92%)   | 0.56   | 5 (4%)    | 37 36   | 54, 68, 82, 95        | 0       |
| 12  | CL    | 122/132 (92%)   | 0.89   | 19 (15%)  | 2 1     | 55, 72, 85, 99        | 0       |

*Continued on next page...*

Continued from previous page...

| Mol | Chain | Analysed        | <RSRZ> | #RSRZ>2        | OWAB(Å <sup>2</sup> ) | Q<0.9 |
|-----|-------|-----------------|--------|----------------|-----------------------|-------|
| 13  | AM    | 114/126 (90%)   | 0.11   | 7 (6%) 21 20   | 68, 82, 97, 102       | 0     |
| 13  | CM    | 112/126 (88%)   | 1.59   | 39 (34%) 0 0   | 94, 117, 126, 134     | 0     |
| 14  | AN    | 60/61 (98%)     | 0.46   | 4 (6%) 17 16   | 68, 79, 92, 102       | 0     |
| 14  | CN    | 60/61 (98%)     | 1.54   | 19 (31%) 0 0   | 99, 110, 121, 128     | 0     |
| 15  | AO    | 88/89 (98%)     | 0.34   | 3 (3%) 45 45   | 52, 73, 90, 94        | 0     |
| 15  | CO    | 88/89 (98%)     | 0.63   | 11 (12%) 3 3   | 58, 77, 91, 96        | 0     |
| 16  | AP    | 82/88 (93%)     | 1.04   | 13 (15%) 1 1   | 68, 82, 100, 110      | 0     |
| 16  | CP    | 82/88 (93%)     | 0.46   | 4 (4%) 29 28   | 66, 79, 94, 103       | 0     |
| 17  | AQ    | 99/105 (94%)    | 0.38   | 3 (3%) 50 51   | 57, 74, 87, 92        | 0     |
| 17  | CQ    | 99/105 (94%)    | 0.62   | 9 (9%) 9 7     | 60, 75, 85, 94        | 0     |
| 18  | AR    | 68/88 (77%)     | 0.08   | 3 (4%) 34 33   | 62, 73, 92, 96        | 0     |
| 18  | CR    | 68/88 (77%)     | 0.58   | 9 (13%) 3 2    | 65, 76, 92, 96        | 0     |
| 19  | AS    | 81/93 (87%)     | 0.63   | 9 (11%) 5 4    | 74, 89, 105, 128      | 0     |
| 19  | CS    | 78/93 (83%)     | 2.18   | 34 (43%) 0 0   | 100, 118, 130, 133    | 0     |
| 20  | AT    | 96/106 (90%)    | 0.85   | 11 (11%) 4 4   | 66, 82, 100, 106      | 0     |
| 20  | CT    | 104/106 (98%)   | 0.81   | 13 (12%) 3 3   | 64, 83, 103, 119      | 0     |
| 21  | AU    | 23/27 (85%)     | 0.71   | 3 (13%) 3 2    | 71, 80, 83, 90        | 0     |
| 21  | CU    | 23/27 (85%)     | 1.82   | 9 (39%) 0 0    | 97, 106, 115, 119     | 0     |
| 22  | AY    | 95/119 (79%)    | 0.05   | 2 (2%) 63 65   | 51, 64, 81, 92        | 0     |
| 22  | CY    | 94/119 (78%)    | 2.31   | 51 (54%) 0 0   | 76, 95, 113, 120      | 0     |
| 23  | BA    | 2827/2915 (96%) | -0.05  | 108 (3%) 40 39 | 24, 40, 120, 169      | 0     |
| 23  | DA    | 2798/2915 (95%) | -0.28  | 147 (5%) 26 25 | 27, 46, 118, 170      | 0     |
| 24  | BB    | 120/122 (98%)   | -0.23  | 1 (0%) 86 87   | 39, 65, 76, 119       | 0     |
| 24  | DB    | 120/122 (98%)   | 0.80   | 24 (20%) 1 0   | 50, 81, 97, 130       | 0     |
| 25  | BD    | 275/276 (99%)   | -0.13  | 0 100 100      | 24, 39, 51, 79        | 0     |
| 25  | DD    | 275/276 (99%)   | -0.26  | 1 (0%) 92 93   | 26, 43, 55, 84        | 0     |
| 26  | BE    | 204/206 (99%)   | -0.15  | 0 100 100      | 24, 44, 64, 81        | 0     |
| 26  | DE    | 204/206 (99%)   | -0.12  | 3 (1%) 73 76   | 27, 48, 69, 84        | 0     |
| 27  | BF    | 203/210 (96%)   | 0.08   | 1 (0%) 91 92   | 25, 49, 82, 113       | 0     |
| 27  | DF    | 203/210 (96%)   | 0.19   | 13 (6%) 19 18  | 28, 58, 84, 115       | 0     |
| 28  | BG    | 181/182 (99%)   | 0.18   | 5 (2%) 53 54   | 64, 83, 108, 138      | 0     |

Continued on next page...

Continued from previous page...

| Mol | Chain | Analysed       | <RSRZ> | #RSRZ>2      | OWAB(Å <sup>2</sup> ) | Q<0.9 |
|-----|-------|----------------|--------|--------------|-----------------------|-------|
| 28  | DG    | 181/182 (99%)  | 2.11   | 84 (46%) 0 0 | 78, 96, 116, 140      | 0     |
| 29  | BH    | 174/180 (96%)  | 0.17   | 3 (1%) 70 72 | 49, 64, 80, 92        | 0     |
| 29  | DH    | 174/180 (96%)  | 1.61   | 55 (31%) 0 0 | 61, 78, 92, 101       | 0     |
| 30  | BI    | 146/148 (98%)  | 0.41   | 12 (8%) 11 9 | 46, 75, 91, 98        | 0     |
| 30  | DI    | 146/148 (98%)  | 0.56   | 12 (8%) 11 9 | 49, 81, 99, 107       | 0     |
| 31  | BN    | 140/140 (100%) | 0.04   | 0 100 100    | 30, 44, 66, 83        | 0     |
| 31  | DN    | 140/140 (100%) | -0.05  | 4 (2%) 51 52 | 35, 52, 73, 86        | 0     |
| 32  | BO    | 122/122 (100%) | -0.17  | 0 100 100    | 34, 43, 62, 65        | 0     |
| 32  | DO    | 122/122 (100%) | -0.35  | 1 (0%) 86 87 | 37, 47, 65, 68        | 0     |
| 33  | BP    | 149/150 (99%)  | 0.16   | 1 (0%) 87 89 | 25, 51, 77, 96        | 0     |
| 33  | DP    | 149/150 (99%)  | 0.46   | 17 (11%) 5 4 | 30, 60, 87, 99        | 0     |
| 34  | BQ    | 141/141 (100%) | 0.08   | 0 100 100    | 31, 47, 59, 74        | 0     |
| 34  | DQ    | 141/141 (100%) | 0.12   | 6 (4%) 35 33 | 39, 55, 69, 79        | 0     |
| 35  | BR    | 118/118 (100%) | -0.01  | 0 100 100    | 30, 39, 51, 62        | 0     |
| 35  | DR    | 118/118 (100%) | -0.27  | 0 100 100    | 33, 42, 55, 67        | 0     |
| 36  | BS    | 110/112 (98%)  | 0.14   | 0 100 100    | 48, 62, 77, 85        | 0     |
| 36  | DS    | 110/112 (98%)  | 1.46   | 27 (24%) 0 0 | 59, 74, 87, 93        | 0     |
| 37  | BT    | 131/146 (89%)  | -0.19  | 1 (0%) 86 87 | 38, 46, 76, 103       | 0     |
| 37  | DT    | 130/146 (89%)  | -0.25  | 2 (1%) 73 76 | 41, 50, 73, 105       | 0     |
| 38  | BU    | 116/118 (98%)  | 0.08   | 1 (0%) 84 85 | 28, 38, 53, 70        | 0     |
| 38  | DU    | 116/118 (98%)  | -0.16  | 1 (0%) 84 85 | 33, 45, 61, 70        | 0     |
| 39  | BV    | 101/101 (100%) | 0.01   | 1 (0%) 82 83 | 27, 48, 67, 83        | 0     |
| 39  | DV    | 101/101 (100%) | 0.59   | 9 (8%) 9 7   | 32, 59, 76, 85        | 0     |
| 40  | BW    | 112/113 (99%)  | -0.19  | 0 100 100    | 28, 35, 52, 92        | 0     |
| 40  | DW    | 111/113 (98%)  | -0.37  | 0 100 100    | 32, 40, 58, 85        | 0     |
| 41  | BX    | 95/96 (98%)    | -0.05  | 0 100 100    | 33, 43, 65, 84        | 0     |
| 41  | DX    | 95/96 (98%)    | -0.04  | 2 (2%) 63 65 | 39, 50, 68, 89        | 0     |
| 42  | BY    | 107/110 (97%)  | -0.08  | 0 100 100    | 44, 55, 77, 88        | 0     |
| 42  | DY    | 107/110 (97%)  | 0.70   | 14 (13%) 3 2 | 53, 63, 82, 91        | 0     |
| 43  | BZ    | 198/206 (96%)  | -0.07  | 0 100 100    | 48, 68, 91, 103       | 0     |
| 43  | DZ    | 203/206 (98%)  | 0.96   | 37 (18%) 1 1 | 57, 78, 100, 126      | 0     |

Continued on next page...



Continued from previous page...

| Mol | Chain | Analysed          | <RSRZ> | #RSRZ>2         | OWAB(Å <sup>2</sup> ) | Q<0.9 |
|-----|-------|-------------------|--------|-----------------|-----------------------|-------|
| 44  | B0    | 76/85 (89%)       | -0.01  | 0 100 100       | 37, 44, 57, 75        | 0     |
| 44  | D0    | 77/85 (90%)       | 0.41   | 7 (9%) 9 7      | 44, 52, 67, 101       | 0     |
| 45  | B1    | 97/98 (98%)       | 0.10   | 2 (2%) 63 65    | 31, 44, 74, 82        | 0     |
| 45  | D1    | 97/98 (98%)       | -0.11  | 3 (3%) 49 49    | 33, 48, 78, 85        | 0     |
| 46  | B2    | 70/72 (97%)       | 0.16   | 1 (1%) 75 77    | 42, 56, 67, 93        | 0     |
| 46  | D2    | 71/72 (98%)       | 0.48   | 7 (9%) 7 5      | 51, 65, 76, 94        | 0     |
| 47  | B3    | 59/60 (98%)       | 0.07   | 1 (1%) 70 72    | 33, 42, 66, 84        | 0     |
| 47  | D3    | 59/60 (98%)       | 0.63   | 6 (10%) 6 5     | 39, 50, 76, 96        | 0     |
| 48  | B4    | 46/71 (64%)       | 0.14   | 2 (4%) 35 33    | 73, 96, 111, 116      | 0     |
| 48  | D4    | 46/71 (64%)       | 1.28   | 12 (26%) 0 0    | 89, 107, 118, 124     | 0     |
| 49  | B5    | 59/60 (98%)       | -0.12  | 0 100 100       | 23, 38, 56, 68        | 0     |
| 49  | D5    | 59/60 (98%)       | -0.14  | 2 (3%) 45 45    | 27, 43, 61, 73        | 0     |
| 50  | B6    | 53/54 (98%)       | -0.23  | 0 100 100       | 40, 46, 59, 66        | 0     |
| 50  | D6    | 53/54 (98%)       | -0.06  | 0 100 100       | 47, 52, 60, 70        | 0     |
| 51  | B7    | 48/49 (97%)       | -0.03  | 0 100 100       | 26, 30, 51, 71        | 0     |
| 51  | D7    | 48/49 (97%)       | -0.20  | 0 100 100       | 28, 33, 54, 82        | 0     |
| 52  | B8    | 64/65 (98%)       | 0.07   | 0 100 100       | 34, 38, 45, 57        | 0     |
| 52  | D8    | 64/65 (98%)       | 0.06   | 1 (1%) 72 74    | 38, 44, 50, 60        | 0     |
| 53  | B9    | 36/37 (97%)       | 0.12   | 0 100 100       | 38, 46, 57, 69        | 0     |
| 53  | D9    | 36/37 (97%)       | 0.09   | 1 (2%) 53 54    | 45, 55, 66, 76        | 0     |
| All | All   | 20617/21484 (95%) | 0.22   | 1551 (7%) 14 12 | 23, 63, 117, 175      | 0     |

The worst 5 of 1551 RSRZ outliers are listed below:

| Mol | Chain | Res     | Type | RSRZ |
|-----|-------|---------|------|------|
| 1   | CA    | 1036    | G    | 16.0 |
| 1   | CA    | 1030(B) | C    | 12.9 |
| 23  | DA    | 2139    | C    | 12.4 |
| 9   | CI    | 30      | GLY  | 11.6 |
| 23  | DA    | 2154    | G    | 11.2 |

## 6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

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

### 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

### 6.4 Ligands [i](#)

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, 95<sup>th</sup> 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.

| Mol | Type | Chain | Res  | Atoms | RSCC  | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|-------|------|----------------------------|-------|
| 54  | MG   | BA    | 3605 | 1/1   | -0.01 | 0.57 | 89,89,89,89                | 0     |
| 54  | MG   | CA    | 1664 | 1/1   | 0.12  | 0.15 | 62,62,62,62                | 0     |
| 54  | MG   | DB    | 206  | 1/1   | 0.23  | 1.97 | 115,115,115,115            | 0     |
| 54  | MG   | CA    | 1741 | 1/1   | 0.28  | 0.12 | 117,117,117,117            | 0     |
| 54  | MG   | AA    | 1675 | 1/1   | 0.42  | 0.16 | 106,106,106,106            | 0     |
| 54  | MG   | CA    | 1729 | 1/1   | 0.49  | 0.23 | 84,84,84,84                | 0     |
| 54  | MG   | BA    | 3264 | 1/1   | 0.50  | 0.10 | 86,86,86,86                | 0     |
| 54  | MG   | CA    | 1630 | 1/1   | 0.53  | 0.44 | 78,78,78,78                | 0     |
| 54  | MG   | DA    | 3547 | 1/1   | 0.53  | 0.44 | 89,89,89,89                | 0     |
| 54  | MG   | CA    | 1758 | 1/1   | 0.53  | 0.24 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3014 | 1/1   | 0.54  | 0.49 | 73,73,73,73                | 0     |
| 54  | MG   | CA    | 1607 | 1/1   | 0.55  | 0.98 | 96,96,96,96                | 0     |
| 54  | MG   | CA    | 1657 | 1/1   | 0.55  | 0.15 | 85,85,85,85                | 0     |
| 54  | MG   | AA    | 1767 | 1/1   | 0.56  | 0.18 | 70,70,70,70                | 0     |
| 54  | MG   | DB    | 208  | 1/1   | 0.56  | 0.19 | 96,96,96,96                | 0     |
| 54  | MG   | BA    | 3517 | 1/1   | 0.57  | 0.17 | 91,91,91,91                | 0     |
| 54  | MG   | BR    | 204  | 1/1   | 0.57  | 0.20 | 49,49,49,49                | 0     |
| 54  | MG   | AA    | 1794 | 1/1   | 0.57  | 0.20 | 111,111,111,111            | 0     |
| 54  | MG   | AA    | 1674 | 1/1   | 0.58  | 0.12 | 75,75,75,75                | 0     |
| 54  | MG   | AA    | 1686 | 1/1   | 0.60  | 0.32 | 68,68,68,68                | 0     |
| 54  | MG   | DA    | 3554 | 1/1   | 0.60  | 0.21 | 70,70,70,70                | 0     |
| 54  | MG   | BA    | 3477 | 1/1   | 0.61  | 0.18 | 101,101,101,101            | 0     |
| 54  | MG   | BA    | 3726 | 1/1   | 0.61  | 0.16 | 73,73,73,73                | 0     |
| 54  | MG   | BA    | 3655 | 1/1   | 0.61  | 0.35 | 68,68,68,68                | 0     |
| 54  | MG   | DA    | 3141 | 1/1   | 0.61  | 0.37 | 70,70,70,70                | 0     |
| 54  | MG   | AA    | 1605 | 1/1   | 0.61  | 0.24 | 62,62,62,62                | 0     |
| 54  | MG   | DA    | 3159 | 1/1   | 0.62  | 0.15 | 66,66,66,66                | 0     |
| 54  | MG   | AA    | 1714 | 1/1   | 0.62  | 0.17 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3614 | 1/1   | 0.62  | 0.86 | 92,92,92,92                | 0     |
| 54  | MG   | DA    | 3618 | 1/1   | 0.64  | 0.37 | 93,93,93,93                | 0     |
| 54  | MG   | AA    | 1635 | 1/1   | 0.64  | 0.10 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3558 | 1/1   | 0.64  | 0.25 | 70,70,70,70                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | CA    | 1746 | 1/1   | 0.65 | 0.23 | 113,113,113,113            | 0     |
| 54  | MG   | DA    | 3096 | 1/1   | 0.66 | 0.21 | 61,61,61,61                | 0     |
| 54  | MG   | CA    | 1604 | 1/1   | 0.67 | 0.49 | 70,70,70,70                | 0     |
| 54  | MG   | CA    | 1643 | 1/1   | 0.67 | 0.12 | 76,76,76,76                | 0     |
| 54  | MG   | BA    | 3590 | 1/1   | 0.67 | 0.35 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3632 | 1/1   | 0.67 | 0.14 | 72,72,72,72                | 0     |
| 54  | MG   | D0    | 101  | 1/1   | 0.68 | 0.16 | 78,78,78,78                | 0     |
| 54  | MG   | BA    | 3564 | 1/1   | 0.68 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | CA    | 1671 | 1/1   | 0.68 | 0.07 | 78,78,78,78                | 0     |
| 54  | MG   | DA    | 3337 | 1/1   | 0.68 | 0.24 | 65,65,65,65                | 0     |
| 54  | MG   | CA    | 1681 | 1/1   | 0.68 | 0.21 | 83,83,83,83                | 0     |
| 54  | MG   | DA    | 3478 | 1/1   | 0.69 | 0.28 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3410 | 1/1   | 0.69 | 0.20 | 80,80,80,80                | 0     |
| 54  | MG   | DA    | 3292 | 1/1   | 0.69 | 0.18 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3347 | 1/1   | 0.69 | 0.23 | 87,87,87,87                | 0     |
| 54  | MG   | DB    | 210  | 1/1   | 0.69 | 0.18 | 82,82,82,82                | 0     |
| 54  | MG   | DA    | 3341 | 1/1   | 0.69 | 0.14 | 60,60,60,60                | 0     |
| 54  | MG   | BQ    | 201  | 1/1   | 0.69 | 0.37 | 61,61,61,61                | 0     |
| 54  | MG   | DA    | 3124 | 1/1   | 0.69 | 0.21 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3606 | 1/1   | 0.70 | 0.32 | 82,82,82,82                | 0     |
| 54  | MG   | BA    | 3579 | 1/1   | 0.70 | 0.26 | 57,57,57,57                | 0     |
| 54  | MG   | CA    | 1660 | 1/1   | 0.70 | 0.23 | 65,65,65,65                | 0     |
| 54  | MG   | CA    | 1616 | 1/1   | 0.71 | 0.15 | 71,71,71,71                | 0     |
| 54  | MG   | CA    | 1761 | 1/1   | 0.71 | 0.13 | 92,92,92,92                | 0     |
| 54  | MG   | BA    | 3600 | 1/1   | 0.71 | 0.24 | 58,58,58,58                | 0     |
| 54  | MG   | CA    | 1791 | 1/1   | 0.71 | 0.15 | 72,72,72,72                | 0     |
| 54  | MG   | BA    | 3334 | 1/1   | 0.72 | 0.17 | 39,39,39,39                | 0     |
| 54  | MG   | DA    | 3592 | 1/1   | 0.72 | 0.12 | 72,72,72,72                | 0     |
| 54  | MG   | DO    | 201  | 1/1   | 0.72 | 0.13 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3122 | 1/1   | 0.72 | 0.25 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3545 | 1/1   | 0.72 | 0.10 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3577 | 1/1   | 0.72 | 0.11 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3318 | 1/1   | 0.72 | 0.25 | 75,75,75,75                | 0     |
| 54  | MG   | D5    | 103  | 1/1   | 0.72 | 0.17 | 61,61,61,61                | 0     |
| 54  | MG   | DA    | 3094 | 1/1   | 0.72 | 0.33 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3435 | 1/1   | 0.72 | 0.09 | 77,77,77,77                | 0     |
| 54  | MG   | CA    | 1750 | 1/1   | 0.73 | 0.13 | 88,88,88,88                | 0     |
| 54  | MG   | DA    | 3476 | 1/1   | 0.73 | 0.09 | 95,95,95,95                | 0     |
| 54  | MG   | DA    | 3164 | 1/1   | 0.73 | 0.16 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3723 | 1/1   | 0.73 | 0.12 | 70,70,70,70                | 0     |
| 54  | MG   | BA    | 3059 | 1/1   | 0.73 | 0.20 | 54,54,54,54                | 0     |
| 54  | MG   | AA    | 1813 | 1/1   | 0.73 | 0.17 | 86,86,86,86                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 55  | ZN   | D4    | 101  | 1/1   | 0.73 | 0.09 | 173,173,173,173            | 0     |
| 54  | MG   | DA    | 3108 | 1/1   | 0.73 | 0.38 | 70,70,70,70                | 0     |
| 54  | MG   | BA    | 3165 | 1/1   | 0.73 | 0.33 | 41,41,41,41                | 0     |
| 54  | MG   | CA    | 1646 | 1/1   | 0.74 | 0.11 | 71,71,71,71                | 0     |
| 54  | MG   | DA    | 3466 | 1/1   | 0.74 | 0.17 | 65,65,65,65                | 0     |
| 54  | MG   | CA    | 1688 | 1/1   | 0.74 | 0.23 | 110,110,110,110            | 0     |
| 54  | MG   | AA    | 1788 | 1/1   | 0.74 | 0.11 | 76,76,76,76                | 0     |
| 54  | MG   | BA    | 3679 | 1/1   | 0.74 | 0.09 | 80,80,80,80                | 0     |
| 54  | MG   | CA    | 1793 | 1/1   | 0.74 | 0.20 | 89,89,89,89                | 0     |
| 54  | MG   | BA    | 3672 | 1/1   | 0.75 | 0.31 | 69,69,69,69                | 0     |
| 54  | MG   | CA    | 1677 | 1/1   | 0.75 | 0.20 | 86,86,86,86                | 0     |
| 54  | MG   | BA    | 3512 | 1/1   | 0.75 | 0.21 | 71,71,71,71                | 0     |
| 54  | MG   | BA    | 3322 | 1/1   | 0.75 | 0.28 | 54,54,54,54                | 0     |
| 54  | MG   | AA    | 1658 | 1/1   | 0.75 | 0.25 | 73,73,73,73                | 0     |
| 54  | MG   | DB    | 205  | 1/1   | 0.75 | 0.23 | 92,92,92,92                | 0     |
| 54  | MG   | BA    | 3074 | 1/1   | 0.75 | 0.32 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3453 | 1/1   | 0.75 | 0.14 | 65,65,65,65                | 0     |
| 54  | MG   | AA    | 1633 | 1/1   | 0.75 | 0.21 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3477 | 1/1   | 0.75 | 0.09 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3316 | 1/1   | 0.75 | 0.12 | 87,87,87,87                | 0     |
| 54  | MG   | DA    | 3247 | 1/1   | 0.75 | 0.26 | 73,73,73,73                | 0     |
| 54  | MG   | DA    | 3130 | 1/1   | 0.76 | 0.65 | 49,49,49,49                | 0     |
| 54  | MG   | BA    | 3669 | 1/1   | 0.76 | 0.14 | 44,44,44,44                | 0     |
| 54  | MG   | DA    | 3494 | 1/1   | 0.76 | 0.26 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3092 | 1/1   | 0.76 | 0.17 | 54,54,54,54                | 0     |
| 54  | MG   | AA    | 1764 | 1/1   | 0.76 | 0.27 | 70,70,70,70                | 0     |
| 54  | MG   | CA    | 1778 | 1/1   | 0.76 | 0.10 | 83,83,83,83                | 0     |
| 54  | MG   | BA    | 3511 | 1/1   | 0.76 | 0.09 | 72,72,72,72                | 0     |
| 55  | ZN   | CD    | 301  | 1/1   | 0.76 | 0.30 | 93,93,93,93                | 0     |
| 54  | MG   | CA    | 1785 | 1/1   | 0.76 | 0.17 | 84,84,84,84                | 0     |
| 54  | MG   | BB    | 201  | 1/1   | 0.76 | 0.21 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3240 | 1/1   | 0.76 | 0.11 | 56,56,56,56                | 0     |
| 54  | MG   | CA    | 1713 | 1/1   | 0.76 | 0.32 | 95,95,95,95                | 0     |
| 54  | MG   | CA    | 1624 | 1/1   | 0.76 | 0.18 | 65,65,65,65                | 0     |
| 54  | MG   | DA    | 3393 | 1/1   | 0.76 | 0.19 | 52,52,52,52                | 0     |
| 54  | MG   | AA    | 1608 | 1/1   | 0.77 | 0.21 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3560 | 1/1   | 0.77 | 0.28 | 93,93,93,93                | 0     |
| 54  | MG   | CA    | 1612 | 1/1   | 0.77 | 0.75 | 84,84,84,84                | 0     |
| 54  | MG   | CA    | 1715 | 1/1   | 0.77 | 0.20 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3486 | 1/1   | 0.77 | 0.28 | 44,44,44,44                | 0     |
| 54  | MG   | CA    | 1645 | 1/1   | 0.77 | 0.38 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3395 | 1/1   | 0.77 | 0.32 | 75,75,75,75                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | CA    | 1606 | 1/1   | 0.77 | 0.36 | 83,83,83,83                | 0     |
| 54  | MG   | AA    | 1623 | 1/1   | 0.77 | 0.18 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3040 | 1/1   | 0.77 | 0.14 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3586 | 1/1   | 0.77 | 0.21 | 142,142,142,142            | 0     |
| 54  | MG   | BA    | 3111 | 1/1   | 0.77 | 0.72 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3479 | 1/1   | 0.77 | 0.16 | 66,66,66,66                | 0     |
| 54  | MG   | AA    | 1646 | 1/1   | 0.77 | 0.26 | 87,87,87,87                | 0     |
| 54  | MG   | BB    | 211  | 1/1   | 0.77 | 0.10 | 61,61,61,61                | 0     |
| 54  | MG   | BA    | 3072 | 1/1   | 0.77 | 0.21 | 48,48,48,48                | 0     |
| 54  | MG   | DA    | 3086 | 1/1   | 0.77 | 0.29 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3402 | 1/1   | 0.77 | 0.17 | 53,53,53,53                | 0     |
| 54  | MG   | DA    | 3577 | 1/1   | 0.78 | 0.34 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3622 | 1/1   | 0.78 | 0.10 | 80,80,80,80                | 0     |
| 54  | MG   | BA    | 3436 | 1/1   | 0.78 | 0.17 | 41,41,41,41                | 0     |
| 54  | MG   | DA    | 3084 | 1/1   | 0.78 | 0.24 | 45,45,45,45                | 0     |
| 54  | MG   | B3    | 101  | 1/1   | 0.78 | 0.19 | 54,54,54,54                | 0     |
| 54  | MG   | AA    | 1603 | 1/1   | 0.78 | 0.11 | 62,62,62,62                | 0     |
| 54  | MG   | BA    | 3537 | 1/1   | 0.78 | 0.25 | 66,66,66,66                | 0     |
| 54  | MG   | B6    | 102  | 1/1   | 0.78 | 0.17 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3175 | 1/1   | 0.78 | 0.35 | 31,31,31,31                | 0     |
| 54  | MG   | AA    | 1787 | 1/1   | 0.79 | 0.20 | 54,54,54,54                | 0     |
| 54  | MG   | CA    | 1719 | 1/1   | 0.79 | 0.11 | 90,90,90,90                | 0     |
| 54  | MG   | CA    | 1629 | 1/1   | 0.79 | 0.32 | 81,81,81,81                | 0     |
| 54  | MG   | BA    | 3020 | 1/1   | 0.79 | 0.09 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3128 | 1/1   | 0.79 | 0.23 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3501 | 1/1   | 0.79 | 0.15 | 51,51,51,51                | 0     |
| 54  | MG   | CA    | 1763 | 1/1   | 0.79 | 0.08 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3447 | 1/1   | 0.79 | 0.09 | 53,53,53,53                | 0     |
| 54  | MG   | DA    | 3205 | 1/1   | 0.79 | 0.12 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3285 | 1/1   | 0.79 | 0.29 | 96,96,96,96                | 0     |
| 54  | MG   | AA    | 1611 | 1/1   | 0.79 | 0.15 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3346 | 1/1   | 0.79 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3145 | 1/1   | 0.79 | 0.13 | 60,60,60,60                | 0     |
| 54  | MG   | CA    | 1647 | 1/1   | 0.79 | 0.10 | 103,103,103,103            | 0     |
| 54  | MG   | CA    | 1781 | 1/1   | 0.79 | 0.15 | 100,100,100,100            | 0     |
| 54  | MG   | DA    | 3182 | 1/1   | 0.79 | 0.16 | 45,45,45,45                | 0     |
| 54  | MG   | DA    | 3038 | 1/1   | 0.80 | 0.21 | 85,85,85,85                | 0     |
| 54  | MG   | BA    | 3617 | 1/1   | 0.80 | 0.24 | 44,44,44,44                | 0     |
| 54  | MG   | CA    | 1674 | 1/1   | 0.80 | 0.12 | 80,80,80,80                | 0     |
| 54  | MG   | DA    | 3503 | 1/1   | 0.80 | 0.12 | 59,59,59,59                | 0     |
| 54  | MG   | BA    | 3535 | 1/1   | 0.80 | 0.10 | 58,58,58,58                | 0     |
| 54  | MG   | CA    | 1797 | 1/1   | 0.80 | 0.21 | 68,68,68,68                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3432 | 1/1   | 0.80 | 0.12 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3497 | 1/1   | 0.80 | 0.21 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3557 | 1/1   | 0.80 | 0.14 | 25,25,25,25                 | 0     |
| 54  | MG   | BA    | 3491 | 1/1   | 0.80 | 0.11 | 72,72,72,72                 | 0     |
| 54  | MG   | DA    | 3013 | 1/1   | 0.80 | 0.26 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3117 | 1/1   | 0.80 | 0.21 | 67,67,67,67                 | 0     |
| 54  | MG   | AA    | 1756 | 1/1   | 0.80 | 0.10 | 107,107,107,107             | 0     |
| 54  | MG   | CA    | 1796 | 1/1   | 0.80 | 0.14 | 85,85,85,85                 | 0     |
| 54  | MG   | DA    | 3579 | 1/1   | 0.80 | 0.18 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3716 | 1/1   | 0.80 | 0.17 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1759 | 1/1   | 0.80 | 0.09 | 95,95,95,95                 | 0     |
| 54  | MG   | DA    | 3551 | 1/1   | 0.80 | 0.16 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3255 | 1/1   | 0.80 | 0.08 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3375 | 1/1   | 0.80 | 0.14 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3172 | 1/1   | 0.80 | 0.13 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3295 | 1/1   | 0.80 | 0.19 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3360 | 1/1   | 0.80 | 0.22 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3414 | 1/1   | 0.80 | 0.10 | 66,66,66,66                 | 0     |
| 54  | MG   | DA    | 3543 | 1/1   | 0.80 | 0.13 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1639 | 1/1   | 0.81 | 0.84 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3136 | 1/1   | 0.81 | 0.70 | 62,62,62,62                 | 0     |
| 54  | MG   | DB    | 207  | 1/1   | 0.81 | 0.08 | 82,82,82,82                 | 0     |
| 54  | MG   | BA    | 3377 | 1/1   | 0.81 | 0.19 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3619 | 1/1   | 0.81 | 0.15 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1777 | 1/1   | 0.81 | 0.12 | 130,130,130,130             | 0     |
| 54  | MG   | DP    | 201  | 1/1   | 0.81 | 0.20 | 78,78,78,78                 | 0     |
| 54  | MG   | DD    | 303  | 1/1   | 0.81 | 0.14 | 53,53,53,53                 | 0     |
| 54  | MG   | CA    | 1705 | 1/1   | 0.81 | 0.16 | 72,72,72,72                 | 0     |
| 54  | MG   | CA    | 1650 | 1/1   | 0.81 | 0.32 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3268 | 1/1   | 0.81 | 0.09 | 54,54,54,54                 | 0     |
| 54  | MG   | AA    | 1772 | 1/1   | 0.81 | 0.13 | 71,71,71,71                 | 0     |
| 54  | MG   | CA    | 1613 | 1/1   | 0.81 | 0.26 | 68,68,68,68                 | 0     |
| 54  | MG   | DA    | 3348 | 1/1   | 0.81 | 0.14 | 87,87,87,87                 | 0     |
| 54  | MG   | AA    | 1779 | 1/1   | 0.81 | 0.17 | 68,68,68,68                 | 0     |
| 54  | MG   | BA    | 3152 | 1/1   | 0.81 | 0.17 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3487 | 1/1   | 0.81 | 0.18 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3571 | 1/1   | 0.81 | 0.16 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3328 | 1/1   | 0.81 | 0.13 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3583 | 1/1   | 0.81 | 0.10 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3345 | 1/1   | 0.81 | 0.29 | 54,54,54,54                 | 0     |
| 54  | MG   | AA    | 1793 | 1/1   | 0.81 | 0.22 | 78,78,78,78                 | 0     |
| 54  | MG   | CA    | 1779 | 1/1   | 0.82 | 0.18 | 116,116,116,116             | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | AA    | 1769 | 1/1   | 0.82 | 0.12 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3573 | 1/1   | 0.82 | 0.54 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3640 | 1/1   | 0.82 | 0.17 | 55,55,55,55                | 0     |
| 54  | MG   | CA    | 1618 | 1/1   | 0.82 | 0.14 | 61,61,61,61                | 0     |
| 54  | MG   | BA    | 3688 | 1/1   | 0.82 | 0.12 | 72,72,72,72                | 0     |
| 54  | MG   | DA    | 3272 | 1/1   | 0.82 | 0.10 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3638 | 1/1   | 0.82 | 0.15 | 82,82,82,82                | 0     |
| 54  | MG   | AA    | 1757 | 1/1   | 0.82 | 0.22 | 91,91,91,91                | 0     |
| 54  | MG   | DA    | 3335 | 1/1   | 0.82 | 0.13 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3653 | 1/1   | 0.82 | 0.12 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3690 | 1/1   | 0.82 | 0.09 | 42,42,42,42                | 0     |
| 54  | MG   | BA    | 3205 | 1/1   | 0.82 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3559 | 1/1   | 0.82 | 0.42 | 76,76,76,76                | 0     |
| 54  | MG   | CA    | 1776 | 1/1   | 0.82 | 0.23 | 76,76,76,76                | 0     |
| 54  | MG   | B3    | 102  | 1/1   | 0.82 | 0.21 | 52,52,52,52                | 0     |
| 54  | MG   | DA    | 3411 | 1/1   | 0.82 | 0.14 | 89,89,89,89                | 0     |
| 54  | MG   | DA    | 3416 | 1/1   | 0.82 | 0.17 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3509 | 1/1   | 0.82 | 0.15 | 77,77,77,77                | 0     |
| 54  | MG   | CA    | 1654 | 1/1   | 0.82 | 0.22 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3685 | 1/1   | 0.82 | 0.30 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3130 | 1/1   | 0.82 | 0.13 | 79,79,79,79                | 0     |
| 54  | MG   | DA    | 3226 | 1/1   | 0.83 | 0.16 | 41,41,41,41                | 0     |
| 54  | MG   | BA    | 3169 | 1/1   | 0.83 | 0.16 | 60,60,60,60                | 0     |
| 54  | MG   | AA    | 1777 | 1/1   | 0.83 | 0.13 | 100,100,100,100            | 0     |
| 54  | MG   | CA    | 1697 | 1/1   | 0.83 | 0.06 | 95,95,95,95                | 0     |
| 54  | MG   | BA    | 3076 | 1/1   | 0.83 | 0.39 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3467 | 1/1   | 0.83 | 0.10 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3118 | 1/1   | 0.83 | 0.14 | 75,75,75,75                | 0     |
| 54  | MG   | AA    | 1765 | 1/1   | 0.83 | 0.21 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3462 | 1/1   | 0.83 | 0.45 | 36,36,36,36                | 0     |
| 54  | MG   | DA    | 3635 | 1/1   | 0.83 | 0.20 | 54,54,54,54                | 0     |
| 54  | MG   | CA    | 1631 | 1/1   | 0.83 | 0.10 | 87,87,87,87                | 0     |
| 54  | MG   | DA    | 3140 | 1/1   | 0.83 | 0.41 | 60,60,60,60                | 0     |
| 54  | MG   | CA    | 1730 | 1/1   | 0.83 | 0.17 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3248 | 1/1   | 0.83 | 0.26 | 30,30,30,30                | 0     |
| 54  | MG   | AA    | 1816 | 1/1   | 0.83 | 0.18 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3065 | 1/1   | 0.83 | 0.25 | 74,74,74,74                | 0     |
| 54  | MG   | DA    | 3502 | 1/1   | 0.83 | 0.08 | 78,78,78,78                | 0     |
| 54  | MG   | BD    | 307  | 1/1   | 0.83 | 0.22 | 65,65,65,65                | 0     |
| 54  | MG   | DA    | 3617 | 1/1   | 0.83 | 0.08 | 74,74,74,74                | 0     |
| 54  | MG   | BA    | 3343 | 1/1   | 0.83 | 0.17 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3309 | 1/1   | 0.83 | 0.15 | 69,69,69,69                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3284 | 1/1   | 0.83 | 0.19 | 70,70,70,70                | 0     |
| 54  | MG   | BA    | 3382 | 1/1   | 0.83 | 0.22 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3569 | 1/1   | 0.83 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3704 | 1/1   | 0.83 | 0.18 | 70,70,70,70                | 0     |
| 54  | MG   | DA    | 3149 | 1/1   | 0.83 | 0.42 | 46,46,46,46                | 0     |
| 54  | MG   | BA    | 3260 | 1/1   | 0.83 | 0.33 | 31,31,31,31                | 0     |
| 54  | MG   | CA    | 1635 | 1/1   | 0.83 | 0.43 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3050 | 1/1   | 0.83 | 0.16 | 52,52,52,52                | 0     |
| 54  | MG   | DA    | 3032 | 1/1   | 0.84 | 0.33 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3163 | 1/1   | 0.84 | 0.14 | 39,39,39,39                | 0     |
| 54  | MG   | D1    | 101  | 1/1   | 0.84 | 0.09 | 59,59,59,59                | 0     |
| 54  | MG   | CA    | 1690 | 1/1   | 0.84 | 0.14 | 75,75,75,75                | 0     |
| 54  | MG   | CA    | 1736 | 1/1   | 0.84 | 0.19 | 94,94,94,94                | 0     |
| 54  | MG   | DA    | 3321 | 1/1   | 0.84 | 0.20 | 74,74,74,74                | 0     |
| 54  | MG   | CA    | 1742 | 1/1   | 0.84 | 0.12 | 99,99,99,99                | 0     |
| 54  | MG   | DA    | 3283 | 1/1   | 0.84 | 0.14 | 51,51,51,51                | 0     |
| 54  | MG   | CA    | 1620 | 1/1   | 0.84 | 0.39 | 74,74,74,74                | 0     |
| 54  | MG   | DA    | 3636 | 1/1   | 0.84 | 0.19 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3185 | 1/1   | 0.84 | 0.21 | 47,47,47,47                | 0     |
| 54  | MG   | BA    | 3120 | 1/1   | 0.84 | 0.09 | 54,54,54,54                | 0     |
| 54  | MG   | AA    | 1801 | 1/1   | 0.84 | 0.08 | 87,87,87,87                | 0     |
| 54  | MG   | DA    | 3179 | 1/1   | 0.84 | 0.24 | 43,43,43,43                | 0     |
| 54  | MG   | AA    | 1695 | 1/1   | 0.84 | 0.14 | 57,57,57,57                | 0     |
| 54  | MG   | AA    | 1652 | 1/1   | 0.84 | 0.19 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3338 | 1/1   | 0.84 | 0.23 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3031 | 1/1   | 0.84 | 0.14 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3275 | 1/1   | 0.84 | 0.13 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3656 | 1/1   | 0.84 | 0.21 | 50,50,50,50                | 0     |
| 54  | MG   | DA    | 3315 | 1/1   | 0.84 | 0.07 | 49,49,49,49                | 0     |
| 54  | MG   | CA    | 1718 | 1/1   | 0.84 | 0.14 | 76,76,76,76                | 0     |
| 54  | MG   | DA    | 3352 | 1/1   | 0.84 | 0.15 | 82,82,82,82                | 0     |
| 54  | MG   | DA    | 3328 | 1/1   | 0.84 | 0.13 | 52,52,52,52                | 0     |
| 54  | MG   | DA    | 3312 | 1/1   | 0.84 | 0.12 | 52,52,52,52                | 0     |
| 54  | MG   | CA    | 1764 | 1/1   | 0.84 | 0.13 | 90,90,90,90                | 0     |
| 54  | MG   | DA    | 3405 | 1/1   | 0.84 | 0.13 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3004 | 1/1   | 0.84 | 0.24 | 64,64,64,64                | 0     |
| 54  | MG   | CA    | 1739 | 1/1   | 0.84 | 0.27 | 76,76,76,76                | 0     |
| 54  | MG   | DA    | 3236 | 1/1   | 0.84 | 0.09 | 40,40,40,40                | 0     |
| 54  | MG   | DA    | 3340 | 1/1   | 0.84 | 0.16 | 72,72,72,72                | 0     |
| 54  | MG   | DA    | 3326 | 1/1   | 0.84 | 0.17 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3375 | 1/1   | 0.85 | 0.05 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3451 | 1/1   | 0.85 | 0.10 | 60,60,60,60                | 0     |

*Continued on next page...*



*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | CA    | 1803 | 1/1   | 0.85 | 0.17 | 55,55,55,55                 | 0     |
| 54  | MG   | DA    | 3101 | 1/1   | 0.85 | 0.14 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3594 | 1/1   | 0.85 | 0.16 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3143 | 1/1   | 0.85 | 0.25 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3536 | 1/1   | 0.85 | 0.20 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3210 | 1/1   | 0.85 | 0.16 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3569 | 1/1   | 0.85 | 0.34 | 60,60,60,60                 | 0     |
| 54  | MG   | AA    | 1730 | 1/1   | 0.85 | 0.18 | 70,70,70,70                 | 0     |
| 54  | MG   | DA    | 3093 | 1/1   | 0.85 | 0.24 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3251 | 1/1   | 0.85 | 0.13 | 24,24,24,24                 | 0     |
| 54  | MG   | CA    | 1669 | 1/1   | 0.85 | 0.20 | 71,71,71,71                 | 0     |
| 54  | MG   | BA    | 3432 | 1/1   | 0.85 | 0.20 | 68,68,68,68                 | 0     |
| 54  | MG   | BA    | 3034 | 1/1   | 0.85 | 0.20 | 40,40,40,40                 | 0     |
| 54  | MG   | AA    | 1698 | 1/1   | 0.85 | 0.20 | 78,78,78,78                 | 0     |
| 54  | MG   | DA    | 3196 | 1/1   | 0.85 | 0.31 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3561 | 1/1   | 0.85 | 0.16 | 46,46,46,46                 | 0     |
| 54  | MG   | AA    | 1613 | 1/1   | 0.85 | 0.34 | 77,77,77,77                 | 0     |
| 54  | MG   | DA    | 3298 | 1/1   | 0.85 | 0.11 | 51,51,51,51                 | 0     |
| 54  | MG   | CA    | 1632 | 1/1   | 0.85 | 0.32 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3670 | 1/1   | 0.85 | 0.16 | 65,65,65,65                 | 0     |
| 54  | MG   | CA    | 1653 | 1/1   | 0.85 | 0.15 | 85,85,85,85                 | 0     |
| 54  | MG   | AA    | 1762 | 1/1   | 0.85 | 0.30 | 78,78,78,78                 | 0     |
| 54  | MG   | BA    | 3151 | 1/1   | 0.85 | 0.20 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3286 | 1/1   | 0.85 | 0.18 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3330 | 1/1   | 0.85 | 0.11 | 56,56,56,56                 | 0     |
| 54  | MG   | DO    | 202  | 1/1   | 0.85 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | B0    | 103  | 1/1   | 0.85 | 0.15 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3286 | 1/1   | 0.85 | 0.12 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3036 | 1/1   | 0.85 | 0.24 | 62,62,62,62                 | 0     |
| 54  | MG   | DA    | 3462 | 1/1   | 0.85 | 0.15 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3287 | 1/1   | 0.85 | 0.27 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3067 | 1/1   | 0.85 | 0.55 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3314 | 1/1   | 0.85 | 0.16 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3457 | 1/1   | 0.85 | 0.08 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3277 | 1/1   | 0.85 | 0.10 | 60,60,60,60                 | 0     |
| 54  | MG   | AA    | 1755 | 1/1   | 0.85 | 0.38 | 76,76,76,76                 | 0     |
| 54  | MG   | DA    | 3508 | 1/1   | 0.85 | 0.24 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3395 | 1/1   | 0.85 | 0.11 | 37,37,37,37                 | 0     |
| 54  | MG   | AA    | 1630 | 1/1   | 0.85 | 0.29 | 76,76,76,76                 | 0     |
| 54  | MG   | DA    | 3484 | 1/1   | 0.85 | 0.26 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3717 | 1/1   | 0.85 | 0.14 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3073 | 1/1   | 0.85 | 0.10 | 74,74,74,74                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | BA    | 3386 | 1/1   | 0.85 | 0.38 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3336 | 1/1   | 0.85 | 0.16 | 71,71,71,71                | 0     |
| 54  | MG   | CA    | 1640 | 1/1   | 0.85 | 0.20 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3244 | 1/1   | 0.85 | 0.19 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3659 | 1/1   | 0.85 | 0.07 | 61,61,61,61                | 0     |
| 54  | MG   | DA    | 3134 | 1/1   | 0.85 | 0.22 | 71,71,71,71                | 0     |
| 54  | MG   | AA    | 1786 | 1/1   | 0.85 | 0.13 | 89,89,89,89                | 0     |
| 54  | MG   | CA    | 1766 | 1/1   | 0.86 | 0.16 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3499 | 1/1   | 0.86 | 0.19 | 35,35,35,35                | 0     |
| 54  | MG   | CA    | 1707 | 1/1   | 0.86 | 0.40 | 73,73,73,73                | 0     |
| 54  | MG   | DA    | 3289 | 1/1   | 0.86 | 0.13 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3281 | 1/1   | 0.86 | 0.12 | 43,43,43,43                | 0     |
| 54  | MG   | AA    | 1644 | 1/1   | 0.86 | 0.16 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3369 | 1/1   | 0.86 | 0.11 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3020 | 1/1   | 0.86 | 0.08 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3701 | 1/1   | 0.86 | 0.15 | 34,34,34,34                | 0     |
| 54  | MG   | CA    | 1787 | 1/1   | 0.86 | 0.20 | 84,84,84,84                | 0     |
| 54  | MG   | DA    | 3211 | 1/1   | 0.86 | 0.08 | 38,38,38,38                | 0     |
| 54  | MG   | BA    | 3129 | 1/1   | 0.86 | 0.07 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3467 | 1/1   | 0.86 | 0.13 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3463 | 1/1   | 0.86 | 0.15 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3006 | 1/1   | 0.86 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3602 | 1/1   | 0.86 | 0.09 | 53,53,53,53                | 0     |
| 54  | MG   | CQ    | 201  | 1/1   | 0.86 | 0.11 | 76,76,76,76                | 0     |
| 54  | MG   | DA    | 3371 | 1/1   | 0.86 | 0.28 | 76,76,76,76                | 0     |
| 54  | MG   | DA    | 3530 | 1/1   | 0.86 | 0.10 | 66,66,66,66                | 0     |
| 54  | MG   | CA    | 1637 | 1/1   | 0.86 | 0.14 | 98,98,98,98                | 0     |
| 54  | MG   | DA    | 3453 | 1/1   | 0.86 | 0.09 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3572 | 1/1   | 0.86 | 0.13 | 45,45,45,45                | 0     |
| 54  | MG   | BA    | 3661 | 1/1   | 0.86 | 0.16 | 40,40,40,40                | 0     |
| 54  | MG   | DA    | 3166 | 1/1   | 0.86 | 0.15 | 56,56,56,56                | 0     |
| 54  | MG   | BA    | 3449 | 1/1   | 0.86 | 0.14 | 40,40,40,40                | 0     |
| 55  | ZN   | B4    | 101  | 1/1   | 0.86 | 0.07 | 117,117,117,117            | 0     |
| 54  | MG   | BA    | 3267 | 1/1   | 0.86 | 0.18 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3387 | 1/1   | 0.86 | 0.08 | 72,72,72,72                | 0     |
| 54  | MG   | BA    | 3621 | 1/1   | 0.86 | 0.21 | 35,35,35,35                | 0     |
| 54  | MG   | BA    | 3702 | 1/1   | 0.86 | 0.09 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3089 | 1/1   | 0.86 | 0.29 | 50,50,50,50                | 0     |
| 54  | MG   | CA    | 1786 | 1/1   | 0.86 | 0.30 | 83,83,83,83                | 0     |
| 54  | MG   | BA    | 3619 | 1/1   | 0.86 | 0.35 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3274 | 1/1   | 0.86 | 0.09 | 51,51,51,51                | 0     |
| 54  | MG   | BA    | 3144 | 1/1   | 0.86 | 0.23 | 51,51,51,51                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | CA    | 1735 | 1/1   | 0.86 | 0.12 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3249 | 1/1   | 0.86 | 0.14 | 47,47,47,47                | 0     |
| 54  | MG   | BA    | 3102 | 1/1   | 0.86 | 0.24 | 33,33,33,33                | 0     |
| 54  | MG   | BA    | 3003 | 1/1   | 0.86 | 0.39 | 68,68,68,68                | 0     |
| 54  | MG   | BB    | 213  | 1/1   | 0.86 | 0.11 | 46,46,46,46                | 0     |
| 54  | MG   | DA    | 3137 | 1/1   | 0.86 | 0.25 | 45,45,45,45                | 0     |
| 54  | MG   | AA    | 1667 | 1/1   | 0.86 | 0.17 | 84,84,84,84                | 0     |
| 54  | MG   | AA    | 1721 | 1/1   | 0.86 | 0.12 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3384 | 1/1   | 0.86 | 0.34 | 49,49,49,49                | 0     |
| 54  | MG   | BA    | 3276 | 1/1   | 0.86 | 0.11 | 47,47,47,47                | 0     |
| 54  | MG   | AA    | 1791 | 1/1   | 0.87 | 0.16 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3587 | 1/1   | 0.87 | 0.07 | 60,60,60,60                | 0     |
| 54  | MG   | B7    | 101  | 1/1   | 0.87 | 0.08 | 45,45,45,45                | 0     |
| 54  | MG   | AA    | 1669 | 1/1   | 0.87 | 0.12 | 80,80,80,80                | 0     |
| 54  | MG   | DA    | 3370 | 1/1   | 0.87 | 0.19 | 87,87,87,87                | 0     |
| 54  | MG   | DA    | 3374 | 1/1   | 0.87 | 0.09 | 73,73,73,73                | 0     |
| 54  | MG   | CA    | 1622 | 1/1   | 0.87 | 0.14 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3510 | 1/1   | 0.87 | 0.07 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3598 | 1/1   | 0.87 | 0.16 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3324 | 1/1   | 0.87 | 0.24 | 86,86,86,86                | 0     |
| 54  | MG   | BA    | 3725 | 1/1   | 0.87 | 0.14 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3509 | 1/1   | 0.87 | 0.16 | 70,70,70,70                | 0     |
| 54  | MG   | AA    | 1654 | 1/1   | 0.87 | 0.09 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3088 | 1/1   | 0.87 | 0.20 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3317 | 1/1   | 0.87 | 0.16 | 69,69,69,69                | 0     |
| 54  | MG   | BA    | 3071 | 1/1   | 0.87 | 0.22 | 46,46,46,46                | 0     |
| 54  | MG   | D7    | 102  | 1/1   | 0.87 | 0.18 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3134 | 1/1   | 0.87 | 0.08 | 50,50,50,50                | 0     |
| 54  | MG   | BA    | 3007 | 1/1   | 0.87 | 0.15 | 41,41,41,41                | 0     |
| 54  | MG   | BF    | 304  | 1/1   | 0.87 | 0.09 | 47,47,47,47                | 0     |
| 54  | MG   | DD    | 304  | 1/1   | 0.87 | 0.23 | 39,39,39,39                | 0     |
| 54  | MG   | DA    | 3418 | 1/1   | 0.87 | 0.09 | 48,48,48,48                | 0     |
| 54  | MG   | CA    | 1675 | 1/1   | 0.87 | 0.18 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3027 | 1/1   | 0.87 | 0.19 | 47,47,47,47                | 0     |
| 54  | MG   | DA    | 3404 | 1/1   | 0.87 | 0.29 | 62,62,62,62                | 0     |
| 54  | MG   | DA    | 3028 | 1/1   | 0.87 | 0.12 | 62,62,62,62                | 0     |
| 54  | MG   | DA    | 3063 | 1/1   | 0.87 | 0.24 | 47,47,47,47                | 0     |
| 54  | MG   | B2    | 102  | 1/1   | 0.87 | 0.19 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3390 | 1/1   | 0.87 | 0.19 | 73,73,73,73                | 0     |
| 54  | MG   | BA    | 3606 | 1/1   | 0.87 | 0.10 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3436 | 1/1   | 0.87 | 0.14 | 77,77,77,77                | 0     |
| 54  | MG   | BA    | 3226 | 1/1   | 0.87 | 0.14 | 49,49,49,49                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3629 | 1/1   | 0.87 | 0.10 | 80,80,80,80                | 0     |
| 54  | MG   | BA    | 3244 | 1/1   | 0.87 | 0.14 | 49,49,49,49                | 0     |
| 54  | MG   | BA    | 3714 | 1/1   | 0.87 | 0.14 | 47,47,47,47                | 0     |
| 54  | MG   | DA    | 3583 | 1/1   | 0.87 | 0.47 | 35,35,35,35                | 0     |
| 54  | MG   | CA    | 1659 | 1/1   | 0.87 | 0.13 | 89,89,89,89                | 0     |
| 54  | MG   | DA    | 3403 | 1/1   | 0.87 | 0.12 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3605 | 1/1   | 0.87 | 0.17 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3399 | 1/1   | 0.87 | 0.18 | 80,80,80,80                | 0     |
| 54  | MG   | DA    | 3446 | 1/1   | 0.87 | 0.10 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3238 | 1/1   | 0.87 | 0.09 | 39,39,39,39                | 0     |
| 54  | MG   | AA    | 1780 | 1/1   | 0.87 | 0.17 | 72,72,72,72                | 0     |
| 54  | MG   | BA    | 3277 | 1/1   | 0.87 | 0.21 | 32,32,32,32                | 0     |
| 54  | MG   | DA    | 3168 | 1/1   | 0.87 | 0.17 | 41,41,41,41                | 0     |
| 54  | MG   | BB    | 205  | 1/1   | 0.87 | 0.13 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3118 | 1/1   | 0.87 | 0.16 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3596 | 1/1   | 0.87 | 0.38 | 60,60,60,60                | 0     |
| 54  | MG   | BA    | 3423 | 1/1   | 0.87 | 0.09 | 46,46,46,46                | 0     |
| 54  | MG   | CA    | 1782 | 1/1   | 0.87 | 0.21 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3596 | 1/1   | 0.87 | 0.23 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3100 | 1/1   | 0.87 | 0.26 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3565 | 1/1   | 0.87 | 0.19 | 62,62,62,62                | 0     |
| 54  | MG   | DA    | 3359 | 1/1   | 0.87 | 0.38 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3198 | 1/1   | 0.87 | 0.39 | 52,52,52,52                | 0     |
| 54  | MG   | AA    | 1676 | 1/1   | 0.87 | 0.18 | 86,86,86,86                | 0     |
| 54  | MG   | DA    | 3144 | 1/1   | 0.87 | 0.23 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3628 | 1/1   | 0.87 | 0.10 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3351 | 1/1   | 0.87 | 0.14 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3646 | 1/1   | 0.87 | 0.17 | 38,38,38,38                | 0     |
| 54  | MG   | DA    | 3523 | 1/1   | 0.87 | 0.16 | 73,73,73,73                | 0     |
| 54  | MG   | BA    | 3689 | 1/1   | 0.88 | 0.17 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3623 | 1/1   | 0.88 | 0.18 | 85,85,85,85                | 0     |
| 54  | MG   | DA    | 3126 | 1/1   | 0.88 | 0.17 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3581 | 1/1   | 0.88 | 0.15 | 46,46,46,46                | 0     |
| 54  | MG   | BA    | 3252 | 1/1   | 0.88 | 0.13 | 52,52,52,52                | 0     |
| 54  | MG   | AA    | 1679 | 1/1   | 0.88 | 0.29 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3673 | 1/1   | 0.88 | 0.27 | 69,69,69,69                | 0     |
| 54  | MG   | AA    | 1789 | 1/1   | 0.88 | 0.11 | 78,78,78,78                | 0     |
| 54  | MG   | BA    | 3496 | 1/1   | 0.88 | 0.30 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3574 | 1/1   | 0.88 | 0.18 | 77,77,77,77                | 0     |
| 54  | MG   | CA    | 1768 | 1/1   | 0.88 | 0.33 | 95,95,95,95                | 0     |
| 54  | MG   | AA    | 1619 | 1/1   | 0.88 | 0.57 | 45,45,45,45                | 0     |
| 54  | MG   | BA    | 3168 | 1/1   | 0.88 | 0.14 | 68,68,68,68                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3296 | 1/1   | 0.88 | 0.19 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3237 | 1/1   | 0.88 | 0.10 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3507 | 1/1   | 0.88 | 0.15 | 90,90,90,90                 | 0     |
| 54  | MG   | CA    | 1694 | 1/1   | 0.88 | 0.09 | 69,69,69,69                 | 0     |
| 54  | MG   | AA    | 1807 | 1/1   | 0.88 | 0.11 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3505 | 1/1   | 0.88 | 0.17 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3626 | 1/1   | 0.88 | 0.15 | 68,68,68,68                 | 0     |
| 54  | MG   | D7    | 101  | 1/1   | 0.88 | 0.66 | 41,41,41,41                 | 0     |
| 54  | MG   | CA    | 1756 | 1/1   | 0.88 | 0.09 | 77,77,77,77                 | 0     |
| 54  | MG   | AA    | 1797 | 1/1   | 0.88 | 0.10 | 106,106,106,106             | 0     |
| 54  | MG   | AA    | 1622 | 1/1   | 0.88 | 0.16 | 60,60,60,60                 | 0     |
| 54  | MG   | DA    | 3533 | 1/1   | 0.88 | 0.07 | 79,79,79,79                 | 0     |
| 54  | MG   | BA    | 3222 | 1/1   | 0.88 | 0.08 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3709 | 1/1   | 0.88 | 0.12 | 47,47,47,47                 | 0     |
| 54  | MG   | AA    | 1651 | 1/1   | 0.88 | 0.23 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3192 | 1/1   | 0.88 | 0.21 | 62,62,62,62                 | 0     |
| 54  | MG   | AA    | 1716 | 1/1   | 0.88 | 0.06 | 62,62,62,62                 | 0     |
| 54  | MG   | CA    | 1666 | 1/1   | 0.88 | 0.12 | 71,71,71,71                 | 0     |
| 54  | MG   | CA    | 1800 | 1/1   | 0.88 | 0.05 | 76,76,76,76                 | 0     |
| 54  | MG   | BA    | 3113 | 1/1   | 0.88 | 0.24 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3026 | 1/1   | 0.88 | 0.20 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3242 | 1/1   | 0.88 | 0.08 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3042 | 1/1   | 0.88 | 0.18 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3559 | 1/1   | 0.88 | 0.27 | 56,56,56,56                 | 0     |
| 54  | MG   | CA    | 1773 | 1/1   | 0.88 | 0.14 | 89,89,89,89                 | 0     |
| 54  | MG   | BP    | 202  | 1/1   | 0.88 | 0.29 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3024 | 1/1   | 0.88 | 0.23 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3077 | 1/1   | 0.88 | 0.19 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3626 | 1/1   | 0.88 | 0.10 | 75,75,75,75                 | 0     |
| 54  | MG   | AA    | 1615 | 1/1   | 0.88 | 0.15 | 76,76,76,76                 | 0     |
| 54  | MG   | DA    | 3500 | 1/1   | 0.88 | 0.21 | 56,56,56,56                 | 0     |
| 54  | MG   | AA    | 1706 | 1/1   | 0.88 | 0.15 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3556 | 1/1   | 0.88 | 0.05 | 87,87,87,87                 | 0     |
| 54  | MG   | BA    | 3576 | 1/1   | 0.88 | 0.10 | 55,55,55,55                 | 0     |
| 54  | MG   | CA    | 1703 | 1/1   | 0.88 | 0.17 | 46,46,46,46                 | 0     |
| 54  | MG   | CA    | 1755 | 1/1   | 0.88 | 0.13 | 79,79,79,79                 | 0     |
| 54  | MG   | DA    | 3039 | 1/1   | 0.88 | 0.21 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3361 | 1/1   | 0.88 | 0.21 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3529 | 1/1   | 0.88 | 0.26 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3207 | 1/1   | 0.88 | 0.16 | 27,27,27,27                 | 0     |
| 54  | MG   | CA    | 1680 | 1/1   | 0.89 | 0.04 | 92,92,92,92                 | 0     |
| 54  | MG   | DA    | 3297 | 1/1   | 0.89 | 0.12 | 49,49,49,49                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3184 | 1/1   | 0.89 | 0.22 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3715 | 1/1   | 0.89 | 0.16 | 88,88,88,88                 | 0     |
| 54  | MG   | DA    | 3222 | 1/1   | 0.89 | 0.28 | 37,37,37,37                 | 0     |
| 54  | MG   | BE    | 301  | 1/1   | 0.89 | 0.46 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3409 | 1/1   | 0.89 | 0.10 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3329 | 1/1   | 0.89 | 0.14 | 30,30,30,30                 | 0     |
| 54  | MG   | DA    | 3495 | 1/1   | 0.89 | 0.17 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3117 | 1/1   | 0.89 | 0.17 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3302 | 1/1   | 0.89 | 0.14 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3616 | 1/1   | 0.89 | 0.09 | 63,63,63,63                 | 0     |
| 54  | MG   | CA    | 1767 | 1/1   | 0.89 | 0.10 | 86,86,86,86                 | 0     |
| 54  | MG   | B9    | 103  | 1/1   | 0.89 | 0.18 | 52,52,52,52                 | 0     |
| 54  | MG   | AA    | 1639 | 1/1   | 0.89 | 0.36 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3053 | 1/1   | 0.89 | 0.20 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3136 | 1/1   | 0.89 | 0.17 | 24,24,24,24                 | 0     |
| 54  | MG   | CA    | 1689 | 1/1   | 0.89 | 0.05 | 90,90,90,90                 | 0     |
| 54  | MG   | AA    | 1703 | 1/1   | 0.89 | 0.28 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3185 | 1/1   | 0.89 | 0.10 | 44,44,44,44                 | 0     |
| 54  | MG   | AA    | 1606 | 1/1   | 0.89 | 0.13 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3365 | 1/1   | 0.89 | 0.20 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3327 | 1/1   | 0.89 | 0.07 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3664 | 1/1   | 0.89 | 0.08 | 56,56,56,56                 | 0     |
| 54  | MG   | AA    | 1693 | 1/1   | 0.89 | 0.17 | 72,72,72,72                 | 0     |
| 54  | MG   | BA    | 3077 | 1/1   | 0.89 | 0.21 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3394 | 1/1   | 0.89 | 0.11 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3155 | 1/1   | 0.89 | 0.10 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3533 | 1/1   | 0.89 | 0.19 | 24,24,24,24                 | 0     |
| 54  | MG   | CA    | 1801 | 1/1   | 0.89 | 0.09 | 88,88,88,88                 | 0     |
| 54  | MG   | DA    | 3464 | 1/1   | 0.89 | 0.09 | 35,35,35,35                 | 0     |
| 54  | MG   | BA    | 3562 | 1/1   | 0.89 | 0.08 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3105 | 1/1   | 0.89 | 0.29 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3692 | 1/1   | 0.89 | 0.13 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3016 | 1/1   | 0.89 | 0.16 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3110 | 1/1   | 0.89 | 0.19 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3536 | 1/1   | 0.89 | 0.06 | 76,76,76,76                 | 0     |
| 54  | MG   | DA    | 3090 | 1/1   | 0.89 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3280 | 1/1   | 0.89 | 0.12 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3043 | 1/1   | 0.89 | 0.17 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3532 | 1/1   | 0.89 | 0.19 | 31,31,31,31                 | 0     |
| 54  | MG   | BG    | 201  | 1/1   | 0.89 | 0.13 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3059 | 1/1   | 0.89 | 0.15 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3474 | 1/1   | 0.89 | 0.18 | 41,41,41,41                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3711 | 1/1   | 0.89 | 0.13 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3472 | 1/1   | 0.89 | 0.20 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3272 | 1/1   | 0.89 | 0.08 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3281 | 1/1   | 0.89 | 0.26 | 85,85,85,85                 | 0     |
| 54  | MG   | DA    | 3480 | 1/1   | 0.89 | 0.06 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1644 | 1/1   | 0.89 | 0.11 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3415 | 1/1   | 0.89 | 0.12 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3520 | 1/1   | 0.89 | 0.13 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3458 | 1/1   | 0.89 | 0.11 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3072 | 1/1   | 0.89 | 0.30 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3018 | 1/1   | 0.89 | 0.28 | 52,52,52,52                 | 0     |
| 54  | MG   | CA    | 1757 | 1/1   | 0.89 | 0.16 | 75,75,75,75                 | 0     |
| 54  | MG   | BB    | 210  | 1/1   | 0.89 | 0.15 | 62,62,62,62                 | 0     |
| 54  | MG   | CA    | 1783 | 1/1   | 0.89 | 0.26 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3309 | 1/1   | 0.89 | 0.21 | 45,45,45,45                 | 0     |
| 54  | MG   | AA    | 1699 | 1/1   | 0.89 | 0.17 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3083 | 1/1   | 0.89 | 0.11 | 50,50,50,50                 | 0     |
| 54  | MG   | DA    | 3135 | 1/1   | 0.89 | 0.17 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3450 | 1/1   | 0.89 | 0.12 | 70,70,70,70                 | 0     |
| 54  | MG   | AA    | 1724 | 1/1   | 0.89 | 0.12 | 93,93,93,93                 | 0     |
| 54  | MG   | DA    | 3594 | 1/1   | 0.89 | 0.09 | 62,62,62,62                 | 0     |
| 54  | MG   | DA    | 3076 | 1/1   | 0.89 | 0.36 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3029 | 1/1   | 0.89 | 0.18 | 38,38,38,38                 | 0     |
| 54  | MG   | DA    | 3079 | 1/1   | 0.89 | 0.26 | 54,54,54,54                 | 0     |
| 54  | MG   | AA    | 1691 | 1/1   | 0.89 | 0.22 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1771 | 1/1   | 0.89 | 0.21 | 71,71,71,71                 | 0     |
| 54  | MG   | D8    | 101  | 1/1   | 0.90 | 0.26 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3075 | 1/1   | 0.90 | 0.13 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3465 | 1/1   | 0.90 | 0.07 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3064 | 1/1   | 0.90 | 0.30 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3157 | 1/1   | 0.90 | 0.17 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3326 | 1/1   | 0.90 | 0.07 | 46,46,46,46                 | 0     |
| 54  | MG   | CA    | 1789 | 1/1   | 0.90 | 0.12 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3612 | 1/1   | 0.90 | 0.26 | 58,58,58,58                 | 0     |
| 54  | MG   | AA    | 1785 | 1/1   | 0.90 | 0.16 | 61,61,61,61                 | 0     |
| 54  | MG   | AA    | 1784 | 1/1   | 0.90 | 0.30 | 63,63,63,63                 | 0     |
| 54  | MG   | AA    | 1632 | 1/1   | 0.90 | 0.11 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3060 | 1/1   | 0.90 | 0.09 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3465 | 1/1   | 0.90 | 0.15 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3015 | 1/1   | 0.90 | 0.12 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3264 | 1/1   | 0.90 | 0.12 | 91,91,91,91                 | 0     |
| 54  | MG   | BN    | 201  | 1/1   | 0.90 | 0.12 | 57,57,57,57                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | BA    | 3061 | 1/1   | 0.90 | 0.16 | 44,44,44,44                | 0     |
| 54  | MG   | AA    | 1650 | 1/1   | 0.90 | 0.27 | 74,74,74,74                | 0     |
| 54  | MG   | AM    | 202  | 1/1   | 0.90 | 0.14 | 59,59,59,59                | 0     |
| 54  | MG   | BA    | 3263 | 1/1   | 0.90 | 0.11 | 63,63,63,63                | 0     |
| 54  | MG   | CA    | 1709 | 1/1   | 0.90 | 0.18 | 76,76,76,76                | 0     |
| 54  | MG   | DF    | 301  | 1/1   | 0.90 | 0.20 | 51,51,51,51                | 0     |
| 54  | MG   | BA    | 3220 | 1/1   | 0.90 | 0.32 | 62,62,62,62                | 0     |
| 54  | MG   | AA    | 1616 | 1/1   | 0.90 | 0.17 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3253 | 1/1   | 0.90 | 0.12 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3141 | 1/1   | 0.90 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3176 | 1/1   | 0.90 | 0.29 | 37,37,37,37                | 0     |
| 54  | MG   | AA    | 1734 | 1/1   | 0.90 | 0.10 | 50,50,50,50                | 0     |
| 54  | MG   | CA    | 1610 | 1/1   | 0.90 | 0.27 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3582 | 1/1   | 0.90 | 0.27 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3541 | 1/1   | 0.90 | 0.13 | 46,46,46,46                | 0     |
| 54  | MG   | DA    | 3152 | 1/1   | 0.90 | 0.20 | 52,52,52,52                | 0     |
| 54  | MG   | BA    | 3305 | 1/1   | 0.90 | 0.09 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3526 | 1/1   | 0.90 | 0.22 | 55,55,55,55                | 0     |
| 54  | MG   | BQ    | 205  | 1/1   | 0.90 | 0.15 | 42,42,42,42                | 0     |
| 54  | MG   | DA    | 3566 | 1/1   | 0.90 | 0.19 | 70,70,70,70                | 0     |
| 54  | MG   | DA    | 3191 | 1/1   | 0.90 | 0.17 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3519 | 1/1   | 0.90 | 0.17 | 61,61,61,61                | 0     |
| 54  | MG   | CA    | 1605 | 1/1   | 0.90 | 0.14 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3163 | 1/1   | 0.90 | 0.32 | 30,30,30,30                | 0     |
| 54  | MG   | AA    | 1690 | 1/1   | 0.90 | 0.10 | 60,60,60,60                | 0     |
| 54  | MG   | BA    | 3637 | 1/1   | 0.90 | 0.15 | 81,81,81,81                | 0     |
| 54  | MG   | BA    | 3705 | 1/1   | 0.90 | 0.10 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3535 | 1/1   | 0.90 | 0.37 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3266 | 1/1   | 0.90 | 0.12 | 40,40,40,40                | 0     |
| 54  | MG   | BA    | 3265 | 1/1   | 0.90 | 0.05 | 69,69,69,69                | 0     |
| 54  | MG   | CA    | 1626 | 1/1   | 0.90 | 0.69 | 86,86,86,86                | 0     |
| 54  | MG   | BA    | 3639 | 1/1   | 0.90 | 0.13 | 56,56,56,56                | 0     |
| 54  | MG   | BH    | 201  | 1/1   | 0.90 | 0.19 | 60,60,60,60                | 0     |
| 54  | MG   | BA    | 3658 | 1/1   | 0.90 | 0.09 | 61,61,61,61                | 0     |
| 54  | MG   | AA    | 1754 | 1/1   | 0.90 | 0.09 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3620 | 1/1   | 0.90 | 0.06 | 65,65,65,65                | 0     |
| 54  | MG   | CA    | 1753 | 1/1   | 0.90 | 0.36 | 74,74,74,74                | 0     |
| 54  | MG   | DA    | 3148 | 1/1   | 0.90 | 0.12 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3014 | 1/1   | 0.90 | 0.18 | 61,61,61,61                | 0     |
| 54  | MG   | BA    | 3030 | 1/1   | 0.90 | 0.26 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3301 | 1/1   | 0.90 | 0.11 | 61,61,61,61                | 0     |
| 54  | MG   | CA    | 1731 | 1/1   | 0.90 | 0.22 | 62,62,62,62                | 0     |

*Continued on next page...*



*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | CA    | 1663 | 1/1   | 0.90 | 0.14 | 75,75,75,75                 | 0     |
| 54  | MG   | BA    | 3201 | 1/1   | 0.90 | 0.16 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3364 | 1/1   | 0.90 | 0.10 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3456 | 1/1   | 0.90 | 0.12 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3027 | 1/1   | 0.90 | 0.16 | 32,32,32,32                 | 0     |
| 54  | MG   | DA    | 3582 | 1/1   | 0.90 | 0.05 | 83,83,83,83                 | 0     |
| 54  | MG   | DA    | 3220 | 1/1   | 0.90 | 0.10 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3216 | 1/1   | 0.90 | 0.10 | 43,43,43,43                 | 0     |
| 54  | MG   | CA    | 1702 | 1/1   | 0.90 | 0.12 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1749 | 1/1   | 0.90 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | AD    | 302  | 1/1   | 0.90 | 0.42 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3099 | 1/1   | 0.90 | 0.26 | 47,47,47,47                 | 0     |
| 54  | MG   | DF    | 302  | 1/1   | 0.90 | 0.17 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3642 | 1/1   | 0.90 | 0.14 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3507 | 1/1   | 0.90 | 0.14 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3550 | 1/1   | 0.90 | 0.19 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3142 | 1/1   | 0.90 | 0.28 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3591 | 1/1   | 0.90 | 0.24 | 104,104,104,104             | 0     |
| 54  | MG   | DA    | 3454 | 1/1   | 0.90 | 0.19 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3408 | 1/1   | 0.90 | 0.16 | 24,24,24,24                 | 0     |
| 54  | MG   | AA    | 1604 | 1/1   | 0.90 | 0.55 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3505 | 1/1   | 0.90 | 0.17 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3514 | 1/1   | 0.90 | 0.10 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3575 | 1/1   | 0.90 | 0.21 | 98,98,98,98                 | 0     |
| 54  | MG   | DA    | 3026 | 1/1   | 0.90 | 0.29 | 47,47,47,47                 | 0     |
| 54  | MG   | DP    | 202  | 1/1   | 0.90 | 0.10 | 53,53,53,53                 | 0     |
| 54  | MG   | B5    | 101  | 1/1   | 0.91 | 0.15 | 49,49,49,49                 | 0     |
| 54  | MG   | CA    | 1609 | 1/1   | 0.91 | 0.55 | 77,77,77,77                 | 0     |
| 54  | MG   | BA    | 3289 | 1/1   | 0.91 | 0.23 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3363 | 1/1   | 0.91 | 0.13 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3643 | 1/1   | 0.91 | 0.34 | 28,28,28,28                 | 0     |
| 54  | MG   | AA    | 1798 | 1/1   | 0.91 | 0.11 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3262 | 1/1   | 0.91 | 0.19 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1804 | 1/1   | 0.91 | 0.19 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3307 | 1/1   | 0.91 | 0.14 | 46,46,46,46                 | 0     |
| 54  | MG   | DA    | 3300 | 1/1   | 0.91 | 0.19 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3253 | 1/1   | 0.91 | 0.13 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3567 | 1/1   | 0.91 | 0.16 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3534 | 1/1   | 0.91 | 0.09 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3206 | 1/1   | 0.91 | 0.14 | 67,67,67,67                 | 0     |
| 54  | MG   | BA    | 3056 | 1/1   | 0.91 | 0.13 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3603 | 1/1   | 0.91 | 0.27 | 39,39,39,39                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | BA    | 3633 | 1/1   | 0.91 | 0.24 | 25,25,25,25                | 0     |
| 54  | MG   | BE    | 305  | 1/1   | 0.91 | 0.20 | 35,35,35,35                | 0     |
| 54  | MG   | DA    | 3190 | 1/1   | 0.91 | 0.14 | 43,43,43,43                | 0     |
| 54  | MG   | CA    | 1775 | 1/1   | 0.91 | 0.10 | 78,78,78,78                | 0     |
| 54  | MG   | DA    | 3053 | 1/1   | 0.91 | 0.28 | 28,28,28,28                | 0     |
| 54  | MG   | DB    | 201  | 1/1   | 0.91 | 0.12 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3627 | 1/1   | 0.91 | 0.12 | 40,40,40,40                | 0     |
| 54  | MG   | DA    | 3031 | 1/1   | 0.91 | 0.35 | 46,46,46,46                | 0     |
| 54  | MG   | DA    | 3051 | 1/1   | 0.91 | 0.14 | 73,73,73,73                | 0     |
| 54  | MG   | DA    | 3322 | 1/1   | 0.91 | 0.20 | 61,61,61,61                | 0     |
| 54  | MG   | AA    | 1680 | 1/1   | 0.91 | 0.33 | 54,54,54,54                | 0     |
| 54  | MG   | BA    | 3618 | 1/1   | 0.91 | 0.09 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3592 | 1/1   | 0.91 | 0.14 | 62,62,62,62                | 0     |
| 54  | MG   | AA    | 1624 | 1/1   | 0.91 | 0.15 | 49,49,49,49                | 0     |
| 54  | MG   | BA    | 3068 | 1/1   | 0.91 | 0.08 | 40,40,40,40                | 0     |
| 54  | MG   | CA    | 1737 | 1/1   | 0.91 | 0.23 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3188 | 1/1   | 0.91 | 0.15 | 51,51,51,51                | 0     |
| 54  | MG   | DA    | 3206 | 1/1   | 0.91 | 0.13 | 34,34,34,34                | 0     |
| 54  | MG   | BA    | 3160 | 1/1   | 0.91 | 0.12 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3155 | 1/1   | 0.91 | 0.13 | 37,37,37,37                | 0     |
| 54  | MG   | BA    | 3240 | 1/1   | 0.91 | 0.14 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3150 | 1/1   | 0.91 | 0.10 | 70,70,70,70                | 0     |
| 54  | MG   | BA    | 3213 | 1/1   | 0.91 | 0.18 | 28,28,28,28                | 0     |
| 54  | MG   | BA    | 3013 | 1/1   | 0.91 | 0.28 | 24,24,24,24                | 0     |
| 54  | MG   | DA    | 3443 | 1/1   | 0.91 | 0.07 | 51,51,51,51                | 0     |
| 54  | MG   | AI    | 201  | 1/1   | 0.91 | 0.28 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3245 | 1/1   | 0.91 | 0.20 | 37,37,37,37                | 0     |
| 54  | MG   | DA    | 3314 | 1/1   | 0.91 | 0.16 | 31,31,31,31                | 0     |
| 54  | MG   | BA    | 3097 | 1/1   | 0.91 | 0.14 | 40,40,40,40                | 0     |
| 54  | MG   | CA    | 1724 | 1/1   | 0.91 | 0.15 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3010 | 1/1   | 0.91 | 0.21 | 48,48,48,48                | 0     |
| 54  | MG   | DA    | 3106 | 1/1   | 0.91 | 0.26 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3331 | 1/1   | 0.91 | 0.11 | 47,47,47,47                | 0     |
| 54  | MG   | AA    | 1685 | 1/1   | 0.91 | 0.37 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3121 | 1/1   | 0.91 | 0.19 | 62,62,62,62                | 0     |
| 54  | MG   | AA    | 1610 | 1/1   | 0.91 | 0.09 | 64,64,64,64                | 0     |
| 54  | MG   | CA    | 1661 | 1/1   | 0.91 | 0.16 | 55,55,55,55                | 0     |
| 54  | MG   | BN    | 202  | 1/1   | 0.91 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3362 | 1/1   | 0.91 | 0.22 | 53,53,53,53                | 0     |
| 54  | MG   | CA    | 1617 | 1/1   | 0.91 | 0.29 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3424 | 1/1   | 0.91 | 0.19 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3419 | 1/1   | 0.91 | 0.10 | 51,51,51,51                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DF    | 303  | 1/1   | 0.91 | 0.17 | 56,56,56,56                 | 0     |
| 54  | MG   | AA    | 1729 | 1/1   | 0.91 | 0.10 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3333 | 1/1   | 0.91 | 0.05 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3042 | 1/1   | 0.91 | 0.26 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3478 | 1/1   | 0.91 | 0.14 | 50,50,50,50                 | 0     |
| 54  | MG   | AA    | 1740 | 1/1   | 0.91 | 0.26 | 70,70,70,70                 | 0     |
| 54  | MG   | CA    | 1668 | 1/1   | 0.91 | 0.26 | 65,65,65,65                 | 0     |
| 54  | MG   | DQ    | 204  | 1/1   | 0.91 | 0.14 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3447 | 1/1   | 0.91 | 0.19 | 58,58,58,58                 | 0     |
| 54  | MG   | BV    | 202  | 1/1   | 0.91 | 0.33 | 83,83,83,83                 | 0     |
| 54  | MG   | BA    | 3084 | 1/1   | 0.91 | 0.17 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3319 | 1/1   | 0.91 | 0.13 | 53,53,53,53                 | 0     |
| 54  | MG   | BT    | 202  | 1/1   | 0.91 | 0.27 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3513 | 1/1   | 0.91 | 0.12 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3145 | 1/1   | 0.91 | 0.17 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3139 | 1/1   | 0.91 | 0.32 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3167 | 1/1   | 0.91 | 0.12 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3219 | 1/1   | 0.91 | 0.17 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3317 | 1/1   | 0.91 | 0.20 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3075 | 1/1   | 0.91 | 0.19 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3263 | 1/1   | 0.91 | 0.10 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3116 | 1/1   | 0.91 | 0.10 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3710 | 1/1   | 0.91 | 0.08 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3174 | 1/1   | 0.91 | 0.24 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3379 | 1/1   | 0.91 | 0.12 | 30,30,30,30                 | 0     |
| 54  | MG   | BZ    | 301  | 1/1   | 0.91 | 0.28 | 61,61,61,61                 | 0     |
| 54  | MG   | DA    | 3209 | 1/1   | 0.91 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3391 | 1/1   | 0.91 | 0.10 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3040 | 1/1   | 0.91 | 0.14 | 52,52,52,52                 | 0     |
| 54  | MG   | CA    | 1733 | 1/1   | 0.91 | 0.11 | 89,89,89,89                 | 0     |
| 54  | MG   | DA    | 3412 | 1/1   | 0.91 | 0.13 | 75,75,75,75                 | 0     |
| 54  | MG   | BV    | 204  | 1/1   | 0.91 | 0.09 | 67,67,67,67                 | 0     |
| 54  | MG   | CA    | 1751 | 1/1   | 0.91 | 0.10 | 89,89,89,89                 | 0     |
| 54  | MG   | DA    | 3496 | 1/1   | 0.91 | 0.24 | 38,38,38,38                 | 0     |
| 54  | MG   | CA    | 1642 | 1/1   | 0.91 | 0.59 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3239 | 1/1   | 0.91 | 0.08 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3294 | 1/1   | 0.91 | 0.10 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3449 | 1/1   | 0.91 | 0.09 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3682 | 1/1   | 0.91 | 0.17 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3297 | 1/1   | 0.92 | 0.12 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3279 | 1/1   | 0.92 | 0.07 | 66,66,66,66                 | 0     |
| 54  | MG   | AA    | 1618 | 1/1   | 0.92 | 0.56 | 57,57,57,57                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3315 | 1/1   | 0.92 | 0.19 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3530 | 1/1   | 0.92 | 0.06 | 95,95,95,95                 | 0     |
| 54  | MG   | AA    | 1760 | 1/1   | 0.92 | 0.27 | 74,74,74,74                 | 0     |
| 54  | MG   | CA    | 1760 | 1/1   | 0.92 | 0.32 | 93,93,93,93                 | 0     |
| 54  | MG   | BA    | 3540 | 1/1   | 0.92 | 0.07 | 64,64,64,64                 | 0     |
| 54  | MG   | CA    | 1614 | 1/1   | 0.92 | 0.16 | 70,70,70,70                 | 0     |
| 54  | MG   | DA    | 3408 | 1/1   | 0.92 | 0.08 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3356 | 1/1   | 0.92 | 0.34 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3625 | 1/1   | 0.92 | 0.21 | 52,52,52,52                 | 0     |
| 54  | MG   | CA    | 1695 | 1/1   | 0.92 | 0.33 | 76,76,76,76                 | 0     |
| 54  | MG   | DA    | 3608 | 1/1   | 0.92 | 0.10 | 74,74,74,74                 | 0     |
| 54  | MG   | CA    | 1625 | 1/1   | 0.92 | 0.20 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3469 | 1/1   | 0.92 | 0.15 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3052 | 1/1   | 0.92 | 0.18 | 38,38,38,38                 | 0     |
| 54  | MG   | DA    | 3353 | 1/1   | 0.92 | 0.06 | 79,79,79,79                 | 0     |
| 54  | MG   | BA    | 3284 | 1/1   | 0.92 | 0.21 | 37,37,37,37                 | 0     |
| 54  | MG   | DA    | 3623 | 1/1   | 0.92 | 0.16 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3686 | 1/1   | 0.92 | 0.07 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3615 | 1/1   | 0.92 | 0.38 | 60,60,60,60                 | 0     |
| 54  | MG   | DA    | 3037 | 1/1   | 0.92 | 0.17 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3019 | 1/1   | 0.92 | 0.19 | 46,46,46,46                 | 0     |
| 54  | MG   | CA    | 1720 | 1/1   | 0.92 | 0.17 | 84,84,84,84                 | 0     |
| 54  | MG   | CA    | 1603 | 1/1   | 0.92 | 0.77 | 83,83,83,83                 | 0     |
| 54  | MG   | DA    | 3054 | 1/1   | 0.92 | 0.20 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3291 | 1/1   | 0.92 | 0.07 | 68,68,68,68                 | 0     |
| 54  | MG   | AA    | 1761 | 1/1   | 0.92 | 0.06 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3270 | 1/1   | 0.92 | 0.11 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3217 | 1/1   | 0.92 | 0.07 | 54,54,54,54                 | 0     |
| 54  | MG   | AF    | 201  | 1/1   | 0.92 | 0.16 | 53,53,53,53                 | 0     |
| 54  | MG   | CA    | 1641 | 1/1   | 0.92 | 0.20 | 62,62,62,62                 | 0     |
| 54  | MG   | DA    | 3593 | 1/1   | 0.92 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | CA    | 1784 | 1/1   | 0.92 | 0.12 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3293 | 1/1   | 0.92 | 0.11 | 85,85,85,85                 | 0     |
| 54  | MG   | BA    | 3546 | 1/1   | 0.92 | 0.12 | 46,46,46,46                 | 0     |
| 54  | MG   | AD    | 303  | 1/1   | 0.92 | 0.13 | 84,84,84,84                 | 0     |
| 54  | MG   | DA    | 3327 | 1/1   | 0.92 | 0.08 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3719 | 1/1   | 0.92 | 0.10 | 83,83,83,83                 | 0     |
| 54  | MG   | AA    | 1665 | 1/1   | 0.92 | 0.20 | 66,66,66,66                 | 0     |
| 54  | MG   | BF    | 301  | 1/1   | 0.92 | 0.14 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3444 | 1/1   | 0.92 | 0.14 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3279 | 1/1   | 0.92 | 0.22 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3290 | 1/1   | 0.92 | 0.13 | 27,27,27,27                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | CA    | 1652 | 1/1   | 0.92 | 0.17 | 88,88,88,88                 | 0     |
| 54  | MG   | BA    | 3554 | 1/1   | 0.92 | 0.13 | 41,41,41,41                 | 0     |
| 54  | MG   | CA    | 1710 | 1/1   | 0.92 | 0.21 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1700 | 1/1   | 0.92 | 0.29 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3217 | 1/1   | 0.92 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3037 | 1/1   | 0.92 | 0.17 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3568 | 1/1   | 0.92 | 0.19 | 35,35,35,35                 | 0     |
| 54  | MG   | BA    | 3486 | 1/1   | 0.92 | 0.14 | 25,25,25,25                 | 0     |
| 54  | MG   | BA    | 3088 | 1/1   | 0.92 | 0.15 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3662 | 1/1   | 0.92 | 0.14 | 26,26,26,26                 | 0     |
| 54  | MG   | DA    | 3307 | 1/1   | 0.92 | 0.49 | 79,79,79,79                 | 0     |
| 54  | MG   | DA    | 3549 | 1/1   | 0.92 | 0.22 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3674 | 1/1   | 0.92 | 0.10 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3724 | 1/1   | 0.92 | 0.11 | 97,97,97,97                 | 0     |
| 54  | MG   | DA    | 3428 | 1/1   | 0.92 | 0.19 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3634 | 1/1   | 0.92 | 0.20 | 75,75,75,75                 | 0     |
| 54  | MG   | BA    | 3104 | 1/1   | 0.92 | 0.26 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3570 | 1/1   | 0.92 | 0.14 | 63,63,63,63                 | 0     |
| 54  | MG   | AA    | 1692 | 1/1   | 0.92 | 0.41 | 66,66,66,66                 | 0     |
| 54  | MG   | DB    | 203  | 1/1   | 0.92 | 0.11 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3300 | 1/1   | 0.92 | 0.14 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1752 | 1/1   | 0.92 | 0.11 | 91,91,91,91                 | 0     |
| 54  | MG   | BA    | 3454 | 1/1   | 0.92 | 0.12 | 55,55,55,55                 | 0     |
| 54  | MG   | DA    | 3233 | 1/1   | 0.92 | 0.14 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3490 | 1/1   | 0.92 | 0.24 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3280 | 1/1   | 0.92 | 0.18 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3329 | 1/1   | 0.92 | 0.19 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3044 | 1/1   | 0.92 | 0.25 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3325 | 1/1   | 0.92 | 0.11 | 72,72,72,72                 | 0     |
| 54  | MG   | BA    | 3721 | 1/1   | 0.92 | 0.41 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3595 | 1/1   | 0.92 | 0.09 | 78,78,78,78                 | 0     |
| 54  | MG   | DA    | 3624 | 1/1   | 0.92 | 0.24 | 56,56,56,56                 | 0     |
| 54  | MG   | CA    | 1700 | 1/1   | 0.92 | 0.12 | 56,56,56,56                 | 0     |
| 54  | MG   | BA    | 3641 | 1/1   | 0.92 | 0.15 | 47,47,47,47                 | 0     |
| 54  | MG   | CA    | 1711 | 1/1   | 0.92 | 0.21 | 55,55,55,55                 | 0     |
| 54  | MG   | CA    | 1601 | 1/1   | 0.92 | 0.18 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1681 | 1/1   | 0.92 | 0.08 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3091 | 1/1   | 0.92 | 0.24 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3261 | 1/1   | 0.92 | 0.17 | 21,21,21,21                 | 0     |
| 54  | MG   | BB    | 202  | 1/1   | 0.92 | 0.17 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3570 | 1/1   | 0.92 | 0.12 | 50,50,50,50                 | 0     |
| 54  | MG   | AA    | 1742 | 1/1   | 0.92 | 0.12 | 78,78,78,78                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3178 | 1/1   | 0.92 | 0.15 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3267 | 1/1   | 0.92 | 0.07 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3067 | 1/1   | 0.92 | 0.26 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3187 | 1/1   | 0.92 | 0.27 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3197 | 1/1   | 0.92 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3524 | 1/1   | 0.92 | 0.09 | 61,61,61,61                 | 0     |
| 54  | MG   | DA    | 3597 | 1/1   | 0.92 | 0.17 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3227 | 1/1   | 0.92 | 0.24 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3722 | 1/1   | 0.92 | 0.12 | 71,71,71,71                 | 0     |
| 54  | MG   | AA    | 1731 | 1/1   | 0.92 | 0.16 | 72,72,72,72                 | 0     |
| 54  | MG   | DA    | 3591 | 1/1   | 0.92 | 0.24 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3389 | 1/1   | 0.92 | 0.08 | 82,82,82,82                 | 0     |
| 54  | MG   | BA    | 3574 | 1/1   | 0.92 | 0.18 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3196 | 1/1   | 0.92 | 0.19 | 52,52,52,52                 | 0     |
| 54  | MG   | AA    | 1621 | 1/1   | 0.92 | 0.63 | 63,63,63,63                 | 0     |
| 54  | MG   | AA    | 1783 | 1/1   | 0.92 | 0.20 | 71,71,71,71                 | 0     |
| 54  | MG   | CA    | 1634 | 1/1   | 0.92 | 0.10 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3202 | 1/1   | 0.92 | 0.13 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3562 | 1/1   | 0.92 | 0.17 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3367 | 1/1   | 0.92 | 0.06 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3525 | 1/1   | 0.92 | 0.22 | 57,57,57,57                 | 0     |
| 54  | MG   | AA    | 1688 | 1/1   | 0.92 | 0.20 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3522 | 1/1   | 0.92 | 0.23 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3219 | 1/1   | 0.92 | 0.22 | 32,32,32,32                 | 0     |
| 54  | MG   | CA    | 1665 | 1/1   | 0.92 | 0.16 | 60,60,60,60                 | 0     |
| 54  | MG   | DA    | 3501 | 1/1   | 0.92 | 0.13 | 85,85,85,85                 | 0     |
| 54  | MG   | DA    | 3173 | 1/1   | 0.92 | 0.12 | 34,34,34,34                 | 0     |
| 54  | MG   | CA    | 1765 | 1/1   | 0.92 | 0.09 | 87,87,87,87                 | 0     |
| 54  | MG   | DA    | 3445 | 1/1   | 0.92 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3184 | 1/1   | 0.92 | 0.14 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3162 | 1/1   | 0.92 | 0.17 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3482 | 1/1   | 0.92 | 0.13 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3218 | 1/1   | 0.92 | 0.09 | 57,57,57,57                 | 0     |
| 54  | MG   | AA    | 1770 | 1/1   | 0.92 | 0.08 | 80,80,80,80                 | 0     |
| 54  | MG   | DA    | 3278 | 1/1   | 0.92 | 0.06 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3545 | 1/1   | 0.92 | 0.06 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3648 | 1/1   | 0.92 | 0.20 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3485 | 1/1   | 0.92 | 0.26 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3392 | 1/1   | 0.92 | 0.09 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3109 | 1/1   | 0.92 | 0.45 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3553 | 1/1   | 0.92 | 0.11 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3513 | 1/1   | 0.92 | 0.19 | 52,52,52,52                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3011 | 1/1   | 0.92 | 0.30 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3683 | 1/1   | 0.92 | 0.23 | 95,95,95,95                 | 0     |
| 54  | MG   | DA    | 3003 | 1/1   | 0.92 | 0.28 | 34,34,34,34                 | 0     |
| 54  | MG   | CA    | 1706 | 1/1   | 0.92 | 0.21 | 76,76,76,76                 | 0     |
| 54  | MG   | DD    | 301  | 1/1   | 0.92 | 0.07 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3720 | 1/1   | 0.92 | 0.09 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3119 | 1/1   | 0.92 | 0.17 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3671 | 1/1   | 0.92 | 0.31 | 50,50,50,50                 | 0     |
| 54  | MG   | DA    | 3471 | 1/1   | 0.92 | 0.14 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3087 | 1/1   | 0.92 | 0.35 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3547 | 1/1   | 0.92 | 0.20 | 33,33,33,33                 | 0     |
| 54  | MG   | DD    | 302  | 1/1   | 0.92 | 0.14 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3431 | 1/1   | 0.92 | 0.21 | 28,28,28,28                 | 0     |
| 54  | MG   | AA    | 1759 | 1/1   | 0.92 | 0.21 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3103 | 1/1   | 0.92 | 0.40 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3066 | 1/1   | 0.92 | 0.11 | 41,41,41,41                 | 0     |
| 54  | MG   | AA    | 1636 | 1/1   | 0.92 | 0.10 | 49,49,49,49                 | 0     |
| 54  | MG   | AA    | 1745 | 1/1   | 0.92 | 0.10 | 63,63,63,63                 | 0     |
| 54  | MG   | AA    | 1707 | 1/1   | 0.92 | 0.20 | 79,79,79,79                 | 0     |
| 54  | MG   | BA    | 3256 | 1/1   | 0.92 | 0.14 | 38,38,38,38                 | 0     |
| 54  | MG   | DA    | 3383 | 1/1   | 0.92 | 0.14 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3234 | 1/1   | 0.92 | 0.09 | 61,61,61,61                 | 0     |
| 54  | MG   | AA    | 1649 | 1/1   | 0.93 | 0.26 | 71,71,71,71                 | 0     |
| 54  | MG   | BA    | 3376 | 1/1   | 0.93 | 0.18 | 37,37,37,37                 | 0     |
| 54  | MG   | AA    | 1718 | 1/1   | 0.93 | 0.11 | 59,59,59,59                 | 0     |
| 54  | MG   | DD    | 305  | 1/1   | 0.93 | 0.16 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3521 | 1/1   | 0.93 | 0.13 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3276 | 1/1   | 0.93 | 0.16 | 76,76,76,76                 | 0     |
| 54  | MG   | BA    | 3055 | 1/1   | 0.93 | 0.26 | 44,44,44,44                 | 0     |
| 54  | MG   | CA    | 1696 | 1/1   | 0.93 | 0.07 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3305 | 1/1   | 0.93 | 0.15 | 66,66,66,66                 | 0     |
| 54  | MG   | CA    | 1774 | 1/1   | 0.93 | 0.22 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3493 | 1/1   | 0.93 | 0.20 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3538 | 1/1   | 0.93 | 0.15 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3390 | 1/1   | 0.93 | 0.24 | 33,33,33,33                 | 0     |
| 54  | MG   | AA    | 1715 | 1/1   | 0.93 | 0.16 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3308 | 1/1   | 0.93 | 0.06 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3073 | 1/1   | 0.93 | 0.18 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3382 | 1/1   | 0.93 | 0.07 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3527 | 1/1   | 0.93 | 0.15 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3420 | 1/1   | 0.93 | 0.12 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3539 | 1/1   | 0.93 | 0.16 | 54,54,54,54                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3221 | 1/1   | 0.93 | 0.21 | 27,27,27,27                | 0     |
| 54  | MG   | DA    | 3049 | 1/1   | 0.93 | 0.10 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3011 | 1/1   | 0.93 | 0.16 | 45,45,45,45                | 0     |
| 54  | MG   | DA    | 3132 | 1/1   | 0.93 | 0.11 | 54,54,54,54                | 0     |
| 54  | MG   | BF    | 306  | 1/1   | 0.93 | 0.12 | 61,61,61,61                | 0     |
| 54  | MG   | BA    | 3092 | 1/1   | 0.93 | 0.17 | 40,40,40,40                | 0     |
| 54  | MG   | BA    | 3657 | 1/1   | 0.93 | 0.20 | 91,91,91,91                | 0     |
| 54  | MG   | AA    | 1678 | 1/1   | 0.93 | 0.43 | 75,75,75,75                | 0     |
| 54  | MG   | DA    | 3625 | 1/1   | 0.93 | 0.12 | 76,76,76,76                | 0     |
| 54  | MG   | DA    | 3056 | 1/1   | 0.93 | 0.11 | 31,31,31,31                | 0     |
| 54  | MG   | DA    | 3425 | 1/1   | 0.93 | 0.25 | 42,42,42,42                | 0     |
| 54  | MG   | BA    | 3608 | 1/1   | 0.93 | 0.13 | 21,21,21,21                | 0     |
| 54  | MG   | BA    | 3352 | 1/1   | 0.93 | 0.09 | 37,37,37,37                | 0     |
| 54  | MG   | BA    | 3002 | 1/1   | 0.93 | 0.10 | 60,60,60,60                | 0     |
| 54  | MG   | AA    | 1614 | 1/1   | 0.93 | 0.20 | 42,42,42,42                | 0     |
| 54  | MG   | BA    | 3107 | 1/1   | 0.93 | 0.22 | 47,47,47,47                | 0     |
| 54  | MG   | CA    | 1799 | 1/1   | 0.93 | 0.10 | 99,99,99,99                | 0     |
| 54  | MG   | BW    | 201  | 1/1   | 0.93 | 0.15 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3143 | 1/1   | 0.93 | 0.17 | 23,23,23,23                | 0     |
| 54  | MG   | BA    | 3463 | 1/1   | 0.93 | 0.14 | 38,38,38,38                | 0     |
| 54  | MG   | BA    | 3324 | 1/1   | 0.93 | 0.13 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3208 | 1/1   | 0.93 | 0.26 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3479 | 1/1   | 0.93 | 0.10 | 77,77,77,77                | 0     |
| 54  | MG   | DA    | 3227 | 1/1   | 0.93 | 0.07 | 39,39,39,39                | 0     |
| 54  | MG   | AA    | 1684 | 1/1   | 0.93 | 0.10 | 43,43,43,43                | 0     |
| 54  | MG   | DA    | 3452 | 1/1   | 0.93 | 0.21 | 45,45,45,45                | 0     |
| 54  | MG   | DA    | 3595 | 1/1   | 0.93 | 0.18 | 90,90,90,90                | 0     |
| 54  | MG   | CA    | 1682 | 1/1   | 0.93 | 0.20 | 60,60,60,60                | 0     |
| 54  | MG   | AA    | 1641 | 1/1   | 0.93 | 0.18 | 62,62,62,62                | 0     |
| 54  | MG   | AA    | 1668 | 1/1   | 0.93 | 0.07 | 52,52,52,52                | 0     |
| 54  | MG   | AA    | 1796 | 1/1   | 0.93 | 0.31 | 100,100,100,100            | 0     |
| 54  | MG   | AA    | 1817 | 1/1   | 0.93 | 0.32 | 78,78,78,78                | 0     |
| 54  | MG   | BA    | 3137 | 1/1   | 0.93 | 0.18 | 45,45,45,45                | 0     |
| 54  | MG   | BA    | 3589 | 1/1   | 0.93 | 0.15 | 41,41,41,41                | 0     |
| 54  | MG   | AA    | 1696 | 1/1   | 0.93 | 0.22 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3372 | 1/1   | 0.93 | 0.24 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3629 | 1/1   | 0.93 | 0.24 | 34,34,34,34                | 0     |
| 54  | MG   | BA    | 3340 | 1/1   | 0.93 | 0.09 | 38,38,38,38                | 0     |
| 54  | MG   | DA    | 3627 | 1/1   | 0.93 | 0.12 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3030 | 1/1   | 0.93 | 0.43 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3433 | 1/1   | 0.93 | 0.29 | 31,31,31,31                | 0     |
| 54  | MG   | DA    | 3540 | 1/1   | 0.93 | 0.10 | 48,48,48,48                | 0     |

*Continued on next page...*



*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3171 | 1/1   | 0.93 | 0.13 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3112 | 1/1   | 0.93 | 0.19 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3380 | 1/1   | 0.93 | 0.09 | 47,47,47,47                 | 0     |
| 54  | MG   | DA    | 3085 | 1/1   | 0.93 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3624 | 1/1   | 0.93 | 0.28 | 36,36,36,36                 | 0     |
| 54  | MG   | CA    | 1627 | 1/1   | 0.93 | 0.19 | 72,72,72,72                 | 0     |
| 54  | MG   | BA    | 3266 | 1/1   | 0.93 | 0.18 | 66,66,66,66                 | 0     |
| 54  | MG   | AA    | 1664 | 1/1   | 0.93 | 0.12 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3504 | 1/1   | 0.93 | 0.16 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3636 | 1/1   | 0.93 | 0.19 | 25,25,25,25                 | 0     |
| 54  | MG   | BA    | 3188 | 1/1   | 0.93 | 0.15 | 47,47,47,47                 | 0     |
| 54  | MG   | CA    | 1670 | 1/1   | 0.93 | 0.22 | 80,80,80,80                 | 0     |
| 54  | MG   | DA    | 3512 | 1/1   | 0.93 | 0.08 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3235 | 1/1   | 0.93 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3355 | 1/1   | 0.93 | 0.10 | 67,67,67,67                 | 0     |
| 54  | MG   | CA    | 1628 | 1/1   | 0.93 | 0.23 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3458 | 1/1   | 0.93 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3500 | 1/1   | 0.93 | 0.18 | 68,68,68,68                 | 0     |
| 54  | MG   | AA    | 1634 | 1/1   | 0.93 | 0.28 | 58,58,58,58                 | 0     |
| 54  | MG   | CA    | 1602 | 1/1   | 0.93 | 0.23 | 70,70,70,70                 | 0     |
| 54  | MG   | BA    | 3005 | 1/1   | 0.93 | 0.12 | 56,56,56,56                 | 0     |
| 54  | MG   | DT    | 201  | 1/1   | 0.93 | 0.07 | 52,52,52,52                 | 0     |
| 54  | MG   | DQ    | 203  | 1/1   | 0.93 | 0.12 | 62,62,62,62                 | 0     |
| 54  | MG   | BD    | 306  | 1/1   | 0.93 | 0.20 | 30,30,30,30                 | 0     |
| 54  | MG   | AA    | 1808 | 1/1   | 0.93 | 0.12 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3588 | 1/1   | 0.93 | 0.10 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3718 | 1/1   | 0.93 | 0.11 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3442 | 1/1   | 0.93 | 0.19 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3252 | 1/1   | 0.93 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | BB    | 203  | 1/1   | 0.93 | 0.23 | 48,48,48,48                 | 0     |
| 54  | MG   | CA    | 1790 | 1/1   | 0.93 | 0.14 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3333 | 1/1   | 0.93 | 0.13 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3388 | 1/1   | 0.93 | 0.35 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3285 | 1/1   | 0.93 | 0.22 | 68,68,68,68                 | 0     |
| 54  | MG   | DA    | 3224 | 1/1   | 0.93 | 0.11 | 60,60,60,60                 | 0     |
| 54  | MG   | DA    | 3095 | 1/1   | 0.93 | 0.18 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3302 | 1/1   | 0.93 | 0.22 | 47,47,47,47                 | 0     |
| 54  | MG   | DA    | 3081 | 1/1   | 0.93 | 0.13 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3237 | 1/1   | 0.93 | 0.06 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3098 | 1/1   | 0.93 | 0.13 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3001 | 1/1   | 0.93 | 0.12 | 38,38,38,38                 | 0     |
| 54  | MG   | AA    | 1776 | 1/1   | 0.93 | 0.24 | 68,68,68,68                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3033 | 1/1   | 0.93 | 0.19 | 48,48,48,48                | 0     |
| 54  | MG   | DA    | 3357 | 1/1   | 0.93 | 0.13 | 45,45,45,45                | 0     |
| 54  | MG   | BA    | 3015 | 1/1   | 0.93 | 0.20 | 32,32,32,32                | 0     |
| 54  | MG   | DA    | 3022 | 1/1   | 0.93 | 0.09 | 37,37,37,37                | 0     |
| 54  | MG   | DA    | 3167 | 1/1   | 0.93 | 0.11 | 30,30,30,30                | 0     |
| 54  | MG   | DA    | 3066 | 1/1   | 0.93 | 0.21 | 51,51,51,51                | 0     |
| 54  | MG   | DA    | 3172 | 1/1   | 0.93 | 0.15 | 30,30,30,30                | 0     |
| 54  | MG   | DA    | 3320 | 1/1   | 0.93 | 0.06 | 54,54,54,54                | 0     |
| 54  | MG   | BB    | 219  | 1/1   | 0.93 | 0.17 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3604 | 1/1   | 0.93 | 0.07 | 72,72,72,72                | 0     |
| 54  | MG   | DT    | 202  | 1/1   | 0.93 | 0.06 | 62,62,62,62                | 0     |
| 54  | MG   | AA    | 1628 | 1/1   | 0.93 | 0.35 | 81,81,81,81                | 0     |
| 54  | MG   | DA    | 3349 | 1/1   | 0.93 | 0.16 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3495 | 1/1   | 0.93 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | CA    | 1792 | 1/1   | 0.93 | 0.14 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3235 | 1/1   | 0.93 | 0.15 | 45,45,45,45                | 0     |
| 54  | MG   | BA    | 3025 | 1/1   | 0.93 | 0.19 | 34,34,34,34                | 0     |
| 54  | MG   | CA    | 1795 | 1/1   | 0.93 | 0.06 | 66,66,66,66                | 0     |
| 54  | MG   | CA    | 1798 | 1/1   | 0.93 | 0.27 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3342 | 1/1   | 0.93 | 0.14 | 40,40,40,40                | 0     |
| 54  | MG   | BA    | 3038 | 1/1   | 0.93 | 0.19 | 34,34,34,34                | 0     |
| 54  | MG   | CA    | 1794 | 1/1   | 0.93 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3469 | 1/1   | 0.93 | 0.16 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3398 | 1/1   | 0.93 | 0.23 | 53,53,53,53                | 0     |
| 54  | MG   | AA    | 1717 | 1/1   | 0.93 | 0.18 | 79,79,79,79                | 0     |
| 54  | MG   | BQ    | 204  | 1/1   | 0.93 | 0.12 | 46,46,46,46                | 0     |
| 54  | MG   | BA    | 3610 | 1/1   | 0.94 | 0.13 | 36,36,36,36                | 0     |
| 54  | MG   | DA    | 3567 | 1/1   | 0.94 | 0.14 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3108 | 1/1   | 0.94 | 0.13 | 51,51,51,51                | 0     |
| 54  | MG   | AA    | 1631 | 1/1   | 0.94 | 0.17 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3097 | 1/1   | 0.94 | 0.18 | 30,30,30,30                | 0     |
| 54  | MG   | AA    | 1806 | 1/1   | 0.94 | 0.15 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3334 | 1/1   | 0.94 | 0.10 | 45,45,45,45                | 0     |
| 54  | MG   | DA    | 3068 | 1/1   | 0.94 | 0.16 | 38,38,38,38                | 0     |
| 54  | MG   | BF    | 305  | 1/1   | 0.94 | 0.45 | 29,29,29,29                | 0     |
| 54  | MG   | AA    | 1607 | 1/1   | 0.94 | 0.11 | 57,57,57,57                | 0     |
| 54  | MG   | CA    | 1673 | 1/1   | 0.94 | 0.20 | 73,73,73,73                | 0     |
| 54  | MG   | DA    | 3310 | 1/1   | 0.94 | 0.30 | 47,47,47,47                | 0     |
| 54  | MG   | BA    | 3578 | 1/1   | 0.94 | 0.10 | 49,49,49,49                | 0     |
| 54  | MG   | AA    | 1733 | 1/1   | 0.94 | 0.12 | 59,59,59,59                | 0     |
| 54  | MG   | BA    | 3448 | 1/1   | 0.94 | 0.20 | 46,46,46,46                | 0     |
| 54  | MG   | DA    | 3516 | 1/1   | 0.94 | 0.08 | 56,56,56,56                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | AA    | 1809 | 1/1   | 0.94 | 0.36 | 79,79,79,79                 | 0     |
| 54  | MG   | BA    | 3480 | 1/1   | 0.94 | 0.10 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3550 | 1/1   | 0.94 | 0.12 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3451 | 1/1   | 0.94 | 0.07 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3344 | 1/1   | 0.94 | 0.11 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3498 | 1/1   | 0.94 | 0.23 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3531 | 1/1   | 0.94 | 0.20 | 25,25,25,25                 | 0     |
| 54  | MG   | DA    | 3046 | 1/1   | 0.94 | 0.27 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3712 | 1/1   | 0.94 | 0.14 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3526 | 1/1   | 0.94 | 0.13 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3651 | 1/1   | 0.94 | 0.29 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3492 | 1/1   | 0.94 | 0.11 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1608 | 1/1   | 0.94 | 0.12 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1651 | 1/1   | 0.94 | 0.10 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3032 | 1/1   | 0.94 | 0.19 | 25,25,25,25                 | 0     |
| 54  | MG   | BA    | 3271 | 1/1   | 0.94 | 0.09 | 66,66,66,66                 | 0     |
| 54  | MG   | AA    | 1727 | 1/1   | 0.94 | 0.19 | 82,82,82,82                 | 0     |
| 54  | MG   | DA    | 3331 | 1/1   | 0.94 | 0.12 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3001 | 1/1   | 0.94 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3546 | 1/1   | 0.94 | 0.07 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3023 | 1/1   | 0.94 | 0.11 | 43,43,43,43                 | 0     |
| 54  | MG   | CA    | 1699 | 1/1   | 0.94 | 0.29 | 73,73,73,73                 | 0     |
| 54  | MG   | AA    | 1645 | 1/1   | 0.94 | 0.09 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3311 | 1/1   | 0.94 | 0.13 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3358 | 1/1   | 0.94 | 0.07 | 59,59,59,59                 | 0     |
| 54  | MG   | BR    | 205  | 1/1   | 0.94 | 0.12 | 45,45,45,45                 | 0     |
| 54  | MG   | CA    | 1672 | 1/1   | 0.94 | 0.09 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3397 | 1/1   | 0.94 | 0.14 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3318 | 1/1   | 0.94 | 0.08 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3588 | 1/1   | 0.94 | 0.11 | 38,38,38,38                 | 0     |
| 54  | MG   | AA    | 1812 | 1/1   | 0.94 | 0.25 | 82,82,82,82                 | 0     |
| 54  | MG   | BA    | 3058 | 1/1   | 0.94 | 0.41 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3470 | 1/1   | 0.94 | 0.12 | 50,50,50,50                 | 0     |
| 54  | MG   | DA    | 3016 | 1/1   | 0.94 | 0.09 | 64,64,64,64                 | 0     |
| 54  | MG   | B9    | 104  | 1/1   | 0.94 | 0.10 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3288 | 1/1   | 0.94 | 0.12 | 51,51,51,51                 | 0     |
| 54  | MG   | AA    | 1709 | 1/1   | 0.94 | 0.14 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3207 | 1/1   | 0.94 | 0.08 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3461 | 1/1   | 0.94 | 0.09 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3549 | 1/1   | 0.94 | 0.15 | 22,22,22,22                 | 0     |
| 54  | MG   | BE    | 304  | 1/1   | 0.94 | 0.27 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3675 | 1/1   | 0.94 | 0.09 | 48,48,48,48                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3347 | 1/1   | 0.94 | 0.23 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3650 | 1/1   | 0.94 | 0.13 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3214 | 1/1   | 0.94 | 0.07 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3666 | 1/1   | 0.94 | 0.14 | 78,78,78,78                 | 0     |
| 54  | MG   | AA    | 1782 | 1/1   | 0.94 | 0.14 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3033 | 1/1   | 0.94 | 0.24 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3296 | 1/1   | 0.94 | 0.27 | 61,61,61,61                 | 0     |
| 54  | MG   | DA    | 3147 | 1/1   | 0.94 | 0.11 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3350 | 1/1   | 0.94 | 0.08 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3257 | 1/1   | 0.94 | 0.28 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3301 | 1/1   | 0.94 | 0.13 | 31,31,31,31                 | 0     |
| 54  | MG   | AA    | 1687 | 1/1   | 0.94 | 0.21 | 79,79,79,79                 | 0     |
| 54  | MG   | DA    | 3231 | 1/1   | 0.94 | 0.10 | 51,51,51,51                 | 0     |
| 54  | MG   | CA    | 1712 | 1/1   | 0.94 | 0.08 | 55,55,55,55                 | 0     |
| 54  | MG   | BE    | 303  | 1/1   | 0.94 | 0.27 | 47,47,47,47                 | 0     |
| 54  | MG   | AA    | 1701 | 1/1   | 0.94 | 0.06 | 68,68,68,68                 | 0     |
| 54  | MG   | BA    | 3369 | 1/1   | 0.94 | 0.11 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3299 | 1/1   | 0.94 | 0.17 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3212 | 1/1   | 0.94 | 0.09 | 32,32,32,32                 | 0     |
| 54  | MG   | DA    | 3112 | 1/1   | 0.94 | 0.19 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3363 | 1/1   | 0.94 | 0.22 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3321 | 1/1   | 0.94 | 0.10 | 77,77,77,77                 | 0     |
| 54  | MG   | DA    | 3489 | 1/1   | 0.94 | 0.16 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3534 | 1/1   | 0.94 | 0.25 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3229 | 1/1   | 0.94 | 0.14 | 61,61,61,61                 | 0     |
| 54  | MG   | DP    | 203  | 1/1   | 0.94 | 0.12 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3542 | 1/1   | 0.94 | 0.07 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3652 | 1/1   | 0.94 | 0.13 | 51,51,51,51                 | 0     |
| 54  | MG   | CA    | 1717 | 1/1   | 0.94 | 0.08 | 85,85,85,85                 | 0     |
| 54  | MG   | BA    | 3047 | 1/1   | 0.94 | 0.13 | 30,30,30,30                 | 0     |
| 54  | MG   | AA    | 1739 | 1/1   | 0.94 | 0.11 | 72,72,72,72                 | 0     |
| 54  | MG   | DA    | 3113 | 1/1   | 0.94 | 0.18 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3258 | 1/1   | 0.94 | 0.23 | 35,35,35,35                 | 0     |
| 54  | MG   | AA    | 1725 | 1/1   | 0.94 | 0.13 | 62,62,62,62                 | 0     |
| 54  | MG   | BA    | 3024 | 1/1   | 0.94 | 0.25 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3006 | 1/1   | 0.94 | 0.18 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3563 | 1/1   | 0.94 | 0.40 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3376 | 1/1   | 0.94 | 0.13 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3151 | 1/1   | 0.94 | 0.13 | 31,31,31,31                 | 0     |
| 54  | MG   | BO    | 201  | 1/1   | 0.94 | 0.15 | 53,53,53,53                 | 0     |
| 54  | MG   | BB    | 204  | 1/1   | 0.94 | 0.10 | 47,47,47,47                 | 0     |
| 54  | MG   | AA    | 1620 | 1/1   | 0.94 | 0.37 | 61,61,61,61                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | BA    | 3584 | 1/1   | 0.94 | 0.15 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3140 | 1/1   | 0.94 | 0.17 | 44,44,44,44                | 0     |
| 54  | MG   | B0    | 101  | 1/1   | 0.94 | 0.30 | 40,40,40,40                | 0     |
| 54  | MG   | DA    | 3023 | 1/1   | 0.94 | 0.29 | 68,68,68,68                | 0     |
| 54  | MG   | AA    | 1753 | 1/1   | 0.94 | 0.11 | 71,71,71,71                | 0     |
| 54  | MG   | AA    | 1774 | 1/1   | 0.94 | 0.14 | 78,78,78,78                | 0     |
| 54  | MG   | AA    | 1758 | 1/1   | 0.94 | 0.13 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3070 | 1/1   | 0.94 | 0.33 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3035 | 1/1   | 0.94 | 0.21 | 23,23,23,23                | 0     |
| 54  | MG   | BA    | 3481 | 1/1   | 0.94 | 0.21 | 22,22,22,22                | 0     |
| 54  | MG   | BA    | 3707 | 1/1   | 0.94 | 0.09 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3542 | 1/1   | 0.94 | 0.22 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3341 | 1/1   | 0.94 | 0.16 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3580 | 1/1   | 0.94 | 0.17 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3439 | 1/1   | 0.94 | 0.33 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3197 | 1/1   | 0.94 | 0.09 | 28,28,28,28                | 0     |
| 54  | MG   | BA    | 3173 | 1/1   | 0.94 | 0.15 | 63,63,63,63                | 0     |
| 54  | MG   | D8    | 102  | 1/1   | 0.94 | 0.15 | 66,66,66,66                | 0     |
| 54  | MG   | CA    | 1744 | 1/1   | 0.94 | 0.08 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3611 | 1/1   | 0.94 | 0.17 | 57,57,57,57                | 0     |
| 54  | MG   | CA    | 1734 | 1/1   | 0.94 | 0.15 | 79,79,79,79                | 0     |
| 54  | MG   | BA    | 3553 | 1/1   | 0.94 | 0.23 | 27,27,27,27                | 0     |
| 54  | MG   | BA    | 3135 | 1/1   | 0.94 | 0.10 | 50,50,50,50                | 0     |
| 54  | MG   | DA    | 3194 | 1/1   | 0.94 | 0.20 | 22,22,22,22                | 0     |
| 54  | MG   | BA    | 3427 | 1/1   | 0.94 | 0.13 | 28,28,28,28                | 0     |
| 54  | MG   | BB    | 216  | 1/1   | 0.94 | 0.31 | 59,59,59,59                | 0     |
| 54  | MG   | BA    | 3419 | 1/1   | 0.94 | 0.15 | 29,29,29,29                | 0     |
| 54  | MG   | BA    | 3699 | 1/1   | 0.94 | 0.12 | 43,43,43,43                | 0     |
| 54  | MG   | BA    | 3146 | 1/1   | 0.94 | 0.23 | 34,34,34,34                | 0     |
| 54  | MG   | DA    | 3514 | 1/1   | 0.94 | 0.29 | 92,92,92,92                | 0     |
| 54  | MG   | DA    | 3229 | 1/1   | 0.94 | 0.16 | 76,76,76,76                | 0     |
| 54  | MG   | BA    | 3218 | 1/1   | 0.94 | 0.12 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3578 | 1/1   | 0.94 | 0.14 | 45,45,45,45                | 0     |
| 54  | MG   | AA    | 1741 | 1/1   | 0.94 | 0.18 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3517 | 1/1   | 0.94 | 0.15 | 52,52,52,52                | 0     |
| 54  | MG   | CA    | 1655 | 1/1   | 0.94 | 0.16 | 66,66,66,66                | 0     |
| 54  | MG   | CA    | 1692 | 1/1   | 0.94 | 0.10 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3519 | 1/1   | 0.94 | 0.12 | 26,26,26,26                | 0     |
| 54  | MG   | CA    | 1788 | 1/1   | 0.94 | 0.11 | 51,51,51,51                | 0     |
| 54  | MG   | BA    | 3539 | 1/1   | 0.94 | 0.05 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3048 | 1/1   | 0.94 | 0.13 | 35,35,35,35                | 0     |
| 54  | MG   | BA    | 3101 | 1/1   | 0.94 | 0.21 | 37,37,37,37                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | AA    | 1719 | 1/1   | 0.94 | 0.16 | 66,66,66,66                 | 0     |
| 54  | MG   | B8    | 101  | 1/1   | 0.94 | 0.29 | 45,45,45,45                 | 0     |
| 54  | MG   | CA    | 1623 | 1/1   | 0.94 | 0.12 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3342 | 1/1   | 0.94 | 0.04 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3353 | 1/1   | 0.94 | 0.11 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3044 | 1/1   | 0.94 | 0.39 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3541 | 1/1   | 0.94 | 0.19 | 21,21,21,21                 | 0     |
| 54  | MG   | BA    | 3677 | 1/1   | 0.94 | 0.11 | 72,72,72,72                 | 0     |
| 54  | MG   | AA    | 1660 | 1/1   | 0.94 | 0.30 | 62,62,62,62                 | 0     |
| 54  | MG   | AA    | 1704 | 1/1   | 0.94 | 0.07 | 75,75,75,75                 | 0     |
| 54  | MG   | DA    | 3372 | 1/1   | 0.94 | 0.13 | 79,79,79,79                 | 0     |
| 54  | MG   | CA    | 1728 | 1/1   | 0.94 | 0.05 | 79,79,79,79                 | 0     |
| 54  | MG   | CA    | 1738 | 1/1   | 0.94 | 0.17 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3461 | 1/1   | 0.94 | 0.08 | 76,76,76,76                 | 0     |
| 54  | MG   | BA    | 3466 | 1/1   | 0.94 | 0.07 | 78,78,78,78                 | 0     |
| 54  | MG   | DA    | 3105 | 1/1   | 0.94 | 0.20 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3228 | 1/1   | 0.94 | 0.25 | 44,44,44,44                 | 0     |
| 54  | MG   | AA    | 1627 | 1/1   | 0.94 | 0.19 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3490 | 1/1   | 0.94 | 0.09 | 60,60,60,60                 | 0     |
| 54  | MG   | CA    | 1770 | 1/1   | 0.94 | 0.09 | 71,71,71,71                 | 0     |
| 54  | MG   | BA    | 3362 | 1/1   | 0.94 | 0.13 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3599 | 1/1   | 0.94 | 0.17 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3585 | 1/1   | 0.94 | 0.08 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3183 | 1/1   | 0.94 | 0.12 | 37,37,37,37                 | 0     |
| 54  | MG   | DA    | 3537 | 1/1   | 0.94 | 0.18 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3046 | 1/1   | 0.94 | 0.15 | 35,35,35,35                 | 0     |
| 54  | MG   | AA    | 1666 | 1/1   | 0.94 | 0.28 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3481 | 1/1   | 0.94 | 0.16 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3344 | 1/1   | 0.94 | 0.15 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3647 | 1/1   | 0.94 | 0.13 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3064 | 1/1   | 0.94 | 0.29 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3483 | 1/1   | 0.94 | 0.22 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3563 | 1/1   | 0.94 | 0.12 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3306 | 1/1   | 0.94 | 0.11 | 68,68,68,68                 | 0     |
| 54  | MG   | CE    | 201  | 1/1   | 0.94 | 0.09 | 78,78,78,78                 | 0     |
| 54  | MG   | AA    | 1689 | 1/1   | 0.94 | 0.17 | 56,56,56,56                 | 0     |
| 54  | MG   | CA    | 1701 | 1/1   | 0.94 | 0.05 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3061 | 1/1   | 0.94 | 0.08 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3213 | 1/1   | 0.94 | 0.10 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3193 | 1/1   | 0.94 | 0.08 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3398 | 1/1   | 0.94 | 0.27 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3429 | 1/1   | 0.94 | 0.14 | 59,59,59,59                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3694 | 1/1   | 0.94 | 0.19 | 21,21,21,21                 | 0     |
| 54  | MG   | DA    | 3223 | 1/1   | 0.94 | 0.08 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3045 | 1/1   | 0.94 | 0.18 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3083 | 1/1   | 0.94 | 0.10 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3147 | 1/1   | 0.94 | 0.23 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3538 | 1/1   | 0.94 | 0.10 | 55,55,55,55                 | 0     |
| 54  | MG   | CA    | 1615 | 1/1   | 0.94 | 0.21 | 42,42,42,42                 | 0     |
| 54  | MG   | CA    | 1747 | 1/1   | 0.94 | 0.15 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3306 | 1/1   | 0.94 | 0.13 | 61,61,61,61                 | 0     |
| 54  | MG   | CA    | 1611 | 1/1   | 0.94 | 0.18 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3381 | 1/1   | 0.95 | 0.09 | 55,55,55,55                 | 0     |
| 54  | MG   | DA    | 3555 | 1/1   | 0.95 | 0.44 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3269 | 1/1   | 0.95 | 0.11 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3291 | 1/1   | 0.95 | 0.18 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3186 | 1/1   | 0.95 | 0.17 | 30,30,30,30                 | 0     |
| 54  | MG   | DA    | 3156 | 1/1   | 0.95 | 0.22 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3455 | 1/1   | 0.95 | 0.21 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3114 | 1/1   | 0.95 | 0.13 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3343 | 1/1   | 0.95 | 0.11 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3181 | 1/1   | 0.95 | 0.09 | 50,50,50,50                 | 0     |
| 54  | MG   | AA    | 1763 | 1/1   | 0.95 | 0.25 | 73,73,73,73                 | 0     |
| 54  | MG   | AA    | 1803 | 1/1   | 0.95 | 0.08 | 81,81,81,81                 | 0     |
| 54  | MG   | DA    | 3485 | 1/1   | 0.95 | 0.14 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3156 | 1/1   | 0.95 | 0.15 | 28,28,28,28                 | 0     |
| 54  | MG   | D9    | 102  | 1/1   | 0.95 | 0.17 | 51,51,51,51                 | 0     |
| 54  | MG   | AA    | 1670 | 1/1   | 0.95 | 0.18 | 56,56,56,56                 | 0     |
| 54  | MG   | BA    | 3154 | 1/1   | 0.95 | 0.12 | 47,47,47,47                 | 0     |
| 54  | MG   | BU    | 201  | 1/1   | 0.95 | 0.24 | 30,30,30,30                 | 0     |
| 54  | MG   | AA    | 1647 | 1/1   | 0.95 | 0.30 | 73,73,73,73                 | 0     |
| 54  | MG   | DA    | 3055 | 1/1   | 0.95 | 0.37 | 25,25,25,25                 | 0     |
| 54  | MG   | AA    | 1602 | 1/1   | 0.95 | 0.19 | 70,70,70,70                 | 0     |
| 54  | MG   | CA    | 1725 | 1/1   | 0.95 | 0.20 | 91,91,91,91                 | 0     |
| 54  | MG   | BA    | 3233 | 1/1   | 0.95 | 0.07 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3473 | 1/1   | 0.95 | 0.14 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3133 | 1/1   | 0.95 | 0.39 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3236 | 1/1   | 0.95 | 0.15 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3022 | 1/1   | 0.95 | 0.24 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3106 | 1/1   | 0.95 | 0.12 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3468 | 1/1   | 0.95 | 0.15 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3371 | 1/1   | 0.95 | 0.25 | 26,26,26,26                 | 0     |
| 54  | MG   | BA    | 3246 | 1/1   | 0.95 | 0.15 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3348 | 1/1   | 0.95 | 0.09 | 44,44,44,44                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | CA    | 1762 | 1/1   | 0.95 | 0.12 | 86,86,86,86                 | 0     |
| 54  | MG   | BA    | 3080 | 1/1   | 0.95 | 0.22 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3087 | 1/1   | 0.95 | 0.23 | 36,36,36,36                 | 0     |
| 54  | MG   | AA    | 1743 | 1/1   | 0.95 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3572 | 1/1   | 0.95 | 0.08 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3600 | 1/1   | 0.95 | 0.07 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3298 | 1/1   | 0.95 | 0.23 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3418 | 1/1   | 0.95 | 0.23 | 28,28,28,28                 | 0     |
| 54  | MG   | AA    | 1617 | 1/1   | 0.95 | 0.35 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3684 | 1/1   | 0.95 | 0.16 | 64,64,64,64                 | 0     |
| 54  | MG   | AA    | 1795 | 1/1   | 0.95 | 0.08 | 87,87,87,87                 | 0     |
| 54  | MG   | BA    | 3383 | 1/1   | 0.95 | 0.13 | 26,26,26,26                 | 0     |
| 54  | MG   | DR    | 201  | 1/1   | 0.95 | 0.30 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3459 | 1/1   | 0.95 | 0.09 | 90,90,90,90                 | 0     |
| 54  | MG   | AE    | 201  | 1/1   | 0.95 | 0.23 | 62,62,62,62                 | 0     |
| 54  | MG   | AA    | 1805 | 1/1   | 0.95 | 0.11 | 82,82,82,82                 | 0     |
| 54  | MG   | DA    | 3241 | 1/1   | 0.95 | 0.19 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3476 | 1/1   | 0.95 | 0.14 | 55,55,55,55                 | 0     |
| 54  | MG   | BD    | 304  | 1/1   | 0.95 | 0.17 | 19,19,19,19                 | 0     |
| 54  | MG   | DA    | 3251 | 1/1   | 0.95 | 0.20 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3400 | 1/1   | 0.95 | 0.17 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3109 | 1/1   | 0.95 | 0.12 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3455 | 1/1   | 0.95 | 0.09 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3201 | 1/1   | 0.95 | 0.16 | 29,29,29,29                 | 0     |
| 54  | MG   | AA    | 1656 | 1/1   | 0.95 | 0.14 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3304 | 1/1   | 0.95 | 0.10 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3208 | 1/1   | 0.95 | 0.12 | 31,31,31,31                 | 0     |
| 54  | MG   | BY    | 202  | 1/1   | 0.95 | 0.15 | 49,49,49,49                 | 0     |
| 54  | MG   | BB    | 206  | 1/1   | 0.95 | 0.19 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3170 | 1/1   | 0.95 | 0.27 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3460 | 1/1   | 0.95 | 0.10 | 51,51,51,51                 | 0     |
| 54  | MG   | AA    | 1766 | 1/1   | 0.95 | 0.12 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3665 | 1/1   | 0.95 | 0.06 | 72,72,72,72                 | 0     |
| 54  | MG   | DA    | 3531 | 1/1   | 0.95 | 0.04 | 51,51,51,51                 | 0     |
| 54  | MG   | CA    | 1749 | 1/1   | 0.95 | 0.16 | 69,69,69,69                 | 0     |
| 54  | MG   | DA    | 3192 | 1/1   | 0.95 | 0.09 | 37,37,37,37                 | 0     |
| 54  | MG   | DA    | 3186 | 1/1   | 0.95 | 0.13 | 27,27,27,27                 | 0     |
| 54  | MG   | CA    | 1636 | 1/1   | 0.95 | 0.19 | 58,58,58,58                 | 0     |
| 54  | MG   | CA    | 1732 | 1/1   | 0.95 | 0.23 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3232 | 1/1   | 0.95 | 0.09 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3170 | 1/1   | 0.95 | 0.10 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3230 | 1/1   | 0.95 | 0.24 | 29,29,29,29                 | 0     |

*Continued on next page...*



*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3215 | 1/1   | 0.95 | 0.09 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3691 | 1/1   | 0.95 | 0.11 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3021 | 1/1   | 0.95 | 0.22 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3103 | 1/1   | 0.95 | 0.32 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3269 | 1/1   | 0.95 | 0.10 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3417 | 1/1   | 0.95 | 0.13 | 25,25,25,25                 | 0     |
| 54  | MG   | BA    | 3424 | 1/1   | 0.95 | 0.14 | 25,25,25,25                 | 0     |
| 54  | MG   | DA    | 3271 | 1/1   | 0.95 | 0.05 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3440 | 1/1   | 0.95 | 0.07 | 50,50,50,50                 | 0     |
| 54  | MG   | AA    | 1683 | 1/1   | 0.95 | 0.21 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3573 | 1/1   | 0.95 | 0.10 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3422 | 1/1   | 0.95 | 0.07 | 71,71,71,71                 | 0     |
| 54  | MG   | CA    | 1684 | 1/1   | 0.95 | 0.27 | 82,82,82,82                 | 0     |
| 54  | MG   | DA    | 3074 | 1/1   | 0.95 | 0.17 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3153 | 1/1   | 0.95 | 0.14 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3561 | 1/1   | 0.95 | 0.12 | 65,65,65,65                 | 0     |
| 54  | MG   | AA    | 1643 | 1/1   | 0.95 | 0.15 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3308 | 1/1   | 0.95 | 0.17 | 70,70,70,70                 | 0     |
| 54  | MG   | BA    | 3565 | 1/1   | 0.95 | 0.20 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1780 | 1/1   | 0.95 | 0.11 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3111 | 1/1   | 0.95 | 0.18 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3423 | 1/1   | 0.95 | 0.08 | 37,37,37,37                 | 0     |
| 54  | MG   | CA    | 1691 | 1/1   | 0.95 | 0.17 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3129 | 1/1   | 0.95 | 0.46 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3687 | 1/1   | 0.95 | 0.09 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3257 | 1/1   | 0.95 | 0.19 | 21,21,21,21                 | 0     |
| 54  | MG   | BA    | 3351 | 1/1   | 0.95 | 0.11 | 49,49,49,49                 | 0     |
| 54  | MG   | AA    | 1811 | 1/1   | 0.95 | 0.08 | 65,65,65,65                 | 0     |
| 54  | MG   | AA    | 1713 | 1/1   | 0.95 | 0.18 | 61,61,61,61                 | 0     |
| 54  | MG   | BR    | 203  | 1/1   | 0.95 | 0.25 | 33,33,33,33                 | 0     |
| 54  | MG   | AA    | 1629 | 1/1   | 0.95 | 0.50 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3110 | 1/1   | 0.95 | 0.14 | 60,60,60,60                 | 0     |
| 54  | MG   | BR    | 201  | 1/1   | 0.95 | 0.42 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3471 | 1/1   | 0.95 | 0.10 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3474 | 1/1   | 0.95 | 0.17 | 63,63,63,63                 | 0     |
| 54  | MG   | BA    | 3316 | 1/1   | 0.95 | 0.06 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3071 | 1/1   | 0.95 | 0.13 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3597 | 1/1   | 0.95 | 0.14 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3445 | 1/1   | 0.95 | 0.06 | 60,60,60,60                 | 0     |
| 54  | MG   | BV    | 201  | 1/1   | 0.95 | 0.33 | 30,30,30,30                 | 0     |
| 54  | MG   | DA    | 3438 | 1/1   | 0.95 | 0.09 | 54,54,54,54                 | 0     |
| 54  | MG   | AA    | 1723 | 1/1   | 0.95 | 0.11 | 82,82,82,82                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3034 | 1/1   | 0.95 | 0.25 | 34,34,34,34                 | 0     |
| 54  | MG   | BU    | 202  | 1/1   | 0.95 | 0.25 | 34,34,34,34                 | 0     |
| 54  | MG   | B0    | 104  | 1/1   | 0.95 | 0.06 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3452 | 1/1   | 0.95 | 0.11 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3510 | 1/1   | 0.95 | 0.15 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3706 | 1/1   | 0.95 | 0.10 | 44,44,44,44                 | 0     |
| 54  | MG   | AA    | 1781 | 1/1   | 0.95 | 0.10 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3576 | 1/1   | 0.95 | 0.26 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3158 | 1/1   | 0.95 | 0.23 | 22,22,22,22                 | 0     |
| 54  | MG   | BA    | 3635 | 1/1   | 0.95 | 0.07 | 72,72,72,72                 | 0     |
| 54  | MG   | AA    | 1799 | 1/1   | 0.95 | 0.15 | 44,44,44,44                 | 0     |
| 54  | MG   | DA    | 3282 | 1/1   | 0.95 | 0.07 | 64,64,64,64                 | 0     |
| 54  | MG   | CA    | 1621 | 1/1   | 0.95 | 0.23 | 87,87,87,87                 | 0     |
| 54  | MG   | CA    | 1723 | 1/1   | 0.95 | 0.14 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3475 | 1/1   | 0.95 | 0.07 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3330 | 1/1   | 0.95 | 0.20 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3444 | 1/1   | 0.95 | 0.12 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3695 | 1/1   | 0.95 | 0.12 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3099 | 1/1   | 0.95 | 0.26 | 54,54,54,54                 | 0     |
| 54  | MG   | AM    | 201  | 1/1   | 0.95 | 0.27 | 78,78,78,78                 | 0     |
| 54  | MG   | DA    | 3069 | 1/1   | 0.95 | 0.10 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3529 | 1/1   | 0.95 | 0.14 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3417 | 1/1   | 0.95 | 0.10 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3589 | 1/1   | 0.95 | 0.07 | 42,42,42,42                 | 0     |
| 54  | MG   | AA    | 1705 | 1/1   | 0.95 | 0.08 | 46,46,46,46                 | 0     |
| 54  | MG   | AA    | 1626 | 1/1   | 0.95 | 0.23 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3494 | 1/1   | 0.95 | 0.14 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3693 | 1/1   | 0.95 | 0.09 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3149 | 1/1   | 0.95 | 0.12 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3070 | 1/1   | 0.95 | 0.25 | 51,51,51,51                 | 0     |
| 54  | MG   | AA    | 1738 | 1/1   | 0.95 | 0.04 | 62,62,62,62                 | 0     |
| 54  | MG   | B2    | 101  | 1/1   | 0.95 | 0.19 | 46,46,46,46                 | 0     |
| 54  | MG   | BD    | 303  | 1/1   | 0.95 | 0.12 | 33,33,33,33                 | 0     |
| 54  | MG   | DA    | 3585 | 1/1   | 0.95 | 0.29 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3614 | 1/1   | 0.95 | 0.34 | 47,47,47,47                 | 0     |
| 54  | MG   | DA    | 3091 | 1/1   | 0.95 | 0.98 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3224 | 1/1   | 0.95 | 0.17 | 28,28,28,28                 | 0     |
| 54  | MG   | DA    | 3171 | 1/1   | 0.95 | 0.10 | 28,28,28,28                 | 0     |
| 54  | MG   | AA    | 1672 | 1/1   | 0.95 | 0.13 | 50,50,50,50                 | 0     |
| 54  | MG   | DA    | 3568 | 1/1   | 0.95 | 0.16 | 62,62,62,62                 | 0     |
| 54  | MG   | B1    | 101  | 1/1   | 0.95 | 0.21 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3278 | 1/1   | 0.95 | 0.20 | 39,39,39,39                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3098 | 1/1   | 0.95 | 0.47 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3283 | 1/1   | 0.95 | 0.16 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3090 | 1/1   | 0.95 | 0.32 | 30,30,30,30                 | 0     |
| 54  | MG   | AA    | 1609 | 1/1   | 0.95 | 0.15 | 66,66,66,66                 | 0     |
| 54  | MG   | DA    | 3430 | 1/1   | 0.95 | 0.23 | 28,28,28,28                 | 0     |
| 54  | MG   | DA    | 3434 | 1/1   | 0.95 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | AL    | 201  | 1/1   | 0.95 | 0.08 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3401 | 1/1   | 0.95 | 0.15 | 56,56,56,56                 | 0     |
| 54  | MG   | BA    | 3470 | 1/1   | 0.95 | 0.11 | 33,33,33,33                 | 0     |
| 54  | MG   | AA    | 1802 | 1/1   | 0.95 | 0.37 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3566 | 1/1   | 0.95 | 0.20 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3128 | 1/1   | 0.95 | 0.32 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3215 | 1/1   | 0.95 | 0.12 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3522 | 1/1   | 0.95 | 0.13 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3160 | 1/1   | 0.95 | 0.04 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3680 | 1/1   | 0.95 | 0.12 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3132 | 1/1   | 0.95 | 0.11 | 45,45,45,45                 | 0     |
| 54  | MG   | BU    | 203  | 1/1   | 0.95 | 0.33 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3261 | 1/1   | 0.95 | 0.13 | 37,37,37,37                 | 0     |
| 54  | MG   | DA    | 3323 | 1/1   | 0.95 | 0.13 | 69,69,69,69                 | 0     |
| 54  | MG   | AA    | 1815 | 1/1   | 0.95 | 0.09 | 72,72,72,72                 | 0     |
| 54  | MG   | BA    | 3581 | 1/1   | 0.95 | 0.12 | 42,42,42,42                 | 0     |
| 54  | MG   | AA    | 1800 | 1/1   | 0.95 | 0.18 | 70,70,70,70                 | 0     |
| 54  | MG   | BA    | 3425 | 1/1   | 0.95 | 0.16 | 38,38,38,38                 | 0     |
| 54  | MG   | BD    | 301  | 1/1   | 0.95 | 0.17 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3216 | 1/1   | 0.95 | 0.12 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3634 | 1/1   | 0.95 | 0.05 | 63,63,63,63                 | 0     |
| 54  | MG   | AA    | 1810 | 1/1   | 0.95 | 0.15 | 67,67,67,67                 | 0     |
| 54  | MG   | BA    | 3370 | 1/1   | 0.95 | 0.21 | 23,23,23,23                 | 0     |
| 54  | MG   | BA    | 3337 | 1/1   | 0.95 | 0.07 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3373 | 1/1   | 0.95 | 0.15 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3085 | 1/1   | 0.95 | 0.23 | 23,23,23,23                 | 0     |
| 54  | MG   | AA    | 1659 | 1/1   | 0.95 | 0.21 | 75,75,75,75                 | 0     |
| 54  | MG   | DA    | 3460 | 1/1   | 0.95 | 0.16 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3133 | 1/1   | 0.95 | 0.19 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3420 | 1/1   | 0.95 | 0.15 | 23,23,23,23                 | 0     |
| 54  | MG   | DA    | 3062 | 1/1   | 0.95 | 0.25 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3175 | 1/1   | 0.95 | 0.07 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3332 | 1/1   | 0.95 | 0.13 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3654 | 1/1   | 0.95 | 0.28 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3603 | 1/1   | 0.95 | 0.14 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3644 | 1/1   | 0.95 | 0.16 | 35,35,35,35                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | DA    | 3246 | 1/1   | 0.95 | 0.17 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3356 | 1/1   | 0.95 | 0.09 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1768 | 1/1   | 0.95 | 0.32 | 79,79,79,79                 | 0     |
| 54  | MG   | DW    | 201  | 1/1   | 0.95 | 0.06 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3025 | 1/1   | 0.95 | 0.33 | 35,35,35,35                 | 0     |
| 54  | MG   | BA    | 3381 | 1/1   | 0.95 | 0.12 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3422 | 1/1   | 0.96 | 0.10 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3195 | 1/1   | 0.96 | 0.10 | 46,46,46,46                 | 0     |
| 54  | MG   | DE    | 302  | 1/1   | 0.96 | 0.14 | 37,37,37,37                 | 0     |
| 54  | MG   | CA    | 1743 | 1/1   | 0.96 | 0.15 | 65,65,65,65                 | 0     |
| 54  | MG   | AA    | 1694 | 1/1   | 0.96 | 0.09 | 76,76,76,76                 | 0     |
| 54  | MG   | CA    | 1698 | 1/1   | 0.96 | 0.10 | 62,62,62,62                 | 0     |
| 54  | MG   | B9    | 102  | 1/1   | 0.96 | 0.28 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3483 | 1/1   | 0.96 | 0.07 | 63,63,63,63                 | 0     |
| 54  | MG   | DA    | 3457 | 1/1   | 0.96 | 0.14 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3287 | 1/1   | 0.96 | 0.15 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3435 | 1/1   | 0.96 | 0.05 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3503 | 1/1   | 0.96 | 0.23 | 23,23,23,23                 | 0     |
| 54  | MG   | DA    | 3273 | 1/1   | 0.96 | 0.05 | 93,93,93,93                 | 0     |
| 54  | MG   | BB    | 207  | 1/1   | 0.96 | 0.17 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3551 | 1/1   | 0.96 | 0.10 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3389 | 1/1   | 0.96 | 0.22 | 30,30,30,30                 | 0     |
| 54  | MG   | AA    | 1790 | 1/1   | 0.96 | 0.19 | 63,63,63,63                 | 0     |
| 54  | MG   | CA    | 1769 | 1/1   | 0.96 | 0.10 | 58,58,58,58                 | 0     |
| 54  | MG   | BA    | 3028 | 1/1   | 0.96 | 0.15 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3177 | 1/1   | 0.96 | 0.13 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3234 | 1/1   | 0.96 | 0.19 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3493 | 1/1   | 0.96 | 0.11 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3708 | 1/1   | 0.96 | 0.17 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3676 | 1/1   | 0.96 | 0.20 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3355 | 1/1   | 0.96 | 0.10 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3339 | 1/1   | 0.96 | 0.08 | 53,53,53,53                 | 0     |
| 54  | MG   | AA    | 1601 | 1/1   | 0.96 | 0.40 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3520 | 1/1   | 0.96 | 0.22 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3256 | 1/1   | 0.96 | 0.23 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3515 | 1/1   | 0.96 | 0.12 | 54,54,54,54                 | 0     |
| 54  | MG   | DE    | 301  | 1/1   | 0.96 | 0.10 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3255 | 1/1   | 0.96 | 0.10 | 25,25,25,25                 | 0     |
| 54  | MG   | BZ    | 302  | 1/1   | 0.96 | 0.13 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3005 | 1/1   | 0.96 | 0.12 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3335 | 1/1   | 0.96 | 0.24 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3142 | 1/1   | 0.96 | 0.11 | 48,48,48,48                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3521 | 1/1   | 0.96 | 0.17 | 35,35,35,35                 | 0     |
| 54  | MG   | BB    | 218  | 1/1   | 0.96 | 0.09 | 69,69,69,69                 | 0     |
| 54  | MG   | BA    | 3157 | 1/1   | 0.96 | 0.15 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3122 | 1/1   | 0.96 | 0.13 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3523 | 1/1   | 0.96 | 0.14 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3123 | 1/1   | 0.96 | 0.12 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3254 | 1/1   | 0.96 | 0.12 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3203 | 1/1   | 0.96 | 0.23 | 39,39,39,39                 | 0     |
| 54  | MG   | CA    | 1683 | 1/1   | 0.96 | 0.06 | 71,71,71,71                 | 0     |
| 54  | MG   | DA    | 3580 | 1/1   | 0.96 | 0.18 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3502 | 1/1   | 0.96 | 0.17 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3065 | 1/1   | 0.96 | 0.17 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3180 | 1/1   | 0.96 | 0.11 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3368 | 1/1   | 0.96 | 0.07 | 56,56,56,56                 | 0     |
| 54  | MG   | BA    | 3668 | 1/1   | 0.96 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | DA    | 3506 | 1/1   | 0.96 | 0.15 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3161 | 1/1   | 0.96 | 0.18 | 20,20,20,20                 | 0     |
| 54  | MG   | BA    | 3178 | 1/1   | 0.96 | 0.27 | 23,23,23,23                 | 0     |
| 54  | MG   | DA    | 3047 | 1/1   | 0.96 | 0.20 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3007 | 1/1   | 0.96 | 0.24 | 59,59,59,59                 | 0     |
| 54  | MG   | BV    | 203  | 1/1   | 0.96 | 0.10 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3102 | 1/1   | 0.96 | 0.22 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3429 | 1/1   | 0.96 | 0.23 | 26,26,26,26                 | 0     |
| 54  | MG   | B0    | 102  | 1/1   | 0.96 | 0.15 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3293 | 1/1   | 0.96 | 0.11 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3443 | 1/1   | 0.96 | 0.17 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3364 | 1/1   | 0.96 | 0.18 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3607 | 1/1   | 0.96 | 0.07 | 76,76,76,76                 | 0     |
| 54  | MG   | BA    | 3645 | 1/1   | 0.96 | 0.18 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3516 | 1/1   | 0.96 | 0.08 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3078 | 1/1   | 0.96 | 0.22 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3268 | 1/1   | 0.96 | 0.07 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3448 | 1/1   | 0.96 | 0.28 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3620 | 1/1   | 0.96 | 0.42 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3100 | 1/1   | 0.96 | 0.20 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3532 | 1/1   | 0.96 | 0.14 | 58,58,58,58                 | 0     |
| 54  | MG   | DA    | 3041 | 1/1   | 0.96 | 0.14 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3202 | 1/1   | 0.96 | 0.05 | 29,29,29,29                 | 0     |
| 54  | MG   | AA    | 1744 | 1/1   | 0.96 | 0.14 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3204 | 1/1   | 0.96 | 0.13 | 32,32,32,32                 | 0     |
| 54  | MG   | CA    | 1648 | 1/1   | 0.96 | 0.09 | 72,72,72,72                 | 0     |
| 54  | MG   | CA    | 1638 | 1/1   | 0.96 | 0.59 | 65,65,65,65                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3214 | 1/1   | 0.96 | 0.16 | 32,32,32,32                | 0     |
| 54  | MG   | DA    | 3048 | 1/1   | 0.96 | 0.14 | 50,50,50,50                | 0     |
| 54  | MG   | BA    | 3727 | 1/1   | 0.96 | 0.17 | 94,94,94,94                | 0     |
| 54  | MG   | BA    | 3611 | 1/1   | 0.96 | 0.06 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3434 | 1/1   | 0.96 | 0.10 | 56,56,56,56                | 0     |
| 54  | MG   | AA    | 1637 | 1/1   | 0.96 | 0.34 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3616 | 1/1   | 0.96 | 0.18 | 26,26,26,26                | 0     |
| 54  | MG   | BA    | 3039 | 1/1   | 0.96 | 0.14 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3231 | 1/1   | 0.96 | 0.19 | 35,35,35,35                | 0     |
| 54  | MG   | BA    | 3426 | 1/1   | 0.96 | 0.08 | 28,28,28,28                | 0     |
| 54  | MG   | BA    | 3359 | 1/1   | 0.96 | 0.32 | 19,19,19,19                | 0     |
| 54  | MG   | BA    | 3696 | 1/1   | 0.96 | 0.06 | 38,38,38,38                | 0     |
| 54  | MG   | AA    | 1697 | 1/1   | 0.96 | 0.16 | 50,50,50,50                | 0     |
| 54  | MG   | DA    | 3610 | 1/1   | 0.96 | 0.10 | 79,79,79,79                | 0     |
| 54  | MG   | CA    | 1726 | 1/1   | 0.96 | 0.10 | 77,77,77,77                | 0     |
| 54  | MG   | BP    | 201  | 1/1   | 0.96 | 0.16 | 44,44,44,44                | 0     |
| 54  | MG   | BD    | 302  | 1/1   | 0.96 | 0.26 | 37,37,37,37                | 0     |
| 55  | ZN   | CN    | 101  | 1/1   | 0.96 | 0.08 | 108,108,108,108            | 0     |
| 54  | MG   | DA    | 3360 | 1/1   | 0.96 | 0.18 | 36,36,36,36                | 0     |
| 54  | MG   | AA    | 1673 | 1/1   | 0.96 | 0.05 | 76,76,76,76                | 0     |
| 54  | MG   | AA    | 1663 | 1/1   | 0.96 | 0.09 | 62,62,62,62                | 0     |
| 55  | ZN   | AD    | 301  | 1/1   | 0.96 | 0.27 | 76,76,76,76                | 0     |
| 54  | MG   | AA    | 1792 | 1/1   | 0.96 | 0.09 | 51,51,51,51                | 0     |
| 54  | MG   | BA    | 3094 | 1/1   | 0.96 | 0.29 | 33,33,33,33                | 0     |
| 54  | MG   | DA    | 3299 | 1/1   | 0.96 | 0.08 | 33,33,33,33                | 0     |
| 54  | MG   | BA    | 3292 | 1/1   | 0.96 | 0.09 | 36,36,36,36                | 0     |
| 54  | MG   | BA    | 3446 | 1/1   | 0.96 | 0.14 | 42,42,42,42                | 0     |
| 54  | MG   | BT    | 201  | 1/1   | 0.96 | 0.14 | 49,49,49,49                | 0     |
| 54  | MG   | DA    | 3018 | 1/1   | 0.96 | 0.16 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3386 | 1/1   | 0.96 | 0.18 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3259 | 1/1   | 0.96 | 0.12 | 20,20,20,20                | 0     |
| 54  | MG   | BA    | 3274 | 1/1   | 0.96 | 0.13 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3544 | 1/1   | 0.96 | 0.13 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3138 | 1/1   | 0.96 | 0.36 | 49,49,49,49                | 0     |
| 54  | MG   | BB    | 208  | 1/1   | 0.96 | 0.14 | 33,33,33,33                | 0     |
| 54  | MG   | DA    | 3303 | 1/1   | 0.96 | 0.14 | 46,46,46,46                | 0     |
| 54  | MG   | DQ    | 201  | 1/1   | 0.96 | 0.12 | 52,52,52,52                | 0     |
| 54  | MG   | DA    | 3057 | 1/1   | 0.96 | 0.14 | 53,53,53,53                | 0     |
| 54  | MG   | DA    | 3200 | 1/1   | 0.96 | 0.17 | 34,34,34,34                | 0     |
| 54  | MG   | DA    | 3492 | 1/1   | 0.96 | 0.17 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3406 | 1/1   | 0.96 | 0.14 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3250 | 1/1   | 0.96 | 0.35 | 38,38,38,38                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3491 | 1/1   | 0.96 | 0.16 | 42,42,42,42                | 0     |
| 54  | MG   | BA    | 3609 | 1/1   | 0.96 | 0.04 | 37,37,37,37                | 0     |
| 54  | MG   | AA    | 1708 | 1/1   | 0.96 | 0.13 | 61,61,61,61                | 0     |
| 54  | MG   | BQ    | 203  | 1/1   | 0.96 | 0.14 | 38,38,38,38                | 0     |
| 54  | MG   | BA    | 3295 | 1/1   | 0.96 | 0.20 | 52,52,52,52                | 0     |
| 54  | MG   | BA    | 3089 | 1/1   | 0.96 | 0.13 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3294 | 1/1   | 0.96 | 0.08 | 32,32,32,32                | 0     |
| 54  | MG   | DA    | 3544 | 1/1   | 0.96 | 0.15 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3310 | 1/1   | 0.96 | 0.13 | 19,19,19,19                | 0     |
| 54  | MG   | CA    | 1649 | 1/1   | 0.96 | 0.20 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3525 | 1/1   | 0.96 | 0.13 | 47,47,47,47                | 0     |
| 54  | MG   | BA    | 3630 | 1/1   | 0.96 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3703 | 1/1   | 0.96 | 0.06 | 26,26,26,26                | 0     |
| 54  | MG   | DA    | 3630 | 1/1   | 0.96 | 0.05 | 76,76,76,76                | 0     |
| 54  | MG   | BA    | 3713 | 1/1   | 0.96 | 0.10 | 35,35,35,35                | 0     |
| 54  | MG   | AA    | 1720 | 1/1   | 0.96 | 0.10 | 74,74,74,74                | 0     |
| 54  | MG   | AA    | 1750 | 1/1   | 0.96 | 0.17 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3593 | 1/1   | 0.96 | 0.30 | 34,34,34,34                | 0     |
| 54  | MG   | AP    | 101  | 1/1   | 0.96 | 0.10 | 81,81,81,81                | 0     |
| 54  | MG   | DA    | 3174 | 1/1   | 0.96 | 0.11 | 24,24,24,24                | 0     |
| 54  | MG   | AA    | 1752 | 1/1   | 0.96 | 0.24 | 102,102,102,102            | 0     |
| 54  | MG   | CA    | 1754 | 1/1   | 0.96 | 0.12 | 77,77,77,77                | 0     |
| 54  | MG   | AA    | 1677 | 1/1   | 0.96 | 0.05 | 50,50,50,50                | 0     |
| 54  | MG   | DA    | 3161 | 1/1   | 0.96 | 0.15 | 47,47,47,47                | 0     |
| 54  | MG   | BA    | 3459 | 1/1   | 0.96 | 0.24 | 57,57,57,57                | 0     |
| 54  | MG   | DA    | 3379 | 1/1   | 0.96 | 0.11 | 69,69,69,69                | 0     |
| 54  | MG   | DA    | 3441 | 1/1   | 0.96 | 0.21 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3345 | 1/1   | 0.96 | 0.15 | 56,56,56,56                | 0     |
| 54  | MG   | DA    | 3397 | 1/1   | 0.96 | 0.15 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3613 | 1/1   | 0.96 | 0.15 | 45,45,45,45                | 0     |
| 54  | MG   | AA    | 1771 | 1/1   | 0.96 | 0.06 | 67,67,67,67                | 0     |
| 54  | MG   | DA    | 3052 | 1/1   | 0.96 | 0.13 | 35,35,35,35                | 0     |
| 54  | MG   | BE    | 306  | 1/1   | 0.96 | 0.23 | 24,24,24,24                | 0     |
| 54  | MG   | DA    | 3475 | 1/1   | 0.96 | 0.16 | 60,60,60,60                | 0     |
| 54  | MG   | CA    | 1662 | 1/1   | 0.96 | 0.09 | 54,54,54,54                | 0     |
| 54  | MG   | DA    | 3165 | 1/1   | 0.96 | 0.14 | 36,36,36,36                | 0     |
| 54  | MG   | BA    | 3400 | 1/1   | 0.96 | 0.07 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3148 | 1/1   | 0.96 | 0.23 | 21,21,21,21                | 0     |
| 54  | MG   | AA    | 1638 | 1/1   | 0.96 | 0.20 | 64,64,64,64                | 0     |
| 54  | MG   | DA    | 3270 | 1/1   | 0.96 | 0.17 | 24,24,24,24                | 0     |
| 54  | MG   | BA    | 3631 | 1/1   | 0.96 | 0.26 | 35,35,35,35                | 0     |
| 54  | MG   | BA    | 3303 | 1/1   | 0.96 | 0.14 | 40,40,40,40                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3043 | 1/1   | 0.96 | 0.06 | 64,64,64,64                | 0     |
| 54  | MG   | DB    | 209  | 1/1   | 0.96 | 0.13 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3182 | 1/1   | 0.96 | 0.10 | 30,30,30,30                | 0     |
| 54  | MG   | BE    | 302  | 1/1   | 0.96 | 0.25 | 29,29,29,29                | 0     |
| 54  | MG   | CA    | 1716 | 1/1   | 0.96 | 0.20 | 49,49,49,49                | 0     |
| 54  | MG   | BA    | 3380 | 1/1   | 0.96 | 0.11 | 37,37,37,37                | 0     |
| 54  | MG   | AA    | 1736 | 1/1   | 0.96 | 0.29 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3339 | 1/1   | 0.96 | 0.16 | 34,34,34,34                | 0     |
| 54  | MG   | CA    | 1714 | 1/1   | 0.96 | 0.19 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3223 | 1/1   | 0.96 | 0.15 | 24,24,24,24                | 0     |
| 54  | MG   | DA    | 3260 | 1/1   | 0.96 | 0.12 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3273 | 1/1   | 0.96 | 0.15 | 60,60,60,60                | 0     |
| 54  | MG   | BF    | 303  | 1/1   | 0.96 | 0.11 | 43,43,43,43                | 0     |
| 54  | MG   | DA    | 3518 | 1/1   | 0.96 | 0.17 | 53,53,53,53                | 0     |
| 54  | MG   | DA    | 3104 | 1/1   | 0.96 | 0.45 | 51,51,51,51                | 0     |
| 54  | MG   | BA    | 3586 | 1/1   | 0.96 | 0.18 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3404 | 1/1   | 0.96 | 0.20 | 27,27,27,27                | 0     |
| 54  | MG   | BA    | 3506 | 1/1   | 0.96 | 0.07 | 33,33,33,33                | 0     |
| 54  | MG   | CA    | 1721 | 1/1   | 0.96 | 0.10 | 53,53,53,53                | 0     |
| 54  | MG   | AA    | 1732 | 1/1   | 0.96 | 0.38 | 68,68,68,68                | 0     |
| 54  | MG   | BA    | 3126 | 1/1   | 0.97 | 0.17 | 30,30,30,30                | 0     |
| 54  | MG   | BA    | 3421 | 1/1   | 0.97 | 0.20 | 34,34,34,34                | 0     |
| 54  | MG   | AA    | 1726 | 1/1   | 0.97 | 0.22 | 75,75,75,75                | 0     |
| 54  | MG   | BA    | 3401 | 1/1   | 0.97 | 0.27 | 34,34,34,34                | 0     |
| 54  | MG   | AA    | 1661 | 1/1   | 0.97 | 0.18 | 62,62,62,62                | 0     |
| 54  | MG   | BA    | 3036 | 1/1   | 0.97 | 0.12 | 41,41,41,41                | 0     |
| 54  | MG   | BA    | 3358 | 1/1   | 0.97 | 0.33 | 22,22,22,22                | 0     |
| 54  | MG   | DA    | 3131 | 1/1   | 0.97 | 0.31 | 25,25,25,25                | 0     |
| 54  | MG   | AA    | 1702 | 1/1   | 0.97 | 0.05 | 67,67,67,67                | 0     |
| 54  | MG   | BA    | 3275 | 1/1   | 0.97 | 0.15 | 31,31,31,31                | 0     |
| 54  | MG   | BA    | 3441 | 1/1   | 0.97 | 0.14 | 58,58,58,58                | 0     |
| 54  | MG   | DA    | 3421 | 1/1   | 0.97 | 0.15 | 44,44,44,44                | 0     |
| 54  | MG   | BA    | 3119 | 1/1   | 0.97 | 0.08 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3204 | 1/1   | 0.97 | 0.20 | 47,47,47,47                | 0     |
| 54  | MG   | DA    | 3127 | 1/1   | 0.97 | 0.25 | 24,24,24,24                | 0     |
| 54  | MG   | BA    | 3325 | 1/1   | 0.97 | 0.23 | 28,28,28,28                | 0     |
| 54  | MG   | BA    | 3399 | 1/1   | 0.97 | 0.13 | 42,42,42,42                | 0     |
| 54  | MG   | BA    | 3193 | 1/1   | 0.97 | 0.14 | 46,46,46,46                | 0     |
| 54  | MG   | BA    | 3162 | 1/1   | 0.97 | 0.24 | 22,22,22,22                | 0     |
| 54  | MG   | DA    | 3248 | 1/1   | 0.97 | 0.10 | 59,59,59,59                | 0     |
| 54  | MG   | DA    | 3154 | 1/1   | 0.97 | 0.15 | 47,47,47,47                | 0     |
| 54  | MG   | DA    | 3378 | 1/1   | 0.97 | 0.11 | 65,65,65,65                | 0     |

*Continued on next page...*



*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | AA    | 1746 | 1/1   | 0.97 | 0.15 | 63,63,63,63                 | 0     |
| 54  | MG   | CA    | 1802 | 1/1   | 0.97 | 0.08 | 60,60,60,60                 | 0     |
| 54  | MG   | AA    | 1662 | 1/1   | 0.97 | 0.08 | 64,64,64,64                 | 0     |
| 54  | MG   | BQ    | 202  | 1/1   | 0.97 | 0.22 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3180 | 1/1   | 0.97 | 0.09 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3199 | 1/1   | 0.97 | 0.26 | 29,29,29,29                 | 0     |
| 54  | MG   | DA    | 3120 | 1/1   | 0.97 | 0.16 | 47,47,47,47                 | 0     |
| 54  | MG   | DA    | 3035 | 1/1   | 0.97 | 0.18 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3164 | 1/1   | 0.97 | 0.17 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3365 | 1/1   | 0.97 | 0.20 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3622 | 1/1   | 0.97 | 0.09 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3456 | 1/1   | 0.97 | 0.12 | 37,37,37,37                 | 0     |
| 54  | MG   | DA    | 3243 | 1/1   | 0.97 | 0.11 | 32,32,32,32                 | 0     |
| 54  | MG   | AA    | 1722 | 1/1   | 0.97 | 0.05 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3159 | 1/1   | 0.97 | 0.20 | 44,44,44,44                 | 0     |
| 54  | MG   | AA    | 1737 | 1/1   | 0.97 | 0.12 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3069 | 1/1   | 0.97 | 0.16 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3058 | 1/1   | 0.97 | 0.11 | 38,38,38,38                 | 0     |
| 55  | ZN   | D5    | 101  | 1/1   | 0.97 | 0.10 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3183 | 1/1   | 0.97 | 0.14 | 36,36,36,36                 | 0     |
| 54  | MG   | CA    | 1772 | 1/1   | 0.97 | 0.09 | 61,61,61,61                 | 0     |
| 54  | MG   | DA    | 3153 | 1/1   | 0.97 | 0.10 | 32,32,32,32                 | 0     |
| 54  | MG   | CA    | 1633 | 1/1   | 0.97 | 0.18 | 50,50,50,50                 | 0     |
| 54  | MG   | BA    | 3095 | 1/1   | 0.97 | 0.18 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3009 | 1/1   | 0.97 | 0.22 | 23,23,23,23                 | 0     |
| 54  | MG   | DA    | 3385 | 1/1   | 0.97 | 0.15 | 59,59,59,59                 | 0     |
| 54  | MG   | D5    | 102  | 1/1   | 0.97 | 0.11 | 44,44,44,44                 | 0     |
| 54  | MG   | BB    | 212  | 1/1   | 0.97 | 0.08 | 49,49,49,49                 | 0     |
| 54  | MG   | AA    | 1653 | 1/1   | 0.97 | 0.19 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3002 | 1/1   | 0.97 | 0.11 | 45,45,45,45                 | 0     |
| 54  | MG   | AA    | 1625 | 1/1   | 0.97 | 0.31 | 42,42,42,42                 | 0     |
| 54  | MG   | DA    | 3377 | 1/1   | 0.97 | 0.07 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3146 | 1/1   | 0.97 | 0.24 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3367 | 1/1   | 0.97 | 0.22 | 34,34,34,34                 | 0     |
| 54  | MG   | DA    | 3607 | 1/1   | 0.97 | 0.09 | 65,65,65,65                 | 0     |
| 54  | MG   | BS    | 201  | 1/1   | 0.97 | 0.13 | 63,63,63,63                 | 0     |
| 54  | MG   | CA    | 1658 | 1/1   | 0.97 | 0.10 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3045 | 1/1   | 0.97 | 0.18 | 35,35,35,35                 | 0     |
| 54  | MG   | DF    | 305  | 1/1   | 0.97 | 0.14 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3114 | 1/1   | 0.97 | 0.08 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3082 | 1/1   | 0.97 | 0.12 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3628 | 1/1   | 0.97 | 0.17 | 46,46,46,46                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3221 | 1/1   | 0.97 | 0.17 | 51,51,51,51                 | 0     |
| 54  | MG   | CA    | 1678 | 1/1   | 0.97 | 0.09 | 55,55,55,55                 | 0     |
| 54  | MG   | DF    | 304  | 1/1   | 0.97 | 0.07 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3411 | 1/1   | 0.97 | 0.18 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3158 | 1/1   | 0.97 | 0.20 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3125 | 1/1   | 0.97 | 0.16 | 39,39,39,39                 | 0     |
| 54  | MG   | DA    | 3366 | 1/1   | 0.97 | 0.22 | 41,41,41,41                 | 0     |
| 54  | MG   | AA    | 1778 | 1/1   | 0.97 | 0.11 | 74,74,74,74                 | 0     |
| 54  | MG   | DA    | 3584 | 1/1   | 0.97 | 0.08 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3366 | 1/1   | 0.97 | 0.20 | 36,36,36,36                 | 0     |
| 54  | MG   | DB    | 204  | 1/1   | 0.97 | 0.17 | 65,65,65,65                 | 0     |
| 54  | MG   | BA    | 3086 | 1/1   | 0.97 | 0.23 | 21,21,21,21                 | 0     |
| 55  | ZN   | DY    | 201  | 1/1   | 0.97 | 0.05 | 77,77,77,77                 | 0     |
| 54  | MG   | CA    | 1686 | 1/1   | 0.97 | 0.27 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3336 | 1/1   | 0.97 | 0.13 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3413 | 1/1   | 0.97 | 0.06 | 78,78,78,78                 | 0     |
| 54  | MG   | DA    | 3599 | 1/1   | 0.97 | 0.07 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3320 | 1/1   | 0.97 | 0.15 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3660 | 1/1   | 0.97 | 0.05 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3121 | 1/1   | 0.97 | 0.33 | 26,26,26,26                 | 0     |
| 54  | MG   | AA    | 1710 | 1/1   | 0.97 | 0.22 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3415 | 1/1   | 0.97 | 0.23 | 26,26,26,26                 | 0     |
| 54  | MG   | BA    | 3729 | 1/1   | 0.97 | 0.24 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3200 | 1/1   | 0.97 | 0.16 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3313 | 1/1   | 0.97 | 0.12 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3464 | 1/1   | 0.97 | 0.14 | 28,28,28,28                 | 0     |
| 54  | MG   | DA    | 3115 | 1/1   | 0.97 | 0.28 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3392 | 1/1   | 0.97 | 0.29 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3414 | 1/1   | 0.97 | 0.19 | 23,23,23,23                 | 0     |
| 54  | MG   | BA    | 3194 | 1/1   | 0.97 | 0.19 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3590 | 1/1   | 0.97 | 0.07 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3062 | 1/1   | 0.97 | 0.10 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3598 | 1/1   | 0.97 | 0.17 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3054 | 1/1   | 0.97 | 0.13 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3488 | 1/1   | 0.97 | 0.16 | 46,46,46,46                 | 0     |
| 54  | MG   | DA    | 3116 | 1/1   | 0.97 | 0.32 | 26,26,26,26                 | 0     |
| 54  | MG   | BA    | 3416 | 1/1   | 0.97 | 0.16 | 22,22,22,22                 | 0     |
| 54  | MG   | DA    | 3504 | 1/1   | 0.97 | 0.12 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3245 | 1/1   | 0.97 | 0.10 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3247 | 1/1   | 0.97 | 0.12 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3557 | 1/1   | 0.97 | 0.38 | 55,55,55,55                 | 0     |
| 54  | MG   | AA    | 1612 | 1/1   | 0.97 | 0.15 | 61,61,61,61                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3262 | 1/1   | 0.97 | 0.04 | 51,51,51,51                 | 0     |
| 54  | MG   | DA    | 3290 | 1/1   | 0.97 | 0.12 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3096 | 1/1   | 0.97 | 0.21 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3063 | 1/1   | 0.97 | 0.17 | 31,31,31,31                 | 0     |
| 54  | MG   | AA    | 1642 | 1/1   | 0.97 | 0.14 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3374 | 1/1   | 0.97 | 0.20 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3123 | 1/1   | 0.97 | 0.21 | 48,48,48,48                 | 0     |
| 54  | MG   | CA    | 1704 | 1/1   | 0.97 | 0.13 | 71,71,71,71                 | 0     |
| 54  | MG   | CA    | 1748 | 1/1   | 0.97 | 0.18 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3609 | 1/1   | 0.97 | 0.10 | 42,42,42,42                 | 0     |
| 54  | MG   | BR    | 202  | 1/1   | 0.97 | 0.21 | 35,35,35,35                 | 0     |
| 54  | MG   | DA    | 3125 | 1/1   | 0.97 | 0.23 | 59,59,59,59                 | 0     |
| 54  | MG   | BA    | 3127 | 1/1   | 0.97 | 0.11 | 30,30,30,30                 | 0     |
| 54  | MG   | BB    | 215  | 1/1   | 0.97 | 0.11 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3211 | 1/1   | 0.97 | 0.15 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3124 | 1/1   | 0.97 | 0.17 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3012 | 1/1   | 0.97 | 0.17 | 37,37,37,37                 | 0     |
| 54  | MG   | BA    | 3663 | 1/1   | 0.97 | 0.06 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3195 | 1/1   | 0.97 | 0.17 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3409 | 1/1   | 0.97 | 0.14 | 26,26,26,26                 | 0     |
| 54  | MG   | BA    | 3391 | 1/1   | 0.97 | 0.21 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3403 | 1/1   | 0.97 | 0.19 | 35,35,35,35                 | 0     |
| 54  | MG   | DA    | 3017 | 1/1   | 0.97 | 0.11 | 48,48,48,48                 | 0     |
| 54  | MG   | DA    | 3548 | 1/1   | 0.97 | 0.11 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1667 | 1/1   | 0.97 | 0.34 | 66,66,66,66                 | 0     |
| 54  | MG   | CA    | 1687 | 1/1   | 0.97 | 0.18 | 68,68,68,68                 | 0     |
| 54  | MG   | BA    | 3057 | 1/1   | 0.97 | 0.31 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3350 | 1/1   | 0.97 | 0.14 | 28,28,28,28                 | 0     |
| 54  | MG   | AA    | 1773 | 1/1   | 0.97 | 0.19 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3393 | 1/1   | 0.97 | 0.20 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3311 | 1/1   | 0.97 | 0.18 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3258 | 1/1   | 0.97 | 0.21 | 18,18,18,18                 | 0     |
| 54  | MG   | BA    | 3209 | 1/1   | 0.97 | 0.24 | 19,19,19,19                 | 0     |
| 54  | MG   | BA    | 3181 | 1/1   | 0.97 | 0.07 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3080 | 1/1   | 0.97 | 0.09 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3323 | 1/1   | 0.97 | 0.11 | 57,57,57,57                 | 0     |
| 54  | MG   | DA    | 3637 | 1/1   | 0.97 | 0.12 | 63,63,63,63                 | 0     |
| 54  | MG   | DO    | 203  | 1/1   | 0.97 | 0.12 | 75,75,75,75                 | 0     |
| 54  | MG   | BA    | 3225 | 1/1   | 0.97 | 0.19 | 19,19,19,19                 | 0     |
| 54  | MG   | DE    | 303  | 1/1   | 0.97 | 0.30 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3238 | 1/1   | 0.97 | 0.08 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3430 | 1/1   | 0.97 | 0.22 | 27,27,27,27                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | AA    | 1640 | 1/1   | 0.97 | 0.13 | 70,70,70,70                 | 0     |
| 54  | MG   | DA    | 3254 | 1/1   | 0.97 | 0.24 | 39,39,39,39                 | 0     |
| 54  | MG   | BB    | 209  | 1/1   | 0.97 | 0.15 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3361 | 1/1   | 0.97 | 0.24 | 40,40,40,40                 | 0     |
| 54  | MG   | DA    | 3021 | 1/1   | 0.97 | 0.20 | 32,32,32,32                 | 0     |
| 54  | MG   | DA    | 3008 | 1/1   | 0.97 | 0.22 | 44,44,44,44                 | 0     |
| 54  | MG   | CA    | 1619 | 1/1   | 0.97 | 0.43 | 56,56,56,56                 | 0     |
| 54  | MG   | AA    | 1657 | 1/1   | 0.97 | 0.24 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3602 | 1/1   | 0.97 | 0.06 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3681 | 1/1   | 0.97 | 0.22 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3288 | 1/1   | 0.97 | 0.16 | 44,44,44,44                 | 0     |
| 54  | MG   | B3    | 103  | 1/1   | 0.97 | 0.27 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3428 | 1/1   | 0.97 | 0.26 | 23,23,23,23                 | 0     |
| 54  | MG   | DA    | 3433 | 1/1   | 0.97 | 0.11 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3212 | 1/1   | 0.97 | 0.07 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3191 | 1/1   | 0.97 | 0.28 | 43,43,43,43                 | 0     |
| 54  | MG   | DA    | 3564 | 1/1   | 0.97 | 0.11 | 61,61,61,61                 | 0     |
| 54  | MG   | BA    | 3524 | 1/1   | 0.97 | 0.08 | 35,35,35,35                 | 0     |
| 54  | MG   | DA    | 3210 | 1/1   | 0.97 | 0.18 | 47,47,47,47                 | 0     |
| 54  | MG   | BA    | 3079 | 1/1   | 0.97 | 0.18 | 45,45,45,45                 | 0     |
| 54  | MG   | BA    | 3571 | 1/1   | 0.97 | 0.15 | 74,74,74,74                 | 0     |
| 54  | MG   | BA    | 3189 | 1/1   | 0.97 | 0.06 | 71,71,71,71                 | 0     |
| 54  | MG   | BA    | 3632 | 1/1   | 0.97 | 0.18 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3667 | 1/1   | 0.97 | 0.12 | 22,22,22,22                 | 0     |
| 54  | MG   | DA    | 3437 | 1/1   | 0.97 | 0.18 | 54,54,54,54                 | 0     |
| 54  | MG   | DA    | 3407 | 1/1   | 0.97 | 0.15 | 51,51,51,51                 | 0     |
| 54  | MG   | BA    | 3138 | 1/1   | 0.97 | 0.06 | 64,64,64,64                 | 0     |
| 54  | MG   | DA    | 3169 | 1/1   | 0.98 | 0.14 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3357 | 1/1   | 0.98 | 0.18 | 40,40,40,40                 | 0     |
| 54  | MG   | BA    | 3082 | 1/1   | 0.98 | 0.15 | 26,26,26,26                 | 0     |
| 54  | MG   | DA    | 3228 | 1/1   | 0.98 | 0.13 | 60,60,60,60                 | 0     |
| 54  | MG   | AA    | 1814 | 1/1   | 0.98 | 0.13 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3338 | 1/1   | 0.98 | 0.07 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3472 | 1/1   | 0.98 | 0.07 | 34,34,34,34                 | 0     |
| 54  | MG   | AA    | 1711 | 1/1   | 0.98 | 0.11 | 35,35,35,35                 | 0     |
| 54  | MG   | BT    | 203  | 1/1   | 0.98 | 0.06 | 51,51,51,51                 | 0     |
| 54  | MG   | DQ    | 202  | 1/1   | 0.98 | 0.30 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3384 | 1/1   | 0.98 | 0.18 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3575 | 1/1   | 0.98 | 0.17 | 59,59,59,59                 | 0     |
| 54  | MG   | DA    | 3487 | 1/1   | 0.98 | 0.27 | 65,65,65,65                 | 0     |
| 54  | MG   | DA    | 3078 | 1/1   | 0.98 | 0.31 | 41,41,41,41                 | 0     |
| 54  | MG   | DA    | 3187 | 1/1   | 0.98 | 0.14 | 44,44,44,44                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3558 | 1/1   | 0.98 | 0.13 | 60,60,60,60                 | 0     |
| 54  | MG   | BA    | 3556 | 1/1   | 0.98 | 0.20 | 52,52,52,52                 | 0     |
| 54  | MG   | BA    | 3249 | 1/1   | 0.98 | 0.23 | 20,20,20,20                 | 0     |
| 54  | MG   | DA    | 3225 | 1/1   | 0.98 | 0.11 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3282 | 1/1   | 0.98 | 0.18 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3050 | 1/1   | 0.98 | 0.26 | 54,54,54,54                 | 0     |
| 54  | MG   | CA    | 1656 | 1/1   | 0.98 | 0.08 | 66,66,66,66                 | 0     |
| 54  | MG   | BA    | 3190 | 1/1   | 0.98 | 0.22 | 36,36,36,36                 | 0     |
| 54  | MG   | BA    | 3346 | 1/1   | 0.98 | 0.09 | 43,43,43,43                 | 0     |
| 54  | MG   | CA    | 1693 | 1/1   | 0.98 | 0.07 | 73,73,73,73                 | 0     |
| 54  | MG   | AA    | 1748 | 1/1   | 0.98 | 0.14 | 57,57,57,57                 | 0     |
| 54  | MG   | CA    | 1685 | 1/1   | 0.98 | 0.26 | 62,62,62,62                 | 0     |
| 54  | MG   | DA    | 3601 | 1/1   | 0.98 | 0.15 | 32,32,32,32                 | 0     |
| 54  | MG   | BD    | 305  | 1/1   | 0.98 | 0.06 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3139 | 1/1   | 0.98 | 0.17 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3199 | 1/1   | 0.98 | 0.05 | 46,46,46,46                 | 0     |
| 54  | MG   | AA    | 1648 | 1/1   | 0.98 | 0.19 | 73,73,73,73                 | 0     |
| 54  | MG   | BF    | 302  | 1/1   | 0.98 | 0.46 | 31,31,31,31                 | 0     |
| 54  | MG   | BB    | 214  | 1/1   | 0.98 | 0.14 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3438 | 1/1   | 0.98 | 0.14 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3166 | 1/1   | 0.98 | 0.09 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3633 | 1/1   | 0.98 | 0.19 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3437 | 1/1   | 0.98 | 0.16 | 28,28,28,28                 | 0     |
| 54  | MG   | BA    | 3405 | 1/1   | 0.98 | 0.16 | 22,22,22,22                 | 0     |
| 54  | MG   | BA    | 3008 | 1/1   | 0.98 | 0.24 | 20,20,20,20                 | 0     |
| 54  | MG   | BA    | 3700 | 1/1   | 0.98 | 0.08 | 41,41,41,41                 | 0     |
| 54  | MG   | CA    | 1745 | 1/1   | 0.98 | 0.27 | 52,52,52,52                 | 0     |
| 54  | MG   | DA    | 3511 | 1/1   | 0.98 | 0.07 | 44,44,44,44                 | 0     |
| 54  | MG   | BA    | 3093 | 1/1   | 0.98 | 0.13 | 28,28,28,28                 | 0     |
| 54  | MG   | BA    | 3313 | 1/1   | 0.98 | 0.15 | 23,23,23,23                 | 0     |
| 54  | MG   | BA    | 3349 | 1/1   | 0.98 | 0.15 | 30,30,30,30                 | 0     |
| 54  | MG   | DA    | 3427 | 1/1   | 0.98 | 0.21 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3555 | 1/1   | 0.98 | 0.13 | 23,23,23,23                 | 0     |
| 54  | MG   | AA    | 1712 | 1/1   | 0.98 | 0.15 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3051 | 1/1   | 0.98 | 0.12 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3060 | 1/1   | 0.98 | 0.24 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3259 | 1/1   | 0.98 | 0.16 | 39,39,39,39                 | 0     |
| 54  | MG   | BA    | 3518 | 1/1   | 0.98 | 0.28 | 28,28,28,28                 | 0     |
| 54  | MG   | DA    | 3107 | 1/1   | 0.98 | 0.23 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3019 | 1/1   | 0.98 | 0.13 | 23,23,23,23                 | 0     |
| 54  | MG   | BA    | 3017 | 1/1   | 0.98 | 0.17 | 27,27,27,27                 | 0     |
| 54  | MG   | CA    | 1676 | 1/1   | 0.98 | 0.06 | 64,64,64,64                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors(Å <sup>2</sup> ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 54  | MG   | DA    | 3354 | 1/1   | 0.98 | 0.15 | 39,39,39,39                | 0     |
| 54  | MG   | BA    | 3543 | 1/1   | 0.98 | 0.21 | 29,29,29,29                | 0     |
| 54  | MG   | BA    | 3548 | 1/1   | 0.98 | 0.13 | 32,32,32,32                | 0     |
| 54  | MG   | BA    | 3697 | 1/1   | 0.98 | 0.18 | 27,27,27,27                | 0     |
| 55  | ZN   | D6    | 101  | 1/1   | 0.98 | 0.13 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3440 | 1/1   | 0.98 | 0.12 | 65,65,65,65                | 0     |
| 54  | MG   | BA    | 3115 | 1/1   | 0.98 | 0.08 | 35,35,35,35                | 0     |
| 54  | MG   | BA    | 3049 | 1/1   | 0.98 | 0.21 | 26,26,26,26                | 0     |
| 54  | MG   | BA    | 3442 | 1/1   | 0.98 | 0.25 | 24,24,24,24                | 0     |
| 54  | MG   | AA    | 1747 | 1/1   | 0.98 | 0.07 | 60,60,60,60                | 0     |
| 54  | MG   | DA    | 3621 | 1/1   | 0.98 | 0.12 | 41,41,41,41                | 0     |
| 54  | MG   | BA    | 3385 | 1/1   | 0.98 | 0.18 | 31,31,31,31                | 0     |
| 54  | MG   | AA    | 1775 | 1/1   | 0.98 | 0.11 | 63,63,63,63                | 0     |
| 54  | MG   | DA    | 3396 | 1/1   | 0.98 | 0.14 | 48,48,48,48                | 0     |
| 54  | MG   | BA    | 3406 | 1/1   | 0.98 | 0.21 | 25,25,25,25                | 0     |
| 54  | MG   | BA    | 3552 | 1/1   | 0.98 | 0.13 | 26,26,26,26                | 0     |
| 54  | MG   | DA    | 3528 | 1/1   | 0.98 | 0.22 | 36,36,36,36                | 0     |
| 54  | MG   | DA    | 3203 | 1/1   | 0.98 | 0.06 | 36,36,36,36                | 0     |
| 54  | MG   | CA    | 1722 | 1/1   | 0.98 | 0.13 | 58,58,58,58                | 0     |
| 54  | MG   | BA    | 3387 | 1/1   | 0.98 | 0.25 | 27,27,27,27                | 0     |
| 54  | MG   | BA    | 3250 | 1/1   | 0.98 | 0.12 | 39,39,39,39                | 0     |
| 54  | MG   | AA    | 1735 | 1/1   | 0.98 | 0.44 | 62,62,62,62                | 0     |
| 54  | MG   | BA    | 3354 | 1/1   | 0.98 | 0.13 | 24,24,24,24                | 0     |
| 54  | MG   | BA    | 3179 | 1/1   | 0.98 | 0.34 | 31,31,31,31                | 0     |
| 54  | MG   | DA    | 3468 | 1/1   | 0.98 | 0.06 | 66,66,66,66                | 0     |
| 54  | MG   | DA    | 3242 | 1/1   | 0.98 | 0.12 | 36,36,36,36                | 0     |
| 54  | MG   | BB    | 217  | 1/1   | 0.98 | 0.09 | 66,66,66,66                | 0     |
| 54  | MG   | BA    | 3489 | 1/1   | 0.98 | 0.04 | 57,57,57,57                | 0     |
| 54  | MG   | BA    | 3081 | 1/1   | 0.98 | 0.13 | 38,38,38,38                | 0     |
| 54  | MG   | DA    | 3552 | 1/1   | 0.98 | 0.08 | 56,56,56,56                | 0     |
| 54  | MG   | BA    | 3243 | 1/1   | 0.98 | 0.24 | 31,31,31,31                | 0     |
| 54  | MG   | BA    | 3412 | 1/1   | 0.98 | 0.18 | 19,19,19,19                | 0     |
| 54  | MG   | AA    | 1671 | 1/1   | 0.98 | 0.09 | 64,64,64,64                | 0     |
| 54  | MG   | BA    | 3396 | 1/1   | 0.98 | 0.15 | 39,39,39,39                | 0     |
| 54  | MG   | DA    | 3265 | 1/1   | 0.98 | 0.16 | 34,34,34,34                | 0     |
| 55  | ZN   | D9    | 101  | 1/1   | 0.98 | 0.09 | 68,68,68,68                | 0     |
| 54  | MG   | CA    | 1727 | 1/1   | 0.98 | 0.25 | 63,63,63,63                | 0     |
| 54  | MG   | BA    | 3678 | 1/1   | 0.98 | 0.29 | 47,47,47,47                | 0     |
| 54  | MG   | DA    | 3499 | 1/1   | 0.98 | 0.07 | 55,55,55,55                | 0     |
| 54  | MG   | BA    | 3482 | 1/1   | 0.98 | 0.19 | 21,21,21,21                | 0     |
| 54  | MG   | DA    | 3009 | 1/1   | 0.98 | 0.17 | 27,27,27,27                | 0     |
| 54  | MG   | BA    | 3601 | 1/1   | 0.98 | 0.17 | 43,43,43,43                | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3241 | 1/1   | 0.98 | 0.17 | 56,56,56,56                 | 0     |
| 54  | MG   | CA    | 1740 | 1/1   | 0.98 | 0.34 | 72,72,72,72                 | 0     |
| 54  | MG   | DA    | 3527 | 1/1   | 0.98 | 0.15 | 38,38,38,38                 | 0     |
| 54  | MG   | BA    | 3649 | 1/1   | 0.98 | 0.21 | 30,30,30,30                 | 0     |
| 54  | MG   | DA    | 3587 | 1/1   | 0.98 | 0.19 | 49,49,49,49                 | 0     |
| 54  | MG   | BA    | 3484 | 1/1   | 0.98 | 0.08 | 41,41,41,41                 | 0     |
| 54  | MG   | BA    | 3373 | 1/1   | 0.98 | 0.19 | 46,46,46,46                 | 0     |
| 54  | MG   | BA    | 3450 | 1/1   | 0.98 | 0.13 | 24,24,24,24                 | 0     |
| 54  | MG   | AA    | 1728 | 1/1   | 0.98 | 0.07 | 68,68,68,68                 | 0     |
| 54  | MG   | BA    | 3439 | 1/1   | 0.98 | 0.08 | 30,30,30,30                 | 0     |
| 54  | MG   | BA    | 3004 | 1/1   | 0.98 | 0.21 | 53,53,53,53                 | 0     |
| 54  | MG   | BA    | 3312 | 1/1   | 0.98 | 0.12 | 32,32,32,32                 | 0     |
| 54  | MG   | BA    | 3319 | 1/1   | 0.98 | 0.17 | 26,26,26,26                 | 0     |
| 54  | MG   | BA    | 3394 | 1/1   | 0.98 | 0.10 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3239 | 1/1   | 0.98 | 0.12 | 46,46,46,46                 | 0     |
| 54  | MG   | DA    | 3426 | 1/1   | 0.98 | 0.13 | 55,55,55,55                 | 0     |
| 54  | MG   | BA    | 3388 | 1/1   | 0.98 | 0.25 | 20,20,20,20                 | 0     |
| 54  | MG   | BA    | 3410 | 1/1   | 0.98 | 0.27 | 56,56,56,56                 | 0     |
| 54  | MG   | DA    | 3612 | 1/1   | 0.98 | 0.36 | 49,49,49,49                 | 0     |
| 54  | MG   | AA    | 1682 | 1/1   | 0.98 | 0.23 | 48,48,48,48                 | 0     |
| 54  | MG   | BA    | 3488 | 1/1   | 0.98 | 0.11 | 20,20,20,20                 | 0     |
| 54  | MG   | BA    | 3131 | 1/1   | 0.98 | 0.14 | 28,28,28,28                 | 0     |
| 54  | MG   | BA    | 3728 | 1/1   | 0.98 | 0.07 | 47,47,47,47                 | 0     |
| 54  | MG   | AA    | 1655 | 1/1   | 0.98 | 0.07 | 64,64,64,64                 | 0     |
| 54  | MG   | BA    | 3515 | 1/1   | 0.98 | 0.10 | 35,35,35,35                 | 0     |
| 54  | MG   | DB    | 202  | 1/1   | 0.98 | 0.20 | 67,67,67,67                 | 0     |
| 54  | MG   | DR    | 202  | 1/1   | 0.98 | 0.16 | 45,45,45,45                 | 0     |
| 54  | MG   | DA    | 3332 | 1/1   | 0.98 | 0.15 | 28,28,28,28                 | 0     |
| 54  | MG   | CA    | 1679 | 1/1   | 0.99 | 0.15 | 53,53,53,53                 | 0     |
| 54  | MG   | DA    | 3012 | 1/1   | 0.99 | 0.18 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3402 | 1/1   | 0.99 | 0.14 | 31,31,31,31                 | 0     |
| 54  | MG   | DA    | 3560 | 1/1   | 0.99 | 0.12 | 57,57,57,57                 | 0     |
| 54  | MG   | BA    | 3368 | 1/1   | 0.99 | 0.08 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3150 | 1/1   | 0.99 | 0.32 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3528 | 1/1   | 0.99 | 0.25 | 27,27,27,27                 | 0     |
| 55  | ZN   | AN    | 101  | 1/1   | 0.99 | 0.11 | 118,118,118,118             | 0     |
| 55  | ZN   | B6    | 101  | 1/1   | 0.99 | 0.13 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3198 | 1/1   | 0.99 | 0.20 | 35,35,35,35                 | 0     |
| 54  | MG   | CA    | 1708 | 1/1   | 0.99 | 0.06 | 73,73,73,73                 | 0     |
| 54  | MG   | BA    | 3041 | 1/1   | 0.99 | 0.13 | 29,29,29,29                 | 0     |
| 54  | MG   | AA    | 1751 | 1/1   | 0.99 | 0.26 | 54,54,54,54                 | 0     |
| 55  | ZN   | BY    | 201  | 1/1   | 0.99 | 0.12 | 54,54,54,54                 | 0     |

*Continued on next page...*

*Continued from previous page...*

| Mol | Type | Chain | Res  | Atoms | RSCC | RSR  | B-factors( $\text{\AA}^2$ ) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 54  | MG   | BA    | 3497 | 1/1   | 0.99 | 0.16 | 29,29,29,29                 | 0     |
| 54  | MG   | BA    | 3508 | 1/1   | 0.99 | 0.10 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3176 | 1/1   | 0.99 | 0.10 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3613 | 1/1   | 0.99 | 0.10 | 50,50,50,50                 | 0     |
| 54  | MG   | DA    | 3473 | 1/1   | 0.99 | 0.22 | 34,34,34,34                 | 0     |
| 54  | MG   | BA    | 3232 | 1/1   | 0.99 | 0.16 | 24,24,24,24                 | 0     |
| 55  | ZN   | B9    | 101  | 1/1   | 0.99 | 0.09 | 49,49,49,49                 | 0     |
| 54  | MG   | DA    | 3431 | 1/1   | 0.99 | 0.15 | 27,27,27,27                 | 0     |
| 54  | MG   | DA    | 3189 | 1/1   | 0.99 | 0.13 | 36,36,36,36                 | 0     |
| 54  | MG   | DA    | 3177 | 1/1   | 0.99 | 0.19 | 32,32,32,32                 | 0     |
| 54  | MG   | DA    | 3230 | 1/1   | 0.99 | 0.09 | 31,31,31,31                 | 0     |
| 54  | MG   | BA    | 3413 | 1/1   | 0.99 | 0.14 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3631 | 1/1   | 0.99 | 0.06 | 54,54,54,54                 | 0     |
| 54  | MG   | BA    | 3498 | 1/1   | 0.99 | 0.13 | 45,45,45,45                 | 0     |
| 55  | ZN   | B5    | 102  | 1/1   | 0.99 | 0.14 | 42,42,42,42                 | 0     |
| 54  | MG   | BA    | 3604 | 1/1   | 0.99 | 0.19 | 43,43,43,43                 | 0     |
| 54  | MG   | BA    | 3407 | 1/1   | 0.99 | 0.13 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3010 | 1/1   | 0.99 | 0.14 | 27,27,27,27                 | 0     |
| 54  | MG   | BA    | 3304 | 1/1   | 0.99 | 0.15 | 33,33,33,33                 | 0     |
| 54  | MG   | BA    | 3378 | 1/1   | 0.99 | 0.12 | 24,24,24,24                 | 0     |
| 54  | MG   | BA    | 3698 | 1/1   | 0.99 | 0.22 | 24,24,24,24                 | 0     |
| 54  | MG   | DA    | 3615 | 1/1   | 0.99 | 0.07 | 67,67,67,67                 | 0     |
| 54  | MG   | DA    | 3029 | 1/1   | 0.99 | 0.14 | 37,37,37,37                 | 0     |

## 6.5 Other polymers [i](#)

There are no such residues in this entry.