



wwPDB X-ray Structure Validation Summary Report ⓘ

Oct 11, 2023 – 08:12 AM EDT

PDB ID : 7LH5
Title : Crystal structure of the *Thermus thermophilus* 70S ribosome in complex with plazomicin, mRNA and tRNAs
Authors : Golkar, T.; Berghuis, A.M.; Schmeing, T.M.
Deposited on : 2021-01-21
Resolution : 3.27 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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.35.1
buster-report : 1.1.7 (2018)
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) : 2.35.1

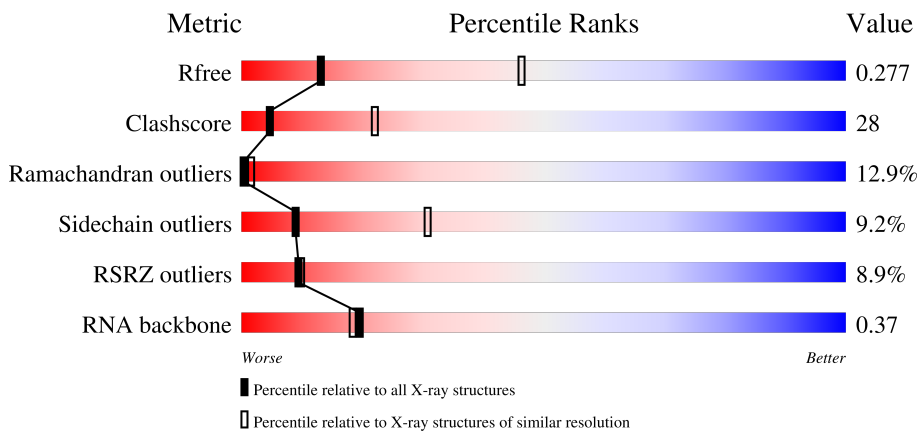
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.27 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 (#Entries) | Similar resolution (#Entries, resolution range(Å)) |
|-----------------------|-----------------------------|---|
| R_{free} | 130704 | 1177 (3.32-3.24) |
| Clashscore | 141614 | 1044 (3.30-3.26) |
| Ramachandran outliers | 138981 | 1026 (3.30-3.26) |
| Sidechain outliers | 138945 | 1025 (3.30-3.26) |
| RSRZ outliers | 127900 | 1141 (3.32-3.24) |
| RNA backbone | 3102 | 1091 (3.66-2.90) |

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 of the lower bar indicate the fraction of residues that contain outliers for ≥ 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 | 1520 | |
| 1 | CA | 1520 | |
| 2 | AB | 256 | |
| 2 | CB | 256 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 3 | AC | 239 | |
| 3 | CC | 239 | |
| 4 | AD | 209 | |
| 4 | CD | 209 | |
| 5 | AE | 162 | |
| 5 | CE | 162 | |
| 6 | AF | 101 | |
| 6 | CF | 101 | |
| 7 | AG | 156 | |
| 7 | CG | 156 | |
| 8 | AH | 138 | |
| 8 | CH | 138 | |
| 9 | AI | 128 | |
| 9 | CI | 128 | |
| 10 | AJ | 105 | |
| 10 | CJ | 105 | |
| 11 | AK | 129 | |
| 11 | CK | 129 | |
| 12 | AL | 132 | |
| 12 | CL | 132 | |
| 13 | AM | 126 | |
| 13 | CM | 126 | |
| 14 | AN | 61 | |
| 14 | CN | 61 | |
| 15 | AO | 89 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------------|
| 15 | CO | 89 | 3% 47% 43% 9% |
| 16 | AP | 88 | 39% 48% 8% 6% |
| 16 | CP | 88 | 6% 35% 48% 11% 6% |
| 17 | AQ | 105 | 10% 42% 47% 6% 6% |
| 17 | CQ | 105 | 38% 31% 51% 11% 6% |
| 18 | AR | 88 | 31% 47% 20% |
| 18 | CR | 88 | 19% 23% 48% 7% 20% |
| 19 | AS | 93 | 20% 17% 53% 14% 16% |
| 19 | CS | 93 | 11% 19% 49% 12% 16% |
| 20 | AT | 106 | 6% 42% 44% 7% 7% |
| 20 | CT | 106 | 14% 36% 45% 10% 7% |
| 21 | AU | 27 | 30% 41% 15% 11% |
| 21 | CU | 27 | 4% 30% 48% 11% 7% |
| 22 | AV | 77 | 34% 30% 22% 13% |
| 22 | CV | 77 | 3% 16% 42% 34% 9% |
| 23 | AW | 76 | 4% 8% 36% 39% 17% |
| 23 | AY | 76 | 5% 11% 5% 75% |
| 23 | CW | 76 | 16% 12% 28% 54% 7% |
| 23 | CY | 76 | 9% 9% 7% 72% |
| 24 | AX | 24 | 8% 29% 8% 50% |
| 24 | CX | 24 | 12% 25% 8% 50% |
| 25 | B0 | 85 | 8% 40% 45% 5% 11% |
| 25 | D0 | 85 | 8% 44% 44% 9% |
| 26 | B1 | 98 | 19% 21% 38% 24% 6% 10% |
| 26 | D1 | 98 | 20% 28% 41% 17% 10% |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 27 | B2 | 72 | |
| 27 | D2 | 72 | |
| 28 | B3 | 60 | |
| 28 | D3 | 60 | |
| 29 | B4 | 71 | |
| 29 | D4 | 71 | |
| 30 | B5 | 60 | |
| 30 | D5 | 60 | |
| 31 | B6 | 54 | |
| 31 | D6 | 54 | |
| 32 | B7 | 49 | |
| 32 | D7 | 49 | |
| 33 | B8 | 65 | |
| 33 | D8 | 65 | |
| 34 | B9 | 37 | |
| 34 | D9 | 37 | |
| 35 | BA | 2839 | |
| 35 | DA | 2839 | |
| 36 | BB | 122 | |
| 36 | DB | 122 | |
| 37 | BC | 229 | |
| 37 | DC | 229 | |
| 38 | BD | 276 | |
| 38 | DD | 276 | |
| 39 | BE | 206 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 39 | DE | 206 | |
| 40 | BF | 210 | |
| 40 | DF | 210 | |
| 41 | BG | 182 | |
| 41 | DG | 182 | |
| 42 | BH | 180 | |
| 42 | DH | 180 | |
| 43 | BI | 148 | |
| 43 | DI | 148 | |
| 44 | BJ | 173 | |
| 44 | DJ | 173 | |
| 45 | BK | 147 | |
| 45 | DK | 147 | |
| 46 | BN | 140 | |
| 46 | DN | 140 | |
| 47 | BO | 122 | |
| 47 | DO | 122 | |
| 48 | BP | 150 | |
| 48 | DP | 150 | |
| 49 | BQ | 141 | |
| 49 | DQ | 141 | |
| 50 | BR | 118 | |
| 50 | DR | 118 | |
| 51 | BS | 112 | |
| 51 | DS | 112 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 52 | BT | 146 | |
| 52 | DT | 146 | |
| 53 | BU | 118 | |
| 53 | DU | 118 | |
| 54 | BV | 101 | |
| 54 | DV | 101 | |
| 55 | BW | 113 | |
| 55 | DW | 113 | |
| 56 | BX | 96 | |
| 56 | DX | 96 | |
| 57 | BY | 110 | |
| 57 | DY | 110 | |
| 58 | BZ | 206 | |
| 58 | DZ | 206 | |

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 |
|-----|------|-------|------|-----------|----------|---------|------------------|
| 59 | MG | AA | 1619 | - | - | - | X |
| 59 | MG | AA | 1645 | - | - | - | X |
| 59 | MG | AA | 1660 | - | - | - | X |
| 59 | MG | AA | 1670 | - | - | - | X |
| 59 | MG | AA | 1674 | - | - | - | X |
| 59 | MG | AA | 1676 | - | - | - | X |
| 59 | MG | AA | 1681 | - | - | - | X |
| 59 | MG | AA | 1697 | - | - | - | X |
| 59 | MG | AA | 1743 | - | - | - | X |
| 59 | MG | AA | 1756 | - | - | - | X |
| 59 | MG | AA | 1760 | - | - | - | X |
| 59 | MG | AA | 1770 | - | - | - | X |
| 59 | MG | AA | 1777 | - | - | - | X |

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| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|------|-----------|----------|---------|------------------|
| 59 | MG | AA | 1804 | - | - | - | X |
| 59 | MG | AA | 1808 | - | - | - | X |
| 59 | MG | AD | 301 | - | - | - | X |
| 59 | MG | AL | 201 | - | - | - | X |
| 59 | MG | AT | 201 | - | - | - | X |
| 59 | MG | AV | 102 | - | - | - | X |
| 59 | MG | AW | 101 | - | - | - | X |
| 59 | MG | AW | 104 | - | - | - | X |
| 59 | MG | AW | 105 | - | - | - | X |
| 59 | MG | AW | 110 | - | - | - | X |
| 59 | MG | AW | 113 | - | - | - | X |
| 59 | MG | AW | 114 | - | - | - | X |
| 59 | MG | AW | 117 | - | - | - | X |
| 59 | MG | AW | 119 | - | - | - | X |
| 59 | MG | BA | 3011 | - | - | - | X |
| 59 | MG | BA | 3014 | - | - | - | X |
| 59 | MG | BA | 3108 | - | - | - | X |
| 59 | MG | BA | 3126 | - | - | - | X |
| 59 | MG | BA | 3132 | - | - | - | X |
| 59 | MG | BA | 3142 | - | - | - | X |
| 59 | MG | BA | 3145 | - | - | - | X |
| 59 | MG | BA | 3186 | - | - | - | X |
| 59 | MG | BA | 3224 | - | - | - | X |
| 59 | MG | BA | 3254 | - | - | - | X |
| 59 | MG | BA | 3257 | - | - | - | X |
| 59 | MG | BA | 3271 | - | - | - | X |
| 59 | MG | BA | 3285 | - | - | - | X |
| 59 | MG | BA | 3302 | - | - | - | X |
| 59 | MG | BA | 3306 | - | - | - | X |
| 59 | MG | BA | 3313 | - | - | - | X |
| 59 | MG | BA | 3344 | - | - | - | X |
| 59 | MG | BA | 3350 | - | - | - | X |
| 59 | MG | BA | 3353 | - | - | - | X |
| 59 | MG | BA | 3357 | - | - | - | X |
| 59 | MG | BA | 3364 | - | - | - | X |
| 59 | MG | BA | 3385 | - | - | - | X |
| 59 | MG | BA | 3389 | - | - | - | X |
| 59 | MG | BA | 3399 | - | - | - | X |
| 59 | MG | BA | 3400 | - | - | - | X |
| 59 | MG | BA | 3405 | - | - | - | X |
| 59 | MG | BA | 3427 | - | - | - | X |
| 59 | MG | BA | 3434 | - | - | - | X |

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| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|-----|------|-------|------|-----------|----------|---------|------------------|
| 59 | MG | BA | 3456 | - | - | - | X |
| 59 | MG | BA | 3457 | - | - | - | X |
| 59 | MG | CA | 1602 | - | - | - | X |
| 59 | MG | CA | 1619 | - | - | - | X |
| 59 | MG | CA | 1620 | - | - | - | X |
| 59 | MG | CA | 1627 | - | - | - | X |
| 59 | MG | CA | 1637 | - | - | - | X |
| 59 | MG | CA | 1646 | - | - | - | X |
| 59 | MG | CA | 1649 | - | - | - | X |
| 59 | MG | CA | 1652 | - | - | - | X |
| 59 | MG | CA | 1664 | - | - | - | X |
| 59 | MG | CA | 1674 | - | - | - | X |
| 59 | MG | CA | 1675 | - | - | - | X |
| 59 | MG | CA | 1677 | - | - | - | X |
| 59 | MG | CA | 1690 | - | - | - | X |
| 59 | MG | CA | 1695 | - | - | - | X |
| 59 | MG | CA | 1725 | - | - | - | X |
| 59 | MG | CA | 1742 | - | - | - | X |
| 59 | MG | CA | 1793 | - | - | - | X |
| 59 | MG | CE | 201 | - | - | - | X |
| 59 | MG | CW | 106 | - | - | - | X |
| 59 | MG | CW | 108 | - | - | - | X |
| 59 | MG | CW | 109 | - | - | - | X |
| 59 | MG | CW | 112 | - | - | - | X |
| 59 | MG | DA | 3005 | - | - | - | X |
| 59 | MG | DA | 3007 | - | - | - | X |
| 59 | MG | DA | 3008 | - | - | - | X |
| 59 | MG | DA | 3086 | - | - | - | X |
| 59 | MG | DA | 3105 | - | - | - | X |
| 59 | MG | DA | 3136 | - | - | - | X |
| 59 | MG | DA | 3152 | - | - | - | X |
| 59 | MG | DA | 3163 | - | - | - | X |
| 59 | MG | DA | 3203 | - | - | - | X |
| 59 | MG | DA | 3206 | - | - | - | X |
| 59 | MG | DA | 3224 | - | - | - | X |
| 59 | MG | DA | 3230 | - | - | - | X |
| 59 | MG | DA | 3246 | - | - | - | X |
| 59 | MG | DA | 3256 | - | - | - | X |
| 59 | MG | DA | 3258 | - | - | - | X |
| 59 | MG | DA | 3280 | - | - | - | X |
| 59 | MG | DA | 3307 | - | - | - | X |
| 59 | MG | DA | 3315 | - | - | - | X |

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| Mol | Type | Chain | Res | Chirality | Geometry | Clashes | Electron density |
|------------|-------------|--------------|------------|------------------|-----------------|----------------|-------------------------|
| 59 | MG | DA | 3316 | - | - | - | X |
| 59 | MG | DA | 3320 | - | - | - | X |
| 59 | MG | DA | 3342 | - | - | - | X |
| 59 | MG | DA | 3348 | - | - | - | X |
| 59 | MG | DA | 3356 | - | - | - | X |
| 59 | MG | DA | 3373 | - | - | - | X |
| 59 | MG | DA | 3382 | - | - | - | X |
| 59 | MG | DB | 207 | - | - | - | X |
| 59 | MG | DB | 211 | - | - | - | X |
| 59 | MG | DO | 202 | - | - | - | X |
| 59 | MG | DV | 201 | - | - | - | X |

2 Entry composition

There are 62 unique types of molecules in this entry. The entry contains 296449 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 | 1504 | Total 32329 | C 14390 | N 5992 | O 10444 | P 1503 | 0 | 0 | 0 |
| 1 | CA | 1504 | Total 32332 | C 14390 | N 5992 | O 10446 | P 1504 | 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 | 218 | Total 1784 | C 1139 | N 321 | O 319 | S 5 | 0 | 0 | 0 |
| 2 | CB | 234 | Total 1900 | C 1213 | N 341 | O 341 | S 5 | 0 | 0 | 0 |

- 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 1612 | C 1016 | N 314 | O 281 | S 1 | 0 | 0 | 0 |
| 3 | CC | 207 | Total 1620 | C 1021 | N 315 | O 282 | S 2 | 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 1703 | C 1066 | N 339 | O 291 | S 7 | 0 | 0 | 0 |
| 4 | CD | 208 | Total 1703 | C 1066 | N 339 | O 291 | S 7 | 0 | 0 | 0 |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 5 | AE | 150 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1146 | 724 | 217 | 201 | 4 | | | |
| 5 | CE | 151 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1155 | 729 | 218 | 204 | 4 | | | |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 6 | AF | 101 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 843 | 531 | 155 | 154 | 3 | | | |
| 6 | CF | 101 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 843 | 531 | 155 | 154 | 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 |
| | | | 1257 | 781 | 252 | 218 | 6 | | | |
| 7 | CG | 155 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1257 | 781 | 252 | 218 | 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 |
| | | | 1116 | 705 | 215 | 193 | 3 | | | |
| 8 | CH | 138 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1116 | 705 | 215 | 193 | 3 | | | |

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

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 9 | AI | 121 | Total | C | N | O | 0 | 0 | 0 |
| | | | 947 | 599 | 186 | 162 | | | |
| 9 | CI | 127 | Total | C | N | O | 0 | 0 | 0 |
| | | | 1010 | 639 | 197 | 174 | | | |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 10 | AJ | 98 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 794 | 499 | 156 | 138 | 1 | | | |

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| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 10 | CJ | 98 | 794 | 499 | 156 | 138 | 1 | 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 | 119 | 885 | 549 | 168 | 165 | 3 | 0 | 0 | 0 |
| 11 | CK | 119 | 885 | 549 | 168 | 165 | 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 | 956 | 603 | 193 | 159 | 1 | 0 | 0 | 0 |
| 12 | CL | 124 | 970 | 611 | 195 | 163 | 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 | 116 | 922 | 570 | 189 | 161 | 2 | 0 | 0 | 0 |
| 13 | CM | 119 | 946 | 585 | 195 | 164 | 2 | 0 | 0 | 0 |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 14 | AN | 60 | 491 | 312 | 104 | 71 | 4 | 0 | 0 | 0 |
| 14 | CN | 60 | 492 | 312 | 104 | 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 | 734 | 459 | 147 | 126 | 2 | 0 | 0 | 0 |
| 15 | CO | 88 | 734 | 459 | 147 | 126 | 2 | 0 | 0 | 0 |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 16 | AP | 83 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 700 | 443 | 139 | 117 | 1 | | | |
| 16 | CP | 83 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 700 | 443 | 139 | 117 | 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 |
| | | | 823 | 528 | 151 | 142 | 2 | | | |

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

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---------|---------|-------|
| 18 | AR | 70 | Total | C | N | O | 0 | 0 | 0 |
| | | | 574 | 367 | 112 | 95 | | | |
| 18 | CR | 70 | Total | C | N | O | 0 | 0 | 0 |
| | | | 574 | 367 | 112 | 95 | | | |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 19 | AS | 78 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 629 | 403 | 114 | 110 | 2 | | | |
| 19 | CS | 78 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 629 | 403 | 114 | 110 | 2 | | | |

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

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 20 | AT | 99 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 763 | 470 | 162 | 129 | 2 | | | |
| 20 | CT | 99 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 763 | 470 | 162 | 129 | 2 | | | |

- Molecule 21 is a protein called 30S ribosomal protein Thx.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---------|---------|-------|
| 21 | AU | 24 | Total | C | N | O | 0 | 0 | 0 |
| | | | 208 | 128 | 50 | 30 | | | |
| 21 | CU | 25 | Total | C | N | O | 0 | 0 | 0 |
| | | | 217 | 134 | 52 | 31 | | | |

- Molecule 22 is a RNA chain called P-site tRNA fMet.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|----|---------|---------|-------|
| 22 | AV | 76 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 1622 | 723 | 294 | 529 | 76 | | | |
| 22 | CV | 77 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 1643 | 732 | 297 | 537 | 77 | | | |

- Molecule 23 is a RNA chain called E-Site tRNA Phe and A-site tRNA Phe.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|----|---------|---------|-------|
| 23 | AW | 76 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 1623 | 723 | 290 | 534 | 76 | | | |
| 23 | AY | 19 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 410 | 183 | 78 | 130 | 19 | | | |
| 23 | CW | 76 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 1623 | 723 | 290 | 534 | 76 | | | |
| 23 | CY | 21 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 453 | 202 | 86 | 144 | 21 | | | |

- Molecule 24 is a RNA chain called mRNA.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|----|---------|---------|-------|
| 24 | AX | 12 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 255 | 115 | 46 | 82 | 12 | | | |
| 24 | CX | 12 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 255 | 115 | 46 | 82 | 12 | | | |

- Molecule 25 is a protein called 50S ribosomal protein L27.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 25 | B0 | 76 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 607 | 376 | 128 | 102 | 1 | | | |
| 25 | D0 | 82 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 645 | 401 | 136 | 107 | 1 | | | |

- Molecule 26 is a protein called 50S ribosomal protein L28.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 26 | B1 | 88 | Total | C | N | O | 0 | 0 | 0 |
| | | | 692 | 435 | 139 | 118 | | | |
| 26 | D1 | 88 | Total | C | N | O | 0 | 0 | 0 |
| | | | 692 | 435 | 139 | 118 | | | |

- Molecule 27 is a protein called 50S ribosomal protein L29.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 27 | B2 | 50 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 420 | 263 | 84 | 72 | 1 | | | |
| 27 | D2 | 53 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 446 | 279 | 88 | 78 | 1 | | | |

- Molecule 28 is a protein called 50S ribosomal protein L30.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 28 | B3 | 58 | Total | C | N | O | | 0 | 0 | 0 |
| | | | 459 | 293 | 89 | 77 | | | | |
| 28 | D3 | 60 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 476 | 303 | 91 | 81 | 1 | | | |

- Molecule 29 is a protein called 50S ribosomal protein L31.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---------|---------|-------|
| 29 | B4 | 45 | Total | C | N | O | 0 | 0 | 0 |
| | | | 222 | 132 | 45 | 45 | | | |
| 29 | D4 | 49 | Total | C | N | O | 0 | 0 | 0 |
| | | | 241 | 143 | 49 | 49 | | | |

- Molecule 30 is a protein called 50S ribosomal protein L32.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 30 | B5 | 54 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 418 | 261 | 84 | 68 | 5 | | | |
| 30 | D5 | 60 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 467 | 293 | 91 | 77 | 6 | | | |

- Molecule 31 is a protein called 50S ribosomal protein L33.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 31 | B6 | 46 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 398 | 247 | 81 | 66 | 4 | | | |

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| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 31 | D6 | 47 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 408 | 253 | 84 | 67 | 4 | | | |

- Molecule 32 is a protein called 50S ribosomal protein L34.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---|---------|---------|-------|
| 32 | B7 | 48 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 418 | 257 | 104 | 55 | 2 | | | |
| 32 | D7 | 48 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 418 | 257 | 104 | 55 | 2 | | | |

- Molecule 33 is a protein called 50S ribosomal protein L35.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|----|---|---------|---------|-------|
| 33 | B8 | 63 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 507 | 326 | 101 | 78 | 2 | | | |
| 33 | D8 | 62 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 495 | 317 | 100 | 76 | 2 | | | |

- Molecule 34 is a protein called 50S ribosomal protein L36.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|---------|-------|
| 34 | B9 | 37 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 307 | 188 | 68 | 47 | 4 | | | |
| 34 | D9 | 37 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 307 | 188 | 68 | 47 | 4 | | | |

- Molecule 35 is a RNA chain called 23S ribosomal RNA.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-------|-------|-------|------|---------|---------|-------|
| 35 | BA | 2824 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 60821 | 27070 | 11372 | 19556 | 2823 | | | |
| 35 | DA | 2824 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 60821 | 27070 | 11372 | 19556 | 2823 | | | |

- Molecule 36 is a RNA chain called 5S ribosomal RNA.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|-----|---------|---------|-------|
| 36 | BB | 120 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 2576 | 1146 | 476 | 834 | 120 | | | |
| 36 | DB | 119 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 2551 | 1136 | 471 | 826 | 118 | | | |

- Molecule 37 is a protein called 50S ribosomal protein L1.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| | | | Total | C | N | O | | | |
| 37 | BC | 190 | Total | C | N | O | 0 | 0 | 0 |
| | | | 1141 | 691 | 220 | 230 | | | |
| 37 | DC | 190 | Total | C | N | O | 0 | 0 | 0 |
| | | | 1141 | 691 | 220 | 230 | | | |

- Molecule 38 is a protein called 50S ribosomal protein L2.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 38 | BD | 273 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 2126 | 1341 | 424 | 358 | 3 | | | |
| 38 | DD | 275 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 2144 | 1353 | 428 | 360 | 3 | | | |

- Molecule 39 is a protein called 50S ribosomal protein L3.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|---|
| | | | Total | C | N | O | | | | |
| 39 | BE | 204 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1563 | 988 | 299 | 270 | 6 | | | |
| 39 | DE | 204 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1563 | 988 | 299 | 270 | 6 | | | |

- Molecule 40 is a protein called 50S ribosomal protein L4.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|------|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 40 | BF | 206 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1615 | 1030 | 302 | 281 | 2 | | | |
| 40 | DF | 208 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1627 | 1037 | 304 | 283 | 3 | | | |

- Molecule 41 is a protein called 50S ribosomal protein L5.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|---|
| | | | Total | C | N | O | | | | |
| 41 | BG | 178 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1449 | 925 | 264 | 256 | 4 | | | |
| 41 | DG | 181 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1474 | 942 | 268 | 260 | 4 | | | |

- Molecule 42 is a protein called 50S ribosomal protein L6.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 42 | BH | 159 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1222 | 773 | 228 | 220 | 1 | | | |
| 42 | DH | 165 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1270 | 806 | 237 | 226 | 1 | | | |

- Molecule 43 is a protein called 50S ribosomal protein L9.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 43 | BI | 145 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1131 | 723 | 200 | 207 | 1 | | | |
| 43 | DI | 144 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1124 | 718 | 199 | 206 | 1 | | | |

- Molecule 44 is a protein called 50S ribosomal protein L10.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 44 | BJ | 130 | Total | C | N | O | 0 | 0 | 0 |
| | | | 651 | 391 | 130 | 130 | | | |
| 44 | DJ | 130 | Total | C | N | O | 0 | 0 | 0 |
| | | | 651 | 391 | 130 | 130 | | | |

- Molecule 45 is a protein called 50S ribosomal protein L11.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| 45 | BK | 140 | Total | C | N | O | 0 | 0 | 0 |
| | | | 700 | 420 | 140 | 140 | | | |
| 45 | DK | 140 | Total | C | N | O | 0 | 0 | 0 |
| | | | 700 | 420 | 140 | 140 | | | |

- Molecule 46 is a protein called 50S ribosomal protein L13.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 46 | BN | 137 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1096 | 707 | 205 | 181 | 3 | | | |
| 46 | DN | 140 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1120 | 722 | 208 | 186 | 4 | | | |

- Molecule 47 is a protein called 50S ribosomal protein L14.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 47 | BO | 122 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 933 | 588 | 171 | 170 | 4 | | | |

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| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 47 | DO | 122 | 933 | 588 | 171 | 170 | 4 | 0 | 0 | 0 |

- Molecule 48 is a protein called 50S ribosomal protein L15.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 48 | BP | 144 | 1099 | 684 | 225 | 188 | 2 | 0 | 0 | 0 |
| 48 | DP | 146 | 1114 | 692 | 227 | 193 | 2 | 0 | 0 | 0 |

- Molecule 49 is a protein called 50S ribosomal protein L16.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 49 | BQ | 135 | 1074 | 686 | 205 | 178 | 5 | 0 | 0 | 0 |
| 49 | DQ | 136 | 1083 | 691 | 206 | 181 | 5 | 0 | 0 | 0 |

- Molecule 50 is a protein called 50S ribosomal protein L17.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| | | | Total | C | N | O | | | |
| 50 | BR | 116 | 949 | 593 | 198 | 158 | 0 | 0 | 0 |
| 50 | DR | 117 | 960 | 599 | 202 | 159 | 0 | 0 | 0 |

- Molecule 51 is a protein called 50S ribosomal protein L18.

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---------|---------|-------|
| | | | Total | C | N | O | | | |
| 51 | BS | 102 | 813 | 512 | 164 | 137 | 0 | 0 | 0 |
| 51 | DS | 99 | 781 | 492 | 158 | 131 | 0 | 0 | 0 |

- Molecule 52 is a protein called 50S ribosomal protein L19.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 52 | BT | 132 | 1100 | 686 | 227 | 186 | 1 | 0 | 0 | 0 |
| 52 | DT | 137 | 1141 | 710 | 234 | 196 | 1 | 0 | 0 | 0 |

- Molecule 53 is a protein called 50S ribosomal protein L20.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 53 | BU | 117 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 964 | 610 | 202 | 151 | 1 | | | |
| 53 | DU | 117 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 964 | 610 | 202 | 151 | 1 | | | |

- Molecule 54 is a protein called 50S ribosomal protein L21.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 54 | BV | 101 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 779 | 501 | 142 | 135 | 1 | | | |
| 54 | DV | 101 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 779 | 501 | 142 | 135 | 1 | | | |

- Molecule 55 is a protein called 50S ribosomal protein L22.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 55 | BW | 111 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 886 | 558 | 174 | 152 | 2 | | | |
| 55 | DW | 111 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 886 | 558 | 174 | 152 | 2 | | | |

- Molecule 56 is a protein called 50S ribosomal protein L23.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 56 | BX | 89 | Total | C | N | O | | 0 | 0 | 0 |
| | | | 704 | 458 | 128 | 118 | | | | |
| 56 | DX | 94 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 742 | 482 | 134 | 125 | 1 | | | |

- Molecule 57 is a protein called 50S ribosomal protein L24.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 57 | BY | 100 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 775 | 500 | 148 | 123 | 4 | | | |
| 57 | DY | 109 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 835 | 534 | 157 | 139 | 5 | | | |

- Molecule 58 is a protein called 50S ribosomal protein L25.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|-----|-----|---|---------|---------|-------|
| 58 | BZ | 176 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1403 | 897 | 252 | 252 | 2 | | | |
| 58 | DZ | 176 | Total | C | N | O | S | 0 | 0 | 0 |
| | | | 1403 | 897 | 252 | 252 | 2 | | | |

- Molecule 59 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|-------|-----|---------|---------|
| 59 | AA | 209 | Total | Mg | 0 | 0 |
| | | | 209 | 209 | | |
| 59 | AC | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | AD | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | AE | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | AL | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | AT | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | AV | 7 | Total | Mg | 0 | 0 |
| | | | 7 | 7 | | |
| 59 | AW | 20 | Total | Mg | 0 | 0 |
| | | | 20 | 20 | | |
| 59 | AX | 3 | Total | Mg | 0 | 0 |
| | | | 3 | 3 | | |
| 59 | B0 | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | B1 | 2 | Total | Mg | 0 | 0 |
| | | | 2 | 2 | | |
| 59 | B2 | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | B5 | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | B7 | 1 | Total | Mg | 0 | 0 |
| | | | 1 | 1 | | |
| 59 | B8 | 2 | Total | Mg | 0 | 0 |
| | | | 2 | 2 | | |
| 59 | BA | 457 | Total | Mg | 0 | 0 |
| | | | 457 | 457 | | |
| 59 | BB | 17 | Total | Mg | 0 | 0 |
| | | | 17 | 17 | | |
| 59 | BC | 2 | Total | Mg | 0 | 0 |
| | | | 2 | 2 | | |

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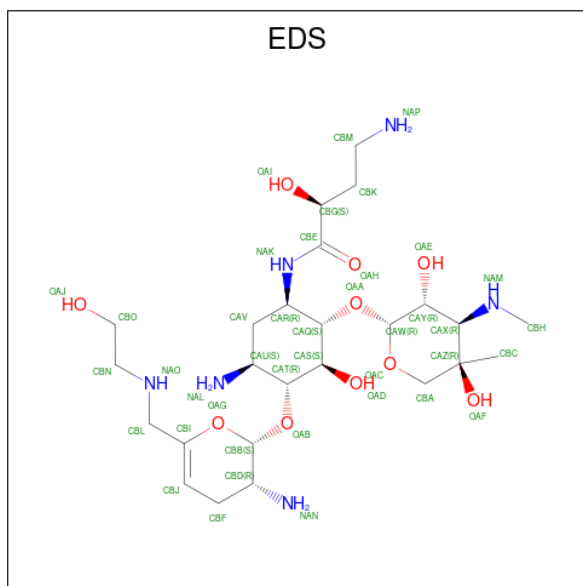
| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|--------------|-----------|---------|---------|
| 59 | BE | 2 | Total 2 | Mg 2 | 0 | 0 |
| 59 | BF | 3 | Total 3 | Mg 3 | 0 | 0 |
| 59 | BQ | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | BS | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | BU | 5 | Total 5 | Mg 5 | 0 | 0 |
| 59 | BV | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | BX | 2 | Total 2 | Mg 2 | 0 | 0 |
| 59 | CA | 195 | Total 195 | Mg 195 | 0 | 0 |
| 59 | CE | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | CF | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | CG | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | CI | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | CU | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | CV | 4 | Total 4 | Mg 4 | 0 | 0 |
| 59 | CW | 13 | Total 13 | Mg 13 | 0 | 0 |
| 59 | CX | 2 | Total 2 | Mg 2 | 0 | 0 |
| 59 | D2 | 2 | Total 2 | Mg 2 | 0 | 0 |
| 59 | D5 | 1 | Total 1 | Mg 1 | 0 | 0 |
| 59 | DA | 392 | Total 392 | Mg 392 | 0 | 0 |
| 59 | DB | 12 | Total 12 | Mg 12 | 0 | 0 |
| 59 | DE | 1 | Total 1 | Mg 1 | 0 | 0 |

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| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|-----------------|---------|---------|
| 59 | DF | 2 | Total Mg 2 2 | 0 | 0 |
| 59 | DN | 1 | Total Mg 1 1 | 0 | 0 |
| 59 | DO | 2 | Total Mg 2 2 | 0 | 0 |
| 59 | DV | 1 | Total Mg 1 1 | 0 | 0 |

- Molecule 60 is (2S)-4-amino-N-[(1R,2S,3S,4R,5S)-5-amino-4-{{[(2S,3R)-3-amino-6-{{[(2-hydroxyethyl)amino]methyl}-3,4-dihydro-2H-pyran-2-yl]oxy}-2-{{[3-deoxy-4-C-methyl-3-(methylamino)-beta-L-arabinopyranosyl]oxy}-3-hydroxycyclohexyl]-2-hydroxybutanamide (three-letter code: EDS) (formula: C₂₅H₄₈N₆O₁₀).



| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|---------------------------|---------|---------|
| 60 | AA | 1 | Total C N O 41 25 6 10 | 0 | 0 |
| 60 | CA | 1 | Total C N O 41 25 6 10 | 0 | 0 |

- Molecule 61 is ZINC ION (three-letter code: ZN) (formula: Zn).

| Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|-----------------|---------|---------|
| 61 | AD | 1 | Total Zn 1 1 | 0 | 0 |
| 61 | AN | 1 | Total Zn 1 1 | 0 | 0 |

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| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|------------|---------|---------|---------|
| 61 | B9 | 1 | Total 1 | Zn 1 | 0 | 0 |
| 61 | CD | 1 | Total 1 | Zn 1 | 0 | 0 |
| 61 | CN | 1 | Total 1 | Zn 1 | 0 | 0 |
| 61 | D9 | 1 | Total 1 | Zn 1 | 0 | 0 |

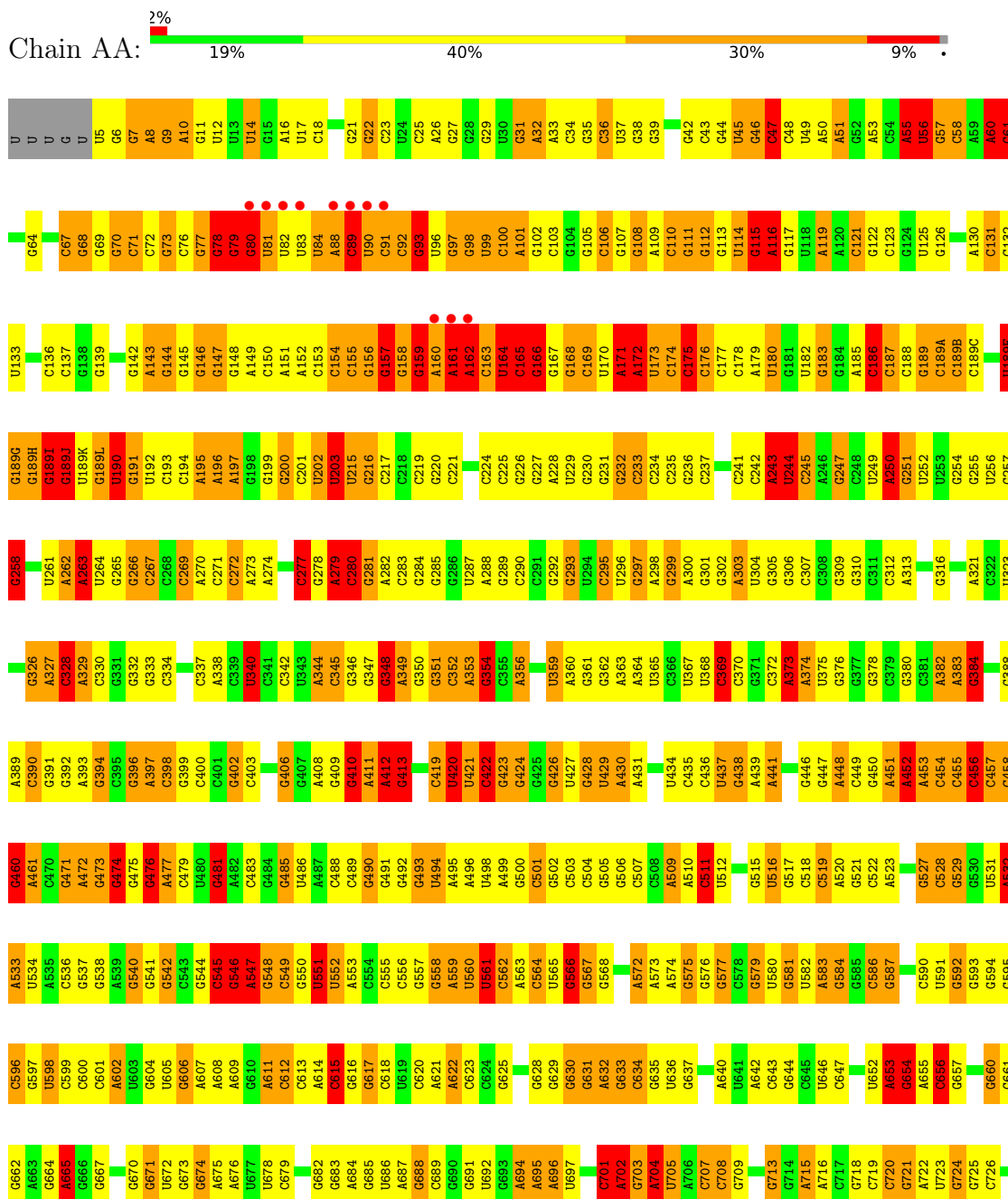
- Molecule 62 is water.

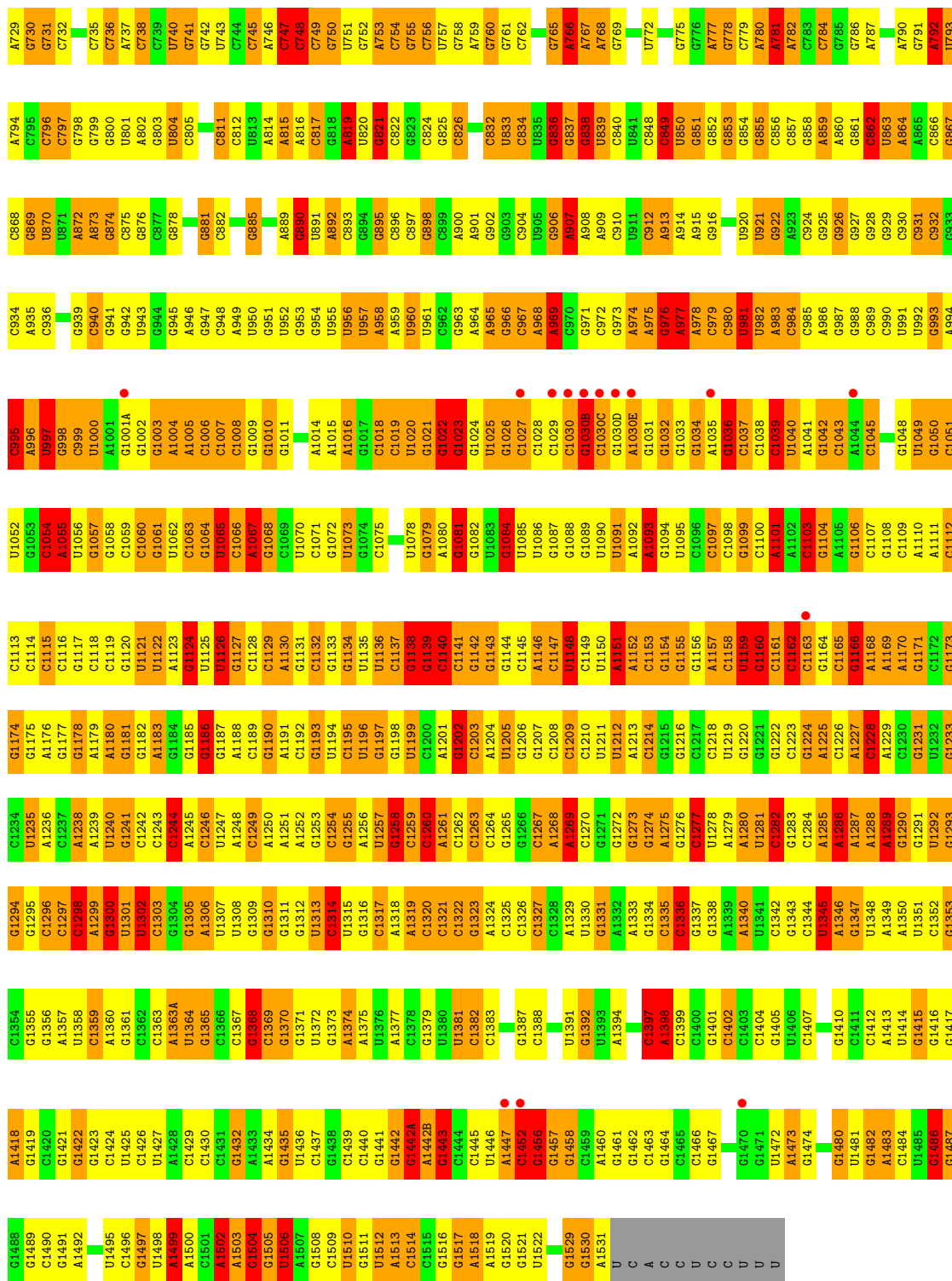
| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|------------|--------|---------|---------|
| 62 | AA | 2 | Total 2 | O 2 | 0 | 0 |

3 Residue-property plots

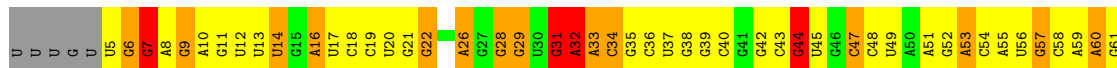
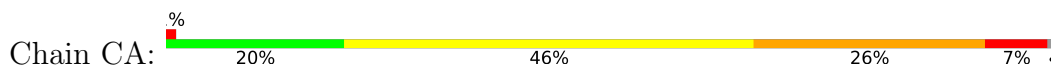
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

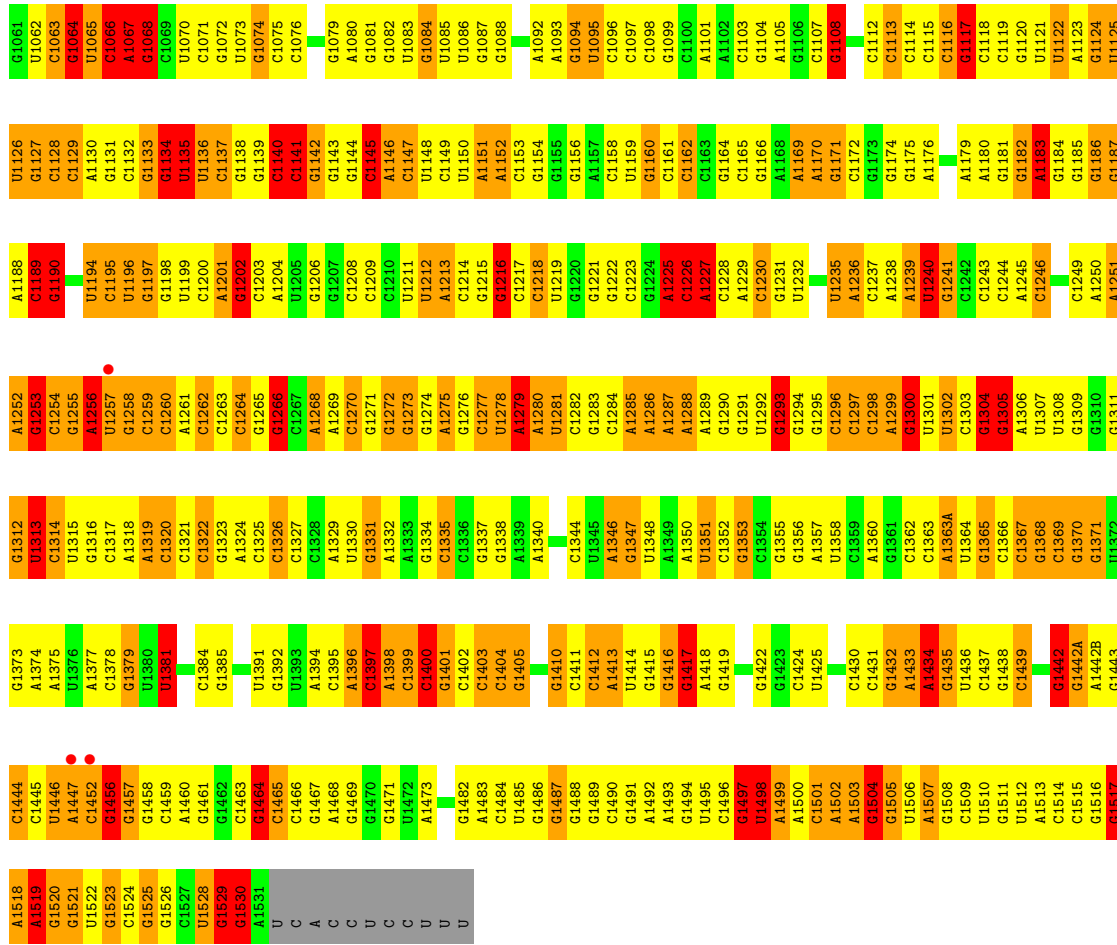
- Molecule 1: 16S ribosomal RNA



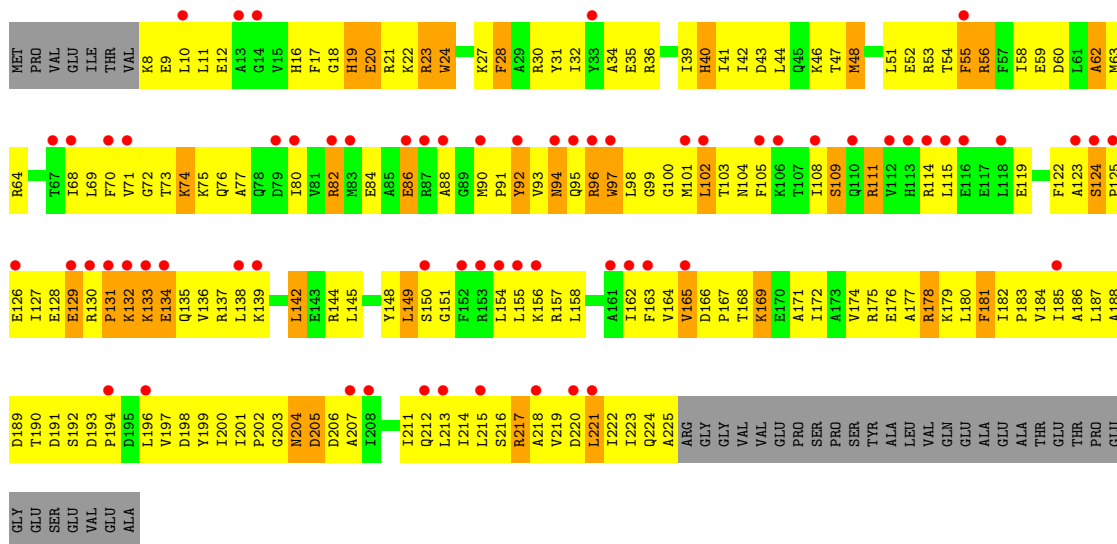
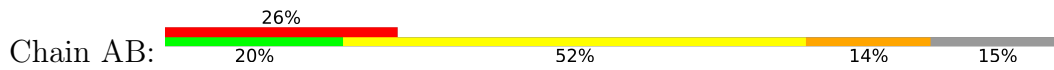


• Molecule 1: 16S ribosomal RNA

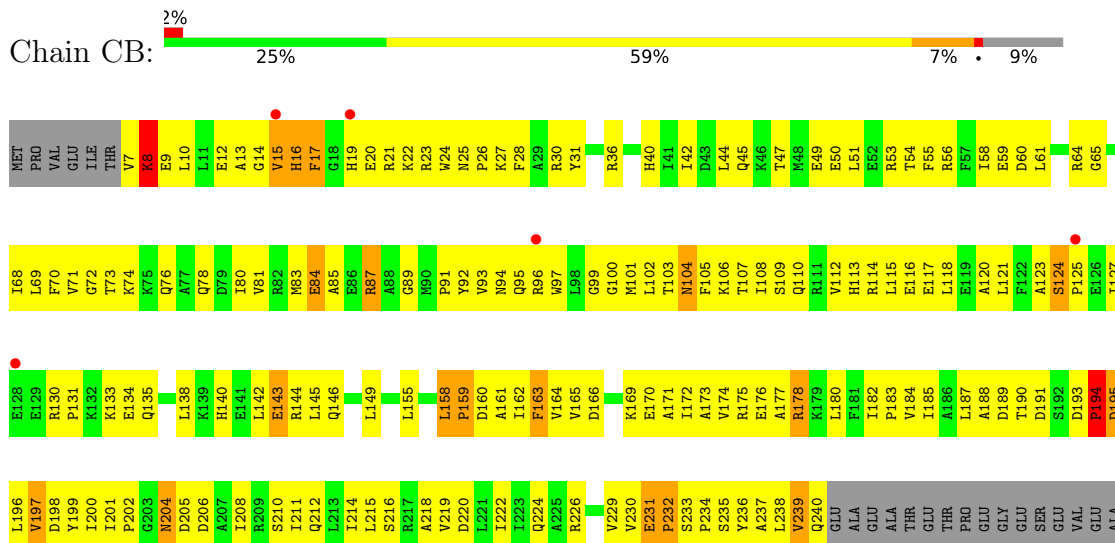




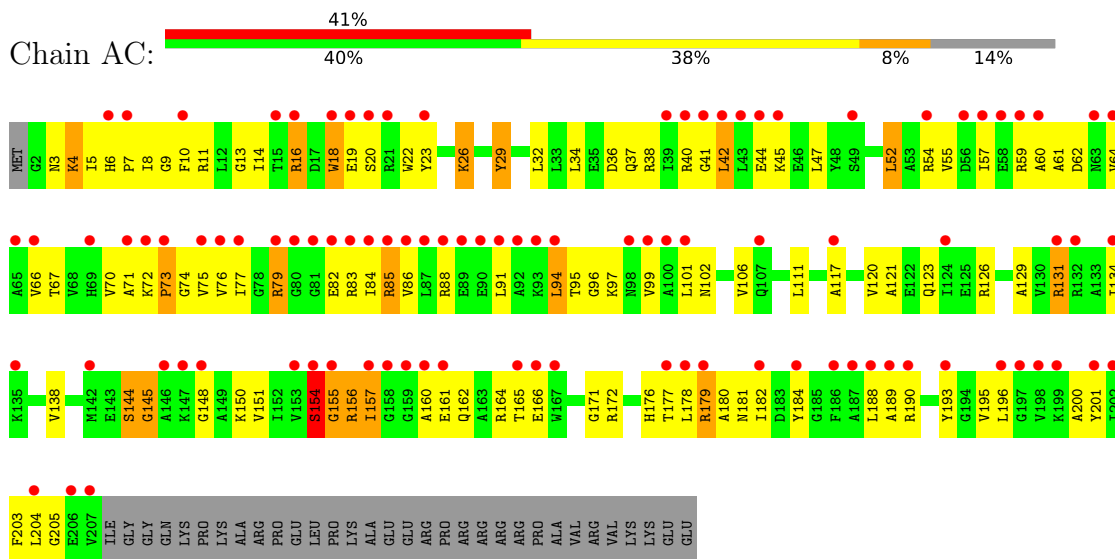
• Molecule 2: 30S ribosomal protein S2



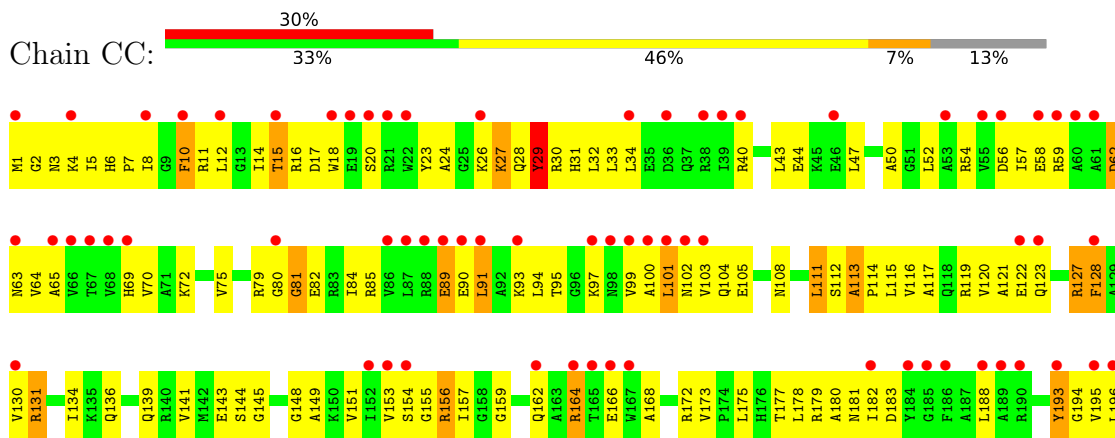
• Molecule 2: 30S ribosomal protein S2

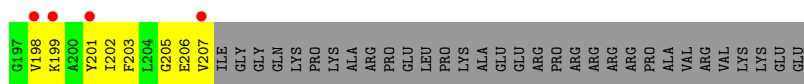


• Molecule 3: 30S ribosomal protein S3

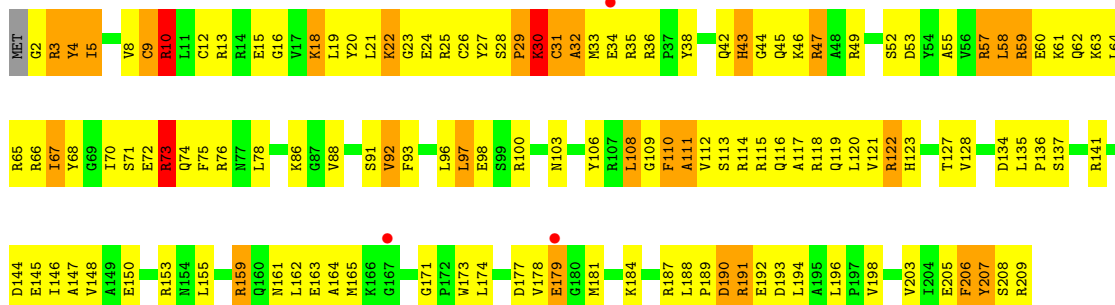


• Molecule 3: 30S ribosomal protein S3

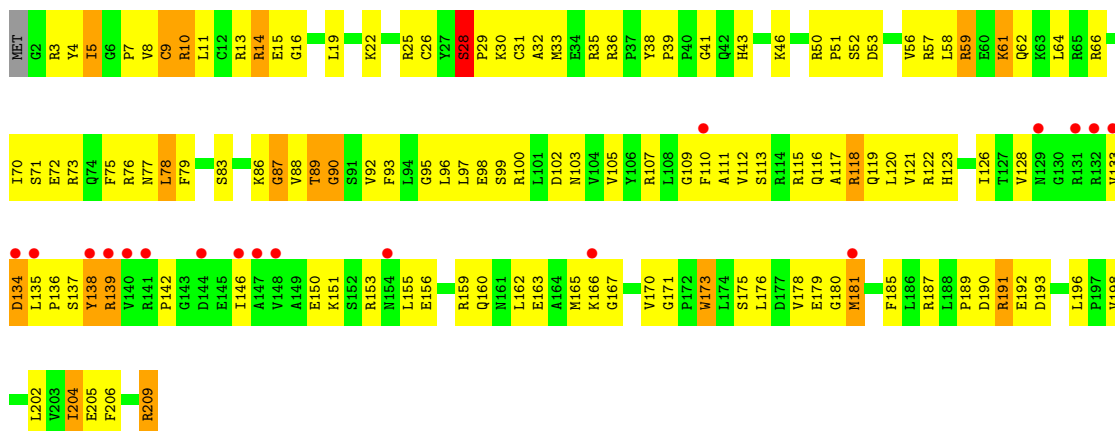




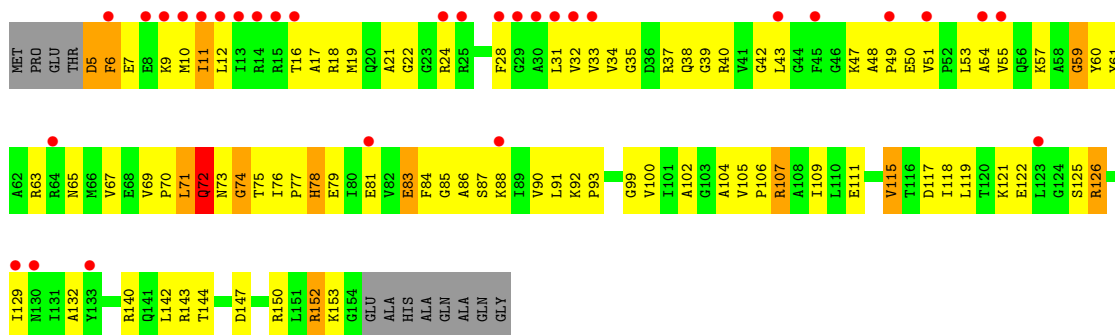
• Molecule 4: 30S ribosomal protein S4



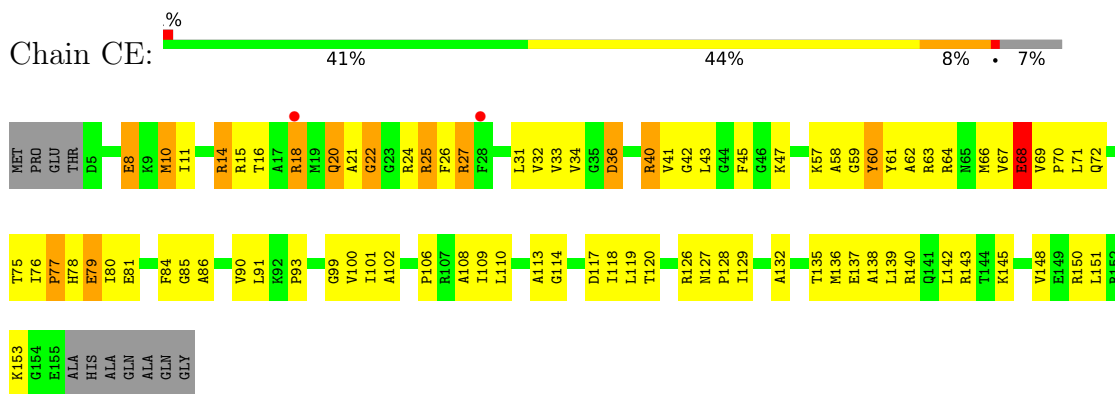
• Molecule 4: 30S ribosomal protein S4



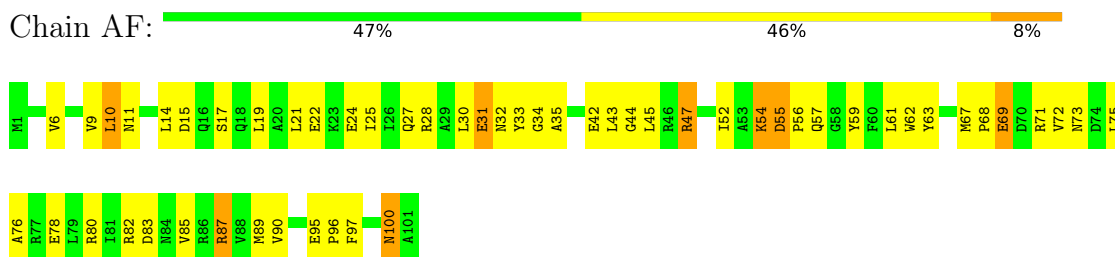
• Molecule 5: 30S ribosomal protein S5



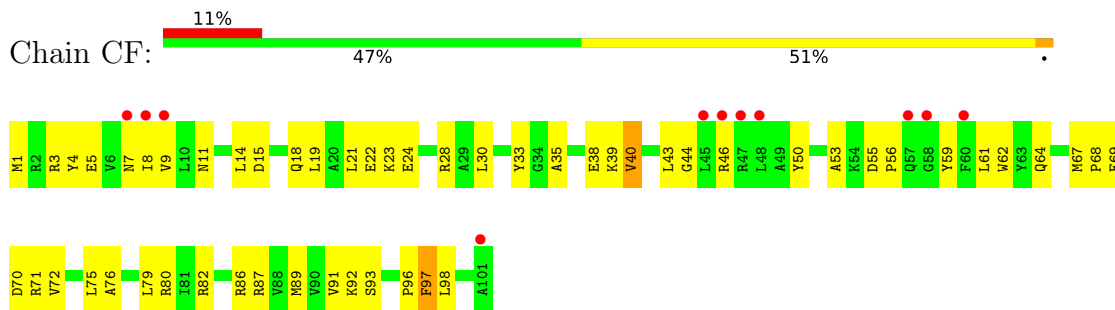
• Molecule 5: 30S ribosomal protein S5



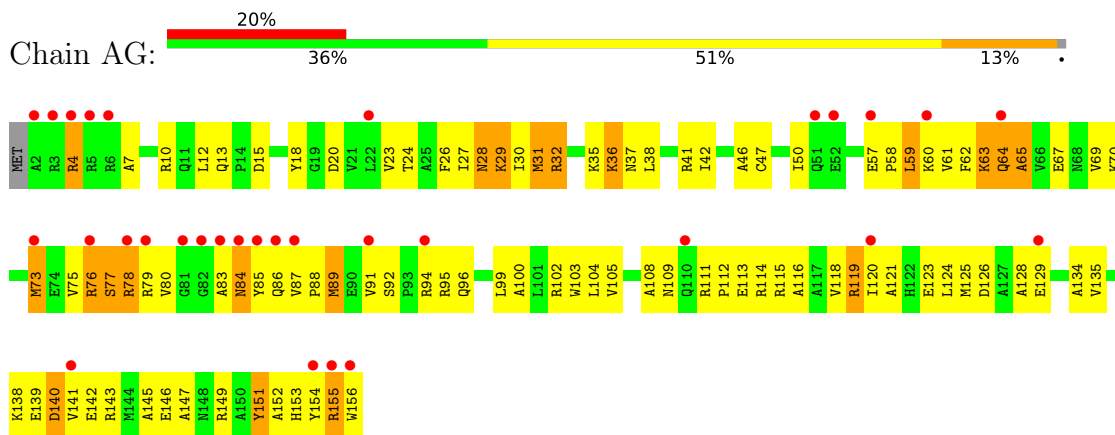
• Molecule 6: 30S ribosomal protein S6



• Molecule 6: 30S ribosomal protein S6

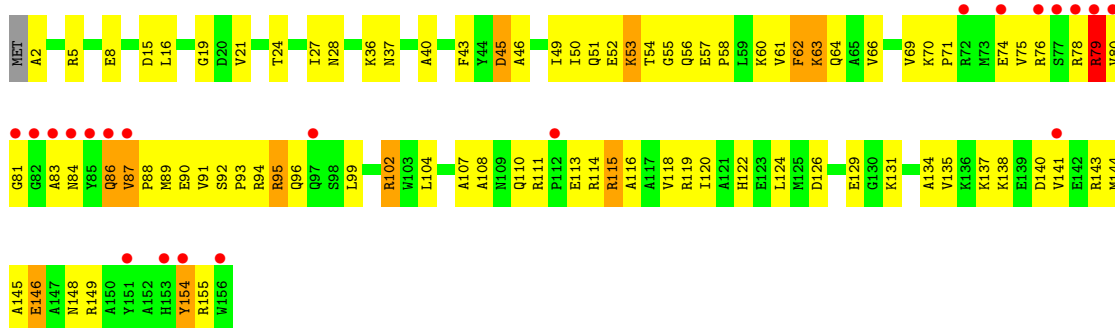


• Molecule 7: 30S ribosomal protein S7

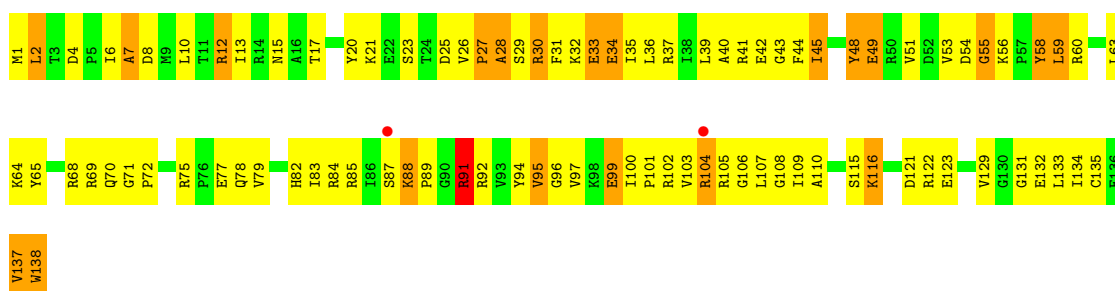


• Molecule 7: 30S ribosomal protein S7

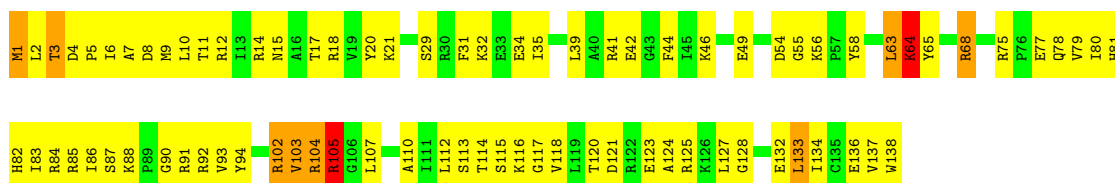




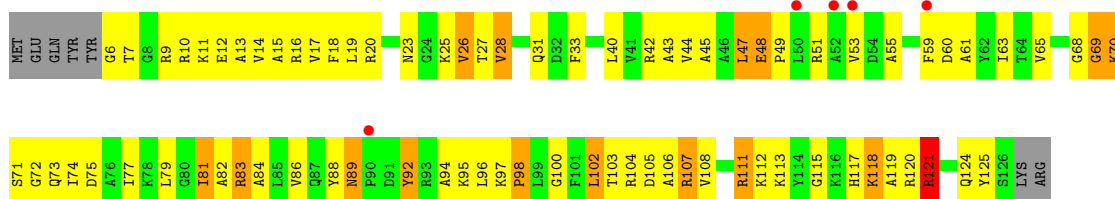
• Molecule 8: 30S ribosomal protein S8



• Molecule 8: 30S ribosomal protein S8

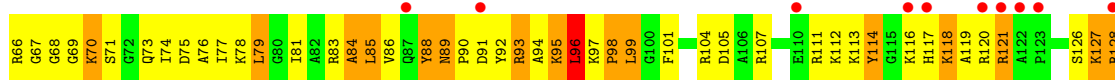


• Molecule 9: 30S ribosomal protein S9

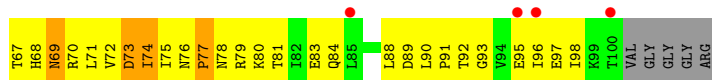


• Molecule 9: 30S ribosomal protein S9

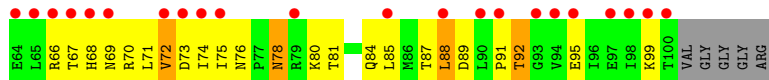
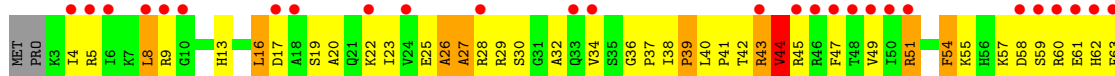




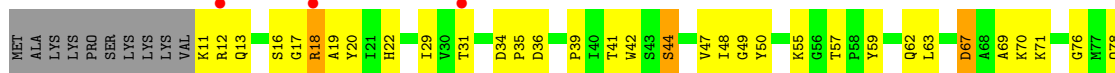
• Molecule 10: 30S ribosomal protein S10



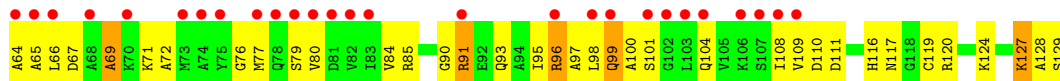
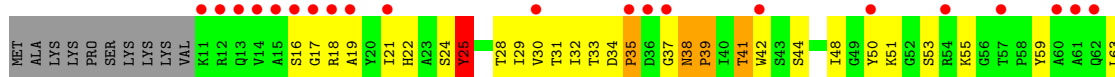
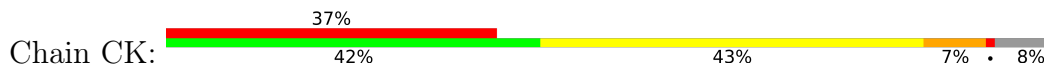
• Molecule 10: 30S ribosomal protein S10



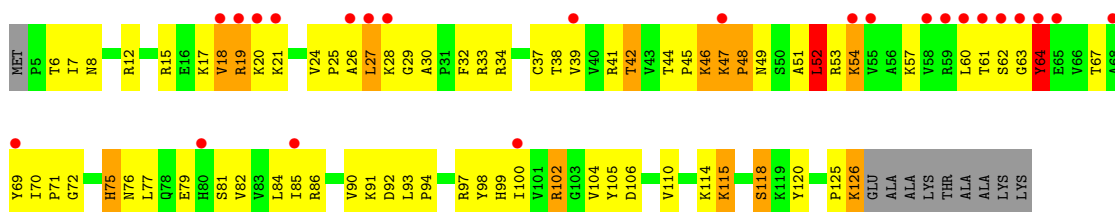
• Molecule 11: 30S ribosomal protein S11



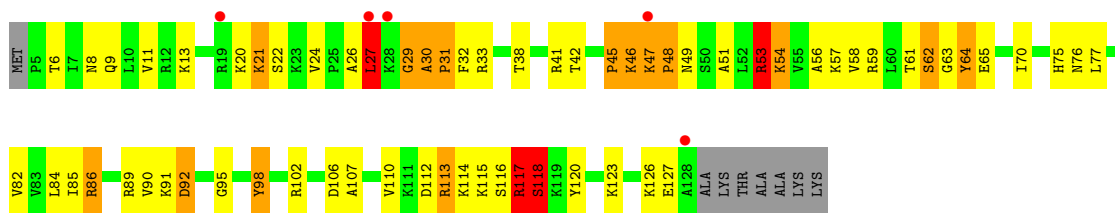
• Molecule 11: 30S ribosomal protein S11



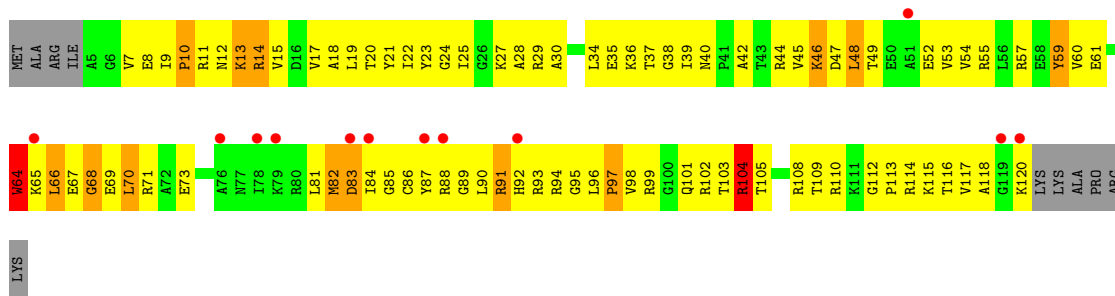
• Molecule 12: 30S ribosomal protein S12



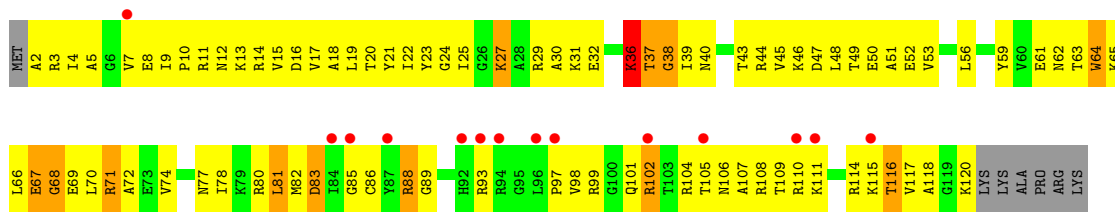
• Molecule 12: 30S ribosomal protein S12



• Molecule 13: 30S ribosomal protein S13



• Molecule 13: 30S ribosomal protein S13

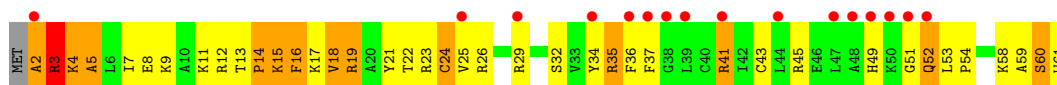


• Molecule 14: 30S ribosomal protein S14 type Z





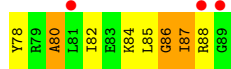
- Molecule 14: 30S ribosomal protein S14 type Z



- Molecule 15: 30S ribosomal protein S15



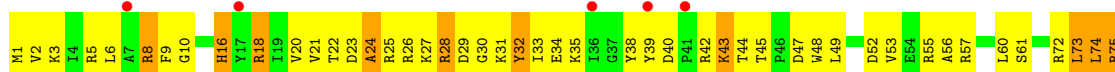
- Molecule 15: 30S ribosomal protein S15



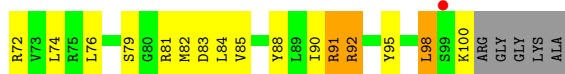
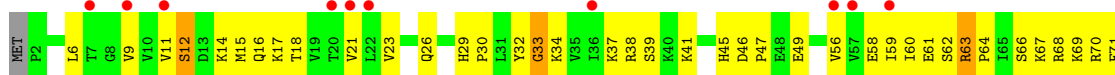
- Molecule 16: 30S ribosomal protein S16



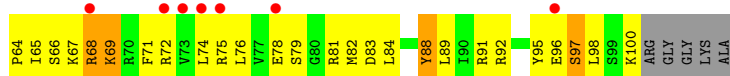
- Molecule 16: 30S ribosomal protein S16



- Molecule 17: 30S ribosomal protein S17



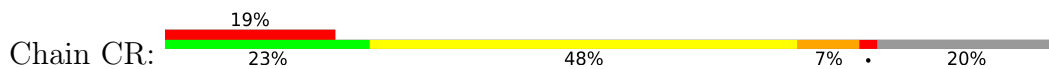
- Molecule 17: 30S ribosomal protein S17



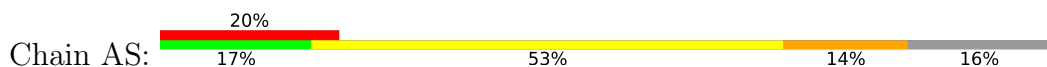
- Molecule 18: 30S ribosomal protein S18

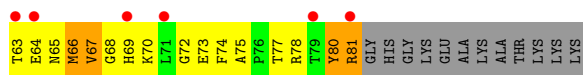


- Molecule 18: 30S ribosomal protein S18

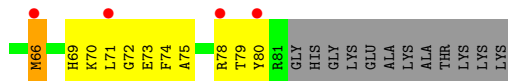
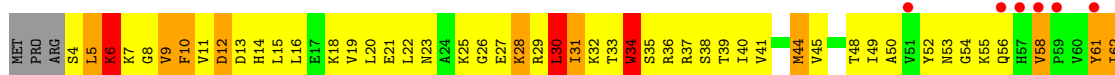
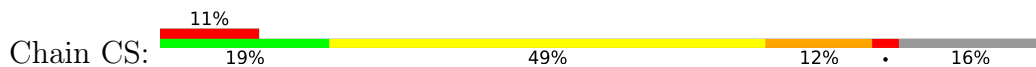


- Molecule 19: 30S ribosomal protein S19

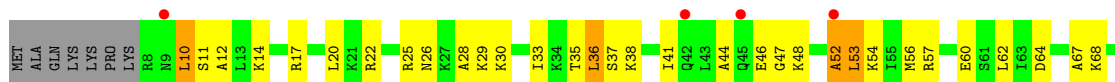




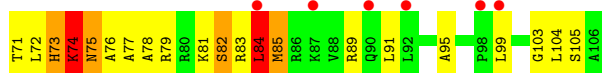
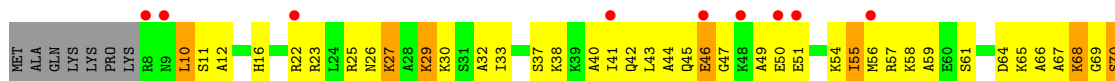
- Molecule 19: 30S ribosomal protein S19



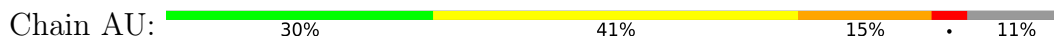
- Molecule 20: 30S ribosomal protein S20



- Molecule 20: 30S ribosomal protein S20



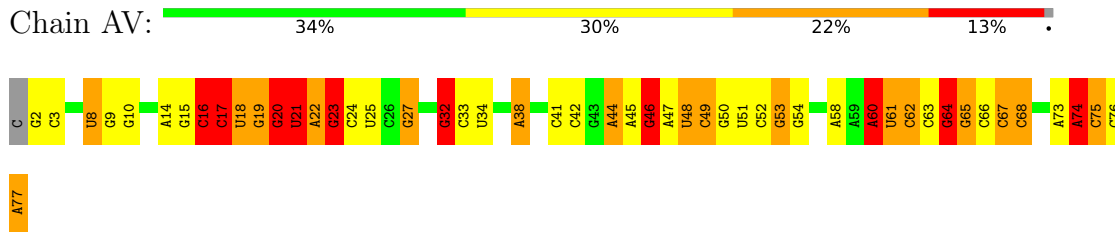
- Molecule 21: 30S ribosomal protein Thx



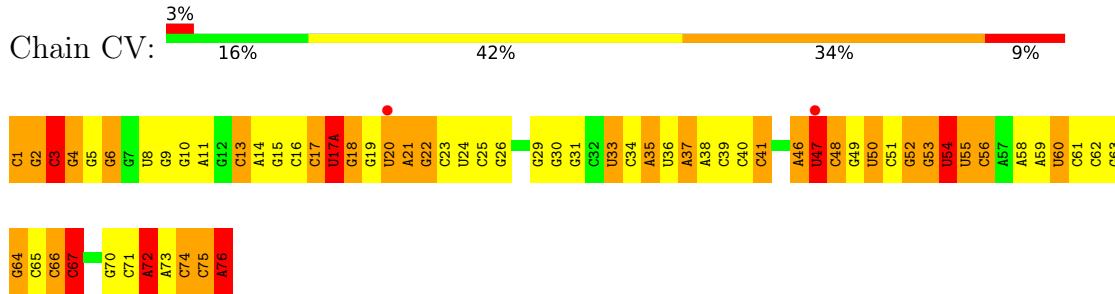
- Molecule 21: 30S ribosomal protein Thx



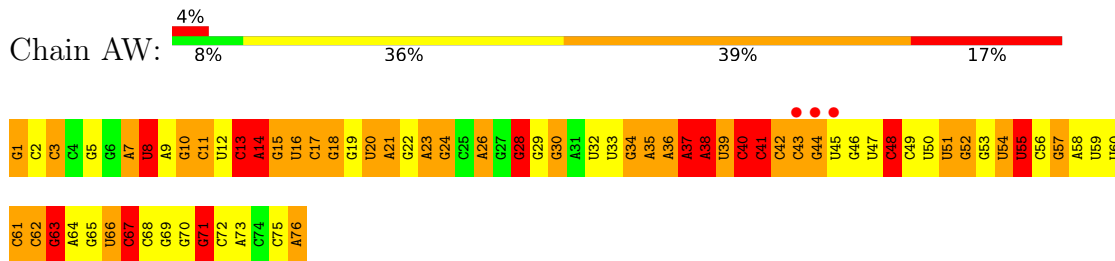
- Molecule 22: P-site tRNA fMet



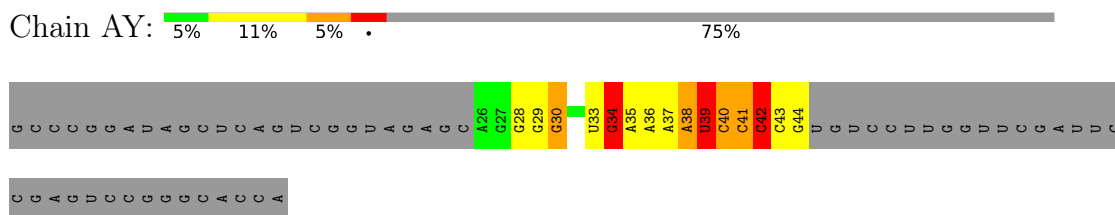
- Molecule 22: P-site tRNA fMet



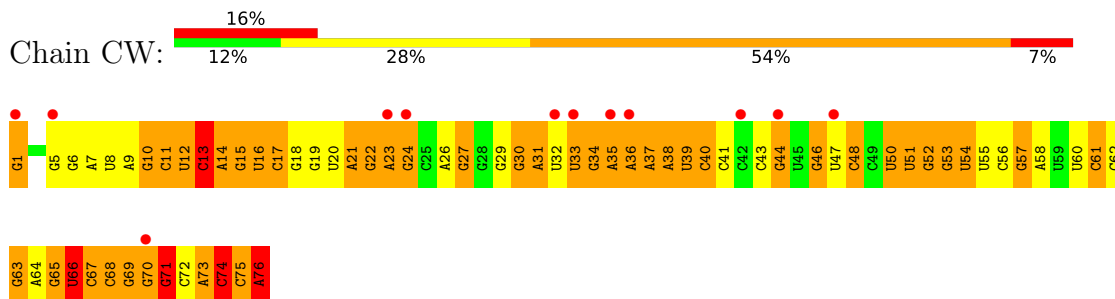
- Molecule 23: E-Site tRNA Phe and A-site tRNA Phe



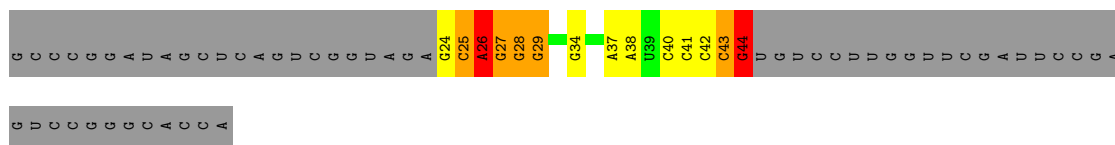
- Molecule 23: E-Site tRNA Phe and A-site tRNA Phe



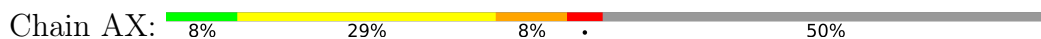
- Molecule 23: E-Site tRNA Phe and A-site tRNA Phe



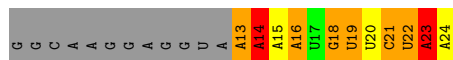
- Molecule 23: E-Site tRNA Phe and A-site tRNA Phe



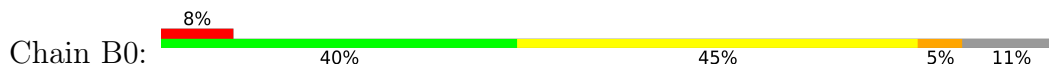
• Molecule 24: mRNA



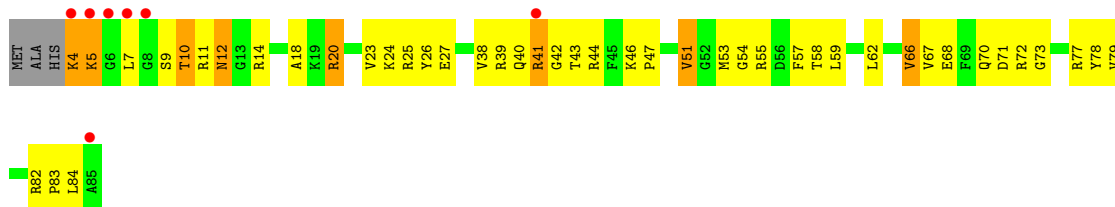
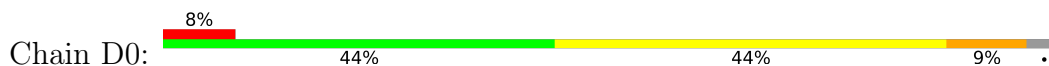
• Molecule 24: mRNA



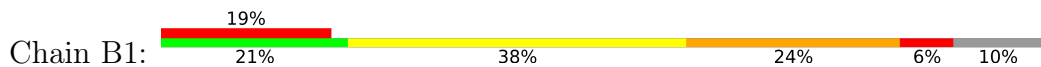
• Molecule 25: 50S ribosomal protein L27

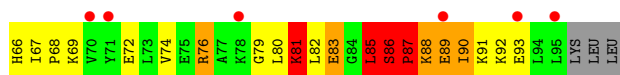


• Molecule 25: 50S ribosomal protein L27

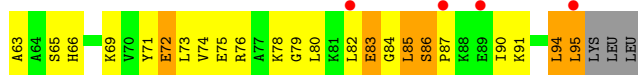
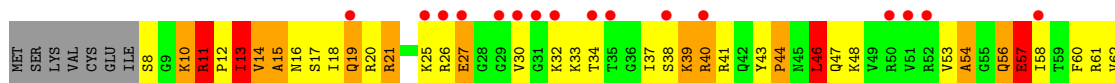


• Molecule 26: 50S ribosomal protein L28

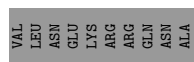
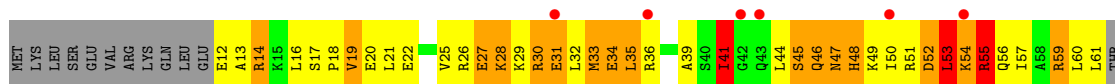




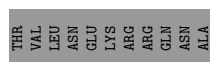
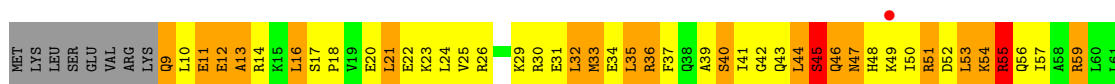
- Molecule 26: 50S ribosomal protein L28



- Molecule 27: 50S ribosomal protein L29



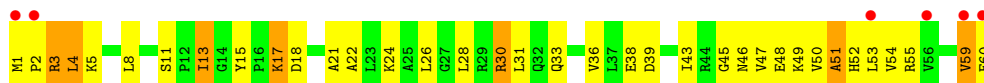
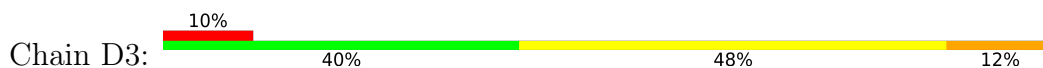
- Molecule 27: 50S ribosomal protein L29



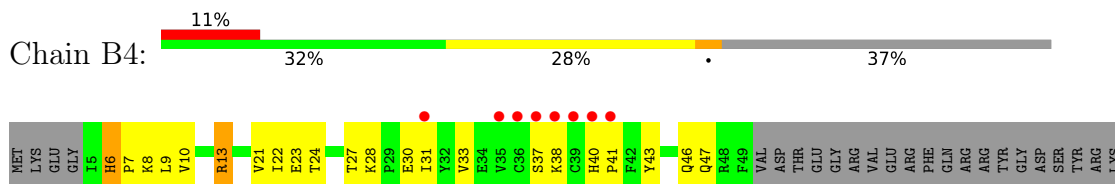
- Molecule 28: 50S ribosomal protein L30



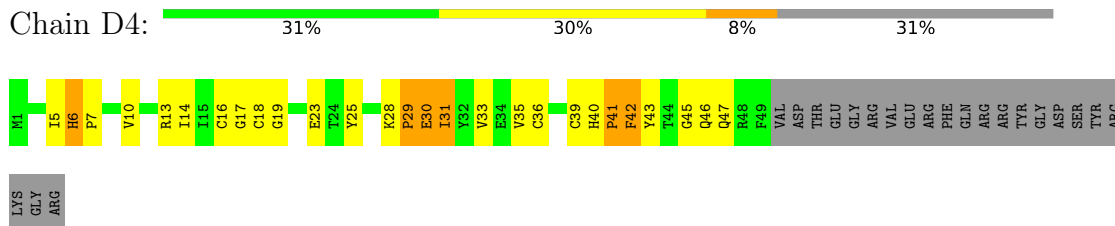
- Molecule 28: 50S ribosomal protein L30



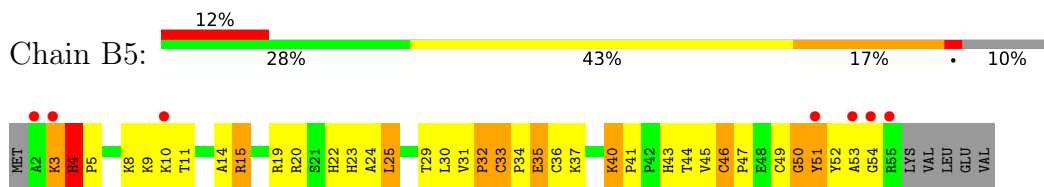
- Molecule 29: 50S ribosomal protein L31



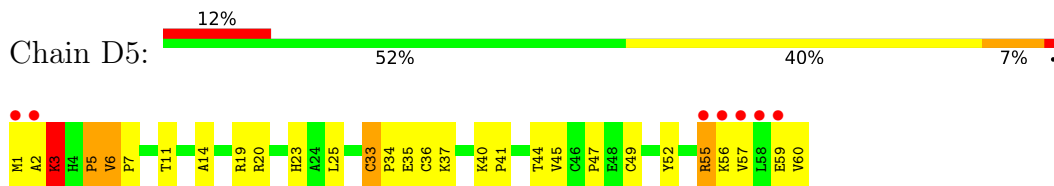
• Molecule 29: 50S ribosomal protein L31



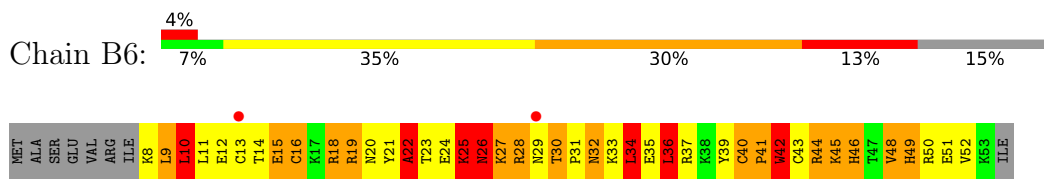
• Molecule 30: 50S ribosomal protein L32



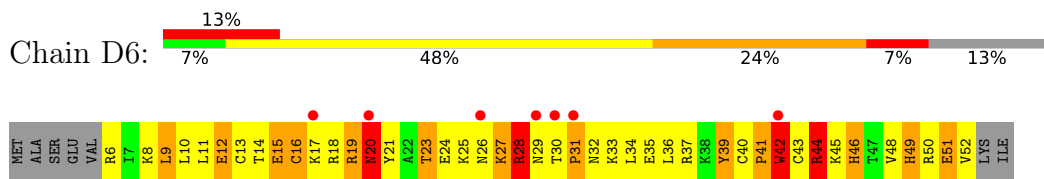
• Molecule 30: 50S ribosomal protein L32



• Molecule 31: 50S ribosomal protein L33

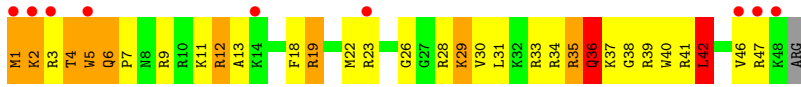


• Molecule 31: 50S ribosomal protein L33

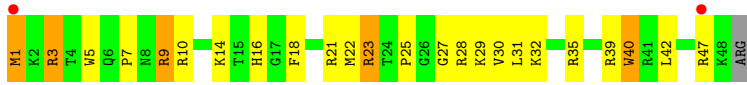


• Molecule 32: 50S ribosomal protein L34

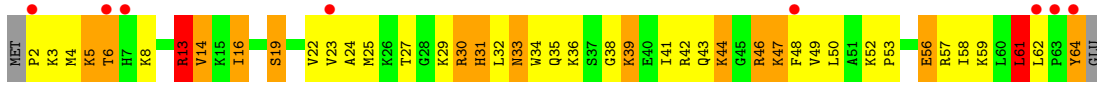




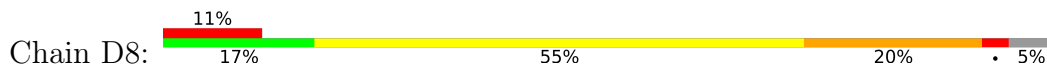
- Molecule 32: 50S ribosomal protein L34



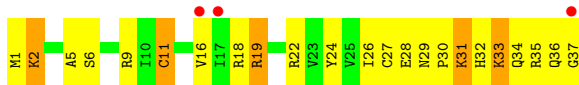
- Molecule 33: 50S ribosomal protein L35



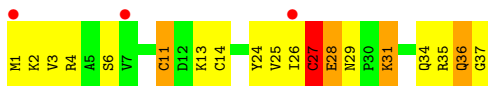
- Molecule 33: 50S ribosomal protein L35



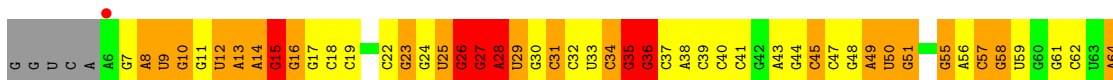
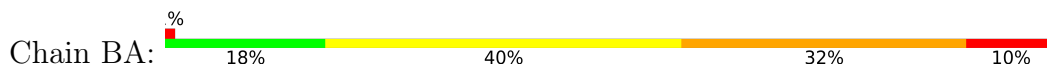
- Molecule 34: 50S ribosomal protein L36

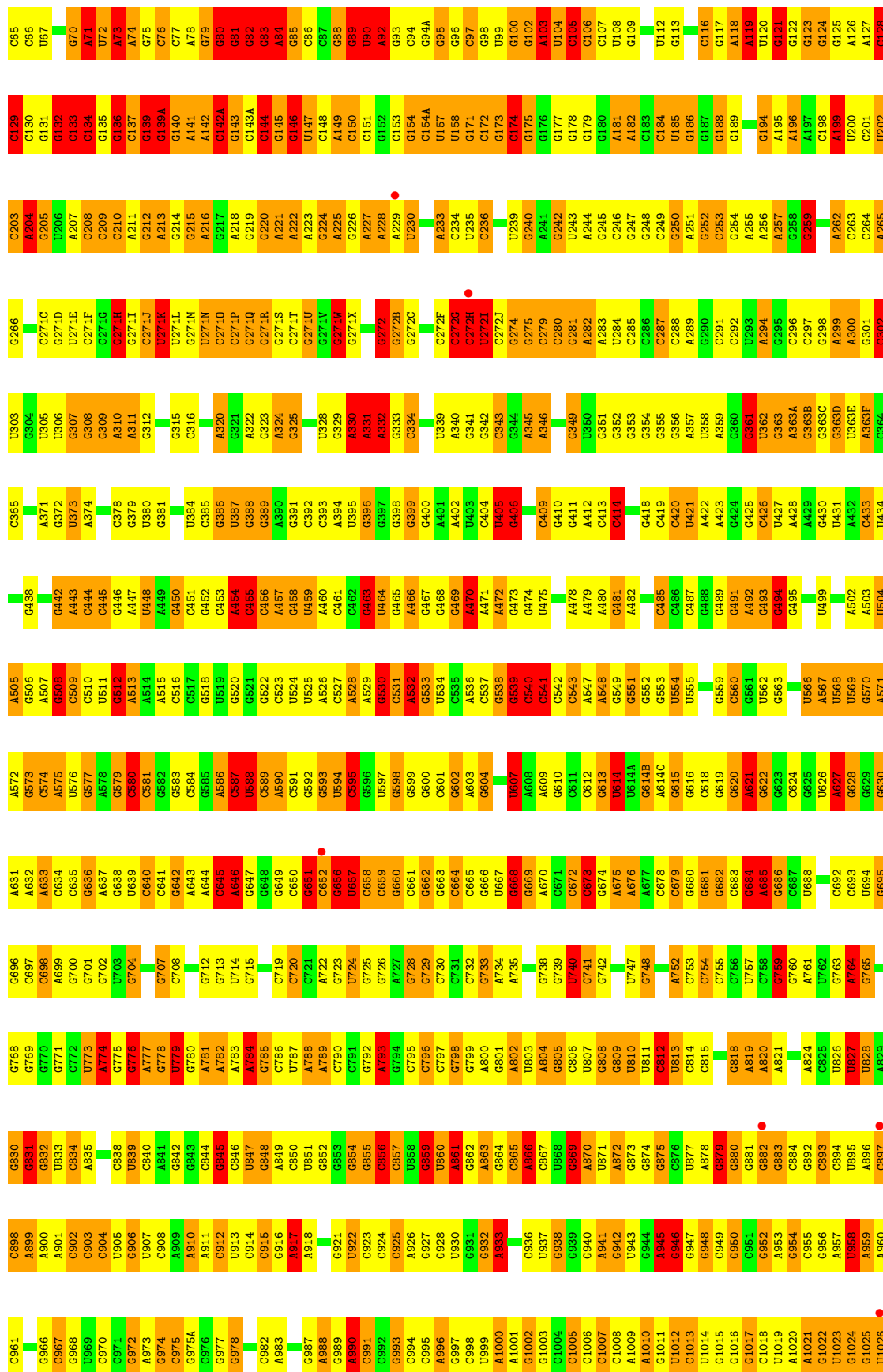


- Molecule 34: 50S ribosomal protein L36



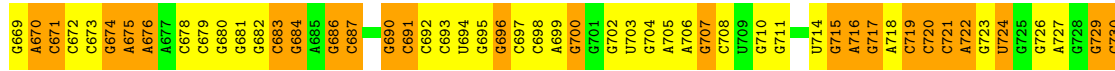
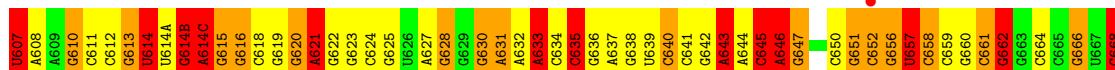
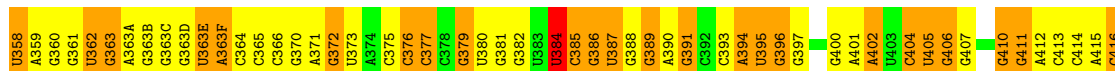
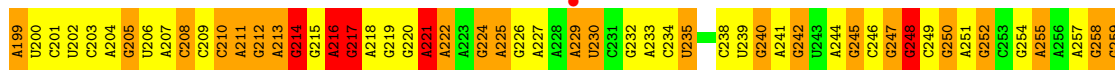
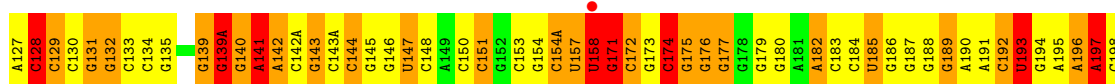
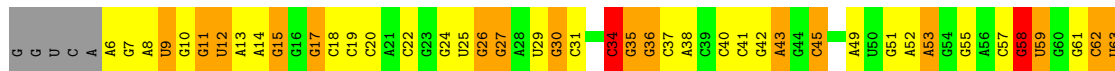
- Molecule 35: 23S ribosomal RNA

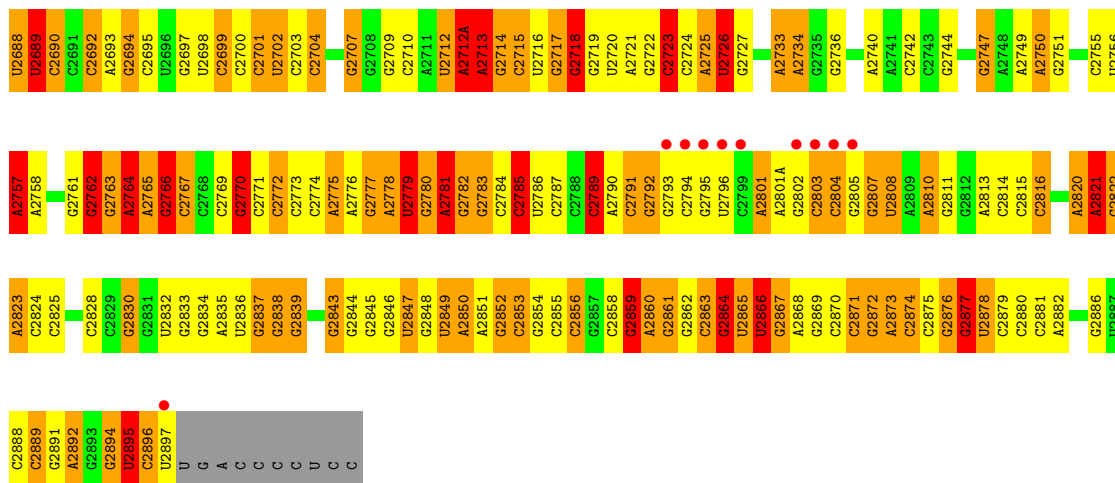




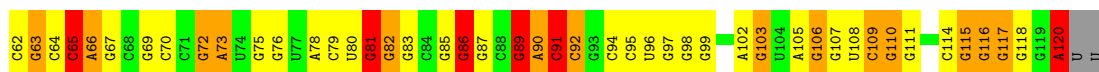
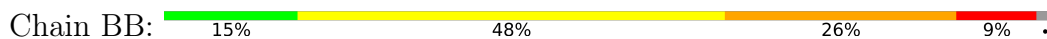


● Molecule 35: 23S ribosomal RNA

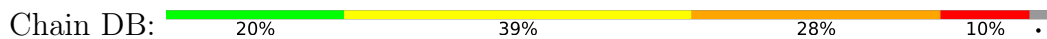




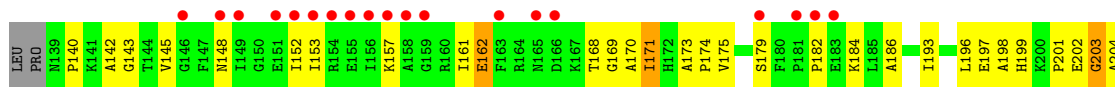
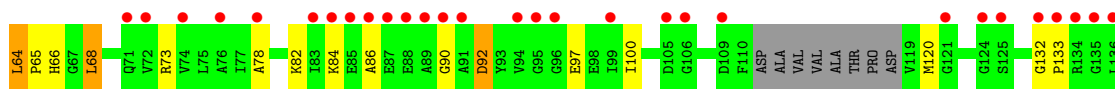
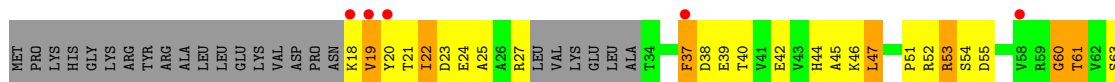
• Molecule 36: 5S ribosomal RNA

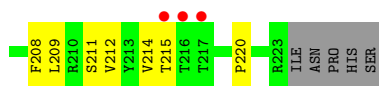


• Molecule 36: 5S ribosomal RNA

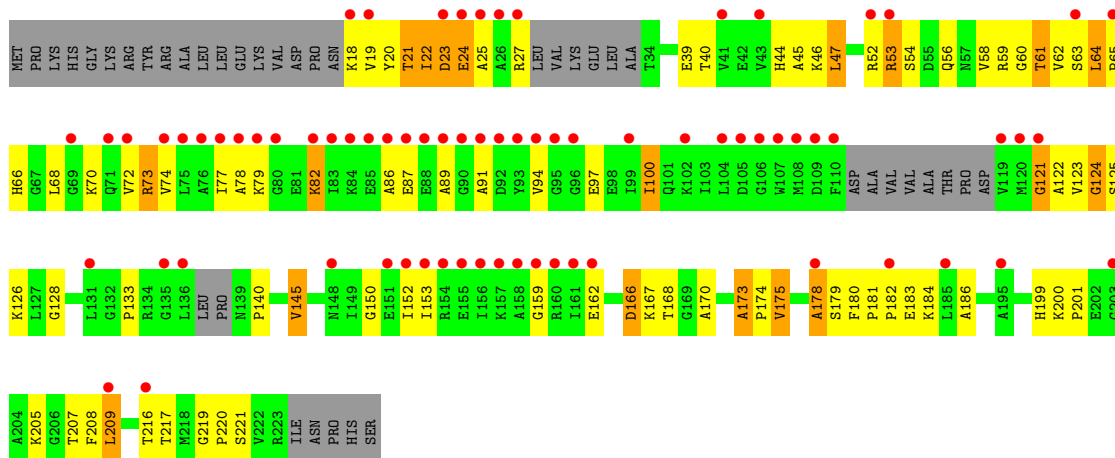


• Molecule 37: 50S ribosomal protein L1

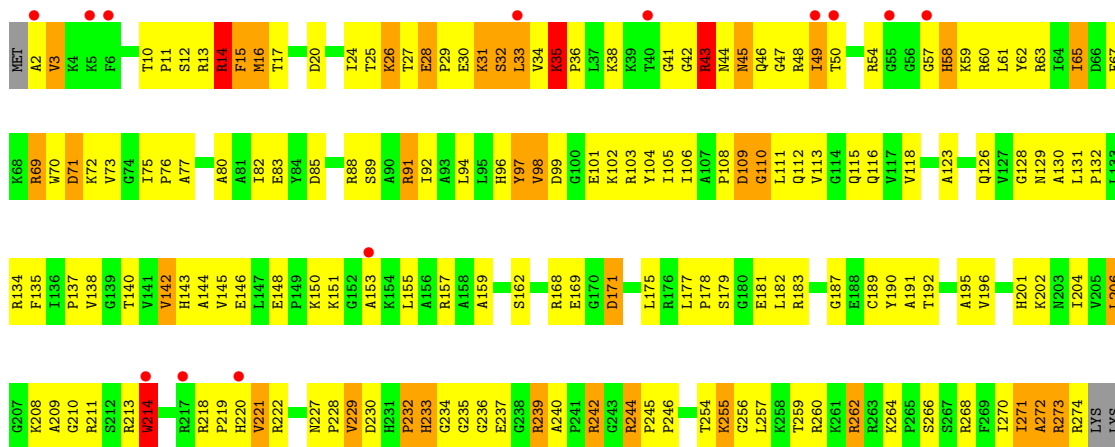




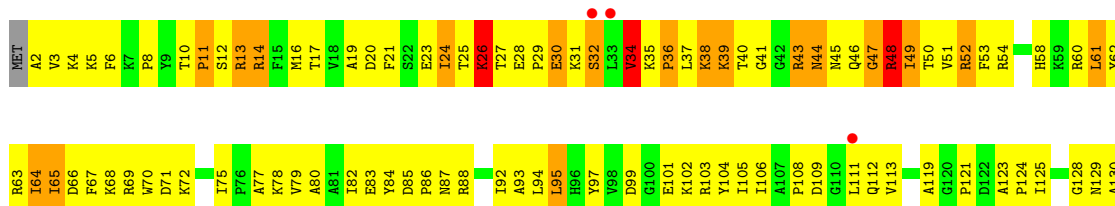
- Molecule 37: 50S ribosomal protein L1

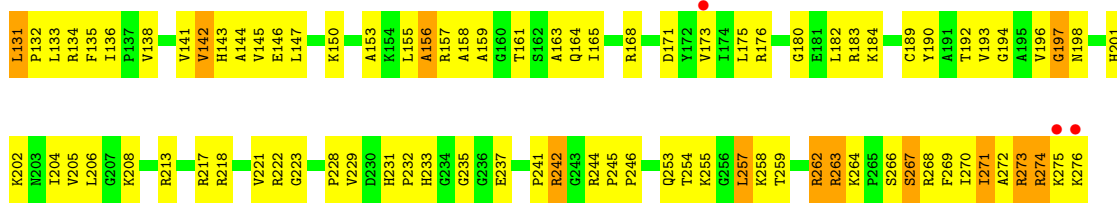


- Molecule 38: 50S ribosomal protein L2

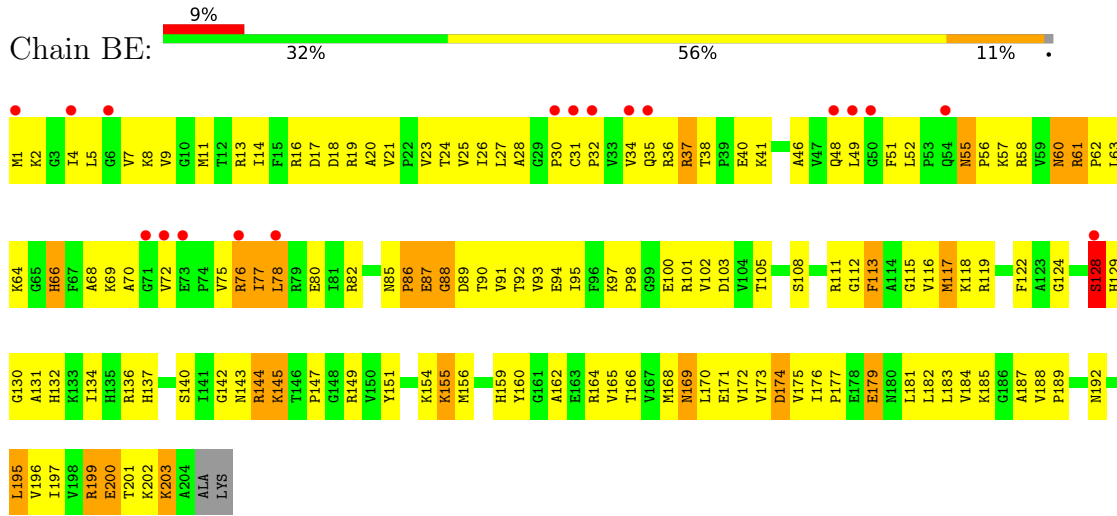


- Molecule 38: 50S ribosomal protein L2

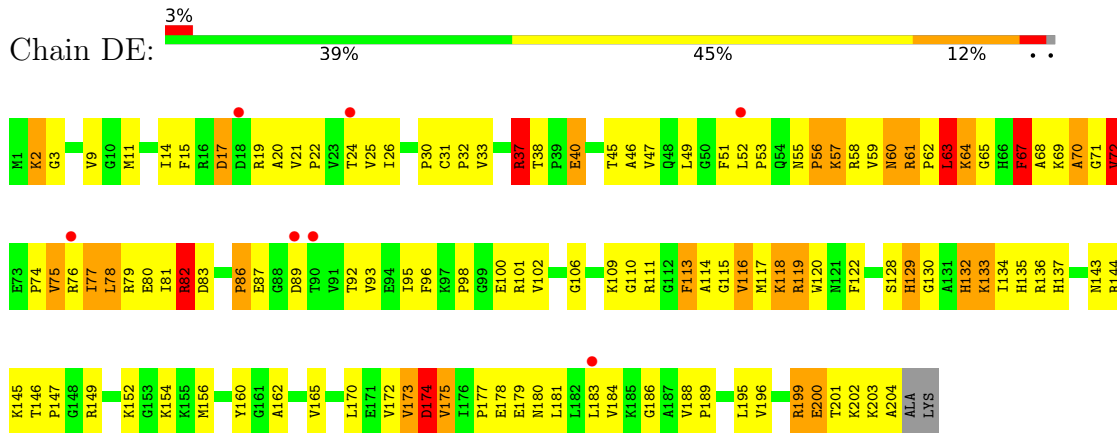




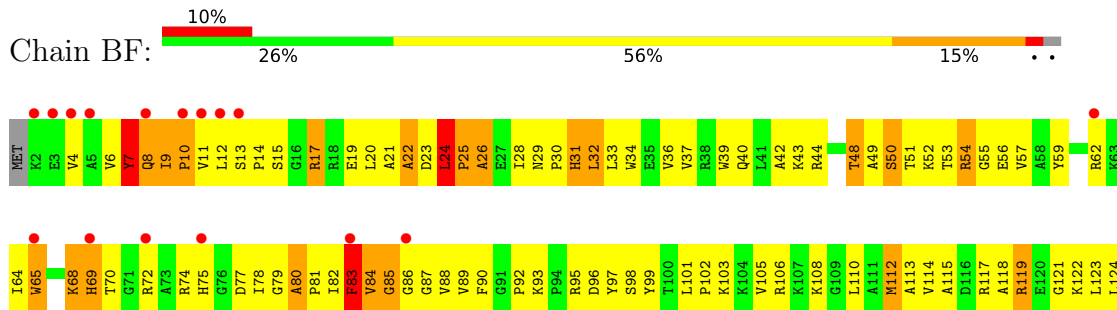
● Molecule 39: 50S ribosomal protein L3

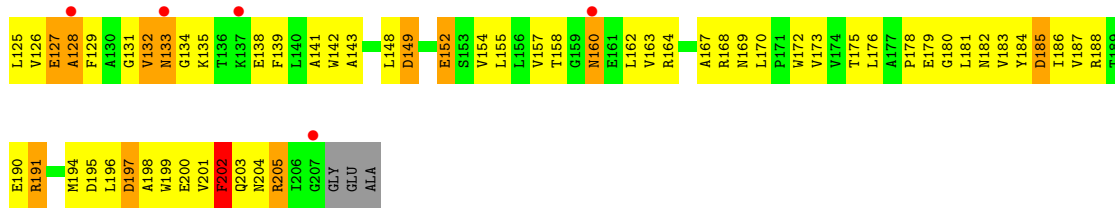


● Molecule 39: 50S ribosomal protein L3

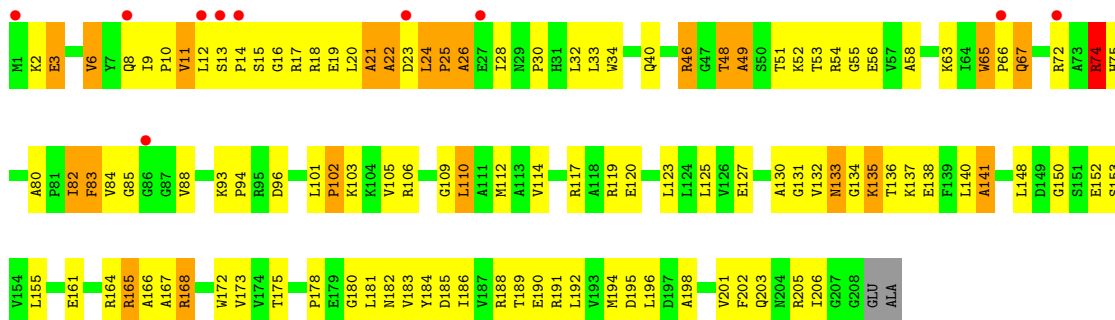


● Molecule 40: 50S ribosomal protein L4

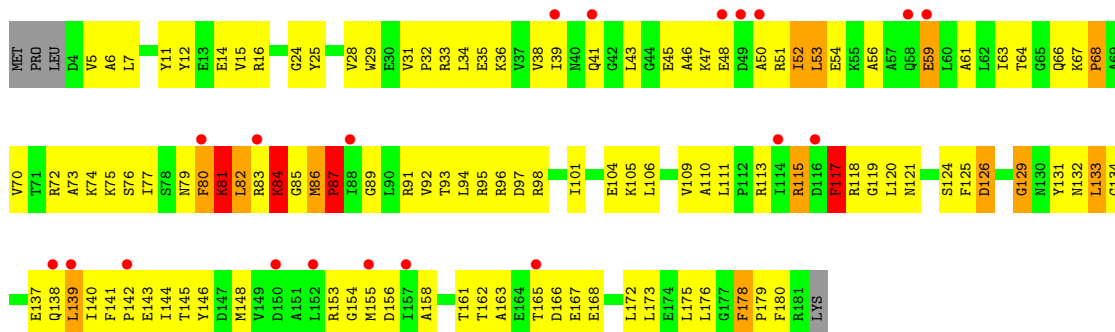




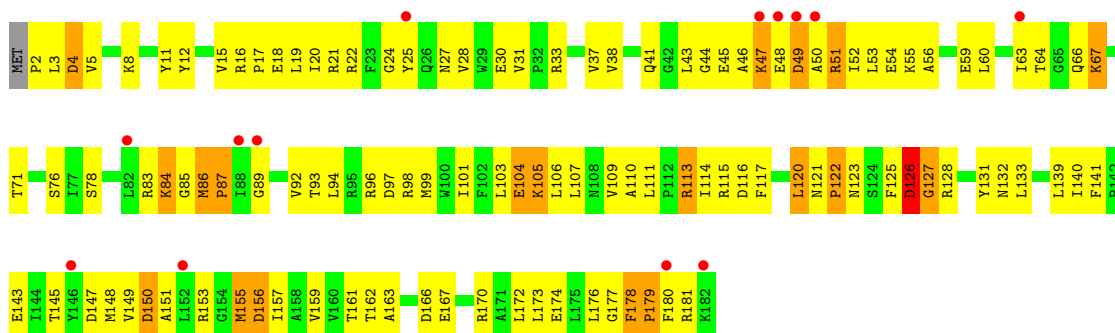
• Molecule 40: 50S ribosomal protein L4



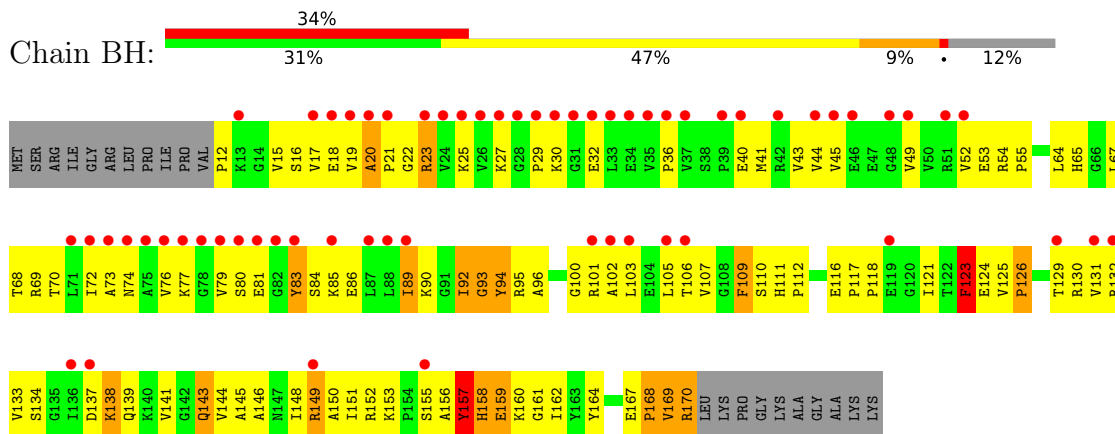
• Molecule 41: 50S ribosomal protein L5



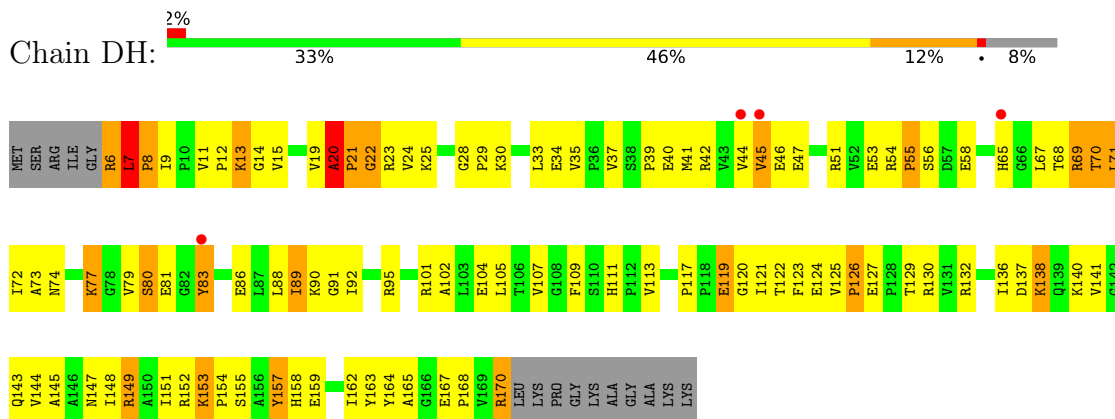
• Molecule 41: 50S ribosomal protein L5



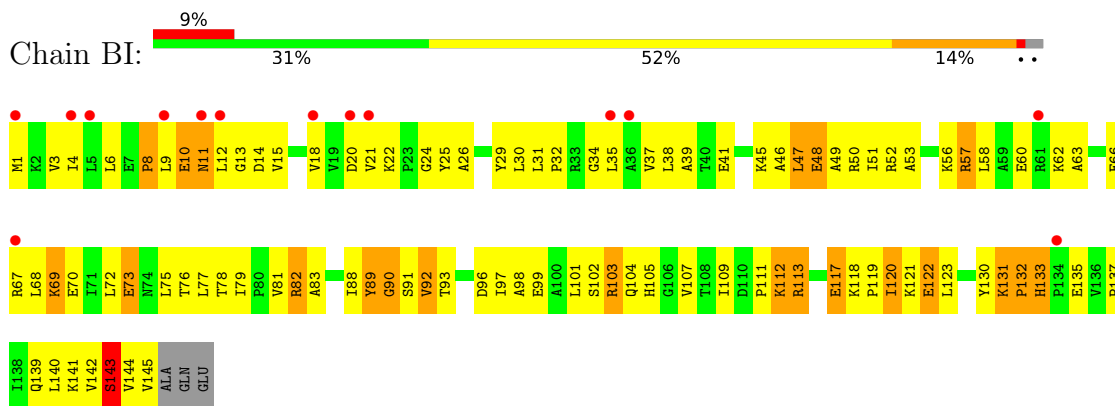
● Molecule 42: 50S ribosomal protein L6



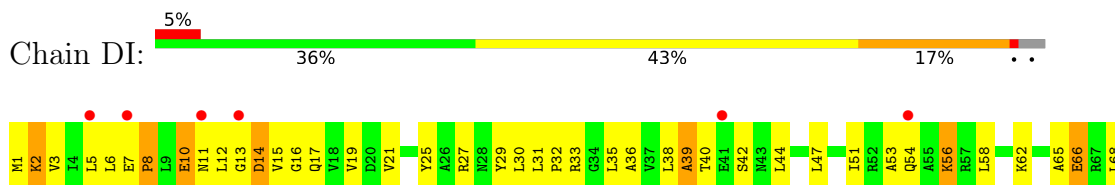
● Molecule 42: 50S ribosomal protein L6

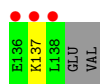


● Molecule 43: 50S ribosomal protein L9

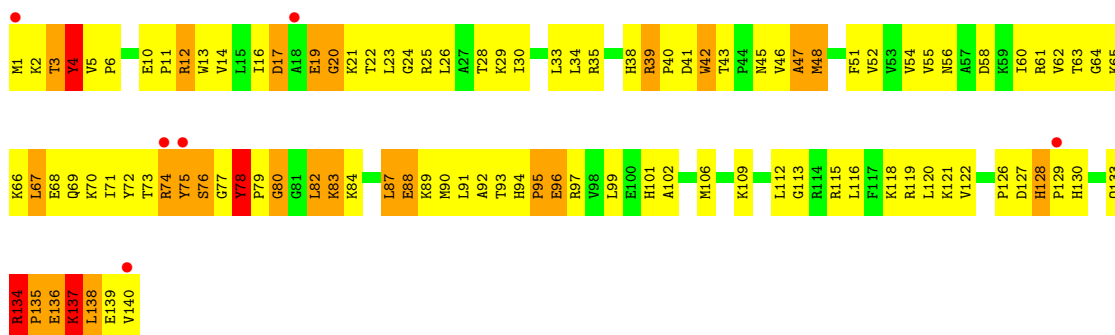


● Molecule 43: 50S ribosomal protein L9

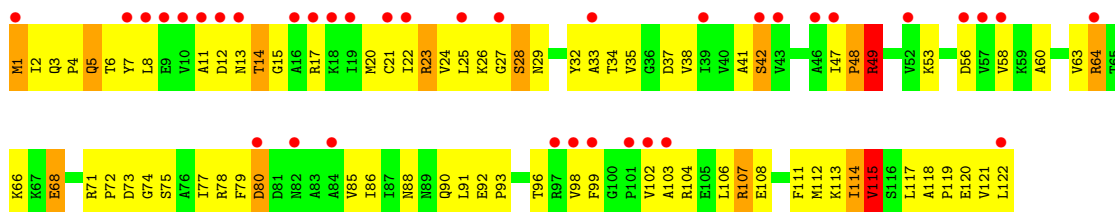




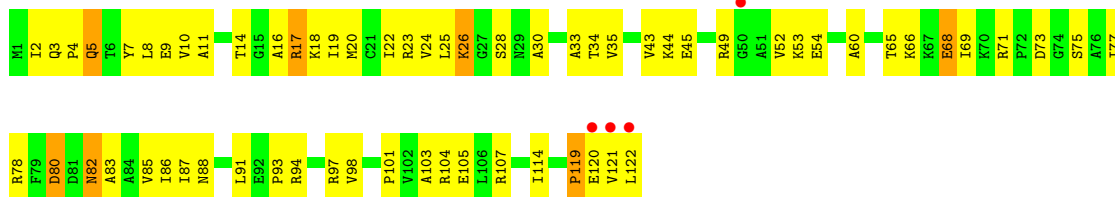
- Molecule 46: 50S ribosomal protein L13



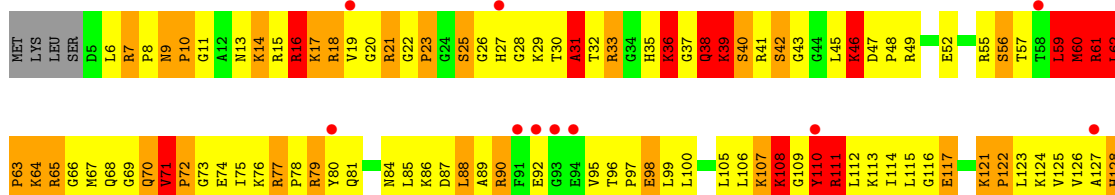
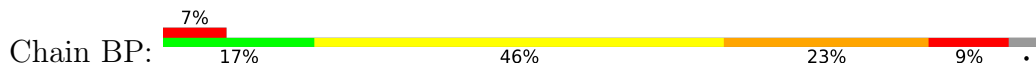
- Molecule 47: 50S ribosomal protein L14

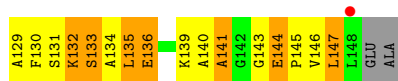


- Molecule 47: 50S ribosomal protein L14

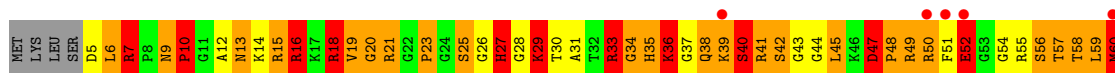
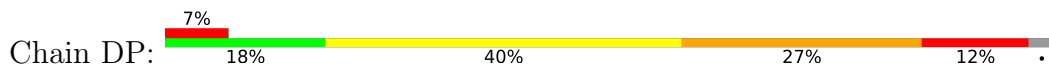


- Molecule 48: 50S ribosomal protein L15

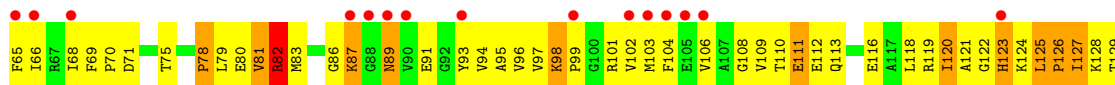




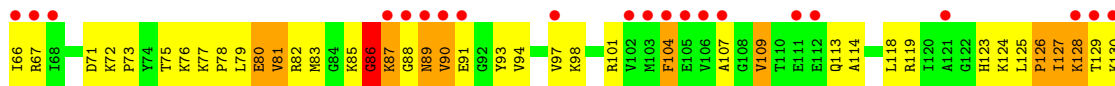
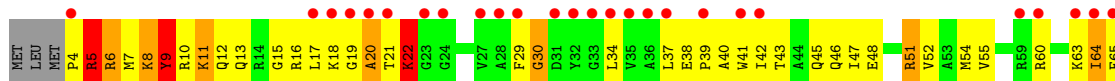
• Molecule 48: 50S ribosomal protein L15



• Molecule 49: 50S ribosomal protein L16

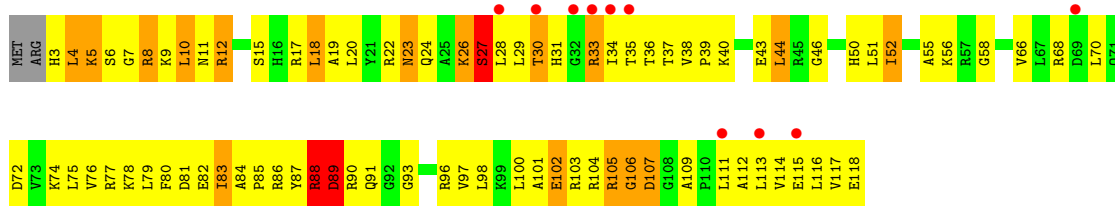


• Molecule 49: 50S ribosomal protein L16

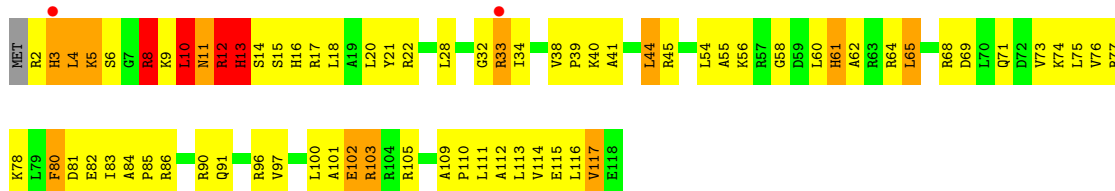


• Molecule 50: 50S ribosomal protein L17

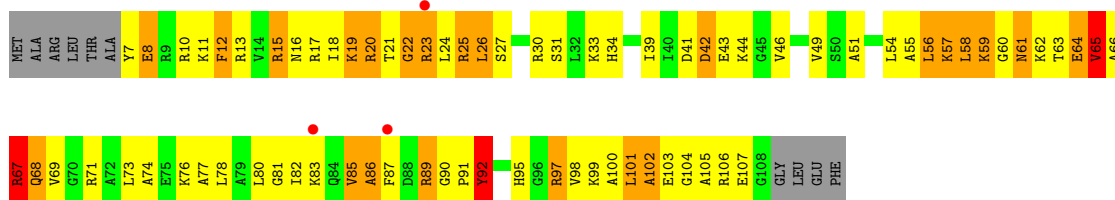
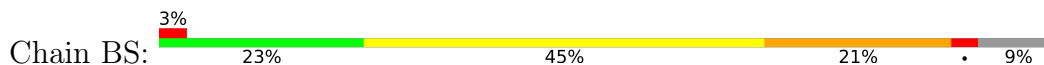




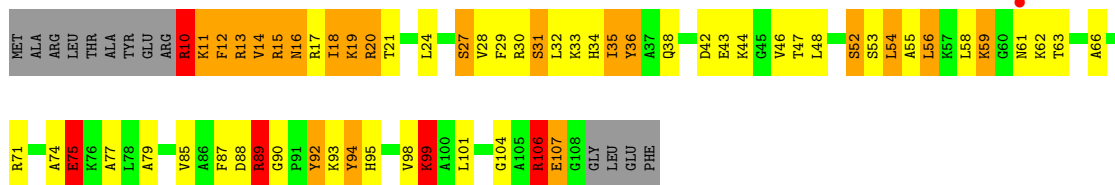
• Molecule 50: 50S ribosomal protein L17



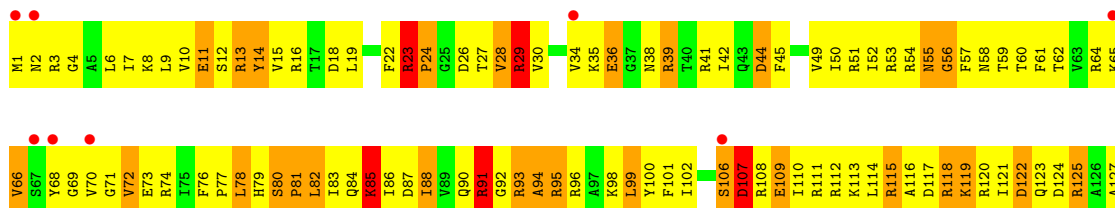
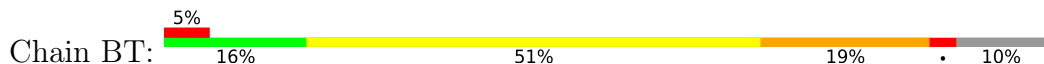
• Molecule 51: 50S ribosomal protein L18

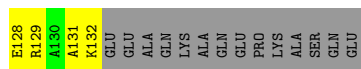


• Molecule 51: 50S ribosomal protein L18

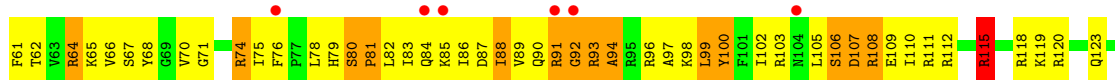
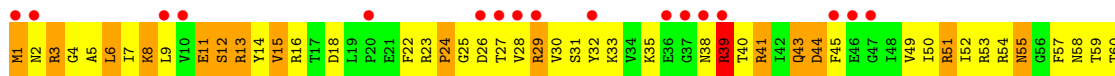


• Molecule 52: 50S ribosomal protein L19

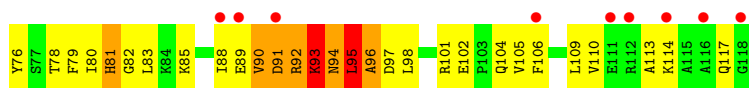




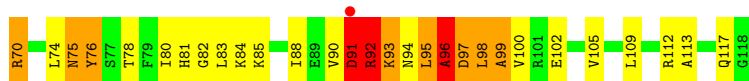
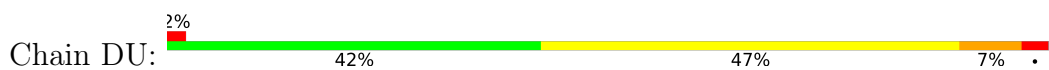
- Molecule 52: 50S ribosomal protein L19



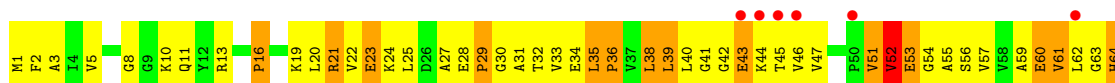
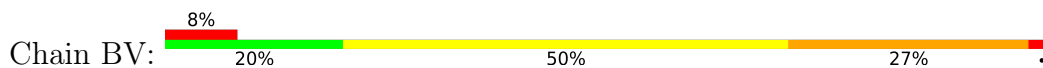
- Molecule 53: 50S ribosomal protein L20



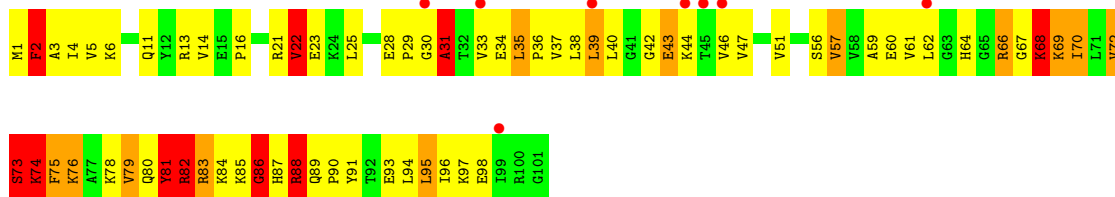
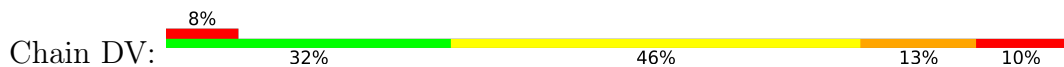
- Molecule 53: 50S ribosomal protein L20



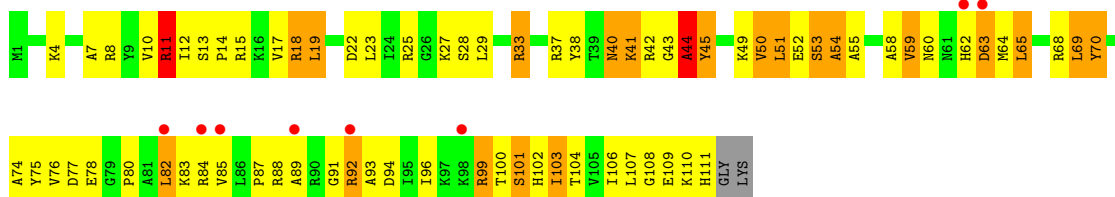
- Molecule 54: 50S ribosomal protein L21



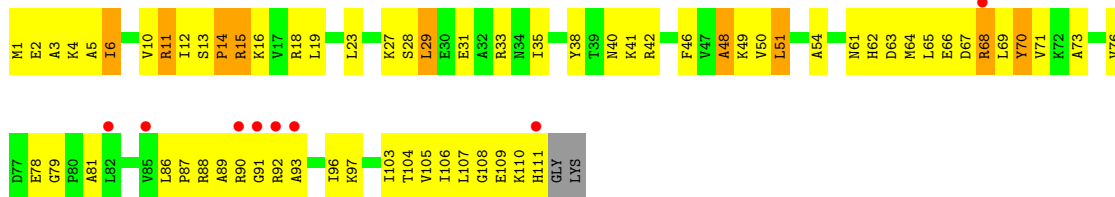
- Molecule 54: 50S ribosomal protein L21



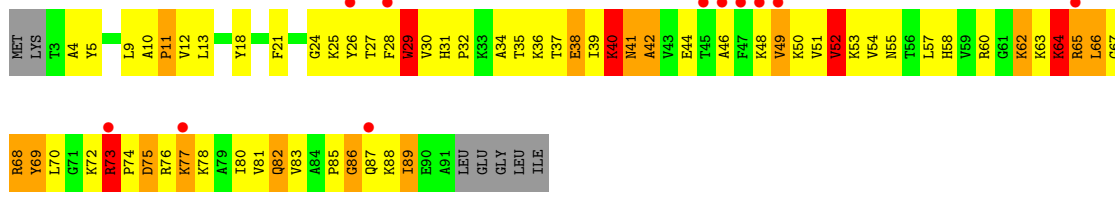
- Molecule 55: 50S ribosomal protein L22



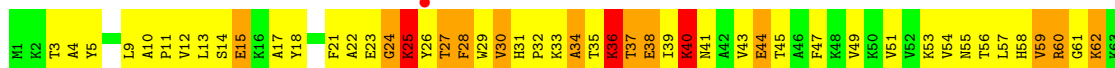
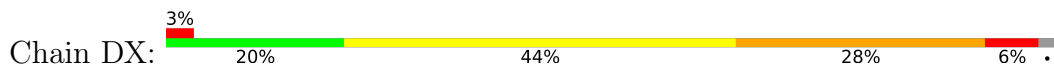
- Molecule 55: 50S ribosomal protein L22

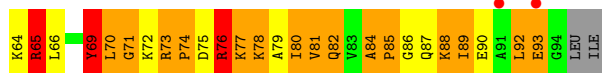


- Molecule 56: 50S ribosomal protein L23

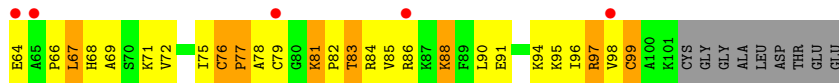
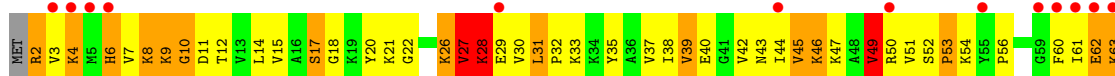
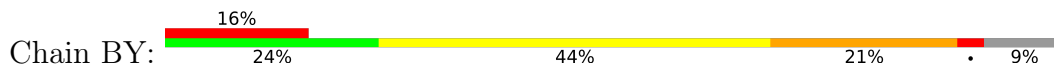


- Molecule 56: 50S ribosomal protein L23

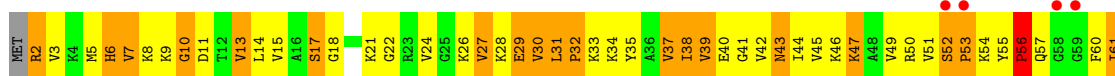
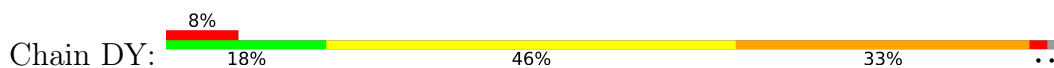




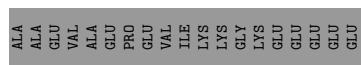
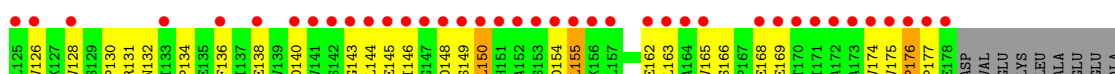
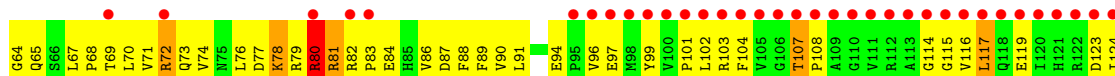
• Molecule 57: 50S ribosomal protein L24



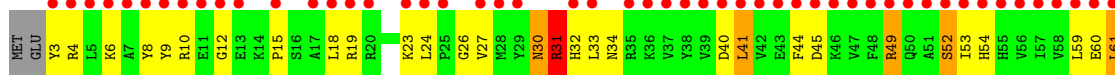
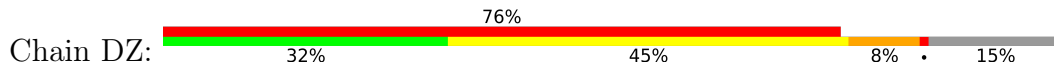
• Molecule 57: 50S ribosomal protein L24



• Molecule 58: 50S ribosomal protein L25



• Molecule 58: 50S ribosomal protein L25



| | | |
|------|------|-----|
| P62 | R192 | LYS |
| D63 | D123 | LEU |
| G64 | I124 | ALA |
| Q65 | L125 | GLU |
| S66 | V126 | GLU |
| L67 | K127 | ALA |
| P68 | V128 | ALA |
| T69 | S129 | ALA |
| L70 | P130 | GLU |
| V71 | R131 | VAL |
| R72 | N132 | ALA |
| Q73 | I133 | GLU |
| V74 | P134 | PRO |
| N75 | E135 | GLU |
| L76 | F136 | VAL |
| D77 | I137 | ILE |
| K78 | E138 | LYS |
| R79 | V139 | LYS |
| R80 | D140 | GLY |
| R81 | V141 | LYS |
| R82 | S142 | GLU |
| P83 | G143 | GLU |
| E84 | L144 | GLU |
| H85 | E145 | GLU |
| V86 | L146 | GLU |
| D87 | G147 | GLU |
| F88 | D148 | GLU |
| F89 | S149 | GLU |
| V90 | L150 | GLU |
| L91 | H151 | GLU |
| S92 | A152 | GLU |
| D93 | S153 | GLU |
| E94 | D154 | GLU |
| P95 | L155 | GLU |
| V96 | K156 | GLU |
| E97 | L157 | GLU |
| M98 | P158 | GLU |
| Y99 | P159 | GLU |
| V100 | G160 | GLU |
| P101 | V161 | GLU |
| L102 | E162 | GLU |
| R103 | L163 | GLU |
| F104 | A164 | GLU |
| V105 | V165 | GLU |
| G106 | S166 | GLU |
| T107 | P167 | GLU |
| P108 | E168 | GLU |
| A109 | E169 | GLU |
| G110 | T170 | GLU |
| W111 | L171 | GLU |
| R112 | A172 | GLU |
| A113 | A173 | GLU |
| G114 | V174 | GLU |
| G115 | V175 | GLU |
| V116 | P176 | GLU |
| L117 | P177 | GLU |
| G118 | E178 | GLU |
| E119 | ASP | ASP |
| I120 | VAL | VAL |
| H121 | GLU | GLU |

4 Data and refinement statistics

| Property | Value | Source |
|---|---|------------------|
| Space group | P 21 21 21 | Depositor |
| Cell constants a, b, c, α , β , γ | 209.45Å 449.38Å 619.59Å 90.00° 90.00° 90.00° | Depositor |
| Resolution (Å) | 147.06 – 3.27 147.06 – 3.27 | Depositor EDS |
| % Data completeness (in resolution range) | 99.7 (147.06-3.27) 99.7 (147.06-3.27) | Depositor EDS |
| R_{merge} | (Not available) | Depositor |
| R_{sym} | (Not available) | Depositor |
| $\langle I/\sigma(I) \rangle$ ¹ | 1.40 (at 3.26Å) | Xtrriage |
| Refinement program | PHENIX 1.16_3549 | Depositor |
| R, R_{free} | 0.214 , 0.277 0.214 , 0.277 | Depositor DCC |
| R_{free} test set | 44294 reflections (4.98%) | wwPDB-VP |
| Wilson B-factor (Å ²) | 85.1 | Xtrriage |
| Anisotropy | 0.091 | Xtrriage |
| Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²) | 0.25 , 75.3 | EDS |
| L-test for twinning ² | $\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$ | Xtrriage |
| Estimated twinning fraction | No twinning to report. | Xtrriage |
| F_o, F_c correlation | 0.92 | EDS |
| Total number of atoms | 296449 | wwPDB-VP |
| Average B, all atoms (Å ²) | 86.0 | wwPDB-VP |

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.44% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical 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: MG, EDS, ZN

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

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|-----------------|-------------|------------------|
| | | RMSZ | # $ Z > 5$ | RMSZ | # $ Z > 5$ |
| 1 | AA | 0.93 | 31/36190 (0.1%) | 1.66 | 836/56486 (1.5%) |
| 1 | CA | 0.90 | 14/36193 (0.0%) | 1.53 | 592/56490 (1.0%) |
| 2 | AB | 0.50 | 1/1816 (0.1%) | 0.90 | 6/2445 (0.2%) |
| 2 | CB | 0.45 | 0/1935 | 0.66 | 1/2609 (0.0%) |
| 3 | AC | 0.43 | 0/1636 | 0.68 | 1/2205 (0.0%) |
| 3 | CC | 0.50 | 0/1644 | 0.68 | 1/2215 (0.0%) |
| 4 | AD | 0.61 | 0/1733 | 0.82 | 2/2318 (0.1%) |
| 4 | CD | 0.53 | 0/1733 | 0.74 | 0/2318 |
| 5 | AE | 0.50 | 0/1162 | 0.94 | 4/1564 (0.3%) |
| 5 | CE | 0.60 | 1/1171 (0.1%) | 0.79 | 0/1576 |
| 6 | AF | 0.52 | 0/856 | 0.70 | 0/1154 |
| 6 | CF | 0.56 | 0/856 | 0.68 | 1/1154 (0.1%) |
| 7 | AG | 0.48 | 0/1276 | 0.71 | 1/1709 (0.1%) |
| 7 | CG | 0.53 | 0/1276 | 0.73 | 4/1709 (0.2%) |
| 8 | AH | 1.00 | 6/1136 (0.5%) | 1.06 | 6/1527 (0.4%) |
| 8 | CH | 0.54 | 0/1136 | 0.73 | 1/1527 (0.1%) |
| 9 | AI | 0.45 | 0/964 | 0.64 | 0/1294 |
| 9 | CI | 0.42 | 0/1029 | 0.71 | 2/1379 (0.1%) |
| 10 | AJ | 0.44 | 0/807 | 0.71 | 0/1085 |
| 10 | CJ | 0.46 | 0/807 | 0.76 | 1/1085 (0.1%) |
| 11 | AK | 0.54 | 0/900 | 0.75 | 0/1213 |
| 11 | CK | 0.54 | 0/900 | 0.72 | 0/1213 |
| 12 | AL | 0.67 | 0/972 | 0.91 | 1/1301 (0.1%) |
| 12 | CL | 0.69 | 0/986 | 0.96 | 1/1320 (0.1%) |
| 13 | AM | 0.44 | 0/932 | 0.71 | 1/1249 (0.1%) |
| 13 | CM | 0.51 | 0/956 | 0.68 | 0/1281 |
| 14 | AN | 0.55 | 0/500 | 0.83 | 0/664 |
| 14 | CN | 0.58 | 0/501 | 0.84 | 0/664 |
| 15 | AO | 0.48 | 0/745 | 0.78 | 1/992 (0.1%) |
| 15 | CO | 0.53 | 0/745 | 0.67 | 0/992 |
| 16 | AP | 0.63 | 0/716 | 0.88 | 2/963 (0.2%) |
| 16 | CP | 0.54 | 0/716 | 0.85 | 2/963 (0.2%) |

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|------------------|-------------|--------------------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 17 | AQ | 0.57 | 0/836 | 0.77 | 1/1117 (0.1%) |
| 17 | CQ | 0.56 | 0/836 | 0.83 | 0/1117 |
| 18 | AR | 0.51 | 0/579 | 0.78 | 1/768 (0.1%) |
| 18 | CR | 0.54 | 0/579 | 0.82 | 0/768 |
| 19 | AS | 0.45 | 0/642 | 0.76 | 0/865 |
| 19 | CS | 0.55 | 0/642 | 0.76 | 0/865 |
| 20 | AT | 0.47 | 0/765 | 0.72 | 1/1007 (0.1%) |
| 20 | CT | 0.47 | 0/765 | 0.77 | 0/1007 |
| 21 | AU | 0.47 | 0/212 | 0.74 | 0/277 |
| 21 | CU | 0.62 | 0/221 | 0.74 | 0/288 |
| 22 | AV | 0.84 | 1/1812 (0.1%) | 1.59 | 39/2823 (1.4%) |
| 22 | CV | 0.96 | 1/1835 (0.1%) | 1.70 | 38/2857 (1.3%) |
| 23 | AW | 0.71 | 1/1813 (0.1%) | 1.52 | 37/2823 (1.3%) |
| 23 | AY | 1.24 | 3/459 (0.7%) | 1.96 | 18/714 (2.5%) |
| 23 | CW | 0.73 | 1/1813 (0.1%) | 1.45 | 25/2823 (0.9%) |
| 23 | CY | 0.93 | 3/507 (0.6%) | 1.56 | 7/789 (0.9%) |
| 24 | AX | 0.90 | 0/285 | 1.66 | 6/441 (1.4%) |
| 24 | CX | 1.11 | 0/285 | 1.87 | 13/441 (2.9%) |
| 25 | B0 | 0.64 | 0/615 | 0.92 | 1/819 (0.1%) |
| 25 | D0 | 0.80 | 1/653 (0.2%) | 1.04 | 1/869 (0.1%) |
| 26 | B1 | 1.05 | 1/699 (0.1%) | 1.30 | 8/929 (0.9%) |
| 26 | D1 | 1.07 | 2/699 (0.3%) | 1.39 | 6/929 (0.6%) |
| 27 | B2 | 0.70 | 0/422 | 1.04 | 1/558 (0.2%) |
| 27 | D2 | 1.02 | 0/448 | 1.59 | 7/593 (1.2%) |
| 28 | B3 | 0.59 | 0/464 | 0.74 | 0/623 |
| 28 | D3 | 0.65 | 0/481 | 0.90 | 1/646 (0.2%) |
| 29 | B4 | 0.46 | 0/221 | 0.72 | 0/306 |
| 29 | D4 | 0.36 | 0/240 | 0.76 | 0/332 |
| 30 | B5 | 0.79 | 0/432 | 1.00 | 2/585 (0.3%) |
| 30 | D5 | 0.82 | 1/481 (0.2%) | 1.02 | 1/649 (0.2%) |
| 31 | B6 | 1.00 | 1/405 (0.2%) | 1.18 | 3/540 (0.6%) |
| 31 | D6 | 1.10 | 5/415 (1.2%) | 1.24 | 2/554 (0.4%) |
| 32 | B7 | 0.89 | 1/426 (0.2%) | 1.11 | 5/561 (0.9%) |
| 32 | D7 | 0.79 | 1/426 (0.2%) | 0.97 | 2/561 (0.4%) |
| 33 | B8 | 1.06 | 3/515 (0.6%) | 1.47 | 6/679 (0.9%) |
| 33 | D8 | 0.98 | 0/502 | 1.37 | 6/661 (0.9%) |
| 34 | B9 | 0.56 | 0/310 | 0.89 | 1/407 (0.2%) |
| 34 | D9 | 0.62 | 0/310 | 0.95 | 1/407 (0.2%) |
| 35 | BA | 1.16 | 199/68122 (0.3%) | 1.89 | 2611/106350 (2.5%) |
| 35 | DA | 1.31 | 367/68122 (0.5%) | 2.03 | 3452/106350 (3.2%) |
| 36 | BB | 0.81 | 0/2881 | 1.58 | 52/4494 (1.2%) |
| 36 | DB | 1.00 | 4/2853 (0.1%) | 1.80 | 95/4451 (2.1%) |
| 37 | BC | 0.32 | 0/1144 | 0.62 | 0/1554 |

| Mol | Chain | Bond lengths | | Bond angles | |
|-----|-------|--------------|-------------------|-------------|--------------------|
| | | RMSZ | # Z >5 | RMSZ | # Z >5 |
| 37 | DC | 0.31 | 0/1144 | 0.57 | 0/1554 |
| 38 | BD | 0.79 | 0/2176 | 1.01 | 9/2933 (0.3%) |
| 38 | DD | 0.82 | 1/2194 (0.0%) | 1.05 | 10/2955 (0.3%) |
| 39 | BE | 0.70 | 0/1596 | 0.98 | 4/2153 (0.2%) |
| 39 | DE | 0.80 | 1/1596 (0.1%) | 1.01 | 3/2153 (0.1%) |
| 40 | BF | 0.72 | 2/1650 (0.1%) | 0.87 | 1/2234 (0.0%) |
| 40 | DF | 0.78 | 1/1662 (0.1%) | 0.98 | 5/2249 (0.2%) |
| 41 | BG | 0.47 | 0/1473 | 0.78 | 2/1983 (0.1%) |
| 41 | DG | 0.52 | 0/1499 | 0.81 | 3/2016 (0.1%) |
| 42 | BH | 0.45 | 0/1245 | 0.69 | 0/1682 |
| 42 | DH | 0.69 | 1/1295 (0.1%) | 0.89 | 4/1753 (0.2%) |
| 43 | BI | 0.52 | 0/1146 | 0.76 | 0/1551 |
| 43 | DI | 0.55 | 0/1139 | 0.87 | 3/1541 (0.2%) |
| 46 | BN | 0.68 | 0/1123 | 0.90 | 1/1515 (0.1%) |
| 46 | DN | 0.87 | 3/1147 (0.3%) | 0.96 | 2/1547 (0.1%) |
| 47 | BO | 0.71 | 0/943 | 0.93 | 3/1269 (0.2%) |
| 47 | DO | 0.78 | 0/943 | 0.88 | 0/1269 |
| 48 | BP | 0.90 | 3/1116 (0.3%) | 1.35 | 14/1485 (0.9%) |
| 48 | DP | 1.12 | 7/1131 (0.6%) | 1.56 | 22/1504 (1.5%) |
| 49 | BQ | 0.70 | 0/1095 | 1.00 | 7/1464 (0.5%) |
| 49 | DQ | 0.90 | 0/1104 | 1.21 | 5/1476 (0.3%) |
| 50 | BR | 0.74 | 0/963 | 1.09 | 5/1288 (0.4%) |
| 50 | DR | 0.74 | 0/974 | 1.08 | 6/1302 (0.5%) |
| 51 | BS | 0.75 | 3/822 (0.4%) | 1.05 | 4/1094 (0.4%) |
| 51 | DS | 0.71 | 0/789 | 1.10 | 2/1050 (0.2%) |
| 52 | BT | 0.72 | 0/1114 | 0.98 | 4/1488 (0.3%) |
| 52 | DT | 0.84 | 2/1155 (0.2%) | 1.12 | 5/1542 (0.3%) |
| 53 | BU | 0.77 | 0/982 | 0.87 | 4/1306 (0.3%) |
| 53 | DU | 0.83 | 1/982 (0.1%) | 0.99 | 2/1306 (0.2%) |
| 54 | BV | 0.70 | 0/790 | 1.48 | 4/1057 (0.4%) |
| 54 | DV | 0.92 | 1/790 (0.1%) | 1.32 | 11/1057 (1.0%) |
| 55 | BW | 0.82 | 0/897 | 1.16 | 8/1204 (0.7%) |
| 55 | DW | 0.70 | 0/897 | 0.97 | 5/1204 (0.4%) |
| 56 | BX | 0.83 | 2/718 (0.3%) | 1.08 | 2/965 (0.2%) |
| 56 | DX | 1.06 | 2/756 (0.3%) | 1.39 | 10/1014 (1.0%) |
| 57 | BY | 0.66 | 1/788 (0.1%) | 0.86 | 0/1051 |
| 57 | DY | 0.82 | 1/848 (0.1%) | 1.10 | 3/1132 (0.3%) |
| 58 | BZ | 0.46 | 1/1435 (0.1%) | 0.69 | 0/1949 |
| 58 | DZ | 0.53 | 0/1435 | 0.82 | 2/1949 (0.1%) |
| All | All | 1.01 | 682/317649 (0.2%) | 1.64 | 8092/475105 (1.7%) |

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 | 1 |
| 3 | AC | 0 | 1 |
| 3 | CC | 0 | 1 |
| 4 | AD | 0 | 2 |
| 4 | CD | 0 | 2 |
| 7 | CG | 0 | 1 |
| 8 | AH | 0 | 2 |
| 9 | CI | 0 | 1 |
| 10 | AJ | 0 | 3 |
| 10 | CJ | 0 | 2 |
| 12 | AL | 0 | 3 |
| 12 | CL | 0 | 4 |
| 14 | CN | 0 | 2 |
| 16 | AP | 0 | 2 |
| 16 | CP | 0 | 1 |
| 17 | AQ | 0 | 1 |
| 17 | CQ | 0 | 2 |
| 18 | AR | 0 | 1 |
| 18 | CR | 0 | 1 |
| 19 | CS | 0 | 1 |
| 20 | AT | 0 | 1 |
| 20 | CT | 0 | 2 |
| 26 | B1 | 0 | 5 |
| 26 | D1 | 0 | 4 |
| 27 | B2 | 0 | 3 |
| 27 | D2 | 0 | 5 |
| 29 | D4 | 0 | 2 |
| 30 | B5 | 0 | 2 |
| 31 | B6 | 0 | 4 |
| 31 | D6 | 0 | 4 |
| 32 | B7 | 0 | 4 |
| 32 | D7 | 0 | 1 |
| 33 | B8 | 0 | 2 |
| 33 | D8 | 0 | 1 |
| 37 | DC | 0 | 1 |
| 38 | BD | 0 | 4 |
| 38 | DD | 0 | 6 |
| 39 | BE | 0 | 3 |
| 39 | DE | 0 | 4 |
| 40 | BF | 0 | 2 |

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| Mol | Chain | #Chirality outliers | #Planarity outliers |
|-----|-------|---------------------|---------------------|
| 40 | DF | 0 | 1 |
| 41 | BG | 0 | 4 |
| 41 | DG | 0 | 1 |
| 42 | BH | 0 | 1 |
| 42 | DH | 0 | 2 |
| 43 | BI | 0 | 2 |
| 43 | DI | 0 | 3 |
| 46 | BN | 0 | 3 |
| 46 | DN | 0 | 5 |
| 47 | BO | 0 | 3 |
| 47 | DO | 0 | 1 |
| 48 | BP | 0 | 10 |
| 48 | DP | 0 | 12 |
| 49 | BQ | 0 | 6 |
| 49 | DQ | 0 | 5 |
| 50 | BR | 0 | 3 |
| 50 | DR | 0 | 1 |
| 51 | BS | 0 | 3 |
| 51 | DS | 0 | 5 |
| 52 | BT | 0 | 4 |
| 52 | DT | 0 | 6 |
| 53 | BU | 0 | 3 |
| 53 | DU | 0 | 3 |
| 54 | BV | 0 | 5 |
| 54 | DV | 0 | 5 |
| 55 | BW | 0 | 2 |
| 56 | BX | 0 | 4 |
| 56 | DX | 0 | 5 |
| 57 | BY | 0 | 2 |
| 57 | DY | 0 | 3 |
| 58 | DZ | 0 | 1 |
| All | All | 0 | 209 |

The worst 5 of 682 bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|--------|-------------|----------|
| 8 | AH | 104 | ARG | CG-CD | 17.27 | 1.95 | 1.51 |
| 35 | BA | 783 | A | N9-C4 | -13.33 | 1.29 | 1.37 |
| 8 | AH | 138 | TRP | CE3-CZ3 | -12.54 | 1.17 | 1.38 |
| 48 | DP | 16 | ARG | CZ-NH1 | -11.74 | 1.17 | 1.33 |
| 35 | DA | 528 | A | N9-C4 | -11.44 | 1.30 | 1.37 |

The worst 5 of 8092 bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|------|------|-----------|--------|-------------|----------|
| 54 | BV | 38 | LEU | CB-CG-CD2 | -27.88 | 63.60 | 111.00 |
| 35 | BA | 1899 | G | N3-C4-N9 | -23.15 | 112.11 | 126.00 |
| 35 | BA | 2818 | G | N1-C6-O6 | 22.38 | 133.33 | 119.90 |
| 35 | BA | 2818 | G | C5-C6-O6 | -22.14 | 115.32 | 128.60 |
| 35 | DA | 1779 | U | C5-C6-N1 | -21.39 | 112.01 | 122.70 |

There are no chirality outliers.

5 of 209 planarity outliers are listed below:

| Mol | Chain | Res | Type | Group |
|-----|-------|-----|------|---------|
| 2 | AB | 109 | SER | Peptide |
| 3 | AC | 161 | GLU | Peptide |
| 4 | AD | 31 | CYS | Peptide |
| 4 | AD | 32 | ALA | Peptide |
| 8 | AH | 7 | ALA | Peptide |

5.2 Too-close contacts [i](#)

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 | 32329 | 0 | 16318 | 1281 | 0 |
| 1 | CA | 32332 | 0 | 16317 | 1094 | 0 |
| 2 | AB | 1784 | 0 | 1833 | 164 | 0 |
| 2 | CB | 1900 | 0 | 1951 | 148 | 0 |
| 3 | AC | 1612 | 0 | 1677 | 106 | 0 |
| 3 | CC | 1620 | 0 | 1689 | 122 | 0 |
| 4 | AD | 1703 | 0 | 1763 | 150 | 0 |
| 4 | CD | 1703 | 0 | 1763 | 120 | 0 |
| 5 | AE | 1146 | 0 | 1207 | 77 | 0 |
| 5 | CE | 1155 | 0 | 1213 | 84 | 0 |
| 6 | AF | 843 | 0 | 857 | 45 | 0 |
| 6 | CF | 843 | 0 | 857 | 43 | 0 |
| 7 | AG | 1257 | 0 | 1296 | 98 | 0 |
| 7 | CG | 1257 | 0 | 1296 | 76 | 0 |
| 8 | AH | 1116 | 0 | 1177 | 114 | 0 |
| 8 | CH | 1116 | 0 | 1177 | 70 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 9 | AI | 947 | 0 | 979 | 93 | 0 |
| 9 | CI | 1010 | 0 | 1037 | 86 | 0 |
| 10 | AJ | 794 | 0 | 840 | 88 | 0 |
| 10 | CJ | 794 | 0 | 840 | 73 | 0 |
| 11 | AK | 885 | 0 | 904 | 46 | 0 |
| 11 | CK | 885 | 0 | 904 | 50 | 0 |
| 12 | AL | 956 | 0 | 1046 | 89 | 0 |
| 12 | CL | 970 | 0 | 1057 | 59 | 0 |
| 13 | AM | 922 | 0 | 979 | 95 | 0 |
| 13 | CM | 946 | 0 | 1008 | 81 | 0 |
| 14 | AN | 491 | 0 | 529 | 71 | 0 |
| 14 | CN | 492 | 0 | 530 | 57 | 0 |
| 15 | AO | 734 | 0 | 771 | 59 | 0 |
| 15 | CO | 734 | 0 | 771 | 42 | 0 |
| 16 | AP | 700 | 0 | 720 | 40 | 0 |
| 16 | CP | 700 | 0 | 720 | 53 | 0 |
| 17 | AQ | 823 | 0 | 891 | 53 | 0 |
| 17 | CQ | 823 | 0 | 889 | 66 | 0 |
| 18 | AR | 574 | 0 | 642 | 37 | 0 |
| 18 | CR | 574 | 0 | 644 | 56 | 0 |
| 19 | AS | 629 | 0 | 652 | 79 | 0 |
| 19 | CS | 629 | 0 | 652 | 62 | 0 |
| 20 | AT | 763 | 0 | 861 | 52 | 0 |
| 20 | CT | 763 | 0 | 861 | 63 | 0 |
| 21 | AU | 208 | 0 | 221 | 14 | 0 |
| 21 | CU | 217 | 0 | 234 | 19 | 0 |
| 22 | AV | 1622 | 0 | 825 | 36 | 0 |
| 22 | CV | 1643 | 0 | 836 | 49 | 0 |
| 23 | AW | 1623 | 0 | 820 | 46 | 0 |
| 23 | AY | 410 | 0 | 207 | 18 | 0 |
| 23 | CW | 1623 | 0 | 821 | 65 | 0 |
| 23 | CY | 453 | 0 | 229 | 10 | 0 |
| 24 | AX | 255 | 0 | 129 | 6 | 0 |
| 24 | CX | 255 | 0 | 129 | 10 | 0 |
| 25 | B0 | 607 | 0 | 628 | 51 | 0 |
| 25 | D0 | 645 | 0 | 673 | 44 | 0 |
| 26 | B1 | 692 | 0 | 764 | 108 | 0 |
| 26 | D1 | 692 | 0 | 764 | 100 | 0 |
| 27 | B2 | 420 | 0 | 461 | 70 | 0 |
| 27 | D2 | 446 | 0 | 486 | 88 | 0 |
| 28 | B3 | 459 | 0 | 512 | 25 | 0 |
| 28 | D3 | 476 | 0 | 529 | 31 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 29 | B4 | 222 | 0 | 91 | 4 | 0 |
| 29 | D4 | 241 | 0 | 103 | 7 | 0 |
| 30 | B5 | 418 | 0 | 432 | 43 | 0 |
| 30 | D5 | 467 | 0 | 492 | 48 | 0 |
| 31 | B6 | 398 | 0 | 417 | 60 | 0 |
| 31 | D6 | 408 | 0 | 426 | 53 | 0 |
| 32 | B7 | 418 | 0 | 467 | 38 | 0 |
| 32 | D7 | 418 | 0 | 467 | 30 | 0 |
| 33 | B8 | 507 | 0 | 576 | 93 | 0 |
| 33 | D8 | 495 | 0 | 567 | 93 | 0 |
| 34 | B9 | 307 | 0 | 336 | 31 | 0 |
| 34 | D9 | 307 | 0 | 335 | 17 | 0 |
| 35 | BA | 60821 | 0 | 30654 | 2020 | 0 |
| 35 | DA | 60821 | 0 | 30655 | 1774 | 0 |
| 36 | BB | 2576 | 0 | 1305 | 111 | 0 |
| 36 | DB | 2551 | 0 | 1295 | 90 | 0 |
| 37 | BC | 1141 | 0 | 865 | 41 | 0 |
| 37 | DC | 1141 | 0 | 865 | 57 | 0 |
| 38 | BD | 2126 | 0 | 2208 | 194 | 0 |
| 38 | DD | 2144 | 0 | 2234 | 185 | 0 |
| 39 | BE | 1563 | 0 | 1629 | 144 | 0 |
| 39 | DE | 1563 | 0 | 1629 | 133 | 0 |
| 40 | BF | 1615 | 0 | 1665 | 165 | 0 |
| 40 | DF | 1627 | 0 | 1679 | 125 | 0 |
| 41 | BG | 1449 | 0 | 1503 | 110 | 0 |
| 41 | DG | 1474 | 0 | 1535 | 115 | 0 |
| 42 | BH | 1222 | 0 | 1282 | 88 | 0 |
| 42 | DH | 1270 | 0 | 1339 | 95 | 0 |
| 43 | BI | 1131 | 0 | 1218 | 97 | 0 |
| 43 | DI | 1124 | 0 | 1209 | 72 | 0 |
| 44 | BJ | 651 | 0 | 171 | 9 | 0 |
| 44 | DJ | 651 | 0 | 163 | 4 | 0 |
| 45 | BK | 700 | 0 | 166 | 0 | 0 |
| 45 | DK | 700 | 0 | 179 | 5 | 0 |
| 46 | BN | 1096 | 0 | 1168 | 101 | 0 |
| 46 | DN | 1120 | 0 | 1195 | 111 | 0 |
| 47 | BO | 933 | 0 | 996 | 72 | 0 |
| 47 | DO | 933 | 0 | 996 | 57 | 0 |
| 48 | BP | 1099 | 0 | 1176 | 221 | 0 |
| 48 | DP | 1114 | 0 | 1187 | 201 | 0 |
| 49 | BQ | 1074 | 0 | 1129 | 114 | 0 |
| 49 | DQ | 1083 | 0 | 1135 | 110 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 50 | BR | 949 | 0 | 1008 | 113 | 0 |
| 50 | DR | 960 | 0 | 1021 | 90 | 0 |
| 51 | BS | 813 | 0 | 873 | 115 | 0 |
| 51 | DS | 781 | 0 | 845 | 87 | 0 |
| 52 | BT | 1100 | 0 | 1164 | 127 | 0 |
| 52 | DT | 1141 | 0 | 1202 | 125 | 0 |
| 53 | BU | 964 | 0 | 1022 | 113 | 0 |
| 53 | DU | 964 | 0 | 1022 | 108 | 0 |
| 54 | BV | 779 | 0 | 852 | 122 | 0 |
| 54 | DV | 779 | 0 | 852 | 108 | 0 |
| 55 | BW | 886 | 0 | 948 | 89 | 0 |
| 55 | DW | 886 | 0 | 948 | 53 | 0 |
| 56 | BX | 704 | 0 | 758 | 103 | 0 |
| 56 | DX | 742 | 0 | 801 | 126 | 0 |
| 57 | BY | 775 | 0 | 870 | 91 | 0 |
| 57 | DY | 835 | 0 | 920 | 127 | 0 |
| 58 | BZ | 1403 | 0 | 1432 | 118 | 0 |
| 58 | DZ | 1403 | 0 | 1432 | 91 | 0 |
| 59 | AA | 209 | 0 | 0 | 0 | 0 |
| 59 | AC | 1 | 0 | 0 | 0 | 0 |
| 59 | AD | 1 | 0 | 0 | 0 | 0 |
| 59 | AE | 1 | 0 | 0 | 0 | 0 |
| 59 | AL | 1 | 0 | 0 | 0 | 0 |
| 59 | AT | 1 | 0 | 0 | 0 | 0 |
| 59 | AV | 7 | 0 | 0 | 0 | 0 |
| 59 | AW | 20 | 0 | 0 | 0 | 0 |
| 59 | AX | 3 | 0 | 0 | 0 | 0 |
| 59 | B0 | 1 | 0 | 0 | 0 | 0 |
| 59 | B1 | 2 | 0 | 0 | 0 | 0 |
| 59 | B2 | 1 | 0 | 0 | 0 | 0 |
| 59 | B5 | 1 | 0 | 0 | 0 | 0 |
| 59 | B7 | 1 | 0 | 0 | 0 | 0 |
| 59 | B8 | 2 | 0 | 0 | 0 | 0 |
| 59 | BA | 457 | 0 | 0 | 0 | 0 |
| 59 | BB | 17 | 0 | 0 | 0 | 0 |
| 59 | BC | 2 | 0 | 0 | 0 | 0 |
| 59 | BE | 2 | 0 | 0 | 0 | 0 |
| 59 | BF | 3 | 0 | 0 | 0 | 0 |
| 59 | BQ | 1 | 0 | 0 | 0 | 0 |
| 59 | BS | 1 | 0 | 0 | 0 | 0 |
| 59 | BU | 5 | 0 | 0 | 0 | 0 |
| 59 | BV | 1 | 0 | 0 | 0 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|--------|----------|----------|---------|--------------|
| 59 | BX | 2 | 0 | 0 | 0 | 0 |
| 59 | CA | 195 | 0 | 0 | 0 | 0 |
| 59 | CE | 1 | 0 | 0 | 0 | 0 |
| 59 | CF | 1 | 0 | 0 | 0 | 0 |
| 59 | CG | 1 | 0 | 0 | 0 | 0 |
| 59 | CI | 1 | 0 | 0 | 0 | 0 |
| 59 | CU | 1 | 0 | 0 | 0 | 0 |
| 59 | CV | 4 | 0 | 0 | 0 | 0 |
| 59 | CW | 13 | 0 | 0 | 0 | 0 |
| 59 | CX | 2 | 0 | 0 | 0 | 0 |
| 59 | D2 | 2 | 0 | 0 | 0 | 0 |
| 59 | D5 | 1 | 0 | 0 | 0 | 0 |
| 59 | DA | 392 | 0 | 0 | 0 | 0 |
| 59 | DB | 12 | 0 | 0 | 0 | 0 |
| 59 | DE | 1 | 0 | 0 | 0 | 0 |
| 59 | DF | 2 | 0 | 0 | 0 | 0 |
| 59 | DN | 1 | 0 | 0 | 0 | 0 |
| 59 | DO | 2 | 0 | 0 | 0 | 0 |
| 59 | DV | 1 | 0 | 0 | 0 | 0 |
| 60 | AA | 41 | 0 | 0 | 2 | 0 |
| 60 | CA | 41 | 0 | 0 | 1 | 0 |
| 61 | AD | 1 | 0 | 0 | 0 | 0 |
| 61 | AN | 1 | 0 | 0 | 0 | 0 |
| 61 | B9 | 1 | 0 | 0 | 0 | 0 |
| 61 | CD | 1 | 0 | 0 | 0 | 0 |
| 61 | CN | 1 | 0 | 0 | 0 | 0 |
| 61 | D9 | 1 | 0 | 0 | 0 | 0 |
| 62 | AA | 2 | 0 | 0 | 1 | 0 |
| All | All | 296449 | 0 | 198495 | 13485 | 0 |

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 28.

The worst 5 of 13485 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) |
|-------------------|------------------|--------------------------|-------------------|
| 2:AB:142:LEU:CD2 | 2:AB:142:LEU:CG | 1.77 | 1.58 |
| 4:AD:122:ARG:HH12 | 4:AD:136:PRO:CD | 1.22 | 1.50 |
| 4:AD:122:ARG:NH1 | 4:AD:136:PRO:HD3 | 1.27 | 1.48 |
| 8:AH:104:ARG:CD | 8:AH:104:ARG:CG | 1.95 | 1.43 |
| 58:DZ:61:LEU:HD12 | 58:DZ:62:PRO:CD | 1.52 | 1.35 |

There are no symmetry-related clashes.

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 | 216/256 (84%) | 148 (68%) | 42 (19%) | 26 (12%) | 0 | 2 |
| 2 | CB | 232/256 (91%) | 148 (64%) | 59 (25%) | 25 (11%) | 0 | 3 |
| 3 | AC | 204/239 (85%) | 145 (71%) | 41 (20%) | 18 (9%) | 1 | 5 |
| 3 | CC | 205/239 (86%) | 153 (75%) | 37 (18%) | 15 (7%) | 1 | 7 |
| 4 | AD | 206/209 (99%) | 148 (72%) | 35 (17%) | 23 (11%) | 0 | 2 |
| 4 | CD | 206/209 (99%) | 150 (73%) | 41 (20%) | 15 (7%) | 1 | 7 |
| 5 | AE | 148/162 (91%) | 113 (76%) | 24 (16%) | 11 (7%) | 1 | 7 |
| 5 | CE | 149/162 (92%) | 114 (76%) | 27 (18%) | 8 (5%) | 2 | 12 |
| 6 | AF | 99/101 (98%) | 80 (81%) | 12 (12%) | 7 (7%) | 1 | 8 |
| 6 | CF | 99/101 (98%) | 84 (85%) | 12 (12%) | 3 (3%) | 4 | 25 |
| 7 | AG | 153/156 (98%) | 103 (67%) | 33 (22%) | 17 (11%) | 0 | 2 |
| 7 | CG | 153/156 (98%) | 112 (73%) | 30 (20%) | 11 (7%) | 1 | 8 |
| 8 | AH | 136/138 (99%) | 98 (72%) | 25 (18%) | 13 (10%) | 0 | 4 |
| 8 | CH | 136/138 (99%) | 100 (74%) | 26 (19%) | 10 (7%) | 1 | 7 |
| 9 | AI | 119/128 (93%) | 80 (67%) | 20 (17%) | 19 (16%) | 0 | 1 |
| 9 | CI | 125/128 (98%) | 87 (70%) | 23 (18%) | 15 (12%) | 0 | 2 |
| 10 | AJ | 96/105 (91%) | 61 (64%) | 23 (24%) | 12 (12%) | 0 | 2 |
| 10 | CJ | 96/105 (91%) | 66 (69%) | 20 (21%) | 10 (10%) | 0 | 3 |
| 11 | AK | 117/129 (91%) | 89 (76%) | 19 (16%) | 9 (8%) | 1 | 6 |
| 11 | CK | 117/129 (91%) | 86 (74%) | 23 (20%) | 8 (7%) | 1 | 8 |
| 12 | AL | 120/132 (91%) | 81 (68%) | 23 (19%) | 16 (13%) | 0 | 1 |
| 12 | CL | 122/132 (92%) | 86 (70%) | 21 (17%) | 15 (12%) | 0 | 2 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|----------|----------|----------|-------------|----|
| 13 | AM | 114/126 (90%) | 78 (68%) | 22 (19%) | 14 (12%) | 0 | 2 |
| 13 | CM | 117/126 (93%) | 88 (75%) | 16 (14%) | 13 (11%) | 0 | 2 |
| 14 | AN | 58/61 (95%) | 35 (60%) | 16 (28%) | 7 (12%) | 0 | 2 |
| 14 | CN | 58/61 (95%) | 36 (62%) | 13 (22%) | 9 (16%) | 0 | 1 |
| 15 | AO | 86/89 (97%) | 67 (78%) | 14 (16%) | 5 (6%) | 1 | 11 |
| 15 | CO | 86/89 (97%) | 61 (71%) | 19 (22%) | 6 (7%) | 1 | 8 |
| 16 | AP | 81/88 (92%) | 58 (72%) | 17 (21%) | 6 (7%) | 1 | 7 |
| 16 | CP | 81/88 (92%) | 53 (65%) | 22 (27%) | 6 (7%) | 1 | 7 |
| 17 | AQ | 97/105 (92%) | 81 (84%) | 13 (13%) | 3 (3%) | 4 | 24 |
| 17 | CQ | 97/105 (92%) | 74 (76%) | 13 (13%) | 10 (10%) | 0 | 3 |
| 18 | AR | 68/88 (77%) | 55 (81%) | 8 (12%) | 5 (7%) | 1 | 7 |
| 18 | CR | 68/88 (77%) | 48 (71%) | 12 (18%) | 8 (12%) | 0 | 2 |
| 19 | AS | 76/93 (82%) | 33 (43%) | 30 (40%) | 13 (17%) | 0 | 1 |
| 19 | CS | 76/93 (82%) | 46 (60%) | 15 (20%) | 15 (20%) | 0 | 0 |
| 20 | AT | 97/106 (92%) | 64 (66%) | 23 (24%) | 10 (10%) | 0 | 3 |
| 20 | CT | 97/106 (92%) | 67 (69%) | 18 (19%) | 12 (12%) | 0 | 2 |
| 21 | AU | 22/27 (82%) | 15 (68%) | 3 (14%) | 4 (18%) | 0 | 1 |
| 21 | CU | 23/27 (85%) | 19 (83%) | 1 (4%) | 3 (13%) | 0 | 1 |
| 25 | B0 | 74/85 (87%) | 56 (76%) | 13 (18%) | 5 (7%) | 1 | 8 |
| 25 | D0 | 80/85 (94%) | 59 (74%) | 13 (16%) | 8 (10%) | 0 | 3 |
| 26 | B1 | 86/98 (88%) | 45 (52%) | 21 (24%) | 20 (23%) | 0 | 0 |
| 26 | D1 | 86/98 (88%) | 60 (70%) | 12 (14%) | 14 (16%) | 0 | 1 |
| 27 | B2 | 48/72 (67%) | 14 (29%) | 20 (42%) | 14 (29%) | 0 | 0 |
| 27 | D2 | 51/72 (71%) | 22 (43%) | 16 (31%) | 13 (26%) | 0 | 0 |
| 28 | B3 | 56/60 (93%) | 47 (84%) | 7 (12%) | 2 (4%) | 3 | 21 |
| 28 | D3 | 58/60 (97%) | 46 (79%) | 7 (12%) | 5 (9%) | 1 | 5 |
| 29 | B4 | 43/71 (61%) | 10 (23%) | 13 (30%) | 20 (46%) | 0 | 0 |
| 29 | D4 | 47/71 (66%) | 11 (23%) | 17 (36%) | 19 (40%) | 0 | 0 |
| 30 | B5 | 52/60 (87%) | 34 (65%) | 9 (17%) | 9 (17%) | 0 | 1 |
| 30 | D5 | 58/60 (97%) | 40 (69%) | 14 (24%) | 4 (7%) | 1 | 8 |
| 31 | B6 | 44/54 (82%) | 19 (43%) | 8 (18%) | 17 (39%) | 0 | 0 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|----------|----------|-------------|-----|
| 31 | D6 | 45/54 (83%) | 19 (42%) | 14 (31%) | 12 (27%) | 0 | 0 |
| 32 | B7 | 46/49 (94%) | 36 (78%) | 6 (13%) | 4 (9%) | 1 | 5 |
| 32 | D7 | 46/49 (94%) | 42 (91%) | 4 (9%) | 0 | 100 | 100 |
| 33 | B8 | 61/65 (94%) | 37 (61%) | 15 (25%) | 9 (15%) | 0 | 1 |
| 33 | D8 | 60/65 (92%) | 35 (58%) | 13 (22%) | 12 (20%) | 0 | 0 |
| 34 | B9 | 35/37 (95%) | 28 (80%) | 5 (14%) | 2 (6%) | 1 | 11 |
| 34 | D9 | 35/37 (95%) | 25 (71%) | 7 (20%) | 3 (9%) | 1 | 5 |
| 37 | BC | 182/229 (80%) | 82 (45%) | 54 (30%) | 46 (25%) | 0 | 0 |
| 37 | DC | 182/229 (80%) | 78 (43%) | 63 (35%) | 41 (22%) | 0 | 0 |
| 38 | BD | 271/276 (98%) | 203 (75%) | 45 (17%) | 23 (8%) | 1 | 5 |
| 38 | DD | 273/276 (99%) | 212 (78%) | 43 (16%) | 18 (7%) | 1 | 9 |
| 39 | BE | 202/206 (98%) | 147 (73%) | 35 (17%) | 20 (10%) | 0 | 3 |
| 39 | DE | 202/206 (98%) | 137 (68%) | 36 (18%) | 29 (14%) | 0 | 1 |
| 40 | BF | 204/210 (97%) | 130 (64%) | 39 (19%) | 35 (17%) | 0 | 1 |
| 40 | DF | 206/210 (98%) | 152 (74%) | 35 (17%) | 19 (9%) | 1 | 4 |
| 41 | BG | 176/182 (97%) | 117 (66%) | 42 (24%) | 17 (10%) | 0 | 4 |
| 41 | DG | 179/182 (98%) | 132 (74%) | 32 (18%) | 15 (8%) | 1 | 5 |
| 42 | BH | 157/180 (87%) | 92 (59%) | 43 (27%) | 22 (14%) | 0 | 1 |
| 42 | DH | 163/180 (91%) | 104 (64%) | 33 (20%) | 26 (16%) | 0 | 1 |
| 43 | BI | 143/148 (97%) | 88 (62%) | 35 (24%) | 20 (14%) | 0 | 1 |
| 43 | DI | 142/148 (96%) | 91 (64%) | 30 (21%) | 21 (15%) | 0 | 1 |
| 46 | BN | 135/140 (96%) | 91 (67%) | 20 (15%) | 24 (18%) | 0 | 1 |
| 46 | DN | 138/140 (99%) | 90 (65%) | 22 (16%) | 26 (19%) | 0 | 1 |
| 47 | BO | 120/122 (98%) | 89 (74%) | 21 (18%) | 10 (8%) | 1 | 6 |
| 47 | DO | 120/122 (98%) | 106 (88%) | 13 (11%) | 1 (1%) | 19 | 52 |
| 48 | BP | 142/150 (95%) | 64 (45%) | 38 (27%) | 40 (28%) | 0 | 0 |
| 48 | DP | 144/150 (96%) | 63 (44%) | 35 (24%) | 46 (32%) | 0 | 0 |
| 49 | BQ | 133/141 (94%) | 76 (57%) | 34 (26%) | 23 (17%) | 0 | 1 |
| 49 | DQ | 134/141 (95%) | 91 (68%) | 27 (20%) | 16 (12%) | 0 | 2 |
| 50 | BR | 114/118 (97%) | 83 (73%) | 19 (17%) | 12 (10%) | 0 | 3 |
| 50 | DR | 115/118 (98%) | 92 (80%) | 12 (10%) | 11 (10%) | 0 | 4 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-------------------|------------|------------|------------|-------------|---|
| 51 | BS | 100/112 (89%) | 58 (58%) | 21 (21%) | 21 (21%) | 0 | 0 |
| 51 | DS | 97/112 (87%) | 59 (61%) | 22 (23%) | 16 (16%) | 0 | 1 |
| 52 | BT | 130/146 (89%) | 70 (54%) | 34 (26%) | 26 (20%) | 0 | 0 |
| 52 | DT | 135/146 (92%) | 96 (71%) | 25 (18%) | 14 (10%) | 0 | 3 |
| 53 | BU | 115/118 (98%) | 86 (75%) | 17 (15%) | 12 (10%) | 0 | 3 |
| 53 | DU | 115/118 (98%) | 96 (84%) | 11 (10%) | 8 (7%) | 1 | 8 |
| 54 | BV | 99/101 (98%) | 50 (50%) | 21 (21%) | 28 (28%) | 0 | 0 |
| 54 | DV | 99/101 (98%) | 62 (63%) | 22 (22%) | 15 (15%) | 0 | 1 |
| 55 | BW | 109/113 (96%) | 84 (77%) | 16 (15%) | 9 (8%) | 1 | 6 |
| 55 | DW | 109/113 (96%) | 95 (87%) | 5 (5%) | 9 (8%) | 1 | 6 |
| 56 | BX | 87/96 (91%) | 46 (53%) | 25 (29%) | 16 (18%) | 0 | 1 |
| 56 | DX | 92/96 (96%) | 63 (68%) | 9 (10%) | 20 (22%) | 0 | 0 |
| 57 | BY | 98/110 (89%) | 45 (46%) | 27 (28%) | 26 (26%) | 0 | 0 |
| 57 | DY | 107/110 (97%) | 53 (50%) | 26 (24%) | 28 (26%) | 0 | 0 |
| 58 | BZ | 174/206 (84%) | 113 (65%) | 43 (25%) | 18 (10%) | 0 | 3 |
| 58 | DZ | 174/206 (84%) | 120 (69%) | 33 (19%) | 21 (12%) | 0 | 2 |
| All | All | 11584/12586 (92%) | 7801 (67%) | 2288 (20%) | 1495 (13%) | 0 | 1 |

5 of 1495 Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 2 | AB | 22 | LYS |
| 2 | AB | 48 | MET |
| 2 | AB | 124 | SER |
| 2 | AB | 132 | LYS |
| 2 | AB | 150 | SER |

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 | 189/220 (86%) | 167 (88%) | 22 (12%) | 5 | 22 |
| 2 | CB | 202/220 (92%) | 186 (92%) | 16 (8%) | 12 | 37 |
| 3 | AC | 160/188 (85%) | 148 (92%) | 12 (8%) | 13 | 39 |
| 3 | CC | 161/188 (86%) | 150 (93%) | 11 (7%) | 16 | 44 |
| 4 | AD | 180/181 (99%) | 164 (91%) | 16 (9%) | 9 | 32 |
| 4 | CD | 180/181 (99%) | 164 (91%) | 16 (9%) | 9 | 32 |
| 5 | AE | 115/123 (94%) | 105 (91%) | 10 (9%) | 10 | 34 |
| 5 | CE | 116/123 (94%) | 104 (90%) | 12 (10%) | 7 | 26 |
| 6 | AF | 90/90 (100%) | 83 (92%) | 7 (8%) | 12 | 38 |
| 6 | CF | 90/90 (100%) | 89 (99%) | 1 (1%) | 73 | 85 |
| 7 | AG | 126/127 (99%) | 114 (90%) | 12 (10%) | 8 | 29 |
| 7 | CG | 126/127 (99%) | 117 (93%) | 9 (7%) | 14 | 42 |
| 8 | AH | 119/119 (100%) | 110 (92%) | 9 (8%) | 13 | 39 |
| 8 | CH | 119/119 (100%) | 107 (90%) | 12 (10%) | 7 | 27 |
| 9 | AI | 92/99 (93%) | 82 (89%) | 10 (11%) | 6 | 24 |
| 9 | CI | 98/99 (99%) | 85 (87%) | 13 (13%) | 4 | 17 |
| 10 | AJ | 88/92 (96%) | 75 (85%) | 13 (15%) | 3 | 14 |
| 10 | CJ | 88/92 (96%) | 83 (94%) | 5 (6%) | 20 | 51 |
| 11 | AK | 90/99 (91%) | 80 (89%) | 10 (11%) | 6 | 24 |
| 11 | CK | 90/99 (91%) | 84 (93%) | 6 (7%) | 16 | 45 |
| 12 | AL | 103/109 (94%) | 96 (93%) | 7 (7%) | 16 | 44 |
| 12 | CL | 104/109 (95%) | 90 (86%) | 14 (14%) | 4 | 17 |
| 13 | AM | 93/101 (92%) | 82 (88%) | 11 (12%) | 5 | 21 |
| 13 | CM | 95/101 (94%) | 84 (88%) | 11 (12%) | 5 | 22 |
| 14 | AN | 49/50 (98%) | 41 (84%) | 8 (16%) | 2 | 10 |
| 14 | CN | 49/50 (98%) | 44 (90%) | 5 (10%) | 7 | 27 |
| 15 | AO | 79/80 (99%) | 72 (91%) | 7 (9%) | 9 | 32 |
| 15 | CO | 79/80 (99%) | 77 (98%) | 2 (2%) | 47 | 72 |
| 16 | AP | 72/74 (97%) | 68 (94%) | 4 (6%) | 21 | 51 |
| 16 | CP | 72/74 (97%) | 68 (94%) | 4 (6%) | 21 | 51 |
| 17 | AQ | 94/97 (97%) | 88 (94%) | 6 (6%) | 17 | 47 |
| 17 | CQ | 94/97 (97%) | 88 (94%) | 6 (6%) | 17 | 47 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|----------------|-----------|----------|-------------|-----|
| 18 | AR | 61/77 (79%) | 60 (98%) | 1 (2%) | 62 | 79 |
| 18 | CR | 61/77 (79%) | 54 (88%) | 7 (12%) | 5 | 22 |
| 19 | AS | 69/80 (86%) | 63 (91%) | 6 (9%) | 10 | 34 |
| 19 | CS | 69/80 (86%) | 58 (84%) | 11 (16%) | 2 | 11 |
| 20 | AT | 76/82 (93%) | 76 (100%) | 0 | 100 | 100 |
| 20 | CT | 76/82 (93%) | 69 (91%) | 7 (9%) | 9 | 31 |
| 21 | AU | 19/22 (86%) | 15 (79%) | 4 (21%) | 1 | 4 |
| 21 | CU | 20/22 (91%) | 16 (80%) | 4 (20%) | 1 | 5 |
| 25 | B0 | 61/67 (91%) | 59 (97%) | 2 (3%) | 38 | 66 |
| 25 | D0 | 64/67 (96%) | 62 (97%) | 2 (3%) | 40 | 67 |
| 26 | B1 | 73/83 (88%) | 65 (89%) | 8 (11%) | 6 | 24 |
| 26 | D1 | 73/83 (88%) | 66 (90%) | 7 (10%) | 8 | 29 |
| 27 | B2 | 46/67 (69%) | 38 (83%) | 8 (17%) | 2 | 8 |
| 27 | D2 | 49/67 (73%) | 45 (92%) | 4 (8%) | 11 | 36 |
| 28 | B3 | 50/52 (96%) | 49 (98%) | 1 (2%) | 55 | 76 |
| 28 | D3 | 52/52 (100%) | 50 (96%) | 2 (4%) | 33 | 62 |
| 30 | B5 | 46/52 (88%) | 41 (89%) | 5 (11%) | 6 | 24 |
| 30 | D5 | 52/52 (100%) | 47 (90%) | 5 (10%) | 8 | 29 |
| 31 | B6 | 45/52 (86%) | 36 (80%) | 9 (20%) | 1 | 5 |
| 31 | D6 | 46/52 (88%) | 38 (83%) | 8 (17%) | 2 | 8 |
| 32 | B7 | 41/42 (98%) | 36 (88%) | 5 (12%) | 5 | 20 |
| 32 | D7 | 41/42 (98%) | 38 (93%) | 3 (7%) | 14 | 40 |
| 33 | B8 | 53/55 (96%) | 47 (89%) | 6 (11%) | 6 | 23 |
| 33 | D8 | 52/55 (94%) | 49 (94%) | 3 (6%) | 20 | 50 |
| 34 | B9 | 34/34 (100%) | 31 (91%) | 3 (9%) | 10 | 33 |
| 34 | D9 | 34/34 (100%) | 31 (91%) | 3 (9%) | 10 | 33 |
| 37 | BC | 61/181 (34%) | 58 (95%) | 3 (5%) | 25 | 56 |
| 37 | DC | 61/181 (34%) | 57 (93%) | 4 (7%) | 16 | 46 |
| 38 | BD | 215/218 (99%) | 198 (92%) | 17 (8%) | 12 | 37 |
| 38 | DD | 217/218 (100%) | 198 (91%) | 19 (9%) | 10 | 33 |
| 39 | BE | 165/166 (99%) | 151 (92%) | 14 (8%) | 10 | 35 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|----------------|-----------|----------|-------------|----|
| 39 | DE | 165/166 (99%) | 153 (93%) | 12 (7%) | 14 | 40 |
| 40 | BF | 164/166 (99%) | 150 (92%) | 14 (8%) | 10 | 35 |
| 40 | DF | 165/166 (99%) | 157 (95%) | 8 (5%) | 25 | 56 |
| 41 | BG | 152/156 (97%) | 145 (95%) | 7 (5%) | 27 | 58 |
| 41 | DG | 155/156 (99%) | 145 (94%) | 10 (6%) | 17 | 46 |
| 42 | BH | 132/148 (89%) | 125 (95%) | 7 (5%) | 22 | 53 |
| 42 | DH | 138/148 (93%) | 129 (94%) | 9 (6%) | 17 | 46 |
| 43 | BI | 122/124 (98%) | 110 (90%) | 12 (10%) | 8 | 29 |
| 43 | DI | 121/124 (98%) | 111 (92%) | 10 (8%) | 11 | 35 |
| 46 | BN | 116/119 (98%) | 106 (91%) | 10 (9%) | 10 | 34 |
| 46 | DN | 119/119 (100%) | 110 (92%) | 9 (8%) | 13 | 39 |
| 47 | BO | 100/100 (100%) | 90 (90%) | 10 (10%) | 7 | 28 |
| 47 | DO | 100/100 (100%) | 92 (92%) | 8 (8%) | 12 | 37 |
| 48 | BP | 111/116 (96%) | 98 (88%) | 13 (12%) | 5 | 22 |
| 48 | DP | 112/116 (97%) | 89 (80%) | 23 (20%) | 1 | 4 |
| 49 | BQ | 106/111 (96%) | 91 (86%) | 15 (14%) | 3 | 16 |
| 49 | DQ | 107/111 (96%) | 95 (89%) | 12 (11%) | 6 | 23 |
| 50 | BR | 99/101 (98%) | 90 (91%) | 9 (9%) | 9 | 31 |
| 50 | DR | 100/101 (99%) | 89 (89%) | 11 (11%) | 6 | 24 |
| 51 | BS | 81/88 (92%) | 71 (88%) | 10 (12%) | 4 | 20 |
| 51 | DS | 78/88 (89%) | 65 (83%) | 13 (17%) | 2 | 10 |
| 52 | BT | 116/127 (91%) | 99 (85%) | 17 (15%) | 3 | 14 |
| 52 | DT | 120/127 (94%) | 101 (84%) | 19 (16%) | 2 | 11 |
| 53 | BU | 93/94 (99%) | 81 (87%) | 12 (13%) | 4 | 18 |
| 53 | DU | 93/94 (99%) | 89 (96%) | 4 (4%) | 29 | 59 |
| 54 | BV | 82/82 (100%) | 75 (92%) | 7 (8%) | 10 | 35 |
| 54 | DV | 82/82 (100%) | 74 (90%) | 8 (10%) | 8 | 29 |
| 55 | BW | 91/92 (99%) | 79 (87%) | 12 (13%) | 4 | 17 |
| 55 | DW | 91/92 (99%) | 85 (93%) | 6 (7%) | 16 | 46 |
| 56 | BX | 72/78 (92%) | 63 (88%) | 9 (12%) | 4 | 19 |
| 56 | DX | 76/78 (97%) | 64 (84%) | 12 (16%) | 2 | 11 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|------------------|------------|----------|-------------|----|
| 57 | BY | 84/91 (92%) | 75 (89%) | 9 (11%) | 6 | 25 |
| 57 | DY | 90/91 (99%) | 78 (87%) | 12 (13%) | 4 | 17 |
| 58 | BZ | 155/179 (87%) | 138 (89%) | 17 (11%) | 6 | 24 |
| 58 | DZ | 155/179 (87%) | 141 (91%) | 14 (9%) | 9 | 32 |
| All | All | 9527/10302 (92%) | 8649 (91%) | 878 (9%) | 9 | 31 |

5 of 878 residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 3 | CC | 20 | SER |
| 14 | CN | 24 | CYS |
| 58 | DZ | 145 | GLU |
| 51 | DS | 71 | ARG |
| 4 | CD | 59 | ARG |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 99 such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 2 | CB | 104 | ASN |
| 17 | CQ | 45 | HIS |
| 3 | CC | 63 | ASN |
| 10 | CJ | 84 | GLN |
| 31 | D6 | 26 | ASN |

5.3.3 RNA [i](#)

| Mol | Chain | Analysed | Backbone Outliers | Pucker Outliers |
|-----|-------|-----------------|-------------------|-----------------|
| 1 | AA | 1503/1520 (98%) | 533 (35%) | 67 (4%) |
| 1 | CA | 1503/1520 (98%) | 451 (30%) | 39 (2%) |
| 22 | AV | 75/77 (97%) | 27 (36%) | 1 (1%) |
| 22 | CV | 76/77 (98%) | 30 (39%) | 0 |
| 23 | AW | 75/76 (98%) | 63 (84%) | 8 (10%) |
| 23 | AY | 18/76 (23%) | 8 (44%) | 0 |
| 23 | CW | 75/76 (98%) | 50 (66%) | 4 (5%) |
| 23 | CY | 20/76 (26%) | 6 (30%) | 0 |
| 24 | AX | 11/24 (45%) | 4 (36%) | 1 (9%) |
| 24 | CX | 11/24 (45%) | 4 (36%) | 1 (9%) |
| 35 | BA | 2823/2839 (99%) | 984 (34%) | 91 (3%) |

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| Mol | Chain | Analysed | Backbone Outliers | Pucker Outliers |
|-----|-------|-----------------|-------------------|-----------------|
| 35 | DA | 2823/2839 (99%) | 882 (31%) | 74 (2%) |
| 36 | BB | 119/122 (97%) | 39 (32%) | 2 (1%) |
| 36 | DB | 118/122 (96%) | 37 (31%) | 5 (4%) |
| All | All | 9250/9468 (97%) | 3118 (33%) | 293 (3%) |

5 of 3118 RNA backbone outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | AA | 9 | G |
| 1 | AA | 10 | A |
| 1 | AA | 14 | U |
| 1 | AA | 22 | G |
| 1 | AA | 31 | G |

5 of 293 RNA pucker outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|------|------|
| 35 | DA | 574 | C |
| 35 | DA | 2859 | G |
| 35 | DA | 859 | G |
| 35 | DA | 1740 | G |
| 35 | BA | 405 | U |

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 monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 1384 ligands modelled in this entry, 1382 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|------|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 60 | EDS | AA | 1805 | - | 38,43,43 | 1.75 | 9 (23%) | 38,61,61 | 1.54 | 7 (18%) |
| 60 | EDS | CA | 1787 | - | 38,43,43 | 1.80 | 6 (15%) | 38,61,61 | 1.96 | 14 (36%) |

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|------|------|---------|------------|---------|
| 60 | EDS | AA | 1805 | - | - | 4/23/79/79 | 0/3/3/3 |
| 60 | EDS | CA | 1787 | - | - | 4/23/79/79 | 0/3/3/3 |

The worst 5 of 15 bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|------|------|---------|-------|-------------|----------|
| 60 | AA | 1805 | EDS | CBE-NAK | 5.54 | 1.46 | 1.34 |
| 60 | CA | 1787 | EDS | OAC-CBA | 5.00 | 1.50 | 1.43 |
| 60 | CA | 1787 | EDS | CBE-NAK | 4.87 | 1.44 | 1.34 |
| 60 | AA | 1805 | EDS | OAJ-CBO | -4.21 | 1.20 | 1.42 |
| 60 | CA | 1787 | EDS | OAF-CAZ | -4.13 | 1.37 | 1.44 |

The worst 5 of 21 bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|------|------|-------------|-------|-------------|----------|
| 60 | AA | 1805 | EDS | CAT-CAS-CAQ | 4.66 | 118.62 | 108.96 |
| 60 | CA | 1787 | EDS | CBL-NAO-CBN | -3.68 | 107.50 | 113.33 |
| 60 | CA | 1787 | EDS | CAV-CAR-NAK | -3.58 | 105.32 | 110.86 |
| 60 | CA | 1787 | EDS | CBA-OAC-CAW | 3.58 | 117.29 | 111.53 |
| 60 | CA | 1787 | EDS | OAJ-CBO-CBN | 3.55 | 124.58 | 111.59 |

There are no chirality outliers.

5 of 8 torsion outliers are listed below:

| Mol | Chain | Res | Type | Atoms |
|-----|-------|------|------|-----------------|
| 60 | CA | 1787 | EDS | CAY-CAX-NAM-CBH |
| 60 | AA | 1805 | EDS | CBO-CBN-NAO-CBL |
| 60 | CA | 1787 | EDS | OAG-CBB-OAB-CAT |
| 60 | AA | 1805 | EDS | CBI-CBL-NAO-CBN |

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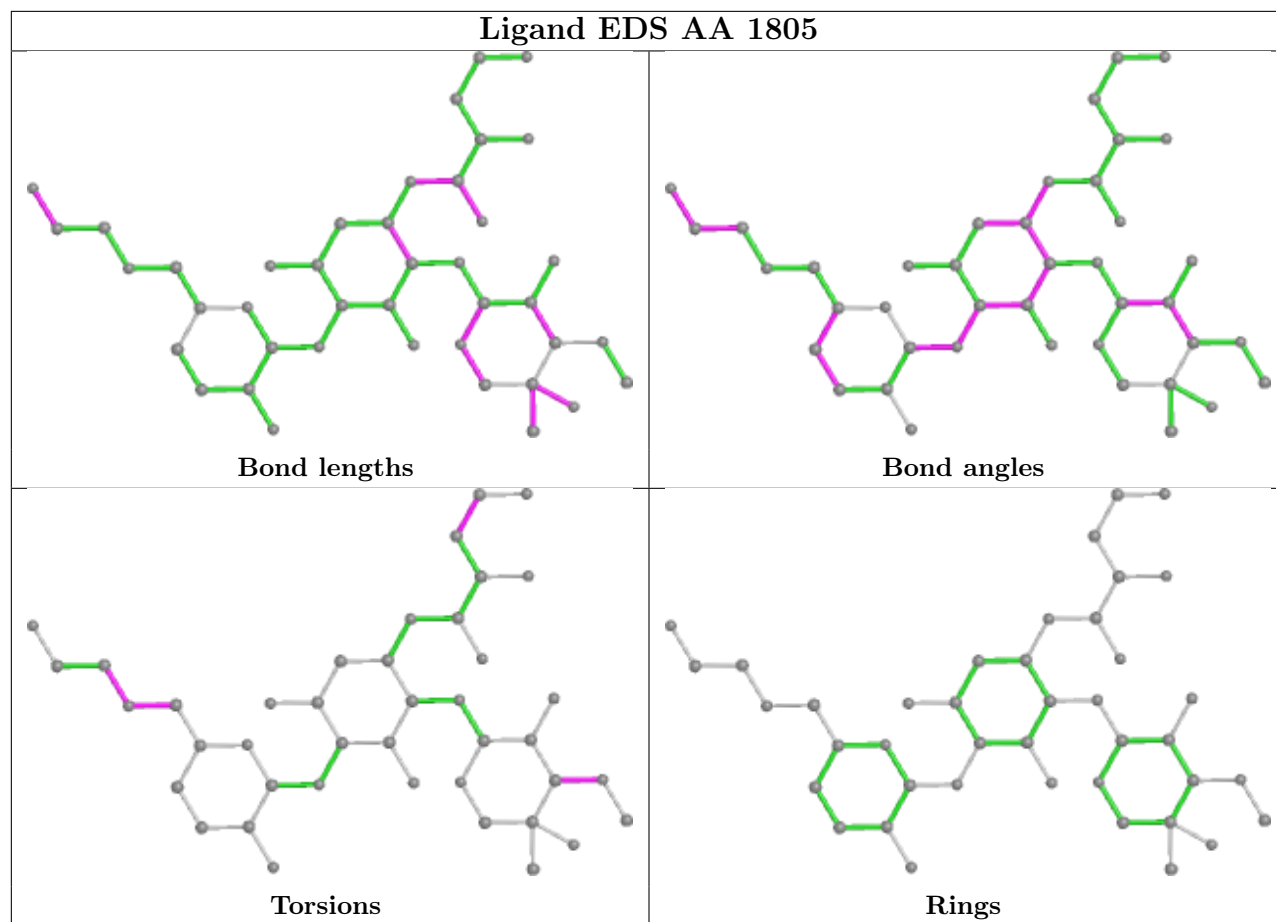
| Mol | Chain | Res | Type | Atoms |
|-----|-------|------|------|-----------------|
| 60 | AA | 1805 | EDS | CBG-CBK-CBM-NAP |

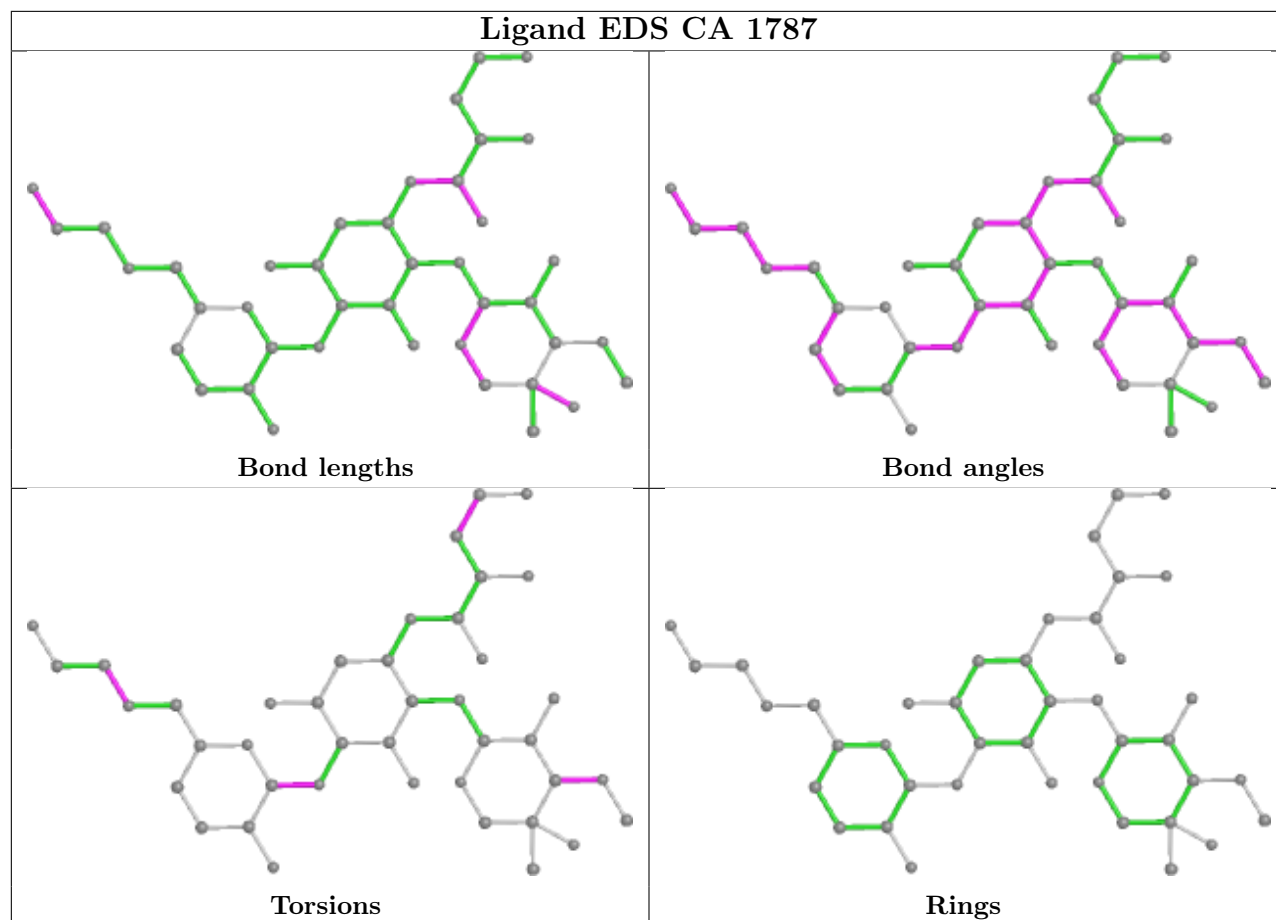
There are no ring outliers.

2 monomers are involved in 3 short contacts:

| Mol | Chain | Res | Type | Clashes | Symm-Clashes |
|-----|-------|------|------|---------|--------------|
| 60 | AA | 1805 | EDS | 2 | 0 |
| 60 | CA | 1787 | EDS | 1 | 0 |

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.





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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q < 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|-----------------|--------|---------------|-----------------------|-------|
| 1 | AA | 1504/1520 (98%) | -0.39 | 25 (1%) 70 67 | 45, 87, 160, 209 | 0 |
| 1 | CA | 1504/1520 (98%) | -0.40 | 13 (0%) 84 84 | 41, 84, 187, 269 | 0 |
| 2 | AB | 218/256 (85%) | 1.43 | 67 (30%) 0 0 | 101, 144, 193, 209 | 0 |
| 2 | CB | 234/256 (91%) | -0.17 | 5 (2%) 63 61 | 92, 134, 190, 208 | 0 |
| 3 | AC | 206/239 (86%) | 2.09 | 97 (47%) 0 0 | 89, 116, 150, 163 | 0 |
| 3 | CC | 207/239 (86%) | 1.55 | 72 (34%) 0 0 | 77, 109, 151, 174 | 0 |
| 4 | AD | 208/209 (99%) | 0.04 | 3 (1%) 75 74 | 65, 80, 100, 111 | 0 |
| 4 | CD | 208/209 (99%) | 0.34 | 18 (8%) 10 10 | 73, 93, 118, 130 | 0 |
| 5 | AE | 150/162 (92%) | 0.88 | 31 (20%) 1 1 | 70, 91, 117, 132 | 0 |
| 5 | CE | 151/162 (93%) | -0.13 | 2 (1%) 77 76 | 63, 83, 110, 144 | 0 |
| 6 | AF | 101/101 (100%) | -0.52 | 0 100 100 | 69, 87, 102, 133 | 0 |
| 6 | CF | 101/101 (100%) | 0.49 | 11 (10%) 5 5 | 68, 89, 110, 129 | 0 |
| 7 | AG | 155/156 (99%) | 1.04 | 31 (20%) 1 1 | 90, 114, 148, 163 | 0 |
| 7 | CG | 155/156 (99%) | 1.35 | 21 (13%) 3 3 | 90, 109, 144, 150 | 0 |
| 8 | AH | 138/138 (100%) | -0.15 | 2 (1%) 75 74 | 69, 95, 112, 129 | 0 |
| 8 | CH | 138/138 (100%) | -0.25 | 0 100 100 | 70, 87, 103, 110 | 0 |
| 9 | AI | 121/128 (94%) | 0.05 | 5 (4%) 37 35 | 90, 141, 171, 181 | 0 |
| 9 | CI | 127/128 (99%) | 0.29 | 11 (8%) 10 10 | 77, 134, 175, 186 | 0 |
| 10 | AJ | 98/105 (93%) | 0.49 | 9 (9%) 9 9 | 87, 150, 182, 186 | 0 |
| 10 | CJ | 98/105 (93%) | 2.33 | 49 (50%) 0 0 | 75, 151, 194, 200 | 0 |
| 11 | AK | 119/129 (92%) | 0.24 | 5 (4%) 36 34 | 72, 89, 120, 186 | 0 |
| 11 | CK | 119/129 (92%) | 1.85 | 48 (40%) 0 0 | 54, 90, 135, 188 | 0 |
| 12 | AL | 122/132 (92%) | 1.02 | 24 (19%) 1 1 | 56, 70, 94, 129 | 0 |
| 12 | CL | 124/132 (93%) | 0.45 | 5 (4%) 38 36 | 49, 64, 106, 170 | 0 |

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| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|---------------|--------|--------------|-----------------------|-------|
| 13 | AM | 116/126 (92%) | 0.38 | 12 (10%) 6 6 | 84, 121, 142, 155 | 0 |
| 13 | CM | 119/126 (94%) | 0.26 | 14 (11%) 4 4 | 68, 110, 127, 143 | 0 |
| 14 | AN | 60/61 (98%) | 1.17 | 16 (26%) 0 0 | 92, 111, 123, 129 | 0 |
| 14 | CN | 60/61 (98%) | 1.30 | 16 (26%) 0 0 | 75, 96, 112, 123 | 0 |
| 15 | AO | 88/89 (98%) | -0.40 | 0 100 100 | 68, 89, 116, 119 | 0 |
| 15 | CO | 88/89 (98%) | -0.30 | 3 (3%) 45 43 | 64, 86, 110, 123 | 0 |
| 16 | AP | 83/88 (94%) | -0.71 | 0 100 100 | 65, 77, 100, 140 | 0 |
| 16 | CP | 83/88 (94%) | 0.31 | 5 (6%) 21 21 | 75, 88, 119, 176 | 0 |
| 17 | AQ | 99/105 (94%) | 0.84 | 11 (11%) 5 5 | 65, 81, 105, 117 | 0 |
| 17 | CQ | 99/105 (94%) | 1.65 | 40 (40%) 0 0 | 76, 88, 106, 117 | 0 |
| 18 | AR | 70/88 (79%) | -0.28 | 1 (1%) 75 74 | 70, 90, 121, 132 | 0 |
| 18 | CR | 70/88 (79%) | 1.24 | 17 (24%) 0 0 | 67, 86, 131, 149 | 0 |
| 19 | AS | 78/93 (83%) | 1.25 | 19 (24%) 0 0 | 106, 141, 172, 180 | 0 |
| 19 | CS | 78/93 (83%) | 0.65 | 10 (12%) 3 3 | 85, 113, 165, 167 | 0 |
| 20 | AT | 99/106 (93%) | 0.36 | 6 (6%) 21 20 | 71, 89, 135, 151 | 0 |
| 20 | CT | 99/106 (93%) | 0.98 | 15 (15%) 2 2 | 78, 104, 140, 145 | 0 |
| 21 | AU | 24/27 (88%) | -0.24 | 0 100 100 | 90, 114, 134, 139 | 0 |
| 21 | CU | 25/27 (92%) | -0.30 | 1 (4%) 38 36 | 86, 96, 126, 130 | 0 |
| 22 | AV | 76/77 (98%) | -0.24 | 0 100 100 | 56, 97, 125, 154 | 0 |
| 22 | CV | 77/77 (100%) | -0.17 | 2 (2%) 56 52 | 43, 88, 118, 155 | 0 |
| 23 | AW | 76/76 (100%) | 0.46 | 3 (3%) 39 37 | 51, 193, 217, 221 | 0 |
| 23 | AY | 19/76 (25%) | -0.17 | 0 100 100 | 75, 101, 161, 166 | 0 |
| 23 | CW | 76/76 (100%) | 0.82 | 12 (15%) 2 2 | 48, 194, 225, 230 | 0 |
| 23 | CY | 21/76 (27%) | -0.12 | 0 100 100 | 63, 99, 162, 202 | 0 |
| 24 | AX | 12/24 (50%) | -0.20 | 0 100 100 | 64, 74, 143, 145 | 0 |
| 24 | CX | 12/24 (50%) | 0.01 | 0 100 100 | 53, 60, 121, 127 | 0 |
| 25 | B0 | 76/85 (89%) | 0.65 | 7 (9%) 9 9 | 49, 69, 93, 149 | 0 |
| 25 | D0 | 82/85 (96%) | 0.46 | 7 (8%) 10 11 | 42, 57, 88, 102 | 0 |
| 26 | B1 | 88/98 (89%) | 1.18 | 19 (21%) 0 1 | 46, 65, 124, 140 | 0 |
| 26 | D1 | 88/98 (89%) | 1.35 | 20 (22%) 0 1 | 38, 60, 110, 120 | 0 |
| 27 | B2 | 50/72 (69%) | 0.38 | 6 (12%) 4 4 | 92, 120, 151, 164 | 0 |

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| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|-----------------|--------|---------------|-----------------------|-------|
| 27 | D2 | 53/72 (73%) | 0.12 | 1 (1%) 66 64 | 54, 69, 107, 120 | 0 |
| 28 | B3 | 58/60 (96%) | 1.09 | 12 (20%) 1 1 | 60, 74, 106, 109 | 0 |
| 28 | D3 | 60/60 (100%) | 0.45 | 6 (10%) 7 7 | 43, 57, 101, 113 | 0 |
| 29 | B4 | 45/71 (63%) | 0.79 | 8 (17%) 1 1 | 91, 152, 167, 176 | 0 |
| 29 | D4 | 49/71 (69%) | -0.71 | 0 100 100 | 81, 130, 153, 160 | 0 |
| 30 | B5 | 54/60 (90%) | 0.82 | 7 (12%) 3 3 | 38, 65, 120, 134 | 0 |
| 30 | D5 | 60/60 (100%) | 0.50 | 7 (11%) 4 4 | 28, 64, 147, 159 | 0 |
| 31 | B6 | 46/54 (85%) | -0.06 | 2 (4%) 35 33 | 68, 89, 104, 117 | 0 |
| 31 | D6 | 47/54 (87%) | 1.26 | 7 (14%) 2 2 | 67, 82, 116, 132 | 0 |
| 32 | B7 | 48/49 (97%) | 1.15 | 9 (18%) 1 1 | 38, 49, 78, 83 | 0 |
| 32 | D7 | 48/49 (97%) | 0.20 | 2 (4%) 36 34 | 29, 34, 68, 88 | 0 |
| 33 | B8 | 63/65 (96%) | 0.77 | 8 (12%) 3 3 | 49, 70, 86, 122 | 0 |
| 33 | D8 | 62/65 (95%) | 0.98 | 7 (11%) 5 5 | 41, 53, 71, 82 | 0 |
| 34 | B9 | 37/37 (100%) | 0.47 | 3 (8%) 12 11 | 77, 92, 106, 114 | 0 |
| 34 | D9 | 37/37 (100%) | 0.30 | 3 (8%) 12 11 | 59, 77, 98, 101 | 0 |
| 35 | BA | 2824/2839 (99%) | -0.25 | 23 (0%) 86 86 | 36, 63, 194, 265 | 0 |
| 35 | DA | 2824/2839 (99%) | -0.19 | 47 (1%) 70 67 | 27, 50, 193, 262 | 0 |
| 36 | BB | 120/122 (98%) | -0.57 | 0 100 100 | 76, 99, 132, 148 | 0 |
| 36 | DB | 119/122 (97%) | -0.52 | 0 100 100 | 53, 78, 113, 159 | 0 |
| 37 | BC | 190/229 (82%) | 1.29 | 56 (29%) 0 0 | 161, 211, 232, 239 | 0 |
| 37 | DC | 190/229 (82%) | 1.85 | 73 (38%) 0 0 | 166, 210, 231, 235 | 0 |
| 38 | BD | 273/276 (98%) | 0.39 | 13 (4%) 30 29 | 34, 55, 77, 89 | 0 |
| 38 | DD | 275/276 (99%) | 0.16 | 6 (2%) 62 59 | 28, 47, 73, 112 | 0 |
| 39 | BE | 204/206 (99%) | 0.57 | 18 (8%) 10 10 | 41, 68, 120, 139 | 0 |
| 39 | DE | 204/206 (99%) | 0.18 | 7 (3%) 45 43 | 27, 55, 101, 125 | 0 |
| 40 | BF | 206/210 (98%) | 0.57 | 21 (10%) 6 6 | 34, 76, 149, 186 | 0 |
| 40 | DF | 208/210 (99%) | 0.23 | 10 (4%) 30 29 | 29, 56, 138, 190 | 0 |
| 41 | BG | 178/182 (97%) | 0.68 | 20 (11%) 5 5 | 84, 108, 143, 182 | 0 |
| 41 | DG | 181/182 (99%) | 0.54 | 13 (7%) 15 15 | 67, 91, 134, 186 | 0 |
| 42 | BH | 159/180 (88%) | 1.73 | 61 (38%) 0 0 | 117, 156, 198, 206 | 0 |
| 42 | DH | 165/180 (91%) | 0.01 | 4 (2%) 59 55 | 57, 80, 107, 168 | 0 |

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| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|----------------|--------|---------------|-----------------------|-------|
| 43 | BI | 145/148 (97%) | 0.44 | 14 (9%) 7 8 | 61, 99, 133, 152 | 0 |
| 43 | DI | 144/148 (97%) | 0.39 | 8 (5%) 24 23 | 55, 140, 180, 195 | 0 |
| 44 | BJ | 0/173 | - | - | - | - |
| 44 | DJ | 0/173 | - | - | - | - |
| 45 | BK | 0/147 | - | - | - | - |
| 45 | DK | 0/147 | - | - | - | - |
| 46 | BN | 137/140 (97%) | 1.12 | 39 (28%) 0 0 | 50, 81, 126, 143 | 0 |
| 46 | DN | 140/140 (100%) | -0.04 | 6 (4%) 35 33 | 42, 60, 102, 120 | 0 |
| 47 | BO | 122/122 (100%) | 1.34 | 37 (30%) 0 0 | 46, 66, 87, 98 | 0 |
| 47 | DO | 122/122 (100%) | 0.25 | 4 (3%) 46 44 | 38, 53, 77, 90 | 0 |
| 48 | BP | 144/150 (96%) | 0.60 | 11 (7%) 13 13 | 44, 90, 126, 143 | 0 |
| 48 | DP | 146/150 (97%) | 0.67 | 11 (7%) 14 13 | 32, 69, 100, 190 | 0 |
| 49 | BQ | 135/141 (95%) | 1.33 | 34 (25%) 0 0 | 54, 85, 119, 154 | 0 |
| 49 | DQ | 136/141 (96%) | 1.94 | 53 (38%) 0 0 | 45, 66, 106, 139 | 0 |
| 50 | BR | 116/118 (98%) | 0.61 | 10 (8%) 10 10 | 46, 64, 103, 117 | 0 |
| 50 | DR | 117/118 (99%) | 0.03 | 2 (1%) 70 67 | 37, 53, 73, 90 | 0 |
| 51 | BS | 102/112 (91%) | -0.18 | 3 (2%) 51 50 | 71, 102, 120, 127 | 0 |
| 51 | DS | 99/112 (88%) | -0.19 | 1 (1%) 82 82 | 62, 82, 104, 107 | 0 |
| 52 | BT | 132/146 (90%) | 0.38 | 8 (6%) 21 20 | 54, 77, 131, 169 | 0 |
| 52 | DT | 137/146 (93%) | 1.19 | 29 (21%) 0 1 | 48, 68, 157, 221 | 0 |
| 53 | BU | 117/118 (99%) | 0.33 | 12 (10%) 6 6 | 44, 72, 113, 127 | 0 |
| 53 | DU | 117/118 (99%) | -0.07 | 2 (1%) 70 67 | 33, 53, 80, 106 | 0 |
| 54 | BV | 101/101 (100%) | 0.38 | 8 (7%) 12 12 | 48, 110, 134, 183 | 0 |
| 54 | DV | 101/101 (100%) | 0.51 | 8 (7%) 12 12 | 37, 81, 121, 153 | 0 |
| 55 | BW | 111/113 (98%) | 0.53 | 8 (7%) 15 15 | 47, 61, 106, 123 | 0 |
| 55 | DW | 111/113 (98%) | 0.30 | 8 (7%) 15 15 | 37, 46, 80, 135 | 0 |
| 56 | BX | 89/96 (92%) | 0.65 | 11 (12%) 4 4 | 61, 82, 138, 159 | 0 |
| 56 | DX | 94/96 (97%) | 0.22 | 3 (3%) 47 46 | 40, 55, 97, 140 | 0 |
| 57 | BY | 100/110 (90%) | 0.95 | 18 (18%) 1 1 | 63, 105, 143, 160 | 0 |
| 57 | DY | 109/110 (99%) | 0.26 | 9 (8%) 11 11 | 49, 76, 174, 200 | 0 |
| 58 | BZ | 176/206 (85%) | 3.69 | 92 (52%) 0 0 | 92, 153, 201, 217 | 0 |
| 58 | DZ | 176/206 (85%) | 5.18 | 156 (88%) 0 0 | 68, 128, 208, 216 | 0 |

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| Mol | Chain | Analysed | <RSRZ> | #RSRZ>2 | OWAB(Å ²) | Q<0.9 |
|-----|-------|-------------------|--------|----------------|-----------------------|-------|
| All | All | 21060/22694 (92%) | 0.29 | 1875 (8%) 9 10 | 27, 80, 183, 269 | 0 |

The worst 5 of 1875 RSRZ outliers are listed below:

| Mol | Chain | Res | Type | RSRZ |
|-----|-------|-----|------|------|
| 7 | CG | 84 | ASN | 29.5 |
| 58 | DZ | 106 | GLY | 20.4 |
| 58 | BZ | 154 | ASP | 19.6 |
| 7 | CG | 83 | ALA | 19.2 |
| 7 | CG | 85 | TYR | 17.8 |

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 monosaccharides 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, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|-------|------|----------------------------|-------|
| 59 | MG | BA | 3397 | 1/1 | -0.22 | 0.29 | 190,190,190,190 | 0 |
| 59 | MG | AA | 1713 | 1/1 | -0.04 | 0.33 | 137,137,137,137 | 0 |
| 59 | MG | BC | 302 | 1/1 | -0.04 | 0.28 | 171,171,171,171 | 0 |
| 59 | MG | BA | 3323 | 1/1 | -0.01 | 0.34 | 159,159,159,159 | 0 |
| 59 | MG | AW | 105 | 1/1 | 0.01 | 0.72 | 170,170,170,170 | 0 |
| 59 | MG | BA | 3344 | 1/1 | 0.07 | 0.65 | 81,81,81,81 | 0 |
| 59 | MG | CW | 109 | 1/1 | 0.07 | 1.10 | 125,125,125,125 | 0 |
| 59 | MG | CW | 112 | 1/1 | 0.08 | 0.45 | 191,191,191,191 | 0 |
| 59 | MG | CA | 1675 | 1/1 | 0.10 | 0.91 | 77,77,77,77 | 0 |
| 59 | MG | BA | 3293 | 1/1 | 0.14 | 0.21 | 108,108,108,108 | 0 |
| 59 | MG | AA | 1756 | 1/1 | 0.16 | 0.86 | 107,107,107,107 | 0 |
| 59 | MG | AA | 1804 | 1/1 | 0.18 | 0.95 | 80,80,80,80 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | BA | 3285 | 1/1 | 0.18 | 1.01 | 103,103,103,103 | 0 |
| 59 | MG | BA | 3437 | 1/1 | 0.20 | 0.16 | 126,126,126,126 | 0 |
| 59 | MG | AW | 114 | 1/1 | 0.25 | 0.48 | 193,193,193,193 | 0 |
| 59 | MG | DA | 3315 | 1/1 | 0.28 | 0.95 | 71,71,71,71 | 0 |
| 59 | MG | DA | 3203 | 1/1 | 0.30 | 0.89 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3431 | 1/1 | 0.30 | 0.37 | 94,94,94,94 | 0 |
| 59 | MG | CW | 108 | 1/1 | 0.31 | 0.79 | 130,130,130,130 | 0 |
| 59 | MG | CA | 1668 | 1/1 | 0.32 | 0.34 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3324 | 1/1 | 0.36 | 0.24 | 194,194,194,194 | 0 |
| 59 | MG | BA | 3351 | 1/1 | 0.39 | 0.27 | 116,116,116,116 | 0 |
| 59 | MG | BA | 3302 | 1/1 | 0.41 | 0.48 | 75,75,75,75 | 0 |
| 59 | MG | CW | 102 | 1/1 | 0.43 | 0.38 | 165,165,165,165 | 0 |
| 59 | MG | AW | 107 | 1/1 | 0.44 | 0.25 | 115,115,115,115 | 0 |
| 59 | MG | DA | 3007 | 1/1 | 0.44 | 0.68 | 77,77,77,77 | 0 |
| 59 | MG | DO | 202 | 1/1 | 0.45 | 1.27 | 86,86,86,86 | 0 |
| 59 | MG | BA | 3257 | 1/1 | 0.46 | 0.97 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1611 | 1/1 | 0.46 | 0.34 | 87,87,87,87 | 0 |
| 59 | MG | BA | 3433 | 1/1 | 0.46 | 0.32 | 94,94,94,94 | 0 |
| 59 | MG | BA | 3222 | 1/1 | 0.47 | 0.35 | 78,78,78,78 | 0 |
| 59 | MG | AA | 1775 | 1/1 | 0.47 | 0.14 | 75,75,75,75 | 0 |
| 59 | MG | DB | 206 | 1/1 | 0.48 | 0.24 | 91,91,91,91 | 0 |
| 59 | MG | AW | 118 | 1/1 | 0.48 | 0.22 | 188,188,188,188 | 0 |
| 59 | MG | DA | 3326 | 1/1 | 0.49 | 0.23 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3322 | 1/1 | 0.49 | 0.21 | 130,130,130,130 | 0 |
| 59 | MG | BB | 216 | 1/1 | 0.49 | 0.35 | 92,92,92,92 | 0 |
| 59 | MG | BA | 3301 | 1/1 | 0.50 | 0.25 | 115,115,115,115 | 0 |
| 59 | MG | CA | 1725 | 1/1 | 0.50 | 0.51 | 80,80,80,80 | 0 |
| 59 | MG | CA | 1620 | 1/1 | 0.51 | 0.54 | 105,105,105,105 | 0 |
| 59 | MG | AW | 104 | 1/1 | 0.51 | 1.21 | 171,171,171,171 | 0 |
| 59 | MG | BA | 3408 | 1/1 | 0.53 | 0.18 | 93,93,93,93 | 0 |
| 59 | MG | CA | 1627 | 1/1 | 0.54 | 0.62 | 49,49,49,49 | 0 |
| 59 | MG | AA | 1738 | 1/1 | 0.54 | 0.28 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3374 | 1/1 | 0.55 | 0.35 | 65,65,65,65 | 0 |
| 59 | MG | DB | 202 | 1/1 | 0.55 | 0.26 | 83,83,83,83 | 0 |
| 59 | MG | BA | 3213 | 1/1 | 0.55 | 0.36 | 72,72,72,72 | 0 |
| 59 | MG | DA | 3230 | 1/1 | 0.55 | 0.80 | 98,98,98,98 | 0 |
| 59 | MG | CA | 1652 | 1/1 | 0.56 | 0.66 | 85,85,85,85 | 0 |
| 59 | MG | AA | 1650 | 1/1 | 0.56 | 0.30 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3434 | 1/1 | 0.56 | 0.62 | 90,90,90,90 | 0 |
| 59 | MG | CA | 1683 | 1/1 | 0.56 | 0.23 | 74,74,74,74 | 0 |
| 59 | MG | AA | 1772 | 1/1 | 0.56 | 0.24 | 86,86,86,86 | 0 |
| 59 | MG | DB | 211 | 1/1 | 0.56 | 0.42 | 106,106,106,106 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | BA | 3438 | 1/1 | 0.56 | 0.20 | 104,104,104,104 | 0 |
| 59 | MG | BB | 207 | 1/1 | 0.57 | 0.31 | 115,115,115,115 | 0 |
| 59 | MG | DB | 207 | 1/1 | 0.57 | 0.73 | 73,73,73,73 | 0 |
| 59 | MG | AA | 1808 | 1/1 | 0.58 | 0.43 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3316 | 1/1 | 0.58 | 0.56 | 63,63,63,63 | 0 |
| 59 | MG | AA | 1677 | 1/1 | 0.58 | 0.26 | 72,72,72,72 | 0 |
| 59 | MG | BB | 217 | 1/1 | 0.59 | 0.29 | 98,98,98,98 | 0 |
| 59 | MG | BA | 3325 | 1/1 | 0.59 | 0.22 | 164,164,164,164 | 0 |
| 59 | MG | CA | 1700 | 1/1 | 0.59 | 0.35 | 87,87,87,87 | 0 |
| 59 | MG | AA | 1724 | 1/1 | 0.59 | 0.22 | 77,77,77,77 | 0 |
| 59 | MG | DA | 3143 | 1/1 | 0.60 | 0.28 | 67,67,67,67 | 0 |
| 59 | MG | AA | 1740 | 1/1 | 0.61 | 0.07 | 114,114,114,114 | 0 |
| 59 | MG | CA | 1643 | 1/1 | 0.61 | 0.19 | 100,100,100,100 | 0 |
| 59 | MG | CA | 1792 | 1/1 | 0.61 | 0.36 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3218 | 1/1 | 0.61 | 0.22 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1697 | 1/1 | 0.62 | 0.50 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3442 | 1/1 | 0.62 | 0.38 | 57,57,57,57 | 0 |
| 59 | MG | AA | 1759 | 1/1 | 0.62 | 0.18 | 93,93,93,93 | 0 |
| 59 | MG | DA | 3348 | 1/1 | 0.62 | 1.02 | 72,72,72,72 | 0 |
| 59 | MG | AW | 117 | 1/1 | 0.62 | 0.60 | 125,125,125,125 | 0 |
| 59 | MG | AA | 1760 | 1/1 | 0.63 | 0.70 | 105,105,105,105 | 0 |
| 59 | MG | DA | 3337 | 1/1 | 0.63 | 0.34 | 67,67,67,67 | 0 |
| 59 | MG | BS | 201 | 1/1 | 0.63 | 0.27 | 97,97,97,97 | 0 |
| 59 | MG | BA | 3007 | 1/1 | 0.64 | 0.19 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3456 | 1/1 | 0.64 | 0.55 | 73,73,73,73 | 0 |
| 59 | MG | CA | 1690 | 1/1 | 0.64 | 0.65 | 84,84,84,84 | 0 |
| 59 | MG | CW | 104 | 1/1 | 0.64 | 0.27 | 174,174,174,174 | 0 |
| 59 | MG | AA | 1674 | 1/1 | 0.64 | 0.49 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3210 | 1/1 | 0.64 | 0.36 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3157 | 1/1 | 0.65 | 0.26 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3364 | 1/1 | 0.65 | 0.48 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3224 | 1/1 | 0.65 | 0.41 | 62,62,62,62 | 0 |
| 59 | MG | CE | 201 | 1/1 | 0.66 | 0.91 | 84,84,84,84 | 0 |
| 59 | MG | AA | 1707 | 1/1 | 0.66 | 0.17 | 87,87,87,87 | 0 |
| 59 | MG | CW | 103 | 1/1 | 0.66 | 0.36 | 178,178,178,178 | 0 |
| 59 | MG | AW | 110 | 1/1 | 0.66 | 0.58 | 134,134,134,134 | 0 |
| 59 | MG | DA | 3163 | 1/1 | 0.66 | 0.88 | 79,79,79,79 | 0 |
| 59 | MG | BA | 3405 | 1/1 | 0.66 | 0.77 | 80,80,80,80 | 0 |
| 59 | MG | DA | 3342 | 1/1 | 0.66 | 0.50 | 59,59,59,59 | 0 |
| 59 | MG | BB | 208 | 1/1 | 0.67 | 0.15 | 83,83,83,83 | 0 |
| 59 | MG | BA | 3142 | 1/1 | 0.67 | 0.70 | 66,66,66,66 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | DA | 3206 | 1/1 | 0.67 | 0.43 | 82,82,82,82 | 0 |
| 59 | MG | CA | 1640 | 1/1 | 0.67 | 0.25 | 91,91,91,91 | 0 |
| 59 | MG | BA | 3398 | 1/1 | 0.67 | 0.25 | 104,104,104,104 | 0 |
| 59 | MG | BA | 3003 | 1/1 | 0.67 | 0.33 | 84,84,84,84 | 0 |
| 59 | MG | AA | 1763 | 1/1 | 0.67 | 0.14 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3320 | 1/1 | 0.67 | 0.45 | 67,67,67,67 | 0 |
| 59 | MG | CA | 1602 | 1/1 | 0.67 | 0.54 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3080 | 1/1 | 0.68 | 0.35 | 43,43,43,43 | 0 |
| 59 | MG | BA | 3132 | 1/1 | 0.68 | 0.44 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3331 | 1/1 | 0.68 | 0.22 | 88,88,88,88 | 0 |
| 59 | MG | AA | 1645 | 1/1 | 0.68 | 0.43 | 79,79,79,79 | 0 |
| 59 | MG | DA | 3356 | 1/1 | 0.68 | 0.63 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3011 | 1/1 | 0.68 | 1.51 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3353 | 1/1 | 0.68 | 1.11 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3244 | 1/1 | 0.68 | 0.15 | 147,147,147,147 | 0 |
| 59 | MG | CA | 1695 | 1/1 | 0.68 | 0.43 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1636 | 1/1 | 0.68 | 0.26 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3059 | 1/1 | 0.68 | 0.35 | 65,65,65,65 | 0 |
| 59 | MG | CW | 106 | 1/1 | 0.69 | 0.48 | 133,133,133,133 | 0 |
| 59 | MG | DA | 3318 | 1/1 | 0.69 | 0.28 | 67,67,67,67 | 0 |
| 59 | MG | AA | 1801 | 1/1 | 0.69 | 0.36 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3389 | 1/1 | 0.69 | 0.47 | 74,74,74,74 | 0 |
| 59 | MG | AW | 115 | 1/1 | 0.69 | 0.39 | 193,193,193,193 | 0 |
| 59 | MG | AV | 103 | 1/1 | 0.69 | 0.36 | 93,93,93,93 | 0 |
| 59 | MG | CA | 1733 | 1/1 | 0.69 | 0.11 | 81,81,81,81 | 0 |
| 59 | MG | CA | 1742 | 1/1 | 0.69 | 0.66 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1766 | 1/1 | 0.69 | 0.15 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1646 | 1/1 | 0.69 | 0.80 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3306 | 1/1 | 0.69 | 0.72 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3187 | 1/1 | 0.69 | 0.38 | 93,93,93,93 | 0 |
| 59 | MG | CA | 1619 | 1/1 | 0.69 | 0.40 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3108 | 1/1 | 0.69 | 0.45 | 69,69,69,69 | 0 |
| 59 | MG | BX | 101 | 1/1 | 0.70 | 0.23 | 48,48,48,48 | 0 |
| 59 | MG | AA | 1681 | 1/1 | 0.70 | 0.55 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3145 | 1/1 | 0.70 | 0.60 | 62,62,62,62 | 0 |
| 59 | MG | AT | 201 | 1/1 | 0.70 | 0.54 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3303 | 1/1 | 0.70 | 0.34 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3427 | 1/1 | 0.70 | 0.44 | 84,84,84,84 | 0 |
| 59 | MG | CA | 1706 | 1/1 | 0.70 | 0.25 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3305 | 1/1 | 0.70 | 0.37 | 77,77,77,77 | 0 |
| 59 | MG | CA | 1642 | 1/1 | 0.70 | 0.17 | 83,83,83,83 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3367 | 1/1 | 0.70 | 0.27 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3168 | 1/1 | 0.70 | 0.23 | 89,89,89,89 | 0 |
| 59 | MG | AA | 1770 | 1/1 | 0.70 | 0.41 | 74,74,74,74 | 0 |
| 59 | MG | CA | 1648 | 1/1 | 0.70 | 0.18 | 96,96,96,96 | 0 |
| 59 | MG | DA | 3224 | 1/1 | 0.70 | 0.49 | 40,40,40,40 | 0 |
| 59 | MG | CA | 1649 | 1/1 | 0.70 | 0.74 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3198 | 1/1 | 0.70 | 0.14 | 54,54,54,54 | 0 |
| 59 | MG | AA | 1777 | 1/1 | 0.71 | 0.90 | 81,81,81,81 | 0 |
| 59 | MG | BA | 3366 | 1/1 | 0.71 | 0.12 | 89,89,89,89 | 0 |
| 59 | MG | CW | 107 | 1/1 | 0.71 | 0.27 | 145,145,145,145 | 0 |
| 59 | MG | DA | 3353 | 1/1 | 0.71 | 0.32 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3254 | 1/1 | 0.71 | 0.43 | 89,89,89,89 | 0 |
| 59 | MG | CA | 1650 | 1/1 | 0.71 | 0.34 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3271 | 1/1 | 0.72 | 0.60 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1677 | 1/1 | 0.72 | 0.41 | 68,68,68,68 | 0 |
| 59 | MG | DA | 3382 | 1/1 | 0.72 | 0.47 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3014 | 1/1 | 0.72 | 0.68 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3025 | 1/1 | 0.72 | 0.20 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1762 | 1/1 | 0.72 | 0.28 | 57,57,57,57 | 0 |
| 59 | MG | CA | 1660 | 1/1 | 0.72 | 0.21 | 65,65,65,65 | 0 |
| 59 | MG | AA | 1706 | 1/1 | 0.72 | 0.24 | 86,86,86,86 | 0 |
| 59 | MG | DA | 3331 | 1/1 | 0.73 | 0.18 | 99,99,99,99 | 0 |
| 59 | MG | CA | 1703 | 1/1 | 0.73 | 0.12 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1670 | 1/1 | 0.73 | 0.40 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1714 | 1/1 | 0.73 | 0.18 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3051 | 1/1 | 0.73 | 0.20 | 66,66,66,66 | 0 |
| 59 | MG | AL | 201 | 1/1 | 0.73 | 0.94 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1678 | 1/1 | 0.73 | 0.39 | 78,78,78,78 | 0 |
| 59 | MG | DA | 3246 | 1/1 | 0.73 | 0.45 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3307 | 1/1 | 0.73 | 0.94 | 64,64,64,64 | 0 |
| 59 | MG | CA | 1761 | 1/1 | 0.73 | 0.26 | 66,66,66,66 | 0 |
| 59 | MG | AA | 1700 | 1/1 | 0.73 | 0.34 | 78,78,78,78 | 0 |
| 59 | MG | AW | 113 | 1/1 | 0.73 | 0.42 | 96,96,96,96 | 0 |
| 59 | MG | AA | 1660 | 1/1 | 0.73 | 1.08 | 84,84,84,84 | 0 |
| 59 | MG | AA | 1727 | 1/1 | 0.73 | 0.21 | 63,63,63,63 | 0 |
| 59 | MG | CW | 101 | 1/1 | 0.74 | 0.34 | 101,101,101,101 | 0 |
| 59 | MG | BF | 302 | 1/1 | 0.74 | 0.34 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3322 | 1/1 | 0.74 | 0.20 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3182 | 1/1 | 0.74 | 0.29 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3194 | 1/1 | 0.74 | 0.20 | 62,62,62,62 | 0 |
| 59 | MG | DA | 3258 | 1/1 | 0.74 | 0.44 | 65,65,65,65 | 0 |
| 59 | MG | AA | 1675 | 1/1 | 0.74 | 0.27 | 85,85,85,85 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | BA | 3192 | 1/1 | 0.74 | 0.25 | 80,80,80,80 | 0 |
| 59 | MG | AD | 301 | 1/1 | 0.74 | 0.44 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1758 | 1/1 | 0.75 | 0.20 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3400 | 1/1 | 0.75 | 0.44 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3280 | 1/1 | 0.75 | 0.44 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3152 | 1/1 | 0.75 | 0.44 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3213 | 1/1 | 0.75 | 0.30 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1683 | 1/1 | 0.75 | 0.31 | 74,74,74,74 | 0 |
| 59 | MG | CA | 1686 | 1/1 | 0.75 | 0.19 | 77,77,77,77 | 0 |
| 59 | MG | AW | 119 | 1/1 | 0.75 | 0.63 | 194,194,194,194 | 0 |
| 59 | MG | AA | 1686 | 1/1 | 0.76 | 0.13 | 86,86,86,86 | 0 |
| 59 | MG | CA | 1735 | 1/1 | 0.76 | 0.36 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3365 | 1/1 | 0.76 | 0.33 | 54,54,54,54 | 0 |
| 59 | MG | CA | 1749 | 1/1 | 0.76 | 0.24 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3024 | 1/1 | 0.76 | 0.33 | 82,82,82,82 | 0 |
| 59 | MG | DA | 3232 | 1/1 | 0.76 | 0.13 | 93,93,93,93 | 0 |
| 59 | MG | BA | 3093 | 1/1 | 0.76 | 0.34 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3162 | 1/1 | 0.76 | 0.32 | 55,55,55,55 | 0 |
| 59 | MG | DA | 3008 | 1/1 | 0.76 | 0.52 | 76,76,76,76 | 0 |
| 59 | MG | AA | 1619 | 1/1 | 0.76 | 1.15 | 83,83,83,83 | 0 |
| 59 | MG | DA | 3299 | 1/1 | 0.76 | 0.39 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1637 | 1/1 | 0.76 | 0.84 | 71,71,71,71 | 0 |
| 59 | MG | CA | 1665 | 1/1 | 0.76 | 0.30 | 72,72,72,72 | 0 |
| 59 | MG | AA | 1765 | 1/1 | 0.76 | 0.19 | 84,84,84,84 | 0 |
| 59 | MG | CA | 1674 | 1/1 | 0.76 | 0.49 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3356 | 1/1 | 0.76 | 0.19 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3457 | 1/1 | 0.77 | 0.52 | 82,82,82,82 | 0 |
| 59 | MG | AA | 1718 | 1/1 | 0.77 | 0.24 | 89,89,89,89 | 0 |
| 59 | MG | DA | 3004 | 1/1 | 0.77 | 0.28 | 89,89,89,89 | 0 |
| 59 | MG | DA | 3005 | 1/1 | 0.77 | 0.72 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3180 | 1/1 | 0.77 | 0.14 | 79,79,79,79 | 0 |
| 59 | MG | CA | 1743 | 1/1 | 0.77 | 0.18 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3383 | 1/1 | 0.77 | 0.37 | 92,92,92,92 | 0 |
| 59 | MG | BB | 211 | 1/1 | 0.77 | 0.26 | 74,74,74,74 | 0 |
| 59 | MG | BA | 3186 | 1/1 | 0.77 | 0.41 | 65,65,65,65 | 0 |
| 59 | MG | AW | 112 | 1/1 | 0.77 | 0.38 | 112,112,112,112 | 0 |
| 59 | MG | AA | 1712 | 1/1 | 0.77 | 0.07 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3230 | 1/1 | 0.77 | 0.32 | 89,89,89,89 | 0 |
| 59 | MG | BA | 3313 | 1/1 | 0.78 | 0.64 | 68,68,68,68 | 0 |
| 59 | MG | DA | 3321 | 1/1 | 0.78 | 0.23 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1750 | 1/1 | 0.78 | 0.31 | 70,70,70,70 | 0 |
| 59 | MG | CA | 1751 | 1/1 | 0.78 | 0.16 | 69,69,69,69 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | AV | 102 | 1/1 | 0.78 | 0.60 | 74,74,74,74 | 0 |
| 59 | MG | DA | 3211 | 1/1 | 0.78 | 0.32 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3350 | 1/1 | 0.78 | 0.45 | 91,91,91,91 | 0 |
| 59 | MG | CA | 1721 | 1/1 | 0.78 | 0.20 | 81,81,81,81 | 0 |
| 59 | MG | DA | 3350 | 1/1 | 0.78 | 0.37 | 58,58,58,58 | 0 |
| 59 | MG | BQ | 201 | 1/1 | 0.78 | 0.23 | 51,51,51,51 | 0 |
| 59 | MG | CA | 1783 | 1/1 | 0.78 | 0.23 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3357 | 1/1 | 0.78 | 0.22 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1732 | 1/1 | 0.78 | 0.24 | 85,85,85,85 | 0 |
| 59 | MG | BA | 3126 | 1/1 | 0.78 | 0.45 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3105 | 1/1 | 0.78 | 0.47 | 40,40,40,40 | 0 |
| 59 | MG | DA | 3136 | 1/1 | 0.78 | 0.49 | 46,46,46,46 | 0 |
| 59 | MG | CI | 201 | 1/1 | 0.78 | 0.29 | 86,86,86,86 | 0 |
| 59 | MG | AA | 1743 | 1/1 | 0.78 | 0.74 | 80,80,80,80 | 0 |
| 59 | MG | DA | 3160 | 1/1 | 0.78 | 0.18 | 73,73,73,73 | 0 |
| 59 | MG | AW | 101 | 1/1 | 0.78 | 0.81 | 154,154,154,154 | 0 |
| 59 | MG | BA | 3327 | 1/1 | 0.78 | 0.36 | 109,109,109,109 | 0 |
| 59 | MG | DV | 201 | 1/1 | 0.78 | 1.76 | 100,100,100,100 | 0 |
| 59 | MG | BA | 3171 | 1/1 | 0.79 | 0.26 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3172 | 1/1 | 0.79 | 0.13 | 62,62,62,62 | 0 |
| 59 | MG | DA | 3086 | 1/1 | 0.79 | 0.47 | 50,50,50,50 | 0 |
| 59 | MG | CV | 103 | 1/1 | 0.79 | 0.30 | 80,80,80,80 | 0 |
| 59 | MG | AA | 1676 | 1/1 | 0.79 | 0.90 | 88,88,88,88 | 0 |
| 59 | MG | BA | 3216 | 1/1 | 0.79 | 0.20 | 88,88,88,88 | 0 |
| 59 | MG | CA | 1671 | 1/1 | 0.79 | 0.10 | 106,106,106,106 | 0 |
| 59 | MG | AA | 1604 | 1/1 | 0.79 | 0.27 | 64,64,64,64 | 0 |
| 59 | MG | B1 | 101 | 1/1 | 0.79 | 0.34 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3166 | 1/1 | 0.79 | 0.40 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1605 | 1/1 | 0.79 | 0.24 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1608 | 1/1 | 0.79 | 0.23 | 75,75,75,75 | 0 |
| 59 | MG | CA | 1775 | 1/1 | 0.79 | 0.39 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3399 | 1/1 | 0.79 | 0.54 | 89,89,89,89 | 0 |
| 59 | MG | DA | 3002 | 1/1 | 0.79 | 0.35 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3357 | 1/1 | 0.79 | 0.50 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1794 | 1/1 | 0.79 | 0.39 | 66,66,66,66 | 0 |
| 59 | MG | CA | 1793 | 1/1 | 0.80 | 0.43 | 75,75,75,75 | 0 |
| 59 | MG | CA | 1689 | 1/1 | 0.80 | 0.40 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3340 | 1/1 | 0.80 | 0.30 | 62,62,62,62 | 0 |
| 59 | MG | CA | 1664 | 1/1 | 0.80 | 0.48 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3317 | 1/1 | 0.80 | 0.29 | 99,99,99,99 | 0 |
| 59 | MG | BA | 3385 | 1/1 | 0.80 | 0.71 | 84,84,84,84 | 0 |
| 59 | MG | DA | 3373 | 1/1 | 0.80 | 0.55 | 75,75,75,75 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | BA | 3167 | 1/1 | 0.80 | 0.28 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1754 | 1/1 | 0.80 | 0.20 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1776 | 1/1 | 0.80 | 0.51 | 72,72,72,72 | 0 |
| 59 | MG | DA | 3387 | 1/1 | 0.80 | 1.10 | 102,102,102,102 | 0 |
| 59 | MG | AA | 1634 | 1/1 | 0.80 | 0.43 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3286 | 1/1 | 0.80 | 0.42 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3086 | 1/1 | 0.80 | 0.57 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3332 | 1/1 | 0.80 | 0.24 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1656 | 1/1 | 0.80 | 0.17 | 74,74,74,74 | 0 |
| 59 | MG | DA | 3256 | 1/1 | 0.80 | 0.67 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3420 | 1/1 | 0.81 | 0.23 | 77,77,77,77 | 0 |
| 59 | MG | CW | 110 | 1/1 | 0.81 | 0.30 | 197,197,197,197 | 0 |
| 59 | MG | AA | 1745 | 1/1 | 0.81 | 0.46 | 77,77,77,77 | 0 |
| 59 | MG | CA | 1767 | 1/1 | 0.81 | 0.36 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3233 | 1/1 | 0.81 | 0.17 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1720 | 1/1 | 0.81 | 0.32 | 67,67,67,67 | 0 |
| 59 | MG | BC | 301 | 1/1 | 0.81 | 0.19 | 166,166,166,166 | 0 |
| 59 | MG | CA | 1673 | 1/1 | 0.81 | 0.13 | 92,92,92,92 | 0 |
| 59 | MG | DA | 3014 | 1/1 | 0.81 | 0.43 | 55,55,55,55 | 0 |
| 59 | MG | CA | 1729 | 1/1 | 0.81 | 0.23 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1764 | 1/1 | 0.81 | 0.46 | 79,79,79,79 | 0 |
| 59 | MG | BA | 3256 | 1/1 | 0.81 | 0.67 | 79,79,79,79 | 0 |
| 59 | MG | BA | 3152 | 1/1 | 0.81 | 0.39 | 46,46,46,46 | 0 |
| 59 | MG | AW | 106 | 1/1 | 0.81 | 0.39 | 149,149,149,149 | 0 |
| 59 | MG | BA | 3182 | 1/1 | 0.81 | 0.13 | 69,69,69,69 | 0 |
| 59 | MG | BX | 102 | 1/1 | 0.81 | 0.20 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1789 | 1/1 | 0.81 | 0.23 | 126,126,126,126 | 0 |
| 59 | MG | AX | 102 | 1/1 | 0.81 | 0.25 | 79,79,79,79 | 0 |
| 59 | MG | DA | 3190 | 1/1 | 0.81 | 0.66 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3229 | 1/1 | 0.81 | 0.38 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3413 | 1/1 | 0.81 | 0.62 | 59,59,59,59 | 0 |
| 59 | MG | B1 | 102 | 1/1 | 0.82 | 0.38 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3002 | 1/1 | 0.82 | 0.31 | 60,60,60,60 | 0 |
| 59 | MG | AA | 1757 | 1/1 | 0.82 | 0.58 | 60,60,60,60 | 0 |
| 59 | MG | AA | 1602 | 1/1 | 0.82 | 0.37 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3439 | 1/1 | 0.82 | 0.28 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1765 | 1/1 | 0.82 | 0.57 | 60,60,60,60 | 0 |
| 59 | MG | CA | 1623 | 1/1 | 0.82 | 0.19 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3116 | 1/1 | 0.82 | 0.39 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3227 | 1/1 | 0.82 | 0.36 | 78,78,78,78 | 0 |
| 59 | MG | AA | 1679 | 1/1 | 0.82 | 0.36 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3113 | 1/1 | 0.82 | 0.32 | 48,48,48,48 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | CA | 1692 | 1/1 | 0.82 | 0.13 | 96,96,96,96 | 0 |
| 59 | MG | DA | 3333 | 1/1 | 0.82 | 0.16 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3388 | 1/1 | 0.82 | 0.38 | 59,59,59,59 | 0 |
| 59 | MG | AA | 1654 | 1/1 | 0.82 | 0.61 | 79,79,79,79 | 0 |
| 59 | MG | DA | 3176 | 1/1 | 0.82 | 0.47 | 70,70,70,70 | 0 |
| 59 | MG | BA | 3022 | 1/1 | 0.82 | 0.49 | 61,61,61,61 | 0 |
| 59 | MG | BB | 215 | 1/1 | 0.82 | 0.36 | 76,76,76,76 | 0 |
| 59 | MG | DA | 3355 | 1/1 | 0.82 | 0.20 | 39,39,39,39 | 0 |
| 59 | MG | CA | 1647 | 1/1 | 0.82 | 0.44 | 67,67,67,67 | 0 |
| 59 | MG | CA | 1716 | 1/1 | 0.82 | 0.30 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3133 | 1/1 | 0.82 | 0.78 | 94,94,94,94 | 0 |
| 59 | MG | DA | 3208 | 1/1 | 0.82 | 0.38 | 63,63,63,63 | 0 |
| 59 | MG | AA | 1752 | 1/1 | 0.82 | 0.34 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3380 | 1/1 | 0.82 | 0.27 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3143 | 1/1 | 0.82 | 0.29 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3339 | 1/1 | 0.82 | 0.22 | 58,58,58,58 | 0 |
| 59 | MG | AA | 1647 | 1/1 | 0.82 | 0.67 | 95,95,95,95 | 0 |
| 59 | MG | BF | 303 | 1/1 | 0.82 | 0.22 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3199 | 1/1 | 0.82 | 0.18 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3203 | 1/1 | 0.82 | 0.50 | 58,58,58,58 | 0 |
| 59 | MG | AA | 1666 | 1/1 | 0.82 | 0.29 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3352 | 1/1 | 0.82 | 0.40 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3003 | 1/1 | 0.82 | 0.43 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1741 | 1/1 | 0.83 | 0.46 | 57,57,57,57 | 0 |
| 59 | MG | AA | 1794 | 1/1 | 0.83 | 1.00 | 103,103,103,103 | 0 |
| 59 | MG | AA | 1656 | 1/1 | 0.83 | 0.35 | 102,102,102,102 | 0 |
| 59 | MG | BA | 3424 | 1/1 | 0.83 | 0.32 | 52,52,52,52 | 0 |
| 59 | MG | CA | 1644 | 1/1 | 0.83 | 0.27 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3344 | 1/1 | 0.83 | 0.28 | 43,43,43,43 | 0 |
| 59 | MG | BA | 3263 | 1/1 | 0.83 | 0.48 | 60,60,60,60 | 0 |
| 59 | MG | DA | 3064 | 1/1 | 0.83 | 0.50 | 32,32,32,32 | 0 |
| 59 | MG | CA | 1753 | 1/1 | 0.83 | 0.31 | 82,82,82,82 | 0 |
| 59 | MG | CA | 1754 | 1/1 | 0.83 | 0.47 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3111 | 1/1 | 0.83 | 0.38 | 28,28,28,28 | 0 |
| 59 | MG | AA | 1710 | 1/1 | 0.83 | 0.21 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3124 | 1/1 | 0.83 | 0.44 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3276 | 1/1 | 0.83 | 0.42 | 70,70,70,70 | 0 |
| 59 | MG | DA | 3274 | 1/1 | 0.83 | 0.24 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3096 | 1/1 | 0.83 | 0.28 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1761 | 1/1 | 0.83 | 0.48 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1726 | 1/1 | 0.83 | 0.39 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3219 | 1/1 | 0.83 | 0.08 | 181,181,181,181 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | CA | 1772 | 1/1 | 0.83 | 0.52 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3255 | 1/1 | 0.83 | 0.58 | 85,85,85,85 | 0 |
| 59 | MG | DA | 3181 | 1/1 | 0.83 | 0.10 | 56,56,56,56 | 0 |
| 59 | MG | D2 | 102 | 1/1 | 0.83 | 0.30 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3001 | 1/1 | 0.83 | 0.70 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3329 | 1/1 | 0.83 | 0.32 | 50,50,50,50 | 0 |
| 59 | MG | CA | 1614 | 1/1 | 0.84 | 0.16 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3409 | 1/1 | 0.84 | 0.41 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3231 | 1/1 | 0.84 | 0.40 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3418 | 1/1 | 0.84 | 0.37 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3232 | 1/1 | 0.84 | 0.41 | 74,74,74,74 | 0 |
| 59 | MG | AA | 1617 | 1/1 | 0.84 | 0.37 | 81,81,81,81 | 0 |
| 59 | MG | AA | 1672 | 1/1 | 0.84 | 0.31 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3338 | 1/1 | 0.84 | 0.52 | 89,89,89,89 | 0 |
| 59 | MG | BA | 3019 | 1/1 | 0.84 | 0.27 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3221 | 1/1 | 0.84 | 0.28 | 87,87,87,87 | 0 |
| 59 | MG | CA | 1681 | 1/1 | 0.84 | 0.65 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3392 | 1/1 | 0.84 | 0.68 | 83,83,83,83 | 0 |
| 59 | MG | AA | 1705 | 1/1 | 0.84 | 0.17 | 83,83,83,83 | 0 |
| 59 | MG | BU | 205 | 1/1 | 0.84 | 0.42 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3233 | 1/1 | 0.84 | 0.33 | 53,53,53,53 | 0 |
| 59 | MG | BA | 3116 | 1/1 | 0.84 | 0.49 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3125 | 1/1 | 0.84 | 0.20 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3366 | 1/1 | 0.84 | 0.58 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3206 | 1/1 | 0.84 | 0.32 | 50,50,50,50 | 0 |
| 59 | MG | DA | 3140 | 1/1 | 0.84 | 0.52 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3264 | 1/1 | 0.84 | 0.48 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3271 | 1/1 | 0.84 | 0.15 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1756 | 1/1 | 0.84 | 0.27 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3280 | 1/1 | 0.84 | 0.13 | 107,107,107,107 | 0 |
| 59 | MG | CA | 1655 | 1/1 | 0.84 | 0.55 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3304 | 1/1 | 0.84 | 0.20 | 70,70,70,70 | 0 |
| 59 | MG | DA | 3162 | 1/1 | 0.84 | 0.21 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3311 | 1/1 | 0.84 | 0.32 | 70,70,70,70 | 0 |
| 59 | MG | AA | 1696 | 1/1 | 0.84 | 0.19 | 81,81,81,81 | 0 |
| 59 | MG | CW | 111 | 1/1 | 0.84 | 1.21 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3317 | 1/1 | 0.84 | 0.31 | 52,52,52,52 | 0 |
| 59 | MG | CA | 1791 | 1/1 | 0.85 | 0.39 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3015 | 1/1 | 0.85 | 0.36 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1783 | 1/1 | 0.85 | 0.84 | 74,74,74,74 | 0 |
| 59 | MG | AA | 1788 | 1/1 | 0.85 | 0.45 | 94,94,94,94 | 0 |
| 59 | MG | CA | 1796 | 1/1 | 0.85 | 0.52 | 68,68,68,68 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3225 | 1/1 | 0.85 | 0.46 | 37,37,37,37 | 0 |
| 59 | MG | CA | 1682 | 1/1 | 0.85 | 0.22 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3108 | 1/1 | 0.85 | 0.27 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3156 | 1/1 | 0.85 | 0.25 | 78,78,78,78 | 0 |
| 59 | MG | CA | 1747 | 1/1 | 0.85 | 0.36 | 40,40,40,40 | 0 |
| 59 | MG | AE | 201 | 1/1 | 0.85 | 0.17 | 86,86,86,86 | 0 |
| 59 | MG | BB | 201 | 1/1 | 0.85 | 0.32 | 87,87,87,87 | 0 |
| 59 | MG | BA | 3412 | 1/1 | 0.85 | 0.27 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3261 | 1/1 | 0.85 | 0.57 | 50,50,50,50 | 0 |
| 59 | MG | AA | 1721 | 1/1 | 0.85 | 0.19 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1609 | 1/1 | 0.85 | 0.17 | 69,69,69,69 | 0 |
| 59 | MG | BB | 209 | 1/1 | 0.85 | 0.32 | 109,109,109,109 | 0 |
| 59 | MG | AA | 1601 | 1/1 | 0.85 | 0.70 | 73,73,73,73 | 0 |
| 59 | MG | AA | 1742 | 1/1 | 0.85 | 0.10 | 72,72,72,72 | 0 |
| 59 | MG | CA | 1707 | 1/1 | 0.85 | 0.38 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3169 | 1/1 | 0.85 | 0.26 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3332 | 1/1 | 0.85 | 0.40 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3391 | 1/1 | 0.85 | 0.21 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3079 | 1/1 | 0.85 | 0.41 | 65,65,65,65 | 0 |
| 59 | MG | CA | 1669 | 1/1 | 0.85 | 0.52 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3013 | 1/1 | 0.85 | 0.42 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3177 | 1/1 | 0.85 | 0.08 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3195 | 1/1 | 0.85 | 0.36 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1733 | 1/1 | 0.85 | 0.41 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3071 | 1/1 | 0.86 | 0.53 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3287 | 1/1 | 0.86 | 0.20 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3301 | 1/1 | 0.86 | 0.26 | 136,136,136,136 | 0 |
| 59 | MG | CA | 1708 | 1/1 | 0.86 | 0.38 | 55,55,55,55 | 0 |
| 59 | MG | DA | 3141 | 1/1 | 0.86 | 0.23 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3012 | 1/1 | 0.86 | 0.30 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3145 | 1/1 | 0.86 | 0.28 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3148 | 1/1 | 0.86 | 0.33 | 44,44,44,44 | 0 |
| 59 | MG | AV | 106 | 1/1 | 0.86 | 0.30 | 96,96,96,96 | 0 |
| 59 | MG | AX | 101 | 1/1 | 0.86 | 0.52 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1797 | 1/1 | 0.86 | 0.28 | 73,73,73,73 | 0 |
| 59 | MG | AA | 1747 | 1/1 | 0.86 | 0.25 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1661 | 1/1 | 0.86 | 0.36 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3248 | 1/1 | 0.86 | 0.41 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3328 | 1/1 | 0.86 | 0.14 | 155,155,155,155 | 0 |
| 59 | MG | BA | 3107 | 1/1 | 0.86 | 0.42 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1667 | 1/1 | 0.86 | 0.47 | 62,62,62,62 | 0 |
| 59 | MG | CA | 1740 | 1/1 | 0.86 | 0.40 | 59,59,59,59 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3163 | 1/1 | 0.86 | 0.16 | 81,81,81,81 | 0 |
| 59 | MG | AA | 1694 | 1/1 | 0.86 | 0.26 | 77,77,77,77 | 0 |
| 59 | MG | BA | 3367 | 1/1 | 0.86 | 0.20 | 85,85,85,85 | 0 |
| 59 | MG | BA | 3371 | 1/1 | 0.86 | 0.47 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1615 | 1/1 | 0.86 | 0.26 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3381 | 1/1 | 0.86 | 0.30 | 53,53,53,53 | 0 |
| 59 | MG | BA | 3383 | 1/1 | 0.86 | 0.25 | 35,35,35,35 | 0 |
| 59 | MG | AA | 1648 | 1/1 | 0.86 | 0.12 | 81,81,81,81 | 0 |
| 59 | MG | BA | 3258 | 1/1 | 0.86 | 0.68 | 69,69,69,69 | 0 |
| 59 | MG | DA | 3363 | 1/1 | 0.86 | 0.30 | 48,48,48,48 | 0 |
| 59 | MG | AW | 116 | 1/1 | 0.86 | 0.86 | 76,76,76,76 | 0 |
| 59 | MG | BA | 3028 | 1/1 | 0.86 | 0.42 | 23,23,23,23 | 0 |
| 59 | MG | DA | 3372 | 1/1 | 0.86 | 0.21 | 68,68,68,68 | 0 |
| 59 | MG | DA | 3231 | 1/1 | 0.86 | 0.20 | 71,71,71,71 | 0 |
| 59 | MG | CA | 1638 | 1/1 | 0.86 | 0.23 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3328 | 1/1 | 0.86 | 0.93 | 80,80,80,80 | 0 |
| 59 | MG | DA | 3234 | 1/1 | 0.86 | 0.64 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3275 | 1/1 | 0.86 | 0.38 | 45,45,45,45 | 0 |
| 59 | MG | AA | 1603 | 1/1 | 0.86 | 0.09 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3249 | 1/1 | 0.86 | 0.27 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3278 | 1/1 | 0.86 | 0.38 | 86,86,86,86 | 0 |
| 59 | MG | DA | 3103 | 1/1 | 0.86 | 0.92 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1699 | 1/1 | 0.86 | 0.15 | 66,66,66,66 | 0 |
| 59 | MG | AW | 109 | 1/1 | 0.86 | 0.26 | 154,154,154,154 | 0 |
| 59 | MG | BA | 3063 | 1/1 | 0.86 | 0.35 | 46,46,46,46 | 0 |
| 59 | MG | CA | 1705 | 1/1 | 0.86 | 0.48 | 46,46,46,46 | 0 |
| 59 | MG | AW | 111 | 1/1 | 0.87 | 0.93 | 139,139,139,139 | 0 |
| 59 | MG | CA | 1633 | 1/1 | 0.87 | 0.29 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1672 | 1/1 | 0.87 | 0.14 | 94,94,94,94 | 0 |
| 59 | MG | BA | 3292 | 1/1 | 0.87 | 0.30 | 48,48,48,48 | 0 |
| 59 | MG | AA | 1644 | 1/1 | 0.87 | 0.46 | 50,50,50,50 | 0 |
| 59 | MG | AA | 1748 | 1/1 | 0.87 | 0.39 | 98,98,98,98 | 0 |
| 59 | MG | AA | 1774 | 1/1 | 0.87 | 0.35 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3169 | 1/1 | 0.87 | 0.34 | 49,49,49,49 | 0 |
| 59 | MG | AA | 1658 | 1/1 | 0.87 | 0.32 | 63,63,63,63 | 0 |
| 59 | MG | CU | 101 | 1/1 | 0.87 | 0.17 | 84,84,84,84 | 0 |
| 59 | MG | DA | 3228 | 1/1 | 0.87 | 0.62 | 43,43,43,43 | 0 |
| 59 | MG | BA | 3435 | 1/1 | 0.87 | 0.19 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3345 | 1/1 | 0.87 | 0.31 | 74,74,74,74 | 0 |
| 59 | MG | BU | 203 | 1/1 | 0.87 | 0.35 | 82,82,82,82 | 0 |
| 59 | MG | BA | 3112 | 1/1 | 0.87 | 0.72 | 42,42,42,42 | 0 |
| 59 | MG | AA | 1701 | 1/1 | 0.87 | 0.39 | 60,60,60,60 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3243 | 1/1 | 0.87 | 0.52 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3441 | 1/1 | 0.87 | 0.50 | 50,50,50,50 | 0 |
| 59 | MG | AA | 1627 | 1/1 | 0.87 | 0.33 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3147 | 1/1 | 0.87 | 0.27 | 31,31,31,31 | 0 |
| 59 | MG | DA | 3254 | 1/1 | 0.87 | 0.37 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3255 | 1/1 | 0.87 | 0.28 | 55,55,55,55 | 0 |
| 59 | MG | CA | 1654 | 1/1 | 0.87 | 0.48 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3454 | 1/1 | 0.87 | 0.27 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3368 | 1/1 | 0.87 | 0.93 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3217 | 1/1 | 0.87 | 0.42 | 72,72,72,72 | 0 |
| 59 | MG | CA | 1759 | 1/1 | 0.87 | 0.29 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3269 | 1/1 | 0.87 | 0.29 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3379 | 1/1 | 0.87 | 0.14 | 53,53,53,53 | 0 |
| 59 | MG | AA | 1615 | 1/1 | 0.87 | 0.63 | 32,32,32,32 | 0 |
| 59 | MG | BA | 3236 | 1/1 | 0.87 | 0.47 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3275 | 1/1 | 0.87 | 0.30 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3279 | 1/1 | 0.87 | 0.73 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3167 | 1/1 | 0.87 | 0.30 | 76,76,76,76 | 0 |
| 59 | MG | DA | 3290 | 1/1 | 0.87 | 0.18 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3284 | 1/1 | 0.87 | 0.32 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3411 | 1/1 | 0.87 | 0.33 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3242 | 1/1 | 0.87 | 0.38 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3244 | 1/1 | 0.87 | 0.74 | 85,85,85,85 | 0 |
| 59 | MG | DA | 3186 | 1/1 | 0.87 | 1.18 | 43,43,43,43 | 0 |
| 59 | MG | CA | 1625 | 1/1 | 0.88 | 0.32 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1649 | 1/1 | 0.88 | 0.20 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3134 | 1/1 | 0.88 | 0.51 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3135 | 1/1 | 0.88 | 0.23 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3127 | 1/1 | 0.88 | 0.24 | 77,77,77,77 | 0 |
| 59 | MG | DA | 3139 | 1/1 | 0.88 | 0.49 | 57,57,57,57 | 0 |
| 59 | MG | AA | 1780 | 1/1 | 0.88 | 0.22 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3259 | 1/1 | 0.88 | 0.25 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3260 | 1/1 | 0.88 | 0.34 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1776 | 1/1 | 0.88 | 0.26 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1697 | 1/1 | 0.88 | 0.21 | 77,77,77,77 | 0 |
| 59 | MG | AA | 1730 | 1/1 | 0.88 | 0.35 | 59,59,59,59 | 0 |
| 59 | MG | BB | 204 | 1/1 | 0.88 | 0.35 | 98,98,98,98 | 0 |
| 59 | MG | DA | 3156 | 1/1 | 0.88 | 0.65 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3314 | 1/1 | 0.88 | 0.12 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3159 | 1/1 | 0.88 | 0.41 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3266 | 1/1 | 0.88 | 0.35 | 64,64,64,64 | 0 |
| 59 | MG | BA | 3269 | 1/1 | 0.88 | 0.21 | 166,166,166,166 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3394 | 1/1 | 0.88 | 0.40 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3396 | 1/1 | 0.88 | 0.39 | 63,63,63,63 | 0 |
| 59 | MG | BB | 214 | 1/1 | 0.88 | 0.27 | 84,84,84,84 | 0 |
| 59 | MG | CA | 1710 | 1/1 | 0.88 | 0.14 | 120,120,120,120 | 0 |
| 59 | MG | CV | 102 | 1/1 | 0.88 | 0.38 | 62,62,62,62 | 0 |
| 59 | MG | AA | 1762 | 1/1 | 0.88 | 0.29 | 100,100,100,100 | 0 |
| 59 | MG | AA | 1623 | 1/1 | 0.88 | 0.35 | 79,79,79,79 | 0 |
| 59 | MG | CA | 1717 | 1/1 | 0.88 | 0.35 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3187 | 1/1 | 0.88 | 0.46 | 53,53,53,53 | 0 |
| 59 | MG | BA | 3330 | 1/1 | 0.88 | 0.10 | 104,104,104,104 | 0 |
| 59 | MG | BA | 3228 | 1/1 | 0.88 | 0.27 | 68,68,68,68 | 0 |
| 59 | MG | AA | 1735 | 1/1 | 0.88 | 0.44 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3202 | 1/1 | 0.88 | 0.21 | 54,54,54,54 | 0 |
| 59 | MG | CA | 1728 | 1/1 | 0.88 | 0.18 | 73,73,73,73 | 0 |
| 59 | MG | AW | 102 | 1/1 | 0.88 | 0.50 | 79,79,79,79 | 0 |
| 59 | MG | CA | 1657 | 1/1 | 0.88 | 0.10 | 88,88,88,88 | 0 |
| 59 | MG | BA | 3282 | 1/1 | 0.88 | 0.27 | 76,76,76,76 | 0 |
| 59 | MG | AA | 1749 | 1/1 | 0.88 | 0.14 | 105,105,105,105 | 0 |
| 59 | MG | CA | 1736 | 1/1 | 0.88 | 0.41 | 63,63,63,63 | 0 |
| 59 | MG | DA | 3215 | 1/1 | 0.88 | 0.76 | 46,46,46,46 | 0 |
| 59 | MG | CA | 1739 | 1/1 | 0.88 | 0.23 | 131,131,131,131 | 0 |
| 59 | MG | BA | 3342 | 1/1 | 0.88 | 0.38 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3229 | 1/1 | 0.88 | 0.25 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1737 | 1/1 | 0.88 | 0.32 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3416 | 1/1 | 0.88 | 0.24 | 50,50,50,50 | 0 |
| 59 | MG | AW | 120 | 1/1 | 0.88 | 0.30 | 104,104,104,104 | 0 |
| 59 | MG | AA | 1691 | 1/1 | 0.88 | 0.62 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3207 | 1/1 | 0.88 | 0.24 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3164 | 1/1 | 0.88 | 0.18 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3300 | 1/1 | 0.88 | 0.45 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3246 | 1/1 | 0.88 | 0.29 | 54,54,54,54 | 0 |
| 59 | MG | AA | 1635 | 1/1 | 0.88 | 0.45 | 53,53,53,53 | 0 |
| 59 | MG | DB | 203 | 1/1 | 0.88 | 0.17 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3253 | 1/1 | 0.88 | 0.16 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3362 | 1/1 | 0.88 | 0.63 | 83,83,83,83 | 0 |
| 59 | MG | AA | 1741 | 1/1 | 0.88 | 0.11 | 69,69,69,69 | 0 |
| 59 | MG | BA | 3304 | 1/1 | 0.88 | 0.20 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1703 | 1/1 | 0.88 | 0.54 | 72,72,72,72 | 0 |
| 59 | MG | DA | 3293 | 1/1 | 0.89 | 0.30 | 16,16,16,16 | 0 |
| 59 | MG | CA | 1694 | 1/1 | 0.89 | 0.16 | 80,80,80,80 | 0 |
| 59 | MG | BU | 202 | 1/1 | 0.89 | 0.23 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1636 | 1/1 | 0.89 | 0.42 | 65,65,65,65 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3017 | 1/1 | 0.89 | 0.25 | 43,43,43,43 | 0 |
| 59 | MG | BA | 3136 | 1/1 | 0.89 | 0.30 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3188 | 1/1 | 0.89 | 0.44 | 30,30,30,30 | 0 |
| 59 | MG | BA | 3440 | 1/1 | 0.89 | 0.43 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3214 | 1/1 | 0.89 | 0.39 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1760 | 1/1 | 0.89 | 0.11 | 92,92,92,92 | 0 |
| 59 | MG | DA | 3197 | 1/1 | 0.89 | 0.47 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3270 | 1/1 | 0.89 | 0.20 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3234 | 1/1 | 0.89 | 0.51 | 83,83,83,83 | 0 |
| 59 | MG | DA | 3019 | 1/1 | 0.89 | 0.47 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3325 | 1/1 | 0.89 | 0.23 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3308 | 1/1 | 0.89 | 0.32 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3074 | 1/1 | 0.89 | 0.22 | 40,40,40,40 | 0 |
| 59 | MG | CA | 1709 | 1/1 | 0.89 | 0.46 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3100 | 1/1 | 0.89 | 0.36 | 29,29,29,29 | 0 |
| 59 | MG | AA | 1714 | 1/1 | 0.89 | 0.12 | 88,88,88,88 | 0 |
| 59 | MG | BA | 3315 | 1/1 | 0.89 | 0.32 | 64,64,64,64 | 0 |
| 59 | MG | BA | 3173 | 1/1 | 0.89 | 0.20 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3001 | 1/1 | 0.89 | 0.63 | 56,56,56,56 | 0 |
| 59 | MG | AA | 1717 | 1/1 | 0.89 | 0.14 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3349 | 1/1 | 0.89 | 0.99 | 39,39,39,39 | 1 |
| 59 | MG | AA | 1729 | 1/1 | 0.89 | 0.19 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3132 | 1/1 | 0.89 | 0.39 | 44,44,44,44 | 0 |
| 59 | MG | CA | 1722 | 1/1 | 0.89 | 0.17 | 67,67,67,67 | 0 |
| 59 | MG | CA | 1723 | 1/1 | 0.89 | 0.09 | 132,132,132,132 | 0 |
| 59 | MG | DA | 3235 | 1/1 | 0.89 | 0.94 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3253 | 1/1 | 0.89 | 0.27 | 97,97,97,97 | 0 |
| 59 | MG | BB | 213 | 1/1 | 0.89 | 0.32 | 50,50,50,50 | 0 |
| 59 | MG | CA | 1634 | 1/1 | 0.89 | 0.22 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1730 | 1/1 | 0.89 | 0.18 | 93,93,93,93 | 0 |
| 59 | MG | AA | 1685 | 1/1 | 0.89 | 0.05 | 104,104,104,104 | 0 |
| 59 | MG | BA | 3008 | 1/1 | 0.89 | 0.36 | 49,49,49,49 | 0 |
| 59 | MG | CA | 1734 | 1/1 | 0.89 | 0.53 | 75,75,75,75 | 0 |
| 59 | MG | AA | 1781 | 1/1 | 0.89 | 0.26 | 70,70,70,70 | 0 |
| 59 | MG | BA | 3423 | 1/1 | 0.89 | 0.61 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3154 | 1/1 | 0.89 | 0.12 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3376 | 1/1 | 0.89 | 0.49 | 81,81,81,81 | 0 |
| 59 | MG | BA | 3380 | 1/1 | 0.89 | 0.20 | 60,60,60,60 | 0 |
| 59 | MG | AV | 107 | 1/1 | 0.89 | 0.26 | 63,63,63,63 | 0 |
| 59 | MG | AA | 1655 | 1/1 | 0.89 | 0.65 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3299 | 1/1 | 0.89 | 0.20 | 63,63,63,63 | 0 |
| 59 | MG | DB | 204 | 1/1 | 0.89 | 0.29 | 77,77,77,77 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3278 | 1/1 | 0.89 | 0.66 | 52,52,52,52 | 0 |
| 59 | MG | CA | 1745 | 1/1 | 0.89 | 0.20 | 51,51,51,51 | 0 |
| 59 | MG | CA | 1691 | 1/1 | 0.89 | 0.14 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3282 | 1/1 | 0.89 | 0.63 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1787 | 1/1 | 0.89 | 0.08 | 84,84,84,84 | 0 |
| 59 | MG | DA | 3313 | 1/1 | 0.90 | 0.36 | 47,47,47,47 | 0 |
| 59 | MG | CA | 1610 | 1/1 | 0.90 | 0.26 | 76,76,76,76 | 0 |
| 59 | MG | CA | 1613 | 1/1 | 0.90 | 0.13 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3226 | 1/1 | 0.90 | 0.20 | 57,57,57,57 | 0 |
| 59 | MG | CA | 1789 | 1/1 | 0.90 | 0.13 | 89,89,89,89 | 0 |
| 59 | MG | BA | 3160 | 1/1 | 0.90 | 0.18 | 57,57,57,57 | 0 |
| 59 | MG | CA | 1727 | 1/1 | 0.90 | 0.09 | 99,99,99,99 | 0 |
| 59 | MG | CA | 1618 | 1/1 | 0.90 | 0.28 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3055 | 1/1 | 0.90 | 0.31 | 23,23,23,23 | 0 |
| 59 | MG | BA | 3122 | 1/1 | 0.90 | 0.22 | 27,27,27,27 | 0 |
| 59 | MG | BB | 203 | 1/1 | 0.90 | 0.33 | 99,99,99,99 | 0 |
| 59 | MG | BA | 3200 | 1/1 | 0.90 | 0.32 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1626 | 1/1 | 0.90 | 0.37 | 94,94,94,94 | 0 |
| 59 | MG | AA | 1616 | 1/1 | 0.90 | 0.17 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3166 | 1/1 | 0.90 | 0.11 | 105,105,105,105 | 0 |
| 59 | MG | DA | 3144 | 1/1 | 0.90 | 0.20 | 45,45,45,45 | 0 |
| 59 | MG | CA | 1737 | 1/1 | 0.90 | 0.41 | 82,82,82,82 | 0 |
| 59 | MG | CA | 1738 | 1/1 | 0.90 | 0.28 | 95,95,95,95 | 0 |
| 59 | MG | BA | 3311 | 1/1 | 0.90 | 0.35 | 63,63,63,63 | 0 |
| 59 | MG | DA | 3248 | 1/1 | 0.90 | 0.61 | 44,44,44,44 | 0 |
| 59 | MG | AA | 1690 | 1/1 | 0.90 | 0.30 | 69,69,69,69 | 0 |
| 59 | MG | DA | 3250 | 1/1 | 0.90 | 0.33 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3210 | 1/1 | 0.90 | 0.17 | 56,56,56,56 | 0 |
| 59 | MG | AA | 1767 | 1/1 | 0.90 | 0.25 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3417 | 1/1 | 0.90 | 0.38 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3358 | 1/1 | 0.90 | 0.16 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3237 | 1/1 | 0.90 | 0.42 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3279 | 1/1 | 0.90 | 0.28 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3421 | 1/1 | 0.90 | 0.55 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3422 | 1/1 | 0.90 | 0.11 | 48,48,48,48 | 0 |
| 59 | MG | AA | 1746 | 1/1 | 0.90 | 0.10 | 87,87,87,87 | 0 |
| 59 | MG | CA | 1752 | 1/1 | 0.90 | 0.32 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3369 | 1/1 | 0.90 | 0.36 | 60,60,60,60 | 0 |
| 59 | MG | AA | 1758 | 1/1 | 0.90 | 0.54 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3326 | 1/1 | 0.90 | 0.31 | 130,130,130,130 | 0 |
| 59 | MG | DA | 3381 | 1/1 | 0.90 | 0.21 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3245 | 1/1 | 0.90 | 0.41 | 32,32,32,32 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | AA | 1699 | 1/1 | 0.90 | 0.05 | 105,105,105,105 | 0 |
| 59 | MG | AA | 1633 | 1/1 | 0.90 | 0.23 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3286 | 1/1 | 0.90 | 0.28 | 35,35,35,35 | 0 |
| 59 | MG | DB | 201 | 1/1 | 0.90 | 0.12 | 65,65,65,65 | 0 |
| 59 | MG | AA | 1798 | 1/1 | 0.90 | 0.37 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3192 | 1/1 | 0.90 | 0.22 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3296 | 1/1 | 0.90 | 0.29 | 46,46,46,46 | 0 |
| 59 | MG | AA | 1618 | 1/1 | 0.90 | 0.20 | 65,65,65,65 | 0 |
| 59 | MG | AA | 1750 | 1/1 | 0.90 | 0.31 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3295 | 1/1 | 0.90 | 0.34 | 51,51,51,51 | 0 |
| 59 | MG | DO | 201 | 1/1 | 0.90 | 0.27 | 64,64,64,64 | 0 |
| 59 | MG | AW | 103 | 1/1 | 0.90 | 0.75 | 105,105,105,105 | 0 |
| 59 | MG | AA | 1711 | 1/1 | 0.90 | 0.09 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3057 | 1/1 | 0.91 | 0.59 | 52,52,52,52 | 0 |
| 59 | MG | CA | 1611 | 1/1 | 0.91 | 0.31 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3134 | 1/1 | 0.91 | 0.30 | 30,30,30,30 | 0 |
| 59 | MG | AV | 104 | 1/1 | 0.91 | 0.73 | 102,102,102,102 | 0 |
| 59 | MG | AV | 105 | 1/1 | 0.91 | 0.58 | 62,62,62,62 | 0 |
| 59 | MG | AA | 1625 | 1/1 | 0.91 | 0.14 | 66,66,66,66 | 0 |
| 59 | MG | AA | 1613 | 1/1 | 0.91 | 0.17 | 89,89,89,89 | 0 |
| 59 | MG | BA | 3208 | 1/1 | 0.91 | 0.15 | 36,36,36,36 | 0 |
| 59 | MG | CA | 1744 | 1/1 | 0.91 | 0.33 | 94,94,94,94 | 0 |
| 59 | MG | CA | 1685 | 1/1 | 0.91 | 0.18 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3147 | 1/1 | 0.91 | 0.26 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3316 | 1/1 | 0.91 | 0.80 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3151 | 1/1 | 0.91 | 0.40 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3384 | 1/1 | 0.91 | 0.83 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3320 | 1/1 | 0.91 | 0.35 | 173,173,173,173 | 0 |
| 59 | MG | BA | 3386 | 1/1 | 0.91 | 0.26 | 83,83,83,83 | 0 |
| 59 | MG | AA | 1779 | 1/1 | 0.91 | 0.58 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3082 | 1/1 | 0.91 | 0.34 | 42,42,42,42 | 0 |
| 59 | MG | AA | 1736 | 1/1 | 0.91 | 0.44 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3089 | 1/1 | 0.91 | 0.26 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3090 | 1/1 | 0.91 | 0.27 | 73,73,73,73 | 0 |
| 59 | MG | AA | 1766 | 1/1 | 0.91 | 0.10 | 54,54,54,54 | 0 |
| 59 | MG | AA | 1809 | 1/1 | 0.91 | 0.66 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3098 | 1/1 | 0.91 | 0.41 | 55,55,55,55 | 0 |
| 59 | MG | AA | 1629 | 1/1 | 0.91 | 0.27 | 61,61,61,61 | 0 |
| 59 | MG | AA | 1631 | 1/1 | 0.91 | 0.31 | 62,62,62,62 | 0 |
| 59 | MG | CA | 1770 | 1/1 | 0.91 | 0.32 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3109 | 1/1 | 0.91 | 0.32 | 32,32,32,32 | 0 |
| 59 | MG | CA | 1713 | 1/1 | 0.91 | 0.12 | 61,61,61,61 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3170 | 1/1 | 0.91 | 0.35 | 66,66,66,66 | 0 |
| 59 | MG | CA | 1777 | 1/1 | 0.91 | 0.22 | 60,60,60,60 | 0 |
| 59 | MG | DA | 3360 | 1/1 | 0.91 | 0.14 | 55,55,55,55 | 0 |
| 59 | MG | AA | 1640 | 1/1 | 0.91 | 0.36 | 42,42,42,42 | 0 |
| 59 | MG | B0 | 101 | 1/1 | 0.91 | 0.27 | 44,44,44,44 | 0 |
| 59 | MG | CA | 1718 | 1/1 | 0.91 | 0.35 | 81,81,81,81 | 0 |
| 59 | MG | AA | 1642 | 1/1 | 0.91 | 0.24 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3415 | 1/1 | 0.91 | 0.53 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1790 | 1/1 | 0.91 | 0.17 | 120,120,120,120 | 0 |
| 59 | MG | BA | 3178 | 1/1 | 0.91 | 0.12 | 53,53,53,53 | 0 |
| 59 | MG | B5 | 101 | 1/1 | 0.91 | 0.27 | 30,30,30,30 | 0 |
| 59 | MG | CF | 201 | 1/1 | 0.91 | 0.35 | 69,69,69,69 | 0 |
| 59 | MG | DA | 3153 | 1/1 | 0.91 | 0.25 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3268 | 1/1 | 0.91 | 0.33 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1662 | 1/1 | 0.91 | 0.16 | 60,60,60,60 | 0 |
| 59 | MG | DA | 3385 | 1/1 | 0.91 | 0.11 | 226,226,226,226 | 0 |
| 59 | MG | DA | 3386 | 1/1 | 0.91 | 0.76 | 181,181,181,181 | 0 |
| 59 | MG | BA | 3036 | 1/1 | 0.91 | 0.32 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3390 | 1/1 | 0.91 | 0.43 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3157 | 1/1 | 0.91 | 0.26 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3298 | 1/1 | 0.91 | 0.23 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3184 | 1/1 | 0.91 | 0.36 | 59,59,59,59 | 0 |
| 59 | MG | CV | 104 | 1/1 | 0.91 | 0.25 | 55,55,55,55 | 0 |
| 59 | MG | B8 | 101 | 1/1 | 0.91 | 0.38 | 79,79,79,79 | 0 |
| 59 | MG | DA | 3164 | 1/1 | 0.91 | 0.17 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3131 | 1/1 | 0.91 | 0.36 | 55,55,55,55 | 0 |
| 59 | MG | AA | 1731 | 1/1 | 0.91 | 0.35 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3363 | 1/1 | 0.91 | 0.34 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3172 | 1/1 | 0.91 | 0.26 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3297 | 1/1 | 0.91 | 0.41 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3188 | 1/1 | 0.92 | 0.33 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3058 | 1/1 | 0.92 | 0.15 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3358 | 1/1 | 0.92 | 0.11 | 73,73,73,73 | 0 |
| 59 | MG | AA | 1791 | 1/1 | 0.92 | 0.24 | 91,91,91,91 | 0 |
| 59 | MG | DA | 3114 | 1/1 | 0.92 | 0.07 | 32,32,32,32 | 0 |
| 59 | MG | BA | 3161 | 1/1 | 0.92 | 0.44 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3319 | 1/1 | 0.92 | 0.53 | 81,81,81,81 | 0 |
| 59 | MG | BA | 3062 | 1/1 | 0.92 | 0.34 | 30,30,30,30 | 0 |
| 59 | MG | DA | 3216 | 1/1 | 0.92 | 0.41 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3220 | 1/1 | 0.92 | 0.30 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1792 | 1/1 | 0.92 | 0.10 | 99,99,99,99 | 0 |
| 59 | MG | DA | 3227 | 1/1 | 0.92 | 0.25 | 49,49,49,49 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | CG | 201 | 1/1 | 0.92 | 0.42 | 72,72,72,72 | 0 |
| 59 | MG | DA | 3330 | 1/1 | 0.92 | 0.34 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3067 | 1/1 | 0.92 | 0.58 | 36,36,36,36 | 0 |
| 59 | MG | BA | 3165 | 1/1 | 0.92 | 0.33 | 44,44,44,44 | 0 |
| 59 | MG | AA | 1626 | 1/1 | 0.92 | 0.29 | 60,60,60,60 | 0 |
| 59 | MG | DA | 3336 | 1/1 | 0.92 | 0.56 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3209 | 1/1 | 0.92 | 0.20 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3372 | 1/1 | 0.92 | 0.32 | 70,70,70,70 | 0 |
| 59 | MG | CA | 1696 | 1/1 | 0.92 | 0.39 | 44,44,44,44 | 0 |
| 59 | MG | AA | 1673 | 1/1 | 0.92 | 0.13 | 55,55,55,55 | 0 |
| 59 | MG | AA | 1695 | 1/1 | 0.92 | 0.26 | 51,51,51,51 | 0 |
| 59 | MG | B2 | 101 | 1/1 | 0.92 | 0.49 | 49,49,49,49 | 0 |
| 59 | MG | CW | 105 | 1/1 | 0.92 | 0.43 | 107,107,107,107 | 0 |
| 59 | MG | DA | 3247 | 1/1 | 0.92 | 0.27 | 41,41,41,41 | 0 |
| 59 | MG | DA | 3150 | 1/1 | 0.92 | 0.16 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3021 | 1/1 | 0.92 | 0.24 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1653 | 1/1 | 0.92 | 0.41 | 38,38,38,38 | 0 |
| 59 | MG | AA | 1663 | 1/1 | 0.92 | 0.45 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3436 | 1/1 | 0.92 | 0.18 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3297 | 1/1 | 0.92 | 0.08 | 66,66,66,66 | 0 |
| 59 | MG | AA | 1802 | 1/1 | 0.92 | 0.28 | 85,85,85,85 | 0 |
| 59 | MG | AA | 1723 | 1/1 | 0.92 | 0.18 | 64,64,64,64 | 0 |
| 59 | MG | DA | 3370 | 1/1 | 0.92 | 0.43 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1785 | 1/1 | 0.92 | 0.41 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1657 | 1/1 | 0.92 | 0.21 | 92,92,92,92 | 0 |
| 59 | MG | DA | 3267 | 1/1 | 0.92 | 0.42 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1663 | 1/1 | 0.92 | 0.36 | 71,71,71,71 | 0 |
| 59 | MG | AA | 1668 | 1/1 | 0.92 | 0.11 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3444 | 1/1 | 0.92 | 0.47 | 58,58,58,58 | 0 |
| 59 | MG | AA | 1688 | 1/1 | 0.92 | 0.37 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3261 | 1/1 | 0.92 | 0.29 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3276 | 1/1 | 0.92 | 0.33 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3346 | 1/1 | 0.92 | 0.51 | 128,128,128,128 | 0 |
| 59 | MG | DA | 3180 | 1/1 | 0.92 | 0.14 | 26,26,26,26 | 0 |
| 59 | MG | AA | 1628 | 1/1 | 0.92 | 0.24 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3018 | 1/1 | 0.92 | 0.30 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3153 | 1/1 | 0.92 | 0.23 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3040 | 1/1 | 0.92 | 0.24 | 22,22,22,22 | 0 |
| 59 | MG | DA | 3049 | 1/1 | 0.92 | 0.52 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3050 | 1/1 | 0.92 | 0.26 | 44,44,44,44 | 0 |
| 59 | MG | BA | 3307 | 1/1 | 0.92 | 0.47 | 39,39,39,39 | 0 |
| 59 | MG | CA | 1624 | 1/1 | 0.92 | 0.30 | 58,58,58,58 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3076 | 1/1 | 0.92 | 0.17 | 29,29,29,29 | 0 |
| 59 | MG | BA | 3111 | 1/1 | 0.92 | 0.21 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3201 | 1/1 | 0.92 | 0.11 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3354 | 1/1 | 0.92 | 0.35 | 38,38,38,38 | 0 |
| 59 | MG | AA | 1641 | 1/1 | 0.93 | 0.17 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3174 | 1/1 | 0.93 | 0.23 | 48,48,48,48 | 0 |
| 59 | MG | AA | 1784 | 1/1 | 0.93 | 0.41 | 70,70,70,70 | 0 |
| 59 | MG | DA | 3221 | 1/1 | 0.93 | 0.24 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3222 | 1/1 | 0.93 | 0.62 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3144 | 1/1 | 0.93 | 0.37 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3099 | 1/1 | 0.93 | 0.23 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3390 | 1/1 | 0.93 | 0.37 | 30,30,30,30 | 0 |
| 59 | MG | AA | 1607 | 1/1 | 0.93 | 0.19 | 53,53,53,53 | 0 |
| 59 | MG | BA | 3009 | 1/1 | 0.93 | 0.14 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3349 | 1/1 | 0.93 | 0.41 | 73,73,73,73 | 0 |
| 59 | MG | DA | 3327 | 1/1 | 0.93 | 0.48 | 89,89,89,89 | 0 |
| 59 | MG | BA | 3185 | 1/1 | 0.93 | 0.17 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1659 | 1/1 | 0.93 | 0.43 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3010 | 1/1 | 0.93 | 0.26 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3151 | 1/1 | 0.93 | 0.31 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3449 | 1/1 | 0.93 | 0.58 | 46,46,46,46 | 0 |
| 59 | MG | CA | 1712 | 1/1 | 0.93 | 0.13 | 86,86,86,86 | 0 |
| 59 | MG | AA | 1768 | 1/1 | 0.93 | 0.21 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3312 | 1/1 | 0.93 | 0.21 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3343 | 1/1 | 0.93 | 0.40 | 26,26,26,26 | 0 |
| 59 | MG | AA | 1716 | 1/1 | 0.93 | 0.09 | 99,99,99,99 | 0 |
| 59 | MG | AA | 1620 | 1/1 | 0.93 | 0.42 | 38,38,38,38 | 0 |
| 59 | MG | AA | 1698 | 1/1 | 0.93 | 0.14 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3252 | 1/1 | 0.93 | 0.23 | 68,68,68,68 | 0 |
| 59 | MG | AA | 1732 | 1/1 | 0.93 | 0.61 | 56,56,56,56 | 0 |
| 59 | MG | CA | 1621 | 1/1 | 0.93 | 0.19 | 67,67,67,67 | 0 |
| 59 | MG | BB | 205 | 1/1 | 0.93 | 0.14 | 65,65,65,65 | 0 |
| 59 | MG | CA | 1774 | 1/1 | 0.93 | 0.62 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3076 | 1/1 | 0.93 | 0.23 | 65,65,65,65 | 0 |
| 59 | MG | DA | 3259 | 1/1 | 0.93 | 0.47 | 34,34,34,34 | 0 |
| 59 | MG | DA | 3260 | 1/1 | 0.93 | 0.41 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3168 | 1/1 | 0.93 | 0.52 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3321 | 1/1 | 0.93 | 0.08 | 175,175,175,175 | 0 |
| 59 | MG | AA | 1719 | 1/1 | 0.93 | 0.31 | 112,112,112,112 | 0 |
| 59 | MG | BA | 3204 | 1/1 | 0.93 | 0.40 | 40,40,40,40 | 0 |
| 59 | MG | CA | 1784 | 1/1 | 0.93 | 0.09 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3051 | 1/1 | 0.93 | 0.25 | 43,43,43,43 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3272 | 1/1 | 0.93 | 0.24 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3375 | 1/1 | 0.93 | 0.20 | 84,84,84,84 | 0 |
| 59 | MG | AA | 1630 | 1/1 | 0.93 | 0.12 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3065 | 1/1 | 0.93 | 0.32 | 23,23,23,23 | 0 |
| 59 | MG | DA | 3070 | 1/1 | 0.93 | 0.42 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3129 | 1/1 | 0.93 | 0.66 | 61,61,61,61 | 0 |
| 59 | MG | CA | 1680 | 1/1 | 0.93 | 0.09 | 84,84,84,84 | 0 |
| 59 | MG | DA | 3084 | 1/1 | 0.93 | 0.39 | 41,41,41,41 | 0 |
| 59 | MG | AA | 1722 | 1/1 | 0.93 | 0.14 | 75,75,75,75 | 0 |
| 59 | MG | AA | 1653 | 1/1 | 0.93 | 0.30 | 45,45,45,45 | 0 |
| 59 | MG | DA | 3289 | 1/1 | 0.93 | 0.33 | 50,50,50,50 | 0 |
| 59 | MG | CA | 1795 | 1/1 | 0.93 | 0.18 | 62,62,62,62 | 0 |
| 59 | MG | B8 | 102 | 1/1 | 0.93 | 0.27 | 58,58,58,58 | 0 |
| 59 | MG | CA | 1639 | 1/1 | 0.93 | 0.36 | 48,48,48,48 | 0 |
| 59 | MG | AA | 1646 | 1/1 | 0.93 | 0.44 | 67,67,67,67 | 0 |
| 59 | MG | AA | 1782 | 1/1 | 0.93 | 0.16 | 116,116,116,116 | 0 |
| 59 | MG | BA | 3139 | 1/1 | 0.93 | 0.41 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3121 | 1/1 | 0.93 | 0.23 | 41,41,41,41 | 0 |
| 59 | MG | DA | 3306 | 1/1 | 0.93 | 0.13 | 39,39,39,39 | 0 |
| 59 | MG | DB | 212 | 1/1 | 0.93 | 0.20 | 99,99,99,99 | 0 |
| 59 | MG | DF | 301 | 1/1 | 0.93 | 0.44 | 66,66,66,66 | 0 |
| 59 | MG | DN | 201 | 1/1 | 0.93 | 0.33 | 98,98,98,98 | 0 |
| 59 | MG | BA | 3140 | 1/1 | 0.93 | 0.26 | 36,36,36,36 | 0 |
| 59 | MG | BA | 3432 | 1/1 | 0.93 | 0.22 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3214 | 1/1 | 0.93 | 0.60 | 31,31,31,31 | 0 |
| 59 | MG | DA | 3251 | 1/1 | 0.94 | 0.18 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3081 | 1/1 | 0.94 | 0.58 | 39,39,39,39 | 0 |
| 59 | MG | BA | 3430 | 1/1 | 0.94 | 0.13 | 69,69,69,69 | 0 |
| 59 | MG | AA | 1806 | 1/1 | 0.94 | 0.46 | 30,30,30,30 | 0 |
| 59 | MG | DA | 3091 | 1/1 | 0.94 | 0.38 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3094 | 1/1 | 0.94 | 0.34 | 38,38,38,38 | 0 |
| 59 | MG | CA | 1679 | 1/1 | 0.94 | 0.18 | 63,63,63,63 | 0 |
| 59 | MG | CA | 1755 | 1/1 | 0.94 | 0.38 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3104 | 1/1 | 0.94 | 0.22 | 23,23,23,23 | 0 |
| 59 | MG | BA | 3041 | 1/1 | 0.94 | 0.62 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3263 | 1/1 | 0.94 | 0.57 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3106 | 1/1 | 0.94 | 0.16 | 32,32,32,32 | 0 |
| 59 | MG | BA | 3264 | 1/1 | 0.94 | 0.46 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3368 | 1/1 | 0.94 | 0.15 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3113 | 1/1 | 0.94 | 0.19 | 23,23,23,23 | 0 |
| 59 | MG | CA | 1612 | 1/1 | 0.94 | 0.62 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3118 | 1/1 | 0.94 | 0.46 | 31,31,31,31 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3267 | 1/1 | 0.94 | 0.34 | 51,51,51,51 | 0 |
| 59 | MG | CA | 1687 | 1/1 | 0.94 | 0.32 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3130 | 1/1 | 0.94 | 0.21 | 41,41,41,41 | 0 |
| 59 | MG | CA | 1688 | 1/1 | 0.94 | 0.28 | 81,81,81,81 | 0 |
| 59 | MG | BA | 3155 | 1/1 | 0.94 | 0.15 | 61,61,61,61 | 0 |
| 59 | MG | BA | 3042 | 1/1 | 0.94 | 0.49 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3084 | 1/1 | 0.94 | 0.19 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3285 | 1/1 | 0.94 | 0.29 | 44,44,44,44 | 0 |
| 59 | MG | BA | 3043 | 1/1 | 0.94 | 0.23 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3087 | 1/1 | 0.94 | 0.16 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1622 | 1/1 | 0.94 | 0.28 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3197 | 1/1 | 0.94 | 1.09 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1778 | 1/1 | 0.94 | 0.38 | 77,77,77,77 | 0 |
| 59 | MG | BA | 3004 | 1/1 | 0.94 | 0.53 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3298 | 1/1 | 0.94 | 0.20 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3446 | 1/1 | 0.94 | 0.45 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1785 | 1/1 | 0.94 | 0.30 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3303 | 1/1 | 0.94 | 0.13 | 48,48,48,48 | 0 |
| 59 | MG | DA | 3149 | 1/1 | 0.94 | 0.47 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3447 | 1/1 | 0.94 | 0.21 | 35,35,35,35 | 0 |
| 59 | MG | CA | 1701 | 1/1 | 0.94 | 0.36 | 53,53,53,53 | 0 |
| 59 | MG | CA | 1702 | 1/1 | 0.94 | 0.14 | 75,75,75,75 | 0 |
| 59 | MG | BA | 3448 | 1/1 | 0.94 | 0.55 | 44,44,44,44 | 0 |
| 59 | MG | CA | 1704 | 1/1 | 0.94 | 0.23 | 66,66,66,66 | 0 |
| 59 | MG | CA | 1629 | 1/1 | 0.94 | 0.32 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3005 | 1/1 | 0.94 | 0.27 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3158 | 1/1 | 0.94 | 0.30 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3450 | 1/1 | 0.94 | 0.11 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3451 | 1/1 | 0.94 | 0.34 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3453 | 1/1 | 0.94 | 2.01 | 172,172,172,172 | 0 |
| 59 | MG | BA | 3281 | 1/1 | 0.94 | 0.47 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3092 | 1/1 | 0.94 | 0.28 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3202 | 1/1 | 0.94 | 0.52 | 65,65,65,65 | 0 |
| 59 | MG | CA | 1641 | 1/1 | 0.94 | 0.36 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3016 | 1/1 | 0.94 | 0.65 | 27,27,27,27 | 0 |
| 59 | MG | BA | 3393 | 1/1 | 0.94 | 0.43 | 34,34,34,34 | 0 |
| 59 | MG | BA | 3006 | 1/1 | 0.94 | 0.47 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3241 | 1/1 | 0.94 | 0.64 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3289 | 1/1 | 0.94 | 0.28 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3290 | 1/1 | 0.94 | 0.69 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3335 | 1/1 | 0.94 | 0.42 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3135 | 1/1 | 0.94 | 0.18 | 46,46,46,46 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3184 | 1/1 | 0.94 | 0.07 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3338 | 1/1 | 0.94 | 0.58 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3185 | 1/1 | 0.94 | 0.32 | 31,31,31,31 | 0 |
| 59 | MG | BB | 210 | 1/1 | 0.94 | 0.29 | 93,93,93,93 | 0 |
| 59 | MG | CA | 1726 | 1/1 | 0.94 | 0.30 | 64,64,64,64 | 0 |
| 59 | MG | AA | 1755 | 1/1 | 0.94 | 0.40 | 70,70,70,70 | 0 |
| 59 | MG | DA | 3189 | 1/1 | 0.94 | 0.34 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3138 | 1/1 | 0.94 | 0.15 | 34,34,34,34 | 0 |
| 59 | MG | BA | 3296 | 1/1 | 0.94 | 0.44 | 59,59,59,59 | 0 |
| 59 | MG | AA | 1704 | 1/1 | 0.94 | 0.65 | 61,61,61,61 | 0 |
| 59 | MG | CW | 113 | 1/1 | 0.94 | 0.21 | 123,123,123,123 | 0 |
| 59 | MG | D2 | 101 | 1/1 | 0.94 | 0.13 | 59,59,59,59 | 0 |
| 59 | MG | CA | 1731 | 1/1 | 0.94 | 0.37 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3348 | 1/1 | 0.94 | 0.30 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3100 | 1/1 | 0.94 | 0.29 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3364 | 1/1 | 0.94 | 0.23 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3365 | 1/1 | 0.94 | 0.14 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3249 | 1/1 | 0.94 | 0.27 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3207 | 1/1 | 0.94 | 0.73 | 83,83,83,83 | 0 |
| 59 | MG | BA | 3414 | 1/1 | 0.94 | 0.28 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3250 | 1/1 | 0.94 | 0.49 | 30,30,30,30 | 0 |
| 59 | MG | BA | 3212 | 1/1 | 0.94 | 0.28 | 64,64,64,64 | 0 |
| 59 | MG | AA | 1810 | 1/1 | 0.94 | 0.14 | 88,88,88,88 | 0 |
| 59 | MG | DA | 3010 | 1/1 | 0.94 | 0.19 | 40,40,40,40 | 0 |
| 59 | MG | DA | 3011 | 1/1 | 0.94 | 0.40 | 27,27,27,27 | 0 |
| 59 | MG | DA | 3378 | 1/1 | 0.94 | 0.13 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3065 | 1/1 | 0.94 | 0.30 | 35,35,35,35 | 0 |
| 59 | MG | AW | 108 | 1/1 | 0.94 | 0.15 | 154,154,154,154 | 0 |
| 59 | MG | AC | 301 | 1/1 | 0.94 | 0.32 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3020 | 1/1 | 0.94 | 0.41 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3026 | 1/1 | 0.94 | 0.42 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3038 | 1/1 | 0.94 | 0.17 | 41,41,41,41 | 0 |
| 59 | MG | DA | 3039 | 1/1 | 0.94 | 0.43 | 27,27,27,27 | 0 |
| 59 | MG | BU | 204 | 1/1 | 0.94 | 0.15 | 64,64,64,64 | 0 |
| 59 | MG | AA | 1662 | 1/1 | 0.94 | 0.76 | 43,43,43,43 | 0 |
| 59 | MG | BA | 3179 | 1/1 | 0.94 | 0.16 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3220 | 1/1 | 0.94 | 0.16 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3060 | 1/1 | 0.94 | 0.65 | 24,24,24,24 | 0 |
| 59 | MG | DA | 3062 | 1/1 | 0.94 | 0.57 | 26,26,26,26 | 0 |
| 59 | MG | CA | 1601 | 1/1 | 0.94 | 0.44 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3241 | 1/1 | 0.94 | 0.38 | 33,33,33,33 | 0 |
| 59 | MG | CA | 1748 | 1/1 | 0.94 | 0.39 | 50,50,50,50 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DB | 208 | 1/1 | 0.94 | 0.30 | 55,55,55,55 | 0 |
| 59 | MG | DA | 3067 | 1/1 | 0.94 | 0.37 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3245 | 1/1 | 0.94 | 0.27 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3069 | 1/1 | 0.94 | 0.19 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3310 | 1/1 | 0.94 | 0.45 | 44,44,44,44 | 0 |
| 59 | MG | CA | 1603 | 1/1 | 0.94 | 0.66 | 55,55,55,55 | 0 |
| 59 | MG | DA | 3075 | 1/1 | 0.94 | 0.18 | 29,29,29,29 | 0 |
| 59 | MG | CA | 1676 | 1/1 | 0.94 | 0.39 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3073 | 1/1 | 0.95 | 0.29 | 38,38,38,38 | 0 |
| 59 | MG | CA | 1788 | 1/1 | 0.95 | 0.19 | 124,124,124,124 | 0 |
| 59 | MG | BA | 3314 | 1/1 | 0.95 | 0.71 | 66,66,66,66 | 0 |
| 59 | MG | BA | 3273 | 1/1 | 0.95 | 0.30 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3080 | 1/1 | 0.95 | 0.25 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3191 | 1/1 | 0.95 | 0.32 | 51,51,51,51 | 0 |
| 59 | MG | BA | 3110 | 1/1 | 0.95 | 0.47 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3204 | 1/1 | 0.95 | 0.35 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3085 | 1/1 | 0.95 | 0.31 | 42,42,42,42 | 0 |
| 59 | MG | CA | 1724 | 1/1 | 0.95 | 0.22 | 120,120,120,120 | 0 |
| 59 | MG | BA | 3319 | 1/1 | 0.95 | 0.23 | 133,133,133,133 | 0 |
| 59 | MG | DA | 3209 | 1/1 | 0.95 | 0.14 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3277 | 1/1 | 0.95 | 0.27 | 56,56,56,56 | 0 |
| 59 | MG | AA | 1715 | 1/1 | 0.95 | 0.28 | 52,52,52,52 | 0 |
| 59 | MG | AA | 1667 | 1/1 | 0.95 | 0.36 | 64,64,64,64 | 0 |
| 59 | MG | CA | 1670 | 1/1 | 0.95 | 0.29 | 68,68,68,68 | 0 |
| 59 | MG | AA | 1744 | 1/1 | 0.95 | 0.23 | 70,70,70,70 | 0 |
| 59 | MG | BA | 3382 | 1/1 | 0.95 | 0.29 | 43,43,43,43 | 0 |
| 59 | MG | AA | 1680 | 1/1 | 0.95 | 0.19 | 51,51,51,51 | 0 |
| 59 | MG | AA | 1689 | 1/1 | 0.95 | 0.26 | 53,53,53,53 | 0 |
| 59 | MG | AA | 1708 | 1/1 | 0.95 | 0.34 | 61,61,61,61 | 0 |
| 59 | MG | AA | 1709 | 1/1 | 0.95 | 0.16 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3226 | 1/1 | 0.95 | 0.25 | 51,51,51,51 | 0 |
| 59 | MG | CA | 1616 | 1/1 | 0.95 | 0.52 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3117 | 1/1 | 0.95 | 0.22 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3205 | 1/1 | 0.95 | 0.24 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3081 | 1/1 | 0.95 | 0.38 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3127 | 1/1 | 0.95 | 0.29 | 31,31,31,31 | 0 |
| 59 | MG | AV | 101 | 1/1 | 0.95 | 0.36 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3339 | 1/1 | 0.95 | 0.45 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3083 | 1/1 | 0.95 | 0.28 | 28,28,28,28 | 0 |
| 59 | MG | BA | 3291 | 1/1 | 0.95 | 0.46 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3333 | 1/1 | 0.95 | 0.39 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3347 | 1/1 | 0.95 | 0.14 | 54,54,54,54 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3238 | 1/1 | 0.95 | 0.48 | 26,26,26,26 | 0 |
| 59 | MG | AA | 1796 | 1/1 | 0.95 | 0.24 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3137 | 1/1 | 0.95 | 0.72 | 25,25,25,25 | 0 |
| 59 | MG | BA | 3029 | 1/1 | 0.95 | 0.36 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3294 | 1/1 | 0.95 | 0.35 | 35,35,35,35 | 0 |
| 59 | MG | CA | 1746 | 1/1 | 0.95 | 0.12 | 79,79,79,79 | 0 |
| 59 | MG | DA | 3142 | 1/1 | 0.95 | 0.36 | 30,30,30,30 | 0 |
| 59 | MG | BA | 3341 | 1/1 | 0.95 | 0.23 | 57,57,57,57 | 0 |
| 59 | MG | CX | 102 | 1/1 | 0.95 | 0.36 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3362 | 1/1 | 0.95 | 0.30 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3251 | 1/1 | 0.95 | 0.36 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3343 | 1/1 | 0.95 | 0.27 | 70,70,70,70 | 0 |
| 59 | MG | BA | 3030 | 1/1 | 0.95 | 0.27 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3034 | 1/1 | 0.95 | 0.34 | 27,27,27,27 | 0 |
| 59 | MG | BA | 3410 | 1/1 | 0.95 | 0.14 | 206,206,206,206 | 0 |
| 59 | MG | AA | 1637 | 1/1 | 0.95 | 0.25 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3347 | 1/1 | 0.95 | 0.26 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3371 | 1/1 | 0.95 | 0.54 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3006 | 1/1 | 0.95 | 0.63 | 63,63,63,63 | 0 |
| 59 | MG | AA | 1652 | 1/1 | 0.95 | 0.21 | 92,92,92,92 | 0 |
| 59 | MG | AA | 1799 | 1/1 | 0.95 | 0.37 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3095 | 1/1 | 0.95 | 0.59 | 30,30,30,30 | 0 |
| 59 | MG | AA | 1800 | 1/1 | 0.95 | 0.19 | 74,74,74,74 | 0 |
| 59 | MG | AA | 1751 | 1/1 | 0.95 | 0.57 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3265 | 1/1 | 0.95 | 0.30 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3015 | 1/1 | 0.95 | 0.22 | 29,29,29,29 | 0 |
| 59 | MG | CA | 1645 | 1/1 | 0.95 | 0.39 | 50,50,50,50 | 0 |
| 59 | MG | AA | 1692 | 1/1 | 0.95 | 0.43 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3262 | 1/1 | 0.95 | 0.43 | 31,31,31,31 | 0 |
| 59 | MG | BF | 301 | 1/1 | 0.95 | 0.18 | 45,45,45,45 | 0 |
| 59 | MG | AA | 1684 | 1/1 | 0.95 | 0.42 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3388 | 1/1 | 0.95 | 0.21 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3105 | 1/1 | 0.95 | 0.24 | 43,43,43,43 | 0 |
| 59 | MG | CA | 1771 | 1/1 | 0.95 | 0.13 | 62,62,62,62 | 0 |
| 59 | MG | DA | 3392 | 1/1 | 0.95 | 0.29 | 28,28,28,28 | 0 |
| 59 | MG | BA | 3146 | 1/1 | 0.95 | 0.35 | 43,43,43,43 | 0 |
| 59 | MG | CA | 1773 | 1/1 | 0.95 | 0.51 | 44,44,44,44 | 0 |
| 59 | MG | AA | 1678 | 1/1 | 0.95 | 0.29 | 82,82,82,82 | 0 |
| 59 | MG | BU | 201 | 1/1 | 0.95 | 0.23 | 74,74,74,74 | 0 |
| 59 | MG | DA | 3284 | 1/1 | 0.95 | 0.14 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3149 | 1/1 | 0.95 | 0.50 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3429 | 1/1 | 0.95 | 0.45 | 62,62,62,62 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3288 | 1/1 | 0.95 | 0.28 | 22,22,22,22 | 0 |
| 59 | MG | CA | 1715 | 1/1 | 0.95 | 0.09 | 104,104,104,104 | 0 |
| 59 | MG | AA | 1807 | 1/1 | 0.95 | 0.30 | 66,66,66,66 | 0 |
| 59 | MG | DF | 302 | 1/1 | 0.95 | 0.20 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3068 | 1/1 | 0.95 | 0.35 | 16,16,16,16 | 0 |
| 59 | MG | AA | 1786 | 1/1 | 0.95 | 0.28 | 56,56,56,56 | 0 |
| 59 | MG | BV | 201 | 1/1 | 0.95 | 0.29 | 33,33,33,33 | 0 |
| 59 | MG | DA | 3071 | 1/1 | 0.95 | 0.24 | 53,53,53,53 | 0 |
| 60 | EDS | AA | 1805 | 41/41 | 0.95 | 0.20 | 47,55,60,66 | 0 |
| 59 | MG | DA | 3300 | 1/1 | 0.96 | 0.35 | 33,33,33,33 | 0 |
| 59 | MG | DA | 3093 | 1/1 | 0.96 | 0.12 | 22,22,22,22 | 0 |
| 59 | MG | DA | 3199 | 1/1 | 0.96 | 0.21 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3200 | 1/1 | 0.96 | 0.38 | 45,45,45,45 | 0 |
| 59 | MG | DA | 3305 | 1/1 | 0.96 | 0.07 | 62,62,62,62 | 0 |
| 59 | MG | BA | 3334 | 1/1 | 0.96 | 0.24 | 54,54,54,54 | 0 |
| 59 | MG | CA | 1711 | 1/1 | 0.96 | 0.64 | 72,72,72,72 | 0 |
| 59 | MG | DA | 3308 | 1/1 | 0.96 | 0.26 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3102 | 1/1 | 0.96 | 0.34 | 27,27,27,27 | 0 |
| 59 | MG | CA | 1666 | 1/1 | 0.96 | 0.35 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3379 | 1/1 | 0.96 | 0.12 | 74,74,74,74 | 0 |
| 59 | MG | BA | 3335 | 1/1 | 0.96 | 0.13 | 81,81,81,81 | 0 |
| 59 | MG | CX | 101 | 1/1 | 0.96 | 0.46 | 44,44,44,44 | 0 |
| 59 | MG | BB | 212 | 1/1 | 0.96 | 0.27 | 48,48,48,48 | 0 |
| 59 | MG | CA | 1763 | 1/1 | 0.96 | 0.14 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3425 | 1/1 | 0.96 | 0.23 | 67,67,67,67 | 0 |
| 59 | MG | BA | 3336 | 1/1 | 0.96 | 0.21 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3428 | 1/1 | 0.96 | 0.40 | 71,71,71,71 | 0 |
| 59 | MG | CA | 1768 | 1/1 | 0.96 | 0.54 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3118 | 1/1 | 0.96 | 0.81 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3218 | 1/1 | 0.96 | 0.47 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3120 | 1/1 | 0.96 | 0.56 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3176 | 1/1 | 0.96 | 0.77 | 66,66,66,66 | 0 |
| 59 | MG | AA | 1624 | 1/1 | 0.96 | 0.22 | 63,63,63,63 | 0 |
| 59 | MG | BA | 3272 | 1/1 | 0.96 | 0.41 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3225 | 1/1 | 0.96 | 0.42 | 42,42,42,42 | 0 |
| 59 | MG | CA | 1631 | 1/1 | 0.96 | 0.33 | 31,31,31,31 | 0 |
| 59 | MG | AA | 1795 | 1/1 | 0.96 | 0.71 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3133 | 1/1 | 0.96 | 0.46 | 22,22,22,22 | 0 |
| 59 | MG | DA | 3009 | 1/1 | 0.96 | 0.20 | 29,29,29,29 | 0 |
| 59 | MG | AA | 1693 | 1/1 | 0.96 | 0.30 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3158 | 1/1 | 0.96 | 0.10 | 71,71,71,71 | 0 |
| 59 | MG | BA | 3159 | 1/1 | 0.96 | 0.13 | 68,68,68,68 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3183 | 1/1 | 0.96 | 0.67 | 68,68,68,68 | 0 |
| 59 | MG | CA | 1779 | 1/1 | 0.96 | 0.54 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3345 | 1/1 | 0.96 | 0.48 | 53,53,53,53 | 0 |
| 59 | MG | DA | 3346 | 1/1 | 0.96 | 0.32 | 13,13,13,13 | 0 |
| 59 | MG | CA | 1782 | 1/1 | 0.96 | 0.15 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3236 | 1/1 | 0.96 | 0.69 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3237 | 1/1 | 0.96 | 0.23 | 34,34,34,34 | 0 |
| 59 | MG | BA | 3247 | 1/1 | 0.96 | 0.12 | 34,34,34,34 | 0 |
| 59 | MG | DA | 3351 | 1/1 | 0.96 | 0.14 | 40,40,40,40 | 0 |
| 59 | MG | DA | 3240 | 1/1 | 0.96 | 0.16 | 27,27,27,27 | 0 |
| 59 | MG | BA | 3035 | 1/1 | 0.96 | 0.37 | 30,30,30,30 | 0 |
| 59 | MG | DA | 3032 | 1/1 | 0.96 | 0.45 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3033 | 1/1 | 0.96 | 0.17 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3146 | 1/1 | 0.96 | 0.35 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3359 | 1/1 | 0.96 | 0.11 | 57,57,57,57 | 0 |
| 59 | MG | DA | 3035 | 1/1 | 0.96 | 0.79 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3036 | 1/1 | 0.96 | 0.24 | 62,62,62,62 | 0 |
| 59 | MG | DA | 3037 | 1/1 | 0.96 | 0.47 | 31,31,31,31 | 0 |
| 59 | MG | AA | 1669 | 1/1 | 0.96 | 0.20 | 57,57,57,57 | 0 |
| 59 | MG | BA | 3066 | 1/1 | 0.96 | 0.22 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1665 | 1/1 | 0.96 | 0.14 | 86,86,86,86 | 0 |
| 59 | MG | DA | 3044 | 1/1 | 0.96 | 0.23 | 23,23,23,23 | 0 |
| 59 | MG | DA | 3045 | 1/1 | 0.96 | 0.42 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3155 | 1/1 | 0.96 | 0.23 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3046 | 1/1 | 0.96 | 0.42 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3252 | 1/1 | 0.96 | 0.64 | 50,50,50,50 | 0 |
| 59 | MG | BA | 3068 | 1/1 | 0.96 | 0.41 | 36,36,36,36 | 0 |
| 59 | MG | BA | 3189 | 1/1 | 0.96 | 0.28 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3052 | 1/1 | 0.96 | 0.34 | 20,20,20,20 | 0 |
| 59 | MG | DA | 3053 | 1/1 | 0.96 | 0.32 | 29,29,29,29 | 0 |
| 59 | MG | BA | 3402 | 1/1 | 0.96 | 0.22 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3288 | 1/1 | 0.96 | 0.17 | 78,78,78,78 | 0 |
| 59 | MG | CA | 1693 | 1/1 | 0.96 | 0.23 | 87,87,87,87 | 0 |
| 59 | MG | BA | 3190 | 1/1 | 0.96 | 0.30 | 38,38,38,38 | 0 |
| 59 | MG | AA | 1682 | 1/1 | 0.96 | 0.15 | 117,117,117,117 | 0 |
| 59 | MG | DA | 3384 | 1/1 | 0.96 | 0.20 | 188,188,188,188 | 0 |
| 59 | MG | BA | 3124 | 1/1 | 0.96 | 0.36 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3270 | 1/1 | 0.96 | 0.31 | 45,45,45,45 | 0 |
| 59 | MG | DA | 3170 | 1/1 | 0.96 | 0.11 | 87,87,87,87 | 0 |
| 59 | MG | DA | 3171 | 1/1 | 0.96 | 0.26 | 46,46,46,46 | 0 |
| 59 | MG | CA | 1606 | 1/1 | 0.96 | 0.35 | 41,41,41,41 | 0 |
| 59 | MG | DA | 3173 | 1/1 | 0.96 | 0.21 | 34,34,34,34 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | CA | 1698 | 1/1 | 0.96 | 0.07 | 74,74,74,74 | 0 |
| 59 | MG | BA | 3194 | 1/1 | 0.96 | 0.23 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3072 | 1/1 | 0.96 | 0.52 | 22,22,22,22 | 0 |
| 59 | MG | BA | 3073 | 1/1 | 0.96 | 0.34 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1661 | 1/1 | 0.96 | 0.51 | 40,40,40,40 | 0 |
| 59 | MG | DB | 205 | 1/1 | 0.96 | 0.20 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3283 | 1/1 | 0.96 | 0.26 | 33,33,33,33 | 0 |
| 59 | MG | BA | 3048 | 1/1 | 0.96 | 0.26 | 69,69,69,69 | 0 |
| 59 | MG | CA | 1658 | 1/1 | 0.96 | 0.48 | 55,55,55,55 | 0 |
| 59 | MG | DB | 209 | 1/1 | 0.96 | 0.30 | 46,46,46,46 | 0 |
| 59 | MG | AA | 1606 | 1/1 | 0.96 | 0.22 | 65,65,65,65 | 0 |
| 59 | MG | BA | 3201 | 1/1 | 0.96 | 0.55 | 49,49,49,49 | 0 |
| 59 | MG | DE | 301 | 1/1 | 0.96 | 0.39 | 25,25,25,25 | 0 |
| 59 | MG | DA | 3082 | 1/1 | 0.96 | 0.35 | 32,32,32,32 | 0 |
| 59 | MG | BA | 3130 | 1/1 | 0.96 | 0.27 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3191 | 1/1 | 0.96 | 0.21 | 32,32,32,32 | 0 |
| 59 | MG | AA | 1739 | 1/1 | 0.96 | 0.29 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3193 | 1/1 | 0.96 | 0.37 | 50,50,50,50 | 0 |
| 59 | MG | AA | 1803 | 1/1 | 0.96 | 0.11 | 70,70,70,70 | 0 |
| 59 | MG | BA | 3154 | 1/1 | 0.96 | 0.54 | 50,50,50,50 | 0 |
| 60 | EDS | CA | 1787 | 41/41 | 0.96 | 0.20 | 39,46,57,70 | 0 |
| 59 | MG | AA | 1771 | 1/1 | 0.97 | 0.27 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3039 | 1/1 | 0.97 | 0.26 | 45,45,45,45 | 0 |
| 59 | MG | AA | 1702 | 1/1 | 0.97 | 0.12 | 93,93,93,93 | 0 |
| 59 | MG | CA | 1780 | 1/1 | 0.97 | 0.16 | 71,71,71,71 | 0 |
| 59 | MG | DA | 3287 | 1/1 | 0.97 | 0.14 | 30,30,30,30 | 0 |
| 59 | MG | AA | 1773 | 1/1 | 0.97 | 0.32 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3054 | 1/1 | 0.97 | 0.27 | 18,18,18,18 | 0 |
| 59 | MG | DA | 3056 | 1/1 | 0.97 | 0.15 | 32,32,32,32 | 0 |
| 59 | MG | AA | 1664 | 1/1 | 0.97 | 0.12 | 89,89,89,89 | 0 |
| 59 | MG | DA | 3294 | 1/1 | 0.97 | 0.61 | 34,34,34,34 | 0 |
| 59 | MG | DA | 3295 | 1/1 | 0.97 | 0.31 | 66,66,66,66 | 0 |
| 59 | MG | DA | 3061 | 1/1 | 0.97 | 0.39 | 21,21,21,21 | 0 |
| 59 | MG | DA | 3178 | 1/1 | 0.97 | 0.16 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3128 | 1/1 | 0.97 | 0.54 | 41,41,41,41 | 0 |
| 59 | MG | DA | 3063 | 1/1 | 0.97 | 0.54 | 19,19,19,19 | 0 |
| 59 | MG | BA | 3211 | 1/1 | 0.97 | 0.21 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3183 | 1/1 | 0.97 | 0.28 | 49,49,49,49 | 0 |
| 59 | MG | DA | 3302 | 1/1 | 0.97 | 0.31 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3085 | 1/1 | 0.97 | 0.26 | 30,30,30,30 | 0 |
| 59 | MG | AA | 1725 | 1/1 | 0.97 | 0.66 | 54,54,54,54 | 0 |
| 59 | MG | CA | 1790 | 1/1 | 0.97 | 0.22 | 46,46,46,46 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | CA | 1651 | 1/1 | 0.97 | 0.34 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3050 | 1/1 | 0.97 | 0.25 | 25,25,25,25 | 0 |
| 59 | MG | CA | 1719 | 1/1 | 0.97 | 0.14 | 57,57,57,57 | 0 |
| 59 | MG | BE | 301 | 1/1 | 0.97 | 0.30 | 35,35,35,35 | 0 |
| 59 | MG | BE | 302 | 1/1 | 0.97 | 0.20 | 23,23,23,23 | 0 |
| 59 | MG | BA | 3309 | 1/1 | 0.97 | 0.56 | 31,31,31,31 | 0 |
| 59 | MG | BA | 3419 | 1/1 | 0.97 | 0.48 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3088 | 1/1 | 0.97 | 0.25 | 42,42,42,42 | 0 |
| 59 | MG | AA | 1643 | 1/1 | 0.97 | 0.17 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3196 | 1/1 | 0.97 | 0.23 | 26,26,26,26 | 0 |
| 59 | MG | BA | 3360 | 1/1 | 0.97 | 0.33 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3198 | 1/1 | 0.97 | 0.45 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3054 | 1/1 | 0.97 | 0.30 | 16,16,16,16 | 0 |
| 59 | MG | DA | 3083 | 1/1 | 0.97 | 0.33 | 33,33,33,33 | 0 |
| 59 | MG | DA | 3323 | 1/1 | 0.97 | 0.30 | 43,43,43,43 | 0 |
| 59 | MG | CV | 101 | 1/1 | 0.97 | 0.38 | 31,31,31,31 | 0 |
| 59 | MG | BA | 3018 | 1/1 | 0.97 | 0.39 | 36,36,36,36 | 0 |
| 59 | MG | AA | 1638 | 1/1 | 0.97 | 0.35 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3087 | 1/1 | 0.97 | 0.23 | 17,17,17,17 | 0 |
| 59 | MG | DA | 3329 | 1/1 | 0.97 | 0.06 | 94,94,94,94 | 0 |
| 59 | MG | DA | 3205 | 1/1 | 0.97 | 0.59 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3088 | 1/1 | 0.97 | 0.54 | 24,24,24,24 | 0 |
| 59 | MG | DA | 3089 | 1/1 | 0.97 | 0.40 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3137 | 1/1 | 0.97 | 0.24 | 33,33,33,33 | 0 |
| 59 | MG | DA | 3334 | 1/1 | 0.97 | 0.28 | 21,21,21,21 | 0 |
| 59 | MG | DA | 3092 | 1/1 | 0.97 | 0.23 | 26,26,26,26 | 0 |
| 59 | MG | BA | 3094 | 1/1 | 0.97 | 0.26 | 30,30,30,30 | 0 |
| 59 | MG | BA | 3223 | 1/1 | 0.97 | 0.24 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3098 | 1/1 | 0.97 | 0.37 | 29,29,29,29 | 0 |
| 59 | MG | AA | 1793 | 1/1 | 0.97 | 0.19 | 85,85,85,85 | 0 |
| 59 | MG | DA | 3341 | 1/1 | 0.97 | 0.28 | 45,45,45,45 | 0 |
| 59 | MG | DA | 3101 | 1/1 | 0.97 | 0.55 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3181 | 1/1 | 0.97 | 0.35 | 44,44,44,44 | 0 |
| 59 | MG | BA | 3370 | 1/1 | 0.97 | 0.17 | 47,47,47,47 | 0 |
| 59 | MG | AA | 1651 | 1/1 | 0.97 | 0.14 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3060 | 1/1 | 0.97 | 0.35 | 26,26,26,26 | 0 |
| 59 | MG | CA | 1604 | 1/1 | 0.97 | 0.23 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3107 | 1/1 | 0.97 | 0.22 | 31,31,31,31 | 0 |
| 59 | MG | AA | 1659 | 1/1 | 0.97 | 0.34 | 74,74,74,74 | 0 |
| 59 | MG | DA | 3109 | 1/1 | 0.97 | 0.35 | 17,17,17,17 | 0 |
| 59 | MG | DA | 3110 | 1/1 | 0.97 | 0.29 | 20,20,20,20 | 0 |
| 59 | MG | DA | 3352 | 1/1 | 0.97 | 0.21 | 36,36,36,36 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3377 | 1/1 | 0.97 | 0.15 | 30,30,30,30 | 0 |
| 59 | MG | DA | 3354 | 1/1 | 0.97 | 0.33 | 36,36,36,36 | 0 |
| 59 | MG | AA | 1639 | 1/1 | 0.97 | 0.17 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3101 | 1/1 | 0.97 | 0.37 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3102 | 1/1 | 0.97 | 0.45 | 31,31,31,31 | 0 |
| 59 | MG | BA | 3104 | 1/1 | 0.97 | 0.54 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3026 | 1/1 | 0.97 | 0.40 | 19,19,19,19 | 0 |
| 59 | MG | AA | 1614 | 1/1 | 0.97 | 0.11 | 85,85,85,85 | 0 |
| 59 | MG | DA | 3361 | 1/1 | 0.97 | 0.19 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3443 | 1/1 | 0.97 | 0.40 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3122 | 1/1 | 0.97 | 0.32 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3235 | 1/1 | 0.97 | 0.44 | 29,29,29,29 | 0 |
| 59 | MG | BA | 3445 | 1/1 | 0.97 | 0.39 | 36,36,36,36 | 0 |
| 59 | MG | DA | 3129 | 1/1 | 0.97 | 0.26 | 34,34,34,34 | 0 |
| 59 | MG | CA | 1617 | 1/1 | 0.97 | 0.34 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3242 | 1/1 | 0.97 | 0.38 | 36,36,36,36 | 0 |
| 59 | MG | DA | 3369 | 1/1 | 0.97 | 0.16 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3131 | 1/1 | 0.97 | 0.47 | 26,26,26,26 | 0 |
| 59 | MG | AA | 1605 | 1/1 | 0.97 | 0.46 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3387 | 1/1 | 0.97 | 0.14 | 42,42,42,42 | 0 |
| 59 | MG | AX | 103 | 1/1 | 0.97 | 0.27 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3031 | 1/1 | 0.97 | 0.31 | 25,25,25,25 | 0 |
| 59 | MG | BA | 3196 | 1/1 | 0.97 | 0.13 | 56,56,56,56 | 0 |
| 59 | MG | BA | 3243 | 1/1 | 0.97 | 0.20 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3138 | 1/1 | 0.97 | 0.59 | 34,34,34,34 | 0 |
| 59 | MG | CA | 1757 | 1/1 | 0.97 | 0.64 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3032 | 1/1 | 0.97 | 0.52 | 45,45,45,45 | 0 |
| 59 | MG | DA | 3012 | 1/1 | 0.97 | 0.35 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3337 | 1/1 | 0.97 | 0.21 | 80,80,80,80 | 0 |
| 59 | MG | BA | 3455 | 1/1 | 0.97 | 0.19 | 59,59,59,59 | 0 |
| 59 | MG | DA | 3016 | 1/1 | 0.97 | 0.30 | 18,18,18,18 | 0 |
| 59 | MG | DA | 3257 | 1/1 | 0.97 | 0.30 | 21,21,21,21 | 0 |
| 59 | MG | BA | 3395 | 1/1 | 0.97 | 0.16 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3075 | 1/1 | 0.97 | 0.28 | 21,21,21,21 | 0 |
| 59 | MG | DA | 3389 | 1/1 | 0.97 | 0.25 | 24,24,24,24 | 0 |
| 59 | MG | CA | 1630 | 1/1 | 0.97 | 0.19 | 120,120,120,120 | 0 |
| 59 | MG | CA | 1764 | 1/1 | 0.97 | 0.55 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3262 | 1/1 | 0.97 | 0.42 | 51,51,51,51 | 0 |
| 59 | MG | DA | 3027 | 1/1 | 0.97 | 0.26 | 32,32,32,32 | 0 |
| 59 | MG | AA | 1769 | 1/1 | 0.97 | 0.26 | 71,71,71,71 | 0 |
| 59 | MG | CA | 1632 | 1/1 | 0.97 | 0.18 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3266 | 1/1 | 0.97 | 0.49 | 47,47,47,47 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(Å ²) | Q<0.9 |
|-----|------|-------|------|-------|------|------|----------------------------|-------|
| 59 | MG | BB | 202 | 1/1 | 0.97 | 0.17 | 98,98,98,98 | 0 |
| 59 | MG | BA | 3115 | 1/1 | 0.97 | 0.22 | 48,48,48,48 | 0 |
| 59 | MG | CA | 1635 | 1/1 | 0.97 | 0.45 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3078 | 1/1 | 0.97 | 0.61 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3117 | 1/1 | 0.97 | 0.39 | 26,26,26,26 | 0 |
| 59 | MG | BB | 206 | 1/1 | 0.97 | 0.35 | 94,94,94,94 | 0 |
| 59 | MG | DA | 3273 | 1/1 | 0.97 | 0.33 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3041 | 1/1 | 0.97 | 0.32 | 24,24,24,24 | 0 |
| 59 | MG | DA | 3042 | 1/1 | 0.97 | 0.32 | 52,52,52,52 | 0 |
| 59 | MG | BA | 3401 | 1/1 | 0.97 | 0.42 | 42,42,42,42 | 0 |
| 59 | MG | DA | 3277 | 1/1 | 0.97 | 0.17 | 49,49,49,49 | 0 |
| 59 | MG | AA | 1610 | 1/1 | 0.97 | 0.17 | 95,95,95,95 | 0 |
| 59 | MG | BA | 3121 | 1/1 | 0.97 | 0.31 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3048 | 1/1 | 0.97 | 0.44 | 14,14,14,14 | 0 |
| 59 | MG | DA | 3281 | 1/1 | 0.97 | 0.39 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3165 | 1/1 | 0.97 | 0.25 | 34,34,34,34 | 0 |
| 61 | ZN | AN | 101 | 1/1 | 0.97 | 0.06 | 100,100,100,100 | 0 |
| 59 | MG | AA | 1671 | 1/1 | 0.98 | 0.21 | 85,85,85,85 | 0 |
| 59 | MG | AA | 1621 | 1/1 | 0.98 | 0.22 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3324 | 1/1 | 0.98 | 0.23 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3193 | 1/1 | 0.98 | 0.48 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3265 | 1/1 | 0.98 | 0.19 | 55,55,55,55 | 0 |
| 59 | MG | BA | 3077 | 1/1 | 0.98 | 0.39 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3066 | 1/1 | 0.98 | 0.38 | 23,23,23,23 | 0 |
| 59 | MG | BA | 3195 | 1/1 | 0.98 | 0.48 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3268 | 1/1 | 0.98 | 0.22 | 48,48,48,48 | 0 |
| 59 | MG | BA | 3052 | 1/1 | 0.98 | 0.35 | 58,58,58,58 | 0 |
| 59 | MG | DA | 3239 | 1/1 | 0.98 | 0.21 | 35,35,35,35 | 0 |
| 59 | MG | CA | 1607 | 1/1 | 0.98 | 0.26 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3053 | 1/1 | 0.98 | 0.22 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3106 | 1/1 | 0.98 | 0.16 | 62,62,62,62 | 0 |
| 59 | MG | AA | 1720 | 1/1 | 0.98 | 0.26 | 59,59,59,59 | 0 |
| 59 | MG | BA | 3452 | 1/1 | 0.98 | 0.39 | 51,51,51,51 | 0 |
| 59 | MG | D5 | 101 | 1/1 | 0.98 | 0.14 | 44,44,44,44 | 0 |
| 59 | MG | BA | 3033 | 1/1 | 0.98 | 0.23 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3340 | 1/1 | 0.98 | 0.12 | 84,84,84,84 | 0 |
| 59 | MG | DA | 3077 | 1/1 | 0.98 | 0.36 | 21,21,21,21 | 0 |
| 59 | MG | DA | 3078 | 1/1 | 0.98 | 0.41 | 33,33,33,33 | 0 |
| 59 | MG | DA | 3161 | 1/1 | 0.98 | 0.34 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1753 | 1/1 | 0.98 | 0.52 | 22,22,22,22 | 0 |
| 59 | MG | CA | 1769 | 1/1 | 0.98 | 0.42 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3403 | 1/1 | 0.98 | 0.44 | 44,44,44,44 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3355 | 1/1 | 0.98 | 0.21 | 60,60,60,60 | 0 |
| 59 | MG | BA | 3406 | 1/1 | 0.98 | 0.12 | 72,72,72,72 | 0 |
| 59 | MG | BA | 3023 | 1/1 | 0.98 | 0.28 | 41,41,41,41 | 0 |
| 59 | MG | AA | 1608 | 1/1 | 0.98 | 0.35 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3238 | 1/1 | 0.98 | 0.37 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3359 | 1/1 | 0.98 | 0.23 | 78,78,78,78 | 0 |
| 59 | MG | BA | 3318 | 1/1 | 0.98 | 0.16 | 46,46,46,46 | 0 |
| 59 | MG | BA | 3239 | 1/1 | 0.98 | 0.38 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3013 | 1/1 | 0.98 | 0.32 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3174 | 1/1 | 0.98 | 0.28 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3175 | 1/1 | 0.98 | 0.22 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3141 | 1/1 | 0.98 | 0.31 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3177 | 1/1 | 0.98 | 0.47 | 25,25,25,25 | 0 |
| 59 | MG | AA | 1612 | 1/1 | 0.98 | 0.35 | 50,50,50,50 | 0 |
| 59 | MG | DA | 3179 | 1/1 | 0.98 | 0.23 | 37,37,37,37 | 0 |
| 59 | MG | DA | 3096 | 1/1 | 0.98 | 0.23 | 31,31,31,31 | 0 |
| 59 | MG | DA | 3097 | 1/1 | 0.98 | 0.41 | 19,19,19,19 | 0 |
| 59 | MG | CA | 1781 | 1/1 | 0.98 | 0.23 | 40,40,40,40 | 0 |
| 59 | MG | BA | 3061 | 1/1 | 0.98 | 0.23 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3283 | 1/1 | 0.98 | 0.23 | 29,29,29,29 | 0 |
| 59 | MG | BA | 3040 | 1/1 | 0.98 | 0.30 | 54,54,54,54 | 0 |
| 59 | MG | DA | 3021 | 1/1 | 0.98 | 0.42 | 25,25,25,25 | 0 |
| 59 | MG | DA | 3023 | 1/1 | 0.98 | 0.56 | 31,31,31,31 | 0 |
| 59 | MG | DA | 3025 | 1/1 | 0.98 | 0.40 | 22,22,22,22 | 0 |
| 59 | MG | CA | 1628 | 1/1 | 0.98 | 0.25 | 33,33,33,33 | 0 |
| 59 | MG | CA | 1786 | 1/1 | 0.98 | 0.71 | 35,35,35,35 | 0 |
| 59 | MG | DA | 3028 | 1/1 | 0.98 | 0.55 | 23,23,23,23 | 0 |
| 59 | MG | DA | 3029 | 1/1 | 0.98 | 0.30 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3031 | 1/1 | 0.98 | 0.45 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3376 | 1/1 | 0.98 | 0.14 | 56,56,56,56 | 0 |
| 59 | MG | DA | 3377 | 1/1 | 0.98 | 0.40 | 23,23,23,23 | 0 |
| 59 | MG | BA | 3175 | 1/1 | 0.98 | 0.33 | 52,52,52,52 | 0 |
| 59 | MG | DA | 3112 | 1/1 | 0.98 | 0.35 | 22,22,22,22 | 0 |
| 59 | MG | AA | 1687 | 1/1 | 0.98 | 0.16 | 84,84,84,84 | 0 |
| 59 | MG | BA | 3027 | 1/1 | 0.98 | 0.23 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3115 | 1/1 | 0.98 | 0.43 | 27,27,27,27 | 0 |
| 59 | MG | B7 | 101 | 1/1 | 0.98 | 0.17 | 39,39,39,39 | 0 |
| 59 | MG | CA | 1684 | 1/1 | 0.98 | 0.13 | 79,79,79,79 | 0 |
| 59 | MG | BA | 3148 | 1/1 | 0.98 | 0.80 | 24,24,24,24 | 0 |
| 59 | MG | DA | 3119 | 1/1 | 0.98 | 0.38 | 44,44,44,44 | 0 |
| 59 | MG | BA | 3373 | 1/1 | 0.98 | 0.15 | 73,73,73,73 | 0 |
| 59 | MG | BA | 3374 | 1/1 | 0.98 | 0.26 | 49,49,49,49 | 0 |

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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | BA | 3375 | 1/1 | 0.98 | 0.19 | 47,47,47,47 | 0 |
| 59 | MG | DA | 3123 | 1/1 | 0.98 | 0.23 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3120 | 1/1 | 0.98 | 0.20 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3125 | 1/1 | 0.98 | 0.22 | 43,43,43,43 | 0 |
| 59 | MG | DA | 3126 | 1/1 | 0.98 | 0.42 | 25,25,25,25 | 0 |
| 59 | MG | DA | 3043 | 1/1 | 0.98 | 0.18 | 26,26,26,26 | 0 |
| 59 | MG | DA | 3128 | 1/1 | 0.98 | 0.22 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3212 | 1/1 | 0.98 | 0.33 | 45,45,45,45 | 0 |
| 59 | MG | BA | 3150 | 1/1 | 0.98 | 0.69 | 37,37,37,37 | 0 |
| 59 | MG | BA | 3378 | 1/1 | 0.98 | 0.18 | 68,68,68,68 | 0 |
| 59 | MG | BA | 3215 | 1/1 | 0.98 | 0.34 | 47,47,47,47 | 0 |
| 59 | MG | BA | 3091 | 1/1 | 0.98 | 0.25 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3217 | 1/1 | 0.98 | 0.11 | 40,40,40,40 | 0 |
| 59 | MG | DB | 210 | 1/1 | 0.98 | 0.07 | 88,88,88,88 | 0 |
| 59 | MG | BA | 3044 | 1/1 | 0.98 | 0.42 | 70,70,70,70 | 0 |
| 59 | MG | DA | 3310 | 1/1 | 0.98 | 0.51 | 27,27,27,27 | 0 |
| 59 | MG | BA | 3123 | 1/1 | 0.98 | 0.26 | 34,34,34,34 | 0 |
| 59 | MG | BA | 3046 | 1/1 | 0.98 | 0.27 | 39,39,39,39 | 0 |
| 59 | MG | BA | 3069 | 1/1 | 0.98 | 0.48 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3223 | 1/1 | 0.98 | 0.47 | 19,19,19,19 | 0 |
| 59 | MG | BA | 3070 | 1/1 | 0.98 | 0.40 | 21,21,21,21 | 0 |
| 59 | MG | BA | 3047 | 1/1 | 0.98 | 0.30 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1778 | 1/1 | 0.98 | 0.50 | 71,71,71,71 | 0 |
| 59 | MG | DA | 3057 | 1/1 | 0.98 | 0.36 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3059 | 1/1 | 0.98 | 0.34 | 38,38,38,38 | 0 |
| 59 | MG | BA | 3074 | 1/1 | 0.98 | 0.22 | 30,30,30,30 | 0 |
| 61 | ZN | B9 | 101 | 1/1 | 0.98 | 0.07 | 91,91,91,91 | 0 |
| 59 | MG | DA | 3219 | 1/1 | 0.99 | 0.32 | 26,26,26,26 | 0 |
| 59 | MG | BA | 3119 | 1/1 | 0.99 | 0.18 | 41,41,41,41 | 0 |
| 59 | MG | BA | 3103 | 1/1 | 0.99 | 0.27 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3240 | 1/1 | 0.99 | 0.24 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3017 | 1/1 | 0.99 | 0.34 | 29,29,29,29 | 0 |
| 59 | MG | DA | 3079 | 1/1 | 0.99 | 0.34 | 30,30,30,30 | 0 |
| 59 | MG | DA | 3047 | 1/1 | 0.99 | 0.26 | 16,16,16,16 | 0 |
| 59 | MG | AA | 1632 | 1/1 | 0.99 | 0.23 | 77,77,77,77 | 0 |
| 59 | MG | BA | 3064 | 1/1 | 0.99 | 0.20 | 37,37,37,37 | 0 |
| 59 | MG | AA | 1734 | 1/1 | 0.99 | 0.19 | 75,75,75,75 | 0 |
| 59 | MG | AA | 1622 | 1/1 | 0.99 | 0.08 | 61,61,61,61 | 0 |
| 59 | MG | DA | 3022 | 1/1 | 0.99 | 0.43 | 17,17,17,17 | 0 |
| 59 | MG | BA | 3045 | 1/1 | 0.99 | 0.38 | 38,38,38,38 | 0 |
| 59 | MG | DA | 3024 | 1/1 | 0.99 | 0.30 | 19,19,19,19 | 0 |
| 59 | MG | DA | 3309 | 1/1 | 0.99 | 0.08 | 67,67,67,67 | 0 |

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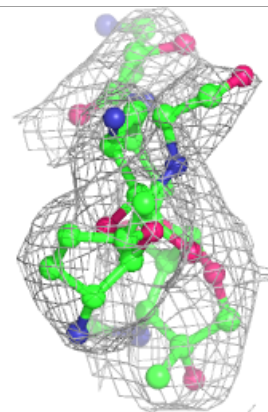
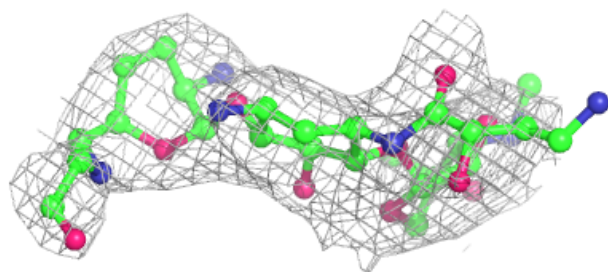
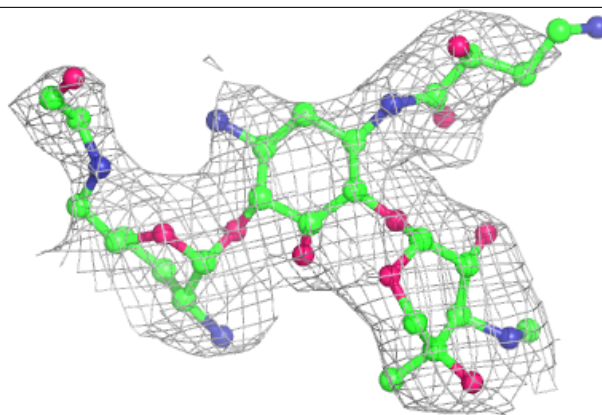
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| Mol | Type | Chain | Res | Atoms | RSCC | RSR | B-factors(\AA^2) | Q<0.9 |
|-----|------|-------|------|-------|------|------|-----------------------------|-------|
| 59 | MG | DA | 3055 | 1/1 | 0.99 | 0.22 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3056 | 1/1 | 0.99 | 0.37 | 31,31,31,31 | 0 |
| 59 | MG | DA | 3090 | 1/1 | 0.99 | 0.30 | 31,31,31,31 | 0 |
| 59 | MG | BA | 3037 | 1/1 | 0.99 | 0.51 | 28,28,28,28 | 0 |
| 59 | MG | DA | 3058 | 1/1 | 0.99 | 0.29 | 29,29,29,29 | 0 |
| 59 | MG | BA | 3361 | 1/1 | 0.99 | 0.11 | 42,42,42,42 | 0 |
| 59 | MG | BA | 3426 | 1/1 | 0.99 | 0.26 | 67,67,67,67 | 0 |
| 59 | MG | DA | 3095 | 1/1 | 0.99 | 0.59 | 24,24,24,24 | 0 |
| 59 | MG | BA | 3038 | 1/1 | 0.99 | 0.48 | 32,32,32,32 | 0 |
| 59 | MG | DA | 3030 | 1/1 | 0.99 | 0.35 | 28,28,28,28 | 0 |
| 59 | MG | BA | 3404 | 1/1 | 0.99 | 0.38 | 46,46,46,46 | 0 |
| 59 | MG | DA | 3099 | 1/1 | 0.99 | 0.41 | 33,33,33,33 | 0 |
| 59 | MG | BA | 3097 | 1/1 | 0.99 | 0.30 | 46,46,46,46 | 0 |
| 59 | MG | AA | 1609 | 1/1 | 0.99 | 0.21 | 80,80,80,80 | 0 |
| 59 | MG | DA | 3034 | 1/1 | 0.99 | 0.28 | 36,36,36,36 | 0 |
| 59 | MG | BA | 3407 | 1/1 | 0.99 | 0.14 | 54,54,54,54 | 0 |
| 59 | MG | BA | 3114 | 1/1 | 0.99 | 0.13 | 49,49,49,49 | 0 |
| 59 | MG | BA | 3072 | 1/1 | 0.99 | 0.23 | 31,31,31,31 | 0 |
| 59 | MG | BA | 3049 | 1/1 | 0.99 | 0.26 | 35,35,35,35 | 0 |
| 59 | MG | BA | 3020 | 1/1 | 0.99 | 0.20 | 49,49,49,49 | 0 |
| 59 | MG | AA | 1728 | 1/1 | 0.99 | 0.29 | 88,88,88,88 | 0 |
| 59 | MG | DA | 3291 | 1/1 | 0.99 | 0.26 | 44,44,44,44 | 0 |
| 59 | MG | DA | 3292 | 1/1 | 0.99 | 0.18 | 21,21,21,21 | 0 |
| 61 | ZN | AD | 302 | 1/1 | 0.99 | 0.26 | 64,64,64,64 | 0 |
| 59 | MG | BA | 3274 | 1/1 | 0.99 | 0.15 | 58,58,58,58 | 0 |
| 59 | MG | BA | 3391 | 1/1 | 0.99 | 0.30 | 44,44,44,44 | 0 |
| 61 | ZN | CD | 301 | 1/1 | 0.99 | 0.31 | 68,68,68,68 | 0 |
| 61 | ZN | CN | 101 | 1/1 | 0.99 | 0.09 | 77,77,77,77 | 0 |
| 61 | ZN | D9 | 101 | 1/1 | 0.99 | 0.05 | 75,75,75,75 | 0 |
| 59 | MG | DA | 3312 | 1/1 | 1.00 | 0.10 | 46,46,46,46 | 0 |

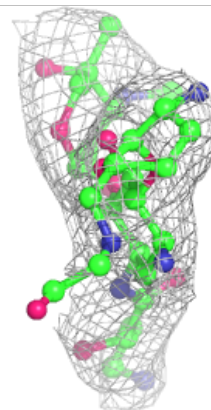
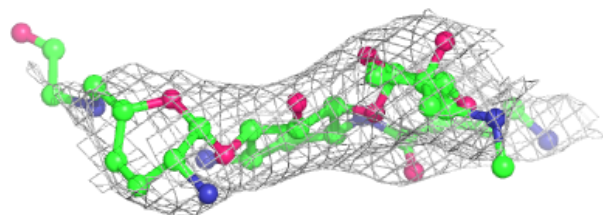
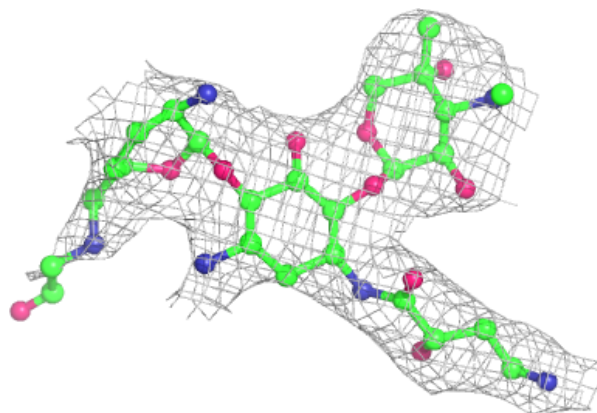
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around EDS AA 1805:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around EDS CA 1787:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers [i](#)

There are no such residues in this entry.