



Full wwPDB EM Validation Report ⓘ

Nov 5, 2024 – 06:25 PM JST

PDB ID : 8JC8
EMDB ID : EMD-36151
Title : Cryo-EM structure of the LH1 complex from thermochromatium tepidum
Authors : Wang, G.-L.; Yan, Y.-H.; Yu, L.-J.
Deposited on : 2023-05-10
Resolution : 3.11 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

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:

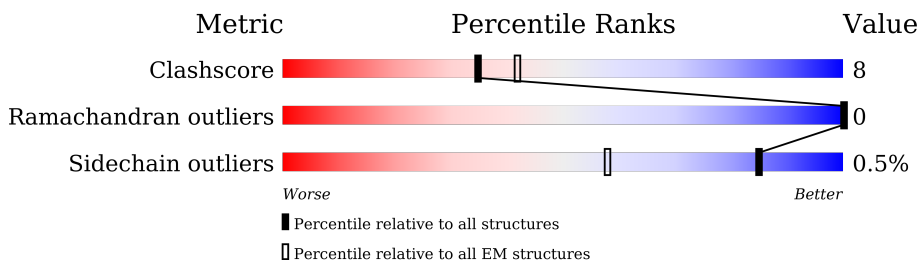
EMDB validation analysis : 0.0.1.dev113
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.11 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) | EM structures (#Entries) |
|-----------------------|--------------------------|--------------------------|
| Clashscore | 210492 | 15764 |
| Ramachandran outliers | 207382 | 16835 |
| Sidechain outliers | 206894 | 16415 |

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | 2 | 47 | |
| 1 | 4 | 47 | |
| 1 | 6 | 47 | |
| 1 | 8 | 47 | |
| 1 | B | 47 | |
| 1 | E | 47 | |
| 1 | G | 47 | |
| 1 | J | 47 | |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | N | 47 | 83% 15% |
| 1 | P | 47 | 72% 13% 15% |
| 1 | R | 47 | 79% 6% 15% |
| 1 | T | 47 | 9% 85% 6% 9% |
| 1 | V | 47 | 79% 6% 15% |
| 1 | X | 47 | 64% 21% 15% |
| 1 | Z | 47 | 6% 72% 13% 15% |
| 2 | 1 | 57 | 70% 21% 9% |
| 2 | 3 | 57 | 74% 19% 7% |
| 2 | 5 | 57 | 79% 12% 9% |
| 2 | 7 | 57 | 75% 18% 7% |
| 2 | A | 57 | 84% 7% 9% |
| 2 | D | 57 | 82% 11% 7% |
| 2 | F | 57 | 77% 16% 7% |
| 2 | I | 57 | 82% 11% 7% |
| 2 | K | 57 | 81% 12% 7% |
| 2 | O | 57 | 84% 7% 9% |
| 2 | Q | 57 | 86% 7% 7% |
| 2 | S | 57 | 77% 16% 7% |
| 2 | U | 57 | 79% 14% 7% |
| 2 | W | 57 | 88% 5% 7% |
| 2 | Y | 57 | 72% 19% 9% |

2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 14456 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

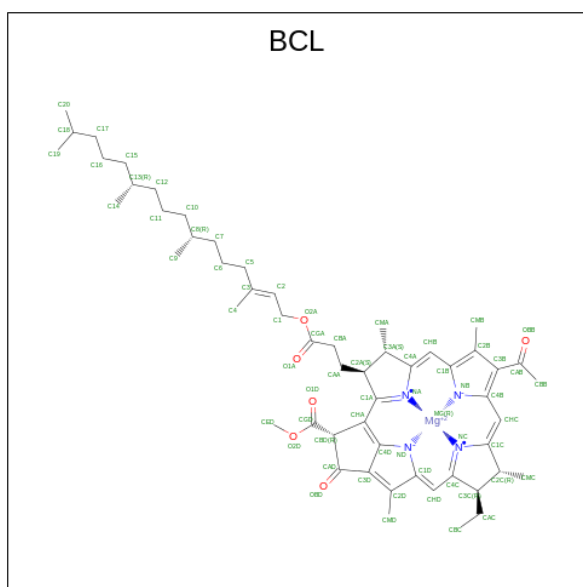
- Molecule 1 is a protein called LH1 beta polypeptide.

| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|--------------|----------|---------|---------|--------|---------|-------|
| | | | Total | C | N | O | S | | |
| 1 | 2 | 41 | Total 345 | C 234 | N 53 | O 56 | S 2 | 0 | 0 |
| 1 | 4 | 42 | Total 351 | C 237 | N 54 | O 58 | S 2 | 0 | 0 |
| 1 | 6 | 42 | Total 351 | C 237 | N 54 | O 58 | S 2 | 0 | 0 |
| 1 | 8 | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | B | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | E | 38 | Total 326 | C 222 | N 50 | O 52 | S 2 | 0 | 0 |
| 1 | G | 42 | Total 351 | C 237 | N 54 | O 58 | S 2 | 0 | 0 |
| 1 | J | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | N | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | P | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | R | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | T | 43 | Total 360 | C 243 | N 56 | O 59 | S 2 | 0 | 0 |
| 1 | V | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | Z | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |
| 1 | X | 40 | Total 337 | C 228 | N 52 | O 55 | S 2 | 0 | 0 |

- Molecule 2 is a protein called LH1 alpha polypeptide.

| Mol | Chain | Residues | Atoms | | | | | AltConf | Trace |
|-----|-------|----------|-------|-----|----|----|---|---------|-------|
| 2 | 3 | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | 5 | 52 | Total | C | N | O | S | 0 | 0 |
| | | | 422 | 282 | 68 | 71 | 1 | | |
| 2 | 7 | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | A | 52 | Total | C | N | O | S | 0 | 0 |
| | | | 422 | 282 | 68 | 71 | 1 | | |
| 2 | D | 53 | Total | C | N | O | S | 1 | 0 |
| | | | 433 | 288 | 70 | 74 | 1 | | |
| 2 | F | 53 | Total | C | N | O | S | 1 | 0 |
| | | | 433 | 288 | 70 | 74 | 1 | | |
| 2 | I | 53 | Total | C | N | O | S | 1 | 0 |
| | | | 433 | 288 | 70 | 74 | 1 | | |
| 2 | K | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | O | 52 | Total | C | N | O | S | 0 | 0 |
| | | | 422 | 282 | 68 | 71 | 1 | | |
| 2 | Q | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | S | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | U | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | W | 53 | Total | C | N | O | S | 0 | 0 |
| | | | 430 | 286 | 70 | 73 | 1 | | |
| 2 | 1 | 52 | Total | C | N | O | S | 0 | 0 |
| | | | 422 | 282 | 68 | 71 | 1 | | |
| 2 | Y | 52 | Total | C | N | O | S | 0 | 0 |
| | | | 422 | 282 | 68 | 71 | 1 | | |

- Molecule 3 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: $C_{55}H_{74}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



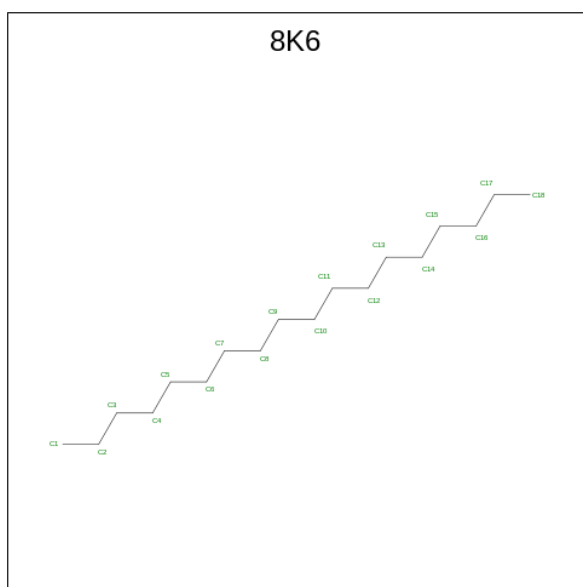
| Mol | Chain | Residues | Atoms | | | | AltConf | |
|-----|-------|----------|-------|----|----|---|---------|---|
| | | | Total | C | Mg | N | | O |
| 3 | 2 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | 3 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | 4 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | 5 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | 6 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | 7 | 1 | 61 | 50 | 1 | 4 | 6 | 0 |
| 3 | 8 | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | A | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | B | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | D | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | E | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | F | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | G | 1 | 66 | 55 | 1 | 4 | 6 | 0 |
| 3 | I | 1 | 66 | 55 | 1 | 4 | 6 | 0 |

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| Mol | Chain | Residues | Atoms | | | | AltConf | |
|-----|-------|----------|-------|----|----|---|---------|---|
| 3 | J | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | K | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | N | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | O | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | P | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | Q | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | R | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | S | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | T | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | U | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | U | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | W | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | Z | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | 1 | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | Y | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |
| 3 | X | 1 | Total | C | Mg | N | O | 0 |
| | | | 66 | 55 | 1 | 4 | 6 | |

- Molecule 4 is Octadecane (three-letter code: 8K6) (formula: C₁₈H₃₈).



| Mol | Chain | Residues | Atoms | AltConf |
|-----|-------|----------|------------------|---------|
| 4 | 2 | 1 | Total C 18 18 | 0 |
| 4 | 4 | 1 | Total C 18 18 | 0 |
| 4 | 6 | 1 | Total C 18 18 | 0 |
| 4 | 8 | 1 | Total C 18 18 | 0 |
| 4 | 8 | 1 | Total C 18 18 | 0 |
| 4 | E | 1 | Total C 18 18 | 0 |
| 4 | G | 1 | Total C 18 18 | 0 |
| 4 | J | 1 | Total C 18 18 | 0 |
| 4 | J | 1 | Total C 18 18 | 0 |
| 4 | P | 1 | Total C 18 18 | 0 |
| 4 | R | 1 | Total C 18 18 | 0 |
| 4 | T | 1 | Total C 18 18 | 0 |
| 4 | V | 1 | Total C 18 18 | 0 |
| 4 | Z | 1 | Total C 18 18 | 0 |

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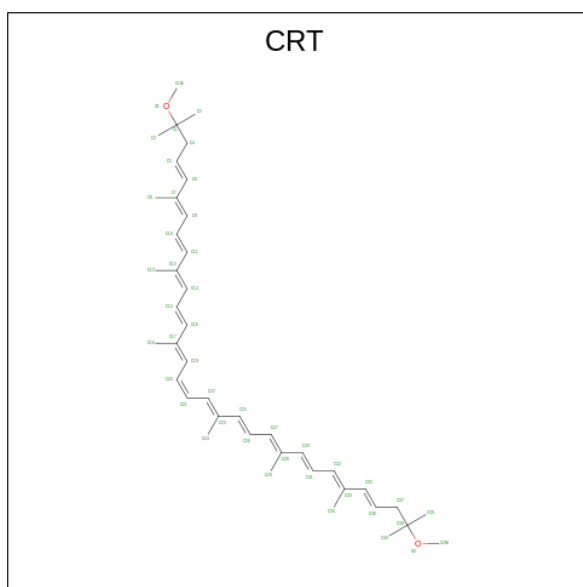
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| Mol | Chain | Residues | Atoms | AltConf |
|-----|-------|----------|------------------|---------|
| 4 | X | 1 | Total C 18 18 | 0 |

- Molecule 5 is CALCIUM ION (three-letter code: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

| Mol | Chain | Residues | Atoms | AltConf |
|-----|-------|----------|-----------------|---------|
| 5 | 3 | 1 | Total Ca 1 1 | 0 |
| 5 | 5 | 1 | Total Ca 1 1 | 0 |
| 5 | 7 | 1 | Total Ca 1 1 | 0 |
| 5 | A | 1 | Total Ca 1 1 | 0 |
| 5 | D | 1 | Total Ca 1 1 | 0 |
| 5 | F | 1 | Total Ca 1 1 | 0 |
| 5 | I | 1 | Total Ca 1 1 | 0 |
| 5 | K | 1 | Total Ca 1 1 | 0 |
| 5 | O | 1 | Total Ca 1 1 | 0 |
| 5 | Q | 1 | Total Ca 1 1 | 0 |
| 5 | S | 1 | Total Ca 1 1 | 0 |
| 5 | U | 1 | Total Ca 1 1 | 0 |
| 5 | W | 1 | Total Ca 1 1 | 0 |
| 5 | 1 | 1 | Total Ca 1 1 | 0 |
| 5 | Y | 1 | Total Ca 1 1 | 0 |

- Molecule 6 is SPIRILLOXANTHIN (three-letter code: CRT) (formula: C₄₂H₆₀O₂) (labeled as "Ligand of Interest" by depositor).



| Mol | Chain | Residues | Atoms | | | AltConf |
|-----|-------|----------|-------|----|---|---------|
| 6 | 3 | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | 5 | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | 7 | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | A | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | D | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | E | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | I | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | J | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | K | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | N | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | S | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | U | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | V | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |
| 6 | 1 | 1 | Total | C | O | 0 |
| | | | 44 | 42 | 2 | |

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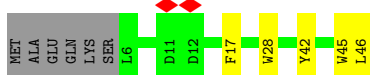
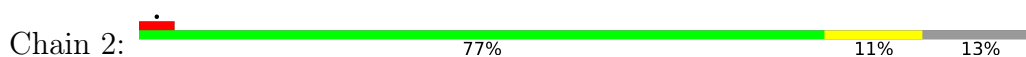
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| Mol | Chain | Residues | Atoms | | | AltConf |
|-----|-------|----------|-------|----|---|---------|
| | | | Total | C | O | |
| 6 | Y | 1 | 44 | 42 | 2 | 0 |

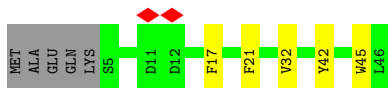
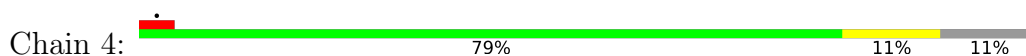
3 Residue-property plots [i](#)

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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

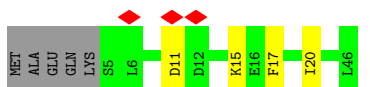
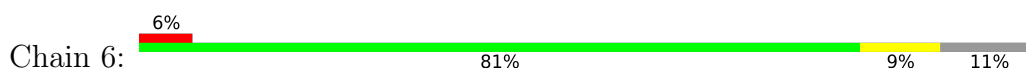
- Molecule 1: LH1 beta polypeptide



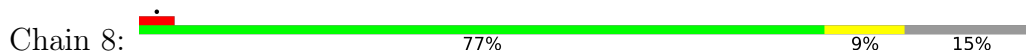
- Molecule 1: LH1 beta polypeptide



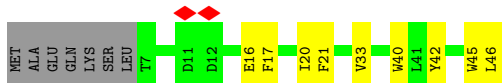
- Molecule 1: LH1 beta polypeptide



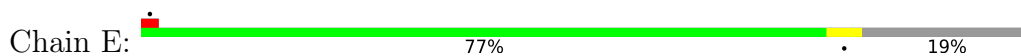
- Molecule 1: LH1 beta polypeptide



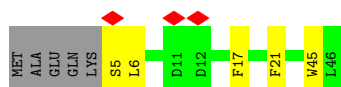
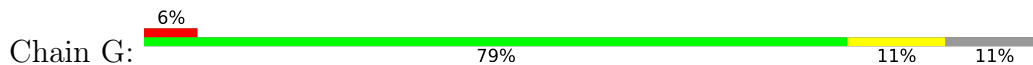
- Molecule 1: LH1 beta polypeptide



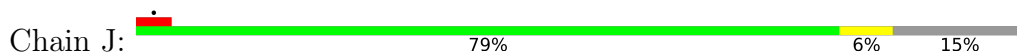
• Molecule 1: LH1 beta polypeptide



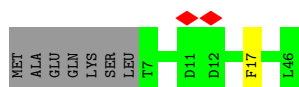
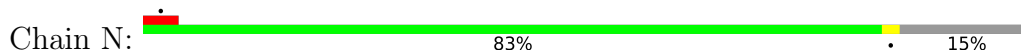
• Molecule 1: LH1 beta polypeptide



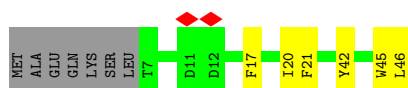
• Molecule 1: LH1 beta polypeptide



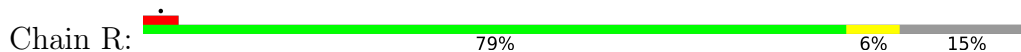
• Molecule 1: LH1 beta polypeptide



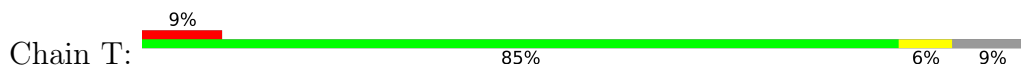
• Molecule 1: LH1 beta polypeptide



• Molecule 1: LH1 beta polypeptide

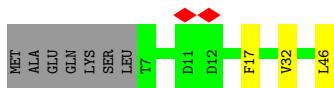
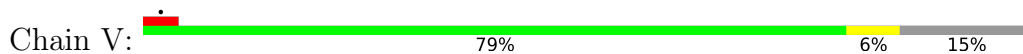


• Molecule 1: LH1 beta polypeptide

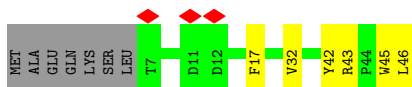




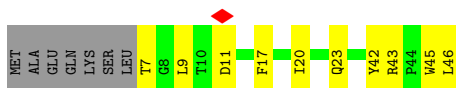
- Molecule 1: LH1 beta polypeptide



- Molecule 1: LH1 beta polypeptide



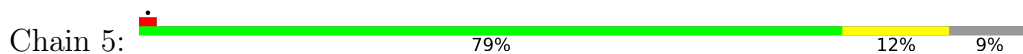
- Molecule 1: LH1 beta polypeptide



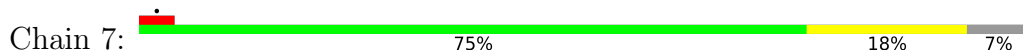
- Molecule 2: LH1 alpha polypeptide



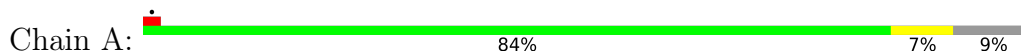
- Molecule 2: LH1 alpha polypeptide



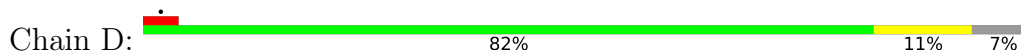
- Molecule 2: LH1 alpha polypeptide



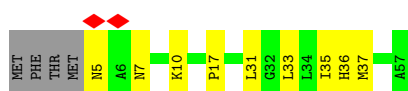
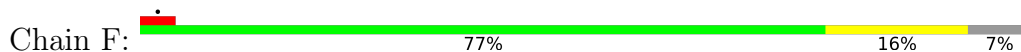
- Molecule 2: LH1 alpha polypeptide



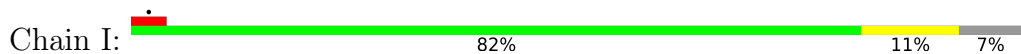
• Molecule 2: LH1 alpha polypeptide



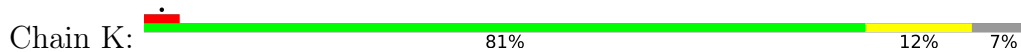
• Molecule 2: LH1 alpha polypeptide



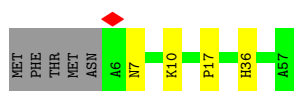
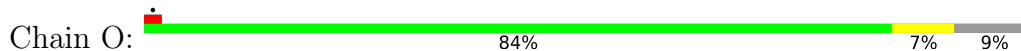
• Molecule 2: LH1 alpha polypeptide



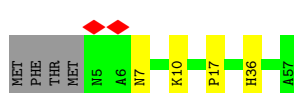
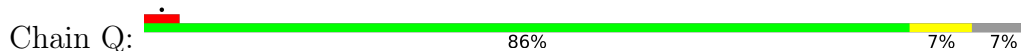
• Molecule 2: LH1 alpha polypeptide




• Molecule 2: LH1 alpha polypeptide



• Molecule 2: LH1 alpha polypeptide




- Molecule 2: LH1 alpha polypeptide

Chain S:  77% 16% 7%

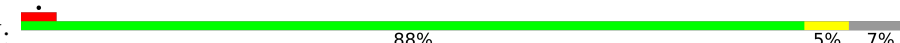


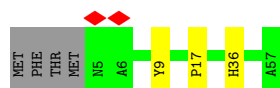
- Molecule 2: LH1 alpha polypeptide

Chain U:  79% 14% 7%



- Molecule 2: LH1 alpha polypeptide

Chain W:  88% 5% 7%



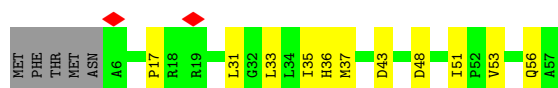
- Molecule 2: LH1 alpha polypeptide

Chain 1:  70% 21% 9%



- Molecule 2: LH1 alpha polypeptide

Chain Y:  72% 19% 9%



4 Experimental information

| Property | Value | Source |
|--------------------------------------|---------------------|-----------|
| EM reconstruction method | SINGLE PARTICLE | Depositor |
| Imposed symmetry | POINT, Not provided | |
| Number of particles used | 116091 | Depositor |
| Resolution determination method | FSC 0.143 CUT-OFF | Depositor |
| CTF correction method | PHASE FLIPPING ONLY | Depositor |
| Microscope | FEI TALOS ARCTICA | Depositor |
| Voltage (kV) | 300 | Depositor |
| Electron dose ($e^-/\text{\AA}^2$) | 63.2 | Depositor |
| Minimum defocus (nm) | 700 | Depositor |
| Maximum defocus (nm) | 2300 | Depositor |
| Magnification | Not provided | |
| Image detector | GATAN K3 (6k x 4k) | Depositor |
| Maximum map value | 2.341 | Depositor |
| Minimum map value | -1.450 | Depositor |
| Average map value | 0.000 | Depositor |
| Map value standard deviation | 0.044 | Depositor |
| Recommended contour level | 0.3 | Depositor |
| Map size (\AA) | 320.4, 320.4, 320.4 | wwPDB |
| Map dimensions | 360, 360, 360 | wwPDB |
| Map angles ($^\circ$) | 90.0, 90.0, 90.0 | wwPDB |
| Pixel spacing (\AA) | 0.89, 0.89, 0.89 | Depositor |

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: 8K6, CRT, BCL, CA

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 | 2 | 0.25 | 0/358 | 0.40 | 0/487 |
| 1 | 4 | 0.25 | 0/364 | 0.38 | 0/495 |
| 1 | 6 | 0.25 | 0/364 | 0.39 | 0/495 |
| 1 | 8 | 0.25 | 0/350 | 0.38 | 0/476 |
| 1 | B | 0.25 | 0/350 | 0.38 | 0/476 |
| 1 | E | 0.25 | 0/339 | 0.37 | 0/461 |
| 1 | G | 0.25 | 0/364 | 0.39 | 0/495 |
| 1 | J | 0.25 | 0/350 | 0.37 | 0/476 |
| 1 | N | 0.25 | 0/350 | 0.38 | 0/476 |
| 1 | P | 0.26 | 0/350 | 0.38 | 0/476 |
| 1 | R | 0.25 | 0/350 | 0.38 | 0/476 |
| 1 | T | 0.25 | 0/373 | 0.38 | 0/506 |
| 1 | V | 0.25 | 0/350 | 0.39 | 0/476 |
| 1 | X | 0.26 | 0/350 | 0.40 | 0/476 |
| 1 | Z | 0.27 | 0/350 | 0.41 | 0/476 |
| 2 | 1 | 0.58 | 0/431 | 0.82 | 0/591 |
| 2 | 3 | 0.23 | 0/439 | 0.42 | 0/602 |
| 2 | 5 | 0.23 | 0/431 | 0.42 | 0/591 |
| 2 | 7 | 0.24 | 0/439 | 0.41 | 0/602 |
| 2 | A | 0.23 | 0/431 | 0.42 | 0/591 |
| 2 | D | 0.23 | 0/445 | 0.42 | 0/610 |
| 2 | F | 0.24 | 0/445 | 0.42 | 0/610 |
| 2 | I | 0.24 | 0/445 | 0.43 | 0/610 |
| 2 | K | 0.23 | 0/439 | 0.43 | 0/602 |
| 2 | O | 0.23 | 0/431 | 0.43 | 0/591 |
| 2 | Q | 0.23 | 0/439 | 0.43 | 0/602 |
| 2 | S | 0.24 | 0/439 | 0.42 | 0/602 |
| 2 | U | 0.23 | 0/439 | 0.42 | 0/602 |
| 2 | W | 0.25 | 0/439 | 0.44 | 0/602 |
| 2 | Y | 0.59 | 0/431 | 0.83 | 0/591 |
| All | All | 0.28 | 0/11875 | 0.45 | 0/16222 |

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 | 1 | 0 | 1 |
| 2 | Y | 0 | 1 |
| All | All | 0 | 2 |

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (2) planarity outliers are listed below:

| Mol | Chain | Res | Type | Group |
|-----|-------|-----|------|---------|
| 2 | 1 | 51 | ILE | Peptide |
| 2 | Y | 51 | ILE | 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 | 2 | 345 | 0 | 334 | 4 | 0 |
| 1 | 4 | 351 | 0 | 339 | 5 | 0 |
| 1 | 6 | 351 | 0 | 339 | 3 | 0 |
| 1 | 8 | 337 | 0 | 323 | 5 | 0 |
| 1 | B | 337 | 0 | 323 | 14 | 0 |
| 1 | E | 326 | 0 | 313 | 4 | 0 |
| 1 | G | 351 | 0 | 339 | 4 | 0 |
| 1 | J | 337 | 0 | 323 | 3 | 0 |
| 1 | N | 337 | 0 | 323 | 1 | 0 |
| 1 | P | 337 | 0 | 323 | 5 | 0 |
| 1 | R | 337 | 0 | 323 | 3 | 0 |
| 1 | T | 360 | 0 | 352 | 2 | 0 |
| 1 | V | 337 | 0 | 323 | 3 | 0 |
| 1 | X | 337 | 0 | 323 | 7 | 0 |
| 1 | Z | 337 | 0 | 323 | 6 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 2 | 1 | 422 | 0 | 446 | 10 | 0 |
| 2 | 3 | 430 | 0 | 452 | 8 | 0 |
| 2 | 5 | 422 | 0 | 446 | 5 | 0 |
| 2 | 7 | 430 | 0 | 452 | 7 | 0 |
| 2 | A | 422 | 0 | 446 | 4 | 0 |
| 2 | D | 433 | 0 | 457 | 6 | 0 |
| 2 | F | 433 | 0 | 457 | 7 | 0 |
| 2 | I | 433 | 0 | 457 | 6 | 0 |
| 2 | K | 430 | 0 | 452 | 5 | 0 |
| 2 | O | 422 | 0 | 446 | 4 | 0 |
| 2 | Q | 430 | 0 | 452 | 5 | 0 |
| 2 | S | 430 | 0 | 452 | 7 | 0 |
| 2 | U | 430 | 0 | 452 | 7 | 0 |
| 2 | W | 430 | 0 | 452 | 4 | 0 |
| 2 | Y | 422 | 0 | 446 | 4 | 0 |
| 3 | 1 | 66 | 0 | 74 | 12 | 0 |
| 3 | 2 | 66 | 0 | 74 | 0 | 0 |
| 3 | 3 | 66 | 0 | 74 | 2 | 0 |
| 3 | 4 | 66 | 0 | 74 | 8 | 0 |
| 3 | 5 | 66 | 0 | 74 | 5 | 0 |
| 3 | 6 | 66 | 0 | 74 | 4 | 0 |
| 3 | 7 | 61 | 0 | 61 | 4 | 0 |
| 3 | 8 | 66 | 0 | 74 | 1 | 0 |
| 3 | A | 66 | 0 | 74 | 1 | 0 |
| 3 | B | 66 | 0 | 74 | 13 | 0 |
| 3 | D | 66 | 0 | 74 | 5 | 0 |
| 3 | E | 66 | 0 | 74 | 6 | 0 |
| 3 | F | 66 | 0 | 74 | 4 | 0 |
| 3 | G | 66 | 0 | 74 | 4 | 0 |
| 3 | I | 66 | 0 | 74 | 4 | 0 |
| 3 | J | 66 | 0 | 74 | 2 | 0 |
| 3 | K | 66 | 0 | 74 | 2 | 0 |
| 3 | N | 66 | 0 | 74 | 4 | 0 |
| 3 | O | 66 | 0 | 74 | 4 | 0 |
| 3 | P | 66 | 0 | 74 | 1 | 0 |
| 3 | Q | 66 | 0 | 74 | 3 | 0 |
| 3 | R | 66 | 0 | 74 | 7 | 0 |
| 3 | S | 66 | 0 | 74 | 4 | 0 |
| 3 | T | 66 | 0 | 74 | 4 | 0 |
| 3 | U | 132 | 0 | 148 | 12 | 0 |
| 3 | W | 66 | 0 | 74 | 2 | 0 |
| 3 | X | 66 | 0 | 74 | 4 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 3 | Y | 66 | 0 | 74 | 5 | 0 |
| 3 | Z | 66 | 0 | 74 | 6 | 0 |
| 4 | 2 | 18 | 0 | 38 | 1 | 0 |
| 4 | 4 | 18 | 0 | 38 | 1 | 0 |
| 4 | 6 | 18 | 0 | 38 | 0 | 0 |
| 4 | 8 | 36 | 0 | 76 | 4 | 0 |
| 4 | E | 18 | 0 | 38 | 0 | 0 |
| 4 | G | 18 | 0 | 38 | 0 | 0 |
| 4 | J | 36 | 0 | 76 | 2 | 0 |
| 4 | P | 18 | 0 | 38 | 1 | 0 |
| 4 | R | 18 | 0 | 38 | 1 | 0 |
| 4 | T | 18 | 0 | 38 | 0 | 0 |
| 4 | V | 18 | 0 | 38 | 0 | 0 |
| 4 | X | 18 | 0 | 38 | 0 | 0 |
| 4 | Z | 18 | 0 | 38 | 1 | 0 |
| 5 | 1 | 1 | 0 | 0 | 0 | 0 |
| 5 | 3 | 1 | 0 | 0 | 0 | 0 |
| 5 | 5 | 1 | 0 | 0 | 0 | 0 |
| 5 | 7 | 1 | 0 | 0 | 0 | 0 |
| 5 | A | 1 | 0 | 0 | 0 | 0 |
| 5 | D | 1 | 0 | 0 | 0 | 0 |
| 5 | F | 1 | 0 | 0 | 0 | 0 |
| 5 | I | 1 | 0 | 0 | 0 | 0 |
| 5 | K | 1 | 0 | 0 | 0 | 0 |
| 5 | O | 1 | 0 | 0 | 0 | 0 |
| 5 | Q | 1 | 0 | 0 | 0 | 0 |
| 5 | S | 1 | 0 | 0 | 0 | 0 |
| 5 | U | 1 | 0 | 0 | 0 | 0 |
| 5 | W | 1 | 0 | 0 | 0 | 0 |
| 5 | Y | 1 | 0 | 0 | 0 | 0 |
| 6 | 1 | 44 | 0 | 60 | 1 | 0 |
| 6 | 3 | 44 | 0 | 60 | 3 | 0 |
| 6 | 5 | 44 | 0 | 60 | 4 | 0 |
| 6 | 7 | 44 | 0 | 60 | 2 | 0 |
| 6 | A | 44 | 0 | 60 | 3 | 0 |
| 6 | D | 44 | 0 | 60 | 6 | 0 |
| 6 | E | 44 | 0 | 60 | 6 | 0 |
| 6 | I | 44 | 0 | 60 | 6 | 0 |
| 6 | J | 44 | 0 | 60 | 1 | 0 |
| 6 | K | 44 | 0 | 60 | 3 | 0 |
| 6 | N | 44 | 0 | 60 | 3 | 0 |
| 6 | S | 44 | 0 | 60 | 7 | 0 |

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| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 6 | U | 44 | 0 | 60 | 4 | 0 |
| 6 | V | 44 | 0 | 60 | 4 | 0 |
| 6 | Y | 44 | 0 | 60 | 6 | 0 |
| All | All | 14456 | 0 | 15365 | 233 | 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 8.

All (233) 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) |
|------------------|------------------|--------------------------|-------------------|
| 1:B:40:TRP:CH2 | 3:B:101:BCL:H201 | 1.68 | 1.28 |
| 1:B:40:TRP:CH2 | 3:B:101:BCL:C20 | 2.22 | 1.22 |
| 1:B:40:TRP:CZ2 | 3:B:101:BCL:H201 | 1.80 | 1.15 |
| 1:B:40:TRP:CZ3 | 3:B:101:BCL:H203 | 1.92 | 1.03 |
| 1:B:40:TRP:CZ3 | 3:B:101:BCL:C20 | 2.42 | 1.01 |
| 2:Q:7:ASN:HB3 | 2:Q:10:LYS:HD2 | 1.67 | 0.76 |
| 1:6:11:ASP:OD2 | 1:6:15:LYS:NZ | 2.19 | 0.75 |
| 3:Z:101:BCL:H51 | 3:1:103:BCL:H192 | 1.69 | 0.72 |
| 2:1:56:GLN:O | 2:1:57:ALA:HB2 | 1.95 | 0.67 |
| 1:T:11:ASP:OD2 | 1:T:15:LYS:NZ | 2.29 | 0.65 |
| 2:7:7:ASN:HB3 | 2:7:10:LYS:HD2 | 1.79 | 0.64 |
| 2:7:5:ASN:HD22 | 1:B:20:ILE:HG12 | 1.63 | 0.63 |
| 1:B:40:TRP:CE3 | 3:B:101:BCL:H203 | 2.35 | 0.61 |
| 3:X:102:BCL:HMB1 | 3:X:102:BCL:HBB2 | 1.83 | 0.61 |
| 6:D:101:CRT:H403 | 3:D:102:BCL:HMB2 | 1.82 | 0.60 |
| 2:I:7:ASN:HB3 | 2:I:10:LYS:HD2 | 1.85 | 0.58 |
| 1:J:42:TYR:HB2 | 4:J:102:8K6:H91C | 1.85 | 0.58 |
| 2:S:33:LEU:O | 2:S:37:MET:HG2 | 2.05 | 0.57 |
| 2:I:36:HIS:CE1 | 3:J:103:BCL:HMD1 | 2.40 | 0.57 |
| 6:U:101:CRT:H403 | 3:U:102:BCL:HMB2 | 1.85 | 0.57 |
| 3:3:101:BCL:HMB2 | 6:3:103:CRT:H403 | 1.86 | 0.56 |
| 3:U:104:BCL:H11 | 6:V:101:CRT:H27 | 1.86 | 0.56 |
| 1:X:7:THR:HB | 1:X:9:LEU:HD13 | 1.88 | 0.56 |
| 2:K:7:ASN:HB3 | 2:K:10:LYS:HD2 | 1.86 | 0.56 |
| 1:2:42:TYR:HB2 | 4:2:102:8K6:H102 | 1.88 | 0.55 |
| 2:D:36:HIS:CE1 | 3:E:103:BCL:HMD1 | 2.42 | 0.55 |
| 2:Q:36:HIS:CE1 | 3:R:101:BCL:HMD1 | 2.42 | 0.55 |
| 2:1:28:GLN:CB | 3:1:103:BCL:H42 | 2.37 | 0.54 |
| 3:1:103:BCL:CBB | 3:1:103:BCL:HMB1 | 2.37 | 0.54 |
| 2:7:36:HIS:CE1 | 3:8:101:BCL:HMD1 | 2.42 | 0.54 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 2:F:5:ASN:HD22 | 1:J:20:ILE:HG12 | 1.73 | 0.54 |
| 2:7:33:LEU:O | 2:7:37:MET:HG2 | 2.07 | 0.53 |
| 2:5:36:HIS:CE1 | 3:6:102:BCL:HMD1 | 2.43 | 0.53 |
| 2:S:36:HIS:CE1 | 3:T:101:BCL:HMD1 | 2.43 | 0.53 |
| 2:U:36:HIS:CE1 | 3:U:104:BCL:HMD1 | 2.43 | 0.53 |
| 6:Y:101:CRT:H403 | 3:Y:103:BCL:HMB2 | 1.89 | 0.53 |
| 2:A:36:HIS:CE1 | 3:B:101:BCL:HMD1 | 2.44 | 0.53 |
| 6:E:101:CRT:H403 | 3:F:101:BCL:HMB2 | 1.90 | 0.53 |
| 2:5:10:LYS:HB2 | 6:A:101:CRT:H5 | 1.90 | 0.53 |
| 2:U:33:LEU:O | 2:U:37:MET:HG2 | 2.09 | 0.53 |
| 2:A:36:HIS:CG | 6:A:101:CRT:H372 | 2.43 | 0.52 |
| 2:W:36:HIS:CE1 | 3:X:102:BCL:HMD1 | 2.45 | 0.52 |
| 6:D:101:CRT:H403 | 3:D:102:BCL:CMB | 2.39 | 0.52 |
| 1:B:40:TRP:CH2 | 3:B:101:BCL:H202 | 2.37 | 0.52 |
| 2:3:36:HIS:CE1 | 3:4:101:BCL:HMD1 | 2.45 | 0.52 |
| 2:I:33:LEU:O | 2:I:37:MET:HG2 | 2.09 | 0.52 |
| 6:S:101:CRT:H403 | 3:S:102:BCL:HMB2 | 1.92 | 0.52 |
| 2:O:36:HIS:CE1 | 3:P:101:BCL:HMD1 | 2.45 | 0.52 |
| 1:Z:42:TYR:HB2 | 4:Z:102:8K6:H101 | 1.92 | 0.52 |
| 2:3:5:ASN:HD22 | 1:6:20:ILE:HG12 | 1.74 | 0.52 |
| 2:U:5:ASN:HD22 | 1:X:20:ILE:HG12 | 1.75 | 0.52 |
| 2:K:5:ASN:HD22 | 1:P:20:ILE:HG12 | 1.74 | 0.51 |
| 2:K:36:HIS:CE1 | 3:N:102:BCL:HMD1 | 2.45 | 0.51 |
| 2:F:31:LEU:O | 2:F:35:ILE:HG13 | 2.10 | 0.51 |
| 1:Z:43:ARG:NH1 | 2:1:55:TYR:HB3 | 2.25 | 0.51 |
| 3:U:104:BCL:HBA1 | 1:V:32:VAL:HG21 | 1.92 | 0.51 |
| 2:O:10:LYS:HB2 | 6:S:101:CRT:H5 | 1.93 | 0.51 |
| 1:8:42:TYR:HB2 | 4:8:102:8K6:H92C | 1.93 | 0.50 |
| 4:8:103:8K6:H81C | 1:B:42:TYR:HB2 | 1.92 | 0.50 |
| 3:X:102:BCL:HMB1 | 3:X:102:BCL:CBB | 2.41 | 0.50 |
| 6:I:101:CRT:H403 | 3:I:102:BCL:HMB2 | 1.93 | 0.50 |
| 2:5:33:LEU:O | 2:5:37:MET:HG2 | 2.11 | 0.50 |
| 2:3:33:LEU:O | 2:3:37:MET:HG2 | 2.12 | 0.50 |
| 2:D:14:ILE:HD11 | 6:I:101:CRT:H23 | 1.93 | 0.50 |
| 2:3:36:HIS:CG | 6:3:103:CRT:H372 | 2.47 | 0.50 |
| 2:1:28:GLN:HB2 | 3:1:103:BCL:H42 | 1.93 | 0.50 |
| 2:D:33:LEU:O | 2:D:37:MET:HG2 | 2.12 | 0.49 |
| 6:E:101:CRT:H36 | 2:F:33:LEU:HD23 | 1.94 | 0.49 |
| 2:F:7:ASN:HB3 | 2:F:10:LYS:HD2 | 1.94 | 0.49 |
| 2:1:56:GLN:O | 2:1:57:ALA:CB | 2.61 | 0.49 |
| 3:U:104:BCL:H171 | 1:V:46:LEU:HD12 | 1.95 | 0.48 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 6:7:101:CRT:H403 | 3:7:102:BCL:HMB2 | 1.94 | 0.48 |
| 1:E:32:VAL:HG21 | 3:E:103:BCL:HBA1 | 1.95 | 0.48 |
| 2:F:33:LEU:O | 2:F:37:MET:HG2 | 2.12 | 0.48 |
| 2:W:17:PRO:HB3 | 1:X:17:PHE:CZ | 2.48 | 0.48 |
| 2:3:31:LEU:O | 2:3:35:ILE:HG13 | 2.14 | 0.48 |
| 2:Y:33:LEU:O | 2:Y:37:MET:HG2 | 2.13 | 0.48 |
| 3:Q:101:BCL:H41 | 3:Q:101:BCL:H62 | 1.47 | 0.48 |
| 6:V:101:CRT:H372 | 2:W:36:HIS:CG | 2.48 | 0.48 |
| 3:4:101:BCL:H93 | 3:4:101:BCL:H62 | 1.77 | 0.48 |
| 1:8:46:LEU:HD13 | 4:8:103:8K6:H102 | 1.96 | 0.48 |
| 2:S:34:LEU:O | 2:S:38:ILE:HG13 | 2.14 | 0.47 |
| 3:3:101:BCL:CMB | 6:3:103:CRT:H403 | 2.45 | 0.47 |
| 1:2:28:TRP:CZ3 | 3:1:103:BCL:HED1 | 2.50 | 0.47 |
| 1:X:45:TRP:CD1 | 1:X:46:LEU:HG | 2.50 | 0.47 |
| 1:R:32:VAL:HG21 | 3:R:101:BCL:HBA1 | 1.95 | 0.47 |
| 3:A:102:BCL:H41 | 3:A:102:BCL:H62 | 1.67 | 0.47 |
| 1:G:5:SER:OG | 1:G:6:LEU:N | 2.47 | 0.46 |
| 6:K:103:CRT:H372 | 2:Q:36:HIS:CG | 2.51 | 0.46 |
| 2:K:31:LEU:O | 2:K:35:ILE:HG13 | 2.16 | 0.46 |
| 1:8:46:LEU:CD1 | 4:8:103:8K6:H102 | 2.46 | 0.46 |
| 3:O:101:BCL:H41 | 3:O:101:BCL:H62 | 1.76 | 0.46 |
| 3:W:101:BCL:H62 | 3:W:101:BCL:H41 | 1.74 | 0.46 |
| 2:D:17:PRO:HB3 | 1:E:17:PHE:CZ | 2.50 | 0.46 |
| 1:2:45:TRP:CD1 | 1:2:46:LEU:HG | 2.51 | 0.46 |
| 3:B:101:BCL:H141 | 3:B:101:BCL:H162 | 1.77 | 0.46 |
| 2:S:17:PRO:HB3 | 1:T:17:PHE:CZ | 2.51 | 0.46 |
| 2:5:17:PRO:HB3 | 1:6:17:PHE:CZ | 2.50 | 0.46 |
| 1:X:42:TYR:CD2 | 1:X:43:ARG:HG2 | 2.51 | 0.46 |
| 2:3:17:PRO:HB3 | 1:4:17:PHE:CZ | 2.51 | 0.45 |
| 2:I:33:LEU:HD23 | 6:I:101:CRT:H36 | 1.98 | 0.45 |
| 3:U:102:BCL:H41 | 3:U:102:BCL:H62 | 1.68 | 0.45 |
| 3:1:103:BCL:H62 | 3:1:103:BCL:H41 | 1.46 | 0.45 |
| 3:7:102:BCL:H62 | 3:7:102:BCL:H41 | 1.31 | 0.45 |
| 1:P:42:TYR:HB2 | 4:P:102:8K6:H92C | 1.97 | 0.45 |
| 3:B:101:BCL:H41 | 3:B:101:BCL:H61 | 1.68 | 0.45 |
| 2:3:7:ASN:HB3 | 2:3:10:LYS:HD2 | 1.97 | 0.45 |
| 6:D:101:CRT:H36 | 6:D:101:CRT:H341 | 1.81 | 0.45 |
| 3:1:103:BCL:HMB1 | 3:1:103:BCL:HBB2 | 1.99 | 0.45 |
| 3:5:102:BCL:H51 | 3:5:102:BCL:H8 | 1.84 | 0.45 |
| 3:Z:101:BCL:H43 | 3:1:103:BCL:H171 | 1.98 | 0.45 |
| 2:5:31:LEU:O | 2:5:35:ILE:HG13 | 2.16 | 0.45 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 3:6:102:BCL:H141 | 3:6:102:BCL:H162 | 1.77 | 0.45 |
| 6:Y:101:CRT:H27 | 3:X:102:BCL:H11 | 1.98 | 0.45 |
| 2:Q:10:LYS:HB2 | 6:U:101:CRT:H5 | 1.99 | 0.45 |
| 3:U:104:BCL:HMC3 | 3:W:101:BCL:HBB1 | 1.98 | 0.45 |
| 6:E:101:CRT:H27 | 3:E:103:BCL:H12 | 1.99 | 0.44 |
| 2:F:36:HIS:CE1 | 3:G:102:BCL:HMD1 | 2.52 | 0.44 |
| 2:I:17:PRO:HB3 | 1:J:17:PHE:CZ | 2.51 | 0.44 |
| 3:T:101:BCL:HMC3 | 3:U:102:BCL:HBB1 | 1.99 | 0.44 |
| 2:U:31:LEU:O | 2:U:35:ILE:HG13 | 2.17 | 0.44 |
| 3:E:103:BCL:HMC3 | 3:F:101:BCL:HBB1 | 2.00 | 0.44 |
| 3:G:102:BCL:HMB1 | 4:J:102:8K6:H171 | 1.99 | 0.44 |
| 1:Z:43:ARG:HH12 | 2:1:55:TYR:HB3 | 1.81 | 0.44 |
| 2:A:31:LEU:O | 2:A:35:ILE:HG13 | 2.17 | 0.44 |
| 3:R:101:BCL:HMC3 | 3:S:102:BCL:HBB1 | 1.98 | 0.44 |
| 3:T:101:BCL:H41 | 3:U:102:BCL:H203 | 1.99 | 0.44 |
| 2:Y:31:LEU:O | 2:Y:35:ILE:HG13 | 2.18 | 0.44 |
| 2:Q:17:PRO:HB3 | 1:R:17:PHE:CZ | 2.53 | 0.44 |
| 3:4:101:BCL:HMC3 | 3:5:102:BCL:HBB1 | 2.00 | 0.44 |
| 2:U:17:PRO:HB3 | 1:V:17:PHE:CZ | 2.53 | 0.44 |
| 3:E:103:BCL:H141 | 3:E:103:BCL:H161 | 1.68 | 0.44 |
| 2:1:28:GLN:HB3 | 3:1:103:BCL:H42 | 1.99 | 0.44 |
| 1:2:17:PHE:CZ | 2:1:17:PRO:HB3 | 2.53 | 0.43 |
| 2:D:33:LEU:HD23 | 6:D:101:CRT:H36 | 2.00 | 0.43 |
| 2:U:5:ASN:N | 1:X:23:GLN:HE22 | 2.16 | 0.43 |
| 1:8:21:PHE:CD1 | 6:A:101:CRT:H14 | 2.53 | 0.43 |
| 2:7:5:ASN:OD1 | 2:7:6:ALA:N | 2.49 | 0.43 |
| 6:U:101:CRT:H403 | 3:U:102:BCL:CMB | 2.49 | 0.43 |
| 1:4:45:TRP:HZ2 | 3:4:101:BCL:H13 | 1.83 | 0.43 |
| 2:A:17:PRO:HB3 | 1:B:17:PHE:CZ | 2.53 | 0.43 |
| 1:E:17:PHE:HD1 | 6:E:101:CRT:H6 | 1.83 | 0.43 |
| 2:U:10:LYS:HB2 | 6:Y:101:CRT:H5 | 1.99 | 0.43 |
| 3:G:102:BCL:H141 | 3:G:102:BCL:H162 | 1.72 | 0.43 |
| 3:F:101:BCL:H41 | 3:F:101:BCL:H62 | 1.66 | 0.43 |
| 2:K:17:PRO:HB3 | 1:N:17:PHE:CZ | 2.54 | 0.43 |
| 1:Z:45:TRP:CD1 | 1:Z:46:LEU:HG | 2.54 | 0.43 |
| 1:B:21:PHE:CD1 | 6:D:101:CRT:H14 | 2.54 | 0.43 |
| 3:J:103:BCL:HMC3 | 3:K:101:BCL:HBB1 | 2.01 | 0.43 |
| 6:N:101:CRT:H36 | 6:N:101:CRT:H341 | 1.86 | 0.43 |
| 3:R:101:BCL:H12 | 6:S:101:CRT:H27 | 2.00 | 0.43 |
| 3:N:102:BCL:H141 | 3:N:102:BCL:H161 | 1.78 | 0.43 |
| 3:U:104:BCL:H3A | 3:U:104:BCL:H52 | 2.01 | 0.43 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 3:Y:103:BCL:H41 | 3:Y:103:BCL:H62 | 1.68 | 0.43 |
| 1:B:45:TRP:CD1 | 1:B:46:LEU:HG | 2.53 | 0.42 |
| 2:F:17:PRO:HB3 | 1:G:17:PHE:CZ | 2.53 | 0.42 |
| 3:F:101:BCL:H8 | 3:F:101:BCL:H51 | 1.78 | 0.42 |
| 2:1:31:LEU:O | 2:1:35:ILE:HG13 | 2.19 | 0.42 |
| 3:4:101:BCL:H12 | 6:5:101:CRT:H27 | 2.00 | 0.42 |
| 3:Y:103:BCL:H51 | 3:Y:103:BCL:H8 | 1.81 | 0.42 |
| 3:B:101:BCL:H51 | 3:D:102:BCL:H203 | 2.01 | 0.42 |
| 3:R:101:BCL:H141 | 3:R:101:BCL:H162 | 1.71 | 0.42 |
| 2:1:33:LEU:O | 2:1:37:MET:HG2 | 2.19 | 0.42 |
| 6:I:101:CRT:H36 | 6:I:101:CRT:H341 | 1.82 | 0.42 |
| 3:N:102:BCL:HMC3 | 3:O:101:BCL:HBB1 | 2.01 | 0.42 |
| 3:R:101:BCL:H93 | 3:R:101:BCL:H62 | 1.75 | 0.42 |
| 6:Y:101:CRT:H403 | 3:Y:103:BCL:CMB | 2.50 | 0.42 |
| 3:1:103:BCL:H8 | 3:1:103:BCL:H51 | 1.58 | 0.42 |
| 3:4:101:BCL:H3A | 3:4:101:BCL:H2 | 2.02 | 0.42 |
| 3:Q:101:BCL:H143 | 3:Q:101:BCL:H112 | 1.79 | 0.42 |
| 2:W:9:TYR:HE1 | 1:X:11:ASP:OD1 | 2.02 | 0.42 |
| 1:Z:17:PHE:HE2 | 2:Y:17:PRO:HB3 | 1.85 | 0.42 |
| 3:Z:101:BCL:H71 | 3:Z:101:BCL:H111 | 1.91 | 0.42 |
| 6:5:101:CRT:H36 | 6:5:101:CRT:H341 | 1.79 | 0.42 |
| 1:B:16:GLU:O | 1:B:20:ILE:HG13 | 2.20 | 0.42 |
| 6:I:101:CRT:H403 | 3:I:102:BCL:CMB | 2.50 | 0.42 |
| 2:O:17:PRO:HB3 | 1:P:17:PHE:CZ | 2.55 | 0.42 |
| 2:S:10:LYS:HB2 | 6:V:101:CRT:H5 | 2.01 | 0.42 |
| 3:B:101:BCL:H62 | 3:B:101:BCL:H93 | 1.72 | 0.41 |
| 3:Z:101:BCL:H51 | 3:1:103:BCL:C19 | 2.44 | 0.41 |
| 3:4:101:BCL:H51 | 3:5:102:BCL:H203 | 2.02 | 0.41 |
| 2:D:28:GLN:CB | 3:D:102:BCL:H42 | 2.50 | 0.41 |
| 3:N:102:BCL:H41 | 3:N:102:BCL:H61 | 1.84 | 0.41 |
| 3:K:101:BCL:H51 | 3:K:101:BCL:H8 | 1.93 | 0.41 |
| 3:R:101:BCL:H51 | 3:S:102:BCL:H203 | 2.02 | 0.41 |
| 3:Z:101:BCL:HMD1 | 2:Y:36:HIS:CE1 | 2.55 | 0.41 |
| 6:1:102:CRT:H36 | 6:1:102:CRT:H341 | 1.81 | 0.41 |
| 3:1:103:BCL:H142 | 3:1:103:BCL:H111 | 1.85 | 0.41 |
| 6:Y:101:CRT:H36 | 6:Y:101:CRT:H341 | 1.83 | 0.41 |
| 2:3:11:ILE:HD12 | 2:3:14:ILE:HD11 | 2.02 | 0.41 |
| 3:6:102:BCL:H62 | 3:6:102:BCL:H93 | 1.82 | 0.41 |
| 2:7:17:PRO:HB3 | 1:8:17:PHE:CZ | 2.55 | 0.41 |
| 2:I:10:LYS:HB2 | 6:N:101:CRT:H5 | 2.02 | 0.41 |
| 3:Q:101:BCL:H162 | 3:Q:101:BCL:H141 | 1.73 | 0.41 |

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| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|------------------|------------------|--------------------------|-------------------|
| 3:T:101:BCL:H161 | 3:T:101:BCL:H141 | 1.78 | 0.41 |
| 6:E:101:CRT:H36 | 6:E:101:CRT:H341 | 1.83 | 0.41 |
| 1:G:21:PHE:CD1 | 6:I:101:CRT:H14 | 2.55 | 0.41 |
| 1:R:21:PHE:CD1 | 6:S:101:CRT:H14 | 2.55 | 0.41 |
| 6:V:101:CRT:H10 | 6:V:101:CRT:H81 | 1.95 | 0.41 |
| 6:K:103:CRT:H341 | 6:K:103:CRT:H36 | 1.87 | 0.41 |
| 4:R:102:8K6:H92C | 4:R:102:8K6:H62C | 1.78 | 0.41 |
| 2:S:31:LEU:O | 2:S:35:ILE:HG13 | 2.21 | 0.41 |
| 1:4:32:VAL:HG21 | 3:4:101:BCL:HBA1 | 2.02 | 0.41 |
| 6:5:101:CRT:H26 | 6:5:101:CRT:H241 | 1.96 | 0.41 |
| 2:O:7:ASN:O | 2:O:10:LYS:HG3 | 2.20 | 0.41 |
| 2:S:33:LEU:HD23 | 6:S:101:CRT:H36 | 2.03 | 0.41 |
| 6:S:101:CRT:H36 | 6:S:101:CRT:H341 | 1.82 | 0.41 |
| 3:U:102:BCL:H51 | 3:U:102:BCL:H8 | 1.79 | 0.41 |
| 3:Y:103:BCL:H111 | 3:Y:103:BCL:H72 | 1.95 | 0.41 |
| 1:4:42:TYR:HB2 | 4:4:102:8K6:H91C | 2.02 | 0.41 |
| 3:6:102:BCL:HMC3 | 3:7:102:BCL:HBB1 | 2.03 | 0.41 |
| 3:D:102:BCL:H162 | 3:D:102:BCL:H202 | 1.74 | 0.41 |
| 3:I:102:BCL:H51 | 3:I:102:BCL:H8 | 1.75 | 0.41 |
| 1:P:45:TRP:CD1 | 1:P:46:LEU:HG | 2.56 | 0.41 |
| 1:4:21:PHE:CD1 | 6:5:101:CRT:H14 | 2.56 | 0.40 |
| 1:B:33:VAL:HG12 | 3:B:101:BCL:H92 | 2.03 | 0.40 |
| 6:J:101:CRT:H36 | 6:J:101:CRT:H341 | 1.88 | 0.40 |
| 6:S:101:CRT:H403 | 3:S:102:BCL:CMB | 2.51 | 0.40 |
| 6:U:101:CRT:H36 | 6:U:101:CRT:H341 | 1.82 | 0.40 |
| 6:D:101:CRT:H26 | 6:D:101:CRT:H241 | 1.96 | 0.40 |
| 2:7:34:LEU:O | 2:7:38:ILE:HG13 | 2.21 | 0.40 |
| 6:7:101:CRT:H403 | 3:7:102:BCL:CMB | 2.51 | 0.40 |
| 6:K:103:CRT:H14 | 1:P:21:PHE:CD1 | 2.56 | 0.40 |
| 3:O:101:BCL:H51 | 3:O:101:BCL:H8 | 1.87 | 0.40 |
| 1:Z:32:VAL:HG21 | 3:Z:101:BCL:HBA1 | 2.03 | 0.40 |
| 3:5:102:BCL:H202 | 3:5:102:BCL:H162 | 1.84 | 0.40 |
| 3:5:102:BCL:H72 | 3:5:102:BCL:H111 | 1.87 | 0.40 |
| 3:I:102:BCL:H202 | 3:I:102:BCL:H162 | 1.79 | 0.40 |
| 6:N:101:CRT:H35 | 3:O:101:BCL:HBB | 2.04 | 0.40 |
| 1:E:17:PHE:CE1 | 6:E:101:CRT:H9 | 2.56 | 0.40 |
| 3:E:103:BCL:H72 | 3:E:103:BCL:HMB2 | 2.03 | 0.40 |
| 1:G:45:TRP:HZ2 | 3:G:102:BCL:H13 | 1.87 | 0.40 |
| 6:Y:101:CRT:H26 | 6:Y:101:CRT:H241 | 1.95 | 0.40 |

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-------------|-----------|---------|----------|-------------|-----|
| 1 | 2 | 39/47 (83%) | 39 (100%) | 0 | 0 | 100 | 100 |
| 1 | 4 | 40/47 (85%) | 40 (100%) | 0 | 0 | 100 | 100 |
| 1 | 6 | 40/47 (85%) | 40 (100%) | 0 | 0 | 100 | 100 |
| 1 | 8 | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | B | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | E | 36/47 (77%) | 36 (100%) | 0 | 0 | 100 | 100 |
| 1 | G | 40/47 (85%) | 40 (100%) | 0 | 0 | 100 | 100 |
| 1 | J | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | N | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | P | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | R | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | T | 41/47 (87%) | 41 (100%) | 0 | 0 | 100 | 100 |
| 1 | V | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | X | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 1 | Z | 38/47 (81%) | 38 (100%) | 0 | 0 | 100 | 100 |
| 2 | 1 | 50/57 (88%) | 46 (92%) | 4 (8%) | 0 | 100 | 100 |
| 2 | 3 | 51/57 (90%) | 49 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | 5 | 50/57 (88%) | 48 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | 7 | 51/57 (90%) | 49 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | A | 50/57 (88%) | 48 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | D | 52/57 (91%) | 51 (98%) | 1 (2%) | 0 | 100 | 100 |
| 2 | F | 52/57 (91%) | 50 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | I | 52/57 (91%) | 49 (94%) | 3 (6%) | 0 | 100 | 100 |
| 2 | K | 51/57 (90%) | 49 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | O | 50/57 (88%) | 48 (96%) | 2 (4%) | 0 | 100 | 100 |

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| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|-----------------|------------|---------|----------|-------------|-----|
| 2 | Q | 51/57 (90%) | 49 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | S | 51/57 (90%) | 48 (94%) | 3 (6%) | 0 | 100 | 100 |
| 2 | U | 51/57 (90%) | 49 (96%) | 2 (4%) | 0 | 100 | 100 |
| 2 | W | 51/57 (90%) | 48 (94%) | 3 (6%) | 0 | 100 | 100 |
| 2 | Y | 50/57 (88%) | 44 (88%) | 6 (12%) | 0 | 100 | 100 |
| All | All | 1341/1560 (86%) | 1303 (97%) | 38 (3%) | 0 | 100 | 100 |

There are no Ramachandran outliers to report.

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 PDB entries followed by that with respect to all EM entries.

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

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|-------------|-----------|----------|-------------|-----|
| 1 | 2 | 34/39 (87%) | 34 (100%) | 0 | 100 | 100 |
| 1 | 4 | 35/39 (90%) | 35 (100%) | 0 | 100 | 100 |
| 1 | 6 | 35/39 (90%) | 35 (100%) | 0 | 100 | 100 |
| 1 | 8 | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | B | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | E | 32/39 (82%) | 32 (100%) | 0 | 100 | 100 |
| 1 | G | 35/39 (90%) | 35 (100%) | 0 | 100 | 100 |
| 1 | J | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | N | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | P | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | R | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | T | 36/39 (92%) | 36 (100%) | 0 | 100 | 100 |
| 1 | V | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | X | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 1 | Z | 33/39 (85%) | 33 (100%) | 0 | 100 | 100 |
| 2 | 1 | 48/53 (91%) | 46 (96%) | 2 (4%) | 25 | 54 |

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| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|-----------------|-------------|----------|-------------|-----|
| 2 | 3 | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | 5 | 48/53 (91%) | 48 (100%) | 0 | 100 | 100 |
| 2 | 7 | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | A | 48/53 (91%) | 48 (100%) | 0 | 100 | 100 |
| 2 | D | 50/53 (94%) | 50 (100%) | 0 | 100 | 100 |
| 2 | F | 50/53 (94%) | 50 (100%) | 0 | 100 | 100 |
| 2 | I | 50/53 (94%) | 50 (100%) | 0 | 100 | 100 |
| 2 | K | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | O | 48/53 (91%) | 48 (100%) | 0 | 100 | 100 |
| 2 | Q | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | S | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | U | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | W | 49/53 (92%) | 49 (100%) | 0 | 100 | 100 |
| 2 | Y | 48/53 (91%) | 44 (92%) | 4 (8%) | 9 | 31 |
| All | All | 1237/1380 (90%) | 1231 (100%) | 6 (0%) | 85 | 92 |

All (6) residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 2 | 1 | 43 | ASP |
| 2 | 1 | 48 | ASP |
| 2 | Y | 43 | ASP |
| 2 | Y | 48 | ASP |
| 2 | Y | 53 | VAL |
| 2 | Y | 56 | GLN |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 75 ligands modelled in this entry, 15 are monoatomic - leaving 60 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 |
| 4 | 8K6 | R | 102 | - | 17,17,17 | 0.18 | 0 | 16,16,16 | 0.11 | 0 |
| 3 | BCL | Y | 103 | - | 64,74,74 | 1.68 | 13 (20%) | 78,115,115 | 2.29 | 19 (24%) |
| 4 | 8K6 | 4 | 102 | - | 17,17,17 | 0.19 | 0 | 16,16,16 | 0.11 | 0 |
| 4 | 8K6 | G | 101 | - | 17,17,17 | 0.20 | 0 | 16,16,16 | 0.11 | 0 |
| 3 | BCL | E | 103 | - | 64,74,74 | 1.71 | 12 (18%) | 78,115,115 | 2.10 | 22 (28%) |
| 6 | CRT | J | 101 | - | 41,43,43 | 1.98 | 12 (29%) | 50,54,54 | 1.75 | 14 (28%) |
| 6 | CRT | A | 101 | - | 41,43,43 | 1.97 | 12 (29%) | 50,54,54 | 1.70 | 12 (24%) |
| 3 | BCL | O | 101 | - | 64,74,74 | 1.68 | 13 (20%) | 78,115,115 | 2.22 | 18 (23%) |
| 3 | BCL | D | 102 | - | 64,74,74 | 1.69 | 13 (20%) | 78,115,115 | 2.22 | 18 (23%) |
| 6 | CRT | Y | 101 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.71 | 13 (26%) |
| 4 | 8K6 | E | 102 | - | 17,17,17 | 0.16 | 0 | 16,16,16 | 0.08 | 0 |
| 3 | BCL | K | 101 | - | 64,74,74 | 1.68 | 14 (21%) | 78,115,115 | 2.24 | 19 (24%) |
| 4 | 8K6 | X | 101 | - | 17,17,17 | 0.17 | 0 | 16,16,16 | 0.09 | 0 |
| 3 | BCL | N | 102 | - | 64,74,74 | 1.70 | 11 (17%) | 78,115,115 | 2.14 | 24 (30%) |
| 3 | BCL | G | 102 | - | 64,74,74 | 1.68 | 10 (15%) | 78,115,115 | 2.13 | 24 (30%) |
| 3 | BCL | R | 101 | - | 64,74,74 | 1.71 | 11 (17%) | 78,115,115 | 2.11 | 23 (29%) |
| 6 | CRT | 1 | 102 | - | 41,43,43 | 2.29 | 14 (34%) | 50,54,54 | 1.85 | 15 (30%) |
| 3 | BCL | Q | 101 | - | 64,74,74 | 1.69 | 14 (21%) | 78,115,115 | 2.22 | 18 (23%) |
| 3 | BCL | J | 103 | - | 64,74,74 | 1.72 | 12 (18%) | 78,115,115 | 2.07 | 22 (28%) |
| 4 | 8K6 | J | 102 | - | 17,17,17 | 0.18 | 0 | 16,16,16 | 0.08 | 0 |
| 3 | BCL | I | 102 | - | 64,74,74 | 1.68 | 14 (21%) | 78,115,115 | 2.23 | 19 (24%) |
| 4 | 8K6 | 6 | 101 | - | 17,17,17 | 0.17 | 0 | 16,16,16 | 0.11 | 0 |
| 4 | 8K6 | T | 102 | - | 17,17,17 | 0.16 | 0 | 16,16,16 | 0.08 | 0 |
| 6 | CRT | 5 | 101 | - | 41,43,43 | 1.97 | 12 (29%) | 50,54,54 | 1.72 | 13 (26%) |

| Mol | Type | Chain | Res | Link | Bond lengths | | | Bond angles | | |
|-----|------|-------|-----|------|--------------|------|----------|-------------|------|----------|
| | | | | | Counts | RMSZ | # Z > 2 | Counts | RMSZ | # Z > 2 |
| 3 | BCL | 2 | 101 | - | 64,74,74 | 1.75 | 12 (18%) | 78,115,115 | 2.06 | 20 (25%) |
| 6 | CRT | U | 101 | - | 41,43,43 | 1.97 | 12 (29%) | 50,54,54 | 1.76 | 14 (28%) |
| 3 | BCL | 7 | 102 | - | 59,69,74 | 1.77 | 13 (22%) | 72,109,115 | 2.32 | 19 (26%) |
| 3 | BCL | 8 | 101 | - | 64,74,74 | 1.69 | 12 (18%) | 78,115,115 | 2.12 | 26 (33%) |
| 3 | BCL | F | 101 | - | 64,74,74 | 1.68 | 13 (20%) | 78,115,115 | 2.19 | 17 (21%) |
| 3 | BCL | S | 102 | - | 64,74,74 | 1.68 | 12 (18%) | 78,115,115 | 2.20 | 19 (24%) |
| 3 | BCL | 1 | 103 | - | 64,74,74 | 1.86 | 14 (21%) | 78,115,115 | 1.89 | 16 (20%) |
| 6 | CRT | K | 103 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.71 | 12 (24%) |
| 3 | BCL | 6 | 102 | - | 64,74,74 | 1.69 | 10 (15%) | 78,115,115 | 2.10 | 24 (30%) |
| 3 | BCL | X | 102 | - | 64,74,74 | 1.68 | 11 (17%) | 78,115,115 | 2.02 | 22 (28%) |
| 3 | BCL | B | 101 | - | 64,74,74 | 1.69 | 11 (17%) | 78,115,115 | 2.19 | 26 (33%) |
| 4 | 8K6 | P | 102 | - | 17,17,17 | 0.14 | 0 | 16,16,16 | 0.05 | 0 |
| 6 | CRT | 7 | 101 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.72 | 13 (26%) |
| 4 | 8K6 | J | 104 | - | 17,17,17 | 0.18 | 0 | 16,16,16 | 0.08 | 0 |
| 6 | CRT | I | 101 | - | 41,43,43 | 1.97 | 12 (29%) | 50,54,54 | 1.73 | 13 (26%) |
| 3 | BCL | 5 | 102 | - | 64,74,74 | 1.69 | 13 (20%) | 78,115,115 | 2.20 | 17 (21%) |
| 6 | CRT | D | 101 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.72 | 13 (26%) |
| 4 | 8K6 | V | 102 | - | 17,17,17 | 0.18 | 0 | 16,16,16 | 0.09 | 0 |
| 4 | 8K6 | Z | 102 | - | 17,17,17 | 0.16 | 0 | 16,16,16 | 0.06 | 0 |
| 6 | CRT | 3 | 103 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.72 | 13 (26%) |
| 6 | CRT | N | 101 | - | 41,43,43 | 1.98 | 12 (29%) | 50,54,54 | 1.75 | 14 (28%) |
| 3 | BCL | 4 | 101 | - | 64,74,74 | 1.71 | 11 (17%) | 78,115,115 | 2.09 | 22 (28%) |
| 4 | 8K6 | 8 | 102 | - | 17,17,17 | 0.17 | 0 | 16,16,16 | 0.08 | 0 |
| 3 | BCL | Z | 101 | - | 64,74,74 | 1.76 | 14 (21%) | 78,115,115 | 2.35 | 24 (30%) |
| 3 | BCL | U | 104 | - | 64,74,74 | 1.69 | 11 (17%) | 78,115,115 | 2.08 | 22 (28%) |
| 6 | CRT | S | 101 | - | 41,43,43 | 1.96 | 12 (29%) | 50,54,54 | 1.73 | 13 (26%) |
| 6 | CRT | E | 101 | - | 41,43,43 | 1.98 | 12 (29%) | 50,54,54 | 1.77 | 14 (28%) |
| 4 | 8K6 | 8 | 103 | - | 17,17,17 | 0.18 | 0 | 16,16,16 | 0.10 | 0 |
| 3 | BCL | 3 | 101 | - | 64,74,74 | 1.69 | 13 (20%) | 78,115,115 | 2.17 | 19 (24%) |
| 3 | BCL | A | 102 | - | 64,74,74 | 1.68 | 13 (20%) | 78,115,115 | 2.25 | 18 (23%) |
| 3 | BCL | P | 101 | - | 64,74,74 | 1.70 | 11 (17%) | 78,115,115 | 2.11 | 23 (29%) |
| 3 | BCL | U | 102 | - | 64,74,74 | 1.70 | 13 (20%) | 78,115,115 | 2.23 | 18 (23%) |
| 3 | BCL | T | 101 | - | 64,74,74 | 1.69 | 10 (15%) | 78,115,115 | 2.14 | 24 (30%) |
| 6 | CRT | V | 101 | - | 41,43,43 | 1.99 | 12 (29%) | 50,54,54 | 1.76 | 14 (28%) |
| 4 | 8K6 | 2 | 102 | - | 17,17,17 | 0.17 | 0 | 16,16,16 | 0.09 | 0 |
| 3 | BCL | W | 101 | - | 64,74,74 | 1.68 | 13 (20%) | 78,115,115 | 2.23 | 17 (21%) |

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 |
|-----|------|-------|-----|------|---------|---------------|-------|
| 4 | 8K6 | R | 102 | - | - | 10/15/15/15 | - |
| 3 | BCL | Y | 103 | - | - | 15/37/137/137 | - |
| 4 | 8K6 | 4 | 102 | - | - | 12/15/15/15 | - |
| 4 | 8K6 | G | 101 | - | - | 8/15/15/15 | - |
| 3 | BCL | E | 103 | - | - | 20/37/137/137 | - |
| 6 | CRT | J | 101 | - | - | 1/51/51/51 | - |
| 6 | CRT | A | 101 | - | - | 0/51/51/51 | - |
| 3 | BCL | O | 101 | - | - | 11/37/137/137 | - |
| 3 | BCL | D | 102 | - | - | 10/37/137/137 | - |
| 6 | CRT | Y | 101 | - | - | 0/51/51/51 | - |
| 4 | 8K6 | E | 102 | - | - | 11/15/15/15 | - |
| 3 | BCL | K | 101 | - | - | 10/37/137/137 | - |
| 4 | 8K6 | X | 101 | - | - | 7/15/15/15 | - |
| 3 | BCL | N | 102 | - | - | 24/37/137/137 | - |
| 3 | BCL | G | 102 | - | - | 24/37/137/137 | - |
| 3 | BCL | R | 101 | - | - | 21/37/137/137 | - |
| 6 | CRT | 1 | 102 | - | - | 0/51/51/51 | - |
| 3 | BCL | Q | 101 | - | - | 15/37/137/137 | - |
| 3 | BCL | J | 103 | - | - | 22/37/137/137 | - |
| 4 | 8K6 | J | 102 | - | - | 7/15/15/15 | - |
| 3 | BCL | I | 102 | - | - | 12/37/137/137 | - |
| 4 | 8K6 | 6 | 101 | - | - | 9/15/15/15 | - |
| 4 | 8K6 | T | 102 | - | - | 7/15/15/15 | - |
| 6 | CRT | 5 | 101 | - | - | 0/51/51/51 | - |
| 3 | BCL | 2 | 101 | - | - | 17/37/137/137 | - |
| 6 | CRT | U | 101 | - | - | 1/51/51/51 | - |
| 3 | BCL | 7 | 102 | - | - | 14/31/131/137 | - |
| 3 | BCL | 8 | 101 | - | - | 21/37/137/137 | - |
| 3 | BCL | F | 101 | - | - | 13/37/137/137 | - |
| 3 | BCL | S | 102 | - | - | 16/37/137/137 | - |
| 3 | BCL | 1 | 103 | - | - | 19/37/137/137 | - |
| 6 | CRT | K | 103 | - | - | 0/51/51/51 | - |
| 3 | BCL | 6 | 102 | - | - | 18/37/137/137 | - |

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| Mol | Type | Chain | Res | Link | Chirals | Torsions | Rings |
|-----|------|-------|-----|------|---------|---------------|-------|
| 3 | BCL | X | 102 | - | - | 13/37/137/137 | - |
| 3 | BCL | B | 101 | - | - | 22/37/137/137 | - |
| 4 | 8K6 | P | 102 | - | - | 7/15/15/15 | - |
| 6 | CRT | 7 | 101 | - | - | 0/51/51/51 | - |
| 4 | 8K6 | J | 104 | - | - | 9/15/15/15 | - |
| 6 | CRT | I | 101 | - | - | 0/51/51/51 | - |
| 3 | BCL | 5 | 102 | - | - | 7/37/137/137 | - |
| 6 | CRT | D | 101 | - | - | 0/51/51/51 | - |
| 4 | 8K6 | V | 102 | - | - | 12/15/15/15 | - |
| 4 | 8K6 | Z | 102 | - | - | 7/15/15/15 | - |
| 6 | CRT | 3 | 103 | - | - | 0/51/51/51 | - |
| 6 | CRT | N | 101 | - | - | 1/51/51/51 | - |
| 3 | BCL | 4 | 101 | - | - | 20/37/137/137 | - |
| 4 | 8K6 | 8 | 102 | - | - | 11/15/15/15 | - |
| 3 | BCL | Z | 101 | - | - | 21/37/137/137 | - |
| 3 | BCL | U | 104 | - | - | 18/37/137/137 | - |
| 6 | CRT | S | 101 | - | - | 0/51/51/51 | - |
| 6 | CRT | E | 101 | - | - | 1/51/51/51 | - |
| 4 | 8K6 | 8 | 103 | - | - | 10/15/15/15 | - |
| 3 | BCL | 3 | 101 | - | - | 14/37/137/137 | - |
| 3 | BCL | A | 102 | - | - | 14/37/137/137 | - |
| 3 | BCL | P | 101 | - | - | 11/37/137/137 | - |
| 3 | BCL | U | 102 | - | - | 13/37/137/137 | - |
| 3 | BCL | T | 101 | - | - | 20/37/137/137 | - |
| 6 | CRT | V | 101 | - | - | 1/51/51/51 | - |
| 4 | 8K6 | 2 | 102 | - | - | 7/15/15/15 | - |
| 3 | BCL | W | 101 | - | - | 11/37/137/137 | - |

All (549) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | 1 | 103 | BCL | C4B-NB | -5.51 | 1.30 | 1.35 |
| 3 | Z | 101 | BCL | C3B-C2B | 5.49 | 1.49 | 1.39 |
| 3 | E | 103 | BCL | C3B-C2B | 5.16 | 1.48 | 1.39 |
| 3 | B | 101 | BCL | C3B-C2B | 5.13 | 1.48 | 1.39 |
| 3 | 1 | 103 | BCL | C3D-C4D | -5.12 | 1.32 | 1.44 |
| 3 | 2 | 101 | BCL | C3B-C2B | 5.07 | 1.48 | 1.39 |
| 3 | T | 101 | BCL | C3B-C2B | 5.06 | 1.48 | 1.39 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | 4 | 101 | BCL | C3B-C2B | 5.05 | 1.48 | 1.39 |
| 3 | J | 103 | BCL | C3B-C2B | 5.05 | 1.48 | 1.39 |
| 3 | P | 101 | BCL | C3B-C2B | 5.03 | 1.48 | 1.39 |
| 6 | 1 | 102 | CRT | C27-C28 | 5.03 | 1.42 | 1.35 |
| 3 | N | 102 | BCL | C3B-C2B | 5.01 | 1.48 | 1.39 |
| 3 | 2 | 101 | BCL | C1D-ND | -4.98 | 1.31 | 1.37 |
| 3 | 8 | 101 | BCL | C3B-C2B | 4.95 | 1.48 | 1.39 |
| 3 | R | 101 | BCL | C3B-C2B | 4.92 | 1.48 | 1.39 |
| 3 | G | 102 | BCL | C3B-C2B | 4.89 | 1.48 | 1.39 |
| 6 | 1 | 102 | CRT | C32-C33 | 4.88 | 1.42 | 1.35 |
| 3 | 5 | 102 | BCL | C3D-C4D | -4.87 | 1.33 | 1.44 |
| 3 | U | 102 | BCL | C3D-C4D | -4.87 | 1.33 | 1.44 |
| 3 | 6 | 102 | BCL | O2D-CGD | 4.86 | 1.45 | 1.33 |
| 3 | 6 | 102 | BCL | C3B-C2B | 4.85 | 1.48 | 1.39 |
| 3 | 3 | 101 | BCL | C3D-C4D | -4.85 | 1.33 | 1.44 |
| 3 | P | 101 | BCL | O2D-CGD | 4.85 | 1.45 | 1.33 |
| 3 | F | 101 | BCL | C3D-C4D | -4.84 | 1.33 | 1.44 |
| 3 | D | 102 | BCL | C3D-C4D | -4.83 | 1.33 | 1.44 |
| 3 | S | 102 | BCL | C3D-C4D | -4.83 | 1.33 | 1.44 |
| 3 | W | 101 | BCL | C3D-C4D | -4.82 | 1.33 | 1.44 |
| 3 | Z | 101 | BCL | C3D-C4D | -4.81 | 1.33 | 1.44 |
| 3 | 2 | 101 | BCL | O2D-CGD | 4.81 | 1.44 | 1.33 |
| 3 | X | 102 | BCL | O2D-CGD | 4.81 | 1.44 | 1.33 |
| 3 | 7 | 102 | BCL | C3D-C4D | -4.80 | 1.33 | 1.44 |
| 3 | K | 101 | BCL | C3D-C4D | -4.80 | 1.33 | 1.44 |
| 3 | N | 102 | BCL | C3D-C4D | -4.79 | 1.33 | 1.44 |
| 3 | U | 104 | BCL | C3B-C2B | 4.78 | 1.48 | 1.39 |
| 3 | T | 101 | BCL | O2D-CGD | 4.78 | 1.44 | 1.33 |
| 3 | Y | 103 | BCL | C3D-C4D | -4.77 | 1.33 | 1.44 |
| 3 | Z | 101 | BCL | O2D-CGD | 4.77 | 1.44 | 1.33 |
| 3 | I | 102 | BCL | C3D-C4D | -4.76 | 1.33 | 1.44 |
| 3 | A | 102 | BCL | C3D-C4D | -4.75 | 1.33 | 1.44 |
| 3 | O | 101 | BCL | C3D-C4D | -4.74 | 1.33 | 1.44 |
| 3 | Q | 101 | BCL | C3D-C4D | -4.73 | 1.33 | 1.44 |
| 3 | 4 | 101 | BCL | O2D-CGD | 4.73 | 1.44 | 1.33 |
| 3 | U | 104 | BCL | O2D-CGD | 4.73 | 1.44 | 1.33 |
| 3 | 8 | 101 | BCL | O2D-CGD | 4.72 | 1.44 | 1.33 |
| 3 | G | 102 | BCL | O2D-CGD | 4.72 | 1.44 | 1.33 |
| 3 | 4 | 101 | BCL | C3D-C4D | -4.71 | 1.33 | 1.44 |
| 3 | G | 102 | BCL | C3D-C4D | -4.71 | 1.33 | 1.44 |
| 3 | B | 101 | BCL | O2D-CGD | 4.71 | 1.44 | 1.33 |
| 3 | J | 103 | BCL | C3D-C4D | -4.71 | 1.33 | 1.44 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | R | 101 | BCL | C3D-C4D | -4.70 | 1.33 | 1.44 |
| 3 | N | 102 | BCL | O2D-CGD | 4.69 | 1.44 | 1.33 |
| 3 | X | 102 | BCL | C3D-C4D | -4.69 | 1.33 | 1.44 |
| 3 | R | 101 | BCL | O2D-CGD | 4.68 | 1.44 | 1.33 |
| 3 | E | 103 | BCL | C3D-C4D | -4.67 | 1.33 | 1.44 |
| 3 | J | 103 | BCL | O2D-CGD | 4.67 | 1.44 | 1.33 |
| 3 | 2 | 101 | BCL | C3D-C4D | -4.66 | 1.33 | 1.44 |
| 3 | 6 | 102 | BCL | C3D-C4D | -4.66 | 1.33 | 1.44 |
| 3 | E | 103 | BCL | O2D-CGD | 4.65 | 1.44 | 1.33 |
| 3 | U | 104 | BCL | C3D-C4D | -4.65 | 1.33 | 1.44 |
| 3 | T | 101 | BCL | C3D-C4D | -4.65 | 1.33 | 1.44 |
| 3 | P | 101 | BCL | C3D-C4D | -4.63 | 1.33 | 1.44 |
| 3 | B | 101 | BCL | C3D-C4D | -4.61 | 1.33 | 1.44 |
| 6 | 1 | 102 | CRT | C9-C7 | 4.57 | 1.41 | 1.35 |
| 3 | 8 | 101 | BCL | C3D-C4D | -4.55 | 1.33 | 1.44 |
| 6 | 1 | 102 | CRT | C22-C23 | 4.52 | 1.41 | 1.35 |
| 3 | X | 102 | BCL | C3B-C2B | 4.52 | 1.47 | 1.39 |
| 3 | Q | 101 | BCL | C3B-C2B | 4.51 | 1.47 | 1.39 |
| 3 | A | 102 | BCL | C3B-C2B | 4.50 | 1.47 | 1.39 |
| 3 | K | 101 | BCL | C3B-C2B | 4.50 | 1.47 | 1.39 |
| 3 | Y | 103 | BCL | O2D-CGD | 4.48 | 1.44 | 1.33 |
| 3 | K | 101 | BCL | O2D-CGD | 4.46 | 1.44 | 1.33 |
| 3 | 1 | 103 | BCL | O2D-CGD | 4.45 | 1.44 | 1.33 |
| 3 | 5 | 102 | BCL | O2D-CGD | 4.45 | 1.44 | 1.33 |
| 3 | S | 102 | BCL | O2D-CGD | 4.45 | 1.44 | 1.33 |
| 3 | A | 102 | BCL | O2D-CGD | 4.44 | 1.44 | 1.33 |
| 3 | D | 102 | BCL | O2D-CGD | 4.44 | 1.44 | 1.33 |
| 3 | U | 102 | BCL | O2D-CGD | 4.44 | 1.44 | 1.33 |
| 3 | 3 | 101 | BCL | O2D-CGD | 4.42 | 1.44 | 1.33 |
| 3 | W | 101 | BCL | O2D-CGD | 4.42 | 1.44 | 1.33 |
| 6 | 1 | 102 | CRT | C14-C12 | 4.41 | 1.41 | 1.35 |
| 3 | J | 103 | BCL | C1D-ND | -4.39 | 1.32 | 1.37 |
| 3 | O | 101 | BCL | C3B-C2B | 4.39 | 1.47 | 1.39 |
| 3 | O | 101 | BCL | O2D-CGD | 4.39 | 1.43 | 1.33 |
| 3 | 7 | 102 | BCL | O2D-CGD | 4.38 | 1.43 | 1.33 |
| 3 | F | 101 | BCL | O2D-CGD | 4.37 | 1.43 | 1.33 |
| 3 | Q | 101 | BCL | O2D-CGD | 4.37 | 1.43 | 1.33 |
| 3 | I | 102 | BCL | O2D-CGD | 4.36 | 1.43 | 1.33 |
| 3 | 8 | 101 | BCL | C1D-ND | -4.36 | 1.32 | 1.37 |
| 3 | R | 101 | BCL | C1D-ND | -4.35 | 1.32 | 1.37 |
| 3 | W | 101 | BCL | C3B-C2B | 4.35 | 1.47 | 1.39 |
| 3 | U | 104 | BCL | C1D-ND | -4.33 | 1.32 | 1.37 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | 4 | 101 | BCL | O2A-CGA | 4.31 | 1.45 | 1.33 |
| 3 | E | 103 | BCL | C1D-ND | -4.31 | 1.32 | 1.37 |
| 3 | 5 | 102 | BCL | C3B-C2B | 4.30 | 1.47 | 1.39 |
| 6 | 1 | 102 | CRT | C19-C17 | 4.30 | 1.41 | 1.35 |
| 3 | D | 102 | BCL | C3B-C2B | 4.29 | 1.47 | 1.39 |
| 3 | G | 102 | BCL | O2A-CGA | 4.29 | 1.45 | 1.33 |
| 3 | T | 101 | BCL | C1D-ND | -4.29 | 1.32 | 1.37 |
| 3 | S | 102 | BCL | C3B-C2B | 4.27 | 1.47 | 1.39 |
| 3 | N | 102 | BCL | C1D-ND | -4.27 | 1.32 | 1.37 |
| 3 | U | 102 | BCL | C3B-C2B | 4.27 | 1.47 | 1.39 |
| 3 | J | 103 | BCL | O2A-CGA | 4.27 | 1.45 | 1.33 |
| 3 | R | 101 | BCL | O2A-CGA | 4.27 | 1.45 | 1.33 |
| 3 | E | 103 | BCL | O2A-CGA | 4.25 | 1.45 | 1.33 |
| 3 | 6 | 102 | BCL | C1D-ND | -4.24 | 1.32 | 1.37 |
| 3 | 2 | 101 | BCL | O2A-CGA | 4.24 | 1.45 | 1.33 |
| 3 | B | 101 | BCL | O2A-CGA | 4.24 | 1.45 | 1.33 |
| 3 | 4 | 101 | BCL | C1D-ND | -4.23 | 1.32 | 1.37 |
| 3 | 7 | 102 | BCL | C3B-C2B | 4.23 | 1.47 | 1.39 |
| 3 | F | 101 | BCL | C3B-C2B | 4.22 | 1.47 | 1.39 |
| 3 | 8 | 101 | BCL | O2A-CGA | 4.21 | 1.45 | 1.33 |
| 3 | G | 102 | BCL | C1D-ND | -4.19 | 1.32 | 1.37 |
| 3 | I | 102 | BCL | C3B-C2B | 4.18 | 1.46 | 1.39 |
| 3 | Y | 103 | BCL | C3B-C2B | 4.18 | 1.46 | 1.39 |
| 6 | V | 101 | CRT | C22-C23 | 4.17 | 1.41 | 1.35 |
| 3 | 3 | 101 | BCL | C3B-C2B | 4.17 | 1.46 | 1.39 |
| 3 | P | 101 | BCL | C1D-ND | -4.14 | 1.32 | 1.37 |
| 6 | N | 101 | CRT | C22-C23 | 4.13 | 1.41 | 1.35 |
| 3 | 1 | 103 | BCL | C1D-ND | -4.12 | 1.32 | 1.37 |
| 3 | Z | 101 | BCL | O2A-CGA | 4.12 | 1.45 | 1.33 |
| 3 | X | 102 | BCL | C1D-ND | -4.11 | 1.32 | 1.37 |
| 3 | B | 101 | BCL | C1D-ND | -4.10 | 1.32 | 1.37 |
| 3 | Q | 101 | BCL | O2A-CGA | 4.09 | 1.45 | 1.33 |
| 3 | X | 102 | BCL | O2A-CGA | 4.09 | 1.45 | 1.33 |
| 6 | J | 101 | CRT | C22-C23 | 4.09 | 1.41 | 1.35 |
| 6 | A | 101 | CRT | C22-C23 | 4.08 | 1.41 | 1.35 |
| 3 | U | 104 | BCL | O2A-CGA | 4.08 | 1.45 | 1.33 |
| 3 | N | 102 | BCL | O2A-CGA | 4.07 | 1.45 | 1.33 |
| 3 | 1 | 103 | BCL | C1B-NB | -4.05 | 1.31 | 1.35 |
| 3 | D | 102 | BCL | O2A-CGA | 4.04 | 1.45 | 1.33 |
| 6 | E | 101 | CRT | C22-C23 | 4.04 | 1.41 | 1.35 |
| 6 | U | 101 | CRT | C22-C23 | 4.04 | 1.41 | 1.35 |
| 6 | E | 101 | CRT | C19-C17 | 4.03 | 1.41 | 1.35 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | 5 | 102 | BCL | O2A-CGA | 4.03 | 1.45 | 1.33 |
| 3 | K | 101 | BCL | O2A-CGA | 4.02 | 1.45 | 1.33 |
| 3 | Z | 101 | BCL | C1D-ND | -4.02 | 1.32 | 1.37 |
| 6 | 7 | 101 | CRT | C22-C23 | 4.01 | 1.41 | 1.35 |
| 6 | 5 | 101 | CRT | C22-C23 | 4.01 | 1.41 | 1.35 |
| 3 | 1 | 103 | BCL | O2A-CGA | 3.99 | 1.45 | 1.33 |
| 6 | U | 101 | CRT | C27-C28 | 3.99 | 1.41 | 1.35 |
| 3 | 7 | 102 | BCL | O2A-CGA | 3.99 | 1.45 | 1.33 |
| 6 | E | 101 | CRT | C27-C28 | 3.98 | 1.41 | 1.35 |
| 6 | S | 101 | CRT | C22-C23 | 3.98 | 1.41 | 1.35 |
| 6 | J | 101 | CRT | C19-C17 | 3.98 | 1.41 | 1.35 |
| 6 | I | 101 | CRT | C22-C23 | 3.98 | 1.41 | 1.35 |
| 6 | J | 101 | CRT | C27-C28 | 3.98 | 1.41 | 1.35 |
| 6 | V | 101 | CRT | C19-C17 | 3.97 | 1.41 | 1.35 |
| 6 | K | 103 | CRT | C22-C23 | 3.97 | 1.41 | 1.35 |
| 3 | 6 | 102 | BCL | O2A-CGA | 3.97 | 1.44 | 1.33 |
| 6 | N | 101 | CRT | C27-C28 | 3.97 | 1.41 | 1.35 |
| 3 | I | 102 | BCL | O2A-CGA | 3.97 | 1.44 | 1.33 |
| 6 | N | 101 | CRT | C19-C17 | 3.97 | 1.41 | 1.35 |
| 3 | A | 102 | BCL | O2A-CGA | 3.97 | 1.44 | 1.33 |
| 6 | 3 | 103 | CRT | C22-C23 | 3.96 | 1.41 | 1.35 |
| 3 | 3 | 101 | BCL | O2A-CGA | 3.95 | 1.44 | 1.33 |
| 6 | E | 101 | CRT | C9-C7 | 3.95 | 1.41 | 1.35 |
| 6 | D | 101 | CRT | C22-C23 | 3.95 | 1.41 | 1.35 |
| 6 | I | 101 | CRT | C19-C17 | 3.95 | 1.41 | 1.35 |
| 6 | V | 101 | CRT | C9-C7 | 3.95 | 1.41 | 1.35 |
| 6 | K | 103 | CRT | C27-C28 | 3.94 | 1.41 | 1.35 |
| 6 | V | 101 | CRT | C27-C28 | 3.94 | 1.41 | 1.35 |
| 6 | J | 101 | CRT | C32-C33 | 3.93 | 1.41 | 1.35 |
| 6 | U | 101 | CRT | C19-C17 | 3.92 | 1.41 | 1.35 |
| 6 | J | 101 | CRT | C14-C12 | 3.92 | 1.41 | 1.35 |
| 6 | Y | 101 | CRT | C22-C23 | 3.92 | 1.41 | 1.35 |
| 6 | 5 | 101 | CRT | C9-C7 | 3.91 | 1.41 | 1.35 |
| 6 | 7 | 101 | CRT | C9-C7 | 3.91 | 1.41 | 1.35 |
| 6 | A | 101 | CRT | C19-C17 | 3.91 | 1.41 | 1.35 |
| 6 | U | 101 | CRT | C9-C7 | 3.90 | 1.41 | 1.35 |
| 6 | K | 103 | CRT | C19-C17 | 3.90 | 1.41 | 1.35 |
| 6 | E | 101 | CRT | C14-C12 | 3.90 | 1.41 | 1.35 |
| 6 | 5 | 101 | CRT | C27-C28 | 3.90 | 1.41 | 1.35 |
| 6 | A | 101 | CRT | C27-C28 | 3.90 | 1.41 | 1.35 |
| 3 | S | 102 | BCL | O2A-CGA | 3.90 | 1.44 | 1.33 |
| 3 | W | 101 | BCL | O2A-CGA | 3.90 | 1.44 | 1.33 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|------|-------------|----------|
| 6 | 3 | 103 | CRT | C9-C7 | 3.90 | 1.41 | 1.35 |
| 6 | Y | 101 | CRT | C9-C7 | 3.90 | 1.41 | 1.35 |
| 6 | S | 101 | CRT | C32-C33 | 3.90 | 1.40 | 1.35 |
| 3 | F | 101 | BCL | O2A-CGA | 3.89 | 1.44 | 1.33 |
| 3 | O | 101 | BCL | O2A-CGA | 3.89 | 1.44 | 1.33 |
| 6 | 7 | 101 | CRT | C27-C28 | 3.89 | 1.40 | 1.35 |
| 6 | Y | 101 | CRT | C27-C28 | 3.89 | 1.40 | 1.35 |
| 6 | V | 101 | CRT | C14-C12 | 3.89 | 1.40 | 1.35 |
| 6 | N | 101 | CRT | C32-C33 | 3.88 | 1.40 | 1.35 |
| 6 | 5 | 101 | CRT | C19-C17 | 3.88 | 1.40 | 1.35 |
| 6 | S | 101 | CRT | C27-C28 | 3.88 | 1.40 | 1.35 |
| 6 | V | 101 | CRT | C32-C33 | 3.88 | 1.40 | 1.35 |
| 3 | P | 101 | BCL | O2A-CGA | 3.87 | 1.44 | 1.33 |
| 6 | N | 101 | CRT | C9-C7 | 3.87 | 1.40 | 1.35 |
| 6 | S | 101 | CRT | C19-C17 | 3.87 | 1.40 | 1.35 |
| 6 | 3 | 103 | CRT | C27-C28 | 3.86 | 1.40 | 1.35 |
| 6 | D | 101 | CRT | C27-C28 | 3.86 | 1.40 | 1.35 |
| 6 | I | 101 | CRT | C27-C28 | 3.85 | 1.40 | 1.35 |
| 6 | I | 101 | CRT | C32-C33 | 3.85 | 1.40 | 1.35 |
| 6 | D | 101 | CRT | C19-C17 | 3.85 | 1.40 | 1.35 |
| 6 | U | 101 | CRT | C32-C33 | 3.85 | 1.40 | 1.35 |
| 6 | N | 101 | CRT | C14-C12 | 3.84 | 1.40 | 1.35 |
| 3 | T | 101 | BCL | O2A-CGA | 3.84 | 1.44 | 1.33 |
| 6 | E | 101 | CRT | C32-C33 | 3.84 | 1.40 | 1.35 |
| 6 | J | 101 | CRT | C9-C7 | 3.84 | 1.40 | 1.35 |
| 3 | Y | 103 | BCL | O2A-CGA | 3.84 | 1.44 | 1.33 |
| 6 | S | 101 | CRT | C9-C7 | 3.84 | 1.40 | 1.35 |
| 6 | D | 101 | CRT | C14-C12 | 3.83 | 1.40 | 1.35 |
| 6 | I | 101 | CRT | C9-C7 | 3.83 | 1.40 | 1.35 |
| 6 | 7 | 101 | CRT | C19-C17 | 3.83 | 1.40 | 1.35 |
| 3 | U | 102 | BCL | O2A-CGA | 3.82 | 1.44 | 1.33 |
| 6 | U | 101 | CRT | C14-C12 | 3.82 | 1.40 | 1.35 |
| 6 | I | 101 | CRT | C14-C12 | 3.82 | 1.40 | 1.35 |
| 6 | D | 101 | CRT | C32-C33 | 3.82 | 1.40 | 1.35 |
| 6 | A | 101 | CRT | C9-C7 | 3.81 | 1.40 | 1.35 |
| 6 | Y | 101 | CRT | C19-C17 | 3.81 | 1.40 | 1.35 |
| 6 | K | 103 | CRT | C32-C33 | 3.80 | 1.40 | 1.35 |
| 6 | D | 101 | CRT | C9-C7 | 3.80 | 1.40 | 1.35 |
| 6 | 7 | 101 | CRT | C32-C33 | 3.80 | 1.40 | 1.35 |
| 6 | K | 103 | CRT | C9-C7 | 3.79 | 1.40 | 1.35 |
| 6 | A | 101 | CRT | C14-C12 | 3.79 | 1.40 | 1.35 |
| 6 | A | 101 | CRT | C32-C33 | 3.79 | 1.40 | 1.35 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 6 | 3 | 103 | CRT | C19-C17 | 3.78 | 1.40 | 1.35 |
| 6 | S | 101 | CRT | C14-C12 | 3.77 | 1.40 | 1.35 |
| 6 | 7 | 101 | CRT | C14-C12 | 3.76 | 1.40 | 1.35 |
| 6 | 5 | 101 | CRT | C14-C12 | 3.76 | 1.40 | 1.35 |
| 6 | K | 103 | CRT | C14-C12 | 3.76 | 1.40 | 1.35 |
| 6 | Y | 101 | CRT | C14-C12 | 3.76 | 1.40 | 1.35 |
| 6 | 3 | 103 | CRT | C14-C12 | 3.75 | 1.40 | 1.35 |
| 6 | 3 | 103 | CRT | C32-C33 | 3.73 | 1.40 | 1.35 |
| 3 | U | 102 | BCL | C1D-ND | -3.71 | 1.33 | 1.37 |
| 6 | 5 | 101 | CRT | C32-C33 | 3.70 | 1.40 | 1.35 |
| 6 | Y | 101 | CRT | C32-C33 | 3.66 | 1.40 | 1.35 |
| 3 | 5 | 102 | BCL | C1D-ND | -3.64 | 1.33 | 1.37 |
| 3 | F | 101 | BCL | C1D-ND | -3.60 | 1.33 | 1.37 |
| 3 | 7 | 102 | BCL | C1D-ND | -3.60 | 1.33 | 1.37 |
| 3 | D | 102 | BCL | C1D-ND | -3.59 | 1.33 | 1.37 |
| 3 | 3 | 101 | BCL | C1D-ND | -3.59 | 1.33 | 1.37 |
| 3 | S | 102 | BCL | C1D-ND | -3.50 | 1.33 | 1.37 |
| 3 | W | 101 | BCL | C1D-ND | -3.47 | 1.33 | 1.37 |
| 3 | I | 102 | BCL | C1D-ND | -3.42 | 1.33 | 1.37 |
| 3 | O | 101 | BCL | C1D-ND | -3.39 | 1.33 | 1.37 |
| 3 | Y | 103 | BCL | C1D-ND | -3.36 | 1.33 | 1.37 |
| 3 | K | 101 | BCL | C1D-ND | -3.34 | 1.33 | 1.37 |
| 3 | Q | 101 | BCL | C1D-ND | -3.33 | 1.33 | 1.37 |
| 3 | 1 | 103 | BCL | CHD-C1D | 3.22 | 1.44 | 1.38 |
| 3 | A | 102 | BCL | C1D-ND | -3.19 | 1.33 | 1.37 |
| 3 | 1 | 103 | BCL | C3B-C2B | 3.15 | 1.45 | 1.39 |
| 3 | S | 102 | BCL | CHD-C1D | 3.08 | 1.44 | 1.38 |
| 3 | 2 | 101 | BCL | C3D-C2D | 3.06 | 1.47 | 1.39 |
| 3 | Y | 103 | BCL | CHD-C1D | 3.06 | 1.44 | 1.38 |
| 3 | 7 | 102 | BCL | CHD-C1D | 3.04 | 1.44 | 1.38 |
| 3 | K | 101 | BCL | CHD-C1D | 3.03 | 1.44 | 1.38 |
| 3 | Z | 101 | BCL | C3C-C4C | -3.03 | 1.47 | 1.51 |
| 3 | I | 102 | BCL | CHD-C1D | 3.01 | 1.44 | 1.38 |
| 3 | 1 | 103 | BCL | C3D-C2D | 3.00 | 1.47 | 1.39 |
| 3 | A | 102 | BCL | CHD-C1D | 2.99 | 1.44 | 1.38 |
| 3 | Q | 101 | BCL | CHD-C1D | 2.99 | 1.44 | 1.38 |
| 3 | D | 102 | BCL | CHD-C1D | 2.96 | 1.44 | 1.38 |
| 3 | F | 101 | BCL | CHD-C1D | 2.94 | 1.44 | 1.38 |
| 3 | 8 | 101 | BCL | C3D-C2D | 2.94 | 1.47 | 1.39 |
| 3 | 5 | 102 | BCL | CHD-C1D | 2.93 | 1.44 | 1.38 |
| 3 | E | 103 | BCL | C3D-C2D | 2.93 | 1.47 | 1.39 |
| 3 | 3 | 101 | BCL | CHD-C1D | 2.93 | 1.44 | 1.38 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | O | 101 | BCL | OBD-CAD | 2.93 | 1.27 | 1.22 |
| 3 | O | 101 | BCL | CHD-C1D | 2.92 | 1.44 | 1.38 |
| 3 | W | 101 | BCL | CHD-C1D | 2.92 | 1.44 | 1.38 |
| 3 | D | 102 | BCL | OBD-CAD | 2.91 | 1.27 | 1.22 |
| 3 | X | 102 | BCL | C3D-C2D | 2.90 | 1.47 | 1.39 |
| 3 | J | 103 | BCL | C3D-C2D | 2.90 | 1.47 | 1.39 |
| 3 | Z | 101 | BCL | OBD-CAD | 2.90 | 1.27 | 1.22 |
| 3 | U | 104 | BCL | C3D-C2D | 2.90 | 1.47 | 1.39 |
| 3 | P | 101 | BCL | C3D-C2D | 2.89 | 1.47 | 1.39 |
| 3 | U | 102 | BCL | CHD-C1D | 2.89 | 1.44 | 1.38 |
| 3 | 6 | 102 | BCL | C3D-C2D | 2.89 | 1.47 | 1.39 |
| 3 | K | 101 | BCL | OBD-CAD | 2.89 | 1.27 | 1.22 |
| 3 | A | 102 | BCL | OBD-CAD | 2.89 | 1.27 | 1.22 |
| 3 | R | 101 | BCL | C3D-C2D | 2.87 | 1.47 | 1.39 |
| 3 | Q | 101 | BCL | OBD-CAD | 2.87 | 1.27 | 1.22 |
| 3 | 7 | 102 | BCL | OBD-CAD | 2.86 | 1.27 | 1.22 |
| 3 | Y | 103 | BCL | C3D-C2D | 2.86 | 1.46 | 1.39 |
| 3 | 2 | 101 | BCL | C3C-C4C | -2.86 | 1.48 | 1.51 |
| 3 | 4 | 101 | BCL | C3D-C2D | 2.85 | 1.46 | 1.39 |
| 3 | B | 101 | BCL | C3D-C2D | 2.83 | 1.46 | 1.39 |
| 3 | 4 | 101 | BCL | OBD-CAD | 2.83 | 1.27 | 1.22 |
| 3 | U | 102 | BCL | OBD-CAD | 2.82 | 1.27 | 1.22 |
| 3 | N | 102 | BCL | C3D-C2D | 2.82 | 1.46 | 1.39 |
| 3 | T | 101 | BCL | C3D-C2D | 2.81 | 1.46 | 1.39 |
| 3 | 5 | 102 | BCL | OBD-CAD | 2.80 | 1.27 | 1.22 |
| 3 | U | 102 | BCL | C3D-C2D | 2.79 | 1.46 | 1.39 |
| 3 | F | 101 | BCL | OBD-CAD | 2.79 | 1.27 | 1.22 |
| 3 | X | 102 | BCL | OBD-CAD | 2.79 | 1.27 | 1.22 |
| 3 | Y | 103 | BCL | MG-NA | -2.78 | 1.99 | 2.06 |
| 3 | I | 102 | BCL | C3D-C2D | 2.78 | 1.46 | 1.39 |
| 3 | 4 | 101 | BCL | C3C-C4C | -2.78 | 1.48 | 1.51 |
| 3 | 8 | 101 | BCL | OBD-CAD | 2.78 | 1.27 | 1.22 |
| 3 | 7 | 102 | BCL | C3D-C2D | 2.78 | 1.46 | 1.39 |
| 3 | D | 102 | BCL | C3D-C2D | 2.77 | 1.46 | 1.39 |
| 3 | Q | 101 | BCL | C3D-C2D | 2.77 | 1.46 | 1.39 |
| 3 | U | 104 | BCL | C3C-C4C | -2.77 | 1.48 | 1.51 |
| 3 | B | 101 | BCL | OBD-CAD | 2.77 | 1.27 | 1.22 |
| 3 | K | 101 | BCL | C3D-C2D | 2.77 | 1.46 | 1.39 |
| 3 | 3 | 101 | BCL | OBD-CAD | 2.77 | 1.27 | 1.22 |
| 3 | Y | 103 | BCL | OBD-CAD | 2.77 | 1.27 | 1.22 |
| 3 | 3 | 101 | BCL | C3D-C2D | 2.77 | 1.46 | 1.39 |
| 3 | A | 102 | BCL | C3D-C2D | 2.76 | 1.46 | 1.39 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | F | 101 | BCL | C3D-C2D | 2.76 | 1.46 | 1.39 |
| 3 | S | 102 | BCL | OBD-CAD | 2.76 | 1.27 | 1.22 |
| 3 | 1 | 103 | BCL | OBD-CAD | 2.76 | 1.27 | 1.22 |
| 3 | 5 | 102 | BCL | C3D-C2D | 2.75 | 1.46 | 1.39 |
| 3 | U | 102 | BCL | MG-NA | -2.75 | 1.99 | 2.06 |
| 3 | E | 103 | BCL | C3C-C4C | -2.74 | 1.48 | 1.51 |
| 3 | X | 102 | BCL | C3C-C4C | -2.73 | 1.48 | 1.51 |
| 3 | W | 101 | BCL | C3D-C2D | 2.73 | 1.46 | 1.39 |
| 3 | Z | 101 | BCL | C3D-C2D | 2.72 | 1.46 | 1.39 |
| 3 | S | 102 | BCL | C3D-C2D | 2.72 | 1.46 | 1.39 |
| 3 | R | 101 | BCL | OBD-CAD | 2.71 | 1.27 | 1.22 |
| 3 | W | 101 | BCL | OBD-CAD | 2.71 | 1.27 | 1.22 |
| 3 | O | 101 | BCL | C3D-C2D | 2.71 | 1.46 | 1.39 |
| 3 | G | 102 | BCL | C3D-C2D | 2.70 | 1.46 | 1.39 |
| 3 | I | 102 | BCL | MG-NA | -2.70 | 1.99 | 2.06 |
| 3 | G | 102 | BCL | OBD-CAD | 2.70 | 1.27 | 1.22 |
| 3 | I | 102 | BCL | OBD-CAD | 2.70 | 1.27 | 1.22 |
| 3 | P | 101 | BCL | C3C-C4C | -2.69 | 1.48 | 1.51 |
| 3 | 6 | 102 | BCL | C3C-C4C | -2.68 | 1.48 | 1.51 |
| 3 | 5 | 102 | BCL | MG-NA | -2.67 | 1.99 | 2.06 |
| 3 | D | 102 | BCL | MG-NA | -2.67 | 1.99 | 2.06 |
| 3 | G | 102 | BCL | C3C-C4C | -2.66 | 1.48 | 1.51 |
| 3 | R | 101 | BCL | C3C-C4C | -2.66 | 1.48 | 1.51 |
| 6 | 1 | 102 | CRT | C6-C7 | -2.66 | 1.40 | 1.45 |
| 3 | T | 101 | BCL | C3C-C4C | -2.66 | 1.48 | 1.51 |
| 3 | N | 102 | BCL | OBD-CAD | 2.64 | 1.27 | 1.22 |
| 3 | O | 101 | BCL | C3C-C4C | -2.63 | 1.48 | 1.51 |
| 3 | J | 103 | BCL | C3C-C4C | -2.63 | 1.48 | 1.51 |
| 3 | U | 104 | BCL | OBD-CAD | 2.63 | 1.27 | 1.22 |
| 3 | Q | 101 | BCL | C3C-C4C | -2.63 | 1.48 | 1.51 |
| 3 | J | 103 | BCL | OBD-CAD | 2.63 | 1.27 | 1.22 |
| 3 | N | 102 | BCL | C3C-C4C | -2.62 | 1.48 | 1.51 |
| 3 | E | 103 | BCL | OBD-CAD | 2.62 | 1.27 | 1.22 |
| 3 | W | 101 | BCL | C3C-C4C | -2.61 | 1.48 | 1.51 |
| 3 | 6 | 102 | BCL | OBD-CAD | 2.59 | 1.26 | 1.22 |
| 3 | S | 102 | BCL | MG-NA | -2.59 | 2.00 | 2.06 |
| 3 | 3 | 101 | BCL | C3C-C4C | -2.59 | 1.48 | 1.51 |
| 3 | 7 | 102 | BCL | MG-NA | -2.58 | 2.00 | 2.06 |
| 3 | S | 102 | BCL | C3C-C4C | -2.58 | 1.48 | 1.51 |
| 3 | A | 102 | BCL | C3C-C4C | -2.57 | 1.48 | 1.51 |
| 6 | 1 | 102 | CRT | C11-C12 | -2.57 | 1.40 | 1.45 |
| 3 | B | 101 | BCL | C3C-C4C | -2.57 | 1.48 | 1.51 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | T | 101 | BCL | OBD-CAD | 2.57 | 1.26 | 1.22 |
| 3 | X | 102 | BCL | CHD-C1D | 2.56 | 1.43 | 1.38 |
| 3 | Q | 101 | BCL | MG-NA | -2.56 | 2.00 | 2.06 |
| 3 | 7 | 102 | BCL | C3C-C4C | -2.55 | 1.48 | 1.51 |
| 3 | F | 101 | BCL | MG-NA | -2.55 | 2.00 | 2.06 |
| 3 | 8 | 101 | BCL | C3C-C4C | -2.55 | 1.48 | 1.51 |
| 3 | P | 101 | BCL | OBD-CAD | 2.54 | 1.26 | 1.22 |
| 3 | N | 102 | BCL | CHD-C1D | 2.54 | 1.43 | 1.38 |
| 3 | Y | 103 | BCL | C3C-C4C | -2.54 | 1.48 | 1.51 |
| 6 | 1 | 102 | CRT | C35-C33 | -2.54 | 1.40 | 1.45 |
| 3 | K | 101 | BCL | MG-NA | -2.53 | 2.00 | 2.06 |
| 3 | I | 102 | BCL | C3C-C4C | -2.53 | 1.48 | 1.51 |
| 3 | O | 101 | BCL | MG-NA | -2.53 | 2.00 | 2.06 |
| 3 | A | 102 | BCL | MG-NA | -2.52 | 2.00 | 2.06 |
| 3 | 1 | 103 | BCL | MG-NA | -2.52 | 2.00 | 2.06 |
| 3 | W | 101 | BCL | MG-NA | -2.52 | 2.00 | 2.06 |
| 3 | U | 102 | BCL | C4B-NB | -2.52 | 1.33 | 1.35 |
| 6 | 3 | 103 | CRT | C30-C28 | -2.52 | 1.40 | 1.45 |
| 6 | Y | 101 | CRT | C30-C28 | -2.50 | 1.40 | 1.45 |
| 3 | K | 101 | BCL | C3C-C4C | -2.50 | 1.48 | 1.51 |
| 3 | 1 | 103 | BCL | CHD-C4C | 2.50 | 1.46 | 1.39 |
| 3 | 3 | 101 | BCL | MG-NA | -2.49 | 2.00 | 2.06 |
| 3 | F | 101 | BCL | C3C-C4C | -2.49 | 1.48 | 1.51 |
| 3 | 6 | 102 | BCL | CHD-C1D | 2.48 | 1.43 | 1.38 |
| 6 | 5 | 101 | CRT | C30-C28 | -2.48 | 1.40 | 1.45 |
| 3 | P | 101 | BCL | CHD-C1D | 2.47 | 1.43 | 1.38 |
| 3 | 5 | 102 | BCL | C3C-C4C | -2.46 | 1.48 | 1.51 |
| 3 | 4 | 101 | BCL | CHD-C1D | 2.46 | 1.43 | 1.38 |
| 3 | B | 101 | BCL | CHD-C1D | 2.46 | 1.43 | 1.38 |
| 3 | E | 103 | BCL | CHD-C1D | 2.46 | 1.43 | 1.38 |
| 3 | 8 | 101 | BCL | CHD-C1D | 2.46 | 1.43 | 1.38 |
| 3 | J | 103 | BCL | CHD-C1D | 2.45 | 1.43 | 1.38 |
| 6 | Y | 101 | CRT | C25-C23 | -2.45 | 1.40 | 1.45 |
| 6 | Y | 101 | CRT | C35-C33 | -2.45 | 1.40 | 1.45 |
| 6 | V | 101 | CRT | C25-C23 | -2.45 | 1.40 | 1.45 |
| 6 | K | 103 | CRT | C25-C23 | -2.44 | 1.40 | 1.45 |
| 6 | 1 | 102 | CRT | C30-C28 | -2.44 | 1.40 | 1.45 |
| 6 | A | 101 | CRT | C35-C33 | -2.44 | 1.40 | 1.45 |
| 3 | Z | 101 | BCL | C1B-CHB | 2.44 | 1.47 | 1.41 |
| 6 | E | 101 | CRT | C30-C28 | -2.44 | 1.40 | 1.45 |
| 6 | I | 101 | CRT | C25-C23 | -2.44 | 1.40 | 1.45 |
| 6 | A | 101 | CRT | C25-C23 | -2.43 | 1.40 | 1.45 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | R | 101 | BCL | CHD-C1D | 2.43 | 1.43 | 1.38 |
| 6 | 7 | 101 | CRT | C30-C28 | -2.43 | 1.40 | 1.45 |
| 3 | F | 101 | BCL | C4B-NB | -2.43 | 1.33 | 1.35 |
| 6 | D | 101 | CRT | C30-C28 | -2.43 | 1.40 | 1.45 |
| 3 | U | 102 | BCL | C3C-C4C | -2.43 | 1.48 | 1.51 |
| 6 | 7 | 101 | CRT | C25-C23 | -2.43 | 1.40 | 1.45 |
| 6 | N | 101 | CRT | C25-C23 | -2.43 | 1.40 | 1.45 |
| 6 | I | 101 | CRT | C35-C33 | -2.42 | 1.40 | 1.45 |
| 6 | 3 | 103 | CRT | C25-C23 | -2.42 | 1.40 | 1.45 |
| 3 | Y | 103 | BCL | CHD-C4C | 2.42 | 1.46 | 1.39 |
| 6 | D | 101 | CRT | C35-C33 | -2.42 | 1.40 | 1.45 |
| 6 | D | 101 | CRT | C25-C23 | -2.42 | 1.40 | 1.45 |
| 6 | 5 | 101 | CRT | C16-C17 | -2.41 | 1.40 | 1.45 |
| 6 | A | 101 | CRT | C30-C28 | -2.41 | 1.40 | 1.45 |
| 6 | Y | 101 | CRT | C16-C17 | -2.41 | 1.40 | 1.45 |
| 6 | 3 | 103 | CRT | C35-C33 | -2.41 | 1.40 | 1.45 |
| 6 | 5 | 101 | CRT | C35-C33 | -2.41 | 1.40 | 1.45 |
| 3 | A | 102 | BCL | CHD-C4C | 2.41 | 1.46 | 1.39 |
| 6 | S | 101 | CRT | C30-C28 | -2.40 | 1.40 | 1.45 |
| 6 | E | 101 | CRT | C35-C33 | -2.40 | 1.40 | 1.45 |
| 6 | S | 101 | CRT | C16-C17 | -2.40 | 1.40 | 1.45 |
| 6 | I | 101 | CRT | C30-C28 | -2.40 | 1.40 | 1.45 |
| 6 | 7 | 101 | CRT | C16-C17 | -2.40 | 1.40 | 1.45 |
| 3 | G | 102 | BCL | CHD-C1D | 2.40 | 1.43 | 1.38 |
| 6 | K | 103 | CRT | C30-C28 | -2.39 | 1.40 | 1.45 |
| 3 | 1 | 103 | BCL | MG-NC | -2.39 | 2.00 | 2.06 |
| 3 | Q | 101 | BCL | CHD-C4C | 2.39 | 1.46 | 1.39 |
| 6 | S | 101 | CRT | C35-C33 | -2.39 | 1.40 | 1.45 |
| 3 | 7 | 102 | BCL | C4B-NB | -2.39 | 1.33 | 1.35 |
| 3 | D | 102 | BCL | C4B-NB | -2.39 | 1.33 | 1.35 |
| 3 | W | 101 | BCL | CHD-C4C | 2.39 | 1.46 | 1.39 |
| 3 | Z | 101 | BCL | MG-NA | -2.39 | 2.00 | 2.06 |
| 6 | S | 101 | CRT | C25-C23 | -2.39 | 1.40 | 1.45 |
| 3 | 7 | 102 | BCL | CHD-C4C | 2.39 | 1.46 | 1.39 |
| 6 | 5 | 101 | CRT | C25-C23 | -2.39 | 1.40 | 1.45 |
| 3 | U | 104 | BCL | CHD-C1D | 2.39 | 1.43 | 1.38 |
| 6 | 3 | 103 | CRT | C16-C17 | -2.39 | 1.40 | 1.45 |
| 6 | J | 101 | CRT | C25-C23 | -2.39 | 1.40 | 1.45 |
| 6 | N | 101 | CRT | C35-C33 | -2.39 | 1.40 | 1.45 |
| 6 | 7 | 101 | CRT | C35-C33 | -2.38 | 1.40 | 1.45 |
| 3 | I | 102 | BCL | CHD-C4C | 2.38 | 1.45 | 1.39 |
| 6 | V | 101 | CRT | C35-C33 | -2.38 | 1.40 | 1.45 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 6 | V | 101 | CRT | C30-C28 | -2.37 | 1.40 | 1.45 |
| 3 | D | 102 | BCL | C3C-C4C | -2.37 | 1.48 | 1.51 |
| 3 | 3 | 101 | BCL | C4B-NB | -2.37 | 1.33 | 1.35 |
| 6 | I | 101 | CRT | C16-C17 | -2.37 | 1.40 | 1.45 |
| 3 | 3 | 101 | BCL | CHD-C4C | 2.37 | 1.45 | 1.39 |
| 6 | E | 101 | CRT | C25-C23 | -2.37 | 1.40 | 1.45 |
| 3 | T | 101 | BCL | CHD-C1D | 2.37 | 1.43 | 1.38 |
| 6 | J | 101 | CRT | C30-C28 | -2.37 | 1.40 | 1.45 |
| 3 | I | 102 | BCL | C4B-NB | -2.37 | 1.33 | 1.35 |
| 6 | U | 101 | CRT | C30-C28 | -2.37 | 1.40 | 1.45 |
| 6 | U | 101 | CRT | C25-C23 | -2.36 | 1.40 | 1.45 |
| 6 | K | 103 | CRT | C35-C33 | -2.36 | 1.40 | 1.45 |
| 3 | K | 101 | BCL | CHD-C4C | 2.35 | 1.45 | 1.39 |
| 6 | J | 101 | CRT | C35-C33 | -2.35 | 1.40 | 1.45 |
| 6 | N | 101 | CRT | C30-C28 | -2.35 | 1.40 | 1.45 |
| 6 | U | 101 | CRT | C35-C33 | -2.35 | 1.40 | 1.45 |
| 6 | D | 101 | CRT | C16-C17 | -2.34 | 1.40 | 1.45 |
| 6 | I | 101 | CRT | C11-C12 | -2.34 | 1.40 | 1.45 |
| 3 | D | 102 | BCL | CHD-C4C | 2.34 | 1.45 | 1.39 |
| 3 | O | 101 | BCL | CHD-C4C | 2.34 | 1.45 | 1.39 |
| 3 | 5 | 102 | BCL | CHD-C4C | 2.34 | 1.45 | 1.39 |
| 6 | 1 | 102 | CRT | C16-C17 | -2.34 | 1.40 | 1.45 |
| 3 | S | 102 | BCL | CHD-C4C | 2.33 | 1.45 | 1.39 |
| 6 | K | 103 | CRT | C16-C17 | -2.33 | 1.40 | 1.45 |
| 3 | S | 102 | BCL | C4B-NB | -2.33 | 1.33 | 1.35 |
| 6 | S | 101 | CRT | C11-C12 | -2.33 | 1.40 | 1.45 |
| 6 | 3 | 103 | CRT | C11-C12 | -2.33 | 1.40 | 1.45 |
| 6 | A | 101 | CRT | C16-C17 | -2.32 | 1.41 | 1.45 |
| 6 | E | 101 | CRT | C16-C17 | -2.32 | 1.41 | 1.45 |
| 6 | A | 101 | CRT | C11-C12 | -2.32 | 1.41 | 1.45 |
| 3 | U | 102 | BCL | CHD-C4C | 2.32 | 1.45 | 1.39 |
| 3 | F | 101 | BCL | CHD-C4C | 2.32 | 1.45 | 1.39 |
| 6 | D | 101 | CRT | C11-C12 | -2.31 | 1.41 | 1.45 |
| 6 | V | 101 | CRT | C16-C17 | -2.31 | 1.41 | 1.45 |
| 6 | U | 101 | CRT | C16-C17 | -2.31 | 1.41 | 1.45 |
| 6 | 5 | 101 | CRT | C11-C12 | -2.30 | 1.41 | 1.45 |
| 3 | Z | 101 | BCL | CHD-C1D | 2.30 | 1.42 | 1.38 |
| 6 | Y | 101 | CRT | C11-C12 | -2.30 | 1.41 | 1.45 |
| 6 | K | 103 | CRT | C6-C7 | -2.29 | 1.41 | 1.45 |
| 6 | S | 101 | CRT | C6-C7 | -2.29 | 1.41 | 1.45 |
| 6 | K | 103 | CRT | C11-C12 | -2.29 | 1.41 | 1.45 |
| 6 | N | 101 | CRT | C16-C17 | -2.29 | 1.41 | 1.45 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 6 | Y | 101 | CRT | C6-C7 | -2.28 | 1.41 | 1.45 |
| 6 | 7 | 101 | CRT | C11-C12 | -2.28 | 1.41 | 1.45 |
| 6 | N | 101 | CRT | C11-C12 | -2.27 | 1.41 | 1.45 |
| 6 | V | 101 | CRT | C11-C12 | -2.27 | 1.41 | 1.45 |
| 3 | 2 | 101 | BCL | CHD-C1D | 2.27 | 1.42 | 1.38 |
| 3 | 5 | 102 | BCL | C4B-NB | -2.27 | 1.33 | 1.35 |
| 6 | D | 101 | CRT | C6-C7 | -2.26 | 1.41 | 1.45 |
| 3 | 2 | 101 | BCL | C1B-CHB | 2.26 | 1.47 | 1.41 |
| 6 | A | 101 | CRT | C6-C7 | -2.26 | 1.41 | 1.45 |
| 6 | I | 101 | CRT | C6-C7 | -2.26 | 1.41 | 1.45 |
| 6 | J | 101 | CRT | C16-C17 | -2.26 | 1.41 | 1.45 |
| 3 | T | 101 | BCL | C1B-CHB | 2.26 | 1.47 | 1.41 |
| 6 | V | 101 | CRT | C6-C7 | -2.25 | 1.41 | 1.45 |
| 6 | 3 | 103 | CRT | C6-C7 | -2.25 | 1.41 | 1.45 |
| 6 | 7 | 101 | CRT | C6-C7 | -2.25 | 1.41 | 1.45 |
| 6 | 5 | 101 | CRT | C6-C7 | -2.24 | 1.41 | 1.45 |
| 6 | J | 101 | CRT | C11-C12 | -2.24 | 1.41 | 1.45 |
| 3 | G | 102 | BCL | C1B-CHB | 2.23 | 1.47 | 1.41 |
| 6 | N | 101 | CRT | C6-C7 | -2.22 | 1.41 | 1.45 |
| 6 | E | 101 | CRT | C11-C12 | -2.22 | 1.41 | 1.45 |
| 6 | U | 101 | CRT | C11-C12 | -2.22 | 1.41 | 1.45 |
| 3 | W | 101 | BCL | C4B-NB | -2.20 | 1.33 | 1.35 |
| 6 | E | 101 | CRT | C6-C7 | -2.20 | 1.41 | 1.45 |
| 6 | 1 | 102 | CRT | C25-C23 | -2.19 | 1.41 | 1.45 |
| 3 | 4 | 101 | BCL | C1B-CHB | 2.19 | 1.47 | 1.41 |
| 3 | A | 102 | BCL | MG-NC | -2.19 | 2.01 | 2.06 |
| 6 | J | 101 | CRT | C6-C7 | -2.18 | 1.41 | 1.45 |
| 6 | U | 101 | CRT | C6-C7 | -2.18 | 1.41 | 1.45 |
| 3 | B | 101 | BCL | C1B-CHB | 2.18 | 1.47 | 1.41 |
| 3 | W | 101 | BCL | MG-NC | -2.18 | 2.01 | 2.06 |
| 3 | Y | 103 | BCL | C1B-CHB | 2.17 | 1.47 | 1.41 |
| 3 | U | 104 | BCL | C1B-CHB | 2.16 | 1.47 | 1.41 |
| 3 | E | 103 | BCL | C1B-CHB | 2.16 | 1.47 | 1.41 |
| 3 | R | 101 | BCL | C1B-CHB | 2.15 | 1.47 | 1.41 |
| 3 | E | 103 | BCL | C4B-CHC | 2.15 | 1.47 | 1.41 |
| 3 | 2 | 101 | BCL | MG-NA | -2.14 | 2.01 | 2.06 |
| 3 | 3 | 101 | BCL | MG-NC | -2.14 | 2.01 | 2.06 |
| 3 | Q | 101 | BCL | MG-NC | -2.13 | 2.01 | 2.06 |
| 3 | Y | 103 | BCL | C4B-NB | -2.13 | 1.33 | 1.35 |
| 3 | P | 101 | BCL | MG-NA | -2.13 | 2.01 | 2.06 |
| 3 | Z | 101 | BCL | C4B-CHC | 2.12 | 1.46 | 1.41 |
| 3 | 6 | 102 | BCL | C1B-CHB | 2.11 | 1.46 | 1.41 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|---------|-------|-------------|----------|
| 3 | K | 101 | BCL | C4B-NB | -2.11 | 1.33 | 1.35 |
| 3 | X | 102 | BCL | C4B-CHC | 2.11 | 1.46 | 1.41 |
| 3 | Z | 101 | BCL | CMA-C3A | -2.11 | 1.48 | 1.53 |
| 3 | Q | 101 | BCL | C4B-NB | -2.10 | 1.33 | 1.35 |
| 3 | O | 101 | BCL | MG-NC | -2.10 | 2.01 | 2.06 |
| 3 | O | 101 | BCL | C4B-NB | -2.10 | 1.33 | 1.35 |
| 3 | K | 101 | BCL | MG-NC | -2.09 | 2.01 | 2.06 |
| 3 | P | 101 | BCL | C1B-CHB | 2.09 | 1.46 | 1.41 |
| 6 | 1 | 102 | CRT | C26-C25 | 2.08 | 1.39 | 1.34 |
| 6 | 1 | 102 | CRT | C31-C30 | 2.08 | 1.39 | 1.34 |
| 3 | U | 104 | BCL | C4B-CHC | 2.07 | 1.46 | 1.41 |
| 3 | N | 102 | BCL | C1B-CHB | 2.06 | 1.46 | 1.41 |
| 3 | Z | 101 | BCL | MG-NC | -2.06 | 2.01 | 2.06 |
| 3 | 4 | 101 | BCL | C4B-CHC | 2.06 | 1.46 | 1.41 |
| 3 | 7 | 102 | BCL | MG-NC | -2.06 | 2.01 | 2.06 |
| 3 | 2 | 101 | BCL | C2C-C3C | -2.05 | 1.48 | 1.54 |
| 3 | 8 | 101 | BCL | C4B-CHC | 2.05 | 1.46 | 1.41 |
| 3 | J | 103 | BCL | C4B-CHC | 2.05 | 1.46 | 1.41 |
| 3 | J | 103 | BCL | C1B-CHB | 2.05 | 1.46 | 1.41 |
| 3 | 8 | 101 | BCL | C4D-CHA | 2.04 | 1.45 | 1.38 |
| 3 | A | 102 | BCL | C4B-NB | -2.04 | 1.33 | 1.35 |
| 3 | 5 | 102 | BCL | MG-NC | -2.04 | 2.01 | 2.06 |
| 3 | X | 102 | BCL | MG-NA | -2.04 | 2.01 | 2.06 |
| 3 | 8 | 101 | BCL | C1B-CHB | 2.03 | 1.46 | 1.41 |
| 3 | I | 102 | BCL | C1B-CHB | 2.03 | 1.46 | 1.41 |
| 3 | 1 | 103 | BCL | C3C-C4C | -2.03 | 1.49 | 1.51 |
| 3 | U | 102 | BCL | C1B-CHB | 2.03 | 1.46 | 1.41 |
| 3 | K | 101 | BCL | C1B-CHB | 2.02 | 1.46 | 1.41 |
| 3 | N | 102 | BCL | C4B-CHC | 2.02 | 1.46 | 1.41 |
| 3 | B | 101 | BCL | C4D-CHA | 2.02 | 1.45 | 1.38 |
| 3 | D | 102 | BCL | C1B-CHB | 2.02 | 1.46 | 1.41 |
| 3 | J | 103 | BCL | C4D-CHA | 2.02 | 1.45 | 1.38 |
| 3 | 2 | 101 | BCL | C4D-CHA | 2.01 | 1.45 | 1.38 |
| 3 | E | 103 | BCL | C4D-CHA | 2.01 | 1.45 | 1.38 |
| 3 | I | 102 | BCL | MG-NC | -2.01 | 2.01 | 2.06 |
| 3 | Q | 101 | BCL | C1B-CHB | 2.01 | 1.46 | 1.41 |
| 3 | F | 101 | BCL | C1B-CHB | 2.01 | 1.46 | 1.41 |
| 3 | R | 101 | BCL | C4B-CHC | 2.00 | 1.46 | 1.41 |

All (819) bond angle outliers are listed below:

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | Y | 103 | BCL | CHD-C1D-ND | -7.54 | 117.52 | 124.45 |
| 3 | 1 | 103 | BCL | O2D-CGD-CBD | 7.37 | 124.37 | 111.27 |
| 3 | A | 102 | BCL | O2D-CGD-CBD | 7.17 | 124.01 | 111.27 |
| 3 | 7 | 102 | BCL | CHD-C1D-ND | -7.09 | 117.94 | 124.45 |
| 3 | Q | 101 | BCL | CHD-C1D-ND | -7.07 | 117.96 | 124.45 |
| 3 | I | 102 | BCL | CHD-C1D-ND | -7.02 | 118.00 | 124.45 |
| 3 | A | 102 | BCL | CHD-C1D-ND | -7.00 | 118.02 | 124.45 |
| 3 | W | 101 | BCL | CHD-C1D-ND | -6.98 | 118.04 | 124.45 |
| 3 | K | 101 | BCL | CHD-C1D-ND | -6.97 | 118.05 | 124.45 |
| 3 | S | 102 | BCL | CHD-C1D-ND | -6.94 | 118.08 | 124.45 |
| 3 | Z | 101 | BCL | C2D-C1D-ND | 6.93 | 115.21 | 110.10 |
| 3 | K | 101 | BCL | O2D-CGD-CBD | 6.87 | 123.48 | 111.27 |
| 3 | 3 | 101 | BCL | CHD-C1D-ND | -6.87 | 118.14 | 124.45 |
| 3 | Y | 103 | BCL | O2D-CGD-CBD | 6.87 | 123.47 | 111.27 |
| 3 | 5 | 102 | BCL | CHD-C1D-ND | -6.85 | 118.16 | 124.45 |
| 3 | O | 101 | BCL | CHD-C1D-ND | -6.85 | 118.16 | 124.45 |
| 3 | U | 102 | BCL | O2D-CGD-CBD | 6.84 | 123.43 | 111.27 |
| 3 | D | 102 | BCL | O2D-CGD-CBD | 6.82 | 123.39 | 111.27 |
| 3 | I | 102 | BCL | O2D-CGD-CBD | 6.81 | 123.38 | 111.27 |
| 3 | U | 102 | BCL | CHD-C1D-ND | -6.75 | 118.25 | 124.45 |
| 3 | F | 101 | BCL | O2D-CGD-CBD | 6.74 | 123.24 | 111.27 |
| 3 | W | 101 | BCL | O2D-CGD-CBD | 6.74 | 123.24 | 111.27 |
| 3 | F | 101 | BCL | CHD-C1D-ND | -6.68 | 118.32 | 124.45 |
| 3 | 7 | 102 | BCL | O2D-CGD-CBD | 6.64 | 123.07 | 111.27 |
| 3 | D | 102 | BCL | CHD-C1D-ND | -6.64 | 118.35 | 124.45 |
| 3 | 3 | 101 | BCL | O2D-CGD-CBD | 6.55 | 122.91 | 111.27 |
| 3 | B | 101 | BCL | C2D-C1D-ND | 6.48 | 114.88 | 110.10 |
| 3 | 5 | 102 | BCL | O2D-CGD-CBD | 6.47 | 122.76 | 111.27 |
| 3 | E | 103 | BCL | C2D-C1D-ND | 6.44 | 114.85 | 110.10 |
| 3 | U | 104 | BCL | C2D-C1D-ND | 6.42 | 114.84 | 110.10 |
| 3 | P | 101 | BCL | C2D-C1D-ND | 6.40 | 114.82 | 110.10 |
| 3 | 8 | 101 | BCL | C2D-C1D-ND | 6.37 | 114.80 | 110.10 |
| 3 | O | 101 | BCL | O2D-CGD-CBD | 6.37 | 122.59 | 111.27 |
| 3 | 2 | 101 | BCL | C2D-C1D-ND | 6.37 | 114.80 | 110.10 |
| 3 | Q | 101 | BCL | O2D-CGD-CBD | 6.31 | 122.48 | 111.27 |
| 3 | R | 101 | BCL | C2D-C1D-ND | 6.30 | 114.75 | 110.10 |
| 3 | 4 | 101 | BCL | C2D-C1D-ND | 6.30 | 114.75 | 110.10 |
| 3 | X | 102 | BCL | C2D-C1D-ND | 6.23 | 114.70 | 110.10 |
| 3 | T | 101 | BCL | C2D-C1D-ND | 6.23 | 114.70 | 110.10 |
| 3 | 6 | 102 | BCL | C2D-C1D-ND | 6.18 | 114.66 | 110.10 |
| 3 | W | 101 | BCL | CMD-C2D-C1D | 6.17 | 135.58 | 124.71 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | A | 102 | BCL | CMD-C2D-C1D | 6.16 | 135.58 | 124.71 |
| 3 | O | 101 | BCL | CMD-C2D-C1D | 6.13 | 135.52 | 124.71 |
| 3 | K | 101 | BCL | CMD-C2D-C1D | 6.11 | 135.48 | 124.71 |
| 3 | S | 102 | BCL | O2D-CGD-CBD | 6.10 | 122.11 | 111.27 |
| 3 | Y | 103 | BCL | CMD-C2D-C1D | 6.10 | 135.46 | 124.71 |
| 3 | J | 103 | BCL | C2D-C1D-ND | 6.07 | 114.58 | 110.10 |
| 3 | S | 102 | BCL | CMD-C2D-C1D | 6.07 | 135.41 | 124.71 |
| 3 | Q | 101 | BCL | CMD-C2D-C1D | 6.05 | 135.38 | 124.71 |
| 3 | 7 | 102 | BCL | CMD-C2D-C1D | 6.05 | 135.37 | 124.71 |
| 3 | G | 102 | BCL | C2D-C1D-ND | 5.99 | 114.52 | 110.10 |
| 3 | 3 | 101 | BCL | CMD-C2D-C1D | 5.98 | 135.26 | 124.71 |
| 3 | F | 101 | BCL | CMD-C2D-C1D | 5.98 | 135.25 | 124.71 |
| 3 | O | 101 | BCL | C2D-C1D-ND | 5.94 | 114.48 | 110.10 |
| 3 | N | 102 | BCL | C2D-C1D-ND | 5.91 | 114.46 | 110.10 |
| 3 | I | 102 | BCL | CMD-C2D-C1D | 5.91 | 135.12 | 124.71 |
| 3 | Q | 101 | BCL | C2D-C1D-ND | 5.83 | 114.40 | 110.10 |
| 3 | W | 101 | BCL | C2D-C1D-ND | 5.79 | 114.37 | 110.10 |
| 3 | D | 102 | BCL | CMD-C2D-C1D | 5.77 | 134.88 | 124.71 |
| 3 | A | 102 | BCL | C2D-C1D-ND | 5.73 | 114.33 | 110.10 |
| 3 | K | 101 | BCL | C2D-C1D-ND | 5.73 | 114.33 | 110.10 |
| 3 | 5 | 102 | BCL | CMD-C2D-C1D | 5.70 | 134.75 | 124.71 |
| 3 | U | 102 | BCL | CMD-C2D-C1D | 5.68 | 134.73 | 124.71 |
| 3 | 7 | 102 | BCL | C2D-C1D-ND | 5.66 | 114.28 | 110.10 |
| 3 | Y | 103 | BCL | C2D-C1D-ND | 5.59 | 114.22 | 110.10 |
| 3 | I | 102 | BCL | C2D-C1D-ND | 5.58 | 114.22 | 110.10 |
| 3 | 3 | 101 | BCL | C2D-C1D-ND | 5.57 | 114.21 | 110.10 |
| 3 | Z | 101 | BCL | C3C-C4C-CHD | -5.56 | 111.52 | 123.39 |
| 3 | 2 | 101 | BCL | C3C-C4C-CHD | -5.53 | 111.57 | 123.39 |
| 3 | Z | 101 | BCL | C4A-NA-C1A | 5.53 | 109.19 | 106.71 |
| 3 | G | 102 | BCL | C3C-C4C-CHD | -5.53 | 111.58 | 123.39 |
| 3 | F | 101 | BCL | C2D-C1D-ND | 5.52 | 114.17 | 110.10 |
| 3 | 1 | 103 | BCL | CHD-C1D-ND | -5.52 | 119.38 | 124.45 |
| 3 | R | 101 | BCL | C3C-C4C-CHD | -5.50 | 111.64 | 123.39 |
| 3 | U | 104 | BCL | C3C-C4C-CHD | -5.46 | 111.73 | 123.39 |
| 3 | U | 102 | BCL | C2D-C1D-ND | 5.45 | 114.12 | 110.10 |
| 3 | E | 103 | BCL | C3C-C4C-CHD | -5.43 | 111.80 | 123.39 |
| 3 | Z | 101 | BCL | CMB-C2B-C3B | 5.42 | 134.82 | 124.68 |
| 3 | T | 101 | BCL | C3C-C4C-CHD | -5.40 | 111.85 | 123.39 |
| 3 | D | 102 | BCL | C2D-C1D-ND | 5.39 | 114.08 | 110.10 |
| 3 | 2 | 101 | BCL | C1C-NC-C4C | -5.37 | 104.29 | 106.71 |
| 3 | P | 101 | BCL | C3C-C4C-CHD | -5.36 | 111.93 | 123.39 |
| 3 | Z | 101 | BCL | O2D-CGD-CBD | 5.36 | 120.79 | 111.27 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 5 | 102 | BCL | C2D-C1D-ND | 5.35 | 114.05 | 110.10 |
| 3 | 4 | 101 | BCL | C3C-C4C-CHD | -5.34 | 111.99 | 123.39 |
| 3 | X | 102 | BCL | C3C-C4C-CHD | -5.34 | 111.99 | 123.39 |
| 3 | J | 103 | BCL | C3C-C4C-CHD | -5.33 | 112.00 | 123.39 |
| 3 | 6 | 102 | BCL | C3C-C4C-CHD | -5.32 | 112.03 | 123.39 |
| 6 | 1 | 102 | CRT | C20-C21-C22 | 5.30 | 134.34 | 123.47 |
| 3 | 8 | 101 | BCL | C3C-C4C-CHD | -5.30 | 112.07 | 123.39 |
| 3 | Z | 101 | BCL | CHD-C1D-ND | -5.30 | 119.58 | 124.45 |
| 3 | B | 101 | BCL | C3C-C4C-CHD | -5.29 | 112.09 | 123.39 |
| 3 | N | 102 | BCL | O2D-CGD-CBD | 5.24 | 120.58 | 111.27 |
| 3 | S | 102 | BCL | C2D-C1D-ND | 5.24 | 113.97 | 110.10 |
| 3 | T | 101 | BCL | C1C-NC-C4C | -5.20 | 104.37 | 106.71 |
| 3 | J | 103 | BCL | CMB-C2B-C3B | 5.16 | 134.33 | 124.68 |
| 3 | E | 103 | BCL | CMB-C2B-C3B | 5.15 | 134.32 | 124.68 |
| 3 | N | 102 | BCL | C3C-C4C-CHD | -5.14 | 112.40 | 123.39 |
| 6 | N | 101 | CRT | C20-C21-C22 | 5.14 | 134.00 | 123.47 |
| 6 | U | 101 | CRT | C20-C21-C22 | 5.12 | 133.97 | 123.47 |
| 3 | P | 101 | BCL | CMB-C2B-C3B | 5.10 | 134.23 | 124.68 |
| 6 | V | 101 | CRT | C20-C21-C22 | 5.08 | 133.88 | 123.47 |
| 3 | 2 | 101 | BCL | CMB-C2B-C3B | 5.07 | 134.17 | 124.68 |
| 6 | E | 101 | CRT | C20-C21-C22 | 5.05 | 133.83 | 123.47 |
| 3 | R | 101 | BCL | CMB-C2B-C3B | 5.04 | 134.10 | 124.68 |
| 6 | J | 101 | CRT | C20-C21-C22 | 5.03 | 133.78 | 123.47 |
| 3 | G | 102 | BCL | C1C-NC-C4C | -4.98 | 104.47 | 106.71 |
| 6 | 3 | 103 | CRT | C20-C21-C22 | 4.96 | 133.64 | 123.47 |
| 3 | N | 102 | BCL | CMB-C2B-C3B | 4.96 | 133.96 | 124.68 |
| 3 | 6 | 102 | BCL | CMB-C2B-C3B | 4.96 | 133.95 | 124.68 |
| 3 | Z | 101 | BCL | C3D-C2D-C1D | -4.94 | 99.08 | 105.83 |
| 3 | B | 101 | BCL | C1C-NC-C4C | -4.92 | 104.50 | 106.71 |
| 6 | 7 | 101 | CRT | C20-C21-C22 | 4.88 | 133.47 | 123.47 |
| 3 | 4 | 101 | BCL | CMB-C2B-C3B | 4.86 | 133.77 | 124.68 |
| 3 | A | 102 | BCL | C3D-C2D-C1D | -4.86 | 99.20 | 105.83 |
| 6 | A | 101 | CRT | C20-C21-C22 | 4.86 | 133.43 | 123.47 |
| 3 | B | 101 | BCL | CMB-C2B-C3B | 4.85 | 133.75 | 124.68 |
| 6 | D | 101 | CRT | C20-C21-C22 | 4.85 | 133.41 | 123.47 |
| 3 | W | 101 | BCL | C3D-C2D-C1D | -4.85 | 99.22 | 105.83 |
| 3 | T | 101 | BCL | CMB-C2B-C3B | 4.83 | 133.72 | 124.68 |
| 3 | O | 101 | BCL | C3D-C2D-C1D | -4.83 | 99.24 | 105.83 |
| 3 | Y | 103 | BCL | C3D-C2D-C1D | -4.83 | 99.24 | 105.83 |
| 3 | Q | 101 | BCL | C3D-C2D-C1D | -4.83 | 99.25 | 105.83 |
| 6 | Y | 101 | CRT | C20-C21-C22 | 4.82 | 133.35 | 123.47 |
| 6 | S | 101 | CRT | C20-C21-C22 | 4.82 | 133.35 | 123.47 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | K | 103 | CRT | C20-C21-C22 | 4.81 | 133.32 | 123.47 |
| 6 | I | 101 | CRT | C20-C21-C22 | 4.80 | 133.30 | 123.47 |
| 3 | 7 | 102 | BCL | C3D-C2D-C1D | -4.80 | 99.28 | 105.83 |
| 3 | K | 101 | BCL | C3D-C2D-C1D | -4.78 | 99.30 | 105.83 |
| 3 | X | 102 | BCL | CHD-C1D-ND | -4.78 | 120.06 | 124.45 |
| 3 | F | 101 | BCL | C3D-C2D-C1D | -4.77 | 99.32 | 105.83 |
| 3 | 3 | 101 | BCL | C3D-C2D-C1D | -4.76 | 99.33 | 105.83 |
| 3 | I | 102 | BCL | C3D-C2D-C1D | -4.74 | 99.37 | 105.83 |
| 6 | 5 | 101 | CRT | C20-C21-C22 | 4.71 | 133.13 | 123.47 |
| 3 | 6 | 102 | BCL | C1C-NC-C4C | -4.70 | 104.59 | 106.71 |
| 3 | O | 101 | BCL | C3C-C4C-CHD | -4.69 | 113.38 | 123.39 |
| 3 | W | 101 | BCL | C3C-C4C-CHD | -4.64 | 113.49 | 123.39 |
| 3 | Q | 101 | BCL | C3C-C4C-CHD | -4.63 | 113.50 | 123.39 |
| 3 | U | 102 | BCL | C3C-C4C-CHD | -4.61 | 113.54 | 123.39 |
| 3 | 8 | 101 | BCL | CMB-C2B-C3B | 4.61 | 133.30 | 124.68 |
| 3 | B | 101 | BCL | C4A-NA-C1A | 4.59 | 108.77 | 106.71 |
| 3 | W | 101 | BCL | CHD-C4C-NC | 4.58 | 130.16 | 125.08 |
| 3 | D | 102 | BCL | C3D-C2D-C1D | -4.58 | 99.59 | 105.83 |
| 3 | G | 102 | BCL | C4A-NA-C1A | 4.57 | 108.76 | 106.71 |
| 3 | S | 102 | BCL | C3D-C2D-C1D | -4.57 | 99.60 | 105.83 |
| 3 | U | 102 | BCL | C3D-C2D-C1D | -4.56 | 99.60 | 105.83 |
| 3 | 8 | 101 | BCL | C4A-NA-C1A | 4.56 | 108.75 | 106.71 |
| 3 | O | 101 | BCL | CHD-C4C-NC | 4.55 | 130.13 | 125.08 |
| 3 | Q | 101 | BCL | CHD-C4C-NC | 4.54 | 130.12 | 125.08 |
| 3 | B | 101 | BCL | C3D-C2D-C1D | -4.53 | 99.65 | 105.83 |
| 3 | 8 | 101 | BCL | C1C-NC-C4C | -4.52 | 104.67 | 106.71 |
| 3 | 1 | 103 | BCL | O2D-CGD-O1D | -4.52 | 115.00 | 123.84 |
| 3 | P | 101 | BCL | CHD-C1D-ND | -4.52 | 120.30 | 124.45 |
| 3 | Y | 103 | BCL | C4A-NA-C1A | 4.52 | 108.74 | 106.71 |
| 3 | A | 102 | BCL | CHD-C4C-NC | 4.51 | 130.08 | 125.08 |
| 3 | J | 103 | BCL | C1C-NC-C4C | -4.51 | 104.68 | 106.71 |
| 3 | I | 102 | BCL | C3C-C4C-CHD | -4.51 | 113.77 | 123.39 |
| 3 | G | 102 | BCL | CMB-C2B-C3B | 4.51 | 133.11 | 124.68 |
| 3 | 7 | 102 | BCL | C3C-C4C-CHD | -4.50 | 113.77 | 123.39 |
| 3 | F | 101 | BCL | C3C-C4C-CHD | -4.50 | 113.78 | 123.39 |
| 3 | 5 | 102 | BCL | C3D-C2D-C1D | -4.50 | 99.69 | 105.83 |
| 3 | X | 102 | BCL | C3D-C2D-C1D | -4.50 | 99.70 | 105.83 |
| 3 | D | 102 | BCL | C3C-C4C-CHD | -4.49 | 113.79 | 123.39 |
| 3 | P | 101 | BCL | C3D-C2D-C1D | -4.49 | 99.71 | 105.83 |
| 3 | A | 102 | BCL | C3C-C4C-CHD | -4.49 | 113.81 | 123.39 |
| 3 | K | 101 | BCL | C3C-C4C-CHD | -4.48 | 113.81 | 123.39 |
| 3 | Z | 101 | BCL | CMD-C2D-C1D | 4.47 | 132.60 | 124.71 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 5 | 102 | BCL | C3C-C4C-CHD | -4.47 | 113.84 | 123.39 |
| 3 | 7 | 102 | BCL | CMB-C2B-C3B | 4.44 | 132.98 | 124.68 |
| 3 | 3 | 101 | BCL | C3C-C4C-CHD | -4.44 | 113.92 | 123.39 |
| 3 | S | 102 | BCL | C3C-C4C-CHD | -4.42 | 113.95 | 123.39 |
| 3 | 5 | 102 | BCL | CMB-C2B-C3B | 4.41 | 132.94 | 124.68 |
| 3 | 8 | 101 | BCL | C3D-C2D-C1D | -4.41 | 99.81 | 105.83 |
| 3 | U | 104 | BCL | CMB-C2B-C3B | 4.40 | 132.91 | 124.68 |
| 3 | K | 101 | BCL | CHD-C4C-NC | 4.40 | 129.96 | 125.08 |
| 3 | U | 102 | BCL | C4A-NA-C1A | 4.39 | 108.68 | 106.71 |
| 3 | Y | 103 | BCL | C3C-C4C-CHD | -4.39 | 114.02 | 123.39 |
| 3 | S | 102 | BCL | CMB-C2B-C3B | 4.38 | 132.88 | 124.68 |
| 3 | 5 | 102 | BCL | CHD-C4C-NC | 4.38 | 129.94 | 125.08 |
| 3 | I | 102 | BCL | CHD-C4C-NC | 4.37 | 129.93 | 125.08 |
| 3 | 4 | 101 | BCL | C3D-C2D-C1D | -4.37 | 99.87 | 105.83 |
| 3 | U | 104 | BCL | C3D-C2D-C1D | -4.37 | 99.87 | 105.83 |
| 3 | 6 | 102 | BCL | C3D-C2D-C1D | -4.36 | 99.88 | 105.83 |
| 3 | U | 102 | BCL | CHD-C4C-NC | 4.36 | 129.92 | 125.08 |
| 3 | Z | 101 | BCL | C1D-ND-C4D | -4.35 | 103.24 | 106.33 |
| 3 | 7 | 102 | BCL | CHD-C4C-NC | 4.35 | 129.91 | 125.08 |
| 3 | W | 101 | BCL | CMB-C2B-C3B | 4.35 | 132.81 | 124.68 |
| 3 | E | 103 | BCL | C3D-C2D-C1D | -4.34 | 99.91 | 105.83 |
| 3 | R | 101 | BCL | C1C-NC-C4C | -4.33 | 104.76 | 106.71 |
| 3 | R | 101 | BCL | C3D-C2D-C1D | -4.33 | 99.92 | 105.83 |
| 3 | Q | 101 | BCL | CMB-C2B-C3B | 4.32 | 132.76 | 124.68 |
| 3 | O | 101 | BCL | C1D-ND-C4D | -4.32 | 103.27 | 106.33 |
| 3 | G | 102 | BCL | C3D-C2D-C1D | -4.31 | 99.95 | 105.83 |
| 3 | U | 104 | BCL | C1C-NC-C4C | -4.31 | 104.77 | 106.71 |
| 3 | U | 104 | BCL | CHD-C1D-ND | -4.31 | 120.50 | 124.45 |
| 3 | T | 101 | BCL | C3D-C2D-C1D | -4.31 | 99.95 | 105.83 |
| 3 | P | 101 | BCL | C4A-NA-C1A | 4.30 | 108.64 | 106.71 |
| 3 | J | 103 | BCL | C3D-C2D-C1D | -4.30 | 99.96 | 105.83 |
| 3 | D | 102 | BCL | CHD-C4C-NC | 4.30 | 129.85 | 125.08 |
| 3 | 8 | 101 | BCL | CHD-C1D-ND | -4.29 | 120.51 | 124.45 |
| 3 | 4 | 101 | BCL | CHD-C1D-ND | -4.28 | 120.52 | 124.45 |
| 3 | P | 101 | BCL | C1C-NC-C4C | -4.28 | 104.78 | 106.71 |
| 3 | Z | 101 | BCL | CHD-C4C-NC | 4.26 | 129.81 | 125.08 |
| 3 | Z | 101 | BCL | C1C-NC-C4C | -4.26 | 104.79 | 106.71 |
| 3 | 3 | 101 | BCL | CHD-C4C-NC | 4.26 | 129.81 | 125.08 |
| 3 | 1 | 103 | BCL | C2D-C1D-ND | 4.26 | 113.24 | 110.10 |
| 3 | A | 102 | BCL | O2D-CGD-O1D | -4.26 | 115.51 | 123.84 |
| 3 | O | 101 | BCL | CMB-C2B-C3B | 4.26 | 132.64 | 124.68 |
| 3 | P | 101 | BCL | CHD-C4C-NC | 4.26 | 129.80 | 125.08 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | N | 102 | BCL | C3D-C2D-C1D | -4.25 | 100.03 | 105.83 |
| 3 | E | 103 | BCL | C1C-NC-C4C | -4.24 | 104.80 | 106.71 |
| 3 | R | 101 | BCL | CHD-C4C-NC | 4.23 | 129.78 | 125.08 |
| 3 | S | 102 | BCL | CHD-C4C-NC | 4.23 | 129.78 | 125.08 |
| 3 | Y | 103 | BCL | CHD-C4C-NC | 4.23 | 129.78 | 125.08 |
| 3 | X | 102 | BCL | CHD-C4C-NC | 4.23 | 129.77 | 125.08 |
| 3 | 4 | 101 | BCL | C1C-NC-C4C | -4.23 | 104.81 | 106.71 |
| 3 | K | 101 | BCL | CMB-C2B-C3B | 4.21 | 132.56 | 124.68 |
| 3 | A | 102 | BCL | CMB-C2B-C3B | 4.20 | 132.54 | 124.68 |
| 3 | 3 | 101 | BCL | CMB-C2B-C3B | 4.20 | 132.53 | 124.68 |
| 3 | E | 103 | BCL | CHD-C1D-ND | -4.20 | 120.60 | 124.45 |
| 3 | U | 102 | BCL | O2D-CGD-O1D | -4.18 | 115.67 | 123.84 |
| 3 | R | 101 | BCL | CHD-C1D-ND | -4.18 | 120.62 | 124.45 |
| 3 | K | 101 | BCL | O2D-CGD-O1D | -4.17 | 115.69 | 123.84 |
| 3 | D | 102 | BCL | CMB-C2B-C3B | 4.16 | 132.47 | 124.68 |
| 3 | Y | 103 | BCL | O2D-CGD-O1D | -4.16 | 115.71 | 123.84 |
| 3 | K | 101 | BCL | C1D-ND-C4D | -4.16 | 103.38 | 106.33 |
| 3 | T | 101 | BCL | C1-C2-C3 | -4.16 | 118.86 | 126.04 |
| 3 | F | 101 | BCL | CHD-C4C-NC | 4.15 | 129.69 | 125.08 |
| 3 | W | 101 | BCL | O2D-CGD-O1D | -4.14 | 115.73 | 123.84 |
| 3 | G | 102 | BCL | CHD-C4C-NC | 4.14 | 129.68 | 125.08 |
| 3 | B | 101 | BCL | CHD-C1D-ND | -4.14 | 120.65 | 124.45 |
| 3 | Q | 101 | BCL | C1D-ND-C4D | -4.14 | 103.40 | 106.33 |
| 3 | U | 104 | BCL | CHD-C4C-NC | 4.13 | 129.66 | 125.08 |
| 3 | D | 102 | BCL | C4A-NA-C1A | 4.12 | 108.56 | 106.71 |
| 3 | 6 | 102 | BCL | CHD-C4C-NC | 4.12 | 129.66 | 125.08 |
| 3 | 2 | 101 | BCL | C4A-NA-C1A | 4.12 | 108.56 | 106.71 |
| 3 | I | 102 | BCL | C4A-NA-C1A | 4.09 | 108.55 | 106.71 |
| 3 | 1 | 103 | BCL | CMD-C2D-C1D | 4.09 | 131.92 | 124.71 |
| 3 | A | 102 | BCL | C1D-ND-C4D | -4.09 | 103.43 | 106.33 |
| 3 | X | 102 | BCL | CMB-C2B-C3B | 4.08 | 132.31 | 124.68 |
| 3 | F | 101 | BCL | O2D-CGD-O1D | -4.08 | 115.87 | 123.84 |
| 3 | D | 102 | BCL | O2D-CGD-O1D | -4.08 | 115.87 | 123.84 |
| 3 | N | 102 | BCL | CHD-C1D-ND | -4.08 | 120.71 | 124.45 |
| 3 | W | 101 | BCL | C1D-ND-C4D | -4.07 | 103.45 | 106.33 |
| 3 | I | 102 | BCL | O2D-CGD-O1D | -4.06 | 115.89 | 123.84 |
| 3 | U | 102 | BCL | CMB-C2B-C3B | 4.06 | 132.28 | 124.68 |
| 3 | 6 | 102 | BCL | CHD-C1D-ND | -4.05 | 120.73 | 124.45 |
| 3 | 5 | 102 | BCL | O2D-CGD-O1D | -4.04 | 115.94 | 123.84 |
| 3 | G | 102 | BCL | CHD-C1D-ND | -4.04 | 120.74 | 124.45 |
| 3 | Q | 101 | BCL | O2D-CGD-O1D | -4.03 | 115.96 | 123.84 |
| 3 | J | 103 | BCL | O2D-CGD-CBD | 4.02 | 118.42 | 111.27 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 4 | 101 | BCL | CHD-C4C-NC | 4.02 | 129.54 | 125.08 |
| 3 | J | 103 | BCL | CHD-C1D-ND | -4.01 | 120.77 | 124.45 |
| 3 | 3 | 101 | BCL | O2D-CGD-O1D | -4.00 | 116.01 | 123.84 |
| 3 | 4 | 101 | BCL | C4A-NA-C1A | 4.00 | 108.50 | 106.71 |
| 3 | N | 102 | BCL | C1C-NC-C4C | -3.99 | 104.91 | 106.71 |
| 3 | T | 101 | BCL | C4A-NA-C1A | 3.99 | 108.50 | 106.71 |
| 3 | 2 | 101 | BCL | C3D-C2D-C1D | -3.99 | 100.39 | 105.83 |
| 3 | 4 | 101 | BCL | O2D-CGD-CBD | 3.98 | 118.34 | 111.27 |
| 3 | E | 103 | BCL | CHD-C4C-NC | 3.97 | 129.49 | 125.08 |
| 3 | I | 102 | BCL | CMB-C2B-C3B | 3.95 | 132.07 | 124.68 |
| 3 | J | 103 | BCL | CHD-C4C-NC | 3.94 | 129.45 | 125.08 |
| 3 | S | 102 | BCL | C4A-NA-C1A | 3.94 | 108.48 | 106.71 |
| 3 | F | 101 | BCL | CMB-C2B-C3B | 3.94 | 132.05 | 124.68 |
| 3 | R | 101 | BCL | O2D-CGD-CBD | 3.94 | 118.27 | 111.27 |
| 3 | 7 | 102 | BCL | O2D-CGD-O1D | -3.93 | 116.16 | 123.84 |
| 3 | E | 103 | BCL | C1D-ND-C4D | -3.90 | 103.56 | 106.33 |
| 3 | 8 | 101 | BCL | CHD-C4C-NC | 3.90 | 129.41 | 125.08 |
| 3 | B | 101 | BCL | CHD-C4C-NC | 3.90 | 129.41 | 125.08 |
| 3 | 5 | 102 | BCL | C1D-ND-C4D | -3.89 | 103.57 | 106.33 |
| 3 | T | 101 | BCL | CHD-C4C-NC | 3.89 | 129.40 | 125.08 |
| 3 | 2 | 101 | BCL | CHD-C4C-NC | 3.89 | 129.40 | 125.08 |
| 3 | U | 104 | BCL | C1D-ND-C4D | -3.88 | 103.58 | 106.33 |
| 3 | 4 | 101 | BCL | C1D-ND-C4D | -3.87 | 103.59 | 106.33 |
| 3 | U | 104 | BCL | O2D-CGD-CBD | 3.86 | 118.13 | 111.27 |
| 3 | 7 | 102 | BCL | C1D-ND-C4D | -3.84 | 103.61 | 106.33 |
| 3 | N | 102 | BCL | CHD-C4C-NC | 3.84 | 129.34 | 125.08 |
| 3 | I | 102 | BCL | C1D-ND-C4D | -3.82 | 103.62 | 106.33 |
| 3 | R | 101 | BCL | C4A-NA-C1A | 3.82 | 108.42 | 106.71 |
| 3 | O | 101 | BCL | O2D-CGD-O1D | -3.82 | 116.37 | 123.84 |
| 3 | P | 101 | BCL | C1D-ND-C4D | -3.81 | 103.63 | 106.33 |
| 3 | R | 101 | BCL | C1D-ND-C4D | -3.81 | 103.63 | 106.33 |
| 3 | 1 | 103 | BCL | C3D-C2D-C1D | -3.81 | 100.63 | 105.83 |
| 3 | T | 101 | BCL | CHD-C1D-ND | -3.80 | 120.96 | 124.45 |
| 3 | 3 | 101 | BCL | C1D-ND-C4D | -3.80 | 103.64 | 106.33 |
| 3 | Y | 103 | BCL | CMB-C2B-C3B | 3.79 | 131.78 | 124.68 |
| 3 | S | 102 | BCL | O2D-CGD-O1D | -3.77 | 116.47 | 123.84 |
| 3 | P | 101 | BCL | C4-C3-C5 | 3.77 | 121.61 | 115.27 |
| 3 | X | 102 | BCL | C1D-ND-C4D | -3.77 | 103.66 | 106.33 |
| 3 | X | 102 | BCL | CMD-C2D-C1D | 3.76 | 131.34 | 124.71 |
| 3 | B | 101 | BCL | C1D-ND-C4D | -3.76 | 103.67 | 106.33 |
| 3 | G | 102 | BCL | CMD-C2D-C1D | 3.75 | 131.33 | 124.71 |
| 3 | D | 102 | BCL | C1D-ND-C4D | -3.75 | 103.67 | 106.33 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 6 | 102 | BCL | C4A-NA-C1A | 3.74 | 108.39 | 106.71 |
| 3 | Y | 103 | BCL | C1D-ND-C4D | -3.74 | 103.68 | 106.33 |
| 3 | U | 104 | BCL | C4A-NA-C1A | 3.73 | 108.39 | 106.71 |
| 3 | E | 103 | BCL | C4A-NA-C1A | 3.72 | 108.38 | 106.71 |
| 3 | U | 102 | BCL | C1C-NC-C4C | -3.72 | 105.03 | 106.71 |
| 3 | X | 102 | BCL | C1C-NC-C4C | -3.70 | 105.04 | 106.71 |
| 3 | U | 102 | BCL | C1D-ND-C4D | -3.70 | 103.71 | 106.33 |
| 3 | 5 | 102 | BCL | C4A-NA-C1A | 3.69 | 108.37 | 106.71 |
| 3 | Y | 103 | BCL | C1C-NC-C4C | -3.67 | 105.06 | 106.71 |
| 3 | F | 101 | BCL | C1C-NC-C4C | -3.66 | 105.06 | 106.71 |
| 6 | 1 | 102 | CRT | C25-C23-C22 | 3.65 | 124.55 | 118.94 |
| 3 | T | 101 | BCL | C1D-ND-C4D | -3.64 | 103.75 | 106.33 |
| 6 | 1 | 102 | CRT | C24-C23-C22 | -3.64 | 117.82 | 122.92 |
| 3 | S | 102 | BCL | C1D-ND-C4D | -3.60 | 103.78 | 106.33 |
| 3 | B | 101 | BCL | O2D-CGD-CBD | 3.60 | 117.66 | 111.27 |
| 3 | F | 101 | BCL | C1D-ND-C4D | -3.59 | 103.79 | 106.33 |
| 3 | N | 102 | BCL | O2A-CGA-CBA | 3.57 | 123.11 | 111.91 |
| 3 | E | 103 | BCL | O2D-CGD-CBD | 3.55 | 117.57 | 111.27 |
| 3 | S | 102 | BCL | C1C-NC-C4C | -3.54 | 105.11 | 106.71 |
| 3 | J | 103 | BCL | C4A-NA-C1A | 3.53 | 108.29 | 106.71 |
| 3 | D | 102 | BCL | C1C-NC-C4C | -3.52 | 105.12 | 106.71 |
| 3 | 6 | 102 | BCL | C1D-ND-C4D | -3.51 | 103.84 | 106.33 |
| 3 | B | 101 | BCL | CMD-C2D-C1D | 3.50 | 130.88 | 124.71 |
| 3 | G | 102 | BCL | C1D-ND-C4D | -3.49 | 103.86 | 106.33 |
| 3 | 6 | 102 | BCL | O2A-CGA-CBA | 3.46 | 122.78 | 111.91 |
| 6 | U | 101 | CRT | C24-C23-C22 | -3.46 | 118.08 | 122.92 |
| 3 | 8 | 101 | BCL | C1D-ND-C4D | -3.45 | 103.88 | 106.33 |
| 3 | G | 102 | BCL | O2D-CGD-CBD | 3.44 | 117.39 | 111.27 |
| 3 | 4 | 101 | BCL | CMD-C2D-C1D | 3.42 | 130.75 | 124.71 |
| 3 | 2 | 101 | BCL | C1D-ND-C4D | -3.42 | 103.91 | 106.33 |
| 6 | V | 101 | CRT | C24-C23-C22 | -3.42 | 118.14 | 122.92 |
| 3 | 8 | 101 | BCL | O2A-CGA-CBA | 3.41 | 122.62 | 111.91 |
| 3 | P | 101 | BCL | CMD-C2D-C1D | 3.41 | 130.73 | 124.71 |
| 6 | N | 101 | CRT | C24-C23-C22 | -3.41 | 118.15 | 122.92 |
| 6 | E | 101 | CRT | C24-C23-C22 | -3.40 | 118.16 | 122.92 |
| 3 | N | 102 | BCL | C1D-ND-C4D | -3.40 | 103.92 | 106.33 |
| 3 | T | 101 | BCL | O2A-CGA-CBA | 3.40 | 122.57 | 111.91 |
| 3 | I | 102 | BCL | C1C-NC-C4C | -3.40 | 105.18 | 106.71 |
| 6 | 3 | 103 | CRT | C24-C23-C22 | -3.39 | 118.17 | 122.92 |
| 6 | 7 | 101 | CRT | C24-C23-C22 | -3.38 | 118.19 | 122.92 |
| 6 | 5 | 101 | CRT | C24-C23-C22 | -3.36 | 118.21 | 122.92 |
| 6 | I | 101 | CRT | C24-C23-C22 | -3.36 | 118.21 | 122.92 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | Y | 101 | CRT | C24-C23-C22 | -3.35 | 118.22 | 122.92 |
| 3 | J | 103 | BCL | C1D-ND-C4D | -3.35 | 103.95 | 106.33 |
| 6 | J | 101 | CRT | C24-C23-C22 | -3.35 | 118.24 | 122.92 |
| 6 | V | 101 | CRT | C8-C7-C9 | -3.34 | 118.25 | 122.92 |
| 6 | S | 101 | CRT | C24-C23-C22 | -3.34 | 118.25 | 122.92 |
| 6 | A | 101 | CRT | C24-C23-C22 | -3.33 | 118.25 | 122.92 |
| 6 | K | 103 | CRT | C24-C23-C22 | -3.32 | 118.27 | 122.92 |
| 3 | T | 101 | BCL | C4-C3-C5 | 3.32 | 120.86 | 115.27 |
| 6 | D | 101 | CRT | C24-C23-C22 | -3.32 | 118.28 | 122.92 |
| 6 | U | 101 | CRT | C8-C7-C9 | -3.31 | 118.28 | 122.92 |
| 6 | E | 101 | CRT | C8-C7-C9 | -3.31 | 118.28 | 122.92 |
| 6 | N | 101 | CRT | C8-C7-C9 | -3.31 | 118.29 | 122.92 |
| 3 | R | 101 | BCL | CMD-C2D-C1D | 3.31 | 130.54 | 124.71 |
| 6 | J | 101 | CRT | C8-C7-C9 | -3.29 | 118.31 | 122.92 |
| 3 | N | 102 | BCL | CMD-C2D-C1D | 3.25 | 130.44 | 124.71 |
| 3 | N | 102 | BCL | O2D-CGD-O1D | -3.25 | 117.49 | 123.84 |
| 6 | E | 101 | CRT | C34-C33-C32 | -3.24 | 118.38 | 122.92 |
| 6 | 5 | 101 | CRT | C34-C33-C32 | -3.24 | 118.39 | 122.92 |
| 3 | Z | 101 | BCL | O2A-CGA-CBA | 3.23 | 122.06 | 111.91 |
| 6 | I | 101 | CRT | C34-C33-C32 | -3.23 | 118.40 | 122.92 |
| 3 | F | 101 | BCL | C4A-NA-C1A | 3.22 | 108.15 | 106.71 |
| 6 | 7 | 101 | CRT | C34-C33-C32 | -3.22 | 118.42 | 122.92 |
| 3 | 2 | 101 | BCL | C1D-CHD-C4C | -3.21 | 118.88 | 126.62 |
| 3 | G | 102 | BCL | O2A-CGA-CBA | 3.21 | 121.97 | 111.91 |
| 6 | U | 101 | CRT | C25-C23-C22 | 3.21 | 123.86 | 118.94 |
| 6 | D | 101 | CRT | C34-C33-C32 | -3.21 | 118.43 | 122.92 |
| 3 | 7 | 102 | BCL | C1C-NC-C4C | -3.20 | 105.27 | 106.71 |
| 6 | S | 101 | CRT | C34-C33-C32 | -3.20 | 118.44 | 122.92 |
| 6 | K | 103 | CRT | C8-C7-C9 | -3.20 | 118.44 | 122.92 |
| 6 | 3 | 103 | CRT | C34-C33-C32 | -3.18 | 118.46 | 122.92 |
| 6 | Y | 101 | CRT | C8-C7-C9 | -3.18 | 118.46 | 122.92 |
| 6 | 3 | 103 | CRT | C8-C7-C9 | -3.18 | 118.47 | 122.92 |
| 6 | S | 101 | CRT | C8-C7-C9 | -3.17 | 118.48 | 122.92 |
| 6 | U | 101 | CRT | C34-C33-C32 | -3.17 | 118.49 | 122.92 |
| 6 | D | 101 | CRT | C8-C7-C9 | -3.17 | 118.49 | 122.92 |
| 3 | N | 102 | BCL | C1-C2-C3 | -3.16 | 120.57 | 126.04 |
| 6 | N | 101 | CRT | C25-C23-C22 | 3.16 | 123.79 | 118.94 |
| 3 | 1 | 103 | BCL | C3D-C4D-ND | 3.16 | 115.34 | 110.24 |
| 6 | E | 101 | CRT | C25-C23-C22 | 3.16 | 123.78 | 118.94 |
| 6 | E | 101 | CRT | C29-C28-C27 | -3.15 | 118.50 | 122.92 |
| 6 | V | 101 | CRT | C25-C23-C22 | 3.14 | 123.76 | 118.94 |
| 3 | B | 101 | BCL | O2A-CGA-CBA | 3.14 | 121.77 | 111.91 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 1 | 103 | BCL | C3C-C4C-CHD | -3.14 | 116.69 | 123.39 |
| 6 | 7 | 101 | CRT | C8-C7-C9 | -3.14 | 118.53 | 122.92 |
| 6 | Y | 101 | CRT | C34-C33-C32 | -3.13 | 118.54 | 122.92 |
| 6 | 5 | 101 | CRT | C8-C7-C9 | -3.13 | 118.55 | 122.92 |
| 6 | A | 101 | CRT | C8-C7-C9 | -3.12 | 118.55 | 122.92 |
| 3 | 2 | 101 | BCL | CHD-C1D-ND | -3.12 | 121.59 | 124.45 |
| 3 | U | 104 | BCL | CMD-C2D-C1D | 3.12 | 130.21 | 124.71 |
| 6 | I | 101 | CRT | C8-C7-C9 | -3.12 | 118.56 | 122.92 |
| 3 | 6 | 102 | BCL | CMD-C2D-C1D | 3.12 | 130.21 | 124.71 |
| 3 | B | 101 | BCL | C1-C2-C3 | -3.11 | 120.66 | 126.04 |
| 6 | 3 | 103 | CRT | C25-C23-C22 | 3.11 | 123.72 | 118.94 |
| 3 | N | 102 | BCL | C4A-NA-C1A | 3.10 | 108.10 | 106.71 |
| 6 | D | 101 | CRT | C29-C28-C27 | -3.10 | 118.58 | 122.92 |
| 6 | U | 101 | CRT | C29-C28-C27 | -3.10 | 118.58 | 122.92 |
| 3 | 6 | 102 | BCL | C1-C2-C3 | -3.09 | 120.70 | 126.04 |
| 6 | I | 101 | CRT | C29-C28-C27 | -3.08 | 118.61 | 122.92 |
| 6 | 7 | 101 | CRT | C25-C23-C22 | 3.08 | 123.67 | 118.94 |
| 6 | J | 101 | CRT | C25-C23-C22 | 3.08 | 123.67 | 118.94 |
| 3 | O | 101 | BCL | C3D-C4D-ND | 3.08 | 115.22 | 110.24 |
| 3 | E | 103 | BCL | CMD-C2D-C1D | 3.08 | 130.13 | 124.71 |
| 6 | S | 101 | CRT | C29-C28-C27 | -3.08 | 118.61 | 122.92 |
| 3 | 2 | 101 | BCL | O2A-CGA-CBA | 3.08 | 121.56 | 111.91 |
| 3 | Z | 101 | BCL | CMB-C2B-C1B | -3.07 | 123.74 | 128.46 |
| 3 | T | 101 | BCL | CMD-C2D-C1D | 3.07 | 130.13 | 124.71 |
| 3 | 5 | 102 | BCL | C3D-C4D-ND | 3.07 | 115.20 | 110.24 |
| 3 | 2 | 101 | BCL | O2D-CGD-CBD | 3.06 | 116.70 | 111.27 |
| 6 | 7 | 101 | CRT | C29-C28-C27 | -3.06 | 118.64 | 122.92 |
| 6 | V | 101 | CRT | C29-C28-C27 | -3.06 | 118.64 | 122.92 |
| 6 | N | 101 | CRT | C34-C33-C32 | -3.05 | 118.65 | 122.92 |
| 6 | Y | 101 | CRT | C25-C23-C22 | 3.05 | 123.62 | 118.94 |
| 6 | K | 103 | CRT | C25-C23-C22 | 3.04 | 123.61 | 118.94 |
| 3 | 1 | 103 | BCL | C1-C2-C3 | -3.04 | 120.78 | 126.04 |
| 3 | 2 | 101 | BCL | CMB-C2B-C1B | -3.04 | 123.79 | 128.46 |
| 6 | 5 | 101 | CRT | C25-C23-C22 | 3.04 | 123.61 | 118.94 |
| 3 | 6 | 102 | BCL | C1D-CHD-C4C | -3.04 | 119.28 | 126.62 |
| 3 | K | 101 | BCL | C3D-C4D-ND | 3.04 | 115.15 | 110.24 |
| 3 | T | 101 | BCL | C1D-CHD-C4C | -3.04 | 119.30 | 126.62 |
| 6 | A | 101 | CRT | C25-C23-C22 | 3.03 | 123.60 | 118.94 |
| 6 | I | 101 | CRT | C25-C23-C22 | 3.03 | 123.60 | 118.94 |
| 6 | K | 103 | CRT | C34-C33-C32 | -3.03 | 118.68 | 122.92 |
| 3 | R | 101 | BCL | O2A-CGA-CBA | 3.03 | 121.40 | 111.91 |
| 3 | 3 | 101 | BCL | C1C-NC-C4C | -3.03 | 105.35 | 106.71 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | N | 101 | CRT | C29-C28-C27 | -3.02 | 118.69 | 122.92 |
| 6 | 3 | 103 | CRT | C29-C28-C27 | -3.02 | 118.69 | 122.92 |
| 6 | J | 101 | CRT | C34-C33-C32 | -3.02 | 118.70 | 122.92 |
| 3 | D | 102 | BCL | CBA-CAA-C2A | -3.02 | 104.96 | 113.86 |
| 6 | S | 101 | CRT | C25-C23-C22 | 3.01 | 123.56 | 118.94 |
| 6 | 5 | 101 | CRT | C29-C28-C27 | -3.01 | 118.70 | 122.92 |
| 6 | Y | 101 | CRT | C29-C28-C27 | -3.01 | 118.70 | 122.92 |
| 6 | V | 101 | CRT | C34-C33-C32 | -3.00 | 118.72 | 122.92 |
| 3 | K | 101 | BCL | C4A-NA-C1A | 3.00 | 108.06 | 106.71 |
| 3 | D | 102 | BCL | C3D-C4D-ND | 3.00 | 115.09 | 110.24 |
| 3 | 8 | 101 | BCL | CMD-C2D-C1D | 3.00 | 130.00 | 124.71 |
| 6 | D | 101 | CRT | C25-C23-C22 | 3.00 | 123.54 | 118.94 |
| 6 | J | 101 | CRT | C29-C28-C27 | -3.00 | 118.72 | 122.92 |
| 3 | Q | 101 | BCL | C3D-C4D-ND | 3.00 | 115.08 | 110.24 |
| 3 | G | 102 | BCL | C1D-CHD-C4C | -2.99 | 119.41 | 126.62 |
| 3 | J | 103 | BCL | O2D-CGD-O1D | -2.99 | 117.99 | 123.84 |
| 6 | A | 101 | CRT | C34-C33-C32 | -2.99 | 118.73 | 122.92 |
| 3 | 4 | 101 | BCL | O2A-CGA-CBA | 2.98 | 121.27 | 111.91 |
| 3 | 8 | 101 | BCL | O2D-CGD-CBD | 2.98 | 116.56 | 111.27 |
| 3 | E | 103 | BCL | C1D-CHD-C4C | -2.98 | 119.44 | 126.62 |
| 6 | K | 103 | CRT | C29-C28-C27 | -2.98 | 118.75 | 122.92 |
| 3 | B | 101 | BCL | C1D-CHD-C4C | -2.98 | 119.44 | 126.62 |
| 3 | 7 | 102 | BCL | C3D-C4D-ND | 2.97 | 115.04 | 110.24 |
| 3 | R | 101 | BCL | CMB-C2B-C1B | -2.97 | 123.90 | 128.46 |
| 3 | 7 | 102 | BCL | C1-C2-C3 | -2.97 | 120.91 | 126.04 |
| 3 | J | 103 | BCL | O2A-CGA-CBA | 2.96 | 121.19 | 111.91 |
| 3 | X | 102 | BCL | O2A-CGA-CBA | 2.96 | 121.19 | 111.91 |
| 3 | A | 102 | BCL | C3D-C4D-ND | 2.95 | 115.02 | 110.24 |
| 3 | 3 | 101 | BCL | C3D-C4D-ND | 2.95 | 115.02 | 110.24 |
| 3 | Z | 101 | BCL | C1D-CHD-C4C | -2.95 | 119.50 | 126.62 |
| 3 | J | 103 | BCL | CMB-C2B-C1B | -2.95 | 123.93 | 128.46 |
| 6 | A | 101 | CRT | C29-C28-C27 | -2.95 | 118.80 | 122.92 |
| 3 | 6 | 102 | BCL | CMB-C2B-C1B | -2.95 | 123.94 | 128.46 |
| 3 | 8 | 101 | BCL | C1D-CHD-C4C | -2.95 | 119.52 | 126.62 |
| 3 | W | 101 | BCL | C3D-C4D-ND | 2.94 | 115.00 | 110.24 |
| 3 | P | 101 | BCL | C1D-CHD-C4C | -2.94 | 119.52 | 126.62 |
| 3 | 5 | 102 | BCL | CBA-CAA-C2A | -2.94 | 105.18 | 113.86 |
| 3 | X | 102 | BCL | C4A-NA-C1A | 2.94 | 108.03 | 106.71 |
| 3 | R | 101 | BCL | C1D-CHD-C4C | -2.93 | 119.55 | 126.62 |
| 3 | J | 103 | BCL | C1D-CHD-C4C | -2.93 | 119.56 | 126.62 |
| 3 | 4 | 101 | BCL | C1D-CHD-C4C | -2.92 | 119.57 | 126.62 |
| 3 | P | 101 | BCL | O2A-CGA-CBA | 2.92 | 121.08 | 111.91 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | Q | 101 | BCL | C1-C2-C3 | -2.92 | 120.99 | 126.04 |
| 3 | P | 101 | BCL | CMB-C2B-C1B | -2.91 | 123.99 | 128.46 |
| 6 | U | 101 | CRT | C6-C7-C9 | 2.91 | 123.41 | 118.94 |
| 3 | I | 102 | BCL | C3D-C4D-ND | 2.91 | 114.94 | 110.24 |
| 3 | N | 102 | BCL | C1D-CHD-C4C | -2.90 | 119.61 | 126.62 |
| 3 | S | 102 | BCL | C3D-C4D-ND | 2.90 | 114.94 | 110.24 |
| 3 | J | 103 | BCL | CMD-C2D-C1D | 2.90 | 129.83 | 124.71 |
| 3 | U | 102 | BCL | C3D-C4D-ND | 2.90 | 114.93 | 110.24 |
| 6 | 1 | 102 | CRT | C30-C28-C27 | 2.89 | 123.38 | 118.94 |
| 6 | V | 101 | CRT | C6-C7-C9 | 2.89 | 123.38 | 118.94 |
| 6 | J | 101 | CRT | C6-C7-C9 | 2.89 | 123.38 | 118.94 |
| 6 | V | 101 | CRT | C13-C12-C14 | -2.89 | 118.88 | 122.92 |
| 6 | U | 101 | CRT | C13-C12-C14 | -2.88 | 118.88 | 122.92 |
| 6 | J | 101 | CRT | C13-C12-C14 | -2.88 | 118.88 | 122.92 |
| 3 | 1 | 103 | BCL | C1D-ND-C4D | -2.88 | 104.29 | 106.33 |
| 3 | Y | 103 | BCL | C3D-C4D-ND | 2.87 | 114.89 | 110.24 |
| 6 | N | 101 | CRT | C13-C12-C14 | -2.87 | 118.90 | 122.92 |
| 3 | 7 | 102 | BCL | C4A-NA-C1A | 2.87 | 108.00 | 106.71 |
| 3 | Z | 101 | BCL | C4-C3-C5 | 2.87 | 120.09 | 115.27 |
| 6 | N | 101 | CRT | C6-C7-C9 | 2.86 | 123.33 | 118.94 |
| 6 | E | 101 | CRT | C13-C12-C14 | -2.86 | 118.91 | 122.92 |
| 3 | 5 | 102 | BCL | C1C-NC-C4C | -2.86 | 105.42 | 106.71 |
| 3 | E | 103 | BCL | CMB-C2B-C1B | -2.86 | 124.07 | 128.46 |
| 6 | E | 101 | CRT | C6-C7-C9 | 2.86 | 123.32 | 118.94 |
| 3 | E | 103 | BCL | O2A-CGA-CBA | 2.86 | 120.87 | 111.91 |
| 6 | 1 | 102 | CRT | C6-C7-C9 | 2.85 | 123.32 | 118.94 |
| 3 | Q | 101 | BCL | C4A-NA-C1A | 2.85 | 107.99 | 106.71 |
| 3 | K | 101 | BCL | CBA-CAA-C2A | -2.85 | 105.46 | 113.86 |
| 6 | 1 | 102 | CRT | C29-C28-C27 | -2.84 | 118.94 | 122.92 |
| 3 | E | 103 | BCL | C7-C6-C5 | -2.84 | 105.65 | 113.36 |
| 6 | 1 | 102 | CRT | C18-C17-C19 | -2.84 | 118.95 | 122.92 |
| 3 | X | 102 | BCL | C1D-CHD-C4C | -2.83 | 119.79 | 126.62 |
| 3 | U | 104 | BCL | O2A-CGA-CBA | 2.83 | 120.79 | 111.91 |
| 3 | P | 101 | BCL | CED-O2D-CGD | 2.83 | 122.33 | 115.94 |
| 3 | R | 101 | BCL | O2D-CGD-O1D | -2.83 | 118.31 | 123.84 |
| 3 | N | 102 | BCL | CMB-C2B-C1B | -2.83 | 124.12 | 128.46 |
| 6 | E | 101 | CRT | C35-C33-C32 | 2.82 | 123.27 | 118.94 |
| 3 | U | 104 | BCL | C1D-CHD-C4C | -2.82 | 119.82 | 126.62 |
| 3 | T | 101 | BCL | CED-O2D-CGD | 2.81 | 122.30 | 115.94 |
| 3 | U | 104 | BCL | C4-C3-C5 | 2.81 | 120.00 | 115.27 |
| 6 | 3 | 103 | CRT | C13-C12-C14 | -2.81 | 118.99 | 122.92 |
| 3 | F | 101 | BCL | C3D-C4D-ND | 2.81 | 114.78 | 110.24 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | 1 | 102 | CRT | C8-C7-C9 | -2.81 | 118.99 | 122.92 |
| 3 | W | 101 | BCL | C4A-NA-C1A | 2.80 | 107.97 | 106.71 |
| 6 | 5 | 101 | CRT | C13-C12-C14 | -2.80 | 119.00 | 122.92 |
| 3 | Z | 101 | BCL | CED-O2D-CGD | 2.80 | 122.26 | 115.94 |
| 6 | S | 101 | CRT | C13-C12-C14 | -2.79 | 119.01 | 122.92 |
| 3 | P | 101 | BCL | O2D-CGD-CBD | 2.79 | 116.22 | 111.27 |
| 6 | 7 | 101 | CRT | C13-C12-C14 | -2.79 | 119.02 | 122.92 |
| 6 | 1 | 102 | CRT | C35-C33-C32 | 2.77 | 123.20 | 118.94 |
| 6 | D | 101 | CRT | C13-C12-C14 | -2.77 | 119.04 | 122.92 |
| 3 | U | 104 | BCL | CED-O2D-CGD | 2.77 | 122.20 | 115.94 |
| 6 | S | 101 | CRT | C18-C17-C19 | -2.76 | 119.05 | 122.92 |
| 6 | Y | 101 | CRT | C13-C12-C14 | -2.76 | 119.05 | 122.92 |
| 6 | I | 101 | CRT | C35-C33-C32 | 2.76 | 123.18 | 118.94 |
| 3 | 8 | 101 | BCL | CHB-C4A-NA | 2.76 | 128.33 | 124.51 |
| 6 | A | 101 | CRT | C13-C12-C14 | -2.76 | 119.06 | 122.92 |
| 6 | 5 | 101 | CRT | C35-C33-C32 | 2.75 | 123.17 | 118.94 |
| 6 | 1 | 102 | CRT | C34-C33-C32 | -2.75 | 119.08 | 122.92 |
| 3 | 2 | 101 | BCL | C4-C3-C5 | 2.75 | 119.89 | 115.27 |
| 6 | E | 101 | CRT | C18-C17-C19 | -2.74 | 119.08 | 122.92 |
| 3 | 4 | 101 | BCL | CED-O2D-CGD | 2.74 | 122.13 | 115.94 |
| 6 | K | 103 | CRT | C18-C17-C19 | -2.74 | 119.09 | 122.92 |
| 6 | K | 103 | CRT | C13-C12-C14 | -2.73 | 119.10 | 122.92 |
| 6 | I | 101 | CRT | C13-C12-C14 | -2.73 | 119.10 | 122.92 |
| 3 | G | 102 | BCL | C1-O2A-CGA | 2.73 | 123.59 | 116.44 |
| 6 | A | 101 | CRT | C18-C17-C19 | -2.72 | 119.11 | 122.92 |
| 6 | 7 | 101 | CRT | C35-C33-C32 | 2.72 | 123.12 | 118.94 |
| 6 | S | 101 | CRT | C35-C33-C32 | 2.72 | 123.12 | 118.94 |
| 6 | I | 101 | CRT | C18-C17-C19 | -2.72 | 119.11 | 122.92 |
| 3 | D | 102 | BCL | C1D-CHD-C4C | -2.72 | 120.06 | 126.62 |
| 6 | J | 101 | CRT | C18-C17-C19 | -2.72 | 119.12 | 122.92 |
| 3 | 6 | 102 | BCL | CED-O2D-CGD | 2.71 | 122.08 | 115.94 |
| 3 | G | 102 | BCL | C1-C2-C3 | -2.71 | 121.35 | 126.04 |
| 6 | V | 101 | CRT | C18-C17-C19 | -2.71 | 119.12 | 122.92 |
| 6 | D | 101 | CRT | C35-C33-C32 | 2.71 | 123.10 | 118.94 |
| 6 | N | 101 | CRT | C18-C17-C19 | -2.71 | 119.13 | 122.92 |
| 6 | U | 101 | CRT | C35-C33-C32 | 2.71 | 123.09 | 118.94 |
| 3 | 8 | 101 | BCL | CED-O2D-CGD | 2.70 | 122.05 | 115.94 |
| 6 | D | 101 | CRT | C18-C17-C19 | -2.70 | 119.14 | 122.92 |
| 6 | U | 101 | CRT | C18-C17-C19 | -2.70 | 119.14 | 122.92 |
| 3 | 1 | 103 | BCL | C1D-CHD-C4C | -2.70 | 120.11 | 126.62 |
| 3 | E | 103 | BCL | C1-O2A-CGA | 2.70 | 123.53 | 116.44 |
| 3 | O | 101 | BCL | C4A-NA-C1A | 2.69 | 107.92 | 106.71 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | S | 102 | BCL | C1D-CHD-C4C | -2.69 | 120.13 | 126.62 |
| 3 | U | 102 | BCL | C1D-CHD-C4C | -2.69 | 120.14 | 126.62 |
| 3 | Q | 101 | BCL | C1C-NC-C4C | -2.68 | 105.50 | 106.71 |
| 6 | 5 | 101 | CRT | C18-C17-C19 | -2.68 | 119.17 | 122.92 |
| 6 | K | 103 | CRT | C6-C7-C9 | 2.68 | 123.05 | 118.94 |
| 6 | 7 | 101 | CRT | C18-C17-C19 | -2.68 | 119.17 | 122.92 |
| 3 | E | 103 | BCL | O2D-CGD-O1D | -2.68 | 118.61 | 123.84 |
| 6 | E | 101 | CRT | C30-C28-C27 | 2.67 | 123.04 | 118.94 |
| 3 | U | 104 | BCL | C3D-C4D-ND | 2.67 | 114.56 | 110.24 |
| 3 | 8 | 101 | BCL | C1-C2-C3 | -2.67 | 121.43 | 126.04 |
| 6 | 1 | 102 | CRT | C15-C14-C12 | 2.67 | 131.11 | 127.31 |
| 6 | Y | 101 | CRT | C18-C17-C19 | -2.66 | 119.19 | 122.92 |
| 3 | 6 | 102 | BCL | C1-O2A-CGA | 2.66 | 123.42 | 116.44 |
| 6 | 1 | 102 | CRT | C20-C19-C17 | 2.66 | 131.10 | 127.31 |
| 3 | E | 103 | BCL | C3D-C4D-ND | 2.65 | 114.53 | 110.24 |
| 6 | 3 | 103 | CRT | C18-C17-C19 | -2.65 | 119.21 | 122.92 |
| 6 | 3 | 103 | CRT | C35-C33-C32 | 2.65 | 123.01 | 118.94 |
| 3 | F | 101 | BCL | C1D-CHD-C4C | -2.65 | 120.23 | 126.62 |
| 6 | 3 | 103 | CRT | C6-C7-C9 | 2.65 | 123.00 | 118.94 |
| 6 | Y | 101 | CRT | C6-C7-C9 | 2.64 | 123.00 | 118.94 |
| 3 | Z | 101 | BCL | CHC-C1C-NC | 2.64 | 128.16 | 124.51 |
| 3 | 4 | 101 | BCL | C3D-C4D-ND | 2.64 | 114.51 | 110.24 |
| 6 | S | 101 | CRT | C6-C7-C9 | 2.64 | 122.98 | 118.94 |
| 3 | 5 | 102 | BCL | C1D-CHD-C4C | -2.64 | 120.26 | 126.62 |
| 3 | X | 102 | BCL | C3D-C4D-ND | 2.63 | 114.49 | 110.24 |
| 3 | J | 103 | BCL | C1-O2A-CGA | 2.63 | 123.34 | 116.44 |
| 3 | I | 102 | BCL | C1D-CHD-C4C | -2.63 | 120.28 | 126.62 |
| 6 | 1 | 102 | CRT | C13-C12-C14 | -2.62 | 119.25 | 122.92 |
| 3 | Y | 103 | BCL | C1D-CHD-C4C | -2.62 | 120.29 | 126.62 |
| 3 | 1 | 103 | BCL | CHD-C4C-NC | 2.62 | 127.99 | 125.08 |
| 3 | R | 101 | BCL | C3D-C4D-ND | 2.62 | 114.48 | 110.24 |
| 6 | U | 101 | CRT | C30-C28-C27 | 2.62 | 122.96 | 118.94 |
| 3 | Z | 101 | BCL | O1D-CGD-CBD | -2.62 | 119.13 | 124.48 |
| 3 | Y | 103 | BCL | C1-C2-C3 | -2.62 | 121.52 | 126.04 |
| 3 | O | 101 | BCL | C1C-NC-C4C | -2.61 | 105.53 | 106.71 |
| 3 | W | 101 | BCL | C1D-CHD-C4C | -2.60 | 120.34 | 126.62 |
| 6 | Y | 101 | CRT | C35-C33-C32 | 2.60 | 122.93 | 118.94 |
| 3 | 2 | 101 | BCL | C3D-C4D-ND | 2.60 | 114.44 | 110.24 |
| 3 | B | 101 | BCL | CHB-C4A-NA | 2.60 | 128.10 | 124.51 |
| 3 | Z | 101 | BCL | C3D-C4D-ND | 2.59 | 114.43 | 110.24 |
| 3 | K | 101 | BCL | C11-C12-C13 | -2.59 | 107.54 | 115.92 |
| 3 | P | 101 | BCL | C3D-C4D-ND | 2.59 | 114.42 | 110.24 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | A | 101 | CRT | C6-C7-C9 | 2.59 | 122.91 | 118.94 |
| 3 | 4 | 101 | BCL | C1-O2A-CGA | 2.59 | 123.23 | 116.44 |
| 3 | B | 101 | BCL | C1-O2A-CGA | 2.59 | 123.23 | 116.44 |
| 6 | D | 101 | CRT | C6-C7-C9 | 2.59 | 122.91 | 118.94 |
| 6 | S | 101 | CRT | C30-C28-C27 | 2.58 | 122.91 | 118.94 |
| 6 | I | 101 | CRT | C30-C28-C27 | 2.58 | 122.90 | 118.94 |
| 3 | N | 102 | BCL | C4D-CHA-C1A | -2.58 | 118.11 | 121.25 |
| 3 | X | 102 | BCL | CED-O2D-CGD | 2.58 | 121.76 | 115.94 |
| 3 | G | 102 | BCL | C4D-CHA-C1A | -2.57 | 118.12 | 121.25 |
| 6 | 7 | 101 | CRT | C6-C7-C9 | 2.57 | 122.89 | 118.94 |
| 3 | O | 101 | BCL | C1D-CHD-C4C | -2.57 | 120.42 | 126.62 |
| 6 | 5 | 101 | CRT | C6-C7-C9 | 2.57 | 122.88 | 118.94 |
| 6 | 7 | 101 | CRT | C30-C28-C27 | 2.56 | 122.88 | 118.94 |
| 3 | N | 102 | BCL | C1-O2A-CGA | 2.56 | 123.16 | 116.44 |
| 3 | 2 | 101 | BCL | CED-O2D-CGD | 2.56 | 121.73 | 115.94 |
| 6 | I | 101 | CRT | C6-C7-C9 | 2.56 | 122.87 | 118.94 |
| 3 | 4 | 101 | BCL | CMB-C2B-C1B | -2.56 | 124.53 | 128.46 |
| 3 | 4 | 101 | BCL | O2D-CGD-O1D | -2.56 | 118.84 | 123.84 |
| 3 | W | 101 | BCL | C1C-NC-C4C | -2.55 | 105.56 | 106.71 |
| 3 | I | 102 | BCL | CHB-C4A-NA | 2.55 | 128.04 | 124.51 |
| 3 | X | 102 | BCL | C4B-C3B-CAB | 2.55 | 132.04 | 127.13 |
| 3 | B | 101 | BCL | O2D-CGD-O1D | -2.54 | 118.87 | 123.84 |
| 3 | Q | 101 | BCL | C1D-CHD-C4C | -2.54 | 120.50 | 126.62 |
| 6 | D | 101 | CRT | C30-C28-C27 | 2.53 | 122.83 | 118.94 |
| 3 | B | 101 | BCL | CED-O2D-CGD | 2.53 | 121.65 | 115.94 |
| 3 | 7 | 102 | BCL | C1D-CHD-C4C | -2.52 | 120.53 | 126.62 |
| 6 | 5 | 101 | CRT | C30-C28-C27 | 2.52 | 122.81 | 118.94 |
| 3 | 1 | 103 | BCL | CBA-CAA-C2A | -2.52 | 106.41 | 113.86 |
| 3 | R | 101 | BCL | C1-O2A-CGA | 2.52 | 123.05 | 116.44 |
| 3 | X | 102 | BCL | CHC-C1C-NC | 2.52 | 127.99 | 124.51 |
| 3 | G | 102 | BCL | CHB-C4A-NA | 2.52 | 127.99 | 124.51 |
| 3 | A | 102 | BCL | C4A-NA-C1A | 2.52 | 107.84 | 106.71 |
| 3 | D | 102 | BCL | CHB-C4A-NA | 2.51 | 127.99 | 124.51 |
| 3 | U | 104 | BCL | C4D-CHA-C1A | -2.51 | 118.19 | 121.25 |
| 3 | X | 102 | BCL | C4-C3-C5 | 2.51 | 119.49 | 115.27 |
| 3 | G | 102 | BCL | O2D-CGD-O1D | -2.50 | 118.94 | 123.84 |
| 3 | T | 101 | BCL | O2D-CGD-CBD | 2.50 | 115.71 | 111.27 |
| 3 | 3 | 101 | BCL | C1D-CHD-C4C | -2.50 | 120.60 | 126.62 |
| 6 | Y | 101 | CRT | C30-C28-C27 | 2.49 | 122.77 | 118.94 |
| 3 | A | 102 | BCL | C1D-CHD-C4C | -2.49 | 120.61 | 126.62 |
| 3 | T | 101 | BCL | C3D-C4D-ND | 2.49 | 114.27 | 110.24 |
| 6 | 3 | 103 | CRT | C30-C28-C27 | 2.48 | 122.75 | 118.94 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | U | 104 | BCL | O2D-CGD-O1D | -2.48 | 118.98 | 123.84 |
| 3 | K | 101 | BCL | C1D-CHD-C4C | -2.48 | 120.64 | 126.62 |
| 3 | B | 101 | BCL | CMB-C2B-C1B | -2.48 | 124.66 | 128.46 |
| 3 | U | 104 | BCL | CHB-C4A-NA | 2.48 | 127.94 | 124.51 |
| 3 | I | 102 | BCL | O2A-CGA-CBA | 2.47 | 119.67 | 111.91 |
| 3 | 8 | 101 | BCL | C6-C5-C3 | -2.47 | 106.97 | 113.45 |
| 3 | U | 102 | BCL | CHB-C4A-NA | 2.47 | 127.93 | 124.51 |
| 3 | B | 101 | BCL | C4D-CHA-C1A | -2.47 | 118.24 | 121.25 |
| 3 | 5 | 102 | BCL | CHB-C4A-NA | 2.46 | 127.92 | 124.51 |
| 3 | S | 102 | BCL | CBA-CAA-C2A | -2.46 | 106.60 | 113.86 |
| 3 | R | 101 | BCL | CED-O2D-CGD | 2.46 | 121.50 | 115.94 |
| 3 | 6 | 102 | BCL | C3D-C4D-ND | 2.46 | 114.22 | 110.24 |
| 3 | N | 102 | BCL | C3D-C4D-ND | 2.46 | 114.22 | 110.24 |
| 3 | N | 102 | BCL | C6-C5-C3 | -2.46 | 107.01 | 113.45 |
| 3 | 6 | 102 | BCL | O2A-CGA-O1A | -2.46 | 117.39 | 123.59 |
| 6 | K | 103 | CRT | C15-C14-C12 | 2.46 | 130.81 | 127.31 |
| 3 | J | 103 | BCL | C3D-C4D-ND | 2.46 | 114.21 | 110.24 |
| 3 | U | 102 | BCL | C1-C2-C3 | -2.46 | 121.80 | 126.04 |
| 3 | N | 102 | BCL | O2A-CGA-O1A | -2.45 | 117.40 | 123.59 |
| 3 | J | 103 | BCL | C4D-CHA-C1A | -2.45 | 118.26 | 121.25 |
| 3 | N | 102 | BCL | CHB-C4A-NA | 2.45 | 127.91 | 124.51 |
| 3 | N | 102 | BCL | CED-O2D-CGD | 2.45 | 121.48 | 115.94 |
| 3 | T | 101 | BCL | O2A-CGA-O1A | -2.45 | 117.41 | 123.59 |
| 3 | 8 | 101 | BCL | C3D-C4D-ND | 2.45 | 114.20 | 110.24 |
| 3 | J | 103 | BCL | CHB-C4A-NA | 2.45 | 127.90 | 124.51 |
| 3 | E | 103 | BCL | CED-O2D-CGD | 2.45 | 121.47 | 115.94 |
| 6 | A | 101 | CRT | C15-C14-C12 | 2.45 | 130.80 | 127.31 |
| 6 | V | 101 | CRT | C30-C28-C27 | 2.44 | 122.69 | 118.94 |
| 3 | 3 | 101 | BCL | C4A-NA-C1A | 2.44 | 107.80 | 106.71 |
| 3 | U | 104 | BCL | C1-C2-C3 | -2.43 | 121.83 | 126.04 |
| 3 | 4 | 101 | BCL | CHB-C4A-NA | 2.42 | 127.86 | 124.51 |
| 6 | I | 101 | CRT | C15-C14-C12 | 2.42 | 130.77 | 127.31 |
| 3 | Z | 101 | BCL | C4D-CHA-C1A | -2.42 | 118.30 | 121.25 |
| 3 | B | 101 | BCL | C3D-C4D-ND | 2.42 | 114.15 | 110.24 |
| 6 | N | 101 | CRT | C35-C33-C32 | 2.42 | 122.65 | 118.94 |
| 3 | J | 103 | BCL | CED-O2D-CGD | 2.40 | 121.37 | 115.94 |
| 3 | Y | 103 | BCL | CHB-C4A-NA | 2.40 | 127.84 | 124.51 |
| 3 | G | 102 | BCL | C3D-C4D-ND | 2.40 | 114.13 | 110.24 |
| 3 | 2 | 101 | BCL | CMD-C2D-C3D | 2.40 | 133.14 | 127.61 |
| 3 | A | 102 | BCL | O2A-CGA-CBA | 2.40 | 119.44 | 111.91 |
| 3 | T | 101 | BCL | CMB-C2B-C1B | -2.40 | 124.77 | 128.46 |
| 6 | K | 103 | CRT | C35-C33-C32 | 2.40 | 122.62 | 118.94 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 6 | N | 101 | CRT | C30-C28-C27 | 2.40 | 122.62 | 118.94 |
| 3 | S | 102 | BCL | CHB-C4A-NA | 2.39 | 127.82 | 124.51 |
| 3 | D | 102 | BCL | C11-C12-C13 | -2.39 | 108.20 | 115.92 |
| 3 | W | 101 | BCL | O2A-CGA-CBA | 2.39 | 119.40 | 111.91 |
| 3 | 4 | 101 | BCL | C4D-CHA-C1A | -2.38 | 118.35 | 121.25 |
| 3 | 5 | 102 | BCL | C11-C12-C13 | -2.38 | 108.23 | 115.92 |
| 3 | R | 101 | BCL | C4D-CHA-C1A | -2.38 | 118.35 | 121.25 |
| 3 | X | 102 | BCL | C4D-CHA-C1A | -2.38 | 118.36 | 121.25 |
| 3 | 8 | 101 | BCL | C1-O2A-CGA | 2.37 | 122.67 | 116.44 |
| 3 | E | 103 | BCL | CHC-C1C-NC | 2.37 | 127.79 | 124.51 |
| 3 | G | 102 | BCL | CED-O2D-CGD | 2.37 | 121.30 | 115.94 |
| 6 | V | 101 | CRT | C35-C33-C32 | 2.37 | 122.58 | 118.94 |
| 3 | F | 101 | BCL | O2A-CGA-CBA | 2.37 | 119.33 | 111.91 |
| 3 | K | 101 | BCL | C1C-NC-C4C | -2.36 | 105.64 | 106.71 |
| 3 | 6 | 102 | BCL | O2D-CGD-CBD | 2.36 | 115.47 | 111.27 |
| 6 | J | 101 | CRT | C30-C28-C27 | 2.36 | 122.56 | 118.94 |
| 6 | 1 | 102 | CRT | C11-C12-C14 | 2.36 | 122.56 | 118.94 |
| 3 | E | 103 | BCL | C4D-CHA-C1A | -2.36 | 118.38 | 121.25 |
| 3 | U | 102 | BCL | O2A-CGA-CBA | 2.36 | 119.30 | 111.91 |
| 6 | J | 101 | CRT | C35-C33-C32 | 2.35 | 122.55 | 118.94 |
| 3 | T | 101 | BCL | C4D-CHA-C1A | -2.35 | 118.39 | 121.25 |
| 6 | Y | 101 | CRT | C15-C14-C12 | 2.35 | 130.67 | 127.31 |
| 3 | B | 101 | BCL | C11-C10-C8 | -2.35 | 108.33 | 115.92 |
| 3 | O | 101 | BCL | O2A-CGA-CBA | 2.34 | 119.26 | 111.91 |
| 3 | P | 101 | BCL | CHC-C1C-NC | 2.34 | 127.75 | 124.51 |
| 6 | A | 101 | CRT | C35-C33-C32 | 2.34 | 122.53 | 118.94 |
| 3 | 8 | 101 | BCL | CMB-C2B-C1B | -2.34 | 124.88 | 128.46 |
| 3 | 6 | 102 | BCL | C4-C3-C5 | 2.33 | 119.19 | 115.27 |
| 3 | F | 101 | BCL | CHB-C4A-NA | 2.33 | 127.74 | 124.51 |
| 3 | 3 | 101 | BCL | C4-C3-C5 | 2.33 | 119.19 | 115.27 |
| 3 | P | 101 | BCL | C4D-CHA-C1A | -2.32 | 118.42 | 121.25 |
| 3 | T | 101 | BCL | CHB-C4A-NA | 2.32 | 127.72 | 124.51 |
| 6 | S | 101 | CRT | C15-C14-C12 | 2.32 | 130.62 | 127.31 |
| 3 | P | 101 | BCL | CHB-C4A-NA | 2.32 | 127.72 | 124.51 |
| 6 | D | 101 | CRT | C15-C14-C12 | 2.32 | 130.62 | 127.31 |
| 3 | G | 102 | BCL | C4-C3-C5 | 2.31 | 119.16 | 115.27 |
| 6 | V | 101 | CRT | C15-C14-C12 | 2.31 | 130.61 | 127.31 |
| 3 | A | 102 | BCL | C1-C2-C3 | -2.31 | 122.04 | 126.04 |
| 3 | 6 | 102 | BCL | CHC-C1C-NC | 2.31 | 127.70 | 124.51 |
| 3 | R | 101 | BCL | CHB-C4A-NA | 2.31 | 127.70 | 124.51 |
| 3 | 2 | 101 | BCL | O2D-CGD-O1D | -2.30 | 119.33 | 123.84 |
| 3 | F | 101 | BCL | C11-C12-C13 | -2.30 | 108.49 | 115.92 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | Y | 103 | BCL | O2A-CGA-CBA | 2.29 | 119.10 | 111.91 |
| 6 | 7 | 101 | CRT | C15-C14-C12 | 2.29 | 130.58 | 127.31 |
| 3 | X | 102 | BCL | O2D-CGD-CBD | 2.29 | 115.34 | 111.27 |
| 3 | 8 | 101 | BCL | O2A-CGA-O1A | -2.29 | 117.82 | 123.59 |
| 6 | 5 | 101 | CRT | C15-C14-C12 | 2.29 | 130.57 | 127.31 |
| 6 | J | 101 | CRT | C15-C14-C12 | 2.28 | 130.57 | 127.31 |
| 6 | 3 | 103 | CRT | C15-C14-C12 | 2.28 | 130.57 | 127.31 |
| 3 | 7 | 102 | BCL | O2A-CGA-CBA | 2.27 | 119.04 | 111.91 |
| 3 | 3 | 101 | BCL | CBA-CAA-C2A | -2.27 | 107.16 | 113.86 |
| 3 | 1 | 103 | BCL | C16-C15-C13 | -2.26 | 108.60 | 115.92 |
| 6 | A | 101 | CRT | C30-C28-C27 | 2.26 | 122.41 | 118.94 |
| 3 | T | 101 | BCL | O2D-CGD-O1D | -2.26 | 119.42 | 123.84 |
| 6 | K | 103 | CRT | C30-C28-C27 | 2.26 | 122.41 | 118.94 |
| 3 | Y | 103 | BCL | CBA-CAA-C2A | -2.26 | 107.19 | 113.86 |
| 3 | Q | 101 | BCL | O2A-CGA-CBA | 2.25 | 118.96 | 111.91 |
| 3 | 7 | 102 | BCL | CHB-C4A-NA | 2.24 | 127.62 | 124.51 |
| 3 | 6 | 102 | BCL | C4D-CHA-C1A | -2.24 | 118.52 | 121.25 |
| 3 | 8 | 101 | BCL | O2D-CGD-O1D | -2.24 | 119.46 | 123.84 |
| 3 | E | 103 | BCL | C4-C3-C5 | 2.24 | 119.03 | 115.27 |
| 3 | O | 101 | BCL | C11-C12-C13 | -2.23 | 108.70 | 115.92 |
| 3 | B | 101 | BCL | CHC-C1C-NC | 2.23 | 127.60 | 124.51 |
| 3 | 2 | 101 | BCL | C4D-CHA-C1A | -2.23 | 118.53 | 121.25 |
| 3 | G | 102 | BCL | CHC-C1C-NC | 2.23 | 127.59 | 124.51 |
| 3 | X | 102 | BCL | C6-C7-C8 | -2.22 | 108.74 | 115.92 |
| 6 | N | 101 | CRT | C15-C14-C12 | 2.22 | 130.48 | 127.31 |
| 6 | 1 | 102 | CRT | C16-C17-C19 | 2.22 | 122.34 | 118.94 |
| 3 | T | 101 | BCL | C11-C12-C13 | -2.22 | 108.75 | 115.92 |
| 3 | Q | 101 | BCL | CBA-CAA-C2A | -2.22 | 107.32 | 113.86 |
| 3 | B | 101 | BCL | C4-C3-C5 | 2.21 | 119.00 | 115.27 |
| 3 | W | 101 | BCL | C11-C12-C13 | -2.21 | 108.76 | 115.92 |
| 3 | A | 102 | BCL | C11-C12-C13 | -2.21 | 108.77 | 115.92 |
| 3 | 6 | 102 | BCL | CHB-C4A-NA | 2.21 | 127.57 | 124.51 |
| 3 | 7 | 102 | BCL | CBA-CAA-C2A | -2.21 | 107.35 | 113.86 |
| 3 | P | 101 | BCL | O2D-CGD-O1D | -2.21 | 119.52 | 123.84 |
| 3 | Z | 101 | BCL | C1-C2-C3 | -2.21 | 122.23 | 126.04 |
| 3 | 2 | 101 | BCL | C1-O2A-CGA | 2.20 | 122.22 | 116.44 |
| 3 | 8 | 101 | BCL | CAA-C2A-C1A | 2.20 | 119.19 | 111.97 |
| 3 | P | 101 | BCL | C1-C2-C3 | -2.20 | 122.24 | 126.04 |
| 3 | P | 101 | BCL | O2A-CGA-O1A | -2.20 | 118.05 | 123.59 |
| 3 | R | 101 | BCL | CHC-C1C-NC | 2.19 | 127.55 | 124.51 |
| 6 | E | 101 | CRT | C20-C19-C17 | 2.19 | 130.44 | 127.31 |
| 3 | S | 102 | BCL | C6-C5-C3 | -2.19 | 107.72 | 113.45 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | 1 | 103 | BCL | O2A-CGA-CBA | 2.18 | 118.76 | 111.91 |
| 3 | X | 102 | BCL | C1-O2A-CGA | 2.18 | 122.15 | 116.44 |
| 6 | E | 101 | CRT | C15-C14-C12 | 2.17 | 130.41 | 127.31 |
| 6 | U | 101 | CRT | C15-C14-C12 | 2.17 | 130.41 | 127.31 |
| 6 | N | 101 | CRT | C20-C19-C17 | 2.16 | 130.40 | 127.31 |
| 3 | Z | 101 | BCL | C4-C3-C2 | -2.15 | 118.15 | 123.68 |
| 6 | U | 101 | CRT | C11-C12-C14 | 2.15 | 122.25 | 118.94 |
| 3 | 1 | 103 | BCL | CMB-C2B-C1B | 2.15 | 131.77 | 128.46 |
| 3 | A | 102 | BCL | C1C-NC-C4C | -2.15 | 105.74 | 106.71 |
| 3 | D | 102 | BCL | C1-O2A-CGA | 2.15 | 122.08 | 116.44 |
| 3 | U | 104 | BCL | C7-C6-C5 | -2.14 | 107.54 | 113.36 |
| 6 | U | 101 | CRT | C20-C19-C17 | 2.14 | 130.36 | 127.31 |
| 3 | 3 | 101 | BCL | CHB-C4A-NA | 2.14 | 127.47 | 124.51 |
| 3 | 8 | 101 | BCL | C4D-CHA-C1A | -2.14 | 118.65 | 121.25 |
| 6 | E | 101 | CRT | C11-C12-C14 | 2.13 | 122.22 | 118.94 |
| 3 | 7 | 102 | BCL | CAC-C3C-C4C | -2.13 | 107.85 | 112.58 |
| 6 | V | 101 | CRT | C20-C19-C17 | 2.13 | 130.35 | 127.31 |
| 3 | 8 | 101 | BCL | C6-C7-C8 | -2.13 | 109.04 | 115.92 |
| 3 | K | 101 | BCL | CHB-C4A-NA | 2.13 | 127.45 | 124.51 |
| 3 | A | 102 | BCL | C16-C15-C13 | -2.13 | 109.05 | 115.92 |
| 6 | 7 | 101 | CRT | C20-C19-C17 | 2.13 | 130.34 | 127.31 |
| 3 | B | 101 | BCL | CAA-C2A-C1A | 2.12 | 118.94 | 111.97 |
| 3 | U | 102 | BCL | C11-C12-C13 | -2.12 | 109.06 | 115.92 |
| 3 | I | 102 | BCL | C11-C12-C13 | -2.12 | 109.06 | 115.92 |
| 3 | I | 102 | BCL | C1-C2-C3 | -2.12 | 122.38 | 126.04 |
| 6 | J | 101 | CRT | C11-C12-C14 | 2.12 | 122.19 | 118.94 |
| 6 | V | 101 | CRT | C11-C12-C14 | 2.12 | 122.19 | 118.94 |
| 6 | 3 | 103 | CRT | C20-C19-C17 | 2.11 | 130.32 | 127.31 |
| 6 | J | 101 | CRT | C20-C19-C17 | 2.10 | 130.31 | 127.31 |
| 6 | N | 101 | CRT | C11-C12-C14 | 2.10 | 122.16 | 118.94 |
| 6 | D | 101 | CRT | C20-C19-C17 | 2.10 | 130.31 | 127.31 |
| 3 | G | 102 | BCL | CMB-C2B-C1B | -2.10 | 125.24 | 128.46 |
| 3 | I | 102 | BCL | CAC-C3C-C4C | -2.09 | 107.94 | 112.58 |
| 3 | Z | 101 | BCL | C2C-C3C-C4C | -2.09 | 98.20 | 101.34 |
| 3 | J | 103 | BCL | C6-C5-C3 | -2.09 | 107.97 | 113.45 |
| 3 | T | 101 | BCL | CHC-C1C-NC | 2.09 | 127.40 | 124.51 |
| 3 | J | 103 | BCL | CHC-C1C-NC | 2.08 | 127.39 | 124.51 |
| 3 | N | 102 | BCL | CHC-C1C-NC | 2.08 | 127.38 | 124.51 |
| 6 | S | 101 | CRT | C20-C19-C17 | 2.08 | 130.27 | 127.31 |
| 3 | S | 102 | BCL | O2A-CGA-CBA | 2.07 | 118.42 | 111.91 |
| 3 | 4 | 101 | BCL | C6-C5-C3 | -2.07 | 108.02 | 113.45 |
| 3 | O | 101 | BCL | C1-C2-C3 | -2.07 | 122.46 | 126.04 |

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| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|-----|------|-------------|-------|-------------|----------|
| 3 | U | 104 | BCL | CMB-C2B-C1B | -2.07 | 125.28 | 128.46 |
| 3 | S | 102 | BCL | CAC-C3C-C4C | -2.07 | 107.99 | 112.58 |
| 3 | 8 | 101 | BCL | C4-C3-C5 | 2.07 | 118.75 | 115.27 |
| 3 | R | 101 | BCL | C4-C3-C5 | 2.07 | 118.75 | 115.27 |
| 3 | Q | 101 | BCL | C6-C5-C3 | -2.07 | 108.04 | 113.45 |
| 3 | 3 | 101 | BCL | C1-O2A-CGA | 2.07 | 121.86 | 116.44 |
| 3 | K | 101 | BCL | C4D-CHA-C1A | -2.06 | 118.74 | 121.25 |
| 3 | G | 102 | BCL | CAA-C2A-C1A | 2.06 | 118.73 | 111.97 |
| 6 | Y | 101 | CRT | C20-C19-C17 | 2.06 | 130.25 | 127.31 |
| 3 | R | 101 | BCL | C6-C5-C3 | -2.05 | 108.07 | 113.45 |
| 3 | 4 | 101 | BCL | CHC-C1C-NC | 2.05 | 127.34 | 124.51 |
| 3 | Y | 103 | BCL | C11-C12-C13 | -2.05 | 109.30 | 115.92 |
| 3 | W | 101 | BCL | CHB-C4A-NA | 2.04 | 127.33 | 124.51 |
| 6 | I | 101 | CRT | C20-C19-C17 | 2.03 | 130.21 | 127.31 |
| 3 | X | 102 | BCL | CHB-C4A-NA | 2.02 | 127.31 | 124.51 |
| 3 | K | 101 | BCL | C1-O2A-CGA | 2.02 | 121.74 | 116.44 |
| 3 | 3 | 101 | BCL | O2A-CGA-CBA | 2.02 | 118.24 | 111.91 |
| 3 | O | 101 | BCL | CAC-C3C-C4C | -2.02 | 108.11 | 112.58 |
| 3 | 6 | 102 | BCL | O2D-CGD-O1D | -2.01 | 119.91 | 123.84 |
| 3 | Z | 101 | BCL | C1-O2A-CGA | 2.01 | 121.71 | 116.44 |
| 3 | B | 101 | BCL | C6-C5-C3 | -2.01 | 108.19 | 113.45 |
| 6 | 5 | 101 | CRT | C11-C12-C14 | 2.01 | 122.02 | 118.94 |

There are no chirality outliers.

All (625) torsion outliers are listed below:

| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | 2 | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | 2 | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | 2 | 101 | BCL | C6-C7-C8-C9 |
| 3 | 3 | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | 3 | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | 4 | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | 4 | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | 4 | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | 6 | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | 6 | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | 7 | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | 7 | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | 8 | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | 8 | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | 8 | 101 | BCL | C4C-C3C-CAC-CBC |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | A | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | A | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | B | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | B | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | B | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | B | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | B | 101 | BCL | C6-C7-C8-C9 |
| 3 | E | 103 | BCL | C2C-C3C-CAC-CBC |
| 3 | E | 103 | BCL | C4C-C3C-CAC-CBC |
| 3 | G | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | G | 102 | BCL | CBD-CGD-O2D-CED |
| 3 | G | 102 | BCL | C6-C7-C8-C9 |
| 3 | I | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | I | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | J | 103 | BCL | C2C-C3C-CAC-CBC |
| 3 | J | 103 | BCL | C4C-C3C-CAC-CBC |
| 3 | J | 103 | BCL | CBD-CGD-O2D-CED |
| 3 | K | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | K | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | N | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | N | 102 | BCL | CHA-CBD-CGD-O1D |
| 3 | N | 102 | BCL | CBD-CGD-O2D-CED |
| 3 | N | 102 | BCL | C6-C7-C8-C9 |
| 3 | P | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | P | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | Q | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | Q | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | Q | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | Q | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | Q | 101 | BCL | C2-C3-C5-C6 |
| 3 | Q | 101 | BCL | C4-C3-C5-C6 |
| 3 | R | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | R | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | S | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | S | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | S | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | S | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | T | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | T | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | U | 104 | BCL | C2C-C3C-CAC-CBC |
| 3 | U | 104 | BCL | C4C-C3C-CAC-CBC |
| 3 | U | 104 | BCL | CBD-CGD-O2D-CED |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | W | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | W | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | Z | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | Z | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | Z | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | Z | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | Z | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | Z | 101 | BCL | CHA-CBD-CGD-O2D |
| 3 | 1 | 103 | BCL | C2C-C3C-CAC-CBC |
| 3 | 1 | 103 | BCL | C4C-C3C-CAC-CBC |
| 3 | 1 | 103 | BCL | C2-C3-C5-C6 |
| 3 | 1 | 103 | BCL | C4-C3-C5-C6 |
| 3 | Y | 103 | BCL | C2C-C3C-CAC-CBC |
| 3 | Y | 103 | BCL | C4C-C3C-CAC-CBC |
| 3 | X | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | X | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | X | 102 | BCL | C4C-C3C-CAC-CBC |
| 6 | E | 101 | CRT | C1-C4-C5-C6 |
| 6 | J | 101 | CRT | C1-C4-C5-C6 |
| 6 | N | 101 | CRT | C1-C4-C5-C6 |
| 6 | U | 101 | CRT | C1-C4-C5-C6 |
| 6 | V | 101 | CRT | C1-C4-C5-C6 |
| 3 | N | 102 | BCL | O1D-CGD-O2D-CED |
| 3 | E | 103 | BCL | CBD-CGD-O2D-CED |
| 3 | Z | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | Z | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | 4 | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | J | 103 | BCL | O1D-CGD-O2D-CED |
| 3 | R | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | U | 104 | BCL | O1D-CGD-O2D-CED |
| 3 | G | 102 | BCL | O1D-CGD-O2D-CED |
| 3 | B | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | 4 | 101 | BCL | C3-C5-C6-C7 |
| 3 | 7 | 102 | BCL | C3-C5-C6-C7 |
| 3 | G | 102 | BCL | C3-C5-C6-C7 |
| 3 | N | 102 | BCL | C3-C5-C6-C7 |
| 3 | P | 101 | BCL | C3-C5-C6-C7 |
| 3 | Q | 101 | BCL | C3-C5-C6-C7 |
| 3 | R | 101 | BCL | C3-C5-C6-C7 |
| 3 | T | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | 8 | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | B | 101 | BCL | C2A-CAA-CBA-CGA |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | G | 102 | BCL | C2A-CAA-CBA-CGA |
| 3 | P | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | 8 | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | E | 103 | BCL | O1D-CGD-O2D-CED |
| 3 | 2 | 101 | BCL | CBD-CGD-O2D-CED |
| 3 | J | 103 | BCL | C3-C5-C6-C7 |
| 3 | S | 102 | BCL | C3-C5-C6-C7 |
| 3 | U | 104 | BCL | C3-C5-C6-C7 |
| 3 | 2 | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | P | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | 1 | 103 | BCL | C5-C6-C7-C8 |
| 3 | 7 | 102 | BCL | C4-C3-C5-C6 |
| 3 | 7 | 102 | BCL | C2-C3-C5-C6 |
| 3 | 2 | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | R | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | 4 | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | 6 | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | 7 | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | A | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | E | 103 | BCL | CBA-CGA-O2A-C1 |
| 3 | F | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | I | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | J | 103 | BCL | CBA-CGA-O2A-C1 |
| 3 | N | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | O | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | T | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | U | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | U | 104 | BCL | CBA-CGA-O2A-C1 |
| 3 | W | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | Z | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | Y | 103 | BCL | CBA-CGA-O2A-C1 |
| 3 | X | 102 | BCL | CBA-CGA-O2A-C1 |
| 4 | T | 102 | 8K6 | C10-C11-C12-C13 |
| 3 | D | 102 | BCL | C10-C11-C12-C13 |
| 3 | N | 102 | BCL | C15-C16-C17-C18 |
| 4 | 6 | 101 | 8K6 | C5-C6-C7-C8 |
| 3 | 5 | 102 | BCL | C10-C11-C12-C13 |
| 3 | Z | 101 | BCL | C10-C11-C12-C13 |
| 4 | 8 | 102 | 8K6 | C11-C12-C13-C14 |
| 3 | U | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | U | 104 | BCL | O1A-CGA-O2A-C1 |
| 3 | Z | 101 | BCL | O1A-CGA-O2A-C1 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | Y | 103 | BCL | O1A-CGA-O2A-C1 |
| 3 | X | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | 3 | 101 | BCL | C6-C7-C8-C9 |
| 3 | 4 | 101 | BCL | C6-C7-C8-C9 |
| 3 | 6 | 102 | BCL | C6-C7-C8-C9 |
| 3 | 8 | 101 | BCL | C14-C13-C15-C16 |
| 3 | E | 103 | BCL | C11-C10-C8-C9 |
| 3 | J | 103 | BCL | C6-C7-C8-C9 |
| 3 | Q | 101 | BCL | C11-C12-C13-C14 |
| 3 | R | 101 | BCL | C6-C7-C8-C9 |
| 3 | R | 101 | BCL | C14-C13-C15-C16 |
| 3 | S | 102 | BCL | C11-C12-C13-C14 |
| 3 | U | 104 | BCL | C11-C10-C8-C9 |
| 3 | U | 104 | BCL | C11-C12-C13-C14 |
| 4 | 8 | 103 | 8K6 | C11-C10-C9-C8 |
| 3 | F | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | W | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | Y | 103 | BCL | C15-C16-C17-C18 |
| 3 | S | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | 7 | 102 | BCL | C8-C10-C11-C12 |
| 3 | N | 102 | BCL | C13-C15-C16-C17 |
| 3 | P | 101 | BCL | C5-C6-C7-C8 |
| 3 | Q | 101 | BCL | C5-C6-C7-C8 |
| 3 | Q | 101 | BCL | C10-C11-C12-C13 |
| 3 | Z | 101 | BCL | C8-C10-C11-C12 |
| 3 | 1 | 103 | BCL | C15-C16-C17-C18 |
| 3 | 8 | 101 | BCL | C13-C15-C16-C17 |
| 3 | J | 103 | BCL | C10-C11-C12-C13 |
| 3 | T | 101 | BCL | C5-C6-C7-C8 |
| 3 | X | 102 | BCL | C8-C10-C11-C12 |
| 3 | 3 | 101 | BCL | C13-C15-C16-C17 |
| 3 | A | 102 | BCL | C15-C16-C17-C18 |
| 3 | G | 102 | BCL | C5-C6-C7-C8 |
| 3 | 8 | 101 | BCL | C8-C10-C11-C12 |
| 3 | N | 102 | BCL | C10-C11-C12-C13 |
| 3 | T | 101 | BCL | C13-C15-C16-C17 |
| 3 | 3 | 101 | BCL | C12-C13-C15-C16 |
| 3 | Q | 101 | BCL | C11-C12-C13-C15 |
| 3 | B | 101 | BCL | C3-C5-C6-C7 |
| 3 | A | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | J | 103 | BCL | O1A-CGA-O2A-C1 |
| 3 | T | 101 | BCL | O1A-CGA-O2A-C1 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | R | 102 | 8K6 | C6-C7-C8-C9 |
| 3 | E | 103 | BCL | C15-C16-C17-C18 |
| 3 | 7 | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | E | 103 | BCL | O1A-CGA-O2A-C1 |
| 3 | I | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | R | 101 | BCL | O1A-CGA-O2A-C1 |
| 4 | J | 104 | 8K6 | C5-C6-C7-C8 |
| 3 | E | 103 | BCL | C10-C11-C12-C13 |
| 3 | S | 102 | BCL | C13-C15-C16-C17 |
| 3 | U | 104 | BCL | C10-C11-C12-C13 |
| 3 | W | 101 | BCL | C10-C11-C12-C13 |
| 3 | X | 102 | BCL | C13-C15-C16-C17 |
| 3 | 4 | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | N | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | O | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | 2 | 101 | BCL | C13-C15-C16-C17 |
| 3 | K | 101 | BCL | C10-C11-C12-C13 |
| 3 | Z | 101 | BCL | C13-C15-C16-C17 |
| 3 | X | 102 | BCL | C10-C11-C12-C13 |
| 3 | 6 | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | S | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | O | 101 | BCL | C15-C16-C17-C18 |
| 3 | F | 101 | BCL | C15-C16-C17-C18 |
| 3 | O | 101 | BCL | C10-C11-C12-C13 |
| 3 | 8 | 101 | BCL | C16-C17-C18-C20 |
| 3 | R | 101 | BCL | C16-C17-C18-C20 |
| 3 | 4 | 101 | BCL | C5-C6-C7-C8 |
| 4 | P | 102 | 8K6 | C6-C7-C8-C9 |
| 4 | T | 102 | 8K6 | C5-C6-C7-C8 |
| 3 | A | 102 | BCL | C16-C17-C18-C20 |
| 3 | F | 101 | BCL | C16-C17-C18-C19 |
| 3 | Y | 103 | BCL | C16-C17-C18-C19 |
| 4 | 8 | 102 | 8K6 | C14-C15-C16-C17 |
| 4 | G | 101 | 8K6 | C5-C6-C7-C8 |
| 4 | Z | 102 | 8K6 | C3-C4-C5-C6 |
| 3 | X | 102 | BCL | C15-C16-C17-C18 |
| 4 | E | 102 | 8K6 | C10-C11-C12-C13 |
| 4 | E | 102 | 8K6 | C14-C15-C16-C17 |
| 4 | 4 | 102 | 8K6 | C6-C7-C8-C9 |
| 4 | 4 | 102 | 8K6 | C10-C11-C12-C13 |
| 4 | 6 | 101 | 8K6 | C12-C13-C14-C15 |
| 4 | P | 102 | 8K6 | C14-C15-C16-C17 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | G | 101 | 8K6 | C2-C3-C4-C5 |
| 4 | P | 102 | 8K6 | C13-C14-C15-C16 |
| 3 | J | 103 | BCL | C5-C6-C7-C8 |
| 3 | R | 101 | BCL | C13-C15-C16-C17 |
| 3 | G | 102 | BCL | C16-C17-C18-C20 |
| 3 | O | 101 | BCL | C16-C17-C18-C19 |
| 3 | Z | 101 | BCL | C16-C17-C18-C20 |
| 3 | 8 | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | T | 101 | BCL | O1D-CGD-O2D-CED |
| 4 | 4 | 102 | 8K6 | C2-C3-C4-C5 |
| 4 | J | 102 | 8K6 | C13-C14-C15-C16 |
| 3 | 7 | 102 | BCL | C11-C10-C8-C9 |
| 3 | G | 102 | BCL | C14-C13-C15-C16 |
| 4 | G | 101 | 8K6 | C12-C13-C14-C15 |
| 4 | R | 102 | 8K6 | C11-C12-C13-C14 |
| 4 | Z | 102 | 8K6 | C11-C10-C9-C8 |
| 3 | B | 101 | BCL | C13-C15-C16-C17 |
| 3 | Z | 101 | BCL | C5-C6-C7-C8 |
| 4 | 8 | 102 | 8K6 | C4-C5-C6-C7 |
| 4 | T | 102 | 8K6 | C13-C14-C15-C16 |
| 4 | 2 | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | 8 | 103 | 8K6 | C13-C14-C15-C16 |
| 4 | T | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | X | 101 | 8K6 | C13-C14-C15-C16 |
| 4 | 8 | 102 | 8K6 | C13-C14-C15-C16 |
| 4 | E | 102 | 8K6 | C2-C3-C4-C5 |
| 4 | P | 102 | 8K6 | C4-C5-C6-C7 |
| 4 | V | 102 | 8K6 | C11-C10-C9-C8 |
| 3 | F | 101 | BCL | C16-C17-C18-C20 |
| 3 | R | 101 | BCL | C16-C17-C18-C19 |
| 3 | T | 101 | BCL | C16-C17-C18-C20 |
| 3 | 2 | 101 | BCL | C10-C11-C12-C13 |
| 3 | 5 | 102 | BCL | C15-C16-C17-C18 |
| 4 | R | 102 | 8K6 | C13-C14-C15-C16 |
| 4 | V | 102 | 8K6 | C9-C10-C11-C12 |
| 4 | 2 | 102 | 8K6 | C13-C14-C15-C16 |
| 4 | 8 | 102 | 8K6 | C6-C7-C8-C9 |
| 4 | V | 102 | 8K6 | C10-C11-C12-C13 |
| 4 | V | 102 | 8K6 | C12-C13-C14-C15 |
| 4 | 8 | 102 | 8K6 | C5-C6-C7-C8 |
| 4 | 8 | 103 | 8K6 | C5-C6-C7-C8 |
| 4 | E | 102 | 8K6 | C11-C10-C9-C8 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | P | 102 | 8K6 | C10-C11-C12-C13 |
| 4 | R | 102 | 8K6 | C4-C5-C6-C7 |
| 4 | 8 | 102 | 8K6 | C2-C3-C4-C5 |
| 3 | 2 | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | 3 | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | 4 | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | 6 | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | 8 | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | A | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | B | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | E | 103 | BCL | C3A-C2A-CAA-CBA |
| 3 | F | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | G | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | I | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | J | 103 | BCL | C3A-C2A-CAA-CBA |
| 3 | N | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | O | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | P | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | R | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | T | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | U | 102 | BCL | C3A-C2A-CAA-CBA |
| 3 | U | 104 | BCL | C3A-C2A-CAA-CBA |
| 3 | W | 101 | BCL | C3A-C2A-CAA-CBA |
| 3 | 1 | 103 | BCL | C3A-C2A-CAA-CBA |
| 3 | Y | 103 | BCL | C3A-C2A-CAA-CBA |
| 3 | D | 102 | BCL | C15-C16-C17-C18 |
| 4 | J | 104 | 8K6 | C10-C11-C12-C13 |
| 4 | Z | 102 | 8K6 | C14-C15-C16-C17 |
| 3 | 3 | 101 | BCL | C16-C17-C18-C19 |
| 3 | 3 | 101 | BCL | C16-C17-C18-C20 |
| 3 | A | 102 | BCL | C16-C17-C18-C19 |
| 3 | T | 101 | BCL | C16-C17-C18-C19 |
| 3 | Y | 103 | BCL | C16-C17-C18-C20 |
| 4 | R | 102 | 8K6 | C12-C13-C14-C15 |
| 4 | R | 102 | 8K6 | C10-C11-C12-C13 |
| 4 | 4 | 102 | 8K6 | C13-C14-C15-C16 |
| 3 | G | 102 | BCL | C13-C15-C16-C17 |
| 3 | 8 | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | I | 102 | BCL | C15-C16-C17-C18 |
| 3 | U | 102 | BCL | C15-C16-C17-C18 |
| 3 | I | 102 | BCL | C10-C11-C12-C13 |
| 3 | W | 101 | BCL | C15-C16-C17-C18 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | 4 | 102 | 8K6 | C5-C6-C7-C8 |
| 4 | J | 104 | 8K6 | C9-C10-C11-C12 |
| 4 | G | 101 | 8K6 | C7-C8-C9-C10 |
| 4 | T | 102 | 8K6 | C6-C7-C8-C9 |
| 4 | V | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | X | 101 | 8K6 | C10-C11-C12-C13 |
| 3 | 8 | 101 | BCL | O1A-CGA-O2A-C1 |
| 4 | 8 | 102 | 8K6 | C11-C10-C9-C8 |
| 3 | G | 102 | BCL | CBA-CGA-O2A-C1 |
| 3 | G | 102 | BCL | C8-C10-C11-C12 |
| 3 | P | 101 | BCL | C15-C16-C17-C18 |
| 3 | S | 102 | BCL | C5-C6-C7-C8 |
| 3 | R | 101 | BCL | C5-C6-C7-C8 |
| 3 | 2 | 101 | BCL | C4-C3-C5-C6 |
| 3 | 4 | 101 | BCL | C6-C7-C8-C10 |
| 3 | 6 | 102 | BCL | C6-C7-C8-C10 |
| 3 | 7 | 102 | BCL | C11-C10-C8-C7 |
| 3 | B | 101 | BCL | C6-C7-C8-C10 |
| 3 | S | 102 | BCL | C11-C12-C13-C15 |
| 3 | Z | 101 | BCL | C11-C10-C8-C7 |
| 3 | 6 | 102 | BCL | C3-C5-C6-C7 |
| 3 | K | 101 | BCL | C15-C16-C17-C18 |
| 3 | 3 | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | Q | 101 | BCL | CBA-CGA-O2A-C1 |
| 4 | R | 102 | 8K6 | C5-C6-C7-C8 |
| 3 | N | 102 | BCL | C2A-CAA-CBA-CGA |
| 3 | T | 101 | BCL | C10-C11-C12-C13 |
| 3 | Y | 103 | BCL | C10-C11-C12-C13 |
| 3 | G | 102 | BCL | O1A-CGA-O2A-C1 |
| 3 | 8 | 101 | BCL | C5-C6-C7-C8 |
| 3 | F | 101 | BCL | C10-C11-C12-C13 |
| 4 | 8 | 103 | 8K6 | C2-C3-C4-C5 |
| 4 | V | 102 | 8K6 | C6-C7-C8-C9 |
| 3 | J | 103 | BCL | C13-C15-C16-C17 |
| 4 | 2 | 102 | 8K6 | C11-C10-C9-C8 |
| 4 | 8 | 103 | 8K6 | C6-C7-C8-C9 |
| 4 | X | 101 | 8K6 | C5-C6-C7-C8 |
| 3 | O | 101 | BCL | C16-C17-C18-C20 |
| 3 | Z | 101 | BCL | C16-C17-C18-C19 |
| 4 | 4 | 102 | 8K6 | C12-C13-C14-C15 |
| 3 | 6 | 102 | BCL | C2A-CAA-CBA-CGA |
| 4 | 8 | 103 | 8K6 | C9-C10-C11-C12 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | 6 | 101 | 8K6 | C2-C3-C4-C5 |
| 4 | G | 101 | 8K6 | C11-C10-C9-C8 |
| 3 | 2 | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | 3 | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | 4 | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | 6 | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | A | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | E | 103 | BCL | C1A-C2A-CAA-CBA |
| 3 | F | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | I | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | J | 103 | BCL | C1A-C2A-CAA-CBA |
| 3 | N | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | O | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | P | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | R | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | T | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | U | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | U | 104 | BCL | C1A-C2A-CAA-CBA |
| 3 | W | 101 | BCL | C1A-C2A-CAA-CBA |
| 3 | 1 | 103 | BCL | C1A-C2A-CAA-CBA |
| 3 | Y | 103 | BCL | C1A-C2A-CAA-CBA |
| 3 | X | 102 | BCL | C1A-C2A-CAA-CBA |
| 3 | G | 102 | BCL | C16-C17-C18-C19 |
| 4 | Z | 102 | 8K6 | C10-C11-C12-C13 |
| 3 | B | 101 | BCL | C5-C6-C7-C8 |
| 4 | 4 | 102 | 8K6 | C11-C12-C13-C14 |
| 4 | V | 102 | 8K6 | C11-C12-C13-C14 |
| 3 | E | 103 | BCL | C13-C15-C16-C17 |
| 4 | 2 | 102 | 8K6 | C12-C13-C14-C15 |
| 3 | 8 | 101 | BCL | C16-C17-C18-C19 |
| 3 | 2 | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | 7 | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | G | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | O | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | 3 | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | Q | 101 | BCL | O1A-CGA-O2A-C1 |
| 3 | T | 101 | BCL | C3-C5-C6-C7 |
| 4 | 4 | 102 | 8K6 | C15-C16-C17-C18 |
| 3 | T | 101 | BCL | C8-C10-C11-C12 |
| 4 | 8 | 103 | 8K6 | C4-C5-C6-C7 |
| 3 | 4 | 101 | BCL | C13-C15-C16-C17 |
| 3 | 1 | 103 | BCL | C16-C17-C18-C19 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | K | 101 | BCL | C2-C1-O2A-CGA |
| 4 | G | 101 | 8K6 | C13-C14-C15-C16 |
| 4 | J | 102 | 8K6 | C9-C10-C11-C12 |
| 3 | B | 101 | BCL | CBA-CGA-O2A-C1 |
| 3 | B | 101 | BCL | O1A-CGA-O2A-C1 |
| 4 | E | 102 | 8K6 | C6-C7-C8-C9 |
| 4 | R | 102 | 8K6 | C3-C4-C5-C6 |
| 3 | N | 102 | BCL | C5-C6-C7-C8 |
| 4 | R | 102 | 8K6 | C15-C16-C17-C18 |
| 3 | 1 | 103 | BCL | C8-C10-C11-C12 |
| 3 | U | 102 | BCL | C16-C17-C18-C19 |
| 4 | E | 102 | 8K6 | C12-C13-C14-C15 |
| 4 | J | 102 | 8K6 | C6-C7-C8-C9 |
| 3 | 4 | 101 | BCL | C11-C10-C8-C7 |
| 3 | J | 103 | BCL | C12-C13-C15-C16 |
| 3 | R | 101 | BCL | C6-C7-C8-C10 |
| 3 | 1 | 103 | BCL | C11-C10-C8-C7 |
| 3 | X | 102 | BCL | C11-C10-C8-C7 |
| 3 | 4 | 101 | BCL | C14-C13-C15-C16 |
| 3 | 6 | 102 | BCL | C14-C13-C15-C16 |
| 3 | 8 | 101 | BCL | C11-C12-C13-C14 |
| 3 | J | 103 | BCL | C14-C13-C15-C16 |
| 3 | K | 101 | BCL | C14-C13-C15-C16 |
| 3 | 1 | 103 | BCL | C11-C10-C8-C9 |
| 4 | J | 104 | 8K6 | C3-C4-C5-C6 |
| 3 | W | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | 4 | 101 | BCL | C16-C17-C18-C20 |
| 4 | J | 104 | 8K6 | C7-C8-C9-C10 |
| 4 | 4 | 102 | 8K6 | C1-C2-C3-C4 |
| 3 | A | 102 | BCL | C5-C6-C7-C8 |
| 3 | A | 102 | BCL | C10-C11-C12-C13 |
| 4 | X | 101 | 8K6 | C2-C3-C4-C5 |
| 3 | B | 101 | BCL | C4-C3-C5-C6 |
| 3 | 2 | 101 | BCL | C2-C3-C5-C6 |
| 4 | 4 | 102 | 8K6 | C11-C10-C9-C8 |
| 3 | Q | 101 | BCL | C8-C10-C11-C12 |
| 4 | E | 102 | 8K6 | C13-C14-C15-C16 |
| 3 | Y | 103 | BCL | C2A-CAA-CBA-CGA |
| 4 | Z | 102 | 8K6 | C7-C8-C9-C10 |
| 3 | S | 102 | BCL | C8-C10-C11-C12 |
| 4 | 6 | 101 | 8K6 | C9-C10-C11-C12 |
| 4 | V | 102 | 8K6 | C14-C15-C16-C17 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | Z | 102 | 8K6 | C5-C6-C7-C8 |
| 3 | Y | 103 | BCL | C4-C3-C5-C6 |
| 3 | T | 101 | BCL | C15-C16-C17-C18 |
| 3 | I | 102 | BCL | C2A-CAA-CBA-CGA |
| 3 | U | 102 | BCL | C2A-CAA-CBA-CGA |
| 4 | T | 102 | 8K6 | C11-C10-C9-C8 |
| 3 | I | 102 | BCL | C5-C6-C7-C8 |
| 4 | J | 104 | 8K6 | C11-C12-C13-C14 |
| 3 | D | 102 | BCL | C2-C1-O2A-CGA |
| 3 | 2 | 101 | BCL | C14-C13-C15-C16 |
| 3 | E | 103 | BCL | C14-C13-C15-C16 |
| 3 | O | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | T | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | 1 | 103 | BCL | C16-C17-C18-C20 |
| 4 | 8 | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | 8 | 103 | 8K6 | C7-C8-C9-C10 |
| 3 | 7 | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | G | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | N | 102 | BCL | C4C-C3C-CAC-CBC |
| 3 | R | 101 | BCL | C4C-C3C-CAC-CBC |
| 3 | U | 102 | BCL | C16-C17-C18-C20 |
| 3 | Z | 101 | BCL | C3-C5-C6-C7 |
| 3 | X | 102 | BCL | C3-C5-C6-C7 |
| 3 | P | 101 | BCL | C10-C11-C12-C13 |
| 3 | 2 | 101 | BCL | C6-C7-C8-C10 |
| 3 | 2 | 101 | BCL | C12-C13-C15-C16 |
| 3 | 8 | 101 | BCL | C11-C12-C13-C15 |
| 3 | 8 | 101 | BCL | C12-C13-C15-C16 |
| 3 | E | 103 | BCL | C6-C7-C8-C10 |
| 3 | E | 103 | BCL | C11-C12-C13-C15 |
| 3 | G | 102 | BCL | C6-C7-C8-C10 |
| 3 | G | 102 | BCL | C11-C10-C8-C7 |
| 3 | N | 102 | BCL | C6-C7-C8-C10 |
| 3 | U | 104 | BCL | C11-C12-C13-C15 |
| 3 | 1 | 103 | BCL | C6-C7-C8-C10 |
| 4 | 4 | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | P | 102 | 8K6 | C12-C13-C14-C15 |
| 3 | F | 101 | BCL | C2A-CAA-CBA-CGA |
| 4 | G | 101 | 8K6 | C11-C12-C13-C14 |
| 3 | 4 | 101 | BCL | C16-C17-C18-C19 |
| 4 | J | 102 | 8K6 | C3-C4-C5-C6 |
| 4 | 6 | 101 | 8K6 | C13-C14-C15-C16 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | J | 104 | 8K6 | C13-C14-C15-C16 |
| 4 | V | 102 | 8K6 | C2-C3-C4-C5 |
| 3 | 1 | 103 | BCL | CBA-CGA-O2A-C1 |
| 3 | F | 101 | BCL | C4-C3-C5-C6 |
| 4 | E | 102 | 8K6 | C1-C2-C3-C4 |
| 3 | J | 103 | BCL | CHA-CBD-CGD-O1D |
| 3 | N | 102 | BCL | CHA-CBD-CGD-O2D |
| 3 | B | 101 | BCL | C8-C10-C11-C12 |
| 3 | 1 | 103 | BCL | C3-C5-C6-C7 |
| 3 | D | 102 | BCL | C4-C3-C5-C6 |
| 3 | 1 | 103 | BCL | C6-C7-C8-C9 |
| 3 | N | 102 | BCL | C16-C17-C18-C19 |
| 3 | D | 102 | BCL | C3-C5-C6-C7 |
| 4 | R | 102 | 8K6 | C14-C15-C16-C17 |
| 4 | T | 102 | 8K6 | C2-C3-C4-C5 |
| 3 | 6 | 102 | BCL | C16-C17-C18-C20 |
| 3 | 1 | 103 | BCL | C10-C11-C12-C13 |
| 3 | J | 103 | BCL | C16-C17-C18-C20 |
| 3 | S | 102 | BCL | C16-C17-C18-C20 |
| 3 | U | 102 | BCL | C4-C3-C5-C6 |
| 3 | 3 | 101 | BCL | C6-C7-C8-C10 |
| 3 | 5 | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | 7 | 102 | BCL | C6-C7-C8-C10 |
| 3 | D | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | E | 103 | BCL | C11-C10-C8-C7 |
| 3 | F | 101 | BCL | C2C-C3C-CAC-CBC |
| 3 | J | 103 | BCL | C6-C7-C8-C10 |
| 3 | R | 101 | BCL | C11-C10-C8-C7 |
| 3 | S | 102 | BCL | C11-C10-C8-C7 |
| 3 | U | 102 | BCL | C2C-C3C-CAC-CBC |
| 3 | U | 104 | BCL | C11-C10-C8-C7 |
| 3 | U | 102 | BCL | C5-C6-C7-C8 |
| 4 | 8 | 102 | 8K6 | C1-C2-C3-C4 |
| 4 | 6 | 101 | 8K6 | C7-C8-C9-C10 |
| 3 | U | 102 | BCL | C10-C11-C12-C13 |
| 4 | X | 101 | 8K6 | C4-C5-C6-C7 |
| 3 | 3 | 101 | BCL | C14-C13-C15-C16 |
| 3 | E | 103 | BCL | C11-C12-C13-C14 |
| 3 | G | 102 | BCL | C11-C10-C8-C9 |
| 4 | E | 102 | 8K6 | C3-C4-C5-C6 |
| 3 | 1 | 103 | BCL | O1A-CGA-O2A-C1 |
| 4 | 2 | 102 | 8K6 | C5-C6-C7-C8 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | J | 104 | 8K6 | C15-C16-C17-C18 |
| 4 | P | 102 | 8K6 | C5-C6-C7-C8 |
| 4 | X | 101 | 8K6 | C11-C10-C9-C8 |
| 3 | N | 102 | BCL | C16-C17-C18-C20 |
| 4 | 2 | 102 | 8K6 | C14-C15-C16-C17 |
| 3 | T | 101 | BCL | CAA-CBA-CGA-O2A |
| 4 | V | 102 | 8K6 | C4-C5-C6-C7 |
| 4 | X | 101 | 8K6 | C12-C13-C14-C15 |
| 3 | 6 | 102 | BCL | C4-C3-C5-C6 |
| 4 | 8 | 103 | 8K6 | C15-C16-C17-C18 |
| 3 | 3 | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | A | 102 | BCL | C2A-CAA-CBA-CGA |
| 3 | K | 101 | BCL | C11-C12-C13-C15 |
| 3 | 4 | 101 | BCL | C11-C10-C8-C9 |
| 3 | 7 | 102 | BCL | C6-C7-C8-C9 |
| 3 | F | 101 | BCL | C5-C6-C7-C8 |
| 4 | 4 | 102 | 8K6 | C9-C10-C11-C12 |
| 4 | J | 104 | 8K6 | C12-C13-C14-C15 |
| 3 | 6 | 102 | BCL | CAA-CBA-CGA-O2A |
| 4 | 8 | 102 | 8K6 | C9-C10-C11-C12 |
| 4 | J | 102 | 8K6 | C7-C8-C9-C10 |
| 3 | A | 102 | BCL | C4-C3-C5-C6 |
| 3 | J | 103 | BCL | C16-C17-C18-C19 |
| 3 | S | 102 | BCL | C16-C17-C18-C19 |
| 4 | E | 102 | 8K6 | C4-C5-C6-C7 |
| 3 | 6 | 102 | BCL | C16-C17-C18-C19 |
| 4 | V | 102 | 8K6 | C5-C6-C7-C8 |
| 3 | B | 101 | BCL | C15-C16-C17-C18 |
| 3 | G | 102 | BCL | C4-C3-C5-C6 |
| 3 | 5 | 102 | BCL | C2-C1-O2A-CGA |
| 3 | 6 | 102 | BCL | C2-C1-O2A-CGA |
| 3 | Z | 101 | BCL | C15-C16-C17-C18 |
| 3 | Y | 103 | BCL | C5-C6-C7-C8 |
| 3 | B | 101 | BCL | C2-C3-C5-C6 |
| 3 | D | 102 | BCL | C14-C13-C15-C16 |
| 3 | Z | 101 | BCL | C11-C10-C8-C9 |
| 4 | J | 102 | 8K6 | C1-C2-C3-C4 |
| 4 | Z | 102 | 8K6 | C1-C2-C3-C4 |
| 3 | P | 101 | BCL | C13-C15-C16-C17 |
| 4 | 6 | 101 | 8K6 | C6-C7-C8-C9 |
| 4 | 8 | 103 | 8K6 | C11-C12-C13-C14 |
| 3 | N | 102 | BCL | C2-C1-O2A-CGA |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 4 | 6 | 101 | 8K6 | C11-C10-C9-C8 |
| 3 | Z | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | N | 102 | BCL | CAA-CBA-CGA-O2A |
| 3 | X | 102 | BCL | C5-C6-C7-C8 |
| 3 | 5 | 102 | BCL | C3-C5-C6-C7 |
| 3 | W | 101 | BCL | C4-C3-C5-C6 |
| 4 | J | 102 | 8K6 | C5-C6-C7-C8 |
| 4 | 6 | 101 | 8K6 | C10-C11-C12-C13 |
| 3 | 6 | 102 | BCL | C13-C15-C16-C17 |
| 4 | E | 102 | 8K6 | C7-C8-C9-C10 |
| 3 | 5 | 102 | BCL | C4-C3-C5-C6 |
| 3 | K | 101 | BCL | C4-C3-C5-C6 |
| 3 | N | 102 | BCL | C4-C3-C5-C6 |
| 3 | D | 102 | BCL | C2-C3-C5-C6 |
| 3 | F | 101 | BCL | C2-C3-C5-C6 |
| 3 | Y | 103 | BCL | C2-C3-C5-C6 |
| 3 | 5 | 102 | BCL | C14-C13-C15-C16 |
| 3 | E | 103 | BCL | C6-C7-C8-C9 |
| 3 | K | 101 | BCL | C11-C12-C13-C14 |
| 3 | R | 101 | BCL | C11-C10-C8-C9 |
| 3 | S | 102 | BCL | C11-C10-C8-C9 |
| 3 | T | 101 | BCL | C14-C13-C15-C16 |
| 4 | 2 | 102 | 8K6 | C2-C3-C4-C5 |
| 4 | V | 102 | 8K6 | C15-C16-C17-C18 |
| 3 | 4 | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | 4 | 101 | BCL | CHA-CBD-CGD-O2D |
| 3 | 8 | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | 8 | 101 | BCL | CHA-CBD-CGD-O2D |
| 3 | B | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | B | 101 | BCL | CHA-CBD-CGD-O2D |
| 3 | E | 103 | BCL | CHA-CBD-CGD-O1D |
| 3 | E | 103 | BCL | CHA-CBD-CGD-O2D |
| 3 | G | 102 | BCL | CHA-CBD-CGD-O1D |
| 3 | G | 102 | BCL | CHA-CBD-CGD-O2D |
| 3 | J | 103 | BCL | CHA-CBD-CGD-O2D |
| 3 | R | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | R | 101 | BCL | CHA-CBD-CGD-O2D |
| 3 | T | 101 | BCL | CHA-CBD-CGD-O1D |
| 3 | U | 104 | BCL | CHA-CBD-CGD-O1D |
| 3 | U | 104 | BCL | CHA-CBD-CGD-O2D |
| 4 | G | 101 | 8K6 | C1-C2-C3-C4 |
| 3 | K | 101 | BCL | C3-C5-C6-C7 |

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| Mol | Chain | Res | Type | Atoms |
|-----|-------|-----|------|-----------------|
| 3 | 2 | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | I | 102 | BCL | C4-C3-C5-C6 |
| 3 | N | 102 | BCL | C8-C10-C11-C12 |
| 3 | 6 | 102 | BCL | C2-C3-C5-C6 |
| 3 | U | 102 | BCL | C2-C3-C5-C6 |
| 3 | Q | 101 | BCL | O1D-CGD-O2D-CED |
| 3 | D | 102 | BCL | C16-C17-C18-C20 |
| 3 | D | 102 | BCL | C13-C15-C16-C17 |
| 3 | J | 103 | BCL | CAD-CBD-CGD-O1D |
| 3 | Y | 103 | BCL | CAD-CBD-CGD-O1D |
| 3 | B | 101 | BCL | C11-C10-C8-C9 |
| 3 | U | 104 | BCL | C14-C13-C15-C16 |
| 3 | I | 102 | BCL | C16-C17-C18-C20 |
| 3 | J | 103 | BCL | C2A-CAA-CBA-CGA |
| 3 | O | 101 | BCL | C5-C6-C7-C8 |
| 3 | A | 102 | BCL | C2-C3-C5-C6 |
| 3 | B | 101 | BCL | C11-C10-C8-C7 |
| 3 | G | 102 | BCL | C2-C3-C5-C6 |
| 3 | U | 104 | BCL | C12-C13-C15-C16 |
| 3 | R | 101 | BCL | C2A-CAA-CBA-CGA |
| 3 | 8 | 101 | BCL | C10-C11-C12-C13 |
| 3 | W | 101 | BCL | C5-C6-C7-C8 |

There are no ring outliers.

52 monomers are involved in 166 short contacts:

| Mol | Chain | Res | Type | Clashes | Symm-Clashes |
|-----|-------|-----|------|---------|--------------|
| 4 | R | 102 | 8K6 | 1 | 0 |
| 3 | Y | 103 | BCL | 5 | 0 |
| 4 | 4 | 102 | 8K6 | 1 | 0 |
| 3 | E | 103 | BCL | 6 | 0 |
| 6 | J | 101 | CRT | 1 | 0 |
| 6 | A | 101 | CRT | 3 | 0 |
| 3 | O | 101 | BCL | 4 | 0 |
| 3 | D | 102 | BCL | 5 | 0 |
| 6 | Y | 101 | CRT | 6 | 0 |
| 3 | K | 101 | BCL | 2 | 0 |
| 3 | N | 102 | BCL | 4 | 0 |
| 3 | G | 102 | BCL | 4 | 0 |
| 3 | R | 101 | BCL | 7 | 0 |
| 6 | 1 | 102 | CRT | 1 | 0 |
| 3 | Q | 101 | BCL | 3 | 0 |

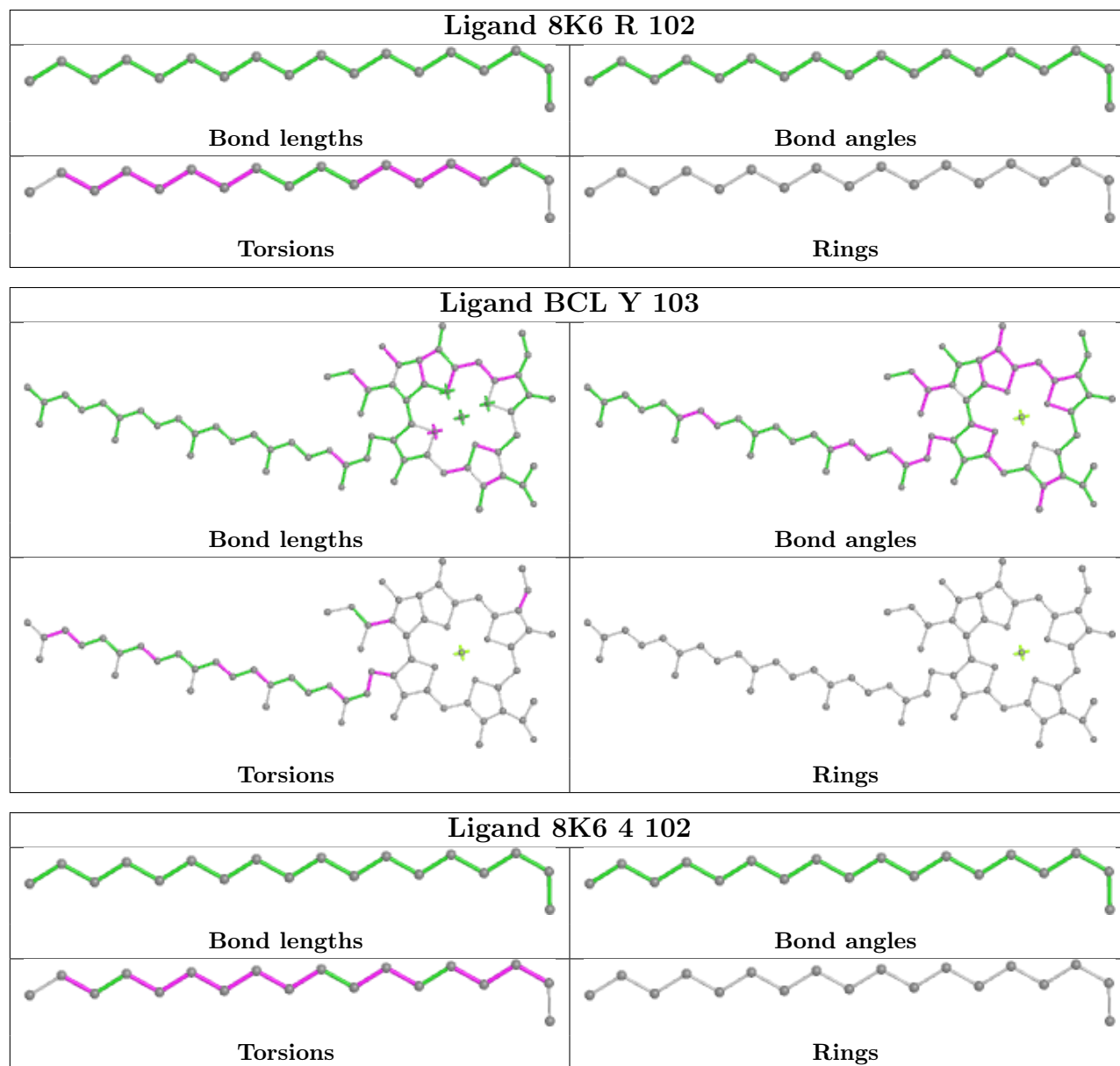
Continued on next page...

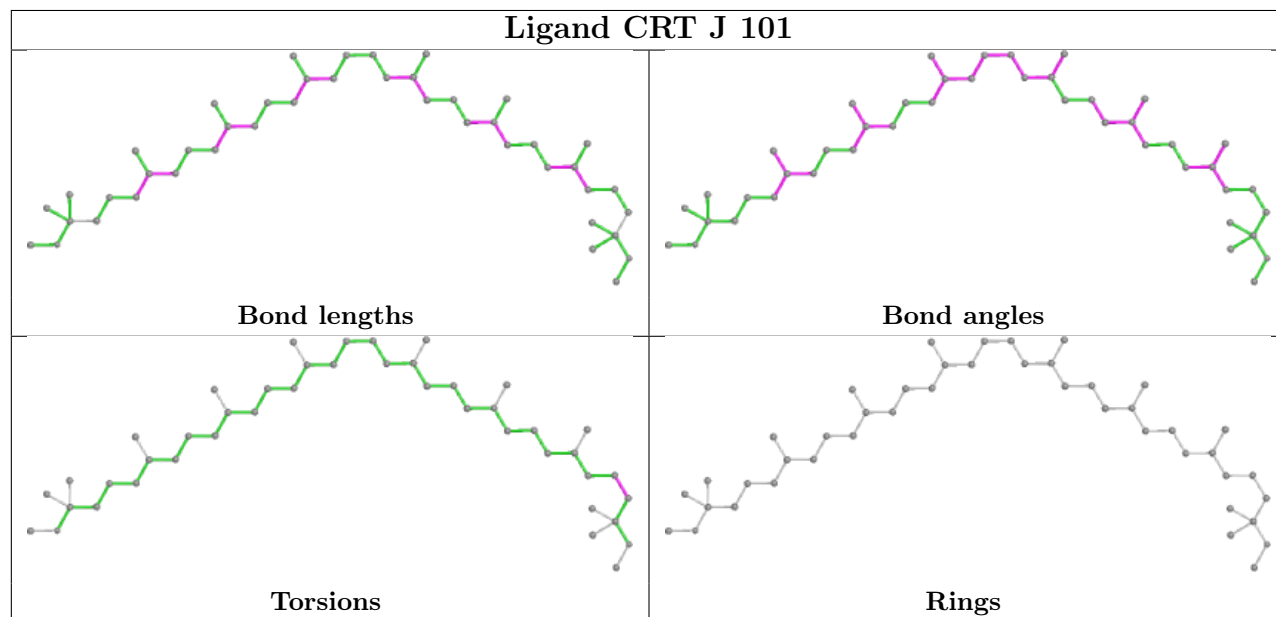
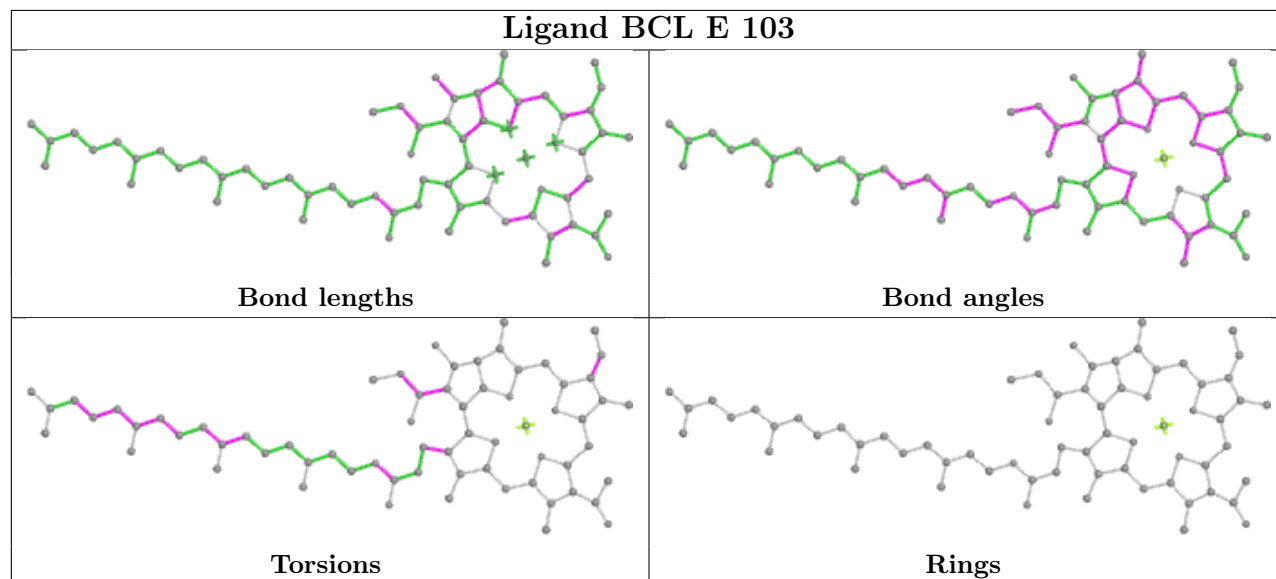
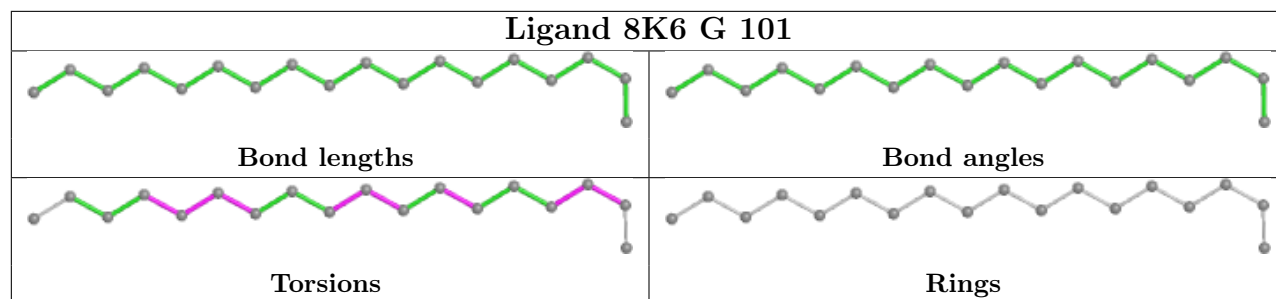
Continued from previous page...

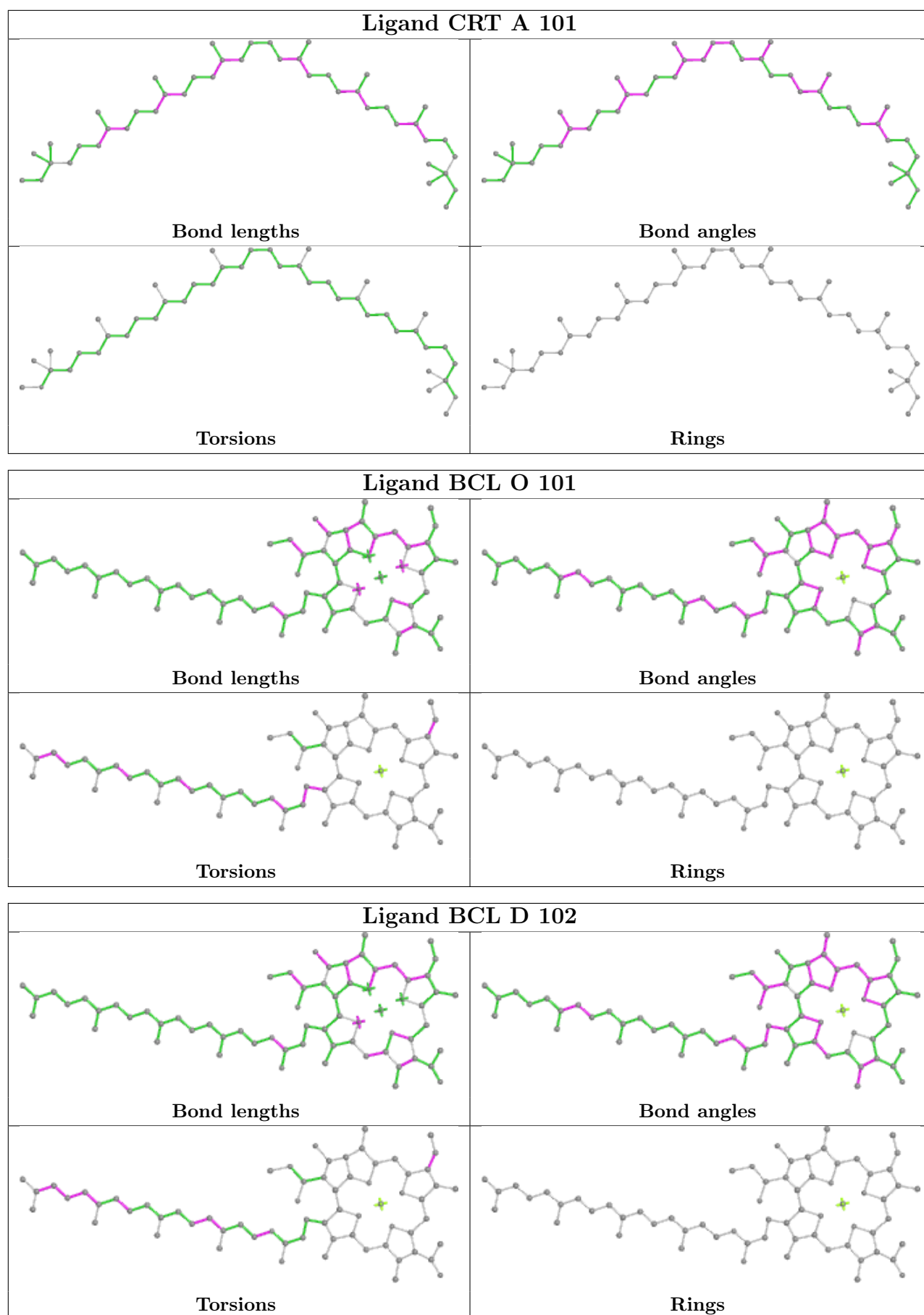
| Mol | Chain | Res | Type | Clashes | Symm-Clashes |
|-----|-------|-----|------|---------|--------------|
| 3 | J | 103 | BCL | 2 | 0 |
| 4 | J | 102 | 8K6 | 2 | 0 |
| 3 | I | 102 | BCL | 4 | 0 |
| 6 | 5 | 101 | CRT | 4 | 0 |
| 6 | U | 101 | CRT | 4 | 0 |
| 3 | 7 | 102 | BCL | 4 | 0 |
| 3 | 8 | 101 | BCL | 1 | 0 |
| 3 | F | 101 | BCL | 4 | 0 |
| 3 | S | 102 | BCL | 4 | 0 |
| 3 | 1 | 103 | BCL | 12 | 0 |
| 6 | K | 103 | CRT | 3 | 0 |
| 3 | 6 | 102 | BCL | 4 | 0 |
| 3 | X | 102 | BCL | 4 | 0 |
| 3 | B | 101 | BCL | 13 | 0 |
| 4 | P | 102 | 8K6 | 1 | 0 |
| 6 | 7 | 101 | CRT | 2 | 0 |
| 6 | I | 101 | CRT | 6 | 0 |
| 3 | 5 | 102 | BCL | 5 | 0 |
| 6 | D | 101 | CRT | 6 | 0 |
| 4 | Z | 102 | 8K6 | 1 | 0 |
| 6 | 3 | 103 | CRT | 3 | 0 |
| 6 | N | 101 | CRT | 3 | 0 |
| 3 | 4 | 101 | BCL | 8 | 0 |
| 4 | 8 | 102 | 8K6 | 1 | 0 |
| 3 | Z | 101 | BCL | 6 | 0 |
| 3 | U | 104 | BCL | 6 | 0 |
| 6 | S | 101 | CRT | 7 | 0 |
| 6 | E | 101 | CRT | 6 | 0 |
| 4 | 8 | 103 | 8K6 | 3 | 0 |
| 3 | 3 | 101 | BCL | 2 | 0 |
| 3 | A | 102 | BCL | 1 | 0 |
| 3 | P | 101 | BCL | 1 | 0 |
| 3 | U | 102 | BCL | 6 | 0 |
| 3 | T | 101 | BCL | 4 | 0 |
| 6 | V | 101 | CRT | 4 | 0 |
| 4 | 2 | 102 | 8K6 | 1 | 0 |
| 3 | W | 101 | BCL | 2 | 0 |

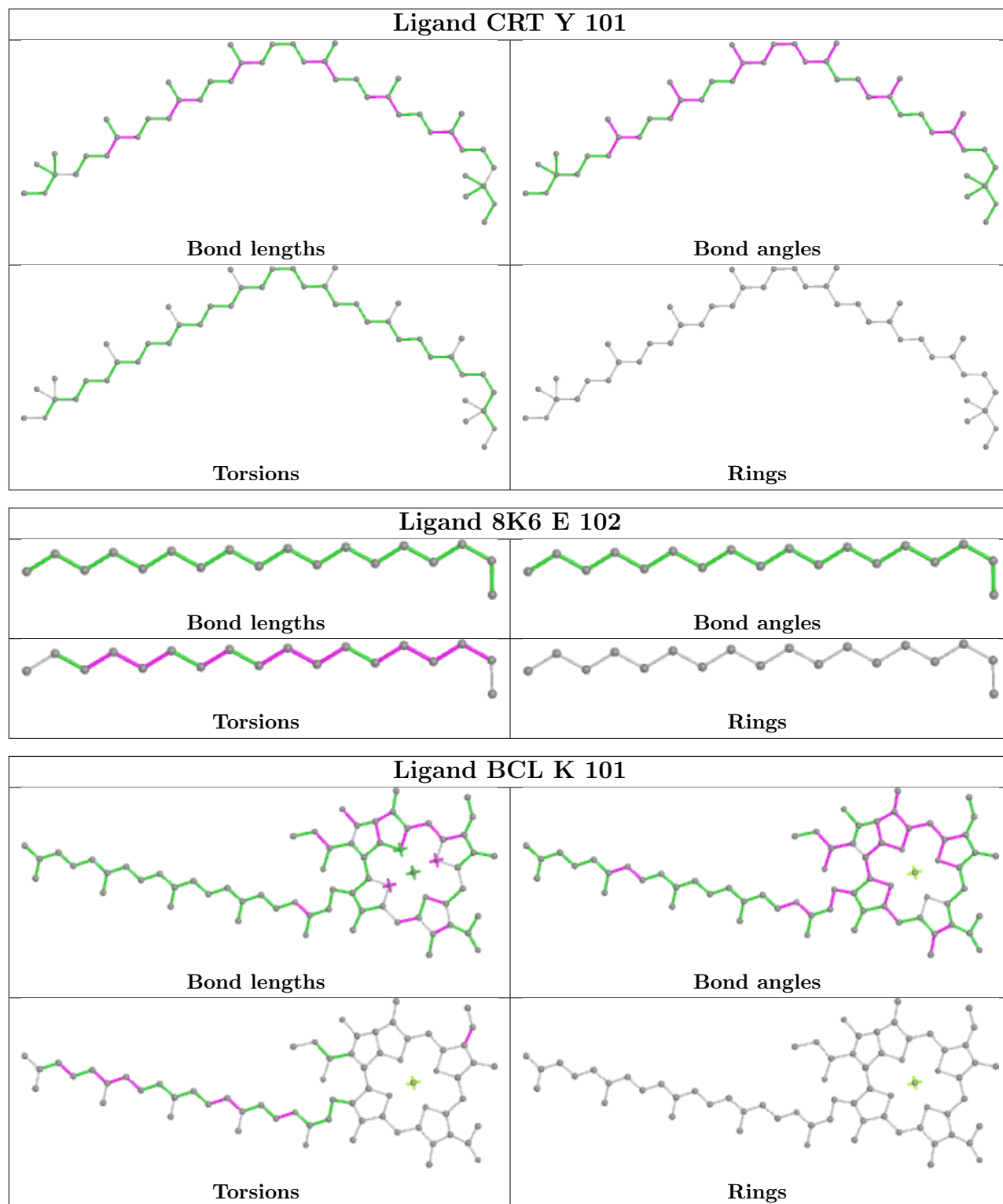
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.

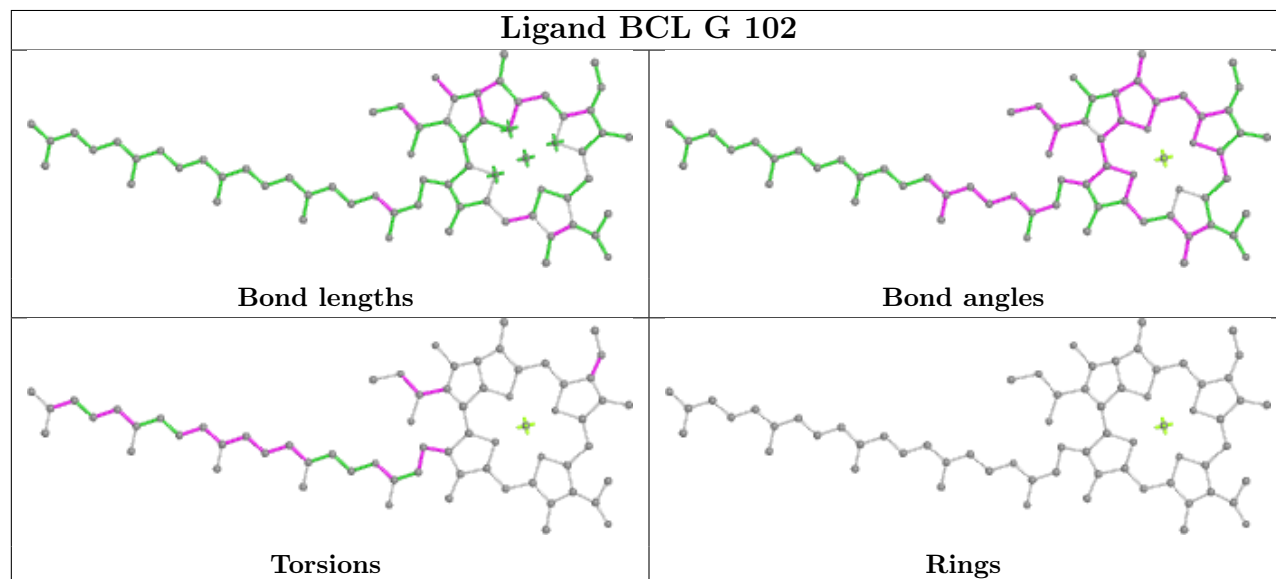
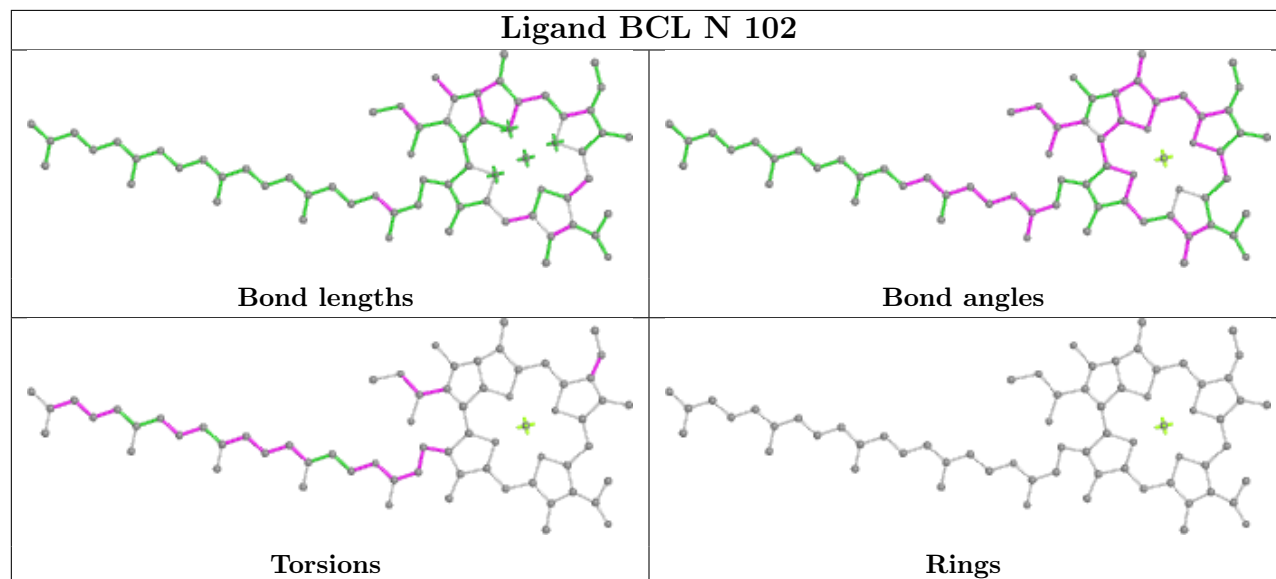
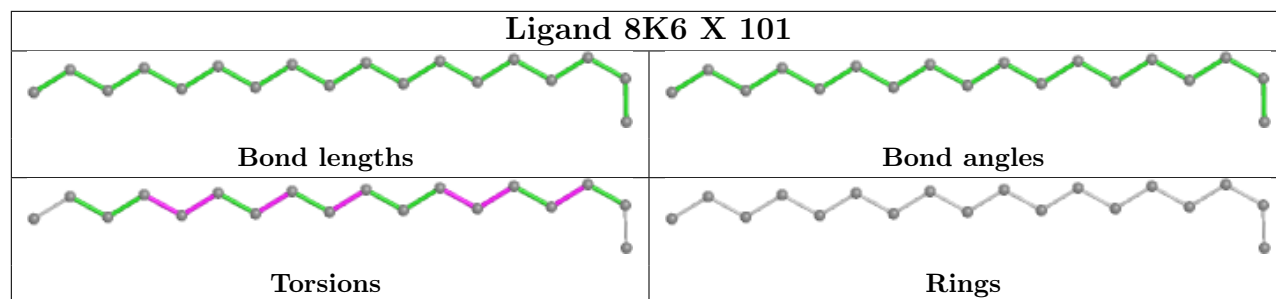
Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD 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.

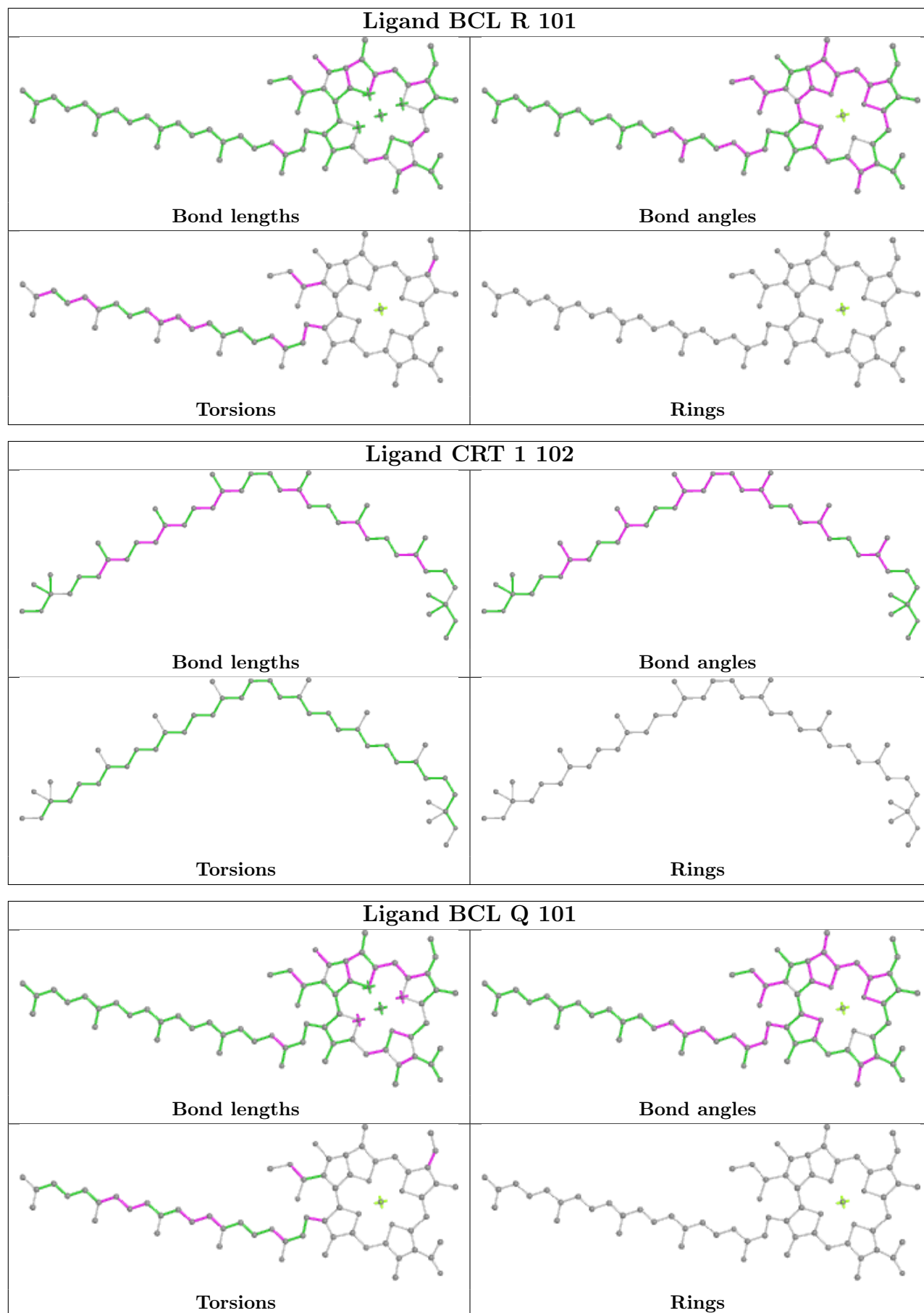


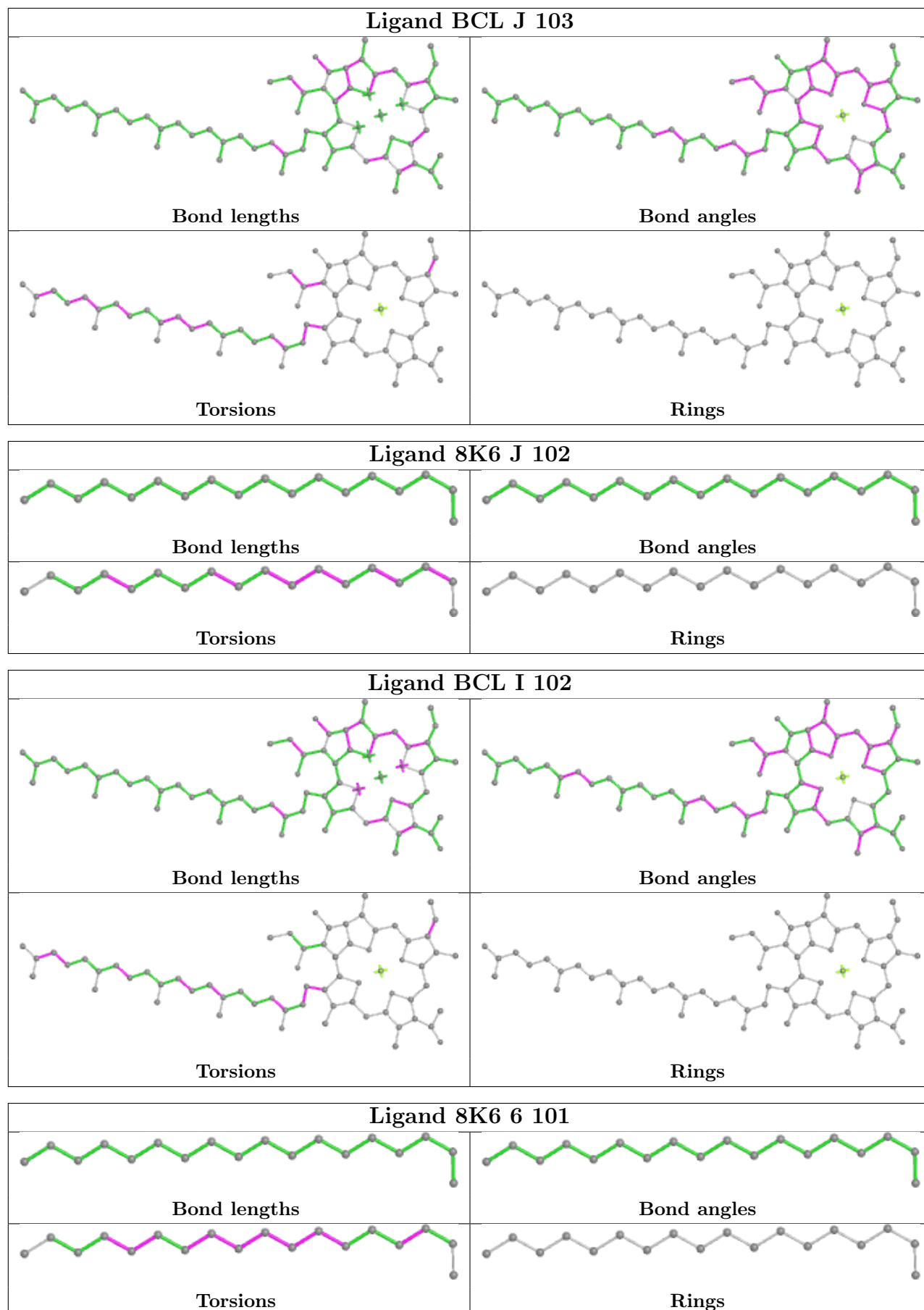


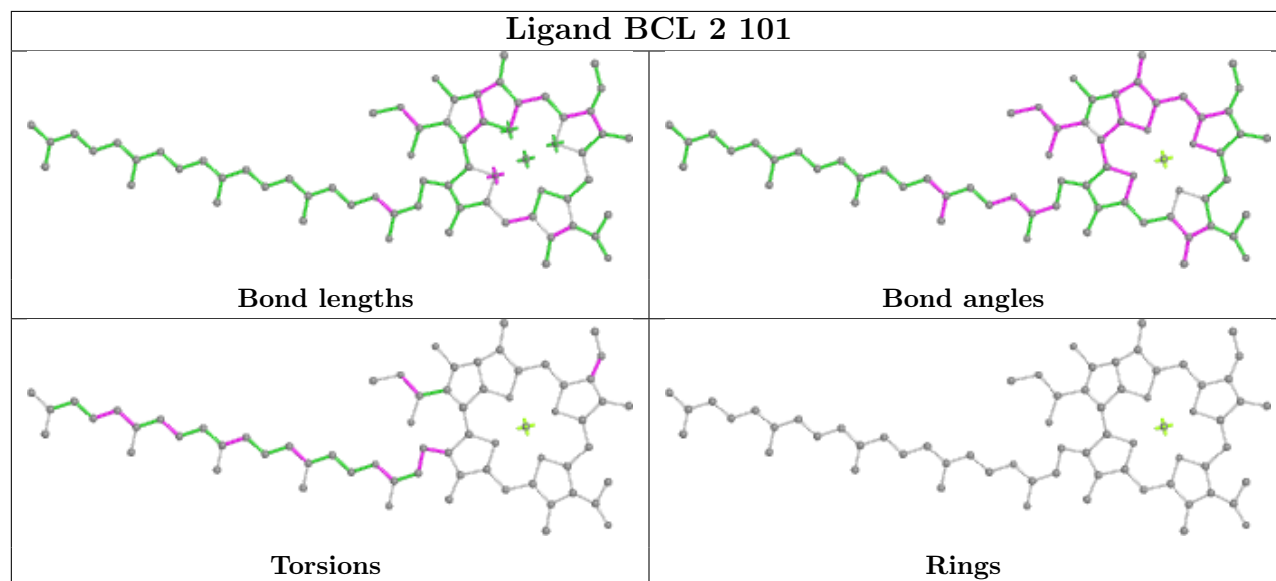
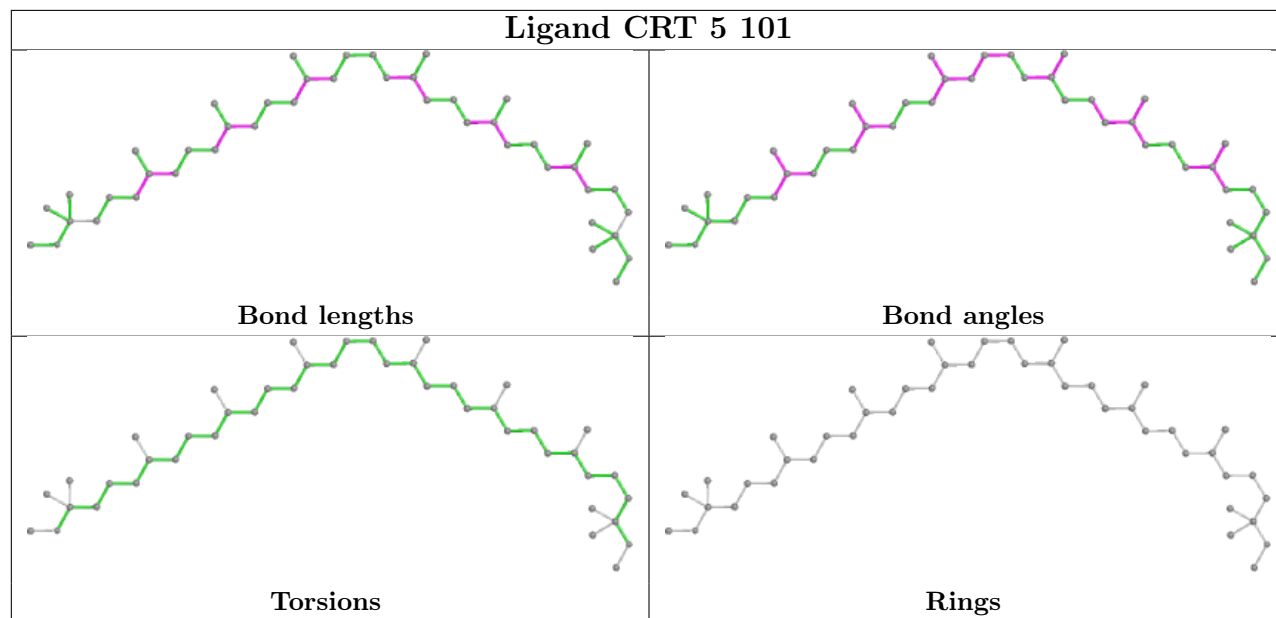
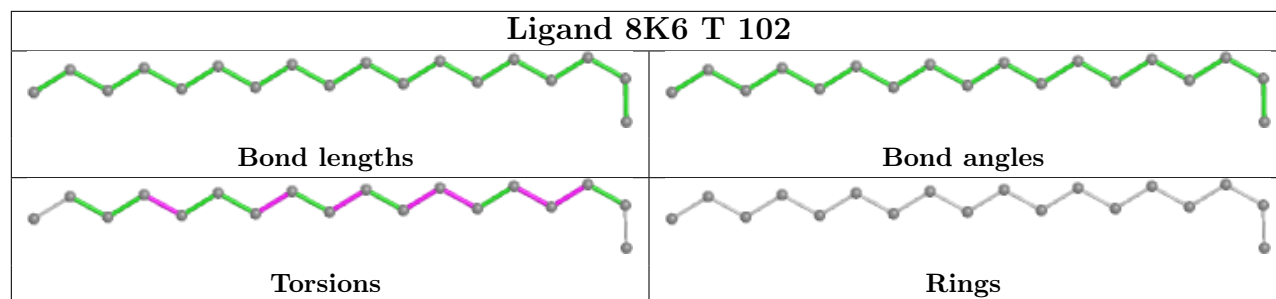


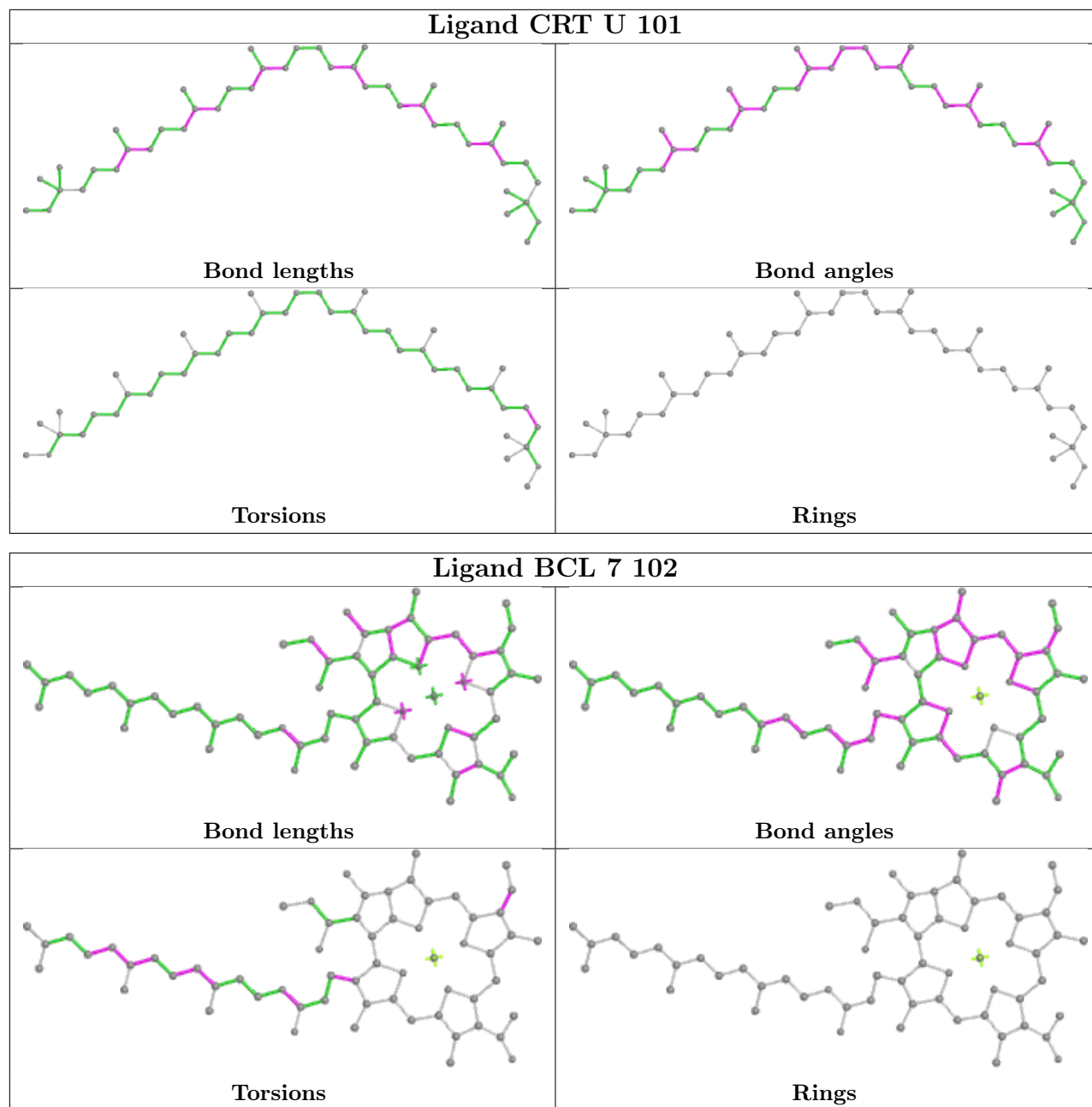


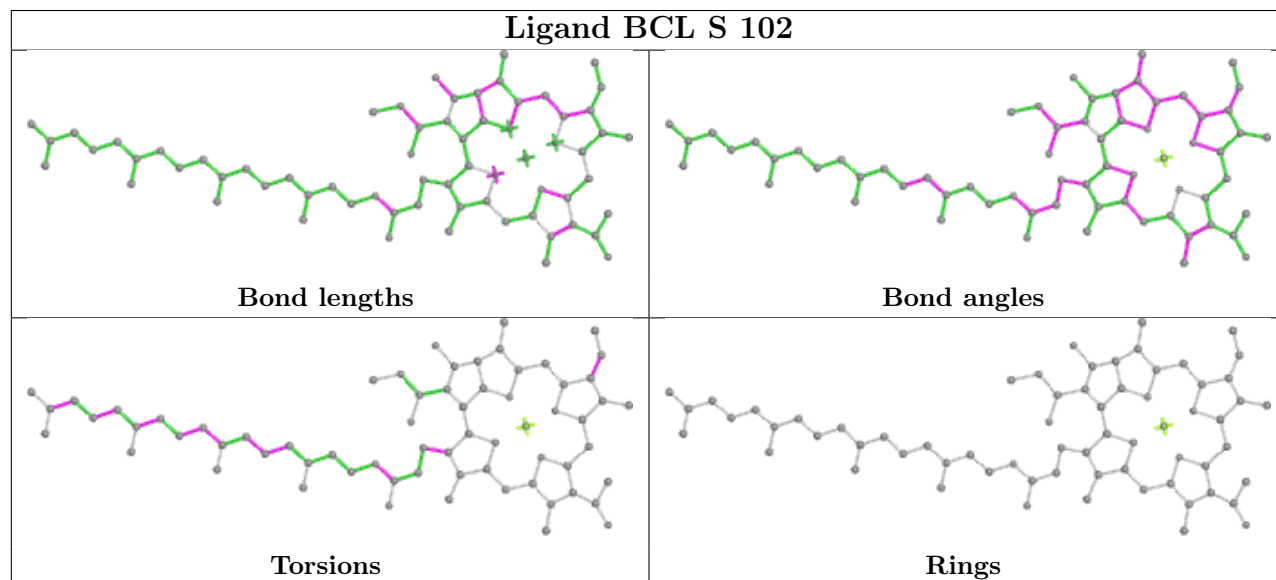
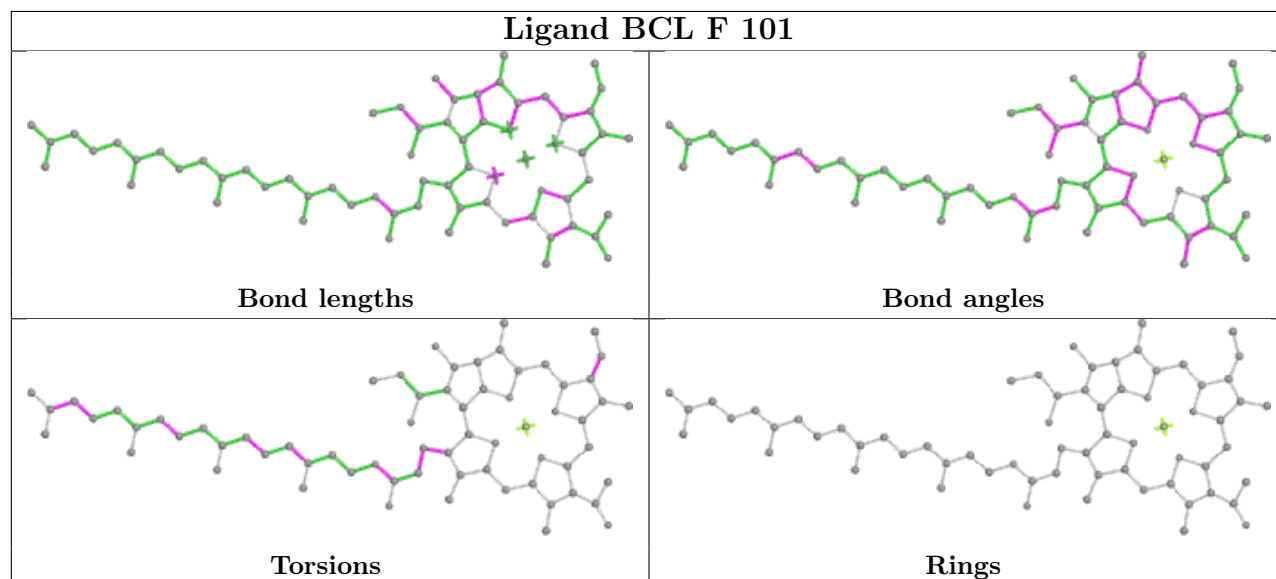
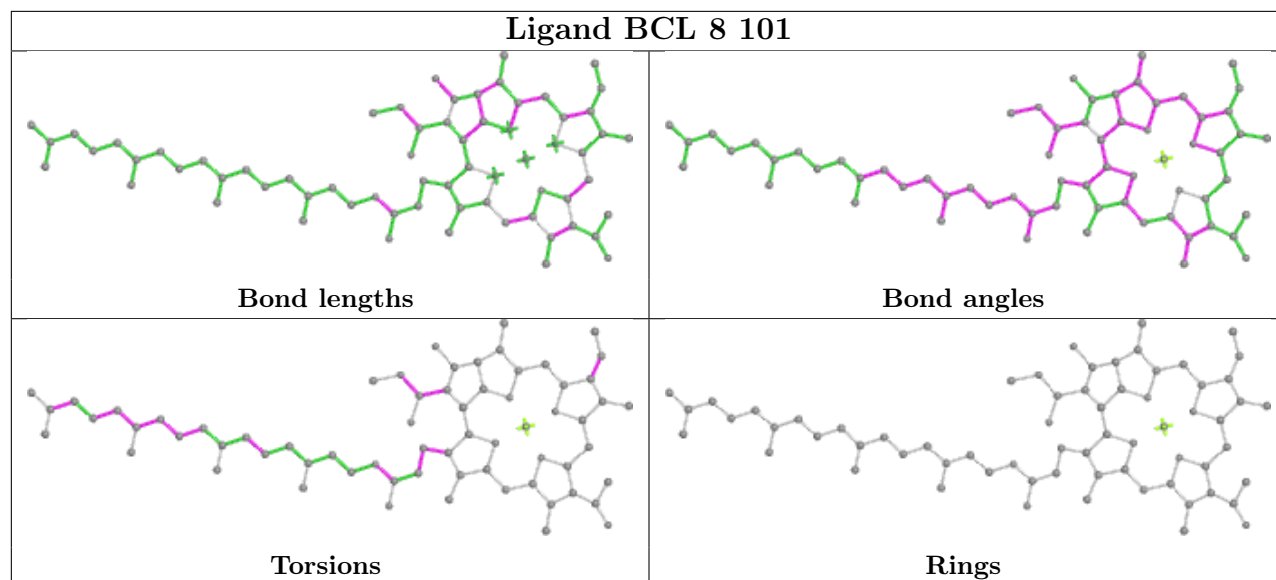


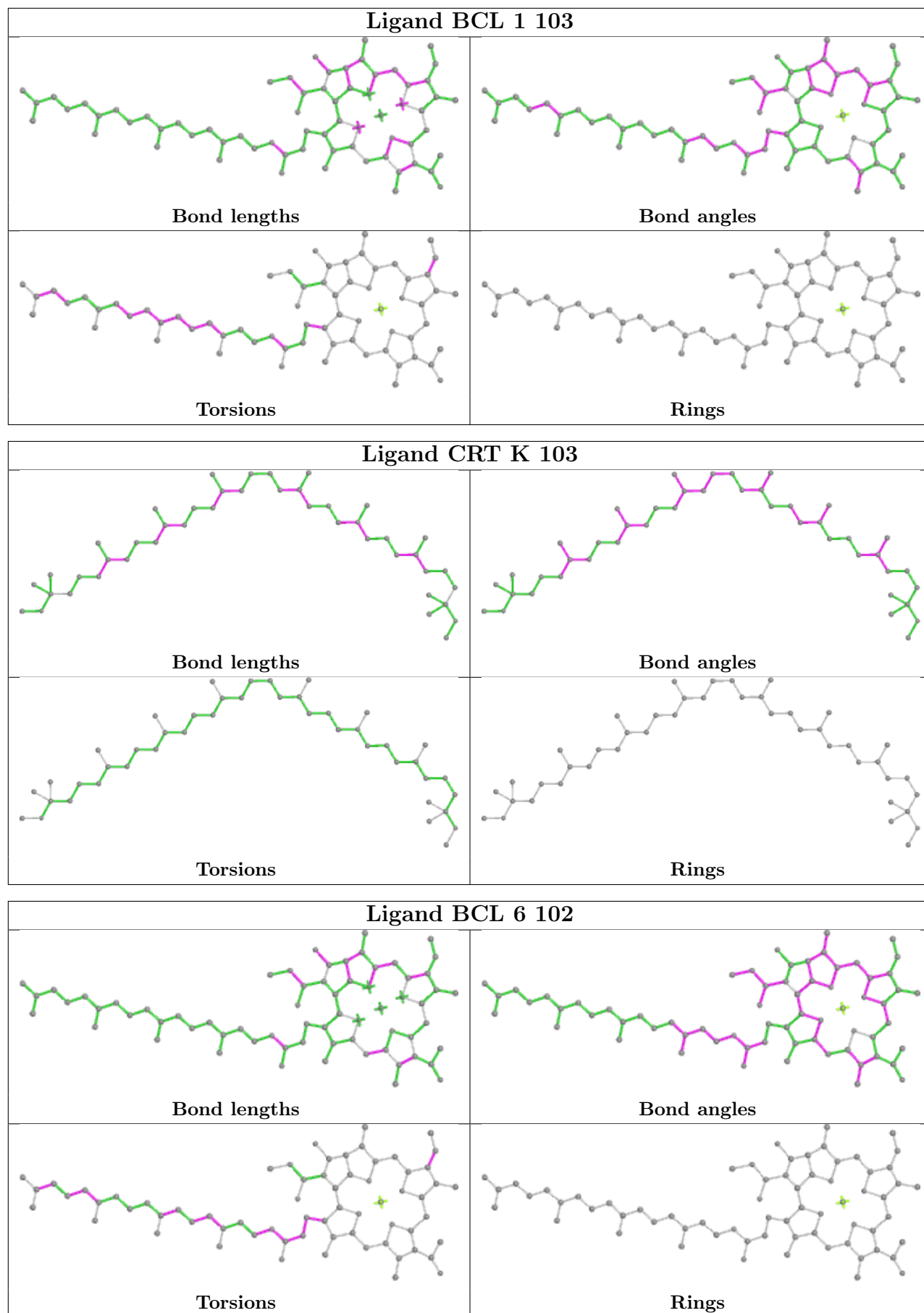


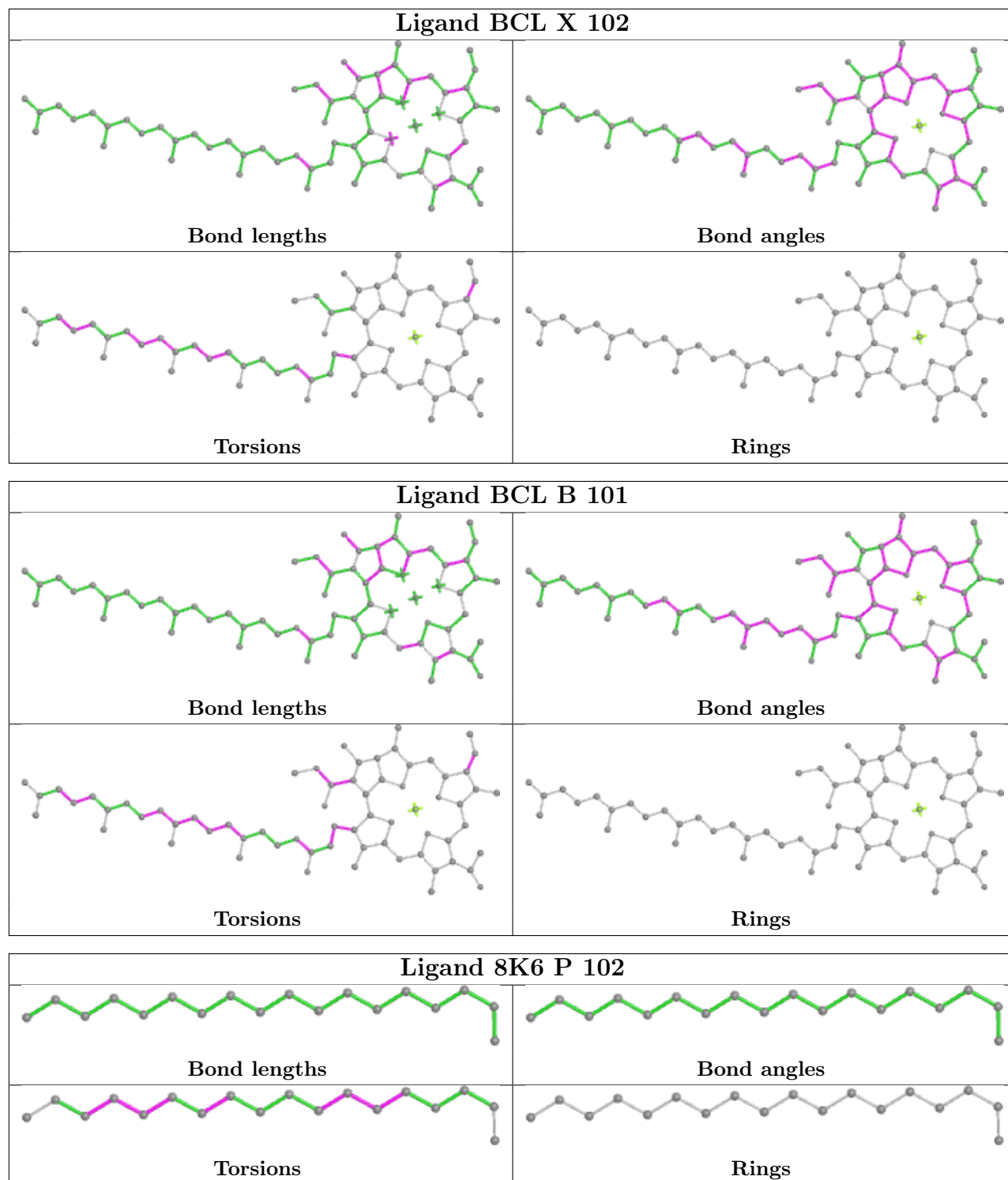


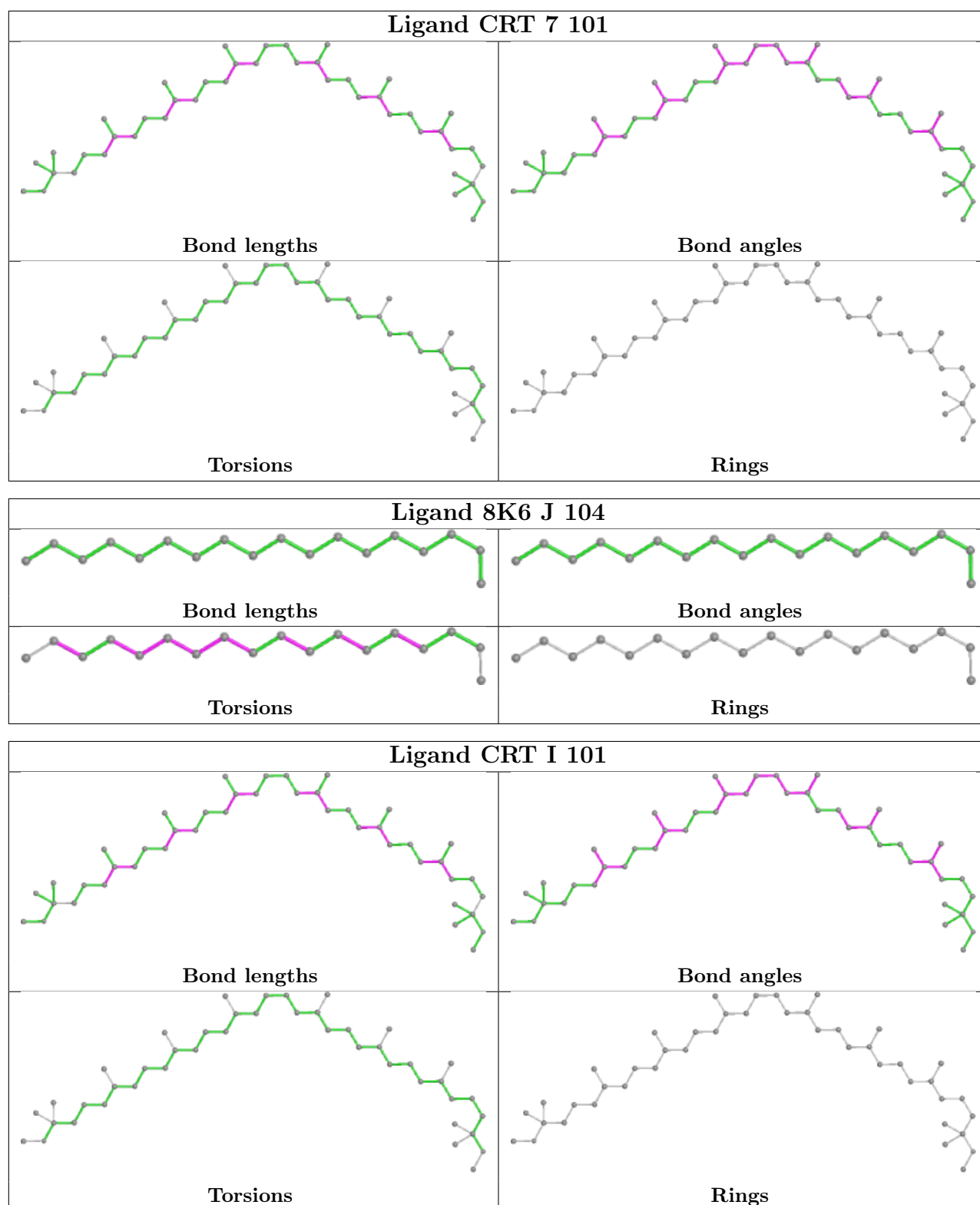


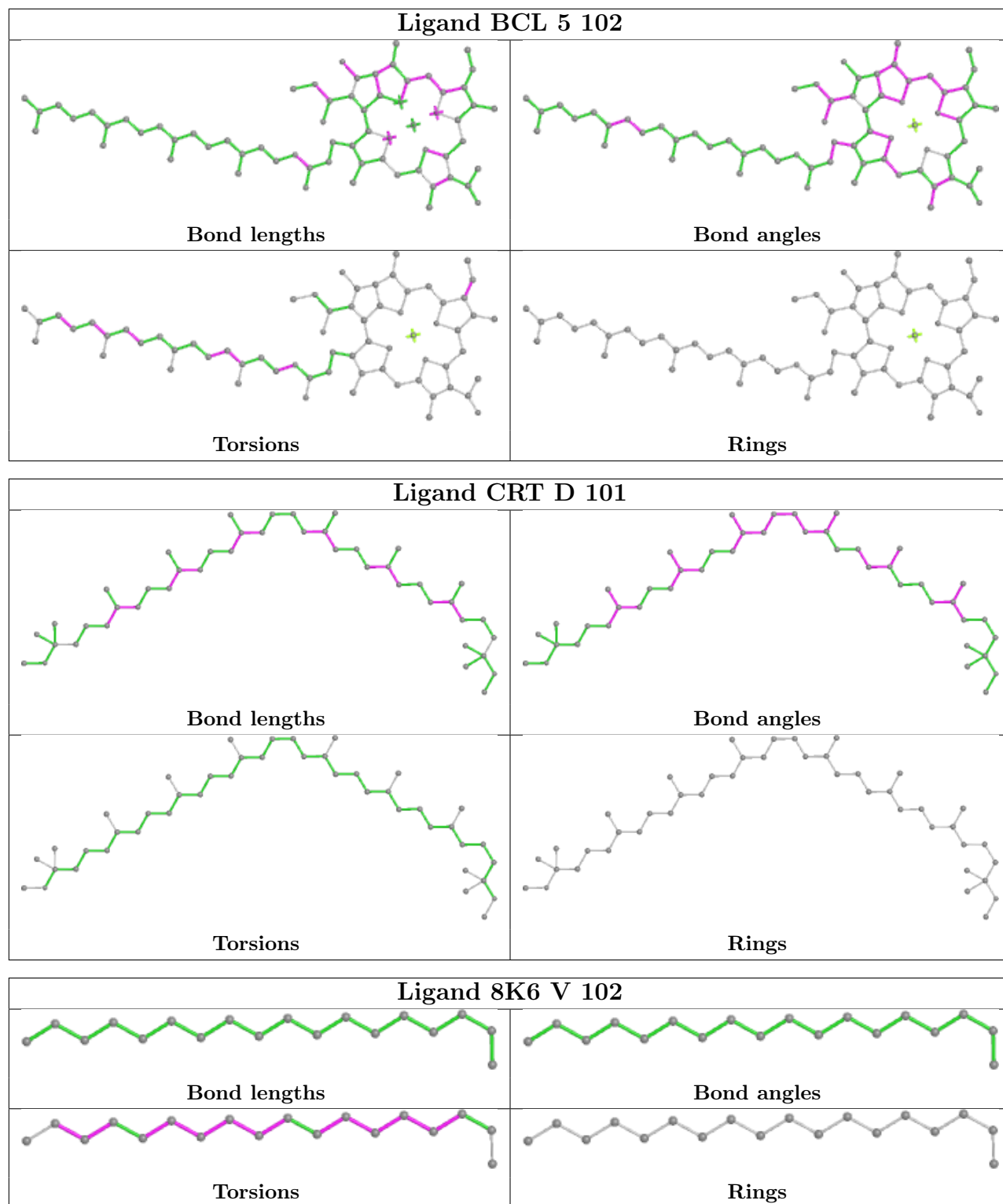


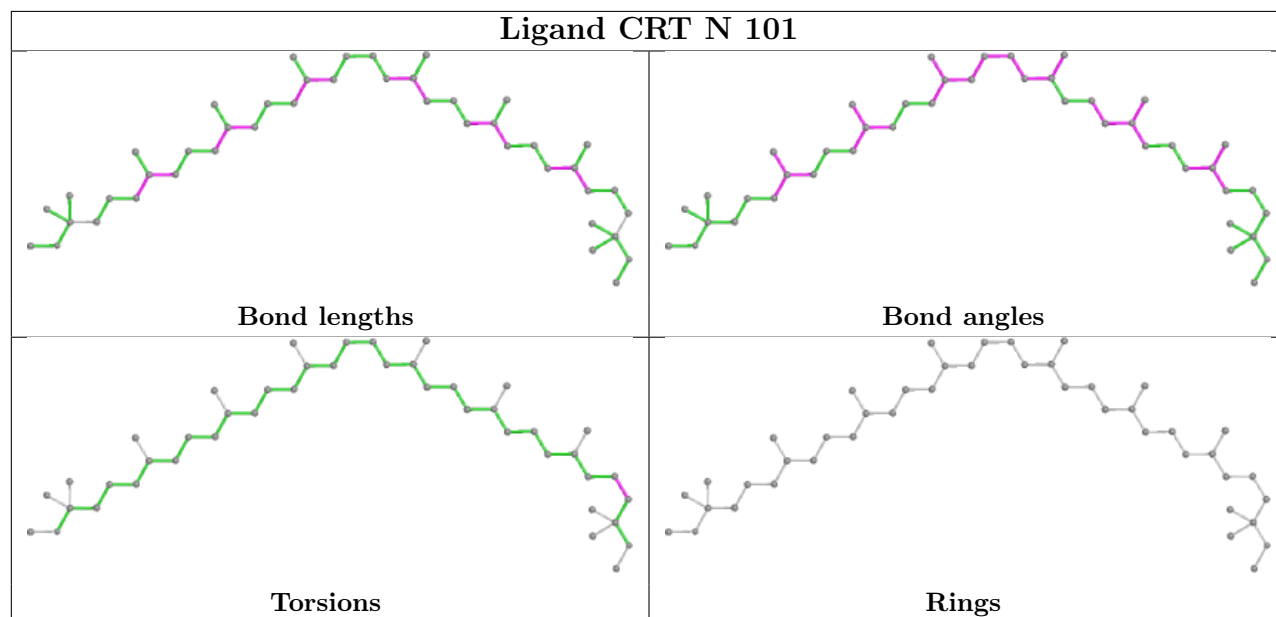
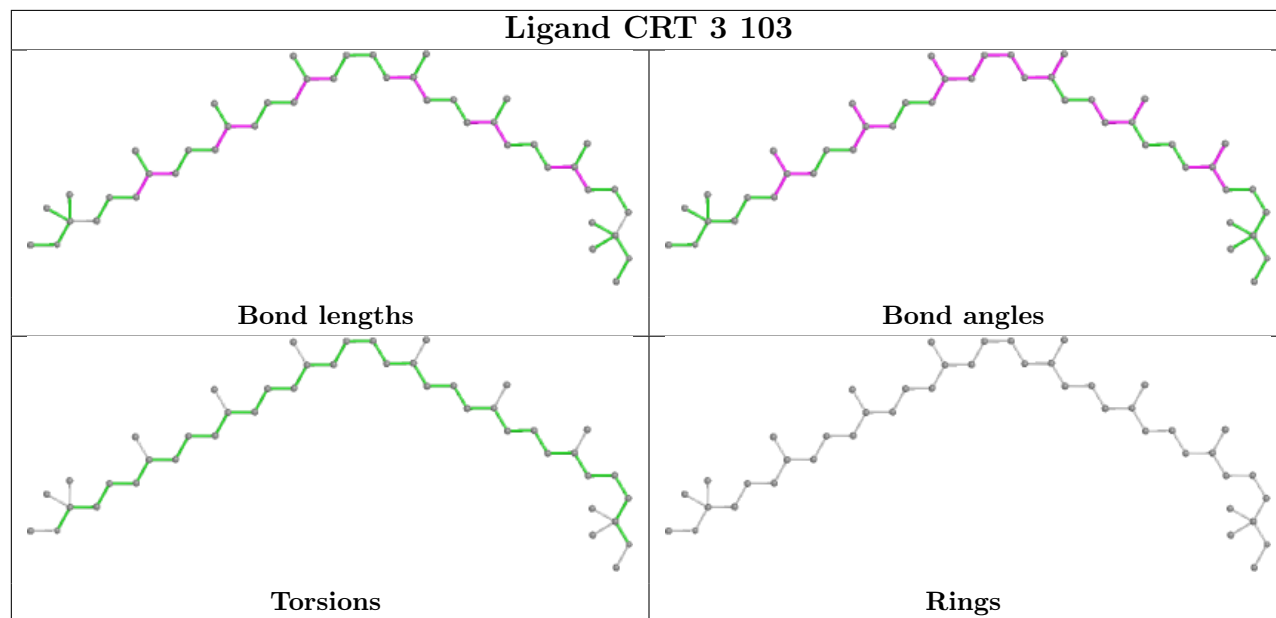
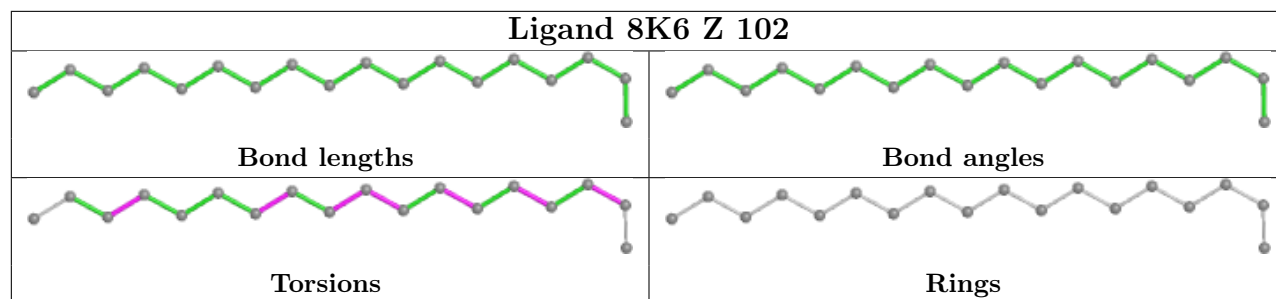


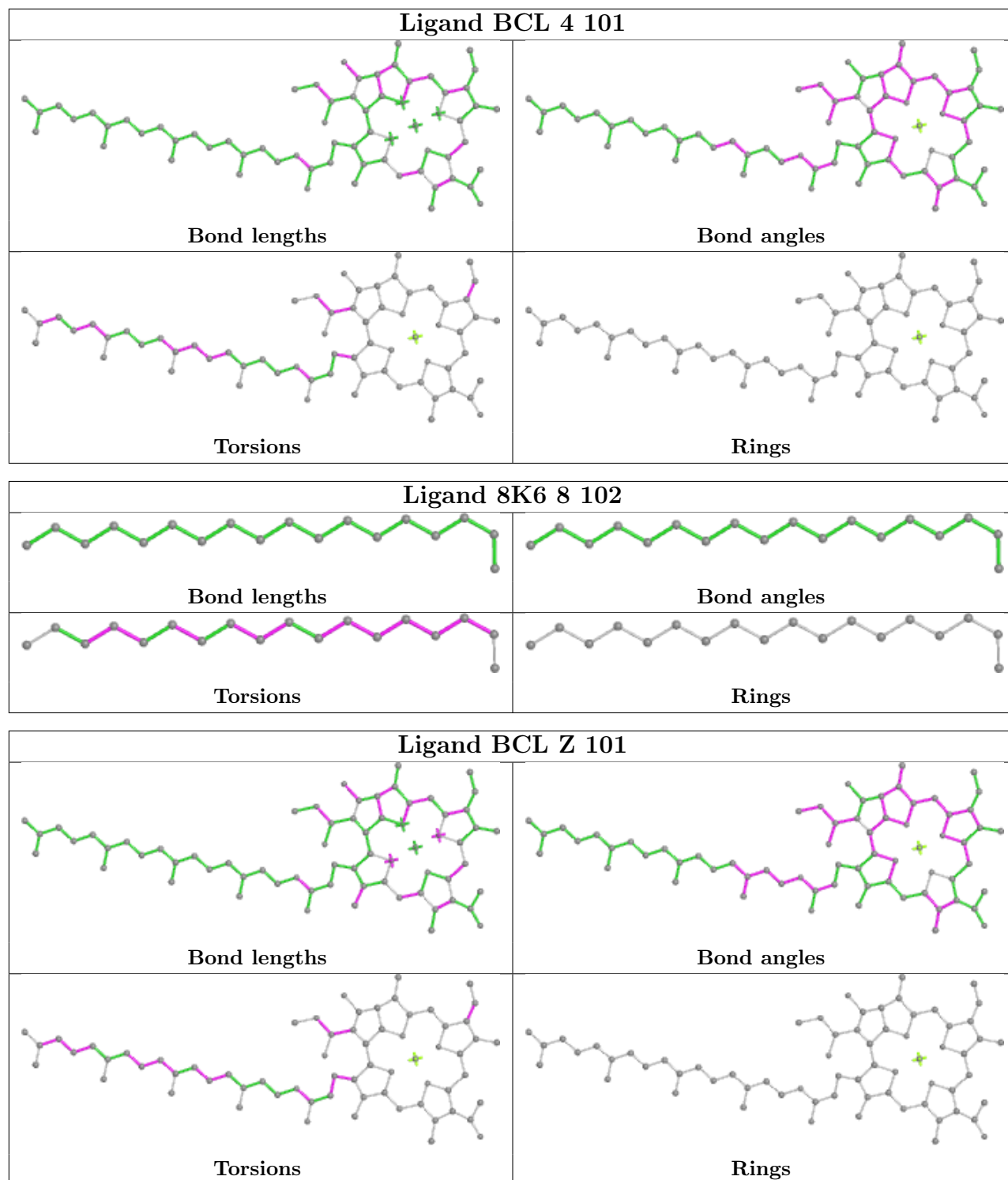


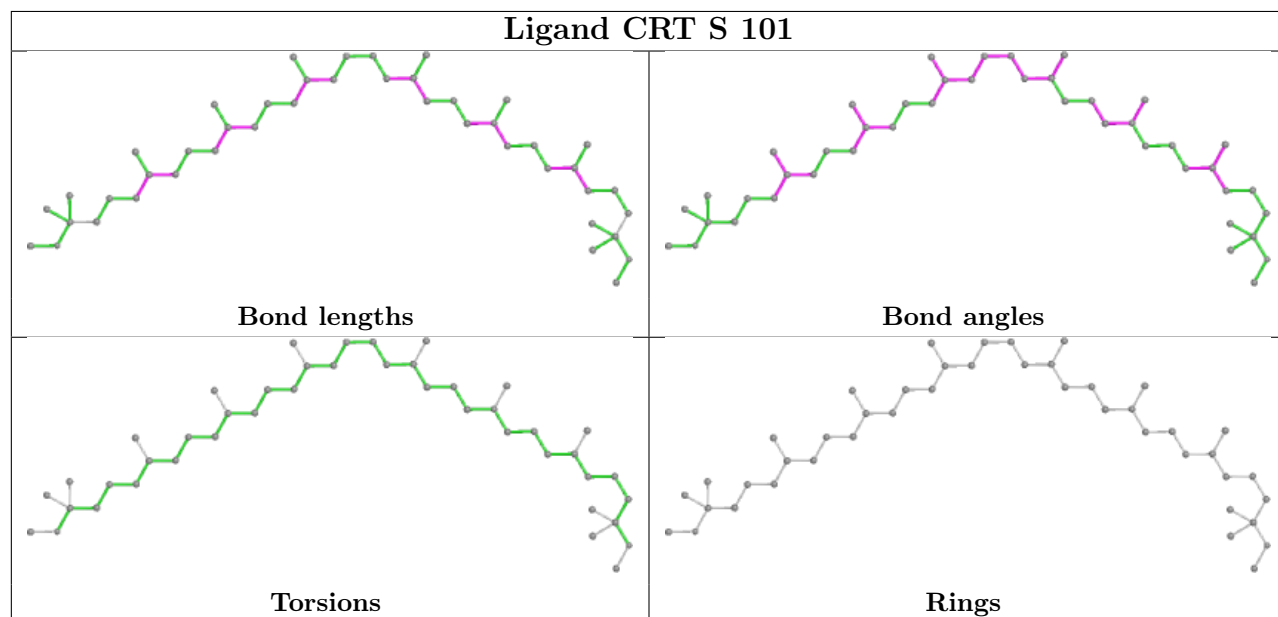
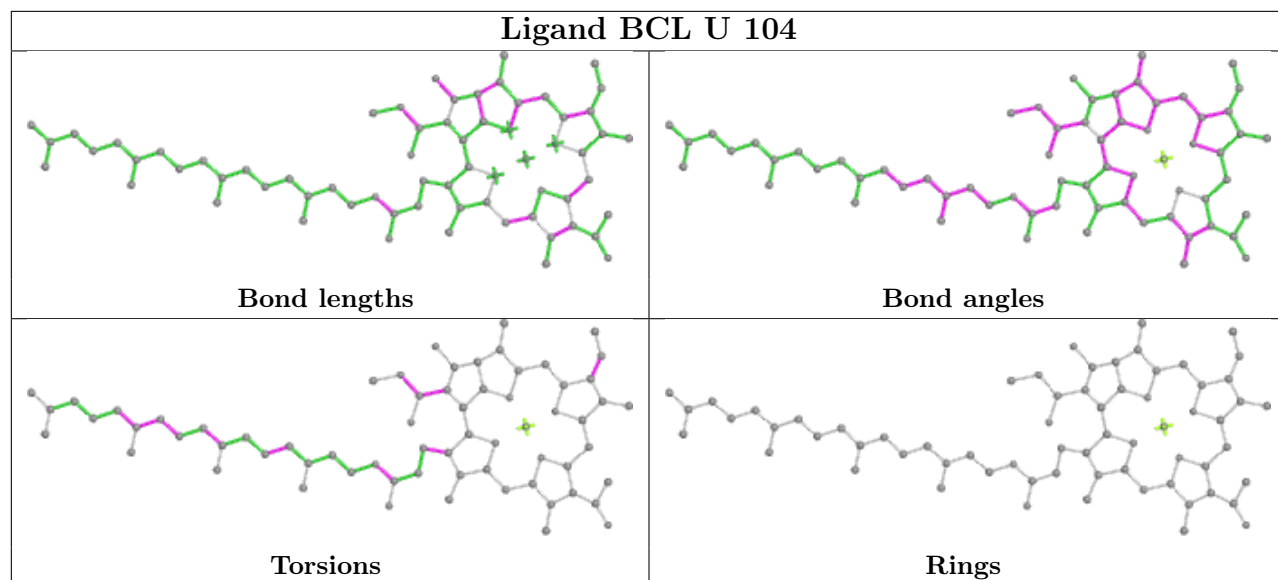


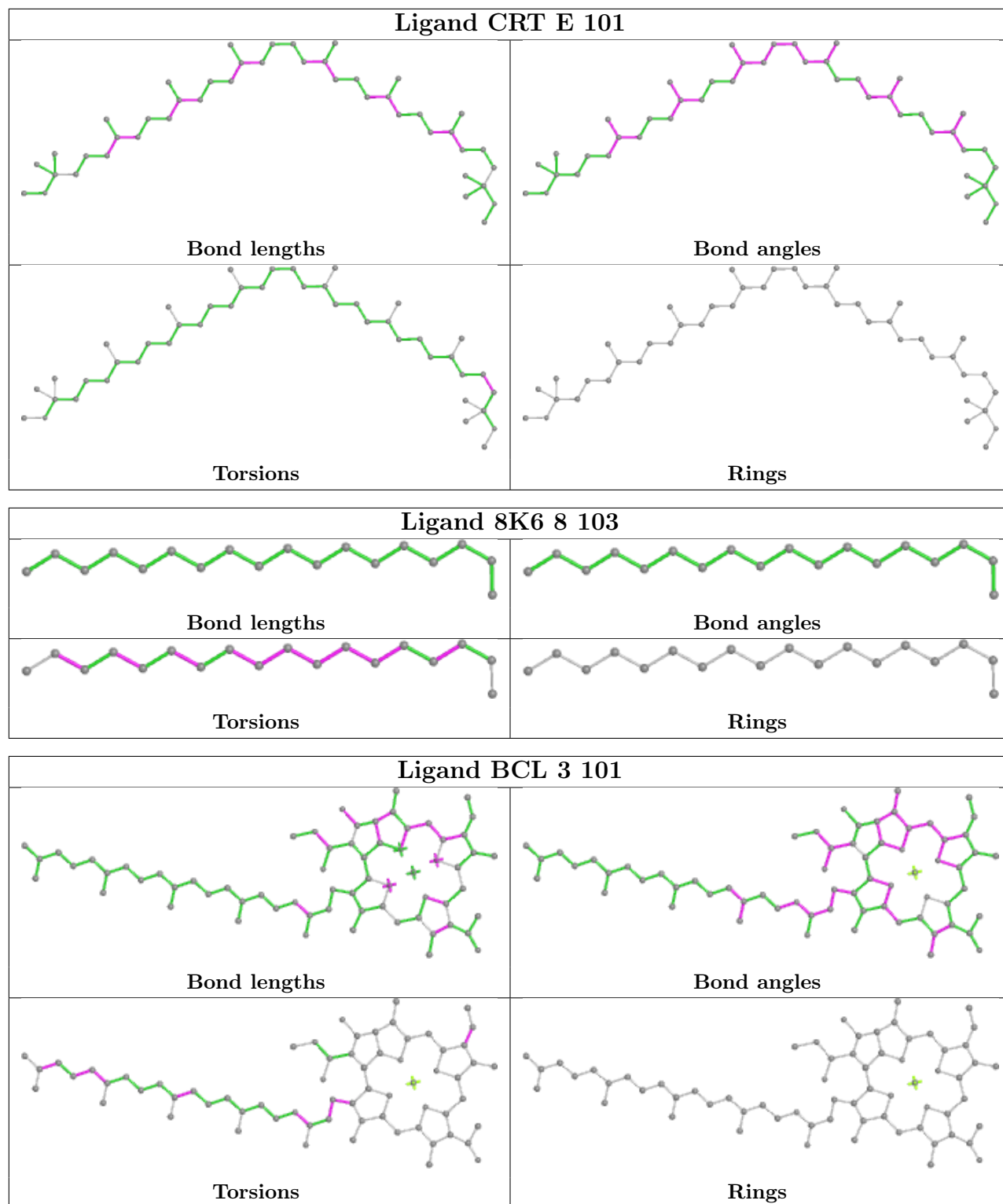


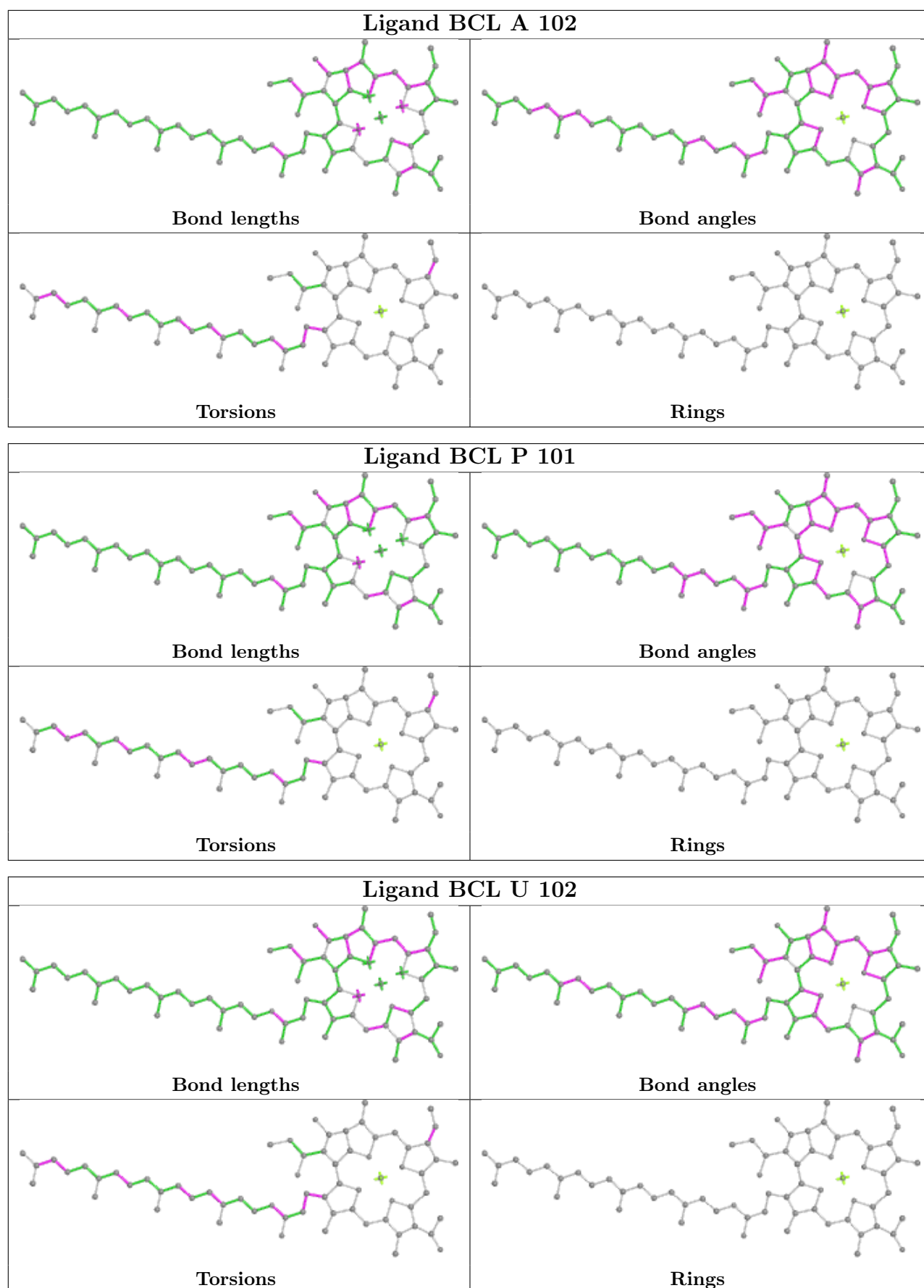


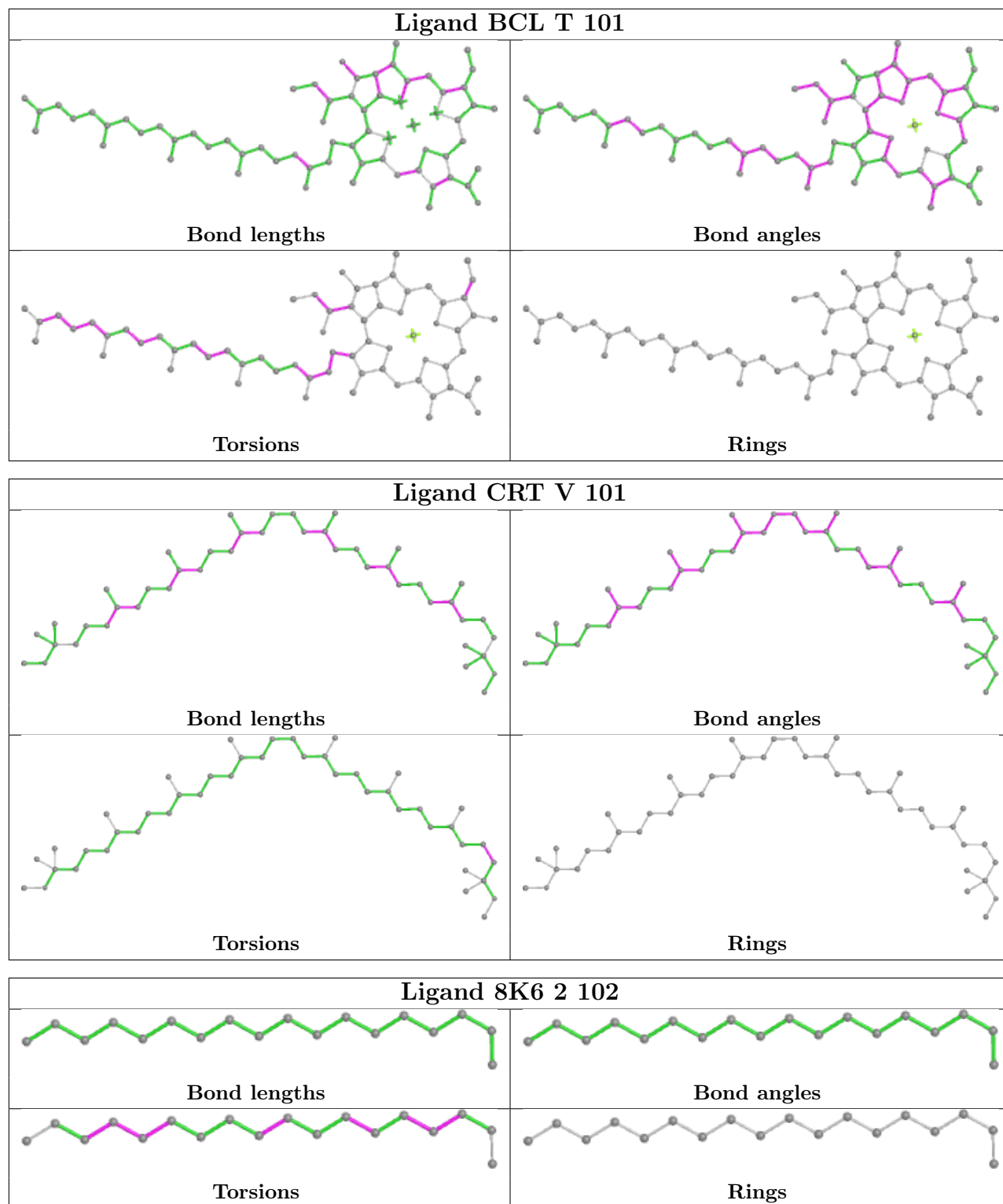


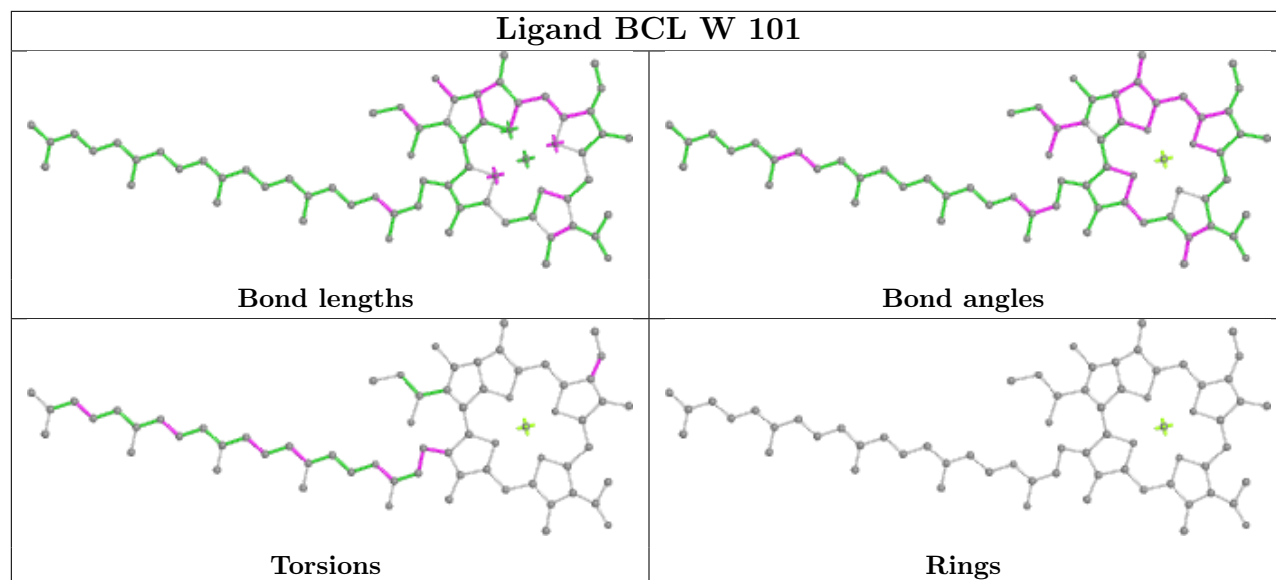












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

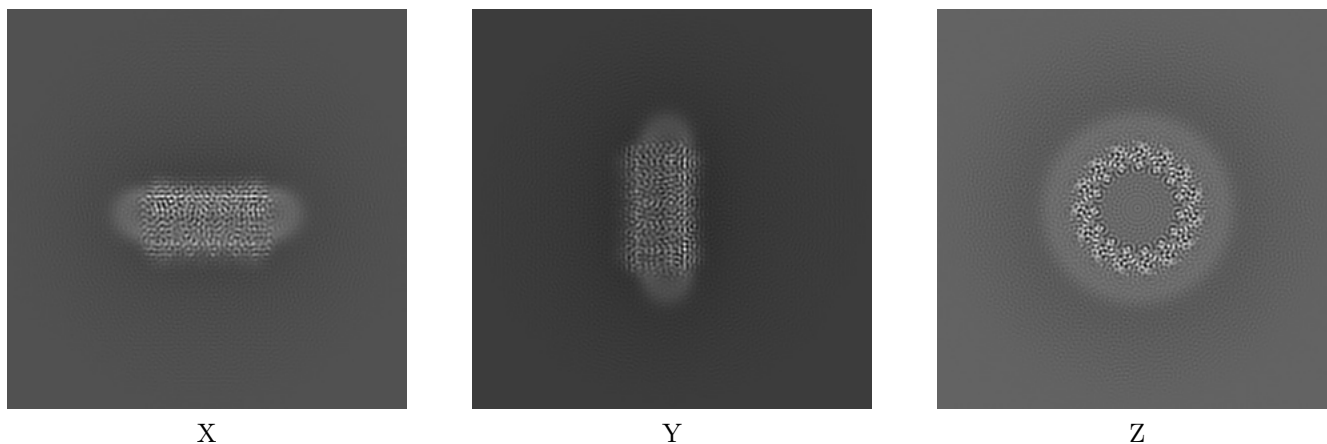
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-36151. These allow visual inspection of the internal detail of the map and identification of artifacts.

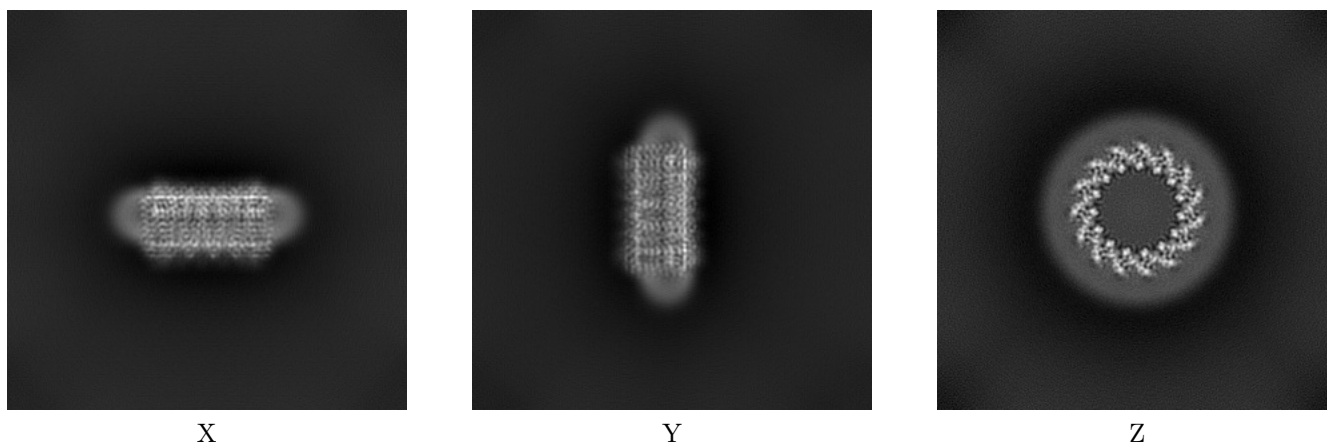
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



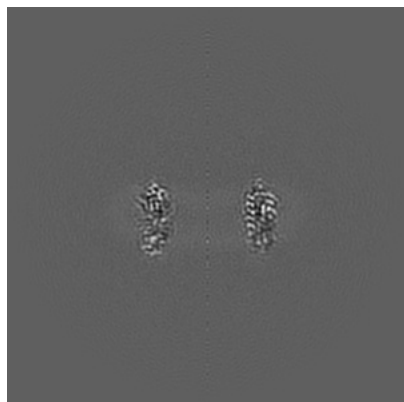
6.1.2 Raw map



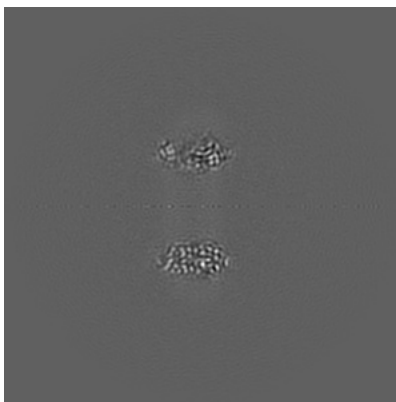
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

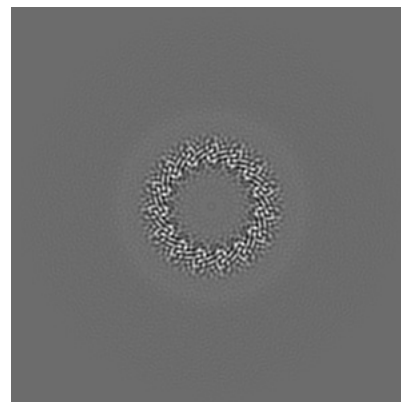
6.2.1 Primary map



X Index: 180

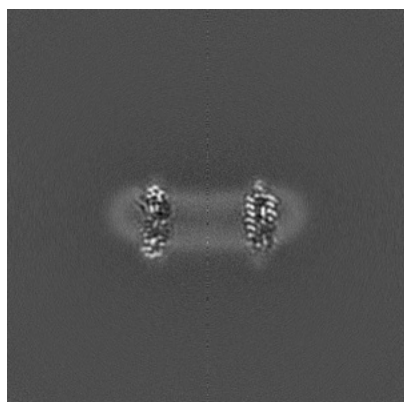


Y Index: 180

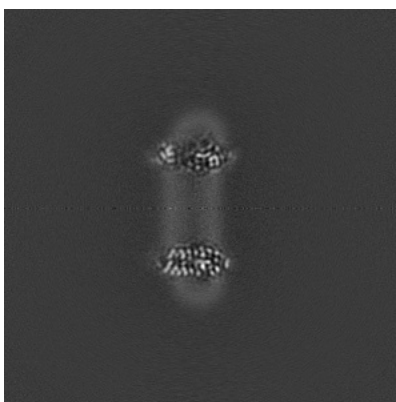


Z Index: 180

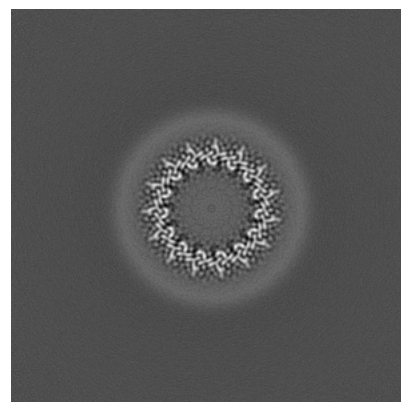
6.2.2 Raw map



X Index: 180



Y Index: 180

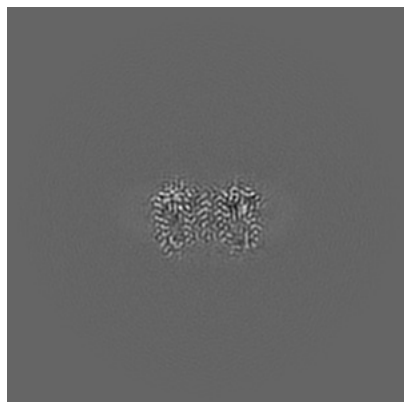


Z Index: 180

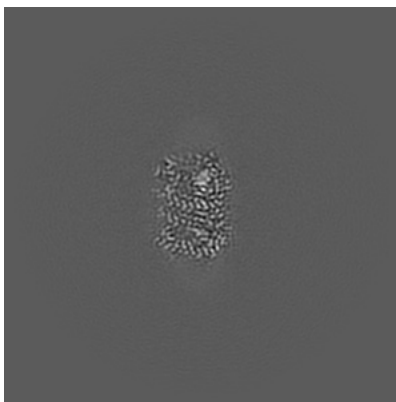
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

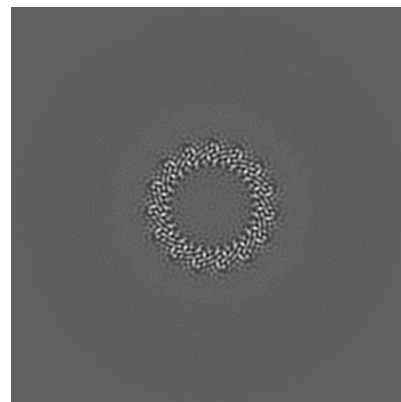
6.3.1 Primary map



X Index: 143

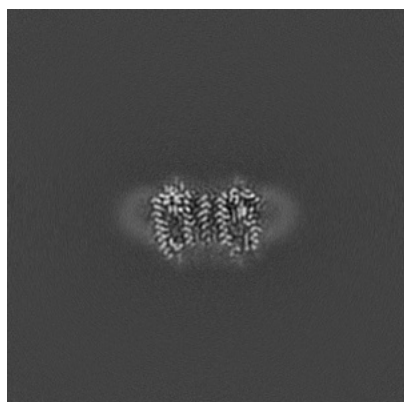


Y Index: 221

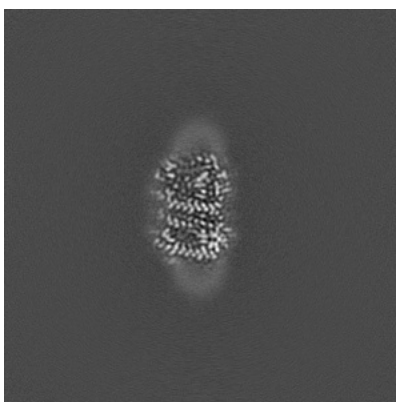


Z Index: 179

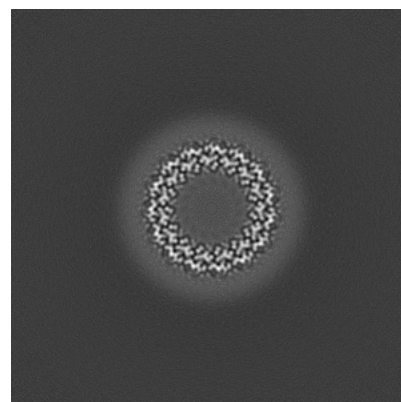
6.3.2 Raw map



X Index: 143



Y Index: 220

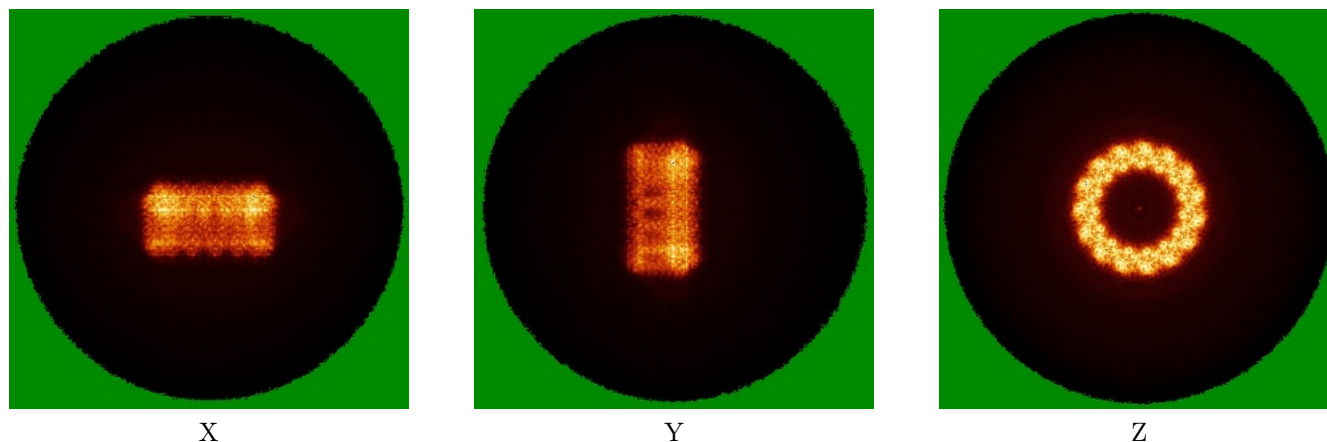


Z Index: 191

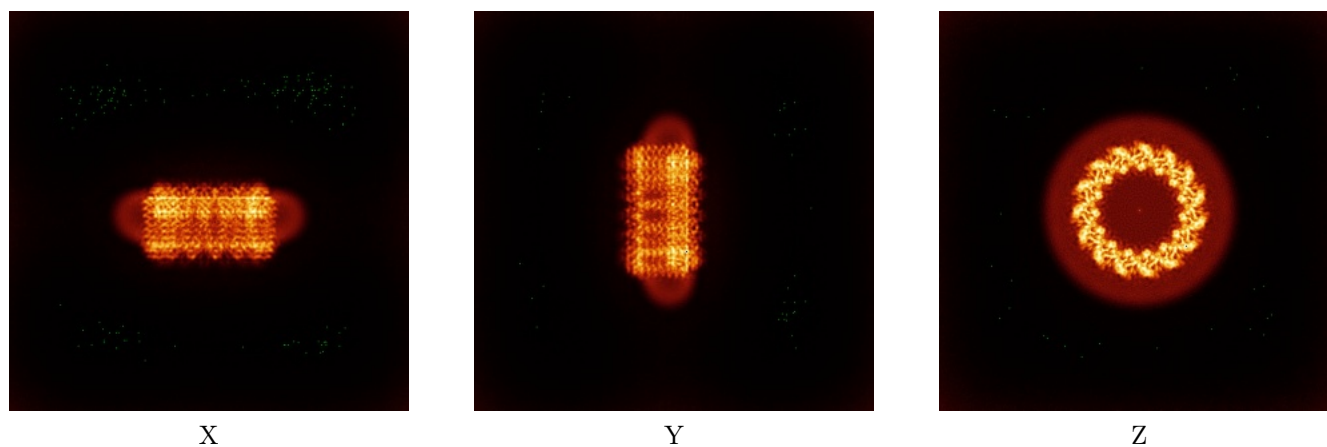
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

6.4.1 Primary map



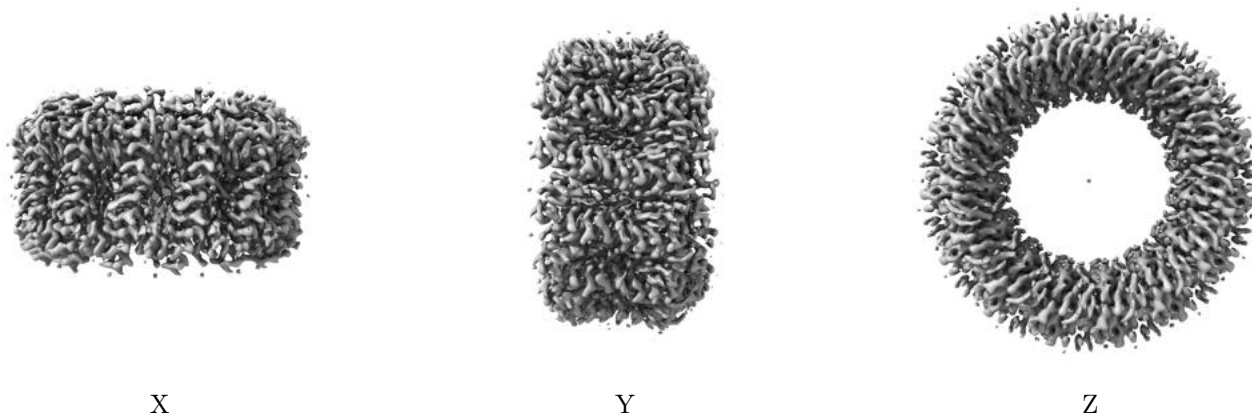
6.4.2 Raw map



The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

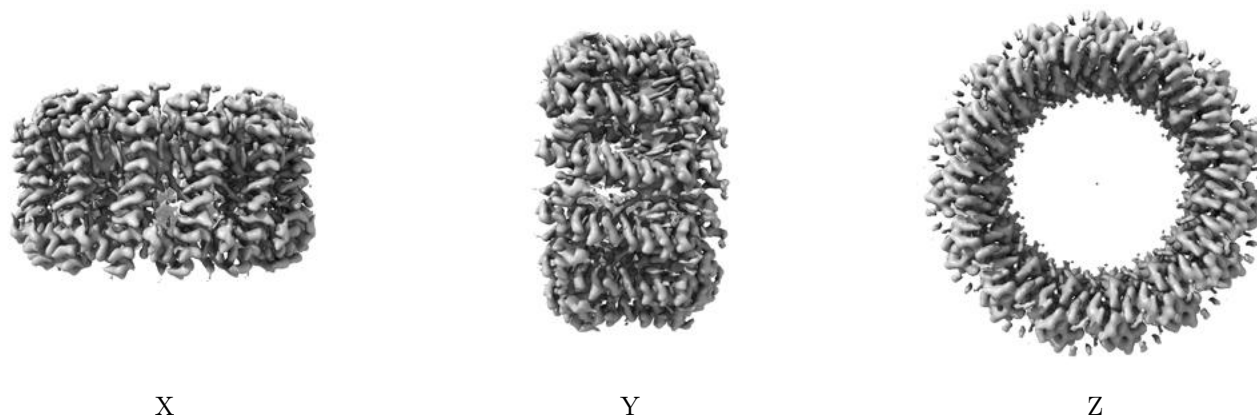
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

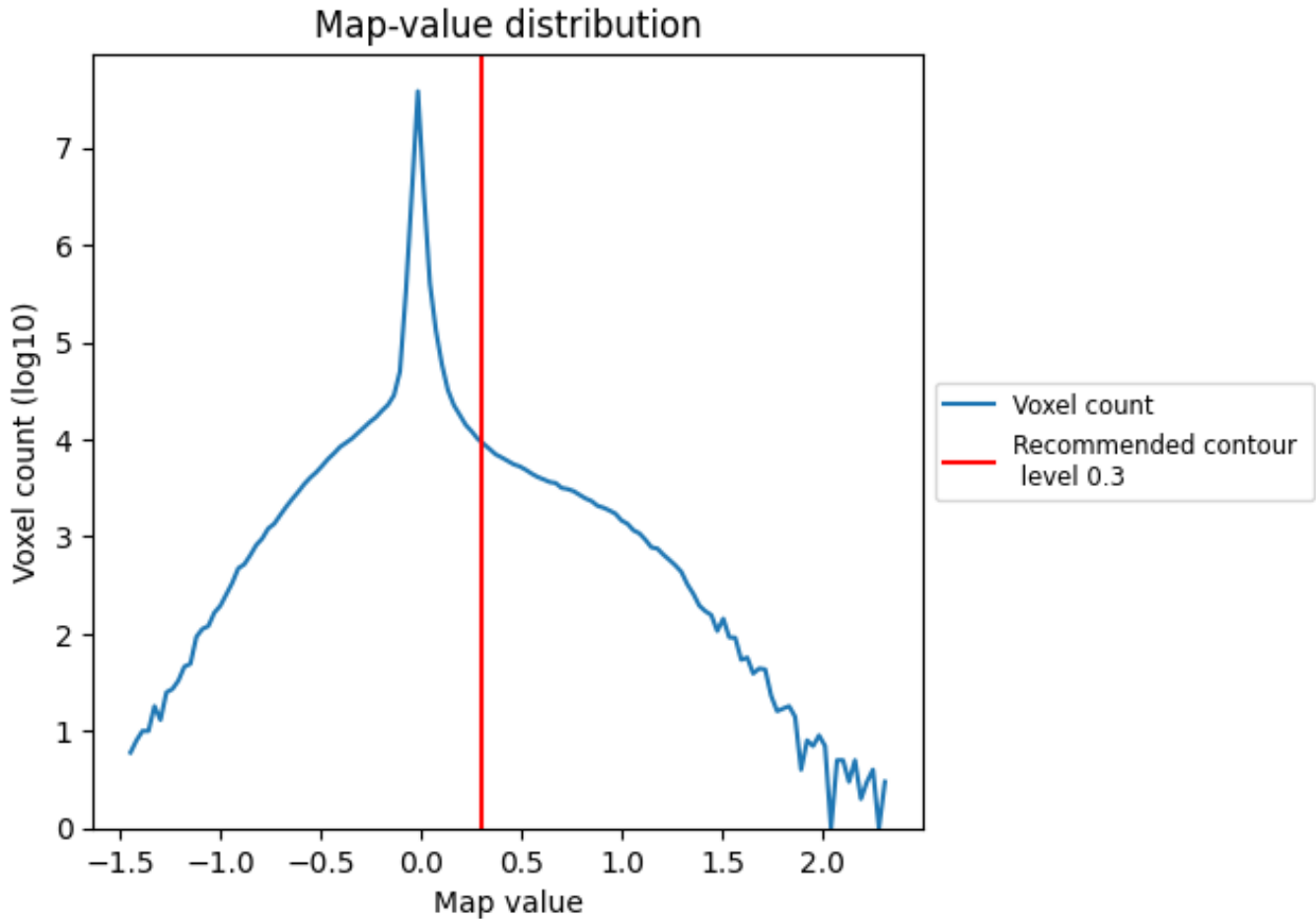
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

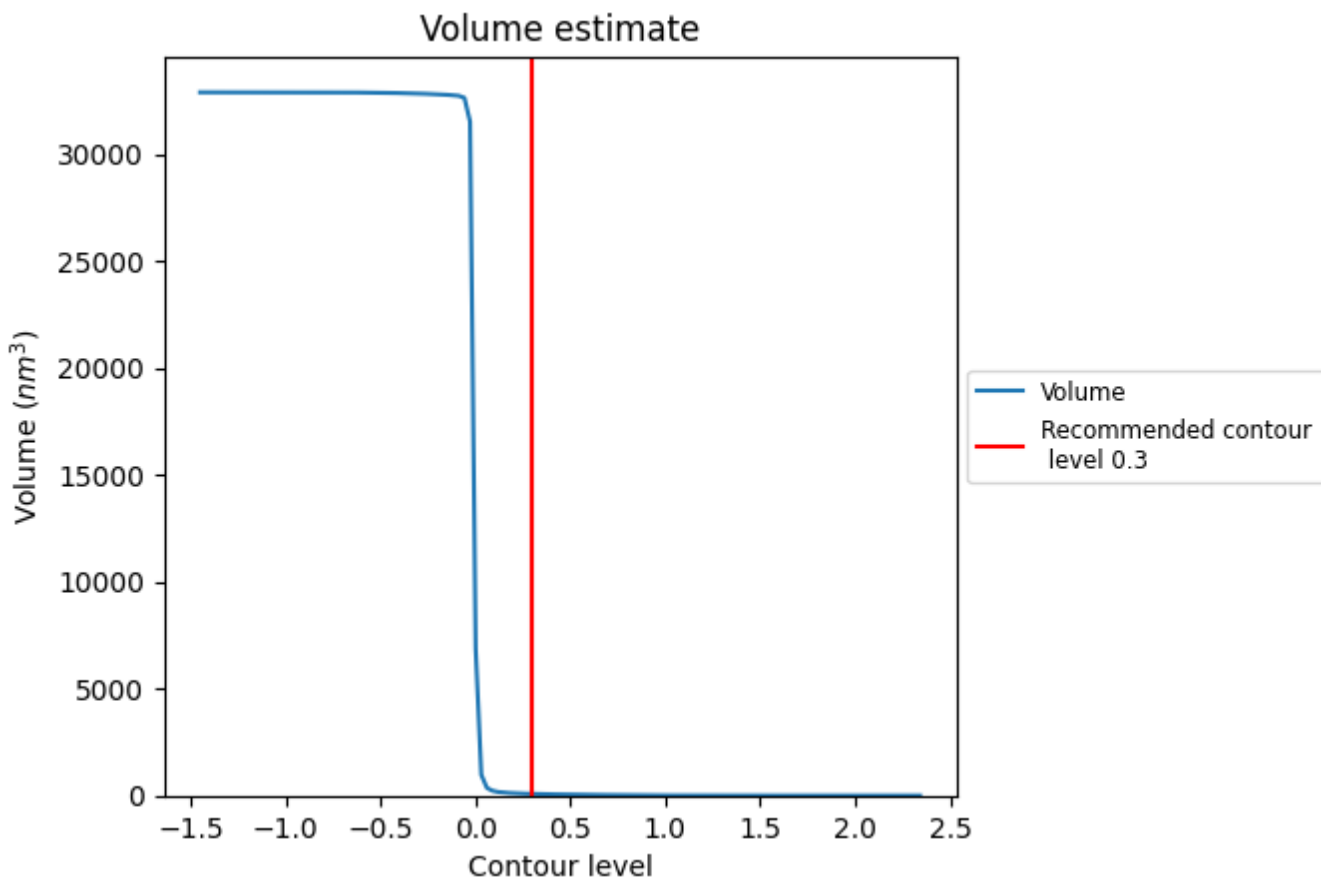
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

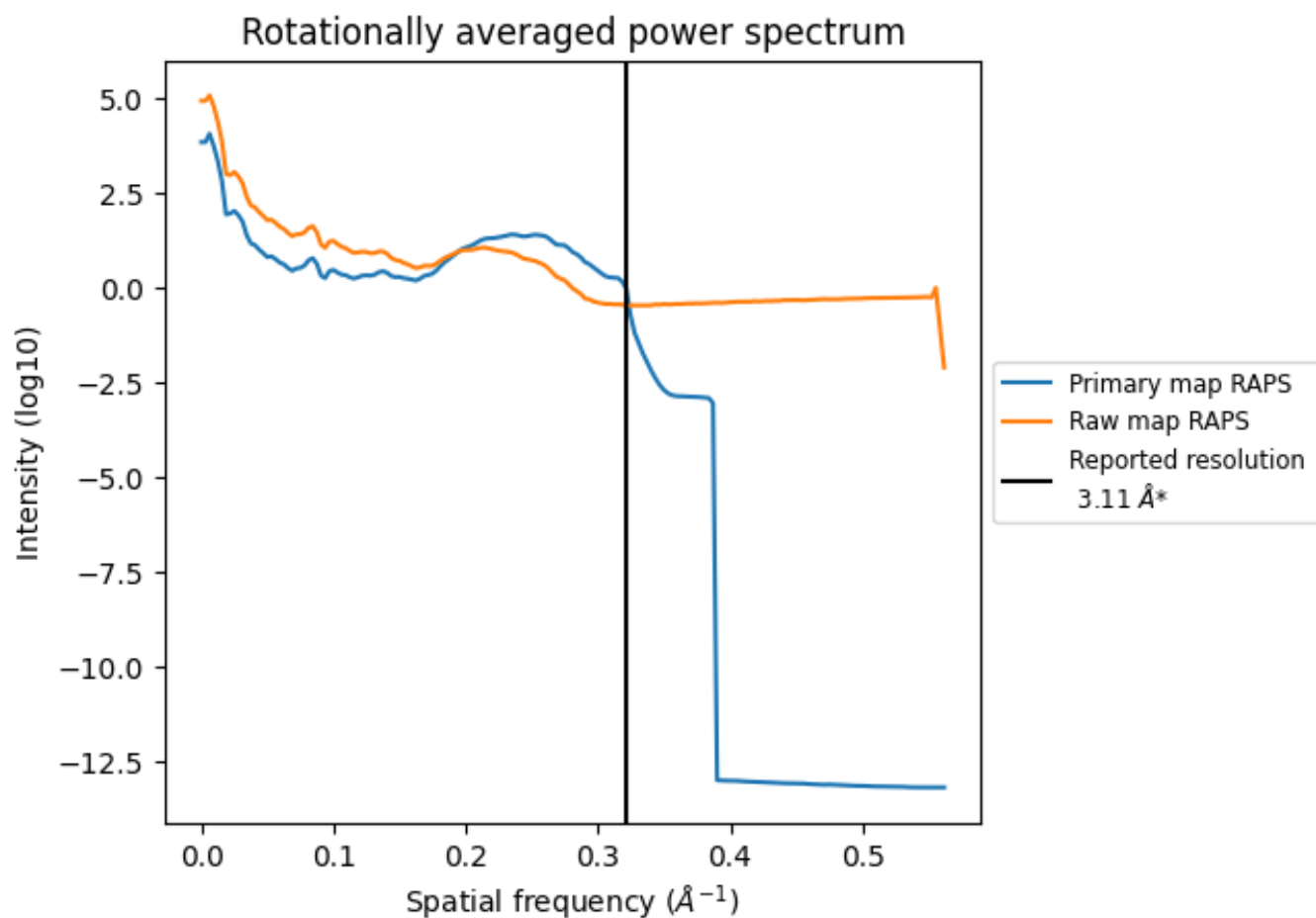
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 79 nm³; this corresponds to an approximate mass of 71 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)

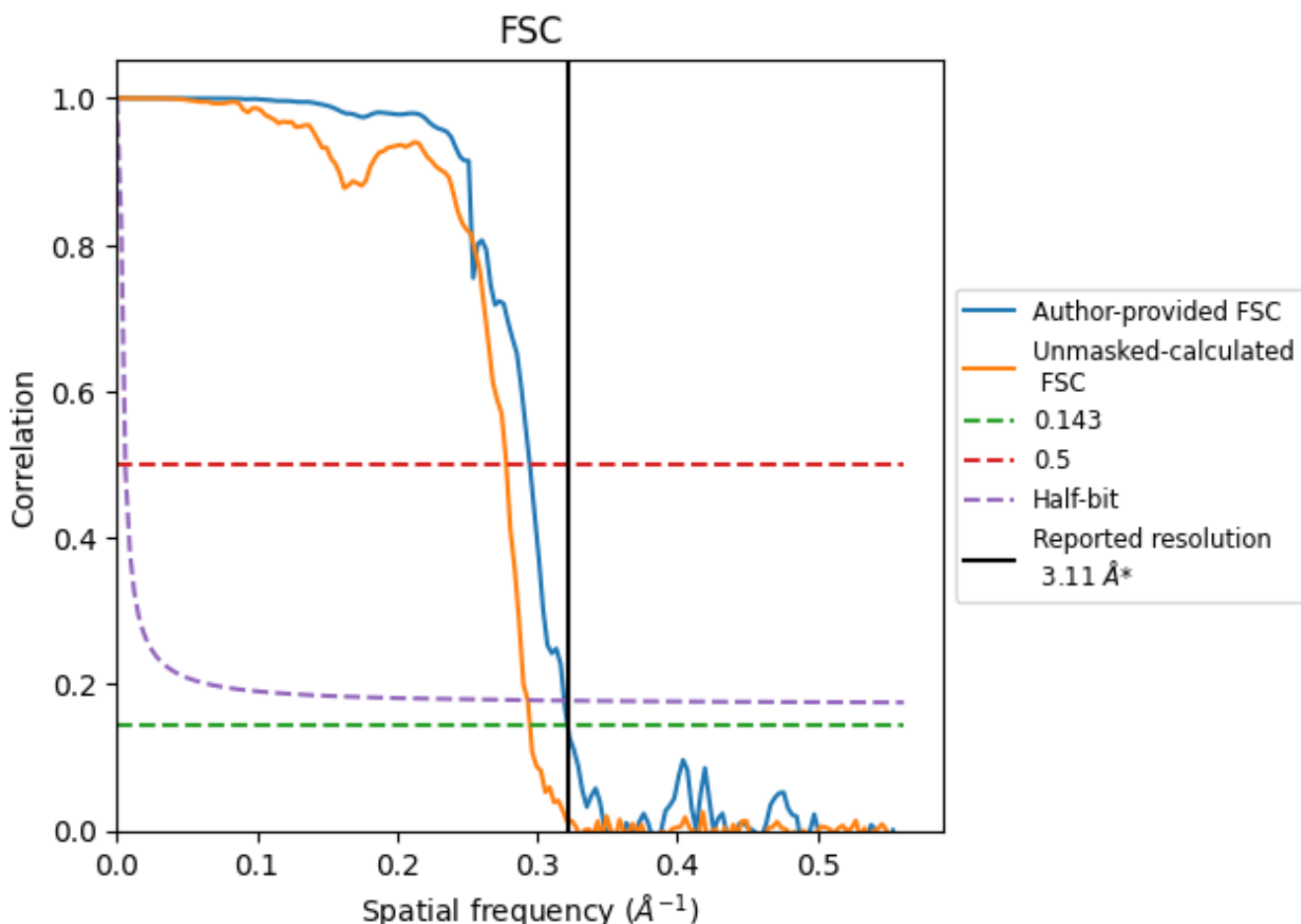


*Reported resolution corresponds to spatial frequency of 0.322 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.322 Å⁻¹

8.2 Resolution estimates [i](#)

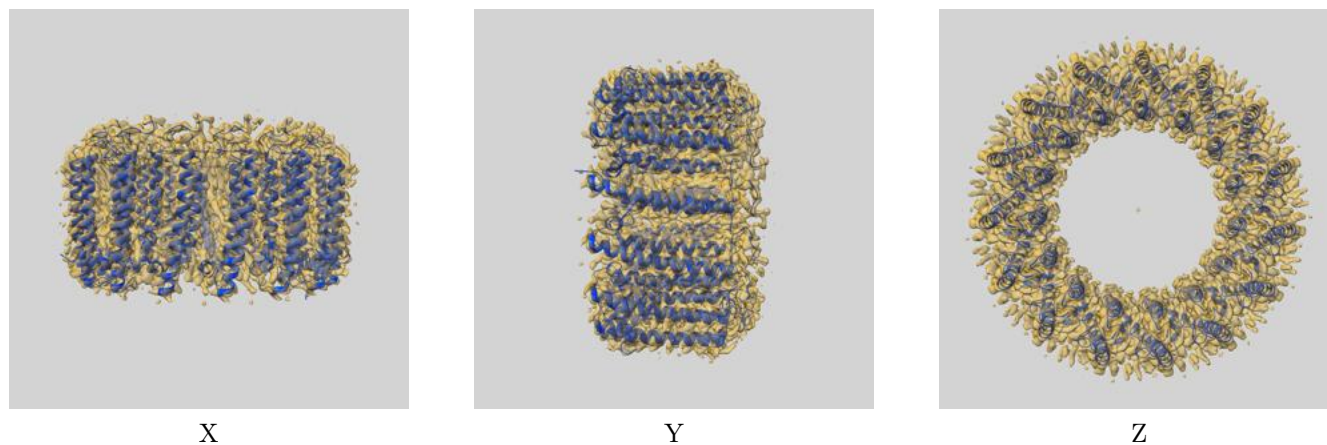
| Resolution estimate (Å) | Estimation criterion (FSC cut-off) | | |
|---------------------------|------------------------------------|------|----------|
| | 0.143 | 0.5 | Half-bit |
| Reported by author | 3.11 | - | - |
| Author-provided FSC curve | 3.11 | 3.39 | 3.13 |
| Unmasked-calculated* | 3.39 | 3.60 | 3.41 |

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

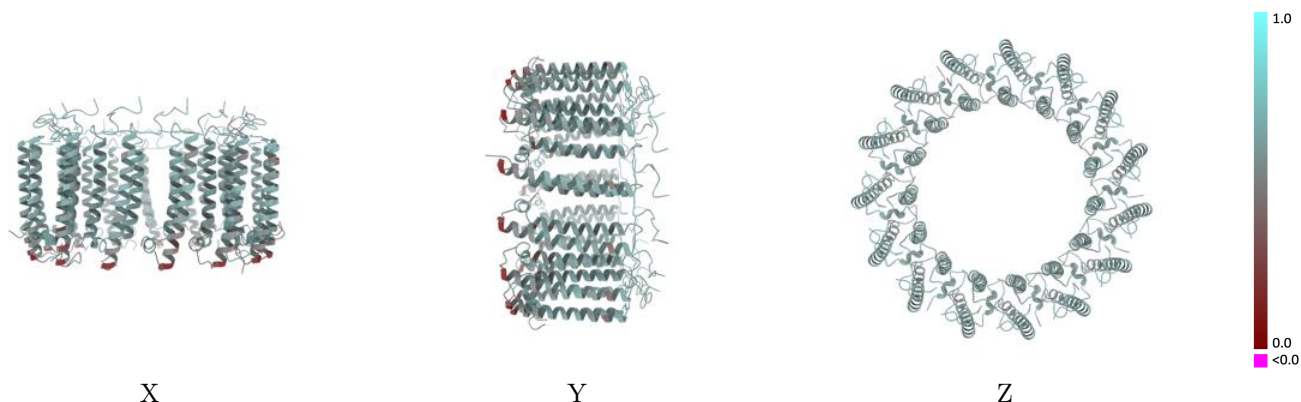
This section contains information regarding the fit between EMDB map EMD-36151 and PDB model 8JC8. Per-residue inclusion information can be found in section 3 on page 12.

9.1 Map-model overlay [i](#)



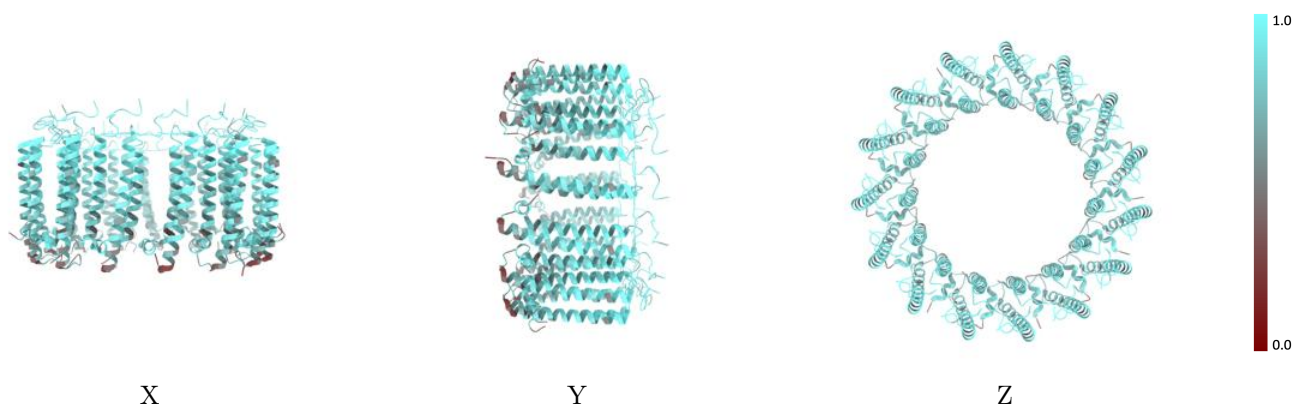
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



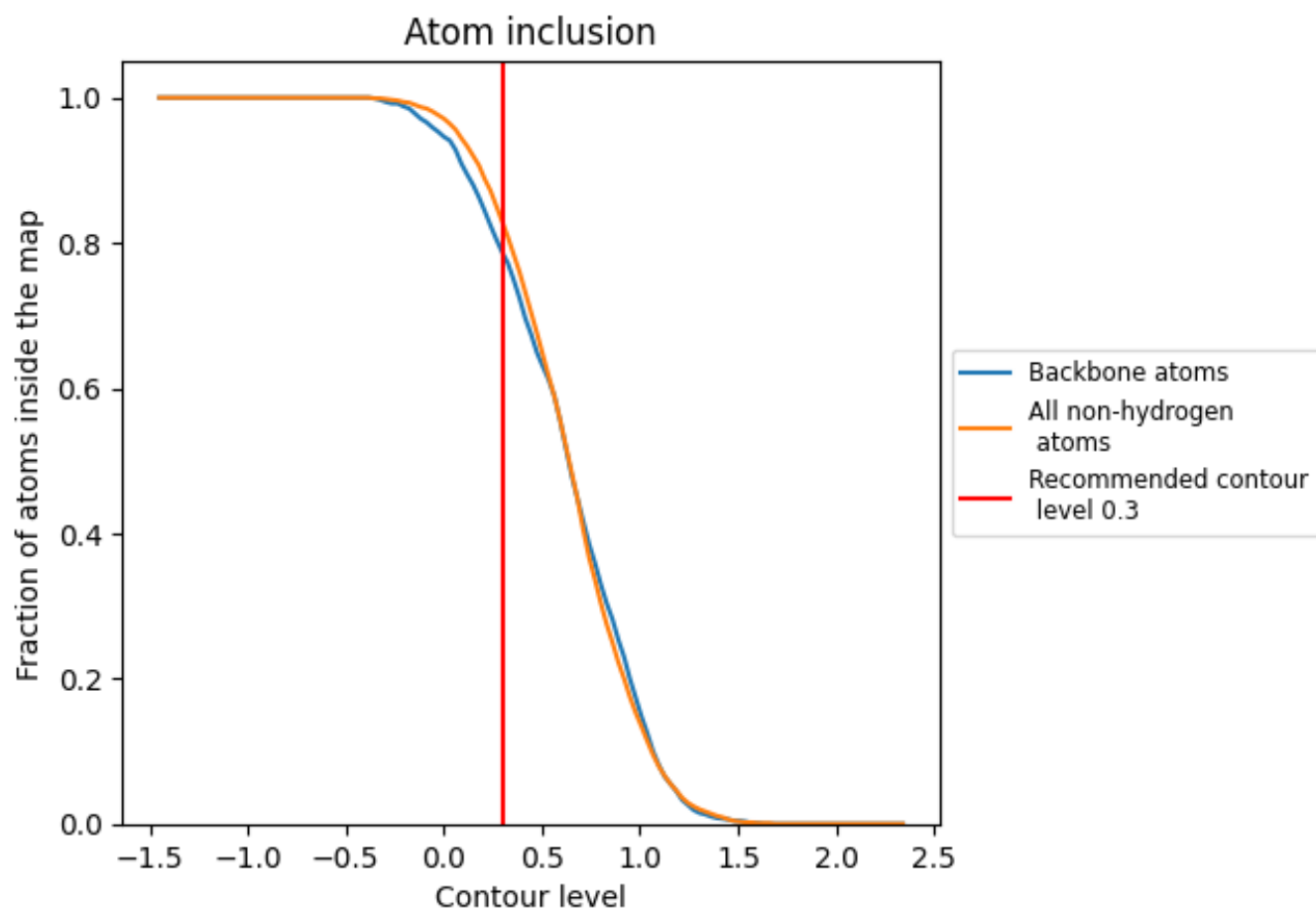
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.3).































































9.4 Atom inclusion [i](#)



At the recommended contour level, 79% of all backbone atoms, 83% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.3) and Q-score for the entire model and for each chain.

| Chain | Atom inclusion | Q-score |
|-------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| All |  0.8280 |  0.5750 |
| 1 |  0.8450 |  0.5960 |
| 2 |  0.8060 |  0.5650 |
| 3 |  0.8510 |  0.5850 |
| 4 |  0.8090 |  0.5660 |
| 5 |  0.8560 |  0.5890 |
| 6 |  0.7970 |  0.5690 |
| 7 |  0.8450 |  0.5790 |
| 8 |  0.8180 |  0.5720 |
| A |  0.8540 |  0.5890 |
| B |  0.8140 |  0.5600 |
| D |  0.8450 |  0.5860 |
| E |  0.8400 |  0.5730 |
| F |  0.8310 |  0.5830 |
| G |  0.8110 |  0.5690 |
| I |  0.8370 |  0.5820 |
| J |  0.8480 |  0.5790 |
| K |  0.8410 |  0.5810 |
| N |  0.8210 |  0.5660 |
| O |  0.8300 |  0.5720 |
| P |  0.8020 |  0.5640 |
| Q |  0.8390 |  0.5720 |
| R |  0.8200 |  0.5670 |
| S |  0.8360 |  0.5780 |
| T |  0.7870 |  0.5650 |
| U |  0.8430 |  0.5790 |
| V |  0.8210 |  0.5650 |
| W |  0.8120 |  0.5640 |
| X |  0.8020 |  0.5630 |
| Y |  0.8450 |  0.5980 |
| Z |  0.7900 |  0.5470 |

