



wwPDB X-ray Structure Validation Summary Report ⓘ

Mar 5, 2026 – 09:28 PM UTC

PDB ID : 1EA4 / pdb_00001ea4
Title : TRANSCRIPTIONAL REPRESSOR COPG/22bp dsDNA COMPLEX
Authors : Gomis-Rueth, F.X.; Costa, M.; Sola, M.; Acebo, P.; Eritja, R.; Espinosa, M.; Solar, G.D.; Coll, M.
Deposited on : 2000-11-05
Resolution : 2.95 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4-5-2 with Phenix2.0
Xtrriage (Phenix) : **NOT EXECUTED**
EDS : **NOT EXECUTED**
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

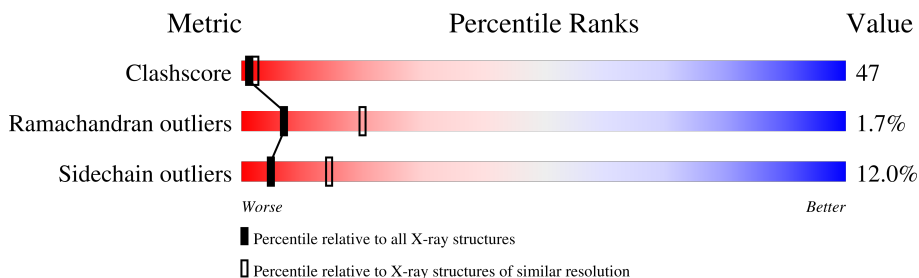
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.95 Å.

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



| Metric | Whole archive (#Entries) | Similar resolution (#Entries, resolution range(Å)) |
|-----------------------|-----------------------------|---|
| Clashscore | 190562 | 1157 (2.98-2.94) |
| Ramachandran outliers | 187476 | 1101 (2.98-2.94) |
| Sidechain outliers | 187428 | 1101 (2.98-2.94) |



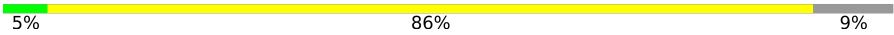
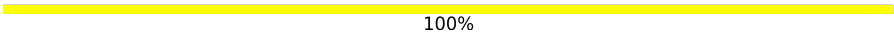
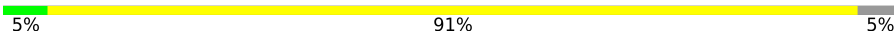
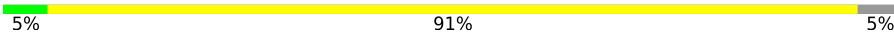
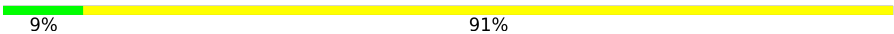
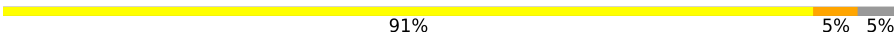
The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively.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

Note EDS was not executed.

| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|------------------|
| 1 | A | 45 | 31% 60% 7% |
| 1 | B | 45 | 36% 49% 9% |
| 1 | D | 45 | 36% 53% 7% |
| 1 | E | 45 | 40% 53% |
| 1 | F | 45 | 42% 42% 16% |
| 1 | G | 45 | 29% 56% 9% 7% |
| 1 | H | 45 | 27% 62% 9% |
| 1 | J | 45 | 33% 58% 7% |

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| Mol | Chain | Length | Quality of chain |
|-----|-------|--------|---|
| 1 | K | 45 |  31% 49% 16% . |
| 1 | L | 45 |  42% 42% 9% . . |
| 2 | U | 22 |  5% 86% 9% |
| 2 | W | 22 |  100% |
| 2 | Y | 22 |  5% 91% 5% |
| 3 | V | 22 |  5% 91% 5% |
| 3 | X | 22 |  9% 91% |
| 3 | Z | 22 |  91% 5% 5% |

2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 6013 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called TRANSCRIPTIONAL REPRESSOR COPG.

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|--------------|----------|---------|---------|--------|---------|---------|-------|
| | | | Total | C | N | O | S | | | |
| 1 | A | 42 | Total 327 | C 204 | N 57 | O 63 | S 3 | 0 | 0 | 0 |
| 1 | B | 41 | Total 322 | C 202 | N 55 | O 61 | S 4 | 0 | 0 | 0 |
| 1 | D | 43 | Total 335 | C 209 | N 58 | O 64 | S 4 | 0 | 0 | 0 |
| 1 | E | 44 | Total 344 | C 214 | N 59 | O 67 | S 4 | 0 | 0 | 0 |
| 1 | F | 45 | Total 354 | C 220 | N 61 | O 69 | S 4 | 0 | 0 | 0 |
| 1 | G | 42 | Total 326 | C 204 | N 56 | O 62 | S 4 | 0 | 0 | 0 |
| 1 | H | 44 | Total 346 | C 215 | N 60 | O 68 | S 3 | 0 | 0 | 0 |
| 1 | J | 44 | Total 344 | C 214 | N 59 | O 67 | S 4 | 0 | 0 | 0 |
| 1 | K | 43 | Total 335 | C 209 | N 58 | O 64 | S 4 | 0 | 0 | 0 |
| 1 | L | 44 | Total 344 | C 214 | N 59 | O 67 | S 4 | 0 | 0 | 0 |

- Molecule 2 is a DNA chain called DNA (5'-D(*TP*AP*AP*CP*CP*GP*TP*GP *CP*AP*CP*TP*CP*AP*AP*TP*GP*CP*AP*AP*TP*C)-3').

| Mol | Chain | Residues | Atoms | | | | ZeroOcc | AltConf | Trace | |
|-----|-------|----------|--------------|----------|---------|----------|---------|---------|-------|---|
| | | | Total | C | N | O | | | | P |
| 2 | U | 20 | Total 388 | C 184 | N 74 | O 111 | P 19 | 0 | 0 | 0 |
| 2 | W | 22 | Total 443 | C 213 | N 81 | O 128 | P 21 | 0 | 0 | 0 |
| 2 | Y | 21 | Total 420 | C 203 | N 79 | O 119 | P 19 | 0 | 21 | 0 |

- Molecule 3 is a DNA chain called DNA(5'-D(*AP*GP*AP*TP*TP*GP*CP*AP*TP *TP*

GP*AP*GP*TP*GP*CP*AP*CP*GP*GP*TP*T)-3').

| Mol | Chain | Residues | Atoms | | | | | ZeroOcc | AltConf | Trace |
|-----|-------|----------|-------|-----|----|-----|----|---------|---------|-------|
| 3 | V | 21 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 417 | 197 | 79 | 121 | 20 | | | |
| 3 | X | 22 | Total | C | N | O | P | 0 | 0 | 0 |
| | | | 437 | 207 | 81 | 128 | 21 | | | |
| 3 | Z | 21 | Total | C | N | O | P | 0 | 21 | 0 |
| | | | 430 | 207 | 81 | 123 | 19 | | | |

- Molecule 4 is water.

| Mol | Chain | Residues | Atoms | | ZeroOcc | AltConf |
|-----|-------|----------|-------|----|---------|---------|
| 4 | A | 11 | Total | O | 0 | 0 |
| | | | 11 | 11 | | |
| 4 | B | 3 | Total | O | 0 | 0 |
| | | | 3 | 3 | | |
| 4 | D | 8 | Total | O | 0 | 0 |
| | | | 8 | 8 | | |
| 4 | E | 5 | Total | O | 0 | 0 |
| | | | 5 | 5 | | |
| 4 | F | 6 | Total | O | 0 | 0 |
| | | | 6 | 6 | | |
| 4 | G | 5 | Total | O | 0 | 0 |
| | | | 5 | 5 | | |
| 4 | H | 4 | Total | O | 0 | 0 |
| | | | 4 | 4 | | |
| 4 | J | 5 | Total | O | 0 | 0 |
| | | | 5 | 5 | | |
| 4 | K | 6 | Total | O | 0 | 0 |
| | | | 6 | 6 | | |
| 4 | L | 6 | Total | O | 0 | 0 |
| | | | 6 | 6 | | |
| 4 | U | 11 | Total | O | 0 | 0 |
| | | | 11 | 11 | | |
| 4 | V | 9 | Total | O | 0 | 0 |
| | | | 9 | 9 | | |
| 4 | W | 2 | Total | O | 0 | 0 |
| | | | 2 | 2 | | |
| 4 | X | 8 | Total | O | 0 | 0 |
| | | | 8 | 8 | | |
| 4 | Y | 9 | Total | O | 0 | 0 |
| | | | 9 | 9 | | |
| 4 | Z | 3 | Total | O | 0 | 0 |
| | | | 3 | 3 | | |

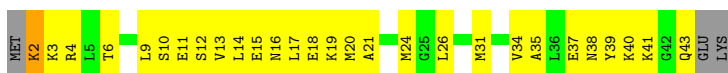
3 Residue-property plots [i](#)

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. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

Note EDS was not executed.

- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

Chain A: 



- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

Chain B: 



- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

Chain D: 



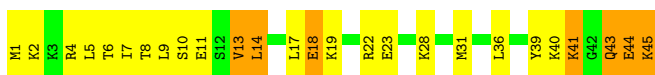
- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

Chain E: 



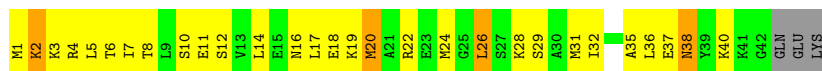
- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

Chain F: 



- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG

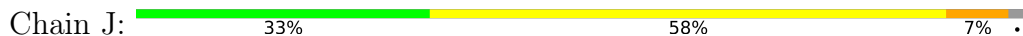
Chain G: 



- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG



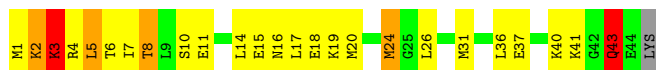
- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG



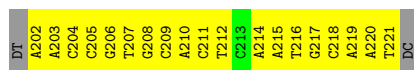
- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG



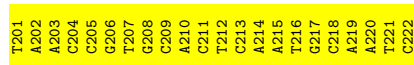
- Molecule 1: TRANSCRIPTIONAL REPRESSOR COPG



- Molecule 2: DNA (5'-D(*TP*AP*AP*CP*CP*GP*TP*GP *CP*AP*CP*TP*CP*AP*AP*TP *GP*CP*AP*AP*TP*C)-3')



- Molecule 2: DNA (5'-D(*TP*AP*AP*CP*CP*GP*TP*GP *CP*AP*CP*TP*CP*AP*AP*TP *GP*CP*AP*AP*TP*C)-3')



- Molecule 2: DNA (5'-D(*TP*AP*AP*CP*CP*GP*TP*GP *CP*AP*CP*TP*CP*AP*AP*TP *GP*CP*AP*AP*TP*C)-3')



DT
A202
A203
C204
C205
G206
T207
G208
C209
A210
C211
T212
C213
A214
A215
T216
G217
C218
A219
A220
T221
C222

- Molecule 3: DNA(5'-D(*AP*GP*AP*TP*TP*GP*CP*AP*TP *TP*GP*AP*GP*TP*GP*CP *AP*CP*GP*GP*TP*T)-3')

Chain V: 5% 91% 5%

A201
G202
A203
T204
T205
G206
C207
A208
T209
T210
G211
A212
G213
T214
G215
C216
A217
C218
G219
G220
T221
DT

- Molecule 3: DNA(5'-D(*AP*GP*AP*TP*TP*GP*CP*AP*TP *TP*GP*AP*GP*TP*GP*CP *AP*CP*GP*GP*TP*T)-3')

Chain X: 9% 91%

A201
G202
A203
T204
T205
G206
C207
A208
T209
T210
G211
A212
G213
T214
G215
C216
A217
C218
G219
G220
T221
DT

- Molecule 3: DNA(5'-D(*AP*GP*AP*TP*TP*GP*CP*AP*TP *TP*GP*AP*GP*TP*GP*CP *AP*CP*GP*GP*TP*T)-3')

Chain Z: 91% 5% 5%

A201
G202
A203
T204
T205
G206
C207
A208
T209
T210
G211
A212
G213
T214
G215
C216
A217
C218
G219
G220
T221
DT

4 Data and refinement statistics

Xtrriage (Phenix) and EDS were not executed - this section is therefore incomplete.

| Property | Value | Source |
|--|---|-----------|
| Space group | P 21 21 2 | Depositor |
| Cell constants a, b, c, α , β , γ | 213.40Å 76.04Å 50.52Å 90.00° 90.00° 90.00° | Depositor |
| Resolution (Å) | 40.00 – 2.95 | Depositor |
| % Data completeness (in resolution range) | 96.9 (40.00-2.95) | Depositor |
| R_{merge} | 0.11 | Depositor |
| R_{sym} | (Not available) | Depositor |
| Refinement program | CNS 1.0 | Depositor |
| R, R_{free} | 0.230 , 0.307 | Depositor |
| Estimated twinning fraction | No twinning to report. | Xtrriage |
| Total number of atoms | 6013 | wwPDB-VP |
| Average B, all atoms (Å ²) | 65.0 | wwPDB-VP |

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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 | A | 0.72 | 0/327 | 0.89 | 0/432 |
| 1 | B | 0.76 | 0/322 | 1.20 | 5/425 (1.2%) |
| 1 | D | 0.72 | 0/335 | 1.07 | 0/442 |
| 1 | E | 0.74 | 0/344 | 0.96 | 0/454 |
| 1 | F | 0.75 | 1/354 (0.3%) | 1.12 | 1/465 (0.2%) |
| 1 | G | 0.68 | 0/326 | 0.96 | 0/430 |
| 1 | H | 0.82 | 1/346 (0.3%) | 1.09 | 0/455 |
| 1 | J | 0.72 | 0/344 | 1.03 | 0/454 |
| 1 | K | 0.63 | 0/335 | 0.99 | 1/442 (0.2%) |
| 1 | L | 0.60 | 0/344 | 1.03 | 1/454 (0.2%) |
| 2 | U | 0.38 | 0/435 | 0.72 | 0/669 |
| 2 | W | 0.40 | 0/496 | 0.83 | 0/762 |
| 2 | Y | 0.34 | 0/470 | 0.79 | 1/720 (0.1%) |
| 3 | V | 0.40 | 0/468 | 0.81 | 0/723 |
| 3 | X | 0.42 | 0/490 | 0.93 | 0/757 |
| 3 | Z | 0.36 | 0/482 | 0.89 | 2/742 (0.3%) |
| All | All | 0.59 | 2/6218 (0.0%) | 0.94 | 11/8826 (0.1%) |

All (2) bond length outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(Å) | Ideal(Å) |
|-----|-------|-----|------|-------|-------|-------------|----------|
| 1 | F | 45 | LYS | CE-NZ | -5.23 | 1.33 | 1.49 |
| 1 | H | 45 | LYS | CE-NZ | -5.20 | 1.33 | 1.49 |

The worst 5 of 11 bond angle outliers are listed below:

| Mol | Chain | Res | Type | Atoms | Z | Observed(°) | Ideal(°) |
|-----|-------|--------|------|-------------|-------|-------------|----------|
| 1 | F | 43 | GLN | N-CA-C | -8.45 | 100.39 | 111.71 |
| 3 | Z | 211[B] | DG | O5'-C5'-C4' | 7.97 | 122.75 | 110.80 |
| 2 | Y | 212[A] | DT | C2'-C3'-O3' | -7.16 | 100.75 | 111.50 |
| 1 | B | 40 | LYS | CA-C-N | 7.03 | 134.35 | 121.70 |
| 1 | B | 40 | LYS | C-N-CA | 7.03 | 134.35 | 121.70 |

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

| Mol | Chain | Non-H | H(model) | H(added) | Clashes | Symm-Clashes |
|-----|-------|-------|----------|----------|---------|--------------|
| 1 | A | 327 | 0 | 355 | 34 | 0 |
| 1 | B | 322 | 0 | 356 | 37 | 0 |
| 1 | D | 335 | 0 | 367 | 43 | 0 |
| 1 | E | 344 | 0 | 373 | 39 | 0 |
| 1 | F | 354 | 0 | 386 | 33 | 0 |
| 1 | G | 326 | 0 | 359 | 29 | 0 |
| 1 | H | 346 | 0 | 374 | 46 | 0 |
| 1 | J | 344 | 0 | 373 | 41 | 0 |
| 1 | K | 335 | 0 | 367 | 44 | 0 |
| 1 | L | 344 | 0 | 373 | 38 | 0 |
| 2 | U | 388 | 0 | 213 | 36 | 0 |
| 2 | W | 443 | 0 | 249 | 38 | 0 |
| 2 | Y | 420 | 0 | 230 | 35 | 0 |
| 3 | V | 417 | 0 | 226 | 40 | 0 |
| 3 | X | 437 | 0 | 238 | 37 | 0 |
| 3 | Z | 430 | 0 | 224 | 38 | 0 |
| 4 | A | 11 | 0 | 0 | 1 | 0 |
| 4 | B | 3 | 0 | 0 | 0 | 0 |
| 4 | D | 8 | 0 | 0 | 0 | 0 |
| 4 | E | 5 | 0 | 0 | 1 | 0 |
| 4 | F | 6 | 0 | 0 | 1 | 0 |
| 4 | G | 5 | 0 | 0 | 0 | 0 |
| 4 | H | 4 | 0 | 0 | 0 | 0 |
| 4 | J | 5 | 0 | 0 | 0 | 0 |
| 4 | K | 6 | 0 | 0 | 0 | 0 |
| 4 | L | 6 | 0 | 0 | 0 | 0 |
| 4 | U | 11 | 0 | 0 | 1 | 0 |
| 4 | V | 9 | 0 | 0 | 0 | 0 |
| 4 | W | 2 | 0 | 0 | 0 | 0 |
| 4 | X | 8 | 0 | 0 | 0 | 0 |
| 4 | Y | 9 | 0 | 0 | 0 | 0 |
| 4 | Z | 3 | 0 | 0 | 0 | 0 |
| All | All | 6013 | 0 | 5063 | 515 | 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 47.

The worst 5 of 515 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

| Atom-1 | Atom-2 | Interatomic distance (Å) | Clash overlap (Å) |
|-------------------|--------------------|--------------------------|-------------------|
| 2:Y:206[A]:DG:N2 | 2:Y:220[A]:DA:H2 | 1.05 | 1.14 |
| 1:B:40:LYS:HE2 | 1:B:40:LYS:HA | 1.33 | 1.08 |
| 1:D:1:MET:HB2 | 1:E:11:GLU:HB2 | 1.41 | 1.03 |
| 2:Y:202[A]:DA:H4' | 2:Y:203[A]:DA:H5'' | 1.38 | 1.01 |
| 1:G:38:ASN:C | 1:G:38:ASN:HD22 | 1.67 | 1.00 |

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

| Mol | Chain | Analysed | Favoured | Allowed | Outliers | Percentiles | |
|-----|-------|---------------|-----------|----------|----------|-------------|-----|
| 1 | A | 40/45 (89%) | 36 (90%) | 4 (10%) | 0 | 100 | 100 |
| 1 | B | 39/45 (87%) | 34 (87%) | 4 (10%) | 1 (3%) | 4 | 12 |
| 1 | D | 41/45 (91%) | 33 (80%) | 8 (20%) | 0 | 100 | 100 |
| 1 | E | 42/45 (93%) | 37 (88%) | 5 (12%) | 0 | 100 | 100 |
| 1 | F | 43/45 (96%) | 35 (81%) | 7 (16%) | 1 (2%) | 5 | 14 |
| 1 | G | 40/45 (89%) | 36 (90%) | 3 (8%) | 1 (2%) | 4 | 13 |
| 1 | H | 42/45 (93%) | 31 (74%) | 11 (26%) | 0 | 100 | 100 |
| 1 | J | 42/45 (93%) | 36 (86%) | 6 (14%) | 0 | 100 | 100 |
| 1 | K | 41/45 (91%) | 34 (83%) | 6 (15%) | 1 (2%) | 4 | 13 |
| 1 | L | 42/45 (93%) | 33 (79%) | 6 (14%) | 3 (7%) | 1 | 1 |
| All | All | 412/450 (92%) | 345 (84%) | 60 (15%) | 7 (2%) | 7 | 20 |

5 of 7 Ramachandran outliers are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | F | 44 | GLU |
| 1 | K | 3 | LYS |
| 1 | L | 2 | LYS |
| 1 | L | 3 | LYS |
| 1 | B | 40 | LYS |

5.3.2 Protein sidechains [i](#)

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

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

| Mol | Chain | Analysed | Rotameric | Outliers | Percentiles | |
|-----|-------|---------------|-----------|----------|-------------|----|
| 1 | A | 37/40 (92%) | 35 (95%) | 2 (5%) | 20 | 44 |
| 1 | B | 37/40 (92%) | 33 (89%) | 4 (11%) | 6 | 18 |
| 1 | D | 38/40 (95%) | 35 (92%) | 3 (8%) | 11 | 29 |
| 1 | E | 39/40 (98%) | 36 (92%) | 3 (8%) | 12 | 30 |
| 1 | F | 40/40 (100%) | 35 (88%) | 5 (12%) | 4 | 13 |
| 1 | G | 37/40 (92%) | 30 (81%) | 7 (19%) | 1 | 3 |
| 1 | H | 39/40 (98%) | 34 (87%) | 5 (13%) | 4 | 13 |
| 1 | J | 39/40 (98%) | 35 (90%) | 4 (10%) | 7 | 19 |
| 1 | K | 38/40 (95%) | 30 (79%) | 8 (21%) | 1 | 2 |
| 1 | L | 39/40 (98%) | 34 (87%) | 5 (13%) | 4 | 13 |
| All | All | 383/400 (96%) | 337 (88%) | 46 (12%) | 5 | 14 |

5 of 46 residues with a non-rotameric sidechain are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | H | 44 | GLU |
| 1 | K | 9 | LEU |
| 1 | J | 37 | GLU |
| 1 | J | 44 | GLU |
| 1 | K | 23 | GLU |

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 11 such sidechains are listed below:

| Mol | Chain | Res | Type |
|-----|-------|-----|------|
| 1 | K | 16 | ASN |
| 1 | K | 43 | GLN |
| 1 | L | 43 | GLN |
| 1 | L | 16 | ASN |
| 1 | G | 38 | ASN |

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](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

6.4 Ligands

EDS was not executed - this section is therefore empty.

6.5 Other polymers

EDS was not executed - this section is therefore empty.