wwPDB X-ray Structure Validation Summary Report ⓘ

Jul 7, 2025 – 07:55 PM JST

PDB ID : 9IQD / pdb_00009iqd
Title : Apo-MicM,homologous of AkaM, SnoaL-like protein
Authors : Zhang, B.; Ge, H.M.
Deposited on : 2024-07-12
Resolution : 1.77 Å(reported)

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

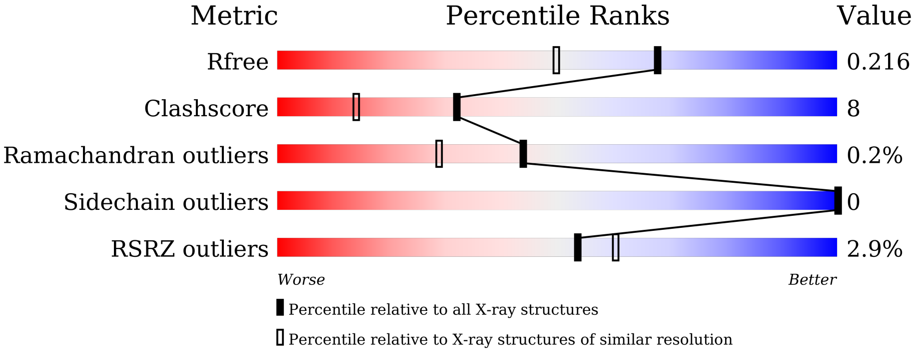
MolProbity : 4-5-2 with Phenix2.0rc1
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 2.0rc1
EDS : 3.0
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4 : 9.0.006 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.44

1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

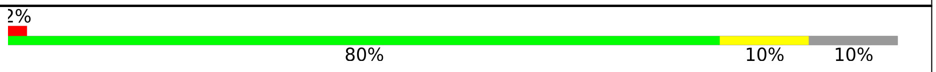
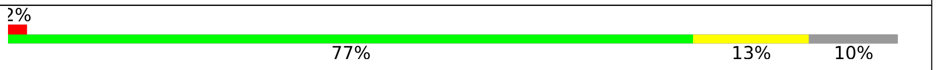
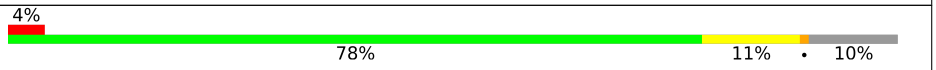
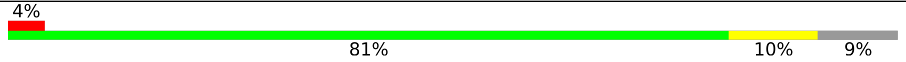
The reported resolution of this entry is 1.77 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1191 (1.78-1.78)
Clashscore	180529	1282 (1.78-1.78)
Ramachandran outliers	177936	1270 (1.78-1.78)
Sidechain outliers	177891	1270 (1.78-1.78)
RSRZ outliers	164620	1191 (1.78-1.78)

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 <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	132	
1	B	132	
1	C	132	
1	D	132	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	PEG	C	204	-	-	X	-

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 4328 atoms, of which 95 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 SnoaL-like domain-containing protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	119	Total 912	C 578	N 157	O 173	S 4	0	0	0
1	B	119	Total 912	C 578	N 157	O 173	S 4	0	0	0
1	C	119	Total 912	C 578	N 157	O 173	S 4	0	0	0
1	D	120	Total 919	C 582	N 158	O 175	S 4	0	0	0

There are 52 discrepancies between the modelled and reference sequences:

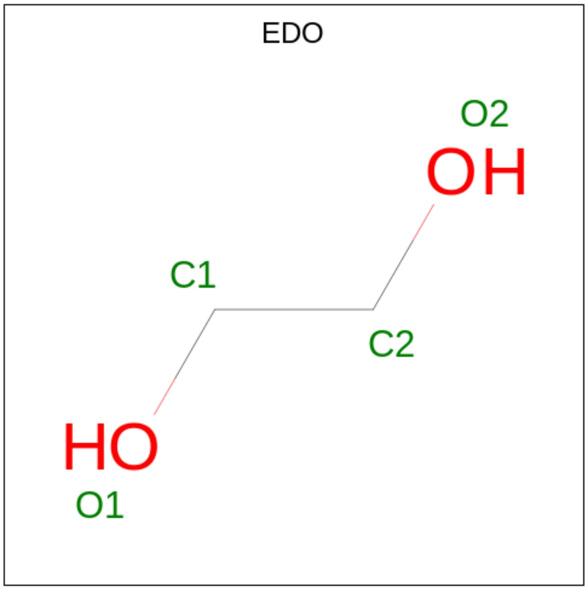
Chain	Residue	Modelled	Actual	Comment	Reference
A	120	LYS	-	expression tag	UNP A0A518WFQ2
A	121	LEU	-	expression tag	UNP A0A518WFQ2
A	122	ALA	-	expression tag	UNP A0A518WFQ2
A	123	ALA	-	expression tag	UNP A0A518WFQ2
A	124	ALA	-	expression tag	UNP A0A518WFQ2
A	125	LEU	-	expression tag	UNP A0A518WFQ2
A	126	GLU	-	expression tag	UNP A0A518WFQ2
A	127	HIS	-	expression tag	UNP A0A518WFQ2
A	128	HIS	-	expression tag	UNP A0A518WFQ2
A	129	HIS	-	expression tag	UNP A0A518WFQ2
A	130	HIS	-	expression tag	UNP A0A518WFQ2
A	131	HIS	-	expression tag	UNP A0A518WFQ2
A	132	HIS	-	expression tag	UNP A0A518WFQ2
B	120	LYS	-	expression tag	UNP A0A518WFQ2
B	121	LEU	-	expression tag	UNP A0A518WFQ2
B	122	ALA	-	expression tag	UNP A0A518WFQ2
B	123	ALA	-	expression tag	UNP A0A518WFQ2
B	124	ALA	-	expression tag	UNP A0A518WFQ2
B	125	LEU	-	expression tag	UNP A0A518WFQ2
B	126	GLU	-	expression tag	UNP A0A518WFQ2
B	127	HIS	-	expression tag	UNP A0A518WFQ2

Continued on next page...

Continued from previous page...

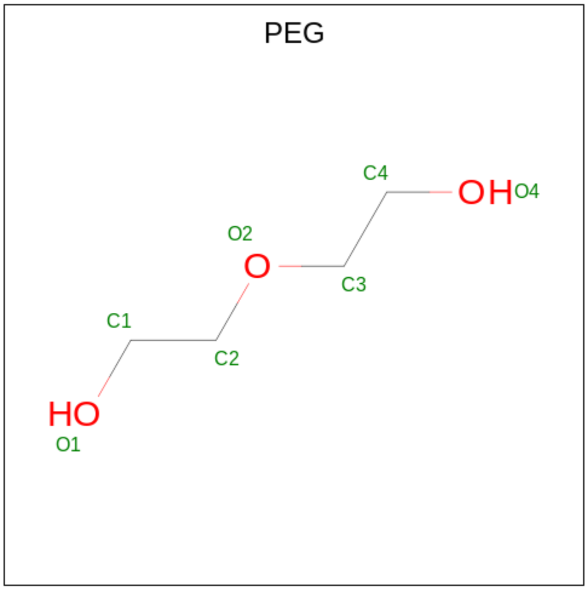
Chain	Residue	Modelled	Actual	Comment	Reference
B	128	HIS	-	expression tag	UNP A0A518WFQ2
B	129	HIS	-	expression tag	UNP A0A518WFQ2
B	130	HIS	-	expression tag	UNP A0A518WFQ2
B	131	HIS	-	expression tag	UNP A0A518WFQ2
B	132	HIS	-	expression tag	UNP A0A518WFQ2
C	120	LYS	-	expression tag	UNP A0A518WFQ2
C	121	LEU	-	expression tag	UNP A0A518WFQ2
C	122	ALA	-	expression tag	UNP A0A518WFQ2
C	123	ALA	-	expression tag	UNP A0A518WFQ2
C	124	ALA	-	expression tag	UNP A0A518WFQ2
C	125	LEU	-	expression tag	UNP A0A518WFQ2
C	126	GLU	-	expression tag	UNP A0A518WFQ2
C	127	HIS	-	expression tag	UNP A0A518WFQ2
C	128	HIS	-	expression tag	UNP A0A518WFQ2
C	129	HIS	-	expression tag	UNP A0A518WFQ2
C	130	HIS	-	expression tag	UNP A0A518WFQ2
C	131	HIS	-	expression tag	UNP A0A518WFQ2
C	132	HIS	-	expression tag	UNP A0A518WFQ2
D	120	LYS	-	expression tag	UNP A0A518WFQ2
D	121	LEU	-	expression tag	UNP A0A518WFQ2
D	122	ALA	-	expression tag	UNP A0A518WFQ2
D	123	ALA	-	expression tag	UNP A0A518WFQ2
D	124	ALA	-	expression tag	UNP A0A518WFQ2
D	125	LEU	-	expression tag	UNP A0A518WFQ2
D	126	GLU	-	expression tag	UNP A0A518WFQ2
D	127	HIS	-	expression tag	UNP A0A518WFQ2
D	128	HIS	-	expression tag	UNP A0A518WFQ2
D	129	HIS	-	expression tag	UNP A0A518WFQ2
D	130	HIS	-	expression tag	UNP A0A518WFQ2
D	131	HIS	-	expression tag	UNP A0A518WFQ2
D	132	HIS	-	expression tag	UNP A0A518WFQ2

- Molecule 2 is 1,2-ETHANEDIOL (CCD ID: EDO) (formula: $C_2H_6O_2$).



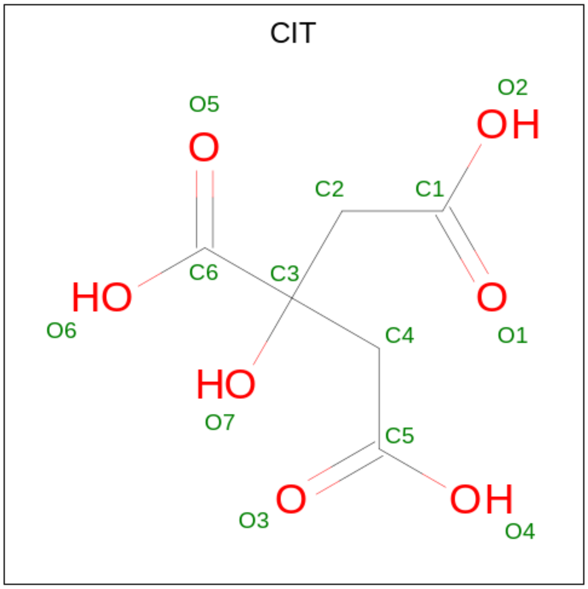
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total C H O 10 2 6 2	0	0
2	A	1	Total C H O 10 2 6 2	0	0
2	A	1	Total C H O 10 2 6 2	0	0
2	B	1	Total C H O 10 2 6 2	0	0
2	B	1	Total C H O 10 2 6 2	0	0
2	C	1	Total C H O 10 2 6 2	0	0
2	C	1	Total C H O 10 2 6 2	0	0
2	C	1	Total C H O 10 2 6 2	0	0
2	D	1	Total C H O 10 2 6 2	0	0
2	D	1	Total C H O 10 2 6 2	0	0

- Molecule 3 is DI(HYDROXYETHYL)ETHER (CCD ID: PEG) (formula: $C_4H_{10}O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C H O 17 4 10 3	0	0
3	B	1	Total C H O 17 4 10 3	0	0
3	C	1	Total C H O 17 4 10 3	0	0

- Molecule 4 is CITRIC ACID (CCD ID: CIT) (formula: $C_6H_8O_7$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	C	1	Total C H O 18 6 5 7	0	0

- Molecule 5 is SODIUM ION (CCD ID: NA) (formula: Na).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	C	1	Total Na 1 1	0	0
5	D	1	Total Na 1 1	0	0

- Molecule 6 is water.

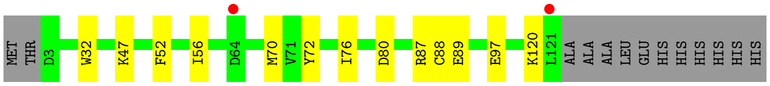
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	149	Total O 149 149	0	0
6	B	113	Total O 113 113	0	0
6	C	123	Total O 123 123	0	0
6	D	117	Total O 117 117	0	0

3 Residue-property plots ⓘ

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

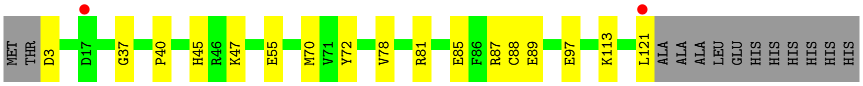
- Molecule 1: SnoaL-like domain-containing protein

Chain A:



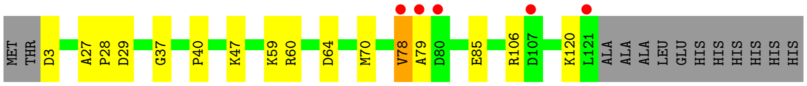
- Molecule 1: SnoaL-like domain-containing protein

Chain B:



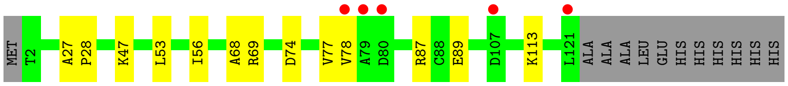
- Molecule 1: SnoaL-like domain-containing protein

Chain C:



- Molecule 1: SnoaL-like domain-containing protein

Chain D:



4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	64.31Å 72.73Å 65.40Å 90.00° 112.21° 90.00°	Depositor
Resolution (Å)	59.54 – 1.77 59.54 – 1.77	Depositor EDS
% Data completeness (in resolution range)	99.1 (59.54-1.77) 99.1 (59.54-1.77)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	3.70 (at 1.77Å)	Xtriage
Refinement program	PHENIX 1.20.1_4487	Depositor
R, R_{free}	0.181 , 0.216 0.181 , 0.216	Depositor DCC
R_{free} test set	2787 reflections (5.13%)	wwPDB-VP
Wilson B-factor (Å^2)	24.0	Xtriage
Anisotropy	0.119	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 35.5	EDS
L-test for twinning[2]	$< \|L\| > = 0.52$, $< L^2 > = 0.35$	Xtriage
Estimated twinning fraction	0.000 for l,-k,h	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	4328	wwPDB-VP
Average B, all atoms (Å^2)	29.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The analyses of the Patterson function reveals a significant off-origin peak that is 44.71 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 1.4670e-04. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

---

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: CIT, EDO, NA, PEG

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	0.31	0/930	0.51	0/1258
1	B	0.30	0/930	0.53	0/1258
1	C	0.27	0/930	0.50	0/1258
1	D	0.28	0/937	0.53	0/1268
All	All	0.29	0/3727	0.52	0/5042

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

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	A	912	0	888	13	0
1	B	912	0	888	21	0
1	C	912	0	888	19	1
1	D	919	0	895	8	0
2	A	12	18	18	1	1
2	B	8	12	12	1	0
2	C	12	18	18	1	0
2	D	8	12	12	0	0
3	A	7	10	10	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	B	7	10	10	0	0
3	C	7	10	10	5	0
4	C	13	5	5	0	0
5	C	1	0	0	0	0
5	D	1	0	0	0	0
6	A	149	0	0	4	2
6	B	113	0	0	3	0
6	C	123	0	0	2	2
6	D	117	0	0	2	4
All	All	4233	95	3654	58	5

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.

The worst 5 of 58 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:D:74:ASP:OD2	6:D:301:HOH:O	1.91	0.89
1:D:68:ALA:O	1:D:69:ARG:HD3	1.82	0.79
1:B:88:CYS:HB3	1:B:97:GLU:HG2	1.69	0.75
1:D:77:VAL:O	1:D:78:VAL:HG13	1.88	0.74
1:A:80:ASP:OD1	6:A:301:HOH:O	2.06	0.72

All (5) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3:ASP:N	2:A:204:EDO:O1[1_656]	2.04	0.16
6:C:392:HOH:O	6:D:408:HOH:O[2_756]	2.05	0.15
6:A:427:HOH:O	6:D:354:HOH:O[1_455]	2.10	0.10
6:A:353:HOH:O	6:D:345:HOH:O[1_455]	2.11	0.09
6:C:419:HOH:O	6:D:308:HOH:O[1_556]	2.19	0.01

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	117/132 (89%)	116 (99%)	1 (1%)	0	100	100
1	B	117/132 (89%)	115 (98%)	2 (2%)	0	100	100
1	C	117/132 (89%)	114 (97%)	2 (2%)	1 (1%)	14	4
1	D	118/132 (89%)	115 (98%)	3 (2%)	0	100	100
All	All	469/528 (89%)	460 (98%)	8 (2%)	1 (0%)	44	29

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	C	78	VAL

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	91/101 (90%)	91 (100%)	0	100	100
1	B	91/101 (90%)	91 (100%)	0	100	100
1	C	91/101 (90%)	91 (100%)	0	100	100
1	D	92/101 (91%)	92 (100%)	0	100	100
All	All	365/404 (90%)	365 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

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

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 16 ligands modelled in this entry, 2 are monoatomic - leaving 14 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	CIT	C	203	-	12,12,12	1.05	0	17,17,17	1.49	2 (11%)
2	EDO	C	201	-	3,3,3	0.46	0	2,2,2	0.57	0
2	EDO	D	201	-	3,3,3	0.46	0	2,2,2	0.35	0
3	PEG	A	203	-	6,6,6	0.19	0	5,5,5	0.11	0
2	EDO	A	204	-	3,3,3	0.63	0	2,2,2	0.16	0
2	EDO	C	202	-	3,3,3	0.48	0	2,2,2	0.37	0
2	EDO	B	201	-	3,3,3	0.49	0	2,2,2	0.29	0
2	EDO	C	205	-	3,3,3	0.46	0	2,2,2	0.32	0
2	EDO	D	202	-	3,3,3	0.51	0	2,2,2	0.27	0
2	EDO	A	202	-	3,3,3	0.52	0	2,2,2	0.26	0
3	PEG	B	202	-	6,6,6	0.16	0	5,5,5	0.10	0
3	PEG	C	204	-	6,6,6	0.08	0	5,5,5	0.25	0
2	EDO	A	201	-	3,3,3	0.52	0	2,2,2	0.39	0
2	EDO	B	203	-	3,3,3	0.52	0	2,2,2	0.21	0

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	CIT	C	203	-	-	7/16/16/16	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	EDO	C	201	-	-	0/1/1/1	-
2	EDO	D	201	-	-	0/1/1/1	-
3	PEG	A	203	-	-	3/4/4/4	-
2	EDO	A	204	-	-	0/1/1/1	-
2	EDO	C	202	-	-	0/1/1/1	-
2	EDO	B	201	-	-	1/1/1/1	-
2	EDO	C	205	-	-	0/1/1/1	-
2	EDO	D	202	-	-	0/1/1/1	-
2	EDO	A	202	-	-	1/1/1/1	-
3	PEG	B	202	-	-	0/4/4/4	-
3	PEG	C	204	-	-	3/4/4/4	-
2	EDO	A	201	-	-	1/1/1/1	-
2	EDO	B	203	-	-	0/1/1/1	-

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	C	203	CIT	O6-C6-C3	4.30	120.51	113.05
4	C	203	CIT	O4-C5-O3	-2.09	118.08	123.30

There are no chirality outliers.

5 of 16 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	C	203	CIT	O7-C3-C6-O5
4	C	203	CIT	O7-C3-C6-O6
4	C	203	CIT	C4-C3-C6-O5
4	C	203	CIT	C4-C3-C6-O6
3	A	203	PEG	O1-C1-C2-O2

There are no ring outliers.

6 monomers are involved in 10 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	C	201	EDO	1	0
3	A	203	PEG	1	0
2	A	204	EDO	0	1
2	B	201	EDO	1	0
3	C	204	PEG	5	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	201	EDO	1	0

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	A	119/132 (90%)	0.05	2 (1%)	69	75	16, 24, 36, 42	0
1	B	119/132 (90%)	0.16	2 (1%)	69	75	16, 25, 41, 46	0
1	C	119/132 (90%)	0.28	5 (4%)	41	47	17, 27, 41, 49	0
1	D	120/132 (90%)	0.39	5 (4%)	41	47	19, 28, 42, 49	0
All	All	477/528 (90%)	0.22	14 (2%)	54	60	16, 26, 41, 49	0

The worst 5 of 14 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	121	LEU	4.6
1	D	121	LEU	4.6
1	D	78	VAL	3.8
1	C	80	ASP	3.6
1	B	121	LEU	3.6

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

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

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\AA^2$)	Q<0.9
2	EDO	A	204	4/4	0.65	0.22	36,46,54,56	0
4	CIT	C	203	13/13	0.67	0.16	44,55,68,81	0
2	EDO	C	202	4/4	0.73	0.22	35,49,50,59	0
2	EDO	B	203	4/4	0.74	0.16	39,47,54,63	0
3	PEG	C	204	7/7	0.77	0.14	36,46,55,56	0
2	EDO	A	202	4/4	0.79	0.17	34,45,54,54	0
3	PEG	B	202	7/7	0.79	0.13	38,47,51,59	0
2	EDO	D	202	4/4	0.80	0.12	36,45,54,60	0
3	PEG	A	203	7/7	0.84	0.13	22,39,49,49	0
2	EDO	C	205	4/4	0.86	0.10	44,52,57,57	0
5	NA	C	206	1/1	0.91	0.14	44,44,44,44	0
2	EDO	A	201	4/4	0.92	0.15	21,34,40,40	0
2	EDO	C	201	4/4	0.92	0.17	21,34,40,41	0
2	EDO	D	201	4/4	0.95	0.17	21,32,33,39	0
5	NA	D	203	1/1	0.95	0.12	35,35,35,35	0
2	EDO	B	201	4/4	0.96	0.09	21,30,36,36	0

6.5 Other polymers ⓘ

There are no such residues in this entry.