



wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 10, 2021 – 10:19 AM EDT

PDB ID : 5VSA
Title : Crystal structure of SsoPox AsA1 mutant (C258L-I261F-W263A)
Authors : Hiblot, J.; Gotthard, G.; Jacquet, P.; Daude, D.; Bergonzi, C.; Chabriere, E.; Elias, M.
Deposited on : 2017-05-11
Resolution : 2.00 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 following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.23.1
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.23.1

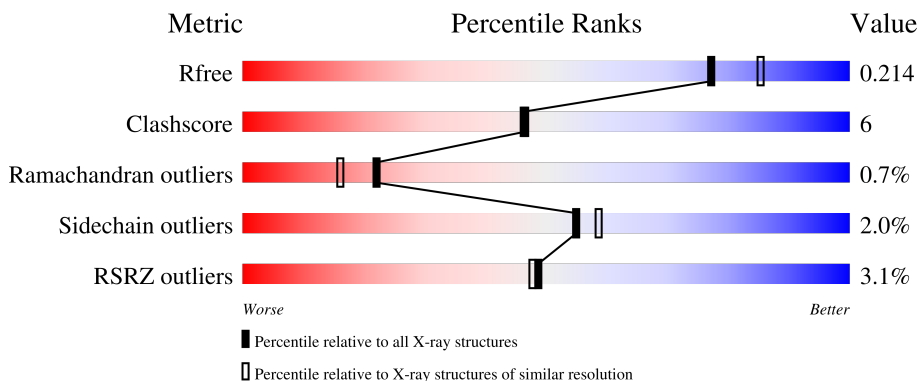
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	8085 (2.00-2.00)
Clashscore	141614	9178 (2.00-2.00)
Ramachandran outliers	138981	9054 (2.00-2.00)
Sidechain outliers	138945	9053 (2.00-2.00)
RSRZ outliers	127900	7900 (2.00-2.00)

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

Mol	Chain	Length	Quality of chain
1	A	314	 2% 83% 13% ..
1	B	314	 2% 86% 12% ..
1	C	314	 4% 89% 8% ..
1	D	314	 5% 86% 13% ..

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
4	GOL	A	403	-	X	-	-

2 Entry composition [i](#)

There are 5 unique types of molecules in this entry. The entry contains 10768 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 Aryldialkylphosphatase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	305	Total 2453	C 1574	N 419	O 454	S 6	0	2	0
1	B	314	Total 2514	C 1615	N 425	O 468	S 6	0	1	0
1	C	310	Total 2503	C 1606	N 427	O 464	S 6	0	2	0
1	D	314	Total 2509	C 1610	N 425	O 468	S 6	0	0	0

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	258	LEU	CYS	engineered mutation	UNP Q97VT7
A	261	PHE	ILE	engineered mutation	UNP Q97VT7
A	263	ALA	TRP	engineered mutation	UNP Q97VT7
B	258	LEU	CYS	engineered mutation	UNP Q97VT7
B	261	PHE	ILE	engineered mutation	UNP Q97VT7
B	263	ALA	TRP	engineered mutation	UNP Q97VT7
C	258	LEU	CYS	engineered mutation	UNP Q97VT7
C	261	PHE	ILE	engineered mutation	UNP Q97VT7
C	263	ALA	TRP	engineered mutation	UNP Q97VT7
D	258	LEU	CYS	engineered mutation	UNP Q97VT7
D	261	PHE	ILE	engineered mutation	UNP Q97VT7
D	263	ALA	TRP	engineered mutation	UNP Q97VT7

- Molecule 2 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
2	A	1	Total 1	Fe 1	0	0
2	B	1	Total 1	Fe 1	0	0

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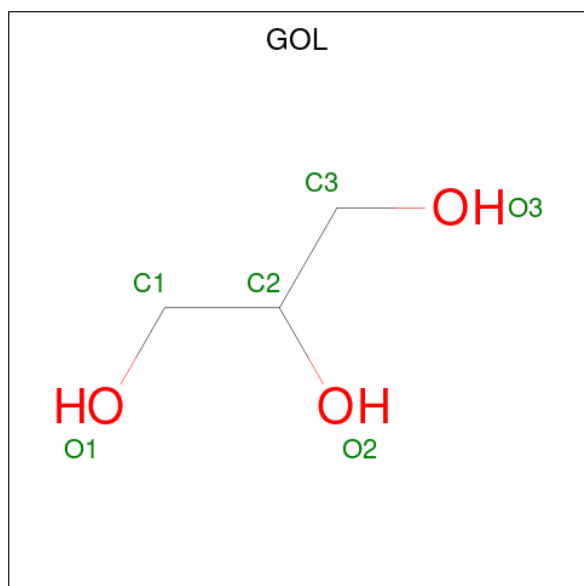
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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	C	1	Total Fe 1 1	0	0
2	D	1	Total Fe 1 1	0	0

- Molecule 3 is COBALT (II) ION (three-letter code: CO) (formula: Co).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total Co 1 1	0	0
3	B	1	Total Co 1 1	0	0
3	C	1	Total Co 1 1	0	0
3	D	1	Total Co 1 1	0	0

- Molecule 4 is GLYCEROL (three-letter code: GOL) (formula: C₃H₈O₃).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 6 3 3	0	0
4	A	1	Total C O 6 3 3	0	0
4	A	1	Total C O 6 3 3	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	B	1	Total	C	O	0	0
			6	3	3		
4	B	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	C	1	Total	C	O	0	0
			6	3	3		
4	D	1	Total	C	O	0	0
			6	3	3		

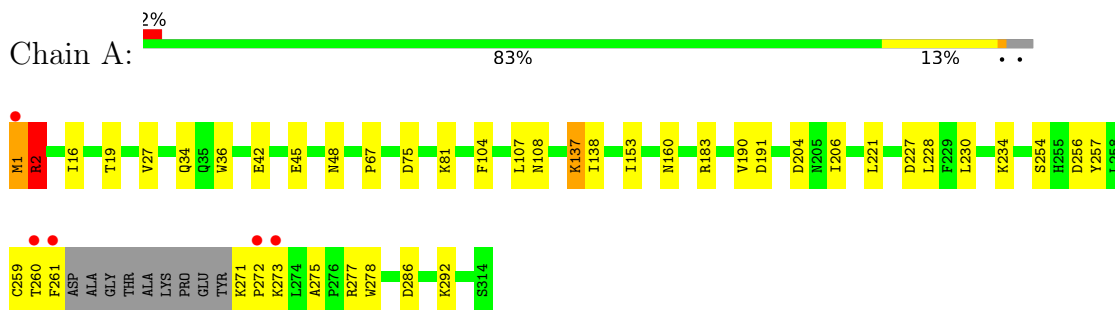
- Molecule 5 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	A	189	Total	O	0	0
			189	189		
5	B	203	Total	O	0	0
			203	203		
5	C	191	Total	O	0	0
			191	191		
5	D	150	Total	O	0	0
			150	150		

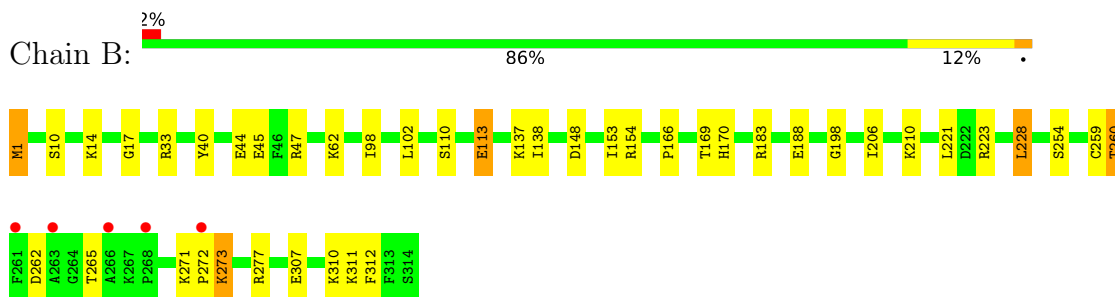
3 Residue-property plots [i](#)

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 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.

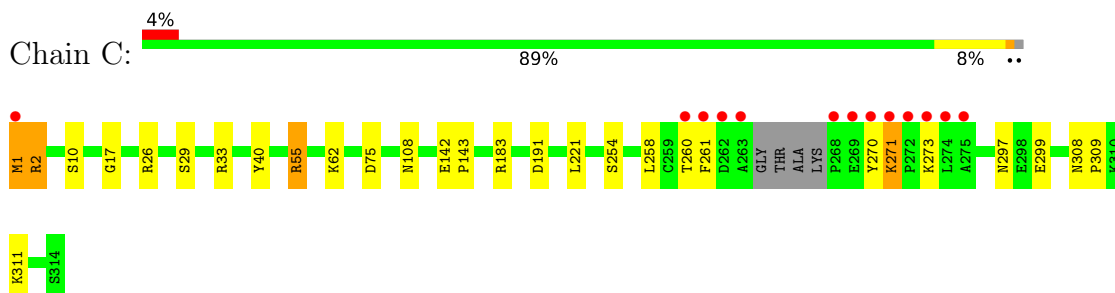
- Molecule 1: Aryldialkylphosphatase



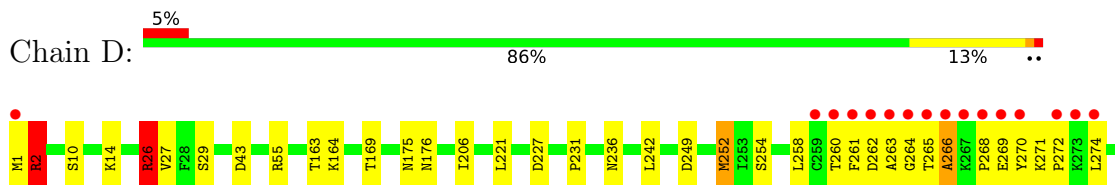
- Molecule 1: Aryldialkylphosphatase



- Molecule 1: Aryldialkylphosphatase



- Molecule 1: Aryldialkylphosphatase





4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	86.60Å 103.10Å 151.80Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.81 – 2.00 48.81 – 2.00	Depositor EDS
% Data completeness (in resolution range)	98.6 (48.81-2.00) 98.6 (48.81-2.00)	Depositor EDS
R_{merge}	0.09	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	3.95 (at 2.00Å)	Xtrriage
Refinement program	REFMAC 5.8.0158	Depositor
R, R_{free}	0.158 , 0.204 0.170 , 0.214	Depositor DCC
R_{free} test set	4556 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å ²)	23.2	Xtrriage
Anisotropy	0.106	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.37 , 46.7	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	10768	wwPDB-VP
Average B, all atoms (Å ²)	30.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.73% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: GOL, CO, FE2, KCX

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	0.88	1/2489 (0.0%)	0.89	5/3357 (0.1%)
1	B	0.89	1/2554 (0.0%)	0.92	5/3449 (0.1%)
1	C	0.86	0/2542	0.88	5/3428 (0.1%)
1	D	0.85	0/2546	0.89	6/3437 (0.2%)
All	All	0.87	2/10131 (0.0%)	0.89	21/13671 (0.2%)

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
1	A	0	1
1	B	0	1
1	C	0	1
1	D	0	1
All	All	0	4

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	36	TRP	CE3-CZ3	5.34	1.47	1.38
1	B	262	ASP	CB-CG	-5.14	1.41	1.51

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

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	26	ARG	NE-CZ-NH2	-9.97	115.32	120.30
1	D	26	ARG	NE-CZ-NH1	8.46	124.53	120.30
1	A	256	ASP	CB-CG-OD1	7.66	125.19	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	183	ARG	NE-CZ-NH2	-7.43	116.58	120.30
1	A	183	ARG	NE-CZ-NH2	-7.00	116.80	120.30

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	221	LEU	Peptide
1	B	221	LEU	Peptide
1	C	221	LEU	Peptide
1	D	221	LEU	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	A	2453	0	2496	42	0
1	B	2514	0	2551	28	0
1	C	2503	0	2537	27	0
1	D	2509	0	2540	38	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
2	C	1	0	0	0	0
2	D	1	0	0	0	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
4	A	18	0	24	0	0
4	B	12	0	16	0	0
4	C	12	0	16	0	0
4	D	6	0	8	0	0
5	A	189	0	0	8	0
5	B	203	0	0	6	0
5	C	191	0	0	3	0
5	D	150	0	0	7	0
All	All	10768	0	10188	128	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 6.

The worst 5 of 128 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:A:2[B]:ARG:HH21	1:A:2[B]:ARG:CG	1.51	1.18
1:A:2[A]:ARG:HH21	1:A:2[A]:ARG:HG2	1.07	1.10
1:A:2[B]:ARG:NH2	1:A:2[B]:ARG:HG3	1.55	1.09
1:D:258:LEU:HD13	1:D:261:PHE:CD2	1.89	1.08
1:A:2[A]:ARG:HH21	1:A:2[A]:ARG:CG	1.66	1.07

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	302/314 (96%)	290 (96%)	10 (3%)	2 (1%)	22 16
1	B	312/314 (99%)	301 (96%)	10 (3%)	1 (0%)	41 37
1	C	307/314 (98%)	293 (95%)	12 (4%)	2 (1%)	22 16
1	D	311/314 (99%)	290 (93%)	17 (6%)	4 (1%)	12 6
All	All	1232/1256 (98%)	1174 (95%)	49 (4%)	9 (1%)	22 16

5 of 9 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	273	LYS
1	C	271	LYS
1	D	268	PRO
1	D	2	ARG
1	D	266	ALA

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	266/271 (98%)	259 (97%)	7 (3%)	46	48
1	B	272/271 (100%)	267 (98%)	5 (2%)	59	63
1	C	271/271 (100%)	265 (98%)	6 (2%)	52	55
1	D	271/271 (100%)	266 (98%)	5 (2%)	59	63
All	All	1080/1084 (100%)	1057 (98%)	23 (2%)	55	57

5 of 23 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	C	55[B]	ARG
1	C	273	LYS
1	C	260	THR
1	D	2	ARG
1	A	277	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 13 such sidechains are listed below:

Mol	Chain	Res	Type
1	C	160	ASN
1	C	236	ASN
1	D	236	ASN
1	D	58	GLN
1	D	160	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](#)

4 non-standard protein/DNA/RNA residues are modelled in this entry.

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
1	KCX	D	137	1,3,2	7,11,12	0.55	0	4,12,14	1.04	0
1	KCX	A	137	1,3,2	7,11,12	1.14	1 (14%)	4,12,14	0.84	0
1	KCX	C	137	1,3,2	7,11,12	0.78	0	4,12,14	0.59	0
1	KCX	B	137	1,3,2	7,11,12	0.70	0	4,12,14	0.97	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
1	KCX	D	137	1,3,2	-	0/7/10/12	-
1	KCX	A	137	1,3,2	-	4/7/10/12	-
1	KCX	C	137	1,3,2	-	0/7/10/12	-
1	KCX	B	137	1,3,2	-	0/7/10/12	-

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	137	KCX	CB-CA	2.38	1.56	1.53

There are no bond angle outliers.

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
1	A	137	KCX	N-CA-CB-CG
1	A	137	KCX	C-CA-CB-CG
1	A	137	KCX	CA-CB-CG-CD
1	A	137	KCX	CG-CD-CE-NZ

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
1	A	137	KCX	1	0
1	B	137	KCX	1	0

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 16 ligands modelled in this entry, 8 are monoatomic - leaving 8 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	GOL	A	405	-	5,5,5	1.00	0	5,5,5	0.72	0
4	GOL	C	403	-	5,5,5	0.38	0	5,5,5	0.89	0
4	GOL	D	403	-	5,5,5	0.62	0	5,5,5	0.81	0
4	GOL	C	404	3,2	5,5,5	0.75	0	5,5,5	1.13	0
4	GOL	A	404	-	5,5,5	0.76	0	5,5,5	0.57	0
4	GOL	A	403	-	5,5,5	1.10	0	5,5,5	2.06	3 (60%)
4	GOL	B	404	-	5,5,5	0.83	0	5,5,5	1.03	0
4	GOL	B	403	-	5,5,5	0.49	0	5,5,5	0.47	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	GOL	A	405	-	-	4/4/4/4	-
4	GOL	C	403	-	-	0/4/4/4	-
4	GOL	D	403	-	-	4/4/4/4	-
4	GOL	C	404	3,2	-	0/4/4/4	-
4	GOL	A	404	-	-	2/4/4/4	-
4	GOL	A	403	-	-	4/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	GOL	B	404	-	-	2/4/4/4	-
4	GOL	B	403	-	-	1/4/4/4	-

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	A	403	GOL	O2-C2-C1	2.77	121.34	109.12
4	A	403	GOL	O3-C3-C2	-2.23	99.50	110.20
4	A	403	GOL	C3-C2-C1	-2.03	103.82	111.70

There are no chirality outliers.

5 of 17 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	403	GOL	C1-C2-C3-O3
4	A	405	GOL	C1-C2-C3-O3
4	B	403	GOL	C1-C2-C3-O3
4	B	404	GOL	O1-C1-C2-C3
4	D	403	GOL	O1-C1-C2-C3

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data [i](#)

6.1 Protein, DNA and RNA chains [i](#)

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	304/314 (96%)	-0.34	5 (1%) 72 70	14, 24, 43, 94	0
1	B	313/314 (99%)	-0.46	5 (1%) 72 70	15, 23, 48, 84	0
1	C	309/314 (98%)	-0.33	13 (4%) 36 35	17, 25, 50, 116	0
1	D	313/314 (99%)	-0.08	16 (5%) 28 27	16, 29, 54, 161	0
All	All	1239/1256 (98%)	-0.30	39 (3%) 49 48	14, 25, 51, 161	0

The worst 5 of 39 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	268	PRO	12.6
1	D	270	TYR	10.8
1	A	272	PRO	8.8
1	D	261	PHE	8.8
1	C	270	TYR	8.1

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
1	KCX	A	137	12/13	0.97	0.09	15,16,20,21	0
1	KCX	C	137	12/13	0.98	0.08	16,17,18,19	0
1	KCX	D	137	12/13	0.98	0.08	17,19,20,23	0
1	KCX	B	137	12/13	0.99	0.09	13,15,16,18	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
4	GOL	A	405	6/6	0.85	0.22	47,52,62,63	0
4	GOL	C	404	6/6	0.86	0.21	35,41,54,61	0
4	GOL	A	403	6/6	0.93	0.16	31,33,34,41	0
4	GOL	A	404	6/6	0.94	0.14	23,30,43,43	0
4	GOL	B	403	6/6	0.95	0.14	27,32,42,49	0
4	GOL	D	403	6/6	0.95	0.14	35,41,43,48	0
4	GOL	C	403	6/6	0.96	0.10	27,30,34,35	0
4	GOL	B	404	6/6	0.97	0.10	27,32,36,41	0
3	CO	D	402	1/1	0.99	0.07	24,24,24,24	0
2	FE2	A	401	1/1	0.99	0.10	15,15,15,15	0
3	CO	A	402	1/1	0.99	0.09	19,19,19,19	0
3	CO	C	402	1/1	1.00	0.08	20,20,20,20	0
2	FE2	C	401	1/1	1.00	0.09	16,16,16,16	0
2	FE2	D	401	1/1	1.00	0.07	19,19,19,19	0
2	FE2	B	401	1/1	1.00	0.09	14,14,14,14	0
3	CO	B	402	1/1	1.00	0.09	20,20,20,20	0

6.5 Other polymers [i](#)

There are no such residues in this entry.