Full wwPDB X-ray Structure Validation Report ⓘ

May 22, 2020 – 02:28 am BST

PDB ID	:	6FN6
Title	:	Modifying region (DH-ER-KR) of an insect fatty acid synthase (FAS)
Authors	:	Benning, F.M.C.; Bukhari, H.S.T.; Jakob, R.P.; Maier, T.
Deposited on	:	2018-02-02
Resolution	:	2.70 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The following versions of software and data (see references ①) were used in the production of this report:

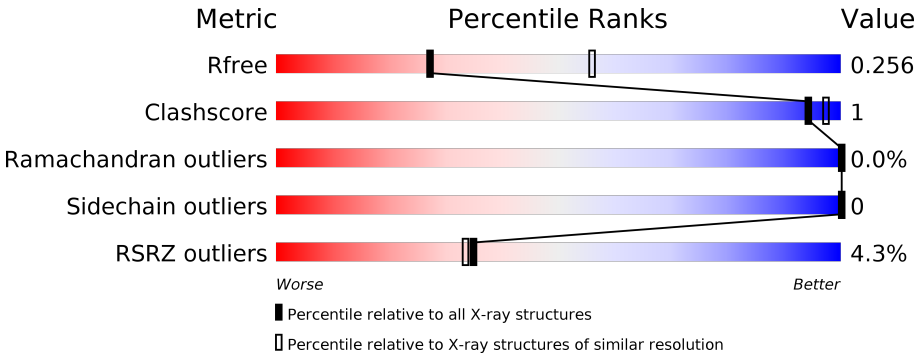
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 2.70 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	2808 (2.70-2.70)
Clashscore	141614	3122 (2.70-2.70)
Ramachandran outliers	138981	3069 (2.70-2.70)
Sidechain outliers	138945	3069 (2.70-2.70)
RSRZ outliers	127900	2737 (2.70-2.70)

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 on 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	1177	3% 90% · 7%
1	B	1177	5% 90% · 7%

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 34293 atoms, of which 17179 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 Fatty acid synthase 1, isoform A.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	1093	Total	C	H	N	O	S	0	0	0
			17066	5376	8595	1462	1600	33			
1	B	1089	Total	C	H	N	O	S	0	0	0
			17000	5355	8566	1455	1591	33			

There are 58 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	888	MET	-	initiating methionine	UNP Q9VQL7
A	2037	LEU	-	expression tag	UNP Q9VQL7
A	2038	GLU	-	expression tag	UNP Q9VQL7
A	2039	VAL	-	expression tag	UNP Q9VQL7
A	2040	LEU	-	expression tag	UNP Q9VQL7
A	2041	PHE	-	expression tag	UNP Q9VQL7
A	2042	GLN	-	expression tag	UNP Q9VQL7
A	2043	GLY	-	expression tag	UNP Q9VQL7
A	2044	PRO	-	expression tag	UNP Q9VQL7
A	2045	HIS	-	expression tag	UNP Q9VQL7
A	2046	PRO	-	expression tag	UNP Q9VQL7
A	2047	ALA	-	expression tag	UNP Q9VQL7
A	2048	PHE	-	expression tag	UNP Q9VQL7
A	2049	LEU	-	expression tag	UNP Q9VQL7
A	2050	TYR	-	expression tag	UNP Q9VQL7
A	2051	LYS	-	expression tag	UNP Q9VQL7
A	2052	VAL	-	expression tag	UNP Q9VQL7
A	2053	VAL	-	expression tag	UNP Q9VQL7
A	2054	SER	-	expression tag	UNP Q9VQL7
A	2055	HIS	-	expression tag	UNP Q9VQL7
A	2056	HIS	-	expression tag	UNP Q9VQL7
A	2057	HIS	-	expression tag	UNP Q9VQL7
A	2058	HIS	-	expression tag	UNP Q9VQL7
A	2059	HIS	-	expression tag	UNP Q9VQL7
A	2060	HIS	-	expression tag	UNP Q9VQL7

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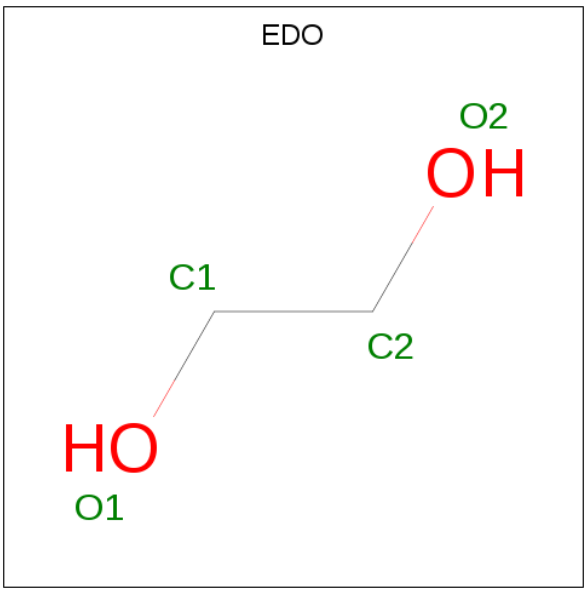
Chain	Residue	Modelled	Actual	Comment	Reference
A	2061	HIS	-	expression tag	UNP Q9VQL7
A	2062	HIS	-	expression tag	UNP Q9VQL7
A	2063	HIS	-	expression tag	UNP Q9VQL7
A	2064	HIS	-	expression tag	UNP Q9VQL7
B	888	MET	-	initiating methionine	UNP Q9VQL7
B	2037	LEU	-	expression tag	UNP Q9VQL7
B	2038	GLU	-	expression tag	UNP Q9VQL7
B	2039	VAL	-	expression tag	UNP Q9VQL7
B	2040	LEU	-	expression tag	UNP Q9VQL7
B	2041	PHE	-	expression tag	UNP Q9VQL7
B	2042	GLN	-	expression tag	UNP Q9VQL7
B	2043	GLY	-	expression tag	UNP Q9VQL7
B	2044	PRO	-	expression tag	UNP Q9VQL7
B	2045	HIS	-	expression tag	UNP Q9VQL7
B	2046	PRO	-	expression tag	UNP Q9VQL7
B	2047	ALA	-	expression tag	UNP Q9VQL7
B	2048	PHE	-	expression tag	UNP Q9VQL7
B	2049	LEU	-	expression tag	UNP Q9VQL7
B	2050	TYR	-	expression tag	UNP Q9VQL7
B	2051	LYS	-	expression tag	UNP Q9VQL7
B	2052	VAL	-	expression tag	UNP Q9VQL7
B	2053	VAL	-	expression tag	UNP Q9VQL7
B	2054	SER	-	expression tag	UNP Q9VQL7
B	2055	HIS	-	expression tag	UNP Q9VQL7
B	2056	HIS	-	expression tag	UNP Q9VQL7
B	2057	HIS	-	expression tag	UNP Q9VQL7
B	2058	HIS	-	expression tag	UNP Q9VQL7
B	2059	HIS	-	expression tag	UNP Q9VQL7
B	2060	HIS	-	expression tag	UNP Q9VQL7
B	2061	HIS	-	expression tag	UNP Q9VQL7
B	2062	HIS	-	expression tag	UNP Q9VQL7
B	2063	HIS	-	expression tag	UNP Q9VQL7
B	2064	HIS	-	expression tag	UNP Q9VQL7

- Molecule 2 is BROMIDE ION (three-letter code: BR) (formula: Br).

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

- Molecule 3 is 1,2-ETHANEDIOL (three-letter code: EDO) (formula: $C_2H_6O_2$).



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

- Molecule 4 is water.

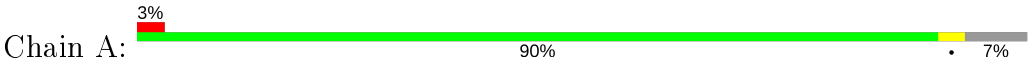
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	137	Total	O	0	0
			137	137		
4	B	58	Total	O	0	0
			58	58		

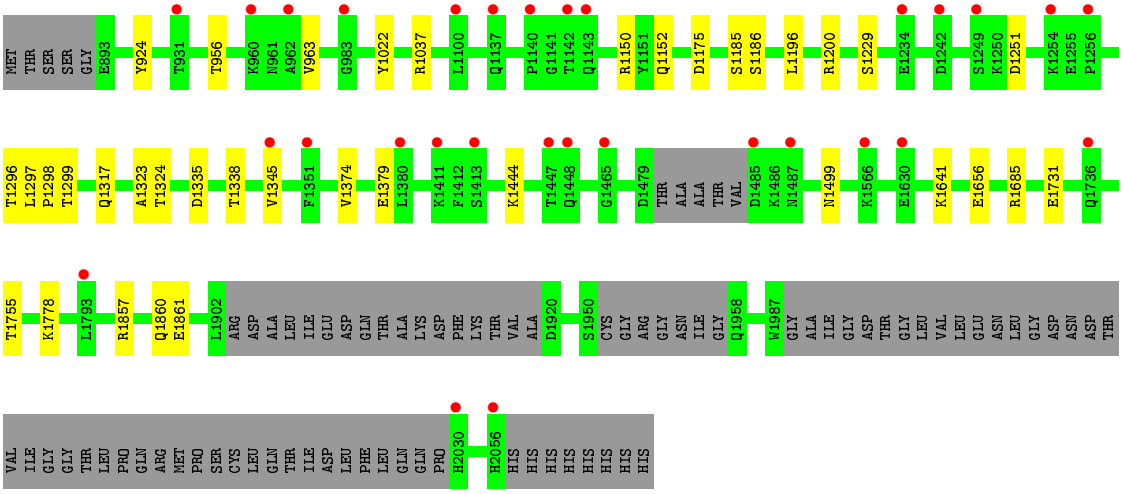
3 Residue-property plots (i)

These plots are drawn for all protein, RNA and DNA 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: Fatty acid synthase 1, isoform A

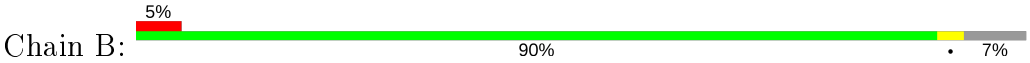
Chain A:

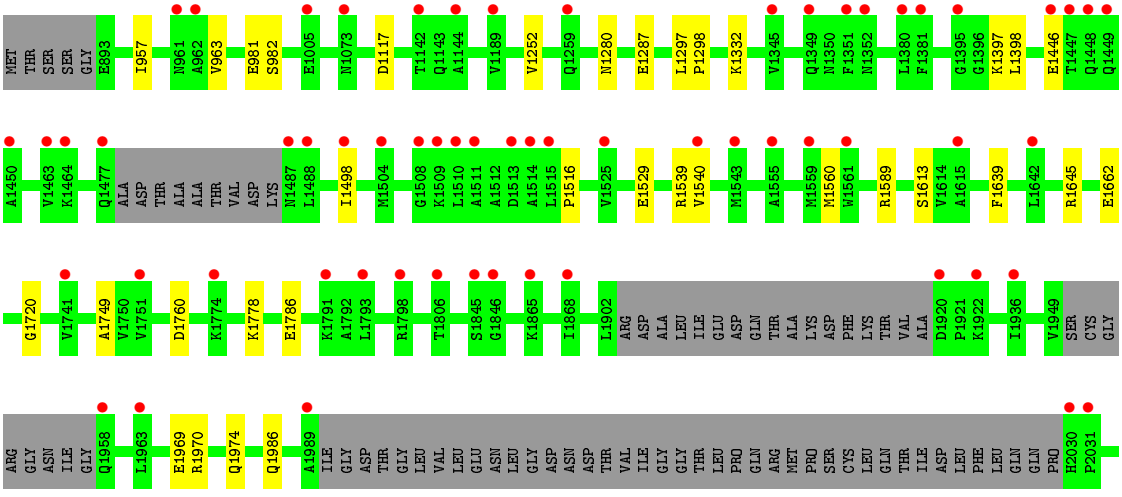




• Molecule 1: Fatty acid synthase 1, isoform A

Chain B:






P2044
H2045
V2052
H2055
HIS
HIS
HIS
HIS
HIS
HIS
HIS
HIS

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	75.45Å 174.15Å 194.45Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	129.73 – 2.70 129.73 – 2.70	Depositor EDS
% Data completeness (in resolution range)	95.8 (129.73-2.70) 95.8 (129.73-2.70)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.66 (at 2.69Å)	Xtriage
Refinement program	PHENIX dev_1992	Depositor
R, R_{free}	0.221 , 0.255 0.222 , 0.256	Depositor DCC
R_{free} test set	3384 reflections (4.96%)	wwPDB-VP
Wilson B-factor (Å^2)	54.0	Xtriage
Anisotropy	0.603	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.36 , 71.4	EDS
L-test for twinning[2]	$< \|L\| > = 0.47$, $< L^2 > = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.93	EDS
Total number of atoms	34293	wwPDB-VP
Average B, all atoms (Å^2)	77.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.21% of the height of the origin peak. No significant pseudotranslation is detected.*

[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

5.1 Standard geometry

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

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	0.23	0/8612	0.39	0/11656
1	B	0.22	0/8574	0.38	0/11605
All	All	0.23	0/17186	0.38	0/23261

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

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	8471	8595	8595	23	0
1	B	8434	8566	8565	22	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	8	12	12	0	0
3	B	4	6	6	0	0
4	A	137	0	0	4	0
4	B	58	0	0	3	0
All	All	17114	17179	17178	45	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 1.

All (45) 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:1498:ILE:O	4:B:2201:HOH:O	1.92	0.86
1:A:924:TYR:OH	1:A:956:THR:OG1	1.93	0.85
1:A:1323:ALA:O	1:A:1324:THR:OG1	1.99	0.81
1:A:1860:GLN:OE1	4:A:2201:HOH:O	2.01	0.77
1:A:1755:THR:O	4:A:2202:HOH:O	2.01	0.76
1:A:1641:LYS:N	4:A:2204:HOH:O	2.18	0.75
1:A:1317:GLN:OE1	4:A:2203:HOH:O	2.08	0.72
1:A:1379:GLU:OE1	1:A:1379:GLU:N	2.23	0.72
1:A:1150:ARG:NH1	1:A:1152:GLN:OE1	2.33	0.61
1:A:1229:SER:OG	1:A:1251:ASP:OD1	2.18	0.60
1:B:1252:VAL:O	1:B:1280:ASN:ND2	2.33	0.57
1:B:1539:ARG:NH1	1:B:1786:GLU:OE2	2.33	0.57
1:A:1296:THR:HG1	1:A:1299:THR:HG1	1.54	0.56
1:A:1175:ASP:OD2	1:A:1444:LYS:NZ	2.32	0.55
1:A:1499:ASN:OD1	1:A:1778:LYS:NZ	2.29	0.54
1:A:1196:LEU:O	1:A:1200:ARG:NH1	2.45	0.50
1:B:1970:ARG:NH2	1:B:1974:GLN:OE1	2.45	0.49
1:B:1613:SER:OG	1:B:1749:ALA:O	2.25	0.47
1:B:1397:LYS:HG3	1:B:1398:LEU:HD12	1.96	0.47
1:B:1645:ARG:NH2	1:B:1662:GLU:OE1	2.49	0.46
1:A:1185:SER:O	1:A:1186:SER:OG	2.30	0.46
1:B:1529:GLU:OE2	1:B:1778:LYS:NZ	2.46	0.46
1:B:1287:GLU:OE2	1:B:1332:LYS:HE2	2.17	0.45
1:B:1297:LEU:N	1:B:1298:PRO:HD2	2.32	0.45
1:B:1117:ASP:OD1	4:B:2202:HOH:O	2.21	0.44
1:B:1446:GLU:HG3	1:B:1446:GLU:O	2.18	0.44
1:B:1639:PHE:O	4:B:2203:HOH:O	2.22	0.43
1:A:1022:TYR:CZ	1:A:1037:ARG:HA	2.54	0.43
1:B:1540:VAL:HG11	1:B:1560:MET:HE3	2.00	0.43
1:B:963:VAL:O	1:B:963:VAL:HG13	2.18	0.42
1:A:1345:VAL:O	1:A:1374:VAL:O	2.38	0.42
1:A:1297:LEU:N	1:A:1298:PRO:HD2	2.35	0.42
1:A:1296:THR:OG1	1:A:1299:THR:OG1	2.29	0.42
1:A:1335:ASP:OD2	1:A:1338:THR:HG23	2.19	0.42
1:B:1540:VAL:HG11	1:B:1560:MET:CE	2.50	0.42
1:A:1857:ARG:NH1	1:A:1861:GLU:OE2	2.52	0.42
1:B:1969:GLU:OE2	1:B:1986:GLN:NE2	2.53	0.41
1:B:1760:ASP:OD1	1:B:1760:ASP:N	2.52	0.41
1:B:981:GLU:OE2	1:B:982:SER:OG	2.21	0.41
1:B:957:ILE:N	1:B:957:ILE:HD12	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1731:GLU:N	1:A:1731:GLU:OE1	2.54	0.40
1:A:1656:GLU:OE2	1:A:1685:ARG:HD2	2.21	0.40
1:B:1117:ASP:N	1:B:1117:ASP:OD1	2.55	0.40
1:B:1589:ARG:NH2	1:B:1720:GLY:O	2.55	0.40
1:A:963:VAL:O	1:A:963:VAL:HG13	2.20	0.40

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	1083/1177 (92%)	1047 (97%)	36 (3%)	0	100	100
1	B	1079/1177 (92%)	1047 (97%)	31 (3%)	1 (0%)	51	78
All	All	2162/2354 (92%)	2094 (97%)	67 (3%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	1516	PRO

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.

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	920/988 (93%)	920 (100%)	0	100	100
1	B	915/988 (93%)	915 (100%)	0	100	100
All	All	1835/1976 (93%)	1835 (100%)	0	100	100

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

Some 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 carbohydrates in this entry.

5.6 Ligand geometry

Of 5 ligands modelled in this entry, 2 are monoatomic - leaving 3 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	$\#\|Z\| > 2$
3	EDO	A	2103	-	3,3,3	0.43	0	2,2,2	0.38	0
3	EDO	B	2102	-	3,3,3	0.45	0	2,2,2	0.30	0
3	EDO	A	2102	-	3,3,3	0.46	0	2,2,2	0.30	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
3	EDO	A	2103	-	-	0/1/1/1	-
3	EDO	B	2102	-	-	1/1/1/1	-
3	EDO	A	2102	-	-	0/1/1/1	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	B	2102	EDO	O1-C1-C2-O2

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

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	1093/1177 (92%)	0.35	30 (2%)	54	55	29, 57, 111, 187	0
1	B	1089/1177 (92%)	0.56	64 (5%)	22	21	31, 73, 126, 190	0
All	All	2182/2354 (92%)	0.46	94 (4%)	35	33	29, 65, 119, 190	0

All (94) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	1514	ALA	7.7
1	B	1488	LEU	5.2
1	B	1989	ALA	5.0
1	B	1351	PHE	4.8
1	A	1380	LEU	4.7
1	B	2030	HIS	4.6
1	A	1345	VAL	4.6
1	B	1515	LEU	4.4
1	B	1920	ASP	4.4
1	B	1381	PHE	4.4
1	B	1446	GLU	4.4
1	B	1463	VAL	4.2
1	A	1140	PRO	4.0
1	B	2031	PRO	4.0
1	A	2030	HIS	3.8
1	B	1793	LEU	3.8
1	A	1447	THR	3.8
1	B	1487	ASN	3.7
1	B	1511	ALA	3.7
1	A	962	ALA	3.7
1	A	2056	HIS	3.6
1	B	1509	LYS	3.5
1	B	1845	SER	3.4
1	A	1566	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
1	A	1234	GLU	3.2
1	B	1642	LEU	3.2
1	B	1508	GLY	3.2
1	A	960	LYS	3.0
1	B	1345	VAL	3.0
1	B	1936	ILE	3.0
1	A	1351	PHE	3.0
1	B	962	ALA	3.0
1	B	1142	THR	2.9
1	B	1540	VAL	2.8
1	B	1447	THR	2.8
1	B	1806	THR	2.8
1	B	1498	ILE	2.8
1	A	1254	LYS	2.8
1	B	1005	GLU	2.8
1	A	1793	LEU	2.8
1	B	1510	LEU	2.8
1	B	1189	VAL	2.7
1	A	1143	GLN	2.7
1	B	1791	LYS	2.7
1	B	1958	GLN	2.7
1	A	1487	ASN	2.6
1	B	1073	ASN	2.6
1	B	2045	HIS	2.6
1	B	1561	TRP	2.6
1	B	1464	LYS	2.6
1	B	2052	VAL	2.5
1	B	1798	ARG	2.5
1	B	1504	MET	2.5
1	A	1249	SER	2.5
1	B	1380	LEU	2.4
1	B	1865	LYS	2.4
1	A	1100	LEU	2.4
1	A	1413	SER	2.4
1	B	1144	ALA	2.4
1	B	1395	GLY	2.4
1	A	931	THR	2.3
1	B	2044	PRO	2.3
1	B	1846	GLY	2.3
1	B	1525	VAL	2.3
1	A	1142	THR	2.3
1	B	1922	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
1	A	1736	GLN	2.3
1	B	1559	MET	2.3
1	B	1513	ASP	2.3
1	B	1259	GLN	2.2
1	A	1630	GLU	2.2
1	B	1868	ILE	2.2
1	A	1465	GLY	2.2
1	A	1242	ASP	2.2
1	B	1555	ALA	2.2
1	B	1349	GLN	2.2
1	A	983	GLY	2.2
1	B	1615	ALA	2.2
1	B	961	ASN	2.1
1	A	1448	GLN	2.1
1	B	1963	LEU	2.1
1	B	1450	ALA	2.1
1	B	1449	GLN	2.1
1	B	1741	VAL	2.1
1	B	1751	VAL	2.1
1	B	1352	ASN	2.1
1	B	1543	MET	2.1
1	B	1448	GLN	2.1
1	A	1137	GLN	2.1
1	A	1256	PRO	2.0
1	A	1411	LYS	2.0
1	A	1485	ASP	2.0
1	B	1477	GLN	2.0
1	B	1774	LYS	2.0

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

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

6.3 Carbohydrates (i)

There are no carbohydrates 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, 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(Å^2)	Q<0.9
3	EDO	B	2102	4/4	0.69	0.32	93,112,117,119	0
3	EDO	A	2102	4/4	0.80	0.28	115,138,139,139	0
3	EDO	A	2103	4/4	0.94	0.25	37,45,46,47	0
2	BR	B	2101	1/1	0.99	0.15	59,59,59,59	0
2	BR	A	2101	1/1	1.00	0.15	48,48,48,48	0

6.5 Other polymers (i)

There are no such residues in this entry.