Full wwPDB X-ray Structure Validation Report (i)

Jun 28, 2022 – 04:07 pm BST

PDB ID	:	6S7L
Title	:	Arbitrium receptor from a Bacillus subtilis Katmira33 phage
Authors	:	Marina, A.; Gallego del Sol, F.
Deposited on	:	2019-07-05
Resolution	:	2.60 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 (i) 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 (1)) were used in the production of this report:

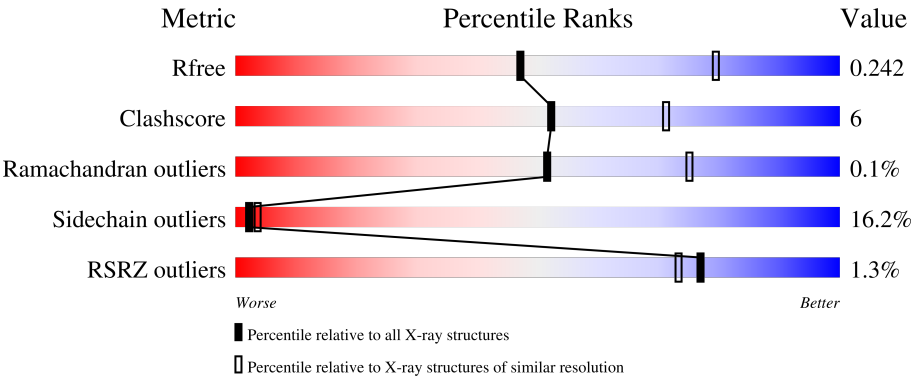
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.29
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0267
CCP4	:	7.1.010 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.29

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 2.60 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	3163 (2.60-2.60)
Clashscore	141614	3518 (2.60-2.60)
Ramachandran outliers	138981	3455 (2.60-2.60)
Sidechain outliers	138945	3455 (2.60-2.60)
RSRZ outliers	127900	3104 (2.60-2.60)

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	387	79% 18% .
1	B	387	2% 77% 20% .
2	C	6	17% 67% 33%
2	D	6	17% 67% 33%

2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 6457 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.

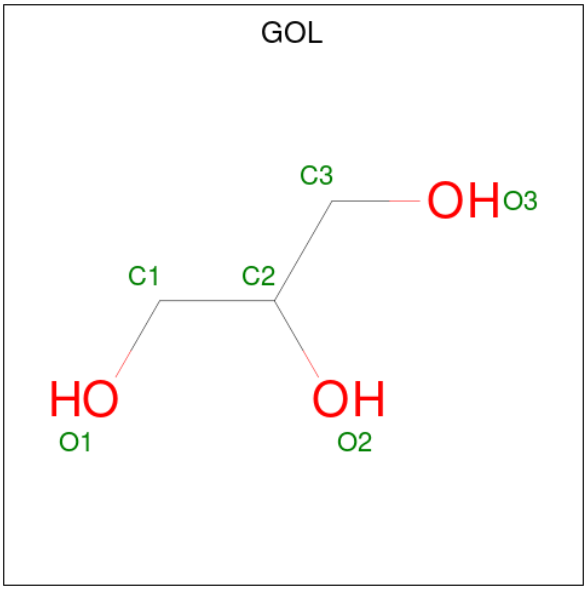
- Molecule 1 is a protein called Arbitrium receptor.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	386	Total	C	N	O	S	0	0	0
			3177	2036	519	602	20			
1	B	386	Total	C	N	O	S	0	0	0
			3177	2036	519	602	20			

- Molecule 2 is a protein called GLY-ILE-VAL-ARG-GLY-ALA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
2	C	6	Total	C	N	O	0	0	0
			40	24	9	7			
2	D	6	Total	C	N	O	0	0	0
			40	24	9	7			

- Molecule 3 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



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

- Molecule 4 is water.

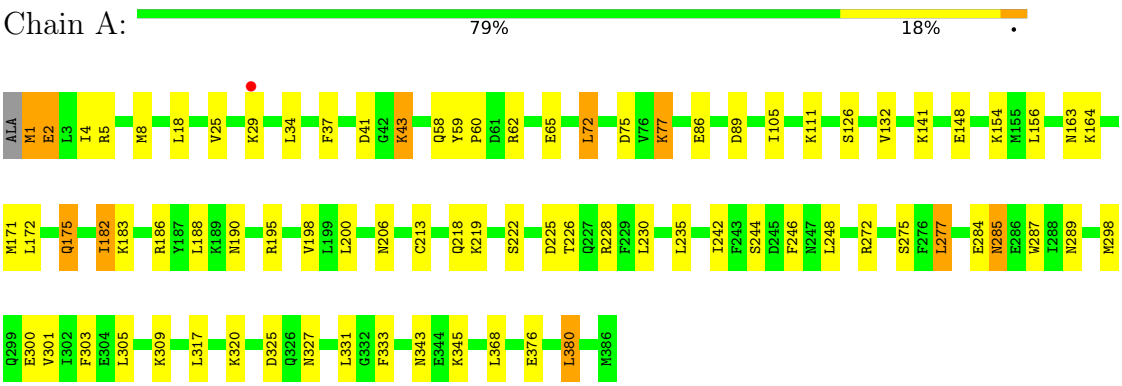
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	4	Total O 4 4	0	0
4	C	1	Total O 1 1	0	0
4	B	6	Total O 6 6	0	0

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 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.

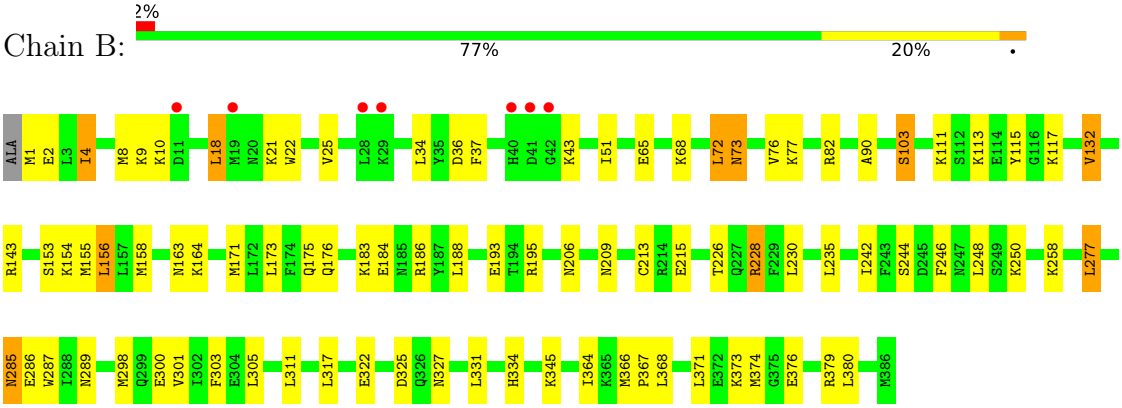
• Molecule 1: Arbitrium receptor

Chain A:



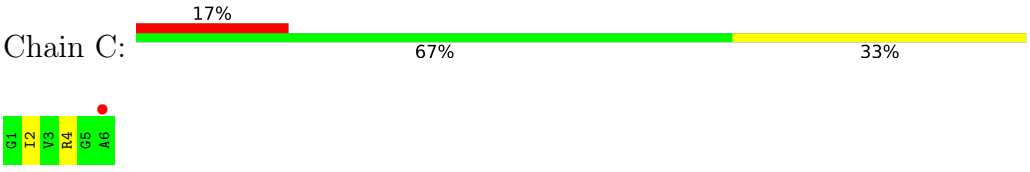
• Molecule 1: Arbitrium receptor

Chain B:



• Molecule 2: GLY-ILE-VAL-ARG-GLY-ALA

Chain C:



• Molecule 2: GLY-ILE-VAL-ARG-GLY-ALA

Chain D:


G1
I2
V3
R4
G5
A6

4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α, β, γ	69.70Å 209.76Å 140.25Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	104.88 – 2.60 49.12 – 2.60	Depositor EDS
% Data completeness (in resolution range)	99.6 (104.88-2.60) 99.7 (49.12-2.60)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.46 (at 2.61Å)	Xtriage
Refinement program	REFMAC 5.8.0158	Depositor
R, R_{free}	0.214 , 0.247 0.204 , 0.242	Depositor DCC
R_{free} test set	1618 reflections (5.06%)	wwPDB-VP
Wilson B-factor (Å^2)	69.9	Xtriage
Anisotropy	0.371	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	(Not available) , (Not available)	EDS
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.96	EDS
Total number of atoms	6457	wwPDB-VP
Average B, all atoms (Å^2)	66.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.91% 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: GOL

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	0.78	0/3236	0.84	2/4346 (0.0%)
1	B	0.73	0/3236	0.85	1/4346 (0.0%)
2	C	0.62	0/39	0.76	0/49
2	D	0.56	0/39	0.76	0/49
All	All	0.76	0/6550	0.85	3/8790 (0.0%)

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	72	LEU	CA-CB-CG	7.19	131.84	115.30
1	B	73	ASN	N-CA-CB	6.02	121.44	110.60
1	A	156	LEU	CA-CB-CG	5.24	127.35	115.30

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	3177	0	3165	40	0
1	B	3177	0	3165	32	0
2	C	40	0	46	3	0
2	D	40	0	46	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	A	6	0	8	3	0
3	B	6	0	8	3	0
4	A	4	0	0	0	0
4	B	6	0	0	0	0
4	C	1	0	0	0	0
All	All	6457	0	6438	71	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.

All (71) 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:250:LYS:HE2	3:B:401:GOL:H12	1.40	1.01
1:A:4:ILE:HG13	1:A:8:MET:HE2	1.51	0.91
1:B:90:ALA:O	1:B:228:ARG:HG2	1.75	0.87
1:B:250:LYS:HE2	3:B:401:GOL:C1	2.06	0.86
1:B:82:ARG:HG2	1:B:115:TYR:CD2	2.21	0.75
1:A:206:ASN:HD21	2:C:4:ARG:HE	1.39	0.68
1:A:345:LYS:HE3	1:A:376:GLU:OE1	1.95	0.67
1:B:82:ARG:HG2	1:B:115:TYR:CE2	2.30	0.67
1:B:68:LYS:O	1:B:72:LEU:HG	1.96	0.66
1:A:89:ASP:OD2	1:A:195:ARG:NH2	2.26	0.66
1:A:86:GLU:OE2	1:A:195:ARG:NH1	2.29	0.66
1:A:86:GLU:OE1	1:A:195:ARG:NH1	2.30	0.64
1:A:206:ASN:HD21	2:C:4:ARG:NE	1.95	0.64
1:A:4:ILE:CG1	1:A:8:MET:HE2	2.25	0.64
1:B:366:MET:HB2	1:B:367:PRO:CD	2.28	0.64
1:B:371:LEU:HD23	1:B:374:MET:HE3	1.82	0.62
1:B:366:MET:CB	1:B:367:PRO:CD	2.78	0.62
1:A:4:ILE:HG13	1:A:8:MET:CE	2.28	0.58
1:A:75:ASP:OD1	1:A:77:LYS:HG2	2.05	0.57
1:B:285:ASN:HD22	1:B:287:TRP:H	1.52	0.56
1:A:2:GLU:HG2	1:A:5:ARG:HG3	1.89	0.55
1:B:371:LEU:HD23	1:B:374:MET:CE	2.37	0.54
1:B:366:MET:HB2	1:B:367:PRO:HD2	1.89	0.54
1:B:18:LEU:HD12	1:B:22:TRP:CZ2	2.42	0.54
1:B:155:MET:HE1	1:B:195:ARG:HD3	1.89	0.54
1:A:59:TYR:HA	3:A:401:GOL:H2	1.89	0.54
1:B:36:ASP:HB3	1:B:43:LYS:HG2	1.89	0.54
1:B:206:ASN:HD21	2:D:4:ARG:NE	2.05	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:59:TYR:N	1:A:60:PRO:HD3	2.24	0.53
1:A:86:GLU:CD	1:A:195:ARG:NH1	2.61	0.53
1:B:206:ASN:HD21	2:D:4:ARG:HE	1.57	0.52
1:A:285:ASN:HD22	1:A:287:TRP:H	1.55	0.51
1:B:8:MET:CE	1:B:37:PHE:HE2	2.24	0.51
1:A:5:ARG:HD3	1:A:37:PHE:O	2.11	0.51
1:A:62:ARG:CD	3:A:401:GOL:H31	2.42	0.49
1:A:333:PHE:CZ	2:C:2:ILE:HG12	2.47	0.49
1:B:345:LYS:HE3	1:B:376:GLU:OE1	2.13	0.48
1:A:5:ARG:NH2	1:A:41:ASP:OD1	2.34	0.47
1:A:58:GLN:C	1:A:60:PRO:HD3	2.36	0.46
1:B:82:ARG:CG	1:B:115:TYR:CD2	2.96	0.46
1:B:8:MET:HE1	1:B:37:PHE:HE2	1.82	0.45
1:A:86:GLU:CD	1:A:195:ARG:HH11	2.17	0.45
1:A:175:GLN:HG3	1:B:176:GLN:HG3	2.00	0.44
1:A:200:LEU:HD12	1:A:200:LEU:HA	1.81	0.44
1:B:250:LYS:CE	3:B:401:GOL:H12	2.28	0.44
1:A:380:LEU:HD12	1:A:380:LEU:HA	1.78	0.44
1:A:62:ARG:HD3	3:A:401:GOL:H31	2.00	0.44
1:A:8:MET:CE	1:A:37:PHE:HE2	2.31	0.44
1:B:153:SER:HA	1:B:156:LEU:HD23	2.00	0.43
1:B:285:ASN:ND2	1:B:287:TRP:H	2.15	0.43
1:B:76:VAL:HG11	1:B:103:SER:HB2	1.99	0.43
1:A:2:GLU:CG	1:A:5:ARG:HG3	2.49	0.43
1:A:43:LYS:HE3	1:A:43:LYS:HB2	1.38	0.43
1:B:4:ILE:HD12	1:B:51:ILE:HD11	2.00	0.43
1:A:300:GLU:OE1	1:A:300:GLU:HA	2.20	0.42
1:A:285:ASN:ND2	1:A:287:TRP:H	2.17	0.42
1:A:275:SER:HB3	1:A:300:GLU:HG3	2.00	0.42
1:B:246:PHE:CE1	1:B:277:LEU:HD13	2.55	0.42
1:A:1:MET:HE3	1:A:1:MET:HB2	1.75	0.41
1:A:246:PHE:CE1	1:A:277:LEU:HD13	2.54	0.41
1:A:164:LYS:HA	1:A:164:LYS:HD3	1.87	0.41
1:B:300:GLU:OE1	1:B:300:GLU:HA	2.21	0.41
1:A:8:MET:HE3	1:A:37:PHE:HE2	1.85	0.41
1:A:331:LEU:HD23	1:A:331:LEU:HA	1.85	0.41
1:A:285:ASN:HD22	1:A:285:ASN:C	2.24	0.41
1:B:155:MET:HB2	1:B:155:MET:HE2	1.85	0.41
1:B:322:GLU:HG3	1:B:334:HIS:NE2	2.36	0.41
1:A:1:MET:O	1:A:1:MET:SD	2.78	0.41
1:B:331:LEU:HD23	1:B:331:LEU:HA	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:272:ARG:O	1:A:275:SER:HB2	2.21	0.40
1:A:148:GLU:HG3	1:A:182:ILE:HB	2.03	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	384/387 (99%)	378 (98%)	6 (2%)	0	100 100
1	B	384/387 (99%)	375 (98%)	8 (2%)	1 (0%)	41 64
2	C	4/6 (67%)	4 (100%)	0	0	100 100
2	D	4/6 (67%)	4 (100%)	0	0	100 100
All	All	776/786 (99%)	761 (98%)	14 (2%)	1 (0%)	51 75

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	132	VAL

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	353/353 (100%)	299 (85%)	54 (15%)	2 4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	B	353/353 (100%)	293 (83%)	60 (17%)	2 3
2	C	3/3 (100%)	3 (100%)	0	100 100
2	D	3/3 (100%)	2 (67%)	1 (33%)	0 0
All	All	712/712 (100%)	597 (84%)	115 (16%)	2 4

All (115) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	1	MET
1	A	2	GLU
1	A	18	LEU
1	A	25	VAL
1	A	29	LYS
1	A	34	LEU
1	A	43	LYS
1	A	65	GLU
1	A	72	LEU
1	A	77	LYS
1	A	105	ILE
1	A	111	LYS
1	A	126	SER
1	A	132	VAL
1	A	141	LYS
1	A	154	LYS
1	A	163	ASN
1	A	171	MET
1	A	172	LEU
1	A	175	GLN
1	A	182	ILE
1	A	183	LYS
1	A	186	ARG
1	A	188	LEU
1	A	190	ASN
1	A	198	VAL
1	A	213	CYS
1	A	218	GLN
1	A	219	LYS
1	A	222	SER
1	A	225	ASP
1	A	226	THR
1	A	228	ARG

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Mol	Chain	Res	Type
1	A	230	LEU
1	A	235	LEU
1	A	242	ILE
1	A	244	SER
1	A	248	LEU
1	A	277	LEU
1	A	284	GLU
1	A	285	ASN
1	A	289	ASN
1	A	298	MET
1	A	301	VAL
1	A	303	PHE
1	A	305	LEU
1	A	309	LYS
1	A	317	LEU
1	A	320	LYS
1	A	325	ASP
1	A	327	ASN
1	A	343	ASN
1	A	368	LEU
1	A	380	LEU
1	B	1	MET
1	B	2	GLU
1	B	4	ILE
1	B	9	LYS
1	B	10	LYS
1	B	18	LEU
1	B	21	LYS
1	B	25	VAL
1	B	34	LEU
1	B	65	GLU
1	B	72	LEU
1	B	73	ASN
1	B	77	LYS
1	B	103	SER
1	B	111	LYS
1	B	113	LYS
1	B	117	LYS
1	B	132	VAL
1	B	143	ARG
1	B	154	LYS
1	B	156	LEU

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Mol	Chain	Res	Type
1	B	158	MET
1	B	163	ASN
1	B	164	LYS
1	B	171	MET
1	B	173	LEU
1	B	175	GLN
1	B	183	LYS
1	B	184	GLU
1	B	186	ARG
1	B	188	LEU
1	B	193	GLU
1	B	209	ASN
1	B	213	CYS
1	B	215	GLU
1	B	226	THR
1	B	228	ARG
1	B	230	LEU
1	B	235	LEU
1	B	242	ILE
1	B	244	SER
1	B	248	LEU
1	B	258	LYS
1	B	277	LEU
1	B	285	ASN
1	B	286	GLU
1	B	289	ASN
1	B	298	MET
1	B	301	VAL
1	B	303	PHE
1	B	305	LEU
1	B	311	LEU
1	B	317	LEU
1	B	325	ASP
1	B	327	ASN
1	B	364	ILE
1	B	368	LEU
1	B	373	LYS
1	B	379	ARG
1	B	380	LEU
2	D	3	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (25) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	30	ASN
1	A	32	ASN
1	A	53	ASN
1	A	58	GLN
1	A	142	GLN
1	A	176	GLN
1	A	197	ASN
1	A	206	ASN
1	A	208	ASN
1	A	251	GLN
1	A	285	ASN
1	A	289	ASN
1	A	307	ASN
1	A	327	ASN
1	B	30	ASN
1	B	53	ASN
1	B	58	GLN
1	B	197	ASN
1	B	206	ASN
1	B	208	ASN
1	B	209	ASN
1	B	285	ASN
1	B	289	ASN
1	B	307	ASN
1	B	327	ASN

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 monosaccharides in this entry.

5.6 Ligand geometry

2 ligands 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	$\#\|Z\| > 2$
3	GOL	B	401	-	5,5,5	0.38	0	5,5,5	0.47	0
3	GOL	A	401	-	5,5,5	0.39	0	5,5,5	0.62	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	GOL	B	401	-	-	3/4/4/4	-
3	GOL	A	401	-	-	2/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (5) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	B	401	GOL	O1-C1-C2-C3
3	A	401	GOL	C1-C2-C3-O3
3	A	401	GOL	O2-C2-C3-O3
3	B	401	GOL	O1-C1-C2-O2
3	B	401	GOL	C1-C2-C3-O3

There are no ring outliers.

2 monomers are involved in 6 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	B	401	GOL	3	0
3	A	401	GOL	3	0

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	386/387 (99%)	-0.27	1 (0%) 94 93	40, 61, 90, 116	0
1	B	386/387 (99%)	-0.09	7 (1%) 68 64	42, 65, 107, 132	0
2	C	6/6 (100%)	1.14	1 (16%) 1 1	64, 72, 86, 122	0
2	D	6/6 (100%)	1.21	1 (16%) 1 1	77, 78, 95, 111	0
All	All	784/786 (99%)	-0.16	10 (1%) 77 73	40, 63, 99, 132	0

All (10) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	C	6	ALA	6.0
1	B	29	LYS	4.1
2	D	6	ALA	3.2
1	A	29	LYS	3.1
1	B	11	ASP	2.5
1	B	19	MET	2.4
1	B	28	LEU	2.3
1	B	42	GLY	2.3
1	B	40	HIS	2.3
1	B	41	ASP	2.2

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 monosaccharides 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(Å^2)	Q<0.9
3	GOL	B	401	6/6	0.79	0.28	91,93,97,100	0
3	GOL	A	401	6/6	0.91	0.24	77,99,102,105	0

6.5 Other polymers

There are no such residues in this entry.