W O R L D W I D E
wwPDB
P R O T E I N   D A T A   B A N K

wwPDB X-ray Structure Validation Summary Report (i)

May 17, 2020 – 01:26 am BST

PDB ID	:	6RPT
Title	:	Structure of tick complement inhibitor CirpT1 complexed with macroglobubu-lin domain 4 of human complement C5
Authors	:	Reichhardt, M.P.; Lea, S.M.; Johnson, S.
Deposited on	:	2019-05-14
Resolution	:	2.70 Å(reported)

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

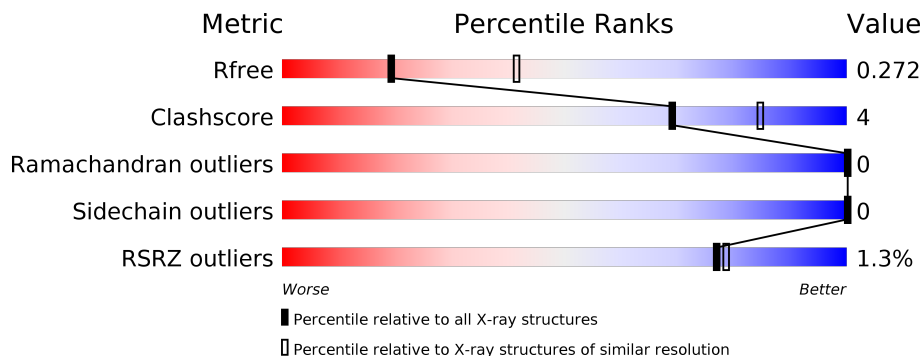|		
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry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

1 Overall quality at a glance ⓘ

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	Percentile Ranks	Value
Rfree		0.272
Clashscore		4
Ramachandran outliers		0
Sidechain outliers		0
RSRZ outliers		1.3%

Worse   *Better*

■ Percentile relative to all X-ray structures

▯ Percentile relative to X-ray structures of similar resolution

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	133	72% 13% 15%
1	C	133	74% 10% 16%
1	E	133	73% 11% 16%
2	B	113	69% 7% 24%
2	D	113	74% • 24%
2	F	113	74% • 24%

2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 4658 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 Complement C5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	E	112	Total	C	N	O	S	0	0	0
			853	544	138	170	1			
1	A	113	Total	C	N	O	S	0	0	0
			859	547	139	172	1			
1	C	112	Total	C	N	O	S	0	0	0
			853	544	138	170	1			

There are 60 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
E	328	MET	-	initiating methionine	UNP P01031
E	329	LYS	-	expression tag	UNP P01031
E	330	HIS	-	expression tag	UNP P01031
E	331	HIS	-	expression tag	UNP P01031
E	332	HIS	-	expression tag	UNP P01031
E	333	HIS	-	expression tag	UNP P01031
E	334	HIS	-	expression tag	UNP P01031
E	335	HIS	-	expression tag	UNP P01031
E	336	SER	-	expression tag	UNP P01031
E	337	ALA	-	expression tag	UNP P01031
E	338	GLY	-	expression tag	UNP P01031
E	339	LEU	-	expression tag	UNP P01031
E	340	GLU	-	expression tag	UNP P01031
E	341	VAL	-	expression tag	UNP P01031
E	342	LEU	-	expression tag	UNP P01031
E	343	PHE	-	expression tag	UNP P01031
E	344	GLN	-	expression tag	UNP P01031
E	345	GLY	-	expression tag	UNP P01031
E	346	PRO	-	expression tag	UNP P01031
E	347	MET	-	expression tag	UNP P01031
A	328	MET	-	initiating methionine	UNP P01031
A	329	LYS	-	expression tag	UNP P01031
A	330	HIS	-	expression tag	UNP P01031

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Chain	Residue	Modelled	Actual	Comment	Reference
A	331	HIS	-	expression tag	UNP P01031
A	332	HIS	-	expression tag	UNP P01031
A	333	HIS	-	expression tag	UNP P01031
A	334	HIS	-	expression tag	UNP P01031
A	335	HIS	-	expression tag	UNP P01031
A	336	SER	-	expression tag	UNP P01031
A	337	ALA	-	expression tag	UNP P01031
A	338	GLY	-	expression tag	UNP P01031
A	339	LEU	-	expression tag	UNP P01031
A	340	GLU	-	expression tag	UNP P01031
A	341	VAL	-	expression tag	UNP P01031
A	342	LEU	-	expression tag	UNP P01031
A	343	PHE	-	expression tag	UNP P01031
A	344	GLN	-	expression tag	UNP P01031
A	345	GLY	-	expression tag	UNP P01031
A	346	PRO	-	expression tag	UNP P01031
A	347	MET	-	expression tag	UNP P01031
C	328	MET	-	initiating methionine	UNP P01031
C	329	LYS	-	expression tag	UNP P01031
C	330	HIS	-	expression tag	UNP P01031
C	331	HIS	-	expression tag	UNP P01031
C	332	HIS	-	expression tag	UNP P01031
C	333	HIS	-	expression tag	UNP P01031
C	334	HIS	-	expression tag	UNP P01031
C	335	HIS	-	expression tag	UNP P01031
C	336	SER	-	expression tag	UNP P01031
C	337	ALA	-	expression tag	UNP P01031
C	338	GLY	-	expression tag	UNP P01031
C	339	LEU	-	expression tag	UNP P01031
C	340	GLU	-	expression tag	UNP P01031
C	341	VAL	-	expression tag	UNP P01031
C	342	LEU	-	expression tag	UNP P01031
C	343	PHE	-	expression tag	UNP P01031
C	344	GLN	-	expression tag	UNP P01031
C	345	GLY	-	expression tag	UNP P01031
C	346	PRO	-	expression tag	UNP P01031
C	347	MET	-	expression tag	UNP P01031

- Molecule 2 is a protein called Putative 8.9 kDa family member.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	F	86	651	401	115	127	8	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	86	Total	C	N	O	S	0	0	0
			651	401	115	127	8			
2	D	86	Total	C	N	O	S	0	0	0
			651	401	115	127	8			

There are 72 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
F	-20	MET	-	initiating methionine	UNP L7MB58
F	-19	LYS	-	expression tag	UNP L7MB58
F	-18	HIS	-	expression tag	UNP L7MB58
F	-17	HIS	-	expression tag	UNP L7MB58
F	-16	HIS	-	expression tag	UNP L7MB58
F	-15	HIS	-	expression tag	UNP L7MB58
F	-14	HIS	-	expression tag	UNP L7MB58
F	-13	HIS	-	expression tag	UNP L7MB58
F	-12	SER	-	expression tag	UNP L7MB58
F	-11	ALA	-	expression tag	UNP L7MB58
F	-10	GLY	-	expression tag	UNP L7MB58
F	-9	LEU	-	expression tag	UNP L7MB58
F	-8	GLU	-	expression tag	UNP L7MB58
F	-7	VAL	-	expression tag	UNP L7MB58
F	-6	LEU	-	expression tag	UNP L7MB58
F	-5	PHE	-	expression tag	UNP L7MB58
F	-4	GLN	-	expression tag	UNP L7MB58
F	-3	GLY	-	expression tag	UNP L7MB58
F	-2	PRO	-	expression tag	UNP L7MB58
F	-1	MET	-	expression tag	UNP L7MB58
F	0	GLY	-	expression tag	UNP L7MB58
F	1	ASP	-	expression tag	UNP L7MB58
F	2	VAL	-	expression tag	UNP L7MB58
F	3	GLN	-	expression tag	UNP L7MB58
B	-20	MET	-	initiating methionine	UNP L7MB58
B	-19	LYS	-	expression tag	UNP L7MB58
B	-18	HIS	-	expression tag	UNP L7MB58
B	-17	HIS	-	expression tag	UNP L7MB58
B	-16	HIS	-	expression tag	UNP L7MB58
B	-15	HIS	-	expression tag	UNP L7MB58
B	-14	HIS	-	expression tag	UNP L7MB58
B	-13	HIS	-	expression tag	UNP L7MB58
B	-12	SER	-	expression tag	UNP L7MB58
B	-11	ALA	-	expression tag	UNP L7MB58

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-10	GLY	-	expression tag	UNP L7MB58
B	-9	LEU	-	expression tag	UNP L7MB58
B	-8	GLU	-	expression tag	UNP L7MB58
B	-7	VAL	-	expression tag	UNP L7MB58
B	-6	LEU	-	expression tag	UNP L7MB58
B	-5	PHE	-	expression tag	UNP L7MB58
B	-4	GLN	-	expression tag	UNP L7MB58
B	-3	GLY	-	expression tag	UNP L7MB58
B	-2	PRO	-	expression tag	UNP L7MB58
B	-1	MET	-	expression tag	UNP L7MB58
B	0	GLY	-	expression tag	UNP L7MB58
B	1	ASP	-	expression tag	UNP L7MB58
B	2	VAL	-	expression tag	UNP L7MB58
B	3	GLN	-	expression tag	UNP L7MB58
D	-20	MET	-	initiating methionine	UNP L7MB58
D	-19	LYS	-	expression tag	UNP L7MB58
D	-18	HIS	-	expression tag	UNP L7MB58
D	-17	HIS	-	expression tag	UNP L7MB58
D	-16	HIS	-	expression tag	UNP L7MB58
D	-15	HIS	-	expression tag	UNP L7MB58
D	-14	HIS	-	expression tag	UNP L7MB58
D	-13	HIS	-	expression tag	UNP L7MB58
D	-12	SER	-	expression tag	UNP L7MB58
D	-11	ALA	-	expression tag	UNP L7MB58
D	-10	GLY	-	expression tag	UNP L7MB58
D	-9	LEU	-	expression tag	UNP L7MB58
D	-8	GLU	-	expression tag	UNP L7MB58
D	-7	VAL	-	expression tag	UNP L7MB58
D	-6	LEU	-	expression tag	UNP L7MB58
D	-5	PHE	-	expression tag	UNP L7MB58
D	-4	GLN	-	expression tag	UNP L7MB58
D	-3	GLY	-	expression tag	UNP L7MB58
D	-2	PRO	-	expression tag	UNP L7MB58
D	-1	MET	-	expression tag	UNP L7MB58
D	0	GLY	-	expression tag	UNP L7MB58
D	1	ASP	-	expression tag	UNP L7MB58
D	2	VAL	-	expression tag	UNP L7MB58
D	3	GLN	-	expression tag	UNP L7MB58

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

GOL

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

- Molecule 4 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	E	21	Total 21	O 21	0	0
4	F	27	Total 27	O 27	0	0
4	A	13	Total 13	O 13	0	0
4	B	5	Total 5	O 5	0	0
4	C	25	Total 25	O 25	0	0
4	D	19	Total 19	O 19	0	0

3 Residue-property plots ⓘ

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: Complement C5

- Molecule 1: Complement C5

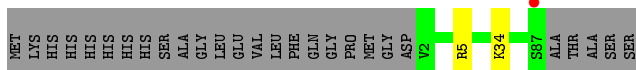- Molecule 1: Complement C5

- Molecule 2: Putative 8.9 kDa family member

- Molecule 2: Putative 8.9 kDa family member

- Molecule 2: Putative 8.9 kDa family member

Chain D:

74%　　　　　　　　　　　　　　　　　　　　　　·　　24%

MET LYS HIS HIS HIS HIS HIS SER ALA GLY LEU GLU VAL LEU PHE GLN GLY PRO MET GLY ASP V2 N59 T71 S87 ALA THR ALA SER SER

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	86.83Å 56.95Å 90.07Å 90.00° 113.02° 90.00°	Depositor
Resolution (Å)	82.90 – 2.70 82.90 – 2.52	Depositor EDS
% Data completeness (in resolution range)	99.8 (82.90-2.70) 99.9 (82.90-2.52)	Depositor EDS
R_{merge}	0.27	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.32 (at 2.51Å)	Xtriage
Refinement program	PHENIX dev_3126	Depositor
R, R_{free}	0.226 , 0.272 0.227 , 0.272	Depositor DCC
R_{free} test set	1438 reflections (5.18%)	wwPDB-VP
Wilson B-factor (Å^2)	38.0	Xtriage
Anisotropy	0.748	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 26.1	EDS
L-test for twinning[2]	$< |L| > = 0.49, < L^2 > = 0.32$	Xtriage
Estimated twinning fraction	0.128 for l,-k,h	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	4658	wwPDB-VP
Average B, all atoms (Å^2)	51.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.56% of the height of the origin peak. No significant pseudotranslation is detected.*

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[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: 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	0.25	0/875	0.45	0/1198
1	C	0.25	0/869	0.47	0/1190
1	E	0.25	0/869	0.46	0/1190
2	B	0.23	0/666	0.47	0/913
2	D	0.25	0/666	0.47	0/913
2	F	0.25	0/666	0.49	0/913
All	All	0.25	0/4611	0.47	0/6317

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	859	0	869	10	0
1	C	853	0	864	7	0
1	E	853	0	864	8	0
2	B	651	0	616	6	0
2	D	651	0	616	3	0
2	F	651	0	616	2	0
3	A	6	0	8	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	B	6	0	8	1	0
3	C	6	0	8	0	0
3	E	6	0	8	1	0
3	F	6	0	8	0	0
4	A	13	0	0	1	0
4	B	5	0	0	1	0
4	C	25	0	0	0	0
4	D	19	0	0	0	0
4	E	21	0	0	0	0
4	F	27	0	0	1	0
All	All	4658	0	4485	33	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 4.

The worst 5 of 33 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:B:15:THR:HB	2:B:22:VAL:HB	1.73	0.71
2:B:7:HIS:NE2	4:B:202:HOH:O	2.27	0.66
1:E:444:GLU:O	1:E:449:ARG:NH2	2.32	0.62
1:E:365:PRO:HA	3:E:501:GOL:H31	1.81	0.62
1:E:432:GLU:OE2	1:E:453:ARG:NH1	2.37	0.58

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	111/133 (84%)	107 (96%)	4 (4%)	0	100	100
1	C	110/133 (83%)	106 (96%)	4 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	E	110/133 (83%)	106 (96%)	4 (4%)	0	100	100
2	B	84/113 (74%)	80 (95%)	4 (5%)	0	100	100
2	D	84/113 (74%)	81 (96%)	3 (4%)	0	100	100
2	F	84/113 (74%)	80 (95%)	4 (5%)	0	100	100
All	All	583/738 (79%)	560 (96%)	23 (4%)	0	100	100

There are no Ramachandran outliers to report.

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	100/117 (86%)	100 (100%)	0	100	100
1	C	99/117 (85%)	99 (100%)	0	100	100
1	E	99/117 (85%)	99 (100%)	0	100	100
2	B	76/97 (78%)	76 (100%)	0	100	100
2	D	76/97 (78%)	76 (100%)	0	100	100
2	F	76/97 (78%)	76 (100%)	0	100	100
All	All	526/642 (82%)	526 (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. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
1	E	393	GLN

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 carbohydrates in this entry.

5.6 Ligand geometry (i)

5 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	E	501	-	5,5,5	0.92	0	5,5,5	0.98	0
3	GOL	B	101	-	5,5,5	0.87	0	5,5,5	1.01	0
3	GOL	C	501	-	5,5,5	0.91	0	5,5,5	1.02	0
3	GOL	A	501	-	5,5,5	0.90	0	5,5,5	0.99	0
3	GOL	F	101	-	5,5,5	0.92	0	5,5,5	0.98	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	E	501	-	-	2/4/4/4	-
3	GOL	B	101	-	-	0/4/4/4	-
3	GOL	C	501	-	-	2/4/4/4	-
3	GOL	A	501	-	-	0/4/4/4	-
3	GOL	F	101	-	-	0/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	C	501	GOL	O1-C1-C2-C3
3	C	501	GOL	O1-C1-C2-O2
3	E	501	GOL	O2-C2-C3-O3
3	E	501	GOL	C1-C2-C3-O3

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	E	501	GOL	1	0
3	B	101	GOL	1	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 (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(Å²)	Q<0.9
1	A	113/133 (84%)	-0.16	1 (0%)	84	85	39, 54, 82, 91	0
1	C	112/133 (84%)	-0.37	0	100	100	24, 37, 58, 85	0
1	E	112/133 (84%)	-0.31	0	100	100	29, 42, 63, 80	0
2	B	86/113 (76%)	0.41	6 (6%)	16	14	43, 74, 110, 136	0
2	D	86/113 (76%)	-0.19	0	100	100	28, 45, 74, 97	0
2	F	86/113 (76%)	-0.22	1 (1%)	79	80	30, 44, 78, 88	0
All	All	595/738 (80%)	-0.16	8 (1%)	77	78	24, 48, 86, 136	0

The worst 5 of 8 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	B	87	SER	8.9
2	B	31	GLY	5.4
2	B	20	ALA	4.8
2	B	16	VAL	4.2
2	B	6	GLY	2.5

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, 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
3	GOL	F	101	6/6	0.64	0.33	73,75,77,77	0
3	GOL	A	501	6/6	0.86	0.21	55,62,66,71	0
3	GOL	B	101	6/6	0.87	0.27	67,74,79,83	0
3	GOL	E	501	6/6	0.91	0.15	54,55,56,57	0
3	GOL	C	501	6/6	0.91	0.18	54,54,54,55	0

6.5 Other polymers (i)

There are no such residues in this entry.