wwPDB X-ray Structure Validation Summary Report (i)

Jan 3, 2024 – 12:52 pm GMT

PDB ID	:	5IIA
Title	:	Crystal structure of red abalone egg VERL repeat 3 in complex with sperm lysin at 1.7 A resolution (crystal form I)
Authors	:	Sadat Al-Hosseini, H.; Raj, I.; Nishimura, K.; De Sanctis, D.; Jovine, L.
Deposited on	:	2016-03-01
Resolution	:	1.70 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 (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 (i)) were used in the production of this report:

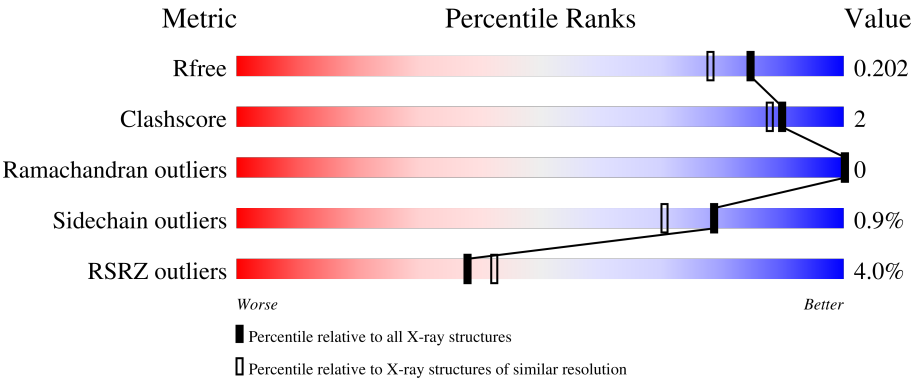
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

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 1.70 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	4298 (1.70-1.70)
Clashscore	141614	4695 (1.70-1.70)
Ramachandran outliers	138981	4610 (1.70-1.70)
Sidechain outliers	138945	4610 (1.70-1.70)
RSRZ outliers	127900	4222 (1.70-1.70)

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 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	136	90% · 8%
1	C	136	90% · 8%
1	E	136	3% 90% · 8%
1	G	136	2% 88% 5% 7%
2	B	129	5% 79% · 17%

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Mol	Chain	Length	Quality of chain
2	D	129	8% 76% 6% 17%
2	F	129	5% 77% 5% 19%
2	H	129	3% 75% 21%

2 Entry composition (i)

There are 4 unique types of molecules in this entry. The entry contains 15983 atoms, of which 7726 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 Egg-lysin.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
1	A	125	Total	C	H	N	O	S	0	1	0
			2153	693	1092	189	172	7			
1	C	125	Total	C	H	N	O	S	0	0	0
			2129	687	1079	185	171	7			
1	E	125	Total	C	H	N	O	S	0	1	0
			2153	693	1092	189	172	7			
1	G	126	Total	C	H	N	O	S	0	1	0
			2175	699	1105	191	173	7			

- Molecule 2 is a protein called Vitelline envelope sperm lysin receptor.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
2	B	107	Total	C	H	N	O	S	0	0	0
			1665	539	823	134	161	8			
2	D	107	Total	C	H	N	O	S	0	0	0
			1662	538	820	135	161	8			
2	F	105	Total	C	H	N	O	S	0	0	0
			1641	532	811	132	158	8			
2	H	102	Total	C	H	N	O	S	0	0	0
			1604	521	792	129	154	8			

There are 60 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	333	ALA	-	expression tag	UNP Q8WR62
B	334	GLN	-	expression tag	UNP Q8WR62
B	335	THR	-	expression tag	UNP Q8WR62
B	336	ASN	-	expression tag	UNP Q8WR62
B	337	ALA	-	expression tag	UNP Q8WR62
B	338	ALA	-	expression tag	UNP Q8WR62
B	339	ALA	-	expression tag	UNP Q8WR62
B	454	LEU	-	expression tag	UNP Q8WR62

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Chain	Residue	Modelled	Actual	Comment	Reference
B	455	GLU	-	expression tag	UNP Q8WR62
B	456	HIS	-	expression tag	UNP Q8WR62
B	457	HIS	-	expression tag	UNP Q8WR62
B	458	HIS	-	expression tag	UNP Q8WR62
B	459	HIS	-	expression tag	UNP Q8WR62
B	460	HIS	-	expression tag	UNP Q8WR62
B	461	HIS	-	expression tag	UNP Q8WR62
D	333	ALA	-	expression tag	UNP Q8WR62
D	334	GLN	-	expression tag	UNP Q8WR62
D	335	THR	-	expression tag	UNP Q8WR62
D	336	ASN	-	expression tag	UNP Q8WR62
D	337	ALA	-	expression tag	UNP Q8WR62
D	338	ALA	-	expression tag	UNP Q8WR62
D	339	ALA	-	expression tag	UNP Q8WR62
D	454	LEU	-	expression tag	UNP Q8WR62
D	455	GLU	-	expression tag	UNP Q8WR62
D	456	HIS	-	expression tag	UNP Q8WR62
D	457	HIS	-	expression tag	UNP Q8WR62
D	458	HIS	-	expression tag	UNP Q8WR62
D	459	HIS	-	expression tag	UNP Q8WR62
D	460	HIS	-	expression tag	UNP Q8WR62
D	461	HIS	-	expression tag	UNP Q8WR62
F	333	ALA	-	expression tag	UNP Q8WR62
F	334	GLN	-	expression tag	UNP Q8WR62
F	335	THR	-	expression tag	UNP Q8WR62
F	336	ASN	-	expression tag	UNP Q8WR62
F	337	ALA	-	expression tag	UNP Q8WR62
F	338	ALA	-	expression tag	UNP Q8WR62
F	339	ALA	-	expression tag	UNP Q8WR62
F	454	LEU	-	expression tag	UNP Q8WR62
F	455	GLU	-	expression tag	UNP Q8WR62
F	456	HIS	-	expression tag	UNP Q8WR62
F	457	HIS	-	expression tag	UNP Q8WR62
F	458	HIS	-	expression tag	UNP Q8WR62
F	459	HIS	-	expression tag	UNP Q8WR62
F	460	HIS	-	expression tag	UNP Q8WR62
F	461	HIS	-	expression tag	UNP Q8WR62
H	333	ALA	-	expression tag	UNP Q8WR62
H	334	GLN	-	expression tag	UNP Q8WR62
H	335	THR	-	expression tag	UNP Q8WR62
H	336	ASN	-	expression tag	UNP Q8WR62
H	337	ALA	-	expression tag	UNP Q8WR62

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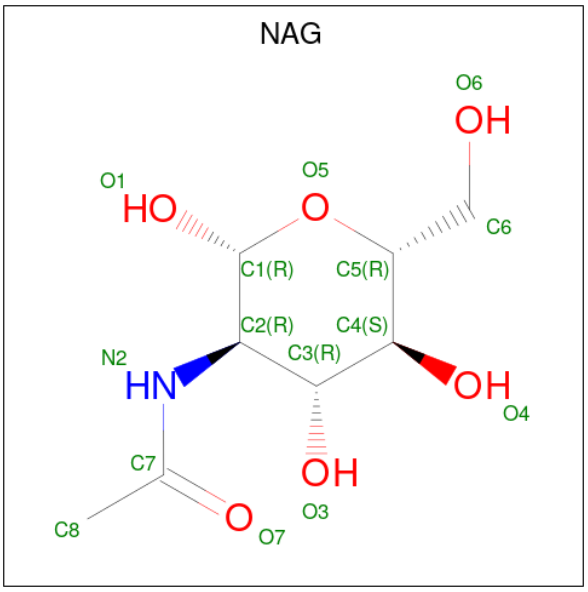
Chain	Residue	Modelled	Actual	Comment	Reference
H	338	ALA	-	expression tag	UNP Q8WR62
H	339	ALA	-	expression tag	UNP Q8WR62
H	454	LEU	-	expression tag	UNP Q8WR62
H	455	GLU	-	expression tag	UNP Q8WR62
H	456	HIS	-	expression tag	UNP Q8WR62
H	457	HIS	-	expression tag	UNP Q8WR62
H	458	HIS	-	expression tag	UNP Q8WR62
H	459	HIS	-	expression tag	UNP Q8WR62
H	460	HIS	-	expression tag	UNP Q8WR62
H	461	HIS	-	expression tag	UNP Q8WR62

- Molecule 3 is 2-acetamido-2-deoxy-beta-D-glucopyranose (three-letter code: NAG) (formula: $C_8H_{15}NO_6$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	B	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	B	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	D	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	D	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	F	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	F	1	Total	C	H	N	O	0	0
			28	8	14	1	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	H	1	Total	C	H	N	O	0	0
			28	8	14	1	5		
3	H	1	Total	C	H	N	O	0	0
			28	8	14	1	5		

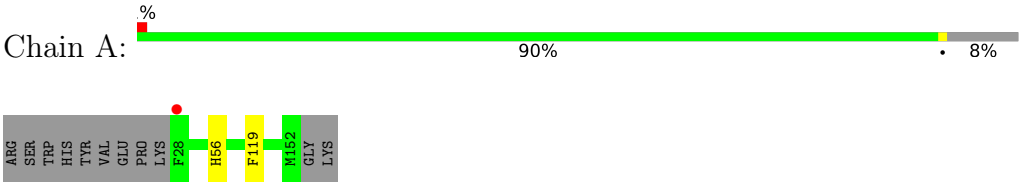
- Molecule 4 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	117	Total	O	0	0
			117	117		
4	B	64	Total	O	0	0
			64	64		
4	C	92	Total	O	0	0
			92	92		
4	D	44	Total	O	0	0
			44	44		
4	E	76	Total	O	0	0
			76	76		
4	F	45	Total	O	0	0
			45	45		
4	G	88	Total	O	0	0
			88	88		
4	H	51	Total	O	0	0
			51	51		

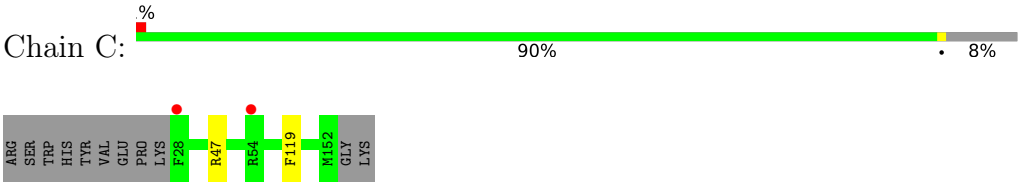
3 Residue-property plots

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.

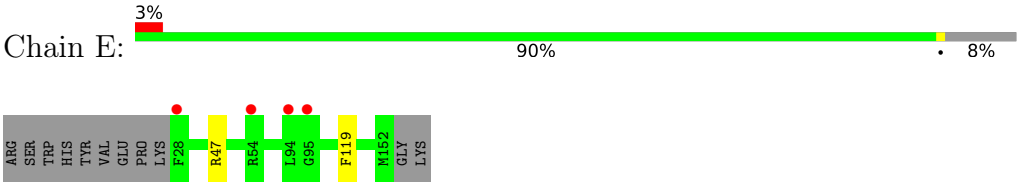
- Molecule 1: Egg-lysin



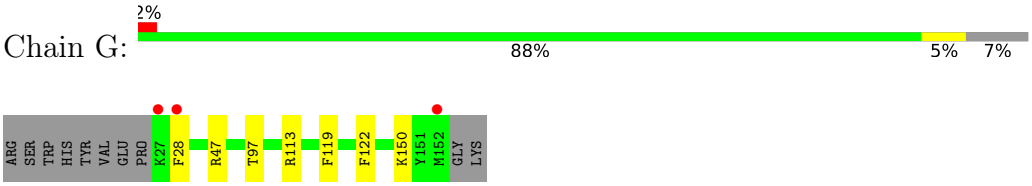
- Molecule 1: Egg-lysin



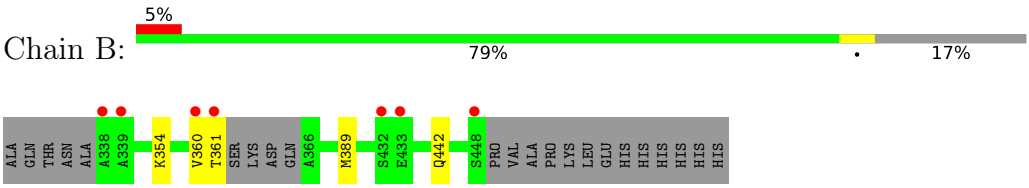
- Molecule 1: Egg-lysin



- Molecule 1: Egg-lysin

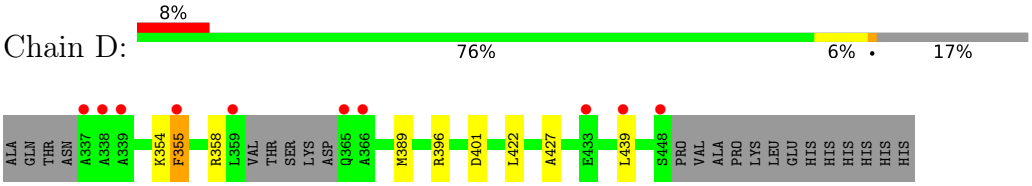


- Molecule 2: Vitelline envelope sperm lysin receptor



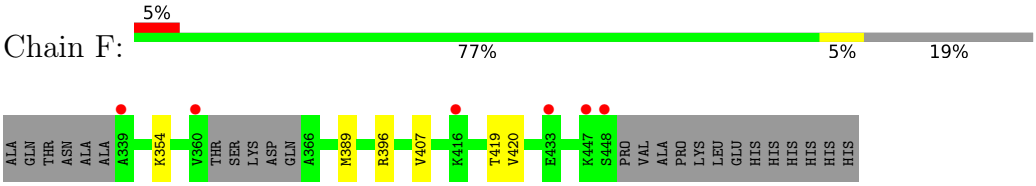
- Molecule 2: Vitelline envelope sperm lysin receptor

Chain D:



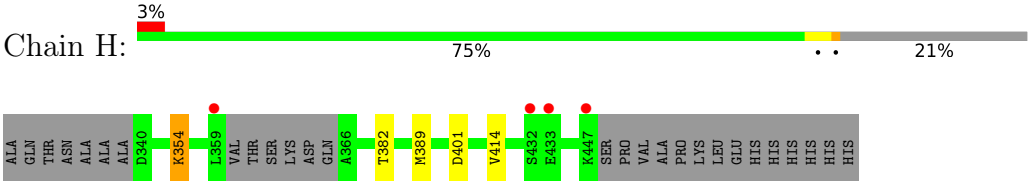
• Molecule 2: Vitelline envelope sperm lysin receptor

Chain F:



• Molecule 2: Vitelline envelope sperm lysin receptor

Chain H:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α, β, γ	60.49Å 60.33Å 89.17Å 105.04° 89.02° 113.28°	Depositor
Resolution (Å)	48.66 – 1.70 48.66 – 1.70	Depositor EDS
% Data completeness (in resolution range)	97.3 (48.66-1.70) 91.7 (48.66-1.70)	Depositor EDS
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.98 (at 1.70Å)	Xtriage
Refinement program	PHENIX (dev_2689: ???)	Depositor
R, R_{free}	0.177 , 0.203 0.178 , 0.202	Depositor DCC
R_{free} test set	3802 reflections (3.19%)	wwPDB-VP
Wilson B-factor (Å^2)	31.9	Xtriage
Anisotropy	0.224	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.40 , 48.9	EDS
L-test for twinning[2]	$< \|L\| > = 0.49$, $< L^2 > = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	15983	wwPDB-VP
Average B, all atoms (Å^2)	52.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.77% 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: NAG

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	0.45	0/1088	0.58	0/1465
1	C	0.42	0/1077	0.56	0/1451
1	E	0.43	0/1088	0.56	0/1465
1	G	0.44	0/1097	0.56	0/1476
2	B	0.38	0/862	0.56	0/1175
2	D	0.38	0/862	0.55	0/1174
2	F	0.39	0/850	0.53	0/1158
2	H	0.40	0/832	0.54	0/1133
All	All	0.42	0/7756	0.56	0/10497

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	1061	1092	1091	2	0
1	C	1050	1079	1079	2	0
1	E	1061	1092	1091	2	0
1	G	1070	1105	1104	5	0
2	B	842	823	823	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	D	842	820	820	7	0
2	F	830	811	811	3	0
2	H	812	792	792	4	0
3	B	28	28	26	1	0
3	D	28	28	26	3	0
3	F	28	28	26	1	0
3	H	28	28	26	3	0
4	A	117	0	0	1	0
4	B	64	0	0	0	0
4	C	92	0	0	2	0
4	D	44	0	0	1	0
4	E	76	0	0	1	0
4	F	45	0	0	0	0
4	G	88	0	0	1	0
4	H	51	0	0	0	0
All	All	8257	7726	7715	27	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 2.

The worst 5 of 27 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)
3:H:502:NAG:O7	3:H:502:NAG:O3	2.09	0.69
3:F:501:NAG:H5	3:H:501:NAG:H5	1.77	0.67
3:D:502:NAG:O7	3:D:502:NAG:O3	2.12	0.64
2:B:360:VAL:O	2:B:361:THR:HB	2.05	0.57
1:G:47:ARG:NH2	4:G:202:HOH:O	2.41	0.52

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	124/136 (91%)	123 (99%)	1 (1%)	0	100	100
1	C	123/136 (90%)	123 (100%)	0	0	100	100
1	E	124/136 (91%)	124 (100%)	0	0	100	100
1	G	125/136 (92%)	125 (100%)	0	0	100	100
2	B	103/129 (80%)	103 (100%)	0	0	100	100
2	D	103/129 (80%)	103 (100%)	0	0	100	100
2	F	101/129 (78%)	100 (99%)	1 (1%)	0	100	100
2	H	98/129 (76%)	98 (100%)	0	0	100	100
All	All	901/1060 (85%)	899 (100%)	2 (0%)	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	110/119 (92%)	110 (100%)	0	100	100
1	C	109/119 (92%)	109 (100%)	0	100	100
1	E	110/119 (92%)	110 (100%)	0	100	100
1	G	111/119 (93%)	109 (98%)	2 (2%)	59	43
2	B	97/116 (84%)	96 (99%)	1 (1%)	76	67
2	D	96/116 (83%)	95 (99%)	1 (1%)	76	67
2	F	96/116 (83%)	95 (99%)	1 (1%)	76	67
2	H	94/116 (81%)	92 (98%)	2 (2%)	53	36
All	All	823/940 (88%)	816 (99%)	7 (1%)	78	70

5 of 7 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	G	28	PHE
1	G	97	THR

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Mol	Chain	Res	Type
2	H	414	VAL
2	H	354	LYS
2	F	354	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	442	GLN
2	D	442	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 monosaccharides in this entry.

5.6 Ligand geometry (i)

8 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	NAG	H	502	2	14,14,15	0.65	1 (7%)	17,19,21	0.49	0
3	NAG	F	501	2	14,14,15	0.52	0	17,19,21	0.61	0
3	NAG	B	502	2	14,14,15	0.12	0	17,19,21	0.46	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
3	NAG	H	501	2	14,14,15	0.47	0	17,19,21	0.71	0
3	NAG	F	502	2	14,14,15	0.73	1 (7%)	17,19,21	0.87	0
3	NAG	D	502	2	14,14,15	0.40	0	17,19,21	0.39	0
3	NAG	D	501	2	14,14,15	0.52	0	17,19,21	0.65	0
3	NAG	B	501	2	14,14,15	0.41	0	17,19,21	0.68	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	NAG	H	502	2	-	4/6/23/26	0/1/1/1
3	NAG	F	501	2	-	0/6/23/26	0/1/1/1
3	NAG	B	502	2	-	2/6/23/26	0/1/1/1
3	NAG	H	501	2	-	0/6/23/26	0/1/1/1
3	NAG	F	502	2	-	4/6/23/26	0/1/1/1
3	NAG	D	502	2	-	4/6/23/26	0/1/1/1
3	NAG	D	501	2	-	0/6/23/26	0/1/1/1
3	NAG	B	501	2	-	0/6/23/26	0/1/1/1

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	502	NAG	O5-C1	-2.40	1.39	1.43
3	H	502	NAG	O5-C1	-2.24	1.40	1.43

There are no bond angle outliers.

There are no chirality outliers.

5 of 14 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	F	502	NAG	C3-C2-N2-C7
3	D	502	NAG	O5-C5-C6-O6
3	D	502	NAG	C1-C2-N2-C7
3	D	502	NAG	C4-C5-C6-O6
3	H	502	NAG	O5-C5-C6-O6

There are no ring outliers.

6 monomers are involved in 6 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	H	502	NAG	2	0
3	F	501	NAG	1	0
3	H	501	NAG	1	0
3	D	502	NAG	2	0
3	D	501	NAG	1	0
3	B	501	NAG	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

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	125/136 (91%)	-0.18	1 (0%)	86 88	29, 37, 56, 96	0
1	C	125/136 (91%)	-0.12	2 (1%)	72 76	30, 41, 66, 99	0
1	E	125/136 (91%)	-0.02	4 (3%)	47 52	32, 44, 70, 107	0
1	G	126/136 (92%)	-0.12	3 (2%)	59 63	31, 42, 67, 106	0
2	B	107/129 (82%)	0.32	7 (6%)	18 21	31, 41, 81, 123	0
2	D	107/129 (82%)	0.42	10 (9%)	8 9	33, 46, 91, 115	0
2	F	105/129 (81%)	0.28	6 (5%)	23 26	34, 46, 87, 114	0
2	H	102/129 (79%)	0.25	4 (3%)	39 44	33, 45, 78, 111	0
All	All	922/1060 (86%)	0.09	37 (4%)	38 42	29, 43, 77, 123	0

The worst 5 of 37 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	28	PHE	6.5
2	F	339	ALA	6.0
1	E	28	PHE	5.8
2	F	448	SER	5.0
2	B	339	ALA	4.9

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 (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	NAG	F	502	14/15	0.64	0.28	99,113,135,135	0
3	NAG	D	502	14/15	0.69	0.25	86,103,122,122	0
3	NAG	B	502	14/15	0.84	0.16	69,85,102,102	0
3	NAG	H	502	14/15	0.85	0.16	87,102,120,120	0
3	NAG	F	501	14/15	0.91	0.10	45,55,70,70	28
3	NAG	H	501	14/15	0.92	0.09	41,55,73,73	28
3	NAG	D	501	14/15	0.93	0.08	38,49,70,70	0
3	NAG	B	501	14/15	0.96	0.08	37,51,67,67	0

6.5 Other polymers (i)

There are no such residues in this entry.