Full wwPDB X-ray Structure Validation Report (i)

Jan 7, 2024 – 10:40 am GMT

PDB ID	:	6EQZ
Title	:	A MamC-MIC insertion in MBP scaffold at position K170
Authors	:	Nudelman, H.; Zarivach, R.
Deposited on	:	2017-10-16
Resolution	:	2.29 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 (i)) were used in the production of this report:

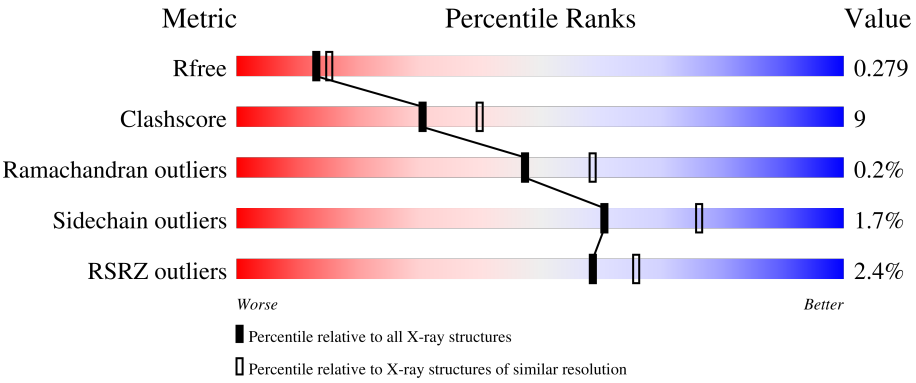
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	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 2.29 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	5042 (2.30-2.30)
Clashscore	141614	5643 (2.30-2.30)
Ramachandran outliers	138981	5575 (2.30-2.30)
Sidechain outliers	138945	5575 (2.30-2.30)
RSRZ outliers	127900	4938 (2.30-2.30)

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	401	74% 19% • 6%
1	B	401	74% 19% 6%
1	D	401	5% 73% 20% • 5%
1	G	401	2% 77% 16% • 6%
2	C	2	50% 50%

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Mol	Chain	Length	Quality of chain
2	E	2	
2	F	2	
2	H	2	

2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 12079 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 Maltose-binding periplasmic protein,Tightly bound bacterial magnetic particle protein,Maltose-binding periplasmic protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	377	Total	C	N	O	S	0	4	0
			2937	1882	481	568	6			
1	B	377	Total	C	N	O	S	0	0	0
			2907	1864	475	562	6			
1	D	379	Total	C	N	O	S	0	3	0
			2948	1891	482	569	6			
1	G	377	Total	C	N	O	S	0	0	0
			2907	1866	475	560	6			

There are 100 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-20	MET	-	initiating methionine	UNP P0AEY0
A	-19	GLY	-	expression tag	UNP P0AEY0
A	-18	SER	-	expression tag	UNP P0AEY0
A	-17	SER	-	expression tag	UNP P0AEY0
A	-16	HIS	-	expression tag	UNP P0AEY0
A	-15	HIS	-	expression tag	UNP P0AEY0
A	-14	HIS	-	expression tag	UNP P0AEY0
A	-13	HIS	-	expression tag	UNP P0AEY0
A	-12	HIS	-	expression tag	UNP P0AEY0
A	-11	HIS	-	expression tag	UNP P0AEY0
A	-10	SER	-	expression tag	UNP P0AEY0
A	-9	SER	-	expression tag	UNP P0AEY0
A	-8	GLY	-	expression tag	UNP P0AEY0
A	-7	LEU	-	expression tag	UNP P0AEY0
A	-6	VAL	-	expression tag	UNP P0AEY0
A	-5	PRO	-	expression tag	UNP P0AEY0
A	-4	ARG	-	expression tag	UNP P0AEY0
A	-3	GLY	-	expression tag	UNP P0AEY0
A	-2	SER	-	expression tag	UNP P0AEY0
A	-1	HIS	-	expression tag	UNP P0AEY0

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Chain	Residue	Modelled	Actual	Comment	Reference
A	0	MET	-	expression tag	UNP P0AEY0
A	377	ASN	-	expression tag	UNP P0AEY0
A	378	SER	-	expression tag	UNP P0AEY0
A	379	SER	-	expression tag	UNP P0AEY0
A	380	SER	-	expression tag	UNP P0AEY0
B	-20	MET	-	initiating methionine	UNP P0AEY0
B	-19	GLY	-	expression tag	UNP P0AEY0
B	-18	SER	-	expression tag	UNP P0AEY0
B	-17	SER	-	expression tag	UNP P0AEY0
B	-16	HIS	-	expression tag	UNP P0AEY0
B	-15	HIS	-	expression tag	UNP P0AEY0
B	-14	HIS	-	expression tag	UNP P0AEY0
B	-13	HIS	-	expression tag	UNP P0AEY0
B	-12	HIS	-	expression tag	UNP P0AEY0
B	-11	HIS	-	expression tag	UNP P0AEY0
B	-10	SER	-	expression tag	UNP P0AEY0
B	-9	SER	-	expression tag	UNP P0AEY0
B	-8	GLY	-	expression tag	UNP P0AEY0
B	-7	LEU	-	expression tag	UNP P0AEY0
B	-6	VAL	-	expression tag	UNP P0AEY0
B	-5	PRO	-	expression tag	UNP P0AEY0
B	-4	ARG	-	expression tag	UNP P0AEY0
B	-3	GLY	-	expression tag	UNP P0AEY0
B	-2	SER	-	expression tag	UNP P0AEY0
B	-1	HIS	-	expression tag	UNP P0AEY0
B	0	MET	-	expression tag	UNP P0AEY0
B	377	ASN	-	expression tag	UNP P0AEY0
B	378	SER	-	expression tag	UNP P0AEY0
B	379	SER	-	expression tag	UNP P0AEY0
B	380	SER	-	expression tag	UNP P0AEY0
D	-20	MET	-	initiating methionine	UNP P0AEY0
D	-19	GLY	-	expression tag	UNP P0AEY0
D	-18	SER	-	expression tag	UNP P0AEY0
D	-17	SER	-	expression tag	UNP P0AEY0
D	-16	HIS	-	expression tag	UNP P0AEY0
D	-15	HIS	-	expression tag	UNP P0AEY0
D	-14	HIS	-	expression tag	UNP P0AEY0
D	-13	HIS	-	expression tag	UNP P0AEY0
D	-12	HIS	-	expression tag	UNP P0AEY0
D	-11	HIS	-	expression tag	UNP P0AEY0
D	-10	SER	-	expression tag	UNP P0AEY0
D	-9	SER	-	expression tag	UNP P0AEY0

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Chain	Residue	Modelled	Actual	Comment	Reference
D	-8	GLY	-	expression tag	UNP P0AEY0
D	-7	LEU	-	expression tag	UNP P0AEY0
D	-6	VAL	-	expression tag	UNP P0AEY0
D	-5	PRO	-	expression tag	UNP P0AEY0
D	-4	ARG	-	expression tag	UNP P0AEY0
D	-3	GLY	-	expression tag	UNP P0AEY0
D	-2	SER	-	expression tag	UNP P0AEY0
D	-1	HIS	-	expression tag	UNP P0AEY0
D	0	MET	-	expression tag	UNP P0AEY0
D	377	ASN	-	expression tag	UNP P0AEY0
D	378	SER	-	expression tag	UNP P0AEY0
D	379	SER	-	expression tag	UNP P0AEY0
D	380	SER	-	expression tag	UNP P0AEY0
G	-20	MET	-	initiating methionine	UNP P0AEY0
G	-19	GLY	-	expression tag	UNP P0AEY0
G	-18	SER	-	expression tag	UNP P0AEY0
G	-17	SER	-	expression tag	UNP P0AEY0
G	-16	HIS	-	expression tag	UNP P0AEY0
G	-15	HIS	-	expression tag	UNP P0AEY0
G	-14	HIS	-	expression tag	UNP P0AEY0
G	-13	HIS	-	expression tag	UNP P0AEY0
G	-12	HIS	-	expression tag	UNP P0AEY0
G	-11	HIS	-	expression tag	UNP P0AEY0
G	-10	SER	-	expression tag	UNP P0AEY0
G	-9	SER	-	expression tag	UNP P0AEY0
G	-8	GLY	-	expression tag	UNP P0AEY0
G	-7	LEU	-	expression tag	UNP P0AEY0
G	-6	VAL	-	expression tag	UNP P0AEY0
G	-5	PRO	-	expression tag	UNP P0AEY0
G	-4	ARG	-	expression tag	UNP P0AEY0
G	-3	GLY	-	expression tag	UNP P0AEY0
G	-2	SER	-	expression tag	UNP P0AEY0
G	-1	HIS	-	expression tag	UNP P0AEY0
G	0	MET	-	expression tag	UNP P0AEY0
G	377	ASN	-	expression tag	UNP P0AEY0
G	378	SER	-	expression tag	UNP P0AEY0
G	379	SER	-	expression tag	UNP P0AEY0
G	380	SER	-	expression tag	UNP P0AEY0

- Molecule 2 is an oligosaccharide called alpha-D-glucopyranose-(1-4)-alpha-D-glucopyranose.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
2	C	2	Total C O 23 12 11	0	0	0
2	E	2	Total C O 23 12 11	0	0	0
2	F	2	Total C O 23 12 11	0	0	0
2	H	2	Total C O 23 12 11	0	0	0

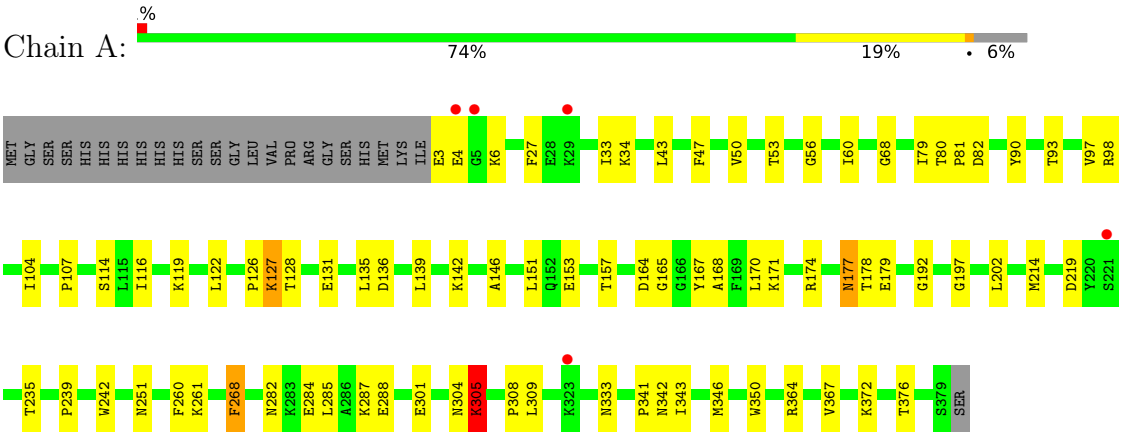
- Molecule 3 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	85	Total O 85 85	0	0
3	B	76	Total O 76 76	0	0
3	D	52	Total O 52 52	0	0
3	G	75	Total O 75 75	0	0

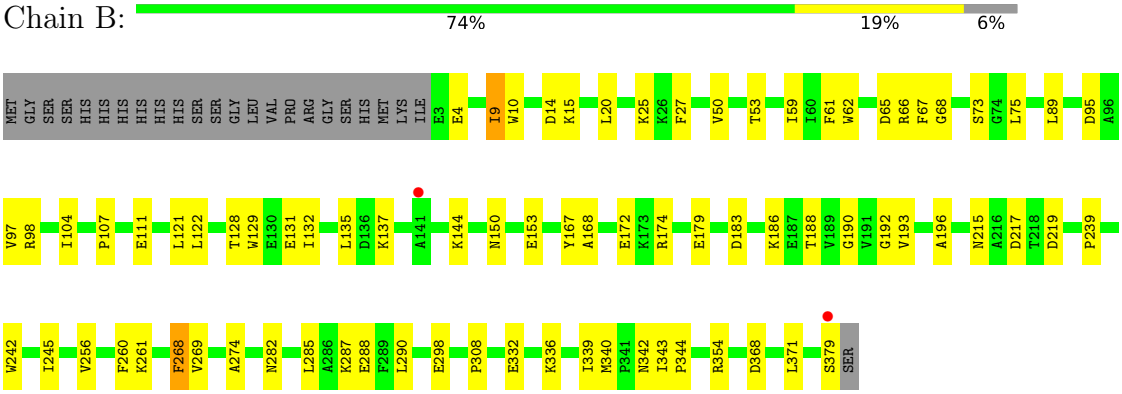
3 Residue-property plots (i)

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.

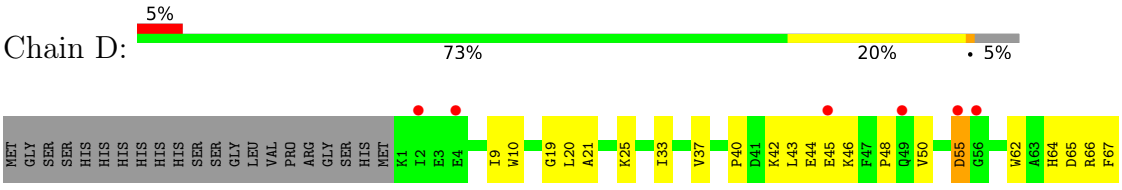
• Molecule 1: Maltose-binding periplasmic protein,Tightly bound bacterial magnetic particle protein,Maltose-binding periplasmic protein

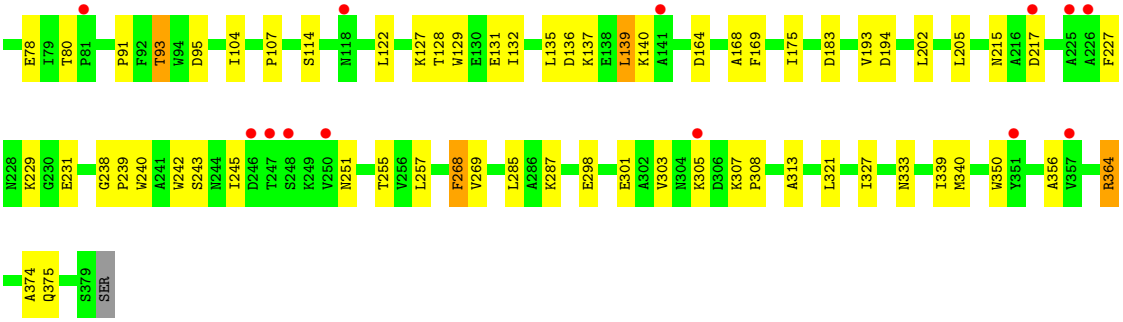


• Molecule 1: Maltose-binding periplasmic protein,Tightly bound bacterial magnetic particle protein,Maltose-binding periplasmic protein

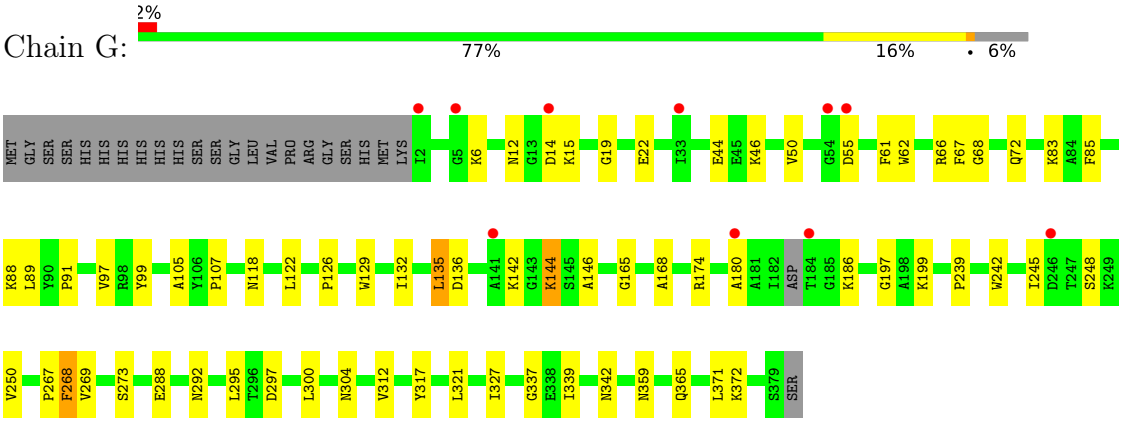


• Molecule 1: Maltose-binding periplasmic protein,Tightly bound bacterial magnetic particle protein,Maltose-binding periplasmic protein



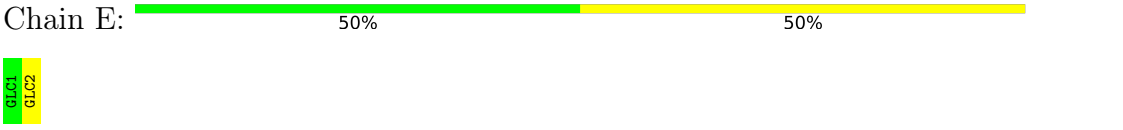


• Molecule 1: Maltose-binding periplasmic protein,Tightly bound bacterial magnetic particle protein,Maltose-binding periplasmic protein



• Molecule 2: alpha-D-glucopyranose-(1-4)-alpha-D-glucopyranose

• Molecule 2: alpha-D-glucopyranose-(1-4)-alpha-D-glucopyranose



• Molecule 2: alpha-D-glucopyranose-(1-4)-alpha-D-glucopyranose

• Molecule 2: alpha-D-glucopyranose-(1-4)-alpha-D-glucopyranose


GLC1
GLC2

4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	110.68Å 113.81Å 115.51Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	46.70 – 2.29 46.70 – 2.29	Depositor EDS
% Data completeness (in resolution range)	99.2 (46.70-2.29) 99.5 (46.70-2.29)	Depositor EDS
R_{merge}	0.25	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.37 (at 2.29Å)	Xtriage
Refinement program	PHENIX (1.12_2829: ???)	Depositor
R, R_{free}	0.205 , 0.274 0.211 , 0.279	Depositor DCC
R_{free} test set	3328 reflections (5.06%)	wwPDB-VP
Wilson B-factor (Å^2)	28.7	Xtriage
Anisotropy	0.211	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.34 , 46.6	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.28$	Xtriage
Estimated twinning fraction	0.000 for -h,l,k 0.000 for -l,-k,-h 0.000 for k,h,-l 0.000 for k,l,h 0.000 for l,h,k	Xtriage
F_o,F_c correlation	0.94	EDS
Total number of atoms	12079	wwPDB-VP
Average B, all atoms (Å^2)	42.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The analyses of the Patterson function reveals a significant off-origin peak that is 38.51 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 3.6453e-04. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

[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: GLC

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	0.46	0/3007	0.65	2/4083 (0.0%)
1	B	0.49	0/2974	0.68	4/4039 (0.1%)
1	D	0.47	0/3018	0.70	7/4096 (0.2%)
1	G	0.43	0/2973	0.62	2/4036 (0.0%)
All	All	0.46	0/11972	0.67	15/16254 (0.1%)

There are no bond length outliers.

All (15) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	137	LYS	CA-CB-CG	8.30	131.66	113.40
1	D	364	ARG	CB-CG-CD	7.95	132.28	111.60
1	D	364	ARG	CA-CB-CG	7.56	130.04	113.40
1	D	364	ARG	CB-CA-C	-7.21	95.98	110.40
1	A	43	LEU	CA-CB-CG	7.03	131.46	115.30
1	B	137	LYS	CB-CG-CD	-6.58	94.50	111.60
1	B	137	LYS	CD-CE-NZ	6.04	125.59	111.70
1	G	55	ASP	CB-CG-OD2	-6.01	112.89	118.30
1	D	364	ARG	NE-CZ-NH2	-5.51	117.55	120.30
1	A	305	LYS	CD-CE-NZ	-5.42	99.25	111.70
1	B	9	ILE	CG1-CB-CG2	-5.40	99.53	111.40
1	D	364	ARG	CG-CD-NE	-5.19	100.90	111.80
1	D	364	ARG	NE-CZ-NH1	5.17	122.89	120.30
1	D	364	ARG	N-CA-CB	5.08	119.74	110.60
1	G	55	ASP	CB-CG-OD1	5.05	122.85	118.30

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	2937	0	2910	61	0
1	B	2907	0	2879	55	0
1	D	2948	0	2931	65	0
1	G	2907	0	2885	41	0
2	C	23	0	21	3	0
2	E	23	0	21	0	0
2	F	23	0	21	1	0
2	H	23	0	21	1	0
3	A	85	0	0	5	0
3	B	76	0	0	5	0
3	D	52	0	0	1	0
3	G	75	0	0	1	0
All	All	12079	0	11689	216	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 9.

All (216) 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:D:42:LYS:HE2	1:D:42:LYS:H	1.23	1.01
1:A:79:ILE:HG22	1:A:81:PRO:HD3	1.50	0.93
1:D:257:LEU:H	1:D:333:ASN:HD21	1.14	0.89
1:D:127:LYS:HG3	1:D:128:THR:HG23	1.57	0.85
1:D:321:LEU:HB3	1:D:327:ILE:HD12	1.57	0.85
1:A:27:PHE:HE1	1:A:288:GLU:HG2	1.43	0.83
1:A:27:PHE:CE1	1:A:288:GLU:HG2	2.16	0.80
1:A:284:GLU:OE2	3:A:501:HOH:O	2.00	0.79
1:A:304:ASN:ND2	1:A:309:LEU:H	1.83	0.75
1:D:10:TRP:HB3	1:D:43:LEU:HD11	1.68	0.74
1:B:193:VAL:HG13	1:B:371:LEU:HD22	1.70	0.74
1:B:168:ALA:HB3	1:B:268:PHE:HZ	1.52	0.73
1:A:304:ASN:HD22	1:A:309:LEU:H	1.35	0.73
1:D:193:VAL:H	1:D:375:GLN:HE22	1.35	0.72
1:A:82:ASP:OD2	3:A:502:HOH:O	2.05	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:301:GLU:HG2	1:A:305:LYS:NZ	2.05	0.71
1:A:116:ILE:HB	1:A:235:THR:HG22	1.76	0.67
1:D:122:LEU:HD11	1:D:135:LEU:HD11	1.77	0.67
1:D:193:VAL:H	1:D:375:GLN:NE2	1.93	0.67
1:A:341:PRO:HG2	1:A:346:MET:SD	2.35	0.66
1:A:179:GLU:HG2	3:B:558:HOH:O	1.95	0.66
1:G:44:GLU:HB2	1:G:66:ARG:HD2	1.79	0.65
1:B:65:ASP:HB3	1:B:340:MET:HE3	1.78	0.64
1:A:372:LYS:NZ	1:A:376:THR:HG23	2.13	0.64
1:B:25:LYS:NZ	3:B:501:HOH:O	2.32	0.63
1:D:42:LYS:HE2	1:D:42:LYS:N	2.04	0.63
1:G:97:VAL:CG2	1:G:105:ALA:HB3	2.28	0.63
1:A:127:LYS:H	1:A:127:LYS:HE2	1.63	0.63
1:A:122:LEU:HD21	1:A:126:PRO:HD3	1.81	0.63
1:A:174:ARG:HD2	1:G:91:PRO:HB2	1.80	0.63
1:A:153:GLU:HG3	2:C:2:GLC:O6	1.99	0.62
1:G:242:TRP:HA	1:G:245:ILE:HD12	1.81	0.62
1:A:97:VAL:HG21	1:A:107:PRO:HD3	1.80	0.62
1:G:62:TRP:HB3	1:G:67:PHE:HE1	1.64	0.61
1:A:177:ASN:ND2	1:A:179:GLU:H	1.98	0.61
1:D:62:TRP:HB3	1:D:67:PHE:HE1	1.65	0.61
1:D:44:GLU:HG3	1:D:66:ARG:NH1	2.15	0.61
1:A:128:THR:OG1	1:A:131:GLU:HG3	2.00	0.60
1:B:73:SER:HB2	1:B:75:LEU:CD2	2.30	0.60
1:G:72:GLN:NE2	1:G:99:TYR:OH	2.34	0.60
1:B:9:ILE:HG21	1:B:20:LEU:HD21	1.82	0.60
1:B:95:ASP:OD1	1:B:98:ARG:NH1	2.35	0.60
1:B:153:GLU:OE1	1:B:354:ARG:NH2	2.34	0.60
1:B:256:VAL:HG22	1:B:332:GLU:OE1	2.02	0.59
1:A:98:ARG:NH2	3:A:503:HOH:O	2.26	0.59
1:G:321:LEU:HB3	1:G:327:ILE:HD12	1.83	0.59
1:D:93:THR:HG21	1:D:313:ALA:HB1	1.85	0.59
1:G:288:GLU:HG3	1:G:292:ASN:HD22	1.67	0.59
1:B:9:ILE:HD13	1:B:59:ILE:HD12	1.85	0.58
1:G:15:LYS:NZ	2:H:1:GLC:O2	2.30	0.58
1:A:242:TRP:HB2	1:A:308:PRO:HG2	1.86	0.58
1:D:269:VAL:CG2	1:D:339:ILE:HD13	2.32	0.58
1:D:168:ALA:HB3	1:D:268:PHE:HZ	1.69	0.58
1:B:242:TRP:HA	1:B:245:ILE:HD12	1.86	0.57
1:G:97:VAL:HG11	1:G:107:PRO:HD3	1.86	0.57
1:A:350:TRP:CE3	2:C:2:GLC:H61	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:46:LYS:O	1:D:50:VAL:HG23	2.05	0.57
1:G:122:LEU:HD11	1:G:135:LEU:HD11	1.85	0.57
1:A:165:GLY:HA3	1:A:197:GLY:HA3	1.87	0.56
1:D:93:THR:HG23	1:D:107:PRO:HB2	1.86	0.56
1:A:90:TYR:HB2	1:A:93:THR:HG23	1.88	0.56
1:A:6:LYS:HG3	1:A:34:LYS:O	2.04	0.56
1:D:243:SER:HB3	1:D:307:LYS:HD3	1.88	0.55
1:D:257:LEU:N	1:D:333:ASN:HD21	1.95	0.55
1:D:135:LEU:O	1:D:139:LEU:HG	2.07	0.55
1:G:142:LYS:O	1:G:144:LYS:HD2	2.07	0.55
1:D:257:LEU:H	1:D:333:ASN:ND2	1.94	0.55
1:A:4:GLU:HA	1:A:282:ASN:OD1	2.07	0.55
1:D:269:VAL:HG22	1:D:339:ILE:HA	1.88	0.54
1:G:168:ALA:HB3	1:G:268:PHE:HZ	1.73	0.54
1:A:177:ASN:HD22	1:A:178:THR:N	2.06	0.54
1:A:239:PRO:HA	1:A:242:TRP:CE2	2.43	0.53
1:D:93:THR:HG23	1:D:107:PRO:CB	2.37	0.53
1:A:301:GLU:HG2	1:A:305:LYS:HZ1	1.72	0.53
1:B:97:VAL:HG21	1:B:107:PRO:HD3	1.90	0.53
1:D:42:LYS:H	1:D:42:LYS:CE	2.10	0.53
1:B:336:LYS:NZ	3:B:503:HOH:O	2.39	0.53
1:G:300:LEU:HD22	1:G:312:VAL:HB	1.91	0.53
1:A:151:LEU:HD11	1:A:214:MET:HE3	1.91	0.53
1:B:343:ILE:HG13	1:B:344:PRO:HD2	1.91	0.52
1:A:47:PHE:CG	1:A:60:ILE:HD12	2.44	0.52
3:A:581:HOH:O	1:B:179:GLU:HG3	2.08	0.52
1:B:50:VAL:O	1:B:53:THR:HG22	2.10	0.51
1:D:50:VAL:HG12	1:D:55:ASP:HB3	1.92	0.51
1:B:122:LEU:HD11	1:B:135:LEU:HD11	1.91	0.51
1:B:269:VAL:HG13	1:B:339:ILE:HD13	1.93	0.51
1:D:44:GLU:HG3	1:D:66:ARG:HH11	1.75	0.51
1:G:68:GLY:HA3	1:G:342:ASN:O	2.10	0.51
1:G:97:VAL:HG21	1:G:105:ALA:HB3	1.93	0.51
1:B:89:LEU:HD23	1:B:107:PRO:HG2	1.93	0.51
1:B:298:GLU:CD	1:B:298:GLU:H	2.14	0.51
1:D:301:GLU:HG2	1:D:305:LYS:HE3	1.92	0.51
1:D:40:PRO:HG2	1:D:43:LEU:HD13	1.93	0.51
1:A:301:GLU:HG2	1:A:305:LYS:HZ3	1.75	0.51
1:A:372:LYS:HZ2	1:A:376:THR:HG23	1.73	0.50
1:B:121:LEU:HD21	1:B:144:LYS:HE3	1.93	0.50
1:A:139:LEU:HD23	1:A:142:LYS:HE2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:27:PHE:HE1	1:B:288:GLU:HG3	1.76	0.50
1:A:219:ASP:HB2	3:A:548:HOH:O	2.11	0.50
1:D:350:TRP:CD1	2:F:2:GLC:H4	2.47	0.50
1:D:136:ASP:O	1:D:139:LEU:HD12	2.12	0.49
1:G:12:ASN:HD22	1:G:14:ASP:CG	2.14	0.49
1:A:282:ASN:HB3	1:A:285:LEU:HD12	1.95	0.49
1:B:269:VAL:HG13	1:B:339:ILE:HA	1.94	0.49
1:D:227:PHE:HE2	1:D:245:ILE:HD12	1.77	0.49
1:G:122:LEU:HD21	1:G:126:PRO:HD3	1.95	0.49
1:D:45:GLU:O	1:D:48:PRO:HD2	2.12	0.49
1:D:137:LYS:HA	1:D:140:LYS:HB2	1.93	0.49
1:A:164:ASP:OD2	1:A:261:LYS:HE2	2.12	0.49
1:D:194:ASP:H	1:D:375:GLN:NE2	2.11	0.49
1:A:153:GLU:HG3	2:C:2:GLC:HO6	1.78	0.49
1:B:239:PRO:HA	1:B:242:TRP:CE2	2.48	0.49
1:D:239:PRO:HA	1:D:242:TRP:CE2	2.48	0.49
1:B:183:ASP:HB2	1:D:91:PRO:HD2	1.95	0.48
1:D:67:PHE:HB3	1:D:104:ILE:HD12	1.95	0.48
1:G:239:PRO:HA	1:G:242:TRP:CE2	2.49	0.48
1:B:9:ILE:CD1	1:B:59:ILE:HD12	2.43	0.47
1:B:111:GLU:O	1:B:269:VAL:HG23	2.13	0.47
1:D:64:HIS:CE1	1:D:340:MET:HB2	2.49	0.47
1:B:4:GLU:HA	1:B:282:ASN:OD1	2.14	0.47
1:D:269:VAL:HG21	1:D:339:ILE:HD13	1.95	0.47
1:G:295:LEU:HA	1:G:300:LEU:HD11	1.96	0.47
1:G:46:LYS:O	1:G:50:VAL:HG12	2.14	0.47
1:B:150:ASN:OD1	1:B:219:ASP:HA	2.14	0.47
1:D:19:GLY:HA3	1:D:303:VAL:HA	1.96	0.47
1:D:242:TRP:HB2	1:D:308:PRO:HG2	1.97	0.47
1:A:80:THR:HG22	1:A:80:THR:O	2.15	0.47
1:D:128:THR:OG1	1:D:131:GLU:HG3	2.14	0.47
1:G:61:PHE:HA	1:G:273:SER:O	2.15	0.46
1:A:170:LEU:HB3	1:A:343:ILE:HD11	1.95	0.46
1:A:168:ALA:HB3	1:A:268:PHE:HZ	1.80	0.46
1:D:215:ASN:OD1	1:D:217:ASP:HB2	2.15	0.46
1:D:202:LEU:HD12	1:D:205:LEU:HD23	1.97	0.46
1:B:68:GLY:HA3	1:B:342:ASN:O	2.15	0.46
1:B:287:LYS:HG3	3:B:533:HOH:O	2.16	0.46
1:G:359:ASN:HD22	1:G:365:GLN:HE21	1.64	0.46
1:D:301:GLU:O	1:D:305:LYS:HG3	2.16	0.46
1:G:129:TRP:HA	1:G:132:ILE:HD12	1.96	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:50:VAL:O	1:A:53:THR:HG22	2.16	0.45
1:D:194:ASP:H	1:D:375:GLN:HE21	1.62	0.45
1:G:174:ARG:HG2	1:G:186:LYS:HD3	1.99	0.45
1:G:267:PRO:O	1:G:337:GLY:HA3	2.17	0.45
1:A:27:PHE:HE1	1:A:288:GLU:CG	2.21	0.45
1:D:10:TRP:HB3	1:D:43:LEU:CD1	2.41	0.45
1:A:114:SER:HA	1:A:333:ASN:ND2	2.32	0.45
1:D:80:THR:HG23	1:D:287:LYS:NZ	2.32	0.45
1:G:19:GLY:O	1:G:22:GLU:HB2	2.16	0.45
1:B:167:TYR:CD2	1:B:192:GLY:HA3	2.52	0.45
1:D:129:TRP:HA	1:D:132:ILE:HD12	1.99	0.45
1:G:199:LYS:HG3	1:G:371:LEU:HD12	1.99	0.45
1:G:297:ASP:OD1	1:G:317:TYR:HB2	2.17	0.45
1:A:122:LEU:HD11	1:A:135:LEU:HD11	1.98	0.44
1:A:284:GLU:CD	1:A:284:GLU:H	2.21	0.44
1:B:183:ASP:OD1	1:B:183:ASP:N	2.43	0.44
1:D:21:ALA:HB2	1:D:37:VAL:HG11	1.99	0.44
1:B:268:PHE:HB3	1:B:340:MET:HG3	1.99	0.44
1:B:67:PHE:HB3	1:B:104:ILE:CD1	2.48	0.44
1:A:3:GLU:O	1:A:282:ASN:ND2	2.43	0.44
1:A:80:THR:O	1:A:80:THR:CG2	2.66	0.44
1:A:372:LYS:NZ	1:A:372:LYS:O	2.44	0.44
1:B:172:GLU:HG3	1:B:186:LYS:HB3	2.00	0.44
1:A:119:LYS:HD3	1:A:251[B]:ASN:ND2	2.33	0.44
1:D:298[B]:GLU:CD	1:D:298[B]:GLU:H	2.19	0.44
1:D:9:ILE:HG21	1:D:20:LEU:HD21	1.98	0.43
1:B:61:PHE:CE2	1:B:274:ALA:HB2	2.53	0.43
1:D:227:PHE:CE2	1:D:245:ILE:HD12	2.53	0.43
1:G:85:PHE:HA	1:G:88:LYS:HZ2	1.83	0.43
1:A:68:GLY:HA3	1:A:342:ASN:O	2.18	0.43
1:B:196:ALA:HB2	1:D:164:ASP:OD2	2.18	0.43
1:A:33:ILE:HD13	1:A:285:LEU:HD22	2.00	0.43
1:A:202:LEU:HD23	1:A:367:VAL:HG13	2.01	0.43
1:G:118:ASN:ND2	1:G:250:VAL:HG13	2.34	0.43
1:G:317:TYR:CZ	1:G:321:LEU:HD21	2.53	0.43
1:B:14:ASP:OD1	1:B:15:LYS:HD2	2.18	0.42
1:B:290:LEU:HA	1:B:290:LEU:HD23	1.81	0.42
1:D:33:ILE:HD13	1:D:285:LEU:HD22	2.00	0.42
1:D:114:SER:HB3	1:D:255:THR:O	2.19	0.42
1:G:15:LYS:HG3	3:G:558:HOH:O	2.17	0.42
1:G:88:LYS:HZ2	1:G:88:LYS:HG3	1.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:129:TRP:HA	1:B:132:ILE:HD12	2.01	0.42
1:A:167:TYR:CE1	1:A:192:GLY:HA3	2.54	0.42
1:A:372:LYS:HZ1	1:A:376:THR:HG23	1.82	0.42
1:B:167:TYR:CE2	1:B:192:GLY:HA3	2.55	0.42
1:G:89:LEU:CD1	1:G:107:PRO:HG2	2.50	0.42
1:A:136:ASP:HA	1:A:146:ALA:HB2	2.02	0.42
1:A:260:PHE:CZ	1:A:261:LYS:HD3	2.55	0.42
1:B:128:THR:OG1	1:B:131:GLU:HG3	2.20	0.42
1:A:80:THR:HG22	1:A:287:LYS:NZ	2.35	0.41
1:B:242:TRP:HB2	1:B:308:PRO:HG2	2.03	0.41
1:D:21:ALA:HB2	1:D:37:VAL:CG1	2.50	0.41
1:D:356:ALA:HB2	1:D:374:ALA:HB2	2.01	0.41
1:B:9:ILE:O	1:B:10:TRP:HD1	2.04	0.41
1:D:229:LYS:HB2	1:D:231:GLU:HG3	2.02	0.41
1:G:89:LEU:HD13	1:G:107:PRO:HG2	2.03	0.41
1:A:27:PHE:CZ	1:A:288:GLU:HG2	2.56	0.41
1:B:62:TRP:HB3	1:B:67:PHE:HE1	1.86	0.41
1:G:300:LEU:O	1:G:304:ASN:HB2	2.21	0.41
1:D:238:GLY:HA3	1:D:240:TRP:CH2	2.55	0.41
1:A:177:ASN:HD22	1:A:177:ASN:C	2.22	0.41
1:B:174:ARG:HB2	1:D:95:ASP:OD2	2.21	0.41
1:D:65:ASP:CG	1:D:340:MET:HE1	2.40	0.41
1:D:78:GLU:OE1	3:D:501:HOH:O	2.22	0.41
1:D:175:ILE:HD11	1:D:183:ASP:HA	2.03	0.41
1:G:136:ASP:HA	1:G:146:ALA:HB2	2.03	0.41
1:G:165:GLY:HA3	1:G:197:GLY:HA3	2.02	0.41
1:B:188:THR:HB	1:B:379:SER:HA	2.03	0.41
1:B:282:ASN:HB3	1:B:285:LEU:HD12	2.03	0.40
1:A:104:ILE:H	1:A:104:ILE:HG13	1.77	0.40
1:B:190:GLY:HA2	1:D:169:PHE:CE2	2.56	0.40
1:B:260:PHE:CE2	1:B:261:LYS:HD2	2.56	0.40
1:G:372:LYS:HB2	1:G:372:LYS:HE2	1.80	0.40
1:B:343:ILE:HD12	1:B:343:ILE:HA	1.86	0.40
1:B:66:ARG:HD3	3:B:531:HOH:O	2.21	0.40
1:B:190:GLY:HA2	1:D:169:PHE:CZ	2.57	0.40
1:B:215:ASN:OD1	1:B:217:ASP:HB2	2.21	0.40
1:G:269:VAL:HB	1:G:339:ILE:HD13	2.04	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	379/401 (94%)	371 (98%)	7 (2%)	1 (0%)	41	50
1	B	375/401 (94%)	367 (98%)	8 (2%)	0	100	100
1	D	380/401 (95%)	371 (98%)	8 (2%)	1 (0%)	41	50
1	G	373/401 (93%)	363 (97%)	9 (2%)	1 (0%)	41	50
All	All	1507/1604 (94%)	1472 (98%)	32 (2%)	3 (0%)	47	58

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	G	180	ALA
1	D	251	ASN
1	A	56	GLY

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	305/322 (95%)	297 (97%)	8 (3%)	46	63
1	B	301/322 (94%)	299 (99%)	2 (1%)	84	92
1	D	306/322 (95%)	300 (98%)	6 (2%)	55	72
1	G	301/322 (94%)	295 (98%)	6 (2%)	55	72
All	All	1213/1288 (94%)	1191 (98%)	22 (2%)	60	75

All (22) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	127	LYS
1	A	157[A]	THR
1	A	157[B]	THR
1	A	171	LYS
1	A	177	ASN
1	A	268	PHE
1	A	305	LYS
1	A	364	ARG
1	B	268	PHE
1	B	368	ASP
1	D	25	LYS
1	D	55	ASP
1	D	93	THR
1	D	139	LEU
1	D	268	PHE
1	D	364	ARG
1	G	6	LYS
1	G	83	LYS
1	G	135	LEU
1	G	144	LYS
1	G	248	SER
1	G	268	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (8) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	177	ASN
1	A	304	ASN
1	B	49	GLN
1	D	333	ASN
1	D	375	GLN
1	G	72	GLN
1	G	292	ASN
1	G	365	GLN

5.3.3 RNA

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)

8 monosaccharides 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	$\#\|Z\| > 2$
2	GLC	C	1	2	12,12,12	0.69	0	17,17,17	1.22	3 (17%)
2	GLC	C	2	2	11,11,12	0.56	0	15,15,17	1.22	2 (13%)
2	GLC	E	1	2	12,12,12	0.56	0	17,17,17	0.77	0
2	GLC	E	2	2	11,11,12	0.65	0	15,15,17	1.20	3 (20%)
2	GLC	F	1	2	12,12,12	0.51	0	17,17,17	1.19	3 (17%)
2	GLC	F	2	2	11,11,12	0.58	0	15,15,17	1.19	3 (20%)
2	GLC	H	1	2	12,12,12	0.44	0	17,17,17	1.17	1 (5%)
2	GLC	H	2	2	11,11,12	0.80	0	15,15,17	1.18	2 (13%)

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
2	GLC	C	1	2	-	0/2/22/22	0/1/1/1
2	GLC	C	2	2	-	0/2/19/22	0/1/1/1
2	GLC	E	1	2	-	2/2/22/22	0/1/1/1
2	GLC	E	2	2	-	1/2/19/22	0/1/1/1
2	GLC	F	1	2	-	2/2/22/22	0/1/1/1
2	GLC	F	2	2	-	0/2/19/22	0/1/1/1
2	GLC	H	1	2	-	1/2/22/22	0/1/1/1
2	GLC	H	2	2	-	2/2/19/22	0/1/1/1

There are no bond length outliers.

All (17) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	C	2	GLC	C1-O5-C5	2.91	116.14	112.19
2	F	2	GLC	C1-O5-C5	2.64	115.77	112.19
2	C	1	GLC	C6-C5-C4	-2.63	106.84	113.00
2	H	2	GLC	O5-C1-C2	-2.61	106.75	110.77
2	H	2	GLC	C1-C2-C3	-2.55	106.53	109.67
2	F	1	GLC	O5-C5-C4	2.55	114.32	109.69
2	C	1	GLC	C1-C2-C3	2.51	115.51	110.31
2	E	2	GLC	C1-C2-C3	-2.41	106.71	109.67
2	F	2	GLC	C2-C3-C4	-2.24	107.02	110.89
2	C	1	GLC	O1-C1-C2	2.23	115.30	109.03
2	F	1	GLC	O2-C2-C1	2.23	114.32	109.16
2	H	1	GLC	C1-O5-C5	2.22	117.85	113.66
2	E	2	GLC	C2-C3-C4	-2.22	107.06	110.89
2	E	2	GLC	C1-O5-C5	2.09	115.02	112.19
2	C	2	GLC	O2-C2-C1	2.07	113.39	109.15
2	F	1	GLC	C6-C5-C4	-2.07	108.17	113.00
2	F	2	GLC	O2-C2-C1	2.03	113.30	109.15

There are no chirality outliers.

All (8) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	F	1	GLC	C4-C5-C6-O6
2	E	1	GLC	C4-C5-C6-O6
2	H	2	GLC	C4-C5-C6-O6
2	E	1	GLC	O5-C5-C6-O6
2	F	1	GLC	O5-C5-C6-O6
2	E	2	GLC	C4-C5-C6-O6
2	H	2	GLC	O5-C5-C6-O6
2	H	1	GLC	C4-C5-C6-O6

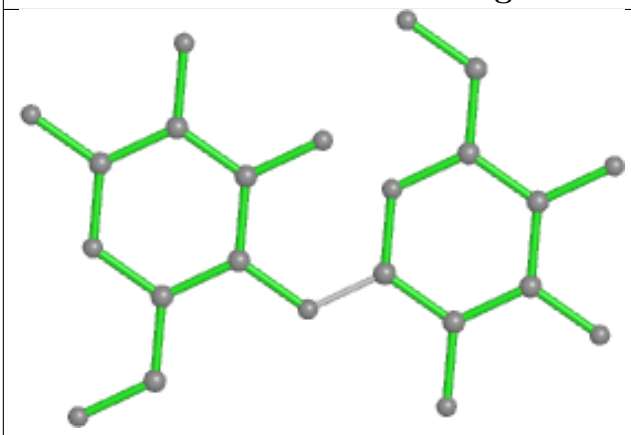
There are no ring outliers.

3 monomers are involved in 5 short contacts:

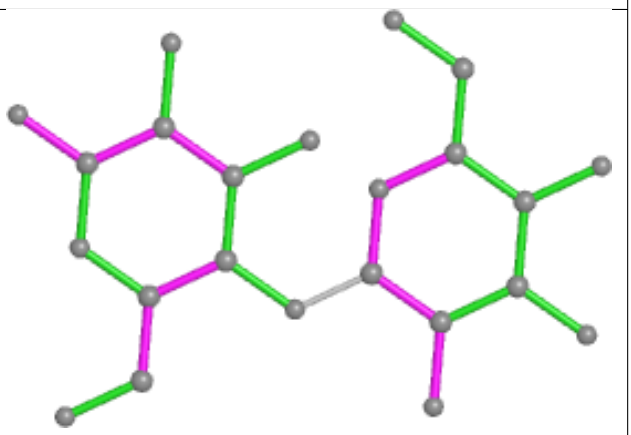
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	C	2	GLC	3	0
2	H	1	GLC	1	0
2	F	2	GLC	1	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for oligosaccharide.

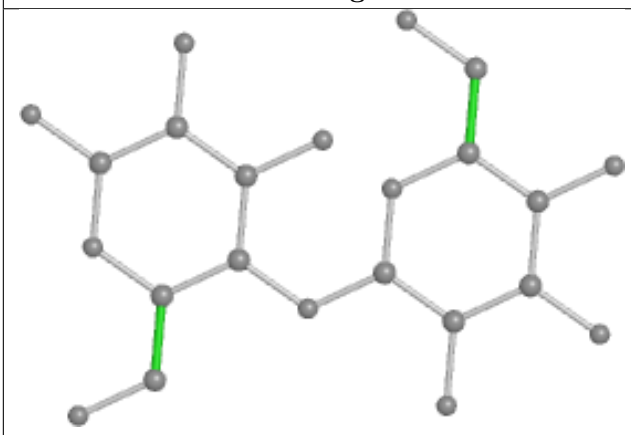
Oligosaccharide Chain C



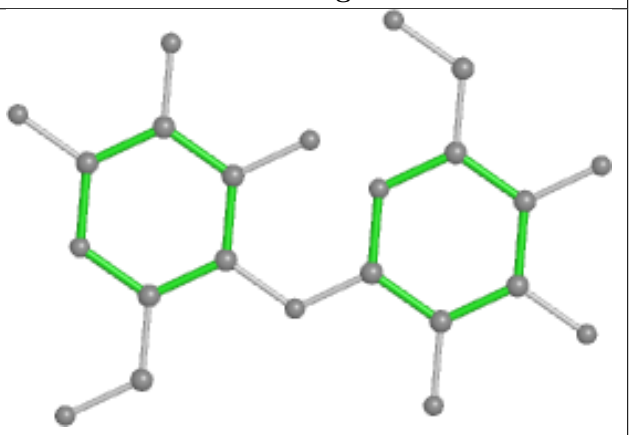
Bond lengths



Bond angles

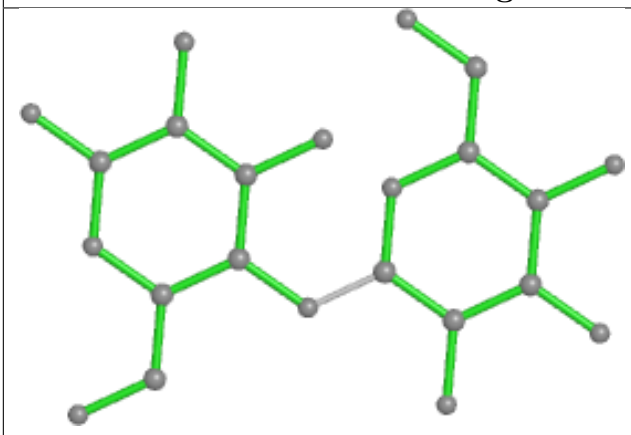


Torsions

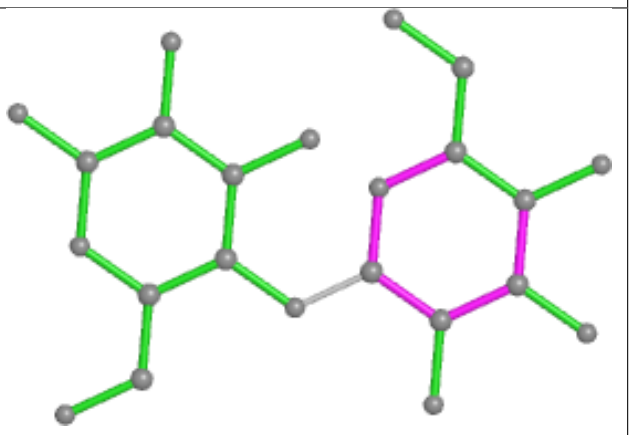


Rings

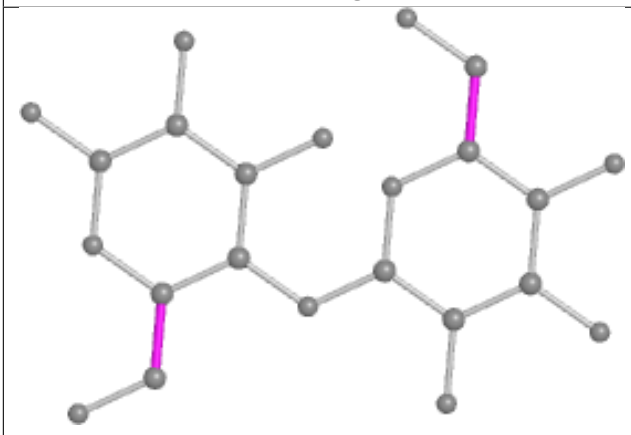
Oligosaccharide Chain E



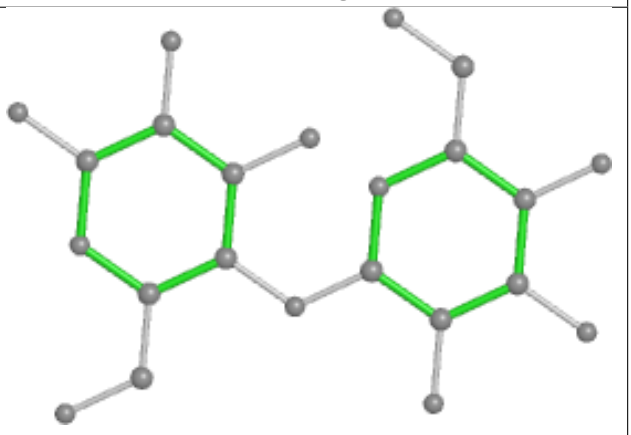
Bond lengths



Bond angles

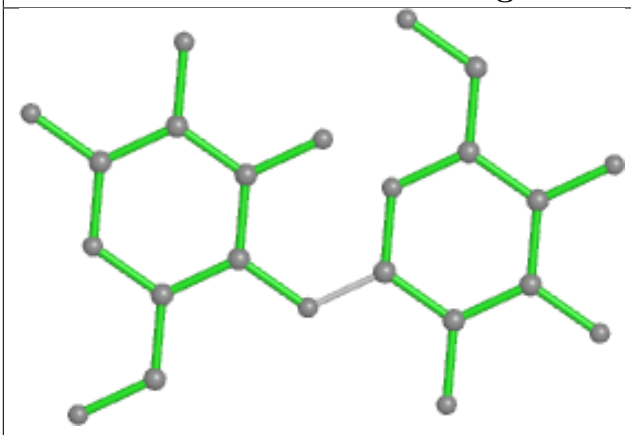


Torsions

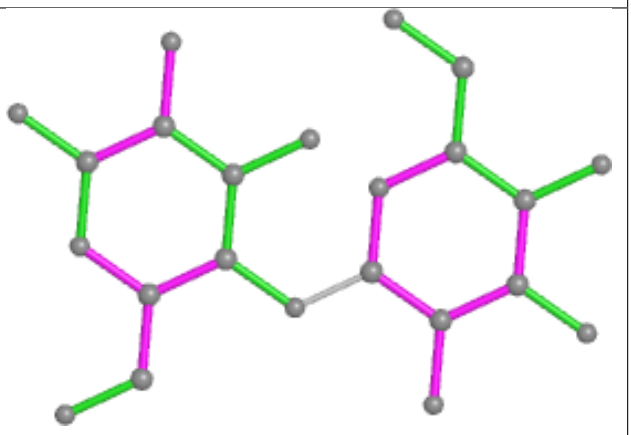


Rings

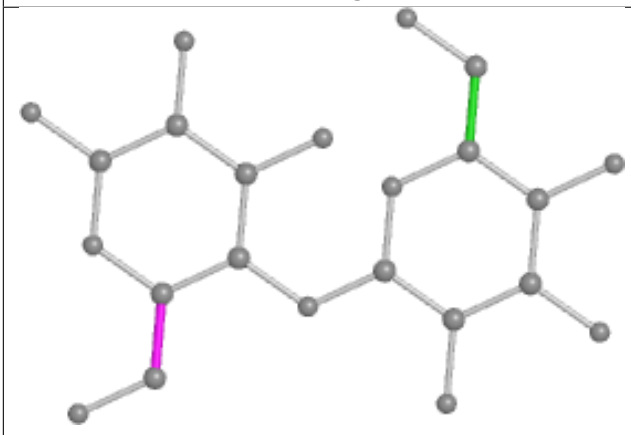
Oligosaccharide Chain F



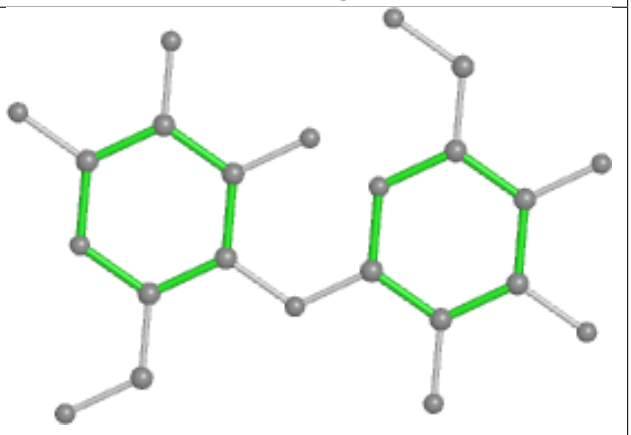
Bond lengths



Bond angles

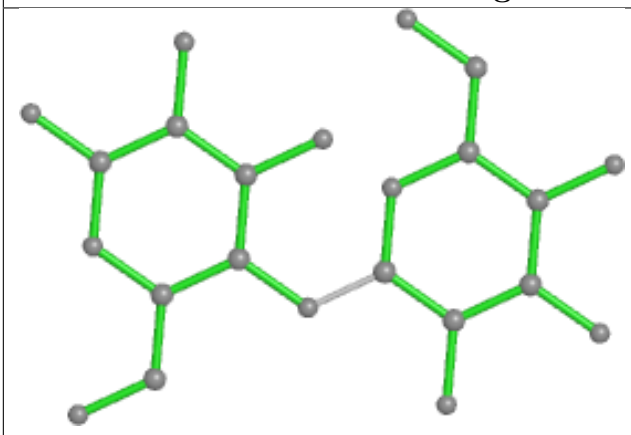


Torsions

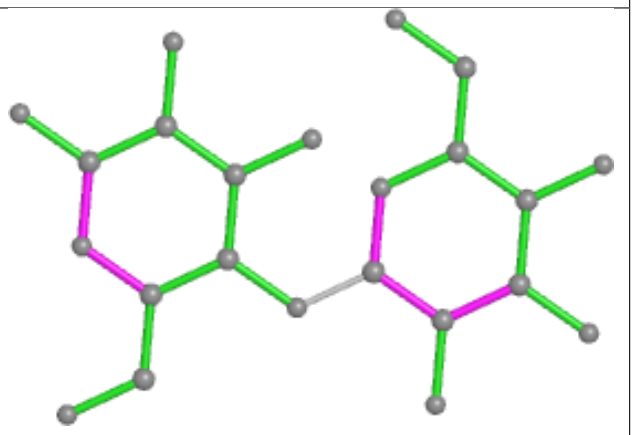


Rings

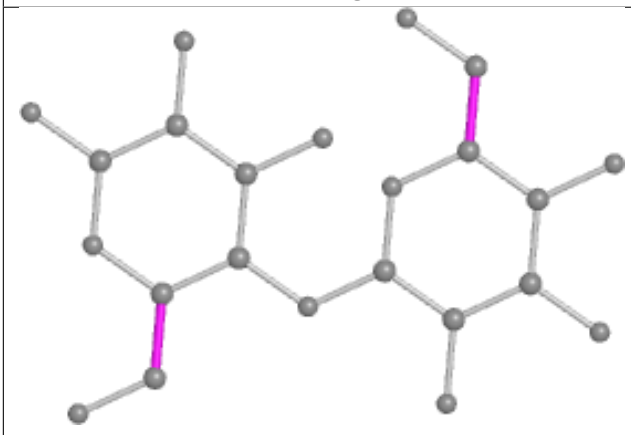
Oligosaccharide Chain H



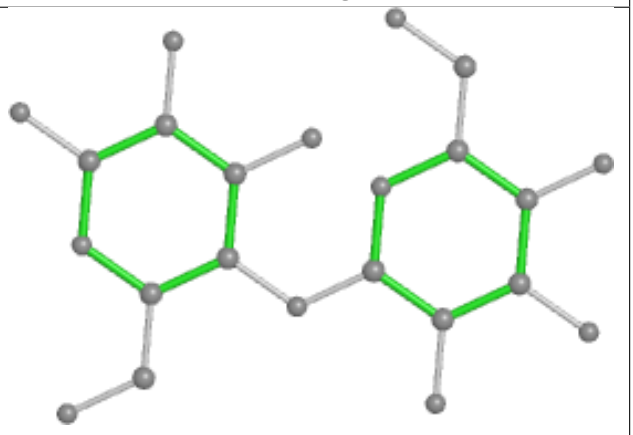
Bond lengths



Bond angles



Torsions



Rings

5.6 Ligand geometry (i)

There are no ligands in this entry.

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	377/401 (94%)	-0.03	5 (1%)	77	81	28, 39, 59, 97	0
1	B	377/401 (94%)	-0.11	2 (0%)	91	94	25, 36, 56, 89	0
1	D	379/401 (94%)	0.17	19 (5%)	28	35	27, 41, 71, 121	0
1	G	377/401 (94%)	0.12	10 (2%)	54	62	25, 41, 74, 116	0
All	All	1510/1604 (94%)	0.04	36 (2%)	59	66	25, 40, 66, 121	0

All (36) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	D	247	THR	6.5
1	G	184	THR	5.7
1	G	5	GLY	5.2
1	G	54	GLY	5.0
1	D	55	ASP	4.8
1	D	141	ALA	4.7
1	D	2	ILE	4.2
1	D	246	ASP	3.7
1	D	225	ALA	3.4
1	D	217	ASP	3.2
1	D	250	VAL	3.2
1	B	141	ALA	3.2
1	G	2	ILE	3.1
1	D	56	GLY	3.1
1	A	29[A]	LYS	3.0
1	G	141	ALA	2.9
1	G	55	ASP	2.8
1	D	4	GLU	2.7
1	G	33	ILE	2.6
1	D	45	GLU	2.6
1	D	357	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
1	G	246	ASP	2.4
1	D	351	TYR	2.4
1	D	305	LYS	2.3
1	A	221	SER	2.3
1	D	248	SER	2.3
1	D	81	PRO	2.3
1	B	379	SER	2.2
1	A	4	GLU	2.2
1	D	226	ALA	2.2
1	G	180	ALA	2.1
1	A	5	GLY	2.1
1	D	118	ASN	2.1
1	D	49[A]	GLN	2.1
1	G	14	ASP	2.0
1	A	323	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)

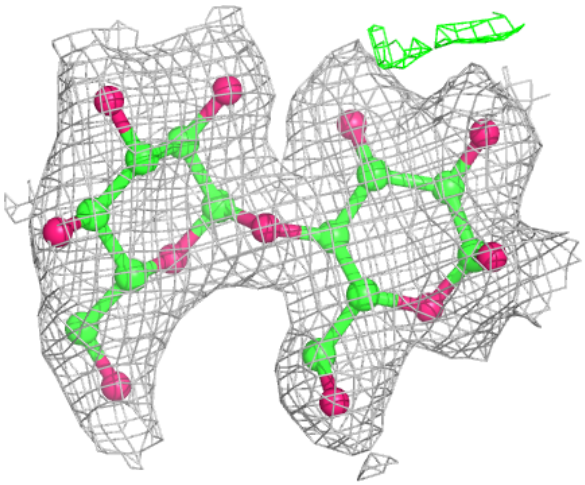
In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9'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

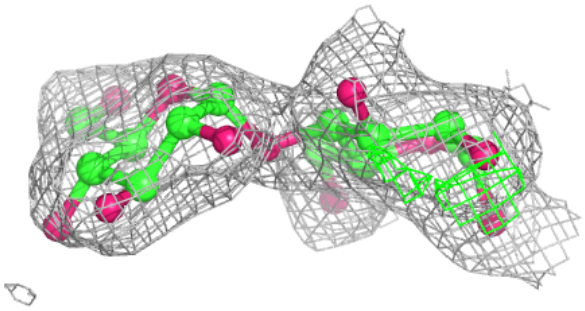
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
2	GLC	C	2	11/12	0.94	0.16	28,33,49,53	0
2	GLC	F	1	12/12	0.94	0.10	28,38,43,49	0
2	GLC	F	2	11/12	0.94	0.11	27,34,39,43	0
2	GLC	C	1	12/12	0.95	0.11	13,30,37,39	0
2	GLC	E	1	12/12	0.95	0.10	21,30,40,42	0
2	GLC	H	1	12/12	0.95	0.10	20,36,41,49	0
2	GLC	E	2	11/12	0.96	0.10	23,25,33,34	0
2	GLC	H	2	11/12	0.96	0.08	18,27,33,39	0

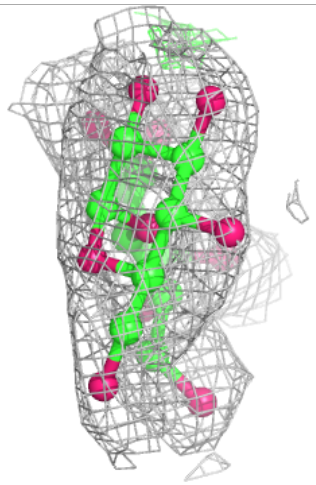
The following is a graphical depiction of the model fit to experimental electron density for oligosaccharide. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around Chain C:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

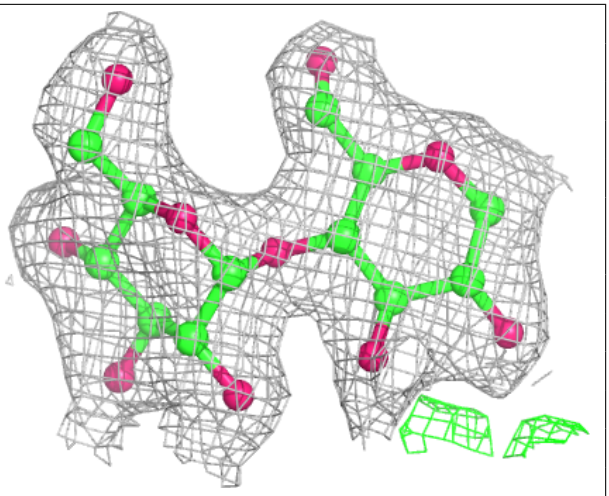


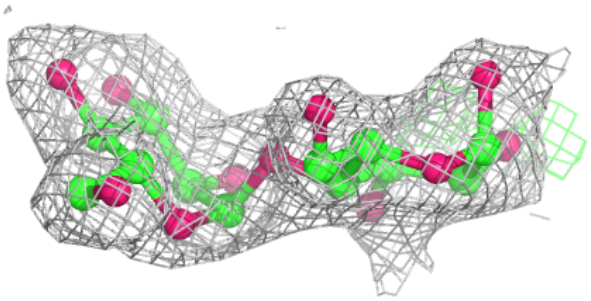


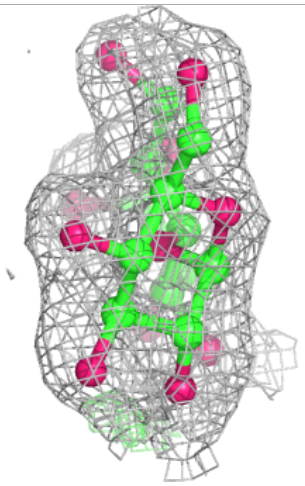


Electron density around Chain E:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

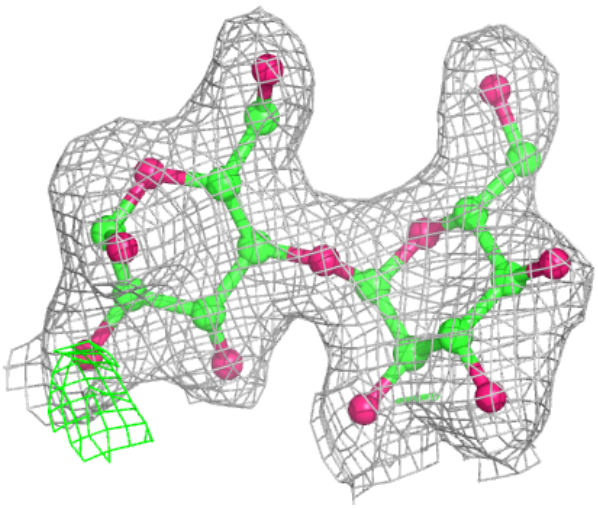


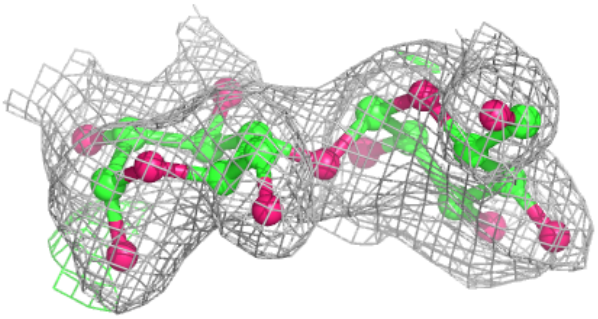


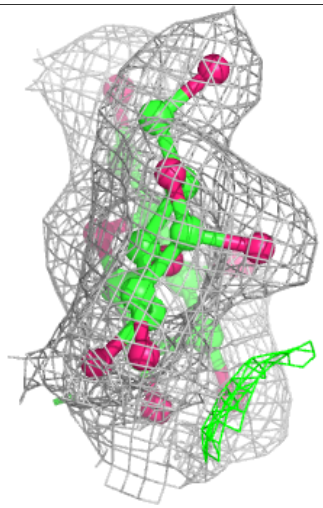


Electron density around Chain F:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

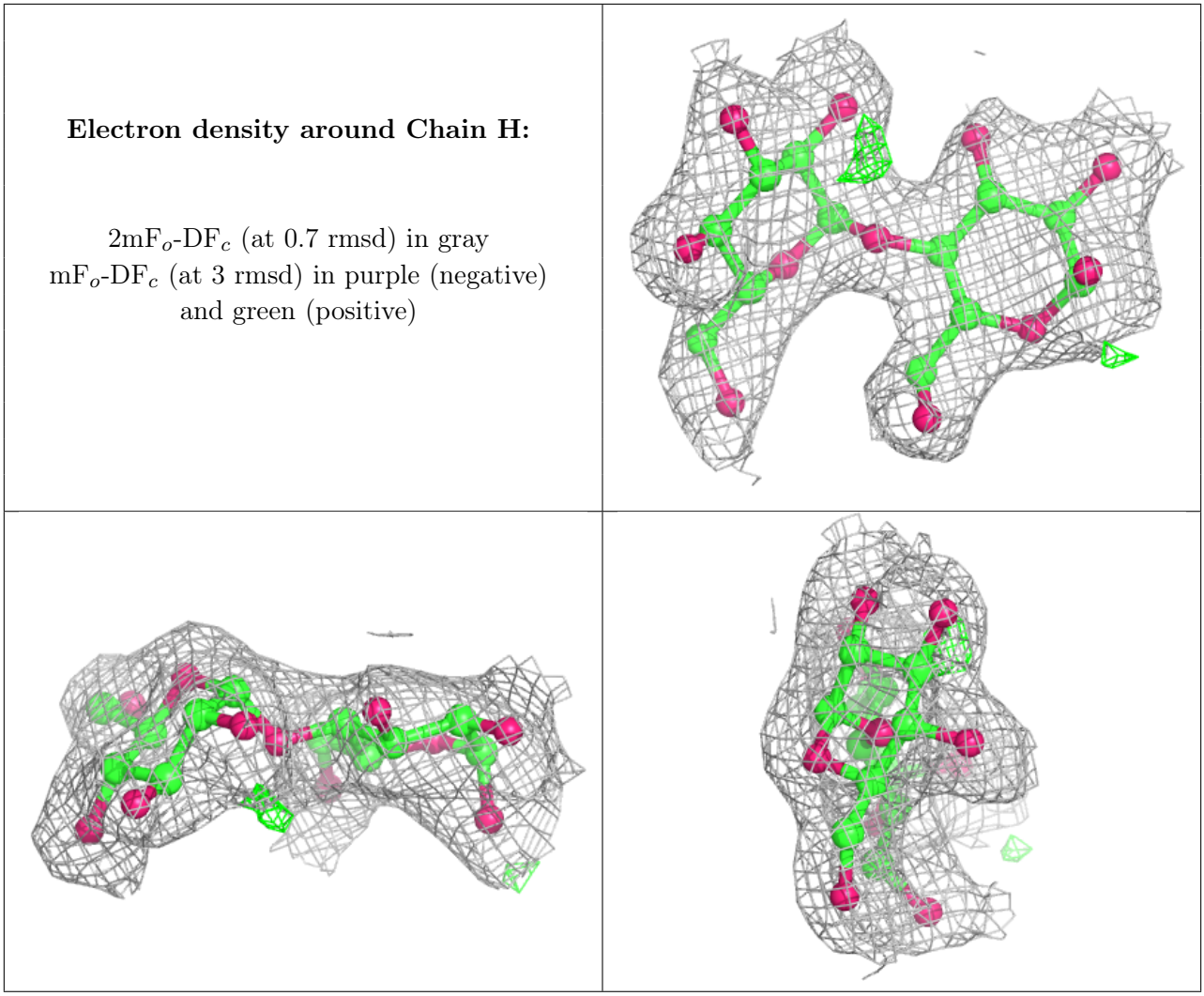






Electron density around Chain H:

$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



6.4 Ligands

There are no ligands in this entry.

6.5 Other polymers

There are no such residues in this entry.