

wwPDB X-ray Structure Validation Summary Report (i)

Sep 26, 2023 – 02:47 AM EDT

PDB ID	:	6AQ6
Title	:	X-ray crystal structure of Erythrina crista-galli lectin in complex with N-
		acetyllactosamine
Authors	:	Gerlits, O.; Woods, R.J.
Deposited on	:	2017-08-18
Resolution	:	1.90 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 (1)) were used in the production of this report:

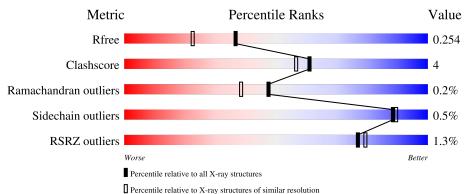
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.35.1
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.35.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure: $X\text{-}RAY \, DIFFRACTION$

The reported resolution of this entry is 1.90 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	$\begin{array}{c} \textbf{Whole archive} \\ (\#\textbf{Entries}) \end{array}$	${f Similar\ resolution}\ (\#{ m Entries,\ resolution\ range}({ m \AA}))$
R_{free}	130704	6207 (1.90-1.90)
Clashscore	141614	6847 (1.90-1.90)
Ramachandran outliers	138981	6760 (1.90-1.90)
Sidechain outliers	138945	6760 (1.90-1.90)
RSRZ outliers	127900	6082 (1.90-1.90)

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	Qualit	y of chain	
1	А	239	87%	13	%
1	В	239	3% 	10	0%
2	С	2	50%	50%	
2	Е	2	50%	50%	
3	D	6		100%	

Continued on next page...



Continued from previous page...

Mol	Chain	Length	Quality of chain
	1		
4	F	2	100%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
8	ACT	В	307	-	-	-	Х



2 Entry composition (i)

There are 9 unique types of molecules in this entry. The entry contains 4263 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 Lectin.

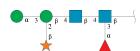
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace	
1	Λ	239	Total	С	Ν	0	S	0	9	0
	Л	239	1863	1196	301	363	3	0	2	0
1	В	239	Total	С	Ν	0	S	0	0	0
	D	239	1855	1189	301	362	3	0	0	0

• Molecule 2 is an oligosaccharide called beta-D-galactopyranose-(1-4)-2-acetamido-2-deoxy-b eta-D-glucopyranose.



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
2	С	2	Total C N O 26 14 1 11	0	0	0
2	Е	2	Total C N O 26 14 1 11	0	0	0

• Molecule 3 is an oligosaccharide called beta-D-xylopyranose-(1-2)-[alpha-D-mannopyranose-(1-3)]beta-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-3)]2-acetamido-2-deoxy-beta-D-glucopyranose.



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf	Trace		
3	D	6	Total 69	C 39	N 2	O 28	0	0	0

• Molecule 4 is an oligosaccharide called 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-a cetamido-2-deoxy-beta-D-glucopyranose.





Mol	Chain	Residues	Atoms		ZeroOcc	AltConf	Trace		
4	F	2	Total 28	C 16	N 2	0 10	0	0	0

• Molecule 5 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	А	1	Total Ca 1 1	0	0
5	В	1	Total Ca 1 1	0	0

• Molecule 6 is MANGANESE (II) ION (three-letter code: MN) (formula: Mn).

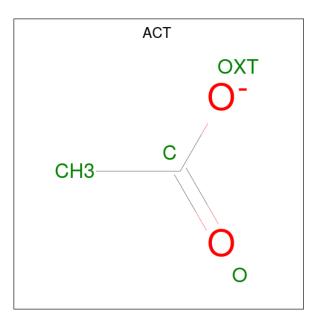
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	А	1	Total Mn 1 1	0	0
6	В	1	Total Mn 1 1	0	0

• Molecule 7 is SODIUM ION (three-letter code: NA) (formula: Na).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
7	А	1	Total Na 1 1	0	0

• Molecule 8 is ACETATE ION (three-letter code: ACT) (formula: $C_2H_3O_2$).





Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
8	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0
8	В	1	$\begin{array}{ccc} \text{Total} & \text{C} & \text{O} \\ 4 & 2 & 2 \end{array}$	0	0

• Molecule 9 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
9	А	195	Total O 195 195	0	0
9	В	188	Total O 188 188	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.

Chain A:	87%	13%	
V1 E2 F11 E12 M15 M15 V33 C30 C30 C30 C33 C33 C33 C33 C33 C33 C	L34 M45 M45 M46 M46 A49 C49 A50 H58 H58 M95 K116 K116	q122 F131 K135 N151 1153 1153 1153 1153 1153 1153 1	D209 V210 R220
E239			
• Molecule 1: Lec	an		
Chain B:	89%	10%	
V1 SS SS N16 N16 D17 L18 D17 L18 D17 L18 D17 L18 D17 L18 D17 L18 D17 L18 D17 L18 D17 L18 D17 D17 D17 D17 D17 D18 D17 D18 D18 D18 D18 D18 D18 D18 D18 D18 D18	G30 154 1555 156 156 166 166 166 165 165 165 16	M95 1122 1123 1123 1124 1124 1124 1124 1124	9 8
• Molecule 2: beta	a-D-galactopyranose-(1-4))-2-acetamido-2-deoxy-beta-D-gl	ucopyranose
Chain C:	50%	50%	i -
NAG1 GAL2			
• Molecule 2: beta	a-D-galactopyranose-(1-4))-2-acetamido-2-deoxy-beta-D-gl	ucopyranose
Chain E:	50%	50%	l.
AAC1 GAL2			
• Moleculo 2. bot	D wylepymenego $(1, 9)$	unha D mannany managa (1.2)lha	to D monno

• Molecule 1: Lectin

• Molecule 3: beta-D-xylopyranose-(1-2)-alpha-D-mannopyranose-(1-3)beta-D-mannopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-[alpha-L-fucopyranose-(1-3)]2-acetamido-2deoxy-beta-D-glucopyranose

Chain D:

100%



• Molecule 4: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose

Chain F:

100%

NAG1 NAG2



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 65	Depositor
Cell constants	134.67Å 134.67Å 81.21Å	Depositor
a, b, c, α , β , γ	90.00° 90.00° 120.00°	Depositor
Resolution (Å)	44.08 - 1.90	Depositor
Resolution (A)	44.08 - 1.90	EDS
% Data completeness	99.1 (44.08-1.90)	Depositor
(in resolution range)	99.1 (44.08-1.90)	EDS
R _{merge}	(Not available)	Depositor
R_{sym}	0.07	Depositor
$< I/\sigma(I) > 1$	$4.12 (at 1.91 \text{\AA})$	Xtriage
Refinement program	PHENIX (1.11_2567: ???)	Depositor
R, R_{free}	0.219 , 0.255	Depositor
II, IIfree	0.219 , 0.254	DCC
R_{free} test set	3297 reflections $(5.06%)$	wwPDB-VP
Wilson B-factor $(Å^2)$	23.5	Xtriage
Anisotropy	0.612	Xtriage
Bulk solvent $k_{sol}(e/Å^3)$, $B_{sol}(Å^2)$	0.35 , 36.2	EDS
L-test for twinning ²	$< L > = 0.39, < L^2 > = 0.22$	Xtriage
Estimated twinning fraction	0.086 for h,-h-k,-l	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	4263	wwPDB-VP
Average B, all atoms $(Å^2)$	32.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: The largest off-origin peak in the Patterson function is 3.57% of the height of the origin peak. No significant pseudotranslation is detected.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.



¹Intensities estimated from amplitudes.

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: GAL, XYP, MAN, ACT, NAG, FUC, BMA, CA, MN, NA

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	
	Unam	RMSZ	# Z > 5	RMSZ	# Z > 5
1	А	0.37	0/1920	0.59	0/2627
1	В	0.36	0/1906	0.55	0/2607
All	All	0.36	0/3826	0.57	0/5234

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	А	1863	0	1808	21	0
1	В	1855	0	1792	15	0
2	С	26	0	24	1	0
2	Е	26	0	24	0	0
3	D	69	0	51	0	0
4	F	28	0	25	0	0
5	А	1	0	0	0	0
5	В	1	0	0	0	0
6	А	1	0	0	0	0
6	В	1	0	0	0	0
7	А	1	0	0	0	0

Continued on next page...



001000	Continuacia fronte precious page						
Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes	
8	В	8	0	6	0	0	
9	А	195	0	0	3	0	
9	В	188	0	0	0	0	
All	All	4263	0	3730	34	0	

Continued from previous page...

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 34 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:A:122:GLN:HB3	1:A:205:PRO:HD3	1.80	0.62
1:B:122:GLN:HB3	1:B:205:PRO:HD3	1.81	0.61
1:A:135:TRP:HB2	1:A:151:ARG:HG2	1.90	0.53
1:A:169:VAL:HB	1:A:182[B]:VAL:HG22	1.92	0.52
1:B:11:PHE:HB3	1:B:26:ILE:HD13	1.94	0.50

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	Perce	ntiles
1	А	239/239~(100%)	234~(98%)	5(2%)	0	100	100
1	В	237/239~(99%)	227~(96%)	9~(4%)	1 (0%)	34	24
All	All	476/478~(100%)	461 (97%)	14 (3%)	1 (0%)	47	38

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	В	16	ASN



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	А	207/205~(101%)	206 (100%)	1 (0%)	88 89		
1	В	205/205~(100%)	204 (100%)	1 (0%)	88 89		
All	All	412/410~(100%)	410 (100%)	2~(0%)	88 89		

All (2) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	А	3	THR
1	В	201	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. There are no such sidechains identified.

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)

12 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	Turne	Chain	Res	Link	Bo	ond leng	ths	B	ond ang	les
IVIOI	Type	Chain	nes	LIIIK	Counts	RMSZ	# Z >2	Counts	RMSZ	# Z >2
2	NAG	С	1	2	$15,\!15,\!15$	1.11	2 (13%)	21,21,21	1.46	4 (19%)
2	GAL	С	2	2	11,11,12	0.61	0	15,15,17	1.03	1 (6%)
3	NAG	D	1	1,3	$14,\!14,\!15$	1.13	3 (21%)	17,19,21	1.07	1 (5%)
3	NAG	D	2	3	$14,\!14,\!15$	1.19	3 (21%)	17,19,21	1.00	0
3	BMA	D	3	3	$11,\!11,\!12$	0.85	0	15,15,17	1.05	1 (6%)
3	XYP	D	4	3	9,9,10	0.62	0	10,12,14	1.40	2 (20%)
3	MAN	D	5	3	11,11,12	0.74	0	15,15,17	0.95	1 (6%)
3	FUC	D	6	3	10,10,11	0.82	0	14,14,16	0.99	1 (7%)
2	NAG	Е	1	2	$15,\!15,\!15$	1.05	1 (6%)	21,21,21	1.52	4 (19%)
2	GAL	Е	2	2	$11,\!11,\!12$	0.81	0	15,15,17	0.89	0
4	NAG	F	1	4,1	$14,\!14,\!15$	1.05	1 (7%)	17,19,21	1.43	1 (5%)
4	NAG	F	2	4	14,14,15	1.02	2 (14%)	17,19,21	1.94	4 (23%)

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	NAG	С	1	2	-	0/6/26/26	0/1/1/1
2	GAL	С	2	2	-	0/2/19/22	0/1/1/1
3	NAG	D	1	1,3	-	0/6/23/26	0/1/1/1
3	NAG	D	2	3	-	1/6/23/26	0/1/1/1
3	BMA	D	3	3	-	0/2/19/22	0/1/1/1
3	XYP	D	4	3	-	-	0/1/1/1
3	MAN	D	5	3	-	0/2/19/22	0/1/1/1
3	FUC	D	6	3	-	-	0/1/1/1
2	NAG	Е	1	2	-	0/6/26/26	0/1/1/1
2	GAL	Е	2	2	-	0/2/19/22	0/1/1/1
4	NAG	F	1	4,1	_	0/6/23/26	0/1/1/1
4	NAG	F	2	4	_	2/6/23/26	0/1/1/1

The worst 5 of 12 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	С	1	NAG	C2-N2	-2.67	1.41	1.45
2	С	1	NAG	C7-N2	2.65	1.43	1.34
4	F	1	NAG	C7-N2	2.56	1.43	1.34
3	D	2	NAG	C7-N2	2.45	1.42	1.34
2	Е	1	NAG	C7-N2	2.31	1.42	1.34



Mol	Chain	Res	Type	Atoms	Z	$\mathbf{Observed}(^{o})$	$Ideal(^{o})$
4	F	2	NAG	C1-O5-C5	5.06	119.05	112.19
4	F	1	NAG	C1-O5-C5	4.61	118.44	112.19
2	Е	1	NAG	O5-C1-C2	-3.91	105.58	109.52
4	F	2	NAG	C2-N2-C7	-3.84	117.44	122.90
3	D	4	XYP	C4-C3-C2	-3.32	106.97	110.92

The worst 5 of 20 bond angle outliers are listed below:

There are no chirality outliers.

All (3) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	F	2	NAG	O5-C5-C6-O6
4	F	2	NAG	C4-C5-C6-O6
3	D	2	NAG	C4-C5-C6-O6

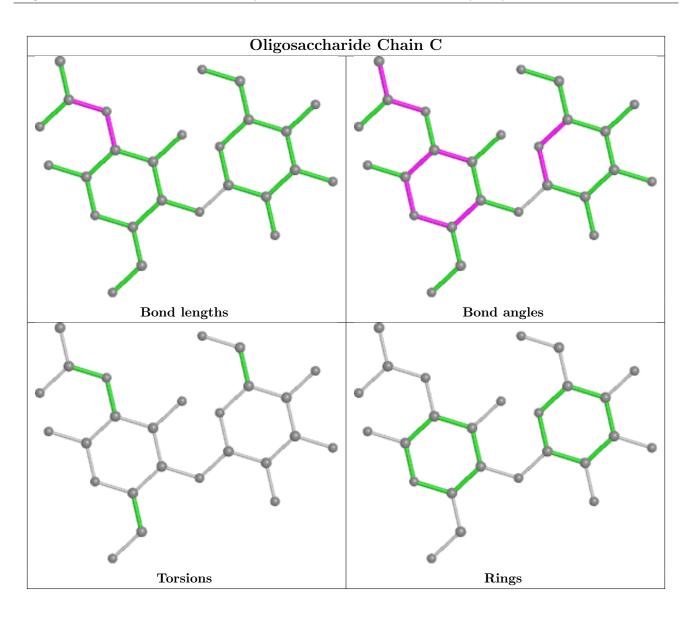
There are no ring outliers.

1 monomer is involved in 1 short contact:

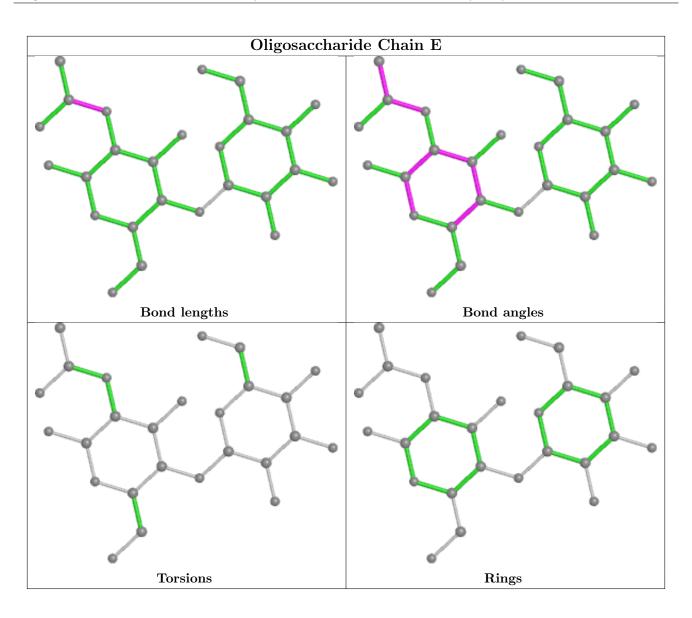
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	\mathbf{C}	2	GAL	1	0

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



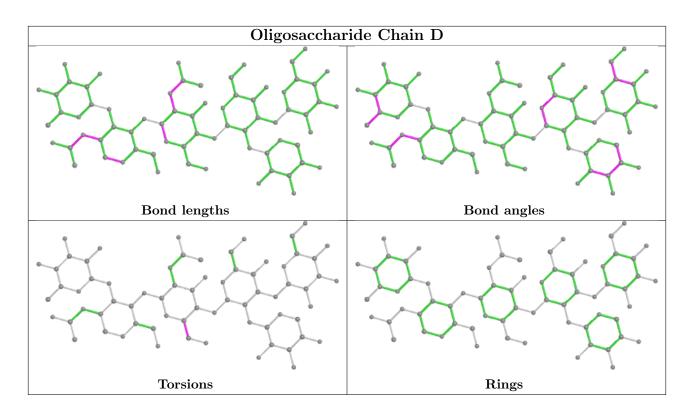






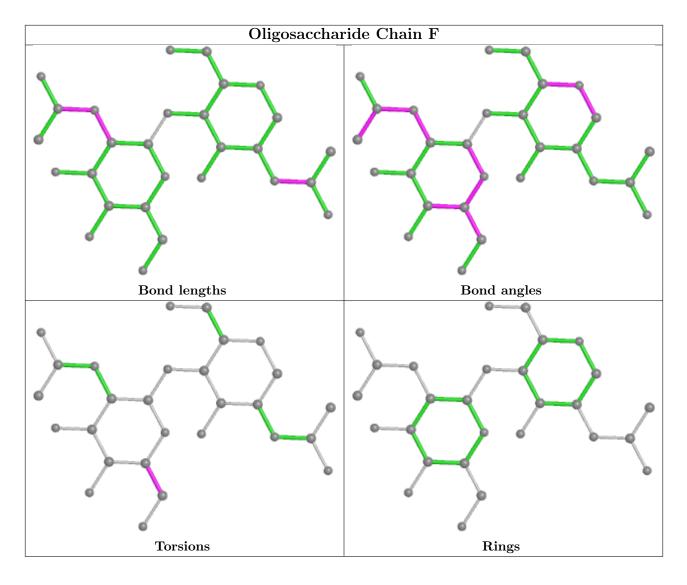












5.6 Ligand geometry (i)

Of 7 ligands modelled in this entry, 5 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with |Z| > 2 is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
IVIOI	Type	Unam	nes		Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z >2
8	ACT	В	308	-	3,3,3	0.70	0	$3,\!3,\!3$	1.02	0
8	ACT	В	307	-	3,3,3	0.79	0	$3,\!3,\!3$	1.21	0



There are no bond length outliers. There are no bond angle outliers. There are no chirality outliers. There are no torsion outliers. There are no ring outliers. No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.



6 Fit of model and data (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, 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	$\langle RSRZ \rangle$	#RSRZ>2	$OWAB(Å^2)$	Q<0.9
1	А	239/239~(100%)	0.09	0 100 100	15, 27, 48, 61	0
1	В	239/239~(100%)	0.31	6 (2%) 57 60	16, 29, 64, 87	0
All	All	478/478 (100%)	0.20	6 (1%) 77 79	15, 27, 58, 87	0

The worst 5 of 6 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	В	62	MET	5.5
1	В	65	GLY	2.8
1	В	239	GLU	2.7
1	В	64	THR	2.7
1	В	60	TRP	2.4

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	$\mathbf{B} ext{-factors}(\mathrm{\AA}^2)$	Q<0.9
4	NAG	F	2	14/15	0.61	0.28	$69,\!78,\!83,\!89$	0
4	NAG	F	1	14/15	0.74	0.16	49,58,69,79	0
3	FUC	D	6	10/11	0.88	0.10	27,35,38,39	0
3	XYP	D	4	9/10	0.89	0.10	37,44,55,57	0
2	NAG	С	1	15/15	0.91	0.12	24,33,43,50	0

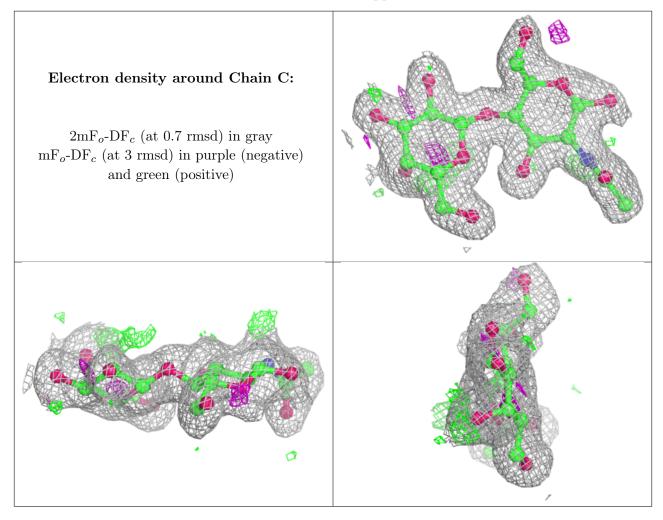
Continued on next page...



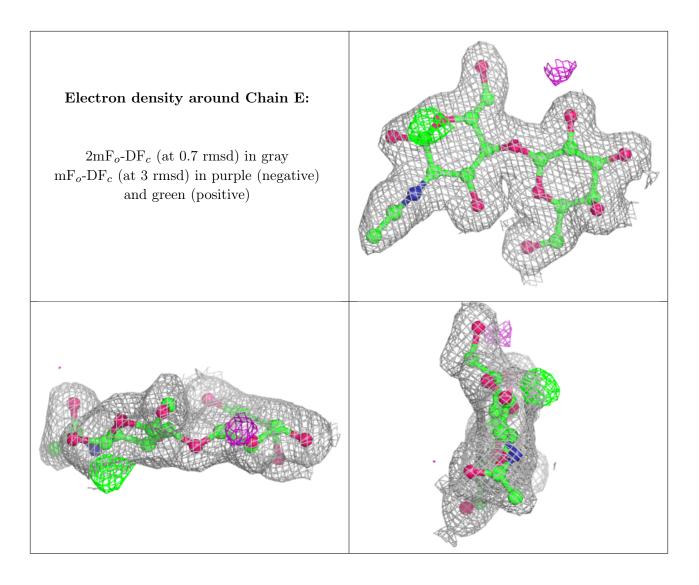
Mol	Type	Chain	Res	Atoms	RSCC	RSR	$\operatorname{B-factors}(\operatorname{\AA}^2)$	$Q{<}0.9$
3	NAG	D	1	14/15	0.91	0.11	24,32,37,39	0
3	MAN	D	5	11/12	0.92	0.12	32,37,42,42	0
2	GAL	С	2	11/12	0.92	0.12	17,22,24,25	0
3	BMA	D	3	11/12	0.95	0.08	28,33,38,42	0
3	NAG	D	2	14/15	0.95	0.11	26,33,43,43	0
2	GAL	Е	2	11/12	0.96	0.11	15,19,24,24	0
2	NAG	Е	1	15/15	0.97	0.10	20,26,35,44	0

Continued from previous page...

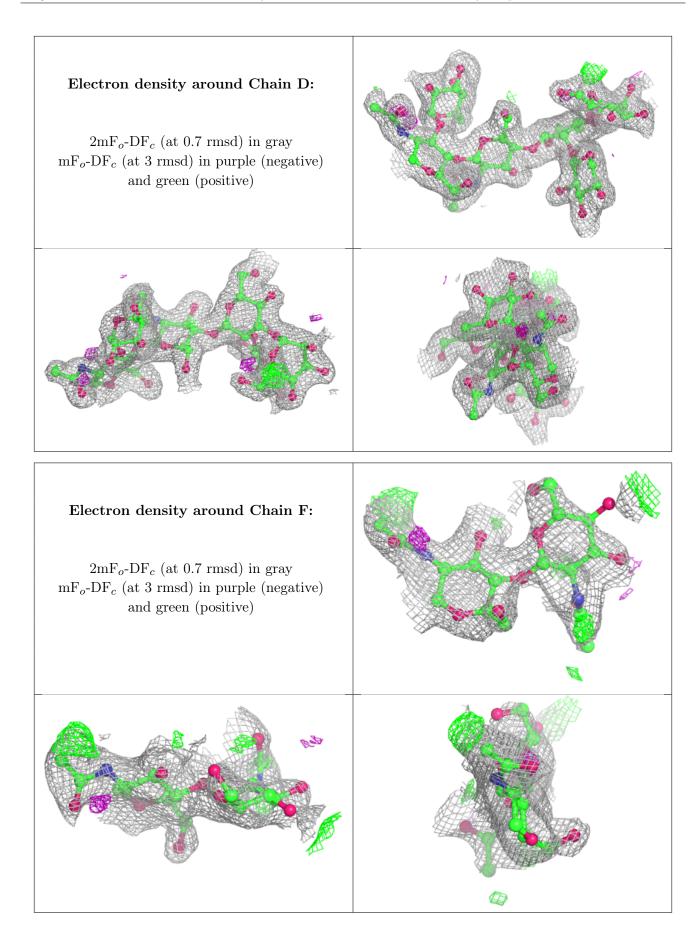
The following is a graphical depiction of the model fit to experimental electron density for oligosaccharide. Each fit is shown from different orientation to approximate a three-dimensional view.













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
8	ACT	В	307	4/4	0.60	0.42	$37,\!44,\!44,\!47$	0
8	ACT	В	308	4/4	0.79	0.23	35,36,42,45	0
7	NA	А	311	1/1	0.97	0.15	22,22,22,22	0
5	CA	А	309	1/1	0.97	0.16	20,20,20,20	0
6	MN	А	310	1/1	0.97	0.14	21,21,21,21	0
6	MN	В	306	1/1	0.99	0.16	20,20,20,20	0
5	CA	В	305	1/1	0.99	0.13	$15,\!15,\!15,\!15$	0

6.5 Other polymers (i)

There are no such residues in this entry.

