WORLDWIDE PDB
PROTEIN DATA BANK

Full wwPDB X-ray Structure Validation Report ⓘ

Jan 8, 2024 – 06:37 am GMT

PDB ID	:	5M62
Title	:	Structure of the Mus musclus Langerin carbohydrate recognition domain in complex with glucose
Authors	:	Loll, B.; Aretz, J.; Rademacher, C.; Wahl, M.C.
Deposited on	:	2016-10-24
Resolution	:	1.70 Å(reported)

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

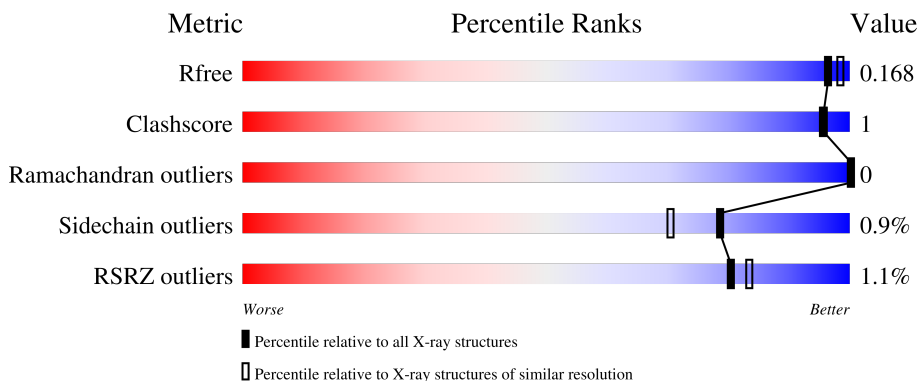|		
MolProbity	:	4.02b-467
Mogul	:	1.8.4, CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance ⓘ

The following experimental techniques were used to determine the structure:
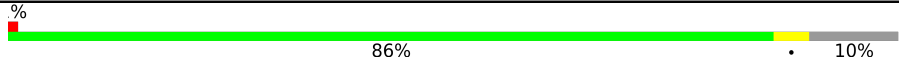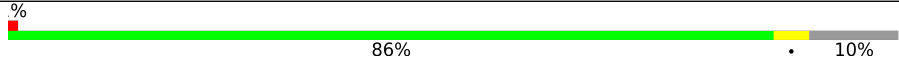*X-RAY DIFFRACTION*

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	Percentile Ranks	Value
Rfree		0.168
Clashscore		1
Ramachandran outliers		0
Sidechain outliers		0.9%
RSRZ outliers		1.1%

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	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	151	% 86% • 10%
1	B	151	% 86% • 10%

2 Entry composition ⓘ

There are 7 unique types of molecules in this entry. The entry contains 2722 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 C-type lectin domain family 4 member K.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	136	Total	C	N	O	S	0	7	0
			1167	744	206	211	6			
1	B	136	Total	C	N	O	S	0	7	0
			1176	751	208	211	6			

There are 28 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	191	MET	-	initiating methionine	UNP Q8VBX4
A	192	ALA	-	expression tag	UNP Q8VBX4
A	193	GLY	-	expression tag	UNP Q8VBX4
A	308	SER	CYS	engineered mutation	UNP Q8VBX4
A	332	GLY	-	expression tag	UNP Q8VBX4
A	333	THR	-	expression tag	UNP Q8VBX4
A	334	TRP	-	expression tag	UNP Q8VBX4
A	335	SER	-	expression tag	UNP Q8VBX4
A	336	HIS	-	expression tag	UNP Q8VBX4
A	337	PRO	-	expression tag	UNP Q8VBX4
A	338	GLN	-	expression tag	UNP Q8VBX4
A	339	PHE	-	expression tag	UNP Q8VBX4
A	340	GLU	-	expression tag	UNP Q8VBX4
A	341	LYS	-	expression tag	UNP Q8VBX4
B	191	MET	-	initiating methionine	UNP Q8VBX4
B	192	ALA	-	expression tag	UNP Q8VBX4
B	193	GLY	-	expression tag	UNP Q8VBX4
B	308	SER	CYS	engineered mutation	UNP Q8VBX4
B	332	GLY	-	expression tag	UNP Q8VBX4
B	333	THR	-	expression tag	UNP Q8VBX4
B	334	TRP	-	expression tag	UNP Q8VBX4
B	335	SER	-	expression tag	UNP Q8VBX4
B	336	HIS	-	expression tag	UNP Q8VBX4
B	337	PRO	-	expression tag	UNP Q8VBX4
B	338	GLN	-	expression tag	UNP Q8VBX4

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Chain	Residue	Modelled	Actual	Comment	Reference
B	339	PHE	-	expression tag	UNP Q8VBX4
B	340	GLU	-	expression tag	UNP Q8VBX4
B	341	LYS	-	expression tag	UNP Q8VBX4

- Molecule 2 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Ca 1 1	0	0
2	B	1	Total Ca 1 1	0	0

- Molecule 3 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).
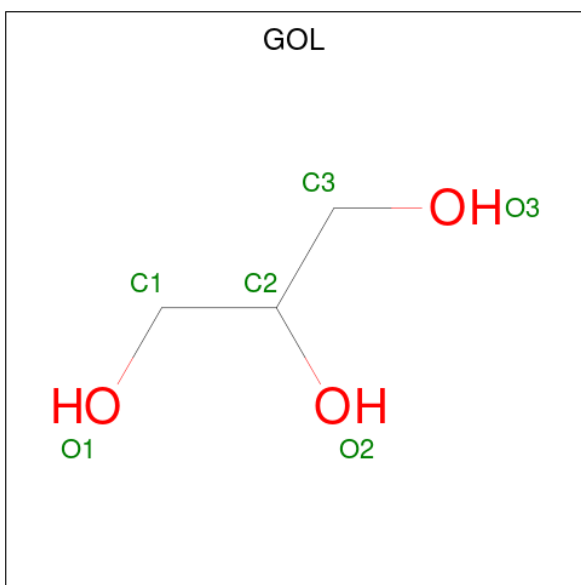
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0
3	A	1	Total C O 6 3 3	0	0

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

- Molecule 4 is HEXAETHYLENE GLYCOL (three-letter code: P6G) (formula: $C_{12}H_{26}O_7$).
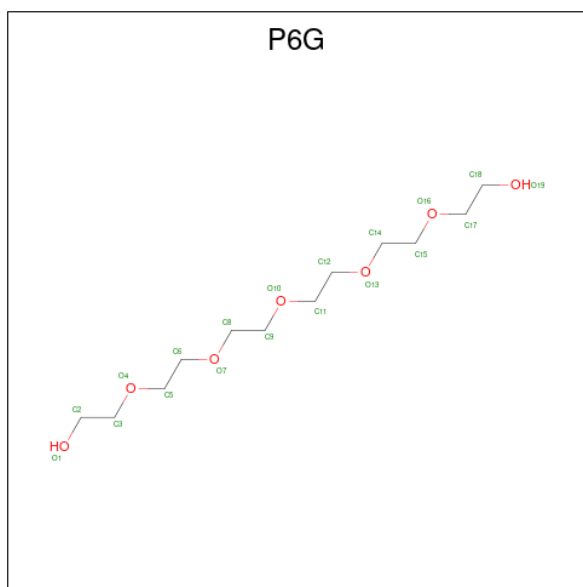
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	A	1	Total 7	C 4	O 3	0	0
4	B	1	Total 10	C 6	O 4	0	0

- Molecule 5 is beta-D-glucopyranose (three-letter code: BGC) (formula: $C_6H_{12}O_6$).
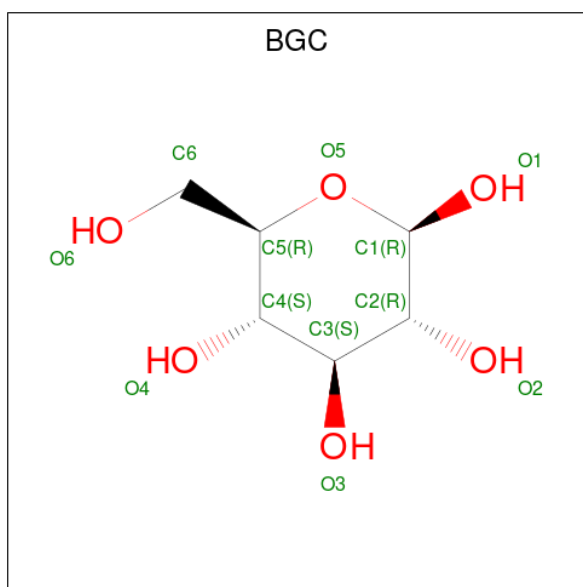
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total 12	C 6	O 6	0	0
5	B	1	Total 12	C 6	O 6	0	1

- Molecule 6 is alpha-D-glucopyranose (three-letter code: GLC) (formula: $C_6H_{12}O_6$).
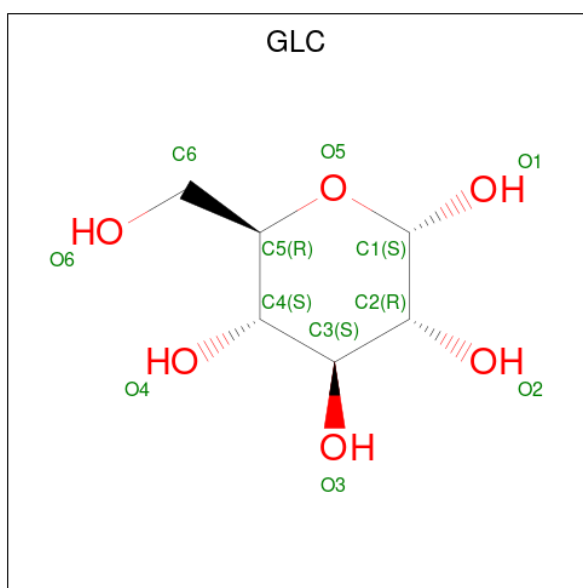
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
6	B	1	Total 12	C 6	O 6	0	1

- Molecule 7 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
7	A	136	Total 136	O 136	0	0
7	B	140	Total 140	O 140	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: C-type lectin domain family 4 member K

Chain A:

• Molecule 1: C-type lectin domain family 4 member K

Chain B:
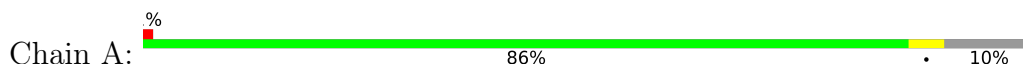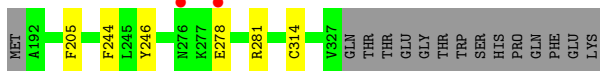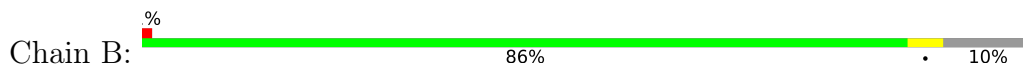
4 Data and refinement statistics ⓘ

Property	Value	Source
Space group	I 2 3	Depositor
Cell constants a, b, c, α, β, γ	144.42Å 144.42Å 144.42Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	45.67 – 1.70 45.67 – 1.70	Depositor EDS
% Data completeness (in resolution range)	100.0 (45.67-1.70) 99.9 (45.67-1.70)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.11	Depositor
$< I/\sigma(I) >$ [1]	2.71 (at 1.70Å)	Xtriage
Refinement program	REFMAC 5.8.0155	Depositor
R, R_{free}	0.144 , 0.164 0.157 , 0.168	Depositor DCC
R_{free} test set	2593 reflections (4.72%)	wwPDB-VP
Wilson B-factor (Å^2)	29.1	Xtriage
Anisotropy	0.000	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.38 , 46.5	EDS
L-test for twinning[2]	$< |L| > = 0.50, < L^2 > = 0.34$	Xtriage
Estimated twinning fraction	0.328 for -l,-k,-h	Xtriage
Reported twinning fraction	0.500 for H, K, L 0.500 for L, -K, H	Depositor
Outliers	0 of 54923 reflections	Xtriage
F_o,F_c correlation	0.98	EDS
Total number of atoms	2722	wwPDB-VP
Average B, all atoms (Å^2)	28.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.38% 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 ⓘ

5.1   Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: GLC, BGC, GOL, P6G, CA

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	0.49	0/1205	0.64	0/1630
1	B	0.49	0/1214	0.66	0/1641
All	All	0.49	0/2419	0.65	0/3271

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	1167	0	1090	3	0
1	B	1176	0	1102	3	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	36	0	48	0	0
3	B	12	0	16	0	0
4	A	7	0	9	0	0
4	B	10	0	13	0	0
5	A	12	0	10	0	0
5	B	12	0	10	0	0
6	B	12	0	9	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	A	136	0	0	0	0
7	B	140	0	0	0	0
All	All	2722	0	2307	5	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 1.

All (5) 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:221:SER:OG	1:B:314[B]:CYS:SG	2.65	0.55
1:B:205:PHE:HB2	1:B:244:PHE:CE1	2.53	0.44
1:A:235:SER:HA	1:A:269:TRP:CE3	2.53	0.43
1:A:298:CYS:SG	1:A:314[B]:CYS:HB3	2.59	0.42
1:B:278[A]:GLU:OE1	1:B:281[A]:ARG:HD3	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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	141/151 (93%)	138 (98%)	3 (2%)	0	100	100
1	B	141/151 (93%)	140 (99%)	1 (1%)	0	100	100
All	All	282/302 (93%)	278 (99%)	4 (1%)	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	123/130 (95%)	122 (99%)	1 (1%)	81	74
1	B	123/130 (95%)	122 (99%)	1 (1%)	81	74
All	All	246/260 (95%)	244 (99%)	2 (1%)	78	74

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

Mol	Chain	Res	Type
1	A	246	TYR
1	B	246	TYR

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)

1 non-standard protein/DNA/RNA residue is 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	$\#|Z| > 2$
6	GLC	B	404[A]	2	12,12,12	1.22	1 (8%)	17,17,17	2.00	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
6	GLC	B	404[A]	2	-	0/2/22/22	0/1/1/1

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	B	404[A]	GLC	O5-C1	2.07	1.48	1.42

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	B	404[A]	GLC	O5-C1-C2	4.77	118.80	110.28
6	B	404[A]	GLC	C1-O5-C5	-3.89	106.32	113.66
6	B	404[A]	GLC	O1-C1-C2	3.12	117.81	109.03
6	B	404[A]	GLC	O1-C1-O5	2.98	119.32	110.38

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates ⓘ

There are no monosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 15 ligands modelled in this entry, 2 are monoatomic - leaving 13 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		
					Counts	RMSZ	#|Z| > 2	Counts	RMSZ	#|Z| > 2
3	GOL	A	405	-	5,5,5	0.43	0	5,5,5	0.81	0
3	GOL	B	403	-	5,5,5	0.32	0	5,5,5	0.31	0
3	GOL	A	403	-	5,5,5	0.22	0	5,5,5	0.42	0
5	BGC	A	409	2	12,12,12	0.49	0	17,17,17	1.90	4 (23%)
3	GOL	B	402	-	5,5,5	0.25	0	5,5,5	0.40	0
3	GOL	A	407	-	5,5,5	0.31	0	5,5,5	0.57	0
4	P6G	A	408	-	6,6,18	0.36	0	5,5,17	0.46	0
3	GOL	A	402	-	5,5,5	0.26	0	5,5,5	0.54	0
4	P6G	B	406	-	9,9,18	0.47	0	8,8,17	0.39	0
6	GLC	B	404[A]	2	12,12,12	1.22	1 (8%)	17,17,17	2.00	4 (23%)
3	GOL	A	406	-	5,5,5	0.33	0	5,5,5	0.26	0
3	GOL	A	404	-	5,5,5	0.34	0	5,5,5	0.48	0
5	BGC	B	405[B]	2	12,12,12	0.45	0	17,17,17	0.91	1 (5%)

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	A	405	-	-	2/4/4/4	-
3	GOL	B	403	-	-	1/4/4/4	-
3	GOL	A	403	-	-	0/4/4/4	-
5	BGC	A	409	2	-	2/2/22/22	0/1/1/1
3	GOL	B	402	-	-	0/4/4/4	-
3	GOL	A	407	-	-	2/4/4/4	-
4	P6G	A	408	-	-	1/4/4/16	-
3	GOL	A	402	-	-	0/4/4/4	-
4	P6G	B	406	-	-	3/7/7/16	-
6	GLC	B	404[A]	2	-	0/2/22/22	0/1/1/1
3	GOL	A	406	-	-	3/4/4/4	-
3	GOL	A	404	-	-	2/4/4/4	-
5	BGC	B	405[B]	2	-	0/2/22/22	0/1/1/1

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	B	404[A]	GLC	O5-C1	2.07	1.48	1.42

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	B	404[A]	GLC	O5-C1-C2	4.77	118.80	110.28
6	B	404[A]	GLC	C1-O5-C5	-3.89	106.32	113.66
5	A	409	BGC	C1-O5-C5	-3.88	106.35	113.66
5	A	409	BGC	O5-C1-C2	-3.48	104.08	110.28
5	A	409	BGC	O5-C5-C6	3.48	115.08	106.44
6	B	404[A]	GLC	O1-C1-C2	3.12	117.81	109.03
6	B	404[A]	GLC	O1-C1-O5	2.98	119.32	110.38
5	B	405[B]	BGC	O4-C4-C3	-2.24	105.17	110.35
5	A	409	BGC	O1-C1-C2	2.20	115.23	109.03

There are no chirality outliers.

All (16) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	404	GOL	O1-C1-C2-C3
3	A	407	GOL	O1-C1-C2-C3
5	A	409	BGC	O5-C5-C6-O6
3	A	405	GOL	C1-C2-C3-O3
3	A	406	GOL	C1-C2-C3-O3
3	B	403	GOL	O1-C1-C2-C3
4	A	408	P6G	O4-C5-C6-O7
3	A	404	GOL	O1-C1-C2-O2
3	A	407	GOL	O1-C1-C2-O2
4	B	406	P6G	O7-C8-C9-O10
3	A	405	GOL	O2-C2-C3-O3
5	A	409	BGC	C4-C5-C6-O6
4	B	406	P6G	C9-C8-O7-C6
4	B	406	P6G	C5-C6-O7-C8
3	A	406	GOL	O2-C2-C3-O3
3	A	406	GOL	O1-C1-C2-O2

There are no ring outliers.

No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and

any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.
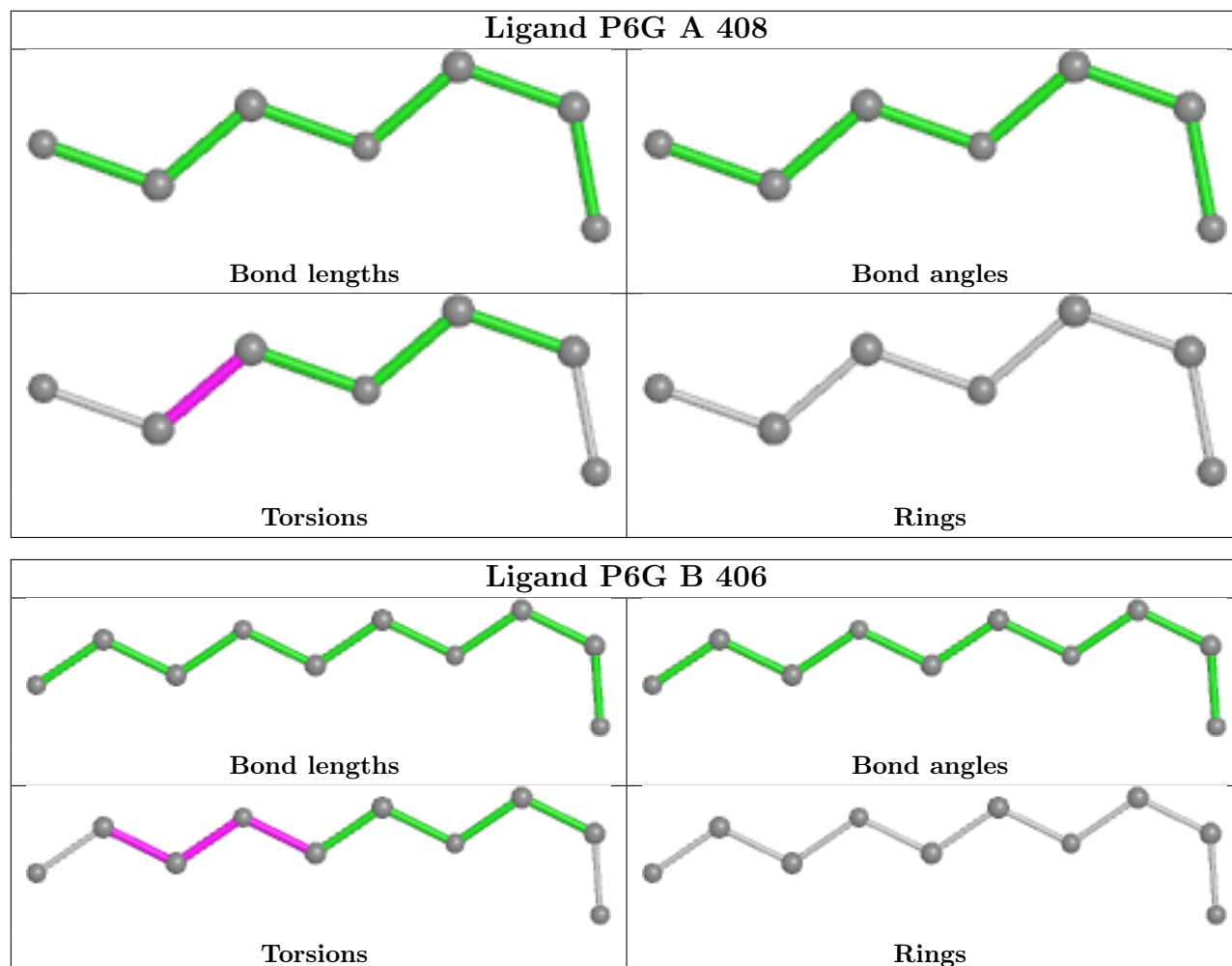
5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

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, 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(Å^2)	Q<0.9
1	A	136/151 (90%)	-0.30	1 (0%)	87	90	21, 26, 40, 47	0
1	B	136/151 (90%)	-0.28	2 (1%)	73	77	21, 26, 39, 45	0
All	All	272/302 (90%)	-0.29	3 (1%)	80	83	21, 26, 39, 47	0

All (3) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	278[A]	GLU	2.4
1	B	276	ASN	2.4
1	A	276	ASN	2.2

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

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
6	GLC	B	404[A]	12/12	0.86	0.14	28,30,31,34	12

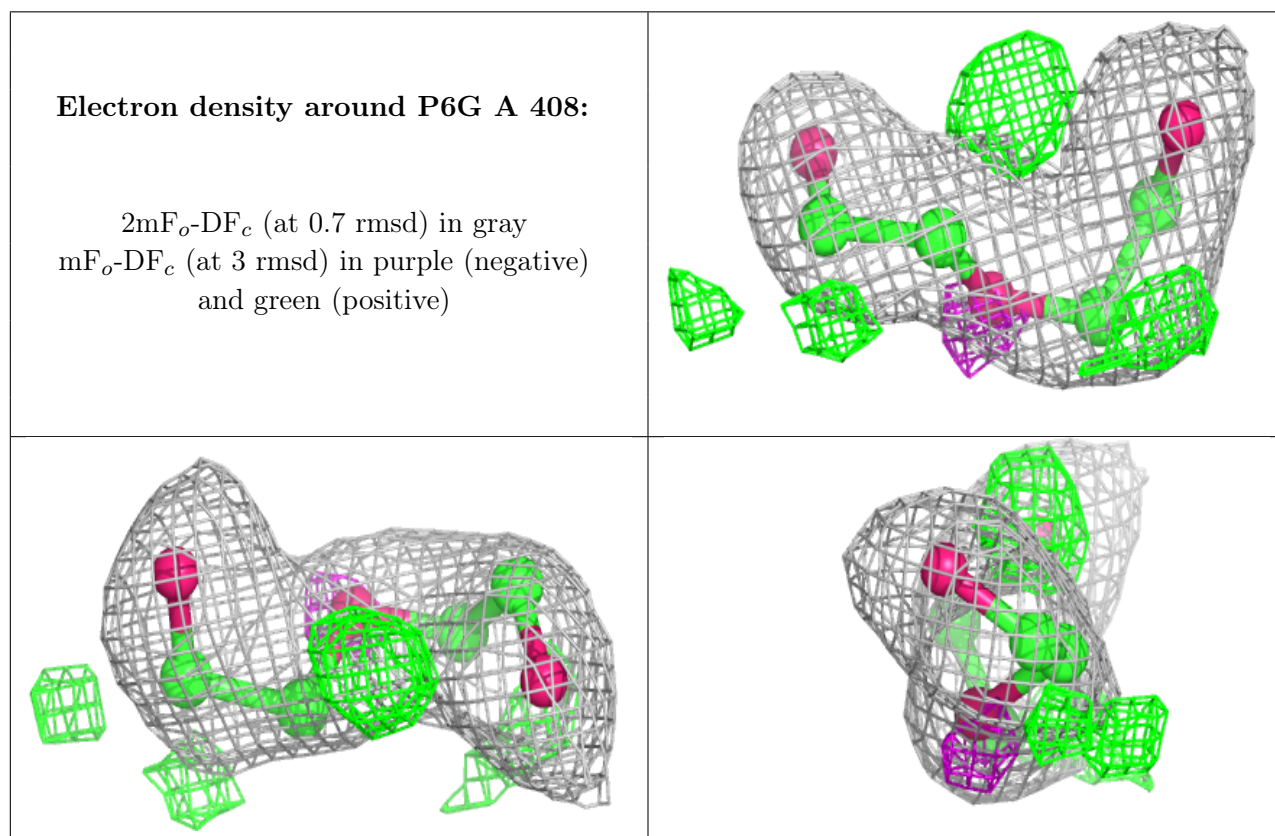## 6.3 Carbohydrates ⓘ

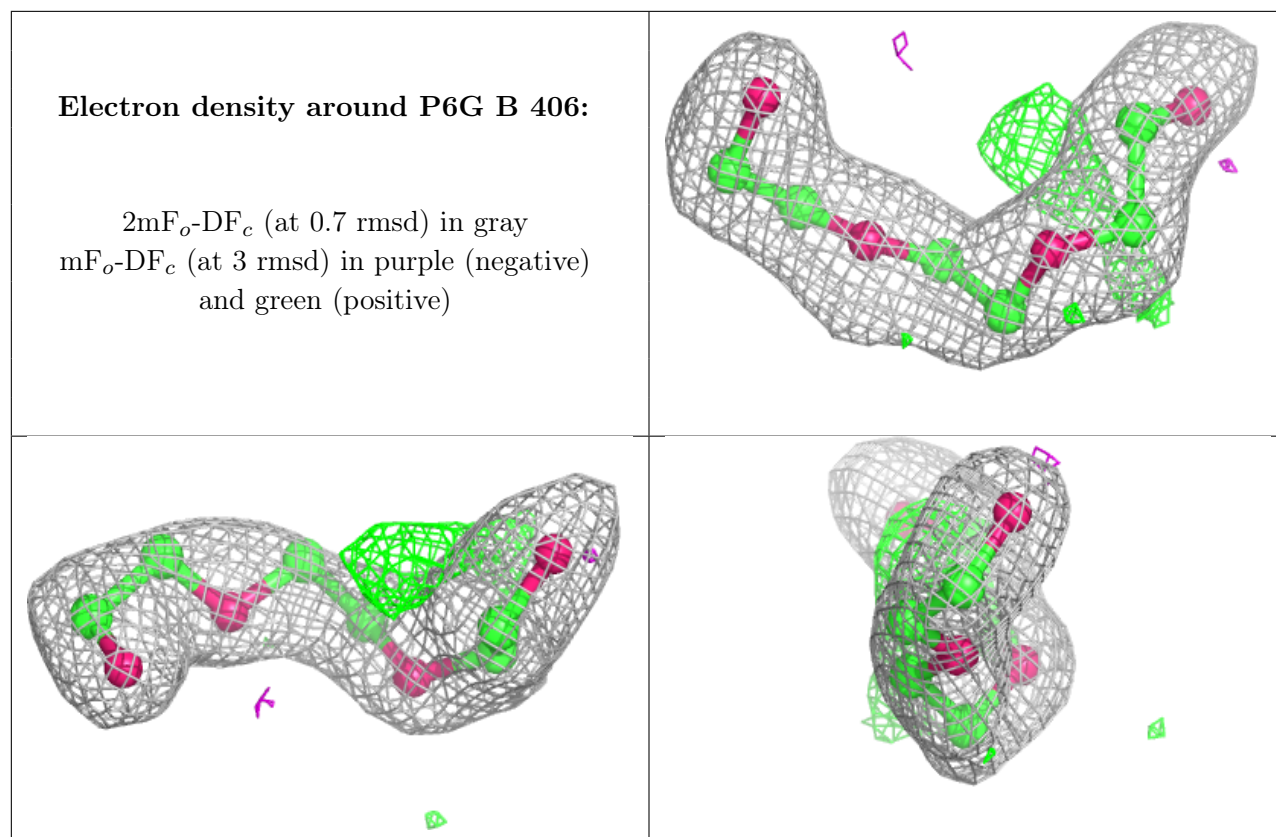There are no monosaccharides in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 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	A	405	6/6	0.80	0.17	31,33,35,38	0
4	P6G	A	408	7/19	0.81	0.15	37,42,47,48	0
5	BGC	A	409	12/12	0.82	0.18	26,32,35,36	0
3	GOL	A	407	6/6	0.83	0.14	46,48,49,49	0
3	GOL	A	406	6/6	0.85	0.17	51,53,53,54	0
3	GOL	B	403	6/6	0.85	0.19	26,29,30,33	0
5	BGC	B	405[B]	12/12	0.85	0.14	24,26,28,29	12
6	GLC	B	404[A]	12/12	0.86	0.14	28,30,31,34	12
3	GOL	A	404	6/6	0.88	0.25	40,43,43,44	0
4	P6G	B	406	10/19	0.90	0.12	37,41,42,43	0
3	GOL	B	402	6/6	0.91	0.15	28,30,31,33	0
3	GOL	A	403	6/6	0.93	0.16	27,30,32,34	0
3	GOL	A	402	6/6	0.94	0.12	28,29,29,31	0
2	CA	B	401	1/1	0.99	0.07	24,24,24,24	0
2	CA	A	401	1/1	0.99	0.07	25,25,25,25	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around P6G A 408:

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 P6G B 406:

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

6.5 Other polymers ⓘ

There are no such residues in this entry.