



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 8, 2026 – 04:34 PM UTC

PDB ID : 1DZG / pdb_00001dzg
Title : N135Q-S380C-ANTITHROMBIN-III
Authors : McCoy, A.J.; Huntington, J.A.; Carrell, R.W.
Deposited on : 2000-02-28
Resolution : 2.80 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 ⓘ 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 ⓘ](#)) were used in the production of this report:

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

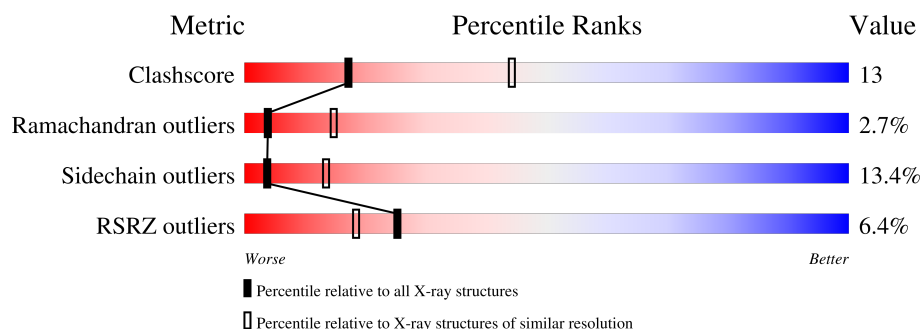
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.80 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))
Clashscore	190562	4276 (2.80-2.80)
Ramachandran outliers	187476	4196 (2.80-2.80)
Sidechain outliers	187428	4198 (2.80-2.80)
RSRZ outliers	180081	3869 (2.80-2.80)

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 $\leq 5\%$. 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	I	432	
2	L	432	
3	A	2	
3	B	2	
3	C	2	

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 6593 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 ANTITHROMBIN-III.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	I	422	Total	C	N	O	S	0	0	0
			3271	2088	549	616	18			

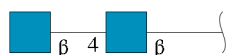
There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
I	135	GLN	ASN	engineered mutation	UNP P01008
I	380	CYS	SER	engineered mutation	UNP P01008

- Molecule 2 is a protein called ANTITHROMBIN-III.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	L	409	Total	C	N	O	S	0	0	0
			3180	2031	525	606	18			

- Molecule 3 is an oligosaccharide called 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose.



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
3	A	2	Total	C	N	O	0	0	0
			28	16	2	10			
3	B	2	Total	C	N	O	0	0	0
			28	16	2	10			
3	C	2	Total	C	N	O	0	0	0
			28	16	2	10			

- Molecule 4 is 2-acetamido-2-deoxy-beta-D-glucopyranose (CCD ID: NAG) (formula: C₈H₁₅NO₆).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
4	I	1	Total	C	N	O	0	0
			14	8	1	5		
4	I	1	Total	C	N	O	0	0
			14	8	1	5		
4	L	1	Total	C	N	O	0	0
			14	8	1	5		

- Molecule 5 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



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

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

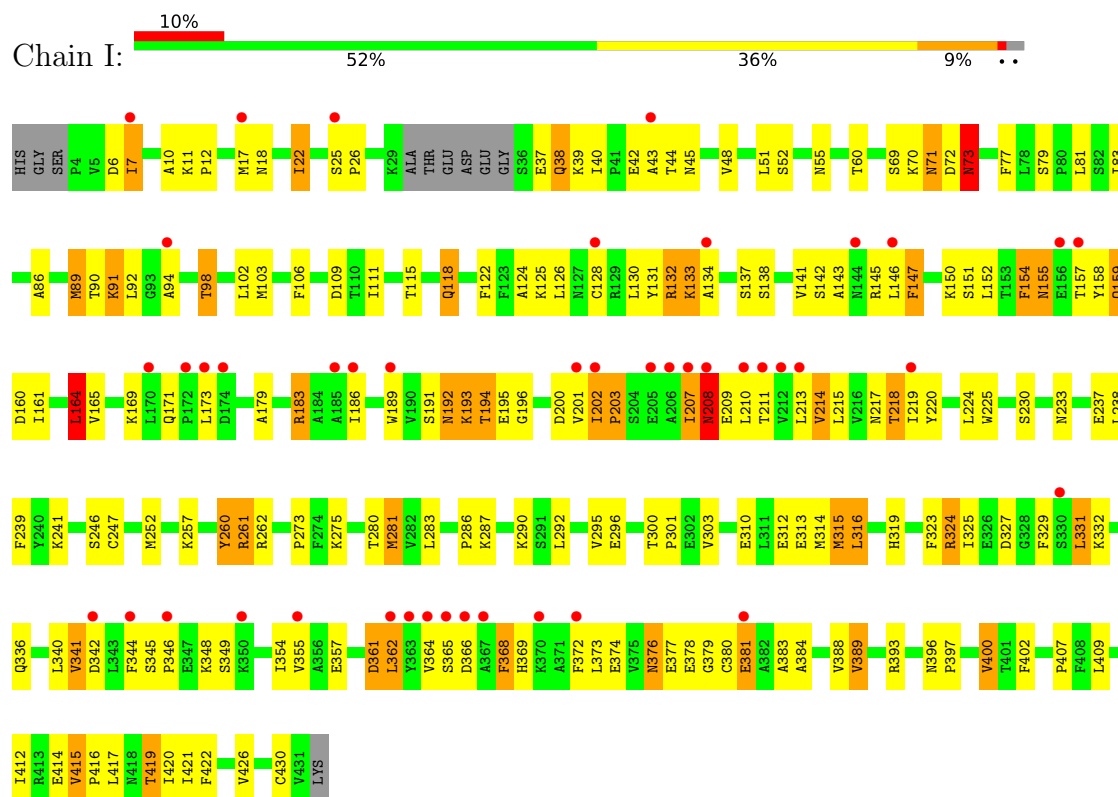
- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	I	2	Total	O	0	0
			2	2		
6	L	2	Total	O	0	0
			2	2		

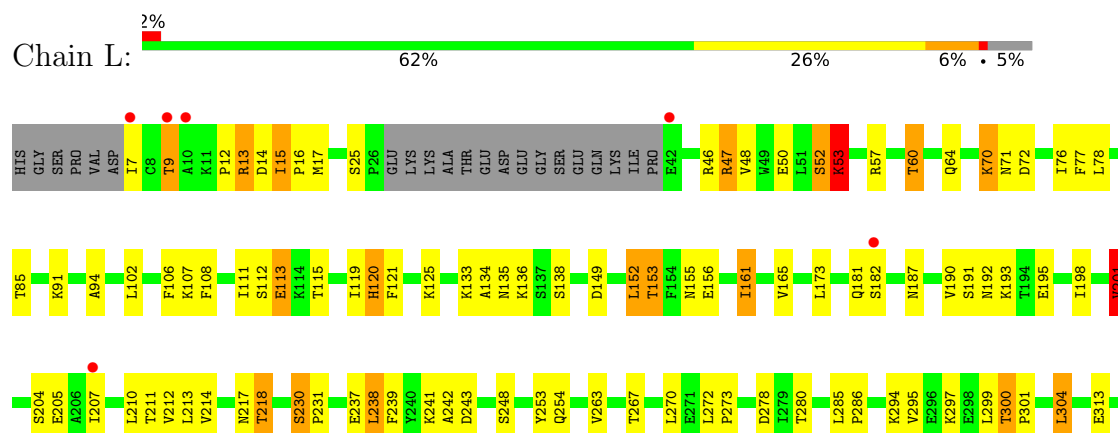
3 Residue-property plots [i](#)

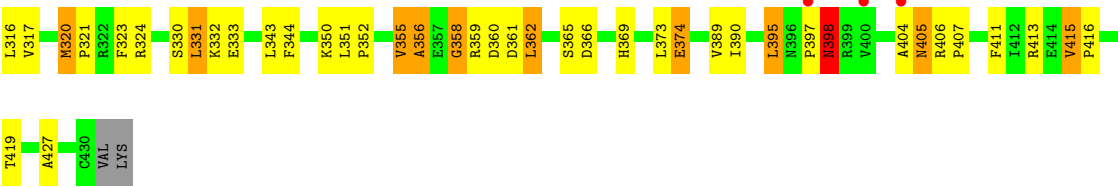
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: ANTITHROMBIN-III



• Molecule 2: ANTITHROMBIN-III





● Molecule 3: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose



● Molecule 3: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose



● Molecule 3: 2-acetamido-2-deoxy-beta-D-glucopyranose-(1-4)-2-acetamido-2-deoxy-beta-D-glucopyranose



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	68.61Å 99.54Å 88.69Å 90.00° 104.79° 90.00°	Depositor
Resolution (Å)	20.00 – 2.80 20.00 – 2.80	Depositor EDS
% Data completeness (in resolution range)	98.3 (20.00-2.80) 97.6 (20.00-2.80)	Depositor EDS
R_{merge}	0.13	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.66 (at 2.80Å)	Xtriage
Refinement program	REFMAC	Depositor
R, R_{free}	0.228 , 0.297 0.243 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	72.6	Xtriage
Anisotropy	0.336	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 60.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	6593	wwPDB-VP
Average B, all atoms (Å ²)	78.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.70% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: GOL, 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	I	0.61	0/3337	1.53	58/4524 (1.3%)
2	L	0.58	0/3245	1.40	29/4398 (0.7%)
All	All	0.60	0/6582	1.47	87/8922 (1.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	L	0	1

There are no bond length outliers.

All (87) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	L	405	ASN	N-CA-C	9.48	124.58	109.79
1	I	38	GLN	N-CA-C	8.32	122.47	110.24
1	I	319	HIS	CA-CB-CG	8.01	121.81	113.80
1	I	366	ASP	CA-CB-CG	7.93	120.53	112.60
1	I	365	SER	N-CA-C	-7.58	104.16	113.41
1	I	72	ASP	N-CA-C	7.53	120.14	111.11
1	I	301	PRO	CA-C-N	7.36	130.37	120.65
1	I	301	PRO	C-N-CA	7.36	130.37	120.65
2	L	15	ILE	CA-C-O	7.33	123.48	119.15
1	I	6	ASP	N-CA-CB	6.65	120.71	110.60
1	I	331	LEU	N-CA-C	6.64	119.52	111.82
2	L	205	GLU	N-CA-C	6.63	122.02	111.81
1	I	71	ASN	CA-CB-CG	6.50	119.10	112.60
2	L	195	GLU	N-CA-C	6.39	120.66	112.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	155	ASN	OD1-CG-ND2	6.37	128.97	122.60
2	L	187	ASN	CA-CB-CG	6.25	118.85	112.60
1	I	7	ILE	N-CA-C	6.23	120.77	112.04
2	L	135	ASN	CA-CB-CG	6.21	118.81	112.60
1	I	402	PHE	CA-CB-CG	6.20	120.00	113.80
1	I	341	VAL	CB-CA-C	-6.19	105.36	111.30
1	I	208	ASN	CA-CB-CG	6.12	118.72	112.60
1	I	327	ASP	CA-CB-CG	6.09	118.69	112.60
1	I	150	LYS	CA-C-N	6.07	130.31	120.60
1	I	150	LYS	C-N-CA	6.07	130.31	120.60
1	I	260	TYR	CA-CB-CG	6.06	124.81	113.90
2	L	323	PHE	N-CA-C	6.01	118.10	109.14
2	L	161	ILE	N-CA-C	-5.99	105.01	110.82
2	L	134	ALA	N-CA-C	-5.97	106.54	113.88
1	I	161	ILE	N-CA-C	5.87	116.05	110.53
1	I	192	ASN	CA-CB-CG	5.85	118.45	112.60
1	I	329	PHE	N-CA-C	5.84	117.93	108.41
1	I	118	GLN	N-CA-C	5.83	118.38	111.33
2	L	397	PRO	N-CA-C	5.82	120.33	111.19
1	I	194	THR	N-CA-C	5.78	119.09	112.97
1	I	122	PHE	CA-CB-CG	5.75	119.56	113.80
2	L	192	ASN	OD1-CG-ND2	5.74	128.34	122.60
2	L	15	ILE	N-CA-C	5.73	113.55	107.76
2	L	152	LEU	N-CA-C	5.72	117.44	110.41
1	I	324	ARG	CD-NE-CZ	5.71	132.39	124.40
1	I	389	VAL	N-CA-CB	5.69	119.04	111.64
2	L	411	PHE	CA-CB-CG	5.58	119.38	113.80
2	L	398	ASN	CA-CB-CG	5.58	118.18	112.60
1	I	17	MET	CA-C-N	5.57	128.22	120.65
1	I	17	MET	C-N-CA	5.57	128.22	120.65
2	L	212	VAL	CB-CA-C	-5.53	105.28	111.80
1	I	203	PRO	N-CA-C	5.53	123.85	112.47
2	L	278	ASP	CA-CB-CG	5.52	118.12	112.60
2	L	238	LEU	N-CA-CB	5.45	119.15	110.16
1	I	98	THR	N-CA-C	-5.41	105.07	110.97
2	L	297	LYS	N-CA-C	5.39	117.91	111.71
1	I	183	ARG	N-CA-C	-5.38	106.85	113.41
1	I	109	ASP	CA-CB-CG	5.34	117.94	112.60
1	I	106	PHE	CA-CB-CG	-5.32	108.48	113.80
1	I	325	ILE	N-CA-CB	5.32	118.48	111.25
2	L	106	PHE	CA-C-N	5.30	131.67	121.54
2	L	106	PHE	C-N-CA	5.30	131.67	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	L	108	PHE	CA-CB-CG	5.30	119.10	113.80
1	I	346	PRO	CA-C-N	5.29	128.36	120.31
1	I	346	PRO	C-N-CA	5.29	128.36	120.31
1	I	361	ASP	N-CA-C	-5.29	106.72	114.39
1	I	261	ARG	N-CA-C	5.27	116.97	108.32
1	I	368	PHE	N-CA-C	5.27	118.32	109.95
1	I	90	THR	CA-C-N	5.22	127.80	120.28
1	I	90	THR	C-N-CA	5.22	127.80	120.28
1	I	154	PHE	CA-CB-CG	-5.22	108.58	113.80
1	I	18	ASN	N-CA-C	5.18	116.94	109.48
2	L	395	LEU	N-CA-C	5.16	116.98	110.33
1	I	344	PHE	CA-CB-CG	-5.14	108.66	113.80
1	I	164	LEU	CA-C-N	5.13	127.48	120.46
1	I	164	LEU	C-N-CA	5.13	127.48	120.46
1	I	17	MET	N-CA-C	5.11	116.75	109.14
1	I	131	TYR	CB-CA-C	-5.11	103.21	111.28
1	I	70	LYS	N-CA-C	5.09	117.87	109.72
1	I	147	PHE	CA-CB-CG	5.09	118.89	113.80
1	I	329	PHE	CA-C-O	5.09	125.74	120.30
1	I	73	ASN	CA-C-N	5.08	130.16	122.99
1	I	73	ASN	C-N-CA	5.08	130.16	122.99
2	L	53	LYS	CA-C-N	5.07	127.03	120.44
2	L	53	LYS	C-N-CA	5.07	127.03	120.44
1	I	342	ASP	CA-C-N	5.07	127.57	120.28
1	I	342	ASP	C-N-CA	5.07	127.57	120.28
1	I	196	GLY	CA-C-N	5.02	127.27	120.44
1	I	196	GLY	C-N-CA	5.02	127.27	120.44
2	L	230	SER	CA-C-N	5.01	124.50	119.19
2	L	230	SER	C-N-CA	5.01	124.50	119.19
2	L	48	VAL	CA-C-N	5.00	126.98	120.28
2	L	48	VAL	C-N-CA	5.00	126.98	120.28

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	L	300	THR	Mainchain

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	I	3271	0	3182	96	0
2	L	3180	0	3094	67	0
3	A	28	0	25	0	0
3	B	28	0	25	1	0
3	C	28	0	25	1	0
4	I	28	0	26	0	0
4	L	14	0	13	0	0
5	I	6	0	8	2	0
5	L	6	0	8	1	0
6	I	2	0	0	0	0
6	L	2	0	0	0	0
All	All	6593	0	6406	164	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 13.

All (164) 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:I:81:LEU:HD21	1:I:130:LEU:HD21	1.58	0.86
1:I:378:GLU:HG3	1:I:384:ALA:HB3	1.64	0.79
1:I:324:ARG:HE	1:I:372:PHE:HZ	1.36	0.74
2:L:214:VAL:HG22	2:L:389:VAL:HG23	1.70	0.73
1:I:388:VAL:HG22	2:L:317:VAL:HB	1.72	0.72
1:I:91:LYS:HB2	1:I:102:LEU:HD13	1.70	0.72
2:L:13:ARG:HH11	2:L:13:ARG:HB2	1.58	0.69
2:L:17:MET:HE1	2:L:121:PHE:HA	1.73	0.69
2:L:111:ILE:HD12	2:L:119:ILE:HD12	1.75	0.68
2:L:331:LEU:HD21	2:L:369:HIS:HB2	1.76	0.67
1:I:281:MET:HE3	1:I:283:LEU:HD21	1.77	0.66
2:L:300:THR:HB	2:L:301:PRO:HD2	1.79	0.63
1:I:45:ASN:HD21	1:I:125:LYS:HD3	1.64	0.62
2:L:17:MET:SD	2:L:120:HIS:HB2	2.39	0.62
1:I:415:VAL:HB	1:I:416:PRO:HD3	1.80	0.62
1:I:7:ILE:HD11	1:I:132:ARG:HE	1.63	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:239:PHE:HE2	2:L:404:ALA:HB1	1.65	0.61
1:I:217:ASN:O	1:I:218:THR:HB	1.99	0.61
1:I:261:ARG:HG2	1:I:310:GLU:HB3	1.83	0.60
2:L:60:THR:HG21	2:L:300:THR:HA	1.82	0.60
1:I:126:LEU:HD11	1:I:419:THR:HG21	1.85	0.59
2:L:85:THR:HB	2:L:217:ASN:ND2	2.17	0.59
1:I:186:ILE:HG21	1:I:202:ILE:HD11	1.85	0.58
1:I:361:ASP:O	1:I:362:LEU:C	2.46	0.58
2:L:47:ARG:HD2	2:L:112:SER:HB2	1.85	0.58
2:L:415:VAL:HB	2:L:416:PRO:HD3	1.85	0.58
1:I:164:LEU:HD23	1:I:165:VAL:HG23	1.86	0.57
1:I:292:LEU:HD11	1:I:409:LEU:HG	1.85	0.57
1:I:86:ALA:HB1	1:I:215:LEU:HD21	1.87	0.57
1:I:147:PHE:HB2	1:I:214:VAL:HG23	1.87	0.57
1:I:102:LEU:HG	1:I:340:LEU:HD11	1.87	0.56
1:I:315:MET:HE1	1:I:393:ARG:NH2	2.20	0.55
1:I:324:ARG:HG3	1:I:374:GLU:HG3	1.88	0.55
2:L:213:LEU:HB3	2:L:390:ILE:HD12	1.88	0.55
1:I:40:ILE:HG23	1:I:44:THR:HB	1.89	0.55
2:L:153:THR:HB	2:L:356:ALA:HB2	1.88	0.54
1:I:86:ALA:HB2	1:I:217:ASN:HB3	1.89	0.54
2:L:213:LEU:HD23	2:L:390:ILE:HD12	1.89	0.54
2:L:355:VAL:HG13	2:L:362:LEU:HD11	1.89	0.54
2:L:91:LYS:HG3	2:L:102:LEU:HD13	1.89	0.53
2:L:358:GLY:O	2:L:359:ARG:C	2.51	0.53
1:I:257:LYS:HE2	1:I:313:GLU:HB3	1.90	0.53
1:I:273:PRO:HB3	1:I:280:THR:HG22	1.91	0.53
1:I:132:ARG:O	1:I:133:LYS:C	2.51	0.52
1:I:115:THR:HB	1:I:118:GLN:HG3	1.92	0.52
1:I:414:GLU:HB2	1:I:421:ILE:HD11	1.90	0.52
1:I:195:GLU:HG2	1:I:220:TYR:CE2	2.45	0.52
3:C:1:NAG:H62	3:C:2:NAG:C7	2.40	0.52
1:I:316:LEU:HB3	1:I:400:VAL:HG12	1.91	0.52
1:I:281:MET:HE1	1:I:323:PHE:HZ	1.74	0.51
1:I:11:LYS:HB3	1:I:12:PRO:HD2	1.91	0.51
1:I:146:LEU:HG	1:I:213:LEU:HD22	1.92	0.51
2:L:70:LYS:HD3	2:L:76:ILE:HG12	1.93	0.51
2:L:7:ILE:HG22	2:L:9:THR:HG23	1.94	0.50
1:I:45:ASN:HB3	1:I:48:VAL:HB	1.93	0.50
2:L:304:LEU:HD12	5:L:901:GOL:H12	1.95	0.49
1:I:412:ILE:HB	1:I:422:PHE:HB2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:154:PHE:O	1:I:155:ASN:C	2.56	0.48
1:I:252:MET:SD	1:I:377:GLU:HG3	2.52	0.48
1:I:287:LYS:HG3	1:I:290:LYS:H	1.78	0.48
2:L:193:LYS:HB3	2:L:218:THR:HG21	1.94	0.48
2:L:207:ILE:HG23	2:L:211:THR:HG21	1.96	0.48
2:L:190:VAL:HG21	2:L:201:VAL:HG21	1.94	0.48
2:L:355:VAL:CG2	2:L:359:ARG:HB2	2.43	0.48
1:I:195:GLU:HG2	1:I:220:TYR:HE2	1.78	0.48
1:I:345:SER:HB3	1:I:348:LYS:HD2	1.95	0.48
2:L:270:LEU:HD21	2:L:272:LEU:HD21	1.95	0.47
1:I:89:MET:HE3	1:I:215:LEU:HD11	1.96	0.47
1:I:83:ILE:HA	1:I:217:ASN:ND2	2.28	0.47
2:L:253:TYR:O	2:L:254:GLN:HB3	2.14	0.47
1:I:179:ALA:HB1	1:I:208:ASN:HA	1.97	0.47
1:I:207:ILE:HD12	1:I:207:ILE:H	1.80	0.47
1:I:207:ILE:HG23	1:I:211:THR:HG21	1.96	0.47
2:L:191:SER:HA	2:L:198:ILE:O	2.16	0.46
2:L:300:THR:HB	2:L:301:PRO:CD	2.45	0.46
1:I:7:ILE:CD1	1:I:132:ARG:HH21	2.29	0.46
2:L:324:ARG:HB2	2:L:374:GLU:OE1	2.15	0.46
1:I:42:GLU:O	1:I:43:ALA:HB3	2.16	0.46
1:I:420:ILE:HD11	5:I:901:GOL:H2	1.97	0.46
2:L:155:ASN:OD1	2:L:156:GLU:N	2.49	0.46
2:L:407:PRO:HB3	2:L:427:ALA:HB2	1.96	0.46
1:I:376:ASN:ND2	1:I:379:GLY:H	2.14	0.46
2:L:173:LEU:HD13	2:L:182:SER:HB3	1.97	0.45
1:I:145:ARG:HG3	1:I:169:LYS:O	2.16	0.45
1:I:237:GLU:HG2	1:I:238:LEU:H	1.81	0.45
1:I:323:PHE:HE1	1:I:373:LEU:HD23	1.80	0.45
2:L:77:PHE:CE2	2:L:373:LEU:HB2	2.51	0.45
1:I:217:ASN:OD1	1:I:369:HIS:HB2	2.16	0.45
1:I:152:LEU:HD13	1:I:354:ILE:HG21	1.97	0.45
2:L:365:SER:OG	2:L:389:VAL:HG13	2.16	0.45
1:I:239:PHE:HB3	1:I:247:CYS:HB3	1.98	0.45
1:I:300:THR:H	1:I:303:VAL:HB	1.81	0.45
2:L:111:ILE:HG22	2:L:112:SER:H	1.82	0.45
2:L:153:THR:CB	2:L:356:ALA:HB2	2.47	0.45
2:L:415:VAL:HB	2:L:416:PRO:CD	2.45	0.45
1:I:92:LEU:HB3	1:I:158:TYR:HE1	1.81	0.45
2:L:359:ARG:HG2	2:L:361:ASP:OD2	2.16	0.45
1:I:51:LEU:HG	1:I:55:ASN:ND2	2.31	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:407:PRO:HA	1:I:426:VAL:O	2.17	0.44
2:L:242:ALA:O	2:L:243:ASP:C	2.60	0.44
1:I:51:LEU:HA	1:I:111:ILE:HD11	2.00	0.44
2:L:267:THR:HA	2:L:286:PRO:HA	1.99	0.44
1:I:159:GLN:O	1:I:160:ASP:C	2.59	0.44
2:L:112:SER:O	2:L:113:GLU:C	2.61	0.44
1:I:25:SER:HB2	1:I:26:PRO:HD2	2.00	0.44
1:I:77:PHE:CE1	1:I:373:LEU:HD22	2.53	0.44
1:I:130:LEU:HD13	1:I:417:LEU:HD12	2.00	0.44
2:L:94:ALA:HA	2:L:351:LEU:HD23	1.98	0.44
2:L:398:ASN:HD22	2:L:398:ASN:H	1.66	0.44
1:I:208:ASN:HB2	1:I:209:GLU:H	1.71	0.44
1:I:202:ILE:HG23	1:I:368:PHE:CE2	2.53	0.43
2:L:152:LEU:HD11	2:L:359:ARG:NH1	2.33	0.43
2:L:71:ASN:ND2	2:L:72:ASP:H	2.16	0.43
1:I:336:GLN:HA	1:I:340:LEU:O	2.18	0.43
1:I:171:GLN:HG3	1:I:173:LEU:HG	2.01	0.43
1:I:189:TRP:O	1:I:193:LYS:HG2	2.19	0.43
1:I:124:ALA:HA	1:I:165:VAL:HG13	2.01	0.43
1:I:281:MET:HE1	1:I:323:PHE:CZ	2.53	0.43
1:I:194:THR:O	1:I:195:GLU:C	2.61	0.43
1:I:230:SER:HB3	1:I:233:ASN:ND2	2.33	0.43
2:L:17:MET:HE2	2:L:165:VAL:HG22	2.00	0.43
2:L:53:LYS:HG3	2:L:57:ARG:HH21	1.82	0.43
2:L:207:ILE:HG12	2:L:389:VAL:HG21	2.00	0.43
2:L:332:LYS:HG3	2:L:344:PHE:CD2	2.53	0.43
1:I:143:ALA:HB3	1:I:218:THR:HG22	2.01	0.42
1:I:157:THR:O	1:I:158:TYR:C	2.62	0.42
3:B:1:NAG:H62	3:B:2:NAG:O7	2.20	0.42
1:I:132:ARG:HA	1:I:132:ARG:HD3	1.46	0.42
1:I:290:LYS:HE2	1:I:295:VAL:HG22	2.01	0.42
2:L:405:ASN:O	2:L:406:ARG:C	2.62	0.42
1:I:376:ASN:HD22	1:I:376:ASN:C	2.28	0.42
1:I:7:ILE:HD11	1:I:132:ARG:NE	2.32	0.42
1:I:261:ARG:HG2	1:I:310:GLU:CB	2.49	0.42
1:I:22:ILE:HG12	1:I:115:THR:CG2	2.50	0.42
2:L:46:ARG:O	2:L:50:GLU:HG3	2.20	0.42
2:L:230:SER:HA	2:L:231:PRO:HD3	1.83	0.42
1:I:396:ASN:OD1	1:I:397:PRO:HD2	2.19	0.42
2:L:13:ARG:O	2:L:14:ASP:C	2.63	0.42
2:L:273:PRO:HA	2:L:280:THR:HG22	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:48:VAL:HG13	1:I:126:LEU:HD13	2.03	0.41
2:L:355:VAL:HG22	2:L:359:ARG:HB2	2.02	0.41
2:L:360:ASP:O	2:L:361:ASP:C	2.64	0.41
1:I:45:ASN:ND2	1:I:48:VAL:HG23	2.36	0.41
2:L:320:MET:HA	2:L:321:PRO:HD3	1.92	0.41
1:I:79:SER:OG	1:I:219:ILE:HD12	2.20	0.41
2:L:17:MET:HG3	2:L:161:ILE:HG23	2.01	0.41
2:L:361:ASP:O	2:L:362:LEU:C	2.63	0.41
1:I:103:MET:HE3	1:I:103:MET:HB3	1.93	0.41
1:I:261:ARG:HG2	1:I:310:GLU:CG	2.51	0.41
2:L:52:SER:HB2	2:L:419:THR:HG23	2.03	0.41
2:L:149:ASP:HB3	2:L:152:LEU:HD12	2.03	0.41
2:L:60:THR:O	2:L:64:GLN:HG3	2.21	0.41
1:I:133:LYS:O	1:I:134:ALA:C	2.62	0.41
1:I:420:ILE:HG13	5:I:901:GOL:H12	2.03	0.41
1:I:380:CYS:O	1:I:381:GLU:HB2	2.20	0.41
1:I:207:ILE:HA	1:I:211:THR:OG1	2.22	0.40
1:I:224:LEU:O	1:I:225:TRP:C	2.64	0.40
1:I:383:ALA:O	1:I:384:ALA:HB2	2.21	0.40
1:I:292:LEU:O	1:I:296:GLU:HG3	2.21	0.40
1:I:312:GLU:O	1:I:313:GLU:C	2.63	0.40
2:L:366:ASP:O	2:L:389:VAL:HG12	2.22	0.40
1:I:286:PRO:HB3	1:I:295:VAL:HG21	2.03	0.40
2:L:15:ILE:HA	2:L:16:PRO:HD3	1.98	0.40
2:L:111:ILE:H	2:L:111:ILE:HG13	1.69	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	I	418/432 (97%)	346 (83%)	58 (14%)	14 (3%)	3 11

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	L	405/432 (94%)	357 (88%)	40 (10%)	8 (2%)	6	21
All	All	823/864 (95%)	703 (85%)	98 (12%)	22 (3%)	4	15

All (22) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	I	203	PRO
1	I	332	LYS
2	L	356	ALA
1	I	164	LEU
1	I	362	LEU
2	L	201	VAL
1	I	94	ALA
1	I	133	LYS
1	I	349	SER
2	L	107	LYS
2	L	358	GLY
1	I	218	THR
1	I	357	GLU
1	I	381	GLU
2	L	362	LEU
1	I	10	ALA
1	I	73	ASN
1	I	159	GLN
2	L	12	PRO
2	L	113	GLU
2	L	352	PRO
1	I	207	ILE

5.3.2 Protein sidechains ⓘ

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	I	350/383 (91%)	302 (86%)	48 (14%)	3	13
2	L	344/383 (90%)	299 (87%)	45 (13%)	4	14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	694/766 (91%)	601 (87%)	93 (13%)	4 13

All (93) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	I	22	ILE
1	I	37	GLU
1	I	38	GLN
1	I	39	LYS
1	I	52	SER
1	I	60	THR
1	I	69	SER
1	I	71	ASN
1	I	73	ASN
1	I	89	MET
1	I	91	LYS
1	I	98	THR
1	I	128	CYS
1	I	132	ARG
1	I	137	SER
1	I	138	SER
1	I	141	VAL
1	I	142	SER
1	I	151	SER
1	I	183	ARG
1	I	191	SER
1	I	192	ASN
1	I	193	LYS
1	I	200	ASP
1	I	201	VAL
1	I	202	ILE
1	I	208	ASN
1	I	210	LEU
1	I	214	VAL
1	I	241	LYS
1	I	246	SER
1	I	260	TYR
1	I	262	ARG
1	I	275	LYS
1	I	281	MET
1	I	314	MET
1	I	315	MET

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Mol	Chain	Res	Type
1	I	316	LEU
1	I	331	LEU
1	I	341	VAL
1	I	355	VAL
1	I	364	VAL
1	I	376	ASN
1	I	389	VAL
1	I	400	VAL
1	I	415	VAL
1	I	419	THR
1	I	430	CYS
2	L	9	THR
2	L	13	ARG
2	L	25	SER
2	L	47	ARG
2	L	52	SER
2	L	53	LYS
2	L	60	THR
2	L	70	LYS
2	L	78	LEU
2	L	115	THR
2	L	120	HIS
2	L	125	LYS
2	L	133	LYS
2	L	136	LYS
2	L	138	SER
2	L	153	THR
2	L	181	GLN
2	L	201	VAL
2	L	204	SER
2	L	210	LEU
2	L	218	THR
2	L	237	GLU
2	L	238	LEU
2	L	241	LYS
2	L	248	SER
2	L	263	VAL
2	L	285	LEU
2	L	294	LYS
2	L	295	VAL
2	L	299	LEU
2	L	304	LEU

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Mol	Chain	Res	Type
2	L	313	GLU
2	L	316	LEU
2	L	320	MET
2	L	330	SER
2	L	331	LEU
2	L	333	GLU
2	L	343	LEU
2	L	350	LYS
2	L	355	VAL
2	L	374	GLU
2	L	395	LEU
2	L	398	ASN
2	L	413	ARG
2	L	415	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (16) such sidechains are listed below:

Mol	Chain	Res	Type
1	I	45	ASN
1	I	55	ASN
1	I	159	GLN
1	I	178	ASN
1	I	233	ASN
1	I	254	GLN
1	I	319	HIS
1	I	376	ASN
1	I	418	ASN
2	L	18	ASN
2	L	71	ASN
2	L	171	GLN
2	L	181	GLN
2	L	233	ASN
2	L	334	GLN
2	L	398	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates ⓘ

6 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$
3	NAG	A	1	3,1	14,14,15	1.25	1 (7%)	17,19,21	1.72	4 (23%)
3	NAG	A	2	3	14,14,15	1.31	1 (7%)	17,19,21	0.86	0
3	NAG	B	1	2,3	14,14,15	1.31	1 (7%)	17,19,21	2.32	5 (29%)
3	NAG	B	2	3	14,14,15	1.21	1 (7%)	17,19,21	1.63	4 (23%)
3	NAG	C	1	2,3	14,14,15	1.46	2 (14%)	17,19,21	1.37	1 (5%)
3	NAG	C	2	3	14,14,15	1.32	1 (7%)	17,19,21	1.65	2 (11%)

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	A	1	3,1	-	0/6/23/26	0/1/1/1
3	NAG	A	2	3	-	2/6/23/26	0/1/1/1
3	NAG	B	1	2,3	-	1/6/23/26	0/1/1/1
3	NAG	B	2	3	-	3/6/23/26	0/1/1/1
3	NAG	C	1	2,3	-	0/6/23/26	0/1/1/1
3	NAG	C	2	3	-	3/6/23/26	0/1/1/1

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	2	NAG	O7-C7	-3.85	1.14	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	2	NAG	O7-C7	-3.83	1.14	1.23
3	B	1	NAG	O7-C7	-3.83	1.14	1.23
3	B	2	NAG	O7-C7	-3.82	1.14	1.23
3	C	1	NAG	O7-C7	-3.80	1.14	1.23
3	A	1	NAG	O7-C7	-3.78	1.14	1.23
3	C	1	NAG	C2-N2	2.26	1.50	1.46

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	1	NAG	C1-C2-N2	5.76	119.51	110.43
3	B	1	NAG	C2-N2-C7	4.95	129.53	122.90
3	C	2	NAG	O5-C1-C2	-4.53	104.28	111.29
3	A	1	NAG	C1-O5-C5	4.15	117.75	112.19
3	B	2	NAG	C1-C2-N2	3.74	116.33	110.43
3	B	2	NAG	C2-N2-C7	3.55	127.66	122.90
3	C	2	NAG	C1-O5-C5	3.52	116.90	112.19
3	B	1	NAG	O5-C1-C2	-3.20	106.33	111.29
3	A	1	NAG	O5-C1-C2	-3.14	106.43	111.29
3	A	1	NAG	C4-C3-C2	-3.14	106.42	111.02
3	B	1	NAG	C1-O5-C5	3.12	116.37	112.19
3	C	1	NAG	C4-C3-C2	3.04	115.47	111.02
3	B	2	NAG	O5-C1-C2	-2.86	106.87	111.29
3	B	1	NAG	O5-C5-C6	-2.32	103.16	107.66
3	B	2	NAG	C4-C3-C2	-2.18	107.82	111.02
3	A	1	NAG	C1-C2-N2	2.12	113.77	110.43

There are no chirality outliers.

All (9) torsion outliers are listed below:

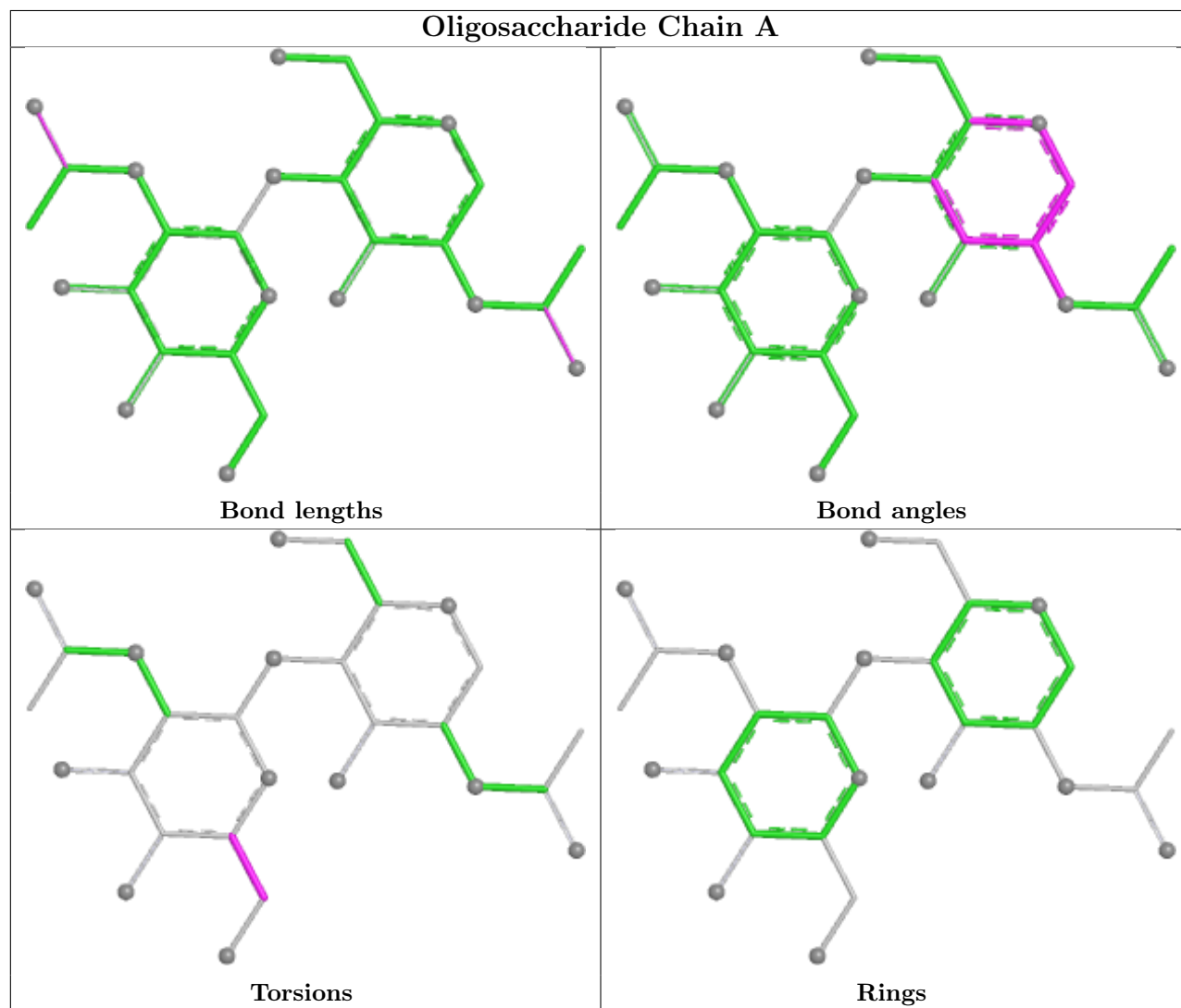
Mol	Chain	Res	Type	Atoms
3	B	1	NAG	C1-C2-N2-C7
3	A	2	NAG	O5-C5-C6-O6
3	A	2	NAG	C4-C5-C6-O6
3	B	2	NAG	O5-C5-C6-O6
3	C	2	NAG	O5-C5-C6-O6
3	B	2	NAG	C4-C5-C6-O6
3	C	2	NAG	C4-C5-C6-O6
3	B	2	NAG	C3-C2-N2-C7
3	C	2	NAG	C3-C2-N2-C7

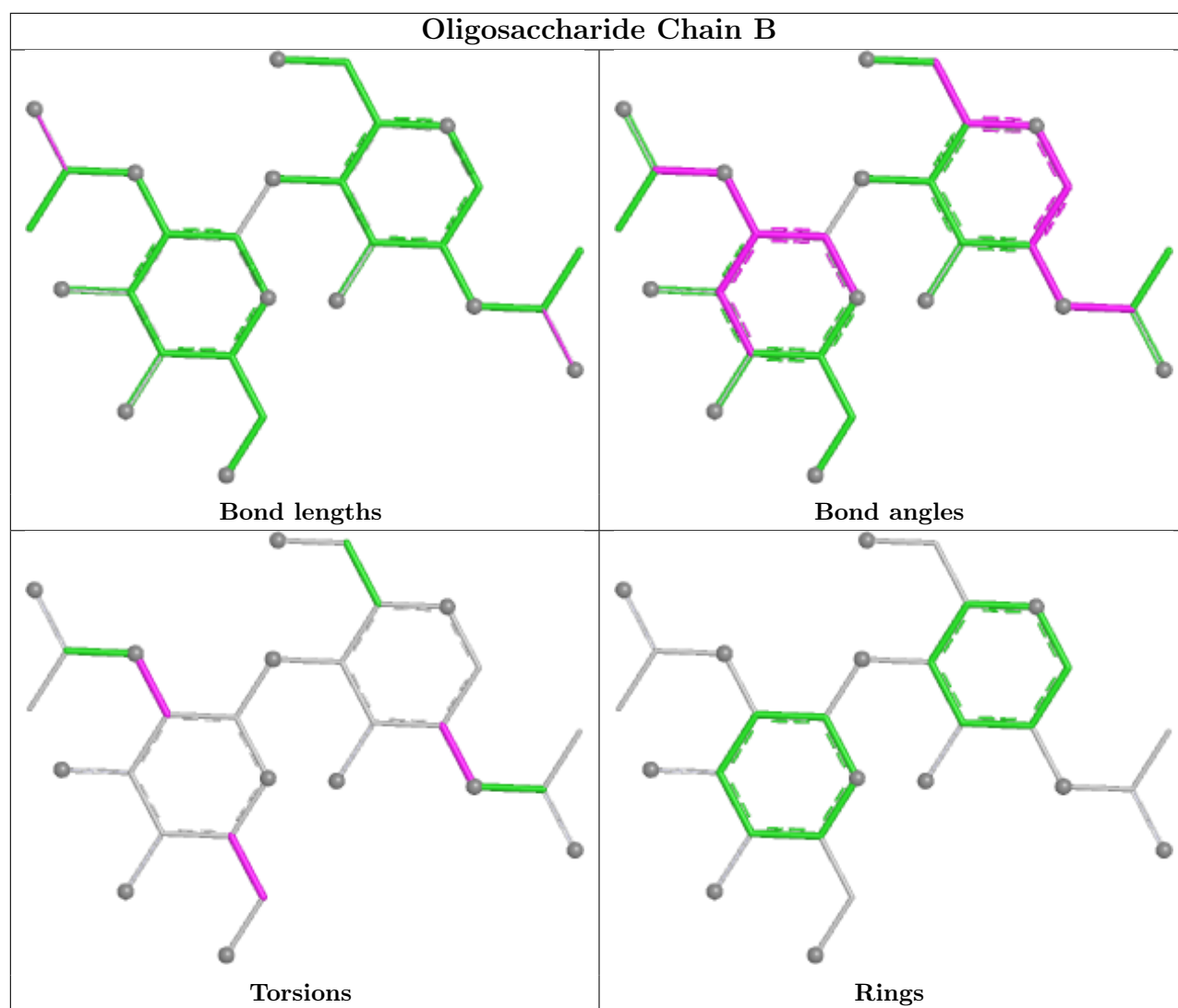
There are no ring outliers.

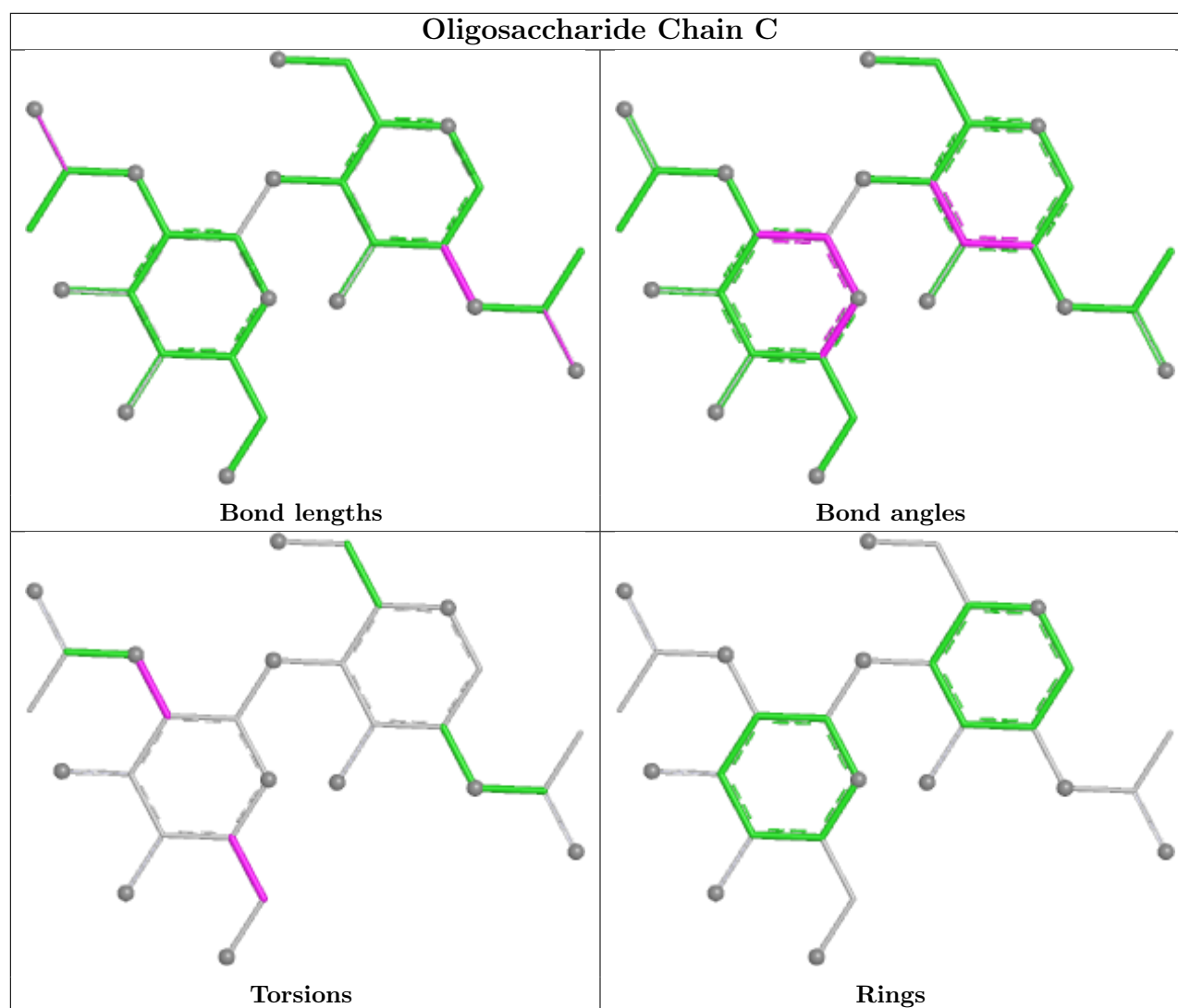
4 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	B	2	NAG	1	0
3	B	1	NAG	1	0
3	C	1	NAG	1	0
3	C	2	NAG	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](#)

5 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
4	NAG	I	801	1	14,14,15	1.36	1 (7%)	17,19,21	2.17	3 (17%)
4	NAG	L	861	2	14,14,15	1.21	1 (7%)	17,19,21	0.88	0
5	GOL	I	901	-	5,5,5	0.64	0	5,5,5	0.77	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	GOL	L	901	-	5,5,5	0.73	0	5,5,5	0.58	0
4	NAG	I	861	1	14,14,15	1.22	1 (7%)	17,19,21	0.83	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
4	NAG	I	801	1	-	3/6/23/26	0/1/1/1
4	NAG	L	861	2	-	2/6/23/26	0/1/1/1
5	GOL	I	901	-	-	3/4/4/4	-
5	GOL	L	901	-	-	0/4/4/4	-
4	NAG	I	861	1	-	2/6/23/26	0/1/1/1

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	I	801	NAG	O7-C7	-3.96	1.14	1.23
4	I	861	NAG	O7-C7	-3.80	1.14	1.23
4	L	861	NAG	O7-C7	-3.76	1.14	1.23

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	I	801	NAG	C2-N2-C7	5.02	129.62	122.90
4	I	801	NAG	C1-O5-C5	4.92	118.78	112.19
4	I	801	NAG	C1-C2-N2	4.70	117.84	110.43

There are no chirality outliers.

All (10) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	I	801	NAG	C1-C2-N2-C7
5	I	901	GOL	C1-C2-C3-O3
4	I	861	NAG	O5-C5-C6-O6
4	I	861	NAG	C4-C5-C6-O6
4	I	801	NAG	C4-C5-C6-O6
4	L	861	NAG	C4-C5-C6-O6
4	L	861	NAG	O5-C5-C6-O6

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Mol	Chain	Res	Type	Atoms
4	I	801	NAG	O5-C5-C6-O6
5	I	901	GOL	O2-C2-C3-O3
5	I	901	GOL	O1-C1-C2-C3

There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
5	I	901	GOL	2	0
5	L	901	GOL	1	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

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	I	422/432 (97%)	0.59	44 (10%) 11 8	39, 82, 125, 145	0
2	L	409/432 (94%)	0.13	9 (2%) 62 52	35, 68, 116, 156	0
All	All	831/864 (96%)	0.36	53 (6%) 25 18	35, 75, 122, 156	0

All (53) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	I	207	ILE	9.5
1	I	363	TYR	4.6
1	I	134	ALA	4.4
1	I	212	VAL	4.1
1	I	365	SER	3.8
1	I	170	LEU	3.3
2	L	400	VAL	3.3
1	I	156	GLU	3.2
1	I	342	ASP	3.1
1	I	172	PRO	3.1
1	I	344	PHE	3.0
2	L	397	PRO	2.8
1	I	17	MET	2.8
1	I	186	ILE	2.8
1	I	366	ASP	2.8
2	L	207	ILE	2.6
1	I	330	SER	2.6
1	I	146	LEU	2.6
1	I	201	VAL	2.6
1	I	206	ALA	2.6
1	I	25	SER	2.6
1	I	355	VAL	2.6
1	I	364	VAL	2.6
1	I	370	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
2	L	404	ALA	2.5
1	I	205	GLU	2.5
1	I	381	GLU	2.5
1	I	174	ASP	2.4
2	L	42	GLU	2.4
1	I	43	ALA	2.4
1	I	367	ALA	2.4
1	I	189	TRP	2.4
2	L	7	ILE	2.3
1	I	202	ILE	2.3
1	I	211	THR	2.2
1	I	7	ILE	2.2
1	I	219	ILE	2.2
1	I	346	PRO	2.2
1	I	350	LYS	2.2
1	I	185	ALA	2.2
1	I	208	ASN	2.1
1	I	94	ALA	2.1
1	I	144	ASN	2.1
1	I	157	THR	2.1
2	L	10	ALA	2.1
1	I	210	LEU	2.1
1	I	213	LEU	2.1
2	L	9	THR	2.1
1	I	173	LEU	2.0
1	I	362	LEU	2.0
1	I	372	PHE	2.0
2	L	182	SER	2.0
1	I	128	CYS	2.0

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

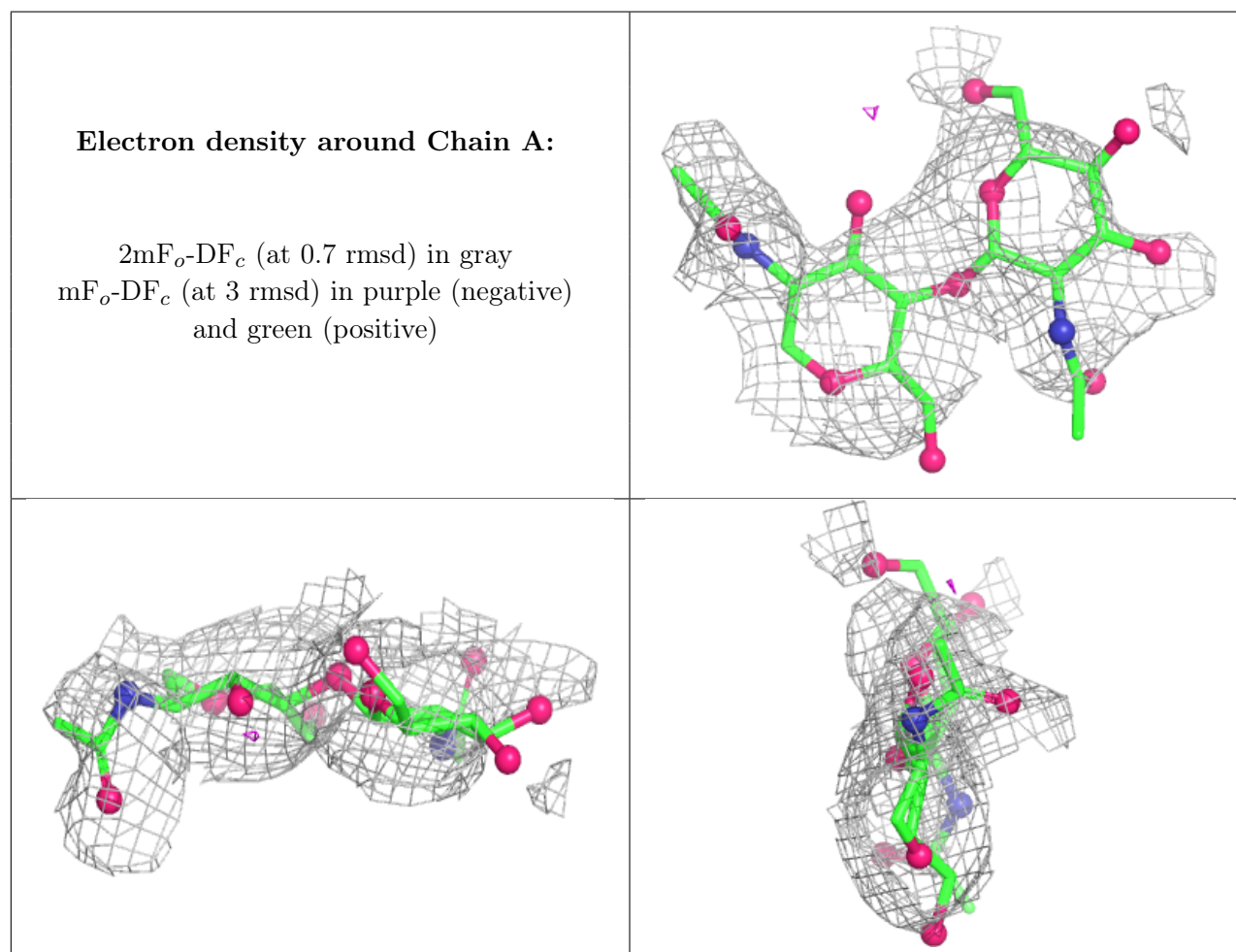
There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates ⓘ

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.

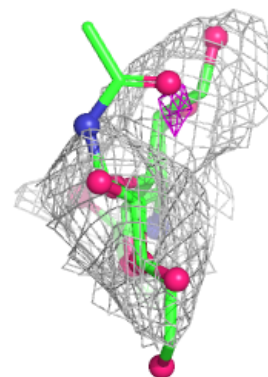
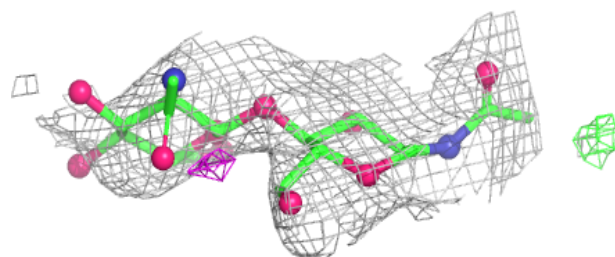
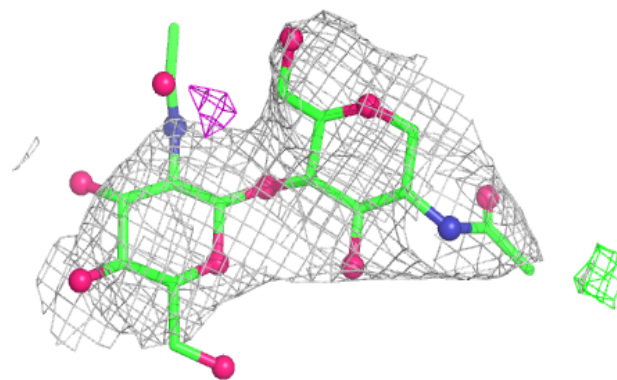
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	NAG	A	1	14/15	-	-	124,126,130,135	0
3	NAG	A	2	14/15	-	-	139,142,145,146	0
3	NAG	B	1	14/15	-	-	120,123,130,137	0
3	NAG	B	2	14/15	-	-	144,148,156,157	0
3	NAG	C	1	14/15	0.60	0.17	87,94,101,108	0
3	NAG	C	2	14/15	0.70	0.13	118,125,127,128	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.

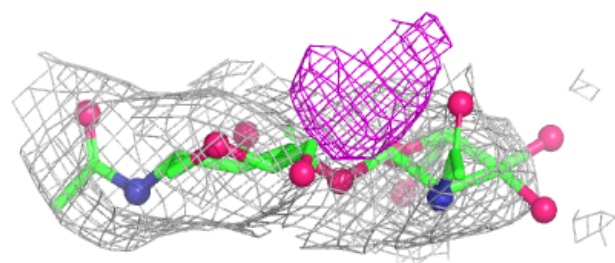
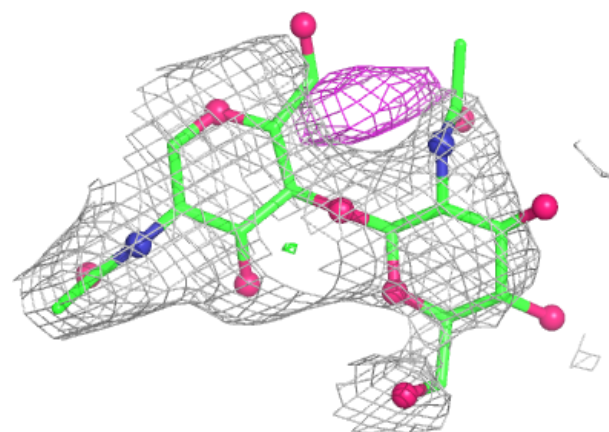


Electron density around Chain B:

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

**Electron density around Chain C:**

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



6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
4	NAG	I	861	14/15	0.59	0.14	147,150,154,154	0
4	NAG	L	861	14/15	0.63	0.15	118,120,124,126	0
4	NAG	I	801	14/15	0.78	0.12	128,132,139,139	0
5	GOL	L	901	6/6	0.80	0.17	76,81,85,88	0
5	GOL	I	901	6/6	0.81	0.22	91,93,94,94	0

6.5 Other polymers [i](#)

There are no such residues in this entry.