



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 3, 2025 – 08:17 AM EDT

PDB ID : 2ICY / pdb_00002icy
Title : Crystal Structure of a Putative UDP-glucose Pyrophosphorylase from Arabidopsis Thaliana with Bound UDP-glucose
Authors : McCoy, J.G.; Wesenberg, G.E.; Phillips Jr., G.N.; Bitto, E.; Bingman, C.A.; Center for Eukaryotic Structural Genomics (CESG)
Deposited on : 2006-09-13
Resolution : 1.64 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 Phenix2.0rc1
Mogul : 2022.3.0, CSD as543be (2022)
Xtriage (Phenix) : 2.0rc1
EDS : 3.0
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4 : 9.0.006 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.45.1

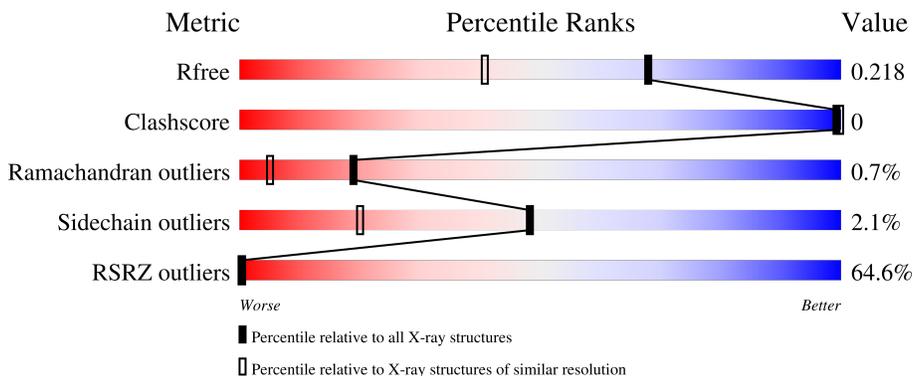
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.64 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}	164625	1015 (1.64-1.64)
Clashscore	180529	1093 (1.64-1.64)
Ramachandran outliers	177936	1077 (1.64-1.64)
Sidechain outliers	177891	1077 (1.64-1.64)
RSRZ outliers	164620	1015 (1.64-1.64)

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	1-A	469	
1	1-B	469	
1	2-A	469	
1	2-B	469	

2 Entry composition [i](#)

There are 5 unique types of molecules in this entry. The entry contains 16171 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.

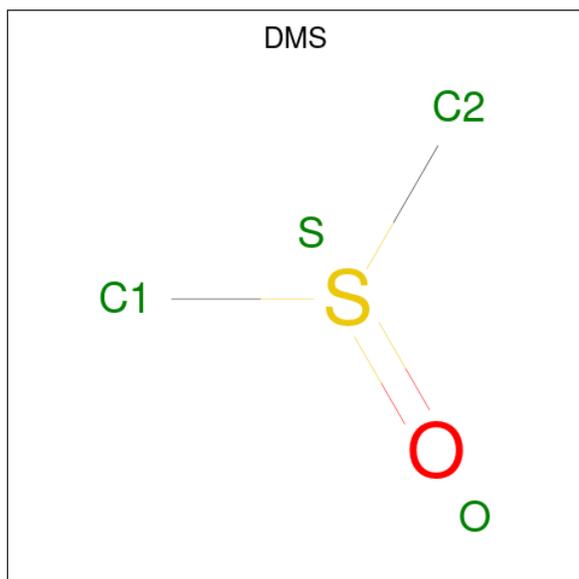
- Molecule 1 is a protein called Probable UTP-glucose-1-phosphate uridylyltransferase 2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	1-A	456	Total 3550	C 2275	N 587	O 678	S 10	0	0	0
1	2-A	459	Total 3574	C 2289	N 593	O 682	S 10	0	0	0
1	1-B	463	Total 3602	C 2305	N 597	O 690	S 10	0	0	0
1	2-B	463	Total 3602	C 2305	N 597	O 690	S 10	0	0	0

There are 2 discrepancies between the modelled and reference sequences:

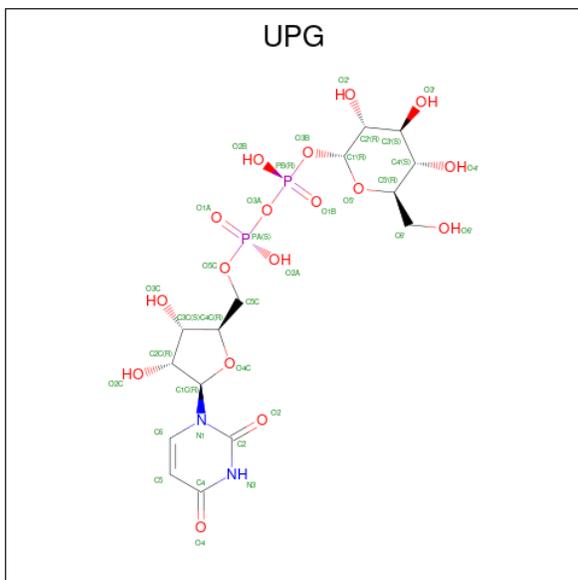
Chain	Residue	Modelled	Actual	Comment	Reference
A	1	SER	-	cloning artifact	UNP Q9M9P3
B	1	SER	-	cloning artifact	UNP Q9M9P3

- Molecule 2 is DIMETHYL SULFOXIDE (CCD ID: DMS) (formula: C₂H₆OS).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	1-A	1	Total C O S 4 2 1 1	0	0
2	2-A	1	Total C O S 4 2 1 1	0	0

- Molecule 3 is URIDINE-5'-DIPHOSPHATE-GLUCOSE (CCD ID: UPG) (formula: $C_{15}H_{24}N_2O_{17}P_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	1-A	1	Total C N O P 36 15 2 17 2	0	0
3	2-A	1	Total C N O P 36 15 2 17 2	0	0
3	1-B	1	Total C N O P 36 15 2 17 2	0	0

- Molecule 4

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
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- Molecule 5 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	1-A	356	Total O 356 356	0	0
5	2-A	356	Total O 356 356	0	0

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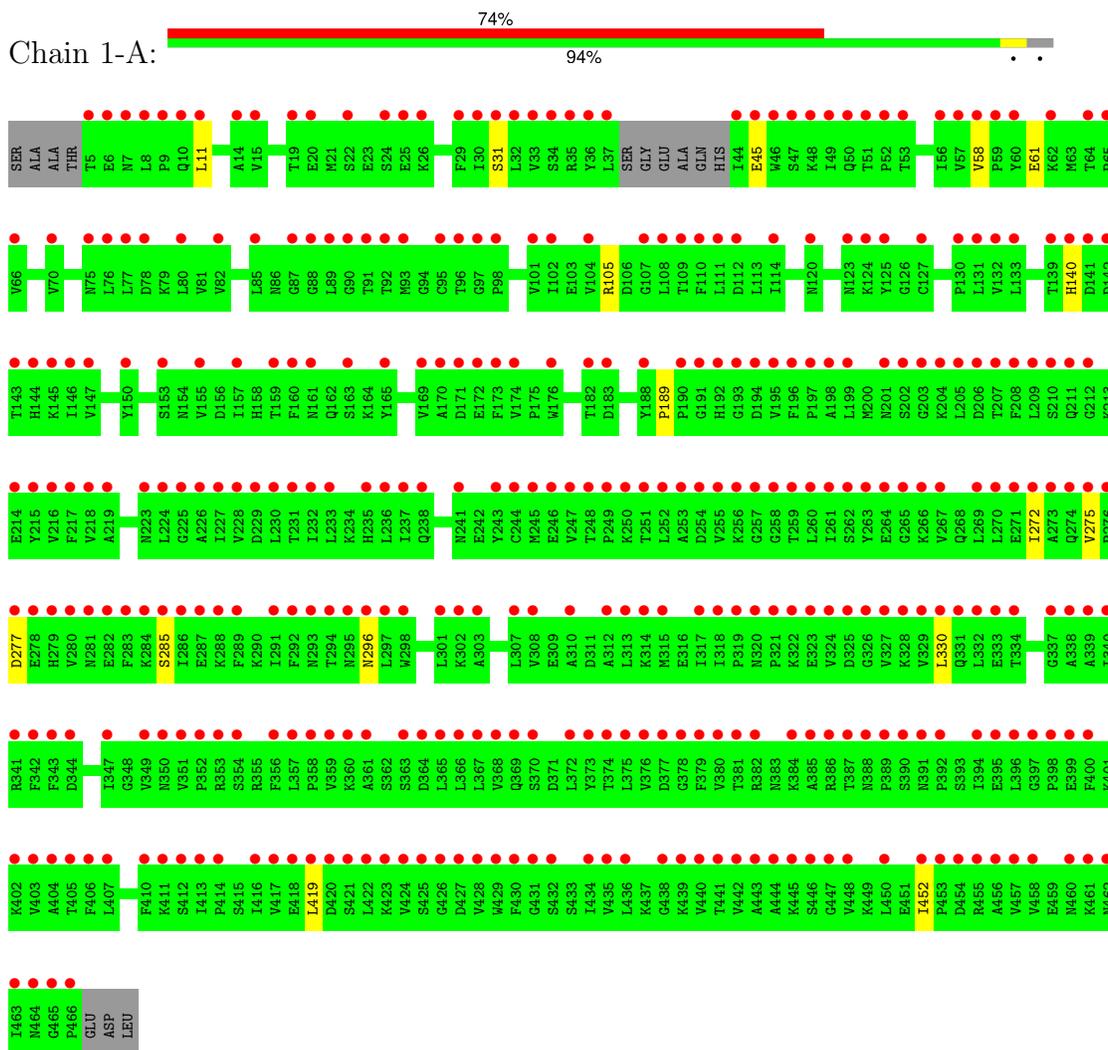
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	1-B	492	Total 492	O 492	0	0
5	2-B	502	Total 502	O 502	0	0

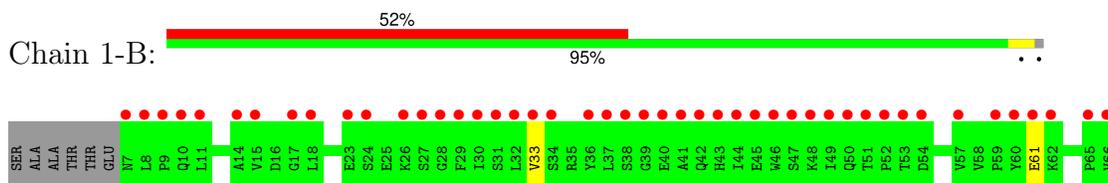
3 Residue-property plots i

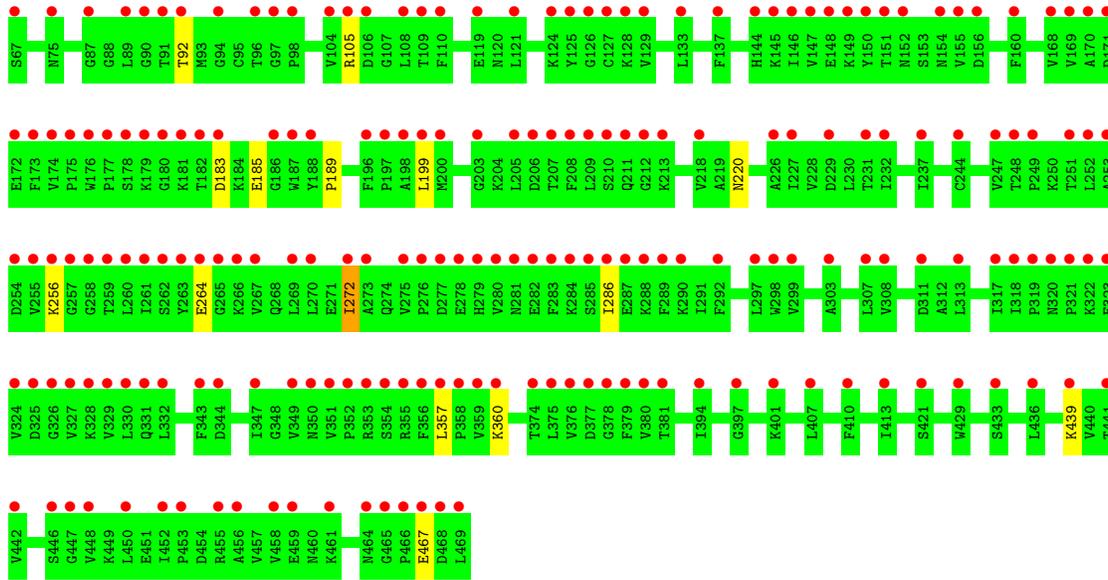
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: Probable UTP-glucose-1-phosphate uridylyltransferase 2



- Molecule 1: Probable UTP-glucose-1-phosphate uridylyltransferase 2





- Molecule 1: Probable UTP-glucose-1-phosphate uridylyltransferase 2

Chain 2-A: 94%



- Molecule 1: Probable UTP-glucose-1-phosphate uridylyltransferase 2

Chain 2-B: 96%



4 Data and refinement statistics

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α , β , γ	188.01Å 59.71Å 89.76Å 90.00° 100.32° 90.00°	Depositor
Resolution (Å)	38.25 – 1.64 38.25 – 1.64	Depositor EDS
% Data completeness (in resolution range)	99.4 (38.25-1.64) 99.4 (38.25-1.64)	Depositor EDS
R_{merge}	0.04	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	3.27 (at 1.64Å)	Xtrriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.183 , 0.223 0.175 , 0.218	Depositor DCC
R_{free} test set	5964 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å ²)	21.9	Xtrriage
Anisotropy	0.347	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.17 , 48.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.33$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.87	EDS
Total number of atoms	16171	wwPDB-VP
Average B, all atoms (Å ²)	26.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.06% 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 i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: DMS, UPG, U5P

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	1-A	0.60	0/3617	0.79	5/4905 (0.1%)
1	1-B	0.67	0/3671	0.83	4/4979 (0.1%)
1	2-A	0.60	0/3642	0.80	5/4939 (0.1%)
1	2-B	0.67	0/3671	0.83	4/4979 (0.1%)
All	All	0.64	0/14601	0.81	18/19802 (0.1%)

There are no bond length outliers.

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1-B	189	PRO	N-CA-C	-7.13	102.00	110.70
1	2-B	189	PRO	N-CA-C	-7.13	102.00	110.70
1	1-A	58	VAL	N-CA-C	6.29	114.03	108.63
1	2-A	58	VAL	N-CA-C	6.29	114.03	108.63
1	1-A	296	ASN	N-CA-C	-6.02	98.72	108.41
1	2-A	296	ASN	N-CA-C	-6.02	98.72	108.41
1	1-B	357	LEU	CA-C-N	-5.73	113.34	119.98
1	1-B	357	LEU	C-N-CA	-5.73	113.34	119.98
1	2-B	357	LEU	CA-C-N	-5.73	113.34	119.98
1	2-B	357	LEU	C-N-CA	-5.73	113.34	119.98
1	1-A	189	PRO	N-CA-C	-5.38	104.14	110.70
1	2-A	189	PRO	N-CA-C	-5.38	104.14	110.70
1	1-B	199	LEU	N-CA-C	-5.34	105.54	111.36
1	2-B	199	LEU	N-CA-C	-5.34	105.54	111.36
1	1-A	275	VAL	N-CA-C	5.33	113.14	107.76
1	2-A	275	VAL	N-CA-C	5.33	113.14	107.76
1	1-A	452	ILE	N-CA-C	-5.05	102.97	107.56
1	2-A	452	ILE	N-CA-C	-5.05	102.97	107.56

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	1-A	3550	0	3630	0	0
1	1-B	3602	0	3673	3	0
1	2-A	3574	0	3650	0	0
1	2-B	3602	0	3673	0	0
2	1-A	4	0	6	0	0
2	2-A	4	0	6	0	0
3	1-A	36	0	22	0	0
3	1-B	36	0	22	3	0
3	2-A	36	0	22	0	0
4	2-B	21	0	11	0	0
5	1-A	356	0	0	0	0
5	1-B	492	0	0	0	0
5	2-A	356	0	0	0	0
5	2-B	502	0	0	0	0
All	All	16171	0	14715	3	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 0.

All (3) 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:B:360:LYS:NZ	3:B:902:UPG:O1A	2.42	0.52
1:B:220:ASN:HD21	3:B:902:UPG:H5C1	1.85	0.42
1:B:220:ASN:OD1	3:B:902:UPG:H4C	2.20	0.42

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	1-A	452/469 (96%)	428 (95%)	22 (5%)	2 (0%)	30	13
1	1-B	461/469 (98%)	442 (96%)	14 (3%)	5 (1%)	12	1
1	2-A	455/469 (97%)	431 (95%)	23 (5%)	1 (0%)	44	26
1	2-B	461/469 (98%)	440 (95%)	17 (4%)	4 (1%)	14	2
All	All	1829/1876 (98%)	1741 (95%)	76 (4%)	12 (1%)	19	5

All (12) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	2-B	40	GLU
1	2-B	181	LYS
1	1-A	45	GLU
1	1-B	264	GLU
1	2-B	70	VAL
1	1-B	272	ILE
1	1-A	285	SER
1	1-B	183	ASP
1	1-B	185	GLU
1	2-B	69	ASP
1	2-A	46	TRP
1	1-B	286	ILE

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	1-A	405/414 (98%)	396 (98%)	9 (2%)	47	18
1	1-B	410/414 (99%)	402 (98%)	8 (2%)	50	22
1	2-A	407/414 (98%)	397 (98%)	10 (2%)	42	14
1	2-B	410/414 (99%)	402 (98%)	8 (2%)	50	22
All	All	1632/1656 (99%)	1597 (98%)	35 (2%)	48	20

All (35) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	1-A	11	LEU
1	1-A	31	SER
1	1-A	61	GLU
1	1-A	105	ARG
1	1-A	140	HIS
1	1-A	272	ILE
1	1-A	277	ASP
1	1-A	330	LEU
1	1-A	419	LEU
1	1-B	33	VAL
1	1-B	61	GLU
1	1-B	92	THR
1	1-B	105	ARG
1	1-B	256	LYS
1	1-B	272	ILE
1	1-B	439	LYS
1	1-B	467	GLU
1	2-A	11	LEU
1	2-A	31	SER
1	2-A	42	GLN
1	2-A	61	GLU
1	2-A	105	ARG
1	2-A	140	HIS
1	2-A	272	ILE
1	2-A	277	ASP
1	2-A	330	LEU
1	2-A	419	LEU
1	2-B	33	VAL
1	2-B	61	GLU
1	2-B	92	THR
1	2-B	105	ARG
1	2-B	256	LYS
1	2-B	272	ILE

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Mol	Chain	Res	Type
1	2-B	439	LYS
1	2-B	467	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
1	1-A	140	HIS
1	1-A	238	GLN
1	1-B	274	GLN
1	1-B	350	ASN
1	2-A	42	GLN
1	2-A	43	HIS
1	2-A	86	ASN
1	2-A	135	ASN
1	2-A	320	ASN
1	2-B	86	ASN
1	2-B	135	ASN
1	2-B	279	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

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
2	DMS	1-A	900	-	3,3,3	1.20	0	3,3,3	1.11	0
3	UPG	1-B	902	-	37,38,38	1.74	9 (24%)	55,58,58	1.40	8 (14%)
3	UPG	1-A	901	-	37,38,38	1.90	10 (27%)	55,58,58	1.28	7 (12%)
3	UPG	2-A	901	-	37,38,38	1.90	10 (27%)	55,58,58	1.28	7 (12%)
2	DMS	2-A	900	-	3,3,3	1.20	0	3,3,3	1.11	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	UPG	1-A	901	-	-	0/23/59/59	0/3/3/3
3	UPG	1-B	902	-	-	0/23/59/59	0/3/3/3
3	UPG	2-A	901	-	-	0/23/59/59	0/3/3/3

All (29) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	1-B	902	UPG	PA-O3A	4.50	1.64	1.59
3	1-A	901	UPG	PB-O3A	4.34	1.64	1.59
3	2-A	901	UPG	PB-O3A	4.34	1.64	1.59
3	1-A	901	UPG	PB-O3B	4.20	1.72	1.59
3	2-A	901	UPG	PB-O3B	4.20	1.72	1.59
3	1-A	901	UPG	PA-O3A	4.05	1.63	1.59
3	2-A	901	UPG	PA-O3A	4.05	1.63	1.59
3	1-B	902	UPG	PB-O3A	3.72	1.63	1.59
3	1-B	902	UPG	O5'-C5'	3.67	1.53	1.44
3	1-A	901	UPG	C6-N1	3.31	1.46	1.38
3	2-A	901	UPG	C6-N1	3.31	1.46	1.38
3	1-B	902	UPG	O3'-C3'	2.74	1.49	1.43
3	1-A	901	UPG	PA-O5C	-2.72	1.48	1.59
3	2-A	901	UPG	PA-O5C	-2.72	1.48	1.59
3	1-B	902	UPG	PB-O1B	-2.56	1.41	1.50
3	1-A	901	UPG	PB-O2B	-2.56	1.43	1.55
3	2-A	901	UPG	PB-O2B	-2.56	1.43	1.55
3	1-A	901	UPG	C2C-C1C	-2.38	1.46	1.53
3	2-A	901	UPG	C2C-C1C	-2.38	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	1-B	902	UPG	C2-N1	2.32	1.42	1.38
3	1-B	902	UPG	C5C-C4C	2.30	1.58	1.51
3	1-B	902	UPG	C4'-C5'	2.29	1.57	1.53
3	1-A	901	UPG	O3C-C3C	2.23	1.48	1.43
3	2-A	901	UPG	O3C-C3C	2.23	1.48	1.43
3	1-A	901	UPG	O4C-C4C	2.16	1.49	1.45
3	2-A	901	UPG	O4C-C4C	2.16	1.49	1.45
3	1-B	902	UPG	PA-O2A	-2.11	1.45	1.55
3	1-A	901	UPG	C4'-C5'	2.10	1.57	1.53
3	2-A	901	UPG	C4'-C5'	2.10	1.57	1.53

All (22) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	1-B	902	UPG	O5'-C1'-O3B	-3.51	106.78	111.36
3	1-B	902	UPG	C4'-C3'-C2'	-3.25	105.12	110.83
3	1-B	902	UPG	O3'-C3'-C2'	3.16	117.83	110.38
3	1-B	902	UPG	C2C-C3C-C4C	2.68	107.78	102.61
3	1-A	901	UPG	O3A-PA-O1A	-2.62	102.83	110.70
3	2-A	901	UPG	O3A-PA-O1A	-2.62	102.83	110.70
3	1-B	902	UPG	O4'-C4'-C3'	-2.58	104.29	110.38
3	1-A	901	UPG	C6'-C5'-C4'	-2.53	106.80	113.02
3	2-A	901	UPG	C6'-C5'-C4'	-2.53	106.80	113.02
3	1-A	901	UPG	O4'-C4'-C3'	-2.49	104.52	110.38
3	2-A	901	UPG	O4'-C4'-C3'	-2.49	104.52	110.38
3	1-B	902	UPG	C1'-C2'-C3'	2.48	115.23	110.01
3	1-B	902	UPG	PB-O3B-C1'	2.30	130.56	121.21
3	1-A	901	UPG	O3'-C3'-C2'	-2.27	105.04	110.38
3	2-A	901	UPG	O3'-C3'-C2'	-2.27	105.04	110.38
3	1-A	901	UPG	C4'-C3'-C2'	-2.25	106.88	110.83
3	2-A	901	UPG	C4'-C3'-C2'	-2.25	106.88	110.83
3	1-B	902	UPG	O6'-C6'-C5'	-2.12	104.13	111.33
3	1-A	901	UPG	C2C-C3C-C4C	2.09	106.64	102.61
3	2-A	901	UPG	C2C-C3C-C4C	2.09	106.64	102.61
3	1-A	901	UPG	O2B-PB-O1B	2.06	122.02	112.44
3	2-A	901	UPG	O2B-PB-O1B	2.06	122.02	112.44

There are no chirality outliers.

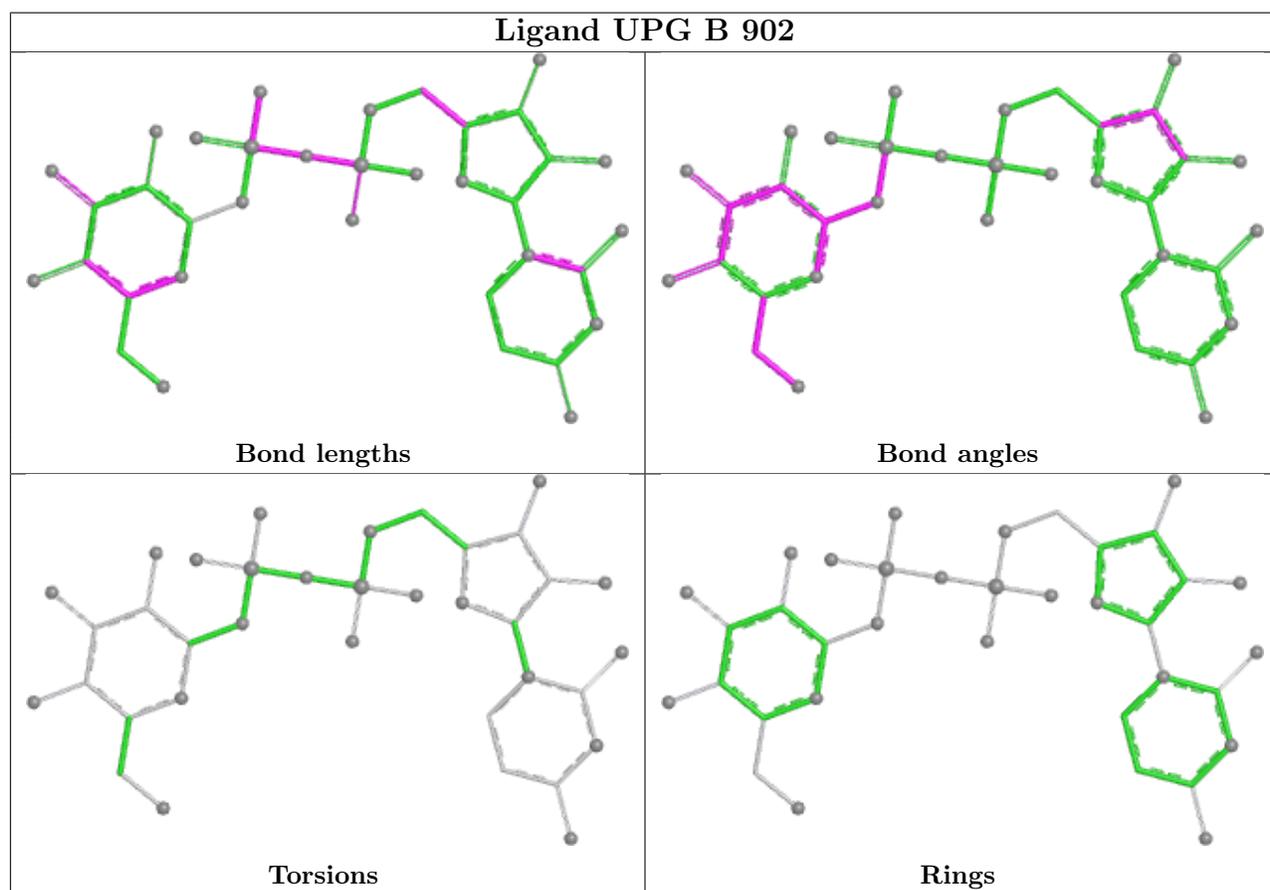
There are no torsion outliers.

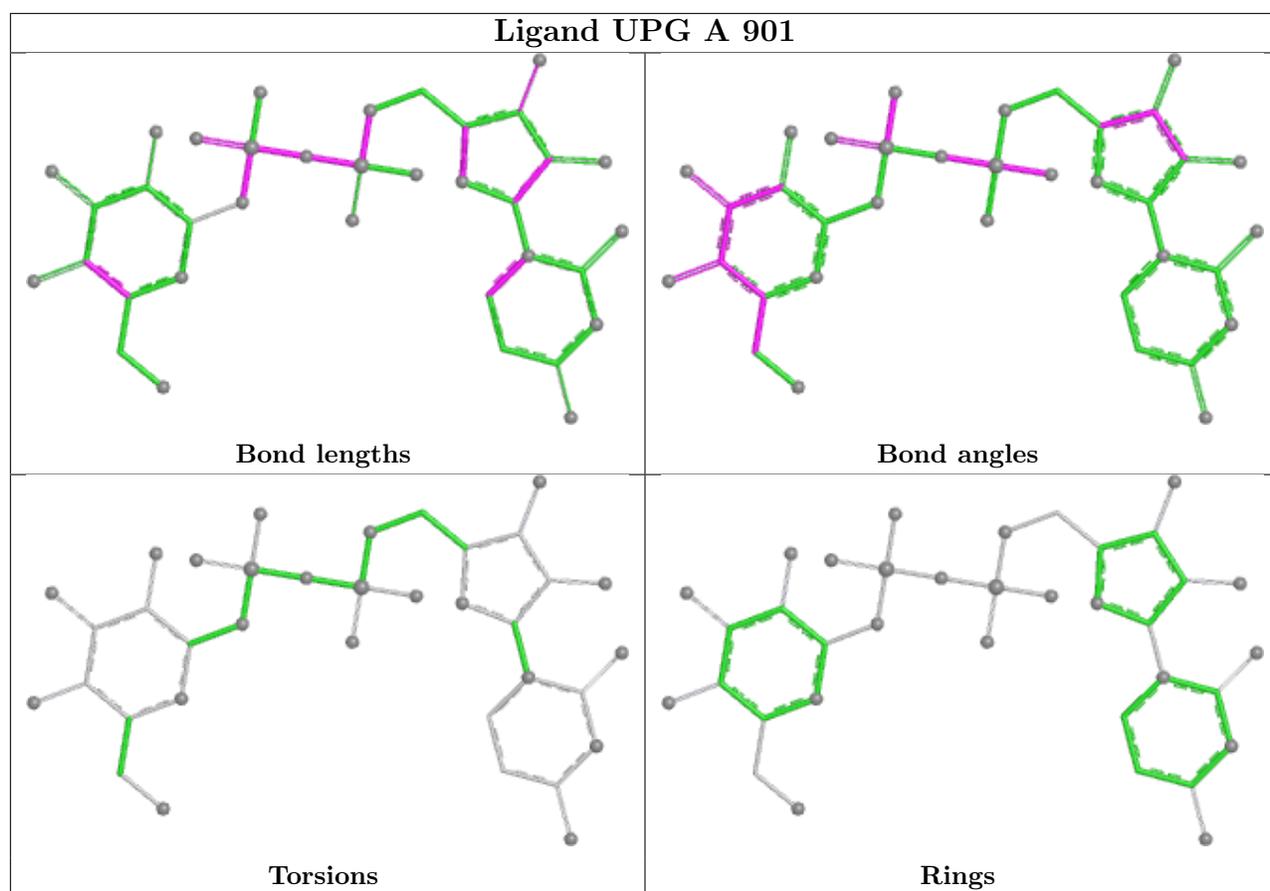
There are no ring outliers.

1 monomer is involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	1-B	902	UPG	3	0

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 than 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 [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	1-A	456/469 (97%)	3.10	348 (76%) 0 0	5, 12, 25, 36	456 (100%)
1	1-B	463/469 (98%)	2.44	246 (53%) 0 0	4, 10, 23, 35	463 (100%)
1	2-A	0/469	-	-	-	-
1	2-B	0/469	-	-	-	-
All	All	919/1876 (48%)	2.77	594 (64%) 0 0	4, 11, 24, 36	919 (100%)

All (594) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	1-A	366	LEU	10.5
1	1-A	44	ILE	9.2
1	1-B	376	VAL	8.3
1	1-B	378	GLY	8.2
1	1-B	379	PHE	8.1
1	1-B	176	TRP	8.1
1	1-B	324	VAL	8.0
1	1-A	89	LEU	7.8
1	1-B	41	ALA	7.4
1	1-A	283	PHE	7.4
1	1-B	283	PHE	7.3
1	1-B	380	VAL	7.1
1	1-A	276	PRO	7.1
1	1-A	324	VAL	7.0
1	1-A	46	TRP	6.9
1	1-A	392	PRO	6.8
1	1-A	441	THR	6.8
1	1-A	273	ALA	6.7
1	1-A	272	ILE	6.7
1	1-A	434	ILE	6.7
1	1-A	458	VAL	6.6
1	1-B	327	VAL	6.6

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Mol	Chain	Res	Type	RSRZ
1	1-A	255	VAL	6.6
1	1-A	280	VAL	6.4
1	1-A	327	VAL	6.4
1	1-A	37	LEU	6.4
1	1-B	286	ILE	6.4
1	1-A	444	ALA	6.4
1	1-A	286	ILE	6.3
1	1-A	253	ALA	6.3
1	1-A	436	LEU	6.3
1	1-A	443	ALA	6.2
1	1-B	252	LEU	6.1
1	1-A	252	LEU	6.0
1	1-B	375	LEU	6.0
1	1-A	251	THR	5.9
1	1-A	406	PHE	5.9
1	1-B	280	VAL	5.8
1	1-B	275	VAL	5.7
1	1-A	365	LEU	5.7
1	1-A	356	PHE	5.7
1	1-A	379	PHE	5.7
1	1-B	285	SER	5.7
1	1-A	394	ILE	5.6
1	1-B	255	VAL	5.6
1	1-B	272	ILE	5.5
1	1-A	275	VAL	5.5
1	1-A	258	GLY	5.5
1	1-A	361	ALA	5.5
1	1-A	417	VAL	5.4
1	1-A	47	SER	5.3
1	1-B	182	THR	5.3
1	1-A	225	GLY	5.3
1	1-A	430	PHE	5.3
1	1-A	422	LEU	5.2
1	1-A	368	VAL	5.2
1	1-B	357	LEU	5.2
1	1-B	50	GLN	5.2
1	1-A	291	ILE	5.2
1	1-A	452	ILE	5.2
1	1-B	92	THR	5.2
1	1-B	377	ASP	5.1
1	1-B	33	VAL	5.1
1	1-B	171	ASP	5.1

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Mol	Chain	Res	Type	RSRZ
1	1-B	326	GLY	5.1
1	1-A	453	PRO	5.1
1	1-A	226	ALA	5.1
1	1-B	34	SER	5.0
1	1-A	372	LEU	5.0
1	1-B	205	LEU	5.0
1	1-B	356	PHE	5.0
1	1-A	171	ASP	5.0
1	1-B	44	ILE	5.0
1	1-B	151	THR	5.0
1	1-B	173	PHE	5.0
1	1-A	88	GLY	5.0
1	1-B	174	VAL	5.0
1	1-A	420	ASP	5.0
1	1-B	49	ILE	4.9
1	1-A	376	VAL	4.9
1	1-B	279	HIS	4.9
1	1-A	254	ASP	4.9
1	1-B	281	ASN	4.9
1	1-A	33	VAL	4.9
1	1-A	351	VAL	4.9
1	1-A	440	VAL	4.9
1	1-A	442	VAL	4.9
1	1-A	410	PHE	4.9
1	1-A	462	ASN	4.9
1	1-B	46	TRP	4.9
1	1-A	374	THR	4.9
1	1-A	289	PHE	4.9
1	1-A	389	PRO	4.8
1	1-A	90	GLY	4.8
1	1-B	289	PHE	4.8
1	1-A	419	LEU	4.8
1	1-A	435	VAL	4.8
1	1-B	320	ASN	4.8
1	1-B	284	LYS	4.8
1	1-B	179	LYS	4.7
1	1-A	326	GLY	4.7
1	1-B	253	ALA	4.7
1	1-A	32	LEU	4.7
1	1-B	32	LEU	4.7
1	1-A	5	THR	4.7
1	1-A	438	GLY	4.7

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Mol	Chain	Res	Type	RSRZ
1	1-B	276	PRO	4.7
1	1-A	400	PHE	4.7
1	1-B	209	LEU	4.7
1	1-B	177	PRO	4.7
1	1-A	203	GLY	4.6
1	1-A	421	SER	4.6
1	1-B	256	LYS	4.6
1	1-A	385	ALA	4.6
1	1-B	30	ILE	4.6
1	1-A	210	SER	4.6
1	1-A	8	LEU	4.5
1	1-B	208	PHE	4.5
1	1-A	257	GLY	4.5
1	1-B	277	ASP	4.5
1	1-B	149	LYS	4.5
1	1-A	279	HIS	4.5
1	1-B	325	ASP	4.5
1	1-A	450	LEU	4.4
1	1-A	431	GLY	4.4
1	1-B	43	HIS	4.4
1	1-A	330	LEU	4.4
1	1-B	328	LYS	4.4
1	1-B	212	GLY	4.4
1	1-A	96	THR	4.4
1	1-A	259	THR	4.4
1	1-B	207	THR	4.4
1	1-B	381	THR	4.4
1	1-B	354	SER	4.4
1	1-B	128	LYS	4.4
1	1-A	357	LEU	4.3
1	1-A	227	ILE	4.3
1	1-A	413	ILE	4.3
1	1-A	352	PRO	4.3
1	1-A	11	LEU	4.3
1	1-A	202	SER	4.3
1	1-A	390	SER	4.3
1	1-A	391	ASN	4.2
1	1-B	152	ASN	4.2
1	1-A	463	ILE	4.2
1	1-A	284	LYS	4.2
1	1-B	292	PHE	4.2
1	1-B	183	ASP	4.2

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Mol	Chain	Res	Type	RSRZ
1	1-A	329	VAL	4.2
1	1-A	349	VAL	4.2
1	1-B	48	LYS	4.2
1	1-B	358	PRO	4.2
1	1-B	273	ALA	4.1
1	1-A	48	LYS	4.1
1	1-B	330	LEU	4.1
1	1-A	456	ALA	4.1
1	1-A	375	LEU	4.1
1	1-B	89	LEU	4.1
1	1-B	351	VAL	4.1
1	1-A	377	ASP	4.1
1	1-A	454	ASP	4.1
1	1-A	350	ASN	4.1
1	1-B	282	GLU	4.1
1	1-A	36	TYR	4.0
1	1-A	285	SER	4.0
1	1-B	261	ILE	4.0
1	1-A	292	PHE	4.0
1	1-B	181	LYS	4.0
1	1-B	169	VAL	4.0
1	1-B	175	PRO	4.0
1	1-A	93	MET	4.0
1	1-A	228	VAL	4.0
1	1-A	321	PRO	4.0
1	1-A	418	GLU	4.0
1	1-A	397	GLY	4.0
1	1-B	8	LEU	4.0
1	1-B	91	THR	4.0
1	1-A	64	THR	3.9
1	1-A	34	SER	3.9
1	1-B	322	LYS	3.9
1	1-B	104	VAL	3.9
1	1-B	170	ALA	3.9
1	1-A	358	PRO	3.9
1	1-B	319	PRO	3.9
1	1-B	329	VAL	3.9
1	1-A	237	ILE	3.8
1	1-A	298	TRP	3.8
1	1-A	464	ASN	3.8
1	1-A	278	GLU	3.8
1	1-A	263	TYR	3.8

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Mol	Chain	Res	Type	RSRZ
1	1-B	150	TYR	3.8
1	1-A	49	ILE	3.8
1	1-A	98	PRO	3.8
1	1-A	209	LEU	3.8
1	1-B	198	ALA	3.8
1	1-B	146	ILE	3.8
1	1-A	266	LYS	3.8
1	1-B	210	SER	3.8
1	1-B	37	LEU	3.8
1	1-A	387	THR	3.7
1	1-A	30	ILE	3.7
1	1-A	398	PRO	3.7
1	1-B	203	GLY	3.7
1	1-A	360	LYS	3.7
1	1-A	439	LYS	3.7
1	1-B	288	LYS	3.7
1	1-A	57	VAL	3.7
1	1-B	178	SER	3.7
1	1-A	322	LYS	3.7
1	1-A	447	GLY	3.7
1	1-B	465	GLY	3.7
1	1-B	469	LEU	3.7
1	1-A	405	THR	3.7
1	1-A	414	PRO	3.7
1	1-B	10	GLN	3.7
1	1-A	45	GLU	3.7
1	1-B	172	GLU	3.7
1	1-A	388	ASN	3.7
1	1-B	31	SER	3.7
1	1-A	455	ARG	3.7
1	1-A	141	ASP	3.6
1	1-A	342	PHE	3.6
1	1-A	87	GLY	3.6
1	1-A	174	VAL	3.6
1	1-A	288	LYS	3.6
1	1-A	142	ASP	3.6
1	1-B	260	LEU	3.6
1	1-B	249	PRO	3.6
1	1-A	143	THR	3.5
1	1-A	231	THR	3.5
1	1-A	248	THR	3.5
1	1-A	317	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
1	1-B	36	TYR	3.5
1	1-A	277	ASP	3.5
1	1-A	287	GLU	3.5
1	1-A	426	GLY	3.5
1	1-A	127	CYS	3.5
1	1-A	173	PHE	3.5
1	1-A	457	VAL	3.5
1	1-A	233	LEU	3.5
1	1-B	53	THR	3.5
1	1-A	274	GLN	3.5
1	1-A	359	VAL	3.5
1	1-B	247	VAL	3.5
1	1-A	111	LEU	3.5
1	1-A	269	LEU	3.5
1	1-A	396	LEU	3.5
1	1-A	423	LYS	3.5
1	1-B	121	LEU	3.5
1	1-A	15	VAL	3.4
1	1-A	446	SER	3.4
1	1-A	217	PHE	3.4
1	1-B	29	PHE	3.4
1	1-B	39	GLY	3.4
1	1-A	320	ASN	3.4
1	1-A	339	ALA	3.4
1	1-A	161	ASN	3.4
1	1-B	450	LEU	3.4
1	1-A	35	ARG	3.4
1	1-A	337	GLY	3.4
1	1-A	144	HIS	3.4
1	1-A	429	TRP	3.4
1	1-A	29	PHE	3.4
1	1-A	6	GLU	3.4
1	1-A	325	ASP	3.4
1	1-B	90	GLY	3.4
1	1-A	247	VAL	3.3
1	1-A	416	ILE	3.3
1	1-B	18	LEU	3.3
1	1-A	92	THR	3.3
1	1-A	50	GLN	3.3
1	1-B	106	ASP	3.3
1	1-B	360	LYS	3.3
1	1-A	363	SER	3.3

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Mol	Chain	Res	Type	RSRZ
1	1-A	448	VAL	3.3
1	1-B	47	SER	3.3
1	1-A	19	THR	3.3
1	1-A	282	GLU	3.3
1	1-A	59	PRO	3.3
1	1-A	31	SER	3.3
1	1-A	66	VAL	3.3
1	1-A	70	VAL	3.3
1	1-A	424	VAL	3.3
1	1-B	155	VAL	3.3
1	1-A	465	GLY	3.3
1	1-B	97	GLY	3.3
1	1-B	180	GLY	3.3
1	1-A	170	ALA	3.3
1	1-A	256	LYS	3.2
1	1-B	51	THR	3.2
1	1-B	248	THR	3.2
1	1-A	56	ILE	3.2
1	1-A	428	VAL	3.2
1	1-B	211	GLN	3.2
1	1-B	267	VAL	3.2
1	1-A	230	LEU	3.2
1	1-A	460	ASN	3.2
1	1-B	321	PRO	3.2
1	1-B	96	THR	3.2
1	1-A	267	VAL	3.2
1	1-A	297	LEU	3.2
1	1-A	301	LEU	3.2
1	1-A	14	ALA	3.2
1	1-A	140	HIS	3.2
1	1-A	341	ARG	3.2
1	1-B	94	GLY	3.2
1	1-B	54	ASP	3.1
1	1-B	452	ILE	3.1
1	1-B	200	MET	3.1
1	1-B	352	PRO	3.1
1	1-A	262	SER	3.1
1	1-A	370	SER	3.1
1	1-B	38	SER	3.1
1	1-A	7	ASN	3.1
1	1-A	238	GLN	3.1
1	1-A	261	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
1	1-A	340	ILE	3.1
1	1-A	132	VAL	3.1
1	1-B	15	VAL	3.1
1	1-A	9	PRO	3.1
1	1-B	264	GLU	3.1
1	1-A	386	ARG	3.1
1	1-B	42	GLN	3.1
1	1-A	76	LEU	3.1
1	1-B	168	VAL	3.1
1	1-A	60	TYR	3.1
1	1-B	186	GLY	3.1
1	1-A	281	ASN	3.1
1	1-A	395	GLU	3.1
1	1-A	205	LEU	3.0
1	1-B	269	LEU	3.0
1	1-B	466	PRO	3.0
1	1-B	257	GLY	3.0
1	1-A	199	LEU	3.0
1	1-A	243	TYR	3.0
1	1-A	373	TYR	3.0
1	1-B	105	ARG	3.0
1	1-A	24	SER	3.0
1	1-B	439	LYS	3.0
1	1-A	466	PRO	3.0
1	1-A	77	LEU	3.0
1	1-A	407	LEU	3.0
1	1-B	374	THR	3.0
1	1-B	413	ILE	3.0
1	1-A	101	VAL	3.0
1	1-A	104	VAL	3.0
1	1-A	125	TYR	3.0
1	1-B	206	ASP	3.0
1	1-A	461	LYS	3.0
1	1-B	433	SER	3.0
1	1-B	9	PRO	2.9
1	1-B	98	PRO	2.9
1	1-B	353	ARG	2.9
1	1-A	51	THR	2.9
1	1-A	332	LEU	2.9
1	1-A	245	MET	2.9
1	1-A	354	SER	2.9
1	1-A	97	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
1	1-B	258	GLY	2.9
1	1-A	80	LEU	2.9
1	1-A	224	LEU	2.9
1	1-A	270	LEU	2.9
1	1-A	271	GLU	2.9
1	1-A	58	VAL	2.9
1	1-A	380	VAL	2.9
1	1-B	127	CYS	2.9
1	1-B	287	GLU	2.9
1	1-A	236	LEU	2.9
1	1-B	7	ASN	2.9
1	1-A	308	VAL	2.9
1	1-B	265	GLY	2.9
1	1-B	278	GLU	2.9
1	1-A	312	ALA	2.9
1	1-B	27	SER	2.8
1	1-A	307	LEU	2.8
1	1-B	11	LEU	2.8
1	1-A	302	LYS	2.8
1	1-A	197	PRO	2.8
1	1-B	229	ASP	2.8
1	1-A	110	PHE	2.8
1	1-A	369	GLN	2.8
1	1-A	157	ILE	2.8
1	1-A	232	ILE	2.8
1	1-A	427	ASP	2.8
1	1-A	319	PRO	2.8
1	1-A	250	LYS	2.8
1	1-B	332	LEU	2.8
1	1-A	249	PRO	2.8
1	1-A	207	THR	2.8
1	1-B	259	THR	2.8
1	1-A	212	GLY	2.8
1	1-A	318	ILE	2.7
1	1-B	24	SER	2.7
1	1-B	262	SER	2.7
1	1-B	317	ILE	2.7
1	1-B	231	THR	2.7
1	1-A	195	VAL	2.7
1	1-B	14	ALA	2.7
1	1-A	445	LYS	2.7
1	1-B	145	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
1	1-A	208	PHE	2.7
1	1-A	201	ASN	2.7
1	1-A	131	LEU	2.7
1	1-A	260	LEU	2.7
1	1-A	52	PRO	2.7
1	1-A	411	LYS	2.7
1	1-B	156	ASP	2.7
1	1-A	244	CYS	2.7
1	1-B	303	ALA	2.7
1	1-B	87	GLY	2.7
1	1-B	467	GLU	2.7
1	1-A	403	VAL	2.7
1	1-B	147	VAL	2.7
1	1-B	199	LEU	2.6
1	1-A	91	THR	2.6
1	1-B	109	THR	2.6
1	1-A	310	ALA	2.6
1	1-A	338	ALA	2.6
1	1-B	318	ILE	2.6
1	1-A	265	GLY	2.6
1	1-A	192	HIS	2.6
1	1-B	125	TYR	2.6
1	1-B	188	TYR	2.6
1	1-A	78	ASP	2.6
1	1-A	367	LEU	2.6
1	1-A	404	ALA	2.6
1	1-B	126	GLY	2.6
1	1-A	204	LYS	2.6
1	1-A	328	LYS	2.6
1	1-B	442	VAL	2.6
1	1-B	61	GLU	2.6
1	1-A	344	ASP	2.6
1	1-A	53	THR	2.6
1	1-A	75	ASN	2.6
1	1-B	455	ARG	2.6
1	1-A	107	GLY	2.6
1	1-A	108	LEU	2.6
1	1-A	95	CYS	2.6
1	1-A	229	ASP	2.6
1	1-B	263	TYR	2.6
1	1-B	52	PRO	2.6
1	1-B	397	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
1	1-A	153	SER	2.6
1	1-A	402	LYS	2.5
1	1-A	303	ALA	2.5
1	1-B	407	LEU	2.5
1	1-B	344	ASP	2.5
1	1-B	251	THR	2.5
1	1-A	172	GLU	2.5
1	1-B	197	PRO	2.5
1	1-A	85	LEU	2.5
1	1-B	108	LEU	2.5
1	1-B	254	ASP	2.5
1	1-A	347	ILE	2.5
1	1-B	464	ASN	2.5
1	1-A	147	VAL	2.5
1	1-B	359	VAL	2.5
1	1-B	133	LEU	2.5
1	1-B	468	ASP	2.5
1	1-A	196	PHE	2.5
1	1-A	223	ASN	2.5
1	1-A	20	GLU	2.5
1	1-A	264	GLU	2.5
1	1-A	102	ILE	2.5
1	1-A	145	LYS	2.5
1	1-A	235	HIS	2.5
1	1-B	394	ILE	2.5
1	1-A	432	SER	2.5
1	1-A	378	GLY	2.5
1	1-A	155	VAL	2.5
1	1-A	150	TYR	2.5
1	1-B	311	ASP	2.5
1	1-A	123	ASN	2.5
1	1-A	246	GLU	2.5
1	1-A	333	GLU	2.5
1	1-B	119	GLU	2.5
1	1-B	270	LEU	2.4
1	1-B	160	PHE	2.4
1	1-A	10	GLN	2.4
1	1-B	331	GLN	2.4
1	1-A	130	PRO	2.4
1	1-B	45	GLU	2.4
1	1-B	57	VAL	2.4
1	1-A	323	GLU	2.4

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Mol	Chain	Res	Type	RSRZ
1	1-A	364	ASP	2.4
1	1-B	59	PRO	2.4
1	1-B	266	LYS	2.4
1	1-A	216	VAL	2.4
1	1-A	218	VAL	2.4
1	1-B	66	VAL	2.4
1	1-B	447	GLY	2.4
1	1-A	343	PHE	2.4
1	1-B	110	PHE	2.4
1	1-B	347	ILE	2.4
1	1-A	382	ARG	2.4
1	1-A	425	SER	2.4
1	1-A	183	ASP	2.4
1	1-A	313	LEU	2.4
1	1-B	154	ASN	2.3
1	1-B	124	LYS	2.3
1	1-A	146	ILE	2.3
1	1-B	148	GLU	2.3
1	1-B	456	ALA	2.3
1	1-B	129	VAL	2.3
1	1-A	296	ASN	2.3
1	1-B	350	ASN	2.3
1	1-B	144	HIS	2.3
1	1-A	211	GLN	2.3
1	1-B	137	PHE	2.3
1	1-B	23	GLU	2.3
1	1-B	227	ILE	2.3
1	1-A	198	ALA	2.3
1	1-A	191	GLY	2.3
1	1-A	215	TYR	2.3
1	1-A	159	THR	2.3
1	1-B	429	TRP	2.3
1	1-B	213	LYS	2.3
1	1-A	219	ALA	2.3
1	1-A	381	THR	2.3
1	1-B	441	THR	2.3
1	1-B	65	PRO	2.2
1	1-B	453	PRO	2.2
1	1-A	194	ASP	2.2
1	1-A	315	MET	2.2
1	1-A	26	LYS	2.2
1	1-A	124	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
1	1-A	384	LYS	2.2
1	1-B	232	ILE	2.2
1	1-B	237	ILE	2.2
1	1-B	343	PHE	2.2
1	1-A	399	GLU	2.2
1	1-B	459	GLU	2.2
1	1-A	294	THR	2.2
1	1-A	169	VAL	2.2
1	1-A	133	LEU	2.2
1	1-B	355	ARG	2.2
1	1-B	187	TRP	2.2
1	1-A	193	GLY	2.2
1	1-B	410	PHE	2.2
1	1-A	412	SER	2.2
1	1-A	112	ASP	2.2
1	1-B	26	LYS	2.2
1	1-B	299	VAL	2.2
1	1-B	308	VAL	2.2
1	1-A	176	TRP	2.2
1	1-B	446	SER	2.2
1	1-A	139	THR	2.2
1	1-A	314	LYS	2.2
1	1-A	25	GLU	2.2
1	1-A	120	ASN	2.2
1	1-A	214	GLU	2.2
1	1-B	60	TYR	2.2
1	1-B	448	VAL	2.2
1	1-B	458	VAL	2.2
1	1-B	307	LEU	2.2
1	1-B	313	LEU	2.2
1	1-B	244	CYS	2.2
1	1-B	461	LYS	2.1
1	1-A	160	PHE	2.1
1	1-A	295	ASN	2.1
1	1-B	75	ASN	2.1
1	1-A	82	VAL	2.1
1	1-A	165	TYR	2.1
1	1-B	436	LEU	2.1
1	1-A	182	THR	2.1
1	1-A	334	THR	2.1
1	1-B	298	TRP	2.1
1	1-A	353	ARG	2.1

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Mol	Chain	Res	Type	RSRZ
1	1-B	290	LYS	2.1
1	1-B	67	SER	2.1
1	1-A	188	TYR	2.1
1	1-B	349	VAL	2.1
1	1-B	226	ALA	2.1
1	1-B	17	GLY	2.1
1	1-B	28	GLY	2.1
1	1-B	62	LYS	2.1
1	1-A	65	PRO	2.1
1	1-A	331	GLN	2.1
1	1-A	163	SER	2.1
1	1-A	241	ASN	2.1
1	1-A	293	ASN	2.1
1	1-A	109	THR	2.0
1	1-A	114	ILE	2.0
1	1-A	190	PRO	2.0
1	1-A	206	ASP	2.0
1	1-B	196	PHE	2.0
1	1-B	297	LEU	2.0
1	1-B	218	VAL	2.0
1	1-B	40	GLU	2.0
1	1-B	323	GLU	2.0
1	1-A	62	LYS	2.0
1	1-B	401	LYS	2.0
1	1-A	22	SER	2.0
1	1-B	421	SER	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 [\(i\)](#)

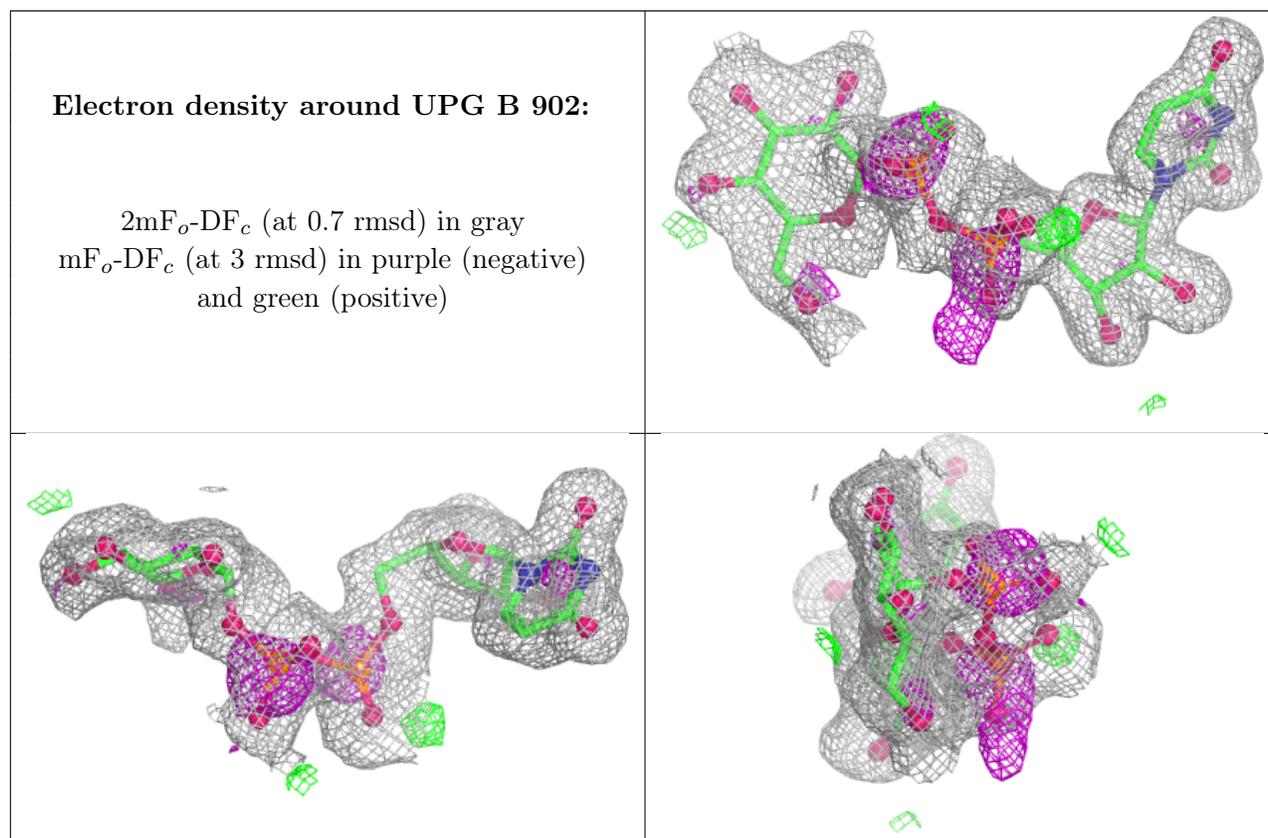
There are no oligosaccharides in this entry.

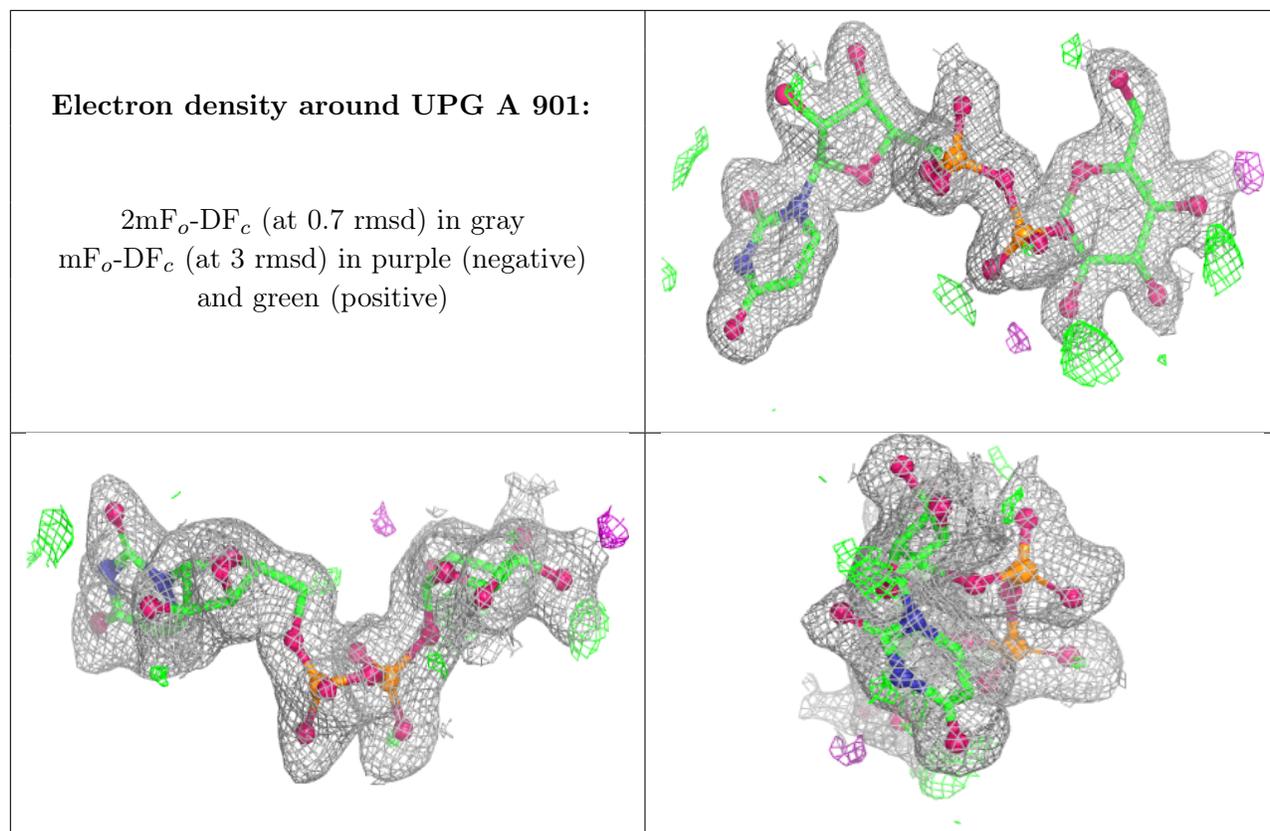
6.4 Ligands [\(i\)](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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(\AA^2)	Q<0.9
2	DMS	1-A	900	4/4	0.88	0.15	28,36,37,39	4
2	DMS	2-A	900	4/4	-	-	28,36,37,39	4
3	UPG	1-B	902	36/36	0.88	0.09	13,22,29,31	36
3	UPG	2-A	901	36/36	-	-	19,22,27,28	36
3	UPG	1-A	901	36/36	0.91	0.12	19,22,27,28	36

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.





6.5 Other polymers [i](#)

There are no such residues in this entry.