



Full wwPDB X-ray Structure Validation Report ⓘ

Sep 26, 2023 – 04:53 AM EDT

PDB ID : 6BRH
Title : The SAM domain of mouse SAMHD1 is critical for its activation and regulation
Authors : Buzovetsky, O.; Tang, C.; Knecht, K.M.; Antonucci, J.M.; Wu, L.; Ji, X.; Xiong, Y.
Deposited on : 2017-11-30
Resolution : 3.40 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 : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.35.1
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) : 2.35.1

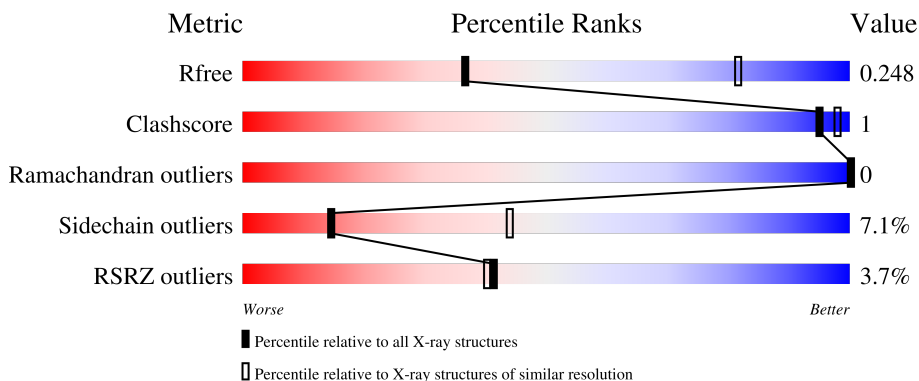
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.40 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1026 (3.48-3.32)
Clashscore	141614	1055 (3.48-3.32)
Ramachandran outliers	138981	1038 (3.48-3.32)
Sidechain outliers	138945	1038 (3.48-3.32)
RSRZ outliers	127900	2173 (3.50-3.30)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	A	672	 3% 68% 6% 26%
1	B	672	 3% 67% 7% 25%

2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 8355 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 Deoxynucleoside triphosphate triphosphohydrolase SAMHD1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	500	4130	2641	727	741	21	0	0	0
1	B	502	4141	2648	727	745	21	0	0	0

There are 28 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-13	MET	-	initiating methionine	UNP F8WJE0
A	-12	GLY	-	expression tag	UNP F8WJE0
A	-11	SER	-	expression tag	UNP F8WJE0
A	-10	SER	-	expression tag	UNP F8WJE0
A	-9	HIS	-	expression tag	UNP F8WJE0
A	-8	HIS	-	expression tag	UNP F8WJE0
A	-7	HIS	-	expression tag	UNP F8WJE0
A	-6	HIS	-	expression tag	UNP F8WJE0
A	-5	HIS	-	expression tag	UNP F8WJE0
A	-4	HIS	-	expression tag	UNP F8WJE0
A	-3	SER	-	expression tag	UNP F8WJE0
A	-2	SER	-	expression tag	UNP F8WJE0
A	-1	GLY	-	expression tag	UNP F8WJE0
A	0	LEU	-	expression tag	UNP F8WJE0
B	-13	MET	-	initiating methionine	UNP F8WJE0
B	-12	GLY	-	expression tag	UNP F8WJE0
B	-11	SER	-	expression tag	UNP F8WJE0
B	-10	SER	-	expression tag	UNP F8WJE0
B	-9	HIS	-	expression tag	UNP F8WJE0
B	-8	HIS	-	expression tag	UNP F8WJE0
B	-7	HIS	-	expression tag	UNP F8WJE0
B	-6	HIS	-	expression tag	UNP F8WJE0
B	-5	HIS	-	expression tag	UNP F8WJE0
B	-4	HIS	-	expression tag	UNP F8WJE0
B	-3	SER	-	expression tag	UNP F8WJE0

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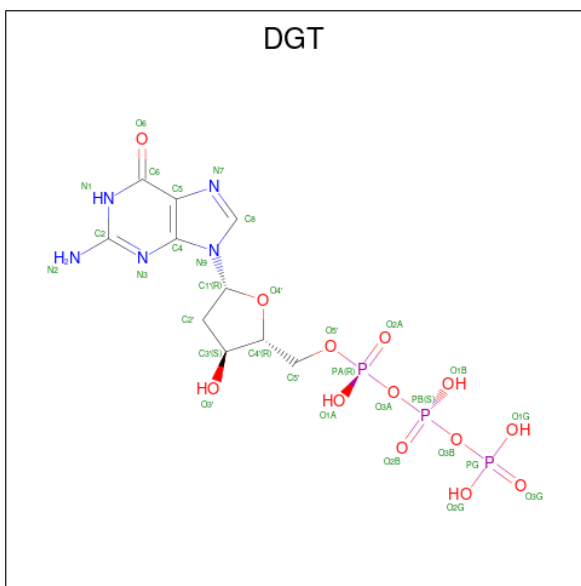
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Chain	Residue	Modelled	Actual	Comment	Reference
B	-2	SER	-	expression tag	UNP F8WJE0
B	-1	GLY	-	expression tag	UNP F8WJE0
B	0	LEU	-	expression tag	UNP F8WJE0

- Molecule 2 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

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

- Molecule 3 is 2'-DEOXYGUANOSINE-5'-TRIPHOSPHATE (three-letter code: DGT) (formula: C₁₀H₁₆N₅O₁₃P₃).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C N O P 31 10 5 13 3	0	0
3	B	1	Total C N O P 31 10 5 13 3	0	0

- Molecule 4 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	9	Total O 9 9	0	0

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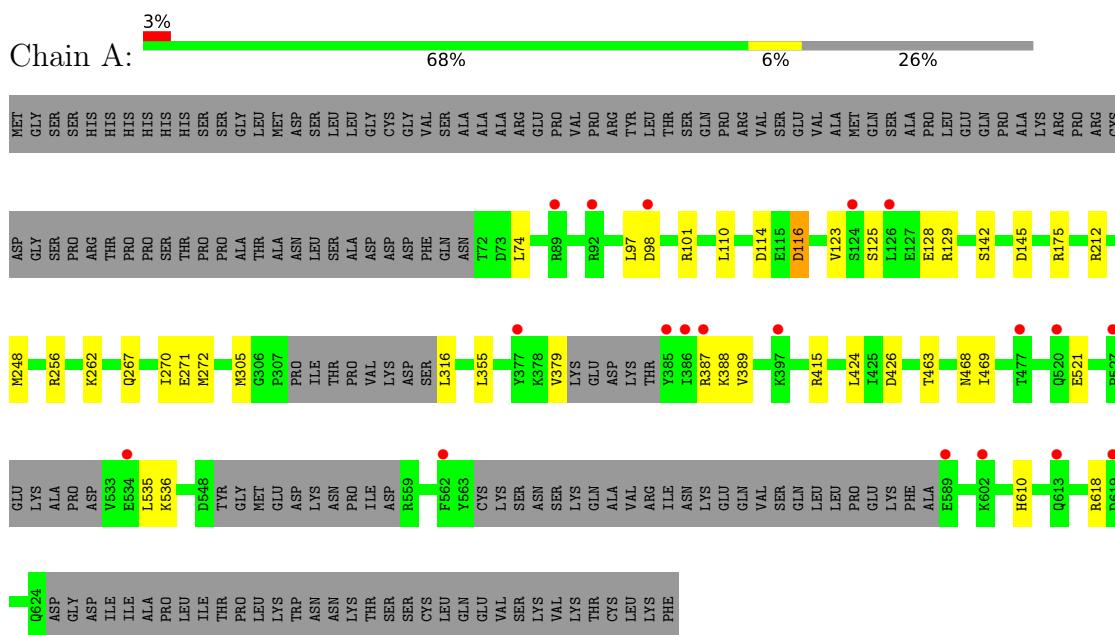
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	B	11	Total	O	0	0
			11	11		

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: Deoxynucleoside triphosphate triphosphohydrolase SAMHD1



- Molecule 1: Deoxynucleoside triphosphate triphosphohydrolase SAMHD1



GLN	LEU	LEU	PRO	GLU	LYS	PHE	ALA	E589	R593	L604	H610	R618	D619	K622	P623	Q624	ASP	GLY	ASP	ILE	ILE	ALA	PRO	LEU	ILE	THR	PRO	LEU	LYS	TRP	ASN	ASN	LYS	THR	SER	SER	CYS	LEU	GLN	GLU	VAL	SER	LYS	VAL	LYS	THR	CYS	LEU	LYS	PHE
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4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 2	Depositor
Cell constants a, b, c, α , β , γ	112.03Å 130.05Å 90.77Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	20.00 – 3.40 19.90 – 3.40	Depositor EDS
% Data completeness (in resolution range)	98.2 (20.00-3.40) 98.9 (19.90-3.40)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.51 (at 3.44Å)	Xtrriage
Refinement program	REFMAC 5.8.0103	Depositor
R, R_{free}	0.196 , 0.247 0.196 , 0.248	Depositor DCC
R_{free} test set	901 reflections (4.88%)	wwPDB-VP
Wilson B-factor (Å ²)	85.2	Xtrriage
Anisotropy	0.228	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.31 , 98.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.32$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	8355	wwPDB-VP
Average B, all atoms (Å ²)	98.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.92% 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: DGT, MG

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	0.45	0/4221	0.59	2/5674 (0.0%)
1	B	0.43	0/4232	0.56	2/5689 (0.0%)
All	All	0.44	0/8453	0.58	4/11363 (0.0%)

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	426	ASP	CB-CG-OD2	-8.68	110.49	118.30
1	A	536	LYS	CD-CE-NZ	5.69	124.78	111.70
1	B	212	ARG	NE-CZ-NH1	-5.48	117.56	120.30
1	B	114	ASP	CB-CG-OD2	-5.15	113.66	118.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	4130	0	4110	7	0
1	B	4141	0	4122	13	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
3	A	31	0	11	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	B	31	0	11	1	0
4	A	9	0	0	0	0
4	B	11	0	0	1	0
All	All	8355	0	8254	19	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 (19) 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:148:LYS:NZ	3:B:701:DGT:O1G	2.33	0.61
1:B:418:GLN:O	1:B:593:ARG:NH1	2.35	0.57
1:B:521:GLU:OE1	1:B:618:ARG:NH2	2.39	0.56
1:A:267:GLN:HA	1:A:305:MET:HE1	1.90	0.53
1:B:245:PHE:N	1:B:467:ASP:OD1	2.42	0.52
1:A:521:GLU:OE1	1:A:618:ARG:NH2	2.43	0.51
1:B:115:GLU:HG2	1:B:129:ARG:HD2	1.93	0.50
1:A:125:SER:HB2	1:A:128:GLU:HB3	1.95	0.49
1:B:116:ASP:N	1:B:116:ASP:OD1	2.46	0.48
1:B:317:TRP:NE1	1:B:322:ARG:O	2.45	0.47
1:A:355:LEU:O	1:B:151:ASN:ND2	2.45	0.45
1:A:116:ASP:N	1:A:116:ASP:OD1	2.50	0.43
1:B:247:HIS:HB2	4:B:804:HOH:O	2.19	0.43
1:A:123:VAL:CG2	1:A:129:ARG:HG2	2.49	0.43
1:A:270:ILE:HG13	1:A:271:GLU:N	2.35	0.42
1:B:172:GLN:HG3	1:B:272:MET:HE3	2.02	0.42
1:B:515:TYR:CZ	1:B:544:VAL:HG21	2.55	0.41
1:B:270:ILE:HG13	1:B:271:GLU:N	2.35	0.41
1:B:413:HIS:HA	1:B:417:TYR:HB2	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	488/672 (73%)	473 (97%)	15 (3%)	0	100	100
1	B	490/672 (73%)	475 (97%)	15 (3%)	0	100	100
All	All	978/1344 (73%)	948 (97%)	30 (3%)	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	449/602 (75%)	422 (94%)	27 (6%)	19	49
1	B	451/602 (75%)	414 (92%)	37 (8%)	11	37
All	All	900/1204 (75%)	836 (93%)	64 (7%)	14	44

All (64) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	74	LEU
1	A	97	LEU
1	A	98	ASP
1	A	101	ARG
1	A	110	LEU
1	A	114	ASP
1	A	116	ASP
1	A	142	SER
1	A	145	ASP
1	A	175	ARG
1	A	212	ARG
1	A	248	MET
1	A	256	ARG
1	A	262	LYS
1	A	272	MET

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Mol	Chain	Res	Type
1	A	316	LEU
1	A	379	VAL
1	A	387	ARG
1	A	388	LYS
1	A	389	VAL
1	A	415	ARG
1	A	424	LEU
1	A	463	THR
1	A	468	ASN
1	A	469	ILE
1	A	535	LEU
1	A	610	HIS
1	B	74	LEU
1	B	96	VAL
1	B	97	LEU
1	B	98	ASP
1	B	101	ARG
1	B	110	LEU
1	B	114	ASP
1	B	116	ASP
1	B	129	ARG
1	B	142	SER
1	B	144	ILE
1	B	145	ASP
1	B	175	ARG
1	B	212	ARG
1	B	216	GLU
1	B	248	MET
1	B	256	ARG
1	B	262	LYS
1	B	272	MET
1	B	287	LYS
1	B	315	SER
1	B	316	LEU
1	B	379	VAL
1	B	385	TYR
1	B	387	ARG
1	B	388	LYS
1	B	389	VAL
1	B	409	ARG
1	B	418	GLN
1	B	424	LEU

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Mol	Chain	Res	Type
1	B	463	THR
1	B	469	ILE
1	B	498	LYS
1	B	508	GLU
1	B	535	LEU
1	B	604	LEU
1	B	610	HIS

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

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 4 ligands modelled in this entry, 2 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
3	DGT	A	702	-	26,33,33	3.26	6 (23%)	32,52,52	1.36	5 (15%)
3	DGT	B	701	-	26,33,33	3.18	8 (30%)	32,52,52	1.33	4 (12%)

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	DGT	A	702	-	-	3/18/34/34	0/3/3/3
3	DGT	B	701	-	-	2/18/34/34	0/3/3/3

All (14) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	B	701	DGT	O4'-C1'	8.18	1.60	1.42
3	A	702	DGT	O4'-C1'	8.17	1.60	1.42
3	A	702	DGT	O6-C6	7.76	1.39	1.23
3	B	701	DGT	O6-C6	7.59	1.38	1.23
3	A	702	DGT	O4'-C4'	-7.01	1.29	1.45
3	A	702	DGT	C2'-C1'	-6.93	1.33	1.52
3	B	701	DGT	O4'-C4'	-6.89	1.29	1.45
3	B	701	DGT	C2'-C1'	-6.28	1.34	1.52
3	A	702	DGT	O3'-C3'	-4.45	1.33	1.43
3	B	701	DGT	O3'-C3'	-4.19	1.34	1.43
3	A	702	DGT	C2-N2	3.10	1.41	1.34
3	B	701	DGT	C2-N2	3.06	1.41	1.34
3	B	701	DGT	C2-N1	-2.15	1.32	1.37
3	B	701	DGT	C5'-C4'	2.12	1.58	1.51

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	701	DGT	PB-O3B-PG	-3.97	119.19	132.83
3	B	701	DGT	C5-C6-N1	3.12	119.45	113.95
3	A	702	DGT	PB-O3B-PG	-3.08	122.27	132.83
3	A	702	DGT	C5-C6-N1	2.80	118.90	113.95
3	B	701	DGT	C8-N7-C5	2.41	107.58	102.99
3	A	702	DGT	C4'-O4'-C1'	-2.38	103.70	109.45
3	A	702	DGT	C8-N7-C5	2.32	107.42	102.99
3	A	702	DGT	O6-C6-C5	-2.28	119.93	124.37
3	B	701	DGT	O6-C6-C5	-2.10	120.27	124.37

There are no chirality outliers.

All (5) torsion outliers are listed below:

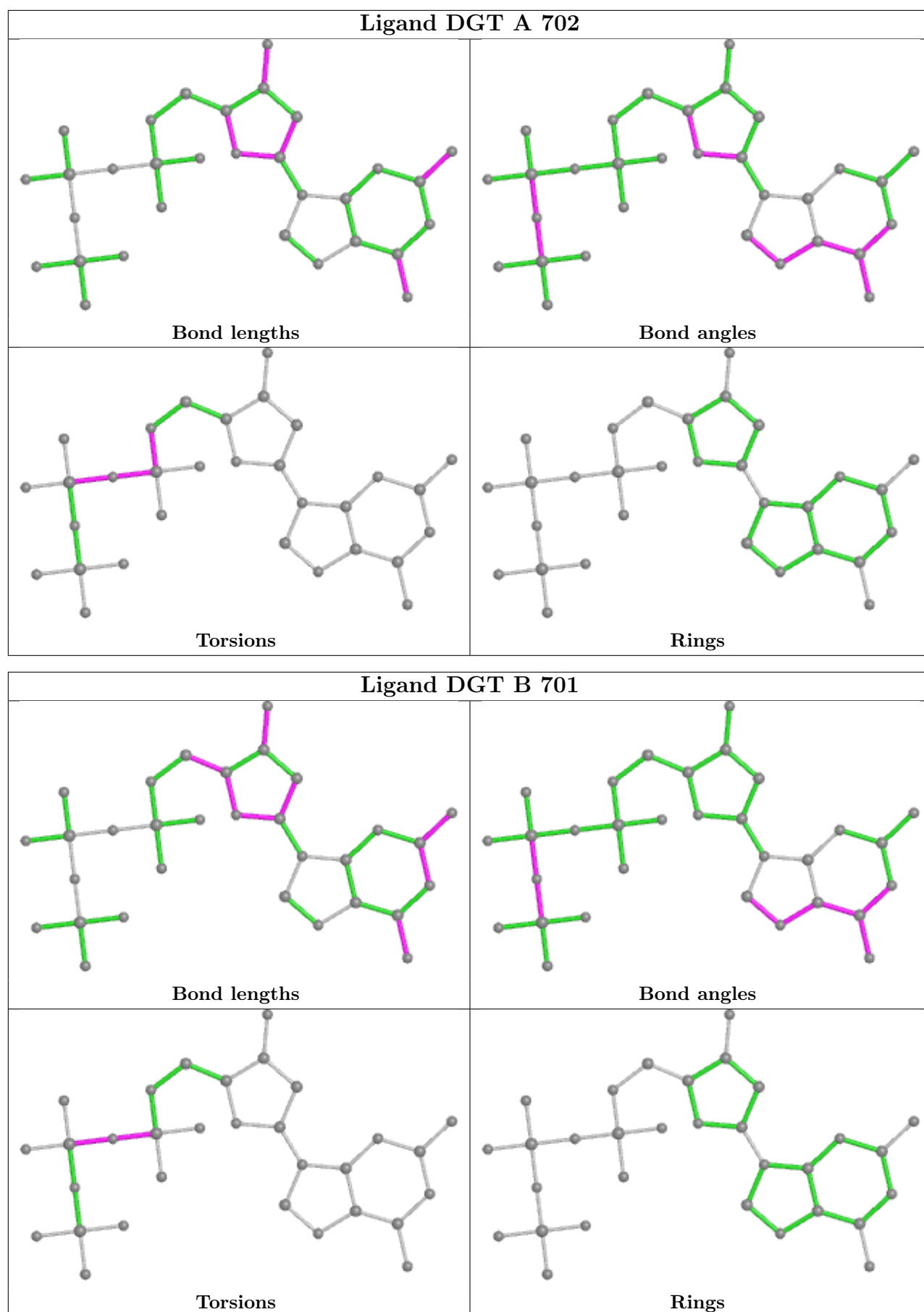
Mol	Chain	Res	Type	Atoms
3	A	702	DGT	C5'-O5'-PA-O2A
3	A	702	DGT	PB-O3A-PA-O5'
3	B	701	DGT	PB-O3A-PA-O5'
3	B	701	DGT	PA-O3A-PB-O2B
3	A	702	DGT	PA-O3A-PB-O1B

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	B	701	DGT	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 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	A	500/672 (74%)	-0.01	19 (3%) 40 39	44, 91, 156, 200	0
1	B	502/672 (74%)	-0.10	18 (3%) 42 42	49, 90, 156, 183	0
All	All	1002/1344 (74%)	-0.06	37 (3%) 41 40	44, 91, 156, 200	0

All (37) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	A	385	TYR	5.7
1	B	336	LYS	5.1
1	B	384	THR	4.2
1	A	92	ARG	3.8
1	B	385	TYR	3.5
1	A	527	PRO	3.4
1	B	403	TYR	3.3
1	A	619	ASP	3.1
1	A	126	LEU	3.1
1	A	98	ASP	3.1
1	B	548	ASP	3.0
1	A	534	GLU	3.0
1	A	386	ILE	3.0
1	B	307	PRO	2.9
1	A	124	SER	2.7
1	B	526	LYS	2.5
1	B	315	SER	2.5
1	B	622	LYS	2.4
1	B	527	PRO	2.3
1	B	507	ARG	2.3
1	B	619	ASP	2.3
1	B	88	ASN	2.2
1	A	562	PHE	2.2
1	B	92	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
1	A	613	GLN	2.2
1	B	73	ASP	2.2
1	A	589	GLU	2.2
1	A	387	ARG	2.1
1	B	387	ARG	2.1
1	B	534	GLU	2.1
1	A	477	THR	2.1
1	A	520	GLN	2.1
1	A	602	LYS	2.1
1	A	377	TYR	2.1
1	B	512	LYS	2.0
1	A	397	LYS	2.0
1	A	89	ARG	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 monosaccharides in this entry.

6.4 Ligands [i](#)

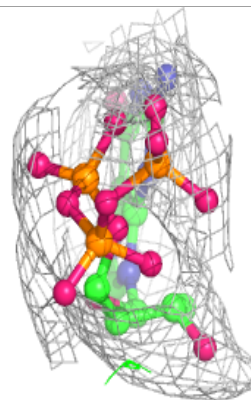
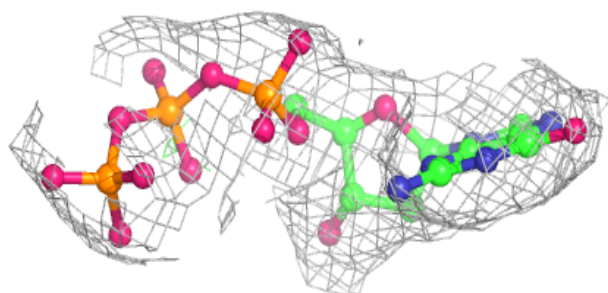
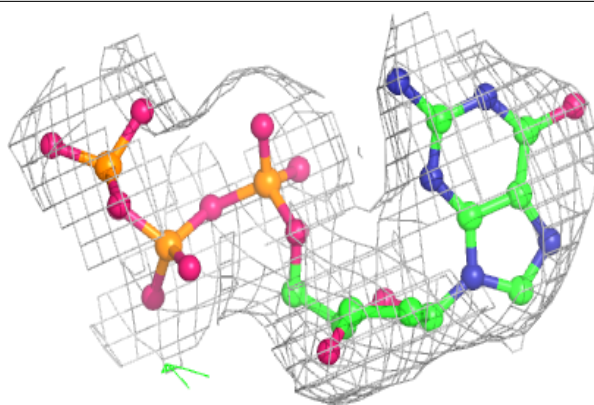
In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
3	DGT	A	702	31/31	0.94	0.16	64,77,153,162	0
3	DGT	B	701	31/31	0.94	0.18	58,69,178,189	0
2	MG	A	701	1/1	0.99	0.21	16,16,16,16	0
2	MG	B	702	1/1	0.99	0.18	21,21,21,21	0

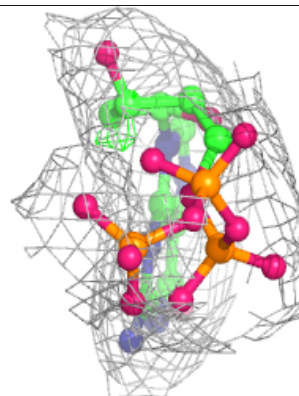
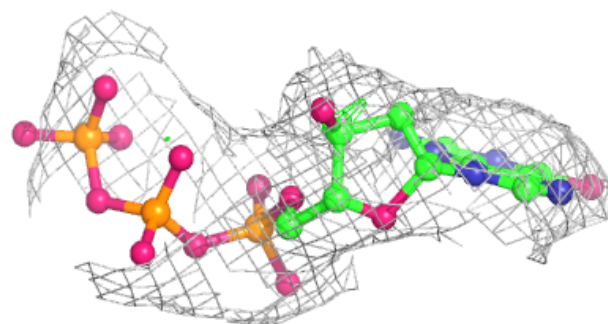
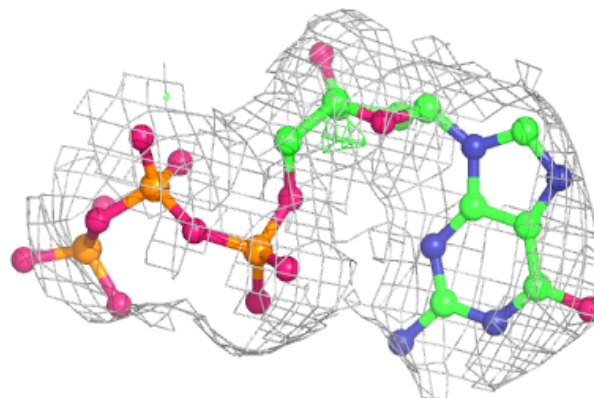
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around DGT A 702:

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

**Electron density around DGT B 701:**

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



6.5 Other polymers [i](#)

There are no such residues in this entry.