Full wwPDB X-ray Structure Validation Report ⓘ

Mar 9, 2026 – 09:20 PM UTC

PDB ID	:	6GDP / pdb_00006gdp
Title	:	Trypanosoma brucei PTR1 in complex with inhibitor 4l (F162)
Authors	:	Pozzi, C.; Landi, G.; Mangani, S.
Deposited on	:	2018-04-24
Resolution	:	1.52 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:

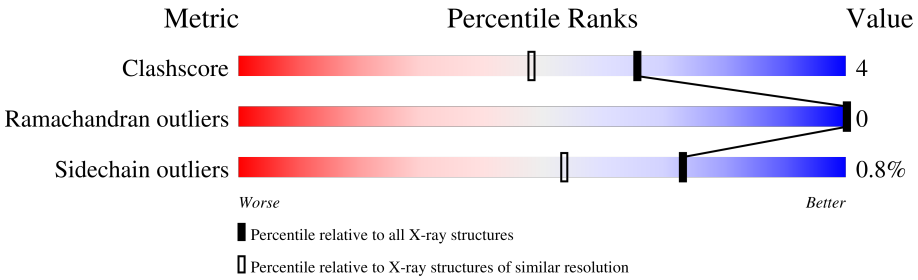
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	NOT EXECUTED
Xtriage (Phenix)	:	2.0
EDS	:	NOT EXECUTED
Buster-report	:	NOT EXECUTED
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 1.52 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	6116 (1.54-1.50)
Ramachandran outliers	187476	6002 (1.54-1.50)
Sidechain outliers	187428	5999 (1.54-1.50)

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

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	288	82% 6% 12%
1	B	288	80% 8% 12%
1	C	288	79% 8% 13%
1	D	288	82% 5% 13%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
5	GOL	B	304[A]	-	-	X	-
5	GOL	B	306	-	-	X	-

2 Entry composition (i)

There are 6 unique types of molecules in this entry. The entry contains 9073 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 Pteridine reductase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	252	Total	C	N	O	S	0	15	0
			1955	1238	344	361	12			
1	B	253	Total	C	N	O	S	0	18	0
			1955	1244	335	364	12			
1	C	251	Total	C	N	O	S	0	13	0
			1903	1202	332	357	12			
1	D	250	Total	C	N	O	S	0	16	0
			1933	1227	335	359	12			

There are 80 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	-19	MET	-	initiating methionine	UNP O76290
A	-18	GLY	-	expression tag	UNP O76290
A	-17	SER	-	expression tag	UNP O76290
A	-16	SER	-	expression tag	UNP O76290
A	-15	HIS	-	expression tag	UNP O76290
A	-14	HIS	-	expression tag	UNP O76290
A	-13	HIS	-	expression tag	UNP O76290
A	-12	HIS	-	expression tag	UNP O76290
A	-11	HIS	-	expression tag	UNP O76290
A	-10	HIS	-	expression tag	UNP O76290
A	-9	SER	-	expression tag	UNP O76290
A	-8	SER	-	expression tag	UNP O76290
A	-7	GLY	-	expression tag	UNP O76290
A	-6	LEU	-	expression tag	UNP O76290
A	-5	VAL	-	expression tag	UNP O76290
A	-4	PRO	-	expression tag	UNP O76290
A	-3	ARG	-	expression tag	UNP O76290
A	-2	GLY	-	expression tag	UNP O76290
A	-1	SER	-	expression tag	UNP O76290
A	0	HIS	-	expression tag	UNP O76290
B	-19	MET	-	initiating methionine	UNP O76290

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-18	GLY	-	expression tag	UNP O76290
B	-17	SER	-	expression tag	UNP O76290
B	-16	SER	-	expression tag	UNP O76290
B	-15	HIS	-	expression tag	UNP O76290
B	-14	HIS	-	expression tag	UNP O76290
B	-13	HIS	-	expression tag	UNP O76290
B	-12	HIS	-	expression tag	UNP O76290
B	-11	HIS	-	expression tag	UNP O76290
B	-10	HIS	-	expression tag	UNP O76290
B	-9	SER	-	expression tag	UNP O76290
B	-8	SER	-	expression tag	UNP O76290
B	-7	GLY	-	expression tag	UNP O76290
B	-6	LEU	-	expression tag	UNP O76290
B	-5	VAL	-	expression tag	UNP O76290
B	-4	PRO	-	expression tag	UNP O76290
B	-3	ARG	-	expression tag	UNP O76290
B	-2	GLY	-	expression tag	UNP O76290
B	-1	SER	-	expression tag	UNP O76290
B	0	HIS	-	expression tag	UNP O76290
C	-19	MET	-	initiating methionine	UNP O76290
C	-18	GLY	-	expression tag	UNP O76290
C	-17	SER	-	expression tag	UNP O76290
C	-16	SER	-	expression tag	UNP O76290
C	-15	HIS	-	expression tag	UNP O76290
C	-14	HIS	-	expression tag	UNP O76290
C	-13	HIS	-	expression tag	UNP O76290
C	-12	HIS	-	expression tag	UNP O76290
C	-11	HIS	-	expression tag	UNP O76290
C	-10	HIS	-	expression tag	UNP O76290
C	-9	SER	-	expression tag	UNP O76290
C	-8	SER	-	expression tag	UNP O76290
C	-7	GLY	-	expression tag	UNP O76290
C	-6	LEU	-	expression tag	UNP O76290
C	-5	VAL	-	expression tag	UNP O76290
C	-4	PRO	-	expression tag	UNP O76290
C	-3	ARG	-	expression tag	UNP O76290
C	-2	GLY	-	expression tag	UNP O76290
C	-1	SER	-	expression tag	UNP O76290
C	0	HIS	-	expression tag	UNP O76290
D	-19	MET	-	initiating methionine	UNP O76290
D	-18	GLY	-	expression tag	UNP O76290
D	-17	SER	-	expression tag	UNP O76290

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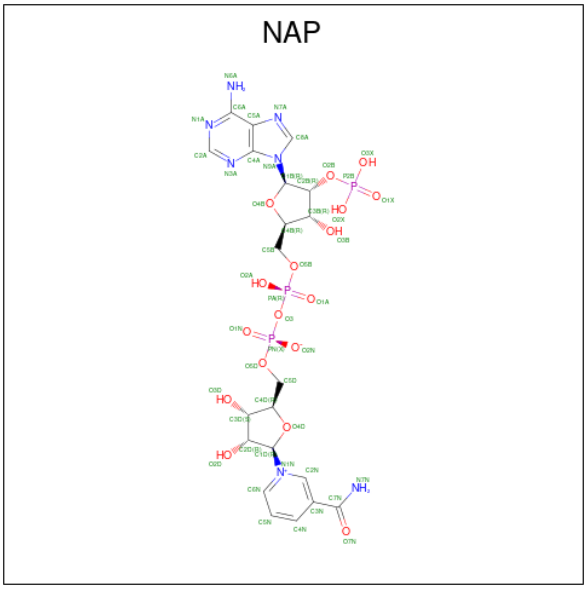
Chain	Residue	Modelled	Actual	Comment	Reference
D	-16	SER	-	expression tag	UNP O76290
D	-15	HIS	-	expression tag	UNP O76290
D	-14	HIS	-	expression tag	UNP O76290
D	-13	HIS	-	expression tag	UNP O76290
D	-12	HIS	-	expression tag	UNP O76290
D	-11	HIS	-	expression tag	UNP O76290
D	-10	HIS	-	expression tag	UNP O76290
D	-9	SER	-	expression tag	UNP O76290
D	-8	SER	-	expression tag	UNP O76290
D	-7	GLY	-	expression tag	UNP O76290
D	-6	LEU	-	expression tag	UNP O76290
D	-5	VAL	-	expression tag	UNP O76290
D	-4	PRO	-	expression tag	UNP O76290
D	-3	ARG	-	expression tag	UNP O76290
D	-2	GLY	-	expression tag	UNP O76290
D	-1	SER	-	expression tag	UNP O76290
D	0	HIS	-	expression tag	UNP O76290

- Molecule 2 is NADP NICOTINAMIDE-ADENINE-DINUCLEOTIDE PHOSPHATE (CCD ID: NAP) (formula: $C_{21}H_{28}N_7O_{17}P_3$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	A	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
2	B	1	Total	C	N	O	P	0	0
			48	21	7	17	3		

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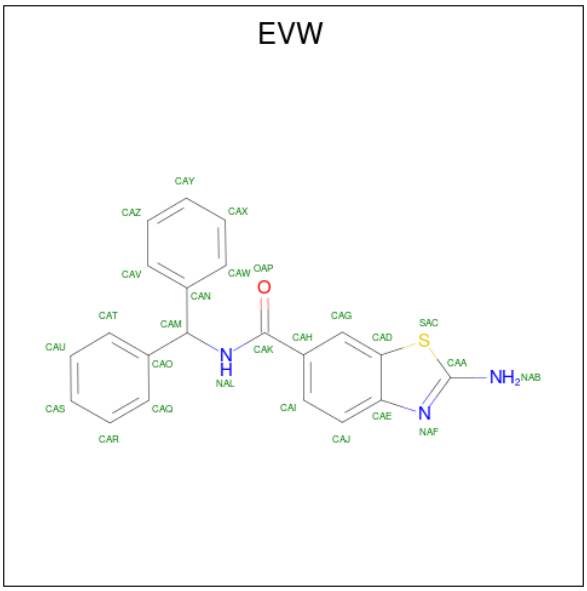
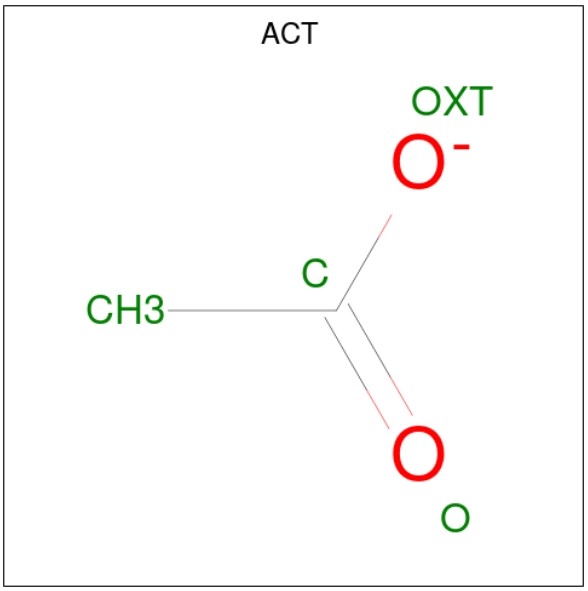
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	C	1	Total	C	N	O	P	0	0
			48	21	7	17	3		
2	D	1	Total	C	N	O	P	0	0
			48	21	7	17	3		

- Molecule 3 is 2-azanyl- {N}-(diphenylmethyl)-1,3-benzothiazole-6-carboxamide (CCD ID: EVW) (formula: $C_{21}H_{17}N_3OS$).



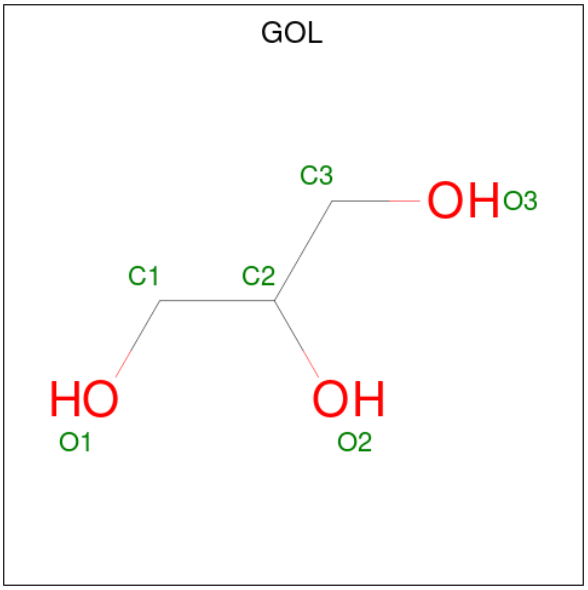
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
3	A	1	Total	C	N	O	S	0	1
			26	21	3	1	1		
3	B	1	Total	C	N	O	S	0	1
			26	21	3	1	1		
3	D	1	Total	C	N	O	S	0	1
			26	21	3	1	1		

- Molecule 4 is ACETATE ION (CCD ID: ACT) (formula: $C_2H_3O_2$).



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

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



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	A	1	Total C O 6 3 3	0	0
5	B	1	Total C O 12 6 6	0	1

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
5	B	1	Total C O 6 3 3	0	0
5	B	1	Total C O 6 3 3	0	0
5	D	1	Total C O 12 6 6	0	1

- Molecule 6 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
6	A	248	Total O 251 251	0	5
6	B	277	Total O 278 278	0	9
6	C	216	Total O 224 224	0	9
6	D	248	Total O 254 254	0	10

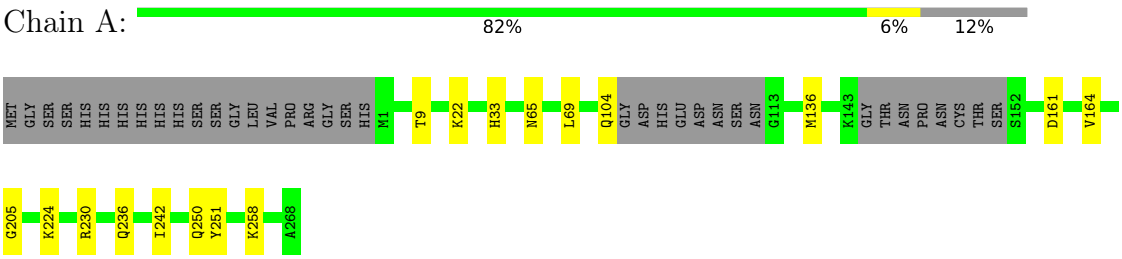
3 Residue-property plots (i)

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. 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. 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.

Note EDS was not executed.

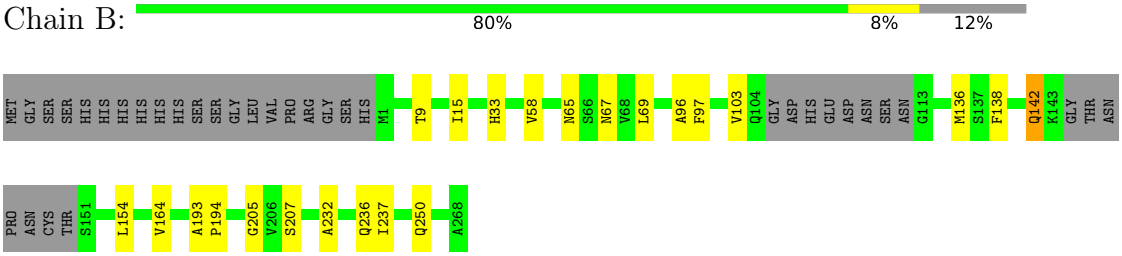
• Molecule 1: Pteridine reductase

Chain A:



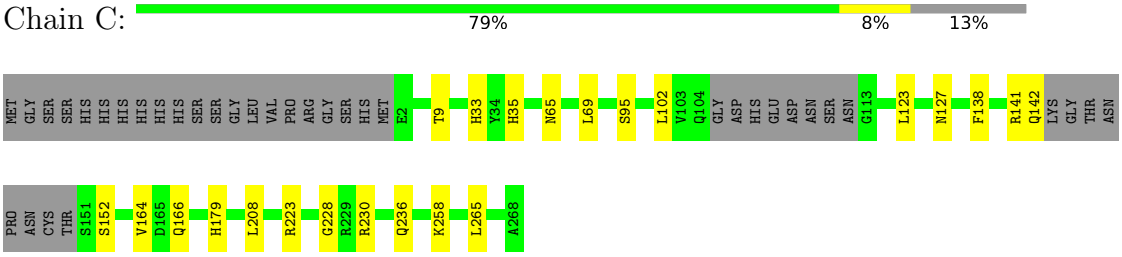
• Molecule 1: Pteridine reductase

Chain B:



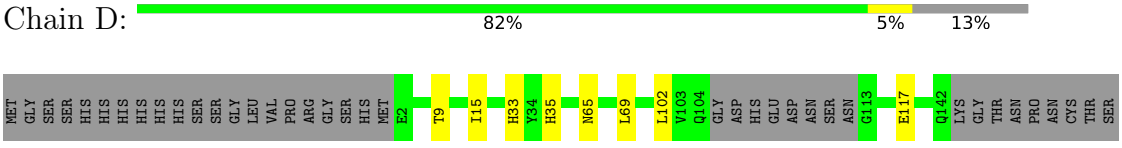
• Molecule 1: Pteridine reductase

Chain C:



• Molecule 1: Pteridine reductase

Chain D:




S152
V164
H179
Y195
K224
Q250
G254
S255
A268

4 Data and refinement statistics (i)

EDS was not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	74.78Å 90.32Å 82.92Å 90.00° 115.72° 90.00°	Depositor
Resolution (Å)	74.71 – 1.52	Depositor
% Data completeness (in resolution range)	99.1 (74.71-1.52)	Depositor
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	3.54 (at 1.52Å)	Xtriage
Refinement program	REFMAC 5.8.0158	Depositor
R, R_{free}	0.159 , 0.179	Depositor
Wilson B-factor (Å^2)	13.7	Xtriage
Anisotropy	0.048	Xtriage
L-test for twinning[2]	$< \|L\| > = 0.50$, $< L^2 > = 0.33$	Xtriage
Estimated twinning fraction	0.011 for h,-k,-h-l	Xtriage
Total number of atoms	9073	wwPDB-VP
Average B, all atoms (Å^2)	18.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The analyses of the Patterson function reveals a significant off-origin peak that is 30.37 % of the origin peak, indicating pseudo-translational symmetry. The chance of finding a peak of this or larger height randomly in a structure without pseudo-translational symmetry is equal to 1.3240e-03. The detected translational NCS is most likely also responsible for the elevated intensity ratio.*

[1]Intensities estimated from amplitudes.

[2]Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: GOL, EVW, ACT, NAP

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	0.86	0/2023	0.87	1/2741 (0.0%)
1	B	0.87	1/2038 (0.0%)	0.90	0/2766
1	C	0.87	0/1966	0.92	0/2669
1	D	0.88	0/2007	0.89	0/2725
All	All	0.87	1/8034 (0.0%)	0.89	1/10901 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	205	GLY	N-CA	5.17	1.49	1.45

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	205	GLY	N-CA-C	-5.88	104.86	110.21

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1955	0	2014	16	0
1	B	1955	0	2015	31	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	C	1903	0	1930	15	0
1	D	1933	0	1984	12	0
2	A	48	0	25	0	0
2	B	48	0	25	1	0
2	C	48	0	25	1	0
2	D	48	0	25	2	0
3	A	26	0	0	0	0
3	B	26	0	0	0	0
3	D	26	0	0	0	0
4	A	4	0	3	0	0
4	B	4	0	3	0	0
5	A	6	0	8	0	0
5	B	24	0	32	10	0
5	D	12	0	16	0	0
6	A	251	0	0	4	0
6	B	278	0	0	1	0
6	C	224	0	0	2	0
6	D	254	0	0	2	0
All	All	9073	0	8105	61	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 4.

All (61) 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:97:PHE:H	5:B:306:GOL:H11	1.32	0.92
1:B:97:PHE:H	5:B:306:GOL:C1	1.89	0.85
1:B:58:VAL:HG22	5:B:304[A]:GOL:H11	1.57	0.85
1:B:67[B]:ASN:ND2	1:D:117[B]:GLU:HG3	1.93	0.84
1:B:97:PHE:N	5:B:306:GOL:H11	1.94	0.82
5:B:304[A]:GOL:H12	6:B:413:HOH:O	1.82	0.77
1:D:164:VAL:HG22	1:D:179:HIS:CD2	2.23	0.74
1:B:142[B]:GLN:HG2	1:B:154:LEU:HD13	1.68	0.73
1:C:164:VAL:HG22	1:C:179:HIS:CD2	2.25	0.71
1:A:250[A]:GLN:CD	1:B:236:GLN:HE21	2.03	0.65
1:A:230[B]:ARG:NH2	6:A:402:HOH:O	2.25	0.64
1:C:228:GLY:HA3	1:C:230:ARG:NH1	2.13	0.63
1:A:224[A]:LYS:HE3	6:A:433:HOH:O	1.97	0.62
1:A:236:GLN:HE21	1:B:250[B]:GLN:CD	2.09	0.60
1:A:258[B]:LYS:NZ	6:A:632[B]:HOH:O	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:207:SER:HB2	1:B:237[B]:ILE:HD11	1.88	0.56
1:C:236:GLN:HE21	1:D:250[B]:GLN:CD	2.13	0.56
1:B:96:ALA:HA	5:B:306:GOL:H11	1.89	0.55
1:A:236:GLN:HE21	1:B:250[B]:GLN:CG	2.19	0.54
1:B:103:VAL:HG22	6:D:405[A]:HOH:O	2.09	0.51
1:A:9:THR:HA	1:A:33:HIS:HB3	1.92	0.51
1:C:9:THR:HA	1:C:33:HIS:HB3	1.93	0.50
1:B:207:SER:CB	1:B:237[B]:ILE:HD11	2.42	0.49
1:A:236:GLN:NE2	1:B:250[B]:GLN:HG3	2.28	0.48
1:B:15:ILE:HB	2:B:301:NAP:H51N	1.94	0.48
1:B:142[B]:GLN:HG2	1:B:154:LEU:CD1	2.40	0.48
1:C:65:ASN:HA	1:C:69:LEU:HD22	1.96	0.48
1:A:250[A]:GLN:CG	1:B:236:GLN:HE21	2.26	0.48
1:C:123:LEU:O	1:C:127[B]:ASN:HB2	2.13	0.48
1:C:208:LEU:HD21	6:C:548:HOH:O	2.12	0.48
1:D:9:THR:HA	1:D:33:HIS:HB3	1.99	0.45
1:D:224[A]:LYS:HE3	6:D:459:HOH:O	2.17	0.44
1:A:236:GLN:HE21	1:B:250[B]:GLN:HG3	1.83	0.44
1:B:58:VAL:H	5:B:304[A]:GOL:C1	2.31	0.44
1:C:35:HIS:HB2	2:C:301:NAP:C2A	2.48	0.44
1:B:9:THR:HA	1:B:33:HIS:HB3	2.00	0.44
1:C:164:VAL:HG22	1:C:179:HIS:NE2	2.32	0.44
1:C:258[B]:LYS:HB3	1:D:255:SER:OG	2.17	0.44
1:A:65:ASN:HA	1:A:69:LEU:HD22	1.99	0.44
1:C:95[B]:SER:HB2	1:C:127[B]:ASN:OD1	2.18	0.44
1:A:22:LYS:CD	1:A:242:ILE:HG13	2.48	0.43
1:C:138:PHE:O	1:C:142:GLN:HG2	2.19	0.43
1:B:65:ASN:HA	1:B:69:LEU:HD22	2.00	0.43
1:A:136[B]:MET:HG3	1:C:102:LEU:O	2.19	0.43
1:A:230[B]:ARG:HG3	6:A:583:HOH:O	2.19	0.43
1:D:15:ILE:HB	2:D:301:NAP:H51N	2.01	0.43
1:B:58:VAL:HG22	5:B:304[A]:GOL:C1	2.40	0.42
1:B:138:PHE:O	1:B:142[A]:GLN:HG2	2.19	0.42
1:B:103:VAL:HG21	1:D:195:TYR:CZ	2.54	0.42
1:B:15:ILE:HD13	1:B:237[B]:ILE:HD13	2.01	0.42
1:B:136[B]:MET:HG3	1:D:102:LEU:O	2.18	0.42
1:D:35:HIS:HB2	2:D:301:NAP:C2A	2.50	0.42
1:A:251:TYR:CE2	1:B:232:ALA:HB2	2.55	0.42
1:B:97:PHE:O	5:B:306:GOL:H12	2.20	0.42
1:B:15:ILE:CD1	1:B:237[B]:ILE:CD1	2.98	0.41
1:B:193:ALA:N	1:B:194:PRO:CD	2.83	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:141:ARG:HG2	6:C:549:HOH:O	2.19	0.41
1:D:65:ASN:HA	1:D:69:LEU:HD22	2.01	0.41
1:B:58:VAL:H	5:B:304[A]:GOL:H11	1.85	0.41
1:C:265:LEU:HD11	1:D:254:GLY:HA3	2.02	0.41
1:A:161:ASP:HB3	1:A:164:VAL:HG13	2.03	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	260/288 (90%)	252 (97%)	8 (3%)	0	100	100
1	B	265/288 (92%)	256 (97%)	9 (3%)	0	100	100
1	C	258/288 (90%)	248 (96%)	10 (4%)	0	100	100
1	D	260/288 (90%)	251 (96%)	9 (4%)	0	100	100
All	All	1043/1152 (90%)	1007 (96%)	36 (4%)	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	211/231 (91%)	210 (100%)	1 (0%)	81	66

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	B	212/231 (92%)	209 (99%)	3 (1%)	59 31
1	C	202/231 (87%)	199 (98%)	3 (2%)	57 29
1	D	209/231 (90%)	209 (100%)	0	100 100
All	All	834/924 (90%)	827 (99%)	7 (1%)	73 53

All (7) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	104	GLN
1	B	142[A]	GLN
1	B	142[B]	GLN
1	B	164	VAL
1	C	152	SER
1	C	166	GLN
1	C	223	ARG

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

Mol	Chain	Res	Type
1	A	25	GLN
1	A	92	ASN
1	A	236	GLN
1	B	92	ASN
1	B	236	GLN
1	C	25	GLN
1	C	54	ASN
1	C	65	ASN
1	C	92	ASN
1	C	236	GLN
1	D	67	ASN
1	D	92	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

Mogul was not executed - this section is therefore empty.

5.5 Carbohydrates (i)

Mogul was not executed - this section is therefore empty.

5.6 Ligand geometry (i)

Mogul was not executed - this section is therefore empty.

5.7 Other polymers (i)

Mogul was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

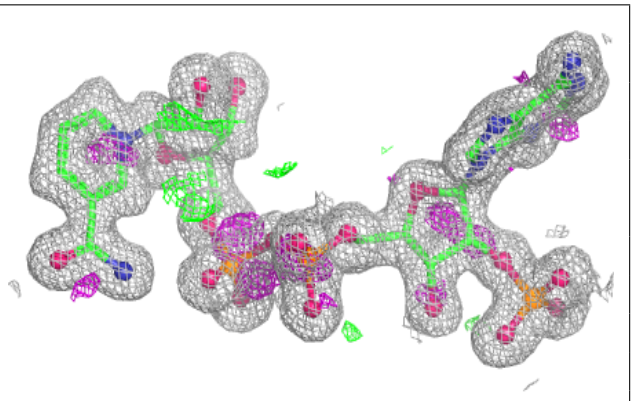
6.4 Ligands

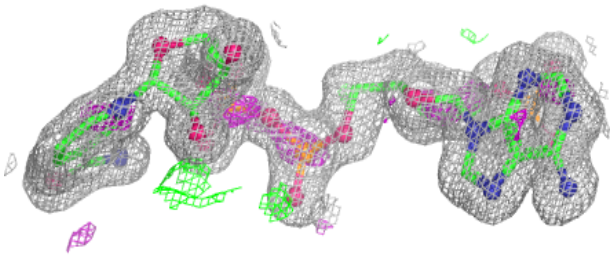
EDS was not executed - this section is therefore empty.

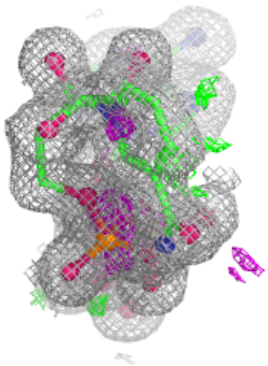
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around NAP A 301:

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

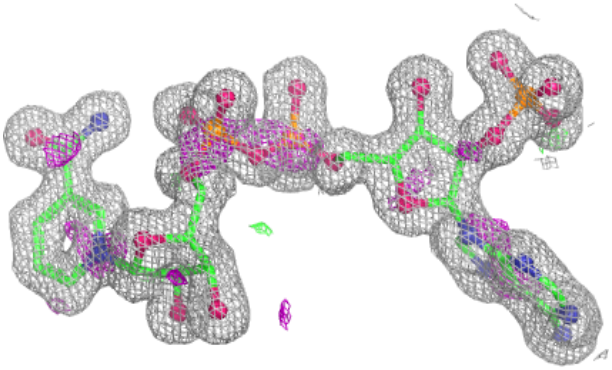


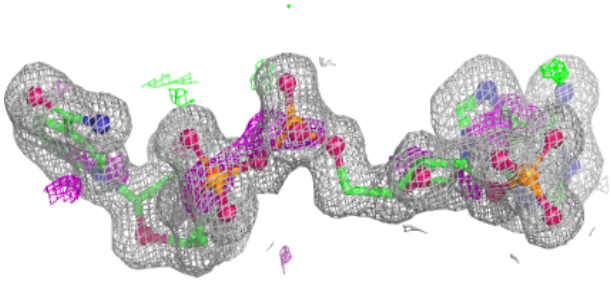


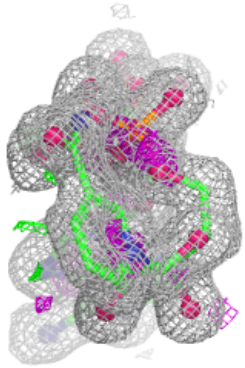


Electron density around NAP B 301:

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

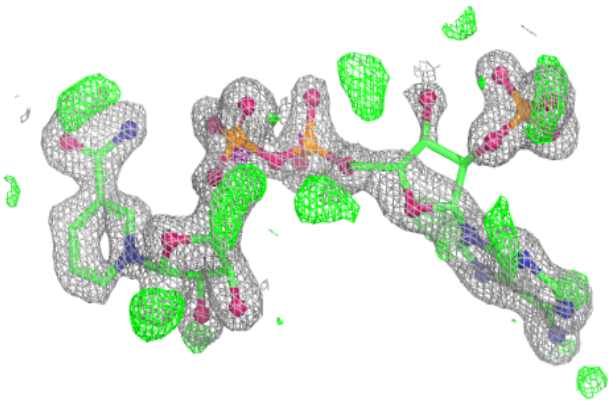


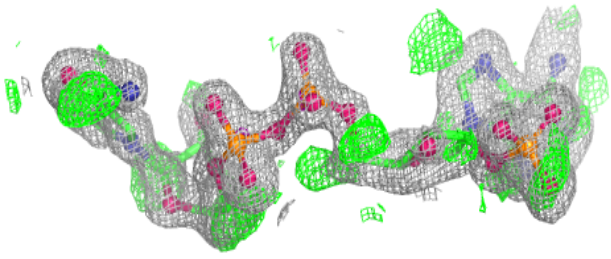


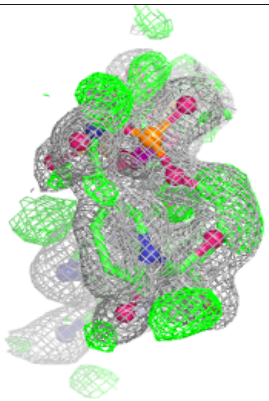


Electron density around NAP C 301:

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

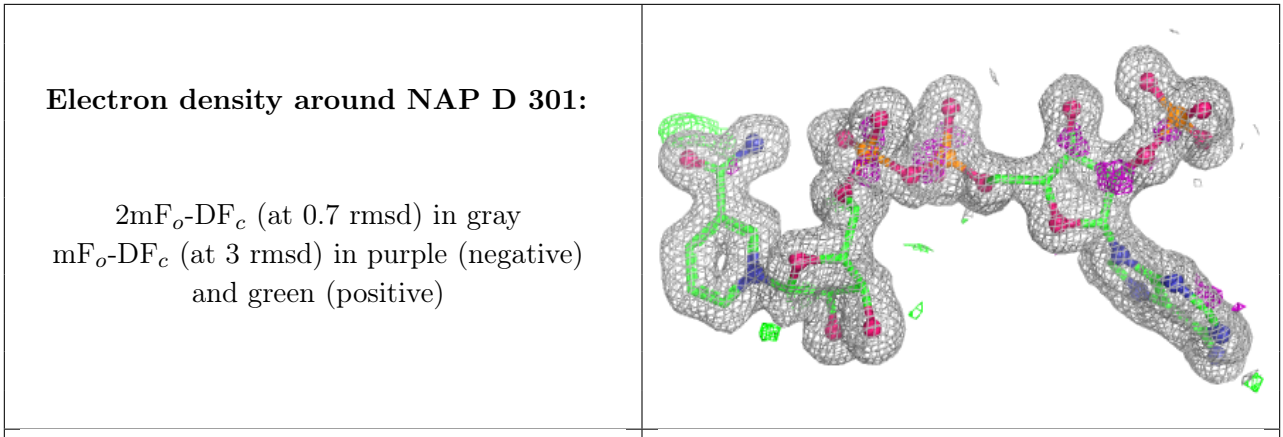






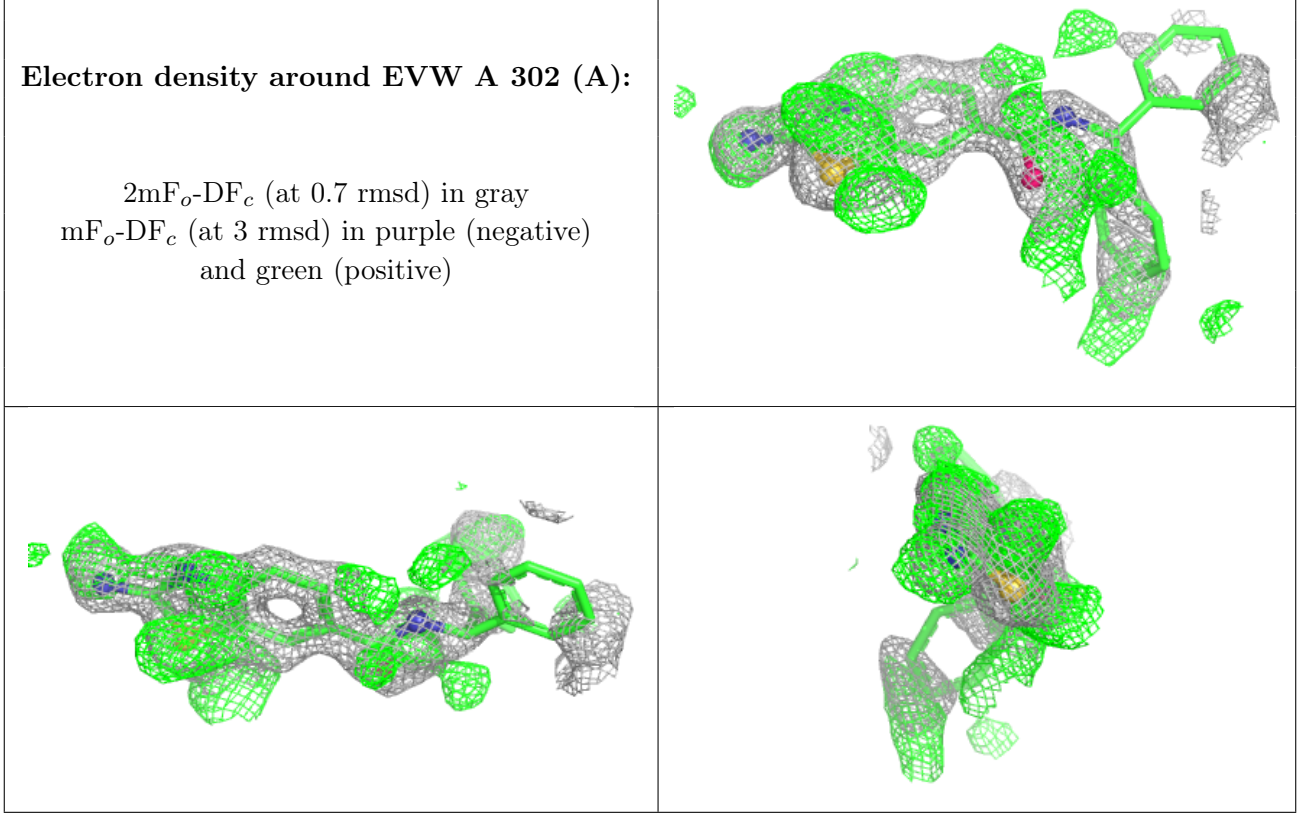
Electron density around NAP D 301:

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



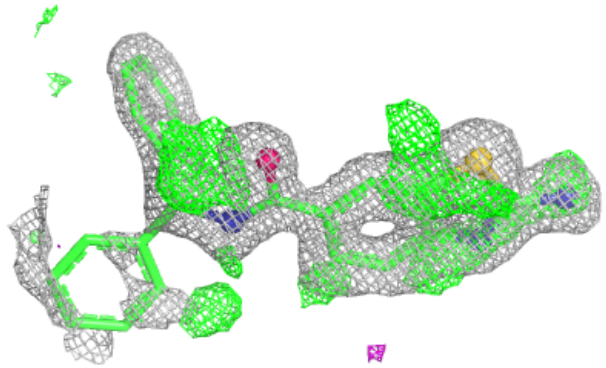
Electron density around EVW A 302 (A):

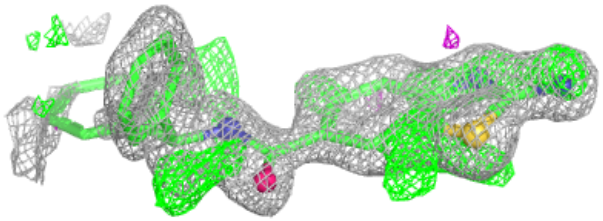
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

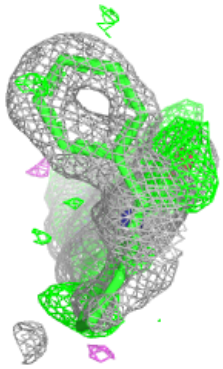


Electron density around EVW B 302 (A):

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

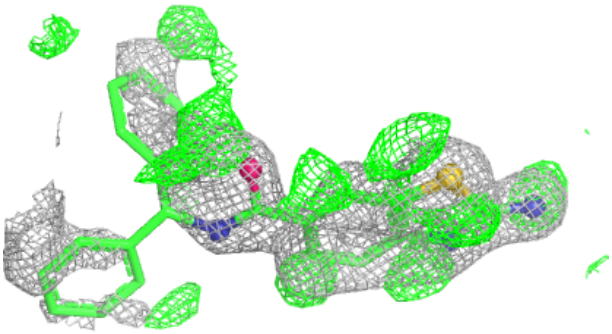


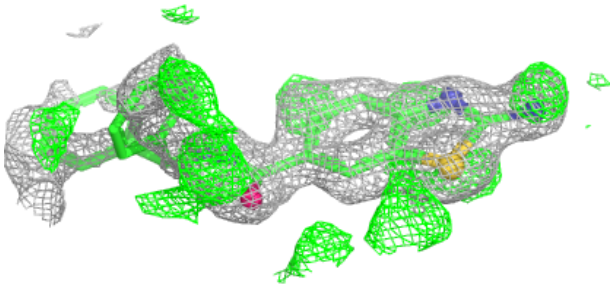


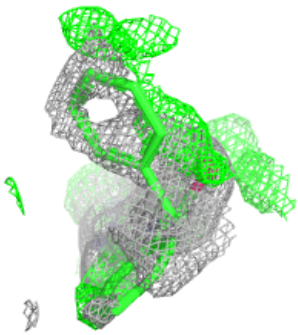


Electron density around EVW D 302 (A):

$2mF_o$-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)

EDS was not executed - this section is therefore empty.