



Full wwPDB X-ray Structure Validation Report ⓘ

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PDB ID : 3NIE
Title : Crystal Structure of PF11_0147
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Deposited on : 2010-06-15
Resolution : 2.30 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
<http://wwpdb.org/validation/2016/XrayValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.7 (RC4), CSD as536be (2015)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20026688
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk26865

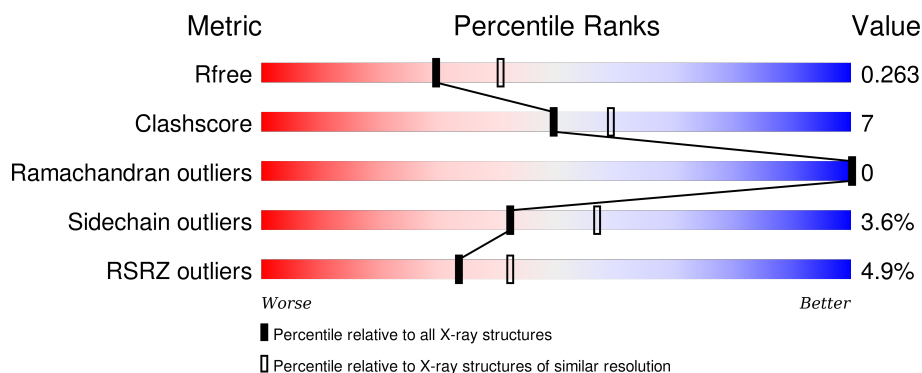
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.30 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}	91344	3852 (2.30-2.30)
Clashscore	102246	4452 (2.30-2.30)
Ramachandran outliers	100387	4410 (2.30-2.30)
Sidechain outliers	100360	4409 (2.30-2.30)
RSRZ outliers	91569	3857 (2.30-2.30)

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 on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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	429	<div> <div>5%</div> <div> <div></div> <div>72%</div> <div>13%</div> <div>•</div> <div>14%</div> </div> </div>
1	B	429	<div> <div>4%</div> <div> <div></div> <div>70%</div> <div>15%</div> <div>•</div> <div>14%</div> </div> </div>

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 5973 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 MAP2 kinase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	369	Total	C	N	O	S	0	2	0
			2929	1894	484	539	12			
1	B	367	Total	C	N	O	S	0	0	0
			2896	1880	479	526	11			

There are 36 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1	MET	-	EXPRESSION TAG	UNP Q9GR08
A	2	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	3	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	4	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	5	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	6	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	7	HIS	-	EXPRESSION TAG	UNP Q9GR08
A	8	SER	-	EXPRESSION TAG	UNP Q9GR08
A	9	SER	-	EXPRESSION TAG	UNP Q9GR08
A	10	GLY	-	EXPRESSION TAG	UNP Q9GR08
A	11	ARG	-	EXPRESSION TAG	UNP Q9GR08
A	12	GLU	-	EXPRESSION TAG	UNP Q9GR08
A	13	ASN	-	EXPRESSION TAG	UNP Q9GR08
A	14	LEU	-	EXPRESSION TAG	UNP Q9GR08
A	15	TYR	-	EXPRESSION TAG	UNP Q9GR08
A	16	PHE	-	EXPRESSION TAG	UNP Q9GR08
A	17	GLN	-	EXPRESSION TAG	UNP Q9GR08
A	18	GLY	-	EXPRESSION TAG	UNP Q9GR08
B	1	MET	-	EXPRESSION TAG	UNP Q9GR08
B	2	HIS	-	EXPRESSION TAG	UNP Q9GR08
B	3	HIS	-	EXPRESSION TAG	UNP Q9GR08
B	4	HIS	-	EXPRESSION TAG	UNP Q9GR08
B	5	HIS	-	EXPRESSION TAG	UNP Q9GR08
B	6	HIS	-	EXPRESSION TAG	UNP Q9GR08
B	7	HIS	-	EXPRESSION TAG	UNP Q9GR08

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Chain	Residue	Modelled	Actual	Comment	Reference
B	8	SER	-	EXPRESSION TAG	UNP Q9GR08
B	9	SER	-	EXPRESSION TAG	UNP Q9GR08
B	10	GLY	-	EXPRESSION TAG	UNP Q9GR08
B	11	ARG	-	EXPRESSION TAG	UNP Q9GR08
B	12	GLU	-	EXPRESSION TAG	UNP Q9GR08
B	13	ASN	-	EXPRESSION TAG	UNP Q9GR08
B	14	LEU	-	EXPRESSION TAG	UNP Q9GR08
B	15	TYR	-	EXPRESSION TAG	UNP Q9GR08
B	16	PHE	-	EXPRESSION TAG	UNP Q9GR08
B	17	GLN	-	EXPRESSION TAG	UNP Q9GR08
B	18	GLY	-	EXPRESSION TAG	UNP Q9GR08

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	45	Total O 45 45	0	0



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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	B	41	Total	O	0	0
			41	41		

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	63.39 Å 107.36 Å 70.79 Å 90.00° 109.65° 90.00°	Depositor
Resolution (Å)	50.00 – 2.30 31.83 – 2.30	Depositor EDS
% Data completeness (in resolution range)	95.0 (50.00-2.30) 95.1 (31.83-2.30)	Depositor EDS
R_{merge}	0.05	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.19 (at 2.29 Å)	Xtriage
Refinement program	REFMAC 5.5.0102	Depositor
R, R_{free}	0.223 , 0.268 0.217 , 0.263	Depositor DCC
R_{free} test set	1906 reflections (5.31%)	DCC
Wilson B-factor (Å ²)	50.5	Xtriage
Anisotropy	0.128	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.32 , 40.9	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Outliers	0 of 37790 reflections	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	5973	wwPDB-VP
Average B, all atoms (Å ²)	48.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.55% 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, 0.375 respectively for untwinned datasets, and 0.333, 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: ANP

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	0.53	0/2988	0.63	0/4055
1	B	0.51	0/2955	0.63	0/4013
All	All	0.52	0/5943	0.63	0/8068

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2929	0	2861	40	0
1	B	2896	0	2830	43	0
2	A	31	0	13	1	0
2	B	31	0	13	1	0
3	A	45	0	0	2	0
3	B	41	0	0	0	0
All	All	5973	0	5717	82	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 7.

All (82) 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:61:VAL:HG11	1:B:74:ILE:CD1	1.96	0.95
1:A:152:ILE:HD11	1:A:386:ILE:HD11	1.51	0.91
1:B:61:VAL:HG11	1:B:74:ILE:HD11	1.54	0.88
1:A:61:VAL:HG11	1:A:74:ILE:HD11	1.59	0.83
1:A:152:ILE:HD11	1:A:386:ILE:CD1	2.10	0.80
1:A:61:VAL:HG11	1:A:74:ILE:CD1	2.13	0.78
1:B:61:VAL:HG11	1:B:74:ILE:HD13	1.68	0.73
1:B:21:ILE:HD12	1:B:32:ILE:CG2	2.21	0.70
1:B:319:LYS:O	1:B:323:LEU:HD13	1.92	0.69
1:A:78:ILE:HD12	1:A:95:LEU:HD21	1.75	0.68
1:B:21:ILE:HD12	1:B:32:ILE:HG22	1.79	0.64
1:B:147:ILE:HG22	1:B:152:ILE:O	1.99	0.62
1:B:75:LEU:HD11	1:B:404:ILE:HG22	1.83	0.61
1:A:20:ILE:HG23	1:B:125:PRO:HG2	1.81	0.61
1:A:167:ASP:O	1:A:168:CYS:HB2	2.03	0.58
1:B:83:ARG:O	1:B:386:ILE:HD11	2.04	0.57
1:A:78:ILE:HD11	1:A:109:ILE:HD13	1.87	0.56
1:A:141:LEU:O	1:A:361:ILE:HD11	2.05	0.56
1:A:101:LEU:HD21	1:A:416:LEU:HD11	1.88	0.56
1:B:75:LEU:HD21	1:B:404:ILE:HG21	1.87	0.56
1:A:151:GLY:HA2	1:A:181:ILE:HD12	1.89	0.55
1:B:64:MET:HE1	1:B:107:LEU:HB2	1.88	0.55
1:A:372[A]:ASP:N	1:A:372[A]:ASP:OD2	2.36	0.55
1:A:78:ILE:HD11	1:A:109:ILE:CD1	2.38	0.54
1:B:303:THR:HG23	1:B:327:ARG:HD3	1.89	0.53
1:B:26:VAL:HG21	1:B:32:ILE:HD11	1.90	0.53
1:A:72:LYS:NZ	1:A:392:ASP:O	2.42	0.53
1:B:27:PRO:HD2	1:B:96:ILE:HD12	1.92	0.52
1:A:15:TYR:OH	1:B:164:LEU:HD21	2.10	0.51
1:A:75:LEU:HD11	1:A:404:ILE:HG22	1.91	0.51
1:A:264:ARG:HB3	3:A:475:HOH:O	2.11	0.51
1:A:339:ILE:HD11	1:A:344:ILE:HD13	1.93	0.50
1:B:229:LEU:HD21	1:B:294:LEU:HD11	1.94	0.50
1:B:150:SER:HB3	1:B:386:ILE:HD13	1.93	0.49
1:A:40:SER:OG	1:A:217:VAL:HG13	2.13	0.49
1:A:27:PRO:HD2	1:A:96:ILE:HD12	1.94	0.48
1:A:61:VAL:HG11	1:A:74:ILE:HD13	1.95	0.48
1:A:152:ILE:CD1	1:A:386:ILE:HD11	2.33	0.48
1:A:17:GLN:HG2	1:B:166:GLN:OE1	2.13	0.48
1:B:78:ILE:O	1:B:82:ASN:HB2	2.14	0.48
1:B:21:ILE:HD12	1:B:32:ILE:HG21	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:90:ILE:HD13	1:B:163:LEU:HD12	1.96	0.48
1:B:349:SER:HB3	1:B:359:ILE:HB	1.96	0.48
1:A:38:ARG:HG3	1:A:43:TYR:CE1	2.48	0.48
1:B:120:LYS:O	1:B:124:THR:HG23	2.15	0.47
1:B:147:ILE:HG23	1:B:152:ILE:HB	1.96	0.47
1:B:167:ASP:O	1:B:168:CYS:HB2	2.15	0.47
1:B:350:MET:O	1:B:358:ARG:HD2	2.15	0.46
2:A:430:ANP:O1G	2:A:430:ANP:O1A	2.33	0.46
1:A:152:ILE:HD11	1:A:386:ILE:CG1	2.44	0.46
1:B:80:ILE:O	1:B:81:LEU:C	2.53	0.46
1:A:368:PRO:HA	1:A:371:LYS:HG3	1.96	0.46
1:A:167:ASP:C	1:A:167:ASP:OD1	2.52	0.46
1:A:78:ILE:HD11	1:A:109:ILE:HG12	1.98	0.46
1:A:139:ASN:ND2	1:A:169:SER:HA	2.31	0.46
1:A:78:ILE:HD11	1:A:109:ILE:CG1	2.47	0.45
1:B:75:LEU:O	1:B:79:THR:HG23	2.16	0.45
1:B:116:SER:OG	1:B:117:ASP:N	2.50	0.44
1:B:339:ILE:HD11	1:B:344:ILE:HG12	1.99	0.44
1:A:23:ASN:O	1:A:60:LYS:NZ	2.50	0.44
1:A:306:GLU:OE2	1:A:322:LYS:NZ	2.37	0.44
1:B:44:VAL:HG22	1:B:59:LYS:HG3	1.98	0.44
1:A:155:ARG:NH2	1:A:177:LEU:O	2.50	0.44
2:B:430:ANP:O5'	2:B:430:ANP:H8	2.19	0.43
1:B:354:ASN:OD1	1:B:356:GLN:HG2	2.19	0.43
1:A:303:THR:HG23	1:A:304:PRO:HD2	2.01	0.43
1:A:76:ARG:HD3	1:A:178:ALA:O	2.18	0.43
1:B:339:ILE:HD12	1:B:340:SER:O	2.19	0.43
1:B:86:SER:HB2	1:B:146:PHE:CZ	2.53	0.43
1:B:64:MET:HE3	1:B:104:PHE:CE1	2.53	0.42
1:B:141:LEU:HD22	1:B:361:ILE:HD12	2.01	0.42
1:B:21:ILE:HA	1:B:21:ILE:HD13	1.92	0.42
1:A:349:SER:HB3	1:A:359:ILE:HB	2.01	0.42
1:A:139:ASN:HD22	1:A:169:SER:HA	1.84	0.42
1:A:107:LEU:HD12	3:A:431:HOH:O	2.19	0.41
1:A:294:LEU:HA	1:A:294:LEU:HD12	1.94	0.41
1:B:121:LEU:HD21	1:B:128:LEU:HD11	2.02	0.41
1:B:331:ASP:OD1	1:B:333:SER:HB3	2.21	0.41
1:B:346:LEU:HD13	1:B:367:HIS:CG	2.56	0.40
1:B:79:THR:HG22	1:B:408:GLU:HG3	2.03	0.40
1:B:32:ILE:N	1:B:32:ILE:CD1	2.85	0.40
1:A:339:ILE:HD12	1:A:343:GLY:HA3	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	365/429 (85%)	344 (94%)	21 (6%)	0	100	100
1	B	359/429 (84%)	340 (95%)	19 (5%)	0	100	100
All	All	724/858 (84%)	684 (94%)	40 (6%)	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	312/402 (78%)	301 (96%)	11 (4%)	43	58
1	B	306/402 (76%)	294 (96%)	12 (4%)	39	53
All	All	618/804 (77%)	595 (96%)	23 (4%)	42	55

All (23) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	36	ILE
1	A	38	ARG
1	A	44	VAL
1	A	68	LEU
1	A	180	THR

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Mol	Chain	Res	Type
1	A	217	VAL
1	A	238	ILE
1	A	309	LEU
1	A	313	THR
1	A	372[A]	ASP
1	A	372[B]	ASP
1	B	28	ASP
1	B	32	ILE
1	B	166	GLN
1	B	180	THR
1	B	289	SER
1	B	307	GLU
1	B	313	THR
1	B	327	ARG
1	B	356	GLN
1	B	358	ARG
1	B	373	VAL
1	B	399	THR

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (2) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	263	ASN
1	B	23	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 ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry

2 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	ANP	A	430	-	27,33,33	1.99	7 (25%)	30,52,52	2.07	7 (23%)
2	ANP	B	430	-	27,33,33	2.13	7 (25%)	30,52,52	1.99	7 (23%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	ANP	A	430	-	-	0/12/38/38	0/3/3/3
2	ANP	B	430	-	-	0/12/38/38	0/3/3/3

All (14) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	A	430	ANP	PG-O2G	-2.76	1.49	1.56
2	B	430	ANP	PG-O3G	-2.52	1.49	1.56
2	B	430	ANP	PG-O2G	-2.49	1.49	1.56
2	A	430	ANP	PG-O3G	-2.17	1.50	1.56
2	B	430	ANP	PB-O1B	2.58	1.49	1.46
2	B	430	ANP	C5-C4	2.90	1.47	1.40
2	A	430	ANP	PB-O1B	3.00	1.49	1.46
2	A	430	ANP	C5-C4	3.20	1.47	1.40
2	A	430	ANP	PB-N3B	3.76	1.73	1.63
2	B	430	ANP	PG-N3B	3.90	1.73	1.63
2	B	430	ANP	PB-N3B	4.41	1.75	1.63
2	A	430	ANP	PG-N3B	4.73	1.75	1.63
2	A	430	ANP	PG-O1G	4.81	1.51	1.46
2	B	430	ANP	PG-O1G	6.50	1.53	1.46

All (14) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	A	430	ANP	N3-C2-N1	-7.14	123.43	128.89
2	B	430	ANP	N3-C2-N1	-7.07	123.48	128.89
2	A	430	ANP	O1G-PG-N3B	-4.61	104.83	111.90
2	A	430	ANP	C4-C5-N7	-3.58	106.19	109.48
2	B	430	ANP	C4-C5-N7	-3.52	106.24	109.48
2	B	430	ANP	O1G-PG-N3B	-3.20	107.00	111.90
2	A	430	ANP	O3A-PA-O5'	-2.61	96.01	102.94
2	A	430	ANP	PA-O3A-PB	-2.48	124.34	132.67
2	B	430	ANP	C1'-N9-C4	-2.42	123.29	126.94
2	B	430	ANP	O3A-PA-O5'	-2.25	96.96	102.94
2	A	430	ANP	C2-N1-C6	2.20	122.69	118.77
2	B	430	ANP	O2B-PB-O1B	2.78	115.81	110.00
2	B	430	ANP	O3G-PG-O2G	3.24	117.20	107.58
2	A	430	ANP	O3G-PG-O2G	3.32	117.42	107.58

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	430	ANP	1	0
2	B	430	ANP	1	0

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9
1	A	369/429 (86%)	0.32	20 (5%)	29 38	28, 47, 68, 84	8 (2%)
1	B	367/429 (85%)	0.29	16 (4%)	38 47	30, 48, 67, 77	7 (1%)
All	All	736/858 (85%)	0.30	36 (4%)	33 42	28, 47, 68, 84	15 (2%)

All (36) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	B	230	LEU	5.4
1	A	393	TRP	5.1
1	B	313	THR	4.5
1	A	15	TYR	4.2
1	A	286	HIS	3.8
1	B	393	TRP	3.7
1	B	214	THR	3.5
1	A	48	TYR	3.5
1	B	21	ILE	3.2
1	A	326	THR	3.1
1	A	182	ASN	3.0
1	A	214	THR	3.0
1	B	395	VAL	2.9
1	A	390	PHE	2.9
1	B	309	LEU	2.8
1	B	275	PRO	2.7
1	B	245	CYS	2.5
1	B	287	GLU	2.5
1	B	222	TYR	2.5
1	A	275	PRO	2.5
1	A	81	LEU	2.4
1	B	162	CYS	2.4
1	B	246	ILE	2.4
1	A	328	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
1	A	16	PHE	2.4
1	A	215	SER	2.4
1	A	68	LEU	2.4
1	B	179	ARG	2.4
1	A	154	HIS	2.3
1	A	414	ALA	2.3
1	B	318	ILE	2.2
1	A	173	CYS	2.2
1	A	157	LEU	2.1
1	B	95	LEU	2.1
1	A	381	PHE	2.1
1	A	159	PRO	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 carbohydrates 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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	LLDF	B-factors(\AA^2)	Q<0.9
2	ANP	A	430	31/31	0.98	0.14	-0.76	28,34,38,40	0
2	ANP	B	430	31/31	0.98	0.13	-0.95	30,34,37,39	0

6.5 Other polymers [i](#)

There are no such residues in this entry.