



Full wwPDB X-ray Structure Validation Report ⓘ

Apr 25, 2026 – 10:54 AM EDT

PDB ID : 6DSY / pdb_00006dsy
Title : Bst DNA polymerase I post-chemistry (n+1) structure
Authors : Chim, N.; Jackson, L.N.; Chaput, J.C.
Deposited on : 2018-06-14
Resolution : 1.98 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

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

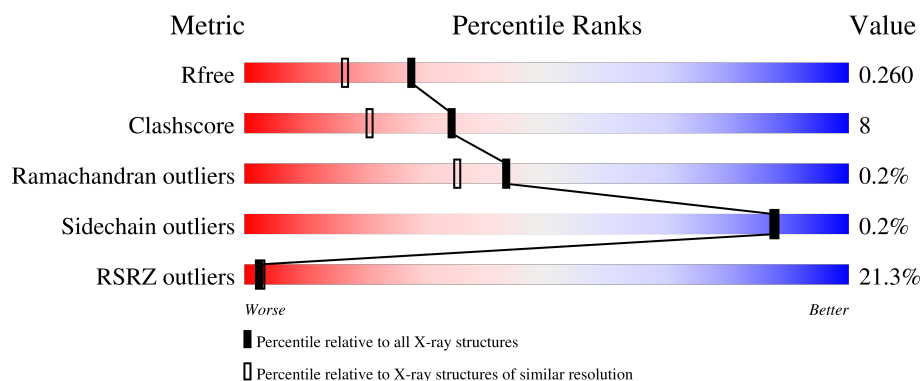
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.98 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}	180053	1506 (1.98-1.98)
Clashscore	190562	1534 (1.98-1.98)
Ramachandran outliers	187476	1518 (1.98-1.98)
Sidechain outliers	187428	1518 (1.98-1.98)
RSRZ outliers	180081	1506 (1.98-1.98)

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	P	11	55% 36% 45% 9% 9%
2	T	13	77% 46% 54%
3	A	580	19% 87% 12% ..

2 Entry composition [i](#)

There are 6 unique types of molecules in this entry. The entry contains 5645 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 DNA chain called DNA (5'-D(*GP*CP*GP*AP*TP*CP*AP*CP*GP*T)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	P	10	Total	C	N	O	P	0	0	0
			202	97	38	58	9			

- Molecule 2 is a DNA chain called DNA (5'-D(P*GP*TP*AP*CP*GP*TP*GP*AP*TP*CP*GP*CP*A)-3').

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	T	13	Total	C	N	O	P	0	0	0
			268	127	50	78	13			

- Molecule 3 is a protein called DNA polymerase I.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	A	577	Total	C	N	O	S	0	0	0
			4636	2946	807	867	16			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	550	THR	SER	conflict	UNP E1C9K5

- Molecule 4 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	1	Total	Mg	0	0
			1	1		

- Molecule 5 is SULFATE ION (CCD ID: SO4) (formula: O₄S).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	A	1	Total	O	S	0	0
			5	4	1		

- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	P	10	Total	O	0	0
			10	10		
6	T	17	Total	O	0	0
			17	17		
6	A	506	Total	O	0	0
			506	506		

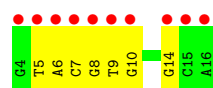
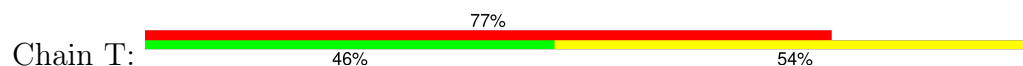
3 Residue-property plots

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.

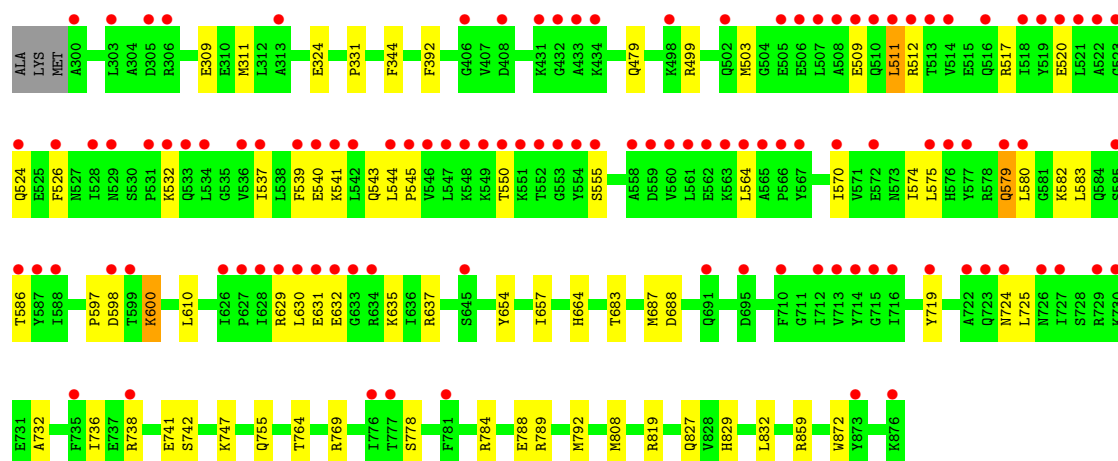
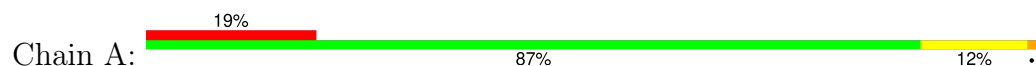
- Molecule 1: DNA (5'-D(*GP*CP*GP*AP*TP*CP*AP*CP*GP*T)-3')



- Molecule 2: DNA (5'-D(P*GP*TP*AP*CP*GP*TP*GP*AP*TP*CP*GP*CP*A)-3')



- Molecule 3: DNA polymerase I



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	88.20Å 93.75Å 105.85Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	46.09 – 1.98 46.09 – 1.98	Depositor EDS
% Data completeness (in resolution range)	97.0 (46.09-1.98) 92.1 (46.09-1.98)	Depositor EDS
R_{merge}	0.71	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.22 (at 1.98Å)	Xtriage
Refinement program	PHENIX (1.11.1 _2575: ???)	Depositor
R, R_{free}	0.203 , 0.255 0.209 , 0.260	Depositor DCC
R_{free} test set	2001 reflections (3.26%)	wwPDB-VP
Wilson B-factor (Å ²)	19.2	Xtriage
Anisotropy	0.188	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 52.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	5645	wwPDB-VP
Average B, all atoms (Å ²)	41.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.67% 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: SO4, 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	P	0.63	0/226	0.83	1/347 (0.3%)
2	T	0.23	0/300	0.43	0/461
3	A	0.38	1/4719 (0.0%)	0.55	2/6378 (0.0%)
All	All	0.39	1/5245 (0.0%)	0.56	3/7186 (0.0%)

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	544	LEU	C-O	-5.39	1.17	1.23

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	8	DC	C4'-C3'-O3'	6.70	120.05	110.00
3	A	511	LEU	CA-C-N	-6.16	111.54	120.29
3	A	511	LEU	C-N-CA	-6.16	111.54	120.29

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	P	202	0	114	13	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	T	268	0	147	17	0
3	A	4636	0	4690	55	0
4	A	1	0	0	0	0
5	A	5	0	0	0	0
6	A	506	0	0	5	0
6	P	10	0	0	1	0
6	T	17	0	0	0	0
All	All	5645	0	4951	72	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 8.

All (72) 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:P:6:DC:H42	2:T:10:DG:H1	1.12	0.97
3:A:631:GLU:HG2	3:A:635:LYS:HE3	1.49	0.92
3:A:664:HIS:HD2	3:A:859:ARG:H	1.21	0.89
3:A:509:GLU:HA	3:A:512:ARG:HH12	1.52	0.75
3:A:664:HIS:CD2	3:A:859:ARG:H	2.06	0.74
3:A:509:GLU:HA	3:A:512:ARG:NH1	2.05	0.71
3:A:724:ASN:ND2	6:A:1004:HOH:O	2.25	0.69
1:P:6:DC:N4	2:T:10:DG:H1	1.91	0.66
3:A:683:THR:HG22	3:A:687:MET:HE2	1.78	0.65
3:A:738:ARG:NH1	3:A:741:GLU:OE2	2.31	0.63
3:A:526:PHE:CD1	3:A:537:ILE:HD12	2.35	0.61
2:T:6:DA:H5'	3:A:789:ARG:NH2	2.17	0.60
1:P:8:DC:H5	6:P:107:HOH:O	1.85	0.59
3:A:597:PRO:HA	3:A:600:LYS:HE3	1.85	0.58
1:P:10:DT:C4	2:T:6:DA:N1	2.72	0.57
1:P:9:DG:H1	2:T:7:DC:H42	1.50	0.57
3:A:511:LEU:HD11	3:A:580:LEU:HB2	1.87	0.57
2:T:8:DG:H2'	2:T:9:DT:C6	2.40	0.57
3:A:524:GLN:OE1	3:A:541:LYS:NZ	2.25	0.56
3:A:827:GLN:HG2	3:A:832:LEU:HD23	1.87	0.56
1:P:10:DT:O4	2:T:6:DA:N1	2.40	0.55
2:T:7:DC:H2''	2:T:8:DG:H8	1.70	0.55
2:T:5:DT:H2'	3:A:719:TYR:CD2	2.43	0.53
1:P:8:DC:H2'	1:P:9:DG:C8	2.43	0.53
3:A:629:ARG:HH12	3:A:630:LEU:HD22	1.72	0.53
1:P:10:DT:O4	2:T:6:DA:C6	2.62	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:512:ARG:HH11	3:A:512:ARG:HB2	1.74	0.53
3:A:570:ILE:O	3:A:574:ILE:HG12	2.09	0.52
3:A:311:MET:HE2	3:A:344:PHE:HB3	1.92	0.52
3:A:392:PHE:HA	3:A:479:GLN:HE22	1.75	0.51
3:A:654:TYR:HB3	3:A:657:ILE:HB	1.93	0.51
3:A:324:GLU:HG3	3:A:331:PRO:HD2	1.93	0.50
3:A:789:ARG:HA	3:A:792:MET:HE3	1.94	0.50
1:P:10:DT:N3	2:T:6:DA:C2	2.71	0.50
3:A:550:THR:HG23	3:A:555:SER:HA	1.94	0.50
3:A:526:PHE:CG	3:A:537:ILE:HD12	2.47	0.49
2:T:8:DG:H2'	2:T:9:DT:H6	1.77	0.49
1:P:10:DT:OP1	3:A:829:HIS:HD2	1.95	0.48
2:T:14:DG:O3'	3:A:532:LYS:NZ	2.47	0.48
3:A:664:HIS:HD2	3:A:859:ARG:N	2.01	0.48
2:T:5:DT:H2''	2:T:6:DA:OP2	2.13	0.48
3:A:583:LEU:HD13	3:A:632:GLU:HG2	1.95	0.47
3:A:637:ARG:HG2	3:A:872:TRP:CE3	2.49	0.47
3:A:683:THR:HG22	3:A:687:MET:CE	2.45	0.47
3:A:600:LYS:HA	3:A:600:LYS:HD3	1.75	0.47
3:A:499:ARG:CZ	3:A:503:MET:HE3	2.46	0.46
2:T:7:DC:H2''	2:T:8:DG:C8	2.49	0.46
3:A:511:LEU:HD11	3:A:580:LEU:CB	2.44	0.46
3:A:732:ALA:O	3:A:736:ILE:HG12	2.16	0.46
3:A:540:GLU:O	3:A:543:GLN:NE2	2.42	0.45
3:A:788:GLU:O	3:A:792:MET:HG3	2.16	0.45
3:A:517:ARG:NH1	3:A:520:GLU:HG2	2.31	0.44
3:A:539:PHE:O	3:A:540:GLU:HB3	2.17	0.44
3:A:819:ARG:HD3	6:A:1133:HOH:O	2.18	0.44
2:T:9:DT:H2'	2:T:10:DG:C8	2.53	0.43
2:T:9:DT:OP1	3:A:610:LEU:HD21	2.17	0.43
3:A:575:LEU:O	3:A:579:GLN:HG3	2.18	0.43
3:A:755:GLN:HG2	6:A:1153:HOH:O	2.19	0.42
3:A:688:ASP:HB3	3:A:742:SER:OG	2.20	0.42
3:A:582:LYS:O	3:A:586:THR:HB	2.19	0.42
3:A:747:LYS:NZ	6:A:1027:HOH:O	2.48	0.42
3:A:309:GLU:OE2	6:A:1003:HOH:O	2.22	0.41
3:A:764:THR:HA	3:A:769:ARG:O	2.18	0.41
1:P:1:DG:H2''	1:P:2:DC:H5''	2.03	0.41
3:A:598:ASP:OD1	3:A:598:ASP:N	2.51	0.41
1:P:2:DC:H6	1:P:2:DC:H5'	1.85	0.41
3:A:545:PRO:HD2	3:A:564:LEU:HD22	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:778:SER:O	3:A:784:ARG:NH1	2.53	0.41
3:A:725:LEU:HD23	3:A:725:LEU:HA	1.82	0.41
3:A:808:MET:HG2	3:A:832:LEU:HD21	2.03	0.41
1:P:10:DT:OP1	3:A:829:HIS:CD2	2.73	0.41
3:A:630:LEU:HD12	3:A:630:LEU:HA	1.88	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	
3	A	575/580 (99%)	559 (97%)	15 (3%)	1 (0%)	43	35

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	A	579	GLN

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	
3	A	494/496 (100%)	493 (100%)	1 (0%)	87	88

All (1) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	A	600	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (9) such sidechains are listed below:

Mol	Chain	Res	Type
3	A	468	ASN
3	A	470	GLN
3	A	479	GLN
3	A	664	HIS
3	A	682	HIS
3	A	709	ASN
3	A	724	ASN
3	A	759	GLN
3	A	793	ASN

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](#)

Of 2 ligands modelled in this entry, 1 is monoatomic - leaving 1 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	$\# Z > 2$
5	SO4	A	902	-	4,4,4	0.23	0	6,6,6	0.19	0

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

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	P	10/11 (90%)	2.55	6 (60%) 0 0	62, 84, 118, 134	0
2	T	13/13 (100%)	3.03	10 (76%) 0 0	75, 109, 165, 190	0
3	A	577/580 (99%)	0.93	112 (19%) 3 4	15, 29, 66, 129	0
All	All	600/604 (99%)	1.00	128 (21%) 2 3	15, 30, 78, 190	0

All (128) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	A	630	LEU	8.1
3	A	550	THR	6.2
3	A	628	ILE	6.2
3	A	631	GLU	5.9
3	A	559	ASP	5.1
3	A	551	LYS	5.0
3	A	552	THR	5.0
3	A	553	GLY	4.8
3	A	632	GLU	4.7
1	P	1	DG	4.6
3	A	536	VAL	4.5
3	A	719	TYR	4.5
3	A	729	ARG	4.4
2	T	4	DG	4.3
3	A	777	THR	4.3
3	A	548	LYS	4.3
2	T	6	DA	4.2
3	A	549	LYS	4.2
3	A	537	ILE	4.1
1	P	10	DT	4.0
3	A	627	PRO	4.0
2	T	16	DA	4.0
3	A	629	ARG	3.9

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Mol	Chain	Res	Type	RSRZ
3	A	554	TYR	3.9
3	A	560	VAL	3.9
3	A	431	LYS	3.9
3	A	433	ALA	3.7
3	A	735	PHE	3.7
3	A	546	VAL	3.6
3	A	547	LEU	3.6
3	A	714	TYR	3.5
3	A	541	LYS	3.5
2	T	7	DC	3.5
3	A	306	ARG	3.5
3	A	531	PRO	3.5
3	A	434	LYS	3.5
3	A	542	LEU	3.4
3	A	511	LEU	3.4
3	A	303	LEU	3.3
2	T	9	DT	3.3
2	T	10	DG	3.3
3	A	710	PHE	3.3
3	A	300	ALA	3.2
3	A	726	ASN	3.2
2	T	14	DG	3.2
2	T	5	DT	3.1
3	A	634	ARG	3.1
3	A	695	ASP	3.1
3	A	532	LYS	3.1
1	P	3	DG	3.1
3	A	563	LYS	3.1
3	A	305	ASP	3.0
3	A	558	ALA	3.0
3	A	580	LEU	3.0
3	A	523	GLY	3.0
3	A	712	ILE	3.0
3	A	540	GLU	2.9
1	P	2	DC	2.9
3	A	579	GLN	2.9
3	A	512	ARG	2.9
3	A	519	TYR	2.9
3	A	505	GLU	2.9
3	A	716	ILE	2.9
3	A	723	GLN	2.8
3	A	539	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
3	A	544	LEU	2.8
3	A	599	THR	2.8
3	A	576	HIS	2.8
3	A	506	GLU	2.8
3	A	507	LEU	2.8
2	T	8	DG	2.8
2	T	15	DC	2.8
3	A	587	TYR	2.7
3	A	633	GLY	2.7
3	A	498	LYS	2.7
3	A	598	ASP	2.7
3	A	521	LEU	2.7
3	A	724	ASN	2.6
3	A	626	ILE	2.6
3	A	514	VAL	2.6
3	A	529	ASN	2.6
3	A	432	GLY	2.5
3	A	513	THR	2.5
3	A	586	THR	2.5
3	A	730	LYS	2.5
3	A	776	ILE	2.5
3	A	566	PRO	2.5
3	A	570	ILE	2.4
3	A	713	VAL	2.4
3	A	727	ILE	2.4
3	A	522	ALA	2.4
1	P	4	DA	2.4
3	A	572	GLU	2.4
3	A	691	GLN	2.4
3	A	585	SER	2.4
3	A	561	LEU	2.3
3	A	516	GLN	2.3
3	A	508	ALA	2.3
3	A	406	GLY	2.3
3	A	408	ASP	2.3
3	A	534	LEU	2.3
3	A	577	TYR	2.3
3	A	528	ILE	2.3
3	A	509	GLU	2.3
3	A	502	GLN	2.3
3	A	564	LEU	2.3
3	A	781	PHE	2.3

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Mol	Chain	Res	Type	RSRZ
3	A	588	ILE	2.3
3	A	562	GLU	2.3
3	A	738	ARG	2.2
3	A	715	GLY	2.2
3	A	722	ALA	2.2
3	A	520	GLU	2.1
3	A	526	PHE	2.1
3	A	524	GLN	2.1
3	A	533	GLN	2.1
3	A	565	ALA	2.1
3	A	518	ILE	2.1
3	A	873	TYR	2.1
3	A	876	LYS	2.1
3	A	545	PRO	2.1
1	P	8	DC	2.1
3	A	510	GLN	2.1
3	A	313	ALA	2.1
3	A	575	LEU	2.0
3	A	555	SER	2.0
3	A	645	SER	2.0
3	A	567	TYR	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($\text{\AA}^2$)	Q<0.9
5	SO4	A	902	5/5	0.89	0.10	62,64,65,72	0
4	MG	A	901	1/1	0.91	0.30	30,30,30,30	0

6.5 Other polymers [i](#)

There are no such residues in this entry.