



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 5, 2026 – 11:38 PM UTC

PDB ID : 6TVC / pdb_00006tvc
Title : Crystal structure of the haemagglutinin from a transmissible H10N7 seal influenza virus isolated in Netherland
Authors : Zhang, J.; Xiong, X.; Purkiss, A.; Walker, P.; Gamblin, S.; Skehel, J.J.
Deposited on : 2020-01-09
Resolution : 1.84 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

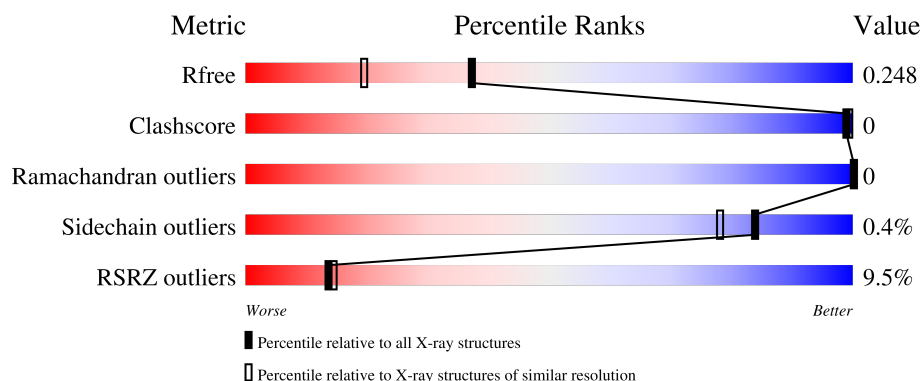
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.84 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	1296 (1.84-1.84)
Clashscore	190562	1329 (1.84-1.84)
Ramachandran outliers	187476	1318 (1.84-1.84)
Sidechain outliers	187428	1318 (1.84-1.84)
RSRZ outliers	180081	1296 (1.84-1.84)

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	319	4% 100%
1	C	319	13% 98%
1	E	319	12% 98%
2	B	172	8% 99%
2	D	172	13% 98%

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Mol	Chain	Length	Quality of chain
2	F	172	7% 98%

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 12116 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 Haemagglutinin HA1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	319	Total	C	N	O	S	0	0	0
			2428	1511	440	461	16			
1	C	319	Total	C	N	O	S	0	0	0
			2394	1492	429	457	16			
1	E	319	Total	C	N	O	S	0	0	0
			2426	1510	439	461	16			

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	0	PRO	-	expression tag	UNP A0A0A7HR51
A	96	LYS	GLU	conflict	UNP A0A0A7HR51
A	205	SER	ASN	conflict	UNP A0A0A7HR51
A	237	ILE	THR	conflict	UNP A0A0A7HR51
C	0	PRO	-	expression tag	UNP A0A0A7HR51
C	96	LYS	GLU	conflict	UNP A0A0A7HR51
C	205	SER	ASN	conflict	UNP A0A0A7HR51
C	237	ILE	THR	conflict	UNP A0A0A7HR51
E	0	PRO	-	expression tag	UNP A0A0A7HR51
E	96	LYS	GLU	conflict	UNP A0A0A7HR51
E	205	SER	ASN	conflict	UNP A0A0A7HR51
E	237	ILE	THR	conflict	UNP A0A0A7HR51

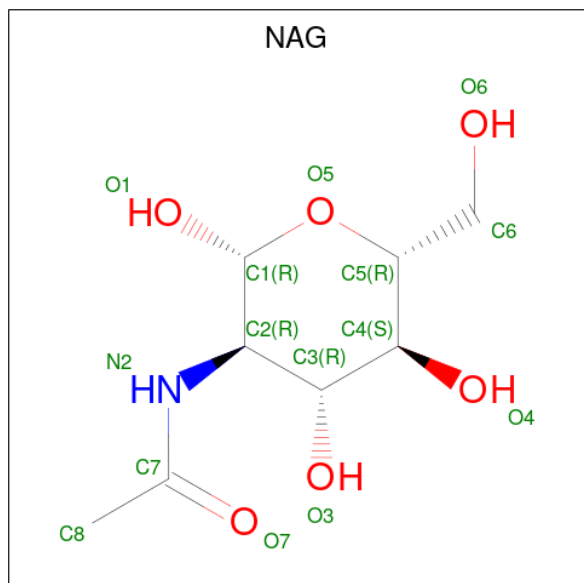
- Molecule 2 is a protein called Haemagglutinin HA2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	172	Total	C	N	O	S	0	0	0
			1366	846	238	274	8			
2	D	172	Total	C	N	O	S	0	0	0
			1361	844	239	270	8			
2	F	172	Total	C	N	O	S	0	0	0
			1368	847	239	274	8			

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	158	ASN	ASP	conflict	UNP A0A0A7HR51
D	158	ASN	ASP	conflict	UNP A0A0A7HR51
F	158	ASN	ASP	conflict	UNP A0A0A7HR51

- Molecule 3 is 2-acetamido-2-deoxy-beta-D-glucopyranose (CCD ID: NAG) (formula: $C_8H_{15}NO_6$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
3	A	1	Total	C	N	O	0	0
			14	8	1	5		
3	E	1	Total	C	N	O	0	0
			14	8	1	5		
3	F	1	Total	C	N	O	0	0
			14	8	1	5		

- Molecule 4 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	A	202	Total	O	0	0
			202	202		
4	B	91	Total	O	0	0
			91	91		
4	C	103	Total	O	0	0
			103	103		
4	D	70	Total	O	0	0
			70	70		

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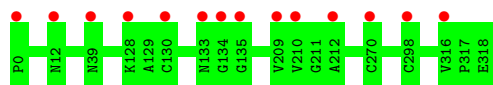
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
4	E	149	Total 149	O 149	0	0
4	F	116	Total 116	O 116	0	0

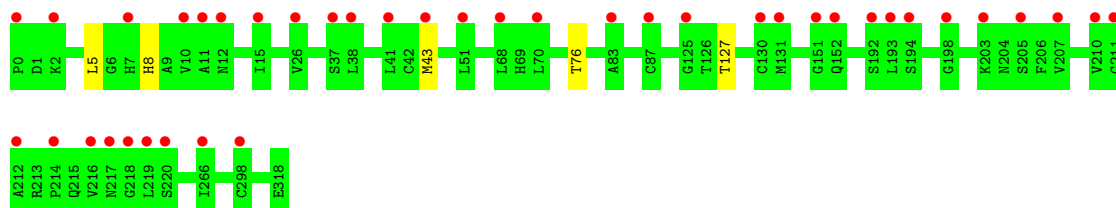
3 Residue-property plots [i](#)

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.

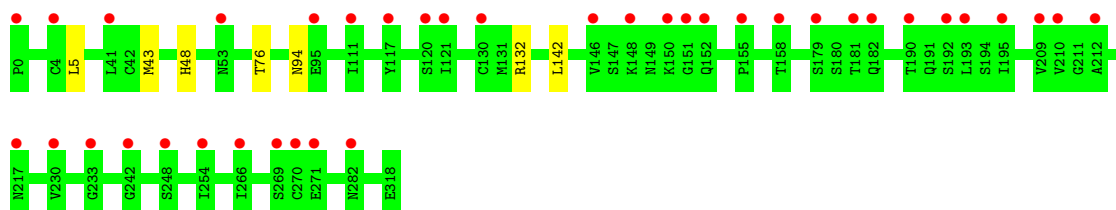
- Molecule 1: Haemagglutinin HA1



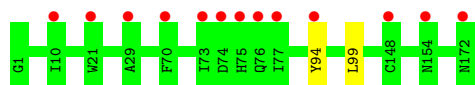
- Molecule 1: Haemagglutinin HA1



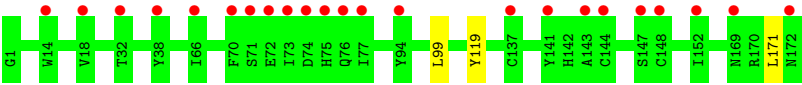
- Molecule 1: Haemagglutinin HA1



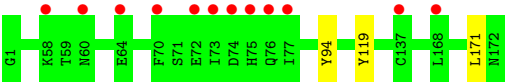
- Molecule 2: Haemagglutinin HA2



- Molecule 2: Haemagglutinin HA2



● Molecule 2: Haemagglutinin HA2



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	64.38Å 214.95Å 74.67Å 90.00° 97.58° 90.00°	Depositor
Resolution (Å)	51.48 – 1.84 51.48 – 1.84	Depositor EDS
% Data completeness (in resolution range)	99.0 (51.48-1.84) 99.0 (51.48-1.84)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.62 (at 1.84Å)	Xtriage
Refinement program	REFMAC 5.8.0158	Depositor
R, R_{free}	0.232 , 0.253 0.228 , 0.248	Depositor DCC
R_{free} test set	8385 reflections (4.89%)	wwPDB-VP
Wilson B-factor (Å ²)	34.4	Xtriage
Anisotropy	0.583	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.34 , 44.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.33$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	12116	wwPDB-VP
Average B, all atoms (Å ²)	49.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.29% 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: NAG

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	0.49	0/2478	0.66	0/3355
1	C	0.49	0/2444	0.66	0/3317
1	E	0.49	0/2476	0.65	0/3353
2	B	0.52	0/1390	0.77	0/1877
2	D	0.50	0/1385	0.77	0/1870
2	F	0.51	0/1392	0.80	0/1878
All	All	0.50	0/11565	0.70	0/15650

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 [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	2428	0	2401	0	0
1	C	2394	0	2331	2	0
1	E	2426	0	2398	4	0
2	B	1366	0	1266	2	0
2	D	1361	0	1258	3	0
2	F	1368	0	1269	3	0
3	A	14	0	13	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	E	14	0	13	0	0
3	F	14	0	13	0	0
4	A	202	0	0	0	0
4	B	91	0	0	0	0
4	C	103	0	0	0	0
4	D	70	0	0	0	0
4	E	149	0	0	0	0
4	F	116	0	0	0	0
All	All	12116	0	10962	9	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 (9) 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:E:5:LEU:HD22	2:F:119:TYR:HA	1.83	0.60
1:E:43:MET:HE2	1:E:48:HIS:CB	2.37	0.55
1:C:5:LEU:HD22	2:D:119:TYR:HA	1.89	0.54
1:C:43:MET:HE1	1:C:76:THR:HG21	1.93	0.51
1:E:43:MET:HE2	1:E:48:HIS:HB3	1.94	0.48
2:D:171:LEU:HD22	2:F:171:LEU:HD11	1.93	0.48
2:B:99:LEU:HD22	2:F:94:TYR:OH	2.16	0.46
1:E:43:MET:HE1	1:E:76:THR:HG21	1.98	0.46
2:B:94:TYR:OH	2:D:99:LEU:HD22	2.18	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	A	317/319 (99%)	312 (98%)	5 (2%)	0	100	100
1	C	317/319 (99%)	311 (98%)	6 (2%)	0	100	100
1	E	317/319 (99%)	312 (98%)	5 (2%)	0	100	100
2	B	170/172 (99%)	165 (97%)	5 (3%)	0	100	100
2	D	170/172 (99%)	163 (96%)	7 (4%)	0	100	100
2	F	170/172 (99%)	167 (98%)	3 (2%)	0	100	100
All	All	1461/1473 (99%)	1430 (98%)	31 (2%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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	268/270 (99%)	268 (100%)	0	100	100
1	C	259/270 (96%)	257 (99%)	2 (1%)	73	65
1	E	268/270 (99%)	265 (99%)	3 (1%)	65	54
2	B	141/146 (97%)	141 (100%)	0	100	100
2	D	138/146 (94%)	138 (100%)	0	100	100
2	F	141/146 (97%)	141 (100%)	0	100	100
All	All	1215/1248 (97%)	1210 (100%)	5 (0%)	84	78

All (5) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	C	8	HIS
1	C	127	THR
1	E	94	ASN
1	E	132	ARG
1	E	142	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (24)

such sidechains are listed below:

Mol	Chain	Res	Type
1	A	55	HIS
1	A	226	HIS
1	A	231	GLN
1	A	303	ASN
2	B	12	ASN
2	B	27	GLN
2	B	95	GLN
1	C	48	HIS
1	C	149	ASN
1	C	152	GLN
1	C	177	HIS
1	C	182	GLN
1	C	268	ASN
1	C	303	ASN
2	D	26	HIS
2	D	105	GLN
2	D	155	ASN
1	E	48	HIS
1	E	149	ASN
1	E	268	ASN
1	E	303	ASN
2	F	12	ASN
2	F	26	HIS
2	F	105	GLN

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 oligosaccharides in this entry.

5.6 Ligand geometry

3 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$
3	NAG	F	201	2	14,14,15	0.41	0	17,19,21	1.12	2 (11%)
3	NAG	A	401	1	14,14,15	0.35	0	17,19,21	1.00	2 (11%)
3	NAG	E	401	1	14,14,15	0.32	0	17,19,21	0.91	1 (5%)

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	NAG	F	201	2	-	0/6/23/26	0/1/1/1
3	NAG	A	401	1	-	0/6/23/26	0/1/1/1
3	NAG	E	401	1	-	0/6/23/26	0/1/1/1

There are no bond length outliers.

All (5) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	F	201	NAG	C1-O5-C5	2.96	116.15	112.19
3	A	401	NAG	C1-O5-C5	2.31	115.28	112.19
3	A	401	NAG	O5-C1-C2	-2.29	107.75	111.29
3	E	401	NAG	C1-O5-C5	2.16	115.09	112.19
3	F	201	NAG	C1-C2-N2	2.04	113.64	110.43

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	A	319/319 (100%)	0.57	14 (4%) 39 42	26, 42, 59, 70	0
1	C	319/319 (100%)	1.19	40 (12%) 8 8	38, 54, 72, 199	0
1	E	319/319 (100%)	1.01	38 (11%) 9 8	24, 47, 64, 78	0
2	B	172/172 (100%)	0.76	13 (7%) 20 20	33, 45, 64, 90	0
2	D	172/172 (100%)	1.07	23 (13%) 7 7	35, 50, 75, 99	0
2	F	172/172 (100%)	0.64	12 (6%) 22 23	27, 40, 62, 89	0
All	All	1473/1473 (100%)	0.89	140 (9%) 14 14	24, 47, 68, 199	0

All (140) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	C	7	HIS	7.3
1	E	270	CYS	6.0
2	B	73	ILE	4.5
2	D	73	ILE	4.3
1	C	217	ASN	3.9
2	F	73	ILE	3.8
1	C	219	LEU	3.7
2	D	144	CYS	3.6
1	E	146	VAL	3.6
1	A	210	VAL	3.6
1	A	135	GLY	3.5
1	E	282	ASN	3.5
2	B	76	GLN	3.4
1	E	217	ASN	3.4
2	B	70	PHE	3.3
1	C	87	CYS	3.2
1	C	0	PRO	3.2
1	C	266	ILE	3.2
1	A	270	CYS	3.1

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Mol	Chain	Res	Type	RSRZ
2	F	75	HIS	3.1
2	D	32	THR	3.0
1	C	216	VAL	3.0
1	E	192	SER	3.0
1	E	195	ILE	3.0
1	C	11	ALA	3.0
2	F	60	ASN	3.0
1	C	210	VAL	2.9
1	E	242	GLY	2.9
1	A	212	ALA	2.9
1	C	220	SER	2.9
2	B	74	ASP	2.9
2	D	94	TYR	2.9
1	E	182	GLN	2.9
1	C	38	LEU	2.9
1	E	193	LEU	2.9
2	D	74	ASP	2.8
1	A	209	VAL	2.8
1	E	269	SER	2.8
1	A	298	CYS	2.8
1	E	254	ILE	2.8
2	B	77	ILE	2.8
1	E	130	CYS	2.7
2	D	148	CYS	2.7
1	C	125	GLY	2.7
1	C	194	SER	2.7
2	B	172	ASN	2.7
1	E	209	VAL	2.7
1	C	198	GLY	2.7
2	F	74	ASP	2.7
2	D	71	SER	2.7
1	A	128	LYS	2.7
1	A	130	CYS	2.6
1	A	0	PRO	2.6
1	C	298	CYS	2.6
1	E	148	LYS	2.6
2	D	77	ILE	2.6
2	D	72	GLU	2.6
2	F	64	GLU	2.6
1	C	212	ALA	2.6
2	F	58	LYS	2.6
1	E	158	THR	2.6

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Mol	Chain	Res	Type	RSRZ
2	B	75	HIS	2.5
1	E	181	THR	2.5
2	F	70	PHE	2.5
1	C	207	VAL	2.5
1	E	155	PRO	2.5
1	C	211	GLY	2.5
2	D	137	CYS	2.4
1	C	51	LEU	2.4
2	D	70	PHE	2.4
2	B	29	ALA	2.4
2	D	14	TRP	2.4
2	D	18	VAL	2.4
1	E	233	GLY	2.4
2	D	172	ASN	2.4
2	D	141	TYR	2.4
2	F	77	ILE	2.4
1	C	214	PRO	2.4
1	A	12	ASN	2.4
1	A	133	ASN	2.4
1	C	152	GLN	2.4
1	A	134	GLY	2.4
1	C	43	MET	2.4
1	C	130	CYS	2.4
1	E	212	ALA	2.4
2	D	75	HIS	2.4
1	C	151	GLY	2.4
1	C	203	LYS	2.4
2	B	10	ILE	2.3
1	E	120	SER	2.3
1	C	68	LEU	2.3
1	E	151	GLY	2.3
1	C	192	SER	2.3
2	F	76	GLN	2.3
1	C	193	LEU	2.3
2	F	168	LEU	2.3
1	C	131	MET	2.3
1	E	117	TYR	2.3
2	B	94	TYR	2.3
2	D	152	ILE	2.3
1	C	205	SER	2.3
1	E	95	GLU	2.3
1	C	2	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
1	E	248	SER	2.2
1	C	26	VAL	2.2
1	C	37	SER	2.2
2	D	143	ALA	2.2
1	C	15	ILE	2.2
1	E	111	ILE	2.2
1	A	39	ASN	2.2
2	D	169	ASN	2.2
2	F	72	GLU	2.2
2	B	148	CYS	2.2
2	D	76	GLN	2.2
2	D	147	SER	2.2
2	D	38	TYR	2.2
1	E	121	ILE	2.2
2	B	21	TRP	2.2
1	C	10	VAL	2.2
1	E	152	GLN	2.2
1	E	4	CYS	2.2
2	F	137	CYS	2.2
1	E	41	LEU	2.2
1	E	150	LYS	2.2
1	A	316	VAL	2.1
1	E	230	VAL	2.1
1	E	179	SER	2.1
1	E	0	PRO	2.1
1	C	12	ASN	2.1
1	C	83	ALA	2.1
2	D	66	ILE	2.1
1	E	190	THR	2.1
1	E	271	GLU	2.1
1	E	53	ASN	2.1
1	C	70	LEU	2.1
1	E	266	ILE	2.0
1	C	218	GLY	2.0
2	B	154	ASN	2.0
1	E	210	VAL	2.0
1	C	41	LEU	2.0

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

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
3	NAG	A	401	14/15	0.53	0.16	58,65,75,76	0
3	NAG	E	401	14/15	0.61	0.17	55,58,66,69	0
3	NAG	F	201	14/15	0.73	0.15	42,45,53,54	0

6.5 Other polymers [i](#)

There are no such residues in this entry.