



Full wwPDB X-ray Structure Validation Report ⓘ

Apr 26, 2026 – 01:05 PM EDT

PDB ID : 8DRW / pdb_00008drw
Title : Product structure of SARS-CoV-2 Mpro C145A mutant in complex with nsp9-nsp10 (C9) cut site sequence
Authors : Lee, J.; Kenward, C.; Worrall, L.J.; Vuckovic, M.; Paetzel, M.; Strynadka, N.C.J.
Deposited on : 2022-07-21
Resolution : 2.67 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

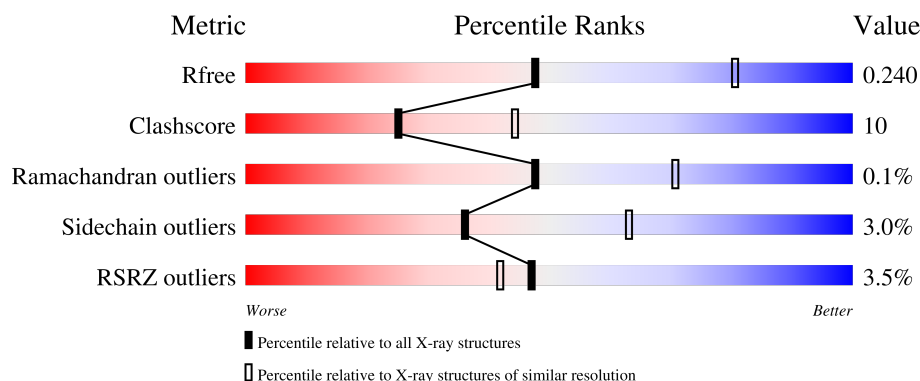
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.67 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	5070 (2.70-2.66)
Clashscore	190562	5409 (2.70-2.66)
Ramachandran outliers	187476	5324 (2.70-2.66)
Sidechain outliers	187428	5324 (2.70-2.66)
RSRZ outliers	180081	5070 (2.70-2.66)

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	306	4% 79% 20%
1	B	306	75% 25%
1	C	306	2% 79% 20%
1	D	306	4% 77% 22%
1	E	306	% 73% 27%

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Mol	Chain	Length	Quality of chain
1	F	306	
1	G	306	
1	H	306	
1	I	306	
1	J	306	
1	K	306	
1	L	306	
1	M	306	
1	N	306	

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
4	PEG	A	404	-	-	X	-

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 33657 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 Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	306	Total	C	N	O	S	0	0	0
			2351	1490	399	442	20			
1	B	306	Total	C	N	O	S	0	0	0
			2359	1491	404	443	21			
1	C	306	Total	C	N	O	S	0	0	0
			2363	1494	405	443	21			
1	D	306	Total	C	N	O	S	0	0	0
			2363	1494	405	443	21			
1	E	306	Total	C	N	O	S	0	0	0
			2359	1491	404	443	21			
1	F	306	Total	C	N	O	S	0	0	0
			2351	1488	399	443	21			
1	G	306	Total	C	N	O	S	0	1	0
			2333	1478	395	439	21			
1	H	306	Total	C	N	O	S	0	0	0
			2368	1499	405	443	21			
1	I	306	Total	C	N	O	S	0	0	0
			2347	1485	398	443	21			
1	J	306	Total	C	N	O	S	0	0	0
			2340	1482	398	440	20			
1	K	298	Total	C	N	O	S	0	0	0
			2208	1392	380	418	18			
1	L	306	Total	C	N	O	S	0	0	0
			2366	1497	404	444	21			
1	M	306	Total	C	N	O	S	0	0	0
			2370	1500	405	444	21			
1	N	306	Total	C	N	O	S	0	0	0
			2356	1489	405	441	21			

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	145	ALA	CYS	conflict	UNP P0DTD1
B	145	ALA	CYS	conflict	UNP P0DTD1
C	145	ALA	CYS	conflict	UNP P0DTD1
D	145	ALA	CYS	conflict	UNP P0DTD1
E	145	ALA	CYS	conflict	UNP P0DTD1
F	145	ALA	CYS	conflict	UNP P0DTD1
G	145	ALA	CYS	conflict	UNP P0DTD1
H	145	ALA	CYS	conflict	UNP P0DTD1
I	145	ALA	CYS	conflict	UNP P0DTD1
J	145	ALA	CYS	conflict	UNP P0DTD1
K	145	ALA	CYS	conflict	UNP P0DTD1
L	145	ALA	CYS	conflict	UNP P0DTD1
M	145	ALA	CYS	conflict	UNP P0DTD1
N	145	ALA	CYS	conflict	UNP P0DTD1

- Molecule 2 is SODIUM ION (CCD ID: NA) (formula: Na).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
2	A	1	Total Na 1 1	0	0
2	B	1	Total Na 1 1	0	0
2	C	1	Total Na 1 1	0	0
2	D	1	Total Na 1 1	0	0
2	E	1	Total Na 1 1	0	0
2	F	1	Total Na 1 1	0	0
2	H	1	Total Na 1 1	0	0
2	I	1	Total Na 1 1	0	0
2	J	1	Total Na 1 1	0	0
2	L	1	Total Na 1 1	0	0
2	M	1	Total Na 1 1	0	0
2	N	1	Total Na 1 1	0	0

- Molecule 3 is PENTAETHYLENE GLYCOL (CCD ID: 1PE) (formula: C₁₀H₂₂O₆).



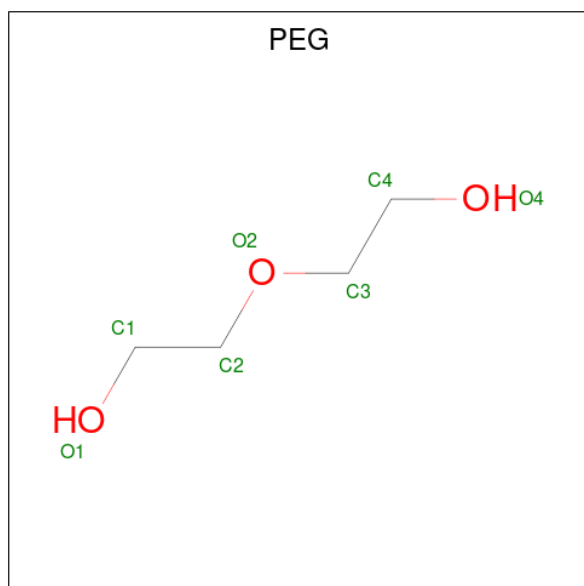
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	A	1	Total	C	O	0	0
			10	6	4		
3	B	1	Total	C	O	0	0
			10	6	4		
3	B	1	Total	C	O	0	0
			10	6	4		
3	C	1	Total	C	O	0	0
			10	6	4		
3	C	1	Total	C	O	0	0
			10	6	4		
3	D	1	Total	C	O	0	0
			10	6	4		
3	D	1	Total	C	O	0	0
			10	6	4		
3	D	1	Total	C	O	0	0
			13	8	5		
3	E	1	Total	C	O	0	0
			10	6	4		
3	F	1	Total	C	O	0	0
			10	6	4		
3	F	1	Total	C	O	0	0
			10	6	4		
3	G	1	Total	C	O	0	0
			10	6	4		
3	H	1	Total	C	O	0	0
			10	6	4		
3	H	1	Total	C	O	0	0
			16	10	6		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	H	1	Total C O 10 6 4	0	0
3	I	1	Total C O 10 6 4	0	0
3	J	1	Total C O 10 6 4	0	0
3	J	1	Total C O 16 10 6	0	0
3	K	1	Total C O 10 6 4	0	0
3	L	1	Total C O 10 6 4	0	0
3	M	1	Total C O 10 6 4	0	0
3	N	1	Total C O 10 6 4	0	0

- Molecule 4 is DI(HYDROXYETHYL)ETHER (CCD ID: PEG) (formula: $C_4H_{10}O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
4	A	1	Total C O 7 4 3	0	0
4	A	1	Total C O 7 4 3	0	0
4	A	1	Total C O 7 4 3	0	0

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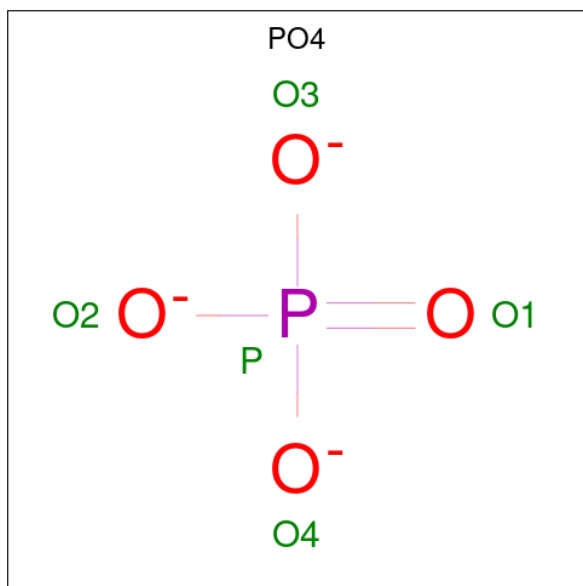
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	B	1	Total	C	O	0	0
			7	4	3		
4	B	1	Total	C	O	0	0
			7	4	3		
4	B	1	Total	C	O	0	0
			7	4	3		
4	B	1	Total	C	O	0	0
			7	4	3		
4	B	1	Total	C	O	0	0
			7	4	3		
4	C	1	Total	C	O	0	0
			7	4	3		
4	C	1	Total	C	O	0	0
			7	4	3		
4	D	1	Total	C	O	0	0
			7	4	3		
4	D	1	Total	C	O	0	0
			7	4	3		
4	E	1	Total	C	O	0	0
			7	4	3		
4	E	1	Total	C	O	0	0
			7	4	3		
4	F	1	Total	C	O	0	0
			7	4	3		
4	F	1	Total	C	O	0	0
			7	4	3		
4	G	1	Total	C	O	0	0
			7	4	3		
4	H	1	Total	C	O	0	0
			7	4	3		
4	H	1	Total	C	O	0	0
			7	4	3		
4	J	1	Total	C	O	0	0
			7	4	3		
4	J	1	Total	C	O	0	0
			7	4	3		
4	J	1	Total	C	O	0	0
			7	4	3		
4	J	1	Total	C	O	0	0
			7	4	3		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	J	1	Total	C	O	0	0
			7	4	3		
4	J	1	Total	C	O	0	0
			7	4	3		
4	L	1	Total	C	O	0	0
			7	4	3		
4	L	1	Total	C	O	0	0
			7	4	3		
4	L	1	Total	C	O	0	0
			7	4	3		
4	M	1	Total	C	O	0	0
			7	4	3		
4	N	1	Total	C	O	0	0
			7	4	3		
4	N	1	Total	C	O	0	0
			7	4	3		
4	N	1	Total	C	O	0	0
			7	4	3		

- Molecule 5 is PHOSPHATE ION (CCD ID: PO4) (formula: O₄P).



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

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	B	1	Total	O	P	0	0
			5	4	1		
5	B	1	Total	O	P	0	0
			5	4	1		
5	B	1	Total	O	P	0	0
			5	4	1		
5	C	1	Total	O	P	0	0
			5	4	1		
5	C	1	Total	O	P	0	0
			5	4	1		
5	C	1	Total	O	P	0	0
			5	4	1		
5	D	1	Total	O	P	0	0
			5	4	1		
5	E	1	Total	O	P	0	0
			5	4	1		
5	E	1	Total	O	P	0	0
			5	4	1		
5	F	1	Total	O	P	0	0
			5	4	1		
5	F	1	Total	O	P	0	0
			5	4	1		
5	F	1	Total	O	P	0	0
			5	4	1		
5	G	1	Total	O	P	0	0
			5	4	1		
5	G	1	Total	O	P	0	0
			5	4	1		
5	H	1	Total	O	P	0	0
			5	4	1		
5	H	1	Total	O	P	0	0
			5	4	1		
5	H	1	Total	O	P	0	0
			5	4	1		
5	I	1	Total	O	P	0	0
			5	4	1		
5	J	1	Total	O	P	0	0
			5	4	1		
5	J	1	Total	O	P	0	0
			5	4	1		
5	K	1	Total	O	P	0	0
			5	4	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
5	L	1	Total	O	P	0	0
			5	4	1		
5	L	1	Total	O	P	0	0
			5	4	1		
5	L	1	Total	O	P	0	0
			5	4	1		
5	M	1	Total	O	P	0	0
			5	4	1		

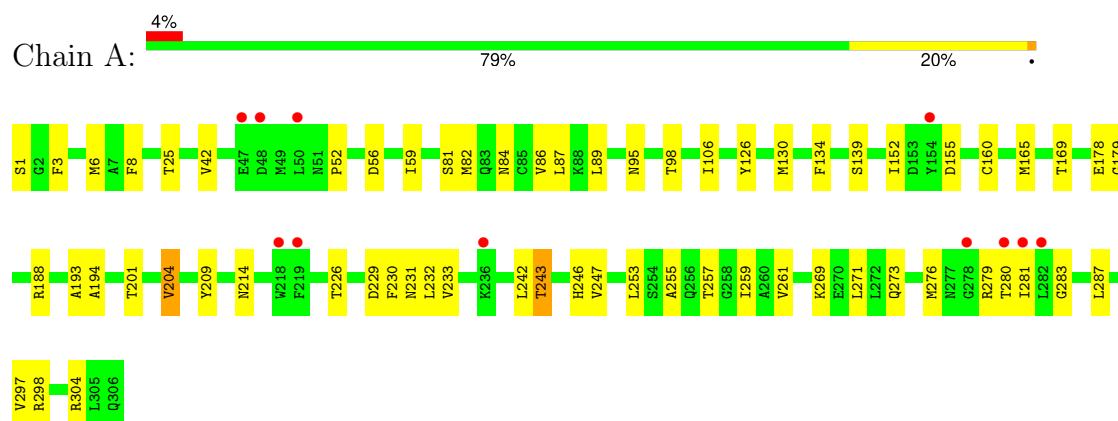
- Molecule 6 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	A	14	Total	O	0	0
			14	14		
6	B	16	Total	O	0	0
			16	16		
6	C	8	Total	O	0	0
			8	8		
6	D	33	Total	O	0	0
			33	33		
6	E	14	Total	O	0	0
			14	14		
6	F	16	Total	O	0	0
			16	16		
6	G	11	Total	O	0	0
			11	11		
6	H	19	Total	O	0	0
			19	19		
6	I	10	Total	O	0	0
			10	10		
6	J	15	Total	O	0	0
			15	15		
6	K	4	Total	O	0	0
			4	4		
6	L	24	Total	O	0	0
			24	24		
6	M	13	Total	O	0	0
			13	13		
6	N	13	Total	O	0	0
			13	13		

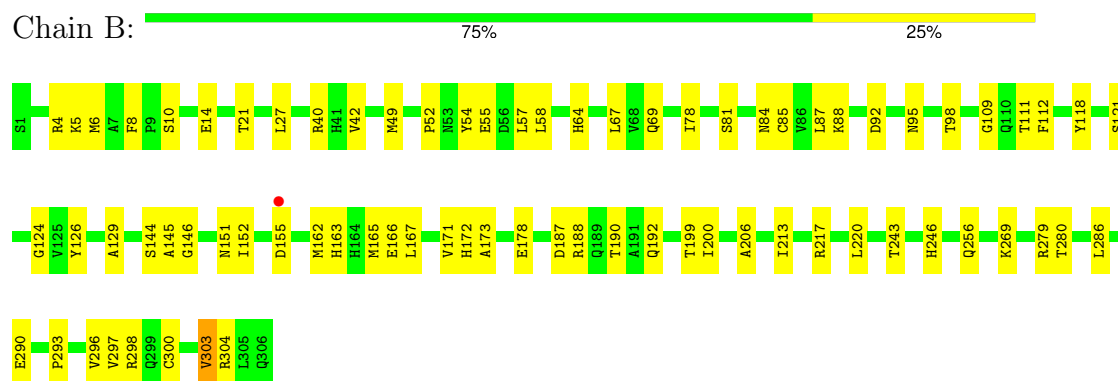
3 Residue-property plots [i](#)

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.

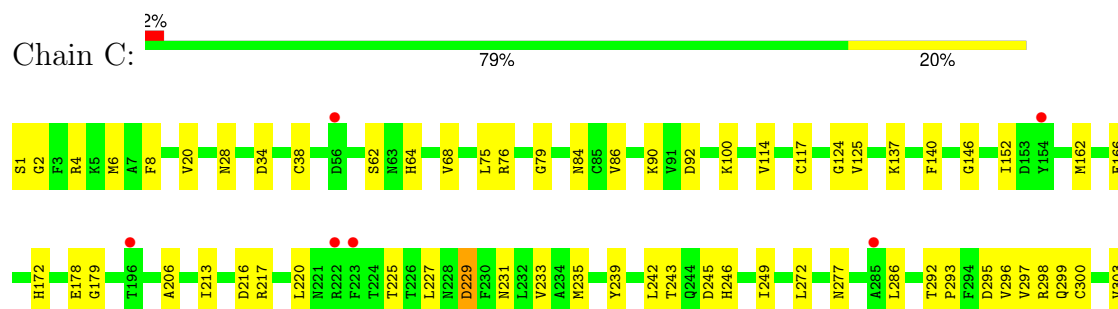
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



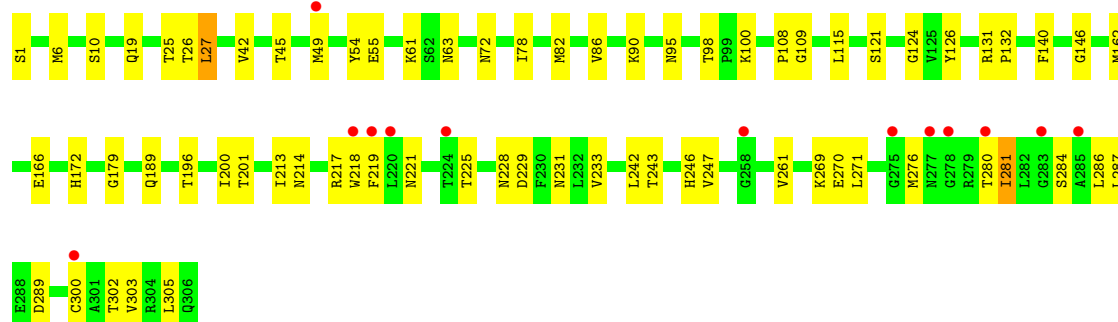
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



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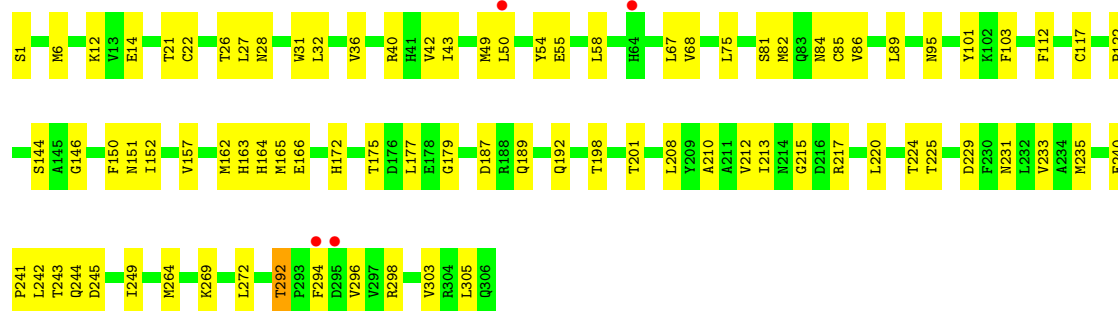
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site

Chain D:  4% 77% 22%



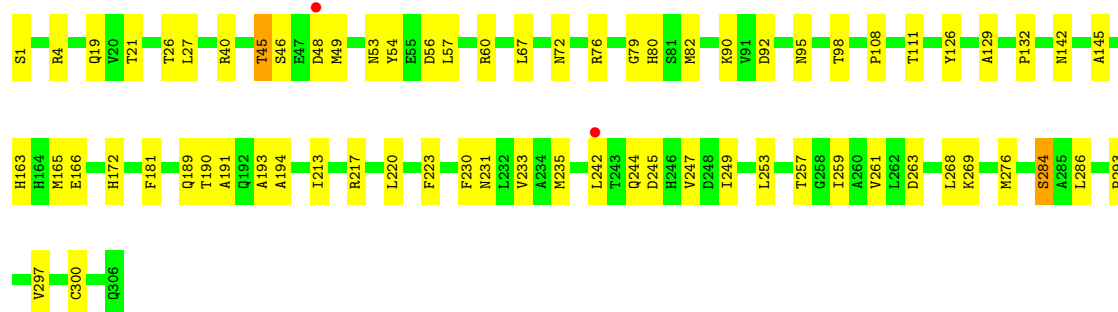
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site

Chain E:  73% 27%



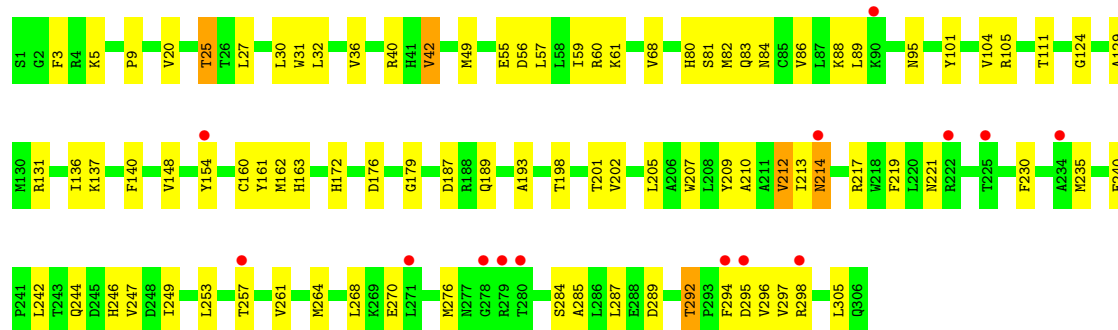
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site

Chain F:  77% 22%

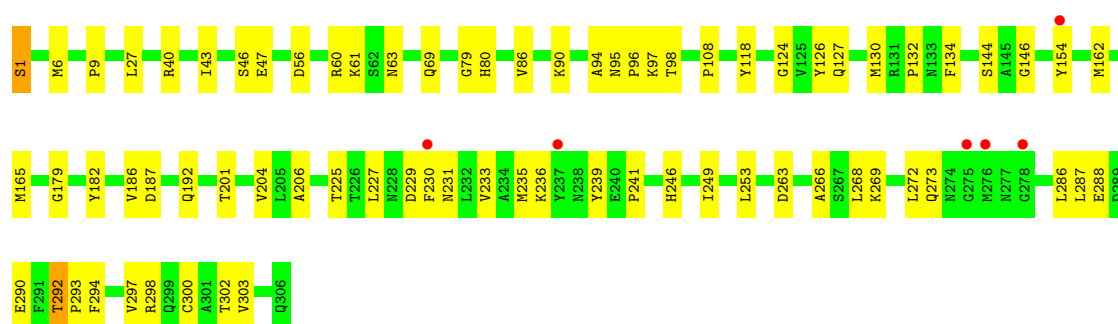
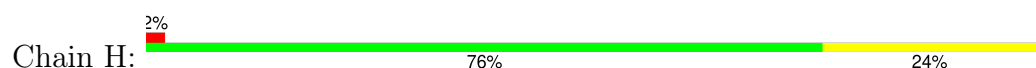


- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site

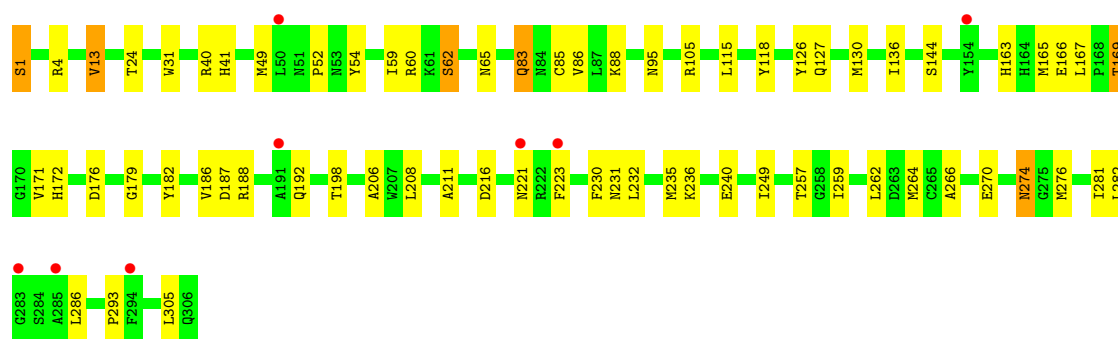
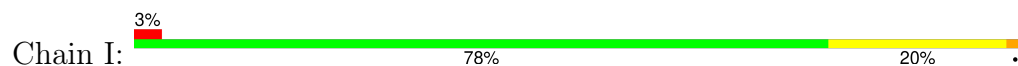
Chain G:  5% 71% 28%



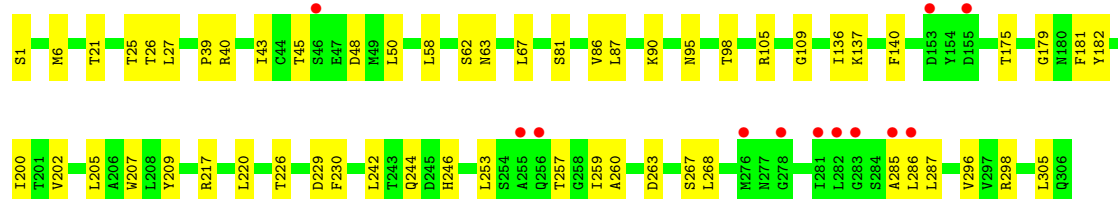
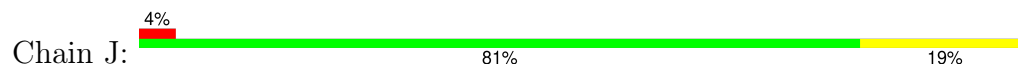
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



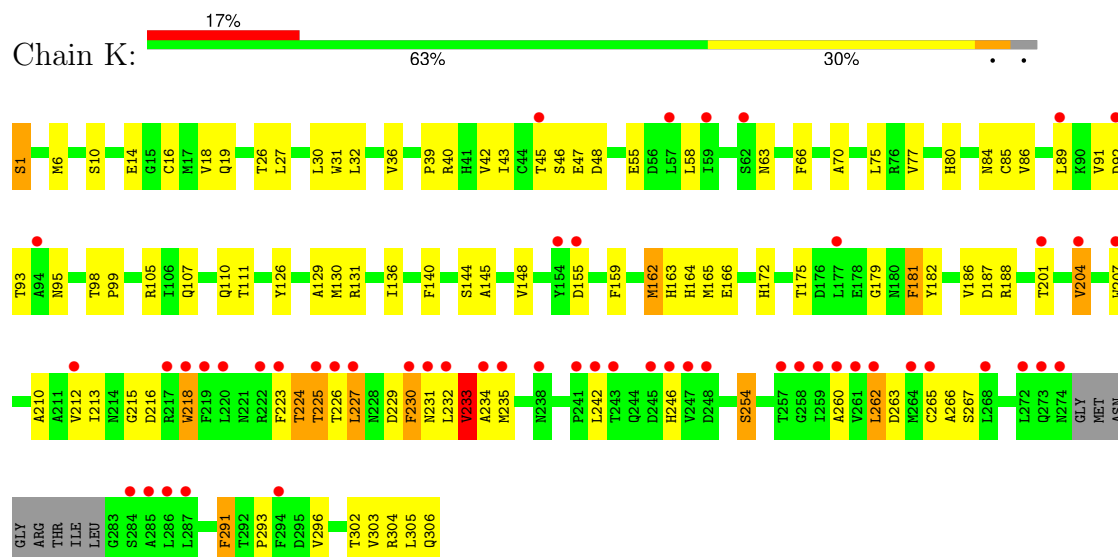
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



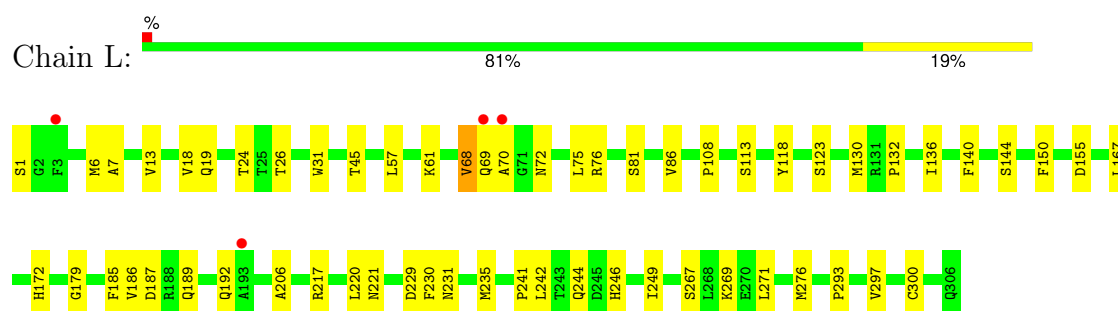
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



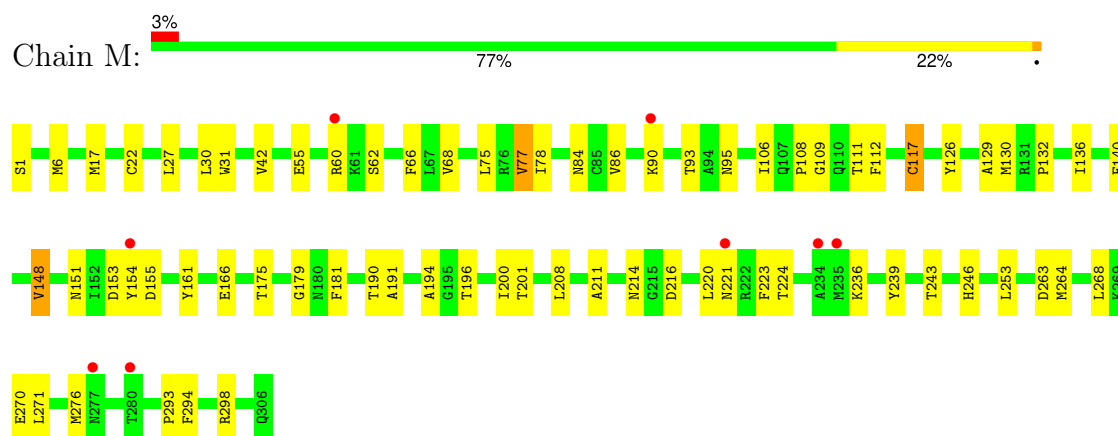
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



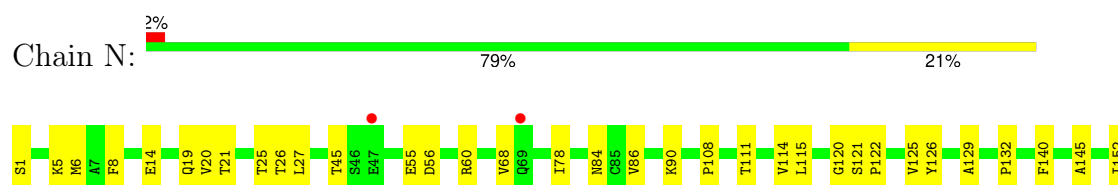
- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site

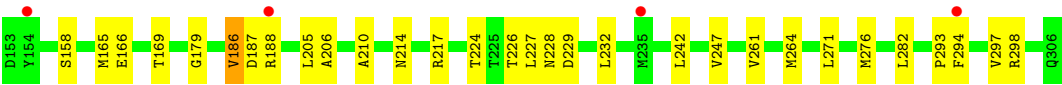


- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site



- Molecule 1: Fusion protein of 3C-like proteinase nsp5 and nsp9-nsp10 (C9) cut site





4 Data and refinement statistics

Property	Value	Source
Space group	C 1 2 1	Depositor
Cell constants a, b, c, α , β , γ	275.64Å 217.22Å 104.64Å 90.00° 110.98° 90.00°	Depositor
Resolution (Å)	67.10 – 2.67 67.10 – 2.67	Depositor EDS
% Data completeness (in resolution range)	74.7 (67.10-2.67) 74.7 (67.10-2.67)	Depositor EDS
R_{merge}	0.18	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.71 (at 2.69Å)	Xtriage
Refinement program	PHENIX 1.20.1_4487	Depositor
R, R_{free}	0.205 , 0.239 0.207 , 0.240	Depositor DCC
R_{free} test set	1998 reflections (1.24%)	wwPDB-VP
Wilson B-factor (Å ²)	59.6	Xtriage
Anisotropy	0.106	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.34 , 58.9	EDS
L-test for twinning ²	$\langle L \rangle = 0.51$, $\langle L^2 \rangle = 0.34$	Xtriage
Estimated twinning fraction	0.000 for -h-2*k,-k,l	Xtriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	33657	wwPDB-VP
Average B, all atoms (Å ²)	68.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 5.31% 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

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: PO4, NA, 1PE, PEG

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	0.08	0/2403	0.26	0/3269
1	B	0.09	0/2410	0.27	0/3276
1	C	0.10	0/2414	0.27	0/3280
1	D	0.12	0/2414	0.30	0/3280
1	E	0.11	0/2410	0.29	0/3276
1	F	0.09	0/2402	0.29	0/3266
1	G	0.11	0/2387	0.30	0/3249
1	H	0.22	0/2420	0.37	0/3288
1	I	0.19	0/2398	0.37	0/3262
1	J	0.15	0/2392	0.32	0/3254
1	K	0.36	0/2257	0.65	2/3077 (0.1%)
1	L	0.11	0/2418	0.28	0/3287
1	M	0.09	0/2422	0.26	0/3291
1	N	0.10	0/2407	0.29	0/3271
All	All	0.15	0/33554	0.33	2/45626 (0.0%)

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	265	CYS	N-CA-C	-7.22	103.49	111.36
1	K	233	VAL	N-CA-C	-5.02	104.66	111.89

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	2351	0	2292	44	0
1	B	2359	0	2308	57	0
1	C	2363	0	2319	44	0
1	D	2363	0	2319	46	0
1	E	2359	0	2308	52	0
1	F	2351	0	2297	47	0
1	G	2333	0	2261	60	0
1	H	2368	0	2321	50	0
1	I	2347	0	2285	48	0
1	J	2340	0	2266	32	0
1	K	2208	0	2051	91	0
1	L	2366	0	2315	39	0
1	M	2370	0	2326	48	0
1	N	2356	0	2306	37	0
2	A	1	0	0	0	0
2	B	1	0	0	0	0
2	C	1	0	0	0	0
2	D	1	0	0	0	0
2	E	1	0	0	0	0
2	F	1	0	0	0	0
2	H	1	0	0	1	0
2	I	1	0	0	0	0
2	J	1	0	0	0	0
2	L	1	0	0	0	0
2	M	1	0	0	0	0
2	N	1	0	0	0	0
3	A	10	0	13	1	0
3	B	20	0	26	5	0
3	C	20	0	26	1	0
3	D	33	0	43	3	0
3	E	10	0	13	0	0
3	F	20	0	26	3	0
3	G	10	0	13	1	0
3	H	36	0	48	5	0
3	I	10	0	13	0	0
3	J	26	0	35	3	0
3	K	10	0	13	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	L	10	0	13	1	0
3	M	10	0	13	3	0
3	N	10	0	13	1	0
4	A	21	0	30	6	0
4	B	42	0	60	2	0
4	C	14	0	20	2	0
4	D	14	0	20	1	0
4	E	14	0	20	0	0
4	F	14	0	20	2	0
4	G	7	0	10	3	0
4	H	14	0	20	2	0
4	J	42	0	60	1	0
4	L	21	0	30	1	0
4	M	7	0	10	0	0
4	N	21	0	30	2	0
5	A	10	0	0	0	0
5	B	15	0	0	2	0
5	C	15	0	0	1	0
5	D	5	0	0	0	0
5	E	10	0	0	0	0
5	F	15	0	0	1	0
5	G	10	0	0	0	0
5	H	15	0	0	0	0
5	I	5	0	0	0	0
5	J	10	0	0	0	0
5	K	5	0	0	0	0
5	L	15	0	0	0	0
5	M	5	0	0	0	0
6	A	14	0	0	2	0
6	B	16	0	0	1	0
6	C	8	0	0	2	0
6	D	33	0	0	2	0
6	E	14	0	0	2	0
6	F	16	0	0	0	0
6	G	11	0	0	1	0
6	H	19	0	0	1	0
6	I	10	0	0	0	0
6	J	15	0	0	0	0
6	K	4	0	0	0	0
6	L	24	0	0	0	0
6	M	13	0	0	0	0
6	N	13	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	33657	0	32612	639	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 10.

All (639) 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:I:62:SER:H	1:I:65:ASN:HD22	1.25	0.82
1:K:226:THR:HG22	1:K:229:ASP:HB2	1.62	0.82
1:J:86:VAL:HG13	1:J:179:GLY:HA2	1.62	0.81
1:K:86:VAL:HG13	1:K:179:GLY:HA2	1.62	0.80
1:A:231:ASN:HD21	1:A:242:LEU:H	1.29	0.80
1:H:95:ASN:HD21	1:H:97:LYS:HE3	1.47	0.80
1:L:186:VAL:H	1:L:192:GLN:HE22	1.28	0.79
1:G:86:VAL:HG13	1:G:179:GLY:HA2	1.64	0.79
1:E:112:PHE:HA	1:E:151:ASN:HD21	1.49	0.78
1:N:86:VAL:HG13	1:N:179:GLY:HA2	1.65	0.77
1:K:230:PHE:HA	1:K:233:VAL:HB	1.66	0.77
1:N:8:PHE:HB3	1:N:152:ILE:HD12	1.67	0.77
1:B:304:ARG:HH22	1:F:142:ASN:ND2	1.84	0.76
1:A:276:MET:HE3	1:A:287:LEU:HD21	1.68	0.76
1:B:304:ARG:HH22	1:F:142:ASN:HD22	1.32	0.75
1:M:109:GLY:HA2	1:M:200:ILE:HD13	1.68	0.75
1:I:127:GLN:H	4:J:403:PEG:H31	1.51	0.75
1:G:295:ASP:HA	1:G:298[B]:ARG:HD2	1.67	0.74
1:I:305:LEU:HD23	1:N:165:MET:HB3	1.70	0.74
1:E:210:ALA:HB2	1:E:296:VAL:HG22	1.71	0.73
1:K:224:THR:HA	1:K:266:ALA:HB2	1.70	0.73
1:G:9:PRO:HD3	1:H:124:GLY:HA2	1.71	0.72
1:E:86:VAL:HG13	1:E:179:GLY:HA2	1.70	0.72
1:H:146:GLY:HA2	1:H:162:MET:HE2	1.71	0.72
1:J:298:ARG:HG3	3:J:404:1PE:H142	1.72	0.71
1:H:79:GLY:HA2	3:H:403:1PE:H261	1.71	0.71
1:D:271:LEU:HB3	1:D:276:MET:HE2	1.72	0.70
1:D:221:ASN:ND2	1:D:270:GLU:OE1	2.24	0.70
1:G:305:LEU:HD23	1:K:165:MET:HB3	1.73	0.70
1:K:263:ASP:HA	1:K:266:ALA:HB3	1.73	0.70
1:G:246:HIS:HA	1:G:249:ILE:HD12	1.74	0.70
1:K:226:THR:HG23	1:K:229:ASP:N	2.06	0.69
1:N:78:ILE:HD11	1:N:90:LYS:HD3	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:90:LYS:HB2	3:H:403:1PE:H131	1.74	0.69
1:E:235:MET:HE3	1:E:241:PRO:HG3	1.75	0.69
4:C:403:PEG:H12	1:D:126:TYR:HA	1.73	0.69
1:K:254:SER:HB3	1:K:260:ALA:HA	1.75	0.69
1:K:130:MET:HE1	1:K:182:TYR:CD1	2.28	0.68
1:B:8:PHE:HB3	1:B:152:ILE:HD12	1.76	0.68
1:B:146:GLY:HA2	1:B:162:MET:HE2	1.76	0.67
1:K:1:SER:N	1:L:140:PHE:O	2.27	0.67
1:C:124:GLY:HA3	1:D:6:MET:HE3	1.75	0.67
1:K:86:VAL:HG12	1:K:162:MET:HE2	1.77	0.66
1:H:130:MET:HE3	1:H:134:PHE:HA	1.76	0.66
1:N:298:ARG:HH11	3:N:404:1PE:H231	1.60	0.66
1:H:86:VAL:HG13	1:H:179:GLY:HA2	1.78	0.65
1:A:52:PRO:HD2	1:A:188:ARG:HG2	1.78	0.65
1:K:226:THR:CG2	1:K:229:ASP:HB2	2.27	0.65
1:H:263:ASP:OD1	2:H:401:NA:NA	1.69	0.65
1:G:292:THR:HG23	1:G:294:PHE:H	1.63	0.64
1:E:217:ARG:HB3	1:E:220:LEU:HD12	1.78	0.64
1:D:86:VAL:HG13	1:D:179:GLY:HA2	1.80	0.64
1:K:111:THR:HG22	1:K:129:ALA:HB2	1.80	0.64
1:H:235:MET:HE2	1:H:241:PRO:HB3	1.80	0.64
1:I:221:ASN:HD21	1:I:266:ALA:HB1	1.62	0.64
1:N:55:GLU:CD	1:N:55:GLU:H	2.05	0.64
1:D:305:LEU:HD23	1:E:165:MET:HB3	1.80	0.63
1:E:146:GLY:HA2	1:E:162:MET:HE3	1.80	0.63
1:G:131:ARG:HD3	1:G:137:LYS:HD2	1.80	0.63
1:I:105:ARG:NH1	1:I:176:ASP:OD2	2.29	0.63
1:K:226:THR:HG23	1:K:229:ASP:H	1.63	0.63
1:A:86:VAL:HG23	1:A:179:GLY:HA2	1.80	0.63
1:K:19:GLN:HE21	1:K:26:THR:HG21	1.63	0.63
1:H:227:LEU:HD23	1:H:231:ASN:HD21	1.63	0.63
1:H:80:HIS:H	3:H:403:1PE:H151	1.63	0.63
1:K:210:ALA:HA	1:K:213:ILE:HD12	1.78	0.62
1:L:217:ARG:HB3	1:L:220:LEU:HD12	1.80	0.62
4:G:402:PEG:H31	1:H:126:TYR:HA	1.80	0.62
1:D:55:GLU:OE1	1:D:55:GLU:N	2.25	0.62
1:G:30:LEU:HD22	1:G:148:VAL:HG11	1.82	0.62
1:K:293:PRO:HA	1:K:296:VAL:HG12	1.82	0.62
1:K:129:ALA:O	1:K:136:ILE:HG22	2.00	0.61
1:K:175:THR:HA	1:K:181:PHE:HA	1.82	0.61
1:G:83:GLN:OE1	1:G:88:LYS:NZ	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:43:ILE:HD13	1:K:58:LEU:HD13	1.82	0.61
1:K:36:VAL:HG22	1:K:89:LEU:HB2	1.82	0.61
1:M:294:PHE:HE2	3:M:402:1PE:H142	1.65	0.61
1:C:227:LEU:HD11	1:C:242:LEU:HD23	1.83	0.61
1:K:225:THR:HB	1:K:229:ASP:OD2	2.01	0.61
1:K:107:GLN:N	1:K:110:GLN:OE1	2.23	0.61
1:G:36:VAL:HB	1:G:89:LEU:HB2	1.82	0.60
1:M:1:SER:N	1:N:166:GLU:OE1	2.29	0.60
1:B:5:LYS:HG3	3:B:408:1PE:H131	1.83	0.60
1:J:63:ASN:HD21	3:J:405:1PE:H121	1.66	0.60
1:H:56:ASP:OD2	1:H:60:ARG:NH1	2.35	0.60
1:B:290:GLU:HG3	4:B:407:PEG:H12	1.84	0.60
1:H:246:HIS:HE2	4:H:406:PEG:H11	1.67	0.60
1:J:257:THR:HB	1:J:259:ILE:HD12	1.83	0.60
1:M:30:LEU:HD22	1:M:148:VAL:HG11	1.83	0.60
1:B:217:ARG:HB2	1:B:220:LEU:HD12	1.84	0.60
1:I:186:VAL:HG11	1:I:188:ARG:HH21	1.65	0.60
1:A:298:ARG:HG2	3:A:402:1PE:H261	1.83	0.60
1:E:292:THR:HG23	1:E:294:PHE:H	1.66	0.60
1:C:20:VAL:HG22	1:C:68:VAL:HG22	1.84	0.59
1:F:80:HIS:H	3:F:404:1PE:H232	1.67	0.59
1:H:165:MET:HE1	1:H:187:ASP:HA	1.83	0.59
1:I:86:VAL:HG13	1:I:179:GLY:HA2	1.83	0.59
4:G:402:PEG:H22	1:H:127:GLN:H	1.68	0.59
1:D:276:MET:O	1:D:276:MET:HG3	2.01	0.59
1:K:201:THR:HA	1:K:204:VAL:HG12	1.82	0.59
1:A:6:MET:HE3	1:B:124:GLY:HA3	1.84	0.59
1:I:83:GLN:HB2	1:I:88:LYS:HE3	1.85	0.59
1:L:230:PHE:HE2	1:L:242:LEU:HD23	1.67	0.59
1:B:112:PHE:HA	1:B:151:ASN:HD21	1.68	0.59
1:D:146:GLY:HA2	1:D:162:MET:HE2	1.83	0.59
1:G:214:ASN:ND2	6:G:501:HOH:O	2.34	0.59
1:J:90:LYS:HB2	3:J:405:1PE:H251	1.85	0.58
1:C:146:GLY:HA2	1:C:162:MET:HE2	1.85	0.58
1:K:242:LEU:HD11	1:K:246:HIS:HB2	1.86	0.58
1:F:40:ARG:HH22	4:F:402:PEG:H41	1.69	0.58
1:M:208:LEU:HD11	1:M:268:LEU:HD13	1.86	0.57
1:D:225:THR:OG1	1:D:229:ASP:OD2	2.22	0.57
1:I:208:LEU:HD22	1:I:281:ILE:HD13	1.87	0.57
1:M:55:GLU:OE1	1:M:55:GLU:N	2.22	0.57
1:N:226:THR:HG23	1:N:229:ASP:H	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:217:ARG:HB3	1:C:220:LEU:HD12	1.84	0.57
1:H:130:MET:HE1	1:H:182:TYR:HB3	1.86	0.57
1:B:269:LYS:NZ	6:B:501:HOH:O	2.36	0.57
1:G:205:LEU:HD11	1:G:242:LEU:HD11	1.87	0.57
1:K:40:ARG:HD3	1:K:85:CYS:HA	1.87	0.57
1:K:163:HIS:HE1	1:K:172:HIS:HB3	1.69	0.57
1:D:217:ARG:NH1	6:D:502:HOH:O	2.33	0.57
1:K:92:ASP:OD1	1:K:93:THR:N	2.38	0.57
1:I:163:HIS:CE1	1:I:172:HIS:HB3	2.40	0.56
1:C:4:ARG:HD3	4:C:404:PEG:H31	1.87	0.56
1:H:230:PHE:HZ	1:H:268:LEU:HD23	1.70	0.56
1:J:226:THR:HG23	1:J:229:ASP:H	1.70	0.56
1:B:109:GLY:HA2	1:B:200:ILE:HD13	1.87	0.56
1:B:155:ASP:OD1	1:B:155:ASP:N	2.37	0.56
1:G:40:ARG:HH11	1:G:82:MET:HE3	1.70	0.56
1:I:1:SER:N	1:J:140:PHE:O	2.37	0.56
1:I:192:GLN:HG3	1:K:303:VAL:HG21	1.86	0.56
1:I:257:THR:HG23	1:I:259:ILE:H	1.69	0.56
1:I:206:ALA:HB2	1:I:293:PRO:HG3	1.88	0.56
1:B:78:ILE:HD11	1:B:92:ASP:HA	1.87	0.56
1:K:165:MET:HE2	1:K:181:PHE:CE2	2.40	0.56
1:F:21:THR:HB	1:F:67:LEU:HB3	1.86	0.56
1:H:231:ASN:O	1:H:235:MET:HG3	2.06	0.55
1:B:27:LEU:HD22	1:B:145:ALA:HB3	1.88	0.55
1:I:163:HIS:HE1	1:I:172:HIS:HB3	1.71	0.55
1:C:137:LYS:NZ	6:C:501:HOH:O	2.29	0.55
1:G:136:ILE:HD11	1:G:161:TYR:CZ	2.41	0.55
1:K:186:VAL:HG11	1:K:188:ARG:HE	1.71	0.55
1:K:263:ASP:HA	1:K:266:ALA:CB	2.37	0.55
1:D:302:THR:OG1	1:D:303:VAL:N	2.36	0.55
1:J:27:LEU:HD13	1:J:39:PRO:HD2	1.89	0.55
1:J:58:LEU:HD13	1:J:87:LEU:HD11	1.88	0.55
1:J:209:TYR:HB3	1:J:253:LEU:HD22	1.89	0.55
1:F:4:ARG:NH1	5:F:408:PO4:O4	2.39	0.55
1:I:165:MET:HB3	1:K:305:LEU:HD23	1.89	0.55
1:K:224:THR:HA	1:K:266:ALA:CB	2.36	0.55
1:N:56:ASP:O	1:N:60:ARG:NH1	2.40	0.55
1:G:57:LEU:O	1:G:61:LYS:HG2	2.08	0.54
1:C:1:SER:OG	1:C:2:GLY:N	2.33	0.54
1:F:54:TYR:HB3	1:F:82:MET:HE1	1.89	0.54
1:G:292:THR:HG22	1:G:295:ASP:OD2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:61:LYS:NZ	6:D:504:HOH:O	2.40	0.54
1:A:194:ALA:O	1:E:217:ARG:NH2	2.41	0.54
1:F:231:ASN:O	1:F:235:MET:HG3	2.07	0.54
1:M:126:TYR:HB2	4:N:403:PEG:H11	1.90	0.54
1:N:210:ALA:O	1:N:214:ASN:ND2	2.28	0.54
1:A:257:THR:HB	1:A:259:ILE:HD12	1.90	0.53
1:F:19:GLN:HE21	1:F:26:THR:HG21	1.73	0.53
1:H:186:VAL:H	1:H:192:GLN:HE22	1.54	0.53
1:M:68:VAL:HG12	1:M:75:LEU:HD23	1.90	0.53
1:G:20:VAL:HG22	1:G:68:VAL:HG22	1.90	0.53
1:C:84:ASN:ND2	1:C:178:GLU:O	2.40	0.53
1:F:108:PRO:HB3	1:F:132:PRO:HA	1.90	0.53
1:H:165:MET:CE	1:H:187:ASP:HA	2.39	0.53
1:L:187:ASP:OD1	1:L:187:ASP:N	2.42	0.53
1:A:279:ARG:HD3	1:B:280:THR:HG21	1.91	0.53
1:D:213:ILE:HD13	1:D:300:CYS:SG	2.49	0.53
1:G:209:TYR:O	1:G:213:ILE:HD12	2.09	0.53
1:K:45:THR:HG22	1:K:48:ASP:CG	2.34	0.53
1:A:226:THR:HG23	1:A:229:ASP:H	1.74	0.53
1:E:103:PHE:CE2	1:E:177:LEU:HB3	2.44	0.53
1:K:105:ARG:HG3	1:K:182:TYR:CE1	2.42	0.53
1:K:263:ASP:O	1:K:267:SER:N	2.40	0.53
1:A:280:THR:HG23	1:A:283:GLY:H	1.74	0.53
1:B:167:LEU:HD12	1:B:171:VAL:HG23	1.91	0.53
1:D:54:TYR:HB3	1:D:82:MET:HE1	1.90	0.53
1:G:111:THR:HG22	1:G:129:ALA:HB2	1.90	0.53
1:E:22:CYS:HB3	1:E:42:VAL:HG22	1.91	0.53
1:E:58:LEU:HD22	1:E:82:MET:HE3	1.91	0.53
1:I:40:ARG:NE	1:I:187:ASP:OD2	2.42	0.53
1:K:166:GLU:OE2	1:L:1:SER:OG	2.23	0.52
1:D:19:GLN:HE21	1:D:26:THR:HG21	1.74	0.52
1:H:61:LYS:NZ	6:H:501:HOH:O	2.42	0.52
1:H:201:THR:HG22	1:H:239:TYR:HD2	1.74	0.52
1:C:277:ASN:OD1	1:C:277:ASN:N	2.43	0.52
1:E:55:GLU:N	1:E:55:GLU:OE1	2.41	0.52
1:M:253:LEU:HD23	1:M:293:PRO:HB3	1.92	0.52
1:B:64:HIS:HD1	5:B:410:PO4:P	2.33	0.52
1:B:52:PRO:HD2	1:B:188:ARG:HG2	1.90	0.52
1:N:56:ASP:CG	1:N:60:ARG:HH12	2.18	0.52
1:C:225:THR:OG1	1:C:229:ASP:OD1	2.27	0.52
1:D:78:ILE:N	1:D:90:LYS:O	2.37	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:6:MET:HE3	1:F:126:TYR:HD2	1.75	0.52
1:K:175:THR:HG22	1:K:181:PHE:CD1	2.45	0.52
1:M:6:MET:HG2	1:N:126:TYR:HB3	1.91	0.52
1:F:259:ILE:HG22	1:F:263:ASP:HB3	1.92	0.51
1:I:13:VAL:HG23	1:I:115:LEU:HD22	1.92	0.51
1:I:24:THR:HG23	1:L:24:THR:HG22	1.92	0.51
1:A:169:THR:HG22	1:E:215:GLY:HA2	1.92	0.51
1:C:86:VAL:HG23	1:C:179:GLY:HA2	1.90	0.51
1:I:126:TYR:HB3	1:J:6:MET:HG2	1.92	0.51
1:C:6:MET:HE3	1:D:124:GLY:HA3	1.91	0.51
1:E:40:ARG:NE	1:E:187:ASP:OD2	2.36	0.51
1:K:105:ARG:NH2	1:K:181:PHE:O	2.41	0.51
1:M:153:ASP:O	1:M:155:ASP:N	2.44	0.51
1:H:206:ALA:HB2	1:H:293:PRO:HG3	1.92	0.51
1:I:59:ILE:HD12	1:I:60:ARG:N	2.26	0.51
1:I:249:ILE:HG22	1:I:293:PRO:HG2	1.93	0.51
1:K:27:LEU:HD13	1:K:145:ALA:HB3	1.92	0.51
1:M:221:ASN:HB3	1:M:223:PHE:HD1	1.76	0.51
1:N:227:LEU:HD11	1:N:242:LEU:HB3	1.91	0.51
1:G:105:ARG:NH1	1:G:176:ASP:OD2	2.44	0.51
1:G:285:ALA:HB2	1:H:286:LEU:HB2	1.93	0.51
1:G:32:LEU:HD22	1:G:101:TYR:CD2	2.46	0.50
1:H:293:PRO:O	1:H:297:VAL:HG23	2.11	0.50
1:L:86:VAL:HG13	1:L:179:GLY:HA2	1.93	0.50
1:B:206:ALA:HB2	1:B:293:PRO:HG3	1.93	0.50
1:E:245:ASP:O	1:E:249:ILE:HD12	2.11	0.50
1:K:32:LEU:HD11	1:K:159:PHE:CE2	2.46	0.50
1:D:214:ASN:HD22	4:D:405:PEG:H22	1.76	0.50
1:E:166:GLU:OE1	1:F:1:SER:N	2.43	0.50
1:G:221:ASN:ND2	1:G:270:GLU:HG3	2.26	0.50
1:A:281:ILE:HG13	1:B:286:LEU:HD21	1.92	0.50
1:G:31:TRP:CD2	1:G:95:ASN:HB2	2.47	0.50
1:N:228:ASN:O	1:N:232:LEU:HD23	2.11	0.50
1:B:304:ARG:NH2	1:F:142:ASN:ND2	2.57	0.50
1:D:303:VAL:HG21	1:E:192:GLN:HG3	1.93	0.50
1:K:225:THR:OG1	1:K:229:ASP:HB3	2.11	0.50
1:A:247:VAL:HG13	1:A:261:VAL:HG11	1.93	0.49
1:B:84:ASN:ND2	1:B:178:GLU:O	2.45	0.49
1:B:213:ILE:HA	1:F:193:ALA:HB2	1.93	0.49
1:D:243:THR:HG22	1:D:246:HIS:CG	2.46	0.49
1:G:198:THR:OG1	1:G:240:GLU:OE1	2.30	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:221:ASN:HD21	1:G:270:GLU:HG3	1.77	0.49
1:I:130:MET:HA	1:I:136:ILE:HG22	1.93	0.49
1:G:27:LEU:HG	1:G:42:VAL:HG13	1.94	0.49
1:H:233:VAL:HA	1:H:236:LYS:HE3	1.93	0.49
1:I:169:THR:HG23	1:I:171:VAL:HG22	1.93	0.49
1:I:232:LEU:HD13	1:I:236:LYS:HE3	1.94	0.49
1:G:55:GLU:O	1:G:59:ILE:HG13	2.12	0.49
1:H:40:ARG:O	1:H:43:ILE:HG12	2.12	0.49
1:K:207:TRP:HE3	1:K:291:PHE:HD2	1.59	0.49
1:L:249:ILE:H	1:L:249:ILE:HD12	1.77	0.49
1:C:1:SER:HG	1:C:2:GLY:H	1.59	0.49
1:E:198:THR:OG1	1:E:240:GLU:OE1	2.29	0.49
1:H:302:THR:OG1	1:H:303:VAL:N	2.46	0.49
1:F:284:SER:OG	1:F:286:LEU:O	2.31	0.49
1:K:45:THR:N	1:K:48:ASP:OD1	2.46	0.49
1:K:63:ASN:OD1	1:K:80:HIS:ND1	2.45	0.49
1:M:298:ARG:NH1	3:M:402:1PE:OH6	2.45	0.49
1:D:233:VAL:HG11	1:D:269:LYS:HG3	1.95	0.49
1:M:22:CYS:HB3	1:M:42:VAL:HG22	1.95	0.49
1:C:298:ARG:NH1	3:C:402:1PE:H152	2.28	0.49
1:N:294:PHE:HA	1:N:297:VAL:HG22	1.94	0.49
1:K:16:CYS:SG	1:K:99:PRO:HD3	2.53	0.48
1:A:3:PHE:HB2	4:A:405:PEG:H42	1.94	0.48
1:H:269:LYS:O	1:H:273:GLN:HG3	2.13	0.48
1:K:163:HIS:CE1	1:K:172:HIS:HB3	2.47	0.48
1:M:106:ILE:HD11	1:M:130:MET:HE3	1.95	0.48
1:H:204:VAL:HG13	1:H:287:LEU:HD12	1.94	0.48
1:I:130:MET:HE1	1:I:182:TYR:CG	2.48	0.48
1:M:136:ILE:HD11	1:M:161:TYR:CZ	2.48	0.48
1:A:214:ASN:ND2	4:A:405:PEG:H31	2.28	0.48
1:F:111:THR:HG22	1:F:129:ALA:HB2	1.96	0.48
1:G:219:PHE:HE1	1:G:264:MET:HE1	1.77	0.48
1:J:260:ALA:HB3	1:J:263:ASP:HB2	1.95	0.48
1:N:247:VAL:HG22	1:N:261:VAL:HG11	1.95	0.48
1:C:140:PHE:HB2	1:C:172:HIS:CD2	2.48	0.48
1:M:111:THR:HG22	1:M:129:ALA:HB2	1.96	0.48
1:N:20:VAL:HG22	1:N:68:VAL:HG22	1.94	0.48
4:A:404:PEG:H31	3:B:408:1PE:H121	1.95	0.48
1:B:217:ARG:NH2	1:F:194:ALA:O	2.47	0.48
1:C:79:GLY:O	1:C:90:LYS:N	2.46	0.48
1:I:231:ASN:O	1:I:235:MET:HG3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:217:ARG:HB3	1:J:220:LEU:CD1	2.43	0.48
1:K:263:ASP:O	1:K:266:ALA:HB3	2.12	0.48
1:C:8:PHE:HB3	1:C:152:ILE:HD12	1.95	0.48
1:C:296:VAL:O	1:C:300:CYS:HB2	2.13	0.48
1:F:276:MET:HB3	1:F:276:MET:HE2	1.77	0.48
1:I:198:THR:OG1	1:I:240:GLU:OE1	2.31	0.48
1:A:139:SER:HB2	1:B:4:ARG:HB2	1.96	0.48
1:A:271:LEU:HD13	1:A:276:MET:HE1	1.96	0.48
1:E:40:ARG:O	1:E:43:ILE:HG12	2.14	0.48
1:H:201:THR:HG22	1:H:239:TYR:CD2	2.49	0.48
1:J:21:THR:HG23	1:J:26:THR:OG1	2.14	0.48
1:J:305:LEU:HG	1:L:189:GLN:HG2	1.94	0.48
1:A:201:THR:HG21	1:A:230:PHE:HZ	1.78	0.48
1:C:34:ASP:OD2	1:C:90:LYS:NZ	2.45	0.48
1:F:79:GLY:HA2	3:F:404:1PE:H221	1.94	0.48
1:K:235:MET:HE2	1:K:235:MET:HB3	1.73	0.48
1:M:86:VAL:HG23	1:M:179:GLY:HA2	1.95	0.48
1:B:111:THR:HG22	1:B:129:ALA:HB2	1.96	0.48
1:B:118:TYR:CZ	1:B:144:SER:HB3	2.48	0.48
1:B:243:THR:HG23	1:B:246:HIS:H	1.79	0.48
1:C:140:PHE:O	1:D:1:SER:N	2.46	0.48
1:F:217:ARG:HB3	1:F:220:LEU:HD12	1.96	0.48
1:C:292:THR:HG23	1:C:295:ASP:H	1.78	0.47
1:G:163:HIS:CE1	1:G:172:HIS:HB3	2.49	0.47
1:J:40:ARG:O	1:J:43:ILE:HG12	2.14	0.47
1:M:220:LEU:HD21	1:M:264:MET:HE2	1.96	0.47
1:G:104:VAL:HG23	1:G:160:CYS:HB3	1.96	0.47
1:K:225:THR:HB	1:K:229:ASP:CG	2.40	0.47
1:L:206:ALA:HB2	1:L:293:PRO:HG3	1.96	0.47
1:L:229:ASP:OD2	1:L:269:LYS:NZ	2.46	0.47
1:B:243:THR:HG22	1:B:246:HIS:ND1	2.30	0.47
1:C:243:THR:HG23	1:C:246:HIS:H	1.79	0.47
1:D:63:ASN:ND2	1:D:78:ILE:O	2.47	0.47
1:F:49:MET:HB3	1:F:189:GLN:HG3	1.97	0.47
1:J:242:LEU:HA	1:J:246:HIS:CD2	2.50	0.47
1:K:262:LEU:O	1:K:266:ALA:HB2	2.14	0.47
1:B:10:SER:O	1:B:14:GLU:HG3	2.15	0.47
1:C:245:ASP:O	1:C:249:ILE:HG13	2.14	0.47
1:K:27:LEU:HD12	1:K:39:PRO:HG2	1.96	0.47
1:A:304:ARG:NH2	6:A:504:HOH:O	2.46	0.47
1:N:111:THR:HG22	1:N:129:ALA:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:218:TRP:H	1:D:218:TRP:CD1	2.33	0.47
1:F:247:VAL:HG13	1:F:261:VAL:HG11	1.97	0.47
1:G:3:PHE:HZ	1:G:296:VAL:HA	1.80	0.47
1:K:75:LEU:HD23	1:K:91:VAL:HG11	1.97	0.47
1:K:216:ASP:O	1:K:218:TRP:HB3	2.15	0.47
1:M:270:GLU:HG3	1:M:271:LEU:N	2.30	0.47
1:G:80:HIS:O	1:G:80:HIS:ND1	2.46	0.47
1:J:175:THR:HG22	1:J:181:PHE:HA	1.97	0.47
1:A:201:THR:HA	1:A:204:VAL:HG13	1.96	0.47
1:B:304:ARG:NH2	1:F:142:ASN:HD22	2.04	0.47
1:D:276:MET:HE3	1:D:287:LEU:HD11	1.97	0.47
1:K:126:TYR:CE1	1:L:6:MET:HE2	2.50	0.47
1:C:206:ALA:HB2	1:C:293:PRO:HG3	1.97	0.47
1:E:21:THR:HB	1:E:67:LEU:HB3	1.96	0.47
1:F:245:ASP:O	1:F:249:ILE:HG12	2.14	0.47
1:L:19:GLN:HB3	1:L:69:GLN:HB3	1.96	0.47
1:A:59:ILE:HD12	1:A:59:ILE:HA	1.85	0.46
1:K:105:ARG:HG3	1:K:182:TYR:HE1	1.80	0.46
1:K:164:HIS:CE1	1:K:175:THR:HG23	2.50	0.46
1:K:263:ASP:CA	1:K:266:ALA:HB3	2.42	0.46
1:L:231:ASN:O	1:L:235:MET:HG3	2.15	0.46
1:M:201:THR:HG23	1:M:239:TYR:HD2	1.80	0.46
1:A:87:LEU:HD22	1:A:89:LEU:HG	1.98	0.46
1:A:139:SER:HB3	1:B:6:MET:HE2	1.97	0.46
1:A:165:MET:HB3	1:E:305:LEU:HD23	1.98	0.46
1:B:95:ASN:HB3	1:B:98:THR:OG1	2.16	0.46
1:D:219:PHE:CD2	1:D:286:LEU:HD21	2.51	0.46
1:I:40:ARG:NH2	1:I:187:ASP:OD1	2.49	0.46
1:I:166:GLU:OE1	1:J:1:SER:N	2.38	0.46
1:I:270:GLU:O	1:I:274:ASN:ND2	2.43	0.46
1:J:230:PHE:HZ	1:J:268:LEU:HD23	1.80	0.46
1:J:242:LEU:HA	1:J:246:HIS:HD2	1.81	0.46
1:K:26:THR:O	1:K:27:LEU:HD23	2.15	0.46
1:M:243:THR:HG23	1:M:246:HIS:H	1.80	0.46
1:H:229:ASP:O	1:H:233:VAL:HG22	2.16	0.46
1:M:27:LEU:HD11	1:M:42:VAL:HB	1.97	0.46
1:I:163:HIS:NE2	1:K:306:GLN:OE1	2.37	0.46
1:K:226:THR:O	1:K:229:ASP:N	2.45	0.46
1:B:5:LYS:HB2	3:B:408:1PE:H221	1.96	0.46
1:B:187:ASP:OD1	1:B:187:ASP:N	2.49	0.46
1:E:6:MET:HE2	1:E:6:MET:HB3	1.84	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:212:VAL:HA	1:K:215:GLY:O	2.16	0.46
1:M:126:TYR:CE2	1:N:6:MET:HE2	2.51	0.46
1:C:100:LYS:HB3	1:C:100:LYS:HE2	1.58	0.46
1:I:167:LEU:HD23	1:K:303:VAL:HG22	1.97	0.46
1:I:230:PHE:CD1	1:I:230:PHE:C	2.93	0.46
1:N:19:GLN:HB2	1:N:120:GLY:HA3	1.98	0.46
1:C:306:GLN:NE2	1:M:166:GLU:HB2	2.31	0.46
1:E:36:VAL:HB	1:E:89:LEU:HB2	1.98	0.46
1:G:210:ALA:HB2	1:G:296:VAL:HG13	1.98	0.46
1:G:247:VAL:HG23	1:G:261:VAL:HG11	1.97	0.46
1:B:303:VAL:HG13	1:F:190:THR:O	2.15	0.45
1:F:165:MET:HE2	1:F:181:PHE:CE1	2.51	0.45
1:H:94:ALA:H	4:H:404:PEG:H31	1.81	0.45
1:C:239:TYR:CZ	1:C:272:LEU:HD21	2.51	0.45
1:E:150:PHE:C	1:E:151:ASN:HD22	2.22	0.45
1:H:46:SER:OG	1:H:47:GLU:OE1	2.34	0.45
1:H:118:TYR:CE1	1:H:144:SER:HB3	2.51	0.45
1:N:21:THR:HG23	1:N:26:THR:HG22	1.98	0.45
1:E:32:LEU:HD13	1:E:101:TYR:CD2	2.51	0.45
1:G:230:PHE:CE1	1:G:242:LEU:HD12	2.51	0.45
1:M:112:PHE:HA	1:M:151:ASN:HD21	1.81	0.45
1:K:84:ASN:HB2	1:K:179:GLY:HA3	1.99	0.45
1:M:126:TYR:HD2	1:N:6:MET:HG2	1.80	0.45
1:A:243:THR:HG23	1:A:246:HIS:CG	2.51	0.45
1:F:76:ARG:HB3	1:F:92:ASP:CG	2.41	0.45
1:G:5:LYS:O	4:G:402:PEG:H21	2.16	0.45
1:L:271:LEU:HD11	1:L:276:MET:HG2	1.97	0.45
1:M:1:SER:N	1:N:140:PHE:O	2.39	0.45
1:M:108:PRO:HB3	1:M:132:PRO:HA	1.98	0.45
1:N:14:GLU:HG2	1:N:122:PRO:HG3	1.97	0.45
1:G:230:PHE:HZ	1:G:268:LEU:HD23	1.81	0.45
4:A:404:PEG:H21	1:B:126:TYR:HA	1.97	0.45
1:D:231:ASN:OD1	1:D:242:LEU:N	2.39	0.45
1:D:49:MET:HB3	1:D:189:GLN:HG3	1.99	0.45
1:F:95:ASN:HB3	1:F:98:THR:OG1	2.16	0.45
1:G:81:SER:OG	1:G:82:MET:N	2.50	0.45
1:G:124:GLY:HA3	1:H:6:MET:HE3	1.98	0.45
1:H:40:ARG:HH22	3:H:405:1PE:H242	1.81	0.45
1:M:236:LYS:HB2	1:M:236:LYS:HE3	1.52	0.45
1:E:68:VAL:HB	1:E:75:LEU:HB2	1.99	0.45
1:K:231:ASN:O	1:K:234:ALA:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:19:GLN:HE21	1:L:26:THR:HG21	1.81	0.45
1:L:108:PRO:HB3	1:L:132:PRO:HA	1.98	0.45
1:L:221:ASN:ND2	1:L:267:SER:HA	2.32	0.45
1:E:49:MET:HB3	1:E:189:GLN:HG3	1.99	0.45
1:I:221:ASN:C	1:I:223:PHE:H	2.25	0.45
1:J:95:ASN:HB3	1:J:98:THR:OG1	2.17	0.45
1:C:286:LEU:HD12	1:D:284:SER:HB3	1.98	0.44
1:D:109:GLY:HA2	1:D:200:ILE:HD13	1.99	0.44
1:G:187:ASP:OD1	1:G:187:ASP:N	2.49	0.44
1:K:207:TRP:CE3	1:K:291:PHE:HD2	2.34	0.44
1:N:27:LEU:HD22	1:N:145:ALA:HB3	1.98	0.44
1:A:193:ALA:HB2	1:E:213:ILE:HG12	2.00	0.44
1:E:163:HIS:CE1	1:E:172:HIS:HB3	2.52	0.44
1:F:27:LEU:HG	1:F:145:ALA:HB3	2.00	0.44
1:J:136:ILE:HD11	1:J:140:PHE:HE2	1.81	0.44
1:K:95:ASN:HB3	1:K:98:THR:OG1	2.18	0.44
1:N:84:ASN:HB2	1:N:179:GLY:HA3	2.00	0.44
1:A:84:ASN:HB2	1:A:179:GLY:HA3	1.99	0.44
1:C:6:MET:HG3	1:C:299:GLN:HE22	1.82	0.44
1:F:233:VAL:HG11	1:F:269:LYS:HG3	2.00	0.44
1:G:253:LEU:HD21	1:G:297:VAL:HG12	2.00	0.44
1:I:259:ILE:HG21	1:I:264:MET:HG2	1.99	0.44
1:K:162:MET:HG2	1:K:164:HIS:CE1	2.53	0.44
1:K:226:THR:O	1:K:227:LEU:C	2.61	0.44
1:A:188:ARG:NH2	6:A:501:HOH:O	2.32	0.44
1:B:298:ARG:HE	3:B:402:1PE:H142	1.82	0.44
1:D:90:LYS:HE2	3:D:403:1PE:H221	2.00	0.44
1:I:208:LEU:HB2	1:I:264:MET:HE1	1.98	0.44
1:K:232:LEU:C	1:K:234:ALA:N	2.73	0.44
1:B:190:THR:O	1:B:192:GLN:HG3	2.18	0.44
1:H:63:ASN:HD21	3:H:403:1PE:H162	1.83	0.44
1:G:298[B]:ARG:HD3	3:G:401:1PE:H222	1.99	0.44
1:H:108:PRO:HB3	1:H:132:PRO:HA	2.00	0.44
1:K:30:LEU:HD22	1:K:148:VAL:HG11	2.00	0.44
4:N:405:PEG:H12	4:N:405:PEG:H31	1.70	0.44
1:B:279:ARG:NH2	5:B:411:PO4:O2	2.51	0.44
1:E:54:TYR:HB3	1:E:82:MET:HE1	1.99	0.44
1:F:53:ASN:O	1:F:57:LEU:HD13	2.17	0.44
1:F:293:PRO:O	1:F:297:VAL:HG23	2.18	0.44
4:F:402:PEG:H32	4:F:402:PEG:H11	1.82	0.44
1:I:211:ALA:HB1	1:I:216:ASP:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:208:LEU:HB3	1:E:264:MET:HE2	2.00	0.44
1:J:109:GLY:HA2	1:J:200:ILE:HD13	1.99	0.44
1:L:136:ILE:HD11	1:L:140:PHE:HE2	1.82	0.44
1:F:56:ASP:O	1:F:60:ARG:HG3	2.18	0.43
1:G:235:MET:HE2	1:G:235:MET:HB2	1.80	0.43
1:H:95:ASN:HB3	1:H:98:THR:OG1	2.18	0.43
1:A:52:PRO:O	1:A:188:ARG:NH1	2.49	0.43
1:A:255:ALA:HB1	1:G:193:ALA:HB2	1.98	0.43
1:B:54:TYR:HA	1:B:57:LEU:HD12	2.00	0.43
1:B:256:GLN:HG2	1:F:191:ALA:O	2.18	0.43
1:I:286:LEU:HD11	1:J:285:ALA:HB2	2.00	0.43
1:M:155:ASP:N	1:M:155:ASP:OD1	2.49	0.43
1:N:276:MET:HE3	1:N:276:MET:HB2	1.87	0.43
1:B:49:MET:HA	1:B:52:PRO:HG3	1.99	0.43
1:K:19:GLN:HE21	1:K:26:THR:CG2	2.30	0.43
1:L:246:HIS:HA	1:L:249:ILE:HD13	1.99	0.43
1:M:224:THR:HG22	1:M:263:ASP:HA	2.00	0.43
1:A:56:ASP:O	1:A:59:ILE:HG22	2.18	0.43
1:I:31:TRP:CD2	1:I:95:ASN:HB2	2.53	0.43
1:K:10:SER:OG	1:K:14:GLU:OE2	2.31	0.43
1:L:155:ASP:OD1	1:L:155:ASP:N	2.51	0.43
1:A:209:TYR:HB3	1:A:253:LEU:HD12	2.00	0.43
1:D:6:MET:HE1	3:D:402:1PE:H142	2.00	0.43
1:E:152:ILE:HG12	1:E:157:VAL:HG22	2.00	0.43
1:F:213:ILE:HD13	1:F:300:CYS:SG	2.58	0.43
1:G:207:TRP:HZ3	1:G:287:LEU:HD22	1.82	0.43
1:K:10:SER:O	1:K:14:GLU:HG3	2.19	0.43
1:M:211:ALA:HB1	1:M:216:ASP:HB2	2.00	0.43
1:E:31:TRP:CE2	1:E:95:ASN:HB2	2.54	0.43
1:J:105:ARG:HG3	1:J:182:TYR:CE1	2.53	0.43
1:L:18:VAL:HG12	1:L:70:ALA:HB2	2.00	0.43
1:A:8:PHE:HB3	1:A:152:ILE:HD12	1.99	0.43
1:B:40:ARG:HG3	1:B:85:CYS:C	2.44	0.43
1:D:27:LEU:HD21	1:D:42:VAL:HB	2.00	0.43
1:D:108:PRO:HB3	1:D:132:PRO:HA	2.00	0.43
1:K:40:ARG:NE	1:K:187:ASP:OD2	2.46	0.43
1:L:7:ALA:HB1	1:L:113:SER:HB3	2.00	0.43
1:L:76:ARG:HG2	1:L:76:ARG:HH11	1.83	0.43
1:L:118:TYR:CZ	1:L:144:SER:HB3	2.54	0.43
1:M:66:PHE:HB2	1:M:77:VAL:HG11	2.00	0.43
1:C:213:ILE:HD13	1:M:191:ALA:HB1	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:100:LYS:HE2	1:D:100:LYS:HB2	1.83	0.43
1:E:231:ASN:O	1:E:235:MET:HG3	2.18	0.43
1:E:242:LEU:HA	1:E:242:LEU:HD12	1.82	0.43
1:F:223:PHE:N	1:F:223:PHE:CD1	2.87	0.43
1:K:85:CYS:HB2	1:K:179:GLY:O	2.19	0.43
1:A:269:LYS:HE2	1:A:273:GLN:OE1	2.19	0.43
1:C:76:ARG:NH2	6:C:502:HOH:O	2.51	0.43
1:G:163:HIS:HE1	1:G:172:HIS:HB3	1.83	0.43
1:G:298[B]:ARG:H	1:G:298[B]:ARG:HG3	1.54	0.43
1:B:58:LEU:HD11	1:B:87:LEU:HD11	2.01	0.42
1:E:233:VAL:HG11	1:E:269:LYS:HG3	2.01	0.42
1:H:95:ASN:HD22	1:H:96:PRO:HD2	1.83	0.42
1:I:4:ARG:NH1	1:J:137:LYS:O	2.45	0.42
4:L:403:PEG:H21	4:L:403:PEG:H42	1.74	0.42
1:B:8:PHE:HE2	1:B:151:ASN:HD22	1.66	0.42
1:L:13:VAL:HG21	1:L:150:PHE:CG	2.54	0.42
1:A:233:VAL:HG21	1:A:269:LYS:HE3	2.01	0.42
1:E:14:GLU:HG2	1:E:122:PRO:HG2	2.01	0.42
1:J:207:TRP:HE1	1:J:286:LEU:HA	1.83	0.42
1:J:217:ARG:HB3	1:J:220:LEU:HD12	2.01	0.42
1:M:220:LEU:HD23	1:M:220:LEU:HA	1.91	0.42
1:D:196:THR:HG22	1:N:217:ARG:HD3	2.01	0.42
1:F:230:PHE:HE2	1:F:268:LEU:HB3	1.84	0.42
1:G:244:GLN:O	1:G:247:VAL:HG12	2.19	0.42
1:M:140:PHE:O	1:N:1:SER:N	2.48	0.42
1:A:95:ASN:HB3	1:A:98:THR:OG1	2.20	0.42
1:A:130:MET:HE2	1:A:134:PHE:C	2.45	0.42
1:B:21:THR:HB	1:B:67:LEU:HB3	2.01	0.42
1:D:131:ARG:NH2	1:D:289:ASP:OD2	2.49	0.42
1:E:225:THR:OG1	1:E:229:ASP:OD1	2.36	0.42
1:G:56:ASP:CG	1:G:60:ARG:HH21	2.27	0.42
1:G:84:ASN:HB2	1:G:179:GLY:HA3	2.01	0.42
1:G:140:PHE:O	1:H:1:SER:N	2.48	0.42
1:H:225:THR:HG22	1:H:266:ALA:HB2	2.02	0.42
1:K:140:PHE:HB3	1:K:144:SER:OG	2.19	0.42
1:L:31:TRP:CZ2	1:L:75:LEU:HD21	2.54	0.42
1:A:155:ASP:OD1	1:A:155:ASP:N	2.53	0.42
1:B:112:PHE:HA	1:B:151:ASN:ND2	2.32	0.42
1:B:296:VAL:O	1:B:300:CYS:HB2	2.19	0.42
1:E:298:ARG:NH1	6:E:503:HOH:O	2.48	0.42
1:G:253:LEU:O	1:G:257:THR:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:31:TRP:CD1	1:K:36:VAL:HG12	2.54	0.42
1:C:28:ASN:ND2	1:C:117:CYS:O	2.50	0.42
1:E:82:MET:HE3	1:E:82:MET:HB2	1.86	0.42
1:B:67:LEU:HD21	1:B:69:GLN:HG3	2.01	0.42
1:B:81:SER:HB2	1:B:88:LYS:HB2	2.02	0.42
1:C:231:ASN:O	1:C:235:MET:HG3	2.19	0.42
1:F:223:PHE:N	1:F:223:PHE:HD1	2.18	0.42
1:J:45:THR:HG23	1:J:48:ASP:H	1.84	0.42
1:J:286:LEU:O	1:J:287:LEU:HD23	2.20	0.42
1:K:201:THR:HA	1:K:204:VAL:CG1	2.48	0.42
1:L:293:PRO:O	1:L:297:VAL:HG23	2.20	0.42
1:N:205:LEU:HD22	1:N:264:MET:HG3	2.02	0.42
1:E:28:ASN:ND2	1:E:117:CYS:O	2.52	0.42
1:F:45:THR:HG23	1:F:48:ASP:HB2	2.01	0.42
1:I:276:MET:HE1	1:I:281:ILE:HD12	2.00	0.42
1:K:218:TRP:O	1:K:218:TRP:CG	2.73	0.42
1:K:263:ASP:C	1:K:266:ALA:HB3	2.44	0.42
1:L:136:ILE:HG12	1:L:172:HIS:HB2	2.01	0.42
1:L:235:MET:HE2	1:L:241:PRO:HB3	2.01	0.42
1:N:108:PRO:HB3	1:N:132:PRO:HA	2.02	0.42
1:H:288:GLU:OE2	1:H:290:GLU:HB2	2.20	0.42
1:C:229:ASP:O	1:C:233:VAL:HG23	2.20	0.41
1:D:271:LEU:O	1:D:276:MET:HG2	2.20	0.41
1:D:281:ILE:H	1:D:281:ILE:HG13	1.59	0.41
1:G:49:MET:HB3	1:G:189:GLN:HG3	2.02	0.41
1:G:276:MET:HE1	1:G:285:ALA:C	2.44	0.41
1:K:131:ARG:HE	1:K:131:ARG:HB3	1.36	0.41
1:A:1:SER:N	1:B:166:GLU:OE1	2.43	0.41
1:C:166:GLU:OE1	1:D:1:SER:N	2.43	0.41
1:E:12:LYS:NZ	6:E:502:HOH:O	2.37	0.41
1:F:253:LEU:O	1:F:257:THR:HG23	2.20	0.41
1:K:18:VAL:HG12	1:K:70:ALA:HB2	2.02	0.41
1:L:242:LEU:HD13	1:L:246:HIS:HB3	2.02	0.41
1:M:298:ARG:NH1	3:M:402:1PE:OH7	2.53	0.41
1:A:106:ILE:HG23	1:A:160:CYS:HB2	2.02	0.41
1:B:165:MET:HE2	1:B:173:ALA:HB3	2.02	0.41
1:D:247:VAL:HG13	1:D:261:VAL:HG11	2.01	0.41
1:K:6:MET:HE3	1:K:6:MET:HB3	1.96	0.41
1:L:19:GLN:O	1:L:68:VAL:HA	2.20	0.41
1:L:68:VAL:CG1	1:L:75:LEU:HB2	2.50	0.41
1:A:126:TYR:HA	4:A:404:PEG:H11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:62:SER:OG	1:C:64:HIS:NE2	2.52	0.41
1:G:212:VAL:HA	1:G:217:ARG:HG2	2.02	0.41
1:K:31:TRP:CZ2	1:K:75:LEU:HD21	2.55	0.41
1:K:227:LEU:O	1:K:231:ASN:N	2.45	0.41
1:E:212:VAL:HA	1:E:217:ARG:HG2	2.01	0.41
1:H:249:ILE:HD13	1:H:249:ILE:HA	1.85	0.41
1:L:57:LEU:O	1:L:61:LYS:HG2	2.20	0.41
1:M:175:THR:HG22	1:M:181:PHE:HA	2.02	0.41
1:E:26:THR:O	1:E:27:LEU:HD23	2.21	0.41
1:E:112:PHE:HA	1:E:151:ASN:ND2	2.27	0.41
1:F:54:TYR:HB3	1:F:82:MET:CE	2.51	0.41
1:G:162:MET:HE3	1:G:162:MET:HB2	1.88	0.41
1:H:239:TYR:CZ	1:H:272:LEU:HD21	2.56	0.41
1:N:186:VAL:HG11	1:N:188:ARG:NH1	2.34	0.41
4:B:403:PEG:H22	1:G:25:THR:HG22	2.03	0.41
1:F:163:HIS:HE1	1:F:172:HIS:HB3	1.85	0.41
1:J:205:LEU:HD12	1:J:242:LEU:HD21	2.01	0.41
1:K:302:THR:O	1:K:304:ARG:NH1	2.52	0.41
1:M:78:ILE:N	1:M:90:LYS:O	2.44	0.41
1:M:90:LYS:HD2	1:M:90:LYS:N	2.35	0.41
1:M:276:MET:HE3	1:M:276:MET:HB2	1.79	0.41
4:A:404:PEG:C2	1:B:126:TYR:HA	2.51	0.41
1:C:92:ASP:OD1	1:C:92:ASP:N	2.54	0.41
1:C:303:VAL:HG23	1:M:190:THR:O	2.21	0.41
1:D:140:PHE:HB2	1:D:172:HIS:CD2	2.56	0.41
3:D:404:1PE:H162	1:F:217:ARG:HH22	1.86	0.41
1:F:242:LEU:HD23	1:F:242:LEU:HA	1.95	0.41
1:H:292:THR:HB	1:H:294:PHE:HD1	1.86	0.41
1:I:41:HIS:HA	1:I:54:TYR:HE1	1.86	0.41
1:I:49:MET:HA	1:I:52:PRO:HG3	2.02	0.41
1:I:62:SER:N	1:I:65:ASN:HD22	2.04	0.41
1:M:17:MET:HG3	1:M:117:CYS:SG	2.61	0.41
3:B:402:1PE:H261	3:B:402:1PE:H252	1.83	0.41
1:C:114:VAL:O	1:C:125:VAL:HA	2.20	0.41
1:E:85:CYS:HB2	1:E:179:GLY:O	2.21	0.41
1:E:272:LEU:HD23	1:E:272:LEU:HA	1.87	0.41
1:H:253:LEU:HD23	1:H:253:LEU:HA	1.87	0.41
1:N:114:VAL:O	1:N:125:VAL:HA	2.21	0.41
1:B:55:GLU:OE1	1:B:55:GLU:N	2.40	0.40
1:B:67:LEU:HD21	1:B:69:GLN:HE21	1.86	0.40
1:C:28:ASN:HB2	1:C:146:GLY:HA3	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:38:CYS:HA	1:C:162:MET:HE1	2.03	0.40
3:K:401:1PE:H141	1:L:123:SER:O	2.21	0.40
1:L:6:MET:SD	3:L:404:1PE:H251	2.61	0.40
1:M:31:TRP:CD2	1:M:95:ASN:HB2	2.57	0.40
1:E:1:SER:OG	1:F:166:GLU:OE1	2.29	0.40
1:F:90:LYS:HB2	3:F:404:1PE:H142	2.04	0.40
1:I:282:LEU:HD23	1:I:282:LEU:HA	1.85	0.40
1:K:186:VAL:HG11	1:K:188:ARG:NE	2.35	0.40
1:L:130:MET:HE3	1:L:130:MET:HA	2.03	0.40
1:L:167:LEU:HD21	1:L:185:PHE:CE1	2.57	0.40
1:M:129:ALA:O	1:M:136:ILE:HG22	2.20	0.40
1:N:187:ASP:OD1	1:N:187:ASP:N	2.55	0.40
1:A:82:MET:HE3	1:A:84:ASN:O	2.20	0.40
1:C:217:ARG:NH2	1:M:194:ALA:O	2.53	0.40
1:D:10:SER:HB2	1:D:115:LEU:HD13	2.04	0.40
1:D:166:GLU:OE2	1:D:172:HIS:NE2	2.54	0.40
1:E:84:ASN:HB2	1:E:179:GLY:HA3	2.04	0.40
1:G:131:ARG:NH2	1:G:289:ASP:OD2	2.45	0.40
1:I:40:ARG:NE	1:I:85:CYS:HA	2.36	0.40
1:N:115:LEU:HD21	1:N:122:PRO:HB3	2.02	0.40
1:N:206:ALA:HB2	1:N:293:PRO:HG3	2.04	0.40
1:A:25:THR:OG1	1:A:42:VAL:O	2.39	0.40
1:B:163:HIS:CE1	1:B:172:HIS:HB3	2.56	0.40
1:C:64:HIS:ND1	5:C:406:PO4:O4	2.54	0.40
1:D:95:ASN:HB3	1:D:98:THR:OG1	2.21	0.40
1:E:164:HIS:CD2	1:E:175:THR:HG23	2.57	0.40
1:I:118:TYR:CE1	1:I:144:SER:HB3	2.57	0.40
1:K:66:PHE:HB2	1:K:77:VAL:HG21	2.03	0.40
1:M:84:ASN:HB2	1:M:179:GLY:HA3	2.04	0.40
1:G:124:GLY:HA2	1:H:9:PRO:HD3	2.02	0.40
1:K:45:THR:HG23	1:K:47:GLU:H	1.85	0.40
1:N:271:LEU:HD21	1:N:276:MET:HE2	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	304/306 (99%)	294 (97%)	10 (3%)	0	100	100
1	B	304/306 (99%)	297 (98%)	7 (2%)	0	100	100
1	C	304/306 (99%)	296 (97%)	8 (3%)	0	100	100
1	D	304/306 (99%)	297 (98%)	7 (2%)	0	100	100
1	E	304/306 (99%)	296 (97%)	8 (3%)	0	100	100
1	F	304/306 (99%)	294 (97%)	10 (3%)	0	100	100
1	G	305/306 (100%)	297 (97%)	7 (2%)	1 (0%)	36	57
1	H	304/306 (99%)	298 (98%)	5 (2%)	1 (0%)	36	57
1	I	304/306 (99%)	298 (98%)	6 (2%)	0	100	100
1	J	304/306 (99%)	298 (98%)	6 (2%)	0	100	100
1	K	294/306 (96%)	276 (94%)	18 (6%)	0	100	100
1	L	304/306 (99%)	299 (98%)	5 (2%)	0	100	100
1	M	304/306 (99%)	296 (97%)	7 (2%)	1 (0%)	36	57
1	N	304/306 (99%)	296 (97%)	8 (3%)	0	100	100
All	All	4247/4284 (99%)	4132 (97%)	112 (3%)	3 (0%)	48	71

All (3) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	M	154	TYR
1	G	154	TYR
1	H	154	TYR

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.

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	258/262 (98%)	252 (98%)	6 (2%)	44	71
1	B	260/262 (99%)	255 (98%)	5 (2%)	50	75
1	C	261/262 (100%)	257 (98%)	4 (2%)	57	79
1	D	261/262 (100%)	252 (97%)	9 (3%)	32	59
1	E	260/262 (99%)	251 (96%)	9 (4%)	32	58
1	F	259/262 (99%)	254 (98%)	5 (2%)	50	75
1	G	253/262 (97%)	245 (97%)	8 (3%)	34	61
1	H	261/262 (100%)	255 (98%)	6 (2%)	44	71
1	I	258/262 (98%)	251 (97%)	7 (3%)	39	67
1	J	254/262 (97%)	245 (96%)	9 (4%)	32	58
1	K	226/262 (86%)	208 (92%)	18 (8%)	11	25
1	L	261/262 (100%)	255 (98%)	6 (2%)	44	71
1	M	262/262 (100%)	254 (97%)	8 (3%)	35	62
1	N	259/262 (99%)	250 (96%)	9 (4%)	32	58
All	All	3593/3668 (98%)	3484 (97%)	109 (3%)	36	63

All (109) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	81	SER
1	A	178	GLU
1	A	204	VAL
1	A	232	LEU
1	A	243	THR
1	A	297	VAL
1	B	42	VAL
1	B	121	SER
1	B	199	THR
1	B	297	VAL
1	B	303	VAL
1	C	75	LEU
1	C	216	ASP
1	C	229	ASP
1	C	297	VAL
1	D	25	THR

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Mol	Chain	Res	Type
1	D	27	LEU
1	D	45	THR
1	D	72	ASN
1	D	121	SER
1	D	201	THR
1	D	228	ASN
1	D	280	THR
1	D	281	ILE
1	E	50	LEU
1	E	81	SER
1	E	144	SER
1	E	201	THR
1	E	224	THR
1	E	243	THR
1	E	244	GLN
1	E	292	THR
1	E	303	VAL
1	F	45	THR
1	F	46	SER
1	F	72	ASN
1	F	244	GLN
1	F	284	SER
1	G	25	THR
1	G	42	VAL
1	G	201	THR
1	G	202	VAL
1	G	212	VAL
1	G	214	ASN
1	G	284	SER
1	G	292	THR
1	H	1	SER
1	H	27	LEU
1	H	69	GLN
1	H	292	THR
1	H	298	ARG
1	H	300	CYS
1	I	1	SER
1	I	13	VAL
1	I	62	SER
1	I	83	GLN
1	I	169	THR
1	I	262	LEU

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Mol	Chain	Res	Type
1	I	274	ASN
1	J	25	THR
1	J	50	LEU
1	J	62	SER
1	J	67	LEU
1	J	81	SER
1	J	202	VAL
1	J	244	GLN
1	J	267	SER
1	J	296	VAL
1	K	1	SER
1	K	42	VAL
1	K	46	SER
1	K	55	GLU
1	K	155	ASP
1	K	162	MET
1	K	181	PHE
1	K	204	VAL
1	K	218	TRP
1	K	223	PHE
1	K	224	THR
1	K	225	THR
1	K	227	LEU
1	K	230	PHE
1	K	233	VAL
1	K	254	SER
1	K	262	LEU
1	K	291	PHE
1	L	45	THR
1	L	68	VAL
1	L	72	ASN
1	L	81	SER
1	L	244	GLN
1	L	300	CYS
1	M	60	ARG
1	M	62	SER
1	M	77	VAL
1	M	93	THR
1	M	117	CYS
1	M	148	VAL
1	M	196	THR
1	M	214	ASN

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Mol	Chain	Res	Type
1	N	5	LYS
1	N	25	THR
1	N	45	THR
1	N	121	SER
1	N	158	SER
1	N	169	THR
1	N	186	VAL
1	N	224	THR
1	N	282	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (89) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	19	GLN
1	A	53	ASN
1	A	69	GLN
1	A	83	GLN
1	A	127	GLN
1	A	164	HIS
1	A	214	ASN
1	A	231	ASN
1	A	274	ASN
1	B	69	GLN
1	B	119	ASN
1	B	151	ASN
1	B	180	ASN
1	B	244	GLN
1	B	256	GLN
1	B	306	GLN
1	C	180	ASN
1	C	244	GLN
1	C	306	GLN
1	D	19	GLN
1	D	84	ASN
1	D	214	ASN
1	D	238	ASN
1	E	51	ASN
1	E	72	ASN
1	E	74	GLN
1	E	80	HIS
1	E	119	ASN
1	E	151	ASN

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Mol	Chain	Res	Type
1	E	172	HIS
1	E	299	GLN
1	F	19	GLN
1	F	51	ASN
1	F	74	GLN
1	F	83	GLN
1	F	84	ASN
1	F	107	GLN
1	F	142	ASN
1	F	244	GLN
1	G	51	ASN
1	G	63	ASN
1	G	142	ASN
1	G	164	HIS
1	G	172	HIS
1	G	238	ASN
1	H	51	ASN
1	H	63	ASN
1	H	80	HIS
1	H	95	ASN
1	H	142	ASN
1	H	172	HIS
1	H	180	ASN
1	H	192	GLN
1	H	231	ASN
1	H	274	ASN
1	H	277	ASN
1	I	53	ASN
1	I	65	ASN
1	I	84	ASN
1	I	142	ASN
1	I	214	ASN
1	I	244	GLN
1	I	273	GLN
1	J	84	ASN
1	J	246	HIS
1	J	273	GLN
1	J	274	ASN
1	K	19	GLN
1	K	51	ASN
1	K	69	GLN
1	K	107	GLN

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Mol	Chain	Res	Type
1	K	119	ASN
1	K	142	ASN
1	K	180	ASN
1	K	203	ASN
1	K	246	HIS
1	L	192	GLN
1	L	228	ASN
1	L	244	GLN
1	L	256	GLN
1	L	273	GLN
1	M	107	GLN
1	M	110	GLN
1	M	151	ASN
1	M	180	ASN
1	M	214	ASN
1	N	74	GLN
1	N	142	ASN
1	N	228	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 94 ligands modelled in this entry, 12 are monoatomic - leaving 82 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	1PE	L	404	-	9,9,15	0.10	0	8,8,14	0.14	0
3	1PE	C	405	-	9,9,15	0.11	0	8,8,14	0.13	0
5	PO4	C	407	-	4,4,4	0.95	0	6,6,6	0.47	0
4	PEG	D	405	-	6,6,6	0.11	0	5,5,5	0.09	0
4	PEG	N	402	-	6,6,6	0.12	0	5,5,5	0.08	0
4	PEG	J	402	-	6,6,6	0.11	0	5,5,5	0.10	0
5	PO4	G	403	-	4,4,4	0.97	0	6,6,6	0.47	0
5	PO4	M	404	-	4,4,4	0.96	0	6,6,6	0.46	0
5	PO4	H	409	-	4,4,4	0.95	0	6,6,6	0.47	0
4	PEG	A	404	-	6,6,6	0.09	0	5,5,5	0.07	0
5	PO4	B	412	-	4,4,4	0.97	0	6,6,6	0.45	0
4	PEG	A	403	-	6,6,6	0.12	0	5,5,5	0.10	0
5	PO4	E	406	-	4,4,4	0.95	0	6,6,6	0.48	0
4	PEG	J	406	-	6,6,6	0.11	0	5,5,5	0.11	0
3	1PE	I	402	-	9,9,15	0.11	0	8,8,14	0.12	0
3	1PE	A	402	-	9,9,15	0.10	0	8,8,14	0.12	0
5	PO4	E	405	-	4,4,4	0.95	0	6,6,6	0.46	0
4	PEG	N	405	-	6,6,6	0.13	0	5,5,5	0.07	0
4	PEG	J	408	-	6,6,6	0.24	0	5,5,5	0.18	0
3	1PE	B	402	-	9,9,15	0.11	0	8,8,14	0.13	0
5	PO4	F	406	-	4,4,4	0.96	0	6,6,6	0.45	0
4	PEG	L	402	-	6,6,6	0.11	0	5,5,5	0.09	0
4	PEG	B	409	-	6,6,6	0.12	0	5,5,5	0.09	0
5	PO4	H	408	-	4,4,4	0.95	0	6,6,6	0.47	0
3	1PE	B	408	-	9,9,15	0.11	0	8,8,14	0.13	0
3	1PE	K	401	-	9,9,15	0.11	0	8,8,14	0.11	0
3	1PE	H	403	-	15,15,15	0.12	0	14,14,14	0.20	0
3	1PE	D	404	-	12,12,15	0.10	0	11,11,14	0.13	0
3	1PE	J	404	-	9,9,15	0.12	0	8,8,14	0.13	0
4	PEG	G	402	-	6,6,6	0.11	0	5,5,5	0.06	0
3	1PE	F	403	-	9,9,15	0.10	0	8,8,14	0.13	0
4	PEG	D	406	-	6,6,6	0.11	0	5,5,5	0.11	0
4	PEG	H	404	-	6,6,6	0.11	0	5,5,5	0.08	0
5	PO4	L	408	-	4,4,4	0.97	0	6,6,6	0.45	0
5	PO4	F	408	-	4,4,4	0.95	0	6,6,6	0.45	0
4	PEG	E	404	-	6,6,6	0.12	0	5,5,5	0.10	0
3	1PE	E	402	-	9,9,15	0.09	0	8,8,14	0.15	0
3	1PE	J	405	-	15,15,15	0.55	0	14,14,14	0.25	0
4	PEG	L	403	-	6,6,6	0.10	0	5,5,5	0.10	0
5	PO4	C	406	-	4,4,4	0.97	0	6,6,6	0.45	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	PO4	D	407	-	4,4,4	0.94	0	6,6,6	0.46	0
5	PO4	I	403	-	4,4,4	0.98	0	6,6,6	0.45	0
3	1PE	H	402	-	9,9,15	0.12	0	8,8,14	0.18	0
4	PEG	N	403	-	6,6,6	0.12	0	5,5,5	0.08	0
5	PO4	B	411	-	4,4,4	0.96	0	6,6,6	0.45	0
4	PEG	M	403	-	6,6,6	0.11	0	5,5,5	0.10	0
4	PEG	J	403	-	6,6,6	0.11	0	5,5,5	0.10	0
5	PO4	A	406	-	4,4,4	0.95	0	6,6,6	0.44	0
5	PO4	L	406	-	4,4,4	0.96	0	6,6,6	0.45	0
4	PEG	H	406	-	6,6,6	0.11	0	5,5,5	0.10	0
3	1PE	H	405	-	9,9,15	0.11	0	8,8,14	0.12	0
5	PO4	J	410	-	4,4,4	0.95	0	6,6,6	0.47	0
4	PEG	C	404	-	6,6,6	0.11	0	5,5,5	0.10	0
5	PO4	J	411	-	4,4,4	0.96	0	6,6,6	0.47	0
3	1PE	D	403	-	9,9,15	0.10	0	8,8,14	0.14	0
5	PO4	K	402	-	4,4,4	0.96	0	6,6,6	0.47	0
4	PEG	L	405	-	6,6,6	0.11	0	5,5,5	0.08	0
3	1PE	F	404	-	9,9,15	0.11	0	8,8,14	0.12	0
4	PEG	F	402	-	6,6,6	0.11	0	5,5,5	0.10	0
4	PEG	J	409	-	6,6,6	0.50	0	5,5,5	0.47	0
4	PEG	A	405	-	6,6,6	0.12	0	5,5,5	0.09	0
3	1PE	N	404	-	9,9,15	0.12	0	8,8,14	0.11	0
4	PEG	B	403	-	6,6,6	0.12	0	5,5,5	0.08	0
4	PEG	J	407	-	6,6,6	0.11	0	5,5,5	0.09	0
3	1PE	D	402	-	9,9,15	0.10	0	8,8,14	0.14	0
4	PEG	B	406	-	6,6,6	0.12	0	5,5,5	0.10	0
5	PO4	B	410	-	4,4,4	0.97	0	6,6,6	0.44	0
5	PO4	H	407	-	4,4,4	0.96	0	6,6,6	0.46	0
4	PEG	B	405	-	6,6,6	0.12	0	5,5,5	0.10	0
5	PO4	G	404	-	4,4,4	0.95	0	6,6,6	0.46	0
3	1PE	M	402	-	9,9,15	0.11	0	8,8,14	0.14	0
3	1PE	G	401	-	9,9,15	0.11	0	8,8,14	0.20	0
4	PEG	F	405	-	6,6,6	0.11	0	5,5,5	0.09	0
4	PEG	B	404	-	6,6,6	0.11	0	5,5,5	0.10	0
3	1PE	C	402	-	9,9,15	0.10	0	8,8,14	0.13	0
4	PEG	C	403	-	6,6,6	0.12	0	5,5,5	0.06	0
5	PO4	C	408	-	4,4,4	0.95	0	6,6,6	0.47	0
5	PO4	A	407	-	4,4,4	0.95	0	6,6,6	0.46	0
5	PO4	L	407	-	4,4,4	0.96	0	6,6,6	0.46	0
5	PO4	F	407	-	4,4,4	0.95	0	6,6,6	0.46	0
4	PEG	E	403	-	6,6,6	0.11	0	5,5,5	0.09	0
4	PEG	B	407	-	6,6,6	0.11	0	5,5,5	0.09	0

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	1PE	J	405	-	-	9/13/13/13	-
3	1PE	L	404	-	-	3/7/7/13	-
4	PEG	J	409	-	-	1/4/4/4	-
4	PEG	A	405	-	-	2/4/4/4	-
4	PEG	L	403	-	-	3/4/4/4	-
4	PEG	N	405	-	-	3/4/4/4	-
3	1PE	N	404	-	-	4/7/7/13	-
3	1PE	C	405	-	-	3/7/7/13	-
4	PEG	B	407	-	-	1/4/4/4	-
4	PEG	J	408	-	-	3/4/4/4	-
3	1PE	B	402	-	-	4/7/7/13	-
4	PEG	B	403	-	-	1/4/4/4	-
3	1PE	D	402	-	-	4/7/7/13	-
4	PEG	B	406	-	-	2/4/4/4	-
3	1PE	H	402	-	-	3/7/7/13	-
4	PEG	J	407	-	-	2/4/4/4	-
4	PEG	N	403	-	-	2/4/4/4	-
4	PEG	M	403	-	-	2/4/4/4	-
4	PEG	J	403	-	-	1/4/4/4	-
4	PEG	L	402	-	-	2/4/4/4	-
4	PEG	D	405	-	-	3/4/4/4	-
4	PEG	B	409	-	-	2/4/4/4	-
4	PEG	B	405	-	-	3/4/4/4	-
3	1PE	M	402	-	-	2/7/7/13	-
4	PEG	N	402	-	-	1/4/4/4	-
4	PEG	J	402	-	-	4/4/4/4	-
3	1PE	B	408	-	-	4/7/7/13	-
3	1PE	G	401	-	-	4/7/7/13	-
3	1PE	K	401	-	-	5/7/7/13	-
4	PEG	F	405	-	-	1/4/4/4	-
4	PEG	B	404	-	-	2/4/4/4	-
3	1PE	H	403	-	-	6/13/13/13	-
3	1PE	C	402	-	-	4/7/7/13	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	1PE	D	404	-	-	4/10/10/13	-
4	PEG	C	403	-	-	2/4/4/4	-
4	PEG	H	406	-	-	1/4/4/4	-
3	1PE	J	404	-	-	5/7/7/13	-
4	PEG	A	404	-	-	2/4/4/4	-
4	PEG	A	403	-	-	2/4/4/4	-
4	PEG	G	402	-	-	2/4/4/4	-
3	1PE	F	403	-	-	6/7/7/13	-
3	1PE	H	405	-	-	5/7/7/13	-
4	PEG	D	406	-	-	2/4/4/4	-
4	PEG	C	404	-	-	1/4/4/4	-
4	PEG	H	404	-	-	2/4/4/4	-
3	1PE	D	403	-	-	4/7/7/13	-
4	PEG	E	404	-	-	0/4/4/4	-
4	PEG	J	406	-	-	2/4/4/4	-
3	1PE	I	402	-	-	3/7/7/13	-
4	PEG	L	405	-	-	2/4/4/4	-
3	1PE	E	402	-	-	4/7/7/13	-
3	1PE	F	404	-	-	3/7/7/13	-
4	PEG	E	403	-	-	1/4/4/4	-
3	1PE	A	402	-	-	3/7/7/13	-
4	PEG	F	402	-	-	2/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (154) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	J	405	1PE	C16-C26-OH6-C15
3	H	403	1PE	OH6-C15-C25-OH5
3	J	405	1PE	OH5-C14-C24-OH4
3	A	402	1PE	OH6-C15-C25-OH5
3	N	404	1PE	OH4-C13-C23-OH3
3	D	403	1PE	OH5-C14-C24-OH4
4	A	404	PEG	O2-C3-C4-O4
3	H	403	1PE	OH4-C13-C23-OH3

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Mol	Chain	Res	Type	Atoms
3	J	405	1PE	OH4-C13-C23-OH3
3	C	402	1PE	OH6-C15-C25-OH5
3	L	404	1PE	OH6-C15-C25-OH5
3	I	402	1PE	OH6-C15-C25-OH5
3	K	401	1PE	OH5-C14-C24-OH4
4	C	403	PEG	C1-C2-O2-C3
3	J	404	1PE	OH6-C15-C25-OH5
3	A	402	1PE	OH7-C16-C26-OH6
3	F	403	1PE	OH5-C14-C24-OH4
4	A	405	PEG	O2-C3-C4-O4
4	B	405	PEG	O2-C3-C4-O4
4	B	409	PEG	O1-C1-C2-O2
4	D	406	PEG	O2-C3-C4-O4
4	L	402	PEG	O2-C3-C4-O4
3	B	402	1PE	OH5-C14-C24-OH4
3	D	404	1PE	OH7-C16-C26-OH6
3	E	402	1PE	OH5-C14-C24-OH4
3	G	401	1PE	OH5-C14-C24-OH4
3	I	402	1PE	OH7-C16-C26-OH6
3	J	404	1PE	OH5-C14-C24-OH4
4	C	403	PEG	O2-C3-C4-O4
3	B	402	1PE	OH7-C16-C26-OH6
4	J	407	PEG	O1-C1-C2-O2
4	L	403	PEG	O2-C3-C4-O4
4	N	402	PEG	O2-C3-C4-O4
3	C	405	1PE	OH5-C14-C24-OH4
3	J	405	1PE	OH7-C16-C26-OH6
3	N	404	1PE	OH5-C14-C24-OH4
4	F	402	PEG	O1-C1-C2-O2
3	G	401	1PE	OH4-C13-C23-OH3
3	K	401	1PE	OH4-C13-C23-OH3
3	D	402	1PE	OH7-C16-C26-OH6
3	F	404	1PE	OH2-C12-C22-OH3
4	D	405	PEG	O1-C1-C2-O2
4	H	406	PEG	O2-C3-C4-O4
4	N	403	PEG	O1-C1-C2-O2
4	N	405	PEG	C1-C2-O2-C3
3	N	404	1PE	C12-C22-OH3-C23
4	J	408	PEG	O2-C3-C4-O4
4	L	403	PEG	O1-C1-C2-O2
3	D	402	1PE	C16-C26-OH6-C15
4	J	402	PEG	O2-C3-C4-O4

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Mol	Chain	Res	Type	Atoms
4	L	405	PEG	O1-C1-C2-O2
4	N	403	PEG	O2-C3-C4-O4
3	B	408	1PE	OH5-C14-C24-OH4
3	C	402	1PE	OH7-C16-C26-OH6
3	F	404	1PE	OH5-C14-C24-OH4
3	L	404	1PE	C25-C15-OH6-C26
3	G	401	1PE	C12-C22-OH3-C23
3	J	405	1PE	OH6-C15-C25-OH5
4	A	403	PEG	O1-C1-C2-O2
4	A	404	PEG	O1-C1-C2-O2
4	J	403	PEG	O1-C1-C2-O2
4	L	405	PEG	O2-C3-C4-O4
3	H	403	1PE	C16-C26-OH6-C15
3	C	405	1PE	C15-C25-OH5-C14
3	H	402	1PE	C25-C15-OH6-C26
4	E	403	PEG	C1-C2-O2-C3
4	D	406	PEG	C1-C2-O2-C3
3	J	404	1PE	C15-C25-OH5-C14
4	J	406	PEG	C1-C2-O2-C3
3	D	403	1PE	C12-C22-OH3-C23
3	H	402	1PE	C15-C25-OH5-C14
3	B	402	1PE	C24-C14-OH5-C25
3	H	402	1PE	C16-C26-OH6-C15
3	H	405	1PE	C13-C23-OH3-C22
3	J	405	1PE	C13-C23-OH3-C22
3	K	401	1PE	C13-C23-OH3-C22
3	G	401	1PE	C23-C13-OH4-C24
3	H	405	1PE	OH5-C14-C24-OH4
3	J	405	1PE	C14-C24-OH4-C13
4	B	405	PEG	C4-C3-O2-C2
4	A	405	PEG	C1-C2-O2-C3
4	B	407	PEG	C1-C2-O2-C3
4	B	404	PEG	C4-C3-O2-C2
3	A	402	1PE	C15-C25-OH5-C14
3	F	403	1PE	C12-C22-OH3-C23
3	J	405	1PE	C24-C14-OH5-C25
4	J	407	PEG	C1-C2-O2-C3
3	F	404	1PE	C23-C13-OH4-C24
4	M	403	PEG	C4-C3-O2-C2
3	B	408	1PE	C12-C22-OH3-C23
4	D	405	PEG	C4-C3-O2-C2
3	E	402	1PE	C12-C22-OH3-C23

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Mol	Chain	Res	Type	Atoms
3	J	404	1PE	C24-C14-OH5-C25
4	J	408	PEG	C1-C2-O2-C3
3	D	404	1PE	C25-C15-OH6-C26
3	C	402	1PE	C15-C25-OH5-C14
3	D	402	1PE	OH6-C15-C25-OH5
3	B	408	1PE	OH2-C12-C22-OH3
3	N	404	1PE	OH2-C12-C22-OH3
4	J	402	PEG	O1-C1-C2-O2
3	C	405	1PE	C16-C26-OH6-C15
4	F	405	PEG	C4-C3-O2-C2
4	B	406	PEG	C1-C2-O2-C3
4	M	403	PEG	O1-C1-C2-O2
3	F	403	1PE	C14-C24-OH4-C13
3	M	402	1PE	C24-C14-OH5-C25
3	F	403	1PE	OH4-C13-C23-OH3
4	B	404	PEG	C1-C2-O2-C3
4	J	402	PEG	C4-C3-O2-C2
4	L	403	PEG	C4-C3-O2-C2
3	I	402	1PE	OH5-C14-C24-OH4
4	J	406	PEG	O1-C1-C2-O2
3	H	403	1PE	C13-C23-OH3-C22
4	B	406	PEG	C4-C3-O2-C2
3	H	405	1PE	C12-C22-OH3-C23
4	J	402	PEG	C1-C2-O2-C3
3	J	405	1PE	C25-C15-OH6-C26
3	D	402	1PE	OH5-C14-C24-OH4
4	G	402	PEG	O2-C3-C4-O4
3	D	403	1PE	OH4-C13-C23-OH3
3	D	404	1PE	C24-C14-OH5-C25
4	A	403	PEG	C4-C3-O2-C2
3	D	403	1PE	C14-C24-OH4-C13
4	H	404	PEG	C1-C2-O2-C3
3	F	403	1PE	C13-C23-OH3-C22
4	G	402	PEG	O1-C1-C2-O2
4	B	403	PEG	C1-C2-O2-C3
4	J	409	PEG	C1-C2-O2-C3
4	F	402	PEG	C1-C2-O2-C3
3	H	403	1PE	C15-C25-OH5-C14
4	B	405	PEG	C1-C2-O2-C3
3	L	404	1PE	C15-C25-OH5-C14
3	B	408	1PE	C14-C24-OH4-C13
3	C	402	1PE	C24-C14-OH5-C25

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Mol	Chain	Res	Type	Atoms
4	N	405	PEG	C4-C3-O2-C2
4	D	405	PEG	C1-C2-O2-C3
3	J	404	1PE	C16-C26-OH6-C15
3	K	401	1PE	C14-C24-OH4-C13
3	H	405	1PE	OH4-C13-C23-OH3
4	L	402	PEG	C1-C2-O2-C3
3	E	402	1PE	C14-C24-OH4-C13
3	D	404	1PE	C15-C25-OH5-C14
3	H	403	1PE	OH2-C12-C22-OH3
3	F	403	1PE	C23-C13-OH4-C24
3	E	402	1PE	C23-C13-OH4-C24
4	B	409	PEG	O2-C3-C4-O4
3	B	402	1PE	C25-C15-OH6-C26
3	H	405	1PE	C14-C24-OH4-C13
3	K	401	1PE	OH2-C12-C22-OH3
3	M	402	1PE	OH6-C15-C25-OH5
4	C	404	PEG	C4-C3-O2-C2
4	J	408	PEG	C4-C3-O2-C2
4	H	404	PEG	O2-C3-C4-O4
4	N	405	PEG	O2-C3-C4-O4

There are no ring outliers.

36 monomers are involved in 53 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	L	404	1PE	1	0
4	D	405	PEG	1	0
4	A	404	PEG	4	0
3	A	402	1PE	1	0
4	N	405	PEG	1	0
3	B	402	1PE	2	0
3	B	408	1PE	3	0
3	K	401	1PE	1	0
3	H	403	1PE	4	0
3	D	404	1PE	1	0
3	J	404	1PE	1	0
4	G	402	PEG	3	0
4	H	404	PEG	1	0
5	F	408	PO4	1	0
3	J	405	1PE	2	0
4	L	403	PEG	1	0
5	C	406	PO4	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	N	403	PEG	1	0
5	B	411	PO4	1	0
4	J	403	PEG	1	0
4	H	406	PEG	1	0
3	H	405	1PE	1	0
4	C	404	PEG	1	0
3	D	403	1PE	1	0
3	F	404	1PE	3	0
4	F	402	PEG	2	0
4	A	405	PEG	2	0
3	N	404	1PE	1	0
4	B	403	PEG	1	0
3	D	402	1PE	1	0
5	B	410	PO4	1	0
3	M	402	1PE	3	0
3	G	401	1PE	1	0
3	C	402	1PE	1	0
4	C	403	PEG	1	0
4	B	407	PEG	1	0

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	306/306 (100%)	0.18	11 (3%) 46 41	42, 56, 96, 119	0
1	B	306/306 (100%)	0.03	1 (0%) 90 89	42, 53, 78, 133	0
1	C	306/306 (100%)	0.33	6 (1%) 65 61	44, 64, 98, 128	0
1	D	306/306 (100%)	0.12	13 (4%) 40 36	41, 56, 86, 131	0
1	E	306/306 (100%)	0.28	4 (1%) 75 73	48, 61, 99, 124	0
1	F	306/306 (100%)	0.15	2 (0%) 84 82	43, 58, 88, 129	0
1	G	306/306 (100%)	0.52	14 (4%) 37 33	42, 73, 112, 142	1 (0%)
1	H	306/306 (100%)	0.22	6 (1%) 65 61	44, 57, 100, 151	0
1	I	306/306 (100%)	0.36	8 (2%) 57 53	45, 64, 103, 126	0
1	J	306/306 (100%)	0.26	12 (3%) 43 38	41, 55, 107, 139	0
1	K	298/306 (97%)	1.19	53 (17%) 4 3	52, 87, 140, 176	0
1	L	306/306 (100%)	0.22	4 (1%) 75 73	47, 62, 91, 117	0
1	M	306/306 (100%)	0.46	8 (2%) 57 53	48, 73, 108, 143	0
1	N	306/306 (100%)	0.38	6 (1%) 65 61	49, 67, 103, 141	0
All	All	4276/4284 (99%)	0.33	148 (3%) 47 42	41, 63, 106, 176	1 (0%)

All (148) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	J	286	LEU	5.9
1	K	218	TRP	5.4
1	J	278	GLY	4.6
1	K	217	ARG	4.4
1	J	281	ILE	4.4
1	N	294	PHE	4.3
1	K	286	LEU	4.3
1	J	285	ALA	4.3

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Mol	Chain	Res	Type	RSRZ
1	K	177	LEU	4.2
1	J	276	MET	4.0
1	K	230	PHE	3.9
1	K	242	LEU	3.7
1	K	223	PHE	3.7
1	K	268	LEU	3.7
1	K	259	ILE	3.6
1	I	283	GLY	3.6
1	G	279	ARG	3.6
1	K	219	PHE	3.5
1	A	281	ILE	3.5
1	K	262	LEU	3.4
1	K	261	VAL	3.4
1	K	154	TYR	3.3
1	K	260	ALA	3.3
1	A	282	LEU	3.3
1	K	234	ALA	3.3
1	K	264	MET	3.3
1	G	222	ARG	3.2
1	E	294	PHE	3.2
1	K	274	ASN	3.2
1	C	196	THR	3.1
1	K	220	LEU	3.1
1	D	283	GLY	3.1
1	H	154	TYR	3.1
1	K	285	ALA	3.1
1	G	298[A]	ARG	3.1
1	K	265	CYS	3.1
1	D	278	GLY	3.0
1	J	255	ALA	3.0
1	K	243	THR	3.0
1	K	284	SER	3.0
1	F	48	ASP	3.0
1	G	294	PHE	3.0
1	J	46	SER	2.9
1	K	245	ASP	2.9
1	G	278	GLY	2.9
1	C	154	TYR	2.9
1	M	234	ALA	2.9
1	K	62	SER	2.8
1	K	232	LEU	2.8
1	J	256	GLN	2.8

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Mol	Chain	Res	Type	RSRZ
1	K	294	PHE	2.8
1	K	238	ASN	2.8
1	I	50	LEU	2.8
1	A	219	PHE	2.8
1	K	247	VAL	2.8
1	I	191	ALA	2.7
1	K	222	ARG	2.7
1	K	227	LEU	2.7
1	D	258	GLY	2.7
1	K	246	HIS	2.7
1	I	294	PHE	2.7
1	K	241	PRO	2.7
1	M	90	LYS	2.7
1	G	295	ASP	2.7
1	K	273	GLN	2.6
1	K	59	ILE	2.6
1	J	282	LEU	2.6
1	N	154	TYR	2.5
1	K	94	ALA	2.5
1	G	257	THR	2.5
1	M	235	MET	2.5
1	J	283	GLY	2.5
1	D	280	THR	2.5
1	K	45	THR	2.5
1	K	225	THR	2.5
1	K	231	ASN	2.5
1	A	47	GLU	2.5
1	A	50	LEU	2.5
1	J	155	ASP	2.5
1	D	219	PHE	2.5
1	G	90	LYS	2.4
1	A	280	THR	2.4
1	A	218	TRP	2.4
1	G	271	LEU	2.4
1	A	278	GLY	2.4
1	K	287	LEU	2.4
1	K	92	ASP	2.4
1	D	220	LEU	2.4
1	K	204	VAL	2.4
1	M	221	ASN	2.3
1	C	285	ALA	2.3
1	K	272	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
1	D	277	ASN	2.3
1	M	154	TYR	2.3
1	K	155	ASP	2.3
1	D	218	TRP	2.3
1	M	60	ARG	2.3
1	N	69	GLN	2.3
1	L	193	ALA	2.3
1	G	214	ASN	2.2
1	F	242	LEU	2.2
1	I	223	PHE	2.2
1	K	201	THR	2.2
1	D	275	GLY	2.2
1	K	258	GLY	2.2
1	A	236	LYS	2.2
1	M	280	THR	2.2
1	G	154	TYR	2.2
1	H	276	MET	2.2
1	G	234	ALA	2.2
1	H	278	GLY	2.2
1	K	248	ASP	2.2
1	C	223	PHE	2.2
1	G	280	THR	2.1
1	K	257	THR	2.1
1	I	154	TYR	2.1
1	E	50	LEU	2.1
1	K	89	LEU	2.1
1	J	153	ASP	2.1
1	H	230	PHE	2.1
1	I	285	ALA	2.1
1	L	70	ALA	2.1
1	D	224	THR	2.1
1	D	49	MET	2.1
1	I	221	ASN	2.1
1	K	235	MET	2.1
1	A	48	ASP	2.1
1	C	56	ASP	2.1
1	C	222	ARG	2.1
1	L	69	GLN	2.1
1	H	237	TYR	2.1
1	B	155	ASP	2.1
1	N	188	ARG	2.1
1	K	207	TRP	2.1

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Mol	Chain	Res	Type	RSRZ
1	G	225	THR	2.1
1	K	226	THR	2.1
1	E	64	HIS	2.1
1	H	275	GLY	2.1
1	A	154	TYR	2.1
1	E	295	ASP	2.0
1	N	235	MET	2.0
1	K	57	LEU	2.0
1	D	300	CYS	2.0
1	K	212	VAL	2.0
1	L	3	PHE	2.0
1	N	47	GLU	2.0
1	D	285	ALA	2.0
1	M	277	ASN	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(Å ²)	Q<0.9
5	PO4	C	408	5/5	0.56	0.16	84,93,106,120	0
5	PO4	K	402	5/5	0.63	0.11	108,117,122,136	0
5	PO4	G	403	5/5	0.64	0.10	113,113,125,129	0
5	PO4	C	406	5/5	0.65	0.12	98,101,119,120	0
5	PO4	E	405	5/5	0.66	0.10	105,111,127,131	0
5	PO4	B	411	5/5	0.69	0.11	90,90,113,121	0
5	PO4	A	407	5/5	0.73	0.11	92,93,107,124	0
2	NA	I	401	1/1	0.74	0.19	116,116,116,116	0
4	PEG	H	406	7/7	0.74	0.22	69,73,76,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
2	NA	C	401	1/1	0.74	0.14	99,99,99,99	0
5	PO4	L	407	5/5	0.74	0.09	105,107,123,133	0
5	PO4	M	404	5/5	0.74	0.09	114,115,130,131	0
5	PO4	A	406	5/5	0.75	0.14	74,89,102,105	0
5	PO4	L	408	5/5	0.76	0.15	93,97,103,117	0
5	PO4	I	403	5/5	0.76	0.11	87,87,104,107	0
4	PEG	J	406	7/7	0.77	0.18	60,65,80,84	0
4	PEG	B	406	7/7	0.78	0.15	59,64,74,77	0
3	1PE	C	405	10/16	0.78	0.17	68,71,73,75	0
5	PO4	B	412	5/5	0.78	0.10	92,102,107,117	0
5	PO4	B	410	5/5	0.79	0.12	87,88,98,104	0
5	PO4	C	407	5/5	0.79	0.10	104,105,121,128	0
5	PO4	F	406	5/5	0.80	0.10	88,91,106,111	0
5	PO4	G	404	5/5	0.81	0.17	83,92,96,120	0
3	1PE	K	401	10/16	0.81	0.18	80,87,91,91	0
4	PEG	F	402	7/7	0.82	0.17	54,61,63,72	0
4	PEG	N	402	7/7	0.82	0.16	61,63,67,69	0
4	PEG	N	405	7/7	0.82	0.15	57,67,69,71	0
3	1PE	D	404	13/16	0.82	0.18	65,74,80,80	0
5	PO4	H	407	5/5	0.83	0.12	80,83,98,101	0
5	PO4	D	407	5/5	0.83	0.12	85,86,101,119	0
2	NA	F	401	1/1	0.84	0.11	88,88,88,88	0
4	PEG	E	404	7/7	0.84	0.16	57,59,64,66	0
5	PO4	H	409	5/5	0.84	0.18	66,68,79,94	0
4	PEG	J	402	7/7	0.84	0.17	65,67,71,75	0
3	1PE	H	403	16/16	0.85	0.15	49,62,71,76	0
5	PO4	J	410	5/5	0.85	0.13	81,83,98,110	0
4	PEG	G	402	7/7	0.86	0.16	51,52,59,61	0
3	1PE	B	408	10/16	0.87	0.16	49,55,61,70	0
5	PO4	H	408	5/5	0.87	0.16	75,83,99,110	0
4	PEG	D	405	7/7	0.87	0.15	57,62,70,73	0
2	NA	H	401	1/1	0.87	0.12	103,103,103,103	0
3	1PE	D	403	10/16	0.87	0.15	62,68,78,81	0
5	PO4	E	406	5/5	0.87	0.23	78,86,92,102	0
4	PEG	L	402	7/7	0.87	0.11	70,72,78,80	0
4	PEG	M	403	7/7	0.87	0.14	77,88,91,92	0
4	PEG	F	405	7/7	0.87	0.16	69,71,72,73	0
4	PEG	C	404	7/7	0.88	0.16	49,52,61,63	0
3	1PE	H	405	10/16	0.88	0.16	66,68,69,71	10
3	1PE	G	401	10/16	0.88	0.16	60,63,69,73	0
4	PEG	J	408	7/7	0.88	0.15	62,63,67,70	0
4	PEG	A	403	7/7	0.88	0.13	62,67,69,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
5	PO4	L	406	5/5	0.88	0.17	58,66,89,91	0
4	PEG	L	403	7/7	0.88	0.15	69,74,81,87	0
4	PEG	B	403	7/7	0.88	0.15	74,75,79,83	0
2	NA	J	401	1/1	0.88	0.07	104,104,104,104	0
3	1PE	F	404	10/16	0.89	0.13	53,63,72,74	0
4	PEG	H	404	7/7	0.89	0.12	65,68,71,75	0
4	PEG	B	405	7/7	0.89	0.12	45,60,67,69	0
3	1PE	B	402	10/16	0.89	0.14	52,57,64,65	0
3	1PE	D	402	10/16	0.89	0.14	53,57,66,67	0
4	PEG	B	407	7/7	0.90	0.13	47,54,58,62	0
4	PEG	B	404	7/7	0.90	0.13	63,66,75,79	0
3	1PE	J	404	10/16	0.90	0.13	53,59,62,69	0
4	PEG	D	406	7/7	0.90	0.13	60,64,67,74	0
3	1PE	H	402	10/16	0.90	0.14	56,62,70,71	0
5	PO4	F	408	5/5	0.90	0.17	65,69,79,83	0
3	1PE	F	403	10/16	0.91	0.13	58,65,68,72	0
5	PO4	F	407	5/5	0.91	0.21	73,75,86,106	0
4	PEG	J	409	7/7	0.91	0.12	62,65,70,71	0
4	PEG	J	407	7/7	0.91	0.11	61,64,70,71	0
4	PEG	N	403	7/7	0.91	0.11	54,54,60,64	0
4	PEG	B	409	7/7	0.92	0.14	58,64,69,79	0
4	PEG	C	403	7/7	0.92	0.11	49,52,55,56	0
3	1PE	M	402	10/16	0.92	0.14	56,62,71,75	0
3	1PE	E	402	10/16	0.93	0.12	55,63,66,71	0
2	NA	N	401	1/1	0.93	0.08	93,93,93,93	0
3	1PE	A	402	10/16	0.93	0.12	48,53,60,66	0
5	PO4	J	411	5/5	0.93	0.09	63,70,78,80	0
3	1PE	J	405	16/16	0.93	0.12	42,53,66,70	0
4	PEG	E	403	7/7	0.93	0.15	49,54,59,62	0
2	NA	D	401	1/1	0.93	0.08	76,76,76,76	0
2	NA	M	401	1/1	0.93	0.12	76,76,76,76	0
3	1PE	N	404	10/16	0.93	0.12	59,62,65,65	0
4	PEG	A	405	7/7	0.94	0.10	52,53,55,58	0
3	1PE	I	402	10/16	0.94	0.10	49,52,57,57	0
3	1PE	C	402	10/16	0.94	0.10	56,62,65,65	0
3	1PE	L	404	10/16	0.94	0.10	50,57,60,63	0
4	PEG	J	403	7/7	0.94	0.11	43,47,51,52	0
4	PEG	A	404	7/7	0.94	0.14	44,48,55,57	0
4	PEG	L	405	7/7	0.95	0.09	52,54,59,60	0
2	NA	B	401	1/1	0.97	0.04	52,52,52,52	0
2	NA	E	401	1/1	0.97	0.05	58,58,58,58	0
2	NA	A	401	1/1	0.97	0.04	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
2	NA	L	401	1/1	0.97	0.08	62,62,62,62	0

6.5 Other polymers [i](#)

There are no such residues in this entry.