



Full wwPDB X-ray Structure Validation Report ⓘ

Oct 9, 2025 – 12:21 PM EDT

PDB ID : 9DJW / pdb_00009djw
Title : X-ray crystal structure of TNFa-VNAR D1 complex
Authors : Ubah, O.C.; Shi, K.; Aihara, H.; Barelle, C.J.; LeBeau, A.M.
Deposited on : 2024-09-06
Resolution : 3.43 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	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
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)	:	2.46

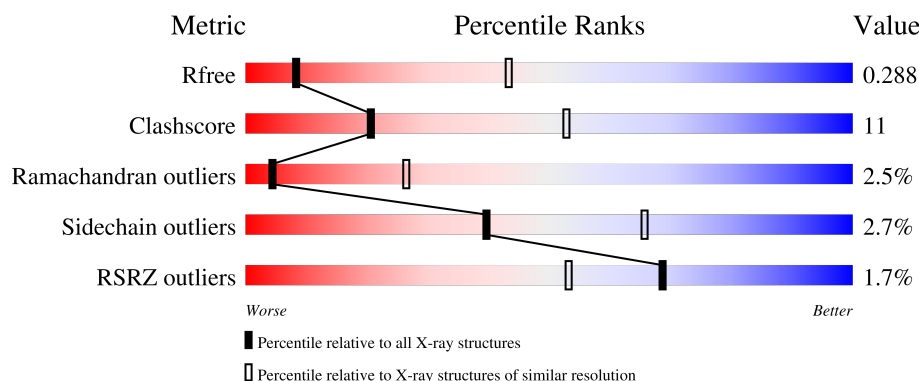
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.43 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.



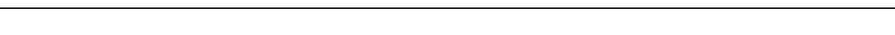
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1587 (3.50-3.38)
Clashscore	180529	1676 (3.50-3.38)
Ramachandran outliers	177936	1665 (3.50-3.38)
Sidechain outliers	177891	1666 (3.50-3.38)
RSRZ outliers	164620	1587 (3.50-3.38)

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	0	129	51% 27% 5% 17%
1	1	129	2% 53% 25% 19%

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Mol	Chain	Length	Quality of chain
1	D	129	
1	E	129	
1	F	129	
1	J	129	
1	K	129	
1	L	129	
1	P	129	
1	Q	129	
1	R	129	
1	V	129	
1	W	129	
1	X	129	
1	b	129	
1	c	129	
1	d	129	
1	h	129	
1	i	129	
1	j	129	
1	n	129	
1	o	129	
1	p	129	
1	t	129	
1	u	129	
1	v	129	
1	z	129	

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Mol	Chain	Length	Quality of chain
2	2	156	
2	3	156	
2	4	156	
2	A	156	
2	B	156	
2	C	156	
2	G	156	
2	H	156	
2	I	156	
2	M	156	
2	N	156	
2	O	156	
2	S	156	
2	T	156	
2	U	156	
2	Y	156	
2	Z	156	
2	a	156	
2	e	156	
2	f	156	
2	g	156	
2	k	156	
2	l	156	
2	m	156	
2	q	156	

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Mol	Chain	Length	Quality of chain
2	r	156	% 76%21%
2	s	156	% 68%29%
2	w	156	% 76%22%
2	x	156	3% 71%26%
2	y	156	% 78%19%

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 60848 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 Antigen receptor.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	0	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	1	104	Total	C	N	O	S	0	0	0
			797	485	137	171	4			
1	5	108	Total	C	N	O	S	0	0	0
			820	498	142	176	4			
1	6	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	7	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	D	106	Total	C	N	O	S	0	0	0
			810	492	140	174	4			
1	E	108	Total	C	N	O	S	0	0	0
			820	498	142	176	4			
1	F	106	Total	C	N	O	S	0	0	0
			810	492	140	174	4			
1	J	108	Total	C	N	O	S	0	0	0
			820	498	142	176	4			
1	K	106	Total	C	N	O	S	0	0	0
			810	492	140	174	4			
1	L	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	P	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	Q	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	R	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	V	106	Total	C	N	O	S	0	1	0
			821	498	144	175	4			
1	W	106	Total	C	N	O	S	0	0	0
			810	492	140	174	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	X	107	Total	C	N	O	S	0	0	0
			815	495	141	175	4			
1	b	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	c	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	d	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	h	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	i	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	j	105	Total	C	N	O	S	0	0	0
			802	488	138	172	4			
1	n	109	Total	C	N	O	S	0	0	0
			825	501	143	177	4			
1	o	104	Total	C	N	O	S	0	0	0
			797	485	137	171	4			
1	p	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	t	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	u	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			
1	v	105	Total	C	N	O	S	0	0	0
			802	488	138	172	4			
1	z	112	Total	C	N	O	S	0	0	0
			855	519	152	180	4			

There are 990 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
0	28	HIS	ASN	conflict	UNP Q8JGJ1
0	31	THR	LEU	conflict	UNP Q8JGJ1
0	?	-	ASN	deletion	UNP Q8JGJ1
0	?	-	VAL	deletion	UNP Q8JGJ1
0	84	ALA	TYR	conflict	UNP Q8JGJ1
0	86	GLU	TRP	conflict	UNP Q8JGJ1
0	87	CYS	TYR	conflict	UNP Q8JGJ1
0	88	GLN	GLY	conflict	UNP Q8JGJ1
0	90	GLY	ASP	conflict	UNP Q8JGJ1
0	91	LEU	CYS	conflict	UNP Q8JGJ1
0	94	TYR	LEU	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
0	107	ALA	-	expression tag	UNP Q8JGJ1
0	108	ALA	-	expression tag	UNP Q8JGJ1
0	109	ALA	-	expression tag	UNP Q8JGJ1
0	110	HIS	-	expression tag	UNP Q8JGJ1
0	111	HIS	-	expression tag	UNP Q8JGJ1
0	112	HIS	-	expression tag	UNP Q8JGJ1
0	113	HIS	-	expression tag	UNP Q8JGJ1
0	114	HIS	-	expression tag	UNP Q8JGJ1
0	115	HIS	-	expression tag	UNP Q8JGJ1
0	116	GLY	-	expression tag	UNP Q8JGJ1
0	117	ALA	-	expression tag	UNP Q8JGJ1
0	118	ALA	-	expression tag	UNP Q8JGJ1
0	119	GLU	-	expression tag	UNP Q8JGJ1
0	120	SER	-	expression tag	UNP Q8JGJ1
0	121	LYS	-	expression tag	UNP Q8JGJ1
0	122	LEU	-	expression tag	UNP Q8JGJ1
0	123	ILE	-	expression tag	UNP Q8JGJ1
0	124	SER	-	expression tag	UNP Q8JGJ1
0	125	GLU	-	expression tag	UNP Q8JGJ1
0	126	GLU	-	expression tag	UNP Q8JGJ1
0	127	ASP	-	expression tag	UNP Q8JGJ1
0	128	LEU	-	expression tag	UNP Q8JGJ1
1	28	HIS	ASN	conflict	UNP Q8JGJ1
1	31	THR	LEU	conflict	UNP Q8JGJ1
1	?	-	ASN	deletion	UNP Q8JGJ1
1	?	-	VAL	deletion	UNP Q8JGJ1
1	84	ALA	TYR	conflict	UNP Q8JGJ1
1	86	GLU	TRP	conflict	UNP Q8JGJ1
1	87	CYS	TYR	conflict	UNP Q8JGJ1
1	88	GLN	GLY	conflict	UNP Q8JGJ1
1	90	GLY	ASP	conflict	UNP Q8JGJ1
1	91	LEU	CYS	conflict	UNP Q8JGJ1
1	94	TYR	LEU	conflict	UNP Q8JGJ1
1	107	ALA	-	expression tag	UNP Q8JGJ1
1	108	ALA	-	expression tag	UNP Q8JGJ1
1	109	ALA	-	expression tag	UNP Q8JGJ1
1	110	HIS	-	expression tag	UNP Q8JGJ1
1	111	HIS	-	expression tag	UNP Q8JGJ1
1	112	HIS	-	expression tag	UNP Q8JGJ1
1	113	HIS	-	expression tag	UNP Q8JGJ1
1	114	HIS	-	expression tag	UNP Q8JGJ1
1	115	HIS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
1	116	GLY	-	expression tag	UNP Q8JGJ1
1	117	ALA	-	expression tag	UNP Q8JGJ1
1	118	ALA	-	expression tag	UNP Q8JGJ1
1	119	GLU	-	expression tag	UNP Q8JGJ1
1	120	SER	-	expression tag	UNP Q8JGJ1
1	121	LYS	-	expression tag	UNP Q8JGJ1
1	122	LEU	-	expression tag	UNP Q8JGJ1
1	123	ILE	-	expression tag	UNP Q8JGJ1
1	124	SER	-	expression tag	UNP Q8JGJ1
1	125	GLU	-	expression tag	UNP Q8JGJ1
1	126	GLU	-	expression tag	UNP Q8JGJ1
1	127	ASP	-	expression tag	UNP Q8JGJ1
1	128	LEU	-	expression tag	UNP Q8JGJ1
5	28	HIS	ASN	conflict	UNP Q8JGJ1
5	31	THR	LEU	conflict	UNP Q8JGJ1
5	?	-	ASN	deletion	UNP Q8JGJ1
5	?	-	VAL	deletion	UNP Q8JGJ1
5	84	ALA	TYR	conflict	UNP Q8JGJ1
5	86	GLU	TRP	conflict	UNP Q8JGJ1
5	87	CYS	TYR	conflict	UNP Q8JGJ1
5	88	GLN	GLY	conflict	UNP Q8JGJ1
5	90	GLY	ASP	conflict	UNP Q8JGJ1
5	91	LEU	CYS	conflict	UNP Q8JGJ1
5	94	TYR	LEU	conflict	UNP Q8JGJ1
5	107	ALA	-	expression tag	UNP Q8JGJ1
5	108	ALA	-	expression tag	UNP Q8JGJ1
5	109	ALA	-	expression tag	UNP Q8JGJ1
5	110	HIS	-	expression tag	UNP Q8JGJ1
5	111	HIS	-	expression tag	UNP Q8JGJ1
5	112	HIS	-	expression tag	UNP Q8JGJ1
5	113	HIS	-	expression tag	UNP Q8JGJ1
5	114	HIS	-	expression tag	UNP Q8JGJ1
5	115	HIS	-	expression tag	UNP Q8JGJ1
5	116	GLY	-	expression tag	UNP Q8JGJ1
5	117	ALA	-	expression tag	UNP Q8JGJ1
5	118	ALA	-	expression tag	UNP Q8JGJ1
5	119	GLU	-	expression tag	UNP Q8JGJ1
5	120	SER	-	expression tag	UNP Q8JGJ1
5	121	LYS	-	expression tag	UNP Q8JGJ1
5	122	LEU	-	expression tag	UNP Q8JGJ1
5	123	ILE	-	expression tag	UNP Q8JGJ1
5	124	SER	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
5	125	GLU	-	expression tag	UNP Q8JGJ1
5	126	GLU	-	expression tag	UNP Q8JGJ1
5	127	ASP	-	expression tag	UNP Q8JGJ1
5	128	LEU	-	expression tag	UNP Q8JGJ1
6	28	HIS	ASN	conflict	UNP Q8JGJ1
6	31	THR	LEU	conflict	UNP Q8JGJ1
6	?	-	ASN	deletion	UNP Q8JGJ1
6	?	-	VAL	deletion	UNP Q8JGJ1
6	84	ALA	TYR	conflict	UNP Q8JGJ1
6	86	GLU	TRP	conflict	UNP Q8JGJ1
6	87	CYS	TYR	conflict	UNP Q8JGJ1
6	88	GLN	GLY	conflict	UNP Q8JGJ1
6	90	GLY	ASP	conflict	UNP Q8JGJ1
6	91	LEU	CYS	conflict	UNP Q8JGJ1
6	94	TYR	LEU	conflict	UNP Q8JGJ1
6	107	ALA	-	expression tag	UNP Q8JGJ1
6	108	ALA	-	expression tag	UNP Q8JGJ1
6	109	ALA	-	expression tag	UNP Q8JGJ1
6	110	HIS	-	expression tag	UNP Q8JGJ1
6	111	HIS	-	expression tag	UNP Q8JGJ1
6	112	HIS	-	expression tag	UNP Q8JGJ1
6	113	HIS	-	expression tag	UNP Q8JGJ1
6	114	HIS	-	expression tag	UNP Q8JGJ1
6	115	HIS	-	expression tag	UNP Q8JGJ1
6	116	GLY	-	expression tag	UNP Q8JGJ1
6	117	ALA	-	expression tag	UNP Q8JGJ1
6	118	ALA	-	expression tag	UNP Q8JGJ1
6	119	GLU	-	expression tag	UNP Q8JGJ1
6	120	SER	-	expression tag	UNP Q8JGJ1
6	121	LYS	-	expression tag	UNP Q8JGJ1
6	122	LEU	-	expression tag	UNP Q8JGJ1
6	123	ILE	-	expression tag	UNP Q8JGJ1
6	124	SER	-	expression tag	UNP Q8JGJ1
6	125	GLU	-	expression tag	UNP Q8JGJ1
6	126	GLU	-	expression tag	UNP Q8JGJ1
6	127	ASP	-	expression tag	UNP Q8JGJ1
6	128	LEU	-	expression tag	UNP Q8JGJ1
7	28	HIS	ASN	conflict	UNP Q8JGJ1
7	31	THR	LEU	conflict	UNP Q8JGJ1
7	?	-	ASN	deletion	UNP Q8JGJ1
7	?	-	VAL	deletion	UNP Q8JGJ1
7	84	ALA	TYR	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
7	86	GLU	TRP	conflict	UNP Q8JGJ1
7	87	CYS	TYR	conflict	UNP Q8JGJ1
7	88	GLN	GLY	conflict	UNP Q8JGJ1
7	90	GLY	ASP	conflict	UNP Q8JGJ1
7	91	LEU	CYS	conflict	UNP Q8JGJ1
7	94	TYR	LEU	conflict	UNP Q8JGJ1
7	107	ALA	-	expression tag	UNP Q8JGJ1
7	108	ALA	-	expression tag	UNP Q8JGJ1
7	109	ALA	-	expression tag	UNP Q8JGJ1
7	110	HIS	-	expression tag	UNP Q8JGJ1
7	111	HIS	-	expression tag	UNP Q8JGJ1
7	112	HIS	-	expression tag	UNP Q8JGJ1
7	113	HIS	-	expression tag	UNP Q8JGJ1
7	114	HIS	-	expression tag	UNP Q8JGJ1
7	115	HIS	-	expression tag	UNP Q8JGJ1
7	116	GLY	-	expression tag	UNP Q8JGJ1
7	117	ALA	-	expression tag	UNP Q8JGJ1
7	118	ALA	-	expression tag	UNP Q8JGJ1
7	119	GLU	-	expression tag	UNP Q8JGJ1
7	120	SER	-	expression tag	UNP Q8JGJ1
7	121	LYS	-	expression tag	UNP Q8JGJ1
7	122	LEU	-	expression tag	UNP Q8JGJ1
7	123	ILE	-	expression tag	UNP Q8JGJ1
7	124	SER	-	expression tag	UNP Q8JGJ1
7	125	GLU	-	expression tag	UNP Q8JGJ1
7	126	GLU	-	expression tag	UNP Q8JGJ1
7	127	ASP	-	expression tag	UNP Q8JGJ1
7	128	LEU	-	expression tag	UNP Q8JGJ1
D	28	HIS	ASN	conflict	UNP Q8JGJ1
D	31	THR	LEU	conflict	UNP Q8JGJ1
D	?	-	ASN	deletion	UNP Q8JGJ1
D	?	-	VAL	deletion	UNP Q8JGJ1
D	84	ALA	TYR	conflict	UNP Q8JGJ1
D	86	GLU	TRP	conflict	UNP Q8JGJ1
D	87	CYS	TYR	conflict	UNP Q8JGJ1
D	88	GLN	GLY	conflict	UNP Q8JGJ1
D	90	GLY	ASP	conflict	UNP Q8JGJ1
D	91	LEU	CYS	conflict	UNP Q8JGJ1
D	94	TYR	LEU	conflict	UNP Q8JGJ1
D	107	ALA	-	expression tag	UNP Q8JGJ1
D	108	ALA	-	expression tag	UNP Q8JGJ1
D	109	ALA	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
D	110	HIS	-	expression tag	UNP Q8JGJ1
D	111	HIS	-	expression tag	UNP Q8JGJ1
D	112	HIS	-	expression tag	UNP Q8JGJ1
D	113	HIS	-	expression tag	UNP Q8JGJ1
D	114	HIS	-	expression tag	UNP Q8JGJ1
D	115	HIS	-	expression tag	UNP Q8JGJ1
D	116	GLY	-	expression tag	UNP Q8JGJ1
D	117	ALA	-	expression tag	UNP Q8JGJ1
D	118	ALA	-	expression tag	UNP Q8JGJ1
D	119	GLU	-	expression tag	UNP Q8JGJ1
D	120	SER	-	expression tag	UNP Q8JGJ1
D	121	LYS	-	expression tag	UNP Q8JGJ1
D	122	LEU	-	expression tag	UNP Q8JGJ1
D	123	ILE	-	expression tag	UNP Q8JGJ1
D	124	SER	-	expression tag	UNP Q8JGJ1
D	125	GLU	-	expression tag	UNP Q8JGJ1
D	126	GLU	-	expression tag	UNP Q8JGJ1
D	127	ASP	-	expression tag	UNP Q8JGJ1
D	128	LEU	-	expression tag	UNP Q8JGJ1
E	28	HIS	ASN	conflict	UNP Q8JGJ1
E	31	THR	LEU	conflict	UNP Q8JGJ1
E	?	-	ASN	deletion	UNP Q8JGJ1
E	?	-	VAL	deletion	UNP Q8JGJ1
E	84	ALA	TYR	conflict	UNP Q8JGJ1
E	86	GLU	TRP	conflict	UNP Q8JGJ1
E	87	CYS	TYR	conflict	UNP Q8JGJ1
E	88	GLN	GLY	conflict	UNP Q8JGJ1
E	90	GLY	ASP	conflict	UNP Q8JGJ1
E	91	LEU	CYS	conflict	UNP Q8JGJ1
E	94	TYR	LEU	conflict	UNP Q8JGJ1
E	107	ALA	-	expression tag	UNP Q8JGJ1
E	108	ALA	-	expression tag	UNP Q8JGJ1
E	109	ALA	-	expression tag	UNP Q8JGJ1
E	110	HIS	-	expression tag	UNP Q8JGJ1
E	111	HIS	-	expression tag	UNP Q8JGJ1
E	112	HIS	-	expression tag	UNP Q8JGJ1
E	113	HIS	-	expression tag	UNP Q8JGJ1
E	114	HIS	-	expression tag	UNP Q8JGJ1
E	115	HIS	-	expression tag	UNP Q8JGJ1
E	116	GLY	-	expression tag	UNP Q8JGJ1
E	117	ALA	-	expression tag	UNP Q8JGJ1
E	118	ALA	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
E	119	GLU	-	expression tag	UNP Q8JGJ1
E	120	SER	-	expression tag	UNP Q8JGJ1
E	121	LYS	-	expression tag	UNP Q8JGJ1
E	122	LEU	-	expression tag	UNP Q8JGJ1
E	123	ILE	-	expression tag	UNP Q8JGJ1
E	124	SER	-	expression tag	UNP Q8JGJ1
E	125	GLU	-	expression tag	UNP Q8JGJ1
E	126	GLU	-	expression tag	UNP Q8JGJ1
E	127	ASP	-	expression tag	UNP Q8JGJ1
E	128	LEU	-	expression tag	UNP Q8JGJ1
F	28	HIS	ASN	conflict	UNP Q8JGJ1
F	31	THR	LEU	conflict	UNP Q8JGJ1
F	?	-	ASN	deletion	UNP Q8JGJ1
F	?	-	VAL	deletion	UNP Q8JGJ1
F	84	ALA	TYR	conflict	UNP Q8JGJ1
F	86	GLU	TRP	conflict	UNP Q8JGJ1
F	87	CYS	TYR	conflict	UNP Q8JGJ1
F	88	GLN	GLY	conflict	UNP Q8JGJ1
F	90	GLY	ASP	conflict	UNP Q8JGJ1
F	91	LEU	CYS	conflict	UNP Q8JGJ1
F	94	TYR	LEU	conflict	UNP Q8JGJ1
F	107	ALA	-	expression tag	UNP Q8JGJ1
F	108	ALA	-	expression tag	UNP Q8JGJ1
F	109	ALA	-	expression tag	UNP Q8JGJ1
F	110	HIS	-	expression tag	UNP Q8JGJ1
F	111	HIS	-	expression tag	UNP Q8JGJ1
F	112	HIS	-	expression tag	UNP Q8JGJ1
F	113	HIS	-	expression tag	UNP Q8JGJ1
F	114	HIS	-	expression tag	UNP Q8JGJ1
F	115	HIS	-	expression tag	UNP Q8JGJ1
F	116	GLY	-	expression tag	UNP Q8JGJ1
F	117	ALA	-	expression tag	UNP Q8JGJ1
F	118	ALA	-	expression tag	UNP Q8JGJ1
F	119	GLU	-	expression tag	UNP Q8JGJ1
F	120	SER	-	expression tag	UNP Q8JGJ1
F	121	LYS	-	expression tag	UNP Q8JGJ1
F	122	LEU	-	expression tag	UNP Q8JGJ1
F	123	ILE	-	expression tag	UNP Q8JGJ1
F	124	SER	-	expression tag	UNP Q8JGJ1
F	125	GLU	-	expression tag	UNP Q8JGJ1
F	126	GLU	-	expression tag	UNP Q8JGJ1
F	127	ASP	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
F	128	LEU	-	expression tag	UNP Q8JGJ1
J	28	HIS	ASN	conflict	UNP Q8JGJ1
J	31	THR	LEU	conflict	UNP Q8JGJ1
J	?	-	ASN	deletion	UNP Q8JGJ1
J	?	-	VAL	deletion	UNP Q8JGJ1
J	84	ALA	TYR	conflict	UNP Q8JGJ1
J	86	GLU	TRP	conflict	UNP Q8JGJ1
J	87	CYS	TYR	conflict	UNP Q8JGJ1
J	88	GLN	GLY	conflict	UNP Q8JGJ1
J	90	GLY	ASP	conflict	UNP Q8JGJ1
J	91	LEU	CYS	conflict	UNP Q8JGJ1
J	94	TYR	LEU	conflict	UNP Q8JGJ1
J	107	ALA	-	expression tag	UNP Q8JGJ1
J	108	ALA	-	expression tag	UNP Q8JGJ1
J	109	ALA	-	expression tag	UNP Q8JGJ1
J	110	HIS	-	expression tag	UNP Q8JGJ1
J	111	HIS	-	expression tag	UNP Q8JGJ1
J	112	HIS	-	expression tag	UNP Q8JGJ1
J	113	HIS	-	expression tag	UNP Q8JGJ1
J	114	HIS	-	expression tag	UNP Q8JGJ1
J	115	HIS	-	expression tag	UNP Q8JGJ1
J	116	GLY	-	expression tag	UNP Q8JGJ1
J	117	ALA	-	expression tag	UNP Q8JGJ1
J	118	ALA	-	expression tag	UNP Q8JGJ1
J	119	GLU	-	expression tag	UNP Q8JGJ1
J	120	SER	-	expression tag	UNP Q8JGJ1
J	121	LYS	-	expression tag	UNP Q8JGJ1
J	122	LEU	-	expression tag	UNP Q8JGJ1
J	123	ILE	-	expression tag	UNP Q8JGJ1
J	124	SER	-	expression tag	UNP Q8JGJ1
J	125	GLU	-	expression tag	UNP Q8JGJ1
J	126	GLU	-	expression tag	UNP Q8JGJ1
J	127	ASP	-	expression tag	UNP Q8JGJ1
J	128	LEU	-	expression tag	UNP Q8JGJ1
K	28	HIS	ASN	conflict	UNP Q8JGJ1
K	31	THR	LEU	conflict	UNP Q8JGJ1
K	?	-	ASN	deletion	UNP Q8JGJ1
K	?	-	VAL	deletion	UNP Q8JGJ1
K	84	ALA	TYR	conflict	UNP Q8JGJ1
K	86	GLU	TRP	conflict	UNP Q8JGJ1
K	87	CYS	TYR	conflict	UNP Q8JGJ1
K	88	GLN	GLY	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
K	90	GLY	ASP	conflict	UNP Q8JGJ1
K	91	LEU	CYS	conflict	UNP Q8JGJ1
K	94	TYR	LEU	conflict	UNP Q8JGJ1
K	107	ALA	-	expression tag	UNP Q8JGJ1
K	108	ALA	-	expression tag	UNP Q8JGJ1
K	109	ALA	-	expression tag	UNP Q8JGJ1
K	110	HIS	-	expression tag	UNP Q8JGJ1
K	111	HIS	-	expression tag	UNP Q8JGJ1
K	112	HIS	-	expression tag	UNP Q8JGJ1
K	113	HIS	-	expression tag	UNP Q8JGJ1
K	114	HIS	-	expression tag	UNP Q8JGJ1
K	115	HIS	-	expression tag	UNP Q8JGJ1
K	116	GLY	-	expression tag	UNP Q8JGJ1
K	117	ALA	-	expression tag	UNP Q8JGJ1
K	118	ALA	-	expression tag	UNP Q8JGJ1
K	119	GLU	-	expression tag	UNP Q8JGJ1
K	120	SER	-	expression tag	UNP Q8JGJ1
K	121	LYS	-	expression tag	UNP Q8JGJ1
K	122	LEU	-	expression tag	UNP Q8JGJ1
K	123	ILE	-	expression tag	UNP Q8JGJ1
K	124	SER	-	expression tag	UNP Q8JGJ1
K	125	GLU	-	expression tag	UNP Q8JGJ1
K	126	GLU	-	expression tag	UNP Q8JGJ1
K	127	ASP	-	expression tag	UNP Q8JGJ1
K	128	LEU	-	expression tag	UNP Q8JGJ1
L	28	HIS	ASN	conflict	UNP Q8JGJ1
L	31	THR	LEU	conflict	UNP Q8JGJ1
L	?	-	ASN	deletion	UNP Q8JGJ1
L	?	-	VAL	deletion	UNP Q8JGJ1
L	84	ALA	TYR	conflict	UNP Q8JGJ1
L	86	GLU	TRP	conflict	UNP Q8JGJ1
L	87	CYS	TYR	conflict	UNP Q8JGJ1
L	88	GLN	GLY	conflict	UNP Q8JGJ1
L	90	GLY	ASP	conflict	UNP Q8JGJ1
L	91	LEU	CYS	conflict	UNP Q8JGJ1
L	94	TYR	LEU	conflict	UNP Q8JGJ1
L	107	ALA	-	expression tag	UNP Q8JGJ1
L	108	ALA	-	expression tag	UNP Q8JGJ1
L	109	ALA	-	expression tag	UNP Q8JGJ1
L	110	HIS	-	expression tag	UNP Q8JGJ1
L	111	HIS	-	expression tag	UNP Q8JGJ1
L	112	HIS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
L	113	HIS	-	expression tag	UNP Q8JGJ1
L	114	HIS	-	expression tag	UNP Q8JGJ1
L	115	HIS	-	expression tag	UNP Q8JGJ1
L	116	GLY	-	expression tag	UNP Q8JGJ1
L	117	ALA	-	expression tag	UNP Q8JGJ1
L	118	ALA	-	expression tag	UNP Q8JGJ1
L	119	GLU	-	expression tag	UNP Q8JGJ1
L	120	SER	-	expression tag	UNP Q8JGJ1
L	121	LYS	-	expression tag	UNP Q8JGJ1
L	122	LEU	-	expression tag	UNP Q8JGJ1
L	123	ILE	-	expression tag	UNP Q8JGJ1
L	124	SER	-	expression tag	UNP Q8JGJ1
L	125	GLU	-	expression tag	UNP Q8JGJ1
L	126	GLU	-	expression tag	UNP Q8JGJ1
L	127	ASP	-	expression tag	UNP Q8JGJ1
L	128	LEU	-	expression tag	UNP Q8JGJ1
P	28	HIS	ASN	conflict	UNP Q8JGJ1
P	31	THR	LEU	conflict	UNP Q8JGJ1
P	?	-	ASN	deletion	UNP Q8JGJ1
P	?	-	VAL	deletion	UNP Q8JGJ1
P	84	ALA	TYR	conflict	UNP Q8JGJ1
P	86	GLU	TRP	conflict	UNP Q8JGJ1
P	87	CYS	TYR	conflict	UNP Q8JGJ1
P	88	GLN	GLY	conflict	UNP Q8JGJ1
P	90	GLY	ASP	conflict	UNP Q8JGJ1
P	91	LEU	CYS	conflict	UNP Q8JGJ1
P	94	TYR	LEU	conflict	UNP Q8JGJ1
P	107	ALA	-	expression tag	UNP Q8JGJ1
P	108	ALA	-	expression tag	UNP Q8JGJ1
P	109	ALA	-	expression tag	UNP Q8JGJ1
P	110	HIS	-	expression tag	UNP Q8JGJ1
P	111	HIS	-	expression tag	UNP Q8JGJ1
P	112	HIS	-	expression tag	UNP Q8JGJ1
P	113	HIS	-	expression tag	UNP Q8JGJ1
P	114	HIS	-	expression tag	UNP Q8JGJ1
P	115	HIS	-	expression tag	UNP Q8JGJ1
P	116	GLY	-	expression tag	UNP Q8JGJ1
P	117	ALA	-	expression tag	UNP Q8JGJ1
P	118	ALA	-	expression tag	UNP Q8JGJ1
P	119	GLU	-	expression tag	UNP Q8JGJ1
P	120	SER	-	expression tag	UNP Q8JGJ1
P	121	LYS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
P	122	LEU	-	expression tag	UNP Q8JGJ1
P	123	ILE	-	expression tag	UNP Q8JGJ1
P	124	SER	-	expression tag	UNP Q8JGJ1
P	125	GLU	-	expression tag	UNP Q8JGJ1
P	126	GLU	-	expression tag	UNP Q8JGJ1
P	127	ASP	-	expression tag	UNP Q8JGJ1
P	128	LEU	-	expression tag	UNP Q8JGJ1
Q	28	HIS	ASN	conflict	UNP Q8JGJ1
Q	31	THR	LEU	conflict	UNP Q8JGJ1
Q	?	-	ASN	deletion	UNP Q8JGJ1
Q	?	-	VAL	deletion	UNP Q8JGJ1
Q	84	ALA	TYR	conflict	UNP Q8JGJ1
Q	86	GLU	TRP	conflict	UNP Q8JGJ1
Q	87	CYS	TYR	conflict	UNP Q8JGJ1
Q	88	GLN	GLY	conflict	UNP Q8JGJ1
Q	90	GLY	ASP	conflict	UNP Q8JGJ1
Q	91	LEU	CYS	conflict	UNP Q8JGJ1
Q	94	TYR	LEU	conflict	UNP Q8JGJ1
Q	107	ALA	-	expression tag	UNP Q8JGJ1
Q	108	ALA	-	expression tag	UNP Q8JGJ1
Q	109	ALA	-	expression tag	UNP Q8JGJ1
Q	110	HIS	-	expression tag	UNP Q8JGJ1
Q	111	HIS	-	expression tag	UNP Q8JGJ1
Q	112	HIS	-	expression tag	UNP Q8JGJ1
Q	113	HIS	-	expression tag	UNP Q8JGJ1
Q	114	HIS	-	expression tag	UNP Q8JGJ1
Q	115	HIS	-	expression tag	UNP Q8JGJ1
Q	116	GLY	-	expression tag	UNP Q8JGJ1
Q	117	ALA	-	expression tag	UNP Q8JGJ1
Q	118	ALA	-	expression tag	UNP Q8JGJ1
Q	119	GLU	-	expression tag	UNP Q8JGJ1
Q	120	SER	-	expression tag	UNP Q8JGJ1
Q	121	LYS	-	expression tag	UNP Q8JGJ1
Q	122	LEU	-	expression tag	UNP Q8JGJ1
Q	123	ILE	-	expression tag	UNP Q8JGJ1
Q	124	SER	-	expression tag	UNP Q8JGJ1
Q	125	GLU	-	expression tag	UNP Q8JGJ1
Q	126	GLU	-	expression tag	UNP Q8JGJ1
Q	127	ASP	-	expression tag	UNP Q8JGJ1
Q	128	LEU	-	expression tag	UNP Q8JGJ1
R	28	HIS	ASN	conflict	UNP Q8JGJ1
R	31	THR	LEU	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
R	?	-	ASN	deletion	UNP Q8JGJ1
R	?	-	VAL	deletion	UNP Q8JGJ1
R	84	ALA	TYR	conflict	UNP Q8JGJ1
R	86	GLU	TRP	conflict	UNP Q8JGJ1
R	87	CYS	TYR	conflict	UNP Q8JGJ1
R	88	GLN	GLY	conflict	UNP Q8JGJ1
R	90	GLY	ASP	conflict	UNP Q8JGJ1
R	91	LEU	CYS	conflict	UNP Q8JGJ1
R	94	TYR	LEU	conflict	UNP Q8JGJ1
R	107	ALA	-	expression tag	UNP Q8JGJ1
R	108	ALA	-	expression tag	UNP Q8JGJ1
R	109	ALA	-	expression tag	UNP Q8JGJ1
R	110	HIS	-	expression tag	UNP Q8JGJ1
R	111	HIS	-	expression tag	UNP Q8JGJ1
R	112	HIS	-	expression tag	UNP Q8JGJ1
R	113	HIS	-	expression tag	UNP Q8JGJ1
R	114	HIS	-	expression tag	UNP Q8JGJ1
R	115	HIS	-	expression tag	UNP Q8JGJ1
R	116	GLY	-	expression tag	UNP Q8JGJ1
R	117	ALA	-	expression tag	UNP Q8JGJ1
R	118	ALA	-	expression tag	UNP Q8JGJ1
R	119	GLU	-	expression tag	UNP Q8JGJ1
R	120	SER	-	expression tag	UNP Q8JGJ1
R	121	LYS	-	expression tag	UNP Q8JGJ1
R	122	LEU	-	expression tag	UNP Q8JGJ1
R	123	ILE	-	expression tag	UNP Q8JGJ1
R	124	SER	-	expression tag	UNP Q8JGJ1
R	125	GLU	-	expression tag	UNP Q8JGJ1
R	126	GLU	-	expression tag	UNP Q8JGJ1
R	127	ASP	-	expression tag	UNP Q8JGJ1
R	128	LEU	-	expression tag	UNP Q8JGJ1
V	28	HIS	ASN	conflict	UNP Q8JGJ1
V	31	THR	LEU	conflict	UNP Q8JGJ1
V	?	-	ASN	deletion	UNP Q8JGJ1
V	?	-	VAL	deletion	UNP Q8JGJ1
V	84	ALA	TYR	conflict	UNP Q8JGJ1
V	86	GLU	TRP	conflict	UNP Q8JGJ1
V	87	CYS	TYR	conflict	UNP Q8JGJ1
V	88	GLN	GLY	conflict	UNP Q8JGJ1
V	90	GLY	ASP	conflict	UNP Q8JGJ1
V	91	LEU	CYS	conflict	UNP Q8JGJ1
V	94	TYR	LEU	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
V	107	ALA	-	expression tag	UNP Q8JGJ1
V	108	ALA	-	expression tag	UNP Q8JGJ1
V	109	ALA	-	expression tag	UNP Q8JGJ1
V	110	HIS	-	expression tag	UNP Q8JGJ1
V	111	HIS	-	expression tag	UNP Q8JGJ1
V	112	HIS	-	expression tag	UNP Q8JGJ1
V	113	HIS	-	expression tag	UNP Q8JGJ1
V	114	HIS	-	expression tag	UNP Q8JGJ1
V	115	HIS	-	expression tag	UNP Q8JGJ1
V	116	GLY	-	expression tag	UNP Q8JGJ1
V	117	ALA	-	expression tag	UNP Q8JGJ1
V	118	ALA	-	expression tag	UNP Q8JGJ1
V	119	GLU	-	expression tag	UNP Q8JGJ1
V	120	SER	-	expression tag	UNP Q8JGJ1
V	121	LYS	-	expression tag	UNP Q8JGJ1
V	122	LEU	-	expression tag	UNP Q8JGJ1
V	123	ILE	-	expression tag	UNP Q8JGJ1
V	124	SER	-	expression tag	UNP Q8JGJ1
V	125	GLU	-	expression tag	UNP Q8JGJ1
V	126	GLU	-	expression tag	UNP Q8JGJ1
V	127	ASP	-	expression tag	UNP Q8JGJ1
V	128	LEU	-	expression tag	UNP Q8JGJ1
W	28	HIS	ASN	conflict	UNP Q8JGJ1
W	31	THR	LEU	conflict	UNP Q8JGJ1
W	?	-	ASN	deletion	UNP Q8JGJ1
W	?	-	VAL	deletion	UNP Q8JGJ1
W	84	ALA	TYR	conflict	UNP Q8JGJ1
W	86	GLU	TRP	conflict	UNP Q8JGJ1
W	87	CYS	TYR	conflict	UNP Q8JGJ1
W	88	GLN	GLY	conflict	UNP Q8JGJ1
W	90	GLY	ASP	conflict	UNP Q8JGJ1
W	91	LEU	CYS	conflict	UNP Q8JGJ1
W	94	TYR	LEU	conflict	UNP Q8JGJ1
W	107	ALA	-	expression tag	UNP Q8JGJ1
W	108	ALA	-	expression tag	UNP Q8JGJ1
W	109	ALA	-	expression tag	UNP Q8JGJ1
W	110	HIS	-	expression tag	UNP Q8JGJ1
W	111	HIS	-	expression tag	UNP Q8JGJ1
W	112	HIS	-	expression tag	UNP Q8JGJ1
W	113	HIS	-	expression tag	UNP Q8JGJ1
W	114	HIS	-	expression tag	UNP Q8JGJ1
W	115	HIS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
W	116	GLY	-	expression tag	UNP Q8JGJ1
W	117	ALA	-	expression tag	UNP Q8JGJ1
W	118	ALA	-	expression tag	UNP Q8JGJ1
W	119	GLU	-	expression tag	UNP Q8JGJ1
W	120	SER	-	expression tag	UNP Q8JGJ1
W	121	LYS	-	expression tag	UNP Q8JGJ1
W	122	LEU	-	expression tag	UNP Q8JGJ1
W	123	ILE	-	expression tag	UNP Q8JGJ1
W	124	SER	-	expression tag	UNP Q8JGJ1
W	125	GLU	-	expression tag	UNP Q8JGJ1
W	126	GLU	-	expression tag	UNP Q8JGJ1
W	127	ASP	-	expression tag	UNP Q8JGJ1
W	128	LEU	-	expression tag	UNP Q8JGJ1
X	28	HIS	ASN	conflict	UNP Q8JGJ1
X	31	THR	LEU	conflict	UNP Q8JGJ1
X	?	-	ASN	deletion	UNP Q8JGJ1
X	?	-	VAL	deletion	UNP Q8JGJ1
X	84	ALA	TYR	conflict	UNP Q8JGJ1
X	86	GLU	TRP	conflict	UNP Q8JGJ1
X	87	CYS	TYR	conflict	UNP Q8JGJ1
X	88	GLN	GLY	conflict	UNP Q8JGJ1
X	90	GLY	ASP	conflict	UNP Q8JGJ1
X	91	LEU	CYS	conflict	UNP Q8JGJ1
X	94	TYR	LEU	conflict	UNP Q8JGJ1
X	107	ALA	-	expression tag	UNP Q8JGJ1
X	108	ALA	-	expression tag	UNP Q8JGJ1
X	109	ALA	-	expression tag	UNP Q8JGJ1
X	110	HIS	-	expression tag	UNP Q8JGJ1
X	111	HIS	-	expression tag	UNP Q8JGJ1
X	112	HIS	-	expression tag	UNP Q8JGJ1
X	113	HIS	-	expression tag	UNP Q8JGJ1
X	114	HIS	-	expression tag	UNP Q8JGJ1
X	115	HIS	-	expression tag	UNP Q8JGJ1
X	116	GLY	-	expression tag	UNP Q8JGJ1
X	117	ALA	-	expression tag	UNP Q8JGJ1
X	118	ALA	-	expression tag	UNP Q8JGJ1
X	119	GLU	-	expression tag	UNP Q8JGJ1
X	120	SER	-	expression tag	UNP Q8JGJ1
X	121	LYS	-	expression tag	UNP Q8JGJ1
X	122	LEU	-	expression tag	UNP Q8JGJ1
X	123	ILE	-	expression tag	UNP Q8JGJ1
X	124	SER	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
X	125	GLU	-	expression tag	UNP Q8JGJ1
X	126	GLU	-	expression tag	UNP Q8JGJ1
X	127	ASP	-	expression tag	UNP Q8JGJ1
X	128	LEU	-	expression tag	UNP Q8JGJ1
b	28	HIS	ASN	conflict	UNP Q8JGJ1
b	31	THR	LEU	conflict	UNP Q8JGJ1
b	?	-	ASN	deletion	UNP Q8JGJ1
b	?	-	VAL	deletion	UNP Q8JGJ1
b	84	ALA	TYR	conflict	UNP Q8JGJ1
b	86	GLU	TRP	conflict	UNP Q8JGJ1
b	87	CYS	TYR	conflict	UNP Q8JGJ1
b	88	GLN	GLY	conflict	UNP Q8JGJ1
b	90	GLY	ASP	conflict	UNP Q8JGJ1
b	91	LEU	CYS	conflict	UNP Q8JGJ1
b	94	TYR	LEU	conflict	UNP Q8JGJ1
b	107	ALA	-	expression tag	UNP Q8JGJ1
b	108	ALA	-	expression tag	UNP Q8JGJ1
b	109	ALA	-	expression tag	UNP Q8JGJ1
b	110	HIS	-	expression tag	UNP Q8JGJ1
b	111	HIS	-	expression tag	UNP Q8JGJ1
b	112	HIS	-	expression tag	UNP Q8JGJ1
b	113	HIS	-	expression tag	UNP Q8JGJ1
b	114	HIS	-	expression tag	UNP Q8JGJ1
b	115	HIS	-	expression tag	UNP Q8JGJ1
b	116	GLY	-	expression tag	UNP Q8JGJ1
b	117	ALA	-	expression tag	UNP Q8JGJ1
b	118	ALA	-	expression tag	UNP Q8JGJ1
b	119	GLU	-	expression tag	UNP Q8JGJ1
b	120	SER	-	expression tag	UNP Q8JGJ1
b	121	LYS	-	expression tag	UNP Q8JGJ1
b	122	LEU	-	expression tag	UNP Q8JGJ1
b	123	ILE	-	expression tag	UNP Q8JGJ1
b	124	SER	-	expression tag	UNP Q8JGJ1
b	125	GLU	-	expression tag	UNP Q8JGJ1
b	126	GLU	-	expression tag	UNP Q8JGJ1
b	127	ASP	-	expression tag	UNP Q8JGJ1
b	128	LEU	-	expression tag	UNP Q8JGJ1
c	28	HIS	ASN	conflict	UNP Q8JGJ1
c	31	THR	LEU	conflict	UNP Q8JGJ1
c	?	-	ASN	deletion	UNP Q8JGJ1
c	?	-	VAL	deletion	UNP Q8JGJ1
c	84	ALA	TYR	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
c	86	GLU	TRP	conflict	UNP Q8JGJ1
c	87	CYS	TYR	conflict	UNP Q8JGJ1
c	88	GLN	GLY	conflict	UNP Q8JGJ1
c	90	GLY	ASP	conflict	UNP Q8JGJ1
c	91	LEU	CYS	conflict	UNP Q8JGJ1
c	94	TYR	LEU	conflict	UNP Q8JGJ1
c	107	ALA	-	expression tag	UNP Q8JGJ1
c	108	ALA	-	expression tag	UNP Q8JGJ1
c	109	ALA	-	expression tag	UNP Q8JGJ1
c	110	HIS	-	expression tag	UNP Q8JGJ1
c	111	HIS	-	expression tag	UNP Q8JGJ1
c	112	HIS	-	expression tag	UNP Q8JGJ1
c	113	HIS	-	expression tag	UNP Q8JGJ1
c	114	HIS	-	expression tag	UNP Q8JGJ1
c	115	HIS	-	expression tag	UNP Q8JGJ1
c	116	GLY	-	expression tag	UNP Q8JGJ1
c	117	ALA	-	expression tag	UNP Q8JGJ1
c	118	ALA	-	expression tag	UNP Q8JGJ1
c	119	GLU	-	expression tag	UNP Q8JGJ1
c	120	SER	-	expression tag	UNP Q8JGJ1
c	121	LYS	-	expression tag	UNP Q8JGJ1
c	122	LEU	-	expression tag	UNP Q8JGJ1
c	123	ILE	-	expression tag	UNP Q8JGJ1
c	124	SER	-	expression tag	UNP Q8JGJ1
c	125	GLU	-	expression tag	UNP Q8JGJ1
c	126	GLU	-	expression tag	UNP Q8JGJ1
c	127	ASP	-	expression tag	UNP Q8JGJ1
c	128	LEU	-	expression tag	UNP Q8JGJ1
d	28	HIS	ASN	conflict	UNP Q8JGJ1
d	31	THR	LEU	conflict	UNP Q8JGJ1
d	?	-	ASN	deletion	UNP Q8JGJ1
d	?	-	VAL	deletion	UNP Q8JGJ1
d	84	ALA	TYR	conflict	UNP Q8JGJ1
d	86	GLU	TRP	conflict	UNP Q8JGJ1
d	87	CYS	TYR	conflict	UNP Q8JGJ1
d	88	GLN	GLY	conflict	UNP Q8JGJ1
d	90	GLY	ASP	conflict	UNP Q8JGJ1
d	91	LEU	CYS	conflict	UNP Q8JGJ1
d	94	TYR	LEU	conflict	UNP Q8JGJ1
d	107	ALA	-	expression tag	UNP Q8JGJ1
d	108	ALA	-	expression tag	UNP Q8JGJ1
d	109	ALA	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
d	110	HIS	-	expression tag	UNP Q8JGJ1
d	111	HIS	-	expression tag	UNP Q8JGJ1
d	112	HIS	-	expression tag	UNP Q8JGJ1
d	113	HIS	-	expression tag	UNP Q8JGJ1
d	114	HIS	-	expression tag	UNP Q8JGJ1
d	115	HIS	-	expression tag	UNP Q8JGJ1
d	116	GLY	-	expression tag	UNP Q8JGJ1
d	117	ALA	-	expression tag	UNP Q8JGJ1
d	118	ALA	-	expression tag	UNP Q8JGJ1
d	119	GLU	-	expression tag	UNP Q8JGJ1
d	120	SER	-	expression tag	UNP Q8JGJ1
d	121	LYS	-	expression tag	UNP Q8JGJ1
d	122	LEU	-	expression tag	UNP Q8JGJ1
d	123	ILE	-	expression tag	UNP Q8JGJ1
d	124	SER	-	expression tag	UNP Q8JGJ1
d	125	GLU	-	expression tag	UNP Q8JGJ1
d	126	GLU	-	expression tag	UNP Q8JGJ1
d	127	ASP	-	expression tag	UNP Q8JGJ1
d	128	LEU	-	expression tag	UNP Q8JGJ1
h	28	HIS	ASN	conflict	UNP Q8JGJ1
h	31	THR	LEU	conflict	UNP Q8JGJ1
h	?	-	ASN	deletion	UNP Q8JGJ1
h	?	-	VAL	deletion	UNP Q8JGJ1
h	84	ALA	TYR	conflict	UNP Q8JGJ1
h	86	GLU	TRP	conflict	UNP Q8JGJ1
h	87	CYS	TYR	conflict	UNP Q8JGJ1
h	88	GLN	GLY	conflict	UNP Q8JGJ1
h	90	GLY	ASP	conflict	UNP Q8JGJ1
h	91	LEU	CYS	conflict	UNP Q8JGJ1
h	94	TYR	LEU	conflict	UNP Q8JGJ1
h	107	ALA	-	expression tag	UNP Q8JGJ1
h	108	ALA	-	expression tag	UNP Q8JGJ1
h	109	ALA	-	expression tag	UNP Q8JGJ1
h	110	HIS	-	expression tag	UNP Q8JGJ1
h	111	HIS	-	expression tag	UNP Q8JGJ1
h	112	HIS	-	expression tag	UNP Q8JGJ1
h	113	HIS	-	expression tag	UNP Q8JGJ1
h	114	HIS	-	expression tag	UNP Q8JGJ1
h	115	HIS	-	expression tag	UNP Q8JGJ1
h	116	GLY	-	expression tag	UNP Q8JGJ1
h	117	ALA	-	expression tag	UNP Q8JGJ1
h	118	ALA	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
h	119	GLU	-	expression tag	UNP Q8JGJ1
h	120	SER	-	expression tag	UNP Q8JGJ1
h	121	LYS	-	expression tag	UNP Q8JGJ1
h	122	LEU	-	expression tag	UNP Q8JGJ1
h	123	ILE	-	expression tag	UNP Q8JGJ1
h	124	SER	-	expression tag	UNP Q8JGJ1
h	125	GLU	-	expression tag	UNP Q8JGJ1
h	126	GLU	-	expression tag	UNP Q8JGJ1
h	127	ASP	-	expression tag	UNP Q8JGJ1
h	128	LEU	-	expression tag	UNP Q8JGJ1
i	28	HIS	ASN	conflict	UNP Q8JGJ1
i	31	THR	LEU	conflict	UNP Q8JGJ1
i	?	-	ASN	deletion	UNP Q8JGJ1
i	?	-	VAL	deletion	UNP Q8JGJ1
i	84	ALA	TYR	conflict	UNP Q8JGJ1
i	86	GLU	TRP	conflict	UNP Q8JGJ1
i	87	CYS	TYR	conflict	UNP Q8JGJ1
i	88	GLN	GLY	conflict	UNP Q8JGJ1
i	90	GLY	ASP	conflict	UNP Q8JGJ1
i	91	LEU	CYS	conflict	UNP Q8JGJ1
i	94	TYR	LEU	conflict	UNP Q8JGJ1
i	107	ALA	-	expression tag	UNP Q8JGJ1
i	108	ALA	-	expression tag	UNP Q8JGJ1
i	109	ALA	-	expression tag	UNP Q8JGJ1
i	110	HIS	-	expression tag	UNP Q8JGJ1
i	111	HIS	-	expression tag	UNP Q8JGJ1
i	112	HIS	-	expression tag	UNP Q8JGJ1
i	113	HIS	-	expression tag	UNP Q8JGJ1
i	114	HIS	-	expression tag	UNP Q8JGJ1
i	115	HIS	-	expression tag	UNP Q8JGJ1
i	116	GLY	-	expression tag	UNP Q8JGJ1
i	117	ALA	-	expression tag	UNP Q8JGJ1
i	118	ALA	-	expression tag	UNP Q8JGJ1
i	119	GLU	-	expression tag	UNP Q8JGJ1
i	120	SER	-	expression tag	UNP Q8JGJ1
i	121	LYS	-	expression tag	UNP Q8JGJ1
i	122	LEU	-	expression tag	UNP Q8JGJ1
i	123	ILE	-	expression tag	UNP Q8JGJ1
i	124	SER	-	expression tag	UNP Q8JGJ1
i	125	GLU	-	expression tag	UNP Q8JGJ1
i	126	GLU	-	expression tag	UNP Q8JGJ1
i	127	ASP	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
i	128	LEU	-	expression tag	UNP Q8JGJ1
j	28	HIS	ASN	conflict	UNP Q8JGJ1
j	31	THR	LEU	conflict	UNP Q8JGJ1
j	?	-	ASN	deletion	UNP Q8JGJ1
j	?	-	VAL	deletion	UNP Q8JGJ1
j	84	ALA	TYR	conflict	UNP Q8JGJ1
j	86	GLU	TRP	conflict	UNP Q8JGJ1
j	87	CYS	TYR	conflict	UNP Q8JGJ1
j	88	GLN	GLY	conflict	UNP Q8JGJ1
j	90	GLY	ASP	conflict	UNP Q8JGJ1
j	91	LEU	CYS	conflict	UNP Q8JGJ1
j	94	TYR	LEU	conflict	UNP Q8JGJ1
j	107	ALA	-	expression tag	UNP Q8JGJ1
j	108	ALA	-	expression tag	UNP Q8JGJ1
j	109	ALA	-	expression tag	UNP Q8JGJ1
j	110	HIS	-	expression tag	UNP Q8JGJ1
j	111	HIS	-	expression tag	UNP Q8JGJ1
j	112	HIS	-	expression tag	UNP Q8JGJ1
j	113	HIS	-	expression tag	UNP Q8JGJ1
j	114	HIS	-	expression tag	UNP Q8JGJ1
j	115	HIS	-	expression tag	UNP Q8JGJ1
j	116	GLY	-	expression tag	UNP Q8JGJ1
j	117	ALA	-	expression tag	UNP Q8JGJ1
j	118	ALA	-	expression tag	UNP Q8JGJ1
j	119	GLU	-	expression tag	UNP Q8JGJ1
j	120	SER	-	expression tag	UNP Q8JGJ1
j	121	LYS	-	expression tag	UNP Q8JGJ1
j	122	LEU	-	expression tag	UNP Q8JGJ1
j	123	ILE	-	expression tag	UNP Q8JGJ1
j	124	SER	-	expression tag	UNP Q8JGJ1
j	125	GLU	-	expression tag	UNP Q8JGJ1
j	126	GLU	-	expression tag	UNP Q8JGJ1
j	127	ASP	-	expression tag	UNP Q8JGJ1
j	128	LEU	-	expression tag	UNP Q8JGJ1
n	28	HIS	ASN	conflict	UNP Q8JGJ1
n	31	THR	LEU	conflict	UNP Q8JGJ1
n	?	-	ASN	deletion	UNP Q8JGJ1
n	?	-	VAL	deletion	UNP Q8JGJ1
n	84	ALA	TYR	conflict	UNP Q8JGJ1
n	86	GLU	TRP	conflict	UNP Q8JGJ1
n	87	CYS	TYR	conflict	UNP Q8JGJ1
n	88	GLN	GLY	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
n	90	GLY	ASP	conflict	UNP Q8JGJ1
n	91	LEU	CYS	conflict	UNP Q8JGJ1
n	94	TYR	LEU	conflict	UNP Q8JGJ1
n	107	ALA	-	expression tag	UNP Q8JGJ1
n	108	ALA	-	expression tag	UNP Q8JGJ1
n	109	ALA	-	expression tag	UNP Q8JGJ1
n	110	HIS	-	expression tag	UNP Q8JGJ1
n	111	HIS	-	expression tag	UNP Q8JGJ1
n	112	HIS	-	expression tag	UNP Q8JGJ1
n	113	HIS	-	expression tag	UNP Q8JGJ1
n	114	HIS	-	expression tag	UNP Q8JGJ1
n	115	HIS	-	expression tag	UNP Q8JGJ1
n	116	GLY	-	expression tag	UNP Q8JGJ1
n	117	ALA	-	expression tag	UNP Q8JGJ1
n	118	ALA	-	expression tag	UNP Q8JGJ1
n	119	GLU	-	expression tag	UNP Q8JGJ1
n	120	SER	-	expression tag	UNP Q8JGJ1
n	121	LYS	-	expression tag	UNP Q8JGJ1
n	122	LEU	-	expression tag	UNP Q8JGJ1
n	123	ILE	-	expression tag	UNP Q8JGJ1
n	124	SER	-	expression tag	UNP Q8JGJ1
n	125	GLU	-	expression tag	UNP Q8JGJ1
n	126	GLU	-	expression tag	UNP Q8JGJ1
n	127	ASP	-	expression tag	UNP Q8JGJ1
n	128	LEU	-	expression tag	UNP Q8JGJ1
o	28	HIS	ASN	conflict	UNP Q8JGJ1
o	31	THR	LEU	conflict	UNP Q8JGJ1
o	?	-	ASN	deletion	UNP Q8JGJ1
o	?	-	VAL	deletion	UNP Q8JGJ1
o	84	ALA	TYR	conflict	UNP Q8JGJ1
o	86	GLU	TRP	conflict	UNP Q8JGJ1
o	87	CYS	TYR	conflict	UNP Q8JGJ1
o	88	GLN	GLY	conflict	UNP Q8JGJ1
o	90	GLY	ASP	conflict	UNP Q8JGJ1
o	91	LEU	CYS	conflict	UNP Q8JGJ1
o	94	TYR	LEU	conflict	UNP Q8JGJ1
o	107	ALA	-	expression tag	UNP Q8JGJ1
o	108	ALA	-	expression tag	UNP Q8JGJ1
o	109	ALA	-	expression tag	UNP Q8JGJ1
o	110	HIS	-	expression tag	UNP Q8JGJ1
o	111	HIS	-	expression tag	UNP Q8JGJ1
o	112	HIS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
o	113	HIS	-	expression tag	UNP Q8JGJ1
o	114	HIS	-	expression tag	UNP Q8JGJ1
o	115	HIS	-	expression tag	UNP Q8JGJ1
o	116	GLY	-	expression tag	UNP Q8JGJ1
o	117	ALA	-	expression tag	UNP Q8JGJ1
o	118	ALA	-	expression tag	UNP Q8JGJ1
o	119	GLU	-	expression tag	UNP Q8JGJ1
o	120	SER	-	expression tag	UNP Q8JGJ1
o	121	LYS	-	expression tag	UNP Q8JGJ1
o	122	LEU	-	expression tag	UNP Q8JGJ1
o	123	ILE	-	expression tag	UNP Q8JGJ1
o	124	SER	-	expression tag	UNP Q8JGJ1
o	125	GLU	-	expression tag	UNP Q8JGJ1
o	126	GLU	-	expression tag	UNP Q8JGJ1
o	127	ASP	-	expression tag	UNP Q8JGJ1
o	128	LEU	-	expression tag	UNP Q8JGJ1
p	28	HIS	ASN	conflict	UNP Q8JGJ1
p	31	THR	LEU	conflict	UNP Q8JGJ1
p	?	-	ASN	deletion	UNP Q8JGJ1
p	?	-	VAL	deletion	UNP Q8JGJ1
p	84	ALA	TYR	conflict	UNP Q8JGJ1
p	86	GLU	TRP	conflict	UNP Q8JGJ1
p	87	CYS	TYR	conflict	UNP Q8JGJ1
p	88	GLN	GLY	conflict	UNP Q8JGJ1
p	90	GLY	ASP	conflict	UNP Q8JGJ1
p	91	LEU	CYS	conflict	UNP Q8JGJ1
p	94	TYR	LEU	conflict	UNP Q8JGJ1
p	107	ALA	-	expression tag	UNP Q8JGJ1
p	108	ALA	-	expression tag	UNP Q8JGJ1
p	109	ALA	-	expression tag	UNP Q8JGJ1
p	110	HIS	-	expression tag	UNP Q8JGJ1
p	111	HIS	-	expression tag	UNP Q8JGJ1
p	112	HIS	-	expression tag	UNP Q8JGJ1
p	113	HIS	-	expression tag	UNP Q8JGJ1
p	114	HIS	-	expression tag	UNP Q8JGJ1
p	115	HIS	-	expression tag	UNP Q8JGJ1
p	116	GLY	-	expression tag	UNP Q8JGJ1
p	117	ALA	-	expression tag	UNP Q8JGJ1
p	118	ALA	-	expression tag	UNP Q8JGJ1
p	119	GLU	-	expression tag	UNP Q8JGJ1
p	120	SER	-	expression tag	UNP Q8JGJ1
p	121	LYS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
p	122	LEU	-	expression tag	UNP Q8JGJ1
p	123	ILE	-	expression tag	UNP Q8JGJ1
p	124	SER	-	expression tag	UNP Q8JGJ1
p	125	GLU	-	expression tag	UNP Q8JGJ1
p	126	GLU	-	expression tag	UNP Q8JGJ1
p	127	ASP	-	expression tag	UNP Q8JGJ1
p	128	LEU	-	expression tag	UNP Q8JGJ1
t	28	HIS	ASN	conflict	UNP Q8JGJ1
t	31	THR	LEU	conflict	UNP Q8JGJ1
t	?	-	ASN	deletion	UNP Q8JGJ1
t	?	-	VAL	deletion	UNP Q8JGJ1
t	84	ALA	TYR	conflict	UNP Q8JGJ1
t	86	GLU	TRP	conflict	UNP Q8JGJ1
t	87	CYS	TYR	conflict	UNP Q8JGJ1
t	88	GLN	GLY	conflict	UNP Q8JGJ1
t	90	GLY	ASP	conflict	UNP Q8JGJ1
t	91	LEU	CYS	conflict	UNP Q8JGJ1
t	94	TYR	LEU	conflict	UNP Q8JGJ1
t	107	ALA	-	expression tag	UNP Q8JGJ1
t	108	ALA	-	expression tag	UNP Q8JGJ1
t	109	ALA	-	expression tag	UNP Q8JGJ1
t	110	HIS	-	expression tag	UNP Q8JGJ1
t	111	HIS	-	expression tag	UNP Q8JGJ1
t	112	HIS	-	expression tag	UNP Q8JGJ1
t	113	HIS	-	expression tag	UNP Q8JGJ1
t	114	HIS	-	expression tag	UNP Q8JGJ1
t	115	HIS	-	expression tag	UNP Q8JGJ1
t	116	GLY	-	expression tag	UNP Q8JGJ1
t	117	ALA	-	expression tag	UNP Q8JGJ1
t	118	ALA	-	expression tag	UNP Q8JGJ1
t	119	GLU	-	expression tag	UNP Q8JGJ1
t	120	SER	-	expression tag	UNP Q8JGJ1
t	121	LYS	-	expression tag	UNP Q8JGJ1
t	122	LEU	-	expression tag	UNP Q8JGJ1
t	123	ILE	-	expression tag	UNP Q8JGJ1
t	124	SER	-	expression tag	UNP Q8JGJ1
t	125	GLU	-	expression tag	UNP Q8JGJ1
t	126	GLU	-	expression tag	UNP Q8JGJ1
t	127	ASP	-	expression tag	UNP Q8JGJ1
t	128	LEU	-	expression tag	UNP Q8JGJ1
u	28	HIS	ASN	conflict	UNP Q8JGJ1
u	31	THR	LEU	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
u	?	-	ASN	deletion	UNP Q8JGJ1
u	?	-	VAL	deletion	UNP Q8JGJ1
u	84	ALA	TYR	conflict	UNP Q8JGJ1
u	86	GLU	TRP	conflict	UNP Q8JGJ1
u	87	CYS	TYR	conflict	UNP Q8JGJ1
u	88	GLN	GLY	conflict	UNP Q8JGJ1
u	90	GLY	ASP	conflict	UNP Q8JGJ1
u	91	LEU	CYS	conflict	UNP Q8JGJ1
u	94	TYR	LEU	conflict	UNP Q8JGJ1
u	107	ALA	-	expression tag	UNP Q8JGJ1
u	108	ALA	-	expression tag	UNP Q8JGJ1
u	109	ALA	-	expression tag	UNP Q8JGJ1
u	110	HIS	-	expression tag	UNP Q8JGJ1
u	111	HIS	-	expression tag	UNP Q8JGJ1
u	112	HIS	-	expression tag	UNP Q8JGJ1
u	113	HIS	-	expression tag	UNP Q8JGJ1
u	114	HIS	-	expression tag	UNP Q8JGJ1
u	115	HIS	-	expression tag	UNP Q8JGJ1
u	116	GLY	-	expression tag	UNP Q8JGJ1
u	117	ALA	-	expression tag	UNP Q8JGJ1
u	118	ALA	-	expression tag	UNP Q8JGJ1
u	119	GLU	-	expression tag	UNP Q8JGJ1
u	120	SER	-	expression tag	UNP Q8JGJ1
u	121	LYS	-	expression tag	UNP Q8JGJ1
u	122	LEU	-	expression tag	UNP Q8JGJ1
u	123	ILE	-	expression tag	UNP Q8JGJ1
u	124	SER	-	expression tag	UNP Q8JGJ1
u	125	GLU	-	expression tag	UNP Q8JGJ1
u	126	GLU	-	expression tag	UNP Q8JGJ1
u	127	ASP	-	expression tag	UNP Q8JGJ1
u	128	LEU	-	expression tag	UNP Q8JGJ1
v	28	HIS	ASN	conflict	UNP Q8JGJ1
v	31	THR	LEU	conflict	UNP Q8JGJ1
v	?	-	ASN	deletion	UNP Q8JGJ1
v	?	-	VAL	deletion	UNP Q8JGJ1
v	84	ALA	TYR	conflict	UNP Q8JGJ1
v	86	GLU	TRP	conflict	UNP Q8JGJ1
v	87	CYS	TYR	conflict	UNP Q8JGJ1
v	88	GLN	GLY	conflict	UNP Q8JGJ1
v	90	GLY	ASP	conflict	UNP Q8JGJ1
v	91	LEU	CYS	conflict	UNP Q8JGJ1
v	94	TYR	LEU	conflict	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
v	107	ALA	-	expression tag	UNP Q8JGJ1
v	108	ALA	-	expression tag	UNP Q8JGJ1
v	109	ALA	-	expression tag	UNP Q8JGJ1
v	110	HIS	-	expression tag	UNP Q8JGJ1
v	111	HIS	-	expression tag	UNP Q8JGJ1
v	112	HIS	-	expression tag	UNP Q8JGJ1
v	113	HIS	-	expression tag	UNP Q8JGJ1
v	114	HIS	-	expression tag	UNP Q8JGJ1
v	115	HIS	-	expression tag	UNP Q8JGJ1
v	116	GLY	-	expression tag	UNP Q8JGJ1
v	117	ALA	-	expression tag	UNP Q8JGJ1
v	118	ALA	-	expression tag	UNP Q8JGJ1
v	119	GLU	-	expression tag	UNP Q8JGJ1
v	120	SER	-	expression tag	UNP Q8JGJ1
v	121	LYS	-	expression tag	UNP Q8JGJ1
v	122	LEU	-	expression tag	UNP Q8JGJ1
v	123	ILE	-	expression tag	UNP Q8JGJ1
v	124	SER	-	expression tag	UNP Q8JGJ1
v	125	GLU	-	expression tag	UNP Q8JGJ1
v	126	GLU	-	expression tag	UNP Q8JGJ1
v	127	ASP	-	expression tag	UNP Q8JGJ1
v	128	LEU	-	expression tag	UNP Q8JGJ1
z	28	HIS	ASN	conflict	UNP Q8JGJ1
z	31	THR	LEU	conflict	UNP Q8JGJ1
z	?	-	ASN	deletion	UNP Q8JGJ1
z	?	-	VAL	deletion	UNP Q8JGJ1
z	84	ALA	TYR	conflict	UNP Q8JGJ1
z	86	GLU	TRP	conflict	UNP Q8JGJ1
z	87	CYS	TYR	conflict	UNP Q8JGJ1
z	88	GLN	GLY	conflict	UNP Q8JGJ1
z	90	GLY	ASP	conflict	UNP Q8JGJ1
z	91	LEU	CYS	conflict	UNP Q8JGJ1
z	94	TYR	LEU	conflict	UNP Q8JGJ1
z	107	ALA	-	expression tag	UNP Q8JGJ1
z	108	ALA	-	expression tag	UNP Q8JGJ1
z	109	ALA	-	expression tag	UNP Q8JGJ1
z	110	HIS	-	expression tag	UNP Q8JGJ1
z	111	HIS	-	expression tag	UNP Q8JGJ1
z	112	HIS	-	expression tag	UNP Q8JGJ1
z	113	HIS	-	expression tag	UNP Q8JGJ1
z	114	HIS	-	expression tag	UNP Q8JGJ1
z	115	HIS	-	expression tag	UNP Q8JGJ1

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Chain	Residue	Modelled	Actual	Comment	Reference
z	116	GLY	-	expression tag	UNP Q8JGJ1
z	117	ALA	-	expression tag	UNP Q8JGJ1
z	118	ALA	-	expression tag	UNP Q8JGJ1
z	119	GLU	-	expression tag	UNP Q8JGJ1
z	120	SER	-	expression tag	UNP Q8JGJ1
z	121	LYS	-	expression tag	UNP Q8JGJ1
z	122	LEU	-	expression tag	UNP Q8JGJ1
z	123	ILE	-	expression tag	UNP Q8JGJ1
z	124	SER	-	expression tag	UNP Q8JGJ1
z	125	GLU	-	expression tag	UNP Q8JGJ1
z	126	GLU	-	expression tag	UNP Q8JGJ1
z	127	ASP	-	expression tag	UNP Q8JGJ1
z	128	LEU	-	expression tag	UNP Q8JGJ1

- Molecule 2 is a protein called Tumor necrosis factor.

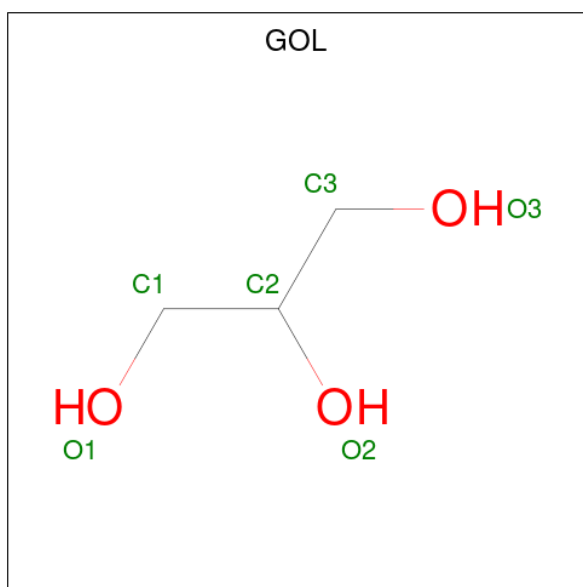
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	2	154	Total	C	N	O	S	0	0	0
			1202	764	209	227	2			
2	3	151	Total	C	N	O	S	0	0	0
			1183	754	206	221	2			
2	4	155	Total	C	N	O	S	0	0	0
			1208	767	210	229	2			
2	A	156	Total	C	N	O	S	0	0	0
			1219	773	214	230	2			
2	B	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	C	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	G	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	H	152	Total	C	N	O	S	0	0	0
			1188	757	207	222	2			
2	I	152	Total	C	N	O	S	0	0	0
			1190	758	207	223	2			
2	M	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	N	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	O	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	S	154	Total	C	N	O	S	0	0	0
			1202	764	209	227	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	T	156	Total	C	N	O	S	0	0	0
			1219	773	214	230	2			
2	U	150	Total	C	N	O	S	0	0	0
			1172	748	202	220	2			
2	Y	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	Z	152	Total	C	N	O	S	0	0	0
			1190	758	207	223	2			
2	a	154	Total	C	N	O	S	0	0	0
			1202	764	209	227	2			
2	e	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	f	156	Total	C	N	O	S	0	0	0
			1219	773	214	230	2			
2	g	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	k	156	Total	C	N	O	S	0	0	0
			1219	773	214	230	2			
2	l	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	m	151	Total	C	N	O	S	0	0	0
			1179	752	203	222	2			
2	q	146	Total	C	N	O	S	0	0	0
			1145	733	198	212	2			
2	r	152	Total	C	N	O	S	0	0	0
			1190	758	207	223	2			
2	s	152	Total	C	N	O	S	0	0	0
			1190	758	207	223	2			
2	w	156	Total	C	N	O	S	0	0	0
			1219	773	214	230	2			
2	x	153	Total	C	N	O	S	0	0	0
			1196	761	208	225	2			
2	y	152	Total	C	N	O	S	0	0	0
			1190	758	207	223	2			

- Molecule 3 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



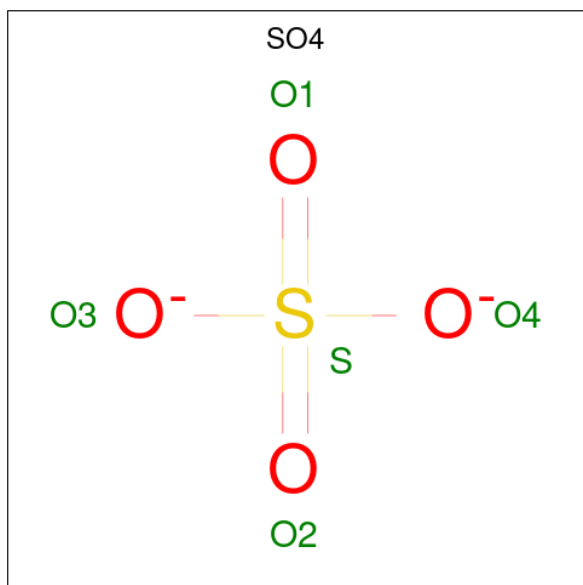
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	0	1	Total	C	O	0	0
			6	3	3		
3	1	1	Total	C	O	0	0
			6	3	3		
3	5	1	Total	C	O	0	0
			6	3	3		
3	D	1	Total	C	O	0	0
			6	3	3		
3	J	1	Total	C	O	0	0
			6	3	3		
3	P	1	Total	C	O	0	0
			6	3	3		
3	V	1	Total	C	O	0	0
			6	3	3		
3	W	1	Total	C	O	0	0
			6	3	3		
3	b	1	Total	C	O	0	0
			6	3	3		
3	b	1	Total	C	O	0	0
			6	3	3		
3	b	1	Total	C	O	0	0
			6	3	3		
3	c	1	Total	C	O	0	0
			6	3	3		
3	h	1	Total	C	O	0	0
			6	3	3		
3	n	1	Total	C	O	0	0
			6	3	3		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
3	t	1	Total	C	O	0	0
			6	3	3		
3	t	1	Total	C	O	0	0
			6	3	3		
3	z	1	Total	C	O	0	0
			6	3	3		

- Molecule 4 is SULFATE ION (CCD ID: SO4) (formula: O₄S).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
4	P	1	Total	O	S	0	0
			5	4	1		
4	h	1	Total	O	S	0	0
			5	4	1		
4	t	1	Total	O	S	0	0
			5	4	1		

- Molecule 5 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
5	S	1	Total	Cl	0	0
			1	1		

- Molecule 6 is water.

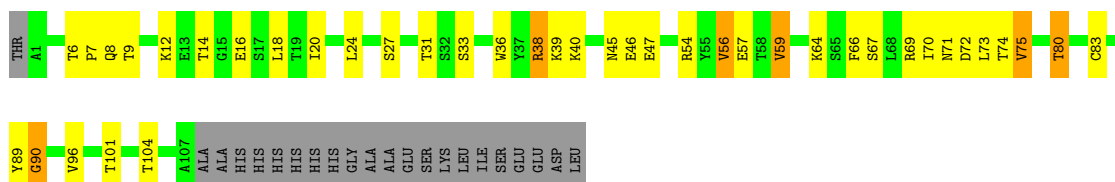
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
6	D	2	Total 2	O 2	0	0
6	I	1	Total 1	O 1	0	0
6	J	1	Total 1	O 1	0	0
6	P	1	Total 1	O 1	0	0
6	S	1	Total 1	O 1	0	0
6	V	2	Total 2	O 2	0	0
6	X	1	Total 1	O 1	0	0

3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

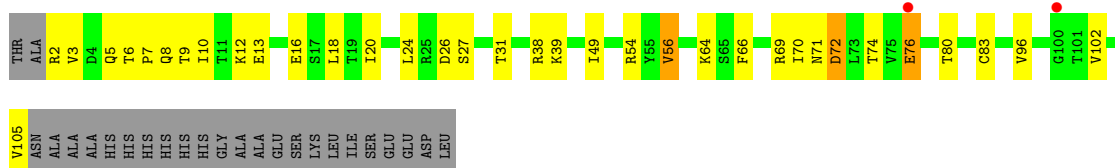
- Molecule 1: Antigen receptor

Chain 0: 



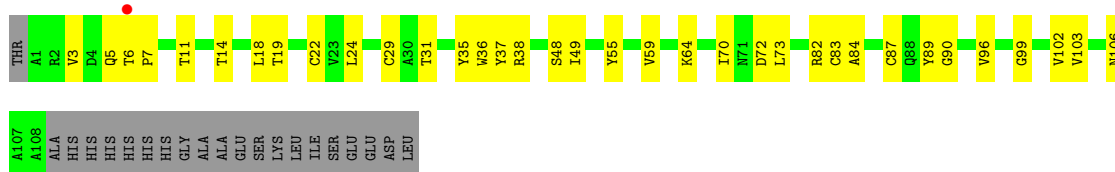
- Molecule 1: Antigen receptor

Chain 1: 



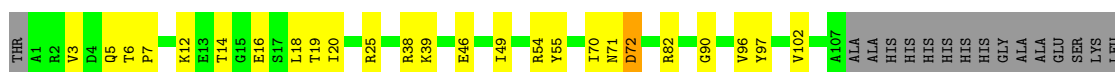
- Molecule 1: Antigen receptor

Chain 5: 



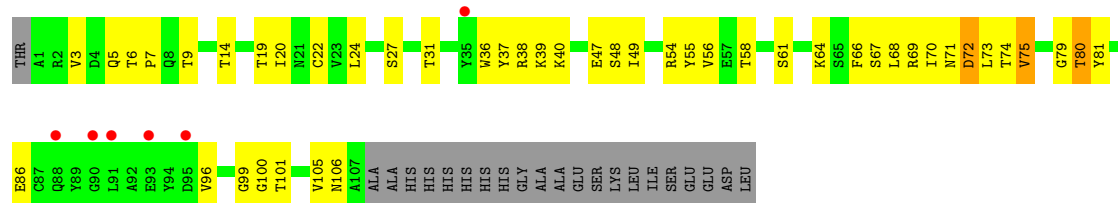
- Molecule 1: Antigen receptor

Chain 6: 

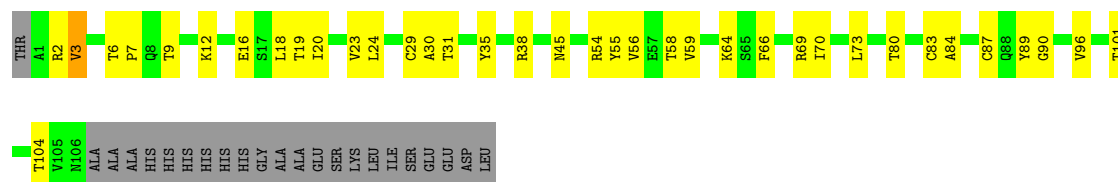


ILE
SER
GLU
ASP
LEU

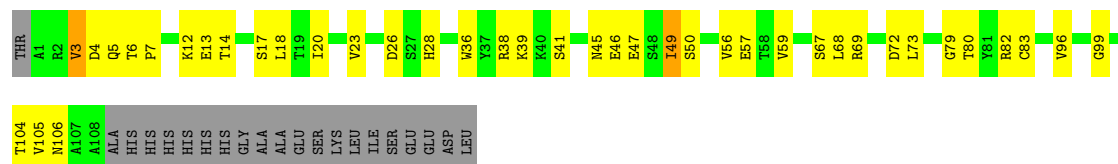
• Molecule 1: Antigen receptor



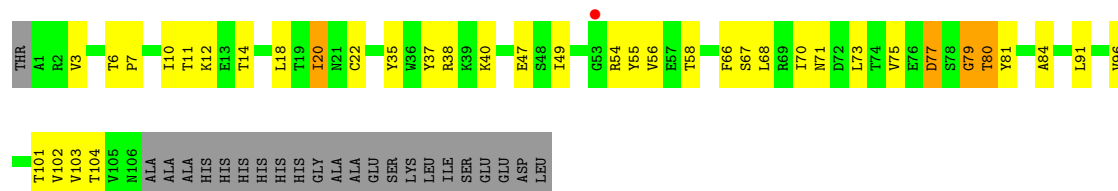
• Molecule 1: Antigen receptor



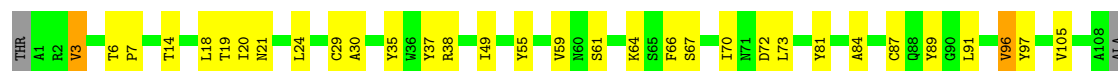
• Molecule 1: Antigen receptor



• Molecule 1: Antigen receptor



• Molecule 1: Antigen receptor



HIS
HIS
HIS
HIS
HIS
HIS
GLY
ALA
ALA
GLU
SER
SER
LYS
LEU
LEU
ILE
SER
GLU
GLU
ASP
LEU

- Molecule 1: Antigen receptor

Chain K:  57% 22% 18%

THR A1 R2 V3 D4 Q5 T6 P7 K12 S17 L18 T19 I20 L24 V36 Y37 R38 K39 K40 T44 E47 Y55 T58 F66 S67 L68 R69 I70 L73 T74 S78 G79 T80 Y81 R82 C83 Y89 G90 V96 T101 V102 V103 T104 V105 N106 ALA

ALA
ALA
HIS
HIS
HIS
HIS
HIS
GLY
ALA
ALA
GLU
SER
LYS
LEU
ILE
SER
GLU
GLU
ASP
LEU

- Molecule 1: Antigen receptor

Chain L:  3% 57% 26% 13%

THR A1 V3 D4 Q5 T6 P7 I10 E13 E16 S17 T19 I20 N21 L24 C29 A30 T31 R38 K39 K40 E47 R54 Y55 V56 K64 R69 I70 N71 D72 L73 T80 Y81 R82 C83 A84 C87 Q88 Y89 G90 E93 V96 Y97 G98

G99 G100 T101 V102 V105 N106 H112 HIS HIS HIS GLY ALA ALA GLU SER LYS LEU ILE SER GLU GLU ASP LEU

- Molecule 1: Antigen receptor

Chain P:  59% 22% 17%

THR A1 V3 T6 P7 K12 E13 T14 T19 I20 L24 R25 D26 C29 A30 T31 Y35 K39 E46 S48 Y55 V59 K64 S65 F66 R69 I70 N71 D72 C83 A84 C87 Q88 Y89 G90 V96 T101 T104 A107 ALA ALA HIS

HIS
HIS
HIS
HIS
GLY
ALA
ALA
GLU
SER
LYS
LEU
ILE
SER
GLU
ASP
LEU

- Molecule 1: Antigen receptor

Chain Q:  2% 55% 31% 13%

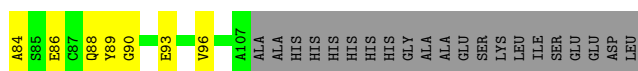
THR A1 R2 V3 D4 Q5 T6 P7 T10 T11 K12 E16 S17 L18 T19 I20 S33 W36 Y37 R38 K39 E46 E47 S48 I49 G53 R54 Y55 V56 E57 T58 R69 I70 N71 D72 L73 S78 G79 T80 Y81 R82 C83 E86 Y89 V96 G99 G100 T101

V102 V103 T104 A108 A109 H110 H111 H112 HIS HIS HIS GLY ALA ALA GLU SER LYS LEU ILE SER GLU GLU ASP LEU

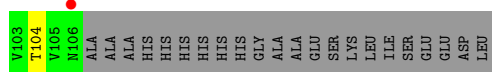
- Molecule 1: Antigen receptor

Chain R:  48% 33% 17%

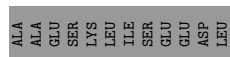
THR A1 R2 V3 D4 Q5 T6 P7 T9 K12 E16 S17 L18 T19 I20 N21 C22 V23 L24 R25 D26 S27 H28 S33 R38 K39 K40 S41 G42 E46 E47 S48 I49 S50 K51 G52 Y55 V56 V59 K64 S65 F66 R69 I70 N71 D72 L73 T80



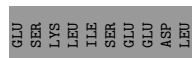
- Molecule 1: Antigen receptor



- Molecule 1: Antigen receptor



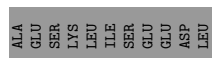
- Molecule 1: Antigen receptor



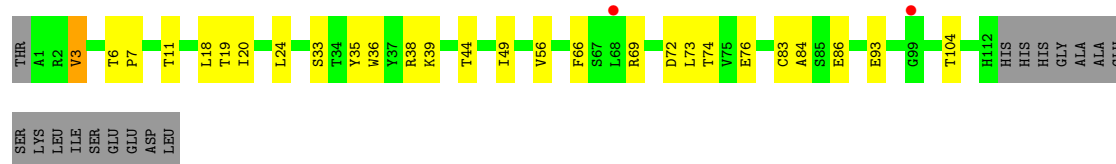
- Molecule 1: Antigen receptor



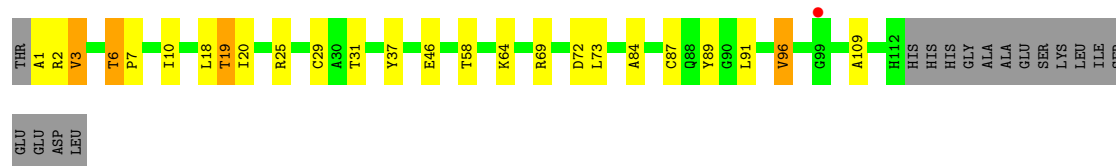
- Molecule 1: Antigen receptor



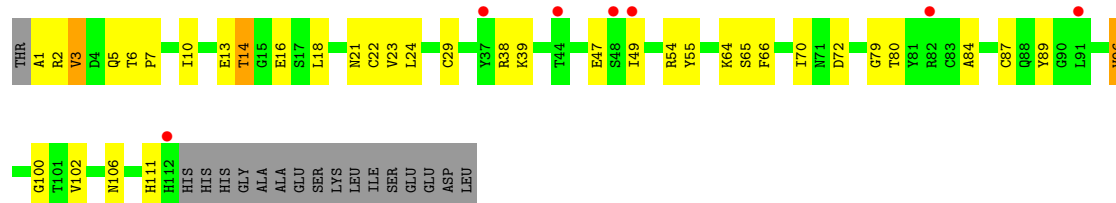
Chain d:



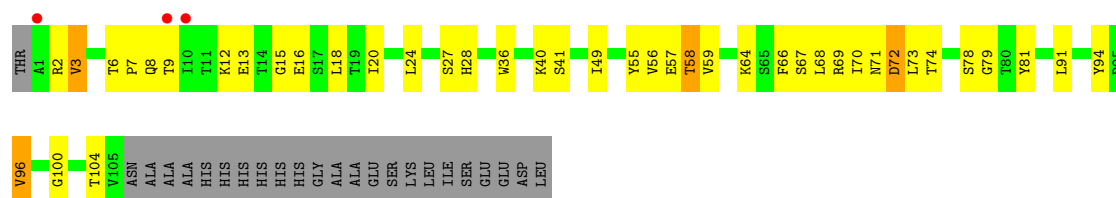
Chain h: 67% 16% 13%



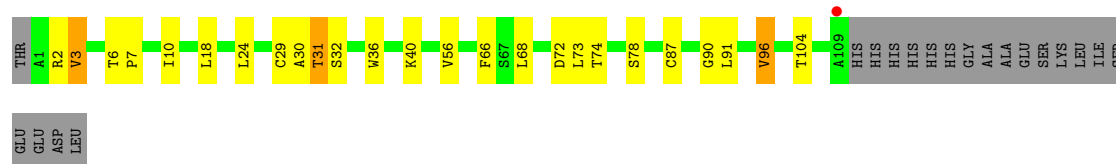
Chain i: 5% 58% 26% 13%



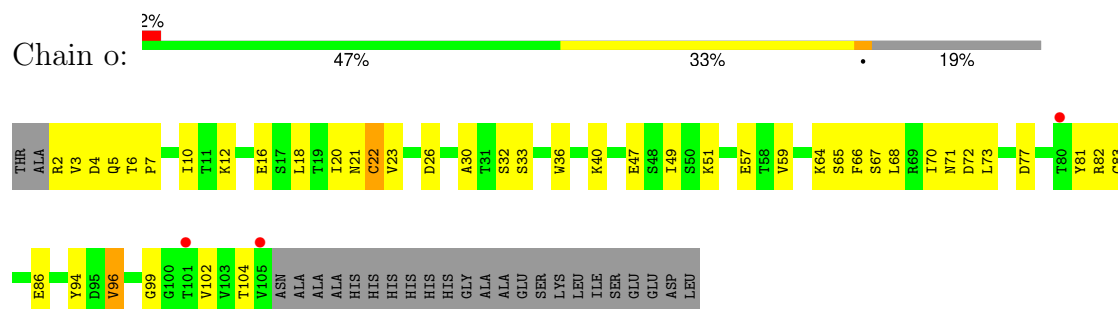
Chain i:



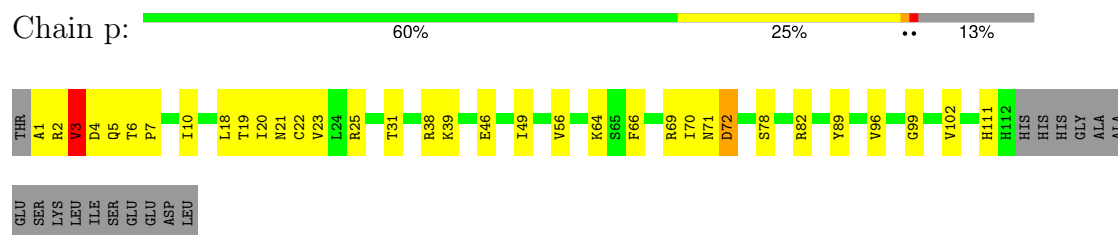
Chain n: % 65% 17% • 16%



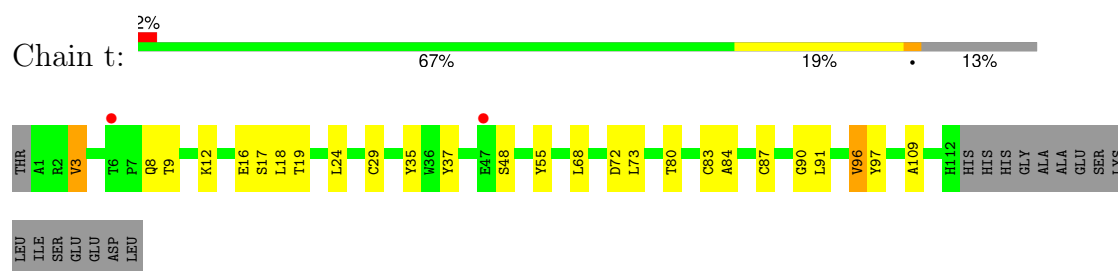
- Molecule 1: Antigen receptor



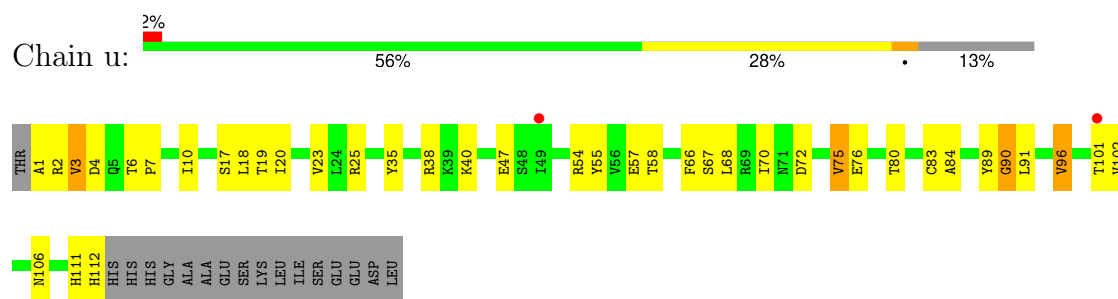
- Molecule 1: Antigen receptor



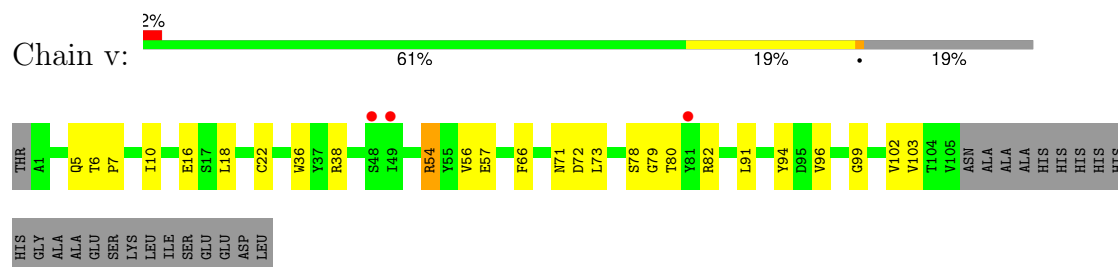
- Molecule 1: Antigen receptor



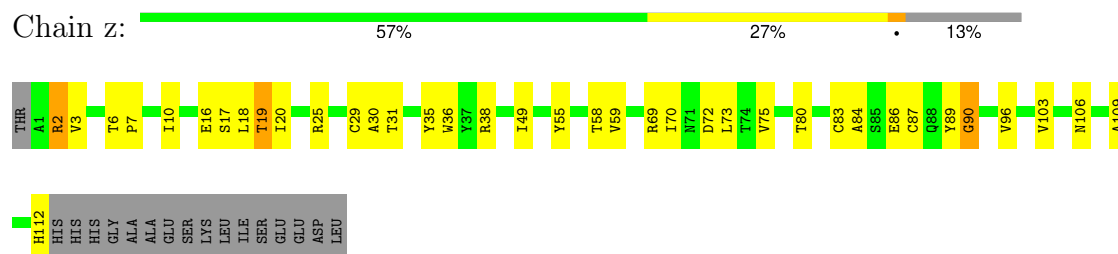
- Molecule 1: Antigen receptor



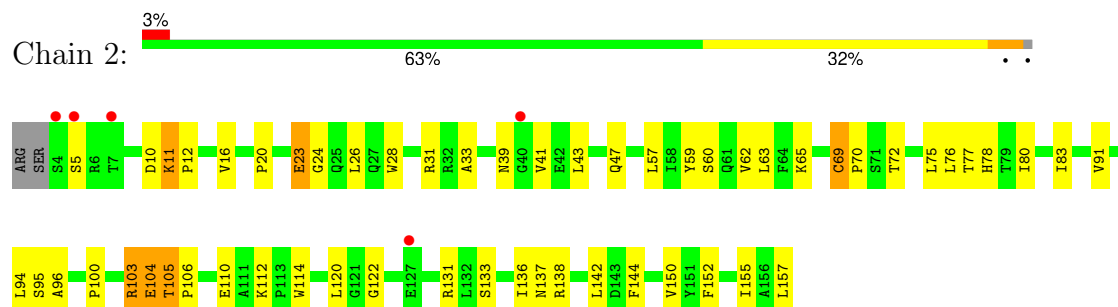
- Molecule 1: Antigen receptor



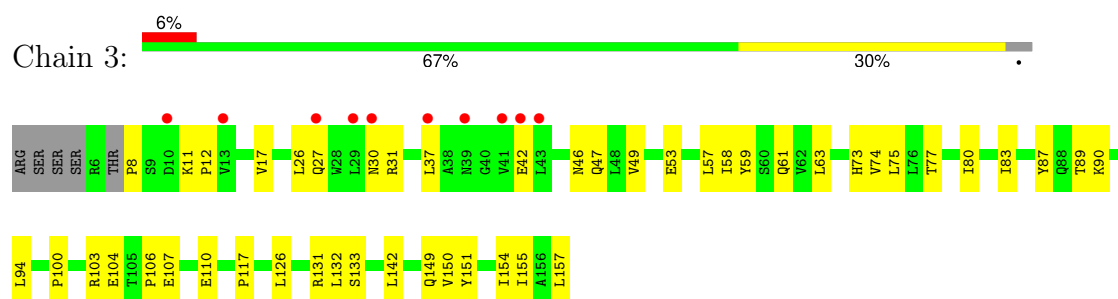
- Molecule 1: Antigen receptor



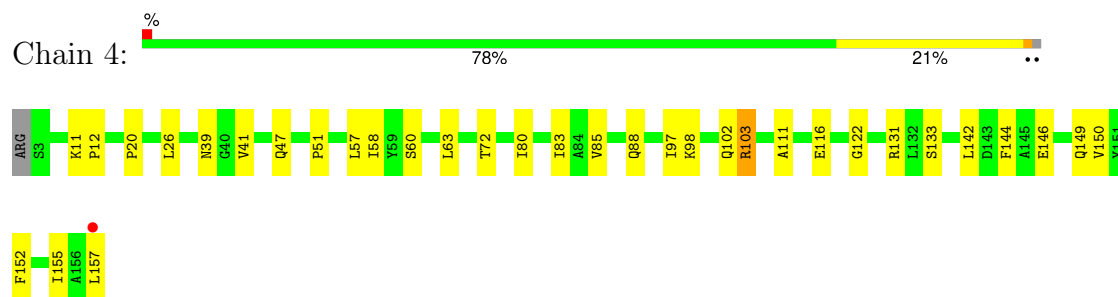
- Molecule 2: Tumor necrosis factor



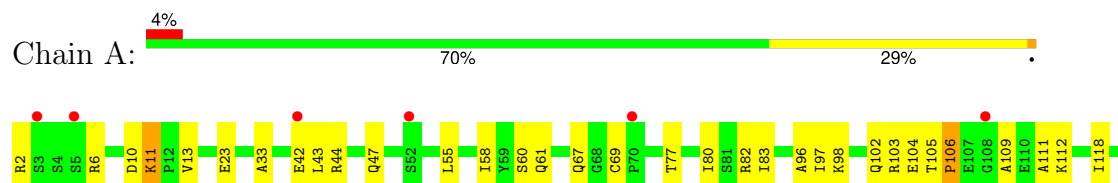
- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor





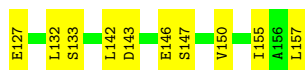
- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor

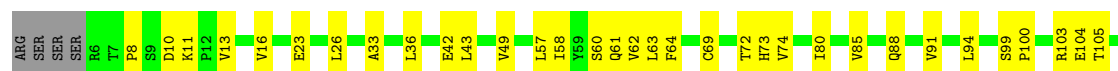


- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor

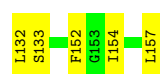
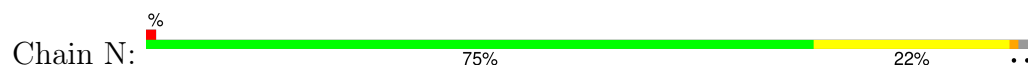




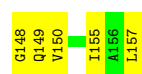
- Molecule 2: Tumor necrosis factor



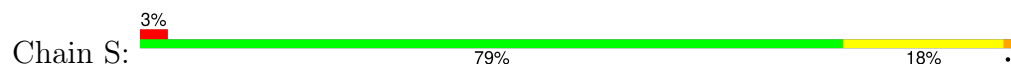
- Molecule 2: Tumor necrosis factor



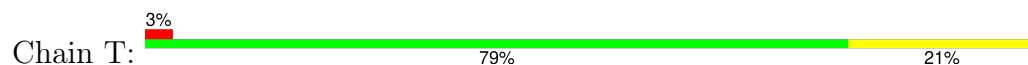
- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor

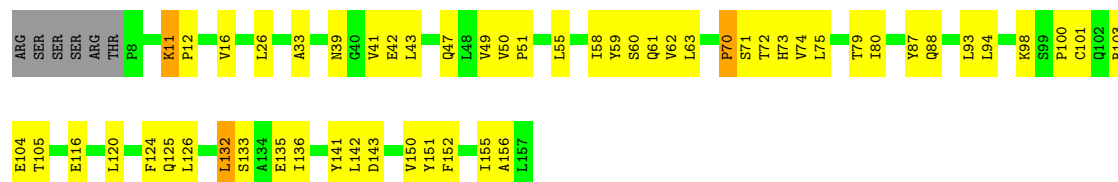


- Molecule 2: Tumor necrosis factor

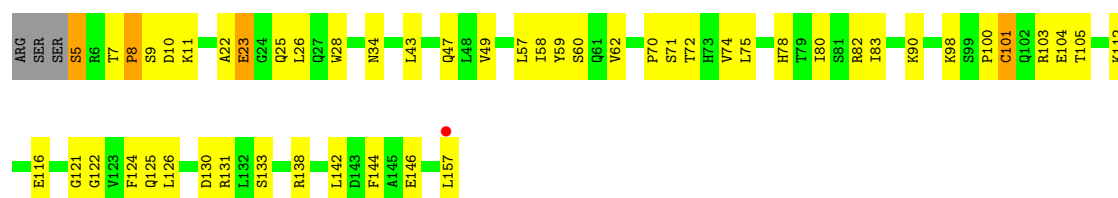




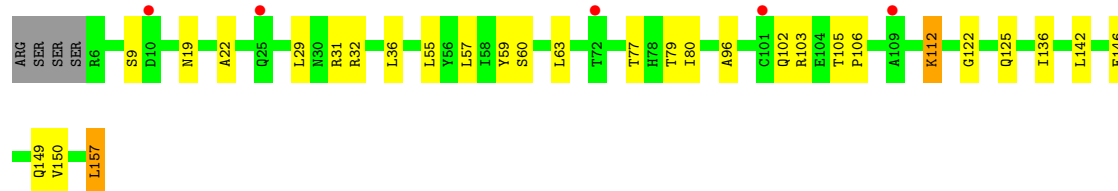
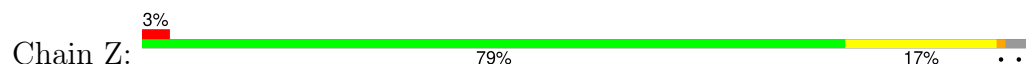
- Molecule 2: Tumor necrosis factor



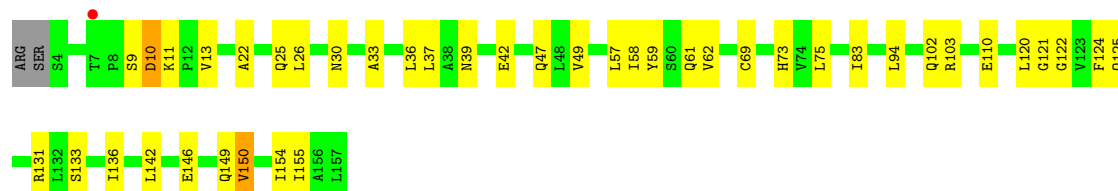
- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor

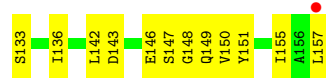


- Molecule 2: Tumor necrosis factor

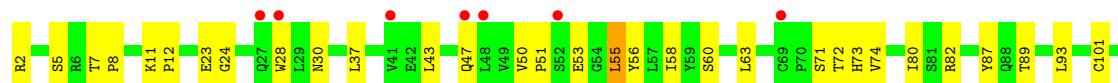


- Molecule 2: Tumor necrosis factor

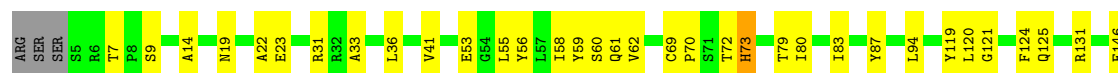




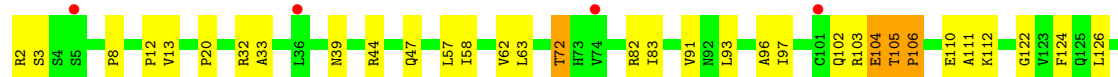
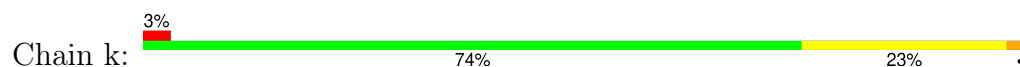
• Molecule 2: Tumor necrosis factor



• Molecule 2: Tumor necrosis factor



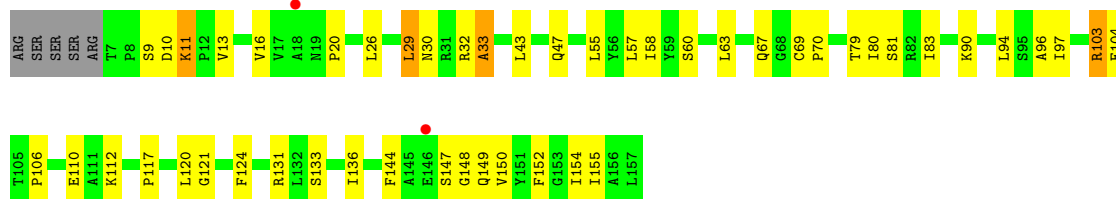
• Molecule 2: Tumor necrosis factor



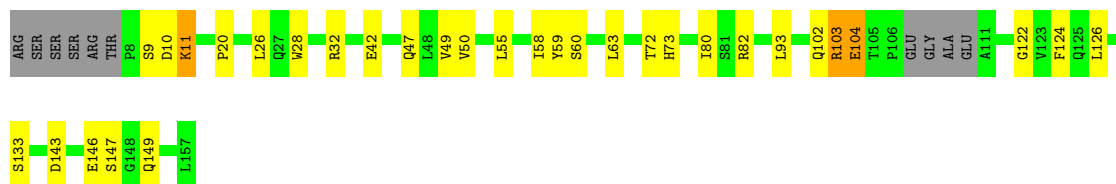
• Molecule 2: Tumor necrosis factor



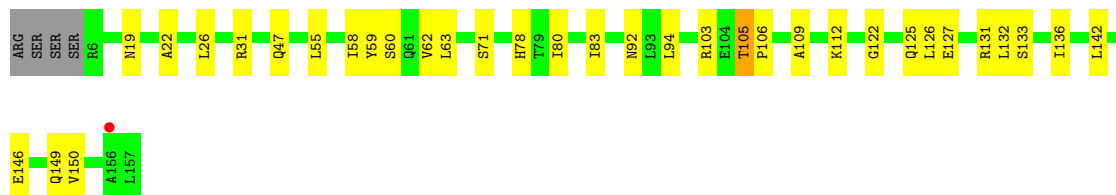
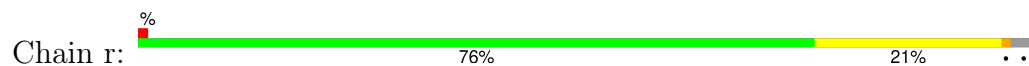
• Molecule 2: Tumor necrosis factor



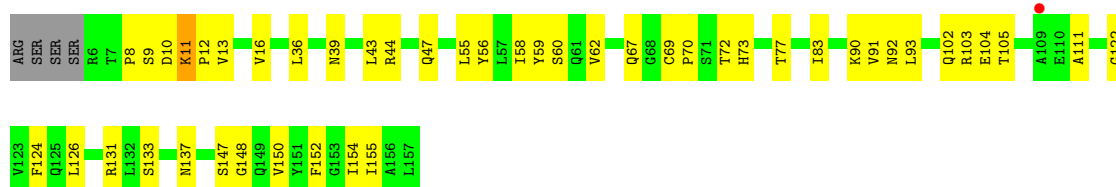
- Molecule 2: Tumor necrosis factor



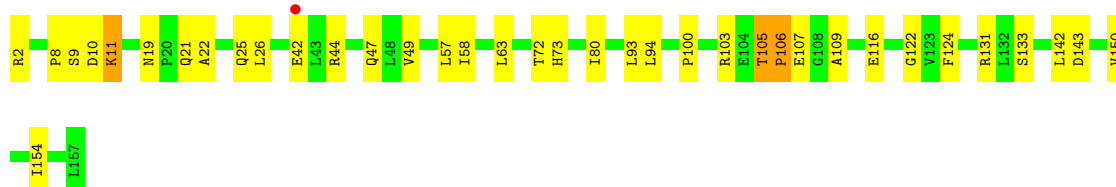
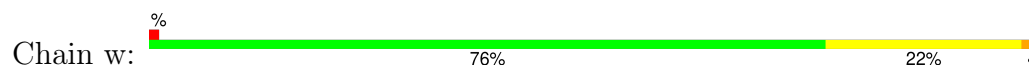
- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor



- Molecule 2: Tumor necrosis factor



- | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ARG | SER | SER | SER | R6 | A14 | M19 | A22 | E23 | W28 | A33 | V41 | V50 | I58 | Y59 | S60 | G61 | V62 | L63 | G68 | C69 | P70 | S71 | T72 | T79 | I83 | R103 | E104 | T105 | G121 | L126 | R131 | T136 | D143 | V150 | Y151 | F152 | G153 | I154 | I155 | A156 | I157 |
|-----|-----|-----|-----|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	112.32Å 218.13Å 236.49Å 90.00° 96.28° 90.00°	Depositor
Resolution (Å)	109.06 – 3.43 109.06 – 3.43	Depositor EDS
% Data completeness (in resolution range)	99.4 (109.06-3.43) 99.5 (109.06-3.43)	Depositor EDS
R_{merge}	0.58	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.97 (at 3.33Å)	Xtriage
Refinement program	PHENIX (1.21.2_5419: ???)	Depositor
R, R_{free}	0.230 , 0.288 0.230 , 0.288	Depositor DCC
R_{free} test set	7793 reflections (4.50%)	wwPDB-VP
Wilson B-factor (Å ²)	78.5	Xtriage
Anisotropy	0.107	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.28 , 83.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.40$, $\langle L^2 \rangle = 0.23$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.87	EDS
Total number of atoms	60848	wwPDB-VP
Average B, all atoms (Å ²)	101.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.99% 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: CL, SO4, GOL

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	0	0.23	0/826	0.55	0/1118
1	1	0.20	0/808	0.53	0/1093
1	5	0.25	0/831	0.52	0/1125
1	6	0.22	0/826	0.55	0/1118
1	7	0.22	0/826	0.64	0/1118
1	D	0.26	0/821	0.62	0/1111
1	E	0.24	0/831	0.56	0/1125
1	F	0.24	0/821	0.65	0/1111
1	J	0.24	0/831	0.52	0/1125
1	K	0.19	0/821	0.51	0/1111
1	L	0.23	0/869	0.54	0/1177
1	P	0.22	0/826	0.55	0/1118
1	Q	0.23	0/869	0.52	0/1177
1	R	0.18	0/826	0.48	0/1118
1	V	0.22	0/832	0.54	0/1125
1	W	0.18	0/821	0.44	0/1111
1	X	0.21	0/826	0.52	0/1118
1	b	0.19	0/869	0.53	0/1177
1	c	0.23	0/869	0.55	0/1177
1	d	0.20	0/869	0.49	0/1177
1	h	0.20	0/869	0.57	0/1177
1	i	0.22	0/869	0.54	0/1177
1	j	0.22	0/813	0.60	0/1100
1	n	0.24	0/836	0.56	0/1132
1	o	0.25	0/808	0.60	0/1093
1	p	0.16	0/869	0.46	0/1177
1	t	0.22	0/869	0.54	0/1177
1	u	0.20	0/869	0.47	0/1177
1	v	0.19	0/813	0.54	0/1100
1	z	0.23	0/869	0.56	0/1177
2	2	0.20	0/1229	0.57	0/1672
2	3	0.20	0/1209	0.52	0/1642

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	4	0.21	0/1235	0.53	0/1680
2	A	0.23	0/1246	0.52	0/1694
2	B	0.20	0/1223	0.53	0/1664
2	C	0.21	0/1223	0.56	0/1664
2	G	0.20	0/1223	0.53	0/1664
2	H	0.22	0/1215	0.52	0/1653
2	I	0.19	0/1217	0.53	0/1656
2	M	0.20	0/1223	0.51	0/1664
2	N	0.18	0/1223	0.52	2/1664 (0.1%)
2	O	0.20	0/1223	0.54	0/1664
2	S	0.21	0/1229	0.55	0/1672
2	T	0.19	0/1246	0.52	0/1694
2	U	0.24	0/1199	0.57	0/1631
2	Y	0.20	0/1223	0.57	0/1664
2	Z	0.22	0/1217	0.50	0/1656
2	a	0.19	0/1229	0.53	2/1672 (0.1%)
2	e	0.20	0/1223	0.56	0/1664
2	f	0.17	0/1246	0.48	0/1694
2	g	0.20	0/1223	0.51	0/1664
2	k	0.18	0/1246	0.51	0/1694
2	l	0.19	0/1223	0.48	0/1664
2	m	0.20	0/1206	0.52	0/1642
2	q	0.19	0/1171	0.57	0/1592
2	r	0.18	0/1217	0.49	0/1656
2	s	0.19	0/1217	0.54	0/1656
2	w	0.20	0/1246	0.58	0/1694
2	x	0.22	0/1223	0.53	0/1664
2	y	0.21	0/1217	0.51	0/1656
All	All	0.21	0/61892	0.54	4/84027 (0.0%)

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	a	10	ASP	CA-C-N	5.57	135.38	121.80
2	a	10	ASP	C-N-CA	5.57	135.38	121.80
2	N	10	ASP	CA-C-N	-5.13	110.23	122.74
2	N	10	ASP	C-N-CA	-5.13	110.23	122.74

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	0	815	0	775	26	0
1	1	797	0	756	23	0
1	5	820	0	780	22	0
1	6	815	0	775	15	0
1	7	815	0	775	31	0
1	D	810	0	770	22	0
1	E	820	0	780	24	0
1	F	810	0	772	25	0
1	J	820	0	780	21	0
1	K	810	0	770	23	0
1	L	855	0	806	23	0
1	P	815	0	775	16	0
1	Q	855	0	806	21	0
1	R	815	0	775	29	0
1	V	821	0	782	22	0
1	W	810	0	770	19	0
1	X	815	0	775	14	0
1	b	855	0	806	12	0
1	c	855	0	806	22	0
1	d	855	0	806	15	0
1	h	855	0	806	17	0
1	i	855	0	806	28	0
1	j	802	0	764	32	0
1	n	825	0	785	17	0
1	o	797	0	756	40	0
1	p	855	0	806	24	0
1	t	855	0	806	13	0
1	u	855	0	806	27	0
1	v	802	0	764	15	0
1	z	855	0	806	20	0
2	2	1202	0	1195	45	0
2	3	1183	0	1178	33	0
2	4	1208	0	1200	22	0
2	A	1219	0	1213	37	0
2	B	1196	0	1190	36	0
2	C	1196	0	1190	28	0
2	G	1196	0	1190	33	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	H	1188	0	1180	28	0
2	I	1190	0	1185	27	0
2	M	1196	0	1190	26	0
2	N	1196	0	1190	24	0
2	O	1196	0	1190	21	0
2	S	1202	0	1195	21	0
2	T	1219	0	1213	24	0
2	U	1172	0	1166	36	0
2	Y	1196	0	1190	32	0
2	Z	1190	0	1185	21	0
2	a	1202	0	1195	30	0
2	e	1196	0	1190	34	0
2	f	1219	0	1213	25	0
2	g	1196	0	1190	29	0
2	k	1219	0	1213	30	0
2	l	1196	0	1190	33	0
2	m	1179	0	1172	33	0
2	q	1145	0	1145	23	0
2	r	1190	0	1185	25	0
2	s	1190	0	1185	26	0
2	w	1219	0	1213	22	0
2	x	1196	0	1190	23	0
2	y	1190	0	1185	20	0
3	0	6	0	8	0	0
3	1	6	0	8	2	0
3	5	6	0	8	0	0
3	D	6	0	8	1	0
3	J	6	0	8	2	0
3	P	6	0	8	0	0
3	V	6	0	8	1	0
3	W	6	0	8	1	0
3	b	18	0	24	0	0
3	c	6	0	8	1	0
3	h	6	0	8	1	0
3	n	6	0	8	0	0
3	t	12	0	16	1	0
3	z	6	0	8	1	0
4	P	5	0	0	0	0
4	h	5	0	0	0	0
4	t	5	0	0	0	0
5	S	1	0	0	0	0
6	D	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
6	I	1	0	0	0	0
6	J	1	0	0	0	0
6	P	1	0	0	0	0
6	S	1	0	0	0	0
6	V	2	0	0	0	0
6	X	1	0	0	0	0
All	All	60848	0	59387	1325	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 11.

All (1325) 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)
1:7:7:PRO:HG2	1:7:20:ILE:HA	1.49	0.93
1:E:39:LYS:HG2	1:E:46:GLU:HG2	1.51	0.92
1:F:10:ILE:HD12	1:F:18:LEU:HD11	1.53	0.90
2:a:125:GLN:HE22	1:b:90:GLY:HA3	1.36	0.90
2:M:102:GLN:HE22	2:O:102:GLN:HB2	1.39	0.88
1:1:38:ARG:HD3	1:1:49:ILE:HD11	1.57	0.85
1:1:56:VAL:HG23	1:1:69:ARG:HB3	1.58	0.85
2:m:63:LEU:H	2:m:150:VAL:HG12	1.42	0.85
1:6:18:LEU:HD21	1:6:102:VAL:HG11	1.60	0.84
2:2:47:GLN:HG2	2:2:133:SER:HB3	1.59	0.84
1:j:55:TYR:HB3	1:j:68:LEU:HD11	1.59	0.84
1:h:6:THR:HG23	1:h:7:PRO:HD3	1.60	0.84
1:L:40:LYS:HG3	1:L:47:GLU:OE2	1.78	0.81
1:6:7:PRO:HG2	1:6:20:ILE:HA	1.60	0.81
1:X:56:VAL:HG23	1:X:69:ARG:HB3	1.62	0.81
2:l:136:ILE:HD11	2:l:142:LEU:HD11	1.60	0.81
2:r:136:ILE:HD11	2:r:142:LEU:HD11	1.61	0.81
1:Q:7:PRO:HG2	1:Q:20:ILE:HA	1.63	0.80
1:i:54:ARG:HD2	1:i:72:ASP:HB2	1.62	0.80
1:F:54:ARG:HE	1:F:71:ASN:HB2	1.47	0.78
2:a:62:VAL:HA	2:a:150:VAL:HG12	1.65	0.77
2:s:62:VAL:HA	2:s:150:VAL:HG12	1.64	0.77
1:D:35:TYR:HB2	1:D:84:ALA:HB3	1.67	0.77
1:j:7:PRO:HG2	1:j:20:ILE:HA	1.66	0.77
2:q:58:ILE:HD12	2:q:124:PHE:HD2	1.49	0.77
2:3:103:ARG:HG2	2:3:104:GLU:H	1.49	0.76
1:L:6:THR:HB	1:L:21:ASN:H	1.51	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:o:36:TRP:HD1	1:o:51:LYS:HE2	1.50	0.75
2:w:80:ILE:HD12	2:w:94:LEU:HD12	1.68	0.75
2:3:8:PRO:HA	2:U:72:THR:HG21	1.68	0.75
2:l:71:SER:HB2	2:l:104:GLU:HG3	1.68	0.75
1:5:35:TYR:HB2	1:5:84:ALA:HB3	1.67	0.75
2:f:125:GLN:HB2	2:g:36:LEU:HD21	1.68	0.74
1:6:38:ARG:HB3	1:6:49:ILE:HD11	1.68	0.74
2:e:82:ARG:HH12	2:e:126:LEU:HA	1.52	0.74
2:A:112:LYS:HG3	2:C:103:ARG:HG3	1.70	0.74
1:t:16:GLU:HG3	1:t:17:SER:H	1.51	0.74
1:j:8:GLN:HG2	1:j:9:THR:H	1.52	0.74
1:X:18:LEU:HD23	1:X:73:LEU:HD21	1.69	0.73
1:F:7:PRO:HG2	1:F:20:ILE:HA	1.70	0.73
1:K:38:ARG:HD2	1:K:40:LYS:HD3	1.69	0.73
1:c:16:GLU:HG3	1:c:17:SER:H	1.53	0.73
2:3:74:VAL:HG23	2:3:100:PRO:HD2	1.70	0.73
2:l:57:LEU:HB2	2:l:157:LEU:HD11	1.70	0.73
1:z:7:PRO:HB2	1:z:10:ILE:HD11	1.71	0.73
2:U:47:GLN:HG2	2:U:133:SER:HB3	1.71	0.73
2:U:103:ARG:HD2	2:U:104:GLU:H	1.51	0.73
1:i:13:GLU:HB3	1:i:16:GLU:HG3	1.72	0.72
1:z:18:LEU:HD23	1:z:73:LEU:HD21	1.71	0.72
2:Z:136:ILE:HD11	2:Z:142:LEU:HD11	1.71	0.72
1:d:38:ARG:HB3	1:d:49:ILE:HD11	1.70	0.72
2:3:49:VAL:HG22	2:3:131:ARG:HG2	1.72	0.72
1:K:7:PRO:HG2	1:K:20:ILE:HA	1.72	0.72
1:E:7:PRO:HG2	1:E:20:ILE:HA	1.70	0.72
2:S:87:TYR:HE1	1:X:1:ALA:HB3	1.55	0.72
1:j:27:SER:HA	1:j:64:LYS:HE2	1.72	0.72
2:y:62:VAL:HA	2:y:150:VAL:HG12	1.70	0.72
1:K:39:LYS:HD2	1:K:44:THR:HA	1.71	0.71
2:T:73:HIS:HB3	1:c:6:THR:HG21	1.73	0.71
2:f:139:PRO:HA	2:f:142:LEU:HD13	1.71	0.71
2:f:2:ARG:HB3	1:i:64:LYS:HE3	1.72	0.70
1:o:36:TRP:CD1	1:o:51:LYS:HE2	2.26	0.70
2:a:22:ALA:HB1	2:a:25:GLN:HG3	1.73	0.70
2:M:72:THR:HG22	2:M:103:ARG:HA	1.74	0.70
2:2:57:LEU:HB2	2:2:157:LEU:HD11	1.73	0.70
2:O:57:LEU:HB2	2:O:157:LEU:HD11	1.71	0.70
1:z:75:VAL:HG21	1:z:106:ASN:HD22	1.57	0.70
1:n:18:LEU:HD23	1:n:73:LEU:HD21	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:39:LYS:HB2	1:P:46:GLU:HG2	1.73	0.69
1:X:17:SER:HB2	1:X:69:ARG:HE	1.55	0.69
1:o:4:ASP:HB2	1:o:23:VAL:HB	1.73	0.69
1:o:21:ASN:HB3	1:o:65:SER:HB2	1.73	0.69
2:U:103:ARG:CD	2:U:104:GLU:H	2.06	0.69
1:1:10:ILE:HD12	1:1:102:VAL:HG22	1.75	0.69
2:q:47:GLN:HG2	2:q:133:SER:HB3	1.75	0.69
1:F:38:ARG:HD3	1:F:81:TYR:CZ	2.27	0.68
2:H:55:LEU:HD13	2:I:13:VAL:HG11	1.74	0.68
2:s:58:ILE:HD11	2:s:126:LEU:HD11	1.75	0.68
1:0:56:VAL:HG13	1:0:69:ARG:HB3	1.74	0.68
1:6:25:ARG:NH1	1:R:52:GLY:HA3	2.08	0.68
1:V:35:TYR:HB2	1:V:84:ALA:HB3	1.76	0.68
1:J:7:PRO:HG2	1:J:20:ILE:HA	1.76	0.68
1:o:82:ARG:HD3	1:o:99:GLY:HA2	1.76	0.68
1:5:24:LEU:HB2	1:5:64:LYS:HB3	1.75	0.68
1:E:14:THR:HG23	1:E:73:LEU:O	1.94	0.67
2:f:47:GLN:HG2	2:f:133:SER:HB3	1.76	0.67
2:k:3:SER:HB2	1:n:30:ALA:HB2	1.76	0.67
1:X:7:PRO:HG2	1:X:20:ILE:HA	1.76	0.67
2:Z:136:ILE:CD1	2:Z:142:LEU:HD11	2.22	0.67
1:V:7:PRO:HG2	1:V:20:ILE:HA	1.75	0.67
2:m:47:GLN:HG2	2:m:133:SER:HB3	1.77	0.67
2:A:103:ARG:HD2	2:B:112:LYS:HZ2	1.60	0.67
1:L:13:GLU:H	1:L:16:GLU:HG3	1.60	0.67
2:Z:57:LEU:HB2	2:Z:157:LEU:HD11	1.76	0.67
2:w:122:GLY:HA2	2:x:59:TYR:CE2	2.29	0.67
2:Y:82:ARG:HH12	2:Y:126:LEU:HA	1.59	0.67
1:W:2:ARG:HD2	3:W:201:GOL:H32	1.75	0.67
1:j:57:GLU:OE2	1:j:66:PHE:HB2	1.95	0.67
1:7:6:THR:HB	1:7:7:PRO:HD3	1.75	0.67
1:1:27:SER:HA	1:1:64:LYS:HE2	1.76	0.67
2:3:58:ILE:HD11	2:3:126:LEU:HD11	1.76	0.67
2:e:26:LEU:HD21	2:e:28:TRP:CE2	2.30	0.67
1:v:82:ARG:HG3	1:v:99:GLY:HA2	1.76	0.67
2:r:103:ARG:HG2	2:r:106:PRO:HG3	1.75	0.66
2:s:103:ARG:HG2	2:s:104:GLU:H	1.61	0.66
1:R:39:LYS:HB2	1:R:46:GLU:HG2	1.76	0.66
1:c:7:PRO:HG2	1:c:20:ILE:HA	1.76	0.66
2:w:58:ILE:HD12	2:w:124:PHE:HD2	1.59	0.66
2:A:61:GLN:HE22	2:C:96:ALA:HB2	1.61	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:e:58:ILE:HD12	2:e:124:PHE:HD2	1.60	0.66
2:4:146:GLU:HB2	2:4:149:GLN:HE22	1.60	0.66
1:L:56:VAL:HG13	1:L:69:ARG:HB3	1.77	0.66
2:M:53:GLU:OE2	1:R:89:TYR:HE1	1.77	0.66
2:B:57:LEU:HB2	2:B:157:LEU:HD11	1.78	0.66
1:Q:5:GLN:HG3	1:Q:99:GLY:H	1.60	0.66
1:1:13:GLU:HA	1:1:105:VAL:HG22	1.76	0.66
1:J:35:TYR:HB2	1:J:84:ALA:HB3	1.78	0.65
1:c:56:VAL:HG23	1:c:69:ARG:HB2	1.77	0.65
2:C:47:GLN:HG2	2:C:133:SER:HB3	1.78	0.65
2:M:80:ILE:HD12	2:M:94:LEU:HD12	1.79	0.65
2:g:9:SER:HB3	1:j:91:LEU:HD11	1.78	0.65
2:g:14:ALA:HB2	2:g:41:VAL:HG11	1.76	0.65
2:k:47:GLN:HG2	2:k:133:SER:HB3	1.78	0.65
1:K:3:VAL:HG22	1:K:24:LEU:HD23	1.77	0.65
2:Z:31:ARG:HE	1:d:93:GLU:HG2	1.59	0.65
1:j:6:THR:HB	1:j:7:PRO:HD3	1.79	0.65
2:A:2:ARG:HA	1:D:30:ALA:HB1	1.77	0.65
1:J:61:SER:HB2	3:J:201:GOL:H11	1.77	0.65
2:H:47:GLN:HG2	2:H:133:SER:HB3	1.78	0.65
1:0:7:PRO:HG2	1:0:20:ILE:HA	1.79	0.65
2:Y:57:LEU:HB2	2:Y:157:LEU:HD11	1.78	0.65
1:R:40:LYS:HE2	1:R:47:GLU:OE2	1.95	0.65
1:j:59:VAL:HA	1:j:66:PHE:HA	1.78	0.64
1:K:38:ARG:O	1:K:47:GLU:HG2	1.96	0.64
1:0:8:GLN:HG3	1:0:9:THR:H	1.61	0.64
1:j:68:LEU:HD23	1:j:81:TYR:HE1	1.62	0.64
1:K:55:TYR:HB3	1:K:68:LEU:HD11	1.79	0.64
2:4:63:LEU:HD22	2:4:149:GLN:HG2	1.79	0.64
2:N:42:GLU:HG3	2:N:49:VAL:HB	1.80	0.64
2:2:76:LEU:HD22	2:2:100:PRO:HB3	1.79	0.64
1:R:88:GLN:HB3	1:R:93:GLU:OE1	1.98	0.64
2:T:57:LEU:HB2	2:T:157:LEU:HD11	1.79	0.64
2:Y:58:ILE:HD12	2:Y:124:PHE:HD2	1.63	0.64
1:V:54:ARG:HH21	3:V:201:GOL:H11	1.63	0.64
1:n:6:THR:HB	1:n:7:PRO:HD3	1.80	0.64
1:6:5:GLN:HE21	1:6:20:ILE:HG21	1.63	0.63
2:G:112:LYS:HE3	2:I:103:ARG:HE	1.63	0.63
2:H:42:GLU:HG3	2:H:49:VAL:HB	1.78	0.63
2:H:72:THR:HG23	2:H:74:VAL:HG13	1.80	0.63
2:e:63:LEU:HD22	2:e:143:ASP:HB3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:49:VAL:HG22	2:H:131:ARG:HG2	1.80	0.63
2:H:139:PRO:HA	2:H:142:LEU:HD13	1.80	0.63
2:e:57:LEU:HB2	2:e:157:LEU:HD11	1.80	0.63
2:x:80:ILE:HD12	2:x:94:LEU:HD12	1.81	0.63
1:D:24:LEU:HB2	1:D:64:LYS:HB3	1.78	0.63
2:l:98:LYS:HE2	2:m:117:PRO:HD2	1.81	0.63
2:3:31:ARG:HH22	1:7:86:GLU:HG3	1.64	0.63
1:c:12:LYS:HD2	1:c:16:GLU:HG2	1.81	0.63
2:m:69:CYS:HB2	2:m:106:PRO:HD3	1.81	0.63
2:q:82:ARG:HH12	2:q:126:LEU:HA	1.64	0.63
1:1:54:ARG:HG3	1:1:71:ASN:HB2	1.80	0.63
1:h:7:PRO:HB2	1:h:10:ILE:HD11	1.79	0.63
1:j:12:LYS:HG3	1:j:18:LEU:HB3	1.81	0.62
2:B:47:GLN:HG2	2:B:133:SER:HB3	1.81	0.62
2:N:57:LEU:HB2	2:N:157:LEU:HD11	1.80	0.62
1:b:6:THR:OG1	1:b:7:PRO:HD3	2.00	0.62
2:q:103:ARG:HH22	2:r:109:ALA:HB3	1.64	0.62
1:Q:6:THR:OG1	1:Q:7:PRO:HD3	1.98	0.62
1:h:1:ALA:HB1	1:h:25:ARG:HG3	1.82	0.62
2:S:122:GLY:HA2	2:T:59:TYR:CE2	2.35	0.62
2:Y:22:ALA:HB1	2:Y:25:GLN:HG3	1.82	0.61
1:6:18:LEU:HB3	1:6:70:ILE:HB	1.82	0.61
1:t:18:LEU:HD23	1:t:73:LEU:HD21	1.81	0.61
1:1:2:ARG:HH11	3:1:201:GOL:H32	1.64	0.61
1:L:6:THR:HG21	1:L:20:ILE:HA	1.81	0.61
2:U:50:VAL:HG21	2:U:126:LEU:HD13	1.82	0.61
2:G:57:LEU:HB2	2:G:157:LEU:HD11	1.82	0.61
1:j:41:SER:HB2	1:j:78:SER:HB3	1.82	0.61
1:u:18:LEU:HD22	1:u:102:VAL:HG11	1.83	0.61
2:O:98:LYS:HE2	2:O:116:GLU:OE2	1.99	0.61
1:R:7:PRO:HG2	1:R:20:ILE:HA	1.83	0.61
2:f:30:ASN:HD22	2:f:37:LEU:HB3	1.65	0.61
2:g:62:VAL:HA	2:g:150:VAL:HG12	1.81	0.61
2:x:72:THR:HG23	2:x:74:VAL:HG13	1.82	0.61
2:T:60:SER:HB3	2:T:80:ILE:HD11	1.83	0.61
1:o:20:ILE:O	1:o:67:SER:HA	2.00	0.61
1:v:10:ILE:HG13	1:v:102:VAL:HG23	1.83	0.61
2:2:137:ASN:ND2	2:2:138:ARG:HG3	2.16	0.60
1:K:44:THR:HG23	1:z:112:HIS:NE2	2.16	0.60
1:h:37:TYR:HB3	1:h:46:GLU:HG2	1.83	0.60
1:z:38:ARG:HB3	1:z:49:ILE:HD11	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:19:THR:HG23	1:h:69:ARG:HB2	1.82	0.60
1:j:3:VAL:HG21	1:j:96:VAL:HB	1.82	0.60
2:y:62:VAL:HG11	2:y:136:ILE:HG21	1.83	0.60
2:T:47:GLN:HG2	2:T:133:SER:HB3	1.82	0.60
2:e:44:ARG:HH11	2:e:131:ARG:HH22	1.49	0.60
2:e:112:LYS:HZ1	2:g:72:THR:HA	1.66	0.60
1:u:54:ARG:HD3	1:u:72:ASP:OD2	2.01	0.60
2:y:58:ILE:HD11	2:y:126:LEU:HD11	1.83	0.60
1:5:18:LEU:HD11	1:5:70:ILE:HD12	1.83	0.60
2:r:126:LEU:HD13	2:r:132:LEU:HD11	1.84	0.60
2:y:83:ILE:HG22	2:y:131:ARG:HB2	1.84	0.60
2:G:103:ARG:HB2	2:H:112:LYS:HD2	1.82	0.60
2:f:122:GLY:HA2	2:g:59:TYR:CE2	2.37	0.60
1:R:24:LEU:HB2	1:R:64:LYS:HB3	1.84	0.60
2:x:47:GLN:HG2	2:x:133:SER:HB3	1.84	0.59
2:2:103:ARG:HG3	2:3:103:ARG:HE	1.66	0.59
1:c:2:ARG:HD2	3:c:201:GOL:H11	1.84	0.59
2:N:157:LEU:HD13	2:O:155:ILE:HD13	1.84	0.59
2:U:63:LEU:HD22	2:U:143:ASP:HB3	1.84	0.59
2:H:98:LYS:HE2	2:I:117:PRO:HD2	1.85	0.59
1:6:82:ARG:HD2	1:6:97:TYR:HB3	1.85	0.59
2:A:47:GLN:HG2	2:A:133:SER:HB3	1.83	0.59
2:H:127:GLU:HG2	1:K:89:TYR:HE2	1.68	0.59
1:Q:78:SER:OG	1:Q:104:THR:HG22	2.03	0.59
1:V:24:LEU:HB2	1:V:64:LYS:HB3	1.84	0.59
1:E:14:THR:H	1:E:106:ASN:HB2	1.67	0.59
1:L:105:VAL:HG12	1:L:106:ASN:H	1.68	0.59
1:o:36:TRP:HD1	1:o:51:LYS:CE	2.16	0.59
2:2:23:GLU:HG3	2:2:24:GLY:H	1.66	0.59
2:f:55:LEU:H	2:f:55:LEU:HD12	1.67	0.59
1:p:1:ALA:H2	1:p:25:ARG:HG3	1.68	0.59
2:U:42:GLU:HG3	2:U:49:VAL:HB	1.85	0.59
1:o:10:ILE:HG13	1:o:18:LEU:HD11	1.85	0.59
1:p:7:PRO:HG2	1:p:20:ILE:HA	1.83	0.59
2:w:2:ARG:HG2	1:z:30:ALA:HA	1.85	0.59
2:H:60:SER:HB3	2:H:80:ILE:HD11	1.84	0.58
2:M:102:GLN:HG2	2:M:102:GLN:O	2.03	0.58
1:W:7:PRO:HG2	1:W:20:ILE:HA	1.84	0.58
1:o:57:GLU:HB3	1:o:67:SER:O	2.03	0.58
2:B:80:ILE:HD12	2:B:94:LEU:HD12	1.84	0.58
1:b:18:LEU:HD23	1:b:73:LEU:HD21	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:3:VAL:HG12	1:L:24:LEU:HD23	1.85	0.58
1:1:8:GLN:HG2	1:1:9:THR:N	2.19	0.58
2:r:83:ILE:HD13	2:r:131:ARG:HH21	1.68	0.58
2:y:103:ARG:HG2	2:y:104:GLU:H	1.68	0.58
2:3:57:LEU:HB3	2:3:155:ILE:HG23	1.84	0.58
1:E:6:THR:OG1	1:E:7:PRO:HD3	2.03	0.58
2:m:60:SER:HB3	2:m:80:ILE:HD11	1.85	0.58
2:x:57:LEU:HB2	2:x:157:LEU:HD11	1.84	0.58
2:B:55:LEU:HD13	2:C:13:VAL:HG11	1.84	0.58
1:P:2:ARG:HG2	1:P:26:ASP:HB2	1.86	0.58
2:e:62:VAL:HG11	2:e:136:ILE:HG21	1.85	0.58
2:S:36:LEU:HD21	2:U:125:GLN:HB2	1.84	0.58
2:U:98:LYS:HE2	2:U:116:GLU:OE2	2.04	0.58
2:Y:10:ASP:CG	2:Y:11:LYS:H	2.12	0.58
2:m:58:ILE:HD12	2:m:124:PHE:HD2	1.68	0.58
2:N:58:ILE:HD11	2:N:126:LEU:HD11	1.86	0.58
1:h:2:ARG:HD2	3:h:202:GOL:H2	1.86	0.58
1:p:6:THR:OG1	1:p:7:PRO:HD3	2.04	0.58
1:K:12:LYS:O	1:K:104:THR:HA	2.03	0.57
1:6:6:THR:OG1	1:6:7:PRO:HD3	2.03	0.57
2:O:147:SER:O	2:O:149:GLN:HG3	2.04	0.57
2:S:63:LEU:HD22	2:S:143:ASP:HB3	1.87	0.57
1:z:7:PRO:HG2	1:z:20:ILE:HA	1.85	0.57
2:w:47:GLN:HG2	2:w:133:SER:HB3	1.85	0.57
2:4:83:ILE:HG23	2:4:131:ARG:HB2	1.85	0.57
1:D:18:LEU:HD23	1:D:73:LEU:HD11	1.86	0.57
1:D:54:ARG:HH21	3:D:201:GOL:H12	1.68	0.57
2:H:73:HIS:CE1	2:I:113:PRO:HG2	2.39	0.57
1:K:18:LEU:HD23	1:K:73:LEU:HD21	1.87	0.57
2:I:103:ARG:HG2	2:I:104:GLU:H	1.70	0.57
1:u:7:PRO:HG2	1:u:20:ILE:HA	1.85	0.57
2:O:74:VAL:HG23	2:O:100:PRO:HD2	1.87	0.57
2:S:102:GLN:HB3	2:T:103:ARG:HD2	1.86	0.57
1:0:40:LYS:HG2	1:0:47:GLU:OE2	2.05	0.57
1:v:73:LEU:H	1:v:73:LEU:HD23	1.69	0.57
2:O:58:ILE:HD11	2:O:126:LEU:HD11	1.87	0.57
1:R:38:ARG:HB3	1:R:49:ILE:HD11	1.85	0.57
2:e:26:LEU:HD21	2:e:28:TRP:CZ2	2.39	0.57
2:q:122:GLY:HA2	2:r:59:TYR:CE2	2.39	0.57
2:s:69:CYS:HB3	2:s:105:THR:HG22	1.86	0.57
2:T:127:GLU:HG2	1:W:89:TYR:HE2	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:7:80:THR:HG22	1:7:100:GLY:H	1.70	0.57
1:F:10:ILE:HB	1:F:102:VAL:HA	1.87	0.57
2:S:57:LEU:HB2	2:S:157:LEU:HD11	1.87	0.57
1:W:38:ARG:HB3	1:W:49:ILE:HD11	1.87	0.57
2:Y:112:LYS:HE2	2:a:103:ARG:HG3	1.86	0.57
1:c:54:ARG:HD2	1:c:72:ASP:OD1	2.04	0.57
2:A:103:ARG:HH12	2:B:109:ALA:H	1.53	0.56
2:s:13:VAL:HG12	2:s:155:ILE:HG13	1.86	0.56
1:0:14:THR:HG23	1:0:74:THR:HA	1.86	0.56
2:G:47:GLN:HG2	2:G:133:SER:HB3	1.86	0.56
1:i:38:ARG:HD3	1:i:49:ILE:HD11	1.87	0.56
2:m:16:VAL:HG11	2:m:43:LEU:HD12	1.86	0.56
1:E:45:ASN:HB2	1:E:47:GLU:OE2	2.05	0.56
1:V:51:LYS:HE2	1:V:57:GLU:OE2	2.04	0.56
2:k:82:ARG:HH12	2:k:126:LEU:HA	1.70	0.56
1:W:38:ARG:NH1	1:W:40:LYS:HE2	2.20	0.56
1:h:29:CYS:HA	1:h:87:CYS:HA	1.88	0.56
2:w:10:ASP:CG	2:w:11:LYS:H	2.14	0.56
2:l:30:ASN:HD22	2:l:37:LEU:HB3	1.70	0.56
2:y:63:LEU:H	2:y:150:VAL:HG12	1.70	0.56
2:A:112:LYS:HB3	2:C:73:HIS:CE1	2.41	0.56
1:c:17:SER:HA	1:c:70:ILE:O	2.05	0.56
1:E:38:ARG:HB2	1:E:49:ILE:HG12	1.87	0.56
2:Y:5:SER:HA	1:b:89:TYR:O	2.05	0.56
2:q:63:LEU:HD22	2:q:143:ASP:HB3	1.88	0.56
2:B:83:ILE:HD11	2:B:90:LYS:HE3	1.87	0.56
1:h:18:LEU:HD23	1:h:73:LEU:HD21	1.88	0.56
1:R:5:GLN:HG3	1:R:22:CYS:SG	2.46	0.56
2:Y:9:SER:HB2	1:b:91:LEU:HD11	1.87	0.56
2:Z:157:LEU:HD13	2:a:155:ILE:HD13	1.87	0.56
1:J:24:LEU:HD11	1:J:66:PHE:HE1	1.71	0.56
1:t:12:LYS:HD2	1:t:16:GLU:HG2	1.88	0.56
2:2:95:SER:HB2	2:3:149:GLN:HG2	1.87	0.55
2:A:2:ARG:N	1:D:31:THR:HG1	2.05	0.55
2:G:58:ILE:HD12	2:G:124:PHE:CD2	2.40	0.55
2:r:122:GLY:HA2	2:s:59:TYR:CE2	2.40	0.55
2:4:12:PRO:HA	2:4:39:ASN:HB2	1.89	0.55
2:A:6:ARG:HB2	1:D:89:TYR:HE1	1.70	0.55
2:f:53:GLU:HG2	2:f:128:LYS:N	2.21	0.55
1:1:7:PRO:HG2	1:1:20:ILE:HA	1.88	0.55
1:i:24:LEU:HB2	1:i:64:LYS:HB3	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:7:PRO:HB2	1:n:10:ILE:HD11	1.89	0.55
1:o:2:ARG:HG2	1:o:26:ASP:HB2	1.87	0.55
1:5:5:GLN:HG3	1:5:99:GLY:H	1.71	0.55
1:5:29:CYS:HA	1:5:87:CYS:HA	1.89	0.55
2:B:125:GLN:HB2	2:C:36:LEU:HD21	1.89	0.55
1:j:8:GLN:HG2	1:j:9:THR:N	2.18	0.55
1:o:73:LEU:HG	1:o:77:ASP:HB3	1.88	0.55
2:B:71:SER:HB3	2:B:104:GLU:HA	1.89	0.55
1:D:45:ASN:HB3	2:U:88:GLN:OE1	2.06	0.55
1:d:74:THR:OG1	1:d:76:GLU:HG3	2.07	0.55
2:w:93:LEU:HB3	2:w:124:PHE:CE2	2.41	0.55
1:z:29:CYS:HA	1:z:87:CYS:HA	1.89	0.55
2:I:63:LEU:HD22	2:I:143:ASP:HB3	1.88	0.55
1:p:7:PRO:HB2	1:p:10:ILE:HD11	1.89	0.55
2:2:112:LYS:HZ2	2:4:102:GLN:HG2	1.71	0.55
1:7:27:SER:HA	1:7:64:LYS:HE2	1.87	0.55
2:G:71:SER:O	2:G:74:VAL:HG13	2.07	0.55
2:2:10:ASP:CG	2:2:11:LYS:H	2.15	0.55
2:I:73:HIS:NE2	2:I:99:SER:HB2	2.21	0.55
2:I:110:GLU:HG2	2:I:111:ALA:H	1.72	0.55
2:r:62:VAL:HG11	2:r:136:ILE:HD13	1.89	0.55
2:s:55:LEU:HD11	1:t:91:LEU:HD12	1.89	0.55
1:0:89:TYR:HE2	2:x:127:GLU:HG2	1.70	0.55
1:o:22:CYS:O	1:o:65:SER:HA	2.07	0.55
1:p:31:THR:HG21	1:p:64:LYS:HA	1.88	0.55
1:d:24:LEU:HD11	1:d:66:PHE:HE1	1.73	0.54
1:i:6:THR:HG23	1:i:7:PRO:HD3	1.89	0.54
1:j:8:GLN:O	1:j:100:GLY:HA2	2.07	0.54
1:7:19:THR:HG22	1:7:69:ARG:HB2	1.88	0.54
1:L:6:THR:OG1	1:L:7:PRO:HD2	2.07	0.54
1:L:29:CYS:HA	1:L:87:CYS:HA	1.89	0.54
1:E:18:LEU:O	1:E:69:ARG:HA	2.07	0.54
2:G:9:SER:HB2	1:J:91:LEU:HD11	1.88	0.54
1:n:2:ARG:HB3	1:n:96:VAL:HG11	1.89	0.54
1:n:29:CYS:HA	1:n:87:CYS:HA	1.89	0.54
1:0:24:LEU:HB2	1:0:64:LYS:HD3	1.90	0.54
2:B:81:SER:HB2	2:B:90:LYS:HE2	1.88	0.54
1:E:13:GLU:HG2	1:E:105:VAL:O	2.07	0.54
2:m:63:LEU:N	2:m:150:VAL:HG12	2.18	0.54
2:I:10:ASP:CG	2:I:11:LYS:H	2.15	0.54
2:O:16:VAL:HG11	2:O:43:LEU:HD12	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:e:10:ASP:CG	2:e:11:LYS:H	2.16	0.54
2:f:71:SER:HB3	2:f:105:THR:HB	1.88	0.54
1:E:14:THR:HA	1:E:73:LEU:HB2	1.89	0.54
1:W:8:GLN:HG3	1:W:9:THR:H	1.72	0.54
1:h:7:PRO:HG2	1:h:20:ILE:HA	1.90	0.54
2:l:55:LEU:HD11	2:m:9:SER:HB3	1.89	0.54
2:a:26:LEU:HD13	2:a:142:LEU:HD11	1.90	0.54
2:e:80:ILE:HD12	2:e:94:LEU:HD12	1.89	0.54
1:i:5:GLN:HA	1:i:21:ASN:O	2.07	0.54
1:j:40:LYS:HA	1:j:79:GLY:HA2	1.90	0.54
1:5:6:THR:HB	1:5:7:PRO:HD3	1.89	0.54
2:G:103:ARG:HE	2:G:104:GLU:H	1.56	0.54
2:T:122:GLY:HA2	2:U:59:TYR:CE2	2.43	0.54
2:k:2:ARG:HB3	1:n:31:THR:H	1.72	0.54
2:2:28:TRP:HB2	2:2:43:LEU:HD11	1.90	0.54
1:i:2:ARG:HB3	1:i:96:VAL:HG11	1.90	0.54
2:A:103:ARG:NH1	2:B:109:ALA:H	2.06	0.53
2:B:81:SER:HB3	2:B:90:LYS:HG2	1.89	0.53
2:Z:60:SER:HB3	2:Z:80:ILE:HD11	1.88	0.53
2:l:62:VAL:HG12	2:l:150:VAL:HG13	1.88	0.53
1:o:12:LYS:HD3	1:o:16:GLU:HB2	1.90	0.53
1:o:36:TRP:HB2	1:o:49:ILE:HG21	1.90	0.53
2:O:12:PRO:HA	2:O:39:ASN:HB2	1.89	0.53
2:S:10:ASP:CG	2:S:11:LYS:H	2.16	0.53
1:7:56:VAL:O	1:7:68:LEU:HA	2.08	0.53
2:e:155:ILE:HD13	2:g:157:LEU:HD11	1.90	0.53
1:o:73:LEU:HB3	1:o:104:THR:HG21	1.91	0.53
2:C:23:GLU:O	2:C:25:GLN:HG2	2.09	0.53
1:W:64:LYS:HD2	2:a:110:GLU:OE2	2.08	0.53
2:f:58:ILE:HG21	2:f:80:ILE:HG21	1.89	0.53
1:X:38:ARG:HB2	1:X:49:ILE:HD11	1.90	0.53
2:I:60:SER:HB3	2:I:80:ILE:HD11	1.90	0.53
1:1:2:ARG:NH1	3:1:201:GOL:H32	2.23	0.53
2:G:127:GLU:HG2	1:L:89:TYR:HE2	1.74	0.53
2:N:122:GLY:HA2	2:O:59:TYR:CE2	2.44	0.53
1:p:18:LEU:HD11	1:p:70:ILE:HD12	1.89	0.53
2:C:30:ASN:HD22	2:C:37:LEU:HD23	1.72	0.53
1:K:70:ILE:HD11	1:K:81:TYR:HE2	1.74	0.53
1:K:78:SER:HA	1:K:102:VAL:HG23	1.91	0.53
1:P:7:PRO:HG2	1:P:20:ILE:HA	1.90	0.53
1:X:18:LEU:HD11	1:X:70:ILE:HD12	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:z:2:ARG:HB2	3:z:201:GOL:H11	1.90	0.53
1:0:6:THR:OG1	1:0:7:PRO:HD3	2.09	0.53
1:W:18:LEU:HD22	1:W:102:VAL:HG11	1.91	0.53
1:c:22:CYS:HB2	1:c:66:PHE:CE1	2.44	0.53
1:o:21:ASN:HA	1:o:66:PHE:O	2.09	0.53
1:P:12:LYS:O	1:P:104:THR:HA	2.09	0.53
1:W:38:ARG:HG3	1:W:39:LYS:N	2.24	0.53
1:c:1:ALA:H2	1:c:25:ARG:HD3	1.73	0.53
1:t:55:TYR:HB3	1:t:68:LEU:HD11	1.91	0.53
2:B:19:ASN:HD22	2:B:22:ALA:HB2	1.74	0.52
2:y:14:ALA:HB2	2:y:41:VAL:HG11	1.91	0.52
1:7:24:LEU:HB2	1:7:64:LYS:HG2	1.90	0.52
1:E:49:ILE:HG22	1:E:50:SER:H	1.74	0.52
1:K:5:GLN:HE21	1:K:20:ILE:HG21	1.75	0.52
1:7:49:ILE:HG23	1:7:55:TYR:CD2	2.43	0.52
2:g:19:ASN:HB3	2:g:22:ALA:HB2	1.90	0.52
2:l:42:GLU:HB2	2:l:49:VAL:HB	1.92	0.52
1:1:74:THR:OG1	1:1:76:GLU:HG2	2.09	0.52
2:3:42:GLU:HB2	2:3:49:VAL:HB	1.90	0.52
2:C:42:GLU:HG3	2:C:49:VAL:HB	1.92	0.52
2:N:87:TYR:OH	1:Q:1:ALA:HA	2.10	0.52
2:a:47:GLN:HG2	2:a:133:SER:HB3	1.90	0.52
2:e:26:LEU:HD12	2:e:142:LEU:HD11	1.91	0.52
2:e:44:ARG:NH1	2:e:131:ARG:HH22	2.07	0.52
1:7:37:TYR:HD1	1:7:48:SER:HA	1.74	0.52
1:t:55:TYR:HE1	3:t:202:GOL:H32	1.75	0.52
1:6:25:ARG:HH12	1:R:52:GLY:HA3	1.73	0.52
2:G:80:ILE:HD12	2:G:94:LEU:HD12	1.90	0.52
1:j:55:TYR:CE1	1:j:70:ILE:HG12	2.45	0.52
2:r:47:GLN:HG2	2:r:133:SER:HB3	1.90	0.52
2:y:60:SER:HB2	2:y:152:PHE:HD1	1.75	0.52
1:5:18:LEU:HD22	1:5:102:VAL:HG11	1.91	0.52
1:D:55:TYR:HD1	1:D:70:ILE:HG12	1.75	0.52
1:E:39:LYS:HE2	1:E:82:ARG:NE	2.25	0.52
1:R:18:LEU:HD23	1:R:73:LEU:HD21	1.90	0.52
1:X:1:ALA:HB1	1:X:25:ARG:HG3	1.91	0.52
2:s:9:SER:HB2	1:u:91:LEU:HD11	1.90	0.52
1:0:24:LEU:HB2	1:0:64:LYS:HB3	1.92	0.52
2:N:7:THR:HG21	1:R:90:GLY:HA3	1.92	0.52
2:O:83:ILE:CG2	2:O:131:ARG:HB2	2.40	0.52
1:R:6:THR:HB	1:R:7:PRO:HD3	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:39:LYS:O	1:i:79:GLY:HA3	2.09	0.52
2:l:111:ALA:O	2:l:112:LYS:HD2	2.10	0.52
2:r:78:HIS:HA	2:r:136:ILE:HG22	1.92	0.52
2:w:103:ARG:HG2	2:w:105:THR:H	1.74	0.52
2:x:62:VAL:HG12	2:x:150:VAL:HG13	1.91	0.52
2:4:98:LYS:HE2	2:4:116:GLU:OE1	2.10	0.52
1:5:18:LEU:HD23	1:5:73:LEU:HD21	1.92	0.52
2:N:63:LEU:HD13	2:N:117:PRO:HB3	1.92	0.52
1:d:33:SER:HB2	1:d:86:GLU:HB2	1.90	0.52
2:g:83:ILE:CG2	2:g:131:ARG:HB2	2.40	0.52
2:3:47:GLN:HG2	2:3:133:SER:HB3	1.92	0.52
2:A:55:LEU:HD11	1:F:91:LEU:HD12	1.91	0.52
1:D:6:THR:OG1	1:D:7:PRO:HD3	2.10	0.52
2:Z:29:LEU:HD13	2:Z:32:ARG:NH1	2.25	0.52
2:a:13:VAL:HG12	2:a:155:ILE:HG13	1.92	0.52
2:f:138:ARG:HH21	2:l:138:ARG:HH22	1.58	0.52
2:m:81:SER:HB2	2:m:90:LYS:HG2	1.92	0.52
2:M:53:GLU:OE2	1:R:89:TYR:CE1	2.61	0.51
1:P:29:CYS:HA	1:P:87:CYS:HA	1.91	0.51
1:p:56:VAL:HG23	1:p:69:ARG:HB3	1.92	0.51
2:w:106:PRO:HA	2:y:103:ARG:HE	1.75	0.51
2:N:44:ARG:HD3	2:N:49:VAL:HG21	1.92	0.51
1:Q:55:TYR:HD1	1:Q:70:ILE:HG12	1.75	0.51
2:U:11:LYS:HD2	2:U:156:ALA:O	2.10	0.51
1:u:66:PHE:CE2	1:u:83:CYS:HB2	2.46	0.51
1:5:55:TYR:CD1	1:5:70:ILE:HG12	2.45	0.51
1:L:31:THR:HG21	1:L:64:LYS:HA	1.91	0.51
2:M:106:PRO:HB3	2:M:109:ALA:HB3	1.92	0.51
2:T:102:GLN:HE22	2:U:101:CYS:HA	1.74	0.51
2:U:61:GLN:HB3	2:U:151:TYR:CZ	2.45	0.51
1:o:2:ARG:HD3	1:o:96:VAL:HG11	1.92	0.51
1:o:23:VAL:HA	1:o:64:LYS:O	2.10	0.51
1:E:82:ARG:HG2	1:E:99:GLY:HA2	1.92	0.51
1:P:55:TYR:HD1	1:P:70:ILE:HG12	1.75	0.51
2:e:47:GLN:HG2	2:e:133:SER:HB3	1.91	0.51
2:s:83:ILE:HG13	2:s:90:LYS:HA	1.92	0.51
1:0:14:THR:OG1	1:0:75:VAL:HG22	2.11	0.51
2:C:22:ALA:HB1	2:C:25:GLN:HG3	1.93	0.51
1:d:18:LEU:HD23	1:d:73:LEU:HD21	1.93	0.51
2:k:82:ARG:NH1	2:k:130:ASP:OD2	2.43	0.51
2:l:106:PRO:O	2:l:110:GLU:HG3	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:1:ALA:N	1:p:25:ARG:HG3	2.25	0.51
1:p:5:GLN:HG2	1:p:22:CYS:SG	2.51	0.51
2:4:60:SER:HB2	2:4:152:PHE:HD1	1.76	0.51
1:5:5:GLN:HG2	1:5:22:CYS:SG	2.51	0.51
2:T:83:ILE:HD13	2:T:131:ARG:NH2	2.26	0.51
2:2:103:ARG:HG3	2:2:104:GLU:H	1.76	0.51
1:R:8:GLN:HG3	1:R:9:THR:H	1.74	0.51
1:R:16:GLU:HG3	1:R:17:SER:H	1.74	0.51
2:A:10:ASP:CG	2:A:11:LYS:H	2.19	0.51
2:C:44:ARG:HD3	2:C:49:VAL:HG21	1.92	0.51
1:j:13:GLU:HB3	1:j:16:GLU:HG3	1.93	0.51
2:G:74:VAL:HG23	2:G:100:PRO:HD2	1.93	0.51
2:q:55:LEU:HD11	1:v:91:LEU:HD12	1.92	0.51
2:4:57:LEU:HB3	2:4:155:ILE:HG23	1.93	0.51
2:M:74:VAL:HG23	2:M:100:PRO:HD2	1.93	0.51
2:l:23:GLU:HA	2:l:144:PHE:HZ	1.76	0.51
1:R:55:TYR:HD1	1:R:70:ILE:HG12	1.75	0.50
1:V:74:THR:O	1:V:104:THR:HG21	2.11	0.50
1:n:24:LEU:HD11	1:n:66:PHE:HE1	1.75	0.50
2:y:63:LEU:HD22	2:y:143:ASP:HB3	1.92	0.50
1:5:55:TYR:HD1	1:5:70:ILE:HG12	1.76	0.50
2:A:98:LYS:HB2	2:A:118:ILE:HD11	1.93	0.50
1:0:54:ARG:HD2	1:0:72:ASP:HB2	1.92	0.50
2:2:103:ARG:CG	2:2:104:GLU:H	2.25	0.50
2:A:96:ALA:HB2	2:B:61:GLN:HE22	1.77	0.50
1:Q:12:LYS:HE2	1:Q:16:GLU:OE1	2.10	0.50
2:U:26:LEU:HD13	2:U:142:LEU:HD11	1.92	0.50
1:u:6:THR:OG1	1:u:7:PRO:HD3	2.11	0.50
2:4:83:ILE:CG2	2:4:131:ARG:HB2	2.42	0.50
1:7:31:THR:HG21	1:7:61:SER:HA	1.93	0.50
1:F:6:THR:HB	1:F:7:PRO:HD3	1.94	0.50
1:F:58:THR:O	1:F:66:PHE:HA	2.11	0.50
1:v:36:TRP:HE1	1:v:57:GLU:CD	2.19	0.50
2:G:26:LEU:HD13	2:G:142:LEU:HD11	1.92	0.50
2:I:57:LEU:HB2	2:I:157:LEU:HD11	1.93	0.50
2:a:10:ASP:CG	2:a:11:LYS:H	2.19	0.50
2:A:82:ARG:NH1	2:A:130:ASP:OD2	2.45	0.50
2:B:70:PRO:HA	2:B:105:THR:HG22	1.92	0.50
2:B:95:SER:HB3	2:C:149:GLN:HG2	1.94	0.50
1:c:1:ALA:N	1:c:25:ARG:HD3	2.26	0.50
2:k:63:LEU:HD11	2:m:97:ILE:H	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:31:THR:HG22	1:0:59:VAL:HG23	1.93	0.50
2:A:103:ARG:HD2	2:B:112:LYS:NZ	2.26	0.50
1:j:36:TRP:HB3	1:j:49:ILE:HD12	1.94	0.50
1:1:16:GLU:O	1:1:72:ASP:HA	2.12	0.50
2:U:87:TYR:OH	1:V:1:ALA:HA	2.12	0.50
2:Y:98:LYS:HE2	2:Y:116:GLU:OE2	2.12	0.50
1:d:35:TYR:HB2	1:d:84:ALA:HB3	1.94	0.50
1:i:5:GLN:OE1	1:i:100:GLY:HA3	2.11	0.50
2:m:57:LEU:O	2:m:154:ILE:HA	2.12	0.50
1:t:84:ALA:HA	1:t:96:VAL:O	2.11	0.50
2:2:59:TYR:CE2	2:4:122:GLY:HA2	2.47	0.50
1:J:38:ARG:HB2	1:J:49:ILE:HD11	1.94	0.50
2:N:60:SER:HB3	2:N:80:ILE:HD11	1.94	0.50
2:f:28:TRP:HB2	2:f:43:LEU:HD21	1.94	0.50
1:h:1:ALA:C	1:h:3:VAL:H	2.20	0.50
1:D:7:PRO:HG2	1:D:20:ILE:HA	1.93	0.49
2:I:42:GLU:HB2	2:I:49:VAL:HB	1.94	0.49
2:I:62:VAL:HG11	2:I:136:ILE:HG21	1.94	0.49
2:g:83:ILE:HG23	2:g:131:ARG:HB2	1.94	0.49
2:2:23:GLU:HG3	2:2:24:GLY:N	2.26	0.49
1:7:14:THR:OG1	1:7:75:VAL:HG22	2.11	0.49
2:G:60:SER:HB3	2:G:80:ILE:HD11	1.93	0.49
2:U:16:VAL:HG11	2:U:43:LEU:HD12	1.93	0.49
1:d:56:VAL:HG23	1:d:69:ARG:HB3	1.94	0.49
1:Q:39:LYS:HB2	1:Q:46:GLU:HG2	1.93	0.49
1:V:66:PHE:HE2	1:V:83:CYS:HB2	1.77	0.49
1:W:23:VAL:HG22	1:W:65:SER:HB3	1.95	0.49
2:Z:103:ARG:HG2	2:Z:106:PRO:HG3	1.94	0.49
2:l:72:THR:HG23	2:l:74:VAL:HG13	1.93	0.49
1:o:10:ILE:HB	1:o:102:VAL:HA	1.95	0.49
2:y:19:ASN:HB3	2:y:22:ALA:HB2	1.94	0.49
1:K:55:TYR:HD1	1:K:70:ILE:HG12	1.77	0.49
1:K:66:PHE:HE1	1:K:83:CYS:HB2	1.77	0.49
2:O:62:VAL:HG23	2:O:78:HIS:CE1	2.47	0.49
2:U:62:VAL:HG11	2:U:136:ILE:HD13	1.94	0.49
2:Z:19:ASN:HB3	2:Z:22:ALA:HB2	1.93	0.49
1:i:23:VAL:HG22	1:i:65:SER:HB3	1.95	0.49
1:6:71:ASN:O	1:6:72:ASP:C	2.54	0.49
1:K:6:THR:OG1	1:K:7:PRO:HD3	2.12	0.49
2:S:151:TYR:CZ	2:U:94:LEU:HD22	2.48	0.49
2:Z:63:LEU:H	2:Z:150:VAL:HG22	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:l:47:GLN:HG2	2:l:133:SER:HB3	1.95	0.49
2:q:26:LEU:HD11	2:q:28:TRP:CZ2	2.46	0.49
2:e:112:LYS:HG3	2:g:73:HIS:NE2	2.27	0.49
1:h:6:THR:CG2	1:h:7:PRO:HD3	2.38	0.49
1:i:14:THR:OG1	1:i:106:ASN:HA	2.13	0.49
1:j:2:ARG:HD3	1:j:96:VAL:HG12	1.93	0.49
2:k:13:VAL:HG11	2:m:55:LEU:HD21	1.94	0.49
2:k:63:LEU:HD22	2:k:143:ASP:HB3	1.94	0.49
1:o:7:PRO:HG2	1:o:20:ILE:HG23	1.95	0.49
2:4:57:LEU:HB2	2:4:157:LEU:HD11	1.94	0.49
2:G:125:GLN:HB2	2:H:36:LEU:HD21	1.95	0.49
2:H:125:GLN:HB2	2:I:36:LEU:HD21	1.95	0.49
1:R:12:LYS:HE2	1:R:16:GLU:HG2	1.95	0.49
2:a:42:GLU:HB2	2:a:49:VAL:HB	1.94	0.49
2:a:94:LEU:HB2	2:a:120:LEU:HD23	1.94	0.49
2:s:12:PRO:HA	2:s:39:ASN:HB2	1.95	0.49
1:v:6:THR:OG1	1:v:7:PRO:HD3	2.12	0.49
1:1:7:PRO:HG2	1:1:20:ILE:HG12	1.94	0.49
2:2:5:SER:HB3	1:5:89:TYR:O	2.11	0.49
2:H:57:LEU:HB2	2:H:157:LEU:HD11	1.94	0.49
1:Q:36:TRP:CZ3	1:Q:83:CYS:HB3	2.47	0.49
1:W:6:THR:OG1	1:W:7:PRO:HD3	2.13	0.49
2:l:73:HIS:NE2	2:m:112:LYS:HE3	2.27	0.49
1:p:39:LYS:HB2	1:p:46:GLU:HG2	1.93	0.49
1:O:66:PHE:HE2	1:O:83:CYS:HB2	1.78	0.49
1:7:58:THR:O	1:7:66:PHE:HA	2.13	0.49
2:M:62:VAL:HG21	2:M:136:ILE:HG21	1.93	0.49
2:M:101:CYS:SG	2:M:104:GLU:HB2	2.53	0.49
2:k:82:ARG:HD3	2:k:93:LEU:HD21	1.95	0.49
2:k:93:LEU:HB3	2:k:124:PHE:CZ	2.47	0.49
2:s:60:SER:HB3	2:s:152:PHE:HD1	1.76	0.49
2:2:104:GLU:HB2	2:4:103:ARG:HH22	1.78	0.48
2:A:157:LEU:HD13	2:B:155:ILE:HG12	1.95	0.48
2:B:123:VAL:HG21	2:C:155:ILE:HG21	1.93	0.48
2:H:103:ARG:HH21	2:H:112:LYS:HZ1	1.61	0.48
1:P:35:TYR:HB2	1:P:84:ALA:HB3	1.95	0.48
2:r:125:GLN:HB2	2:s:36:LEU:HD21	1.95	0.48
1:O:80:THR:HG23	1:O:101:THR:OG1	2.14	0.48
2:3:103:ARG:CG	2:3:104:GLU:H	2.23	0.48
2:I:64:PHE:HE2	2:I:118:ILE:HD12	1.78	0.48
1:i:13:GLU:HB3	1:i:16:GLU:CG	2.42	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:29:CYS:HA	1:D:87:CYS:HA	1.95	0.48
1:L:5:GLN:HG2	1:L:6:THR:O	2.13	0.48
2:O:47:GLN:HG2	2:O:133:SER:HB3	1.95	0.48
1:W:39:LYS:HZ3	1:W:44:THR:HA	1.78	0.48
2:k:2:ARG:HB2	1:n:31:THR:HG22	1.96	0.48
2:m:103:ARG:HG2	2:m:104:GLU:H	1.78	0.48
2:q:58:ILE:HD12	2:q:124:PHE:CD2	2.37	0.48
2:2:26:LEU:HG	2:2:142:LEU:HD11	1.95	0.48
2:B:65:LYS:HB3	2:B:143:ASP:HB2	1.95	0.48
2:H:64:PHE:CE1	2:H:76:LEU:HD12	2.49	0.48
1:K:80:THR:HG23	1:K:101:THR:OG1	2.13	0.48
2:O:5:SER:HB3	1:Q:89:TYR:CE1	2.48	0.48
2:e:106:PRO:HB3	2:e:109:ALA:HB3	1.95	0.48
1:i:3:VAL:HG22	1:i:24:LEU:HD23	1.95	0.48
1:j:55:TYR:HA	1:j:69:ARG:O	2.13	0.48
1:t:35:TYR:HB2	1:t:84:ALA:HB3	1.95	0.48
1:u:1:ALA:N	1:u:25:ARG:HD2	2.29	0.48
2:x:44:ARG:HD2	2:x:49:VAL:HG21	1.95	0.48
2:2:69:CYS:O	2:2:106:PRO:HD2	2.13	0.48
2:I:94:LEU:HB2	2:I:120:LEU:HD23	1.95	0.48
1:p:5:GLN:NE2	1:p:82:ARG:HA	2.29	0.48
1:l:5:GLN:HG2	1:l:83:CYS:SG	2.53	0.48
1:7:105:VAL:HG12	1:7:106:ASN:H	1.79	0.48
2:G:112:LYS:HE3	2:I:103:ARG:NE	2.28	0.48
2:M:151:TYR:CZ	2:O:94:LEU:HD22	2.47	0.48
2:Y:49:VAL:HG22	2:Y:131:ARG:HD3	1.95	0.48
1:o:40:LYS:HD3	1:o:47:GLU:OE2	2.14	0.48
1:t:83:CYS:O	1:t:97:TYR:HA	2.14	0.48
1:v:18:LEU:HD22	1:v:102:VAL:HG21	1.94	0.48
2:A:109:ALA:HB3	2:C:103:ARG:HD2	1.96	0.48
1:c:39:LYS:HD2	1:c:44:THR:HA	1.96	0.48
2:y:69:CYS:HB3	2:y:105:THR:HG22	1.95	0.48
1:7:19:THR:HA	1:7:69:ARG:HA	1.96	0.48
2:B:57:LEU:O	2:B:154:ILE:HA	2.13	0.48
1:R:3:VAL:HG22	1:R:24:LEU:HD23	1.96	0.48
2:Y:82:ARG:NH1	2:Y:130:ASP:OD2	2.46	0.48
2:A:55:LEU:HD13	2:B:10:ASP:OD2	2.14	0.48
2:M:82:ARG:NH1	2:M:130:ASP:OD2	2.47	0.48
2:M:146:GLU:HB2	2:M:149:GLN:CD	2.38	0.48
2:e:147:SER:O	2:e:149:GLN:N	2.47	0.48
2:f:53:GLU:HG2	2:f:128:LYS:H	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:o:12:LYS:O	1:o:104:THR:HA	2.13	0.48
2:A:60:SER:HB3	2:A:80:ILE:HD11	1.96	0.48
2:G:110:GLU:HB3	2:G:112:LYS:HZ2	1.78	0.48
2:S:102:GLN:O	2:S:104:GLU:HG2	2.14	0.48
1:V:24:LEU:HD11	1:V:66:PHE:HE1	1.78	0.48
2:m:26:LEU:HD22	2:m:136:ILE:HG12	1.95	0.48
2:w:49:VAL:HG22	2:w:131:ARG:HG2	1.96	0.48
2:B:53:GLU:OE2	2:C:6:ARG:HB3	2.13	0.47
1:E:36:TRP:CE2	1:E:68:LEU:HB2	2.49	0.47
1:F:3:VAL:HG12	1:F:96:VAL:HG12	1.96	0.47
1:J:18:LEU:HD23	1:J:73:LEU:HD21	1.96	0.47
1:L:10:ILE:HB	1:L:102:VAL:HG12	1.96	0.47
1:V:18:LEU:HD22	1:V:102:VAL:HG11	1.96	0.47
1:W:38:ARG:HH11	1:W:40:LYS:HG2	1.79	0.47
1:X:5:GLN:HG2	1:X:22:CYS:SG	2.54	0.47
1:7:56:VAL:O	1:7:68:LEU:HD12	2.13	0.47
1:W:33:SER:HB2	1:W:86:GLU:HB2	1.96	0.47
2:e:82:ARG:HB2	2:e:93:LEU:HD11	1.96	0.47
2:k:110:GLU:H	2:k:112:LYS:HE2	1.78	0.47
1:o:49:ILE:HG23	1:o:51:LYS:NZ	2.29	0.47
2:q:72:THR:HG23	2:q:73:HIS:ND1	2.28	0.47
2:w:103:ARG:HG2	2:w:105:THR:N	2.27	0.47
2:2:23:GLU:CG	2:2:24:GLY:H	2.24	0.47
1:F:22:CYS:HB2	1:F:66:PHE:CE2	2.49	0.47
2:e:62:VAL:HG13	2:e:142:LEU:HD21	1.96	0.47
2:g:94:LEU:HB2	2:g:120:LEU:HD23	1.95	0.47
2:C:11:LYS:O	2:C:13:VAL:HG13	2.14	0.47
2:C:74:VAL:O	2:C:100:PRO:HD2	2.14	0.47
1:F:75:VAL:HA	1:F:104:THR:HB	1.95	0.47
1:J:21:ASN:ND2	1:J:67:SER:HB3	2.28	0.47
1:c:3:VAL:HA	1:c:23:VAL:O	2.14	0.47
2:m:10:ASP:CG	2:m:11:LYS:H	2.22	0.47
2:q:10:ASP:CG	2:q:11:LYS:H	2.23	0.47
2:r:127:GLU:HG2	1:u:89:TYR:HE2	1.80	0.47
2:2:104:GLU:O	2:2:105:THR:C	2.57	0.47
1:D:31:THR:HB	1:D:59:VAL:HG21	1.97	0.47
1:E:41:SER:OG	1:E:79:GLY:HA2	2.15	0.47
1:n:74:THR:O	1:n:104:THR:HG21	2.14	0.47
2:4:41:VAL:HG22	2:4:51:PRO:HD3	1.96	0.47
1:F:54:ARG:HB3	1:F:70:ILE:HD12	1.96	0.47
1:L:54:ARG:O	1:L:70:ILE:HA	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m:94:LEU:HB2	2:m:120:LEU:HD23	1.96	0.47
2:q:147:SER:HB3	2:s:92:ASN:HB2	1.96	0.47
2:r:60:SER:HB3	2:r:80:ILE:HD11	1.96	0.47
1:0:66:PHE:CE2	1:0:83:CYS:HB2	2.49	0.47
2:3:90:LYS:HE2	2:3:90:LYS:HB3	1.68	0.47
2:C:57:LEU:HB2	2:C:157:LEU:HD11	1.95	0.47
1:E:14:THR:HB	1:E:106:ASN:CG	2.40	0.47
1:L:5:GLN:HG3	1:L:99:GLY:O	2.15	0.47
1:Q:38:ARG:HG3	1:Q:81:TYR:CZ	2.50	0.47
2:S:6:ARG:HB2	1:V:89:TYR:CE1	2.50	0.47
2:T:110:GLU:HB3	2:T:111:ALA:H	1.53	0.47
2:U:58:ILE:HD13	2:U:132:LEU:HD11	1.97	0.47
2:Y:112:LYS:HD3	2:a:73:HIS:NE2	2.30	0.47
1:b:7:PRO:HB2	1:b:10:ILE:HD11	1.96	0.47
1:d:6:THR:OG1	1:d:7:PRO:HD3	2.15	0.47
2:f:82:ARG:HD2	2:f:93:LEU:HD11	1.95	0.47
2:s:67:GLN:HG3	2:s:111:ALA:HB1	1.96	0.47
2:x:146:GLU:HB2	2:x:149:GLN:NE2	2.30	0.47
1:z:6:THR:OG1	1:z:7:PRO:HD3	2.14	0.47
1:D:12:LYS:O	1:D:104:THR:HA	2.15	0.47
1:P:6:THR:OG1	1:P:7:PRO:HD3	2.14	0.47
2:Y:7:THR:HG23	2:Y:8:PRO:HD2	1.97	0.47
2:f:93:LEU:HB3	2:f:124:PHE:CZ	2.49	0.47
2:2:76:LEU:CD2	2:2:100:PRO:HB3	2.44	0.47
2:A:127:GLU:HG2	2:A:128:LYS:H	1.80	0.47
2:C:48:LEU:HD13	2:C:152:PHE:CE2	2.49	0.47
2:M:7:THR:HG23	2:M:8:PRO:HD2	1.96	0.47
2:M:10:ASP:CG	2:M:11:LYS:H	2.23	0.47
2:M:49:VAL:HG22	2:M:131:ARG:HG2	1.96	0.47
2:O:106:PRO:HB2	2:O:109:ALA:HB3	1.95	0.47
2:Z:96:ALA:HB2	2:a:61:GLN:HE22	1.79	0.47
2:Z:146:GLU:HB2	2:Z:149:GLN:NE2	2.29	0.47
2:e:103:ARG:O	2:e:104:GLU:HB3	2.14	0.47
1:j:18:LEU:HG	1:j:70:ILE:HD12	1.96	0.47
1:W:84:ALA:HA	1:W:96:VAL:O	2.15	0.47
2:e:72:THR:HG23	2:e:103:ARG:HA	1.97	0.47
2:x:70:PRO:HB2	2:x:72:THR:HG22	1.97	0.47
1:6:39:LYS:HD2	1:6:46:GLU:HG2	1.97	0.46
2:H:96:ALA:HB2	2:H:120:LEU:HD21	1.96	0.46
1:1:24:LEU:HB3	1:1:64:LYS:HG2	1.97	0.46
1:F:56:VAL:O	1:F:68:LEU:HA	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2:96:ALA:HB2	2:3:61:GLN:HE22	1.79	0.46
2:3:11:LYS:HB2	2:3:12:PRO:HD2	1.97	0.46
2:B:71:SER:H	2:B:105:THR:HG23	1.80	0.46
2:S:127:GLU:HG2	1:X:89:TYR:HE2	1.79	0.46
1:p:2:ARG:O	1:p:3:VAL:HB	2.14	0.46
2:x:62:VAL:HA	2:x:150:VAL:HG22	1.98	0.46
2:A:58:ILE:HD11	2:A:126:LEU:HD11	1.96	0.46
2:I:73:HIS:CE1	2:I:99:SER:HB2	2.50	0.46
1:j:15:GLY:H	1:j:73:LEU:HB3	1.80	0.46
1:o:49:ILE:HG23	1:o:51:LYS:HZ1	1.81	0.46
1:p:5:GLN:HG3	1:p:99:GLY:H	1.80	0.46
2:q:104:GLU:OE2	2:s:102:GLN:O	2.33	0.46
2:q:146:GLU:O	2:q:149:GLN:HG3	2.16	0.46
2:I:85:VAL:HA	2:I:88:GLN:NE2	2.30	0.46
2:S:55:LEU:HD13	2:T:10:ASP:OD2	2.16	0.46
1:j:70:ILE:HG22	1:j:71:ASN:N	2.31	0.46
2:l:106:PRO:HG2	2:l:112:LYS:HG2	1.98	0.46
2:m:60:SER:HB2	2:m:152:PHE:HD1	1.80	0.46
1:Q:37:TYR:HD1	1:Q:48:SER:HA	1.81	0.46
2:U:62:VAL:HG11	2:U:136:ILE:HG21	1.97	0.46
2:f:5:SER:HA	1:i:89:TYR:CD1	2.50	0.46
2:f:63:LEU:HD13	2:f:117:PRO:HB3	1.97	0.46
2:x:26:LEU:HD13	2:x:142:LEU:HD11	1.97	0.46
2:y:63:LEU:H	2:y:150:VAL:CG1	2.28	0.46
1:7:40:LYS:HD3	1:7:47:GLU:OE2	2.15	0.46
1:D:9:THR:HG22	1:D:101:THR:HG22	1.98	0.46
2:G:22:ALA:HB1	2:G:25:GLN:HG3	1.98	0.46
2:Y:70:PRO:HA	2:Y:105:THR:HG23	1.98	0.46
2:g:55:LEU:HD11	1:h:91:LEU:HD12	1.98	0.46
1:j:58:THR:HB	1:j:67:SER:HB3	1.97	0.46
1:7:9:THR:HA	1:7:101:THR:HB	1.98	0.46
1:J:37:TYR:HE2	1:J:97:TYR:HE1	1.64	0.46
2:T:49:VAL:HG22	2:T:131:ARG:HG2	1.97	0.46
2:Y:23:GLU:HA	2:Y:144:PHE:HZ	1.81	0.46
1:d:39:LYS:HE3	1:d:44:THR:HA	1.97	0.46
1:j:68:LEU:HD23	1:j:81:TYR:CE1	2.46	0.46
1:o:4:ASP:O	1:o:22:CYS:HA	2.16	0.46
2:2:60:SER:HB2	2:2:152:PHE:HD1	1.81	0.46
2:B:14:ALA:HB2	2:B:41:VAL:HG11	1.98	0.46
2:U:12:PRO:HA	2:U:39:ASN:HB2	1.97	0.46
2:x:57:LEU:HB3	2:x:155:ILE:HG23	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:z:31:THR:HB	1:z:59:VAL:CG2	2.46	0.46
2:H:83:ILE:HD13	2:H:131:ARG:NH2	2.31	0.46
2:Y:74:VAL:HG21	2:Y:101:CYS:HB2	1.98	0.46
1:u:57:GLU:HG3	1:u:67:SER:O	2.16	0.46
2:A:151:TYR:CZ	2:C:94:LEU:HD22	2.51	0.45
1:F:73:LEU:HD22	1:F:77:ASP:CG	2.41	0.45
1:J:24:LEU:HD23	1:J:29:CYS:HB2	1.98	0.45
2:T:9:SER:HA	1:X:91:LEU:HD11	1.98	0.45
1:V:29:CYS:HA	1:V:87:CYS:HA	1.99	0.45
2:Z:122:GLY:HA2	2:a:59:TYR:CE2	2.51	0.45
2:g:33:ALA:HA	1:j:94:TYR:CD2	2.52	0.45
2:m:58:ILE:HD12	2:m:124:PHE:CD2	2.49	0.45
1:u:10:ILE:HD11	1:u:102:VAL:HG22	1.98	0.45
1:v:16:GLU:O	1:v:71:ASN:HA	2.16	0.45
1:v:22:CYS:HB2	1:v:66:PHE:CE1	2.51	0.45
2:w:100:PRO:HB3	2:w:116:GLU:HG3	1.98	0.45
2:2:104:GLU:HB2	2:4:103:ARG:NH2	2.31	0.45
2:3:83:ILE:HD11	2:3:131:ARG:CZ	2.46	0.45
1:7:38:ARG:HB2	1:7:81:TYR:CD1	2.50	0.45
2:a:62:VAL:HG11	2:a:136:ILE:HG21	1.98	0.45
2:l:55:LEU:HD12	2:l:55:LEU:H	1.82	0.45
1:n:36:TRP:CE2	1:n:68:LEU:HB2	2.51	0.45
1:o:68:LEU:HD23	1:o:70:ILE:HD11	1.96	0.45
2:r:55:LEU:HD23	2:s:13:VAL:HG11	1.98	0.45
2:w:105:THR:O	2:w:107:GLU:HB2	2.16	0.45
1:z:55:TYR:HD1	1:z:70:ILE:HG12	1.80	0.45
2:3:30:ASN:HD22	2:3:37:LEU:HD23	1.82	0.45
1:5:14:THR:OG1	1:5:106:ASN:HA	2.16	0.45
2:N:92:ASN:HB2	2:O:147:SER:OG	2.16	0.45
2:O:63:LEU:HD22	2:O:143:ASP:HB3	1.98	0.45
1:o:5:GLN:HG2	1:o:7:PRO:HD2	1.98	0.45
1:u:47:GLU:H	1:u:47:GLU:HG2	1.64	0.45
2:w:22:ALA:HB1	2:w:25:GLN:HG3	1.97	0.45
1:0:38:ARG:HD3	1:0:40:LYS:HD3	1.98	0.45
1:5:36:TRP:CZ3	1:5:83:CYS:HB3	2.51	0.45
2:Z:102:GLN:HG2	2:a:102:GLN:HE21	1.82	0.45
1:d:7:PRO:HG2	1:d:20:ILE:HG12	1.99	0.45
2:e:83:ILE:CG2	2:e:131:ARG:HB2	2.46	0.45
2:k:62:VAL:HG13	2:k:142:LEU:HD21	1.97	0.45
2:l:126:LEU:HD13	2:l:132:LEU:HD11	1.97	0.45
1:o:6:THR:OG1	1:o:7:PRO:HD3	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:35:TYR:HB2	1:u:84:ALA:HB3	1.99	0.45
1:5:5:GLN:HE21	1:5:5:GLN:HB3	1.54	0.45
1:6:18:LEU:HD23	1:6:70:ILE:HD12	1.99	0.45
2:C:44:ARG:HB3	2:C:45:ASP:H	1.67	0.45
1:E:36:TRP:CZ3	1:E:83:CYS:HB3	2.51	0.45
2:G:58:ILE:HD12	2:G:124:PHE:HD2	1.81	0.45
2:H:65:LYS:HA	2:H:114:TRP:O	2.16	0.45
1:c:71:ASN:O	1:c:72:ASP:C	2.60	0.45
1:d:7:PRO:HG2	1:d:20:ILE:HA	1.99	0.45
2:k:58:ILE:HD12	2:k:124:PHE:HD2	1.81	0.45
2:3:53:GLU:HA	2:3:126:LEU:O	2.17	0.45
1:P:59:VAL:HG12	1:P:66:PHE:HB3	1.97	0.45
2:s:60:SER:HB3	2:s:152:PHE:CD1	2.52	0.45
1:u:1:ALA:H1	1:u:25:ARG:HD2	1.82	0.45
2:2:103:ARG:HE	2:2:104:GLU:N	2.15	0.45
2:f:56:TYR:CD2	2:f:154:ILE:HD12	2.52	0.45
2:g:23:GLU:O	2:g:23:GLU:HG2	2.17	0.45
1:u:20:ILE:O	1:u:67:SER:HA	2.17	0.45
1:1:18:LEU:HD11	1:1:70:ILE:HD12	1.98	0.45
2:B:58:ILE:HG21	2:B:80:ILE:HG21	1.99	0.45
2:M:57:LEU:O	2:M:154:ILE:HA	2.17	0.45
2:N:98:LYS:HE2	2:N:116:GLU:OE2	2.16	0.45
1:P:26:ASP:HB3	1:P:29:CYS:SG	2.57	0.45
2:S:58:ILE:O	2:S:121:GLY:HA2	2.17	0.45
2:T:58:ILE:HG21	2:T:80:ILE:HG21	1.98	0.45
1:V:38:ARG:HB3	1:V:49:ILE:HD11	1.97	0.45
2:Y:122:GLY:HA2	2:Z:59:TYR:CE2	2.51	0.45
1:i:18:LEU:HD22	1:i:102:VAL:HG11	1.98	0.45
2:m:58:ILE:O	2:m:121:GLY:HA2	2.16	0.45
1:F:38:ARG:HH12	1:F:40:LYS:NZ	2.15	0.45
1:F:80:THR:HG22	1:F:101:THR:HG22	1.99	0.45
2:G:69:CYS:HB2	2:G:106:PRO:HD3	1.98	0.45
2:O:103:ARG:HE	2:O:104:GLU:H	1.65	0.45
2:a:58:ILE:O	2:a:121:GLY:HA2	2.17	0.45
1:b:7:PRO:HG2	1:b:20:ILE:HA	1.99	0.45
2:l:5:SER:HA	1:p:89:TYR:HE1	1.81	0.45
2:q:82:ARG:HD3	2:q:93:LEU:HD21	1.99	0.45
1:v:16:GLU:H	1:v:73:LEU:HD21	1.82	0.45
1:0:39:LYS:HB2	1:0:46:GLU:HG2	1.99	0.45
2:2:62:VAL:HG11	2:2:136:ILE:HG21	1.99	0.45
2:2:80:ILE:HD12	2:2:94:LEU:HD12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:54:ARG:NE	1:F:71:ASN:HB2	2.23	0.45
2:N:55:LEU:HD13	2:O:13:VAL:HG11	1.98	0.45
1:Q:108:ALA:HA	1:Q:110:HIS:CE1	2.52	0.45
2:a:30:ASN:HD22	2:a:37:LEU:HD23	1.82	0.45
1:b:2:ARG:O	1:b:3:VAL:HB	2.16	0.45
2:e:87:TYR:HE1	1:i:1:ALA:H2	1.65	0.45
1:j:56:VAL:O	1:j:68:LEU:HA	2.16	0.45
2:q:102:GLN:O	2:q:103:ARG:HB3	2.17	0.45
2:3:126:LEU:HD13	2:3:132:LEU:HD11	1.99	0.44
1:K:5:GLN:NE2	1:K:20:ILE:HG21	2.31	0.44
2:N:82:ARG:NE	2:N:84:ALA:HB2	2.32	0.44
2:Y:60:SER:HB3	2:Y:80:ILE:HD11	1.99	0.44
1:b:2:ARG:HG2	1:b:96:VAL:HG11	2.00	0.44
2:m:20:PRO:HA	2:m:144:PHE:CD1	2.53	0.44
1:p:6:THR:OG1	1:p:21:ASN:HB2	2.17	0.44
1:z:19:THR:HG23	1:z:69:ARG:HB2	1.98	0.44
1:E:57:GLU:HG3	1:E:67:SER:O	2.17	0.44
2:G:22:ALA:O	2:G:25:GLN:HG2	2.17	0.44
2:H:56:TYR:CD2	2:H:154:ILE:HD12	2.53	0.44
2:H:70:PRO:HB2	2:H:72:THR:HG22	1.98	0.44
1:J:30:ALA:HA	3:J:201:GOL:H2	1.99	0.44
2:N:56:TYR:CD2	2:N:154:ILE:HD12	2.52	0.44
1:Q:10:ILE:HD11	1:Q:102:VAL:HG22	1.98	0.44
1:Q:18:LEU:HD23	1:Q:73:LEU:HD21	1.99	0.44
2:T:61:GLN:HB2	2:T:119:TYR:HD1	1.82	0.44
1:c:2:ARG:O	1:c:3:VAL:HG22	2.16	0.44
2:g:87:TYR:HE1	1:h:1:ALA:HB3	1.83	0.44
2:k:110:GLU:HG2	2:k:111:ALA:H	1.82	0.44
2:2:76:LEU:HD13	2:2:100:PRO:HG3	1.99	0.44
1:J:38:ARG:HG3	1:J:81:TYR:CZ	2.52	0.44
1:R:56:VAL:HG23	1:R:69:ARG:HB3	1.97	0.44
2:m:147:SER:O	2:m:149:GLN:HG3	2.16	0.44
1:o:18:LEU:HD22	1:o:20:ILE:HG12	2.00	0.44
2:x:123:VAL:HG21	2:y:155:ILE:HG21	2.00	0.44
2:2:31:ARG:CZ	1:D:23:VAL:HG21	2.47	0.44
2:3:27:GLN:HA	2:3:46:ASN:HD21	1.81	0.44
2:3:63:LEU:HD13	2:3:117:PRO:HB3	1.98	0.44
1:7:5:GLN:HG2	1:7:22:CYS:SG	2.57	0.44
1:7:19:THR:HB	1:7:67:SER:OG	2.16	0.44
1:7:37:TYR:CD1	1:7:48:SER:HA	2.52	0.44
2:A:105:THR:O	2:A:106:PRO:C	2.60	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:142:LEU:HD23	2:B:144:PHE:HD2	1.81	0.44
1:Q:38:ARG:HB2	1:Q:49:ILE:HD11	2.00	0.44
1:X:36:TRP:CZ3	1:X:83:CYS:HB3	2.52	0.44
2:e:151:TYR:CZ	2:g:94:LEU:HD22	2.52	0.44
1:5:31:THR:HG21	1:5:64:LYS:HA	1.98	0.44
1:7:58:THR:HB	1:7:67:SER:HB3	1.99	0.44
1:J:6:THR:OG1	1:J:7:PRO:HD3	2.17	0.44
2:N:44:ARG:NH1	2:N:131:ARG:HD3	2.33	0.44
1:W:26:ASP:HB3	1:W:29:CYS:SG	2.58	0.44
1:d:74:THR:O	1:d:104:THR:HG21	2.17	0.44
2:f:60:SER:HB3	2:f:80:ILE:HD11	2.00	0.44
2:l:87:TYR:CE2	2:l:89:THR:HB	2.53	0.44
1:o:33:SER:OG	1:o:86:GLU:HG3	2.18	0.44
2:s:10:ASP:CG	2:s:11:LYS:H	2.25	0.44
1:v:54:ARG:HD3	1:v:72:ASP:H	1.82	0.44
1:z:16:GLU:HG2	1:z:17:SER:H	1.82	0.44
1:0:36:TRP:CZ3	1:0:83:CYS:HB3	2.52	0.44
2:2:41:VAL:O	1:D:58:THR:HG23	2.18	0.44
2:G:94:LEU:HB2	2:G:120:LEU:HD23	1.98	0.44
1:L:18:LEU:HD21	1:L:73:LEU:HD13	1.99	0.44
1:R:33:SER:HB2	1:R:86:GLU:HB2	2.00	0.44
1:u:111:HIS:HB2	1:u:112:HIS:H	1.68	0.44
1:5:24:LEU:HD12	1:5:31:THR:HG22	2.00	0.44
2:I:58:ILE:O	2:I:121:GLY:HA2	2.17	0.44
1:P:13:GLU:HG2	1:P:14:THR:N	2.33	0.44
2:U:94:LEU:HB2	2:U:120:LEU:HD23	2.00	0.44
2:Y:59:TYR:CE2	2:a:122:GLY:HA2	2.53	0.44
2:a:58:ILE:HD12	2:a:124:PHE:CD2	2.52	0.44
1:b:3:VAL:HG22	1:b:24:LEU:HD23	1.99	0.44
2:l:58:ILE:HG12	2:l:154:ILE:HG22	1.99	0.44
1:o:20:ILE:HD12	1:o:68:LEU:HD23	1.99	0.44
1:o:36:TRP:CZ3	1:o:83:CYS:HB2	2.53	0.44
1:o:71:ASN:O	1:o:73:LEU:HD12	2.18	0.44
2:w:63:LEU:HD22	2:w:143:ASP:HB3	1.99	0.44
2:y:157:LEU:OXT	2:y:157:LEU:HD12	2.17	0.44
2:N:126:LEU:HD13	2:N:132:LEU:HD11	2.00	0.44
1:R:2:ARG:HG2	1:R:26:ASP:HB2	1.99	0.44
2:U:75:LEU:HD23	2:U:75:LEU:HA	1.87	0.44
1:b:36:TRP:CZ3	1:b:83:CYS:HB3	2.52	0.44
2:f:87:TYR:CZ	2:f:89:THR:HB	2.53	0.44
1:u:18:LEU:HD11	1:u:70:ILE:HD12	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:84:ALA:HA	1:u:96:VAL:O	2.18	0.44
2:w:57:LEU:O	2:w:154:ILE:HA	2.18	0.44
2:2:94:LEU:HD22	2:3:151:TYR:CZ	2.53	0.44
2:2:103:ARG:CG	2:3:103:ARG:HE	2.28	0.44
2:3:17:VAL:HG23	2:3:150:VAL:O	2.17	0.44
2:A:43:LEU:HB3	1:V:60:ASN:HD22	1.83	0.44
2:A:77:THR:HG22	2:A:97:ILE:HG12	1.99	0.44
1:V:84:ALA:HA	1:V:96:VAL:O	2.17	0.44
2:a:83:ILE:CG2	2:a:131:ARG:HB2	2.48	0.44
2:e:6:ARG:HH11	1:h:89:TYR:HE1	1.64	0.44
1:h:31:THR:HG21	1:h:64:LYS:HA	2.00	0.44
1:i:38:ARG:HG2	1:i:47:GLU:HG3	2.00	0.44
1:i:84:ALA:HA	1:i:96:VAL:O	2.17	0.44
2:k:72:THR:HG21	2:k:103:ARG:HD2	2.00	0.44
2:m:103:ARG:CG	2:m:104:GLU:H	2.30	0.44
1:V:31:THR:HG23	1:V:64:LYS:HD3	2.00	0.43
2:a:9:SER:HB2	1:c:91:LEU:HD11	1.99	0.43
1:0:27:SER:HA	1:0:64:LYS:NZ	2.33	0.43
2:2:16:VAL:HG23	2:2:28:TRP:CE3	2.54	0.43
1:5:5:GLN:OE1	1:5:82:ARG:HA	2.18	0.43
2:A:6:ARG:HB2	1:D:89:TYR:CE1	2.52	0.43
1:J:84:ALA:HA	1:J:96:VAL:O	2.18	0.43
1:R:51:LYS:O	1:R:51:LYS:HG3	2.17	0.43
2:Z:55:LEU:CD2	2:a:13:VAL:HG11	2.48	0.43
1:c:40:LYS:HE3	1:c:76:GLU:OE2	2.18	0.43
2:f:50:VAL:HG13	2:f:56:TYR:CZ	2.53	0.43
1:j:3:VAL:HG22	1:j:24:LEU:HD23	1.99	0.43
1:o:59:VAL:HA	1:o:66:PHE:HA	2.00	0.43
2:r:58:ILE:HG21	2:r:80:ILE:HG21	2.00	0.43
1:0:16:GLU:H	1:0:73:LEU:HB3	1.82	0.43
1:1:7:PRO:CG	1:1:20:ILE:HA	2.48	0.43
2:2:83:ILE:CG2	2:2:131:ARG:HB2	2.47	0.43
1:J:6:THR:HG1	1:J:7:PRO:HD3	1.83	0.43
2:O:127:GLU:HG2	1:P:89:TYR:HE2	1.83	0.43
1:P:19:THR:HG23	1:P:69:ARG:HB2	1.99	0.43
1:R:59:VAL:HG12	1:R:66:PHE:HB3	1.99	0.43
2:Z:125:GLN:HB2	2:a:36:LEU:HD21	2.00	0.43
2:f:11:LYS:HB2	2:f:12:PRO:HD2	2.00	0.43
2:g:58:ILE:HD12	2:g:124:PHE:CD2	2.52	0.43
1:i:29:CYS:HA	1:i:87:CYS:HA	2.00	0.43
2:k:122:GLY:HA2	2:l:59:TYR:CE2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:10:ILE:HD12	1:p:102:VAL:HG12	1.99	0.43
2:y:58:ILE:O	2:y:121:GLY:HA2	2.17	0.43
2:2:75:LEU:O	2:2:137:ASN:ND2	2.51	0.43
1:5:3:VAL:HG22	1:5:24:LEU:HD23	2.00	0.43
2:C:13:VAL:HG12	2:C:155:ILE:HG13	2.01	0.43
1:E:12:LYS:HE3	1:E:17:SER:C	2.43	0.43
2:I:26:LEU:HB2	2:I:142:LEU:HD11	2.01	0.43
1:L:18:LEU:HD22	1:L:73:LEU:HD22	2.00	0.43
1:P:24:LEU:HB2	1:P:64:LYS:HB3	2.00	0.43
2:S:142:LEU:HD23	2:S:142:LEU:HA	1.82	0.43
2:Y:28:TRP:HB2	2:Y:43:LEU:HD21	2.00	0.43
2:Y:74:VAL:HG23	2:Y:100:PRO:HD2	2.00	0.43
2:g:31:ARG:HG3	1:j:94:TYR:HA	2.01	0.43
2:k:44:ARG:O	2:k:47:GLN:HB2	2.18	0.43
2:k:82:ARG:NH1	2:k:126:LEU:HA	2.33	0.43
2:l:58:ILE:HG21	2:l:80:ILE:HG21	2.00	0.43
2:s:11:LYS:O	2:s:13:VAL:HG13	2.19	0.43
1:t:24:LEU:HD22	1:t:29:CYS:HB2	2.00	0.43
1:z:36:TRP:CZ3	1:z:83:CYS:HB3	2.53	0.43
1:0:18:LEU:HD11	1:0:70:ILE:HD12	2.00	0.43
2:A:102:GLN:O	2:A:104:GLU:HG2	2.18	0.43
2:G:57:LEU:HB3	2:G:155:ILE:HG23	2.00	0.43
2:M:26:LEU:HD21	2:M:28:TRP:CZ2	2.53	0.43
1:Q:80:THR:HG22	1:Q:101:THR:OG1	2.17	0.43
1:i:6:THR:CG2	1:i:7:PRO:HD3	2.48	0.43
1:i:22:CYS:HB2	1:i:66:PHE:CE1	2.53	0.43
1:i:55:TYR:HD1	1:i:70:ILE:HG12	1.83	0.43
1:o:7:PRO:HG3	1:o:18:LEU:HD21	2.01	0.43
2:q:26:LEU:HD11	2:q:28:TRP:CE2	2.53	0.43
2:r:125:GLN:HE22	1:u:90:GLY:H	1.66	0.43
1:5:11:THR:HG22	1:5:103:VAL:HG22	2.01	0.43
2:A:83:ILE:HG23	2:A:131:ARG:HB2	2.01	0.43
1:J:6:THR:HB	1:z:86:GLU:HG2	2.01	0.43
2:N:100:PRO:HB3	2:N:116:GLU:HG3	2.00	0.43
1:R:84:ALA:HA	1:R:96:VAL:O	2.17	0.43
2:U:79:THR:HG23	2:U:135:GLU:HG3	2.01	0.43
2:a:57:LEU:O	2:a:154:ILE:HA	2.19	0.43
2:f:138:ARG:NH2	2:l:138:ARG:HH22	2.15	0.43
1:n:40:LYS:HB2	1:n:40:LYS:HE3	1.63	0.43
1:u:75:VAL:HG21	1:u:106:ASN:ND2	2.34	0.43
1:1:6:THR:HB	1:1:7:PRO:HD3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:58:ILE:O	2:B:121:GLY:HA2	2.18	0.43
1:F:20:ILE:O	1:F:67:SER:HA	2.19	0.43
2:H:44:ARG:HH22	2:H:131:ARG:HD3	1.83	0.43
1:X:19:THR:HG22	1:X:69:ARG:HD3	2.00	0.43
2:e:26:LEU:HD23	2:e:26:LEU:C	2.43	0.43
1:o:30:ALA:C	1:o:32:SER:H	2.26	0.43
1:p:78:SER:HA	1:p:102:VAL:HG23	2.00	0.43
1:z:35:TYR:HB2	1:z:84:ALA:HB3	2.00	0.43
2:2:78:HIS:ND1	2:2:120:LEU:HD13	2.34	0.43
2:4:58:ILE:HG21	2:4:80:ILE:HG21	2.01	0.43
1:7:54:ARG:HH21	1:7:74:THR:HG23	1.83	0.43
2:B:79:THR:HG23	2:B:135:GLU:HG3	1.99	0.43
2:G:10:ASP:CG	2:G:11:LYS:H	2.27	0.43
2:I:74:VAL:O	2:I:100:PRO:HD2	2.18	0.43
2:N:16:VAL:HG22	2:N:152:PHE:O	2.18	0.43
1:c:12:LYS:O	1:c:104:THR:HA	2.19	0.43
2:s:16:VAL:HG11	2:s:43:LEU:HD12	2.01	0.43
1:1:2:ARG:HG2	1:1:26:ASP:HB2	2.00	0.43
1:7:36:TRP:CE3	1:7:68:LEU:HD22	2.54	0.43
1:F:79:GLY:H	1:F:102:VAL:HG13	1.84	0.43
2:S:5:SER:HA	1:V:89:TYR:O	2.19	0.43
2:S:58:ILE:HG21	2:S:80:ILE:HG21	2.01	0.43
1:d:7:PRO:HD2	1:d:20:ILE:HG23	2.01	0.43
2:f:55:LEU:HD11	2:g:9:SER:OG	2.18	0.43
2:g:53:GLU:OE2	1:h:89:TYR:CE2	2.71	0.43
2:g:157:LEU:H	2:g:157:LEU:HD23	1.84	0.43
2:k:20:PRO:HG3	2:k:32:ARG:NH2	2.34	0.43
2:k:105:THR:O	2:k:106:PRO:C	2.61	0.43
2:l:5:SER:HA	1:p:89:TYR:CE1	2.53	0.43
2:2:60:SER:HB2	2:2:152:PHE:CD1	2.54	0.43
2:A:125:GLN:HB2	2:B:36:LEU:HD21	2.00	0.43
2:B:112:LYS:HE3	2:B:112:LYS:HB2	1.71	0.43
2:Y:26:LEU:HD21	2:Y:28:TRP:CZ2	2.54	0.43
2:a:39:ASN:H	1:p:111:HIS:HB2	1.84	0.43
2:g:58:ILE:O	2:g:121:GLY:HA2	2.19	0.43
2:m:55:LEU:HD11	1:n:91:LEU:HD12	2.00	0.43
2:s:77:THR:HG22	2:s:137:ASN:HB3	2.01	0.43
1:t:37:TYR:HD1	1:t:48:SER:HA	1.83	0.43
1:7:54:ARG:NH2	1:7:72:ASP:HB3	2.34	0.42
2:B:92:ASN:HB2	2:C:147:SER:CB	2.49	0.42
2:C:19:ASN:HB3	2:C:22:ALA:HB2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:66:PHE:HE2	1:D:83:CYS:HB2	1.84	0.42
2:I:16:VAL:HG11	2:I:43:LEU:HD12	2.01	0.42
1:L:83:CYS:O	1:L:97:TYR:HA	2.19	0.42
2:M:30:ASN:OD1	2:M:31:ARG:HG2	2.19	0.42
2:N:14:ALA:HB2	2:N:41:VAL:HG11	2.01	0.42
2:T:76:LEU:HD13	2:T:100:PRO:HG3	2.00	0.42
2:T:157:LEU:HD13	2:U:155:ILE:HD13	2.01	0.42
1:V:36:TRP:CE2	1:V:68:LEU:HB2	2.54	0.42
2:s:93:LEU:HB3	2:s:124:PHE:CZ	2.54	0.42
1:u:3:VAL:HA	1:u:23:VAL:O	2.19	0.42
1:v:38:ARG:HH22	1:v:79:GLY:H	1.66	0.42
2:x:63:LEU:HD13	2:x:117:PRO:HB3	2.01	0.42
2:x:71:SER:OG	2:x:105:THR:HG22	2.19	0.42
1:6:55:TYR:HD1	1:6:70:ILE:HG12	1.84	0.42
2:C:58:ILE:O	2:C:121:GLY:HA2	2.19	0.42
1:J:59:VAL:HG22	2:w:42:GLU:HG2	2.02	0.42
2:S:58:ILE:HG22	2:S:80:ILE:HD13	2.00	0.42
2:Y:58:ILE:O	2:Y:121:GLY:HA2	2.19	0.42
2:a:22:ALA:HB1	2:a:25:GLN:CG	2.47	0.42
1:o:40:LYS:HB2	1:o:47:GLU:OE2	2.19	0.42
1:0:12:LYS:O	1:0:104:THR:HG23	2.19	0.42
2:2:57:LEU:HB3	2:2:155:ILE:HG23	2.00	0.42
2:2:63:LEU:HD11	2:4:97:ILE:H	1.84	0.42
1:E:12:LYS:O	1:E:104:THR:HA	2.18	0.42
1:J:55:TYR:HD1	1:J:70:ILE:HG12	1.85	0.42
1:Q:5:GLN:HE22	1:Q:82:ARG:HA	1.83	0.42
1:Q:16:GLU:O	1:Q:73:LEU:HD13	2.19	0.42
2:Y:142:LEU:HD23	2:Y:142:LEU:HA	1.73	0.42
2:q:42:GLU:HB2	2:q:49:VAL:HB	2.00	0.42
2:r:146:GLU:HB2	2:r:149:GLN:CD	2.44	0.42
2:A:42:GLU:HG2	1:V:59:VAL:H	1.83	0.42
2:A:44:ARG:HH11	2:A:131:ARG:NH2	2.17	0.42
2:G:69:CYS:O	2:G:106:PRO:HD2	2.19	0.42
2:I:126:LEU:HD13	2:I:132:LEU:HD11	2.00	0.42
2:k:142:LEU:HD23	2:k:142:LEU:HA	1.85	0.42
1:p:7:PRO:HG2	1:p:20:ILE:HG12	2.00	0.42
2:r:63:LEU:H	2:r:150:VAL:HG22	1.85	0.42
2:r:80:ILE:HD12	2:r:94:LEU:HD12	2.00	0.42
2:y:50:VAL:HG21	2:y:126:LEU:HD13	2.01	0.42
2:2:31:ARG:NH1	1:D:23:VAL:HG21	2.34	0.42
2:B:137:ASN:ND2	2:B:138:ARG:HG3	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:103:ARG:HE	2:G:104:GLU:N	2.17	0.42
2:Y:71:SER:O	2:Y:74:VAL:HG13	2.19	0.42
1:i:6:THR:HG22	1:i:21:ASN:HB2	2.02	0.42
2:l:57:LEU:CB	2:l:157:LEU:HD11	2.44	0.42
2:m:29:LEU:HD22	2:m:32:ARG:HG2	2.01	0.42
1:o:12:LYS:HG3	1:o:104:THR:HG22	2.01	0.42
2:r:26:LEU:HD13	2:r:142:LEU:HD21	2.02	0.42
2:y:23:GLU:O	2:y:23:GLU:HG2	2.19	0.42
1:l:31:THR:HG22	1:l:66:PHE:HD2	1.84	0.42
2:2:12:PRO:HA	2:2:39:ASN:HB2	2.02	0.42
1:6:55:TYR:CD1	1:6:70:ILE:HG12	2.55	0.42
2:G:63:LEU:HD22	2:G:143:ASP:HB3	2.01	0.42
1:J:14:THR:HG23	1:J:105:VAL:O	2.20	0.42
1:L:38:ARG:HG3	1:L:81:TYR:CZ	2.55	0.42
2:S:62:VAL:HG13	2:S:142:LEU:HD21	2.02	0.42
1:b:56:VAL:HG23	1:b:69:ARG:HB3	2.01	0.42
2:k:57:LEU:HB2	2:k:157:LEU:HD11	2.01	0.42
2:m:83:ILE:HG22	2:m:131:ARG:HB2	2.01	0.42
2:q:20:PRO:HG3	2:q:32:ARG:HH22	1.85	0.42
1:0:8:GLN:HG3	1:0:9:THR:N	2.31	0.42
1:0:71:ASN:O	1:0:72:ASP:C	2.62	0.42
2:3:26:LEU:HD13	2:3:142:LEU:HD21	2.01	0.42
2:3:57:LEU:O	2:3:154:ILE:HA	2.19	0.42
1:F:35:TYR:HB2	1:F:84:ALA:HB3	2.00	0.42
2:H:110:GLU:O	2:H:111:ALA:C	2.62	0.42
1:L:84:ALA:HA	1:L:96:VAL:O	2.20	0.42
2:N:47:GLN:HG2	2:N:133:SER:HB3	2.01	0.42
1:R:7:PRO:HD3	1:R:21:ASN:OD1	2.20	0.42
1:i:3:VAL:HA	1:i:23:VAL:O	2.19	0.42
1:i:24:LEU:HD22	1:i:29:CYS:HB2	2.02	0.42
1:F:37:TYR:HA	1:F:47:GLU:O	2.20	0.42
1:R:6:THR:HB	1:R:21:ASN:OD1	2.19	0.42
2:Y:47:GLN:HG3	2:Y:133:SER:HB3	2.01	0.42
2:Y:125:GLN:HB2	2:Z:36:LEU:HD21	2.02	0.42
1:c:13:GLU:CD	1:c:13:GLU:H	2.27	0.42
1:t:29:CYS:HA	1:t:87:CYS:HA	2.02	0.42
1:u:17:SER:HA	1:u:70:ILE:O	2.20	0.42
2:x:16:VAL:HG11	2:x:43:LEU:HD12	2.02	0.42
2:A:58:ILE:HG23	2:A:154:ILE:HG22	2.02	0.42
1:D:56:VAL:HG23	1:D:69:ARG:HB3	2.01	0.42
1:F:55:TYR:HD2	1:F:68:LEU:HD11	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:146:GLU:HB2	2:Z:149:GLN:HE21	1.84	0.42
1:c:55:TYR:CD1	1:c:70:ILE:HG12	2.55	0.42
2:e:93:LEU:HB3	2:e:124:PHE:CE2	2.54	0.42
2:r:71:SER:HB3	2:r:105:THR:HG21	2.01	0.42
2:2:112:LYS:NZ	2:4:102:GLN:HG2	2.34	0.42
1:7:71:ASN:O	1:7:72:ASP:C	2.63	0.42
2:A:13:VAL:HB	2:A:155:ILE:HD13	2.01	0.42
2:G:126:LEU:HD13	2:G:132:LEU:HD11	2.02	0.42
1:L:2:ARG:HD2	1:L:96:VAL:HG11	2.02	0.42
2:M:22:ALA:HB1	2:M:25:GLN:HG2	2.02	0.42
2:g:61:GLN:HB2	2:g:119:TYR:HD1	1.84	0.42
2:m:29:LEU:HD23	2:m:30:ASN:H	1.85	0.42
1:p:82:ARG:HG2	1:p:99:GLY:HA2	2.01	0.42
1:1:10:ILE:HG22	1:1:12:LYS:HG2	2.02	0.41
1:7:70:ILE:CG2	1:7:73:LEU:HD13	2.49	0.41
1:K:36:TRP:CZ3	1:K:83:CYS:HB3	2.55	0.41
2:N:57:LEU:O	2:N:154:ILE:HA	2.19	0.41
1:i:3:VAL:CG2	1:i:24:LEU:HD23	2.50	0.41
2:x:20:PRO:HA	2:x:144:PHE:CD1	2.55	0.41
1:z:49:ILE:HG23	1:z:55:TYR:CD2	2.55	0.41
1:E:26:ASP:OD2	1:E:28:HIS:HB2	2.20	0.41
1:F:12:LYS:HG3	1:F:18:LEU:HD12	2.02	0.41
2:I:23:GLU:H	2:I:23:GLU:CD	2.28	0.41
2:M:30:ASN:HD22	2:M:37:LEU:HB3	1.85	0.41
2:T:62:VAL:HG12	2:T:150:VAL:HG13	2.02	0.41
2:U:70:PRO:HB2	2:U:71:SER:H	1.71	0.41
1:W:36:TRP:CZ3	1:W:83:CYS:HB3	2.55	0.41
2:g:56:TYR:CE2	2:g:156:ALA:HB2	2.54	0.41
1:h:84:ALA:HA	1:h:96:VAL:O	2.20	0.41
1:j:73:LEU:HD12	1:j:73:LEU:HA	1.94	0.41
2:m:13:VAL:HG12	2:m:155:ILE:HG13	2.03	0.41
2:m:33:ALA:HA	1:o:94:TYR:CD1	2.55	0.41
2:3:87:TYR:CE2	2:3:89:THR:HB	2.54	0.41
2:4:47:GLN:HG2	2:4:133:SER:HB3	2.01	0.41
1:E:4:ASP:HB2	1:E:23:VAL:HB	2.03	0.41
1:E:5:GLN:HG2	1:E:99:GLY:O	2.20	0.41
1:Q:33:SER:HB2	1:Q:86:GLU:HB2	2.03	0.41
2:Y:58:ILE:HD12	2:Y:124:PHE:CD2	2.49	0.41
2:a:75:LEU:HD23	2:a:75:LEU:HA	1.89	0.41
1:c:10:ILE:HD11	1:c:102:VAL:HG22	2.02	0.41
2:k:12:PRO:HA	2:k:39:ASN:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:k:63:LEU:HD12	2:m:96:ALA:HA	2.01	0.41
2:k:83:ILE:CG1	2:k:131:ARG:HB2	2.51	0.41
1:p:38:ARG:HB3	1:p:49:ILE:HD11	2.03	0.41
2:q:58:ILE:HG21	2:q:80:ILE:HG21	2.01	0.41
2:r:19:ASN:HB3	2:r:22:ALA:HB2	2.02	0.41
2:w:103:ARG:H	2:w:103:ARG:HD3	1.84	0.41
2:x:56:TYR:CD2	2:x:154:ILE:HD12	2.55	0.41
1:z:89:TYR:CG	1:z:90:GLY:N	2.89	0.41
2:3:80:ILE:HD12	2:3:94:LEU:HD12	2.02	0.41
2:4:20:PRO:HA	2:4:144:PHE:CD1	2.55	0.41
2:B:126:LEU:CD1	2:B:132:LEU:HD11	2.50	0.41
2:C:102:GLN:O	2:C:103:ARG:C	2.63	0.41
2:H:87:TYR:OH	1:K:1:ALA:HA	2.21	0.41
2:N:112:LYS:HA	2:N:112:LYS:HD3	1.77	0.41
2:e:26:LEU:HD23	2:e:26:LEU:O	2.20	0.41
1:n:78:SER:OG	1:n:104:THR:HG22	2.21	0.41
2:r:31:ARG:HA	1:v:94:TYR:HA	2.02	0.41
1:F:11:THR:HA	1:F:103:VAL:O	2.20	0.41
2:H:125:GLN:OE1	1:K:90:GLY:HA3	2.21	0.41
2:U:60:SER:HB2	2:U:152:PHE:HD1	1.86	0.41
2:Y:75:LEU:HD12	2:Y:75:LEU:HA	1.86	0.41
2:Y:138:ARG:HA	2:Y:138:ARG:HD2	1.92	0.41
2:l:136:ILE:CD1	2:l:142:LEU:HD11	2.41	0.41
1:u:40:LYS:HD3	1:u:76:GLU:O	2.20	0.41
2:G:59:TYR:CE2	2:I:122:GLY:HA2	2.55	0.41
2:H:66:GLY:O	2:H:113:PRO:HA	2.21	0.41
1:J:24:LEU:HB2	1:J:64:LYS:HB3	2.03	0.41
1:P:31:THR:HG21	1:P:64:LYS:HA	2.03	0.41
1:d:36:TRP:CH2	1:d:83:CYS:HB3	2.56	0.41
2:l:90:LYS:HE2	2:l:90:LYS:HB3	1.83	0.41
2:2:20:PRO:HA	2:2:144:PHE:CD1	2.56	0.41
2:4:85:VAL:HA	2:4:88:GLN:NE2	2.36	0.41
1:7:5:GLN:CD	1:7:99:GLY:H	2.28	0.41
2:G:87:TYR:CE2	2:G:89:THR:HB	2.55	0.41
2:M:76:LEU:HD13	2:M:76:LEU:HA	1.93	0.41
2:M:127:GLU:OE2	1:R:28:HIS:NE2	2.48	0.41
2:S:36:LEU:HD22	2:U:55:LEU:HD21	2.03	0.41
1:V:16:GLU:HB3	1:V:17:SER:H	1.77	0.41
1:V:66:PHE:CE2	1:V:83:CYS:HB2	2.55	0.41
2:a:146:GLU:HB2	2:a:149:GLN:CD	2.46	0.41
2:e:142:LEU:HD23	2:e:142:LEU:HA	1.91	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:24:LEU:HD23	1:n:29:CYS:HB2	2.01	0.41
1:o:81:TYR:O	1:o:82:ARG:C	2.63	0.41
1:u:55:TYR:HB3	1:u:68:LEU:HD11	2.02	0.41
2:w:58:ILE:HG22	2:w:80:ILE:HD13	2.02	0.41
2:w:72:THR:OG1	2:x:112:LYS:HE2	2.19	0.41
1:1:39:LYS:HG2	1:1:80:THR:HB	2.03	0.41
2:2:122:GLY:HA2	2:3:59:TYR:CE2	2.55	0.41
2:3:75:LEU:HD23	2:3:75:LEU:HA	1.91	0.41
1:D:3:VAL:HA	1:D:23:VAL:O	2.21	0.41
1:K:74:THR:O	1:K:104:THR:HG21	2.21	0.41
2:M:58:ILE:HG22	2:M:80:ILE:HD13	2.03	0.41
2:T:16:VAL:HG22	2:T:152:PHE:O	2.21	0.41
2:T:57:LEU:HB3	2:T:155:ILE:HG23	2.02	0.41
2:U:93:LEU:HB3	2:U:124:PHE:CZ	2.55	0.41
2:e:58:ILE:HG21	2:e:80:ILE:HG21	2.03	0.41
2:k:2:ARG:N	1:n:32:SER:HG	2.18	0.41
2:w:26:LEU:HG	2:w:142:LEU:HD11	2.03	0.41
2:3:106:PRO:HB2	2:3:110:GLU:HA	2.03	0.41
1:5:38:ARG:HB2	1:5:49:ILE:HD11	2.02	0.41
1:E:56:VAL:O	1:E:68:LEU:HD12	2.21	0.41
2:G:142:LEU:HD23	2:G:142:LEU:HA	1.92	0.41
1:K:17:SER:HA	1:K:73:LEU:HD13	2.03	0.41
2:M:67:GLN:HG2	2:M:113:PRO:HB3	2.03	0.41
2:S:112:LYS:HD2	2:U:73:HIS:NE2	2.35	0.41
2:T:157:LEU:CD1	2:U:155:ILE:HD13	2.51	0.41
1:c:51:LYS:HE3	1:c:57:GLU:HB3	2.02	0.41
2:g:60:SER:HB3	2:g:80:ILE:HD11	2.03	0.41
2:q:50:VAL:HG21	2:q:126:LEU:HD13	2.03	0.41
2:q:60:SER:HB3	2:q:80:ILE:HD11	2.03	0.41
1:u:38:ARG:O	1:u:47:GLU:HG2	2.21	0.41
2:x:103:ARG:HB3	2:x:106:PRO:HG3	2.02	0.41
2:y:68:GLY:O	2:y:70:PRO:HD3	2.21	0.41
1:L:18:LEU:HD23	1:L:18:LEU:H	1.84	0.41
1:Q:56:VAL:HG23	1:Q:69:ARG:HB3	2.02	0.41
2:e:107:GLU:HG3	2:e:108:GLY:N	2.36	0.41
2:e:147:SER:O	2:e:149:GLN:HG3	2.21	0.41
1:i:7:PRO:HB2	1:i:10:ILE:HD11	2.03	0.41
2:k:96:ALA:HA	2:l:63:LEU:HD12	2.02	0.41
2:k:97:ILE:H	2:l:63:LEU:HD11	1.85	0.41
2:q:59:TYR:CE2	2:s:122:GLY:HA2	2.55	0.41
1:t:8:GLN:HG2	1:t:9:THR:HG23	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:90:GLY:HA3	2:x:125:GLN:HE22	1.85	0.40
2:G:5:SER:HA	1:J:89:TYR:O	2.21	0.40
1:P:66:PHE:CE2	1:P:83:CYS:HB2	2.57	0.40
2:T:75:LEU:HD23	2:T:75:LEU:HA	1.87	0.40
2:U:41:VAL:HG22	2:U:51:PRO:HD3	2.03	0.40
1:V:78:SER:OG	1:V:104:THR:HG22	2.22	0.40
2:g:60:SER:HB2	2:g:152:PHE:HD1	1.86	0.40
2:l:66:GLY:O	2:l:113:PRO:HA	2.21	0.40
2:r:92:ASN:HB2	2:s:147:SER:OG	2.21	0.40
2:r:112:LYS:HE3	2:r:112:LYS:HB2	1.75	0.40
2:w:19:ASN:OD1	2:w:21:GLN:HG2	2.21	0.40
2:x:65:LYS:HB3	2:x:143:ASP:HB2	2.03	0.40
2:y:58:ILE:HG12	2:y:154:ILE:HG22	2.04	0.40
2:2:65:LYS:HA	2:2:114:TRP:O	2.21	0.40
2:3:103:ARG:HG2	2:3:104:GLU:N	2.25	0.40
1:6:12:LYS:HA	1:6:12:LYS:HD2	1.88	0.40
1:7:39:LYS:HB2	1:7:79:GLY:HA3	2.02	0.40
2:B:68:GLY:HA2	2:B:111:ALA:O	2.22	0.40
2:G:48:LEU:HD23	2:G:48:LEU:HA	1.94	0.40
1:L:13:GLU:OE1	1:L:105:VAL:HB	2.21	0.40
2:T:26:LEU:HD13	2:T:142:LEU:HD11	2.03	0.40
2:g:23:GLU:CD	2:g:23:GLU:H	2.28	0.40
2:k:102:GLN:O	2:k:104:GLU:HG2	2.20	0.40
1:p:4:ASP:HB2	1:p:23:VAL:HG23	2.04	0.40
1:p:71:ASN:O	1:p:72:ASP:C	2.64	0.40
2:s:47:GLN:HG2	2:s:133:SER:HB3	2.01	0.40
2:s:56:TYR:CD2	2:s:154:ILE:HD12	2.56	0.40
1:v:78:SER:OG	1:v:103:VAL:HA	2.21	0.40
1:1:8:GLN:HG2	1:1:9:THR:HG23	2.03	0.40
1:5:37:TYR:HD1	1:5:48:SER:HA	1.86	0.40
1:7:38:ARG:HD3	1:7:49:ILE:HD11	2.03	0.40
2:A:106:PRO:HA	2:C:103:ARG:NH1	2.37	0.40
1:F:73:LEU:HD12	1:F:73:LEU:O	2.20	0.40
2:H:62:VAL:HG21	2:H:136:ILE:HG21	2.02	0.40
2:M:75:LEU:HD12	2:M:75:LEU:HA	1.87	0.40
1:R:23:VAL:HG22	1:R:65:SER:HB3	2.03	0.40
2:S:87:TYR:CE1	1:X:1:ALA:HB3	2.45	0.40
2:U:74:VAL:HG11	2:U:141:TYR:HE2	1.86	0.40
1:W:10:ILE:HD11	1:W:102:VAL:HG22	2.04	0.40
1:W:71:ASN:O	1:W:72:ASP:C	2.64	0.40
2:Y:62:VAL:HG23	2:Y:78:HIS:CE1	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:71:ASN:O	1:j:72:ASP:C	2.64	0.40
1:j:74:THR:O	1:j:104:THR:HG21	2.21	0.40
2:l:157:LEU:HD22	2:m:155:ILE:HD13	2.02	0.40
1:n:36:TRP:CZ2	1:n:68:LEU:HB2	2.56	0.40
1:u:4:ASP:HB2	1:u:23:VAL:HG13	2.02	0.40
1:u:7:PRO:CG	1:u:20:ILE:HA	2.51	0.40
1:0:57:GLU:HG3	1:0:67:SER:O	2.22	0.40
2:3:157:LEU:HD13	2:4:155:ILE:HG12	2.02	0.40
2:4:26:LEU:HD13	2:4:142:LEU:HD11	2.03	0.40
2:U:74:VAL:O	2:U:100:PRO:HD2	2.21	0.40
2:Z:103:ARG:HG2	2:Z:106:PRO:HD3	2.04	0.40
2:l:62:VAL:HA	2:l:150:VAL:HG22	2.03	0.40
2:m:110:GLU:CD	2:m:110:GLU:H	2.29	0.40
2:A:67:GLN:O	2:A:111:ALA:HB1	2.22	0.40
2:A:103:ARG:HD3	2:B:106:PRO:HB3	2.04	0.40
2:C:80:ILE:HD12	2:C:94:LEU:HD12	2.03	0.40
2:G:75:LEU:HD12	2:G:75:LEU:HA	1.96	0.40
2:H:96:ALA:HB2	2:I:61:GLN:HE22	1.87	0.40
2:N:67:GLN:OE1	2:N:111:ALA:HA	2.20	0.40
2:U:80:ILE:HD12	2:U:94:LEU:HD12	2.02	0.40
2:Y:83:ILE:HD11	2:Y:90:LYS:HE2	2.04	0.40
2:Z:112:LYS:HE3	2:Z:112:LYS:HB2	1.73	0.40
2:e:36:LEU:HD21	2:g:125:GLN:HB2	2.03	0.40
2:f:51:PRO:HD2	2:f:56:TYR:OH	2.20	0.40
1:u:80:THR:HG22	1:u:101:THR:OG1	2.20	0.40
1:v:5:GLN:HG3	1:v:99:GLY:O	2.21	0.40
1:z:2:ARG:H	1:z:25:ARG:HB2	1.87	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	0	105/129 (81%)	91 (87%)	13 (12%)	1 (1%)	13	44
1	1	102/129 (79%)	89 (87%)	12 (12%)	1 (1%)	13	44
1	5	106/129 (82%)	93 (88%)	11 (10%)	2 (2%)	6	31
1	6	105/129 (81%)	91 (87%)	10 (10%)	4 (4%)	2	19
1	7	105/129 (81%)	88 (84%)	16 (15%)	1 (1%)	13	44
1	D	104/129 (81%)	93 (89%)	7 (7%)	4 (4%)	2	19
1	E	106/129 (82%)	89 (84%)	14 (13%)	3 (3%)	4	25
1	F	104/129 (81%)	83 (80%)	16 (15%)	5 (5%)	2	15
1	J	106/129 (82%)	95 (90%)	9 (8%)	2 (2%)	6	31
1	K	104/129 (81%)	89 (86%)	13 (12%)	2 (2%)	6	31
1	L	110/129 (85%)	93 (84%)	14 (13%)	3 (3%)	4	25
1	P	105/129 (81%)	90 (86%)	11 (10%)	4 (4%)	2	19
1	Q	110/129 (85%)	91 (83%)	17 (16%)	2 (2%)	7	32
1	R	105/129 (81%)	92 (88%)	10 (10%)	3 (3%)	3	24
1	V	105/129 (81%)	93 (89%)	10 (10%)	2 (2%)	6	31
1	W	104/129 (81%)	94 (90%)	9 (9%)	1 (1%)	13	44
1	X	105/129 (81%)	90 (86%)	13 (12%)	2 (2%)	6	31
1	b	110/129 (85%)	95 (86%)	13 (12%)	2 (2%)	7	32
1	c	110/129 (85%)	92 (84%)	14 (13%)	4 (4%)	3	20
1	d	110/129 (85%)	92 (84%)	16 (14%)	2 (2%)	7	32
1	h	110/129 (85%)	97 (88%)	11 (10%)	2 (2%)	7	32
1	i	110/129 (85%)	93 (84%)	15 (14%)	2 (2%)	7	32
1	j	103/129 (80%)	88 (85%)	13 (13%)	2 (2%)	6	31
1	n	107/129 (83%)	93 (87%)	11 (10%)	3 (3%)	4	25
1	o	102/129 (79%)	73 (72%)	27 (26%)	2 (2%)	6	30
1	p	110/129 (85%)	95 (86%)	13 (12%)	2 (2%)	7	32
1	t	110/129 (85%)	95 (86%)	11 (10%)	4 (4%)	3	20
1	u	110/129 (85%)	93 (84%)	14 (13%)	3 (3%)	4	25
1	v	103/129 (80%)	92 (89%)	11 (11%)	0	100	100
1	z	110/129 (85%)	94 (86%)	11 (10%)	5 (4%)	2	16
2	2	152/156 (97%)	123 (81%)	21 (14%)	8 (5%)	1	13
2	3	148/156 (95%)	126 (85%)	21 (14%)	1 (1%)	19	52

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	4	153/156 (98%)	131 (86%)	19 (12%)	3 (2%)	6	30
2	A	154/156 (99%)	132 (86%)	16 (10%)	6 (4%)	2	19
2	B	151/156 (97%)	127 (84%)	23 (15%)	1 (1%)	19	52
2	C	151/156 (97%)	120 (80%)	24 (16%)	7 (5%)	2	16
2	G	151/156 (97%)	129 (85%)	17 (11%)	5 (3%)	3	22
2	H	150/156 (96%)	125 (83%)	23 (15%)	2 (1%)	10	38
2	I	150/156 (96%)	127 (85%)	20 (13%)	3 (2%)	6	30
2	M	151/156 (97%)	126 (83%)	21 (14%)	4 (3%)	4	26
2	N	151/156 (97%)	135 (89%)	15 (10%)	1 (1%)	19	52
2	O	151/156 (97%)	134 (89%)	12 (8%)	5 (3%)	3	22
2	S	152/156 (97%)	122 (80%)	22 (14%)	8 (5%)	1	13
2	T	154/156 (99%)	135 (88%)	18 (12%)	1 (1%)	22	54
2	U	148/156 (95%)	131 (88%)	14 (10%)	3 (2%)	6	30
2	Y	151/156 (97%)	126 (83%)	20 (13%)	5 (3%)	3	22
2	Z	150/156 (96%)	128 (85%)	19 (13%)	3 (2%)	6	30
2	a	152/156 (97%)	133 (88%)	18 (12%)	1 (1%)	19	52
2	e	151/156 (97%)	127 (84%)	15 (10%)	9 (6%)	1	11
2	f	154/156 (99%)	126 (82%)	23 (15%)	5 (3%)	3	22
2	g	151/156 (97%)	126 (83%)	22 (15%)	3 (2%)	6	30
2	k	154/156 (99%)	129 (84%)	20 (13%)	5 (3%)	3	22
2	l	151/156 (97%)	134 (89%)	16 (11%)	1 (1%)	19	52
2	m	149/156 (96%)	131 (88%)	13 (9%)	5 (3%)	3	21
2	q	142/156 (91%)	125 (88%)	13 (9%)	4 (3%)	4	25
2	r	150/156 (96%)	130 (87%)	19 (13%)	1 (1%)	19	52
2	s	150/156 (96%)	125 (83%)	18 (12%)	7 (5%)	2	15
2	w	154/156 (99%)	128 (83%)	18 (12%)	8 (5%)	1	13
2	x	151/156 (97%)	132 (87%)	15 (10%)	4 (3%)	4	26
2	y	150/156 (96%)	132 (88%)	17 (11%)	1 (1%)	19	52
All	All	7723/8550 (90%)	6591 (85%)	937 (12%)	195 (2%)	4	26

All (195) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	2	33	ALA
2	2	104	GLU
2	A	106	PRO
2	A	146	GLU
2	C	72	THR
1	F	49	ILE
2	G	8	PRO
2	G	11	LYS
2	H	111	ALA
2	I	33	ALA
2	O	148	GLY
2	T	105	THR
2	U	11	LYS
2	Y	34	ASN
2	Y	104	GLU
2	Y	146	GLU
2	Z	9	SER
2	a	33	ALA
1	c	3	VAL
2	e	111	ALA
2	e	146	GLU
2	e	148	GLY
2	k	106	PRO
2	l	111	ALA
2	m	148	GLY
1	0	90	GLY
1	1	72	ASP
2	2	23	GLU
1	5	90	GLY
1	6	14	THR
1	6	90	GLY
2	A	33	ALA
2	C	24	GLY
2	C	34	ASN
2	C	104	GLU
1	D	90	GLY
1	E	3	VAL
1	E	49	ILE
1	F	77	ASP
1	J	3	VAL
1	K	90	GLY
1	L	90	GLY
2	M	11	LYS

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Mol	Chain	Res	Type
2	M	104	GLU
1	P	2	ARG
1	R	3	VAL
2	S	104	GLU
2	U	70	PRO
1	V	3	VAL
1	X	3	VAL
2	Y	23	GLU
1	c	2	ARG
1	c	90	GLY
1	d	3	VAL
2	e	8	PRO
2	f	8	PRO
1	i	14	THR
1	n	3	VAL
1	n	90	GLY
1	o	3	VAL
1	p	3	VAL
2	s	11	LYS
2	s	148	GLY
1	t	3	VAL
1	t	90	GLY
1	u	3	VAL
1	u	90	GLY
2	x	146	GLU
1	z	3	VAL
1	z	90	GLY
1	z	109	ALA
2	2	105	THR
2	3	107	GLU
2	4	103	ARG
2	4	111	ALA
1	5	72	ASP
1	6	16	GLU
1	6	72	ASP
2	C	11	LYS
1	D	2	ARG
1	D	3	VAL
1	E	72	ASP
1	F	14	THR
1	F	80	THR
2	G	146	GLU

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Mol	Chain	Res	Type
2	G	147	SER
1	J	72	ASP
2	O	33	ALA
2	O	70	PRO
1	P	3	VAL
1	P	72	ASP
1	R	72	ASP
2	S	33	ALA
2	S	111	ALA
1	V	72	ASP
1	X	72	ASP
2	Z	105	THR
1	b	3	VAL
1	b	72	ASP
1	c	72	ASP
1	d	72	ASP
2	g	70	PRO
1	h	72	ASP
1	i	3	VAL
2	k	8	PRO
2	k	33	ALA
2	m	33	ALA
2	m	70	PRO
1	n	72	ASP
1	o	72	ASP
1	p	72	ASP
2	q	103	ARG
2	q	104	GLU
2	s	72	THR
2	s	73	HIS
1	t	72	ASP
2	w	73	HIS
2	w	105	THR
2	x	72	THR
1	z	72	ASP
2	2	11	LYS
2	2	110	GLU
2	4	11	LYS
2	A	11	LYS
2	A	23	GLU
2	A	148	GLY
2	H	73	HIS

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Mol	Chain	Res	Type
1	L	7	PRO
1	L	72	ASP
2	M	8	PRO
1	Q	3	VAL
1	Q	72	ASP
2	S	70	PRO
2	U	33	ALA
1	W	72	ASP
2	Y	8	PRO
2	e	105	THR
2	f	23	GLU
2	f	24	GLY
2	f	72	THR
2	f	73	HIS
2	g	146	GLU
1	j	72	ASP
2	k	104	GLU
2	m	103	ARG
2	q	9	SER
2	r	105	THR
2	s	70	PRO
1	t	109	ALA
1	u	2	ARG
2	w	8	PRO
2	y	33	ALA
1	z	2	ARG
2	2	70	PRO
2	2	103	ARG
2	C	8	PRO
2	C	9	SER
1	D	16	GLU
2	G	44	ARG
2	I	8	PRO
2	I	105	THR
1	K	3	VAL
2	M	70	PRO
2	N	44	ARG
1	R	2	ARG
2	S	44	ARG
2	S	145	ALA
2	e	11	LYS
2	e	103	ARG

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Mol	Chain	Res	Type
2	g	73	HIS
1	h	109	ALA
1	j	3	VAL
2	k	105	THR
2	s	44	ARG
2	w	9	SER
2	w	44	ARG
2	w	109	ALA
2	x	111	ALA
2	x	148	GLY
1	7	72	ASP
2	B	111	ALA
2	O	44	ARG
2	O	105	THR
2	S	8	PRO
2	e	9	SER
2	e	44	ARG
2	q	11	LYS
2	s	8	PRO
2	w	11	LYS
1	P	90	GLY
1	F	79	GLY
2	S	11	LYS
2	w	106	PRO
2	Z	112	LYS
2	m	11	LYS

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	0	92/109 (84%)	84 (91%)	8 (9%)	8	30
1	1	91/109 (84%)	87 (96%)	4 (4%)	24	52
1	5	92/109 (84%)	89 (97%)	3 (3%)	33	61
1	6	92/109 (84%)	88 (96%)	4 (4%)	25	53

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	7	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	D	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	E	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	F	92/109 (84%)	91 (99%)	1 (1%)	70	82
1	J	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	K	92/109 (84%)	87 (95%)	5 (5%)	18	46
1	L	95/109 (87%)	89 (94%)	6 (6%)	15	42
1	P	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	Q	95/109 (87%)	90 (95%)	5 (5%)	19	46
1	R	92/109 (84%)	91 (99%)	1 (1%)	70	82
1	V	93/109 (85%)	90 (97%)	3 (3%)	34	62
1	W	92/109 (84%)	90 (98%)	2 (2%)	47	70
1	X	92/109 (84%)	86 (94%)	6 (6%)	14	41
1	b	95/109 (87%)	92 (97%)	3 (3%)	34	62
1	c	95/109 (87%)	92 (97%)	3 (3%)	34	62
1	d	95/109 (87%)	92 (97%)	3 (3%)	34	62
1	h	95/109 (87%)	90 (95%)	5 (5%)	19	46
1	i	95/109 (87%)	92 (97%)	3 (3%)	34	62
1	j	91/109 (84%)	88 (97%)	3 (3%)	33	61
1	n	92/109 (84%)	88 (96%)	4 (4%)	25	53
1	o	91/109 (84%)	89 (98%)	2 (2%)	47	70
1	p	95/109 (87%)	91 (96%)	4 (4%)	25	53
1	t	95/109 (87%)	91 (96%)	4 (4%)	25	53
1	u	95/109 (87%)	91 (96%)	4 (4%)	25	53
1	v	91/109 (84%)	87 (96%)	4 (4%)	24	52
1	z	95/109 (87%)	90 (95%)	5 (5%)	19	46
2	2	130/132 (98%)	125 (96%)	5 (4%)	28	56
2	3	127/132 (96%)	125 (98%)	2 (2%)	58	76
2	4	131/132 (99%)	129 (98%)	2 (2%)	60	77
2	A	132/132 (100%)	130 (98%)	2 (2%)	60	77
2	B	129/132 (98%)	128 (99%)	1 (1%)	79	88

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	C	129/132 (98%)	124 (96%)	5 (4%)	27	56
2	G	129/132 (98%)	127 (98%)	2 (2%)	58	76
2	H	127/132 (96%)	127 (100%)	0	100	100
2	I	128/132 (97%)	124 (97%)	4 (3%)	35	63
2	M	129/132 (98%)	127 (98%)	2 (2%)	58	76
2	N	129/132 (98%)	128 (99%)	1 (1%)	79	88
2	O	129/132 (98%)	128 (99%)	1 (1%)	79	88
2	S	130/132 (98%)	128 (98%)	2 (2%)	60	77
2	T	132/132 (100%)	132 (100%)	0	100	100
2	U	126/132 (96%)	123 (98%)	3 (2%)	44	68
2	Y	129/132 (98%)	125 (97%)	4 (3%)	35	63
2	Z	128/132 (97%)	125 (98%)	3 (2%)	45	69
2	a	130/132 (98%)	128 (98%)	2 (2%)	60	77
2	e	129/132 (98%)	127 (98%)	2 (2%)	58	76
2	f	132/132 (100%)	128 (97%)	4 (3%)	36	63
2	g	129/132 (98%)	126 (98%)	3 (2%)	45	69
2	k	132/132 (100%)	129 (98%)	3 (2%)	45	69
2	l	129/132 (98%)	128 (99%)	1 (1%)	79	88
2	m	127/132 (96%)	124 (98%)	3 (2%)	44	68
2	q	124/132 (94%)	124 (100%)	0	100	100
2	r	128/132 (97%)	128 (100%)	0	100	100
2	s	128/132 (97%)	126 (98%)	2 (2%)	58	76
2	w	132/132 (100%)	131 (99%)	1 (1%)	79	88
2	x	129/132 (98%)	126 (98%)	3 (2%)	45	69
2	y	128/132 (97%)	126 (98%)	2 (2%)	58	76
All	All	6661/7230 (92%)	6481 (97%)	180 (3%)	40	66

All (180) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	33	SER
1	0	38	ARG
1	0	45	ASN

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Mol	Chain	Res	Type
1	0	56	VAL
1	0	59	VAL
1	0	75	VAL
1	0	80	THR
1	0	96	VAL
1	1	3	VAL
1	1	56	VAL
1	1	76	GLU
1	1	96	VAL
2	2	69	CYS
2	2	72	THR
2	2	77	THR
2	2	91	VAL
2	2	150	VAL
2	3	73	HIS
2	3	77	THR
2	4	72	THR
2	4	150	VAL
1	5	19	THR
1	5	59	VAL
1	5	96	VAL
1	6	3	VAL
1	6	19	THR
1	6	54	ARG
1	6	96	VAL
1	7	3	VAL
1	7	75	VAL
1	7	80	THR
1	7	96	VAL
2	A	69	CYS
2	A	150	VAL
2	B	79	THR
2	C	6	ARG
2	C	17	VAL
2	C	69	CYS
2	C	79	THR
2	C	150	VAL
1	D	19	THR
1	D	38	ARG
1	D	80	THR
1	D	96	VAL
1	E	3	VAL

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Mol	Chain	Res	Type
1	E	59	VAL
1	E	80	THR
1	E	96	VAL
1	F	20	ILE
2	G	101	CYS
2	G	150	VAL
2	I	69	CYS
2	I	72	THR
2	I	91	VAL
2	I	150	VAL
1	J	3	VAL
1	J	19	THR
1	J	87	CYS
1	J	96	VAL
1	K	38	ARG
1	K	47	GLU
1	K	58	THR
1	K	80	THR
1	K	96	VAL
1	L	10	ILE
1	L	19	THR
1	L	64	LYS
1	L	80	THR
1	L	96	VAL
1	L	105	VAL
2	M	5	SER
2	M	91	VAL
2	N	79	THR
2	O	150	VAL
1	P	3	VAL
1	P	19	THR
1	P	96	VAL
1	P	101	THR
1	Q	3	VAL
1	Q	11	THR
1	Q	19	THR
1	Q	58	THR
1	Q	96	VAL
1	R	80	THR
2	S	26	LEU
2	S	74	VAL
2	U	105	THR

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Mol	Chain	Res	Type
2	U	132	LEU
2	U	150	VAL
1	V	3	VAL
1	V	38	ARG
1	V	96	VAL
1	W	38	ARG
1	W	96	VAL
1	X	3	VAL
1	X	56	VAL
1	X	58	THR
1	X	66	PHE
1	X	80	THR
1	X	96	VAL
2	Y	5	SER
2	Y	72	THR
2	Y	101	CYS
2	Y	103	ARG
2	Z	77	THR
2	Z	79	THR
2	Z	157	LEU
2	a	69	CYS
2	a	150	VAL
1	b	19	THR
1	b	38	ARG
1	b	96	VAL
1	c	3	VAL
1	c	38	ARG
1	c	96	VAL
1	d	3	VAL
1	d	11	THR
1	d	19	THR
2	e	77	THR
2	e	150	VAL
2	f	7	THR
2	f	55	LEU
2	f	74	VAL
2	f	101	CYS
2	g	7	THR
2	g	69	CYS
2	g	79	THR
1	h	3	VAL
1	h	6	THR

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Mol	Chain	Res	Type
1	h	19	THR
1	h	58	THR
1	h	96	VAL
1	i	80	THR
1	i	96	VAL
1	i	111	HIS
1	j	28	HIS
1	j	58	THR
1	j	96	VAL
2	k	72	THR
2	k	91	VAL
2	k	150	VAL
2	l	55	LEU
2	m	29	LEU
2	m	67	GLN
2	m	79	THR
1	n	3	VAL
1	n	31	THR
1	n	56	VAL
1	n	96	VAL
1	o	22	CYS
1	o	96	VAL
1	p	3	VAL
1	p	19	THR
1	p	66	PHE
1	p	96	VAL
2	s	91	VAL
2	s	131	ARG
1	t	3	VAL
1	t	19	THR
1	t	80	THR
1	t	96	VAL
1	u	19	THR
1	u	58	THR
1	u	75	VAL
1	u	96	VAL
1	v	54	ARG
1	v	56	VAL
1	v	80	THR
1	v	96	VAL
2	w	150	VAL
2	x	55	LEU

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Mol	Chain	Res	Type
2	x	69	CYS
2	x	79	THR
2	y	72	THR
2	y	79	THR
1	z	19	THR
1	z	58	THR
1	z	80	THR
1	z	96	VAL
1	z	103	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (52) such sidechains are listed below:

Mol	Chain	Res	Type
2	2	47	GLN
2	3	61	GLN
2	4	73	HIS
1	5	21	ASN
1	6	21	ASN
1	7	45	ASN
2	A	61	GLN
2	B	102	GLN
2	G	39	ASN
2	G	47	GLN
2	G	149	GLN
2	I	34	ASN
1	J	21	ASN
2	M	34	ASN
2	M	61	GLN
2	M	102	GLN
2	N	34	ASN
2	N	61	GLN
2	N	102	GLN
2	O	30	ASN
2	O	149	GLN
1	Q	45	ASN
1	Q	60	ASN
1	R	71	ASN
2	S	15	HIS
2	S	149	GLN
2	T	39	ASN
2	T	73	HIS
1	V	60	ASN

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Mol	Chain	Res	Type
1	V	88	GLN
1	W	71	ASN
1	X	71	ASN
2	Y	73	HIS
2	Z	34	ASN
2	a	102	GLN
1	c	21	ASN
1	c	71	ASN
2	e	46	ASN
2	f	47	GLN
2	k	47	GLN
2	k	61	GLN
2	l	34	ASN
2	l	125	GLN
1	o	5	GLN
1	p	60	ASN
2	q	47	GLN
2	r	61	GLN
2	r	149	GLN
2	s	46	ASN
1	u	71	ASN
2	x	61	GLN
1	z	111	HIS

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 21 ligands modelled in this entry, 1 is monoatomic - leaving 20 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	GOL	c	201	-	5,5,5	0.35	0	5,5,5	0.40	0
3	GOL	5	201	-	5,5,5	0.34	0	5,5,5	0.47	0
4	SO4	t	201	-	4,4,4	0.66	0	6,6,6	0.15	0
3	GOL	V	201	-	5,5,5	0.35	0	5,5,5	0.46	0
3	GOL	z	201	-	5,5,5	0.36	0	5,5,5	0.44	0
3	GOL	b	202	-	5,5,5	0.35	0	5,5,5	0.48	0
3	GOL	h	202	-	5,5,5	0.38	0	5,5,5	0.47	0
3	GOL	b	203	-	5,5,5	0.34	0	5,5,5	0.38	0
3	GOL	b	201	-	5,5,5	0.37	0	5,5,5	0.68	0
3	GOL	D	201	-	5,5,5	0.37	0	5,5,5	0.46	0
3	GOL	W	201	-	5,5,5	0.38	0	5,5,5	0.52	0
4	SO4	P	201	-	4,4,4	0.67	0	6,6,6	0.06	0
4	SO4	h	201	-	4,4,4	0.66	0	6,6,6	0.10	0
3	GOL	l	201	-	5,5,5	0.36	0	5,5,5	0.29	0
3	GOL	t	203	-	5,5,5	0.33	0	5,5,5	0.53	0
3	GOL	t	202	-	5,5,5	0.35	0	5,5,5	0.48	0
3	GOL	0	201	-	5,5,5	0.36	0	5,5,5	0.46	0
3	GOL	P	202	-	5,5,5	0.34	0	5,5,5	0.45	0
3	GOL	J	201	-	5,5,5	0.32	0	5,5,5	0.45	0
3	GOL	n	201	-	5,5,5	0.35	0	5,5,5	0.39	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	GOL	P	202	-	-	2/4/4/4	-
3	GOL	V	201	-	-	1/4/4/4	-
3	GOL	z	201	-	-	2/4/4/4	-
3	GOL	b	201	-	-	1/4/4/4	-
3	GOL	D	201	-	-	0/4/4/4	-
3	GOL	W	201	-	-	0/4/4/4	-
3	GOL	b	202	-	-	0/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	GOL	5	201	-	-	2/4/4/4	-
3	GOL	c	201	-	-	0/4/4/4	-
3	GOL	1	201	-	-	0/4/4/4	-
3	GOL	0	201	-	-	2/4/4/4	-
3	GOL	h	202	-	-	0/4/4/4	-
3	GOL	t	203	-	-	2/4/4/4	-
3	GOL	b	203	-	-	4/4/4/4	-
3	GOL	n	201	-	-	0/4/4/4	-
3	GOL	t	202	-	-	4/4/4/4	-
3	GOL	J	201	-	-	2/4/4/4	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (22) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	5	201	GOL	O1-C1-C2-C3
3	J	201	GOL	O1-C1-C2-C3
3	t	202	GOL	O1-C1-C2-O2
3	t	202	GOL	O1-C1-C2-C3
3	t	202	GOL	C1-C2-C3-O3
3	t	203	GOL	O1-C1-C2-C3
3	J	201	GOL	O1-C1-C2-O2
3	t	203	GOL	O1-C1-C2-O2
3	0	201	GOL	O1-C1-C2-C3
3	P	202	GOL	O1-C1-C2-C3
3	z	201	GOL	O1-C1-C2-C3
3	0	201	GOL	O1-C1-C2-O2
3	t	202	GOL	O2-C2-C3-O3
3	z	201	GOL	O1-C1-C2-O2
3	V	201	GOL	O1-C1-C2-O2
3	5	201	GOL	O1-C1-C2-O2
3	P	202	GOL	O1-C1-C2-O2
3	b	203	GOL	O2-C2-C3-O3
3	b	203	GOL	O1-C1-C2-C3
3	b	203	GOL	C1-C2-C3-O3
3	b	201	GOL	O2-C2-C3-O3
3	b	203	GOL	O1-C1-C2-O2

There are no ring outliers.

9 monomers are involved in 11 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	c	201	GOL	1	0
3	V	201	GOL	1	0
3	z	201	GOL	1	0
3	h	202	GOL	1	0
3	D	201	GOL	1	0
3	W	201	GOL	1	0
3	1	201	GOL	2	0
3	t	202	GOL	1	0
3	J	201	GOL	2	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	0	107/129 (82%)	0.09	0 100 100	58, 119, 171, 224	0
1	1	104/129 (80%)	0.09	2 (1%) 66 50	52, 127, 182, 224	0
1	5	108/129 (83%)	-0.21	1 (0%) 81 67	39, 62, 100, 157	0
1	6	107/129 (82%)	0.01	0 100 100	95, 122, 157, 179	0
1	7	107/129 (82%)	0.44	6 (5%) 31 25	97, 169, 222, 243	0
1	D	106/129 (82%)	-0.10	0 100 100	44, 67, 112, 144	0
1	E	108/129 (83%)	-0.01	0 100 100	74, 130, 187, 213	0
1	F	106/129 (82%)	-0.02	1 (0%) 81 67	78, 154, 207, 222	0
1	J	108/129 (83%)	-0.24	0 100 100	38, 60, 97, 155	0
1	K	106/129 (82%)	-0.05	0 100 100	69, 110, 166, 182	0
1	L	112/129 (86%)	0.32	4 (3%) 46 34	62, 134, 188, 256	0
1	P	107/129 (82%)	-0.26	0 100 100	43, 65, 91, 111	0
1	Q	112/129 (86%)	0.15	2 (1%) 67 52	84, 124, 175, 210	0
1	R	107/129 (82%)	0.02	1 (0%) 81 67	64, 131, 179, 210	0
1	V	106/129 (82%)	-0.04	4 (3%) 44 33	42, 62, 95, 117	1 (0%)
1	W	106/129 (82%)	0.02	0 100 100	59, 107, 149, 195	0
1	X	107/129 (82%)	0.16	1 (0%) 81 67	69, 104, 149, 175	0
1	b	112/129 (86%)	-0.06	0 100 100	50, 73, 151, 270	0
1	c	112/129 (86%)	-0.04	0 100 100	58, 98, 177, 221	0
1	d	112/129 (86%)	0.30	2 (1%) 67 52	60, 131, 176, 222	0
1	h	112/129 (86%)	-0.17	1 (0%) 81 67	40, 69, 160, 273	0
1	i	112/129 (86%)	0.57	7 (6%) 27 23	95, 151, 206, 233	0
1	j	105/129 (81%)	0.31	3 (2%) 54 40	121, 168, 202, 253	0
1	n	109/129 (84%)	-0.16	1 (0%) 81 67	41, 66, 117, 191	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	o	104/129 (80%)	0.35	3 (2%) 54 40	109, 190, 244, 284	0
1	p	112/129 (86%)	0.06	0 100 100	89, 131, 173, 195	0
1	t	112/129 (86%)	0.03	2 (1%) 67 52	43, 74, 242, 333	0
1	u	112/129 (86%)	0.16	2 (1%) 67 52	68, 128, 193, 210	0
1	v	105/129 (81%)	0.33	3 (2%) 54 40	73, 181, 241, 295	0
1	z	112/129 (86%)	-0.26	0 100 100	44, 61, 109, 222	0
2	2	154/156 (98%)	0.02	5 (3%) 50 37	45, 85, 204, 322	0
2	3	151/156 (96%)	0.28	10 (6%) 26 22	59, 106, 210, 265	0
2	4	155/156 (99%)	-0.22	1 (0%) 85 74	42, 82, 200, 242	0
2	A	156/156 (100%)	-0.03	6 (3%) 44 33	38, 76, 195, 231	0
2	B	153/156 (98%)	0.00	1 (0%) 84 72	54, 89, 212, 262	0
2	C	153/156 (98%)	-0.06	1 (0%) 84 72	42, 76, 186, 259	0
2	G	153/156 (98%)	-0.16	1 (0%) 84 72	35, 64, 162, 227	0
2	H	152/156 (97%)	0.20	6 (3%) 44 33	39, 69, 188, 254	0
2	I	152/156 (97%)	-0.19	1 (0%) 84 72	37, 63, 161, 249	0
2	M	153/156 (98%)	-0.17	2 (1%) 74 59	37, 73, 265, 305	0
2	N	153/156 (98%)	-0.06	1 (0%) 84 72	55, 90, 197, 238	0
2	O	153/156 (98%)	-0.02	0 100 100	44, 80, 222, 282	0
2	S	154/156 (98%)	0.04	5 (3%) 50 37	30, 65, 164, 205	0
2	T	156/156 (100%)	0.07	4 (2%) 57 43	34, 66, 172, 217	0
2	U	150/156 (96%)	-0.25	0 100 100	34, 61, 139, 194	0
2	Y	153/156 (98%)	-0.11	1 (0%) 84 72	32, 59, 136, 188	0
2	Z	152/156 (97%)	-0.02	5 (3%) 49 37	27, 65, 157, 203	0
2	a	154/156 (98%)	-0.27	1 (0%) 85 74	34, 62, 143, 182	0
2	e	153/156 (98%)	0.13	3 (1%) 64 49	52, 93, 171, 237	0
2	f	156/156 (100%)	0.55	12 (7%) 21 18	81, 130, 213, 266	0
2	g	153/156 (98%)	0.04	1 (0%) 84 72	59, 106, 181, 205	0
2	k	156/156 (100%)	0.28	4 (2%) 57 43	52, 91, 193, 285	0
2	l	153/156 (98%)	0.37	4 (2%) 57 43	79, 119, 199, 290	0
2	m	151/156 (96%)	0.11	2 (1%) 74 59	58, 99, 177, 218	0
2	q	146/156 (93%)	-0.35	0 100 100	37, 71, 157, 275	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9
2	r	152/156 (97%)	-0.15	1 (0%)	84 72	48, 80, 184, 220	0
2	s	152/156 (97%)	-0.11	1 (0%)	84 72	40, 75, 205, 242	0
2	w	156/156 (100%)	-0.18	1 (0%)	85 74	36, 67, 172, 238	0
2	x	153/156 (98%)	0.02	4 (2%)	57 43	34, 74, 191, 225	0
2	y	152/156 (97%)	-0.18	1 (0%)	84 72	32, 64, 160, 223	0
All	All	7845/8550 (91%)	0.02	131 (1%)	69 53	27, 90, 193, 333	1 (0%)

All (131) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	7	91	LEU	5.6
2	H	42	GLU	5.5
2	3	41	VAL	5.2
2	3	42	GLU	5.0
1	V	2[A]	ARG	4.5
2	3	43	LEU	4.3
1	7	93	GLU	3.9
1	Q	53	GLY	3.6
1	i	49	ILE	3.5
2	f	112	LYS	3.3
2	1	157	LEU	3.3
2	3	27	GLN	3.3
2	3	13	VAL	3.3
1	1	76	GLU	3.3
1	v	81	TYR	3.2
2	f	28	TRP	3.2
2	H	7	THR	3.2
2	3	10	ASP	3.2
2	H	70	PRO	3.2
1	j	1	ALA	3.1
1	L	100	GLY	3.1
1	j	10	ILE	3.1
1	d	68	LEU	3.1
2	3	29	LEU	3.1
2	M	99	SER	3.1
1	7	90	GLY	3.0
2	H	9	SER	3.0
2	3	39	ASN	2.9
2	l	25	GLN	2.9
2	T	54	GLY	2.9

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Mol	Chain	Res	Type	RSRZ
2	A	42	GLU	2.9
1	d	99	GLY	2.8
2	2	4	SER	2.8
2	x	9	SER	2.8
2	Z	10	ASP	2.7
2	x	7	THR	2.7
1	L	89	TYR	2.7
2	H	8	PRO	2.7
2	e	157	LEU	2.7
2	T	127	GLU	2.7
2	w	42	GLU	2.7
2	f	69	CYS	2.7
2	T	53	GLU	2.7
1	V	106	ASN	2.7
1	i	44	THR	2.7
1	i	48	SER	2.6
1	t	47	GLU	2.6
2	f	52	SER	2.6
2	x	8	PRO	2.6
2	2	7	THR	2.6
2	Z	72	THR	2.6
2	3	30	ASN	2.6
2	k	36	LEU	2.6
2	f	113	PRO	2.6
2	Z	109	ALA	2.6
2	S	127	GLU	2.5
2	Y	157	LEU	2.5
1	L	99	GLY	2.5
2	T	7	THR	2.5
2	a	7	THR	2.5
2	k	5	SER	2.5
1	j	9	THR	2.4
2	4	157	LEU	2.4
2	f	47	GLN	2.4
2	3	37	LEU	2.4
2	A	70	PRO	2.4
2	f	157	LEU	2.4
1	X	44	THR	2.4
1	u	101	THR	2.4
2	C	7	THR	2.4
1	i	37	TYR	2.3
1	v	48	SER	2.3

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Mol	Chain	Res	Type	RSRZ
1	7	95	ASP	2.3
2	Z	101	CYS	2.3
1	F	53	GLY	2.3
2	G	7	THR	2.3
2	k	101	CYS	2.3
2	f	41	VAL	2.3
2	x	72	THR	2.3
2	f	27	GLN	2.3
1	7	35	TYR	2.3
1	i	82	ARG	2.3
2	S	69	CYS	2.3
2	Z	25	GLN	2.3
1	5	6	THR	2.3
1	i	91	LEU	2.3
1	i	112	HIS	2.2
2	M	100	PRO	2.2
1	1	100	GLY	2.2
1	u	49	ILE	2.2
2	A	3	SER	2.2
2	l	95	SER	2.2
2	H	10	ASP	2.2
2	S	46	ASN	2.2
1	o	101	THR	2.2
2	B	7	THR	2.2
2	S	90	LYS	2.2
2	f	48	LEU	2.2
1	L	93	GLU	2.2
2	2	127	GLU	2.2
2	S	110	GLU	2.2
2	y	28	TRP	2.2
1	t	6	THR	2.2
2	m	18	ALA	2.2
2	A	108	GLY	2.2
2	l	26	LEU	2.2
1	R	42	GLY	2.2
1	Q	70	ILE	2.2
1	V	86	GLU	2.2
2	r	156	ALA	2.1
2	2	40	GLY	2.1
1	o	105	VAL	2.1
1	n	109	ALA	2.1
2	f	111	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
2	e	69	CYS	2.1
2	m	146	GLU	2.1
2	I	157	LEU	2.1
2	A	5	SER	2.1
2	A	52	SER	2.1
2	f	132	LEU	2.1
2	e	72	THR	2.1
1	7	88	GLN	2.1
2	s	109	ALA	2.1
1	o	80	THR	2.1
2	2	5	SER	2.1
2	k	74	VAL	2.1
2	N	101	CYS	2.1
1	v	49	ILE	2.0
1	V	9	THR	2.0
2	g	157	LEU	2.0
1	h	99	GLY	2.0

6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	GOL	b	202	6/6	0.75	0.09	74,81,88,89	0
3	GOL	0	201	6/6	0.80	0.11	54,63,65,73	0
3	GOL	b	203	6/6	0.80	0.11	66,67,70,76	0
3	GOL	1	201	6/6	0.81	0.11	63,69,73,74	0
3	GOL	t	203	6/6	0.82	0.11	49,76,82,86	0
3	GOL	c	201	6/6	0.83	0.14	57,65,71,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	GOL	P	202	6/6	0.83	0.09	59,62,74,81	0
3	GOL	D	201	6/6	0.84	0.09	54,61,69,73	0
3	GOL	z	201	6/6	0.84	0.09	53,58,65,70	0
3	GOL	b	201	6/6	0.85	0.11	42,56,61,67	0
4	SO4	h	201	5/5	0.87	0.11	68,85,106,117	0
3	GOL	n	201	6/6	0.88	0.08	67,74,75,82	0
3	GOL	W	201	6/6	0.88	0.08	64,67,79,80	0
3	GOL	t	202	6/6	0.90	0.08	58,71,81,89	0
3	GOL	5	201	6/6	0.90	0.10	53,62,65,70	0
3	GOL	h	202	6/6	0.90	0.08	50,56,58,58	0
3	GOL	V	201	6/6	0.90	0.11	61,65,66,67	0
3	GOL	J	201	6/6	0.92	0.09	38,41,51,59	0
4	SO4	P	201	5/5	0.93	0.10	66,71,83,84	0
4	SO4	t	201	5/5	0.93	0.12	68,74,81,104	0
5	CL	S	201	1/1	0.95	0.04	45,45,45,45	0

6.5 Other polymers [i](#)

There are no such residues in this entry.