



Full wwPDB EM Validation Report ⓘ

Mar 29, 2026 – 02:23 AM UTC

PDB ID : 5VFT / pdb_00005vft
EMDB ID : EMD-8667
Title : Nucleotide-driven Triple-state Remodeling of the AAA-ATPase Channel in the Activated Human 26S Proteasome
Authors : Zhu, Y.; Wang, W.L.; Yu, D.; Ouyang, Q.; Lu, Y.; Mao, Y.
Deposited on : 2017-04-09
Resolution : 7.00 Å(reported)

This is a Full wwPDB EM 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/EMValidationReportHelp>
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:

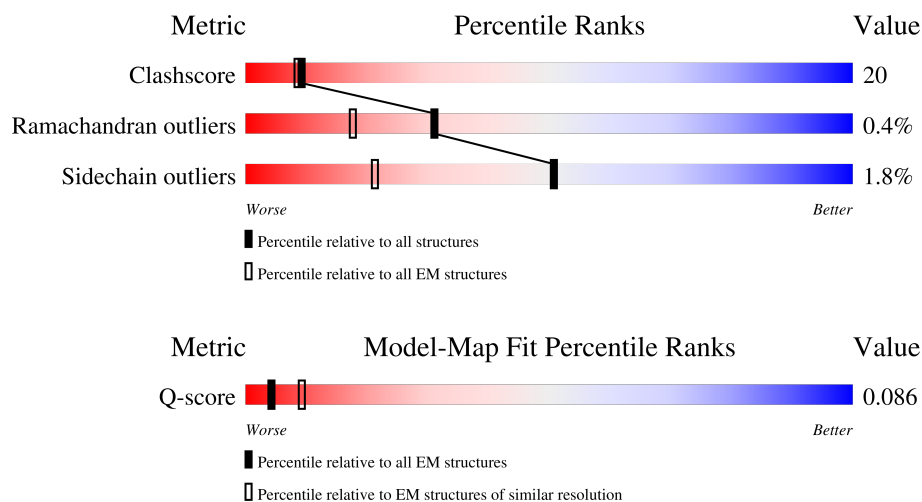
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 7.00 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)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	483 (6.50 - 7.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	U	911	<div> <div>39%</div> <div>54%</div> <div>33%</div> <div>12%</div> </div>
2	V	480	<div> <div>68%</div> <div>54%</div> <div>42%</div> <div>•</div> </div>
3	W	456	<div> <div>41%</div> <div>31%</div> <div>19%</div> <div>•</div> <div>48%</div> </div>
4	X	380	<div> <div>17%</div> <div>14%</div> <div>6%</div> <div>•</div> <div>79%</div> </div>

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Mol	Chain	Length	Quality of chain
5	Y	378	
6	Z	286	
7	a	373	
8	b	191	
9	c	287	
10	d	257	
11	e	70	
12	A	361	
13	B	341	
14	C	384	
15	D	380	
16	E	353	
17	F	377	
18	G	240	
18	g	240	
19	H	232	
19	h	232	
20	I	250	
20	i	250	
21	J	243	
21	j	243	
22	K	234	
22	k	234	
23	L	238	
23	l	238	

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Mol	Chain	Length	Quality of chain
24	M	245	
24	m	245	
25	N	191	
25	n	191	
26	O	220	
26	o	220	
27	P	204	
27	p	204	
28	Q	199	
28	q	199	
29	R	201	
29	r	201	
30	S	213	
30	s	213	
31	T	215	
31	t	215	
32	f	908	

2 Entry composition

There are 33 unique types of molecules in this entry. The entry contains 96994 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 26S proteasome non-ATPase regulatory subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	U	806	Total	C	N	O	S	0	0
			6287	3990	1075	1178	44		

- Molecule 2 is a protein called 26S proteasome non-ATPase regulatory subunit 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	V	480	Total	C	N	O	S	0	0
			3852	2444	684	710	14		

- Molecule 3 is a protein called 26S proteasome non-ATPase regulatory subunit 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	W	236	Total	C	N	O	S	0	0
			1940	1237	331	361	11		

- Molecule 4 is a protein called 26S proteasome non-ATPase regulatory subunit 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	X	81	Total	C	N	O	S	0	0
			647	414	107	124	2		

- Molecule 5 is a protein called 26S proteasome non-ATPase regulatory subunit 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	Y	378	Total	C	N	O	S	0	0
			3115	1987	533	578	17		

- Molecule 6 is a protein called 26S proteasome non-ATPase regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	Z	286	Total	C	N	O	S	0	0
			2281	1457	392	427	5		

- Molecule 7 is a protein called Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 13, isoform CRA_a.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	a	373	Total	C	N	O	S	0	0
			2993	1910	509	559	15		

- Molecule 8 is a protein called 26S proteasome non-ATPase regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	b	191	Total	C	N	O	S	0	0
			1458	910	261	279	8		

- Molecule 9 is a protein called 26S proteasome non-ATPase regulatory subunit 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	c	287	Total	C	N	O	S	0	0
			2260	1430	389	422	19		

- Molecule 10 is a protein called 26S proteasome non-ATPase regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	d	257	Total	C	N	O	S	0	0
			2116	1371	346	390	9		

- Molecule 11 is a protein called sem1.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	e	24	Total	C	N	O	S	0	0
			197	121	34	40	2		

- Molecule 12 is a protein called 26S proteasome regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	A	361	Total	C	N	O	S	0	0
			2835	1788	501	528	18		

- Molecule 13 is a protein called 26S proteasome regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	B	341	Total	C	N	O	S	0	0
			2662	1671	453	526	12		

- Molecule 14 is a protein called 26S proteasome regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	C	384	Total	C	N	O	S	0	0
			3015	1894	540	564	17		

- Molecule 15 is a protein called 26S proteasome regulatory subunit 6B.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	D	380	Total	C	N	O	S	0	0
			3040	1923	524	580	13		

- Molecule 16 is a protein called 26S proteasome regulatory subunit 10B.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	E	353	Total	C	N	O	S	0	0
			2790	1755	494	525	16		

- Molecule 17 is a protein called 26S proteasome regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	F	366	Total	C	N	O	S	0	0
			2863	1802	496	549	16		

- Molecule 18 is a protein called Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	G	240	Total	C	N	O	S	0	0
			1825	1160	304	348	13		
18	g	240	Total	C	N	O	S	0	0
			1826	1160	305	348	13		

- Molecule 19 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	H	232	Total	C	N	O	S	0	0
			1708	1081	289	333	5		
19	h	232	Total	C	N	O	S	0	0
			1708	1081	289	333	5		

- Molecule 20 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	I	250	Total	C	N	O	S	0	0
			1912	1204	329	371	8		
20	i	250	Total	C	N	O	S	0	0
			1912	1204	329	371	8		

- Molecule 21 is a protein called Proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	J	239	Total	C	N	O	S	0	0
			1704	1056	308	335	5		
21	j	239	Total	C	N	O	S	0	0
			1704	1056	308	335	5		

- Molecule 22 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	K	228	Total	C	N	O	S	0	0
			1722	1080	284	348	10		
22	k	228	Total	C	N	O	S	0	0
			1722	1080	284	348	10		

- Molecule 23 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	L	238	Total	C	N	O	S	0	0
			1850	1159	334	346	11		
23	l	238	Total	C	N	O	S	0	0
			1850	1159	334	346	11		

- Molecule 24 is a protein called Proteasome subunit alpha type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	M	240	Total	C	N	O	S	0	0
			1856	1178	314	353	11		
24	m	240	Total	C	N	O	S	0	0
			1856	1178	314	353	11		

- Molecule 25 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	N	191	Total	C	N	O	S	0	0
			1430	893	245	280	12		

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Mol	Chain	Residues	Atoms					AltConf	Trace
25	n	191	Total	C	N	O	S	0	0
			1430	893	245	280	12		

- Molecule 26 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	O	220	Total	C	N	O	S	0	0
			1643	1033	280	318	12		
26	o	220	Total	C	N	O	S	0	0
			1643	1033	280	318	12		

- Molecule 27 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	P	204	Total	C	N	O	S	0	0
			1585	1010	262	294	19		
27	p	204	Total	C	N	O	S	0	0
			1585	1010	262	294	19		

- Molecule 28 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	Q	199	Total	C	N	O	S	0	0
			1570	1006	265	290	9		
28	q	199	Total	C	N	O	S	0	0
			1570	1006	265	290	9		

- Molecule 29 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	R	201	Total	C	N	O	S	0	0
			1548	974	273	292	9		
29	r	201	Total	C	N	O	S	0	0
			1548	974	273	292	9		

- Molecule 30 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	S	213	Total	C	N	O	S	0	0
			1641	1036	282	313	10		
30	s	213	Total	C	N	O	S	0	0
			1641	1036	282	313	10		

- Molecule 31 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	T	215	Total	C	N	O	S	0	0
			1667	1052	285	318	12		
31	t	215	Total	C	N	O	S	0	0
			1667	1052	285	318	12		

- Molecule 32 is a protein called 26S proteasome non-ATPase regulatory subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	f	689	Total	C	N	O	S	0	0
			5319	3343	904	1037	35		

- Molecule 33 is ZINC ION (CCD ID: ZN) (formula: Zn).

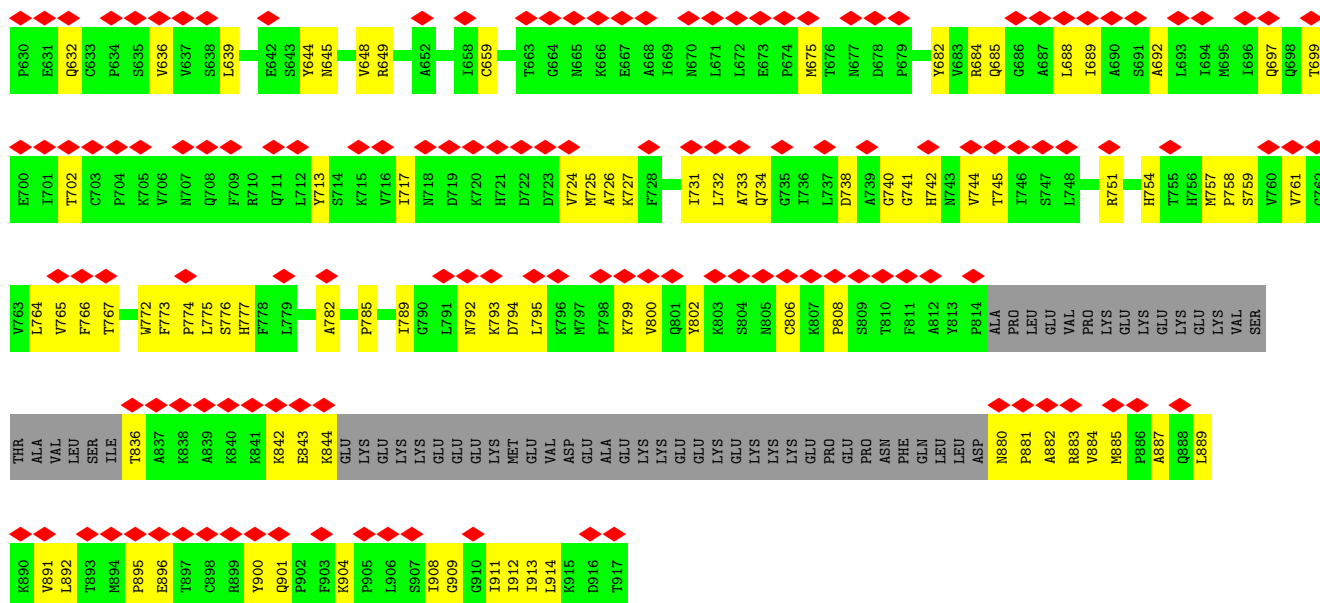
Mol	Chain	Residues	Atoms		AltConf
33	c	1	Total	Zn	0
			1	1	

3 Residue-property plots

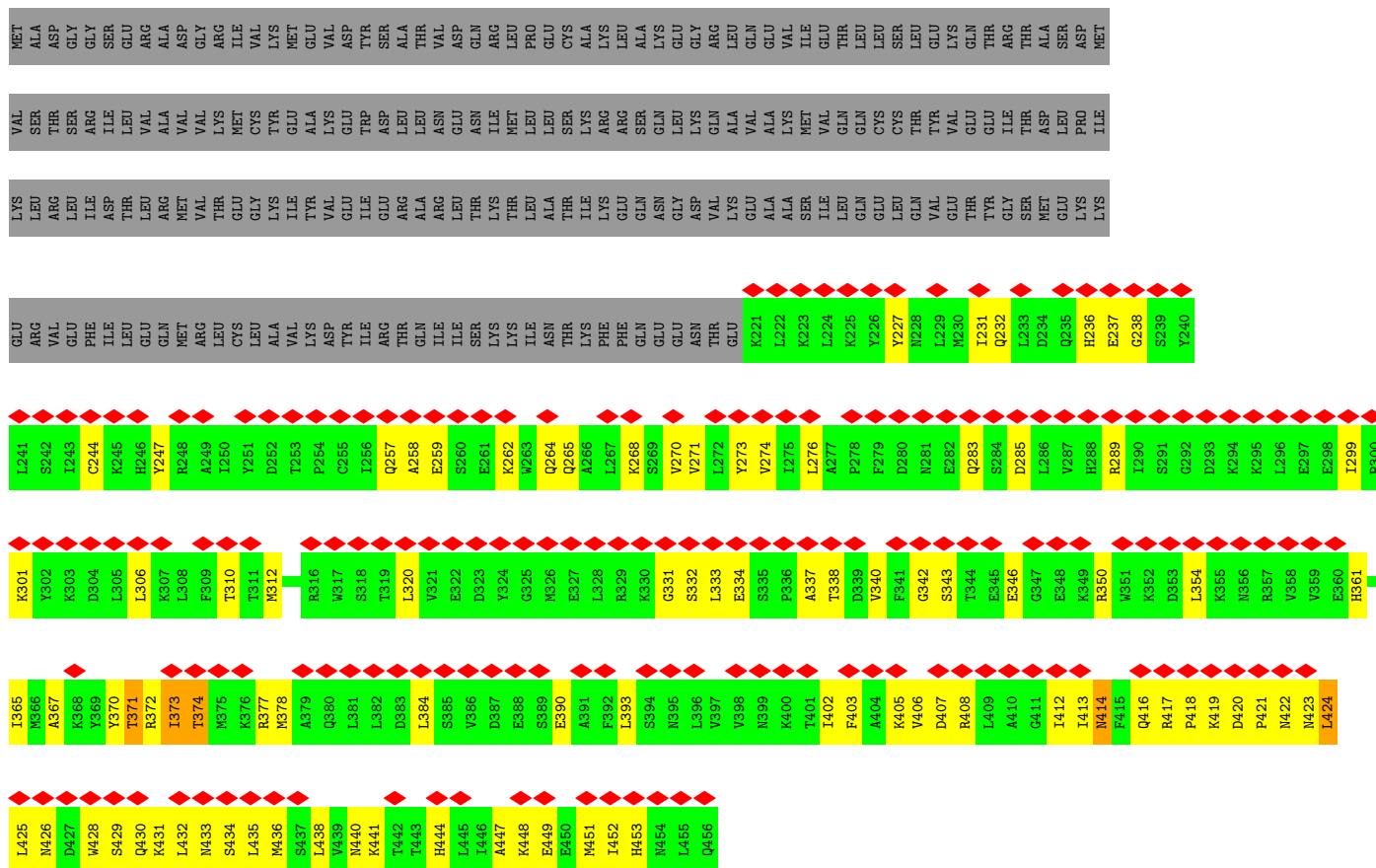
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: 26S proteasome non-ATPase regulatory subunit 1

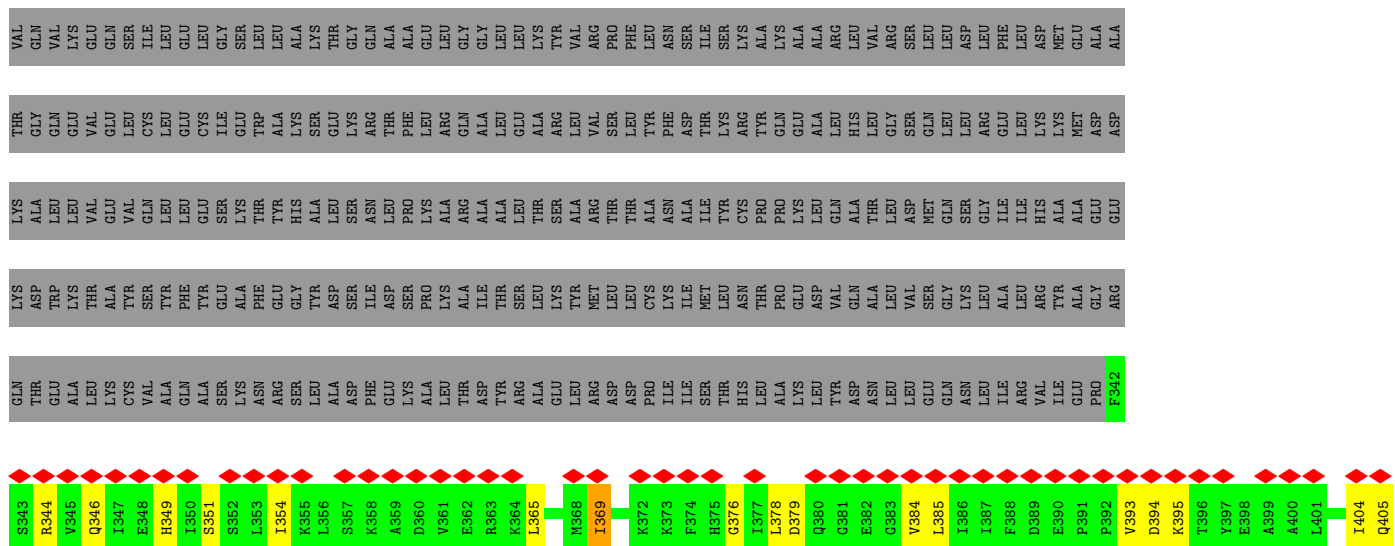


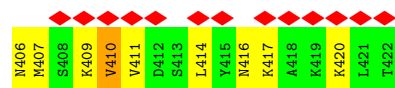


Chain W:

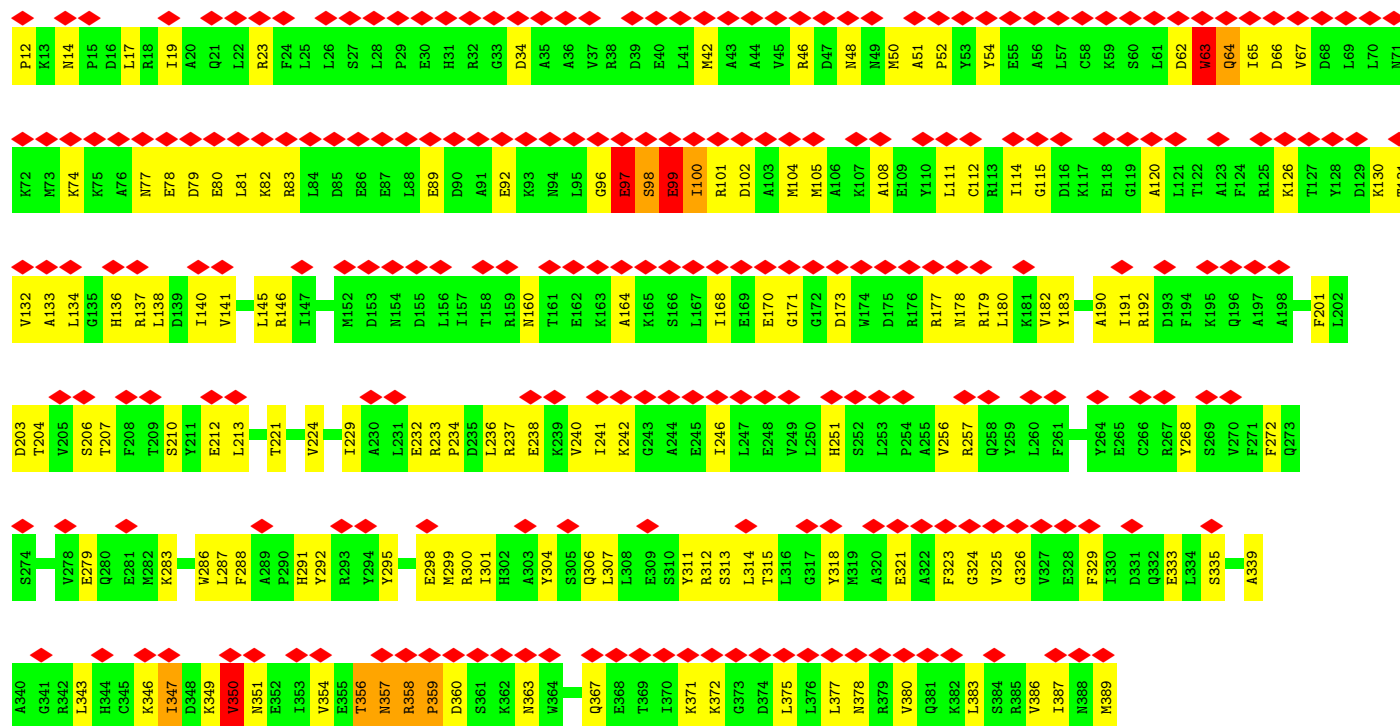


Chain X:

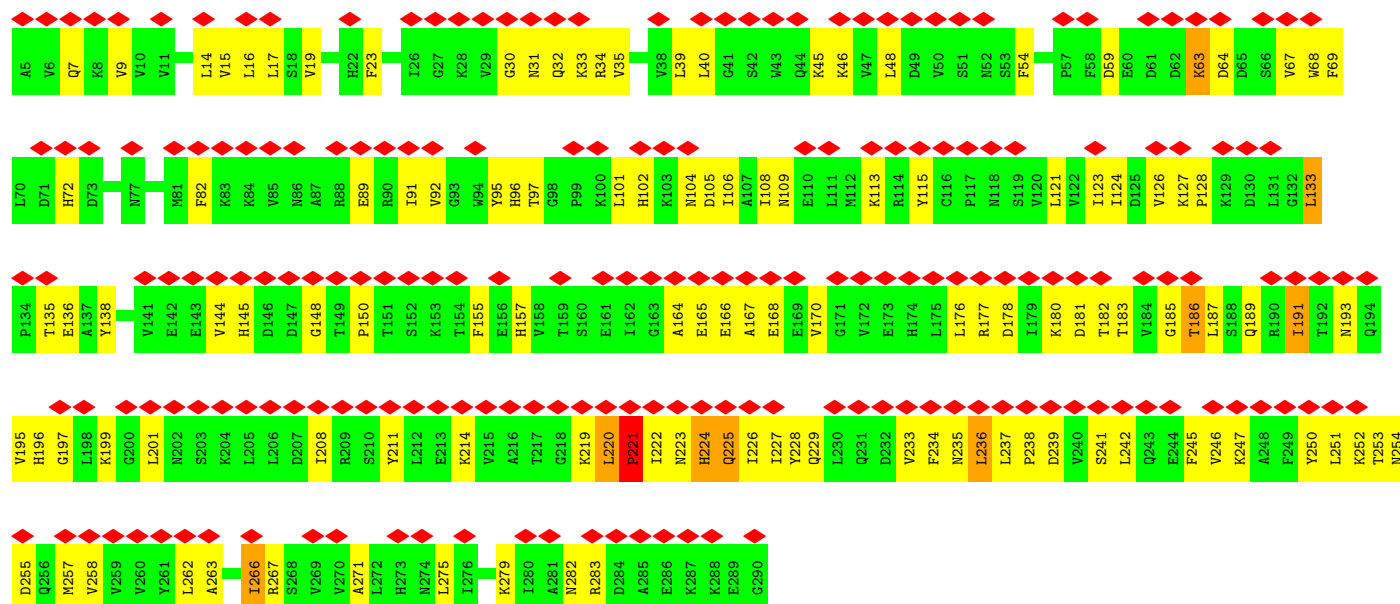




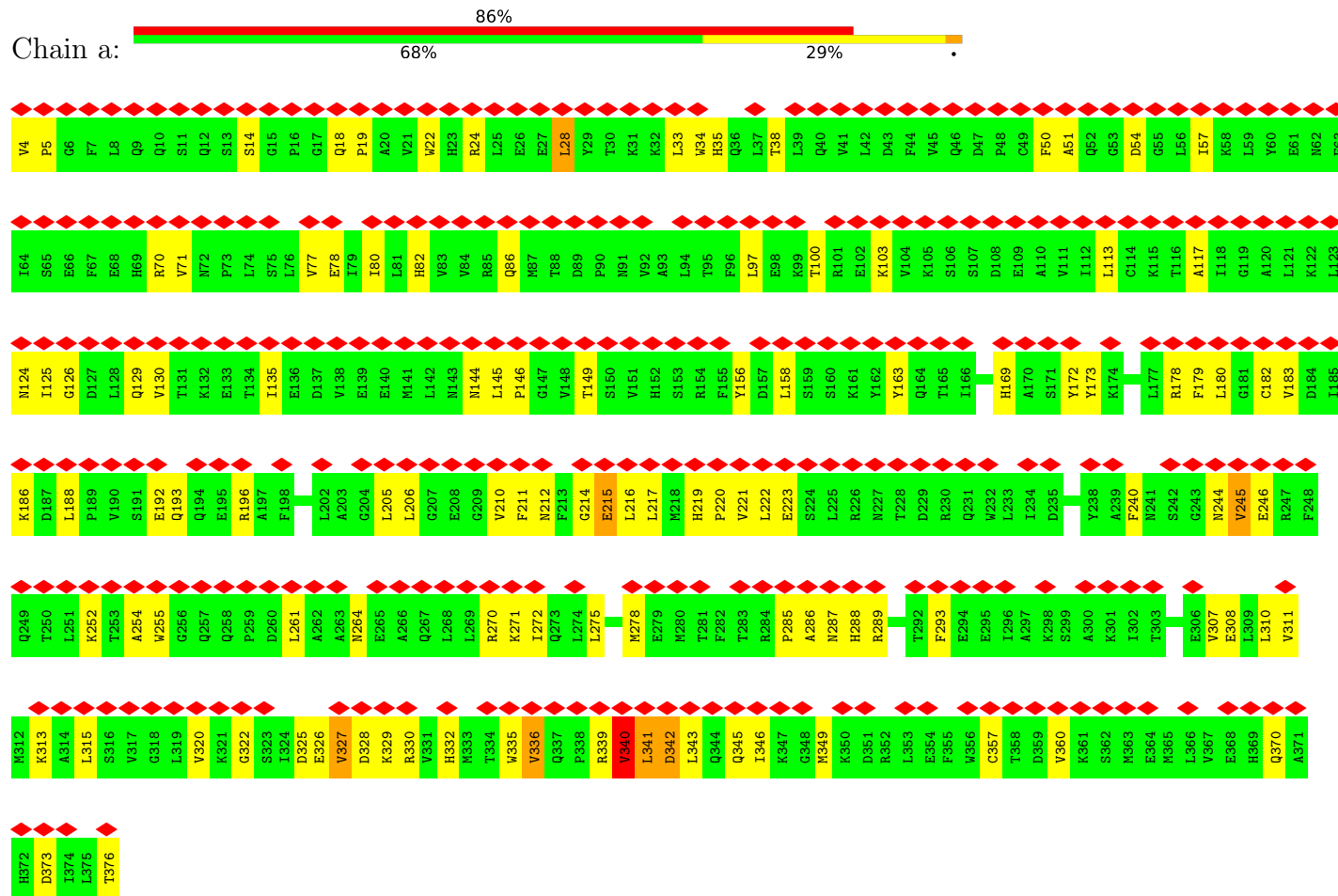
• Molecule 5: 26S proteasome non-ATPase regulatory subunit 6



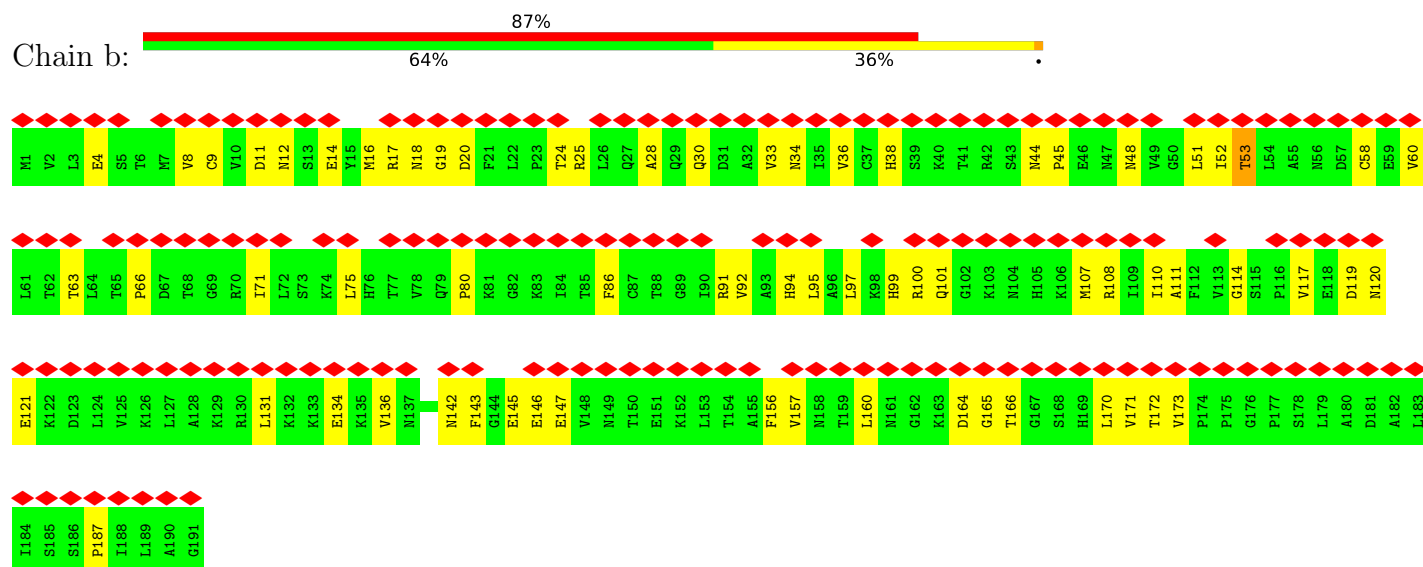
• Molecule 6: 26S proteasome non-ATPase regulatory subunit 7



- Molecule 7: Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 13, isoform CRA_a

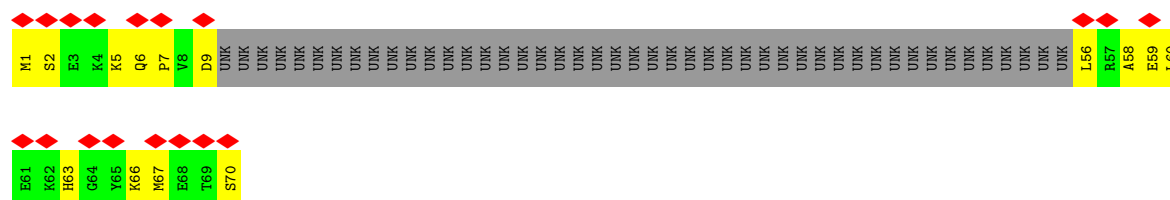


- Molecule 8: 26S proteasome non-ATPase regulatory subunit 4

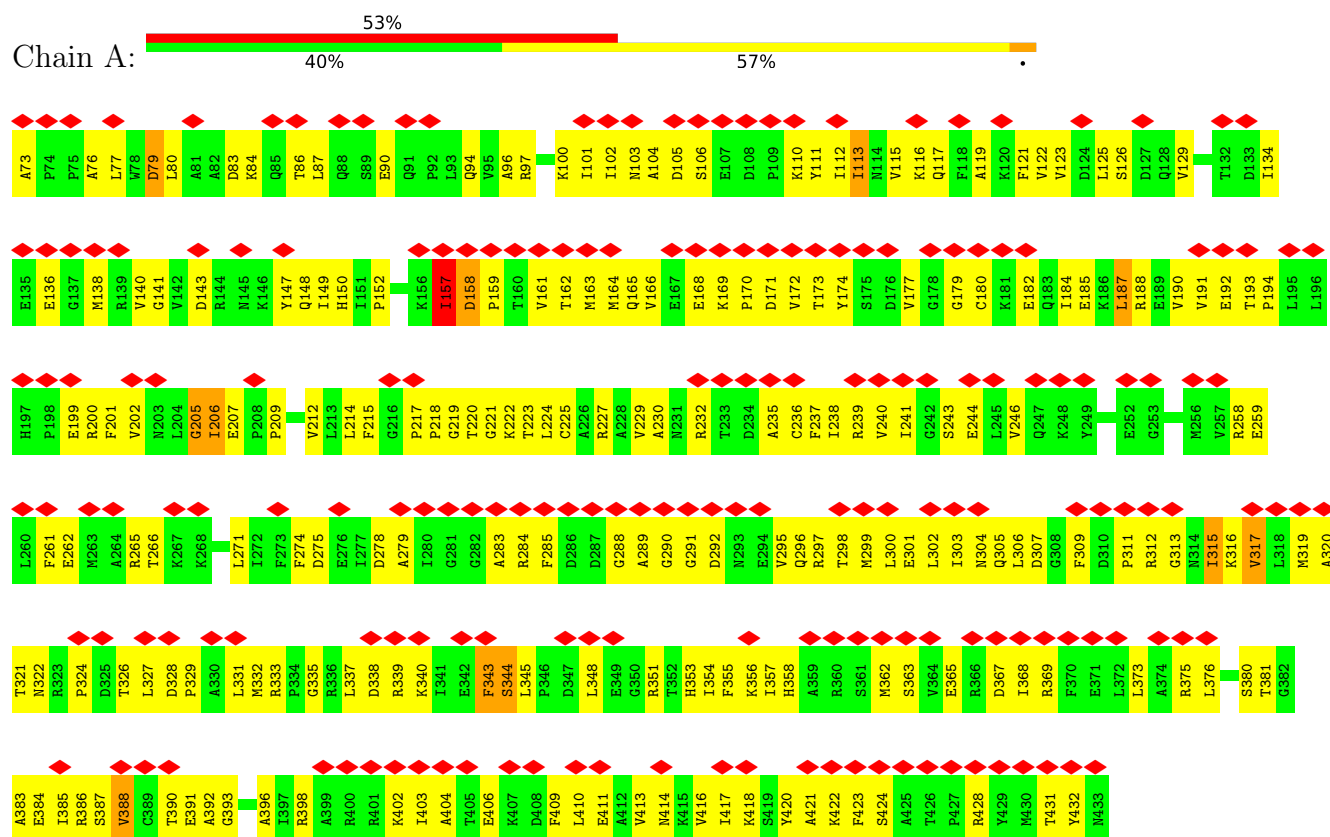


- Molecule 9: 26S proteasome non-ATPase regulatory subunit 14

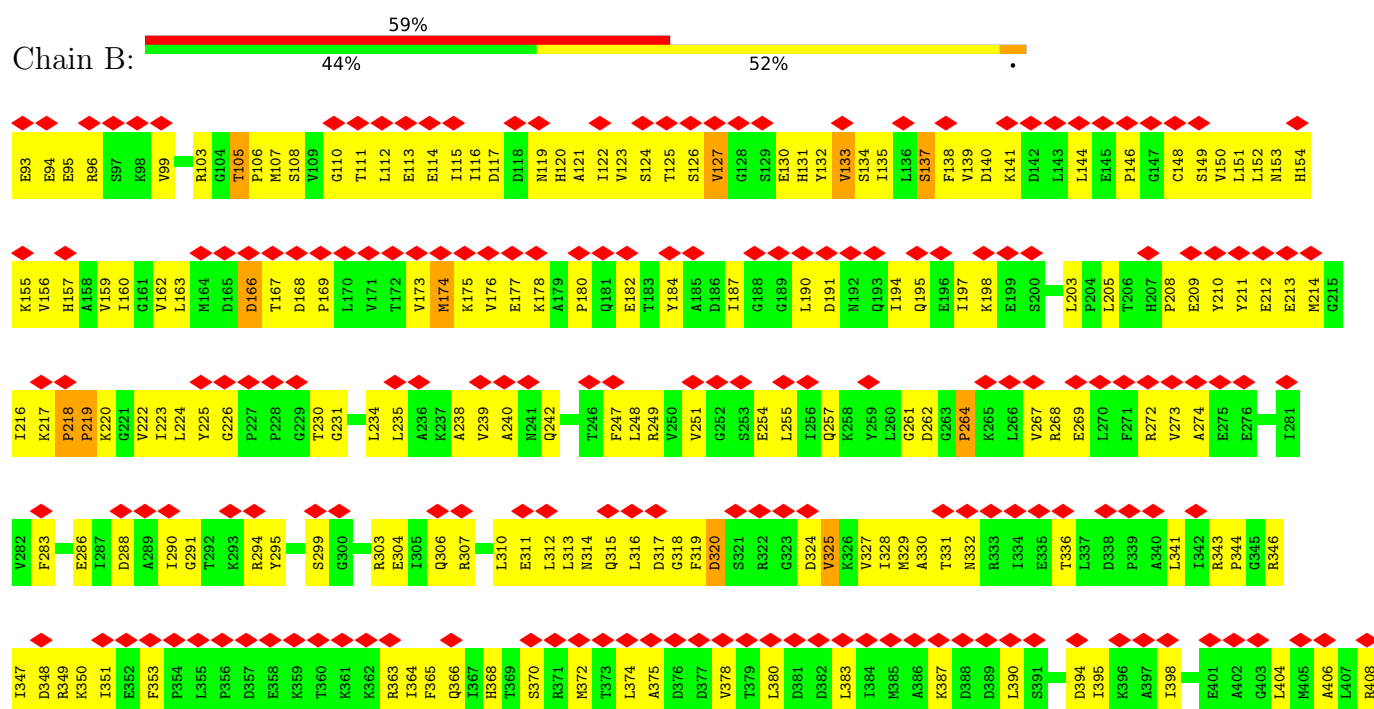


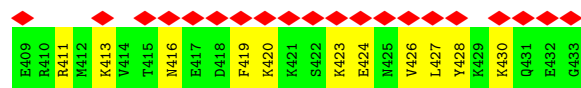


• Molecule 12: 26S proteasome regulatory subunit 7

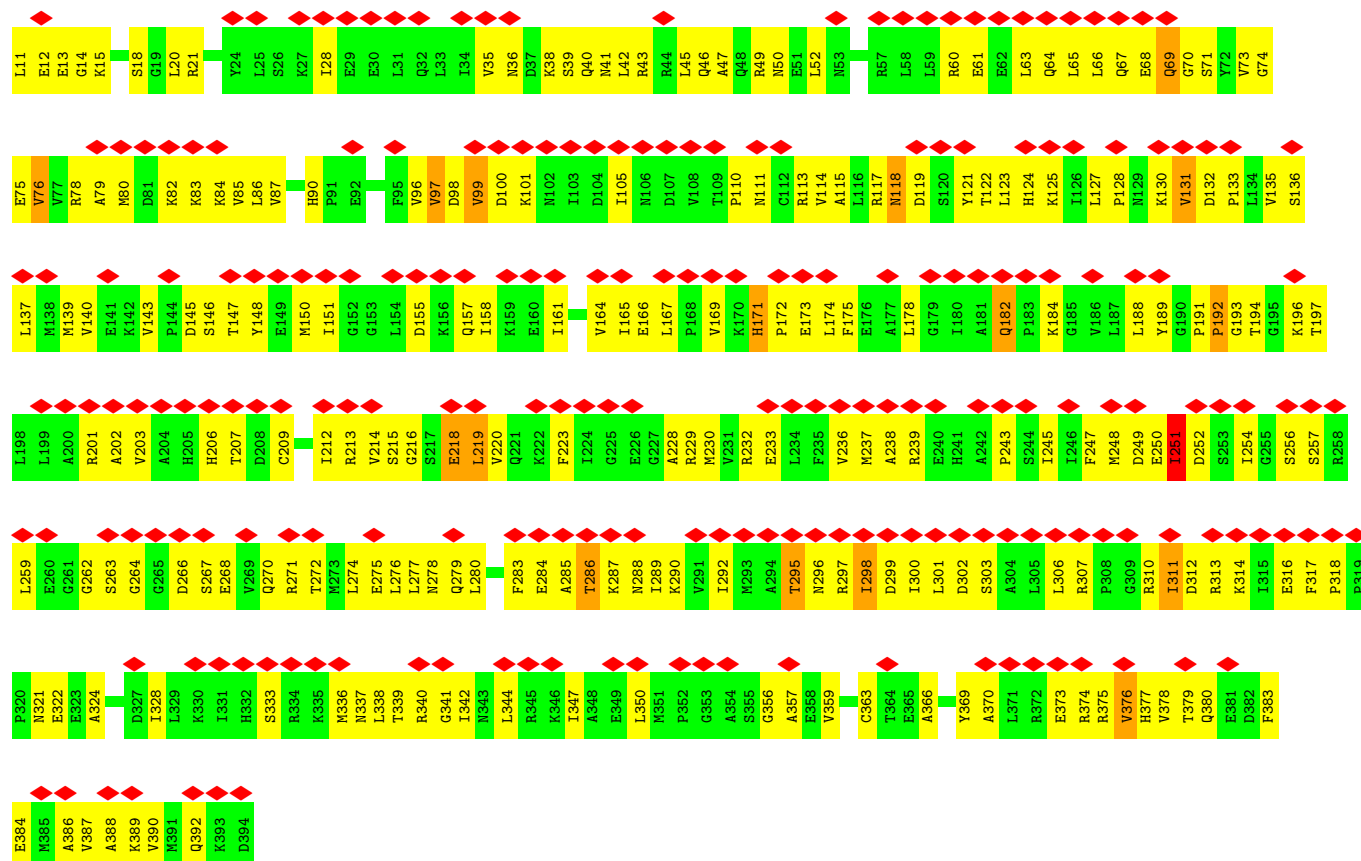


• Molecule 13: 26S proteasome regulatory subunit 4





• Molecule 14: 26S proteasome regulatory subunit 8

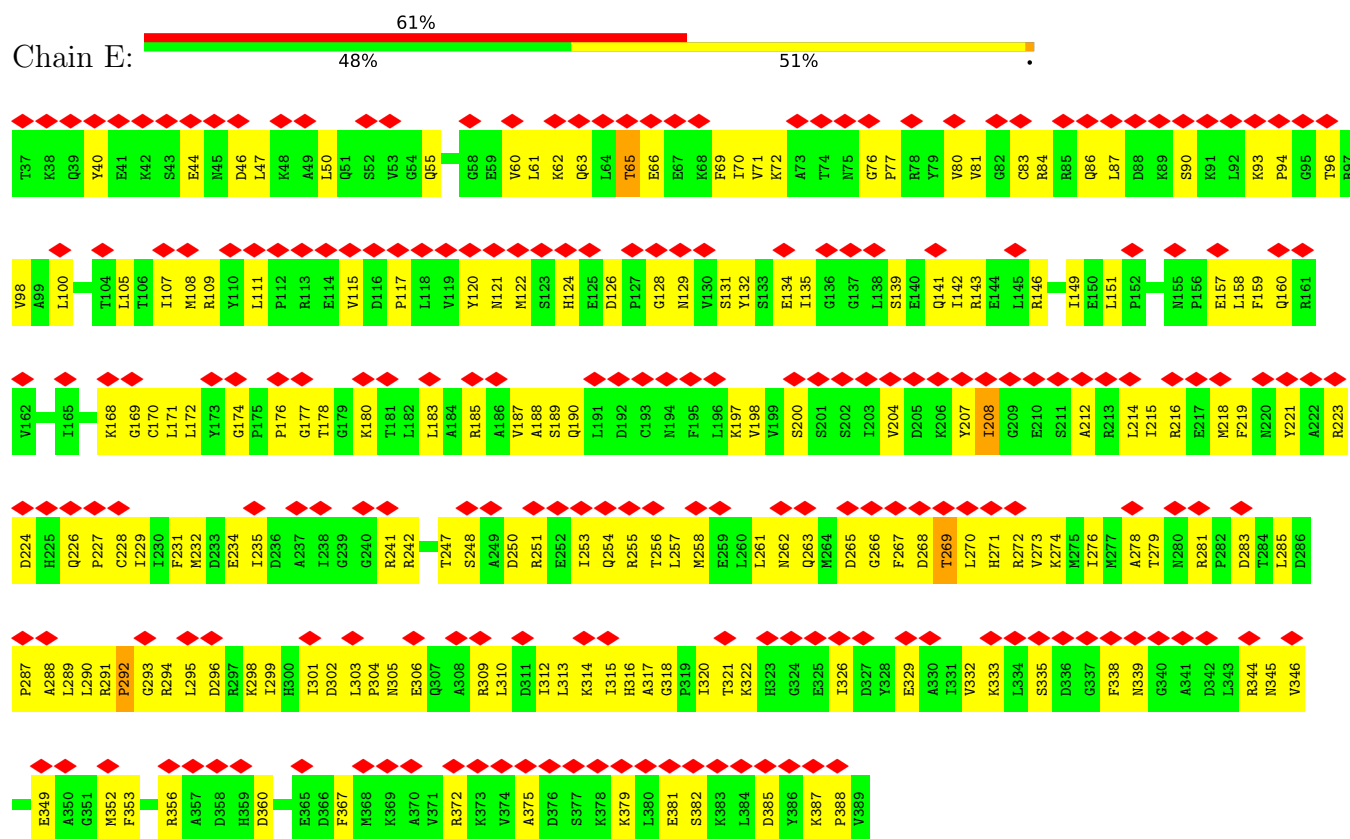


• Molecule 15: 26S proteasome regulatory subunit 6B

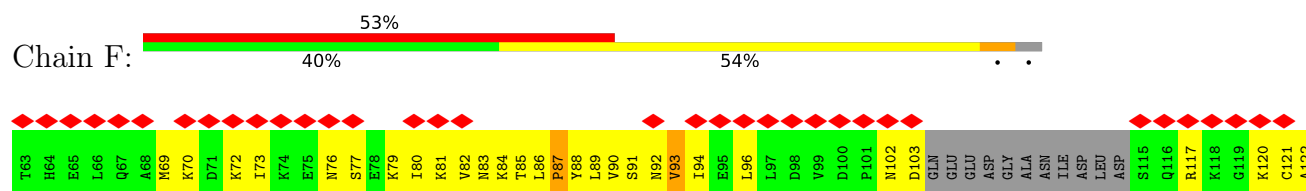


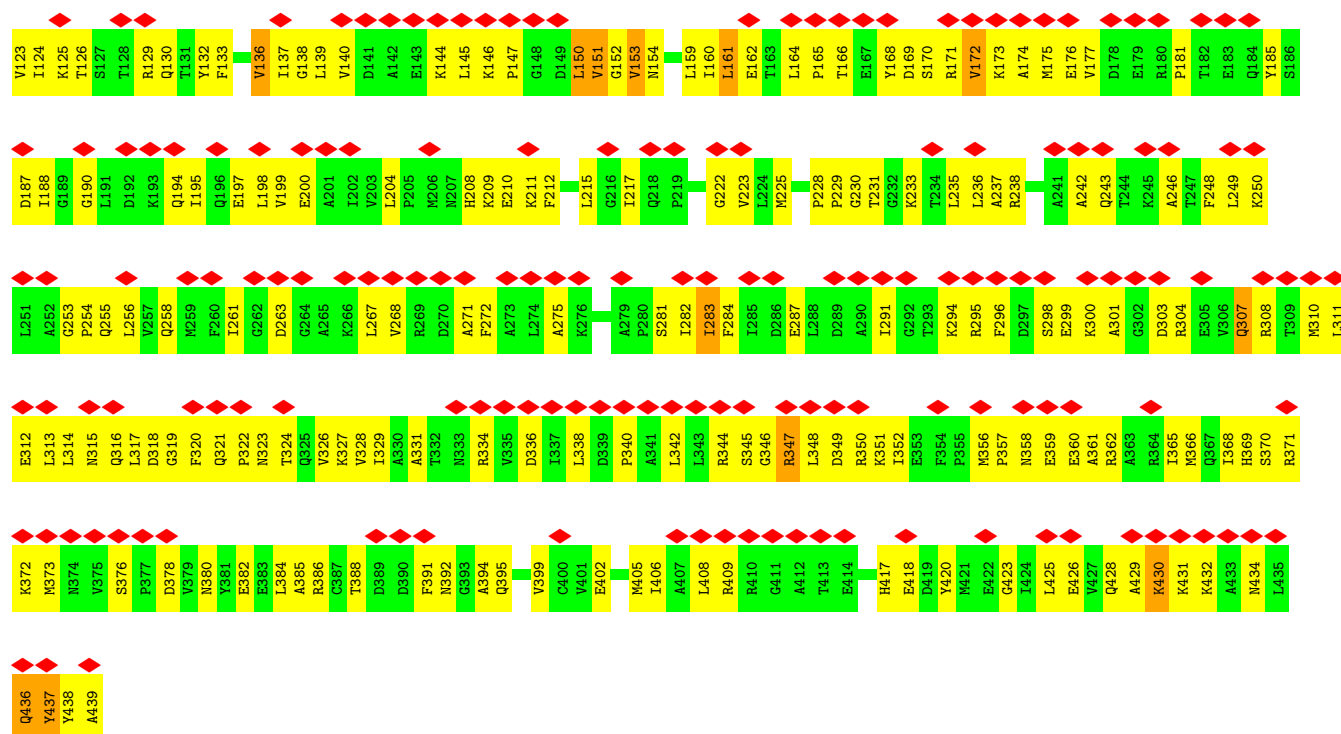


• Molecule 16: 26S proteasome regulatory subunit 10B

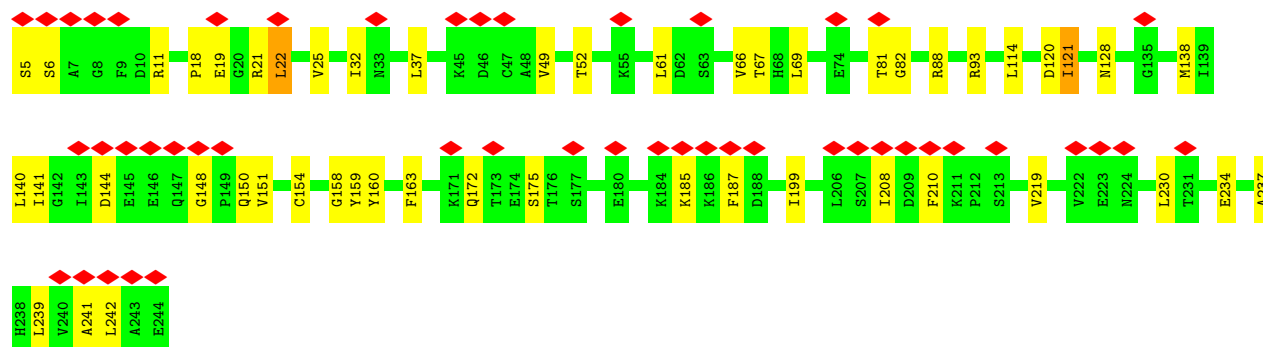
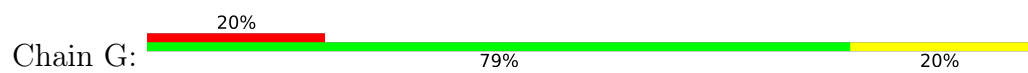


• Molecule 17: 26S proteasome regulatory subunit 6A

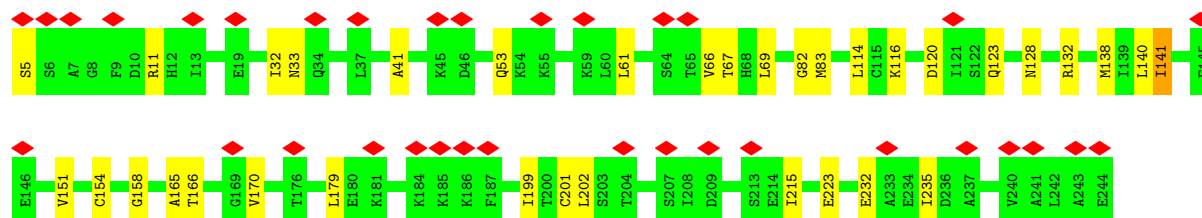
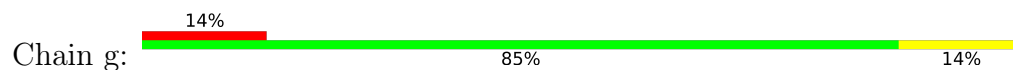




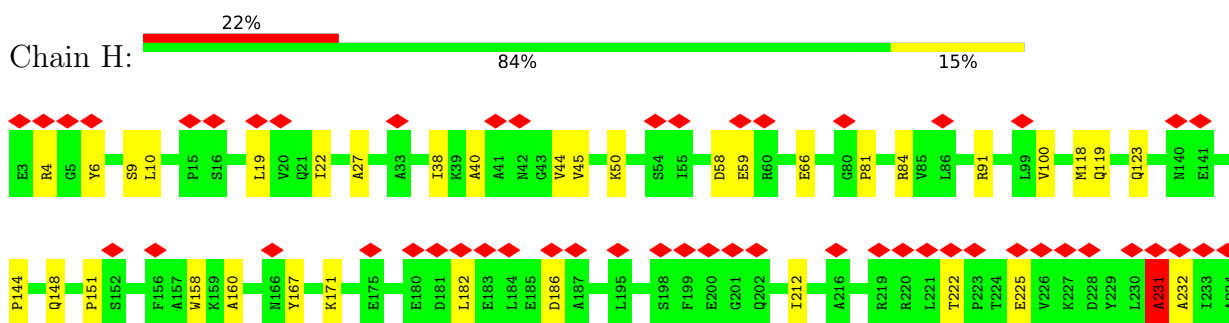
• Molecule 18: Proteasome subunit alpha type-6



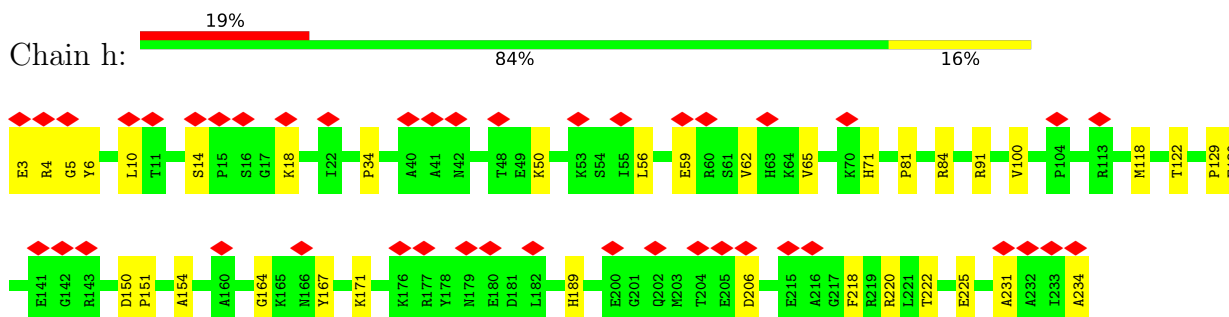
• Molecule 18: Proteasome subunit alpha type-6



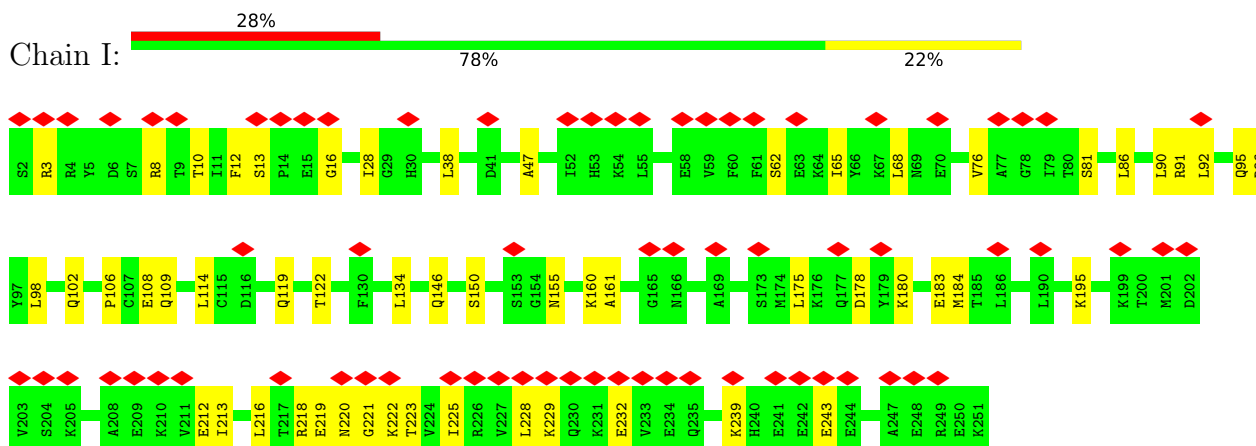
• Molecule 19: Proteasome subunit alpha type-2



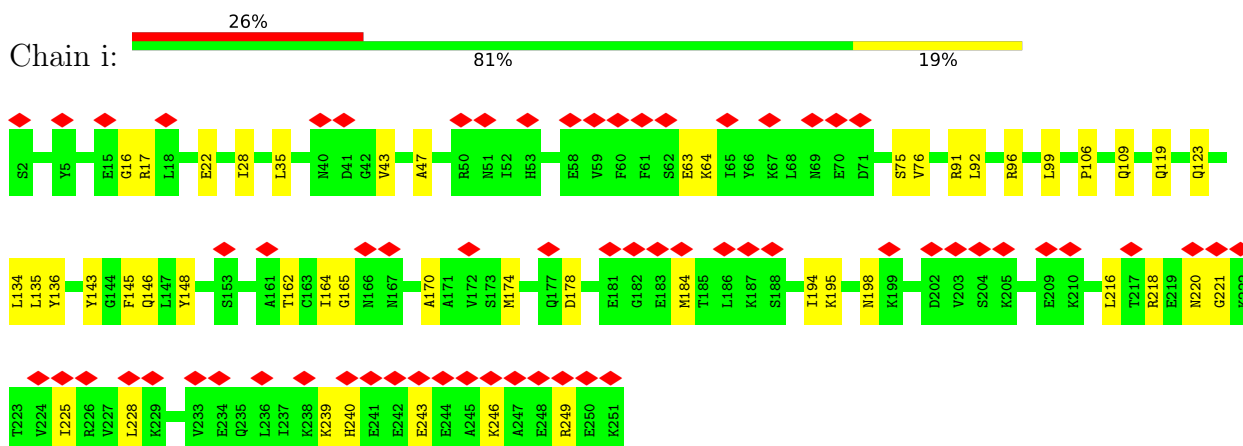
• Molecule 19: Proteasome subunit alpha type-2



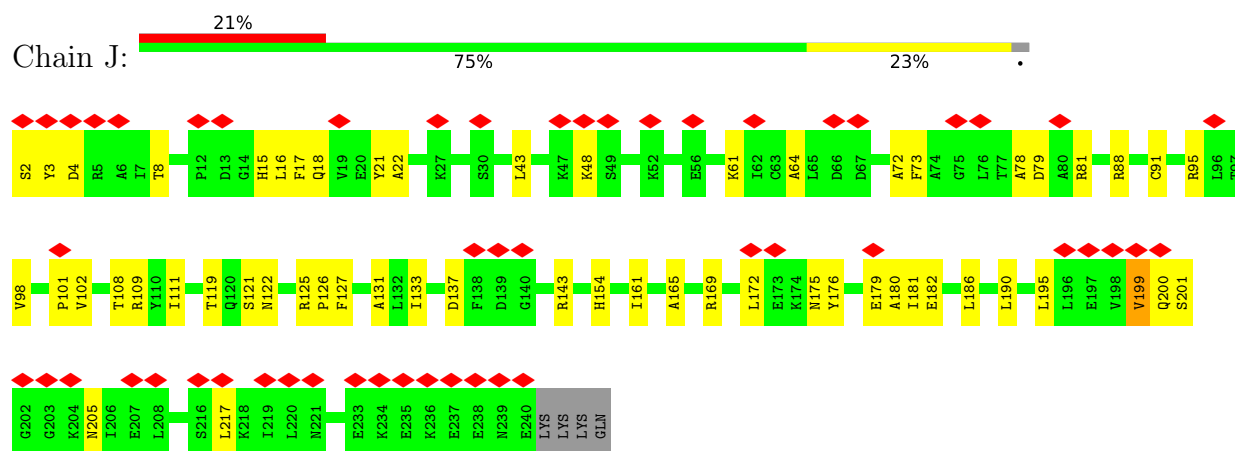
• Molecule 20: Proteasome subunit alpha type-4



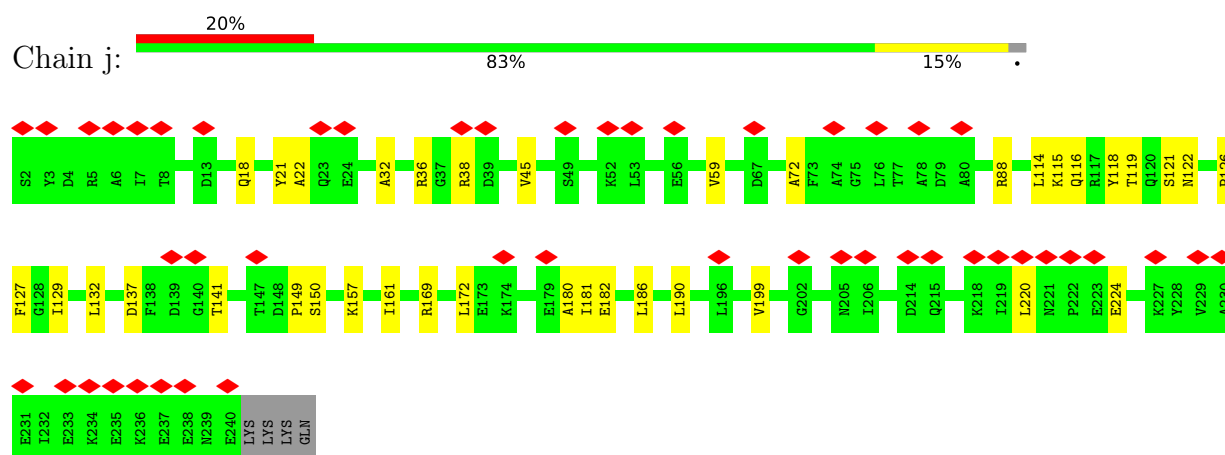
• Molecule 20: Proteasome subunit alpha type-4



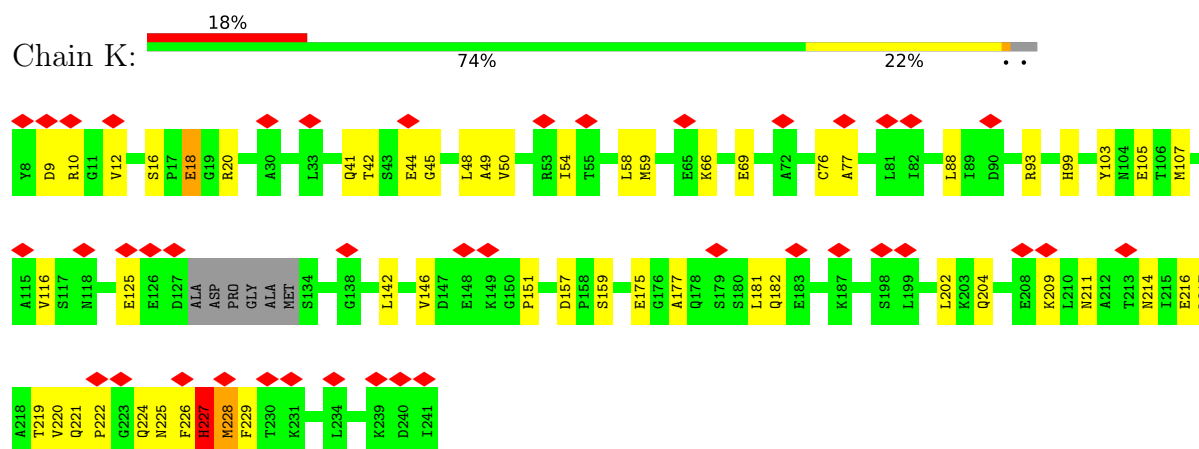
- Molecule 21: Proteasome subunit alpha type-7



- Molecule 21: Proteasome subunit alpha type-7

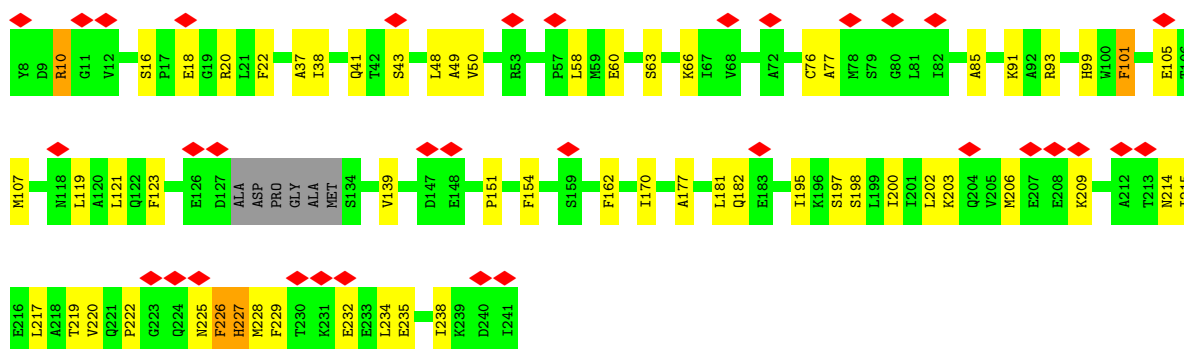


- Molecule 22: Proteasome subunit alpha type-5

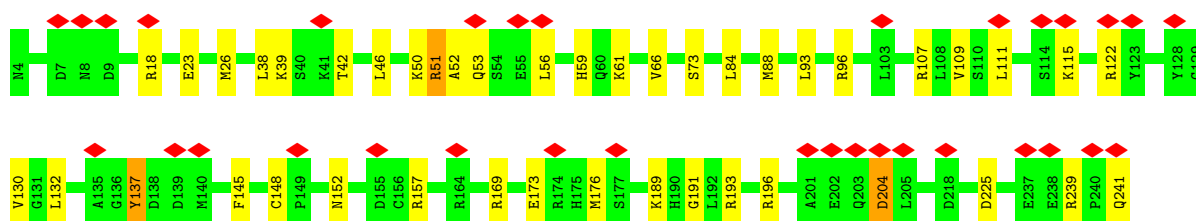
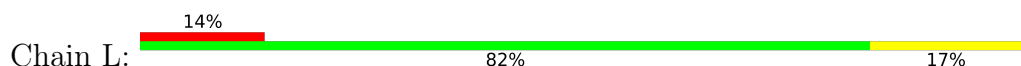


- Molecule 22: Proteasome subunit alpha type-5

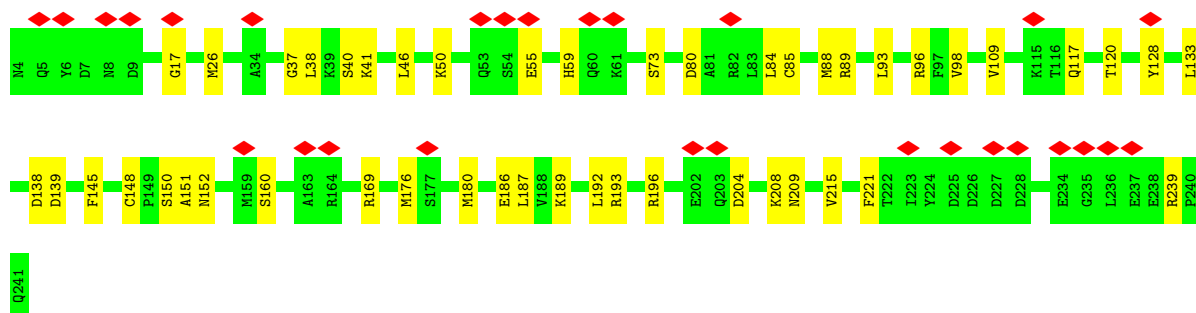
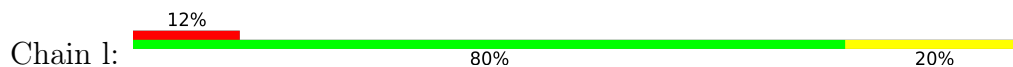




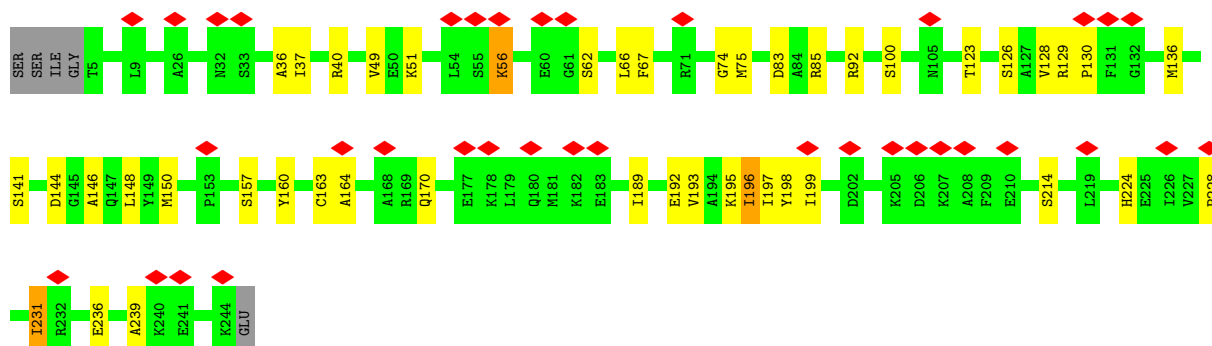
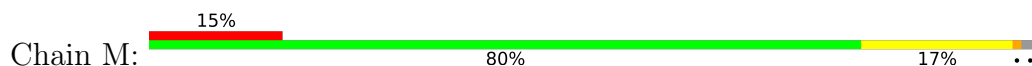
• Molecule 23: Proteasome subunit alpha type-1



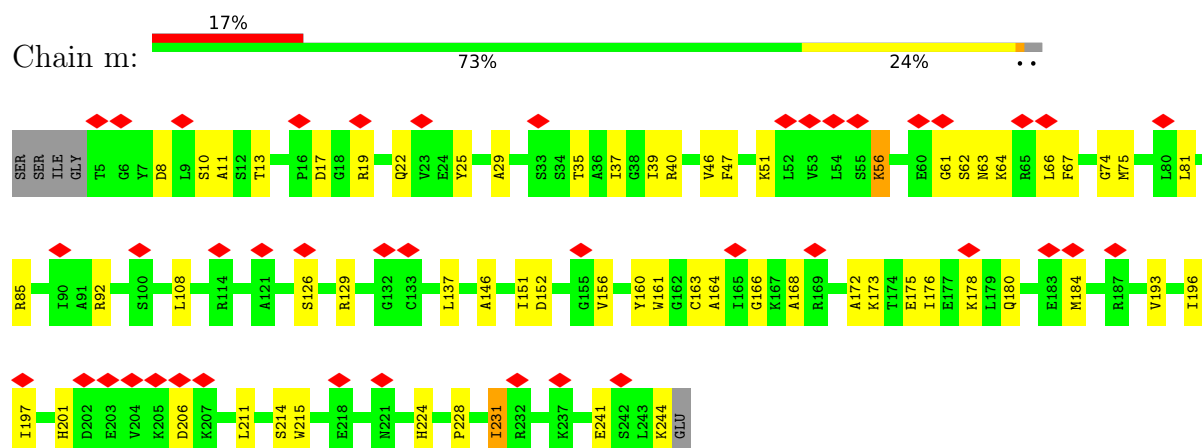
• Molecule 23: Proteasome subunit alpha type-1



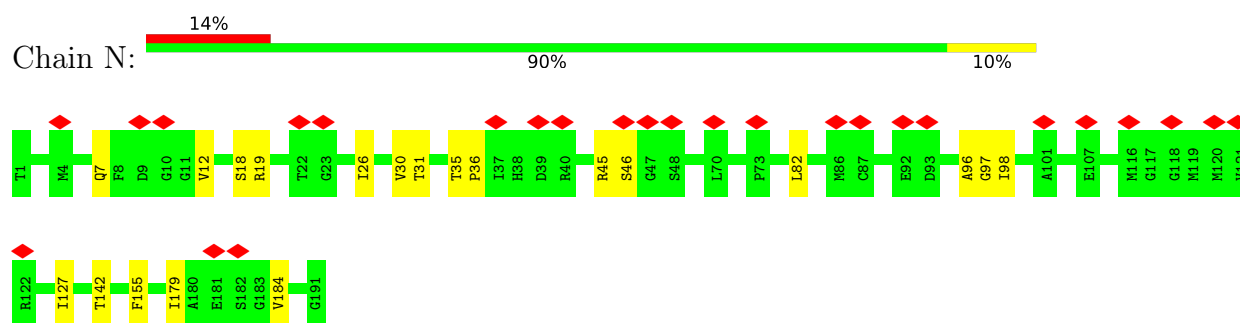
• Molecule 24: Proteasome subunit alpha type-3



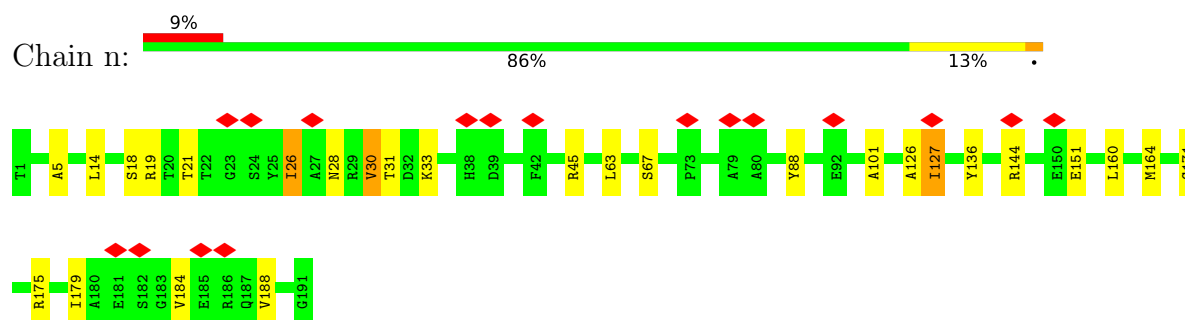
- Molecule 24: Proteasome subunit alpha type-3



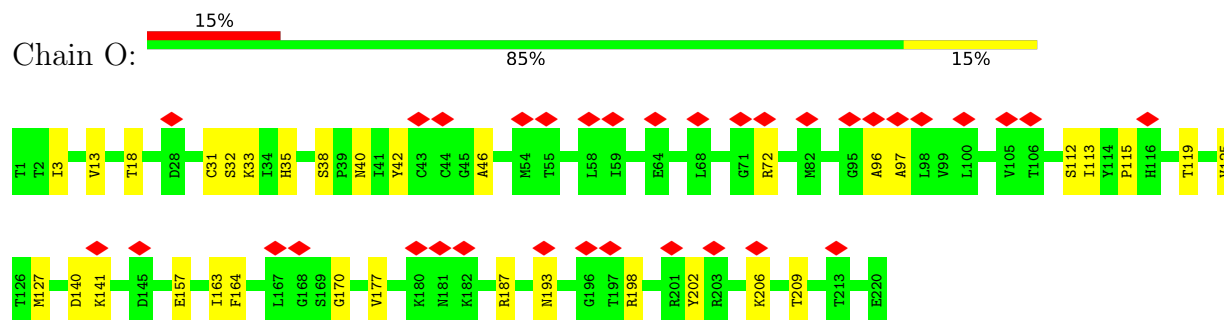
- Molecule 25: Proteasome subunit beta type-6



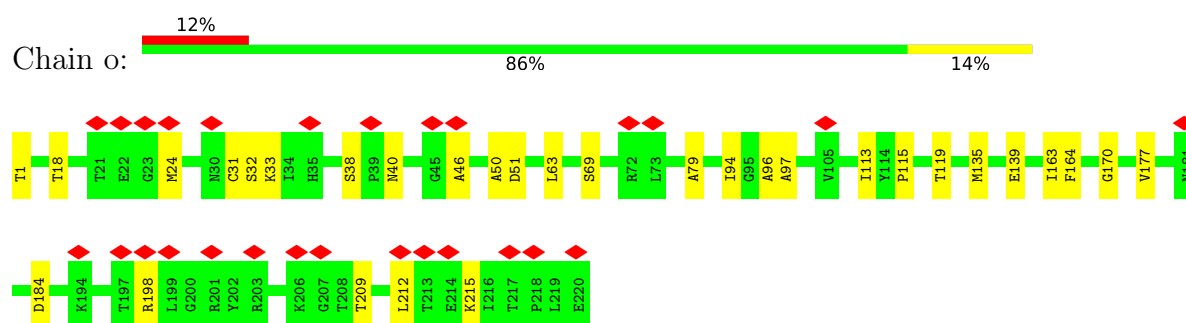
- Molecule 25: Proteasome subunit beta type-6



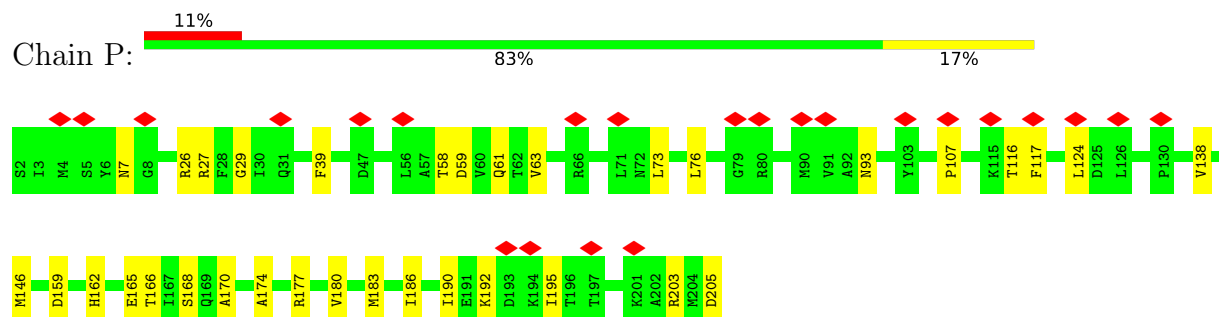
- Molecule 26: Proteasome subunit beta type-7



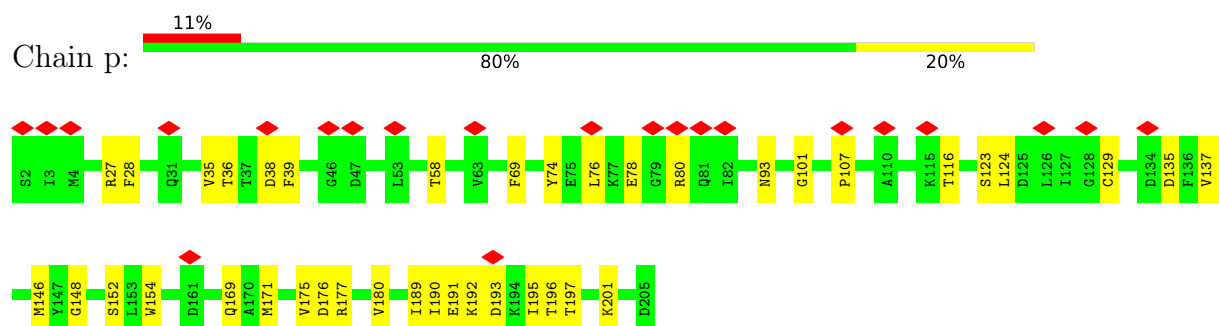
- Molecule 26: Proteasome subunit beta type-7



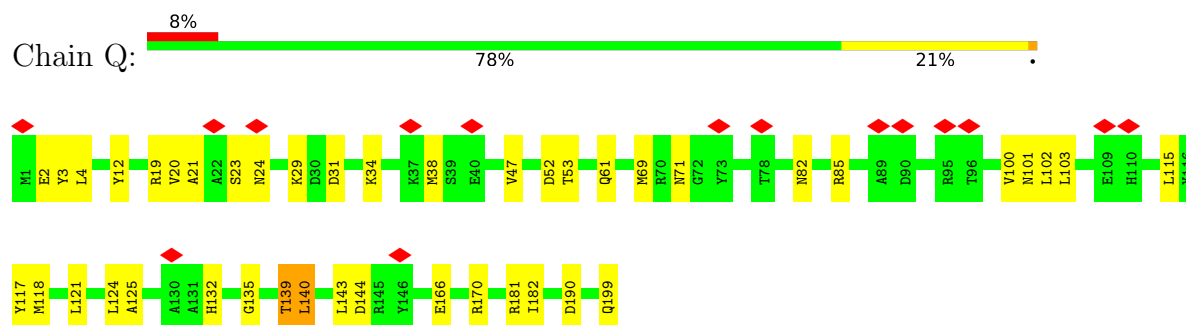
- Molecule 27: Proteasome subunit beta type-3



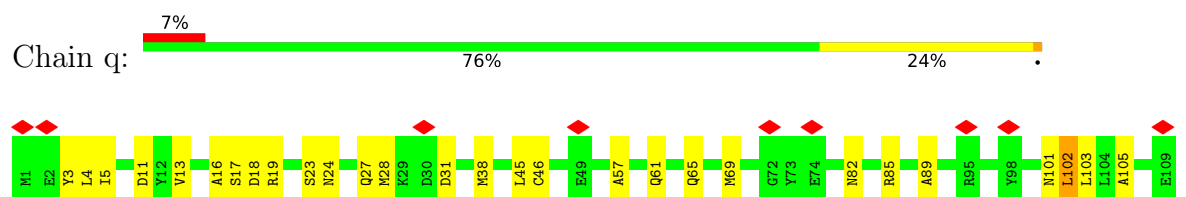
- Molecule 27: Proteasome subunit beta type-3

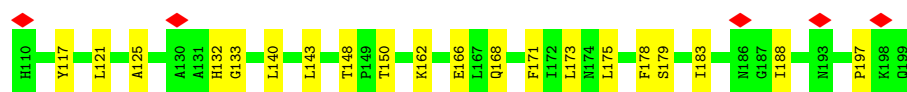


- Molecule 28: Proteasome subunit beta type-2



- Molecule 28: Proteasome subunit beta type-2

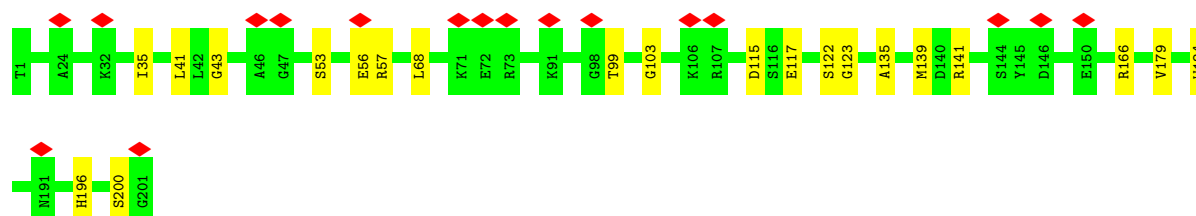




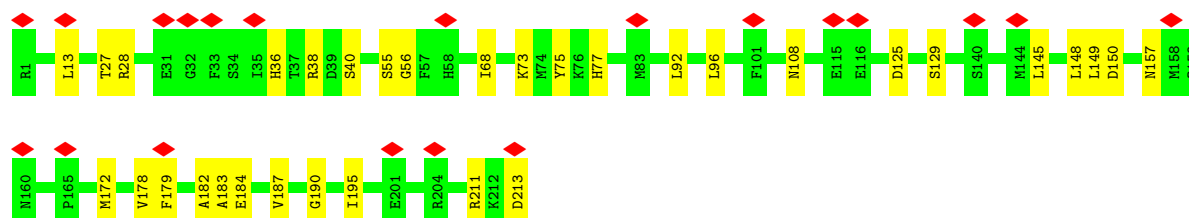
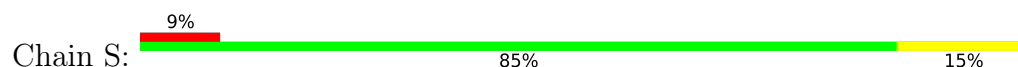
- Molecule 29: Proteasome subunit beta type-5



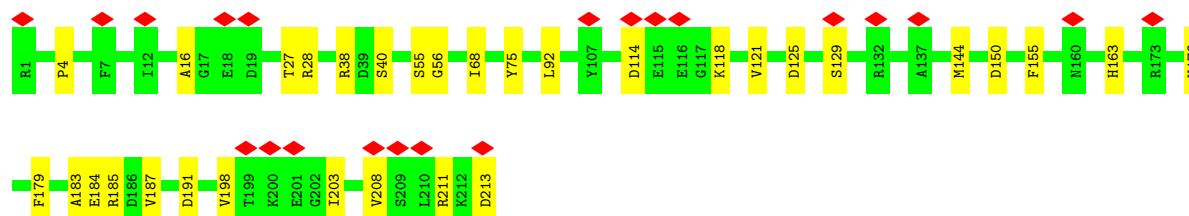
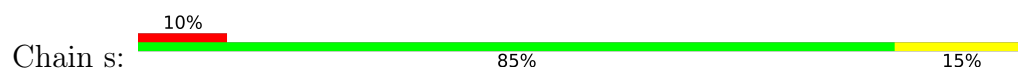
- Molecule 29: Proteasome subunit beta type-5



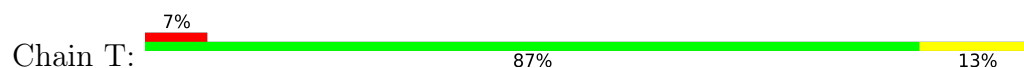
- Molecule 30: Proteasome subunit beta type-1

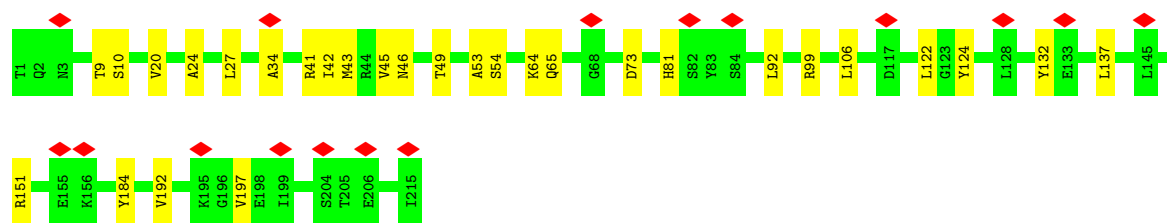


- Molecule 30: Proteasome subunit beta type-1

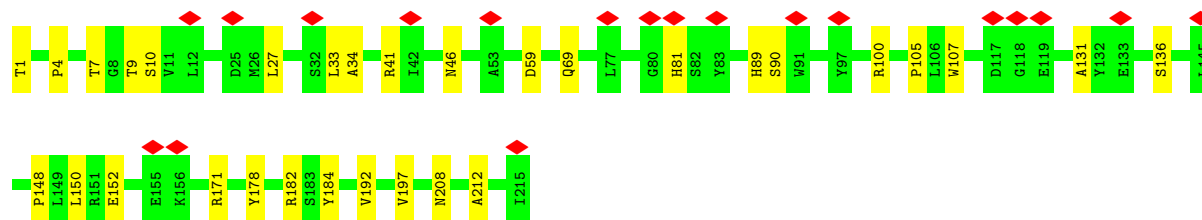
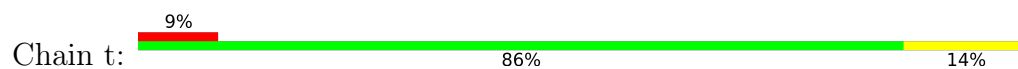


- Molecule 31: Proteasome subunit beta type-4

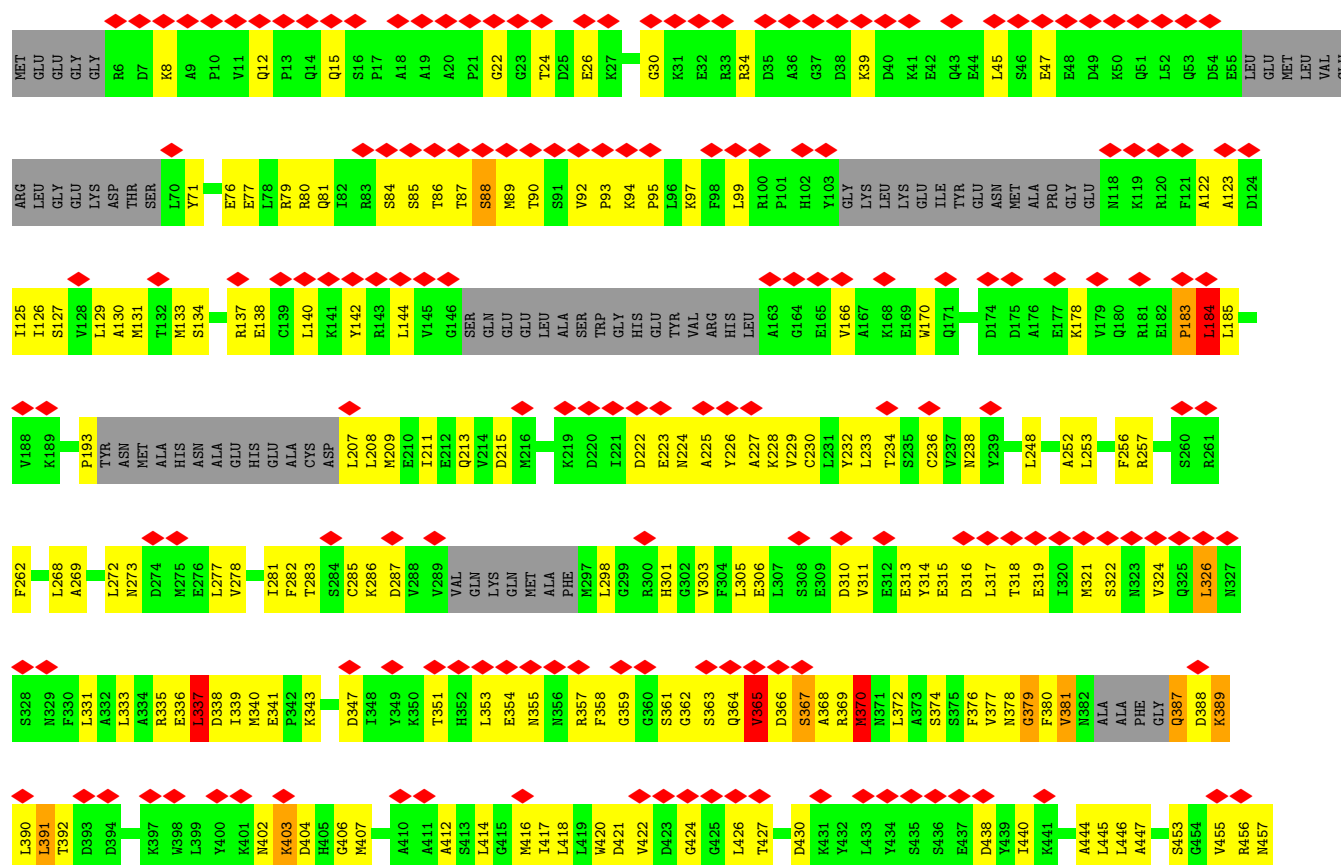




• Molecule 31: Proteasome subunit beta type-4



• Molecule 32: 26S proteasome non-ATPase regulatory subunit 2





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	15536	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TECNAI ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	30	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.008	Depositor
Minimum map value	-0.003	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.001	Depositor
Recommended contour level	0.003	Depositor
Map size (Å)	420.0, 420.0, 420.0	wwPDB
Map dimensions	560, 560, 560	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.75, 0.75, 0.75	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: ZN

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	U	0.12	0/6396	0.36	0/8646
2	V	0.18	0/3929	0.50	0/5309
3	W	0.16	0/1975	0.48	0/2659
4	X	0.10	0/655	0.35	0/877
5	Y	0.13	0/3173	0.40	0/4273
6	Z	0.15	0/2324	0.51	4/3150 (0.1%)
7	a	0.16	0/3051	0.45	1/4130 (0.0%)
8	b	0.14	0/1478	0.33	0/2001
9	c	0.19	0/2302	0.53	2/3110 (0.1%)
10	d	0.19	0/2162	0.53	1/2919 (0.0%)
11	e	0.22	0/198	0.62	0/258
12	A	0.21	0/2886	0.56	6/3899 (0.2%)
13	B	0.21	0/2700	0.59	4/3645 (0.1%)
14	C	0.17	0/3054	0.52	0/4107
15	D	0.22	0/3090	0.60	9/4168 (0.2%)
16	E	0.16	0/2835	0.49	0/3821
17	F	0.19	0/2903	0.57	1/3912 (0.0%)
18	G	0.30	0/1858	0.66	0/2521
18	g	0.26	0/1859	0.63	1/2523 (0.0%)
19	H	0.31	0/1743	0.71	3/2372 (0.1%)
19	h	0.29	0/1743	0.69	2/2372 (0.1%)
20	I	0.31	0/1942	0.70	2/2628 (0.1%)
20	i	0.28	0/1942	0.70	2/2628 (0.1%)
21	J	0.33	0/1728	0.68	0/2358
21	j	0.28	0/1728	0.64	1/2358 (0.0%)
22	K	0.32	0/1747	0.71	2/2364 (0.1%)
22	k	0.31	0/1747	0.70	5/2364 (0.2%)
23	L	0.33	0/1885	0.70	2/2552 (0.1%)
23	l	0.27	0/1885	0.66	0/2552
24	M	0.33	0/1891	0.68	2/2552 (0.1%)
24	m	0.29	0/1891	0.67	4/2552 (0.2%)
25	N	0.29	0/1454	0.55	0/1967

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
25	n	0.28	0/1454	0.56	0/1967
26	O	0.29	0/1670	0.57	0/2265
26	o	0.28	0/1670	0.51	0/2265
27	P	0.31	0/1614	0.61	0/2177
27	p	0.30	0/1614	0.58	1/2177 (0.0%)
28	Q	0.34	0/1603	0.73	0/2174
28	q	0.33	0/1603	0.75	0/2174
29	R	0.30	0/1579	0.55	0/2134
29	r	0.29	0/1579	0.52	0/2134
30	S	0.30	0/1671	0.58	0/2253
30	s	0.29	0/1671	0.57	0/2253
31	T	0.32	0/1700	0.61	0/2305
31	t	0.30	0/1700	0.59	0/2305
32	f	0.33	1/5393 (0.0%)	0.87	19/7271 (0.3%)
All	All	0.25	1/98675 (0.0%)	0.60	74/133401 (0.1%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	U	0	3
2	V	0	4
5	Y	0	2
6	Z	0	1
9	c	0	1
10	d	0	1
12	A	0	1
13	B	0	2
14	C	0	1
15	D	0	1
16	E	0	1
17	F	0	2
18	G	0	1
19	H	0	2
21	J	0	2
21	j	0	1
22	K	0	1
22	k	0	3
23	L	0	2
23	l	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
24	M	0	1
26	O	0	1
27	p	0	1
28	Q	0	2
28	q	0	1
All	All	0	39

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	f	494	ARG	CA-C	5.16	1.59	1.52

All (74) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	Z	220	LEU	C-N-CD	-11.96	94.29	120.60
32	f	488	ALA	N-CA-C	10.57	122.88	111.36
7	a	342	ASP	N-CA-C	8.80	120.29	107.88
19	h	231	ALA	CA-C-N	7.91	135.93	121.70
19	h	231	ALA	C-N-CA	7.91	135.93	121.70
23	L	204	ASP	CA-C-N	7.63	135.44	121.70
23	L	204	ASP	C-N-CA	7.63	135.44	121.70
6	Z	63	LYS	N-CA-C	7.49	119.23	111.14
20	I	184	MET	CA-C-N	7.46	135.14	121.70
20	I	184	MET	C-N-CA	7.46	135.14	121.70
32	f	493	ASN	N-CA-C	-6.99	95.91	110.80
32	f	472	HIS	CA-C-N	6.96	130.47	120.79
32	f	472	HIS	C-N-CA	6.96	130.47	120.79
20	i	184	MET	CA-C-N	6.95	134.21	121.70
20	i	184	MET	C-N-CA	6.95	134.21	121.70
32	f	493	ASN	CA-C-N	-6.92	111.06	120.82
32	f	493	ASN	C-N-CA	-6.92	111.06	120.82
18	g	223	GLU	N-CA-C	-6.88	104.02	113.18
10	d	228	GLN	N-CA-C	6.75	123.97	113.72
27	p	35	VAL	N-CA-C	-6.54	106.60	111.90
22	k	228	MET	N-CA-C	6.52	124.68	110.80
19	H	231	ALA	CA-C-N	6.51	133.41	121.70
19	H	231	ALA	C-N-CA	6.51	133.41	121.70
15	D	373	ALA	CA-C-N	6.37	133.17	121.70
15	D	373	ALA	C-N-CA	6.37	133.17	121.70
32	f	492	SER	N-CA-C	-6.30	104.41	111.28
32	f	663	GLY	N-CA-C	6.12	121.36	110.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	f	370	MET	N-CA-C	-6.12	104.69	111.36
32	f	324	VAL	CA-C-N	6.08	133.16	121.54
32	f	324	VAL	C-N-CA	6.08	133.16	121.54
12	A	344	SER	CA-C-N	6.05	132.59	121.70
12	A	344	SER	C-N-CA	6.05	132.59	121.70
6	Z	63	LYS	CA-C-N	6.01	132.52	121.70
6	Z	63	LYS	C-N-CA	6.01	132.52	121.70
22	k	226	PHE	CA-C-N	5.95	132.41	121.70
22	k	226	PHE	C-N-CA	5.95	132.41	121.70
32	f	489	TYR	N-CA-C	5.93	118.42	109.23
32	f	365	VAL	N-CA-C	5.79	121.39	109.34
15	D	389	GLU	CA-C-N	5.78	132.11	121.70
15	D	389	GLU	C-N-CA	5.78	132.11	121.70
15	D	206	GLY	CA-C-N	-5.78	114.43	120.38
15	D	206	GLY	C-N-CA	-5.78	114.43	120.38
15	D	302	ASN	CB-CA-C	-5.75	109.41	117.23
22	K	18	GLU	CA-C-N	5.72	131.99	121.70
22	K	18	GLU	C-N-CA	5.72	131.99	121.70
24	M	231	ILE	CA-C-N	5.68	132.39	121.54
24	M	231	ILE	C-N-CA	5.68	132.39	121.54
32	f	374	SER	CA-C-N	-5.67	112.68	120.28
32	f	374	SER	C-N-CA	-5.67	112.68	120.28
32	f	379	GLY	CA-C-N	-5.63	113.48	122.66
32	f	379	GLY	C-N-CA	-5.63	113.48	122.66
19	H	231	ALA	N-CA-C	5.63	119.92	112.72
12	A	205	GLY	CA-C-N	5.61	131.79	121.70
12	A	205	GLY	C-N-CA	5.61	131.79	121.70
32	f	337	LEU	N-CA-C	5.53	122.57	110.80
9	c	244	VAL	CA-C-N	-5.47	112.71	121.35
9	c	244	VAL	C-N-CA	-5.47	112.71	121.35
17	F	430	LYS	CB-CA-C	-5.43	109.84	117.23
13	B	166	ASP	CA-C-N	5.30	131.25	121.70
13	B	166	ASP	C-N-CA	5.30	131.25	121.70
24	m	56	LYS	CA-C-N	5.23	131.12	121.70
24	m	56	LYS	C-N-CA	5.23	131.12	121.70
22	k	18	GLU	CA-C-N	5.23	131.11	121.70
22	k	18	GLU	C-N-CA	5.23	131.11	121.70
24	m	231	ILE	CA-C-N	5.21	131.50	121.54
24	m	231	ILE	C-N-CA	5.21	131.50	121.54
13	B	324	ASP	CA-C-N	5.21	131.08	121.70
13	B	324	ASP	C-N-CA	5.21	131.08	121.70
21	j	59	VAL	N-CA-C	-5.13	107.34	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	f	404	ASP	N-CA-C	5.02	117.14	111.02
12	A	343	PHE	CA-C-N	5.01	130.73	121.70
12	A	343	PHE	C-N-CA	5.01	130.73	121.70
15	D	84	SER	CA-C-N	5.01	130.71	121.70
15	D	84	SER	C-N-CA	5.01	130.71	121.70

There are no chirality outliers.

All (39) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	A	157	ILE	Peptide
13	B	133	VAL	Peptide
13	B	264	PRO	Peptide
14	C	171	HIS	Peptide
15	D	151	ILE	Peptide
16	E	292	PRO	Peptide
17	F	294	LYS	Peptide
17	F	87	PRO	Peptide
18	G	160	TYR	Peptide
19	H	231	ALA	Peptide
19	H	40	ALA	Peptide
21	J	15	HIS	Peptide
21	J	199	VAL	Peptide
22	K	10	ARG	Peptide
23	L	137	TYR	Peptide
23	L	204	ASP	Peptide
24	M	56	LYS	Peptide
26	O	187	ARG	Peptide
28	Q	101	ASN	Peptide
28	Q	139	THR	Peptide
1	U	432	SER	Peptide
1	U	433	PRO	Peptide
1	U	435	SER	Peptide
2	V	319	HIS	Peptide
2	V	54	LYS	Peptide
2	V	57	ALA	Peptide
2	V	80	LYS	Peptide
5	Y	356	THR	Peptide
5	Y	63	TRP	Peptide
6	Z	221	PRO	Peptide
9	c	242	GLU	Mainchain
10	d	3	GLU	Peptide

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Mol	Chain	Res	Type	Group
21	j	199	VAL	Peptide
22	k	10	ARG	Peptide
22	k	227	HIS	Peptide
22	k	232	GLU	Peptide
23	l	204	ASP	Peptide
27	p	101	GLY	Peptide
28	q	102	LEU	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	U	6287	0	6330	520	0
2	V	3852	0	3893	210	0
3	W	1940	0	1978	110	0
4	X	647	0	676	25	0
5	Y	3115	0	3116	219	0
6	Z	2281	0	2312	191	0
7	a	2993	0	3011	105	0
8	b	1458	0	1505	50	0
9	c	2260	0	2276	120	0
10	d	2116	0	2146	97	0
11	e	197	0	199	14	0
12	A	2835	0	2879	254	0
13	B	2662	0	2702	194	0
14	C	3015	0	3120	417	0
15	D	3040	0	3071	563	0
16	E	2790	0	2845	179	0
17	F	2863	0	2929	280	0
18	G	1825	0	1792	107	0
18	g	1826	0	1796	20	0
19	H	1708	0	1594	30	0
19	h	1708	0	1594	24	0
20	I	1912	0	1851	35	0
20	i	1912	0	1851	28	0
21	J	1704	0	1517	39	0
21	j	1704	0	1517	23	0
22	K	1722	0	1672	96	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	k	1722	0	1673	37	0
23	L	1850	0	1819	100	0
23	l	1850	0	1822	28	0
24	M	1856	0	1814	31	0
24	m	1856	0	1814	39	0
25	N	1430	0	1398	12	0
25	n	1430	0	1398	16	0
26	O	1643	0	1644	21	0
26	o	1643	0	1644	21	0
27	P	1585	0	1598	24	0
27	p	1585	0	1598	27	0
28	Q	1570	0	1547	32	0
28	q	1570	0	1547	34	0
29	R	1548	0	1499	14	0
29	r	1548	0	1499	18	0
30	S	1641	0	1618	26	0
30	s	1641	0	1618	22	0
31	T	1667	0	1628	22	0
31	t	1667	0	1628	24	0
32	f	5319	0	5329	454	0
33	c	1	0	0	0	0
All	All	96994	0	96307	3933	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 20.

All (3933) 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)
15:D:417:TYR:CG	18:G:5:SER:HB2	1.25	1.67
15:D:417:TYR:CD2	18:G:5:SER:HB3	1.31	1.61
15:D:417:TYR:CA	18:G:19:GLU:CB	1.74	1.60
12:A:375:ARG:CZ	22:K:204:GLN:HG2	1.34	1.57
1:U:639:LEU:HD22	14:C:43:ARG:CA	1.33	1.56
17:F:437:TYR:CA	23:L:53:GLN:HA	1.08	1.55
5:Y:132:VAL:HG21	14:C:338:LEU:C	1.26	1.54
1:U:153:ILE:CG2	14:C:13:GLU:CG	1.81	1.53
5:Y:132:VAL:HG21	14:C:338:LEU:CA	1.33	1.53
15:D:417:TYR:CG	18:G:5:SER:CB	1.88	1.53
15:D:417:TYR:N	18:G:19:GLU:CB	1.69	1.52
1:U:607:VAL:CG1	15:D:64:GLU:HA	1.39	1.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:138:PHE:CE1	14:C:11:LEU:HD21	1.46	1.49
12:A:375:ARG:NH1	22:K:204:GLN:HG2	1.27	1.49
15:D:417:TYR:CD2	18:G:5:SER:CB	1.95	1.49
5:Y:132:VAL:HG23	14:C:377:HIS:CB	1.40	1.47
5:Y:170:GLU:O	15:D:189:GLU:CB	1.64	1.46
1:U:149:GLN:OE1	15:D:40:LEU:CD2	1.64	1.45
2:V:193:GLN:CD	2:V:200:ARG:HH12	1.25	1.45
1:U:600:ARG:NE	15:D:56:VAL:CG2	1.80	1.44
1:U:186:SER:CB	15:D:46:LYS:HD3	1.18	1.44
17:F:437:TYR:HA	23:L:53:GLN:CA	1.45	1.44
17:F:437:TYR:CA	23:L:53:GLN:CA	1.91	1.44
1:U:595:ASN:C	15:D:53:PHE:CE1	1.95	1.42
17:F:437:TYR:N	23:L:53:GLN:HA	1.29	1.41
15:D:418:LYS:H	18:G:19:GLU:CG	1.31	1.41
1:U:600:ARG:CD	15:D:56:VAL:CG2	1.97	1.41
5:Y:132:VAL:CG2	14:C:338:LEU:C	1.94	1.41
15:D:417:TYR:CA	18:G:19:GLU:HB2	0.93	1.40
1:U:187:LEU:HD13	15:D:45:LYS:CB	1.51	1.39
1:U:183:LEU:O	15:D:46:LYS:CE	1.69	1.38
15:D:417:TYR:N	18:G:19:GLU:HB2	1.08	1.38
1:U:158:ARG:NH2	15:D:45:LYS:HE2	1.39	1.38
1:U:607:VAL:HG23	15:D:60:TYR:CE1	1.59	1.38
5:Y:130:LYS:HG3	14:C:340:ARG:NE	1.39	1.38
2:V:193:GLN:CD	2:V:200:ARG:NH1	1.81	1.38
1:U:153:ILE:HG21	14:C:13:GLU:CG	0.91	1.37
5:Y:132:VAL:CG2	14:C:377:HIS:HB2	1.55	1.37
15:D:418:LYS:N	18:G:19:GLU:HA	1.29	1.37
15:D:417:TYR:CB	18:G:5:SER:HB2	1.53	1.37
1:U:603:LEU:CD1	15:D:60:TYR:CD2	1.77	1.37
1:U:595:ASN:CA	15:D:53:PHE:CE1	1.97	1.36
3:W:453:HIS:NE2	6:Z:222:ILE:CG2	1.86	1.36
1:U:600:ARG:HD3	15:D:56:VAL:CG2	1.51	1.35
1:U:155:LEU:HD23	15:D:42:SER:CA	1.56	1.34
1:U:155:LEU:CD2	15:D:42:SER:CA	2.04	1.34
1:U:599:ILE:CG2	15:D:56:VAL:CG1	2.05	1.34
17:F:437:TYR:HA	23:L:53:GLN:CB	1.55	1.34
22:K:217:LEU:O	22:K:229:PHE:CD1	1.79	1.34
22:K:217:LEU:O	22:K:229:PHE:CE1	1.73	1.34
1:U:158:ARG:HH22	15:D:45:LYS:CE	1.39	1.34
2:V:193:GLN:NE2	2:V:200:ARG:HH12	1.26	1.33
16:E:372:ARG:NH2	24:M:170:GLN:OE1	1.58	1.33

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:417:TYR:N	18:G:19:GLU:CG	1.92	1.33
1:U:155:LEU:CD2	15:D:42:SER:N	1.91	1.33
1:U:600:ARG:CD	15:D:56:VAL:HG21	1.55	1.32
5:Y:132:VAL:CG1	14:C:338:LEU:O	1.77	1.32
15:D:417:TYR:C	18:G:19:GLU:CA	1.90	1.32
15:D:418:LYS:N	18:G:19:GLU:HG2	1.45	1.32
1:U:607:VAL:CG2	15:D:60:TYR:CE1	2.11	1.32
5:Y:98:SER:H	14:C:340:ARG:C	1.37	1.31
32:f:494:ARG:HD3	32:f:496:ASP:OD1	1.26	1.31
32:f:796:LEU:O	32:f:799:VAL:HG22	1.30	1.31
3:W:453:HIS:NE2	6:Z:222:ILE:HG21	0.98	1.30
1:U:599:ILE:CG2	15:D:56:VAL:HG11	1.62	1.30
17:F:438:TYR:CB	23:L:51:ARG:HB3	1.62	1.29
1:U:596:ASN:N	15:D:53:PHE:CE1	1.98	1.29
17:F:439:ALA:N	23:L:52:ALA:O	1.65	1.29
22:K:217:LEU:C	22:K:229:PHE:CE1	1.83	1.29
32:f:753:ALA:O	32:f:754:LYS:HE2	1.27	1.28
1:U:186:SER:HB3	15:D:46:LYS:CD	1.34	1.28
5:Y:132:VAL:HG11	14:C:338:LEU:O	1.20	1.28
1:U:153:ILE:CG2	14:C:13:GLU:HG3	1.50	1.27
17:F:438:TYR:HA	23:L:51:ARG:O	1.17	1.27
1:U:153:ILE:CG2	14:C:13:GLU:HG2	1.53	1.26
15:D:413:GLU:O	18:G:5:SER:CA	1.83	1.26
1:U:183:LEU:O	15:D:46:LYS:HE3	1.09	1.26
12:A:348:LEU:HD11	22:K:175:GLU:CD	1.61	1.26
15:D:418:LYS:N	18:G:19:GLU:CA	1.96	1.26
1:U:644:TYR:HD1	14:C:50:ASN:OD1	0.95	1.26
1:U:149:GLN:OE1	15:D:40:LEU:HD21	1.22	1.25
22:K:226:PHE:HA	22:K:227:HIS:CB	1.54	1.25
1:U:155:LEU:CD2	15:D:42:SER:OG	1.84	1.25
1:U:607:VAL:CG2	15:D:60:TYR:HE1	1.48	1.24
1:U:644:TYR:CD1	14:C:50:ASN:OD1	1.88	1.24
15:D:418:LYS:CD	19:H:27:ALA:HB1	1.67	1.24
1:U:603:LEU:HD11	15:D:60:TYR:CD2	1.10	1.24
15:D:413:GLU:O	18:G:5:SER:C	1.78	1.24
32:f:742:ALA:HA	32:f:745:LEU:CD2	1.66	1.24
12:A:348:LEU:HD11	22:K:175:GLU:OE1	1.39	1.23
17:F:437:TYR:O	23:L:52:ALA:C	1.81	1.23
15:D:414:HIS:HA	18:G:5:SER:CA	1.66	1.23
1:U:639:LEU:HD22	14:C:43:ARG:CB	1.69	1.22
3:W:453:HIS:HE2	6:Z:222:ILE:CG2	1.46	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:376:PHE:CE2	32:f:798:THR:CG2	2.23	1.21
2:V:80:LYS:HE2	2:V:90:GLU:OE2	1.36	1.21
6:Z:145:HIS:HE1	6:Z:225:GLN:OE1	1.19	1.21
1:U:186:SER:CB	15:D:46:LYS:CD	1.90	1.20
5:Y:63:TRP:NE1	5:Y:66:ASP:OD1	1.72	1.20
1:U:187:LEU:CD1	15:D:45:LYS:HB2	1.72	1.19
15:D:413:GLU:CG	18:G:11:ARG:NH1	2.04	1.19
32:f:471:LEU:CG	32:f:509:LYS:HE3	1.73	1.19
1:U:153:ILE:HG13	15:D:41:TYR:OH	1.40	1.18
14:C:218:GLU:OE2	15:D:274:ARG:O	1.59	1.17
1:U:603:LEU:HD13	15:D:57:GLN:OE1	1.42	1.17
1:U:155:LEU:HD23	15:D:42:SER:HA	1.16	1.16
1:U:600:ARG:NE	15:D:56:VAL:HG23	1.49	1.16
1:U:155:LEU:HD22	15:D:42:SER:N	1.54	1.16
3:W:452:ILE:HG13	6:Z:222:ILE:HD11	1.26	1.16
17:F:438:TYR:HA	23:L:51:ARG:C	1.69	1.16
1:U:596:ASN:CG	15:D:53:PHE:HD1	1.52	1.16
1:U:155:LEU:HD21	15:D:42:SER:OG	1.01	1.15
32:f:696:LEU:HD13	32:f:752:HIS:CD2	1.80	1.15
32:f:389:LYS:HG2	32:f:418:LEU:HD21	1.29	1.15
1:U:639:LEU:HD22	14:C:43:ARG:C	1.72	1.14
1:U:639:LEU:CD2	14:C:43:ARG:CA	2.24	1.14
32:f:494:ARG:HE	32:f:495:GLU:N	1.44	1.14
1:U:102:ALA:HB1	14:C:20:LEU:CD2	1.76	1.14
1:U:102:ALA:HB2	14:C:20:LEU:HD13	1.29	1.14
1:U:153:ILE:HG12	14:C:13:GLU:HG3	1.29	1.14
1:U:607:VAL:CG1	15:D:64:GLU:CA	2.25	1.14
17:F:438:TYR:HB3	23:L:51:ARG:CB	1.76	1.14
12:A:375:ARG:CZ	22:K:204:GLN:CG	2.26	1.13
5:Y:97:GLU:CB	14:C:340:ARG:O	1.96	1.13
22:K:217:LEU:O	22:K:229:PHE:CZ	2.01	1.13
32:f:389:LYS:CG	32:f:418:LEU:HD21	1.79	1.12
1:U:102:ALA:HB1	14:C:20:LEU:HD21	1.24	1.12
1:U:155:LEU:HD21	15:D:42:SER:CB	1.78	1.12
2:V:79:VAL:HG22	2:V:80:LYS:HG2	1.18	1.12
12:A:375:ARG:NH1	22:K:204:GLN:CG	2.12	1.12
32:f:494:ARG:HH21	32:f:495:GLU:HG2	1.02	1.12
32:f:494:ARG:NH2	32:f:495:GLU:HG2	1.64	1.12
5:Y:170:GLU:C	15:D:189:GLU:HB2	1.74	1.11
3:W:452:ILE:CG2	6:Z:225:GLN:HB3	1.80	1.11
32:f:479:LEU:HD21	32:f:513:GLU:CB	1.80	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:193:GLN:OE1	2:V:200:ARG:NH2	1.83	1.11
6:Z:145:HIS:CE1	6:Z:225:GLN:CD	2.28	1.11
32:f:692:LEU:HD12	32:f:748:LEU:HD21	1.19	1.11
5:Y:130:LYS:CG	14:C:340:ARG:HE	1.64	1.10
6:Z:145:HIS:CE1	6:Z:225:GLN:OE1	2.04	1.10
17:F:438:TYR:HB3	23:L:51:ARG:HB3	1.15	1.10
15:D:417:TYR:N	18:G:19:GLU:HG3	1.57	1.10
22:K:224:GLN:HG2	22:K:227:HIS:CE1	1.85	1.10
32:f:479:LEU:CD2	32:f:513:GLU:HB2	1.79	1.10
1:U:152:GLY:HA2	15:D:41:TYR:H	1.14	1.10
1:U:600:ARG:HE	15:D:56:VAL:CG2	1.51	1.10
5:Y:96:GLY:O	14:C:340:ARG:O	1.67	1.10
1:U:187:LEU:O	15:D:45:LYS:O	1.70	1.10
1:U:607:VAL:HG11	15:D:64:GLU:CA	1.79	1.09
6:Z:145:HIS:HE1	6:Z:225:GLN:CD	1.59	1.09
15:D:414:HIS:CA	18:G:5:SER:CA	2.29	1.09
32:f:692:LEU:HD12	32:f:748:LEU:CD2	1.82	1.09
1:U:607:VAL:HG13	15:D:64:GLU:HA	1.26	1.09
15:D:152:MET:HG2	16:E:62:LYS:HE2	1.22	1.09
32:f:471:LEU:HG	32:f:509:LYS:CE	1.83	1.09
1:U:599:ILE:HG22	15:D:56:VAL:HG11	1.35	1.09
32:f:483:PHE:CE2	32:f:799:VAL:HB	1.88	1.09
1:U:155:LEU:HB2	15:D:41:TYR:HB2	1.31	1.08
1:U:187:LEU:CD1	15:D:45:LYS:CB	2.30	1.08
1:U:639:LEU:HD11	14:C:47:ALA:CB	1.80	1.08
6:Z:224:HIS:CD2	6:Z:228:TYR:HB3	1.89	1.08
32:f:311:VAL:HB	32:f:490:ALA:HB1	1.17	1.08
1:U:639:LEU:HD22	14:C:43:ARG:HA	1.26	1.07
15:D:417:TYR:C	18:G:19:GLU:CB	2.23	1.07
15:D:417:TYR:HB3	18:G:5:SER:HB2	1.35	1.07
17:F:437:TYR:O	23:L:53:GLN:N	1.87	1.07
5:Y:134:LEU:HG	14:C:376:VAL:HG12	1.32	1.07
32:f:742:ALA:O	32:f:745:LEU:HG	1.54	1.07
15:D:413:GLU:HG3	18:G:11:ARG:NH1	1.13	1.06
15:D:417:TYR:CA	18:G:19:GLU:CA	2.27	1.06
1:U:603:LEU:CD1	15:D:60:TYR:CE2	2.37	1.06
1:U:102:ALA:CB	14:C:20:LEU:CD2	2.34	1.06
32:f:376:PHE:CE2	32:f:798:THR:HG21	1.85	1.06
32:f:780:PRO:HB3	32:f:800:LEU:HA	1.37	1.06
1:U:600:ARG:CD	15:D:56:VAL:HG23	1.75	1.05
17:F:437:TYR:C	23:L:53:GLN:HA	1.80	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:K:221:GLN:OE1	22:K:227:HIS:NE2	1.88	1.05
1:U:639:LEU:CD2	14:C:43:ARG:HA	1.86	1.05
1:U:639:LEU:CD2	14:C:43:ARG:O	2.05	1.05
3:W:453:HIS:CE1	6:Z:222:ILE:HG21	1.90	1.04
22:K:217:LEU:HB2	22:K:229:PHE:CE1	1.88	1.04
32:f:471:LEU:HD12	32:f:509:LYS:CG	1.87	1.04
1:U:607:VAL:HG11	15:D:64:GLU:HA	1.10	1.04
22:K:226:PHE:HA	22:K:227:HIS:HB3	1.11	1.04
5:Y:132:VAL:CG2	14:C:338:LEU:CA	2.26	1.04
1:U:599:ILE:HG21	15:D:56:VAL:CG1	1.82	1.04
1:U:153:ILE:CG1	14:C:13:GLU:HG3	1.88	1.03
1:U:596:ASN:CG	15:D:53:PHE:CD1	2.36	1.03
1:U:599:ILE:CG2	15:D:56:VAL:HG13	1.81	1.03
15:D:416:PHE:C	18:G:19:GLU:CB	2.31	1.03
15:D:417:TYR:CA	18:G:19:GLU:N	2.15	1.03
6:Z:180:LYS:HE2	15:D:70:LYS:HE3	1.38	1.03
15:D:417:TYR:HA	18:G:19:GLU:N	1.72	1.03
15:D:418:LYS:N	18:G:19:GLU:CB	2.21	1.03
1:U:632:GLN:HE21	15:D:54:LEU:HD21	1.24	1.02
5:Y:132:VAL:HG21	14:C:338:LEU:HA	1.35	1.02
15:D:417:TYR:HA	18:G:19:GLU:CB	1.55	1.02
32:f:494:ARG:CD	32:f:496:ASP:OD1	2.06	1.02
1:U:141:CYS:N	14:C:11:LEU:HA	1.40	1.02
1:U:183:LEU:C	15:D:46:LYS:HE3	1.82	1.02
1:U:137:MET:O	14:C:11:LEU:O	1.76	1.02
1:U:138:PHE:CE1	14:C:11:LEU:CD2	2.42	1.02
1:U:155:LEU:HB2	15:D:41:TYR:CB	1.88	1.02
32:f:753:ALA:O	32:f:754:LYS:CE	2.08	1.02
1:U:639:LEU:HD11	14:C:47:ALA:HB2	1.39	1.02
5:Y:132:VAL:CG2	14:C:339:THR:N	2.23	1.02
15:D:416:PHE:C	18:G:19:GLU:HB2	1.84	1.02
17:F:437:TYR:C	23:L:52:ALA:C	2.26	1.02
17:F:438:TYR:CD2	23:L:51:ARG:CZ	2.42	1.01
1:U:158:ARG:NH2	15:D:45:LYS:HG2	1.75	1.01
15:D:418:LYS:HD2	19:H:27:ALA:HB1	1.40	1.01
1:U:150:ALA:HA	14:C:11:LEU:HD22	1.38	1.01
1:U:155:LEU:CD2	15:D:42:SER:CB	2.34	1.01
1:U:599:ILE:CG1	15:D:57:GLN:OE1	2.09	1.01
5:Y:98:SER:N	14:C:340:ARG:C	2.19	1.01
1:U:158:ARG:HH22	15:D:45:LYS:CD	1.73	1.00
14:C:84:LYS:HG2	14:C:98:ASP:HB2	1.40	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:K:217:LEU:O	22:K:229:PHE:CG	2.12	1.00
1:U:186:SER:HB3	15:D:46:LYS:HD2	1.39	1.00
17:F:437:TYR:N	23:L:53:GLN:CA	2.11	1.00
1:U:138:PHE:CD1	14:C:11:LEU:HD21	1.97	1.00
1:U:155:LEU:HD23	15:D:42:SER:N	1.61	1.00
1:U:599:ILE:HG23	15:D:56:VAL:HG13	1.39	1.00
1:U:153:ILE:HG12	14:C:13:GLU:C	1.85	1.00
1:U:596:ASN:N	15:D:53:PHE:CD1	2.28	0.99
15:D:417:TYR:HA	18:G:19:GLU:HB2	1.00	0.99
15:D:417:TYR:H	18:G:19:GLU:HG3	1.14	0.99
12:A:158:ASP:OD2	12:A:159:PRO:HD2	1.61	0.99
1:U:632:GLN:NE2	15:D:54:LEU:HD21	1.77	0.99
1:U:102:ALA:CB	14:C:20:LEU:CD1	2.39	0.99
1:U:158:ARG:CZ	15:D:45:LYS:HE2	1.90	0.99
5:Y:98:SER:N	14:C:340:ARG:CB	2.20	0.99
17:F:437:TYR:HA	23:L:53:GLN:HB2	1.43	0.99
1:U:102:ALA:HB2	14:C:20:LEU:CD1	1.91	0.99
1:U:639:LEU:CB	14:C:43:ARG:HB3	1.92	0.99
3:W:452:ILE:HG21	6:Z:225:GLN:HB3	1.41	0.99
17:F:434:ASN:HB3	17:F:436:GLN:OE1	1.63	0.99
1:U:155:LEU:HD22	15:D:42:SER:H	1.16	0.98
5:Y:63:TRP:CD1	5:Y:66:ASP:OD1	2.15	0.98
32:f:337:LEU:HD13	32:f:420:TRP:HZ3	1.26	0.98
1:U:596:ASN:N	15:D:53:PHE:HE1	1.48	0.98
1:U:603:LEU:HG	15:D:60:TYR:CZ	1.98	0.98
1:U:632:GLN:NE2	15:D:54:LEU:HD11	1.77	0.98
32:f:359:GLY:O	32:f:363:SER:HB3	1.63	0.98
1:U:607:VAL:CG2	15:D:64:GLU:HB2	1.93	0.97
17:F:438:TYR:CA	23:L:51:ARG:O	2.12	0.97
17:F:438:TYR:HB3	23:L:51:ARG:CG	1.94	0.97
1:U:158:ARG:NH2	15:D:45:LYS:CG	2.28	0.97
1:U:158:ARG:HH22	15:D:45:LYS:CG	1.76	0.97
5:Y:137:ARG:NH2	14:C:376:VAL:HG21	1.80	0.97
32:f:692:LEU:CD1	32:f:748:LEU:HD21	1.93	0.97
13:B:212:GLU:OE1	32:f:714:SER:HA	1.65	0.96
32:f:696:LEU:HD13	32:f:752:HIS:HD2	1.14	0.96
5:Y:137:ARG:HH22	14:C:376:VAL:HG21	1.27	0.96
22:K:226:PHE:CA	22:K:227:HIS:CB	2.38	0.96
12:A:348:LEU:HD11	22:K:175:GLU:OE2	1.64	0.96
32:f:494:ARG:HG3	32:f:497:VAL:HG12	1.43	0.96
32:f:456:ARG:HB3	32:f:489:TYR:CE2	2.00	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:413:GLU:CG	18:G:11:ARG:HH12	1.71	0.96
1:U:595:ASN:HA	15:D:53:PHE:CE1	1.54	0.96
5:Y:134:LEU:HG	14:C:376:VAL:CG1	1.96	0.96
32:f:479:LEU:HD21	32:f:513:GLU:HB2	0.99	0.96
5:Y:133:ALA:HA	14:C:377:HIS:H	1.28	0.96
1:U:639:LEU:CD2	14:C:43:ARG:C	2.39	0.95
1:U:186:SER:CB	15:D:46:LYS:NZ	2.22	0.95
15:D:418:LYS:N	18:G:19:GLU:CG	2.11	0.95
32:f:311:VAL:HB	32:f:490:ALA:CB	1.96	0.95
15:D:418:LYS:HB2	18:G:18:PRO:O	1.65	0.95
32:f:376:PHE:CD2	32:f:416:MET:HE1	2.01	0.95
1:U:153:ILE:CB	14:C:13:GLU:HG3	1.96	0.95
1:U:149:GLN:OE1	15:D:40:LEU:HD22	1.66	0.95
15:D:417:TYR:CE2	18:G:5:SER:HB3	2.00	0.95
22:K:226:PHE:HA	22:K:227:HIS:HB2	1.47	0.95
32:f:224:ASN:O	32:f:228:LYS:HB3	1.66	0.95
5:Y:132:VAL:HG23	14:C:377:HIS:CG	2.02	0.95
32:f:95:PRO:O	32:f:99:LEU:HB2	1.67	0.94
32:f:742:ALA:HA	32:f:745:LEU:HD23	1.46	0.94
1:U:148:LYS:HB3	15:D:40:LEU:HD11	1.48	0.94
1:U:599:ILE:HG12	15:D:57:GLN:OE1	1.65	0.94
12:A:348:LEU:CD1	22:K:175:GLU:OE2	2.15	0.94
1:U:599:ILE:HG23	15:D:56:VAL:CG1	1.87	0.94
32:f:780:PRO:CB	32:f:800:LEU:HA	1.96	0.94
5:Y:63:TRP:CD1	5:Y:66:ASP:CG	2.45	0.94
32:f:358:PHE:CZ	32:f:381:VAL:HG21	2.03	0.94
32:f:471:LEU:HG	32:f:509:LYS:HE3	0.96	0.94
12:A:362:MET:HB2	13:B:216:ILE:HD11	1.47	0.94
1:U:102:ALA:CB	14:C:20:LEU:HD22	1.98	0.94
17:F:436:GLN:O	17:F:438:TYR:N	2.01	0.94
17:F:438:TYR:CA	23:L:51:ARG:HB3	1.97	0.93
32:f:494:ARG:HE	32:f:495:GLU:H	1.16	0.93
1:U:153:ILE:HG13	15:D:41:TYR:CZ	2.03	0.93
1:U:639:LEU:CD1	14:C:43:ARG:O	2.16	0.93
1:U:183:LEU:C	15:D:46:LYS:CE	2.41	0.93
15:D:418:LYS:CA	18:G:19:GLU:HA	1.98	0.93
1:U:607:VAL:HG13	15:D:64:GLU:CA	1.95	0.93
12:A:158:ASP:CG	12:A:159:PRO:HD2	1.93	0.93
32:f:372:LEU:HD11	32:f:406:GLY:HA3	1.47	0.93
1:U:187:LEU:HD13	15:D:45:LYS:HB2	0.95	0.93
1:U:603:LEU:HD11	15:D:60:TYR:CE2	1.99	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:376:PHE:CE2	32:f:416:MET:HE1	2.03	0.93
6:Z:224:HIS:HB3	6:Z:227:ILE:HB	1.51	0.93
22:K:225:ASN:HA	22:K:227:HIS:CB	1.98	0.92
1:U:607:VAL:HG23	15:D:60:TYR:HE1	0.76	0.92
17:F:438:TYR:CA	23:L:51:ARG:C	2.42	0.92
32:f:388:ASP:OD1	32:f:390:LEU:HB2	1.68	0.92
5:Y:130:LYS:HG3	14:C:340:ARG:HE	0.75	0.92
1:U:600:ARG:NE	15:D:56:VAL:HG21	1.60	0.92
1:U:600:ARG:HE	15:D:56:VAL:CB	1.81	0.92
1:U:603:LEU:CD1	15:D:57:GLN:OE1	2.17	0.92
17:F:438:TYR:C	23:L:52:ALA:O	2.12	0.92
15:D:417:TYR:HA	18:G:19:GLU:CA	1.94	0.91
6:Z:63:LYS:HB2	6:Z:64:ASP:HB2	1.52	0.91
32:f:691:PRO:CB	32:f:749:ALA:HB2	1.99	0.91
1:U:187:LEU:HD22	15:D:44:TYR:N	1.79	0.91
15:D:417:TYR:H	18:G:19:GLU:CG	1.65	0.91
5:Y:132:VAL:HG21	14:C:339:THR:N	1.81	0.91
1:U:151:ILE:HG23	15:D:39:ASP:N	1.86	0.91
5:Y:133:ALA:HA	14:C:377:HIS:N	1.83	0.91
32:f:315:GLU:HG2	32:f:491:GLY:HA2	1.51	0.91
1:U:603:LEU:HG	15:D:60:TYR:CE1	1.88	0.91
32:f:376:PHE:CE2	32:f:798:THR:HB	2.06	0.91
15:D:417:TYR:C	18:G:19:GLU:HA	1.69	0.91
1:U:153:ILE:HG21	14:C:13:GLU:CD	1.96	0.90
16:E:50:LEU:HD13	17:F:138:GLY:HA2	1.50	0.90
1:U:639:LEU:HD22	14:C:43:ARG:HB3	1.51	0.90
1:U:639:LEU:CD1	14:C:47:ALA:HB2	2.02	0.90
32:f:363:SER:O	32:f:365:VAL:N	2.04	0.90
1:U:183:LEU:O	15:D:46:LYS:CD	2.19	0.90
1:U:639:LEU:HD21	14:C:43:ARG:O	1.71	0.90
32:f:483:PHE:CZ	32:f:799:VAL:HB	2.06	0.90
15:D:413:GLU:HG3	18:G:11:ARG:HH12	1.13	0.89
32:f:376:PHE:CE2	32:f:798:THR:CB	2.55	0.89
32:f:366:ASP:OD1	32:f:367:SER:N	2.04	0.89
22:K:224:GLN:CG	22:K:227:HIS:CE1	2.56	0.89
32:f:742:ALA:HA	32:f:745:LEU:HD21	1.53	0.89
1:U:632:GLN:HE22	15:D:54:LEU:CG	1.84	0.89
32:f:223:GLU:O	32:f:227:ALA:HB3	1.73	0.89
32:f:369:ARG:HB3	32:f:370:MET:SD	2.13	0.89
1:U:153:ILE:HG21	14:C:13:GLU:HG3	1.08	0.88
6:Z:224:HIS:HD2	6:Z:228:TYR:HB3	1.32	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:F:437:TYR:C	23:L:53:GLN:N	2.29	0.88
32:f:318:THR:O	32:f:322:SER:HB3	1.74	0.88
32:f:389:LYS:HG2	32:f:418:LEU:CD2	2.02	0.88
15:D:152:MET:HG2	16:E:62:LYS:CE	2.03	0.88
15:D:418:LYS:CD	19:H:27:ALA:CB	2.52	0.88
32:f:378:ASN:HB3	32:f:391:LEU:HG	1.56	0.88
17:F:438:TYR:O	23:L:51:ARG:CA	2.21	0.88
14:C:70:GLY:O	14:C:118:ASN:ND2	2.06	0.87
22:K:217:LEU:CB	22:K:229:PHE:CE1	2.39	0.87
1:U:150:ALA:HA	14:C:11:LEU:CD2	2.04	0.87
32:f:122:ALA:O	32:f:126:ILE:HB	1.72	0.87
1:U:639:LEU:CD2	14:C:43:ARG:HB3	2.04	0.87
17:F:438:TYR:HB3	23:L:51:ARG:CD	2.03	0.87
1:U:603:LEU:CD1	15:D:57:GLN:CD	2.46	0.87
1:U:639:LEU:CD2	14:C:43:ARG:CB	2.50	0.87
5:Y:134:LEU:HD23	14:C:376:VAL:HB	1.56	0.87
1:U:186:SER:OG	15:D:46:LYS:HD3	1.73	0.87
1:U:187:LEU:HD13	15:D:45:LYS:CA	2.05	0.87
5:Y:98:SER:N	14:C:340:ARG:HB2	1.37	0.87
5:Y:170:GLU:O	15:D:189:GLU:HB2	0.69	0.87
1:U:187:LEU:HD11	15:D:42:SER:HA	1.57	0.86
5:Y:132:VAL:HG22	14:C:339:THR:N	1.89	0.86
1:U:102:ALA:CB	14:C:20:LEU:HD13	2.05	0.86
32:f:337:LEU:HD13	32:f:420:TRP:CZ3	2.10	0.86
19:H:167:TYR:O	19:H:171:LYS:HB2	1.76	0.86
32:f:378:ASN:HB3	32:f:391:LEU:CG	2.05	0.86
1:U:603:LEU:HD13	15:D:57:GLN:CD	2.00	0.86
1:U:148:LYS:HB3	15:D:40:LEU:CD1	2.06	0.86
12:A:157:ILE:HD13	12:A:259:GLU:OE1	1.75	0.86
1:U:138:PHE:HE1	14:C:11:LEU:HD21	1.35	0.85
15:D:418:LYS:CB	18:G:19:GLU:HA	2.05	0.85
2:V:193:GLN:OE1	2:V:200:ARG:CZ	2.25	0.85
5:Y:132:VAL:O	14:C:377:HIS:CB	2.18	0.85
15:D:413:GLU:C	18:G:5:SER:CA	2.48	0.85
32:f:88:SER:CB	32:f:92:VAL:HG23	2.06	0.85
32:f:471:LEU:HD12	32:f:509:LYS:HG2	1.58	0.85
1:U:603:LEU:HG	15:D:60:TYR:CE2	2.03	0.85
17:F:438:TYR:O	23:L:51:ARG:HA	1.77	0.85
22:K:177:ALA:O	22:K:181:LEU:HB2	1.76	0.85
22:k:219:THR:HG1	22:k:227:HIS:HE2	1.23	0.85
22:K:217:LEU:O	22:K:229:PHE:CE2	2.30	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:97:GLU:OE2	14:C:342:ILE:N	2.10	0.84
12:A:205:GLY:HA2	12:A:206:ILE:HG22	1.58	0.84
32:f:129:LEU:O	32:f:133:MET:HB3	1.75	0.84
5:Y:132:VAL:CB	14:C:338:LEU:N	2.40	0.84
5:Y:137:ARG:HH22	14:C:376:VAL:CG2	1.90	0.84
32:f:696:LEU:CD1	32:f:752:HIS:HD2	1.90	0.84
1:U:158:ARG:NH2	15:D:45:LYS:CE	2.11	0.84
1:U:632:GLN:NE2	15:D:54:LEU:CG	2.40	0.84
3:W:453:HIS:CE1	6:Z:222:ILE:CG2	2.55	0.84
5:Y:132:VAL:HB	14:C:338:LEU:N	1.92	0.84
21:J:186:LEU:O	21:J:190:LEU:HB2	1.77	0.84
32:f:311:VAL:CB	32:f:490:ALA:HB1	2.03	0.84
32:f:123:ALA:O	32:f:127:SER:HB2	1.76	0.84
2:V:193:GLN:CD	2:V:200:ARG:CZ	2.51	0.84
17:F:437:TYR:C	23:L:53:GLN:CA	2.42	0.84
15:D:151:ILE:HG12	15:D:228:ILE:HG23	1.59	0.84
12:A:158:ASP:CG	12:A:159:PRO:CD	2.51	0.84
1:U:155:LEU:CD2	15:D:42:SER:HA	1.88	0.84
32:f:301:HIS:O	32:f:305:LEU:HB2	1.77	0.84
32:f:695:ALA:HB3	32:f:752:HIS:HB2	1.59	0.84
1:U:603:LEU:CD1	15:D:57:GLN:NE2	2.41	0.83
1:U:603:LEU:HD12	15:D:57:GLN:HE22	1.43	0.83
1:U:152:GLY:HA2	15:D:41:TYR:N	1.93	0.83
1:U:148:LYS:O	15:D:40:LEU:HD13	1.78	0.83
14:C:218:GLU:CD	15:D:274:ARG:O	2.20	0.83
32:f:336:GLU:HG3	32:f:337:LEU:HD22	1.60	0.83
32:f:691:PRO:HB2	32:f:749:ALA:HB2	1.58	0.83
1:U:607:VAL:HG21	15:D:64:GLU:HB2	1.61	0.83
1:U:184:CYS:N	15:D:42:SER:HB3	1.92	0.83
1:U:632:GLN:NE2	15:D:54:LEU:CD1	2.41	0.83
1:U:632:GLN:HE22	15:D:54:LEU:HG	1.43	0.83
3:W:452:ILE:HG13	6:Z:222:ILE:CD1	2.06	0.83
32:f:714:SER:O	32:f:718:ASP:HB2	1.78	0.83
32:f:126:ILE:O	32:f:130:ALA:HB3	1.77	0.83
32:f:479:LEU:CD2	32:f:513:GLU:CB	2.50	0.83
1:U:632:GLN:NE2	15:D:54:LEU:CD2	2.42	0.83
1:U:639:LEU:HD11	14:C:47:ALA:HB3	1.59	0.83
15:D:83:GLN:HE22	15:D:140:VAL:HG21	1.44	0.83
32:f:494:ARG:NE	32:f:495:GLU:N	2.26	0.83
3:W:416:GLN:HB3	3:W:417:ARG:HA	1.60	0.83
32:f:376:PHE:HE2	32:f:798:THR:CG2	1.89	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:141:CYS:N	14:C:11:LEU:CA	2.35	0.82
15:D:413:GLU:CD	18:G:11:ARG:HH12	1.87	0.82
1:U:596:ASN:H	15:D:53:PHE:HE1	1.22	0.82
32:f:376:PHE:HE2	32:f:798:THR:CB	1.91	0.82
15:D:418:LYS:CG	19:H:27:ALA:HB1	2.10	0.82
15:D:418:LYS:HG3	18:G:19:GLU:O	1.78	0.82
32:f:225:ALA:O	32:f:229:VAL:HB	1.79	0.82
1:U:155:LEU:CB	15:D:41:TYR:HB3	2.09	0.82
14:C:84:LYS:HA	14:C:98:ASP:HA	1.62	0.82
5:Y:98:SER:O	5:Y:100:ILE:N	2.11	0.82
32:f:376:PHE:CZ	32:f:416:MET:SD	2.73	0.82
1:U:155:LEU:CB	15:D:41:TYR:CB	2.58	0.82
1:U:183:LEU:C	15:D:46:LYS:NZ	2.38	0.82
12:A:385:ILE:HA	12:A:388:VAL:HB	1.62	0.82
14:C:299:ASP:HA	14:C:302:ASP:HB3	1.62	0.82
17:F:299:GLU:HG3	17:F:300:LYS:HB3	1.62	0.82
1:U:596:ASN:OD1	15:D:53:PHE:CD1	2.14	0.81
15:D:150:SER:HB3	15:D:151:ILE:HD12	1.62	0.81
2:V:56:ALA:N	2:V:57:ALA:HA	1.93	0.81
5:Y:132:VAL:HG13	14:C:338:LEU:O	1.78	0.81
6:Z:145:HIS:HE2	6:Z:225:GLN:CG	1.93	0.81
1:U:607:VAL:HG22	15:D:64:GLU:HB2	1.63	0.81
2:V:193:GLN:NE2	2:V:200:ARG:NH1	2.08	0.81
5:Y:132:VAL:CG2	14:C:377:HIS:CB	2.29	0.81
32:f:471:LEU:HD12	32:f:509:LYS:HG3	1.62	0.81
32:f:796:LEU:O	32:f:799:VAL:CG2	2.22	0.81
5:Y:132:VAL:CG1	14:C:338:LEU:C	2.54	0.81
12:A:271:LEU:HA	12:A:315:ILE:HB	1.61	0.81
15:D:418:LYS:CG	18:G:19:GLU:O	2.29	0.81
32:f:494:ARG:HH21	32:f:495:GLU:CG	1.88	0.81
1:U:151:ILE:CG2	15:D:39:ASP:N	2.43	0.81
5:Y:132:VAL:O	14:C:377:HIS:HB3	1.30	0.81
1:U:600:ARG:HD3	15:D:56:VAL:HG21	1.24	0.81
1:U:636:VAL:HA	14:C:43:ARG:HH12	1.46	0.80
16:E:126:ASP:HB2	16:E:185:ARG:HG2	1.62	0.80
32:f:742:ALA:C	32:f:745:LEU:HG	2.06	0.80
3:W:453:HIS:NE2	6:Z:222:ILE:CB	2.45	0.80
5:Y:132:VAL:HG11	14:C:338:LEU:C	2.06	0.80
15:D:417:TYR:CD1	18:G:5:SER:CB	2.63	0.80
12:A:348:LEU:CD1	22:K:175:GLU:CD	2.51	0.80
22:K:217:LEU:O	22:K:229:PHE:CD2	2.34	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:503:PRO:O	32:f:507:ASP:HB2	1.82	0.80
1:U:184:CYS:C	15:D:46:LYS:HE3	2.06	0.80
5:Y:63:TRP:NE1	5:Y:66:ASP:CG	2.40	0.80
9:c:174:PRO:HB2	9:c:175:ARG:HD3	1.62	0.80
32:f:88:SER:HB2	32:f:92:VAL:HG23	1.63	0.80
32:f:635:LYS:HZ2	32:f:641:GLU:HG3	1.45	0.80
6:Z:180:LYS:HE2	15:D:70:LYS:CE	2.11	0.80
7:a:286:ALA:HB1	7:a:287:ASN:HA	1.63	0.80
32:f:232:TYR:O	32:f:236:CYS:HB2	1.82	0.80
32:f:378:ASN:O	32:f:381:VAL:HG12	1.80	0.80
32:f:376:PHE:CE2	32:f:416:MET:CE	2.64	0.79
1:U:639:LEU:HD11	14:C:43:ARG:O	1.82	0.79
6:Z:228:TYR:CE1	7:a:215:GLU:CD	2.61	0.79
2:V:79:VAL:HG22	2:V:80:LYS:CG	2.06	0.79
32:f:456:ARG:HB3	32:f:489:TYR:HE2	1.47	0.79
1:U:186:SER:CB	15:D:46:LYS:HZ3	1.93	0.79
14:C:99:VAL:HA	14:C:100:ASP:HB2	1.62	0.79
15:D:418:LYS:HG3	18:G:19:GLU:C	2.07	0.79
32:f:184:LEU:HG	32:f:185:LEU:N	1.98	0.79
15:D:418:LYS:H	18:G:19:GLU:HG2	0.62	0.79
6:Z:180:LYS:CE	15:D:70:LYS:HE3	2.12	0.79
15:D:184:PRO:HB2	15:D:306:LYS:HE2	1.63	0.79
1:U:140:ARG:C	14:C:11:LEU:HA	2.08	0.79
1:U:183:LEU:C	15:D:42:SER:HB3	2.08	0.79
12:A:344:SER:N	12:A:345:LEU:HB2	1.98	0.78
17:F:438:TYR:C	23:L:51:ARG:C	2.51	0.78
3:W:452:ILE:CG1	6:Z:222:ILE:HD11	2.11	0.78
1:U:148:LYS:C	15:D:40:LEU:HD13	2.09	0.78
17:F:316:GLN:HA	17:F:320:PHE:HB2	1.63	0.78
15:D:89:ILE:HA	15:D:131:ALA:HA	1.64	0.78
13:B:387:LYS:HB3	13:B:390:LEU:HD11	1.65	0.78
15:D:416:PHE:C	18:G:19:GLU:HG3	2.09	0.78
22:K:217:LEU:CB	22:K:229:PHE:HE1	1.95	0.78
32:f:392:THR:HG22	32:f:417:ILE:CD1	2.14	0.78
1:U:607:VAL:CG2	15:D:60:TYR:CD1	2.66	0.78
1:U:636:VAL:O	14:C:43:ARG:NH1	2.17	0.78
32:f:494:ARG:HE	32:f:494:ARG:C	1.92	0.78
32:f:612:LEU:O	32:f:616:CYS:HB2	1.83	0.78
6:Z:222:ILE:O	6:Z:227:ILE:HG13	1.83	0.78
6:Z:233:VAL:HA	6:Z:236:LEU:HD13	1.64	0.78
17:F:84:LYS:N	17:F:85:THR:HA	1.98	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:a:342:ASP:CG	7:a:343:LEU:H	1.91	0.77
5:Y:96:GLY:C	14:C:340:ARG:O	2.27	0.77
5:Y:99:GLU:O	5:Y:100:ILE:HG13	1.84	0.77
9:c:243:SER:C	9:c:245:VAL:H	1.92	0.77
15:D:243:GLY:HA3	15:D:288:ILE:HD13	1.65	0.77
22:K:226:PHE:CA	22:K:227:HIS:HB3	2.06	0.77
1:U:607:VAL:HG21	15:D:60:TYR:CE1	2.19	0.77
5:Y:130:LYS:HG3	14:C:340:ARG:CD	2.13	0.77
14:C:157:GLN:NE2	14:C:316:GLU:O	2.18	0.77
32:f:745:LEU:HD12	32:f:746:ARG:N	1.99	0.77
1:U:600:ARG:HE	15:D:56:VAL:HB	1.50	0.77
12:A:158:ASP:CG	12:A:159:PRO:N	2.43	0.77
15:D:389:GLU:HB2	15:D:391:ARG:HB2	1.64	0.77
15:D:113:VAL:HG11	15:D:138:ALA:HA	1.64	0.77
17:F:434:ASN:HB3	17:F:436:GLN:CD	2.10	0.77
32:f:376:PHE:CE2	32:f:798:THR:HG22	2.20	0.77
2:V:148:ARG:HG3	2:V:149:PRO:HD3	1.67	0.77
14:C:218:GLU:O	14:C:219:LEU:CB	2.31	0.77
16:E:250:ASP:HB2	17:F:300:LYS:HD3	1.66	0.77
19:h:167:TYR:O	19:h:171:LYS:HB2	1.85	0.77
16:E:320:ILE:HD13	17:F:217:ILE:HD11	1.67	0.77
17:F:438:TYR:CE2	23:L:51:ARG:NH2	2.53	0.77
21:j:186:LEU:O	21:j:190:LEU:HB2	1.83	0.77
1:U:183:LEU:C	15:D:46:LYS:HZ2	1.92	0.76
5:Y:132:VAL:HG21	14:C:338:LEU:N	2.01	0.76
1:U:153:ILE:HG13	15:D:41:TYR:CE2	2.19	0.76
6:Z:150:PRO:HD3	7:a:182:CYS:HA	1.68	0.76
10:d:3:GLU:HB3	10:d:4:GLN:HA	1.66	0.76
15:D:153:MET:HG3	15:D:154:LEU:N	2.00	0.76
22:K:224:GLN:HB3	22:K:227:HIS:HE2	1.50	0.76
32:f:494:ARG:NE	32:f:495:GLU:H	1.80	0.76
32:f:784:ASP:HB2	32:f:800:LEU:HD21	1.66	0.76
1:U:599:ILE:HG13	15:D:57:GLN:OE1	1.85	0.76
1:U:639:LEU:HB2	14:C:43:ARG:HB3	1.66	0.76
2:V:193:GLN:CG	2:V:200:ARG:NH1	2.47	0.76
16:E:262:ASN:HA	16:E:265:ASP:HB2	1.67	0.76
32:f:478:ARG:HD3	32:f:504:VAL:HG13	1.68	0.76
32:f:695:ALA:C	32:f:752:HIS:HB3	2.09	0.76
17:F:120:LYS:HD2	17:F:136:VAL:HG21	1.68	0.76
32:f:494:ARG:CG	32:f:497:VAL:HG12	2.16	0.76
17:F:437:TYR:CA	23:L:53:GLN:CB	2.46	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:279:THR:O	15:D:283:ARG:N	2.17	0.75
15:D:418:LYS:HD3	19:H:27:ALA:HB1	1.63	0.75
32:f:675:PHE:O	32:f:679:LEU:HB2	1.85	0.75
32:f:796:LEU:HG	32:f:799:VAL:HG21	1.66	0.75
1:U:596:ASN:OD1	15:D:53:PHE:HD1	1.60	0.75
7:a:342:ASP:CG	7:a:343:LEU:N	2.44	0.75
1:U:153:ILE:HG12	14:C:13:GLU:CG	2.14	0.75
15:D:416:PHE:HA	18:G:19:GLU:HG3	1.68	0.75
32:f:635:LYS:NZ	32:f:641:GLU:CG	2.50	0.75
32:f:691:PRO:HB3	32:f:749:ALA:HB2	1.66	0.75
5:Y:98:SER:N	14:C:340:ARG:O	2.17	0.75
32:f:370:MET:SD	32:f:370:MET:N	2.57	0.75
22:K:226:PHE:CA	22:K:227:HIS:HB2	2.09	0.75
32:f:664:GLU:HB3	32:f:696:LEU:HG	1.69	0.75
1:U:153:ILE:CG2	14:C:13:GLU:CD	2.58	0.75
1:U:595:ASN:C	15:D:53:PHE:CD1	2.61	0.75
7:a:270:ARG:HH11	7:a:313:LYS:HB3	1.50	0.75
32:f:684:PRO:O	32:f:688:ARG:HB2	1.87	0.75
6:Z:224:HIS:CG	6:Z:228:TYR:HD2	2.04	0.74
32:f:357:ARG:O	32:f:361:SER:HB2	1.87	0.74
32:f:376:PHE:CZ	32:f:798:THR:HB	2.22	0.74
1:U:102:ALA:CB	14:C:20:LEU:HD11	2.16	0.74
1:U:607:VAL:HG13	15:D:64:GLU:HG3	1.69	0.74
5:Y:63:TRP:CD1	5:Y:66:ASP:OD2	2.39	0.74
32:f:358:PHE:O	32:f:362:GLY:HA3	1.87	0.74
32:f:471:LEU:CD1	32:f:509:LYS:CE	2.65	0.74
10:d:147:SER:OG	10:d:151:VAL:N	2.19	0.74
13:B:105:THR:HG23	13:B:106:PRO:HD3	1.68	0.74
13:B:261:GLY:HA2	13:B:262:ASP:HB3	1.69	0.74
32:f:389:LYS:CG	32:f:418:LEU:CD2	2.63	0.74
1:U:639:LEU:CD1	14:C:47:ALA:CB	2.60	0.74
5:Y:358:ARG:HG3	5:Y:358:ARG:HH21	1.52	0.74
7:a:340:VAL:O	7:a:341:LEU:HB2	1.87	0.74
17:F:437:TYR:C	23:L:52:ALA:O	2.30	0.74
1:U:105:ILE:C	14:C:21:ARG:HH22	1.93	0.74
2:V:287:ARG:HD2	11:e:5:LYS:HB2	1.68	0.74
3:W:453:HIS:CD2	6:Z:222:ILE:HG21	2.13	0.74
6:Z:201:LEU:HD22	7:a:357:CYS:HA	1.70	0.74
14:C:263:SER:O	14:C:267:SER:N	2.20	0.74
15:D:418:LYS:HD3	19:H:27:ALA:CB	2.18	0.74
16:E:60:VAL:HG23	16:E:98:VAL:HG21	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:607:VAL:HG21	15:D:60:TYR:CD1	2.23	0.74
6:Z:224:HIS:CB	6:Z:227:ILE:HB	2.18	0.74
32:f:494:ARG:NH2	32:f:495:GLU:CG	2.48	0.74
1:U:600:ARG:HD3	15:D:56:VAL:HG22	1.65	0.73
6:Z:145:HIS:HE2	6:Z:225:GLN:HG3	1.53	0.73
32:f:392:THR:CG2	32:f:417:ILE:HG21	2.18	0.73
15:D:418:LYS:H	18:G:19:GLU:CB	1.88	0.73
16:E:109:ARG:HH12	17:F:121:CYS:HB2	1.53	0.73
17:F:437:TYR:H	23:L:53:GLN:CA	1.96	0.73
32:f:635:LYS:HZ3	32:f:641:GLU:CD	1.96	0.73
1:U:187:LEU:O	15:D:45:LYS:C	2.31	0.73
17:F:418:GLU:OE2	23:L:241:GLN:C	2.32	0.73
32:f:376:PHE:HE2	32:f:798:THR:HG21	1.49	0.73
1:U:156:GLU:OE1	15:D:45:LYS:NZ	2.22	0.73
12:A:90:GLU:O	12:A:94:GLN:HB2	1.88	0.73
32:f:211:ILE:O	32:f:215:ASP:HB2	1.88	0.73
32:f:742:ALA:HA	32:f:745:LEU:CG	2.18	0.73
1:U:150:ALA:CA	14:C:11:LEU:HD22	2.16	0.73
3:W:257:GLN:HA	3:W:258:ALA:HB3	1.71	0.73
15:D:417:TYR:HA	18:G:19:GLU:H	1.53	0.73
1:U:153:ILE:HD13	14:C:11:LEU:HD23	1.70	0.73
7:a:342:ASP:O	7:a:345:GLN:HB2	1.88	0.73
16:E:290:LEU:HA	16:E:295:LEU:HD12	1.70	0.73
2:V:435:GLU:HG2	2:V:453:HIS:CE1	2.24	0.73
4:X:417:LYS:HD2	5:Y:383:LEU:HD23	1.70	0.73
7:a:340:VAL:HG12	7:a:341:LEU:H	1.54	0.73
12:A:90:GLU:HG3	12:A:94:GLN:HE21	1.53	0.73
7:a:376:THR:HG21	15:D:63:ASP:OD2	1.89	0.72
17:F:418:GLU:OE2	23:L:241:GLN:O	2.07	0.72
22:K:225:ASN:HA	22:K:227:HIS:HB2	1.69	0.72
1:U:636:VAL:CA	14:C:43:ARG:HH12	2.00	0.72
32:f:691:PRO:HG2	32:f:745:LEU:HD13	1.70	0.72
16:E:266:GLY:HA2	16:E:267:PHE:HB2	1.71	0.72
17:F:94:ILE:HB	17:F:123:VAL:HB	1.70	0.72
1:U:155:LEU:HB3	15:D:41:TYR:HB3	1.71	0.72
1:U:186:SER:HB3	15:D:46:LYS:HZ3	1.46	0.72
1:U:596:ASN:CB	15:D:53:PHE:HD1	2.03	0.72
13:B:131:HIS:NE2	13:B:156:VAL:O	2.22	0.72
14:C:65:LEU:O	14:C:69:GLN:NE2	2.22	0.72
22:K:216:GLU:CA	22:K:229:PHE:HE2	2.03	0.72
14:C:137:LEU:HA	14:C:140:VAL:HG12	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:97:GLU:CA	14:C:340:ARG:O	2.36	0.72
5:Y:132:VAL:CG2	14:C:338:LEU:N	2.53	0.72
15:D:133:HIS:HB3	15:D:138:ALA:H	1.53	0.72
17:F:86:LEU:HD12	17:F:87:PRO:HD2	1.72	0.72
13:B:264:PRO:HG3	13:B:311:GLU:HG2	1.72	0.72
14:C:218:GLU:O	14:C:219:LEU:HB2	1.89	0.72
6:Z:219:LYS:HG3	6:Z:221:PRO:HA	1.71	0.72
6:Z:97:THR:HA	6:Z:124:ILE:HG13	1.70	0.72
14:C:118:ASN:OD1	14:C:118:ASN:N	2.21	0.71
17:F:437:TYR:CA	23:L:53:GLN:CD	2.63	0.71
1:U:595:ASN:HA	15:D:53:PHE:HE1	1.23	0.71
15:D:185:LEU:HD11	15:D:259:PRO:HB3	1.71	0.71
6:Z:128:PRO:HG3	9:c:216:MET:HB3	1.72	0.71
1:U:842:LYS:HA	1:U:843:GLU:HB3	1.72	0.71
7:a:70:ARG:HE	8:b:80:PRO:HD2	1.55	0.71
9:c:180:ASN:HB2	9:c:204:THR:HG21	1.71	0.71
15:D:414:HIS:C	18:G:5:SER:CA	2.63	0.71
22:K:224:GLN:HB3	22:K:227:HIS:NE2	2.06	0.71
32:f:315:GLU:CG	32:f:491:GLY:HA2	2.20	0.71
1:U:607:VAL:HG13	15:D:64:GLU:CG	2.21	0.71
32:f:635:LYS:HZ2	32:f:641:GLU:CG	2.02	0.71
2:V:326:GLN:HB3	2:V:353:LEU:HD13	1.72	0.71
3:W:418:PRO:HA	3:W:419:LYS:HB2	1.72	0.71
7:a:320:VAL:HG22	7:a:322:GLY:H	1.56	0.71
13:B:307:ARG:HA	13:B:310:LEU:HB3	1.73	0.71
5:Y:64:GLN:HG2	5:Y:65:ILE:HG22	1.73	0.71
15:D:152:MET:CG	16:E:62:LYS:HE2	2.13	0.71
32:f:311:VAL:CG2	32:f:527:VAL:O	2.39	0.71
32:f:389:LYS:HG2	32:f:418:LEU:HD11	1.72	0.71
15:D:417:TYR:CD1	18:G:5:SER:HB2	2.17	0.71
1:U:138:PHE:O	14:C:11:LEU:HD12	1.91	0.70
32:f:311:VAL:O	32:f:490:ALA:O	2.09	0.70
1:U:603:LEU:HD12	15:D:57:GLN:NE2	2.04	0.70
2:V:193:GLN:OE1	2:V:200:ARG:NH1	2.24	0.70
4:X:407:MET:HE1	5:Y:375:LEU:HB3	1.73	0.70
6:Z:221:PRO:HB2	6:Z:223:ASN:H	1.55	0.70
15:D:83:GLN:HG3	15:D:133:HIS:CD2	2.25	0.70
17:F:168:TYR:HB2	17:F:169:ASP:HB2	1.72	0.70
32:f:337:LEU:CD1	32:f:420:TRP:CZ3	2.74	0.70
32:f:376:PHE:CD2	32:f:798:THR:HG21	2.27	0.70
32:f:797:LEU:O	32:f:800:LEU:HD13	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:184:CYS:C	15:D:46:LYS:CE	2.65	0.70
2:V:275:VAL:HB	2:V:277:PRO:HD3	1.73	0.70
13:B:378:VAL:HG22	13:B:416:ASN:HB2	1.73	0.70
20:i:194:ILE:O	20:i:198:ASN:HB2	1.91	0.70
32:f:389:LYS:CD	32:f:418:LEU:HD21	2.20	0.70
1:U:356:THR:HG21	1:U:731:ILE:HD13	1.72	0.70
1:U:799:LYS:HA	1:U:843:GLU:HG3	1.72	0.70
13:B:212:GLU:OE1	32:f:714:SER:CA	2.40	0.70
32:f:494:ARG:HD3	32:f:496:ASP:CG	2.16	0.70
1:U:636:VAL:C	14:C:43:ARG:HH12	2.00	0.70
29:r:196:HIS:O	29:r:200:SER:HB3	1.91	0.70
12:A:398:ARG:NH1	13:B:195:GLN:O	2.21	0.70
32:f:222:ASP:O	32:f:226:TYR:HB3	1.91	0.70
3:W:432:LEU:HD23	3:W:435:LEU:HD22	1.74	0.70
5:Y:132:VAL:HG22	14:C:338:LEU:C	2.06	0.70
12:A:384:GLU:H	13:B:343:ARG:HH11	1.40	0.70
15:D:417:TYR:HB3	18:G:5:SER:CB	2.15	0.70
2:V:262:SER:HB2	2:V:263:LEU:HB2	1.74	0.70
12:A:182:GLU:HA	12:A:185:GLU:HB3	1.73	0.70
12:A:240:VAL:HB	12:A:274:PHE:HA	1.74	0.70
14:C:85:VAL:N	14:C:97:VAL:O	2.24	0.70
32:f:625:LYS:O	32:f:629:LYS:HB2	1.91	0.70
6:Z:167:ALA:HB1	9:c:42:LEU:HB2	1.73	0.70
1:U:153:ILE:CG1	15:D:41:TYR:CE2	2.74	0.69
5:Y:132:VAL:HG11	14:C:338:LEU:H	1.56	0.69
9:c:154:LYS:HG2	9:c:156:VAL:H	1.57	0.69
15:D:151:ILE:HG12	15:D:228:ILE:CG2	2.21	0.69
17:F:438:TYR:CD2	23:L:51:ARG:NH1	2.60	0.69
1:U:112:CYS:SG	1:U:159:ARG:NH1	2.65	0.69
22:K:217:LEU:HB2	22:K:229:PHE:HE1	1.49	0.69
32:f:392:THR:HG22	32:f:417:ILE:HD12	1.74	0.69
5:Y:136:HIS:HD2	14:C:377:HIS:HE2	1.40	0.69
12:A:284:ARG:O	12:A:296:GLN:NE2	2.24	0.69
1:U:632:GLN:HE22	15:D:54:LEU:CD1	2.03	0.69
5:Y:62:ASP:O	5:Y:63:TRP:HB2	1.91	0.69
12:A:413:VAL:HA	12:A:416:VAL:HG12	1.74	0.69
32:f:88:SER:HB3	32:f:92:VAL:HG23	1.72	0.69
1:U:740:GLY:HA3	1:U:744:VAL:HG22	1.74	0.69
5:Y:272:PHE:HB2	11:e:67:MET:HE3	1.74	0.69
10:d:160:ALA:HB3	10:d:161:GLU:HA	1.75	0.69
17:F:438:TYR:O	23:L:51:ARG:C	2.34	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:607:VAL:CG1	15:D:64:GLU:CB	2.70	0.69
1:U:607:VAL:HG13	15:D:64:GLU:CB	2.22	0.69
14:C:113:ARG:NH1	14:C:128:PRO:O	2.25	0.69
1:U:187:LEU:CD1	15:D:45:LYS:HB3	2.22	0.69
1:U:446:LEU:O	1:U:450:HIS:ND1	2.26	0.69
1:U:607:VAL:HG22	15:D:64:GLU:CG	2.23	0.69
3:W:441:LYS:HE3	6:Z:233:VAL:HG12	1.75	0.69
6:Z:33:LYS:NZ	6:Z:34:ARG:O	2.25	0.69
7:a:211:PHE:HA	7:a:271:LYS:HE3	1.73	0.69
13:B:111:THR:OG1	13:B:124:SER:O	2.10	0.69
15:D:230:VAL:HG23	15:D:264:ILE:HA	1.73	0.69
15:D:285:VAL:HA	15:D:288:ILE:HB	1.74	0.69
32:f:130:ALA:O	32:f:134:SER:HB3	1.92	0.69
5:Y:132:VAL:O	14:C:376:VAL:HG22	1.93	0.69
6:Z:150:PRO:HG2	7:a:149:THR:HG23	1.74	0.69
8:b:12:ASN:ND2	8:b:53:THR:OG1	2.26	0.69
12:A:409:PHE:O	12:A:413:VAL:N	2.25	0.69
15:D:248:ARG:NH2	15:D:291:GLU:OE2	2.26	0.69
17:F:85:THR:H	17:F:159:LEU:HD11	1.56	0.69
26:O:18:THR:HB	26:O:31:CYS:H	1.57	0.69
32:f:695:ALA:HB3	32:f:752:HIS:CB	2.23	0.69
20:i:17:ARG:HD2	20:i:22:GLU:HG3	1.75	0.69
32:f:664:GLU:O	32:f:665:GLU:O	2.10	0.69
1:U:155:LEU:O	1:U:158:ARG:NH1	2.26	0.69
2:V:413:SER:OG	5:Y:335:SER:OG	2.09	0.69
12:A:292:ASP:O	12:A:296:GLN:N	2.25	0.69
32:f:353:LEU:HG	32:f:387:GLN:HG3	1.75	0.69
32:f:372:LEU:O	32:f:372:LEU:HD23	1.93	0.69
1:U:191:LYS:HG3	1:U:194:ARG:HE	1.57	0.68
12:A:232:ARG:HH12	12:A:271:LEU:HD13	1.56	0.68
6:Z:228:TYR:HE1	7:a:215:GLU:CD	2.02	0.68
12:A:123:VAL:HG21	12:A:147:TYR:HB2	1.74	0.68
15:D:401:LYS:HG3	15:D:404:LYS:HE2	1.74	0.68
22:K:225:ASN:HA	22:K:227:HIS:HB3	1.75	0.68
5:Y:132:VAL:CB	14:C:338:LEU:C	2.66	0.68
13:B:294:ARG:NH1	13:B:295:TYR:O	2.26	0.68
2:V:349:ARG:HH12	2:V:361:PHE:HB2	1.59	0.68
4:X:395:LYS:HD3	6:Z:258:VAL:HG13	1.75	0.68
5:Y:138:LEU:HD11	5:Y:180:LEU:HD11	1.75	0.68
1:U:149:GLN:NE2	14:C:18:SER:OG	2.25	0.68
5:Y:97:GLU:OE2	14:C:340:ARG:C	2.36	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:A:304:ASN:HD22	17:F:254:PRO:HG2	1.59	0.68
12:A:348:LEU:HD13	22:K:175:GLU:OE2	1.93	0.68
13:B:175:LYS:HB3	13:B:176:VAL:HB	1.76	0.68
15:D:194:ILE:HG13	15:D:196:ILE:H	1.58	0.68
15:D:416:PHE:CA	18:G:19:GLU:HG3	2.23	0.68
17:F:267:LEU:O	17:F:271:ALA:N	2.22	0.68
22:K:216:GLU:HB2	22:K:229:PHE:CE2	2.28	0.68
3:W:407:ASP:H	3:W:413:ILE:HG22	1.58	0.68
13:B:174:MET:HA	13:B:248:LEU:HD13	1.76	0.68
12:A:380:SER:HB3	12:A:385:ILE:HG21	1.74	0.68
15:D:260:ALA:H	15:D:304:ASN:HD22	1.40	0.68
2:V:255:LEU:HD22	2:V:291:TYR:HB3	1.75	0.68
2:V:321:ALA:HB1	2:V:322:VAL:HB	1.75	0.68
6:Z:145:HIS:NE2	6:Z:225:GLN:CG	2.56	0.68
14:C:145:ASP:HB3	14:C:201:ARG:HG2	1.75	0.68
1:U:808:PRO:HD3	1:U:836:THR:HB	1.76	0.67
12:A:375:ARG:NE	22:K:204:GLN:HG2	2.06	0.67
14:C:328:ILE:HG23	14:C:359:VAL:HG11	1.75	0.67
21:j:114:LEU:O	21:j:118:TYR:HB2	1.94	0.67
1:U:186:SER:HB2	15:D:46:LYS:NZ	2.07	0.67
1:U:607:VAL:HG22	15:D:64:GLU:CB	2.25	0.67
2:V:259:LEU:HD11	2:V:294:ARG:HD2	1.76	0.67
5:Y:134:LEU:CG	14:C:376:VAL:CG1	2.67	0.67
17:F:263:ASP:O	17:F:267:LEU:N	2.22	0.67
32:f:478:ARG:O	32:f:482:ILE:HB	1.94	0.67
1:U:108:TYR:OH	1:U:159:ARG:NH2	2.27	0.67
1:U:341:PHE:HB2	1:U:881:PRO:HD2	1.77	0.67
1:U:639:LEU:CG	14:C:43:ARG:HB3	2.24	0.67
15:D:246:MET:O	15:D:250:VAL:N	2.25	0.67
32:f:688:ARG:HA	32:f:745:LEU:HD22	1.75	0.67
3:W:452:ILE:HB	6:Z:225:GLN:CB	2.25	0.67
5:Y:99:GLU:C	5:Y:100:ILE:HG13	2.19	0.67
10:d:147:SER:HA	10:d:148:TYR:HB2	1.77	0.67
12:A:157:ILE:HG22	12:A:158:ASP:HA	1.76	0.67
15:D:417:TYR:CD1	18:G:5:SER:OG	2.48	0.67
32:f:367:SER:HB3	32:f:370:MET:SD	2.34	0.67
13:B:175:LYS:O	14:C:232:ARG:NH1	2.27	0.67
32:f:311:VAL:HG21	32:f:527:VAL:O	1.94	0.67
32:f:315:GLU:HG2	32:f:491:GLY:CA	2.24	0.67
32:f:804:LEU:H	32:f:804:LEU:HD12	1.60	0.67
1:U:418:GLU:HG3	1:U:421:GLN:HE21	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:98:SER:C	5:Y:100:ILE:H	2.02	0.67
12:A:375:ARG:NH2	22:K:204:GLN:HA	2.09	0.67
12:A:410:LEU:O	12:A:414:ASN:ND2	2.27	0.67
16:E:207:TYR:HD2	16:E:208:ILE:HD12	1.58	0.67
1:U:150:ALA:H	14:C:15:LYS:HE2	1.58	0.67
2:V:196:SER:O	2:V:198:GLN:N	2.28	0.67
7:a:205:LEU:O	7:a:271:LYS:NZ	2.28	0.67
22:K:77:ALA:HB3	22:K:142:LEU:HB2	1.77	0.67
32:f:376:PHE:HE2	32:f:798:THR:HB	1.53	0.67
13:B:103:ARG:HG2	13:B:160:ILE:HG21	1.76	0.67
32:f:372:LEU:HD23	32:f:372:LEU:C	2.20	0.67
9:c:124:GLY:O	9:c:128:ASN:ND2	2.28	0.67
9:c:243:SER:C	9:c:245:VAL:N	2.49	0.67
23:L:52:ALA:HB2	23:L:59:HIS:CG	2.30	0.67
17:F:249:LEU:HB2	17:F:283:ILE:HG13	1.76	0.67
23:L:38:LEU:HD21	23:L:191:GLY:HA2	1.76	0.67
32:f:625:LYS:HA	32:f:657:ILE:HD11	1.75	0.67
1:U:636:VAL:O	14:C:43:ARG:CZ	2.44	0.66
3:W:373:ILE:HG12	3:W:374:THR:H	1.59	0.66
22:K:224:GLN:CG	22:K:227:HIS:NE2	2.58	0.66
22:K:224:GLN:CB	22:K:227:HIS:NE2	2.57	0.66
5:Y:97:GLU:OE2	14:C:342:ILE:HG22	1.94	0.66
12:A:80:LEU:HD22	13:B:99:VAL:HG11	1.75	0.66
18:g:138:MET:HB3	18:g:154:CYS:HB3	1.75	0.66
28:q:57:ALA:O	28:q:61:GLN:HB3	1.96	0.66
32:f:337:LEU:HD11	32:f:422:VAL:HG21	1.77	0.66
32:f:800:LEU:HD12	32:f:800:LEU:N	2.10	0.66
6:Z:16:LEU:HD13	9:c:220:LEU:HD21	1.76	0.66
12:A:112:ILE:HA	12:A:122:VAL:HA	1.75	0.66
17:F:437:TYR:N	23:L:53:GLN:C	2.53	0.66
22:K:224:GLN:HG2	22:K:227:HIS:NE2	2.09	0.66
5:Y:134:LEU:CD2	14:C:376:VAL:HB	2.24	0.66
9:c:260:GLU:HA	9:c:263:ASP:HB2	1.77	0.66
32:f:578:ALA:O	32:f:582:VAL:HB	1.95	0.66
32:f:742:ALA:O	32:f:745:LEU:CG	2.38	0.66
3:W:420:ASP:HB3	3:W:422:ASN:HB3	1.76	0.66
9:c:152:LYS:HE3	15:D:78:GLU:OE1	1.95	0.66
12:A:140:VAL:HA	12:A:152:PRO:HA	1.77	0.66
13:B:191:ASP:HA	13:B:194:ILE:HG22	1.77	0.66
1:U:153:ILE:HG21	14:C:13:GLU:HG2	0.67	0.66
5:Y:63:TRP:CE2	5:Y:66:ASP:OD1	2.48	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:F:308:ARG:HA	17:F:311:LEU:HB2	1.76	0.66
32:f:628:ASP:HB2	32:f:657:ILE:HD13	1.77	0.66
6:Z:133:LEU:HB2	9:c:229:LEU:HA	1.78	0.66
12:A:362:MET:HG2	12:A:363:SER:H	1.61	0.66
12:A:410:LEU:HA	12:A:413:VAL:HB	1.77	0.66
15:D:249:ASP:HA	15:D:252:ARG:HG2	1.77	0.66
15:D:345:PHE:HB3	15:D:360:LEU:HD13	1.76	0.66
30:s:38:ARG:HA	30:s:191:ASP:OD2	1.94	0.66
12:A:258:ARG:NH2	17:F:255:GLN:OE1	2.28	0.66
16:E:47:LEU:HA	16:E:50:LEU:HD12	1.78	0.66
15:D:355:SER:HB2	15:D:393:ILE:HG21	1.78	0.66
32:f:460:ASP:N	32:f:460:ASP:OD1	2.29	0.66
15:D:335:LEU:HD11	15:D:372:GLY:HA2	1.78	0.66
2:V:82:LEU:HD22	2:V:84:LYS:NZ	2.11	0.65
15:D:229:ARG:NH2	16:E:267:PHE:O	2.29	0.65
22:K:219:THR:HB	22:K:221:GLN:HE22	1.61	0.65
6:Z:208:ILE:HD11	7:a:349:MET:HG2	1.78	0.65
14:C:169:VAL:HG21	14:C:207:THR:HG21	1.78	0.65
17:F:209:LYS:NZ	17:F:217:ILE:O	2.28	0.65
30:S:38:ARG:NH2	26:o:164:PHE:O	2.29	0.65
15:D:287:ARG:O	15:D:291:GLU:N	2.27	0.65
32:f:80:ARG:HB3	32:f:95:PRO:HB2	1.78	0.65
9:c:191:ALA:O	9:c:195:GLY:N	2.29	0.65
32:f:376:PHE:CE2	32:f:416:MET:SD	2.88	0.65
32:f:471:LEU:CD1	32:f:509:LYS:HE3	2.26	0.65
2:V:298:ILE:HG13	10:d:116:HIS:HB3	1.77	0.65
12:A:290:GLY:O	17:F:295:ARG:NH1	2.30	0.65
15:D:373:ALA:HB1	15:D:374:ASP:HB3	1.77	0.65
12:A:103:ASN:HB2	12:A:112:ILE:HG23	1.78	0.65
17:F:150:LEU:HD22	17:F:164:LEU:HB3	1.78	0.65
32:f:692:LEU:HG	32:f:752:HIS:CE1	2.32	0.65
2:V:97:ALA:HB3	2:V:98:LEU:HA	1.79	0.65
3:W:452:ILE:CB	6:Z:225:GLN:HB3	2.27	0.65
13:B:291:GLY:HA2	13:B:336:THR:HG21	1.79	0.65
17:F:438:TYR:HA	23:L:51:ARG:HB3	1.77	0.65
1:U:249:CYS:HB3	1:U:328:ILE:HD12	1.78	0.65
14:C:182:GLN:NE2	14:C:286:THR:O	2.30	0.65
14:C:182:GLN:HE21	14:C:287:LYS:HG2	1.61	0.65
16:E:309:ARG:NH2	16:E:338:PHE:O	2.30	0.65
17:F:437:TYR:H	23:L:53:GLN:C	2.04	0.65
27:P:27:ARG:HD2	27:P:183:MET:HG2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:S:27:THR:HB	30:S:40:SER:H	1.61	0.65
32:f:389:LYS:HG2	32:f:418:LEU:CG	2.27	0.65
1:U:596:ASN:CA	15:D:53:PHE:CD1	2.80	0.65
5:Y:98:SER:HB2	14:C:341:GLY:N	2.12	0.65
5:Y:251:HIS:HA	5:Y:257:ARG:HD3	1.79	0.65
9:c:190:GLN:HE22	14:C:65:LEU:C	2.05	0.65
13:B:416:ASN:HA	13:B:419:PHE:HB3	1.77	0.65
32:f:379:GLY:O	32:f:417:ILE:HG12	1.97	0.65
1:U:105:ILE:C	14:C:21:ARG:NH2	2.53	0.65
12:A:303:ILE:HD12	12:A:332:MET:HG2	1.77	0.65
1:U:14:GLU:O	1:U:20:LYS:NZ	2.26	0.64
1:U:138:PHE:O	14:C:11:LEU:CD1	2.45	0.64
1:U:140:ARG:HB2	14:C:11:LEU:C	2.22	0.64
16:E:131:SER:HA	16:E:134:GLU:HB2	1.79	0.64
32:f:138:GLU:O	32:f:142:TYR:HB2	1.97	0.64
5:Y:98:SER:N	14:C:340:ARG:CA	2.58	0.64
14:C:188:LEU:HB3	14:C:317:PHE:HB2	1.78	0.64
16:E:281:ARG:HD3	16:E:387:LYS:HE3	1.78	0.64
6:Z:219:LYS:HG3	6:Z:220:LEU:HA	1.77	0.64
14:C:268:GLU:HA	14:C:271:ARG:HB3	1.79	0.64
32:f:804:LEU:H	32:f:804:LEU:CD1	2.10	0.64
1:U:599:ILE:HG21	15:D:56:VAL:HG13	1.61	0.64
1:U:607:VAL:CG2	15:D:64:GLU:CB	2.73	0.64
5:Y:132:VAL:CG1	14:C:338:LEU:H	2.09	0.64
10:d:12:LYS:HG2	10:d:57:ILE:HD11	1.79	0.64
13:B:217:LYS:C	13:B:219:PRO:HD3	2.23	0.64
17:F:138:GLY:O	17:F:160:ILE:N	2.31	0.64
17:F:417:HIS:HA	17:F:420:TYR:HB2	1.79	0.64
23:L:52:ALA:HB2	23:L:59:HIS:HA	1.79	0.64
32:f:93:PRO:HB2	32:f:137:ARG:HE	1.63	0.64
10:d:182:ILE:HG12	10:d:213:ARG:HH12	1.62	0.64
27:P:26:ARG:HB3	27:P:39:PHE:O	1.96	0.64
18:g:123:GLN:HE21	19:h:81:PRO:HB2	1.63	0.64
5:Y:79:ASP:HA	5:Y:82:LYS:HG2	1.79	0.64
13:B:317:ASP:HB3	13:B:318:GLY:HA2	1.79	0.64
16:E:86:GLN:OE1	17:F:117:ARG:NH2	2.31	0.64
17:F:366:MET:O	17:F:370:SER:N	2.29	0.64
5:Y:133:ALA:CA	14:C:377:HIS:H	2.06	0.64
32:f:366:ASP:O	32:f:367:SER:HB2	1.97	0.64
2:V:362:LEU:HB3	2:V:382:PHE:HE2	1.63	0.64
17:F:437:TYR:O	23:L:52:ALA:CA	2.45	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:h:4:ARG:NH2	24:m:126:SER:OG	2.31	0.64
1:U:158:ARG:NH1	15:D:45:LYS:HE2	2.11	0.64
12:A:348:LEU:CD1	22:K:175:GLU:OE1	2.32	0.64
13:B:112:LEU:HB2	13:B:150:VAL:HG13	1.80	0.64
22:K:146:VAL:HG11	22:K:222:PRO:HG3	1.80	0.64
31:t:9:THR:O	31:t:41:ARG:NH2	2.31	0.64
1:U:376:MET:O	1:U:741:GLY:N	2.31	0.64
3:W:331:GLY:HA2	3:W:332:SER:HB3	1.79	0.64
5:Y:132:VAL:HG23	14:C:377:HIS:HB2	0.68	0.64
6:Z:241:SER:HB3	6:Z:245:PHE:HB3	1.79	0.64
9:c:159:ALA:HB1	9:c:203:ILE:HG22	1.80	0.64
9:c:190:GLN:OE1	14:C:65:LEU:HA	1.98	0.64
12:A:122:VAL:HG21	17:F:150:LEU:HD21	1.79	0.64
13:B:398:ILE:HG22	13:B:426:VAL:HG11	1.80	0.64
15:D:89:ILE:O	15:D:106:THR:OG1	2.15	0.64
21:J:154:HIS:NE2	22:K:59:MET:SD	2.71	0.64
31:T:9:THR:O	31:T:41:ARG:NH2	2.31	0.64
31:t:148:PRO:O	31:t:152:GLU:HB2	1.97	0.64
1:U:183:LEU:O	15:D:46:LYS:NZ	2.31	0.63
2:V:464:ILE:O	5:Y:358:ARG:NH1	2.31	0.63
17:F:436:GLN:C	17:F:438:TYR:H	2.04	0.63
18:G:138:MET:HB3	18:G:154:CYS:HB3	1.80	0.63
15:D:284:GLU:O	15:D:288:ILE:N	2.31	0.63
24:m:11:ALA:HA	24:m:22:GLN:HG3	1.79	0.63
1:U:374:SER:HA	1:U:411:ILE:HG12	1.80	0.63
1:U:685:GLN:HB2	1:U:726:ALA:HA	1.81	0.63
17:F:298:SER:HB3	17:F:299:GLU:HB2	1.80	0.63
25:n:28:ASN:ND2	25:n:31:THR:OG1	2.30	0.63
2:V:344:ASP:HB2	2:V:368:ARG:HH11	1.62	0.63
7:a:129:GLN:HG3	7:a:130:VAL:H	1.63	0.63
15:D:406:VAL:HG23	15:D:407:ILE:HB	1.79	0.63
15:D:416:PHE:C	18:G:19:GLU:CG	2.59	0.63
16:E:177:GLY:H	16:E:303:LEU:HD12	1.63	0.63
19:H:119:GLN:HE21	20:I:81:SER:HB2	1.63	0.63
23:L:52:ALA:H	23:L:59:HIS:CD2	2.16	0.63
24:m:47:PHE:HB2	24:m:214:SER:HB3	1.79	0.63
1:U:603:LEU:CG	15:D:60:TYR:CE2	2.58	0.63
7:a:186:LYS:HD2	7:a:193:GLN:HE22	1.64	0.63
7:a:370:GLN:O	10:d:251:ARG:NH1	2.32	0.63
8:b:164:ASP:N	8:b:165:GLY:HA2	2.14	0.63
9:c:299:CYS:SG	9:c:300:LEU:N	2.71	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:A:339:ARG:NH2	17:F:402:GLU:OE1	2.32	0.63
17:F:392:ASN:HB2	17:F:395:GLN:HG3	1.80	0.63
24:M:51:LYS:NZ	24:M:62:SER:O	2.29	0.63
3:W:432:LEU:HA	3:W:435:LEU:HB2	1.80	0.63
12:A:158:ASP:OD1	12:A:159:PRO:N	2.31	0.63
14:C:236:VAL:HG22	14:C:239:ARG:HH12	1.64	0.63
14:C:271:ARG:HD3	14:C:274:LEU:HB2	1.81	0.63
15:D:100:THR:HB	15:D:114:ARG:HD2	1.78	0.63
16:E:171:LEU:HD22	16:E:295:LEU:HD13	1.81	0.63
21:J:119:THR:HG22	21:J:126:PRO:HB3	1.80	0.63
32:f:804:LEU:HD12	32:f:804:LEU:N	2.12	0.63
1:U:444:TYR:HB2	1:U:476:GLY:HA3	1.80	0.63
5:Y:358:ARG:HG3	5:Y:359:PRO:HD2	1.80	0.63
8:b:14:GLU:HB2	8:b:17:ARG:HH21	1.64	0.63
15:D:129:SER:HB2	15:D:252:ARG:HH12	1.62	0.63
28:q:57:ALA:O	28:q:61:GLN:CB	2.46	0.63
1:U:149:GLN:CD	15:D:40:LEU:CD2	2.65	0.63
1:U:842:LYS:HG2	1:U:882:ALA:HB2	1.81	0.63
2:V:55:THR:HB	2:V:198:GLN:HE22	1.61	0.63
5:Y:232:GLU:HG2	5:Y:234:PRO:HD2	1.81	0.63
6:Z:225:GLN:HA	6:Z:225:GLN:NE2	2.13	0.63
12:A:157:ILE:CD1	12:A:259:GLU:OE1	2.45	0.63
32:f:313:GLU:O	32:f:317:LEU:HB2	1.98	0.63
1:U:639:LEU:HB3	14:C:43:ARG:HB3	1.81	0.63
10:d:198:LEU:HD22	10:d:205:LYS:HE3	1.81	0.63
12:A:232:ARG:HE	12:A:235:ALA:H	1.47	0.63
15:D:150:SER:O	15:D:152:MET:N	2.32	0.63
22:K:224:GLN:CD	22:K:227:HIS:CE1	2.77	0.63
5:Y:132:VAL:CB	14:C:377:HIS:CB	2.77	0.62
15:D:418:LYS:HD2	19:H:27:ALA:CB	2.23	0.62
32:f:494:ARG:HH21	32:f:495:GLU:H	1.46	0.62
15:D:418:LYS:CG	18:G:19:GLU:C	2.71	0.62
15:D:418:LYS:HG2	18:G:19:GLU:O	1.98	0.62
9:c:127:ILE:HA	9:c:130:GLN:HB2	1.81	0.62
9:c:298:GLN:HE22	10:d:246:VAL:HB	1.64	0.62
17:F:284:PHE:HD1	17:F:329:ILE:HB	1.64	0.62
28:q:19:ARG:HB3	28:q:31:ASP:HA	1.82	0.62
32:f:339:ILE:HG23	32:f:340:MET:HG2	1.81	0.62
14:C:171:HIS:O	14:C:173:GLU:N	2.32	0.62
32:f:664:GLU:HA	32:f:697:ILE:HA	1.80	0.62
1:U:208:LEU:HD23	1:U:210:LYS:H	1.62	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:595:ASN:CA	15:D:53:PHE:HE1	1.71	0.62
3:W:436:MET:O	3:W:440:ASN:ND2	2.26	0.62
12:A:353:HIS:HA	12:A:356:LYS:HB2	1.82	0.62
14:C:386:ALA:HA	14:C:389:LYS:HB2	1.80	0.62
22:k:209:LYS:O	22:k:214:ASN:ND2	2.32	0.62
24:m:8:ASP:O	24:m:22:GLN:NE2	2.31	0.62
1:U:183:LEU:O	15:D:46:LYS:HD2	2.00	0.62
7:a:315:LEU:HD23	7:a:320:VAL:HG13	1.82	0.62
14:C:63:LEU:HD11	15:D:133:HIS:CD2	2.34	0.62
15:D:269:ALA:HB2	16:E:258:MET:HG3	1.80	0.62
28:Q:140:LEU:HD13	29:r:166:ARG:HE	1.64	0.62
12:A:206:ILE:HG23	12:A:207:GLU:H	1.65	0.62
15:D:418:LYS:CB	18:G:18:PRO:O	2.45	0.62
17:F:137:ILE:HG21	17:F:160:ILE:HB	1.80	0.62
18:G:237:ALA:O	18:G:241:ALA:HB2	2.00	0.62
32:f:483:PHE:CE2	32:f:799:VAL:CB	2.75	0.62
1:U:603:LEU:O	15:D:60:TYR:CE1	2.52	0.62
8:b:34:ASN:O	8:b:38:HIS:ND1	2.25	0.62
12:A:111:TYR:HE2	12:A:125:LEU:HD23	1.64	0.62
12:A:122:VAL:O	17:F:88:TYR:HA	1.99	0.62
14:C:313:ARG:NH1	14:C:314:LYS:O	2.32	0.62
15:D:87:LEU:HD11	15:D:133:HIS:HA	1.82	0.62
15:D:417:TYR:CG	18:G:5:SER:OG	2.52	0.62
17:F:79:LYS:HA	17:F:82:VAL:HG22	1.80	0.62
17:F:388:THR:HG22	17:F:391:PHE:HD2	1.65	0.62
23:l:186:GLU:HA	23:l:189:LYS:HG2	1.82	0.62
1:U:156:GLU:OE2	15:D:44:TYR:HD2	1.83	0.62
6:Z:180:LYS:CE	15:D:70:LYS:CE	2.76	0.62
10:d:49:ILE:HD11	10:d:89:LEU:HD22	1.81	0.62
12:A:168:GLU:HA	12:A:236:CYS:HB2	1.79	0.62
14:C:192:PRO:HG3	14:C:296:ASN:HD21	1.64	0.62
15:D:247:VAL:HA	15:D:250:VAL:HB	1.82	0.62
1:U:12:LEU:HD22	1:U:20:LYS:HG3	1.80	0.62
2:V:37:MET:HE2	2:V:115:LYS:HE3	1.81	0.62
2:V:281:ASN:ND2	5:Y:389:MET:SD	2.71	0.62
2:V:324:PHE:HB3	11:e:6:GLN:HA	1.81	0.62
12:A:184:ILE:HD13	12:A:224:LEU:HD22	1.82	0.62
12:A:205:GLY:HA2	12:A:206:ILE:CG2	2.29	0.62
12:A:333:ARG:HB2	12:A:337:LEU:HB2	1.81	0.62
13:B:346:ARG:NH1	13:B:348:ASP:OD2	2.33	0.62
15:D:150:SER:CB	15:D:151:ILE:HD12	2.29	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:286:GLN:HA	15:D:289:LEU:HB3	1.80	0.62
16:E:329:GLU:HA	16:E:332:VAL:HB	1.82	0.62
32:f:654:VAL:HA	32:f:657:ILE:HD12	1.81	0.62
2:V:262:SER:HB3	10:d:121:ARG:HA	1.82	0.61
4:X:420:LYS:HD2	6:Z:283:ARG:HD2	1.81	0.61
6:Z:72:HIS:ND1	8:b:63:THR:OG1	2.31	0.61
10:d:227:SER:C	10:d:229:GLN:HA	2.24	0.61
17:F:121:CYS:SG	17:F:122:ALA:N	2.72	0.61
21:J:8:THR:HG22	21:J:16:LEU:HD22	1.82	0.61
1:U:247:GLN:HE22	1:U:912:ILE:HG22	1.64	0.61
3:W:374:THR:HG23	7:a:327:VAL:HA	1.82	0.61
4:X:379:ASP:N	4:X:384:VAL:O	2.32	0.61
6:Z:220:LEU:HB3	6:Z:221:PRO:HG3	1.81	0.61
7:a:376:THR:CG2	15:D:63:ASP:OD2	2.48	0.61
10:d:147:SER:HG	10:d:151:VAL:H	1.43	0.61
22:K:69:GLU:OE1	22:K:228:MET:HG2	2.00	0.61
22:K:216:GLU:HA	22:K:229:PHE:HE2	1.65	0.61
25:n:18:SER:HB2	25:n:30:VAL:HA	1.81	0.61
32:f:471:LEU:CD1	32:f:509:LYS:HE2	2.30	0.61
13:B:107:MET:HG3	14:C:96:VAL:HG13	1.82	0.61
13:B:133:VAL:HG21	13:B:159:VAL:HG12	1.81	0.61
13:B:225:TYR:CE1	13:B:350:LYS:HE3	2.34	0.61
14:C:147:THR:HG1	14:C:206:HIS:HE2	1.47	0.61
17:F:230:GLY:H	17:F:392:ASN:HB3	1.65	0.61
17:F:438:TYR:CG	23:L:51:ARG:HB3	2.33	0.61
26:o:18:THR:HB	26:o:31:CYS:H	1.65	0.61
32:f:801:VAL:HG13	32:f:801:VAL:O	2.01	0.61
1:U:105:ILE:HD12	14:C:13:GLU:OE2	2.00	0.61
16:E:60:VAL:HA	16:E:71:VAL:HG12	1.82	0.61
24:M:196:ILE:HA	24:M:199:ILE:HB	1.83	0.61
32:f:376:PHE:CG	32:f:416:MET:HE1	2.35	0.61
1:U:429:LYS:HA	1:U:430:ASP:HB3	1.82	0.61
3:W:390:GLU:HG3	3:W:408:ARG:HH21	1.66	0.61
10:d:82:TYR:HE2	10:d:98:LEU:HD21	1.65	0.61
22:K:216:GLU:CA	22:K:229:PHE:CE2	2.82	0.61
22:k:177:ALA:O	22:k:181:LEU:HB2	2.01	0.61
32:f:234:THR:O	32:f:238:ASN:HB2	2.00	0.61
32:f:687:ARG:HH21	32:f:742:ALA:HB2	1.64	0.61
1:U:188:MET:HG2	1:U:194:ARG:HD3	1.83	0.61
2:V:143:ALA:HB3	2:V:145:LEU:HB3	1.83	0.61
3:W:416:GLN:HB3	3:W:417:ARG:CA	2.29	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:173:ASP:HB2	5:Y:177:ARG:HG3	1.82	0.61
6:Z:148:GLY:HA3	7:a:178:ARG:HA	1.82	0.61
12:A:115:VAL:HG13	12:A:117:GLN:H	1.65	0.61
16:E:288:ALA:O	16:E:294:ARG:NH1	2.32	0.61
32:f:471:LEU:O	32:f:471:LEU:HD23	2.01	0.61
1:U:102:ALA:HB2	14:C:20:LEU:HD22	1.81	0.61
1:U:388:ASP:OD1	1:U:389:ASN:ND2	2.34	0.61
5:Y:312:ARG:HG3	5:Y:313:SER:H	1.65	0.61
6:Z:7:GLN:OE1	6:Z:46:LYS:NZ	2.33	0.61
6:Z:33:LYS:HE2	6:Z:59:ASP:HA	1.81	0.61
8:b:171:VAL:HG21	8:b:187:PRO:HG3	1.83	0.61
13:B:404:LEU:O	13:B:408:ARG:N	2.32	0.61
16:E:128:GLY:O	16:E:189:SER:OG	2.16	0.61
16:E:292:PRO:HA	16:E:295:LEU:O	2.00	0.61
17:F:130:GLN:OE1	17:F:132:TYR:OH	2.17	0.61
17:F:303:ASP:O	17:F:307:GLN:N	2.33	0.61
29:R:196:HIS:O	29:R:200:SER:HB3	2.01	0.61
1:U:632:GLN:HE21	15:D:54:LEU:CD2	2.02	0.61
9:c:242:GLU:HA	9:c:245:VAL:HB	1.83	0.61
14:C:67:GLN:HB2	15:D:135:HIS:HB3	1.82	0.61
32:f:378:ASN:HB2	32:f:391:LEU:HD11	1.82	0.61
1:U:221:ILE:HB	1:U:754:HIS:HB2	1.82	0.61
6:Z:222:ILE:O	6:Z:222:ILE:HG23	2.01	0.61
9:c:242:GLU:O	9:c:243:SER:O	2.19	0.61
12:A:191:VAL:HG13	12:A:192:GLU:H	1.66	0.61
14:C:83:LYS:HA	14:C:105:ILE:HD11	1.81	0.61
15:D:212:LYS:HE3	15:D:310:ALA:HB1	1.83	0.61
17:F:233:LYS:O	17:F:237:ALA:N	2.29	0.61
24:M:192:GLU:HA	24:M:195:LYS:HE3	1.82	0.61
5:Y:136:HIS:HD2	14:C:377:HIS:NE2	1.98	0.61
14:C:307:ARG:HE	14:C:312:ASP:HB2	1.66	0.61
16:E:310:LEU:O	16:E:314:LYS:NZ	2.27	0.61
32:f:494:ARG:NE	32:f:496:ASP:H	1.99	0.61
1:U:800:VAL:HG21	1:U:914:LEU:HD21	1.81	0.60
7:a:35:HIS:CE1	8:b:17:ARG:HB2	2.36	0.60
17:F:438:TYR:N	23:L:52:ALA:O	2.34	0.60
17:F:438:TYR:CE2	23:L:51:ARG:CZ	2.84	0.60
28:q:4:LEU:HD12	28:q:45:LEU:HB3	1.83	0.60
32:f:389:LYS:HD3	32:f:389:LYS:N	2.15	0.60
1:U:138:PHE:CD1	14:C:11:LEU:CD2	2.78	0.60
9:c:190:GLN:HE22	14:C:65:LEU:HA	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:I:122:THR:O	21:J:125:ARG:NH1	2.34	0.60
20:i:119:GLN:HE21	20:i:123:GLN:HE22	1.47	0.60
32:f:315:GLU:CB	32:f:491:GLY:HA2	2.32	0.60
32:f:392:THR:HG23	32:f:417:ILE:HG21	1.81	0.60
1:U:187:LEU:HD11	15:D:42:SER:CA	2.29	0.60
1:U:757:MET:HG3	1:U:758:PRO:HD3	1.84	0.60
1:U:789:ILE:HB	1:U:911:ILE:HA	1.82	0.60
3:W:452:ILE:HB	6:Z:225:GLN:HB2	1.83	0.60
6:Z:191:ILE:HG22	9:c:226:MET:HE1	1.83	0.60
7:a:19:PRO:HA	7:a:22:TRP:HB2	1.83	0.60
13:B:173:VAL:HA	14:C:232:ARG:HG2	1.83	0.60
14:C:60:ARG:O	14:C:64:GLN:N	2.33	0.60
30:S:148:LEU:HD23	30:S:178:VAL:HG12	1.82	0.60
27:p:58:THR:OG1	28:q:121:LEU:O	2.19	0.60
30:s:27:THR:HB	30:s:40:SER:H	1.65	0.60
5:Y:323:PHE:HD2	5:Y:326:GLY:HA3	1.66	0.60
5:Y:358:ARG:HH21	5:Y:358:ARG:CG	2.14	0.60
12:A:375:ARG:HD2	22:K:204:GLN:HB3	1.82	0.60
11:e:1:MET:H3	11:e:2:SER:HA	1.66	0.60
1:U:233:LEU:HD22	1:U:268:LEU:HD21	1.83	0.60
1:U:252:LEU:HD21	1:U:264:VAL:HG11	1.82	0.60
12:A:313:GLY:C	12:A:315:ILE:H	2.07	0.60
15:D:261:ILE:HG23	15:D:306:LYS:HB2	1.83	0.60
32:f:782:HIS:HA	32:f:785:ARG:HG2	1.83	0.60
1:U:792:ASN:HA	1:U:914:LEU:HB3	1.81	0.60
2:V:122:THR:O	2:V:125:ASN:ND2	2.35	0.60
2:V:275:VAL:H	2:V:276:PHE:HA	1.67	0.60
6:Z:69:PHE:HE1	8:b:60:VAL:H	1.49	0.60
14:C:76:VAL:O	14:C:111:ASN:N	2.30	0.60
16:E:178:THR:HG22	16:E:339:ASN:HB3	1.82	0.60
16:E:241:ARG:O	16:E:242:ARG:HG2	2.02	0.60
16:E:305:ASN:O	16:E:309:ARG:N	2.33	0.60
1:U:474:ARG:NH1	1:U:500:ASN:O	2.24	0.60
1:U:600:ARG:HE	15:D:56:VAL:HG21	1.35	0.60
5:Y:132:VAL:CG2	14:C:338:LEU:HA	2.15	0.60
8:b:8:VAL:HA	8:b:110:ILE:HG13	1.84	0.60
14:C:14:GLY:O	14:C:18:SER:N	2.31	0.60
15:D:130:VAL:HA	15:D:142:VAL:HA	1.84	0.60
17:F:436:GLN:C	17:F:438:TYR:N	2.60	0.60
1:U:361:ARG:HG3	1:U:365:CYS:HB2	1.84	0.60
3:W:237:GLU:HG2	3:W:238:GLY:H	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:132:VAL:HB	14:C:337:ASN:C	2.26	0.60
5:Y:134:LEU:CG	14:C:376:VAL:HB	2.32	0.60
7:a:376:THR:HG21	15:D:63:ASP:CG	2.26	0.60
12:A:365:GLU:HB3	12:A:368:ILE:HG13	1.84	0.60
14:C:202:ALA:O	14:C:206:HIS:N	2.30	0.60
15:D:202:VAL:HB	15:D:308:ILE:HA	1.83	0.60
15:D:348:ILE:HG21	15:D:379:CYS:HB3	1.83	0.60
21:j:115:LYS:NZ	21:j:129:ILE:O	2.35	0.60
32:f:695:ALA:CB	32:f:752:HIS:HB2	2.31	0.60
8:b:51:LEU:HD23	8:b:71:ILE:HG23	1.84	0.60
12:A:381:THR:OG1	13:B:343:ARG:NH1	2.35	0.60
15:D:91:GLN:NE2	15:D:244:PRO:HB2	2.16	0.60
24:M:40:ARG:NH1	24:M:146:ALA:O	2.34	0.60
32:f:477:MET:O	32:f:481:SER:HB2	2.02	0.60
1:U:607:VAL:HG22	15:D:60:TYR:CE1	2.27	0.59
2:V:80:LYS:HE2	2:V:90:GLU:CD	2.23	0.59
10:d:122:LEU:HD11	10:d:125:LYS:HG2	1.84	0.59
10:d:254:GLU:HA	10:d:257:VAL:HG23	1.83	0.59
14:C:171:HIS:HB3	14:C:174:LEU:HG	1.84	0.59
16:E:172:LEU:HB2	16:E:278:ALA:HB2	1.84	0.59
1:U:141:CYS:H	14:C:11:LEU:HA	1.59	0.59
1:U:603:LEU:HD12	15:D:60:TYR:CE2	2.35	0.59
6:Z:242:LEU:O	7:a:288:HIS:N	2.35	0.59
16:E:229:ILE:HG23	16:E:274:LYS:HB3	1.82	0.59
32:f:89:MET:HG2	32:f:90:THR:HG23	1.84	0.59
32:f:378:ASN:O	32:f:381:VAL:CG1	2.49	0.59
1:U:102:ALA:CA	14:C:20:LEU:HD22	2.32	0.59
2:V:480:ILE:HG23	6:Z:271:ALA:HB2	1.84	0.59
3:W:453:HIS:CD2	6:Z:222:ILE:CG2	2.81	0.59
5:Y:12:PRO:O	5:Y:146:ARG:NH1	2.35	0.59
9:c:263:ASP:OD1	9:c:283:HIS:ND1	2.32	0.59
15:D:171:ASP:HA	15:D:174:LYS:HE2	1.84	0.59
15:D:207:PRO:HB3	15:D:210:CYS:HA	1.83	0.59
16:E:335:SER:HB3	16:E:338:PHE:CE2	2.37	0.59
32:f:380:PHE:CB	32:f:751:TYR:HE1	2.14	0.59
1:U:152:GLY:CA	15:D:41:TYR:H	2.04	0.59
5:Y:170:GLU:N	5:Y:171:GLY:HA3	2.17	0.59
12:A:305:GLN:O	12:A:312:ARG:NE	2.33	0.59
12:A:311:PRO:HD2	12:A:313:GLY:HA2	1.83	0.59
14:C:148:TYR:H	14:C:206:HIS:HE2	1.50	0.59
17:F:320:PHE:HB3	17:F:322:PRO:HD2	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:I:47:ALA:HB3	20:I:212:GLU:HB3	1.84	0.59
28:q:19:ARG:HH21	28:q:31:ASP:HB2	1.66	0.59
32:f:358:PHE:HZ	32:f:381:VAL:HG21	1.66	0.59
3:W:373:ILE:HG12	3:W:374:THR:N	2.16	0.59
6:Z:124:ILE:HA	6:Z:135:THR:HA	1.83	0.59
7:a:182:CYS:SG	7:a:183:VAL:N	2.75	0.59
14:C:67:GLN:HA	15:D:136:SER:HA	1.85	0.59
15:D:153:MET:CG	15:D:154:LEU:N	2.63	0.59
15:D:417:TYR:CB	18:G:5:SER:CB	2.47	0.59
17:F:308:ARG:O	17:F:312:GLU:N	2.29	0.59
1:U:153:ILE:HG23	14:C:13:GLU:OE2	2.02	0.59
6:Z:14:LEU:HA	9:c:39:LEU:HD13	1.84	0.59
12:A:299:MET:HE2	12:A:300:LEU:HG	1.83	0.59
17:F:314:LEU:O	17:F:318:ASP:N	2.35	0.59
23:l:93:LEU:HA	23:l:96:ARG:HB3	1.85	0.59
32:f:389:LYS:HG2	32:f:418:LEU:CD1	2.32	0.59
1:U:599:ILE:O	1:U:603:LEU:HB3	2.03	0.59
9:c:98:MET:O	9:c:102:THR:OG1	2.21	0.59
20:I:180:LYS:HD2	20:I:183:GLU:HB2	1.83	0.59
32:f:337:LEU:HD22	32:f:337:LEU:N	2.17	0.59
32:f:501:LEU:HD22	32:f:518:THR:HG23	1.84	0.59
12:A:159:PRO:O	12:A:162:THR:OG1	2.20	0.59
32:f:129:LEU:O	32:f:133:MET:CB	2.50	0.59
32:f:337:LEU:CD1	32:f:420:TRP:HZ3	2.04	0.59
32:f:378:ASN:CB	32:f:391:LEU:HD11	2.33	0.59
1:U:636:VAL:C	14:C:43:ARG:NH1	2.60	0.59
2:V:252:ASN:ND2	2:V:284:GLU:OE2	2.35	0.59
3:W:453:HIS:CD2	6:Z:222:ILE:CB	2.85	0.59
5:Y:300:ARG:HH22	11:e:56:LEU:HD13	1.68	0.59
15:D:203:LEU:O	15:D:331:ILE:HB	2.02	0.59
21:j:116:GLN:NE2	21:j:150:SER:O	2.36	0.59
32:f:494:ARG:CZ	32:f:496:ASP:H	2.16	0.59
1:U:149:GLN:HA	15:D:40:LEU:HD22	1.85	0.59
9:c:282:ARG:N	9:c:283:HIS:HB2	2.18	0.59
15:D:408:LYS:HB3	15:D:409:LYS:HB2	1.83	0.59
16:E:128:GLY:HA2	16:E:129:ASN:HB2	1.85	0.59
32:f:376:PHE:CZ	32:f:416:MET:HE1	2.36	0.59
1:U:184:CYS:CA	15:D:42:SER:HB3	2.33	0.58
5:Y:108:ALA:O	5:Y:112:CYS:N	2.35	0.58
5:Y:279:GLU:HB3	11:e:60:LEU:HD13	1.84	0.58
6:Z:222:ILE:O	6:Z:227:ILE:CG1	2.50	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:d:105:PHE:HA	10:d:170:LEU:HD12	1.85	0.58
12:A:327:LEU:O	12:A:331:LEU:N	2.33	0.58
14:C:69:GLN:HB2	14:C:118:ASN:HB2	1.84	0.58
24:M:83:ASP:OD2	24:M:129:ARG:NH2	2.36	0.58
26:O:193:ASN:ND2	30:s:213:ASP:OD2	2.35	0.58
19:h:3:GLU:HG3	19:h:5:GLY:H	1.68	0.58
24:m:92:ARG:NH2	31:t:69:GLN:OE1	2.36	0.58
28:q:168:GLN:NE2	28:q:175:LEU:O	2.35	0.58
32:f:353:LEU:H	32:f:387:GLN:HG2	1.68	0.58
7:a:14:SER:HB2	7:a:18:GLN:HG2	1.85	0.58
10:d:151:VAL:O	10:d:155:LYS:N	2.35	0.58
12:A:303:ILE:O	12:A:307:ASP:N	2.34	0.58
12:A:375:ARG:CZ	22:K:204:GLN:HA	2.32	0.58
13:B:224:LEU:HB2	13:B:330:ALA:HB2	1.85	0.58
14:C:299:ASP:O	14:C:303:SER:N	2.35	0.58
24:m:108:LEU:HD11	24:m:137:LEU:HB3	1.83	0.58
32:f:22:GLY:O	32:f:26:GLU:HB2	2.04	0.58
32:f:618:GLU:HG2	32:f:623:LYS:HD2	1.85	0.58
32:f:780:PRO:O	32:f:800:LEU:HG	2.03	0.58
5:Y:132:VAL:CB	14:C:377:HIS:HB3	2.33	0.58
12:A:303:ILE:HA	12:A:306:LEU:HB2	1.85	0.58
15:D:337:ASP:H	15:D:340:GLN:HB2	1.67	0.58
30:S:13:LEU:HD11	30:S:149:LEU:HD11	1.85	0.58
32:f:456:ARG:HD3	32:f:489:TYR:OH	2.03	0.58
32:f:780:PRO:HB2	32:f:800:LEU:HB3	1.86	0.58
5:Y:97:GLU:OE1	14:C:342:ILE:O	2.22	0.58
6:Z:17:LEU:HD12	9:c:217:LEU:HD13	1.85	0.58
13:B:349:ARG:HE	13:B:351:ILE:HG22	1.68	0.58
14:C:338:LEU:HD13	14:C:383:PHE:HE2	1.68	0.58
15:D:237:GLN:HG3	15:D:242:GLU:HB3	1.85	0.58
17:F:185:TYR:HE1	17:F:243:GLN:HG3	1.68	0.58
17:F:195:ILE:HG13	17:F:198:LEU:HD23	1.86	0.58
3:W:452:ILE:HD11	6:Z:222:ILE:HG12	1.85	0.58
5:Y:132:VAL:O	14:C:337:ASN:HB3	2.03	0.58
6:Z:180:LYS:HD3	15:D:70:LYS:CE	2.33	0.58
10:d:215:TRP:CD1	10:d:216:VAL:H	2.22	0.58
10:d:246:VAL:HA	10:d:249:TYR:HB3	1.84	0.58
20:I:119:GLN:NE2	21:J:78:ALA:O	2.37	0.58
2:V:441:ALA:HB1	2:V:446:VAL:HB	1.85	0.58
6:Z:181:ASP:OD2	15:D:74:HIS:CD2	2.56	0.58
7:a:125:ILE:N	7:a:126:GLY:HA2	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:a:286:ALA:HA	7:a:288:HIS:HB2	1.85	0.58
10:d:114:GLU:HA	10:d:117:THR:HG22	1.85	0.58
15:D:183:LEU:HA	15:D:186:THR:HG22	1.85	0.58
17:F:181:PRO:HG2	17:F:242:ALA:HB2	1.84	0.58
32:f:541:THR:O	32:f:545:LYS:HB2	2.03	0.58
2:V:174:PHE:HA	2:V:177:ASN:HD22	1.68	0.58
2:V:331:LEU:HD12	2:V:334:VAL:HG21	1.85	0.58
5:Y:112:CYS:SG	5:Y:120:ALA:N	2.73	0.58
15:D:418:LYS:HG3	19:H:27:ALA:HB1	1.86	0.58
16:E:200:SER:O	17:F:308:ARG:NH1	2.36	0.58
28:q:117:TYR:HB3	28:q:125:ALA:HB3	1.85	0.58
32:f:378:ASN:HB3	32:f:391:LEU:CD2	2.34	0.58
1:U:576:PRO:HA	1:U:579:ARG:HE	1.68	0.58
2:V:55:THR:HB	2:V:198:GLN:NE2	2.19	0.58
2:V:263:LEU:HD13	10:d:121:ARG:HD3	1.84	0.58
6:Z:101:LEU:HD23	6:Z:123:ILE:HD11	1.86	0.58
6:Z:228:TYR:CZ	7:a:215:GLU:HB2	2.39	0.58
12:A:383:ALA:HB3	13:B:343:ARG:HE	1.68	0.58
32:f:494:ARG:NH2	32:f:495:GLU:H	2.00	0.58
1:U:198:LEU:HD21	1:U:219:CYS:HA	1.86	0.58
1:U:644:TYR:HB3	14:C:50:ASN:O	2.04	0.58
5:Y:132:VAL:CG2	14:C:377:HIS:CG	2.80	0.58
5:Y:170:GLU:O	15:D:189:GLU:CG	2.48	0.58
7:a:327:VAL:HG13	7:a:328:ASP:H	1.69	0.58
8:b:17:ARG:HG2	8:b:80:PRO:HG2	1.86	0.58
9:c:273:LYS:HD2	9:c:277:LYS:HG3	1.84	0.58
15:D:285:VAL:HA	15:D:288:ILE:HD12	1.86	0.58
18:G:158:GLY:O	19:H:84:ARG:NH2	2.36	0.58
32:f:232:TYR:O	32:f:236:CYS:CB	2.49	0.58
10:d:225:PHE:HB3	10:d:226:ALA:HB2	1.86	0.58
12:A:102:ILE:HA	12:A:113:ILE:HA	1.86	0.58
12:A:343:PHE:HB3	12:A:344:SER:C	2.29	0.58
13:B:120:HIS:HB3	13:B:132:TYR:HB3	1.84	0.58
20:i:35:LEU:HB2	20:i:162:THR:HG21	1.84	0.58
20:i:198:ASN:HD22	20:i:240:HIS:HD2	1.52	0.58
1:U:17:PRO:HA	1:U:20:LYS:HD3	1.86	0.57
1:U:607:VAL:HG11	15:D:64:GLU:N	2.19	0.57
9:c:161:ARG:NH1	9:c:162:LEU:O	2.37	0.57
13:B:182:GLU:HB2	13:B:239:VAL:HG11	1.86	0.57
15:D:283:ARG:HA	15:D:286:GLN:HG2	1.86	0.57
15:D:318:ASP:HB2	15:D:321:LEU:HG	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:t:192:VAL:HG12	31:t:197:VAL:HG22	1.85	0.57
32:f:127:SER:O	32:f:131:MET:CB	2.52	0.57
1:U:155:LEU:HD23	15:D:41:TYR:C	2.25	0.57
1:U:792:ASN:OD1	1:U:793:LYS:N	2.36	0.57
2:V:173:ILE:O	2:V:177:ASN:ND2	2.38	0.57
3:W:423:ASN:HA	6:Z:251:LEU:HD21	1.85	0.57
12:A:390:THR:HA	13:B:216:ILE:HG21	1.86	0.57
1:U:554:LEU:HG	1:U:588:MET:HE1	1.86	0.57
6:Z:16:LEU:HD21	9:c:216:MET:HE2	1.86	0.57
16:E:223:ARG:NE	16:E:268:ASP:OD2	2.36	0.57
17:F:438:TYR:HB3	23:L:51:ARG:HD2	1.86	0.57
32:f:140:LEU:O	32:f:144:LEU:HB2	2.04	0.57
32:f:269:ALA:HB2	32:f:277:LEU:HD22	1.87	0.57
32:f:695:ALA:CB	32:f:752:HIS:CB	2.82	0.57
2:V:394:LEU:HD23	10:d:116:HIS:HE1	1.68	0.57
9:c:190:GLN:NE2	14:C:65:LEU:HA	2.19	0.57
11:e:63:HIS:HA	11:e:66:LYS:HE2	1.84	0.57
12:A:119:ALA:HB1	12:A:121:PHE:HE1	1.70	0.57
3:W:273:TYR:HA	3:W:276:LEU:HD13	1.87	0.57
14:C:212:ILE:N	14:C:245:ILE:O	2.35	0.57
16:E:221:TYR:HA	16:E:224:ASP:HB3	1.87	0.57
17:F:406:ILE:HA	17:F:409:ARG:HG2	1.84	0.57
23:L:42:THR:O	23:L:137:TYR:OH	2.23	0.57
24:M:163:CYS:SG	24:M:164:ALA:N	2.77	0.57
26:O:140:ASP:OD2	31:t:171:ARG:NH2	2.36	0.57
30:S:184:GLU:OE1	30:S:211:ARG:NH1	2.37	0.57
5:Y:99:GLU:O	5:Y:100:ILE:CG1	2.52	0.57
5:Y:136:HIS:CD2	14:C:377:HIS:HE2	2.21	0.57
14:C:83:LYS:C	14:C:98:ASP:OD2	2.48	0.57
14:C:214:VAL:HG12	14:C:249:ASP:H	1.68	0.57
16:E:149:ILE:HG23	16:E:274:LYS:HG2	1.87	0.57
16:E:197:LYS:NZ	16:E:198:VAL:O	2.37	0.57
16:E:385:ASP:OD1	17:F:340:PRO:HB2	2.04	0.57
27:P:177:ARG:NH2	30:s:150:ASP:OD2	2.35	0.57
32:f:438:ASP:N	32:f:438:ASP:OD1	2.35	0.57
1:U:649:ARG:HB3	1:U:675:MET:HE1	1.86	0.57
14:C:99:VAL:HG13	14:C:100:ASP:C	2.30	0.57
14:C:336:MET:HA	15:D:195:GLY:HA3	1.86	0.57
15:D:282:ASP:HA	15:D:285:VAL:HG22	1.87	0.57
3:W:237:GLU:HG2	3:W:238:GLY:N	2.20	0.57
13:B:294:ARG:HB3	14:C:264:GLY:H	1.70	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:J:43:LEU:HD13	21:J:72:ALA:HB2	1.86	0.57
22:k:16:SER:HB3	22:k:20:ARG:H	1.69	0.57
1:U:194:ARG:HH22	1:U:222:PHE:HB3	1.68	0.57
1:U:908:ILE:HG12	1:U:909:GLY:H	1.70	0.57
2:V:79:VAL:HG13	2:V:80:LYS:H	1.70	0.57
7:a:188:LEU:HD11	7:a:193:GLN:HG3	1.86	0.57
9:c:63:ASP:OD1	9:c:66:THR:OG1	2.21	0.57
14:C:165:ILE:HA	14:C:290:LYS:HE3	1.85	0.57
15:D:89:ILE:HG21	15:D:143:LEU:HD11	1.86	0.57
17:F:365:ILE:HG13	17:F:366:MET:H	1.70	0.57
24:m:241:GLU:O	24:m:244:LYS:NZ	2.36	0.57
1:U:185:MET:HE3	1:U:628:ARG:HH12	1.70	0.57
9:c:168:MET:HA	9:c:172:HIS:HE1	1.70	0.57
13:B:286:GLU:HA	13:B:331:THR:HA	1.87	0.57
30:S:150:ASP:OD2	27:p:177:ARG:NH2	2.36	0.57
32:f:487:LEU:HD23	32:f:524:MET:HE1	1.85	0.57
32:f:536:SER:O	32:f:540:GLN:HB2	2.05	0.57
32:f:742:ALA:HA	32:f:745:LEU:HG	1.87	0.57
1:U:493:VAL:O	1:U:497:LEU:HB2	2.05	0.56
3:W:452:ILE:CG2	6:Z:225:GLN:CB	2.70	0.56
6:Z:145:HIS:CE1	6:Z:225:GLN:CG	2.88	0.56
10:d:142:TYR:O	10:d:147:SER:N	2.38	0.56
12:A:246:VAL:HG21	13:B:307:ARG:HD2	1.87	0.56
12:A:406:GLU:HA	12:A:409:PHE:CE2	2.40	0.56
14:C:132:ASP:O	14:C:136:SER:N	2.28	0.56
15:D:146:GLU:HG2	15:D:148:ASP:H	1.70	0.56
16:E:345:ASN:HB3	17:F:345:SER:HB2	1.87	0.56
24:m:61:GLY:O	24:m:64:LYS:NZ	2.38	0.56
2:V:210:CYS:HA	2:V:213:TYR:HB2	1.87	0.56
2:V:287:ARG:HB2	11:e:5:LYS:HD3	1.87	0.56
3:W:436:MET:HE3	9:c:239:LYS:HD3	1.87	0.56
4:X:420:LYS:HD3	5:Y:387:ILE:HG21	1.86	0.56
9:c:232:GLN:O	9:c:236:GLU:N	2.36	0.56
13:B:220:LYS:HB2	13:B:346:ARG:HH21	1.69	0.56
15:D:83:GLN:HG2	15:D:84:SER:N	2.19	0.56
15:D:284:GLU:HA	15:D:287:ARG:HB2	1.85	0.56
16:E:169:GLY:N	16:E:296:ASP:OD2	2.39	0.56
32:f:88:SER:HB2	32:f:92:VAL:CG2	2.33	0.56
1:U:102:ALA:HA	14:C:20:LEU:HD22	1.87	0.56
1:U:187:LEU:CD2	15:D:44:TYR:N	2.57	0.56
2:V:81:GLN:H	2:V:162:GLU:HG2	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:141:VAL:HG21	5:Y:164:ALA:HB2	1.88	0.56
8:b:91:ARG:NH1	8:b:134:GLU:OE1	2.35	0.56
9:c:131:GLN:HA	9:c:134:GLU:HG2	1.87	0.56
9:c:190:GLN:HE22	14:C:65:LEU:CA	2.18	0.56
12:A:358:HIS:HE1	12:A:386:ARG:HA	1.69	0.56
15:D:414:HIS:N	18:G:5:SER:CA	2.68	0.56
16:E:151:LEU:HD11	16:E:158:LEU:HD12	1.87	0.56
16:E:316:HIS:CE1	16:E:344:ARG:HB2	2.39	0.56
17:F:301:ALA:HB3	17:F:304:ARG:HB2	1.87	0.56
20:I:108:GLU:OE2	20:I:146:GLN:NE2	2.38	0.56
22:K:209:LYS:O	22:K:214:ASN:ND2	2.37	0.56
23:L:173:GLU:HG3	24:M:56:LYS:HD3	1.87	0.56
26:O:164:PHE:O	30:s:38:ARG:NH2	2.37	0.56
18:g:158:GLY:O	19:h:84:ARG:NH2	2.38	0.56
21:j:115:LYS:HE2	21:j:149:PRO:HA	1.86	0.56
23:l:151:ALA:O	24:m:85:ARG:NH2	2.38	0.56
28:q:183:ILE:HG12	28:q:188:ILE:HG13	1.87	0.56
32:f:226:TYR:O	32:f:230:CYS:CB	2.53	0.56
32:f:353:LEU:HG	32:f:387:GLN:CG	2.36	0.56
1:U:102:ALA:HB2	14:C:20:LEU:CD2	2.28	0.56
2:V:82:LEU:HD21	2:V:128:ARG:HE	1.71	0.56
4:X:351:SER:HA	4:X:354:ILE:HG22	1.88	0.56
14:C:115:ALA:HB3	14:C:125:LYS:H	1.71	0.56
15:D:201:GLY:HA3	15:D:328:ASP:H	1.69	0.56
15:D:417:TYR:CE2	18:G:5:SER:CB	2.73	0.56
17:F:91:SER:OG	17:F:125:LYS:O	2.17	0.56
17:F:190:GLY:HA3	17:F:361:ALA:HB2	1.87	0.56
23:L:66:VAL:O	30:S:77:HIS:NE2	2.39	0.56
24:m:160:TYR:HD2	24:m:163:CYS:HB2	1.70	0.56
29:r:196:HIS:O	29:r:200:SER:CB	2.54	0.56
32:f:358:PHE:CE1	32:f:381:VAL:HG21	2.40	0.56
32:f:780:PRO:HB2	32:f:800:LEU:CB	2.36	0.56
1:U:153:ILE:HG23	14:C:13:GLU:CG	2.18	0.56
1:U:183:LEU:CA	15:D:46:LYS:NZ	2.69	0.56
12:A:170:PRO:HA	12:A:229:VAL:HG12	1.87	0.56
13:B:223:ILE:HG13	13:B:346:ARG:HB3	1.86	0.56
15:D:115:ILE:HA	15:D:139:LEU:HB2	1.86	0.56
20:I:218:ARG:NH1	20:I:223:THR:OG1	2.39	0.56
32:f:301:HIS:O	32:f:305:LEU:CB	2.53	0.56
32:f:494:ARG:CZ	32:f:495:GLU:H	2.17	0.56
1:U:203:LYS:O	1:U:207:ASN:ND2	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X:346:GLN:HE21	4:X:349:HIS:HB2	1.71	0.56
5:Y:182:VAL:HA	5:Y:201:PHE:HE1	1.70	0.56
7:a:244:ASN:HB2	7:a:272:ILE:HB	1.87	0.56
12:A:206:ILE:H	17:F:373:MET:HE3	1.70	0.56
12:A:333:ARG:HH22	12:A:340:LYS:HD3	1.69	0.56
13:B:133:VAL:HG13	13:B:135:ILE:HG23	1.87	0.56
13:B:139:VAL:HA	13:B:140:ASP:HB3	1.87	0.56
13:B:269:GLU:HA	13:B:272:ARG:HG2	1.87	0.56
22:K:225:ASN:CA	22:K:227:HIS:HB2	2.35	0.56
18:g:120:ASP:OD1	19:h:84:ARG:NH1	2.39	0.56
29:r:135:ALA:O	29:r:139:MET:CB	2.54	0.56
32:f:317:LEU:O	32:f:321:MET:HB2	2.05	0.56
5:Y:132:VAL:CB	14:C:338:LEU:H	2.19	0.56
7:a:212:ASN:HD21	7:a:339:ARG:HG3	1.70	0.56
12:A:239:ARG:HD3	13:B:319:PHE:HD2	1.71	0.56
16:E:50:LEU:CD1	17:F:138:GLY:HA2	2.30	0.56
17:F:249:LEU:HD12	17:F:283:ILE:HD11	1.88	0.56
17:F:438:TYR:CA	23:L:51:ARG:CB	2.78	0.56
21:J:17:PHE:O	21:J:21:TYR:N	2.36	0.56
22:K:76:CYS:SG	22:K:77:ALA:N	2.78	0.56
32:f:623:LYS:O	32:f:627:GLU:CB	2.54	0.56
1:U:772:TRP:HB3	1:U:775:LEU:HG	1.88	0.56
7:a:341:LEU:O	7:a:342:ASP:HB2	2.04	0.56
10:d:108:SER:HB2	10:d:170:LEU:HD11	1.87	0.56
12:A:162:THR:O	12:A:166:VAL:N	2.28	0.56
14:C:270:GLN:HB3	14:C:306:LEU:HD21	1.86	0.56
15:D:391:ARG:NE	15:D:393:ILE:O	2.35	0.56
17:F:176:GLU:HB2	17:F:250:LYS:HB2	1.88	0.56
2:V:149:PRO:HG2	2:V:199:ASN:HB3	1.88	0.56
2:V:419:LEU:HD22	2:V:431:PRO:HA	1.87	0.56
2:V:492:LYS:CD	14:C:41:ASN:HD21	2.18	0.56
3:W:268:LYS:HE2	3:W:301:LYS:HE2	1.87	0.56
12:A:375:ARG:CZ	22:K:204:GLN:CB	2.83	0.56
14:C:67:GLN:CB	15:D:135:HIS:HB3	2.35	0.56
14:C:266:ASP:O	14:C:270:GLN:N	2.27	0.56
17:F:376:SER:O	17:F:378:ASP:N	2.39	0.56
12:A:73:ALA:O	12:A:77:LEU:N	2.36	0.56
13:B:119:ASN:O	13:B:134:SER:OG	2.19	0.56
13:B:366:GLN:O	13:B:370:SER:OG	2.23	0.56
17:F:384:LEU:O	17:F:388:THR:N	2.38	0.56
23:L:18:ARG:NH1	23:L:23:GLU:OE2	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:k:48:LEU:HD21	22:k:77:ALA:HB2	1.88	0.56
23:l:73:SER:HB3	23:l:133:LEU:HB2	1.87	0.56
25:n:144:ARG:NH2	25:n:151:GLU:OE1	2.39	0.56
1:U:153:ILE:CG1	15:D:41:TYR:HE2	2.11	0.55
15:D:96:VAL:HG22	15:D:101:ALA:HA	1.87	0.55
16:E:90:SER:O	16:E:93:LYS:NZ	2.36	0.55
16:E:187:VAL:HA	16:E:190:GLN:HB3	1.88	0.55
16:E:212:ALA:HB2	16:E:256:THR:HA	1.88	0.55
28:Q:117:TYR:HB3	28:Q:125:ALA:HB3	1.88	0.55
28:q:38:MET:O	28:q:65:GLN:NE2	2.39	0.55
32:f:780:PRO:CB	32:f:800:LEU:CA	2.79	0.55
1:U:26:LYS:HG2	10:d:36:LEU:HG	1.87	0.55
5:Y:78:GLU:O	5:Y:82:LYS:N	2.33	0.55
13:B:96:ARG:HH22	14:C:82:LYS:HB2	1.70	0.55
15:D:341:LYS:O	15:D:345:PHE:N	2.32	0.55
24:m:17:ASP:OD2	24:m:19:ARG:NH2	2.40	0.55
30:s:28:ARG:HA	30:s:191:ASP:OD2	2.06	0.55
32:f:229:VAL:O	32:f:233:LEU:HB2	2.06	0.55
1:U:639:LEU:HD13	14:C:43:ARG:C	2.31	0.55
2:V:212:TYR:HE1	2:V:256:ARG:HE	1.52	0.55
3:W:373:ILE:HG23	3:W:413:ILE:HG13	1.88	0.55
6:Z:201:LEU:HD21	7:a:360:VAL:HB	1.89	0.55
6:Z:224:HIS:HB2	6:Z:228:TYR:H	1.71	0.55
8:b:117:VAL:HG22	8:b:119:ASP:H	1.71	0.55
12:A:143:ASP:H	12:A:148:GLN:HG2	1.72	0.55
12:A:373:LEU:HD22	12:A:409:PHE:HE1	1.72	0.55
1:U:600:ARG:NE	15:D:56:VAL:CB	2.51	0.55
2:V:227:VAL:HA	2:V:230:PHE:HB3	1.87	0.55
6:Z:182:THR:N	6:Z:183:THR:HA	2.22	0.55
13:B:383:LEU:HB3	13:B:387:LYS:HZ1	1.71	0.55
23:l:41:LYS:NZ	23:l:180:MET:O	2.37	0.55
30:s:184:GLU:OE2	30:s:211:ARG:NH1	2.40	0.55
32:f:471:LEU:CG	32:f:509:LYS:CE	2.56	0.55
32:f:742:ALA:CA	32:f:745:LEU:HG	2.35	0.55
1:U:429:LYS:HB3	1:U:431:THR:HG23	1.89	0.55
16:E:247:THR:OG1	16:E:248:SER:N	2.39	0.55
17:F:208:HIS:HB3	17:F:211:LYS:HD3	1.89	0.55
17:F:283:ILE:HG22	17:F:328:VAL:HG13	1.87	0.55
17:F:437:TYR:HA	23:L:53:GLN:CG	2.31	0.55
3:W:429:SER:O	3:W:433:ASN:HB2	2.07	0.55
3:W:452:ILE:HG22	6:Z:225:GLN:HB3	1.83	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:133:ALA:O	14:C:377:HIS:CE1	2.57	0.55
8:b:25:ARG:NH2	8:b:145:GLU:OE1	2.29	0.55
14:C:267:SER:O	14:C:271:ARG:N	2.36	0.55
14:C:297:ARG:HG3	14:C:298:ILE:H	1.71	0.55
17:F:437:TYR:N	23:L:53:GLN:O	2.38	0.55
21:J:172:LEU:HD22	21:J:175:ASN:HD22	1.71	0.55
22:k:37:ALA:HB2	22:k:50:VAL:HG23	1.88	0.55
24:m:51:LYS:NZ	24:m:62:SER:O	2.36	0.55
32:f:403:LYS:O	32:f:407:MET:N	2.40	0.55
1:U:583:MET:HE1	1:U:602:LEU:HA	1.87	0.55
12:A:355:PHE:HE1	12:A:385:ILE:HB	1.72	0.55
12:A:375:ARG:NE	22:K:204:GLN:CB	2.70	0.55
15:D:389:GLU:HB3	15:D:390:ASN:C	2.32	0.55
16:E:360:ASP:OD1	16:E:360:ASP:N	2.34	0.55
24:M:214:SER:OG	24:M:224:HIS:NE2	2.35	0.55
29:R:141:ARG:HH21	28:q:166:GLU:HG2	1.71	0.55
2:V:455:LYS:N	2:V:456:GLY:HA2	2.22	0.55
3:W:420:ASP:CG	3:W:421:PRO:HD2	2.31	0.55
10:d:30:LEU:HA	10:d:34:ASN:HA	1.87	0.55
12:A:324:PRO:HD3	12:A:432:TYR:HB2	1.89	0.55
14:C:135:VAL:HG22	14:C:223:PHE:HE2	1.72	0.55
14:C:376:VAL:HG13	14:C:377:HIS:H	1.71	0.55
15:D:418:LYS:HB2	18:G:19:GLU:HA	1.89	0.55
16:E:81:VAL:HG11	16:E:105:LEU:HB2	1.88	0.55
16:E:356:ARG:NH2	17:F:197:GLU:OE1	2.40	0.55
30:S:157:ASN:ND2	27:p:176:ASP:OD2	2.38	0.55
32:f:253:LEU:O	32:f:257:ARG:HB2	2.07	0.55
1:U:639:LEU:CG	14:C:43:ARG:O	2.54	0.55
5:Y:191:ILE:HG13	5:Y:192:ARG:H	1.72	0.55
10:d:35:PHE:HD2	10:d:36:LEU:HD23	1.71	0.55
13:B:106:PRO:HG2	13:B:154:HIS:CD2	2.41	0.55
13:B:255:LEU:HD11	13:B:267:VAL:HG23	1.88	0.55
13:B:313:LEU:O	13:B:317:ASP:N	2.40	0.55
14:C:375:ARG:HH21	14:C:378:VAL:HG13	1.72	0.55
16:E:313:LEU:O	16:E:317:ALA:N	2.31	0.55
22:K:93:ARG:NH1	29:R:68:LEU:O	2.40	0.55
18:g:165:ALA:HB3	19:h:56:LEU:HD22	1.88	0.55
32:f:688:ARG:HH12	32:f:788:MET:HA	1.71	0.55
2:V:394:LEU:HA	2:V:397:ARG:HG2	1.89	0.55
3:W:259:GLU:HG2	3:W:262:LYS:HB3	1.89	0.55
6:Z:241:SER:HB2	6:Z:242:LEU:HA	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:B:113:GLU:HB3	13:B:123:VAL:HA	1.89	0.55
13:B:249:ARG:HB3	14:C:283:PHE:HE2	1.72	0.55
15:D:200:ARG:NH2	15:D:325:GLY:O	2.35	0.55
32:f:426:LEU:O	32:f:430:ASP:HB3	2.07	0.55
32:f:663:GLY:O	32:f:697:ILE:HB	2.07	0.55
32:f:684:PRO:O	32:f:688:ARG:CB	2.54	0.55
1:U:603:LEU:HD11	15:D:60:TYR:HD2	0.75	0.54
2:V:320:THR:HG23	2:V:321:ALA:HB2	1.89	0.54
10:d:215:TRP:CG	10:d:216:VAL:H	2.25	0.54
13:B:133:VAL:HG21	13:B:159:VAL:H	1.71	0.54
14:C:373:GLU:HG2	14:C:375:ARG:NH1	2.22	0.54
15:D:323:ARG:HE	15:D:326:ARG:NE	2.05	0.54
15:D:353:ASN:HB3	15:D:393:ILE:HG12	1.89	0.54
16:E:61:LEU:HD11	16:E:72:LYS:HB2	1.88	0.54
20:i:91:ARG:NH1	27:p:76:LEU:O	2.40	0.54
24:m:214:SER:HG	24:m:224:HIS:HE2	1.55	0.54
32:f:278:VAL:HA	32:f:281:ILE:HG22	1.89	0.54
3:W:449:GLU:O	3:W:453:HIS:ND1	2.39	0.54
5:Y:98:SER:OG	14:C:339:THR:OG1	2.10	0.54
13:B:424:GLU:O	13:B:428:TYR:N	2.29	0.54
14:C:277:LEU:HD13	14:C:311:ILE:HG13	1.90	0.54
14:C:350:LEU:HD23	14:C:387:VAL:HG11	1.89	0.54
15:D:405:THR:O	16:E:298:LYS:NZ	2.37	0.54
20:I:38:LEU:HG	20:I:160:LYS:HB3	1.88	0.54
32:f:456:ARG:HB3	32:f:489:TYR:CZ	2.39	0.54
1:U:187:LEU:HD12	15:D:45:LYS:HB3	1.89	0.54
15:D:287:ARG:HA	15:D:290:LEU:HB3	1.88	0.54
30:s:28:ARG:NH1	30:s:187:VAL:O	2.40	0.54
32:f:742:ALA:CA	32:f:745:LEU:HD21	2.31	0.54
1:U:494:TYR:OH	1:U:531:ASP:OD2	2.24	0.54
12:A:232:ARG:NE	12:A:235:ALA:O	2.40	0.54
12:A:420:TYR:HA	12:A:423:PHE:CE1	2.43	0.54
14:C:248:MET:HE1	14:C:272:THR:HB	1.89	0.54
15:D:92:PHE:HA	15:D:103:VAL:HG23	1.88	0.54
16:E:44:GLU:HB3	17:F:76:ASN:HD22	1.73	0.54
16:E:207:TYR:OH	17:F:129:ARG:NH1	2.41	0.54
21:J:108:THR:HG22	21:J:133:ILE:HD13	1.88	0.54
31:T:45:VAL:HB	31:T:49:THR:HG23	1.89	0.54
31:T:99:ARG:HD2	31:T:106:LEU:HG	1.88	0.54
18:g:53:GLN:HA	18:g:215:ILE:HA	1.88	0.54
19:h:14:SER:OG	19:h:18:LYS:N	2.38	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:h:65:VAL:O	19:h:220:ARG:NH1	2.41	0.54
23:l:84:LEU:O	23:l:88:MET:HB2	2.08	0.54
32:f:8:LYS:O	32:f:12:GLN:CB	2.56	0.54
32:f:15:GLN:NE2	32:f:47:GLU:OE1	2.41	0.54
32:f:281:ILE:O	32:f:285:CYS:CB	2.55	0.54
32:f:376:PHE:CD2	32:f:416:MET:CE	2.83	0.54
9:c:111:TRP:NE1	9:c:130:GLN:OE1	2.29	0.54
13:B:251:VAL:HG11	14:C:271:ARG:HD2	1.89	0.54
14:C:247:PHE:HD1	14:C:292:ILE:HB	1.72	0.54
15:D:417:TYR:C	15:D:417:TYR:CD1	2.86	0.54
20:I:161:ALA:HB1	20:I:175:LEU:HD13	1.88	0.54
32:f:380:PHE:CG	32:f:751:TYR:HE1	2.24	0.54
2:V:100:MET:HG2	2:V:102:PRO:HD2	1.89	0.54
2:V:200:ARG:HH11	2:V:242:HIS:CE1	2.26	0.54
13:B:313:LEU:HD22	13:B:341:LEU:HD23	1.89	0.54
18:g:5:SER:O	18:g:11:ARG:NH2	2.40	0.54
32:f:575:ALA:O	32:f:579:ALA:HB2	2.07	0.54
1:U:153:ILE:CB	14:C:13:GLU:CG	2.66	0.54
2:V:462:GLU:HB3	5:Y:346:LYS:HG3	1.90	0.54
3:W:438:LEU:HD21	6:Z:237:LEU:HD21	1.89	0.54
9:c:27:THR:HB	9:c:65:TYR:HB3	1.90	0.54
9:c:157:ILE:HG12	9:c:158:ASP:H	1.73	0.54
9:c:241:ASN:HD21	9:c:300:LEU:HB3	1.73	0.54
9:c:278:GLN:N	9:c:279:ASP:HB2	2.22	0.54
15:D:204:MET:HE3	15:D:310:ALA:HB2	1.89	0.54
15:D:208:PRO:HD2	16:E:287:PRO:HB2	1.90	0.54
15:D:225:ALA:HB1	15:D:260:ALA:HA	1.90	0.54
19:h:118:MET:HE2	19:h:151:PRO:HA	1.88	0.54
32:f:80:ARG:O	32:f:84:SER:HB3	2.07	0.54
32:f:714:SER:C	32:f:718:ASP:HB2	2.33	0.54
2:V:349:ARG:NH2	2:V:358:MET:SD	2.81	0.54
3:W:274:VAL:O	3:W:283:GLN:NE2	2.41	0.54
5:Y:102:ASP:HA	5:Y:105:MET:HG2	1.88	0.54
7:a:28:LEU:HG	7:a:33:LEU:HD11	1.89	0.54
10:d:45:LYS:HG2	10:d:48:LEU:HD12	1.89	0.54
14:C:35:VAL:HA	14:C:38:LYS:HD3	1.89	0.54
17:F:380:ASN:C	17:F:382:GLU:H	2.16	0.54
19:h:71:HIS:HA	19:h:218:PHE:H	1.72	0.54
21:j:172:LEU:HD13	22:k:58:LEU:HD11	1.89	0.54
32:f:8:LYS:O	32:f:12:GLN:HB2	2.08	0.54
32:f:586:PRO:HA	32:f:589:SER:HB2	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:102:ALA:HB1	14:C:20:LEU:CD1	2.29	0.54
1:U:161:ASP:OD1	1:U:162:VAL:N	2.35	0.54
1:U:403:THR:HG23	1:U:777:HIS:HE2	1.73	0.54
2:V:357:LEU:O	2:V:360:TYR:N	2.41	0.54
11:e:1:MET:N	11:e:2:SER:HA	2.21	0.54
14:C:97:VAL:HG11	14:C:122:THR:HA	1.90	0.54
22:K:42:THR:HG22	22:K:44:GLU:H	1.73	0.54
23:L:93:LEU:HA	23:L:96:ARG:HB3	1.90	0.54
28:Q:21:ALA:HB3	28:Q:29:LYS:HB3	1.89	0.54
1:U:155:LEU:HD21	1:U:184:CYS:HG	1.73	0.54
3:W:412:ILE:HG22	4:X:344:ARG:HH22	1.73	0.54
5:Y:97:GLU:CD	14:C:340:ARG:O	2.51	0.54
13:B:177:GLU:H	13:B:178:LYS:HA	1.72	0.54
14:C:257:SER:C	14:C:259:LEU:H	2.16	0.54
14:C:295:THR:HG21	14:C:299:ASP:HB2	1.90	0.54
15:D:133:HIS:HE1	15:D:135:HIS:HB2	1.72	0.54
32:f:138:GLU:O	32:f:142:TYR:CB	2.55	0.54
32:f:612:LEU:O	32:f:616:CYS:CB	2.56	0.54
7:a:70:ARG:HG2	8:b:17:ARG:HB3	1.90	0.53
10:d:145:GLU:N	10:d:146:GLY:HA2	2.23	0.53
15:D:412:GLN:H	15:D:416:PHE:HB2	1.74	0.53
18:G:88:ARG:NH1	24:M:157:SER:O	2.41	0.53
19:H:45:VAL:HG22	19:H:212:ILE:HG22	1.90	0.53
20:I:3:ARG:HH12	22:K:12:VAL:HG13	1.72	0.53
28:Q:139:THR:OG1	28:Q:140:LEU:N	2.38	0.53
29:R:196:HIS:O	29:R:200:SER:CB	2.57	0.53
31:T:41:ARG:HH21	31:T:54:SER:HA	1.72	0.53
32:f:76:GLU:OE1	32:f:79:ARG:NH2	2.41	0.53
1:U:904:LYS:H	1:U:913:ILE:HD11	1.73	0.53
2:V:82:LEU:HD22	2:V:84:LYS:HZ1	1.73	0.53
2:V:235:LEU:HD11	2:V:247:GLN:HG3	1.90	0.53
8:b:19:GLY:HA2	8:b:24:THR:HA	1.89	0.53
8:b:30:GLN:HG3	8:b:75:LEU:HD13	1.90	0.53
8:b:131:LEU:HD22	8:b:136:VAL:HB	1.89	0.53
12:A:122:VAL:N	17:F:88:TYR:O	2.29	0.53
12:A:302:LEU:O	12:A:306:LEU:N	2.40	0.53
13:B:303:ARG:HA	13:B:306:GLN:HB3	1.90	0.53
13:B:374:LEU:HB2	13:B:378:VAL:HB	1.89	0.53
16:E:241:ARG:HD3	17:F:298:SER:HB2	1.88	0.53
32:f:313:GLU:O	32:f:317:LEU:CB	2.55	0.53
32:f:377:VAL:HG22	32:f:751:TYR:HB2	1.88	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:688:ARG:HA	32:f:745:LEU:CD2	2.38	0.53
1:U:187:LEU:HD13	15:D:45:LYS:N	2.22	0.53
1:U:225:ASP:OD1	1:U:225:ASP:N	2.39	0.53
1:U:639:LEU:HD13	14:C:43:ARG:O	2.04	0.53
5:Y:229:ILE:HG23	5:Y:298:GLU:HG2	1.90	0.53
5:Y:377:LEU:HA	5:Y:380:VAL:HG22	1.90	0.53
9:c:242:GLU:OE2	9:c:297:VAL:HA	2.08	0.53
10:d:147:SER:HG	10:d:148:TYR:C	2.16	0.53
11:e:58:ALA:HB3	11:e:59:GLU:HA	1.91	0.53
14:C:71:SER:HA	14:C:118:ASN:HB3	1.91	0.53
15:D:417:TYR:O	15:D:418:LYS:OXT	2.26	0.53
17:F:126:THR:OG1	17:F:130:GLN:N	2.42	0.53
17:F:310:MET:HA	17:F:313:LEU:HB3	1.90	0.53
19:H:66:GLU:OE2	19:H:91:ARG:NH2	2.41	0.53
28:Q:2:GLU:HB2	28:Q:47:VAL:HG11	1.90	0.53
22:k:222:PRO:O	22:k:225:ASN:ND2	2.41	0.53
32:f:211:ILE:O	32:f:215:ASP:CB	2.56	0.53
32:f:229:VAL:O	32:f:233:LEU:CB	2.56	0.53
32:f:311:VAL:CB	32:f:490:ALA:CB	2.77	0.53
1:U:106:ASP:HA	14:C:21:ARG:NH1	2.24	0.53
3:W:453:HIS:CD2	6:Z:222:ILE:HB	2.43	0.53
5:Y:98:SER:HG	14:C:339:THR:HG1	1.50	0.53
13:B:111:THR:HA	13:B:149:SER:HA	1.90	0.53
14:C:98:ASP:CG	14:C:99:VAL:N	2.66	0.53
18:g:128:ASN:OD1	19:h:6:TYR:OH	2.26	0.53
26:o:209:THR:OG1	27:p:169:GLN:NE2	2.41	0.53
27:p:191:GLU:HG3	27:p:193:ASP:H	1.73	0.53
32:f:273:ASN:ND2	32:f:310:ASP:OD2	2.41	0.53
32:f:314:TYR:CE1	32:f:490:ALA:HB3	2.43	0.53
32:f:477:MET:O	32:f:481:SER:CB	2.56	0.53
10:d:93:ALA:O	10:d:97:GLN:NE2	2.41	0.53
13:B:264:PRO:O	13:B:267:VAL:N	2.36	0.53
15:D:293:LEU:O	15:D:326:ARG:NH2	2.42	0.53
16:E:281:ARG:HH22	17:F:296:PHE:HD1	1.55	0.53
16:E:349:GLU:O	16:E:353:PHE:N	2.35	0.53
18:G:6:SER:HB2	18:G:11:ARG:HE	1.74	0.53
24:M:236:GLU:HA	24:M:239:ALA:HB3	1.90	0.53
1:U:137:MET:O	14:C:12:GLU:HB3	2.07	0.53
1:U:645:ASN:HD21	1:U:648:VAL:HG23	1.73	0.53
1:U:765:VAL:HG12	1:U:775:LEU:HD22	1.91	0.53
2:V:254:LEU:O	2:V:258:TYR:HB2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:416:ARG:HG2	2:V:457:TYR:HB3	1.91	0.53
2:V:495:ARG:NH1	6:Z:282:ASN:OD1	2.41	0.53
3:W:236:HIS:HB3	3:W:237:GLU:OE1	2.09	0.53
5:Y:323:PHE:CD2	5:Y:326:GLY:HA3	2.44	0.53
7:a:135:ILE:HG12	7:a:158:LEU:HD13	1.90	0.53
9:c:121:TRP:HB3	9:c:193:ILE:HD13	1.90	0.53
9:c:145:VAL:HA	9:c:157:ILE:HA	1.90	0.53
12:A:375:ARG:NH1	22:K:204:GLN:CD	2.64	0.53
13:B:208:PRO:HG2	32:f:715:HIS:HB2	1.91	0.53
13:B:316:LEU:HD11	13:B:327:VAL:HG21	1.91	0.53
14:C:388:ALA:O	14:C:392:GLN:HG2	2.08	0.53
20:I:106:PRO:HD2	20:I:109:GLN:HE21	1.74	0.53
22:K:99:HIS:HB2	22:K:107:MET:HE3	1.89	0.53
22:k:177:ALA:O	22:k:181:LEU:CB	2.56	0.53
1:U:596:ASN:CA	15:D:53:PHE:HD1	2.17	0.53
2:V:224:LEU:O	2:V:227:VAL:N	2.29	0.53
5:Y:190:ALA:HA	5:Y:287:LEU:HD13	1.90	0.53
6:Z:214:LYS:HB3	6:Z:222:ILE:HG22	1.90	0.53
12:A:284:ARG:HG3	12:A:285:PHE:HD1	1.73	0.53
15:D:289:LEU:O	15:D:293:LEU:HB2	2.09	0.53
16:E:312:ILE:HD12	16:E:315:ILE:HD11	1.89	0.53
20:I:134:LEU:N	20:I:150:SER:OG	2.42	0.53
20:I:216:LEU:HD12	20:I:225:ILE:HG12	1.90	0.53
1:U:105:ILE:CA	14:C:21:ARG:HH22	2.00	0.53
1:U:151:ILE:HG21	15:D:39:ASP:N	2.24	0.53
2:V:59:ALA:N	2:V:60:ALA:HB3	2.23	0.53
2:V:349:ARG:HB3	2:V:354:LYS:HB2	1.89	0.53
15:D:243:GLY:O	15:D:247:VAL:N	2.31	0.53
20:I:13:SER:O	21:J:21:TYR:OH	2.13	0.53
18:g:41:ALA:HB3	18:g:166:THR:HB	1.91	0.53
19:h:34:PRO:HA	19:h:164:GLY:HA3	1.90	0.53
20:i:99:LEU:HD13	27:p:69:PHE:HB2	1.90	0.53
26:o:198:ARG:NH1	27:p:154:TRP:O	2.42	0.53
32:f:515:ALA:HB1	32:f:558:LEU:HD21	1.91	0.53
1:U:485:ALA:HB3	1:U:519:VAL:HG12	1.91	0.53
5:Y:190:ALA:O	5:Y:291:HIS:NE2	2.36	0.53
9:c:227:GLU:HB3	9:c:233:ASP:HB2	1.91	0.53
9:c:250:GLU:HA	9:c:253:LYS:HG2	1.90	0.53
16:E:335:SER:HB3	16:E:338:PHE:HE2	1.74	0.53
17:F:312:GLU:O	17:F:316:GLN:N	2.38	0.53
21:J:91:CYS:HB2	21:J:102:VAL:HG21	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:319:HIS:HB2	2:V:320:THR:HA	1.90	0.53
3:W:320:LEU:HD21	3:W:354:LEU:HD21	1.90	0.53
5:Y:349:LYS:O	5:Y:350:VAL:HG22	2.09	0.53
7:a:71:VAL:HG22	8:b:17:ARG:HH12	1.74	0.53
10:d:228:GLN:N	10:d:229:GLN:HA	2.24	0.53
14:C:286:THR:HG23	14:C:287:LYS:H	1.74	0.53
16:E:235:ILE:HG23	16:E:285:LEU:HD21	1.90	0.53
17:F:253:GLY:H	17:F:287:GLU:HB2	1.74	0.53
18:g:33:ASN:HA	18:g:170:VAL:HG22	1.91	0.53
32:f:347:ASP:O	32:f:351:THR:OG1	2.25	0.53
32:f:366:ASP:O	32:f:367:SER:CB	2.57	0.53
32:f:635:LYS:NZ	32:f:641:GLU:CD	2.66	0.53
1:U:8:ILE:HD11	1:U:27:LEU:HG	1.90	0.52
1:U:325:MET:HA	1:U:328:ILE:HG12	1.91	0.52
2:V:33:GLN:HG2	2:V:86:VAL:HG21	1.90	0.52
3:W:412:ILE:O	4:X:344:ARG:NH2	2.42	0.52
6:Z:234:PHE:CE2	7:a:349:MET:HG3	2.44	0.52
7:a:34:TRP:O	7:a:38:THR:OG1	2.19	0.52
9:c:190:GLN:CD	14:C:65:LEU:HA	2.35	0.52
14:C:276:LEU:O	14:C:280:LEU:N	2.42	0.52
16:E:126:ASP:OD1	16:E:185:ARG:NE	2.36	0.52
17:F:195:ILE:HG12	17:F:199:VAL:HG23	1.90	0.52
22:K:41:GLN:NE2	22:K:151:PRO:O	2.43	0.52
30:S:211:ARG:NH2	30:S:213:ASP:OD2	2.42	0.52
22:k:93:ARG:NH1	29:r:68:LEU:O	2.42	0.52
22:k:154:PHE:HB3	22:k:162:PHE:HE1	1.74	0.52
27:p:27:ARG:NH1	27:p:180:VAL:O	2.43	0.52
2:V:399:ARG:HG2	10:d:141:GLN:HE22	1.73	0.52
5:Y:77:ASN:HD21	5:Y:114:ILE:HG13	1.74	0.52
6:Z:235:ASN:HD22	7:a:341:LEU:HD11	1.74	0.52
14:C:98:ASP:OD1	14:C:99:VAL:N	2.42	0.52
25:N:179:ILE:HG12	25:N:184:VAL:HG22	1.91	0.52
22:k:50:VAL:HG11	22:k:66:LYS:HB2	1.91	0.52
27:p:189:ILE:HG23	27:p:196:THR:HB	1.91	0.52
1:U:31:VAL:HA	1:U:34:PHE:HB2	1.91	0.52
1:U:102:ALA:HB1	14:C:20:LEU:HD11	1.91	0.52
1:U:156:GLU:OE2	15:D:44:TYR:CD2	2.61	0.52
1:U:186:SER:C	15:D:46:LYS:HB3	2.32	0.52
2:V:318:GLN:O	2:V:319:HIS:ND1	2.42	0.52
2:V:419:LEU:HD21	2:V:456:GLY:H	1.73	0.52
6:Z:69:PHE:HB2	8:b:99:HIS:CE1	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:c:191:ALA:HA	9:c:194:HIS:ND1	2.24	0.52
10:d:257:VAL:CG1	15:D:69:LYS:HD2	2.39	0.52
13:B:268:ARG:HA	13:B:315:GLN:HE22	1.73	0.52
15:D:281:ALA:O	15:D:285:VAL:HG13	2.10	0.52
15:D:366:ARG:HB3	15:D:367:PRO:HD3	1.92	0.52
16:E:157:GLU:HA	16:E:160:GLN:HG2	1.92	0.52
23:L:84:LEU:O	23:L:88:MET:HB2	2.08	0.52
27:P:7:ASN:ND2	27:P:29:GLY:O	2.40	0.52
27:p:58:THR:O	28:q:85:ARG:NH2	2.42	0.52
30:s:176:LYS:HE2	30:s:208:VAL:HG21	1.90	0.52
32:f:24:THR:HG22	32:f:71:TYR:HB2	1.91	0.52
32:f:80:ARG:O	32:f:84:SER:CB	2.57	0.52
1:U:896:GLU:O	1:U:901:GLN:NE2	2.42	0.52
2:V:342:ILE:HD12	2:V:343:PRO:HD2	1.91	0.52
2:V:393:THR:HB	10:d:115:PHE:HE1	1.74	0.52
12:A:100:LYS:HG3	12:A:115:VAL:HB	1.92	0.52
13:B:212:GLU:OE1	32:f:714:SER:CB	2.57	0.52
14:C:298:ILE:O	14:C:301:LEU:N	2.42	0.52
15:D:151:ILE:HD12	15:D:151:ILE:N	2.24	0.52
15:D:268:ASP:N	15:D:268:ASP:OD1	2.41	0.52
16:E:115:VAL:HG22	16:E:117:PRO:HD2	1.92	0.52
20:I:91:ARG:NH1	27:P:76:LEU:O	2.43	0.52
24:M:67:PHE:HB2	24:M:75:MET:HB2	1.92	0.52
24:m:168:ALA:HB1	24:m:172:ALA:HB2	1.92	0.52
24:m:197:ILE:HG21	24:m:211:LEU:HD13	1.91	0.52
29:r:135:ALA:O	29:r:139:MET:HB3	2.09	0.52
32:f:262:PHE:HB3	32:f:281:ILE:HD11	1.91	0.52
32:f:463:LEU:HD22	32:f:466:LEU:CD1	2.40	0.52
2:V:349:ARG:HE	2:V:354:LYS:HG3	1.75	0.52
7:a:205:LEU:HD11	7:a:240:PHE:CG	2.45	0.52
12:A:106:SER:HB3	12:A:110:LYS:HD2	1.92	0.52
15:D:387:VAL:HG21	16:E:159:PHE:HE1	1.74	0.52
17:F:342:LEU:HA	17:F:347:ARG:HD3	1.92	0.52
19:H:100:VAL:HG13	27:P:93:ASN:HD22	1.74	0.52
18:g:165:ALA:HB1	18:g:179:LEU:HD13	1.92	0.52
18:g:201:CYS:SG	18:g:202:LEU:N	2.82	0.52
32:f:632:LYS:HD2	32:f:661:ALA:HA	1.92	0.52
1:U:102:ALA:CB	14:C:20:LEU:CG	2.87	0.52
1:U:186:SER:HG	15:D:46:LYS:HD3	1.71	0.52
1:U:625:ILE:HG13	1:U:626:LEU:HG	1.91	0.52
2:V:191:LEU:O	2:V:193:GLN:O	2.18	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:273:LYS:HA	2:V:274:SER:HB2	1.91	0.52
13:B:166:ASP:N	13:B:166:ASP:OD1	2.40	0.52
13:B:224:LEU:HA	13:B:351:ILE:HG13	1.91	0.52
13:B:383:LEU:HD21	13:B:420:LYS:HG2	1.90	0.52
15:D:377:SER:O	15:D:381:GLU:N	2.42	0.52
17:F:359:GLU:HB2	17:F:385:ALA:HB1	1.91	0.52
18:G:141:ILE:HG22	18:G:151:VAL:HG22	1.91	0.52
30:S:13:LEU:HD13	30:S:145:LEU:HD13	1.92	0.52
18:g:83:MET:SD	18:g:132:ARG:NH1	2.75	0.52
32:f:306:GLU:HB3	32:f:339:ILE:HD12	1.91	0.52
1:U:636:VAL:HA	14:C:43:ARG:NH1	2.21	0.52
3:W:343:SER:HB2	3:W:346:GLU:HB3	1.90	0.52
6:Z:91:ILE:HD11	6:Z:115:TYR:HB3	1.90	0.52
6:Z:186:THR:HG23	6:Z:187:LEU:H	1.75	0.52
7:a:206:LEU:HD22	7:a:264:ASN:HB2	1.92	0.52
7:a:214:GLY:HA2	7:a:217:LEU:HD22	1.91	0.52
9:c:168:MET:HA	9:c:172:HIS:CE1	2.45	0.52
14:C:39:SER:O	14:C:43:ARG:HG3	2.10	0.52
14:C:74:GLY:N	14:C:114:VAL:O	2.39	0.52
16:E:135:ILE:HD11	16:E:142:ILE:HG12	1.92	0.52
16:E:269:THR:OG1	16:E:271:HIS:ND1	2.41	0.52
24:m:40:ARG:NH1	24:m:146:ALA:O	2.43	0.52
26:o:31:CYS:SG	26:o:32:SER:N	2.80	0.52
1:U:639:LEU:CD1	14:C:43:ARG:C	2.82	0.52
9:c:209:LYS:HA	9:c:210:ASN:HB2	1.91	0.52
9:c:267:PRO:HA	9:c:270:LEU:HD12	1.91	0.52
12:A:76:ALA:HA	12:A:79:ASP:HB2	1.92	0.52
12:A:80:LEU:HD22	13:B:99:VAL:HG21	1.92	0.52
15:D:217:LYS:NZ	16:E:266:GLY:O	2.42	0.52
16:E:322:LYS:HD2	16:E:367:PHE:HE2	1.74	0.52
27:P:116:THR:O	27:P:192:LYS:NZ	2.41	0.52
26:o:163:ILE:HG23	26:o:170:GLY:HA2	1.91	0.52
32:f:337:LEU:HD22	32:f:337:LEU:H	1.75	0.52
32:f:502:LEU:HG	32:f:540:GLN:HE22	1.75	0.52
32:f:537:THR:OG1	32:f:538:ILE:N	2.42	0.52
2:V:324:PHE:HD2	11:e:9:ASP:HB2	1.74	0.52
2:V:492:LYS:HD3	14:C:41:ASN:HD21	1.74	0.52
6:Z:32:GLN:HG3	6:Z:33:LYS:H	1.75	0.52
6:Z:180:LYS:CD	15:D:70:LYS:HE3	2.39	0.52
13:B:230:THR:HG21	13:B:353:PHE:CE1	2.45	0.52
14:C:285:ALA:HB1	14:C:286:THR:HB	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:E:111:LEU:HD22	17:F:96:LEU:HD23	1.92	0.52
16:E:242:ARG:HB3	16:E:254:GLN:HG3	1.91	0.52
17:F:195:ILE:HD12	17:F:236:LEU:HD21	1.92	0.52
19:H:118:MET:HE2	19:H:151:PRO:HA	1.92	0.52
23:L:196:ARG:HH21	23:L:239:ARG:HG3	1.74	0.52
32:f:485:LEU:HD12	32:f:488:ALA:HB3	1.92	0.52
32:f:600:TYR:HB3	32:f:608:LYS:HE2	1.91	0.52
3:W:424:LEU:O	3:W:428:TRP:HB2	2.10	0.52
13:B:194:ILE:O	13:B:198:LYS:N	2.43	0.52
21:j:186:LEU:O	21:j:190:LEU:CB	2.56	0.52
32:f:378:ASN:HB3	32:f:391:LEU:CD1	2.39	0.52
32:f:468:ASP:OD2	32:f:475:ASN:N	2.42	0.52
1:U:184:CYS:HA	15:D:42:SER:HB3	1.92	0.51
1:U:212:ASP:O	1:U:215:ASN:ND2	2.43	0.51
5:Y:179:ARG:NH2	5:Y:212:GLU:OE2	2.39	0.51
6:Z:225:GLN:NE2	6:Z:225:GLN:CA	2.73	0.51
9:c:275:VAL:HG13	9:c:276:GLY:H	1.75	0.51
10:d:106:LEU:HD11	10:d:114:GLU:HB3	1.91	0.51
10:d:159:PRO:N	10:d:160:ALA:HA	2.25	0.51
12:A:80:LEU:HG	13:B:137:SER:OG	2.10	0.51
13:B:151:LEU:O	13:B:159:VAL:HA	2.10	0.51
15:D:153:MET:HG3	15:D:154:LEU:H	1.74	0.51
22:K:177:ALA:O	22:K:181:LEU:CB	2.53	0.51
27:P:39:PHE:HE1	27:P:61:GLN:HE21	1.57	0.51
30:s:125:ASP:OD1	30:s:129:SER:N	2.43	0.51
32:f:523:GLY:O	32:f:527:VAL:N	2.43	0.51
1:U:522:GLY:O	1:U:559:ARG:NH2	2.43	0.51
2:V:148:ARG:HH21	2:V:197:THR:HG21	1.75	0.51
2:V:167:LEU:HD11	2:V:171:VAL:HB	1.92	0.51
3:W:393:LEU:HD23	3:W:406:VAL:HG11	1.91	0.51
5:Y:98:SER:C	5:Y:100:ILE:N	2.64	0.51
7:a:373:ASP:HB2	10:d:251:ARG:HH12	1.75	0.51
9:c:219:ASN:HA	9:c:222:LYS:HB2	1.92	0.51
12:A:100:LYS:HG2	12:A:113:ILE:HG22	1.92	0.51
12:A:223:THR:O	12:A:227:ARG:N	2.30	0.51
14:C:143:VAL:HG11	14:C:197:THR:HG22	1.91	0.51
20:I:213:ILE:HB	20:I:228:LEU:HD11	1.92	0.51
21:J:88:ARG:HH22	28:Q:69:MET:HB3	1.75	0.51
22:K:99:HIS:O	22:K:103:TYR:HB2	2.11	0.51
26:O:198:ARG:HH21	26:O:202:TYR:H	1.56	0.51
18:g:32:ILE:HA	18:g:82:GLY:HA2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:l:120:THR:O	24:m:129:ARG:NH1	2.35	0.51
26:o:51:ASP:HB3	26:o:94:ILE:HG23	1.92	0.51
32:f:127:SER:O	32:f:131:MET:HB3	2.10	0.51
32:f:268:LEU:O	32:f:272:LEU:HB2	2.10	0.51
32:f:800:LEU:N	32:f:800:LEU:CD1	2.73	0.51
1:U:45:ILE:HG21	1:U:64:ALA:HB2	1.93	0.51
1:U:595:ASN:C	15:D:53:PHE:HE1	1.71	0.51
1:U:774:PRO:HA	1:U:777:HIS:HD2	1.75	0.51
2:V:26:PRO:O	2:V:29:PRO:HD2	2.10	0.51
4:X:404:ILE:HG12	5:Y:372:LYS:HE2	1.91	0.51
7:a:270:ARG:NH1	7:a:310:LEU:O	2.44	0.51
8:b:97:LEU:O	8:b:100:ARG:NE	2.43	0.51
14:C:13:GLU:N	14:C:14:GLY:HA3	2.25	0.51
14:C:165:ILE:HG13	14:C:203:VAL:HG11	1.92	0.51
14:C:283:PHE:CD1	14:C:284:GLU:HG2	2.44	0.51
15:D:311:THR:HG21	15:D:317:LEU:HD11	1.93	0.51
16:E:180:LYS:NZ	16:E:279:THR:O	2.43	0.51
17:F:336:ASP:OD1	17:F:336:ASP:N	2.43	0.51
17:F:438:TYR:CA	23:L:52:ALA:O	2.58	0.51
23:l:139:ASP:H	31:t:81:HIS:HE1	1.58	0.51
32:f:380:PHE:CG	32:f:751:TYR:CE1	2.99	0.51
32:f:742:ALA:CA	32:f:745:LEU:CD2	2.61	0.51
2:V:200:ARG:HA	2:V:203:LEU:HB2	1.93	0.51
2:V:451:ILE:HG12	2:V:458:VAL:HG22	1.91	0.51
9:c:96:LEU:HD23	9:c:99:LEU:HD12	1.93	0.51
12:A:362:MET:HE3	12:A:404:ALA:H	1.76	0.51
15:D:277:ALA:C	15:D:280:GLY:H	2.18	0.51
17:F:229:PRO:O	17:F:392:ASN:ND2	2.44	0.51
22:K:225:ASN:HA	22:K:227:HIS:CG	2.46	0.51
21:j:88:ARG:NH1	28:q:69:MET:O	2.44	0.51
25:n:160:LEU:O	25:n:164:MET:HB2	2.10	0.51
30:s:4:PRO:O	31:t:100:ARG:NH2	2.37	0.51
32:f:337:LEU:N	32:f:337:LEU:CD2	2.73	0.51
1:U:490:ARG:HH11	1:U:493:VAL:HB	1.75	0.51
2:V:244:ALA:C	2:V:246:GLY:H	2.18	0.51
5:Y:224:VAL:HG13	5:Y:256:VAL:HG11	1.92	0.51
5:Y:233:ARG:NH1	5:Y:306:GLN:OE1	2.43	0.51
12:A:316:LYS:O	12:A:317:VAL:HG13	2.11	0.51
13:B:235:LEU:HA	13:B:238:ALA:HB3	1.93	0.51
14:C:166:GLU:OE2	14:C:207:THR:OG1	2.22	0.51
14:C:307:ARG:HE	14:C:312:ASP:CB	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:133:HIS:CB	15:D:138:ALA:H	2.22	0.51
15:D:418:LYS:CG	18:G:19:GLU:HA	2.41	0.51
16:E:176:PRO:HB2	16:E:302:ASP:HA	1.91	0.51
18:G:239:LEU:HD12	18:G:242:LEU:HD21	1.93	0.51
25:N:7:GLN:HA	25:N:12:VAL:HA	1.92	0.51
30:S:178:VAL:O	30:S:182:ALA:HB3	2.11	0.51
23:l:160:SER:O	23:l:169:ARG:NH2	2.44	0.51
32:f:336:GLU:HG3	32:f:337:LEU:H	1.76	0.51
2:V:310:THR:HA	2:V:332:LEU:HD11	1.91	0.51
3:W:414:ASN:N	3:W:414:ASN:OD1	2.43	0.51
7:a:156:TYR:CG	7:a:179:PHE:HB2	2.46	0.51
8:b:25:ARG:HA	8:b:28:ALA:HB3	1.91	0.51
12:A:190:VAL:HG23	12:A:209:PRO:HG2	1.93	0.51
14:C:98:ASP:CG	14:C:99:VAL:H	2.19	0.51
14:C:337:ASN:ND2	15:D:193:GLN:O	2.43	0.51
15:D:98:GLN:HG3	15:D:99:ASN:HD22	1.76	0.51
15:D:242:GLU:HG3	15:D:246:MET:HE2	1.92	0.51
17:F:225:MET:O	17:F:331:ALA:HA	2.11	0.51
17:F:246:ALA:HB3	17:F:282:ILE:HG12	1.92	0.51
22:K:45:GLY:HA3	22:K:221:GLN:HG3	1.93	0.51
24:M:189:ILE:HA	24:M:192:GLU:HB2	1.91	0.51
32:f:389:LYS:HD2	32:f:418:LEU:HD21	1.92	0.51
1:U:138:PHE:CG	14:C:11:LEU:HD11	2.45	0.51
1:U:427:LEU:HG	1:U:428:PRO:HD2	1.93	0.51
2:V:193:GLN:HE21	2:V:241:ARG:HD2	1.76	0.51
3:W:373:ILE:HD13	3:W:378:MET:HE3	1.92	0.51
7:a:54:ASP:HA	7:a:57:ILE:HG22	1.92	0.51
12:A:274:PHE:HB2	12:A:319:MET:SD	2.50	0.51
13:B:372:MET:HE3	14:C:178:LEU:HD11	1.92	0.51
18:G:114:LEU:HD22	18:G:140:LEU:HD21	1.91	0.51
24:M:195:LYS:HG3	24:M:196:ILE:HG13	1.92	0.51
22:k:105:GLU:OE2	30:s:75:TYR:OH	2.28	0.51
22:k:182:GLN:NE2	23:l:55:GLU:OE1	2.44	0.51
32:f:226:TYR:O	32:f:230:CYS:HB2	2.11	0.51
32:f:440:ILE:O	32:f:444:ALA:HB2	2.10	0.51
32:f:471:LEU:HD12	32:f:509:LYS:CE	2.36	0.51
32:f:790:GLN:HG3	32:f:792:ALA:H	1.75	0.51
1:U:19:LEU:HD13	10:d:27:LYS:HZ3	1.76	0.51
2:V:80:LYS:O	2:V:162:GLU:HA	2.11	0.51
3:W:452:ILE:CD1	6:Z:222:ILE:HG12	2.41	0.51
5:Y:304:TYR:OH	5:Y:333:GLU:OE2	2.28	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Z:48:LEU:HD11	6:Z:92:VAL:HG21	1.93	0.51
13:B:151:LEU:HD11	13:B:163:LEU:HD13	1.93	0.51
13:B:235:LEU:O	13:B:239:VAL:N	2.31	0.51
14:C:130:LYS:HG3	14:C:133:PRO:HG2	1.92	0.51
15:D:375:ILE:HD13	15:D:378:ILE:HD12	1.93	0.51
16:E:306:GLU:HA	16:E:309:ARG:HB3	1.91	0.51
17:F:169:ASP:N	17:F:173:LYS:HB2	2.26	0.51
17:F:174:ALA:HB1	17:F:177:VAL:HG23	1.92	0.51
20:I:62:SER:OG	20:I:65:ILE:O	2.22	0.51
20:I:92:LEU:HD22	20:I:96:ARG:HH21	1.76	0.51
21:J:186:LEU:O	21:J:190:LEU:CB	2.55	0.51
21:j:119:THR:HG22	21:j:126:PRO:HB3	1.92	0.51
23:l:17:GLY:HA3	24:m:29:ALA:HB2	1.93	0.51
32:f:343:LYS:NZ	32:f:804:LEU:HD23	2.26	0.51
32:f:536:SER:HA	32:f:539:LEU:HB3	1.93	0.51
32:f:623:LYS:O	32:f:627:GLU:HB2	2.11	0.51
1:U:126:ILE:HG23	1:U:130:LEU:HD11	1.93	0.51
4:X:416:ASN:HB3	6:Z:283:ARG:HH21	1.76	0.51
13:B:144:LEU:HD22	13:B:162:VAL:HG21	1.93	0.51
14:C:254:ILE:HG23	14:C:296:ASN:HD22	1.76	0.51
19:H:44:VAL:HG23	19:H:144:PRO:HB2	1.92	0.51
32:f:714:SER:O	32:f:718:ASP:CB	2.55	0.51
1:U:137:MET:HG3	14:C:12:GLU:C	2.36	0.51
2:V:148:ARG:NH2	2:V:192:MET:O	2.44	0.51
12:A:328:ASP:HA	12:A:331:LEU:HG	1.93	0.51
14:C:189:TYR:O	14:C:317:PHE:N	2.31	0.51
16:E:65:THR:HG22	16:E:66:GLU:H	1.75	0.51
17:F:80:ILE:HA	17:F:83:ASN:O	2.11	0.51
17:F:92:ASN:HB3	17:F:125:LYS:HB2	1.92	0.51
23:L:111:LEU:O	23:L:115:LYS:HB2	2.11	0.51
26:O:46:ALA:HB3	26:O:97:ALA:HB3	1.93	0.51
23:l:189:LYS:HA	23:l:192:LEU:HG	1.93	0.51
32:f:343:LYS:O	32:f:347:ASP:N	2.40	0.51
32:f:455:VAL:HG12	32:f:457:ASN:H	1.76	0.51
32:f:556:ARG:NH1	32:f:786:GLN:OE1	2.44	0.51
32:f:745:LEU:HD12	32:f:745:LEU:C	2.36	0.51
1:U:109:THR:OG1	1:U:156:GLU:O	2.18	0.50
2:V:195:ILE:HD12	2:V:196:SER:H	1.76	0.50
3:W:232:GLN:O	3:W:236:HIS:HB2	2.11	0.50
5:Y:386:VAL:HG12	5:Y:387:ILE:HG23	1.92	0.50
10:d:214:GLY:N	10:d:215:TRP:HB3	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:A:102:ILE:HG22	12:A:113:ILE:HG23	1.93	0.50
13:B:180:PRO:HD2	13:B:242:GLN:NE2	2.26	0.50
14:C:238:ALA:HB1	14:C:289:ILE:HD12	1.92	0.50
28:Q:38:MET:HA	28:Q:61:GLN:HE22	1.76	0.50
32:f:531:ASN:HA	32:f:569:LYS:HA	1.93	0.50
1:U:106:ASP:HA	14:C:21:ARG:HH12	1.75	0.50
3:W:334:GLU:OE1	3:W:338:THR:OG1	2.29	0.50
5:Y:301:ILE:HG13	5:Y:343:LEU:HB2	1.92	0.50
9:c:64:ASP:HA	9:c:139:ARG:HH21	1.77	0.50
10:d:49:ILE:HG13	10:d:90:PRO:HD2	1.93	0.50
12:A:375:ARG:CD	22:K:204:GLN:HB3	2.41	0.50
17:F:342:LEU:HB3	17:F:348:LEU:HG	1.93	0.50
28:q:140:LEU:HA	28:q:143:LEU:HB3	1.92	0.50
5:Y:358:ARG:CG	5:Y:358:ARG:NH2	2.73	0.50
15:D:407:ILE:HG13	15:D:408:LYS:H	1.76	0.50
16:E:281:ARG:HD2	16:E:388:PRO:HD2	1.93	0.50
16:E:305:ASN:OD1	16:E:306:GLU:N	2.45	0.50
27:P:107:PRO:HG2	27:P:124:LEU:HB2	1.93	0.50
30:S:125:ASP:OD1	30:S:129:SER:N	2.45	0.50
22:k:43:SER:HA	22:k:151:PRO:HG3	1.92	0.50
32:f:479:LEU:CD2	32:f:513:GLU:HB3	2.39	0.50
32:f:641:GLU:HG3	32:f:641:GLU:O	2.09	0.50
1:U:54:PHE:CZ	1:U:56:SER:HB2	2.46	0.50
2:V:319:HIS:HB3	2:V:325:LYS:HD3	1.93	0.50
2:V:478:GLN:HE22	10:d:245:GLN:HE22	1.59	0.50
20:I:16:GLY:N	21:J:21:TYR:OH	2.44	0.50
20:i:145:PHE:HZ	20:i:218:ARG:HB2	1.76	0.50
32:f:463:LEU:HD22	32:f:466:LEU:HD11	1.93	0.50
6:Z:254:ASN:HA	6:Z:257:MET:HG3	1.91	0.50
14:C:271:ARG:HA	14:C:274:LEU:HB2	1.94	0.50
16:E:216:ARG:HG3	16:E:263:GLN:HE21	1.77	0.50
17:F:204:LEU:HD13	17:F:212:PHE:CE2	2.46	0.50
23:L:152:ASN:HA	24:M:85:ARG:HH22	1.76	0.50
32:f:336:GLU:CG	32:f:337:LEU:HD22	2.36	0.50
2:V:266:GLN:HG3	2:V:295:ILE:HG23	1.92	0.50
3:W:312:MET:SD	3:W:361:HIS:ND1	2.85	0.50
6:Z:180:LYS:CD	15:D:70:LYS:CE	2.90	0.50
12:A:384:GLU:HA	13:B:347:ILE:HG12	1.94	0.50
12:A:388:VAL:HG13	12:A:413:VAL:HG22	1.92	0.50
15:D:417:TYR:CG	18:G:18:PRO:HB2	2.46	0.50
16:E:313:LEU:HD12	16:E:316:HIS:HB2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:647:GLY:HA2	32:f:655:LEU:HG	1.92	0.50
1:U:138:PHE:HD1	14:C:13:GLU:CB	2.25	0.50
1:U:154:ALA:HB2	1:U:166:THR:HG21	1.93	0.50
2:V:304:GLU:HA	2:V:307:ARG:HG2	1.93	0.50
13:B:108:SER:N	13:B:152:LEU:O	2.37	0.50
13:B:139:VAL:HB	13:B:141:LYS:N	2.26	0.50
14:C:49:ARG:HA	14:C:52:LEU:HB2	1.94	0.50
17:F:223:VAL:HG23	17:F:350:ARG:HB2	1.94	0.50
22:K:54:ILE:HA	22:K:59:MET:HE1	1.94	0.50
23:L:52:ALA:H	23:L:59:HIS:HD2	1.60	0.50
22:k:85:ALA:HB2	22:k:139:VAL:HG21	1.94	0.50
28:q:23:SER:OG	28:q:24:ASN:N	2.44	0.50
2:V:314:ARG:HD2	5:Y:378:ASN:OD1	2.11	0.50
10:d:182:ILE:HG23	10:d:183:GLU:H	1.76	0.50
12:A:328:ASP:HB3	12:A:329:PRO:HD3	1.94	0.50
13:B:394:ASP:O	13:B:398:ILE:N	2.44	0.50
15:D:83:GLN:HG2	15:D:84:SER:H	1.77	0.50
15:D:181:VAL:O	15:D:306:LYS:NZ	2.32	0.50
15:D:315:ASP:OD1	15:D:315:ASP:N	2.45	0.50
16:E:174:GLY:HA2	16:E:176:PRO:HD2	1.93	0.50
17:F:181:PRO:HG3	17:F:238:ARG:O	2.12	0.50
19:H:38:ILE:HG12	19:H:160:ALA:HB1	1.94	0.50
28:q:3:TYR:HB2	28:q:133:GLY:HA3	1.94	0.50
32:f:691:PRO:HG2	32:f:745:LEU:CD1	2.41	0.50
32:f:691:PRO:HA	32:f:694:LEU:HB3	1.93	0.50
3:W:452:ILE:HD13	6:Z:226:ILE:H	1.76	0.50
5:Y:367:GLN:HG3	5:Y:371:LYS:HG2	1.92	0.50
16:E:63:GLN:HA	16:E:69:PHE:HA	1.93	0.50
20:I:10:THR:HG22	21:J:125:ARG:HB2	1.94	0.50
26:O:31:CYS:SG	26:O:32:SER:N	2.85	0.50
30:S:96:LEU:HD11	30:S:108:ASN:HD22	1.76	0.50
21:j:38:ARG:HH12	21:j:182:GLU:HA	1.77	0.50
32:f:517:VAL:O	32:f:521:ALA:CB	2.60	0.50
1:U:155:LEU:CD2	15:D:41:TYR:C	2.79	0.49
2:V:54:LYS:HA	2:V:55:THR:OG1	2.10	0.49
3:W:420:ASP:OD2	3:W:425:LEU:HB3	2.12	0.49
5:Y:132:VAL:HG11	14:C:338:LEU:N	2.25	0.49
8:b:120:ASN:OD1	8:b:121:GLU:N	2.45	0.49
9:c:32:TYR:HB3	9:c:208:ARG:HD3	1.94	0.49
21:J:109:ARG:NH2	29:R:70:ASN:OD1	2.45	0.49
22:K:216:GLU:CB	22:K:229:PHE:HE2	2.25	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:M:228:PRO:HB2	24:M:231:ILE:HB	1.92	0.49
25:N:46:SER:HB2	25:N:97:GLY:HA3	1.94	0.49
32:f:692:LEU:HD12	32:f:748:LEU:HD23	1.84	0.49
1:U:154:ALA:HB1	1:U:163:PHE:HD1	1.77	0.49
1:U:413:LYS:HA	1:U:449:ILE:HG12	1.94	0.49
1:U:436:ALA:HB1	1:U:472:ILE:HD13	1.94	0.49
1:U:474:ARG:NH1	1:U:500:ASN:OD1	2.45	0.49
2:V:80:LYS:CE	2:V:90:GLU:OE2	2.31	0.49
2:V:410:ILE:HG23	2:V:414:TYR:CD1	2.47	0.49
5:Y:63:TRP:HD1	5:Y:66:ASP:OD2	1.92	0.49
5:Y:132:VAL:CG1	14:C:338:LEU:N	2.73	0.49
9:c:234:TYR:HA	9:c:237:HIS:HB2	1.94	0.49
10:d:94:TYR:HD1	10:d:97:GLN:HE21	1.58	0.49
12:A:279:ALA:O	13:B:307:ARG:NH1	2.43	0.49
15:D:375:ILE:O	15:D:379:CYS:N	2.36	0.49
16:E:227:PRO:HD3	16:E:272:ARG:HH11	1.77	0.49
17:F:84:LYS:H	17:F:85:THR:HA	1.76	0.49
28:Q:53:THR:HG22	28:Q:100:VAL:HG12	1.94	0.49
18:g:114:LEU:HD22	18:g:140:LEU:HD21	1.94	0.49
32:f:478:ARG:NE	32:f:504:VAL:HG22	2.27	0.49
2:V:91:PRO:HA	2:V:94:VAL:HG12	1.94	0.49
2:V:311:ASN:HA	2:V:314:ARG:HG2	1.94	0.49
5:Y:170:GLU:HB2	15:D:189:GLU:HB3	1.94	0.49
6:Z:9:VAL:HG12	6:Z:48:LEU:HB3	1.94	0.49
9:c:240:HIS:O	9:c:243:SER:HB3	2.13	0.49
12:A:96:ALA:HB3	13:B:132:TYR:CE2	2.47	0.49
12:A:163:MET:SD	13:B:146:PRO:HG2	2.52	0.49
13:B:290:ILE:HG23	13:B:336:THR:HB	1.93	0.49
14:C:87:VAL:HG21	14:C:123:LEU:HD11	1.94	0.49
14:C:131:VAL:HG13	14:C:132:ASP:H	1.76	0.49
14:C:218:GLU:O	14:C:219:LEU:HB3	2.08	0.49
17:F:204:LEU:O	17:F:209:LYS:N	2.44	0.49
26:O:96:ALA:H	26:O:115:PRO:HB3	1.77	0.49
30:S:68:ILE:HD11	30:S:92:LEU:HD13	1.94	0.49
21:j:18:GLN:O	21:j:22:ALA:HB2	2.13	0.49
25:n:136:TYR:HE2	31:t:33:LEU:HD21	1.77	0.49
32:f:479:LEU:HA	32:f:517:VAL:HG21	1.93	0.49
2:V:97:ALA:N	2:V:98:LEU:HB2	2.27	0.49
2:V:436:PHE:HB2	10:d:146:GLY:H	1.78	0.49
5:Y:63:TRP:HB3	5:Y:65:ILE:N	2.27	0.49
6:Z:185:GLY:O	9:c:292:MET:HB3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:c:229:LEU:O	9:c:230:THR:OG1	2.24	0.49
12:A:111:TYR:CE2	12:A:125:LEU:HD23	2.46	0.49
12:A:206:ILE:N	17:F:373:MET:HE3	2.27	0.49
15:D:207:PRO:HD2	15:D:312:ASN:HA	1.93	0.49
15:D:344:ILE:HA	15:D:347:THR:HG22	1.94	0.49
16:E:47:LEU:HD13	17:F:80:ILE:HG12	1.93	0.49
16:E:108:MET:HG2	16:E:109:ARG:HG3	1.95	0.49
16:E:349:GLU:HA	16:E:352:MET:HE3	1.95	0.49
17:F:438:TYR:CD2	23:L:51:ARG:NH2	2.76	0.49
19:H:4:ARG:NH2	24:M:126:SER:OG	2.45	0.49
30:S:178:VAL:O	30:S:182:ALA:CB	2.61	0.49
20:i:198:ASN:HD22	20:i:240:HIS:CD2	2.30	0.49
21:j:32:ALA:HB2	21:j:45:VAL:HG23	1.93	0.49
24:m:67:PHE:HB2	24:m:75:MET:HB2	1.93	0.49
32:f:336:GLU:HG3	32:f:337:LEU:CD2	2.38	0.49
1:U:148:LYS:CA	15:D:40:LEU:HD13	2.42	0.49
1:U:367:THR:HG21	1:U:773:PHE:HB3	1.94	0.49
1:U:581:SER:O	1:U:585:THR:OG1	2.27	0.49
3:W:447:ALA:O	3:W:451:MET:HG2	2.12	0.49
5:Y:63:TRP:HE1	5:Y:66:ASP:CG	2.19	0.49
12:A:115:VAL:HG12	12:A:119:ALA:O	2.12	0.49
12:A:177:VAL:HG22	12:A:179:GLY:H	1.77	0.49
12:A:375:ARG:NE	22:K:204:GLN:CG	2.72	0.49
14:C:83:LYS:HB2	14:C:98:ASP:OD2	2.12	0.49
15:D:113:VAL:HB	15:D:139:LEU:HG	1.95	0.49
15:D:374:ASP:HA	16:E:291:ARG:CZ	2.42	0.49
16:E:204:VAL:HB	17:F:261:ILE:HD12	1.95	0.49
17:F:139:LEU:N	17:F:160:ILE:O	2.45	0.49
17:F:388:THR:HG22	17:F:391:PHE:CD2	2.47	0.49
21:J:18:GLN:O	21:J:22:ALA:CB	2.61	0.49
25:n:175:ARG:HG2	25:n:188:VAL:HG22	1.95	0.49
32:f:336:GLU:HB3	32:f:337:LEU:HD23	1.95	0.49
1:U:396:ALA:O	1:U:401:LYS:NZ	2.45	0.49
2:V:82:LEU:C	2:V:84:LYS:H	2.21	0.49
2:V:485:ASP:O	2:V:489:MET:HG2	2.13	0.49
6:Z:224:HIS:ND1	6:Z:224:HIS:N	2.61	0.49
7:a:33:LEU:HA	8:b:18:ASN:HD22	1.77	0.49
7:a:50:PHE:O	7:a:86:GLN:NE2	2.46	0.49
8:b:94:HIS:HD2	8:b:136:VAL:HG21	1.78	0.49
14:C:191:PRO:O	14:C:193:GLY:HA3	2.13	0.49
14:C:295:THR:HG22	14:C:296:ASN:H	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:E:121:ASN:HB3	16:E:197:LYS:O	2.13	0.49
16:E:170:CYS:SG	16:E:171:LEU:N	2.85	0.49
16:E:329:GLU:O	16:E:333:LYS:N	2.37	0.49
17:F:438:TYR:C	23:L:52:ALA:N	2.71	0.49
19:h:100:VAL:HG13	27:p:93:ASN:HD22	1.77	0.49
31:t:27:LEU:HD11	31:t:34:ALA:HB1	1.94	0.49
32:f:389:LYS:HB3	32:f:392:THR:HG21	1.95	0.49
1:U:138:PHE:HD1	14:C:13:GLU:HB3	1.77	0.49
1:U:586:VAL:HG11	1:U:601:ARG:HH12	1.78	0.49
2:V:38:LYS:HA	2:V:41:ALA:HB3	1.93	0.49
3:W:285:ASP:OD1	3:W:285:ASP:N	2.46	0.49
4:X:414:LEU:HD23	5:Y:383:LEU:HD11	1.95	0.49
5:Y:51:ALA:HA	5:Y:54:TYR:HD2	1.78	0.49
5:Y:312:ARG:HG3	5:Y:313:SER:N	2.28	0.49
6:Z:181:ASP:OD1	6:Z:181:ASP:N	2.46	0.49
12:A:292:ASP:O	12:A:296:GLN:HG2	2.13	0.49
12:A:402:LYS:HD2	12:A:402:LYS:N	2.27	0.49
14:C:86:LEU:HD23	14:C:96:VAL:HB	1.94	0.49
17:F:299:GLU:CG	17:F:300:LYS:HB3	2.40	0.49
22:k:200:ILE:HA	22:k:203:LYS:HZ3	1.77	0.49
28:q:4:LEU:HD22	28:q:18:ASP:H	1.78	0.49
32:f:392:THR:HG22	32:f:417:ILE:HD13	1.92	0.49
2:V:148:ARG:HH21	2:V:197:THR:CG2	2.26	0.49
12:A:355:PHE:CE1	12:A:385:ILE:HB	2.48	0.49
15:D:62:LYS:HA	15:D:65:GLN:HE21	1.77	0.49
16:E:281:ARG:NE	16:E:283:ASP:OD2	2.35	0.49
17:F:437:TYR:O	23:L:51:ARG:O	2.30	0.49
25:n:5:ALA:HB3	25:n:126:ALA:HB3	1.94	0.49
32:f:392:THR:CG2	32:f:417:ILE:HD13	2.42	0.49
32:f:597:VAL:HG22	32:f:630:ASP:HB2	1.95	0.49
32:f:804:LEU:CD1	32:f:804:LEU:N	2.74	0.49
1:U:14:GLU:OE1	1:U:16:GLU:HG2	2.13	0.49
1:U:140:ARG:HB2	14:C:11:LEU:O	2.12	0.49
1:U:146:LYS:CB	14:C:15:LYS:HD2	2.43	0.49
7:a:78:GLU:O	7:a:82:HIS:ND1	2.38	0.49
10:d:54:ILE:HA	10:d:57:ILE:HG22	1.95	0.49
13:B:224:LEU:N	13:B:329:MET:O	2.45	0.49
14:C:61:GLU:O	14:C:65:LEU:N	2.44	0.49
15:D:151:ILE:HB	15:D:152:MET:HA	1.94	0.49
16:E:228:CYS:O	16:E:273:VAL:HA	2.13	0.49
16:E:304:PRO:HD2	16:E:309:ARG:HH22	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:E:379:LYS:O	16:E:382:SER:OG	2.29	0.49
17:F:195:ILE:HA	17:F:198:LEU:HB3	1.94	0.49
30:S:55:SER:OG	30:S:56:GLY:N	2.42	0.49
22:k:203:LYS:HA	22:k:206:MET:HG2	1.94	0.49
32:f:234:THR:HG23	32:f:637:LYS:HE2	1.94	0.49
32:f:376:PHE:CZ	32:f:416:MET:CE	2.95	0.49
32:f:387:GLN:N	32:f:387:GLN:NE2	2.60	0.49
32:f:517:VAL:O	32:f:521:ALA:HB3	2.12	0.49
1:U:82:LEU:HD21	1:U:130:LEU:HB3	1.94	0.49
1:U:724:VAL:HA	1:U:727:LYS:HG2	1.95	0.49
2:V:27:PRO:O	2:V:30:PRO:HD2	2.13	0.49
2:V:263:LEU:HG	2:V:264:TYR:H	1.78	0.49
2:V:413:SER:HB2	5:Y:339:ALA:HB2	1.95	0.49
5:Y:232:GLU:O	5:Y:236:LEU:N	2.41	0.49
9:c:290:VAL:O	9:c:293:THR:OG1	2.23	0.49
12:A:316:LYS:HG2	12:A:317:VAL:H	1.78	0.49
13:B:286:GLU:OE1	13:B:332:ASN:N	2.45	0.49
14:C:117:ARG:O	14:C:121:TYR:HA	2.13	0.49
14:C:249:ASP:HA	14:C:250:GLU:HA	1.56	0.49
17:F:69:MET:HA	17:F:72:LYS:HG2	1.95	0.49
17:F:434:ASN:CB	17:F:436:GLN:CD	2.84	0.49
18:G:128:ASN:OD1	19:H:6:TYR:OH	2.30	0.49
28:Q:19:ARG:HH21	28:Q:31:ASP:HB2	1.78	0.49
18:g:67:THR:HG22	18:g:69:LEU:H	1.78	0.49
20:i:75:SER:HB2	20:i:135:LEU:HB2	1.95	0.49
1:U:137:MET:HG3	14:C:12:GLU:HB3	1.13	0.48
1:U:599:ILE:HD12	1:U:602:LEU:HD22	1.95	0.48
1:U:689:ILE:HG12	1:U:732:LEU:HD22	1.95	0.48
1:U:699:THR:O	1:U:702:THR:OG1	2.31	0.48
2:V:56:ALA:N	2:V:57:ALA:CA	2.69	0.48
2:V:250:LEU:HA	2:V:253:LEU:HD12	1.95	0.48
6:Z:178:ASP:HB2	9:c:218:LEU:HD11	1.95	0.48
6:Z:263:ALA:O	6:Z:267:ARG:HG2	2.13	0.48
6:Z:271:ALA:O	6:Z:275:LEU:HB2	2.13	0.48
12:A:271:LEU:HG	12:A:315:ILE:O	2.13	0.48
12:A:297:ARG:NH1	17:F:303:ASP:OD1	2.41	0.48
12:A:329:PRO:HA	12:A:332:MET:HB3	1.94	0.48
13:B:224:LEU:HD22	13:B:351:ILE:HG12	1.95	0.48
14:C:97:VAL:HG21	14:C:122:THR:HA	1.96	0.48
14:C:167:LEU:HG	14:C:171:HIS:HB2	1.95	0.48
15:D:105:SER:OG	15:D:107:THR:OG1	2.25	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:Q:20:VAL:O	28:Q:34:LYS:NZ	2.46	0.48
28:Q:103:LEU:HD13	28:Q:115:LEU:HD11	1.93	0.48
32:f:127:SER:O	32:f:131:MET:HB2	2.13	0.48
32:f:645:ASP:HB3	32:f:648:ALA:HB3	1.95	0.48
1:U:27:LEU:O	1:U:31:VAL:HB	2.13	0.48
1:U:435:SER:O	1:U:437:TYR:N	2.45	0.48
12:A:184:ILE:HD12	12:A:187:LEU:HD21	1.94	0.48
12:A:190:VAL:HG22	12:A:316:LYS:HD2	1.94	0.48
12:A:215:PHE:HB3	12:A:321:THR:HG23	1.95	0.48
14:C:157:GLN:HE22	14:C:318:PRO:HD3	1.77	0.48
15:D:244:PRO:HA	15:D:248:ARG:H	1.78	0.48
15:D:410:ASP:HA	15:D:411:GLU:O	2.12	0.48
16:E:268:ASP:OD1	16:E:269:THR:N	2.46	0.48
19:H:50:LYS:HE2	19:H:59:GLU:HG3	1.95	0.48
21:J:176:TYR:HE2	22:K:58:LEU:HA	1.78	0.48
23:L:46:LEU:HD13	23:L:73:SER:HB2	1.94	0.48
23:L:52:ALA:HB2	23:L:59:HIS:CD2	2.48	0.48
31:T:20:VAL:HG11	31:T:122:LEU:HD13	1.96	0.48
31:T:192:VAL:HG12	31:T:197:VAL:HG22	1.95	0.48
32:f:487:LEU:HD22	32:f:801:VAL:HG11	1.95	0.48
32:f:657:ILE:HA	32:f:660:ILE:HD12	1.94	0.48
2:V:349:ARG:HH21	2:V:354:LYS:HG3	1.77	0.48
5:Y:42:MET:HE3	5:Y:46:ARG:HH12	1.76	0.48
5:Y:130:LYS:HD2	14:C:340:ARG:HD2	1.95	0.48
7:a:144:ASN:HA	7:a:145:LEU:HA	1.58	0.48
12:A:79:ASP:HB3	13:B:137:SER:HA	1.95	0.48
13:B:283:PHE:HA	13:B:328:ILE:O	2.13	0.48
15:D:153:MET:O	15:D:154:LEU:CB	2.61	0.48
15:D:204:MET:SD	15:D:212:LYS:HA	2.53	0.48
17:F:84:LYS:HZ3	17:F:139:LEU:HD23	1.78	0.48
17:F:164:LEU:HD12	17:F:165:PRO:HD2	1.96	0.48
17:F:170:SER:OG	17:F:171:ARG:N	2.47	0.48
17:F:272:PHE:HA	17:F:275:ALA:HB3	1.95	0.48
19:h:50:LYS:NZ	19:h:62:VAL:O	2.47	0.48
32:f:253:LEU:O	32:f:257:ARG:CB	2.61	0.48
1:U:62:LEU:HD12	1:U:84:ALA:HB1	1.94	0.48
1:U:403:THR:HG23	1:U:777:HIS:NE2	2.29	0.48
3:W:435:LEU:HG	3:W:438:LEU:HD12	1.96	0.48
3:W:452:ILE:HD13	6:Z:226:ILE:HG22	1.94	0.48
6:Z:164:ALA:HB1	6:Z:168:GLU:HG3	1.93	0.48
8:b:114:GLY:HA2	8:b:143:PHE:O	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:c:100:LYS:HA	9:c:105:PRO:HB3	1.95	0.48
13:B:155:LYS:HA	13:B:156:VAL:HA	1.56	0.48
13:B:274:ALA:HB1	13:B:325:VAL:HB	1.95	0.48
14:C:194:THR:HG21	14:C:357:ALA:N	2.28	0.48
14:C:380:GLN:O	14:C:384:GLU:N	2.40	0.48
15:D:418:LYS:CA	18:G:19:GLU:HG2	2.37	0.48
17:F:223:VAL:HG13	17:F:329:ILE:HG23	1.96	0.48
22:K:217:LEU:C	22:K:229:PHE:CD1	2.51	0.48
23:L:107:ARG:HH22	31:T:81:HIS:HB2	1.79	0.48
22:k:197:SER:HA	22:k:200:ILE:HD12	1.95	0.48
26:o:96:ALA:H	26:o:115:PRO:HB3	1.78	0.48
32:f:376:PHE:CZ	32:f:798:THR:CG2	2.91	0.48
2:V:194:LYS:HB3	2:V:195:ILE:HG23	1.95	0.48
10:d:147:SER:OG	10:d:150:LYS:N	2.46	0.48
12:A:295:VAL:HG21	13:B:303:ARG:HH12	1.78	0.48
13:B:394:ASP:O	13:B:398:ILE:HG23	2.13	0.48
14:C:256:SER:O	14:C:262:GLY:HA3	2.13	0.48
26:O:33:LYS:O	26:O:35:HIS:ND1	2.47	0.48
23:l:196:ARG:HE	23:l:239:ARG:HH21	1.61	0.48
24:m:163:CYS:SG	24:m:164:ALA:N	2.85	0.48
32:f:635:LYS:NZ	32:f:641:GLU:HG3	2.16	0.48
1:U:74:PHE:HD1	1:U:103:LYS:HD2	1.79	0.48
1:U:253:TYR:CZ	1:U:331:GLY:HA3	2.49	0.48
1:U:759:SER:HA	1:U:782:ALA:HA	1.95	0.48
3:W:372:ARG:HG2	3:W:414:ASN:HB3	1.94	0.48
12:A:184:ILE:O	12:A:188:ARG:N	2.47	0.48
12:A:333:ARG:O	12:A:337:LEU:N	2.46	0.48
12:A:417:ILE:HG13	12:A:418:LYS:N	2.28	0.48
15:D:230:VAL:O	15:D:265:ASP:N	2.45	0.48
17:F:194:GLN:HB2	17:F:352:ILE:HG21	1.95	0.48
23:L:50:LYS:HB3	23:L:59:HIS:HB3	1.95	0.48
25:n:19:ARG:HH11	25:n:171:GLY:HA3	1.79	0.48
29:r:35:ILE:N	29:r:43:GLY:O	2.47	0.48
32:f:140:LEU:O	32:f:144:LEU:CB	2.61	0.48
2:V:322:VAL:HG13	2:V:323:GLY:H	1.78	0.48
6:Z:239:ASP:OD1	6:Z:239:ASP:N	2.47	0.48
8:b:97:LEU:HD23	8:b:107:MET:HB3	1.95	0.48
12:A:243:SER:HB3	13:B:264:PRO:HD3	1.96	0.48
12:A:384:GLU:O	12:A:388:VAL:N	2.45	0.48
12:A:392:ALA:HB2	12:A:409:PHE:HB3	1.95	0.48
14:C:295:THR:HB	14:C:300:ILE:HG12	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:82:ILE:HG23	15:D:83:GLN:HB3	1.95	0.48
16:E:253:ILE:O	16:E:256:THR:OG1	2.26	0.48
24:m:180:GLN:HB2	24:m:184:MET:HG2	1.96	0.48
1:U:388:ASP:OD1	1:U:389:ASN:N	2.47	0.48
2:V:210:CYS:HA	2:V:213:TYR:HD2	1.78	0.48
2:V:416:ARG:CZ	2:V:457:TYR:HB2	2.44	0.48
10:d:167:ILE:HA	10:d:170:LEU:HB3	1.96	0.48
13:B:364:ILE:HG22	13:B:368:HIS:HE1	1.78	0.48
14:C:250:GLU:O	14:C:251:ILE:HG22	2.14	0.48
15:D:49:GLN:OE1	15:D:49:GLN:N	2.46	0.48
15:D:86:PRO:HB3	16:E:81:VAL:HG12	1.96	0.48
15:D:303:VAL:CG2	15:D:304:ASN:HB2	2.44	0.48
20:I:86:LEU:HD22	20:I:114:LEU:HD11	1.96	0.48
32:f:453:SER:O	32:f:488:ALA:O	2.32	0.48
32:f:626:GLU:OE1	32:f:782:HIS:NE2	2.47	0.48
32:f:695:ALA:CB	32:f:752:HIS:HB3	2.44	0.48
12:A:96:ALA:HB3	13:B:132:TYR:HE2	1.79	0.48
12:A:194:PRO:HB3	12:A:201:PHE:HE2	1.78	0.48
12:A:421:ALA:HA	12:A:424:SER:O	2.13	0.48
13:B:167:THR:OG1	13:B:168:ASP:N	2.46	0.48
15:D:82:ILE:HA	15:D:83:GLN:HA	1.47	0.48
15:D:373:ALA:HB3	15:D:375:ILE:HG12	1.95	0.48
22:K:211:ASN:OD1	22:K:214:ASN:ND2	2.46	0.48
24:M:100:SER:O	31:T:65:GLN:NE2	2.47	0.48
24:m:37:ILE:HD11	24:m:193:VAL:HG13	1.96	0.48
24:m:46:VAL:HG22	24:m:215:TRP:HD1	1.79	0.48
30:s:68:ILE:HD11	30:s:92:LEU:HD13	1.95	0.48
1:U:149:GLN:HE22	14:C:18:SER:HG	1.60	0.48
2:V:480:ILE:HG13	6:Z:267:ARG:HB3	1.95	0.48
9:c:217:LEU:HA	9:c:220:LEU:HB2	1.95	0.48
12:A:111:TYR:O	12:A:123:VAL:N	2.47	0.48
13:B:151:LEU:HD13	14:C:96:VAL:HG11	1.96	0.48
13:B:318:GLY:O	13:B:320:ASP:HA	2.13	0.48
17:F:230:GLY:HA2	17:F:231:THR:HB	1.96	0.48
17:F:428:GLN:HG2	17:F:429:ALA:HB2	1.96	0.48
20:I:219:GLU:O	20:I:222:LYS:N	2.47	0.48
22:K:16:SER:OG	22:K:18:GLU:OE1	2.24	0.48
24:M:141:SER:HB3	24:M:144:ASP:HB2	1.96	0.48
27:P:203:ARG:NH2	27:P:205:ASP:OD2	2.47	0.48
28:Q:4:LEU:HD21	28:Q:132:HIS:HB2	1.96	0.48
27:p:74:TYR:OH	27:p:80:ARG:NH2	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:94:LYS:HA	32:f:97:LYS:HG2	1.94	0.48
32:f:178:LYS:NZ	32:f:215:ASP:O	2.42	0.48
32:f:209:MET:SD	32:f:213:GLN:NE2	2.87	0.48
32:f:372:LEU:C	32:f:372:LEU:CD2	2.86	0.48
32:f:456:ARG:HD3	32:f:489:TYR:CZ	2.49	0.48
1:U:89:ASN:HB3	1:U:136:LYS:NZ	2.29	0.47
2:V:160:LEU:HB2	2:V:161:PRO:HD3	1.95	0.47
2:V:290:TYR:OH	2:V:294:ARG:NH2	2.46	0.47
9:c:190:GLN:NE2	14:C:64:GLN:O	2.47	0.47
12:A:97:ARG:HD3	13:B:130:GLU:O	2.15	0.47
12:A:180:CYS:SG	12:A:344:SER:HB2	2.54	0.47
12:A:206:ILE:HG23	12:A:207:GLU:N	2.29	0.47
12:A:288:GLY:HA2	12:A:289:ALA:HA	1.65	0.47
13:B:111:THR:H	13:B:125:THR:HB	1.79	0.47
13:B:375:ALA:HA	13:B:413:LYS:HD2	1.96	0.47
14:C:213:ARG:HH21	14:C:249:ASP:CG	2.22	0.47
32:f:252:ALA:O	32:f:256:PHE:HB2	2.14	0.47
32:f:315:GLU:HA	32:f:318:THR:HG22	1.95	0.47
32:f:664:GLU:HB3	32:f:696:LEU:CG	2.43	0.47
3:W:262:LYS:HA	3:W:265:GLN:HG2	1.95	0.47
6:Z:102:HIS:CD2	6:Z:104:ASN:HB3	2.50	0.47
6:Z:238:PRO:HB2	6:Z:239:ASP:HA	1.95	0.47
6:Z:239:ASP:O	9:c:308:VAL:HG13	2.13	0.47
12:A:237:PHE:HB2	12:A:271:LEU:O	2.14	0.47
14:C:172:PRO:O	14:C:175:PHE:HB2	2.15	0.47
14:C:363:CYS:HA	14:C:366:ALA:HB3	1.95	0.47
15:D:106:THR:HB	16:E:77:PRO:HA	1.95	0.47
15:D:147:ALA:O	16:E:62:LYS:HD2	2.14	0.47
15:D:282:ASP:OD1	16:E:251:ARG:NH2	2.47	0.47
16:E:346:VAL:HA	16:E:349:GLU:HB3	1.96	0.47
17:F:315:ASN:O	17:F:320:PHE:N	2.47	0.47
28:Q:47:VAL:H	28:Q:102:LEU:HG	1.79	0.47
22:k:76:CYS:SG	22:k:77:ALA:N	2.87	0.47
32:f:336:GLU:CG	32:f:337:LEU:CD2	2.92	0.47
1:U:610:VAL:O	6:Z:177:ARG:NH2	2.47	0.47
3:W:425:LEU:O	3:W:429:SER:OG	2.19	0.47
6:Z:193:ASN:HA	6:Z:196:HIS:CE1	2.50	0.47
6:Z:262:LEU:O	6:Z:266:ILE:HD12	2.13	0.47
8:b:157:VAL:HG21	8:b:170:LEU:HB2	1.97	0.47
9:c:174:PRO:HB2	9:c:175:ARG:HH11	1.78	0.47
10:d:164:THR:O	10:d:167:ILE:HG12	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:401:LYS:HA	15:D:404:LYS:HG2	1.96	0.47
16:E:62:LYS:O	16:E:70:ILE:N	2.47	0.47
17:F:152:GLY:O	17:F:160:ILE:HA	2.14	0.47
24:M:150:MET:HG2	24:M:160:TYR:HE2	1.78	0.47
23:l:117:GLN:O	23:l:120:THR:OG1	2.30	0.47
32:f:248:LEU:O	32:f:252:ALA:CB	2.62	0.47
32:f:333:LEU:HA	32:f:338:ASP:HB2	1.94	0.47
2:V:336:GLU:HA	2:V:339:LEU:HD12	1.96	0.47
5:Y:34:ASP:N	5:Y:34:ASP:OD1	2.47	0.47
5:Y:292:TYR:HA	5:Y:295:TYR:HB3	1.95	0.47
5:Y:329:PHE:HZ	11:e:70:SER:HB2	1.80	0.47
6:Z:228:TYR:HB2	7:a:340:VAL:HA	1.97	0.47
15:D:244:PRO:O	15:D:248:ARG:HB3	2.14	0.47
15:D:416:PHE:C	18:G:19:GLU:HB3	2.30	0.47
16:E:44:GLU:HB3	17:F:76:ASN:ND2	2.29	0.47
17:F:438:TYR:O	23:L:51:ARG:CB	2.62	0.47
28:Q:23:SER:OG	28:Q:24:ASN:N	2.43	0.47
28:Q:140:LEU:HA	28:Q:143:LEU:HB3	1.97	0.47
31:T:43:MET:HE3	31:T:45:VAL:HG22	1.96	0.47
21:j:115:LYS:HG3	21:j:127:PHE:HD2	1.79	0.47
32:f:331:LEU:O	32:f:335:ARG:NH1	2.47	0.47
32:f:359:GLY:O	32:f:363:SER:CB	2.50	0.47
32:f:392:THR:HA	32:f:414:LEU:CD2	2.44	0.47
32:f:691:PRO:HB3	32:f:749:ALA:CB	2.39	0.47
1:U:22:PHE:HE2	10:d:31:LEU:HD12	1.79	0.47
1:U:146:LYS:HB3	14:C:15:LYS:HD2	1.95	0.47
2:V:289:LEU:HA	2:V:292:THR:HG22	1.96	0.47
5:Y:134:LEU:CG	14:C:376:VAL:CB	2.92	0.47
5:Y:170:GLU:C	15:D:189:GLU:CB	2.56	0.47
5:Y:221:THR:HA	5:Y:224:VAL:HG12	1.97	0.47
6:Z:145:HIS:NE2	6:Z:225:GLN:HG3	2.23	0.47
12:A:384:GLU:H	13:B:343:ARG:NH1	2.09	0.47
15:D:62:LYS:HD2	15:D:65:GLN:HE21	1.78	0.47
16:E:134:GLU:O	16:E:315:ILE:HD12	2.14	0.47
16:E:204:VAL:HG13	17:F:308:ARG:HH22	1.79	0.47
18:G:32:ILE:HA	18:G:82:GLY:HA2	1.97	0.47
18:G:93:ARG:HH21	18:G:121:ILE:HG12	1.78	0.47
19:H:9:SER:OG	19:H:123:GLN:O	2.30	0.47
19:h:14:SER:HG	19:h:18:LYS:H	1.57	0.47
23:l:215:VAL:HB	23:l:221:PHE:HD1	1.78	0.47
1:U:241:ASN:HD21	1:U:244:MET:HG3	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:738:ASP:OD1	1:U:742:HIS:NE2	2.47	0.47
2:V:224:LEU:HD13	2:V:227:VAL:HB	1.96	0.47
3:W:247:TYR:HB3	3:W:270:VAL:HG23	1.97	0.47
4:X:378:LEU:HA	4:X:385:LEU:HA	1.97	0.47
5:Y:78:GLU:HA	5:Y:81:LEU:HB3	1.97	0.47
7:a:97:LEU:HD11	7:a:117:ALA:HB1	1.97	0.47
9:c:54:MET:HE2	9:c:82:VAL:HG13	1.96	0.47
12:A:187:LEU:O	12:A:191:VAL:HG12	2.14	0.47
14:C:233:GLU:O	14:C:237:MET:HG2	2.13	0.47
17:F:233:LYS:HA	17:F:236:LEU:HB3	1.97	0.47
20:I:12:PHE:HB3	21:J:21:TYR:HE2	1.80	0.47
29:R:115:ASP:HB2	29:R:119:ASN:HB2	1.96	0.47
31:T:27:LEU:HD22	31:T:184:TYR:HB2	1.96	0.47
1:U:167:ILE:HD12	1:U:204:ILE:HG21	1.97	0.47
1:U:340:GLN:HG3	1:U:880:ASN:HB3	1.95	0.47
1:U:447:GLY:HA3	1:U:480:GLY:HA2	1.96	0.47
1:U:541:HIS:HB2	1:U:544:ILE:HG22	1.97	0.47
2:V:258:TYR:HB3	2:V:265:ASP:OD2	2.15	0.47
3:W:431:LYS:O	3:W:434:SER:OG	2.21	0.47
3:W:435:LEU:HA	3:W:438:LEU:HB2	1.96	0.47
5:Y:101:ARG:HA	5:Y:104:MET:HG2	1.96	0.47
5:Y:134:LEU:CB	14:C:376:VAL:HB	2.45	0.47
5:Y:178:ASN:HB3	5:Y:207:THR:HG22	1.96	0.47
7:a:335:TRP:CG	7:a:336:VAL:H	2.33	0.47
9:c:49:VAL:HG22	9:c:116:PRO:HB3	1.97	0.47
10:d:6:LYS:HD3	10:d:50:LEU:HG	1.97	0.47
10:d:182:ILE:HG13	10:d:183:GLU:HG3	1.96	0.47
12:A:115:VAL:HG13	12:A:117:GLN:N	2.28	0.47
12:A:193:THR:O	12:A:200:ARG:NH1	2.47	0.47
12:A:219:GLY:HA2	12:A:220:THR:HA	1.49	0.47
13:B:169:PRO:HB3	14:C:228:ALA:HB2	1.96	0.47
13:B:314:ASN:HA	13:B:317:ASP:HB2	1.96	0.47
14:C:229:ARG:NH1	14:C:279:GLN:HE22	2.13	0.47
15:D:231:VAL:HA	15:D:265:ASP:O	2.14	0.47
16:E:289:LEU:HD23	16:E:294:ARG:HD3	1.97	0.47
17:F:358:ASN:HA	17:F:362:ARG:NH1	2.30	0.47
17:F:437:TYR:N	23:L:53:GLN:CD	2.73	0.47
18:G:49:VAL:HG22	18:G:219:VAL:HG23	1.97	0.47
22:K:216:GLU:CB	22:K:229:PHE:CE2	2.95	0.47
22:K:220:VAL:HG23	22:K:226:PHE:HE1	1.79	0.47
26:O:113:ILE:HG12	26:O:119:THR:HG22	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:Q:12:TYR:HB2	28:Q:182:ILE:HD11	1.97	0.47
25:n:21:THR:HG22	25:n:26:ILE:HG13	1.97	0.47
27:p:107:PRO:HG2	27:p:124:LEU:HB2	1.95	0.47
28:q:23:SER:HB2	28:q:28:MET:HE2	1.97	0.47
31:t:46:ASN:OD1	31:t:46:ASN:N	2.47	0.47
32:f:30:GLY:O	32:f:34:ARG:HB2	2.14	0.47
32:f:376:PHE:CZ	32:f:798:THR:CB	2.91	0.47
5:Y:108:ALA:HA	5:Y:111:LEU:HB2	1.97	0.47
6:Z:96:HIS:HE1	6:Z:121:LEU:HD13	1.79	0.47
9:c:293:THR:O	9:c:297:VAL:HG23	2.14	0.47
12:A:221:GLY:C	12:A:223:THR:H	2.23	0.47
13:B:178:LYS:HE2	14:C:285:ALA:HB2	1.97	0.47
13:B:406:ALA:O	13:B:411:ARG:N	2.44	0.47
14:C:184:LYS:HG3	14:C:311:ILE:HD12	1.96	0.47
16:E:215:ILE:HB	16:E:263:GLN:HE22	1.79	0.47
17:F:93:VAL:HA	17:F:124:ILE:HD12	1.97	0.47
17:F:392:ASN:H	17:F:395:GLN:CD	2.23	0.47
18:G:208:ILE:HB	18:G:210:PHE:HD2	1.78	0.47
27:P:26:ARG:NH1	27:P:186:ILE:HD12	2.29	0.47
31:T:122:LEU:HG	31:T:137:LEU:HD12	1.96	0.47
29:r:53:SER:O	29:r:57:ARG:HB2	2.15	0.47
32:f:193:PRO:C	32:f:208:LEU:HD12	2.40	0.47
2:V:432:GLU:HB3	10:d:196:ARG:HB3	1.96	0.47
5:Y:204:THR:HB	5:Y:246:ILE:HD13	1.96	0.47
6:Z:133:LEU:HB3	9:c:229:LEU:HG	1.97	0.47
10:d:187:GLU:CD	10:d:188:LYS:H	2.23	0.47
13:B:223:ILE:O	13:B:350:LYS:HA	2.15	0.47
14:C:78:ARG:HB3	14:C:86:LEU:HD12	1.97	0.47
15:D:288:ILE:O	15:D:292:LEU:N	2.30	0.47
19:H:222:THR:OG1	19:H:225:GLU:OE1	2.33	0.47
23:L:26:MET:HE1	23:L:148:CYS:HB2	1.96	0.47
24:M:37:ILE:HD11	24:M:193:VAL:HG13	1.97	0.47
27:P:58:THR:OG1	28:Q:121:LEU:O	2.27	0.47
30:S:73:LYS:O	30:S:77:HIS:ND1	2.36	0.47
26:o:46:ALA:HB3	26:o:97:ALA:HB3	1.97	0.47
32:f:559:PRO:HA	32:f:562:LEU:HB2	1.96	0.47
1:U:49:TYR:O	1:U:57:ARG:NH2	2.48	0.47
3:W:403:PHE:CD1	3:W:419:LYS:HE3	2.49	0.47
3:W:444:HIS:O	3:W:448:LYS:NZ	2.46	0.47
5:Y:311:TYR:HD2	5:Y:314:LEU:HG	1.80	0.47
5:Y:349:LYS:C	5:Y:351:ASN:H	2.23	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Z:45:LYS:HG3	6:Z:46:LYS:H	1.80	0.47
12:A:168:GLU:HG2	12:A:169:LYS:HG2	1.97	0.47
13:B:365:PHE:HD2	13:B:380:LEU:HD12	1.79	0.47
14:C:117:ARG:HD3	14:C:122:THR:OG1	2.15	0.47
14:C:214:VAL:HG22	14:C:215:SER:H	1.80	0.47
15:D:151:ILE:HG21	15:D:228:ILE:HG23	1.96	0.47
28:Q:52:ASP:OD1	29:R:88:TYR:OH	2.31	0.47
28:q:101:ASN:HB3	28:q:132:HIS:CD2	2.51	0.47
30:s:179:PHE:O	30:s:183:ALA:HB2	2.15	0.47
32:f:695:ALA:O	32:f:752:HIS:HB3	2.15	0.47
2:V:54:LYS:HA	2:V:55:THR:C	2.41	0.46
2:V:98:LEU:HA	2:V:99:ARG:HA	1.69	0.46
4:X:411:VAL:HA	4:X:414:LEU:HD12	1.97	0.46
6:Z:228:TYR:CE1	7:a:215:GLU:OE1	2.68	0.46
10:d:155:LYS:O	10:d:158:ILE:HD11	2.15	0.46
15:D:208:PRO:HA	15:D:209:GLY:C	2.39	0.46
15:D:280:GLY:HA2	15:D:283:ARG:HD3	1.97	0.46
16:E:375:ALA:O	16:E:379:LYS:N	2.46	0.46
17:F:368:ILE:O	17:F:371:ARG:HG2	2.14	0.46
18:G:61:LEU:HD21	18:G:66:VAL:HG21	1.95	0.46
19:H:167:TYR:O	19:H:171:LYS:CB	2.57	0.46
21:J:4:ASP:HB3	22:K:125:GLU:HB3	1.97	0.46
21:J:180:ALA:HA	21:J:181:ILE:HA	1.60	0.46
22:k:195:ILE:O	22:k:198:SER:OG	2.30	0.46
27:p:135:ASP:OD1	27:p:135:ASP:N	2.48	0.46
32:f:166:VAL:O	32:f:170:TRP:HB2	2.14	0.46
32:f:483:PHE:HE2	32:f:799:VAL:HB	1.70	0.46
4:X:365:LEU:O	4:X:369:ILE:HD12	2.16	0.46
10:d:101:LEU:HD11	10:d:161:GLU:CD	2.41	0.46
14:C:146:SER:HB2	14:C:150:MET:HB2	1.97	0.46
14:C:219:LEU:HD21	15:D:287:ARG:HG2	1.97	0.46
15:D:133:HIS:CE1	15:D:135:HIS:HB2	2.49	0.46
15:D:413:GLU:OE1	15:D:413:GLU:N	2.48	0.46
16:E:84:ARG:HD2	16:E:108:MET:HA	1.96	0.46
17:F:88:TYR:HB2	17:F:154:ASN:OD1	2.14	0.46
17:F:311:LEU:O	17:F:315:ASN:N	2.32	0.46
17:F:438:TYR:CB	23:L:51:ARG:CD	2.87	0.46
18:G:159:TYR:HB3	19:H:81:PRO:HG3	1.96	0.46
20:I:95:GLN:HE22	20:I:98:LEU:HD23	1.80	0.46
20:I:109:GLN:OE1	28:Q:71:ASN:ND2	2.38	0.46
27:P:117:PHE:HB3	27:P:192:LYS:HD3	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:424:GLY:HA2	32:f:427:THR:HG22	1.96	0.46
32:f:475:ASN:O	32:f:478:ARG:HB3	2.15	0.46
32:f:675:PHE:CG	32:f:694:LEU:HD23	2.51	0.46
32:f:692:LEU:HG	32:f:752:HIS:HE1	1.77	0.46
1:U:153:ILE:HG23	14:C:13:GLU:HG3	1.74	0.46
1:U:187:LEU:O	15:D:49:GLN:NE2	2.45	0.46
2:V:100:MET:O	2:V:104:THR:HG23	2.15	0.46
5:Y:97:GLU:OE2	14:C:342:ILE:CG2	2.62	0.46
5:Y:134:LEU:HG	14:C:376:VAL:CB	2.45	0.46
5:Y:170:GLU:CA	15:D:189:GLU:CB	2.93	0.46
6:Z:138:TYR:HB3	6:Z:155:PHE:HB3	1.97	0.46
7:a:325:ASP:O	7:a:330:ARG:N	2.49	0.46
9:c:261:GLU:HA	9:c:264:LYS:HE3	1.96	0.46
12:A:125:LEU:HB3	12:A:149:ILE:HD12	1.98	0.46
13:B:116:ILE:O	13:B:119:ASN:N	2.47	0.46
13:B:187:ILE:HB	13:B:190:LEU:HD21	1.97	0.46
13:B:220:LYS:HB2	13:B:346:ARG:NH2	2.30	0.46
15:D:152:MET:HE2	15:D:152:MET:HB2	1.66	0.46
17:F:93:VAL:HG22	17:F:151:VAL:HG21	1.97	0.46
17:F:144:LYS:HA	17:F:145:LEU:HA	1.70	0.46
28:Q:3:TYR:HD1	28:Q:135:GLY:HA3	1.80	0.46
30:S:211:ARG:NE	30:S:213:ASP:OD1	2.41	0.46
31:T:9:THR:OG1	31:T:10:SER:N	2.47	0.46
32:f:541:THR:O	32:f:545:LYS:CB	2.63	0.46
1:U:188:MET:O	15:D:49:GLN:NE2	2.42	0.46
1:U:429:LYS:HA	1:U:430:ASP:CB	2.46	0.46
1:U:600:ARG:CG	15:D:56:VAL:HG21	2.38	0.46
1:U:636:VAL:HG11	15:D:54:LEU:HD21	1.96	0.46
2:V:194:LYS:HA	2:V:195:ILE:HA	1.68	0.46
3:W:377:ARG:NH2	7:a:308:GLU:OE2	2.37	0.46
3:W:452:ILE:HG13	6:Z:222:ILE:CG1	2.45	0.46
5:Y:89:GLU:HA	5:Y:92:GLU:HG2	1.96	0.46
10:d:103:LEU:HD12	10:d:106:LEU:HD22	1.97	0.46
10:d:118:GLU:HA	10:d:121:ARG:HH12	1.81	0.46
12:A:141:GLY:C	12:A:150:HIS:HB3	2.41	0.46
13:B:115:ILE:HA	13:B:121:ALA:HA	1.98	0.46
14:C:229:ARG:HH11	14:C:279:GLN:HE22	1.63	0.46
15:D:202:VAL:HG11	15:D:308:ILE:HG22	1.96	0.46
15:D:263:PHE:HB2	15:D:308:ILE:HD11	1.97	0.46
16:E:55:GLN:N	17:F:133:PHE:O	2.48	0.46
16:E:128:GLY:HA3	16:E:131:SER:H	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:F:137:ILE:HA	17:F:138:GLY:HA3	1.75	0.46
17:F:344:ARG:HB3	17:F:347:ARG:HG3	1.97	0.46
19:H:148:GLN:OE1	19:H:158:TRP:NE1	2.48	0.46
26:O:112:SER:HB3	26:O:125:VAL:HG11	1.97	0.46
28:Q:4:LEU:HD13	28:Q:102:LEU:HD13	1.97	0.46
29:R:35:ILE:N	29:R:43:GLY:O	2.48	0.46
18:g:116:LYS:NZ	26:o:69:SER:O	2.49	0.46
20:i:170:ALA:O	20:i:174:MET:HB2	2.16	0.46
22:k:60:GLU:OE1	22:k:63:SER:N	2.48	0.46
26:o:215:LYS:HB3	27:p:197:THR:HB	1.97	0.46
30:s:55:SER:OG	30:s:56:GLY:N	2.48	0.46
32:f:376:PHE:CZ	32:f:798:THR:HG22	2.50	0.46
32:f:445:LEU:HG	32:f:462:ALA:HB2	1.95	0.46
32:f:538:ILE:HA	32:f:541:THR:HG22	1.97	0.46
1:U:148:LYS:HB3	15:D:40:LEU:HD13	1.94	0.46
1:U:363:SER:C	1:U:365:CYS:H	2.24	0.46
1:U:607:VAL:HG22	15:D:64:GLU:HG3	1.96	0.46
2:V:31:ALA:HB3	2:V:32:PRO:HD3	1.97	0.46
2:V:363:LEU:HA	2:V:378:VAL:HG11	1.97	0.46
10:d:125:LYS:HD2	10:d:128:GLN:HE22	1.80	0.46
10:d:226:ALA:HA	10:d:227:SER:HA	1.66	0.46
13:B:249:ARG:HG3	13:B:283:PHE:HD2	1.80	0.46
14:C:117:ARG:N	14:C:122:THR:O	2.30	0.46
15:D:104:GLY:HA2	15:D:109:SER:O	2.14	0.46
15:D:411:GLU:HA	15:D:412:GLN:HA	1.61	0.46
16:E:55:GLN:NE2	16:E:108:MET:SD	2.89	0.46
16:E:83:CYS:HA	16:E:107:ILE:HB	1.97	0.46
23:L:157:ARG:HD2	23:L:176:MET:HE3	1.97	0.46
21:j:180:ALA:HA	21:j:181:ILE:HA	1.66	0.46
22:k:101:PHE:HE1	29:r:57:ARG:HG2	1.81	0.46
26:o:177:VAL:HB	26:o:184:ASP:HB2	1.97	0.46
27:p:116:THR:O	27:p:192:LYS:NZ	2.48	0.46
1:U:118:LEU:HD23	1:U:121:GLY:O	2.15	0.46
1:U:153:ILE:CG2	14:C:13:GLU:OE2	2.61	0.46
2:V:96:ARG:HB2	2:V:107:ARG:HD2	1.95	0.46
9:c:269:GLN:O	9:c:273:LYS:HG2	2.16	0.46
10:d:97:GLN:HB2	10:d:101:LEU:HG	1.96	0.46
15:D:105:SER:HB3	15:D:111:TYR:HE2	1.80	0.46
16:E:168:LYS:NZ	16:E:293:GLY:HA2	2.31	0.46
17:F:70:LYS:HD2	17:F:73:ILE:HD11	1.98	0.46
17:F:138:GLY:O	17:F:159:LEU:HB2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:S:38:ARG:HH12	31:T:151:ARG:HD3	1.80	0.46
26:o:50:ALA:HB2	27:p:129:CYS:HB2	1.96	0.46
28:q:17:SER:OG	28:q:179:SER:OG	2.30	0.46
1:U:187:LEU:HD22	15:D:45:LYS:N	2.29	0.46
2:V:241:ARG:HG3	2:V:242:HIS:H	1.81	0.46
3:W:420:ASP:HB3	3:W:422:ASN:CB	2.44	0.46
6:Z:197:GLY:O	6:Z:201:LEU:HG	2.15	0.46
8:b:101:GLN:HB3	9:c:101:GLN:HB3	1.98	0.46
12:A:105:ASP:N	12:A:105:ASP:OD1	2.46	0.46
14:C:271:ARG:O	14:C:275:GLU:HG2	2.16	0.46
17:F:222:GLY:O	17:F:349:ASP:HB3	2.15	0.46
23:L:122:ARG:HG2	24:M:128:VAL:HG12	1.96	0.46
24:m:8:ASP:HB2	24:m:25:TYR:HE2	1.80	0.46
27:p:138:VAL:HB	27:p:146:MET:HE3	1.98	0.46
1:U:32:ASN:OD1	1:U:33:ASP:N	2.44	0.46
5:Y:50:MET:HE2	5:Y:74:LYS:HD2	1.98	0.46
6:Z:67:VAL:HG12	8:b:95:LEU:HD23	1.97	0.46
6:Z:195:VAL:HG11	9:c:230:THR:HB	1.97	0.46
6:Z:221:PRO:HD2	6:Z:222:ILE:HA	1.97	0.46
12:A:112:ILE:HB	12:A:122:VAL:HG13	1.98	0.46
12:A:298:THR:HA	12:A:301:GLU:HB3	1.98	0.46
13:B:363:ARG:NH1	13:B:363:ARG:O	2.48	0.46
14:C:76:VAL:HG22	14:C:110:PRO:HA	1.98	0.46
17:F:334:ARG:HD3	17:F:336:ASP:HB3	1.97	0.46
21:J:61:LYS:HD2	21:J:73:PHE:HZ	1.81	0.46
21:J:95:ARG:HH22	21:J:101:PRO:HB3	1.81	0.46
25:N:19:ARG:HE	25:N:26:ILE:HG13	1.80	0.46
27:P:190:ILE:HG22	27:P:195:ILE:HG23	1.98	0.46
24:m:66:LEU:HD13	24:m:214:SER:HB2	1.97	0.46
24:m:74:GLY:HA3	24:m:224:HIS:CE1	2.50	0.46
30:s:16:ALA:HB2	30:s:121:VAL:HG23	1.96	0.46
32:f:125:ILE:HA	32:f:129:LEU:HD12	1.98	0.46
32:f:688:ARG:CA	32:f:745:LEU:HD22	2.44	0.46
32:f:796:LEU:HD12	32:f:799:VAL:HG11	1.98	0.46
1:U:900:TYR:HB3	1:U:914:LEU:HG	1.97	0.46
3:W:299:ILE:HG22	3:W:301:LYS:H	1.79	0.46
5:Y:324:GLY:N	5:Y:325:VAL:HA	2.30	0.46
9:c:255:TYR:HB2	9:c:287:HIS:HE1	1.80	0.46
13:B:95:GLU:O	13:B:99:VAL:HG22	2.16	0.46
14:C:194:THR:OG1	14:C:356:GLY:HA3	2.15	0.46
14:C:378:VAL:HG12	14:C:379:THR:H	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:258:ALA:HA	15:D:259:PRO:C	2.40	0.46
15:D:408:LYS:HB3	15:D:409:LYS:CB	2.46	0.46
15:D:417:TYR:CD2	18:G:18:PRO:HB2	2.50	0.46
19:H:182:LEU:HB3	19:H:186:ASP:HB2	1.98	0.46
23:L:52:ALA:HB2	23:L:59:HIS:CA	2.46	0.46
28:Q:19:ARG:HB3	28:Q:31:ASP:HA	1.97	0.46
25:n:19:ARG:HE	25:n:26:ILE:HG12	1.80	0.46
32:f:281:ILE:O	32:f:285:CYS:HB3	2.15	0.46
32:f:378:ASN:HB3	32:f:391:LEU:HD21	1.97	0.46
1:U:149:GLN:CD	15:D:40:LEU:HD22	2.39	0.46
1:U:524:LYS:HB3	1:U:559:ARG:HE	1.80	0.46
1:U:794:ASP:OD1	1:U:795:LEU:N	2.49	0.46
3:W:268:LYS:HA	3:W:271:VAL:HG12	1.98	0.46
3:W:432:LEU:HD13	9:c:241:ASN:HB3	1.98	0.46
6:Z:67:VAL:HG13	8:b:92:VAL:HG23	1.98	0.46
8:b:146:GLU:HG2	8:b:147:GLU:H	1.81	0.46
8:b:156:PHE:O	8:b:160:LEU:HB2	2.16	0.46
9:c:227:GLU:CD	9:c:234:TYR:HB2	2.40	0.46
9:c:268:GLU:O	9:c:272:ILE:HD12	2.16	0.46
12:A:129:VAL:HG21	12:A:149:ILE:HG22	1.98	0.46
12:A:174:TYR:OH	12:A:192:GLU:OE1	2.28	0.46
12:A:261:PHE:O	12:A:265:ARG:N	2.38	0.46
12:A:338:ASP:OD1	12:A:339:ARG:N	2.45	0.46
12:A:388:VAL:HG13	12:A:413:VAL:CG2	2.45	0.46
15:D:205:TYR:HA	15:D:311:THR:O	2.15	0.46
15:D:240:LEU:HB2	15:D:284:GLU:OE1	2.16	0.46
15:D:244:PRO:HD3	15:D:288:ILE:CD1	2.46	0.46
15:D:272:THR:HB	16:E:251:ARG:HE	1.81	0.46
16:E:270:LEU:O	16:E:273:VAL:HG12	2.16	0.46
17:F:423:GLY:HA2	17:F:426:GLU:HB3	1.98	0.46
18:G:22:LEU:HD11	18:G:25:VAL:HB	1.97	0.46
21:j:220:LEU:HD13	21:j:224:GLU:HB2	1.97	0.46
26:o:1:THR:HG23	26:o:33:LYS:HE3	1.97	0.46
31:t:136:SER:HB2	31:t:150:LEU:HD13	1.97	0.46
2:V:156:SER:HB2	2:V:160:LEU:HG	1.98	0.45
2:V:474:LEU:HD13	10:d:245:GLN:HG3	1.98	0.45
5:Y:77:ASN:O	5:Y:81:LEU:N	2.49	0.45
5:Y:170:GLU:O	15:D:189:GLU:OE1	2.34	0.45
6:Z:68:TRP:CE3	6:Z:108:ILE:HG13	2.51	0.45
6:Z:145:HIS:HE2	6:Z:225:GLN:HG2	1.78	0.45
6:Z:245:PHE:CE2	9:c:308:VAL:HG11	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:a:145:LEU:HD12	7:a:146:PRO:HD2	1.97	0.45
10:d:201:ASN:OD1	10:d:201:ASN:N	2.49	0.45
12:A:299:MET:O	12:A:303:ILE:HG12	2.16	0.45
12:A:343:PHE:HA	12:A:344:SER:OG	2.16	0.45
14:C:114:VAL:HG21	14:C:123:LEU:HD13	1.97	0.45
14:C:268:GLU:O	14:C:272:THR:N	2.47	0.45
16:E:146:ARG:HH22	16:E:190:GLN:HG2	1.80	0.45
17:F:386:ARG:NH2	23:L:169:ARG:HD2	2.31	0.45
17:F:439:ALA:OXT	23:L:53:GLN:O	2.34	0.45
24:M:136:MET:HE3	24:M:148:LEU:HD11	1.99	0.45
27:P:59:ASP:O	27:P:63:VAL:HB	2.15	0.45
27:P:170:ALA:O	27:P:174:ALA:CB	2.63	0.45
28:Q:170:ARG:NH1	28:q:27:GLN:O	2.49	0.45
20:i:43:VAL:HG12	20:i:216:LEU:HB3	1.98	0.45
20:i:106:PRO:HD2	20:i:109:GLN:HE21	1.81	0.45
23:l:189:LYS:HZ3	23:l:193:ARG:HH22	1.63	0.45
28:q:11:ASP:N	28:q:11:ASP:OD1	2.48	0.45
32:f:675:PHE:O	32:f:679:LEU:CB	2.59	0.45
1:U:885:MET:HG2	1:U:887:ALA:H	1.81	0.45
9:c:226:MET:O	9:c:227:GLU:HG2	2.16	0.45
13:B:112:LEU:N	13:B:148:CYS:O	2.49	0.45
15:D:269:ALA:HB1	16:E:255:ARG:HG2	1.97	0.45
16:E:62:LYS:HA	16:E:94:PRO:HB3	1.98	0.45
16:E:215:ILE:O	16:E:219:PHE:N	2.42	0.45
16:E:356:ARG:NE	17:F:200:GLU:OE2	2.48	0.45
20:I:95:GLN:HG2	27:P:73:LEU:HG	1.98	0.45
23:L:225:ASP:OD1	23:L:225:ASP:N	2.49	0.45
31:T:24:ALA:H	31:T:42:ILE:HD11	1.80	0.45
1:U:20:LYS:HG2	1:U:48:LEU:HD21	1.97	0.45
1:U:607:VAL:O	1:U:615:ARG:NH1	2.49	0.45
2:V:79:VAL:CG2	2:V:80:LYS:NZ	2.79	0.45
2:V:192:MET:O	2:V:200:ARG:NH2	2.49	0.45
5:Y:358:ARG:O	5:Y:359:PRO:C	2.59	0.45
6:Z:34:ARG:HB2	6:Z:97:THR:HG22	1.97	0.45
7:a:272:ILE:HA	7:a:275:LEU:HB3	1.98	0.45
10:d:122:LEU:HD12	10:d:125:LYS:H	1.82	0.45
12:A:83:ASP:HA	12:A:86:THR:HB	1.97	0.45
12:A:100:LYS:HE2	12:A:115:VAL:HB	1.97	0.45
12:A:173:THR:OG1	12:A:174:TYR:N	2.50	0.45
12:A:283:ALA:HA	12:A:284:ARG:HA	1.69	0.45
13:B:131:HIS:CD2	13:B:157:HIS:HB2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:C:338:LEU:HD21	14:C:342:ILE:HG21	1.98	0.45
15:D:91:GLN:N	15:D:104:GLY:O	2.49	0.45
15:D:180:ALA:C	15:D:184:PRO:HG2	2.41	0.45
16:E:188:ALA:HB2	16:E:231:PHE:CE2	2.52	0.45
17:F:231:THR:HG22	17:F:233:LYS:HG3	1.99	0.45
1:U:415:HIS:NE2	1:U:418:GLU:HB3	2.32	0.45
1:U:697:GLN:HG3	1:U:745:THR:HB	1.99	0.45
5:Y:240:VAL:HG23	5:Y:241:ILE:HG13	1.97	0.45
13:B:166:ASP:HB2	13:B:167:THR:O	2.16	0.45
15:D:413:GLU:CD	15:D:413:GLU:N	2.75	0.45
16:E:139:SER:O	16:E:143:ARG:N	2.32	0.45
17:F:314:LEU:HG	17:F:347:ARG:HE	1.80	0.45
1:U:65:SER:HB3	1:U:96:TYR:OH	2.16	0.45
1:U:92:ASP:OD1	1:U:92:ASP:N	2.48	0.45
1:U:639:LEU:HD21	14:C:46:GLN:HB3	1.97	0.45
2:V:280:ALA:HB1	2:V:281:ASN:ND2	2.30	0.45
2:V:305:ALA:HB1	2:V:335:VAL:HG11	1.99	0.45
2:V:451:ILE:HB	2:V:453:HIS:CE1	2.52	0.45
2:V:469:THR:HG21	6:Z:257:MET:SD	2.56	0.45
3:W:428:TRP:HE1	6:Z:252:LYS:HD3	1.81	0.45
6:Z:220:LEU:HA	6:Z:221:PRO:HA	1.50	0.45
7:a:50:PHE:N	7:a:51:ALA:HA	2.32	0.45
7:a:192:GLU:OE2	7:a:196:ARG:NH2	2.49	0.45
7:a:254:ALA:HA	7:a:261:LEU:HD23	1.99	0.45
8:b:86:PHE:HB2	8:b:117:VAL:HG21	1.98	0.45
12:A:428:ARG:HD3	12:A:431:THR:OG1	2.17	0.45
13:B:117:ASP:OD1	13:B:117:ASP:N	2.49	0.45
13:B:222:VAL:HA	13:B:346:ARG:HG2	1.98	0.45
14:C:209:CYS:HB3	14:C:243:PRO:HG2	1.99	0.45
15:D:45:LYS:O	15:D:48:GLN:NE2	2.49	0.45
15:D:348:ILE:HG12	15:D:379:CYS:HB3	1.99	0.45
16:E:174:GLY:C	16:E:176:PRO:HD2	2.42	0.45
17:F:161:LEU:HG	17:F:162:GLU:N	2.32	0.45
17:F:365:ILE:HG13	17:F:366:MET:N	2.31	0.45
18:G:237:ALA:O	18:G:241:ALA:CB	2.65	0.45
19:H:19:LEU:HD13	19:H:22:ILE:HD12	1.97	0.45
24:M:92:ARG:HH21	31:T:73:ASP:HA	1.81	0.45
32:f:226:TYR:O	32:f:230:CYS:HB3	2.16	0.45
32:f:420:TRP:CG	32:f:421:ASP:H	2.35	0.45
32:f:533:ASP:OD1	32:f:565:ASN:ND2	2.50	0.45
32:f:688:ARG:HG3	32:f:745:LEU:HB3	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:9:ILE:HG12	1:U:38:ILE:HG23	1.99	0.45
1:U:186:SER:HB2	15:D:46:LYS:HZ3	1.72	0.45
1:U:187:LEU:HD22	15:D:45:LYS:H	1.82	0.45
2:V:286:ALA:HB2	2:V:315:LYS:HB3	1.98	0.45
2:V:309:MET:HB3	2:V:332:LEU:HG	1.99	0.45
9:c:295:ASN:HA	9:c:298:GLN:HG2	1.98	0.45
15:D:275:PHE:O	15:D:283:ARG:HD2	2.17	0.45
15:D:337:ASP:O	15:D:341:LYS:N	2.28	0.45
17:F:84:LYS:NZ	17:F:139:LEU:HD23	2.31	0.45
17:F:225:MET:HE2	17:F:233:LYS:HG2	1.97	0.45
18:G:37:LEU:HD23	18:G:81:THR:HG22	1.97	0.45
20:I:155:ASN:HA	21:J:81:ARG:HH22	1.81	0.45
31:t:178:TYR:OH	31:t:208:ASN:N	2.42	0.45
32:f:797:LEU:HD22	32:f:797:LEU:HA	1.76	0.45
1:U:554:LEU:HD11	1:U:761:VAL:HG13	1.99	0.45
2:V:470:ARG:HD2	10:d:242:LEU:HD21	1.99	0.45
5:Y:268:TYR:CZ	5:Y:307:LEU:HD12	2.52	0.45
6:Z:228:TYR:HE1	7:a:215:GLU:OE1	2.00	0.45
7:a:100:THR:HA	7:a:103:LYS:HE2	1.99	0.45
9:c:243:SER:O	9:c:245:VAL:N	2.49	0.45
12:A:411:GLU:HA	12:A:414:ASN:HD21	1.82	0.45
13:B:294:ARG:HD2	13:B:295:TYR:H	1.82	0.45
13:B:313:LEU:HD22	13:B:341:LEU:HA	1.98	0.45
15:D:300:ASP:HA	15:D:301:GLN:HA	1.51	0.45
16:E:40:TYR:O	16:E:44:GLU:HG2	2.17	0.45
16:E:84:ARG:HH22	17:F:117:ARG:HH12	1.65	0.45
17:F:310:MET:O	17:F:314:LEU:N	2.44	0.45
20:I:220:ASN:HA	20:I:221:GLY:HA2	1.58	0.45
21:J:18:GLN:O	21:J:22:ALA:HB3	2.17	0.45
25:N:96:ALA:HB1	25:N:98:ILE:HG12	1.99	0.45
26:O:163:ILE:HG23	26:O:170:GLY:HA2	1.99	0.45
20:i:143:TYR:HB2	20:i:146:GLN:HE21	1.81	0.45
22:k:41:GLN:NE2	22:k:151:PRO:O	2.50	0.45
23:l:80:ASP:HB3	23:l:128:TYR:HD1	1.82	0.45
25:n:179:ILE:HG12	25:n:184:VAL:HG22	1.98	0.45
27:p:171:MET:O	27:p:175:VAL:HB	2.17	0.45
31:t:4:PRO:HG3	31:t:107:TRP:CE2	2.52	0.45
32:f:79:ARG:HE	32:f:95:PRO:HG3	1.80	0.45
32:f:353:LEU:H	32:f:387:GLN:CG	2.29	0.45
32:f:509:LYS:HB3	32:f:514:VAL:HG21	1.99	0.45
1:U:155:LEU:HD22	15:D:42:SER:OG	2.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:342:LEU:O	1:U:346:ASN:HB2	2.16	0.45
1:U:639:LEU:CD1	14:C:47:ALA:HB3	2.37	0.45
2:V:62:HIS:HA	2:V:65:ARG:HB3	1.98	0.45
2:V:225:ASP:HA	2:V:228:ARG:HG3	1.99	0.45
3:W:306:LEU:O	3:W:310:THR:HG22	2.17	0.45
10:d:3:GLU:HB3	10:d:4:GLN:CA	2.42	0.45
10:d:36:LEU:HB2	10:d:37:PRO:HA	1.99	0.45
12:A:104:ALA:H	12:A:112:ILE:HG23	1.80	0.45
12:A:164:MET:O	12:A:239:ARG:NH2	2.50	0.45
12:A:218:PRO:O	12:A:221:GLY:N	2.45	0.45
13:B:93:GLU:HG3	13:B:94:GLU:H	1.82	0.45
17:F:425:LEU:HA	17:F:428:GLN:O	2.17	0.45
17:F:438:TYR:HD2	23:L:51:ARG:NH1	2.11	0.45
21:J:98:VAL:HG13	29:R:78:ALA:HB2	1.99	0.45
30:s:114:ASP:OD1	30:s:118:LYS:N	2.49	0.45
32:f:183:PRO:HB2	32:f:184:LEU:H	1.63	0.45
32:f:392:THR:HB	32:f:414:LEU:HD22	1.97	0.45
2:V:495:ARG:HH12	6:Z:282:ASN:HA	1.82	0.45
5:Y:136:HIS:HD2	14:C:377:HIS:CE1	2.34	0.45
6:Z:258:VAL:O	6:Z:262:LEU:HG	2.17	0.45
9:c:176:GLN:O	9:c:177:THR:OG1	2.30	0.45
9:c:190:GLN:NE2	14:C:65:LEU:O	2.49	0.45
13:B:283:PHE:HB2	13:B:328:ILE:HB	1.99	0.45
15:D:260:ALA:H	15:D:304:ASN:ND2	2.12	0.45
15:D:274:ARG:HE	16:E:248:SER:HB3	1.82	0.45
15:D:417:TYR:CE1	18:G:5:SER:OG	2.70	0.45
15:D:418:LYS:OXT	18:G:18:PRO:O	2.34	0.45
16:E:117:PRO:HG2	16:E:214:LEU:HD11	1.98	0.45
18:G:230:LEU:HD23	18:G:234:GLU:HG3	1.99	0.45
24:M:74:GLY:HA3	24:M:224:HIS:CE1	2.52	0.45
24:M:198:TYR:CG	24:M:239:ALA:HB1	2.52	0.45
30:S:172:MET:HE1	30:S:195:ILE:HG21	1.97	0.45
31:T:46:ASN:OD1	31:T:46:ASN:N	2.49	0.45
6:Z:185:GLY:O	6:Z:189:GLN:NE2	2.50	0.45
6:Z:242:LEU:HB2	7:a:288:HIS:NE2	2.32	0.45
7:a:340:VAL:HG12	7:a:341:LEU:N	2.28	0.45
9:c:238:CYS:HA	9:c:241:ASN:ND2	2.32	0.45
11:e:56:LEU:O	11:e:59:GLU:HB2	2.16	0.45
12:A:126:SER:OG	12:A:149:ILE:O	2.23	0.45
14:C:243:PRO:HA	14:C:288:ASN:HB3	1.99	0.45
15:D:89:ILE:HG12	15:D:143:LEU:HD21	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:274:ARG:HA	15:D:274:ARG:HD2	1.76	0.45
15:D:362:ASP:OD1	15:D:363:TYR:N	2.50	0.45
17:F:92:ASN:OD1	17:F:93:VAL:N	2.43	0.45
29:R:141:ARG:NH2	28:q:162:LYS:O	2.50	0.45
23:l:109:VAL:HG21	23:l:145:PHE:HD2	1.81	0.45
28:q:13:VAL:HG11	28:q:105:ALA:HB1	1.99	0.45
32:f:358:PHE:O	32:f:362:GLY:CA	2.63	0.45
1:U:563:ALA:O	1:U:567:ILE:HG12	2.17	0.44
1:U:742:HIS:HB2	1:U:883:ARG:HH12	1.82	0.44
1:U:889:LEU:HD23	1:U:892:LEU:HD21	1.98	0.44
2:V:344:ASP:HB2	2:V:368:ARG:NH1	2.29	0.44
3:W:407:ASP:HB2	4:X:344:ARG:HG2	2.00	0.44
6:Z:165:GLU:H	6:Z:168:GLU:HG3	1.81	0.44
7:a:77:VAL:HA	7:a:80:ILE:HG22	1.99	0.44
7:a:178:ARG:O	7:a:182:CYS:HB3	2.16	0.44
8:b:11:ASP:OD2	8:b:114:GLY:N	2.39	0.44
10:d:188:LYS:HG3	10:d:221:ASN:HD21	1.82	0.44
13:B:174:MET:HE3	13:B:174:MET:HB2	1.72	0.44
13:B:178:LYS:HB3	13:B:180:PRO:HD3	1.99	0.44
14:C:28:ILE:HG22	15:D:51:LEU:HD11	1.99	0.44
15:D:280:GLY:HA2	15:D:283:ARG:HB2	1.99	0.44
22:K:88:LEU:HD22	22:K:116:VAL:HG13	1.99	0.44
27:P:159:ASP:N	27:P:159:ASP:OD1	2.48	0.44
1:U:501:LEU:HD11	1:U:544:ILE:HD11	1.98	0.44
2:V:328:VAL:O	2:V:332:LEU:HB2	2.17	0.44
2:V:435:GLU:HG2	2:V:453:HIS:NE2	2.32	0.44
5:Y:134:LEU:HB3	14:C:376:VAL:HB	1.99	0.44
5:Y:170:GLU:CA	15:D:189:GLU:HB3	2.47	0.44
5:Y:183:TYR:OH	5:Y:212:GLU:OE1	2.31	0.44
6:Z:181:ASP:HA	6:Z:182:THR:HA	1.72	0.44
6:Z:223:ASN:HA	6:Z:224:HIS:HA	1.63	0.44
7:a:220:PRO:O	7:a:223:GLU:HG2	2.17	0.44
9:c:241:ASN:C	9:c:243:SER:H	2.25	0.44
12:A:297:ARG:O	12:A:301:GLU:N	2.31	0.44
13:B:153:ASN:O	13:B:157:HIS:HA	2.17	0.44
14:C:182:GLN:H	14:C:182:GLN:CD	2.25	0.44
15:D:186:THR:HG23	15:D:187:HIS:CD2	2.52	0.44
15:D:201:GLY:O	15:D:329:ARG:HB2	2.17	0.44
15:D:229:ARG:CZ	16:E:267:PHE:HB3	2.47	0.44
15:D:231:VAL:HG12	15:D:232:GLY:H	1.81	0.44
17:F:255:GLN:O	17:F:258:GLN:NE2	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:K:48:LEU:HD21	22:K:77:ALA:HB2	1.99	0.44
23:L:148:CYS:SG	23:L:152:ASN:N	2.83	0.44
20:i:178:ASP:OD2	20:i:195:LYS:NZ	2.41	0.44
26:o:113:ILE:HG12	26:o:119:THR:HG22	1.99	0.44
28:q:57:ALA:O	28:q:61:GLN:HB2	2.17	0.44
32:f:608:LYS:HA	32:f:611:GLN:HB3	1.99	0.44
32:f:623:LYS:O	32:f:627:GLU:HB3	2.17	0.44
32:f:671:ALA:O	32:f:674:THR:OG1	2.26	0.44
1:U:107:HIS:HA	1:U:110:LYS:HE3	1.99	0.44
1:U:184:CYS:O	15:D:46:LYS:CE	2.65	0.44
2:V:25:GLU:O	2:V:28:PRO:HD2	2.16	0.44
2:V:394:LEU:HD23	10:d:116:HIS:CE1	2.50	0.44
9:c:213:GLU:HA	9:c:216:MET:HG2	1.99	0.44
12:A:187:LEU:O	12:A:190:VAL:HG12	2.17	0.44
12:A:301:GLU:HG3	17:F:254:PRO:HG3	1.98	0.44
13:B:140:ASP:O	13:B:144:LEU:HG	2.17	0.44
13:B:184:TYR:HD1	13:B:240:ALA:HB1	1.82	0.44
13:B:307:ARG:O	13:B:311:GLU:N	2.33	0.44
13:B:365:PHE:HD1	13:B:395:ILE:HG12	1.82	0.44
13:B:427:LEU:HD12	13:B:430:LYS:HD2	1.99	0.44
17:F:312:GLU:HA	17:F:315:ASN:HB3	1.98	0.44
32:f:286:LYS:HD3	32:f:326:LEU:HD23	2.00	0.44
32:f:664:GLU:C	32:f:665:GLU:O	2.59	0.44
32:f:780:PRO:HB2	32:f:800:LEU:HA	1.94	0.44
1:U:105:ILE:HG13	14:C:13:GLU:O	2.17	0.44
4:X:406:ASN:HA	4:X:409:LYS:HB2	1.99	0.44
5:Y:131:THR:O	5:Y:137:ARG:NH1	2.50	0.44
5:Y:318:TYR:HA	5:Y:321:GLU:HG3	1.99	0.44
6:Z:68:TRP:HD1	6:Z:104:ASN:HD21	1.64	0.44
6:Z:228:TYR:CE1	7:a:215:GLU:CB	3.00	0.44
6:Z:228:TYR:CD1	6:Z:229:GLN:N	2.86	0.44
9:c:170:LEU:HG	9:c:171:GLY:H	1.82	0.44
9:c:190:GLN:HG3	14:C:68:GLU:HG3	1.99	0.44
9:c:258:ALA:O	9:c:261:GLU:HG2	2.17	0.44
10:d:123:PRO:O	10:d:127:ILE:HG12	2.17	0.44
13:B:166:ASP:HA	13:B:167:THR:OG1	2.17	0.44
13:B:194:ILE:HA	13:B:197:ILE:HG22	2.00	0.44
14:C:82:LYS:HG3	14:C:84:LYS:HG3	1.98	0.44
16:E:289:LEU:HA	16:E:294:ARG:HD2	1.99	0.44
19:h:91:ARG:HH12	26:o:69:SER:HA	1.82	0.44
29:r:122:SER:OG	29:r:123:GLY:N	2.49	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:s:198:VAL:HG22	30:s:203:ILE:HG12	1.99	0.44
1:U:152:GLY:HA2	15:D:41:TYR:CB	2.47	0.44
2:V:416:ARG:CB	5:Y:349:LYS:HB3	2.47	0.44
3:W:367:ALA:HB1	3:W:416:GLN:OE1	2.18	0.44
5:Y:101:ARG:HD3	5:Y:130:LYS:HD3	1.99	0.44
5:Y:238:GLU:O	5:Y:242:LYS:HB2	2.18	0.44
6:Z:63:LYS:CB	6:Z:64:ASP:HB2	2.33	0.44
7:a:18:GLN:HG3	7:a:22:TRP:CD1	2.53	0.44
7:a:219:HIS:HB3	7:a:222:LEU:HG	2.00	0.44
7:a:219:HIS:ND1	7:a:221:VAL:HG22	2.33	0.44
9:c:191:ALA:CB	14:C:119:ASP:HB2	2.48	0.44
12:A:290:GLY:HA2	12:A:291:GLY:HA3	1.82	0.44
13:B:211:TYR:CD2	13:B:218:PRO:HD2	2.52	0.44
14:C:203:VAL:HA	14:C:206:HIS:HB2	2.00	0.44
16:E:60:VAL:N	16:E:96:THR:O	2.49	0.44
21:J:2:SER:OG	21:J:3:TYR:N	2.45	0.44
21:J:165:ALA:O	21:J:169:ARG:CB	2.66	0.44
26:O:141:LYS:NZ	26:O:157:GLU:OE2	2.44	0.44
28:Q:166:GLU:HG2	29:r:141:ARG:HH21	1.83	0.44
31:T:124:TYR:HB2	31:T:137:LEU:HD13	1.99	0.44
26:o:212:LEU:HD21	27:p:201:LYS:HD2	1.99	0.44
28:q:18:ASP:HA	28:q:178:PHE:HD1	1.83	0.44
31:t:1:THR:N	31:t:105:PRO:O	2.47	0.44
32:f:283:THR:O	32:f:287:ASP:HB2	2.18	0.44
32:f:378:ASN:CB	32:f:391:LEU:CD1	2.94	0.44
2:V:265:ASP:HA	2:V:268:GLU:HB3	2.00	0.44
6:Z:96:HIS:CE1	6:Z:123:ILE:HG12	2.53	0.44
12:A:166:VAL:HG22	12:A:238:ILE:HG12	2.00	0.44
13:B:249:ARG:NH1	14:C:278:ASN:O	2.50	0.44
15:D:145:PRO:HB2	15:D:146:GLU:HB2	1.99	0.44
15:D:355:SER:HB3	15:D:358:VAL:HG23	2.00	0.44
16:E:44:GLU:OE2	17:F:77:SER:OG	2.33	0.44
26:O:38:SER:OG	26:O:40:ASN:OD1	2.29	0.44
28:Q:199:GLN:HA	28:q:197:PRO:HD2	1.99	0.44
22:k:235:GLU:HA	22:k:238:ILE:HD12	1.98	0.44
32:f:664:GLU:CB	32:f:696:LEU:HG	2.45	0.44
1:U:147:TYR:C	14:C:15:LYS:CE	2.76	0.44
1:U:505:ASP:HB3	1:U:508:THR:HG22	1.99	0.44
3:W:340:VAL:HG22	3:W:350:ARG:HH11	1.82	0.44
6:Z:176:LEU:HD12	6:Z:177:ARG:N	2.33	0.44
9:c:240:HIS:O	9:c:243:SER:CB	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:A:222:LYS:HD2	13:B:319:PHE:HB2	2.00	0.44
12:A:335:GLY:HA2	17:F:394:ALA:HB3	1.99	0.44
13:B:343:ARG:HA	13:B:347:ILE:HD13	2.00	0.44
14:C:215:SER:HA	14:C:216:GLY:HA3	1.57	0.44
14:C:228:ALA:O	14:C:230:MET:HG2	2.18	0.44
15:D:192:LYS:NZ	15:D:302:ASN:OD1	2.40	0.44
15:D:289:LEU:HA	15:D:292:LEU:HG	1.99	0.44
16:E:349:GLU:OE2	17:F:350:ARG:NH1	2.50	0.44
17:F:93:VAL:HB	17:F:147:PRO:HB3	1.99	0.44
17:F:145:LEU:HG	17:F:146:LYS:HG2	2.00	0.44
17:F:428:GLN:HA	17:F:429:ALA:HA	1.69	0.44
20:I:178:ASP:OD2	20:I:195:LYS:NZ	2.39	0.44
22:k:99:HIS:HB2	22:k:107:MET:HE3	1.99	0.44
32:f:281:ILE:O	32:f:285:CYS:HB2	2.18	0.44
32:f:303:VAL:HG22	32:f:339:ILE:HA	2.00	0.44
32:f:354:GLU:HG3	32:f:355:ASN:H	1.82	0.44
32:f:536:SER:O	32:f:540:GLN:CB	2.66	0.44
32:f:646:MET:HA	32:f:649:HIS:HD1	1.82	0.44
2:V:266:GLN:HB3	2:V:299:GLN:HE22	1.82	0.44
2:V:451:ILE:HG23	2:V:458:VAL:HA	1.99	0.44
3:W:312:MET:HG3	3:W:365:ILE:HD13	2.00	0.44
6:Z:224:HIS:CD2	6:Z:228:TYR:CD2	3.06	0.44
6:Z:253:THR:O	6:Z:257:MET:HG2	2.17	0.44
12:A:311:PRO:N	12:A:312:ARG:HA	2.33	0.44
12:A:414:ASN:HA	12:A:417:ILE:HG12	2.00	0.44
23:L:189:LYS:HZ2	23:L:193:ARG:HH22	1.64	0.44
19:h:122:THR:HG22	19:h:129:PRO:HB3	2.00	0.44
20:i:216:LEU:HD12	20:i:225:ILE:HG12	2.00	0.44
22:k:10:ARG:HD2	22:k:22:PHE:HE2	1.83	0.44
28:q:171:PHE:HB3	28:q:173:LEU:H	1.83	0.44
32:f:282:PHE:HE2	32:f:317:LEU:HD21	1.83	0.44
32:f:357:ARG:NH2	32:f:754:LYS:HG3	2.33	0.44
32:f:380:PHE:CD2	32:f:380:PHE:O	2.70	0.44
2:V:25:GLU:HB2	2:V:26:PRO:HD3	2.00	0.44
2:V:31:ALA:O	2:V:35:VAL:HG22	2.18	0.44
2:V:197:THR:HG21	2:V:200:ARG:HG3	2.00	0.44
3:W:423:ASN:HB2	6:Z:255:ASP:OD1	2.18	0.44
3:W:452:ILE:CD1	6:Z:222:ILE:CG1	2.96	0.44
5:Y:283:LYS:HE2	5:Y:292:TYR:CZ	2.53	0.44
5:Y:363:ASN:O	5:Y:367:GLN:HB2	2.17	0.44
6:Z:40:LEU:HD22	6:Z:89:GLU:HG3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:a:245:VAL:HA	7:a:246:GLU:C	2.41	0.44
9:c:247:GLU:OE1	9:c:247:GLU:N	2.51	0.44
10:d:191:PHE:HB2	10:d:220:ASN:HA	1.99	0.44
12:A:261:PHE:HD2	12:A:305:GLN:HE21	1.64	0.44
15:D:276:ASP:O	15:D:279:THR:OG1	2.27	0.44
16:E:124:HIS:CE1	17:F:320:PHE:HA	2.53	0.44
16:E:257:LEU:O	16:E:261:LEU:HG	2.18	0.44
17:F:300:LYS:HD2	17:F:304:ARG:NH2	2.33	0.44
21:J:195:LEU:O	21:J:201:SER:OG	2.36	0.44
23:l:40:SER:HB3	23:l:187:LEU:HD22	1.98	0.44
24:m:201:HIS:HE1	24:m:206:ASP:HB2	1.83	0.44
1:U:407:SER:O	1:U:411:ILE:HG13	2.17	0.43
1:U:842:LYS:HE3	1:U:843:GLU:O	2.18	0.43
2:V:137:GLU:N	2:V:138:PRO:HD2	2.33	0.43
3:W:337:ALA:O	3:W:342:GLY:N	2.51	0.43
5:Y:237:ARG:HB2	5:Y:241:ILE:HD12	2.00	0.43
6:Z:30:GLY:HA3	6:Z:31:ASN:OD1	2.18	0.43
6:Z:105:ASP:HA	6:Z:108:ILE:HD13	1.99	0.43
6:Z:196:HIS:HA	9:c:231:LEU:HG	1.99	0.43
8:b:142:ASN:HD22	8:b:172:THR:HG22	1.83	0.43
9:c:242:GLU:CA	9:c:245:VAL:HB	2.48	0.43
12:A:102:ILE:HD11	12:A:136:GLU:HA	2.00	0.43
12:A:244:GLU:HG2	13:B:268:ARG:NH2	2.32	0.43
12:A:375:ARG:NH1	22:K:204:GLN:NE2	2.66	0.43
14:C:42:LEU:HD12	14:C:42:LEU:HA	1.84	0.43
14:C:196:LYS:HE3	14:C:252:ASP:OD2	2.18	0.43
15:D:232:GLY:HA3	15:D:269:ALA:HB3	2.00	0.43
15:D:263:PHE:CD1	15:D:308:ILE:HG13	2.52	0.43
15:D:410:ASP:HA	15:D:411:GLU:C	2.43	0.43
17:F:327:LYS:N	17:F:327:LYS:HD2	2.32	0.43
17:F:434:ASN:CB	17:F:436:GLN:NE2	2.81	0.43
19:h:222:THR:OG1	19:h:225:GLU:OE1	2.28	0.43
28:q:38:MET:HA	28:q:61:GLN:HE22	1.83	0.43
32:f:45:LEU:HD22	32:f:86:THR:HG21	1.99	0.43
32:f:130:ALA:O	32:f:134:SER:CB	2.64	0.43
32:f:368:ALA:O	32:f:372:LEU:HB2	2.18	0.43
1:U:362:ASN:HA	1:U:395:ARG:NH1	2.33	0.43
2:V:193:GLN:HG3	2:V:200:ARG:NH1	2.32	0.43
2:V:280:ALA:HA	2:V:281:ASN:HA	1.69	0.43
2:V:416:ARG:HA	2:V:458:VAL:O	2.17	0.43
2:V:438:VAL:O	2:V:442:ILE:HG13	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Z:221:PRO:HB2	6:Z:223:ASN:N	2.30	0.43
9:c:236:GLU:HG2	9:c:239:LYS:HD2	2.00	0.43
10:d:233:GLU:HB3	10:d:235:THR:HG23	1.99	0.43
14:C:73:VAL:HA	14:C:115:ALA:HA	1.99	0.43
17:F:222:GLY:HA3	17:F:347:ARG:O	2.18	0.43
22:K:105:GLU:OE2	30:S:75:TYR:OH	2.25	0.43
28:Q:31:ASP:N	28:Q:31:ASP:OD1	2.50	0.43
20:i:63:GLU:CD	20:i:64:LYS:H	2.26	0.43
23:l:50:LYS:N	23:l:209:ASN:O	2.47	0.43
23:l:98:VAL:O	31:t:90:SER:OG	2.34	0.43
24:m:152:ASP:OD1	24:m:156:VAL:N	2.51	0.43
30:s:28:ARG:HB2	30:s:191:ASP:CG	2.43	0.43
32:f:494:ARG:NE	32:f:494:ARG:CA	2.82	0.43
2:V:416:ARG:HB3	5:Y:349:LYS:HB3	1.99	0.43
5:Y:46:ARG:C	5:Y:48:ASN:H	2.26	0.43
5:Y:286:TRP:O	5:Y:287:LEU:HG	2.17	0.43
6:Z:96:HIS:NE2	6:Z:123:ILE:HG12	2.34	0.43
6:Z:136:GLU:OE2	6:Z:157:HIS:ND1	2.40	0.43
7:a:163:TYR:HH	7:a:169:HIS:HD1	1.59	0.43
10:d:225:PHE:HA	10:d:226:ALA:HA	1.76	0.43
12:A:134:ILE:HD12	12:A:152:PRO:HG3	2.00	0.43
12:A:306:LEU:HA	12:A:312:ARG:NE	2.33	0.43
12:A:351:ARG:O	12:A:355:PHE:N	2.50	0.43
12:A:376:LEU:HD12	22:K:204:GLN:O	2.17	0.43
13:B:295:TYR:CG	13:B:299:SER:HB3	2.53	0.43
14:C:369:TYR:O	14:C:373:GLU:N	2.49	0.43
17:F:438:TYR:CG	23:L:51:ARG:NE	2.86	0.43
29:r:56:GLU:OE2	29:r:99:THR:OG1	2.33	0.43
32:f:412:ALA:HA	32:f:447:ALA:HB2	2.00	0.43
32:f:690:VAL:O	32:f:694:LEU:HB2	2.18	0.43
1:U:149:GLN:NE2	14:C:18:SER:HG	2.10	0.43
1:U:424:ALA:HA	1:U:427:LEU:HD13	2.00	0.43
2:V:90:GLU:OE1	2:V:90:GLU:N	2.50	0.43
9:c:152:LYS:HE3	15:D:78:GLU:CD	2.43	0.43
12:A:376:LEU:CD1	22:K:204:GLN:O	2.67	0.43
15:D:293:LEU:HG	15:D:326:ARG:CZ	2.49	0.43
16:E:135:ILE:HD12	16:E:183:LEU:HD12	1.99	0.43
22:K:216:GLU:HB2	22:K:229:PHE:CD2	2.54	0.43
29:R:56:GLU:OE2	29:R:99:THR:OG1	2.29	0.43
25:n:14:LEU:HD11	25:n:101:ALA:HB3	2.01	0.43
25:n:33:LYS:O	25:n:45:ARG:NH2	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:316:ASP:HA	32:f:319:GLU:HG2	1.99	0.43
32:f:446:LEU:HD13	32:f:480:GLY:HA2	2.00	0.43
1:U:24:LEU:HA	1:U:27:LEU:HB2	2.01	0.43
1:U:163:PHE:CE2	1:U:201:LEU:HD21	2.54	0.43
2:V:167:LEU:HD12	2:V:168:GLN:N	2.33	0.43
3:W:276:LEU:HD21	3:W:350:ARG:NH1	2.34	0.43
9:c:36:LEU:HD11	9:c:71:ASP:HA	2.00	0.43
9:c:149:GLN:HB2	9:c:156:VAL:HG13	1.99	0.43
10:d:148:TYR:CE2	10:d:178:ILE:HD13	2.54	0.43
12:A:299:MET:HG3	12:A:300:LEU:H	1.83	0.43
12:A:322:ASN:OD1	12:A:428:ARG:NH2	2.52	0.43
16:E:124:HIS:NE2	17:F:319:GLY:O	2.52	0.43
17:F:76:ASN:O	17:F:80:ILE:HG13	2.18	0.43
17:F:228:PRO:HA	17:F:229:PRO:HD3	1.92	0.43
23:L:52:ALA:CB	23:L:59:HIS:CD2	3.01	0.43
28:Q:181:ARG:NH1	28:Q:190:ASP:OD1	2.52	0.43
21:j:32:ALA:HB3	21:j:161:ILE:HD11	2.01	0.43
22:k:101:PHE:CE1	29:r:57:ARG:HG2	2.53	0.43
32:f:664:GLU:O	32:f:665:GLU:C	2.57	0.43
6:Z:14:LEU:HD23	9:c:43:LYS:HD3	2.01	0.43
7:a:100:THR:HA	7:a:103:LYS:HG2	2.00	0.43
9:c:145:VAL:HB	9:c:157:ILE:HG13	2.00	0.43
10:d:244:LYS:HA	10:d:247:ILE:HD12	2.01	0.43
12:A:171:ASP:C	12:A:230:ALA:HB2	2.43	0.43
13:B:203:LEU:HD21	13:B:211:TYR:HB2	2.00	0.43
14:C:370:ALA:O	14:C:374:ARG:N	2.51	0.43
15:D:375:ILE:HA	15:D:378:ILE:HB	2.00	0.43
16:E:232:MET:N	16:E:276:ILE:O	2.47	0.43
17:F:395:GLN:O	17:F:399:VAL:HG23	2.19	0.43
17:F:438:TYR:CB	23:L:51:ARG:HD2	2.48	0.43
20:I:102:GLN:HG2	28:Q:82:ASN:ND2	2.34	0.43
31:T:27:LEU:HD11	31:T:34:ALA:HB1	2.01	0.43
18:g:141:ILE:HG22	18:g:151:VAL:HG22	1.99	0.43
19:h:189:HIS:NE2	19:h:234:ALA:O	2.51	0.43
20:i:136:TYR:HB2	20:i:148:TYR:HB2	2.00	0.43
23:l:26:MET:HE1	23:l:148:CYS:HB2	2.01	0.43
27:p:28:PHE:HB2	27:p:39:PHE:HB2	2.01	0.43
27:p:123:SER:HB3	27:p:137:VAL:HB	2.00	0.43
32:f:494:ARG:HE	32:f:494:ARG:CA	2.31	0.43
32:f:513:GLU:HG3	32:f:557:TRP:HZ3	1.84	0.43
32:f:698:SER:OG	32:f:716:ASP:OD1	2.36	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:173:VAL:N	1:U:174:PRO:HD3	2.34	0.43
1:U:431:THR:C	1:U:433:PRO:HD3	2.43	0.43
1:U:713:TYR:HB2	1:U:734:GLN:HE21	1.84	0.43
2:V:487:HIS:ND1	6:Z:279:LYS:HD2	2.33	0.43
3:W:373:ILE:HG13	7:a:326:GLU:HB2	2.00	0.43
3:W:416:GLN:CB	3:W:417:ARG:HA	2.39	0.43
8:b:4:GLU:HG3	8:b:108:ARG:HE	1.84	0.43
9:c:55:GLY:HA3	9:c:112:TYR:CZ	2.54	0.43
12:A:123:VAL:HG23	17:F:88:TYR:CE1	2.54	0.43
12:A:217:PRO:HA	12:A:428:ARG:NE	2.33	0.43
14:C:274:LEU:HD21	14:C:306:LEU:HD23	1.99	0.43
15:D:233:SER:HB2	16:E:255:ARG:HB3	2.00	0.43
15:D:371:SER:HA	15:D:372:GLY:HA3	1.72	0.43
16:E:261:LEU:O	16:E:265:ASP:N	2.52	0.43
17:F:283:ILE:O	17:F:328:VAL:HA	2.19	0.43
17:F:300:LYS:HD2	17:F:304:ARG:HH21	1.82	0.43
17:F:338:LEU:HD13	17:F:342:LEU:HD12	2.00	0.43
17:F:438:TYR:CG	23:L:51:ARG:CZ	2.99	0.43
23:L:50:LYS:HE2	23:L:61:LYS:HA	2.01	0.43
22:k:91:LYS:HD2	22:k:119:LEU:HD21	1.99	0.43
23:l:37:GLY:HA2	23:l:46:LEU:HA	2.01	0.43
24:m:40:ARG:HH21	24:m:161:TRP:NE1	2.17	0.43
1:U:186:SER:C	15:D:46:LYS:CB	2.55	0.43
1:U:187:LEU:HD13	15:D:45:LYS:H	1.83	0.43
1:U:338:HIS:NE2	1:U:342:LEU:HD11	2.34	0.43
2:V:353:LEU:HG	2:V:357:LEU:HD23	2.00	0.43
7:a:343:LEU:HD23	7:a:343:LEU:C	2.44	0.43
12:A:170:PRO:HB2	12:A:230:ALA:HA	2.00	0.43
12:A:289:ALA:HB1	17:F:295:ARG:HD3	2.01	0.43
12:A:313:GLY:C	12:A:315:ILE:N	2.76	0.43
12:A:384:GLU:HB2	13:B:347:ILE:HD11	2.00	0.43
14:C:80:MET:HE3	14:C:86:LEU:HG	2.01	0.43
14:C:113:ARG:HG2	14:C:127:LEU:HB2	2.00	0.43
14:C:229:ARG:NH1	14:C:232:ARG:HB2	2.33	0.43
15:D:303:VAL:HG23	15:D:304:ASN:HB2	2.01	0.43
15:D:340:GLN:H	15:D:340:GLN:CD	2.25	0.43
15:D:406:VAL:HA	15:D:407:ILE:HA	1.70	0.43
17:F:188:ILE:HD11	17:F:236:LEU:HD13	2.01	0.43
17:F:356:MET:HE2	17:F:362:ARG:HH11	1.83	0.43
24:M:92:ARG:NH2	31:T:73:ASP:OD1	2.52	0.43
28:q:85:ARG:O	28:q:89:ALA:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:22:GLY:O	32:f:26:GLU:CB	2.66	0.43
32:f:122:ALA:HB1	32:f:126:ILE:HD12	2.01	0.43
32:f:311:VAL:CA	32:f:490:ALA:HB1	2.48	0.43
1:U:74:PHE:CD1	1:U:103:LYS:HD2	2.53	0.43
1:U:385:PHE:CE2	1:U:411:ILE:HD13	2.54	0.43
1:U:596:ASN:O	1:U:600:ARG:HG2	2.19	0.43
2:V:94:VAL:HG22	2:V:138:PRO:HD3	1.99	0.43
2:V:455:LYS:HD2	2:V:457:TYR:HE1	1.83	0.43
3:W:428:TRP:CH2	6:Z:255:ASP:HB3	2.54	0.43
5:Y:295:TYR:O	5:Y:299:MET:HG2	2.18	0.43
7:a:124:ASN:C	7:a:126:GLY:HA2	2.43	0.43
7:a:287:ASN:HA	7:a:288:HIS:C	2.44	0.43
9:c:289:ASP:HA	9:c:292:MET:HG2	2.01	0.43
10:d:184:LYS:HB2	10:d:185:ALA:HB2	2.00	0.43
12:A:119:ALA:HB1	12:A:121:PHE:CE1	2.52	0.43
12:A:375:ARG:NE	22:K:204:GLN:HA	2.34	0.43
12:A:380:SER:HB3	12:A:385:ILE:CG2	2.45	0.43
12:A:409:PHE:O	12:A:413:VAL:HG23	2.19	0.43
13:B:249:ARG:HG3	13:B:283:PHE:CD2	2.53	0.43
14:C:161:ILE:HD12	14:C:164:VAL:HB	1.99	0.43
15:D:337:ASP:C	15:D:341:LYS:HG2	2.43	0.43
15:D:396:ALA:HA	15:D:399:PHE:CD2	2.54	0.43
16:E:309:ARG:O	16:E:312:ILE:HG22	2.19	0.43
18:G:22:LEU:HD11	18:G:25:VAL:CG2	2.49	0.43
18:G:185:LYS:HG3	18:G:187:PHE:H	1.84	0.43
21:J:179:GLU:O	21:J:182:GLU:N	2.48	0.43
22:K:157:ASP:OD2	22:K:159:SER:OG	2.37	0.43
1:U:153:ILE:CG1	15:D:41:TYR:OH	2.35	0.43
1:U:356:THR:HG22	1:U:717:ILE:HD13	2.01	0.43
1:U:764:LEU:HA	1:U:767:THR:HG23	2.00	0.43
9:c:33:ILE:HD11	9:c:207:TYR:CD2	2.54	0.43
12:A:143:ASP:O	12:A:147:TYR:N	2.46	0.43
12:A:243:SER:CB	13:B:264:PRO:HD3	2.49	0.43
13:B:304:GLU:HA	13:B:307:ARG:HG2	2.00	0.43
15:D:74:HIS:O	15:D:78:GLU:HG2	2.19	0.43
16:E:47:LEU:HA	16:E:50:LEU:CD1	2.45	0.43
31:T:41:ARG:NH2	31:T:53:ALA:O	2.52	0.43
19:h:59:GLU:HG2	19:h:206:ASP:HB3	2.01	0.43
32:f:645:ASP:O	32:f:649:HIS:ND1	2.51	0.43
1:U:570:LEU:HD22	1:U:578:LEU:HD11	2.00	0.42
1:U:742:HIS:O	1:U:883:ARG:NH2	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:789:ILE:HG23	1:U:844:LYS:HG2	2.01	0.42
2:V:193:GLN:HG2	2:V:242:HIS:HE1	1.84	0.42
2:V:345:ARG:HH12	2:V:357:LEU:HD22	1.84	0.42
5:Y:80:GLU:HA	5:Y:83:ARG:HG2	2.00	0.42
5:Y:132:VAL:HG22	14:C:339:THR:CA	2.47	0.42
5:Y:133:ALA:HA	14:C:376:VAL:HG13	1.42	0.42
6:Z:224:HIS:CD2	6:Z:228:TYR:HD2	2.36	0.42
7:a:346:ILE:HA	7:a:349:MET:HE2	2.00	0.42
13:B:126:SER:HA	13:B:127:VAL:HA	1.42	0.42
14:C:157:GLN:NE2	14:C:318:PRO:HD3	2.34	0.42
14:C:307:ARG:HA	14:C:307:ARG:HD3	1.75	0.42
15:D:83:GLN:NE2	15:D:140:VAL:HG21	2.23	0.42
15:D:103:VAL:HG11	15:D:139:LEU:HD21	2.01	0.42
15:D:297:ASP:OD2	15:D:326:ARG:NH2	2.52	0.42
15:D:357:GLU:OE2	15:D:396:ALA:N	2.52	0.42
15:D:417:TYR:HB2	18:G:18:PRO:HD2	2.01	0.42
17:F:187:ASP:HB3	17:F:368:ILE:HG21	2.00	0.42
17:F:366:MET:HA	17:F:369:HIS:HB2	2.00	0.42
18:G:120:ASP:OD1	19:H:84:ARG:NH1	2.51	0.42
19:H:231:ALA:H	19:H:232:ALA:HB3	1.84	0.42
20:I:86:LEU:O	20:I:90:LEU:HB2	2.19	0.42
23:L:109:VAL:HG21	23:L:145:PHE:HD2	1.84	0.42
23:L:111:LEU:O	23:L:115:LYS:CB	2.67	0.42
20:i:76:VAL:HG23	20:i:134:LEU:HB3	2.00	0.42
26:o:135:MET:O	26:o:139:GLU:HB2	2.19	0.42
32:f:355:ASN:HA	32:f:358:PHE:HD2	1.83	0.42
32:f:629:LYS:HE2	32:f:660:ILE:HG21	2.01	0.42
32:f:635:LYS:HD3	32:f:641:GLU:HG2	2.01	0.42
1:U:149:GLN:OE1	15:D:40:LEU:HD23	1.95	0.42
1:U:184:CYS:CA	15:D:46:LYS:HE3	2.49	0.42
2:V:32:PRO:O	2:V:36:GLU:HB3	2.19	0.42
3:W:244:CYS:HA	3:W:273:TYR:CE1	2.54	0.42
6:Z:247:LYS:HA	6:Z:250:TYR:CE2	2.54	0.42
6:Z:254:ASN:HA	6:Z:257:MET:CG	2.49	0.42
9:c:245:VAL:O	9:c:249:LEU:HG	2.20	0.42
12:A:174:TYR:HE1	12:A:227:ARG:HH21	1.68	0.42
13:B:110:GLY:N	13:B:150:VAL:O	2.47	0.42
14:C:42:LEU:HD12	14:C:45:LEU:HB2	2.00	0.42
14:C:310:ARG:HA	14:C:311:ILE:HA	1.77	0.42
14:C:388:ALA:O	14:C:392:GLN:N	2.52	0.42
15:D:163:MET:HA	15:D:221:HIS:NE2	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:D:231:VAL:H	15:D:234:GLU:CD	2.28	0.42
16:E:132:TYR:O	16:E:135:ILE:HG12	2.19	0.42
17:F:361:ALA:O	17:F:365:ILE:N	2.41	0.42
17:F:402:GLU:HA	17:F:405:MET:HB2	2.01	0.42
17:F:437:TYR:HA	23:L:53:GLN:CD	2.36	0.42
27:p:148:GLY:O	27:p:152:SER:CB	2.66	0.42
1:U:140:ARG:HG3	14:C:12:GLU:HB2	2.01	0.42
1:U:187:LEU:HA	15:D:46:LYS:HA	0.92	0.42
2:V:398:LEU:O	2:V:402:VAL:HG23	2.19	0.42
2:V:466:ILE:HG23	2:V:467:TYR:HB2	2.01	0.42
2:V:494:MET:SD	6:Z:282:ASN:ND2	2.92	0.42
3:W:436:MET:HG2	9:c:239:LYS:HG2	2.01	0.42
7:a:173:TYR:CZ	7:a:216:LEU:HD13	2.54	0.42
7:a:270:ARG:NH2	7:a:270:ARG:O	2.52	0.42
12:A:232:ARG:NH1	12:A:271:LEU:HD13	2.30	0.42
12:A:309:PHE:HZ	17:F:235:LEU:HA	1.84	0.42
13:B:114:GLU:HG3	13:B:122:ILE:HB	2.00	0.42
13:B:175:LYS:NZ	13:B:247:PHE:O	2.53	0.42
15:D:143:LEU:HB3	15:D:144:PRO:HD2	2.00	0.42
15:D:200:ARG:O	15:D:307:VAL:HB	2.19	0.42
16:E:83:CYS:HB3	16:E:87:LEU:HD21	2.01	0.42
17:F:357:PRO:O	17:F:362:ARG:NH1	2.53	0.42
25:N:18:SER:HB2	25:N:31:THR:H	1.83	0.42
27:P:162:HIS:O	27:P:166:THR:OG1	2.34	0.42
30:S:187:VAL:HG21	26:o:24:MET:HE3	2.02	0.42
18:g:61:LEU:HD21	18:g:66:VAL:HG21	2.00	0.42
32:f:688:ARG:HA	32:f:745:LEU:CB	2.49	0.42
32:f:794:ALA:HA	32:f:797:LEU:HB2	2.01	0.42
1:U:195:ASN:HB2	1:U:223:LEU:HD13	2.01	0.42
1:U:479:LEU:HD13	1:U:511:ALA:HA	2.02	0.42
2:V:378:VAL:HG13	2:V:382:PHE:CD2	2.55	0.42
3:W:310:THR:C	3:W:312:MET:H	2.27	0.42
6:Z:195:VAL:O	6:Z:199:LYS:HB2	2.20	0.42
8:b:52:ILE:HD11	8:b:58:CYS:HB3	2.01	0.42
12:A:214:LEU:HB2	12:A:320:ALA:HA	2.00	0.42
12:A:261:PHE:HE2	12:A:305:GLN:HB3	1.84	0.42
13:B:387:LYS:HE3	13:B:423:LYS:HE3	2.01	0.42
14:C:115:ALA:O	14:C:124:HIS:N	2.33	0.42
15:D:164:TYR:HE1	15:D:222:HIS:HE1	1.66	0.42
15:D:263:PHE:HD1	15:D:308:ILE:HG13	1.83	0.42
16:E:149:ILE:HG12	16:E:274:LYS:HE2	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:E:226:GLN:CD	16:E:272:ARG:HD3	2.44	0.42
17:F:256:LEU:HD13	17:F:291:ILE:HD13	2.01	0.42
21:J:79:ASP:HB3	21:J:127:PHE:HD1	1.85	0.42
22:K:50:VAL:HG11	22:K:66:LYS:HB2	2.02	0.42
26:O:209:THR:HG21	27:P:168:SER:HB3	2.01	0.42
24:m:35:THR:H	24:m:166:GLY:HA3	1.84	0.42
24:m:39:ILE:HG22	24:m:46:VAL:HB	2.02	0.42
28:q:46:CYS:HA	28:q:102:LEU:HB2	2.02	0.42
1:U:338:HIS:CE1	1:U:785:PRO:HB3	2.54	0.42
2:V:359:PRO:HB3	2:V:382:PHE:CG	2.53	0.42
5:Y:210:SER:HB3	5:Y:213:LEU:HG	2.01	0.42
6:Z:241:SER:HB2	6:Z:246:VAL:HG23	2.01	0.42
8:b:33:VAL:HA	8:b:36:VAL:HG22	2.00	0.42
9:c:157:ILE:HG23	9:c:158:ASP:N	2.35	0.42
10:d:191:PHE:O	10:d:194:ALA:N	2.51	0.42
12:A:392:ALA:HB2	12:A:409:PHE:CD2	2.54	0.42
13:B:209:GLU:HG2	13:B:210:TYR:N	2.34	0.42
13:B:249:ARG:HB3	14:C:283:PHE:CE2	2.53	0.42
15:D:205:TYR:O	15:D:333:PHE:HB2	2.20	0.42
17:F:356:MET:HE2	17:F:362:ARG:HD3	2.02	0.42
21:J:48:LYS:H	21:J:205:ASN:HB3	1.84	0.42
21:J:199:VAL:O	21:J:201:SER:N	2.53	0.42
29:R:37:ILE:HG23	29:R:60:ALA:HB2	2.01	0.42
22:k:101:PHE:HD1	22:k:101:PHE:HA	1.72	0.42
24:m:228:PRO:HB2	24:m:231:ILE:HG12	2.00	0.42
29:r:41:LEU:HD23	29:r:103:GLY:HA3	2.00	0.42
31:t:7:THR:OG1	31:t:182:ARG:NH2	2.52	0.42
32:f:77:GLU:O	32:f:81:GLN:HB2	2.19	0.42
1:U:444:TYR:CE1	1:U:479:LEU:HD23	2.54	0.42
1:U:639:LEU:HB3	14:C:43:ARG:HD3	2.01	0.42
4:X:405:GLN:O	4:X:409:LYS:HD3	2.19	0.42
6:Z:228:TYR:CZ	7:a:215:GLU:CB	3.02	0.42
9:c:288:VAL:O	9:c:292:MET:HG2	2.19	0.42
10:d:47:GLN:HA	10:d:50:LEU:HB2	2.02	0.42
14:C:115:ALA:HB3	14:C:124:HIS:HB3	2.01	0.42
14:C:219:LEU:HD11	15:D:287:ARG:HG3	2.01	0.42
15:D:267:ILE:HG12	15:D:309:MET:HG3	2.01	0.42
15:D:313:ARG:NH2	16:E:242:ARG:O	2.52	0.42
16:E:46:ASP:O	16:E:50:LEU:HG	2.20	0.42
16:E:69:PHE:O	16:E:80:VAL:HA	2.20	0.42
16:E:170:CYS:SG	16:E:299:ILE:HD13	2.60	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:I:239:LYS:NZ	20:I:243:GLU:OE2	2.52	0.42
22:K:49:ALA:HB1	22:K:202:LEU:HD11	2.00	0.42
24:M:36:ALA:HB1	24:M:49:VAL:HG22	2.02	0.42
27:P:138:VAL:HB	27:P:146:MET:HE3	2.01	0.42
30:S:28:ARG:HB2	30:S:190:GLY:HA3	2.00	0.42
18:g:232:GLU:HA	18:g:235:ILE:HD12	2.02	0.42
25:n:88:TYR:OH	31:t:59:ASP:OD1	2.33	0.42
32:f:796:LEU:HG	32:f:799:VAL:CG2	2.42	0.42
2:V:487:HIS:CG	6:Z:275:LEU:HG	2.55	0.42
3:W:433:ASN:HA	3:W:436:MET:HG3	2.00	0.42
4:X:378:LEU:O	5:Y:312:ARG:HG2	2.19	0.42
5:Y:130:LYS:CG	14:C:340:ARG:CD	2.93	0.42
7:a:180:LEU:HD11	7:a:222:LEU:HB3	2.02	0.42
7:a:289:ARG:HG3	7:a:332:HIS:CE1	2.55	0.42
7:a:307:VAL:O	7:a:311:VAL:HG22	2.20	0.42
12:A:84:LYS:O	12:A:87:LEU:HG	2.19	0.42
12:A:94:GLN:OE1	13:B:131:HIS:NE2	2.53	0.42
12:A:170:PRO:CB	12:A:230:ALA:HA	2.50	0.42
12:A:393:GLY:HA2	12:A:396:ALA:HB3	2.01	0.42
13:B:177:GLU:N	13:B:178:LYS:HA	2.34	0.42
13:B:180:PRO:HD2	13:B:242:GLN:HE22	1.83	0.42
13:B:197:ILE:HG13	13:B:222:VAL:HG11	2.01	0.42
13:B:208:PRO:HG2	32:f:715:HIS:CB	2.49	0.42
14:C:75:GLU:HG2	14:C:90:HIS:NE2	2.34	0.42
15:D:309:MET:HE3	15:D:309:MET:HB2	1.98	0.42
15:D:341:LYS:HA	15:D:344:ILE:HG22	2.00	0.42
16:E:83:CYS:SG	16:E:87:LEU:HD11	2.60	0.42
18:G:148:GLY:O	18:G:150:GLN:NE2	2.52	0.42
20:I:229:LYS:N	20:I:232:GLU:OE2	2.46	0.42
28:Q:140:LEU:HD22	29:r:166:ARG:HH21	1.85	0.42
19:h:150:ASP:OD1	19:h:154:ALA:N	2.53	0.42
20:i:194:ILE:O	20:i:198:ASN:CB	2.66	0.42
21:j:169:ARG:HA	21:j:172:LEU:HD12	2.02	0.42
29:r:135:ALA:O	29:r:139:MET:HB2	2.20	0.42
31:t:27:LEU:HD22	31:t:184:TYR:HB2	2.00	0.42
1:U:451:ALA:HB2	1:U:483:LEU:HG	2.01	0.42
1:U:579:ARG:O	1:U:583:MET:HG2	2.19	0.42
2:V:30:PRO:HA	2:V:33:GLN:HB2	2.01	0.42
2:V:43:THR:HG23	2:V:62:HIS:HB3	2.01	0.42
3:W:370:TYR:HA	3:W:371:THR:HB	2.02	0.42
6:Z:15:VAL:O	6:Z:19:VAL:HG23	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:a:163:TYR:CE1	7:a:172:TYR:HB2	2.54	0.42
9:c:256:ASN:O	9:c:260:GLU:HB2	2.19	0.42
12:A:115:VAL:HG22	12:A:116:LYS:H	1.85	0.42
12:A:165:GLN:HE21	12:A:240:VAL:HG13	1.85	0.42
12:A:241:ILE:HD12	13:B:268:ARG:CZ	2.49	0.42
13:B:226:GLY:HA3	13:B:353:PHE:HB3	2.02	0.42
13:B:294:ARG:C	14:C:264:GLY:HA3	2.44	0.42
14:C:321:ASN:OD1	14:C:322:GLU:N	2.50	0.42
14:C:324:ALA:O	14:C:328:ILE:HG22	2.19	0.42
15:D:182:GLU:HG3	15:D:183:LEU:H	1.85	0.42
15:D:361:GLU:O	15:D:364:VAL:HG12	2.19	0.42
16:E:141:GLN:HE22	16:E:301:ILE:HA	1.85	0.42
17:F:89:LEU:HG	17:F:153:VAL:O	2.19	0.42
18:G:67:THR:HG22	18:G:69:LEU:H	1.85	0.42
22:K:59:MET:HE2	22:K:59:MET:HB3	1.86	0.42
20:i:16:GLY:N	21:j:21:TYR:OH	2.52	0.42
21:j:137:ASP:HB2	21:j:141:THR:H	1.85	0.42
28:q:5:ILE:HG22	28:q:16:ALA:HB3	2.02	0.42
30:s:155:PHE:HB2	30:s:163:HIS:CE1	2.55	0.42
1:U:342:LEU:HD13	1:U:378:CYS:O	2.19	0.42
3:W:285:ASP:O	3:W:289:ARG:HG3	2.20	0.42
3:W:440:ASN:O	3:W:444:HIS:ND1	2.53	0.42
5:Y:97:GLU:C	14:C:340:ARG:O	2.63	0.42
6:Z:54:PHE:HB3	6:Z:82:PHE:HE2	1.84	0.42
7:a:4:VAL:HB	7:a:5:PRO:HD3	2.02	0.42
7:a:278:MET:HE1	7:a:339:ARG:HB2	2.01	0.42
9:c:37:ALA:O	9:c:41:MET:HG2	2.20	0.42
9:c:152:LYS:HE2	15:D:81:ARG:NE	2.35	0.42
9:c:282:ARG:NH1	9:c:284:LEU:O	2.52	0.42
10:d:106:LEU:O	10:d:109:GLN:HG2	2.20	0.42
11:e:6:GLN:N	11:e:7:PRO:HD2	2.34	0.42
12:A:275:ASP:CG	13:B:314:ASN:HD21	2.28	0.42
12:A:367:ASP:O	12:A:369:ARG:NH1	2.53	0.42
12:A:387:SER:O	12:A:391:GLU:HG2	2.20	0.42
12:A:417:ILE:O	12:A:421:ALA:N	2.51	0.42
13:B:214:MET:HB3	13:B:216:ILE:HG12	2.01	0.42
14:C:155:ASP:HA	14:C:158:ILE:HG12	2.02	0.42
14:C:333:SER:HA	14:C:336:MET:HE3	2.02	0.42
15:D:207:PRO:HG2	15:D:312:ASN:HB3	2.01	0.42
15:D:370:ILE:HG23	15:D:371:SER:H	1.84	0.42
15:D:407:ILE:HA	15:D:407:ILE:HD12	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:E:83:CYS:SG	16:E:107:ILE:HD13	2.59	0.42
16:E:120:TYR:OH	17:F:147:PRO:HD2	2.19	0.42
16:E:242:ARG:HB3	16:E:254:GLN:CD	2.44	0.42
17:F:317:LEU:HD13	17:F:346:GLY:O	2.20	0.42
20:i:47:ALA:HB1	20:i:64:LYS:HD2	2.01	0.42
24:m:173:LYS:HA	24:m:176:ILE:HD12	2.01	0.42
24:m:175:GLU:HA	24:m:178:LYS:HD3	2.01	0.42
26:o:63:LEU:HD11	26:o:79:ALA:HB2	2.01	0.42
29:r:179:VAL:HA	29:r:184:TRP:HA	2.01	0.42
32:f:248:LEU:O	32:f:252:ALA:HB3	2.19	0.42
1:U:105:ILE:C	14:C:21:ARG:HH12	2.28	0.42
1:U:636:VAL:HG11	15:D:54:LEU:CD2	2.50	0.42
2:V:290:TYR:HB2	2:V:312:ALA:HB1	2.01	0.42
2:V:400:HIS:O	2:V:403:ILE:HG22	2.20	0.42
8:b:18:ASN:HD21	8:b:25:ARG:NH2	2.17	0.42
10:d:148:TYR:HB3	10:d:199:PHE:CE2	2.55	0.42
12:A:212:VAL:HG12	12:A:339:ARG:HB3	2.02	0.42
12:A:354:ILE:O	12:A:357:ILE:HG22	2.19	0.42
12:A:375:ARG:CZ	22:K:204:GLN:CA	2.97	0.42
12:A:413:VAL:O	12:A:417:ILE:HG12	2.19	0.42
13:B:288:ASP:OD2	14:C:271:ARG:NH2	2.52	0.42
14:C:80:MET:HB3	14:C:82:LYS:HG2	2.02	0.42
15:D:159:LYS:HB3	15:D:160:PRO:HA	2.02	0.42
15:D:413:GLU:O	18:G:6:SER:N	2.44	0.42
16:E:76:GLY:N	16:E:77:PRO:HD2	2.35	0.42
16:E:170:CYS:HB3	16:E:276:ILE:CD1	2.50	0.42
16:E:234:GLU:OE1	17:F:308:ARG:HD3	2.20	0.42
17:F:246:ALA:HB1	17:F:281:SER:HA	2.01	0.42
17:F:437:TYR:CA	23:L:53:GLN:CG	2.96	0.42
24:M:37:ILE:HG12	24:M:197:ILE:HD11	2.02	0.42
21:j:72:ALA:HB3	21:j:132:LEU:HB2	2.01	0.42
27:p:78:GLU:OE1	27:p:80:ARG:NE	2.40	0.42
32:f:402:ASN:OD1	32:f:403:LYS:N	2.52	0.42
32:f:573:ILE:HG22	32:f:576:ILE:HB	2.01	0.42
2:V:275:VAL:HB	2:V:277:PRO:CD	2.46	0.41
6:Z:23:PHE:HA	6:Z:35:VAL:HG21	2.02	0.41
6:Z:109:ASN:O	6:Z:113:LYS:HG3	2.19	0.41
7:a:286:ALA:HB1	7:a:287:ASN:CA	2.43	0.41
8:b:164:ASP:H	8:b:165:GLY:HA2	1.81	0.41
10:d:40:GLY:HA3	10:d:41:THR:C	2.45	0.41
10:d:82:TYR:CZ	10:d:95:MET:HG3	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:A:101:ILE:HA	12:A:138:MET:O	2.20	0.41
12:A:122:VAL:HG23	17:F:90:VAL:HG22	2.01	0.41
12:A:123:VAL:HG11	12:A:147:TYR:HB3	2.03	0.41
12:A:403:ILE:HA	13:B:214:MET:HE1	2.02	0.41
13:B:138:PHE:HE2	13:B:162:VAL:H	1.67	0.41
14:C:99:VAL:HG13	14:C:101:LYS:HA	2.02	0.41
15:D:241:GLY:O	15:D:244:PRO:HD2	2.20	0.41
16:E:124:HIS:NE2	16:E:185:ARG:HD2	2.35	0.41
16:E:381:GLU:HG2	17:F:351:LYS:HZ2	1.84	0.41
17:F:93:VAL:C	17:F:147:PRO:HB3	2.45	0.41
17:F:299:GLU:HA	17:F:300:LYS:HA	1.92	0.41
26:O:141:LYS:NZ	31:t:152:GLU:OE2	2.44	0.41
32:f:80:ARG:HE	32:f:99:LEU:HD13	1.85	0.41
32:f:298:LEU:HA	32:f:301:HIS:CD2	2.55	0.41
32:f:338:ASP:HA	32:f:341:GLU:HG3	2.02	0.41
32:f:389:LYS:HD3	32:f:389:LYS:H	1.81	0.41
32:f:512:MET:HE1	32:f:554:TYR:HA	2.02	0.41
1:U:15:ASP:O	1:U:20:LYS:NZ	2.53	0.41
1:U:362:ASN:HA	1:U:395:ARG:HH11	1.85	0.41
2:V:108:LEU:HD23	2:V:111:TYR:HE2	1.86	0.41
2:V:346:LEU:HB3	2:V:361:PHE:CE1	2.54	0.41
3:W:340:VAL:HG13	3:W:350:ARG:HD2	2.01	0.41
7:a:287:ASN:HB3	7:a:289:ARG:HB3	2.02	0.41
9:c:53:VAL:HG22	9:c:114:SER:HB2	2.02	0.41
9:c:270:LEU:HB3	9:c:275:VAL:HG23	2.02	0.41
12:A:292:ASP:HB3	12:A:296:GLN:HE21	1.86	0.41
13:B:152:LEU:HD23	13:B:157:HIS:HB3	2.02	0.41
14:C:147:THR:HG22	14:C:150:MET:HG2	2.02	0.41
14:C:386:ALA:O	14:C:390:VAL:HG22	2.21	0.41
15:D:267:ILE:HG12	15:D:309:MET:CG	2.50	0.41
16:E:111:LEU:HD23	17:F:133:PHE:HE2	1.84	0.41
17:F:405:MET:HB3	17:F:409:ARG:HH22	1.85	0.41
29:R:21:THR:HG22	29:R:26:ILE:HG12	2.01	0.41
30:S:179:PHE:O	30:S:183:ALA:CB	2.68	0.41
32:f:228:LYS:O	32:f:232:TYR:HB3	2.19	0.41
1:U:600:ARG:CZ	15:D:56:VAL:HG23	2.37	0.41
2:V:135:LEU:HB3	2:V:181:TYR:HE2	1.85	0.41
2:V:430:SER:HB2	2:V:431:PRO:HD2	2.02	0.41
4:X:344:ARG:HA	4:X:385:LEU:O	2.21	0.41
5:Y:52:PRO:HD3	5:Y:115:GLY:HA2	2.02	0.41
5:Y:134:LEU:CB	14:C:376:VAL:CB	2.98	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:Y:145:LEU:HD13	5:Y:183:TYR:CD1	2.54	0.41
5:Y:236:LEU:O	5:Y:240:VAL:HG22	2.20	0.41
6:Z:229:GLN:O	6:Z:233:VAL:HG23	2.20	0.41
6:Z:238:PRO:HG2	7:a:285:PRO:O	2.21	0.41
10:d:101:LEU:HD13	10:d:161:GLU:H	1.84	0.41
12:A:138:MET:O	12:A:140:VAL:HG13	2.21	0.41
12:A:262:GLU:O	12:A:266:THR:N	2.50	0.41
13:B:211:TYR:CZ	13:B:217:LYS:HA	2.55	0.41
13:B:303:ARG:HH21	13:B:307:ARG:NH1	2.19	0.41
14:C:83:LYS:CB	14:C:98:ASP:OD2	2.69	0.41
14:C:84:LYS:HA	14:C:98:ASP:CA	2.43	0.41
15:D:411:GLU:HB3	15:D:412:GLN:NE2	2.35	0.41
17:F:321:GLN:O	17:F:324:THR:HG23	2.21	0.41
21:J:121:SER:OG	21:J:122:ASN:N	2.53	0.41
24:M:66:LEU:HD13	24:M:214:SER:HB2	2.02	0.41
25:N:82:LEU:HD23	25:N:82:LEU:HA	1.87	0.41
25:N:142:THR:HB	25:N:155:PHE:HE1	1.86	0.41
31:T:43:MET:SD	31:T:64:LYS:HG3	2.60	0.41
22:k:227:HIS:HE1	22:k:229:PHE:HD1	1.68	0.41
24:m:46:VAL:HG22	24:m:215:TRP:CD1	2.56	0.41
32:f:81:GLN:O	32:f:85:SER:HB2	2.21	0.41
32:f:170:TRP:CZ3	32:f:208:LEU:HB3	2.55	0.41
1:U:11:LEU:HB3	1:U:19:LEU:HG	2.02	0.41
1:U:252:LEU:O	1:U:256:ALA:HB3	2.19	0.41
1:U:632:GLN:HE21	15:D:54:LEU:HD11	1.72	0.41
1:U:632:GLN:NE2	15:D:54:LEU:HG	2.18	0.41
10:d:45:LYS:O	10:d:49:ILE:HG12	2.21	0.41
10:d:182:ILE:HG23	10:d:183:GLU:N	2.35	0.41
10:d:193:GLU:HG3	10:d:196:ARG:HD2	2.01	0.41
12:A:206:ILE:HD12	12:A:206:ILE:HA	1.90	0.41
13:B:231:GLY:HA2	13:B:234:LEU:HD12	2.02	0.41
13:B:343:ARG:HB2	13:B:344:PRO:HD3	2.02	0.41
13:B:346:ARG:HG3	13:B:349:ARG:H	1.85	0.41
16:E:115:VAL:HG22	16:E:117:PRO:CD	2.49	0.41
17:F:248:PHE:CE1	17:F:284:PHE:HB3	2.55	0.41
17:F:405:MET:O	17:F:408:LEU:HB3	2.20	0.41
17:F:438:TYR:O	23:L:52:ALA:N	2.52	0.41
17:F:438:TYR:O	23:L:51:ARG:HG2	2.21	0.41
20:I:8:ARG:HH22	22:K:9:ASP:HB2	1.86	0.41
28:Q:85:ARG:HD2	28:Q:124:LEU:HG	2.02	0.41
20:i:164:ILE:HA	20:i:165:GLY:HA2	1.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:t:89:HIS:CE1	31:t:131:ALA:HB1	2.55	0.41
32:f:86:THR:HG23	32:f:87:THR:H	1.85	0.41
32:f:380:PHE:CB	32:f:751:TYR:CE1	2.99	0.41
32:f:479:LEU:HD23	32:f:513:GLU:CB	2.42	0.41
1:U:457:ILE:H	1:U:457:ILE:HD12	1.85	0.41
1:U:494:TYR:O	1:U:498:LYS:HG3	2.20	0.41
1:U:510:GLU:HA	1:U:547:GLY:HA3	2.01	0.41
2:V:207:ALA:HA	2:V:210:CYS:SG	2.60	0.41
2:V:273:LYS:HB3	2:V:274:SER:O	2.21	0.41
2:V:329:HIS:HD2	2:V:353:LEU:HD21	1.84	0.41
2:V:350:GLN:HB3	2:V:351:PRO:HD2	2.02	0.41
3:W:227:TYR:O	3:W:231:ILE:HG23	2.20	0.41
5:Y:14:ASN:HA	5:Y:17:LEU:HB3	2.02	0.41
6:Z:33:LYS:HE3	6:Z:33:LYS:HB3	1.82	0.41
6:Z:69:PHE:HB2	8:b:99:HIS:HE1	1.86	0.41
6:Z:126:VAL:HG23	6:Z:127:LYS:HG3	2.01	0.41
8:b:48:ASN:HA	8:b:66:PRO:HA	2.02	0.41
10:d:142:TYR:HB3	10:d:147:SER:HB3	2.03	0.41
12:A:222:LYS:HG2	13:B:319:PHE:CD1	2.55	0.41
12:A:225:CYS:O	12:A:229:VAL:HG23	2.20	0.41
13:B:208:PRO:O	13:B:211:TYR:HB3	2.21	0.41
13:B:316:LEU:HD11	13:B:327:VAL:HG11	2.01	0.41
14:C:158:ILE:HA	14:C:161:ILE:HG22	2.02	0.41
14:C:161:ILE:O	14:C:165:ILE:HG12	2.21	0.41
15:D:130:VAL:HB	15:D:142:VAL:HG12	2.02	0.41
15:D:201:GLY:HA2	15:D:327:LEU:HA	2.01	0.41
15:D:297:ASP:OD1	15:D:326:ARG:NH1	2.54	0.41
16:E:84:ARG:HG2	16:E:87:LEU:HD23	2.02	0.41
16:E:285:LEU:HB3	16:E:289:LEU:HD12	2.01	0.41
16:E:314:LYS:O	16:E:318:GLY:N	2.53	0.41
17:F:172:VAL:HG13	17:F:267:LEU:HG	2.02	0.41
17:F:436:GLN:CA	23:L:53:GLN:O	2.69	0.41
23:L:39:LYS:HE2	23:L:157:ARG:HA	2.03	0.41
27:P:27:ARG:NH1	27:P:180:VAL:O	2.53	0.41
29:R:135:ALA:O	29:R:139:MET:HB2	2.20	0.41
30:S:36:HIS:HB3	31:T:132:TYR:CZ	2.55	0.41
20:i:64:LYS:HG3	20:i:76:VAL:HG12	2.03	0.41
21:j:115:LYS:HE3	21:j:127:PHE:HB2	2.00	0.41
32:f:303:VAL:HG13	32:f:339:ILE:HG13	2.02	0.41
32:f:388:ASP:O	32:f:390:LEU:N	2.49	0.41
32:f:471:LEU:HD11	32:f:509:LYS:HE2	2.00	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:479:LEU:HD23	32:f:513:GLU:HB3	2.02	0.41
32:f:664:GLU:HA	32:f:697:ILE:CA	2.46	0.41
1:U:59:PHE:HA	1:U:62:LEU:HD13	2.02	0.41
1:U:802:TYR:HB3	1:U:895:PRO:HD3	2.02	0.41
2:V:24:GLN:C	2:V:27:PRO:HD2	2.45	0.41
2:V:239:THR:HA	2:V:240:LEU:HA	1.65	0.41
5:Y:347:ILE:HG13	5:Y:354:VAL:HG22	2.02	0.41
6:Z:166:GLU:O	6:Z:170:VAL:HG23	2.20	0.41
7:a:293:PHE:HB3	7:a:329:LYS:O	2.21	0.41
15:D:102:ILE:HA	15:D:111:TYR:O	2.20	0.41
15:D:162:VAL:O	15:D:221:HIS:NE2	2.45	0.41
16:E:216:ARG:HA	16:E:219:PHE:HB2	2.02	0.41
16:E:321:THR:HG23	17:F:215:LEU:HD22	2.03	0.41
17:F:140:VAL:HG13	17:F:161:LEU:O	2.21	0.41
17:F:431:LYS:HB2	17:F:432:LYS:HA	2.01	0.41
18:G:172:GLN:HA	18:G:175:SER:HB3	2.03	0.41
21:J:73:PHE:HA	21:J:131:ALA:HA	2.03	0.41
25:N:30:VAL:HG11	31:t:212:ALA:HA	2.01	0.41
25:N:35:THR:HA	25:N:36:PRO:HD3	1.90	0.41
26:O:3:ILE:HD11	26:O:127:MET:HB2	2.03	0.41
24:m:201:HIS:CE1	24:m:206:ASP:HB2	2.55	0.41
32:f:89:MET:SD	32:f:89:MET:N	2.94	0.41
1:U:150:ALA:N	14:C:15:LYS:HE2	2.31	0.41
1:U:188:MET:HE3	1:U:194:ARG:HG3	2.03	0.41
1:U:603:LEU:O	1:U:607:VAL:HG23	2.20	0.41
1:U:684:ARG:O	1:U:688:LEU:HG	2.20	0.41
1:U:806:CYS:SG	1:U:891:VAL:HG21	2.60	0.41
5:Y:63:TRP:NE1	5:Y:66:ASP:OD2	2.49	0.41
5:Y:97:GLU:CG	14:C:340:ARG:O	2.63	0.41
7:a:24:ARG:O	7:a:28:LEU:HD13	2.21	0.41
7:a:252:LYS:HA	7:a:255:TRP:HD1	1.85	0.41
14:C:268:GLU:O	14:C:272:THR:OG1	2.22	0.41
15:D:191:TYR:HB3	15:D:198:PRO:HD3	2.01	0.41
15:D:288:ILE:HA	15:D:291:GLU:HB3	2.03	0.41
16:E:141:GLN:NE2	16:E:301:ILE:HA	2.36	0.41
16:E:320:ILE:HD12	17:F:215:LEU:HB3	2.01	0.41
17:F:360:GLU:H	17:F:360:GLU:CD	2.29	0.41
18:G:163:PHE:HD1	19:H:58:ASP:H	1.68	0.41
20:I:68:LEU:HD22	20:I:90:LEU:HD22	2.02	0.41
26:O:206:LYS:HA	27:P:165:GLU:HG3	2.01	0.41
20:i:92:LEU:HD22	20:i:96:ARG:HH21	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:k:220:VAL:HG23	22:k:226:PHE:HE1	1.86	0.41
30:s:28:ARG:HB2	30:s:191:ASP:HB2	2.02	0.41
30:s:144:MET:HE1	30:s:185:ARG:HB2	2.02	0.41
31:t:148:PRO:O	31:t:152:GLU:CB	2.65	0.41
32:f:86:THR:O	32:f:87:THR:HB	2.21	0.41
1:U:102:ALA:HB2	14:C:20:LEU:CG	2.45	0.41
1:U:138:PHE:O	14:C:11:LEU:HD11	2.19	0.41
1:U:321:GLN:HA	1:U:324:LYS:HB3	2.03	0.41
1:U:428:PRO:HB3	1:U:442:GLY:HA3	2.03	0.41
1:U:609:ASP:O	1:U:615:ARG:HD2	2.21	0.41
1:U:627:PHE:HA	1:U:659:CYS:SG	2.61	0.41
3:W:264:GLN:NE2	3:W:299:ILE:HD11	2.35	0.41
5:Y:19:ILE:O	5:Y:23:ARG:HG2	2.20	0.41
5:Y:101:ARG:HH21	5:Y:126:LYS:HG3	1.86	0.41
5:Y:138:LEU:HD13	5:Y:168:ILE:HD11	2.03	0.41
7:a:342:ASP:O	7:a:345:GLN:CB	2.63	0.41
8:b:20:ASP:OD1	8:b:25:ARG:NE	2.49	0.41
10:d:215:TRP:CG	10:d:216:VAL:N	2.89	0.41
13:B:269:GLU:O	13:B:273:VAL:N	2.43	0.41
14:C:79:ALA:C	14:C:80:MET:HE2	2.46	0.41
14:C:135:VAL:O	14:C:139:MET:HG2	2.21	0.41
14:C:243:PRO:HB3	14:C:288:ASN:HB3	2.02	0.41
15:D:54:LEU:O	15:D:58:GLU:HG2	2.20	0.41
15:D:203:LEU:HB3	15:D:330:LYS:HA	2.02	0.41
15:D:241:GLY:O	15:D:245:ARG:HG3	2.21	0.41
15:D:417:TYR:HB3	18:G:5:SER:CA	2.51	0.41
16:E:55:GLN:HB3	16:E:100:LEU:O	2.21	0.41
17:F:204:LEU:HA	17:F:208:HIS:HB2	2.02	0.41
17:F:344:ARG:O	17:F:349:ASP:HB2	2.21	0.41
21:J:64:ALA:HB2	21:J:217:LEU:HD21	2.02	0.41
19:h:118:MET:HE3	19:h:130:PHE:HB2	2.03	0.41
32:f:333:LEU:HD23	32:f:338:ASP:HB3	2.02	0.41
1:U:148:LYS:H	14:C:15:LYS:HE3	1.48	0.41
1:U:152:GLY:HA2	15:D:41:TYR:HB2	2.02	0.41
1:U:423:MET:O	1:U:427:LEU:N	2.54	0.41
1:U:472:ILE:HA	1:U:475:HIS:CE1	2.56	0.41
2:V:96:ARG:HA	2:V:98:LEU:HB2	2.02	0.41
2:V:185:GLN:O	2:V:189:ASP:HB2	2.21	0.41
3:W:426:ASN:O	3:W:430:GLN:HB3	2.21	0.41
3:W:449:GLU:HG3	6:Z:211:TYR:HE1	1.85	0.41
5:Y:358:ARG:O	5:Y:360:ASP:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:Z:69:PHE:CE1	8:b:60:VAL:HB	2.56	0.41
10:d:43:LEU:HA	10:d:46:GLN:HG2	2.01	0.41
12:A:283:ALA:HB3	12:A:326:THR:HB	2.03	0.41
12:A:327:LEU:HD12	12:A:328:ASP:N	2.36	0.41
13:B:210:TYR:HA	13:B:213:GLU:HB2	2.03	0.41
13:B:211:TYR:OH	13:B:217:LYS:HG3	2.21	0.41
13:B:264:PRO:HG2	13:B:268:ARG:HG3	2.03	0.41
13:B:349:ARG:NE	13:B:351:ILE:HG22	2.32	0.41
14:C:100:ASP:OD1	14:C:122:THR:HB	2.21	0.41
14:C:151:ILE:HD12	14:C:151:ILE:HA	1.88	0.41
14:C:344:LEU:HA	14:C:347:ILE:HG22	2.03	0.41
15:D:116:LEU:HB2	15:D:140:VAL:HA	2.02	0.41
15:D:397:LYS:HE2	15:D:397:LYS:HB2	1.96	0.41
15:D:417:TYR:HB2	18:G:18:PRO:CD	2.50	0.41
16:E:214:LEU:O	16:E:218:MET:N	2.50	0.41
17:F:77:SER:O	17:F:81:LYS:HG3	2.21	0.41
17:F:175:MET:HG3	17:F:176:GLU:H	1.86	0.41
17:F:317:LEU:HG	17:F:323:ASN:ND2	2.36	0.41
17:F:356:MET:HE2	17:F:362:ARG:NH1	2.36	0.41
17:F:438:TYR:HA	23:L:51:ARG:CB	2.48	0.41
21:J:137:ASP:OD2	21:J:143:ARG:NH1	2.54	0.41
30:S:179:PHE:O	30:S:183:ALA:HB2	2.21	0.41
22:k:38:ILE:HD12	22:k:202:LEU:HG	2.03	0.41
23:l:150:SER:OG	23:l:152:ASN:ND2	2.53	0.41
23:l:176:MET:SD	24:m:56:LYS:HE2	2.61	0.41
27:p:36:THR:OG1	27:p:38:ASP:OD1	2.31	0.41
27:p:190:ILE:HG22	27:p:195:ILE:HG12	2.03	0.41
31:t:9:THR:OG1	31:t:10:SER:N	2.51	0.41
32:f:379:GLY:O	32:f:417:ILE:CG1	2.65	0.41
2:V:469:THR:O	2:V:473:GLN:HG2	2.21	0.41
6:Z:228:TYR:CE1	7:a:215:GLU:HB3	2.55	0.41
9:c:235:SER:O	9:c:239:LYS:HG3	2.21	0.41
15:D:146:GLU:CG	15:D:148:ASP:H	2.33	0.41
15:D:203:LEU:HB3	15:D:331:ILE:H	1.85	0.41
15:D:410:ASP:CA	15:D:411:GLU:O	2.68	0.41
17:F:372:LYS:HG2	17:F:373:MET:HE2	2.03	0.41
22:K:16:SER:HB3	22:K:20:ARG:H	1.85	0.41
28:Q:140:LEU:O	28:Q:144:ASP:HB2	2.21	0.41
22:k:49:ALA:HB2	22:k:217:LEU:HD23	2.03	0.41
29:r:115:ASP:HB3	29:r:117:GLU:H	1.86	0.41
32:f:380:PHE:CD2	32:f:751:TYR:CE1	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:478:ARG:HD3	32:f:504:VAL:HG22	2.03	0.41
32:f:545:LYS:HE2	32:f:555:ALA:HA	2.03	0.41
1:U:26:LYS:HA	10:d:36:LEU:HD11	2.03	0.40
1:U:474:ARG:HG2	1:U:500:ASN:HD21	1.85	0.40
1:U:884:VAL:HG11	1:U:889:LEU:HD21	2.04	0.40
2:V:144:ASP:N	2:V:145:LEU:HA	2.34	0.40
2:V:436:PHE:CB	10:d:146:GLY:H	2.34	0.40
5:Y:105:MET:HE3	5:Y:140:ILE:HD11	2.03	0.40
5:Y:141:VAL:HG22	5:Y:160:ASN:HB2	2.02	0.40
6:Z:39:LEU:HB2	6:Z:95:TYR:HD2	1.87	0.40
6:Z:223:ASN:ND2	6:Z:227:ILE:HG21	2.35	0.40
10:d:197:ILE:HG22	10:d:198:LEU:HG	2.03	0.40
12:A:140:VAL:HG12	12:A:152:PRO:HB3	2.04	0.40
12:A:418:LYS:O	12:A:422:LYS:N	2.52	0.40
13:B:254:GLU:HA	13:B:257:GLN:HG2	2.01	0.40
15:D:341:LYS:NZ	15:D:375:ILE:HG13	2.36	0.40
16:E:172:LEU:HA	16:E:299:ILE:O	2.21	0.40
17:F:185:TYR:CE1	17:F:243:GLN:HG3	2.54	0.40
17:F:230:GLY:HA2	17:F:231:THR:CB	2.51	0.40
18:G:144:ASP:OD2	26:O:72:ARG:NH2	2.44	0.40
21:J:16:LEU:HD23	21:J:16:LEU:HA	1.94	0.40
25:N:18:SER:HB2	25:N:30:VAL:HA	2.03	0.40
26:O:42:TYR:HD1	26:O:42:TYR:HA	1.78	0.40
20:i:239:LYS:NZ	20:i:243:GLU:OE2	2.54	0.40
22:k:121:LEU:HD22	22:k:123:PHE:HE1	1.86	0.40
25:n:127:ILE:HD12	25:n:136:TYR:CD1	2.56	0.40
32:f:775:THR:HA	32:f:778:LEU:HD12	2.03	0.40
1:U:408:LEU:O	1:U:412:HIS:ND1	2.53	0.40
3:W:428:TRP:O	3:W:432:LEU:HD12	2.22	0.40
5:Y:97:GLU:N	14:C:340:ARG:O	2.55	0.40
5:Y:203:ASP:HB2	5:Y:206:SER:OG	2.20	0.40
5:Y:367:GLN:HG3	5:Y:371:LYS:CG	2.50	0.40
9:c:113:HIS:O	9:c:144:VAL:HG13	2.21	0.40
12:A:390:THR:HG22	13:B:218:PRO:HB3	2.04	0.40
15:D:185:LEU:HB2	15:D:306:LYS:HZ2	1.86	0.40
16:E:122:MET:HE3	16:E:122:MET:HB3	1.87	0.40
17:F:77:SER:HA	17:F:80:ILE:HB	2.03	0.40
17:F:204:LEU:HD13	17:F:212:PHE:HE2	1.86	0.40
18:G:37:LEU:HD11	18:G:52:THR:HG22	2.03	0.40
24:M:123:THR:HG22	24:M:130:PRO:HB3	2.02	0.40
20:i:246:LYS:HD2	20:i:249:ARG:HG3	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:k:225:ASN:HA	22:k:226:PHE:HA	1.78	0.40
23:l:59:HIS:ND1	23:l:208:LYS:O	2.37	0.40
24:m:63:ASN:HB2	24:m:81:LEU:HD21	2.03	0.40
26:o:38:SER:OG	26:o:40:ASN:OD1	2.28	0.40
28:q:148:THR:HG22	28:q:150:THR:H	1.86	0.40
32:f:389:LYS:O	32:f:392:THR:OG1	2.36	0.40
1:U:138:PHE:CD2	14:C:11:LEU:HD11	2.56	0.40
1:U:682:TYR:HB3	1:U:725:MET:SD	2.61	0.40
1:U:692:ALA:HB2	1:U:733:ALA:HB1	2.03	0.40
1:U:766:PHE:CD1	1:U:776:SER:HA	2.56	0.40
2:V:492:LYS:HD2	14:C:41:ASN:HD21	1.86	0.40
3:W:405:LYS:HG3	4:X:344:ARG:H	1.87	0.40
4:X:369:ILE:HG12	4:X:376:GLY:O	2.21	0.40
4:X:406:ASN:O	4:X:410:VAL:HG23	2.22	0.40
8:b:9:CYS:HB3	8:b:111:ALA:HA	2.04	0.40
12:A:362:MET:CE	12:A:404:ALA:H	2.35	0.40
13:B:175:LYS:HB3	13:B:176:VAL:CB	2.48	0.40
14:C:214:VAL:HG23	14:C:272:THR:HG21	2.02	0.40
17:F:102:ASN:HA	17:F:103:ASP:HA	1.69	0.40
26:O:13:VAL:HG22	26:O:177:VAL:HG22	2.03	0.40
27:P:73:LEU:HD23	27:P:73:LEU:HA	1.92	0.40
21:j:36:ARG:HE	21:j:157:LYS:HA	1.85	0.40
28:q:102:LEU:HB3	28:q:103:LEU:H	1.71	0.40
32:f:478:ARG:HD3	32:f:504:VAL:CG1	2.45	0.40
1:U:42:VAL:HG11	1:U:68:PHE:CZ	2.55	0.40
1:U:104:CYS:SG	1:U:133:ILE:HD11	2.62	0.40
1:U:405:THR:O	1:U:408:LEU:HB3	2.21	0.40
1:U:688:LEU:HD22	1:U:713:TYR:HE1	1.86	0.40
2:V:447:ILE:HG13	2:V:449:ALA:H	1.86	0.40
5:Y:99:GLU:C	5:Y:100:ILE:CG1	2.93	0.40
5:Y:132:VAL:HG23	14:C:377:HIS:CD2	2.52	0.40
8:b:44:ASN:OD1	8:b:45:PRO:HD2	2.21	0.40
8:b:164:ASP:HB2	8:b:166:THR:HG22	2.04	0.40
12:A:199:GLU:HA	12:A:202:VAL:HG23	2.04	0.40
13:B:187:ILE:HD12	13:B:190:LEU:HD11	2.03	0.40
13:B:267:VAL:HG11	13:B:312:LEU:HD13	2.04	0.40
13:B:346:ARG:CZ	13:B:348:ASP:HB3	2.51	0.40
15:D:163:MET:HA	15:D:221:HIS:HE2	1.86	0.40
16:E:250:ASP:O	16:E:254:GLN:HG2	2.20	0.40
22:K:182:GLN:HG3	23:L:56:LEU:HD23	2.03	0.40
23:L:130:VAL:HG22	23:L:132:LEU:HG	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:h:10:LEU:H	19:h:10:LEU:HG	1.71	0.40
20:i:220:ASN:HA	20:i:221:GLY:HA2	1.66	0.40
24:m:10:SER:HB3	24:m:13:THR:HG23	2.02	0.40
32:f:8:LYS:HD3	32:f:39:LYS:HD2	2.02	0.40
32:f:479:LEU:HG	32:f:513:GLU:O	2.21	0.40
32:f:687:ARG:O	32:f:745:LEU:HD22	2.21	0.40
1:U:184:CYS:O	15:D:46:LYS:HE3	2.18	0.40
1:U:494:TYR:HD1	1:U:516:LEU:HD11	1.86	0.40
1:U:751:ARG:HD2	1:U:908:ILE:HD12	2.04	0.40
2:V:54:LYS:O	2:V:54:LYS:CG	2.70	0.40
3:W:453:HIS:N	6:Z:222:ILE:HD11	2.37	0.40
4:X:394:ASP:N	4:X:394:ASP:OD1	2.54	0.40
5:Y:286:TRP:C	5:Y:288:PHE:H	2.30	0.40
8:b:16:MET:SD	8:b:114:GLY:HA3	2.61	0.40
9:c:184:LEU:HB2	9:c:204:THR:HG22	2.04	0.40
10:d:133:ILE:O	10:d:137:VAL:HG22	2.21	0.40
12:A:278:ASP:HB3	12:A:321:THR:OG1	2.21	0.40
14:C:36:ASN:O	14:C:40:GLN:HG2	2.21	0.40
17:F:351:LYS:HE3	17:F:351:LYS:HB2	1.88	0.40
25:N:35:THR:OG1	25:N:45:ARG:NH2	2.55	0.40
28:Q:118:MET:HE1	28:Q:124:LEU:HD23	2.03	0.40
21:j:121:SER:OG	21:j:122:ASN:N	2.55	0.40
22:k:215:ILE:HD12	22:k:234:LEU:HD11	2.04	0.40
23:l:85:CYS:SG	23:l:89:ARG:NH2	2.95	0.40
23:l:138:ASP:HB2	31:t:81:HIS:CE1	2.56	0.40
25:n:63:LEU:O	25:n:67:SER:CB	2.69	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	U	798/911 (88%)	729 (91%)	67 (8%)	2 (0%)	36	72
2	V	478/480 (100%)	412 (86%)	60 (13%)	6 (1%)	9	42
3	W	234/456 (51%)	213 (91%)	21 (9%)	0	100	100
4	X	79/380 (21%)	75 (95%)	4 (5%)	0	100	100
5	Y	376/378 (100%)	331 (88%)	36 (10%)	9 (2%)	4	27
6	Z	284/286 (99%)	252 (89%)	30 (11%)	2 (1%)	18	56
7	a	371/373 (100%)	340 (92%)	28 (8%)	3 (1%)	16	54
8	b	189/191 (99%)	178 (94%)	11 (6%)	0	100	100
9	c	285/287 (99%)	241 (85%)	39 (14%)	5 (2%)	6	34
10	d	255/257 (99%)	220 (86%)	33 (13%)	2 (1%)	16	54
11	e	20/70 (29%)	16 (80%)	4 (20%)	0	100	100
12	A	359/361 (99%)	303 (84%)	54 (15%)	2 (1%)	21	59
13	B	339/341 (99%)	298 (88%)	38 (11%)	3 (1%)	14	51
14	C	382/384 (100%)	318 (83%)	60 (16%)	4 (1%)	12	48
15	D	378/380 (100%)	325 (86%)	51 (14%)	2 (0%)	24	63
16	E	351/353 (99%)	299 (85%)	51 (14%)	1 (0%)	36	72
17	F	362/377 (96%)	315 (87%)	45 (12%)	2 (1%)	21	59
18	G	238/240 (99%)	223 (94%)	15 (6%)	0	100	100
18	g	238/240 (99%)	226 (95%)	12 (5%)	0	100	100
19	H	230/232 (99%)	213 (93%)	17 (7%)	0	100	100
19	h	230/232 (99%)	214 (93%)	16 (7%)	0	100	100
20	I	248/250 (99%)	236 (95%)	12 (5%)	0	100	100
20	i	248/250 (99%)	228 (92%)	20 (8%)	0	100	100
21	J	237/243 (98%)	215 (91%)	21 (9%)	1 (0%)	30	67
21	j	237/243 (98%)	222 (94%)	15 (6%)	0	100	100
22	K	224/234 (96%)	204 (91%)	19 (8%)	1 (0%)	30	67
22	k	224/234 (96%)	203 (91%)	21 (9%)	0	100	100
23	L	236/238 (99%)	222 (94%)	14 (6%)	0	100	100
23	l	236/238 (99%)	222 (94%)	14 (6%)	0	100	100
24	M	238/245 (97%)	221 (93%)	17 (7%)	0	100	100
24	m	238/245 (97%)	220 (92%)	18 (8%)	0	100	100
25	N	189/191 (99%)	179 (95%)	10 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
25	n	189/191 (99%)	181 (96%)	8 (4%)	0	100	100
26	O	218/220 (99%)	210 (96%)	8 (4%)	0	100	100
26	o	218/220 (99%)	210 (96%)	8 (4%)	0	100	100
27	P	202/204 (99%)	194 (96%)	8 (4%)	0	100	100
27	p	202/204 (99%)	186 (92%)	16 (8%)	0	100	100
28	Q	197/199 (99%)	179 (91%)	18 (9%)	0	100	100
28	q	197/199 (99%)	177 (90%)	20 (10%)	0	100	100
29	R	199/201 (99%)	189 (95%)	10 (5%)	0	100	100
29	r	199/201 (99%)	191 (96%)	8 (4%)	0	100	100
30	S	211/213 (99%)	203 (96%)	8 (4%)	0	100	100
30	s	211/213 (99%)	202 (96%)	9 (4%)	0	100	100
31	T	213/215 (99%)	204 (96%)	9 (4%)	0	100	100
31	t	213/215 (99%)	201 (94%)	12 (6%)	0	100	100
32	f	669/908 (74%)	579 (86%)	82 (12%)	8 (1%)	10	44
All	All	12369/13423 (92%)	11219 (91%)	1097 (9%)	53 (0%)	31	67

All (53) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	U	364	VAL
2	V	58	ALA
2	V	81	GLN
2	V	193	GLN
2	V	197	THR
5	Y	64	GLN
5	Y	99	GLU
5	Y	350	VAL
6	Z	221	PRO
7	a	341	LEU
9	c	243	SER
14	C	219	LEU
15	D	151	ILE
15	D	154	LEU
32	f	337	LEU
32	f	364	GLN
32	f	367	SER
32	f	665	GLU

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Mol	Chain	Res	Type
5	Y	63	TRP
5	Y	100	ILE
5	Y	357	ASN
7	a	340	VAL
12	A	206	ILE
17	F	437	TYR
22	K	227	HIS
32	f	183	PRO
32	f	365	VAL
5	Y	97	GLU
9	c	157	ILE
14	C	298	ILE
32	f	184	LEU
32	f	326	LEU
5	Y	67	VAL
6	Z	144	VAL
7	a	336	VAL
9	c	156	VAL
10	d	121	ARG
21	J	200	GLN
2	V	466	ILE
9	c	244	VAL
10	d	213	ARG
1	U	433	PRO
5	Y	359	PRO
13	B	218	PRO
2	V	86	VAL
13	B	219	PRO
13	B	325	VAL
16	E	208	ILE
9	c	189	ILE
12	A	172	VAL
14	C	192	PRO
14	C	251	ILE
17	F	326	VAL

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 PDB entries followed by that with respect to all EM entries.

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	U	685/779 (88%)	674 (98%)	11 (2%)	55	70
2	V	414/414 (100%)	395 (95%)	19 (5%)	24	45
3	W	218/416 (52%)	210 (96%)	8 (4%)	30	51
4	X	74/327 (23%)	71 (96%)	3 (4%)	27	48
5	Y	334/334 (100%)	325 (97%)	9 (3%)	39	61
6	Z	257/257 (100%)	249 (97%)	8 (3%)	35	56
7	a	333/333 (100%)	326 (98%)	7 (2%)	47	65
8	b	167/167 (100%)	165 (99%)	2 (1%)	63	75
9	c	252/252 (100%)	244 (97%)	8 (3%)	34	55
10	d	231/231 (100%)	229 (99%)	2 (1%)	70	79
11	e	22/22 (100%)	22 (100%)	0	100	100
12	A	308/308 (100%)	299 (97%)	9 (3%)	37	58
13	B	298/298 (100%)	292 (98%)	6 (2%)	48	66
14	C	332/332 (100%)	317 (96%)	15 (4%)	24	46
15	D	333/333 (100%)	315 (95%)	18 (5%)	20	41
16	E	308/308 (100%)	305 (99%)	3 (1%)	68	78
17	F	312/321 (97%)	297 (95%)	15 (5%)	23	44
18	G	192/205 (94%)	188 (98%)	4 (2%)	47	65
18	g	193/205 (94%)	191 (99%)	2 (1%)	68	78
19	H	164/190 (86%)	163 (99%)	1 (1%)	78	83
19	h	164/190 (86%)	164 (100%)	0	100	100
20	I	193/210 (92%)	191 (99%)	2 (1%)	68	78
20	i	193/210 (92%)	191 (99%)	2 (1%)	68	78
21	J	152/207 (73%)	150 (99%)	2 (1%)	61	74
21	j	152/207 (73%)	152 (100%)	0	100	100
22	K	186/196 (95%)	184 (99%)	2 (1%)	65	76
22	k	186/196 (95%)	184 (99%)	2 (1%)	65	76
23	L	198/204 (97%)	197 (100%)	1 (0%)	81	83
23	l	198/204 (97%)	197 (100%)	1 (0%)	81	83
24	M	192/202 (95%)	191 (100%)	1 (0%)	81	83
24	m	192/202 (95%)	190 (99%)	2 (1%)	68	78

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	N	148/148 (100%)	147 (99%)	1 (1%)	76	81
25	n	148/148 (100%)	145 (98%)	3 (2%)	48	66
26	O	177/181 (98%)	177 (100%)	0	100	100
26	o	177/181 (98%)	177 (100%)	0	100	100
27	P	172/173 (99%)	172 (100%)	0	100	100
27	p	172/173 (99%)	172 (100%)	0	100	100
28	Q	164/170 (96%)	163 (99%)	1 (1%)	78	83
28	q	164/170 (96%)	163 (99%)	1 (1%)	78	83
29	R	153/156 (98%)	153 (100%)	0	100	100
29	r	153/156 (98%)	153 (100%)	0	100	100
30	S	174/178 (98%)	174 (100%)	0	100	100
30	s	174/178 (98%)	174 (100%)	0	100	100
31	T	175/178 (98%)	174 (99%)	1 (1%)	78	83
31	t	175/178 (98%)	175 (100%)	0	100	100
32	f	580/763 (76%)	564 (97%)	16 (3%)	38	59
All	All	10339/11391 (91%)	10151 (98%)	188 (2%)	51	68

All (188) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	U	8	ILE
1	U	9	ILE
1	U	97	VAL
1	U	173	VAL
1	U	217	CYS
1	U	233	LEU
1	U	427	LEU
1	U	479	LEU
1	U	554	LEU
1	U	603	LEU
1	U	629	THR
2	V	54	LYS
2	V	79	VAL
2	V	80	LYS
2	V	81	GLN
2	V	82	LEU
2	V	94	VAL

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Mol	Chain	Res	Type
2	V	167	LEU
2	V	193	GLN
2	V	194	LYS
2	V	195	ILE
2	V	197	THR
2	V	298	ILE
2	V	320	THR
2	V	322	VAL
2	V	391	THR
2	V	392	TYR
2	V	398	LEU
2	V	432	GLU
2	V	464	ILE
3	W	333	LEU
3	W	371	THR
3	W	373	ILE
3	W	374	THR
3	W	384	LEU
3	W	402	ILE
3	W	414	ASN
3	W	424	LEU
4	X	369	ILE
4	X	393	VAL
4	X	410	VAL
5	Y	97	GLU
5	Y	98	SER
5	Y	99	GLU
5	Y	315	THR
5	Y	347	ILE
5	Y	350	VAL
5	Y	356	THR
5	Y	357	ASN
5	Y	358	ARG
6	Z	106	ILE
6	Z	133	LEU
6	Z	186	THR
6	Z	191	ILE
6	Z	224	HIS
6	Z	225	GLN
6	Z	236	LEU
6	Z	266	ILE
7	a	28	LEU

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Mol	Chain	Res	Type
7	a	113	LEU
7	a	210	VAL
7	a	215	GLU
7	a	245	VAL
7	a	327	VAL
7	a	340	VAL
8	b	53	THR
8	b	173	VAL
9	c	33	ILE
9	c	69	VAL
9	c	194	HIS
9	c	227	GLU
9	c	229	LEU
9	c	272	ILE
9	c	275	VAL
9	c	308	VAL
10	d	107	LEU
10	d	131	VAL
12	A	79	ASP
12	A	113	ILE
12	A	157	ILE
12	A	158	ASP
12	A	161	VAL
12	A	187	LEU
12	A	315	ILE
12	A	317	VAL
12	A	388	VAL
13	B	105	THR
13	B	127	VAL
13	B	137	SER
13	B	174	MET
13	B	205	LEU
13	B	320	ASP
14	C	66	LEU
14	C	69	GLN
14	C	76	VAL
14	C	97	VAL
14	C	99	VAL
14	C	118	ASN
14	C	131	VAL
14	C	182	GLN
14	C	218	GLU

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Mol	Chain	Res	Type
14	C	220	VAL
14	C	251	ILE
14	C	286	THR
14	C	295	THR
14	C	311	ILE
14	C	376	VAL
15	D	82	ILE
15	D	88	VAL
15	D	152	MET
15	D	153	MET
15	D	219	VAL
15	D	230	VAL
15	D	231	VAL
15	D	250	VAL
15	D	267	ILE
15	D	282	ASP
15	D	285	VAL
15	D	370	ILE
15	D	406	VAL
15	D	411	GLU
15	D	412	GLN
15	D	413	GLU
15	D	417	TYR
15	D	418	LYS
16	E	65	THR
16	E	269	THR
16	E	326	ILE
17	F	93	VAL
17	F	136	VAL
17	F	150	LEU
17	F	151	VAL
17	F	153	VAL
17	F	161	LEU
17	F	166	THR
17	F	172	VAL
17	F	210	GLU
17	F	268	VAL
17	F	283	ILE
17	F	307	GLN
17	F	347	ARG
17	F	430	LYS
17	F	436	GLN

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Mol	Chain	Res	Type
18	G	21	ARG
18	G	22	LEU
18	G	121	ILE
18	G	199	ILE
19	H	10	LEU
20	I	28	ILE
20	I	76	VAL
21	J	111	ILE
21	J	161	ILE
22	K	227	HIS
22	K	228	MET
23	L	51	ARG
24	M	196	ILE
25	N	127	ILE
28	Q	140	LEU
31	T	92	LEU
18	g	141	ILE
18	g	199	ILE
20	i	28	ILE
20	i	228	LEU
22	k	101	PHE
22	k	170	ILE
23	l	38	LEU
24	m	151	ILE
24	m	196	ILE
25	n	26	ILE
25	n	30	VAL
25	n	127	ILE
28	q	82	ASN
32	f	88	SER
32	f	184	LEU
32	f	207	LEU
32	f	337	LEU
32	f	370	MET
32	f	381	VAL
32	f	387	GLN
32	f	389	LYS
32	f	391	LEU
32	f	403	LYS
32	f	460	ASP
32	f	463	LEU
32	f	479	LEU

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Mol	Chain	Res	Type
32	f	641	GLU
32	f	797	LEU
32	f	800	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (164) such sidechains are listed below:

Mol	Chain	Res	Type
1	U	111	GLN
1	U	267	ASN
1	U	355	ASN
1	U	421	GLN
1	U	464	GLN
1	U	491	GLN
1	U	632	GLN
1	U	685	GLN
1	U	708	GLN
1	U	734	GLN
1	U	754	HIS
2	V	177	ASN
2	V	242	HIS
2	V	279	GLN
2	V	281	ASN
2	V	318	GLN
2	V	329	HIS
2	V	365	GLN
2	V	400	HIS
2	V	453	HIS
3	W	264	GLN
3	W	444	HIS
4	X	406	ASN
5	Y	77	ASN
5	Y	136	HIS
5	Y	351	ASN
6	Z	77	ASN
6	Z	145	HIS
6	Z	224	HIS
6	Z	235	ASN
6	Z	243	GLN
7	a	86	GLN
7	a	193	GLN
7	a	287	ASN
7	a	337	GLN

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Mol	Chain	Res	Type
7	a	370	GLN
8	b	76	HIS
8	b	142	ASN
8	b	149	ASN
9	c	92	GLN
9	c	101	GLN
9	c	172	HIS
9	c	210	ASN
9	c	241	ASN
9	c	287	HIS
9	c	298	GLN
10	d	97	GLN
10	d	102	ASN
10	d	128	GLN
10	d	130	ASN
10	d	228	GLN
10	d	245	GLN
11	e	6	GLN
12	A	145	ASN
12	A	293	ASN
12	A	304	ASN
12	A	305	GLN
12	A	358	HIS
12	A	414	ASN
13	B	120	HIS
13	B	154	HIS
13	B	193	GLN
13	B	241	ASN
13	B	314	ASN
14	C	41	ASN
14	C	48	GLN
14	C	182	GLN
14	C	279	GLN
14	C	296	ASN
15	D	65	GLN
15	D	91	GLN
15	D	99	ASN
15	D	187	HIS
15	D	222	HIS
15	D	304	ASN
15	D	412	GLN
15	D	414	HIS

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Mol	Chain	Res	Type
16	E	55	GLN
16	E	141	GLN
16	E	225	HIS
16	E	323	HIS
17	F	76	ASN
17	F	83	ASN
17	F	207	ASN
17	F	218	GLN
17	F	258	GLN
17	F	392	ASN
17	F	434	ASN
18	G	68	HIS
18	G	127	GLN
19	H	71	HIS
19	H	119	GLN
20	I	40	ASN
20	I	53	HIS
20	I	95	GLN
20	I	102	GLN
20	I	119	GLN
20	I	149	GLN
21	J	116	GLN
21	J	122	ASN
22	K	41	GLN
22	K	155	HIS
22	K	214	ASN
23	L	59	HIS
23	L	60	GLN
23	L	90	GLN
23	L	146	GLN
23	L	152	ASN
24	M	97	ASN
24	M	201	HIS
25	N	158	ASN
26	O	116	HIS
26	O	193	ASN
27	P	61	GLN
27	P	93	ASN
28	Q	61	GLN
28	Q	82	ASN
28	Q	101	ASN
29	R	85	ASN

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Mol	Chain	Res	Type
30	S	108	ASN
31	T	81	HIS
31	T	185	ASN
18	g	12	HIS
18	g	75	ASN
18	g	193	GLN
19	h	21	GLN
19	h	71	HIS
20	i	53	HIS
20	i	95	GLN
20	i	102	GLN
20	i	119	GLN
20	i	149	GLN
20	i	198	ASN
21	j	15	HIS
21	j	85	ASN
21	j	122	ASN
22	k	114	GLN
22	k	214	ASN
23	l	65	HIS
23	l	90	GLN
23	l	152	ASN
25	n	77	HIS
25	n	158	ASN
26	o	193	ASN
27	p	18	ASN
27	p	93	ASN
28	q	61	GLN
28	q	101	ASN
29	r	70	ASN
30	s	58	HIS
30	s	108	ASN
30	s	146	GLN
30	s	159	GLN
30	s	163	HIS
31	t	81	HIS
31	t	89	HIS
32	f	102	HIS
32	f	213	GLN
32	f	387	GLN
32	f	473	ASN
32	f	493	ASN

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Mol	Chain	Res	Type
32	f	540	GLN
32	f	565	ASN
32	f	650	GLN

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 1 ligands modelled in this entry, 1 is monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

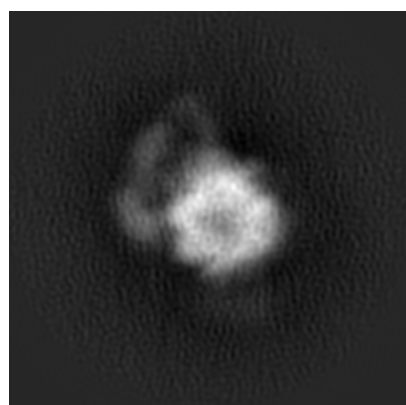
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-8667. These allow visual inspection of the internal detail of the map and identification of artifacts.

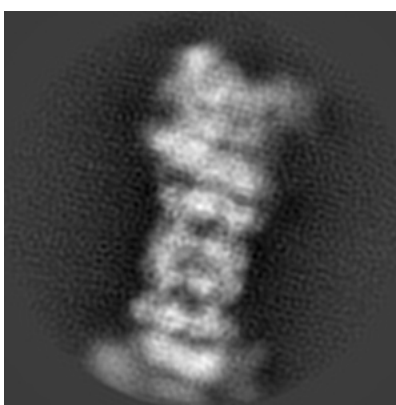
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

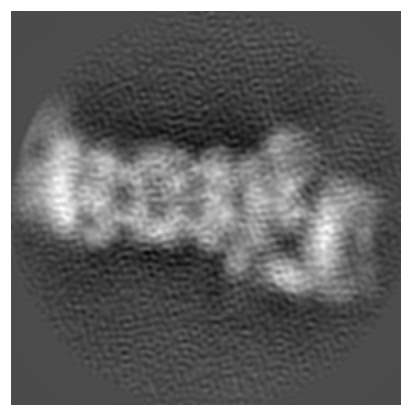
6.1.1 Primary map



X



Y

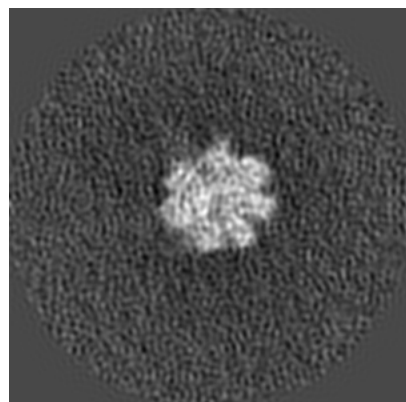


Z

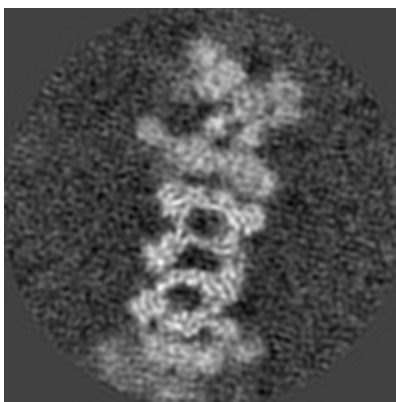
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

6.2.1 Primary map



X Index: 280



Y Index: 280

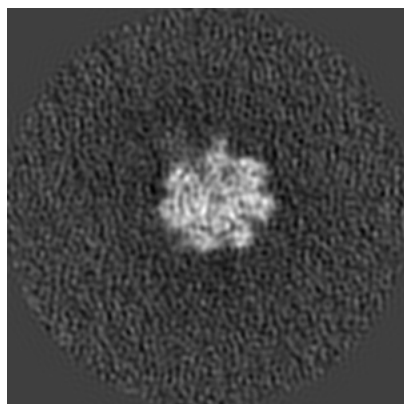


Z Index: 280

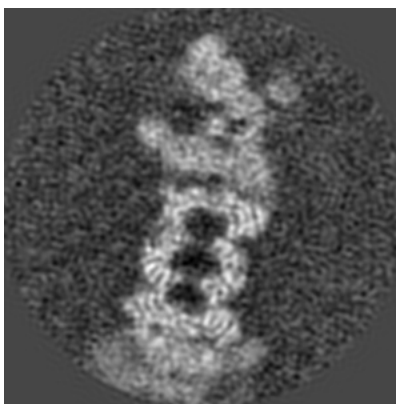
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

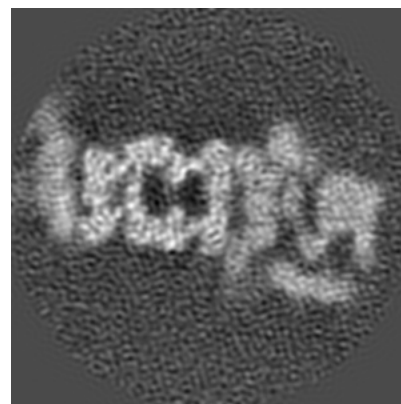
6.3.1 Primary map



X Index: 283



Y Index: 290

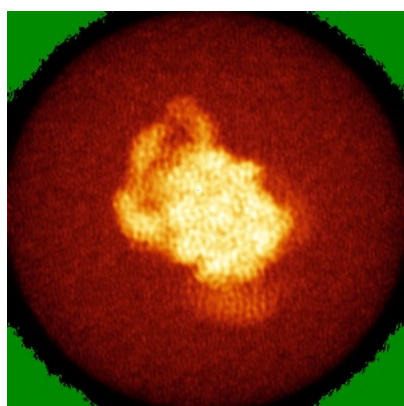


Z Index: 283

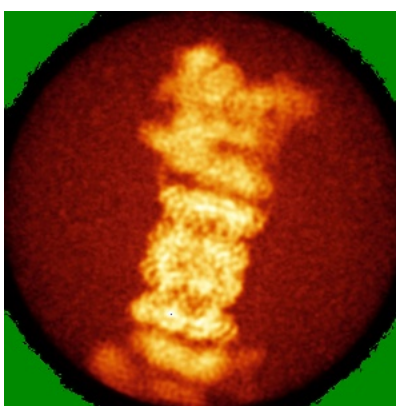
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

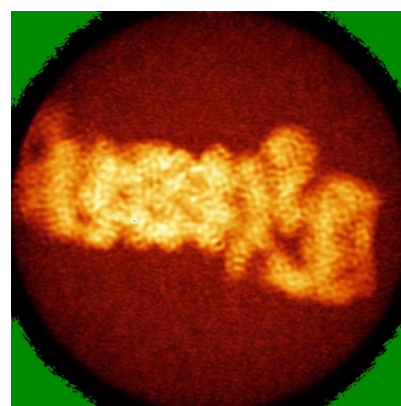
6.4.1 Primary map



X



Y

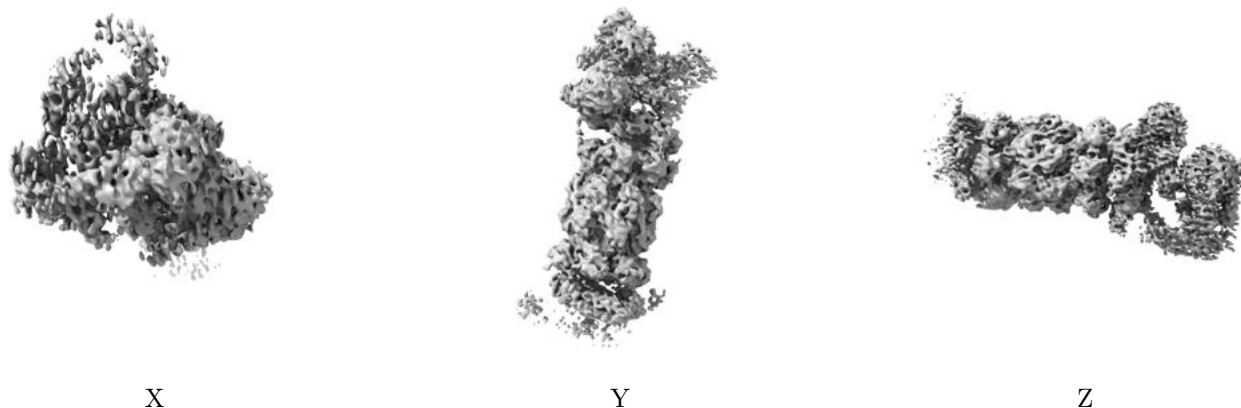


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.003. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

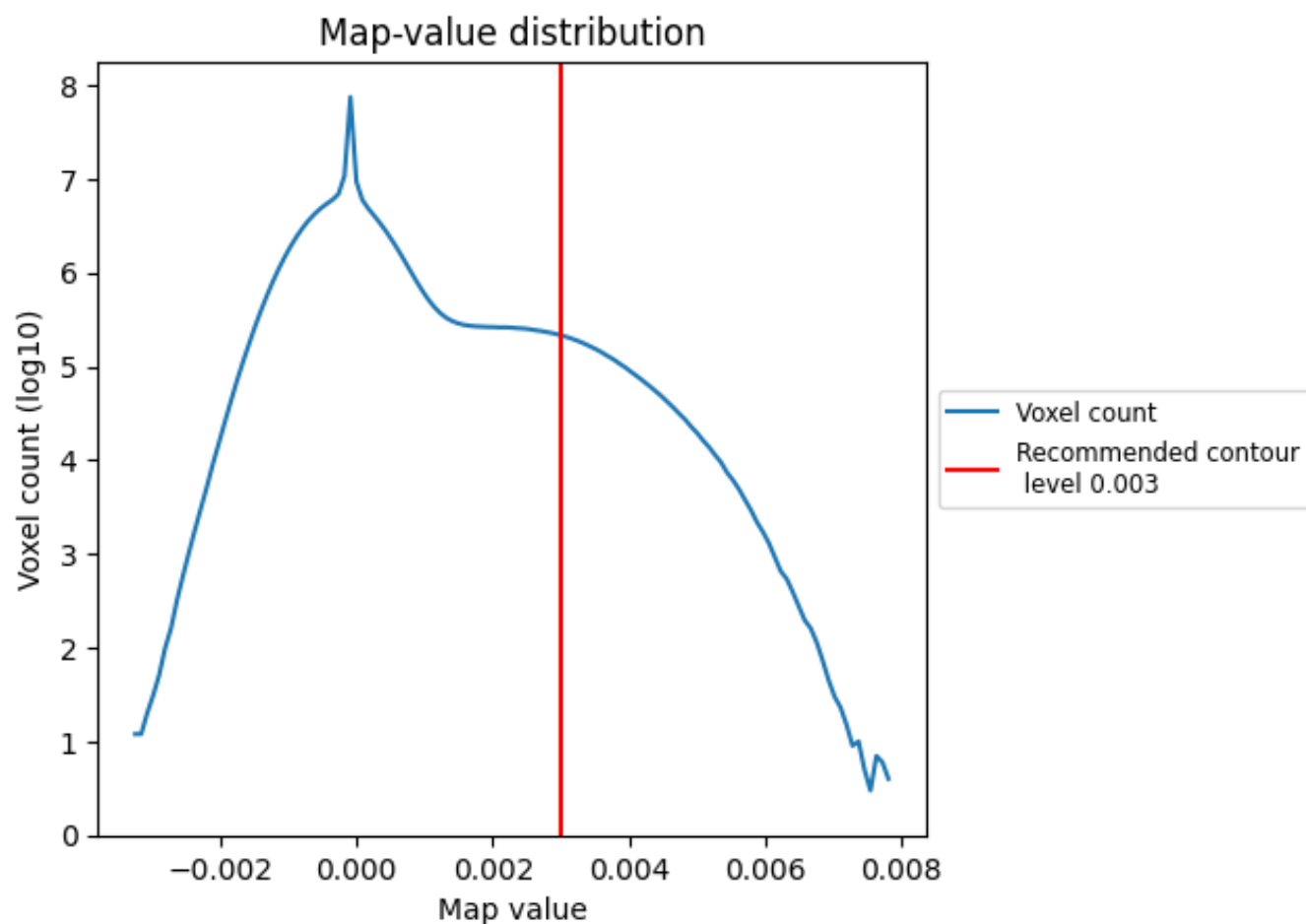
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

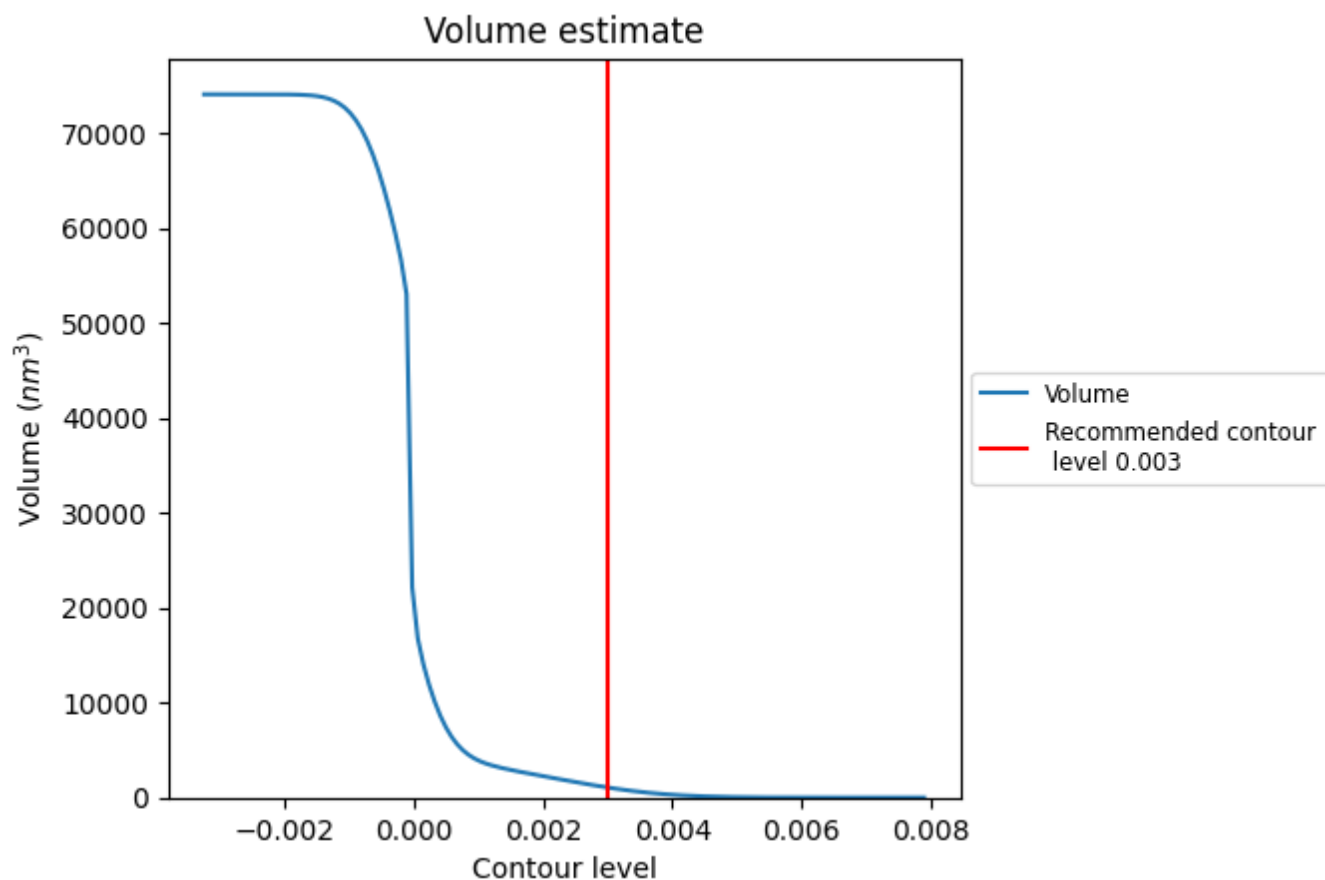
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

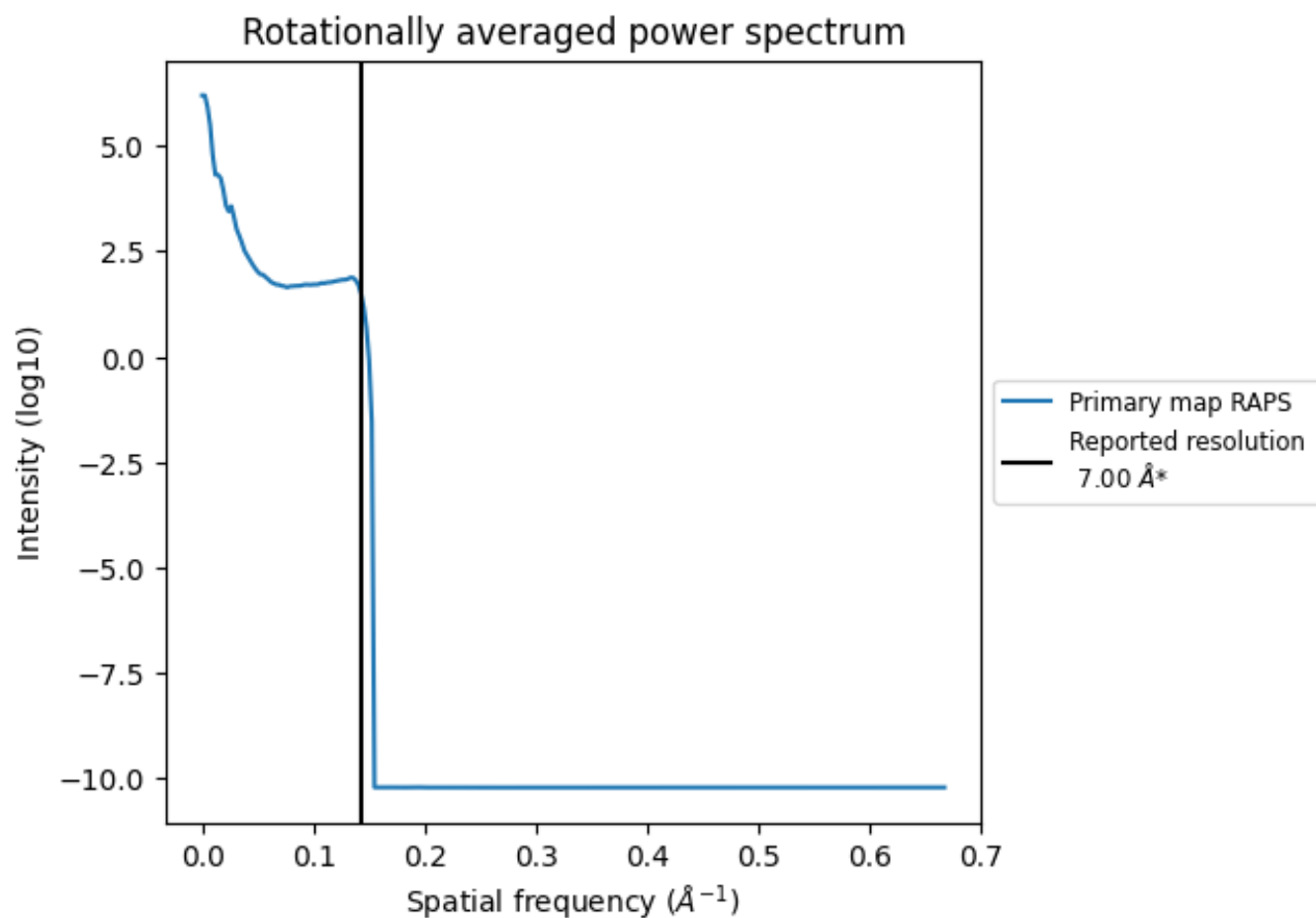
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1064 nm³; this corresponds to an approximate mass of 961 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ



*Reported resolution corresponds to spatial frequency of 0.143 Å⁻¹

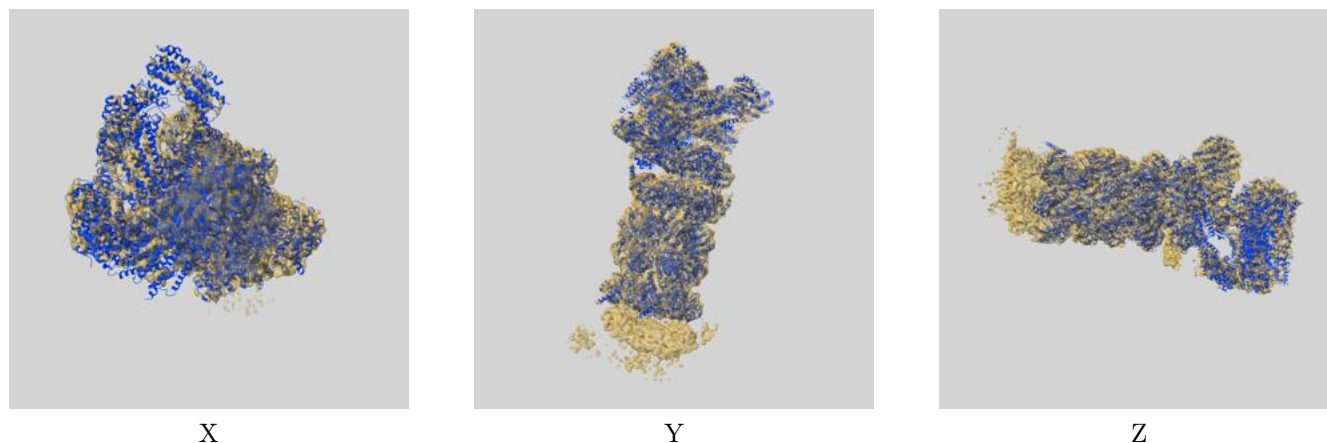
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

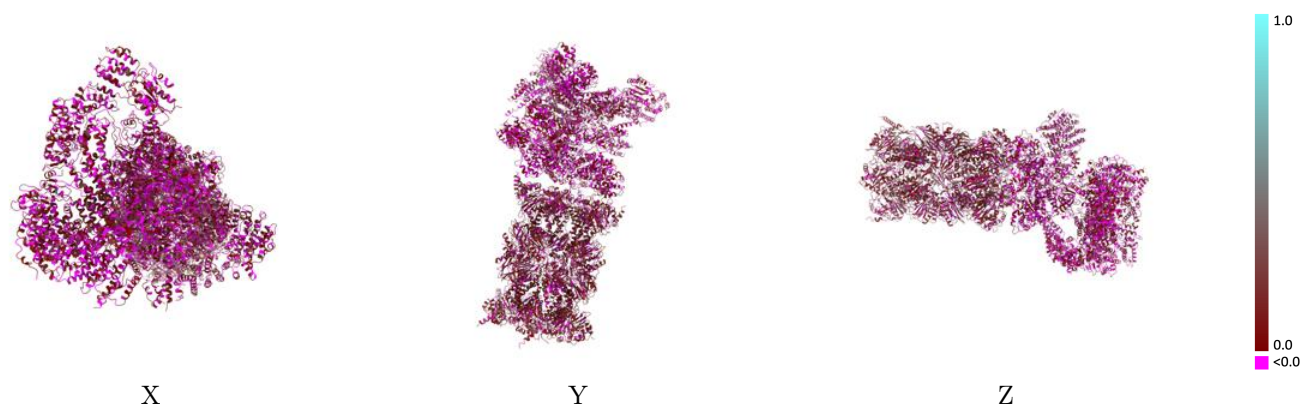
This section contains information regarding the fit between EMDB map EMD-8667 and PDB model 5VFT. Per-residue inclusion information can be found in section 3 on page 11.

9.1 Map-model overlay [i](#)



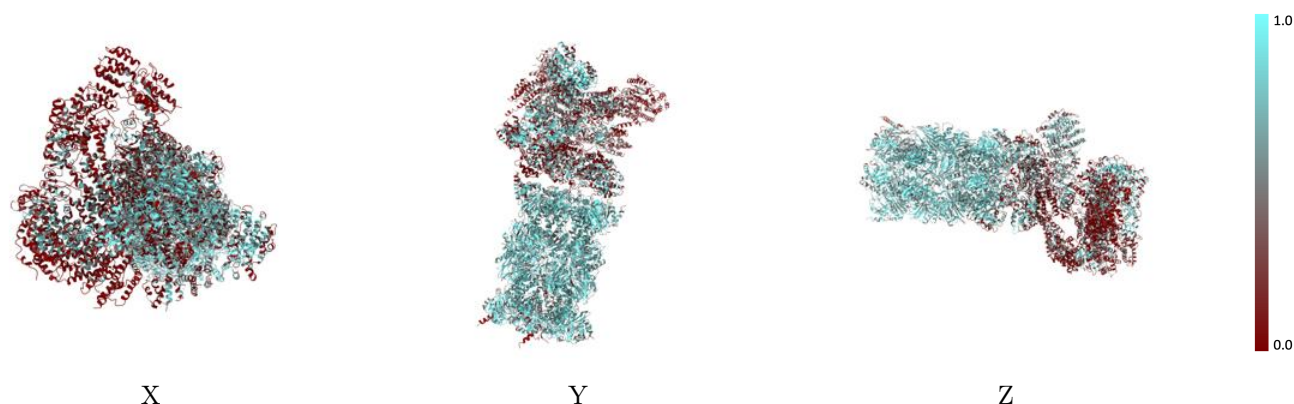
The images above show the 3D surface view of the map at the recommended contour level 0.003 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



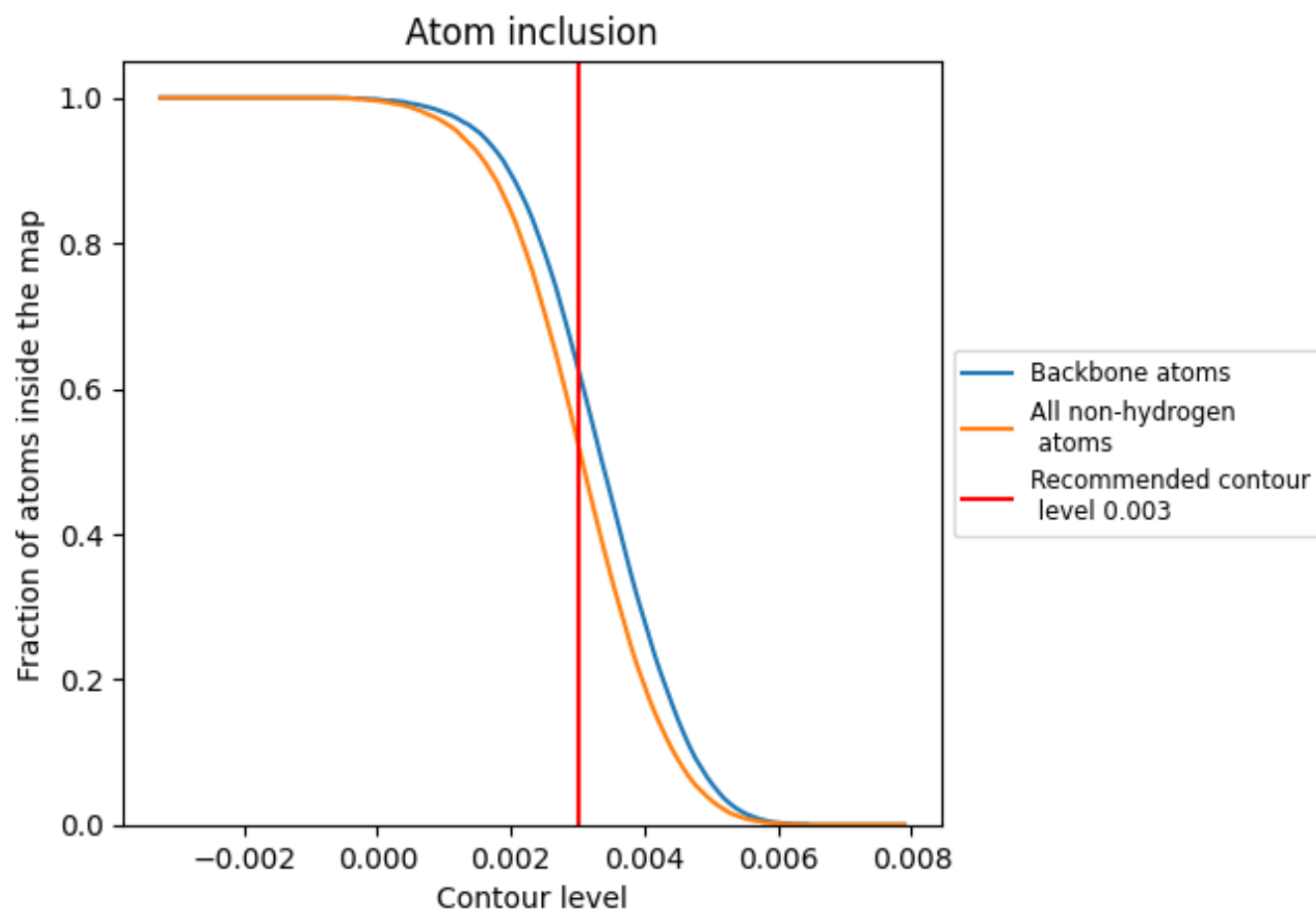
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.003).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 63% of all backbone atoms, 53% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

























The table lists the average atom inclusion at the recommended contour level (0.003) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5270	 0.0860
A	 0.4110	 0.0520
B	 0.3570	 0.0310
C	 0.3820	 0.0460
D	 0.3210	 0.0300
E	 0.3460	 0.0490
F	 0.3880	 0.0470
G	 0.6550	 0.1240
H	 0.6350	 0.1190
I	 0.6130	 0.1090
J	 0.6850	 0.1340
K	 0.6840	 0.1080
L	 0.7250	 0.1150
M	 0.7020	 0.1220
N	 0.7350	 0.1150
O	 0.7110	 0.1090
P	 0.7430	 0.1080
Q	 0.7380	 0.1360
R	 0.7750	 0.1420
S	 0.7410	 0.1350
T	 0.7500	 0.1290
U	 0.5030	 0.0500
V	 0.2900	 0.0350
W	 0.2100	 0.0430
X	 0.2220	 0.0750
Y	 0.3370	 0.0310
Z	 0.2680	 0.0460
a	 0.1390	 0.0500
b	 0.1350	 0.0560
c	 0.3500	 0.0820
d	 0.2240	 0.0360
e	 0.2470	 0.0240
f	 0.5170	 0.0680
g	 0.7340	 0.1350
h	 0.6780	 0.1260



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Chain	Atom inclusion	Q-score
i	 0.6040	 0.1370
j	 0.7050	 0.1300
k	 0.7070	 0.1280
l	 0.7220	 0.1160
m	 0.6900	 0.1180
n	 0.7560	 0.1400
o	 0.7210	 0.1440
p	 0.7310	 0.1080
q	 0.7700	 0.1410
r	 0.7680	 0.1310
s	 0.7430	 0.1220
t	 0.7770	 0.1290