Full wwPDB EM Validation Report

Mar 8, 2026 – 07:39 AM UTC

PDB ID	:	9E8G / pdb_00009e8g
EMDB ID	:	EMD-47719
Title	:	Nub1/Fat10-processing human 26S proteasome bound to Txnl1 with Rpt5 at top of spiral staircase
Authors	:	Arkinson, C.; Gee, C.L.; Martin, A.
Deposited on	:	2024-11-05
Resolution	:	3.01 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:

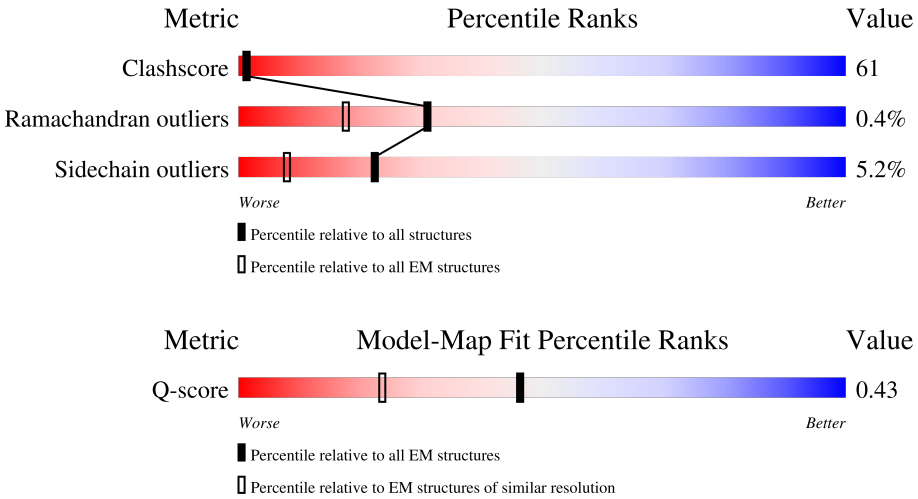
EMDB validation analysis	:	0.0.1.dev132
Mogul	:	2022.3.0, CSD as543be (2022)
MolProbity	:	4-5-2 with Phenix2.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data 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

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

The reported resolution of this entry is 3.01 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	13882 (2.51 - 3.51)

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 <=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	A	433	34% 56% 7%
2	B	440	5% 33% 53% 10%
3	C	406	37% 54% 5%
4	D	418	33% 54% 10%

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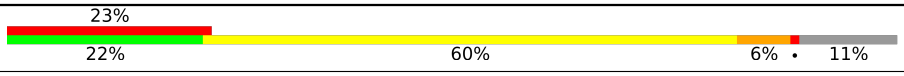
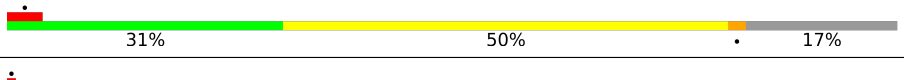
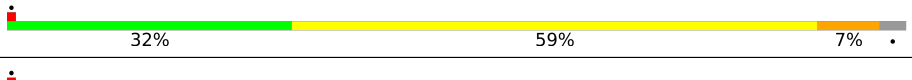
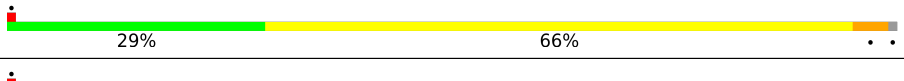
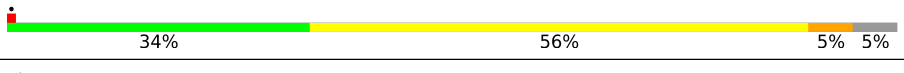
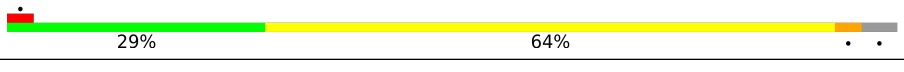
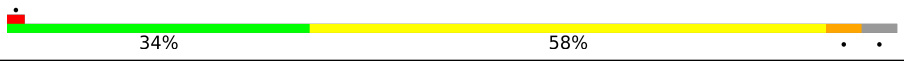
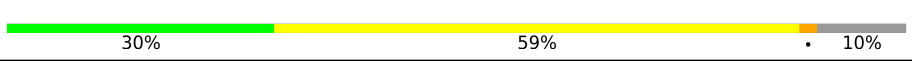
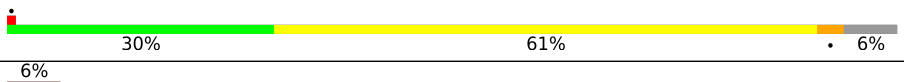
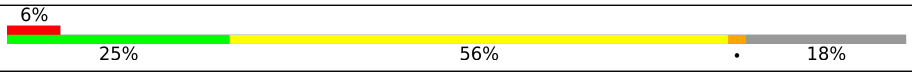
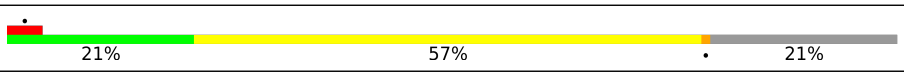
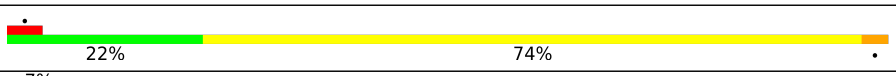
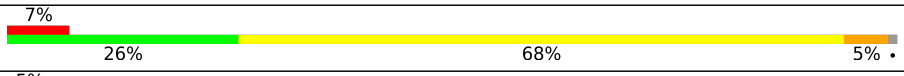
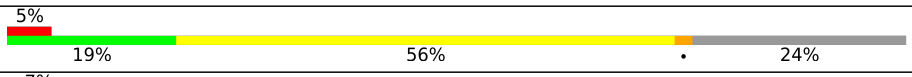
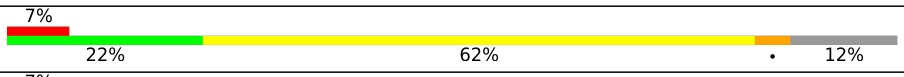
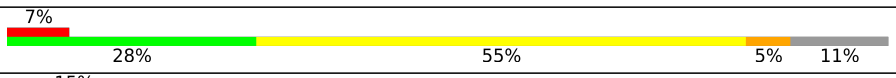
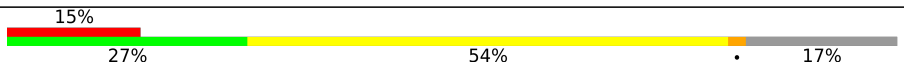
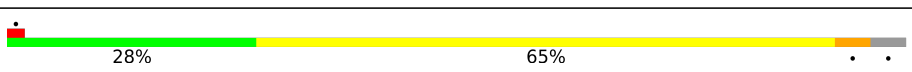
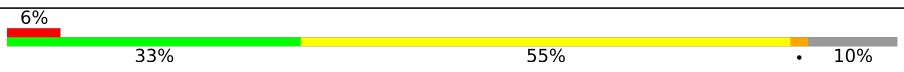
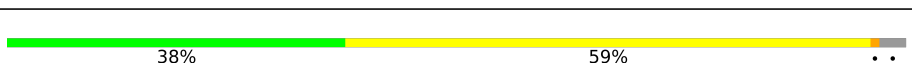
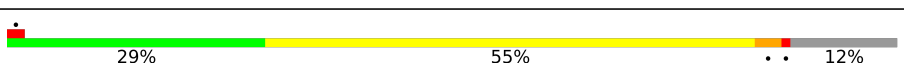
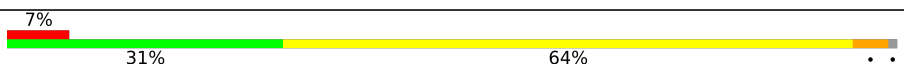
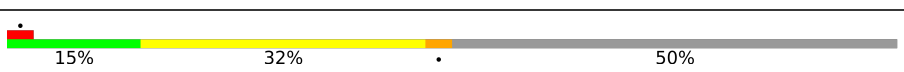
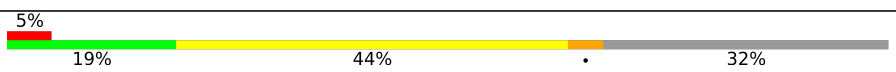
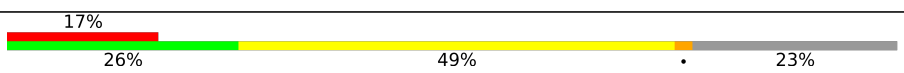
Mol	Chain	Length	Quality of chain
5	E	389	
6	F	439	
7	G	246	
8	H	234	
9	I	261	
10	J	248	
11	K	241	
12	L	263	
13	M	255	
14	N	239	
15	P	277	
16	Q	205	
17	R	201	
18	S	263	
19	T	241	
20	U	953	
21	V	534	
22	W	456	
23	X	422	
24	Y	389	
25	Z	324	
26	a	376	
27	b	377	
28	c	424	
29	d	350	

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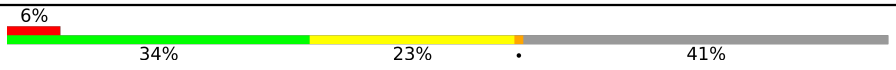
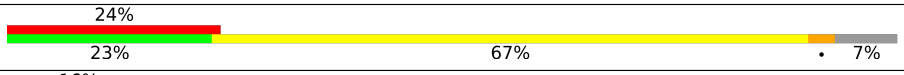
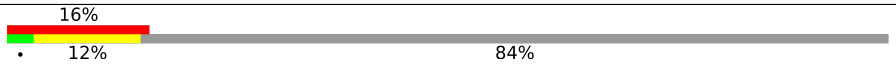
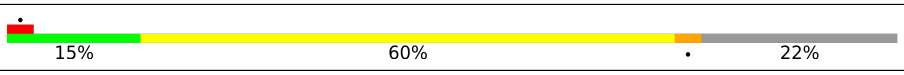
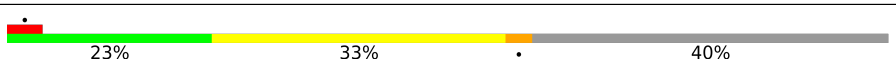
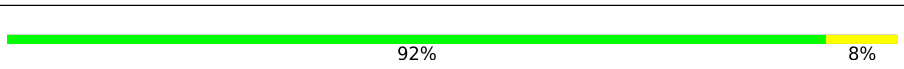
Mol	Chain	Length	Quality of chain
30	e	70	
31	f	908	
32	g	601	
33	h	264	
34	u	289	
35	v	12	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
38	ADP	C	501	-	-	X	-
38	ADP	D	501	-	-	X	-

2 Entry composition

There are 39 unique types of molecules in this entry. The entry contains 82193 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 regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	401	3163	1995	557	593	18	0	0

- Molecule 2 is a protein called 26S proteasome regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	398	3126	1968	532	611	15	0	0

- Molecule 3 is a protein called 26S protease regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	386	3051	1919	547	567	18	0	0

- Molecule 4 is a protein called 26S proteasome regulatory subunit 6B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	377	3018	1911	521	573	13	0	0

- Molecule 5 is a protein called 26S protease regulatory subunit 10B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	E	347	2750	1736	487	511	16	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	F	364	2850	1803	492	538	17	0	0

- Molecule 7 is a protein called Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	239	Total	C	N	O	S	0	0
			1831	1164	306	348	13		

- Molecule 8 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	232	Total	C	N	O	S	0	0
			1813	1158	307	342	6		

- Molecule 9 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	248	Total	C	N	O	S	0	0
			1908	1205	325	369	9		

- Molecule 10 is a protein called Proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	J	239	Total	C	N	O	S	0	0
			1813	1136	320	352	5		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
J	230	VAL	ALA	conflict	UNP O14818

- Molecule 11 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	231	Total	C	N	O	S	0	0
			1763	1106	292	355	10		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	83	LYS	ALA	conflict	UNP P28066

- Molecule 12 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	237	Total	C	N	O	S	0	0
			1845	1156	333	345	11		

- Molecule 13 is a protein called Proteasome subunit alpha type-3.

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

- Molecule 14 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	N	197	Total	C	N	O	S	0	0
			1482	928	253	289	12		

- Molecule 15 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	P	220	Total	C	N	O	S	0	0
			1645	1035	278	320	12		

- Molecule 16 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	Q	204	Total	C	N	O	S	0	0
			1587	1010	264	294	19		

- Molecule 17 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	R	199	Total	C	N	O	S	0	0
			1588	1017	270	292	9		

- Molecule 18 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	S	201	Total	C	N	O	S	0	0
			1559	982	274	294	9		

- Molecule 19 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	T	213	Total	C	N	O	S	0	0
			1641	1041	281	309	10		

- Molecule 20 is a protein called 26S proteasome non-ATPase regulatory subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	U	844	Total	C	N	O	S	0	0
			6584	4178	1119	1243	44		

- Molecule 21 is a protein called 26S proteasome non-ATPase regulatory subunit 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	V	442	Total	C	N	O	S	0	0
			3602	2296	643	650	13		

- Molecule 22 is a protein called 26S proteasome non-ATPase regulatory subunit 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	W	438	Total	C	N	O	S	0	0
			3570	2261	609	677	23		

- Molecule 23 is a protein called 26S proteasome non-ATPase regulatory subunit 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	X	378	Total	C	N	O	S	0	0
			2994	1909	507	566	12		

- Molecule 24 is a protein called 26S proteasome non-ATPase regulatory subunit 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Y	379	Total	C	N	O	S	0	0
			3123	1993	534	579	17		

- Molecule 25 is a protein called 26S proteasome non-ATPase regulatory subunit 7.

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

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

Mol	Chain	Residues	Atoms					AltConf	Trace
26	a	372	Total	C	N	O	S	0	0
			2991	1909	509	558	15		

- Molecule 27 is a protein called 26S proteasome non-ATPase regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	b	190	Total	C	N	O	S	0	0
			1454	908	260	278	8		

- Molecule 28 is a protein called 26S proteasome non-ATPase regulatory subunit 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	c	288	Total	C	N	O	S	0	0
			2264	1433	390	422	19		

- Molecule 29 is a protein called 26S proteasome non-ATPase regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	d	269	Total	C	N	O	S	0	0
			2188	1414	359	406	9		

- Molecule 30 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms				AltConf	Trace
30	e	41	Total	C	N	O	0	0
			353	217	55	81		

- Molecule 31 is a protein called 26S proteasome non-ATPase regulatory subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	f	842	Total	C	N	O	S	0	0
			6512	4117	1105	1245	45		

- Molecule 32 is a protein called Isoform 2 of NEDD8 ultimate buster 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	g	95	Total	C	N	O	S	0	0
			771	487	139	144	1		

- Molecule 33 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	h	206	Total	C	N	O	S	0	0
			1601	1010	277	303	11		

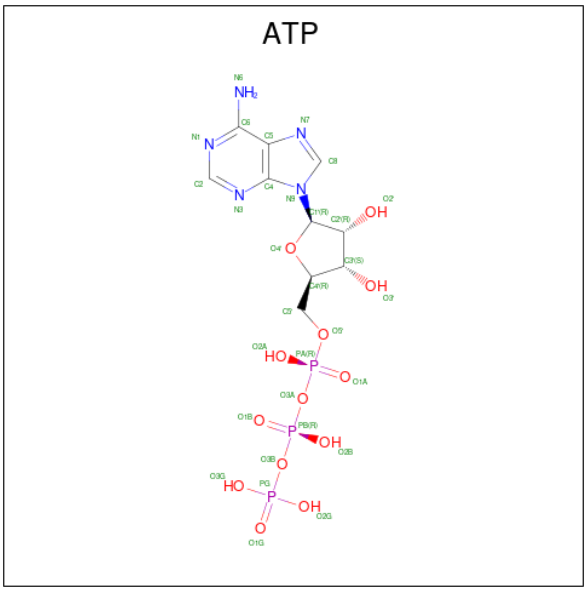
- Molecule 34 is a protein called Thioredoxin-like protein 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	u	172	Total	C	N	O	S	0	0
			1376	865	226	276	9		

- Molecule 35 is a protein called substrate peptide.

Mol	Chain	Residues	Atoms				AltConf	Trace
35	v	12	Total	C	N	O	0	0
			60	36	12	12		

- Molecule 36 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$) (labeled as "Ligand of Interest" by depositor).



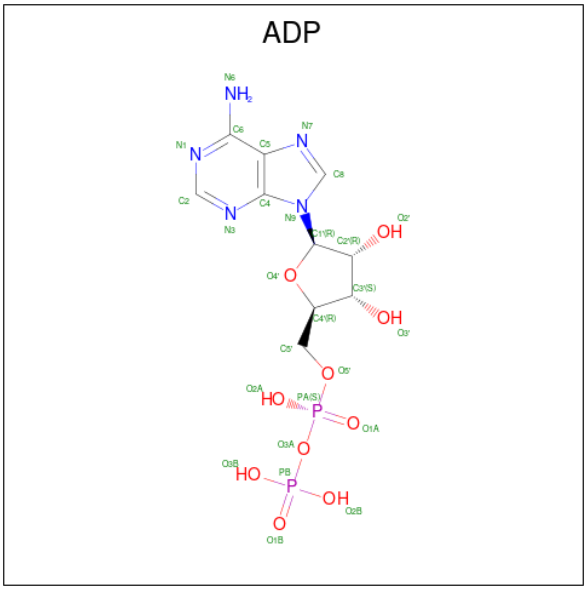
Mol	Chain	Residues	Atoms					AltConf
36	A	1	Total	C	N	O	P	0
			31	10	5	13	3	
36	B	1	Total	C	N	O	P	0
			31	10	5	13	3	
36	F	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 37 is MAGNESIUM ION (CCD ID: MG) (formula: Mg) (labeled as "Ligand of

Interest" by depositor).

Mol	Chain	Residues	Atoms	AltConf
37	A	1	Total Mg 1 1	0
37	B	1	Total Mg 1 1	0
37	C	1	Total Mg 1 1	0
37	D	1	Total Mg 1 1	0
37	F	1	Total Mg 1 1	0

- Molecule 38 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: $C_{10}H_{15}N_5O_{10}P_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
38	C	1	Total C N O P 27 10 5 10 2	0
38	D	1	Total C N O P 27 10 5 10 2	0
38	E	1	Total C N O P 27 10 5 10 2	0

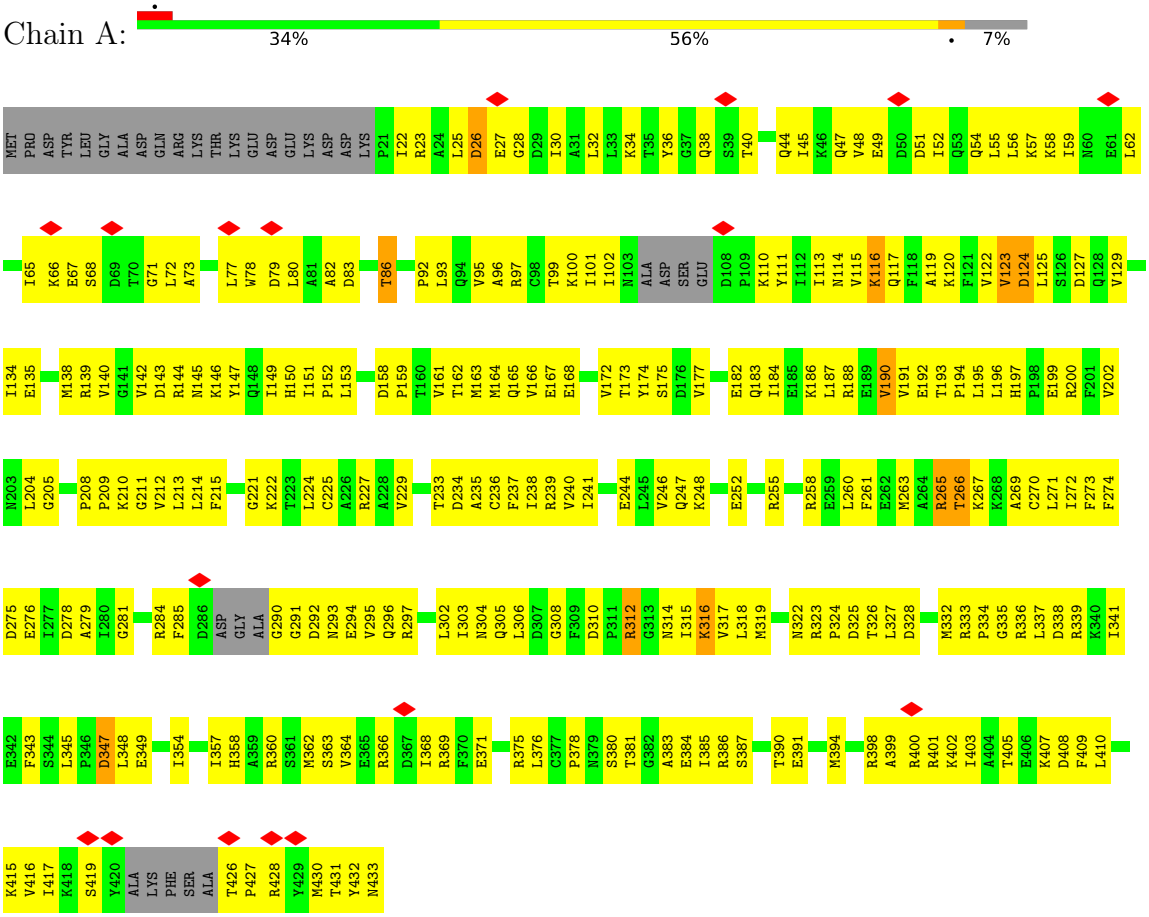
- Molecule 39 is ZINC ION (CCD ID: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		AltConf
39	u	1	Total	Zn	0
			1	1	

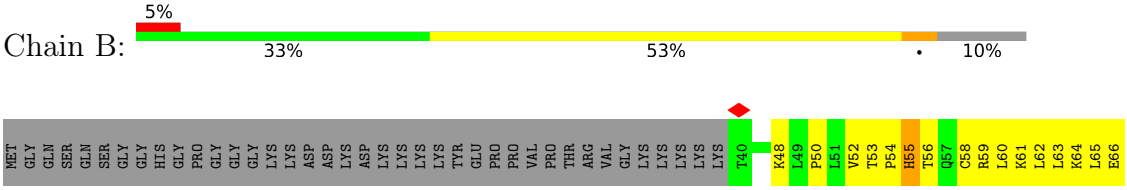
3 Residue-property plots (i)

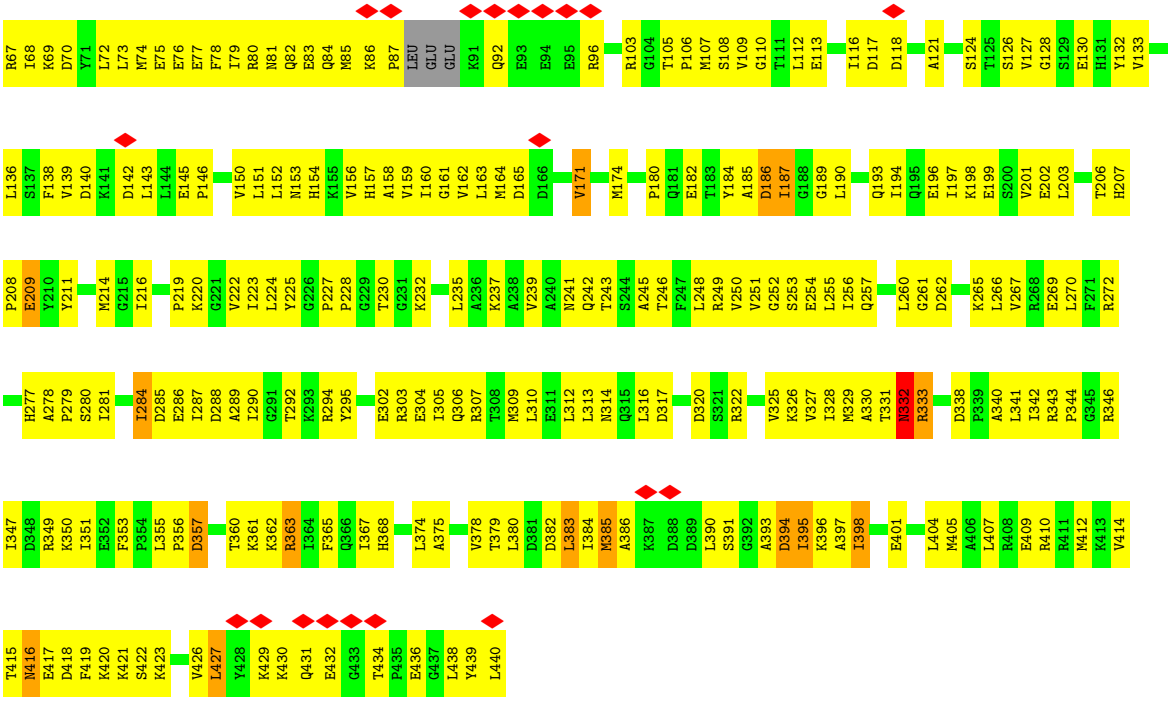
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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 regulatory subunit 7



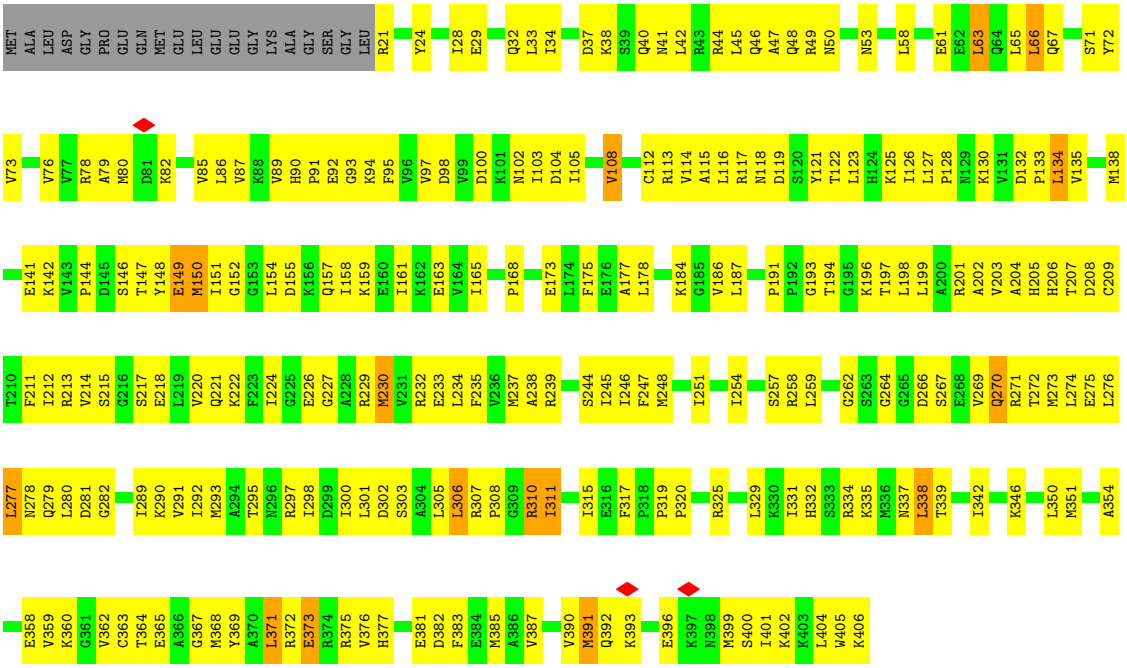
• Molecule 2: 26S proteasome regulatory subunit 4





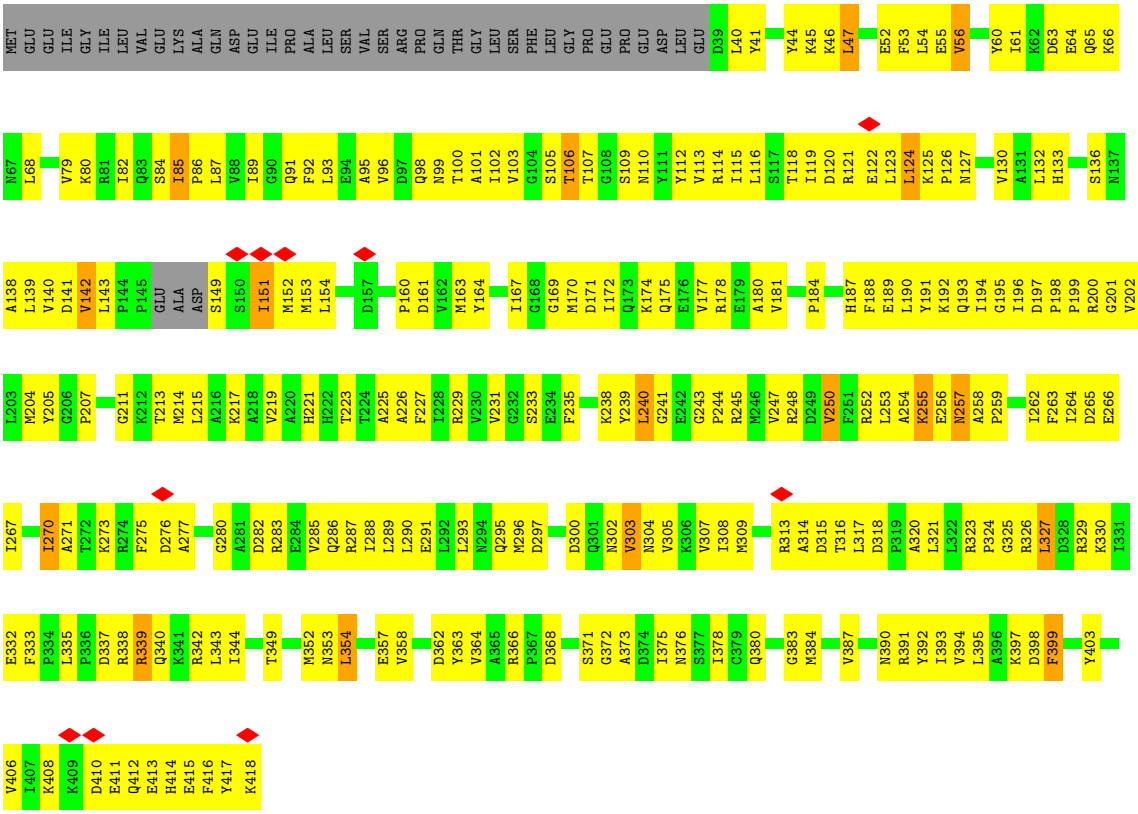
• Molecule 3: 26S protease regulatory subunit 8

Chain C:



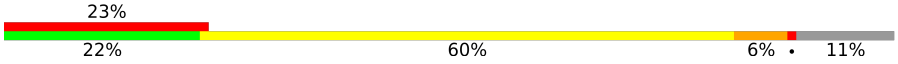
• Molecule 4: 26S proteasome regulatory subunit 6B

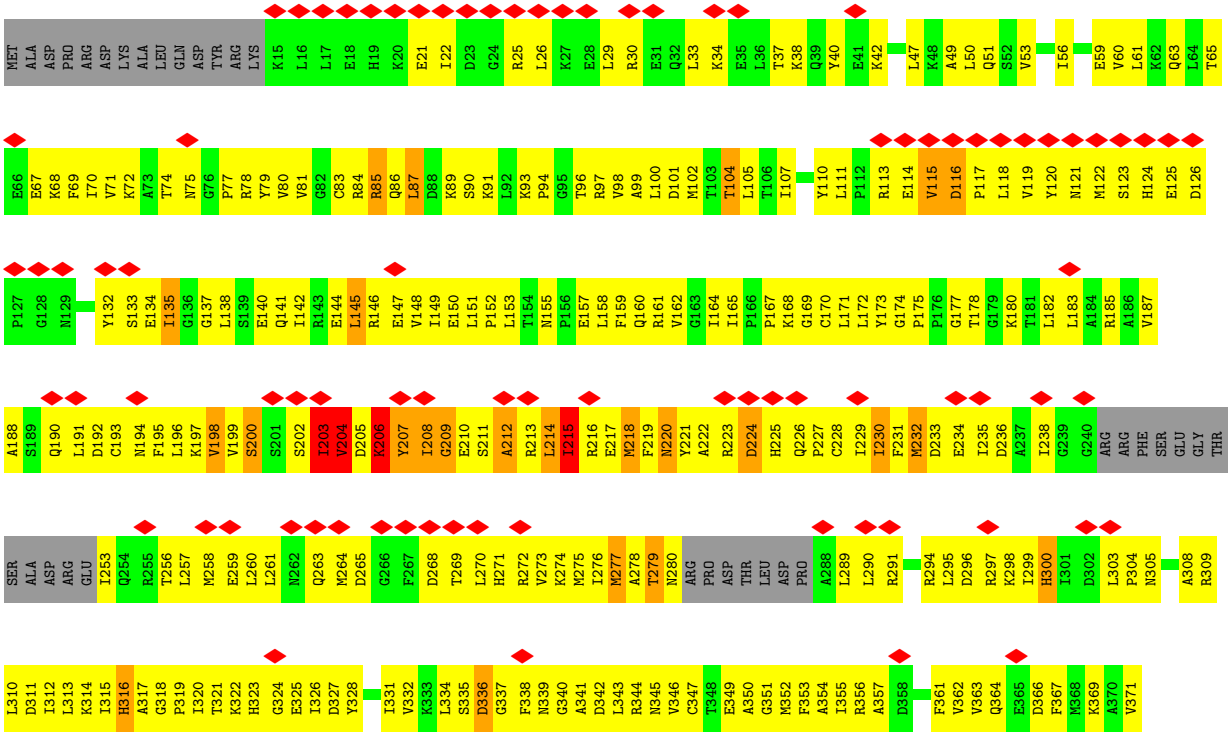
Chain D:

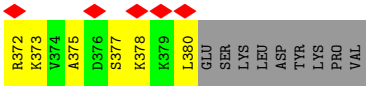


• Molecule 5: 26S protease regulatory subunit 10B

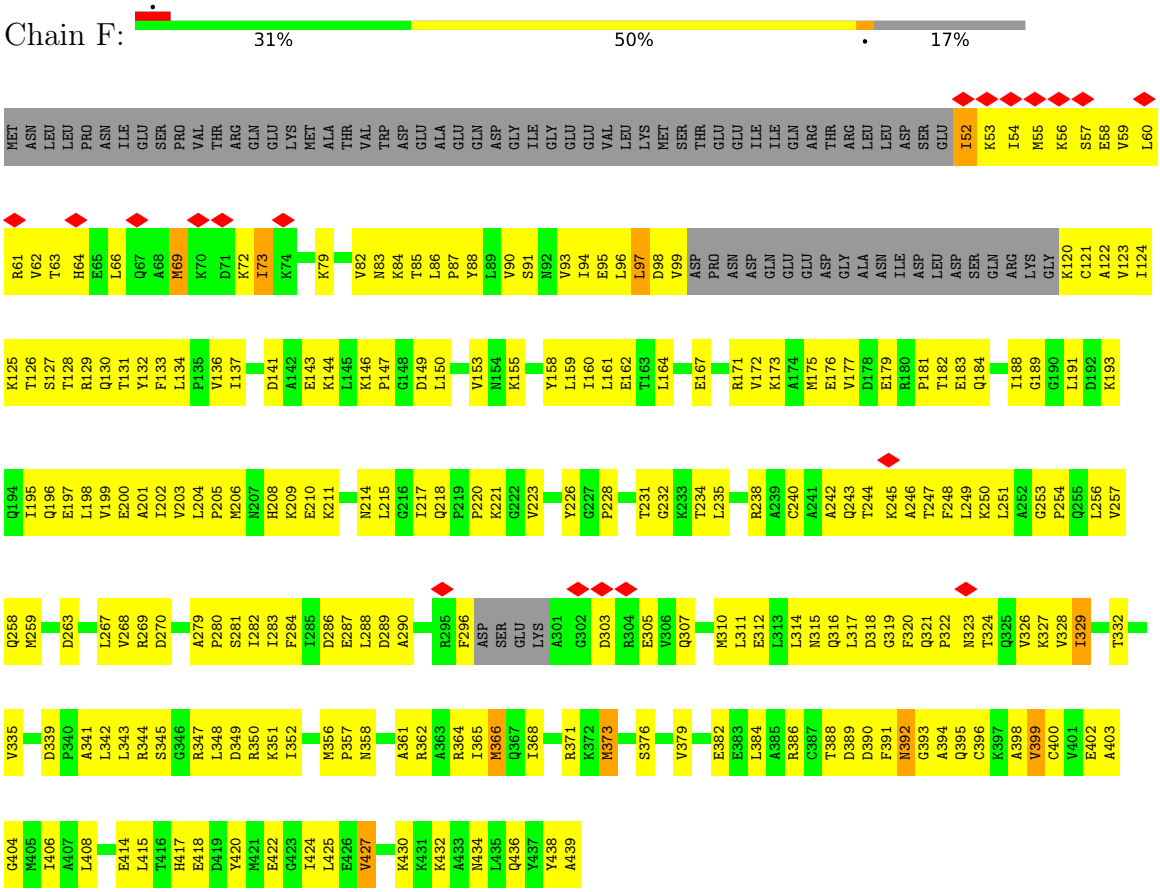
Chain E:



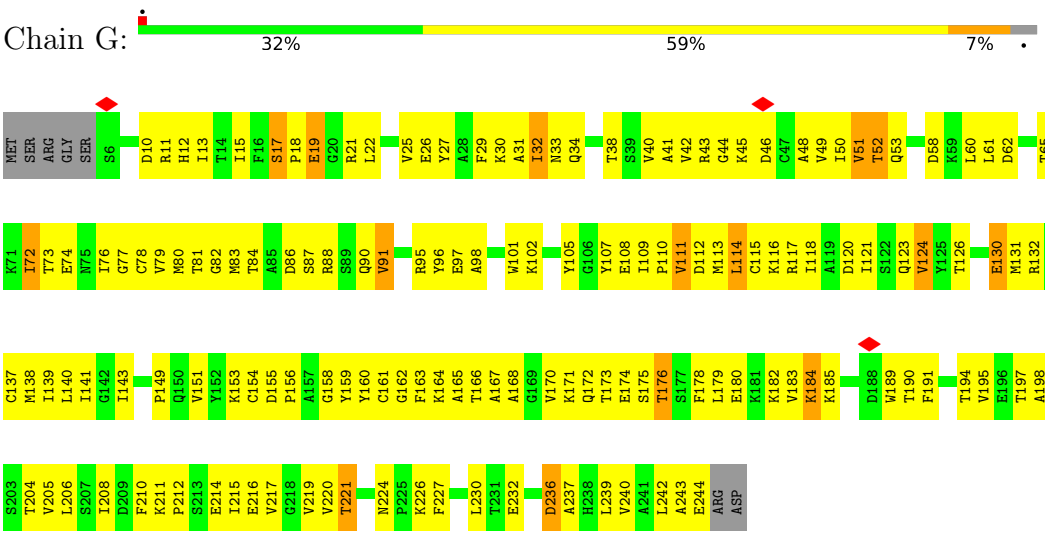




• Molecule 6: 26S proteasome regulatory subunit 6A

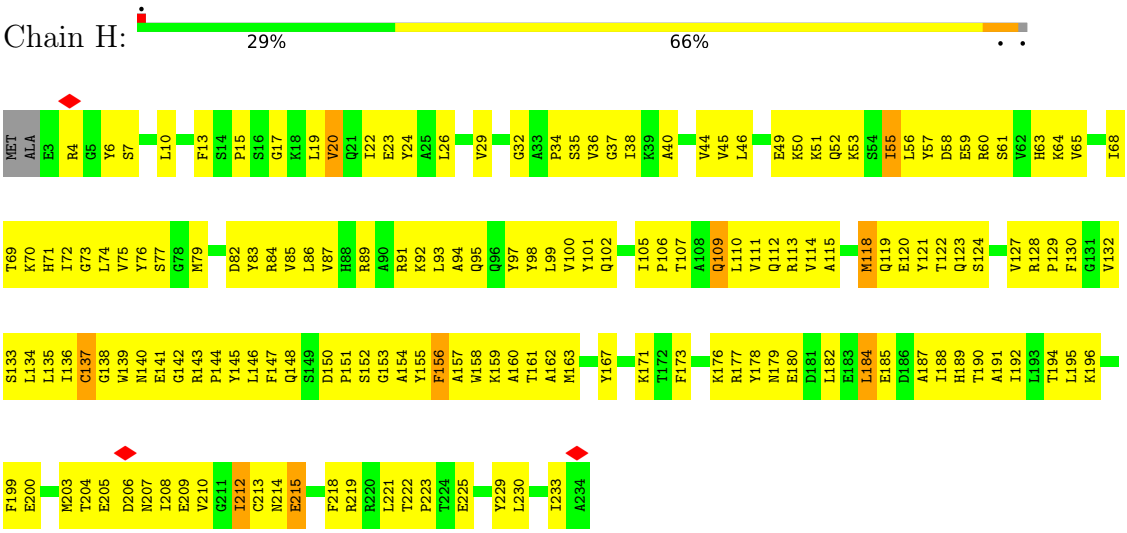


• Molecule 7: Proteasome subunit alpha type-6



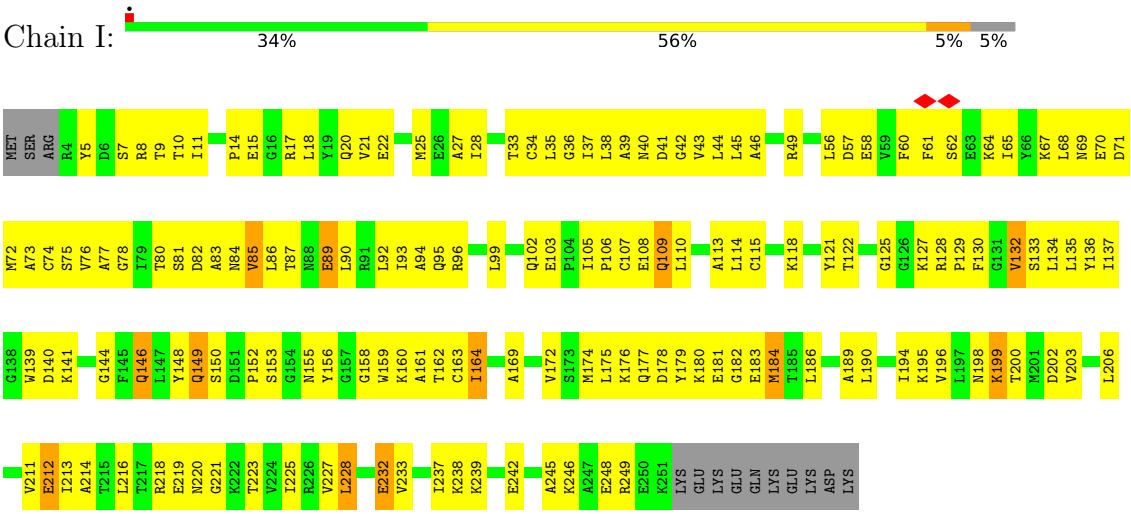
• Molecule 8: Proteasome subunit alpha type-2

Chain H:



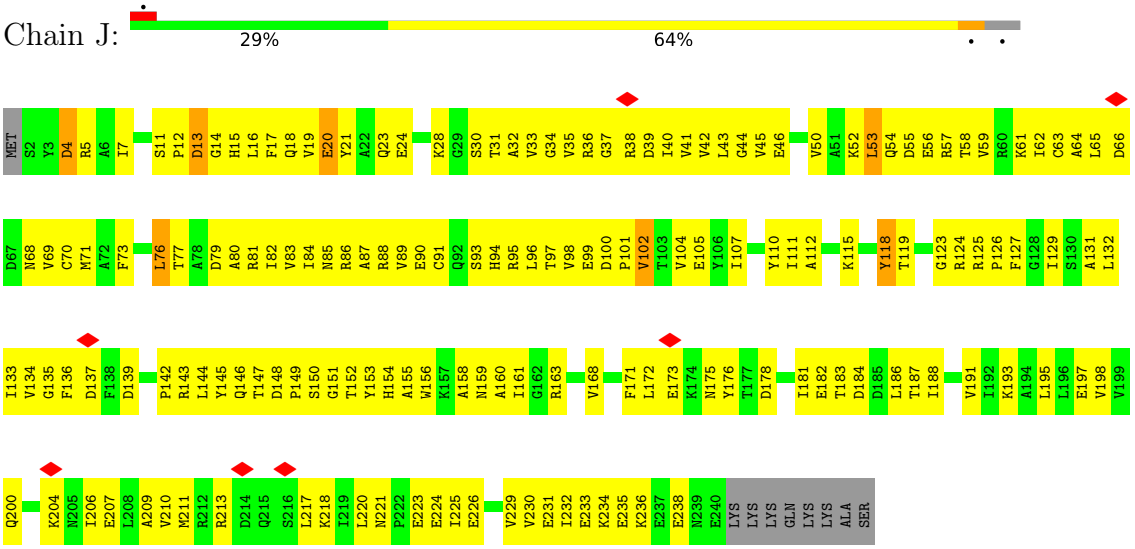
• Molecule 9: Proteasome subunit alpha type-4

Chain I:



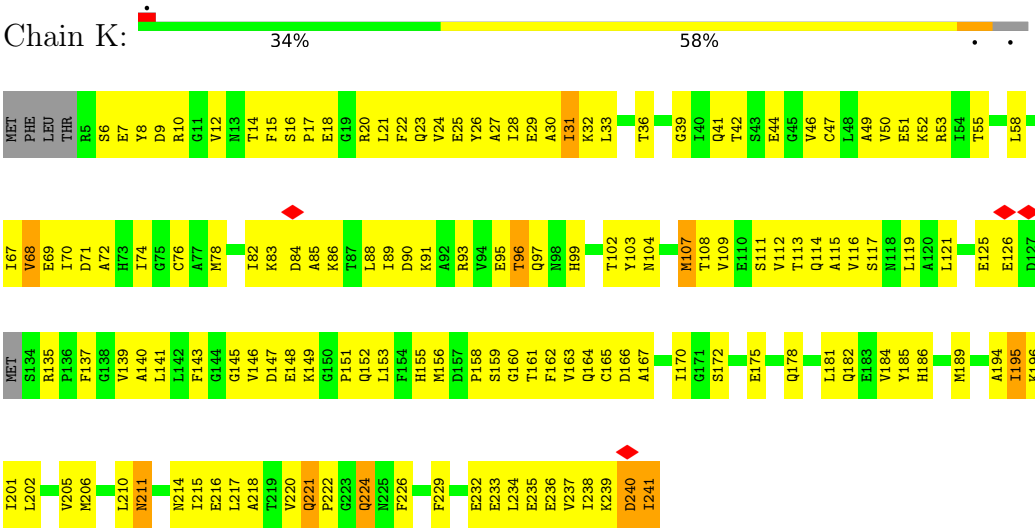
• Molecule 10: Proteasome subunit alpha type-7

Chain J:



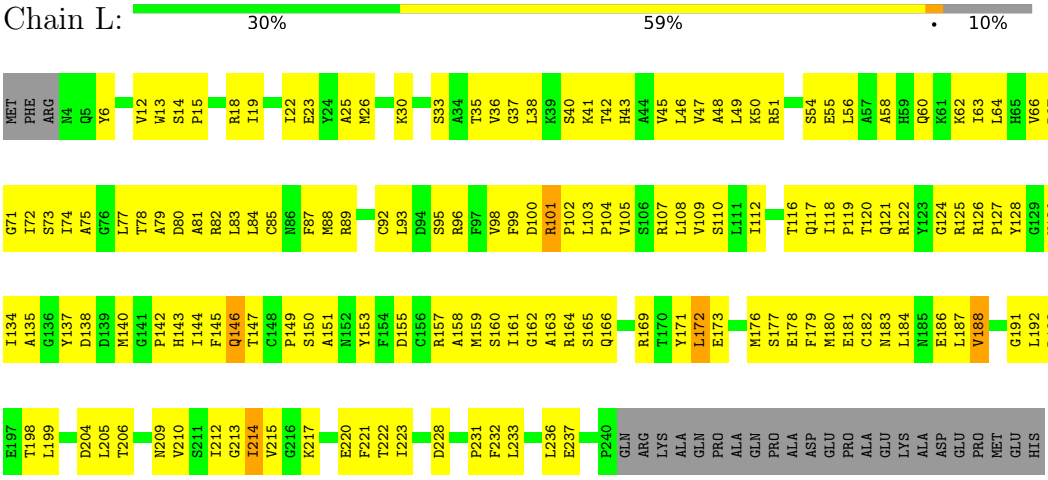
• Molecule 11: Proteasome subunit alpha type-5

Chain K:



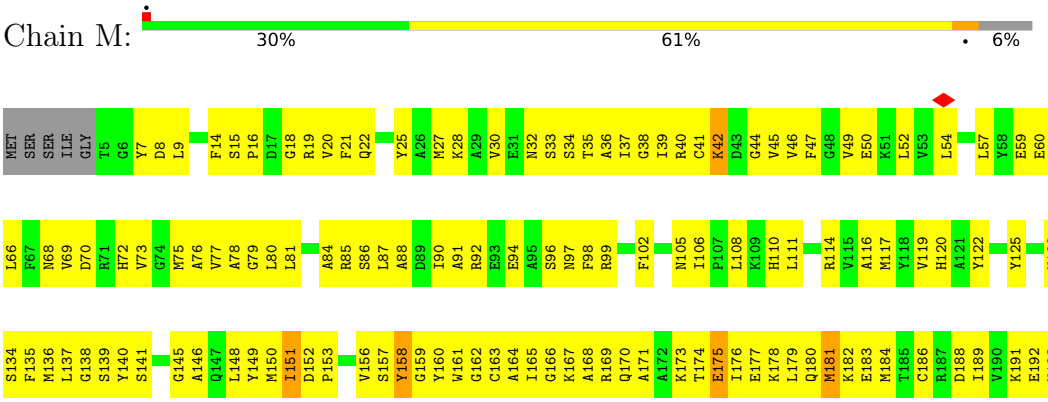
• Molecule 12: Proteasome subunit alpha type-1

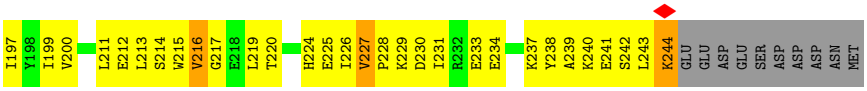
Chain L:



• Molecule 13: Proteasome subunit alpha type-3

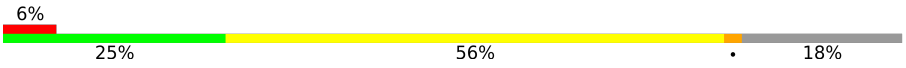
Chain M:

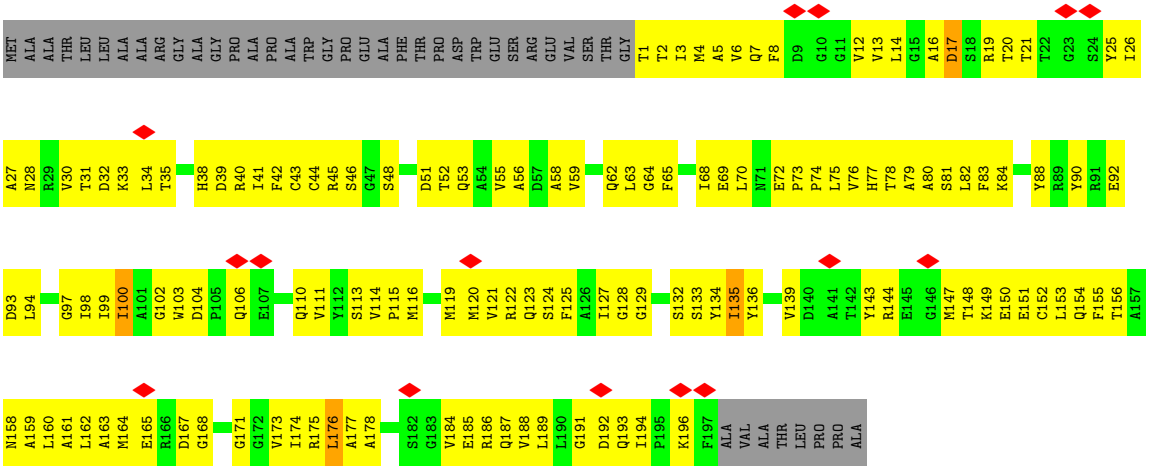




• Molecule 14: Proteasome subunit beta type-6

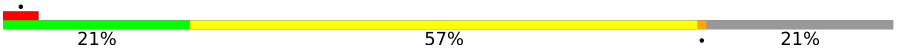
Chain N:

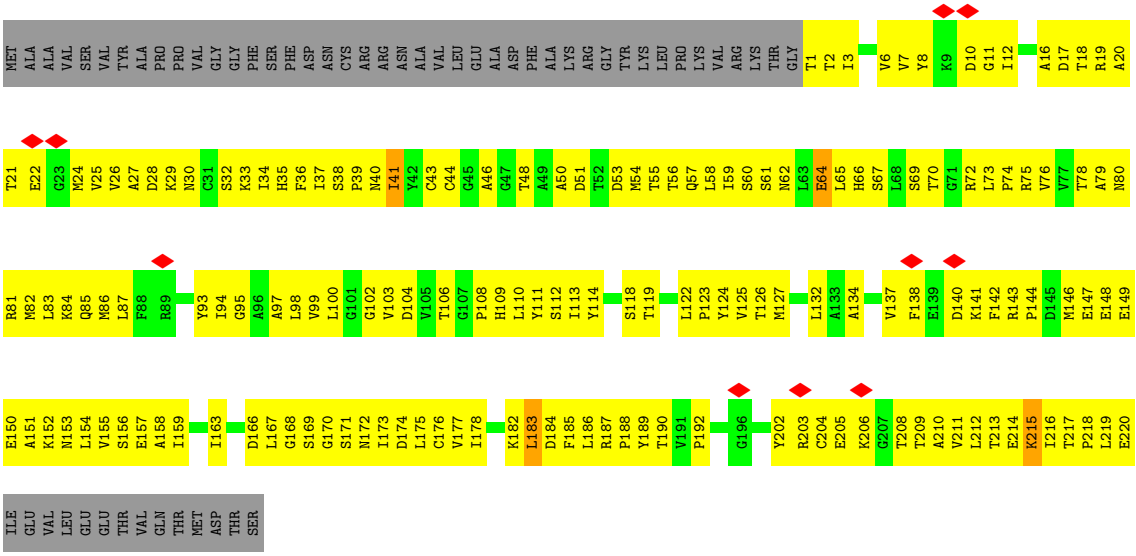




• Molecule 15: Proteasome subunit beta type-7

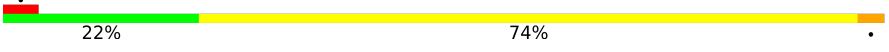
Chain P:

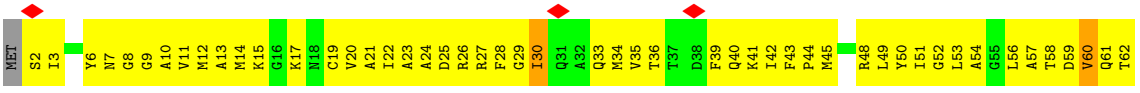




• Molecule 16: Proteasome subunit beta type-3

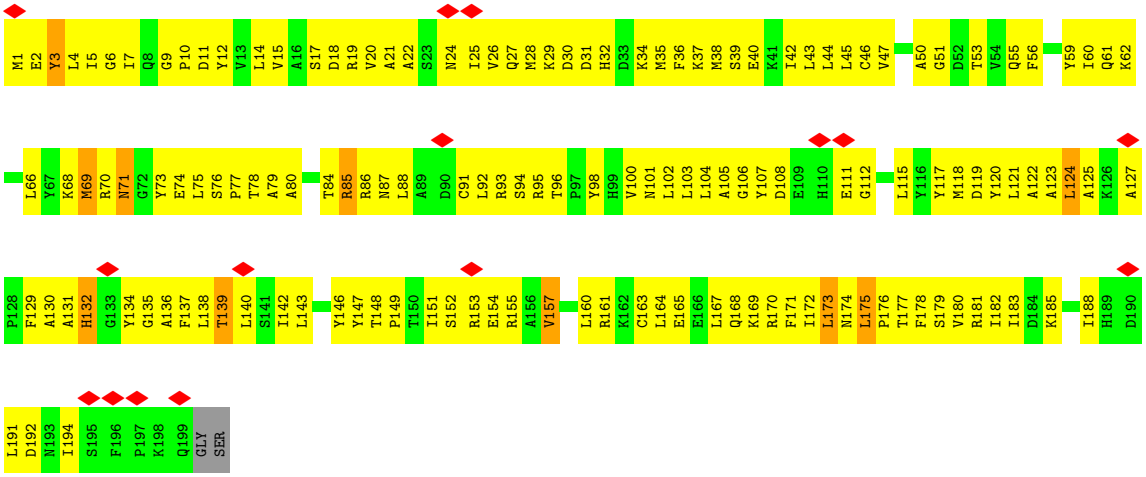
Chain Q:





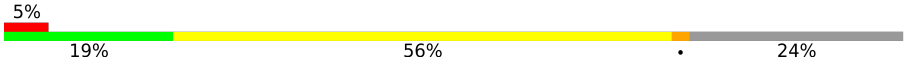
• Molecule 17: Proteasome subunit beta type-2

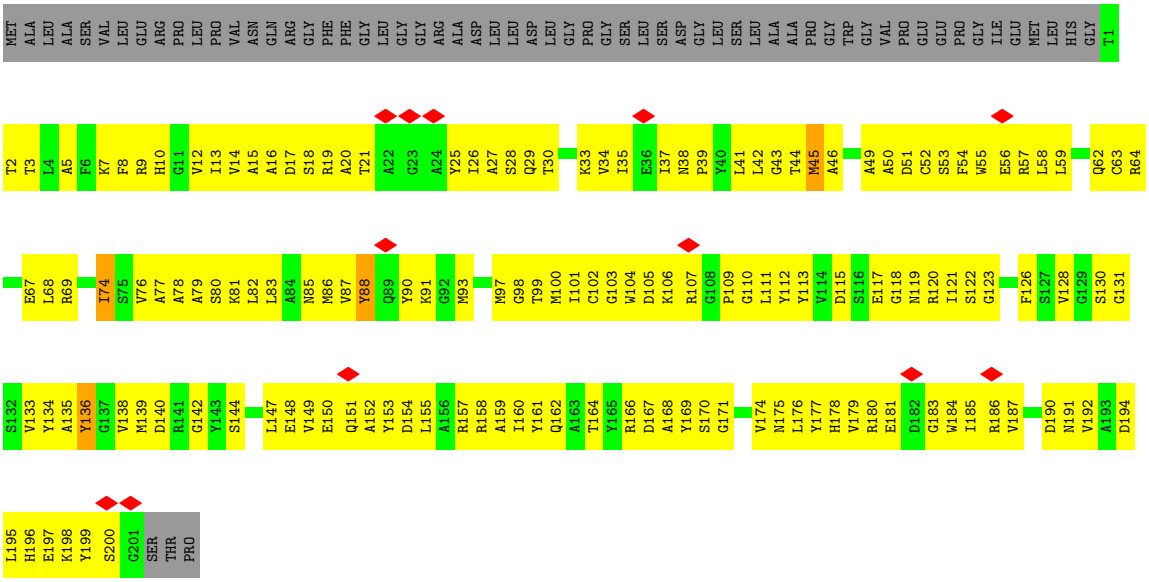
Chain R:



• Molecule 18: Proteasome subunit beta type-5

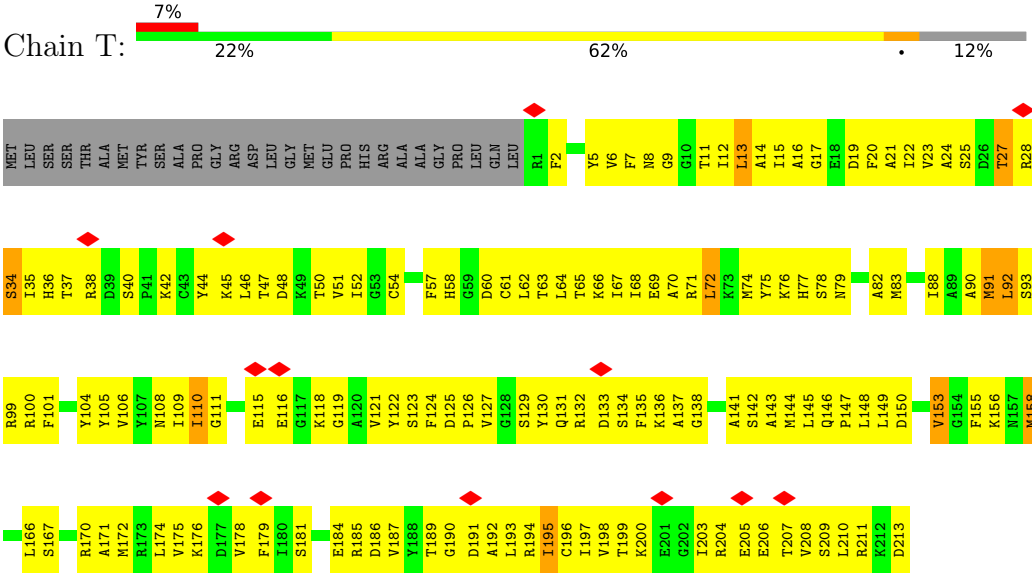
Chain S:





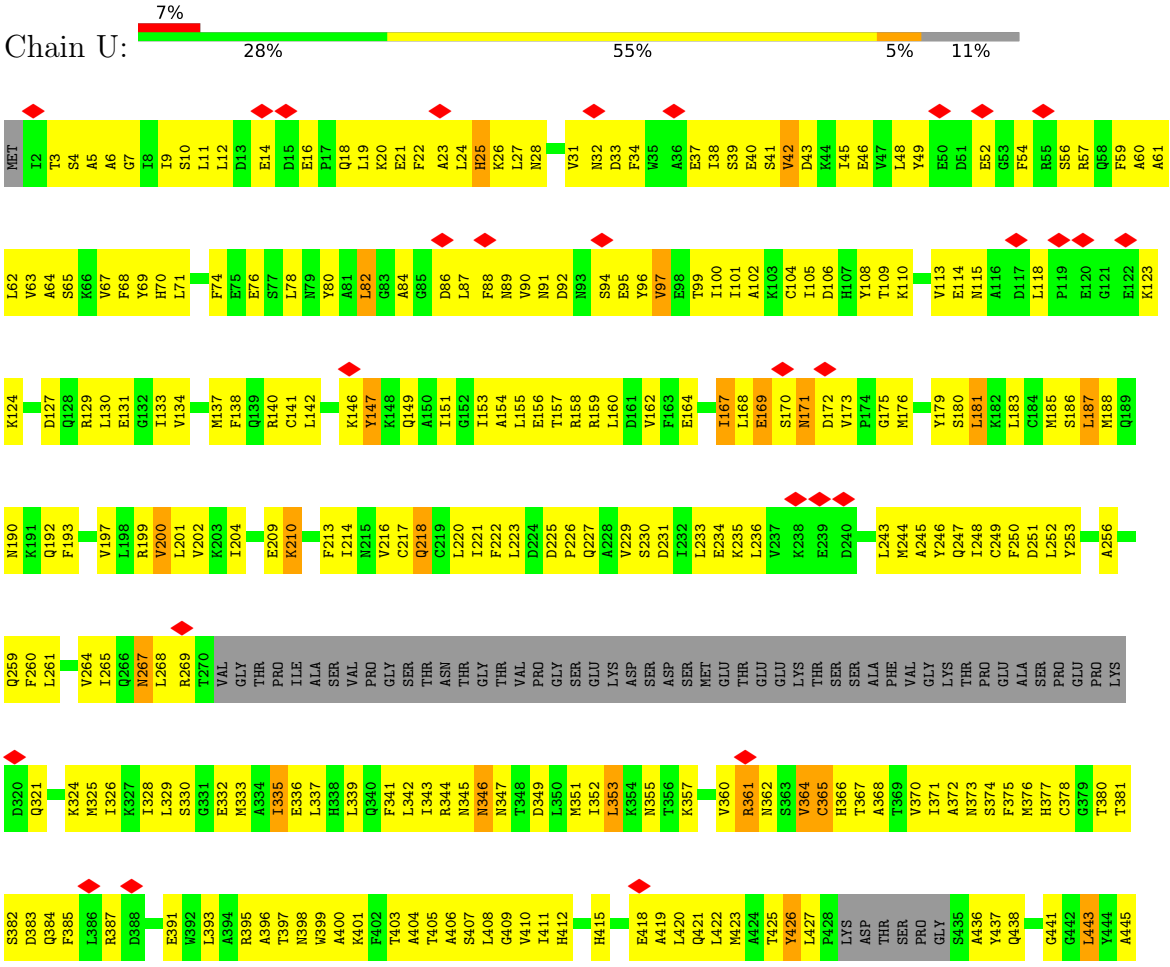
• Molecule 19: Proteasome subunit beta type-1

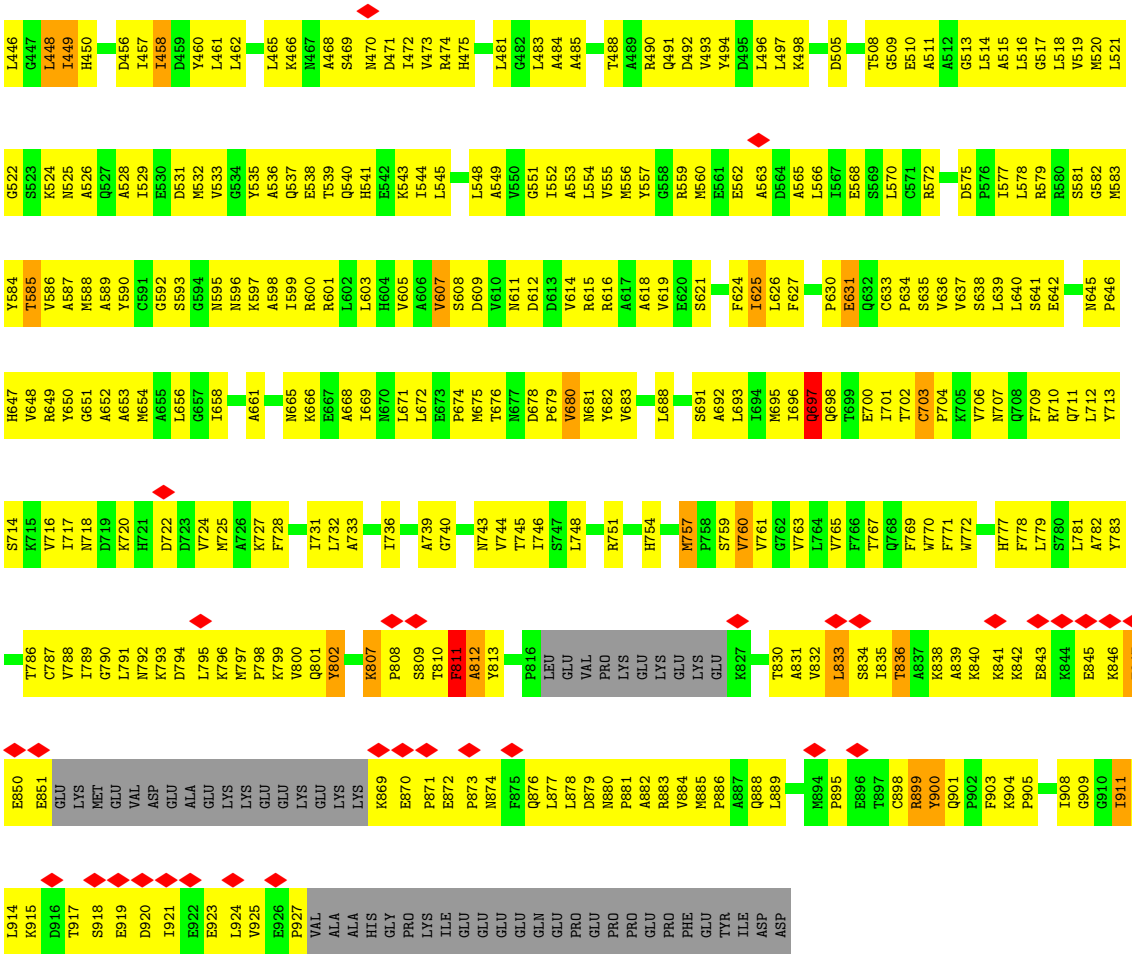
Chain T:



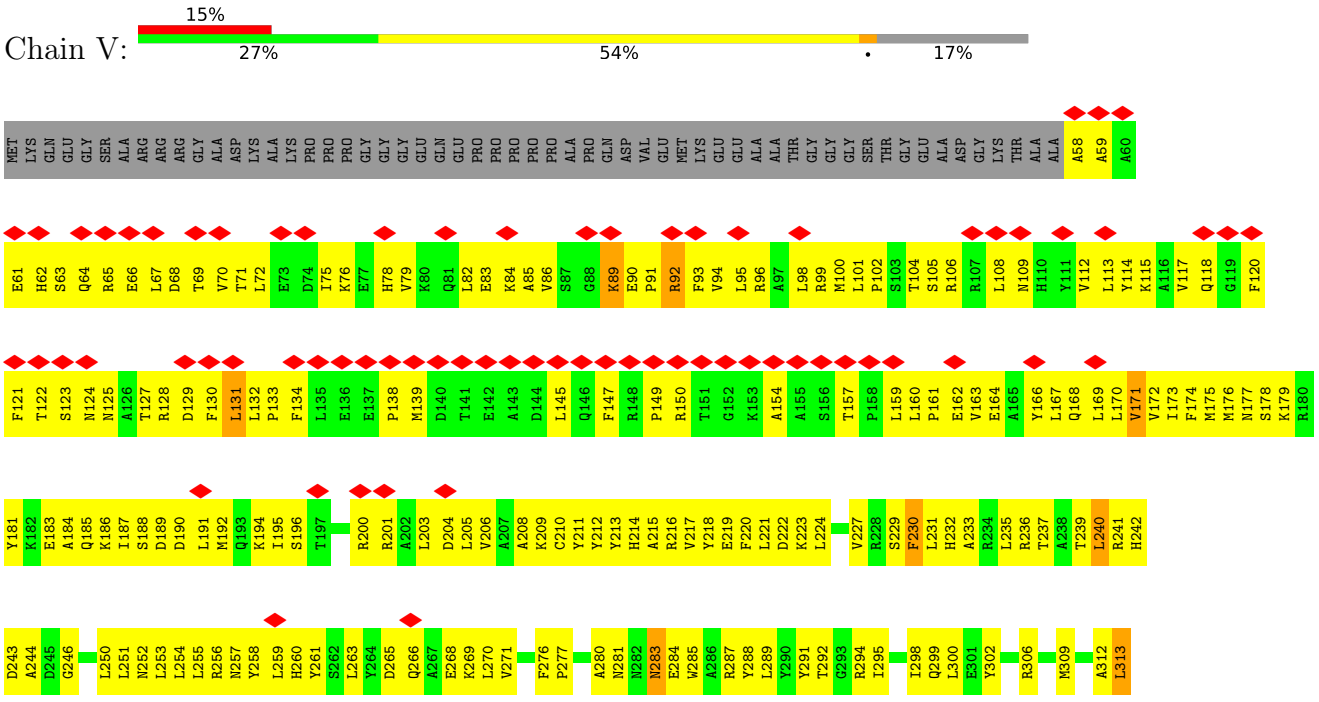
• Molecule 20: 26S proteasome non-ATPase regulatory subunit 1

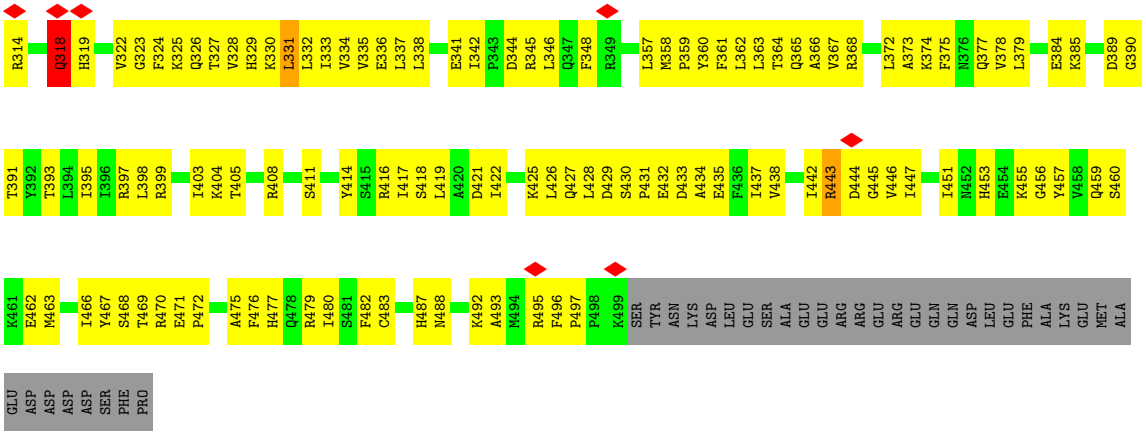
Chain U:





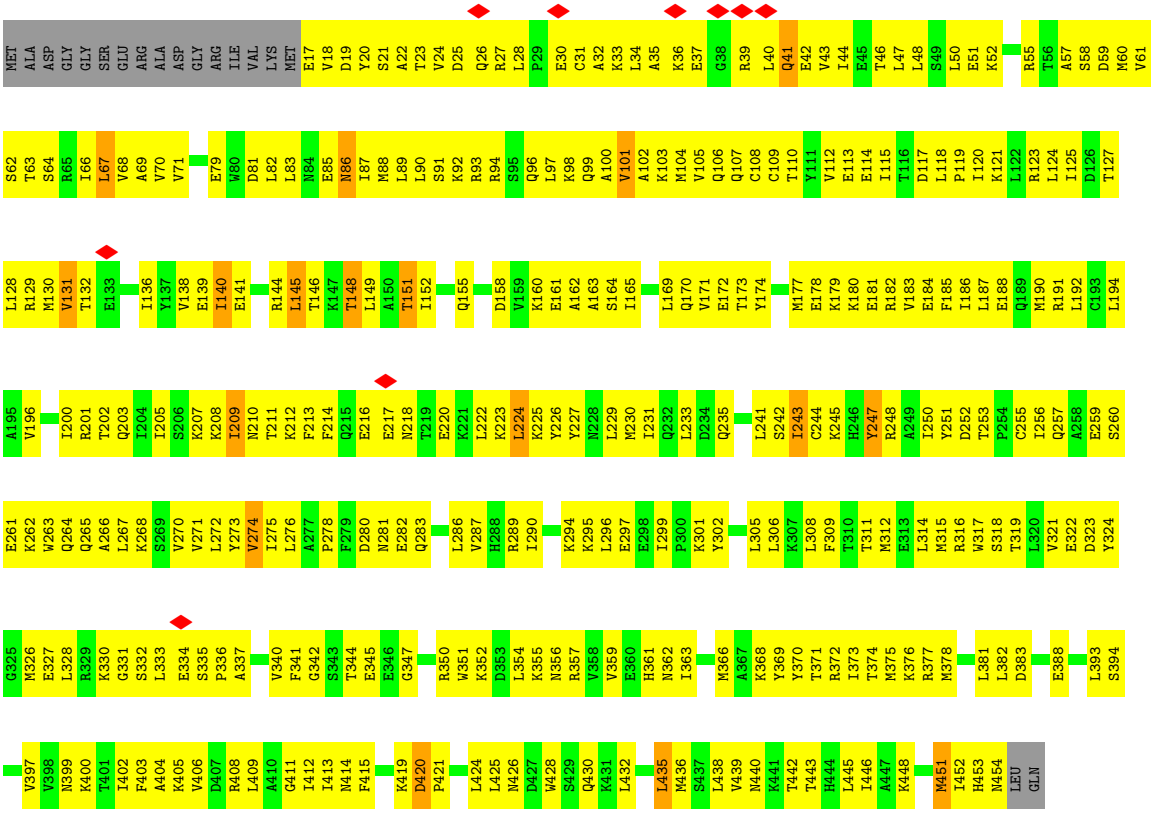
• Molecule 21: 26S proteasome non-ATPase regulatory subunit 3





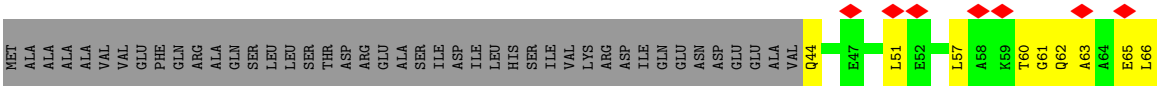
• Molecule 22: 26S proteasome non-ATPase regulatory subunit 12

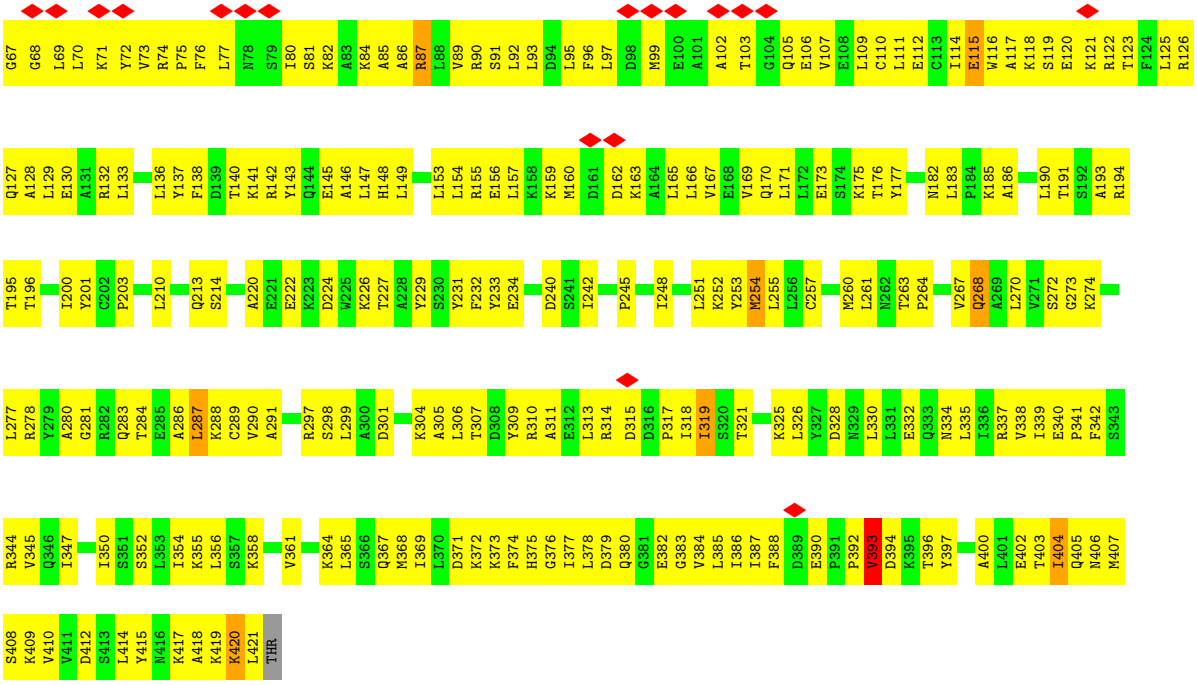
Chain W:



• Molecule 23: 26S proteasome non-ATPase regulatory subunit 11

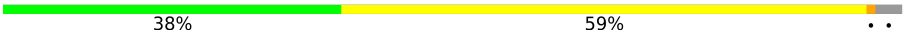
Chain X:

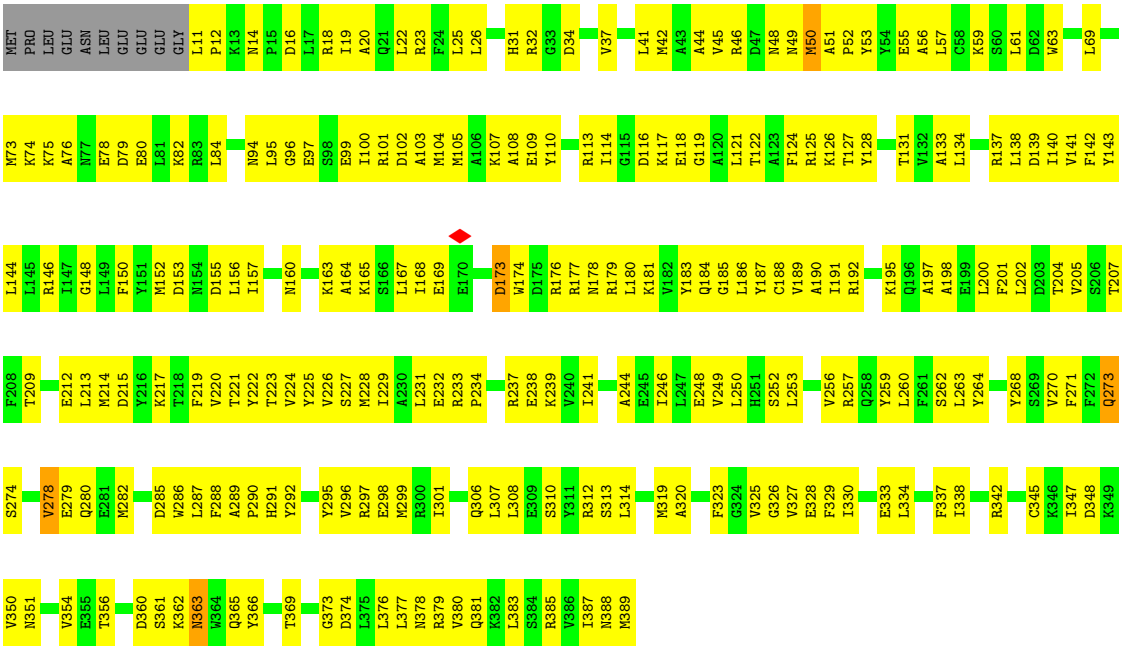




• Molecule 24: 26S proteasome non-ATPase regulatory subunit 6

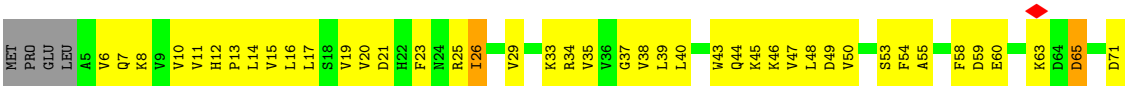
Chain Y:

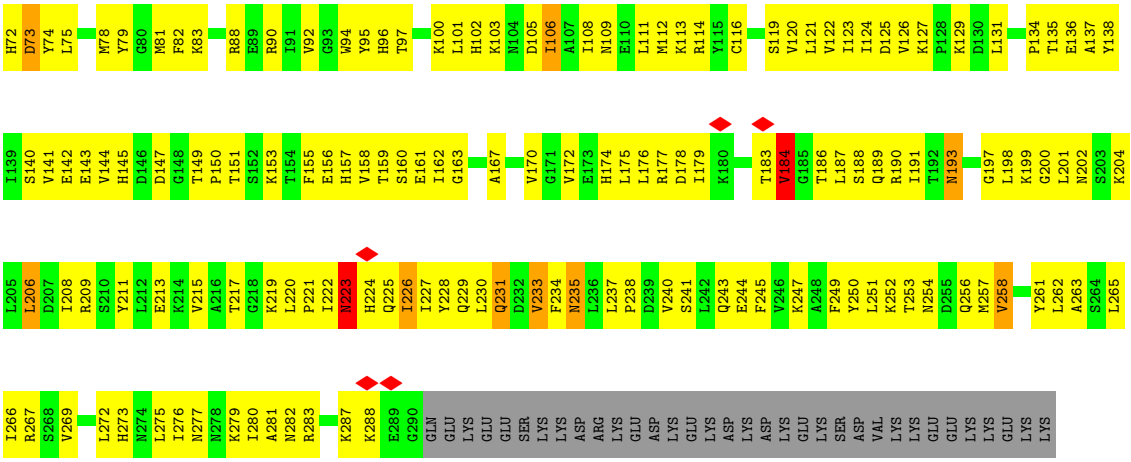




• Molecule 25: 26S proteasome non-ATPase regulatory subunit 7

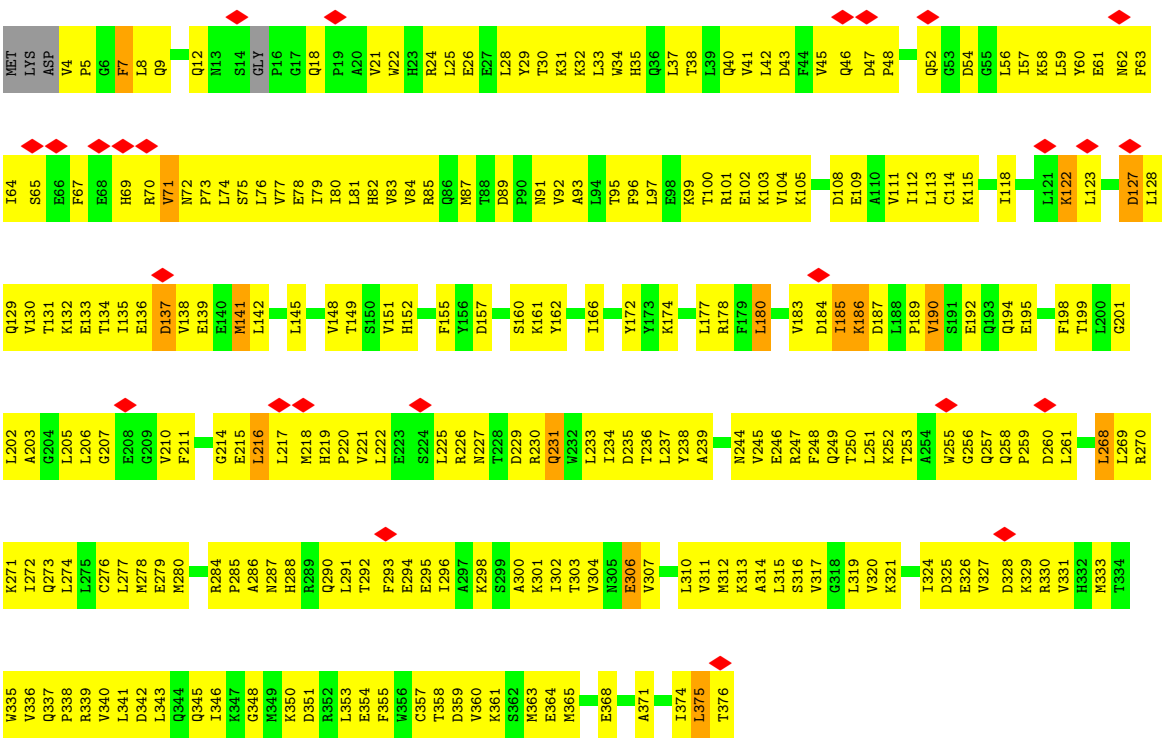
Chain Z:





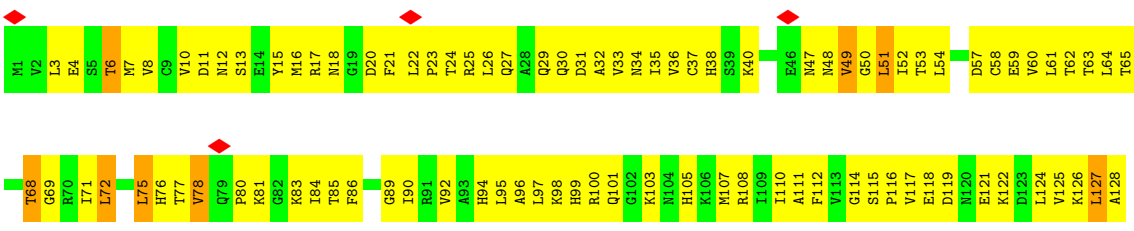
• Molecule 26: 26S proteasome non-ATPase regulatory subunit 13

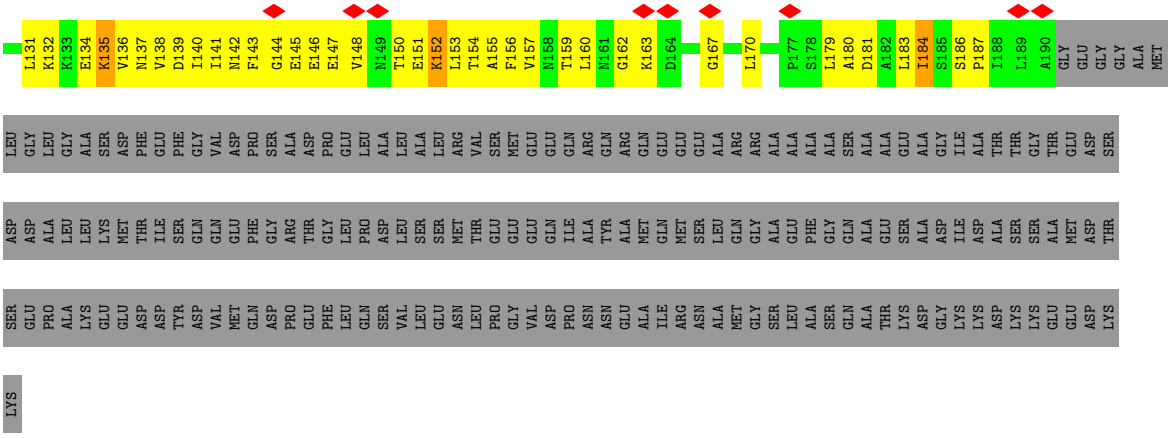
Chain a:



• Molecule 27: 26S proteasome non-ATPase regulatory subunit 4

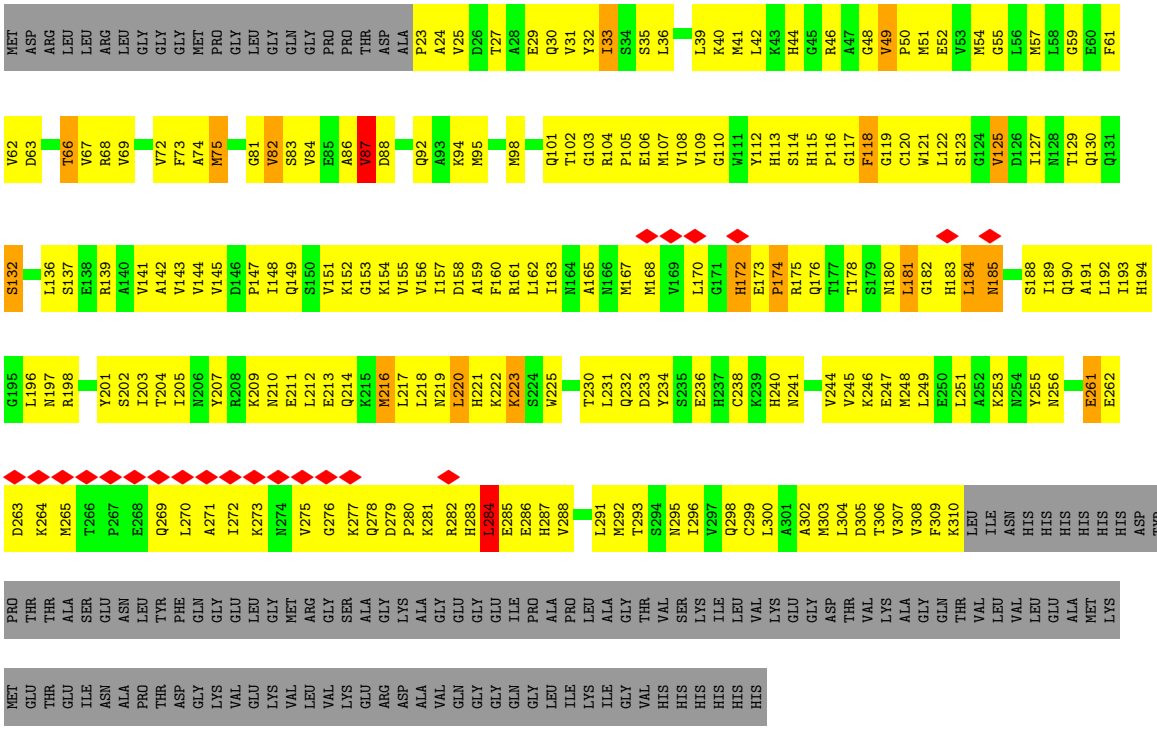
Chain b:





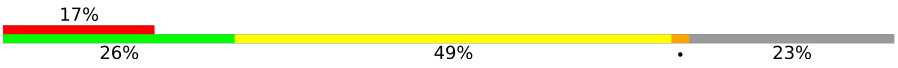
• Molecule 28: 26S proteasome non-ATPase regulatory subunit 14

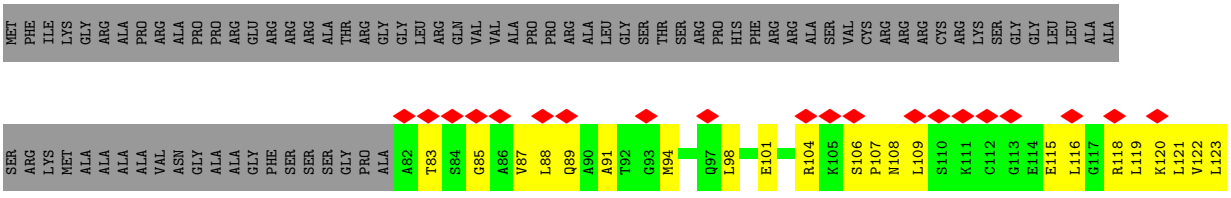
Chain c:

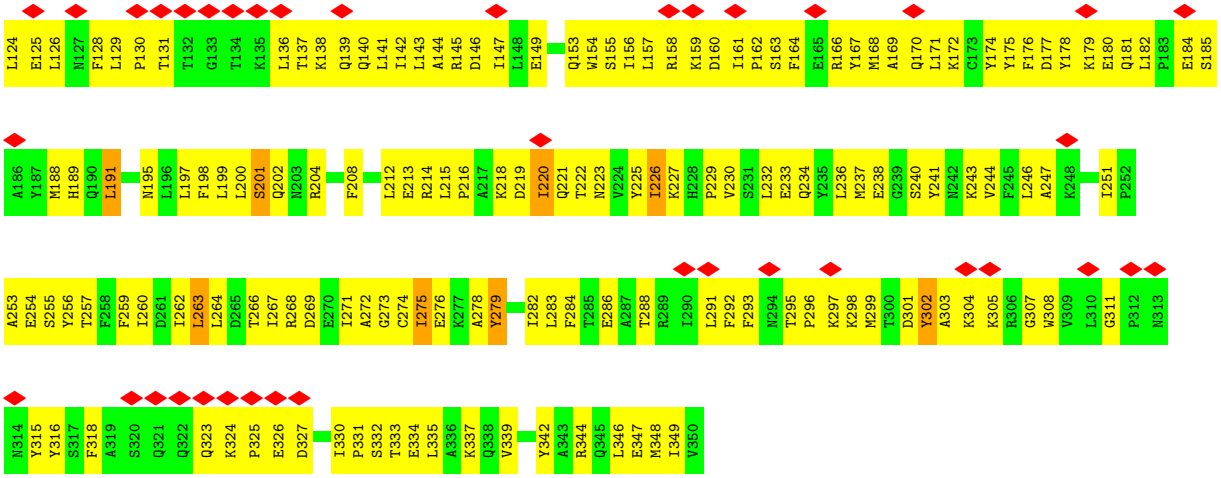


• Molecule 29: 26S proteasome non-ATPase regulatory subunit 8

Chain d:

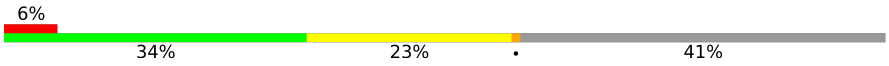


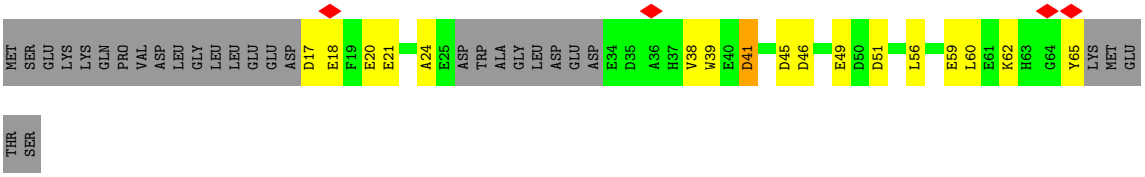




• Molecule 30: 26S proteasome complex subunit SEM1

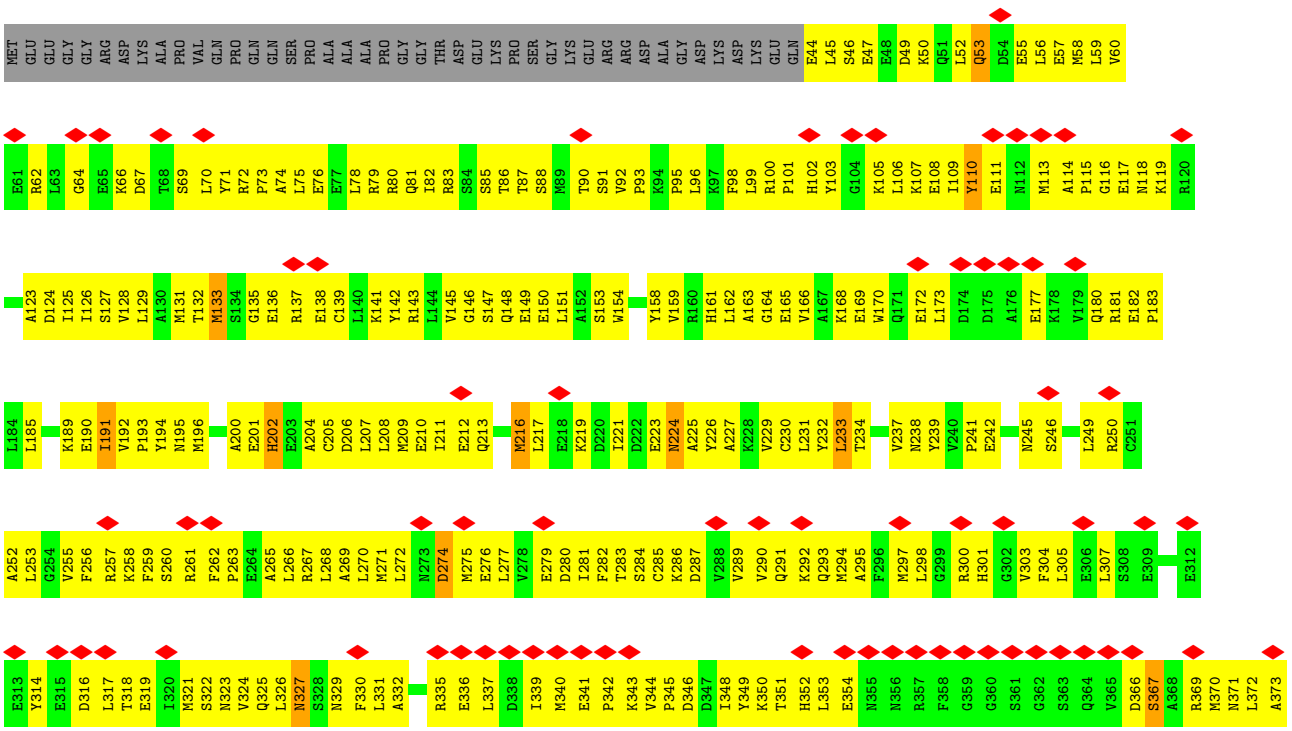
Chain e:

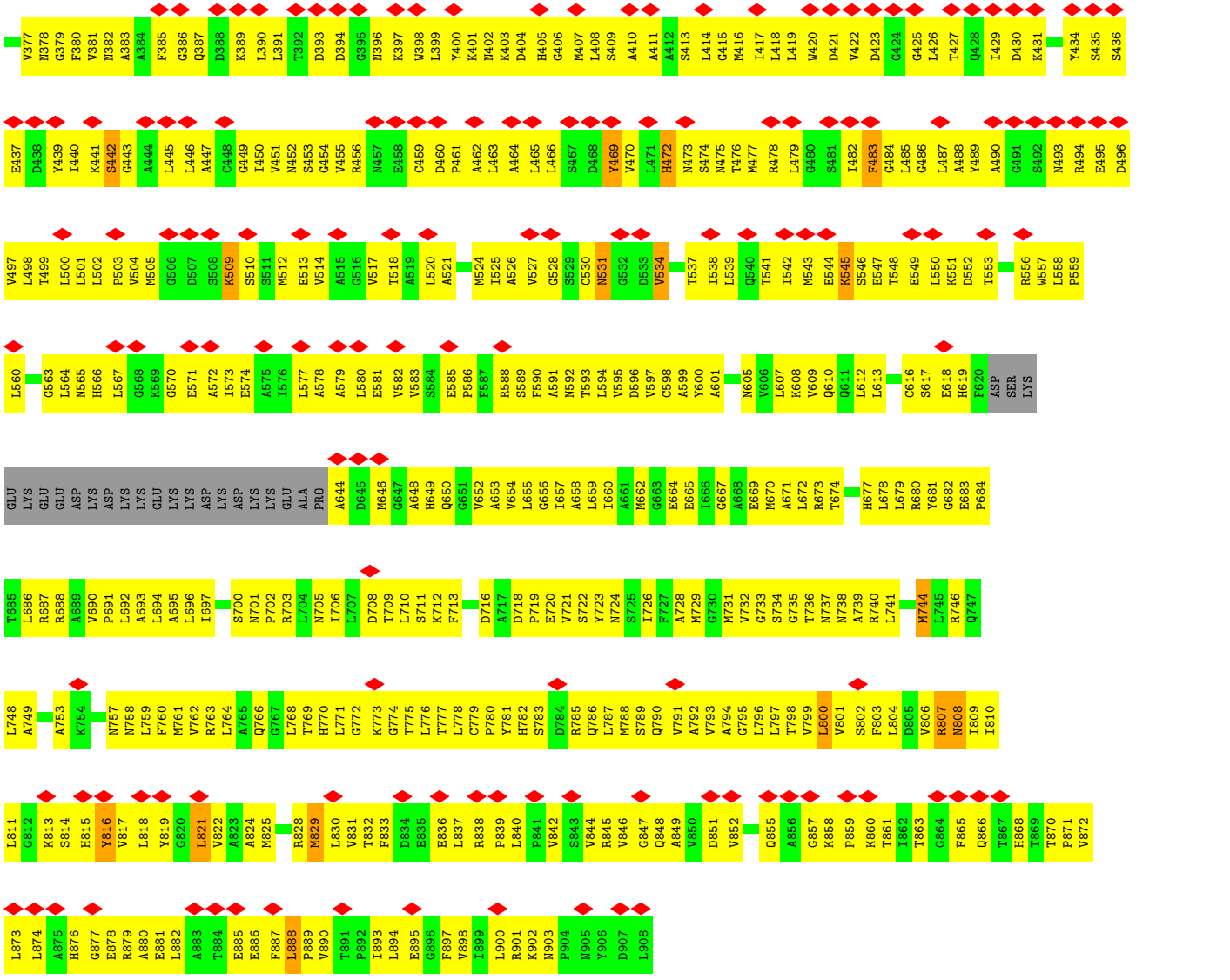




• Molecule 31: 26S proteasome non-ATPase regulatory subunit 2

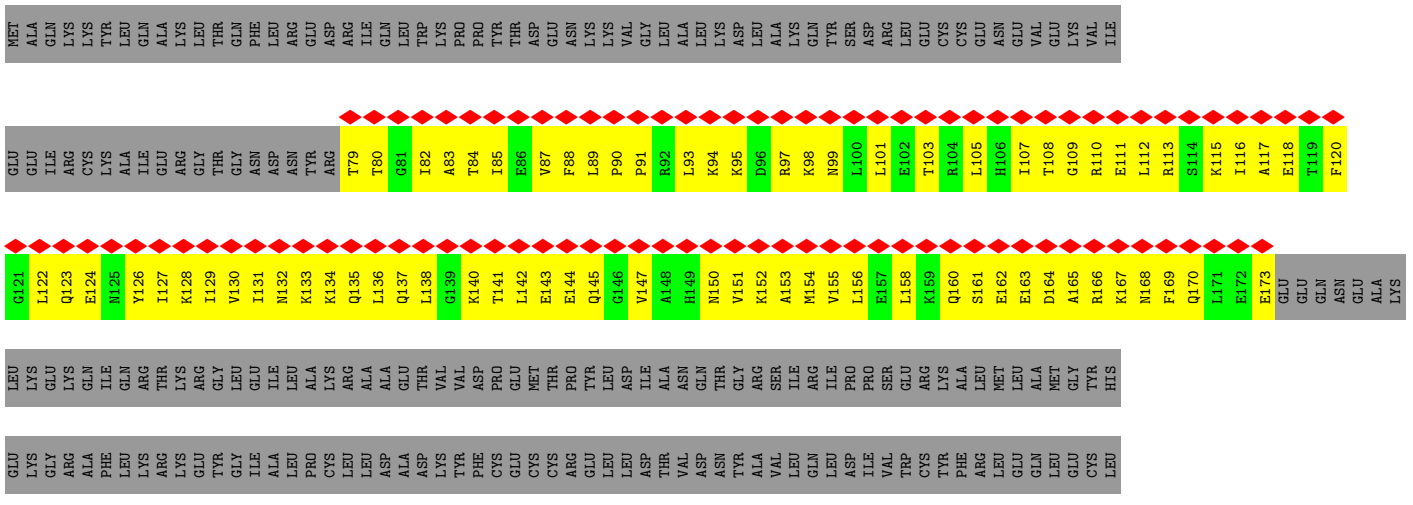
Chain f:

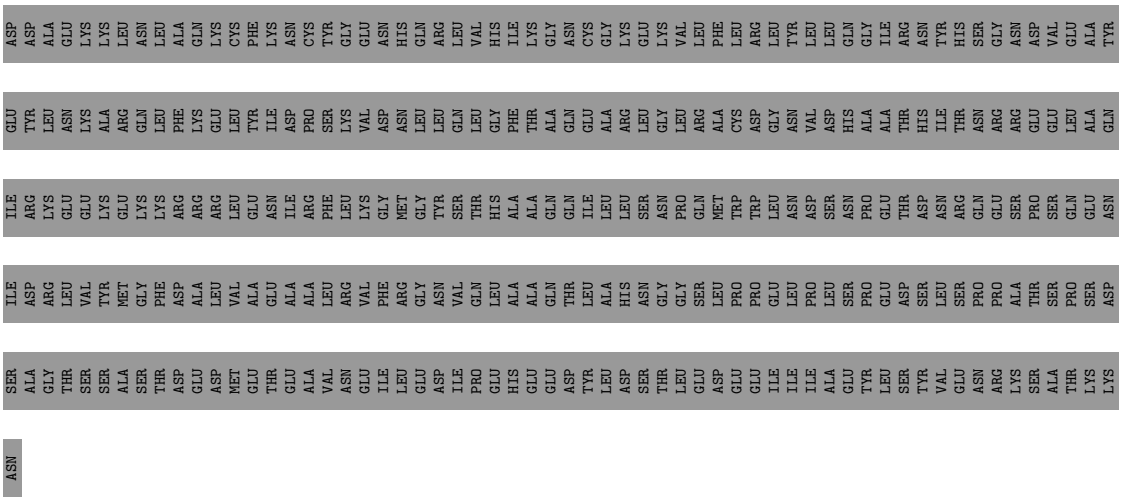




• Molecule 32: Isoform 2 of NEDD8 ultimate buster 1

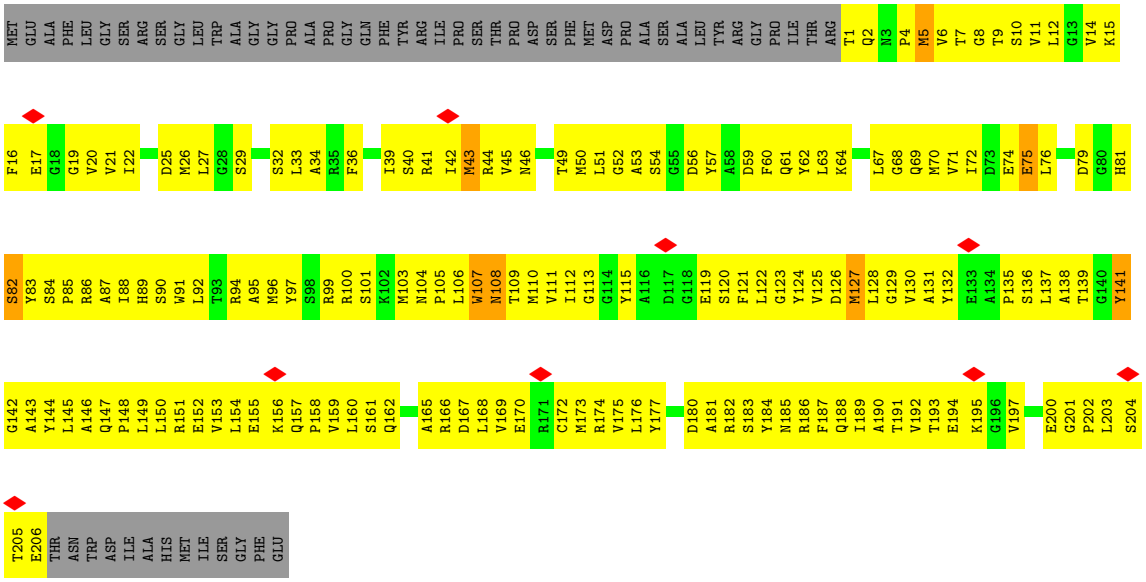
Chain g:





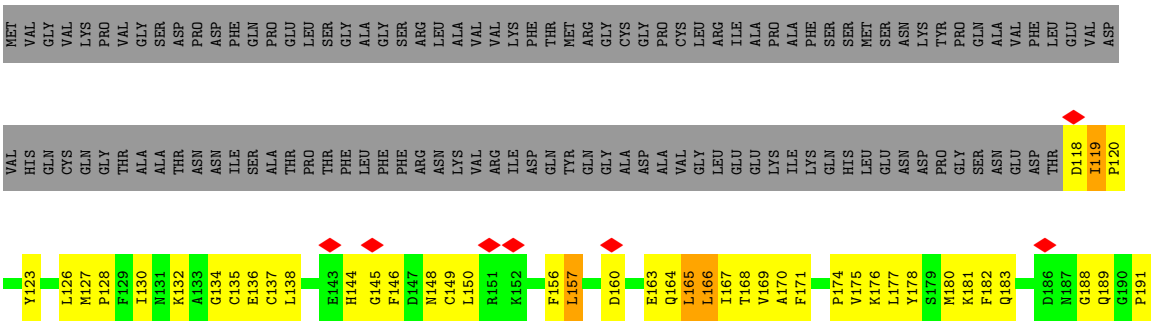
• Molecule 33: Proteasome subunit beta type-4

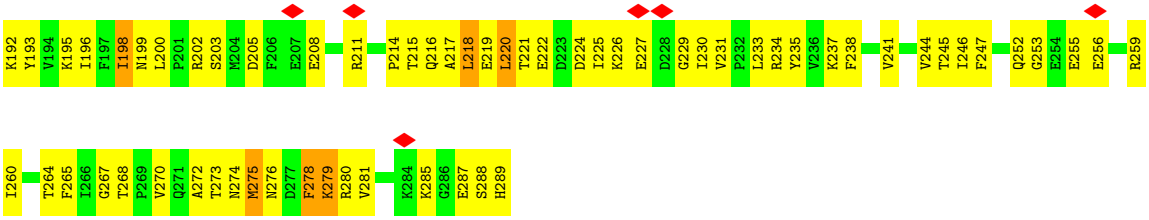
Chain h:



• Molecule 34: Thioredoxin-like protein 1

Chain u:





• Molecule 35: substrate peptide

Chain v:

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	95437	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	1700	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.771	Depositor
Minimum map value	-0.285	Depositor
Average map value	0.004	Depositor
Map value standard deviation	0.034	Depositor
Recommended contour level	0.15	Depositor
Map size (Å)	356.32, 356.32, 356.32	wwPDB
Map dimensions	340, 340, 340	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.048, 1.048, 1.048	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, ATP, MG, ADP

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	0.21	0/3213	0.39	1/4333 (0.0%)
2	B	0.31	0/3171	0.54	2/4276 (0.0%)
3	C	0.19	0/3092	0.35	1/4154 (0.0%)
4	D	0.16	0/3067	0.33	0/4135
5	E	0.27	0/2789	0.41	0/3751
6	F	0.26	0/2888	0.45	0/3889
7	G	0.16	0/1864	0.32	2/2527 (0.1%)
8	H	0.15	0/1852	0.31	0/2507
9	I	0.16	0/1938	0.33	0/2622
10	J	0.15	0/1838	0.28	0/2493
11	K	0.19	0/1789	0.34	0/2417
12	L	0.14	0/1880	0.27	0/2545
13	M	0.15	0/1891	0.28	0/2552
14	N	0.14	0/1508	0.28	0/2040
15	P	0.13	0/1672	0.31	0/2267
16	Q	0.18	0/1616	0.33	0/2180
17	R	0.35	0/1621	0.68	2/2194 (0.1%)
18	S	0.24	2/1590 (0.1%)	0.31	0/2147
19	T	0.13	0/1671	0.30	0/2252
20	U	0.33	4/6696 (0.1%)	0.65	12/9052 (0.1%)
21	V	0.18	0/3672	0.31	0/4957
22	W	0.13	0/3618	0.26	0/4868
23	X	0.13	0/3038	0.25	0/4095
24	Y	0.14	0/3181	0.24	0/4285
25	Z	0.24	0/2324	0.54	4/3150 (0.1%)
26	a	0.14	0/3048	0.31	0/4124
27	b	0.19	0/1474	0.41	1/1996 (0.1%)
28	c	0.46	0/2306	0.79	5/3117 (0.2%)
29	d	0.14	0/2234	0.31	0/3018
30	e	0.14	0/362	0.25	0/490
31	f	0.13	0/6623	0.31	0/8965
32	g	0.12	0/778	0.23	0/1041

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
33	h	0.14	0/1631	0.33	0/2206
34	u	0.42	0/1403	0.62	3/1892 (0.2%)
All	All	0.22	6/83338 (0.0%)	0.41	33/112537 (0.0%)

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	A	0	3
17	R	0	2
20	U	0	1
21	V	0	1
25	Z	0	1
28	c	0	1
All	All	0	9

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	U	697	GLN	CD-OE1	-8.47	1.07	1.23
20	U	697	GLN	CG-CD	7.67	1.71	1.52
20	U	697	GLN	CD-NE2	7.56	1.49	1.33
20	U	697	GLN	C-N	5.74	1.41	1.33
18	S	88	TYR	CE2-CZ	-5.23	1.25	1.38
18	S	88	TYR	CG-CD2	-5.09	1.28	1.39

All (33) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	U	697	GLN	OE1-CD-NE2	-21.59	101.01	122.60
20	U	697	GLN	CG-CD-NE2	-21.22	84.56	116.40
20	U	697	GLN	CB-CA-C	18.23	136.43	111.63
25	Z	223	ASN	CB-CG-ND2	-14.85	94.13	116.40
20	U	697	GLN	CG-CD-OE1	12.84	146.47	120.80
28	c	174	PRO	CB-CA-C	-11.13	93.20	111.56
20	U	697	GLN	CA-CB-CG	-10.92	92.26	114.10
20	U	696	ILE	CA-C-N	-9.51	108.46	122.35
20	U	696	ILE	C-N-CA	-9.51	108.46	122.35
25	Z	223	ASN	OD1-CG-ND2	-8.16	114.44	122.60
25	Z	223	ASN	N-CA-CB	7.69	121.42	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	U	697	GLN	N-CA-CB	-7.50	100.68	112.46
25	Z	223	ASN	CB-CA-C	-7.07	99.06	110.79
20	U	811	PHE	CA-C-O	-6.60	112.99	120.32
2	B	332	ASN	N-CA-C	-6.51	105.63	112.93
20	U	811	PHE	CA-CB-CG	6.27	120.07	113.80
28	c	218	LEU	N-CA-C	-6.08	106.52	112.97
1	A	305	GLN	N-CA-C	-6.02	104.64	111.14
28	c	23	PRO	N-CA-CB	5.95	109.54	103.00
34	u	281	VAL	N-CA-C	-5.75	107.90	113.53
17	R	66	LEU	N-CA-C	-5.70	105.06	111.28
20	U	361	ARG	N-CA-C	-5.62	106.31	114.12
34	u	160	ASP	N-CA-C	5.61	117.39	111.28
28	c	184	LEU	N-CA-C	-5.55	106.36	113.02
17	R	87	ASN	CA-C-O	-5.54	115.00	120.82
34	u	275	MET	N-CA-C	-5.37	106.80	113.19
27	b	134	GLU	N-CA-C	-5.37	105.43	111.28
20	U	171	ASN	CA-C-O	-5.29	112.95	120.51
3	C	310	ARG	N-CA-C	-5.24	106.57	113.12
28	c	87	VAL	CA-C-O	-5.23	118.08	122.63
2	B	397	ALA	N-CA-C	-5.12	105.70	111.28
7	G	114	LEU	CA-C-N	-5.12	113.12	122.38
7	G	114	LEU	C-N-CA	-5.12	113.12	122.38

There are no chirality outliers.

All (9) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	258	ARG	Sidechain
1	A	265	ARG	Sidechain
1	A	312	ARG	Sidechain
17	R	85	ARG	Sidechain
17	R	86	ARG	Sidechain
20	U	697	GLN	Sidechain
21	V	443	ARG	Sidechain
25	Z	223	ASN	Sidechain
28	c	49	VAL	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	A	3163	0	3226	338	0
2	B	3126	0	3188	385	0
3	C	3051	0	3165	363	0
4	D	3018	0	3060	347	0
5	E	2750	0	2832	466	0
6	F	2850	0	2944	304	0
7	G	1831	0	1813	255	0
8	H	1813	0	1804	246	0
9	I	1908	0	1864	243	0
10	J	1813	0	1751	246	0
11	K	1763	0	1723	236	0
12	L	1845	0	1820	227	0
13	M	1856	0	1814	234	0
14	N	1482	0	1450	203	0
15	P	1645	0	1648	259	0
16	Q	1587	0	1598	332	0
17	R	1588	0	1584	266	0
18	S	1559	0	1522	223	0
19	T	1641	0	1639	296	0
20	U	6584	0	6624	869	0
21	V	3602	0	3672	518	0
22	W	3570	0	3685	472	0
23	X	2994	0	3097	321	0
24	Y	3123	0	3130	302	0
25	Z	2281	0	2312	305	0
26	a	2991	0	3009	410	0
27	b	1454	0	1502	209	0
28	c	2264	0	2278	280	0
29	d	2188	0	2216	348	0
30	e	353	0	276	25	0
31	f	6512	0	6529	1085	0
32	g	771	0	815	145	0
33	h	1601	0	1587	295	0
34	u	1376	0	1324	141	0
35	v	60	0	16	1	0
36	A	31	0	12	2	0
36	B	31	0	12	2	0
36	F	31	0	12	8	0
37	A	1	0	0	0	0
37	B	1	0	0	0	0
37	C	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
37	D	1	0	0	0	0
37	F	1	0	0	0	0
38	C	27	0	12	9	0
38	D	27	0	12	9	0
38	E	27	0	12	5	0
39	u	1	0	0	0	0
All	All	82193	0	82589	10100	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 61.

All (10100) 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)
20:U:353:LEU:HD22	20:U:385:PHE:CE2	1.52	1.45
31:f:208:LEU:HD13	31:f:217:LEU:CD2	1.65	1.26
20:U:353:LEU:HD22	20:U:385:PHE:CD2	1.70	1.25
21:V:443:ARG:HH22	29:d:273:GLY:C	1.46	1.21
16:Q:61:GLN:OE1	17:R:124:LEU:HD21	1.41	1.19
6:F:84:LYS:HD3	6:F:88:TYR:OH	1.41	1.19
21:V:192:MET:HE1	21:V:230:PHE:CE1	1.77	1.18
20:U:702:THR:CG2	20:U:811:PHE:HE2	1.55	1.18
31:f:786:GLN:OE1	31:f:787:LEU:HD23	1.45	1.17
21:V:443:ARG:HH22	29:d:274:CYS:N	1.42	1.15
31:f:282:PHE:CD1	31:f:294:MET:HE1	1.81	1.14
17:R:124:LEU:HD23	17:R:124:LEU:H	1.10	1.14
31:f:208:LEU:HD13	31:f:217:LEU:HD21	1.22	1.13
3:C:46:GLN:HG2	20:U:639:LEU:HD12	1.13	1.12
29:d:161:ILE:HG13	29:d:162:PRO:HD3	1.30	1.12
31:f:391:LEU:HD11	31:f:414:LEU:HA	1.22	1.11
33:h:145:LEU:HD21	33:h:175:VAL:HG13	1.32	1.11
2:B:208:PRO:HG2	31:f:739:ALA:HB3	1.30	1.10
31:f:505:MET:HE3	31:f:537:THR:HG23	1.32	1.10
21:V:443:ARG:NH1	29:d:274:CYS:SG	2.24	1.10
5:E:37:THR:HA	6:F:69:MET:CE	1.81	1.10
13:M:39:ILE:HD13	13:M:193:VAL:HG22	1.22	1.09
8:H:59:GLU:HG3	8:H:206:ASP:HB3	1.23	1.09
31:f:479:LEU:HD21	31:f:514:VAL:HA	1.33	1.09
21:V:259:LEU:HD11	21:V:295:ILE:HD11	1.33	1.09
26:a:70:ARG:HD2	26:a:76:LEU:HD22	1.33	1.09
18:S:59:LEU:HD12	18:S:83:LEU:HG	1.22	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:367:GLY:HA3	4:D:196:ILE:HG21	1.34	1.08
23:X:240:ASP:OD1	23:X:278:ARG:NH2	1.85	1.08
24:Y:383:LEU:HD12	25:Z:272:LEU:HD13	1.35	1.07
26:a:324:ILE:HG13	26:a:331:VAL:HG22	1.35	1.07
33:h:153:VAL:HA	33:h:156:LYS:HE3	1.34	1.07
34:u:189:GLN:HG2	34:u:255:GLU:HG3	1.32	1.07
20:U:409:GLY:HA3	20:U:445:ALA:HB1	1.13	1.07
22:W:130:MET:HA	22:W:130:MET:HE2	1.34	1.07
26:a:8:LEU:HD11	26:a:26:GLU:HB2	1.33	1.07
2:B:251:VAL:HG12	2:B:254:GLU:HG2	1.37	1.06
8:H:46:LEU:HD11	8:H:137:CYS:HB3	1.35	1.06
9:I:106:PRO:HD2	9:I:109:GLN:HG3	1.29	1.06
20:U:808:PRO:HD2	20:U:873:PRO:O	1.53	1.06
21:V:192:MET:HE1	21:V:230:PHE:CZ	1.90	1.06
8:H:93:LEU:HD13	8:H:113:ARG:HB3	1.30	1.06
20:U:353:LEU:CD2	20:U:385:PHE:CE2	2.37	1.06
21:V:219:GLU:HG2	21:V:224:LEU:HD11	1.36	1.06
27:b:51:LEU:HD11	27:b:61:LEU:HD12	1.35	1.06
31:f:560:LEU:HD21	31:f:798:THR:HG22	1.35	1.06
25:Z:131:LEU:HD11	25:Z:200:GLY:HA2	1.32	1.06
15:P:182:LYS:HD2	15:P:184:ASP:HB2	1.34	1.05
31:f:271:MET:HE1	31:f:786:GLN:NE2	1.71	1.05
31:f:47:GLU:HA	31:f:50:LYS:HE3	1.29	1.05
31:f:772:GLY:HA3	31:f:776:LEU:HG	1.35	1.05
27:b:16:MET:HE1	27:b:114:GLY:HA3	1.32	1.05
24:Y:48:ASN:HB3	24:Y:50:MET:HE3	1.34	1.05
16:Q:8:GLY:HA2	16:Q:141:THR:HG21	1.37	1.04
2:B:74:MET:HE1	31:f:609:VAL:HB	1.35	1.04
20:U:702:THR:CG2	20:U:811:PHE:CE2	2.40	1.04
23:X:71:LYS:HA	23:X:74:ARG:HD3	1.38	1.04
7:G:45:LYS:O	7:G:45:LYS:HD2	1.56	1.04
16:Q:14:MET:HE2	16:Q:14:MET:HA	1.39	1.04
18:S:52:CYS:HA	18:S:97:MET:HE1	1.40	1.04
6:F:343:LEU:HD13	6:F:351:LYS:HD2	1.40	1.04
16:Q:14:MET:HB3	16:Q:21:ALA:HB3	1.36	1.04
31:f:99:LEU:HD23	31:f:129:LEU:HD12	1.38	1.04
20:U:799:LYS:HA	20:U:880:ASN:HD21	1.23	1.03
22:W:438:LEU:HD23	25:Z:233:VAL:HG23	1.40	1.03
2:B:59:ARG:HD3	31:f:209:MET:HE1	1.37	1.03
20:U:465:LEU:HD23	20:U:496:LEU:HD22	1.37	1.03
21:V:236:ARG:O	21:V:239:THR:HG22	1.57	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:204:MET:HA	16:Q:204:MET:HE3	1.38	1.03
9:I:45:LEU:HD11	9:I:137:ILE:HG12	1.41	1.02
22:W:256:ILE:HD13	22:W:262:LYS:HD2	1.39	1.02
21:V:463:MET:HA	21:V:463:MET:HE3	1.37	1.02
21:V:443:ARG:NH2	29:d:273:GLY:C	2.15	1.02
26:a:363:MET:HE3	28:c:307:VAL:HG11	1.39	1.02
22:W:43:VAL:O	22:W:47:LEU:HD23	1.58	1.02
31:f:679:LEU:HD22	31:f:690:VAL:HG11	1.38	1.02
12:L:88:MET:HG2	12:L:112:ILE:HD11	1.41	1.01
15:P:29:LYS:HB3	15:P:171:SER:HB2	1.40	1.01
5:E:199:VAL:HG22	5:E:233:ASP:HB3	1.41	1.01
9:I:73:ALA:HB3	9:I:137:ILE:HD11	1.41	1.01
25:Z:228:TYR:HB2	26:a:338:PRO:HB2	1.43	1.01
27:b:138:VAL:HG12	27:b:160:LEU:HD22	1.41	1.01
31:f:372:LEU:HD11	31:f:409:SER:HB2	1.38	1.01
8:H:212:ILE:HG23	8:H:221:LEU:HD21	1.40	1.01
31:f:592:ASN:OD1	31:f:593:THR:N	1.93	1.01
1:A:80:LEU:HD11	1:A:82:ALA:HB3	1.43	1.01
22:W:276:LEU:HD12	22:W:354:LEU:HD23	1.38	1.01
24:Y:186:LEU:HD12	24:Y:213:LEU:HD13	1.43	1.01
4:D:153:MET:HE1	4:D:226:ALA:HB1	1.39	1.00
20:U:185:MET:C	20:U:185:MET:HE3	1.86	1.00
21:V:232:HIS:NE2	21:V:258:TYR:OH	1.93	1.00
25:Z:237:LEU:HD13	28:c:310:LYS:HG2	1.40	1.00
20:U:676:THR:HG21	20:U:712:LEU:HD21	1.42	1.00
14:N:13:VAL:HG21	14:N:152:CYS:HB3	1.40	1.00
16:Q:98:LYS:HD2	16:Q:103:TYR:CE1	1.97	1.00
23:X:297:ARG:HG2	23:X:330:LEU:HD11	1.42	1.00
18:S:100:MET:HB3	18:S:111:LEU:HD11	1.42	1.00
20:U:789:ILE:HB	20:U:911:ILE:HD12	1.42	1.00
21:V:403:ILE:HD11	21:V:428:LEU:HD11	1.41	1.00
23:X:407:MET:HE2	25:Z:269:VAL:HG11	1.40	1.00
3:C:165:ILE:HG12	3:C:292:ILE:HD11	1.44	0.99
15:P:159:ILE:HD13	15:P:173:ILE:HG23	1.43	0.99
20:U:465:LEU:HD23	20:U:496:LEU:CD2	1.90	0.99
2:B:417:GLU:HA	2:B:420:LYS:HZ3	1.26	0.99
6:F:84:LYS:CD	6:F:88:TYR:OH	2.10	0.99
33:h:61:GLN:HA	33:h:64:LYS:HD3	1.44	0.99
20:U:797:MET:HE2	20:U:881:PRO:HD3	1.43	0.99
21:V:85:ALA:HB2	21:V:93:PHE:HB2	1.42	0.99
33:h:173:MET:HA	33:h:176:LEU:HD12	1.45	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:185:MET:HE3	20:U:186:SER:N	1.77	0.99
3:C:87:VAL:HG21	3:C:116:LEU:HD11	1.41	0.99
31:f:753:ALA:HA	31:f:759:LEU:HD12	1.41	0.99
17:R:181:ARG:HB3	17:R:188:ILE:HD11	1.43	0.98
15:P:171:SER:O	15:P:172:ASN:ND2	1.95	0.98
21:V:117:VAL:HG21	21:V:132:LEU:HD21	1.42	0.98
29:d:168:MET:HA	29:d:168:MET:HE3	1.43	0.98
24:Y:389:MET:HA	24:Y:389:MET:HE3	1.44	0.98
16:Q:61:GLN:CD	17:R:124:LEU:HD21	1.88	0.98
31:f:367:SER:N	31:f:370:MET:SD	2.37	0.98
31:f:173:LEU:HD21	31:f:180:GLN:HB2	1.45	0.97
31:f:250:ARG:HA	31:f:253:LEU:HD12	1.43	0.97
15:P:216:ILE:HG22	16:Q:194:LYS:HE2	1.46	0.97
20:U:702:THR:HG23	20:U:811:PHE:CE2	2.00	0.97
23:X:365:LEU:HD13	23:X:385:LEU:HD13	1.44	0.97
29:d:271:ILE:HG22	29:d:291:LEU:HD22	1.44	0.97
7:G:138:MET:HE2	7:G:140:LEU:HD21	1.46	0.97
13:M:169:ARG:O	13:M:173:LYS:HG3	1.64	0.97
19:T:50:THR:HG21	19:T:88:ILE:HD12	1.44	0.97
14:N:174:ILE:HB	14:N:189:LEU:HB2	1.44	0.97
24:Y:301:ILE:HD13	24:Y:342:ARG:HD3	1.46	0.97
4:D:63:ASP:HB3	20:U:607:VAL:HG11	1.44	0.97
19:T:138:GLY:HA2	19:T:142:SER:HB3	1.46	0.97
32:g:128:LYS:HB3	32:g:156:LEU:HB3	1.47	0.97
26:a:214:GLY:HA3	26:a:340:VAL:HG21	1.45	0.97
5:E:352:MET:HE1	5:E:355:ILE:HG12	1.47	0.96
6:F:188:ILE:HG21	6:F:195:ILE:HD11	1.44	0.96
15:P:143:ARG:HH21	15:P:146:MET:HA	1.31	0.96
5:E:219:PHE:HA	5:E:222:ALA:HB3	1.45	0.96
7:G:51:VAL:HG23	7:G:202:LEU:HD22	1.47	0.96
1:A:52:ILE:HD11	2:B:68:ILE:HG22	1.44	0.96
4:D:89:ILE:HD11	5:E:80:VAL:HG23	1.46	0.96
5:E:203:ILE:HG21	5:E:232:MET:SD	2.05	0.96
17:R:118:MET:HE2	17:R:118:MET:HA	1.45	0.96
2:B:164:MET:HA	2:B:164:MET:HE3	1.48	0.96
3:C:338:LEU:HD13	3:C:342:ILE:HG12	1.43	0.96
20:U:658:ILE:HG23	20:U:763:VAL:HG11	1.46	0.96
22:W:34:LEU:HD21	22:W:39:ARG:HD2	1.46	0.96
25:Z:144:VAL:HG21	26:a:178:ARG:HD3	1.47	0.96
33:h:143:ALA:HA	33:h:147:GLN:HB2	1.46	0.96
21:V:309:MET:HE1	21:V:331:LEU:HD12	1.45	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:104:THR:HG22	28:c:46:ARG:HH21	1.31	0.96
10:J:158:ALA:HB1	10:J:172:LEU:HD13	1.48	0.96
31:f:208:LEU:CD1	31:f:217:LEU:HD21	1.96	0.96
1:A:213:LEU:HB2	1:A:337:LEU:HD13	1.47	0.96
5:E:203:ILE:N	5:E:210:GLU:HB2	1.79	0.96
24:Y:229:ILE:HB	24:Y:295:TYR:HE1	1.28	0.96
9:I:76:VAL:HG11	9:I:83:ALA:HB1	1.47	0.95
19:T:5:TYR:HA	19:T:57:PHE:HE2	1.32	0.95
29:d:268:ARG:NH1	29:d:292:PHE:O	1.98	0.95
31:f:459:CYS:HB3	32:g:152:LYS:HD3	1.48	0.95
33:h:147:GLN:HG3	33:h:151:ARG:HH12	1.28	0.95
31:f:512:MET:HE2	31:f:512:MET:HA	1.48	0.95
5:E:206:LYS:C	5:E:253:ILE:HD12	1.91	0.95
9:I:15:GLU:O	10:J:28:LYS:NZ	2.00	0.95
10:J:87:ALA:HB2	10:J:111:ILE:HD11	1.49	0.95
32:g:116:ILE:HG22	32:g:122:LEU:HD21	1.44	0.95
33:h:145:LEU:HD11	33:h:175:VAL:HG22	1.48	0.95
24:Y:45:VAL:HG13	24:Y:50:MET:HG3	1.47	0.95
11:K:68:VAL:HG21	11:K:89:ILE:HD13	1.49	0.95
16:Q:51:ILE:HG13	16:Q:109:ILE:HG22	1.45	0.95
12:L:45:VAL:HG23	12:L:214:ILE:HG12	1.48	0.95
20:U:653:ALA:HB2	20:U:675:MET:HE1	1.47	0.95
32:g:154:MET:HA	32:g:154:MET:HE3	1.48	0.95
14:N:40:ARG:HH21	14:N:103:TRP:HZ3	1.04	0.94
5:E:172:LEU:HD13	5:E:278:ALA:HB2	1.46	0.94
5:E:289:LEU:HA	5:E:294:ARG:HD2	1.49	0.94
29:d:180:GLU:HG2	29:d:181:GLN:OE1	1.68	0.94
7:G:13:ILE:HD11	7:G:126:THR:HA	1.48	0.94
12:L:15:PRO:HA	13:M:25:TYR:CE2	2.02	0.94
2:B:278:ALA:HB3	2:B:279:PRO:HD3	1.50	0.94
4:D:384:MET:HG2	5:E:164:ILE:HD12	1.47	0.94
20:U:437:TYR:HE1	20:U:472:ILE:CD1	1.80	0.94
1:A:32:LEU:HD13	31:f:93:PRO:HD2	1.46	0.94
5:E:37:THR:HA	6:F:69:MET:HE1	1.44	0.94
6:F:69:MET:HG3	6:F:72:LYS:HZ1	1.30	0.94
9:I:67:LYS:NZ	9:I:225:ILE:HB	1.81	0.94
20:U:796:LYS:HG2	20:U:798:PRO:HD3	1.49	0.94
31:f:874:LEU:HD11	31:f:895:GLU:HG3	1.48	0.94
5:E:125:GLU:HA	5:E:194:ASN:HA	1.46	0.94
18:S:138:VAL:HG11	18:S:159:ALA:HA	1.48	0.94
7:G:131:MET:HG2	13:M:125:TYR:CE1	2.02	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:37:GLY:HA2	10:J:181:ILE:HD13	1.50	0.94
20:U:885:MET:HG3	20:U:886:PRO:HD2	1.50	0.94
7:G:51:VAL:HG12	7:G:217:VAL:HG22	1.49	0.93
12:L:47:VAL:HG12	12:L:212:ILE:HG12	1.48	0.93
20:U:904:LYS:HE2	20:U:908:ILE:HD11	1.51	0.93
29:d:264:LEU:HD11	29:d:268:ARG:HH21	1.30	0.93
5:E:38:LYS:HE2	5:E:38:LYS:HA	1.50	0.93
10:J:65:LEU:HD21	10:J:71:MET:HG2	1.48	0.93
25:Z:252:LYS:NZ	28:c:238:CYS:SG	2.41	0.93
33:h:173:MET:HE1	33:h:205:THR:HG21	1.50	0.93
22:W:446:ILE:HD11	25:Z:211:TYR:HB3	1.49	0.93
31:f:655:LEU:HD21	31:f:800:LEU:HB3	1.50	0.93
7:G:60:LEU:HD21	13:M:176:ILE:HG23	1.51	0.93
8:H:111:VAL:HG22	8:H:136:ILE:HD13	1.49	0.93
26:a:69:HIS:HB3	27:b:17:ARG:HD3	1.49	0.93
16:Q:99:ARG:HA	16:Q:127:ILE:HD11	1.48	0.93
20:U:19:LEU:HD23	29:d:124:LEU:HD12	1.48	0.93
28:c:160:PHE:HE1	28:c:202:SER:OG	1.49	0.93
31:f:470:VAL:HG21	31:f:500:LEU:HD21	1.51	0.93
8:H:210:VAL:HG23	8:H:221:LEU:HD23	1.51	0.93
10:J:193:LYS:HD3	10:J:232:ILE:HD11	1.50	0.93
26:a:180:LEU:HD21	26:a:221:VAL:HG21	1.49	0.93
21:V:475:ALA:HB1	21:V:479:ARG:HH21	1.33	0.92
1:A:384:GLU:HG2	2:B:344:PRO:HG2	1.51	0.92
5:E:74:THR:HG21	6:F:131:THR:HG22	1.48	0.92
7:G:208:ILE:HG22	7:G:210:PHE:H	1.32	0.92
29:d:302:TYR:HA	29:d:305:LYS:HG2	1.51	0.92
31:f:545:LYS:HG3	31:f:550:LEU:HG	1.49	0.92
2:B:109:VAL:HG11	3:C:94:LYS:HE2	1.52	0.92
25:Z:11:VAL:HA	25:Z:50:VAL:HG23	1.52	0.92
33:h:92:LEU:HD22	33:h:96:MET:HE1	1.48	0.92
20:U:371:ILE:HD12	20:U:732:LEU:HD21	1.52	0.92
21:V:192:MET:HE1	21:V:230:PHE:HE1	1.34	0.92
9:I:33:THR:HG21	9:I:200:THR:HG21	1.52	0.92
13:M:108:LEU:HD11	13:M:137:LEU:HB3	1.50	0.92
17:R:17:SER:O	17:R:179:SER:N	2.03	0.92
5:E:312:ILE:HG21	5:E:343:LEU:HG	1.52	0.92
6:F:99:VAL:HG23	6:F:120:LYS:HB2	1.50	0.92
33:h:125:VAL:HG22	33:h:131:ALA:HB2	1.51	0.92
22:W:68:VAL:HG23	22:W:107:GLN:HG3	1.51	0.92
29:d:275:ILE:HD11	29:d:282:ILE:HG21	1.50	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:161:ALA:HB3	10:J:53:LEU:HD21	1.49	0.91
21:V:227:VAL:HB	21:V:231:LEU:CD1	2.00	0.91
11:K:50:VAL:HG11	11:K:67:ILE:HD11	1.52	0.91
20:U:796:LYS:HE2	20:U:798:PRO:HB3	1.50	0.91
21:V:309:MET:CE	21:V:331:LEU:HD12	1.99	0.91
31:f:459:CYS:HB2	32:g:154:MET:SD	2.10	0.91
1:A:140:VAL:HG12	1:A:152:PRO:HA	1.52	0.91
11:K:218:ALA:HB1	11:K:226:PHE:HE1	1.33	0.91
31:f:692:LEU:HD12	31:f:800:LEU:HD13	1.50	0.91
8:H:17:GLY:HA3	9:I:27:ALA:HB2	1.52	0.91
20:U:583:MET:HE2	20:U:614:VAL:HG22	1.52	0.91
24:Y:221:THR:HG22	24:Y:256:VAL:HG21	1.52	0.91
26:a:194:GLN:HB2	26:a:225:LEU:HD12	1.53	0.91
26:a:216:LEU:HG	26:a:217:LEU:HD12	1.49	0.91
1:A:239:ARG:NH1	2:B:320:ASP:OD2	2.03	0.91
9:I:38:LEU:HA	9:I:43:VAL:HG23	1.52	0.91
21:V:192:MET:CE	21:V:230:PHE:CE1	2.53	0.91
28:c:108:VAL:HG11	34:u:275:MET:HE3	1.52	0.91
28:c:303:MET:HE3	29:d:335:LEU:HB2	1.53	0.91
33:h:100:ARG:HA	33:h:105:PRO:HG3	1.50	0.91
33:h:192:VAL:HG12	33:h:197:VAL:HG23	1.51	0.91
26:a:142:LEU:HD13	26:a:155:PHE:HD2	1.35	0.91
26:a:321:LYS:HD2	26:a:336:VAL:HG11	1.53	0.91
28:c:62:VAL:HG13	28:c:66:THR:HG23	1.53	0.91
13:M:173:LYS:HA	13:M:176:ILE:HG22	1.53	0.91
26:a:64:ILE:HG23	26:a:70:ARG:HB2	1.52	0.91
9:I:45:LEU:HD23	9:I:75:SER:HB2	1.54	0.90
11:K:52:LYS:HD2	11:K:64:ILE:HD11	1.53	0.90
14:N:40:ARG:NH2	14:N:103:TRP:HZ3	1.67	0.90
20:U:808:PRO:CD	20:U:873:PRO:O	2.19	0.90
20:U:877:LEU:HD22	20:U:878:LEU:H	1.35	0.90
21:V:326:GLN:O	21:V:330:LYS:HG2	1.69	0.90
31:f:407:MET:HE1	31:f:439:TYR:HB3	1.53	0.90
2:B:289:ALA:O	3:C:271:ARG:NH1	2.04	0.90
24:Y:387:ILE:HD13	25:Z:276:ILE:HG12	1.53	0.90
12:L:103:LEU:HD12	12:L:104:PRO:HD2	1.50	0.90
18:S:176:LEU:HG	18:S:187:VAL:HB	1.52	0.90
5:E:203:ILE:H	5:E:210:GLU:HB2	1.34	0.90
8:H:65:VAL:HG22	8:H:75:VAL:HG12	1.51	0.90
20:U:202:VAL:HG23	20:U:216:VAL:HG23	1.51	0.90
21:V:76:LYS:HE3	21:V:149:PRO:HB3	1.50	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:45:MET:HE3	16:Q:67:LEU:HD23	1.51	0.90
17:R:55:GLN:HE22	18:S:88:TYR:HD2	0.99	0.90
19:T:110:ILE:HG22	19:T:122:TYR:HB2	1.51	0.90
21:V:192:MET:CE	21:V:230:PHE:HE1	1.83	0.90
22:W:43:VAL:O	22:W:47:LEU:CD2	2.19	0.90
17:R:55:GLN:NE2	18:S:88:TYR:HD2	1.69	0.90
29:d:272:ALA:HA	29:d:291:LEU:HD21	1.53	0.90
21:V:233:ALA:O	21:V:237:THR:HG23	1.71	0.90
25:Z:106:ILE:HG21	25:Z:153:LYS:HD3	1.52	0.90
19:T:109:ILE:HD12	19:T:123:SER:HA	1.53	0.90
22:W:187:LEU:HD23	22:W:225:LYS:HD3	1.54	0.90
4:D:41:TYR:HE1	20:U:156:GLU:HG2	1.36	0.89
9:I:216:LEU:HD13	9:I:225:ILE:HD11	1.55	0.89
16:Q:61:GLN:OE1	17:R:124:LEU:CD2	2.19	0.89
29:d:272:ALA:HB2	29:d:291:LEU:HD11	1.51	0.89
31:f:502:LEU:O	31:f:505:MET:HG3	1.72	0.89
1:A:65:ILE:HD12	3:C:82:LYS:HG3	1.53	0.89
21:V:438:VAL:O	21:V:442:ILE:HG13	1.73	0.89
20:U:353:LEU:HD11	20:U:373:ASN:HB2	1.51	0.89
27:b:111:ALA:HB3	27:b:140:ILE:HD13	1.54	0.89
29:d:94:MET:HG3	29:d:118:ARG:HH12	1.35	0.89
1:A:190:VAL:HG11	1:A:212:VAL:HG23	1.54	0.89
3:C:207:THR:HG23	3:C:209:CYS:H	1.35	0.89
21:V:322:VAL:HG22	21:V:326:GLN:HE21	1.35	0.89
28:c:303:MET:CE	29:d:335:LEU:HB2	2.03	0.89
31:f:655:LEU:HD11	31:f:800:LEU:HD12	1.54	0.89
4:D:45:LYS:HB3	20:U:187:LEU:HD11	1.54	0.89
16:Q:98:LYS:HE3	16:Q:103:TYR:CZ	2.08	0.89
20:U:801:GLN:HB3	20:U:877:LEU:HD21	1.55	0.89
28:c:277:LYS:HA	28:c:282:ARG:HD2	1.53	0.89
34:u:127:MET:HA	34:u:130:ILE:HD12	1.55	0.89
20:U:437:TYR:CE1	20:U:472:ILE:HD13	2.08	0.89
20:U:535:TYR:O	20:U:539:THR:HG22	1.73	0.89
21:V:236:ARG:HE	21:V:239:THR:HG21	1.35	0.89
26:a:195:GLU:O	26:a:199:THR:HG23	1.73	0.89
14:N:35:THR:HG1	14:N:43:CYS:HG	1.01	0.89
20:U:471:ASP:OD1	20:U:472:ILE:N	2.06	0.89
7:G:18:PRO:HA	8:H:24:TYR:CE2	2.08	0.88
18:S:136:TYR:HA	18:S:139:MET:SD	2.12	0.88
23:X:93:LEU:HD23	23:X:129:LEU:HD22	1.53	0.88
15:P:28:ASP:HB3	16:Q:131:MET:HE1	1.55	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:25:HIS:HA	20:U:59:PHE:HE2	1.38	0.88
24:Y:279:GLU:HB2	24:Y:296:VAL:HG21	1.55	0.88
24:Y:262:SER:HB3	24:Y:271:PHE:HB2	1.54	0.88
26:a:172:TYR:HH	26:a:199:THR:HG1	0.99	0.88
29:d:141:LEU:HD12	29:d:182:LEU:HD11	1.56	0.88
1:A:92:PRO:HG2	1:A:144:ARG:HD2	1.53	0.88
1:A:416:VAL:HG12	1:A:417:ILE:HD12	1.54	0.88
2:B:426:VAL:O	2:B:429:LYS:NZ	2.06	0.88
24:Y:229:ILE:HB	24:Y:295:TYR:CE1	2.07	0.88
12:L:184:LEU:HD11	12:L:214:ILE:HD13	1.55	0.88
17:R:29:LYS:HZ1	18:S:122:SER:H	1.22	0.88
20:U:362:ASN:HD22	20:U:724:VAL:CG1	1.86	0.88
26:a:189:PRO:HD2	26:a:192:GLU:HB3	1.55	0.88
29:d:123:LEU:HD11	29:d:147:ILE:HG12	1.56	0.88
31:f:50:LYS:HA	31:f:53:GLN:CG	2.03	0.88
9:I:174:MET:CE	9:I:196:VAL:HA	2.03	0.88
16:Q:113:ASP:HB3	16:Q:118:LYS:H	1.37	0.88
17:R:124:LEU:HD23	17:R:124:LEU:N	1.87	0.88
2:B:246:THR:HG21	2:B:277:HIS:HB2	1.55	0.88
23:X:260:MET:HA	23:X:260:MET:HE3	1.55	0.88
29:d:91:ALA:HA	29:d:94:MET:SD	2.14	0.88
7:G:155:ASP:HB2	7:G:156:PRO:HD2	1.54	0.88
20:U:901:GLN:HE22	20:U:915:LYS:HE3	1.37	0.88
26:a:139:GLU:HG2	26:a:155:PHE:HZ	1.37	0.88
31:f:216:MET:HA	31:f:216:MET:HE3	1.54	0.88
34:u:198:ILE:HB	34:u:241:VAL:HG23	1.54	0.88
7:G:131:MET:HG2	13:M:125:TYR:HE1	1.32	0.88
11:K:107:MET:HG2	11:K:111:SER:HB2	1.55	0.88
21:V:86:VAL:HG11	21:V:160:LEU:HD11	1.56	0.88
22:W:363:ILE:HG13	22:W:382:LEU:HD21	1.54	0.88
31:f:135:GLY:O	31:f:139:CYS:N	2.07	0.88
31:f:208:LEU:HD13	31:f:217:LEU:HD22	1.55	0.88
4:D:270:ILE:HD12	4:D:288:ILE:HG21	1.56	0.88
13:M:136:MET:HE2	13:M:148:LEU:HD11	1.53	0.88
20:U:39:SER:HB3	20:U:71:LEU:HD12	1.55	0.88
16:Q:61:GLN:HE22	17:R:124:LEU:HG	1.39	0.87
17:R:70:ARG:HG3	17:R:71:ASN:ND2	1.88	0.87
2:B:440:LEU:HB2	10:J:77:THR:HG23	1.56	0.87
12:L:72:ILE:HG22	12:L:134:ILE:HG12	1.56	0.87
14:N:41:ILE:HD13	14:N:102:GLY:HA3	1.56	0.87
16:Q:22:ILE:HG22	16:Q:188:HIS:HB2	1.56	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:209:PRO:HB3	1:A:338:ASP:HB2	1.54	0.87
19:T:131:GLN:OE1	19:T:132:ARG:N	2.07	0.87
23:X:137:TYR:HB3	23:X:146:ALA:HB2	1.53	0.87
32:g:142:LEU:HG	32:g:147:VAL:HG21	1.56	0.87
1:A:327:LEU:HB2	1:A:332:MET:HE2	1.57	0.87
5:E:352:MET:HA	5:E:352:MET:HE3	1.55	0.87
11:K:69:GLU:HG3	11:K:226:PHE:HD2	1.37	0.87
21:V:462:GLU:OE1	21:V:462:GLU:N	2.06	0.87
26:a:58:LYS:HA	26:a:61:GLU:HB2	1.56	0.87
5:E:313:LEU:HD13	5:E:343:LEU:HD12	1.55	0.87
22:W:274:VAL:HG13	22:W:287:VAL:HG22	1.55	0.87
5:E:331:ILE:HG23	5:E:371:VAL:HG21	1.56	0.87
12:L:33:SER:HB2	12:L:51:ARG:HD2	1.55	0.87
13:M:41:CYS:SG	13:M:189:ILE:HG21	2.15	0.87
31:f:469:TYR:HE2	31:f:477:MET:HB3	1.38	0.87
2:B:316:LEU:HD21	2:B:327:VAL:HG21	1.56	0.87
9:I:118:LYS:O	9:I:122:THR:HG23	1.75	0.87
21:V:443:ARG:NH2	29:d:274:CYS:HA	1.89	0.87
29:d:264:LEU:HD11	29:d:268:ARG:NH2	1.89	0.87
23:X:57:LEU:HD22	23:X:66:LEU:HD13	1.56	0.86
24:Y:45:VAL:HG12	24:Y:73:MET:HE1	1.57	0.86
31:f:367:SER:O	31:f:370:MET:SD	2.33	0.86
31:f:659:LEU:HA	31:f:662:MET:HE2	1.57	0.86
18:S:191:ASN:OD1	18:S:192:VAL:N	2.07	0.86
23:X:290:VAL:HG21	23:X:313:LEU:HD21	1.56	0.86
2:B:251:VAL:HG13	2:B:253:SER:H	1.39	0.86
6:F:84:LYS:HD3	6:F:88:TYR:HH	1.34	0.86
21:V:309:MET:HE1	21:V:331:LEU:CD1	2.04	0.86
26:a:114:CYS:O	26:a:118:ILE:HG23	1.75	0.86
31:f:814:SER:O	31:f:817:VAL:HG12	1.75	0.86
3:C:46:GLN:CG	20:U:639:LEU:HD12	2.02	0.86
9:I:71:ASP:HA	9:I:223:THR:HG21	1.56	0.86
17:R:55:GLN:NE2	18:S:88:TYR:CD2	2.41	0.86
20:U:801:GLN:CB	20:U:877:LEU:HD21	2.05	0.86
28:c:151:VAL:HG13	28:c:152:LYS:HG2	1.57	0.86
5:E:194:ASN:HB2	5:E:228:CYS:HB3	1.57	0.86
15:P:216:ILE:HD12	16:Q:196:THR:HA	1.55	0.86
16:Q:25:ASP:OD1	16:Q:27:ARG:N	2.07	0.86
21:V:342:ILE:CD1	21:V:368:ARG:HG3	2.05	0.86
2:B:417:GLU:HA	2:B:420:LYS:NZ	1.88	0.86
16:Q:12:MET:N	16:Q:23:ALA:O	2.08	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:R:172:ILE:H	17:R:172:ILE:HD12	1.40	0.86
31:f:437:GLU:HB2	31:f:440:ILE:HD13	1.56	0.86
16:Q:49:LEU:HD23	16:Q:111:GLY:HA3	1.57	0.86
24:Y:319:MET:HG3	24:Y:330:ILE:HD13	1.55	0.86
33:h:10:SER:OG	33:h:139:THR:O	1.93	0.86
6:F:368:ILE:HG23	6:F:371:ARG:HH22	1.41	0.86
11:K:146:VAL:HG23	11:K:220:VAL:HG12	1.58	0.86
13:M:116:ALA:HB2	13:M:151:ILE:HD13	1.57	0.86
20:U:109:THR:HA	20:U:157:THR:HG22	1.56	0.86
21:V:176:MET:SD	21:V:217:VAL:HG12	2.16	0.86
29:d:129:LEU:HD12	29:d:130:PRO:CD	2.04	0.86
34:u:167:ILE:HG23	34:u:246:ILE:HB	1.57	0.86
22:W:87:ILE:HA	22:W:104:MET:HE1	1.56	0.86
31:f:505:MET:HE2	31:f:541:THR:HG23	1.58	0.86
31:f:505:MET:HE2	31:f:541:THR:CG2	2.06	0.86
32:g:105:LEU:HB3	32:g:143:GLU:HG2	1.58	0.86
2:B:78:PHE:HB2	31:f:613:LEU:HD21	1.55	0.85
17:R:55:GLN:OE1	18:S:88:TYR:CE2	2.28	0.85
20:U:529:ILE:HD11	20:U:566:LEU:HD13	1.56	0.85
31:f:82:ILE:HG21	31:f:128:VAL:HG11	1.58	0.85
31:f:274:ASP:HB3	31:f:277:LEU:HD23	1.58	0.85
2:B:106:PRO:HB3	3:C:97:VAL:HG12	1.56	0.85
5:E:199:VAL:HG13	5:E:234:GLU:HB2	1.58	0.85
6:F:188:ILE:CG2	6:F:195:ILE:HD11	2.06	0.85
21:V:208:ALA:HB2	21:V:246:GLY:HA2	1.58	0.85
29:d:251:ILE:HG21	29:d:257:THR:HG23	1.58	0.85
7:G:200:THR:O	7:G:204:THR:HG23	1.76	0.85
10:J:31:THR:HG22	10:J:46:GLU:OE2	1.75	0.85
22:W:271:VAL:HG23	22:W:306:LEU:HD22	1.59	0.85
33:h:147:GLN:HG3	33:h:151:ARG:NH1	1.89	0.85
9:I:90:LEU:HD11	9:I:136:TYR:HE2	1.40	0.85
18:S:44:THR:HG21	18:S:100:MET:HE2	1.59	0.85
4:D:115:ILE:HD13	4:D:139:LEU:HD22	1.56	0.85
9:I:172:VAL:O	9:I:176:LYS:HG3	1.77	0.85
19:T:5:TYR:HA	19:T:57:PHE:CE2	2.11	0.85
23:X:57:LEU:HD11	23:X:65:GLU:HB2	1.58	0.85
31:f:289:VAL:HG11	31:f:901:ARG:HE	1.40	0.85
31:f:327:ASN:HD22	31:f:327:ASN:C	1.84	0.85
5:E:22:ILE:HG21	6:F:55:MET:HB2	1.59	0.85
29:d:138:LYS:O	29:d:142:ILE:HD12	1.77	0.85
31:f:801:VAL:HA	31:f:804:LEU:HD11	1.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:89:ILE:HB	5:E:78:ARG:HG3	1.57	0.85
16:Q:178:ASP:OD2	16:Q:181:SER:OG	1.94	0.84
22:W:244:CYS:SG	22:W:274:VAL:HG23	2.16	0.84
23:X:252:LYS:HD2	23:X:283:GLN:HB3	1.57	0.84
31:f:282:PHE:HD1	31:f:294:MET:HE1	1.37	0.84
9:I:90:LEU:HG	9:I:114:LEU:HD22	1.58	0.84
11:K:195:ILE:CD1	11:K:217:LEU:HD21	2.07	0.84
16:Q:54:ALA:HB1	16:Q:140:GLY:HA2	1.59	0.84
26:a:64:ILE:HG23	26:a:70:ARG:CB	2.06	0.84
20:U:545:LEU:HB3	20:U:577:ILE:HG21	1.59	0.84
8:H:68:ILE:HG21	8:H:110:LEU:HD11	1.57	0.84
20:U:362:ASN:HB2	20:U:365:CYS:SG	2.18	0.84
24:Y:95:LEU:HG	24:Y:99:GLU:HG3	1.57	0.84
31:f:793:VAL:O	31:f:797:LEU:HD12	1.76	0.84
5:E:155:ASN:HB3	5:E:158:LEU:HG	1.56	0.84
20:U:11:LEU:HD12	20:U:19:LEU:HD22	1.60	0.84
23:X:392:PRO:O	23:X:393:VAL:HG13	1.78	0.84
24:Y:117:LYS:NZ	24:Y:153:ASP:OD2	2.09	0.84
3:C:298:ILE:HD11	3:C:306:LEU:HD21	1.57	0.84
31:f:436:SER:HB2	32:g:173:GLU:HG2	1.57	0.84
31:f:498:LEU:HD13	31:f:534:VAL:HG22	1.59	0.84
7:G:113:MET:HE2	15:P:70:THR:HA	1.59	0.84
15:P:73:LEU:HD23	15:P:74:PRO:HD2	1.57	0.84
17:R:20:VAL:HG11	17:R:176:PRO:HD2	1.59	0.84
33:h:22:ILE:HG22	33:h:190:ALA:HB3	1.59	0.84
5:E:157:GLU:HA	5:E:160:GLN:HG2	1.59	0.84
26:a:54:ASP:OD2	26:a:57:ILE:HB	1.78	0.84
5:E:37:THR:HA	6:F:69:MET:HE2	1.58	0.84
17:R:42:ILE:HD12	17:R:106:GLY:HA3	1.58	0.84
17:R:139:THR:HA	17:R:142:ILE:HD13	1.58	0.84
25:Z:235:ASN:C	25:Z:235:ASN:HD22	1.86	0.84
26:a:78:GLU:OE1	26:a:113:LEU:HD11	1.78	0.84
18:S:37:ILE:HD11	18:S:41:LEU:HG	1.60	0.84
20:U:510:GLU:HB2	20:U:543:LYS:HG2	1.57	0.84
24:Y:141:VAL:HG11	24:Y:164:ALA:HB2	1.60	0.84
25:Z:81:MET:HE1	28:c:94:LYS:HB3	1.60	0.84
28:c:159:ALA:HB2	28:c:205:ILE:HD11	1.59	0.84
29:d:178:TYR:HB3	29:d:181:GLN:HE21	1.41	0.84
31:f:858:LYS:HD3	31:f:859:PRO:HD2	1.60	0.84
22:W:241:LEU:HD21	22:W:282:GLU:HG2	1.60	0.83
6:F:193:LYS:HB2	6:F:193:LYS:NZ	1.92	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:35:VAL:HG23	16:Q:36:THR:HG23	1.58	0.83
28:c:284:LEU:O	28:c:286:GLU:N	2.10	0.83
1:A:238:ILE:HG21	1:A:260:LEU:HD11	1.59	0.83
10:J:43:LEU:HD21	10:J:134:VAL:HG11	1.60	0.83
11:K:126:GLU:OE2	12:L:124:GLY:O	1.96	0.83
18:S:51:ASP:OD1	19:T:100:ARG:NH1	2.11	0.83
19:T:176:LYS:NZ	19:T:208:VAL:HG21	1.93	0.83
23:X:114:ILE:HD12	23:X:130:GLU:HG2	1.60	0.83
24:Y:200:LEU:O	24:Y:204:THR:HG22	1.78	0.83
31:f:720:GLU:HG3	31:f:807:ARG:HH21	1.41	0.83
5:E:203:ILE:HD12	5:E:232:MET:SD	2.18	0.83
8:H:119:GLN:HG3	9:I:81:SER:HB2	1.61	0.83
16:Q:26:ARG:HG3	16:Q:185:VAL:HA	1.59	0.83
16:Q:61:GLN:CD	17:R:124:LEU:CD2	2.52	0.83
31:f:664:GLU:HG2	31:f:667:GLY:H	1.43	0.83
12:L:72:ILE:HG21	12:L:88:MET:HE1	1.60	0.83
17:R:92:LEU:HD11	17:R:121:LEU:HD12	1.60	0.83
17:R:107:TYR:HE2	17:R:185:LYS:HG2	1.42	0.83
19:T:78:SER:OG	19:T:79:ASN:OD1	1.95	0.83
23:X:260:MET:HE1	23:X:326:LEU:HD13	1.59	0.83
29:d:109:LEU:HD21	29:d:158:ARG:HG3	1.60	0.83
29:d:137:THR:O	29:d:140:GLN:HG2	1.79	0.83
1:A:432:TYR:OH	10:J:14:GLY:O	1.94	0.83
6:F:357:PRO:O	6:F:362:ARG:NH1	2.12	0.83
8:H:69:THR:HG22	8:H:70:LYS:H	1.44	0.83
20:U:28:ASN:HB2	20:U:63:VAL:HG22	1.59	0.83
23:X:335:LEU:O	23:X:339:ILE:HG12	1.78	0.83
26:a:278:MET:HE1	26:a:319:LEU:HD23	1.59	0.83
16:Q:53:LEU:HB3	16:Q:60:VAL:HG22	1.61	0.83
20:U:549:ALA:HA	20:U:581:SER:OG	1.79	0.83
28:c:130:GLN:HG3	28:c:162:LEU:HG	1.59	0.83
31:f:801:VAL:HA	31:f:804:LEU:CD1	2.09	0.83
33:h:69:GLN:HA	33:h:72:ILE:HG22	1.58	0.83
24:Y:127:THR:O	24:Y:131:THR:OG1	1.96	0.83
26:a:7:PHE:HE2	26:a:60:TYR:HB2	1.43	0.83
3:C:254:ILE:HG22	3:C:269:VAL:HG13	1.61	0.83
5:E:210:GLU:HB3	5:E:214:LEU:HB3	1.60	0.83
5:E:312:ILE:HD11	38:E:501:ADP:C6	2.14	0.83
31:f:505:MET:CE	31:f:541:THR:HG23	2.08	0.83
20:U:405:THR:HG23	20:U:427:LEU:HG	1.61	0.82
22:W:105:VAL:HG11	22:W:132:THR:HG21	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:227:SER:HB2	24:Y:231:LEU:HD12	1.58	0.82
31:f:201:GLU:N	31:f:201:GLU:OE1	2.12	0.82
1:A:275:ASP:OD2	2:B:314:ASN:ND2	2.12	0.82
22:W:163:ALA:HA	22:W:192:LEU:HD13	1.61	0.82
22:W:326:MET:HE1	22:W:330:LYS:HB2	1.60	0.82
3:C:254:ILE:O	3:C:254:ILE:HD12	1.79	0.82
5:E:194:ASN:HB2	5:E:228:CYS:CB	2.08	0.82
10:J:91:CYS:HA	10:J:102:VAL:HG11	1.60	0.82
16:Q:104:TYR:HA	16:Q:126:LEU:HD12	1.59	0.82
16:Q:110:ALA:CB	16:Q:121:ILE:HG22	2.07	0.82
32:g:117:ALA:HA	32:g:122:LEU:HD23	1.60	0.82
16:Q:29:GLY:HA2	16:Q:35:VAL:HG13	1.61	0.82
19:T:52:ILE:HD13	19:T:110:ILE:HG12	1.60	0.82
20:U:324:LYS:HD3	20:U:794:ASP:HB3	1.61	0.82
25:Z:215:VAL:HG13	25:Z:222:ILE:HG12	1.60	0.82
5:E:312:ILE:CG2	5:E:343:LEU:HG	2.09	0.82
9:I:35:LEU:HD13	9:I:37:ILE:HD11	1.60	0.82
10:J:135:GLY:HA2	10:J:211:MET:CE	2.10	0.82
15:P:218:PRO:HA	16:Q:194:LYS:HD2	1.59	0.82
17:R:139:THR:HA	17:R:142:ILE:CD1	2.09	0.82
22:W:123:ARG:O	22:W:127:THR:HG23	1.80	0.82
1:A:172:VAL:HG21	1:A:227:ARG:HH21	1.43	0.82
2:B:407:LEU:HG	3:C:178:LEU:HD11	1.61	0.82
7:G:60:LEU:HD13	13:M:173:LYS:HZ2	1.45	0.82
3:C:133:PRO:O	3:C:134:LEU:HB2	1.80	0.82
14:N:174:ILE:HG21	14:N:189:LEU:HD12	1.59	0.82
18:S:80:SER:OG	18:S:120:ARG:NE	2.13	0.82
22:W:40:LEU:HD12	22:W:43:VAL:HG21	1.61	0.82
11:K:199:LEU:HB3	11:K:241:ILE:HD13	1.61	0.82
31:f:783:SER:HB2	31:f:787:LEU:HG	1.62	0.82
20:U:14:GLU:OE1	20:U:16:GLU:N	2.13	0.82
21:V:430:SER:OG	21:V:432:GLU:OE2	1.96	0.82
22:W:81:ASP:O	22:W:85:GLU:HG3	1.79	0.82
29:d:104:ARG:HG2	29:d:106:SER:H	1.43	0.82
17:R:29:LYS:HE3	18:S:121:ILE:HG22	1.60	0.82
25:Z:135:THR:HG1	25:Z:160:SER:HG	1.18	0.82
5:E:362:VAL:HG13	5:E:366:ASP:HB3	1.62	0.81
20:U:362:ASN:HD22	20:U:724:VAL:HG12	1.42	0.81
21:V:171:VAL:O	21:V:175:MET:HG2	1.80	0.81
21:V:306:ARG:HD2	21:V:336:GLU:HG3	1.60	0.81
21:V:442:ILE:HD12	29:d:278:ALA:HB1	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:283:GLN:O	22:W:287:VAL:HG23	1.79	0.81
31:f:795:GLY:O	31:f:799:VAL:HG23	1.78	0.81
2:B:74:MET:HE1	31:f:609:VAL:CB	2.10	0.81
2:B:140:ASP:HB2	2:B:143:LEU:CD1	2.10	0.81
3:C:342:ILE:O	3:C:342:ILE:HG13	1.78	0.81
3:C:358:GLU:HA	4:D:324:PRO:HG2	1.61	0.81
9:I:174:MET:SD	9:I:199:LYS:HD3	2.20	0.81
15:P:126:THR:HG21	15:P:134:ALA:HB3	1.62	0.81
16:Q:99:ARG:HD2	16:Q:127:ILE:HD11	1.61	0.81
19:T:22:ILE:HD11	19:T:197:ILE:HG12	1.60	0.81
21:V:227:VAL:O	21:V:231:LEU:HD12	1.80	0.81
21:V:309:MET:HE1	21:V:331:LEU:CG	2.11	0.81
22:W:140:ILE:HD12	22:W:141:GLU:H	1.45	0.81
22:W:451:MET:HE3	25:Z:100:LYS:HA	1.62	0.81
27:b:40:LYS:O	27:b:47:ASN:ND2	2.12	0.81
31:f:47:GLU:CA	31:f:50:LYS:HE3	2.10	0.81
31:f:159:VAL:HG11	31:f:194:TYR:HD2	1.45	0.81
31:f:271:MET:CE	31:f:786:GLN:NE2	2.43	0.81
31:f:539:LEU:HD12	31:f:543:MET:HE3	1.62	0.81
34:u:118:ASP:O	34:u:119:ILE:HG13	1.79	0.81
6:F:384:LEU:O	6:F:388:THR:HG23	1.80	0.81
9:I:105:ILE:HD12	9:I:105:ILE:H	1.44	0.81
10:J:65:LEU:CD2	10:J:71:MET:HG2	2.10	0.81
17:R:6:GLY:HA3	17:R:115:LEU:HD11	1.60	0.81
17:R:55:GLN:CD	18:S:88:TYR:CE2	2.59	0.81
21:V:92:ARG:NH2	24:Y:388:ASN:O	2.13	0.81
31:f:794:ALA:O	31:f:798:THR:HG23	1.78	0.81
2:B:256:ILE:HD11	2:B:290:ILE:HG22	1.61	0.81
11:K:95:GLU:HG3	11:K:115:ALA:HB1	1.63	0.81
15:P:173:ILE:HG13	15:P:192:PRO:HD3	1.61	0.81
19:T:174:LEU:O	19:T:178:VAL:HG12	1.81	0.81
23:X:147:LEU:HD21	23:X:177:TYR:HE1	1.44	0.81
26:a:180:LEU:HB3	26:a:219:HIS:HE2	1.46	0.81
31:f:45:LEU:HD12	31:f:49:ASP:HB3	1.60	0.81
31:f:822:VAL:HG13	31:f:825:MET:HG3	1.62	0.81
33:h:7:THR:HG22	33:h:8:GLY:H	1.44	0.81
33:h:42:ILE:HD11	33:h:188:GLN:HB2	1.63	0.81
5:E:22:ILE:HG12	5:E:25:ARG:HH21	1.46	0.81
7:G:45:LYS:HD2	7:G:45:LYS:C	2.02	0.81
8:H:46:LEU:HD22	8:H:135:LEU:CD2	2.11	0.81
10:J:76:LEU:HD23	10:J:76:LEU:H	1.46	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:28:ASP:HB3	16:Q:131:MET:CE	2.10	0.81
16:Q:107:PRO:HG2	16:Q:124:LEU:HB2	1.62	0.81
17:R:175:LEU:HD22	17:R:178:PHE:HZ	1.45	0.81
21:V:443:ARG:NH2	29:d:274:CYS:N	2.25	0.81
22:W:23:THR:HB	22:W:27:ARG:NH2	1.95	0.81
31:f:880:ALA:O	31:f:894:LEU:HD13	1.81	0.81
2:B:103:ARG:O	2:B:153:ASN:ND2	2.14	0.81
4:D:143:LEU:HD13	5:E:70:ILE:HD11	1.63	0.81
15:P:37:ILE:HD11	15:P:43:CYS:HB2	1.62	0.81
20:U:554:LEU:HD22	20:U:761:VAL:HG22	1.63	0.81
31:f:367:SER:OG	31:f:370:MET:HG3	1.81	0.81
31:f:789:SER:HB3	31:f:792:ALA:HB3	1.62	0.81
15:P:218:PRO:HG3	16:Q:194:LYS:HE3	1.61	0.81
18:S:45:MET:HE3	18:S:49:ALA:HA	1.63	0.81
26:a:252:LYS:HA	26:a:252:LYS:HE3	1.63	0.81
18:S:19:ARG:NH2	18:S:168:ALA:O	2.14	0.81
20:U:344:ARG:HD2	20:U:927:PRO:HG3	1.62	0.81
20:U:839:ALA:O	20:U:843:GLU:HG2	1.80	0.81
2:B:227:PRO:HB2	2:B:355:LEU:HD21	1.61	0.81
7:G:200:THR:HG23	7:G:242:LEU:HD11	1.62	0.81
9:I:68:LEU:HD22	9:I:90:LEU:HB3	1.63	0.81
24:Y:118:GLU:OE1	24:Y:118:GLU:N	2.13	0.81
28:c:113:HIS:CE1	28:c:144:VAL:HG22	2.15	0.81
3:C:229:ARG:O	3:C:233:GLU:HG2	1.81	0.80
7:G:40:VAL:HG12	7:G:202:LEU:HD13	1.61	0.80
16:Q:102:PRO:HB2	16:Q:126:LEU:HD21	1.63	0.80
27:b:7:MET:HE2	27:b:96:ALA:HB3	1.63	0.80
5:E:194:ASN:HD21	5:E:225:HIS:HB3	1.46	0.80
8:H:177:ARG:HD2	23:X:201:TYR:CE1	2.16	0.80
14:N:147:MET:HB3	14:N:151:GLU:HG3	1.62	0.80
18:S:148:GLU:HG3	18:S:151:GLN:HG2	1.63	0.80
24:Y:57:LEU:HG	24:Y:61:LEU:HD12	1.62	0.80
32:g:129:ILE:HG22	32:g:153:ALA:HB1	1.63	0.80
6:F:193:LYS:HB2	6:F:193:LYS:HZ3	1.46	0.80
7:G:101:TRP:CG	7:G:109:ILE:HB	2.15	0.80
20:U:599:ILE:HD11	20:U:626:LEU:HD21	1.62	0.80
2:B:174:MET:HE2	2:B:250:VAL:HG12	1.62	0.80
20:U:835:ILE:CD1	31:f:241:PRO:HG3	2.10	0.80
21:V:324:PHE:O	21:V:328:VAL:HG23	1.81	0.80
31:f:539:LEU:O	31:f:543:MET:HE2	1.81	0.80
32:g:112:LEU:HD13	32:g:142:LEU:HD21	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:384:MET:HG2	5:E:164:ILE:CD1	2.12	0.80
5:E:40:TYR:HE2	6:F:72:LYS:HG2	1.46	0.80
9:I:90:LEU:HD22	9:I:110:LEU:HG	1.63	0.80
14:N:45:ARG:HB3	14:N:52:THR:HB	1.63	0.80
21:V:443:ARG:NH2	29:d:274:CYS:CA	2.44	0.80
22:W:160:LYS:NZ	22:W:164:SER:OG	2.14	0.80
33:h:43:MET:N	33:h:43:MET:SD	2.55	0.80
33:h:153:VAL:HG11	33:h:168:LEU:HD21	1.64	0.80
5:E:97:ARG:NH2	6:F:95:GLU:OE1	2.15	0.80
5:E:279:THR:HG23	5:E:280:ASN:H	1.45	0.80
9:I:25:MET:O	9:I:28:ILE:HG22	1.81	0.80
13:M:108:LEU:HD22	13:M:139:SER:HB3	1.62	0.80
16:Q:14:MET:SD	16:Q:15:LYS:N	2.54	0.80
27:b:100:ARG:HD2	27:b:105:HIS:HB2	1.61	0.80
31:f:842:VAL:HG11	31:f:900:LEU:HD21	1.64	0.80
1:A:164:MET:HE2	1:A:240:VAL:HA	1.62	0.80
10:J:115:LYS:O	10:J:119:THR:HG23	1.82	0.80
15:P:80:ASN:OD1	15:P:81:ARG:N	2.14	0.80
20:U:217:CYS:O	20:U:221:ILE:HG23	1.82	0.80
21:V:108:LEU:HD12	21:V:113:LEU:HD11	1.62	0.80
23:X:374:PHE:CE2	23:X:385:LEU:HD21	2.17	0.80
29:d:199:LEU:HD13	29:d:204:ARG:HD3	1.64	0.80
31:f:272:LEU:HD23	31:f:272:LEU:O	1.81	0.80
31:f:600:TYR:CD2	31:f:608:LYS:HG3	2.17	0.80
5:E:141:GLN:OE1	5:E:141:GLN:N	2.15	0.80
8:H:69:THR:HB	8:H:72:ILE:HD13	1.63	0.80
10:J:41:VAL:HG21	10:J:134:VAL:HB	1.63	0.80
11:K:47:CYS:HB2	11:K:195:ILE:HD11	1.64	0.80
2:B:163:LEU:HD11	3:C:80:MET:HE1	1.64	0.80
3:C:278:ASN:ND2	3:C:282:GLY:HA3	1.97	0.80
26:a:139:GLU:HG2	26:a:155:PHE:CZ	2.15	0.80
31:f:343:LYS:HG3	31:f:773:LYS:HE2	1.62	0.80
1:A:199:GLU:HA	1:A:202:VAL:HG12	1.64	0.80
3:C:151:ILE:HG12	3:C:198:LEU:HG	1.62	0.80
6:F:84:LYS:CG	6:F:88:TYR:OH	2.30	0.80
20:U:11:LEU:O	20:U:14:GLU:HG3	1.82	0.80
27:b:22:LEU:HB2	27:b:23:PRO:HD3	1.64	0.80
32:g:140:LYS:HE3	32:g:144:GLU:HG3	1.63	0.80
6:F:279:ALA:HB3	6:F:280:PRO:HD3	1.63	0.79
16:Q:11:VAL:HG21	16:Q:52:GLY:HA3	1.64	0.79
22:W:17:GLU:N	22:W:57:ALA:O	2.14	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:79:GLU:HB3	22:W:82:LEU:HB3	1.64	0.79
31:f:252:ALA:O	31:f:256:PHE:CD1	2.35	0.79
33:h:6:VAL:O	33:h:56:ASP:HA	1.82	0.79
2:B:383:LEU:HD11	2:B:419:PHE:HB3	1.63	0.79
11:K:121:LEU:HD11	12:L:79:ALA:HA	1.63	0.79
14:N:55:VAL:HG21	14:N:94:LEU:HD21	1.65	0.79
24:Y:84:LEU:HD13	24:Y:107:LYS:HA	1.62	0.79
3:C:28:ILE:HD11	4:D:44:TYR:HB2	1.63	0.79
4:D:270:ILE:HD12	4:D:288:ILE:CG2	2.13	0.79
6:F:69:MET:HG3	6:F:72:LYS:NZ	1.97	0.79
7:G:60:LEU:HD13	13:M:173:LYS:NZ	1.98	0.79
10:J:30:SER:HB3	10:J:46:GLU:HG2	1.62	0.79
13:M:197:ILE:HG21	13:M:211:LEU:CD1	2.12	0.79
16:Q:98:LYS:HD2	16:Q:103:TYR:HE1	1.47	0.79
19:T:97:TYR:CD1	19:T:100:ARG:HB2	2.16	0.79
21:V:259:LEU:HD11	21:V:295:ILE:CD1	2.12	0.79
1:A:173:THR:HG23	1:A:175:SER:H	1.46	0.79
15:P:173:ILE:HD12	15:P:190:THR:HB	1.64	0.79
16:Q:59:ASP:OD2	17:R:93:ARG:NH2	2.14	0.79
17:R:29:LYS:HD2	17:R:32:HIS:HB2	1.64	0.79
20:U:895:PRO:HB2	20:U:898:CYS:HB3	1.64	0.79
31:f:648:ALA:O	31:f:652:VAL:HG22	1.81	0.79
20:U:714:SER:O	20:U:718:ASN:ND2	2.16	0.79
22:W:31:CYS:SG	22:W:47:LEU:HD11	2.22	0.79
5:E:207:TYR:HD1	5:E:209:GLY:H	1.29	0.79
11:K:195:ILE:HD12	11:K:217:LEU:HD11	1.65	0.79
22:W:287:VAL:HG13	22:W:306:LEU:HD11	1.63	0.79
29:d:200:LEU:HD12	29:d:263:LEU:HD12	1.63	0.79
31:f:372:LEU:HD13	31:f:406:GLY:HA2	1.62	0.79
1:A:233:THR:HG23	1:A:235:ALA:H	1.46	0.79
5:E:272:ARG:HB3	5:E:274:LYS:HZ2	1.47	0.79
7:G:130:GLU:HG3	7:G:131:MET:HG3	1.63	0.79
10:J:135:GLY:HA2	10:J:211:MET:HE1	1.65	0.79
14:N:80:ALA:HA	14:N:100:ILE:HD11	1.64	0.79
17:R:55:GLN:CD	18:S:88:TYR:HE2	1.90	0.79
20:U:19:LEU:HD23	29:d:124:LEU:CD1	2.12	0.79
21:V:217:VAL:HG23	21:V:218:TYR:HD1	1.48	0.79
24:Y:387:ILE:CD1	25:Z:276:ILE:HG12	2.13	0.79
25:Z:227:ILE:HD12	26:a:346:ILE:HD11	1.63	0.79
33:h:50:MET:HE2	33:h:51:LEU:N	1.98	0.79
2:B:410:ARG:O	31:f:91:SER:HA	1.82	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:41:TYR:CE1	20:U:156:GLU:HG2	2.18	0.79
14:N:14:LEU:HD11	14:N:34:LEU:HG	1.64	0.79
14:N:28:ASN:OD1	14:N:31:THR:OG1	1.97	0.79
16:Q:25:ASP:OD2	16:Q:182:GLY:N	2.16	0.79
16:Q:71:LEU:HD11	16:Q:82:ILE:HG21	1.64	0.79
22:W:247:TYR:O	22:W:250:ILE:HG22	1.83	0.79
23:X:365:LEU:HD13	23:X:385:LEU:CD1	2.13	0.79
29:d:129:LEU:HD12	29:d:130:PRO:HD2	1.63	0.79
33:h:72:ILE:O	33:h:76:LEU:HD23	1.82	0.79
26:a:335:TRP:NE1	26:a:337:GLN:O	2.15	0.79
31:f:797:LEU:O	31:f:801:VAL:HG22	1.83	0.79
10:J:16:LEU:HD11	11:K:135:ARG:HE	1.47	0.79
10:J:79:ASP:OD2	10:J:125:ARG:NH1	2.15	0.79
20:U:680:VAL:HB	20:U:683:VAL:HG12	1.64	0.79
31:f:268:LEU:O	31:f:271:MET:HB2	1.83	0.79
33:h:99:ARG:NH1	33:h:104:ASN:O	2.15	0.79
7:G:240:VAL:HG13	22:W:94:ARG:NH2	1.98	0.78
10:J:187:THR:O	10:J:191:VAL:HG23	1.83	0.78
12:L:41:LYS:HG3	12:L:180:MET:O	1.83	0.78
16:Q:133:THR:OG1	16:Q:136:PHE:O	2.01	0.78
20:U:691:SER:OG	20:U:713:TYR:OH	1.99	0.78
21:V:177:ASN:O	21:V:179:LYS:NZ	2.14	0.78
24:Y:56:ALA:HA	24:Y:59:LYS:HE3	1.65	0.78
29:d:188:MET:HE1	29:d:189:HIS:CE1	2.17	0.78
31:f:226:TYR:HE2	31:f:261:ARG:HD2	1.48	0.78
2:B:64:LYS:HG2	31:f:239:TYR:CE2	2.17	0.78
6:F:141:ASP:HB2	6:F:144:LYS:HG2	1.65	0.78
12:L:181:GLU:N	12:L:181:GLU:OE1	2.17	0.78
15:P:59:ILE:HD11	15:P:82:MET:HG2	1.65	0.78
20:U:32:ASN:HA	20:U:70:HIS:HE2	1.48	0.78
20:U:583:MET:O	20:U:586:VAL:HG12	1.83	0.78
20:U:588:MET:HE2	20:U:588:MET:HA	1.64	0.78
22:W:443:THR:O	22:W:446:ILE:HG22	1.82	0.78
25:Z:17:LEU:HD12	28:c:39:LEU:HD12	1.65	0.78
4:D:398:ASP:OD1	4:D:399:PHE:N	2.15	0.78
13:M:179:LEU:HD22	13:M:181:MET:HG3	1.64	0.78
18:S:3:THR:HG22	18:S:16:ALA:HB1	1.65	0.78
23:X:407:MET:HA	23:X:407:MET:HE3	1.66	0.78
6:F:197:GLU:OE1	6:F:350:ARG:NH2	2.16	0.78
13:M:86:SER:O	13:M:90:ILE:HG12	1.82	0.78
17:R:88:LEU:HB3	17:R:122:ALA:HB2	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:71:ARG:HD2	19:T:74:MET:HE2	1.63	0.78
20:U:250:PHE:CE1	20:U:328:ILE:HD12	2.19	0.78
22:W:19:ASP:OD1	22:W:21:SER:OG	2.02	0.78
22:W:280:ASP:OD1	22:W:281:ASN:N	2.15	0.78
31:f:605:ASN:OD1	31:f:608:LYS:N	2.15	0.78
1:A:246:VAL:HG21	2:B:307:ARG:HD3	1.65	0.78
8:H:222:THR:N	8:H:225:GLU:OE1	2.16	0.78
9:I:118:LYS:NZ	9:I:150:SER:OG	2.16	0.78
16:Q:25:ASP:HA	16:Q:185:VAL:HG12	1.65	0.78
22:W:276:LEU:CD1	22:W:354:LEU:HD23	2.13	0.78
28:c:303:MET:CE	29:d:335:LEU:CB	2.62	0.78
31:f:407:MET:CE	31:f:440:ILE:HD12	2.13	0.78
5:E:202:SER:HA	5:E:210:GLU:HG3	1.64	0.78
15:P:34:ILE:HD13	15:P:176:CYS:HB2	1.64	0.78
20:U:101:ILE:O	20:U:105:ILE:HG13	1.84	0.78
23:X:77:LEU:HD22	23:X:85:ALA:HB1	1.66	0.78
25:Z:243:GLN:O	25:Z:247:LYS:HG2	1.83	0.78
26:a:293:PHE:HE2	26:a:304:VAL:HG22	1.48	0.78
31:f:411:ALA:HB3	31:f:443:GLY:HA3	1.66	0.78
31:f:505:MET:CE	31:f:537:THR:HG23	2.13	0.78
1:A:274:PHE:HB2	1:A:319:MET:HG2	1.65	0.78
2:B:374:LEU:HD22	2:B:378:VAL:HG21	1.65	0.78
2:B:385:MET:SD	2:B:386:ALA:N	2.57	0.78
8:H:20:VAL:HG12	8:H:24:TYR:CE1	2.19	0.78
12:L:85:CYS:SG	12:L:89:ARG:NH2	2.57	0.78
20:U:109:THR:O	20:U:113:VAL:HG13	1.84	0.78
23:X:409:LYS:HD2	28:c:256:ASN:OD1	1.84	0.78
26:a:72:ASN:OD1	26:a:74:LEU:HB2	1.83	0.78
32:g:113:ARG:HB2	32:g:124:GLU:HG2	1.65	0.78
33:h:50:MET:HG3	33:h:192:VAL:HG11	1.64	0.78
5:E:355:ILE:HD12	6:F:211:LYS:HZ2	1.47	0.78
13:M:229:LYS:NZ	13:M:233:GLU:OE2	2.17	0.78
20:U:11:LEU:CD2	29:d:170:GLN:HG2	2.14	0.78
20:U:97:VAL:O	20:U:101:ILE:HG23	1.84	0.78
20:U:437:TYR:CE1	20:U:472:ILE:CD1	2.64	0.78
6:F:159:LEU:HD23	6:F:161:LEU:HD12	1.65	0.78
7:G:88:ARG:O	7:G:91:VAL:HG12	1.84	0.78
8:H:45:VAL:CG1	8:H:188:ILE:HD12	2.14	0.78
13:M:237:LYS:O	13:M:241:GLU:HG3	1.84	0.78
24:Y:383:LEU:O	24:Y:387:ILE:HG22	1.84	0.78
25:Z:106:ILE:CG2	25:Z:153:LYS:HD3	2.14	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:160:PHE:CE1	28:c:202:SER:OG	2.32	0.78
28:c:299:CYS:O	28:c:303:MET:HG2	1.84	0.78
29:d:94:MET:HG3	29:d:118:ARG:NH1	1.97	0.78
3:C:66:LEU:HD11	4:D:116:LEU:HD13	1.65	0.78
20:U:798:PRO:O	20:U:880:ASN:OD1	2.02	0.78
31:f:49:ASP:O	31:f:53:GLN:HG2	1.84	0.78
31:f:82:ILE:CG2	31:f:128:VAL:HG11	2.13	0.78
31:f:567:LEU:HD21	31:f:793:VAL:HG13	1.65	0.78
33:h:92:LEU:HD11	33:h:110:MET:CE	2.14	0.78
2:B:107:MET:CE	2:B:151:LEU:HD23	2.13	0.77
2:B:250:VAL:HG23	2:B:284:ILE:HA	1.66	0.77
5:E:202:SER:HA	5:E:210:GLU:CG	2.13	0.77
9:I:17:ARG:NH2	9:I:22:GLU:OE1	2.17	0.77
20:U:587:ALA:HB2	20:U:621:SER:HB3	1.66	0.77
4:D:243:GLY:HA3	4:D:288:ILE:HD11	1.67	0.77
6:F:172:VAL:HG21	6:F:270:ASP:HB3	1.64	0.77
9:I:106:PRO:HD2	9:I:109:GLN:CG	2.13	0.77
21:V:443:ARG:CZ	29:d:274:CYS:HA	2.14	0.77
22:W:115:ILE:HD12	22:W:120:ILE:HD12	1.67	0.77
22:W:271:VAL:HG11	22:W:302:TYR:HB3	1.67	0.77
24:Y:308:LEU:HD23	24:Y:314:LEU:HD21	1.66	0.77
24:Y:326:GLY:N	30:e:59:GLU:OE2	2.16	0.77
25:Z:71:ASP:HB3	25:Z:74:TYR:HB3	1.63	0.77
31:f:439:TYR:CE1	31:f:476:THR:HG21	2.19	0.77
31:f:461:PRO:HG3	32:g:154:MET:HG3	1.65	0.77
32:g:160:GLN:HB3	32:g:165:ALA:HB2	1.63	0.77
2:B:85:MET:HE1	31:f:619:HIS:HD1	1.48	0.77
2:B:209:GLU:OE1	31:f:737:ASN:O	2.03	0.77
5:E:305:ASN:O	5:E:309:ARG:N	2.18	0.77
11:K:25:GLU:HA	11:K:28:ILE:HD12	1.65	0.77
20:U:583:MET:HE1	20:U:618:ALA:HB2	1.65	0.77
31:f:534:VAL:O	31:f:538:ILE:HG12	1.84	0.77
32:g:128:LYS:HZ1	32:g:136:LEU:H	1.32	0.77
20:U:226:PRO:HA	20:U:260:PHE:HE1	1.47	0.77
20:U:353:LEU:CD2	20:U:385:PHE:CD2	2.62	0.77
27:b:155:ALA:O	27:b:159:THR:HG22	1.85	0.77
28:c:75:MET:SD	28:c:87:VAL:HA	2.25	0.77
31:f:608:LYS:HB3	31:f:608:LYS:HZ3	1.50	0.77
3:C:212:ILE:HD13	3:C:237:MET:HE3	1.65	0.77
20:U:560:MET:HE1	20:U:593:SER:HB2	1.65	0.77
25:Z:156:GLU:OE1	25:Z:157:HIS:N	2.16	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:a:278:MET:HE3	26:a:319:LEU:HB3	1.67	0.77
32:g:110:ARG:HD2	32:g:138:LEU:HD12	1.65	0.77
3:C:214:VAL:HG11	3:C:248:MET:HE3	1.64	0.77
16:Q:14:MET:HE1	16:Q:135:ASP:O	1.84	0.77
17:R:42:ILE:HD13	17:R:77:PRO:HB3	1.67	0.77
19:T:83:MET:HE1	19:T:91:MET:HE3	1.67	0.77
21:V:66:GLU:O	21:V:69:THR:HG22	1.85	0.77
31:f:530:CYS:HG	31:f:566:HIS:HD1	0.77	0.77
3:C:251:ILE:HG22	3:C:295:THR:HB	1.67	0.77
10:J:11:SER:OG	10:J:13:ASP:OD1	2.02	0.77
15:P:50:ALA:HB3	16:Q:127:ILE:HG23	1.67	0.77
17:R:35:MET:CE	17:R:181:ARG:HG3	2.14	0.77
19:T:31:GLU:N	19:T:31:GLU:OE1	2.17	0.77
20:U:799:LYS:HA	20:U:880:ASN:ND2	2.00	0.77
21:V:98:LEU:HD22	21:V:209:LYS:HG3	1.67	0.77
25:Z:208:ILE:HG23	25:Z:230:LEU:HD11	1.67	0.77
26:a:276:CYS:O	26:a:279:GLU:HG3	1.84	0.77
29:d:145:ARG:NH1	29:d:149:GLU:OE2	2.17	0.77
29:d:164:PHE:CE1	29:d:168:MET:HG2	2.20	0.77
31:f:217:LEU:O	31:f:221:ILE:HG13	1.85	0.77
34:u:181:LYS:HB3	34:u:230:ILE:HD12	1.67	0.77
5:E:42:LYS:HD2	5:E:42:LYS:O	1.85	0.77
6:F:184:GLN:OE1	6:F:243:GLN:NE2	2.18	0.77
19:T:28:ARG:NE	19:T:191:ASP:OD2	2.14	0.77
21:V:283:ASN:ND2	30:e:17:ASP:OD2	2.16	0.77
22:W:378:MET:HE1	22:W:393:LEU:HD22	1.66	0.77
11:K:68:VAL:CG2	11:K:89:ILE:HD13	2.14	0.77
16:Q:145:GLN:OE1	16:Q:145:GLN:N	2.17	0.77
17:R:34:LYS:HD2	17:R:46:CYS:O	1.85	0.77
20:U:74:PHE:HZ	21:V:240:LEU:HD12	1.49	0.77
20:U:367:THR:O	20:U:371:ILE:HG12	1.85	0.77
26:a:278:MET:CE	26:a:319:LEU:HD23	2.14	0.77
31:f:110:TYR:CD2	31:f:119:LYS:HG2	2.20	0.77
31:f:223:GLU:HA	31:f:259:PHE:CZ	2.20	0.77
31:f:501:LEU:HD12	31:f:518:THR:HG23	1.67	0.77
22:W:132:THR:HG22	22:W:138:VAL:HG11	1.67	0.77
22:W:451:MET:CE	25:Z:100:LYS:HA	2.15	0.77
23:X:118:LYS:NZ	23:X:118:LYS:O	2.18	0.77
25:Z:224:HIS:HB2	26:a:218:MET:HE1	1.67	0.77
25:Z:276:ILE:O	25:Z:280:ILE:HG23	1.83	0.77
31:f:262:PHE:HE1	31:f:284:SER:HB2	1.50	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:71:GLY:HA3	2:B:162:VAL:HG12	1.65	0.76
9:I:65:ILE:HD13	9:I:214:ALA:HB3	1.67	0.76
29:d:145:ARG:O	29:d:149:GLU:HG3	1.86	0.76
1:A:278:ASP:OD1	2:B:310:LEU:HD11	1.84	0.76
13:M:39:ILE:HD13	13:M:193:VAL:CG2	2.10	0.76
23:X:379:ASP:OD1	23:X:384:VAL:HG22	1.85	0.76
25:Z:144:VAL:HA	25:Z:151:THR:HG21	1.67	0.76
28:c:247:GLU:OE2	28:c:287:HIS:NE2	2.18	0.76
31:f:466:LEU:O	31:f:470:VAL:HG13	1.84	0.76
2:B:190:LEU:O	2:B:194:ILE:HG13	1.85	0.76
5:E:212:ALA:HA	5:E:216:ARG:HB2	1.68	0.76
15:P:3:ILE:HD12	15:P:99:VAL:HG12	1.66	0.76
21:V:280:ALA:O	24:Y:385:ARG:NH1	2.18	0.76
22:W:67:LEU:HD11	22:W:90:LEU:HB3	1.66	0.76
31:f:50:LYS:HA	31:f:53:GLN:OE1	1.83	0.76
31:f:115:PRO:HA	31:f:119:LYS:HE2	1.64	0.76
2:B:59:ARG:CD	31:f:209:MET:HE1	2.15	0.76
5:E:138:LEU:HD22	5:E:183:LEU:HD21	1.67	0.76
6:F:365:ILE:HD11	36:F:501:ATP:C6	2.20	0.76
10:J:40:ILE:HD11	10:J:210:VAL:HG13	1.68	0.76
15:P:104:ASP:OD1	15:P:106:THR:N	2.15	0.76
23:X:137:TYR:CB	23:X:146:ALA:HB2	2.15	0.76
25:Z:102:HIS:N	25:Z:105:ASP:OD2	2.16	0.76
28:c:41:MET:HG2	28:c:112:TYR:CD2	2.20	0.76
28:c:277:LYS:HA	28:c:282:ARG:CD	2.16	0.76
33:h:2:GLN:NE2	33:h:103:MET:O	2.17	0.76
11:K:7:GLU:N	11:K:7:GLU:OE1	2.18	0.76
18:S:112:TYR:HE1	18:S:122:SER:HB2	1.48	0.76
23:X:365:LEU:O	23:X:369:ILE:HG13	1.85	0.76
26:a:67:PHE:O	26:a:70:ARG:NH2	2.17	0.76
31:f:653:ALA:O	31:f:657:ILE:HG13	1.86	0.76
3:C:267:SER:HB3	3:C:271:ARG:NH2	2.01	0.76
5:E:115:VAL:HG22	5:E:116:ASP:H	1.49	0.76
22:W:67:LEU:O	22:W:71:VAL:HG22	1.85	0.76
22:W:370:TYR:HE1	26:a:312:MET:HE2	1.49	0.76
23:X:57:LEU:HG	23:X:62:GLN:HB2	1.67	0.76
25:Z:227:ILE:CD1	26:a:346:ILE:HD11	2.15	0.76
31:f:858:LYS:HD3	31:f:859:PRO:CD	2.15	0.76
33:h:99:ARG:NH2	33:h:104:ASN:OD1	2.19	0.76
2:B:85:MET:HE1	31:f:619:HIS:ND1	2.01	0.76
2:B:287:ILE:HG12	2:B:329:MET:HE2	1.67	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:93:LEU:HD13	8:H:113:ARG:CB	2.14	0.76
13:M:39:ILE:HG13	13:M:176:ILE:HD11	1.68	0.76
20:U:138:PHE:CE2	20:U:162:VAL:HG11	2.21	0.76
29:d:251:ILE:HD11	29:d:260:ILE:HG13	1.67	0.76
31:f:105:LYS:O	31:f:108:GLU:HG3	1.85	0.76
3:C:222:LYS:HD3	4:D:239:TYR:HB3	1.66	0.76
5:E:211:SER:HA	5:E:215:ILE:HB	1.68	0.76
7:G:49:VAL:HG11	7:G:195:VAL:HG22	1.67	0.76
15:P:1:THR:HG21	15:P:46:ALA:HA	1.68	0.76
17:R:107:TYR:HE1	17:R:112:GLY:HA2	1.51	0.76
26:a:18:GLN:HB2	26:a:21:VAL:HG12	1.66	0.76
26:a:206:LEU:HD23	26:a:268:LEU:HD11	1.67	0.76
33:h:200:GLU:OE1	33:h:200:GLU:N	2.18	0.76
1:A:145:ASN:OD1	1:A:146:LYS:N	2.19	0.76
9:I:45:LEU:CD1	9:I:137:ILE:HG12	2.16	0.76
21:V:72:LEU:HA	21:V:75:ILE:HD11	1.68	0.76
21:V:214:HIS:O	21:V:217:VAL:HG22	1.85	0.76
31:f:110:TYR:CE2	31:f:119:LYS:HG2	2.21	0.76
31:f:223:GLU:HG2	31:f:259:PHE:HZ	1.49	0.76
31:f:407:MET:HE2	31:f:439:TYR:HD1	1.50	0.76
32:g:129:ILE:CG2	32:g:153:ALA:HB1	2.16	0.76
34:u:188:GLY:O	34:u:253:GLY:N	2.13	0.76
1:A:65:ILE:HB	3:C:82:LYS:HE3	1.68	0.76
16:Q:113:ASP:OD1	16:Q:116:THR:N	2.19	0.76
18:S:21:THR:HG22	18:S:26:ILE:HD12	1.68	0.76
20:U:351:MET:O	20:U:355:ASN:ND2	2.16	0.76
24:Y:155:ASP:OD1	24:Y:156:LEU:N	2.19	0.76
27:b:128:ALA:HB2	27:b:156:PHE:CD1	2.21	0.76
34:u:192:LYS:HG3	34:u:252:GLN:NE2	2.00	0.76
1:A:49:GLU:O	1:A:52:ILE:HG22	1.84	0.75
5:E:161:ARG:HH12	22:W:200:ILE:HD13	1.50	0.75
13:M:214:SER:OG	13:M:224:HIS:NE2	2.19	0.75
14:N:38:HIS:ND1	14:N:39:ASP:OD1	2.19	0.75
26:a:73:PRO:O	26:a:77:VAL:HG23	1.86	0.75
27:b:140:ILE:HG21	27:b:153:LEU:HD12	1.67	0.75
11:K:82:ILE:O	11:K:86:LYS:HG2	1.86	0.75
14:N:143:TYR:HA	14:N:155:PHE:HE2	1.51	0.75
16:Q:101:GLY:O	17:R:93:ARG:NH1	2.18	0.75
21:V:213:TYR:O	21:V:217:VAL:HG13	1.85	0.75
29:d:251:ILE:HD13	29:d:257:THR:HA	1.67	0.75
6:F:318:ASP:OD2	6:F:347:ARG:NH1	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:162:GLY:O	8:H:58:ASP:N	2.15	0.75
12:L:22:ILE:CD1	12:L:120:THR:HB	2.16	0.75
15:P:214:GLU:OE1	16:Q:198:ARG:HG2	1.85	0.75
16:Q:29:GLY:HA3	16:Q:34:MET:HA	1.68	0.75
20:U:654:MET:O	20:U:658:ILE:HG13	1.86	0.75
22:W:59:ASP:HB3	22:W:62:SER:OG	1.87	0.75
22:W:301:LYS:HG3	22:W:327:GLU:HG2	1.69	0.75
26:a:257:GLN:NE2	26:a:259:PRO:O	2.20	0.75
31:f:771:LEU:HD21	31:f:825:MET:HE1	1.67	0.75
32:g:112:LEU:HD22	32:g:142:LEU:HD11	1.68	0.75
1:A:116:LYS:NZ	2:B:128:GLY:O	2.13	0.75
2:B:54:PRO:HG3	2:B:60:LEU:HD23	1.68	0.75
11:K:90:ASP:OD2	18:S:69:ARG:NH1	2.18	0.75
21:V:227:VAL:HB	21:V:231:LEU:HD11	1.69	0.75
21:V:236:ARG:O	21:V:240:LEU:HD22	1.85	0.75
21:V:408:ARG:HG2	21:V:446:VAL:HG12	1.68	0.75
24:Y:202:LEU:HD11	24:Y:231:LEU:HD11	1.67	0.75
24:Y:365:GLN:O	24:Y:369:THR:HG22	1.87	0.75
26:a:360:VAL:HG22	28:c:308:VAL:HG13	1.68	0.75
27:b:179:LEU:HD21	27:b:183:LEU:HD11	1.66	0.75
28:c:291:LEU:O	28:c:295:ASN:ND2	2.18	0.75
2:B:67:ARG:NH1	31:f:664:GLU:OE1	2.19	0.75
7:G:211:LYS:CG	7:G:212:PRO:HD2	2.16	0.75
10:J:146:GLN:OE1	10:J:159:ASN:ND2	2.18	0.75
14:N:92:GLU:OE1	14:N:92:GLU:N	2.20	0.75
16:Q:7:ASN:ND2	16:Q:29:GLY:O	2.20	0.75
20:U:328:ILE:HD13	20:U:333:MET:HB3	1.68	0.75
21:V:251:LEU:HD11	21:V:270:LEU:HD21	1.67	0.75
22:W:18:VAL:HB	22:W:20:TYR:CE1	2.22	0.75
22:W:184:GLU:HG3	22:W:222:LEU:HD21	1.68	0.75
31:f:373:ALA:HB2	31:f:760:PHE:HD1	1.51	0.75
33:h:49:THR:CG2	33:h:112:ILE:HD11	2.17	0.75
6:F:201:ALA:O	6:F:202:ILE:HD13	1.85	0.75
7:G:10:ASP:HB2	7:G:27:TYR:HE2	1.52	0.75
11:K:186:HIS:O	11:K:189:MET:HG3	1.86	0.75
18:S:41:LEU:HD11	18:S:101:ILE:HG23	1.67	0.75
21:V:463:MET:HA	21:V:463:MET:CE	2.14	0.75
22:W:99:GLN:O	22:W:103:LYS:HG2	1.86	0.75
29:d:168:MET:O	29:d:172:LYS:HG2	1.85	0.75
31:f:72:ARG:HH12	31:f:117:GLU:HG2	1.51	0.75
5:E:126:ASP:N	5:E:193:CYS:O	2.17	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:180:LYS:H	9:I:184:MET:HE1	1.51	0.75
11:K:148:GLU:OE1	11:K:148:GLU:N	2.19	0.75
11:K:195:ILE:HG23	11:K:217:LEU:HD11	1.69	0.75
11:K:218:ALA:HB1	11:K:226:PHE:CE1	2.20	0.75
12:L:157:ARG:HD2	12:L:176:MET:SD	2.27	0.75
12:L:205:LEU:HG	12:L:210:VAL:HG21	1.69	0.75
17:R:77:PRO:HD2	17:R:108:ASP:HB2	1.69	0.75
19:T:148:LEU:HD21	19:T:178:VAL:HG23	1.67	0.75
20:U:807:LYS:CE	20:U:810:THR:HG21	2.02	0.75
20:U:835:ILE:HG13	31:f:607:LEU:HD21	1.67	0.75
22:W:446:ILE:HD11	25:Z:211:TYR:CB	2.17	0.75
26:a:342:ASP:HB3	26:a:345:GLN:HG2	1.67	0.75
31:f:398:TRP:O	31:f:401:LYS:HG2	1.87	0.75
13:M:33:SER:OG	13:M:79:GLY:HA2	1.86	0.75
15:P:113:ILE:HG22	15:P:119:THR:HB	1.69	0.75
15:P:163:ILE:HG23	15:P:170:GLY:HA3	1.69	0.75
19:T:90:ALA:O	19:T:93:SER:OG	2.05	0.75
20:U:791:LEU:O	20:U:913:ILE:HD13	1.86	0.75
21:V:98:LEU:HD13	21:V:209:LYS:HG2	1.69	0.75
21:V:466:ILE:HD12	21:V:469:THR:OG1	1.86	0.75
31:f:833:PHE:HD1	31:f:839:PRO:HA	1.51	0.75
33:h:92:LEU:HD11	33:h:110:MET:HE3	1.67	0.75
14:N:63:LEU:HD11	14:N:74:PRO:HB3	1.69	0.75
22:W:21:SER:O	22:W:24:VAL:HG22	1.87	0.75
31:f:221:ILE:HD13	31:f:229:VAL:HG11	1.67	0.75
7:G:211:LYS:HG2	7:G:212:PRO:HD2	1.68	0.74
9:I:62:SER:HB2	9:I:65:ILE:O	1.87	0.74
15:P:41:ILE:HD11	15:P:76:VAL:HA	1.68	0.74
16:Q:188:HIS:HD2	16:Q:197:THR:HA	1.52	0.74
20:U:49:TYR:HD2	20:U:61:ALA:HB2	1.50	0.74
24:Y:48:ASN:CB	24:Y:50:MET:HE3	2.15	0.74
27:b:25:ARG:NH1	27:b:145:GLU:OE1	2.18	0.74
28:c:303:MET:HE1	29:d:335:LEU:HD22	1.69	0.74
31:f:423:ASP:HB2	32:g:91:PRO:HD2	1.67	0.74
31:f:597:VAL:HG22	31:f:612:LEU:HD21	1.69	0.74
31:f:646:MET:N	31:f:646:MET:SD	2.58	0.74
11:K:27:ALA:O	11:K:31:ILE:HG23	1.87	0.74
14:N:63:LEU:HD11	14:N:74:PRO:CB	2.17	0.74
15:P:212:LEU:HG	16:Q:201:LYS:HD2	1.69	0.74
31:f:806:VAL:HA	31:f:810:ILE:HG12	1.67	0.74
5:E:230:ILE:HD13	5:E:273:VAL:HG11	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:323:HIS:HB3	5:E:325:GLU:OE2	1.87	0.74
12:L:36:VAL:HG23	12:L:195:LEU:CD1	2.17	0.74
21:V:479:ARG:HG2	24:Y:377:LEU:HD12	1.69	0.74
23:X:138:PHE:HE2	23:X:175:LYS:HB3	1.51	0.74
24:Y:41:LEU:O	24:Y:45:VAL:HG23	1.87	0.74
4:D:125:LYS:HB3	4:D:126:PRO:HD2	1.69	0.74
13:M:195:LYS:O	13:M:199:ILE:HG12	1.88	0.74
14:N:32:ASP:O	14:N:45:ARG:NH1	2.19	0.74
20:U:158:ARG:HA	20:U:193:PHE:CE1	2.22	0.74
20:U:381:THR:HA	20:U:412:HIS:HD2	1.53	0.74
20:U:661:ALA:HB1	20:U:746:ILE:HG22	1.69	0.74
22:W:171:VAL:HG11	22:W:186:ILE:HG12	1.68	0.74
31:f:483:PHE:O	31:f:487:LEU:HG	1.87	0.74
31:f:498:LEU:O	31:f:502:LEU:HG	1.87	0.74
33:h:45:VAL:O	33:h:71:VAL:HG11	1.87	0.74
7:G:52:THR:HG23	7:G:216:GLU:HG2	1.70	0.74
12:L:177:SER:OG	12:L:178:GLU:OE1	2.03	0.74
15:P:166:ASP:OD1	15:P:167:LEU:N	2.21	0.74
20:U:221:ILE:HG22	20:U:260:PHE:HE2	1.52	0.74
25:Z:220:LEU:HG	25:Z:221:PRO:HD2	1.68	0.74
26:a:215:GLU:OE1	26:a:215:GLU:N	2.21	0.74
26:a:355:PHE:O	26:a:358:THR:HG22	1.88	0.74
3:C:127:LEU:HD22	4:D:102:ILE:HD11	1.69	0.74
8:H:65:VAL:N	8:H:209:GLU:OE2	2.11	0.74
10:J:232:ILE:O	10:J:236:LYS:HG3	1.88	0.74
13:M:39:ILE:HG22	13:M:189:ILE:HD11	1.69	0.74
20:U:65:SER:OG	20:U:96:TYR:OH	2.06	0.74
21:V:446:VAL:O	21:V:447:ILE:HD13	1.88	0.74
26:a:28:LEU:HB3	26:a:37:LEU:HB2	1.68	0.74
29:d:234:GLN:OE1	29:d:234:GLN:HA	1.86	0.74
6:F:289:ASP:OD1	6:F:332:THR:OG1	2.05	0.74
11:K:195:ILE:HD12	11:K:217:LEU:HD21	1.69	0.74
20:U:357:LYS:HB2	20:U:385:PHE:HZ	1.53	0.74
21:V:367:VAL:HG21	21:V:398:LEU:HD21	1.68	0.74
21:V:411:SER:HB3	21:V:447:ILE:HD12	1.70	0.74
25:Z:228:TYR:HB2	26:a:338:PRO:CB	2.18	0.74
31:f:56:LEU:HD21	31:f:99:LEU:HD11	1.70	0.74
5:E:37:THR:CA	6:F:69:MET:HE1	2.14	0.74
10:J:182:GLU:OE1	10:J:182:GLU:N	2.21	0.74
13:M:69:VAL:HG22	13:M:75:MET:HE3	1.69	0.74
15:P:100:LEU:N	15:P:111:TYR:O	2.21	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:34:MET:HG3	16:Q:183:MET:SD	2.28	0.74
20:U:529:ILE:HD11	20:U:566:LEU:HD22	1.69	0.74
21:V:443:ARG:HH22	29:d:274:CYS:CA	1.99	0.74
21:V:467:TYR:O	25:Z:254:ASN:ND2	2.20	0.74
28:c:163:ILE:HG12	28:c:201:TYR:HD2	1.52	0.74
32:g:122:LEU:HG	32:g:127:ILE:HD13	1.70	0.74
1:A:334:PRO:HG2	6:F:395:GLN:HG2	1.70	0.74
4:D:357:GLU:OE1	4:D:395:LEU:HB3	1.86	0.74
18:S:148:GLU:OE2	18:S:151:GLN:N	2.19	0.74
22:W:214:PHE:HB3	22:W:223:LYS:HE2	1.69	0.74
1:A:177:VAL:HG22	1:A:224:LEU:HD23	1.69	0.74
7:G:138:MET:CE	7:G:140:LEU:HD21	2.18	0.74
9:I:28:ILE:HG12	9:I:133:SER:HB3	1.69	0.74
17:R:180:VAL:HG23	17:R:191:LEU:HB2	1.68	0.74
19:T:12:ILE:HD12	19:T:12:ILE:O	1.88	0.74
20:U:38:ILE:HG22	20:U:67:VAL:HG21	1.70	0.74
20:U:61:ALA:HB3	20:U:84:ALA:HB2	1.68	0.74
21:V:495:ARG:O	25:Z:282:ASN:ND2	2.20	0.74
23:X:414:LEU:HD11	25:Z:273:HIS:HB2	1.70	0.74
24:Y:334:LEU:HB3	24:Y:347:ILE:HD11	1.70	0.74
27:b:51:LEU:HG	27:b:62:THR:HG22	1.68	0.74
29:d:83:THR:O	29:d:87:VAL:HG23	1.87	0.74
31:f:539:LEU:CD1	31:f:543:MET:HE3	2.18	0.74
33:h:12:LEU:O	33:h:22:ILE:HG13	1.88	0.74
3:C:375:ARG:NH1	3:C:377:HIS:O	2.21	0.73
5:E:325:GLU:O	5:E:364:GLN:NE2	2.20	0.73
6:F:244:THR:HG22	6:F:246:ALA:H	1.51	0.73
14:N:55:VAL:CG2	14:N:94:LEU:HD21	2.18	0.73
16:Q:20:VAL:HG13	16:Q:190:ILE:HD13	1.69	0.73
22:W:130:MET:HA	22:W:130:MET:CE	2.16	0.73
24:Y:282:MET:CE	24:Y:292:TYR:HA	2.18	0.73
29:d:272:ALA:O	29:d:275:ILE:HG23	1.86	0.73
33:h:15:LYS:HG2	33:h:135:PRO:O	1.87	0.73
13:M:192:GLU:O	13:M:196:ILE:HG22	1.88	0.73
16:Q:123:SER:O	16:Q:124:LEU:HD13	1.86	0.73
20:U:443:LEU:HG	20:U:461:LEU:HD22	1.69	0.73
22:W:109:CYS:O	22:W:112:VAL:HG12	1.88	0.73
22:W:263:TRP:CG	22:W:295:LYS:HZ1	2.07	0.73
29:d:236:LEU:HD12	29:d:241:TYR:CE1	2.23	0.73
31:f:50:LYS:O	31:f:53:GLN:HG3	1.89	0.73
33:h:63:LEU:HD21	33:h:106:LEU:HD13	1.69	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:145:LEU:HD22	33:h:176:LEU:HD23	1.69	0.73
2:B:257:GLN:HB2	2:B:262:ASP:HB3	1.70	0.73
7:G:50:ILE:CG2	7:G:141:ILE:HD13	2.18	0.73
20:U:368:ALA:HB2	20:U:728:PHE:CD1	2.23	0.73
22:W:117:ASP:HB3	22:W:120:ILE:CG1	2.18	0.73
31:f:466:LEU:HD22	31:f:485:LEU:HB2	1.69	0.73
31:f:654:VAL:HA	31:f:657:ILE:HD12	1.69	0.73
33:h:145:LEU:HD22	33:h:176:LEU:CD2	2.18	0.73
1:A:122:VAL:HG21	6:F:164:LEU:HD11	1.69	0.73
3:C:264:GLY:O	4:D:280:GLY:N	2.19	0.73
15:P:11:GLY:C	15:P:12:ILE:HD13	2.12	0.73
17:R:70:ARG:HG3	17:R:71:ASN:HD22	1.48	0.73
17:R:180:VAL:CG2	17:R:191:LEU:HB2	2.19	0.73
20:U:24:LEU:HD21	20:U:60:ALA:CA	2.19	0.73
20:U:702:THR:HG22	20:U:811:PHE:HE2	1.50	0.73
22:W:230:MET:HE2	22:W:230:MET:HA	1.69	0.73
31:f:256:PHE:CE1	31:f:268:LEU:CD1	2.72	0.73
9:I:223:THR:O	9:I:223:THR:HG22	1.87	0.73
17:R:44:LEU:HD13	17:R:104:LEU:HG	1.70	0.73
20:U:552:ILE:CG2	20:U:566:LEU:HD21	2.19	0.73
27:b:4:GLU:OE1	27:b:4:GLU:N	2.21	0.73
31:f:411:ALA:O	31:f:414:LEU:HB2	1.89	0.73
31:f:423:ASP:O	31:f:427:THR:HG23	1.89	0.73
15:P:66:HIS:O	15:P:70:THR:HG23	1.89	0.73
20:U:552:ILE:O	20:U:555:VAL:HG12	1.89	0.73
21:V:76:LYS:CE	21:V:149:PRO:HB3	2.18	0.73
26:a:64:ILE:HG22	26:a:76:LEU:HD13	1.70	0.73
31:f:297:MET:HE1	31:f:300:ARG:HG2	1.71	0.73
31:f:574:GLU:O	31:f:577:LEU:HG	1.87	0.73
31:f:605:ASN:O	31:f:609:VAL:HG23	1.87	0.73
31:f:886:GLU:O	31:f:903:ASN:N	2.19	0.73
5:E:345:ASN:O	5:E:349:GLU:N	2.17	0.73
8:H:10:LEU:HD12	8:H:10:LEU:O	1.89	0.73
15:P:84:LYS:HE2	15:P:119:THR:HG22	1.71	0.73
20:U:245:ALA:O	20:U:248:ILE:HG22	1.89	0.73
21:V:99:ARG:HH22	30:e:17:ASP:HB2	1.52	0.73
24:Y:188:CYS:HA	24:Y:191:ILE:CG2	2.19	0.73
27:b:117:VAL:HG21	27:b:153:LEU:HD21	1.71	0.73
31:f:137:ARG:NH1	31:f:172:GLU:OE1	2.20	0.73
31:f:463:LEU:HD12	31:f:464:ALA:N	2.04	0.73
33:h:22:ILE:HG21	33:h:50:MET:CE	2.18	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:378:ILE:HG13	4:D:406:VAL:HG11	1.70	0.73
7:G:86:ASP:OD2	7:G:134:LEU:HA	1.88	0.73
10:J:43:LEU:HD21	10:J:134:VAL:CG1	2.19	0.73
20:U:835:ILE:HD11	31:f:241:PRO:HG3	1.70	0.73
24:Y:186:LEU:HD22	24:Y:287:LEU:CD2	2.19	0.73
24:Y:376:LEU:HD23	25:Z:265:LEU:HD21	1.71	0.73
27:b:52:ILE:HG23	27:b:59:GLU:O	1.88	0.73
33:h:26:MET:SD	33:h:188:GLN:NE2	2.62	0.73
8:H:34:PRO:HD2	8:H:49:GLU:HG2	1.69	0.73
9:I:233:VAL:O	9:I:237:ILE:HG12	1.88	0.73
12:L:72:ILE:CG2	12:L:88:MET:HE1	2.18	0.73
15:P:170:GLY:O	15:P:171:SER:OG	2.06	0.73
16:Q:99:ARG:HD2	16:Q:127:ILE:CD1	2.17	0.73
19:T:150:ASP:O	19:T:156:LYS:N	2.18	0.73
20:U:846:LYS:O	20:U:849:LYS:HG3	1.88	0.73
24:Y:48:ASN:OD1	24:Y:113:ARG:NE	2.20	0.73
33:h:72:ILE:HA	33:h:75:GLU:OE2	1.88	0.73
4:D:384:MET:CE	5:E:297:ARG:HH12	2.01	0.73
6:F:130:GLN:OE1	6:F:132:TYR:OH	2.04	0.73
7:G:165:ALA:HB1	7:G:179:LEU:HD13	1.70	0.73
9:I:180:LYS:N	9:I:184:MET:HE1	2.04	0.73
9:I:216:LEU:CD1	9:I:225:ILE:HD11	2.19	0.73
20:U:41:SER:O	20:U:43:ASP:N	2.22	0.73
25:Z:167:ALA:O	25:Z:170:VAL:HG12	1.89	0.73
28:c:113:HIS:HE1	28:c:144:VAL:HG22	1.52	0.73
31:f:211:ILE:HD13	31:f:213:GLN:HB3	1.71	0.73
31:f:521:ALA:O	31:f:524:MET:HG3	1.88	0.73
2:B:64:LYS:HG2	31:f:239:TYR:HE2	1.53	0.72
4:D:141:ASP:OD1	4:D:142:VAL:N	2.22	0.72
6:F:188:ILE:HG12	6:F:235:LEU:HD23	1.70	0.72
8:H:65:VAL:HG23	8:H:209:GLU:HG2	1.71	0.72
8:H:188:ILE:HG21	8:H:229:TYR:CE1	2.24	0.72
11:K:66:LYS:HB2	11:K:216:GLU:OE2	1.88	0.72
14:N:144:ARG:HB2	14:N:147:MET:HE2	1.71	0.72
19:T:19:ASP:O	19:T:200:LYS:NZ	2.21	0.72
19:T:91:MET:O	19:T:95:ILE:HG22	1.89	0.72
21:V:479:ARG:NH1	24:Y:374:ASP:OD1	2.22	0.72
22:W:20:TYR:O	22:W:24:VAL:HG13	1.87	0.72
22:W:138:VAL:HG22	22:W:141:GLU:HB2	1.69	0.72
22:W:231:ILE:CD1	22:W:243:ILE:HG23	2.19	0.72
22:W:326:MET:O	22:W:326:MET:HE3	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:a:52:GLN:OE1	26:a:52:GLN:N	2.22	0.72
26:a:74:LEU:HD21	26:a:109:GLU:HB3	1.69	0.72
32:g:161:SER:O	32:g:165:ALA:N	2.13	0.72
4:D:115:ILE:HD11	4:D:139:LEU:HD13	1.71	0.72
11:K:50:VAL:CG1	11:K:67:ILE:HD11	2.18	0.72
19:T:11:THR:HG23	19:T:189:THR:HG21	1.70	0.72
20:U:374:SER:HB2	20:U:407:SER:OG	1.89	0.72
31:f:498:LEU:CD1	31:f:534:VAL:HG22	2.19	0.72
31:f:541:THR:O	31:f:544:GLU:HG3	1.89	0.72
3:C:278:ASN:HD22	3:C:282:GLY:HA3	1.53	0.72
12:L:166:GLN:OE1	12:L:169:ARG:NH1	2.22	0.72
16:Q:158:MET:HG3	16:Q:162:HIS:HB3	1.69	0.72
17:R:170:ARG:O	17:R:170:ARG:HD2	1.88	0.72
23:X:177:TYR:CE2	23:X:185:LYS:HB3	2.25	0.72
28:c:54:MET:HE1	28:c:87:VAL:HG22	1.69	0.72
28:c:125:VAL:HG21	34:u:289:HIS:HB3	1.71	0.72
33:h:161:SER:OG	33:h:162:GLN:OE1	2.07	0.72
1:A:369:ARG:NH2	11:K:206:MET:O	2.22	0.72
2:B:219:PRO:HG2	2:B:349:ARG:HE	1.54	0.72
7:G:214:GLU:O	7:G:215:ILE:HD13	1.89	0.72
12:L:137:TYR:HB2	12:L:215:VAL:HG12	1.70	0.72
14:N:5:ALA:HB3	14:N:111:VAL:HG11	1.71	0.72
20:U:332:GLU:OE1	20:U:332:GLU:N	2.21	0.72
20:U:740:GLY:HA3	20:U:744:VAL:HG22	1.70	0.72
20:U:832:VAL:HB	20:U:836:THR:OG1	1.89	0.72
22:W:274:VAL:HG22	22:W:286:LEU:HD23	1.72	0.72
26:a:32:LYS:HE2	27:b:20:ASP:O	1.90	0.72
31:f:62:ARG:O	31:f:70:LEU:HD13	1.89	0.72
31:f:290:VAL:HA	31:f:890:VAL:HG11	1.70	0.72
31:f:339:ILE:O	31:f:773:LYS:NZ	2.22	0.72
33:h:67:LEU:O	33:h:71:VAL:N	2.18	0.72
1:A:426:THR:HB	1:A:427:PRO:HD3	1.71	0.72
2:B:103:ARG:HG2	2:B:160:ILE:HD12	1.71	0.72
3:C:61:GLU:O	3:C:65:LEU:HD23	1.90	0.72
4:D:418:LYS:NZ	8:H:76:TYR:OH	2.16	0.72
5:E:261:LEU:CD1	5:E:294:ARG:HG3	2.20	0.72
12:L:64:LEU:HD11	12:L:74:ILE:HD13	1.72	0.72
12:L:67:ASP:OD1	12:L:68:ASN:N	2.21	0.72
16:Q:22:ILE:CG2	16:Q:188:HIS:HB2	2.18	0.72
17:R:44:LEU:CD1	17:R:104:LEU:HG	2.19	0.72
19:T:205:GLU:N	19:T:205:GLU:OE1	2.23	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:312:MET:HE1	22:W:368:LYS:HE3	1.72	0.72
23:X:255:LEU:HD22	23:X:267:VAL:HG13	1.70	0.72
25:Z:78:MET:HE1	28:c:95:MET:SD	2.28	0.72
27:b:138:VAL:HG12	27:b:160:LEU:CD2	2.17	0.72
31:f:436:SER:CB	32:g:173:GLU:HG2	2.18	0.72
32:g:128:LYS:HB2	32:g:158:LEU:HD11	1.70	0.72
7:G:138:MET:HE2	7:G:140:LEU:CD2	2.19	0.72
17:R:14:LEU:HD22	17:R:182:ILE:HG22	1.71	0.72
17:R:163:CYS:O	17:R:167:LEU:HG	1.88	0.72
20:U:22:PHE:HB3	29:d:124:LEU:HD11	1.70	0.72
22:W:55:ARG:HD2	22:W:94:ARG:O	1.90	0.72
26:a:58:LYS:H	26:a:61:GLU:HG3	1.54	0.72
27:b:7:MET:HE2	27:b:96:ALA:CB	2.19	0.72
29:d:130:PRO:HA	29:d:136:LEU:CD1	2.19	0.72
29:d:220:ILE:HA	29:d:226:ILE:HD11	1.71	0.72
31:f:287:ASP:HB3	31:f:290:VAL:HG12	1.71	0.72
31:f:332:ALA:O	31:f:336:GLU:HG2	1.90	0.72
1:A:52:ILE:HD11	2:B:68:ILE:CG2	2.18	0.72
5:E:74:THR:HG21	6:F:131:THR:CG2	2.20	0.72
7:G:18:PRO:HA	8:H:24:TYR:HE2	1.51	0.72
12:L:74:ILE:HG21	12:L:81:ALA:HB1	1.70	0.72
15:P:22:GLU:OE1	15:P:22:GLU:N	2.23	0.72
15:P:76:VAL:HG11	15:P:109:HIS:CB	2.19	0.72
16:Q:71:LEU:HA	16:Q:90:MET:HE1	1.70	0.72
18:S:113:TYR:O	18:S:120:ARG:HA	1.90	0.72
22:W:268:LYS:HB3	22:W:302:TYR:CE2	2.24	0.72
24:Y:383:LEU:HD11	25:Z:276:ILE:HD11	1.71	0.72
31:f:442:SER:HB3	31:f:477:MET:HA	1.72	0.72
32:g:79:THR:O	32:g:82:ILE:HG13	1.89	0.72
5:E:223:ARG:C	5:E:225:HIS:H	1.98	0.72
5:E:233:ASP:OD1	5:E:278:ALA:HB3	1.88	0.72
6:F:314:LEU:HD21	6:F:342:LEU:HD12	1.70	0.72
7:G:105:TYR:HB3	15:P:78:THR:HG23	1.72	0.72
18:S:139:MET:HE1	18:S:140:ASP:OD1	1.88	0.72
19:T:176:LYS:HZ3	19:T:208:VAL:HG21	1.54	0.72
20:U:611:ASN:O	20:U:614:VAL:HG12	1.89	0.72
31:f:386:GLY:HA2	31:f:418:LEU:HG	1.72	0.72
33:h:97:TYR:HA	33:h:100:ARG:HG2	1.71	0.72
9:I:174:MET:HE3	9:I:196:VAL:HA	1.71	0.72
14:N:114:VAL:HA	14:N:119:MET:O	1.90	0.72
16:Q:61:GLN:HE22	17:R:124:LEU:CG	2.03	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:R:4:LEU:C	17:R:5:ILE:HD13	2.14	0.72
20:U:494:TYR:OH	20:U:528:ALA:HA	1.89	0.72
21:V:443:ARG:NH2	29:d:273:GLY:O	2.22	0.72
22:W:248:ARG:HD2	22:W:290:ILE:HD11	1.72	0.72
23:X:65:GLU:O	23:X:69:LEU:HG	1.90	0.72
26:a:287:ASN:OD1	26:a:288:HIS:ND1	2.23	0.72
27:b:150:THR:O	27:b:154:THR:HG22	1.89	0.72
28:c:54:MET:CE	28:c:87:VAL:HG22	2.20	0.72
29:d:174:TYR:HA	29:d:178:TYR:CD2	2.25	0.72
31:f:391:LEU:CD1	31:f:414:LEU:HD13	2.20	0.72
32:g:85:ILE:HG13	32:g:151:VAL:O	1.90	0.72
1:A:56:LEU:CD1	2:B:72:LEU:HD11	2.19	0.72
3:C:351:MET:HE3	3:C:354:ALA:HB2	1.72	0.72
4:D:296:MET:CE	4:D:326:ARG:HB3	2.20	0.72
5:E:325:GLU:OE2	5:E:325:GLU:N	2.22	0.72
6:F:146:LYS:HG3	6:F:149:ASP:OD1	1.89	0.72
19:T:2:PHE:CE2	33:h:105:PRO:HG2	2.25	0.72
20:U:583:MET:CE	20:U:618:ALA:HB2	2.20	0.72
21:V:429:ASP:OD1	21:V:430:SER:N	2.23	0.72
23:X:171:LEU:HD21	23:X:210:LEU:HA	1.70	0.72
31:f:304:PHE:CD1	31:f:321:MET:HE2	2.24	0.72
33:h:22:ILE:HG21	33:h:50:MET:HE1	1.72	0.72
4:D:204:MET:HE3	4:D:308:ILE:CG2	2.19	0.71
8:H:141:GLU:OE2	16:Q:80:ARG:NH1	2.23	0.71
9:I:45:LEU:HD11	9:I:137:ILE:HG21	1.72	0.71
10:J:93:SER:O	10:J:97:THR:HG23	1.90	0.71
14:N:174:ILE:HG22	14:N:176:LEU:HD11	1.71	0.71
23:X:132:ARG:O	23:X:132:ARG:HD3	1.90	0.71
24:Y:46:ARG:HD3	24:Y:69:LEU:HD11	1.70	0.71
25:Z:143:GLU:HA	25:Z:143:GLU:OE2	1.89	0.71
31:f:672:LEU:HD11	31:f:706:ILE:HG12	1.72	0.71
31:f:799:VAL:HG21	31:f:821:LEU:HB3	1.71	0.71
15:P:7:VAL:HG12	15:P:123:PRO:O	1.90	0.71
19:T:57:PHE:CZ	33:h:128:LEU:HD21	2.24	0.71
19:T:57:PHE:HB2	19:T:105:TYR:CD2	2.24	0.71
20:U:877:LEU:HD22	20:U:878:LEU:N	2.06	0.71
21:V:330:LYS:HD3	21:V:389:ASP:OD2	1.89	0.71
21:V:372:LEU:HD23	21:V:372:LEU:H	1.55	0.71
21:V:455:LYS:HE2	21:V:457:TYR:HE2	1.55	0.71
21:V:463:MET:HE3	21:V:463:MET:CA	2.20	0.71
23:X:280:ALA:HA	23:X:284:THR:HG21	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:85:GLY:O	29:d:89:GLN:HG2	1.89	0.71
20:U:137:MET:HE1	20:U:140:ARG:NH1	2.05	0.71
23:X:408:SER:HA	24:Y:376:LEU:HD13	1.71	0.71
31:f:479:LEU:HG	31:f:514:VAL:HG22	1.72	0.71
31:f:802:SER:CB	31:f:817:VAL:HG21	2.20	0.71
31:f:881:GLU:HA	31:f:894:LEU:HD22	1.71	0.71
34:u:146:PHE:HA	34:u:157:LEU:HD12	1.72	0.71
3:C:186:VAL:CG1	3:C:292:ILE:HG12	2.20	0.71
4:D:45:LYS:CB	20:U:187:LEU:HD11	2.19	0.71
8:H:6:TYR:CD2	8:H:15:PRO:HD3	2.25	0.71
9:I:90:LEU:CG	9:I:114:LEU:HD22	2.20	0.71
17:R:107:TYR:CE2	17:R:185:LYS:HG2	2.26	0.71
19:T:23:VAL:HG11	19:T:51:VAL:HG11	1.71	0.71
20:U:344:ARG:HD2	20:U:927:PRO:CG	2.20	0.71
20:U:842:LYS:O	20:U:846:LYS:HG3	1.91	0.71
21:V:411:SER:CB	21:V:447:ILE:HD12	2.20	0.71
22:W:125:ILE:HG23	22:W:145:LEU:HD12	1.73	0.71
24:Y:282:MET:HE1	24:Y:295:TYR:HB3	1.73	0.71
31:f:50:LYS:HA	31:f:53:GLN:CD	2.14	0.71
1:A:196:LEU:HD21	1:A:234:ASP:OD2	1.90	0.71
3:C:320:PRO:O	3:C:325:ARG:NH1	2.24	0.71
5:E:158:LEU:HD12	5:E:159:PHE:N	2.03	0.71
5:E:230:ILE:HD13	5:E:273:VAL:CG1	2.20	0.71
8:H:93:LEU:CD1	8:H:113:ARG:HB3	2.16	0.71
11:K:69:GLU:HG3	11:K:226:PHE:CD2	2.25	0.71
12:L:74:ILE:CG2	12:L:81:ALA:HB1	2.20	0.71
16:Q:103:TYR:HA	17:R:93:ARG:HH22	1.54	0.71
18:S:63:CYS:SG	18:S:74:ILE:HG21	2.30	0.71
19:T:13:LEU:HD11	19:T:175:VAL:HG23	1.72	0.71
20:U:330:SER:HB3	20:U:332:GLU:OE1	1.91	0.71
24:Y:97:GLU:O	24:Y:100:ILE:HG12	1.91	0.71
27:b:49:VAL:HG13	27:b:71:ILE:CD1	2.20	0.71
31:f:462:ALA:HA	31:f:465:LEU:HD12	1.71	0.71
33:h:22:ILE:CG2	33:h:190:ALA:HB3	2.21	0.71
2:B:193:GLN:OE1	2:B:193:GLN:N	2.22	0.71
4:D:41:TYR:HE1	20:U:156:GLU:CG	2.04	0.71
5:E:165:ILE:O	5:E:167:PRO:HD3	1.89	0.71
5:E:367:PHE:O	5:E:371:VAL:HG23	1.91	0.71
13:M:36:ALA:HB1	13:M:49:VAL:HG12	1.71	0.71
13:M:227:VAL:HG13	13:M:231:ILE:HD11	1.73	0.71
17:R:29:LYS:CE	18:S:121:ILE:HG22	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:539:LEU:O	31:f:543:MET:HG2	1.90	0.71
2:B:322:ARG:HG2	2:B:325:VAL:HG22	1.70	0.71
12:L:45:VAL:HG21	12:L:188:VAL:HG22	1.70	0.71
13:M:173:LYS:HA	13:M:176:ILE:CG2	2.19	0.71
15:P:209:THR:HG21	16:Q:168:SER:OG	1.90	0.71
22:W:177:MET:HG3	22:W:182:ARG:HG3	1.72	0.71
23:X:418:ALA:HB2	25:Z:276:ILE:HD13	1.72	0.71
26:a:35:HIS:HA	26:a:71:VAL:CG2	2.21	0.71
26:a:70:ARG:CD	26:a:76:LEU:HD22	2.16	0.71
26:a:245:VAL:HG13	26:a:247:ARG:HD3	1.73	0.71
29:d:237:MET:HA	29:d:237:MET:HE3	1.71	0.71
31:f:266:LEU:HD13	31:f:281:ILE:CG2	2.20	0.71
31:f:415:GLY:H	31:f:447:ALA:HB1	1.53	0.71
31:f:564:LEU:HD11	31:f:798:THR:CG2	2.20	0.71
32:g:108:THR:HA	32:g:141:THR:HA	1.72	0.71
34:u:196:ILE:O	34:u:215:THR:HG22	1.91	0.71
2:B:227:PRO:CB	2:B:355:LEU:HD21	2.19	0.71
5:E:164:ILE:HG13	5:E:164:ILE:O	1.89	0.71
9:I:69:ASN:OD1	9:I:95:GLN:NE2	2.24	0.71
10:J:104:VAL:HG11	10:J:143:ARG:HB2	1.71	0.71
12:L:104:PRO:HG2	12:L:107:ARG:HB2	1.72	0.71
16:Q:53:LEU:CB	16:Q:60:VAL:HG22	2.20	0.71
20:U:130:LEU:O	20:U:133:ILE:HG22	1.91	0.71
20:U:759:SER:O	20:U:763:VAL:HG23	1.91	0.71
27:b:16:MET:O	27:b:25:ARG:HB3	1.90	0.71
28:c:270:LEU:HA	28:c:273:LYS:HZ2	1.55	0.71
29:d:143:LEU:O	29:d:147:ILE:HG22	1.90	0.71
3:C:401:ILE:HD13	8:H:26:LEU:HD12	1.72	0.71
4:D:60:TYR:CG	20:U:603:LEU:HD22	2.26	0.71
8:H:130:PHE:O	8:H:151:PRO:HB3	1.90	0.71
10:J:94:HIS:ND1	10:J:102:VAL:HG12	2.06	0.71
19:T:211:ARG:NH1	19:T:213:ASP:O	2.24	0.71
21:V:163:VAL:O	21:V:167:LEU:HG	1.90	0.71
27:b:63:THR:O	27:b:65:THR:HG23	1.90	0.71
31:f:828:ARG:HD2	31:f:874:LEU:O	1.90	0.71
5:E:121:ASN:ND2	5:E:197:LYS:O	2.24	0.71
12:L:180:MET:HA	12:L:180:MET:HE3	1.73	0.71
13:M:77:VAL:HG21	13:M:84:ALA:HB1	1.72	0.71
15:P:155:VAL:O	15:P:159:ILE:HG22	1.91	0.71
20:U:11:LEU:CD1	20:U:19:LEU:HD22	2.21	0.71
20:U:353:LEU:HD22	20:U:385:PHE:HE2	1.48	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:334:GLU:OE1	22:W:334:GLU:N	2.18	0.71
24:Y:282:MET:HE2	24:Y:292:TYR:HA	1.72	0.71
31:f:149:GLU:HG3	31:f:150:GLU:H	1.54	0.71
33:h:95:ALA:O	33:h:99:ARG:HG3	1.91	0.71
33:h:150:LEU:HD21	33:h:172:CYS:SG	2.31	0.71
1:A:172:VAL:HG11	1:A:224:LEU:HD11	1.71	0.70
4:D:214:MET:HE1	38:D:501:ADP:C4	2.26	0.70
4:D:338:ARG:NE	23:X:234:GLU:OE2	2.18	0.70
6:F:69:MET:HA	6:F:72:LYS:HZ2	1.56	0.70
15:P:143:ARG:NH2	15:P:150:GLU:OE2	2.23	0.70
26:a:231:GLN:HG3	26:a:231:GLN:O	1.91	0.70
29:d:284:PHE:HZ	29:d:296:PRO:HB3	1.54	0.70
2:B:430:LYS:NZ	2:B:432:GLU:O	2.21	0.70
4:D:384:MET:HE3	5:E:297:ARG:HH12	1.54	0.70
9:I:218:ARG:NH2	9:I:221:GLY:HA2	2.07	0.70
16:Q:12:MET:HG3	16:Q:167:ILE:HD11	1.73	0.70
17:R:183:ILE:HD13	17:R:188:ILE:HB	1.72	0.70
19:T:108:ASN:O	19:T:109:ILE:HD13	1.90	0.70
24:Y:220:VAL:HG21	24:Y:249:VAL:HG21	1.73	0.70
24:Y:279:GLU:HB2	24:Y:296:VAL:CG2	2.21	0.70
25:Z:11:VAL:HG22	25:Z:50:VAL:HG21	1.73	0.70
26:a:64:ILE:CG2	26:a:76:LEU:HD13	2.21	0.70
33:h:1:THR:HG21	33:h:107:TRP:HB2	1.73	0.70
1:A:134:ILE:HD12	1:A:140:VAL:HG11	1.72	0.70
1:A:339:ARG:NH2	6:F:402:GLU:OE2	2.22	0.70
1:A:375:ARG:NH1	11:K:172:SER:OG	2.24	0.70
5:E:261:LEU:HD11	5:E:294:ARG:HG3	1.71	0.70
5:E:334:LEU:HD23	5:E:371:VAL:HG12	1.72	0.70
6:F:211:LYS:O	6:F:215:LEU:HD12	1.90	0.70
19:T:172:MET:HA	19:T:175:VAL:HG12	1.74	0.70
20:U:105:ILE:O	20:U:109:THR:HG22	1.91	0.70
20:U:409:GLY:CA	20:U:445:ALA:HB1	2.06	0.70
20:U:557:TYR:HE2	20:U:760:VAL:HG11	1.54	0.70
27:b:25:ARG:NH1	27:b:144:GLY:HA3	2.05	0.70
31:f:573:ILE:HG13	31:f:599:ALA:CB	2.20	0.70
31:f:580:LEU:HD21	31:f:591:ALA:HB1	1.73	0.70
1:A:190:VAL:HG12	1:A:191:VAL:HG13	1.74	0.70
3:C:258:ARG:CG	3:C:273:MET:HE1	2.21	0.70
5:E:229:ILE:HG21	5:E:276:ILE:HD12	1.73	0.70
7:G:109:ILE:HD11	7:G:114:LEU:HA	1.74	0.70
7:G:123:GLN:O	7:G:126:THR:HG22	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:95:GLN:CG	15:P:65:LEU:HD21	2.21	0.70
20:U:24:LEU:HD21	20:U:60:ALA:HA	1.73	0.70
23:X:407:MET:HE2	25:Z:269:VAL:CG1	2.19	0.70
28:c:75:MET:HE1	28:c:88:ASP:N	2.06	0.70
30:e:49:GLU:OE1	30:e:49:GLU:N	2.24	0.70
3:C:280:LEU:HD21	3:C:291:VAL:HG11	1.73	0.70
7:G:236:ASP:O	7:G:240:VAL:HG22	1.91	0.70
10:J:195:LEU:HD13	10:J:206:ILE:HG23	1.73	0.70
12:L:100:ASP:OD2	19:T:66:LYS:HE2	1.90	0.70
19:T:14:ALA:C	19:T:15:ILE:HD13	2.15	0.70
19:T:99:ARG:HH21	33:h:101:SER:HB3	1.57	0.70
20:U:510:GLU:HB2	20:U:543:LYS:CG	2.22	0.70
22:W:101:VAL:O	22:W:105:VAL:HG23	1.90	0.70
23:X:57:LEU:HD21	23:X:62:GLN:O	1.91	0.70
29:d:168:MET:HA	29:d:168:MET:CE	2.21	0.70
29:d:201:SER:HB2	29:d:262:ILE:HG22	1.73	0.70
33:h:103:MET:HE2	33:h:103:MET:HA	1.72	0.70
34:u:136:GLU:O	34:u:168:THR:HG22	1.90	0.70
6:F:339:ASP:OD1	6:F:341:ALA:N	2.24	0.70
9:I:67:LYS:HZ3	9:I:225:ILE:HB	1.57	0.70
11:K:28:ILE:O	11:K:31:ILE:HG12	1.90	0.70
16:Q:191:GLU:OE2	16:Q:194:LYS:HB3	1.92	0.70
20:U:82:LEU:HD21	20:U:130:LEU:HD13	1.73	0.70
20:U:185:MET:HG2	20:U:222:PHE:HE2	1.56	0.70
20:U:763:VAL:O	20:U:767:THR:HG23	1.89	0.70
21:V:416:ARG:HB3	24:Y:348:ASP:OD1	1.91	0.70
24:Y:49:ASN:O	24:Y:114:ILE:HG22	1.91	0.70
24:Y:57:LEU:HD21	24:Y:63:TRP:CZ3	2.27	0.70
25:Z:178:ASP:OD1	25:Z:179:ILE:HG23	1.91	0.70
34:u:177:LEU:HB2	34:u:238:PHE:CB	2.21	0.70
6:F:438:TYR:CE1	12:L:77:LEU:HG	2.27	0.70
8:H:143:ARG:HE	8:H:145:TYR:HE1	1.40	0.70
17:R:165:GLU:HA	17:R:168:GLN:OE1	1.92	0.70
20:U:437:TYR:HE1	20:U:472:ILE:HD12	1.54	0.70
21:V:236:ARG:HD3	21:V:240:LEU:HD22	1.74	0.70
25:Z:38:VAL:HG21	25:Z:75:LEU:HD11	1.74	0.70
31:f:794:ALA:HA	31:f:797:LEU:CD1	2.22	0.70
33:h:15:LYS:HB3	33:h:122:LEU:HD12	1.74	0.70
1:A:113:ILE:HD13	1:A:142:VAL:HG11	1.73	0.70
7:G:113:MET:CE	15:P:70:THR:HA	2.21	0.70
8:H:29:VAL:HG11	8:H:133:SER:OG	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:229:VAL:O	10:J:232:ILE:HG22	1.92	0.70
13:M:233:GLU:O	13:M:237:LYS:HG2	1.92	0.70
14:N:25:TYR:HE1	14:N:27:ALA:HA	1.57	0.70
17:R:37:LYS:HA	17:R:43:LEU:HD12	1.74	0.70
19:T:145:LEU:O	19:T:148:LEU:HG	1.91	0.70
20:U:149:GLN:OE1	20:U:149:GLN:N	2.25	0.70
20:U:904:LYS:HD2	20:U:905:PRO:HD2	1.72	0.70
21:V:186:LYS:HA	21:V:189:ASP:OD2	1.90	0.70
25:Z:172:VAL:HG22	28:c:217:LEU:HD22	1.73	0.70
26:a:216:LEU:HD22	26:a:237:LEU:HB3	1.73	0.70
29:d:276:GLU:HG3	29:d:308:TRP:CZ2	2.26	0.70
3:C:273:MET:O	3:C:277:LEU:HD13	1.91	0.70
5:E:161:ARG:NH1	22:W:200:ILE:HD13	2.07	0.70
6:F:176:GLU:HA	6:F:249:LEU:HD12	1.73	0.70
8:H:95:GLN:HG3	15:P:65:LEU:HD21	1.72	0.70
11:K:71:ASP:OD1	11:K:72:ALA:N	2.23	0.70
17:R:102:LEU:HD23	17:R:103:LEU:N	2.06	0.70
18:S:88:TYR:O	18:S:91:LYS:N	2.21	0.70
18:S:148:GLU:HG3	18:S:151:GLN:CG	2.22	0.70
19:T:15:ILE:H	19:T:22:ILE:HG22	1.55	0.70
21:V:203:LEU:HD22	21:V:206:VAL:HG23	1.74	0.70
21:V:411:SER:HB2	21:V:447:ILE:HG23	1.72	0.70
29:d:301:ASP:HA	29:d:304:LYS:HZ2	1.56	0.70
29:d:302:TYR:HA	29:d:305:LYS:CG	2.21	0.70
31:f:325:GLN:N	31:f:325:GLN:OE1	2.23	0.70
31:f:407:MET:HE2	31:f:439:TYR:CD1	2.27	0.70
5:E:261:LEU:HD13	5:E:294:ARG:HA	1.72	0.70
6:F:64:HIS:NE2	27:b:69:GLY:HA3	2.07	0.70
9:I:176:LYS:NZ	10:J:52:LYS:HB3	2.07	0.70
10:J:155:ALA:HB3	11:K:63:SER:HB2	1.73	0.70
20:U:26:LYS:HE3	29:d:129:LEU:HB3	1.73	0.70
20:U:332:GLU:O	20:U:336:GLU:HG3	1.92	0.70
20:U:557:TYR:CE2	20:U:760:VAL:HG11	2.26	0.70
3:C:89:VAL:CG2	3:C:92:GLU:HB2	2.22	0.69
3:C:134:LEU:HD13	3:C:230:MET:CE	2.22	0.69
4:D:264:ILE:HG22	4:D:267:ILE:HB	1.73	0.69
5:E:172:LEU:HB2	5:E:278:ALA:HB1	1.74	0.69
7:G:179:LEU:HB3	8:H:56:LEU:HD21	1.73	0.69
8:H:46:LEU:HD22	8:H:135:LEU:HD21	1.72	0.69
14:N:35:THR:OG1	14:N:43:CYS:O	2.10	0.69
15:P:59:ILE:CD1	15:P:82:MET:HG2	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:64:LEU:HD11	19:T:96:LEU:HD21	1.74	0.69
19:T:160:ASN:O	19:T:160:ASN:ND2	2.25	0.69
21:V:93:PHE:HA	21:V:96:ARG:HE	1.56	0.69
26:a:58:LYS:NZ	26:a:65:SER:HB3	2.07	0.69
26:a:71:VAL:HA	27:b:17:ARG:NE	2.07	0.69
29:d:128:PHE:HA	29:d:174:TYR:OH	1.92	0.69
31:f:266:LEU:HD13	31:f:281:ILE:HG21	1.73	0.69
31:f:327:ASN:C	31:f:327:ASN:ND2	2.49	0.69
31:f:665:GLU:OE1	31:f:665:GLU:N	2.21	0.69
1:A:25:LEU:HG	2:B:410:ARG:HH12	1.57	0.69
1:A:172:VAL:HG11	1:A:224:LEU:CD1	2.21	0.69
4:D:271:ALA:HB1	4:D:317:LEU:HG	1.74	0.69
18:S:120:ARG:C	18:S:121:ILE:HD13	2.17	0.69
19:T:68:ILE:HD11	19:T:92:LEU:HD13	1.74	0.69
20:U:108:TYR:CD2	20:U:134:VAL:HG21	2.26	0.69
20:U:265:ILE:O	20:U:269:ARG:HG2	1.92	0.69
20:U:353:LEU:HD12	20:U:376:MET:SD	2.32	0.69
24:Y:50:MET:HB2	24:Y:53:TYR:HB3	1.73	0.69
31:f:373:ALA:HB2	31:f:760:PHE:CD1	2.27	0.69
31:f:435:SER:HA	32:g:169:PHE:CE1	2.28	0.69
33:h:126:ASP:OD1	33:h:130:VAL:N	2.24	0.69
19:T:8:ASN:HD22	19:T:58:HIS:HB3	1.56	0.69
20:U:583:MET:SD	20:U:605:VAL:HG11	2.32	0.69
20:U:680:VAL:HB	20:U:683:VAL:CG1	2.22	0.69
21:V:283:ASN:O	21:V:287:ARG:HG3	1.91	0.69
22:W:23:THR:O	22:W:27:ARG:HG2	1.92	0.69
27:b:29:GLN:O	27:b:33:VAL:HG13	1.93	0.69
31:f:469:TYR:CE2	31:f:477:MET:HB3	2.25	0.69
31:f:723:TYR:HB3	31:f:761:MET:HE1	1.74	0.69
31:f:886:GLU:O	31:f:902:LYS:NZ	2.18	0.69
33:h:74:GLU:HB2	33:h:83:TYR:CE2	2.26	0.69
1:A:26:ASP:OD1	1:A:28:GLY:N	2.24	0.69
1:A:187:LEU:O	1:A:191:VAL:HG22	1.92	0.69
1:A:387:SER:HB2	2:B:344:PRO:HB3	1.74	0.69
5:E:202:SER:O	5:E:203:ILE:HG23	1.92	0.69
5:E:219:PHE:CA	5:E:222:ALA:HB3	2.20	0.69
8:H:17:GLY:HA3	9:I:27:ALA:CB	2.22	0.69
16:Q:17:LYS:HG2	16:Q:157:ASN:HA	1.74	0.69
17:R:38:MET:CB	17:R:42:ILE:HG23	2.23	0.69
23:X:417:LYS:HG2	23:X:418:ALA:H	1.58	0.69
26:a:185:ILE:O	26:a:186:LYS:HB2	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:b:108:ARG:NH1	27:b:167:GLY:O	2.25	0.69
31:f:397:LYS:H	31:f:397:LYS:HD2	1.54	0.69
9:I:102:GLN:OE1	16:Q:65:GLN:NE2	2.26	0.69
9:I:106:PRO:CD	9:I:109:GLN:HG3	2.16	0.69
10:J:35:VAL:CG1	10:J:191:VAL:HG22	2.22	0.69
11:K:84:ASP:HB3	11:K:137:PHE:HD1	1.58	0.69
18:S:14:VAL:HG21	18:S:102:CYS:SG	2.31	0.69
20:U:118:LEU:HD12	20:U:118:LEU:O	1.91	0.69
22:W:318:SER:O	22:W:321:VAL:HG12	1.93	0.69
25:Z:78:MET:HE2	25:Z:82:PHE:HE1	1.55	0.69
26:a:80:ILE:HG23	26:a:96:PHE:HE2	1.56	0.69
26:a:111:VAL:HG12	26:a:141:MET:HE1	1.73	0.69
27:b:27:GLN:OE1	27:b:27:GLN:N	2.24	0.69
31:f:99:LEU:CD2	31:f:129:LEU:HD12	2.20	0.69
31:f:472:HIS:NE2	31:f:474:SER:HB3	2.08	0.69
7:G:202:LEU:HB3	7:G:210:PHE:CE2	2.27	0.69
15:P:149:GLU:OE1	15:P:149:GLU:N	2.22	0.69
17:R:142:ILE:O	17:R:146:TYR:HB2	1.93	0.69
20:U:246:TYR:OH	20:U:324:LYS:HD2	1.93	0.69
20:U:522:GLY:O	20:U:559:ARG:NH1	2.25	0.69
20:U:796:LYS:HZ2	20:U:921:ILE:HD12	1.56	0.69
20:U:878:LEU:HB3	20:U:882:ALA:HB1	1.74	0.69
24:Y:360:ASP:OD1	24:Y:361:SER:N	2.25	0.69
26:a:269:LEU:HD11	26:a:273:GLN:NE2	2.07	0.69
31:f:159:VAL:HG11	31:f:194:TYR:CD2	2.27	0.69
31:f:478:ARG:HH21	31:f:504:VAL:HG13	1.56	0.69
34:u:278:PHE:O	34:u:279:LYS:HB3	1.91	0.69
2:B:164:MET:HE3	2:B:164:MET:CA	2.22	0.69
5:E:362:VAL:HG11	5:E:367:PHE:CE1	2.28	0.69
7:G:40:VAL:CG1	7:G:202:LEU:HD13	2.21	0.69
15:P:149:GLU:O	15:P:152:LYS:HG2	1.92	0.69
15:P:185:PHE:CE1	15:P:187:ARG:HG3	2.27	0.69
17:R:4:LEU:HD21	17:R:47:VAL:CG1	2.23	0.69
18:S:5:ALA:HB1	18:S:14:VAL:HG22	1.75	0.69
18:S:115:ASP:OD1	18:S:119:ASN:N	2.24	0.69
21:V:287:ARG:NH1	30:e:21:GLU:OE2	2.23	0.69
31:f:423:ASP:OD2	32:g:90:PRO:HA	1.93	0.69
34:u:256:GLU:OE1	34:u:256:GLU:N	2.26	0.69
1:A:204:LEU:O	1:A:204:LEU:HD23	1.93	0.69
2:B:374:LEU:HD22	2:B:378:VAL:HG11	1.73	0.69
3:C:45:LEU:HB3	4:D:61:ILE:HG21	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:97:VAL:HG23	3:C:123:LEU:HD11	1.75	0.69
5:E:168:LYS:HE2	5:E:269:THR:HG23	1.74	0.69
5:E:172:LEU:CD1	5:E:278:ALA:HB2	2.19	0.69
7:G:117:ARG:O	7:G:121:ILE:HG12	1.92	0.69
10:J:79:ASP:HB3	10:J:127:PHE:HD1	1.57	0.69
14:N:19:ARG:HB2	14:N:171:GLY:H	1.57	0.69
15:P:37:ILE:HB	15:P:41:ILE:HG22	1.74	0.69
16:Q:27:ARG:HD3	16:Q:34:MET:SD	2.33	0.69
17:R:39:SER:HB3	17:R:42:ILE:HG22	1.75	0.69
18:S:83:LEU:O	18:S:87:VAL:HG12	1.92	0.69
20:U:520:MET:HE2	20:U:525:ASN:HB2	1.73	0.69
20:U:676:THR:CG2	20:U:712:LEU:HD21	2.22	0.69
21:V:265:ASP:O	21:V:269:LYS:HG2	1.93	0.69
21:V:379:LEU:HD21	21:V:395:ILE:HG21	1.73	0.69
22:W:170:GLN:O	22:W:173:THR:OG1	2.09	0.69
22:W:355:LYS:O	22:W:359:VAL:HG13	1.92	0.69
24:Y:226:VAL:HA	24:Y:229:ILE:HG22	1.74	0.69
27:b:186:SER:HB3	27:b:187:PRO:HD3	1.74	0.69
29:d:275:ILE:HD12	29:d:282:ILE:HG12	1.75	0.69
34:u:218:LEU:HD23	34:u:220:LEU:HD11	1.74	0.69
2:B:220:LYS:HZ3	2:B:322:ARG:HH21	1.39	0.69
5:E:355:ILE:HD12	6:F:211:LYS:NZ	2.07	0.69
14:N:41:ILE:CD1	14:N:76:VAL:HG13	2.23	0.69
16:Q:204:MET:HA	16:Q:204:MET:CE	2.21	0.69
19:T:22:ILE:CD1	19:T:197:ILE:HG12	2.23	0.69
19:T:148:LEU:CD2	19:T:178:VAL:HG23	2.23	0.69
19:T:149:LEU:H	19:T:149:LEU:HD12	1.58	0.69
20:U:7:GLY:HA3	29:d:169:ALA:O	1.92	0.69
20:U:54:PHE:HD1	20:U:56:SER:H	1.38	0.69
20:U:399:TRP:CD1	28:c:178:THR:HG21	2.28	0.69
20:U:813:TYR:H	20:U:883:ARG:HH12	1.40	0.69
21:V:212:TYR:HA	21:V:253:LEU:HD11	1.74	0.69
24:Y:188:CYS:HA	24:Y:191:ILE:HG22	1.74	0.69
26:a:102:GLU:HA	26:a:105:LYS:HE2	1.74	0.69
31:f:683:GLU:H	31:f:686:LEU:HD12	1.58	0.69
31:f:858:LYS:NZ	31:f:861:THR:HA	2.08	0.69
1:A:405:THR:N	1:A:408:ASP:OD2	2.26	0.69
7:G:50:ILE:HG23	7:G:141:ILE:HD13	1.73	0.69
7:G:200:THR:HG23	7:G:242:LEU:CD1	2.23	0.69
12:L:196:ARG:NH1	12:L:237:GLU:O	2.26	0.69
13:M:179:LEU:CD2	13:M:181:MET:HG3	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:b:86:PHE:CZ	27:b:140:ILE:HD11	2.27	0.69
31:f:93:PRO:HG2	31:f:96:LEU:HB2	1.74	0.69
31:f:211:ILE:HD12	31:f:213:GLN:H	1.58	0.69
31:f:459:CYS:SG	32:g:152:LYS:HB2	2.32	0.69
31:f:882:LEU:HD12	31:f:889:PRO:HG3	1.74	0.69
2:B:83:GLU:OE1	2:B:83:GLU:N	2.25	0.68
5:E:303:LEU:H	5:E:303:LEU:HD12	1.57	0.68
6:F:364:ARG:HG3	6:F:368:ILE:HD11	1.74	0.68
9:I:103:GLU:OE1	9:I:141:LYS:NZ	2.23	0.68
15:P:211:VAL:HG11	16:Q:198:ARG:HD2	1.73	0.68
15:P:214:GLU:OE2	15:P:216:ILE:HD11	1.93	0.68
16:Q:99:ARG:HA	16:Q:127:ILE:CD1	2.21	0.68
17:R:55:GLN:OE1	18:S:88:TYR:HE2	1.76	0.68
17:R:182:ILE:CG2	17:R:191:LEU:HD11	2.24	0.68
20:U:878:LEU:HB3	20:U:882:ALA:CB	2.24	0.68
21:V:337:LEU:HD22	21:V:367:VAL:HG11	1.72	0.68
21:V:470:ARG:HG3	21:V:470:ARG:O	1.93	0.68
22:W:99:GLN:OE1	22:W:99:GLN:HA	1.91	0.68
26:a:194:GLN:HB2	26:a:225:LEU:CD1	2.22	0.68
27:b:181:ASP:O	27:b:184:ILE:HG12	1.93	0.68
28:c:51:MET:HG2	28:c:52:GLU:H	1.56	0.68
28:c:151:VAL:O	28:c:152:LYS:HD3	1.92	0.68
31:f:771:LEU:HD11	31:f:825:MET:HE1	1.73	0.68
32:g:137:GLN:HB2	32:g:140:LYS:HB2	1.75	0.68
2:B:87:PRO:HD3	31:f:619:HIS:NE2	2.08	0.68
5:E:172:LEU:HB2	5:E:278:ALA:CB	2.23	0.68
5:E:309:ARG:HH22	5:E:338:PHE:HA	1.57	0.68
5:E:352:MET:HE3	5:E:355:ILE:HB	1.75	0.68
6:F:228:PRO:O	6:F:231:THR:OG1	2.10	0.68
9:I:71:ASP:HA	9:I:223:THR:CG2	2.22	0.68
17:R:12:TYR:CZ	17:R:153:ARG:HD2	2.28	0.68
20:U:899:ARG:NH2	20:U:918:SER:O	2.26	0.68
21:V:64:GLN:HA	21:V:67:LEU:HD21	1.73	0.68
22:W:326:MET:CE	22:W:330:LYS:HB2	2.22	0.68
25:Z:21:ASP:O	25:Z:25:ARG:HG2	1.93	0.68
28:c:244:VAL:HG11	28:c:291:LEU:HG	1.76	0.68
31:f:350:LYS:HG3	31:f:353:LEU:HB2	1.76	0.68
33:h:12:LEU:HD11	33:h:176:LEU:HD11	1.75	0.68
5:E:202:SER:HA	5:E:210:GLU:CB	2.22	0.68
8:H:195:LEU:O	8:H:199:PHE:HB2	1.94	0.68
18:S:59:LEU:CD1	18:S:83:LEU:HG	2.13	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:185:MET:HE3	20:U:186:SER:CA	2.22	0.68
21:V:172:VAL:HG22	21:V:187:ILE:HG23	1.76	0.68
26:a:245:VAL:HA	26:a:247:ARG:NH1	2.09	0.68
28:c:63:ASP:OD1	28:c:66:THR:HG22	1.93	0.68
31:f:79:ARG:HD2	31:f:154:TRP:HH2	1.57	0.68
31:f:822:VAL:HA	31:f:825:MET:HG2	1.75	0.68
31:f:874:LEU:H	31:f:874:LEU:HD23	1.58	0.68
33:h:86:ARG:O	33:h:86:ARG:HD3	1.94	0.68
7:G:13:ILE:CD1	7:G:126:THR:HA	2.23	0.68
8:H:77:SER:OG	8:H:163:MET:HE3	1.92	0.68
15:P:43:CYS:HB3	15:P:98:LEU:HD12	1.73	0.68
19:T:136:LYS:HD2	19:T:137:ALA:H	1.59	0.68
21:V:251:LEU:CD1	21:V:270:LEU:HD21	2.24	0.68
22:W:148:THR:O	22:W:152:ILE:HG22	1.93	0.68
23:X:260:MET:HE3	23:X:260:MET:CA	2.24	0.68
31:f:242:GLU:CD	31:f:245:ASN:HB3	2.18	0.68
31:f:694:LEU:O	31:f:697:ILE:HG22	1.93	0.68
33:h:69:GLN:HA	33:h:72:ILE:CG2	2.23	0.68
33:h:89:HIS:NE2	33:h:131:ALA:HB1	2.09	0.68
3:C:400:SER:OG	8:H:150:ASP:OD2	2.03	0.68
4:D:265:ASP:OD1	4:D:266:GLU:N	2.26	0.68
10:J:64:ALA:HB2	10:J:217:LEU:HD22	1.74	0.68
16:Q:10:ALA:CB	16:Q:146:MET:HE1	2.22	0.68
19:T:22:ILE:HD11	19:T:172:MET:HE1	1.74	0.68
20:U:42:VAL:HG13	20:U:43:ASP:H	1.57	0.68
20:U:658:ILE:HD11	20:U:767:THR:HG21	1.74	0.68
20:U:796:LYS:HG3	20:U:924:LEU:HD11	1.74	0.68
21:V:72:LEU:HD22	21:V:75:ILE:HD11	1.74	0.68
22:W:177:MET:HE2	22:W:181:GLU:HG2	1.75	0.68
26:a:32:LYS:HE2	27:b:20:ASP:HA	1.75	0.68
27:b:3:LEU:HD13	27:b:105:HIS:CE1	2.29	0.68
29:d:118:ARG:O	29:d:122:VAL:HG13	1.93	0.68
2:B:156:VAL:HG13	2:B:158:ALA:H	1.58	0.68
2:B:163:LEU:CD1	3:C:80:MET:HE1	2.22	0.68
3:C:372:ARG:NH1	4:D:175:GLN:OE1	2.27	0.68
4:D:84:SER:O	4:D:85:ILE:HB	1.94	0.68
4:D:189:GLU:O	4:D:193:GLN:HG3	1.93	0.68
4:D:339:ARG:HD2	23:X:231:TYR:CE1	2.28	0.68
5:E:326:ILE:HD13	5:E:362:VAL:O	1.94	0.68
7:G:130:GLU:CG	7:G:131:MET:HG3	2.22	0.68
14:N:2:THR:HG22	14:N:160:LEU:HD22	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:14:MET:HG3	16:Q:163:LEU:HD11	1.75	0.68
16:Q:189:ILE:HB	16:Q:196:THR:OG1	1.93	0.68
25:Z:17:LEU:HD11	28:c:217:LEU:HD11	1.74	0.68
26:a:71:VAL:HG12	26:a:72:ASN:H	1.59	0.68
31:f:79:ARG:HD3	31:f:125:ILE:HG12	1.73	0.68
31:f:479:LEU:CD2	31:f:514:VAL:HA	2.17	0.68
33:h:50:MET:HE2	33:h:50:MET:C	2.18	0.68
5:E:50:LEU:HD21	6:F:83:ASN:HD21	1.58	0.68
6:F:188:ILE:HG13	6:F:235:LEU:CD2	2.24	0.68
11:K:202:LEU:O	11:K:206:MET:HB2	1.94	0.68
16:Q:142:CYS:O	16:Q:146:MET:HE3	1.93	0.68
17:R:18:ASP:HA	17:R:178:PHE:HA	1.76	0.68
19:T:116:GLU:N	19:T:116:GLU:OE1	2.27	0.68
21:V:203:LEU:HD22	21:V:206:VAL:CG2	2.24	0.68
22:W:194:LEU:HD21	22:W:202:THR:HG21	1.74	0.68
25:Z:217:THR:HG21	25:Z:219:LYS:HE2	1.75	0.68
26:a:198:PHE:HA	26:a:233:LEU:CD2	2.24	0.68
27:b:32:ALA:HB1	27:b:183:LEU:HD12	1.75	0.68
27:b:75:LEU:O	27:b:78:VAL:HG23	1.93	0.68
29:d:218:LYS:HZ1	29:d:222:THR:HG21	1.59	0.68
31:f:597:VAL:CG2	31:f:612:LEU:HD21	2.24	0.68
32:g:107:ILE:O	32:g:142:LEU:N	2.25	0.68
32:g:109:GLY:O	32:g:113:ARG:HG2	1.94	0.68
1:A:310:ASP:OD2	6:F:250:LYS:NZ	2.24	0.68
4:D:415:GLU:OE2	8:H:57:TYR:OH	2.11	0.68
5:E:210:GLU:HB3	5:E:214:LEU:CB	2.22	0.68
6:F:55:MET:SD	6:F:56:LYS:N	2.66	0.68
11:K:88:LEU:HD13	11:K:156:MET:HE1	1.76	0.68
12:L:133:LEU:HD11	12:L:159:MET:HB3	1.74	0.68
14:N:14:LEU:CD1	14:N:34:LEU:HG	2.23	0.68
14:N:164:MET:HE2	14:N:171:GLY:HA2	1.76	0.68
15:P:2:THR:HG23	15:P:169:SER:CB	2.24	0.68
18:S:2:THR:OG1	18:S:131:GLY:N	2.24	0.68
20:U:637:VAL:CG1	20:U:652:ALA:HB1	2.23	0.68
20:U:889:LEU:HD21	20:U:909:GLY:N	2.09	0.68
21:V:71:THR:O	21:V:75:ILE:HG12	1.94	0.68
25:Z:59:ASP:OD2	34:u:202:ARG:HD2	1.94	0.68
26:a:81:LEU:HD12	26:a:82:HIS:N	2.08	0.68
28:c:130:GLN:CG	28:c:162:LEU:HG	2.22	0.68
29:d:138:LYS:N	29:d:138:LYS:HD3	2.09	0.68
31:f:560:LEU:HD11	31:f:798:THR:HA	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:67:LYS:HZ2	9:I:225:ILE:HB	1.55	0.68
12:L:157:ARG:HG2	13:M:59:GLU:OE2	1.93	0.68
14:N:13:VAL:CG2	14:N:152:CYS:HB3	2.20	0.68
16:Q:13:ALA:HB1	16:Q:110:ALA:HB2	1.76	0.68
16:Q:88:MET:HG3	16:Q:122:CYS:SG	2.34	0.68
18:S:56:GLU:OE2	18:S:99:THR:HG21	1.94	0.68
20:U:49:TYR:CD2	20:U:61:ALA:HB2	2.28	0.68
20:U:376:MET:HG3	20:U:377:HIS:HD2	1.59	0.68
20:U:443:LEU:HG	20:U:461:LEU:CD2	2.24	0.68
20:U:552:ILE:HG22	20:U:566:LEU:HD21	1.76	0.68
21:V:134:PHE:CD2	21:V:183:GLU:HB3	2.29	0.68
22:W:363:ILE:CG1	22:W:382:LEU:HD21	2.22	0.68
22:W:438:LEU:HG	25:Z:229:GLN:HE21	1.57	0.68
23:X:110:CYS:O	23:X:114:ILE:HG22	1.92	0.68
24:Y:138:LEU:HD23	24:Y:176:ARG:HG2	1.75	0.68
26:a:72:ASN:O	26:a:75:SER:OG	2.10	0.68
31:f:450:ILE:HG13	31:f:822:VAL:HG11	1.76	0.68
3:C:90:HIS:HB3	3:C:91:PRO:HD3	1.76	0.68
5:E:352:MET:HE1	5:E:355:ILE:CG1	2.22	0.68
12:L:137:TYR:CE2	12:L:217:LYS:HA	2.29	0.68
20:U:598:ALA:HB3	20:U:625:ILE:HD11	1.76	0.68
21:V:467:TYR:HA	21:V:472:PRO:HG2	1.75	0.68
25:Z:263:ALA:HB1	28:c:288:VAL:HG13	1.75	0.68
28:c:41:MET:HG3	28:c:72:VAL:HG11	1.74	0.68
31:f:405:HIS:HB2	31:f:815:HIS:HD2	1.59	0.68
31:f:470:VAL:HG11	31:f:500:LEU:HD21	1.75	0.68
31:f:475:ASN:O	31:f:478:ARG:HG2	1.93	0.68
3:C:146:SER:HB2	3:C:201:ARG:HB3	1.76	0.67
3:C:373:GLU:OE1	3:C:375:ARG:NE	2.19	0.67
7:G:80:MET:HB3	7:G:87:SER:HB2	1.76	0.67
7:G:179:LEU:O	7:G:183:VAL:HG23	1.93	0.67
10:J:139:ASP:O	18:S:106:LYS:NZ	2.19	0.67
11:K:195:ILE:HD11	11:K:217:LEU:HD21	1.76	0.67
12:L:49:LEU:HD22	12:L:199:LEU:HD21	1.75	0.67
13:M:37:ILE:CD1	13:M:197:ILE:HG13	2.24	0.67
14:N:8:PHE:CE1	14:N:13:VAL:HG13	2.27	0.67
15:P:28:ASP:CB	16:Q:131:MET:HE1	2.24	0.67
15:P:37:ILE:HA	15:P:60:SER:HB2	1.75	0.67
18:S:198:LYS:HZ1	18:S:199:TYR:HD1	1.41	0.67
19:T:92:LEU:HA	19:T:95:ILE:CG2	2.24	0.67
21:V:184:ALA:HA	21:V:187:ILE:HG22	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:457:TYR:HE1	21:V:459:GLN:HB2	1.59	0.67
23:X:115:GLU:HG2	23:X:116:TRP:N	2.08	0.67
28:c:307:VAL:HG23	29:d:332:SER:HB2	1.75	0.67
31:f:777:THR:HG22	31:f:779:CYS:H	1.59	0.67
31:f:846:VAL:HG12	31:f:880:ALA:HB2	1.74	0.67
3:C:297:ARG:O	3:C:300:ILE:HG22	1.94	0.67
6:F:245:LYS:H	6:F:245:LYS:HD3	1.58	0.67
7:G:111:VAL:HG23	7:G:140:LEU:HB3	1.74	0.67
10:J:33:VAL:O	10:J:44:GLY:N	2.23	0.67
21:V:219:GLU:HB2	21:V:224:LEU:HD21	1.76	0.67
21:V:442:ILE:HD12	29:d:278:ALA:CB	2.23	0.67
27:b:100:ARG:HH12	27:b:107:MET:HE1	1.59	0.67
28:c:251:LEU:HD11	28:c:283:HIS:HB3	1.76	0.67
29:d:253:ALA:HB3	29:d:256:TYR:HD2	1.58	0.67
31:f:67:ASP:OD2	31:f:70:LEU:HG	1.95	0.67
31:f:612:LEU:HD23	31:f:653:ALA:O	1.93	0.67
2:B:289:ALA:HB2	3:C:274:LEU:HD12	1.76	0.67
5:E:199:VAL:CG2	5:E:233:ASP:HB3	2.23	0.67
10:J:88:ARG:HH11	17:R:69:MET:HG2	1.59	0.67
20:U:158:ARG:HA	20:U:193:PHE:HE1	1.59	0.67
22:W:370:TYR:CE2	22:W:373:ILE:HD12	2.29	0.67
26:a:84:VAL:HG21	26:a:97:LEU:CD2	2.24	0.67
26:a:255:TRP:O	26:a:258:GLN:NE2	2.28	0.67
29:d:283:LEU:HB2	29:d:315:TYR:CE1	2.28	0.67
31:f:293:GLN:HG2	31:f:890:VAL:HB	1.76	0.67
31:f:592:ASN:OD1	31:f:593:THR:HG23	1.93	0.67
31:f:683:GLU:O	31:f:687:ARG:HG3	1.94	0.67
33:h:143:ALA:HA	33:h:147:GLN:CB	2.22	0.67
33:h:145:LEU:CD1	33:h:175:VAL:HG22	2.23	0.67
1:A:290:GLY:HA2	6:F:296:PHE:CE2	2.30	0.67
3:C:100:ASP:HB2	3:C:123:LEU:O	1.95	0.67
4:D:84:SER:O	4:D:86:PRO:HD2	1.94	0.67
8:H:98:TYR:O	8:H:102:GLN:N	2.28	0.67
9:I:90:LEU:HD11	9:I:136:TYR:CE2	2.27	0.67
11:K:145:GLY:HA2	11:K:220:VAL:HG11	1.76	0.67
16:Q:20:VAL:CG2	16:Q:110:ALA:HB1	2.25	0.67
16:Q:61:GLN:NE2	17:R:124:LEU:HG	2.10	0.67
18:S:59:LEU:HD12	18:S:83:LEU:CG	2.12	0.67
20:U:518:LEU:HD23	20:U:554:LEU:HD13	1.76	0.67
21:V:208:ALA:CB	21:V:246:GLY:HA2	2.24	0.67
21:V:265:ASP:OD1	21:V:269:LYS:HE2	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:96:GLN:HG3	22:W:101:VAL:HG23	1.76	0.67
26:a:25:LEU:HD21	26:a:60:TYR:CZ	2.29	0.67
26:a:189:PRO:O	26:a:190:VAL:HB	1.93	0.67
26:a:214:GLY:CA	26:a:340:VAL:HG21	2.22	0.67
31:f:350:LYS:HB3	31:f:746:ARG:HD3	1.77	0.67
33:h:193:THR:OG1	33:h:195:LYS:HG3	1.95	0.67
4:D:100:THR:HG21	4:D:112:TYR:CZ	2.29	0.67
9:I:18:LEU:HD11	10:J:125:ARG:CZ	2.23	0.67
9:I:68:LEU:HD11	9:I:74:CYS:HB3	1.76	0.67
10:J:152:THR:HG23	11:K:83:LYS:HZ3	1.59	0.67
14:N:59:VAL:HG11	14:N:83:PHE:CZ	2.29	0.67
16:Q:12:MET:HB3	16:Q:23:ALA:HB3	1.77	0.67
17:R:102:LEU:O	17:R:118:MET:HB3	1.95	0.67
20:U:807:LYS:HB2	20:U:810:THR:H	1.59	0.67
22:W:179:LYS:HD3	22:W:213:PHE:CD1	2.29	0.67
23:X:87:ARG:NH1	23:X:87:ARG:O	2.28	0.67
26:a:64:ILE:O	26:a:70:ARG:NE	2.27	0.67
31:f:545:LYS:NZ	31:f:549:GLU:HB2	2.09	0.67
5:E:183:LEU:O	5:E:187:VAL:HG23	1.94	0.67
12:L:140:MET:HE3	33:h:79:ASP:O	1.95	0.67
20:U:384:GLN:HG3	20:U:387:ARG:HH22	1.58	0.67
20:U:587:ALA:HB2	20:U:621:SER:CB	2.25	0.67
22:W:188:GLU:OE1	22:W:191:ARG:NH2	2.23	0.67
23:X:339:ILE:HG21	23:X:385:LEU:HD22	1.77	0.67
25:Z:197:GLY:HA2	28:c:225:TRP:HB2	1.76	0.67
26:a:142:LEU:HD13	26:a:155:PHE:CD2	2.25	0.67
28:c:282:ARG:O	28:c:286:GLU:HB2	1.95	0.67
31:f:103:TYR:O	31:f:107:LYS:N	2.21	0.67
31:f:195:ASN:HA	31:f:200:ALA:HB3	1.76	0.67
31:f:391:LEU:CD1	31:f:414:LEU:HA	2.14	0.67
31:f:659:LEU:HD13	31:f:696:LEU:HD21	1.77	0.67
33:h:152:GLU:O	33:h:156:LYS:HG3	1.95	0.67
5:E:235:ILE:CD1	5:E:279:THR:HG21	2.24	0.67
7:G:179:LEU:CB	8:H:56:LEU:HD21	2.24	0.67
10:J:90:GLU:HG2	10:J:110:TYR:CG	2.29	0.67
15:P:20:ALA:O	15:P:27:ALA:N	2.26	0.67
17:R:164:LEU:HD23	17:R:167:LEU:HD12	1.77	0.67
18:S:112:TYR:CE1	18:S:122:SER:HB2	2.29	0.67
19:T:175:VAL:HA	19:T:178:VAL:CG1	2.25	0.67
20:U:38:ILE:HG22	20:U:67:VAL:CG2	2.25	0.67
20:U:559:ARG:HB3	20:U:562:GLU:HB2	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:79:VAL:HG11	21:V:120:PHE:HZ	1.59	0.67
21:V:318:GLN:O	21:V:325:LYS:NZ	2.20	0.67
22:W:140:ILE:HD12	22:W:141:GLU:N	2.10	0.67
26:a:103:LYS:HB2	26:a:103:LYS:HZ3	1.60	0.67
27:b:53:THR:OG1	27:b:59:GLU:HB2	1.95	0.67
29:d:275:ILE:HD11	29:d:282:ILE:CG2	2.25	0.67
33:h:9:THR:OG1	33:h:25:ASP:HB2	1.94	0.67
4:D:247:VAL:O	4:D:250:VAL:HG12	1.95	0.67
5:E:147:GLU:OE2	5:E:297:ARG:NE	2.28	0.67
6:F:382:GLU:HB3	6:F:386:ARG:HH12	1.60	0.67
9:I:44:LEU:HD13	9:I:190:LEU:HD23	1.76	0.67
11:K:210:LEU:HD11	11:K:215:ILE:HG12	1.77	0.67
14:N:19:ARG:HG2	14:N:26:ILE:HD13	1.77	0.67
20:U:744:VAL:HB	20:U:783:TYR:HB3	1.74	0.67
23:X:317:PRO:O	23:X:321:THR:HG22	1.95	0.67
25:Z:14:LEU:HD11	28:c:40:LYS:HG2	1.77	0.67
25:Z:177:ARG:NH2	28:c:153:GLY:O	2.25	0.67
26:a:292:THR:O	26:a:295:GLU:HG2	1.94	0.67
27:b:118:GLU:OE1	27:b:118:GLU:N	2.21	0.67
28:c:292:MET:SD	29:d:346:LEU:HD21	2.35	0.67
31:f:512:MET:HA	31:f:512:MET:CE	2.21	0.67
1:A:364:VAL:HG22	1:A:368:ILE:HG13	1.76	0.67
3:C:215:SER:HB2	3:C:218:GLU:CG	2.25	0.67
7:G:43:ARG:HH21	7:G:164:LYS:HG3	1.59	0.67
8:H:34:PRO:HD2	8:H:49:GLU:CG	2.25	0.67
8:H:82:ASP:OD2	8:H:128:ARG:NH1	2.27	0.67
15:P:6:VAL:HG23	15:P:124:TYR:HB3	1.77	0.67
16:Q:171:MET:HE1	16:Q:185:VAL:HG21	1.76	0.67
18:S:17:ASP:O	18:S:33:LYS:HG2	1.95	0.67
18:S:194:ASP:O	18:S:197:GLU:HG3	1.95	0.67
20:U:213:PHE:HA	20:U:216:VAL:HG12	1.75	0.67
24:Y:108:ALA:HB1	24:Y:124:PHE:CD1	2.30	0.67
24:Y:282:MET:HG2	24:Y:288:PHE:CB	2.25	0.67
26:a:35:HIS:H	27:b:18:ASN:HB3	1.59	0.67
26:a:122:LYS:NZ	26:a:130:VAL:HG13	2.10	0.67
29:d:119:LEU:O	29:d:122:VAL:HG22	1.94	0.67
31:f:418:LEU:HB3	31:f:421:ASP:OD2	1.95	0.67
31:f:466:LEU:CD2	31:f:485:LEU:HD12	2.25	0.67
31:f:680:ARG:HD2	31:f:681:TYR:CD1	2.30	0.67
4:D:169:GLY:O	4:D:340:GLN:HG2	1.95	0.67
5:E:311:ASP:O	5:E:315:ILE:HG12	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:45:VAL:HG21	12:L:188:VAL:CG2	2.25	0.67
13:M:42:LYS:HD2	13:M:183:GLU:O	1.95	0.67
14:N:143:TYR:HA	14:N:155:PHE:CE2	2.29	0.67
16:Q:8:GLY:HA3	16:Q:180:VAL:HG22	1.76	0.67
16:Q:14:MET:N	16:Q:21:ALA:O	2.23	0.67
16:Q:45:MET:HE2	16:Q:51:ILE:HG21	1.76	0.67
18:S:160:ILE:O	18:S:164:THR:HG22	1.94	0.67
22:W:375:MET:SD	22:W:413:ILE:HD11	2.35	0.67
22:W:408:ARG:HD2	23:X:342:PHE:HE2	1.58	0.67
25:Z:198:LEU:HD11	28:c:304:LEU:HD13	1.77	0.67
31:f:723:TYR:HB3	31:f:761:MET:CE	2.25	0.67
2:B:206:THR:HG22	2:B:207:HIS:ND1	2.11	0.66
4:D:384:MET:O	4:D:387:VAL:HG12	1.94	0.66
6:F:85:THR:HG22	6:F:87:PRO:HD2	1.77	0.66
8:H:75:VAL:CG2	8:H:135:LEU:HD22	2.24	0.66
9:I:33:THR:HG23	9:I:163:CYS:SG	2.35	0.66
10:J:40:ILE:HD11	10:J:210:VAL:CG1	2.26	0.66
10:J:155:ALA:N	11:K:63:SER:OG	2.23	0.66
11:K:66:LYS:C	11:K:67:ILE:HD13	2.19	0.66
11:K:234:LEU:O	11:K:238:ILE:HG22	1.94	0.66
18:S:19:ARG:HD3	18:S:170:SER:C	2.20	0.66
20:U:265:ILE:HD12	20:U:326:ILE:HD12	1.77	0.66
21:V:62:HIS:O	21:V:66:GLU:HG3	1.95	0.66
22:W:55:ARG:HD3	22:W:96:GLN:HA	1.77	0.66
27:b:58:CYS:SG	27:b:89:GLY:HA2	2.34	0.66
29:d:254:GLU:O	29:d:257:THR:OG1	2.11	0.66
31:f:256:PHE:CE1	31:f:268:LEU:HD12	2.29	0.66
1:A:284:ARG:HD3	1:A:328:ASP:OD2	1.96	0.66
10:J:112:ALA:HB1	10:J:151:GLY:O	1.96	0.66
14:N:7:GLN:HB2	14:N:12:VAL:HG22	1.76	0.66
15:P:218:PRO:CA	16:Q:194:LYS:HD2	2.24	0.66
16:Q:26:ARG:HG3	16:Q:185:VAL:CA	2.25	0.66
16:Q:171:MET:HE1	16:Q:185:VAL:CG2	2.25	0.66
18:S:8:PHE:CZ	18:S:13:ILE:HG12	2.30	0.66
20:U:185:MET:C	20:U:185:MET:CE	2.64	0.66
20:U:324:LYS:HD3	20:U:794:ASP:CB	2.24	0.66
23:X:123:THR:O	23:X:127:GLN:HG2	1.95	0.66
23:X:407:MET:HE2	25:Z:269:VAL:HG21	1.78	0.66
24:Y:45:VAL:HG13	24:Y:50:MET:CG	2.23	0.66
24:Y:191:ILE:O	30:e:39:TRP:HB3	1.94	0.66
25:Z:188:SER:OG	29:d:347:GLU:OE1	2.13	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:256:PHE:HB3	31:f:261:ARG:HB2	1.77	0.66
31:f:846:VAL:CG2	31:f:866:GLN:HB3	2.26	0.66
2:B:54:PRO:HG3	2:B:60:LEU:CD2	2.24	0.66
3:C:67:GLN:HA	3:C:67:GLN:NE2	2.10	0.66
4:D:174:LYS:O	4:D:178:ARG:HG2	1.96	0.66
10:J:154:HIS:HB2	10:J:156:TRP:HE1	1.61	0.66
11:K:182:GLN:HB3	12:L:55:GLU:OE2	1.95	0.66
16:Q:98:LYS:CD	16:Q:103:TYR:CE1	2.77	0.66
20:U:352:ILE:HD11	20:U:376:MET:HE1	1.77	0.66
21:V:61:GLU:O	21:V:65:ARG:HG2	1.95	0.66
21:V:217:VAL:HG23	21:V:218:TYR:CD1	2.29	0.66
25:Z:125:ASP:OD2	25:Z:129:LYS:NZ	2.27	0.66
31:f:287:ASP:HB3	31:f:290:VAL:CG1	2.25	0.66
5:E:263:GLN:HG3	5:E:264:MET:H	1.61	0.66
6:F:365:ILE:HG21	6:F:396:CYS:HB2	1.74	0.66
9:I:114:LEU:HD23	9:I:136:TYR:OH	1.94	0.66
13:M:175:GLU:OE1	13:M:199:ILE:HG21	1.96	0.66
15:P:76:VAL:HG11	15:P:109:HIS:HB3	1.76	0.66
16:Q:107:PRO:HD2	16:Q:124:LEU:O	1.95	0.66
20:U:880:ASN:HB2	20:U:881:PRO:HD3	1.75	0.66
25:Z:54:PHE:CD1	25:Z:78:MET:HG2	2.30	0.66
28:c:232:GLN:HG2	28:c:233:ASP:H	1.59	0.66
31:f:351:THR:HA	31:f:354:GLU:HG2	1.76	0.66
31:f:500:LEU:O	31:f:503:PRO:HD2	1.96	0.66
33:h:17:GLU:OE2	33:h:159:VAL:HG12	1.96	0.66
4:D:270:ILE:HG22	4:D:285:VAL:HG23	1.77	0.66
10:J:186:LEU:HD22	10:J:186:LEU:H	1.60	0.66
12:L:176:MET:HA	12:L:179:PHE:CD2	2.30	0.66
13:M:140:TYR:CG	13:M:217:GLY:HA2	2.31	0.66
18:S:161:TYR:HA	18:S:164:THR:CG2	2.25	0.66
20:U:110:LYS:O	20:U:113:VAL:HG22	1.95	0.66
20:U:421:GLN:O	20:U:425:THR:HG23	1.95	0.66
24:Y:259:TYR:CD2	24:Y:278:VAL:HG21	2.31	0.66
26:a:162:TYR:O	26:a:166:ILE:HG12	1.94	0.66
27:b:12:ASN:HB3	27:b:78:VAL:HG13	1.77	0.66
27:b:157:VAL:HG21	27:b:170:LEU:HB2	1.78	0.66
31:f:524:MET:HA	31:f:527:VAL:HG13	1.77	0.66
31:f:794:ALA:HA	31:f:797:LEU:HD12	1.78	0.66
33:h:151:ARG:HB3	33:h:155:GLU:OE2	1.95	0.66
33:h:173:MET:SD	33:h:174:ARG:N	2.69	0.66
34:u:176:LYS:HD3	34:u:268:THR:HG23	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:54:GLN:O	1:A:58:LYS:HG3	1.96	0.66
3:C:191:PRO:HG2	3:C:319:PRO:HD3	1.77	0.66
3:C:375:ARG:NH2	3:C:382:ASP:OD2	2.23	0.66
4:D:410:ASP:OD1	4:D:411:GLU:N	2.29	0.66
5:E:363:VAL:HG23	5:E:366:ASP:H	1.61	0.66
6:F:376:SER:HB3	6:F:415:LEU:O	1.96	0.66
7:G:53:GLN:OE1	7:G:206:LEU:HD21	1.95	0.66
20:U:554:LEU:CD2	20:U:761:VAL:HG22	2.26	0.66
21:V:363:LEU:CD2	21:V:395:ILE:HD12	2.26	0.66
26:a:80:ILE:HG23	26:a:96:PHE:CE2	2.30	0.66
26:a:183:VAL:HG22	26:a:184:ASP:H	1.61	0.66
33:h:1:THR:CG2	33:h:107:TRP:HB2	2.26	0.66
33:h:96:MET:HE2	33:h:125:VAL:HG11	1.78	0.66
34:u:126:LEU:HD22	34:u:175:VAL:HG21	1.77	0.66
3:C:267:SER:HB3	3:C:271:ARG:HH22	1.61	0.66
8:H:84:ARG:O	8:H:87:VAL:HG12	1.96	0.66
9:I:206:LEU:HD21	9:I:211:VAL:HG21	1.76	0.66
11:K:178:GLN:NE2	12:L:56:LEU:HD11	2.11	0.66
16:Q:186:ILE:HD12	16:Q:199:THR:HB	1.78	0.66
17:R:77:PRO:CD	17:R:108:ASP:HB2	2.25	0.66
17:R:103:LEU:CD2	17:R:117:TYR:HA	2.26	0.66
19:T:23:VAL:HG11	19:T:51:VAL:CG1	2.24	0.66
19:T:62:LEU:HD12	19:T:63:THR:N	2.11	0.66
22:W:24:VAL:HG11	22:W:62:SER:HB2	1.76	0.66
22:W:139:GLU:OE1	22:W:174:TYR:HD1	1.78	0.66
22:W:210:ASN:OD1	22:W:211:THR:N	2.28	0.66
24:Y:14:ASN:ND2	24:Y:113:ARG:HG2	2.11	0.66
26:a:32:LYS:CE	27:b:20:ASP:O	2.44	0.66
27:b:6:THR:O	27:b:49:VAL:HA	1.94	0.66
29:d:276:GLU:HA	29:d:318:PHE:CD2	2.31	0.66
31:f:253:LEU:CD2	31:f:268:LEU:HB2	2.26	0.66
31:f:764:LEU:O	31:f:768:LEU:HD23	1.96	0.66
2:B:436:GLU:OE1	2:B:436:GLU:N	2.28	0.66
6:F:258:GLN:HB2	6:F:263:ASP:HB3	1.78	0.66
6:F:406:ILE:HD12	6:F:422:GLU:OE2	1.94	0.66
10:J:24:GLU:OE1	10:J:24:GLU:HA	1.96	0.66
11:K:18:GLU:HB2	11:K:20:ARG:HG3	1.77	0.66
17:R:10:PRO:HD2	17:R:12:TYR:CE1	2.31	0.66
17:R:50:ALA:HB1	18:S:119:ASN:OD1	1.95	0.66
18:S:25:TYR:HE2	19:T:143:ALA:HA	1.59	0.66
20:U:95:GLU:OE1	20:U:95:GLU:N	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:126:ARG:O	23:X:130:GLU:HG3	1.95	0.66
23:X:342:PHE:CD2	23:X:345:VAL:HB	2.30	0.66
24:Y:383:LEU:CD1	25:Z:272:LEU:HD13	2.21	0.66
25:Z:142:GLU:HA	25:Z:142:GLU:OE2	1.96	0.66
26:a:222:LEU:O	26:a:234:ILE:HD11	1.95	0.66
26:a:290:GLN:HG2	26:a:330:ARG:HB2	1.77	0.66
29:d:200:LEU:HD23	29:d:233:GLU:HB2	1.78	0.66
2:B:208:PRO:CG	31:f:739:ALA:HB3	2.19	0.66
6:F:188:ILE:CG1	6:F:235:LEU:HD23	2.25	0.66
17:R:129:PHE:HB2	17:R:143:LEU:HD13	1.76	0.66
17:R:164:LEU:HA	17:R:167:LEU:HD12	1.77	0.66
19:T:195:ILE:HG23	19:T:206:GLU:OE1	1.95	0.66
22:W:117:ASP:HB3	22:W:120:ILE:HG12	1.77	0.66
24:Y:148:GLY:O	24:Y:152:MET:N	2.29	0.66
25:Z:29:VAL:HG11	34:u:199:ASN:HB2	1.78	0.66
28:c:61:PHE:CE1	28:c:109:VAL:HG13	2.30	0.66
29:d:326:GLU:O	29:d:326:GLU:HG3	1.95	0.66
1:A:405:THR:HG23	1:A:407:LYS:H	1.61	0.66
2:B:248:LEU:HD23	2:B:270:LEU:HD12	1.75	0.66
2:B:409:GLU:HA	2:B:409:GLU:OE2	1.96	0.66
3:C:367:GLY:HA3	4:D:196:ILE:CG2	2.20	0.66
4:D:122:GLU:OE1	4:D:122:GLU:N	2.29	0.66
8:H:52:GLN:N	8:H:52:GLN:OE1	2.29	0.66
13:M:30:VAL:HG21	13:M:134:SER:HB2	1.78	0.66
15:P:56:THR:O	15:P:59:ILE:HG22	1.95	0.66
17:R:151:ILE:HA	17:R:155:ARG:HD3	1.77	0.66
22:W:91:SER:HB2	22:W:131:VAL:HG23	1.78	0.66
25:Z:114:ARG:HG3	25:Z:114:ARG:HH11	1.60	0.66
26:a:128:LEU:HB3	26:a:129:GLN:OE1	1.95	0.66
26:a:226:ARG:NH2	26:a:230:ARG:HB2	2.11	0.66
32:g:130:VAL:CG2	32:g:154:MET:HG2	2.26	0.66
33:h:111:VAL:HG22	33:h:124:TYR:HB2	1.77	0.66
1:A:394:MET:HE1	2:B:199:GLU:HB3	1.78	0.65
2:B:54:PRO:HB2	2:B:61:LYS:HB2	1.77	0.65
3:C:108:VAL:HG23	3:C:112:CYS:SG	2.36	0.65
3:C:152:GLY:O	38:C:501:ADP:N6	2.22	0.65
3:C:165:ILE:CG1	3:C:292:ILE:HD11	2.23	0.65
7:G:232:GLU:OE1	7:G:232:GLU:HA	1.95	0.65
19:T:44:TYR:CD2	19:T:65:THR:HG21	2.31	0.65
19:T:136:LYS:HD2	19:T:137:ALA:N	2.11	0.65
20:U:213:PHE:HA	20:U:216:VAL:CG1	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:688:LEU:HD22	20:U:713:TYR:CE1	2.30	0.65
20:U:904:LYS:HG2	20:U:912:ILE:HD11	1.77	0.65
21:V:169:LEU:O	21:V:173:ILE:HG12	1.96	0.65
25:Z:257:MET:HA	25:Z:257:MET:HE3	1.77	0.65
26:a:74:LEU:HD11	26:a:109:GLU:HG2	1.78	0.65
26:a:100:THR:O	26:a:104:VAL:HG22	1.96	0.65
31:f:95:PRO:O	31:f:99:LEU:HD13	1.95	0.65
31:f:100:ARG:N	31:f:101:PRO:HD3	2.11	0.65
31:f:845:ARG:CD	31:f:865:PHE:HB2	2.26	0.65
10:J:231:GLU:O	10:J:235:GLU:HG3	1.95	0.65
16:Q:51:ILE:HG13	16:Q:109:ILE:CG2	2.22	0.65
17:R:56:PHE:HB2	17:R:98:TYR:CD2	2.32	0.65
20:U:353:LEU:CD2	20:U:385:PHE:HE2	2.02	0.65
20:U:832:VAL:HG12	20:U:835:ILE:HG22	1.77	0.65
23:X:112:GLU:HA	23:X:115:GLU:CD	2.21	0.65
23:X:268:GLN:HG2	23:X:288:LYS:NZ	2.10	0.65
29:d:126:LEU:HD21	29:d:140:GLN:HB2	1.79	0.65
29:d:232:LEU:HD13	29:d:244:VAL:HG22	1.78	0.65
31:f:131:MET:HA	31:f:161:HIS:CD2	2.31	0.65
31:f:323:ASN:ND2	31:f:454:GLY:O	2.26	0.65
31:f:539:LEU:HD12	31:f:543:MET:CE	2.27	0.65
33:h:63:LEU:HD21	33:h:106:LEU:CD1	2.26	0.65
33:h:156:LYS:HD2	33:h:157:GLN:N	2.10	0.65
1:A:271:LEU:CD1	1:A:316:LYS:HB2	2.25	0.65
2:B:405:MET:HE2	2:B:421:LYS:HB3	1.78	0.65
5:E:117:PRO:HG2	5:E:118:LEU:HD12	1.78	0.65
7:G:72:ILE:HD13	7:G:78:CYS:SG	2.36	0.65
7:G:191:PHE:CZ	7:G:219:VAL:HG21	2.32	0.65
8:H:102:GLN:HA	8:H:102:GLN:NE2	2.11	0.65
10:J:70:CYS:HB3	10:J:217:LEU:HD21	1.78	0.65
12:L:80:ASP:OD2	12:L:128:TYR:HA	1.96	0.65
13:M:66:LEU:HB2	13:M:212:GLU:OE2	1.96	0.65
13:M:96:SER:HB2	33:h:69:GLN:NE2	2.10	0.65
14:N:3:ILE:HG22	14:N:16:ALA:CB	2.25	0.65
14:N:51:ASP:HB3	14:N:94:LEU:CD1	2.26	0.65
18:S:64:ARG:NH1	18:S:67:GLU:OE1	2.29	0.65
20:U:199:ARG:O	20:U:202:VAL:HG12	1.94	0.65
20:U:835:ILE:HD13	31:f:241:PRO:HG3	1.77	0.65
22:W:82:LEU:O	22:W:82:LEU:HD12	1.95	0.65
23:X:318:ILE:H	23:X:318:ILE:HD12	1.61	0.65
26:a:28:LEU:HD13	26:a:37:LEU:HA	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:149:GLU:HG3	31:f:150:GLU:N	2.11	0.65
31:f:237:VAL:HG21	31:f:249:LEU:HD21	1.76	0.65
31:f:256:PHE:CE1	31:f:268:LEU:HD11	2.31	0.65
31:f:486:GLY:HA2	31:f:524:MET:CE	2.27	0.65
33:h:20:VAL:CG2	33:h:120:SER:HB2	2.26	0.65
33:h:69:GLN:CA	33:h:72:ILE:HG22	2.27	0.65
5:E:202:SER:HB3	5:E:214:LEU:HD12	1.79	0.65
10:J:34:GLY:O	10:J:158:ALA:HA	1.97	0.65
16:Q:28:PHE:HB2	16:Q:39:PHE:HB2	1.78	0.65
19:T:190:GLY:HA2	19:T:210:LEU:CD1	2.26	0.65
21:V:131:LEU:HD12	21:V:132:LEU:H	1.60	0.65
21:V:160:LEU:HD23	21:V:161:PRO:CD	2.27	0.65
21:V:418:SER:O	21:V:422:ILE:HG22	1.96	0.65
22:W:115:ILE:HD11	22:W:121:LYS:HA	1.77	0.65
22:W:274:VAL:CG1	22:W:287:VAL:HG22	2.24	0.65
26:a:278:MET:CE	26:a:319:LEU:HB3	2.27	0.65
27:b:151:GLU:OE1	27:b:151:GLU:N	2.29	0.65
28:c:75:MET:HE1	28:c:88:ASP:H	1.61	0.65
28:c:141:VAL:HG22	28:c:203:ILE:HD12	1.78	0.65
31:f:291:GLN:O	31:f:294:MET:HG3	1.97	0.65
31:f:560:LEU:HD23	31:f:564:LEU:HG	1.78	0.65
3:C:198:LEU:HD22	38:C:501:ADP:H2'	1.79	0.65
12:L:171:TYR:OH	12:L:193:ARG:HD2	1.96	0.65
14:N:51:ASP:HB3	14:N:94:LEU:HD12	1.78	0.65
15:P:114:TYR:CD1	15:P:127:MET:HE1	2.31	0.65
17:R:151:ILE:CG2	17:R:155:ARG:HG3	2.27	0.65
18:S:33:LYS:O	18:S:45:MET:HB2	1.96	0.65
20:U:925:VAL:HG22	20:U:927:PRO:HD3	1.77	0.65
22:W:105:VAL:HG11	22:W:132:THR:CG2	2.27	0.65
22:W:140:ILE:HD13	22:W:141:GLU:OE1	1.96	0.65
22:W:332:SER:N	22:W:335:SER:OG	2.29	0.65
25:Z:237:LEU:HD13	28:c:310:LYS:CG	2.22	0.65
26:a:363:MET:CE	28:c:307:VAL:HG11	2.19	0.65
32:g:112:LEU:CD1	32:g:142:LEU:HD21	2.26	0.65
2:B:140:ASP:HB2	2:B:143:LEU:HD12	1.78	0.65
2:B:251:VAL:HG23	3:C:278:ASN:OD1	1.96	0.65
4:D:187:HIS:HB3	4:D:190:LEU:HD13	1.77	0.65
4:D:245:ARG:HA	4:D:248:ARG:NH1	2.10	0.65
8:H:29:VAL:HG22	8:H:132:VAL:HA	1.78	0.65
8:H:77:SER:OG	8:H:163:MET:HB2	1.96	0.65
9:I:105:ILE:CG2	9:I:109:GLN:HB2	2.27	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:22:ILE:HD12	12:L:120:THR:HB	1.76	0.65
12:L:36:VAL:HG23	12:L:195:LEU:HD12	1.79	0.65
12:L:47:VAL:CG1	12:L:212:ILE:HG12	2.25	0.65
19:T:115:GLU:N	19:T:115:GLU:OE1	2.30	0.65
20:U:791:LEU:O	20:U:913:ILE:HA	1.97	0.65
22:W:370:TYR:CE1	26:a:312:MET:HE2	2.30	0.65
23:X:147:LEU:HD21	23:X:177:TYR:CE1	2.29	0.65
24:Y:263:LEU:O	24:Y:306:GLN:NE2	2.22	0.65
26:a:180:LEU:HD21	26:a:221:VAL:CG2	2.23	0.65
27:b:186:SER:CB	27:b:187:PRO:HD3	2.26	0.65
28:c:296:ILE:HG23	29:d:339:VAL:HG13	1.78	0.65
31:f:62:ARG:HG2	31:f:70:LEU:HD21	1.77	0.65
31:f:307:LEU:HB3	31:f:314:TYR:CE2	2.32	0.65
31:f:679:LEU:HD22	31:f:690:VAL:CG1	2.22	0.65
31:f:766:GLN:O	31:f:769:THR:HG22	1.96	0.65
1:A:140:VAL:HG21	1:A:149:ILE:HD13	1.77	0.65
4:D:239:TYR:HA	35:v:15:UNK:O	1.96	0.65
5:E:125:GLU:HB3	5:E:194:ASN:OD1	1.97	0.65
6:F:365:ILE:HA	6:F:368:ILE:HD12	1.78	0.65
12:L:145:PHE:CE1	12:L:155:ASP:HB2	2.31	0.65
14:N:14:LEU:HD13	14:N:44:CYS:SG	2.37	0.65
15:P:59:ILE:HG12	15:P:83:LEU:HD13	1.78	0.65
18:S:5:ALA:CB	18:S:14:VAL:HG22	2.26	0.65
18:S:26:ILE:HG23	18:S:26:ILE:O	1.96	0.65
26:a:37:LEU:O	26:a:41:VAL:HG23	1.97	0.65
27:b:8:VAL:O	27:b:51:LEU:HA	1.97	0.65
31:f:449:GLY:HA3	31:f:484:GLY:HA2	1.77	0.65
31:f:499:THR:HA	31:f:502:LEU:CD1	2.25	0.65
33:h:25:ASP:OD2	33:h:184:TYR:N	2.29	0.65
34:u:156:PHE:CD2	34:u:259:ARG:HG2	2.32	0.65
2:B:251:VAL:HG11	3:C:275:GLU:OE1	1.97	0.65
4:D:199:PRO:HG3	4:D:329:ARG:HH11	1.62	0.65
6:F:134:LEU:HD21	6:F:158:TYR:O	1.96	0.65
7:G:18:PRO:HA	8:H:24:TYR:CD2	2.31	0.65
9:I:76:VAL:HG11	9:I:83:ALA:CB	2.24	0.65
12:L:125:ARG:HH21	12:L:128:TYR:HE1	1.45	0.65
14:N:129:GLY:O	14:N:132:SER:OG	2.14	0.65
16:Q:49:LEU:CD2	16:Q:111:GLY:HA3	2.26	0.65
17:R:118:MET:SD	17:R:122:ALA:HA	2.37	0.65
20:U:436:ALA:HB1	20:U:471:ASP:OD2	1.96	0.65
22:W:217:GLU:OE1	22:W:217:GLU:N	2.22	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:421:PRO:HG3	25:Z:251:LEU:HD23	1.77	0.65
25:Z:231:GLN:NE2	26:a:341:LEU:HD21	2.11	0.65
26:a:270:ARG:NH1	26:a:310:LEU:HD23	2.12	0.65
31:f:494:ARG:HB2	31:f:496:ASP:OD1	1.96	0.65
31:f:607:LEU:H	31:f:607:LEU:HD22	1.62	0.65
31:f:792:ALA:O	31:f:796:LEU:HD23	1.96	0.65
34:u:134:GLY:HA3	34:u:170:ALA:CB	2.27	0.65
34:u:200:LEU:HD12	34:u:245:THR:HG21	1.79	0.65
2:B:164:MET:HA	2:B:164:MET:CE	2.25	0.65
2:B:228:PRO:HG3	3:C:303:SER:O	1.97	0.65
4:D:349:THR:HG23	4:D:354:LEU:CD2	2.27	0.65
8:H:179:ASN:O	8:H:182:LEU:HG	1.96	0.65
10:J:64:ALA:HB2	10:J:217:LEU:CD2	2.25	0.65
10:J:134:VAL:HG12	10:J:144:LEU:HG	1.79	0.65
10:J:188:ILE:HD11	10:J:210:VAL:HG22	1.78	0.65
17:R:4:LEU:HD11	17:R:47:VAL:HG13	1.79	0.65
19:T:150:ASP:HB3	19:T:156:LYS:HB2	1.79	0.65
20:U:646:PRO:HB2	20:U:682:TYR:OH	1.97	0.65
21:V:92:ARG:NH2	24:Y:389:MET:HB2	2.12	0.65
22:W:60:MET:HB2	22:W:97:LEU:HD13	1.78	0.65
22:W:105:VAL:HG11	22:W:138:VAL:HG21	1.77	0.65
26:a:328:ASP:HB2	26:a:330:ARG:HG2	1.79	0.65
31:f:772:GLY:O	31:f:775:THR:OG1	2.07	0.65
31:f:881:GLU:HA	31:f:894:LEU:CD2	2.26	0.65
32:g:88:PHE:HE1	32:g:98:LYS:HB2	1.61	0.65
33:h:136:SER:O	33:h:147:GLN:NE2	2.30	0.65
1:A:56:LEU:HD13	2:B:72:LEU:HD11	1.79	0.65
2:B:106:PRO:HG3	3:C:121:TYR:CD1	2.31	0.65
2:B:245:ALA:HB1	2:B:279:PRO:O	1.97	0.65
4:D:187:HIS:HB3	4:D:190:LEU:CD1	2.27	0.65
5:E:146:ARG:O	5:E:150:GLU:HB3	1.96	0.65
5:E:310:LEU:O	5:E:314:LYS:HD2	1.96	0.65
6:F:56:LYS:O	6:F:59:VAL:HG12	1.97	0.65
14:N:8:PHE:HE1	14:N:13:VAL:HG13	1.61	0.65
19:T:92:LEU:HD23	19:T:124:PHE:CE2	2.32	0.65
20:U:553:ALA:HA	20:U:585:THR:OG1	1.96	0.65
21:V:219:GLU:HA	21:V:224:LEU:HG	1.77	0.65
21:V:482:PHE:HZ	24:Y:381:GLN:HB2	1.62	0.65
22:W:108:CYS:HB2	22:W:128:LEU:HD11	1.79	0.65
23:X:407:MET:CE	25:Z:269:VAL:HG11	2.21	0.65
31:f:545:LYS:HG3	31:f:550:LEU:CG	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:659:LEU:CD1	31:f:696:LEU:HD21	2.26	0.65
33:h:17:GLU:OE1	33:h:17:GLU:N	2.27	0.65
1:A:92:PRO:HD3	2:B:156:VAL:HG22	1.79	0.64
2:B:75:GLU:OE1	31:f:673:ARG:NH1	2.30	0.64
3:C:157:GLN:HG3	3:C:315:ILE:CG2	2.26	0.64
5:E:153:LEU:HD23	5:E:272:ARG:HB2	1.79	0.64
6:F:365:ILE:HD11	36:F:501:ATP:N1	2.12	0.64
8:H:112:GLN:OE1	16:Q:77:LYS:HD2	1.97	0.64
8:H:222:THR:HG22	8:H:225:GLU:OE1	1.96	0.64
10:J:57:ARG:NH1	10:J:57:ARG:HB2	2.12	0.64
11:K:235:GLU:HA	11:K:238:ILE:CG2	2.27	0.64
19:T:7:PHE:HD1	19:T:9:GLY:H	1.43	0.64
21:V:403:ILE:HG21	21:V:437:ILE:HD12	1.80	0.64
22:W:22:ALA:HA	22:W:25:ASP:OD2	1.97	0.64
22:W:113:GLU:OE1	22:W:113:GLU:N	2.27	0.64
26:a:97:LEU:HB3	26:a:118:ILE:HG22	1.79	0.64
26:a:250:THR:O	26:a:253:THR:HG22	1.96	0.64
28:c:61:PHE:HD1	28:c:67:VAL:HG22	1.62	0.64
34:u:175:VAL:O	34:u:241:VAL:HG12	1.97	0.64
3:C:89:VAL:HG21	3:C:92:GLU:HB2	1.79	0.64
6:F:88:TYR:HE2	6:F:162:GLU:OE2	1.80	0.64
7:G:70:PHE:HD2	7:G:91:VAL:HG21	1.61	0.64
8:H:185:GLU:O	8:H:188:ILE:HG22	1.98	0.64
10:J:160:ALA:HB2	10:J:168:VAL:HG12	1.78	0.64
11:K:220:VAL:HG22	11:K:226:PHE:HA	1.79	0.64
12:L:50:LYS:HZ3	12:L:209:ASN:HA	1.60	0.64
16:Q:191:GLU:HG2	16:Q:194:LYS:H	1.61	0.64
18:S:7:LYS:NZ	18:S:110:GLY:HA2	2.12	0.64
19:T:64:LEU:HG	19:T:104:TYR:CD2	2.32	0.64
21:V:215:ALA:HB1	21:V:253:LEU:HD22	1.79	0.64
23:X:153:LEU:CD2	23:X:169:VAL:HG21	2.28	0.64
27:b:11:ASP:CG	27:b:16:MET:HE3	2.22	0.64
31:f:316:ASP:O	31:f:319:GLU:HG3	1.97	0.64
32:g:123:GLN:HB2	32:g:126:TYR:HB2	1.79	0.64
33:h:124:TYR:O	33:h:131:ALA:HA	1.97	0.64
34:u:127:MET:SD	34:u:150:LEU:HD12	2.38	0.64
2:B:436:GLU:HG2	9:I:25:MET:HE2	1.78	0.64
3:C:34:ILE:HA	3:C:37:ASP:OD2	1.98	0.64
4:D:296:MET:HE2	4:D:326:ARG:HB3	1.78	0.64
6:F:188:ILE:HG13	6:F:235:LEU:HD21	1.79	0.64
9:I:82:ASP:OD2	9:I:128:ARG:NH1	2.24	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:186:HIS:CE1	11:K:189:MET:HG2	2.33	0.64
15:P:46:ALA:O	15:P:97:ALA:N	2.26	0.64
17:R:44:LEU:HG	17:R:102:LEU:HD21	1.78	0.64
17:R:105:ALA:HB2	17:R:115:LEU:HG	1.80	0.64
20:U:217:CYS:SG	20:U:248:ILE:HD11	2.38	0.64
21:V:96:ARG:HH12	25:Z:283:ARG:HH12	1.44	0.64
22:W:352:LYS:HE3	22:W:352:LYS:HA	1.80	0.64
25:Z:6:VAL:HG22	25:Z:43:TRP:HH2	1.61	0.64
31:f:66:LYS:HD3	31:f:113:MET:CE	2.28	0.64
31:f:268:LEU:HA	31:f:271:MET:HG2	1.79	0.64
31:f:393:ASP:O	31:f:397:LYS:NZ	2.29	0.64
31:f:459:CYS:CB	32:g:152:LYS:HD3	2.27	0.64
31:f:573:ILE:HG13	31:f:599:ALA:HB2	1.78	0.64
34:u:176:LYS:HD2	34:u:270:VAL:HG22	1.77	0.64
1:A:394:MET:CE	2:B:199:GLU:HB3	2.28	0.64
7:G:101:TRP:CD1	7:G:109:ILE:HB	2.32	0.64
16:Q:15:LYS:HE2	16:Q:134:ASP:HA	1.79	0.64
19:T:57:PHE:HZ	33:h:128:LEU:HD21	1.59	0.64
21:V:124:ASN:HA	21:V:128:ARG:HD3	1.80	0.64
21:V:184:ALA:HA	21:V:187:ILE:CG2	2.28	0.64
24:Y:259:TYR:CE2	24:Y:278:VAL:HG21	2.33	0.64
25:Z:19:VAL:HG22	25:Z:95:TYR:CE2	2.31	0.64
26:a:76:LEU:O	26:a:80:ILE:HG12	1.97	0.64
31:f:738:ASN:HB3	31:f:741:LEU:HB3	1.78	0.64
1:A:240:VAL:HG21	1:A:274:PHE:CD1	2.33	0.64
2:B:390:LEU:HD13	2:B:427:LEU:HD21	1.80	0.64
5:E:313:LEU:HD21	5:E:331:ILE:HG21	1.78	0.64
8:H:71:HIS:C	8:H:72:ILE:HD12	2.23	0.64
11:K:96:THR:HA	11:K:107:MET:CE	2.26	0.64
14:N:75:LEU:HG	14:N:104:ASP:OD2	1.97	0.64
19:T:97:TYR:HD1	19:T:100:ARG:HB2	1.62	0.64
20:U:137:MET:HE1	20:U:140:ARG:HH11	1.62	0.64
20:U:412:HIS:CE1	20:U:422:LEU:HD11	2.32	0.64
20:U:458:ILE:HD11	20:U:485:ALA:N	2.13	0.64
23:X:222:GLU:OE2	23:X:325:LYS:NZ	2.19	0.64
24:Y:11:LEU:CD1	24:Y:12:PRO:HD2	2.27	0.64
26:a:96:PHE:O	26:a:99:LYS:HG2	1.97	0.64
28:c:62:VAL:HG13	28:c:66:THR:CG2	2.27	0.64
31:f:769:THR:HG23	31:f:770:HIS:CD2	2.32	0.64
5:E:272:ARG:HB3	5:E:274:LYS:NZ	2.13	0.64
9:I:73:ALA:O	9:I:137:ILE:HG13	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:99:GLU:HB3	18:S:81:LYS:HG3	1.78	0.64
16:Q:58:THR:OG1	17:R:121:LEU:O	2.14	0.64
16:Q:88:MET:SD	16:Q:130:PRO:HB3	2.38	0.64
17:R:38:MET:HB2	17:R:42:ILE:HG23	1.80	0.64
18:S:147:LEU:HD23	18:S:152:ALA:HA	1.80	0.64
20:U:91:ASN:OD1	20:U:97:VAL:HG21	1.98	0.64
20:U:446:LEU:HD11	20:U:457:ILE:HD11	1.80	0.64
20:U:536:ALA:O	20:U:545:LEU:HD21	1.98	0.64
21:V:64:GLN:HA	21:V:67:LEU:CD2	2.27	0.64
22:W:121:LYS:HG2	22:W:125:ILE:HD11	1.79	0.64
23:X:367:GLN:NE2	23:X:371:ASP:OD2	2.30	0.64
24:Y:95:LEU:HB3	24:Y:99:GLU:CB	2.28	0.64
26:a:37:LEU:HD11	26:a:60:TYR:OH	1.97	0.64
28:c:107:MET:CE	34:u:272:ALA:HA	2.27	0.64
31:f:274:ASP:CB	31:f:277:LEU:HD23	2.27	0.64
31:f:779:CYS:SG	31:f:785:ARG:NH2	2.70	0.64
33:h:184:TYR:HE2	33:h:186:ARG:HD3	1.63	0.64
4:D:295:GLN:OE1	4:D:295:GLN:HA	1.98	0.64
5:E:310:LEU:CD1	5:E:332:VAL:HG21	2.27	0.64
6:F:91:SER:OG	6:F:126:THR:HA	1.98	0.64
6:F:283:ILE:HB	6:F:328:VAL:HG22	1.79	0.64
11:K:235:GLU:O	11:K:239:LYS:HG3	1.96	0.64
17:R:70:ARG:C	17:R:71:ASN:HD22	2.05	0.64
20:U:505:ASP:HB3	20:U:508:THR:HB	1.79	0.64
21:V:414:TYR:CE1	21:V:425:LYS:HE2	2.32	0.64
22:W:23:THR:O	22:W:26:GLN:HG3	1.97	0.64
23:X:298:SER:OG	23:X:301:ASP:HB2	1.97	0.64
25:Z:175:LEU:HD21	28:c:35:SER:CB	2.28	0.64
28:c:25:VAL:O	28:c:175:ARG:HA	1.98	0.64
31:f:136:GLU:HA	31:f:165:GLU:OE1	1.97	0.64
32:g:156:LEU:O	32:g:158:LEU:HD12	1.98	0.64
2:B:250:VAL:CG2	2:B:284:ILE:HA	2.28	0.64
3:C:53:ASN:ND2	20:U:642:GLU:O	2.31	0.64
4:D:92:PHE:HZ	4:D:95:ALA:HB2	1.61	0.64
5:E:138:LEU:CD2	5:E:183:LEU:HD21	2.27	0.64
5:E:145:LEU:HB3	5:E:187:VAL:HG21	1.78	0.64
7:G:162:GLY:N	8:H:61:SER:OG	2.31	0.64
8:H:45:VAL:HG13	8:H:188:ILE:HD12	1.79	0.64
9:I:36:GLY:O	9:I:161:ALA:HA	1.96	0.64
10:J:42:VAL:HG11	10:J:191:VAL:HG21	1.80	0.64
12:L:26:MET:HA	12:L:149:PRO:HG2	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:115:PRO:HD2	14:N:119:MET:O	1.98	0.64
18:S:176:LEU:HG	18:S:187:VAL:CB	2.25	0.64
23:X:138:PHE:CE2	23:X:175:LYS:HB3	2.33	0.64
26:a:84:VAL:HG21	26:a:97:LEU:HD21	1.79	0.64
26:a:269:LEU:HA	26:a:272:ILE:HG22	1.79	0.64
27:b:32:ALA:HB1	27:b:183:LEU:CD1	2.27	0.64
27:b:112:PHE:CE1	27:b:141:ILE:HD12	2.32	0.64
28:c:115:HIS:HB3	28:c:118:PHE:HD1	1.61	0.64
31:f:600:TYR:CE2	31:f:608:LYS:HG3	2.32	0.64
32:g:113:ARG:CZ	32:g:138:LEU:HD11	2.27	0.64
33:h:128:LEU:HD23	33:h:128:LEU:C	2.23	0.64
1:A:122:VAL:HB	6:F:88:TYR:HB2	1.79	0.64
2:B:78:PHE:CB	31:f:613:LEU:HD21	2.28	0.64
3:C:97:VAL:HG11	3:C:121:TYR:HB3	1.80	0.64
4:D:190:LEU:O	4:D:194:ILE:HG13	1.98	0.64
5:E:40:TYR:CE2	6:F:72:LYS:HG2	2.31	0.64
5:E:363:VAL:HG22	5:E:366:ASP:HB2	1.80	0.64
10:J:150:SER:CB	11:K:83:LYS:HZ1	2.09	0.64
12:L:40:SER:HB3	12:L:187:LEU:HD22	1.79	0.64
15:P:43:CYS:SG	15:P:100:LEU:HD12	2.38	0.64
20:U:9:ILE:HD11	20:U:38:ILE:CD1	2.28	0.64
20:U:524:LYS:HB2	20:U:556:MET:HE1	1.80	0.64
20:U:560:MET:HE1	20:U:593:SER:CB	2.28	0.64
21:V:128:ARG:HG3	21:V:129:ASP:OD1	1.98	0.64
21:V:150:ARG:HB3	21:V:154:ALA:HB1	1.80	0.64
25:Z:151:THR:OG1	26:a:148:VAL:HG21	1.98	0.64
31:f:407:MET:HE3	31:f:440:ILE:HD12	1.79	0.64
34:u:288:SER:O	34:u:289:HIS:HB3	1.97	0.64
5:E:37:THR:CA	6:F:69:MET:CE	2.69	0.64
8:H:83:TYR:HD1	8:H:134:LEU:HD21	1.62	0.64
10:J:83:VAL:HG13	10:J:111:ILE:HD12	1.80	0.64
10:J:233:GLU:HA	10:J:236:LYS:HZ3	1.62	0.64
11:K:41:GLN:OE1	11:K:152:GLN:HA	1.98	0.64
15:P:175:LEU:HB2	15:P:186:LEU:HD22	1.79	0.64
15:P:186:LEU:HD23	15:P:189:TYR:CD1	2.32	0.64
17:R:24:ASN:OD1	17:R:25:ILE:HG13	1.98	0.64
18:S:3:THR:OG1	18:S:100:MET:HE1	1.97	0.64
18:S:25:TYR:CE2	19:T:143:ALA:HA	2.33	0.64
21:V:59:ALA:HA	21:V:62:HIS:ND1	2.13	0.64
21:V:236:ARG:HD3	21:V:240:LEU:CD2	2.27	0.64
21:V:256:ARG:HH11	21:V:256:ARG:HG2	1.63	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:308:LEU:CD2	24:Y:314:LEU:HD21	2.28	0.64
25:Z:35:VAL:O	25:Z:96:HIS:HA	1.98	0.64
26:a:72:ASN:O	26:a:75:SER:N	2.32	0.64
26:a:194:GLN:HG3	26:a:226:ARG:HD3	1.80	0.64
26:a:320:VAL:HG11	26:a:333:MET:HE1	1.80	0.64
33:h:11:VAL:O	33:h:138:ALA:HA	1.98	0.64
1:A:163:MET:HE3	1:A:163:MET:O	1.98	0.63
2:B:78:PHE:HB2	31:f:613:LEU:HD11	1.80	0.63
2:B:223:ILE:CG2	2:B:350:LYS:HA	2.28	0.63
3:C:29:GLU:OE1	21:V:201:ARG:HG2	1.98	0.63
11:K:178:GLN:HE22	12:L:56:LEU:HD11	1.62	0.63
13:M:186:CYS:HA	13:M:189:ILE:CG2	2.28	0.63
13:M:200:VAL:HG23	13:M:200:VAL:O	1.98	0.63
15:P:2:THR:HG23	15:P:169:SER:OG	1.97	0.63
17:R:29:LYS:HD3	17:R:31:ASP:OD1	1.98	0.63
20:U:192:GLN:OE1	20:U:192:GLN:N	2.27	0.63
23:X:103:THR:OG1	23:X:105:GLN:HG2	1.98	0.63
29:d:101:GLU:HA	29:d:104:ARG:HH12	1.61	0.63
29:d:212:LEU:HD11	29:d:220:ILE:HD13	1.79	0.63
31:f:287:ASP:O	31:f:291:GLN:HG2	1.97	0.63
34:u:132:LYS:HA	34:u:135:CYS:SG	2.39	0.63
34:u:191:PRO:O	34:u:225:ILE:HD11	1.98	0.63
1:A:209:PRO:HB3	1:A:338:ASP:CB	2.28	0.63
6:F:200:GLU:O	6:F:205:PRO:HD3	1.98	0.63
10:J:79:ASP:HB3	10:J:127:PHE:CD1	2.32	0.63
14:N:189:LEU:HA	14:N:193:GLN:OE1	1.99	0.63
15:P:81:ARG:O	15:P:85:GLN:HG2	1.97	0.63
16:Q:99:ARG:CA	16:Q:127:ILE:HD11	2.25	0.63
19:T:97:TYR:CE1	19:T:100:ARG:HB2	2.33	0.63
20:U:470:ASN:OD1	20:U:474:ARG:NH2	2.31	0.63
20:U:813:TYR:N	20:U:883:ARG:HH12	1.96	0.63
21:V:114:TYR:O	21:V:118:GLN:HG2	1.99	0.63
21:V:203:LEU:O	21:V:203:LEU:HD13	1.98	0.63
23:X:402:GLU:HB3	28:c:249:LEU:HD13	1.80	0.63
24:Y:26:LEU:HD13	24:Y:63:TRP:CH2	2.33	0.63
25:Z:235:ASN:C	25:Z:235:ASN:ND2	2.53	0.63
31:f:256:PHE:CZ	31:f:268:LEU:HD11	2.33	0.63
31:f:415:GLY:N	31:f:447:ALA:HB1	2.12	0.63
31:f:524:MET:CE	31:f:525:ILE:HG13	2.28	0.63
31:f:775:THR:O	31:f:776:LEU:HD23	1.97	0.63
33:h:14:VAL:HG22	33:h:150:LEU:HD13	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:394:ASP:C	2:B:396:LYS:H	2.07	0.63
5:E:339:ASN:O	5:E:342:ASP:HB3	1.98	0.63
6:F:425:LEU:CD2	6:F:432:LYS:HB2	2.27	0.63
11:K:232:GLU:HA	11:K:235:GLU:OE1	1.97	0.63
12:L:18:ARG:HD2	12:L:23:GLU:OE2	1.98	0.63
12:L:37:GLY:O	12:L:158:ALA:HA	1.97	0.63
14:N:114:VAL:O	14:N:114:VAL:HG12	1.97	0.63
21:V:466:ILE:HD11	21:V:471:GLU:HB3	1.79	0.63
22:W:96:GLN:NE2	22:W:100:ALA:HB3	2.13	0.63
26:a:311:VAL:O	26:a:315:LEU:HD13	1.97	0.63
27:b:131:LEU:HD22	27:b:136:VAL:HG11	1.79	0.63
31:f:683:GLU:OE1	31:f:684:PRO:HD3	1.99	0.63
33:h:187:PHE:CE1	33:h:203:LEU:HB3	2.33	0.63
1:A:65:ILE:HD12	3:C:82:LYS:CG	2.26	0.63
1:A:213:LEU:HB2	1:A:337:LEU:CD1	2.26	0.63
1:A:240:VAL:HG21	1:A:274:PHE:CE1	2.32	0.63
2:B:390:LEU:CD1	2:B:427:LEU:HD21	2.28	0.63
5:E:115:VAL:O	5:E:116:ASP:HB2	1.98	0.63
9:I:75:SER:O	9:I:134:LEU:HB2	1.97	0.63
16:Q:30:ILE:HG22	16:Q:33:GLN:HG3	1.78	0.63
19:T:15:ILE:HD12	19:T:135:PHE:HB2	1.81	0.63
20:U:579:ARG:NH1	20:U:609:ASP:OD1	2.32	0.63
21:V:76:LYS:O	21:V:79:VAL:HG12	1.96	0.63
22:W:235:GLN:CA	22:W:243:ILE:HD11	2.29	0.63
22:W:452:ILE:HG22	22:W:453:HIS:ND1	2.14	0.63
23:X:260:MET:HA	23:X:260:MET:CE	2.18	0.63
25:Z:208:ILE:HD13	25:Z:230:LEU:HD21	1.80	0.63
27:b:86:PHE:HZ	27:b:140:ILE:HD11	1.63	0.63
29:d:283:LEU:HB3	29:d:286:GLU:CD	2.23	0.63
31:f:463:LEU:HD12	31:f:464:ALA:H	1.62	0.63
31:f:466:LEU:HD21	31:f:485:LEU:HD12	1.80	0.63
31:f:524:MET:HA	31:f:527:VAL:CG1	2.28	0.63
4:D:354:LEU:HA	4:D:394:VAL:CG2	2.28	0.63
9:I:71:ASP:CA	9:I:223:THR:HG21	2.28	0.63
10:J:118:TYR:CD1	10:J:124:ARG:HD2	2.32	0.63
10:J:146:GLN:NE2	10:J:148:ASP:OD1	2.31	0.63
15:P:124:TYR:HB2	15:P:138:PHE:CD2	2.34	0.63
17:R:7:ILE:HD11	17:R:14:LEU:HB2	1.81	0.63
19:T:27:THR:HB	19:T:40:SER:H	1.64	0.63
21:V:268:GLU:HG3	21:V:299:GLN:NE2	2.14	0.63
22:W:82:LEU:HA	22:W:85:GLU:OE2	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:256:ILE:CD1	22:W:262:LYS:HD2	2.21	0.63
22:W:260:SER:HA	22:W:263:TRP:CD1	2.33	0.63
23:X:67:GLY:O	23:X:71:LYS:HG2	1.98	0.63
23:X:374:PHE:CZ	23:X:385:LEU:HD21	2.33	0.63
23:X:403:THR:HG21	25:Z:262:LEU:HD11	1.80	0.63
23:X:407:MET:HE1	23:X:410:VAL:HG11	1.80	0.63
26:a:76:LEU:HD23	26:a:104:VAL:CG1	2.29	0.63
26:a:226:ARG:HH22	26:a:230:ARG:HB2	1.62	0.63
26:a:365:MET:HA	26:a:365:MET:HE3	1.79	0.63
29:d:243:LYS:HA	29:d:246:LEU:HD21	1.79	0.63
31:f:223:GLU:HG2	31:f:259:PHE:CZ	2.32	0.63
31:f:764:LEU:HD21	31:f:818:LEU:HD13	1.80	0.63
1:A:194:PRO:HB3	1:A:208:PRO:HG3	1.80	0.63
8:H:105:ILE:HG12	8:H:110:LEU:HB2	1.79	0.63
15:P:219:LEU:HG	16:Q:48:ARG:HH21	1.63	0.63
18:S:196:HIS:O	18:S:200:SER:OG	2.07	0.63
19:T:110:ILE:HD13	19:T:111:GLY:N	2.13	0.63
20:U:45:ILE:HD11	20:U:63:VAL:HB	1.80	0.63
20:U:599:ILE:CD1	20:U:626:LEU:HD21	2.28	0.63
24:Y:191:ILE:HG13	30:e:38:VAL:HG13	1.80	0.63
28:c:33:ILE:HA	28:c:69:VAL:HG22	1.80	0.63
31:f:381:VAL:HG22	31:f:770:HIS:HB2	1.80	0.63
31:f:780:PRO:O	31:f:789:SER:N	2.29	0.63
31:f:885:GLU:O	31:f:903:ASN:ND2	2.26	0.63
32:g:113:ARG:NE	32:g:138:LEU:HD11	2.14	0.63
5:E:38:LYS:HA	5:E:38:LYS:CE	2.18	0.63
5:E:170:CYS:H	5:E:296:ASP:HB3	1.63	0.63
7:G:80:MET:HE1	7:G:138:MET:CG	2.28	0.63
11:K:47:CYS:HB2	11:K:195:ILE:CD1	2.28	0.63
16:Q:10:ALA:HB1	16:Q:146:MET:HE1	1.79	0.63
20:U:509:GLY:HA3	20:U:544:ILE:HG12	1.81	0.63
21:V:117:VAL:HG23	21:V:118:GLN:NE2	2.14	0.63
22:W:171:VAL:HG21	22:W:185:PHE:HB2	1.81	0.63
29:d:283:LEU:HD12	29:d:284:PHE:H	1.64	0.63
31:f:234:THR:O	31:f:237:VAL:HG12	1.98	0.63
1:A:322:ASN:OD1	2:B:294:ARG:NH2	2.16	0.63
2:B:401:GLU:OE1	2:B:401:GLU:HA	1.99	0.63
3:C:82:LYS:HA	3:C:105:ILE:HG12	1.80	0.63
3:C:134:LEU:HD13	3:C:230:MET:HE1	1.80	0.63
5:E:222:ALA:HA	5:E:228:CYS:SG	2.39	0.63
9:I:90:LEU:HD22	9:I:110:LEU:CG	2.29	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:143:PHE:O	11:K:153:LEU:HD12	1.98	0.63
13:M:94:GLU:OE2	13:M:114:ARG:NH2	2.32	0.63
15:P:112:SER:CB	15:P:125:VAL:HG21	2.28	0.63
15:P:149:GLU:HA	15:P:152:LYS:NZ	2.13	0.63
18:S:9:ARG:HD2	18:S:9:ARG:O	1.97	0.63
22:W:117:ASP:HB3	22:W:120:ILE:HG13	1.81	0.63
22:W:453:HIS:HB2	25:Z:220:LEU:HD11	1.81	0.63
23:X:93:LEU:CD2	23:X:129:LEU:HD22	2.27	0.63
24:Y:134:LEU:CD2	24:Y:167:LEU:HD22	2.29	0.63
26:a:244:ASN:OD1	26:a:246:GLU:HG2	1.99	0.63
33:h:184:TYR:CE2	33:h:186:ARG:HB2	2.34	0.63
34:u:189:GLN:OE1	34:u:259:ARG:NE	2.32	0.63
4:D:123:LEU:HD12	4:D:142:VAL:HG11	1.80	0.63
5:E:152:PRO:HB2	5:E:274:LYS:NZ	2.14	0.63
12:L:26:MET:HA	12:L:149:PRO:CG	2.29	0.63
13:M:161:TRP:HB3	13:M:181:MET:HE2	1.80	0.63
14:N:187:GLN:HE22	14:N:189:LEU:HD23	1.62	0.63
15:P:21:THR:HA	15:P:26:VAL:HA	1.81	0.63
15:P:215:LYS:O	16:Q:197:THR:OG1	2.15	0.63
20:U:341:PHE:CZ	20:U:787:CYS:HB3	2.34	0.63
21:V:91:PRO:O	21:V:94:VAL:HG22	1.99	0.63
21:V:128:ARG:O	21:V:132:LEU:HB2	1.98	0.63
21:V:236:ARG:HE	21:V:239:THR:CG2	2.08	0.63
22:W:425:LEU:HD12	25:Z:252:LYS:HG3	1.79	0.63
25:Z:109:ASN:OD1	25:Z:119:SER:OG	2.16	0.63
26:a:9:GLN:O	26:a:12:GLN:HB3	1.98	0.63
26:a:129:GLN:OE1	26:a:129:GLN:N	2.32	0.63
26:a:261:LEU:HD22	26:a:268:LEU:HD21	1.79	0.63
26:a:348:GLY:HA2	26:a:351:ASP:OD1	1.98	0.63
29:d:174:TYR:HA	29:d:178:TYR:CE2	2.34	0.63
31:f:394:ASP:CG	31:f:397:LYS:HD3	2.24	0.63
3:C:127:LEU:HD23	3:C:128:PRO:HD2	1.80	0.62
4:D:313:ARG:HH11	4:D:313:ARG:HA	1.64	0.62
5:E:173:TYR:CE2	5:E:300:HIS:HB2	2.33	0.62
5:E:191:LEU:HB3	5:E:227:PRO:HB2	1.81	0.62
7:G:73:THR:HG21	7:G:108:GLU:OE2	1.99	0.62
7:G:80:MET:HE1	7:G:138:MET:HG2	1.81	0.62
9:I:103:GLU:OE2	17:R:79:ALA:HB2	1.99	0.62
13:M:117:MET:HE2	13:M:117:MET:N	2.14	0.62
13:M:186:CYS:HA	13:M:189:ILE:HG22	1.81	0.62
15:P:110:LEU:HD23	15:P:122:LEU:O	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:212:LEU:CG	16:Q:201:LYS:HD2	2.28	0.62
16:Q:14:MET:HA	16:Q:14:MET:CE	2.22	0.62
16:Q:53:LEU:HD12	16:Q:107:PRO:HB3	1.78	0.62
18:S:76:VAL:HG22	18:S:105:ASP:CG	2.24	0.62
20:U:797:MET:HE2	20:U:881:PRO:CD	2.26	0.62
20:U:885:MET:CG	20:U:886:PRO:HD2	2.24	0.62
21:V:63:SER:HA	21:V:66:GLU:OE1	1.99	0.62
22:W:60:MET:SD	22:W:61:VAL:HG13	2.39	0.62
23:X:229:TYR:CD1	23:X:254:MET:HG2	2.34	0.62
31:f:275:MET:HE2	31:f:275:MET:HA	1.81	0.62
31:f:840:LEU:HD22	31:f:900:LEU:HD22	1.80	0.62
32:g:107:ILE:HD12	32:g:108:THR:O	1.99	0.62
32:g:131:ILE:N	32:g:134:LYS:O	2.31	0.62
32:g:154:MET:HA	32:g:154:MET:CE	2.27	0.62
33:h:173:MET:HE3	33:h:187:PHE:CE2	2.34	0.62
2:B:198:LYS:HG2	2:B:202:GLU:OE2	1.99	0.62
3:C:66:LEU:HD22	4:D:138:ALA:CB	2.29	0.62
3:C:198:LEU:HD12	3:C:198:LEU:O	1.99	0.62
7:G:50:ILE:HD12	7:G:79:VAL:CG1	2.29	0.62
13:M:140:TYR:CD2	13:M:146:ALA:HB2	2.35	0.62
20:U:185:MET:CE	20:U:186:SER:HB3	2.29	0.62
20:U:251:ASP:OD2	20:U:904:LYS:NZ	2.32	0.62
20:U:259:GLN:OE1	20:U:259:GLN:HA	1.97	0.62
20:U:529:ILE:CD1	20:U:566:LEU:HD13	2.27	0.62
22:W:356:ASN:O	22:W:359:VAL:HG22	1.99	0.62
24:Y:204:THR:HG23	24:Y:219:PHE:HZ	1.61	0.62
31:f:268:LEU:HA	31:f:271:MET:CG	2.29	0.62
31:f:505:MET:HE3	31:f:537:THR:CG2	2.20	0.62
34:u:156:PHE:CE2	34:u:259:ARG:HG2	2.33	0.62
4:D:60:TYR:OH	20:U:640:LEU:HD13	1.99	0.62
4:D:160:PRO:HB3	4:D:217:LYS:HG2	1.81	0.62
4:D:241:GLY:O	4:D:245:ARG:HB2	1.98	0.62
6:F:314:LEU:HD23	6:F:347:ARG:HD3	1.79	0.62
8:H:139:TRP:CD1	8:H:215:GLU:HA	2.34	0.62
13:M:37:ILE:HD13	13:M:197:ILE:HG13	1.81	0.62
22:W:161:GLU:O	22:W:165:ILE:HG22	1.98	0.62
22:W:372:ARG:HG3	26:a:325:ASP:OD1	1.98	0.62
23:X:60:THR:OG1	23:X:62:GLN:OE1	2.14	0.62
25:Z:186:THR:HG23	25:Z:189:GLN:HB2	1.80	0.62
27:b:49:VAL:HG13	27:b:71:ILE:HD11	1.79	0.62
29:d:253:ALA:O	29:d:256:TYR:HB2	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:196:MET:HA	31:f:196:MET:HE3	1.82	0.62
31:f:372:LEU:CD1	31:f:406:GLY:HA2	2.29	0.62
31:f:389:LYS:HG3	31:f:390:LEU:HD12	1.81	0.62
31:f:706:ILE:O	31:f:709:THR:HG22	1.99	0.62
32:g:90:PRO:HD3	32:g:155:VAL:CG1	2.28	0.62
33:h:20:VAL:HG23	33:h:120:SER:HB2	1.80	0.62
3:C:76:VAL:HG23	3:C:114:VAL:HG22	1.80	0.62
6:F:171:ARG:O	6:F:175:MET:HG3	2.00	0.62
10:J:145:TYR:HE1	10:J:155:ALA:HB2	1.64	0.62
14:N:30:VAL:HG12	14:N:175:ARG:HH22	1.65	0.62
14:N:135:ILE:O	14:N:139:VAL:HG12	1.98	0.62
16:Q:29:GLY:HA2	16:Q:35:VAL:H	1.65	0.62
16:Q:42:ILE:HA	16:Q:52:GLY:HA2	1.81	0.62
17:R:12:TYR:CE2	17:R:153:ARG:HD2	2.34	0.62
17:R:22:ALA:HB2	17:R:27:GLN:HA	1.81	0.62
17:R:160:LEU:O	17:R:164:LEU:N	2.20	0.62
20:U:202:VAL:CG2	20:U:216:VAL:HG23	2.28	0.62
21:V:68:ASP:CG	21:V:112:VAL:HA	2.24	0.62
22:W:86:ASN:C	22:W:86:ASN:HD22	2.02	0.62
25:Z:266:ILE:O	25:Z:269:VAL:HG12	1.98	0.62
26:a:7:PHE:CE1	26:a:56:LEU:HB2	2.34	0.62
28:c:41:MET:HE1	28:c:157:ILE:HD11	1.82	0.62
28:c:210:ASN:OD1	28:c:213:GLU:HB2	2.00	0.62
28:c:292:MET:SD	29:d:346:LEU:HD11	2.39	0.62
31:f:885:GLU:OE1	31:f:885:GLU:N	2.33	0.62
32:g:115:LYS:O	32:g:118:GLU:HG2	1.99	0.62
34:u:177:LEU:HG	34:u:241:VAL:HG11	1.81	0.62
1:A:62:LEU:HD22	2:B:79:ILE:CG2	2.29	0.62
2:B:405:MET:CE	2:B:421:LYS:HB3	2.29	0.62
3:C:147:THR:HG22	3:C:150:MET:HG3	1.80	0.62
3:C:193:GLY:HA3	4:D:323:ARG:HD2	1.80	0.62
4:D:214:MET:CE	38:D:501:ADP:H3'	2.29	0.62
4:D:338:ARG:O	4:D:339:ARG:HB2	2.00	0.62
5:E:145:LEU:CB	5:E:187:VAL:HG21	2.29	0.62
5:E:290:LEU:HD23	5:E:295:LEU:CD1	2.28	0.62
9:I:38:LEU:HD12	9:I:39:ALA:N	2.14	0.62
9:I:44:LEU:C	9:I:45:LEU:HD12	2.24	0.62
9:I:239:LYS:O	9:I:242:GLU:HG2	2.00	0.62
14:N:28:ASN:OD1	14:N:31:THR:N	2.32	0.62
15:P:19:ARG:HG3	15:P:171:SER:OG	2.00	0.62
16:Q:169:GLN:HA	16:Q:172:LEU:HG	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:R:71:ASN:HD22	17:R:71:ASN:N	1.97	0.62
20:U:221:ILE:HG22	20:U:260:PHE:CE2	2.34	0.62
24:Y:56:ALA:O	24:Y:59:LYS:HG2	1.99	0.62
24:Y:214:MET:HE3	24:Y:219:PHE:HD1	1.65	0.62
24:Y:319:MET:HG3	24:Y:330:ILE:CD1	2.27	0.62
27:b:142:ASN:HD21	27:b:146:GLU:HG3	1.64	0.62
31:f:262:PHE:CE1	31:f:284:SER:HB2	2.33	0.62
31:f:298:LEU:HD11	31:f:303:VAL:HB	1.80	0.62
31:f:542:ILE:HG22	31:f:543:MET:HE2	1.80	0.62
32:g:110:ARG:CD	32:g:138:LEU:HD12	2.29	0.62
2:B:81:ASN:OD1	31:f:617:SER:HB2	2.00	0.62
4:D:89:ILE:CD1	5:E:80:VAL:HG23	2.25	0.62
18:S:158:ARG:HA	18:S:199:TYR:HE2	1.65	0.62
20:U:64:ALA:O	20:U:67:VAL:HG12	1.99	0.62
20:U:101:ILE:HG13	20:U:102:ALA:N	2.15	0.62
20:U:536:ALA:HB1	20:U:578:LEU:HD21	1.82	0.62
23:X:369:ILE:HD12	23:X:378:LEU:HD12	1.81	0.62
26:a:226:ARG:NH1	26:a:229:ASP:O	2.32	0.62
1:A:99:THR:HG21	6:F:167:GLU:OE2	1.99	0.62
1:A:159:PRO:HG3	2:B:113:GLU:OE2	1.98	0.62
10:J:234:LYS:HZ1	10:J:238:GLU:HB2	1.64	0.62
14:N:42:PHE:CE1	14:N:184:VAL:HG21	2.34	0.62
16:Q:61:GLN:NE2	17:R:124:LEU:CD2	2.62	0.62
19:T:108:ASN:C	19:T:109:ILE:HD13	2.24	0.62
20:U:641:SER:O	20:U:649:ARG:HG2	1.99	0.62
20:U:789:ILE:CB	20:U:911:ILE:HD12	2.23	0.62
25:Z:40:LEU:HD11	25:Z:54:PHE:CE2	2.34	0.62
26:a:304:VAL:O	26:a:307:VAL:HG12	2.00	0.62
27:b:21:PHE:HE2	27:b:179:LEU:HB2	1.65	0.62
31:f:211:ILE:CD1	31:f:213:GLN:HB3	2.29	0.62
34:u:182:PHE:CZ	34:u:246:ILE:HG21	2.34	0.62
4:D:153:MET:HA	4:D:153:MET:HE3	1.81	0.62
4:D:378:ILE:HD13	4:D:403:TYR:HD1	1.65	0.62
9:I:45:LEU:HD11	9:I:137:ILE:CG1	2.25	0.62
10:J:45:VAL:CG2	10:J:62:ILE:HD11	2.30	0.62
13:M:140:TYR:CB	13:M:217:GLY:HA2	2.30	0.62
16:Q:61:GLN:OE1	17:R:124:LEU:CG	2.48	0.62
18:S:59:LEU:HD23	18:S:59:LEU:O	2.00	0.62
19:T:22:ILE:HG13	19:T:195:ILE:HD11	1.81	0.62
20:U:725:MET:HE3	28:c:183:HIS:HB2	1.81	0.62
20:U:870:GLU:HB3	20:U:871:PRO:HD3	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:402:GLU:HB3	28:c:249:LEU:CD1	2.30	0.62
25:Z:175:LEU:HD21	28:c:35:SER:HB3	1.82	0.62
27:b:12:ASN:O	27:b:80:PRO:HA	2.00	0.62
29:d:160:ASP:O	29:d:163:SER:OG	2.17	0.62
33:h:50:MET:HG3	33:h:192:VAL:CG1	2.30	0.62
1:A:215:PHE:HD2	1:A:324:PRO:HG3	1.63	0.62
2:B:257:GLN:CB	2:B:262:ASP:HB3	2.30	0.62
2:B:394:ASP:CG	3:C:308:PRO:HG3	2.25	0.62
2:B:431:GLN:HG2	2:B:432:GLU:H	1.64	0.62
2:B:440:LEU:HB2	10:J:77:THR:CG2	2.28	0.62
4:D:255:LYS:NZ	4:D:302:ASN:OD1	2.31	0.62
6:F:344:ARG:HG2	6:F:345:SER:H	1.65	0.62
12:L:204:ASP:OD1	12:L:205:LEU:N	2.32	0.62
18:S:76:VAL:HG11	18:S:103:GLY:C	2.25	0.62
20:U:213:PHE:HB2	20:U:244:MET:SD	2.40	0.62
20:U:233:LEU:HD12	20:U:325:MET:SD	2.40	0.62
21:V:131:LEU:HD12	21:V:132:LEU:N	2.14	0.62
22:W:112:VAL:O	22:W:115:ILE:HG12	1.99	0.62
25:Z:16:LEU:HD23	25:Z:124:ILE:HD13	1.81	0.62
25:Z:240:VAL:HG22	25:Z:245:PHE:CE2	2.35	0.62
26:a:87:MET:CE	26:a:93:ALA:HA	2.29	0.62
29:d:104:ARG:NE	29:d:106:SER:O	2.29	0.62
29:d:185:SER:O	29:d:188:MET:HB3	2.00	0.62
31:f:64:GLY:HA2	31:f:105:LYS:HZ2	1.63	0.62
31:f:806:VAL:HG12	31:f:810:ILE:HG13	1.81	0.62
34:u:193:TYR:HD1	34:u:219:GLU:HG2	1.64	0.62
3:C:215:SER:HB2	3:C:218:GLU:HG3	1.81	0.62
8:H:20:VAL:HG12	8:H:24:TYR:HE1	1.63	0.62
8:H:68:ILE:HD11	8:H:87:VAL:HG23	1.80	0.62
8:H:157:ALA:HB3	9:I:57:ASP:O	1.99	0.62
15:P:48:THR:OG1	15:P:95:GLY:O	2.15	0.62
15:P:153:ASN:HA	15:P:156:SER:OG	1.99	0.62
20:U:26:LYS:CD	29:d:129:LEU:HD23	2.30	0.62
20:U:33:ASP:OD2	21:V:229:SER:HB3	2.00	0.62
20:U:412:HIS:O	20:U:449:ILE:HG12	1.99	0.62
20:U:656:LEU:HD22	20:U:668:ALA:CB	2.29	0.62
21:V:117:VAL:CG2	21:V:132:LEU:HD21	2.26	0.62
22:W:214:PHE:HB3	22:W:223:LYS:CE	2.29	0.62
22:W:274:VAL:HG21	22:W:290:ILE:HD12	1.82	0.62
23:X:252:LYS:NZ	23:X:283:GLN:OE1	2.30	0.62
26:a:251:LEU:HD12	26:a:255:TRP:CZ2	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:73:PHE:CD2	28:c:95:MET:HG2	2.35	0.62
28:c:261:GLU:OE2	28:c:263:ASP:N	2.31	0.62
29:d:156:ILE:HD12	29:d:157:LEU:HD13	1.80	0.62
29:d:244:VAL:HG11	29:d:267:ILE:HD12	1.81	0.62
31:f:115:PRO:CA	31:f:119:LYS:HE2	2.28	0.62
31:f:207:LEU:O	31:f:211:ILE:HG13	2.00	0.62
31:f:447:ALA:O	31:f:450:ILE:HG22	2.00	0.62
1:A:68:SER:OG	3:C:78:ARG:NH1	2.33	0.61
4:D:219:VAL:O	4:D:223:THR:HB	2.00	0.61
5:E:71:VAL:CG1	5:E:107:ILE:HD11	2.30	0.61
5:E:104:THR:HG22	28:c:46:ARG:NH2	2.09	0.61
5:E:196:LEU:H	5:E:196:LEU:HD22	1.65	0.61
5:E:352:MET:O	5:E:355:ILE:HG22	1.99	0.61
8:H:36:VAL:HG11	8:H:194:THR:HG21	1.82	0.61
8:H:173:PHE:CZ	8:H:177:ARG:HD3	2.35	0.61
10:J:70:CYS:CB	10:J:217:LEU:HD21	2.30	0.61
11:K:6:SER:O	11:K:10:ARG:NH1	2.31	0.61
12:L:100:ASP:HB2	33:h:90:SER:OG	2.00	0.61
13:M:188:ASP:O	13:M:192:GLU:HG2	2.00	0.61
14:N:56:ALA:O	14:N:59:VAL:HG12	2.00	0.61
16:Q:14:MET:HG3	16:Q:163:LEU:CD1	2.30	0.61
16:Q:189:ILE:HB	16:Q:196:THR:HG1	1.65	0.61
17:R:92:LEU:HD11	17:R:121:LEU:CD1	2.28	0.61
18:S:161:TYR:HA	18:S:164:THR:HG22	1.81	0.61
20:U:381:THR:HA	20:U:412:HIS:CD2	2.32	0.61
20:U:382:SER:OG	20:U:384:GLN:OE1	2.16	0.61
22:W:377:ARG:HH12	22:W:381:LEU:HG	1.65	0.61
24:Y:217:LYS:NZ	24:Y:252:SER:OG	2.33	0.61
25:Z:35:VAL:HB	25:Z:97:THR:HG23	1.81	0.61
25:Z:141:VAL:HG21	25:Z:156:GLU:HB2	1.81	0.61
31:f:62:ARG:HG2	31:f:70:LEU:CD2	2.30	0.61
31:f:205:CYS:SG	31:f:229:VAL:HG23	2.40	0.61
34:u:181:LYS:HE2	34:u:230:ILE:CD1	2.29	0.61
1:A:222:LYS:HG3	36:A:501:ATP:O1B	2.00	0.61
2:B:398:ILE:HD11	2:B:423:LYS:HG3	1.81	0.61
3:C:115:ALA:HB2	3:C:127:LEU:CD1	2.31	0.61
3:C:150:MET:O	3:C:331:ILE:HG21	2.00	0.61
6:F:218:GLN:OE1	6:F:218:GLN:HA	2.00	0.61
7:G:29:PHE:O	7:G:32:ILE:HB	2.00	0.61
10:J:234:LYS:NZ	10:J:238:GLU:HB2	2.14	0.61
12:L:107:ARG:NH2	33:h:74:GLU:OE1	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:191:GLY:O	14:N:196:LYS:NZ	2.31	0.61
16:Q:3:ILE:HG21	16:Q:104:TYR:CG	2.35	0.61
21:V:208:ALA:HB2	21:V:246:GLY:CA	2.29	0.61
22:W:32:ALA:O	22:W:36:LYS:HG2	2.00	0.61
22:W:60:MET:HB2	22:W:97:LEU:CD1	2.30	0.61
22:W:376:LYS:NZ	22:W:376:LYS:HB3	2.15	0.61
22:W:412:ILE:HD12	26:a:327:VAL:CG2	2.30	0.61
24:Y:201:PHE:HB3	24:Y:223:THR:OG1	2.00	0.61
28:c:307:VAL:CG2	29:d:332:SER:HB2	2.30	0.61
29:d:184:GLU:OE1	29:d:184:GLU:N	2.32	0.61
31:f:202:HIS:CD2	31:f:855:GLN:HG3	2.35	0.61
33:h:54:SER:OG	33:h:109:THR:OG1	2.17	0.61
33:h:90:SER:O	33:h:94:ARG:HG2	2.00	0.61
1:A:333:ARG:HD2	6:F:394:ALA:CB	2.30	0.61
2:B:180:PRO:HB2	2:B:182:GLU:OE1	1.99	0.61
3:C:135:VAL:HA	3:C:138:MET:HE2	1.83	0.61
3:C:135:VAL:HA	3:C:138:MET:CE	2.30	0.61
5:E:113:ARG:NH2	5:E:116:ASP:OD2	2.26	0.61
10:J:45:VAL:HG23	10:J:62:ILE:HD11	1.82	0.61
12:L:157:ARG:NH2	13:M:60:GLU:OE1	2.32	0.61
13:M:34:SER:OG	13:M:65:ARG:NH1	2.31	0.61
14:N:16:ALA:CB	14:N:33:LYS:HB2	2.30	0.61
20:U:226:PRO:HA	20:U:260:PHE:CE1	2.31	0.61
20:U:339:LEU:O	20:U:343:ILE:HG22	2.01	0.61
20:U:532:MET:HE1	20:U:551:GLY:C	2.25	0.61
21:V:363:LEU:HD21	21:V:395:ILE:HD12	1.83	0.61
22:W:115:ILE:CD1	22:W:121:LYS:HA	2.30	0.61
23:X:297:ARG:HG2	23:X:330:LEU:CD1	2.26	0.61
24:Y:52:PRO:O	24:Y:55:GLU:HG2	2.00	0.61
26:a:64:ILE:CG2	26:a:70:ARG:HD3	2.31	0.61
27:b:16:MET:HE1	27:b:114:GLY:CA	2.20	0.61
31:f:298:LEU:CD2	31:f:305:LEU:HD23	2.31	0.61
31:f:688:ARG:O	31:f:724:ASN:ND2	2.25	0.61
31:f:733:GLY:O	31:f:769:THR:HA	2.00	0.61
32:g:162:GLU:O	32:g:166:ARG:HG2	1.99	0.61
4:D:202:VAL:CG2	4:D:308:ILE:HG23	2.31	0.61
6:F:436:GLN:NE2	11:K:28:ILE:HG21	2.15	0.61
7:G:113:MET:HE3	15:P:70:THR:HG22	1.82	0.61
9:I:45:LEU:HD11	9:I:137:ILE:CG2	2.30	0.61
10:J:16:LEU:HD11	11:K:135:ARG:NE	2.14	0.61
15:P:1:THR:N	15:P:168:GLY:O	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:46:ALA:HB3	15:P:97:ALA:HB3	1.83	0.61
15:P:59:ILE:CG1	15:P:83:LEU:HD13	2.30	0.61
21:V:127:THR:O	21:V:131:LEU:HG	1.99	0.61
22:W:98:LYS:H	22:W:98:LYS:HD3	1.65	0.61
22:W:438:LEU:HD23	25:Z:233:VAL:CG2	2.24	0.61
24:Y:173:ASP:N	24:Y:173:ASP:OD1	2.33	0.61
25:Z:13:PRO:HD3	25:Z:163:GLY:O	2.00	0.61
25:Z:73:ASP:N	25:Z:73:ASP:OD1	2.32	0.61
4:D:229:ARG:HD3	4:D:263:PHE:HD2	1.66	0.61
6:F:314:LEU:CD2	6:F:342:LEU:HD12	2.29	0.61
7:G:80:MET:HE2	7:G:80:MET:HA	1.82	0.61
8:H:36:VAL:HG23	8:H:195:LEU:HD22	1.83	0.61
8:H:89:ARG:HA	8:H:89:ARG:HH11	1.65	0.61
11:K:210:LEU:HD12	11:K:211:ASN:N	2.15	0.61
17:R:35:MET:HE2	17:R:181:ARG:NH1	2.16	0.61
18:S:8:PHE:HZ	18:S:13:ILE:HG12	1.64	0.61
20:U:82:LEU:HD11	20:U:104:CYS:SG	2.40	0.61
20:U:250:PHE:CD2	20:U:911:ILE:HB	2.35	0.61
20:U:475:HIS:ND1	20:U:511:ALA:HB2	2.16	0.61
20:U:796:LYS:HG3	20:U:924:LEU:CD1	2.29	0.61
21:V:289:LEU:HB2	21:V:312:ALA:HB2	1.81	0.61
21:V:342:ILE:CD1	21:V:368:ARG:CG	2.78	0.61
22:W:114:GLU:OE1	22:W:114:GLU:HA	2.01	0.61
24:Y:334:LEU:O	24:Y:338:ILE:HG13	1.99	0.61
25:Z:208:ILE:CG2	25:Z:230:LEU:HD11	2.30	0.61
26:a:12:GLN:HG2	26:a:22:TRP:CB	2.30	0.61
28:c:251:LEU:CD1	28:c:283:HIS:HB3	2.30	0.61
31:f:100:ARG:NH1	31:f:133:MET:HG3	2.16	0.61
31:f:391:LEU:HD13	31:f:414:LEU:HD13	1.82	0.61
31:f:450:ILE:HD11	31:f:822:VAL:HG21	1.82	0.61
31:f:778:LEU:HD11	31:f:824:ALA:HB3	1.83	0.61
7:G:86:ASP:OD1	7:G:134:LEU:HD22	2.00	0.61
7:G:194:THR:O	7:G:197:THR:HG22	2.00	0.61
8:H:65:VAL:HG12	8:H:218:PHE:HZ	1.65	0.61
12:L:70:ILE:HD13	12:L:108:LEU:HD23	1.80	0.61
14:N:127:ILE:HG13	14:N:132:SER:HB3	1.82	0.61
17:R:118:MET:HE1	17:R:123:ALA:C	2.25	0.61
18:S:41:LEU:HD11	18:S:101:ILE:CG2	2.30	0.61
20:U:27:LEU:HD22	20:U:38:ILE:HD11	1.83	0.61
20:U:529:ILE:HD11	20:U:566:LEU:CD1	2.28	0.61
21:V:76:LYS:O	21:V:76:LYS:HD2	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:160:LEU:O	21:V:164:GLU:HG2	1.99	0.61
21:V:212:TYR:HA	21:V:253:LEU:CD1	2.30	0.61
21:V:360:TYR:OH	21:V:389:ASP:OD2	2.16	0.61
22:W:87:ILE:HG12	22:W:104:MET:HE3	1.83	0.61
22:W:140:ILE:CG2	22:W:177:MET:HB3	2.31	0.61
22:W:186:ILE:HG21	22:W:209:ILE:HB	1.83	0.61
24:Y:102:ASP:OD1	24:Y:103:ALA:N	2.34	0.61
24:Y:297:ARG:NH2	30:e:45:ASP:OD1	2.32	0.61
28:c:120:CYS:SG	28:c:156:VAL:HG22	2.40	0.61
31:f:531:ASN:HB3	31:f:534:VAL:HG23	1.81	0.61
31:f:578:ALA:HA	31:f:581:GLU:CD	2.25	0.61
33:h:188:GLN:OE1	33:h:201:GLY:HA3	2.01	0.61
2:B:165:ASP:HB3	3:C:78:ARG:NH2	2.15	0.61
2:B:361:LYS:HD3	2:B:390:LEU:HB3	1.83	0.61
5:E:280:ASN:O	5:E:280:ASN:ND2	2.33	0.61
5:E:304:PRO:HB2	5:E:309:ARG:CZ	2.31	0.61
11:K:84:ASP:OD2	11:K:135:ARG:NH1	2.34	0.61
16:Q:168:SER:O	16:Q:172:LEU:HG	2.00	0.61
17:R:154:GLU:H	17:R:154:GLU:CD	2.09	0.61
19:T:118:LYS:HZ1	19:T:132:ARG:NH1	1.99	0.61
24:Y:179:ARG:NH1	24:Y:179:ARG:HB2	2.16	0.61
25:Z:48:LEU:HD11	25:Z:92:VAL:HG21	1.83	0.61
25:Z:142:GLU:OE1	25:Z:153:LYS:HG2	2.00	0.61
26:a:8:LEU:HD21	26:a:26:GLU:OE1	2.00	0.61
27:b:62:THR:HG23	27:b:62:THR:O	2.01	0.61
31:f:463:LEU:HD13	32:g:133:LYS:HB3	1.83	0.61
33:h:14:VAL:HG22	33:h:136:SER:HB2	1.83	0.61
2:B:85:MET:HE2	31:f:617:SER:O	2.00	0.61
3:C:47:ALA:HB1	21:V:496:PHE:CZ	2.36	0.61
3:C:279:GLN:OE1	3:C:279:GLN:HA	2.00	0.61
4:D:171:ASP:OD1	4:D:172:ILE:HD12	2.01	0.61
4:D:323:ARG:HH21	4:D:326:ARG:CZ	2.14	0.61
5:E:40:TYR:HA	6:F:73:ILE:HD11	1.81	0.61
16:Q:169:GLN:HA	16:Q:172:LEU:CG	2.30	0.61
18:S:25:TYR:HE2	19:T:143:ALA:CA	2.13	0.61
20:U:588:MET:HE1	20:U:760:VAL:HG22	1.83	0.61
26:a:123:LEU:O	26:a:127:ASP:HB3	2.01	0.61
31:f:405:HIS:CD2	31:f:813:LYS:HA	2.35	0.61
31:f:560:LEU:HD12	31:f:801:VAL:HG21	1.83	0.61
32:g:105:LEU:HB3	32:g:143:GLU:CG	2.30	0.61
32:g:112:LEU:HD22	32:g:142:LEU:CD1	2.31	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:152:MET:HE2	4:D:229:ARG:HB3	1.82	0.61
5:E:37:THR:CB	6:F:69:MET:HE1	2.31	0.61
5:E:38:LYS:HE2	5:E:38:LYS:CA	2.28	0.61
5:E:335:SER:HB2	5:E:371:VAL:HG11	1.82	0.61
7:G:161:CYS:HB3	7:G:163:PHE:CE1	2.35	0.61
7:G:191:PHE:HZ	7:G:219:VAL:HG11	1.66	0.61
8:H:102:GLN:HA	8:H:102:GLN:HE21	1.65	0.61
10:J:86:ARG:O	10:J:89:VAL:HG12	2.01	0.61
11:K:233:GLU:HA	11:K:233:GLU:OE2	2.01	0.61
12:L:35:THR:HG22	12:L:48:ALA:CB	2.31	0.61
14:N:32:ASP:OD1	14:N:34:LEU:N	2.33	0.61
14:N:80:ALA:HA	14:N:100:ILE:CD1	2.30	0.61
15:P:1:THR:HA	15:P:17:ASP:OD2	2.01	0.61
20:U:368:ALA:HA	20:U:371:ILE:HD11	1.83	0.61
21:V:241:ARG:NH1	21:V:241:ARG:HB2	2.16	0.61
22:W:23:THR:HB	22:W:27:ARG:CZ	2.30	0.61
22:W:305:LEU:HB2	22:W:324:TYR:HE2	1.65	0.61
26:a:74:LEU:O	26:a:78:GLU:HG2	2.01	0.61
27:b:107:MET:CB	27:b:136:VAL:HA	2.31	0.61
28:c:296:ILE:HG23	29:d:339:VAL:CG1	2.31	0.61
31:f:644:ALA:O	31:f:648:ALA:N	2.32	0.61
32:g:110:ARG:HG2	32:g:138:LEU:HD12	1.83	0.61
34:u:134:GLY:HA3	34:u:170:ALA:HB3	1.81	0.61
1:A:73:ALA:HA	2:B:140:ASP:OD2	2.00	0.61
1:A:430:MET:HE1	11:K:55:THR:CB	2.31	0.61
2:B:184:TYR:HD1	2:B:194:ILE:HD13	1.65	0.61
3:C:148:TYR:H	3:C:206:HIS:HE1	1.47	0.61
5:E:235:ILE:C	5:E:235:ILE:HD12	2.26	0.61
18:S:50:ALA:CB	19:T:127:VAL:HG13	2.31	0.61
19:T:29:LEU:O	19:T:36:HIS:N	2.34	0.61
19:T:30:SER:HB2	19:T:34:SER:O	2.00	0.61
20:U:229:VAL:HG21	20:U:252:LEU:HD21	1.83	0.61
21:V:79:VAL:HG23	21:V:163:VAL:HB	1.83	0.61
21:V:309:MET:HE1	21:V:331:LEU:HG	1.83	0.61
22:W:102:ALA:O	22:W:106:GLN:HG3	2.00	0.61
22:W:163:ALA:CA	22:W:192:LEU:HD13	2.29	0.61
25:Z:19:VAL:HG21	25:Z:124:ILE:HD12	1.83	0.61
25:Z:48:LEU:HD21	25:Z:92:VAL:CG2	2.31	0.61
25:Z:235:ASN:OD1	26:a:335:TRP:O	2.19	0.61
31:f:687:ARG:NH1	31:f:716:ASP:OD2	2.29	0.61
31:f:735:GLY:O	31:f:774:GLY:HA2	1.99	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:181:VAL:HG11	4:D:308:ILE:HD11	1.81	0.60
5:E:175:PRO:HG2	5:E:178:THR:HG21	1.83	0.60
5:E:263:GLN:HG3	5:E:264:MET:HG3	1.82	0.60
13:M:30:VAL:HG21	13:M:134:SER:CB	2.31	0.60
15:P:30:ASN:O	15:P:187:ARG:NH2	2.34	0.60
16:Q:28:PHE:HB3	16:Q:36:THR:OG1	2.01	0.60
17:R:35:MET:HE1	17:R:181:ARG:HG3	1.82	0.60
20:U:357:LYS:HD2	20:U:357:LYS:C	2.25	0.60
20:U:481:LEU:HD21	20:U:493:VAL:CG2	2.31	0.60
20:U:524:LYS:HA	20:U:556:MET:CE	2.31	0.60
20:U:688:LEU:HD22	20:U:713:TYR:HE1	1.64	0.60
22:W:52:LYS:HB2	22:W:93:ARG:NH2	2.16	0.60
22:W:265:GLN:HE22	22:W:336:PRO:CG	2.13	0.60
22:W:438:LEU:HB3	25:Z:233:VAL:CG2	2.32	0.60
23:X:93:LEU:HD12	23:X:97:LEU:CD2	2.31	0.60
24:Y:11:LEU:HD13	24:Y:12:PRO:HD2	1.83	0.60
24:Y:56:ALA:HA	24:Y:59:LYS:CE	2.31	0.60
25:Z:71:ASP:CB	25:Z:74:TYR:HB3	2.31	0.60
26:a:71:VAL:HG12	26:a:72:ASN:N	2.16	0.60
29:d:168:MET:HE3	29:d:168:MET:CA	2.24	0.60
31:f:369:ARG:NH2	31:f:811:LEU:O	2.29	0.60
31:f:731:MET:CA	31:f:731:MET:HE3	2.31	0.60
32:g:128:LYS:NZ	32:g:129:ILE:O	2.34	0.60
32:g:131:ILE:CG2	32:g:151:VAL:HG11	2.31	0.60
4:D:190:LEU:H	4:D:190:LEU:HD12	1.66	0.60
12:L:46:LEU:HD12	12:L:73:SER:HB2	1.82	0.60
16:Q:44:PRO:HB3	16:Q:50:TYR:CE2	2.36	0.60
18:S:42:LEU:HD12	18:S:179:VAL:HG12	1.82	0.60
21:V:166:TYR:O	21:V:170:LEU:HD13	2.00	0.60
21:V:243:ASP:OD1	21:V:244:ALA:N	2.34	0.60
21:V:416:ARG:O	24:Y:350:VAL:HG23	2.02	0.60
22:W:24:VAL:HA	22:W:27:ARG:CG	2.31	0.60
24:Y:95:LEU:HB3	24:Y:99:GLU:HB2	1.82	0.60
24:Y:95:LEU:CG	24:Y:99:GLU:HG3	2.30	0.60
26:a:317:VAL:HG12	26:a:319:LEU:HD11	1.83	0.60
26:a:341:LEU:HD12	26:a:345:GLN:HB2	1.83	0.60
31:f:456:ARG:NH2	31:f:490:ALA:O	2.34	0.60
34:u:177:LEU:HB2	34:u:238:PHE:HB3	1.83	0.60
2:B:252:GLY:O	2:B:290:ILE:HG23	2.01	0.60
2:B:256:ILE:HD12	3:C:271:ARG:HD3	1.83	0.60
3:C:358:GLU:HG2	4:D:324:PRO:HG2	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:171:LEU:HA	5:E:277:MET:O	2.02	0.60
6:F:281:SER:OG	6:F:326:VAL:HG22	2.00	0.60
7:G:83:MET:HE1	7:G:132:ARG:NH1	2.17	0.60
7:G:131:MET:CG	13:M:125:TYR:HE1	2.07	0.60
13:M:59:GLU:OE1	13:M:59:GLU:HA	2.01	0.60
18:S:7:LYS:HZ3	18:S:110:GLY:HA2	1.64	0.60
19:T:13:LEU:HA	19:T:137:ALA:HA	1.83	0.60
22:W:67:LEU:HD11	22:W:90:LEU:HD12	1.84	0.60
26:a:38:THR:HB	26:a:71:VAL:HG21	1.82	0.60
28:c:185:ASN:C	28:c:185:ASN:HD22	2.07	0.60
31:f:367:SER:O	31:f:371:ASN:ND2	2.34	0.60
31:f:539:LEU:HA	31:f:543:MET:HE2	1.84	0.60
32:g:128:LYS:CB	32:g:156:LEU:HB3	2.28	0.60
5:E:335:SER:HB2	5:E:371:VAL:CG1	2.31	0.60
6:F:127:SER:O	6:F:129:ARG:NH1	2.34	0.60
7:G:87:SER:HA	7:G:136:CYS:SG	2.41	0.60
9:I:70:GLU:OE1	9:I:70:GLU:N	2.34	0.60
10:J:99:GLU:OE1	18:S:120:ARG:NH2	2.33	0.60
11:K:70:ILE:CD1	11:K:89:ILE:HG23	2.31	0.60
12:L:22:ILE:HD11	12:L:120:THR:HB	1.83	0.60
12:L:192:LEU:HD21	12:L:212:ILE:HD11	1.83	0.60
16:Q:163:LEU:O	16:Q:167:ILE:HG22	2.01	0.60
22:W:265:GLN:HE22	22:W:336:PRO:HG2	1.65	0.60
22:W:375:MET:HE1	22:W:406:VAL:CG1	2.31	0.60
26:a:365:MET:HE3	26:a:365:MET:CA	2.31	0.60
29:d:164:PHE:HE1	29:d:168:MET:HG2	1.64	0.60
31:f:326:LEU:HA	31:f:329:ASN:OD1	2.01	0.60
31:f:692:LEU:HB3	31:f:800:LEU:CD1	2.32	0.60
33:h:51:LEU:HD13	33:h:110:MET:CE	2.31	0.60
2:B:248:LEU:HD23	2:B:270:LEU:CD1	2.32	0.60
6:F:94:ILE:HD11	6:F:125:LYS:CB	2.32	0.60
10:J:65:LEU:HD21	10:J:71:MET:CG	2.28	0.60
11:K:71:ASP:HB2	11:K:96:THR:HG21	1.83	0.60
12:L:33:SER:HB2	12:L:51:ARG:CD	2.27	0.60
15:P:212:LEU:CD1	16:Q:201:LYS:HD2	2.31	0.60
16:Q:19:CYS:HB2	16:Q:163:LEU:HD22	1.83	0.60
22:W:127:THR:O	22:W:131:VAL:HG12	2.01	0.60
23:X:91:SER:O	23:X:95:LEU:HD23	2.01	0.60
24:Y:290:PRO:HG2	24:Y:291:HIS:CD2	2.36	0.60
25:Z:228:TYR:CB	26:a:338:PRO:HB2	2.26	0.60
28:c:278:GLN:H	28:c:282:ARG:HE	1.49	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:139:GLN:N	29:d:139:GLN:OE1	2.35	0.60
1:A:239:ARG:HD2	1:A:239:ARG:O	2.02	0.60
1:A:380:SER:HB2	1:A:384:GLU:OE2	2.02	0.60
3:C:238:ALA:HB1	3:C:244:SER:OG	2.01	0.60
5:E:289:LEU:HA	5:E:294:ARG:CD	2.29	0.60
7:G:165:ALA:O	8:H:56:LEU:HD23	2.01	0.60
8:H:72:ILE:HG21	8:H:110:LEU:HD13	1.83	0.60
9:I:35:LEU:HG	9:I:46:ALA:HB3	1.82	0.60
9:I:37:ILE:O	9:I:44:LEU:HD23	2.02	0.60
11:K:109:VAL:HG22	11:K:147:ASP:OD2	2.02	0.60
12:L:36:VAL:HG23	12:L:195:LEU:HD13	1.82	0.60
14:N:33:LYS:O	14:N:44:CYS:HA	2.01	0.60
15:P:43:CYS:HB3	15:P:98:LEU:CD1	2.32	0.60
20:U:423:MET:CE	20:U:427:LEU:HB2	2.32	0.60
21:V:72:LEU:HA	21:V:75:ILE:CD1	2.30	0.60
21:V:252:ASN:OD1	21:V:288:TYR:HB2	2.01	0.60
22:W:327:GLU:OE1	22:W:335:SER:HB2	2.02	0.60
23:X:342:PHE:CG	23:X:345:VAL:HB	2.36	0.60
23:X:407:MET:HA	23:X:407:MET:CE	2.31	0.60
25:Z:16:LEU:HB3	28:c:216:MET:HG2	1.84	0.60
25:Z:40:LEU:HD11	25:Z:54:PHE:HE2	1.66	0.60
26:a:269:LEU:HD12	26:a:269:LEU:O	2.00	0.60
28:c:265:MET:SD	28:c:270:LEU:HD22	2.41	0.60
31:f:391:LEU:HD13	31:f:391:LEU:O	2.02	0.60
31:f:485:LEU:HD11	31:f:497:VAL:HG13	1.84	0.60
33:h:53:ALA:CB	33:h:110:MET:HA	2.32	0.60
2:B:85:MET:HE3	2:B:85:MET:C	2.27	0.60
3:C:66:LEU:HD11	4:D:116:LEU:CD1	2.30	0.60
4:D:387:VAL:HG21	5:E:159:PHE:CE1	2.37	0.60
10:J:125:ARG:HG2	10:J:126:PRO:HD2	1.82	0.60
14:N:59:VAL:HG21	14:N:83:PHE:CE2	2.36	0.60
20:U:124:LYS:HD3	20:U:124:LYS:N	2.15	0.60
21:V:201:ARG:HA	21:V:204:ASP:OD2	2.02	0.60
22:W:225:LYS:O	22:W:229:LEU:HD12	2.01	0.60
22:W:451:MET:HE2	25:Z:101:LEU:N	2.17	0.60
23:X:332:GLU:HG2	23:X:368:MET:SD	2.41	0.60
29:d:334:GLU:HA	29:d:337:LYS:HE3	1.82	0.60
31:f:326:LEU:HD23	31:f:897:PHE:CE2	2.37	0.60
31:f:370:MET:C	31:f:370:MET:HE2	2.26	0.60
33:h:1:THR:HB	33:h:105:PRO:O	2.02	0.60
33:h:92:LEU:HD22	33:h:96:MET:CE	2.27	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:u:181:LYS:HE2	34:u:230:ILE:HD11	1.83	0.60
1:A:333:ARG:HD2	6:F:394:ALA:HB3	1.83	0.60
2:B:66:GLU:HB3	20:U:834:SER:CB	2.32	0.60
6:F:321:GLN:HE21	6:F:324:THR:HA	1.66	0.60
6:F:399:VAL:HG22	6:F:424:ILE:HA	1.83	0.60
8:H:45:VAL:HG11	8:H:188:ILE:HD12	1.84	0.60
10:J:119:THR:HG22	10:J:126:PRO:HB3	1.84	0.60
14:N:19:ARG:CG	14:N:26:ILE:HD13	2.31	0.60
18:S:10:HIS:CD2	18:S:149:VAL:HG22	2.37	0.60
20:U:234:GLU:HG3	20:U:235:LYS:N	2.16	0.60
20:U:344:ARG:HB3	20:U:344:ARG:NH1	2.17	0.60
20:U:796:LYS:NZ	20:U:921:ILE:HD12	2.16	0.60
21:V:94:VAL:HG23	21:V:205:LEU:HD22	1.84	0.60
21:V:150:ARG:NH2	21:V:157:THR:O	2.34	0.60
21:V:191:LEU:HD12	21:V:192:MET:N	2.16	0.60
21:V:236:ARG:HA	21:V:236:ARG:NE	2.17	0.60
23:X:74:ARG:HG3	23:X:116:TRP:CE2	2.37	0.60
24:Y:51:ALA:HB3	24:Y:52:PRO:HD3	1.84	0.60
24:Y:138:LEU:HD23	24:Y:176:ARG:CG	2.30	0.60
26:a:87:MET:HE2	26:a:93:ALA:HA	1.84	0.60
29:d:104:ARG:NH2	29:d:107:PRO:HA	2.16	0.60
31:f:151:LEU:HG	31:f:190:GLU:OE1	2.01	0.60
31:f:731:MET:HE1	31:f:778:LEU:HD23	1.82	0.60
34:u:259:ARG:O	34:u:260:ILE:HD13	2.01	0.60
1:A:36:TYR:CD2	31:f:131:MET:HE1	2.36	0.60
1:A:80:LEU:HG	1:A:83:ASP:H	1.67	0.60
1:A:240:VAL:HG11	1:A:274:PHE:HE1	1.67	0.60
1:A:363:SER:HB3	2:B:214:MET:HE1	1.84	0.60
2:B:365:PHE:HB3	2:B:380:LEU:HD13	1.82	0.60
4:D:115:ILE:CD1	4:D:139:LEU:HD13	2.32	0.60
7:G:22:LEU:O	7:G:25:VAL:HG22	2.01	0.60
7:G:115:CYS:HB3	7:G:140:LEU:CD1	2.32	0.60
11:K:178:GLN:O	11:K:182:GLN:HG3	2.01	0.60
14:N:191:GLY:O	14:N:194:ILE:HG12	2.02	0.60
16:Q:12:MET:O	16:Q:23:ALA:N	2.24	0.60
17:R:160:LEU:HD12	17:R:161:ARG:N	2.16	0.60
19:T:166:LEU:HD11	19:T:171:ALA:HB2	1.83	0.60
19:T:176:LYS:HZ1	19:T:208:VAL:HG21	1.67	0.60
20:U:173:VAL:HG23	20:U:175:GLY:H	1.67	0.60
20:U:199:ARG:CD	20:U:223:LEU:HD11	2.32	0.60
20:U:222:PHE:HE1	20:U:754:HIS:HD1	1.48	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:326:MET:HE3	22:W:326:MET:CA	2.32	0.60
24:Y:84:LEU:CD1	24:Y:107:LYS:HA	2.32	0.60
26:a:321:LYS:HD2	26:a:336:VAL:CG1	2.29	0.60
31:f:229:VAL:O	31:f:233:LEU:CD2	2.50	0.60
31:f:383:ALA:HB1	31:f:419:LEU:CD1	2.31	0.60
31:f:711:SER:HB3	31:f:744:MET:SD	2.42	0.60
1:A:166:VAL:C	1:A:167:GLU:HG2	2.27	0.60
4:D:151:ILE:HG23	4:D:152:MET:H	1.65	0.60
5:E:135:ILE:HD11	5:E:183:LEU:HD22	1.84	0.60
6:F:172:VAL:HG21	6:F:270:ASP:CB	2.31	0.60
6:F:183:GLU:HG3	6:F:238:ARG:HD2	1.84	0.60
8:H:212:ILE:CG2	8:H:221:LEU:HD21	2.25	0.60
11:K:211:ASN:OD1	11:K:214:ASN:ND2	2.35	0.60
15:P:185:PHE:HE1	15:P:187:ARG:HG3	1.67	0.60
16:Q:41:LYS:NZ	16:Q:54:ALA:HA	2.16	0.60
16:Q:171:MET:SD	16:Q:185:VAL:HG11	2.42	0.60
18:S:38:ASN:CG	18:S:39:PRO:HD2	2.27	0.60
18:S:50:ALA:HB3	19:T:127:VAL:HG13	1.83	0.60
19:T:16:ALA:HB3	19:T:134:SER:HA	1.83	0.60
20:U:346:ASN:ND2	20:U:346:ASN:C	2.57	0.60
21:V:176:MET:CE	21:V:217:VAL:HG12	2.32	0.60
23:X:77:LEU:HA	23:X:80:ILE:HG12	1.84	0.60
23:X:201:TYR:O	23:X:203:PRO:HD3	2.02	0.60
24:Y:192:ARG:HB2	24:Y:291:HIS:CE1	2.37	0.60
25:Z:144:VAL:HG21	26:a:178:ARG:CD	2.27	0.60
26:a:239:ALA:HB2	26:a:246:GLU:HG3	1.84	0.60
26:a:326:GLU:O	26:a:329:LYS:NZ	2.31	0.60
28:c:172:HIS:CG	28:c:173:GLU:H	2.19	0.60
31:f:45:LEU:HB3	31:f:49:ASP:HB3	1.84	0.60
31:f:459:CYS:CB	32:g:152:LYS:HB2	2.32	0.60
31:f:646:MET:HA	31:f:649:HIS:CD2	2.37	0.60
33:h:173:MET:HE3	33:h:187:PHE:HE2	1.67	0.60
34:u:196:ILE:HG23	34:u:244:VAL:HG23	1.83	0.60
2:B:126:SER:CB	3:C:93:GLY:HA3	2.32	0.59
2:B:404:LEU:HD21	3:C:175:PHE:CZ	2.37	0.59
5:E:320:ILE:HB	6:F:217:ILE:HD11	1.84	0.59
6:F:393:GLY:HA3	36:F:501:ATP:C8	2.38	0.59
7:G:10:ASP:OD2	13:M:7:TYR:OH	2.18	0.59
9:I:105:ILE:HG22	9:I:109:GLN:HB2	1.84	0.59
9:I:174:MET:HE1	9:I:199:LYS:HG2	1.82	0.59
11:K:46:VAL:HG21	11:K:152:GLN:O	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:21:PHE:O	13:M:25:TYR:HD1	1.85	0.59
13:M:199:ILE:CD1	13:M:244:LYS:HB2	2.32	0.59
14:N:90:TYR:O	14:N:94:LEU:N	2.30	0.59
16:Q:49:LEU:HD11	16:Q:84:PRO:HA	1.82	0.59
17:R:4:LEU:HD21	17:R:47:VAL:HG13	1.84	0.59
17:R:151:ILE:HG22	17:R:155:ARG:HG3	1.84	0.59
19:T:145:LEU:HD12	19:T:178:VAL:CG2	2.32	0.59
20:U:22:PHE:CB	29:d:124:LEU:HD11	2.31	0.59
20:U:223:LEU:O	20:U:223:LEU:HD23	2.01	0.59
20:U:692:ALA:HB2	20:U:733:ALA:HB1	1.83	0.59
20:U:799:LYS:HB2	20:U:923:GLU:HB3	1.84	0.59
21:V:467:TYR:CE2	24:Y:362:LYS:HE2	2.36	0.59
25:Z:47:VAL:HG23	25:Z:47:VAL:O	2.02	0.59
27:b:103:LYS:HB3	34:u:136:GLU:OE2	2.02	0.59
31:f:679:LEU:HD13	31:f:690:VAL:HG21	1.84	0.59
34:u:120:PRO:HG2	34:u:123:TYR:HB2	1.83	0.59
34:u:181:LYS:HD2	34:u:264:THR:CG2	2.32	0.59
1:A:348:LEU:CD1	11:K:175:GLU:HB3	2.32	0.59
2:B:109:VAL:HB	3:C:94:LYS:HB2	1.84	0.59
4:D:384:MET:N	5:E:164:ILE:HD13	2.16	0.59
6:F:220:PRO:CB	6:F:350:ARG:HG2	2.32	0.59
10:J:45:VAL:HG13	10:J:61:LYS:HD3	1.84	0.59
10:J:153:TYR:O	10:J:154:HIS:ND1	2.34	0.59
11:K:39:GLY:O	11:K:167:ALA:HA	2.03	0.59
11:K:52:LYS:HB2	11:K:214:ASN:HA	1.83	0.59
11:K:52:LYS:HB2	11:K:214:ASN:C	2.27	0.59
11:K:181:LEU:HD13	11:K:201:ILE:HD12	1.84	0.59
12:L:66:VAL:HG21	12:L:88:MET:CE	2.32	0.59
12:L:162:GLY:O	12:L:165:SER:HB3	2.02	0.59
17:R:35:MET:HE2	17:R:181:ARG:HG3	1.84	0.59
17:R:108:ASP:OD1	17:R:111:GLU:N	2.28	0.59
18:S:52:CYS:O	18:S:56:GLU:HG2	2.02	0.59
19:T:181:SER:HA	19:T:184:GLU:HG2	1.83	0.59
20:U:583:MET:CE	20:U:614:VAL:HG22	2.28	0.59
21:V:479:ARG:HG2	24:Y:377:LEU:CD1	2.33	0.59
22:W:275:ILE:HG23	22:W:309:PHE:CE2	2.37	0.59
24:Y:133:ALA:O	24:Y:137:ARG:HG3	2.02	0.59
25:Z:231:GLN:CD	26:a:341:LEU:HD21	2.26	0.59
26:a:207:GLY:HA3	26:a:210:VAL:HG22	1.83	0.59
26:a:354:GLU:HA	26:a:357:CYS:SG	2.43	0.59
29:d:212:LEU:HA	29:d:215:LEU:HD12	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:191:ILE:HG21	31:f:207:LEU:HD23	1.83	0.59
33:h:45:VAL:HG23	33:h:46:ASN:OD1	2.02	0.59
3:C:105:ILE:HD12	3:C:108:VAL:CG1	2.32	0.59
5:E:279:THR:HG23	5:E:280:ASN:N	2.17	0.59
6:F:408:LEU:HD23	6:F:408:LEU:O	2.02	0.59
8:H:119:GLN:HE22	9:I:85:VAL:HG21	1.65	0.59
10:J:136:PHE:CE1	10:J:142:PRO:HB3	2.37	0.59
13:M:173:LYS:CA	13:M:176:ILE:HG22	2.28	0.59
14:N:149:LYS:HE3	14:N:178:ALA:CB	2.33	0.59
14:N:158:ASN:O	14:N:162:LEU:HD13	2.01	0.59
16:Q:103:TYR:HA	17:R:93:ARG:NH2	2.17	0.59
17:R:38:MET:HA	17:R:38:MET:HE2	1.84	0.59
17:R:157:VAL:O	17:R:160:LEU:HG	2.02	0.59
20:U:131:GLU:O	20:U:134:VAL:HG12	2.03	0.59
22:W:105:VAL:HG13	22:W:128:LEU:CD1	2.32	0.59
22:W:263:TRP:CE3	22:W:295:LYS:HE2	2.37	0.59
23:X:147:LEU:HD11	23:X:177:TYR:CE1	2.38	0.59
24:Y:134:LEU:HD23	24:Y:167:LEU:HD22	1.84	0.59
27:b:33:VAL:HG21	27:b:75:LEU:HG	1.83	0.59
29:d:236:LEU:HD12	29:d:241:TYR:HE1	1.68	0.59
29:d:301:ASP:HA	29:d:304:LYS:NZ	2.17	0.59
31:f:413:SER:OG	31:f:819:TYR:OH	2.13	0.59
31:f:557:TRP:O	31:f:560:LEU:HB3	2.02	0.59
31:f:592:ASN:OD1	31:f:592:ASN:C	2.45	0.59
1:A:134:ILE:CD1	1:A:140:VAL:HG11	2.32	0.59
1:A:159:PRO:O	1:A:162:THR:HG22	2.02	0.59
1:A:271:LEU:HD12	1:A:316:LYS:O	2.02	0.59
1:A:290:GLY:HA2	6:F:296:PHE:CD2	2.38	0.59
5:E:235:ILE:HD12	5:E:236:ASP:N	2.17	0.59
5:E:356:ARG:O	5:E:357:ALA:HB3	2.03	0.59
7:G:121:ILE:O	7:G:124:VAL:HG12	2.01	0.59
8:H:10:LEU:CD2	8:H:129:PRO:HG3	2.33	0.59
9:I:28:ILE:HD11	9:I:77:ALA:O	2.02	0.59
10:J:171:PHE:O	10:J:175:ASN:ND2	2.35	0.59
11:K:199:LEU:HD11	11:K:215:ILE:HD13	1.84	0.59
12:L:132:LEU:HB2	12:L:147:THR:OG1	2.02	0.59
13:M:46:VAL:HG21	13:M:189:ILE:HG23	1.85	0.59
15:P:8:TYR:CE2	15:P:10:ASP:HB2	2.37	0.59
15:P:163:ILE:HG23	15:P:170:GLY:CA	2.31	0.59
17:R:93:ARG:O	17:R:95:ARG:NH2	2.34	0.59
19:T:190:GLY:HA2	19:T:210:LEU:HD13	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:199:THR:HG22	19:T:204:ARG:NH2	2.17	0.59
20:U:268:LEU:HB2	20:U:326:ILE:HD11	1.84	0.59
22:W:48:LEU:HD21	22:W:89:LEU:CD2	2.32	0.59
23:X:374:PHE:HZ	23:X:385:LEU:HD11	1.67	0.59
24:Y:313:SER:HA	24:Y:354:VAL:O	2.02	0.59
25:Z:127:LYS:HA	25:Z:127:LYS:HE3	1.83	0.59
26:a:112:ILE:HG12	26:a:141:MET:HE3	1.84	0.59
26:a:296:ILE:HG21	26:a:307:VAL:HG23	1.83	0.59
27:b:22:LEU:H	27:b:22:LEU:HD12	1.67	0.59
28:c:209:LYS:HB2	28:c:214:GLN:HE21	1.67	0.59
31:f:282:PHE:CD1	31:f:294:MET:CE	2.73	0.59
31:f:284:SER:C	31:f:286:LYS:NZ	2.61	0.59
31:f:297:MET:O	31:f:297:MET:HE3	2.02	0.59
33:h:173:MET:HA	33:h:176:LEU:CD1	2.26	0.59
1:A:166:VAL:O	1:A:167:GLU:HG2	2.02	0.59
3:C:48:GLN:HB3	4:D:65:GLN:NE2	2.16	0.59
4:D:143:LEU:CD1	5:E:70:ILE:HD11	2.30	0.59
5:E:159:PHE:HE2	5:E:167:PRO:HB3	1.67	0.59
8:H:44:VAL:HG11	8:H:146:LEU:HD13	1.84	0.59
11:K:8:TYR:CD2	11:K:17:PRO:HD3	2.36	0.59
11:K:107:MET:HG2	11:K:111:SER:CB	2.32	0.59
11:K:113:THR:O	11:K:116:VAL:HG12	2.02	0.59
11:K:117:SER:OG	12:L:82:ARG:NH1	2.32	0.59
12:L:223:ILE:N	12:L:223:ILE:HD12	2.18	0.59
18:S:19:ARG:HG3	18:S:26:ILE:HD11	1.83	0.59
19:T:75:TYR:CD1	19:T:83:MET:HB3	2.36	0.59
20:U:678:ASP:OD1	20:U:679:PRO:HD2	2.01	0.59
21:V:284:GLU:HA	21:V:287:ARG:HD3	1.85	0.59
22:W:448:LYS:HD2	25:Z:155:PHE:O	2.03	0.59
23:X:190:LEU:HD21	23:X:214:SER:CB	2.32	0.59
24:Y:282:MET:HG2	24:Y:288:PHE:HB3	1.85	0.59
26:a:190:VAL:HG13	26:a:225:LEU:HD21	1.84	0.59
31:f:55:GLU:O	31:f:58:MET:HG3	2.03	0.59
31:f:105:LYS:HG3	31:f:106:LEU:N	2.16	0.59
31:f:881:GLU:CA	31:f:894:LEU:HD22	2.32	0.59
32:g:103:THR:HB	32:g:115:LYS:HE2	1.84	0.59
33:h:7:THR:HG22	33:h:8:GLY:N	2.16	0.59
2:B:230:THR:CG2	2:B:353:PHE:HB3	2.32	0.59
4:D:293:LEU:CD1	4:D:321:LEU:HD13	2.32	0.59
5:E:125:GLU:CA	5:E:194:ASN:HA	2.26	0.59
5:E:167:PRO:HD2	5:E:168:LYS:HZ3	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:57:SER:O	6:F:61:ARG:HG2	2.02	0.59
8:H:184:LEU:CD2	8:H:214:ASN:HB3	2.33	0.59
20:U:524:LYS:O	20:U:524:LYS:HG3	2.02	0.59
20:U:838:LYS:C	20:U:838:LYS:HD3	2.28	0.59
21:V:113:LEU:CD2	21:V:171:VAL:HA	2.32	0.59
21:V:342:ILE:HD11	21:V:368:ARG:HG3	1.80	0.59
21:V:408:ARG:CG	21:V:446:VAL:HG12	2.32	0.59
23:X:114:ILE:CD1	23:X:130:GLU:HG2	2.31	0.59
26:a:77:VAL:HG12	26:a:113:LEU:HD22	1.85	0.59
26:a:293:PHE:CE1	26:a:294:GLU:HG3	2.38	0.59
26:a:319:LEU:N	26:a:319:LEU:HD12	2.16	0.59
28:c:303:MET:HE2	29:d:335:LEU:HB3	1.83	0.59
29:d:243:LYS:HD2	29:d:246:LEU:HD21	1.83	0.59
31:f:66:LYS:HD3	31:f:113:MET:HE3	1.83	0.59
31:f:282:PHE:CE1	31:f:294:MET:HE1	2.35	0.59
31:f:548:THR:HA	31:f:551:LYS:HE3	1.83	0.59
31:f:731:MET:HE3	31:f:731:MET:HA	1.84	0.59
32:g:87:VAL:HG22	32:g:155:VAL:HG23	1.84	0.59
1:A:143:ASP:OD1	1:A:147:TYR:N	2.36	0.59
1:A:212:VAL:CG1	1:A:341:ILE:HD12	2.32	0.59
2:B:50:PRO:HG3	31:f:669:GLU:HB3	1.84	0.59
4:D:105:SER:OG	4:D:107:THR:HG23	2.03	0.59
5:E:276:ILE:O	5:E:276:ILE:HG22	2.03	0.59
7:G:153:LYS:HE3	7:G:163:PHE:CE2	2.38	0.59
8:H:111:VAL:HG22	8:H:136:ILE:CD1	2.29	0.59
9:I:38:LEU:CA	9:I:43:VAL:HG23	2.31	0.59
14:N:192:ASP:HA	14:N:196:LYS:HZ3	1.67	0.59
15:P:212:LEU:HD11	16:Q:201:LYS:HA	1.84	0.59
17:R:21:ALA:O	17:R:28:MET:N	2.34	0.59
17:R:71:ASN:HB3	17:R:73:TYR:CE1	2.37	0.59
20:U:538:GLU:OE1	34:u:234:ARG:NH2	2.23	0.59
20:U:599:ILE:HD11	20:U:626:LEU:CD2	2.32	0.59
20:U:637:VAL:HG13	20:U:652:ALA:HB1	1.83	0.59
20:U:641:SER:HB2	20:U:675:MET:SD	2.42	0.59
20:U:653:ALA:CB	20:U:675:MET:HE1	2.29	0.59
20:U:771:PHE:CD1	28:c:181:LEU:HD11	2.36	0.59
21:V:289:LEU:CB	21:V:312:ALA:HB2	2.33	0.59
22:W:194:LEU:CD2	22:W:202:THR:HG21	2.31	0.59
24:Y:187:TYR:O	24:Y:191:ILE:HG22	2.03	0.59
26:a:35:HIS:CD2	27:b:15:TYR:HD1	2.20	0.59
29:d:142:ILE:HD12	29:d:142:ILE:H	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:156:ILE:HD13	29:d:255:SER:HB3	1.84	0.59
31:f:253:LEU:HD23	31:f:268:LEU:HB2	1.85	0.59
31:f:564:LEU:HD22	31:f:794:ALA:HB1	1.84	0.59
31:f:671:ALA:HA	31:f:674:THR:HG22	1.83	0.59
33:h:21:VAL:HA	33:h:190:ALA:O	2.02	0.59
2:B:142:ASP:OD1	2:B:143:LEU:HD12	2.02	0.59
3:C:87:VAL:HG21	3:C:116:LEU:CD1	2.24	0.59
4:D:100:THR:HG21	4:D:112:TYR:CE2	2.38	0.59
7:G:155:ASP:HB2	7:G:156:PRO:CD	2.31	0.59
8:H:65:VAL:CG2	8:H:209:GLU:HG2	2.32	0.59
13:M:197:ILE:HG21	13:M:211:LEU:HD13	1.82	0.59
13:M:228:PRO:HB2	13:M:230:ASP:OD1	2.02	0.59
14:N:28:ASN:ND2	15:P:122:LEU:HD21	2.17	0.59
17:R:138:LEU:O	17:R:142:ILE:CD1	2.51	0.59
19:T:148:LEU:HD11	19:T:178:VAL:HG21	1.84	0.59
23:X:368:MET:HE3	23:X:374:PHE:CD1	2.37	0.59
24:Y:348:ASP:OD2	24:Y:351:ASN:ND2	2.35	0.59
25:Z:10:VAL:HA	25:Z:161:GLU:O	2.03	0.59
26:a:4:VAL:O	26:a:7:PHE:HB3	2.03	0.59
26:a:277:LEU:HD11	26:a:311:VAL:HG22	1.85	0.59
28:c:107:MET:HE2	34:u:272:ALA:HA	1.84	0.59
29:d:251:ILE:HD11	29:d:260:ILE:CG1	2.32	0.59
31:f:59:LEU:CD1	31:f:74:ALA:HA	2.33	0.59
31:f:221:ILE:HD12	31:f:255:VAL:HG13	1.83	0.59
31:f:282:PHE:CZ	31:f:307:LEU:HD21	2.38	0.59
31:f:560:LEU:HD12	31:f:801:VAL:CG2	2.33	0.59
31:f:671:ALA:O	31:f:674:THR:HG22	2.01	0.59
33:h:169:VAL:HA	33:h:172:CYS:HB2	1.84	0.59
2:B:78:PHE:HA	2:B:81:ASN:ND2	2.17	0.59
3:C:186:VAL:CG2	3:C:315:ILE:CD1	2.80	0.59
3:C:232:ARG:HG3	3:C:275:GLU:OE2	2.02	0.59
5:E:69:PHE:HZ	5:E:89:LYS:HD2	1.68	0.59
6:F:200:GLU:HA	6:F:204:LEU:HB2	1.84	0.59
7:G:70:PHE:CD2	7:G:91:VAL:HG21	2.37	0.59
8:H:65:VAL:HG22	8:H:75:VAL:CG1	2.31	0.59
13:M:37:ILE:HG22	13:M:164:ALA:CB	2.32	0.59
17:R:102:LEU:HD23	17:R:103:LEU:H	1.66	0.59
18:S:167:ASP:OD1	18:S:169:TYR:N	2.28	0.59
20:U:220:LEU:HD22	20:U:225:ASP:HB3	1.85	0.59
22:W:96:GLN:HE22	22:W:100:ALA:HB3	1.67	0.59
22:W:420:ASP:N	22:W:420:ASP:OD1	2.31	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:202:ASN:ND2	26:a:361:LYS:HE3	2.16	0.59
26:a:123:LEU:HD12	26:a:127:ASP:HB3	1.84	0.59
26:a:317:VAL:CG1	26:a:319:LEU:HD11	2.32	0.59
29:d:156:ILE:HD12	29:d:157:LEU:N	2.18	0.59
31:f:297:MET:HE3	31:f:297:MET:CA	2.32	0.59
31:f:700:SER:HB2	31:f:777:THR:HG23	1.83	0.59
34:u:176:LYS:HE2	34:u:235:TYR:OH	2.03	0.59
5:E:40:TYR:HD2	6:F:73:ILE:HG12	1.68	0.59
5:E:336:ASP:OD1	5:E:336:ASP:N	2.36	0.59
5:E:352:MET:HA	5:E:352:MET:CE	2.26	0.59
7:G:111:VAL:CG2	7:G:140:LEU:HB3	2.32	0.59
7:G:210:PHE:CE1	7:G:215:ILE:HD11	2.38	0.59
11:K:70:ILE:HG22	11:K:74:ILE:HD11	1.85	0.59
12:L:228:ASP:O	12:L:231:PRO:HD2	2.03	0.59
20:U:146:LYS:HD2	20:U:149:GLN:HE22	1.68	0.59
20:U:226:PRO:O	20:U:229:VAL:HG12	2.02	0.59
20:U:796:LYS:HD2	20:U:924:LEU:HD21	1.84	0.59
21:V:322:VAL:HG22	21:V:326:GLN:NE2	2.12	0.59
22:W:86:ASN:ND2	22:W:90:LEU:HD23	2.17	0.59
22:W:268:LYS:O	22:W:271:VAL:HG12	2.03	0.59
24:Y:237:ARG:HA	24:Y:241:ILE:HB	1.85	0.59
24:Y:268:TYR:OH	24:Y:306:GLN:HG2	2.03	0.59
28:c:33:ILE:HA	28:c:69:VAL:CG2	2.33	0.59
29:d:284:PHE:CZ	29:d:296:PRO:HB3	2.35	0.59
31:f:399:LEU:HD13	31:f:410:ALA:HB3	1.84	0.59
32:g:85:ILE:HD11	32:g:131:ILE:HD12	1.85	0.59
33:h:176:LEU:O	33:h:180:ASP:HB3	2.02	0.59
1:A:199:GLU:HA	1:A:202:VAL:CG1	2.32	0.58
2:B:48:LYS:HE2	2:B:241:ASN:O	2.03	0.58
4:D:52:GLU:O	4:D:56:VAL:HG22	2.02	0.58
5:E:22:ILE:HG23	5:E:25:ARG:NH2	2.18	0.58
6:F:64:HIS:CE1	27:b:69:GLY:HA3	2.37	0.58
8:H:83:TYR:CD1	8:H:134:LEU:HD21	2.38	0.58
13:M:81:LEU:HG	13:M:85:ARG:HH21	1.68	0.58
14:N:19:ARG:HD2	14:N:171:GLY:N	2.18	0.58
14:N:149:LYS:HE3	14:N:178:ALA:HB1	1.85	0.58
20:U:779:LEU:HD12	20:U:782:ALA:HB3	1.83	0.58
20:U:788:VAL:HG12	20:U:909:GLY:HA2	1.85	0.58
20:U:838:LYS:O	20:U:841:LYS:HG3	2.03	0.58
20:U:904:LYS:HG3	20:U:905:PRO:HD2	1.85	0.58
21:V:72:LEU:CD2	21:V:75:ILE:HD11	2.32	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:268:GLU:HG3	21:V:299:GLN:HE22	1.67	0.58
21:V:442:ILE:HD11	21:V:451:ILE:HD11	1.85	0.58
26:a:206:LEU:HD23	26:a:268:LEU:CD1	2.33	0.58
27:b:35:ILE:HG21	27:b:184:ILE:HG22	1.85	0.58
29:d:271:ILE:O	29:d:275:ILE:HG22	2.03	0.58
30:e:62:LYS:HA	30:e:65:TYR:CE2	2.38	0.58
2:B:261:GLY:O	2:B:265:LYS:HE2	2.03	0.58
7:G:88:ARG:CD	13:M:117:MET:HE3	2.33	0.58
7:G:113:MET:HE1	15:P:69:SER:C	2.28	0.58
10:J:32:ALA:HB3	10:J:161:ILE:CG1	2.34	0.58
11:K:78:MET:HG3	11:K:85:ALA:CB	2.32	0.58
14:N:48:SER:O	14:N:52:THR:HG23	2.03	0.58
16:Q:110:ALA:HB2	16:Q:121:ILE:HG22	1.84	0.58
16:Q:125:ASP:OD1	16:Q:129:CYS:HB3	2.02	0.58
20:U:583:MET:SD	20:U:618:ALA:HB2	2.43	0.58
23:X:141:LYS:HG3	23:X:143:TYR:OH	2.03	0.58
23:X:328:ASP:OD1	23:X:364:LYS:HE2	2.03	0.58
24:Y:285:ASP:O	24:Y:289:ALA:HB2	2.03	0.58
27:b:107:MET:HB3	27:b:136:VAL:HG23	1.84	0.58
28:c:67:VAL:HG13	28:c:109:VAL:HG11	1.85	0.58
31:f:552:ASP:N	31:f:552:ASP:OD1	2.35	0.58
31:f:880:ALA:O	31:f:894:LEU:HB2	2.03	0.58
32:g:113:ARG:HA	32:g:116:ILE:HD12	1.84	0.58
32:g:129:ILE:HG23	32:g:154:MET:O	2.03	0.58
3:C:144:PRO:CB	3:C:201:ARG:HG2	2.32	0.58
7:G:163:PHE:CD2	7:G:166:THR:HB	2.37	0.58
8:H:155:TYR:HE1	9:I:60:PHE:HE2	1.51	0.58
11:K:96:THR:HA	11:K:107:MET:HE2	1.84	0.58
13:M:99:ARG:HD2	33:h:69:GLN:OE1	2.03	0.58
15:P:212:LEU:HG	16:Q:201:LYS:CD	2.32	0.58
16:Q:110:ALA:HB1	16:Q:121:ILE:HG22	1.85	0.58
20:U:138:PHE:CZ	20:U:153:ILE:HG22	2.39	0.58
27:b:30:GLN:O	27:b:33:VAL:HG22	2.03	0.58
28:c:190:GLN:HG2	28:c:191:ALA:H	1.68	0.58
31:f:425:GLY:HA3	31:f:451:VAL:HG11	1.85	0.58
1:A:164:MET:CE	1:A:240:VAL:HA	2.33	0.58
1:A:190:VAL:HG11	1:A:212:VAL:CG2	2.29	0.58
2:B:86:LYS:HE3	2:B:87:PRO:HD2	1.84	0.58
3:C:221:GLN:OE1	3:C:221:GLN:HA	2.03	0.58
3:C:381:GLU:O	3:C:385:MET:HG3	2.04	0.58
5:E:151:LEU:HD12	5:E:151:LEU:H	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:362:ARG:HD2	6:F:388:THR:OG1	2.03	0.58
9:I:245:ALA:O	9:I:249:ARG:HG2	2.02	0.58
11:K:70:ILE:HD11	11:K:89:ILE:HG23	1.85	0.58
11:K:199:LEU:HB3	11:K:241:ILE:CD1	2.32	0.58
13:M:36:ALA:CB	13:M:49:VAL:HG12	2.34	0.58
16:Q:15:LYS:HZ2	16:Q:121:ILE:CD1	2.15	0.58
16:Q:54:ALA:O	16:Q:106:GLU:N	2.23	0.58
20:U:649:ARG:HD2	20:U:678:ASP:OD2	2.02	0.58
20:U:793:LYS:HA	20:U:793:LYS:HE2	1.85	0.58
22:W:413:ILE:HG22	22:W:413:ILE:O	2.04	0.58
24:Y:61:LEU:HD13	24:Y:63:TRP:CZ2	2.39	0.58
25:Z:109:ASN:ND2	25:Z:140:SER:HB2	2.18	0.58
25:Z:224:HIS:CB	26:a:218:MET:HE1	2.32	0.58
28:c:32:TYR:O	28:c:69:VAL:HG22	2.03	0.58
28:c:191:ALA:HB1	28:c:196:LEU:HD22	1.85	0.58
31:f:79:ARG:HD3	31:f:125:ILE:CD1	2.33	0.58
31:f:497:VAL:O	31:f:501:LEU:HD23	2.03	0.58
31:f:683:GLU:OE1	31:f:683:GLU:HA	2.02	0.58
2:B:432:GLU:O	2:B:434:THR:HG23	2.03	0.58
4:D:120:ASP:HB3	4:D:123:LEU:HG	1.85	0.58
4:D:267:ILE:HG21	4:D:309:MET:HB3	1.86	0.58
4:D:289:LEU:O	4:D:293:LEU:HD13	2.04	0.58
6:F:436:GLN:HE22	11:K:28:ILE:HG21	1.68	0.58
9:I:103:GLU:CD	17:R:79:ALA:HB2	2.28	0.58
9:I:140:ASP:OD2	9:I:146:GLN:OE1	2.20	0.58
15:P:44:CYS:O	15:P:98:LEU:HD13	2.02	0.58
16:Q:120:PHE:CE1	16:Q:122:CYS:HB2	2.39	0.58
18:S:82:LEU:CD2	18:S:86:MET:HE3	2.33	0.58
19:T:63:THR:O	19:T:67:ILE:HG13	2.03	0.58
19:T:64:LEU:HD11	19:T:96:LEU:CD2	2.34	0.58
20:U:884:VAL:HG21	20:U:889:LEU:HD12	1.86	0.58
21:V:230:PHE:CE2	21:V:231:LEU:CD1	2.87	0.58
21:V:411:SER:CB	21:V:447:ILE:HG23	2.33	0.58
21:V:437:ILE:HD11	29:d:238:GLU:O	2.03	0.58
22:W:210:ASN:OD1	22:W:212:LYS:HG3	2.04	0.58
22:W:274:VAL:CG2	22:W:286:LEU:HD23	2.33	0.58
22:W:438:LEU:CD2	25:Z:233:VAL:HG23	2.25	0.58
27:b:25:ARG:HH12	27:b:145:GLU:H	1.50	0.58
29:d:208:PHE:CE2	29:d:233:GLU:HG2	2.37	0.58
31:f:196:MET:HE3	31:f:196:MET:CA	2.33	0.58
31:f:216:MET:HA	31:f:216:MET:CE	2.31	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:485:LEU:HD21	31:f:497:VAL:HG11	1.85	0.58
31:f:570:GLY:HA3	31:f:600:TYR:CD1	2.38	0.58
33:h:109:THR:HG22	33:h:127:MET:H	1.68	0.58
2:B:230:THR:HG21	2:B:353:PHE:O	2.03	0.58
3:C:132:ASP:OD2	3:C:229:ARG:NH1	2.32	0.58
3:C:251:ILE:HG22	3:C:295:THR:CB	2.31	0.58
7:G:50:ILE:HD11	7:G:69:LEU:HD22	1.85	0.58
10:J:105:GLU:HA	10:J:145:TYR:HE2	1.68	0.58
10:J:233:GLU:HA	10:J:236:LYS:NZ	2.19	0.58
11:K:104:ASN:HB2	19:T:90:ALA:HB2	1.84	0.58
15:P:50:ALA:CB	16:Q:127:ILE:HG23	2.32	0.58
16:Q:71:LEU:CA	16:Q:90:MET:HE1	2.33	0.58
20:U:656:LEU:HD22	20:U:668:ALA:HB2	1.84	0.58
21:V:72:LEU:HA	21:V:75:ILE:CG1	2.33	0.58
26:a:31:LYS:HB3	26:a:33:LEU:HG	1.86	0.58
26:a:76:LEU:HD23	26:a:104:VAL:HG11	1.84	0.58
26:a:245:VAL:CG1	26:a:247:ARG:HD3	2.33	0.58
27:b:36:VAL:HG21	27:b:110:ILE:HD13	1.85	0.58
28:c:115:HIS:HB3	28:c:118:PHE:CD1	2.38	0.58
31:f:276:GLU:OE1	31:f:276:GLU:N	2.37	0.58
31:f:343:LYS:HG3	31:f:773:LYS:CE	2.33	0.58
33:h:96:MET:HE2	33:h:125:VAL:CG1	2.34	0.58
33:h:145:LEU:HD23	33:h:146:ALA:N	2.18	0.58
33:h:166:ARG:O	33:h:169:VAL:HG22	2.04	0.58
34:u:192:LYS:NZ	34:u:219:GLU:OE2	2.37	0.58
1:A:284:ARG:HG3	1:A:296:GLN:HG2	1.85	0.58
1:A:349:GLU:HA	1:A:349:GLU:OE1	2.03	0.58
3:C:399:MET:HG3	8:H:158:TRP:CZ2	2.39	0.58
5:E:83:CYS:HB3	5:E:89:LYS:HE3	1.86	0.58
5:E:198:VAL:HG23	5:E:232:MET:HA	1.85	0.58
6:F:256:LEU:HD13	6:F:268:VAL:CG2	2.34	0.58
6:F:364:ARG:O	6:F:368:ILE:HG13	2.04	0.58
12:L:184:LEU:CD1	12:L:214:ILE:HD13	2.31	0.58
14:N:115:PRO:HG3	33:h:36:PHE:CE2	2.39	0.58
16:Q:20:VAL:HG12	16:Q:190:ILE:HB	1.86	0.58
16:Q:25:ASP:OD1	16:Q:26:ARG:N	2.37	0.58
17:R:4:LEU:HD23	17:R:17:SER:OG	2.03	0.58
19:T:38:ARG:HH21	33:h:151:ARG:HG2	1.68	0.58
19:T:145:LEU:CD1	19:T:178:VAL:HG22	2.34	0.58
20:U:345:ASN:HB2	20:U:743:ASN:HD21	1.67	0.58
20:U:661:ALA:HB1	20:U:746:ILE:CG2	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:268:LYS:NZ	22:W:336:PRO:HG2	2.19	0.58
22:W:451:MET:HE2	25:Z:101:LEU:H	1.68	0.58
23:X:96:PHE:CD2	23:X:109:LEU:HD22	2.38	0.58
23:X:173:GLU:O	23:X:176:THR:HG22	2.04	0.58
23:X:379:ASP:CG	23:X:384:VAL:HG22	2.29	0.58
24:Y:181:LYS:HG3	24:Y:200:LEU:HG	1.86	0.58
28:c:41:MET:HE3	28:c:145:VAL:HG21	1.85	0.58
28:c:281:LYS:HA	28:c:284:LEU:HB3	1.85	0.58
31:f:391:LEU:HG	31:f:417:ILE:HG13	1.84	0.58
31:f:558:LEU:HB2	31:f:559:PRO:HD3	1.84	0.58
31:f:570:GLY:HA3	31:f:600:TYR:CE1	2.38	0.58
9:I:135:LEU:HD21	9:I:162:THR:OG1	2.03	0.58
11:K:229:PHE:CD2	11:K:233:GLU:HG3	2.39	0.58
13:M:151:ILE:HG12	13:M:157:SER:HB2	1.86	0.58
16:Q:15:LYS:HZ2	16:Q:121:ILE:HD11	1.69	0.58
18:S:81:LYS:HG2	18:S:120:ARG:CZ	2.33	0.58
20:U:406:ALA:HA	20:U:445:ALA:HB2	1.85	0.58
20:U:509:GLY:HA3	20:U:544:ILE:CD1	2.34	0.58
20:U:615:ARG:HH21	20:U:645:ASN:HD22	1.51	0.58
20:U:807:LYS:HA	20:U:874:ASN:HA	1.86	0.58
21:V:68:ASP:OD1	21:V:112:VAL:HG13	2.04	0.58
23:X:273:GLY:O	23:X:277:LEU:HG	2.03	0.58
25:Z:15:VAL:O	25:Z:19:VAL:HG23	2.03	0.58
29:d:251:ILE:HD11	29:d:260:ILE:CB	2.33	0.58
29:d:272:ALA:CB	29:d:291:LEU:HD11	2.30	0.58
31:f:100:ARG:HH11	31:f:133:MET:HE2	1.68	0.58
31:f:789:SER:O	31:f:793:VAL:HG12	2.03	0.58
32:g:129:ILE:HB	32:g:136:LEU:HG	1.86	0.58
1:A:214:LEU:HD23	1:A:343:PHE:CZ	2.39	0.58
6:F:389:ASP:OD2	12:L:18:ARG:NH1	2.37	0.58
10:J:23:GLN:HA	10:J:149:PRO:HG3	1.85	0.58
12:L:15:PRO:CA	13:M:25:TYR:CE2	2.83	0.58
15:P:18:THR:OG1	15:P:29:LYS:O	2.22	0.58
15:P:50:ALA:HB3	16:Q:127:ILE:CG2	2.32	0.58
15:P:83:LEU:O	15:P:87:LEU:HD23	2.04	0.58
20:U:28:ASN:HB2	20:U:63:VAL:CG2	2.33	0.58
20:U:399:TRP:CH2	20:U:472:ILE:CG2	2.87	0.58
22:W:265:GLN:OE1	22:W:265:GLN:HA	2.03	0.58
22:W:287:VAL:CG1	22:W:306:LEU:HD11	2.33	0.58
23:X:403:THR:CG2	25:Z:262:LEU:HD11	2.34	0.58
25:Z:35:VAL:HB	25:Z:97:THR:CG2	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:191:ILE:CD1	28:c:300:LEU:HD23	2.34	0.58
25:Z:209:ARG:HG2	25:Z:213:GLU:OE2	2.03	0.58
26:a:320:VAL:CG1	26:a:333:MET:HE1	2.34	0.58
29:d:243:LYS:HA	29:d:246:LEU:CD2	2.33	0.58
31:f:170:TRP:CG	31:f:211:ILE:HG22	2.39	0.58
31:f:208:LEU:CD1	31:f:217:LEU:CD2	2.58	0.58
31:f:493:ASN:OD1	31:f:525:ILE:O	2.22	0.58
1:A:25:LEU:HB3	1:A:30:ILE:CD1	2.34	0.58
1:A:65:ILE:HG23	1:A:66:LYS:H	1.69	0.58
2:B:223:ILE:CG2	2:B:347:ILE:HG21	2.34	0.58
4:D:106:THR:HG21	5:E:78:ARG:HG2	1.85	0.58
4:D:286:GLN:O	4:D:290:LEU:HG	2.04	0.58
6:F:430:LYS:HG2	11:K:18:GLU:OE1	2.04	0.58
9:I:106:PRO:O	9:I:108:GLU:N	2.36	0.58
9:I:245:ALA:O	9:I:248:GLU:HG3	2.04	0.58
10:J:105:GLU:HA	10:J:145:TYR:CE2	2.39	0.58
10:J:160:ALA:HB2	10:J:168:VAL:CG1	2.34	0.58
13:M:37:ILE:HG22	13:M:164:ALA:HB2	1.84	0.58
14:N:127:ILE:HG13	14:N:132:SER:CB	2.34	0.58
18:S:59:LEU:HD21	18:S:79:ALA:HB1	1.84	0.58
19:T:63:THR:OG1	33:h:94:ARG:NH2	2.34	0.58
20:U:130:LEU:HD12	20:U:133:ILE:CG2	2.34	0.58
21:V:76:LYS:HB2	21:V:147:PHE:HE1	1.69	0.58
21:V:459:GLN:NE2	21:V:460:SER:O	2.36	0.58
22:W:30:GLU:O	22:W:33:LYS:HG2	2.03	0.58
22:W:252:ASP:OD1	22:W:252:ASP:O	2.22	0.58
26:a:7:PHE:CE2	26:a:60:TYR:HB2	2.33	0.58
28:c:57:MET:SD	28:c:69:VAL:HG11	2.44	0.58
31:f:324:VAL:HG11	32:g:97:ARG:NH2	2.18	0.58
31:f:753:ALA:HA	31:f:759:LEU:CD1	2.27	0.58
33:h:60:PHE:HB2	33:h:108:ASN:ND2	2.19	0.58
34:u:136:GLU:HG2	34:u:168:THR:CG2	2.34	0.58
2:B:92:GLN:O	2:B:96:ARG:HG2	2.04	0.57
4:D:235:PHE:HB3	4:D:288:ILE:HD13	1.86	0.57
4:D:293:LEU:HD11	4:D:321:LEU:HD13	1.84	0.57
5:E:59:GLU:OE1	5:E:97:ARG:HG3	2.03	0.57
5:E:194:ASN:HB2	5:E:228:CYS:HB2	1.86	0.57
6:F:171:ARG:H	6:F:171:ARG:HD3	1.69	0.57
8:H:68:ILE:CG2	8:H:110:LEU:HD11	2.33	0.57
8:H:137:CYS:SG	8:H:138:GLY:N	2.76	0.57
10:J:181:ILE:HD12	10:J:181:ILE:O	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:186:HIS:NE2	11:K:189:MET:HG2	2.19	0.57
17:R:183:ILE:CD1	17:R:188:ILE:HD13	2.35	0.57
20:U:524:LYS:NZ	20:U:563:ALA:HB2	2.18	0.57
20:U:560:MET:CE	20:U:593:SER:HB2	2.34	0.57
21:V:342:ILE:HD12	21:V:368:ARG:HG3	1.86	0.57
21:V:446:VAL:C	21:V:447:ILE:HD13	2.29	0.57
22:W:158:ASP:HB3	22:W:161:GLU:CD	2.29	0.57
25:Z:44:GLN:HB3	25:Z:47:VAL:HG22	1.86	0.57
26:a:24:ARG:HH11	26:a:40:GLN:HE21	1.50	0.57
27:b:18:ASN:OD1	27:b:25:ARG:NH2	2.36	0.57
31:f:252:ALA:O	31:f:256:PHE:CE1	2.57	0.57
31:f:344:VAL:HG12	31:f:346:ASP:H	1.68	0.57
31:f:418:LEU:O	31:f:451:VAL:HG22	2.03	0.57
31:f:564:LEU:HD22	31:f:794:ALA:CB	2.34	0.57
1:A:386:ARG:O	1:A:390:THR:HG23	2.04	0.57
5:E:161:ARG:HH12	22:W:200:ILE:HG21	1.70	0.57
5:E:221:TYR:HA	5:E:224:ASP:CG	2.29	0.57
10:J:55:ASP:OD2	10:J:57:ARG:HG2	2.04	0.57
10:J:68:ASN:HD21	10:J:137:ASP:HA	1.69	0.57
12:L:6:TYR:CD2	12:L:15:PRO:HD3	2.39	0.57
15:P:40:ASN:CG	15:P:73:LEU:HD22	2.29	0.57
17:R:39:SER:OG	17:R:40:GLU:N	2.36	0.57
17:R:107:TYR:CE1	17:R:112:GLY:HA2	2.36	0.57
19:T:54:CYS:HB2	19:T:106:VAL:CG1	2.34	0.57
20:U:419:ALA:HB1	20:U:449:ILE:HD13	1.86	0.57
20:U:700:GLU:OE1	20:U:704:PRO:HA	2.04	0.57
21:V:160:LEU:O	21:V:163:VAL:HG22	2.05	0.57
22:W:340:VAL:HA	22:W:350:ARG:NH1	2.19	0.57
23:X:260:MET:CE	23:X:326:LEU:HD13	2.32	0.57
23:X:415:TYR:CE1	24:Y:383:LEU:HD23	2.39	0.57
24:Y:222:TYR:O	24:Y:226:VAL:HG13	2.04	0.57
26:a:58:LYS:HG2	26:a:96:PHE:HZ	1.69	0.57
27:b:68:THR:HA	27:b:71:ILE:HD12	1.86	0.57
31:f:229:VAL:O	31:f:233:LEU:HD22	2.03	0.57
31:f:290:VAL:HA	31:f:890:VAL:CG1	2.33	0.57
31:f:343:LYS:CG	31:f:773:LYS:HE2	2.34	0.57
31:f:680:ARG:HD2	31:f:681:TYR:HD1	1.68	0.57
4:D:161:ASP:OD1	4:D:161:ASP:O	2.22	0.57
6:F:128:THR:HG22	6:F:128:THR:O	2.04	0.57
6:F:288:LEU:HD21	6:F:342:LEU:HD21	1.86	0.57
16:Q:61:GLN:NE2	17:R:124:LEU:CG	2.66	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:67:LEU:HD13	16:Q:94:LEU:HD23	1.85	0.57
16:Q:102:PRO:CB	16:Q:126:LEU:HD21	2.33	0.57
17:R:42:ILE:HD11	17:R:104:LEU:CD2	2.34	0.57
17:R:55:GLN:CD	18:S:88:TYR:CD2	2.82	0.57
20:U:68:PHE:CD2	20:U:76:GLU:HB2	2.39	0.57
20:U:716:VAL:HG23	20:U:722:ASP:OD2	2.04	0.57
21:V:224:LEU:HB3	21:V:257:ASN:OD1	2.05	0.57
21:V:298:ILE:HD13	21:V:397:ARG:HH22	1.69	0.57
21:V:331:LEU:O	21:V:335:VAL:HG12	2.04	0.57
22:W:89:LEU:O	22:W:93:ARG:HG2	2.04	0.57
23:X:87:ARG:HH12	23:X:91:SER:HB3	1.69	0.57
26:a:12:GLN:HG2	26:a:22:TRP:HB2	1.86	0.57
26:a:26:GLU:O	26:a:30:THR:HG23	2.04	0.57
26:a:245:VAL:HG12	26:a:247:ARG:H	1.69	0.57
28:c:125:VAL:HG21	34:u:288:SER:O	2.05	0.57
29:d:268:ARG:HD3	29:d:293:PHE:CE1	2.38	0.57
31:f:80:ARG:NH1	31:f:80:ARG:HA	2.18	0.57
31:f:394:ASP:OD1	31:f:397:LYS:HD3	2.04	0.57
31:f:470:VAL:CG2	31:f:500:LEU:HD21	2.30	0.57
32:g:110:ARG:O	32:g:113:ARG:HG3	2.04	0.57
1:A:158:ASP:HB3	1:A:161:VAL:HB	1.85	0.57
1:A:164:MET:CE	1:A:240:VAL:HG13	2.34	0.57
1:A:240:VAL:HG11	1:A:274:PHE:CE1	2.38	0.57
2:B:416:ASN:O	2:B:420:LYS:HG3	2.04	0.57
4:D:123:LEU:CD1	4:D:142:VAL:HG11	2.35	0.57
5:E:221:TYR:C	5:E:223:ARG:H	2.13	0.57
5:E:352:MET:HE3	5:E:355:ILE:CB	2.34	0.57
8:H:212:ILE:HD11	8:H:219:ARG:NH2	2.19	0.57
9:I:161:ALA:HB3	10:J:53:LEU:CD2	2.29	0.57
16:Q:23:ALA:CB	16:Q:187:VAL:HG12	2.34	0.57
17:R:164:LEU:HD13	17:R:194:ILE:HD13	1.85	0.57
18:S:13:ILE:HG23	18:S:176:LEU:CD1	2.35	0.57
18:S:34:VAL:HG11	18:S:177:TYR:CD2	2.39	0.57
19:T:21:ALA:HB3	19:T:198:VAL:HG13	1.85	0.57
20:U:69:TYR:CE1	20:U:99:THR:HG21	2.38	0.57
20:U:353:LEU:HD11	20:U:373:ASN:CB	2.29	0.57
20:U:653:ALA:HB2	20:U:675:MET:CE	2.29	0.57
20:U:745:THR:HB	20:U:786:THR:CG2	2.34	0.57
21:V:129:ASP:O	21:V:133:PRO:HG3	2.04	0.57
21:V:172:VAL:HG21	21:V:191:LEU:HD21	1.85	0.57
22:W:373:ILE:HG22	22:W:415:PHE:HE2	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:89:VAL:HA	23:X:92:LEU:HD21	1.85	0.57
25:Z:217:THR:CG2	25:Z:219:LYS:HE2	2.34	0.57
31:f:470:VAL:HG11	31:f:500:LEU:CD2	2.33	0.57
1:A:127:ASP:OD1	1:A:127:ASP:N	2.38	0.57
1:A:135:GLU:H	1:A:138:MET:HE3	1.68	0.57
1:A:381:THR:O	1:A:385:ILE:HG12	2.05	0.57
4:D:180:ALA:HB2	4:D:329:ARG:CD	2.35	0.57
6:F:399:VAL:HG23	6:F:427:VAL:HG21	1.85	0.57
7:G:32:ILE:O	7:G:82:GLY:HA2	2.05	0.57
8:H:59:GLU:OE2	8:H:60:ARG:NH2	2.37	0.57
9:I:115:CYS:HB3	10:J:81:ARG:NH2	2.19	0.57
15:P:163:ILE:HD12	15:P:170:GLY:N	2.20	0.57
16:Q:190:ILE:N	16:Q:190:ILE:HD12	2.19	0.57
17:R:164:LEU:CD1	17:R:194:ILE:HD13	2.35	0.57
18:S:130:SER:OG	18:S:167:ASP:OD2	2.15	0.57
19:T:27:THR:OG1	19:T:38:ARG:O	2.22	0.57
21:V:479:ARG:HB3	25:Z:261:TYR:CE1	2.40	0.57
23:X:153:LEU:HD21	23:X:169:VAL:HG21	1.87	0.57
23:X:289:CYS:SG	23:X:305:ALA:HB1	2.45	0.57
26:a:70:ARG:HG3	26:a:76:LEU:HB2	1.86	0.57
31:f:124:ASP:OD2	31:f:147:SER:HB3	2.04	0.57
31:f:271:MET:HE1	31:f:786:GLN:CD	2.27	0.57
31:f:370:MET:HE2	31:f:371:ASN:N	2.19	0.57
31:f:462:ALA:HB3	31:f:489:TYR:CZ	2.39	0.57
31:f:688:ARG:HD3	31:f:720:GLU:HB3	1.85	0.57
32:g:110:ARG:CG	32:g:138:LEU:HD12	2.34	0.57
3:C:198:LEU:CD2	38:C:501:ADP:H2'	2.34	0.57
5:E:155:ASN:OD1	22:W:207:LYS:HB3	2.04	0.57
5:E:157:GLU:OE2	22:W:207:LYS:HG2	2.03	0.57
5:E:161:ARG:HH12	22:W:200:ILE:CG2	2.17	0.57
5:E:362:VAL:HG11	5:E:367:PHE:CD1	2.40	0.57
9:I:179:TYR:CD1	10:J:53:LEU:HD11	2.40	0.57
12:L:180:MET:HE3	12:L:180:MET:CA	2.34	0.57
14:N:3:ILE:HG22	14:N:16:ALA:HB1	1.85	0.57
14:N:178:ALA:O	14:N:184:VAL:HA	2.04	0.57
16:Q:56:LEU:HD22	17:R:121:LEU:HD23	1.85	0.57
16:Q:88:MET:HB2	16:Q:109:ILE:HD11	1.86	0.57
19:T:155:PHE:CE2	19:T:163:HIS:HA	2.39	0.57
20:U:399:TRP:CH2	20:U:472:ILE:HG21	2.40	0.57
20:U:399:TRP:HD1	28:c:176:GLN:NE2	2.01	0.57
20:U:676:THR:HG21	20:U:712:LEU:CD2	2.25	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:743:ASN:O	20:U:786:THR:OG1	2.22	0.57
20:U:904:LYS:HB3	20:U:912:ILE:HD11	1.85	0.57
21:V:327:THR:HA	21:V:330:LYS:CG	2.35	0.57
21:V:455:LYS:HE2	21:V:457:TYR:CE2	2.38	0.57
22:W:388:GLU:HA	22:W:388:GLU:OE2	2.05	0.57
22:W:426:ASN:O	22:W:430:GLN:HG2	2.04	0.57
23:X:93:LEU:HD12	23:X:97:LEU:HD23	1.86	0.57
23:X:145:GLU:OE2	23:X:145:GLU:N	2.25	0.57
24:Y:189:VAL:HG23	24:Y:197:ALA:HB1	1.86	0.57
25:Z:96:HIS:HD2	25:Z:121:LEU:HD11	1.68	0.57
25:Z:266:ILE:CG2	28:c:288:VAL:HG21	2.34	0.57
27:b:21:PHE:CE2	27:b:179:LEU:HB2	2.39	0.57
31:f:407:MET:CE	31:f:439:TYR:HB3	2.31	0.57
31:f:656:GLY:O	31:f:660:ILE:HD13	2.05	0.57
31:f:731:MET:HE1	31:f:778:LEU:CD2	2.34	0.57
32:g:103:THR:CB	32:g:115:LYS:HE2	2.34	0.57
33:h:50:MET:HB3	33:h:197:VAL:HG21	1.86	0.57
34:u:126:LEU:CD2	34:u:175:VAL:HG21	2.34	0.57
1:A:113:ILE:CD1	1:A:142:VAL:HG11	2.34	0.57
1:A:416:VAL:HG12	1:A:417:ILE:CD1	2.32	0.57
2:B:201:VAL:HA	2:B:326:LYS:HD3	1.86	0.57
3:C:50:ASN:ND2	20:U:639:LEU:HD11	2.19	0.57
3:C:187:LEU:HD12	3:C:293:MET:O	2.05	0.57
6:F:91:SER:HB3	6:F:124:ILE:HG23	1.85	0.57
7:G:107:TYR:CD1	15:P:75:ARG:HD2	2.38	0.57
7:G:115:CYS:HB3	7:G:140:LEU:HD12	1.87	0.57
14:N:75:LEU:HD11	14:N:106:GLN:HB2	1.85	0.57
17:R:172:ILE:HD12	17:R:172:ILE:N	2.15	0.57
18:S:19:ARG:CD	18:S:26:ILE:HD11	2.35	0.57
19:T:83:MET:HE1	19:T:91:MET:CE	2.35	0.57
20:U:904:LYS:CG	20:U:912:ILE:HD11	2.35	0.57
21:V:327:THR:HA	21:V:330:LYS:HD2	1.85	0.57
21:V:342:ILE:HD12	21:V:368:ARG:CG	2.34	0.57
22:W:323:ASP:HB3	22:W:324:TYR:CD1	2.39	0.57
23:X:133:LEU:HD12	23:X:133:LEU:O	2.04	0.57
24:Y:105:MET:HG3	24:Y:109:GLU:OE2	2.04	0.57
28:c:123:SER:O	28:c:127:ILE:HG12	2.05	0.57
28:c:174:PRO:HG2	28:c:175:ARG:N	2.20	0.57
29:d:180:GLU:CD	29:d:180:GLU:H	2.12	0.57
31:f:297:MET:HE3	31:f:297:MET:HA	1.86	0.57
31:f:564:LEU:HD11	31:f:798:THR:HG22	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:844:VAL:HG23	31:f:881:GLU:O	2.05	0.57
31:f:847:GLY:HA3	31:f:863:THR:O	2.05	0.57
32:g:160:GLN:HB3	32:g:165:ALA:CB	2.35	0.57
34:u:208:GLU:HG3	34:u:211:ARG:HH21	1.70	0.57
34:u:229:GLY:O	34:u:230:ILE:HD13	2.04	0.57
2:B:202:GLU:OE1	2:B:242:GLN:HB3	2.04	0.57
3:C:115:ALA:HB2	3:C:127:LEU:HD11	1.87	0.57
3:C:194:THR:HG21	3:C:317:PHE:O	2.05	0.57
5:E:337:GLY:HA3	5:E:342:ASP:OD2	2.04	0.57
6:F:97:LEU:CD1	6:F:121:CYS:HB2	2.34	0.57
6:F:226:TYR:CD2	6:F:335:VAL:HG11	2.38	0.57
7:G:214:GLU:C	7:G:215:ILE:HD13	2.30	0.57
8:H:124:SER:O	8:H:127:VAL:HG22	2.05	0.57
11:K:140:ALA:HB3	11:K:170:ILE:HD12	1.87	0.57
13:M:125:TYR:HB2	13:M:128:VAL:HG22	1.86	0.57
16:Q:6:TYR:CE1	16:Q:30:ILE:HD11	2.39	0.57
17:R:182:ILE:O	17:R:188:ILE:HD12	2.05	0.57
18:S:76:VAL:HG11	18:S:103:GLY:HA3	1.87	0.57
20:U:344:ARG:NH1	20:U:881:PRO:HG2	2.18	0.57
20:U:669:ILE:HD11	20:U:695:MET:HG3	1.87	0.57
23:X:109:LEU:O	23:X:112:GLU:HG2	2.05	0.57
23:X:190:LEU:HD21	23:X:214:SER:HB2	1.85	0.57
24:Y:221:THR:CG2	24:Y:256:VAL:HG21	2.30	0.57
25:Z:191:ILE:HD12	28:c:300:LEU:HD23	1.87	0.57
28:c:281:LYS:HA	28:c:284:LEU:CB	2.34	0.57
31:f:415:GLY:HA3	31:f:447:ALA:HB1	1.86	0.57
31:f:829:MET:SD	31:f:829:MET:N	2.77	0.57
1:A:30:ILE:HG23	1:A:34:LYS:HD2	1.86	0.57
1:A:113:ILE:HG13	1:A:113:ILE:O	2.05	0.57
4:D:170:MET:CE	4:D:215:LEU:HD22	2.35	0.57
5:E:33:LEU:HD12	6:F:66:LEU:HD23	1.84	0.57
5:E:135:ILE:CD1	5:E:183:LEU:HD22	2.35	0.57
5:E:144:GLU:OE1	5:E:299:ILE:HD13	2.04	0.57
7:G:27:TYR:CD1	13:M:16:PRO:HA	2.40	0.57
7:G:51:VAL:CG2	7:G:202:LEU:HD22	2.29	0.57
8:H:95:GLN:HG3	15:P:65:LEU:CD2	2.34	0.57
9:I:49:ARG:HH22	9:I:61:PHE:HA	1.70	0.57
12:L:13:TRP:HB2	13:M:22:GLN:OE1	2.05	0.57
13:M:44:GLY:HA2	13:M:140:TYR:HD2	1.69	0.57
13:M:161:TRP:HB3	13:M:181:MET:CE	2.34	0.57
13:M:195:LYS:HD2	13:M:238:TYR:CE2	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:38:ASN:OD1	18:S:39:PRO:HD2	2.05	0.57
18:S:158:ARG:HA	18:S:199:TYR:CE2	2.40	0.57
22:W:33:LYS:O	22:W:37:GLU:HG3	2.04	0.57
22:W:375:MET:HE1	22:W:406:VAL:HG13	1.87	0.57
23:X:111:LEU:HA	23:X:114:ILE:CG2	2.34	0.57
26:a:160:SER:HB2	26:a:172:TYR:CE1	2.40	0.57
27:b:100:ARG:NH1	27:b:107:MET:HE1	2.19	0.57
28:c:114:SER:HA	28:c:145:VAL:O	2.04	0.57
29:d:129:LEU:HG	29:d:131:THR:OG1	2.05	0.57
31:f:337:LEU:O	31:f:339:ILE:HG13	2.05	0.57
31:f:659:LEU:CA	31:f:662:MET:HE2	2.31	0.57
31:f:679:LEU:CD1	31:f:687:ARG:HA	2.35	0.57
31:f:708:ASP:O	31:f:712:LYS:HG3	2.04	0.57
31:f:719:PRO:HB2	31:f:723:TYR:HE1	1.69	0.57
1:A:192:GLU:OE2	1:A:233:THR:HA	2.05	0.57
1:A:212:VAL:HG11	1:A:341:ILE:HD12	1.87	0.57
2:B:227:PRO:HB2	2:B:355:LEU:CD2	2.34	0.57
3:C:135:VAL:HG22	3:C:138:MET:CE	2.35	0.57
5:E:53:VAL:HG11	28:c:50:PRO:HD3	1.85	0.57
5:E:168:LYS:HD2	5:E:274:LYS:HA	1.87	0.57
5:E:355:ILE:HA	6:F:211:LYS:HZ1	1.70	0.57
6:F:365:ILE:HD11	36:F:501:ATP:C2	2.40	0.57
6:F:376:SER:O	6:F:379:VAL:HG23	2.05	0.57
9:I:5:TYR:CD2	9:I:14:PRO:HD3	2.40	0.57
11:K:10:ARG:NH1	11:K:10:ARG:HB2	2.19	0.57
14:N:69:GLU:OE1	14:N:70:LEU:HD22	2.05	0.57
15:P:110:LEU:HD21	15:P:125:VAL:HG12	1.87	0.57
17:R:20:VAL:CG1	17:R:176:PRO:HD2	2.32	0.57
19:T:172:MET:HA	19:T:175:VAL:CG1	2.34	0.57
20:U:397:THR:HG23	20:U:398:ASN:OD1	2.05	0.57
20:U:846:LYS:O	20:U:850:GLU:HG2	2.05	0.57
21:V:67:LEU:HA	21:V:70:VAL:HG12	1.87	0.57
21:V:188:SER:HB2	21:V:214:HIS:ND1	2.20	0.57
24:Y:286:TRP:CZ2	24:Y:287:LEU:HD13	2.40	0.57
24:Y:329:PHE:HB3	30:e:59:GLU:OE2	2.04	0.57
24:Y:389:MET:HE3	24:Y:389:MET:CA	2.29	0.57
25:Z:145:HIS:O	25:Z:147:ASP:N	2.33	0.57
26:a:92:VAL:O	26:a:95:THR:HG22	2.05	0.57
28:c:231:LEU:O	28:c:298:GLN:NE2	2.38	0.57
29:d:104:ARG:HH21	29:d:108:ASN:H	1.52	0.57
32:g:90:PRO:HD3	32:g:155:VAL:HG11	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:27:LEU:HB2	33:h:184:TYR:HB2	1.87	0.57
33:h:162:GLN:OE1	33:h:162:GLN:N	2.38	0.57
1:A:22:ILE:HD11	3:C:159:LYS:CB	2.35	0.56
2:B:113:GLU:OE2	2:B:113:GLU:HA	2.04	0.56
2:B:404:LEU:HD21	3:C:175:PHE:CE2	2.40	0.56
7:G:88:ARG:HD2	13:M:117:MET:HE3	1.87	0.56
7:G:162:GLY:HA3	8:H:61:SER:HB3	1.87	0.56
11:K:7:GLU:HG2	11:K:8:TYR:CD1	2.40	0.56
12:L:41:LYS:NZ	12:L:181:GLU:HA	2.19	0.56
12:L:68:ASN:HB2	12:L:220:GLU:HG3	1.86	0.56
12:L:118:ILE:HD12	12:L:122:ARG:HH12	1.69	0.56
15:P:19:ARG:HD2	15:P:170:GLY:C	2.30	0.56
15:P:114:TYR:HD1	15:P:127:MET:HE1	1.68	0.56
17:R:175:LEU:HB2	17:R:178:PHE:CE1	2.39	0.56
18:S:7:LYS:HG2	18:S:12:VAL:HG22	1.86	0.56
20:U:157:THR:O	20:U:159:ARG:HG2	2.05	0.56
21:V:90:GLU:HB2	21:V:93:PHE:HE2	1.70	0.56
21:V:211:TYR:CD2	21:V:250:LEU:HD21	2.39	0.56
21:V:332:LEU:HA	21:V:335:VAL:HG12	1.87	0.56
22:W:40:LEU:HD12	22:W:43:VAL:CG2	2.32	0.56
22:W:404:ALA:O	22:W:405:LYS:HD3	2.04	0.56
24:Y:121:LEU:HD23	24:Y:121:LEU:C	2.29	0.56
25:Z:275:LEU:HD11	25:Z:279:LYS:HE2	1.86	0.56
34:u:215:THR:O	34:u:237:LYS:NZ	2.37	0.56
2:B:187:ILE:CD1	2:B:190:LEU:HB2	2.35	0.56
6:F:228:PRO:HG2	6:F:356:MET:HG2	1.86	0.56
9:I:25:MET:HG2	9:I:152:PRO:HD2	1.86	0.56
12:L:89:ARG:HD3	19:T:77:HIS:ND1	2.21	0.56
14:N:83:PHE:CE2	14:N:100:ILE:HG21	2.40	0.56
15:P:3:ILE:O	15:P:126:THR:OG1	2.15	0.56
16:Q:94:LEU:HA	16:Q:97:GLU:OE1	2.05	0.56
16:Q:169:GLN:O	16:Q:173:ASN:HB2	2.05	0.56
18:S:76:VAL:HG11	18:S:103:GLY:CA	2.35	0.56
18:S:144:SER:HB2	18:S:147:LEU:HD12	1.85	0.56
20:U:127:ASP:OD2	20:U:130:LEU:N	2.32	0.56
20:U:488:THR:OG1	20:U:490:ARG:HG3	2.04	0.56
20:U:525:ASN:HB3	20:U:528:ALA:HB3	1.86	0.56
20:U:724:VAL:HA	20:U:727:LYS:HG2	1.86	0.56
22:W:106:GLN:O	22:W:110:THR:HG23	2.05	0.56
26:a:222:LEU:HD11	26:a:237:LEU:HD12	1.87	0.56
29:d:115:GLU:CD	29:d:118:ARG:HH21	2.13	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:223:GLU:HA	31:f:259:PHE:HZ	1.70	0.56
33:h:141:TYR:O	33:h:144:TYR:N	2.38	0.56
34:u:144:HIS:HB3	34:u:156:PHE:O	2.05	0.56
2:B:223:ILE:HG21	2:B:350:LYS:HG2	1.88	0.56
2:B:251:VAL:HG21	3:C:275:GLU:OE1	2.05	0.56
3:C:258:ARG:HD3	3:C:273:MET:HE1	1.87	0.56
3:C:258:ARG:HA	3:C:270:GLN:OE1	2.05	0.56
4:D:45:LYS:HG2	20:U:187:LEU:CD1	2.34	0.56
4:D:121:ARG:HA	4:D:124:LEU:HD23	1.88	0.56
4:D:152:MET:HE3	4:D:154:LEU:CD1	2.35	0.56
4:D:191:TYR:HD1	4:D:196:ILE:HD11	1.70	0.56
4:D:245:ARG:HA	4:D:248:ARG:HH11	1.70	0.56
5:E:98:VAL:HG21	5:E:107:ILE:HG12	1.87	0.56
5:E:138:LEU:O	5:E:142:ILE:HG22	2.05	0.56
5:E:290:LEU:HD23	5:E:295:LEU:HD12	1.86	0.56
5:E:349:GLU:OE1	5:E:352:MET:HB2	2.06	0.56
5:E:352:MET:CE	5:E:355:ILE:HB	2.35	0.56
6:F:96:LEU:HD23	6:F:122:ALA:HA	1.87	0.56
7:G:12:HIS:HB2	7:G:15:ILE:HD12	1.87	0.56
7:G:29:PHE:HE1	7:G:155:ASP:HB2	1.69	0.56
8:H:69:THR:HB	8:H:72:ILE:CD1	2.35	0.56
9:I:179:TYR:CG	10:J:53:LEU:HD11	2.39	0.56
10:J:152:THR:HG23	11:K:83:LYS:NZ	2.21	0.56
13:M:215:TRP:CE3	13:M:219:LEU:HD21	2.40	0.56
14:N:30:VAL:O	14:N:175:ARG:NH2	2.39	0.56
14:N:81:SER:O	14:N:84:LYS:HG2	2.05	0.56
14:N:194:ILE:O	14:N:194:ILE:HG13	2.05	0.56
15:P:216:ILE:HD12	16:Q:196:THR:CA	2.33	0.56
17:R:19:ARG:HG3	17:R:177:THR:HG23	1.86	0.56
17:R:34:LYS:HE2	17:R:34:LYS:HA	1.86	0.56
17:R:37:LYS:HA	17:R:43:LEU:CD1	2.33	0.56
19:T:24:ALA:HB2	19:T:195:ILE:CD1	2.36	0.56
19:T:108:ASN:O	19:T:124:PHE:HB2	2.06	0.56
19:T:155:PHE:CZ	19:T:163:HIS:HA	2.40	0.56
19:T:158:MET:SD	19:T:161:VAL:HB	2.46	0.56
19:T:166:LEU:HD11	19:T:171:ALA:CA	2.36	0.56
20:U:247:GLN:OE1	20:U:912:ILE:HD12	2.05	0.56
20:U:458:ILE:CD1	20:U:485:ALA:HB2	2.35	0.56
20:U:545:LEU:CB	20:U:577:ILE:HG21	2.33	0.56
20:U:552:ILE:C	20:U:555:VAL:HG12	2.30	0.56
20:U:658:ILE:CD1	20:U:767:THR:HG21	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:880:ASN:HB2	20:U:881:PRO:CD	2.34	0.56
21:V:64:GLN:O	21:V:67:LEU:HG	2.05	0.56
21:V:68:ASP:OD2	21:V:112:VAL:HA	2.05	0.56
21:V:94:VAL:CG2	21:V:205:LEU:HD22	2.34	0.56
21:V:430:SER:HB3	21:V:433:ASP:OD1	2.05	0.56
22:W:108:CYS:HB3	22:W:128:LEU:HD21	1.87	0.56
22:W:314:LEU:HD12	26:a:312:MET:SD	2.46	0.56
24:Y:168:ILE:HG23	24:Y:177:ARG:HH21	1.69	0.56
24:Y:190:ALA:HB2	24:Y:287:LEU:HD11	1.87	0.56
27:b:128:ALA:HB2	27:b:156:PHE:HD1	1.69	0.56
27:b:140:ILE:CG2	27:b:153:LEU:HD12	2.33	0.56
28:c:117:GLY:N	28:c:148:ILE:HD12	2.19	0.56
29:d:212:LEU:HD11	29:d:220:ILE:CD1	2.35	0.56
31:f:69:SER:O	31:f:73:PRO:HG3	2.05	0.56
31:f:79:ARG:HD3	31:f:125:ILE:CG1	2.36	0.56
31:f:213:GLN:HE22	31:f:216:MET:HG2	1.69	0.56
31:f:224:ASN:O	31:f:224:ASN:ND2	2.37	0.56
31:f:326:LEU:HD23	31:f:897:PHE:HE2	1.70	0.56
31:f:351:THR:HA	31:f:354:GLU:CG	2.36	0.56
31:f:411:ALA:O	31:f:447:ALA:HB2	2.06	0.56
31:f:452:ASN:HB3	31:f:488:ALA:CB	2.34	0.56
31:f:705:ASN:OD1	31:f:705:ASN:N	2.38	0.56
33:h:115:TYR:HE2	33:h:194:GLU:HG2	1.70	0.56
34:u:191:PRO:HD3	34:u:260:ILE:CD1	2.35	0.56
34:u:214:PRO:HG2	34:u:217:ALA:HB2	1.86	0.56
5:E:191:LEU:HD12	5:E:227:PRO:HD2	1.87	0.56
5:E:310:LEU:HD12	5:E:332:VAL:HG21	1.86	0.56
5:E:331:ILE:O	5:E:335:SER:N	2.39	0.56
13:M:77:VAL:CG2	13:M:84:ALA:HB1	2.33	0.56
13:M:151:ILE:HG23	13:M:157:SER:HB3	1.86	0.56
14:N:19:ARG:HD2	14:N:171:GLY:CA	2.35	0.56
15:P:73:LEU:CD2	15:P:74:PRO:HD2	2.32	0.56
17:R:47:VAL:O	17:R:100:VAL:HG23	2.06	0.56
20:U:218:GLN:N	20:U:218:GLN:HE21	2.03	0.56
20:U:583:MET:CE	20:U:605:VAL:HG11	2.36	0.56
20:U:889:LEU:HD21	20:U:909:GLY:H	1.71	0.56
22:W:187:LEU:HB3	22:W:225:LYS:HE2	1.87	0.56
23:X:57:LEU:HD22	23:X:66:LEU:CD1	2.33	0.56
23:X:170:GLN:NE2	23:X:193:ALA:HA	2.20	0.56
23:X:397:TYR:HE2	24:Y:369:THR:HG21	1.71	0.56
24:Y:141:VAL:CG1	24:Y:164:ALA:HB2	2.34	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:121:LEU:HD21	25:Z:123:ILE:HG13	1.88	0.56
26:a:35:HIS:HA	26:a:71:VAL:HG22	1.85	0.56
26:a:216:LEU:HB2	26:a:237:LEU:HD13	1.86	0.56
31:f:370:MET:HE1	31:f:371:ASN:OD1	2.04	0.56
31:f:399:LEU:HD21	31:f:440:ILE:HG13	1.86	0.56
34:u:229:GLY:C	34:u:230:ILE:HD13	2.31	0.56
2:B:150:VAL:HG23	2:B:152:LEU:HD21	1.87	0.56
3:C:399:MET:HE1	9:I:56:LEU:HD22	1.87	0.56
4:D:363:TYR:CE2	4:D:399:PHE:HB3	2.41	0.56
10:J:45:VAL:N	10:J:195:LEU:HD11	2.20	0.56
10:J:88:ARG:NH1	17:R:69:MET:HG2	2.21	0.56
15:P:51:ASP:OD2	16:Q:99:ARG:NH1	2.38	0.56
17:R:4:LEU:HD12	17:R:132:HIS:ND1	2.20	0.56
20:U:361:ARG:HG2	20:U:362:ASN:OD1	2.05	0.56
21:V:79:VAL:HG11	21:V:120:PHE:CZ	2.39	0.56
21:V:227:VAL:O	21:V:231:LEU:CD1	2.52	0.56
23:X:306:LEU:HD22	23:X:314:ARG:HD3	1.86	0.56
29:d:119:LEU:HD13	29:d:147:ILE:HD13	1.86	0.56
29:d:130:PRO:HA	29:d:136:LEU:HD12	1.87	0.56
30:e:62:LYS:HA	30:e:65:TYR:CZ	2.41	0.56
31:f:164:GLY:O	31:f:168:LYS:HG2	2.04	0.56
31:f:223:GLU:HA	31:f:259:PHE:CE1	2.39	0.56
31:f:425:GLY:O	31:f:429:ILE:HG12	2.06	0.56
33:h:185:ASN:OD1	33:h:204:SER:HA	2.05	0.56
1:A:32:LEU:HD22	1:A:36:TYR:HB2	1.86	0.56
2:B:304:GLU:HG2	3:C:224:ILE:HD11	1.87	0.56
3:C:113:ARG:HH11	3:C:130:LYS:HA	1.70	0.56
4:D:130:VAL:HG11	4:D:139:LEU:HD11	1.86	0.56
8:H:69:THR:HG22	8:H:70:LYS:N	2.17	0.56
9:I:18:LEU:HD21	10:J:125:ARG:HD3	1.88	0.56
9:I:95:GLN:HG3	16:Q:73:LEU:HD22	1.87	0.56
9:I:149:GLN:O	9:I:156:TYR:HA	2.06	0.56
10:J:33:VAL:HG22	10:J:168:VAL:HG11	1.88	0.56
10:J:91:CYS:CA	10:J:102:VAL:HG11	2.35	0.56
15:P:215:LYS:O	15:P:216:ILE:HD13	2.06	0.56
16:Q:158:MET:SD	16:Q:163:LEU:HA	2.46	0.56
17:R:172:ILE:H	17:R:172:ILE:CD1	2.15	0.56
19:T:12:ILE:HD13	19:T:109:ILE:HG12	1.87	0.56
20:U:552:ILE:HA	20:U:555:VAL:HG12	1.88	0.56
21:V:327:THR:O	21:V:330:LYS:HG3	2.05	0.56
22:W:272:LEU:HD13	22:W:341:PHE:CE1	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:153:LEU:HD21	23:X:157:LEU:CD1	2.35	0.56
23:X:368:MET:O	23:X:373:LYS:HB2	2.06	0.56
26:a:7:PHE:CZ	26:a:56:LEU:HB2	2.40	0.56
26:a:252:LYS:HA	26:a:255:TRP:CD1	2.40	0.56
31:f:127:SER:HB3	31:f:142:TYR:HB2	1.87	0.56
31:f:548:THR:HA	31:f:551:LYS:CE	2.35	0.56
31:f:831:VAL:HB	31:f:897:PHE:HD1	1.70	0.56
31:f:898:VAL:HG23	31:f:900:LEU:HD12	1.87	0.56
5:E:37:THR:OG1	6:F:69:MET:HE1	2.05	0.56
5:E:352:MET:HE3	5:E:352:MET:CA	2.30	0.56
7:G:60:LEU:HD11	13:M:177:GLU:HG3	1.87	0.56
7:G:80:MET:HE1	7:G:138:MET:HA	1.86	0.56
7:G:115:CYS:HA	7:G:118:ILE:HB	1.87	0.56
9:I:34:CYS:HA	9:I:46:ALA:O	2.05	0.56
9:I:90:LEU:CD2	9:I:114:LEU:HD22	2.35	0.56
9:I:206:LEU:CD2	9:I:211:VAL:HG21	2.35	0.56
11:K:217:LEU:HD23	11:K:218:ALA:N	2.19	0.56
13:M:229:LYS:O	13:M:233:GLU:HG2	2.05	0.56
15:P:64:GLU:HA	15:P:67:SER:OG	2.06	0.56
16:Q:172:LEU:HA	16:Q:175:VAL:CG1	2.35	0.56
18:S:74:ILE:HG13	18:S:78:ALA:HB3	1.88	0.56
19:T:65:THR:O	19:T:69:GLU:HG3	2.05	0.56
19:T:71:ARG:HD2	19:T:74:MET:CE	2.35	0.56
20:U:71:LEU:O	20:U:71:LEU:HD23	2.06	0.56
20:U:261:LEU:HD13	20:U:329:LEU:O	2.06	0.56
20:U:364:VAL:HG13	20:U:365:CYS:H	1.71	0.56
21:V:85:ALA:HB2	21:V:93:PHE:CB	2.28	0.56
22:W:231:ILE:HD12	22:W:243:ILE:HG23	1.88	0.56
22:W:421:PRO:HG3	25:Z:251:LEU:CD2	2.35	0.56
23:X:268:GLN:HG2	23:X:288:LYS:HZ3	1.69	0.56
25:Z:48:LEU:HD12	25:Z:49:ASP:N	2.20	0.56
25:Z:94:TRP:CH2	25:Z:108:ILE:HB	2.40	0.56
29:d:145:ARG:HG2	29:d:145:ARG:HH11	1.71	0.56
31:f:138:GLU:HG2	31:f:142:TYR:OH	2.06	0.56
31:f:350:LYS:CE	31:f:353:LEU:HB2	2.36	0.56
34:u:126:LEU:HD13	34:u:175:VAL:HG11	1.88	0.56
3:C:342:ILE:HD11	3:C:383:PHE:CD2	2.40	0.56
4:D:177:VAL:O	4:D:181:VAL:HG22	2.06	0.56
6:F:58:GLU:HA	6:F:61:ARG:HG2	1.88	0.56
8:H:212:ILE:HD11	8:H:219:ARG:CZ	2.35	0.56
9:I:8:ARG:NH2	10:J:5:ARG:O	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:158:ALA:CB	10:J:172:LEU:HD13	2.29	0.56
11:K:69:GLU:OE2	11:K:72:ALA:HA	2.05	0.56
12:L:72:ILE:HD11	12:L:85:CYS:SG	2.46	0.56
13:M:192:GLU:O	13:M:195:LYS:HG2	2.05	0.56
17:R:118:MET:HA	17:R:118:MET:CE	2.22	0.56
17:R:139:THR:HA	17:R:142:ILE:HD12	1.87	0.56
18:S:139:MET:HE2	18:S:139:MET:C	2.31	0.56
19:T:99:ARG:HD3	19:T:104:TYR:CE1	2.41	0.56
19:T:199:THR:OG1	19:T:200:LYS:N	2.38	0.56
20:U:904:LYS:CG	20:U:905:PRO:HD2	2.35	0.56
21:V:160:LEU:HD23	21:V:161:PRO:HD2	1.86	0.56
21:V:358:MET:SD	21:V:362:LEU:HD23	2.46	0.56
22:W:88:MET:HA	22:W:88:MET:HE3	1.87	0.56
23:X:70:LEU:HD22	23:X:92:LEU:HD13	1.88	0.56
23:X:166:LEU:O	23:X:170:GLN:HG3	2.06	0.56
26:a:229:ASP:OD1	26:a:230:ARG:HG3	2.04	0.56
29:d:212:LEU:HD12	29:d:215:LEU:HD13	1.87	0.56
31:f:191:ILE:HG21	31:f:207:LEU:CD2	2.36	0.56
31:f:381:VAL:HG22	31:f:770:HIS:CB	2.35	0.56
31:f:403:LYS:O	31:f:403:LYS:HG3	2.04	0.56
34:u:189:GLN:HG2	34:u:255:GLU:CG	2.20	0.56
1:A:177:VAL:HG22	1:A:224:LEU:CD2	2.35	0.56
1:A:306:LEU:HD21	1:A:317:VAL:HG21	1.87	0.56
2:B:203:LEU:HB3	2:B:211:TYR:OH	2.06	0.56
2:B:362:LYS:HG3	2:B:384:ILE:CD1	2.36	0.56
4:D:164:TYR:CZ	4:D:178:ARG:HD3	2.41	0.56
5:E:67:GLU:OE1	5:E:67:GLU:N	2.37	0.56
7:G:27:TYR:CE1	13:M:16:PRO:HA	2.41	0.56
7:G:51:VAL:CG1	7:G:217:VAL:HG22	2.29	0.56
8:H:192:ILE:HD13	8:H:208:ILE:HD11	1.87	0.56
9:I:72:MET:SD	9:I:107:CYS:HA	2.46	0.56
10:J:152:THR:CG2	11:K:83:LYS:HZ3	2.18	0.56
11:K:119:LEU:O	11:K:119:LEU:HD12	2.06	0.56
11:K:235:GLU:HA	11:K:238:ILE:HG22	1.86	0.56
12:L:35:THR:O	12:L:160:SER:HA	2.05	0.56
12:L:95:SER:CB	12:L:103:LEU:HB2	2.36	0.56
13:M:240:LYS:HD2	13:M:240:LYS:O	2.06	0.56
15:P:113:ILE:HG22	15:P:119:THR:CB	2.35	0.56
15:P:146:MET:HE1	15:P:154:LEU:CD2	2.36	0.56
16:Q:23:ALA:HB2	16:Q:187:VAL:HG12	1.88	0.56
16:Q:28:PHE:HB2	16:Q:39:PHE:CD2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:R:154:GLU:OE1	17:R:154:GLU:N	2.36	0.56
20:U:4:SER:N	29:d:177:ASP:OD2	2.36	0.56
20:U:265:ILE:CD1	20:U:326:ILE:HD12	2.35	0.56
20:U:346:ASN:C	20:U:346:ASN:HD22	2.13	0.56
20:U:572:ARG:NH1	20:U:572:ARG:HB3	2.21	0.56
20:U:645:ASN:HD21	20:U:648:VAL:CG2	2.19	0.56
20:U:668:ALA:O	20:U:672:LEU:HG	2.06	0.56
22:W:48:LEU:HD21	22:W:89:LEU:HD22	1.88	0.56
23:X:335:LEU:HD13	23:X:365:LEU:CD2	2.35	0.56
24:Y:207:THR:O	24:Y:209:THR:HG23	2.05	0.56
24:Y:226:VAL:HA	24:Y:229:ILE:CG2	2.35	0.56
26:a:273:GLN:HG2	26:a:300:ALA:HB1	1.87	0.56
27:b:100:ARG:CD	27:b:105:HIS:HB2	2.34	0.56
31:f:182:GLU:H	31:f:182:GLU:CD	2.12	0.56
31:f:479:LEU:HD22	31:f:517:VAL:HG21	1.87	0.56
33:h:42:ILE:HD11	33:h:188:GLN:CB	2.36	0.56
1:A:238:ILE:HG21	1:A:260:LEU:CD1	2.33	0.56
1:A:432:TYR:HE2	11:K:33:LEU:HD12	1.69	0.56
2:B:220:LYS:HB2	2:B:220:LYS:NZ	2.21	0.56
6:F:181:PRO:O	6:F:242:ALA:HB2	2.06	0.56
7:G:109:ILE:CD1	7:G:114:LEU:HA	2.36	0.56
11:K:125:GLU:HG3	12:L:83:LEU:CD1	2.36	0.56
17:R:15:VAL:HG21	17:R:45:LEU:HD11	1.87	0.56
18:S:18:SER:O	18:S:18:SER:OG	2.18	0.56
19:T:8:ASN:ND2	19:T:58:HIS:HB3	2.20	0.56
19:T:13:LEU:HD22	19:T:179:PHE:CE1	2.40	0.56
19:T:197:ILE:O	19:T:203:ILE:HA	2.06	0.56
20:U:570:LEU:HD12	20:U:582:GLY:HA2	1.88	0.56
20:U:671:LEU:O	20:U:674:PRO:HD2	2.06	0.56
25:Z:213:GLU:HG2	26:a:350:LYS:NZ	2.20	0.56
26:a:160:SER:HB2	26:a:172:TYR:HE1	1.70	0.56
29:d:200:LEU:CD2	29:d:233:GLU:HB2	2.36	0.56
29:d:302:TYR:CA	29:d:305:LYS:HG2	2.31	0.56
31:f:394:ASP:HA	31:f:397:LYS:HZ3	1.71	0.56
31:f:556:ARG:HG2	31:f:590:PHE:CZ	2.39	0.56
31:f:757:ASN:HB3	31:f:811:LEU:HD11	1.88	0.56
31:f:887:PHE:HA	31:f:901:ARG:O	2.06	0.56
31:f:898:VAL:HG23	31:f:900:LEU:CD1	2.36	0.56
33:h:159:VAL:C	33:h:160:LEU:HD12	2.31	0.56
34:u:176:LYS:HG3	34:u:270:VAL:CG2	2.36	0.56
2:B:398:ILE:CD1	2:B:423:LYS:HG3	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:158:ILE:O	3:C:161:ILE:HG22	2.07	0.55
3:C:212:ILE:HD13	3:C:237:MET:CE	2.35	0.55
7:G:112:ASP:OD1	7:G:113:MET:N	2.38	0.55
7:G:158:GLY:O	8:H:84:ARG:NH1	2.29	0.55
8:H:4:ARG:O	8:H:4:ARG:HD3	2.06	0.55
11:K:78:MET:SD	11:K:82:ILE:HD13	2.46	0.55
11:K:125:GLU:HG2	12:L:125:ARG:CZ	2.36	0.55
15:P:146:MET:HG3	15:P:150:GLU:CD	2.30	0.55
17:R:92:LEU:CD1	17:R:121:LEU:HD12	2.35	0.55
18:S:77:ALA:HA	18:S:112:TYR:CE2	2.40	0.55
20:U:78:LEU:HD11	20:U:104:CYS:HA	1.87	0.55
21:V:64:GLN:HA	21:V:67:LEU:CG	2.36	0.55
21:V:252:ASN:ND2	21:V:287:ARG:HB2	2.21	0.55
21:V:298:ILE:HD13	21:V:397:ARG:NH2	2.21	0.55
22:W:43:VAL:O	22:W:47:LEU:HD22	2.06	0.55
22:W:331:GLY:HA3	22:W:337:ALA:HB2	1.89	0.55
24:Y:146:ARG:HD3	24:Y:183:TYR:OH	2.06	0.55
24:Y:389:MET:HA	24:Y:389:MET:CE	2.29	0.55
26:a:35:HIS:CD2	27:b:15:TYR:CD1	2.93	0.55
28:c:117:GLY:H	28:c:148:ILE:HD12	1.71	0.55
29:d:264:LEU:HD13	29:d:264:LEU:C	2.31	0.55
31:f:757:ASN:HB3	31:f:811:LEU:CD1	2.36	0.55
31:f:852:VAL:HG22	31:f:852:VAL:O	2.04	0.55
1:A:38:GLN:HE22	1:A:40:THR:HG22	1.71	0.55
2:B:412:MET:HE1	3:C:177:ALA:CB	2.36	0.55
5:E:71:VAL:HG11	5:E:107:ILE:HD11	1.86	0.55
5:E:223:ARG:C	5:E:225:HIS:N	2.64	0.55
5:E:352:MET:CE	5:E:355:ILE:CB	2.84	0.55
7:G:180:GLU:HG2	8:H:55:ILE:CD1	2.35	0.55
8:H:10:LEU:HD22	8:H:129:PRO:HG3	1.87	0.55
9:I:95:GLN:HB3	16:Q:69:PHE:CD1	2.41	0.55
10:J:98:VAL:HG12	10:J:100:ASP:OD1	2.06	0.55
15:P:11:GLY:HA2	15:P:108:PRO:HB3	1.88	0.55
18:S:3:THR:HG22	18:S:16:ALA:CB	2.35	0.55
20:U:497:LEU:HD13	20:U:515:ALA:CB	2.36	0.55
22:W:88:MET:HE3	22:W:88:MET:CA	2.36	0.55
22:W:268:LYS:HZ1	22:W:336:PRO:HG2	1.72	0.55
23:X:166:LEU:HD23	23:X:196:THR:HG21	1.87	0.55
26:a:222:LEU:HD22	26:a:234:ILE:CG1	2.36	0.55
28:c:269:GLN:O	28:c:272:ILE:HG22	2.06	0.55
29:d:195:ASN:OD1	29:d:199:LEU:HD23	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:253:LEU:HD21	31:f:268:LEU:C	2.31	0.55
31:f:284:SER:C	31:f:286:LYS:HZ3	2.12	0.55
2:B:382:ASP:O	2:B:385:MET:HE3	2.06	0.55
3:C:212:ILE:CD1	3:C:237:MET:HE3	2.36	0.55
3:C:338:LEU:HB3	3:C:342:ILE:HG21	1.89	0.55
4:D:192:LYS:HD2	4:D:192:LYS:O	2.07	0.55
5:E:133:SER:O	5:E:315:ILE:HG21	2.05	0.55
12:L:178:GLU:OE1	12:L:178:GLU:N	2.40	0.55
13:M:69:VAL:O	13:M:92:ARG:HG2	2.05	0.55
15:P:215:LYS:C	15:P:216:ILE:HD13	2.31	0.55
15:P:218:PRO:CG	16:Q:194:LYS:HE3	2.33	0.55
18:S:77:ALA:HA	18:S:112:TYR:HE2	1.71	0.55
20:U:221:ILE:HG13	20:U:222:PHE:N	2.20	0.55
20:U:494:TYR:CD1	20:U:516:LEU:HD22	2.41	0.55
21:V:134:PHE:HB3	21:V:175:MET:HE1	1.88	0.55
21:V:241:ARG:O	21:V:242:HIS:HB2	2.06	0.55
21:V:332:LEU:HA	21:V:335:VAL:CG1	2.36	0.55
23:X:92:LEU:HD12	23:X:93:LEU:N	2.22	0.55
23:X:394:ASP:OD1	23:X:396:THR:HG22	2.07	0.55
25:Z:75:LEU:CD1	25:Z:112:MET:HE1	2.36	0.55
26:a:291:LEU:HD11	26:a:333:MET:HG3	1.88	0.55
27:b:142:ASN:ND2	27:b:146:GLU:HG3	2.21	0.55
27:b:170:LEU:HD23	27:b:170:LEU:C	2.31	0.55
28:c:277:LYS:HA	28:c:282:ARG:NE	2.21	0.55
29:d:156:ILE:CD1	29:d:255:SER:HB3	2.36	0.55
29:d:167:TYR:HA	29:d:170:GLN:NE2	2.22	0.55
29:d:275:ILE:CD1	29:d:282:ILE:HG12	2.35	0.55
31:f:100:ARG:N	31:f:101:PRO:CD	2.69	0.55
32:g:167:LYS:HG3	32:g:168:ASN:N	2.22	0.55
33:h:11:VAL:CG1	33:h:22:ILE:HD11	2.35	0.55
34:u:146:PHE:HA	34:u:157:LEU:CD1	2.36	0.55
1:A:391:GLU:HG3	1:A:416:VAL:CG2	2.36	0.55
2:B:86:LYS:CE	2:B:87:PRO:HD2	2.36	0.55
3:C:368:MET:HA	3:C:368:MET:HE3	1.88	0.55
3:C:369:TYR:CE2	3:C:385:MET:HE3	2.42	0.55
4:D:231:VAL:HG21	5:E:259:GLU:HG3	1.88	0.55
5:E:114:GLU:O	5:E:115:VAL:HG12	2.06	0.55
6:F:287:GLU:HA	6:F:287:GLU:OE2	2.05	0.55
7:G:10:ASP:HB2	7:G:27:TYR:CE2	2.38	0.55
10:J:42:VAL:O	10:J:43:LEU:HD23	2.07	0.55
15:P:50:ALA:HB2	16:Q:129:CYS:HB2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:94:ILE:HA	16:Q:99:ARG:HH12	1.71	0.55
16:Q:116:THR:HG23	16:Q:118:LYS:HB2	1.88	0.55
17:R:101:ASN:OD1	17:R:120:TYR:HB3	2.07	0.55
18:S:9:ARG:NH1	18:S:10:HIS:HA	2.20	0.55
19:T:166:LEU:CG	19:T:171:ALA:HB2	2.37	0.55
20:U:11:LEU:HD21	29:d:170:GLN:HG2	1.88	0.55
20:U:74:PHE:CZ	21:V:240:LEU:HD12	2.36	0.55
20:U:415:HIS:NE2	20:U:418:GLU:OE1	2.26	0.55
20:U:552:ILE:O	20:U:555:VAL:CG1	2.54	0.55
20:U:609:ASP:CG	20:U:614:VAL:HG11	2.32	0.55
22:W:17:GLU:OE2	22:W:58:SER:HB3	2.06	0.55
22:W:187:LEU:HB3	22:W:225:LYS:CE	2.36	0.55
22:W:369:TYR:HD2	26:a:312:MET:HG2	1.70	0.55
23:X:90:ARG:HD2	23:X:128:ALA:HB1	1.86	0.55
23:X:392:PRO:C	23:X:393:VAL:HG22	2.32	0.55
24:Y:202:LEU:HD13	24:Y:239:LYS:HB3	1.89	0.55
25:Z:134:PRO:HD3	28:c:219:ASN:HD22	1.71	0.55
28:c:303:MET:HE1	29:d:335:LEU:CD2	2.35	0.55
29:d:251:ILE:HD11	29:d:260:ILE:HG21	1.87	0.55
31:f:305:LEU:HD12	31:f:305:LEU:O	2.07	0.55
31:f:711:SER:HA	31:f:729:MET:CE	2.37	0.55
32:g:128:LYS:HB3	32:g:156:LEU:CB	2.29	0.55
32:g:162:GLU:HG2	32:g:163:GLU:N	2.21	0.55
33:h:138:ALA:HB1	33:h:142:GLY:HA3	1.88	0.55
2:B:417:GLU:HG3	2:B:420:LYS:NZ	2.21	0.55
4:D:214:MET:SD	38:D:501:ADP:H3'	2.46	0.55
4:D:343:LEU:CD2	23:X:226:LYS:HG2	2.36	0.55
6:F:175:MET:HB3	6:F:250:LYS:O	2.05	0.55
6:F:188:ILE:CG1	6:F:235:LEU:CD2	2.82	0.55
7:G:107:TYR:HB3	15:P:75:ARG:HD2	1.88	0.55
7:G:155:ASP:CB	7:G:156:PRO:HD2	2.32	0.55
8:H:173:PHE:HD2	8:H:194:THR:HA	1.71	0.55
16:Q:27:ARG:HB2	16:Q:183:MET:HB2	1.88	0.55
17:R:38:MET:HB3	17:R:42:ILE:HG23	1.87	0.55
17:R:92:LEU:C	17:R:92:LEU:HD23	2.31	0.55
18:S:21:THR:CG2	18:S:26:ILE:HD12	2.35	0.55
18:S:34:VAL:HG11	18:S:177:TYR:HD2	1.71	0.55
18:S:153:TYR:CD1	18:S:176:LEU:HD21	2.40	0.55
19:T:58:HIS:O	19:T:61:CYS:HB2	2.06	0.55
20:U:24:LEU:HD21	20:U:60:ALA:CB	2.36	0.55
20:U:39:SER:CB	20:U:71:LEU:HD12	2.32	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:130:LEU:HD12	20:U:133:ILE:HG21	1.89	0.55
20:U:265:ILE:HD11	20:U:329:LEU:HB2	1.87	0.55
21:V:344:ASP:OD2	21:V:346:LEU:HB2	2.06	0.55
22:W:64:SER:O	22:W:68:VAL:HG12	2.06	0.55
22:W:220:GLU:HG3	22:W:255:CYS:CB	2.36	0.55
22:W:442:THR:HG23	25:Z:208:ILE:HD11	1.87	0.55
23:X:252:LYS:HG2	23:X:287:LEU:CD2	2.36	0.55
25:Z:45:LYS:HG3	25:Z:46:LYS:H	1.71	0.55
26:a:38:THR:CB	26:a:71:VAL:HG21	2.37	0.55
26:a:64:ILE:HG22	26:a:70:ARG:HD3	1.88	0.55
26:a:335:TRP:HE1	26:a:337:GLN:HB3	1.72	0.55
28:c:174:PRO:CG	28:c:175:ARG:N	2.70	0.55
29:d:251:ILE:HG23	29:d:256:TYR:CB	2.35	0.55
31:f:383:ALA:HB1	31:f:419:LEU:HD11	1.89	0.55
31:f:733:GLY:C	31:f:736:THR:HG23	2.31	0.55
31:f:772:GLY:HA3	31:f:776:LEU:CG	2.24	0.55
31:f:882:LEU:H	31:f:894:LEU:HD21	1.72	0.55
1:A:363:SER:HB3	2:B:214:MET:CE	2.36	0.55
2:B:374:LEU:HB3	2:B:378:VAL:HG11	1.88	0.55
3:C:97:VAL:CG2	3:C:123:LEU:HD11	2.36	0.55
3:C:254:ILE:HG22	3:C:269:VAL:CG1	2.34	0.55
4:D:302:ASN:HB3	4:D:305:VAL:HG22	1.87	0.55
5:E:42:LYS:HD2	5:E:42:LYS:C	2.32	0.55
5:E:191:LEU:HD12	5:E:227:PRO:HG2	1.88	0.55
6:F:122:ALA:HB2	6:F:137:ILE:HD12	1.88	0.55
12:L:15:PRO:HA	13:M:25:TYR:CD2	2.41	0.55
12:L:36:VAL:CG1	12:L:172:LEU:HD21	2.37	0.55
16:Q:8:GLY:CA	16:Q:141:THR:HG21	2.26	0.55
17:R:169:LYS:HG3	17:R:170:ARG:N	2.22	0.55
20:U:398:ASN:HA	20:U:437:TYR:CE2	2.42	0.55
20:U:470:ASN:HA	20:U:474:ARG:HE	1.71	0.55
20:U:809:SER:N	20:U:876:GLN:NE2	2.41	0.55
20:U:847:GLU:O	20:U:851:GLU:HG2	2.06	0.55
21:V:230:PHE:CD2	21:V:231:LEU:HD12	2.41	0.55
22:W:220:GLU:HG3	22:W:255:CYS:HB2	1.88	0.55
26:a:127:ASP:C	26:a:128:LEU:HD12	2.32	0.55
28:c:82:VAL:HG21	28:c:113:HIS:CD2	2.40	0.55
28:c:94:LYS:O	28:c:98:MET:HG3	2.07	0.55
29:d:171:LEU:HG	29:d:175:TYR:CD1	2.41	0.55
31:f:572:ALA:O	31:f:573:ILE:HD13	2.07	0.55
31:f:574:GLU:OE1	31:f:574:GLU:N	2.35	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:771:LEU:HD21	31:f:825:MET:CE	2.37	0.55
33:h:12:LEU:HD22	33:h:138:ALA:CB	2.37	0.55
33:h:174:ARG:HH22	33:h:206:GLU:H	1.54	0.55
34:u:119:ILE:C	34:u:119:ILE:HD12	2.32	0.55
1:A:92:PRO:HD3	2:B:156:VAL:CG2	2.36	0.55
1:A:212:VAL:HG12	1:A:214:LEU:HD12	1.88	0.55
2:B:222:VAL:HG23	2:B:328:ILE:HG23	1.89	0.55
3:C:332:HIS:CG	3:C:360:LYS:HG3	2.42	0.55
3:C:351:MET:HE3	3:C:354:ALA:CB	2.37	0.55
3:C:358:GLU:HG2	4:D:324:PRO:CG	2.37	0.55
4:D:64:GLU:O	4:D:68:LEU:HG	2.06	0.55
5:E:22:ILE:HA	5:E:25:ARG:HE	1.72	0.55
7:G:79:VAL:C	7:G:80:MET:HE2	2.31	0.55
7:G:120:ASP:OD1	8:H:84:ARG:NH2	2.29	0.55
7:G:202:LEU:HB3	7:G:210:PHE:HE2	1.68	0.55
12:L:88:MET:SD	12:L:134:ILE:HD11	2.47	0.55
14:N:119:MET:HG2	33:h:36:PHE:CE2	2.42	0.55
20:U:158:ARG:HD3	20:U:193:PHE:CE1	2.42	0.55
21:V:109:ASN:H	21:V:112:VAL:CG2	2.19	0.55
21:V:218:TYR:CD2	21:V:227:VAL:HG12	2.42	0.55
21:V:235:LEU:HD21	21:V:251:LEU:HD13	1.88	0.55
22:W:120:ILE:HD12	22:W:121:LYS:N	2.21	0.55
22:W:151:THR:O	22:W:155:GLN:HG2	2.07	0.55
24:Y:228:MET:SD	24:Y:260:LEU:HA	2.47	0.55
25:Z:72:HIS:NE2	25:Z:111:LEU:HD11	2.22	0.55
25:Z:253:THR:O	25:Z:257:MET:HG2	2.07	0.55
26:a:62:ASN:HA	26:a:65:SER:OG	2.07	0.55
27:b:7:MET:HE1	27:b:52:ILE:HG13	1.87	0.55
27:b:122:LYS:HA	27:b:125:VAL:HG22	1.89	0.55
28:c:271:ALA:O	28:c:275:VAL:HG13	2.07	0.55
29:d:161:ILE:HG13	29:d:162:PRO:CD	2.20	0.55
29:d:243:LYS:O	29:d:246:LEU:HG	2.07	0.55
29:d:276:GLU:HA	29:d:318:PHE:CE2	2.41	0.55
31:f:69:SER:O	31:f:69:SER:OG	2.20	0.55
31:f:407:MET:HE1	31:f:440:ILE:HD12	1.88	0.55
31:f:846:VAL:HG22	31:f:866:GLN:HB3	1.88	0.55
33:h:49:THR:OG1	33:h:85:PRO:HG3	2.06	0.55
1:A:354:ILE:HG22	1:A:385:ILE:HG21	1.89	0.55
2:B:310:LEU:HD23	2:B:313:LEU:HD21	1.88	0.55
3:C:187:LEU:HD21	3:C:298:ILE:HD13	1.88	0.55
4:D:153:MET:CE	4:D:226:ALA:HB1	2.27	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:352:MET:CE	5:E:355:ILE:HG21	2.36	0.55
6:F:342:LEU:O	6:F:347:ARG:HB2	2.07	0.55
7:G:69:LEU:HG	7:G:216:GLU:OE2	2.07	0.55
11:K:76:CYS:SG	11:K:141:LEU:HD22	2.46	0.55
14:N:174:ILE:HG22	14:N:176:LEU:CD1	2.37	0.55
15:P:98:LEU:HB2	15:P:113:ILE:HD11	1.87	0.55
15:P:112:SER:O	15:P:119:THR:OG1	2.10	0.55
17:R:45:LEU:HD12	17:R:103:LEU:O	2.06	0.55
18:S:107:ARG:CZ	18:S:107:ARG:HA	2.35	0.55
20:U:732:LEU:O	20:U:736:ILE:HG12	2.07	0.55
21:V:276:PHE:CD1	21:V:277:PRO:HD2	2.42	0.55
21:V:453:HIS:HB2	29:d:279:TYR:CE2	2.41	0.55
21:V:477:HIS:HA	29:d:342:TYR:OH	2.07	0.55
22:W:34:LEU:HD21	22:W:39:ARG:CD	2.30	0.55
22:W:138:VAL:CG2	22:W:141:GLU:HB2	2.35	0.55
23:X:57:LEU:CD2	23:X:66:LEU:HD22	2.36	0.55
24:Y:42:MET:HE2	24:Y:42:MET:HA	1.89	0.55
24:Y:116:ASP:OD1	24:Y:119:GLY:N	2.35	0.55
25:Z:275:LEU:CD1	25:Z:279:LYS:HE2	2.36	0.55
26:a:40:GLN:OE1	26:a:40:GLN:HA	2.07	0.55
27:b:16:MET:HG3	27:b:26:LEU:HD22	1.89	0.55
31:f:472:HIS:HD2	31:f:474:SER:O	1.90	0.55
31:f:882:LEU:CD1	31:f:889:PRO:HG3	2.36	0.55
33:h:33:LEU:HD23	33:h:34:ALA:C	2.32	0.55
34:u:183:GLN:NE2	34:u:227:GLU:O	2.40	0.55
2:B:230:THR:HG21	2:B:353:PHE:HB3	1.88	0.55
5:E:194:ASN:HB3	5:E:196:LEU:HD21	1.87	0.55
5:E:257:LEU:HD12	5:E:260:LEU:HD23	1.87	0.55
6:F:256:LEU:HD13	6:F:268:VAL:HG22	1.89	0.55
7:G:162:GLY:HA3	8:H:58:ASP:HB3	1.88	0.55
7:G:165:ALA:C	8:H:56:LEU:HD23	2.32	0.55
9:I:175:LEU:HG	9:I:196:VAL:HG21	1.88	0.55
9:I:176:LYS:HZ1	10:J:52:LYS:HB3	1.72	0.55
10:J:221:ASN:O	10:J:225:ILE:HD12	2.07	0.55
12:L:215:VAL:HG23	12:L:221:PHE:CD1	2.42	0.55
13:M:63:ASN:HB2	13:M:81:LEU:CD2	2.36	0.55
13:M:171:ALA:O	13:M:174:THR:OG1	2.25	0.55
15:P:19:ARG:HD3	15:P:169:SER:C	2.32	0.55
16:Q:20:VAL:CG1	16:Q:190:ILE:HB	2.36	0.55
17:R:124:LEU:H	17:R:124:LEU:CD2	2.01	0.55
19:T:68:ILE:HD11	19:T:92:LEU:CD1	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:16:GLU:CD	29:d:121:LEU:HD11	2.32	0.55
20:U:376:MET:HG3	20:U:377:HIS:CD2	2.41	0.55
20:U:396:ALA:HB1	20:U:400:ALA:CB	2.37	0.55
20:U:423:MET:HE1	20:U:427:LEU:HB2	1.89	0.55
24:Y:57:LEU:HD21	24:Y:63:TRP:CE3	2.41	0.55
26:a:29:TYR:CD2	26:a:60:TYR:HE1	2.25	0.55
27:b:32:ALA:HB2	27:b:179:LEU:HD23	1.88	0.55
27:b:51:LEU:HD22	27:b:75:LEU:HD22	1.88	0.55
28:c:233:ASP:HB3	28:c:236:GLU:OE1	2.07	0.55
28:c:233:ASP:HB3	28:c:236:GLU:OE2	2.07	0.55
29:d:185:SER:O	29:d:188:MET:HE3	2.07	0.55
29:d:331:PRO:O	29:d:333:THR:N	2.40	0.55
31:f:71:TYR:CE2	31:f:109:ILE:HG21	2.41	0.55
31:f:253:LEU:HD21	31:f:269:ALA:N	2.22	0.55
33:h:49:THR:HG23	33:h:112:ILE:HD11	1.88	0.55
33:h:51:LEU:HD13	33:h:110:MET:SD	2.47	0.55
33:h:53:ALA:HB2	33:h:110:MET:HA	1.88	0.55
1:A:111:TYR:CZ	1:A:125:LEU:HD21	2.42	0.55
2:B:82:GLN:OE1	2:B:82:GLN:HA	2.06	0.55
3:C:138:MET:HB3	3:C:213:ARG:O	2.07	0.55
3:C:194:THR:HG21	3:C:317:PHE:HB3	1.89	0.55
5:E:168:LYS:O	5:E:296:ASP:HB2	2.07	0.55
5:E:310:LEU:CB	5:E:314:LYS:HZ3	2.20	0.55
6:F:124:ILE:HD11	6:F:160:ILE:HD11	1.88	0.55
6:F:196:GLN:HA	6:F:199:VAL:HG12	1.89	0.55
7:G:50:ILE:HG21	7:G:141:ILE:HD13	1.88	0.55
11:K:109:VAL:HG21	11:K:152:GLN:HB2	1.89	0.55
11:K:114:GLN:HG2	11:K:162:PHE:CZ	2.42	0.55
11:K:166:ASP:HB3	11:K:185:TYR:CZ	2.42	0.55
13:M:72:HIS:NE2	13:M:105:ASN:HB3	2.22	0.55
13:M:226:ILE:HD12	13:M:227:VAL:H	1.71	0.55
16:Q:185:VAL:HG23	16:Q:200:LEU:HG	1.88	0.55
17:R:38:MET:SD	17:R:44:LEU:HD22	2.46	0.55
17:R:42:ILE:HD12	17:R:106:GLY:CA	2.35	0.55
18:S:177:TYR:CD1	18:S:186:ARG:HA	2.42	0.55
20:U:415:HIS:CD2	20:U:418:GLU:HB2	2.42	0.55
20:U:419:ALA:CB	20:U:449:ILE:HD13	2.37	0.55
21:V:84:LYS:HD3	21:V:93:PHE:CE1	2.42	0.55
21:V:221:LEU:HB3	21:V:223:LYS:HG2	1.88	0.55
21:V:416:ARG:NH2	21:V:459:GLN:OE1	2.40	0.55
23:X:306:LEU:HD22	23:X:314:ARG:HH11	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:220:VAL:HB	24:Y:249:VAL:HG11	1.89	0.55
24:Y:314:LEU:HD11	24:Y:319:MET:HE3	1.88	0.55
25:Z:137:ALA:HB3	25:Z:158:VAL:HG23	1.88	0.55
26:a:32:LYS:HE2	27:b:20:ASP:C	2.31	0.55
27:b:76:HIS:O	27:b:77:THR:OG1	2.13	0.55
31:f:528:GLY:HA2	31:f:567:LEU:O	2.07	0.55
31:f:545:LYS:HZ1	31:f:549:GLU:C	2.14	0.55
32:g:83:ALA:HB2	32:g:105:LEU:HD21	1.89	0.55
34:u:163:GLU:HG2	34:u:164:GLN:HE21	1.71	0.55
2:B:105:THR:HG21	3:C:98:ASP:OD2	2.07	0.54
4:D:53:PHE:O	4:D:56:VAL:HG23	2.07	0.54
4:D:339:ARG:HD2	23:X:231:TYR:HE1	1.72	0.54
5:E:309:ARG:O	5:E:312:ILE:HG22	2.06	0.54
5:E:310:LEU:HB3	5:E:314:LYS:HZ3	1.72	0.54
8:H:50:LYS:N	8:H:207:ASN:O	2.30	0.54
10:J:7:ILE:HG12	10:J:18:GLN:HG2	1.90	0.54
13:M:63:ASN:HB2	13:M:81:LEU:HD21	1.89	0.54
14:N:34:LEU:HB2	14:N:186:ARG:HH12	1.72	0.54
14:N:40:ARG:O	14:N:41:ILE:HG12	2.07	0.54
15:P:146:MET:SD	15:P:151:ALA:HA	2.47	0.54
20:U:19:LEU:HA	29:d:124:LEU:CD1	2.37	0.54
20:U:24:LEU:HD21	20:U:60:ALA:HB2	1.88	0.54
20:U:155:LEU:HD22	20:U:193:PHE:HE2	1.72	0.54
20:U:427:LEU:CD1	20:U:438:GLN:HG3	2.37	0.54
20:U:695:MET:HE1	20:U:709:PHE:CB	2.37	0.54
22:W:323:ASP:C	22:W:324:TYR:HD1	2.15	0.54
23:X:167:VAL:HG23	23:X:196:THR:HG22	1.89	0.54
24:Y:326:GLY:H	30:e:59:GLU:CD	2.15	0.54
28:c:191:ALA:CB	28:c:196:LEU:HD22	2.37	0.54
1:A:415:LYS:O	1:A:419:SER:HB3	2.08	0.54
2:B:78:PHE:HB2	31:f:613:LEU:CD2	2.35	0.54
6:F:324:THR:HG23	6:F:326:VAL:H	1.70	0.54
7:G:40:VAL:HG13	7:G:51:VAL:HG22	1.88	0.54
12:L:110:SER:HA	12:L:153:TYR:CE2	2.42	0.54
16:Q:12:MET:CG	16:Q:167:ILE:HD11	2.37	0.54
17:R:80:ALA:O	17:R:84:THR:HG23	2.06	0.54
20:U:793:LYS:HG3	20:U:794:ASP:OD1	2.08	0.54
20:U:831:ALA:O	20:U:836:THR:HB	2.07	0.54
21:V:99:ARG:NH2	30:e:17:ASP:HB2	2.22	0.54
21:V:466:ILE:HG22	24:Y:363:ASN:OD1	2.07	0.54
22:W:96:GLN:HA	22:W:96:GLN:OE1	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:223:LYS:HG3	22:W:227:TYR:CE2	2.42	0.54
23:X:407:MET:CE	25:Z:269:VAL:HG21	2.36	0.54
26:a:78:GLU:O	26:a:81:LEU:HG	2.06	0.54
27:b:138:VAL:HG11	27:b:156:PHE:CE2	2.43	0.54
31:f:545:LYS:HZ1	31:f:549:GLU:HB2	1.72	0.54
32:g:130:VAL:HG22	32:g:154:MET:HG2	1.88	0.54
2:B:256:ILE:CD1	3:C:271:ARG:HD3	2.37	0.54
2:B:375:ALA:O	2:B:378:VAL:HG12	2.06	0.54
3:C:61:GLU:OE1	3:C:61:GLU:HA	2.07	0.54
3:C:104:ASP:OD1	3:C:104:ASP:N	2.35	0.54
3:C:399:MET:CE	9:I:56:LEU:HD22	2.37	0.54
5:E:50:LEU:HD11	6:F:83:ASN:CG	2.32	0.54
5:E:334:LEU:HD23	5:E:371:VAL:CG1	2.37	0.54
7:G:219:VAL:CG1	7:G:230:LEU:HD21	2.38	0.54
8:H:36:VAL:CG2	8:H:195:LEU:HD22	2.38	0.54
18:S:81:LYS:HG2	18:S:120:ARG:NH2	2.22	0.54
20:U:361:ARG:H	20:U:361:ARG:HD2	1.71	0.54
20:U:481:LEU:HD23	20:U:481:LEU:O	2.07	0.54
23:X:352:SER:O	23:X:355:LYS:HD3	2.07	0.54
23:X:380:GLN:HB3	24:Y:314:LEU:HA	1.89	0.54
28:c:41:MET:HG2	28:c:112:TYR:CE2	2.42	0.54
28:c:211:GLU:O	28:c:212:LEU:HB3	2.06	0.54
28:c:233:ASP:HB3	28:c:236:GLU:CD	2.32	0.54
29:d:223:ASN:OD1	29:d:226:ILE:HG23	2.07	0.54
31:f:206:ASP:O	31:f:210:GLU:HB2	2.07	0.54
31:f:327:ASN:HB2	31:f:420:TRP:O	2.06	0.54
31:f:386:GLY:HA2	31:f:418:LEU:CG	2.37	0.54
31:f:461:PRO:HG3	32:g:154:MET:CG	2.34	0.54
31:f:686:LEU:O	31:f:690:VAL:HG23	2.06	0.54
31:f:749:ALA:HB2	31:f:762:VAL:HG11	1.90	0.54
32:g:130:VAL:O	32:g:153:ALA:HA	2.07	0.54
33:h:11:VAL:C	33:h:12:LEU:HD23	2.31	0.54
33:h:53:ALA:HB3	33:h:60:PHE:CD1	2.43	0.54
1:A:347:ASP:OD1	1:A:347:ASP:N	2.34	0.54
4:D:85:ILE:HB	4:D:86:PRO:HD3	1.90	0.54
4:D:154:LEU:HB2	4:D:227:PHE:O	2.07	0.54
5:E:134:GLU:O	5:E:315:ILE:HD12	2.07	0.54
13:M:69:VAL:HG13	13:M:91:ALA:HB1	1.89	0.54
13:M:75:MET:HE1	13:M:88:ALA:HA	1.88	0.54
14:N:119:MET:HG2	33:h:36:PHE:HE2	1.72	0.54
16:Q:45:MET:CE	16:Q:67:LEU:HD23	2.33	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:74:TYR:HE2	16:Q:82:ILE:HA	1.73	0.54
19:T:50:THR:HG23	19:T:110:ILE:HD11	1.90	0.54
20:U:68:PHE:HD2	20:U:76:GLU:HB2	1.71	0.54
21:V:348:PHE:HD2	21:V:361:PHE:HB2	1.72	0.54
21:V:363:LEU:HD11	21:V:375:PHE:CZ	2.42	0.54
22:W:87:ILE:HG23	22:W:104:MET:CE	2.38	0.54
23:X:77:LEU:HD22	23:X:85:ALA:CB	2.36	0.54
24:Y:74:LYS:O	24:Y:78:GLU:HG2	2.07	0.54
25:Z:200:GLY:O	25:Z:204:LYS:HG2	2.07	0.54
26:a:244:ASN:ND2	26:a:246:GLU:HG2	2.22	0.54
26:a:244:ASN:HD21	26:a:246:GLU:HG2	1.72	0.54
27:b:12:ASN:CB	27:b:78:VAL:HG13	2.36	0.54
31:f:266:LEU:O	31:f:270:LEU:HG	2.07	0.54
31:f:389:LYS:HG3	31:f:390:LEU:CD1	2.37	0.54
31:f:415:GLY:CA	31:f:447:ALA:HB1	2.38	0.54
31:f:478:ARG:HD3	31:f:514:VAL:HG11	1.90	0.54
31:f:662:MET:HA	31:f:697:ILE:CD1	2.38	0.54
31:f:836:GLU:O	31:f:837:LEU:HB2	2.08	0.54
32:g:145:GLN:CG	32:g:147:VAL:HG23	2.37	0.54
1:A:297:ARG:HD3	6:F:257:VAL:HG21	1.90	0.54
7:G:132:ARG:HD2	13:M:14:PHE:CZ	2.43	0.54
7:G:174:GLU:OE1	7:G:174:GLU:N	2.35	0.54
11:K:146:VAL:HG23	11:K:220:VAL:CG1	2.35	0.54
14:N:104:ASP:OD1	14:N:106:GLN:N	2.41	0.54
19:T:21:ALA:HB3	19:T:198:VAL:CG1	2.37	0.54
19:T:22:ILE:CG1	19:T:195:ILE:HD11	2.37	0.54
20:U:214:ILE:HG21	20:U:904:LYS:HD3	1.89	0.54
21:V:309:MET:SD	21:V:331:LEU:HD12	2.47	0.54
22:W:33:LYS:HG3	22:W:34:LEU:N	2.21	0.54
22:W:412:ILE:HD12	26:a:327:VAL:HG21	1.89	0.54
22:W:435:LEU:CD1	25:Z:237:LEU:HD23	2.38	0.54
23:X:281:GLY:H	23:X:284:THR:HG22	1.71	0.54
24:Y:215:ASP:OD1	24:Y:215:ASP:N	2.38	0.54
27:b:51:LEU:H	27:b:62:THR:HG23	1.73	0.54
28:c:104:ARG:HH11	28:c:104:ARG:HG3	1.72	0.54
29:d:175:TYR:CE2	29:d:188:MET:HA	2.43	0.54
29:d:251:ILE:CD1	29:d:260:ILE:HG13	2.35	0.54
31:f:64:GLY:HA2	31:f:105:LYS:NZ	2.23	0.54
31:f:291:GLN:HA	31:f:291:GLN:OE1	2.05	0.54
31:f:472:HIS:NE2	31:f:474:SER:CB	2.70	0.54
31:f:785:ARG:HE	31:f:876:HIS:CG	2.26	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:107:TRP:HA	33:h:127:MET:CG	2.38	0.54
34:u:174:PRO:O	34:u:270:VAL:HB	2.08	0.54
2:B:357:ASP:OD1	2:B:360:THR:OG1	2.06	0.54
3:C:117:ARG:HG2	3:C:117:ARG:HH11	1.72	0.54
4:D:41:TYR:CE2	20:U:183:LEU:HD21	2.43	0.54
4:D:160:PRO:HG2	4:D:217:LYS:O	2.08	0.54
5:E:340:GLY:HA3	38:E:501:ADP:C8	2.42	0.54
7:G:69:LEU:N	7:G:216:GLU:OE2	2.40	0.54
8:H:173:PHE:CD2	8:H:194:THR:HA	2.43	0.54
13:M:73:VAL:HG13	13:M:108:LEU:HD13	1.88	0.54
15:P:12:ILE:HG13	15:P:109:HIS:O	2.07	0.54
19:T:24:ALA:HB2	19:T:195:ILE:HA	1.88	0.54
20:U:214:ILE:O	20:U:218:GLN:HG2	2.07	0.54
20:U:556:MET:O	20:U:589:ALA:HB2	2.07	0.54
21:V:451:ILE:HD12	29:d:278:ALA:HB1	1.89	0.54
22:W:205:ILE:O	22:W:208:LYS:HB3	2.07	0.54
23:X:311:ALA:HA	23:X:315:ASP:OD1	2.08	0.54
24:Y:225:TYR:OH	24:Y:278:VAL:HG22	2.08	0.54
25:Z:96:HIS:CD2	25:Z:121:LEU:HD11	2.42	0.54
27:b:30:GLN:HG2	27:b:75:LEU:HD12	1.90	0.54
29:d:288:THR:HG23	29:d:293:PHE:HB2	1.89	0.54
31:f:71:TYR:HE2	31:f:109:ILE:HG21	1.71	0.54
31:f:415:GLY:H	31:f:447:ALA:CB	2.21	0.54
31:f:524:MET:HE3	31:f:525:ILE:HG13	1.89	0.54
33:h:32:SER:HA	33:h:182:ARG:NH1	2.23	0.54
33:h:99:ARG:NH1	33:h:99:ARG:HB3	2.22	0.54
33:h:125:VAL:HA	33:h:130:VAL:O	2.07	0.54
33:h:126:ASP:OD1	33:h:129:GLY:N	2.38	0.54
1:A:348:LEU:O	1:A:348:LEU:HD23	2.08	0.54
2:B:255:LEU:HA	2:B:266:LEU:HD23	1.88	0.54
3:C:76:VAL:HG11	3:C:108:VAL:CG2	2.38	0.54
3:C:337:ASN:HB2	3:C:376:VAL:O	2.07	0.54
4:D:318:ASP:OD1	4:D:320:ALA:N	2.26	0.54
9:I:132:VAL:HG12	9:I:134:LEU:HD22	1.88	0.54
10:J:95:ARG:NH2	10:J:101:PRO:HB3	2.22	0.54
11:K:141:LEU:HD12	11:K:156:MET:CE	2.37	0.54
14:N:16:ALA:HB3	14:N:33:LYS:HB2	1.89	0.54
14:N:176:LEU:HD11	14:N:189:LEU:HG	1.90	0.54
15:P:154:LEU:HD12	15:P:154:LEU:O	2.08	0.54
15:P:210:ALA:C	16:Q:201:LYS:HG2	2.33	0.54
19:T:17:GLY:HA3	19:T:20:PHE:CE1	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:185:MET:CE	20:U:186:SER:CB	2.86	0.54
23:X:252:LYS:HG2	23:X:287:LEU:HD23	1.89	0.54
24:Y:41:LEU:O	24:Y:41:LEU:HD12	2.07	0.54
26:a:8:LEU:O	26:a:12:GLN:N	2.40	0.54
28:c:57:MET:HE1	28:c:143:VAL:CG2	2.38	0.54
28:c:211:GLU:C	28:c:213:GLU:H	2.15	0.54
31:f:81:GLN:OE1	31:f:81:GLN:HA	2.08	0.54
31:f:93:PRO:O	31:f:96:LEU:N	2.40	0.54
31:f:105:LYS:HE3	31:f:106:LEU:CD2	2.37	0.54
31:f:143:ARG:HG2	31:f:162:LEU:HD21	1.88	0.54
31:f:349:TYR:CZ	31:f:763:ARG:HG2	2.43	0.54
31:f:479:LEU:HD21	31:f:514:VAL:CA	2.22	0.54
32:g:116:ILE:HG23	32:g:120:PHE:CD2	2.42	0.54
2:B:79:ILE:HD11	31:f:677:HIS:HB3	1.90	0.54
4:D:65:GLN:HB3	29:d:349:ILE:HD12	1.89	0.54
4:D:362:ASP:OD2	23:X:274:LYS:HE2	2.08	0.54
5:E:26:LEU:CD1	6:F:58:GLU:HB2	2.38	0.54
5:E:175:PRO:O	5:E:180:LYS:HE3	2.07	0.54
5:E:199:VAL:HG22	5:E:233:ASP:CB	2.26	0.54
5:E:275:MET:HG2	5:E:277:MET:HG3	1.89	0.54
7:G:96:TYR:HA	14:N:65:PHE:CE2	2.42	0.54
9:I:44:LEU:CD1	9:I:190:LEU:HD23	2.37	0.54
10:J:4:ASP:HB2	10:J:21:TYR:HE2	1.72	0.54
10:J:155:ALA:H	11:K:63:SER:CB	2.20	0.54
12:L:72:ILE:HG21	12:L:88:MET:CE	2.35	0.54
13:M:152:ASP:HB2	13:M:153:PRO:HD2	1.89	0.54
14:N:4:MET:HB2	14:N:160:LEU:HD21	1.88	0.54
14:N:104:ASP:OD1	14:N:104:ASP:C	2.50	0.54
15:P:33:LYS:O	15:P:44:CYS:HA	2.08	0.54
16:Q:28:PHE:CE2	17:R:125:ALA:HB2	2.42	0.54
19:T:66:LYS:NZ	33:h:94:ARG:HD3	2.23	0.54
19:T:123:SER:HB3	19:T:133:ASP:OD2	2.08	0.54
20:U:59:PHE:HD1	20:U:87:LEU:HD11	1.72	0.54
20:U:375:PHE:O	20:U:739:ALA:HA	2.08	0.54
20:U:491:GLN:OE1	20:U:491:GLN:HA	2.07	0.54
20:U:701:ILE:HD11	20:U:810:THR:O	2.08	0.54
20:U:724:VAL:O	20:U:727:LYS:HG2	2.08	0.54
20:U:904:LYS:CD	20:U:905:PRO:HD2	2.37	0.54
21:V:90:GLU:HB2	21:V:93:PHE:CE2	2.42	0.54
22:W:140:ILE:HG22	22:W:177:MET:HB3	1.90	0.54
23:X:290:VAL:CG2	23:X:313:LEU:HD21	2.31	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:105:MET:CE	24:Y:140:ILE:HD11	2.38	0.54
26:a:113:LEU:O	26:a:113:LEU:HD23	2.07	0.54
27:b:97:LEU:O	27:b:100:ARG:HB2	2.08	0.54
31:f:229:VAL:HG22	31:f:233:LEU:CD2	2.38	0.54
31:f:418:LEU:HB3	31:f:421:ASP:CG	2.32	0.54
1:A:333:ARG:NH1	1:A:335:GLY:HA3	2.23	0.54
3:C:132:ASP:OD1	3:C:133:PRO:HD2	2.07	0.54
5:E:121:ASN:HA	5:E:124:HIS:ND1	2.23	0.54
6:F:97:LEU:HD12	6:F:97:LEU:O	2.08	0.54
6:F:253:GLY:N	6:F:254:PRO:HD2	2.23	0.54
7:G:31:ALA:HB2	13:M:18:GLY:CA	2.38	0.54
8:H:68:ILE:HD12	8:H:91:ARG:HG3	1.90	0.54
9:I:216:LEU:CD1	9:I:225:ILE:CD1	2.85	0.54
10:J:133:ILE:H	10:J:133:ILE:HD12	1.71	0.54
10:J:145:TYR:HD1	10:J:155:ALA:HA	1.73	0.54
18:S:13:ILE:HD13	18:S:178:HIS:HA	1.89	0.54
19:T:62:LEU:HD12	19:T:63:THR:H	1.72	0.54
20:U:26:LYS:HD2	29:d:129:LEU:HD23	1.90	0.54
20:U:410:VAL:HG23	20:U:448:LEU:HD22	1.89	0.54
21:V:291:TYR:O	21:V:295:ILE:HD13	2.08	0.54
22:W:87:ILE:HA	22:W:104:MET:CE	2.35	0.54
22:W:312:MET:CE	22:W:368:LYS:HE3	2.38	0.54
23:X:57:LEU:HD22	23:X:66:LEU:HD22	1.90	0.54
24:Y:192:ARG:HB2	24:Y:291:HIS:ND1	2.22	0.54
24:Y:273:GLN:HA	24:Y:273:GLN:HE21	1.72	0.54
25:Z:33:LYS:O	25:Z:34:ARG:HG2	2.08	0.54
25:Z:172:VAL:CG2	28:c:217:LEU:HD22	2.38	0.54
26:a:172:TYR:OH	26:a:199:THR:OG1	1.96	0.54
26:a:206:LEU:HD11	26:a:260:ASP:O	2.07	0.54
28:c:36:LEU:HD11	28:c:40:LYS:HE2	1.90	0.54
31:f:52:LEU:O	31:f:52:LEU:HD13	2.08	0.54
31:f:110:TYR:HE2	31:f:123:ALA:HB2	1.73	0.54
31:f:237:VAL:HG21	31:f:249:LEU:CD2	2.38	0.54
31:f:270:LEU:HD13	31:f:301:HIS:ND1	2.23	0.54
31:f:372:LEU:CD1	31:f:409:SER:HB2	2.24	0.54
1:A:56:LEU:HD12	2:B:72:LEU:HD11	1.90	0.54
2:B:251:VAL:HG12	2:B:254:GLU:H	1.73	0.54
7:G:221:THR:HG23	7:G:224:ASN:H	1.72	0.54
9:I:34:CYS:SG	9:I:164:ILE:HG13	2.48	0.54
9:I:72:MET:HE1	9:I:107:CYS:HA	1.90	0.54
9:I:218:ARG:HH22	9:I:221:GLY:HA2	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:173:GLU:HA	11:K:58:LEU:CD2	2.38	0.54
14:N:150:GLU:O	14:N:154:GLN:HG2	2.07	0.54
16:Q:171:MET:O	16:Q:175:VAL:HG12	2.08	0.54
19:T:52:ILE:HD13	19:T:110:ILE:CG1	2.34	0.54
19:T:166:LEU:CD1	19:T:171:ALA:HB2	2.38	0.54
20:U:115:ASN:OD1	20:U:123:LYS:HB2	2.08	0.54
20:U:250:PHE:CE2	20:U:911:ILE:HG21	2.43	0.54
20:U:597:LYS:O	20:U:600:ARG:HG2	2.08	0.54
20:U:666:LYS:HG2	20:U:666:LYS:O	2.08	0.54
20:U:788:VAL:O	20:U:802:TYR:OH	2.26	0.54
25:Z:142:GLU:CD	25:Z:153:LYS:HA	2.33	0.54
26:a:32:LYS:HE2	27:b:20:ASP:CA	2.38	0.54
26:a:112:ILE:HD12	26:a:151:VAL:HG21	1.89	0.54
26:a:155:PHE:C	26:a:155:PHE:CD1	2.84	0.54
26:a:371:ALA:HB1	26:a:374:ILE:CG2	2.37	0.54
27:b:100:ARG:HH22	27:b:107:MET:HE1	1.72	0.54
31:f:801:VAL:O	31:f:804:LEU:HD12	2.08	0.54
31:f:849:ALA:HB1	31:f:860:LYS:CB	2.37	0.54
32:g:142:LEU:HA	32:g:145:GLN:HG2	1.89	0.54
33:h:33:LEU:HD23	33:h:34:ALA:N	2.23	0.54
34:u:127:MET:HE1	34:u:150:LEU:CD1	2.37	0.54
1:A:348:LEU:HD13	11:K:175:GLU:HB3	1.90	0.53
2:B:60:LEU:O	2:B:64:LYS:HG3	2.08	0.53
2:B:245:ALA:HB1	2:B:279:PRO:C	2.33	0.53
2:B:374:LEU:HD23	2:B:414:VAL:CG2	2.38	0.53
3:C:127:LEU:CD2	4:D:102:ILE:HD11	2.38	0.53
3:C:298:ILE:CD1	3:C:306:LEU:HD11	2.38	0.53
4:D:65:GLN:OE1	29:d:349:ILE:HG23	2.08	0.53
8:H:92:LYS:HD2	15:P:65:LEU:CD1	2.38	0.53
10:J:135:GLY:HA2	10:J:211:MET:HE3	1.87	0.53
16:Q:186:ILE:CD1	16:Q:199:THR:HB	2.38	0.53
17:R:60:ILE:HD12	17:R:84:THR:HA	1.90	0.53
18:S:52:CYS:CA	18:S:97:MET:HE1	2.26	0.53
19:T:23:VAL:CG1	19:T:196:CYS:HB3	2.39	0.53
19:T:24:ALA:CB	19:T:195:ILE:HA	2.38	0.53
20:U:10:SER:HB2	29:d:166:ARG:HA	1.90	0.53
20:U:465:LEU:HD23	20:U:496:LEU:HD21	1.83	0.53
20:U:796:LYS:HZ1	20:U:921:ILE:HB	1.73	0.53
21:V:123:SER:HB2	21:V:125:ASN:OD1	2.08	0.53
21:V:192:MET:HE2	21:V:230:PHE:HE1	1.69	0.53
21:V:285:TRP:O	21:V:289:LEU:HG	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:276:LEU:HD11	22:W:341:PHE:CZ	2.44	0.53
23:X:96:PHE:CE2	23:X:109:LEU:HD13	2.44	0.53
23:X:154:LEU:HD13	23:X:169:VAL:HG12	1.90	0.53
25:Z:34:ARG:NH2	25:Z:105:ASP:OD1	2.40	0.53
26:a:43:ASP:O	26:a:46:GLN:HB2	2.08	0.53
31:f:195:ASN:CA	31:f:200:ALA:HB3	2.37	0.53
31:f:282:PHE:HZ	31:f:307:LEU:HD21	1.73	0.53
33:h:145:LEU:HD11	33:h:175:VAL:O	2.08	0.53
34:u:216:GLN:NE2	34:u:233:LEU:HA	2.23	0.53
4:D:255:LYS:HZ2	4:D:302:ASN:HA	1.72	0.53
5:E:145:LEU:CG	5:E:187:VAL:HG21	2.38	0.53
7:G:78:CYS:HA	7:G:139:ILE:O	2.09	0.53
7:G:189:TRP:CZ3	7:G:197:THR:HG21	2.44	0.53
8:H:74:LEU:HD11	8:H:134:LEU:HD13	1.89	0.53
8:H:222:THR:OG1	8:H:223:PRO:HD2	2.08	0.53
9:I:14:PRO:O	10:J:24:GLU:HG3	2.09	0.53
9:I:90:LEU:HG	9:I:114:LEU:CD2	2.34	0.53
12:L:77:LEU:HD13	12:L:126:ARG:NH1	2.23	0.53
14:N:19:ARG:HB2	14:N:171:GLY:N	2.23	0.53
14:N:135:ILE:HG23	14:N:163:ALA:HB2	1.89	0.53
18:S:19:ARG:CG	18:S:26:ILE:HD11	2.38	0.53
20:U:108:TYR:CE2	20:U:134:VAL:HG11	2.43	0.53
20:U:884:VAL:HG23	20:U:888:GLN:CG	2.38	0.53
22:W:24:VAL:HA	22:W:27:ARG:HG2	1.89	0.53
22:W:129:ARG:HH11	22:W:146:THR:HG22	1.74	0.53
22:W:194:LEU:CG	22:W:202:THR:HG21	2.38	0.53
22:W:326:MET:HE3	22:W:326:MET:C	2.33	0.53
24:Y:45:VAL:HG12	24:Y:73:MET:CE	2.34	0.53
24:Y:202:LEU:CD1	24:Y:231:LEU:HD11	2.36	0.53
25:Z:38:VAL:HG12	25:Z:40:LEU:CD1	2.38	0.53
28:c:41:MET:CE	28:c:157:ILE:HD11	2.37	0.53
28:c:125:VAL:HG21	34:u:289:HIS:CB	2.37	0.53
29:d:129:LEU:HD12	29:d:130:PRO:CG	2.39	0.53
31:f:103:TYR:HA	31:f:106:LEU:HG	1.89	0.53
31:f:195:ASN:HB3	31:f:200:ALA:O	2.08	0.53
31:f:372:LEU:HD11	31:f:409:SER:CB	2.25	0.53
31:f:858:LYS:CD	31:f:859:PRO:HD2	2.36	0.53
32:g:103:THR:HB	32:g:115:LYS:CD	2.38	0.53
32:g:128:LYS:NZ	32:g:136:LEU:H	2.05	0.53
1:A:428:ARG:CG	10:J:20:GLU:HG2	2.37	0.53
2:B:220:LYS:HZ3	2:B:220:LYS:HB2	1.72	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:374:LEU:CD2	2:B:378:VAL:HG21	2.36	0.53
3:C:220:VAL:HG13	3:C:269:VAL:CG2	2.38	0.53
4:D:366:ARG:HD2	4:D:403:TYR:CE2	2.43	0.53
5:E:172:LEU:HD11	5:E:276:ILE:HG22	1.89	0.53
6:F:408:LEU:HD23	6:F:408:LEU:C	2.33	0.53
8:H:74:LEU:CG	8:H:134:LEU:HD13	2.38	0.53
8:H:115:ALA:HB1	8:H:153:GLY:O	2.09	0.53
13:M:8:ASP:C	13:M:8:ASP:OD1	2.51	0.53
14:N:135:ILE:CG2	14:N:163:ALA:HB2	2.38	0.53
14:N:174:ILE:CG2	14:N:176:LEU:HD11	2.38	0.53
17:R:37:LYS:HE2	17:R:188:ILE:HG21	1.89	0.53
19:T:199:THR:HG22	19:T:204:ARG:HH22	1.73	0.53
20:U:246:TYR:CZ	20:U:324:LYS:HD2	2.44	0.53
20:U:249:CYS:SG	20:U:329:LEU:HD21	2.48	0.53
20:U:253:TYR:HA	20:U:261:LEU:HD11	1.91	0.53
20:U:324:LYS:CD	20:U:794:ASP:HB3	2.36	0.53
20:U:349:ASP:OD2	20:U:351:MET:HE2	2.08	0.53
20:U:391:GLU:OE1	20:U:391:GLU:N	2.40	0.53
20:U:405:THR:HG23	20:U:427:LEU:CG	2.37	0.53
20:U:545:LEU:HB3	20:U:577:ILE:CG2	2.36	0.53
21:V:99:ARG:O	21:V:102:PRO:HD2	2.08	0.53
22:W:40:LEU:O	22:W:42:GLU:N	2.42	0.53
22:W:305:LEU:HB2	22:W:324:TYR:CE2	2.41	0.53
23:X:167:VAL:CG2	23:X:196:THR:HG22	2.39	0.53
23:X:332:GLU:HG3	23:X:364:LYS:HE3	1.90	0.53
24:Y:222:TYR:OH	24:Y:285:ASP:OD2	2.22	0.53
26:a:317:VAL:HB	26:a:319:LEU:HD13	1.90	0.53
2:B:133:VAL:CG2	2:B:159:VAL:HG23	2.39	0.53
2:B:368:HIS:HE1	36:B:501:ATP:N3	2.06	0.53
5:E:313:LEU:HD12	5:E:347:CYS:SG	2.47	0.53
9:I:139:TRP:CD1	9:I:144:GLY:HA2	2.44	0.53
9:I:178:ASP:C	9:I:178:ASP:OD1	2.52	0.53
10:J:144:LEU:HD23	10:J:144:LEU:C	2.34	0.53
13:M:34:SER:HB3	13:M:52:LEU:CD1	2.39	0.53
13:M:160:TYR:CD2	13:M:163:CYS:HB2	2.43	0.53
13:M:193:VAL:HA	13:M:196:ILE:CG2	2.37	0.53
15:P:16:ALA:HB2	15:P:44:CYS:SG	2.49	0.53
15:P:84:LYS:HE2	15:P:119:THR:CG2	2.35	0.53
15:P:153:ASN:O	15:P:157:GLU:HG3	2.09	0.53
16:Q:172:LEU:HA	16:Q:175:VAL:HG12	1.89	0.53
20:U:497:LEU:HD13	20:U:515:ALA:HB1	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:616:ARG:HD2	20:U:650:TYR:CD1	2.43	0.53
20:U:883:ARG:O	20:U:883:ARG:HG2	2.07	0.53
21:V:100:MET:HE2	21:V:100:MET:N	2.23	0.53
22:W:177:MET:CE	22:W:181:GLU:HG2	2.37	0.53
22:W:260:SER:HA	22:W:263:TRP:NE1	2.24	0.53
22:W:275:ILE:HD12	22:W:309:PHE:CG	2.43	0.53
22:W:394:SER:HB3	23:X:341:PRO:HG2	1.89	0.53
22:W:409:LEU:HD22	23:X:384:VAL:HG11	1.90	0.53
23:X:81:SER:HB3	23:X:84:LYS:HD2	1.89	0.53
25:Z:19:VAL:HG13	25:Z:95:TYR:CE2	2.43	0.53
25:Z:183:THR:O	25:Z:184:VAL:HB	2.08	0.53
26:a:58:LYS:HZ1	26:a:65:SER:HB3	1.73	0.53
31:f:307:LEU:HD12	31:f:318:THR:OG1	2.09	0.53
31:f:616:CYS:SG	31:f:654:VAL:HG23	2.48	0.53
1:A:97:ARG:HA	1:A:139:ARG:HA	1.89	0.53
5:E:212:ALA:N	5:E:215:ILE:HB	2.23	0.53
6:F:284:PHE:HA	6:F:329:ILE:O	2.08	0.53
12:L:140:MET:HE1	33:h:81:HIS:CG	2.44	0.53
13:M:44:GLY:HA3	13:M:186:CYS:SG	2.48	0.53
14:N:75:LEU:O	14:N:78:THR:HB	2.08	0.53
14:N:173:VAL:HG22	14:N:174:ILE:N	2.22	0.53
18:S:26:ILE:O	18:S:26:ILE:CG2	2.57	0.53
20:U:138:PHE:CZ	20:U:162:VAL:HG11	2.44	0.53
21:V:108:LEU:CD1	21:V:174:PHE:HB2	2.39	0.53
23:X:102:ALA:HA	23:X:106:GLU:OE2	2.08	0.53
23:X:117:ALA:HA	23:X:122:ARG:HH21	1.73	0.53
23:X:286:ALA:HA	23:X:309:TYR:CD2	2.43	0.53
23:X:415:TYR:CD1	24:Y:383:LEU:HD23	2.43	0.53
24:Y:220:VAL:HG21	24:Y:249:VAL:CG2	2.38	0.53
25:Z:65:ASP:C	25:Z:65:ASP:OD1	2.52	0.53
26:a:216:LEU:HA	26:a:222:LEU:HD12	1.91	0.53
27:b:151:GLU:HA	27:b:154:THR:CG2	2.39	0.53
31:f:78:LEU:HB3	31:f:125:ILE:HD12	1.89	0.53
31:f:292:LYS:HA	31:f:317:LEU:CD2	2.38	0.53
31:f:563:GLY:O	31:f:567:LEU:N	2.41	0.53
31:f:738:ASN:OD1	31:f:741:LEU:N	2.33	0.53
31:f:786:GLN:CD	31:f:786:GLN:C	2.77	0.53
31:f:802:SER:O	31:f:809:ILE:HD12	2.09	0.53
33:h:1:THR:HG21	33:h:107:TRP:H	1.73	0.53
33:h:174:ARG:NH2	33:h:206:GLU:H	2.07	0.53
1:A:25:LEU:HG	2:B:410:ARG:NH1	2.24	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:166:VAL:HG12	1:A:168:GLU:H	1.74	0.53
11:K:210:LEU:HD12	11:K:211:ASN:H	1.73	0.53
12:L:49:LEU:HD11	12:L:199:LEU:HD11	1.91	0.53
13:M:69:VAL:CG1	13:M:91:ALA:HB1	2.38	0.53
13:M:69:VAL:HG11	13:M:111:LEU:HD21	1.91	0.53
17:R:3:TYR:CD2	17:R:5:ILE:HD11	2.44	0.53
18:S:19:ARG:HD3	18:S:171:GLY:N	2.24	0.53
18:S:82:LEU:HD21	18:S:86:MET:HE3	1.90	0.53
20:U:123:LYS:HD3	20:U:123:LYS:H	1.74	0.53
20:U:470:ASN:HA	20:U:474:ARG:NE	2.24	0.53
20:U:665:ASN:O	20:U:666:LYS:HB3	2.08	0.53
20:U:846:LYS:HA	20:U:849:LYS:CG	2.39	0.53
23:X:253:TYR:OH	23:X:318:ILE:HD13	2.09	0.53
24:Y:75:LYS:HG3	24:Y:76:ALA:N	2.22	0.53
24:Y:282:MET:HE1	24:Y:295:TYR:CB	2.37	0.53
24:Y:333:GLU:HG2	24:Y:337:PHE:CE2	2.43	0.53
24:Y:376:LEU:HD23	25:Z:265:LEU:CD2	2.39	0.53
24:Y:387:ILE:CD1	25:Z:276:ILE:HA	2.38	0.53
25:Z:8:LYS:HB2	25:Z:159:THR:CG2	2.39	0.53
25:Z:226:ILE:O	25:Z:229:GLN:HB3	2.09	0.53
26:a:29:TYR:HD2	26:a:60:TYR:HE1	1.57	0.53
26:a:274:LEU:CD2	26:a:314:ALA:HB2	2.39	0.53
27:b:11:ASP:OD1	27:b:13:SER:N	2.31	0.53
29:d:199:LEU:CD1	29:d:204:ARG:HD3	2.37	0.53
29:d:295:THR:HG22	29:d:297:LYS:H	1.74	0.53
31:f:57:GLU:O	31:f:60:VAL:HG12	2.07	0.53
31:f:242:GLU:OE2	31:f:245:ASN:HB3	2.08	0.53
31:f:252:ALA:C	31:f:256:PHE:CE1	2.87	0.53
31:f:459:CYS:HB3	32:g:152:LYS:HB2	1.91	0.53
31:f:618:GLU:O	31:f:650:GLN:NE2	2.41	0.53
33:h:45:VAL:CG2	33:h:49:THR:HG22	2.38	0.53
33:h:108:ASN:OD1	33:h:110:MET:HG2	2.09	0.53
1:A:38:GLN:OE1	1:A:40:THR:N	2.41	0.53
1:A:44:GLN:O	1:A:48:VAL:HG23	2.08	0.53
1:A:210:LYS:O	1:A:316:LYS:HA	2.09	0.53
2:B:255:LEU:HD22	2:B:267:VAL:HG22	1.91	0.53
2:B:415:THR:HG22	2:B:416:ASN:H	1.73	0.53
4:D:398:ASP:OD1	4:D:398:ASP:C	2.52	0.53
5:E:77:PRO:HG2	5:E:79:TYR:CZ	2.43	0.53
5:E:309:ARG:HD2	5:E:343:LEU:HD21	1.90	0.53
9:I:134:LEU:HD23	9:I:134:LEU:H	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:160:LYS:HB2	10:J:53:LEU:HG	1.91	0.53
12:L:184:LEU:CD1	12:L:214:ILE:HG21	2.39	0.53
13:M:34:SER:HB2	13:M:50:GLU:HG2	1.90	0.53
15:P:159:ILE:O	15:P:163:ILE:HG12	2.08	0.53
16:Q:171:MET:HE1	16:Q:185:VAL:CB	2.39	0.53
16:Q:175:VAL:HA	16:Q:178:ASP:OD1	2.09	0.53
19:T:138:GLY:CA	19:T:142:SER:HB3	2.30	0.53
20:U:521:LEU:HG	20:U:757:MET:HE2	1.90	0.53
20:U:633:CYS:O	20:U:636:VAL:HG12	2.08	0.53
20:U:678:ASP:OD2	20:U:683:VAL:HG21	2.07	0.53
20:U:700:GLU:OE1	20:U:700:GLU:HA	2.09	0.53
20:U:921:ILE:HG13	20:U:921:ILE:O	2.08	0.53
21:V:109:ASN:H	21:V:112:VAL:HG21	1.74	0.53
21:V:236:ARG:NE	21:V:239:THR:HG21	2.15	0.53
21:V:302:TYR:OH	21:V:397:ARG:HD2	2.08	0.53
21:V:468:SER:OG	25:Z:247:LYS:HB3	2.09	0.53
22:W:326:MET:HE1	22:W:330:LYS:CB	2.35	0.53
24:Y:26:LEU:HD13	24:Y:63:TRP:HH2	1.73	0.53
26:a:248:PHE:O	26:a:252:LYS:HG2	2.09	0.53
28:c:303:MET:HA	28:c:306:THR:OG1	2.09	0.53
29:d:271:ILE:HG22	29:d:291:LEU:CD2	2.30	0.53
31:f:410:ALA:O	31:f:414:LEU:HD23	2.09	0.53
31:f:460:ASP:HB3	31:f:489:TYR:OH	2.08	0.53
31:f:780:PRO:O	31:f:788:MET:HA	2.09	0.53
33:h:11:VAL:HB	33:h:139:THR:CG2	2.39	0.53
33:h:173:MET:CA	33:h:176:LEU:HD12	2.30	0.53
1:A:30:ILE:O	1:A:34:LYS:HG3	2.09	0.53
3:C:332:HIS:CD2	3:C:360:LYS:HG3	2.43	0.53
5:E:149:ILE:O	5:E:153:LEU:HD12	2.09	0.53
5:E:289:LEU:O	5:E:294:ARG:HB3	2.08	0.53
7:G:22:LEU:HD21	8:H:128:ARG:HD2	1.91	0.53
8:H:65:VAL:HG12	8:H:218:PHE:CZ	2.44	0.53
11:K:125:GLU:HG3	12:L:83:LEU:HD11	1.91	0.53
13:M:77:VAL:CB	13:M:84:ALA:HB1	2.38	0.53
15:P:177:VAL:O	15:P:178:ILE:HD13	2.09	0.53
16:Q:171:MET:HE1	16:Q:185:VAL:HB	1.90	0.53
20:U:370:VAL:HG11	20:U:404:ALA:HA	1.91	0.53
20:U:520:MET:HE2	20:U:525:ASN:CB	2.38	0.53
20:U:901:GLN:NE2	20:U:915:LYS:HB2	2.23	0.53
21:V:466:ILE:O	21:V:469:THR:OG1	2.22	0.53
22:W:268:LYS:HD2	22:W:302:TYR:CE2	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:89:VAL:O	23:X:92:LEU:HG	2.08	0.53
25:Z:247:LYS:HA	25:Z:247:LYS:HE3	1.91	0.53
26:a:41:VAL:HG12	26:a:79:ILE:HD13	1.91	0.53
26:a:277:LEU:CD1	26:a:311:VAL:HG22	2.38	0.53
28:c:139:ARG:HA	28:c:161:ARG:HH11	1.74	0.53
31:f:350:LYS:HG3	31:f:353:LEU:CB	2.38	0.53
31:f:530:CYS:SG	31:f:566:HIS:ND1	2.55	0.53
31:f:799:VAL:HG21	31:f:821:LEU:CB	2.37	0.53
33:h:172:CYS:O	33:h:176:LEU:HG	2.09	0.53
2:B:180:PRO:HG3	2:B:237:LYS:HG2	1.89	0.53
3:C:119:ASP:HB3	28:c:193:ILE:HD11	1.90	0.53
3:C:298:ILE:HD11	3:C:306:LEU:HD11	1.91	0.53
4:D:100:THR:CG2	4:D:101:ALA:N	2.72	0.53
4:D:180:ALA:HB2	4:D:329:ARG:HD2	1.91	0.53
4:D:387:VAL:HG21	5:E:159:PHE:CD1	2.44	0.53
5:E:125:GLU:OE1	5:E:125:GLU:N	2.42	0.53
5:E:208:ILE:O	5:E:210:GLU:N	2.42	0.53
5:E:355:ILE:HA	6:F:211:LYS:NZ	2.24	0.53
8:H:180:GLU:OE1	8:H:180:GLU:N	2.42	0.53
10:J:225:ILE:O	10:J:229:VAL:HG12	2.08	0.53
14:N:3:ILE:HG22	14:N:16:ALA:HB2	1.89	0.53
14:N:135:ILE:HD13	14:N:163:ALA:HB2	1.91	0.53
15:P:34:ILE:HD13	15:P:176:CYS:CB	2.35	0.53
15:P:212:LEU:HD12	16:Q:201:LYS:HD2	1.91	0.53
16:Q:103:TYR:O	16:Q:126:LEU:HG	2.09	0.53
18:S:122:SER:OG	18:S:123:GLY:N	2.41	0.53
20:U:25:HIS:HA	20:U:59:PHE:CE2	2.31	0.53
20:U:371:ILE:CD1	20:U:732:LEU:HD21	2.34	0.53
20:U:637:VAL:O	20:U:637:VAL:HG12	2.09	0.53
20:U:791:LEU:HD12	20:U:796:LYS:O	2.08	0.53
21:V:114:TYR:CG	21:V:138:PRO:HD2	2.44	0.53
21:V:294:ARG:NH1	21:V:390:GLY:O	2.38	0.53
21:V:337:LEU:CD2	21:V:367:VAL:HG11	2.38	0.53
24:Y:228:MET:HE1	24:Y:259:TYR:CZ	2.44	0.53
26:a:4:VAL:N	26:a:5:PRO:HD2	2.24	0.53
27:b:98:LYS:HD2	34:u:203:SER:HB2	1.91	0.53
29:d:142:ILE:O	29:d:146:ASP:OD2	2.27	0.53
31:f:96:LEU:HD13	31:f:132:THR:CG2	2.39	0.53
31:f:472:HIS:C	31:f:472:HIS:CD2	2.87	0.53
31:f:583:VAL:O	31:f:588:ARG:NE	2.40	0.53
31:f:831:VAL:HG22	31:f:871:PRO:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:855:GLN:OE1	31:f:855:GLN:HA	2.07	0.53
1:A:120:LYS:HB3	6:F:90:VAL:HB	1.91	0.53
2:B:415:THR:HG22	2:B:416:ASN:N	2.24	0.53
3:C:49:ARG:NH1	20:U:639:LEU:O	2.36	0.53
3:C:91:PRO:HG2	3:C:92:GLU:OE2	2.08	0.53
3:C:186:VAL:CG2	3:C:315:ILE:HD11	2.39	0.53
4:D:204:MET:HE3	4:D:308:ILE:HG23	1.91	0.53
4:D:276:ASP:N	4:D:276:ASP:OD1	2.42	0.53
4:D:373:ALA:HA	38:D:501:ADP:H1'	1.91	0.53
5:E:115:VAL:HG13	5:E:116:ASP:N	2.23	0.53
5:E:355:ILE:O	6:F:211:LYS:HE3	2.09	0.53
6:F:202:ILE:CG2	6:F:282:ILE:HD13	2.39	0.53
7:G:110:PRO:HB2	7:G:112:ASP:OD1	2.08	0.53
8:H:72:ILE:HD12	8:H:72:ILE:N	2.23	0.53
12:L:183:ASN:OD1	12:L:186:GLU:HB2	2.09	0.53
14:N:26:ILE:O	14:N:26:ILE:HG23	2.09	0.53
19:T:145:LEU:CD1	19:T:178:VAL:CG2	2.87	0.53
21:V:99:ARG:HH22	30:e:17:ASP:CB	2.21	0.53
21:V:160:LEU:HB3	21:V:163:VAL:HG22	1.90	0.53
21:V:217:VAL:O	21:V:221:LEU:HD23	2.09	0.53
21:V:224:LEU:HD13	21:V:260:HIS:ND1	2.24	0.53
21:V:482:PHE:CZ	24:Y:381:GLN:HB2	2.42	0.53
22:W:121:LYS:HG2	22:W:125:ILE:CD1	2.39	0.53
22:W:129:ARG:NH1	22:W:146:THR:HG22	2.23	0.53
22:W:369:TYR:CD2	26:a:312:MET:HG2	2.44	0.53
23:X:420:LYS:HE2	28:c:264:LYS:NZ	2.24	0.53
25:Z:90:ARG:O	25:Z:92:VAL:HG13	2.09	0.53
28:c:230:THR:HG22	28:c:232:GLN:H	1.74	0.53
29:d:324:LYS:N	29:d:325:PRO:HD3	2.24	0.53
31:f:195:ASN:HB2	31:f:204:ALA:HB2	1.91	0.53
31:f:300:ARG:HG2	31:f:782:HIS:CD2	2.44	0.53
31:f:446:LEU:HD23	31:f:483:PHE:HB3	1.90	0.53
31:f:802:SER:HB2	31:f:817:VAL:HG21	1.90	0.53
33:h:20:VAL:HG11	33:h:122:LEU:HG	1.92	0.53
2:B:251:VAL:HG13	2:B:253:SER:N	2.19	0.52
3:C:76:VAL:HG11	3:C:108:VAL:HG22	1.91	0.52
4:D:252:ARG:O	4:D:256:GLU:HG3	2.09	0.52
4:D:303:VAL:O	4:D:304:ASN:HB2	2.09	0.52
6:F:54:ILE:HD12	6:F:55:MET:N	2.24	0.52
6:F:425:LEU:HD23	6:F:432:LYS:HB2	1.89	0.52
7:G:98:ALA:HA	7:G:109:ILE:HG21	1.89	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:206:LEU:HD22	9:I:237:ILE:HD12	1.91	0.52
11:K:24:VAL:HG11	11:K:159:SER:CB	2.38	0.52
11:K:116:VAL:HG11	11:K:143:PHE:HE2	1.75	0.52
14:N:40:ARG:NH2	14:N:103:TRP:CZ3	2.54	0.52
15:P:54:MET:HG3	16:Q:96:TYR:CG	2.44	0.52
15:P:146:MET:HG3	15:P:150:GLU:HG3	1.90	0.52
18:S:148:GLU:CD	18:S:151:GLN:H	2.15	0.52
19:T:208:VAL:HG12	19:T:209:SER:H	1.73	0.52
20:U:42:VAL:O	20:U:46:GLU:HG2	2.09	0.52
21:V:188:SER:HA	21:V:191:LEU:HD21	1.91	0.52
21:V:391:THR:O	21:V:395:ILE:HG12	2.09	0.52
24:Y:50:MET:HA	24:Y:114:ILE:HA	1.91	0.52
24:Y:191:ILE:O	24:Y:191:ILE:HG12	2.08	0.52
26:a:74:LEU:HD21	26:a:109:GLU:CB	2.36	0.52
27:b:51:LEU:HD22	27:b:75:LEU:CD2	2.39	0.52
31:f:442:SER:HB3	31:f:476:THR:O	2.09	0.52
31:f:498:LEU:HD11	31:f:502:LEU:HD21	1.91	0.52
31:f:679:LEU:HD13	31:f:690:VAL:CB	2.40	0.52
33:h:44:ARG:HD2	33:h:197:VAL:CG1	2.38	0.52
34:u:146:PHE:HE1	34:u:167:ILE:HD11	1.72	0.52
1:A:174:TYR:CE2	1:A:188:ARG:HD3	2.45	0.52
1:A:190:VAL:HG23	1:A:339:ARG:HD2	1.90	0.52
2:B:302:GLU:O	2:B:306:GLN:HG3	2.09	0.52
3:C:173:GLU:HA	3:C:173:GLU:OE2	2.10	0.52
12:L:40:SER:CB	12:L:187:LEU:HD22	2.38	0.52
12:L:51:ARG:HD3	12:L:60:GLN:OE1	2.08	0.52
12:L:184:LEU:HD11	12:L:214:ILE:CD1	2.34	0.52
13:M:98:PHE:CE1	13:M:106:ILE:HA	2.43	0.52
14:N:72:GLU:OE1	14:N:73:PRO:HD2	2.09	0.52
16:Q:164:PHE:HE1	16:Q:187:VAL:HG21	1.73	0.52
17:R:19:ARG:NH2	17:R:31:ASP:HA	2.24	0.52
19:T:12:ILE:O	19:T:138:GLY:N	2.40	0.52
20:U:364:VAL:HG11	20:U:724:VAL:HB	1.91	0.52
20:U:518:LEU:CD2	20:U:554:LEU:HD13	2.38	0.52
20:U:518:LEU:HD11	20:U:778:PHE:HE2	1.74	0.52
20:U:529:ILE:O	20:U:533:VAL:HG23	2.08	0.52
21:V:221:LEU:HB3	21:V:223:LYS:CD	2.39	0.52
21:V:268:GLU:HA	21:V:271:VAL:HG22	1.91	0.52
22:W:266:ALA:O	22:W:270:VAL:HG23	2.08	0.52
23:X:57:LEU:CG	23:X:62:GLN:HB2	2.37	0.52
23:X:138:PHE:HE2	23:X:175:LYS:CB	2.21	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:340:GLU:HB3	23:X:341:PRO:HD3	1.89	0.52
23:X:407:MET:HE3	23:X:407:MET:CA	2.34	0.52
23:X:420:LYS:O	23:X:421:LEU:HB2	2.09	0.52
29:d:130:PRO:HA	29:d:136:LEU:HD11	1.90	0.52
29:d:240:SER:O	29:d:243:LYS:HB2	2.08	0.52
31:f:50:LYS:HA	31:f:53:GLN:HG2	1.87	0.52
31:f:62:ARG:HB3	31:f:70:LEU:HD22	1.90	0.52
31:f:211:ILE:O	31:f:212:GLU:HG3	2.08	0.52
31:f:882:LEU:N	31:f:894:LEU:CD2	2.73	0.52
33:h:84:SER:O	33:h:88:ILE:HD12	2.08	0.52
33:h:104:ASN:N	33:h:105:PRO:HD3	2.23	0.52
34:u:118:ASP:C	34:u:119:ILE:HG13	2.35	0.52
1:A:117:GLN:OE1	1:A:117:GLN:N	2.38	0.52
2:B:250:VAL:HA	2:B:254:GLU:OE2	2.09	0.52
3:C:371:LEU:HD13	4:D:191:TYR:CE1	2.44	0.52
5:E:168:LYS:CE	5:E:274:LYS:HG3	2.39	0.52
7:G:191:PHE:CZ	7:G:219:VAL:HG11	2.43	0.52
9:I:33:THR:HG21	9:I:200:THR:CG2	2.33	0.52
10:J:111:ILE:HG22	10:J:147:THR:HG21	1.91	0.52
11:K:69:GLU:HB3	18:S:68:LEU:CD2	2.40	0.52
12:L:128:TYR:O	12:L:149:PRO:HB3	2.09	0.52
15:P:176:CYS:SG	15:P:178:ILE:HD11	2.50	0.52
16:Q:29:GLY:CA	16:Q:35:VAL:H	2.22	0.52
19:T:14:ALA:O	19:T:15:ILE:HD13	2.09	0.52
19:T:99:ARG:NH2	33:h:101:SER:HB3	2.24	0.52
20:U:377:HIS:HB2	20:U:411:ILE:HD11	1.90	0.52
20:U:541:HIS:ND1	28:c:63:ASP:HB3	2.25	0.52
20:U:625:ILE:HG23	20:U:626:LEU:HG	1.90	0.52
20:U:788:VAL:HG22	20:U:884:VAL:CG1	2.40	0.52
20:U:790:GLY:C	20:U:914:LEU:HD11	2.34	0.52
21:V:322:VAL:O	21:V:326:GLN:HG3	2.09	0.52
24:Y:314:LEU:HD23	24:Y:314:LEU:H	1.73	0.52
26:a:261:LEU:CD2	26:a:268:LEU:HD21	2.39	0.52
28:c:167:MET:HA	28:c:170:LEU:HB2	1.92	0.52
31:f:107:LYS:HG3	31:f:111:GLU:OE2	2.10	0.52
31:f:833:PHE:CE2	31:f:897:PHE:HB3	2.44	0.52
31:f:845:ARG:HB2	31:f:881:GLU:OE2	2.10	0.52
33:h:51:LEU:HD13	33:h:110:MET:HE1	1.91	0.52
33:h:173:MET:C	33:h:173:MET:HE2	2.34	0.52
34:u:145:GLY:N	34:u:148:ASN:OD1	2.43	0.52
1:A:62:LEU:O	1:A:62:LEU:HD23	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:357:ILE:HA	1:A:360:ARG:NH2	2.24	0.52
2:B:74:MET:CE	31:f:609:VAL:HB	2.25	0.52
2:B:230:THR:HG21	2:B:353:PHE:C	2.35	0.52
2:B:412:MET:HE1	3:C:177:ALA:HB3	1.89	0.52
2:B:412:MET:H	31:f:90:THR:HG23	1.73	0.52
3:C:338:LEU:O	24:Y:174:TRP:HB3	2.10	0.52
4:D:205:TYR:CB	4:D:314:ALA:HB2	2.40	0.52
4:D:392:TYR:CE2	22:W:200:ILE:HG21	2.44	0.52
5:E:167:PRO:HD2	5:E:168:LYS:NZ	2.25	0.52
5:E:223:ARG:HG2	5:E:270:LEU:HD22	1.91	0.52
6:F:175:MET:HE1	6:F:267:LEU:HD22	1.90	0.52
6:F:182:THR:O	6:F:183:GLU:HG2	2.10	0.52
6:F:425:LEU:HD21	6:F:432:LYS:HB2	1.90	0.52
10:J:158:ALA:N	11:K:58:LEU:HD12	2.24	0.52
13:M:44:GLY:HA2	13:M:140:TYR:CD2	2.45	0.52
14:N:41:ILE:HD11	14:N:76:VAL:HG22	1.91	0.52
15:P:163:ILE:HD12	15:P:170:GLY:CA	2.39	0.52
16:Q:3:ILE:HG21	16:Q:104:TYR:CD1	2.45	0.52
16:Q:15:LYS:NZ	16:Q:121:ILE:HD11	2.25	0.52
16:Q:94:LEU:HD12	16:Q:94:LEU:O	2.09	0.52
17:R:10:PRO:HD2	17:R:12:TYR:HE1	1.74	0.52
17:R:25:ILE:HG21	18:S:133:VAL:HG21	1.92	0.52
17:R:95:ARG:NE	17:R:95:ARG:HA	2.24	0.52
20:U:405:THR:HB	20:U:441:GLY:HA3	1.90	0.52
20:U:566:LEU:O	20:U:570:LEU:HG	2.09	0.52
20:U:771:PHE:HD1	28:c:181:LEU:HD21	1.75	0.52
20:U:904:LYS:HG3	20:U:905:PRO:CD	2.39	0.52
21:V:92:ARG:CZ	24:Y:389:MET:HB2	2.40	0.52
22:W:149:LEU:HA	22:W:152:ILE:CG2	2.38	0.52
23:X:182:ASN:ND2	24:Y:248:GLU:OE1	2.41	0.52
27:b:34:ASN:OD1	27:b:72:LEU:HD11	2.09	0.52
28:c:174:PRO:HG2	28:c:175:ARG:HG3	1.91	0.52
29:d:251:ILE:HG23	29:d:256:TYR:HB2	1.91	0.52
31:f:832:THR:CG2	31:f:870:THR:HG21	2.40	0.52
33:h:1:THR:OG1	33:h:59:ASP:OD2	2.09	0.52
33:h:180:ASP:OD1	33:h:181:ALA:N	2.43	0.52
3:C:73:VAL:CG1	4:D:110:ASN:HB3	2.39	0.52
3:C:155:ASP:OD1	3:C:155:ASP:N	2.34	0.52
3:C:269:VAL:HG21	4:D:287:ARG:CZ	2.40	0.52
3:C:404:LEU:HD21	8:H:22:ILE:HG22	1.90	0.52
5:E:40:TYR:CZ	6:F:72:LYS:HD2	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:111:LEU:HD11	6:F:133:PHE:CD2	2.44	0.52
5:E:206:LYS:CA	5:E:253:ILE:HD12	2.40	0.52
5:E:309:ARG:CD	5:E:343:LEU:HD21	2.40	0.52
5:E:310:LEU:HD11	5:E:332:VAL:HG21	1.91	0.52
6:F:358:ASN:N	6:F:361:ALA:HB3	2.25	0.52
7:G:131:MET:HG2	13:M:125:TYR:CD1	2.44	0.52
7:G:219:VAL:HG12	7:G:230:LEU:HD21	1.90	0.52
8:H:167:TYR:O	8:H:171:LYS:HG3	2.09	0.52
9:I:49:ARG:NH2	9:I:61:PHE:HA	2.24	0.52
9:I:84:ASN:O	9:I:87:THR:HG22	2.09	0.52
10:J:64:ALA:HA	10:J:70:CYS:HA	1.91	0.52
11:K:181:LEU:HD13	11:K:201:ILE:CD1	2.40	0.52
12:L:49:LEU:CD2	12:L:199:LEU:HD21	2.38	0.52
12:L:116:THR:O	12:L:119:PRO:HD2	2.09	0.52
13:M:152:ASP:HB2	13:M:153:PRO:CD	2.39	0.52
14:N:90:TYR:HB3	14:N:94:LEU:HB2	1.91	0.52
16:Q:27:ARG:HB2	16:Q:182:GLY:O	2.08	0.52
16:Q:75:GLU:OE1	16:Q:81:GLN:HA	2.09	0.52
18:S:180:ARG:NH2	18:S:185:ILE:HD13	2.23	0.52
19:T:11:THR:HG22	19:T:141:ALA:H	1.73	0.52
20:U:199:ARG:NE	20:U:223:LEU:HD11	2.25	0.52
20:U:736:ILE:HD13	20:U:783:TYR:OH	2.09	0.52
21:V:125:ASN:O	21:V:128:ARG:HG2	2.10	0.52
21:V:175:MET:HB2	21:V:184:ALA:HB2	1.90	0.52
21:V:221:LEU:HB3	21:V:223:LYS:HE3	1.91	0.52
22:W:132:THR:CG2	22:W:138:VAL:HG11	2.37	0.52
22:W:214:PHE:HB3	22:W:223:LYS:NZ	2.24	0.52
22:W:424:LEU:HD11	25:Z:244:GLU:HG2	1.91	0.52
23:X:224:ASP:OD2	23:X:227:THR:OG1	2.19	0.52
25:Z:202:ASN:HD21	26:a:361:LYS:HE3	1.74	0.52
26:a:35:HIS:HA	26:a:71:VAL:HG21	1.91	0.52
26:a:222:LEU:HD11	26:a:237:LEU:CD1	2.39	0.52
28:c:62:VAL:CG1	28:c:66:THR:HG23	2.33	0.52
31:f:339:ILE:HG22	31:f:773:LYS:NZ	2.25	0.52
31:f:502:LEU:HB2	31:f:503:PRO:HD3	1.92	0.52
31:f:701:ASN:HB2	31:f:876:HIS:CE1	2.44	0.52
3:C:163:GLU:O	3:C:168:PRO:HD3	2.08	0.52
3:C:258:ARG:CD	3:C:273:MET:HE1	2.39	0.52
38:C:501:ADP:H5'2	4:D:323:ARG:NH1	2.25	0.52
4:D:133:HIS:ND1	4:D:136:SER:OG	2.35	0.52
5:E:352:MET:HE3	5:E:355:ILE:CG2	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:344:ARG:NH1	6:F:347:ARG:HH21	2.08	0.52
9:I:10:THR:HG23	10:J:125:ARG:HB2	1.91	0.52
9:I:181:GLU:N	9:I:181:GLU:OE1	2.43	0.52
10:J:107:ILE:CG2	10:J:133:ILE:HG21	2.40	0.52
11:K:64:ILE:O	11:K:64:ILE:HG13	2.09	0.52
15:P:204:CYS:N	15:P:205:GLU:OE2	2.43	0.52
15:P:219:LEU:O	15:P:220:GLU:HB3	2.10	0.52
18:S:113:TYR:CZ	18:S:115:ASP:HB3	2.44	0.52
19:T:57:PHE:HZ	33:h:128:LEU:HD11	1.74	0.52
19:T:72:LEU:HD21	19:T:88:ILE:HD11	1.91	0.52
20:U:469:SER:OG	20:U:471:ASP:HB3	2.09	0.52
21:V:168:GLN:HA	21:V:171:VAL:CG1	2.40	0.52
22:W:438:LEU:HB3	25:Z:233:VAL:HG22	1.91	0.52
26:a:100:THR:HA	26:a:103:LYS:HZ3	1.75	0.52
27:b:127:LEU:HD13	27:b:131:LEU:HG	1.90	0.52
27:b:143:PHE:CE2	27:b:179:LEU:HD13	2.44	0.52
28:c:270:LEU:HA	28:c:273:LYS:HG2	1.91	0.52
31:f:490:ALA:HB1	31:f:791:VAL:HG21	1.91	0.52
31:f:566:HIS:HB3	31:f:573:ILE:HD11	1.91	0.52
31:f:700:SER:CB	31:f:777:THR:HG23	2.40	0.52
32:g:131:ILE:HG22	32:g:151:VAL:HG11	1.91	0.52
32:g:161:SER:HB3	32:g:164:ASP:HB3	1.91	0.52
1:A:25:LEU:HD23	1:A:30:ILE:CD1	2.40	0.52
1:A:62:LEU:HD22	2:B:79:ILE:HG21	1.90	0.52
1:A:174:TYR:OH	1:A:229:VAL:HG22	2.10	0.52
1:A:199:GLU:HG2	1:A:200:ARG:N	2.25	0.52
4:D:191:TYR:O	4:D:195:GLY:N	2.42	0.52
4:D:352:MET:HE2	4:D:354:LEU:HD22	1.91	0.52
5:E:147:GLU:O	5:E:151:LEU:HD13	2.09	0.52
10:J:76:LEU:HD23	10:J:76:LEU:N	2.22	0.52
12:L:95:SER:HB2	12:L:103:LEU:HD13	1.91	0.52
12:L:135:ALA:HB2	12:L:144:ILE:HD13	1.92	0.52
13:M:69:VAL:HG13	13:M:91:ALA:CB	2.39	0.52
13:M:69:VAL:CG2	13:M:75:MET:HE3	2.40	0.52
16:Q:149:MET:HG2	16:Q:153:LEU:HD12	1.91	0.52
17:R:19:ARG:CZ	17:R:31:ASP:HA	2.39	0.52
18:S:100:MET:HE1	18:S:128:VAL:HG12	1.91	0.52
19:T:22:ILE:CD1	19:T:195:ILE:HD11	2.39	0.52
19:T:190:GLY:HA2	19:T:210:LEU:HD12	1.91	0.52
20:U:346:ASN:CG	20:U:380:THR:HB	2.35	0.52
20:U:524:LYS:CB	20:U:556:MET:HE1	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:529:ILE:HD11	20:U:566:LEU:CD2	2.36	0.52
21:V:64:GLN:HA	21:V:67:LEU:HG	1.92	0.52
21:V:483:CYS:SG	24:Y:377:LEU:HD21	2.50	0.52
22:W:363:ILE:HG12	22:W:378:MET:HE2	1.92	0.52
23:X:72:TYR:O	23:X:75:PRO:HD2	2.10	0.52
25:Z:126:VAL:C	25:Z:127:LYS:HD2	2.35	0.52
27:b:114:GLY:HA2	27:b:143:PHE:HB3	1.92	0.52
29:d:200:LEU:O	29:d:200:LEU:HD13	2.09	0.52
31:f:103:TYR:HA	31:f:106:LEU:HD12	1.92	0.52
31:f:137:ARG:HA	31:f:137:ARG:NE	2.24	0.52
31:f:159:VAL:HG21	31:f:194:TYR:CE2	2.44	0.52
31:f:323:ASN:OD1	31:f:455:VAL:HA	2.10	0.52
31:f:462:ALA:O	31:f:466:LEU:HD23	2.10	0.52
1:A:124:ASP:OD2	6:F:86:LEU:HG	2.10	0.52
1:A:195:LEU:HD22	1:A:269:ALA:HB1	1.92	0.52
1:A:285:PHE:HE1	2:B:303:ARG:NH1	2.07	0.52
5:E:137:GLY:C	5:E:138:LEU:HD12	2.35	0.52
7:G:43:ARG:HD2	7:G:149:PRO:O	2.10	0.52
9:I:36:GLY:C	9:I:37:ILE:HD13	2.35	0.52
11:K:8:TYR:CE2	11:K:17:PRO:HD3	2.44	0.52
12:L:116:THR:O	12:L:120:THR:HG23	2.09	0.52
13:M:87:LEU:HD21	13:M:119:VAL:CG2	2.39	0.52
13:M:188:ASP:OD1	13:M:188:ASP:N	2.40	0.52
15:P:22:GLU:HG2	15:P:25:VAL:HG13	1.91	0.52
17:R:19:ARG:HB2	17:R:177:THR:HG23	1.92	0.52
17:R:51:GLY:HA2	18:S:118:GLY:O	2.10	0.52
20:U:341:PHE:CD2	20:U:342:LEU:HD22	2.44	0.52
20:U:344:ARG:HB3	20:U:344:ARG:CZ	2.40	0.52
20:U:789:ILE:HD12	20:U:881:PRO:HA	1.92	0.52
20:U:793:LYS:HA	20:U:793:LYS:CE	2.39	0.52
21:V:211:TYR:HB3	21:V:250:LEU:HD21	1.91	0.52
21:V:219:GLU:CG	21:V:224:LEU:HD11	2.25	0.52
22:W:86:ASN:C	22:W:86:ASN:ND2	2.65	0.52
22:W:409:LEU:HD23	23:X:344:ARG:CZ	2.40	0.52
25:Z:224:HIS:HB2	26:a:218:MET:CE	2.38	0.52
27:b:15:TYR:CD2	27:b:116:PRO:HD2	2.45	0.52
27:b:90:ILE:CG2	27:b:127:LEU:HD11	2.40	0.52
27:b:147:GLU:HG2	27:b:150:THR:OG1	2.10	0.52
29:d:344:ARG:O	29:d:348:MET:HG2	2.09	0.52
34:u:177:LEU:HD22	34:u:265:PHE:HD2	1.74	0.52
34:u:216:GLN:OE1	34:u:234:ARG:HB2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:45:LYS:CG	20:U:187:LEU:HD11	2.39	0.52
4:D:139:LEU:C	4:D:139:LEU:HD23	2.35	0.52
4:D:181:VAL:HG11	4:D:308:ILE:CD1	2.39	0.52
4:D:397:LYS:HG3	4:D:398:ASP:N	2.24	0.52
4:D:418:LYS:HZ3	8:H:64:LYS:HD2	1.74	0.52
7:G:60:LEU:HD21	13:M:176:ILE:CG2	2.34	0.52
8:H:139:TRP:CZ3	8:H:144:PRO:HD3	2.45	0.52
11:K:148:GLU:OE2	11:K:149:LYS:HG3	2.10	0.52
17:R:171:PHE:CE2	17:R:175:LEU:HG	2.45	0.52
19:T:12:ILE:HD12	19:T:138:GLY:N	2.25	0.52
19:T:22:ILE:HD13	19:T:197:ILE:HG23	1.92	0.52
19:T:193:LEU:O	19:T:207:THR:HA	2.09	0.52
20:U:209:GLU:HG2	20:U:210:LYS:N	2.25	0.52
20:U:884:VAL:HG23	20:U:888:GLN:HG2	1.91	0.52
21:V:89:LYS:NZ	21:V:89:LYS:HB3	2.25	0.52
21:V:192:MET:O	21:V:195:ILE:HG13	2.10	0.52
21:V:493:ALA:HB1	21:V:495:ARG:CZ	2.40	0.52
22:W:362:ASN:O	22:W:366:MET:HG3	2.10	0.52
23:X:374:PHE:HE2	23:X:385:LEU:HD21	1.73	0.52
24:Y:142:PHE:HE2	24:Y:179:ARG:HB3	1.75	0.52
26:a:97:LEU:CB	26:a:118:ILE:HG22	2.39	0.52
31:f:123:ALA:HA	31:f:126:ILE:HG22	1.91	0.52
31:f:370:MET:HE1	31:f:371:ASN:CG	2.34	0.52
31:f:539:LEU:C	31:f:543:MET:HE2	2.35	0.52
31:f:589:SER:O	31:f:593:THR:HG23	2.10	0.52
31:f:659:LEU:HD12	31:f:662:MET:HE1	1.92	0.52
31:f:664:GLU:CG	31:f:667:GLY:H	2.20	0.52
31:f:792:ALA:HA	31:f:824:ALA:HB2	1.92	0.52
31:f:888:LEU:O	31:f:901:ARG:HB3	2.10	0.52
34:u:165:LEU:HD11	34:u:167:ILE:HG22	1.92	0.52
1:A:62:LEU:HD12	2:B:80:ARG:NH2	2.24	0.52
1:A:164:MET:HE1	1:A:240:VAL:HG13	1.90	0.52
1:A:236:CYS:SG	1:A:267:LYS:HD3	2.50	0.52
2:B:223:ILE:HG22	2:B:350:LYS:HA	1.92	0.52
4:D:376:ASN:O	4:D:380:GLN:HG2	2.10	0.52
5:E:168:LYS:HE2	5:E:269:THR:CG2	2.40	0.52
5:E:190:GLN:N	5:E:190:GLN:OE1	2.40	0.52
5:E:223:ARG:CD	5:E:270:LEU:HB3	2.39	0.52
6:F:188:ILE:HG21	6:F:195:ILE:CD1	2.30	0.52
8:H:152:SER:O	9:I:81:SER:HB3	2.10	0.52
10:J:41:VAL:CG2	10:J:134:VAL:HB	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:88:LEU:HD22	11:K:116:VAL:HG22	1.92	0.52
11:K:141:LEU:HD12	11:K:156:MET:HE1	1.92	0.52
11:K:221:GLN:HG3	11:K:224:GLN:OE1	2.10	0.52
12:L:14:SER:O	13:M:25:TYR:HD2	1.92	0.52
12:L:75:ALA:HB3	12:L:161:ILE:CD1	2.40	0.52
13:M:136:MET:CE	13:M:148:LEU:HD11	2.34	0.52
15:P:54:MET:HE2	15:P:54:MET:HA	1.91	0.52
15:P:182:LYS:O	15:P:183:LEU:HD22	2.10	0.52
16:Q:175:VAL:CG2	16:Q:182:GLY:HA2	2.40	0.52
20:U:366:HIS:HD2	20:U:395:ARG:HH21	1.57	0.52
21:V:283:ASN:OD1	21:V:283:ASN:N	2.35	0.52
21:V:374:LYS:O	21:V:378:VAL:HG23	2.10	0.52
22:W:140:ILE:CD1	22:W:141:GLU:OE1	2.57	0.52
22:W:190:MET:HG3	22:W:205:ILE:CG2	2.40	0.52
22:W:201:ARG:O	22:W:205:ILE:HG12	2.10	0.52
22:W:439:VAL:O	22:W:442:THR:HG22	2.10	0.52
23:X:70:LEU:HD22	23:X:92:LEU:CD1	2.40	0.52
26:a:217:LEU:HG	26:a:238:TYR:CE1	2.45	0.52
28:c:255:TYR:HA	28:c:279:ASP:OD2	2.10	0.52
31:f:322:SER:HB2	31:f:456:ARG:O	2.10	0.52
31:f:367:SER:C	31:f:370:MET:SD	2.92	0.52
2:B:54:PRO:HB3	2:B:58:CYS:SG	2.50	0.51
4:D:390:ASN:O	22:W:201:ARG:NH1	2.42	0.51
5:E:157:GLU:CA	5:E:160:GLN:HG2	2.37	0.51
6:F:223:VAL:HG11	6:F:352:ILE:HD12	1.91	0.51
6:F:389:ASP:OD1	6:F:390:ASP:N	2.42	0.51
7:G:48:ALA:HB3	7:G:220:VAL:HG12	1.91	0.51
9:I:169:ALA:O	9:I:172:VAL:HG12	2.10	0.51
11:K:9:ASP:HB2	11:K:22:PHE:HB3	1.91	0.51
12:L:125:ARG:HG3	12:L:126:ARG:N	2.24	0.51
15:P:126:THR:CG2	15:P:134:ALA:HB3	2.36	0.51
16:Q:107:PRO:CG	16:Q:124:LEU:HB2	2.38	0.51
18:S:104:TRP:CD2	18:S:109:PRO:HG3	2.45	0.51
19:T:52:ILE:CD1	19:T:110:ILE:HG12	2.38	0.51
20:U:360:VAL:HG22	20:U:365:CYS:HB2	1.92	0.51
21:V:130:PHE:O	21:V:133:PRO:HG2	2.10	0.51
21:V:373:ALA:O	21:V:377:GLN:OE1	2.28	0.51
23:X:281:GLY:H	23:X:284:THR:CG2	2.22	0.51
24:Y:228:MET:HE1	24:Y:259:TYR:CE1	2.45	0.51
27:b:34:ASN:CG	27:b:72:LEU:HD11	2.35	0.51
28:c:244:VAL:CG1	28:c:291:LEU:HG	2.39	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:293:PHE:HD2	29:d:299:MET:HE2	1.75	0.51
32:g:113:ARG:CB	32:g:124:GLU:HG2	2.38	0.51
33:h:97:TYR:O	33:h:100:ARG:HG3	2.10	0.51
34:u:177:LEU:CD2	34:u:265:PHE:HD2	2.22	0.51
2:B:186:ASP:OD1	2:B:186:ASP:N	2.42	0.51
2:B:251:VAL:O	2:B:286:GLU:HB2	2.10	0.51
2:B:251:VAL:CG1	2:B:253:SER:H	2.19	0.51
3:C:113:ARG:HD2	3:C:130:LYS:HB2	1.92	0.51
4:D:45:LYS:HG2	20:U:187:LEU:HD11	1.91	0.51
5:E:173:TYR:HB2	5:E:280:ASN:HA	1.93	0.51
5:E:173:TYR:O	5:E:300:HIS:HA	2.10	0.51
7:G:77:GLY:HA3	7:G:227:PHE:CD2	2.45	0.51
8:H:110:LEU:O	8:H:114:VAL:HG23	2.10	0.51
9:I:65:ILE:HD13	9:I:214:ALA:CB	2.40	0.51
11:K:69:GLU:CG	11:K:226:PHE:HD2	2.17	0.51
12:L:188:VAL:HG11	12:L:232:PHE:HB3	1.91	0.51
12:L:213:GLY:HA2	12:L:222:THR:O	2.11	0.51
14:N:30:VAL:HG12	14:N:175:ARG:NH2	2.26	0.51
16:Q:58:THR:HG1	17:R:121:LEU:C	2.12	0.51
18:S:8:PHE:CE2	18:S:10:HIS:HB3	2.45	0.51
19:T:166:LEU:HG	19:T:171:ALA:HB2	1.92	0.51
20:U:169:GLU:O	20:U:170:SER:C	2.53	0.51
20:U:213:PHE:CA	20:U:216:VAL:HG12	2.38	0.51
20:U:247:GLN:OE1	20:U:912:ILE:HA	2.11	0.51
21:V:92:ARG:HD2	21:V:495:ARG:HD2	1.93	0.51
21:V:426:LEU:C	21:V:427:GLN:OE1	2.53	0.51
22:W:115:ILE:HD12	22:W:120:ILE:CD1	2.39	0.51
25:Z:249:PHE:HE1	28:c:302:ALA:HB1	1.76	0.51
26:a:58:LYS:HG2	26:a:96:PHE:CZ	2.44	0.51
27:b:107:MET:HB2	27:b:136:VAL:HA	1.93	0.51
29:d:129:LEU:HD12	29:d:130:PRO:N	2.24	0.51
29:d:269:ASP:HA	29:d:302:TYR:OH	2.11	0.51
31:f:78:LEU:O	31:f:82:ILE:HG12	2.10	0.51
31:f:485:LEU:HD23	31:f:485:LEU:C	2.35	0.51
31:f:505:MET:CE	31:f:541:THR:CG2	2.77	0.51
31:f:573:ILE:HG13	31:f:599:ALA:HB1	1.92	0.51
33:h:119:GLU:HA	33:h:119:GLU:OE1	2.11	0.51
34:u:132:LYS:HD3	34:u:132:LYS:N	2.25	0.51
2:B:278:ALA:CB	2:B:279:PRO:HD3	2.32	0.51
3:C:246:ILE:HB	3:C:291:VAL:HG12	1.92	0.51
4:D:353:ASN:OD1	4:D:393:ILE:HG12	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:85:ARG:HG3	5:E:86:GLN:HG3	1.92	0.51
5:E:157:GLU:HA	5:E:160:GLN:CG	2.37	0.51
7:G:173:THR:O	7:G:176:THR:HG22	2.09	0.51
7:G:178:PHE:HE2	7:G:204:THR:HG21	1.76	0.51
8:H:68:ILE:HD11	8:H:87:VAL:CG2	2.39	0.51
9:I:86:LEU:HD21	9:I:130:PHE:CD2	2.45	0.51
12:L:66:VAL:HB	12:L:70:ILE:O	2.10	0.51
12:L:87:PHE:HE2	12:L:112:ILE:HD12	1.75	0.51
12:L:158:ALA:O	12:L:172:LEU:HD23	2.11	0.51
13:M:37:ILE:HD11	13:M:197:ILE:HG13	1.92	0.51
16:Q:17:LYS:CG	16:Q:157:ASN:HA	2.39	0.51
16:Q:41:LYS:HZ2	16:Q:54:ALA:HA	1.75	0.51
19:T:54:CYS:HB3	19:T:108:ASN:OD1	2.10	0.51
21:V:188:SER:HA	21:V:191:LEU:CD2	2.40	0.51
21:V:435:GLU:O	21:V:438:VAL:HG12	2.11	0.51
22:W:161:GLU:OE1	22:W:161:GLU:N	2.31	0.51
22:W:178:GLU:OE2	22:W:180:LYS:HB3	2.10	0.51
22:W:210:ASN:OD1	22:W:212:LYS:N	2.33	0.51
23:X:166:LEU:HG	23:X:170:GLN:OE1	2.10	0.51
25:Z:186:THR:O	25:Z:190:ARG:HG2	2.10	0.51
27:b:146:GLU:OE2	27:b:148:VAL:HA	2.11	0.51
29:d:331:PRO:O	29:d:332:SER:OG	2.27	0.51
31:f:408:LEU:HD12	31:f:443:GLY:N	2.24	0.51
31:f:574:GLU:HA	31:f:577:LEU:CD2	2.40	0.51
31:f:664:GLU:N	31:f:664:GLU:OE2	2.42	0.51
31:f:679:LEU:HD13	31:f:690:VAL:CG2	2.40	0.51
31:f:845:ARG:HG2	31:f:865:PHE:HB2	1.93	0.51
31:f:886:GLU:C	31:f:903:ASN:HB2	2.36	0.51
32:g:107:ILE:HD13	32:g:111:GLU:HB3	1.92	0.51
34:u:146:PHE:CE1	34:u:167:ILE:HD11	2.46	0.51
1:A:252:GLU:OE1	1:A:255:ARG:NH2	2.43	0.51
2:B:85:MET:CE	31:f:619:HIS:HD1	2.19	0.51
3:C:28:ILE:CD1	4:D:44:TYR:HB2	2.36	0.51
3:C:295:THR:HG21	3:C:301:LEU:HD11	1.92	0.51
5:E:63:GLN:OE1	5:E:63:GLN:HA	2.11	0.51
6:F:96:LEU:HD21	6:F:122:ALA:HB2	1.93	0.51
7:G:80:MET:CB	7:G:87:SER:HB2	2.41	0.51
7:G:178:PHE:CD1	7:G:178:PHE:C	2.89	0.51
8:H:97:TYR:CD1	8:H:105:ILE:HA	2.46	0.51
8:H:110:LEU:O	8:H:110:LEU:HD23	2.10	0.51
11:K:116:VAL:HG13	11:K:156:MET:SD	2.50	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:226:ILE:HD12	13:M:227:VAL:N	2.26	0.51
18:S:7:LYS:CG	18:S:12:VAL:HG22	2.41	0.51
18:S:51:ASP:CG	19:T:100:ARG:HH12	2.12	0.51
19:T:22:ILE:HD11	19:T:195:ILE:HD11	1.92	0.51
19:T:110:ILE:O	19:T:121:VAL:HA	2.11	0.51
19:T:175:VAL:HA	19:T:178:VAL:HG12	1.90	0.51
20:U:532:MET:HE1	20:U:552:ILE:N	2.25	0.51
20:U:624:PHE:CE2	20:U:658:ILE:HD13	2.46	0.51
21:V:299:GLN:O	21:V:300:LEU:HB2	2.10	0.51
21:V:419:LEU:HA	21:V:422:ILE:CG2	2.40	0.51
22:W:183:VAL:O	22:W:187:LEU:HD13	2.11	0.51
22:W:370:TYR:CD2	22:W:373:ILE:HB	2.45	0.51
26:a:244:ASN:CG	26:a:246:GLU:HG2	2.36	0.51
26:a:285:PRO:HG2	26:a:288:HIS:HD1	1.76	0.51
29:d:104:ARG:O	29:d:107:PRO:HD3	2.10	0.51
31:f:372:LEU:HD13	31:f:406:GLY:CA	2.37	0.51
31:f:475:ASN:HB2	31:f:514:VAL:HG23	1.93	0.51
31:f:702:PRO:HG3	31:f:736:THR:HG21	1.92	0.51
32:g:87:VAL:HG11	32:g:120:PHE:CE2	2.44	0.51
1:A:25:LEU:HB3	1:A:30:ILE:HD11	1.92	0.51
1:A:51:ASP:OD2	2:B:69:LYS:HE3	2.10	0.51
2:B:288:ASP:OD1	3:C:274:LEU:HD11	2.10	0.51
3:C:71:SER:HB2	3:C:116:LEU:O	2.10	0.51
4:D:154:LEU:HD22	4:D:227:PHE:HD2	1.76	0.51
5:E:162:VAL:CG2	5:E:164:ILE:HG12	2.40	0.51
5:E:170:CYS:H	5:E:296:ASP:CB	2.23	0.51
5:E:258:MET:SD	5:E:261:LEU:HD21	2.51	0.51
5:E:261:LEU:HD11	5:E:294:ARG:NH1	2.25	0.51
6:F:208:HIS:O	6:F:210:GLU:N	2.44	0.51
9:I:72:MET:CE	9:I:107:CYS:HA	2.41	0.51
13:M:220:THR:HG21	13:M:225:GLU:HG2	1.92	0.51
14:N:25:TYR:CE1	14:N:27:ALA:HA	2.42	0.51
18:S:53:SER:O	18:S:57:ARG:HB2	2.11	0.51
19:T:11:THR:CG2	19:T:189:THR:HG21	2.39	0.51
19:T:11:THR:HG21	19:T:141:ALA:HB3	1.92	0.51
19:T:66:LYS:HA	19:T:69:GLU:OE1	2.10	0.51
20:U:42:VAL:HG13	20:U:43:ASP:N	2.25	0.51
20:U:533:VAL:O	20:U:537:GLN:HG3	2.11	0.51
20:U:919:GLU:O	20:U:920:ASP:HB3	2.11	0.51
21:V:150:ARG:HB3	21:V:154:ALA:CB	2.39	0.51
23:X:153:LEU:HD22	23:X:169:VAL:HG21	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:48:LEU:HD23	25:Z:120:VAL:HG21	1.93	0.51
25:Z:234:PHE:CE2	26:a:353:LEU:HD12	2.44	0.51
26:a:226:ARG:NH1	26:a:230:ARG:HB2	2.25	0.51
31:f:50:LYS:C	31:f:53:GLN:HG3	2.35	0.51
33:h:173:MET:HE1	33:h:205:THR:CG2	2.32	0.51
1:A:111:TYR:OH	1:A:125:LEU:HD11	2.11	0.51
4:D:116:LEU:HB3	4:D:119:ILE:CG1	2.40	0.51
4:D:414:HIS:NE2	7:G:26:GLU:HB3	2.26	0.51
9:I:72:MET:HE1	9:I:107:CYS:CA	2.40	0.51
10:J:195:LEU:HD23	10:J:198:VAL:CG1	2.41	0.51
13:M:215:TRP:CE2	13:M:227:VAL:HG22	2.46	0.51
14:N:161:ALA:O	14:N:165:GLU:HG2	2.10	0.51
16:Q:28:PHE:HD2	16:Q:36:THR:HG1	1.58	0.51
18:S:76:VAL:HG22	18:S:105:ASP:OD2	2.11	0.51
20:U:352:ILE:HD12	20:U:353:LEU:N	2.26	0.51
21:V:84:LYS:HD3	21:V:93:PHE:CD1	2.45	0.51
21:V:435:GLU:HA	21:V:438:VAL:HG12	1.92	0.51
22:W:241:LEU:HD21	22:W:282:GLU:CG	2.36	0.51
24:Y:246:ILE:O	24:Y:250:LEU:HG	2.10	0.51
25:Z:223:ASN:O	25:Z:224:HIS:HB3	2.10	0.51
28:c:48:GLY:O	28:c:49:VAL:C	2.53	0.51
28:c:248:MET:CE	28:c:291:LEU:HD12	2.39	0.51
29:d:122:VAL:O	29:d:125:GLU:HB2	2.10	0.51
33:h:45:VAL:CG1	33:h:51:LEU:HD23	2.41	0.51
34:u:157:LEU:O	34:u:259:ARG:HA	2.11	0.51
1:A:36:TYR:CE2	31:f:131:MET:HE1	2.46	0.51
1:A:71:GLY:O	2:B:139:VAL:HA	2.10	0.51
5:E:83:CYS:SG	5:E:87:LEU:HB2	2.50	0.51
5:E:323:HIS:HB2	5:E:361:PHE:HB2	1.93	0.51
6:F:159:LEU:HD23	6:F:161:LEU:CD1	2.39	0.51
9:I:74:CYS:SG	9:I:134:LEU:HD12	2.50	0.51
12:L:157:ARG:HG2	13:M:59:GLU:CD	2.35	0.51
15:P:177:VAL:C	15:P:178:ILE:HD13	2.35	0.51
15:P:210:ALA:O	16:Q:200:LEU:HA	2.11	0.51
16:Q:98:LYS:CE	16:Q:103:TYR:CZ	2.88	0.51
18:S:107:ARG:HA	18:S:107:ARG:NE	2.26	0.51
19:T:100:ARG:HG3	19:T:101:PHE:N	2.25	0.51
20:U:243:LEU:HG	20:U:913:ILE:CG2	2.41	0.51
21:V:192:MET:HE1	21:V:230:PHE:HZ	1.63	0.51
21:V:366:ALA:HB2	21:V:374:LYS:HG3	1.92	0.51
23:X:233:TYR:HA	23:X:254:MET:SD	2.51	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:6:VAL:HG22	25:Z:43:TRP:CH2	2.44	0.51
25:Z:7:GLN:NE2	25:Z:8:LYS:HB3	2.26	0.51
25:Z:243:GLN:OE1	25:Z:243:GLN:HA	2.09	0.51
28:c:106:GLU:OE1	28:c:106:GLU:HA	2.10	0.51
31:f:571:GLU:OE1	31:f:571:GLU:N	2.43	0.51
31:f:650:GLN:CD	31:f:686:LEU:HD21	2.36	0.51
31:f:658:ALA:HB2	31:f:693:ALA:HB1	1.92	0.51
1:A:190:VAL:HG21	1:A:212:VAL:CG2	2.40	0.51
5:E:50:LEU:HD21	6:F:83:ASN:ND2	2.25	0.51
6:F:86:LEU:O	6:F:86:LEU:HD13	2.11	0.51
9:I:121:TYR:CD1	9:I:127:LYS:HD3	2.46	0.51
10:J:186:LEU:HD22	10:J:186:LEU:N	2.24	0.51
14:N:115:PRO:HG3	33:h:36:PHE:CZ	2.45	0.51
15:P:112:SER:HB2	15:P:125:VAL:HG21	1.92	0.51
15:P:182:LYS:HD2	15:P:184:ASP:CB	2.24	0.51
17:R:7:ILE:HD11	17:R:14:LEU:CG	2.40	0.51
17:R:46:CYS:SG	17:R:53:THR:OG1	2.61	0.51
17:R:55:GLN:NE2	18:S:88:TYR:CE2	2.79	0.51
21:V:108:LEU:HD11	21:V:174:PHE:HB2	1.93	0.51
21:V:330:LYS:O	21:V:334:VAL:HG23	2.10	0.51
22:W:326:MET:HE3	22:W:326:MET:HA	1.93	0.51
23:X:86:ALA:HB1	23:X:125:LEU:HD23	1.92	0.51
23:X:120:GLU:HB2	23:X:122:ARG:NE	2.26	0.51
26:a:61:GLU:OE2	26:a:64:ILE:HD13	2.11	0.51
26:a:261:LEU:HD22	26:a:268:LEU:CD2	2.39	0.51
29:d:174:TYR:HA	29:d:178:TYR:HD2	1.75	0.51
29:d:216:PRO:HG2	29:d:219:ASP:OD2	2.10	0.51
29:d:283:LEU:HD12	29:d:284:PHE:N	2.25	0.51
30:e:18:GLU:OE1	30:e:20:GLU:HB2	2.11	0.51
33:h:83:TYR:HB2	33:h:88:ILE:HD11	1.93	0.51
33:h:89:HIS:HD1	33:h:121:PHE:HE1	1.59	0.51
33:h:143:ALA:O	33:h:148:PRO:HD3	2.11	0.51
33:h:173:MET:O	33:h:176:LEU:HB2	2.10	0.51
2:B:59:ARG:CZ	2:B:63:LEU:HD21	2.41	0.51
2:B:287:ILE:HG12	2:B:329:MET:CE	2.39	0.51
3:C:371:LEU:HD23	3:C:371:LEU:C	2.36	0.51
4:D:340:GLN:O	4:D:344:ILE:HG13	2.09	0.51
5:E:56:ILE:O	5:E:99:ALA:HA	2.10	0.51
5:E:317:ALA:HB2	5:E:347:CYS:SG	2.51	0.51
6:F:321:GLN:NE2	6:F:324:THR:HA	2.26	0.51
7:G:80:MET:HE2	7:G:80:MET:CA	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:95:GLN:HG3	16:Q:73:LEU:CD2	2.41	0.51
11:K:67:ILE:HG21	11:K:218:ALA:CB	2.41	0.51
12:L:35:THR:HG22	12:L:48:ALA:HB1	1.93	0.51
13:M:41:CYS:N	13:M:44:GLY:O	2.43	0.51
13:M:69:VAL:CG2	13:M:75:MET:HB2	2.41	0.51
13:M:186:CYS:CB	13:M:219:LEU:HD23	2.41	0.51
15:P:143:ARG:HG2	15:P:144:PRO:N	2.25	0.51
17:R:38:MET:HG2	17:R:44:LEU:HB2	1.93	0.51
17:R:160:LEU:HA	17:R:163:CYS:HB2	1.93	0.51
18:S:162:GLN:NE2	18:S:166:ARG:HE	2.09	0.51
19:T:146:GLN:N	19:T:147:PRO:HD2	2.26	0.51
19:T:176:LYS:HZ3	19:T:208:VAL:CG2	2.24	0.51
20:U:706:VAL:HG13	20:U:710:ARG:HH21	1.76	0.51
20:U:748:LEU:CD2	20:U:760:VAL:HA	2.41	0.51
22:W:342:GLY:O	22:W:347:GLY:HA3	2.11	0.51
23:X:182:ASN:HA	24:Y:244:ALA:HB1	1.92	0.51
24:Y:139:ASP:C	24:Y:139:ASP:OD1	2.54	0.51
25:Z:141:VAL:CG2	25:Z:156:GLU:HB2	2.40	0.51
26:a:12:GLN:C	26:a:12:GLN:NE2	2.68	0.51
29:d:154:TRP:HA	29:d:157:LEU:HD23	1.92	0.51
29:d:237:MET:HA	29:d:237:MET:CE	2.39	0.51
31:f:405:HIS:NE2	31:f:813:LYS:HG3	2.26	0.51
31:f:545:LYS:NZ	31:f:546:SER:O	2.44	0.51
31:f:596:ASP:OD2	31:f:608:LYS:HE3	2.11	0.51
31:f:723:TYR:HE2	31:f:757:ASN:CB	2.23	0.51
2:B:395:ILE:O	2:B:395:ILE:HG22	2.11	0.51
4:D:202:VAL:HG22	4:D:308:ILE:HG12	1.93	0.51
5:E:74:THR:HG23	5:E:75:ASN:N	2.25	0.51
7:G:208:ILE:HG22	7:G:210:PHE:N	2.14	0.51
10:J:4:ASP:HB2	10:J:21:TYR:CE2	2.45	0.51
12:L:122:ARG:NH2	13:M:122:TYR:OH	2.44	0.51
13:M:87:LEU:HD13	13:M:135:PHE:CD1	2.46	0.51
13:M:227:VAL:CG1	13:M:231:ILE:HD11	2.41	0.51
16:Q:13:ALA:HB3	16:Q:137:VAL:CG2	2.41	0.51
16:Q:87:LEU:HD12	16:Q:87:LEU:O	2.11	0.51
17:R:107:TYR:HB2	17:R:183:ILE:HG22	1.92	0.51
17:R:174:ASN:OD1	17:R:174:ASN:N	2.44	0.51
19:T:92:LEU:HD12	19:T:95:ILE:CG2	2.41	0.51
20:U:138:PHE:HA	20:U:141:CYS:SG	2.51	0.51
20:U:884:VAL:CG2	20:U:889:LEU:HD12	2.41	0.51
21:V:232:HIS:CE1	21:V:258:TYR:OH	2.60	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:240:VAL:CG1	25:Z:241:SER:N	2.74	0.51
26:a:93:ALA:O	26:a:97:LEU:HD23	2.11	0.51
28:c:149:GLN:CB	28:c:156:VAL:HG11	2.41	0.51
29:d:284:PHE:CE1	29:d:299:MET:HG2	2.46	0.51
29:d:297:LYS:O	29:d:297:LYS:HD3	2.11	0.51
31:f:221:ILE:CD1	31:f:229:VAL:HG11	2.38	0.51
34:u:192:LYS:HG3	34:u:252:GLN:CD	2.35	0.51
2:B:107:MET:HE3	2:B:151:LEU:HD23	1.91	0.50
3:C:66:LEU:HD22	4:D:138:ALA:HB1	1.93	0.50
3:C:76:VAL:HB	3:C:112:CYS:SG	2.51	0.50
4:D:368:ASP:OD2	4:D:403:TYR:OH	2.26	0.50
5:E:22:ILE:HG23	5:E:25:ARG:HH21	1.76	0.50
5:E:205:ASP:HB3	5:E:209:GLY:HA3	1.94	0.50
5:E:215:ILE:HD11	5:E:260:LEU:HD11	1.93	0.50
12:L:66:VAL:CG2	12:L:72:ILE:HD13	2.41	0.50
15:P:148:GLU:OE2	15:P:152:LYS:NZ	2.37	0.50
16:Q:70:ARG:HB2	16:Q:90:MET:HE2	1.93	0.50
18:S:144:SER:HB2	18:S:147:LEU:CD1	2.41	0.50
19:T:12:ILE:HG22	19:T:25:SER:OG	2.11	0.50
20:U:401:LYS:HD2	20:U:438:GLN:NE2	2.26	0.50
20:U:568:GLU:OE1	20:U:601:ARG:NH2	2.44	0.50
21:V:76:LYS:HB2	21:V:147:PHE:CE1	2.46	0.50
21:V:168:GLN:HA	21:V:171:VAL:HG12	1.92	0.50
21:V:348:PHE:CD2	21:V:361:PHE:HB2	2.47	0.50
21:V:430:SER:OG	21:V:431:PRO:HD2	2.10	0.50
23:X:263:THR:O	23:X:263:THR:OG1	2.29	0.50
24:Y:125:ARG:HB3	24:Y:125:ARG:NH1	2.27	0.50
26:a:239:ALA:CB	26:a:246:GLU:HG3	2.41	0.50
29:d:144:ALA:HA	29:d:147:ILE:CG2	2.41	0.50
29:d:146:ASP:HA	29:d:149:GLU:HG3	1.92	0.50
30:e:21:GLU:CD	30:e:21:GLU:H	2.16	0.50
31:f:131:MET:HA	31:f:161:HIS:HD2	1.74	0.50
1:A:292:ASP:O	1:A:294:GLU:N	2.44	0.50
4:D:85:ILE:HB	4:D:86:PRO:CD	2.41	0.50
4:D:417:TYR:HE1	7:G:21:ARG:HA	1.75	0.50
5:E:60:VAL:O	5:E:94:PRO:HA	2.11	0.50
7:G:29:PHE:CE1	7:G:155:ASP:HB2	2.45	0.50
7:G:84:THR:OG1	13:M:156:VAL:HG23	2.10	0.50
10:J:30:SER:HB3	10:J:46:GLU:CG	2.35	0.50
10:J:32:ALA:HB3	10:J:161:ILE:HG12	1.92	0.50
12:L:69:HIS:CD2	12:L:102:PRO:HB2	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:121:GLN:HG3	12:L:121:GLN:O	2.11	0.50
12:L:137:TYR:HB2	12:L:215:VAL:CG1	2.40	0.50
16:Q:36:THR:HG22	17:R:127:ALA:HB2	1.93	0.50
17:R:140:LEU:O	17:R:140:LEU:HD23	2.12	0.50
20:U:86:ASP:O	20:U:90:VAL:HG13	2.11	0.50
21:V:336:GLU:HG2	21:V:341:GLU:HB2	1.92	0.50
22:W:301:LYS:CG	22:W:327:GLU:HG2	2.41	0.50
23:X:171:LEU:HD22	23:X:210:LEU:HG	1.92	0.50
24:Y:179:ARG:O	24:Y:183:TYR:HD1	1.95	0.50
24:Y:366:TYR:HA	24:Y:369:THR:CG2	2.42	0.50
25:Z:16:LEU:HD11	25:Z:162:ILE:HD13	1.94	0.50
25:Z:59:ASP:HB3	27:b:95:LEU:HD13	1.94	0.50
26:a:359:ASP:C	26:a:359:ASP:OD1	2.54	0.50
28:c:130:GLN:OE1	28:c:142:ALA:HB2	2.10	0.50
28:c:219:ASN:HA	28:c:222:LYS:HB2	1.93	0.50
29:d:254:GLU:HA	29:d:257:THR:OG1	2.11	0.50
31:f:87:THR:HG22	31:f:87:THR:O	2.10	0.50
31:f:154:TRP:CB	31:f:158:TYR:HD2	2.24	0.50
32:g:129:ILE:O	32:g:136:LEU:HG	2.11	0.50
33:h:29:SER:HA	33:h:33:LEU:O	2.11	0.50
33:h:53:ALA:HB3	33:h:108:ASN:HD21	1.77	0.50
33:h:154:LEU:HD13	33:h:160:LEU:HD11	1.92	0.50
1:A:51:ASP:OD1	1:A:52:ILE:N	2.44	0.50
1:A:119:ALA:HB1	6:F:127:SER:OG	2.11	0.50
1:A:271:LEU:HD11	1:A:316:LYS:HB2	1.93	0.50
1:A:433:ASN:HB3	11:K:78:MET:HE1	1.93	0.50
2:B:305:ILE:HD13	3:C:271:ARG:CZ	2.41	0.50
4:D:120:ASP:OD2	4:D:122:GLU:HB2	2.12	0.50
5:E:29:LEU:HD23	6:F:62:VAL:CG1	2.41	0.50
5:E:30:ARG:NH2	6:F:62:VAL:HG22	2.26	0.50
7:G:72:ILE:HG21	7:G:114:LEU:HD21	1.91	0.50
7:G:237:ALA:HA	7:G:240:VAL:CG2	2.41	0.50
10:J:226:GLU:HA	10:J:229:VAL:HG12	1.93	0.50
14:N:35:THR:HG21	14:N:45:ARG:HD3	1.92	0.50
14:N:173:VAL:HG23	14:N:189:LEU:O	2.11	0.50
15:P:140:ASP:OD2	15:P:141:LYS:HG2	2.11	0.50
20:U:108:TYR:OH	20:U:159:ARG:HD3	2.10	0.50
20:U:481:LEU:HD21	20:U:493:VAL:HG22	1.92	0.50
20:U:748:LEU:HD21	20:U:760:VAL:HA	1.93	0.50
20:U:771:PHE:HD1	28:c:181:LEU:HD11	1.75	0.50
21:V:95:LEU:HD13	24:Y:389:MET:O	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:235:GLN:HA	22:W:243:ILE:HD11	1.92	0.50
23:X:138:PHE:O	23:X:138:PHE:HD1	1.94	0.50
23:X:177:TYR:CD2	23:X:185:LYS:HB3	2.46	0.50
25:Z:114:ARG:HG3	25:Z:114:ARG:NH1	2.26	0.50
26:a:118:ILE:O	26:a:122:LYS:HB3	2.11	0.50
31:f:521:ALA:O	31:f:525:ILE:HD12	2.11	0.50
31:f:557:TRP:HZ2	31:f:809:ILE:HG21	1.77	0.50
33:h:27:LEU:HD23	33:h:182:ARG:O	2.11	0.50
33:h:40:SER:O	33:h:43:MET:HE1	2.11	0.50
34:u:127:MET:CE	34:u:150:LEU:HD12	2.41	0.50
2:B:118:ASP:C	2:B:118:ASP:OD1	2.54	0.50
2:B:246:THR:HG23	2:B:280:SER:CB	2.41	0.50
4:D:318:ASP:OD1	4:D:318:ASP:C	2.55	0.50
4:D:416:PHE:HD2	8:H:79:MET:HE3	1.77	0.50
5:E:327:ASP:HB3	5:E:364:GLN:NE2	2.26	0.50
6:F:221:LYS:HD2	6:F:320:PHE:HB2	1.92	0.50
7:G:200:THR:CG2	7:G:242:LEU:HD11	2.38	0.50
8:H:138:GLY:N	8:H:213:CYS:SG	2.85	0.50
9:I:68:LEU:HD13	9:I:90:LEU:HD13	1.92	0.50
9:I:206:LEU:HD22	9:I:237:ILE:CD1	2.42	0.50
10:J:56:GLU:O	10:J:59:VAL:HG12	2.11	0.50
10:J:173:GLU:HA	11:K:58:LEU:HD21	1.92	0.50
14:N:1:THR:OG1	14:N:2:THR:N	2.43	0.50
14:N:123:GLN:HG3	14:N:125:PHE:O	2.12	0.50
15:P:43:CYS:CB	15:P:98:LEU:HD12	2.42	0.50
16:Q:8:GLY:HA3	16:Q:180:VAL:CG2	2.41	0.50
16:Q:67:LEU:HD21	16:Q:87:LEU:HD11	1.94	0.50
19:T:72:LEU:CD1	19:T:83:MET:HG2	2.41	0.50
20:U:213:PHE:CE2	20:U:236:LEU:HD13	2.47	0.50
20:U:217:CYS:SG	20:U:229:VAL:HG23	2.51	0.50
20:U:676:THR:CG2	20:U:688:LEU:HD21	2.42	0.50
21:V:64:GLN:OE1	21:V:65:ARG:NH1	2.43	0.50
21:V:314:ARG:HD3	24:Y:378:ASN:ND2	2.26	0.50
21:V:333:ILE:HD13	21:V:348:PHE:CZ	2.46	0.50
22:W:81:ASP:OD1	22:W:81:ASP:C	2.54	0.50
22:W:341:PHE:CD2	22:W:351:TRP:HE3	2.29	0.50
24:Y:134:LEU:O	24:Y:134:LEU:HD22	2.11	0.50
24:Y:325:VAL:HB	30:e:59:GLU:OE2	2.11	0.50
26:a:239:ALA:HB1	26:a:246:GLU:HB2	1.94	0.50
27:b:111:ALA:HB3	27:b:140:ILE:CD1	2.32	0.50
27:b:139:ASP:OD2	27:b:187:PRO:HB3	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:276:GLU:HG3	29:d:308:TRP:CE2	2.46	0.50
31:f:182:GLU:N	31:f:183:PRO:HD2	2.27	0.50
31:f:413:SER:HA	31:f:416:MET:CB	2.42	0.50
1:A:51:ASP:OD1	1:A:51:ASP:C	2.54	0.50
1:A:122:VAL:O	6:F:86:LEU:HD13	2.12	0.50
1:A:123:VAL:HA	6:F:86:LEU:CD1	2.42	0.50
4:D:85:ILE:O	4:D:87:LEU:N	2.45	0.50
4:D:204:MET:HB3	4:D:333:PHE:CE1	2.46	0.50
4:D:205:TYR:HE2	4:D:330:LYS:HB3	1.76	0.50
4:D:235:PHE:HD2	4:D:270:ILE:HD11	1.76	0.50
4:D:349:THR:HG23	4:D:354:LEU:HD23	1.94	0.50
5:E:152:PRO:HB2	5:E:274:LYS:HE2	1.92	0.50
6:F:248:PHE:CZ	6:F:329:ILE:HD11	2.47	0.50
6:F:288:LEU:HD21	6:F:342:LEU:CD2	2.42	0.50
7:G:19:GLU:CG	7:G:21:ARG:HG3	2.42	0.50
9:I:96:ARG:HH11	9:I:96:ARG:HG3	1.76	0.50
10:J:30:SER:HB2	10:J:61:LYS:NZ	2.25	0.50
11:K:7:GLU:HG2	11:K:8:TYR:CE1	2.47	0.50
14:N:63:LEU:HD12	14:N:63:LEU:O	2.12	0.50
14:N:75:LEU:HD21	14:N:106:GLN:HG2	1.92	0.50
15:P:29:LYS:HB3	15:P:171:SER:CB	2.27	0.50
15:P:132:LEU:HD12	15:P:132:LEU:N	2.27	0.50
16:Q:43:PHE:CE2	16:Q:53:LEU:HD23	2.46	0.50
16:Q:106:GLU:OE1	16:Q:125:ASP:HA	2.10	0.50
17:R:4:LEU:O	17:R:5:ILE:HD13	2.11	0.50
17:R:151:ILE:HG23	17:R:155:ARG:HG3	1.93	0.50
21:V:417:ILE:HD11	21:V:421:ASP:CB	2.42	0.50
22:W:125:ILE:HG23	22:W:145:LEU:CD1	2.39	0.50
22:W:257:GLN:OE1	22:W:257:GLN:HA	2.11	0.50
24:Y:180:LEU:HD13	24:Y:184:GLN:HG3	1.93	0.50
29:d:116:LEU:HD23	29:d:147:ILE:HD11	1.92	0.50
29:d:156:ILE:CD1	29:d:157:LEU:HD22	2.42	0.50
29:d:272:ALA:CA	29:d:291:LEU:HD21	2.34	0.50
31:f:226:TYR:CE2	31:f:261:ARG:HD2	2.38	0.50
31:f:542:ILE:CG2	31:f:543:MET:CE	2.90	0.50
31:f:597:VAL:CG2	31:f:656:GLY:HA3	2.42	0.50
31:f:598:CYS:SG	31:f:797:LEU:HD22	2.51	0.50
31:f:801:VAL:HA	31:f:804:LEU:HD12	1.92	0.50
32:g:93:LEU:HG	32:g:95:LYS:HG2	1.93	0.50
32:g:101:LEU:HD21	32:g:115:LYS:CD	2.42	0.50
33:h:184:TYR:HE2	33:h:186:ARG:HB2	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:399:ALA:O	1:A:401:ARG:N	2.44	0.50
2:B:440:LEU:HD22	10:J:77:THR:CG2	2.42	0.50
3:C:221:GLN:NE2	3:C:230:MET:HE1	2.27	0.50
5:E:90:SER:O	5:E:93:LYS:HG2	2.11	0.50
5:E:153:LEU:CD2	5:E:272:ARG:HB2	2.41	0.50
5:E:155:ASN:HB3	5:E:158:LEU:CG	2.34	0.50
6:F:403:ALA:HB2	6:F:420:TYR:HA	1.94	0.50
8:H:109:GLN:HG2	16:Q:78:GLU:OE1	2.12	0.50
9:I:35:LEU:HA	9:I:162:THR:O	2.11	0.50
9:I:181:GLU:O	9:I:183:GLU:HG3	2.12	0.50
12:L:158:ALA:HB1	12:L:172:LEU:CD2	2.42	0.50
13:M:230:ASP:OD1	13:M:231:ILE:N	2.44	0.50
15:P:172:ASN:HA	15:P:192:PRO:HD2	1.94	0.50
16:Q:109:ILE:O	16:Q:121:ILE:HA	2.12	0.50
16:Q:164:PHE:CE1	16:Q:187:VAL:HG21	2.46	0.50
20:U:352:ILE:HD12	20:U:352:ILE:C	2.36	0.50
20:U:575:ASP:OD1	20:U:577:ILE:HB	2.10	0.50
20:U:706:VAL:CG1	20:U:710:ARG:HH21	2.24	0.50
20:U:761:VAL:O	20:U:765:VAL:HG23	2.11	0.50
20:U:771:PHE:CD1	28:c:181:LEU:HD21	2.47	0.50
20:U:802:TYR:OH	20:U:880:ASN:O	2.27	0.50
20:U:847:GLU:HG2	20:U:851:GLU:OE2	2.11	0.50
21:V:181:TYR:HB3	21:V:221:LEU:CD2	2.41	0.50
22:W:209:ILE:HD11	22:W:214:PHE:CZ	2.46	0.50
22:W:414:ASN:C	22:W:414:ASN:OD1	2.54	0.50
23:X:57:LEU:O	23:X:61:GLY:N	2.44	0.50
23:X:118:LYS:HZ3	23:X:121:LYS:HE2	1.77	0.50
23:X:415:TYR:CE1	24:Y:383:LEU:HB2	2.47	0.50
25:Z:19:VAL:HG22	25:Z:95:TYR:CZ	2.46	0.50
25:Z:113:LYS:HA	25:Z:116:CYS:O	2.11	0.50
26:a:34:TRP:N	27:b:18:ASN:HB2	2.27	0.50
26:a:100:THR:HA	26:a:103:LYS:NZ	2.27	0.50
26:a:374:ILE:HD12	26:a:374:ILE:O	2.12	0.50
27:b:23:PRO:O	27:b:24:THR:OG1	2.28	0.50
27:b:147:GLU:HG2	27:b:150:THR:HA	1.93	0.50
28:c:139:ARG:HA	28:c:161:ARG:NH1	2.26	0.50
28:c:241:ASN:O	28:c:245:VAL:HG23	2.11	0.50
29:d:85:GLY:HA2	29:d:88:LEU:HD21	1.94	0.50
29:d:202:GLN:OE1	29:d:202:GLN:HA	2.11	0.50
29:d:220:ILE:HA	29:d:226:ILE:CD1	2.41	0.50
31:f:466:LEU:CD2	31:f:485:LEU:HB2	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:472:HIS:CD2	31:f:474:SER:N	2.79	0.50
33:h:103:MET:C	33:h:105:PRO:HD3	2.37	0.50
1:A:45:ILE:HG23	2:B:65:LEU:HD12	1.94	0.50
3:C:63:LEU:CD2	4:D:79:VAL:HG22	2.41	0.50
4:D:383:GLY:C	5:E:164:ILE:HD13	2.37	0.50
5:E:152:PRO:HB2	5:E:274:LYS:CE	2.41	0.50
5:E:158:LEU:O	5:E:162:VAL:HG13	2.12	0.50
6:F:94:ILE:HD11	6:F:125:LYS:N	2.27	0.50
6:F:123:VAL:C	6:F:124:ILE:HD12	2.37	0.50
6:F:202:ILE:HG13	6:F:329:ILE:CG2	2.42	0.50
7:G:88:ARG:HD2	13:M:117:MET:CE	2.41	0.50
9:I:94:ALA:O	9:I:105:ILE:HD11	2.12	0.50
9:I:136:TYR:HE1	9:I:150:SER:CB	2.25	0.50
10:J:152:THR:HB	11:K:82:ILE:HG21	1.94	0.50
12:L:15:PRO:HA	13:M:25:TYR:HE2	1.66	0.50
12:L:30:LYS:O	12:L:163:ALA:HB2	2.11	0.50
13:M:32:ASN:O	13:M:32:ASN:ND2	2.39	0.50
16:Q:164:PHE:CE1	16:Q:168:SER:HB2	2.47	0.50
20:U:9:ILE:HD13	20:U:9:ILE:N	2.26	0.50
21:V:235:LEU:HB2	21:V:250:LEU:HB3	1.94	0.50
22:W:118:LEU:HB3	22:W:119:PRO:HD3	1.94	0.50
23:X:107:VAL:HG22	23:X:136:LEU:HD21	1.94	0.50
23:X:260:MET:HE1	23:X:326:LEU:CD1	2.39	0.50
24:Y:76:ALA:O	24:Y:79:ASP:OD1	2.29	0.50
25:Z:81:MET:HE2	28:c:94:LYS:NZ	2.26	0.50
25:Z:183:THR:O	25:Z:184:VAL:CB	2.59	0.50
25:Z:206:LEU:HD13	25:Z:209:ARG:HH21	1.77	0.50
26:a:25:LEU:HD21	26:a:60:TYR:OH	2.11	0.50
26:a:180:LEU:CD2	26:a:221:VAL:HG11	2.42	0.50
27:b:49:VAL:O	27:b:71:ILE:HD11	2.12	0.50
29:d:139:GLN:HA	29:d:142:ILE:HD13	1.92	0.50
29:d:220:ILE:CA	29:d:226:ILE:HD11	2.39	0.50
31:f:654:VAL:HG12	31:f:693:ALA:HB2	1.94	0.50
31:f:846:VAL:HG23	31:f:866:GLN:HB3	1.94	0.50
33:h:16:PHE:CD1	33:h:16:PHE:C	2.90	0.50
34:u:181:LYS:HD2	34:u:264:THR:HG23	1.92	0.50
34:u:193:TYR:CD1	34:u:219:GLU:HG2	2.46	0.50
1:A:65:ILE:HG23	1:A:66:LYS:N	2.26	0.50
3:C:204:ALA:HB2	3:C:211:PHE:CE2	2.47	0.50
3:C:400:SER:OG	8:H:26:LEU:HD22	2.11	0.50
4:D:352:MET:HE2	4:D:354:LEU:CD2	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:366:ARG:HD2	4:D:403:TYR:HE2	1.77	0.50
5:E:320:ILE:HD13	6:F:217:ILE:HG12	1.94	0.50
6:F:259:MET:O	6:F:305:GLU:OE2	2.30	0.50
8:H:40:ALA:O	8:H:144:PRO:HG3	2.12	0.50
8:H:97:TYR:CE1	8:H:105:ILE:HA	2.47	0.50
11:K:52:LYS:HB2	11:K:214:ASN:CA	2.42	0.50
11:K:67:ILE:HD13	11:K:67:ILE:N	2.26	0.50
11:K:109:VAL:HA	11:K:112:VAL:HG12	1.93	0.50
12:L:15:PRO:CA	13:M:25:TYR:HE2	2.23	0.50
12:L:84:LEU:O	12:L:88:MET:HG3	2.11	0.50
12:L:117:GLN:NE2	12:L:121:GLN:OE1	2.45	0.50
14:N:19:ARG:HD2	14:N:171:GLY:HA3	1.93	0.50
17:R:75:LEU:HG	17:R:79:ALA:HB3	1.92	0.50
19:T:124:PHE:CE1	19:T:130:TYR:HB2	2.47	0.50
20:U:16:GLU:OE1	20:U:19:LEU:N	2.41	0.50
20:U:707:ASN:O	20:U:711:GLN:HG2	2.12	0.50
20:U:745:THR:HB	20:U:786:THR:HG21	1.94	0.50
21:V:230:PHE:CE2	21:V:231:LEU:HD12	2.46	0.50
21:V:276:PHE:HE2	21:V:288:TYR:HB2	1.77	0.50
21:V:313:LEU:HD11	21:V:329:HIS:CE1	2.47	0.50
21:V:408:ARG:HA	21:V:447:ILE:HD11	1.94	0.50
22:W:43:VAL:C	22:W:47:LEU:HD23	2.35	0.50
22:W:442:THR:CG2	25:Z:208:ILE:HD11	2.41	0.50
23:X:93:LEU:HD12	23:X:93:LEU:O	2.12	0.50
23:X:138:PHE:C	23:X:138:PHE:CD1	2.89	0.50
23:X:376:GLY:C	23:X:377:ILE:HG13	2.36	0.50
26:a:368:GLU:HG2	26:a:375:LEU:HD11	1.94	0.50
26:a:371:ALA:HB1	26:a:374:ILE:HG23	1.94	0.50
31:f:211:ILE:C	31:f:212:GLU:HG3	2.37	0.50
31:f:259:PHE:O	31:f:260:SER:OG	2.29	0.50
31:f:460:ASP:OD2	31:f:494:ARG:NH1	2.45	0.50
33:h:143:ALA:CA	33:h:147:GLN:HB2	2.31	0.50
1:A:322:ASN:ND2	2:B:340:ALA:HB2	2.27	0.50
1:A:336:ARG:O	1:A:337:LEU:HD23	2.12	0.50
2:B:96:ARG:NE	2:B:96:ARG:HA	2.27	0.50
3:C:213:ARG:NE	4:D:300:ASP:OD2	2.44	0.50
5:E:350:ALA:O	5:E:353:PHE:HB2	2.12	0.50
8:H:49:GLU:HG3	8:H:49:GLU:O	2.11	0.50
11:K:121:LEU:HD11	12:L:79:ALA:CA	2.40	0.50
14:N:116:MET:HE3	33:h:5:MET:HG3	1.94	0.50
15:P:147:GLU:OE1	15:P:147:GLU:HA	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:98:LYS:HE3	16:Q:103:TYR:CE1	2.47	0.50
17:R:7:ILE:HD11	17:R:14:LEU:HG	1.93	0.50
17:R:60:ILE:CG2	17:R:84:THR:HG22	2.42	0.50
18:S:8:PHE:CD2	18:S:10:HIS:HB3	2.46	0.50
18:S:21:THR:HA	18:S:27:ALA:H	1.76	0.50
19:T:144:MET:HG3	19:T:186:ASP:OD1	2.11	0.50
20:U:95:GLU:O	20:U:99:THR:HG22	2.11	0.50
20:U:364:VAL:O	20:U:367:THR:HG22	2.11	0.50
20:U:372:ALA:HB2	20:U:731:ILE:HG22	1.94	0.50
21:V:496:PHE:CD1	21:V:497:PRO:HD2	2.47	0.50
25:Z:213:GLU:HG2	26:a:350:LYS:HZ3	1.77	0.50
26:a:12:GLN:HG2	26:a:22:TRP:HB3	1.93	0.50
27:b:8:VAL:N	27:b:50:GLY:O	2.45	0.50
27:b:162:GLY:O	27:b:163:LYS:HB2	2.11	0.50
28:c:127:ILE:HG23	28:c:162:LEU:CD2	2.42	0.50
29:d:118:ARG:HG2	29:d:118:ARG:HH11	1.77	0.50
31:f:149:GLU:CG	31:f:150:GLU:N	2.73	0.50
33:h:10:SER:OG	33:h:142:GLY:N	2.44	0.50
1:A:164:MET:HE3	1:A:241:ILE:H	1.77	0.49
1:A:308:GLY:HA2	6:F:234:THR:HG21	1.92	0.49
5:E:208:ILE:O	5:E:209:GLY:C	2.55	0.49
5:E:290:LEU:HD23	5:E:295:LEU:HD13	1.94	0.49
7:G:96:TYR:C	7:G:96:TYR:CD1	2.90	0.49
10:J:183:THR:CB	10:J:186:LEU:HD23	2.41	0.49
10:J:200:GLN:OE1	10:J:200:GLN:N	2.45	0.49
10:J:223:GLU:HA	10:J:226:GLU:OE1	2.11	0.49
11:K:52:LYS:NZ	11:K:64:ILE:HG13	2.27	0.49
12:L:71:GLY:HA3	12:L:221:PHE:CE2	2.46	0.49
12:L:110:SER:HA	12:L:153:TYR:HE2	1.77	0.49
15:P:76:VAL:HG11	15:P:109:HIS:HB2	1.93	0.49
15:P:156:SER:HA	15:P:159:ILE:HG22	1.94	0.49
16:Q:28:PHE:HB3	16:Q:36:THR:HG1	1.76	0.49
20:U:631:GLU:O	20:U:634:PRO:HD2	2.12	0.49
21:V:98:LEU:HD21	21:V:206:VAL:HG12	1.93	0.49
21:V:161:PRO:HA	21:V:164:GLU:HG2	1.93	0.49
21:V:476:PHE:CE2	25:Z:258:VAL:HB	2.47	0.49
22:W:263:TRP:CD1	22:W:295:LYS:HZ1	2.30	0.49
22:W:374:THR:HA	22:W:411:GLY:O	2.12	0.49
22:W:412:ILE:HD12	26:a:327:VAL:HG22	1.93	0.49
24:Y:20:ALA:HB2	24:Y:150:PHE:CD1	2.46	0.49
24:Y:180:LEU:HD13	24:Y:180:LEU:O	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:94:TRP:CE2	25:Z:121:LEU:HD12	2.47	0.49
26:a:97:LEU:CG	26:a:118:ILE:HG22	2.42	0.49
26:a:341:LEU:HD12	26:a:345:GLN:CB	2.42	0.49
27:b:124:LEU:HD12	27:b:156:PHE:HB2	1.93	0.49
27:b:137:ASN:HB3	27:b:167:GLY:O	2.12	0.49
29:d:123:LEU:HD21	29:d:147:ILE:HG21	1.93	0.49
29:d:156:ILE:HD12	29:d:157:LEU:HD22	1.94	0.49
31:f:505:MET:HE1	31:f:541:THR:HG23	1.89	0.49
31:f:881:GLU:HA	31:f:894:LEU:HD13	1.94	0.49
3:C:115:ALA:C	3:C:116:LEU:HD23	2.37	0.49
3:C:191:PRO:HG2	3:C:319:PRO:CD	2.42	0.49
6:F:404:GLY:HA2	6:F:415:LEU:HD11	1.93	0.49
8:H:139:TRP:CZ2	8:H:142:GLY:HA2	2.47	0.49
9:I:18:LEU:HD11	10:J:125:ARG:NE	2.27	0.49
9:I:37:ILE:HG22	9:I:179:TYR:HE2	1.77	0.49
9:I:72:MET:HG3	9:I:137:ILE:O	2.12	0.49
9:I:239:LYS:O	9:I:239:LYS:HD2	2.12	0.49
11:K:16:SER:OG	11:K:17:PRO:HD2	2.12	0.49
12:L:155:ASP:C	12:L:155:ASP:OD1	2.55	0.49
13:M:164:ALA:O	13:M:169:ARG:HG3	2.12	0.49
14:N:147:MET:HB3	14:N:151:GLU:CG	2.40	0.49
17:R:50:ALA:HB3	18:S:117:GLU:CD	2.37	0.49
19:T:179:PHE:CD2	19:T:193:LEU:HD13	2.46	0.49
20:U:40:GLU:OE1	21:V:269:LYS:HD2	2.11	0.49
20:U:408:LEU:HD23	20:U:408:LEU:C	2.37	0.49
20:U:788:VAL:CG1	20:U:909:GLY:HA2	2.41	0.49
20:U:796:LYS:CD	20:U:924:LEU:HD21	2.41	0.49
20:U:800:VAL:HG22	20:U:898:CYS:SG	2.52	0.49
20:U:801:GLN:HB3	20:U:877:LEU:HD11	1.94	0.49
22:W:278:PRO:HA	22:W:357:ARG:HE	1.77	0.49
22:W:439:VAL:HA	22:W:442:THR:HG22	1.93	0.49
23:X:90:ARG:CD	23:X:128:ALA:HB1	2.42	0.49
24:Y:119:GLY:O	24:Y:122:THR:HG22	2.12	0.49
27:b:90:ILE:HG21	27:b:127:LEU:HD11	1.94	0.49
27:b:121:GLU:OE1	27:b:152:LYS:HB3	2.12	0.49
28:c:24:ALA:HB3	28:c:176:GLN:HG3	1.94	0.49
28:c:244:VAL:HB	28:c:291:LEU:HD21	1.93	0.49
31:f:792:ALA:HB1	31:f:824:ALA:HB1	1.94	0.49
31:f:846:VAL:HG12	31:f:880:ALA:CB	2.42	0.49
31:f:849:ALA:HB1	31:f:860:LYS:HB3	1.94	0.49
31:f:882:LEU:HD12	31:f:889:PRO:CG	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:g:116:ILE:HG23	32:g:120:PHE:HD2	1.77	0.49
32:g:160:GLN:HG2	32:g:165:ALA:HA	1.94	0.49
33:h:20:VAL:HG13	33:h:122:LEU:HD11	1.94	0.49
2:B:184:TYR:O	2:B:187:ILE:HG23	2.11	0.49
3:C:214:VAL:CG1	3:C:248:MET:HE3	2.39	0.49
4:D:184:PRO:HG3	4:D:191:TYR:CE2	2.47	0.49
4:D:335:LEU:CD2	4:D:371:SER:HB3	2.42	0.49
6:F:91:SER:OG	6:F:126:THR:HG22	2.12	0.49
7:G:109:ILE:HD11	7:G:114:LEU:CA	2.42	0.49
13:M:69:VAL:HG21	13:M:137:LEU:HD21	1.94	0.49
13:M:180:GLN:OE1	13:M:180:GLN:HA	2.12	0.49
17:R:3:TYR:CE2	17:R:5:ILE:HD11	2.48	0.49
19:T:54:CYS:SG	19:T:61:CYS:HB3	2.52	0.49
19:T:166:LEU:HD11	19:T:171:ALA:CB	2.42	0.49
20:U:640:LEU:HD12	20:U:640:LEU:O	2.13	0.49
21:V:68:ASP:O	21:V:72:LEU:HG	2.12	0.49
21:V:365:GLN:HG2	30:e:46:ASP:OD2	2.11	0.49
21:V:442:ILE:HD11	21:V:451:ILE:CD1	2.43	0.49
21:V:443:ARG:O	21:V:445:GLY:N	2.45	0.49
21:V:457:TYR:CE1	21:V:459:GLN:HB2	2.45	0.49
22:W:88:MET:HE3	22:W:88:MET:O	2.11	0.49
22:W:363:ILE:CG2	22:W:402:ILE:HD13	2.42	0.49
26:a:155:PHE:O	26:a:155:PHE:HD1	1.95	0.49
27:b:26:LEU:HD11	27:b:78:VAL:HG11	1.93	0.49
29:d:139:GLN:HA	29:d:142:ILE:CD1	2.42	0.49
29:d:168:MET:SD	29:d:191:LEU:HD12	2.52	0.49
29:d:218:LYS:NZ	29:d:222:THR:HG21	2.26	0.49
31:f:45:LEU:CD1	31:f:49:ASP:HB3	2.36	0.49
31:f:345:PRO:CG	31:f:378:ASN:HB2	2.42	0.49
31:f:510:SER:HB3	31:f:514:VAL:CG1	2.42	0.49
31:f:539:LEU:CA	31:f:543:MET:HE2	2.41	0.49
31:f:619:HIS:HD1	31:f:619:HIS:H	1.58	0.49
31:f:816:TYR:H	31:f:816:TYR:HD1	1.60	0.49
1:A:428:ARG:H	1:A:428:ARG:HD3	1.77	0.49
2:B:74:MET:HE1	31:f:609:VAL:CG1	2.42	0.49
2:B:223:ILE:HB	2:B:347:ILE:HG21	1.95	0.49
3:C:134:LEU:HD13	3:C:230:MET:HE2	1.92	0.49
3:C:267:SER:O	3:C:270:GLN:HB2	2.12	0.49
3:C:399:MET:HE1	9:I:56:LEU:CD2	2.42	0.49
5:E:135:ILE:HD12	5:E:182:LEU:CB	2.43	0.49
5:E:235:ILE:HD12	5:E:279:THR:HG21	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:42:VAL:HG21	10:J:188:ILE:HD13	1.95	0.49
10:J:45:VAL:HG21	10:J:62:ILE:CG1	2.42	0.49
11:K:126:GLU:CD	12:L:125:ARG:HB2	2.38	0.49
12:L:98:VAL:HA	33:h:94:ARG:HG3	1.94	0.49
13:M:76:ALA:HB3	13:M:136:MET:HG3	1.94	0.49
15:P:132:LEU:HD12	15:P:132:LEU:H	1.77	0.49
15:P:149:GLU:HG2	15:P:150:GLU:N	2.27	0.49
16:Q:88:MET:CB	16:Q:109:ILE:HD11	2.43	0.49
20:U:27:LEU:O	20:U:31:VAL:HB	2.13	0.49
20:U:385:PHE:O	20:U:385:PHE:HD1	1.95	0.49
21:V:82:LEU:O	21:V:86:VAL:HG12	2.11	0.49
22:W:63:THR:O	22:W:66:ILE:HG22	2.12	0.49
22:W:67:LEU:HD11	22:W:90:LEU:CB	2.38	0.49
22:W:155:GLN:HA	22:W:155:GLN:NE2	2.27	0.49
23:X:153:LEU:HD22	23:X:169:VAL:HG11	1.95	0.49
23:X:272:SER:HA	23:X:277:LEU:HD21	1.94	0.49
25:Z:48:LEU:HD12	25:Z:49:ASP:H	1.77	0.49
31:f:85:SER:HB2	31:f:95:PRO:HG2	1.95	0.49
31:f:391:LEU:HG	31:f:417:ILE:CG1	2.42	0.49
31:f:493:ASN:OD1	31:f:526:ALA:HA	2.11	0.49
31:f:499:THR:HA	31:f:502:LEU:HD12	1.93	0.49
31:f:886:GLU:O	31:f:903:ASN:HB2	2.13	0.49
33:h:69:GLN:O	33:h:72:ILE:HG22	2.12	0.49
33:h:184:TYR:CD2	33:h:186:ARG:HB2	2.46	0.49
1:A:96:ALA:HB1	1:A:114:ASN:O	2.12	0.49
2:B:54:PRO:O	2:B:55:HIS:HB2	2.12	0.49
3:C:49:ARG:HH22	20:U:639:LEU:C	2.20	0.49
3:C:138:MET:SD	3:C:214:VAL:HG22	2.52	0.49
6:F:245:LYS:HD3	6:F:245:LYS:N	2.27	0.49
7:G:183:VAL:O	7:G:184:LYS:HB2	2.11	0.49
9:I:216:LEU:HD11	9:I:223:THR:HG23	1.94	0.49
10:J:55:ASP:CG	10:J:57:ARG:HG2	2.37	0.49
10:J:63:CYS:HB2	10:J:84:ILE:HD13	1.93	0.49
10:J:65:LEU:HD12	10:J:87:ALA:HB3	1.95	0.49
10:J:221:ASN:OD1	10:J:224:GLU:HG3	2.12	0.49
11:K:78:MET:HG3	11:K:85:ALA:HB1	1.93	0.49
14:N:3:ILE:HD12	14:N:44:CYS:HB2	1.94	0.49
15:P:124:TYR:HB2	15:P:138:PHE:HD2	1.76	0.49
17:R:37:LYS:HE2	17:R:188:ILE:CG2	2.42	0.49
17:R:182:ILE:O	17:R:182:ILE:HG13	2.12	0.49
18:S:111:LEU:HD12	18:S:112:TYR:N	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:118:LEU:O	20:U:118:LEU:CD1	2.60	0.49
20:U:509:GLY:HA3	20:U:544:ILE:CG1	2.42	0.49
21:V:99:ARG:C	21:V:100:MET:HE2	2.37	0.49
21:V:171:VAL:CG1	21:V:187:ILE:HD11	2.42	0.49
21:V:173:ILE:HD13	21:V:173:ILE:N	2.28	0.49
21:V:219:GLU:CB	21:V:224:LEU:HD21	2.42	0.49
21:V:470:ARG:NH1	29:d:331:PRO:HG2	2.27	0.49
22:W:87:ILE:HG23	22:W:104:MET:HE2	1.95	0.49
22:W:160:LYS:HD2	22:W:160:LYS:O	2.13	0.49
22:W:259:GLU:HG2	22:W:262:LYS:HZ3	1.78	0.49
22:W:363:ILE:HA	22:W:366:MET:HG3	1.94	0.49
25:Z:19:VAL:HG13	25:Z:95:TYR:HE2	1.77	0.49
25:Z:47:VAL:O	25:Z:47:VAL:CG2	2.60	0.49
28:c:149:GLN:HB2	28:c:156:VAL:HG11	1.95	0.49
31:f:71:TYR:O	31:f:75:LEU:HB2	2.11	0.49
31:f:143:ARG:O	31:f:143:ARG:HD2	2.13	0.49
31:f:345:PRO:HG3	31:f:378:ASN:HB2	1.95	0.49
2:B:108:SER:HA	3:C:95:PHE:HD1	1.77	0.49
2:B:224:LEU:O	2:B:330:ALA:HA	2.12	0.49
2:B:438:LEU:HA	9:I:155:ASN:HD22	1.77	0.49
3:C:29:GLU:CG	21:V:201:ARG:HG2	2.42	0.49
3:C:79:ALA:CB	3:C:105:ILE:HD11	2.42	0.49
3:C:141:GLU:OE1	3:C:141:GLU:N	2.33	0.49
4:D:302:ASN:HB3	4:D:305:VAL:CG2	2.43	0.49
5:E:216:ARG:O	5:E:217:GLU:C	2.55	0.49
7:G:65:THR:HB	13:M:159:GLY:H	1.77	0.49
8:H:200:GLU:OE1	8:H:200:GLU:N	2.46	0.49
10:J:42:VAL:CG1	10:J:191:VAL:HG21	2.41	0.49
11:K:104:ASN:OD1	18:S:57:ARG:NH2	2.44	0.49
12:L:47:VAL:HG21	12:L:191:GLY:C	2.38	0.49
14:N:78:THR:O	14:N:82:LEU:HG	2.11	0.49
14:N:174:ILE:CB	14:N:189:LEU:HB2	2.30	0.49
16:Q:183:MET:C	16:Q:204:MET:HE1	2.38	0.49
19:T:6:VAL:HG13	19:T:8:ASN:OD1	2.12	0.49
19:T:148:LEU:HD21	19:T:178:VAL:CG2	2.40	0.49
19:T:158:MET:SD	19:T:159:GLN:N	2.86	0.49
20:U:10:SER:OG	29:d:170:GLN:HG3	2.12	0.49
21:V:218:TYR:CD2	21:V:227:VAL:CG1	2.96	0.49
22:W:79:GLU:O	22:W:83:LEU:N	2.38	0.49
22:W:171:VAL:HG21	22:W:185:PHE:CB	2.42	0.49
22:W:370:TYR:HD2	22:W:373:ILE:HB	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:445:LEU:HD12	25:Z:226:ILE:HD12	1.94	0.49
24:Y:69:LEU:CD2	24:Y:73:MET:HE3	2.43	0.49
24:Y:229:ILE:CD1	24:Y:298:GLU:HB3	2.42	0.49
26:a:91:ASN:N	26:a:91:ASN:OD1	2.44	0.49
27:b:22:LEU:HB2	27:b:23:PRO:CD	2.39	0.49
27:b:34:ASN:ND2	27:b:72:LEU:HD11	2.27	0.49
28:c:272:ILE:O	28:c:275:VAL:HG22	2.12	0.49
31:f:44:GLU:C	31:f:45:LEU:HD22	2.37	0.49
31:f:399:LEU:HD11	31:f:407:MET:HB2	1.95	0.49
31:f:879:ARG:NH1	31:f:879:ARG:HG2	2.28	0.49
32:g:127:ILE:HA	32:g:156:LEU:O	2.13	0.49
34:u:127:MET:HE1	34:u:150:LEU:HD12	1.93	0.49
1:A:345:LEU:HD22	1:A:381:THR:HG23	1.93	0.49
2:B:59:ARG:NE	2:B:63:LEU:HD21	2.28	0.49
3:C:191:PRO:HG2	3:C:319:PRO:HG3	1.94	0.49
3:C:335:LYS:HE2	3:C:335:LYS:HA	1.94	0.49
5:E:323:HIS:CD2	5:E:324:GLY:H	2.30	0.49
7:G:13:ILE:HD11	7:G:126:THR:CA	2.32	0.49
10:J:57:ARG:HB2	10:J:57:ARG:HH11	1.75	0.49
11:K:121:LEU:CD2	11:K:160:GLY:HA3	2.43	0.49
12:L:67:ASP:OD1	12:L:68:ASN:OD1	2.31	0.49
13:M:184:MET:HE2	13:M:188:ASP:OD2	2.13	0.49
15:P:149:GLU:HA	15:P:152:LYS:HZ1	1.77	0.49
16:Q:20:VAL:HG11	16:Q:111:GLY:HA2	1.95	0.49
16:Q:26:ARG:HG2	16:Q:26:ARG:HH11	1.77	0.49
17:R:175:LEU:HD22	17:R:178:PHE:CZ	2.37	0.49
18:S:104:TRP:CG	18:S:109:PRO:HG3	2.48	0.49
18:S:195:LEU:HD22	18:S:199:TYR:CD2	2.48	0.49
19:T:34:SER:OG	33:h:144:TYR:HE1	1.96	0.49
20:U:7:GLY:HA2	29:d:169:ALA:HB1	1.94	0.49
20:U:736:ILE:HD11	20:U:779:LEU:HD23	1.93	0.49
20:U:793:LYS:CG	20:U:794:ASP:H	2.25	0.49
21:V:211:TYR:HD2	21:V:250:LEU:HD21	1.78	0.49
21:V:309:MET:SD	21:V:331:LEU:HB3	2.53	0.49
21:V:408:ARG:HA	21:V:447:ILE:CD1	2.42	0.49
22:W:117:ASP:OD1	22:W:119:PRO:HD2	2.11	0.49
24:Y:227:SER:HB2	24:Y:231:LEU:CD1	2.37	0.49
24:Y:238:GLU:OE1	24:Y:238:GLU:HA	2.13	0.49
25:Z:39:LEU:HD23	25:Z:53:SER:HB2	1.95	0.49
26:a:135:ILE:HG22	26:a:136:GLU:OE2	2.13	0.49
28:c:57:MET:HE1	28:c:143:VAL:HG23	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:107:MET:HE1	34:u:272:ALA:HA	1.95	0.49
28:c:196:LEU:O	28:c:197:ASN:HB2	2.12	0.49
31:f:50:LYS:HA	31:f:53:GLN:HG3	1.91	0.49
31:f:271:MET:SD	31:f:786:GLN:NE2	2.86	0.49
32:g:131:ILE:HG21	32:g:147:VAL:HG22	1.95	0.49
32:g:164:ASP:HA	32:g:167:LYS:HG2	1.93	0.49
1:A:364:VAL:CG2	1:A:368:ILE:HG13	2.42	0.49
1:A:376:LEU:O	1:A:378:PRO:HD3	2.12	0.49
2:B:187:ILE:HD11	2:B:190:LEU:HB2	1.95	0.49
2:B:393:ALA:CB	3:C:308:PRO:HG2	2.42	0.49
3:C:29:GLU:HA	3:C:29:GLU:OE2	2.12	0.49
3:C:144:PRO:HB2	3:C:201:ARG:HG2	1.94	0.49
3:C:191:PRO:HD2	3:C:317:PHE:O	2.13	0.49
5:E:194:ASN:HB3	5:E:196:LEU:CD2	2.43	0.49
5:E:226:GLN:HB3	5:E:227:PRO:HD2	1.94	0.49
5:E:263:GLN:OE1	5:E:263:GLN:HA	2.13	0.49
5:E:355:ILE:HD12	6:F:211:LYS:CE	2.43	0.49
8:H:20:VAL:O	8:H:24:TYR:HD1	1.94	0.49
8:H:119:GLN:NE2	9:I:85:VAL:HG21	2.27	0.49
9:I:159:TRP:HB3	9:I:162:THR:HG23	1.93	0.49
9:I:178:ASP:OD2	9:I:195:LYS:HE3	2.13	0.49
10:J:38:ARG:NE	10:J:182:GLU:HA	2.27	0.49
11:K:109:VAL:O	11:K:112:VAL:HG12	2.13	0.49
12:L:87:PHE:CE2	12:L:112:ILE:HD12	2.48	0.49
17:R:180:VAL:HG21	17:R:191:LEU:HB2	1.95	0.49
18:S:42:LEU:HD12	18:S:179:VAL:CG1	2.41	0.49
19:T:15:ILE:N	19:T:22:ILE:HG22	2.27	0.49
19:T:75:TYR:CE1	19:T:83:MET:HB3	2.48	0.49
19:T:166:LEU:HD12	19:T:167:SER:H	1.78	0.49
20:U:127:ASP:OD1	20:U:130:LEU:HB2	2.12	0.49
20:U:625:ILE:CG2	20:U:626:LEU:HG	2.42	0.49
21:V:221:LEU:HD12	21:V:223:LYS:NZ	2.27	0.49
22:W:33:LYS:HA	22:W:36:LYS:HG2	1.94	0.49
22:W:264:GLN:O	22:W:268:LYS:HG3	2.13	0.49
22:W:271:VAL:CG2	22:W:306:LEU:HB2	2.43	0.49
22:W:428:TRP:CD1	25:Z:238:PRO:HB3	2.48	0.49
23:X:173:GLU:HA	23:X:176:THR:HG22	1.95	0.49
25:Z:135:THR:O	25:Z:136:GLU:HG2	2.13	0.49
27:b:142:ASN:OD1	27:b:146:GLU:HG3	2.13	0.49
29:d:266:THR:HA	29:d:269:ASP:OD2	2.12	0.49
29:d:273:GLY:O	29:d:276:GLU:N	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:138:GLU:HB3	31:f:142:TYR:CE2	2.47	0.49
31:f:538:ILE:HA	31:f:541:THR:OG1	2.12	0.49
31:f:771:LEU:HG	31:f:776:LEU:HD12	1.93	0.49
31:f:881:GLU:HA	31:f:894:LEU:CD1	2.43	0.49
1:A:211:GLY:HA2	1:A:317:VAL:O	2.12	0.49
4:D:167:ILE:HD11	4:D:215:LEU:N	2.27	0.49
5:E:216:ARG:C	5:E:218:MET:N	2.67	0.49
5:E:230:ILE:CD1	5:E:273:VAL:HG11	2.41	0.49
5:E:236:ASP:HB2	5:E:279:THR:OG1	2.11	0.49
5:E:355:ILE:CG2	5:E:356:ARG:HD3	2.43	0.49
6:F:191:LEU:O	6:F:195:ILE:HG13	2.13	0.49
7:G:73:THR:HG22	7:G:74:GLU:N	2.28	0.49
7:G:132:ARG:NE	13:M:20:VAL:HG21	2.28	0.49
9:I:35:LEU:HD22	9:I:196:VAL:HG11	1.95	0.49
12:L:62:LYS:HE3	12:L:74:ILE:O	2.12	0.49
13:M:175:GLU:HA	13:M:178:LYS:NZ	2.27	0.49
16:Q:169:GLN:HA	16:Q:172:LEU:HD11	1.94	0.49
17:R:45:LEU:O	17:R:102:LEU:HD23	2.13	0.49
18:S:100:MET:HA	18:S:112:TYR:O	2.13	0.49
19:T:27:THR:OG1	19:T:192:ALA:HB3	2.13	0.49
19:T:110:ILE:CG2	19:T:122:TYR:HB2	2.33	0.49
20:U:39:SER:HB3	20:U:71:LEU:CD1	2.34	0.49
20:U:40:GLU:O	20:U:42:VAL:HG12	2.12	0.49
20:U:138:PHE:HZ	20:U:154:ALA:HA	1.77	0.49
20:U:396:ALA:HB1	20:U:400:ALA:HB1	1.94	0.49
20:U:466:LYS:HE3	20:U:496:LEU:CD1	2.43	0.49
20:U:833:LEU:HD23	20:U:834:SER:N	2.28	0.49
21:V:166:TYR:CE1	21:V:170:LEU:HD11	2.48	0.49
21:V:168:GLN:HE22	21:V:194:LYS:NZ	2.11	0.49
21:V:218:TYR:HD2	21:V:227:VAL:CG1	2.26	0.49
22:W:144:ARG:NH1	22:W:181:GLU:OE2	2.46	0.49
22:W:377:ARG:NH1	22:W:381:LEU:HG	2.28	0.49
23:X:89:VAL:HA	23:X:92:LEU:CD2	2.42	0.49
23:X:299:LEU:HD22	23:X:299:LEU:H	1.78	0.49
23:X:310:ARG:HB3	23:X:310:ARG:CZ	2.42	0.49
24:Y:61:LEU:HB3	24:Y:63:TRP:NE1	2.28	0.49
26:a:32:LYS:HB2	27:b:20:ASP:HA	1.95	0.49
26:a:34:TRP:H	27:b:18:ASN:HB2	1.77	0.49
26:a:89:ASP:HB2	26:a:92:VAL:CG2	2.43	0.49
26:a:269:LEU:O	26:a:272:ILE:HG22	2.13	0.49
26:a:328:ASP:HB3	26:a:330:ARG:HH11	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:218:LYS:O	29:d:218:LYS:HD2	2.13	0.49
31:f:103:TYR:HA	31:f:106:LEU:CD1	2.43	0.49
31:f:326:LEU:HD13	31:f:326:LEU:C	2.38	0.49
31:f:679:LEU:HD13	31:f:690:VAL:HB	1.94	0.49
31:f:830:LEU:CD2	31:f:880:ALA:HB3	2.42	0.49
31:f:886:GLU:HB3	31:f:902:LYS:HE2	1.95	0.49
32:g:131:ILE:HG23	32:g:151:VAL:HG11	1.93	0.49
33:h:20:VAL:HG11	33:h:122:LEU:CG	2.43	0.49
34:u:178:TYR:HB2	34:u:235:TYR:HE1	1.77	0.49
1:A:212:VAL:HG12	1:A:214:LEU:CD1	2.42	0.49
2:B:197:ILE:HG12	2:B:351:ILE:HD13	1.94	0.49
2:B:292:THR:O	2:B:309:MET:HE1	2.13	0.49
2:B:398:ILE:HG13	2:B:426:VAL:CG1	2.41	0.49
4:D:65:GLN:OE1	29:d:349:ILE:HD12	2.13	0.49
4:D:172:ILE:HD12	4:D:172:ILE:H	1.78	0.49
6:F:87:PRO:CB	6:F:155:LYS:HD3	2.43	0.49
6:F:98:ASP:O	6:F:99:VAL:C	2.56	0.49
6:F:253:GLY:HA3	6:F:290:ALA:HB3	1.95	0.49
6:F:321:GLN:O	6:F:324:THR:HB	2.13	0.49
7:G:140:LEU:O	7:G:151:VAL:HA	2.13	0.49
7:G:154:CYS:HB3	7:G:160:TYR:HB2	1.94	0.49
9:I:134:LEU:HD23	9:I:134:LEU:N	2.27	0.49
10:J:7:ILE:O	10:J:16:LEU:HD22	2.13	0.49
11:K:125:GLU:HG2	12:L:125:ARG:NE	2.28	0.49
11:K:236:GLU:HA	11:K:239:LYS:NZ	2.28	0.49
12:L:70:ILE:HG12	12:L:105:VAL:HG22	1.94	0.49
14:N:17:ASP:OD1	14:N:19:ARG:N	2.24	0.49
14:N:135:ILE:HG21	14:N:159:ALA:O	2.13	0.49
15:P:206:LYS:NZ	16:Q:161:ASP:HB2	2.28	0.49
16:Q:53:LEU:HB2	16:Q:60:VAL:HG13	1.95	0.49
19:T:17:GLY:HA3	19:T:20:PHE:CD1	2.48	0.49
20:U:702:THR:HG21	20:U:811:PHE:CE2	2.39	0.49
21:V:379:LEU:HD21	21:V:395:ILE:CG2	2.42	0.49
22:W:371:THR:O	22:W:414:ASN:HA	2.13	0.49
22:W:399:ASN:O	22:W:400:LYS:HB2	2.12	0.49
24:Y:229:ILE:HD11	24:Y:298:GLU:HB3	1.95	0.49
25:Z:38:VAL:HG21	25:Z:75:LEU:CD1	2.42	0.49
26:a:244:ASN:OD1	26:a:245:VAL:N	2.45	0.49
26:a:284:ARG:HH21	26:a:295:GLU:CD	2.21	0.49
28:c:236:GLU:OE1	28:c:236:GLU:N	2.45	0.49
31:f:99:LEU:HB3	31:f:129:LEU:CD1	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:326:LEU:O	31:f:326:LEU:HD22	2.13	0.49
31:f:495:GLU:OE2	31:f:498:LEU:HD23	2.12	0.49
31:f:556:ARG:HG2	31:f:590:PHE:CE1	2.48	0.49
31:f:758:ASN:O	31:f:762:VAL:HG23	2.12	0.49
33:h:69:GLN:C	33:h:72:ILE:HG22	2.38	0.49
33:h:136:SER:HB2	33:h:150:LEU:HD13	1.94	0.49
1:A:205:GLY:O	6:F:373:MET:HG2	2.13	0.48
3:C:396:GLU:HB3	3:C:402:LYS:HG3	1.95	0.48
4:D:60:TYR:CD1	20:U:603:LEU:HD22	2.48	0.48
4:D:214:MET:HE1	38:D:501:ADP:N3	2.28	0.48
4:D:240:LEU:O	4:D:240:LEU:HD23	2.12	0.48
4:D:277:ALA:CB	4:D:283:ARG:HG3	2.43	0.48
4:D:354:LEU:HA	4:D:394:VAL:HG22	1.94	0.48
4:D:384:MET:HE1	5:E:297:ARG:HH12	1.76	0.48
5:E:26:LEU:HD12	6:F:54:ILE:CD1	2.43	0.48
5:E:170:CYS:N	5:E:296:ASP:HB3	2.27	0.48
7:G:153:LYS:HE3	7:G:163:PHE:CZ	2.48	0.48
9:I:7:SER:OG	9:I:8:ARG:HG2	2.12	0.48
9:I:103:GLU:OE2	17:R:76:SER:OG	2.31	0.48
9:I:114:LEU:HD12	9:I:114:LEU:HA	1.70	0.48
10:J:119:THR:CG2	10:J:126:PRO:HB3	2.43	0.48
10:J:125:ARG:HG2	10:J:126:PRO:CD	2.43	0.48
10:J:178:ASP:N	10:J:178:ASP:OD1	2.44	0.48
11:K:91:LYS:O	11:K:91:LYS:HD3	2.13	0.48
12:L:48:ALA:HB2	12:L:63:ILE:HD11	1.95	0.48
14:N:98:ILE:C	14:N:99:ILE:HD13	2.38	0.48
15:P:79:ALA:CB	15:P:100:LEU:HD21	2.43	0.48
15:P:219:LEU:HD23	15:P:219:LEU:H	1.78	0.48
16:Q:27:ARG:HG3	16:Q:183:MET:SD	2.53	0.48
18:S:111:LEU:HD12	18:S:112:TYR:H	1.76	0.48
20:U:438:GLN:OE1	20:U:438:GLN:HA	2.13	0.48
20:U:524:LYS:HZ1	20:U:563:ALA:HB2	1.76	0.48
20:U:698:GLN:OE1	20:U:698:GLN:HA	2.12	0.48
21:V:98:LEU:HD22	21:V:209:LYS:CG	2.40	0.48
22:W:41:GLN:OE1	22:W:41:GLN:HA	2.12	0.48
22:W:178:GLU:HG2	22:W:180:LYS:H	1.78	0.48
22:W:224:LEU:HD22	22:W:250:ILE:HG13	1.95	0.48
27:b:54:LEU:HD22	27:b:89:GLY:HA3	1.95	0.48
28:c:190:GLN:O	28:c:194:HIS:HD2	1.96	0.48
29:d:119:LEU:HD23	29:d:122:VAL:HG21	1.95	0.48
31:f:496:ASP:OD1	31:f:496:ASP:N	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:560:LEU:CD1	31:f:801:VAL:HG21	2.42	0.48
33:h:74:GLU:OE1	33:h:74:GLU:HA	2.13	0.48
2:B:108:SER:HA	3:C:95:PHE:CD1	2.48	0.48
2:B:197:ILE:HG12	2:B:351:ILE:CD1	2.43	0.48
3:C:226:GLU:OE1	3:C:226:GLU:HA	2.13	0.48
3:C:351:MET:HE2	3:C:359:VAL:HG22	1.95	0.48
4:D:273:LYS:NZ	4:D:315:ASP:O	2.46	0.48
4:D:417:TYR:CE1	7:G:21:ARG:HA	2.48	0.48
5:E:157:GLU:H	5:E:157:GLU:CD	2.21	0.48
5:E:177:GLY:HA2	38:E:501:ADP:O1B	2.14	0.48
5:E:230:ILE:CG2	5:E:232:MET:HG2	2.43	0.48
6:F:215:LEU:HD12	6:F:215:LEU:H	1.78	0.48
7:G:167:ALA:O	7:G:172:GLN:HG3	2.12	0.48
8:H:86:LEU:HD23	8:H:134:LEU:HG	1.94	0.48
9:I:86:LEU:HD12	9:I:114:LEU:CG	2.43	0.48
9:I:93:ILE:HD13	9:I:113:ALA:HB1	1.94	0.48
9:I:102:GLN:NE2	16:Q:65:GLN:HG2	2.28	0.48
9:I:161:ALA:CB	10:J:53:LEU:HD21	2.34	0.48
10:J:144:LEU:HD22	10:J:156:TRP:O	2.12	0.48
11:K:93:ARG:HG2	18:S:68:LEU:HD13	1.94	0.48
11:K:102:THR:HB	11:K:103:TYR:HD1	1.79	0.48
15:P:98:LEU:CB	15:P:113:ILE:HD11	2.43	0.48
16:Q:51:ILE:CG1	16:Q:109:ILE:HG22	2.32	0.48
18:S:35:ILE:H	18:S:35:ILE:HD12	1.78	0.48
18:S:113:TYR:OH	18:S:115:ASP:HB3	2.13	0.48
19:T:150:ASP:HB3	19:T:156:LYS:CB	2.42	0.48
20:U:349:ASP:O	20:U:352:ILE:HG13	2.13	0.48
20:U:616:ARG:HG3	20:U:647:HIS:HB3	1.95	0.48
20:U:702:THR:HG23	20:U:811:PHE:CD2	2.48	0.48
20:U:872:GLU:O	20:U:874:ASN:N	2.45	0.48
21:V:132:LEU:N	21:V:133:PRO:HD2	2.28	0.48
21:V:195:ILE:HD12	21:V:196:SER:N	2.28	0.48
22:W:251:TYR:CE1	22:W:267:LEU:HD13	2.48	0.48
23:X:177:TYR:HE2	23:X:185:LYS:HB3	1.76	0.48
25:Z:170:VAL:CG1	28:c:42:LEU:HD13	2.43	0.48
27:b:31:ASP:O	27:b:35:ILE:HD13	2.12	0.48
28:c:119:GLY:HA2	28:c:149:GLN:OE1	2.12	0.48
31:f:367:SER:CA	31:f:370:MET:SD	3.01	0.48
31:f:512:MET:HE2	31:f:512:MET:CA	2.33	0.48
31:f:542:ILE:HG23	31:f:543:MET:SD	2.54	0.48
33:h:45:VAL:HG21	33:h:49:THR:HG22	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:240:VAL:HG23	1:A:273:PHE:O	2.13	0.48
2:B:196:GLU:HG2	2:B:349:ARG:HH11	1.77	0.48
3:C:33:LEU:HD23	3:C:33:LEU:C	2.39	0.48
3:C:144:PRO:CG	3:C:201:ARG:HG2	2.43	0.48
3:C:157:GLN:HG3	3:C:315:ILE:HG22	1.95	0.48
3:C:368:MET:HG3	4:D:329:ARG:HH12	1.79	0.48
5:E:144:GLU:HG3	5:E:299:ILE:HG21	1.95	0.48
5:E:159:PHE:O	5:E:162:VAL:HG22	2.13	0.48
5:E:169:GLY:O	5:E:170:CYS:HB3	2.13	0.48
5:E:221:TYR:HA	5:E:224:ASP:OD1	2.13	0.48
5:E:226:GLN:HB3	5:E:227:PRO:CD	2.43	0.48
5:E:258:MET:SD	5:E:294:ARG:HD3	2.52	0.48
7:G:105:TYR:CB	15:P:78:THR:HG23	2.40	0.48
7:G:175:SER:CA	7:G:205:VAL:HG21	2.43	0.48
10:J:61:LYS:HE2	10:J:73:PHE:O	2.13	0.48
12:L:33:SER:CB	12:L:51:ARG:HD2	2.35	0.48
12:L:47:VAL:HG12	12:L:212:ILE:CG1	2.33	0.48
13:M:39:ILE:CG1	13:M:176:ILE:HD11	2.40	0.48
14:N:20:THR:H	14:N:26:ILE:HD11	1.78	0.48
14:N:53:GLN:NE2	15:P:119:THR:O	2.45	0.48
14:N:88:TYR:CE2	33:h:62:TYR:HB2	2.48	0.48
16:Q:169:GLN:HA	16:Q:172:LEU:CD1	2.43	0.48
17:R:103:LEU:HD23	17:R:117:TYR:HA	1.94	0.48
18:S:9:ARG:NH2	18:S:10:HIS:HB2	2.28	0.48
19:T:15:ILE:HB	19:T:22:ILE:CG2	2.43	0.48
19:T:145:LEU:O	19:T:149:LEU:HD12	2.13	0.48
20:U:26:LYS:NZ	29:d:131:THR:OG1	2.44	0.48
20:U:799:LYS:CA	20:U:880:ASN:HD21	2.11	0.48
20:U:809:SER:N	20:U:876:GLN:HE22	2.10	0.48
23:X:111:LEU:HA	23:X:114:ILE:HG22	1.95	0.48
23:X:251:LEU:O	23:X:255:LEU:HG	2.14	0.48
24:Y:301:ILE:CD1	24:Y:342:ARG:HD3	2.30	0.48
25:Z:179:ILE:O	25:Z:179:ILE:HG13	2.13	0.48
25:Z:188:SER:HA	26:a:374:ILE:HD11	1.94	0.48
27:b:32:ALA:HB2	27:b:179:LEU:CD2	2.44	0.48
27:b:118:GLU:O	27:b:118:GLU:HG2	2.14	0.48
28:c:190:GLN:HG2	28:c:191:ALA:N	2.27	0.48
31:f:190:GLU:C	31:f:193:PRO:HD2	2.38	0.48
31:f:547:GLU:HA	31:f:550:LEU:HB2	1.95	0.48
31:f:838:ARG:HH11	31:f:838:ARG:HG3	1.78	0.48
31:f:881:GLU:C	31:f:894:LEU:HD22	2.38	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:27:LEU:HD11	33:h:34:ALA:HA	1.94	0.48
33:h:100:ARG:HA	33:h:105:PRO:CG	2.35	0.48
1:A:26:ASP:O	1:A:30:ILE:HD13	2.13	0.48
1:A:59:ILE:HD11	2:B:76:GLU:CA	2.42	0.48
2:B:81:ASN:O	2:B:85:MET:N	2.31	0.48
4:D:254:ALA:CB	4:D:262:ILE:HD11	2.43	0.48
5:E:135:ILE:HD12	5:E:182:LEU:HB2	1.94	0.48
5:E:185:ARG:O	5:E:188:ALA:HB3	2.13	0.48
5:E:212:ALA:H	5:E:215:ILE:HB	1.77	0.48
5:E:217:GLU:O	5:E:220:ASN:HB2	2.12	0.48
6:F:128:THR:O	6:F:129:ARG:HB2	2.13	0.48
7:G:163:PHE:HD2	7:G:166:THR:HB	1.77	0.48
8:H:154:ALA:CB	9:I:80:THR:HG21	2.43	0.48
9:I:44:LEU:CD2	9:I:189:ALA:HB1	2.43	0.48
9:I:161:ALA:O	10:J:53:LEU:HD23	2.13	0.48
10:J:65:LEU:HB2	10:J:69:VAL:HG13	1.95	0.48
12:L:99:PHE:HE1	33:h:91:TRP:HD1	1.61	0.48
14:N:32:ASP:OD1	14:N:32:ASP:C	2.57	0.48
15:P:174:ASP:C	15:P:175:LEU:HD12	2.39	0.48
18:S:20:ALA:O	18:S:27:ALA:HB3	2.14	0.48
18:S:142:GLY:O	18:S:155:LEU:HD22	2.13	0.48
20:U:108:TYR:HD2	20:U:134:VAL:HG21	1.77	0.48
21:V:167:LEU:O	21:V:171:VAL:HG12	2.13	0.48
22:W:224:LEU:HD22	22:W:250:ILE:CG1	2.44	0.48
22:W:314:LEU:HD13	22:W:381:LEU:CD1	2.44	0.48
23:X:175:LYS:HG2	23:X:213:GLN:OE1	2.13	0.48
23:X:267:VAL:HG21	23:X:291:ALA:HB2	1.94	0.48
25:Z:227:ILE:HD11	26:a:346:ILE:HD11	1.93	0.48
26:a:210:VAL:HG23	26:a:210:VAL:O	2.14	0.48
28:c:49:VAL:HG23	28:c:49:VAL:O	2.12	0.48
31:f:256:PHE:HE1	31:f:268:LEU:CD1	2.25	0.48
31:f:305:LEU:HD12	31:f:305:LEU:C	2.38	0.48
31:f:343:LYS:HD3	31:f:348:ILE:HD11	1.95	0.48
31:f:545:LYS:HD2	31:f:545:LYS:HA	1.57	0.48
31:f:692:LEU:CD1	31:f:800:LEU:HD13	2.34	0.48
31:f:845:ARG:HD2	31:f:865:PHE:HB2	1.95	0.48
32:g:116:ILE:HG22	32:g:122:LEU:CD2	2.32	0.48
33:h:97:TYR:HD1	33:h:100:ARG:HD3	1.77	0.48
1:A:55:LEU:HD21	2:B:73:LEU:CD2	2.43	0.48
2:B:110:GLY:O	2:B:150:VAL:N	2.44	0.48
3:C:91:PRO:HG2	3:C:92:GLU:CD	2.38	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:263:PHE:CE2	4:D:265:ASP:HB2	2.48	0.48
6:F:85:THR:HG22	6:F:87:PRO:CD	2.41	0.48
8:H:60:ARG:O	8:H:63:HIS:NE2	2.45	0.48
8:H:196:LYS:HG3	8:H:203:MET:HE2	1.96	0.48
9:I:89:GLU:O	9:I:93:ILE:HG13	2.13	0.48
9:I:115:CYS:HB3	10:J:81:ARG:HH22	1.77	0.48
10:J:145:TYR:CD1	10:J:155:ALA:HA	2.48	0.48
11:K:24:VAL:HG11	11:K:159:SER:HB2	1.94	0.48
11:K:70:ILE:CG2	11:K:74:ILE:HD11	2.43	0.48
15:P:150:GLU:HA	15:P:153:ASN:OD1	2.14	0.48
17:R:183:ILE:HD13	17:R:188:ILE:HD13	1.94	0.48
18:S:176:LEU:HD12	18:S:177:TYR:N	2.29	0.48
19:T:121:VAL:HB	19:T:133:ASP:O	2.13	0.48
20:U:185:MET:CG	20:U:222:PHE:HE2	2.24	0.48
20:U:456:ASP:OD1	20:U:456:ASP:N	2.40	0.48
20:U:789:ILE:CD1	20:U:881:PRO:HA	2.44	0.48
20:U:869:LYS:O	20:U:872:GLU:HB3	2.13	0.48
20:U:895:PRO:O	20:U:898:CYS:HB3	2.14	0.48
21:V:72:LEU:O	21:V:75:ILE:HG13	2.13	0.48
21:V:100:MET:HE2	21:V:100:MET:HA	1.96	0.48
23:X:107:VAL:HG21	23:X:142:ARG:HH12	1.78	0.48
25:Z:277:ASN:O	25:Z:280:ILE:HG12	2.14	0.48
26:a:70:ARG:HD2	26:a:76:LEU:CD2	2.23	0.48
26:a:285:PRO:O	26:a:286:ALA:HB3	2.14	0.48
27:b:147:GLU:CD	27:b:147:GLU:H	2.21	0.48
29:d:176:PHE:O	29:d:179:LYS:HG3	2.14	0.48
29:d:333:THR:O	29:d:337:LYS:HE2	2.13	0.48
31:f:71:TYR:CE2	31:f:113:MET:HE3	2.49	0.48
31:f:99:LEU:HB3	31:f:129:LEU:HD11	1.95	0.48
31:f:301:HIS:HD2	31:f:301:HIS:O	1.97	0.48
31:f:607:LEU:HD22	31:f:607:LEU:N	2.28	0.48
33:h:128:LEU:HD23	33:h:128:LEU:O	2.13	0.48
4:D:296:MET:HE1	4:D:326:ARG:HB3	1.93	0.48
4:D:302:ASN:CB	4:D:305:VAL:HG22	2.44	0.48
4:D:363:TYR:HE2	4:D:399:PHE:HB3	1.78	0.48
5:E:26:LEU:HD13	6:F:58:GLU:HB2	1.96	0.48
6:F:93:VAL:O	6:F:147:PRO:HA	2.13	0.48
6:F:232:GLY:HA2	36:F:501:ATP:O1A	2.13	0.48
6:F:399:VAL:CG2	6:F:427:VAL:HG21	2.43	0.48
8:H:85:VAL:O	8:H:89:ARG:HG2	2.13	0.48
10:J:19:VAL:HG13	10:J:150:SER:HA	1.93	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:Q:13:ALA:HB2	16:Q:22:ILE:CD1	2.43	0.48
17:R:4:LEU:O	17:R:131:ALA:HA	2.13	0.48
20:U:39:SER:O	20:U:42:VAL:HB	2.14	0.48
20:U:48:LEU:HG	20:U:54:PHE:CD2	2.48	0.48
20:U:49:TYR:CD1	20:U:49:TYR:C	2.91	0.48
20:U:61:ALA:CB	20:U:84:ALA:HB2	2.39	0.48
20:U:221:ILE:HA	20:U:260:PHE:CE2	2.49	0.48
20:U:384:GLN:HA	20:U:387:ARG:NH2	2.28	0.48
20:U:698:GLN:HB3	20:U:703:CYS:SG	2.53	0.48
22:W:96:GLN:HG3	22:W:101:VAL:CG2	2.43	0.48
22:W:194:LEU:HG	22:W:202:THR:HG21	1.96	0.48
22:W:317:TRP:CZ3	22:W:355:LYS:HA	2.49	0.48
23:X:310:ARG:HB3	23:X:310:ARG:NH1	2.29	0.48
24:Y:299:MET:HA	24:Y:299:MET:HE3	1.94	0.48
25:Z:19:VAL:HG11	25:Z:124:ILE:HB	1.96	0.48
26:a:226:ARG:CZ	26:a:230:ARG:HB2	2.43	0.48
27:b:51:LEU:HD23	27:b:71:ILE:HG23	1.95	0.48
29:d:199:LEU:HD12	29:d:204:ARG:HB2	1.95	0.48
31:f:100:ARG:HH12	31:f:129:LEU:HD21	1.79	0.48
31:f:413:SER:HA	31:f:416:MET:HB3	1.95	0.48
31:f:461:PRO:O	31:f:465:LEU:HG	2.12	0.48
31:f:539:LEU:CG	31:f:543:MET:HE3	2.43	0.48
34:u:216:GLN:OE1	34:u:234:ARG:HG3	2.13	0.48
1:A:32:LEU:CD1	31:f:92:VAL:HG23	2.43	0.48
1:A:310:ASP:OD1	6:F:250:LYS:HE2	2.13	0.48
2:B:54:PRO:O	2:B:56:THR:N	2.45	0.48
2:B:150:VAL:CG2	2:B:152:LEU:HD21	2.43	0.48
2:B:287:ILE:CG1	2:B:329:MET:HE2	2.41	0.48
2:B:333:ARG:HD3	3:C:258:ARG:HE	1.78	0.48
3:C:251:ILE:CG2	3:C:301:LEU:HD21	2.44	0.48
3:C:329:LEU:HD23	3:C:363:CYS:SG	2.54	0.48
3:C:358:GLU:CA	4:D:324:PRO:HG2	2.37	0.48
4:D:44:TYR:HE2	20:U:156:GLU:OE2	1.97	0.48
4:D:177:VAL:CG1	4:D:219:VAL:HG21	2.43	0.48
5:E:120:TYR:HE2	6:F:311:LEU:HD11	1.78	0.48
5:E:203:ILE:HG13	5:E:232:MET:HE1	1.94	0.48
6:F:223:VAL:HB	6:F:329:ILE:HG22	1.96	0.48
7:G:132:ARG:CZ	13:M:20:VAL:HG21	2.43	0.48
7:G:175:SER:HA	7:G:205:VAL:HG21	1.96	0.48
9:I:8:ARG:NH2	9:I:11:ILE:HD11	2.29	0.48
10:J:31:THR:HB	10:J:163:ARG:O	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:113:SER:OG	14:N:123:GLN:NE2	2.47	0.48
15:P:146:MET:HE1	15:P:154:LEU:HD22	1.96	0.48
15:P:149:GLU:HA	15:P:152:LYS:HZ2	1.77	0.48
17:R:38:MET:HA	17:R:38:MET:CE	2.44	0.48
19:T:159:GLN:N	19:T:159:GLN:OE1	2.44	0.48
19:T:172:MET:HA	19:T:172:MET:HE2	1.95	0.48
20:U:16:GLU:OE1	20:U:18:GLN:HB3	2.13	0.48
20:U:34:PHE:O	20:U:37:GLU:OE1	2.32	0.48
20:U:563:ALA:C	20:U:565:ALA:H	2.20	0.48
21:V:85:ALA:O	21:V:89:LYS:N	2.47	0.48
21:V:195:ILE:HD12	21:V:195:ILE:C	2.39	0.48
23:X:77:LEU:HD12	23:X:116:TRP:HZ2	1.77	0.48
23:X:93:LEU:CD1	23:X:97:LEU:CD2	2.91	0.48
23:X:112:GLU:HA	23:X:115:GLU:OE1	2.13	0.48
26:a:25:LEU:HG	26:a:37:LEU:CD1	2.44	0.48
26:a:58:LYS:N	26:a:61:GLU:HG3	2.25	0.48
27:b:146:GLU:OE1	27:b:146:GLU:N	2.46	0.48
28:c:81:GLY:O	28:c:86:ALA:HB2	2.14	0.48
28:c:87:VAL:HG21	34:u:278:PHE:CE2	2.48	0.48
29:d:283:LEU:HD13	29:d:315:TYR:HE1	1.79	0.48
31:f:759:LEU:HD23	31:f:763:ARG:HD2	1.95	0.48
31:f:781:TYR:CZ	31:f:788:MET:HB2	2.49	0.48
31:f:844:VAL:HG12	31:f:868:HIS:O	2.13	0.48
33:h:67:LEU:O	33:h:71:VAL:HB	2.14	0.48
34:u:167:ILE:CG2	34:u:246:ILE:HB	2.35	0.48
34:u:244:VAL:HG11	34:u:265:PHE:CE2	2.48	0.48
1:A:172:VAL:HG21	1:A:227:ARG:NH2	2.21	0.48
2:B:64:LYS:HG2	31:f:239:TYR:CD2	2.47	0.48
2:B:256:ILE:CD1	2:B:290:ILE:HG22	2.37	0.48
3:C:29:GLU:HG3	21:V:201:ARG:HG2	1.95	0.48
4:D:84:SER:CB	28:c:152:LYS:HE2	2.44	0.48
5:E:215:ILE:HG22	5:E:216:ARG:HE	1.79	0.48
7:G:154:CYS:HA	7:G:159:TYR:O	2.13	0.48
7:G:237:ALA:O	7:G:240:VAL:HG23	2.13	0.48
8:H:52:GLN:HG2	8:H:57:TYR:CB	2.43	0.48
8:H:139:TRP:CE2	8:H:142:GLY:HA2	2.49	0.48
11:K:52:LYS:HE2	11:K:216:GLU:CD	2.39	0.48
11:K:97:GLN:OE1	11:K:97:GLN:HA	2.09	0.48
12:L:88:MET:HG2	12:L:112:ILE:CD1	2.29	0.48
12:L:153:TYR:CZ	13:M:85:ARG:NH1	2.82	0.48
15:P:163:ILE:HD12	15:P:170:GLY:HA2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:203:ARG:HA	15:P:205:GLU:OE2	2.13	0.48
16:Q:6:TYR:HE1	16:Q:30:ILE:HD11	1.78	0.48
17:R:11:ASP:C	17:R:11:ASP:OD1	2.56	0.48
17:R:35:MET:HE2	17:R:181:ARG:HH11	1.77	0.48
17:R:88:LEU:HA	17:R:91:CYS:SG	2.53	0.48
17:R:101:ASN:ND2	17:R:119:ASP:HA	2.29	0.48
19:T:5:TYR:HD1	19:T:57:PHE:CD2	2.32	0.48
19:T:47:THR:CG2	19:T:48:ASP:N	2.77	0.48
19:T:121:VAL:O	19:T:133:ASP:N	2.36	0.48
20:U:801:GLN:HA	20:U:878:LEU:O	2.13	0.48
24:Y:185:GLY:HA3	24:Y:201:PHE:CE1	2.49	0.48
28:c:188:SER:HB2	28:c:190:GLN:NE2	2.29	0.48
29:d:88:LEU:HD12	29:d:89:GLN:N	2.29	0.48
29:d:161:ILE:CG1	29:d:162:PRO:HD3	2.22	0.48
31:f:66:LYS:HG3	31:f:66:LYS:O	2.14	0.48
31:f:450:ILE:CG1	31:f:822:VAL:HG11	2.42	0.48
31:f:542:ILE:CD1	31:f:558:LEU:HD13	2.43	0.48
31:f:542:ILE:HD13	31:f:558:LEU:HD13	1.96	0.48
32:g:132:ASN:O	32:g:134:LYS:NZ	2.35	0.48
33:h:113:GLY:HA2	33:h:121:PHE:O	2.14	0.48
34:u:180:MET:HE1	34:u:196:ILE:HD11	1.96	0.48
1:A:80:LEU:HG	1:A:83:ASP:N	2.29	0.48
1:A:199:GLU:CA	1:A:202:VAL:HG12	2.40	0.48
1:A:323:ARG:CG	1:A:326:THR:HG23	2.43	0.48
1:A:430:MET:HE1	11:K:55:THR:OG1	2.13	0.48
2:B:59:ARG:O	2:B:63:LEU:HD23	2.13	0.48
2:B:203:LEU:HD23	2:B:211:TYR:OH	2.14	0.48
2:B:356:PRO:HB2	2:B:361:LYS:HG3	1.96	0.48
5:E:40:TYR:CB	6:F:73:ILE:HD11	2.44	0.48
6:F:199:VAL:O	6:F:203:VAL:HB	2.14	0.48
7:G:202:LEU:HB3	7:G:210:PHE:CZ	2.48	0.48
8:H:35:SER:O	8:H:162:ALA:HA	2.14	0.48
11:K:14:THR:O	11:K:21:LEU:HD12	2.14	0.48
11:K:85:ALA:HB2	11:K:139:VAL:HG21	1.95	0.48
12:L:116:THR:C	12:L:119:PRO:HD2	2.39	0.48
12:L:193:ARG:HG2	12:L:196:ARG:HH21	1.79	0.48
13:M:170:GLN:OE1	13:M:170:GLN:HA	2.12	0.48
13:M:175:GLU:HA	13:M:178:LYS:HZ3	1.78	0.48
15:P:28:ASP:CG	16:Q:131:MET:HE1	2.38	0.48
15:P:126:THR:C	15:P:127:MET:HG2	2.39	0.48
18:S:81:LYS:O	18:S:85:ASN:OD1	2.32	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:100:MET:CE	18:S:128:VAL:HG12	2.43	0.48
19:T:15:ILE:HB	19:T:22:ILE:HG22	1.95	0.48
19:T:58:HIS:ND1	33:h:130:VAL:HG13	2.29	0.48
20:U:160:LEU:HD11	20:U:197:VAL:HG22	1.96	0.48
20:U:552:ILE:HA	20:U:555:VAL:CG1	2.44	0.48
21:V:113:LEU:HD13	21:V:174:PHE:CG	2.49	0.48
21:V:235:LEU:CD2	21:V:251:LEU:HD13	2.44	0.48
22:W:47:LEU:HD22	22:W:47:LEU:H	1.79	0.48
22:W:52:LYS:HB2	22:W:93:ARG:HH21	1.77	0.48
23:X:160:MET:HE3	23:X:162:ASP:HB3	1.95	0.48
25:Z:38:VAL:CG2	25:Z:75:LEU:HD11	2.42	0.48
27:b:33:VAL:O	27:b:36:VAL:HG12	2.14	0.48
27:b:145:GLU:OE1	27:b:145:GLU:N	2.45	0.48
28:c:220:LEU:HD22	28:c:221:HIS:CE1	2.49	0.48
29:d:94:MET:CG	29:d:118:ARG:HH22	2.27	0.48
29:d:240:SER:HB3	29:d:243:LYS:HG3	1.95	0.48
31:f:103:TYR:HA	31:f:106:LEU:CG	2.43	0.48
1:A:124:ASP:OD1	1:A:124:ASP:N	2.45	0.48
1:A:244:GLU:OE1	1:A:244:GLU:HA	2.14	0.48
2:B:66:GLU:HB3	20:U:834:SER:HB3	1.96	0.48
2:B:338:ASP:C	2:B:338:ASP:OD1	2.56	0.48
2:B:407:LEU:HD23	2:B:407:LEU:HA	1.77	0.48
3:C:194:THR:CG2	3:C:317:PHE:HB3	2.43	0.48
4:D:238:LYS:N	4:D:238:LYS:HD3	2.27	0.48
6:F:53:LYS:HA	6:F:56:LYS:NZ	2.28	0.48
6:F:202:ILE:HG13	6:F:329:ILE:HG23	1.96	0.48
7:G:113:MET:CE	15:P:70:THR:HG22	2.44	0.48
10:J:31:THR:HG21	10:J:198:VAL:HG21	1.95	0.48
10:J:193:LYS:CD	10:J:232:ILE:HD11	2.33	0.48
13:M:195:LYS:HD2	13:M:238:TYR:HE2	1.78	0.48
16:Q:26:ARG:CZ	16:Q:26:ARG:HB3	2.44	0.48
16:Q:154:TRP:CZ3	16:Q:156:PRO:HG3	2.49	0.48
19:T:68:ILE:CD1	19:T:92:LEU:HD13	2.42	0.48
20:U:138:PHE:CG	20:U:162:VAL:HG21	2.48	0.48
20:U:167:ILE:CG2	20:U:204:ILE:HD13	2.44	0.48
20:U:187:LEU:CD1	20:U:187:LEU:O	2.62	0.48
20:U:368:ALA:O	20:U:371:ILE:HG13	2.13	0.48
22:W:174:TYR:O	22:W:177:MET:HG2	2.13	0.48
22:W:403:PHE:C	22:W:403:PHE:CD1	2.91	0.48
23:X:128:ALA:HA	23:X:165:LEU:HD21	1.96	0.48
24:Y:26:LEU:HD13	24:Y:63:TRP:CZ2	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:376:LEU:O	24:Y:380:VAL:HG23	2.14	0.48
25:Z:142:GLU:OE1	25:Z:153:LYS:HA	2.14	0.48
27:b:6:THR:HG21	27:b:110:ILE:HD12	1.95	0.48
28:c:63:ASP:OD1	28:c:63:ASP:C	2.57	0.48
31:f:226:TYR:CD1	31:f:227:ALA:N	2.82	0.48
31:f:486:GLY:HA2	31:f:524:MET:SD	2.54	0.48
31:f:560:LEU:HD23	31:f:560:LEU:C	2.39	0.48
31:f:567:LEU:HD12	31:f:601:ALA:HB3	1.96	0.48
32:g:113:ARG:HD3	32:g:124:GLU:HG2	1.95	0.48
34:u:178:TYR:HB2	34:u:235:TYR:CE1	2.49	0.48
1:A:23:ARG:HH21	31:f:44:GLU:C	2.21	0.47
1:A:322:ASN:OD1	1:A:322:ASN:C	2.57	0.47
1:A:415:LYS:NZ	1:A:415:LYS:HB2	2.28	0.47
2:B:412:MET:H	31:f:90:THR:CG2	2.27	0.47
3:C:405:TRP:CZ3	9:I:78:GLY:HA2	2.49	0.47
5:E:263:GLN:CG	5:E:264:MET:H	2.26	0.47
10:J:144:LEU:CD2	10:J:156:TRP:HB2	2.43	0.47
11:K:69:GLU:HB3	18:S:68:LEU:HD21	1.96	0.47
11:K:126:GLU:OE2	12:L:125:ARG:HB2	2.14	0.47
13:M:151:ILE:HG12	13:M:157:SER:CB	2.44	0.47
16:Q:113:ASP:OD1	16:Q:115:LYS:N	2.46	0.47
16:Q:147:TYR:O	16:Q:147:TYR:HD1	1.96	0.47
16:Q:154:TRP:CH2	16:Q:156:PRO:HG3	2.49	0.47
19:T:149:LEU:O	19:T:153:VAL:N	2.47	0.47
19:T:181:SER:O	19:T:184:GLU:HG3	2.13	0.47
20:U:16:GLU:OE2	20:U:18:GLN:HB3	2.14	0.47
20:U:393:LEU:HD11	20:U:404:ALA:HB1	1.94	0.47
20:U:630:PRO:O	20:U:634:PRO:HD3	2.14	0.47
21:V:375:PHE:CE2	21:V:399:ARG:HA	2.50	0.47
21:V:393:THR:OG1	29:d:213:GLU:OE2	2.12	0.47
22:W:57:ALA:HB3	22:W:59:ASP:OD1	2.14	0.47
22:W:136:ILE:O	22:W:139:GLU:HB3	2.14	0.47
22:W:230:MET:HE1	22:W:233:LEU:CD2	2.45	0.47
22:W:243:ILE:HG21	22:W:273:TYR:CZ	2.49	0.47
23:X:116:TRP:O	23:X:119:SER:OG	2.22	0.47
24:Y:226:VAL:CA	24:Y:229:ILE:HG22	2.42	0.47
27:b:122:LYS:O	27:b:125:VAL:HG22	2.13	0.47
28:c:120:CYS:HB2	28:c:158:ASP:OD2	2.13	0.47
28:c:192:LEU:O	28:c:198:ARG:NH1	2.46	0.47
29:d:171:LEU:HD21	29:d:175:TYR:HE1	1.79	0.47
29:d:198:PHE:CE1	29:d:202:GLN:HG2	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:137:ARG:NH2	31:f:169:GLU:HB2	2.29	0.47
31:f:344:VAL:CG2	31:f:389:LYS:HD2	2.43	0.47
31:f:701:ASN:O	31:f:703:ARG:N	2.46	0.47
31:f:774:GLY:O	31:f:828:ARG:NH2	2.47	0.47
32:g:158:LEU:HB3	32:g:160:GLN:O	2.13	0.47
33:h:15:LYS:HD2	33:h:135:PRO:HA	1.96	0.47
2:B:112:LEU:HB2	2:B:150:VAL:CG1	2.44	0.47
2:B:417:GLU:OE1	2:B:417:GLU:N	2.46	0.47
3:C:212:ILE:HD12	3:C:238:ALA:HB2	1.96	0.47
7:G:62:ASP:HB3	7:G:65:THR:OG1	2.13	0.47
8:H:38:ILE:CD1	8:H:190:THR:HB	2.44	0.47
8:H:46:LEU:CD2	8:H:135:LEU:HD21	2.44	0.47
9:I:86:LEU:HD21	9:I:130:PHE:CG	2.50	0.47
10:J:86:ARG:HA	10:J:89:VAL:HG12	1.95	0.47
12:L:12:VAL:HG23	13:M:9:LEU:O	2.13	0.47
12:L:62:LYS:O	12:L:74:ILE:HG12	2.13	0.47
14:N:19:ARG:NH1	14:N:168:GLY:O	2.47	0.47
14:N:110:GLN:HB3	14:N:122:ARG:HH12	1.79	0.47
14:N:135:ILE:CG1	14:N:163:ALA:HB2	2.44	0.47
14:N:144:ARG:H	14:N:147:MET:CE	2.27	0.47
14:N:153:LEU:CD1	14:N:176:LEU:HD22	2.44	0.47
19:T:145:LEU:HD12	19:T:178:VAL:HG22	1.95	0.47
20:U:243:LEU:HG	20:U:913:ILE:HG21	1.95	0.47
20:U:842:LYS:HD2	20:U:842:LYS:HA	1.74	0.47
20:U:904:LYS:CE	20:U:908:ILE:HD11	2.31	0.47
21:V:67:LEU:O	21:V:70:VAL:HG12	2.14	0.47
21:V:416:ARG:NH1	21:V:416:ARG:HB2	2.28	0.47
22:W:209:ILE:HD13	22:W:226:TYR:CD2	2.49	0.47
22:W:352:LYS:HA	22:W:352:LYS:CE	2.39	0.47
23:X:182:ASN:OD1	24:Y:244:ALA:HB1	2.14	0.47
24:Y:338:ILE:HD13	24:Y:345:CYS:O	2.13	0.47
24:Y:387:ILE:HD11	25:Z:276:ILE:HA	1.96	0.47
26:a:52:GLN:O	26:a:52:GLN:HG2	2.14	0.47
29:d:221:GLN:OE1	29:d:222:THR:N	2.47	0.47
31:f:46:SER:N	31:f:49:ASP:HB2	2.30	0.47
31:f:213:GLN:NE2	31:f:216:MET:HG2	2.29	0.47
31:f:258:LYS:HD3	31:f:258:LYS:C	2.39	0.47
31:f:475:ASN:HB2	31:f:514:VAL:CG2	2.45	0.47
31:f:500:LEU:C	31:f:503:PRO:HD2	2.38	0.47
31:f:807:ARG:HA	31:f:811:LEU:HB2	1.96	0.47
31:f:882:LEU:N	31:f:894:LEU:HD21	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:47:ALA:CB	21:V:496:PHE:CZ	2.97	0.47
3:C:350:LEU:HB3	3:C:387:VAL:HG11	1.96	0.47
5:E:132:TYR:HB3	5:E:142:ILE:CD1	2.45	0.47
9:I:223:THR:O	9:I:223:THR:CG2	2.60	0.47
10:J:197:GLU:C	10:J:200:GLN:HE22	2.21	0.47
14:N:153:LEU:HD13	14:N:176:LEU:HD22	1.96	0.47
16:Q:113:ASP:CG	16:Q:116:THR:HG22	2.39	0.47
16:Q:200:LEU:CD1	16:Q:202:ALA:HB2	2.45	0.47
17:R:2:GLU:OE1	17:R:34:LYS:HG2	2.14	0.47
17:R:5:ILE:HD12	17:R:131:ALA:CB	2.44	0.47
17:R:101:ASN:HB3	17:R:132:HIS:CE1	2.49	0.47
18:S:105:ASP:OD1	18:S:105:ASP:N	2.47	0.47
18:S:147:LEU:HB3	18:S:152:ALA:HB2	1.96	0.47
19:T:58:HIS:HA	19:T:61:CYS:HB2	1.95	0.47
19:T:187:VAL:HB	19:T:211:ARG:NH2	2.28	0.47
20:U:462:LEU:HD12	20:U:496:LEU:HD13	1.96	0.47
21:V:160:LEU:HD22	21:V:162:GLU:HB2	1.96	0.47
21:V:219:GLU:HA	21:V:224:LEU:CG	2.41	0.47
21:V:258:TYR:CE2	21:V:266:GLN:HB2	2.49	0.47
22:W:169:LEU:HD23	22:W:169:LEU:C	2.39	0.47
22:W:216:GLU:HB3	22:W:217:GLU:OE1	2.13	0.47
23:X:177:TYR:HB3	23:X:186:ALA:HB2	1.94	0.47
25:Z:252:LYS:HA	25:Z:252:LYS:HD2	1.53	0.47
26:a:63:PHE:CE1	26:a:64:ILE:HG13	2.49	0.47
26:a:321:LYS:HD2	26:a:336:VAL:HG21	1.96	0.47
27:b:143:PHE:CD2	27:b:179:LEU:HD13	2.49	0.47
28:c:31:VAL:HG21	28:c:141:VAL:HG11	1.96	0.47
28:c:232:GLN:CG	28:c:233:ASP:H	2.26	0.47
29:d:85:GLY:O	29:d:88:LEU:HG	2.14	0.47
31:f:408:LEU:HD11	31:f:442:SER:HB2	1.96	0.47
31:f:473:ASN:HA	31:f:509:LYS:NZ	2.29	0.47
31:f:475:ASN:OD1	31:f:476:THR:N	2.48	0.47
31:f:670:MET:HE3	31:f:670:MET:HA	1.95	0.47
31:f:678:LEU:HD11	31:f:690:VAL:HG22	1.97	0.47
32:g:130:VAL:HG21	32:g:154:MET:HG2	1.96	0.47
33:h:184:TYR:CE2	33:h:186:ARG:HD3	2.46	0.47
33:h:187:PHE:O	33:h:202:PRO:HA	2.14	0.47
2:B:255:LEU:HA	2:B:266:LEU:CD2	2.44	0.47
6:F:206:MET:HE1	6:F:280:PRO:CA	2.45	0.47
6:F:245:LYS:H	6:F:245:LYS:CD	2.24	0.47
7:G:191:PHE:C	7:G:191:PHE:CD1	2.93	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:36:VAL:HG22	8:H:162:ALA:CB	2.44	0.47
9:I:45:LEU:CD1	9:I:137:ILE:HG21	2.41	0.47
9:I:86:LEU:HD12	9:I:114:LEU:HD21	1.95	0.47
10:J:65:LEU:CD1	10:J:87:ALA:HB3	2.44	0.47
10:J:79:ASP:CG	10:J:125:ARG:HH12	2.20	0.47
10:J:195:LEU:HD23	10:J:198:VAL:HG11	1.95	0.47
11:K:186:HIS:CD2	11:K:189:MET:HG2	2.49	0.47
12:L:180:MET:HA	12:L:180:MET:CE	2.43	0.47
14:N:187:GLN:NE2	14:N:189:LEU:HD23	2.30	0.47
15:P:32:SER:HA	15:P:187:ARG:HH12	1.80	0.47
15:P:212:LEU:HG	16:Q:201:LYS:CE	2.45	0.47
16:Q:34:MET:HE1	16:Q:180:VAL:O	2.14	0.47
18:S:100:MET:N	18:S:100:MET:SD	2.87	0.47
18:S:147:LEU:HA	18:S:151:GLN:OE1	2.14	0.47
18:S:160:ILE:CG2	18:S:174:VAL:HG21	2.45	0.47
19:T:23:VAL:HG12	19:T:196:CYS:HB3	1.96	0.47
20:U:19:LEU:HD11	29:d:120:LYS:HD2	1.97	0.47
21:V:184:ALA:CA	21:V:187:ILE:HG22	2.44	0.47
21:V:221:LEU:HB3	21:V:223:LYS:CG	2.44	0.47
21:V:268:GLU:O	21:V:271:VAL:HG22	2.15	0.47
21:V:284:GLU:OE1	21:V:287:ARG:HD3	2.15	0.47
24:Y:232:GLU:OE1	24:Y:232:GLU:N	2.43	0.47
24:Y:280:GLN:OE1	24:Y:280:GLN:HA	2.15	0.47
25:Z:39:LEU:HD23	25:Z:53:SER:CB	2.45	0.47
26:a:109:GLU:HG3	26:a:151:VAL:HG11	1.95	0.47
26:a:162:TYR:CE1	26:a:166:ILE:HG13	2.49	0.47
27:b:48:ASN:HB3	27:b:64:LEU:HD22	1.96	0.47
28:c:114:SER:O	28:c:116:PRO:HD3	2.15	0.47
31:f:46:SER:H	31:f:49:ASP:HB2	1.78	0.47
31:f:462:ALA:HB3	31:f:489:TYR:CE1	2.49	0.47
31:f:472:HIS:CD2	31:f:474:SER:O	2.66	0.47
31:f:650:GLN:HB3	31:f:686:LEU:CD2	2.45	0.47
31:f:660:ILE:HD12	31:f:660:ILE:N	2.29	0.47
33:h:4:PRO:HB3	33:h:56:ASP:OD1	2.14	0.47
33:h:138:ALA:N	33:h:147:GLN:OE1	2.48	0.47
34:u:130:ILE:HG23	34:u:169:VAL:CG2	2.45	0.47
1:A:80:LEU:HD12	1:A:82:ALA:H	1.79	0.47
1:A:159:PRO:CG	2:B:113:GLU:OE2	2.63	0.47
1:A:174:TYR:CD1	1:A:184:ILE:HD12	2.49	0.47
1:A:215:PHE:CD2	1:A:324:PRO:HG3	2.48	0.47
2:B:189:GLY:O	2:B:190:LEU:C	2.58	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:232:LYS:HD3	36:B:501:ATP:O1B	2.14	0.47
2:B:341:LEU:HD12	2:B:341:LEU:O	2.14	0.47
4:D:56:VAL:HG12	20:U:600:ARG:HB3	1.96	0.47
4:D:65:GLN:HB3	29:d:349:ILE:CD1	2.44	0.47
4:D:92:PHE:CZ	4:D:95:ALA:HB2	2.46	0.47
4:D:244:PRO:HD3	4:D:288:ILE:CG1	2.44	0.47
4:D:323:ARG:HG3	4:D:324:PRO:HD2	1.96	0.47
5:E:212:ALA:C	5:E:214:LEU:N	2.73	0.47
5:E:352:MET:HA	5:E:355:ILE:HB	1.97	0.47
9:I:83:ALA:N	9:I:132:VAL:HG21	2.29	0.47
9:I:216:LEU:HD12	9:I:225:ILE:CD1	2.45	0.47
10:J:30:SER:HB2	10:J:61:LYS:HZ1	1.79	0.47
12:L:41:LYS:HA	12:L:180:MET:HE1	1.95	0.47
13:M:137:LEU:N	13:M:149:TYR:O	2.38	0.47
17:R:111:GLU:HG3	17:R:112:GLY:N	2.29	0.47
18:S:100:MET:SD	18:S:128:VAL:CG1	3.02	0.47
18:S:191:ASN:OD1	18:S:191:ASN:C	2.56	0.47
20:U:548:LEU:O	20:U:552:ILE:HG13	2.14	0.47
20:U:638:SER:HA	20:U:671:LEU:HD11	1.96	0.47
21:V:323:GLY:HA2	21:V:326:GLN:HG3	1.96	0.47
21:V:345:ARG:HG2	30:e:41:ASP:O	2.14	0.47
21:V:493:ALA:C	21:V:495:ARG:H	2.23	0.47
22:W:18:VAL:HB	22:W:20:TYR:HE1	1.73	0.47
24:Y:186:LEU:HD22	24:Y:287:LEU:HD23	1.92	0.47
26:a:81:LEU:HD23	26:a:113:LEU:HD21	1.94	0.47
26:a:293:PHE:CD1	26:a:329:LYS:HB3	2.50	0.47
27:b:15:TYR:HB2	27:b:115:SER:HB2	1.95	0.47
29:d:212:LEU:HA	29:d:215:LEU:CD1	2.44	0.47
31:f:323:ASN:O	31:f:455:VAL:HG12	2.15	0.47
31:f:557:TRP:HD1	31:f:560:LEU:CD1	2.28	0.47
31:f:794:ALA:CA	31:f:797:LEU:HD12	2.44	0.47
33:h:107:TRP:HA	33:h:127:MET:HG2	1.95	0.47
34:u:195:LYS:HG2	34:u:214:PRO:HG3	1.95	0.47
1:A:59:ILE:HD11	2:B:76:GLU:N	2.30	0.47
1:A:73:ALA:HB3	1:A:78:TRP:HD1	1.80	0.47
2:B:182:GLU:OE1	2:B:182:GLU:N	2.36	0.47
2:B:405:MET:HE3	2:B:421:LYS:HE2	1.96	0.47
3:C:147:THR:HG23	3:C:149:GLU:HG2	1.95	0.47
4:D:98:GLN:O	4:D:99:ASN:HB2	2.14	0.47
6:F:315:ASN:O	6:F:319:GLY:N	2.43	0.47
6:F:322:PRO:O	6:F:323:ASN:OD1	2.32	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:366:MET:HG3	6:F:400:CYS:SG	2.54	0.47
7:G:80:MET:HB3	7:G:87:SER:CB	2.44	0.47
7:G:138:MET:HE2	7:G:140:LEU:CG	2.45	0.47
7:G:243:ALA:O	22:W:92:LYS:HG2	2.15	0.47
11:K:66:LYS:O	11:K:67:ILE:HD13	2.14	0.47
11:K:74:ILE:HD12	11:K:112:VAL:HG11	1.96	0.47
12:L:69:HIS:NE2	12:L:103:LEU:O	2.44	0.47
13:M:70:ASP:C	33:h:76:LEU:HD11	2.40	0.47
14:N:5:ALA:O	14:N:125:PHE:HA	2.15	0.47
15:P:202:TYR:HE2	16:Q:152:SER:HB2	1.80	0.47
16:Q:113:ASP:HB3	16:Q:118:LYS:N	2.18	0.47
17:R:36:PHE:O	17:R:43:LEU:HD12	2.15	0.47
18:S:144:SER:O	18:S:147:LEU:HD13	2.15	0.47
18:S:178:HIS:O	18:S:184:TRP:HA	2.13	0.47
20:U:446:LEU:HD23	20:U:460:TYR:HE2	1.79	0.47
20:U:898:CYS:SG	20:U:899:ARG:N	2.88	0.47
21:V:453:HIS:HB2	29:d:279:TYR:CD2	2.49	0.47
22:W:451:MET:HE2	25:Z:100:LYS:HA	1.95	0.47
23:X:397:TYR:CE1	25:Z:258:VAL:HG11	2.49	0.47
24:Y:179:ARG:HB2	24:Y:179:ARG:HH11	1.75	0.47
25:Z:44:GLN:CB	25:Z:47:VAL:HG22	2.44	0.47
25:Z:81:MET:CE	28:c:94:LYS:HG2	2.45	0.47
26:a:109:GLU:OE2	26:a:145:LEU:HD21	2.14	0.47
27:b:100:ARG:NH2	27:b:107:MET:HE1	2.29	0.47
28:c:185:ASN:C	28:c:185:ASN:ND2	2.73	0.47
29:d:156:ILE:HG22	29:d:259:PHE:HE2	1.80	0.47
29:d:178:TYR:HB3	29:d:181:GLN:NE2	2.20	0.47
31:f:239:TYR:HE1	31:f:664:GLU:HB2	1.79	0.47
31:f:394:ASP:HA	31:f:397:LYS:NZ	2.29	0.47
31:f:446:LEU:CD2	31:f:483:PHE:HB3	2.44	0.47
31:f:822:VAL:HA	31:f:825:MET:CG	2.41	0.47
33:h:42:ILE:O	33:h:42:ILE:HG13	2.15	0.47
1:A:165:GLN:OE1	1:A:263:MET:CE	2.62	0.47
1:A:190:VAL:HG21	1:A:212:VAL:HG23	1.96	0.47
1:A:263:MET:HA	1:A:266:THR:HG22	1.96	0.47
1:A:285:PHE:CE2	1:A:291:GLY:HA3	2.49	0.47
2:B:126:SER:OG	3:C:93:GLY:HA3	2.15	0.47
3:C:113:ARG:O	3:C:127:LEU:HB2	2.14	0.47
3:C:203:VAL:O	3:C:207:THR:HB	2.15	0.47
3:C:239:ARG:N	3:C:289:ILE:HD11	2.30	0.47
3:C:351:MET:SD	3:C:362:VAL:HG21	2.55	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:116:LEU:HB3	4:D:119:ILE:HD11	1.96	0.47
4:D:138:ALA:O	4:D:140:VAL:HG13	2.14	0.47
5:E:173:TYR:HE1	5:E:298:LYS:HB2	1.79	0.47
5:E:373:LYS:O	5:E:377:SER:N	2.37	0.47
6:F:282:ILE:HG23	6:F:327:LYS:O	2.14	0.47
6:F:339:ASP:OD1	6:F:339:ASP:C	2.58	0.47
7:G:45:LYS:NZ	7:G:46:ASP:OD1	2.40	0.47
7:G:167:ALA:HB3	7:G:175:SER:OG	2.14	0.47
7:G:191:PHE:C	7:G:191:PHE:HD1	2.22	0.47
7:G:240:VAL:N	22:W:94:ARG:HH21	2.13	0.47
8:H:119:GLN:HG2	8:H:119:GLN:O	2.14	0.47
8:H:173:PHE:HZ	8:H:177:ARG:HD3	1.78	0.47
10:J:12:PRO:HA	11:K:26:TYR:CE1	2.50	0.47
11:K:52:LYS:HZ3	11:K:64:ILE:HG13	1.80	0.47
11:K:199:LEU:CD1	11:K:215:ILE:HD13	2.45	0.47
13:M:34:SER:HB3	13:M:52:LEU:HD11	1.95	0.47
13:M:39:ILE:HG23	13:M:181:MET:HG2	1.95	0.47
13:M:68:ASN:O	33:h:76:LEU:HD12	2.15	0.47
15:P:70:THR:CB	15:P:72:ARG:HD2	2.44	0.47
15:P:177:VAL:HB	15:P:184:ASP:HB3	1.96	0.47
17:R:4:LEU:HB2	17:R:132:HIS:HB2	1.96	0.47
18:S:46:ALA:HB3	18:S:98:GLY:O	2.14	0.47
19:T:34:SER:O	19:T:35:ILE:HD12	2.15	0.47
20:U:14:GLU:OE2	20:U:20:LYS:HG3	2.15	0.47
20:U:142:LEU:HD23	20:U:147:TYR:HD1	1.80	0.47
20:U:142:LEU:HD23	20:U:147:TYR:CD1	2.49	0.47
20:U:231:ASP:HA	20:U:234:GLU:HG2	1.97	0.47
20:U:840:LYS:O	20:U:840:LYS:HD3	2.15	0.47
21:V:227:VAL:HA	21:V:230:PHE:HD2	1.80	0.47
22:W:66:ILE:O	22:W:70:VAL:HG12	2.14	0.47
22:W:106:GLN:HA	22:W:109:CYS:SG	2.54	0.47
22:W:170:GLN:OE1	22:W:170:GLN:N	2.48	0.47
22:W:251:TYR:HB2	22:W:266:ALA:HB1	1.97	0.47
22:W:289:ARG:HB2	22:W:289:ARG:CZ	2.44	0.47
22:W:435:LEU:HD23	22:W:435:LEU:C	2.40	0.47
23:X:138:PHE:HD1	23:X:138:PHE:C	2.23	0.47
23:X:342:PHE:CB	23:X:345:VAL:HB	2.45	0.47
24:Y:22:LEU:HD22	24:Y:37:VAL:HG23	1.97	0.47
26:a:85:ARG:HG2	26:a:85:ARG:HH11	1.80	0.47
26:a:132:LYS:O	26:a:136:GLU:HG2	2.15	0.47
26:a:245:VAL:HG21	26:a:301:LYS:HE2	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:a:270:ARG:HH11	26:a:310:LEU:HD23	1.76	0.47
27:b:108:ARG:HA	27:b:137:ASN:O	2.14	0.47
28:c:44:HIS:NE2	28:c:74:ALA:HB1	2.29	0.47
28:c:277:LYS:HA	28:c:282:ARG:HE	1.79	0.47
29:d:123:LEU:HD11	29:d:147:ILE:CG1	2.36	0.47
29:d:175:TYR:OH	29:d:188:MET:HA	2.14	0.47
31:f:479:LEU:CD2	31:f:517:VAL:HB	2.45	0.47
31:f:579:ALA:O	31:f:582:VAL:HG23	2.14	0.47
31:f:785:ARG:NE	31:f:877:GLY:H	2.12	0.47
31:f:808:ASN:OD1	31:f:808:ASN:N	2.47	0.47
31:f:845:ARG:CG	31:f:865:PHE:HB2	2.44	0.47
33:h:29:SER:O	33:h:29:SER:OG	2.33	0.47
33:h:168:LEU:HD12	33:h:168:LEU:O	2.15	0.47
34:u:216:GLN:OE1	34:u:234:ARG:CB	2.63	0.47
34:u:216:GLN:HE22	34:u:233:LEU:HA	1.79	0.47
34:u:216:GLN:HG2	34:u:218:LEU:CD1	2.45	0.47
2:B:124:SER:HA	2:B:130:GLU:HA	1.97	0.47
2:B:401:GLU:HB3	2:B:422:SER:HB2	1.97	0.47
3:C:203:VAL:HG12	3:C:211:PHE:CE1	2.50	0.47
3:C:405:TRP:CE3	9:I:78:GLY:HA2	2.49	0.47
4:D:205:TYR:CG	4:D:314:ALA:HB2	2.50	0.47
4:D:392:TYR:H	4:D:392:TYR:HD1	1.62	0.47
5:E:22:ILE:HG12	5:E:25:ARG:NH2	2.24	0.47
5:E:115:VAL:O	5:E:116:ASP:CB	2.60	0.47
6:F:94:ILE:HD11	6:F:125:LYS:HB2	1.97	0.47
7:G:113:MET:CE	15:P:70:THR:CA	2.93	0.47
8:H:188:ILE:HG21	8:H:229:TYR:CD1	2.49	0.47
9:I:179:TYR:CD2	9:I:184:MET:HE3	2.50	0.47
10:J:43:LEU:HD11	10:J:134:VAL:HG22	1.97	0.47
15:P:21:THR:HG22	15:P:26:VAL:HA	1.97	0.47
15:P:58:LEU:HD22	15:P:86:MET:SD	2.55	0.47
16:Q:188:HIS:CD2	16:Q:197:THR:HG22	2.50	0.47
17:R:185:LYS:HB2	17:R:185:LYS:HZ3	1.79	0.47
19:T:136:LYS:HD2	19:T:137:ALA:O	2.14	0.47
21:V:95:LEU:CD2	21:V:205:LEU:HD23	2.44	0.47
21:V:100:MET:HE2	21:V:100:MET:CA	2.44	0.47
22:W:28:LEU:HD11	22:W:69:ALA:HB2	1.96	0.47
22:W:48:LEU:HD22	22:W:93:ARG:NH1	2.30	0.47
22:W:274:VAL:O	22:W:283:GLN:NE2	2.47	0.47
23:X:160:MET:HE2	23:X:160:MET:HB3	1.83	0.47
24:Y:212:GLU:HG2	24:Y:213:LEU:N	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:225:TYR:CZ	24:Y:278:VAL:HG22	2.49	0.47
25:Z:147:ASP:HA	26:a:177:LEU:HD13	1.96	0.47
25:Z:153:LYS:NZ	25:Z:153:LYS:HB3	2.30	0.47
26:a:100:THR:HG22	26:a:114:CYS:SG	2.54	0.47
26:a:131:THR:O	26:a:134:THR:OG1	2.32	0.47
26:a:216:LEU:CB	26:a:237:LEU:HD13	2.45	0.47
29:d:123:LEU:CD2	29:d:147:ILE:HG21	2.45	0.47
29:d:175:TYR:HE2	29:d:188:MET:HA	1.80	0.47
29:d:332:SER:HG	29:d:333:THR:H	1.62	0.47
31:f:396:ASN:OD1	31:f:396:ASN:N	2.48	0.47
31:f:441:LYS:O	31:f:445:LEU:HD23	2.14	0.47
32:g:107:ILE:HD12	32:g:142:LEU:HD13	1.97	0.47
33:h:15:LYS:CD	33:h:135:PRO:HA	2.45	0.47
34:u:171:PHE:HE1	34:u:244:VAL:HG12	1.80	0.47
34:u:178:TYR:HA	34:u:235:TYR:HD1	1.79	0.47
1:A:357:ILE:HG12	1:A:360:ARG:HH22	1.80	0.47
2:B:201:VAL:HG11	2:B:328:ILE:HD11	1.97	0.47
3:C:123:LEU:HD12	3:C:123:LEU:N	2.29	0.47
3:C:271:ARG:NH1	3:C:271:ARG:HG3	2.30	0.47
4:D:205:TYR:HB2	4:D:314:ALA:HB2	1.96	0.47
5:E:159:PHE:CE2	5:E:167:PRO:HB3	2.48	0.47
5:E:212:ALA:O	5:E:216:ARG:N	2.42	0.47
6:F:175:MET:CE	6:F:267:LEU:HD22	2.45	0.47
6:F:438:TYR:CZ	12:L:77:LEU:HG	2.50	0.47
7:G:58:ASP:OD1	7:G:60:LEU:HD12	2.15	0.47
8:H:36:VAL:HG13	8:H:162:ALA:HB2	1.96	0.47
8:H:75:VAL:HG22	8:H:135:LEU:HD22	1.97	0.47
8:H:79:MET:HE2	8:H:79:MET:HB3	1.75	0.47
8:H:118:MET:HE3	8:H:150:ASP:C	2.40	0.47
14:N:8:PHE:HB3	14:N:152:CYS:SG	2.55	0.47
14:N:115:PRO:HG2	14:N:119:MET:HB3	1.96	0.47
15:P:43:CYS:SG	15:P:98:LEU:HD12	2.55	0.47
15:P:112:SER:HB2	15:P:125:VAL:HG11	1.97	0.47
17:R:35:MET:HG2	17:R:45:LEU:HD23	1.96	0.47
17:R:42:ILE:CD1	17:R:106:GLY:HA3	2.39	0.47
19:T:28:ARG:NH1	19:T:187:VAL:O	2.46	0.47
19:T:155:PHE:HD2	19:T:161:VAL:HG11	1.80	0.47
20:U:9:ILE:HD11	20:U:38:ILE:HD11	1.97	0.47
20:U:185:MET:HE3	20:U:186:SER:CB	2.44	0.47
20:U:218:GLN:O	20:U:221:ILE:HG12	2.14	0.47
20:U:790:GLY:O	20:U:798:PRO:HD2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:331:LEU:O	21:V:331:LEU:HD13	2.14	0.47
24:Y:320:ALA:HB1	24:Y:325:VAL:O	2.15	0.47
25:Z:94:TRP:O	25:Z:121:LEU:HA	2.15	0.47
25:Z:283:ARG:HH11	25:Z:287:LYS:HZ3	1.63	0.47
28:c:108:VAL:O	34:u:273:THR:HG21	2.15	0.47
29:d:141:LEU:HB3	29:d:182:LEU:CD1	2.45	0.47
31:f:267:ARG:NH2	31:f:893:ILE:HG23	2.30	0.47
32:g:130:VAL:C	32:g:131:ILE:HD13	2.40	0.47
3:C:197:THR:HB	38:C:501:ADP:O2A	2.15	0.47
4:D:53:PHE:HA	4:D:56:VAL:CG2	2.45	0.47
4:D:293:LEU:HD21	4:D:320:ALA:HB3	1.97	0.47
5:E:257:LEU:HA	5:E:260:LEU:HB3	1.97	0.47
6:F:284:PHE:CE2	6:F:286:ASP:HB2	2.50	0.47
6:F:323:ASN:O	6:F:323:ASN:ND2	2.48	0.47
6:F:439:ALA:HB1	12:L:60:GLN:CD	2.40	0.47
9:I:68:LEU:HD11	9:I:74:CYS:CB	2.43	0.47
10:J:13:ASP:OD1	10:J:13:ASP:N	2.33	0.47
10:J:71:MET:HE1	10:J:73:PHE:HB3	1.97	0.47
10:J:204:LYS:NZ	10:J:207:GLU:OE2	2.39	0.47
11:K:32:LYS:HG3	11:K:32:LYS:O	2.13	0.47
11:K:184:VAL:O	11:K:184:VAL:HG13	2.14	0.47
12:L:25:ALA:O	12:L:149:PRO:HG3	2.15	0.47
18:S:83:LEU:HD23	18:S:83:LEU:HA	1.78	0.47
18:S:195:LEU:HD22	18:S:199:TYR:CE2	2.50	0.47
19:T:64:LEU:O	19:T:68:ILE:HG12	2.15	0.47
20:U:19:LEU:HD11	29:d:120:LYS:HG2	1.97	0.47
20:U:167:ILE:HG21	20:U:204:ILE:HD13	1.96	0.47
20:U:475:HIS:CE1	20:U:511:ALA:HB2	2.50	0.47
20:U:802:TYR:HE1	20:U:882:ALA:HB3	1.80	0.47
21:V:106:ARG:HB2	21:V:106:ARG:NH1	2.30	0.47
21:V:215:ALA:CB	21:V:253:LEU:HD13	2.45	0.47
21:V:416:ARG:HB2	21:V:416:ARG:HH11	1.80	0.47
22:W:250:ILE:O	22:W:253:THR:HG23	2.15	0.47
22:W:275:ILE:HD11	22:W:306:LEU:HA	1.97	0.47
25:Z:81:MET:HE3	28:c:94:LYS:HG2	1.96	0.47
26:a:293:PHE:CE2	26:a:304:VAL:HG22	2.38	0.47
27:b:7:MET:HE1	27:b:52:ILE:CD1	2.45	0.47
28:c:165:ALA:O	28:c:168:MET:HB3	2.14	0.47
29:d:271:ILE:CG2	29:d:291:LEU:HD22	2.31	0.47
31:f:256:PHE:HE1	31:f:268:LEU:HD12	1.75	0.47
31:f:545:LYS:NZ	31:f:546:SER:H	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:g:82:ILE:C	32:g:82:ILE:HD12	2.40	0.47
34:u:180:MET:CE	34:u:196:ILE:HD11	2.44	0.47
1:A:45:ILE:HG23	2:B:65:LEU:CD1	2.45	0.46
1:A:146:LYS:O	1:A:147:TYR:HB2	2.15	0.46
4:D:313:ARG:O	4:D:314:ALA:HB3	2.16	0.46
5:E:40:TYR:CA	6:F:73:ILE:HD11	2.45	0.46
5:E:69:PHE:N	5:E:81:VAL:O	2.40	0.46
5:E:223:ARG:O	5:E:225:HIS:N	2.47	0.46
6:F:88:TYR:CE2	6:F:162:GLU:OE2	2.65	0.46
6:F:159:LEU:O	6:F:161:LEU:HD13	2.15	0.46
7:G:19:GLU:HG3	7:G:21:ARG:HG3	1.96	0.46
7:G:66:VAL:O	7:G:66:VAL:HG12	2.14	0.46
8:H:74:LEU:HD21	8:H:134:LEU:CD1	2.44	0.46
11:K:151:PRO:O	11:K:152:GLN:HG2	2.16	0.46
11:K:196:LYS:NZ	11:K:240:ASP:OD2	2.47	0.46
15:P:174:ASP:OD1	15:P:188:PRO:HA	2.15	0.46
16:Q:59:ASP:CG	17:R:93:ARG:HH21	2.22	0.46
17:R:44:LEU:CG	17:R:102:LEU:HD21	2.44	0.46
20:U:199:ARG:HD3	20:U:223:LEU:CD1	2.44	0.46
20:U:209:GLU:HG2	20:U:210:LYS:H	1.79	0.46
22:W:115:ILE:HB	22:W:120:ILE:CD1	2.45	0.46
22:W:241:LEU:CD2	22:W:282:GLU:HG2	2.38	0.46
24:Y:42:MET:HE2	24:Y:42:MET:CA	2.45	0.46
24:Y:105:MET:SD	24:Y:140:ILE:HD11	2.55	0.46
25:Z:131:LEU:CD1	25:Z:200:GLY:HA2	2.24	0.46
28:c:210:ASN:O	28:c:214:GLN:HG3	2.15	0.46
29:d:171:LEU:HG	29:d:175:TYR:CE1	2.50	0.46
29:d:241:TYR:CD2	29:d:271:ILE:HD11	2.50	0.46
31:f:113:MET:SD	31:f:114:ALA:HB3	2.55	0.46
31:f:401:LYS:HB3	31:f:401:LYS:HE2	1.75	0.46
31:f:418:LEU:HB3	31:f:421:ASP:OD1	2.15	0.46
31:f:700:SER:HB3	31:f:734:SER:OG	2.16	0.46
31:f:718:ASP:CG	31:f:721:VAL:HG23	2.39	0.46
1:A:25:LEU:CG	2:B:410:ARG:HH12	2.28	0.46
1:A:334:PRO:HD2	6:F:395:GLN:HG3	1.96	0.46
1:A:383:ALA:HB1	2:B:344:PRO:O	2.15	0.46
3:C:186:VAL:HG12	3:C:292:ILE:HG12	1.96	0.46
3:C:208:ASP:C	3:C:208:ASP:OD1	2.57	0.46
4:D:116:LEU:O	4:D:119:ILE:HG13	2.14	0.46
5:E:33:LEU:CD1	6:F:66:LEU:HD23	2.45	0.46
5:E:59:GLU:OE1	5:E:97:ARG:HA	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:74:GLU:O	7:G:226:LYS:HA	2.15	0.46
9:I:34:CYS:O	9:I:163:CYS:HA	2.15	0.46
10:J:50:VAL:HB	10:J:54:GLN:OE1	2.15	0.46
10:J:63:CYS:HB3	10:J:88:ARG:HH22	1.80	0.46
10:J:220:LEU:HB2	10:J:225:ILE:HD11	1.97	0.46
11:K:53:ARG:O	11:K:53:ARG:HG3	2.15	0.46
12:L:84:LEU:HD13	12:L:132:LEU:HD12	1.96	0.46
13:M:216:VAL:HB	13:M:224:HIS:HB2	1.96	0.46
14:N:167:ASP:OD1	14:N:168:GLY:N	2.48	0.46
17:R:14:LEU:HD22	17:R:182:ILE:CG2	2.42	0.46
18:S:55:TRP:CZ3	18:S:58:LEU:HD12	2.50	0.46
18:S:111:LEU:HG	18:S:126:PHE:CD2	2.49	0.46
18:S:134:TYR:HD2	18:S:167:ASP:HB2	1.79	0.46
20:U:48:LEU:HG	20:U:54:PHE:CE2	2.50	0.46
20:U:199:ARG:HD3	20:U:223:LEU:HD11	1.96	0.46
20:U:230:SER:HB2	20:U:267:ASN:HB3	1.98	0.46
20:U:526:ALA:O	20:U:529:ILE:HG22	2.15	0.46
20:U:832:VAL:CG1	20:U:835:ILE:HG22	2.42	0.46
21:V:327:THR:HA	21:V:330:LYS:CD	2.45	0.46
22:W:86:ASN:ND2	22:W:86:ASN:O	2.42	0.46
22:W:274:VAL:HG21	22:W:290:ILE:CD1	2.44	0.46
23:X:69:LEU:O	23:X:73:VAL:HG22	2.16	0.46
23:X:347:ILE:CG2	23:X:358:LYS:HZ2	2.29	0.46
23:X:390:GLU:HG3	23:X:390:GLU:O	2.15	0.46
24:Y:101:ARG:O	24:Y:104:MET:HG2	2.15	0.46
24:Y:220:VAL:HG21	24:Y:249:VAL:CB	2.46	0.46
24:Y:259:TYR:HB2	24:Y:274:SER:HB2	1.97	0.46
25:Z:81:MET:CE	28:c:94:LYS:HB3	2.40	0.46
25:Z:88:ARG:HH11	25:Z:88:ARG:HG2	1.80	0.46
26:a:64:ILE:HG23	26:a:70:ARG:HD3	1.97	0.46
26:a:97:LEU:HD12	26:a:118:ILE:HG22	1.97	0.46
26:a:226:ARG:HH12	26:a:230:ARG:HB2	1.80	0.46
31:f:343:LYS:O	31:f:382:ASN:ND2	2.48	0.46
31:f:513:GLU:HG3	31:f:816:TYR:OH	2.16	0.46
31:f:738:ASN:OD1	31:f:740:ARG:N	2.48	0.46
1:A:22:ILE:HD11	3:C:159:LYS:HB3	1.96	0.46
1:A:166:VAL:HG23	1:A:237:PHE:O	2.15	0.46
1:A:364:VAL:HG22	1:A:368:ILE:CG1	2.45	0.46
3:C:67:GLN:HA	3:C:67:GLN:HE21	1.78	0.46
4:D:92:PHE:O	4:D:127:ASN:HA	2.15	0.46
4:D:297:ASP:CG	4:D:323:ARG:HH22	2.24	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:65:THR:OG1	5:E:68:LYS:HB2	2.16	0.46
5:E:206:LYS:HE2	5:E:206:LYS:HB2	1.84	0.46
6:F:347:ARG:HG2	6:F:347:ARG:HH11	1.81	0.46
7:G:10:ASP:OD1	7:G:11:ARG:NH1	2.47	0.46
8:H:29:VAL:HG22	8:H:132:VAL:CA	2.45	0.46
8:H:44:VAL:CG1	8:H:146:LEU:HD13	2.44	0.46
9:I:102:GLN:CD	16:Q:65:GLN:HG2	2.41	0.46
9:I:194:ILE:HD12	9:I:237:ILE:CD1	2.45	0.46
10:J:90:GLU:HB2	10:J:110:TYR:CE2	2.51	0.46
10:J:226:GLU:HA	10:J:229:VAL:CG1	2.46	0.46
14:N:77:HIS:CE1	14:N:120:MET:HE1	2.50	0.46
14:N:79:ALA:O	14:N:83:PHE:HD2	1.99	0.46
15:P:80:ASN:ND2	15:P:111:TYR:HD2	2.14	0.46
16:Q:49:LEU:HD11	16:Q:84:PRO:CA	2.45	0.46
16:Q:62:THR:HG23	17:R:85:ARG:HH22	1.81	0.46
19:T:13:LEU:HG	19:T:13:LEU:O	2.15	0.46
20:U:418:GLU:O	20:U:421:GLN:NE2	2.49	0.46
20:U:789:ILE:HG23	20:U:797:MET:HE3	1.96	0.46
21:V:115:LYS:HE2	21:V:145:LEU:O	2.16	0.46
21:V:160:LEU:HD23	21:V:161:PRO:N	2.30	0.46
21:V:453:HIS:ND1	21:V:453:HIS:O	2.48	0.46
22:W:34:LEU:HD22	22:W:43:VAL:HG12	1.96	0.46
23:X:417:LYS:HG2	23:X:418:ALA:N	2.28	0.46
24:Y:262:SER:HB3	24:Y:271:PHE:CB	2.35	0.46
24:Y:262:SER:OG	24:Y:270:VAL:HG12	2.15	0.46
25:Z:20:VAL:HG22	25:Z:126:VAL:HG12	1.97	0.46
26:a:180:LEU:HB3	26:a:219:HIS:NE2	2.24	0.46
26:a:226:ARG:HD2	26:a:226:ARG:HA	1.72	0.46
28:c:82:VAL:HG21	28:c:113:HIS:CG	2.49	0.46
28:c:296:ILE:HD12	29:d:339:VAL:HG13	1.97	0.46
29:d:200:LEU:HD12	29:d:263:LEU:CD1	2.41	0.46
29:d:348:MET:HA	29:d:348:MET:HE3	1.97	0.46
31:f:261:ARG:HA	31:f:261:ARG:HE	1.79	0.46
31:f:275:MET:HA	31:f:275:MET:CE	2.42	0.46
31:f:423:ASP:CB	32:g:91:PRO:HD2	2.41	0.46
31:f:545:LYS:HZ3	31:f:549:GLU:HB2	1.80	0.46
31:f:723:TYR:HE2	31:f:757:ASN:HB3	1.80	0.46
31:f:779:CYS:HG	31:f:785:ARG:NH2	2.12	0.46
33:h:151:ARG:O	33:h:155:GLU:N	2.38	0.46
34:u:218:LEU:HD23	34:u:220:LEU:CD1	2.41	0.46
2:B:133:VAL:HG21	2:B:159:VAL:HG23	1.95	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:153:ASN:O	2:B:157:HIS:HA	2.15	0.46
2:B:440:LEU:C	10:J:30:SER:H	2.24	0.46
3:C:147:THR:CG2	3:C:150:MET:HG3	2.45	0.46
6:F:415:LEU:HD23	6:F:420:TYR:CE1	2.50	0.46
7:G:91:VAL:O	7:G:95:ARG:HG3	2.16	0.46
8:H:74:LEU:HD21	8:H:134:LEU:HD13	1.96	0.46
8:H:196:LYS:HG3	8:H:203:MET:CE	2.45	0.46
10:J:154:HIS:HB2	10:J:156:TRP:NE1	2.29	0.46
11:K:52:LYS:HB2	11:K:214:ASN:O	2.15	0.46
13:M:69:VAL:HG21	13:M:137:LEU:CD2	2.46	0.46
14:N:7:GLN:CB	14:N:12:VAL:HG22	2.44	0.46
16:Q:9:GLY:HA2	16:Q:181:SER:HB2	1.96	0.46
16:Q:112:LEU:HD12	16:Q:112:LEU:N	2.30	0.46
18:S:54:PHE:CG	19:T:97:TYR:HD2	2.33	0.46
20:U:16:GLU:CD	20:U:18:GLN:HB3	2.40	0.46
20:U:483:LEU:HD11	20:U:778:PHE:CE1	2.51	0.46
20:U:633:CYS:N	20:U:634:PRO:HD2	2.31	0.46
20:U:832:VAL:O	20:U:836:THR:HB	2.15	0.46
20:U:874:ASN:N	20:U:874:ASN:OD1	2.48	0.46
22:W:98:LYS:HG2	22:W:99:GLN:N	2.31	0.46
23:X:87:ARG:HH12	23:X:91:SER:CB	2.27	0.46
24:Y:202:LEU:O	24:Y:205:VAL:HG12	2.15	0.46
25:Z:191:ILE:HD12	28:c:300:LEU:CD2	2.46	0.46
26:a:183:VAL:HG22	26:a:184:ASP:N	2.30	0.46
28:c:161:ARG:NE	28:c:201:TYR:OH	2.48	0.46
31:f:858:LYS:HD2	31:f:861:THR:H	1.80	0.46
34:u:120:PRO:HG2	34:u:123:TYR:HD2	1.79	0.46
34:u:195:LYS:CD	34:u:214:PRO:HG3	2.46	0.46
34:u:222:GLU:O	34:u:226:LYS:HE3	2.15	0.46
1:A:123:VAL:HG11	1:A:147:TYR:O	2.15	0.46
1:A:295:VAL:HG21	2:B:307:ARG:CZ	2.46	0.46
2:B:106:PRO:HG3	3:C:121:TYR:CG	2.51	0.46
2:B:343:ARG:NH1	2:B:344:PRO:O	2.47	0.46
2:B:436:GLU:HB2	9:I:25:MET:HE1	1.96	0.46
3:C:142:LYS:O	3:C:142:LYS:HG3	2.13	0.46
3:C:186:VAL:HG21	3:C:315:ILE:HD11	1.96	0.46
4:D:201:GLY:HA2	4:D:307:VAL:O	2.16	0.46
5:E:85:ARG:HG3	5:E:86:GLN:N	2.30	0.46
5:E:116:ASP:HB2	5:E:119:VAL:CG2	2.44	0.46
5:E:196:LEU:O	5:E:231:PHE:HB3	2.15	0.46
6:F:251:LEU:N	6:F:251:LEU:HD23	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:148:TYR:CD1	9:I:158:GLY:HA2	2.50	0.46
10:J:132:LEU:CD2	10:J:146:GLN:HB2	2.45	0.46
11:K:189:MET:CE	11:K:194:ALA:HA	2.46	0.46
12:L:146:GLN:O	12:L:146:GLN:HG3	2.14	0.46
15:P:50:ALA:N	16:Q:129:CYS:SG	2.88	0.46
16:Q:49:LEU:HD23	16:Q:49:LEU:HA	1.77	0.46
17:R:28:MET:HA	17:R:28:MET:HE3	1.97	0.46
19:T:45:LYS:HG3	19:T:203:ILE:HD13	1.97	0.46
19:T:206:GLU:OE1	19:T:206:GLU:N	2.49	0.46
20:U:52:GLU:HA	20:U:57:ARG:NE	2.31	0.46
20:U:155:LEU:HD22	20:U:193:PHE:CE2	2.50	0.46
20:U:471:ASP:CG	20:U:473:VAL:HG12	2.41	0.46
20:U:703:CYS:SG	20:U:706:VAL:HG23	2.55	0.46
21:V:139:MET:SD	21:V:139:MET:N	2.89	0.46
21:V:218:TYR:O	21:V:221:LEU:HB2	2.15	0.46
21:V:276:PHE:HD1	21:V:277:PRO:HD2	1.80	0.46
21:V:389:ASP:OD1	21:V:389:ASP:O	2.32	0.46
21:V:493:ALA:HB1	21:V:495:ARG:NH2	2.30	0.46
22:W:34:LEU:O	22:W:37:GLU:HB2	2.16	0.46
22:W:96:GLN:CG	22:W:101:VAL:HG23	2.46	0.46
22:W:294:LYS:HD2	22:W:294:LYS:O	2.15	0.46
25:Z:11:VAL:HA	25:Z:50:VAL:CG2	2.33	0.46
25:Z:109:ASN:HD22	25:Z:140:SER:HB2	1.78	0.46
26:a:108:ASP:O	26:a:112:ILE:HG13	2.15	0.46
27:b:8:VAL:HG12	27:b:110:ILE:HD12	1.96	0.46
27:b:150:THR:CG2	27:b:152:LYS:HG3	2.46	0.46
28:c:189:ILE:O	28:c:193:ILE:HG13	2.15	0.46
29:d:167:TYR:HA	29:d:170:GLN:HE21	1.80	0.46
31:f:105:LYS:HE3	31:f:106:LEU:HD21	1.97	0.46
31:f:370:MET:CE	31:f:371:ASN:N	2.78	0.46
31:f:505:MET:HE2	31:f:541:THR:HG21	1.95	0.46
31:f:591:ALA:O	31:f:595:VAL:HG22	2.15	0.46
31:f:682:GLY:CA	31:f:686:LEU:HD12	2.45	0.46
34:u:127:MET:HB3	34:u:128:PRO:HD3	1.96	0.46
34:u:274:ASN:HD21	34:u:276:ASN:HB3	1.80	0.46
1:A:190:VAL:CG2	1:A:339:ARG:HD2	2.46	0.46
2:B:223:ILE:HG23	2:B:350:LYS:HA	1.97	0.46
2:B:409:GLU:O	2:B:410:ARG:HB2	2.16	0.46
4:D:52:GLU:HB3	20:U:596:ASN:OD1	2.16	0.46
4:D:167:ILE:HD11	4:D:214:MET:C	2.40	0.46
4:D:376:ASN:ND2	38:D:501:ADP:O2'	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:418:LYS:OXT	8:H:32:GLY:HA2	2.15	0.46
5:E:155:ASN:O	5:E:158:LEU:HG	2.16	0.46
5:E:178:THR:O	5:E:178:THR:OG1	2.34	0.46
6:F:58:GLU:HA	6:F:61:ARG:CG	2.44	0.46
6:F:211:LYS:O	6:F:214:ASN:HB3	2.14	0.46
7:G:199:ILE:HG21	7:G:239:LEU:HD22	1.96	0.46
8:H:100:VAL:HG12	8:H:101:TYR:CD1	2.50	0.46
8:H:184:LEU:HD21	8:H:214:ASN:HB3	1.95	0.46
9:I:86:LEU:CD1	9:I:114:LEU:HD11	2.45	0.46
10:J:19:VAL:CG1	10:J:150:SER:HA	2.45	0.46
10:J:39:ASP:OD1	10:J:213:ARG:NE	2.48	0.46
10:J:90:GLU:HG2	10:J:110:TYR:CD2	2.50	0.46
10:J:133:ILE:HD12	10:J:133:ILE:N	2.31	0.46
11:K:111:SER:OG	19:T:79:ASN:ND2	2.48	0.46
11:K:189:MET:HE1	11:K:194:ALA:HA	1.97	0.46
12:L:196:ARG:HE	12:L:196:ARG:HB3	1.60	0.46
15:P:51:ASP:O	15:P:55:THR:HG22	2.16	0.46
15:P:104:ASP:OD1	15:P:104:ASP:C	2.57	0.46
18:S:120:ARG:O	18:S:121:ILE:HD13	2.15	0.46
19:T:28:ARG:HB2	19:T:190:GLY:O	2.15	0.46
20:U:403:THR:HG23	20:U:777:HIS:HE1	1.80	0.46
20:U:772:TRP:HA	20:U:772:TRP:CE3	2.50	0.46
20:U:793:LYS:HG3	20:U:794:ASP:H	1.79	0.46
20:U:904:LYS:CB	20:U:912:ILE:HD11	2.46	0.46
21:V:375:PHE:O	21:V:375:PHE:HD1	1.99	0.46
21:V:480:ILE:HG12	25:Z:261:TYR:HA	1.98	0.46
22:W:324:TYR:O	22:W:328:LEU:HB2	2.16	0.46
23:X:93:LEU:HD23	23:X:129:LEU:CD2	2.36	0.46
24:Y:312:ARG:HA	24:Y:356:THR:OG1	2.14	0.46
27:b:83:LYS:HG2	27:b:84:ILE:N	2.31	0.46
28:c:280:PRO:HD2	28:c:282:ARG:NH2	2.30	0.46
29:d:240:SER:HB3	29:d:243:LYS:CG	2.46	0.46
29:d:251:ILE:HG23	29:d:256:TYR:HB3	1.97	0.46
31:f:453:SER:HA	31:f:487:LEU:O	2.15	0.46
31:f:781:TYR:CE2	31:f:788:MET:HB2	2.51	0.46
32:g:84:THR:O	32:g:150:ASN:HA	2.16	0.46
33:h:180:ASP:CG	33:h:182:ARG:H	2.23	0.46
1:A:319:MET:SD	1:A:337:LEU:HD11	2.55	0.46
4:D:180:ALA:HB2	4:D:329:ARG:HD3	1.96	0.46
5:E:30:ARG:O	5:E:34:LYS:HG3	2.16	0.46
5:E:341:ALA:HB1	5:E:344:ARG:HH12	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:69:LEU:HG	7:G:216:GLU:HG3	1.98	0.46
8:H:118:MET:HE3	8:H:150:ASP:O	2.16	0.46
8:H:222:THR:HG22	8:H:225:GLU:CD	2.41	0.46
12:L:41:LYS:HZ2	12:L:181:GLU:HA	1.80	0.46
13:M:45:VAL:HG23	13:M:146:ALA:HB1	1.97	0.46
13:M:134:SER:O	13:M:165:ILE:HD12	2.16	0.46
14:N:14:LEU:C	14:N:14:LEU:HD12	2.40	0.46
15:P:12:ILE:HD13	15:P:12:ILE:N	2.30	0.46
15:P:102:GLY:HA2	15:P:178:ILE:HG21	1.97	0.46
16:Q:56:LEU:HD13	17:R:121:LEU:HD21	1.97	0.46
16:Q:136:PHE:CE2	16:Q:138:VAL:HG13	2.50	0.46
18:S:15:ALA:HA	18:S:175:ASN:O	2.16	0.46
20:U:168:LEU:HD21	20:U:204:ILE:HG23	1.98	0.46
20:U:269:ARG:HD3	20:U:326:ILE:HG13	1.97	0.46
20:U:328:ILE:HD11	20:U:333:MET:HG2	1.96	0.46
20:U:612:ASP:HB3	20:U:647:HIS:CG	2.50	0.46
21:V:173:ILE:HD12	21:V:213:TYR:CD1	2.50	0.46
22:W:315:MET:HE3	22:W:361:HIS:ND1	2.29	0.46
23:X:154:LEU:HD11	23:X:170:GLN:HG2	1.97	0.46
24:Y:165:LYS:O	24:Y:169:GLU:HG3	2.16	0.46
24:Y:279:GLU:OE2	30:e:51:ASP:HB3	2.15	0.46
26:a:192:GLU:HA	26:a:192:GLU:OE2	2.15	0.46
27:b:154:THR:HA	27:b:170:LEU:HD13	1.97	0.46
31:f:67:ASP:OD1	31:f:70:LEU:HD12	2.16	0.46
31:f:72:ARG:HH12	31:f:117:GLU:CG	2.26	0.46
31:f:297:MET:HE1	31:f:782:HIS:NE2	2.31	0.46
31:f:396:ASN:OD1	31:f:397:LYS:NZ	2.47	0.46
31:f:493:ASN:CG	31:f:526:ALA:HA	2.41	0.46
31:f:679:LEU:HD23	31:f:713:PHE:CE2	2.50	0.46
31:f:769:THR:HG23	31:f:770:HIS:HD2	1.80	0.46
34:u:280:ARG:HH22	34:u:287:GLU:CD	2.23	0.46
2:B:374:LEU:HD21	2:B:419:PHE:HE2	1.81	0.46
3:C:98:ASP:OD1	3:C:122:THR:HG23	2.15	0.46
5:E:61:LEU:HD11	5:E:72:LYS:HB2	1.98	0.46
5:E:172:LEU:HB2	5:E:278:ALA:HB2	1.96	0.46
5:E:203:ILE:N	5:E:210:GLU:CB	2.67	0.46
5:E:231:PHE:CE2	5:E:233:ASP:HB2	2.50	0.46
6:F:221:LYS:HD2	6:F:320:PHE:CB	2.45	0.46
7:G:130:GLU:HG2	7:G:131:MET:N	2.30	0.46
8:H:159:LYS:HD2	8:H:178:TYR:HE2	1.81	0.46
9:I:43:VAL:CG1	9:I:137:ILE:HB	2.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:36:ARG:NH1	10:J:142:PRO:O	2.48	0.46
10:J:221:ASN:CG	10:J:224:GLU:HG3	2.41	0.46
13:M:165:ILE:HG13	13:M:165:ILE:O	2.16	0.46
15:P:34:ILE:HG12	15:P:44:CYS:SG	2.55	0.46
16:Q:23:ALA:HB1	16:Q:171:MET:HE2	1.98	0.46
16:Q:49:LEU:HD13	16:Q:87:LEU:HD23	1.97	0.46
17:R:28:MET:HE3	17:R:28:MET:CA	2.46	0.46
17:R:88:LEU:CB	17:R:122:ALA:HB2	2.40	0.46
19:T:12:ILE:HD12	19:T:138:GLY:H	1.79	0.46
19:T:27:THR:HG1	19:T:38:ARG:C	2.24	0.46
19:T:50:THR:HG21	19:T:88:ILE:CD1	2.30	0.46
19:T:60:ASP:HB3	19:T:106:VAL:CG2	2.45	0.46
20:U:524:LYS:O	20:U:524:LYS:CG	2.63	0.46
20:U:692:ALA:CB	20:U:733:ALA:HA	2.46	0.46
21:V:64:GLN:OE1	21:V:65:ARG:HD3	2.15	0.46
21:V:114:TYR:O	21:V:117:VAL:HG22	2.16	0.46
21:V:241:ARG:HB2	21:V:241:ARG:CZ	2.45	0.46
22:W:33:LYS:HA	22:W:36:LYS:CG	2.46	0.46
23:X:369:ILE:HD12	23:X:378:LEU:CD1	2.44	0.46
25:Z:187:LEU:HD13	28:c:293:THR:HA	1.98	0.46
25:Z:201:LEU:HD23	28:c:308:VAL:HG11	1.98	0.46
26:a:174:LYS:HB2	26:a:174:LYS:NZ	2.30	0.46
28:c:61:PHE:CD1	28:c:67:VAL:HG22	2.46	0.46
28:c:172:HIS:CG	28:c:173:GLU:N	2.83	0.46
31:f:115:PRO:HA	31:f:119:LYS:CE	2.42	0.46
31:f:146:GLY:O	31:f:148:GLN:OE1	2.33	0.46
31:f:307:LEU:HD23	31:f:307:LEU:HA	1.80	0.46
31:f:524:MET:O	31:f:527:VAL:HG13	2.16	0.46
31:f:803:PHE:CE2	31:f:810:ILE:HG21	2.51	0.46
1:A:261:PHE:HB3	1:A:265:ARG:HH12	1.81	0.46
1:A:273:PHE:CD1	1:A:273:PHE:C	2.92	0.46
1:A:348:LEU:HD23	1:A:348:LEU:C	2.41	0.46
1:A:400:ARG:HG2	31:f:868:HIS:NE2	2.31	0.46
2:B:116:ILE:HG22	2:B:117:ASP:OD1	2.16	0.46
2:B:365:PHE:CE2	2:B:395:ILE:HG23	2.50	0.46
3:C:32:GLN:OE1	4:D:47:LEU:HD21	2.16	0.46
3:C:184:LYS:O	3:C:290:LYS:HA	2.15	0.46
3:C:387:VAL:O	3:C:391:MET:HB2	2.16	0.46
3:C:401:ILE:CD1	8:H:26:LEU:HD12	2.41	0.46
4:D:113:VAL:HB	4:D:138:ALA:HA	1.97	0.46
4:D:200:ARG:NH2	4:D:325:GLY:O	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:98:VAL:HG23	5:E:100:LEU:HD23	1.98	0.46
5:E:161:ARG:HH22	22:W:200:ILE:HG23	1.81	0.46
5:E:378:LYS:HE3	5:E:378:LYS:HB3	1.68	0.46
6:F:52:ILE:HG23	6:F:53:LYS:N	2.31	0.46
6:F:201:ALA:C	6:F:202:ILE:HD13	2.40	0.46
7:G:211:LYS:HG3	7:G:212:PRO:HD2	1.96	0.46
8:H:218:PHE:C	8:H:218:PHE:CD1	2.94	0.46
10:J:66:ASP:HB3	10:J:69:VAL:HG12	1.98	0.46
11:K:52:LYS:HD3	11:K:52:LYS:HA	1.72	0.46
11:K:164:GLN:O	12:L:58:ALA:N	2.45	0.46
11:K:211:ASN:HA	11:K:238:ILE:CD1	2.46	0.46
11:K:238:ILE:O	11:K:238:ILE:HG12	2.15	0.46
14:N:1:THR:HG21	14:N:46:SER:HA	1.98	0.46
17:R:29:LYS:HG2	17:R:30:ASP:N	2.30	0.46
17:R:38:MET:HE2	17:R:38:MET:CA	2.46	0.46
17:R:148:THR:O	17:R:151:ILE:HG13	2.15	0.46
17:R:181:ARG:HG3	17:R:181:ARG:HH11	1.81	0.46
18:S:19:ARG:HD2	18:S:29:GLN:HE22	1.80	0.46
18:S:88:TYR:HD1	18:S:91:LYS:HB2	1.81	0.46
20:U:82:LEU:C	20:U:129:ARG:HE	2.23	0.46
20:U:188:MET:HE3	20:U:193:PHE:CE2	2.51	0.46
20:U:570:LEU:HB2	20:U:582:GLY:HA3	1.98	0.46
20:U:901:GLN:HE22	20:U:915:LYS:CE	2.18	0.46
21:V:169:LEU:HD22	21:V:210:CYS:SG	2.56	0.46
22:W:47:LEU:HD22	22:W:47:LEU:N	2.31	0.46
22:W:272:LEU:HD13	22:W:341:PHE:CD1	2.51	0.46
22:W:314:LEU:CD1	22:W:381:LEU:HD13	2.46	0.46
22:W:393:LEU:O	22:W:397:VAL:HG23	2.16	0.46
22:W:419:LYS:HD3	22:W:419:LYS:HA	1.78	0.46
24:Y:41:LEU:HD21	24:Y:57:LEU:CD1	2.46	0.46
24:Y:79:ASP:OD1	24:Y:80:GLU:N	2.48	0.46
24:Y:142:PHE:CE2	24:Y:179:ARG:HB3	2.51	0.46
24:Y:338:ILE:HD11	24:Y:345:CYS:SG	2.56	0.46
26:a:89:ASP:HB2	26:a:92:VAL:HG23	1.97	0.46
26:a:137:ASP:OD1	26:a:138:VAL:N	2.48	0.46
27:b:107:MET:HB3	27:b:136:VAL:HA	1.96	0.46
27:b:128:ALA:CB	27:b:159:THR:HG23	2.46	0.46
28:c:84:VAL:HG13	34:u:278:PHE:CE2	2.51	0.46
29:d:293:PHE:CD2	29:d:299:MET:HE2	2.50	0.46
31:f:70:LEU:C	31:f:73:PRO:HD2	2.41	0.46
31:f:659:LEU:HD12	31:f:662:MET:CE	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:719:PRO:O	31:f:723:TYR:HD1	1.98	0.46
32:g:108:THR:OG1	32:g:138:LEU:O	2.34	0.46
32:g:133:LYS:H	32:g:152:LYS:NZ	2.13	0.46
33:h:86:ARG:HB2	33:h:121:PHE:CE2	2.50	0.46
33:h:145:LEU:O	33:h:149:LEU:HD13	2.16	0.46
1:A:193:THR:HB	1:A:194:PRO:HD3	1.98	0.46
1:A:271:LEU:HD12	1:A:271:LEU:HA	1.82	0.46
2:B:222:VAL:HG12	2:B:349:ARG:HB2	1.98	0.46
2:B:312:LEU:HD13	2:B:312:LEU:C	2.41	0.46
4:D:207:PRO:HG2	4:D:335:LEU:HG	1.97	0.46
5:E:213:ARG:O	5:E:214:LEU:HD13	2.16	0.46
5:E:313:LEU:HD12	5:E:313:LEU:HA	1.79	0.46
5:E:323:HIS:HB3	5:E:325:GLU:CD	2.41	0.46
7:G:58:ASP:OD2	7:G:61:LEU:N	2.49	0.46
11:K:195:ILE:HD12	11:K:217:LEU:CD1	2.42	0.46
13:M:180:GLN:HB3	13:M:183:GLU:OE1	2.16	0.46
14:N:2:THR:HG22	14:N:2:THR:O	2.15	0.46
14:N:155:PHE:C	14:N:155:PHE:HD1	2.24	0.46
15:P:8:TYR:HE2	15:P:10:ASP:HB2	1.81	0.46
15:P:11:GLY:O	15:P:12:ILE:HD13	2.14	0.46
18:S:138:VAL:HG11	18:S:159:ALA:CA	2.32	0.46
19:T:38:ARG:NH2	33:h:151:ARG:HG2	2.30	0.46
19:T:47:THR:HG22	19:T:48:ASP:N	2.31	0.46
20:U:209:GLU:HG2	20:U:210:LYS:HG2	1.97	0.46
20:U:387:ARG:HB3	20:U:387:ARG:CZ	2.45	0.46
20:U:552:ILE:CA	20:U:555:VAL:HG12	2.45	0.46
21:V:168:GLN:OE1	21:V:194:LYS:HD3	2.16	0.46
21:V:221:LEU:O	21:V:223:LYS:HE3	2.16	0.46
23:X:373:LYS:O	23:X:374:PHE:C	2.59	0.46
24:Y:124:PHE:HD2	24:Y:140:ILE:HG23	1.80	0.46
25:Z:123:ILE:O	25:Z:123:ILE:HG22	2.15	0.46
27:b:6:THR:CG2	27:b:110:ILE:HD12	2.45	0.46
29:d:178:TYR:HA	29:d:181:GLN:NE2	2.31	0.46
29:d:189:HIS:HB3	29:d:223:ASN:OD1	2.15	0.46
29:d:221:GLN:OE1	29:d:221:GLN:C	2.59	0.46
29:d:282:ILE:HG23	29:d:283:LEU:N	2.29	0.46
31:f:330:PHE:CD2	31:f:420:TRP:HZ3	2.34	0.46
31:f:781:TYR:HA	31:f:787:LEU:O	2.16	0.46
31:f:844:VAL:HG22	31:f:880:ALA:HB1	1.98	0.46
31:f:858:LYS:CE	31:f:861:THR:HA	2.45	0.46
32:g:112:LEU:O	32:g:115:LYS:HG2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:g:141:THR:HG22	32:g:144:GLU:OE2	2.15	0.46
33:h:180:ASP:OD2	33:h:183:SER:N	2.49	0.46
2:B:66:GLU:OE1	2:B:66:GLU:HA	2.16	0.45
2:B:143:LEU:HD12	2:B:143:LEU:H	1.81	0.45
3:C:50:ASN:HD21	20:U:639:LEU:HD11	1.80	0.45
3:C:298:ILE:HD11	3:C:306:LEU:CD2	2.40	0.45
4:D:277:ALA:HB3	4:D:283:ARG:HG3	1.98	0.45
5:E:137:GLY:HA3	5:E:308:ALA:HB1	1.99	0.45
6:F:84:LYS:O	6:F:84:LYS:HG2	2.16	0.45
6:F:124:ILE:O	6:F:131:THR:HA	2.16	0.45
7:G:199:ILE:HG21	7:G:239:LEU:CD2	2.46	0.45
8:H:177:ARG:HG2	8:H:177:ARG:HH11	1.81	0.45
9:I:25:MET:CG	9:I:152:PRO:HD2	2.45	0.45
10:J:230:VAL:HA	10:J:233:GLU:OE1	2.16	0.45
11:K:166:ASP:HB3	11:K:185:TYR:OH	2.16	0.45
13:M:84:ALA:HA	13:M:133:CYS:SG	2.56	0.45
13:M:186:CYS:HB2	13:M:219:LEU:HD23	1.96	0.45
14:N:3:ILE:CD1	14:N:99:ILE:HG12	2.46	0.45
17:R:104:LEU:HD23	17:R:105:ALA:N	2.31	0.45
19:T:118:LYS:HZ1	19:T:132:ARG:HH12	1.62	0.45
19:T:125:ASP:OD1	19:T:126:PRO:HD2	2.17	0.45
20:U:10:SER:HB2	29:d:166:ARG:HG3	1.98	0.45
20:U:45:ILE:CD1	20:U:63:VAL:HB	2.45	0.45
20:U:185:MET:CE	20:U:186:SER:CA	2.92	0.45
21:V:161:PRO:HA	21:V:164:GLU:CG	2.46	0.45
21:V:306:ARG:CD	21:V:336:GLU:HG3	2.40	0.45
21:V:414:TYR:CZ	21:V:425:LYS:HE2	2.52	0.45
21:V:497:PRO:HD3	25:Z:282:ASN:OD1	2.15	0.45
22:W:52:LYS:HA	22:W:55:ARG:NH2	2.30	0.45
22:W:214:PHE:CB	22:W:223:LYS:NZ	2.79	0.45
23:X:66:LEU:HD12	23:X:69:LEU:HD12	1.98	0.45
23:X:264:PRO:O	23:X:267:VAL:HG23	2.16	0.45
25:Z:266:ILE:HG21	28:c:288:VAL:HG21	1.97	0.45
26:a:63:PHE:CZ	26:a:64:ILE:HG13	2.51	0.45
26:a:216:LEU:C	26:a:216:LEU:HD12	2.42	0.45
28:c:57:MET:HA	28:c:72:VAL:HG23	1.98	0.45
31:f:56:LEU:HD11	31:f:99:LEU:CD1	2.46	0.45
31:f:230:CYS:SG	31:f:231:LEU:N	2.88	0.45
31:f:367:SER:OG	31:f:370:MET:CG	2.59	0.45
31:f:531:ASN:HB2	31:f:565:ASN:OD1	2.16	0.45
31:f:560:LEU:HD11	31:f:798:THR:CA	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:790:GLN:OE1	31:f:790:GLN:HA	2.16	0.45
32:g:145:GLN:HG3	32:g:147:VAL:HG23	1.97	0.45
34:u:136:GLU:HG2	34:u:168:THR:HG21	1.98	0.45
1:A:80:LEU:CD1	1:A:82:ALA:H	2.30	0.45
1:A:195:LEU:CD2	1:A:269:ALA:HB1	2.46	0.45
1:A:273:PHE:HA	1:A:318:LEU:O	2.16	0.45
2:B:69:LYS:NZ	20:U:833:LEU:HD22	2.30	0.45
2:B:313:LEU:HD12	2:B:314:ASN:N	2.31	0.45
2:B:398:ILE:HG13	2:B:426:VAL:HG11	1.99	0.45
3:C:85:VAL:HG11	3:C:108:VAL:HG21	1.99	0.45
3:C:98:ASP:O	3:C:123:LEU:HD13	2.15	0.45
4:D:152:MET:HG2	4:D:229:ARG:H	1.81	0.45
4:D:416:PHE:CD2	8:H:79:MET:HE3	2.51	0.45
5:E:168:LYS:HE3	5:E:274:LYS:HG3	1.97	0.45
5:E:296:ASP:O	5:E:297:ARG:C	2.59	0.45
5:E:318:GLY:N	5:E:319:PRO:HD2	2.32	0.45
5:E:369:LYS:HA	5:E:372:ARG:NH2	2.31	0.45
6:F:206:MET:CE	6:F:280:PRO:HA	2.47	0.45
7:G:40:VAL:CG1	7:G:51:VAL:HG22	2.47	0.45
7:G:165:ALA:CB	7:G:179:LEU:HD13	2.42	0.45
9:I:246:LYS:O	9:I:249:ARG:HB2	2.15	0.45
11:K:99:HIS:CD2	11:K:107:MET:HG3	2.51	0.45
12:L:70:ILE:HD13	12:L:108:LEU:CD2	2.45	0.45
13:M:175:GLU:HA	13:M:178:LYS:HG2	1.98	0.45
14:N:116:MET:CE	33:h:5:MET:HG3	2.46	0.45
15:P:37:ILE:CD1	15:P:43:CYS:HB2	2.40	0.45
19:T:135:PHE:CD1	19:T:135:PHE:C	2.95	0.45
19:T:148:LEU:HD12	19:T:149:LEU:N	2.30	0.45
20:U:521:LEU:CD2	20:U:761:VAL:HG21	2.46	0.45
20:U:695:MET:HE1	20:U:709:PHE:HB3	1.98	0.45
21:V:254:LEU:O	21:V:258:TYR:CD1	2.69	0.45
21:V:322:VAL:HG13	30:e:24:ALA:HB1	1.97	0.45
23:X:190:LEU:HD11	23:X:214:SER:HB2	1.98	0.45
23:X:257:CYS:O	23:X:261:LEU:HD12	2.16	0.45
23:X:339:ILE:HG23	23:X:350:ILE:CD1	2.46	0.45
24:Y:195:LYS:HB2	24:Y:195:LYS:NZ	2.31	0.45
24:Y:237:ARG:HD3	24:Y:264:TYR:OH	2.16	0.45
25:Z:8:LYS:HB2	25:Z:159:THR:HG23	1.98	0.45
25:Z:197:GLY:HA2	28:c:225:TRP:CB	2.45	0.45
26:a:269:LEU:CA	26:a:272:ILE:HG22	2.46	0.45
27:b:16:MET:HA	27:b:25:ARG:HG2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:273:GLY:HA2	29:d:276:GLU:HB2	1.98	0.45
31:f:56:LEU:HD21	31:f:99:LEU:CD1	2.44	0.45
31:f:252:ALA:HB1	31:f:256:PHE:HE1	1.80	0.45
31:f:494:ARG:HG3	31:f:497:VAL:CG2	2.46	0.45
31:f:573:ILE:HG22	31:f:573:ILE:O	2.16	0.45
31:f:771:LEU:HD11	31:f:825:MET:CE	2.44	0.45
32:g:88:PHE:HA	32:g:97:ARG:O	2.16	0.45
32:g:141:THR:HG22	32:g:144:GLU:HG2	1.99	0.45
34:u:176:LYS:CD	34:u:270:VAL:HG22	2.45	0.45
1:A:427:PRO:HD2	1:A:428:ARG:NH1	2.31	0.45
2:B:124:SER:HB3	2:B:130:GLU:HG3	1.97	0.45
4:D:91:GLN:N	4:D:91:GLN:OE1	2.50	0.45
4:D:100:THR:HG22	4:D:101:ALA:N	2.32	0.45
4:D:275:PHE:HE2	4:D:282:ASP:OD2	1.98	0.45
5:E:257:LEU:O	5:E:260:LEU:HB3	2.15	0.45
5:E:342:ASP:O	5:E:346:VAL:HG23	2.17	0.45
6:F:247:THR:O	6:F:247:THR:OG1	2.33	0.45
7:G:50:ILE:CD1	7:G:79:VAL:HB	2.46	0.45
7:G:199:ILE:HD12	7:G:239:LEU:HD21	1.98	0.45
7:G:202:LEU:HD23	7:G:210:PHE:CZ	2.51	0.45
8:H:38:ILE:HD13	8:H:190:THR:HB	1.97	0.45
9:I:41:ASP:OD1	9:I:41:ASP:N	2.40	0.45
9:I:44:LEU:HD22	9:I:189:ALA:HB1	1.98	0.45
10:J:14:GLY:HA3	11:K:30:ALA:HB2	1.98	0.45
12:L:93:LEU:HD21	19:T:70:ALA:HB1	1.99	0.45
16:Q:54:ALA:CB	16:Q:140:GLY:HA2	2.39	0.45
16:Q:120:PHE:HE1	16:Q:122:CYS:HB2	1.80	0.45
17:R:46:CYS:HG	17:R:53:THR:HG1	1.52	0.45
20:U:376:MET:HA	20:U:739:ALA:HA	1.96	0.45
20:U:599:ILE:HD11	20:U:626:LEU:CG	2.47	0.45
22:W:67:LEU:CD1	22:W:90:LEU:HD12	2.46	0.45
25:Z:26:ILE:HD11	28:c:102:THR:O	2.17	0.45
26:a:71:VAL:HA	27:b:17:ARG:HE	1.81	0.45
27:b:24:THR:HG22	27:b:26:LEU:H	1.82	0.45
29:d:182:LEU:N	29:d:182:LEU:HD23	2.31	0.45
31:f:66:LYS:NZ	31:f:67:ASP:O	2.50	0.45
31:f:494:ARG:HG3	31:f:497:VAL:HG23	1.99	0.45
31:f:683:GLU:HB3	31:f:684:PRO:HD2	1.97	0.45
34:u:169:VAL:HG12	34:u:244:VAL:HG13	1.97	0.45
2:B:77:GLU:CD	20:U:830:THR:HG23	2.41	0.45
2:B:362:LYS:HA	2:B:384:ILE:HD13	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:199:VAL:HA	5:E:233:ASP:O	2.16	0.45
5:E:206:LYS:HA	5:E:253:ILE:HG23	1.99	0.45
6:F:344:ARG:HD2	6:F:347:ARG:NE	2.31	0.45
6:F:357:PRO:HB3	6:F:361:ALA:HB1	1.97	0.45
8:H:102:GLN:OE1	15:P:57:GLN:HG2	2.17	0.45
8:H:204:THR:HG22	8:H:205:GLU:N	2.31	0.45
8:H:213:CYS:SG	8:H:213:CYS:O	2.74	0.45
10:J:59:VAL:HG13	10:J:59:VAL:O	2.15	0.45
12:L:35:THR:HG21	12:L:73:SER:OG	2.15	0.45
12:L:204:ASP:O	12:L:206:THR:HG23	2.16	0.45
13:M:136:MET:HA	13:M:150:MET:HA	1.98	0.45
14:N:7:GLN:HA	14:N:12:VAL:HG22	1.97	0.45
15:P:22:GLU:HG2	15:P:22:GLU:O	2.16	0.45
15:P:140:ASP:OD2	15:P:141:LYS:HE2	2.16	0.45
15:P:156:SER:HA	15:P:159:ILE:CG2	2.45	0.45
16:Q:19:CYS:HB2	16:Q:163:LEU:CD2	2.45	0.45
16:Q:175:VAL:HG23	16:Q:182:GLY:HA2	1.99	0.45
17:R:147:TYR:CD2	17:R:151:ILE:HD11	2.52	0.45
19:T:24:ALA:HB2	19:T:195:ILE:HD13	1.99	0.45
20:U:94:SER:OG	20:U:97:VAL:HG23	2.15	0.45
20:U:181:LEU:HD13	20:U:181:LEU:C	2.41	0.45
20:U:185:MET:C	20:U:185:MET:SD	3.00	0.45
20:U:213:PHE:C	20:U:216:VAL:HG12	2.42	0.45
20:U:398:ASN:HA	20:U:437:TYR:HE2	1.81	0.45
20:U:497:LEU:CD1	20:U:515:ALA:HB1	2.47	0.45
20:U:514:LEU:O	20:U:518:LEU:HG	2.15	0.45
20:U:832:VAL:HB	20:U:836:THR:CB	2.46	0.45
20:U:879:ASP:OD1	20:U:879:ASP:N	2.48	0.45
21:V:189:ASP:OD1	21:V:218:TYR:OH	2.34	0.45
21:V:338:LEU:HD22	21:V:398:LEU:HD13	1.98	0.45
22:W:344:THR:HG23	22:W:347:GLY:H	1.82	0.45
22:W:362:ASN:O	22:W:366:MET:CG	2.65	0.45
23:X:153:LEU:HD23	23:X:153:LEU:C	2.41	0.45
26:a:195:GLU:OE1	26:a:195:GLU:HA	2.16	0.45
27:b:7:MET:HE1	27:b:52:ILE:CG1	2.46	0.45
27:b:126:LYS:HE3	27:b:126:LYS:HB3	1.82	0.45
28:c:276:GLY:C	28:c:278:GLN:HG3	2.41	0.45
28:c:282:ARG:HH11	28:c:282:ARG:HG3	1.80	0.45
31:f:45:LEU:HB3	31:f:49:ASP:CB	2.47	0.45
31:f:100:ARG:NH1	31:f:129:LEU:HD21	2.31	0.45
31:f:252:ALA:C	31:f:256:PHE:HE1	2.25	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:831:VAL:HB	31:f:897:PHE:CD1	2.50	0.45
1:A:47:GLN:OE1	1:A:48:VAL:N	2.50	0.45
1:A:432:TYR:CE2	11:K:33:LEU:HD12	2.50	0.45
2:B:184:TYR:CD1	2:B:194:ILE:HD13	2.49	0.45
2:B:235:LEU:HD23	2:B:353:PHE:HZ	1.82	0.45
3:C:191:PRO:HG2	3:C:319:PRO:CG	2.47	0.45
3:C:271:ARG:HG3	3:C:271:ARG:HH11	1.81	0.45
3:C:358:GLU:CG	4:D:324:PRO:HG2	2.46	0.45
4:D:116:LEU:HB3	4:D:119:ILE:HG13	1.98	0.45
4:D:116:LEU:CB	4:D:119:ILE:HD11	2.47	0.45
4:D:225:ALA:HB1	4:D:259:PRO:O	2.16	0.45
4:D:384:MET:HE1	5:E:297:ARG:NH1	2.32	0.45
5:E:101:ASP:OD1	5:E:102:MET:N	2.50	0.45
5:E:191:LEU:HD12	5:E:227:PRO:CD	2.47	0.45
5:E:191:LEU:CD1	5:E:227:PRO:HG2	2.47	0.45
5:E:299:ILE:HG13	5:E:299:ILE:O	2.16	0.45
6:F:188:ILE:CB	6:F:195:ILE:HD11	2.47	0.45
8:H:38:ILE:HD12	8:H:187:ALA:O	2.16	0.45
8:H:127:VAL:HG23	8:H:127:VAL:O	2.17	0.45
11:K:218:ALA:CB	11:K:226:PHE:HE1	2.17	0.45
12:L:135:ALA:HA	12:L:143:HIS:O	2.16	0.45
14:N:42:PHE:CZ	14:N:184:VAL:HG21	2.51	0.45
15:P:35:HIS:NE2	15:P:53:ASP:OD1	2.50	0.45
16:Q:53:LEU:CD1	16:Q:107:PRO:HB3	2.45	0.45
17:R:19:ARG:CG	17:R:177:THR:HG23	2.46	0.45
17:R:44:LEU:CD1	17:R:102:LEU:HD21	2.47	0.45
17:R:138:LEU:O	17:R:142:ILE:HD12	2.17	0.45
18:S:180:ARG:N	18:S:183:GLY:O	2.30	0.45
19:T:179:PHE:CE2	19:T:193:LEU:HD13	2.51	0.45
19:T:184:GLU:HG3	19:T:185:ARG:N	2.31	0.45
20:U:471:ASP:O	20:U:474:ARG:N	2.43	0.45
20:U:555:VAL:O	20:U:555:VAL:HG22	2.17	0.45
20:U:635:SER:HA	20:U:638:SER:OG	2.17	0.45
20:U:728:PHE:HE2	20:U:769:PHE:CE2	2.34	0.45
21:V:120:PHE:CZ	21:V:149:PRO:HG2	2.52	0.45
22:W:263:TRP:CD2	22:W:295:LYS:CE	2.99	0.45
22:W:344:THR:OG1	22:W:345:GLU:N	2.50	0.45
24:Y:25:LEU:HD23	24:Y:31:HIS:HB3	1.98	0.45
24:Y:124:PHE:CD2	24:Y:140:ILE:HD12	2.52	0.45
25:Z:188:SER:CA	26:a:374:ILE:HD11	2.47	0.45
26:a:7:PHE:HE1	26:a:56:LEU:HB2	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:a:123:LEU:HD12	26:a:127:ASP:CB	2.46	0.45
26:a:285:PRO:HG2	26:a:287:ASN:OD1	2.16	0.45
26:a:287:ASN:OD1	26:a:288:HIS:N	2.46	0.45
29:d:175:TYR:HE2	29:d:188:MET:CA	2.29	0.45
31:f:131:MET:CG	31:f:161:HIS:HD2	2.29	0.45
31:f:294:MET:SD	31:f:295:ALA:N	2.90	0.45
31:f:429:ILE:HG22	31:f:429:ILE:O	2.17	0.45
31:f:578:ALA:HA	31:f:581:GLU:OE2	2.16	0.45
31:f:683:GLU:H	31:f:686:LEU:CD1	2.28	0.45
31:f:792:ALA:HA	31:f:824:ALA:CB	2.46	0.45
31:f:833:PHE:CD1	31:f:839:PRO:HA	2.40	0.45
32:g:107:ILE:HD13	32:g:111:GLU:CB	2.47	0.45
32:g:107:ILE:CD1	32:g:142:LEU:HD13	2.47	0.45
32:g:128:LYS:HZ1	32:g:136:LEU:HB2	1.81	0.45
3:C:144:PRO:O	3:C:205:HIS:HD2	2.00	0.45
4:D:120:ASP:OD2	4:D:123:LEU:HG	2.17	0.45
5:E:49:ALA:HB1	6:F:136:VAL:HG21	1.99	0.45
5:E:162:VAL:HG23	5:E:164:ILE:HG12	1.97	0.45
5:E:228:CYS:O	5:E:273:VAL:HG13	2.16	0.45
7:G:42:VAL:CG2	7:G:198:ALA:HB2	2.47	0.45
11:K:102:THR:HA	19:T:94:THR:HG21	1.97	0.45
11:K:126:GLU:OE1	12:L:125:ARG:HB2	2.16	0.45
13:M:80:LEU:HD23	13:M:80:LEU:HA	1.75	0.45
13:M:186:CYS:HA	13:M:189:ILE:HG21	1.98	0.45
14:N:156:THR:O	14:N:160:LEU:HG	2.16	0.45
14:N:164:MET:SD	14:N:174:ILE:HD11	2.56	0.45
14:N:173:VAL:CG2	14:N:174:ILE:N	2.78	0.45
17:R:56:PHE:HB2	17:R:98:TYR:CE2	2.51	0.45
17:R:192:ASP:N	17:R:192:ASP:OD1	2.44	0.45
18:S:76:VAL:CG1	18:S:103:GLY:HA3	2.46	0.45
18:S:135:ALA:O	18:S:138:VAL:HG12	2.17	0.45
20:U:222:PHE:HE1	20:U:754:HIS:ND1	2.13	0.45
20:U:345:ASN:OD1	20:U:345:ASN:N	2.49	0.45
20:U:383:ASP:OD2	20:U:426:TYR:OH	2.23	0.45
20:U:535:TYR:HE1	20:U:544:ILE:HG21	1.82	0.45
20:U:583:MET:HE1	20:U:614:VAL:O	2.17	0.45
21:V:215:ALA:HB3	21:V:253:LEU:CD1	2.46	0.45
21:V:342:ILE:CG1	21:V:368:ARG:HG3	2.47	0.45
21:V:477:HIS:C	21:V:477:HIS:CD2	2.94	0.45
22:W:171:VAL:HA	22:W:174:TYR:CD2	2.52	0.45
22:W:276:LEU:HD11	22:W:341:PHE:HZ	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:155:ASP:OD1	24:Y:155:ASP:C	2.60	0.45
24:Y:221:THR:HG23	24:Y:253:LEU:HD13	1.98	0.45
25:Z:14:LEU:HD23	25:Z:14:LEU:C	2.41	0.45
25:Z:71:ASP:HB3	25:Z:74:TYR:CB	2.40	0.45
26:a:269:LEU:HA	26:a:272:ILE:CG2	2.44	0.45
28:c:299:CYS:SG	29:d:339:VAL:HG21	2.57	0.45
31:f:287:ASP:O	31:f:290:VAL:HG12	2.17	0.45
31:f:542:ILE:HG22	31:f:543:MET:CE	2.44	0.45
31:f:563:GLY:HA3	31:f:598:CYS:SG	2.56	0.45
31:f:672:LEU:HD21	31:f:706:ILE:HD11	1.99	0.45
31:f:846:VAL:HG22	31:f:866:GLN:O	2.17	0.45
2:B:220:LYS:NZ	2:B:220:LYS:CB	2.80	0.45
2:B:390:LEU:HD12	2:B:390:LEU:HA	1.85	0.45
2:B:401:GLU:O	2:B:405:MET:HG2	2.16	0.45
2:B:440:LEU:HD22	10:J:77:THR:HG21	1.99	0.45
3:C:115:ALA:HB2	3:C:127:LEU:HD12	1.97	0.45
3:C:351:MET:SD	3:C:387:VAL:HG22	2.56	0.45
3:C:392:GLN:C	3:C:393:LYS:HD2	2.42	0.45
4:D:64:GLU:HB2	20:U:607:VAL:HG22	1.99	0.45
4:D:296:MET:HE2	4:D:326:ARG:CB	2.45	0.45
5:E:121:ASN:HA	5:E:124:HIS:HD1	1.81	0.45
5:E:150:GLU:OE1	5:E:151:LEU:N	2.50	0.45
5:E:211:SER:CA	5:E:215:ILE:HB	2.42	0.45
5:E:232:MET:O	5:E:235:ILE:HG23	2.16	0.45
8:H:49:GLU:OE1	8:H:51:LYS:HE2	2.17	0.45
10:J:115:LYS:HG2	10:J:127:PHE:HB2	1.98	0.45
10:J:129:ILE:C	10:J:129:ILE:HD12	2.42	0.45
10:J:150:SER:HB2	11:K:83:LYS:CE	2.46	0.45
11:K:84:ASP:HB3	11:K:137:PHE:CD1	2.46	0.45
11:K:205:VAL:O	11:K:205:VAL:HG23	2.16	0.45
13:M:161:TRP:CE2	13:M:182:LYS:HE3	2.51	0.45
14:N:147:MET:HE1	14:N:155:PHE:CD2	2.51	0.45
15:P:1:THR:N	15:P:169:SER:OG	2.42	0.45
17:R:7:ILE:HD11	17:R:14:LEU:CB	2.44	0.45
19:T:62:LEU:HD13	33:h:94:ARG:HH12	1.81	0.45
19:T:68:ILE:O	19:T:72:LEU:HD23	2.17	0.45
20:U:21:GLU:OE2	20:U:56:SER:OG	2.20	0.45
20:U:199:ARG:NE	20:U:223:LEU:CD1	2.80	0.45
20:U:493:VAL:CG1	20:U:519:VAL:HG21	2.46	0.45
20:U:555:VAL:O	20:U:556:MET:HE2	2.16	0.45
20:U:616:ARG:HG2	20:U:647:HIS:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:V:179:LYS:HE2	21:V:179:LYS:HB2	1.77	0.45
21:V:487:HIS:CD2	25:Z:267:ARG:NH2	2.85	0.45
22:W:55:ARG:NH2	22:W:93:ARG:HE	2.15	0.45
22:W:190:MET:HG3	22:W:205:ILE:HG22	1.98	0.45
22:W:341:PHE:CD2	22:W:351:TRP:CE3	3.05	0.45
23:X:299:LEU:HD21	23:X:334:ASN:OD1	2.17	0.45
24:Y:279:GLU:CB	24:Y:296:VAL:HG21	2.38	0.45
24:Y:301:ILE:HD11	24:Y:337:PHE:CD1	2.52	0.45
26:a:25:LEU:HD23	26:a:25:LEU:C	2.42	0.45
26:a:29:TYR:O	26:a:29:TYR:HD1	2.00	0.45
26:a:219:HIS:ND1	26:a:220:PRO:HD2	2.31	0.45
26:a:317:VAL:HG12	26:a:319:LEU:CD1	2.47	0.45
27:b:52:ILE:CD1	27:b:92:VAL:HG12	2.46	0.45
31:f:136:GLU:HG2	31:f:165:GLU:OE2	2.17	0.45
31:f:196:MET:HE1	31:f:225:ALA:CB	2.47	0.45
31:f:297:MET:HE1	31:f:782:HIS:CD2	2.51	0.45
31:f:600:TYR:HD2	31:f:608:LYS:HG3	1.78	0.45
32:g:128:LYS:HZ3	32:g:129:ILE:N	2.15	0.45
34:u:132:LYS:HD3	34:u:132:LYS:H	1.80	0.45
1:A:123:VAL:HG11	1:A:147:TYR:HB3	1.99	0.45
1:A:153:LEU:HD21	2:B:132:TYR:CE2	2.52	0.45
1:A:276:GLU:HA	1:A:276:GLU:OE2	2.17	0.45
2:B:145:GLU:HG2	2:B:146:PRO:HD2	1.98	0.45
3:C:97:VAL:CG1	3:C:121:TYR:HB3	2.45	0.45
4:D:378:ILE:CG1	4:D:406:VAL:HG11	2.44	0.45
4:D:395:LEU:HD12	4:D:395:LEU:N	2.32	0.45
5:E:312:ILE:HD11	38:E:501:ADP:N1	2.30	0.45
6:F:368:ILE:CG2	6:F:371:ARG:HH22	2.22	0.45
7:G:190:THR:HG22	7:G:191:PHE:N	2.32	0.45
8:H:119:GLN:OE1	9:I:85:VAL:HG23	2.16	0.45
8:H:173:PHE:O	8:H:176:LYS:HB2	2.17	0.45
9:I:18:LEU:O	9:I:22:GLU:HG3	2.16	0.45
9:I:43:VAL:HG11	9:I:137:ILE:HB	1.98	0.45
9:I:58:GLU:HG3	9:I:61:PHE:CE1	2.51	0.45
9:I:184:MET:HE2	9:I:184:MET:HB2	1.88	0.45
10:J:63:CYS:HB3	10:J:88:ARG:NH2	2.32	0.45
12:L:84:LEU:HD23	12:L:84:LEU:HA	1.83	0.45
12:L:99:PHE:HE1	33:h:91:TRP:CD1	2.35	0.45
13:M:39:ILE:CG2	13:M:189:ILE:HD11	2.42	0.45
13:M:87:LEU:HD13	13:M:135:PHE:CE1	2.52	0.45
13:M:102:PHE:O	14:N:81:SER:OG	2.35	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:199:ILE:HD12	13:M:244:LYS:HB2	1.98	0.45
14:N:93:ASP:OD1	14:N:93:ASP:O	2.34	0.45
16:Q:61:GLN:OE1	17:R:124:LEU:HD11	2.17	0.45
17:R:3:TYR:HE1	17:R:135:GLY:C	2.25	0.45
18:S:35:ILE:HD12	18:S:35:ILE:N	2.32	0.45
18:S:177:TYR:HD1	18:S:186:ARG:HA	1.80	0.45
19:T:45:LYS:HG3	19:T:203:ILE:CD1	2.47	0.45
19:T:57:PHE:CE1	33:h:128:LEU:HD21	2.52	0.45
19:T:150:ASP:CB	19:T:156:LYS:HB2	2.46	0.45
20:U:539:THR:OG1	20:U:540:GLN:O	2.30	0.45
20:U:808:PRO:HD3	20:U:873:PRO:O	2.09	0.45
22:W:366:MET:HE3	22:W:381:LEU:HD13	1.99	0.45
22:W:454:ASN:HB2	25:Z:103:LYS:NZ	2.31	0.45
23:X:140:THR:O	23:X:141:LYS:HB2	2.16	0.45
23:X:267:VAL:HG21	23:X:291:ALA:CB	2.47	0.45
23:X:354:ILE:O	23:X:354:ILE:HG22	2.17	0.45
25:Z:134:PRO:HD3	28:c:219:ASN:ND2	2.31	0.45
26:a:202:LEU:HD22	26:a:233:LEU:HD11	1.98	0.45
28:c:31:VAL:HB	28:c:205:ILE:HD13	1.97	0.45
28:c:33:ILE:HG12	28:c:69:VAL:HG21	1.99	0.45
29:d:251:ILE:HD11	29:d:260:ILE:CG2	2.46	0.45
29:d:331:PRO:HB2	29:d:335:LEU:HD13	1.99	0.45
31:f:86:THR:HG22	31:f:154:TRP:O	2.17	0.45
31:f:341:GLU:O	31:f:773:LYS:NZ	2.47	0.45
31:f:349:TYR:CE1	31:f:763:ARG:HG2	2.52	0.45
31:f:567:LEU:HD21	31:f:793:VAL:CG1	2.41	0.45
31:f:783:SER:CB	31:f:787:LEU:HG	2.41	0.45
31:f:832:THR:HG23	31:f:870:THR:HG21	1.99	0.45
32:g:82:ILE:HD12	32:g:82:ILE:O	2.17	0.45
33:h:145:LEU:HD21	33:h:175:VAL:CG1	2.23	0.45
1:A:27:GLU:OE1	1:A:27:GLU:HA	2.16	0.45
1:A:233:THR:O	1:A:234:ASP:OD1	2.34	0.45
1:A:336:ARG:C	1:A:337:LEU:HD23	2.42	0.45
2:B:70:ASP:CG	20:U:832:VAL:HG13	2.42	0.45
2:B:309:MET:O	2:B:313:LEU:HG	2.15	0.45
3:C:66:LEU:HD23	4:D:114:ARG:HD2	1.98	0.45
3:C:125:LYS:HG3	3:C:126:ILE:N	2.32	0.45
3:C:276:LEU:HD23	3:C:305:LEU:CD1	2.46	0.45
4:D:167:ILE:CD1	4:D:215:LEU:HA	2.47	0.45
4:D:253:LEU:O	4:D:257:ASN:ND2	2.50	0.45
5:E:147:GLU:OE1	5:E:148:VAL:HG23	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:203:ILE:O	5:E:260:LEU:HD13	2.16	0.45
7:G:97:GLU:HG3	7:G:117:ARG:HG2	1.99	0.45
7:G:102:LYS:HZ2	7:G:102:LYS:HB3	1.82	0.45
9:I:90:LEU:HD21	9:I:114:LEU:HD22	1.99	0.45
12:L:89:ARG:HD3	19:T:77:HIS:CG	2.51	0.45
14:N:41:ILE:CD1	14:N:102:GLY:HA3	2.35	0.45
14:N:122:ARG:NH1	14:N:122:ARG:HB2	2.32	0.45
18:S:21:THR:HB	18:S:25:TYR:O	2.16	0.45
19:T:187:VAL:HB	19:T:211:ARG:HH21	1.82	0.45
20:U:22:PHE:CZ	29:d:128:PHE:HB2	2.52	0.45
20:U:808:PRO:HD3	20:U:876:GLN:N	2.32	0.45
21:V:480:ILE:CG1	25:Z:261:TYR:HA	2.47	0.45
22:W:275:ILE:HG23	22:W:309:PHE:CD2	2.51	0.45
23:X:82:LYS:HA	23:X:82:LYS:HE3	1.99	0.45
25:Z:88:ARG:O	25:Z:88:ARG:HG3	2.16	0.45
25:Z:174:HIS:ND1	28:c:155:VAL:HB	2.32	0.45
26:a:101:ARG:NH1	26:a:115:LYS:HE3	2.31	0.45
26:a:343:LEU:HD23	26:a:343:LEU:O	2.17	0.45
29:d:223:ASN:HD21	29:d:225:TYR:HD2	1.65	0.45
31:f:123:ALA:HB1	31:f:142:TYR:O	2.16	0.45
31:f:185:LEU:O	31:f:189:LYS:HD3	2.17	0.45
31:f:221:ILE:HD12	31:f:255:VAL:CG1	2.47	0.45
31:f:486:GLY:HA2	31:f:524:MET:HE2	1.99	0.45
31:f:590:PHE:CD2	31:f:648:ALA:HB1	2.51	0.45
31:f:662:MET:HA	31:f:697:ILE:HD11	1.99	0.45
31:f:778:LEU:O	31:f:778:LEU:HG	2.17	0.45
33:h:180:ASP:OD2	33:h:183:SER:HB3	2.17	0.45
34:u:191:PRO:HD3	34:u:260:ILE:HD13	1.98	0.45
34:u:216:GLN:CD	34:u:234:ARG:H	2.24	0.45
34:u:247:PHE:C	34:u:247:PHE:CD1	2.95	0.45
1:A:212:VAL:HA	1:A:339:ARG:O	2.17	0.45
1:A:323:ARG:HG2	1:A:326:THR:HG23	1.97	0.45
2:B:197:ILE:CG2	2:B:239:VAL:HG21	2.47	0.45
4:D:149:SER:O	4:D:153:MET:HB2	2.17	0.45
4:D:414:HIS:O	4:D:415:GLU:HB2	2.17	0.45
5:E:118:LEU:O	5:E:122:MET:HE1	2.17	0.45
5:E:344:ARG:HB3	5:E:344:ARG:NH1	2.32	0.45
6:F:314:LEU:CD2	6:F:347:ARG:HD3	2.47	0.45
8:H:144:PRO:O	8:H:145:TYR:HD1	2.00	0.45
10:J:184:ASP:OD1	10:J:184:ASP:N	2.48	0.45
11:K:137:PHE:O	11:K:158:PRO:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:R:5:ILE:HA	17:R:130:ALA:O	2.17	0.45
19:T:54:CYS:HB2	19:T:106:VAL:HG11	1.97	0.45
20:U:187:LEU:O	20:U:187:LEU:HD13	2.17	0.45
20:U:517:GLY:HA3	20:U:551:GLY:HA2	1.99	0.45
20:U:720:LYS:HE2	20:U:720:LYS:O	2.17	0.45
21:V:58:ALA:HB3	21:V:61:GLU:OE1	2.17	0.45
21:V:218:TYR:HA	21:V:221:LEU:HB2	1.98	0.45
21:V:261:TYR:O	21:V:263:LEU:HD22	2.17	0.45
21:V:419:LEU:O	21:V:422:ILE:HG23	2.17	0.45
22:W:55:ARG:HH21	22:W:93:ARG:HE	1.65	0.45
22:W:231:ILE:HD13	22:W:243:ILE:HG23	1.95	0.45
23:X:407:MET:HE2	25:Z:269:VAL:CG2	2.45	0.45
24:Y:19:ILE:HD11	24:Y:44:ALA:CB	2.46	0.45
24:Y:19:ILE:HD11	24:Y:44:ALA:HB1	1.99	0.45
26:a:28:LEU:CB	26:a:37:LEU:HB2	2.41	0.45
27:b:7:MET:HE1	27:b:52:ILE:HD11	1.99	0.45
27:b:26:LEU:HD11	27:b:78:VAL:CG1	2.46	0.45
27:b:141:ILE:HG21	27:b:183:LEU:HD21	1.99	0.45
29:d:129:LEU:HD12	29:d:130:PRO:HG2	1.98	0.45
29:d:153:GLN:O	29:d:156:ILE:HG13	2.17	0.45
29:d:156:ILE:CD1	29:d:157:LEU:HD13	2.47	0.45
31:f:110:TYR:O	31:f:119:LYS:HG3	2.17	0.45
31:f:297:MET:HE3	31:f:297:MET:C	2.42	0.45
31:f:547:GLU:O	31:f:551:LYS:HG3	2.17	0.45
31:f:720:GLU:HA	31:f:723:TYR:CD1	2.51	0.45
31:f:779:CYS:HG	31:f:876:HIS:HD1	1.62	0.45
33:h:57:TYR:O	33:h:61:GLN:N	2.36	0.45
1:A:102:ILE:HB	1:A:110:LYS:O	2.17	0.44
2:B:224:LEU:HD22	2:B:353:PHE:CE1	2.52	0.44
2:B:390:LEU:HG	2:B:395:ILE:HG13	1.98	0.44
4:D:412:GLN:C	4:D:414:HIS:H	2.25	0.44
5:E:227:PRO:HG3	5:E:271:HIS:CD2	2.52	0.44
5:E:268:ASP:OD1	5:E:268:ASP:N	2.49	0.44
6:F:206:MET:HE1	6:F:280:PRO:C	2.41	0.44
6:F:357:PRO:HD2	6:F:392:ASN:HA	1.99	0.44
7:G:90:GLN:HG3	7:G:134:LEU:HD12	1.99	0.44
9:I:159:TRP:CG	9:I:162:THR:HG21	2.52	0.44
11:K:108:THR:HG23	11:K:147:ASP:OD2	2.17	0.44
11:K:195:ILE:HD12	11:K:217:LEU:CD2	2.44	0.44
12:L:42:THR:OG1	12:L:43:HIS:ND1	2.46	0.44
13:M:35:THR:HA	13:M:166:GLY:HA3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:168:ALA:HB1	13:M:171:ALA:HB3	1.97	0.44
14:N:51:ASP:OD1	14:N:51:ASP:N	2.50	0.44
16:Q:33:GLN:HG3	16:Q:33:GLN:O	2.17	0.44
16:Q:102:PRO:O	17:R:93:ARG:NH1	2.31	0.44
16:Q:125:ASP:OD1	16:Q:125:ASP:N	2.50	0.44
20:U:37:GLU:OE1	20:U:37:GLU:N	2.50	0.44
20:U:513:GLY:CA	20:U:548:LEU:HD12	2.48	0.44
21:V:215:ALA:CB	21:V:253:LEU:HD22	2.47	0.44
21:V:417:ILE:HD12	21:V:418:SER:N	2.32	0.44
22:W:115:ILE:HD13	22:W:124:LEU:HD23	1.99	0.44
22:W:217:GLU:HG2	22:W:218:ASN:N	2.32	0.44
22:W:453:HIS:CD2	25:Z:221:PRO:HG3	2.52	0.44
23:X:57:LEU:HD11	23:X:65:GLU:CB	2.37	0.44
23:X:153:LEU:CD2	23:X:169:VAL:HG11	2.46	0.44
24:Y:97:GLU:HA	24:Y:100:ILE:CD1	2.48	0.44
24:Y:128:TYR:CE2	24:Y:163:LYS:HD2	2.53	0.44
25:Z:83:LYS:HE3	25:Z:83:LYS:HB3	1.60	0.44
25:Z:280:ILE:HG13	25:Z:281:ALA:N	2.32	0.44
26:a:47:ASP:CG	26:a:48:PRO:HD2	2.41	0.44
26:a:180:LEU:HD21	26:a:221:VAL:CB	2.46	0.44
26:a:274:LEU:HD23	26:a:274:LEU:HA	1.82	0.44
28:c:222:LYS:O	28:c:223:LYS:HB2	2.16	0.44
31:f:192:VAL:N	31:f:193:PRO:HD2	2.32	0.44
33:h:44:ARG:HB2	33:h:197:VAL:HG11	1.99	0.44
33:h:177:TYR:CE2	33:h:185:ASN:HB2	2.51	0.44
33:h:187:PHE:CZ	33:h:203:LEU:HD23	2.52	0.44
2:B:342:ILE:O	2:B:350:LYS:HE3	2.16	0.44
2:B:401:GLU:CB	2:B:422:SER:HB2	2.48	0.44
3:C:277:LEU:CD1	3:C:305:LEU:HD12	2.48	0.44
3:C:368:MET:HE3	3:C:368:MET:CA	2.45	0.44
5:E:162:VAL:HG23	5:E:164:ILE:H	1.82	0.44
5:E:256:THR:O	5:E:260:LEU:N	2.49	0.44
5:E:344:ARG:HB3	5:E:344:ARG:HH11	1.81	0.44
6:F:439:ALA:H	12:L:78:THR:HG23	1.83	0.44
7:G:84:THR:OG1	13:M:156:VAL:CG2	2.65	0.44
7:G:171:LYS:HB3	7:G:205:VAL:CG1	2.47	0.44
8:H:94:ALA:CB	8:H:105:ILE:HG21	2.47	0.44
8:H:110:LEU:HD23	8:H:114:VAL:HG23	1.98	0.44
9:I:8:ARG:NH1	9:I:11:ILE:HG12	2.32	0.44
11:K:12:VAL:CG1	11:K:23:GLN:HB3	2.47	0.44
12:L:40:SER:O	12:L:142:PRO:HG3	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:188:VAL:HG11	12:L:232:PHE:CD2	2.52	0.44
13:M:49:VAL:HG13	13:M:66:LEU:HD21	1.97	0.44
13:M:230:ASP:OD1	13:M:231:ILE:HG23	2.16	0.44
14:N:14:LEU:HD21	14:N:42:PHE:HB2	1.99	0.44
14:N:119:MET:HE1	33:h:57:TYR:CD2	2.53	0.44
15:P:154:LEU:HD12	15:P:154:LEU:C	2.43	0.44
15:P:184:ASP:CG	15:P:186:LEU:HD11	2.43	0.44
16:Q:82:ILE:HD11	16:Q:87:LEU:HA	1.98	0.44
19:T:2:PHE:CZ	33:h:105:PRO:HG2	2.52	0.44
20:U:88:PHE:CG	20:U:89:ASN:N	2.85	0.44
20:U:227:GLN:OE1	20:U:227:GLN:HA	2.18	0.44
20:U:410:VAL:CG2	20:U:448:LEU:HD22	2.47	0.44
21:V:171:VAL:HG13	21:V:187:ILE:HD11	1.98	0.44
22:W:87:ILE:CA	22:W:104:MET:HE1	2.37	0.44
23:X:130:GLU:HB2	23:X:153:LEU:HD12	1.99	0.44
25:Z:101:LEU:HD11	25:Z:138:TYR:CD2	2.52	0.44
25:Z:121:LEU:O	25:Z:138:TYR:N	2.45	0.44
26:a:123:LEU:HD13	26:a:131:THR:HG21	1.99	0.44
26:a:157:ASP:O	26:a:161:LYS:HG2	2.17	0.44
28:c:29:GLU:CD	28:c:161:ARG:HH22	2.25	0.44
28:c:249:LEU:HD11	28:c:253:LYS:NZ	2.32	0.44
31:f:80:ARG:HA	31:f:80:ARG:HH11	1.82	0.44
31:f:332:ALA:HA	31:f:335:ARG:HH21	1.82	0.44
31:f:350:LYS:HE2	31:f:353:LEU:HB2	1.99	0.44
31:f:493:ASN:ND2	31:f:526:ALA:HA	2.32	0.44
33:h:154:LEU:CD1	33:h:158:PRO:HA	2.47	0.44
33:h:187:PHE:CE1	33:h:203:LEU:HD23	2.52	0.44
1:A:358:HIS:CE1	1:A:386:ARG:HB2	2.52	0.44
3:C:47:ALA:CB	21:V:496:PHE:CE2	3.00	0.44
4:D:258:ALA:HA	4:D:259:PRO:C	2.42	0.44
4:D:339:ARG:CD	23:X:231:TYR:HE1	2.31	0.44
5:E:158:LEU:HD12	5:E:159:PHE:H	1.79	0.44
5:E:221:TYR:C	5:E:223:ARG:N	2.75	0.44
5:E:353:PHE:HB3	5:E:366:ASP:OD1	2.18	0.44
9:I:45:LEU:HB2	9:I:65:ILE:HD11	2.00	0.44
9:I:68:LEU:HD11	9:I:74:CYS:SG	2.57	0.44
9:I:159:TRP:HB3	9:I:162:THR:CG2	2.48	0.44
10:J:17:PHE:HA	10:J:20:GLU:OE1	2.18	0.44
11:K:146:VAL:HG11	11:K:222:PRO:HB3	1.99	0.44
12:L:81:ALA:HA	12:L:130:VAL:HG21	1.99	0.44
12:L:104:PRO:HG2	12:L:107:ARG:HG3	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:147:MET:HB2	14:N:152:CYS:SG	2.58	0.44
16:Q:138:VAL:HB	16:Q:146:MET:HG3	1.98	0.44
17:R:91:CYS:HA	17:R:94:SER:OG	2.17	0.44
18:S:157:ARG:O	18:S:160:ILE:HG22	2.18	0.44
20:U:10:SER:HB2	29:d:166:ARG:CA	2.47	0.44
20:U:10:SER:CB	29:d:166:ARG:HA	2.47	0.44
20:U:22:PHE:HE2	29:d:128:PHE:CD2	2.35	0.44
20:U:34:PHE:O	20:U:38:ILE:HB	2.17	0.44
20:U:192:GLN:HG2	20:U:193:PHE:N	2.33	0.44
20:U:524:LYS:CE	20:U:556:MET:HE1	2.47	0.44
20:U:801:GLN:HB3	20:U:877:LEU:CD2	2.38	0.44
21:V:166:TYR:CZ	21:V:170:LEU:HD11	2.52	0.44
22:W:263:TRP:CD2	22:W:295:LYS:HE2	2.53	0.44
22:W:272:LEU:HD11	22:W:328:LEU:HD22	1.99	0.44
23:X:68:GLY:HA2	23:X:71:LYS:CG	2.48	0.44
23:X:70:LEU:O	23:X:74:ARG:HD2	2.17	0.44
23:X:71:LYS:HA	23:X:74:ARG:HH11	1.82	0.44
23:X:96:PHE:O	23:X:99:MET:HG2	2.16	0.44
23:X:375:HIS:O	23:X:387:ILE:HG23	2.17	0.44
24:Y:327:VAL:O	24:Y:330:ILE:HG22	2.17	0.44
25:Z:225:GLN:O	25:Z:226:ILE:HB	2.17	0.44
26:a:258:GLN:N	26:a:259:PRO:HD2	2.32	0.44
27:b:11:ASP:OD2	27:b:16:MET:HE3	2.16	0.44
27:b:108:ARG:HH22	27:b:167:GLY:HA2	1.81	0.44
29:d:324:LYS:HB3	29:d:327:ASP:OD2	2.18	0.44
31:f:276:GLU:HG2	31:f:277:LEU:HD22	2.00	0.44
31:f:351:THR:O	31:f:354:GLU:HG3	2.17	0.44
31:f:459:CYS:O	32:g:152:LYS:NZ	2.49	0.44
31:f:557:TRP:HD1	31:f:560:LEU:HD13	1.82	0.44
33:h:8:GLY:HA2	33:h:41:ARG:NH2	2.33	0.44
33:h:49:THR:HG1	33:h:85:PRO:HG3	1.81	0.44
1:A:92:PRO:HB2	1:A:144:ARG:HH11	1.82	0.44
2:B:105:THR:OG1	2:B:106:PRO:HA	2.18	0.44
3:C:196:LYS:N	38:C:501:ADP:O1B	2.51	0.44
3:C:248:MET:HE2	3:C:248:MET:HB3	1.88	0.44
3:C:275:GLU:OE1	3:C:275:GLU:HA	2.16	0.44
4:D:202:VAL:HG23	4:D:308:ILE:HG23	1.99	0.44
6:F:226:TYR:HB2	6:F:335:VAL:CG1	2.47	0.44
7:G:84:THR:CB	13:M:156:VAL:HG23	2.47	0.44
8:H:76:TYR:C	8:H:76:TYR:CD1	2.94	0.44
13:M:96:SER:HB2	33:h:69:GLN:HE21	1.79	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:11:GLY:HA2	15:P:108:PRO:CG	2.48	0.44
15:P:146:MET:HG3	15:P:150:GLU:CG	2.47	0.44
19:T:15:ILE:HD13	19:T:15:ILE:N	2.30	0.44
19:T:52:ILE:HD12	19:T:52:ILE:HA	1.85	0.44
20:U:218:GLN:N	20:U:218:GLN:NE2	2.65	0.44
20:U:458:ILE:CD1	20:U:484:ALA:HB3	2.47	0.44
20:U:462:LEU:CD1	20:U:496:LEU:HD13	2.47	0.44
21:V:150:ARG:CZ	21:V:159:LEU:HD23	2.48	0.44
21:V:192:MET:HA	21:V:195:ILE:CG1	2.47	0.44
21:V:235:LEU:HD12	21:V:235:LEU:O	2.17	0.44
22:W:41:GLN:O	22:W:44:ILE:HB	2.18	0.44
22:W:79:GLU:CB	22:W:82:LEU:HB3	2.43	0.44
22:W:162:ALA:HA	22:W:165:ILE:CG2	2.47	0.44
22:W:373:ILE:HA	26:a:326:GLU:HB3	2.00	0.44
23:X:68:GLY:O	23:X:71:LYS:HG3	2.17	0.44
23:X:71:LYS:O	23:X:74:ARG:HB2	2.18	0.44
23:X:133:LEU:HD11	23:X:137:TYR:CZ	2.53	0.44
23:X:229:TYR:HD1	23:X:254:MET:HG2	1.78	0.44
24:Y:137:ARG:NH1	24:Y:167:LEU:HD21	2.32	0.44
25:Z:176:LEU:HD11	28:c:217:LEU:HB3	1.99	0.44
26:a:291:LEU:HB3	26:a:295:GLU:OE2	2.17	0.44
27:b:10:VAL:HG11	27:b:75:LEU:HD21	1.99	0.44
27:b:11:ASP:OD1	27:b:12:ASN:N	2.50	0.44
28:c:30:GLN:HG2	28:c:204:THR:OG1	2.17	0.44
29:d:98:LEU:HD12	29:d:98:LEU:O	2.17	0.44
29:d:123:LEU:HD11	29:d:147:ILE:HG21	1.99	0.44
29:d:156:ILE:HG22	29:d:259:PHE:CE2	2.52	0.44
29:d:166:ARG:O	29:d:170:GLN:HG3	2.18	0.44
31:f:416:MET:HG2	31:f:450:ILE:CD1	2.48	0.44
31:f:463:LEU:CD1	32:g:133:LYS:HA	2.48	0.44
31:f:722:SER:O	31:f:726:ILE:HG12	2.18	0.44
34:u:165:LEU:HD12	34:u:166:LEU:N	2.32	0.44
1:A:73:ALA:HB1	1:A:77:LEU:HD23	1.99	0.44
2:B:67:ARG:NH2	31:f:239:TYR:HA	2.32	0.44
2:B:75:GLU:OE2	31:f:673:ARG:HB2	2.18	0.44
2:B:83:GLU:HG2	2:B:84:GLN:N	2.33	0.44
2:B:151:LEU:N	2:B:161:GLY:O	2.37	0.44
2:B:201:VAL:HB	2:B:281:ILE:HD13	2.00	0.44
2:B:220:LYS:HZ3	2:B:322:ARG:NH2	2.10	0.44
3:C:196:LYS:NZ	38:C:501:ADP:O3B	2.49	0.44
3:C:245:ILE:HA	3:C:290:LYS:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:172:LEU:N	5:E:172:LEU:HD12	2.32	0.44
5:E:213:ARG:HD3	5:E:213:ARG:HA	1.77	0.44
5:E:235:ILE:CD1	5:E:235:ILE:C	2.91	0.44
7:G:50:ILE:HD12	7:G:79:VAL:HG11	1.98	0.44
8:H:95:GLN:HA	8:H:95:GLN:OE1	2.17	0.44
9:I:45:LEU:HD12	9:I:45:LEU:N	2.31	0.44
9:I:71:ASP:CB	9:I:223:THR:HG21	2.47	0.44
12:L:158:ALA:HB1	12:L:172:LEU:HG	1.99	0.44
13:M:141:SER:O	13:M:145:GLY:N	2.51	0.44
15:P:40:ASN:ND2	15:P:103:VAL:O	2.42	0.44
15:P:50:ALA:HB2	16:Q:129:CYS:CB	2.47	0.44
15:P:58:LEU:HD13	15:P:86:MET:HE1	1.98	0.44
15:P:66:HIS:O	15:P:66:HIS:HD2	2.00	0.44
15:P:205:GLU:O	15:P:208:THR:HG23	2.17	0.44
16:Q:25:ASP:OD1	16:Q:25:ASP:C	2.61	0.44
17:R:38:MET:HE1	17:R:61:GLN:HB2	1.99	0.44
17:R:42:ILE:HD11	17:R:104:LEU:HD22	1.97	0.44
17:R:152:SER:H	17:R:155:ARG:HD3	1.82	0.44
18:S:50:ALA:HB2	19:T:129:SER:H	1.82	0.44
19:T:2:PHE:HE2	33:h:105:PRO:HG2	1.75	0.44
19:T:150:ASP:C	19:T:156:LYS:HB2	2.42	0.44
20:U:521:LEU:HD12	20:U:554:LEU:O	2.17	0.44
20:U:524:LYS:HA	20:U:556:MET:HE1	1.99	0.44
20:U:796:LYS:HE3	20:U:924:LEU:CD2	2.47	0.44
20:U:801:GLN:HB2	20:U:877:LEU:HD21	1.95	0.44
21:V:331:LEU:HD22	21:V:331:LEU:HA	1.82	0.44
23:X:190:LEU:CD2	23:X:214:SER:HA	2.47	0.44
23:X:406:ASN:OD1	28:c:253:LYS:HG2	2.18	0.44
26:a:57:ILE:C	26:a:59:LEU:H	2.26	0.44
27:b:180:ALA:O	27:b:184:ILE:HG23	2.18	0.44
28:c:108:VAL:CG1	34:u:275:MET:HE3	2.35	0.44
28:c:270:LEU:CD1	28:c:273:LYS:HD2	2.48	0.44
29:d:175:TYR:CE2	29:d:188:MET:HG2	2.53	0.44
29:d:330:ILE:H	29:d:330:ILE:HG13	1.64	0.44
31:f:52:LEU:HD12	31:f:98:PHE:HD2	1.83	0.44
31:f:107:LYS:HE2	31:f:107:LYS:HA	1.99	0.44
31:f:115:PRO:O	31:f:119:LYS:HE2	2.17	0.44
31:f:416:MET:CG	31:f:450:ILE:HD13	2.48	0.44
31:f:521:ALA:O	31:f:524:MET:HE3	2.17	0.44
31:f:723:TYR:CE2	31:f:757:ASN:HB2	2.52	0.44
32:g:103:THR:HB	32:g:115:LYS:CE	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:g:110:ARG:HD2	32:g:113:ARG:HD2	1.98	0.44
32:g:170:GLN:O	32:g:173:GLU:HG3	2.17	0.44
1:A:260:LEU:HD12	1:A:260:LEU:O	2.17	0.44
1:A:426:THR:CG2	1:A:430:MET:HE2	2.47	0.44
4:D:80:LYS:NZ	4:D:80:LYS:HB3	2.32	0.44
7:G:179:LEU:HB2	8:H:56:LEU:HD21	2.00	0.44
8:H:13:PHE:HB2	9:I:20:GLN:OE1	2.18	0.44
9:I:137:ILE:C	9:I:137:ILE:HD12	2.43	0.44
10:J:20:GLU:HA	10:J:23:GLN:HG3	1.98	0.44
10:J:68:ASN:ND2	10:J:137:ASP:HA	2.31	0.44
11:K:39:GLY:HA2	11:K:47:CYS:O	2.18	0.44
12:L:104:PRO:HG2	12:L:107:ARG:CB	2.44	0.44
13:M:140:TYR:HD2	13:M:146:ALA:HB2	1.80	0.44
15:P:98:LEU:O	15:P:113:ILE:HG13	2.16	0.44
20:U:173:VAL:HG23	20:U:175:GLY:N	2.31	0.44
20:U:185:MET:HE3	20:U:186:SER:HB3	1.97	0.44
20:U:509:GLY:CA	20:U:544:ILE:HG12	2.46	0.44
20:U:693:LEU:HD21	20:U:779:LEU:HD21	2.00	0.44
20:U:791:LEU:C	20:U:914:LEU:HD12	2.43	0.44
21:V:260:HIS:C	21:V:260:HIS:CD2	2.95	0.44
24:Y:308:LEU:HD23	24:Y:314:LEU:CD2	2.44	0.44
25:Z:11:VAL:HG21	25:Z:122:VAL:HG11	1.98	0.44
25:Z:149:THR:CG2	25:Z:150:PRO:HD2	2.48	0.44
25:Z:235:ASN:ND2	25:Z:235:ASN:O	2.50	0.44
27:b:63:THR:CG2	27:b:64:LEU:N	2.79	0.44
28:c:159:ALA:HB2	28:c:205:ILE:CD1	2.40	0.44
28:c:270:LEU:HA	28:c:270:LEU:HD12	1.84	0.44
29:d:199:LEU:CD1	29:d:204:ARG:HB2	2.47	0.44
29:d:284:PHE:HA	29:d:316:TYR:HE1	1.83	0.44
29:d:311:GLY:HA3	29:d:315:TYR:O	2.17	0.44
30:e:21:GLU:OE1	30:e:21:GLU:N	2.46	0.44
31:f:173:LEU:HG	31:f:181:ARG:NH2	2.32	0.44
31:f:230:CYS:HB2	31:f:256:PHE:CE2	2.52	0.44
31:f:279:GLU:O	31:f:283:THR:HG23	2.17	0.44
31:f:350:LYS:HE3	31:f:353:LEU:N	2.33	0.44
31:f:592:ASN:OD1	31:f:593:THR:CG2	2.64	0.44
31:f:683:GLU:N	31:f:686:LEU:HD12	2.31	0.44
33:h:74:GLU:CG	33:h:82:SER:HA	2.47	0.44
34:u:177:LEU:HB2	34:u:238:PHE:HB2	1.98	0.44
1:A:62:LEU:HD23	1:A:62:LEU:C	2.43	0.44
1:A:279:ALA:HA	2:B:310:LEU:HD12	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:398:ARG:NH2	2:B:199:GLU:OE1	2.51	0.44
1:A:400:ARG:HG2	31:f:868:HIS:CE1	2.53	0.44
3:C:126:ILE:O	3:C:127:LEU:HB2	2.18	0.44
3:C:144:PRO:O	3:C:205:HIS:CD2	2.71	0.44
3:C:247:PHE:HA	3:C:292:ILE:O	2.17	0.44
4:D:204:MET:HE3	4:D:308:ILE:HG21	1.98	0.44
5:E:221:TYR:HA	5:E:224:ASP:OD2	2.18	0.44
5:E:323:HIS:HD2	5:E:324:GLY:H	1.66	0.44
6:F:220:PRO:HB3	6:F:350:ARG:HG2	2.00	0.44
7:G:80:MET:CE	7:G:138:MET:HA	2.46	0.44
8:H:99:LEU:HD21	15:P:61:SER:OG	2.17	0.44
9:I:125:GLY:HA3	10:J:123:GLY:HA2	1.99	0.44
11:K:31:ILE:HD12	11:K:140:ALA:HB2	2.00	0.44
11:K:84:ASP:CB	11:K:137:PHE:HD1	2.29	0.44
15:P:80:ASN:O	15:P:84:LYS:N	2.33	0.44
15:P:80:ASN:HD22	15:P:111:TYR:HD2	1.66	0.44
15:P:114:TYR:HD2	15:P:118:SER:HB3	1.83	0.44
16:Q:14:MET:HB2	16:Q:167:ILE:HD13	1.99	0.44
16:Q:22:ILE:HG22	16:Q:188:HIS:CB	2.39	0.44
16:Q:71:LEU:N	16:Q:90:MET:HE1	2.32	0.44
16:Q:123:SER:O	16:Q:131:MET:HB3	2.18	0.44
17:R:161:ARG:O	17:R:165:GLU:N	2.38	0.44
18:S:19:ARG:HB2	18:S:171:GLY:O	2.18	0.44
18:S:136:TYR:O	18:S:139:MET:SD	2.75	0.44
18:S:181:GLU:OE1	18:S:181:GLU:N	2.42	0.44
20:U:59:PHE:CD1	20:U:87:LEU:HD11	2.53	0.44
20:U:788:VAL:HG22	20:U:884:VAL:HG11	2.00	0.44
21:V:72:LEU:HA	21:V:75:ILE:HG12	2.00	0.44
21:V:404:LYS:NZ	21:V:444:ASP:OD2	2.49	0.44
22:W:67:LEU:HD12	22:W:104:MET:SD	2.57	0.44
22:W:68:VAL:HA	22:W:71:VAL:CG2	2.48	0.44
22:W:261:GLU:OE1	22:W:262:LYS:N	2.51	0.44
23:X:57:LEU:HA	23:X:60:THR:OG1	2.17	0.44
23:X:339:ILE:HD12	23:X:374:PHE:CD2	2.52	0.44
23:X:414:LEU:HD21	25:Z:273:HIS:CD2	2.53	0.44
26:a:194:GLN:CB	26:a:225:LEU:HD12	2.34	0.44
26:a:226:ARG:HH12	26:a:230:ARG:NE	2.15	0.44
26:a:361:LYS:HD3	26:a:364:GLU:OE1	2.18	0.44
27:b:24:THR:HG22	27:b:25:ARG:N	2.33	0.44
27:b:128:ALA:HB2	27:b:156:PHE:CE1	2.53	0.44
28:c:24:ALA:CB	28:c:176:GLN:HG3	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:175:ARG:HD3	28:c:201:TYR:CE1	2.52	0.44
28:c:175:ARG:NH1	28:c:202:SER:O	2.51	0.44
28:c:278:GLN:N	28:c:282:ARG:HE	2.14	0.44
29:d:188:MET:SD	29:d:189:HIS:N	2.90	0.44
29:d:276:GLU:HG2	29:d:318:PHE:CD2	2.53	0.44
31:f:53:GLN:HE21	31:f:53:GLN:HB2	1.63	0.44
31:f:670:MET:CE	31:f:673:ARG:HD3	2.47	0.44
33:h:53:ALA:HB2	33:h:110:MET:SD	2.57	0.44
34:u:285:LYS:NZ	34:u:285:LYS:HB3	2.32	0.44
1:A:67:GLU:HA	3:C:80:MET:O	2.18	0.44
1:A:428:ARG:HG2	10:J:20:GLU:HG2	1.98	0.44
2:B:197:ILE:CD1	2:B:222:VAL:HG21	2.48	0.44
2:B:357:ASP:OD1	2:B:357:ASP:N	2.45	0.44
3:C:24:TYR:HB3	4:D:40:LEU:HD12	1.99	0.44
3:C:102:ASN:OD1	3:C:103:ILE:N	2.51	0.44
4:D:115:ILE:HG23	4:D:119:ILE:HD12	1.99	0.44
4:D:415:GLU:HA	8:H:53:LYS:HE2	1.99	0.44
5:E:312:ILE:O	5:E:316:HIS:HB2	2.17	0.44
5:E:352:MET:HE3	5:E:355:ILE:HG21	2.00	0.44
5:E:356:ARG:O	5:E:357:ALA:CB	2.66	0.44
8:H:110:LEU:HD23	8:H:110:LEU:C	2.42	0.44
8:H:120:GLU:HA	8:H:123:GLN:OE1	2.17	0.44
11:K:32:LYS:HE2	11:K:32:LYS:HB2	1.84	0.44
12:L:205:LEU:O	12:L:233:LEU:HD11	2.18	0.44
13:M:76:ALA:HB3	13:M:136:MET:CG	2.48	0.44
14:N:119:MET:SD	33:h:57:TYR:HD2	2.40	0.44
15:P:38:SER:OG	15:P:39:PRO:HD2	2.18	0.44
16:Q:116:THR:CG2	16:Q:118:LYS:HB2	2.47	0.44
16:Q:168:SER:OG	16:Q:200:LEU:HD22	2.18	0.44
18:S:151:GLN:HA	18:S:154:ASP:OD2	2.17	0.44
19:T:46:LEU:HD13	19:T:68:ILE:CG2	2.48	0.44
19:T:72:LEU:HD11	19:T:83:MET:HG2	2.00	0.44
19:T:166:LEU:HD11	19:T:171:ALA:HA	1.99	0.44
20:U:559:ARG:HE	20:U:562:GLU:CD	2.23	0.44
20:U:692:ALA:HB2	20:U:733:ALA:CB	2.47	0.44
21:V:160:LEU:HD23	21:V:162:GLU:H	1.83	0.44
21:V:216:ARG:HH12	21:V:220:PHE:HD2	1.65	0.44
22:W:33:LYS:O	22:W:36:LYS:HG3	2.18	0.44
22:W:88:MET:HA	22:W:88:MET:CE	2.47	0.44
22:W:314:LEU:HD13	22:W:381:LEU:HD13	1.98	0.44
23:X:229:TYR:CE1	23:X:254:MET:HG2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:101:LEU:HD11	25:Z:138:TYR:CE2	2.53	0.44
25:Z:223:ASN:CB	25:Z:225:GLN:O	2.66	0.44
26:a:375:LEU:O	26:a:376:THR:OG1	2.27	0.44
31:f:141:LYS:O	31:f:145:VAL:HG22	2.18	0.44
31:f:170:TRP:CB	31:f:211:ILE:HG22	2.48	0.44
31:f:216:MET:HE3	31:f:219:LYS:HZ2	1.82	0.44
31:f:426:LEU:HD21	32:g:156:LEU:HD12	1.99	0.44
31:f:490:ALA:HB1	31:f:791:VAL:CG2	2.47	0.44
31:f:564:LEU:CD2	31:f:797:LEU:HD13	2.48	0.44
31:f:683:GLU:HB3	31:f:684:PRO:CD	2.47	0.44
32:g:140:LYS:HE3	32:g:144:GLU:CG	2.41	0.44
33:h:88:ILE:HD12	33:h:88:ILE:H	1.83	0.44
1:A:306:LEU:HD23	1:A:312:ARG:NE	2.32	0.44
2:B:239:VAL:O	2:B:243:THR:HB	2.17	0.44
4:D:125:LYS:N	4:D:125:LYS:HD3	2.32	0.44
4:D:170:MET:O	4:D:174:LYS:HB2	2.18	0.44
4:D:270:ILE:HG13	4:D:270:ILE:O	2.18	0.44
4:D:344:ILE:HG22	4:D:375:ILE:HG21	2.00	0.44
4:D:387:VAL:HG11	5:E:159:PHE:CE1	2.53	0.44
5:E:91:LYS:HG3	5:E:110:TYR:CE2	2.53	0.44
6:F:221:LYS:NZ	6:F:317:LEU:O	2.42	0.44
6:F:223:VAL:CG1	6:F:352:ILE:HD12	2.48	0.44
7:G:17:SER:OG	7:G:18:PRO:HD2	2.18	0.44
7:G:32:ILE:HD13	7:G:137:CYS:HB2	2.00	0.44
7:G:52:THR:HG23	7:G:216:GLU:CG	2.44	0.44
9:I:35:LEU:CD1	9:I:37:ILE:HD11	2.40	0.44
10:J:71:MET:CE	10:J:73:PHE:HB3	2.48	0.44
13:M:54:LEU:N	13:M:54:LEU:HD12	2.32	0.44
13:M:102:PHE:CE1	14:N:82:LEU:HD21	2.53	0.44
13:M:180:GLN:OE1	13:M:180:GLN:CA	2.65	0.44
13:M:193:VAL:HA	13:M:196:ILE:HG22	1.99	0.44
13:M:199:ILE:HD13	13:M:244:LYS:HB2	1.99	0.44
14:N:155:PHE:C	14:N:155:PHE:CD1	2.94	0.44
15:P:132:LEU:H	15:P:132:LEU:CD1	2.31	0.44
15:P:143:ARG:NH2	15:P:146:MET:HA	2.13	0.44
16:Q:30:ILE:HD12	16:Q:30:ILE:HA	1.78	0.44
16:Q:39:PHE:CZ	16:Q:57:ALA:HB1	2.53	0.44
16:Q:43:PHE:HE2	16:Q:53:LEU:HD23	1.83	0.44
19:T:124:PHE:CD1	19:T:130:TYR:HB2	2.53	0.44
20:U:155:LEU:HD23	20:U:155:LEU:HA	1.87	0.44
20:U:368:ALA:HB2	20:U:728:PHE:HD1	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:513:GLY:HA3	20:U:548:LEU:HD12	1.99	0.44
20:U:529:ILE:CD1	20:U:566:LEU:HD22	2.44	0.44
20:U:559:ARG:NE	20:U:562:GLU:OE2	2.40	0.44
21:V:235:LEU:HA	21:V:250:LEU:HD12	1.99	0.44
22:W:118:LEU:C	22:W:118:LEU:HD23	2.43	0.44
22:W:316:ARG:CB	22:W:319:THR:HG23	2.47	0.44
22:W:331:GLY:CA	22:W:337:ALA:HB2	2.48	0.44
23:X:417:LYS:O	23:X:418:ALA:HB3	2.17	0.44
24:Y:26:LEU:O	24:Y:32:ARG:HA	2.18	0.44
24:Y:102:ASP:OD1	24:Y:102:ASP:C	2.61	0.44
24:Y:105:MET:HE1	24:Y:140:ILE:HD11	1.98	0.44
24:Y:233:ARG:N	24:Y:234:PRO:HD2	2.33	0.44
24:Y:323:PHE:O	24:Y:325:VAL:HG13	2.18	0.44
25:Z:20:VAL:CG1	28:c:212:LEU:HG	2.48	0.44
26:a:109:GLU:HG3	26:a:151:VAL:CG1	2.48	0.44
26:a:235:ASP:HB3	26:a:249:GLN:OE1	2.18	0.44
28:c:57:MET:HG3	28:c:72:VAL:HG23	1.99	0.44
28:c:145:VAL:HG22	28:c:157:ILE:CD1	2.48	0.44
29:d:197:LEU:HD21	29:d:260:ILE:HG12	1.99	0.44
29:d:251:ILE:CG1	29:d:260:ILE:HG13	2.48	0.44
31:f:539:LEU:HG	31:f:543:MET:HE3	1.99	0.44
31:f:560:LEU:CD1	31:f:798:THR:HA	2.44	0.44
31:f:608:LYS:HB3	31:f:608:LYS:NZ	2.22	0.44
31:f:655:LEU:HD12	31:f:655:LEU:HA	1.76	0.44
31:f:877:GLY:HA2	31:f:879:ARG:HH12	1.83	0.44
31:f:882:LEU:HD12	31:f:889:PRO:HD3	1.99	0.44
33:h:12:LEU:CD1	33:h:172:CYS:HB3	2.48	0.44
1:A:25:LEU:HD23	1:A:30:ILE:HD12	1.99	0.43
1:A:166:VAL:HG21	1:A:237:PHE:HD1	1.83	0.43
2:B:329:MET:SD	2:B:347:ILE:HD11	2.58	0.43
3:C:135:VAL:HA	3:C:138:MET:HE3	2.00	0.43
3:C:187:LEU:CD2	3:C:298:ILE:HD13	2.48	0.43
3:C:258:ARG:HH11	3:C:273:MET:HE1	1.83	0.43
5:E:83:CYS:SG	5:E:84:ARG:N	2.91	0.43
5:E:188:ALA:HB1	5:E:192:ASP:HB3	2.00	0.43
5:E:190:GLN:HG2	5:E:191:LEU:HD23	2.00	0.43
6:F:196:GLN:O	6:F:199:VAL:HG12	2.18	0.43
8:H:148:GLN:CD	8:H:156:PHE:HE2	2.26	0.43
9:I:21:VAL:HG11	9:I:153:SER:HB2	1.99	0.43
10:J:144:LEU:HD22	10:J:156:TRP:HB2	1.99	0.43
13:M:169:ARG:HB3	13:M:169:ARG:CZ	2.47	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:54:MET:HG3	16:Q:96:TYR:CD1	2.53	0.43
16:Q:21:ALA:HB2	16:Q:163:LEU:HG	1.98	0.43
16:Q:28:PHE:N	16:Q:36:THR:O	2.38	0.43
16:Q:96:TYR:C	16:Q:98:LYS:H	2.25	0.43
19:T:92:LEU:HA	19:T:92:LEU:HD12	1.72	0.43
19:T:196:CYS:HA	19:T:204:ARG:O	2.18	0.43
20:U:62:LEU:O	20:U:62:LEU:HD22	2.17	0.43
20:U:76:GLU:N	20:U:76:GLU:CD	2.76	0.43
20:U:485:ALA:C	20:U:488:THR:HG23	2.43	0.43
20:U:590:TYR:HD2	20:U:595:ASN:HB3	1.83	0.43
20:U:845:GLU:O	20:U:849:LYS:HG2	2.17	0.43
21:V:102:PRO:O	21:V:105:SER:OG	2.31	0.43
21:V:114:TYR:CD2	21:V:138:PRO:HD2	2.53	0.43
21:V:159:LEU:HD23	21:V:159:LEU:HA	1.86	0.43
21:V:181:TYR:HB3	21:V:221:LEU:HD21	1.99	0.43
21:V:342:ILE:CD1	21:V:368:ARG:HB2	2.48	0.43
22:W:230:MET:HE1	22:W:233:LEU:HD23	1.99	0.43
24:Y:188:CYS:CA	24:Y:191:ILE:HG22	2.44	0.43
26:a:252:LYS:NZ	26:a:255:TRP:HE1	2.16	0.43
27:b:81:LYS:O	27:b:81:LYS:HG3	2.18	0.43
29:d:119:LEU:HD23	29:d:122:VAL:CG2	2.48	0.43
29:d:144:ALA:O	29:d:147:ILE:HG23	2.18	0.43
31:f:252:ALA:HB1	31:f:256:PHE:CE1	2.52	0.43
31:f:366:ASP:C	31:f:370:MET:SD	2.99	0.43
31:f:380:PHE:CD2	31:f:768:LEU:HD22	2.53	0.43
31:f:389:LYS:C	31:f:390:LEU:HD12	2.43	0.43
31:f:583:VAL:O	31:f:588:ARG:HB2	2.18	0.43
31:f:585:GLU:HB3	31:f:586:PRO:HA	1.98	0.43
31:f:702:PRO:HA	31:f:732:VAL:CG1	2.48	0.43
31:f:733:GLY:HA2	31:f:736:THR:HG21	2.00	0.43
31:f:786:GLN:OE1	31:f:786:GLN:C	2.61	0.43
33:h:167:ASP:HA	33:h:170:GLU:OE1	2.18	0.43
1:A:190:VAL:CG1	1:A:212:VAL:HG23	2.39	0.43
1:A:314:ASN:C	1:A:315:ILE:HD12	2.43	0.43
2:B:223:ILE:HG22	2:B:347:ILE:CG2	2.47	0.43
2:B:374:LEU:CD2	2:B:419:PHE:HE2	2.31	0.43
3:C:41:ASN:O	3:C:45:LEU:HD12	2.18	0.43
3:C:364:THR:O	3:C:368:MET:HG2	2.18	0.43
4:D:233:SER:HB3	5:E:256:THR:HG23	2.00	0.43
5:E:229:ILE:CG2	5:E:276:ILE:HD12	2.44	0.43
5:E:291:ARG:HH11	5:E:291:ARG:HG3	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:321:THR:O	5:E:361:PHE:HA	2.19	0.43
6:F:86:LEU:O	6:F:87:PRO:C	2.61	0.43
6:F:173:LYS:HE2	6:F:173:LYS:HB2	1.73	0.43
7:G:81:THR:HG21	7:G:168:ALA:O	2.18	0.43
7:G:112:ASP:O	7:G:116:LYS:HB3	2.17	0.43
8:H:36:VAL:HG11	8:H:194:THR:CG2	2.48	0.43
8:H:37:GLY:O	8:H:160:ALA:HA	2.18	0.43
9:I:35:LEU:C	9:I:35:LEU:HD12	2.43	0.43
9:I:115:CYS:SG	9:I:156:TYR:HB3	2.57	0.43
13:M:41:CYS:SG	13:M:189:ILE:HD13	2.58	0.43
16:Q:136:PHE:CD2	16:Q:138:VAL:HG13	2.53	0.43
16:Q:149:MET:SD	16:Q:173:ASN:HB3	2.58	0.43
16:Q:171:MET:HE3	16:Q:200:LEU:HD21	2.00	0.43
19:T:38:ARG:HG2	19:T:191:ASP:CB	2.48	0.43
19:T:153:VAL:HG22	19:T:174:LEU:CD2	2.48	0.43
19:T:153:VAL:CG2	19:T:174:LEU:HD21	2.47	0.43
20:U:520:MET:CE	20:U:525:ASN:HB2	2.45	0.43
20:U:592:GLY:HA2	20:U:627:PHE:CE1	2.53	0.43
20:U:727:LYS:O	20:U:728:PHE:C	2.61	0.43
21:V:92:ARG:NH1	21:V:495:ARG:HH11	2.16	0.43
21:V:99:ARG:HH22	30:e:17:ASP:N	2.16	0.43
21:V:101:LEU:N	21:V:102:PRO:HD2	2.34	0.43
21:V:176:MET:CE	21:V:217:VAL:CG1	2.94	0.43
22:W:112:VAL:HG13	22:W:113:GLU:N	2.34	0.43
22:W:354:LEU:HD13	22:W:354:LEU:O	2.18	0.43
22:W:432:LEU:CD1	28:c:305:ASP:HB3	2.49	0.43
23:X:74:ARG:HG3	23:X:116:TRP:CZ2	2.53	0.43
26:a:291:LEU:HG	26:a:333:MET:HG2	2.00	0.43
27:b:37:CYS:SG	27:b:68:THR:HB	2.58	0.43
27:b:140:ILE:HD13	27:b:140:ILE:HA	1.90	0.43
28:c:211:GLU:C	28:c:213:GLU:N	2.75	0.43
29:d:167:TYR:HD1	29:d:170:GLN:HE22	1.67	0.43
31:f:190:GLU:O	31:f:193:PRO:HG2	2.18	0.43
31:f:396:ASN:HB2	31:f:400:TYR:CZ	2.53	0.43
31:f:422:VAL:HG13	31:f:452:ASN:OD1	2.18	0.43
31:f:479:LEU:HD22	31:f:517:VAL:CG2	2.49	0.43
33:h:68:GLY:O	33:h:72:ILE:N	2.42	0.43
1:A:186:LYS:HB3	1:A:339:ARG:HD3	2.00	0.43
1:A:225:CYS:O	1:A:229:VAL:HG23	2.18	0.43
2:B:53:THR:OG1	2:B:64:LYS:NZ	2.51	0.43
2:B:54:PRO:HD3	2:B:64:LYS:HZ3	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:74:MET:HE2	31:f:610:GLN:N	2.33	0.43
2:B:174:MET:HE2	2:B:250:VAL:CG1	2.40	0.43
2:B:180:PRO:CG	2:B:237:LYS:HG2	2.48	0.43
3:C:404:LEU:HD21	8:H:22:ILE:CG2	2.47	0.43
4:D:410:ASP:O	4:D:413:GLU:HG2	2.18	0.43
5:E:40:TYR:CD1	5:E:40:TYR:C	2.96	0.43
5:E:199:VAL:O	5:E:200:SER:C	2.61	0.43
6:F:144:LYS:HZ2	6:F:144:LYS:HB3	1.82	0.43
7:G:143:ILE:HD13	7:G:149:PRO:HA	1.99	0.43
7:G:151:VAL:HG13	7:G:163:PHE:O	2.18	0.43
7:G:182:LYS:HD3	7:G:185:LYS:NZ	2.34	0.43
8:H:52:GLN:HG2	8:H:57:TYR:HB3	2.00	0.43
8:H:189:HIS:ND1	8:H:233:ILE:HG12	2.34	0.43
9:I:148:TYR:HD1	9:I:158:GLY:HA2	1.84	0.43
9:I:228:LEU:HB3	9:I:232:GLU:HG3	2.00	0.43
11:K:15:PHE:CE2	12:L:127:PRO:HD2	2.54	0.43
12:L:26:MET:CA	12:L:149:PRO:HG2	2.46	0.43
12:L:68:ASN:HB3	12:L:220:GLU:OE2	2.18	0.43
19:T:14:ALA:HB1	19:T:121:VAL:HG22	1.99	0.43
19:T:22:ILE:CD1	19:T:172:MET:HE1	2.43	0.43
19:T:35:ILE:HG22	33:h:151:ARG:HH21	1.83	0.43
20:U:538:GLU:HG2	20:U:538:GLU:O	2.19	0.43
20:U:646:PRO:HB2	20:U:682:TYR:CZ	2.53	0.43
20:U:841:LYS:HE3	20:U:842:LYS:HD3	1.99	0.43
21:V:105:SER:O	21:V:108:LEU:HD22	2.18	0.43
21:V:470:ARG:CZ	29:d:335:LEU:HD11	2.48	0.43
22:W:60:MET:HE3	22:W:60:MET:HB3	1.85	0.43
23:X:133:LEU:HG	23:X:149:LEU:CD2	2.49	0.43
23:X:155:ARG:O	23:X:159:LYS:HG3	2.18	0.43
23:X:183:LEU:HD21	23:X:220:ALA:HB1	2.00	0.43
23:X:245:PRO:O	23:X:248:ILE:HG22	2.18	0.43
23:X:342:PHE:HB3	23:X:345:VAL:HB	2.00	0.43
24:Y:96:GLY:O	24:Y:100:ILE:HG23	2.18	0.43
24:Y:186:LEU:HD23	24:Y:186:LEU:HA	1.89	0.43
26:a:198:PHE:HA	26:a:233:LEU:HD22	1.97	0.43
26:a:248:PHE:HD1	26:a:249:GLN:N	2.15	0.43
26:a:271:LYS:HZ3	26:a:271:LYS:HB2	1.83	0.43
27:b:26:LEU:HD21	27:b:80:PRO:HB3	1.99	0.43
27:b:52:ILE:HD13	27:b:92:VAL:HG12	1.98	0.43
27:b:57:ASP:OD1	27:b:57:ASP:N	2.45	0.43
28:c:163:ILE:HG12	28:c:201:TYR:CD2	2.41	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:180:ASN:O	28:c:184:LEU:HG	2.18	0.43
31:f:239:TYR:HE1	31:f:664:GLU:CB	2.31	0.43
31:f:379:GLY:O	31:f:380:PHE:C	2.61	0.43
31:f:589:SER:O	31:f:592:ASN:OD1	2.37	0.43
2:B:316:LEU:HA	2:B:322:ARG:HD3	2.00	0.43
4:D:100:THR:HG21	4:D:112:TYR:OH	2.18	0.43
5:E:70:ILE:HG12	5:E:80:VAL:HG22	1.99	0.43
5:E:355:ILE:HD12	5:E:355:ILE:HA	1.86	0.43
6:F:128:THR:O	6:F:128:THR:CG2	2.65	0.43
6:F:141:ASP:HB3	6:F:143:GLU:OE1	2.19	0.43
7:G:79:VAL:HG13	7:G:139:ILE:HB	2.00	0.43
10:J:176:TYR:CE1	10:J:181:ILE:HG21	2.53	0.43
11:K:155:HIS:HB3	11:K:165:CYS:SG	2.58	0.43
12:L:96:ARG:HE	12:L:96:ARG:HB2	1.50	0.43
12:L:132:LEU:O	12:L:146:GLN:HA	2.18	0.43
13:M:28:LYS:HB2	13:M:28:LYS:HE3	1.83	0.43
14:N:135:ILE:CD1	14:N:163:ALA:HB2	2.48	0.43
20:U:113:VAL:HG12	20:U:158:ARG:HH21	1.83	0.43
20:U:583:MET:HE2	20:U:614:VAL:CG2	2.36	0.43
21:V:121:PHE:CD2	21:V:159:LEU:HD12	2.53	0.43
21:V:175:MET:HA	21:V:178:SER:OG	2.17	0.43
21:V:241:ARG:NH1	21:V:241:ARG:CB	2.80	0.43
22:W:327:GLU:OE1	22:W:327:GLU:HA	2.19	0.43
23:X:66:LEU:HA	23:X:69:LEU:HD12	2.00	0.43
23:X:407:MET:HE1	23:X:410:VAL:CG1	2.47	0.43
24:Y:110:TYR:O	24:Y:113:ARG:HB2	2.19	0.43
25:Z:11:VAL:HG22	25:Z:50:VAL:CG2	2.45	0.43
26:a:189:PRO:O	26:a:190:VAL:CB	2.62	0.43
27:b:3:LEU:HD23	27:b:3:LEU:HA	1.76	0.43
27:b:101:GLN:OE1	27:b:101:GLN:HA	2.16	0.43
28:c:83:SER:HA	28:c:129:THR:HG21	2.01	0.43
29:d:293:PHE:CE1	29:d:298:LYS:HB3	2.52	0.43
30:e:60:LEU:HD23	30:e:60:LEU:HA	1.77	0.43
31:f:402:ASN:HB3	31:f:407:MET:N	2.33	0.43
31:f:473:ASN:C	31:f:509:LYS:HZ1	2.26	0.43
31:f:744:MET:O	31:f:748:LEU:HD23	2.18	0.43
31:f:902:LYS:HD2	31:f:902:LYS:HA	1.79	0.43
34:u:181:LYS:HE2	34:u:230:ILE:HD12	1.99	0.43
34:u:196:ILE:C	34:u:215:THR:HG22	2.43	0.43
1:A:32:LEU:O	1:A:36:TYR:N	2.45	0.43
1:A:65:ILE:H	1:A:66:LYS:HZ3	1.67	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:295:TYR:CE2	3:C:262:GLY:HA2	2.54	0.43
2:B:365:PHE:CD2	2:B:384:ILE:HG12	2.54	0.43
3:C:72:TYR:CE2	3:C:118:ASN:HA	2.53	0.43
3:C:76:VAL:HG22	3:C:87:VAL:HG12	2.00	0.43
3:C:151:ILE:HD11	3:C:202:ALA:HB2	2.00	0.43
3:C:401:ILE:HD12	8:H:23:GLU:CD	2.44	0.43
3:C:406:LYS:OXT	9:I:64:LYS:HE3	2.18	0.43
4:D:46:LYS:HG3	4:D:47:LEU:N	2.33	0.43
4:D:199:PRO:HG3	4:D:329:ARG:NH1	2.30	0.43
4:D:211:GLY:HA2	38:D:501:ADP:H5'2	1.99	0.43
6:F:59:VAL:CG1	6:F:60:LEU:N	2.82	0.43
6:F:91:SER:HB2	6:F:153:VAL:HG13	2.01	0.43
6:F:141:ASP:HB2	6:F:144:LYS:CG	2.43	0.43
6:F:365:ILE:CD1	36:F:501:ATP:C2	3.01	0.43
7:G:79:VAL:HG13	7:G:79:VAL:O	2.19	0.43
8:H:50:LYS:O	8:H:207:ASN:HA	2.18	0.43
8:H:74:LEU:CD1	8:H:134:LEU:HD13	2.48	0.43
10:J:118:TYR:CE1	10:J:124:ARG:HD2	2.54	0.43
12:L:99:PHE:CD2	12:L:101:ARG:NH1	2.86	0.43
12:L:104:PRO:HB3	33:h:81:HIS:ND1	2.33	0.43
12:L:205:LEU:HD12	12:L:205:LEU:HA	1.80	0.43
14:N:25:TYR:CD1	14:N:25:TYR:C	2.96	0.43
14:N:51:ASP:HB3	14:N:94:LEU:HD11	2.00	0.43
14:N:136:TYR:H	14:N:136:TYR:HD1	1.65	0.43
15:P:80:ASN:OD1	15:P:80:ASN:C	2.61	0.43
17:R:55:GLN:HG3	17:R:56:PHE:N	2.34	0.43
18:S:30:THR:O	18:S:30:THR:CG2	2.67	0.43
19:T:16:ALA:N	19:T:134:SER:O	2.34	0.43
19:T:22:ILE:HD12	19:T:22:ILE:HA	1.81	0.43
19:T:57:PHE:CZ	33:h:128:LEU:HD11	2.51	0.43
20:U:12:LEU:HD12	20:U:12:LEU:HA	1.87	0.43
20:U:345:ASN:HB2	20:U:743:ASN:ND2	2.30	0.43
20:U:579:ARG:HB3	20:U:614:VAL:HG21	2.01	0.43
20:U:645:ASN:OD1	20:U:648:VAL:N	2.26	0.43
20:U:701:ILE:HD12	20:U:811:PHE:HB2	2.00	0.43
20:U:792:ASN:OD1	20:U:793:LYS:N	2.50	0.43
20:U:792:ASN:CG	20:U:798:PRO:HG3	2.44	0.43
21:V:85:ALA:HA	21:V:93:PHE:CD2	2.52	0.43
23:X:297:ARG:CZ	23:X:297:ARG:HB3	2.48	0.43
23:X:313:LEU:O	23:X:319:ILE:HG22	2.18	0.43
23:X:335:LEU:HD13	23:X:365:LEU:HD21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Y:16:ASP:HB3	24:Y:19:ILE:HG12	2.00	0.43
24:Y:108:ALA:HB1	24:Y:124:PHE:CE1	2.54	0.43
24:Y:122:THR:O	24:Y:126:LYS:NZ	2.50	0.43
24:Y:366:TYR:O	24:Y:369:THR:HG23	2.19	0.43
25:Z:126:VAL:O	25:Z:127:LYS:HD2	2.19	0.43
25:Z:134:PRO:HG3	28:c:219:ASN:HD22	1.84	0.43
25:Z:199:LYS:HE2	25:Z:199:LYS:HB2	1.69	0.43
28:c:129:THR:HA	28:c:132:SER:OG	2.19	0.43
31:f:105:LYS:HE3	31:f:106:LEU:HD23	1.99	0.43
31:f:463:LEU:HD13	32:g:133:LYS:CB	2.47	0.43
31:f:479:LEU:CG	31:f:514:VAL:HG22	2.45	0.43
31:f:510:SER:HB3	31:f:514:VAL:HG11	2.00	0.43
31:f:600:TYR:O	31:f:660:ILE:HG13	2.18	0.43
31:f:659:LEU:CD1	31:f:662:MET:HE1	2.47	0.43
31:f:695:ALA:HB2	31:f:728:ALA:HA	2.01	0.43
31:f:711:SER:HA	31:f:729:MET:HE1	2.00	0.43
32:g:101:LEU:HB2	32:g:120:PHE:HZ	1.84	0.43
34:u:127:MET:HA	34:u:130:ILE:CD1	2.39	0.43
1:A:410:LEU:HD13	1:A:410:LEU:HA	1.91	0.43
2:B:225:TYR:HA	2:B:331:THR:O	2.18	0.43
2:B:363:ARG:HD2	2:B:363:ARG:HA	1.51	0.43
3:C:105:ILE:HD12	3:C:105:ILE:O	2.17	0.43
3:C:149:GLU:H	3:C:149:GLU:CD	2.25	0.43
3:C:197:THR:HB	38:C:501:ADP:PA	2.58	0.43
3:C:270:GLN:O	3:C:274:LEU:HG	2.18	0.43
5:E:145:LEU:HG	5:E:187:VAL:HG21	1.99	0.43
5:E:371:VAL:O	5:E:375:ALA:HB3	2.19	0.43
6:F:388:THR:O	6:F:391:PHE:HB2	2.19	0.43
6:F:399:VAL:CG1	6:F:424:ILE:HG13	2.49	0.43
7:G:76:ILE:HD11	7:G:109:ILE:O	2.17	0.43
7:G:180:GLU:HG2	8:H:55:ILE:HD11	1.99	0.43
8:H:158:TRP:CD1	8:H:161:THR:HG21	2.54	0.43
8:H:180:GLU:H	8:H:180:GLU:CD	2.21	0.43
9:I:186:LEU:HD12	9:I:186:LEU:HA	1.73	0.43
9:I:202:ASP:OD1	9:I:203:VAL:N	2.52	0.43
10:J:35:VAL:HG12	10:J:191:VAL:HG22	1.97	0.43
13:M:50:GLU:O	13:M:50:GLU:CG	2.66	0.43
14:N:99:ILE:HD13	14:N:99:ILE:N	2.33	0.43
16:Q:13:ALA:HB2	16:Q:22:ILE:HD12	2.00	0.43
16:Q:84:PRO:HD3	16:Q:114:PRO:HD3	2.00	0.43
17:R:147:TYR:OH	17:R:149:PRO:HA	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:141:ALA:HB1	19:T:145:LEU:CD2	2.49	0.43
20:U:843:GLU:HA	20:U:843:GLU:OE1	2.19	0.43
21:V:319:HIS:ND1	21:V:319:HIS:O	2.52	0.43
23:X:73:VAL:O	23:X:76:PHE:N	2.50	0.43
23:X:297:ARG:HH21	23:X:334:ASN:ND2	2.16	0.43
24:Y:144:LEU:HB3	24:Y:160:ASN:OD1	2.17	0.43
25:Z:272:LEU:O	25:Z:276:ILE:HG13	2.19	0.43
26:a:186:LYS:O	26:a:187:ASP:HB2	2.18	0.43
27:b:146:GLU:HG2	27:b:147:GLU:O	2.18	0.43
28:c:163:ILE:HD11	28:c:201:TYR:HB3	2.00	0.43
29:d:227:LYS:HB3	29:d:227:LYS:HE3	1.76	0.43
29:d:246:LEU:HD12	29:d:247:ALA:N	2.34	0.43
31:f:246:SER:O	31:f:250:ARG:HG3	2.19	0.43
31:f:257:ARG:HD3	31:f:265:ALA:HB1	1.99	0.43
31:f:404:ASP:HB3	31:f:405:HIS:H	1.64	0.43
31:f:470:VAL:CG1	31:f:500:LEU:HD21	2.47	0.43
31:f:607:LEU:H	31:f:607:LEU:CD2	2.31	0.43
31:f:659:LEU:HD21	31:f:797:LEU:HD21	2.00	0.43
31:f:720:GLU:HA	31:f:723:TYR:HD1	1.84	0.43
31:f:790:GLN:HA	31:f:793:VAL:HG12	2.01	0.43
33:h:33:LEU:HD23	33:h:33:LEU:C	2.43	0.43
33:h:127:MET:C	33:h:127:MET:SD	3.02	0.43
1:A:138:MET:HE2	1:A:138:MET:HB2	1.89	0.43
1:A:366:ARG:HG3	1:A:366:ARG:HH11	1.84	0.43
3:C:66:LEU:HD23	3:C:66:LEU:HA	1.81	0.43
3:C:227:GLY:HA3	3:C:272:THR:HG1	1.84	0.43
6:F:189:GLY:HA3	6:F:368:ILE:HD11	2.00	0.43
8:H:102:GLN:NE2	8:H:102:GLN:CA	2.82	0.43
9:I:92:LEU:HD12	9:I:92:LEU:HA	1.78	0.43
9:I:227:VAL:HG23	9:I:227:VAL:O	2.19	0.43
10:J:12:PRO:HA	11:K:26:TYR:CD1	2.54	0.43
12:L:99:PHE:HD2	12:L:101:ARG:NH1	2.16	0.43
13:M:54:LEU:H	13:M:54:LEU:CD1	2.32	0.43
14:N:98:ILE:CG2	14:N:100:ILE:HG23	2.48	0.43
16:Q:61:GLN:CD	17:R:124:LEU:CG	2.89	0.43
16:Q:149:MET:CG	16:Q:153:LEU:HD12	2.47	0.43
17:R:1:MET:HG3	17:R:134:TYR:CD2	2.53	0.43
17:R:3:TYR:OH	17:R:139:THR:HG22	2.19	0.43
17:R:175:LEU:HB2	17:R:178:PHE:CZ	2.52	0.43
19:T:62:LEU:O	19:T:66:LYS:HG2	2.18	0.43
19:T:92:LEU:HA	19:T:95:ILE:HG22	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:166:LEU:CD1	19:T:170:ARG:HD3	2.49	0.43
20:U:217:CYS:SG	20:U:248:ILE:CD1	3.05	0.43
20:U:347:ASN:OD1	20:U:347:ASN:N	2.50	0.43
20:U:377:HIS:ND1	20:U:382:SER:O	2.35	0.43
21:V:188:SER:HA	21:V:191:LEU:HG	1.99	0.43
21:V:192:MET:SD	21:V:214:HIS:CG	3.12	0.43
21:V:309:MET:HE1	21:V:331:LEU:CB	2.48	0.43
21:V:338:LEU:HD11	21:V:398:LEU:N	2.33	0.43
22:W:35:ALA:HB1	22:W:40:LEU:CD1	2.49	0.43
22:W:97:LEU:HD23	22:W:97:LEU:HA	1.82	0.43
22:W:140:ILE:O	22:W:144:ARG:HG3	2.19	0.43
22:W:141:GLU:HA	22:W:141:GLU:OE2	2.19	0.43
22:W:370:TYR:HE1	26:a:312:MET:CE	2.26	0.43
24:Y:34:ASP:HB3	24:Y:37:VAL:HG12	2.00	0.43
24:Y:46:ARG:HB3	24:Y:46:ARG:HH11	1.83	0.43
26:a:97:LEU:HB3	26:a:118:ILE:CG2	2.48	0.43
26:a:142:LEU:HD21	26:a:152:HIS:CE1	2.53	0.43
26:a:214:GLY:HA3	26:a:340:VAL:CG2	2.33	0.43
26:a:302:ILE:HB	26:a:306:GLU:HB3	2.00	0.43
26:a:319:LEU:N	26:a:319:LEU:CD1	2.81	0.43
27:b:131:LEU:HB3	27:b:136:VAL:CG1	2.48	0.43
28:c:120:CYS:HB3	28:c:158:ASP:HB2	2.01	0.43
31:f:692:LEU:HB3	31:f:800:LEU:HD13	1.99	0.43
31:f:879:ARG:HG2	31:f:879:ARG:HH11	1.84	0.43
33:h:27:LEU:CB	33:h:184:TYR:HB2	2.48	0.43
1:A:234:ASP:OD1	1:A:234:ASP:C	2.62	0.43
1:A:304:ASN:OD1	1:A:304:ASN:O	2.36	0.43
1:A:371:GLU:OE1	1:A:371:GLU:N	2.38	0.43
2:B:436:GLU:N	2:B:436:GLU:CD	2.77	0.43
5:E:200:SER:HA	5:E:238:ILE:HG22	1.99	0.43
5:E:352:MET:HE1	5:E:355:ILE:CB	2.49	0.43
5:E:377:SER:HA	5:E:380:LEU:CD1	2.49	0.43
7:G:41:ALA:CB	7:G:151:VAL:HG21	2.49	0.43
7:G:50:ILE:HD12	7:G:79:VAL:HB	2.00	0.43
8:H:17:GLY:CA	9:I:27:ALA:HB2	2.37	0.43
8:H:45:VAL:HG13	8:H:188:ILE:CD1	2.48	0.43
9:I:39:ALA:N	9:I:42:GLY:O	2.46	0.43
10:J:105:GLU:CA	10:J:145:TYR:HE2	2.32	0.43
11:K:49:ALA:HB3	11:K:198:SER:OG	2.19	0.43
11:K:117:SER:O	11:K:121:LEU:HD23	2.18	0.43
15:P:7:VAL:HG23	15:P:12:ILE:CD1	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:P:32:SER:HA	15:P:187:ARG:NH1	2.33	0.43
15:P:178:ILE:HD12	15:P:183:LEU:CD1	2.49	0.43
17:R:4:LEU:HD12	17:R:132:HIS:CG	2.54	0.43
18:S:42:LEU:HD11	18:S:184:TRP:HB2	2.01	0.43
20:U:88:PHE:CE2	20:U:89:ASN:HB2	2.52	0.43
20:U:658:ILE:HG23	20:U:763:VAL:CG1	2.32	0.43
21:V:270:LEU:C	21:V:270:LEU:HD23	2.43	0.43
21:V:488:ASN:O	21:V:492:LYS:HB2	2.18	0.43
22:W:425:LEU:HB3	28:c:234:TYR:CE2	2.53	0.43
23:X:163:LYS:HB2	23:X:200:ILE:HG21	1.99	0.43
23:X:224:ASP:OD1	23:X:224:ASP:C	2.61	0.43
23:X:378:LEU:HD12	24:Y:310:SER:O	2.19	0.43
24:Y:148:GLY:C	24:Y:157:ILE:HD11	2.44	0.43
26:a:189:PRO:CD	26:a:192:GLU:HB3	2.36	0.43
27:b:117:VAL:HG12	27:b:119:ASP:HB2	2.00	0.43
28:c:137:SER:HB3	34:u:273:THR:HG22	2.00	0.43
28:c:296:ILE:CD1	29:d:339:VAL:HG13	2.48	0.43
29:d:164:PHE:CD1	29:d:164:PHE:C	2.96	0.43
29:d:201:SER:HB2	29:d:262:ILE:CG2	2.47	0.43
31:f:289:VAL:CG1	31:f:901:ARG:HH21	2.32	0.43
31:f:350:LYS:HE3	31:f:353:LEU:H	1.84	0.43
31:f:574:GLU:HA	31:f:577:LEU:HD21	2.00	0.43
31:f:764:LEU:HD21	31:f:818:LEU:CD1	2.47	0.43
31:f:782:HIS:CG	31:f:783:SER:N	2.86	0.43
33:h:160:LEU:HD12	33:h:160:LEU:N	2.34	0.43
33:h:165:ALA:O	33:h:169:VAL:HG13	2.19	0.43
34:u:127:MET:CE	34:u:264:THR:HB	2.49	0.43
34:u:149:CYS:SG	34:u:150:LEU:HD22	2.58	0.43
34:u:216:GLN:HE21	34:u:218:LEU:HD11	1.84	0.43
2:B:103:ARG:HE	2:B:138:PHE:HE2	1.67	0.43
2:B:151:LEU:CD1	2:B:163:LEU:HB2	2.49	0.43
2:B:208:PRO:HG2	31:f:739:ALA:CB	2.23	0.43
2:B:278:ALA:HB3	2:B:279:PRO:CD	2.36	0.43
3:C:198:LEU:HD12	3:C:198:LEU:C	2.43	0.43
4:D:89:ILE:HD11	5:E:80:VAL:CG2	2.32	0.43
5:E:196:LEU:HD22	5:E:196:LEU:N	2.30	0.43
5:E:204:VAL:CG2	5:E:260:LEU:HD22	2.49	0.43
5:E:211:SER:O	5:E:213:ARG:N	2.52	0.43
5:E:312:ILE:CG2	5:E:313:LEU:N	2.81	0.43
7:G:70:PHE:CB	7:G:91:VAL:HG21	2.49	0.43
8:H:73:GLY:N	8:H:137:CYS:SG	2.92	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:71:MET:HE3	10:J:131:ALA:HB1	2.01	0.43
11:K:67:ILE:HA	11:K:76:CYS:O	2.18	0.43
11:K:181:LEU:HA	11:K:184:VAL:HG12	2.01	0.43
14:N:46:SER:OG	14:N:97:GLY:O	2.35	0.43
14:N:58:ALA:O	14:N:62:GLN:HG3	2.18	0.43
14:N:148:THR:HG23	14:N:151:GLU:H	1.84	0.43
16:Q:127:ILE:HD12	16:Q:127:ILE:HA	1.94	0.43
17:R:85:ARG:HG3	17:R:124:LEU:HD22	2.01	0.43
18:S:50:ALA:HB2	19:T:129:SER:N	2.33	0.43
18:S:104:TRP:NE1	18:S:109:PRO:HD3	2.34	0.43
18:S:180:ARG:HH21	18:S:185:ILE:HD13	1.84	0.43
19:T:58:HIS:HE1	33:h:131:ALA:O	2.02	0.43
19:T:123:SER:O	19:T:130:TYR:HA	2.19	0.43
20:U:11:LEU:HB3	20:U:23:ALA:HB2	2.01	0.43
20:U:588:MET:HA	20:U:588:MET:CE	2.42	0.43
20:U:645:ASN:OD1	20:U:645:ASN:O	2.37	0.43
20:U:879:ASP:O	20:U:882:ALA:HB2	2.19	0.43
20:U:901:GLN:NE2	20:U:915:LYS:HE3	2.19	0.43
21:V:176:MET:HE1	21:V:217:VAL:CG1	2.49	0.43
21:V:342:ILE:CD1	21:V:368:ARG:CB	2.97	0.43
22:W:90:LEU:HA	22:W:93:ARG:HG2	2.00	0.43
22:W:140:ILE:HG21	22:W:177:MET:HB3	1.98	0.43
22:W:172:GLU:HA	22:W:172:GLU:OE2	2.18	0.43
23:X:392:PRO:O	23:X:393:VAL:CG1	2.58	0.43
25:Z:75:LEU:HD11	25:Z:112:MET:HE1	1.99	0.43
26:a:253:THR:O	26:a:256:GLY:O	2.37	0.43
27:b:15:TYR:C	27:b:17:ARG:H	2.27	0.43
28:c:240:HIS:O	28:c:244:VAL:HG23	2.19	0.43
29:d:276:GLU:HG3	29:d:308:TRP:HZ2	1.81	0.43
31:f:177:GLU:O	31:f:177:GLU:HG3	2.19	0.43
31:f:478:ARG:O	31:f:482:ILE:HG13	2.19	0.43
31:f:553:THR:HG23	31:f:556:ARG:NH2	2.33	0.43
31:f:688:ARG:CD	31:f:720:GLU:HB3	2.49	0.43
31:f:706:ILE:O	31:f:710:LEU:HG	2.19	0.43
32:g:128:LYS:NZ	32:g:135:GLN:OE1	2.32	0.43
33:h:19:GLY:HA3	33:h:192:VAL:O	2.19	0.43
34:u:180:MET:O	34:u:231:VAL:HG12	2.19	0.43
2:B:394:ASP:C	2:B:396:LYS:N	2.72	0.43
3:C:125:LYS:HG3	3:C:126:ILE:H	1.84	0.43
3:C:154:LEU:HD13	3:C:317:PHE:CE2	2.54	0.43
4:D:342:ARG:HB2	4:D:364:VAL:HG11	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:119:VAL:HG23	5:E:119:VAL:O	2.18	0.43
5:E:309:ARG:HH11	5:E:343:LEU:HD21	1.84	0.43
5:E:309:ARG:CG	5:E:332:VAL:HG12	2.48	0.43
7:G:154:CYS:HB3	7:G:160:TYR:CB	2.48	0.43
7:G:162:GLY:HA3	8:H:61:SER:CB	2.47	0.43
7:G:182:LYS:HD3	7:G:185:LYS:HZ1	1.84	0.43
9:I:40:ASN:HD21	9:I:182:GLY:C	2.26	0.43
11:K:78:MET:HE1	11:K:82:ILE:HD11	2.01	0.43
12:L:33:SER:OG	12:L:49:LEU:HB3	2.19	0.43
12:L:38:LEU:HD23	12:L:45:VAL:O	2.19	0.43
12:L:92:CYS:SG	12:L:93:LEU:N	2.92	0.43
13:M:116:ALA:C	13:M:117:MET:HE2	2.43	0.43
14:N:133:SER:O	14:N:134:TYR:HD1	2.02	0.43
15:P:108:PRO:O	15:P:109:HIS:ND1	2.26	0.43
16:Q:158:MET:CG	16:Q:162:HIS:HB3	2.44	0.43
20:U:377:HIS:CB	20:U:411:ILE:HD11	2.48	0.43
20:U:475:HIS:CG	20:U:511:ALA:HB2	2.54	0.43
20:U:563:ALA:C	20:U:565:ALA:N	2.77	0.43
21:V:160:LEU:CD2	21:V:162:GLU:H	2.32	0.43
21:V:252:ASN:ND2	21:V:284:GLU:OE1	2.52	0.43
21:V:419:LEU:HD23	21:V:456:GLY:C	2.43	0.43
22:W:263:TRP:CE2	22:W:295:LYS:CE	3.01	0.43
22:W:446:ILE:CD1	25:Z:208:ILE:HA	2.49	0.43
23:X:335:LEU:HA	23:X:338:VAL:HG22	2.01	0.43
24:Y:18:ARG:O	24:Y:22:LEU:HG	2.19	0.43
24:Y:46:ARG:CD	24:Y:69:LEU:HD11	2.46	0.43
24:Y:153:ASP:HB3	24:Y:156:LEU:HB3	2.01	0.43
24:Y:198:ALA:HA	24:Y:226:VAL:HG23	2.00	0.43
25:Z:120:VAL:O	25:Z:120:VAL:HG23	2.19	0.43
26:a:65:SER:HB2	26:a:103:LYS:CD	2.49	0.43
29:d:109:LEU:HD11	29:d:158:ARG:NE	2.34	0.43
29:d:120:LYS:HA	29:d:123:LEU:HD12	2.01	0.43
29:d:181:GLN:HG2	29:d:182:LEU:HD23	2.01	0.43
29:d:275:ILE:HD11	29:d:282:ILE:CB	2.49	0.43
31:f:93:PRO:CG	31:f:96:LEU:HB2	2.47	0.43
31:f:102:HIS:ND1	31:f:102:HIS:O	2.52	0.43
31:f:229:VAL:O	31:f:233:LEU:HD23	2.16	0.43
31:f:339:ILE:HG22	31:f:773:LYS:HZ3	1.84	0.43
31:f:478:ARG:HH11	31:f:509:LYS:HZ3	1.66	0.43
31:f:688:ARG:HD3	31:f:720:GLU:CD	2.44	0.43
31:f:719:PRO:O	31:f:723:TYR:CD1	2.71	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:92:LEU:HD11	33:h:110:MET:HE2	1.96	0.43
33:h:124:TYR:HB3	33:h:137:LEU:HD23	1.99	0.43
1:A:115:VAL:O	1:A:117:GLN:N	2.52	0.42
1:A:166:VAL:HG21	1:A:237:PHE:CD1	2.54	0.42
1:A:191:VAL:HB	1:A:271:LEU:HD21	2.01	0.42
2:B:77:GLU:OE2	20:U:830:THR:HG23	2.19	0.42
2:B:106:PRO:O	2:B:154:HIS:HB2	2.17	0.42
2:B:317:ASP:C	2:B:317:ASP:OD1	2.62	0.42
3:C:58:LEU:HD23	3:C:58:LEU:C	2.44	0.42
3:C:112:CYS:SG	3:C:114:VAL:HG13	2.59	0.42
3:C:257:SER:HA	3:C:302:ASP:HB3	2.00	0.42
3:C:281:ASP:HB3	3:C:310:ARG:HE	1.84	0.42
4:D:273:LYS:O	4:D:275:PHE:HD1	2.00	0.42
4:D:339:ARG:HD2	23:X:231:TYR:CD1	2.54	0.42
5:E:98:VAL:HG23	5:E:100:LEU:CD2	2.49	0.42
5:E:203:ILE:HA	5:E:215:ILE:HG12	2.01	0.42
7:G:49:VAL:HG22	7:G:219:VAL:HG23	2.01	0.42
8:H:146:LEU:HB3	8:H:158:TRP:O	2.19	0.42
9:I:5:TYR:CE2	9:I:14:PRO:HD3	2.54	0.42
9:I:65:ILE:HB	9:I:212:GLU:OE2	2.18	0.42
9:I:190:LEU:CD2	9:I:213:ILE:HG21	2.49	0.42
9:I:238:LYS:NZ	9:I:242:GLU:HB3	2.34	0.42
10:J:62:ILE:HG21	10:J:209:ALA:HB2	2.00	0.42
10:J:70:CYS:HB2	10:J:217:LEU:HD21	2.00	0.42
13:M:99:ARG:NH2	13:M:105:ASN:OD1	2.49	0.42
13:M:152:ASP:OD1	13:M:156:VAL:HG12	2.18	0.42
14:N:121:VAL:HG11	33:h:39:ILE:HG22	2.01	0.42
15:P:149:GLU:O	15:P:153:ASN:OD1	2.36	0.42
16:Q:20:VAL:HG21	16:Q:111:GLY:N	2.34	0.42
19:T:76:LYS:HD3	19:T:76:LYS:O	2.18	0.42
19:T:76:LYS:HE2	19:T:82:ALA:N	2.33	0.42
20:U:229:VAL:CG1	20:U:264:VAL:HG22	2.49	0.42
20:U:794:ASP:OD1	20:U:795:LEU:N	2.52	0.42
21:V:178:SER:C	21:V:179:LYS:HE2	2.43	0.42
21:V:227:VAL:HB	21:V:231:LEU:HD12	1.94	0.42
22:W:89:LEU:CD2	22:W:90:LEU:HD22	2.49	0.42
22:W:413:ILE:O	22:W:414:ASN:C	2.62	0.42
23:X:194:ARG:HH21	23:X:214:SER:HB2	1.83	0.42
24:Y:48:ASN:OD1	24:Y:113:ARG:NH2	2.51	0.42
24:Y:57:LEU:HD23	24:Y:57:LEU:C	2.44	0.42
24:Y:101:ARG:HA	24:Y:104:MET:SD	2.59	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Z:174:HIS:CE1	28:c:207:TYR:CE2	3.07	0.42
26:a:142:LEU:HD21	26:a:152:HIS:ND1	2.33	0.42
26:a:310:LEU:C	26:a:310:LEU:HD13	2.44	0.42
27:b:53:THR:CG2	27:b:61:LEU:HD11	2.49	0.42
28:c:309:PHE:O	28:c:310:LYS:HB2	2.19	0.42
31:f:71:TYR:CD2	31:f:113:MET:HE3	2.53	0.42
31:f:109:ILE:HG23	31:f:113:MET:HG2	2.00	0.42
31:f:209:MET:C	31:f:209:MET:SD	3.02	0.42
31:f:613:LEU:C	31:f:613:LEU:HD23	2.43	0.42
33:h:12:LEU:HD22	33:h:138:ALA:HB2	2.00	0.42
1:A:187:LEU:CD1	1:A:318:LEU:HD21	2.49	0.42
1:A:212:VAL:HG13	1:A:341:ILE:HD12	1.98	0.42
1:A:400:ARG:HD3	1:A:400:ARG:HA	1.80	0.42
3:C:217:SER:HA	3:C:220:VAL:HG23	2.01	0.42
3:C:278:ASN:ND2	3:C:278:ASN:C	2.77	0.42
3:C:278:ASN:HD22	3:C:278:ASN:C	2.25	0.42
3:C:392:GLN:O	3:C:393:LYS:HD2	2.19	0.42
4:D:239:TYR:O	4:D:240:LEU:C	2.61	0.42
4:D:384:MET:CE	5:E:297:ARG:NH1	2.76	0.42
5:E:40:TYR:OH	6:F:72:LYS:HD2	2.18	0.42
5:E:140:GLU:CD	5:E:140:GLU:H	2.27	0.42
5:E:228:CYS:O	5:E:229:ILE:HD13	2.19	0.42
8:H:102:GLN:HE21	8:H:102:GLN:CA	2.31	0.42
8:H:106:PRO:HB3	8:H:140:ASN:HD22	1.84	0.42
10:J:150:SER:HB2	11:K:83:LYS:HE3	2.00	0.42
11:K:8:TYR:CD1	11:K:8:TYR:N	2.87	0.42
11:K:36:THR:HG22	11:K:51:GLU:OE1	2.19	0.42
12:L:49:LEU:HD22	12:L:199:LEU:CD2	2.48	0.42
12:L:144:ILE:O	12:L:144:ILE:HG22	2.20	0.42
13:M:81:LEU:HD12	13:M:81:LEU:HA	1.84	0.42
14:N:83:PHE:CE1	14:N:98:ILE:HG21	2.54	0.42
17:R:29:LYS:HG2	17:R:31:ASP:H	1.84	0.42
17:R:175:LEU:H	17:R:175:LEU:HD12	1.83	0.42
18:S:80:SER:C	18:S:120:ARG:HD2	2.44	0.42
18:S:107:ARG:HG2	18:S:107:ARG:HH11	1.84	0.42
19:T:25:SER:CB	19:T:42:LYS:HB2	2.49	0.42
19:T:38:ARG:HG2	19:T:191:ASP:HB3	2.00	0.42
19:T:58:HIS:HA	19:T:61:CYS:SG	2.59	0.42
20:U:246:TYR:CE1	20:U:321:GLN:NE2	2.88	0.42
20:U:427:LEU:HD13	20:U:438:GLN:HG3	2.01	0.42
20:U:483:LEU:CD2	20:U:781:LEU:HD21	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:494:TYR:CE1	20:U:516:LEU:HD22	2.55	0.42
20:U:676:THR:HG23	20:U:688:LEU:HD21	2.00	0.42
20:U:793:LYS:HD3	20:U:794:ASP:H	1.84	0.42
21:V:115:LYS:HA	21:V:115:LYS:HD2	1.76	0.42
21:V:333:ILE:HD12	21:V:357:LEU:HD22	2.00	0.42
21:V:344:ASP:OD1	21:V:345:ARG:N	2.52	0.42
21:V:443:ARG:C	21:V:445:GLY:H	2.27	0.42
22:W:82:LEU:HD12	22:W:82:LEU:C	2.44	0.42
22:W:163:ALA:CB	22:W:196:VAL:HG21	2.49	0.42
23:X:71:LYS:CA	23:X:74:ARG:HD3	2.28	0.42
23:X:368:MET:HE3	23:X:374:PHE:HD1	1.83	0.42
24:Y:116:ASP:OD1	24:Y:116:ASP:C	2.62	0.42
24:Y:202:LEU:HD11	24:Y:231:LEU:CD1	2.42	0.42
24:Y:286:TRP:CH2	24:Y:287:LEU:HD13	2.53	0.42
25:Z:23:PHE:HA	25:Z:35:VAL:HG21	2.00	0.42
25:Z:288:LYS:O	25:Z:288:LYS:HG2	2.19	0.42
26:a:80:ILE:HG21	26:a:100:THR:OG1	2.19	0.42
26:a:122:LYS:CE	26:a:130:VAL:HG13	2.48	0.42
26:a:256:GLY:O	26:a:257:GLN:C	2.62	0.42
26:a:290:GLN:NE2	26:a:330:ARG:HD3	2.34	0.42
28:c:209:LYS:HB2	28:c:214:GLN:NE2	2.32	0.42
28:c:263:ASP:HB2	28:c:270:LEU:CD2	2.48	0.42
29:d:323:GLN:C	29:d:325:PRO:HD3	2.44	0.42
31:f:274:ASP:CG	31:f:277:LEU:HD23	2.43	0.42
31:f:300:ARG:HG2	31:f:782:HIS:NE2	2.34	0.42
31:f:349:TYR:CE1	31:f:377:VAL:HG11	2.54	0.42
31:f:560:LEU:HD23	31:f:560:LEU:O	2.19	0.42
31:f:848:GLN:OE1	31:f:878:GLU:HA	2.19	0.42
32:g:107:ILE:HD11	32:g:112:LEU:HD13	2.01	0.42
32:g:128:LYS:C	32:g:129:ILE:HD13	2.44	0.42
1:A:96:ALA:O	1:A:140:VAL:N	2.44	0.42
1:A:272:ILE:HG13	1:A:315:ILE:HG23	2.01	0.42
2:B:246:THR:HG22	2:B:279:PRO:O	2.19	0.42
2:B:410:ARG:HB3	31:f:92:VAL:HG12	2.02	0.42
3:C:351:MET:HE3	3:C:351:MET:HB3	1.87	0.42
3:C:365:GLU:HG3	3:C:390:VAL:HG23	2.00	0.42
5:E:26:LEU:HD12	6:F:54:ILE:HD12	2.00	0.42
5:E:49:ALA:HB1	6:F:136:VAL:CG2	2.49	0.42
5:E:340:GLY:HA3	38:E:501:ADP:N7	2.34	0.42
6:F:59:VAL:HG13	6:F:60:LEU:N	2.34	0.42
6:F:86:LEU:N	6:F:87:PRO:CD	2.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:196:GLN:HA	6:F:199:VAL:CG1	2.49	0.42
6:F:326:VAL:C	6:F:327:LYS:HD2	2.45	0.42
7:G:72:ILE:HG21	7:G:114:LEU:CD2	2.49	0.42
8:H:100:VAL:HG12	8:H:101:TYR:CE1	2.54	0.42
8:H:121:TYR:O	8:H:127:VAL:HG23	2.20	0.42
8:H:155:TYR:CE1	9:I:60:PHE:HE2	2.35	0.42
9:I:34:CYS:SG	9:I:135:LEU:HD12	2.59	0.42
9:I:102:GLN:CD	16:Q:65:GLN:HE21	2.27	0.42
10:J:82:ILE:HD13	10:J:82:ILE:HA	1.92	0.42
12:L:45:VAL:HA	12:L:213:GLY:O	2.19	0.42
12:L:155:ASP:OD1	13:M:59:GLU:HG3	2.18	0.42
12:L:181:GLU:N	12:L:181:GLU:CD	2.76	0.42
12:L:184:LEU:HD13	12:L:214:ILE:HG21	2.01	0.42
13:M:102:PHE:CD1	14:N:82:LEU:HD21	2.54	0.42
14:N:8:PHE:HB2	14:N:147:MET:O	2.18	0.42
14:N:31:THR:HG22	14:N:32:ASP:N	2.34	0.42
15:P:138:PHE:O	15:P:142:PHE:HB3	2.18	0.42
16:Q:15:LYS:HD2	16:Q:134:ASP:O	2.20	0.42
18:S:42:LEU:HG	18:S:184:TRP:CD1	2.54	0.42
19:T:166:LEU:HD12	19:T:167:SER:N	2.34	0.42
19:T:172:MET:CA	19:T:175:VAL:HG12	2.46	0.42
20:U:42:VAL:O	20:U:45:ILE:HG22	2.19	0.42
20:U:378:CYS:O	20:U:380:THR:HG23	2.19	0.42
20:U:543:LYS:HB2	20:U:543:LYS:HE3	1.78	0.42
20:U:560:MET:H	20:U:589:ALA:HB1	1.84	0.42
20:U:671:LEU:HD23	20:U:671:LEU:HA	1.84	0.42
21:V:255:LEU:HD11	21:V:271:VAL:HG12	2.01	0.42
21:V:337:LEU:HD11	21:V:364:THR:OG1	2.20	0.42
21:V:417:ILE:HD11	21:V:421:ASP:HB2	2.00	0.42
22:W:149:LEU:O	22:W:152:ILE:HG23	2.19	0.42
22:W:308:LEU:O	22:W:311:THR:HG22	2.19	0.42
22:W:435:LEU:HD23	22:W:436:MET:N	2.35	0.42
23:X:71:LYS:HA	23:X:74:ARG:CD	2.29	0.42
23:X:272:SER:HA	23:X:277:LEU:CD2	2.49	0.42
23:X:358:LYS:O	23:X:361:VAL:HG12	2.18	0.42
23:X:392:PRO:O	23:X:393:VAL:HG22	2.20	0.42
23:X:417:LYS:C	23:X:419:LYS:H	2.27	0.42
24:Y:48:ASN:CG	24:Y:113:ARG:HH21	2.28	0.42
24:Y:168:ILE:CG2	24:Y:177:ARG:HH21	2.31	0.42
25:Z:37:GLY:HA3	25:Z:95:TYR:CE1	2.54	0.42
25:Z:198:LEU:HD23	25:Z:198:LEU:HA	1.90	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:a:69:HIS:CG	27:b:17:ARG:HH11	2.37	0.42
26:a:184:ASP:C	26:a:185:ILE:HD12	2.44	0.42
27:b:54:LEU:O	27:b:84:ILE:HA	2.19	0.42
27:b:94:HIS:HA	27:b:97:LEU:HD12	2.01	0.42
31:f:528:GLY:HA3	31:f:790:GLN:NE2	2.34	0.42
31:f:825:MET:HE3	31:f:825:MET:HB3	1.83	0.42
31:f:874:LEU:O	31:f:874:LEU:HG	2.18	0.42
33:h:154:LEU:HD12	33:h:158:PRO:HA	2.00	0.42
33:h:189:ILE:O	33:h:200:GLU:OE1	2.37	0.42
1:A:32:LEU:HD21	31:f:132:THR:HB	2.01	0.42
1:A:47:GLN:C	1:A:47:GLN:CD	2.87	0.42
1:A:73:ALA:HA	2:B:140:ASP:CG	2.43	0.42
1:A:83:ASP:OD1	2:B:136:LEU:HD22	2.19	0.42
1:A:281:GLY:O	1:A:327:LEU:HA	2.19	0.42
1:A:363:SER:O	2:B:214:MET:HE1	2.19	0.42
2:B:163:LEU:HD11	3:C:80:MET:CE	2.41	0.42
2:B:310:LEU:HA	2:B:313:LEU:HG	2.01	0.42
2:B:374:LEU:HD22	2:B:378:VAL:CG2	2.44	0.42
3:C:150:MET:HB3	3:C:150:MET:HE2	1.71	0.42
4:D:160:PRO:HD2	4:D:221:HIS:HB2	2.01	0.42
4:D:408:LYS:HA	4:D:408:LYS:HD2	1.87	0.42
10:J:31:THR:HG21	10:J:198:VAL:CG2	2.49	0.42
10:J:80:ALA:HB2	10:J:129:ILE:HG21	2.02	0.42
11:K:42:THR:HG21	11:K:194:ALA:HB2	2.01	0.42
11:K:121:LEU:HD22	11:K:160:GLY:HA3	2.01	0.42
11:K:199:LEU:HD11	11:K:215:ILE:CD1	2.47	0.42
11:K:217:LEU:HD23	11:K:218:ALA:H	1.84	0.42
12:L:26:MET:HE2	12:L:26:MET:HB2	1.80	0.42
12:L:72:ILE:HD13	12:L:88:MET:HE2	2.01	0.42
13:M:15:SER:HB3	13:M:19:ARG:HG2	2.02	0.42
14:N:155:PHE:HD1	14:N:155:PHE:O	2.01	0.42
16:Q:74:TYR:CE1	16:Q:78:GLU:HG3	2.55	0.42
16:Q:165:GLU:O	16:Q:169:GLN:HG3	2.19	0.42
17:R:56:PHE:CD1	17:R:98:TYR:HD2	2.37	0.42
17:R:60:ILE:HG23	17:R:84:THR:HG22	2.01	0.42
17:R:96:THR:O	17:R:96:THR:OG1	2.27	0.42
17:R:183:ILE:CD1	17:R:188:ILE:HB	2.46	0.42
18:S:19:ARG:NE	18:S:26:ILE:HD11	2.35	0.42
20:U:7:GLY:O	20:U:10:SER:OG	2.28	0.42
20:U:185:MET:HG2	20:U:222:PHE:CE2	2.46	0.42
20:U:267:ASN:HD22	20:U:267:ASN:HA	1.59	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:849:LYS:NZ	20:U:850:GLU:HG2	2.34	0.42
20:U:899:ARG:CZ	20:U:900:TYR:HE1	2.32	0.42
20:U:903:PHE:HB3	20:U:913:ILE:O	2.19	0.42
21:V:117:VAL:HG21	21:V:132:LEU:CD2	2.31	0.42
21:V:329:HIS:O	21:V:333:ILE:HG13	2.20	0.42
22:W:67:LEU:HD21	22:W:90:LEU:HD12	2.00	0.42
23:X:73:VAL:O	23:X:76:PHE:HB3	2.20	0.42
23:X:356:LEU:HD23	23:X:356:LEU:HA	1.89	0.42
24:Y:195:LYS:HB2	24:Y:195:LYS:HZ3	1.83	0.42
24:Y:282:MET:SD	24:Y:295:TYR:CD2	3.13	0.42
25:Z:48:LEU:HD21	25:Z:92:VAL:HG23	1.99	0.42
25:Z:223:ASN:C	25:Z:225:GLN:H	2.27	0.42
25:Z:234:PHE:CZ	26:a:353:LEU:HD12	2.54	0.42
26:a:127:ASP:OD1	26:a:127:ASP:N	2.42	0.42
27:b:52:ILE:HG12	27:b:60:VAL:HA	2.01	0.42
27:b:131:LEU:HD13	27:b:136:VAL:HG13	2.01	0.42
31:f:138:GLU:HB3	31:f:142:TYR:CZ	2.54	0.42
31:f:267:ARG:HD3	31:f:787:LEU:HD21	2.01	0.42
31:f:430:ASP:OD1	31:f:431:LYS:N	2.52	0.42
31:f:520:LEU:HD23	31:f:520:LEU:C	2.45	0.42
31:f:656:GLY:O	31:f:660:ILE:CD1	2.67	0.42
32:g:123:GLN:CB	32:g:126:TYR:HB2	2.48	0.42
32:g:142:LEU:HD12	32:g:145:GLN:OE1	2.19	0.42
33:h:11:VAL:HB	33:h:139:THR:HG23	2.00	0.42
33:h:16:PHE:HB2	33:h:160:LEU:O	2.19	0.42
34:u:176:LYS:O	34:u:267:GLY:HA3	2.18	0.42
34:u:192:LYS:HG3	34:u:252:GLN:HE22	1.80	0.42
1:A:71:GLY:HA3	2:B:162:VAL:CG1	2.43	0.42
1:A:92:PRO:HB2	1:A:144:ARG:NH1	2.35	0.42
1:A:151:ILE:HG13	1:A:152:PRO:HD2	2.01	0.42
1:A:204:LEU:O	1:A:204:LEU:CD2	2.64	0.42
1:A:214:LEU:HD11	1:A:318:LEU:HD22	2.01	0.42
2:B:171:VAL:HG23	2:B:266:LEU:HD12	2.01	0.42
2:B:182:GLU:H	2:B:182:GLU:CD	2.25	0.42
2:B:374:LEU:HD21	2:B:419:PHE:CE2	2.55	0.42
2:B:418:ASP:OD1	2:B:418:ASP:N	2.52	0.42
3:C:33:LEU:HD23	3:C:33:LEU:O	2.20	0.42
3:C:38:LYS:NZ	4:D:55:GLU:HG2	2.34	0.42
3:C:258:ARG:HD3	3:C:273:MET:CE	2.50	0.42
3:C:277:LEU:HD12	3:C:305:LEU:HD12	2.02	0.42
4:D:103:VAL:HG21	4:D:132:LEU:HD13	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:171:ASP:OD1	4:D:172:ILE:CD1	2.67	0.42
4:D:291:GLU:OE2	4:D:291:GLU:HA	2.20	0.42
5:E:84:ARG:O	5:E:85:ARG:CB	2.66	0.42
36:F:501:ATP:C8	36:F:501:ATP:H5'1	2.54	0.42
7:G:44:GLY:HA2	7:G:189:TRP:HB3	2.01	0.42
8:H:10:LEU:HD21	8:H:122:THR:HG22	2.00	0.42
9:I:10:THR:HG23	10:J:125:ARG:N	2.34	0.42
9:I:225:ILE:HD13	9:I:225:ILE:HA	1.80	0.42
10:J:21:TYR:O	10:J:24:GLU:HB2	2.19	0.42
11:K:84:ASP:OD1	11:K:84:ASP:N	2.53	0.42
13:M:87:LEU:HD12	13:M:133:CYS:SG	2.60	0.42
14:N:194:ILE:HG13	14:N:196:LYS:HE3	2.02	0.42
15:P:22:GLU:OE2	15:P:27:ALA:HA	2.18	0.42
15:P:36:PHE:HE1	15:P:38:SER:C	2.27	0.42
16:Q:40:GLN:HG2	16:Q:43:PHE:CE1	2.54	0.42
16:Q:111:GLY:O	16:Q:120:PHE:N	2.38	0.42
19:T:90:ALA:O	19:T:94:THR:HG23	2.18	0.42
19:T:175:VAL:CA	19:T:178:VAL:HG12	2.47	0.42
20:U:24:LEU:HD13	20:U:48:LEU:CD2	2.49	0.42
20:U:92:ASP:H	20:U:97:VAL:HG11	1.85	0.42
20:U:751:ARG:NH1	20:U:751:ARG:HB3	2.34	0.42
20:U:842:LYS:HG3	20:U:846:LYS:HZ2	1.85	0.42
20:U:895:PRO:HB2	20:U:898:CYS:CB	2.43	0.42
21:V:121:PHE:HB3	21:V:122:THR:H	1.65	0.42
21:V:190:ASP:C	21:V:190:ASP:OD1	2.62	0.42
21:V:482:PHE:HZ	24:Y:381:GLN:CB	2.29	0.42
22:W:41:GLN:O	22:W:44:ILE:N	2.51	0.42
22:W:393:LEU:HD21	22:W:413:ILE:HG23	2.02	0.42
24:Y:55:GLU:O	24:Y:59:LYS:HE3	2.19	0.42
24:Y:138:LEU:HD13	24:Y:167:LEU:HB3	2.01	0.42
24:Y:220:VAL:CB	24:Y:249:VAL:HG11	2.48	0.42
26:a:38:THR:OG1	26:a:71:VAL:HG23	2.19	0.42
26:a:166:ILE:HD13	26:a:166:ILE:N	2.34	0.42
26:a:174:LYS:HD3	26:a:178:ARG:NH2	2.35	0.42
27:b:60:VAL:O	27:b:61:LEU:C	2.62	0.42
27:b:97:LEU:O	27:b:100:ARG:NH1	2.53	0.42
28:c:104:ARG:HG3	28:c:104:ARG:NH1	2.35	0.42
28:c:141:VAL:HG22	28:c:203:ILE:CD1	2.48	0.42
29:d:226:ILE:C	29:d:229:PRO:HD2	2.44	0.42
29:d:283:LEU:HD13	29:d:315:TYR:CE1	2.53	0.42
31:f:58:MET:SD	31:f:59:LEU:HD22	2.59	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:f:231:LEU:HD13	31:f:857:GLY:HA2	2.01	0.42
31:f:434:TYR:HE2	32:g:158:LEU:HD23	1.84	0.42
33:h:63:LEU:CD2	33:h:106:LEU:HD13	2.44	0.42
33:h:136:SER:C	33:h:147:GLN:HE22	2.23	0.42
1:A:174:TYR:HE2	1:A:188:ARG:HD3	1.83	0.42
2:B:116:ILE:HD13	2:B:116:ILE:HA	1.93	0.42
3:C:44:ARG:NH1	21:V:492:LYS:HA	2.34	0.42
3:C:67:GLN:NE2	3:C:67:GLN:CA	2.78	0.42
3:C:186:VAL:CG2	3:C:315:ILE:HD12	2.48	0.42
3:C:259:LEU:HG	4:D:283:ARG:HH12	1.85	0.42
4:D:41:TYR:CD2	20:U:183:LEU:HD21	2.55	0.42
4:D:352:MET:HE2	4:D:352:MET:HB3	1.87	0.42
5:E:174:GLY:N	5:E:180:LYS:HZ3	2.18	0.42
6:F:177:VAL:HG22	6:F:250:LYS:HD3	2.01	0.42
8:H:45:VAL:HG22	8:H:188:ILE:HD13	2.00	0.42
8:H:86:LEU:HD21	8:H:118:MET:SD	2.60	0.42
8:H:173:PHE:HE1	8:H:177:ARG:HG3	1.85	0.42
9:I:136:TYR:HE1	9:I:150:SER:HB2	1.84	0.42
13:M:47:PHE:CZ	13:M:138:GLY:HA3	2.55	0.42
13:M:191:LYS:HD2	13:M:234:GLU:HG3	2.00	0.42
14:N:88:TYR:HE2	33:h:62:TYR:HB2	1.83	0.42
15:P:219:LEU:HG	16:Q:48:ARG:NH2	2.32	0.42
17:R:39:SER:HB3	17:R:42:ILE:CG2	2.47	0.42
18:S:117:GLU:HG2	18:S:119:ASN:HD21	1.85	0.42
18:S:155:LEU:HD12	18:S:155:LEU:O	2.19	0.42
19:T:34:SER:C	19:T:35:ILE:HD12	2.45	0.42
20:U:3:THR:O	20:U:3:THR:OG1	2.37	0.42
20:U:636:VAL:HG13	20:U:637:VAL:HG23	2.01	0.42
20:U:725:MET:HE3	28:c:183:HIS:CB	2.47	0.42
20:U:765:VAL:HG11	20:U:778:PHE:CD2	2.54	0.42
20:U:899:ARG:O	20:U:917:THR:HG21	2.19	0.42
21:V:192:MET:HA	21:V:195:ILE:HG13	2.01	0.42
21:V:236:ARG:NE	21:V:236:ARG:CA	2.82	0.42
22:W:308:LEU:HD12	22:W:308:LEU:HA	1.91	0.42
22:W:314:LEU:CD1	26:a:312:MET:SD	3.07	0.42
23:X:111:LEU:O	23:X:114:ILE:HG23	2.19	0.42
23:X:171:LEU:CD1	23:X:210:LEU:HD23	2.50	0.42
23:X:384:VAL:HG23	23:X:386:ILE:HG13	2.00	0.42
24:Y:80:GLU:HB3	24:Y:110:TYR:CE2	2.54	0.42
24:Y:366:TYR:HA	24:Y:369:THR:HG22	2.02	0.42
26:a:172:TYR:HD2	26:a:203:ALA:HB2	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:b:26:LEU:CD2	27:b:80:PRO:HG3	2.50	0.42
27:b:84:ILE:HG12	27:b:85:THR:N	2.34	0.42
28:c:217:LEU:C	28:c:219:ASN:H	2.27	0.42
29:d:283:LEU:HD23	29:d:286:GLU:OE1	2.20	0.42
31:f:114:ALA:C	31:f:116:GLY:H	2.27	0.42
31:f:163:ALA:HB1	31:f:207:LEU:HD22	2.01	0.42
31:f:262:PHE:HB2	31:f:263:PRO:HD3	2.01	0.42
31:f:505:MET:HG2	31:f:537:THR:CG2	2.49	0.42
31:f:833:PHE:HA	31:f:840:LEU:H	1.85	0.42
31:f:848:GLN:OE1	31:f:878:GLU:HG2	2.20	0.42
32:g:89:LEU:HD12	32:g:95:LYS:HB2	2.02	0.42
33:h:84:SER:O	33:h:87:ALA:N	2.52	0.42
33:h:157:GLN:HG2	33:h:159:VAL:O	2.20	0.42
1:A:72:LEU:HD23	1:A:72:LEU:HA	1.78	0.42
1:A:221:GLY:HA2	36:A:501:ATP:O2A	2.20	0.42
3:C:86:LEU:HD11	3:C:94:LYS:HB3	2.01	0.42
3:C:150:MET:O	38:C:501:ADP:H2	2.03	0.42
3:C:227:GLY:HA3	3:C:272:THR:OG1	2.20	0.42
3:C:254:ILE:HG22	3:C:269:VAL:HG22	2.02	0.42
3:C:339:THR:O	3:C:342:ILE:HG22	2.19	0.42
4:D:154:LEU:HD22	4:D:227:PHE:CD2	2.54	0.42
4:D:315:ASP:OD1	4:D:316:THR:HG23	2.19	0.42
5:E:29:LEU:HB3	6:F:62:VAL:HG11	2.01	0.42
5:E:208:ILE:HD12	5:E:208:ILE:HA	1.80	0.42
5:E:352:MET:CE	5:E:355:ILE:CG2	2.97	0.42
6:F:150:LEU:HD23	6:F:150:LEU:HA	1.88	0.42
6:F:235:LEU:HD22	36:F:501:ATP:N3	2.34	0.42
8:H:38:ILE:HD11	8:H:191:ALA:N	2.34	0.42
8:H:135:LEU:O	8:H:135:LEU:HD23	2.20	0.42
8:H:173:PHE:CE1	8:H:177:ARG:HD3	2.55	0.42
9:I:86:LEU:HD12	9:I:114:LEU:HG	2.01	0.42
10:J:232:ILE:HD12	10:J:232:ILE:HA	1.81	0.42
11:K:15:PHE:CE2	12:L:126:ARG:HB2	2.55	0.42
12:L:42:THR:HG1	12:L:43:HIS:CE1	2.36	0.42
12:L:66:VAL:HG21	12:L:88:MET:HE3	2.00	0.42
12:L:138:ASP:CG	33:h:81:HIS:HE1	2.28	0.42
14:N:6:VAL:HA	14:N:124:SER:O	2.19	0.42
14:N:144:ARG:HH22	14:N:151:GLU:CD	2.28	0.42
16:Q:19:CYS:SG	16:Q:160:PRO:HG3	2.60	0.42
17:R:173:LEU:HD12	17:R:174:ASN:OD1	2.20	0.42
18:S:8:PHE:HD2	18:S:10:HIS:H	1.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:S:20:ALA:O	18:S:27:ALA:N	2.53	0.42
18:S:82:LEU:O	18:S:86:MET:HB3	2.20	0.42
18:S:161:TYR:HD1	18:S:164:THR:HG23	1.84	0.42
19:T:79:ASN:OD1	19:T:79:ASN:N	2.52	0.42
19:T:193:LEU:HD12	19:T:194:ARG:N	2.35	0.42
19:T:197:ILE:HB	19:T:204:ARG:NH2	2.34	0.42
20:U:458:ILE:HD13	20:U:458:ILE:HA	1.92	0.42
20:U:521:LEU:HD22	20:U:761:VAL:HG21	2.02	0.42
21:V:298:ILE:HA	21:V:397:ARG:HH22	1.84	0.42
22:W:256:ILE:HD13	22:W:262:LYS:HB3	2.02	0.42
22:W:256:ILE:O	22:W:263:TRP:HB3	2.19	0.42
22:W:321:VAL:CG1	22:W:322:GLU:N	2.83	0.42
23:X:171:LEU:HD21	23:X:210:LEU:CA	2.44	0.42
25:Z:55:ALA:HB3	28:c:102:THR:HG21	2.02	0.42
26:a:33:LEU:N	26:a:33:LEU:HD23	2.34	0.42
26:a:201:GLY:O	26:a:205:LEU:HD23	2.19	0.42
27:b:32:ALA:HB3	27:b:112:PHE:HE2	1.84	0.42
27:b:54:LEU:CD2	27:b:89:GLY:HA3	2.50	0.42
27:b:142:ASN:CG	27:b:146:GLU:HG3	2.45	0.42
28:c:54:MET:HG3	28:c:55:GLY:N	2.35	0.42
28:c:59:GLY:HA3	28:c:68:ARG:O	2.20	0.42
29:d:164:PHE:HD1	29:d:164:PHE:O	2.03	0.42
29:d:263:LEU:HD23	29:d:263:LEU:C	2.44	0.42
31:f:105:LYS:HA	31:f:108:GLU:HG2	2.01	0.42
31:f:115:PRO:C	31:f:119:LYS:HE2	2.44	0.42
31:f:162:LEU:HD12	31:f:162:LEU:HA	1.80	0.42
31:f:339:ILE:HG22	31:f:773:LYS:CD	2.50	0.42
31:f:524:MET:HE3	31:f:525:ILE:CD1	2.49	0.42
31:f:674:THR:O	31:f:678:LEU:HG	2.19	0.42
33:h:45:VAL:HG11	33:h:51:LEU:HD23	2.02	0.42
1:A:431:THR:O	11:K:82:ILE:HG12	2.19	0.42
3:C:66:LEU:HD23	4:D:114:ARG:CD	2.50	0.42
3:C:208:ASP:OD1	3:C:208:ASP:O	2.38	0.42
3:C:251:ILE:HG21	3:C:301:LEU:HD21	2.01	0.42
4:D:378:ILE:HD13	4:D:403:TYR:CD1	2.50	0.42
5:E:26:LEU:CD2	6:F:58:GLU:HB2	2.50	0.42
5:E:101:ASP:O	5:E:105:LEU:HD22	2.20	0.42
5:E:140:GLU:CD	5:E:140:GLU:N	2.78	0.42
6:F:371:ARG:HB3	6:F:371:ARG:NH1	2.34	0.42
7:G:178:PHE:CE2	7:G:204:THR:HG21	2.55	0.42
7:G:227:PHE:CD1	7:G:227:PHE:C	2.98	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:136:ILE:HG22	8:H:137:CYS:O	2.20	0.42
8:H:179:ASN:HB3	8:H:182:LEU:HD21	2.00	0.42
9:I:218:ARG:HA	9:I:218:ARG:HD2	1.78	0.42
10:J:45:VAL:HG21	10:J:62:ILE:HG13	2.01	0.42
11:K:44:GLU:O	11:K:222:PRO:HD2	2.20	0.42
11:K:195:ILE:HD13	11:K:195:ILE:HA	1.83	0.42
13:M:73:VAL:HG12	13:M:137:LEU:HD22	2.01	0.42
13:M:186:CYS:HB3	13:M:219:LEU:HD23	2.01	0.42
15:P:11:GLY:HA2	15:P:108:PRO:HG3	2.01	0.42
16:Q:20:VAL:HG21	16:Q:110:ALA:HB1	2.01	0.42
17:R:29:LYS:NZ	18:S:122:SER:H	2.05	0.42
17:R:124:LEU:CD2	17:R:124:LEU:N	2.68	0.42
20:U:765:VAL:HG21	20:U:778:PHE:CD2	2.54	0.42
20:U:770:TRP:O	28:c:181:LEU:HD13	2.20	0.42
21:V:185:GLN:O	21:V:189:ASP:OD2	2.37	0.42
21:V:358:MET:N	21:V:359:PRO:HD2	2.34	0.42
23:X:412:ASP:OD1	24:Y:379:ARG:NH2	2.53	0.42
24:Y:11:LEU:HD13	24:Y:12:PRO:CD	2.50	0.42
24:Y:307:LEU:HD12	24:Y:307:LEU:O	2.19	0.42
25:Z:39:LEU:C	25:Z:40:LEU:HD12	2.45	0.42
26:a:122:LYS:NZ	26:a:131:THR:OG1	2.49	0.42
27:b:20:ASP:OD1	27:b:21:PHE:HD1	2.03	0.42
27:b:131:LEU:HB3	27:b:136:VAL:HG13	2.00	0.42
28:c:61:PHE:CZ	28:c:109:VAL:HA	2.54	0.42
28:c:284:LEU:HA	28:c:284:LEU:HD13	1.72	0.42
29:d:164:PHE:HD2	29:d:259:PHE:CZ	2.38	0.42
31:f:93:PRO:HG3	31:f:96:LEU:HD12	2.01	0.42
31:f:126:ILE:HG23	31:f:142:TYR:CD2	2.55	0.42
31:f:181:ARG:NE	31:f:181:ARG:HA	2.35	0.42
31:f:266:LEU:HD12	31:f:281:ILE:HD12	2.01	0.42
31:f:322:SER:O	31:f:323:ASN:OD1	2.37	0.42
31:f:422:VAL:HG22	31:f:452:ASN:OD1	2.20	0.42
32:g:94:LYS:HA	32:g:94:LYS:HD3	1.71	0.42
1:A:173:THR:HG23	1:A:175:SER:N	2.22	0.42
1:A:270:CYS:SG	1:A:271:LEU:N	2.93	0.42
2:B:86:LYS:NZ	2:B:87:PRO:HD2	2.35	0.42
3:C:351:MET:CE	3:C:359:VAL:HG22	2.50	0.42
4:D:44:TYR:CE2	20:U:156:GLU:OE2	2.72	0.42
4:D:119:ILE:HD13	4:D:139:LEU:CD2	2.49	0.42
5:E:191:LEU:HD22	5:E:191:LEU:N	2.35	0.42
7:G:240:VAL:HG13	22:W:94:ARG:HH21	1.79	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:86:LEU:CD2	8:H:134:LEU:HG	2.49	0.42
8:H:95:GLN:HG2	15:P:65:LEU:HD21	2.00	0.42
9:I:86:LEU:HD13	9:I:114:LEU:HD11	2.01	0.42
10:J:65:LEU:HD22	10:J:71:MET:HG2	2.00	0.42
13:M:211:LEU:HG	13:M:213:LEU:CD2	2.50	0.42
15:P:79:ALA:C	15:P:100:LEU:HD21	2.44	0.42
15:P:108:PRO:C	15:P:109:HIS:HD1	2.20	0.42
16:Q:59:ASP:HA	16:Q:62:THR:OG1	2.19	0.42
17:R:2:GLU:HB3	17:R:18:ASP:OD1	2.20	0.42
18:S:35:ILE:HD12	18:S:43:GLY:O	2.19	0.42
18:S:54:PHE:CD2	19:T:97:TYR:HD2	2.37	0.42
19:T:118:LYS:NZ	19:T:119:GLY:O	2.52	0.42
20:U:6:ALA:CB	20:U:37:GLU:OE2	2.67	0.42
20:U:324:LYS:HE3	20:U:324:LYS:HB2	1.65	0.42
20:U:408:LEU:HD11	20:U:426:TYR:CD2	2.54	0.42
21:V:64:GLN:C	21:V:67:LEU:HG	2.44	0.42
21:V:172:VAL:HG22	21:V:187:ILE:CG2	2.48	0.42
21:V:256:ARG:HG2	21:V:256:ARG:NH1	2.32	0.42
21:V:367:VAL:HG21	21:V:398:LEU:CD2	2.46	0.42
21:V:475:ALA:HB1	21:V:479:ARG:NH2	2.16	0.42
22:W:149:LEU:HA	22:W:152:ILE:HG22	2.01	0.42
23:X:156:GLU:OE1	23:X:156:GLU:N	2.52	0.42
25:Z:174:HIS:CE1	28:c:207:TYR:CZ	3.07	0.42
25:Z:272:LEU:HD23	25:Z:272:LEU:HA	1.71	0.42
26:a:85:ARG:HG2	26:a:85:ARG:NH1	2.35	0.42
29:d:109:LEU:HD12	29:d:154:TRP:HE1	1.85	0.42
29:d:175:TYR:HE2	29:d:188:MET:CB	2.33	0.42
29:d:301:ASP:O	29:d:305:LYS:HG2	2.19	0.42
29:d:302:TYR:N	29:d:305:LYS:HE3	2.35	0.42
31:f:72:ARG:NH1	31:f:117:GLU:HG2	2.28	0.42
31:f:83:ARG:NH1	31:f:153:SER:OG	2.53	0.42
31:f:253:LEU:O	31:f:257:ARG:HG2	2.19	0.42
31:f:285:CYS:C	31:f:286:LYS:HZ2	2.27	0.42
31:f:702:PRO:HG3	31:f:736:THR:CG2	2.50	0.42
31:f:840:LEU:O	31:f:840:LEU:HD23	2.19	0.42
33:h:12:LEU:HD22	33:h:138:ALA:HB1	2.01	0.42
33:h:61:GLN:HA	33:h:64:LYS:CD	2.33	0.42
33:h:70:MET:HE1	33:h:83:TYR:CD2	2.55	0.42
34:u:120:PRO:HG2	34:u:123:TYR:CD2	2.55	0.42
34:u:196:ILE:HG23	34:u:244:VAL:CG2	2.48	0.42
1:A:405:THR:HG23	1:A:407:LYS:N	2.31	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:432:TYR:OH	10:J:15:HIS:HA	2.20	0.42
2:B:260:LEU:HD12	2:B:260:LEU:HA	1.90	0.42
2:B:361:LYS:HG2	2:B:395:ILE:CD1	2.50	0.42
2:B:417:GLU:HG3	2:B:420:LYS:HZ1	1.84	0.42
3:C:114:VAL:HG23	3:C:116:LEU:HD21	2.02	0.42
3:C:235:PHE:HE2	3:C:276:LEU:HD12	1.84	0.42
3:C:311:ILE:HD13	3:C:311:ILE:HA	1.83	0.42
5:E:21:GLU:OE1	5:E:22:ILE:HG13	2.19	0.42
5:E:322:LYS:HD2	5:E:328:TYR:OH	2.20	0.42
6:F:79:LYS:O	6:F:82:VAL:HG12	2.19	0.42
7:G:211:LYS:HE3	7:G:211:LYS:HB2	1.72	0.42
8:H:13:PHE:HE2	9:I:129:PRO:O	2.03	0.42
9:I:38:LEU:HD12	9:I:38:LEU:C	2.45	0.42
10:J:156:TRP:CE3	10:J:159:ASN:HB2	2.55	0.42
13:M:33:SER:O	13:M:167:LYS:N	2.53	0.42
13:M:73:VAL:HA	13:M:138:GLY:O	2.20	0.42
16:Q:123:SER:C	16:Q:124:LEU:HD13	2.45	0.42
18:S:88:TYR:O	18:S:90:TYR:N	2.53	0.42
20:U:22:PHE:CD2	29:d:124:LEU:HG	2.55	0.42
20:U:86:ASP:O	20:U:90:VAL:HG22	2.19	0.42
20:U:714:SER:O	20:U:717:ILE:HG22	2.19	0.42
21:V:327:THR:HA	21:V:330:LYS:HG3	2.01	0.42
21:V:428:LEU:HD23	21:V:434:ALA:HA	2.01	0.42
22:W:333:LEU:HG	22:W:334:GLU:OE1	2.19	0.42
23:X:254:MET:CE	23:X:270:LEU:HD12	2.50	0.42
24:Y:189:VAL:HG23	24:Y:197:ALA:CB	2.48	0.42
25:Z:7:GLN:O	25:Z:159:THR:HG22	2.20	0.42
25:Z:224:HIS:ND1	26:a:340:VAL:HG22	2.34	0.42
26:a:29:TYR:CD1	26:a:29:TYR:C	2.98	0.42
27:b:145:GLU:O	27:b:145:GLU:HG2	2.20	0.42
28:c:32:TYR:HB2	28:c:68:ARG:HA	2.02	0.42
29:d:181:GLN:CD	29:d:181:GLN:N	2.78	0.42
31:f:110:TYR:CE2	31:f:123:ALA:HB2	2.52	0.42
31:f:237:VAL:HG13	31:f:238:ASN:N	2.35	0.42
31:f:325:GLN:O	31:f:329:ASN:OD1	2.38	0.42
31:f:405:HIS:HB2	31:f:815:HIS:CD2	2.48	0.42
31:f:521:ALA:HA	31:f:524:MET:HG3	2.02	0.42
31:f:749:ALA:HB2	31:f:762:VAL:CG1	2.50	0.42
33:h:9:THR:HG21	33:h:183:SER:HA	2.02	0.42
33:h:145:LEU:HD23	33:h:145:LEU:C	2.45	0.42
1:A:25:LEU:HD23	1:A:30:ILE:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:325:ASP:C	1:A:325:ASP:OD1	2.63	0.41
1:A:387:SER:O	1:A:391:GLU:HG2	2.19	0.41
2:B:187:ILE:HD12	2:B:190:LEU:HB2	2.00	0.41
2:B:362:LYS:HA	2:B:384:ILE:CD1	2.50	0.41
3:C:48:GLN:HB3	4:D:65:GLN:HE21	1.83	0.41
3:C:217:SER:CB	4:D:248:ARG:HH22	2.33	0.41
4:D:188:PHE:HE1	4:D:198:PRO:HG3	1.85	0.41
5:E:168:LYS:CD	5:E:274:LYS:HG3	2.50	0.41
5:E:172:LEU:HD11	5:E:276:ILE:CG2	2.49	0.41
6:F:242:ALA:CB	6:F:243:GLN:OE1	2.68	0.41
6:F:269:ARG:HG3	6:F:316:GLN:NE2	2.35	0.41
7:G:60:LEU:HD11	13:M:177:GLU:CG	2.50	0.41
7:G:65:THR:CB	13:M:159:GLY:H	2.33	0.41
7:G:78:CYS:SG	7:G:91:VAL:HG23	2.60	0.41
12:L:38:LEU:HD23	12:L:38:LEU:N	2.35	0.41
13:M:27:MET:HA	13:M:30:VAL:HG12	2.01	0.41
14:N:115:PRO:HG3	33:h:36:PHE:HE2	1.85	0.41
14:N:127:ILE:HD12	14:N:128:GLY:N	2.35	0.41
16:Q:13:ALA:HA	16:Q:21:ALA:O	2.20	0.41
16:Q:41:LYS:HD3	16:Q:53:LEU:O	2.20	0.41
16:Q:72:ASN:HD22	16:Q:72:ASN:HA	1.70	0.41
16:Q:164:PHE:HA	16:Q:167:ILE:HG22	2.01	0.41
16:Q:199:THR:O	16:Q:199:THR:HG23	2.20	0.41
20:U:106:ASP:O	20:U:109:THR:HG23	2.20	0.41
20:U:335:ILE:HD13	20:U:335:ILE:HA	1.92	0.41
20:U:498:LYS:HD2	20:U:531:ASP:OD2	2.20	0.41
20:U:645:ASN:HD21	20:U:648:VAL:HG23	1.85	0.41
21:V:203:LEU:O	21:V:206:VAL:HG23	2.19	0.41
21:V:342:ILE:HD11	21:V:368:ARG:CB	2.50	0.41
22:W:98:LYS:H	22:W:98:LYS:CD	2.33	0.41
22:W:162:ALA:HA	22:W:165:ILE:HG22	2.02	0.41
22:W:203:GLN:OE1	22:W:207:LYS:HD3	2.20	0.41
24:Y:128:TYR:CD1	24:Y:128:TYR:C	2.97	0.41
24:Y:289:ALA:N	24:Y:290:PRO:HD2	2.35	0.41
25:Z:109:ASN:ND2	25:Z:140:SER:CB	2.82	0.41
26:a:24:ARG:NH1	26:a:40:GLN:HE21	2.17	0.41
26:a:371:ALA:O	26:a:375:LEU:HG	2.20	0.41
31:f:99:LEU:HD23	31:f:129:LEU:CD1	2.27	0.41
31:f:608:LYS:O	31:f:612:LEU:HD13	2.20	0.41
31:f:678:LEU:CD1	31:f:690:VAL:HG22	2.49	0.41
31:f:723:TYR:HB3	31:f:761:MET:HE2	1.99	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:20:VAL:HG11	33:h:122:LEU:HD21	2.02	0.41
1:A:51:ASP:OD1	2:B:69:LYS:HD2	2.19	0.41
1:A:83:ASP:O	1:A:86:THR:HG23	2.20	0.41
1:A:93:LEU:CD2	1:A:150:HIS:HB2	2.50	0.41
1:A:195:LEU:HD13	1:A:269:ALA:HB1	2.02	0.41
1:A:364:VAL:HG23	1:A:409:PHE:HE1	1.86	0.41
1:A:394:MET:HG3	2:B:349:ARG:HH21	1.85	0.41
1:A:405:THR:HG22	1:A:408:ASP:OD2	2.19	0.41
2:B:182:GLU:N	2:B:182:GLU:CD	2.78	0.41
2:B:185:ALA:HB1	31:f:852:VAL:HG23	2.02	0.41
2:B:289:ALA:CB	3:C:274:LEU:HD12	2.47	0.41
2:B:374:LEU:HD23	2:B:414:VAL:HG23	2.02	0.41
3:C:391:MET:HE3	3:C:391:MET:HB3	1.86	0.41
4:D:66:LYS:HB3	4:D:66:LYS:HE3	1.92	0.41
4:D:149:SER:HA	4:D:153:MET:HB3	2.01	0.41
4:D:267:ILE:O	4:D:271:ALA:HB2	2.20	0.41
4:D:412:GLN:O	4:D:413:GLU:HB2	2.20	0.41
5:E:170:CYS:SG	5:E:171:LEU:N	2.93	0.41
6:F:122:ALA:CB	6:F:137:ILE:HD12	2.50	0.41
6:F:137:ILE:O	6:F:160:ILE:HB	2.19	0.41
6:F:362:ARG:NH1	6:F:362:ARG:HG3	2.34	0.41
8:H:34:PRO:HD2	8:H:49:GLU:HG3	2.02	0.41
9:I:37:ILE:HB	9:I:44:LEU:HD21	2.01	0.41
10:J:132:LEU:HD23	10:J:146:GLN:HA	2.02	0.41
12:L:46:LEU:CD1	12:L:73:SER:HB2	2.50	0.41
12:L:64:LEU:CD1	12:L:74:ILE:HD13	2.46	0.41
12:L:150:SER:O	12:L:151:ALA:HB3	2.19	0.41
14:N:127:ILE:HD12	14:N:128:GLY:H	1.85	0.41
14:N:135:ILE:HG12	14:N:163:ALA:HB2	2.01	0.41
20:U:24:LEU:HD13	20:U:48:LEU:HD22	2.01	0.41
20:U:337:LEU:HD13	20:U:337:LEU:HA	1.93	0.41
20:U:443:LEU:HD12	20:U:443:LEU:HA	1.90	0.41
20:U:549:ALA:HA	20:U:581:SER:HG	1.82	0.41
20:U:678:ASP:HB3	20:U:683:VAL:HG11	2.02	0.41
20:U:802:TYR:HD1	20:U:802:TYR:O	2.03	0.41
21:V:68:ASP:OD1	21:V:112:VAL:HA	2.19	0.41
21:V:83:GLU:O	21:V:86:VAL:HG13	2.21	0.41
22:W:34:LEU:HD22	22:W:43:VAL:CG1	2.50	0.41
22:W:296:LEU:HD23	22:W:299:ILE:HD11	2.02	0.41
22:W:316:ARG:HB3	22:W:319:THR:HG23	2.02	0.41
22:W:376:LYS:HB3	22:W:376:LYS:HZ1	1.83	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:261:LEU:O	23:X:263:THR:HG23	2.20	0.41
24:Y:50:MET:H	24:Y:50:MET:HG2	1.65	0.41
24:Y:52:PRO:HA	24:Y:55:GLU:HG2	2.02	0.41
24:Y:191:ILE:O	24:Y:191:ILE:CG1	2.68	0.41
26:a:57:ILE:HG23	26:a:61:GLU:HG3	2.03	0.41
28:c:163:ILE:HG23	28:c:174:PRO:HB3	2.02	0.41
28:c:188:SER:O	28:c:192:LEU:HG	2.20	0.41
28:c:248:MET:HE1	28:c:291:LEU:HD12	2.00	0.41
31:f:266:LEU:HD13	31:f:281:ILE:CB	2.51	0.41
31:f:399:LEU:HD12	31:f:399:LEU:O	2.20	0.41
31:f:434:TYR:OH	32:g:158:LEU:HD21	2.21	0.41
31:f:441:LYS:HB2	31:f:477:MET:HG3	2.03	0.41
31:f:678:LEU:HD12	31:f:679:LEU:N	2.35	0.41
31:f:679:LEU:CD2	31:f:690:VAL:HG11	2.28	0.41
31:f:723:TYR:CB	31:f:761:MET:CE	2.98	0.41
31:f:782:HIS:O	31:f:787:LEU:N	2.38	0.41
31:f:792:ALA:HA	31:f:824:ALA:HA	2.02	0.41
1:A:78:TRP:O	1:A:79:ASP:C	2.62	0.41
1:A:83:ASP:HA	1:A:86:THR:HG22	2.01	0.41
1:A:427:PRO:O	1:A:430:MET:HB2	2.20	0.41
3:C:266:ASP:OD1	3:C:267:SER:N	2.53	0.41
4:D:178:ARG:NH1	4:D:178:ARG:HG3	2.35	0.41
4:D:257:ASN:HD22	4:D:257:ASN:C	2.29	0.41
4:D:302:ASN:O	4:D:303:VAL:HB	2.20	0.41
4:D:391:ARG:HE	4:D:395:LEU:CD1	2.33	0.41
5:E:191:LEU:HD12	5:E:227:PRO:CG	2.50	0.41
6:F:198:LEU:HD21	6:F:240:CYS:SG	2.60	0.41
6:F:362:ARG:HG3	6:F:362:ARG:HH11	1.83	0.41
8:H:50:LYS:HB2	8:H:50:LYS:NZ	2.35	0.41
8:H:101:TYR:CE2	16:Q:74:TYR:CD1	3.08	0.41
9:I:219:GLU:O	9:I:220:ASN:OD1	2.37	0.41
10:J:45:VAL:HG21	10:J:62:ILE:HD11	2.01	0.41
10:J:85:ASN:CG	17:R:70:ARG:HH12	2.25	0.41
10:J:132:LEU:HD21	10:J:146:GLN:HB2	2.02	0.41
11:K:52:LYS:HE2	11:K:216:GLU:OE1	2.20	0.41
12:L:66:VAL:HG21	12:L:72:ILE:HD13	2.02	0.41
12:L:173:GLU:HB2	13:M:57:LEU:HD21	2.01	0.41
15:P:48:THR:OG1	15:P:51:ASP:HB2	2.20	0.41
18:S:177:TYR:CE1	18:S:186:ARG:HD3	2.55	0.41
19:T:193:LEU:HD12	19:T:193:LEU:C	2.45	0.41
20:U:509:GLY:HA3	20:U:544:ILE:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:572:ARG:HB3	20:U:572:ARG:HH11	1.85	0.41
21:V:172:VAL:HG21	21:V:191:LEU:CD2	2.51	0.41
21:V:221:LEU:HB3	21:V:223:LYS:CE	2.51	0.41
21:V:281:ASN:HB3	21:V:283:ASN:OD1	2.20	0.41
21:V:287:ARG:HG3	21:V:287:ARG:H	1.74	0.41
21:V:322:VAL:HG13	30:e:24:ALA:CB	2.51	0.41
22:W:51:GLU:HG3	22:W:90:LEU:CD1	2.51	0.41
22:W:242:SER:HA	22:W:245:LYS:NZ	2.36	0.41
22:W:442:THR:O	22:W:446:ILE:HB	2.20	0.41
23:X:297:ARG:NH2	23:X:337:ARG:HE	2.19	0.41
23:X:347:ILE:HA	23:X:350:ILE:HG22	2.01	0.41
24:Y:146:ARG:NH1	24:Y:146:ARG:HB2	2.36	0.41
25:Z:206:LEU:CD1	25:Z:209:ARG:HH21	2.33	0.41
26:a:244:ASN:HD21	26:a:246:GLU:CG	2.33	0.41
26:a:293:PHE:HE2	26:a:304:VAL:CG2	2.26	0.41
31:f:297:MET:HA	31:f:297:MET:CE	2.46	0.41
31:f:672:LEU:HD11	31:f:706:ILE:CG1	2.47	0.41
31:f:782:HIS:N	31:f:787:LEU:O	2.53	0.41
31:f:872:VAL:HG12	31:f:873:LEU:H	1.85	0.41
34:u:138:LEU:HD12	34:u:166:LEU:HB3	2.01	0.41
2:B:85:MET:O	2:B:85:MET:SD	2.78	0.41
2:B:269:GLU:OE2	2:B:272:ARG:NH2	2.48	0.41
3:C:63:LEU:HD21	4:D:79:VAL:HG22	2.02	0.41
3:C:266:ASP:OD1	3:C:270:GLN:HG3	2.20	0.41
4:D:225:ALA:HB1	4:D:259:PRO:C	2.45	0.41
4:D:327:LEU:HD12	4:D:327:LEU:HA	1.87	0.41
5:E:51:GLN:H	5:E:51:GLN:HG2	1.62	0.41
5:E:85:ARG:HB3	5:E:86:GLN:OE1	2.21	0.41
6:F:373:MET:HE2	6:F:373:MET:HB2	1.89	0.41
7:G:182:LYS:HA	7:G:185:LYS:NZ	2.34	0.41
8:H:74:LEU:CD1	8:H:136:ILE:HG13	2.51	0.41
9:I:198:ASN:CA	9:I:206:LEU:HD12	2.50	0.41
10:J:204:LYS:HA	10:J:204:LYS:HD2	1.81	0.41
11:K:12:VAL:HG12	11:K:23:GLN:HB3	2.02	0.41
11:K:234:LEU:O	11:K:237:VAL:HG12	2.21	0.41
13:M:197:ILE:HG21	13:M:211:LEU:HD11	1.96	0.41
14:N:19:ARG:HB2	14:N:171:GLY:O	2.20	0.41
17:R:3:TYR:OH	17:R:135:GLY:O	2.33	0.41
17:R:7:ILE:CD1	17:R:14:LEU:HB2	2.50	0.41
17:R:22:ALA:CB	17:R:27:GLN:HA	2.48	0.41
18:S:58:LEU:O	18:S:62:GLN:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:155:LEU:HD21	20:U:197:VAL:HG21	2.02	0.41
20:U:437:TYR:CE1	20:U:472:ILE:HD12	2.44	0.41
20:U:481:LEU:HD23	20:U:481:LEU:C	2.44	0.41
20:U:732:LEU:HD23	20:U:732:LEU:HA	1.87	0.41
20:U:812:ALA:O	20:U:813:TYR:C	2.64	0.41
21:V:78:HIS:O	21:V:82:LEU:HG	2.20	0.41
21:V:162:GLU:HA	21:V:203:LEU:HD23	2.02	0.41
21:V:266:GLN:H	21:V:266:GLN:HG2	1.66	0.41
22:W:23:THR:CB	22:W:27:ARG:CZ	2.98	0.41
22:W:89:LEU:HD23	22:W:93:ARG:HD3	2.01	0.41
23:X:400:ALA:O	23:X:404:ILE:HG13	2.20	0.41
24:Y:190:ALA:HB2	24:Y:287:LEU:CD1	2.48	0.41
25:Z:79:TYR:OH	25:Z:90:ARG:HA	2.21	0.41
26:a:138:VAL:HG12	26:a:155:PHE:CD2	2.56	0.41
28:c:49:VAL:CG1	28:c:147:PRO:HG2	2.50	0.41
28:c:110:GLY:HA3	28:c:141:VAL:O	2.20	0.41
29:d:138:LYS:O	29:d:141:LEU:HB2	2.20	0.41
29:d:176:PHE:HD2	29:d:214:ARG:NH2	2.19	0.41
31:f:348:ILE:HD12	31:f:770:HIS:ND1	2.35	0.41
1:A:402:LYS:C	1:A:403:ILE:HD12	2.45	0.41
3:C:65:LEU:HB3	4:D:114:ARG:HE	1.85	0.41
3:C:79:ALA:HB2	3:C:105:ILE:HD11	2.02	0.41
3:C:214:VAL:O	3:C:248:MET:HA	2.21	0.41
4:D:205:TYR:CE2	4:D:330:LYS:HB3	2.55	0.41
4:D:372:GLY:HA3	38:D:501:ADP:C8	2.55	0.41
4:D:397:LYS:HG3	4:D:398:ASP:H	1.86	0.41
5:E:40:TYR:HB2	6:F:73:ILE:HD11	2.02	0.41
5:E:47:LEU:HD12	5:E:47:LEU:HA	1.88	0.41
5:E:49:ALA:CB	6:F:136:VAL:HG21	2.50	0.41
5:E:60:VAL:HG23	5:E:98:VAL:CG1	2.50	0.41
5:E:60:VAL:CG2	5:E:98:VAL:HG11	2.51	0.41
5:E:351:GLY:O	5:E:354:ALA:N	2.54	0.41
6:F:59:VAL:O	6:F:63:THR:OG1	2.30	0.41
6:F:417:HIS:NE2	12:L:166:GLN:HG2	2.36	0.41
7:G:97:GLU:CD	7:G:117:ARG:HG2	2.45	0.41
7:G:239:LEU:HB2	22:W:94:ARG:NH2	2.35	0.41
9:I:245:ALA:HA	9:I:248:GLU:HG3	2.01	0.41
10:J:57:ARG:HG3	10:J:58:THR:HG23	2.02	0.41
11:K:78:MET:HG3	11:K:85:ALA:HB2	2.03	0.41
11:K:164:GLN:OE1	12:L:58:ALA:HB2	2.20	0.41
13:M:163:CYS:SG	13:M:164:ALA:N	2.93	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:183:GLU:HG2	13:M:184:MET:N	2.32	0.41
15:P:46:ALA:N	15:P:97:ALA:O	2.50	0.41
15:P:147:GLU:OE1	15:P:147:GLU:CA	2.67	0.41
15:P:216:ILE:CD1	16:Q:196:THR:HA	2.39	0.41
16:Q:26:ARG:HB2	16:Q:184:GLY:C	2.46	0.41
16:Q:43:PHE:CE2	16:Q:64:ALA:HB2	2.55	0.41
17:R:3:TYR:CE2	17:R:167:LEU:HD11	2.56	0.41
18:S:54:PHE:CG	19:T:97:TYR:CD2	3.09	0.41
19:T:24:ALA:HB2	19:T:195:ILE:HD12	2.01	0.41
19:T:54:CYS:HB2	19:T:106:VAL:HG12	2.01	0.41
19:T:61:CYS:SG	19:T:106:VAL:HG13	2.61	0.41
20:U:91:ASN:HD21	20:U:97:VAL:CG2	2.33	0.41
20:U:630:PRO:O	20:U:634:PRO:CD	2.69	0.41
20:U:713:TYR:CE2	20:U:733:ALA:HB1	2.55	0.41
21:V:232:HIS:CE1	21:V:258:TYR:HH	2.16	0.41
23:X:44:GLN:CD	23:X:44:GLN:C	2.89	0.41
23:X:106:GLU:H	23:X:106:GLU:CD	2.29	0.41
23:X:183:LEU:HD21	23:X:220:ALA:CB	2.50	0.41
24:Y:46:ARG:HD3	24:Y:69:LEU:CD1	2.44	0.41
25:Z:20:VAL:HG11	28:c:212:LEU:HG	2.02	0.41
26:a:31:LYS:C	26:a:32:LYS:HG3	2.45	0.41
26:a:187:ASP:OD1	26:a:187:ASP:N	2.52	0.41
27:b:151:GLU:HG2	27:b:152:LYS:N	2.36	0.41
29:d:197:LEU:HG	29:d:259:PHE:HB3	2.03	0.41
31:f:229:VAL:HG22	31:f:233:LEU:HD21	2.01	0.41
31:f:380:PHE:HD1	31:f:416:MET:CE	2.33	0.41
31:f:391:LEU:CG	31:f:417:ILE:HG13	2.49	0.41
31:f:439:TYR:CZ	31:f:476:THR:HG21	2.53	0.41
31:f:450:ILE:O	31:f:453:SER:OG	2.26	0.41
31:f:498:LEU:CD1	31:f:502:LEU:HD21	2.50	0.41
31:f:499:THR:O	31:f:503:PRO:HD3	2.20	0.41
33:h:11:VAL:N	33:h:139:THR:OG1	2.51	0.41
33:h:153:VAL:CA	33:h:156:LYS:HE3	2.25	0.41
34:u:221:THR:HG22	34:u:224:ASP:OD2	2.21	0.41
1:A:290:GLY:N	4:D:239:TYR:HH	2.19	0.41
2:B:214:MET:O	2:B:214:MET:HE3	2.20	0.41
3:C:331:ILE:O	3:C:334:ARG:HD3	2.21	0.41
4:D:204:MET:CE	4:D:308:ILE:HG21	2.50	0.41
5:E:313:LEU:CD2	5:E:331:ILE:HG21	2.47	0.41
6:F:179:GLU:OE1	6:F:179:GLU:HA	2.20	0.41
7:G:38:THR:HG21	7:G:206:LEU:HD11	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:77:GLY:HA3	7:G:227:PHE:CE2	2.56	0.41
7:G:80:MET:SD	7:G:138:MET:HG3	2.61	0.41
7:G:237:ALA:HA	7:G:240:VAL:HG22	2.03	0.41
7:G:240:VAL:O	7:G:244:GLU:HG3	2.21	0.41
9:I:103:GLU:OE2	17:R:78:THR:HG23	2.20	0.41
11:K:117:SER:CB	12:L:82:ARG:HH12	2.33	0.41
12:L:19:ILE:HD13	13:M:129:ARG:NE	2.35	0.41
12:L:75:ALA:CB	12:L:161:ILE:HG13	2.51	0.41
12:L:89:ARG:HD3	19:T:77:HIS:CB	2.51	0.41
13:M:179:LEU:C	13:M:179:LEU:HD23	2.45	0.41
13:M:211:LEU:CD2	13:M:213:LEU:HD21	2.50	0.41
14:N:31:THR:HG21	14:N:33:LYS:HZ2	1.86	0.41
15:P:35:HIS:O	15:P:37:ILE:HD12	2.20	0.41
15:P:37:ILE:HA	15:P:60:SER:CB	2.45	0.41
15:P:126:THR:O	15:P:127:MET:HG2	2.20	0.41
16:Q:99:ARG:HD2	16:Q:127:ILE:CG1	2.50	0.41
16:Q:121:ILE:HD12	16:Q:137:VAL:HG22	2.02	0.41
17:R:38:MET:SD	17:R:61:GLN:HA	2.61	0.41
17:R:77:PRO:CG	17:R:108:ASP:HB2	2.50	0.41
17:R:136:ALA:O	17:R:140:LEU:HB2	2.21	0.41
18:S:16:ALA:CB	18:S:33:LYS:HB2	2.51	0.41
19:T:46:LEU:HD13	19:T:68:ILE:HG22	2.03	0.41
19:T:67:ILE:HG21	19:T:95:ILE:CD1	2.51	0.41
20:U:158:ARG:O	20:U:159:ARG:C	2.63	0.41
20:U:344:ARG:HD2	20:U:927:PRO:HG2	1.99	0.41
21:V:314:ARG:HD3	24:Y:378:ASN:CG	2.46	0.41
22:W:446:ILE:CD1	25:Z:211:TYR:CB	2.94	0.41
23:X:153:LEU:HD21	23:X:157:LEU:HD11	2.02	0.41
23:X:232:PHE:HB3	23:X:254:MET:HG3	2.02	0.41
23:X:252:LYS:HB3	23:X:319:ILE:HD11	2.02	0.41
23:X:382:GLU:HG2	23:X:383:GLY:N	2.35	0.41
24:Y:82:LYS:HB3	24:Y:82:LYS:HE3	1.92	0.41
24:Y:373:GLY:HA3	25:Z:261:TYR:OH	2.20	0.41
26:a:45:VAL:HG11	26:a:82:HIS:CB	2.51	0.41
27:b:100:ARG:NH1	27:b:100:ARG:HB2	2.35	0.41
29:d:94:MET:HG3	29:d:118:ARG:CZ	2.51	0.41
29:d:175:TYR:HE2	29:d:188:MET:HG2	1.84	0.41
29:d:275:ILE:HG12	29:d:318:PHE:CZ	2.56	0.41
31:f:79:ARG:HD3	31:f:125:ILE:HD11	2.02	0.41
31:f:170:TRP:CH2	31:f:181:ARG:HD2	2.56	0.41
31:f:498:LEU:HD22	31:f:534:VAL:CG2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:h:191:THR:O	33:h:191:THR:HG23	2.19	0.41
34:u:181:LYS:O	34:u:181:LYS:HG3	2.21	0.41
1:A:182:GLU:HG2	1:A:186:LYS:HD2	2.03	0.41
3:C:91:PRO:HG3	4:D:109:SER:HB2	2.01	0.41
3:C:151:ILE:CD1	3:C:199:LEU:HA	2.50	0.41
4:D:205:TYR:HE1	4:D:332:GLU:OE1	2.04	0.41
5:E:61:LEU:HB2	5:E:70:ILE:HG22	2.03	0.41
5:E:81:VAL:HB	5:E:105:LEU:O	2.20	0.41
5:E:192:ASP:O	5:E:195:PHE:HB2	2.21	0.41
10:J:5:ARG:HB2	10:J:5:ARG:NH1	2.35	0.41
10:J:94:HIS:CE1	10:J:102:VAL:HA	2.55	0.41
15:P:58:LEU:O	15:P:62:ASN:HB2	2.21	0.41
15:P:152:LYS:HE3	15:P:152:LYS:HB3	1.87	0.41
15:P:215:LYS:HB3	16:Q:197:THR:OG1	2.21	0.41
16:Q:42:ILE:O	16:Q:42:ILE:HG13	2.17	0.41
17:R:31:ASP:OD1	17:R:31:ASP:C	2.64	0.41
17:R:71:ASN:HB3	17:R:73:TYR:CZ	2.56	0.41
18:S:44:THR:HG23	18:S:100:MET:O	2.21	0.41
18:S:100:MET:SD	18:S:128:VAL:HG12	2.61	0.41
18:S:194:ASP:OD1	18:S:194:ASP:C	2.64	0.41
19:T:184:GLU:HG3	19:T:185:ARG:H	1.85	0.41
19:T:208:VAL:HG12	19:T:209:SER:N	2.34	0.41
20:U:18:GLN:OE1	29:d:121:LEU:HD12	2.20	0.41
20:U:154:ALA:HB2	20:U:162:VAL:HG13	2.03	0.41
20:U:330:SER:HB3	20:U:332:GLU:CD	2.44	0.41
20:U:365:CYS:SG	20:U:727:LYS:HD2	2.61	0.41
20:U:450:HIS:CE1	20:U:457:ILE:HD13	2.55	0.41
20:U:911:ILE:HD13	20:U:911:ILE:N	2.34	0.41
21:V:83:GLU:HA	21:V:86:VAL:HG12	2.03	0.41
21:V:168:GLN:O	21:V:171:VAL:HG13	2.20	0.41
21:V:188:SER:O	21:V:191:LEU:HG	2.21	0.41
21:V:211:TYR:CD2	21:V:250:LEU:HD11	2.56	0.41
22:W:301:LYS:HD3	22:W:301:LYS:HA	1.85	0.41
23:X:410:VAL:HG22	28:c:256:ASN:HA	2.01	0.41
24:Y:328:GLU:HG2	24:Y:329:PHE:N	2.36	0.41
25:Z:58:PHE:CZ	25:Z:108:ILE:HD11	2.56	0.41
25:Z:226:ILE:N	25:Z:226:ILE:HD13	2.35	0.41
25:Z:250:TYR:OH	29:d:331:PRO:HD3	2.21	0.41
26:a:41:VAL:O	26:a:45:VAL:HG23	2.21	0.41
26:a:227:ASN:OD1	26:a:227:ASN:C	2.64	0.41
26:a:252:LYS:HZ1	26:a:255:TRP:NE1	2.18	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:d:200:LEU:HD21	29:d:233:GLU:OE1	2.20	0.41
29:d:219:ASP:O	29:d:226:ILE:HD11	2.21	0.41
31:f:231:LEU:HD13	31:f:857:GLY:C	2.45	0.41
31:f:416:MET:HG2	31:f:450:ILE:HD13	2.02	0.41
31:f:435:SER:CB	31:f:440:ILE:HG21	2.50	0.41
31:f:501:LEU:O	31:f:504:VAL:HB	2.20	0.41
31:f:531:ASN:HB3	31:f:534:VAL:CG2	2.47	0.41
31:f:560:LEU:HD11	31:f:798:THR:HB	2.03	0.41
32:g:105:LEU:HD12	32:g:143:GLU:HA	2.01	0.41
1:A:183:GLN:HG3	1:A:341:ILE:HG23	2.02	0.41
1:A:364:VAL:HG22	1:A:368:ILE:CD1	2.50	0.41
3:C:45:LEU:HB3	4:D:61:ILE:CG2	2.47	0.41
3:C:113:ARG:NH2	4:D:102:ILE:HD12	2.36	0.41
3:C:186:VAL:HG21	3:C:315:ILE:CD1	2.50	0.41
3:C:281:ASP:HB2	3:C:310:ARG:HG3	2.02	0.41
5:E:169:GLY:HA3	5:E:296:ASP:H	1.85	0.41
5:E:171:LEU:HD12	5:E:172:LEU:H	1.85	0.41
5:E:211:SER:H	5:E:214:LEU:HB2	1.86	0.41
5:E:235:ILE:HG21	5:E:277:MET:HE3	2.03	0.41
7:G:242:LEU:C	7:G:242:LEU:HD23	2.46	0.41
8:H:82:ASP:CG	8:H:128:ARG:HH22	2.29	0.41
11:K:232:GLU:H	11:K:232:GLU:CD	2.28	0.41
11:K:240:ASP:OD1	11:K:240:ASP:N	2.38	0.41
12:L:146:GLN:HE21	12:L:146:GLN:HB2	1.73	0.41
13:M:110:HIS:HB2	14:N:70:LEU:HD11	2.03	0.41
16:Q:11:VAL:HA	16:Q:24:ALA:HA	2.02	0.41
16:Q:71:LEU:CD1	16:Q:82:ILE:HG21	2.42	0.41
17:R:9:GLY:N	17:R:12:TYR:O	2.49	0.41
19:T:13:LEU:HD22	19:T:179:PHE:CD1	2.55	0.41
19:T:37:THR:HG21	33:h:132:TYR:CG	2.55	0.41
19:T:209:SER:O	19:T:210:LEU:HD23	2.21	0.41
20:U:14:GLU:OE2	20:U:20:LYS:N	2.53	0.41
20:U:468:ALA:CB	20:U:474:ARG:HG2	2.50	0.41
20:U:553:ALA:CB	20:U:584:TYR:HB3	2.51	0.41
20:U:587:ALA:HB2	20:U:621:SER:OG	2.21	0.41
21:V:203:LEU:HD22	21:V:206:VAL:HG21	2.02	0.41
21:V:385:LYS:HB2	21:V:385:LYS:HE2	1.88	0.41
22:W:34:LEU:HA	22:W:37:GLU:HG3	2.03	0.41
22:W:217:GLU:CG	22:W:218:ASN:N	2.84	0.41
22:W:223:LYS:HG3	22:W:227:TYR:HE2	1.83	0.41
22:W:235:GLN:N	22:W:243:ILE:HD11	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:X:77:LEU:HA	23:X:80:ILE:CG1	2.50	0.41
23:X:127:GLN:OE1	23:X:127:GLN:N	2.54	0.41
23:X:380:GLN:O	23:X:380:GLN:HG3	2.19	0.41
23:X:417:LYS:HD2	25:Z:276:ILE:HG21	2.03	0.41
26:a:276:CYS:O	26:a:280:MET:HG3	2.21	0.41
27:b:122:LYS:HD3	27:b:122:LYS:C	2.46	0.41
28:c:182:GLY:O	28:c:185:ASN:ND2	2.53	0.41
28:c:284:LEU:C	28:c:286:GLU:N	2.77	0.41
29:d:130:PRO:HG3	29:d:178:TYR:HE1	1.85	0.41
29:d:303:ALA:O	29:d:307:GLY:HA2	2.20	0.41
31:f:298:LEU:HG	31:f:303:VAL:O	2.21	0.41
31:f:340:MET:HE1	31:f:385:PHE:O	2.21	0.41
31:f:389:LYS:HB3	31:f:389:LYS:HE3	1.91	0.41
31:f:404:ASP:O	31:f:407:MET:HG3	2.20	0.41
32:g:113:ARG:HH12	32:g:162:GLU:CD	2.29	0.41
33:h:42:ILE:HG22	33:h:52:GLY:HA3	2.02	0.41
33:h:56:ASP:HB2	33:h:59:ASP:HB2	2.02	0.41
33:h:145:LEU:HD11	33:h:175:VAL:C	2.46	0.41
1:A:45:ILE:HG12	2:B:62:LEU:HD23	2.03	0.41
1:A:229:VAL:O	1:A:233:THR:HB	2.21	0.41
2:B:87:PRO:HD3	31:f:619:HIS:CE1	2.56	0.41
2:B:305:ILE:HD13	3:C:271:ARG:NE	2.36	0.41
2:B:404:LEU:HD23	2:B:404:LEU:HA	1.79	0.41
2:B:439:TYR:HA	10:J:76:LEU:HA	2.02	0.41
3:C:29:GLU:HG3	21:V:201:ARG:CG	2.50	0.41
3:C:217:SER:OG	4:D:287:ARG:HG2	2.21	0.41
3:C:329:LEU:HG	3:C:359:VAL:HG13	2.02	0.41
4:D:163:MET:HB3	4:D:163:MET:HE3	1.78	0.41
4:D:164:TYR:CE2	4:D:178:ARG:HD3	2.55	0.41
4:D:167:ILE:HD11	4:D:215:LEU:HA	2.02	0.41
4:D:354:LEU:HD11	4:D:358:VAL:HG11	2.01	0.41
5:E:26:LEU:HD23	5:E:26:LEU:HA	1.87	0.41
5:E:212:ALA:C	5:E:214:LEU:H	2.28	0.41
5:E:320:ILE:HD12	6:F:215:LEU:O	2.20	0.41
6:F:69:MET:HA	6:F:72:LYS:NZ	2.30	0.41
6:F:365:ILE:HA	6:F:365:ILE:HD13	1.90	0.41
6:F:418:GLU:CD	12:L:164:ARG:HA	2.46	0.41
6:F:418:GLU:OE2	12:L:164:ARG:HA	2.20	0.41
7:G:30:LYS:HE2	7:G:30:LYS:HB2	1.85	0.41
7:G:65:THR:O	13:M:158:TYR:HB3	2.20	0.41
8:H:38:ILE:HG23	8:H:160:ALA:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:135:LEU:HD21	8:H:146:LEU:HD11	2.02	0.41
8:H:145:TYR:HB3	8:H:147:PHE:HE1	1.86	0.41
8:H:196:LYS:HE2	8:H:203:MET:CE	2.51	0.41
9:I:28:ILE:HG12	9:I:133:SER:CB	2.47	0.41
9:I:64:LYS:O	9:I:75:SER:HA	2.20	0.41
10:J:38:ARG:NH2	10:J:178:ASP:O	2.54	0.41
10:J:45:VAL:CG1	10:J:61:LYS:HD3	2.51	0.41
10:J:66:ASP:CB	10:J:69:VAL:HG12	2.51	0.41
11:K:70:ILE:HG13	11:K:143:PHE:HE1	1.85	0.41
11:K:102:THR:HB	11:K:103:TYR:CD1	2.56	0.41
11:K:164:GLN:HB3	12:L:58:ALA:CB	2.50	0.41
13:M:42:LYS:HB3	13:M:184:MET:O	2.21	0.41
13:M:85:ARG:HE	13:M:85:ARG:HB2	1.33	0.41
13:M:219:LEU:C	13:M:219:LEU:HD12	2.46	0.41
14:N:135:ILE:HD13	14:N:163:ALA:CB	2.50	0.41
15:P:213:THR:HG22	16:Q:199:THR:HG21	2.01	0.41
15:P:214:GLU:OE1	15:P:214:GLU:HA	2.20	0.41
15:P:217:THR:HG23	15:P:217:THR:O	2.21	0.41
16:Q:6:TYR:O	16:Q:6:TYR:HD1	2.04	0.41
16:Q:10:ALA:HA	16:Q:140:GLY:HA3	2.02	0.41
16:Q:95:LEU:HD23	16:Q:125:ASP:O	2.20	0.41
16:Q:104:TYR:HA	16:Q:126:LEU:CD1	2.41	0.41
17:R:171:PHE:CD2	17:R:175:LEU:HG	2.56	0.41
17:R:180:VAL:HG23	17:R:191:LEU:CB	2.47	0.41
19:T:45:LYS:C	19:T:46:LEU:HD23	2.45	0.41
19:T:195:ILE:O	19:T:205:GLU:HA	2.21	0.41
19:T:204:ARG:HH11	19:T:204:ARG:HG3	1.86	0.41
20:U:38:ILE:HD13	20:U:38:ILE:HA	1.98	0.41
20:U:46:GLU:OE1	20:U:80:TYR:CE2	2.74	0.41
20:U:92:ASP:HA	20:U:97:VAL:HG11	2.03	0.41
20:U:109:THR:CA	20:U:157:THR:HG22	2.39	0.41
20:U:368:ALA:HA	20:U:371:ILE:CG1	2.50	0.41
20:U:472:ILE:H	20:U:472:ILE:HG13	1.71	0.41
20:U:700:GLU:OE1	20:U:700:GLU:CA	2.69	0.41
20:U:713:TYR:O	20:U:716:VAL:HG12	2.21	0.41
20:U:904:LYS:HB3	20:U:912:ILE:CD1	2.48	0.41
21:V:96:ARG:NH1	25:Z:283:ARG:HH12	2.14	0.41
21:V:101:LEU:C	21:V:101:LEU:HD23	2.46	0.41
21:V:251:LEU:HD12	21:V:251:LEU:HA	1.88	0.41
21:V:276:PHE:HD1	21:V:277:PRO:CD	2.34	0.41
22:W:241:LEU:HG	22:W:245:LYS:NZ	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:W:341:PHE:HD2	22:W:351:TRP:CE3	2.39	0.41
23:X:171:LEU:HA	23:X:171:LEU:HD12	1.79	0.41
24:Y:45:VAL:O	24:Y:49:ASN:N	2.54	0.41
24:Y:144:LEU:CB	24:Y:160:ASN:OD1	2.69	0.41
24:Y:238:GLU:OE1	24:Y:238:GLU:CA	2.69	0.41
24:Y:307:LEU:HD23	24:Y:323:PHE:HE2	1.86	0.41
24:Y:377:LEU:HD21	25:Z:265:LEU:HD13	2.03	0.41
25:Z:54:PHE:CG	25:Z:78:MET:HG2	2.56	0.41
25:Z:58:PHE:HE2	25:Z:60:GLU:OE1	2.04	0.41
25:Z:78:MET:HE2	25:Z:82:PHE:CE1	2.44	0.41
26:a:45:VAL:CG1	26:a:82:HIS:HB3	2.51	0.41
26:a:274:LEU:HD22	26:a:314:ALA:HB2	2.03	0.41
26:a:374:ILE:HD13	29:d:347:GLU:CB	2.51	0.41
27:b:37:CYS:SG	27:b:38:HIS:N	2.93	0.41
27:b:115:SER:OG	27:b:116:PRO:HD2	2.20	0.41
29:d:118:ARG:NH1	29:d:118:ARG:HG2	2.36	0.41
29:d:123:LEU:CD1	29:d:147:ILE:HG21	2.51	0.41
29:d:138:LYS:C	29:d:142:ILE:HD12	2.44	0.41
29:d:164:PHE:CE1	29:d:168:MET:CG	2.99	0.41
31:f:50:LYS:CA	31:f:53:GLN:CG	2.87	0.41
31:f:52:LEU:HD13	31:f:52:LEU:C	2.46	0.41
31:f:56:LEU:O	31:f:56:LEU:HD23	2.21	0.41
31:f:76:GLU:O	31:f:80:ARG:HG2	2.21	0.41
31:f:79:ARG:HD2	31:f:154:TRP:CH2	2.46	0.41
31:f:154:TRP:HB2	31:f:158:TYR:HD2	1.84	0.41
31:f:280:ASP:O	31:f:283:THR:OG1	2.31	0.41
31:f:383:ALA:CB	31:f:416:MET:HE1	2.50	0.41
31:f:505:MET:SD	31:f:505:MET:C	3.04	0.41
31:f:577:LEU:HD12	31:f:581:GLU:OE2	2.21	0.41
31:f:600:TYR:HE2	31:f:608:LYS:HD3	1.85	0.41
31:f:804:LEU:HD12	31:f:804:LEU:H	1.86	0.41
31:f:859:PRO:O	31:f:860:LYS:HB2	2.21	0.41
32:g:79:THR:O	32:g:80:THR:HG22	2.20	0.41
33:h:53:ALA:CB	33:h:108:ASN:HD21	2.33	0.41
33:h:89:HIS:CE1	33:h:123:GLY:HA3	2.55	0.41
1:A:65:ILE:CD1	3:C:82:LYS:HG3	2.37	0.41
1:A:247:GLN:OE1	1:A:247:GLN:HA	2.21	0.41
2:B:58:CYS:HB2	31:f:232:TYR:OH	2.20	0.41
2:B:66:GLU:CD	20:U:834:SER:HB3	2.46	0.41
2:B:223:ILE:HG22	2:B:347:ILE:HG21	2.03	0.41
2:B:250:VAL:HG23	2:B:284:ILE:HG23	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:21:ARG:HH11	3:C:21:ARG:HG2	1.86	0.41
3:C:149:GLU:OE1	3:C:149:GLU:N	2.53	0.41
3:C:155:ASP:O	3:C:159:LYS:HD2	2.21	0.41
3:C:258:ARG:HH11	3:C:258:ARG:HG3	1.86	0.41
4:D:52:GLU:OE2	4:D:52:GLU:HA	2.21	0.41
4:D:180:ALA:HB3	4:D:202:VAL:HG11	2.03	0.41
4:D:337:ASP:OD1	4:D:337:ASP:N	2.44	0.41
6:F:172:VAL:HA	6:F:175:MET:HE3	2.02	0.41
6:F:343:LEU:N	6:F:343:LEU:HD23	2.36	0.41
7:G:78:CYS:HB3	7:G:140:LEU:CD2	2.51	0.41
11:K:6:SER:O	11:K:10:ARG:NH2	2.53	0.41
12:L:135:ALA:HB2	12:L:144:ILE:CD1	2.49	0.41
12:L:158:ALA:O	13:M:57:LEU:HD12	2.21	0.41
12:L:158:ALA:C	12:L:172:LEU:HD23	2.46	0.41
13:M:117:MET:HE2	13:M:117:MET:CA	2.49	0.41
14:N:174:ILE:O	14:N:188:VAL:HA	2.20	0.41
16:Q:191:GLU:CD	16:Q:194:LYS:HB3	2.46	0.41
17:R:4:LEU:HD22	17:R:45:LEU:HB3	2.03	0.41
19:T:12:ILE:O	19:T:12:ILE:CD1	2.63	0.41
19:T:135:PHE:CD1	19:T:135:PHE:O	2.74	0.41
20:U:78:LEU:HD23	20:U:78:LEU:C	2.46	0.41
20:U:164:GLU:HG3	20:U:200:VAL:HG13	2.03	0.41
20:U:222:PHE:CE1	20:U:754:HIS:ND1	2.87	0.41
20:U:333:MET:O	20:U:337:LEU:HD23	2.21	0.41
20:U:353:LEU:HD13	20:U:385:PHE:HD2	1.86	0.41
20:U:373:ASN:ND2	20:U:385:PHE:HB3	2.36	0.41
20:U:420:LEU:O	20:U:420:LEU:HD23	2.21	0.41
20:U:443:LEU:CD1	20:U:461:LEU:CD2	2.99	0.41
20:U:579:ARG:HH11	20:U:609:ASP:CG	2.29	0.41
21:V:255:LEU:HD21	21:V:271:VAL:HG13	2.02	0.41
21:V:416:ARG:HG3	21:V:457:TYR:CD1	2.56	0.41
21:V:434:ALA:O	21:V:438:VAL:HG12	2.21	0.41
22:W:40:LEU:HD12	22:W:40:LEU:HA	1.88	0.41
22:W:263:TRP:CZ3	22:W:295:LYS:HE2	2.56	0.41
23:X:183:LEU:HA	23:X:183:LEU:HD12	1.85	0.41
23:X:242:ILE:O	23:X:242:ILE:CG2	2.68	0.41
23:X:307:THR:O	23:X:310:ARG:HG3	2.22	0.41
25:Z:240:VAL:HG22	25:Z:245:PHE:HE2	1.86	0.41
26:a:133:GLU:OE1	26:a:133:GLU:HA	2.20	0.41
26:a:222:LEU:HD22	26:a:234:ILE:HG13	2.02	0.41
26:a:328:ASP:HB2	26:a:330:ARG:CG	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:b:186:SER:CB	27:b:187:PRO:CD	2.98	0.41
28:c:121:TRP:O	28:c:122:LEU:HD23	2.21	0.41
29:d:129:LEU:CD1	29:d:130:PRO:HD2	2.43	0.41
29:d:282:ILE:O	29:d:315:TYR:HA	2.21	0.41
31:f:58:MET:SD	31:f:62:ARG:HD3	2.61	0.41
31:f:126:ILE:HG23	31:f:142:TYR:HB3	2.03	0.41
31:f:231:LEU:HD13	31:f:857:GLY:CA	2.51	0.41
31:f:460:ASP:CB	31:f:463:LEU:HD21	2.51	0.41
31:f:779:CYS:HG	31:f:876:HIS:CE1	2.39	0.41
32:g:122:LEU:HD12	32:g:155:VAL:CG1	2.50	0.41
33:h:7:THR:CG2	33:h:8:GLY:H	2.23	0.41
33:h:203:LEU:HD12	33:h:204:SER:H	1.85	0.41
1:A:129:VAL:HG13	1:A:150:HIS:O	2.21	0.40
1:A:197:HIS:HB3	1:A:199:GLU:OE2	2.20	0.40
1:A:246:VAL:HG13	1:A:295:VAL:CG2	2.51	0.40
1:A:362:MET:HG2	2:B:216:ILE:HG23	2.01	0.40
1:A:417:ILE:HD12	1:A:417:ILE:N	2.36	0.40
2:B:53:THR:HB	31:f:851:ASP:OD2	2.21	0.40
2:B:285:ASP:O	2:B:286:GLU:C	2.64	0.40
2:B:379:THR:OG1	2:B:382:ASP:OD2	2.39	0.40
4:D:152:MET:O	4:D:153:MET:C	2.63	0.40
4:D:197:ASP:O	4:D:198:PRO:C	2.64	0.40
5:E:59:GLU:OE1	5:E:59:GLU:HA	2.21	0.40
6:F:55:MET:SD	6:F:55:MET:C	3.04	0.40
6:F:220:PRO:HG2	6:F:350:ARG:CG	2.51	0.40
6:F:312:GLU:O	6:F:316:GLN:HG2	2.21	0.40
6:F:376:SER:HA	6:F:414:GLU:OE1	2.21	0.40
7:G:43:ARG:HB3	7:G:164:LYS:O	2.21	0.40
8:H:107:THR:HB	8:H:145:TYR:HD2	1.86	0.40
8:H:135:LEU:HD23	8:H:135:LEU:C	2.46	0.40
8:H:203:MET:O	8:H:230:LEU:HD13	2.21	0.40
9:I:90:LEU:HD23	9:I:90:LEU:HA	1.83	0.40
10:J:88:ARG:NH1	17:R:69:MET:O	2.54	0.40
10:J:218:LYS:O	10:J:220:LEU:HD23	2.20	0.40
11:K:29:GLU:O	11:K:32:LYS:HB3	2.21	0.40
13:M:135:PHE:CZ	13:M:151:ILE:HB	2.56	0.40
13:M:173:LYS:C	13:M:176:ILE:HG22	2.46	0.40
15:P:76:VAL:O	15:P:79:ALA:N	2.52	0.40
15:P:100:LEU:HB3	15:P:111:TYR:HB2	2.03	0.40
15:P:137:VAL:HG21	15:P:158:ALA:HA	2.03	0.40
18:S:136:TYR:O	18:S:140:ASP:OD2	2.38	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:T:12:ILE:O	19:T:137:ALA:HA	2.20	0.40
19:T:95:ILE:O	19:T:98:SER:OG	2.34	0.40
20:U:5:ALA:O	20:U:34:PHE:HE2	2.04	0.40
20:U:155:LEU:HD13	20:U:188:MET:HE2	2.02	0.40
20:U:792:ASN:HD21	20:U:796:LYS:HD3	1.86	0.40
20:U:800:VAL:CG2	20:U:900:TYR:HD2	2.34	0.40
20:U:841:LYS:HG3	20:U:842:LYS:N	2.35	0.40
21:V:128:ARG:HG3	21:V:129:ASP:N	2.37	0.40
21:V:285:TRP:CZ3	21:V:289:LEU:HD21	2.56	0.40
21:V:289:LEU:HB3	21:V:312:ALA:HB2	2.02	0.40
21:V:419:LEU:HA	21:V:422:ILE:HG22	2.03	0.40
22:W:17:GLU:N	22:W:58:SER:O	2.53	0.40
22:W:91:SER:CB	22:W:131:VAL:HG23	2.50	0.40
22:W:149:LEU:O	22:W:149:LEU:HD12	2.21	0.40
22:W:425:LEU:HD12	25:Z:252:LYS:CG	2.48	0.40
23:X:264:PRO:HB3	23:X:291:ALA:O	2.22	0.40
25:Z:219:LYS:H	25:Z:219:LYS:HG2	1.67	0.40
25:Z:220:LEU:HA	25:Z:220:LEU:HD12	1.79	0.40
26:a:78:GLU:HA	26:a:81:LEU:CD2	2.51	0.40
26:a:194:GLN:CD	26:a:225:LEU:HD12	2.46	0.40
28:c:145:VAL:HG22	28:c:157:ILE:HD12	2.02	0.40
29:d:109:LEU:HD11	29:d:158:ARG:HG3	2.03	0.40
29:d:200:LEU:HD13	29:d:200:LEU:C	2.46	0.40
29:d:226:ILE:O	29:d:229:PRO:HG2	2.20	0.40
31:f:280:ASP:O	31:f:284:SER:OG	2.33	0.40
31:f:440:ILE:O	31:f:440:ILE:CG2	2.68	0.40
31:f:509:LYS:O	31:f:509:LYS:HG2	2.20	0.40
31:f:832:THR:OG1	31:f:842:VAL:HG12	2.20	0.40
32:g:89:LEU:HG	32:g:99:ASN:ND2	2.35	0.40
33:h:15:LYS:HE3	33:h:122:LEU:HB2	2.02	0.40
33:h:156:LYS:HD2	33:h:157:GLN:H	1.86	0.40
1:A:100:LYS:HD2	1:A:101:ILE:H	1.86	0.40
2:B:52:VAL:O	2:B:52:VAL:HG23	2.21	0.40
2:B:332:ASN:OD1	2:B:332:ASN:N	2.54	0.40
3:C:113:ARG:HH21	4:D:102:ILE:HD12	1.86	0.40
3:C:401:ILE:HD13	3:C:401:ILE:HA	1.91	0.40
4:D:93:LEU:HB2	4:D:102:ILE:HG22	2.04	0.40
5:E:59:GLU:OE1	5:E:59:GLU:CA	2.69	0.40
5:E:206:LYS:HB3	5:E:253:ILE:CD1	2.51	0.40
6:F:303:ASP:O	6:F:307:GLN:HG2	2.21	0.40
8:H:204:THR:HG22	8:H:205:GLU:H	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:158:ALA:HB1	10:J:172:LEU:CD1	2.34	0.40
10:J:225:ILE:HD12	10:J:225:ILE:H	1.86	0.40
11:K:9:ASP:OD1	11:K:9:ASP:C	2.63	0.40
11:K:10:ARG:HB2	11:K:10:ARG:CZ	2.51	0.40
11:K:71:ASP:CB	11:K:96:THR:HG21	2.50	0.40
12:L:236:LEU:HD23	12:L:237:GLU:N	2.36	0.40
13:M:46:VAL:CG1	13:M:193:VAL:HG21	2.51	0.40
13:M:200:VAL:O	13:M:200:VAL:CG2	2.69	0.40
13:M:239:ALA:O	13:M:242:SER:OG	2.28	0.40
14:N:31:THR:CG2	14:N:33:LYS:HZ2	2.34	0.40
14:N:119:MET:HE3	33:h:36:PHE:CD2	2.56	0.40
17:R:103:LEU:HD23	17:R:103:LEU:HA	1.74	0.40
18:S:104:TRP:HA	18:S:109:PRO:HA	2.02	0.40
19:T:45:LYS:C	19:T:45:LYS:HD3	2.46	0.40
19:T:145:LEU:HD13	19:T:145:LEU:HA	1.90	0.40
20:U:188:MET:HE3	20:U:193:PHE:HE2	1.84	0.40
20:U:190:ASN:HB2	20:U:193:PHE:HB3	2.03	0.40
20:U:552:ILE:HD12	20:U:581:SER:OG	2.22	0.40
20:U:711:GLN:HA	20:U:711:GLN:OE1	2.22	0.40
21:V:342:ILE:HD11	21:V:368:ARG:CG	2.49	0.40
21:V:435:GLU:CA	21:V:438:VAL:HG12	2.51	0.40
22:W:27:ARG:HH11	22:W:50:LEU:HD11	1.86	0.40
22:W:33:LYS:HA	22:W:36:LYS:HD2	2.03	0.40
22:W:46:THR:O	22:W:50:LEU:HD23	2.21	0.40
22:W:158:ASP:HB3	22:W:161:GLU:OE1	2.22	0.40
22:W:318:SER:N	22:W:383:ASP:OD2	2.48	0.40
23:X:74:ARG:CB	23:X:75:PRO:HD3	2.51	0.40
25:Z:193:ASN:HD22	25:Z:193:ASN:HA	1.45	0.40
26:a:9:GLN:OE1	26:a:12:GLN:HB3	2.21	0.40
26:a:177:LEU:HD23	26:a:177:LEU:HA	1.80	0.40
26:a:233:LEU:O	26:a:236:THR:HG22	2.21	0.40
29:d:178:TYR:HA	29:d:180:GLU:OE2	2.21	0.40
29:d:348:MET:HA	29:d:348:MET:CE	2.49	0.40
31:f:275:MET:HE2	31:f:275:MET:CA	2.48	0.40
31:f:331:LEU:HD23	31:f:331:LEU:HA	1.79	0.40
31:f:886:GLU:C	31:f:902:LYS:HZ3	2.17	0.40
33:h:109:THR:CG2	33:h:127:MET:H	2.32	0.40
34:u:200:LEU:HD23	34:u:200:LEU:HA	1.83	0.40
1:A:101:ILE:HG13	1:A:111:TYR:CD2	2.56	0.40
1:A:255:ARG:NH1	1:A:255:ARG:HG2	2.36	0.40
1:A:263:MET:HA	1:A:266:THR:CG2	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:127:VAL:O	2:B:127:VAL:HG12	2.20	0.40
2:B:317:ASP:HB3	2:B:346:ARG:HG2	2.02	0.40
3:C:128:PRO:HD3	4:D:96:VAL:HG13	2.04	0.40
4:D:178:ARG:HG3	4:D:178:ARG:HH11	1.87	0.40
4:D:213:THR:N	38:D:501:ADP:O2A	2.51	0.40
4:D:265:ASP:OD1	4:D:265:ASP:C	2.64	0.40
5:E:123:SER:HB2	5:E:221:TYR:CD2	2.57	0.40
5:E:188:ALA:CB	5:E:192:ASP:HB3	2.51	0.40
5:E:261:LEU:HD11	5:E:294:ARG:CZ	2.51	0.40
11:K:21:LEU:HD12	11:K:21:LEU:HA	1.86	0.40
12:L:80:ASP:CG	12:L:126:ARG:HH12	2.29	0.40
14:N:64:GLY:O	14:N:68:ILE:HG13	2.21	0.40
15:P:66:HIS:CD2	15:P:70:THR:CG2	3.05	0.40
16:Q:188:HIS:CD2	16:Q:197:THR:HA	2.42	0.40
18:S:160:ILE:HG21	18:S:174:VAL:HG11	2.04	0.40
19:T:22:ILE:HD12	19:T:197:ILE:HA	2.02	0.40
19:T:185:ARG:O	19:T:185:ARG:HG3	2.22	0.40
20:U:252:LEU:O	20:U:256:ALA:HB3	2.21	0.40
20:U:376:MET:CG	20:U:377:HIS:HD2	2.31	0.40
22:W:370:TYR:HA	26:a:324:ILE:HG22	2.04	0.40
23:X:77:LEU:HB3	23:X:85:ALA:HB1	2.04	0.40
23:X:214:SER:HG	23:X:231:TYR:HD2	1.62	0.40
23:X:226:LYS:NZ	23:X:226:LYS:HB2	2.37	0.40
24:Y:23:ARG:HG2	24:Y:23:ARG:HH11	1.87	0.40
24:Y:69:LEU:HD23	24:Y:69:LEU:O	2.22	0.40
25:Z:63:LYS:HD2	25:Z:63:LYS:HA	1.83	0.40
26:a:38:THR:OG1	26:a:71:VAL:CG2	2.70	0.40
26:a:339:ARG:NH1	26:a:339:ARG:HG3	2.37	0.40
28:c:59:GLY:HA3	28:c:69:VAL:HA	2.03	0.40
28:c:67:VAL:HG13	28:c:109:VAL:CG1	2.49	0.40
28:c:75:MET:HB3	28:c:75:MET:HE2	1.86	0.40
31:f:56:LEU:CD2	31:f:99:LEU:CD1	3.00	0.40
31:f:426:LEU:CD2	32:g:156:LEU:HD12	2.52	0.40
31:f:489:TYR:N	31:f:489:TYR:CD1	2.88	0.40
31:f:690:VAL:HB	31:f:691:PRO:HD3	2.02	0.40
1:A:57:LYS:HB3	1:A:57:LYS:HE3	1.69	0.40
1:A:334:PRO:HB2	6:F:398:ALA:HB2	2.03	0.40
2:B:112:LEU:HD11	2:B:121:ALA:HB1	2.02	0.40
2:B:112:LEU:HD12	2:B:113:GLU:N	2.37	0.40
2:B:193:GLN:HG3	2:B:351:ILE:CG2	2.51	0.40
3:C:346:LYS:O	3:C:350:LEU:HD13	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:351:GLY:O	5:E:355:ILE:N	2.54	0.40
6:F:344:ARG:HG2	6:F:345:SER:N	2.33	0.40
7:G:70:PHE:HB2	7:G:78:CYS:SG	2.62	0.40
8:H:6:TYR:CE2	8:H:15:PRO:HD3	2.55	0.40
8:H:76:TYR:CD2	8:H:83:TYR:CG	3.09	0.40
8:H:102:GLN:CG	16:Q:89:SER:OG	2.70	0.40
8:H:122:THR:CG2	8:H:129:PRO:HB3	2.51	0.40
11:K:50:VAL:HG11	11:K:67:ILE:CD1	2.38	0.40
13:M:38:GLY:O	13:M:162:GLY:HA2	2.21	0.40
14:N:16:ALA:HB1	14:N:33:LYS:HB2	2.03	0.40
14:N:21:THR:HA	14:N:26:ILE:HA	2.03	0.40
15:P:35:HIS:ND1	15:P:56:THR:HG21	2.35	0.40
16:Q:12:MET:HG3	16:Q:167:ILE:CD1	2.46	0.40
16:Q:22:ILE:HD12	16:Q:22:ILE:HA	1.98	0.40
16:Q:28:PHE:HB2	16:Q:39:PHE:CG	2.56	0.40
16:Q:98:LYS:CE	16:Q:103:TYR:CE1	3.04	0.40
16:Q:172:LEU:CA	16:Q:175:VAL:HG12	2.51	0.40
18:S:38:ASN:O	18:S:184:TRP:NE1	2.27	0.40
18:S:148:GLU:OE2	18:S:150:GLU:HB2	2.22	0.40
19:T:148:LEU:HD11	19:T:178:VAL:CG2	2.51	0.40
20:U:76:GLU:N	20:U:76:GLU:OE1	2.51	0.40
20:U:220:LEU:HD23	20:U:220:LEU:HA	1.85	0.40
20:U:249:CYS:HB3	20:U:328:ILE:CG2	2.51	0.40
20:U:521:LEU:HD13	20:U:554:LEU:HB3	2.03	0.40
20:U:570:LEU:HD22	20:U:578:LEU:HD12	2.03	0.40
20:U:635:SER:O	20:U:638:SER:OG	2.39	0.40
21:V:345:ARG:O	21:V:345:ARG:HG3	2.21	0.40
21:V:435:GLU:HA	21:V:438:VAL:CG1	2.51	0.40
22:W:89:LEU:HD23	22:W:89:LEU:C	2.46	0.40
22:W:272:LEU:HD23	22:W:272:LEU:HA	1.74	0.40
23:X:132:ARG:HD3	23:X:132:ARG:C	2.47	0.40
23:X:190:LEU:HD22	23:X:214:SER:HA	2.02	0.40
23:X:194:ARG:HH22	23:X:210:LEU:C	2.30	0.40
24:Y:250:LEU:HB3	24:Y:257:ARG:HB2	2.04	0.40
25:Z:12:HIS:NE2	25:Z:49:ASP:OD1	2.54	0.40
25:Z:45:LYS:HG3	25:Z:46:LYS:N	2.35	0.40
26:a:222:LEU:HD22	26:a:234:ILE:HG12	2.04	0.40
26:a:248:PHE:HD1	26:a:249:GLN:H	1.69	0.40
26:a:269:LEU:C	26:a:272:ILE:HG22	2.47	0.40
26:a:374:ILE:HD13	29:d:347:GLU:HB2	2.03	0.40
27:b:151:GLU:HA	27:b:154:THR:HG22	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:c:103:GLY:C	28:c:105:PRO:HD3	2.46	0.40
28:c:136:LEU:HD21	34:u:278:PHE:HA	2.03	0.40
29:d:85:GLY:HA2	29:d:88:LEU:CD2	2.51	0.40
31:f:85:SER:O	31:f:88:SER:OG	2.32	0.40
31:f:123:ALA:HA	31:f:126:ILE:CG2	2.51	0.40
31:f:159:VAL:HG21	31:f:194:TYR:CD2	2.56	0.40
31:f:342:PRO:HB3	31:f:387:GLN:OE1	2.22	0.40
31:f:813:LYS:N	31:f:813:LYS:HD3	2.36	0.40
32:g:122:LEU:HD23	32:g:122:LEU:O	2.21	0.40
32:g:128:LYS:HZ3	32:g:129:ILE:H	1.69	0.40
1:A:285:PHE:H	1:A:296:GLN:NE2	2.20	0.40
2:B:112:LEU:HB2	2:B:150:VAL:HG13	2.04	0.40
2:B:378:VAL:HG13	2:B:378:VAL:O	2.22	0.40
3:C:116:LEU:HD23	3:C:116:LEU:N	2.36	0.40
3:C:117:ARG:O	3:C:121:TYR:HA	2.21	0.40
3:C:127:LEU:HD22	4:D:102:ILE:CD1	2.46	0.40
4:D:235:PHE:CD2	4:D:270:ILE:HD11	2.55	0.40
5:E:121:ASN:HA	5:E:124:HIS:CE1	2.57	0.40
6:F:349:ASP:OD1	6:F:349:ASP:C	2.64	0.40
7:G:45:LYS:H	7:G:189:TRP:HB3	1.86	0.40
8:H:19:LEU:HD13	8:H:19:LEU:HA	1.91	0.40
8:H:69:THR:CB	8:H:72:ILE:HD13	2.43	0.40
9:I:194:ILE:HD13	9:I:194:ILE:HA	1.90	0.40
13:M:40:ARG:O	13:M:181:MET:HB3	2.22	0.40
13:M:65:ARG:HH21	13:M:78:ALA:CB	2.35	0.40
14:N:119:MET:HE3	33:h:36:PHE:HD2	1.86	0.40
14:N:177:ALA:HA	14:N:185:GLU:O	2.22	0.40
15:P:7:VAL:CG1	15:P:123:PRO:HA	2.51	0.40
16:Q:12:MET:SD	16:Q:138:VAL:HG12	2.61	0.40
16:Q:59:ASP:OD2	16:Q:103:TYR:HA	2.22	0.40
16:Q:132:VAL:HG23	16:Q:132:VAL:O	2.21	0.40
16:Q:183:MET:HA	16:Q:204:MET:HE3	2.02	0.40
17:R:7:ILE:O	17:R:7:ILE:HD12	2.21	0.40
17:R:161:ARG:CD	17:R:194:ILE:HG12	2.52	0.40
18:S:19:ARG:HE	18:S:21:THR:HG21	1.85	0.40
18:S:100:MET:SD	18:S:128:VAL:HG11	2.61	0.40
18:S:161:TYR:CA	18:S:164:THR:HG22	2.50	0.40
20:U:33:ASP:C	20:U:34:PHE:HD1	2.30	0.40
20:U:100:ILE:HA	20:U:100:ILE:HD13	1.85	0.40
20:U:619:VAL:HG12	20:U:651:GLY:C	2.46	0.40
20:U:654:MET:HE2	20:U:654:MET:CA	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:U:771:PHE:CE1	28:c:181:LEU:HD11	2.57	0.40
21:V:200:ARG:NE	21:V:200:ARG:HA	2.37	0.40
22:W:317:TRP:HZ3	22:W:354:LEU:CD1	2.35	0.40
23:X:63:ALA:HB2	23:X:99:MET:HE2	2.02	0.40
23:X:97:LEU:HD11	23:X:106:GLU:HB3	2.03	0.40
23:X:214:SER:OG	23:X:231:TYR:CE2	2.75	0.40
23:X:420:LYS:NZ	28:c:262:GLU:OE2	2.45	0.40
23:X:421:LEU:HB3	25:Z:283:ARG:NE	2.37	0.40
24:Y:165:LYS:HE2	24:Y:184:GLN:HE22	1.86	0.40
24:Y:299:MET:HA	24:Y:299:MET:CE	2.45	0.40
25:Z:59:ASP:HB2	27:b:99:HIS:NE2	2.36	0.40
26:a:29:TYR:HD1	26:a:29:TYR:C	2.28	0.40
26:a:313:LYS:HA	26:a:316:SER:OG	2.21	0.40
26:a:317:VAL:HB	26:a:319:LEU:CD1	2.50	0.40
27:b:98:LYS:HD3	34:u:205:ASP:OD1	2.21	0.40
27:b:124:LEU:HD12	27:b:156:PHE:CG	2.56	0.40
27:b:128:ALA:HB1	27:b:159:THR:HG23	2.04	0.40
28:c:281:LYS:HA	28:c:284:LEU:HB2	2.02	0.40
29:d:121:LEU:HD13	29:d:121:LEU:HA	1.92	0.40
29:d:144:ALA:HA	29:d:147:ILE:HG22	2.04	0.40
29:d:164:PHE:CD1	29:d:164:PHE:O	2.75	0.40
29:d:279:TYR:N	29:d:279:TYR:CD1	2.90	0.40
31:f:337:LEU:HB3	31:f:339:ILE:CD1	2.51	0.40
31:f:521:ALA:HA	31:f:524:MET:CG	2.51	0.40
32:g:108:THR:OG1	32:g:140:LYS:O	2.21	0.40
32:g:111:GLU:OE1	32:g:111:GLU:HA	2.20	0.40
33:h:128:LEU:C	33:h:128:LEU:CD2	2.94	0.40
34:u:231:VAL:O	34:u:231:VAL:CG1	2.68	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	A	393/433 (91%)	363 (92%)	28 (7%)	2 (0%)	24 59
2	B	394/440 (90%)	361 (92%)	32 (8%)	1 (0%)	36 68
3	C	384/406 (95%)	352 (92%)	31 (8%)	1 (0%)	36 68
4	D	373/418 (89%)	335 (90%)	35 (9%)	3 (1%)	16 48
5	E	341/389 (88%)	290 (85%)	37 (11%)	14 (4%)	2 12
6	F	358/439 (82%)	340 (95%)	17 (5%)	1 (0%)	36 68
7	G	237/246 (96%)	230 (97%)	6 (2%)	1 (0%)	30 63
8	H	230/234 (98%)	226 (98%)	4 (2%)	0	100 100
9	I	246/261 (94%)	239 (97%)	7 (3%)	0	100 100
10	J	237/248 (96%)	231 (98%)	6 (2%)	0	100 100
11	K	227/241 (94%)	219 (96%)	8 (4%)	0	100 100
12	L	235/263 (89%)	227 (97%)	8 (3%)	0	100 100
13	M	238/255 (93%)	228 (96%)	10 (4%)	0	100 100
14	N	195/239 (82%)	190 (97%)	5 (3%)	0	100 100
15	P	218/277 (79%)	213 (98%)	5 (2%)	0	100 100
16	Q	202/205 (98%)	196 (97%)	6 (3%)	0	100 100
17	R	197/201 (98%)	191 (97%)	6 (3%)	0	100 100
18	S	199/263 (76%)	195 (98%)	4 (2%)	0	100 100
19	T	211/241 (88%)	196 (93%)	15 (7%)	0	100 100
20	U	834/953 (88%)	771 (92%)	59 (7%)	4 (0%)	24 59
21	V	440/534 (82%)	416 (94%)	23 (5%)	1 (0%)	43 75
22	W	436/456 (96%)	416 (95%)	19 (4%)	1 (0%)	43 75
23	X	376/422 (89%)	358 (95%)	17 (4%)	1 (0%)	36 68
24	Y	377/389 (97%)	371 (98%)	6 (2%)	0	100 100
25	Z	284/324 (88%)	269 (95%)	13 (5%)	2 (1%)	18 51
26	a	368/376 (98%)	344 (94%)	21 (6%)	3 (1%)	16 48
27	b	188/377 (50%)	161 (86%)	26 (14%)	1 (0%)	24 59
28	c	286/424 (68%)	248 (87%)	34 (12%)	4 (1%)	9 34
29	d	267/350 (76%)	255 (96%)	12 (4%)	0	100 100
30	e	37/70 (53%)	37 (100%)	0	0	100 100
31	f	838/908 (92%)	789 (94%)	49 (6%)	0	100 100
32	g	93/601 (16%)	90 (97%)	3 (3%)	0	100 100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
33	h	204/264 (77%)	197 (97%)	7 (3%)	0	100 100
34	u	170/289 (59%)	160 (94%)	7 (4%)	3 (2%)	6 29
All	All	10313/12436 (83%)	9704 (94%)	566 (6%)	43 (0%)	31 63

All (43) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	D	85	ILE
4	D	339	ARG
5	E	85	ARG
5	E	116	ASP
5	E	203	ILE
5	E	207	TYR
7	G	184	LYS
20	U	42	VAL
20	U	812	ALA
23	X	393	VAL
25	Z	184	VAL
27	b	135	LYS
28	c	285	GLU
34	u	278	PHE
1	A	116	LYS
1	A	293	ASN
2	B	395	ILE
3	C	134	LEU
5	E	115	VAL
5	E	209	GLY
5	E	218	MET
5	E	224	ASP
20	U	171	ASN
22	W	41	GLN
28	c	172	HIS
5	E	212	ALA
5	E	220	ASN
6	F	209	LYS
20	U	172	ASP
4	D	303	VAL
5	E	206	LYS
21	V	318	GLN
26	a	71	VAL
26	a	185	ILE

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Mol	Chain	Res	Type
28	c	284	LEU
34	u	279	LYS
5	E	279	THR
26	a	190	VAL
28	c	223	LYS
5	E	215	ILE
5	E	204	VAL
25	Z	226	ILE
34	u	119	ILE

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	A	347/372 (93%)	335 (96%)	12 (4%)	32	64
2	B	351/385 (91%)	332 (95%)	19 (5%)	20	52
3	C	338/352 (96%)	320 (95%)	18 (5%)	20	52
4	D	331/366 (90%)	314 (95%)	17 (5%)	21	54
5	E	303/341 (89%)	283 (93%)	20 (7%)	15	44
6	F	311/379 (82%)	298 (96%)	13 (4%)	26	59
7	G	195/210 (93%)	178 (91%)	17 (9%)	9	34
8	H	190/191 (100%)	180 (95%)	10 (5%)	20	52
9	I	195/221 (88%)	180 (92%)	15 (8%)	12	38
10	J	183/212 (86%)	175 (96%)	8 (4%)	25	58
11	K	192/204 (94%)	180 (94%)	12 (6%)	16	46
12	L	198/224 (88%)	189 (96%)	9 (4%)	24	57
13	M	192/212 (91%)	181 (94%)	11 (6%)	18	50
14	N	154/181 (85%)	150 (97%)	4 (3%)	40	71
15	P	178/228 (78%)	172 (97%)	6 (3%)	32	64
16	Q	172/174 (99%)	163 (95%)	9 (5%)	21	53
17	R	168/171 (98%)	153 (91%)	15 (9%)	9	33

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
18	S	156/202 (77%)	150 (96%)	6 (4%)	29 62
19	T	175/199 (88%)	165 (94%)	10 (6%)	18 50
20	U	718/816 (88%)	668 (93%)	50 (7%)	14 42
21	V	390/460 (85%)	375 (96%)	15 (4%)	29 62
22	W	403/416 (97%)	385 (96%)	18 (4%)	24 57
23	X	325/362 (90%)	308 (95%)	17 (5%)	21 53
24	Y	335/344 (97%)	326 (97%)	9 (3%)	39 70
25	Z	257/295 (87%)	245 (95%)	12 (5%)	23 56
26	a	333/336 (99%)	315 (95%)	18 (5%)	20 52
27	b	167/312 (54%)	155 (93%)	12 (7%)	13 41
28	c	252/359 (70%)	233 (92%)	19 (8%)	12 39
29	d	237/294 (81%)	226 (95%)	11 (5%)	24 57
30	e	37/63 (59%)	35 (95%)	2 (5%)	20 52
31	f	709/763 (93%)	678 (96%)	31 (4%)	25 58
32	g	85/527 (16%)	85 (100%)	0	100 100
33	h	169/215 (79%)	161 (95%)	8 (5%)	23 56
34	u	156/253 (62%)	149 (96%)	7 (4%)	24 57
All	All	8902/10639 (84%)	8442 (95%)	460 (5%)	22 53

All (460) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	26	ASP
1	A	86	THR
1	A	95	VAL
1	A	123	VAL
1	A	124	ASP
1	A	190	VAL
1	A	248	LYS
1	A	266	THR
1	A	302	LEU
1	A	303	ILE
1	A	316	LYS
1	A	347	ASP
2	B	55	HIS
2	B	171	VAL

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Mol	Chain	Res	Type
2	B	186	ASP
2	B	187	ILE
2	B	209	GLU
2	B	249	ARG
2	B	284	ILE
2	B	332	ASN
2	B	333	ARG
2	B	357	ASP
2	B	363	ARG
2	B	367	ILE
2	B	383	LEU
2	B	385	MET
2	B	391	SER
2	B	394	ASP
2	B	398	ILE
2	B	416	ASN
2	B	427	LEU
3	C	40	GLN
3	C	42	LEU
3	C	63	LEU
3	C	66	LEU
3	C	108	VAL
3	C	149	GLU
3	C	150	MET
3	C	230	MET
3	C	234	LEU
3	C	270	GLN
3	C	277	LEU
3	C	306	LEU
3	C	307	ARG
3	C	311	ILE
3	C	338	LEU
3	C	371	LEU
3	C	373	GLU
3	C	391	MET
4	D	47	LEU
4	D	54	LEU
4	D	56	VAL
4	D	82	ILE
4	D	106	THR
4	D	118	THR
4	D	124	LEU

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Mol	Chain	Res	Type
4	D	142	VAL
4	D	151	ILE
4	D	240	LEU
4	D	250	VAL
4	D	255	LYS
4	D	257	ASN
4	D	270	ILE
4	D	327	LEU
4	D	354	LEU
4	D	399	PHE
5	E	87	LEU
5	E	96	THR
5	E	104	THR
5	E	135	ILE
5	E	145	LEU
5	E	198	VAL
5	E	200	SER
5	E	203	ILE
5	E	204	VAL
5	E	206	LYS
5	E	208	ILE
5	E	214	LEU
5	E	215	ILE
5	E	230	ILE
5	E	232	MET
5	E	265	ASP
5	E	277	MET
5	E	300	HIS
5	E	316	HIS
5	E	336	ASP
6	F	52	ILE
6	F	69	MET
6	F	73	ILE
6	F	97	LEU
6	F	310	MET
6	F	329	ILE
6	F	348	LEU
6	F	366	MET
6	F	373	MET
6	F	392	ASN
6	F	399	VAL
6	F	427	VAL

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Mol	Chain	Res	Type
6	F	434	ASN
7	G	17	SER
7	G	19	GLU
7	G	32	ILE
7	G	33	ASN
7	G	34	GLN
7	G	51	VAL
7	G	52	THR
7	G	72	ILE
7	G	91	VAL
7	G	111	VAL
7	G	124	VAL
7	G	130	GLU
7	G	170	VAL
7	G	176	THR
7	G	200	THR
7	G	221	THR
7	G	236	ASP
8	H	7	SER
8	H	20	VAL
8	H	55	ILE
8	H	109	GLN
8	H	118	MET
8	H	137	CYS
8	H	156	PHE
8	H	184	LEU
8	H	212	ILE
8	H	215	GLU
9	I	9	THR
9	I	85	VAL
9	I	89	GLU
9	I	99	LEU
9	I	109	GLN
9	I	132	VAL
9	I	146	GLN
9	I	149	GLN
9	I	164	ILE
9	I	177	GLN
9	I	184	MET
9	I	199	LYS
9	I	212	GLU
9	I	228	LEU

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Mol	Chain	Res	Type
9	I	232	GLU
10	J	4	ASP
10	J	13	ASP
10	J	20	GLU
10	J	53	LEU
10	J	76	LEU
10	J	96	LEU
10	J	102	VAL
10	J	118	TYR
11	K	31	ILE
11	K	68	VAL
11	K	96	THR
11	K	107	MET
11	K	161	THR
11	K	163	VAL
11	K	195	ILE
11	K	211	ASN
11	K	221	GLN
11	K	224	GLN
11	K	240	ASP
11	K	241	ILE
12	L	54	SER
12	L	101	ARG
12	L	109	VAL
12	L	146	GLN
12	L	172	LEU
12	L	182	CYS
12	L	188	VAL
12	L	198	THR
12	L	214	ILE
13	M	42	LYS
13	M	97	ASN
13	M	120	HIS
13	M	151	ILE
13	M	158	TYR
13	M	175	GLU
13	M	181	MET
13	M	216	VAL
13	M	227	VAL
13	M	243	LEU
13	M	244	LYS
14	N	17	ASP

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Mol	Chain	Res	Type
14	N	100	ILE
14	N	135	ILE
14	N	176	LEU
15	P	24	MET
15	P	41	ILE
15	P	64	GLU
15	P	93	TYR
15	P	183	LEU
15	P	215	LYS
16	Q	2	SER
16	Q	30	ILE
16	Q	60	VAL
16	Q	72	ASN
16	Q	108	VAL
16	Q	123	SER
16	Q	126	LEU
16	Q	175	VAL
16	Q	183	MET
17	R	3	TYR
17	R	26	VAL
17	R	59	TYR
17	R	62	LYS
17	R	68	LYS
17	R	69	MET
17	R	71	ASN
17	R	74	GLU
17	R	124	LEU
17	R	132	HIS
17	R	137	PHE
17	R	139	THR
17	R	157	VAL
17	R	173	LEU
17	R	175	LEU
18	S	28	SER
18	S	45	MET
18	S	74	ILE
18	S	93	MET
18	S	136	TYR
18	S	190	ASP
19	T	13	LEU
19	T	27	THR
19	T	34	SER

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Mol	Chain	Res	Type
19	T	72	LEU
19	T	91	MET
19	T	92	LEU
19	T	110	ILE
19	T	153	VAL
19	T	158	MET
19	T	195	ILE
20	U	25	HIS
20	U	82	LEU
20	U	97	VAL
20	U	114	GLU
20	U	147	TYR
20	U	151	ILE
20	U	167	ILE
20	U	169	GLU
20	U	176	MET
20	U	179	TYR
20	U	180	SER
20	U	181	LEU
20	U	187	LEU
20	U	200	VAL
20	U	201	LEU
20	U	210	LYS
20	U	218	GLN
20	U	267	ASN
20	U	335	ILE
20	U	346	ASN
20	U	353	LEU
20	U	364	VAL
20	U	365	CYS
20	U	426	TYR
20	U	443	LEU
20	U	448	LEU
20	U	449	ILE
20	U	458	ILE
20	U	492	ASP
20	U	585	THR
20	U	607	VAL
20	U	608	SER
20	U	625	ILE
20	U	631	GLU
20	U	680	VAL

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Mol	Chain	Res	Type
20	U	681	ASN
20	U	697	GLN
20	U	703	CYS
20	U	757	MET
20	U	760	VAL
20	U	802	TYR
20	U	807	LYS
20	U	811	PHE
20	U	833	LEU
20	U	836	THR
20	U	847	GLU
20	U	849	LYS
20	U	899	ARG
20	U	900	TYR
20	U	911	ILE
21	V	89	LYS
21	V	92	ARG
21	V	104	THR
21	V	131	LEU
21	V	171	VAL
21	V	222	ASP
21	V	230	PHE
21	V	240	LEU
21	V	283	ASN
21	V	292	THR
21	V	313	LEU
21	V	318	GLN
21	V	331	LEU
21	V	384	GLU
21	V	405	THR
22	W	67	LEU
22	W	86	ASN
22	W	101	VAL
22	W	131	VAL
22	W	140	ILE
22	W	145	LEU
22	W	148	THR
22	W	151	THR
22	W	209	ILE
22	W	224	LEU
22	W	243	ILE
22	W	247	TYR

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Mol	Chain	Res	Type
22	W	274	VAL
22	W	297	GLU
22	W	420	ASP
22	W	435	LEU
22	W	440	ASN
22	W	451	MET
23	X	51	LEU
23	X	87	ARG
23	X	115	GLU
23	X	148	HIS
23	X	191	THR
23	X	195	THR
23	X	254	MET
23	X	268	GLN
23	X	287	LEU
23	X	304	LYS
23	X	319	ILE
23	X	372	LYS
23	X	388	PHE
23	X	393	VAL
23	X	404	ILE
23	X	405	GLN
23	X	420	LYS
24	Y	50	MET
24	Y	94	ASN
24	Y	143	TYR
24	Y	173	ASP
24	Y	178	ASN
24	Y	224	VAL
24	Y	273	GLN
24	Y	278	VAL
24	Y	363	ASN
25	Z	26	ILE
25	Z	65	ASP
25	Z	73	ASP
25	Z	106	ILE
25	Z	184	VAL
25	Z	193	ASN
25	Z	206	LEU
25	Z	231	GLN
25	Z	233	VAL
25	Z	235	ASN

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Mol	Chain	Res	Type
25	Z	256	GLN
25	Z	258	VAL
26	a	7	PHE
26	a	42	LEU
26	a	83	VAL
26	a	122	LYS
26	a	127	ASP
26	a	137	ASP
26	a	141	MET
26	a	149	THR
26	a	180	LEU
26	a	186	LYS
26	a	211	PHE
26	a	216	LEU
26	a	231	GLN
26	a	268	LEU
26	a	298	LYS
26	a	303	THR
26	a	306	GLU
26	a	375	LEU
27	b	6	THR
27	b	49	VAL
27	b	51	LEU
27	b	68	THR
27	b	72	LEU
27	b	75	LEU
27	b	78	VAL
27	b	127	LEU
27	b	132	LYS
27	b	135	LYS
27	b	152	LYS
27	b	184	ILE
28	c	27	THR
28	c	33	ILE
28	c	66	THR
28	c	75	MET
28	c	82	VAL
28	c	87	VAL
28	c	92	GLN
28	c	101	GLN
28	c	118	PHE
28	c	125	VAL

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Mol	Chain	Res	Type
28	c	132	SER
28	c	154	LYS
28	c	181	LEU
28	c	185	ASN
28	c	216	MET
28	c	220	LEU
28	c	246	LYS
28	c	261	GLU
28	c	284	LEU
29	d	155	SER
29	d	159	LYS
29	d	191	LEU
29	d	201	SER
29	d	220	ILE
29	d	226	ILE
29	d	230	VAL
29	d	263	LEU
29	d	275	ILE
29	d	279	TYR
29	d	302	TYR
30	e	41	ASP
30	e	56	LEU
31	f	53	GLN
31	f	110	TYR
31	f	118	ASN
31	f	133	MET
31	f	166	VAL
31	f	191	ILE
31	f	202	HIS
31	f	216	MET
31	f	224	ASN
31	f	233	LEU
31	f	274	ASP
31	f	327	ASN
31	f	352	HIS
31	f	367	SER
31	f	442	SER
31	f	469	TYR
31	f	472	HIS
31	f	483	PHE
31	f	509	LYS
31	f	531	ASN

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Mol	Chain	Res	Type
31	f	534	VAL
31	f	545	LYS
31	f	594	LEU
31	f	744	MET
31	f	800	LEU
31	f	807	ARG
31	f	808	ASN
31	f	816	TYR
31	f	821	LEU
31	f	829	MET
31	f	888	LEU
33	h	5	MET
33	h	43	MET
33	h	75	GLU
33	h	82	SER
33	h	107	TRP
33	h	108	ASN
33	h	127	MET
33	h	141	TYR
34	u	137	CYS
34	u	157	LEU
34	u	165	LEU
34	u	166	LEU
34	u	198	ILE
34	u	218	LEU
34	u	220	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (33) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	358	HIS
2	B	368	HIS
3	C	205	HIS
5	E	220	ASN
6	F	436	GLN
9	I	109	GLN
11	K	221	GLN
12	L	60	GLN
15	P	62	ASN
16	Q	65	GLN
16	Q	188	HIS
17	R	55	GLN

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Mol	Chain	Res	Type
17	R	61	GLN
17	R	71	ASN
20	U	128	GLN
20	U	362	ASN
20	U	670	ASN
21	V	473	GLN
22	W	236	HIS
22	W	440	ASN
23	X	182	ASN
23	X	329	ASN
25	Z	193	ASN
25	Z	202	ASN
28	c	176	GLN
28	c	185	ASN
28	c	219	ASN
28	c	221	HIS
29	d	338	GLN
31	f	472	HIS
34	u	164	GLN
34	u	274	ASN
34	u	276	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 12 ligands modelled in this entry, 6 are monoatomic - leaving 6 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The

Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
38	ADP	C	501	37	28,29,29	1.37	4 (14%)	43,45,45	1.84	8 (18%)
38	ADP	D	501	37	28,29,29	0.48	0	43,45,45	0.60	0
36	ATP	F	501	37	32,33,33	0.51	0	48,52,52	0.64	0
36	ATP	B	501	37	32,33,33	0.50	0	48,52,52	0.55	0
38	ADP	E	501	-	28,29,29	1.37	4 (14%)	43,45,45	1.90	11 (25%)
36	ATP	A	501	37	32,33,33	0.53	0	48,52,52	0.60	0

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	ADP	C	501	37	-	4/16/32/32	0/3/3/3
38	ADP	D	501	37	-	3/16/32/32	0/3/3/3
36	ATP	F	501	37	-	7/22/38/38	0/3/3/3
36	ATP	B	501	37	-	7/22/38/38	0/3/3/3
38	ADP	E	501	-	-	5/16/32/32	0/3/3/3
36	ATP	A	501	37	-	4/22/38/38	0/3/3/3

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	E	501	ADP	C5-C4	4.42	1.47	1.39
38	C	501	ADP	C5-C4	4.42	1.47	1.39
38	C	501	ADP	C5-C6	2.61	1.48	1.41
38	E	501	ADP	C5-C6	2.57	1.48	1.41
38	E	501	ADP	C5-N7	-2.49	1.34	1.39
38	C	501	ADP	C5-N7	-2.36	1.34	1.39
38	C	501	ADP	C8-N7	2.29	1.36	1.31
38	E	501	ADP	C8-N7	2.29	1.36	1.31

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	E	501	ADP	C5-C4-N3	-5.93	118.55	126.72
38	C	501	ADP	C5-C4-N3	-5.83	118.69	126.72
38	E	501	ADP	N3-C4-N9	4.59	134.97	127.17
38	C	501	ADP	N3-C4-N9	4.54	134.89	127.17
38	E	501	ADP	C2-N3-C4	4.00	121.59	111.83
38	E	501	ADP	N3-C2-N1	-3.89	122.69	128.58
38	C	501	ADP	C2-N3-C4	3.68	120.82	111.83
38	E	501	ADP	C4-C5-N7	-3.57	106.50	110.58
38	C	501	ADP	C4-C5-N7	-3.42	106.67	110.58
38	C	501	ADP	N3-C2-N1	-3.21	123.72	128.58
38	E	501	ADP	C5-N7-C8	2.81	107.86	103.45
38	E	501	ADP	C3'-C2'-C1'	2.62	106.42	101.46
38	C	501	ADP	C4-N9-C8	2.58	108.45	105.74
38	E	501	ADP	C4-N9-C8	2.52	108.38	105.74
38	C	501	ADP	C3'-C2'-C1'	2.52	106.23	101.46
38	C	501	ADP	C5-N7-C8	2.48	107.35	103.45
38	E	501	ADP	N9-C8-N7	-2.23	110.78	113.94
38	E	501	ADP	C6-C5-N7	2.22	136.37	132.09
38	E	501	ADP	C2-N1-C6	2.07	122.13	118.73

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
36	A	501	ATP	C5'-O5'-PA-O1A
36	A	501	ATP	C5'-O5'-PA-O2A
36	A	501	ATP	C5'-O5'-PA-O3A
36	B	501	ATP	PB-O3B-PG-O2G
36	B	501	ATP	PB-O3B-PG-O3G
36	F	501	ATP	PB-O3A-PA-O5'
36	F	501	ATP	C5'-O5'-PA-O2A
36	F	501	ATP	C5'-O5'-PA-O3A
38	E	501	ADP	C5'-O5'-PA-O1A
38	C	501	ADP	O4'-C4'-C5'-O5'
38	E	501	ADP	C3'-C4'-C5'-O5'
36	F	501	ATP	C4'-C5'-O5'-PA
36	B	501	ATP	PG-O3B-PB-O2B
36	B	501	ATP	O4'-C4'-C5'-O5'
38	C	501	ADP	C5'-O5'-PA-O1A
38	C	501	ADP	C5'-O5'-PA-O2A
38	C	501	ADP	C5'-O5'-PA-O3A
38	D	501	ADP	C5'-O5'-PA-O1A
36	F	501	ATP	PG-O3B-PB-O2B

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Mol	Chain	Res	Type	Atoms
38	E	501	ADP	C2'-C1'-N9-C4
36	B	501	ATP	C3'-C4'-C5'-O5'
38	E	501	ADP	C2'-C1'-N9-C8
36	B	501	ATP	C4'-C5'-O5'-PA
38	E	501	ADP	O4'-C4'-C5'-O5'
38	D	501	ADP	C2'-C1'-N9-C8
36	B	501	ATP	PG-O3B-PB-O1B
36	F	501	ATP	PG-O3B-PB-O1B
38	D	501	ADP	C2'-C1'-N9-C4
36	A	501	ATP	PA-O3A-PB-O2B
36	F	501	ATP	PA-O3A-PB-O2B

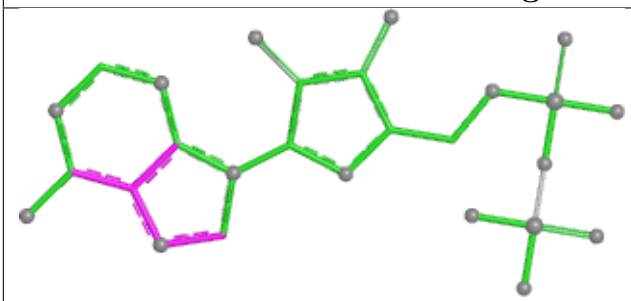
There are no ring outliers.

6 monomers are involved in 35 short contacts:

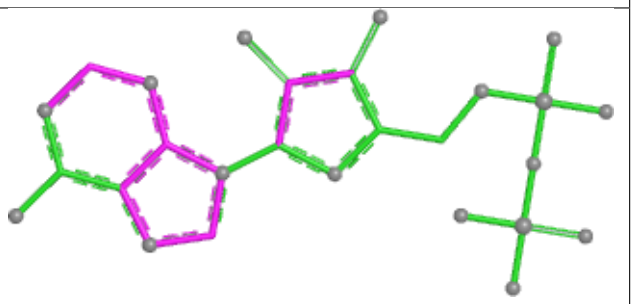
Mol	Chain	Res	Type	Clashes	Symm-Clashes
38	C	501	ADP	9	0
38	D	501	ADP	9	0
36	F	501	ATP	8	0
36	B	501	ATP	2	0
38	E	501	ADP	5	0
36	A	501	ATP	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

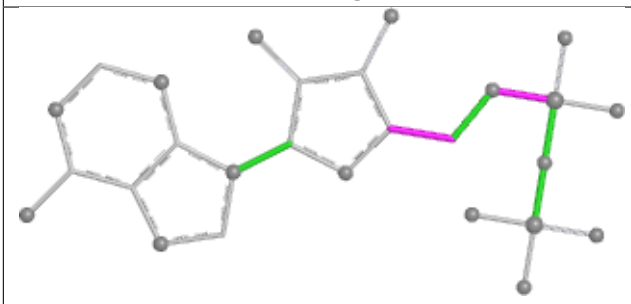
Ligand ADP C 501



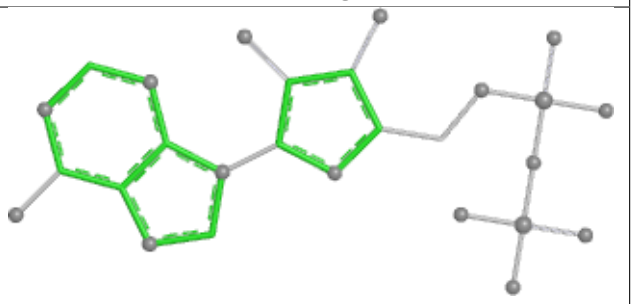
Bond lengths



Bond angles

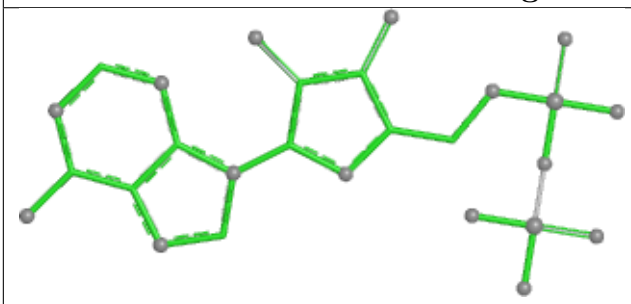


Torsions

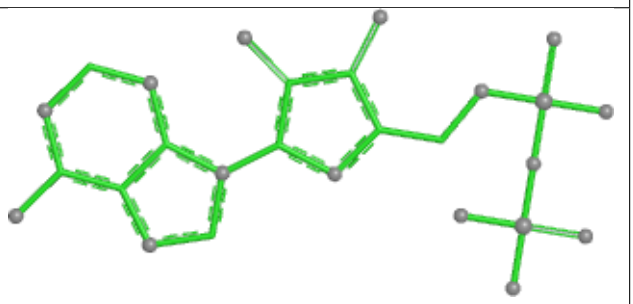


Rings

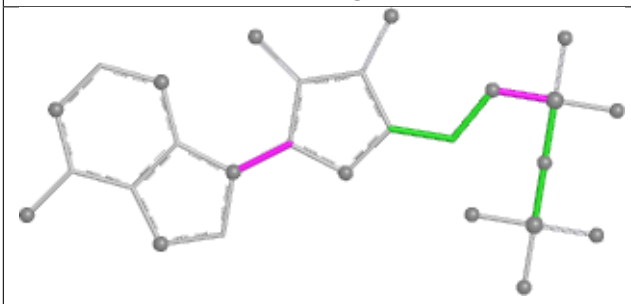
Ligand ADP D 501



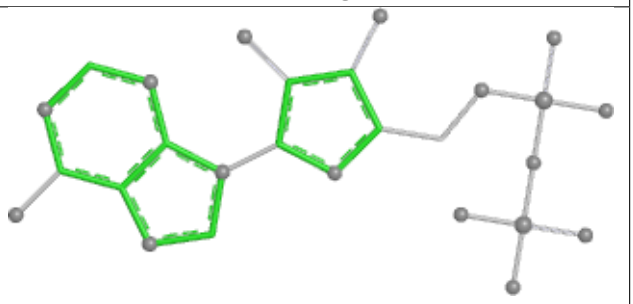
Bond lengths



Bond angles

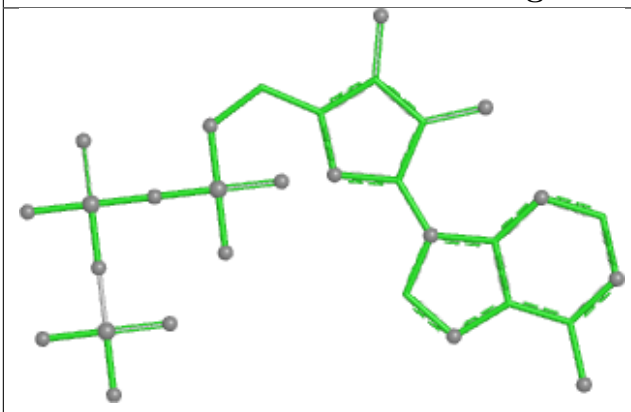


Torsions

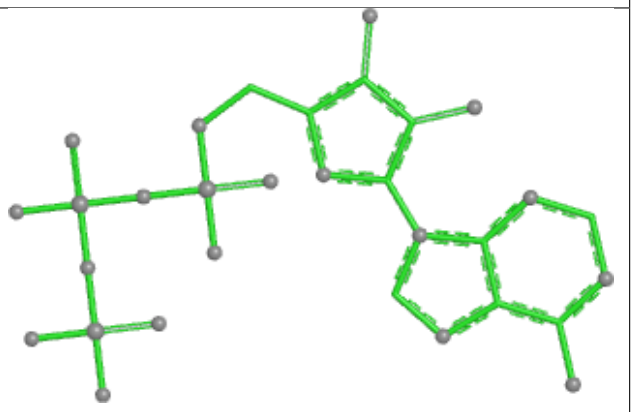


Rings

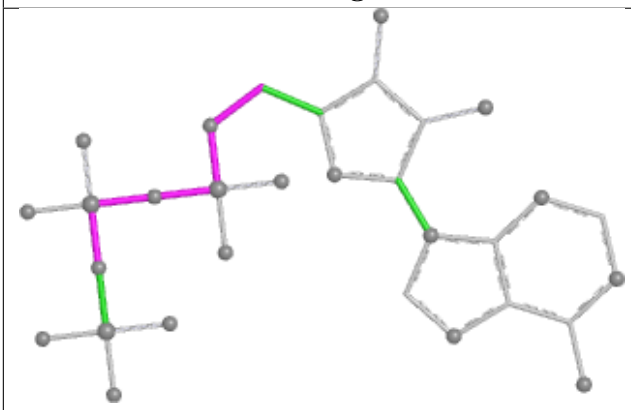
Ligand ATP F 501



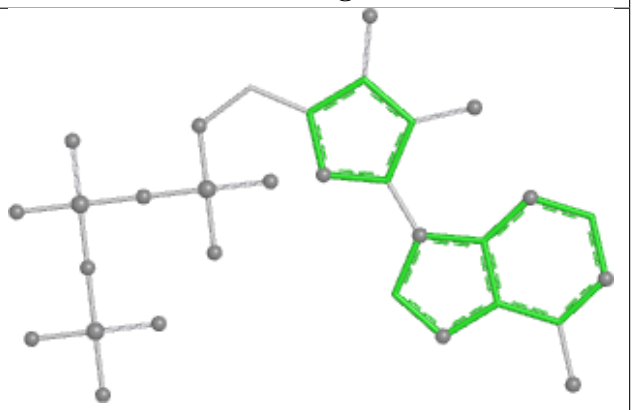
Bond lengths



Bond angles

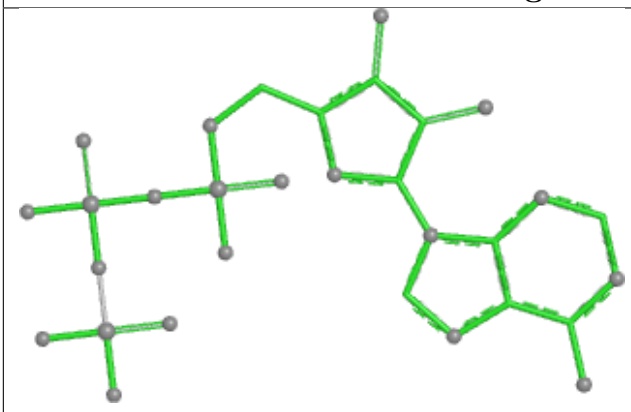


Torsions

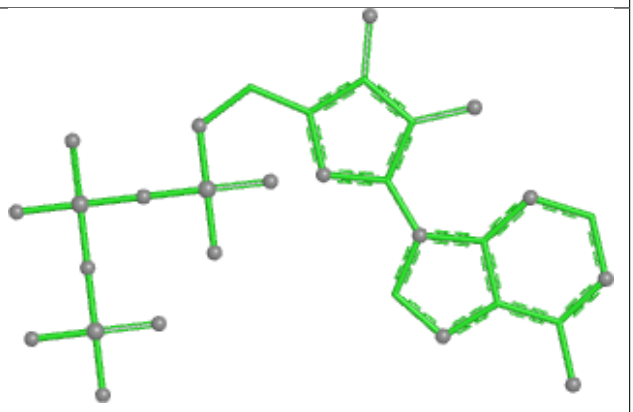


Rings

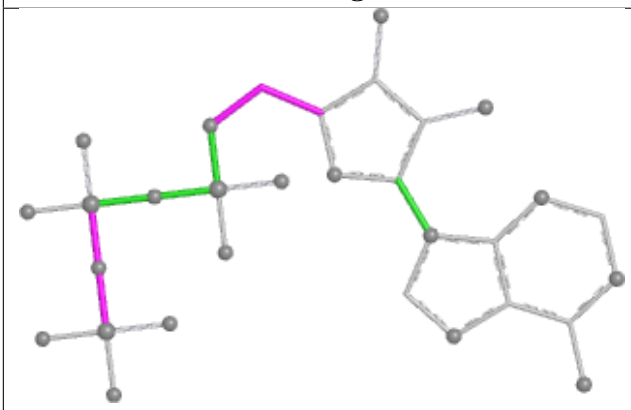
Ligand ATP B 501



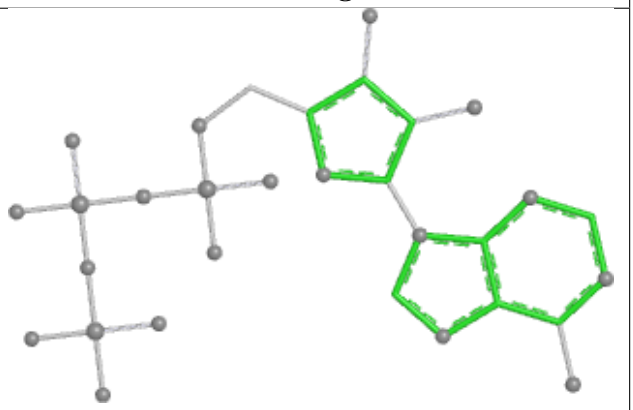
Bond lengths



Bond angles

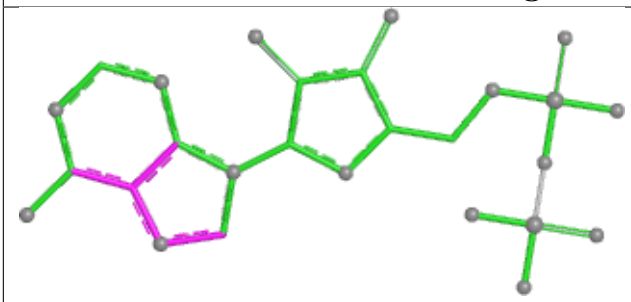


Torsions

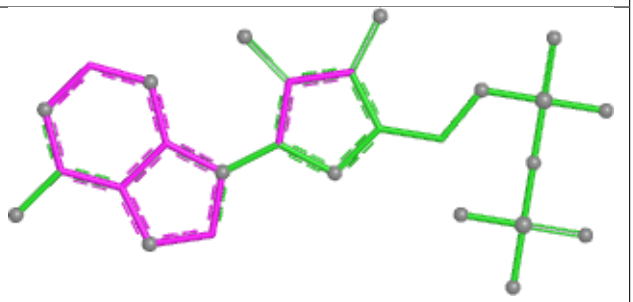


Rings

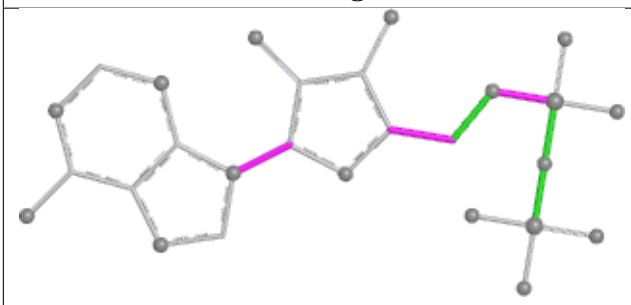
Ligand ADP E 501



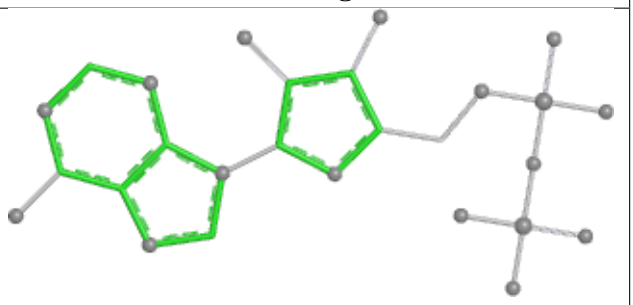
Bond lengths



Bond angles

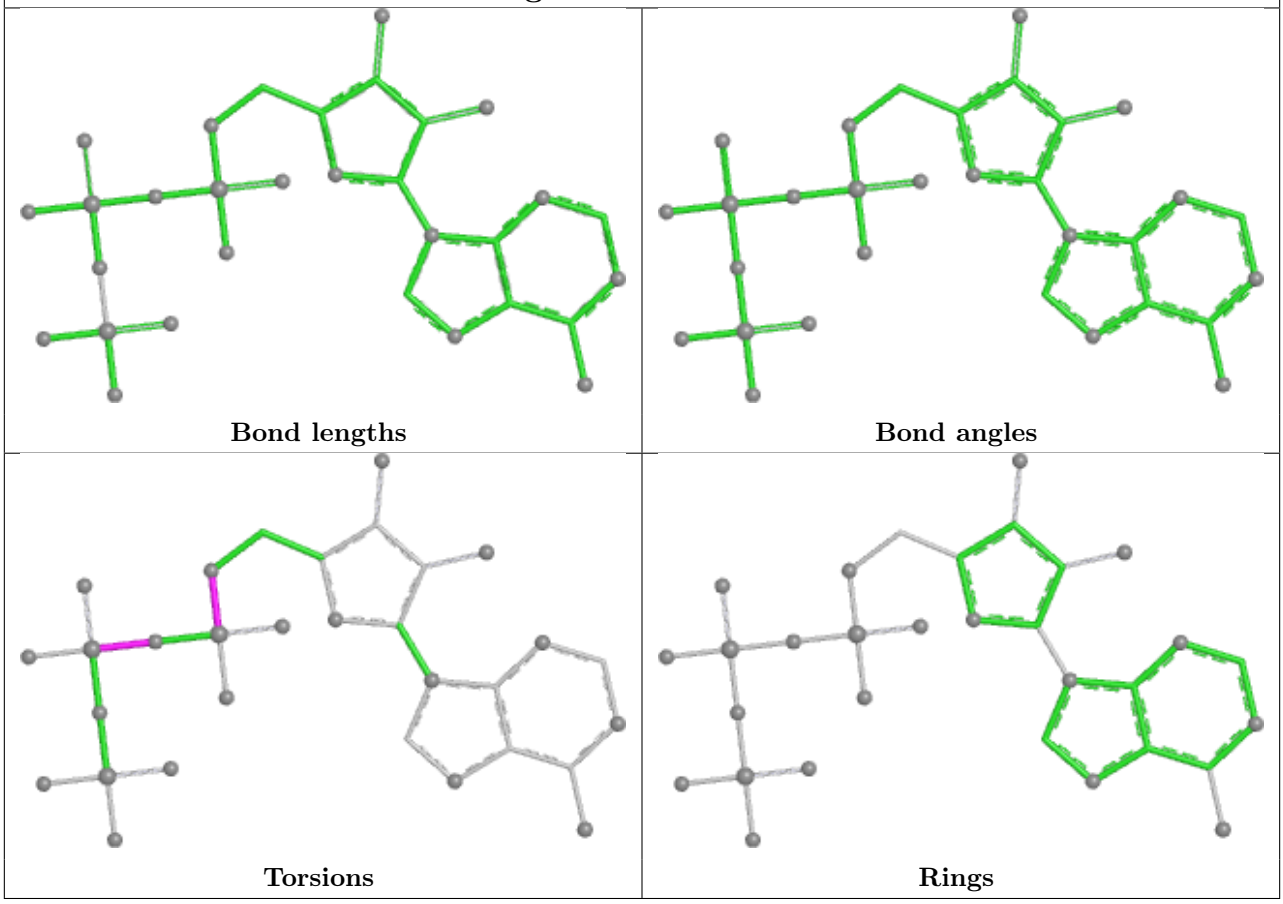


Torsions



Rings

Ligand ATP A 501



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.

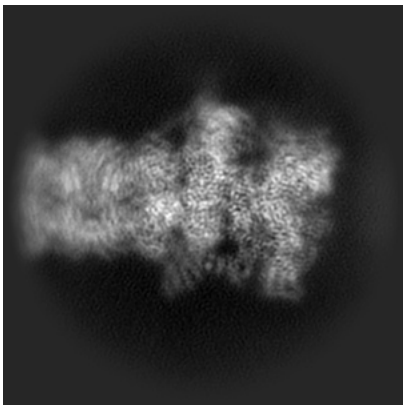
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-47719. These allow visual inspection of the internal detail of the map and identification of artifacts.

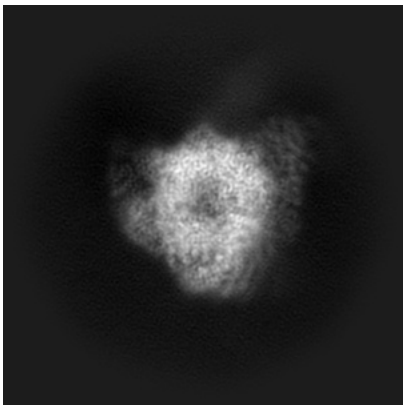
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

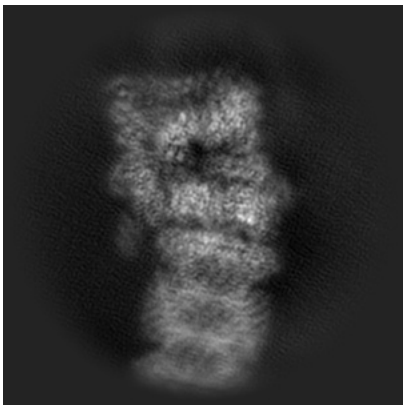
6.1.1 Primary map



X

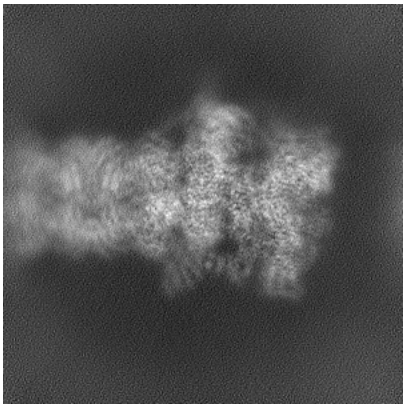


Y

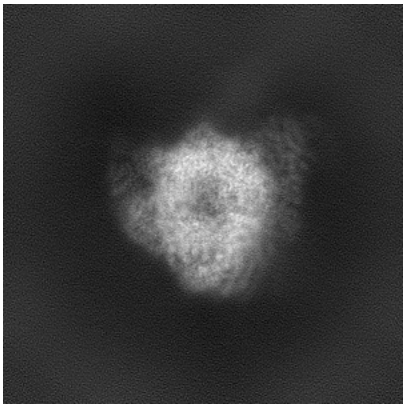


Z

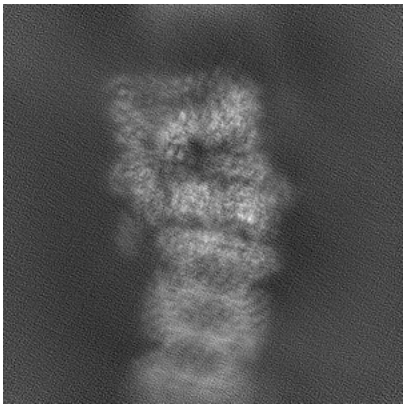
6.1.2 Raw map



X



Y

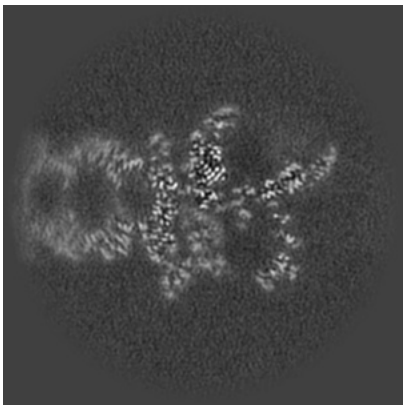


Z

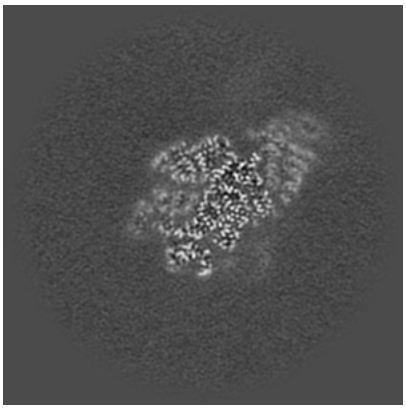
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

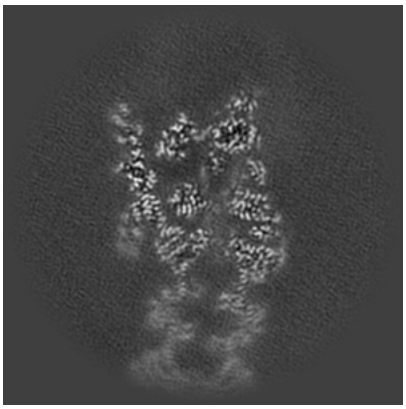
6.2.1 Primary map



X Index: 170

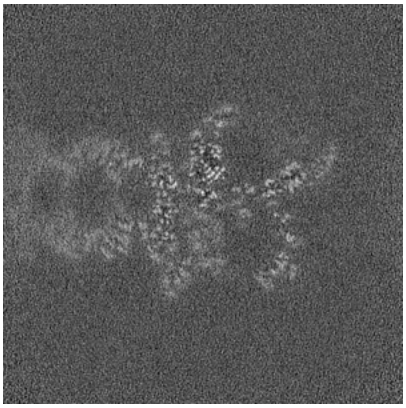


Y Index: 170

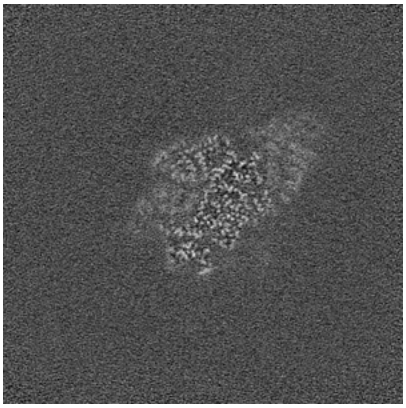


Z Index: 170

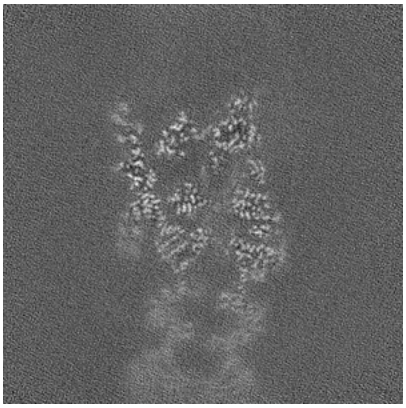
6.2.2 Raw map



X Index: 170



Y Index: 170

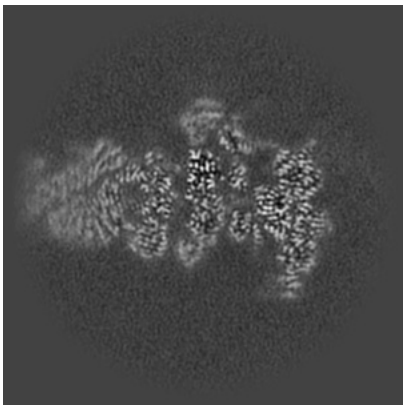


Z Index: 170

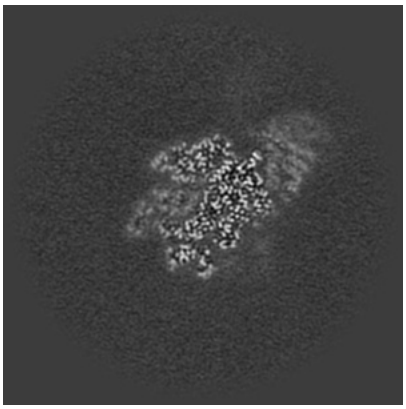
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

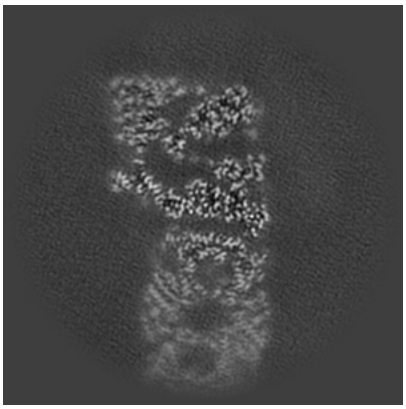
6.3.1 Primary map



X Index: 200

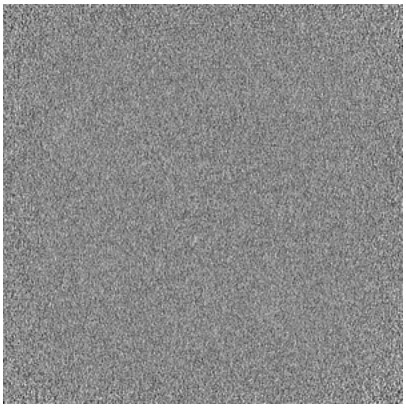


Y Index: 169

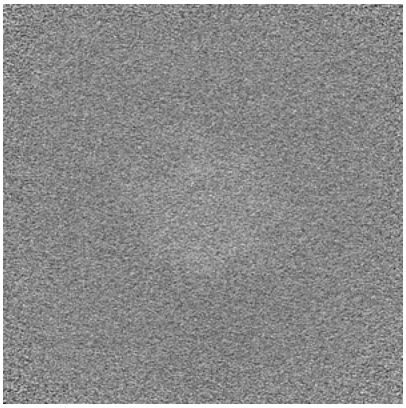


Z Index: 192

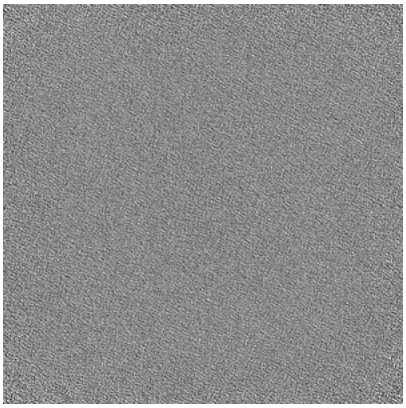
6.3.2 Raw map



X Index: 0



Y Index: 0

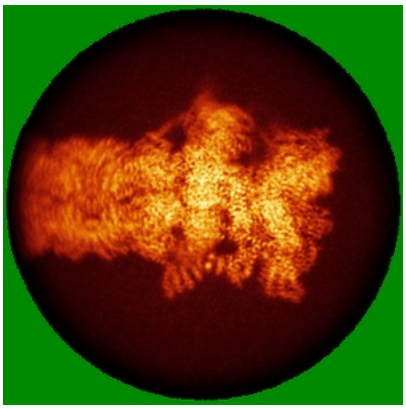


Z Index: 0

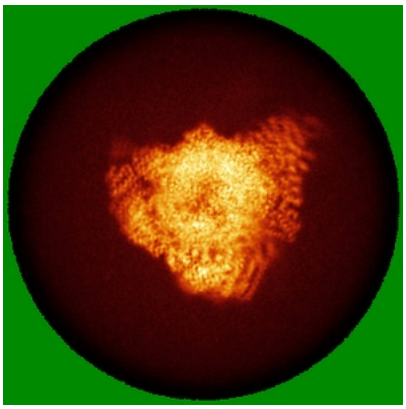
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

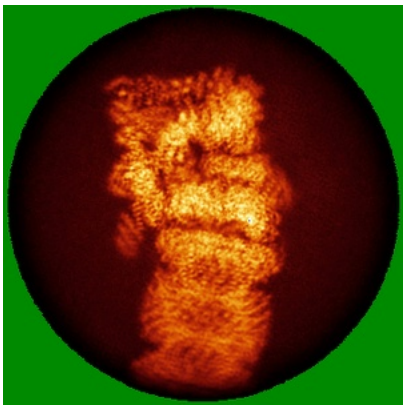
6.4.1 Primary map



X

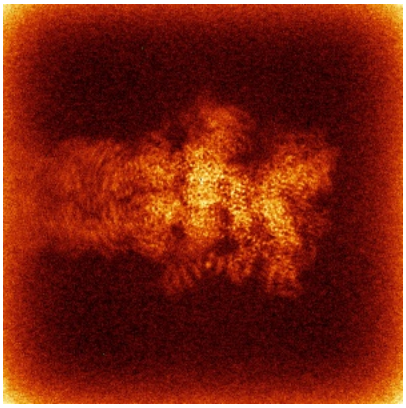


Y

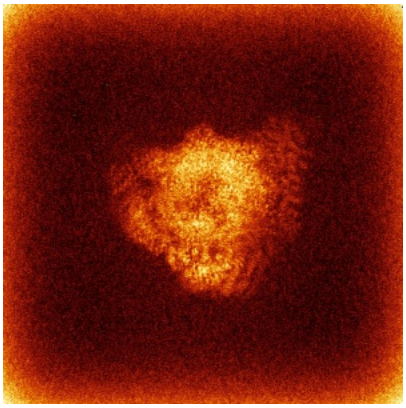


Z

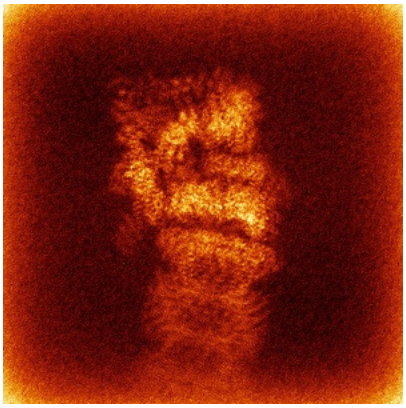
6.4.2 Raw map



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.

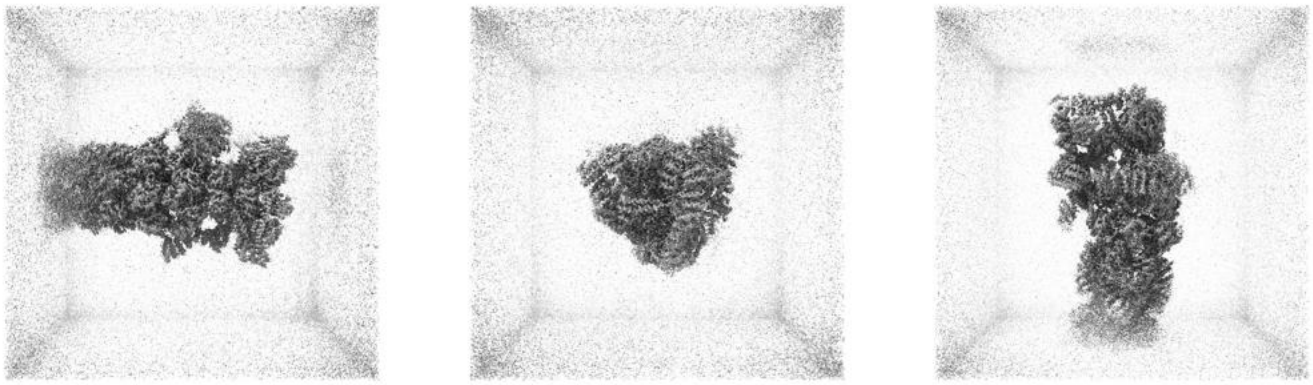
6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.15. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

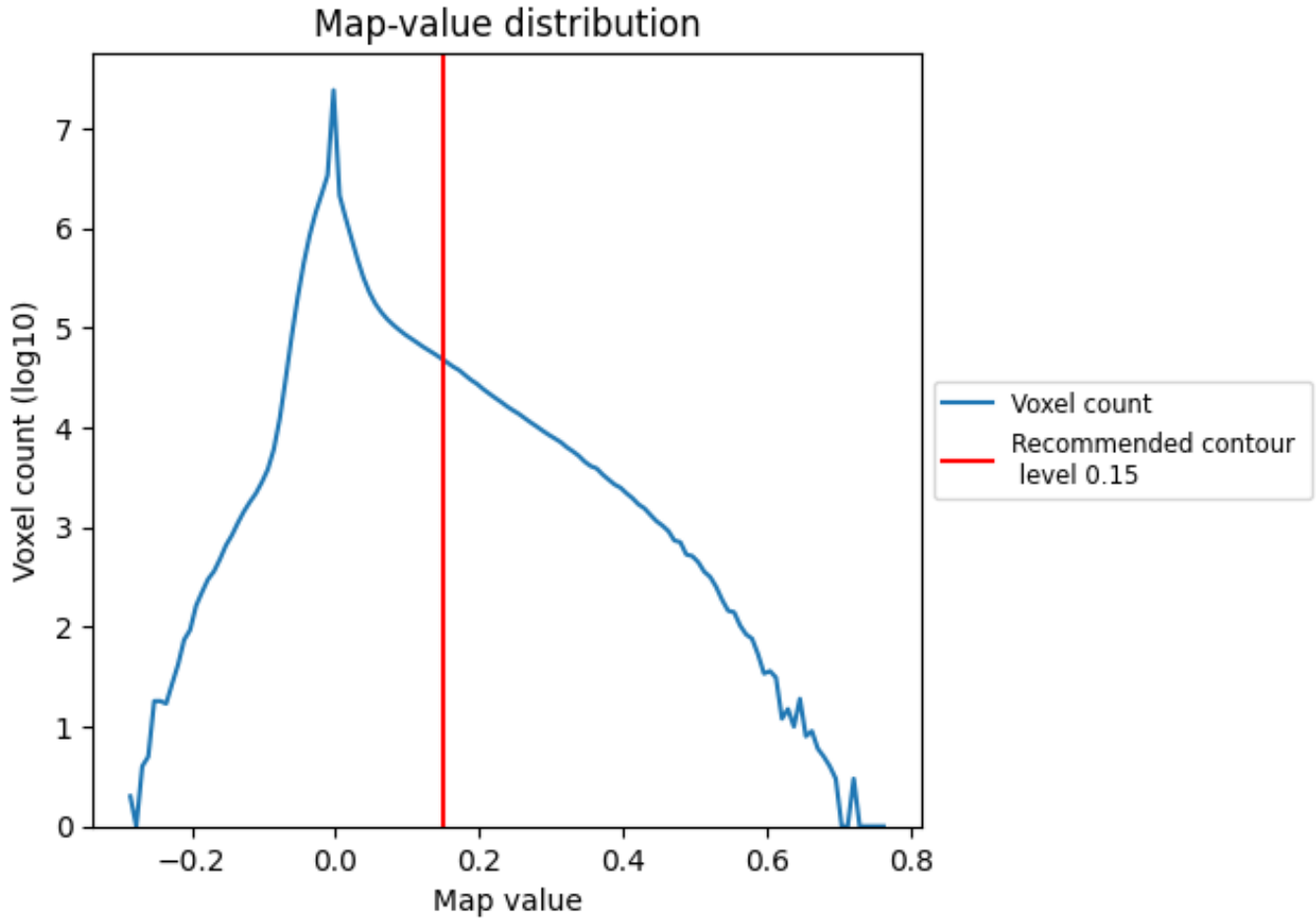
6.6 Mask visualisation (i)

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

7 Map analysis

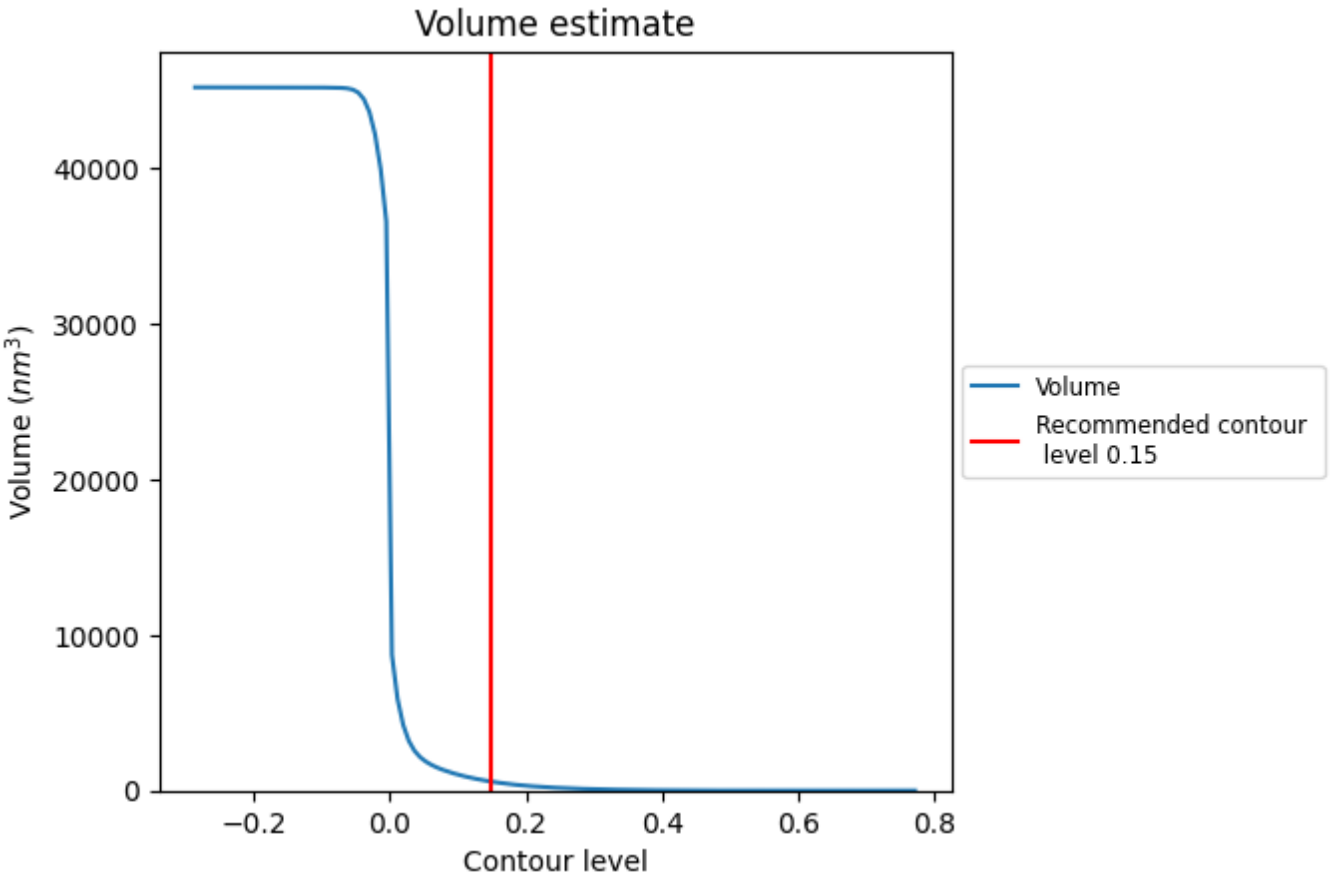
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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.

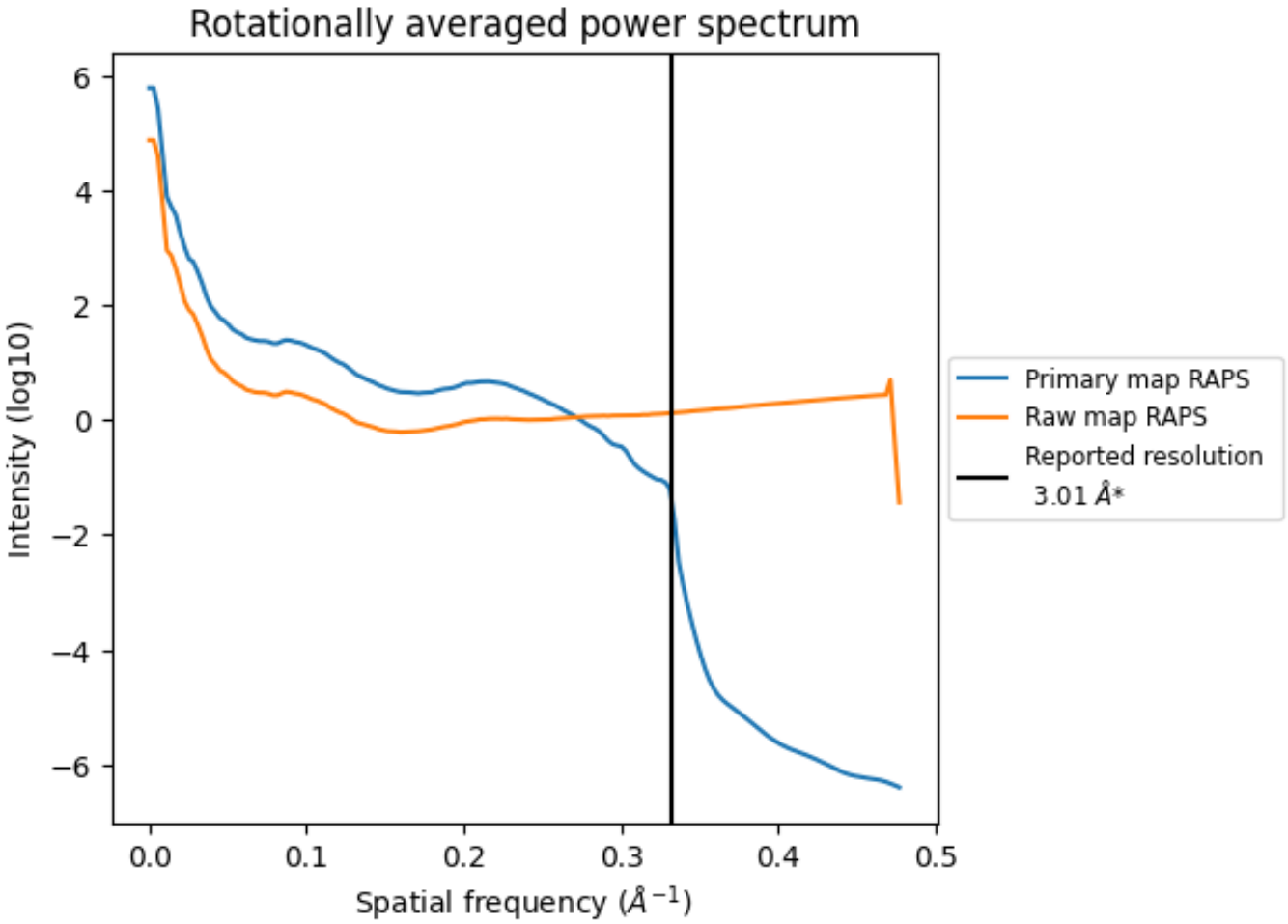
7.2 Volume estimate



The volume at the recommended contour level is 574 nm^3; this corresponds to an approximate mass of 518 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 (i)

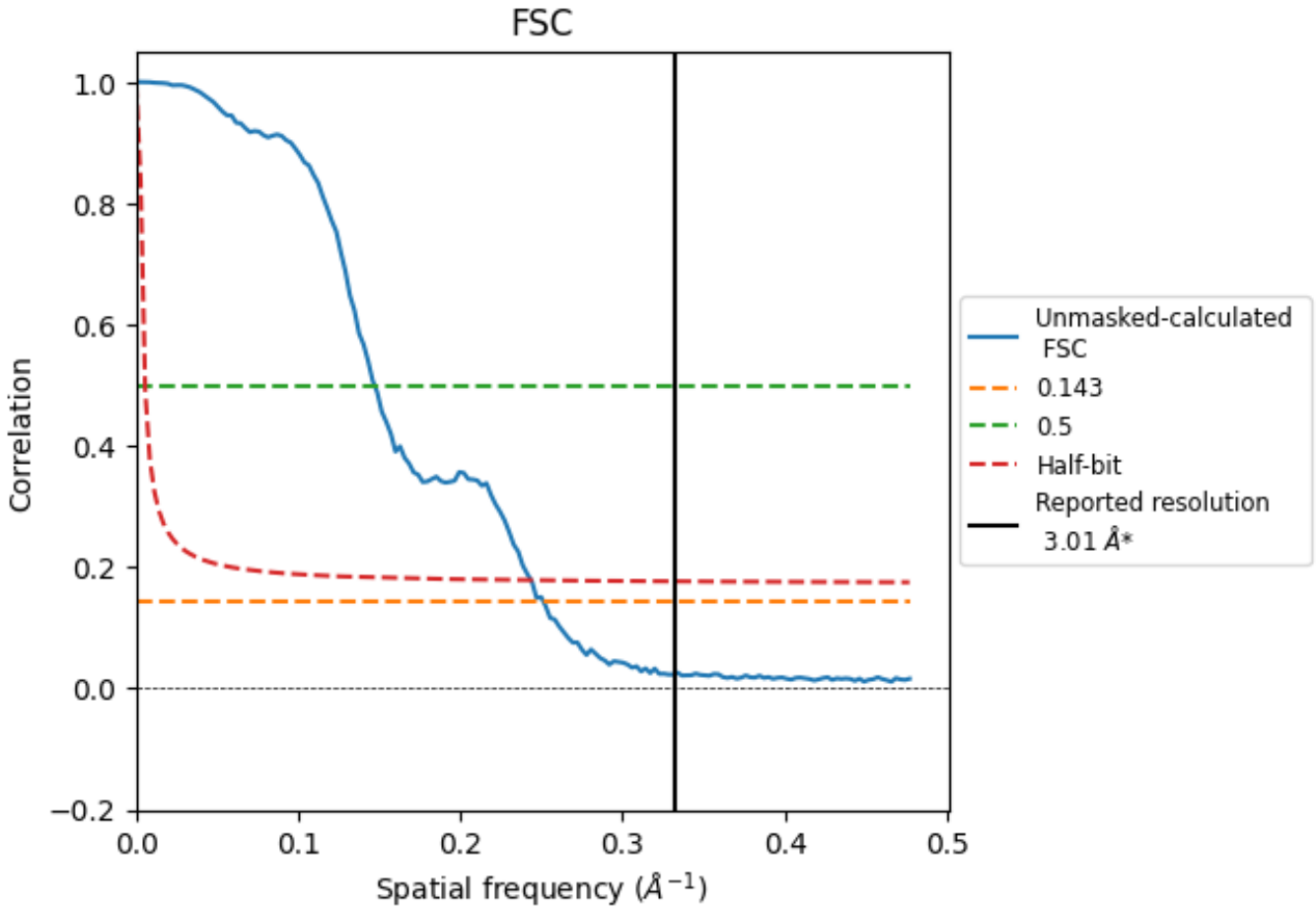


*Reported resolution corresponds to spatial frequency of 0.332 Å^{-1}

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.332 Å^{-1}

8.2 Resolution estimates (i)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.01	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.98	6.80	4.11

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.98 differs from the reported value 3.01 by more than 10 %

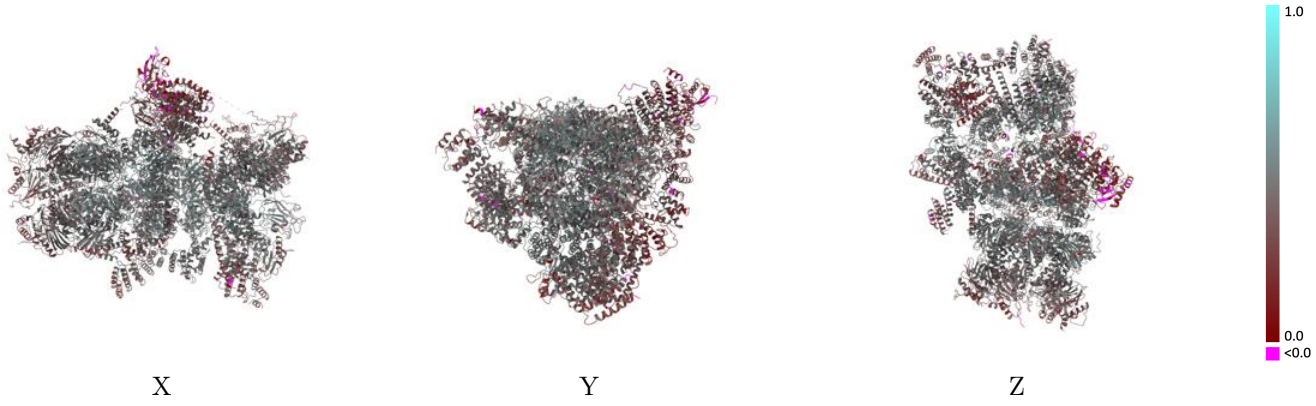
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-47719 and PDB model 9E8G. Per-residue inclusion information can be found in section 3 on page 13.

9.1 Map-model overlay

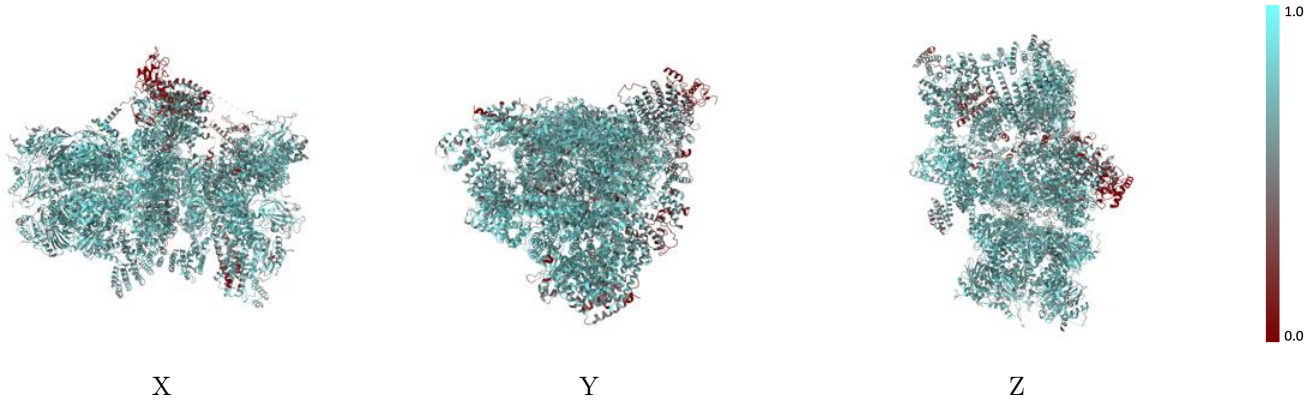
This section was not generated.

9.2 Q-score mapped to coordinate model



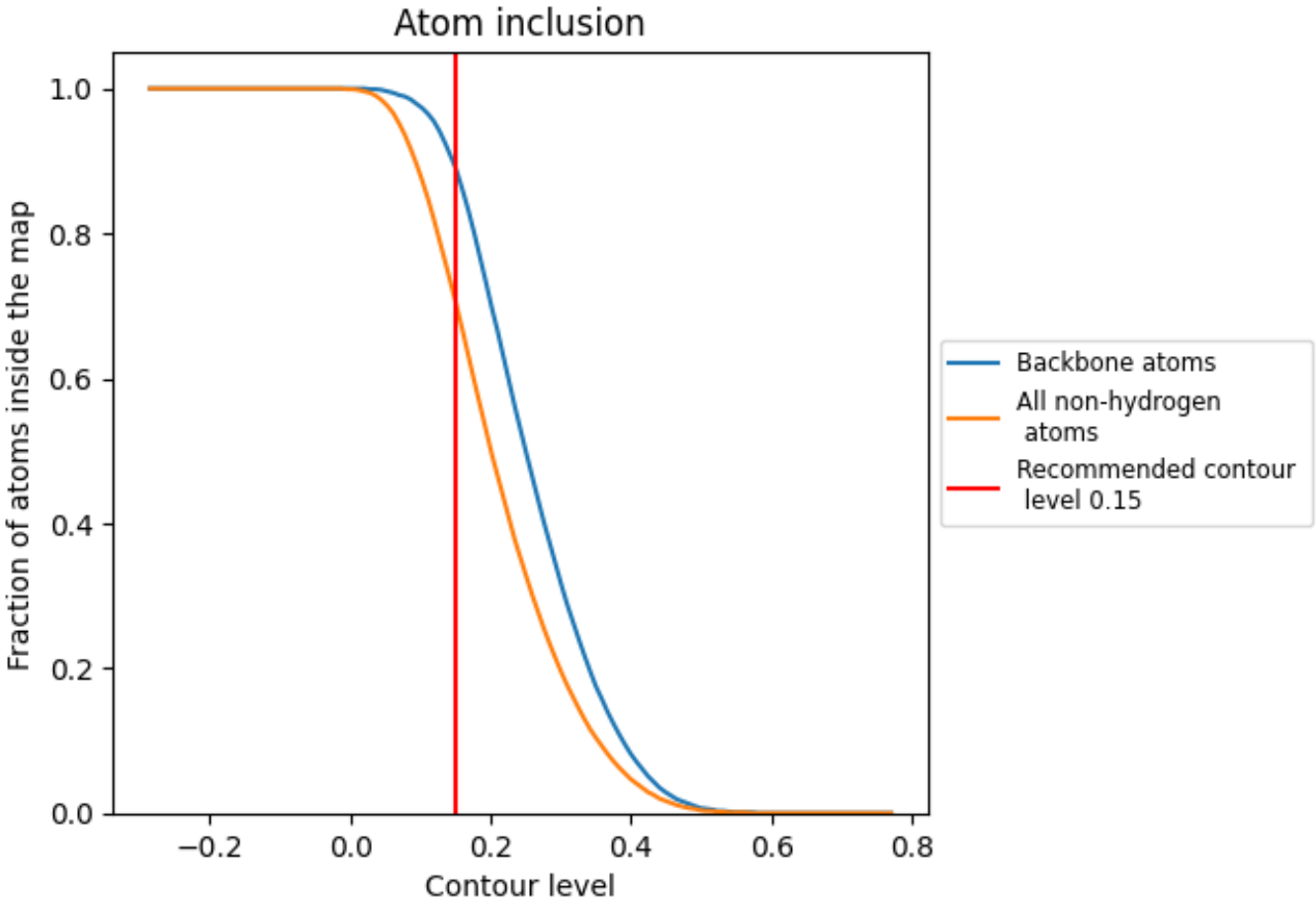
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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



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 (0.15).

9.4 Atom inclusion (i)



At the recommended contour level, 89% of all backbone atoms, 71% 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 (0.15) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7060	0.4300
A	0.7700	0.4910
B	0.7550	0.4890
C	0.7820	0.5010
D	0.7700	0.4930
E	0.5510	0.3450
F	0.7250	0.4710
G	0.7730	0.4720
H	0.7890	0.4830
I	0.7840	0.4720
J	0.7720	0.4640
K	0.7760	0.4810
L	0.7920	0.4860
M	0.7620	0.4580
N	0.6900	0.3960
P	0.7120	0.4070
Q	0.7090	0.4020
R	0.6830	0.3810
S	0.7120	0.3920
T	0.7030	0.3860
U	0.6980	0.4290
V	0.6310	0.3820
W	0.7340	0.4360
X	0.7550	0.4440
Y	0.8320	0.4690
Z	0.7730	0.4870
a	0.7110	0.4070
b	0.6950	0.4420
c	0.7280	0.4740
d	0.5840	0.3570
e	0.7560	0.4460
f	0.5580	0.3320
g	0.0030	0.1250
h	0.6930	0.3790
u	0.6680	0.4660
v	0.8830	0.5600