



Full wwPDB EM Validation Report ⓘ

May 10, 2025 – 03:36 PM EDT

PDB ID : 9NKJ / pdb_00009nkj
EMDB ID : EMD-49510
Title : Structure of substrates-engaged MIDN-bound human 26S proteasome,ED-MIDN state (Composite map)
Authors : Peddada, N.; Beutler, B.
Deposited on : 2025-02-28
Resolution : 3.84 Å (reported)
Based on initial model : 6MSK

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.dev118
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0rc1
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.43.1

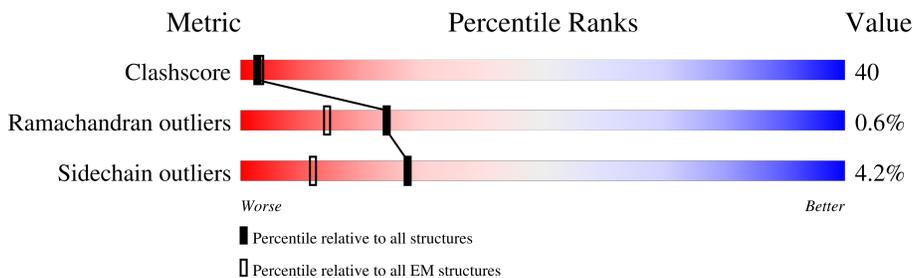
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.84 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



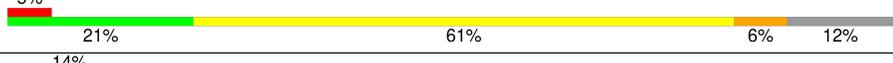
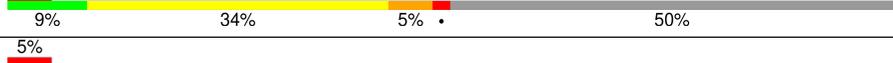
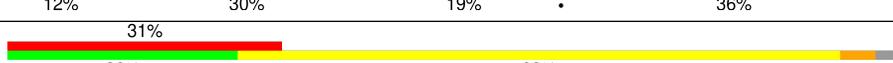
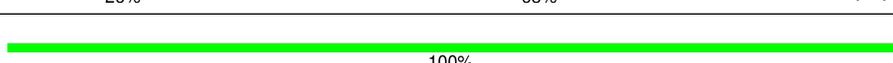
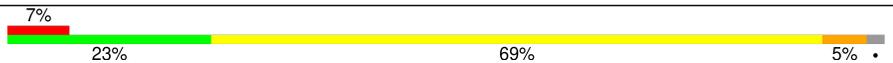
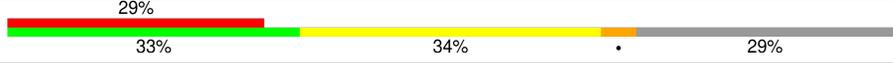
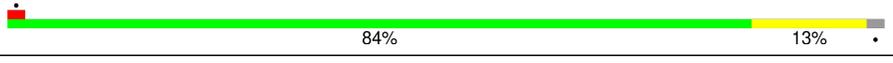
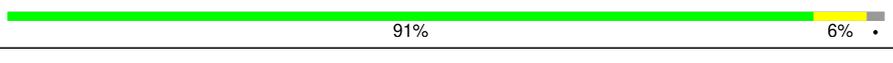
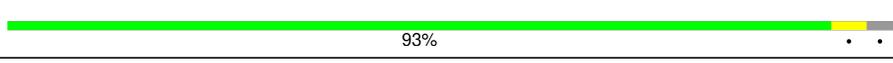
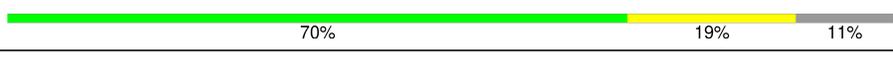
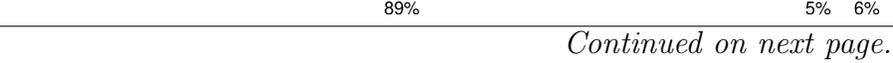
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	433	
2	B	440	
3	C	406	
4	D	418	
5	E	403	
6	F	439	
7	U	953	
8	V	534	

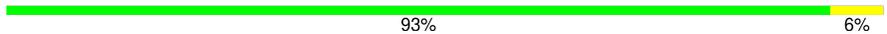
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Mol	Chain	Length	Quality of chain
9	X	422	
10	Y	389	
11	Z	324	
12	a	376	
13	b	377	
14	c	310	
15	d	350	
16	f	908	
17	v	8	
18	W	456	
19	e	70	
20	G	246	
20	g	246	
21	H	234	
21	h	234	
22	I	261	
22	i	261	
23	J	248	
23	j	248	
24	K	241	
24	k	241	
25	L	263	
25	l	263	
26	M	255	
26	m	255	

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Mol	Chain	Length	Quality of chain
27	N	239	
27	n	239	
28	O	277	
28	o	277	
29	P	205	
29	p	205	
30	Q	201	
30	q	201	
31	R	263	
31	r	263	
32	S	241	
32	s	241	
33	T	264	
33	t	264	

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
34	ATP	A	501	-	-	X	-

2 Entry composition [i](#)

There are 38 unique types of molecules in this entry. The entry contains 146355 atoms, of which 44182 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	413	3245	2044	570	613	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	403	3137	1976	534	612	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	387	3047	1920	548	562	17	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	380	3040	1923	524	580	13	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	E	375	2993	1886	530	560	17	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	363	2834	1789	487	542	16	0	0

- Molecule 7 is a protein called 26S proteasome non-ATPase regulatory subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	U	851	6640	4213	1129	1254	44	0	0

- Molecule 8 is a protein called 26S proteasome non-ATPase regulatory subunit 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	V	444	3612	2301	645	653	13	0	0

- Molecule 9 is a protein called 26S proteasome non-ATPase regulatory subunit 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	X	380	3006	1917	509	568	12	0	0

- Molecule 10 is a protein called 26S proteasome non-ATPase regulatory subunit 6.

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

- Molecule 11 is a protein called 26S proteasome non-ATPase regulatory subunit 7.

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

- Molecule 12 is a protein called 26S proteasome non-ATPase regulatory subunit 13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	a	373	2995	1911	510	559	15	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	b	189	1427	894	257	269	7	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	c	284	2227	1409	381	418	19	0	0

- Molecule 15 is a protein called 26S proteasome non-ATPase regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	d	224	1813	1173	298	333	9	0	0

- Molecule 16 is a protein called 26S proteasome non-ATPase regulatory subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	f	889	6859	4309	1174	1330	46	0	0

- Molecule 17 is a protein called unknown density-Substrate density.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
17	v	8	40	24	8	8	0	0

- Molecule 18 is a protein called 26S proteasome non-ATPase regulatory subunit 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	W	446	3635	2302	622	687	24	0	0

- Molecule 19 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
19	e	50	425	260	65	100	0	0

- Molecule 20 is a protein called Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
20	G	240	3394	1106	1656	304	316	12	0	0
20	g	240	3445	1124	1687	306	316	12	0	0

- Molecule 21 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
21	H	229	Total 3252	C 1080	H 1590	N 288	O 288	S 6	0	0
21	h	229	Total 3252	C 1080	H 1590	N 288	O 288	S 6	0	0

- Molecule 22 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
22	I	247	Total 3543	C 1150	H 1741	N 322	O 320	S 10	0	0
22	i	247	Total 3503	C 1143	H 1717	N 320	O 313	S 10	0	0

- Molecule 23 is a protein called Proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
23	J	232	Total 3151	C 1038	H 1518	N 306	O 284	S 5	0	0
23	j	232	Total 3151	C 1038	H 1518	N 306	O 284	S 5	0	0

- Molecule 24 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
24	K	233	Total 3255	C 1057	H 1592	N 287	O 308	S 11	0	0
24	k	233	Total 3249	C 1056	H 1589	N 287	O 306	S 11	0	0

- Molecule 25 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
25	L	233	Total 3359	C 1090	H 1649	N 318	O 293	S 9	0	0
25	l	233	Total 3352	C 1089	H 1645	N 315	O 293	S 10	0	0

- Molecule 26 is a protein called Proteasome subunit alpha type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace	
			Total	C	H	N	O			S
26	M	239	Total 3440	C 1131	H 1680	N 308	O 311	S 10	0	0

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Mol	Chain	Residues	Atoms						AltConf	Trace
26	m	239	Total	C	H	N	O	S	0	0
			3444	1131	1683	308	312	10		

- Molecule 27 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms						AltConf	Trace
27	N	202	Total	C	H	N	O	S	0	0
			2891	928	1422	257	272	12		
27	n	202	Total	C	H	N	O	S	0	0
			2881	926	1416	256	271	12		

- Molecule 28 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms						AltConf	Trace
28	O	220	Total	C	H	N	O	S	0	0
			3139	1005	1559	272	294	9		
28	o	220	Total	C	H	N	O	S	0	0
			3131	1003	1555	272	292	9		

- Molecule 29 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms						AltConf	Trace
29	P	204	Total	C	H	N	O	S	0	0
			3096	992	1550	262	273	19		
29	p	204	Total	C	H	N	O	S	0	0
			3081	989	1543	263	268	18		

- Molecule 30 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms						AltConf	Trace
30	Q	196	Total	C	H	N	O	S	0	0
			2986	974	1477	259	268	8		
30	q	196	Total	C	H	N	O	S	0	0
			2981	973	1475	259	266	8		

- Molecule 31 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms						AltConf	Trace
31	R	200	Total	C	H	N	O	S	0	0
			2953	957	1449	271	267	9		
31	r	200	Total	C	H	N	O	S	0	0
			2938	954	1438	270	267	9		

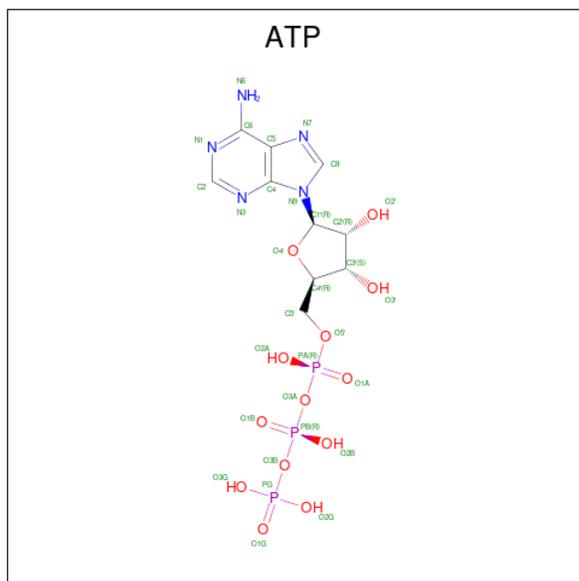
- Molecule 32 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
32	S	212	Total 3163	1016	1579	279	279	10	0	0
32	s	212	Total 3168	1017	1581	279	281	10	0	0

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

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
33	T	212	Total 3102	1003	1526	280	282	11	0	0
33	t	212	Total 3079	998	1511	279	280	11	0	0

- Molecule 34 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$) (labeled as "Ligand of Interest" by depositor).

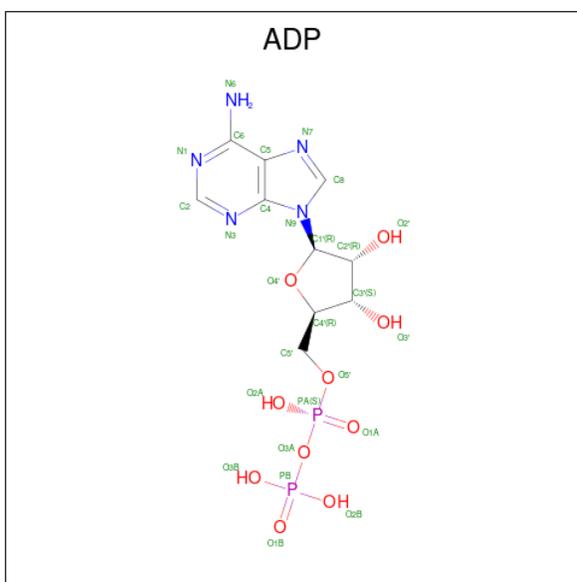


Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
34	A	1	Total 31	10	5	13	3	0
34	B	1	Total 31	10	5	13	3	0
34	C	1	Total 31	10	5	13	3	0
34	F	1	Total 31	10	5	13	3	0

- Molecule 35 is MAGNESIUM ION (CCD ID: MG) (formula: Mg) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms	AltConf
35	A	1	Total Mg 1 1	0
35	B	1	Total Mg 1 1	0
35	F	1	Total Mg 1 1	0

- Molecule 36 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: C₁₀H₁₅N₅O₁₀P₂) (labeled as "Ligand of Interest" by depositor).

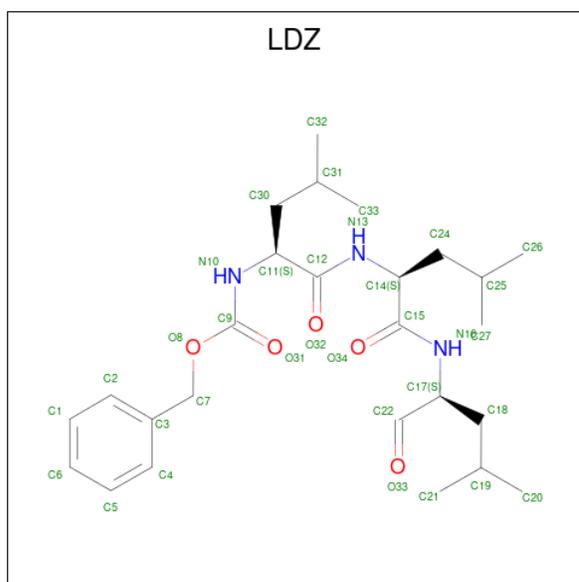


Mol	Chain	Residues	Atoms	AltConf
36	D	1	Total C N O P 27 10 5 10 2	0

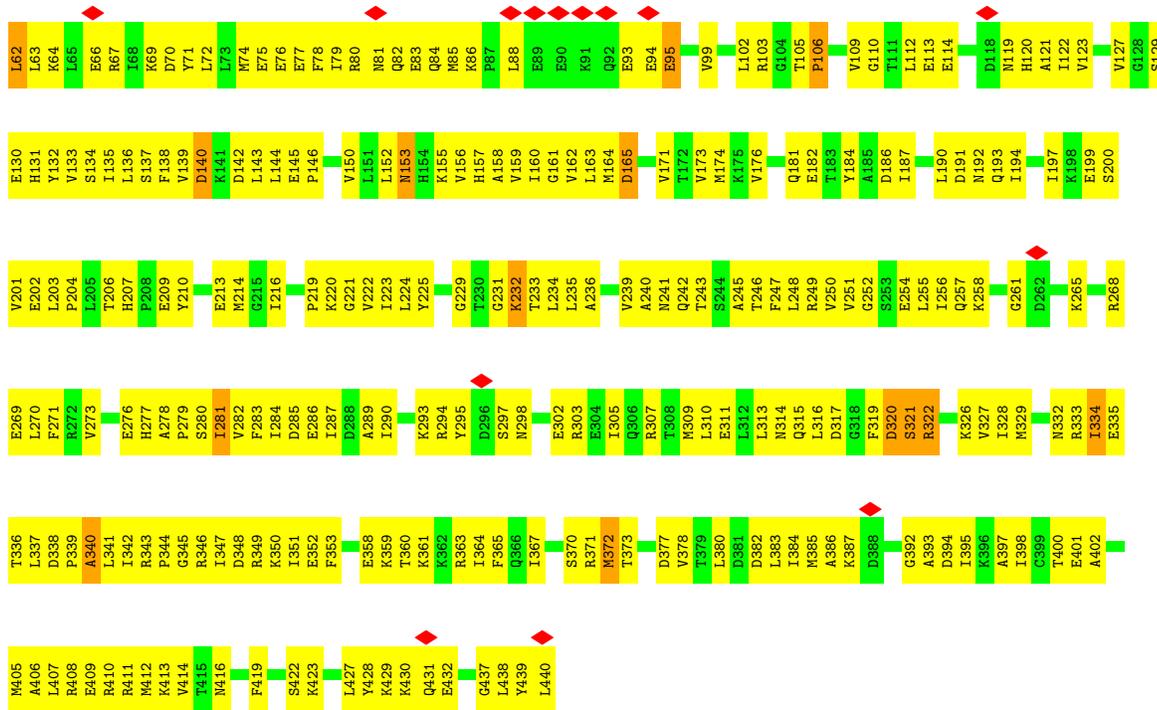
- Molecule 37 is ZINC ION (CCD ID: ZN) (formula: Zn) (labeled as "Ligand of Interest" by depositor).

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

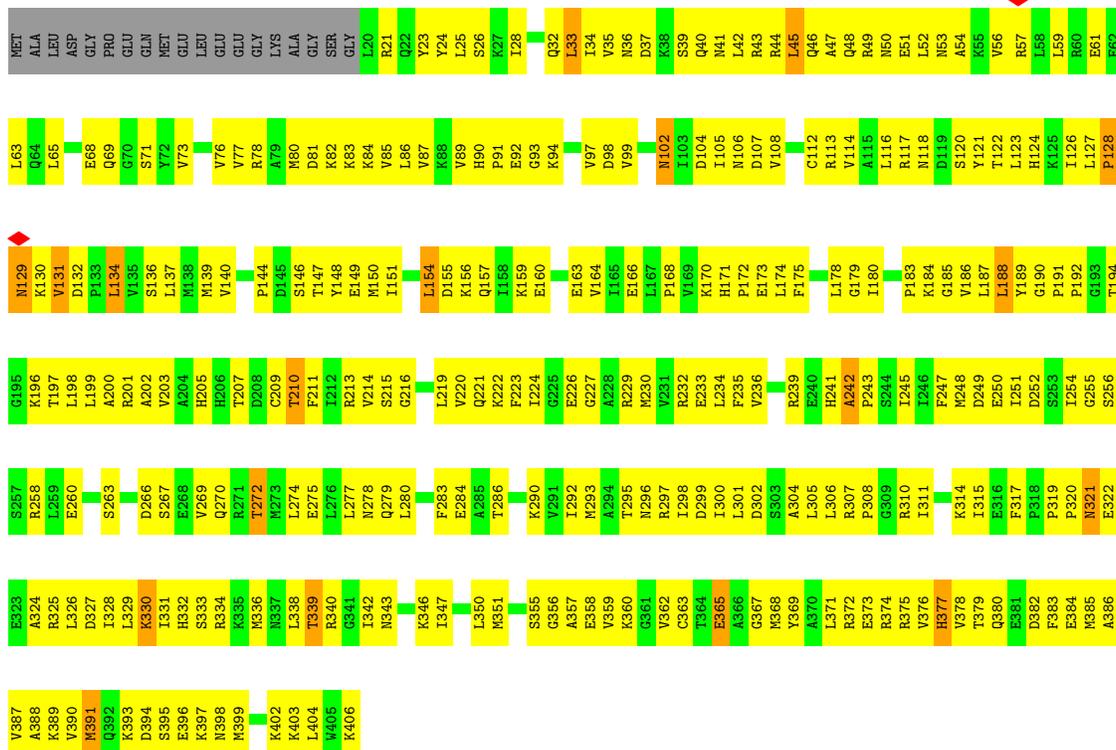
- Molecule 38 is N-[(benzyloxy)carbonyl]-L-leucyl-N-[(2S)-4-methyl-1-oxopentan-2-yl]-L-leucinamide (CCD ID: LDZ) (formula: C₂₆H₄₁N₃O₅) (labeled as "Ligand of Interest" by depositor).



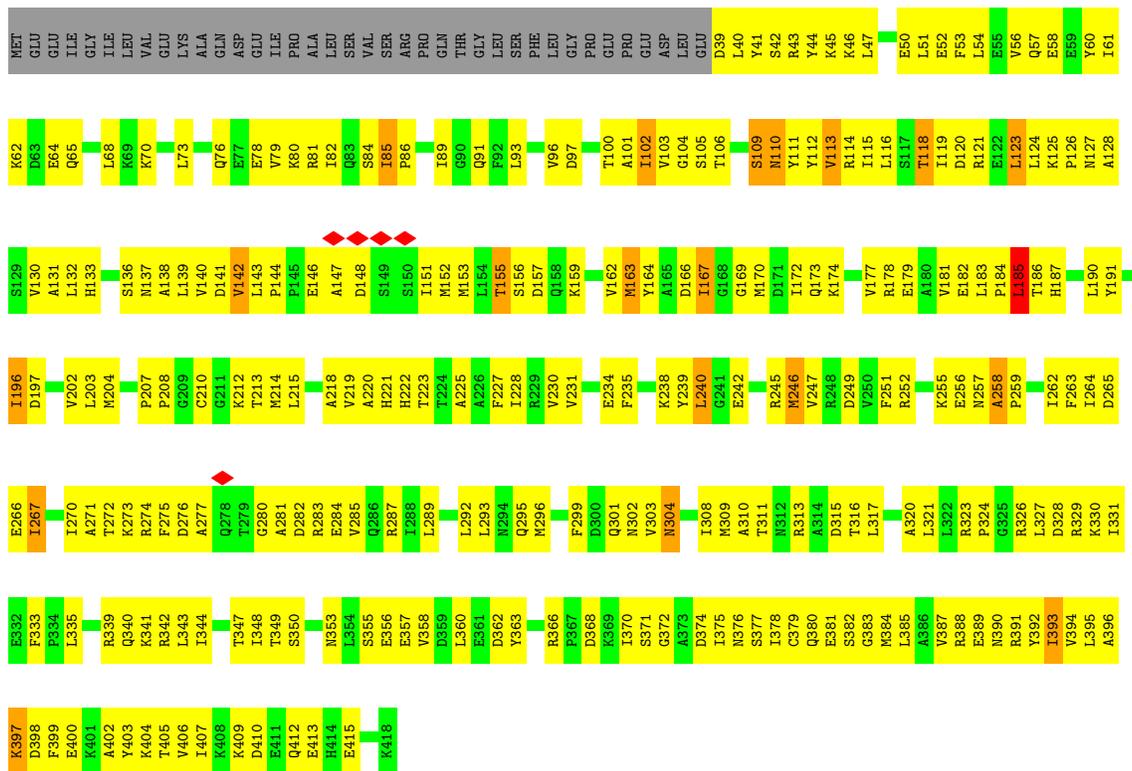
Mol	Chain	Residues	Atoms					AltConf
			Total	C	H	N	O	
38	N	1	Total	C	H	N	O	0
			75	26	41	3	5	
38	O	1	Total	C	H	N	O	0
			75	26	41	3	5	
38	R	1	Total	C	H	N	O	0
			75	26	41	3	5	
38	n	1	Total	C	H	N	O	0
			75	26	41	3	5	
38	o	1	Total	C	H	N	O	0
			75	26	41	3	5	
38	r	1	Total	C	H	N	O	0
			75	26	41	3	5	



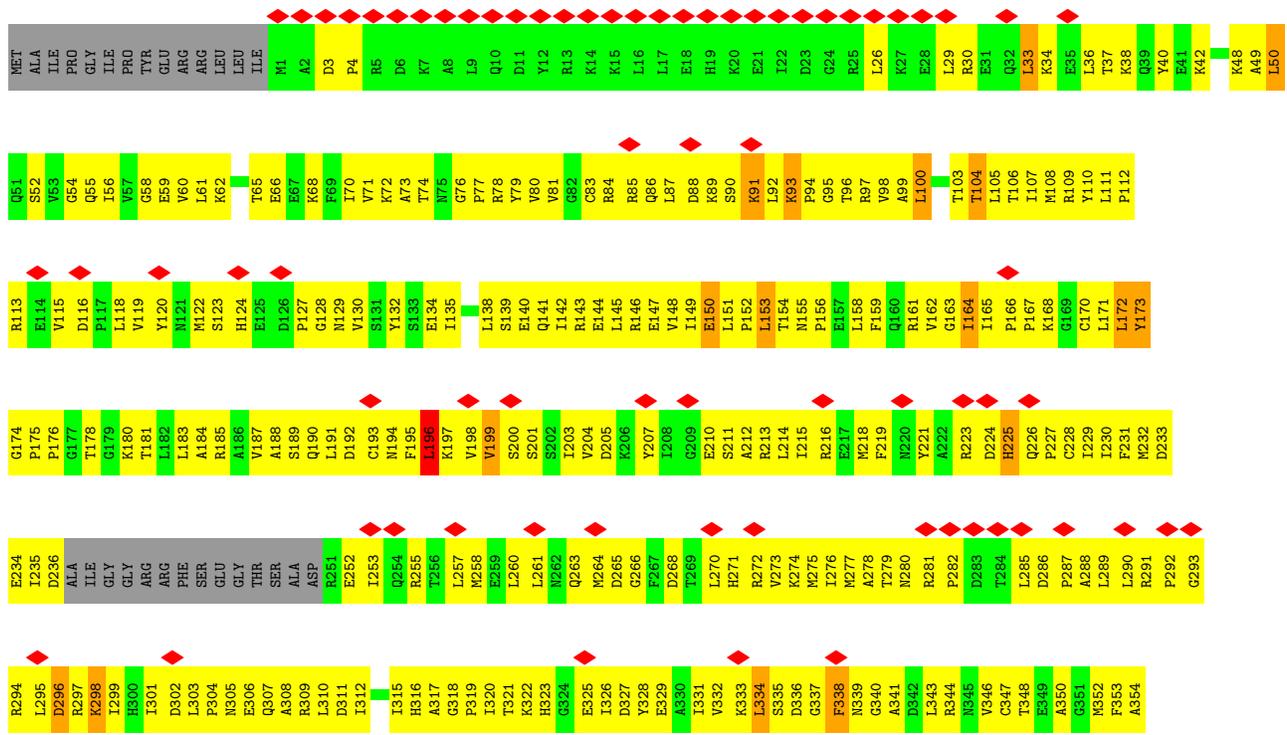
• Molecule 3: 26S protease regulatory subunit 8

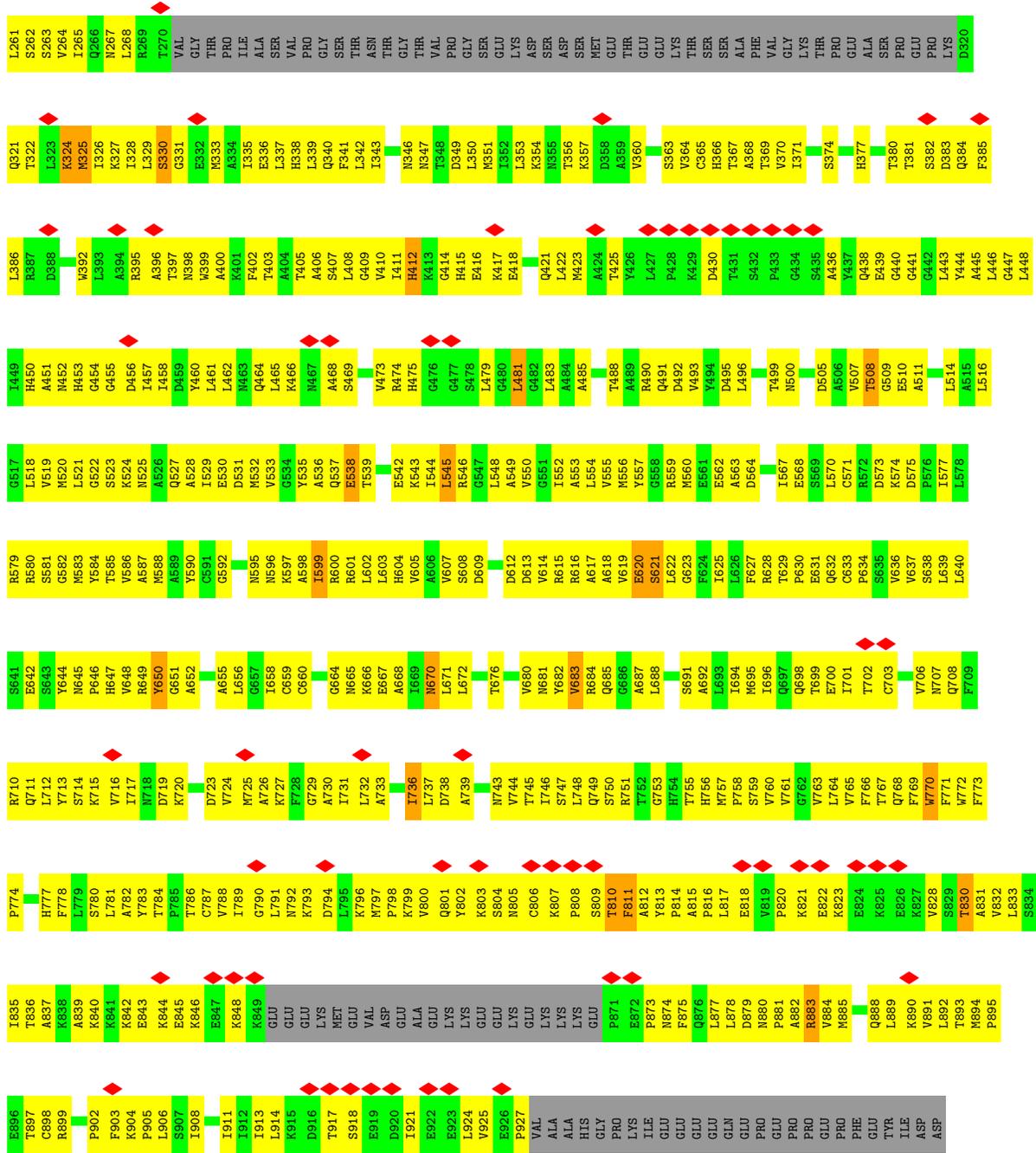


• Molecule 4: 26S proteasome regulatory subunit 6B

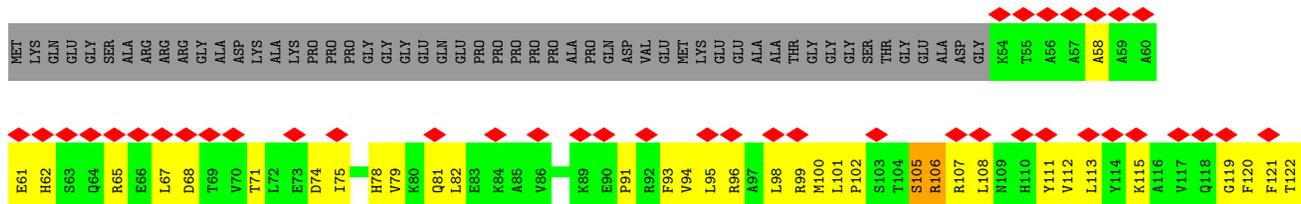


• Molecule 5: 26S proteasome regulatory subunit 10B



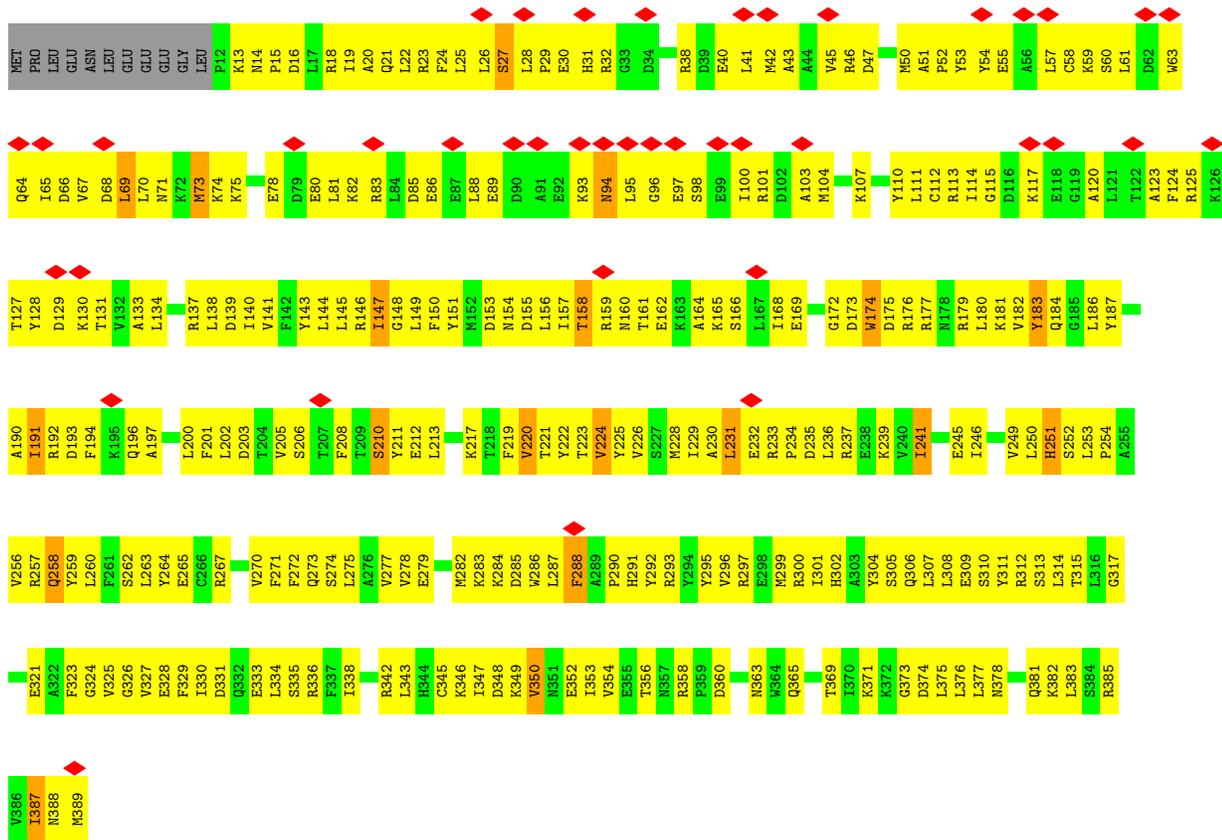


• Molecule 8: 26S proteasome non-ATPase regulatory subunit 3

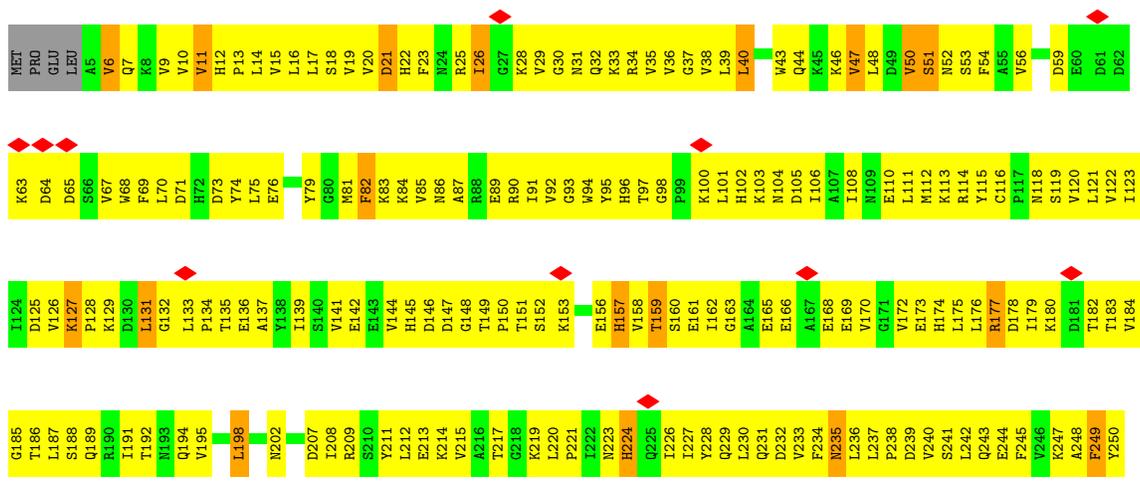




• Molecule 10: 26S proteasome non-ATPase regulatory subunit 6

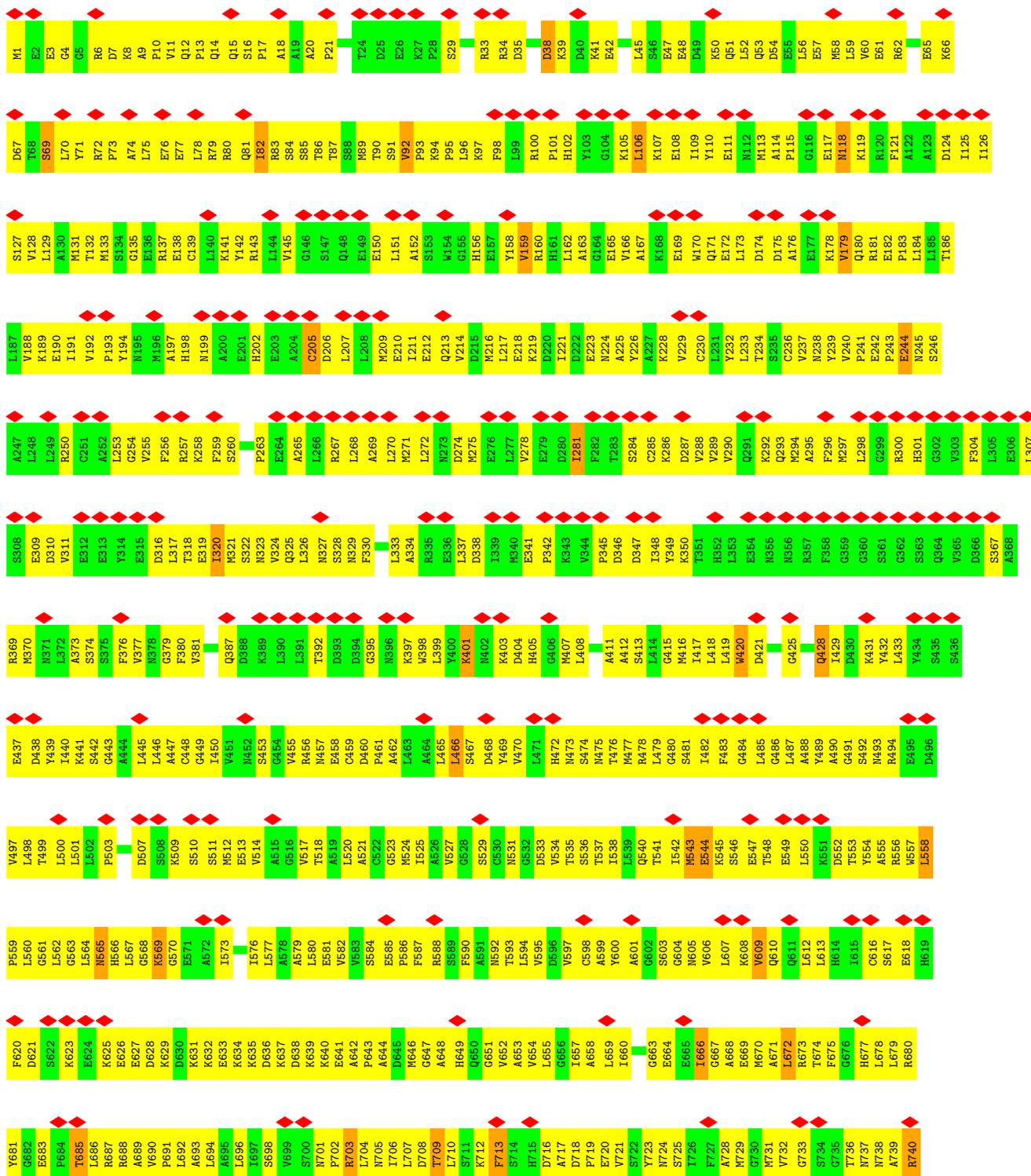


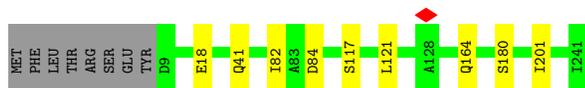
• Molecule 11: 26S proteasome non-ATPase regulatory subunit 7





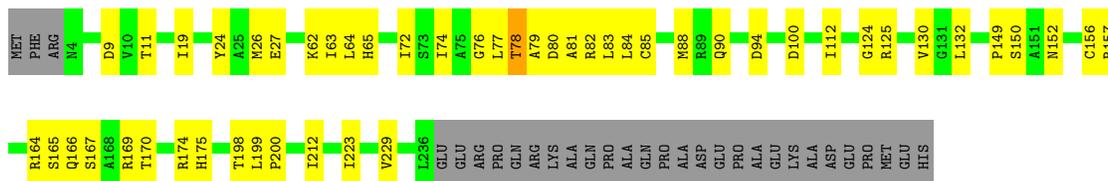
• Molecule 16: 26S proteasome non-ATPase regulatory subunit 2





- Molecule 25: Proteasome subunit alpha type-1

Chain L: 70% 19% 11%



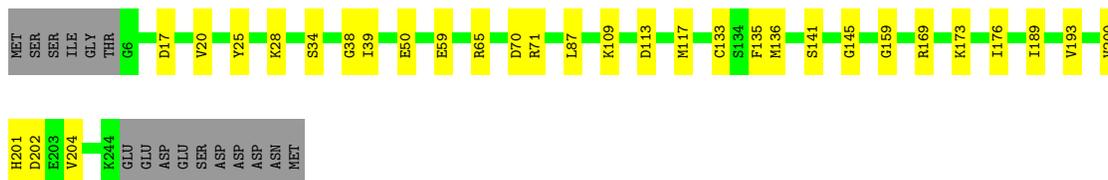
- Molecule 25: Proteasome subunit alpha type-1

Chain l: 80% 9% 11%



- Molecule 26: Proteasome subunit alpha type-3

Chain M: 82% 12% 6%



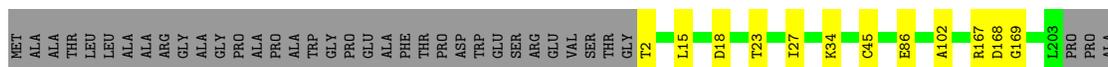
- Molecule 26: Proteasome subunit alpha type-3

Chain m: 89% 5% 6%

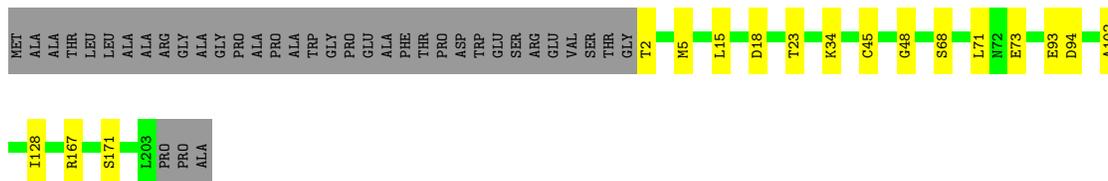


- Molecule 27: Proteasome subunit beta type-6

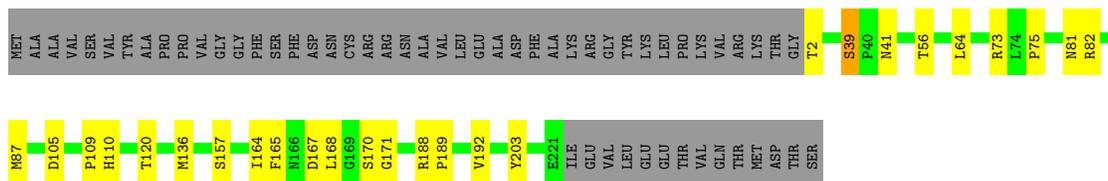
Chain N: 79% 5% 15%



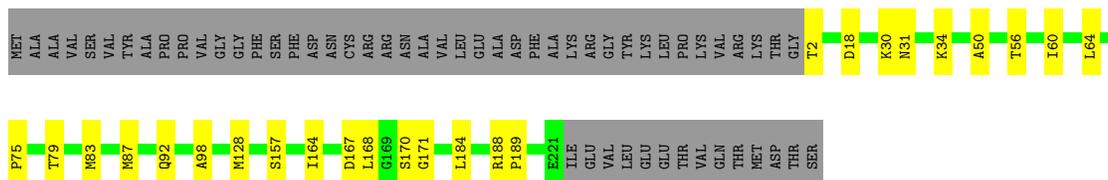
- Molecule 27: Proteasome subunit beta type-6



● Molecule 28: Proteasome subunit beta type-7



● Molecule 28: Proteasome subunit beta type-7



● Molecule 29: Proteasome subunit beta type-3

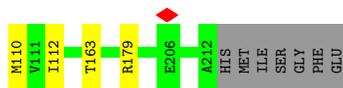


● Molecule 29: Proteasome subunit beta type-3



● Molecule 30: Proteasome subunit beta type-2





- Molecule 33: Proteasome subunit beta type-4

Chain t: 74% 6% 20%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	39000	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 ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	2700	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	1.985	Depositor
Minimum map value	-0.002	Depositor
Average map value	0.006	Depositor
Map value standard deviation	0.026	Depositor
Recommended contour level	0.165	Depositor
Map size (\AA)	687.36, 687.36, 687.36	wwPDB
Map dimensions	640, 640, 640	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.074, 1.074, 1.074	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: ADP, MG, LDZ, ZN, ATP

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	0.26	0/3299	0.37	0/4454
2	B	0.30	0/3182	0.42	0/4294
3	C	0.29	0/3088	0.42	1/4150 (0.0%)
4	D	0.27	0/3090	0.41	0/4168
5	E	0.19	0/3038	0.39	0/4089
6	F	0.25	0/2873	0.44	0/3873
7	U	0.24	0/6755	0.39	0/9132
8	V	0.20	0/3681	0.34	0/4969
9	X	0.31	0/3050	0.51	3/4111 (0.1%)
10	Y	0.24	0/3173	0.39	0/4273
11	Z	0.29	0/2324	0.41	0/3150
12	a	0.22	0/3053	0.38	0/4133
13	b	0.47	0/1447	0.85	9/1962 (0.5%)
14	c	0.34	0/2266	0.58	2/3060 (0.1%)
15	d	0.81	0/1843	1.47	30/2480 (1.2%)
16	f	0.20	0/6972	0.40	1/9422 (0.0%)
18	W	0.24	0/3683	0.39	0/4952
19	e	0.21	0/437	0.47	0/595
20	G	0.21	0/1767	0.32	0/2398
20	g	0.16	0/1790	0.23	0/2429
21	H	0.22	0/1701	0.32	0/2318
21	h	0.17	0/1701	0.25	0/2318
22	I	0.20	0/1831	0.36	0/2487
22	i	0.16	0/1815	0.25	0/2466
23	J	0.19	0/1657	0.35	0/2261
23	j	0.16	0/1657	0.27	0/2261
24	K	0.21	0/1689	0.36	0/2294
24	k	0.16	0/1686	0.24	0/2290
25	L	0.21	0/1744	0.37	0/2371
25	l	0.17	0/1741	0.26	0/2367
26	M	0.18	0/1795	0.31	0/2434
26	m	0.16	0/1796	0.23	0/2435

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
27	N	0.18	0/1495	0.23	0/2026
27	n	0.19	0/1491	0.23	0/2021
28	O	0.17	0/1607	0.26	0/2185
28	o	0.18	0/1603	0.24	0/2180
29	P	0.18	0/1575	0.25	0/2128
29	p	0.18	0/1567	0.25	0/2118
30	Q	0.17	0/1541	0.23	0/2092
30	q	0.18	0/1538	0.24	0/2088
31	R	0.17	0/1535	0.22	0/2080
31	r	0.18	0/1531	0.24	0/2076
32	S	0.18	0/1614	0.25	0/2178
32	s	0.17	0/1617	0.25	0/2182
33	T	0.19	0/1606	0.27	0/2179
33	t	0.18	0/1598	0.26	0/2170
All	All	0.25	0/103542	0.41	46/140099 (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
7	U	0	1
9	X	0	1
13	b	0	1
14	c	0	2
15	d	0	4
All	All	0	9

There are no bond length outliers.

All (46) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	d	52	ARG	N-CA-C	-10.40	100.26	113.16
15	d	85	TYR	N-CA-C	-8.02	101.49	111.75
15	d	83	PHE	N-CA-C	-7.85	103.59	113.01
15	d	6	LYS	N-CA-C	-7.50	104.02	113.02
13	b	29	GLN	N-CA-C	-7.24	102.43	111.11
15	d	47	GLN	N-CA-C	-7.07	103.58	111.28
15	d	208	ASP	N-CA-C	-6.71	104.20	112.38
13	b	31	ASP	CB-CA-C	6.60	121.12	110.96
15	d	29	VAL	N-CA-C	-6.45	102.99	111.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	d	50	LEU	N-CA-C	-6.40	105.34	113.02
13	b	38	HIS	N-CA-C	-6.37	103.62	111.33
15	d	146	GLY	N-CA-C	-6.37	105.97	114.95
15	d	53	ASP	N-CA-C	-6.27	103.73	111.75
15	d	60	GLN	N-CA-C	-6.25	104.47	111.28
13	b	31	ASP	CA-CB-CG	6.14	118.74	112.60
15	d	148	TYR	N-CA-CB	-5.97	100.05	109.78
15	d	28	LEU	N-CA-C	-5.92	107.05	114.56
15	d	102	ASN	N-CA-C	-5.88	104.21	111.33
13	b	181	ASP	N-CA-C	-5.87	104.23	111.75
14	c	101	GLN	N-CA-C	-5.78	104.35	111.75
15	d	148	TYR	CB-CA-C	5.78	120.34	110.74
15	d	179	ALA	N-CA-C	-5.76	105.00	111.28
13	b	20	ASP	N-CA-C	-5.75	108.07	114.62
9	X	367	GLN	CA-C-N	-5.70	113.03	120.44
9	X	367	GLN	C-N-CA	-5.70	113.03	120.44
15	d	104	LEU	N-CA-C	-5.67	104.31	111.11
3	C	357	ALA	N-CA-C	-5.59	107.11	114.04
15	d	21	GLU	N-CA-C	-5.56	106.45	113.18
15	d	59	ALA	N-CA-C	-5.53	105.16	111.07
14	c	96	LEU	N-CA-C	-5.50	105.39	111.71
15	d	106	LEU	N-CA-C	-5.49	106.65	113.19
13	b	27	GLN	N-CA-C	-5.38	105.34	112.34
13	b	34	ASN	N-CA-C	-5.32	99.48	110.80
15	d	56	GLU	N-CA-C	-5.32	102.60	111.37
15	d	95	MET	N-CA-C	-5.27	106.69	113.01
15	d	115	PHE	N-CA-CB	5.27	117.96	110.06
13	b	180	ALA	N-CA-C	-5.22	106.86	114.12
9	X	354	ILE	N-CA-C	-5.19	107.77	112.96
15	d	3	GLU	CB-CA-C	5.16	117.95	109.90
16	f	543	MET	CA-CB-CG	5.15	124.40	114.10
15	d	120	GLU	N-CA-C	-5.13	106.71	113.12
15	d	164	THR	N-CA-C	-5.10	106.16	112.38
15	d	101	LEU	N-CA-C	-5.05	105.85	111.36
15	d	22	GLU	CB-CA-C	-5.03	100.40	110.42
15	d	171	LEU	N-CA-C	-5.03	105.81	112.34
15	d	85	TYR	N-CA-CB	5.02	118.07	110.14

There are no chirality outliers.

All (9) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
7	U	650	TYR	Peptide
9	X	363	ARG	Sidechain
13	b	25	ARG	Sidechain
14	c	104	ARG	Sidechain
14	c	223	LYS	Peptide
15	d	11	ARG	Sidechain
15	d	121	ARG	Sidechain
15	d	175	ARG	Sidechain
15	d	25	ARG	Sidechain

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	3245	0	3302	462	0
2	B	3137	0	3192	476	0
3	C	3047	0	3164	440	0
4	D	3040	0	3076	401	0
5	E	2993	0	3076	508	0
6	F	2834	0	2904	420	0
7	U	6640	0	6699	905	0
8	V	3612	0	3682	429	0
9	X	3006	0	3111	279	0
10	Y	3115	0	3120	445	0
11	Z	2281	0	2312	394	0
12	a	2995	0	3012	455	0
13	b	1427	0	1468	274	0
14	c	2227	0	2246	318	0
15	d	1813	0	1834	325	0
16	f	6859	0	6859	1165	0
17	v	40	0	12	0	0
18	W	3635	0	3762	615	0
19	e	425	0	328	68	0
20	G	1738	1656	1656	25	0
20	g	1758	1687	1687	8	0
21	H	1662	1590	1590	26	0
21	h	1662	1590	1590	10	0
22	I	1802	1741	1741	41	0
22	i	1786	1717	1717	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	J	1633	1518	1518	44	0
23	j	1633	1518	1518	12	0
24	K	1663	1592	1591	26	0
24	k	1660	1589	1589	7	0
25	L	1710	1649	1649	44	0
25	l	1707	1645	1645	14	0
26	M	1760	1680	1680	25	0
26	m	1761	1683	1683	8	0
27	N	1469	1422	1422	11	0
27	n	1465	1416	1416	11	0
28	O	1580	1559	1559	17	0
28	o	1576	1555	1555	18	0
29	P	1546	1550	1552	8	0
29	p	1538	1543	1545	8	0
30	Q	1509	1477	1477	14	0
30	q	1506	1475	1475	11	0
31	R	1504	1449	1449	17	0
31	r	1500	1438	1438	14	0
32	S	1584	1579	1579	12	0
32	s	1587	1581	1581	7	0
33	T	1576	1526	1528	9	0
33	t	1568	1511	1513	8	0
34	A	31	0	12	11	0
34	B	31	0	12	7	0
34	C	31	0	12	6	0
34	F	31	0	12	6	0
35	A	1	0	0	0	0
35	B	1	0	0	0	0
35	F	1	0	0	0	0
36	D	27	0	12	6	0
37	c	1	0	0	0	0
38	N	34	41	41	2	0
38	O	34	41	41	2	0
38	R	34	41	41	7	0
38	n	34	41	41	5	0
38	o	34	41	41	3	0
38	r	34	41	41	1	0
All	All	102173	44182	101408	8138	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 40.

All (8138) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:116:HIS:NE2	15:d:140:GLU:OE2	1.63	1.27
15:d:115:PHE:O	15:d:119:LEU:HD13	1.15	1.23
15:d:43:LEU:CD2	15:d:48:LEU:HD11	1.68	1.22
6:F:188:ILE:HD11	6:F:191:LEU:HG	1.20	1.17
16:f:486:GLY:HA3	16:f:521:ALA:HB1	1.25	1.16
5:E:305:ASN:HA	5:E:308:ALA:HB3	1.20	1.16
15:d:116:HIS:CE1	15:d:140:GLU:OE2	1.99	1.16
16:f:176:ALA:HB3	16:f:178:LYS:HE2	1.24	1.16
13:b:68:THR:HG23	13:b:71:ILE:HD11	1.27	1.15
4:D:156:SER:HA	4:D:159:LYS:HD2	1.26	1.15
15:d:43:LEU:HD21	15:d:48:LEU:HD11	1.29	1.14
2:B:106:PRO:HG3	3:C:121:TYR:HB2	1.29	1.14
18:W:68:VAL:HG12	18:W:72:LYS:HE3	1.21	1.13
11:Z:40:LEU:HD11	11:Z:52:ASN:HB3	1.30	1.12
16:f:91:SER:HB2	16:f:110:TYR:HB2	1.27	1.13
6:F:421:MET:HA	6:F:424:ILE:HD12	1.16	1.12
2:B:85:MET:HE3	2:B:86:LYS:H	1.14	1.12
8:V:337:LEU:HD11	8:V:367:VAL:HG21	1.29	1.11
16:f:379:GLY:HA3	16:f:413:SER:HB2	1.33	1.11
5:E:307:GLN:HA	5:E:310:LEU:HD13	1.26	1.11
3:C:52:LEU:HG	4:D:68:LEU:HD23	1.23	1.10
6:F:225:MET:HG2	6:F:352:ILE:HD11	1.34	1.10
16:f:170:TRP:HA	16:f:173:LEU:HG	1.33	1.10
3:C:146:SER:HA	3:C:150:MET:HE1	1.16	1.09
1:A:256:MET:HE2	1:A:256:MET:HA	1.28	1.09
5:E:72:LYS:HG3	5:E:78:ARG:HG2	1.26	1.09
16:f:545:LYS:HE3	16:f:547:GLU:HB3	1.35	1.08
16:f:670:MET:HE3	16:f:670:MET:HA	1.32	1.08
2:B:287:ILE:HG12	2:B:329:MET:HE2	1.30	1.07
16:f:789:SER:HA	16:f:793:VAL:HB	1.35	1.07
19:e:60:LEU:HA	19:e:65:TYR:H	0.94	1.07
1:A:224:LEU:HD22	34:A:501:ATP:H2'	1.27	1.07
16:f:75:LEU:HD12	16:f:77:GLU:H	1.15	1.07
7:U:554:LEU:HA	7:U:588:MET:HE1	1.12	1.07
3:C:367:GLY:HA3	4:D:196:ILE:HD11	1.35	1.07
13:b:131:LEU:HG	13:b:136:VAL:HB	1.18	1.07
8:V:480:ILE:HB	11:Z:260:VAL:HG13	1.32	1.06
1:A:393:GLY:HA3	2:B:214:MET:HE1	1.28	1.05
14:c:303:MET:HE1	15:d:242:LEU:HD12	1.33	1.05
4:D:39:ASP:N	4:D:42:SER:HG	1.54	1.05
7:U:792:ASN:HB3	7:U:798:PRO:HG2	1.32	1.05
15:d:115:PHE:O	15:d:119:LEU:CD1	2.04	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:403:LYS:HE3	16:f:405:HIS:HB2	1.37	1.05
8:V:443:ARG:HH12	15:d:180:GLY:HA3	1.19	1.04
12:a:25:LEU:HG	12:a:29:TYR:HE1	1.22	1.04
15:d:19:CYS:HA	15:d:22:GLU:HB2	1.38	1.04
2:B:246:THR:HG23	2:B:280:SER:HB2	1.40	1.03
4:D:113:VAL:HG23	4:D:138:ALA:HA	1.40	1.03
12:a:363:MET:HE3	14:c:307:VAL:HG11	1.38	1.02
5:E:261:LEU:HD11	5:E:295:LEU:HD23	1.37	1.02
8:V:192:MET:HE2	8:V:192:MET:HA	1.42	1.02
14:c:104:ARG:HH11	14:c:104:ARG:H	1.06	1.02
18:W:69:ALA:HA	18:W:72:LYS:HD2	1.41	1.02
16:f:524:MET:HB3	16:f:776:LEU:HD11	1.42	1.02
5:E:175:PRO:HG2	5:E:178:THR:HG21	1.41	1.02
16:f:670:MET:HE1	16:f:704:LEU:HA	1.41	1.02
1:A:134:ILE:HG23	1:A:138:MET:HE1	1.42	1.02
15:d:237:ILE:HD12	15:d:238:PRO:HD2	1.41	1.02
16:f:75:LEU:HD13	16:f:82:ILE:HD11	1.35	1.02
5:E:33:LEU:HD11	6:F:67:GLN:H	1.20	1.01
15:d:26:LEU:HA	15:d:29:VAL:HG22	1.42	1.01
18:W:60:MET:HE1	18:W:99:GLN:HB2	1.42	1.01
7:U:82:LEU:HD11	7:U:130:LEU:HD22	1.43	1.01
7:U:925:VAL:HG12	7:U:927:PRO:HD3	1.41	1.01
8:V:358:MET:HE3	8:V:359:PRO:HD3	1.39	1.01
11:Z:33:LYS:O	11:Z:33:LYS:HD3	1.61	1.00
16:f:869:THR:HA	16:f:885:GLU:HG2	1.41	1.00
7:U:397:THR:H	7:U:400:ALA:HB3	1.24	1.00
7:U:595:ASN:OD1	7:U:598:ALA:N	1.94	1.00
18:W:122:LEU:HD23	18:W:125:ILE:HD12	1.42	1.00
11:Z:129:LYS:HG3	14:c:215:LYS:HD3	1.43	1.00
7:U:221:ILE:HA	7:U:260:PHE:HE2	1.22	1.00
7:U:521:LEU:HD12	7:U:554:LEU:HD21	1.41	1.00
16:f:415:GLY:HA3	16:f:447:ALA:HB1	1.43	1.00
10:Y:220:VAL:HG21	10:Y:249:VAL:HG11	1.40	1.00
11:Z:25:ARG:HH21	14:c:103:GLY:HA3	1.25	1.00
15:d:164:THR:HA	15:d:167:ILE:HG12	1.39	0.99
16:f:171:GLN:HG2	16:f:172:GLU:HG2	1.42	0.99
16:f:804:LEU:HD12	16:f:806:VAL:HG11	1.44	0.99
3:C:406:LYS:HE2	22:I:80:THR:OG1	1.61	0.99
7:U:904:LYS:HD2	7:U:905:PRO:HD2	1.41	0.99
13:b:125:VAL:HA	13:b:129:LYS:HD2	1.42	0.99
7:U:446:LEU:HD11	7:U:457:ILE:HD11	1.43	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:569:LYS:HE2	16:f:573:ILE:HB	1.43	0.99
5:E:184:ALA:HB1	5:E:195:PHE:CE2	1.98	0.99
7:U:17:PRO:HA	7:U:20:LYS:HE2	1.40	0.99
16:f:628:ASP:HA	16:f:631:LYS:HE2	1.39	0.99
11:Z:32:GLN:OE1	11:Z:32:GLN:N	1.95	0.99
13:b:160:LEU:HG	13:b:166:THR:H	1.27	0.99
10:Y:97:GLU:HA	10:Y:101:ARG:HD3	1.42	0.98
7:U:800:VAL:HG12	7:U:880:ASN:HB2	1.46	0.98
16:f:94:LYS:HZ3	16:f:137:ARG:HH11	1.04	0.98
7:U:8:ILE:HD11	7:U:27:LEU:HD12	1.44	0.98
14:c:221:HIS:HD2	14:c:222:LYS:HG3	1.28	0.98
1:A:366:ARG:O	1:A:366:ARG:NE	1.97	0.98
8:V:371:ASN:OD1	8:V:374:LYS:N	1.96	0.98
12:a:362:SER:HA	12:a:365:MET:HE3	1.42	0.98
16:f:445:LEU:HG	16:f:466:LEU:HD11	1.41	0.98
2:B:136:LEU:HD11	2:B:158:ALA:HB1	1.44	0.98
3:C:113:ARG:NH2	3:C:129:ASN:O	1.97	0.98
7:U:633:CYS:HA	7:U:636:VAL:HG12	1.46	0.98
13:b:140:ILE:HB	13:b:170:LEU:HG	1.41	0.98
18:W:215:GLN:HG3	18:W:223:LYS:HD3	1.42	0.98
5:E:139:SER:HA	5:E:142:ILE:HG12	1.46	0.98
8:V:105:SER:HB2	8:V:106:ARG:HD3	1.46	0.98
1:A:119:ALA:HB1	6:F:127:SER:HB2	1.46	0.97
5:E:71:VAL:HG11	5:E:100:LEU:HD21	1.45	0.97
6:F:143:GLU:OE1	6:F:143:GLU:N	1.97	0.97
9:X:309:TYR:HB3	9:X:312:GLU:HB2	1.42	0.97
8:V:466:ILE:HD11	8:V:470:ARG:HB2	1.45	0.97
18:W:70:VAL:HA	18:W:73:MET:HE2	1.44	0.97
18:W:210:ASN:ND2	18:W:212:LYS:O	1.97	0.97
16:f:719:PRO:HB2	16:f:721:VAL:HG13	1.43	0.97
10:Y:89:GLU:HG3	10:Y:100:ILE:HB	1.47	0.97
4:D:273:LYS:HA	4:D:273:LYS:HE3	1.47	0.97
5:E:184:ALA:HB1	5:E:195:PHE:HE2	1.30	0.96
16:f:680:ARG:HH12	16:f:761:MET:HA	1.28	0.96
6:F:67:GLN:HG2	6:F:70:LYS:HD2	1.47	0.96
9:X:260:MET:HE1	9:X:322:HIS:HB3	1.47	0.96
6:F:90:VAL:HG12	6:F:150:LEU:HD12	1.45	0.96
7:U:16:GLU:HG2	7:U:19:LEU:H	1.28	0.96
8:V:175:MET:HE1	8:V:184:ALA:HB2	1.47	0.96
16:f:569:LYS:HZ1	16:f:573:ILE:H	1.12	0.96
6:F:439:ALA:HA	25:L:78:THR:N	1.79	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:384:GLU:HG3	2:B:344:PRO:HG3	1.45	0.96
4:D:85:ILE:HG22	4:D:86:PRO:HD2	1.48	0.96
12:a:25:LEU:HA	12:a:28:LEU:HD23	1.43	0.96
9:X:200:ILE:HD12	9:X:203:PRO:HG3	1.47	0.96
16:f:125:ILE:HG12	16:f:129:LEU:H	1.31	0.95
5:E:175:PRO:HD2	5:E:301:ILE:HD12	1.45	0.95
16:f:397:LYS:O	16:f:401:LYS:NZ	1.98	0.95
18:W:268:LYS:HD2	18:W:302:TYR:HE1	1.28	0.95
19:e:60:LEU:HA	19:e:65:TYR:N	1.80	0.95
10:Y:88:LEU:HG	10:Y:100:ILE:HG22	1.48	0.95
11:Z:73:ASP:HA	11:Z:76:GLU:OE2	1.66	0.95
16:f:678:LEU:HG	16:f:679:LEU:HG	1.49	0.95
3:C:24:TYR:HH	4:D:41:TYR:HD1	1.05	0.95
3:C:406:LYS:HG2	22:I:80:THR:HG23	1.46	0.95
8:V:464:ILE:HD11	8:V:468:SER:HB3	1.47	0.95
13:b:157:VAL:HG21	13:b:166:THR:HG23	1.48	0.95
10:Y:53:TYR:HE1	10:Y:57:LEU:HD22	1.31	0.94
10:Y:325:VAL:HG23	19:e:65:TYR:HA	1.49	0.94
2:B:313:LEU:HD21	2:B:340:ALA:HB1	1.49	0.94
4:D:120:ASP:HB3	4:D:123:LEU:HD11	1.45	0.94
7:U:516:LEU:HD21	7:U:532:MET:HE2	1.49	0.94
12:a:341:LEU:HG	12:a:345:GLN:HB2	1.49	0.94
7:U:220:LEU:HD11	7:U:225:ASP:HB3	1.50	0.94
1:A:222:LYS:NZ	34:A:501:ATP:O3G	2.00	0.94
6:F:151:VAL:HG21	6:F:160:ILE:HG23	1.49	0.94
6:F:405:MET:HE3	6:F:405:MET:HA	1.50	0.94
8:V:356:SER:HB3	19:e:25:GLU:HG2	1.50	0.94
9:X:370:LEU:HD21	10:Y:306:GLN:HG3	1.47	0.94
18:W:47:LEU:HD22	18:W:73:MET:HE1	1.48	0.94
3:C:52:LEU:HG	4:D:68:LEU:CD2	1.97	0.94
4:D:169:GLY:HA3	4:D:343:LEU:HD13	1.50	0.94
9:X:255:LEU:HD12	9:X:267:VAL:HG23	1.50	0.94
8:V:472:PRO:HG2	11:Z:253:THR:HG21	1.46	0.93
13:b:33:VAL:HG21	13:b:75:LEU:HD21	1.48	0.93
7:U:243:LEU:HD12	7:U:913:ILE:HG23	1.50	0.93
8:V:235:LEU:HD13	8:V:254:LEU:HD12	1.49	0.93
16:f:637:LYS:HD2	16:f:678:LEU:HB2	1.48	0.93
7:U:353:LEU:O	7:U:357:LYS:HG2	1.68	0.93
8:V:326:GLN:HG3	8:V:353:LEU:HD22	1.47	0.93
9:X:411:VAL:HG21	10:Y:376:LEU:HD11	1.51	0.93
5:E:235:ILE:HG21	5:E:257:LEU:HD11	1.51	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:251:LEU:HA	9:X:254:MET:HG3	1.50	0.93
14:c:218:LEU:O	14:c:221:HIS:N	2.00	0.93
18:W:116:THR:HG23	18:W:118:LEU:H	1.31	0.93
18:W:145:LEU:HD21	18:W:171:VAL:HG11	1.49	0.93
18:W:407:ASP:HB3	18:W:412:ILE:HG13	1.45	0.93
15:d:166:PHE:HA	15:d:169:ILE:HB	1.46	0.93
10:Y:229:ILE:HA	10:Y:299:MET:HE1	1.50	0.93
7:U:335:ILE:HA	7:U:338:HIS:CE1	2.04	0.93
16:f:511:SER:HB2	16:f:514:VAL:HG23	1.51	0.93
18:W:417:ARG:HG3	18:W:418:PRO:HD2	1.51	0.93
2:B:171:VAL:HA	2:B:174:MET:HE2	1.49	0.92
14:c:150:SER:HB2	14:c:156:VAL:HG23	1.49	0.92
12:a:87:MET:HE1	12:a:89:ASP:HB2	1.51	0.92
16:f:131:MET:HE1	16:f:173:LEU:HD11	1.51	0.92
16:f:321:MET:HA	16:f:321:MET:HE3	1.49	0.92
1:A:76:ALA:HA	1:A:79:ASP:HB2	1.52	0.92
1:A:56:LEU:HD23	2:B:72:LEU:HD21	1.51	0.92
11:Z:63:LYS:HD3	13:b:91:ARG:HH22	1.33	0.92
7:U:802:TYR:CE2	7:U:880:ASN:HA	2.04	0.92
13:b:16:MET:HG3	13:b:26:LEU:HB3	1.52	0.92
15:d:43:LEU:CD2	15:d:48:LEU:CD1	2.47	0.92
5:E:36:LEU:HD12	6:F:69:MET:HB2	1.51	0.92
18:W:169:LEU:HD21	18:W:189:GLN:HE22	1.35	0.92
1:A:354:ILE:HG22	1:A:385:ILE:HG21	1.50	0.92
6:F:125:LYS:HD3	6:F:126:THR:H	1.35	0.92
15:d:50:LEU:HA	15:d:53:ASP:HB2	1.50	0.92
8:V:468:SER:O	11:Z:247:LYS:NZ	2.02	0.91
18:W:335:SER:HB2	18:W:336:PRO:CD	2.00	0.91
1:A:78:TRP:HZ2	2:B:138:PHE:HA	1.32	0.91
6:F:180:ARG:HD3	6:F:242:ALA:HA	1.52	0.91
12:a:188:LEU:HD21	12:a:192:GLU:HG2	1.51	0.91
2:B:429:LYS:HD2	3:C:306:LEU:HD23	1.53	0.91
10:Y:233:ARG:HA	10:Y:236:LEU:HD22	1.53	0.91
12:a:212:ASN:HD22	12:a:241:ASN:HB2	1.36	0.91
12:a:335:TRP:HD1	12:a:337:GLN:H	1.16	0.91
1:A:91:GLN:HB2	1:A:92:PRO:HD2	1.52	0.91
2:B:387:LYS:HD3	2:B:427:LEU:HD21	1.51	0.91
18:W:34:LEU:HA	18:W:37:GLU:HB3	1.51	0.91
7:U:349:ASP:OD1	7:U:350:LEU:N	2.04	0.91
7:U:155:LEU:HD23	7:U:188:MET:HE3	1.51	0.90
16:f:51:GLN:OE1	16:f:53:GLN:N	2.02	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:378:MET:HE2	18:W:382:LEU:HG	1.51	0.90
10:Y:134:LEU:HA	10:Y:137:ARG:HE	1.36	0.90
12:a:68:GLU:OE1	12:a:68:GLU:N	2.04	0.90
16:f:634:LYS:O	16:f:635:LYS:NZ	2.03	0.90
2:B:410:ARG:HB3	16:f:53:GLN:HG2	1.53	0.90
7:U:91:ASN:O	7:U:136:LYS:NZ	2.03	0.90
11:Z:25:ARG:NH2	14:c:103:GLY:HA3	1.87	0.90
15:d:34:ASN:HD21	15:d:43:LEU:HB2	1.36	0.90
5:E:180:LYS:HZ2	5:E:301:ILE:HD11	1.36	0.90
9:X:402:GLU:HG3	14:c:249:LEU:HD13	1.52	0.90
4:D:123:LEU:HD12	4:D:124:LEU:HD22	1.53	0.90
14:c:235:SER:HA	18:W:422:ASN:HD21	1.34	0.90
5:E:309:ARG:NE	5:E:335:SER:OG	2.03	0.90
5:E:323:HIS:NE2	5:E:325:GLU:O	2.05	0.90
7:U:377:HIS:HB2	7:U:411:ILE:HG12	1.54	0.90
1:A:103:ASN:HD22	6:F:167:GLU:HG3	1.35	0.90
13:b:41:THR:C	13:b:43:SER:H	1.76	0.90
16:f:828:ARG:H	16:f:861:THR:HG22	1.35	0.90
12:a:210:VAL:O	12:a:271:LYS:NZ	2.05	0.90
2:B:59:ARG:HB2	16:f:184:LEU:HG	1.52	0.89
3:C:403:LYS:O	3:C:406:LYS:HE3	1.72	0.89
10:Y:141:VAL:HG11	10:Y:164:ALA:HB2	1.53	0.89
18:W:293:ASP:O	18:W:296:LEU:N	2.05	0.89
18:W:34:LEU:O	18:W:38:GLY:N	2.04	0.89
16:f:94:LYS:NZ	16:f:106:LEU:O	2.05	0.89
16:f:761:MET:SD	16:f:762:VAL:N	2.44	0.89
11:Z:22:HIS:HA	11:Z:25:ARG:HD3	1.51	0.89
12:a:293:PHE:HE2	12:a:329:LYS:HA	1.37	0.89
2:B:187:ILE:HD13	2:B:234:LEU:HD23	1.53	0.89
12:a:106:SER:OG	12:a:108:ASP:OD2	1.89	0.89
16:f:637:LYS:O	16:f:641:GLU:N	2.05	0.89
3:C:146:SER:CA	3:C:150:MET:HE1	2.03	0.89
5:E:307:GLN:HA	5:E:310:LEU:CD1	2.02	0.89
7:U:221:ILE:HA	7:U:260:PHE:CE2	2.07	0.89
10:Y:58:CYS:HB2	10:Y:59:LYS:HZ2	1.36	0.89
16:f:692:LEU:HD12	16:f:712:LYS:HG2	1.54	0.89
16:f:747:GLN:HG3	16:f:751:TYR:HD2	1.38	0.89
7:U:357:LYS:HB3	7:U:392:TRP:HZ3	1.37	0.89
8:V:469:THR:HA	11:Z:247:LYS:HZ3	1.35	0.89
8:V:467:TYR:HA	8:V:471:GLU:HB3	1.55	0.88
1:A:78:TRP:CZ2	2:B:138:PHE:HA	2.08	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:380:LEU:HD21	2:B:419:PHE:HE2	1.38	0.88
5:E:165:ILE:HG22	5:E:168:LYS:HE2	1.53	0.88
10:Y:387:ILE:HG23	11:Z:279:LYS:HZ1	1.36	0.88
12:a:140:GLU:O	12:a:143:ASN:ND2	2.06	0.88
16:f:84:SER:HB3	16:f:115:PRO:HB3	1.55	0.88
11:Z:188:SER:O	11:Z:192:THR:HG23	1.73	0.88
5:E:203:ILE:HA	5:E:214:LEU:HD23	1.55	0.88
2:B:316:LEU:HD23	2:B:346:ARG:HG2	1.55	0.88
7:U:554:LEU:CA	7:U:588:MET:HE1	2.03	0.88
9:X:141:LYS:NZ	9:X:142:ARG:O	2.07	0.88
16:f:209:MET:O	16:f:213:GLN:NE2	2.07	0.88
4:D:85:ILE:CG2	4:D:86:PRO:HD2	2.02	0.88
4:D:378:ILE:HG13	4:D:406:VAL:HG11	1.56	0.88
7:U:792:ASN:CB	7:U:798:PRO:HG2	2.03	0.88
18:W:218:ASN:OD1	18:W:220:GLU:N	2.06	0.88
10:Y:376:LEU:HD23	11:Z:265:LEU:HD21	1.56	0.88
11:Z:34:ARG:HH21	11:Z:98:GLY:HA3	1.39	0.88
2:B:193:GLN:OE1	2:B:193:GLN:N	2.06	0.88
5:E:375:ALA:HA	5:E:378:LYS:HZ2	1.36	0.88
2:B:41:LYS:HE3	16:f:690:VAL:HG22	1.56	0.87
2:B:243:THR:HG22	2:B:245:ALA:H	1.38	0.87
15:d:34:ASN:ND2	15:d:43:LEU:HB2	1.88	0.87
12:a:223:GLU:N	12:a:223:GLU:OE1	2.07	0.87
5:E:199:VAL:CG1	5:E:234:GLU:HB2	2.05	0.87
8:V:175:MET:CE	8:V:184:ALA:HB2	2.03	0.87
14:c:251:LEU:HB3	14:c:284:LEU:HD13	1.56	0.87
5:E:305:ASN:CA	5:E:308:ALA:HB3	2.04	0.87
16:f:183:PRO:HB3	16:f:216:MET:HE1	1.55	0.87
2:B:240:ALA:O	2:B:243:THR:OG1	1.93	0.87
4:D:258:ALA:HB1	4:D:259:PRO:HD2	1.56	0.87
7:U:509:GLY:HA3	7:U:544:ILE:HG12	1.54	0.87
15:d:125:LYS:HA	15:d:128:GLN:HB2	1.55	0.87
16:f:57:GLU:OE1	16:f:96:LEU:HD13	1.75	0.87
16:f:333:LEU:HD12	16:f:334:ALA:N	1.89	0.87
16:f:474:SER:HB3	16:f:477:MET:HE3	1.54	0.87
1:A:95:VAL:HB	1:A:144:ARG:HH12	1.40	0.87
16:f:512:MET:HE1	16:f:554:TYR:O	1.74	0.87
18:W:253:THR:OG1	18:W:257:GLN:O	1.92	0.87
7:U:743:ASN:O	7:U:786:THR:OG1	1.94	0.86
8:V:192:MET:SD	8:V:234:ARG:NH2	2.48	0.86
30:q:154:GLU:N	30:q:154:GLU:OE2	2.08	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:279:GLU:HG3	10:Y:296:VAL:HG21	1.57	0.86
16:f:51:GLN:HE22	16:f:54:ASP:HA	1.40	0.86
16:f:170:TRP:HA	16:f:173:LEU:CG	2.05	0.86
1:A:103:ASN:OD1	1:A:104:ALA:N	2.08	0.86
8:V:443:ARG:HH12	15:d:180:GLY:CA	1.87	0.86
11:Z:79:TYR:OH	11:Z:90:ARG:HA	1.75	0.86
14:c:57:MET:HA	14:c:72:VAL:HG13	1.58	0.86
10:Y:50:MET:HG2	10:Y:71:ASN:HB3	1.57	0.86
1:A:243:SER:OG	2:B:268:ARG:NH2	2.08	0.86
7:U:583:MET:CE	7:U:614:VAL:HG13	2.05	0.86
18:W:54:THR:O	18:W:58:SER:N	2.09	0.86
10:Y:373:GLY:O	10:Y:377:LEU:HG	1.74	0.86
7:U:58:GLN:OE1	7:U:87:LEU:HD22	1.76	0.86
7:U:62:LEU:HB2	7:U:87:LEU:HD23	1.58	0.86
7:U:357:LYS:HA	7:U:392:TRP:HH2	1.40	0.86
7:U:495:ASP:O	7:U:499:THR:HG23	1.76	0.86
1:A:333:ARG:HG2	1:A:334:PRO:HD2	1.57	0.86
5:E:261:LEU:HD13	5:E:289:LEU:HD22	1.57	0.86
5:E:311:ASP:O	5:E:315:ILE:HG12	1.76	0.86
6:F:185:TYR:HE1	6:F:239:ALA:HB1	1.41	0.86
7:U:633:CYS:HA	7:U:636:VAL:CG1	2.05	0.86
7:U:646:PRO:HG3	7:U:649:ARG:HH22	1.41	0.86
7:U:749:GLN:OE1	7:U:749:GLN:N	2.09	0.86
8:V:102:PRO:O	8:V:105:SER:OG	1.94	0.86
14:c:219:ASN:CB	14:c:223:LYS:HG3	2.04	0.86
7:U:383:ASP:HB2	7:U:386:LEU:HD21	1.57	0.86
18:W:20:TYR:HE1	18:W:53:GLN:HB3	1.38	0.86
3:C:37:ASP:O	3:C:40:GLN:NE2	2.08	0.85
3:C:338:LEU:HB3	3:C:342:ILE:HG21	1.57	0.85
5:E:40:TYR:HA	6:F:73:ILE:HD11	1.57	0.85
6:F:283:ILE:HD11	6:F:285:ILE:HD11	1.58	0.85
11:Z:38:VAL:HG11	11:Z:91:ILE:HD11	1.56	0.85
14:c:219:ASN:HB3	14:c:223:LYS:HG3	1.57	0.85
6:F:321:GLN:OE1	6:F:323:ASN:N	2.08	0.85
16:f:490:ALA:HA	16:f:525:ILE:HA	1.58	0.85
18:W:275:ILE:HG21	18:W:305:LEU:HD21	1.56	0.85
7:U:171:ASN:OD1	7:U:174:PRO:HA	1.76	0.85
10:Y:365:GLN:O	10:Y:369:THR:HG23	1.77	0.85
12:a:34:TRP:HB2	13:b:18:ASN:OD1	1.76	0.85
16:f:549:GLU:HA	16:f:552:ASP:HB2	1.58	0.85
16:f:664:GLU:HB3	16:f:668:ALA:HB3	1.55	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:307:LYS:HA	18:W:310:THR:HG22	1.57	0.85
7:U:331:GLY:O	7:U:335:ILE:HG12	1.76	0.85
13:b:28:ALA:HA	13:b:31:ASP:HB3	1.56	0.85
4:D:120:ASP:O	4:D:121:ARG:NE	2.08	0.85
6:F:91:SER:HB2	6:F:125:LYS:O	1.77	0.85
18:W:112:VAL:HA	18:W:115:ILE:HG13	1.57	0.85
7:U:554:LEU:HA	7:U:588:MET:CE	2.04	0.85
20:G:7:ALA:N	20:G:10:ASP:OD1	2.10	0.85
4:D:377:SER:HB3	5:E:292:PRO:HG2	1.59	0.85
5:E:145:LEU:O	5:E:149:ILE:HG22	1.77	0.85
16:f:298:LEU:HD13	16:f:493:ASN:HB2	1.59	0.85
18:W:69:ALA:O	18:W:73:MET:HG2	1.77	0.85
7:U:567:ILE:HB	7:U:601:ARG:HH12	1.42	0.85
16:f:577:LEU:HA	16:f:580:LEU:HD21	1.59	0.85
18:W:280:ASP:OD1	18:W:281:ASN:N	2.08	0.85
18:W:335:SER:HB2	18:W:336:PRO:HD2	1.59	0.85
19:e:56:LEU:O	19:e:60:LEU:HD13	1.75	0.85
4:D:163:MET:SD	4:D:222:HIS:NE2	2.49	0.85
7:U:532:MET:HE1	7:U:555:VAL:HG21	1.58	0.85
12:a:186:LYS:HD2	12:a:187:ASP:N	1.91	0.85
2:B:405:MET:HE2	2:B:405:MET:HA	1.59	0.84
9:X:286:ALA:HB2	9:X:309:TYR:CD2	2.11	0.84
13:b:161:ASN:OD1	13:b:165:GLY:N	2.10	0.84
3:C:191:PRO:HG3	3:C:319:PRO:HG3	1.58	0.84
7:U:16:GLU:HB3	7:U:19:LEU:HB3	1.57	0.84
8:V:113:LEU:HD13	8:V:171:VAL:HG22	1.58	0.84
15:d:33:LEU:HB3	15:d:44:THR:HG21	1.59	0.84
2:B:59:ARG:O	2:B:63:LEU:HG	1.76	0.84
4:D:85:ILE:HG22	4:D:86:PRO:CD	2.06	0.84
8:V:101:LEU:HD23	8:V:209:LYS:HD2	1.57	0.84
18:W:121:LYS:O	18:W:125:ILE:HG13	1.76	0.84
1:A:52:ILE:HD11	2:B:69:LYS:HA	1.57	0.84
3:C:85:VAL:HG23	3:C:97:VAL:HG23	1.59	0.84
16:f:479:LEU:CD1	16:f:514:VAL:HA	2.07	0.84
16:f:825:MET:HG2	16:f:863:THR:HB	1.57	0.84
8:V:161:PRO:HA	8:V:164:GLU:HG2	1.58	0.84
13:b:35:ILE:HA	13:b:38:HIS:HB3	1.59	0.84
14:c:38:LEU:O	14:c:42:LEU:HD12	1.77	0.84
8:V:480:ILE:HD13	11:Z:260:VAL:HA	1.58	0.84
18:W:152:ILE:HD13	18:W:165:ILE:HD13	1.58	0.84
16:f:716:ASP:OD2	16:f:724:ASN:ND2	2.10	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:194:ASN:ND2	5:E:227:PRO:O	2.09	0.84
10:Y:325:VAL:CG2	19:e:65:TYR:HA	2.08	0.84
1:A:38:GLN:OE1	16:f:132:THR:HG21	1.77	0.84
1:A:114:ASN:HB2	1:A:120:LYS:HE3	1.58	0.84
3:C:340:ARG:NH2	10:Y:174:TRP:O	2.10	0.84
7:U:789:ILE:HB	7:U:911:ILE:HG12	1.59	0.84
7:U:802:TYR:O	7:U:878:LEU:N	2.10	0.84
8:V:237:THR:O	8:V:240:LEU:HG	1.78	0.84
10:Y:15:PRO:HG2	10:Y:147:ILE:HD11	1.60	0.84
15:d:241:GLU:OE2	15:d:241:GLU:N	2.11	0.84
6:F:224:LEU:HD21	6:F:226:TYR:HB3	1.57	0.84
12:a:84:VAL:O	12:a:87:MET:HG3	1.77	0.84
2:B:411:ARG:HD2	2:B:413:LYS:O	1.78	0.83
6:F:273:ALA:O	6:F:274:LEU:HG	1.78	0.83
7:U:699:THR:HG23	7:U:701:ILE:HG23	1.60	0.83
16:f:731:MET:HE2	16:f:746:ARG:HB3	1.59	0.83
18:W:210:ASN:OD1	18:W:223:LYS:NZ	2.10	0.83
19:e:59:GLU:HG2	19:e:65:TYR:HB2	1.60	0.83
2:B:302:GLU:OE2	3:C:267:SER:OG	1.95	0.83
5:E:124:HIS:HB3	5:E:196:LEU:HD22	1.59	0.83
11:Z:208:ILE:HD13	18:W:446:ILE:HD13	1.59	0.83
11:Z:280:ILE:HD12	11:Z:283:ARG:HH22	1.42	0.83
21:H:8:SER:OG	21:H:122:GLN:O	1.96	0.83
8:V:195:ILE:HG12	8:V:203:LEU:HD21	1.59	0.83
9:X:170:GLN:HB3	9:X:193:ALA:HB2	1.59	0.83
10:Y:73:MET:SD	10:Y:73:MET:N	2.50	0.83
16:f:13:PRO:HG3	16:f:41:LYS:HZ3	1.44	0.83
16:f:73:PRO:O	16:f:76:GLU:HG2	1.78	0.83
18:W:382:LEU:HB3	18:W:384:LEU:HG	1.59	0.83
4:D:162:VAL:C	4:D:163:MET:HE2	2.03	0.83
2:B:194:ILE:HG13	2:B:235:LEU:HD11	1.61	0.83
3:C:36:ASN:O	3:C:39:SER:OG	1.96	0.83
6:F:362:ARG:NH2	6:F:389:ASP:OD1	2.11	0.83
7:U:458:ILE:HG21	7:U:490:ARG:NH2	1.93	0.83
9:X:377:ILE:HD11	10:Y:311:TYR:C	2.02	0.83
14:c:247:GLU:OE2	14:c:287:HIS:NE2	2.11	0.83
16:f:350:LYS:HD3	16:f:747:GLN:OE1	1.79	0.83
16:f:466:LEU:HD12	16:f:481:SER:HA	1.58	0.83
16:f:856:ALA:HB1	16:f:860:LYS:HG3	1.61	0.83
3:C:248:MET:HE1	3:C:254:ILE:HD11	1.59	0.83
4:D:267:ILE:HD11	4:D:270:ILE:HG13	1.60	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:443:ARG:NH1	15:d:180:GLY:HA3	1.93	0.83
3:C:242:ALA:HB1	3:C:243:PRO:HD2	1.58	0.83
8:V:294:ARG:NH1	8:V:390:GLY:O	2.12	0.83
12:a:286:ALA:HA	12:a:289:ARG:HD3	1.59	0.83
13:b:33:VAL:N	13:b:36:VAL:HB	1.93	0.83
12:a:115:LYS:HG3	12:a:138:VAL:HG13	1.60	0.83
7:U:198:LEU:HG	7:U:223:LEU:HD21	1.61	0.83
8:V:463:MET:HG2	8:V:464:ILE:H	1.42	0.83
16:f:636:ASP:O	16:f:640:LYS:HB3	1.78	0.83
1:A:178:GLY:O	34:A:501:ATP:N6	2.12	0.82
18:W:200:ILE:O	18:W:204:ILE:HG12	1.79	0.82
12:a:248:PHE:O	12:a:251:LEU:HG	1.78	0.82
13:b:124:LEU:HB3	13:b:159:THR:HG21	1.59	0.82
16:f:107:LYS:O	16:f:111:GLU:N	2.11	0.82
8:V:121:PHE:HB2	8:V:128:ARG:HH11	1.41	0.82
2:B:409:GLU:OE1	2:B:411:ARG:NH2	2.12	0.82
3:C:252:ASP:OD1	3:C:295:THR:OG1	1.97	0.82
5:E:37:THR:HA	6:F:69:MET:HE3	1.62	0.82
7:U:185:MET:HE1	7:U:222:PHE:CE2	2.15	0.82
7:U:646:PRO:HB3	7:U:680:VAL:HG21	1.61	0.82
7:U:724:VAL:HG23	7:U:725:MET:SD	2.19	0.82
10:Y:46:ARG:NH1	10:Y:47:ASP:OD2	2.12	0.82
13:b:48:ASN:OD1	13:b:65:THR:N	2.13	0.82
18:W:268:LYS:HD2	18:W:302:TYR:CE1	2.14	0.82
2:B:78:PHE:CE1	16:f:658:ALA:HB1	2.14	0.82
6:F:291:ILE:HG13	6:F:310:MET:HE2	1.61	0.82
12:a:26:GLU:HA	12:a:29:TYR:CZ	2.14	0.82
1:A:377:CYS:HA	1:A:417:ILE:HD11	1.60	0.82
10:Y:81:LEU:HB2	10:Y:107:LYS:HZ2	1.45	0.82
12:a:137:ASP:O	12:a:141:MET:HG3	1.80	0.82
16:f:106:LEU:O	16:f:137:ARG:NH1	2.10	0.82
5:E:36:LEU:HB3	6:F:69:MET:HG3	1.60	0.82
11:Z:67:VAL:HG11	13:b:91:ARG:HB2	1.62	0.82
12:a:162:TYR:HE2	12:a:168:ASN:HB3	1.43	0.82
16:f:320:ILE:HG22	16:f:321:MET:SD	2.20	0.82
18:W:223:LYS:HG2	18:W:226:TYR:HE2	1.43	0.82
3:C:132:ASP:HB3	3:C:136:SER:HB3	1.59	0.82
5:E:281:ARG:NH2	5:E:385:ASP:O	2.13	0.82
7:U:381:THR:HA	7:U:412:HIS:CE1	2.14	0.82
16:f:38:ASP:O	16:f:41:LYS:HG2	1.79	0.82
16:f:245:ASN:HB2	16:f:256:PHE:HB2	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:165:ILE:HG13	18:W:189:GLN:HG2	1.60	0.82
3:C:190:GLY:HA3	3:C:196:LYS:HE3	1.62	0.82
12:a:32:LYS:HZ2	13:b:19:GLY:HA3	1.43	0.82
16:f:788:MET:O	16:f:790:GLN:NE2	2.13	0.82
3:C:242:ALA:HB1	3:C:243:PRO:CD	2.09	0.82
4:D:52:GLU:O	4:D:56:VAL:HG13	1.79	0.82
7:U:879:ASP:OD1	7:U:880:ASN:N	2.11	0.82
14:c:219:ASN:O	14:c:223:LYS:N	2.13	0.82
14:c:221:HIS:CD2	14:c:222:LYS:HG3	2.13	0.82
16:f:813:LYS:HD3	16:f:825:MET:HE1	1.62	0.82
4:D:45:LYS:HB3	7:U:187:LEU:HD12	1.62	0.81
10:Y:230:ALA:O	10:Y:231:LEU:HD13	1.79	0.81
11:Z:146:ASP:OD1	11:Z:147:ASP:N	2.12	0.81
16:f:520:LEU:HG	16:f:524:MET:HE3	1.60	0.81
8:V:270:LEU:O	8:V:274:SER:OG	1.97	0.81
2:B:123:VAL:HG21	2:B:152:LEU:HD21	1.62	0.81
3:C:266:ASP:OD2	3:C:269:VAL:HB	1.80	0.81
5:E:119:VAL:O	5:E:122:MET:HE2	1.81	0.81
6:F:317:LEU:HD21	6:F:328:VAL:HG11	1.61	0.81
7:U:156:GLU:O	7:U:158:ARG:NH1	2.13	0.81
8:V:91:PRO:O	8:V:95:LEU:HG	1.80	0.81
9:X:153:LEU:HD23	9:X:169:VAL:HG21	1.62	0.81
16:f:125:ILE:HG12	16:f:129:LEU:N	1.94	0.81
16:f:267:ARG:HA	16:f:271:MET:SD	2.19	0.81
16:f:693:ALA:HA	16:f:696:LEU:HD12	1.61	0.81
6:F:415:LEU:HD13	6:F:420:TYR:HE1	1.45	0.81
7:U:409:GLY:HA3	7:U:445:ALA:HB1	1.63	0.81
7:U:664:GLY:N	7:U:698:GLN:OE1	2.14	0.81
20:g:120:ASP:OD1	21:h:83:ARG:NH1	2.14	0.81
1:A:91:GLN:HB2	1:A:92:PRO:CD	2.11	0.81
2:B:145:GLU:OE1	2:B:145:GLU:N	2.13	0.81
9:X:218:HIS:O	9:X:221:GLU:HG3	1.80	0.81
12:a:159:SER:O	12:a:162:TYR:HB3	1.80	0.81
1:A:256:MET:HA	1:A:256:MET:CE	2.10	0.81
7:U:632:GLN:OE1	7:U:632:GLN:N	2.13	0.81
5:E:156:PRO:HG2	5:E:272:ARG:HE	1.46	0.81
5:E:261:LEU:HD11	5:E:295:LEU:CD2	2.11	0.81
12:a:211:PHE:HD1	12:a:212:ASN:H	1.27	0.81
16:f:333:LEU:HD21	16:f:810:ILE:HD12	1.61	0.81
1:A:161:VAL:HG12	1:A:263:MET:CE	2.11	0.81
1:A:171:ASP:OD1	1:A:171:ASP:N	2.13	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:275:ALA:HB1	6:F:326:VAL:HG11	1.63	0.81
11:Z:279:LYS:HA	11:Z:282:ASN:HD21	1.46	0.81
16:f:713:PHE:CG	16:f:749:ALA:HB1	2.15	0.81
3:C:251:ILE:HD13	3:C:293:MET:HE2	1.59	0.81
6:F:283:ILE:HG23	6:F:328:VAL:HG23	1.60	0.81
7:U:535:TYR:HA	7:U:538:GLU:HG2	1.60	0.81
16:f:597:VAL:HG11	16:f:635:LYS:HG3	1.60	0.81
16:f:787:LEU:N	16:f:790:GLN:OE1	2.14	0.81
7:U:368:ALA:HB1	7:U:731:ILE:HG21	1.63	0.81
4:D:156:SER:HA	4:D:159:LYS:CD	2.09	0.80
8:V:176:MET:HE3	8:V:217:VAL:HG23	1.62	0.80
12:a:56:LEU:HA	12:a:59:LEU:HD23	1.63	0.80
1:A:94:GLN:OE1	1:A:95:VAL:N	2.13	0.80
7:U:492:ASP:OD1	7:U:493:VAL:N	2.12	0.80
12:a:68:GLU:O	12:a:70:ARG:N	2.13	0.80
12:a:132:LYS:O	12:a:136:GLU:HG2	1.81	0.80
18:W:329:ARG:HH11	18:W:329:ARG:HG3	1.45	0.80
27:n:2:THR:OG1	38:n:301:LDZ:O33	1.99	0.80
8:V:416:ARG:HD3	8:V:459:GLN:NE2	1.96	0.80
12:a:354:GLU:O	12:a:358:THR:HG23	1.81	0.80
15:d:15:ASN:HB3	15:d:61:TRP:CD1	2.17	0.80
16:f:325:GLN:O	16:f:328:SER:OG	1.99	0.80
16:f:605:ASN:HD21	16:f:608:LYS:H	1.27	0.80
20:G:174:GLU:N	20:G:174:GLU:OE2	2.15	0.80
7:U:256:ALA:HB3	7:U:261:LEU:HD21	1.64	0.80
7:U:792:ASN:HB3	7:U:798:PRO:CG	2.12	0.80
7:U:836:THR:O	7:U:840:LYS:HG3	1.80	0.80
16:f:259:PHE:O	16:f:263:PRO:HD3	1.81	0.80
16:f:415:GLY:HA3	16:f:447:ALA:CB	2.11	0.80
16:f:804:LEU:HD12	16:f:806:VAL:CG1	2.12	0.80
1:A:416:VAL:HG12	1:A:417:ILE:CG2	2.12	0.80
3:C:340:ARG:HH22	10:Y:175:ASP:HA	1.46	0.80
4:D:116:LEU:HB3	4:D:119:ILE:HD11	1.62	0.80
7:U:803:LYS:HA	7:U:877:LEU:HA	1.63	0.80
16:f:95:PRO:HB3	16:f:133:MET:HE2	1.63	0.80
18:W:299:ILE:HG12	18:W:302:TYR:HD1	1.45	0.80
1:A:430:MET:CE	1:A:433:ASN:HB3	2.12	0.80
12:a:193:GLN:CB	12:a:225:LEU:HG	2.12	0.80
14:c:111:TRP:HZ2	14:c:130:GLN:HB3	1.45	0.80
18:W:436:MET:O	18:W:439:VAL:HG12	1.82	0.80
3:C:154:LEU:H	3:C:154:LEU:HD22	1.45	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:172:VAL:O	6:F:175:MET:HG3	1.82	0.80
18:W:412:ILE:HD12	18:W:414:ASN:HD22	1.44	0.80
1:A:284:ARG:NH1	1:A:328:ASP:OD2	2.14	0.80
2:B:278:ALA:HB1	2:B:279:PRO:HD2	1.63	0.80
5:E:50:LEU:HD21	6:F:83:ASN:ND2	1.97	0.80
9:X:61:GLY:HA2	9:X:99:MET:HE1	1.63	0.80
11:Z:228:TYR:OH	12:a:341:LEU:N	2.14	0.80
14:c:64:ASP:HA	14:c:139:ARG:HH12	1.46	0.80
15:d:19:CYS:HB3	15:d:23:LEU:HB3	1.62	0.80
16:f:346:ASP:HA	16:f:349:TYR:CE2	2.17	0.80
16:f:520:LEU:O	16:f:524:MET:HG2	1.80	0.80
18:W:98:LYS:NZ	18:W:138:VAL:O	2.14	0.80
6:F:198:LEU:HD13	6:F:236:LEU:HG	1.64	0.80
10:Y:220:VAL:HG21	10:Y:249:VAL:CG1	2.11	0.80
16:f:229:VAL:HG13	16:f:605:ASN:HB2	1.64	0.80
16:f:274:ASP:OD1	16:f:275:MET:N	2.15	0.80
5:E:127:PRO:HA	5:E:193:CYS:O	1.82	0.79
7:U:846:LYS:O	7:U:846:LYS:NZ	2.11	0.79
8:V:71:THR:HG21	8:V:107:ARG:HB2	1.62	0.79
4:D:39:ASP:N	4:D:42:SER:OG	2.14	0.79
5:E:334:LEU:HD22	5:E:372:ARG:HH12	1.45	0.79
12:a:70:ARG:HA	13:b:17:ARG:HE	1.47	0.79
16:f:125:ILE:HG12	16:f:129:LEU:HB2	1.64	0.79
16:f:446:LEU:CD1	16:f:480:GLY:HA2	2.11	0.79
16:f:569:LYS:NZ	16:f:570:GLY:O	2.13	0.79
3:C:260:GLU:OE1	3:C:260:GLU:N	2.14	0.79
5:E:167:PRO:O	5:E:274:LYS:NZ	2.16	0.79
12:a:87:MET:HE1	12:a:92:VAL:HB	1.63	0.79
15:d:116:HIS:CE1	15:d:140:GLU:CD	2.61	0.79
18:W:149:LEU:HD22	18:W:185:PHE:CE2	2.17	0.79
7:U:243:LEU:HD21	7:U:903:PHE:HB3	1.63	0.79
8:V:98:LEU:HD22	8:V:209:LYS:HG3	1.63	0.79
12:a:351:ASP:O	12:a:354:GLU:HG3	1.82	0.79
16:f:719:PRO:HB2	16:f:721:VAL:CG1	2.12	0.79
16:f:811:LEU:HD13	16:f:878:GLU:HA	1.64	0.79
16:f:858:LYS:HB3	16:f:859:PRO:HD3	1.63	0.79
18:W:60:MET:CE	18:W:99:GLN:HB2	2.12	0.79
27:N:2:THR:OG1	38:N:301:LDZ:O33	2.00	0.79
7:U:35:TRP:HA	7:U:38:ILE:HG22	1.64	0.79
7:U:82:LEU:O	7:U:129:ARG:NH1	2.15	0.79
8:V:372:LEU:HD23	8:V:372:LEU:H	1.48	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:G:10:ASP:OD2	20:G:11:ARG:NE	2.15	0.79
1:A:393:GLY:CA	2:B:214:MET:HE1	2.12	0.79
2:B:53:THR:OG1	2:B:54:PRO:HD3	1.81	0.79
4:D:384:MET:HE2	4:D:384:MET:HA	1.62	0.79
5:E:72:LYS:HG3	5:E:78:ARG:CG	2.11	0.79
5:E:341:ALA:HA	5:E:344:ARG:HD2	1.64	0.79
8:V:79:VAL:HG22	8:V:163:VAL:HG13	1.64	0.79
9:X:282:ARG:HG2	9:X:312:GLU:HG3	1.63	0.79
11:Z:129:LYS:HE3	14:c:215:LYS:HB3	1.64	0.79
11:Z:224:HIS:NE2	12:a:340:VAL:HG22	1.96	0.79
16:f:271:MET:HA	16:f:274:ASP:OD2	1.82	0.79
16:f:829:MET:SD	16:f:859:PRO:HG2	2.22	0.79
2:B:377:ASP:O	2:B:416:ASN:ND2	2.16	0.79
7:U:400:ALA:O	7:U:403:THR:OG1	1.99	0.79
16:f:709:THR:HG21	16:f:746:ARG:HA	1.63	0.79
18:W:223:LYS:NZ	18:W:226:TYR:OH	2.14	0.79
18:W:390:GLU:OE2	18:W:408:ARG:HD2	1.83	0.79
1:A:430:MET:HG3	1:A:430:MET:O	1.83	0.79
4:D:235:PHE:CE1	4:D:246:MET:HE2	2.17	0.79
11:Z:239:ASP:OD2	18:W:428:TRP:NE1	2.16	0.79
12:a:335:TRP:CD1	12:a:337:GLN:H	2.01	0.79
13:b:120:ASN:ND2	13:b:123:ASP:OD1	2.16	0.79
16:f:210:GLU:O	16:f:213:GLN:HG2	1.83	0.79
16:f:379:GLY:HA2	16:f:417:ILE:HD11	1.64	0.79
16:f:560:LEU:HB3	16:f:564:LEU:HD11	1.63	0.79
6:F:185:TYR:CE1	6:F:239:ALA:HB1	2.18	0.79
8:V:172:VAL:O	8:V:176:MET:HB2	1.82	0.79
8:V:384:GLU:N	8:V:384:GLU:OE2	2.14	0.79
9:X:70:LEU:HA	9:X:73:VAL:HG22	1.64	0.79
11:Z:259:VAL:HB	14:c:295:ASN:HB3	1.65	0.79
16:f:687:ARG:HH22	16:f:688:ARG:HB2	1.46	0.79
2:B:75:GLU:O	2:B:79:ILE:HG23	1.83	0.79
5:E:72:LYS:NZ	5:E:73:ALA:O	2.15	0.79
5:E:195:PHE:HE1	5:E:229:ILE:HG22	1.48	0.79
7:U:357:LYS:HB3	7:U:392:TRP:CZ3	2.17	0.79
7:U:713:TYR:O	7:U:717:ILE:HG12	1.81	0.79
16:f:304:PHE:CZ	16:f:311:VAL:HG22	2.17	0.79
18:W:68:VAL:HG13	18:W:107:GLN:HG2	1.63	0.79
18:W:196:VAL:HG13	18:W:197:LYS:H	1.48	0.79
1:A:86:THR:O	1:A:89:SER:OG	2.01	0.78
3:C:251:ILE:CD1	3:C:293:MET:HE2	2.12	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:245:ARG:NH1	4:D:249:ASP:OD2	2.15	0.78
5:E:261:LEU:CD1	5:E:289:LEU:HD22	2.13	0.78
16:f:604:GLY:HA2	16:f:639:LYS:O	1.82	0.78
16:f:643:PRO:HB2	16:f:647:GLY:H	1.47	0.78
16:f:42:GLU:HB2	16:f:89:MET:HE1	1.65	0.78
18:W:64:SER:O	18:W:68:VAL:HG23	1.83	0.78
20:g:19:GLU:OE2	20:g:19:GLU:N	2.17	0.78
3:C:350:LEU:CD2	3:C:387:VAL:HG11	2.13	0.78
5:E:323:HIS:HB2	5:E:361:PHE:CE1	2.16	0.78
7:U:525:ASN:HB2	7:U:528:ALA:HB3	1.62	0.78
16:f:670:MET:HB3	16:f:673:ARG:NH2	1.97	0.78
16:f:688:ARG:NH1	16:f:689:ALA:HA	1.98	0.78
3:C:339:THR:HB	3:C:377:HIS:CD2	2.18	0.78
4:D:39:ASP:O	4:D:42:SER:N	2.16	0.78
10:Y:97:GLU:HA	10:Y:101:ARG:CD	2.13	0.78
11:Z:36:VAL:HG22	11:Z:96:HIS:HB2	1.65	0.78
18:W:92:LYS:O	18:W:93:ARG:HG2	1.84	0.78
18:W:264:GLN:O	18:W:268:LYS:HG2	1.83	0.78
3:C:191:PRO:HB2	3:C:192:PRO:HD2	1.63	0.78
5:E:26:LEU:HD12	5:E:30:ARG:HH11	1.48	0.78
5:E:185:ARG:HH21	5:E:196:LEU:HG	1.48	0.78
8:V:187:ILE:O	8:V:191:LEU:HG	1.84	0.78
10:Y:58:CYS:HB2	10:Y:59:LYS:NZ	1.98	0.78
11:Z:178:ASP:OD1	11:Z:179:ILE:N	2.15	0.78
18:W:225:LYS:O	18:W:228:ASN:N	2.16	0.78
6:F:225:MET:HE2	6:F:354:PHE:HZ	1.48	0.78
7:U:645:ASN:OD1	7:U:648:VAL:N	2.15	0.78
12:a:25:LEU:HG	12:a:29:TYR:CE1	2.14	0.78
12:a:244:ASN:O	12:a:246:GLU:HG3	1.83	0.78
1:A:59:ILE:O	1:A:63:THR:HG22	1.84	0.78
7:U:92:ASP:O	7:U:140:ARG:NH2	2.17	0.78
15:d:162:SER:C	15:d:164:THR:H	1.90	0.78
4:D:70:LYS:HG3	11:Z:184:VAL:HG11	1.66	0.78
4:D:391:ARG:NH2	4:D:398:ASP:OD2	2.17	0.78
7:U:899:ARG:NH2	7:U:918:SER:HB3	1.99	0.78
11:Z:139:ILE:HG23	11:Z:141:VAL:HG13	1.66	0.78
16:f:789:SER:CA	16:f:793:VAL:HB	2.13	0.78
18:W:132:THR:O	18:W:136:ILE:HD12	1.83	0.78
6:F:233:LYS:HD2	34:F:501:ATP:O2G	1.83	0.78
7:U:514:LEU:O	7:U:518:LEU:HG	1.83	0.78
7:U:676:THR:O	7:U:684:ARG:HD2	1.84	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:51:LEU:HD22	13:b:61:LEU:HB2	1.65	0.78
18:W:190:MET:HA	18:W:205:ILE:HD11	1.66	0.78
2:B:429:LYS:CD	3:C:306:LEU:HD23	2.13	0.77
5:E:38:LYS:O	5:E:42:LYS:HG2	1.82	0.77
12:a:51:ALA:HB1	12:a:86:GLN:HB3	1.66	0.77
12:a:65:SER:OG	12:a:68:GLU:HB3	1.84	0.77
16:f:449:GLY:HA3	16:f:484:GLY:CA	2.14	0.77
2:B:343:ARG:HG3	2:B:344:PRO:HD2	1.65	0.77
6:F:289:ASP:OD1	6:F:289:ASP:N	2.15	0.77
13:b:115:SER:OG	13:b:116:PRO:HD2	1.83	0.77
16:f:585:GLU:HB2	16:f:586:PRO:HD2	1.66	0.77
1:A:158:ASP:OD1	1:A:158:ASP:N	2.12	0.77
3:C:146:SER:HA	3:C:150:MET:CE	2.07	0.77
7:U:88:PHE:HA	7:U:91:ASN:OD1	1.83	0.77
16:f:544:GLU:OE2	16:f:548:THR:HG21	1.84	0.77
1:A:195:LEU:HD21	1:A:316:LYS:HE2	1.65	0.77
1:A:297:ARG:HD3	6:F:257:VAL:HG21	1.65	0.77
6:F:348:LEU:H	6:F:348:LEU:HD12	1.49	0.77
10:Y:13:LYS:HE3	10:Y:211:TYR:CZ	2.20	0.77
1:A:398:ARG:NH2	2:B:199:GLU:OE1	2.17	0.77
7:U:525:ASN:O	7:U:529:ILE:HD12	1.85	0.77
12:a:56:LEU:O	12:a:59:LEU:HG	1.84	0.77
12:a:356:TRP:O	12:a:360:VAL:HG13	1.85	0.77
14:c:155:VAL:HG12	14:c:157:ILE:HG13	1.65	0.77
1:A:30:ILE:O	1:A:34:LYS:HG2	1.84	0.77
4:D:384:MET:CE	5:E:164:ILE:HD12	2.14	0.77
5:E:327:ASP:HB3	5:E:364:GLN:HE22	1.47	0.77
7:U:458:ILE:HG21	7:U:490:ARG:HH21	1.49	0.77
7:U:644:TYR:O	7:U:646:PRO:HD3	1.85	0.77
7:U:802:TYR:HA	7:U:895:PRO:HG3	1.66	0.77
9:X:407:MET:O	9:X:411:VAL:HG23	1.84	0.77
15:d:43:LEU:HD22	15:d:48:LEU:HD11	1.63	0.77
16:f:254:GLY:HA3	16:f:873:LEU:HD13	1.66	0.77
1:A:195:LEU:HD21	1:A:316:LYS:CE	2.15	0.77
2:B:105:THR:CB	2:B:106:PRO:HD2	2.14	0.77
2:B:251:VAL:HG13	3:C:278:ASN:HD22	1.50	0.77
7:U:54:PHE:CZ	7:U:56:SER:HB2	2.19	0.77
7:U:583:MET:HE2	7:U:614:VAL:HG13	1.66	0.77
12:a:70:ARG:HA	13:b:17:ARG:NE	1.98	0.77
15:d:233:GLU:HG2	15:d:236:THR:HG23	1.66	0.77
16:f:416:MET:CE	16:f:801:VAL:HG13	2.14	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:73:LEU:HD13	11:Z:185:GLY:H	1.50	0.77
4:D:392:TYR:HB2	5:E:161:ARG:CZ	2.15	0.77
5:E:91:LYS:HD2	5:E:92:LEU:H	1.49	0.77
5:E:197:LYS:HD2	5:E:197:LYS:N	1.99	0.77
7:U:137:MET:HA	7:U:137:MET:HE3	1.65	0.77
9:X:397:TYR:CE1	11:Z:257:MET:HG2	2.20	0.77
12:a:269:LEU:HD12	12:a:272:ILE:HG21	1.66	0.77
13:b:86:PHE:O	13:b:88:THR:N	2.18	0.77
16:f:51:GLN:NE2	16:f:54:ASP:HA	1.99	0.77
28:O:56:THR:HG23	28:O:87:MET:HE1	1.65	0.77
8:V:281:ASN:OD1	8:V:282:ASN:N	2.18	0.77
10:Y:51:ALA:HB3	10:Y:52:PRO:HD3	1.65	0.77
12:a:326:GLU:OE1	18:W:377:ARG:HG3	1.85	0.77
14:c:64:ASP:OD1	14:c:139:ARG:NH1	2.17	0.77
14:c:186:LYS:HB3	14:c:187:PRO:HD2	1.67	0.77
14:c:218:LEU:HG	14:c:219:ASN:H	1.50	0.77
16:f:254:GLY:HA3	16:f:873:LEU:CD1	2.15	0.77
18:W:176:SER:OG	18:W:177:MET:SD	2.43	0.77
18:W:221:LYS:HA	18:W:224:LEU:HB3	1.66	0.77
2:B:276:GLU:OE1	2:B:277:HIS:ND1	2.18	0.77
8:V:342:ILE:HD11	8:V:368:ARG:HH11	1.49	0.77
11:Z:213:GLU:O	11:Z:217:THR:HG22	1.84	0.77
16:f:687:ARG:HG2	16:f:687:ARG:O	1.84	0.77
5:E:316:HIS:O	5:E:319:PRO:HD2	1.84	0.76
7:U:236:LEU:HD21	7:U:245:ALA:CA	2.15	0.76
7:U:542:GLU:HG3	7:U:546:ARG:HH21	1.50	0.76
7:U:899:ARG:HH22	7:U:918:SER:HB3	1.50	0.76
10:Y:287:LEU:O	10:Y:291:HIS:ND1	2.17	0.76
10:Y:352:GLU:O	10:Y:353:ILE:HD13	1.85	0.76
14:c:303:MET:HA	14:c:306:THR:HG23	1.65	0.76
16:f:765:ALA:HB1	16:f:877:GLY:HA2	1.67	0.76
2:B:130:GLU:N	2:B:130:GLU:OE1	2.18	0.76
2:B:221:GLY:HA2	2:B:327:VAL:O	1.86	0.76
7:U:756:HIS:ND1	7:U:758:PRO:HD2	2.01	0.76
11:Z:12:HIS:O	11:Z:15:VAL:HG22	1.85	0.76
16:f:71:TYR:HH	16:f:86:THR:HG1	1.09	0.76
16:f:229:VAL:HG11	16:f:607:LEU:HB2	1.65	0.76
1:A:261:PHE:CD2	1:A:305:GLN:HB3	2.20	0.76
7:U:699:THR:OG1	7:U:700:GLU:OE1	2.03	0.76
8:V:282:ASN:HD21	10:Y:385:ARG:HH11	1.30	0.76
8:V:291:TYR:O	8:V:295:ILE:HG23	1.86	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:47:ASP:OD2	10:Y:113:ARG:NH2	2.17	0.76
12:a:269:LEU:HD12	12:a:272:ILE:CG2	2.15	0.76
16:f:241:PRO:O	16:f:245:ASN:ND2	2.19	0.76
16:f:593:THR:HG22	16:f:612:LEU:HD11	1.67	0.76
18:W:11:GLY:N	18:W:97:LEU:HA	2.00	0.76
24:K:18:GLU:OE1	24:K:18:GLU:N	2.17	0.76
1:A:365:GLU:OE2	1:A:406:GLU:N	2.18	0.76
5:E:348:THR:O	5:E:352:MET:HG3	1.84	0.76
6:F:90:VAL:CG1	6:F:150:LEU:HD12	2.15	0.76
8:V:267:ALA:O	8:V:271:VAL:HG23	1.85	0.76
18:W:274:VAL:HG22	18:W:286:LEU:HD21	1.66	0.76
1:A:166:VAL:HG11	1:A:237:PHE:HB3	1.67	0.76
5:E:310:LEU:HD23	5:E:328:TYR:HD2	1.50	0.76
10:Y:184:GLN:NE2	10:Y:197:ALA:O	2.18	0.76
16:f:597:VAL:HG11	16:f:635:LYS:CG	2.15	0.76
18:W:17:GLU:HB2	18:W:57:ALA:HB1	1.65	0.76
18:W:44:ILE:HA	18:W:47:LEU:CD2	2.14	0.76
1:A:419:SER:HB2	1:A:423:PHE:HD2	1.51	0.76
16:f:450:ILE:HG12	16:f:487:LEU:HD23	1.66	0.76
18:W:212:LYS:HB3	18:W:215:GLN:OE1	1.85	0.76
2:B:82:GLN:CD	16:f:617:SER:HG	1.94	0.76
4:D:392:TYR:CE1	4:D:393:ILE:HG12	2.21	0.76
6:F:81:LYS:HD3	6:F:82:VAL:N	2.00	0.76
10:Y:71:ASN:HA	10:Y:74:LYS:HG2	1.68	0.76
10:Y:117:LYS:HB2	10:Y:151:TYR:CE1	2.20	0.76
10:Y:193:ASP:O	10:Y:197:ALA:HB3	1.85	0.76
10:Y:388:ASN:H	11:Z:279:LYS:NZ	1.84	0.76
15:d:9:TRP:CD1	15:d:10:ASN:H	2.04	0.76
16:f:209:MET:O	16:f:212:GLU:HG2	1.85	0.76
16:f:267:ARG:HD2	16:f:300:ARG:HH12	1.50	0.76
18:W:274:VAL:HG22	18:W:286:LEU:CD2	2.16	0.76
16:f:274:ASP:OD1	16:f:275:MET:HG2	1.84	0.76
16:f:706:ILE:HG23	16:f:745:LEU:HG	1.68	0.76
5:E:334:LEU:HD13	5:E:371:VAL:HG11	1.68	0.76
7:U:458:ILE:HD13	7:U:490:ARG:HH22	1.51	0.76
10:Y:25:LEU:O	10:Y:29:PRO:HG2	1.86	0.76
10:Y:53:TYR:CE1	10:Y:57:LEU:HD22	2.17	0.76
16:f:125:ILE:CB	16:f:129:LEU:HB2	2.15	0.76
16:f:268:LEU:HA	16:f:272:LEU:HD22	1.65	0.76
18:W:299:ILE:HG12	18:W:302:TYR:CD1	2.19	0.76
30:Q:154:GLU:OE1	30:Q:154:GLU:N	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:62:LEU:HD23	2:B:79:ILE:HD11	1.67	0.75
1:A:284:ARG:HA	1:A:296:GLN:OE1	1.86	0.75
7:U:368:ALA:HB1	7:U:731:ILE:CG2	2.16	0.75
7:U:665:ASN:OD1	7:U:667:GLU:N	2.19	0.75
7:U:685:GLN:HG2	7:U:729:GLY:HA3	1.68	0.75
8:V:105:SER:HB2	8:V:106:ARG:CD	2.16	0.75
16:f:728:ALA:HB1	16:f:750:GLN:HB3	1.68	0.75
1:A:30:ILE:HG23	1:A:34:LYS:HE2	1.66	0.75
6:F:396:CYS:O	6:F:399:VAL:N	2.19	0.75
7:U:582:GLY:O	7:U:585:THR:HG22	1.85	0.75
8:V:78:HIS:HE2	8:V:100:MET:HE2	1.51	0.75
8:V:218:TYR:HD2	8:V:227:VAL:HG12	1.50	0.75
11:Z:36:VAL:HG22	11:Z:96:HIS:CB	2.16	0.75
12:a:193:GLN:HB3	12:a:225:LEU:HG	1.66	0.75
4:D:170:MET:HG3	4:D:170:MET:O	1.86	0.75
6:F:301:ALA:HB1	6:F:304:ARG:HH21	1.51	0.75
7:U:628:ARG:NH1	7:U:753:GLY:O	2.18	0.75
12:a:231:GLN:HB2	12:a:234:ILE:HG22	1.68	0.75
12:a:274:LEU:C	12:a:278:MET:HE3	2.11	0.75
13:b:89:GLY:O	13:b:92:VAL:HG22	1.86	0.75
15:d:43:LEU:HD22	15:d:48:LEU:CD1	2.15	0.75
16:f:494:ARG:HD2	16:f:497:VAL:HG21	1.66	0.75
16:f:563:GLY:HA3	16:f:598:CYS:HB3	1.68	0.75
6:F:318:ASP:OD1	6:F:347:ARG:NE	2.19	0.75
7:U:745:THR:O	7:U:784:THR:N	2.12	0.75
11:Z:237:LEU:HD12	11:Z:237:LEU:O	1.86	0.75
12:a:250:THR:HA	12:a:253:THR:OG1	1.86	0.75
14:c:256:ASN:O	14:c:259:VAL:HG12	1.86	0.75
16:f:271:MET:SD	16:f:271:MET:N	2.55	0.75
16:f:617:SER:HB3	16:f:632:LYS:NZ	2.01	0.75
18:W:314:LEU:HD23	18:W:365:ILE:HD11	1.67	0.75
5:E:149:ILE:O	5:E:152:PRO:HD2	1.86	0.75
5:E:308:ALA:O	5:E:312:ILE:HG12	1.86	0.75
7:U:185:MET:HE1	7:U:222:PHE:CZ	2.22	0.75
16:f:79:ARG:HD3	16:f:81:GLN:H	1.50	0.75
16:f:138:GLU:O	16:f:141:LYS:HG2	1.86	0.75
1:A:30:ILE:HG12	3:C:171:HIS:ND1	2.00	0.75
4:D:96:VAL:HG12	4:D:97:ASP:H	1.51	0.75
4:D:214:MET:HE1	36:D:501:ADP:C2	2.21	0.75
9:X:130:GLU:OE2	9:X:153:LEU:HB2	1.86	0.75
11:Z:147:ASP:HA	12:a:177:LEU:HD13	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:182:THR:HG23	11:Z:184:VAL:HG23	1.69	0.75
18:W:48:LEU:C	18:W:52:LYS:HE3	2.12	0.75
7:U:22:PHE:CD2	15:d:31:LEU:HG	2.22	0.75
18:W:86:ASN:O	18:W:90:LEU:HG	1.86	0.75
1:A:116:LYS:HB3	1:A:117:GLN:OE1	1.87	0.75
5:E:175:PRO:O	5:E:180:LYS:NZ	2.19	0.75
6:F:59:VAL:HG22	6:F:63:THR:OG1	1.87	0.75
7:U:37:GLU:OE2	8:V:266:GLN:NE2	2.19	0.75
7:U:199:ARG:HD3	7:U:223:LEU:CD1	2.17	0.75
18:W:416:GLN:OE1	18:W:416:GLN:N	2.15	0.75
1:A:428:ARG:NE	23:J:161:ILE:HG23	2.01	0.75
2:B:278:ALA:HB1	2:B:279:PRO:CD	2.16	0.75
3:C:52:LEU:CG	4:D:68:LEU:HD23	2.12	0.75
3:C:191:PRO:HG2	3:C:194:THR:HG21	1.69	0.75
3:C:350:LEU:HD21	3:C:387:VAL:HG11	1.69	0.75
4:D:86:PRO:HG3	5:E:104:THR:O	1.86	0.75
6:F:65:GLU:OE2	13:b:69:GLY:HA2	1.85	0.75
6:F:421:MET:HA	6:F:424:ILE:CD1	2.07	0.75
7:U:723:ASP:OD2	7:U:726:ALA:N	2.20	0.75
8:V:470:ARG:NH2	11:Z:249:PHE:O	2.20	0.75
11:Z:243:GLN:N	11:Z:243:GLN:OE1	2.20	0.75
12:a:162:TYR:CE2	12:a:168:ASN:HB3	2.22	0.75
16:f:407:MET:HE1	16:f:440:ILE:HD13	1.69	0.75
18:W:307:LYS:O	18:W:311:THR:HG23	1.86	0.75
4:D:214:MET:HE1	36:D:501:ADP:N1	2.01	0.74
5:E:188:ALA:HB1	5:E:193:CYS:HA	1.68	0.74
7:U:10:SER:HB2	15:d:76:ALA:HB2	1.67	0.74
7:U:62:LEU:HD22	7:U:87:LEU:HD21	1.67	0.74
11:Z:79:TYR:HE2	11:Z:91:ILE:HB	1.52	0.74
12:a:290:GLN:HB3	12:a:330:ARG:HH21	1.51	0.74
16:f:479:LEU:HD12	16:f:482:ILE:HD11	1.68	0.74
18:W:216:GLU:OE1	18:W:216:GLU:N	2.18	0.74
18:W:442:THR:O	18:W:446:ILE:HG23	1.87	0.74
1:A:56:LEU:O	1:A:59:ILE:HG22	1.87	0.74
2:B:70:ASP:OD2	16:f:606:VAL:HG21	1.87	0.74
3:C:150:MET:HA	3:C:331:ILE:HG12	1.68	0.74
6:F:67:GLN:CG	6:F:70:LYS:HD2	2.17	0.74
8:V:309:MET:HE1	8:V:335:VAL:HG21	1.69	0.74
12:a:18:GLN:HA	12:a:22:TRP:CD1	2.22	0.74
12:a:26:GLU:O	12:a:30:THR:HG23	1.87	0.74
16:f:241:PRO:HG2	16:f:259:PHE:HD2	1.52	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:811:LEU:CD1	16:f:878:GLU:HA	2.17	0.74
3:C:48:GLN:OE1	15:d:257:VAL:HG12	1.86	0.74
4:D:60:TYR:CD1	7:U:603:LEU:HD22	2.21	0.74
6:F:439:ALA:HA	25:L:78:THR:H	1.50	0.74
6:F:439:ALA:OXT	25:L:79:ALA:N	2.19	0.74
11:Z:12:HIS:ND1	11:Z:51:SER:OG	2.19	0.74
16:f:535:THR:O	16:f:538:ILE:HG13	1.87	0.74
16:f:788:MET:O	16:f:789:SER:OG	2.05	0.74
29:p:202:ARG:NH2	29:p:204:ASP:OD2	2.20	0.74
5:E:166:PRO:O	5:E:297:ARG:NH2	2.20	0.74
9:X:310:ARG:O	9:X:314:ARG:HB2	1.87	0.74
12:a:247:ARG:HE	12:a:247:ARG:HA	1.50	0.74
16:f:75:LEU:HD12	16:f:77:GLU:N	1.98	0.74
18:W:334:GLU:HB2	18:W:337:ALA:HA	1.69	0.74
3:C:333:SER:HA	3:C:336:MET:CE	2.16	0.74
6:F:210:GLU:OE1	6:F:210:GLU:N	2.19	0.74
6:F:384:LEU:O	6:F:388:THR:HG23	1.87	0.74
9:X:142:ARG:HB3	9:X:145:GLU:OE1	1.86	0.74
12:a:8:LEU:O	12:a:12:GLN:NE2	2.20	0.74
16:f:294:MET:HB3	16:f:807:ARG:HH22	1.50	0.74
3:C:296:ASN:OD1	3:C:297:ARG:N	2.20	0.74
4:D:64:GLU:CD	7:U:607:VAL:HG23	2.13	0.74
7:U:357:LYS:HA	7:U:392:TRP:CH2	2.22	0.74
8:V:237:THR:HA	8:V:240:LEU:CD2	2.16	0.74
9:X:255:LEU:CD1	9:X:267:VAL:HG23	2.17	0.74
10:Y:321:GLU:HA	10:Y:324:GLY:O	1.86	0.74
11:Z:136:GLU:OE1	11:Z:136:GLU:N	2.21	0.74
12:a:134:THR:O	12:a:138:VAL:HG22	1.88	0.74
12:a:290:GLN:HG2	12:a:330:ARG:HE	1.53	0.74
16:f:48:GLU:OE2	16:f:48:GLU:N	2.20	0.74
16:f:106:LEU:HG	16:f:137:ARG:HG3	1.69	0.74
16:f:855:GLN:OE1	16:f:855:GLN:HA	1.85	0.74
3:C:45:LEU:HB3	4:D:61:ILE:HG12	1.68	0.74
5:E:310:LEU:HD23	5:E:328:TYR:CD2	2.23	0.74
6:F:282:ILE:HD11	6:F:329:ILE:HG13	1.70	0.74
8:V:283:ASN:HB3	19:e:19:PHE:CE2	2.23	0.74
11:Z:142:GLU:OE2	11:Z:153:LYS:HA	1.88	0.74
12:a:7:PHE:CD2	12:a:59:LEU:HD11	2.22	0.74
15:d:9:TRP:HD1	15:d:10:ASN:H	1.34	0.74
1:A:99:THR:HG23	1:A:115:VAL:HA	1.69	0.74
2:B:225:TYR:OH	2:B:352:GLU:HG2	1.86	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:191:PRO:HG2	3:C:194:THR:CG2	2.18	0.74
3:C:324:ALA:O	3:C:328:ILE:HG13	1.87	0.74
5:E:66:GLU:OE1	5:E:66:GLU:N	2.21	0.74
7:U:454:GLY:HA3	7:U:458:ILE:HD11	1.70	0.74
7:U:813:TYR:CD1	7:U:815:ALA:HB3	2.23	0.74
7:U:830:THR:OG1	7:U:832:VAL:HG12	1.88	0.74
12:a:222:LEU:CD1	12:a:226:ARG:HG3	2.17	0.74
12:a:222:LEU:HD12	12:a:226:ARG:HG3	1.70	0.74
15:d:242:LEU:O	15:d:246:VAL:HG12	1.87	0.74
18:W:98:LYS:HZ2	18:W:138:VAL:HG13	1.52	0.74
1:A:73:ALA:HB2	2:B:140:ASP:N	2.03	0.74
1:A:253:GLY:O	1:A:257:VAL:HG22	1.87	0.74
1:A:306:LEU:HA	1:A:312:ARG:HD3	1.67	0.74
1:A:362:MET:HE1	1:A:389:CYS:HB2	1.68	0.74
4:D:131:ALA:O	4:D:132:LEU:HD13	1.87	0.74
4:D:164:TYR:OH	4:D:219:VAL:HG22	1.88	0.74
8:V:357:LEU:O	8:V:360:TYR:N	2.20	0.74
12:a:95:THR:HA	12:a:98:GLU:OE1	1.88	0.74
13:b:157:VAL:CG2	13:b:166:THR:HG23	2.15	0.74
14:c:55:GLY:O	14:c:112:TYR:N	2.21	0.74
25:l:16:GLN:OE1	25:l:16:GLN:N	2.21	0.74
2:B:261:GLY:C	2:B:265:LYS:HE2	2.13	0.74
3:C:196:LYS:HB2	34:C:501:ATP:O2B	1.88	0.74
5:E:130:VAL:HG21	5:E:185:ARG:HG2	1.69	0.74
5:E:194:ASN:CG	5:E:228:CYS:HA	2.13	0.74
6:F:209:LYS:HD2	6:F:325:GLN:HG3	1.70	0.74
7:U:368:ALA:CB	7:U:731:ILE:HD13	2.18	0.74
12:a:112:ILE:HD12	12:a:151:VAL:HG21	1.70	0.74
12:a:342:ASP:OD1	12:a:344:GLN:HG2	1.88	0.74
18:W:187:LEU:HD21	18:W:225:LYS:HB3	1.68	0.74
18:W:234:ASP:HB2	18:W:243:ILE:CD1	2.16	0.74
3:C:35:VAL:HG11	4:D:50:GLU:OE1	1.88	0.73
3:C:71:SER:HB2	4:D:112:TYR:HB3	1.68	0.73
7:U:250:PHE:CZ	7:U:333:MET:HE1	2.23	0.73
8:V:469:THR:HA	11:Z:247:LYS:NZ	2.02	0.73
10:Y:117:LYS:HB2	10:Y:151:TYR:CD1	2.23	0.73
13:b:2:VAL:HG11	13:b:47:ASN:HD21	1.53	0.73
14:c:54:MET:SD	14:c:55:GLY:N	2.61	0.73
16:f:413:SER:O	16:f:417:ILE:HG12	1.87	0.73
18:W:247:TYR:O	18:W:250:ILE:HG12	1.88	0.73
18:W:420:ASP:OD1	18:W:422:ASN:N	2.20	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:281:ILE:HD11	2:B:328:ILE:HD12	1.68	0.73
6:F:154:ASN:OD1	6:F:155:LYS:N	2.21	0.73
7:U:780:SER:HA	7:U:783:TYR:CE2	2.23	0.73
8:V:480:ILE:HD12	11:Z:264:SER:HB3	1.70	0.73
12:a:34:TRP:O	12:a:37:LEU:N	2.21	0.73
13:b:41:THR:C	13:b:43:SER:N	2.35	0.73
16:f:609:VAL:HB	16:f:639:LYS:HD2	1.70	0.73
18:W:187:LEU:HD13	18:W:226:TYR:HB3	1.70	0.73
5:E:87:LEU:HG	5:E:89:LYS:H	1.50	0.73
5:E:110:TYR:O	5:E:111:LEU:HG	1.89	0.73
6:F:65:GLU:OE1	6:F:65:GLU:N	2.21	0.73
6:F:126:THR:HG1	6:F:128:THR:HG1	1.26	0.73
7:U:264:VAL:HA	7:U:267:ASN:ND2	2.04	0.73
8:V:289:LEU:HB3	8:V:312:ALA:HB2	1.68	0.73
12:a:34:TRP:O	12:a:36:GLN:N	2.22	0.73
15:d:13:SER:HB2	15:d:14:PRO:HD3	1.69	0.73
16:f:257:ARG:HH22	16:f:286:LYS:HE3	1.53	0.73
20:g:158:GLY:O	21:h:83:ARG:NH2	2.22	0.73
1:A:151:ILE:HD12	1:A:152:PRO:HD2	1.70	0.73
1:A:402:LYS:O	1:A:403:ILE:HD13	1.89	0.73
2:B:103:ARG:HB3	2:B:160:ILE:HG21	1.68	0.73
4:D:355:SER:HA	4:D:393:ILE:HG23	1.70	0.73
5:E:229:ILE:HG23	5:E:274:LYS:HB2	1.71	0.73
12:a:280:MET:HE1	12:a:296:ILE:HD13	1.70	0.73
13:b:33:VAL:HG21	13:b:75:LEU:CD2	2.18	0.73
14:c:104:ARG:HH11	14:c:104:ARG:N	1.86	0.73
14:c:123:SER:O	14:c:127:ILE:HG13	1.88	0.73
16:f:680:ARG:NH1	16:f:680:ARG:HB2	2.04	0.73
2:B:383:LEU:HD12	2:B:423:LYS:HE3	1.68	0.73
4:D:400:GLU:N	4:D:400:GLU:OE2	2.21	0.73
6:F:284:PHE:HA	6:F:329:ILE:O	1.87	0.73
6:F:356:MET:HE1	6:F:392:ASN:CA	2.19	0.73
7:U:244:MET:SD	7:U:244:MET:N	2.61	0.73
8:V:348:PHE:O	8:V:354:LYS:NZ	2.18	0.73
8:V:352:SER:O	8:V:353:LEU:HD23	1.87	0.73
12:a:56:LEU:HA	12:a:59:LEU:CD2	2.17	0.73
16:f:333:LEU:HD12	16:f:334:ALA:H	1.51	0.73
16:f:475:ASN:HA	16:f:478:ARG:HE	1.53	0.73
16:f:862:ILE:HA	16:f:876:HIS:CD2	2.24	0.73
16:f:869:THR:HA	16:f:885:GLU:CG	2.18	0.73
18:W:92:LYS:HG3	18:W:93:ARG:H	1.51	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:326:MET:HE2	18:W:326:MET:N	2.03	0.73
18:W:366:MET:HE1	18:W:378:MET:HE1	1.68	0.73
3:C:248:MET:HE3	3:C:251:ILE:HD11	1.68	0.73
4:D:80:LYS:HD2	4:D:80:LYS:O	1.88	0.73
5:E:226:GLN:HB3	5:E:227:PRO:HD2	1.69	0.73
6:F:80:ILE:HD11	6:F:139:LEU:HD13	1.71	0.73
6:F:141:ASP:HB2	6:F:143:GLU:OE1	1.89	0.73
6:F:364:ARG:O	6:F:368:ILE:HD13	1.88	0.73
7:U:588:MET:SD	7:U:764:LEU:HD22	2.29	0.73
10:Y:387:ILE:HG13	11:Z:276:ILE:CD1	2.18	0.73
13:b:16:MET:CG	13:b:26:LEU:HB3	2.18	0.73
13:b:97:LEU:HB3	13:b:107:MET:SD	2.28	0.73
14:c:257:LYS:HD2	14:c:260:GLU:OE2	1.87	0.73
18:W:443:THR:O	18:W:446:ILE:HG12	1.89	0.73
22:i:209:GLU:OE1	22:i:230:GLN:NE2	2.21	0.73
9:X:131:ALA:O	9:X:134:VAL:HG12	1.87	0.73
10:Y:89:GLU:CG	10:Y:100:ILE:HB	2.17	0.73
11:Z:11:VAL:HG23	11:Z:162:ILE:HA	1.70	0.73
11:Z:37:GLY:HA2	11:Z:56:VAL:HG12	1.69	0.73
11:Z:211:TYR:OH	11:Z:227:ILE:HG21	1.89	0.73
14:c:116:PRO:HD2	14:c:118:PHE:CE2	2.22	0.73
7:U:199:ARG:HD3	7:U:223:LEU:HD11	1.71	0.73
12:a:35:HIS:HA	12:a:38:THR:HG23	1.69	0.73
16:f:269:ALA:HB3	16:f:270:LEU:HD22	1.71	0.73
16:f:766:GLN:OE1	16:f:768:LEU:HB2	1.89	0.73
16:f:828:ARG:CD	16:f:847:GLY:HA3	2.19	0.73
18:W:313:GLU:O	18:W:315:MET:HE3	1.88	0.73
5:E:357:ALA:HB3	5:E:359:HIS:CD2	2.24	0.73
6:F:356:MET:HE1	6:F:392:ASN:HA	1.71	0.73
7:U:32:ASN:HA	7:U:70:HIS:NE2	2.03	0.73
7:U:789:ILE:HG23	7:U:797:MET:SD	2.29	0.73
11:Z:65:ASP:HB3	11:Z:103:LYS:HE2	1.71	0.73
18:W:129:ARG:HH11	18:W:130:MET:HA	1.53	0.73
2:B:384:ILE:HG22	2:B:385:MET:HE3	1.71	0.73
13:b:59:GLU:N	13:b:59:GLU:OE2	2.22	0.73
13:b:132:LYS:NZ	13:b:160:LEU:HD12	2.03	0.73
3:C:227:GLY:O	3:C:272:THR:OG1	2.03	0.72
3:C:358:GLU:N	3:C:358:GLU:OE1	2.22	0.72
4:D:153:MET:HG3	4:D:228:ILE:HG13	1.70	0.72
7:U:54:PHE:CE2	7:U:56:SER:HB2	2.24	0.72
7:U:806:CYS:SG	7:U:809:SER:OG	2.45	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:68:ILE:O	15:d:69:PRO:C	2.32	0.72
1:A:112:ILE:HD12	1:A:122:VAL:HG22	1.70	0.72
1:A:416:VAL:HG12	1:A:417:ILE:HG23	1.71	0.72
2:B:243:THR:HG22	2:B:245:ALA:N	2.02	0.72
2:B:360:THR:O	2:B:364:ILE:HG22	1.89	0.72
3:C:159:LYS:O	3:C:163:GLU:HG3	1.89	0.72
5:E:132:TYR:HB3	5:E:135:ILE:HD13	1.70	0.72
5:E:199:VAL:HG11	5:E:234:GLU:HB2	1.71	0.72
8:V:414:TYR:HB2	8:V:417:ILE:HD11	1.70	0.72
12:a:373:ASP:OD2	15:d:251:ARG:NH1	2.22	0.72
13:b:88:THR:O	13:b:92:VAL:HG13	1.89	0.72
14:c:116:PRO:HA	14:c:147:PRO:HD2	1.70	0.72
14:c:302:ALA:O	14:c:306:THR:HG23	1.88	0.72
16:f:211:ILE:O	16:f:214:VAL:HG22	1.88	0.72
18:W:70:VAL:HA	18:W:73:MET:CE	2.18	0.72
18:W:321:VAL:O	18:W:323:ASP:N	2.22	0.72
3:C:127:LEU:HD23	3:C:129:ASN:HB3	1.70	0.72
3:C:376:VAL:HG12	3:C:377:HIS:H	1.52	0.72
4:D:53:PHE:O	4:D:56:VAL:HG22	1.89	0.72
4:D:177:VAL:HG11	4:D:215:LEU:HD21	1.69	0.72
4:D:272:THR:HG22	4:D:316:THR:HG22	1.70	0.72
4:D:353:ASN:ND2	4:D:393:ILE:HD13	2.05	0.72
5:E:142:ILE:HG22	5:E:183:LEU:HG	1.72	0.72
5:E:352:MET:O	5:E:355:ILE:HG22	1.89	0.72
6:F:202:ILE:HG21	6:F:240:CYS:SG	2.28	0.72
7:U:28:ASN:ND2	7:U:63:VAL:HG22	2.03	0.72
8:V:74:ASP:O	8:V:78:HIS:ND1	2.22	0.72
10:Y:101:ARG:HA	10:Y:104:MET:SD	2.30	0.72
10:Y:250:LEU:HD21	10:Y:256:VAL:HG12	1.71	0.72
11:Z:43:TRP:CE3	11:Z:48:LEU:HB2	2.24	0.72
18:W:341:PHE:CZ	18:W:354:LEU:HD22	2.24	0.72
5:E:139:SER:HA	5:E:142:ILE:CG1	2.19	0.72
7:U:27:LEU:HD11	7:U:38:ILE:HD11	1.72	0.72
7:U:793:LYS:HG3	7:U:794:ASP:H	1.53	0.72
9:X:143:TYR:HE1	10:Y:251:HIS:HB3	1.54	0.72
10:Y:300:ARG:NH2	10:Y:333:GLU:OE1	2.21	0.72
10:Y:371:LYS:O	10:Y:375:LEU:HD23	1.90	0.72
11:Z:44:GLN:HE21	11:Z:47:VAL:HG22	1.52	0.72
11:Z:79:TYR:CE2	11:Z:91:ILE:HB	2.25	0.72
11:Z:263:ALA:HB1	14:c:292:MET:CE	2.19	0.72
12:a:137:ASP:HA	12:a:140:GLU:OE1	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:210:ASN:OD1	14:c:212:LEU:N	2.21	0.72
16:f:573:ILE:O	16:f:576:ILE:HG22	1.89	0.72
18:W:45:GLU:HA	18:W:48:LEU:HD12	1.71	0.72
18:W:121:LYS:HB3	18:W:124:LEU:HD11	1.68	0.72
1:A:212:VAL:HG22	1:A:339:ARG:HB2	1.70	0.72
6:F:366:MET:HG3	6:F:396:CYS:SG	2.29	0.72
7:U:725:MET:HG3	14:c:183:HIS:CD2	2.25	0.72
14:c:224:SER:HB3	14:c:227:GLU:HG2	1.71	0.72
15:d:6:LYS:HG2	15:d:16:LEU:HD23	1.71	0.72
15:d:44:THR:HB	15:d:47:GLN:HB3	1.72	0.72
16:f:170:TRP:CA	16:f:173:LEU:HG	2.17	0.72
2:B:41:LYS:HA	2:B:278:ALA:HB3	1.70	0.72
3:C:395:SER:OG	3:C:396:GLU:N	2.20	0.72
7:U:243:LEU:CD1	7:U:913:ILE:HG23	2.17	0.72
8:V:162:GLU:OE1	8:V:203:LEU:HA	1.89	0.72
15:d:75:MET:HA	15:d:78:LEU:HD11	1.69	0.72
15:d:151:VAL:O	15:d:152:PHE:C	2.30	0.72
16:f:206:ASP:O	16:f:213:GLN:NE2	2.23	0.72
16:f:642:ALA:HB2	16:f:763:ARG:NH1	2.03	0.72
2:B:405:MET:HE2	2:B:405:MET:CA	2.17	0.72
3:C:24:TYR:CD2	4:D:40:LEU:HG	2.24	0.72
6:F:276:LYS:H	6:F:276:LYS:HD2	1.54	0.72
8:V:98:LEU:HD11	8:V:205:LEU:O	1.90	0.72
9:X:311:ALA:HA	9:X:315:ASP:OD2	1.90	0.72
11:Z:186:THR:HA	11:Z:189:GLN:NE2	2.04	0.72
14:c:55:GLY:N	14:c:112:TYR:HB2	2.04	0.72
16:f:466:LEU:HD13	16:f:469:TYR:HD2	1.54	0.72
16:f:657:ILE:HG13	16:f:658:ALA:N	2.04	0.72
3:C:102:ASN:OD1	3:C:102:ASN:N	2.16	0.72
4:D:263:PHE:CE2	4:D:265:ASP:HB2	2.25	0.72
4:D:316:THR:O	4:D:317:LEU:HD23	1.90	0.72
6:F:188:ILE:HD11	6:F:191:LEU:CG	2.09	0.72
6:F:208:HIS:HB3	6:F:211:LYS:HE3	1.72	0.72
7:U:525:ASN:HB2	7:U:528:ALA:CB	2.20	0.72
8:V:178:SER:O	8:V:179:LYS:NZ	2.19	0.72
8:V:276:PHE:HD1	8:V:277:PRO:HD2	1.53	0.72
10:Y:275:LEU:O	10:Y:278:VAL:HG12	1.90	0.72
11:Z:132:GLY:O	11:Z:134:PRO:HD3	1.88	0.72
12:a:57:ILE:O	12:a:61:GLU:HG2	1.90	0.72
12:a:251:LEU:HD12	12:a:252:LYS:H	1.55	0.72
18:W:215:GLN:CG	18:W:223:LYS:HD3	2.18	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:256:ILE:HD11	2:B:290:ILE:HG23	1.71	0.72
7:U:249:CYS:SG	7:U:329:LEU:HG	2.29	0.72
12:a:7:PHE:CE1	12:a:56:LEU:HB3	2.25	0.72
12:a:190:VAL:HA	12:a:225:LEU:HD11	1.72	0.72
12:a:363:MET:HE3	14:c:307:VAL:CG1	2.18	0.72
13:b:35:ILE:HG21	13:b:184:ILE:HG12	1.71	0.72
16:f:240:VAL:O	16:f:243:PRO:HD2	1.88	0.72
18:W:405:LYS:HB2	18:W:414:ASN:OD1	1.90	0.72
5:E:142:ILE:HG22	5:E:183:LEU:CG	2.18	0.72
5:E:192:ASP:OD1	5:E:227:PRO:HB2	1.90	0.72
6:F:329:ILE:O	6:F:329:ILE:HD12	1.90	0.72
7:U:462:LEU:HD21	7:U:493:VAL:HG12	1.72	0.72
8:V:411:SER:HB2	8:V:447:ILE:HG12	1.72	0.72
10:Y:123:ALA:O	10:Y:127:THR:HG22	1.90	0.72
10:Y:133:ALA:O	10:Y:137:ARG:HG2	1.90	0.72
12:a:87:MET:SD	12:a:89:ASP:N	2.59	0.72
16:f:192:VAL:HB	16:f:193:PRO:HD3	1.72	0.72
18:W:253:THR:O	18:W:257:GLN:C	2.33	0.72
18:W:361:HIS:HA	18:W:364:ARG:NH1	2.05	0.72
3:C:254:ILE:HG13	3:C:254:ILE:O	1.89	0.71
3:C:336:MET:O	3:C:338:LEU:HD12	1.90	0.71
3:C:347:ILE:HD13	3:C:383:PHE:HB3	1.71	0.71
5:E:172:LEU:HB3	5:E:299:ILE:HB	1.70	0.71
5:E:303:LEU:HG	5:E:303:LEU:O	1.90	0.71
6:F:211:LYS:O	6:F:214:ASN:HB3	1.89	0.71
7:U:524:LYS:NZ	7:U:562:GLU:O	2.22	0.71
9:X:71:LYS:O	9:X:74:ARG:HG2	1.90	0.71
10:Y:229:ILE:HB	10:Y:295:TYR:CE1	2.25	0.71
10:Y:237:ARG:HA	10:Y:241:ILE:HB	1.71	0.71
11:Z:279:LYS:HA	11:Z:282:ASN:ND2	2.05	0.71
16:f:418:LEU:HD13	16:f:425:GLY:HA2	1.70	0.71
16:f:791:VAL:HA	16:f:797:LEU:HD22	1.72	0.71
1:A:263:MET:O	1:A:266:THR:HG22	1.89	0.71
1:A:274:PHE:HB3	1:A:277:ILE:HD13	1.70	0.71
2:B:248:LEU:HB2	2:B:282:VAL:HG12	1.72	0.71
5:E:175:PRO:HG2	5:E:178:THR:CG2	2.18	0.71
5:E:320:ILE:HD12	5:E:321:THR:N	2.05	0.71
5:E:374:VAL:HG22	5:E:378:LYS:HD3	1.70	0.71
10:Y:98:SER:O	10:Y:101:ARG:HG2	1.90	0.71
16:f:125:ILE:CG1	16:f:129:LEU:HB2	2.20	0.71
16:f:171:GLN:O	16:f:178:LYS:HB2	1.90	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:446:LEU:HD12	16:f:480:GLY:HA2	1.72	0.71
16:f:696:LEU:O	16:f:705:ASN:ND2	2.23	0.71
7:U:892:LEU:HD11	7:U:906:LEU:HD21	1.71	0.71
8:V:323:GLY:O	8:V:327:THR:HG23	1.90	0.71
9:X:283:GLN:HG2	9:X:312:GLU:OE2	1.91	0.71
11:Z:7:GLN:HG2	11:Z:46:LYS:HD2	1.73	0.71
12:a:332:HIS:O	12:a:333:MET:HE2	1.90	0.71
15:d:118:GLU:O	15:d:120:GLU:N	2.24	0.71
18:W:152:ILE:HD13	18:W:165:ILE:CD1	2.19	0.71
18:W:234:ASP:HB2	18:W:243:ILE:HD11	1.71	0.71
2:B:74:MET:HE1	16:f:609:VAL:HG22	1.73	0.71
6:F:208:HIS:CB	6:F:211:LYS:HE3	2.21	0.71
6:F:225:MET:HE2	6:F:354:PHE:CZ	2.25	0.71
9:X:109:LEU:HA	9:X:112:GLU:HG2	1.71	0.71
13:b:12:ASN:O	13:b:12:ASN:ND2	2.24	0.71
13:b:87:CYS:O	13:b:91:ARG:HG3	1.90	0.71
15:d:45:LYS:HA	15:d:48:LEU:HB2	1.73	0.71
16:f:466:LEU:O	16:f:470:VAL:HG23	1.89	0.71
16:f:683:GLU:OE2	16:f:686:LEU:HB3	1.91	0.71
2:B:74:MET:HE1	16:f:609:VAL:HG13	1.72	0.71
5:E:195:PHE:HE1	5:E:229:ILE:CG2	2.02	0.71
8:V:128:ARG:O	8:V:132:LEU:HG	1.89	0.71
16:f:367:SER:HB3	16:f:370:MET:HG2	1.71	0.71
5:E:127:PRO:C	5:E:193:CYS:HB3	2.16	0.71
7:U:353:LEU:HG	7:U:357:LYS:NZ	2.05	0.71
8:V:259:LEU:HD12	8:V:259:LEU:O	1.91	0.71
10:Y:336:ARG:NH2	19:e:44:ASP:OD1	2.21	0.71
11:Z:178:ASP:OD1	11:Z:179:ILE:HG12	1.89	0.71
12:a:194:GLN:OE1	12:a:225:LEU:HB3	1.89	0.71
12:a:269:LEU:O	12:a:272:ILE:HG22	1.90	0.71
13:b:48:ASN:ND2	13:b:64:LEU:HB3	2.04	0.71
16:f:557:TRP:O	16:f:560:LEU:HG	1.90	0.71
18:W:253:THR:HG23	18:W:254:PRO:HD3	1.72	0.71
5:E:145:LEU:HD23	5:E:183:LEU:HD22	1.72	0.71
6:F:418:GLU:OE1	6:F:418:GLU:N	2.24	0.71
7:U:680:VAL:HB	7:U:683:VAL:HB	1.73	0.71
8:V:358:MET:CE	8:V:359:PRO:HD3	2.18	0.71
10:Y:157:ILE:O	10:Y:161:THR:HG23	1.90	0.71
14:c:51:MET:SD	14:c:51:MET:N	2.64	0.71
18:W:403:PHE:CE2	18:W:417:ARG:HD3	2.25	0.71
28:O:2:THR:N	28:O:170:SER:HG	1.89	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:90:GLU:O	1:A:92:PRO:HD2	1.91	0.71
4:D:130:VAL:HG21	4:D:139:LEU:HD11	1.72	0.71
5:E:50:LEU:HD11	6:F:83:ASN:HD22	1.55	0.71
5:E:212:ALA:HA	5:E:216:ARG:NH1	2.05	0.71
11:Z:127:LYS:O	11:Z:129:LYS:HE2	1.89	0.71
12:a:251:LEU:HD12	12:a:252:LYS:N	2.05	0.71
16:f:125:ILE:HB	16:f:129:LEU:HD12	1.73	0.71
16:f:268:LEU:CA	16:f:272:LEU:HD22	2.20	0.71
16:f:653:ALA:O	16:f:657:ILE:HG23	1.89	0.71
16:f:687:ARG:NH2	16:f:688:ARG:HB2	2.05	0.71
3:C:42:LEU:O	3:C:42:LEU:HD23	1.91	0.71
4:D:267:ILE:HG21	4:D:309:MET:HE2	1.71	0.71
6:F:65:GLU:OE2	13:b:72:LEU:HD12	1.91	0.71
7:U:692:ALA:HB2	7:U:733:ALA:HB1	1.73	0.71
7:U:802:TYR:N	7:U:878:LEU:O	2.24	0.71
10:Y:129:ASP:OD1	10:Y:130:LYS:HG2	1.90	0.71
14:c:54:MET:HE1	14:c:111:TRP:HB3	1.73	0.71
15:d:47:GLN:O	15:d:51:ALA:N	2.23	0.71
16:f:113:MET:HE1	16:f:115:PRO:HA	1.72	0.71
16:f:230:CYS:HB3	16:f:232:TYR:CE1	2.26	0.71
16:f:670:MET:HA	16:f:670:MET:CE	2.15	0.71
18:W:79:GLU:O	18:W:83:LEU:HG	1.90	0.71
1:A:124:ASP:HB3	6:F:86:LEU:HD12	1.73	0.71
2:B:412:MET:HE1	3:C:174:LEU:HD12	1.71	0.71
3:C:24:TYR:HD2	4:D:40:LEU:HG	1.54	0.71
3:C:150:MET:HA	3:C:331:ILE:CD1	2.21	0.71
6:F:85:THR:HG22	6:F:87:PRO:HD2	1.71	0.71
6:F:218:GLN:OE1	6:F:218:GLN:N	2.23	0.71
7:U:904:LYS:NZ	7:U:905:PRO:O	2.24	0.71
13:b:25:ARG:O	13:b:27:GLN:N	2.23	0.71
14:c:292:MET:HG2	15:d:253:LEU:HD22	1.71	0.71
3:C:24:TYR:HE2	4:D:41:TYR:HB2	1.56	0.70
3:C:105:ILE:O	3:C:108:VAL:HG22	1.91	0.70
4:D:396:ALA:O	4:D:397:LYS:HG2	1.90	0.70
7:U:645:ASN:O	7:U:648:VAL:HG12	1.91	0.70
11:Z:22:HIS:HA	11:Z:25:ARG:CD	2.19	0.70
11:Z:211:TYR:CZ	11:Z:227:ILE:HG21	2.26	0.70
16:f:524:MET:HE2	16:f:776:LEU:CD1	2.21	0.70
18:W:145:LEU:HD21	18:W:171:VAL:CG1	2.21	0.70
32:S:148:LEU:HD23	32:S:178:VAL:HG12	1.71	0.70
1:A:101:ILE:HG23	1:A:137:GLY:H	1.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:148:TYR:CE1	3:C:202:ALA:HB1	2.25	0.70
4:D:100:THR:HG21	4:D:112:TYR:OH	1.91	0.70
6:F:305:GLU:N	6:F:305:GLU:OE2	2.22	0.70
7:U:340:GLN:HA	7:U:343:ILE:HD11	1.71	0.70
7:U:409:GLY:CA	7:U:445:ALA:HB1	2.20	0.70
7:U:545:LEU:CD2	7:U:577:ILE:HG21	2.20	0.70
8:V:192:MET:HA	8:V:192:MET:CE	2.20	0.70
8:V:480:ILE:HB	11:Z:260:VAL:CG1	2.15	0.70
11:Z:34:ARG:NH2	11:Z:98:GLY:HA3	2.05	0.70
11:Z:256:GLN:HA	11:Z:259:VAL:HG12	1.72	0.70
12:a:148:VAL:HG21	12:a:151:VAL:HG12	1.72	0.70
14:c:201:TYR:HD1	14:c:202:SER:H	1.39	0.70
18:W:299:ILE:HD12	18:W:300:PRO:HD2	1.72	0.70
1:A:74:PRO:O	1:A:76:ALA:N	2.23	0.70
1:A:194:PRO:C	1:A:195:LEU:HD23	2.16	0.70
5:E:87:LEU:HD12	5:E:88:ASP:N	2.05	0.70
5:E:197:LYS:HD2	5:E:197:LYS:H	1.54	0.70
6:F:188:ILE:HG12	6:F:191:LEU:HB2	1.73	0.70
13:b:53:THR:O	13:b:58:CYS:HB2	1.91	0.70
16:f:91:SER:HB2	16:f:110:TYR:CB	2.15	0.70
16:f:416:MET:HE2	16:f:801:VAL:HG13	1.72	0.70
4:D:113:VAL:CG2	4:D:138:ALA:HA	2.17	0.70
6:F:365:ILE:HG13	34:F:501:ATP:C2	2.27	0.70
7:U:353:LEU:HG	7:U:357:LYS:HE2	1.74	0.70
7:U:595:ASN:OD1	7:U:597:LYS:HG3	1.92	0.70
7:U:748:LEU:HD23	7:U:760:VAL:HA	1.73	0.70
8:V:292:THR:O	8:V:295:ILE:HG13	1.92	0.70
10:Y:43:ALA:HB1	10:Y:46:ARG:HH21	1.57	0.70
10:Y:387:ILE:HG13	11:Z:276:ILE:HD11	1.72	0.70
14:c:56:LEU:HB2	14:c:73:PHE:CE1	2.26	0.70
16:f:94:LYS:NZ	16:f:137:ARG:HH11	1.87	0.70
16:f:121:PHE:HB3	16:f:129:LEU:HD22	1.74	0.70
16:f:179:VAL:O	16:f:182:GLU:HG2	1.91	0.70
16:f:425:GLY:C	16:f:429:ILE:HD12	2.15	0.70
2:B:184:TYR:HD2	2:B:194:ILE:HD11	1.55	0.70
5:E:153:LEU:HD23	5:E:154:THR:N	2.06	0.70
7:U:124:LYS:C	7:U:124:LYS:HD3	2.16	0.70
7:U:469:SER:N	7:U:473:VAL:HG11	2.06	0.70
8:V:419:LEU:O	8:V:422:ILE:HG22	1.92	0.70
16:f:529:SER:OG	16:f:531:ASN:OD1	2.06	0.70
16:f:548:THR:HG22	16:f:552:ASP:OD2	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:K:60:GLU:OE2	24:K:62:SER:N	2.23	0.70
21:h:8:SER:OG	21:h:122:GLN:O	2.09	0.70
5:E:81:VAL:HG21	5:E:100:LEU:HD23	1.73	0.70
5:E:331:ILE:HD12	5:E:331:ILE:H	1.54	0.70
7:U:550:VAL:HG21	7:U:768:GLN:HG3	1.72	0.70
8:V:68:ASP:OD1	8:V:108:LEU:HG	1.91	0.70
8:V:78:HIS:NE2	8:V:100:MET:HE2	2.06	0.70
14:c:105:PRO:O	14:c:106:GLU:C	2.33	0.70
18:W:101:VAL:O	18:W:105:VAL:HG22	1.91	0.70
18:W:188:GLU:O	18:W:192:LEU:HD13	1.92	0.70
2:B:225:TYR:CZ	2:B:352:GLU:HG2	2.27	0.70
6:F:382:GLU:OE1	6:F:382:GLU:N	2.24	0.70
7:U:220:LEU:HD11	7:U:228:ALA:HB3	1.71	0.70
9:X:143:TYR:CE2	10:Y:252:SER:HB2	2.25	0.70
9:X:202:CYS:O	9:X:204:PRO:HD3	1.91	0.70
10:Y:301:ILE:HD13	10:Y:342:ARG:HD2	1.73	0.70
11:Z:23:PHE:CD2	11:Z:126:VAL:HG21	2.27	0.70
12:a:188:LEU:HG	12:a:189:PRO:HD2	1.71	0.70
16:f:562:LEU:HA	16:f:565:ASN:HD21	1.57	0.70
25:L:150:SER:O	25:L:152:ASN:N	2.24	0.70
3:C:351:MET:HE1	3:C:359:VAL:HG12	1.72	0.70
5:E:165:ILE:C	5:E:167:PRO:HD2	2.17	0.70
6:F:436:GLN:HE21	6:F:437:TYR:HB3	1.56	0.70
7:U:151:ILE:HG12	7:U:166:THR:HG21	1.74	0.70
9:X:80:ILE:HG22	9:X:81:SER:H	1.56	0.70
9:X:82:LYS:HE3	9:X:122:ARG:HE	1.56	0.70
9:X:123:THR:O	9:X:127:GLN:HG2	1.92	0.70
12:a:215:GLU:HA	12:a:218:MET:SD	2.32	0.70
12:a:247:ARG:HH21	12:a:250:THR:HB	1.57	0.70
14:c:27:THR:HG21	14:c:179:SER:HB2	1.72	0.70
16:f:9:ALA:O	16:f:13:PRO:HD2	1.91	0.70
18:W:136:ILE:HG23	18:W:144:ARG:HH12	1.56	0.70
23:J:175:ASN:O	23:J:175:ASN:ND2	2.24	0.70
28:o:56:THR:HG23	28:o:87:MET:HE1	1.73	0.70
1:A:243:SER:HG	2:B:268:ARG:HH22	1.37	0.70
3:C:403:LYS:HB3	21:H:155:PHE:CZ	2.27	0.70
4:D:378:ILE:CG1	4:D:406:VAL:HG11	2.21	0.70
7:U:360:VAL:HG11	7:U:392:TRP:CH2	2.27	0.70
7:U:757:MET:HE2	7:U:757:MET:N	2.06	0.70
9:X:240:ASP:OD2	9:X:275:LEU:HD21	1.92	0.70
9:X:337:ARG:HA	9:X:340:GLU:OE2	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:125:VAL:HA	13:b:129:LYS:CD	2.19	0.70
14:c:285:GLU:O	14:c:288:VAL:HG12	1.91	0.70
16:f:566:HIS:ND1	16:f:577:LEU:HD11	2.07	0.70
16:f:577:LEU:HA	16:f:580:LEU:CD2	2.21	0.70
16:f:621:ASP:HA	16:f:626:GLU:CD	2.16	0.70
16:f:825:MET:HA	16:f:864:GLY:CA	2.21	0.70
1:A:369:ARG:HH21	1:A:372:LEU:HD13	1.56	0.70
2:B:81:ASN:O	2:B:84:GLN:HG3	1.92	0.70
9:X:397:TYR:HE1	11:Z:257:MET:HG2	1.53	0.70
11:Z:147:ASP:OD1	11:Z:148:GLY:N	2.25	0.70
16:f:214:VAL:O	16:f:217:LEU:HG	1.91	0.70
16:f:428:GLN:O	16:f:431:LYS:HG2	1.92	0.70
16:f:637:LYS:HE3	16:f:655:LEU:HD11	1.73	0.70
1:A:177:VAL:HG22	1:A:224:LEU:HD23	1.73	0.69
2:B:174:MET:HB3	2:B:249:ARG:O	1.92	0.69
4:D:120:ASP:OD2	4:D:123:LEU:HG	1.91	0.69
9:X:397:TYR:HD2	10:Y:365:GLN:HB3	1.57	0.69
15:d:55:LEU:O	15:d:56:GLU:C	2.35	0.69
16:f:304:PHE:CE2	16:f:310:ASP:HB2	2.27	0.69
16:f:601:ALA:O	16:f:639:LYS:N	2.18	0.69
16:f:773:LYS:O	16:f:776:LEU:HD23	1.92	0.69
1:A:363:SER:HB3	1:A:403:ILE:HD12	1.74	0.69
3:C:233:GLU:O	3:C:236:VAL:HG12	1.92	0.69
4:D:385:LEU:HD23	4:D:388:ARG:HD2	1.74	0.69
5:E:54:GLY:HA2	6:F:135:PRO:HD3	1.72	0.69
7:U:59:PHE:O	7:U:63:VAL:HG23	1.92	0.69
7:U:357:LYS:O	7:U:360:VAL:HG12	1.92	0.69
7:U:516:LEU:HD21	7:U:532:MET:CE	2.21	0.69
9:X:136:LEU:HA	9:X:139:ASP:OD1	1.92	0.69
10:Y:60:SER:OG	10:Y:61:LEU:N	2.24	0.69
11:Z:122:VAL:HG12	11:Z:137:ALA:CB	2.22	0.69
12:a:69:HIS:HB2	12:a:70:ARG:HH11	1.57	0.69
14:c:255:TYR:HE1	14:c:280:PRO:HD3	1.56	0.69
18:W:178:GLU:HG3	18:W:181:GLU:HB3	1.75	0.69
4:D:366:ARG:HD2	4:D:403:TYR:HE2	1.57	0.69
7:U:573:ASP:OD1	7:U:575:ASP:N	2.25	0.69
10:Y:263:LEU:HD12	10:Y:271:PHE:CE2	2.27	0.69
14:c:71:ASP:OD1	14:c:72:VAL:N	2.25	0.69
15:d:116:HIS:NE2	15:d:140:GLU:CD	2.49	0.69
16:f:267:ARG:HB3	16:f:272:LEU:HD11	1.74	0.69
16:f:724:ASN:OD1	16:f:725:SER:N	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:787:LEU:O	16:f:792:ALA:N	2.24	0.69
18:W:20:TYR:HE1	18:W:53:GLN:CB	2.06	0.69
18:W:246:HIS:O	18:W:250:ILE:HG23	1.91	0.69
1:A:223:THR:N	34:A:501:ATP:O1B	2.19	0.69
2:B:54:PRO:HG3	2:B:60:LEU:CD2	2.23	0.69
2:B:256:ILE:HG12	2:B:305:ILE:CD1	2.22	0.69
5:E:158:LEU:HD12	5:E:161:ARG:HH21	1.56	0.69
5:E:201:SER:O	5:E:204:VAL:HG12	1.92	0.69
8:V:366:ALA:O	8:V:369:THR:HG22	1.92	0.69
9:X:369:ILE:HB	10:Y:310:SER:HB2	1.74	0.69
10:Y:86:GLU:HA	10:Y:89:GLU:OE2	1.92	0.69
13:b:40:LYS:O	13:b:47:ASN:ND2	2.26	0.69
16:f:114:ALA:HB1	16:f:118:ASN:ND2	2.08	0.69
16:f:221:ILE:HA	16:f:259:PHE:HZ	1.55	0.69
1:A:224:LEU:CD2	34:A:501:ATP:H2'	2.14	0.69
2:B:284:ILE:CG2	2:B:287:ILE:HD13	2.22	0.69
3:C:395:SER:OG	3:C:397:LYS:NZ	2.24	0.69
5:E:165:ILE:N	5:E:166:PRO:HD2	2.07	0.69
5:E:219:PHE:O	5:E:223:ARG:HG2	1.92	0.69
7:U:446:LEU:CD1	7:U:457:ILE:HD11	2.21	0.69
7:U:796:LYS:C	7:U:797:MET:HE2	2.18	0.69
8:V:237:THR:HA	8:V:240:LEU:HD23	1.74	0.69
9:X:138:PHE:HE2	9:X:175:LYS:HB3	1.57	0.69
9:X:233:TYR:HA	9:X:254:MET:HE1	1.73	0.69
11:Z:186:THR:HA	11:Z:189:GLN:HE21	1.57	0.69
15:d:50:LEU:O	15:d:54:ILE:N	2.26	0.69
18:W:151:THR:HA	18:W:154:GLU:OE1	1.92	0.69
1:A:117:GLN:OE1	1:A:117:GLN:N	2.25	0.69
1:A:268:LYS:HD2	1:A:269:ALA:N	2.08	0.69
2:B:66:GLU:HG2	7:U:835:ILE:HG23	1.73	0.69
8:V:482:PHE:HZ	10:Y:381:GLN:HB2	1.57	0.69
9:X:335:LEU:HD23	9:X:368:MET:HE1	1.74	0.69
12:a:185:ILE:HB	12:a:187:ASP:CG	2.16	0.69
16:f:329:ASN:O	16:f:333:LEU:HG	1.91	0.69
18:W:47:LEU:CD2	18:W:73:MET:HE1	2.22	0.69
18:W:149:LEU:O	18:W:153:LYS:HG2	1.93	0.69
7:U:364:VAL:HA	7:U:366:HIS:CE1	2.28	0.69
10:Y:312:ARG:O	10:Y:356:THR:HG23	1.93	0.69
11:Z:183:THR:HA	11:Z:189:GLN:HE22	1.56	0.69
11:Z:226:ILE:CD1	18:W:445:LEU:HD21	2.22	0.69
12:a:257:GLN:HG2	12:a:259:PRO:O	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:a:342:ASP:N	12:a:345:GLN:OE1	2.25	0.69
18:W:41:GLN:OE1	18:W:44:ILE:HG13	1.92	0.69
18:W:42:GLU:HA	18:W:45:GLU:OE2	1.93	0.69
1:A:100:LYS:NZ	1:A:137:GLY:O	2.15	0.69
1:A:266:THR:HG23	1:A:267:LYS:HG3	1.75	0.69
1:A:284:ARG:HD3	1:A:300:LEU:HD21	1.75	0.69
2:B:81:ASN:OD1	7:U:828:VAL:HG21	1.93	0.69
2:B:411:ARG:NH1	16:f:50:LYS:O	2.25	0.69
4:D:384:MET:O	4:D:387:VAL:HG22	1.91	0.69
5:E:210:GLU:HG2	5:E:213:ARG:HH21	1.58	0.69
8:V:176:MET:CE	8:V:217:VAL:HG23	2.22	0.69
8:V:323:GLY:HA3	19:e:24:ALA:HA	1.73	0.69
8:V:434:ALA:O	8:V:438:VAL:HG22	1.93	0.69
10:Y:57:LEU:HD23	10:Y:63:TRP:CD2	2.28	0.69
10:Y:222:TYR:O	10:Y:226:VAL:HG23	1.92	0.69
12:a:231:GLN:HB2	12:a:234:ILE:CG2	2.22	0.69
16:f:131:MET:CE	16:f:170:TRP:HB2	2.23	0.69
16:f:819:TYR:OH	16:f:853:VAL:HG23	1.93	0.69
18:W:141:GLU:O	18:W:145:LEU:HG	1.92	0.69
18:W:254:PRO:HA	18:W:258:ALA:CB	2.22	0.69
24:k:18:GLU:OE1	24:k:18:GLU:N	2.25	0.69
31:r:18:ASP:OD2	31:r:34:LYS:NZ	2.24	0.69
4:D:82:ILE:HD11	4:D:133:HIS:CD2	2.28	0.69
6:F:89:LEU:O	6:F:153:VAL:HG22	1.93	0.69
6:F:92:ASN:OD1	6:F:149:ASP:N	2.26	0.69
6:F:274:LEU:HA	6:F:277:GLU:HB3	1.74	0.69
7:U:531:ASP:OD1	7:U:532:MET:N	2.26	0.69
7:U:727:LYS:O	7:U:731:ILE:HG22	1.93	0.69
8:V:113:LEU:HD11	8:V:174:PHE:CD2	2.28	0.69
14:c:41:MET:HE1	14:c:112:TYR:HA	1.74	0.69
14:c:231:LEU:O	14:c:298:GLN:NE2	2.22	0.69
16:f:13:PRO:HG3	16:f:41:LYS:NZ	2.07	0.69
16:f:162:LEU:O	16:f:165:GLU:HG3	1.93	0.69
16:f:377:VAL:O	16:f:381:VAL:HG23	1.93	0.69
18:W:17:GLU:OE1	18:W:57:ALA:HA	1.93	0.69
18:W:385:SER:HB3	18:W:388:GLU:OE2	1.93	0.69
4:D:50:GLU:OE2	4:D:54:LEU:HD22	1.93	0.69
4:D:131:ALA:C	4:D:132:LEU:HD22	2.18	0.69
5:E:212:ALA:O	5:E:216:ARG:HG2	1.93	0.69
6:F:151:VAL:CG2	6:F:160:ILE:HG23	2.20	0.69
7:U:172:ASP:OD1	7:U:172:ASP:N	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:467:TYR:HA	8:V:471:GLU:CB	2.22	0.69
16:f:442:SER:O	16:f:446:LEU:HD13	1.93	0.69
16:f:718:ASP:N	16:f:719:PRO:HD3	2.08	0.69
1:A:427:PRO:HA	23:J:169:ARG:HH22	1.58	0.68
3:C:406:LYS:HG2	22:I:80:THR:CG2	2.23	0.68
4:D:169:GLY:CA	4:D:343:LEU:HD13	2.22	0.68
7:U:128:GLN:HA	7:U:131:GLU:OE1	1.93	0.68
8:V:466:ILE:CD1	8:V:470:ARG:HB2	2.21	0.68
12:a:112:ILE:HD12	12:a:151:VAL:HG11	1.73	0.68
13:b:6:THR:HB	13:b:48:ASN:O	1.94	0.68
14:c:251:LEU:HD11	14:c:283:HIS:HB3	1.74	0.68
15:d:106:LEU:HB3	15:d:115:PHE:HA	1.74	0.68
15:d:181:CYS:O	15:d:182:ILE:C	2.35	0.68
16:f:560:LEU:O	16:f:564:LEU:HD12	1.92	0.68
18:W:169:LEU:HD21	18:W:189:GLN:NE2	2.07	0.68
1:A:292:ASP:OD2	2:B:303:ARG:HG2	1.94	0.68
2:B:232:LYS:NZ	34:B:501:ATP:O1B	2.26	0.68
3:C:132:ASP:CB	3:C:136:SER:HB3	2.23	0.68
4:D:272:THR:HG22	4:D:316:THR:CG2	2.23	0.68
4:D:366:ARG:HD2	4:D:403:TYR:CE2	2.28	0.68
7:U:324:LYS:HG3	7:U:325:MET:N	2.07	0.68
7:U:813:TYR:CE1	7:U:815:ALA:HB3	2.27	0.68
9:X:143:TYR:CZ	10:Y:252:SER:HB2	2.28	0.68
10:Y:81:LEU:HB3	10:Y:107:LYS:HG2	1.76	0.68
10:Y:325:VAL:HG23	19:e:65:TYR:CA	2.21	0.68
11:Z:250:TYR:O	11:Z:253:THR:OG1	2.10	0.68
11:Z:263:ALA:HB1	14:c:292:MET:HE1	1.74	0.68
18:W:180:LYS:CD	18:W:222:LEU:HD21	2.22	0.68
19:e:59:GLU:HG2	19:e:65:TYR:HD2	1.58	0.68
1:A:309:PHE:CE1	6:F:181:PRO:HG3	2.29	0.68
2:B:102:LEU:HD23	2:B:138:PHE:CZ	2.28	0.68
2:B:251:VAL:HB	2:B:254:GLU:HG2	1.75	0.68
4:D:323:ARG:NH1	4:D:324:PRO:O	2.27	0.68
9:X:264:PRO:O	9:X:267:VAL:HG12	1.93	0.68
11:Z:21:ASP:O	11:Z:25:ARG:HG2	1.92	0.68
12:a:45:VAL:HG21	12:a:79:ILE:HD11	1.74	0.68
12:a:87:MET:CE	12:a:89:ASP:HB2	2.23	0.68
16:f:655:LEU:HD23	16:f:659:LEU:CD1	2.23	0.68
1:A:121:PHE:HA	6:F:88:TYR:O	1.94	0.68
3:C:332:HIS:O	3:C:336:MET:HE1	1.93	0.68
5:E:364:GLN:HA	5:E:367:PHE:CD1	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:573:ASP:O	7:U:579:ARG:NH1	2.25	0.68
8:V:402:VAL:O	8:V:405:THR:HG22	1.93	0.68
8:V:490:SER:O	11:Z:275:LEU:HD12	1.93	0.68
10:Y:233:ARG:N	10:Y:234:PRO:HD3	2.09	0.68
11:Z:127:LYS:HB3	11:Z:128:PRO:HD3	1.75	0.68
12:a:232:TRP:CE3	12:a:253:THR:HA	2.27	0.68
12:a:293:PHE:CE2	12:a:329:LYS:HA	2.26	0.68
16:f:307:LEU:HB3	16:f:309:GLU:OE1	1.93	0.68
5:E:139:SER:CA	5:E:142:ILE:HG12	2.22	0.68
6:F:405:MET:HE3	6:F:405:MET:CA	2.22	0.68
7:U:137:MET:N	7:U:137:MET:SD	2.67	0.68
7:U:155:LEU:HD23	7:U:188:MET:CE	2.24	0.68
7:U:204:ILE:HG13	7:U:205:TYR:N	2.08	0.68
7:U:262:SER:O	7:U:265:ILE:HG12	1.92	0.68
7:U:557:TYR:O	7:U:559:ARG:HD3	1.94	0.68
8:V:438:VAL:HG21	8:V:451:ILE:HD12	1.75	0.68
9:X:278:ARG:HG2	9:X:279:TYR:CE1	2.29	0.68
11:Z:217:THR:CG2	11:Z:219:LYS:HD3	2.23	0.68
16:f:65:GLU:O	16:f:69:SER:OG	2.11	0.68
16:f:543:MET:O	16:f:543:MET:SD	2.52	0.68
31:R:46:MET:HE3	38:R:301:LDZ:H17	1.76	0.68
1:A:52:ILE:HD11	2:B:69:LYS:CA	2.23	0.68
2:B:136:LEU:CD1	2:B:158:ALA:HB1	2.23	0.68
3:C:190:GLY:HA3	3:C:196:LYS:CE	2.23	0.68
7:U:349:ASP:OD1	7:U:351:MET:N	2.25	0.68
7:U:366:HIS:O	7:U:370:VAL:HG23	1.93	0.68
13:b:2:VAL:HG21	13:b:47:ASN:OD1	1.93	0.68
14:c:251:LEU:CG	14:c:283:HIS:HB3	2.22	0.68
18:W:248:ARG:HD3	18:W:290:ILE:HD11	1.74	0.68
3:C:59:LEU:HD12	3:C:59:LEU:O	1.94	0.68
5:E:34:LYS:HD2	5:E:34:LYS:O	1.92	0.68
12:a:148:VAL:HG22	12:a:150:SER:H	1.59	0.68
12:a:214:GLY:C	12:a:340:VAL:HG21	2.18	0.68
16:f:38:ASP:OD1	16:f:39:LYS:N	2.27	0.68
16:f:466:LEU:O	16:f:481:SER:OG	2.12	0.68
1:A:414:ASN:O	1:A:419:SER:OG	2.10	0.68
4:D:153:MET:HE1	4:D:257:ASN:HD22	1.58	0.68
4:D:163:MET:HE1	4:D:221:HIS:NE2	2.08	0.68
5:E:33:LEU:HD11	6:F:67:GLN:N	2.02	0.68
5:E:375:ALA:HA	5:E:378:LYS:NZ	2.08	0.68
7:U:396:ALA:HB1	7:U:400:ALA:CB	2.23	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:58:ALA:O	8:V:62:HIS:ND1	2.27	0.68
10:Y:20:ALA:HB2	10:Y:150:PHE:CD1	2.29	0.68
11:Z:244:GLU:OE1	11:Z:248:ALA:HB2	1.94	0.68
14:c:303:MET:HA	14:c:306:THR:CG2	2.24	0.68
16:f:616:CYS:HB3	16:f:632:LYS:CE	2.23	0.68
18:W:98:LYS:HD3	18:W:135:LYS:HD2	1.76	0.68
19:e:59:GLU:HG2	19:e:65:TYR:CD2	2.28	0.68
2:B:171:VAL:HA	2:B:174:MET:CE	2.23	0.68
2:B:251:VAL:HG11	3:C:275:GLU:OE2	1.94	0.68
7:U:353:LEU:CD2	7:U:357:LYS:HE2	2.24	0.68
7:U:799:LYS:HE2	7:U:925:VAL:O	1.93	0.68
8:V:67:LEU:HD22	8:V:107:ARG:HD2	1.76	0.68
8:V:238:ALA:HA	8:V:241:ARG:NE	2.09	0.68
8:V:262:SER:HA	8:V:264:TYR:CE1	2.29	0.68
9:X:44:GLN:HA	9:X:47:GLU:CD	2.19	0.68
10:Y:154:ASN:O	10:Y:158:THR:HG22	1.94	0.68
11:Z:94:TRP:CZ2	11:Z:121:LEU:HD22	2.29	0.68
14:c:293:THR:O	14:c:297:VAL:HG12	1.92	0.68
16:f:294:MET:HB3	16:f:807:ARG:NH2	2.08	0.68
16:f:771:LEU:HG	16:f:774:GLY:H	1.59	0.68
5:E:329:GLU:HA	5:E:332:VAL:CG2	2.24	0.68
7:U:353:LEU:HG	7:U:357:LYS:CE	2.24	0.68
15:d:103:LEU:HA	15:d:106:LEU:HB2	1.75	0.68
16:f:159:VAL:HA	16:f:162:LEU:CD2	2.24	0.68
16:f:637:LYS:HE2	16:f:674:THR:HB	1.75	0.68
28:o:2:THR:OG1	38:o:301:LDZ:O33	2.08	0.68
7:U:807:LYS:O	7:U:874:ASN:ND2	2.26	0.67
13:b:75:LEU:O	13:b:78:VAL:HG23	1.95	0.67
14:c:139:ARG:O	14:c:161:ARG:NH1	2.26	0.67
16:f:531:ASN:O	16:f:534:VAL:HG12	1.94	0.67
18:W:190:MET:CA	18:W:205:ILE:HD11	2.24	0.67
1:A:166:VAL:CG1	1:A:237:PHE:HB3	2.24	0.67
2:B:294:ARG:HD2	2:B:309:MET:HE2	1.74	0.67
7:U:894:MET:HE1	7:U:902:PRO:HD2	1.76	0.67
10:Y:74:LYS:HE3	10:Y:75:LYS:HD3	1.75	0.67
11:Z:40:LEU:CD1	11:Z:52:ASN:HB3	2.19	0.67
16:f:474:SER:HB3	16:f:477:MET:CE	2.24	0.67
20:G:103:TYR:O	28:O:82:ARG:NH1	2.27	0.67
1:A:30:ILE:HG23	1:A:34:LYS:CE	2.24	0.67
2:B:84:GLN:NE2	2:B:85:MET:HG2	2.10	0.67
2:B:112:LEU:HD23	2:B:113:GLU:N	2.09	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:249:LEU:HD12	6:F:250:LYS:N	2.10	0.67
7:U:199:ARG:O	7:U:202:VAL:HG22	1.95	0.67
7:U:764:LEU:O	7:U:767:THR:OG1	2.11	0.67
7:U:885:MET:HE2	7:U:885:MET:HA	1.76	0.67
10:Y:55:GLU:O	10:Y:59:LYS:HG2	1.94	0.67
13:b:8:VAL:HG22	13:b:51:LEU:HA	1.76	0.67
13:b:37:CYS:HA	13:b:40:LYS:HG2	1.77	0.67
14:c:26:ASP:OD2	14:c:174:PRO:HB2	1.94	0.67
14:c:219:ASN:HB3	14:c:223:LYS:HA	1.76	0.67
16:f:701:ASN:HD21	16:f:703:ARG:HG2	1.59	0.67
18:W:403:PHE:HD1	18:W:404:ALA:N	1.92	0.67
1:A:161:VAL:HG12	1:A:263:MET:HE3	1.75	0.67
3:C:219:LEU:HD12	3:C:254:ILE:HD13	1.75	0.67
5:E:309:ARG:HG3	5:E:310:LEU:HD12	1.75	0.67
5:E:363:VAL:HG12	5:E:365:GLU:H	1.59	0.67
6:F:363:ALA:O	6:F:367:GLN:HG3	1.95	0.67
7:U:77:SER:OG	7:U:100:ILE:HD11	1.95	0.67
8:V:96:ARG:O	8:V:100:MET:HG2	1.95	0.67
9:X:341:PRO:HG2	9:X:342:PHE:CD1	2.30	0.67
10:Y:250:LEU:CD2	10:Y:256:VAL:HG12	2.24	0.67
1:A:183:GLN:N	1:A:183:GLN:OE1	2.28	0.67
1:A:240:VAL:HG21	1:A:274:PHE:CE2	2.30	0.67
1:A:426:THR:H	1:A:427:PRO:HD2	1.60	0.67
2:B:364:ILE:HA	2:B:367:ILE:HG22	1.75	0.67
3:C:63:LEU:CD1	4:D:78:GLU:HG3	2.23	0.67
3:C:127:LEU:CD2	3:C:129:ASN:HB3	2.24	0.67
3:C:219:LEU:HA	3:C:230:MET:CE	2.25	0.67
3:C:248:MET:CE	3:C:254:ILE:HD11	2.22	0.67
6:F:420:TYR:O	6:F:424:ILE:HG13	1.95	0.67
7:U:885:MET:H	7:U:888:GLN:NE2	1.92	0.67
8:V:113:LEU:HD11	8:V:174:PHE:HD2	1.60	0.67
9:X:44:GLN:O	9:X:47:GLU:HG2	1.93	0.67
11:Z:38:VAL:CG1	11:Z:91:ILE:HD11	2.24	0.67
12:a:229:ASP:O	12:a:230:ARG:HG3	1.95	0.67
16:f:65:GLU:HA	16:f:97:LYS:NZ	2.08	0.67
18:W:69:ALA:CA	18:W:72:LYS:HD2	2.22	0.67
18:W:366:MET:HE1	18:W:378:MET:CE	2.24	0.67
31:R:2:THR:N	31:R:131:SER:HG	1.91	0.67
1:A:111:TYR:O	1:A:112:ILE:HD13	1.94	0.67
2:B:106:PRO:HG3	3:C:121:TYR:CB	2.18	0.67
2:B:165:ASP:HB2	3:C:78:ARG:CZ	2.25	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:194:ASN:ND2	5:E:228:CYS:HA	2.08	0.67
7:U:114:GLU:HA	7:U:117:ASP:OD2	1.94	0.67
11:Z:94:TRP:CZ3	11:Z:108:ILE:HG21	2.29	0.67
15:d:82:TYR:CD1	15:d:94:TYR:HB2	2.30	0.67
16:f:294:MET:HA	16:f:321:MET:HE2	1.75	0.67
16:f:828:ARG:N	16:f:861:THR:HG22	2.06	0.67
18:W:98:LYS:HD3	18:W:135:LYS:HE3	1.75	0.67
18:W:271:VAL:O	18:W:275:ILE:HG23	1.94	0.67
1:A:296:GLN:HA	1:A:299:MET:HE2	1.76	0.67
2:B:41:LYS:HE3	16:f:690:VAL:CG2	2.24	0.67
3:C:168:PRO:HG2	3:C:290:LYS:HE3	1.77	0.67
4:D:265:ASP:OD1	4:D:266:GLU:N	2.28	0.67
9:X:70:LEU:HA	9:X:73:VAL:CG2	2.25	0.67
9:X:337:ARG:HG2	9:X:340:GLU:OE2	1.95	0.67
11:Z:69:PHE:CD2	13:b:96:ALA:HA	2.29	0.67
12:a:100:THR:HA	12:a:103:LYS:HG2	1.76	0.67
15:d:107:LEU:HD11	15:d:112:VAL:HG12	1.77	0.67
16:f:176:ALA:CB	16:f:178:LYS:HE2	2.15	0.67
16:f:696:LEU:HA	16:f:708:ASP:OD2	1.95	0.67
18:W:75:TYR:CE1	18:W:112:VAL:HB	2.30	0.67
18:W:325:GLY:C	18:W:326:MET:HE2	2.20	0.67
18:W:363:ILE:CD1	18:W:366:MET:HE2	2.25	0.67
2:B:78:PHE:HB2	16:f:613:LEU:HD21	1.77	0.67
3:C:222:LYS:HG3	3:C:223:PHE:CD1	2.30	0.67
4:D:340:GLN:O	4:D:344:ILE:HG22	1.93	0.67
5:E:71:VAL:HG21	5:E:107:ILE:HD11	1.76	0.67
8:V:195:ILE:HG23	8:V:203:LEU:HD23	1.76	0.67
9:X:126:ARG:HG3	9:X:127:GLN:OE1	1.95	0.67
9:X:407:MET:O	9:X:410:VAL:HG12	1.95	0.67
10:Y:32:ARG:NE	10:Y:284:LYS:HD2	2.10	0.67
10:Y:381:GLN:HG3	10:Y:385:ARG:NH2	2.10	0.67
11:Z:112:MET:O	11:Z:112:MET:HG2	1.95	0.67
11:Z:217:THR:HG21	11:Z:219:LYS:HD3	1.77	0.67
12:a:6:GLY:HA2	12:a:9:GLN:HG2	1.76	0.67
12:a:27:GLU:HA	12:a:30:THR:OG1	1.94	0.67
12:a:132:LYS:O	12:a:135:ILE:HG22	1.95	0.67
12:a:280:MET:CE	12:a:296:ILE:HD13	2.25	0.67
15:d:14:PRO:HB2	15:d:17:SER:CA	2.25	0.67
16:f:319:GLU:C	16:f:320:ILE:HD12	2.20	0.67
16:f:620:PHE:HD1	16:f:623:LYS:HZ1	1.43	0.67
16:f:672:LEU:HD13	16:f:708:ASP:HB3	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:113:GLU:HG3	18:W:147:LYS:HZ3	1.60	0.67
18:W:116:THR:HG21	18:W:123:ARG:NH1	2.10	0.67
18:W:243:ILE:HG21	18:W:273:TYR:CE2	2.30	0.67
1:A:123:VAL:HG23	1:A:147:TYR:O	1.94	0.67
1:A:207:GLU:OE1	1:A:208:PRO:HD2	1.95	0.67
4:D:151:ILE:HG23	4:D:151:ILE:O	1.95	0.67
5:E:87:LEU:HD12	5:E:88:ASP:H	1.60	0.67
5:E:166:PRO:N	5:E:167:PRO:HD2	2.10	0.67
7:U:101:ILE:O	7:U:105:ILE:HG12	1.94	0.67
7:U:423:MET:HA	7:U:423:MET:HE3	1.76	0.67
7:U:564:ASP:HA	7:U:567:ILE:HG12	1.76	0.67
8:V:399:ARG:NH1	8:V:399:ARG:O	2.28	0.67
9:X:137:TYR:CE2	9:X:145:GLU:HB2	2.29	0.67
10:Y:387:ILE:HG23	11:Z:279:LYS:NZ	2.10	0.67
12:a:70:ARG:O	13:b:17:ARG:HD3	1.95	0.67
3:C:76:VAL:HG12	3:C:112:CYS:O	1.94	0.67
4:D:64:GLU:OE1	7:U:607:VAL:HG23	1.94	0.67
5:E:317:ALA:O	5:E:320:ILE:HG13	1.95	0.67
7:U:200:VAL:O	7:U:204:ILE:HG23	1.94	0.67
11:Z:226:ILE:HG13	18:W:445:LEU:HD21	1.77	0.67
15:d:80:CYS:O	15:d:85:TYR:N	2.27	0.67
16:f:670:MET:HE3	16:f:670:MET:CA	2.20	0.67
16:f:678:LEU:HG	16:f:679:LEU:CG	2.24	0.67
16:f:779:CYS:HA	16:f:782:HIS:CE1	2.30	0.67
18:W:259:GLU:CG	18:W:261:GLU:HG3	2.25	0.67
23:j:66:ASP:OD2	23:j:95:ARG:NH1	2.28	0.67
2:B:385:MET:HE2	2:B:385:MET:HA	1.77	0.66
3:C:371:LEU:HD22	4:D:191:TYR:CE1	2.30	0.66
4:D:357:GLU:OE1	4:D:357:GLU:N	2.25	0.66
5:E:55:GLN:HB2	5:E:99:ALA:HB1	1.76	0.66
5:E:199:VAL:HB	5:E:234:GLU:HB2	1.77	0.66
7:U:637:VAL:HA	7:U:640:LEU:HD21	1.77	0.66
7:U:681:ASN:HB2	7:U:723:ASP:OD2	1.95	0.66
11:Z:67:VAL:HG13	13:b:92:VAL:HG12	1.76	0.66
15:d:101:LEU:HB2	15:d:163:TYR:CE1	2.30	0.66
16:f:94:LYS:HD3	16:f:109:ILE:HB	1.77	0.66
16:f:107:LYS:HB2	16:f:111:GLU:CB	2.25	0.66
16:f:260:SER:O	16:f:263:PRO:HD2	1.95	0.66
16:f:267:ARG:O	16:f:272:LEU:HD13	1.95	0.66
16:f:415:GLY:CA	16:f:447:ALA:HB1	2.23	0.66
16:f:494:ARG:HD2	16:f:497:VAL:CG2	2.24	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:692:LEU:O	16:f:696:LEU:HG	1.94	0.66
16:f:708:ASP:OD1	16:f:709:THR:N	2.28	0.66
18:W:274:VAL:HG13	18:W:287:VAL:HG22	1.76	0.66
1:A:220:THR:HG23	1:A:222:LYS:HG3	1.77	0.66
2:B:59:ARG:CB	16:f:184:LEU:HG	2.23	0.66
4:D:148:ASP:HB2	4:D:151:ILE:HD13	1.77	0.66
4:D:271:ALA:HB1	4:D:317:LEU:HD22	1.75	0.66
7:U:46:GLU:O	7:U:50:GLU:HG2	1.96	0.66
7:U:89:ASN:O	7:U:136:LYS:HD2	1.94	0.66
7:U:446:LEU:HD11	7:U:457:ILE:CD1	2.23	0.66
7:U:925:VAL:HG12	7:U:927:PRO:CD	2.21	0.66
13:b:2:VAL:HG11	13:b:47:ASN:ND2	2.10	0.66
15:d:57:ILE:O	15:d:61:TRP:N	2.29	0.66
15:d:112:VAL:O	15:d:113:ALA:C	2.38	0.66
16:f:238:ASN:HB3	16:f:263:PRO:HG3	1.77	0.66
25:L:78:THR:O	25:L:82:ARG:N	2.24	0.66
3:C:331:ILE:O	3:C:334:ARG:NE	2.26	0.66
3:C:359:VAL:O	3:C:362:VAL:HG12	1.95	0.66
4:D:120:ASP:HB3	4:D:123:LEU:CD1	2.21	0.66
4:D:293:LEU:HD21	4:D:320:ALA:HB3	1.77	0.66
6:F:187:ASP:OD1	6:F:371:ARG:NH2	2.29	0.66
6:F:226:TYR:CZ	6:F:353:GLU:HB2	2.30	0.66
6:F:418:GLU:HG2	25:L:164:ARG:CZ	2.25	0.66
7:U:422:LEU:O	7:U:425:THR:OG1	2.12	0.66
8:V:224:LEU:HB3	8:V:257:ASN:ND2	2.10	0.66
10:Y:376:LEU:HD23	11:Z:265:LEU:CD2	2.26	0.66
12:a:7:PHE:HE1	12:a:56:LEU:HB3	1.60	0.66
13:b:28:ALA:C	13:b:31:ASP:H	2.03	0.66
13:b:146:GLU:HA	13:b:146:GLU:OE2	1.95	0.66
14:c:57:MET:HG3	14:c:110:GLY:C	2.21	0.66
15:d:26:LEU:O	15:d:28:LEU:N	2.27	0.66
16:f:91:SER:HA	16:f:94:LYS:HG3	1.77	0.66
1:A:221:GLY:N	34:A:501:ATP:O2B	2.20	0.66
2:B:142:ASP:O	2:B:143:LEU:HB2	1.93	0.66
2:B:321:SER:O	2:B:322:ARG:HB3	1.95	0.66
2:B:440:LEU:HB3	23:J:30:SER:CB	2.24	0.66
4:D:162:VAL:HG23	4:D:166:ASP:HB2	1.76	0.66
4:D:242:GLU:OE2	4:D:245:ARG:NE	2.23	0.66
4:D:258:ALA:HB1	4:D:259:PRO:CD	2.25	0.66
5:E:227:PRO:HA	5:E:271:HIS:CE1	2.30	0.66
8:V:131:LEU:O	8:V:135:LEU:HG	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:352:SER:C	8:V:353:LEU:HD23	2.21	0.66
9:X:316:ASP:HB3	9:X:319:ILE:HG22	1.77	0.66
11:Z:144:VAL:HG23	11:Z:145:HIS:N	2.10	0.66
14:c:265:MET:SD	14:c:270:LEU:HD12	2.34	0.66
15:d:50:LEU:CA	15:d:53:ASP:HB2	2.23	0.66
15:d:107:LEU:O	15:d:108:SER:C	2.39	0.66
16:f:569:LYS:HZ1	16:f:573:ILE:N	1.88	0.66
16:f:670:MET:SD	16:f:703:ARG:HG3	2.36	0.66
16:f:811:LEU:O	16:f:853:VAL:HG13	1.96	0.66
1:A:430:MET:HE2	1:A:433:ASN:HB3	1.76	0.66
5:E:199:VAL:CB	5:E:234:GLU:HB2	2.26	0.66
6:F:69:MET:O	6:F:73:ILE:HB	1.95	0.66
10:Y:38:ARG:HA	10:Y:41:LEU:CD2	2.26	0.66
10:Y:297:ARG:HA	10:Y:300:ARG:HD3	1.78	0.66
11:Z:81:MET:HE2	14:c:94:LYS:CD	2.26	0.66
11:Z:250:TYR:OH	18:W:421:PRO:HG2	1.95	0.66
12:a:5:PRO:O	12:a:9:GLN:HG2	1.96	0.66
13:b:61:LEU:HD12	13:b:74:LYS:HG3	1.77	0.66
13:b:68:THR:O	13:b:72:LEU:HG	1.96	0.66
16:f:65:GLU:HB2	16:f:97:LYS:HD2	1.76	0.66
16:f:808:ASN:HD22	16:f:810:ILE:HG12	1.60	0.66
18:W:68:VAL:CG1	18:W:72:LYS:HE3	2.13	0.66
18:W:378:MET:HA	18:W:378:MET:HE3	1.78	0.66
19:e:25:GLU:OE2	19:e:28:ALA:HB2	1.96	0.66
2:B:365:PHE:HB3	2:B:380:LEU:HD13	1.78	0.66
3:C:52:LEU:HD12	3:C:52:LEU:O	1.96	0.66
4:D:121:ARG:HA	4:D:124:LEU:HD23	1.78	0.66
7:U:159:ARG:HB3	7:U:162:VAL:HG12	1.77	0.66
7:U:167:ILE:HG12	7:U:204:ILE:CD1	2.25	0.66
7:U:322:THR:O	7:U:326:ILE:HG12	1.95	0.66
9:X:282:ARG:HG2	9:X:312:GLU:CG	2.26	0.66
10:Y:134:LEU:HA	10:Y:137:ARG:NE	2.08	0.66
10:Y:225:TYR:O	10:Y:229:ILE:HG22	1.96	0.66
10:Y:262:SER:HB2	10:Y:270:VAL:HG13	1.78	0.66
15:d:14:PRO:HB2	15:d:17:SER:HA	1.77	0.66
15:d:195:THR:O	15:d:199:PHE:N	2.19	0.66
16:f:479:LEU:HD13	16:f:514:VAL:HA	1.78	0.66
16:f:784:ASP:CG	16:f:787:LEU:HD11	2.21	0.66
20:G:193:GLN:OE1	20:G:193:GLN:N	2.28	0.66
1:A:391:GLU:HA	1:A:394:MET:HB2	1.76	0.66
2:B:187:ILE:HD13	2:B:234:LEU:CD2	2.24	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:428:TYR:O	2:B:429:LYS:HB3	1.96	0.66
5:E:132:TYR:HA	5:E:135:ILE:HG23	1.78	0.66
7:U:609:ASP:N	7:U:615:ARG:HH21	1.93	0.66
7:U:803:LYS:O	7:U:893:THR:HB	1.96	0.66
12:a:115:LYS:HE2	12:a:115:LYS:HA	1.77	0.66
16:f:536:SER:OG	16:f:540:GLN:NE2	2.29	0.66
16:f:632:LYS:HG3	16:f:633:GLU:H	1.59	0.66
4:D:220:ALA:O	4:D:223:THR:HG22	1.95	0.66
6:F:405:MET:HA	6:F:405:MET:CE	2.25	0.66
6:F:432:LYS:HZ1	6:F:434:ASN:HA	1.61	0.66
7:U:206:MET:HE2	7:U:206:MET:HA	1.77	0.66
7:U:532:MET:HE1	7:U:555:VAL:CG2	2.26	0.66
9:X:61:GLY:HA2	9:X:99:MET:CE	2.26	0.66
10:Y:228:MET:HE1	10:Y:260:LEU:HB2	1.78	0.66
11:Z:7:GLN:CG	11:Z:46:LYS:HD2	2.25	0.66
14:c:56:LEU:HB2	14:c:73:PHE:HE1	1.61	0.66
16:f:182:GLU:HG3	16:f:183:PRO:HD3	1.77	0.66
16:f:799:VAL:O	16:f:802:SER:N	2.29	0.66
18:W:272:LEU:HD12	18:W:341:PHE:CE1	2.30	0.66
1:A:95:VAL:HB	1:A:144:ARG:NH1	2.11	0.66
4:D:156:SER:CA	4:D:159:LYS:HD2	2.18	0.66
5:E:50:LEU:HD21	6:F:83:ASN:HD22	1.59	0.66
5:E:329:GLU:HA	5:E:332:VAL:HB	1.78	0.66
7:U:717:ILE:HA	7:U:727:LYS:HZ2	1.61	0.66
8:V:465:ASP:N	8:V:465:ASP:OD1	2.27	0.66
11:Z:94:TRP:NE1	11:Z:121:LEU:HB2	2.11	0.66
12:a:284:ARG:HG3	12:a:285:PRO:HD2	1.78	0.66
16:f:170:TRP:HA	16:f:173:LEU:CD1	2.25	0.66
18:W:136:ILE:CG2	18:W:144:ARG:HH12	2.08	0.66
2:B:139:VAL:HG21	2:B:159:VAL:HG12	1.78	0.66
6:F:138:GLY:HA3	6:F:160:ILE:HB	1.78	0.66
8:V:416:ARG:HH21	10:Y:350:VAL:CG2	2.08	0.66
8:V:495:ARG:HE	11:Z:278:ASN:HD21	1.43	0.66
12:a:115:LYS:HG3	12:a:138:VAL:CG1	2.25	0.66
12:a:123:LEU:HD22	12:a:158:LEU:HD12	1.77	0.66
13:b:142:ASN:OD1	13:b:172:THR:HB	1.96	0.66
16:f:398:TRP:HE3	16:f:401:LYS:HD2	1.60	0.66
16:f:772:GLY:O	16:f:775:THR:HG22	1.95	0.66
3:C:150:MET:HA	3:C:331:ILE:CG1	2.25	0.65
3:C:340:ARG:NH1	10:Y:173:ASP:O	2.28	0.65
6:F:77:SER:HA	6:F:80:ILE:HG22	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:431:LYS:NZ	6:F:432:LYS:O	2.29	0.65
8:V:112:VAL:O	8:V:115:LYS:HG2	1.96	0.65
10:Y:138:LEU:CD2	10:Y:168:ILE:HD12	2.26	0.65
10:Y:165:LYS:O	10:Y:169:GLU:HB2	1.96	0.65
10:Y:382:LYS:HA	10:Y:385:ARG:NH1	2.10	0.65
11:Z:245:PHE:CE1	18:W:424:LEU:HD21	2.31	0.65
12:a:99:LYS:HA	12:a:102:GLU:OE2	1.95	0.65
1:A:112:ILE:CD1	1:A:122:VAL:HG13	2.26	0.65
5:E:165:ILE:O	5:E:168:LYS:NZ	2.24	0.65
5:E:204:VAL:HG23	5:E:252:GLU:OE1	1.95	0.65
7:U:324:LYS:O	7:U:328:ILE:HG22	1.94	0.65
7:U:524:LYS:HZ2	7:U:562:GLU:HB3	1.60	0.65
7:U:667:GLU:HA	7:U:670:ASN:OD1	1.96	0.65
10:Y:177:ARG:HH12	10:Y:208:PHE:H	1.44	0.65
13:b:124:LEU:HD13	13:b:159:THR:CG2	2.26	0.65
16:f:744:MET:SD	16:f:748:LEU:HD22	2.36	0.65
18:W:201:ARG:O	18:W:205:ILE:HG23	1.96	0.65
18:W:243:ILE:HG21	18:W:273:TYR:HE2	1.60	0.65
1:A:336:ARG:O	1:A:337:LEU:HD23	1.94	0.65
2:B:393:ALA:HB1	3:C:308:PRO:O	1.96	0.65
5:E:312:ILE:HG21	5:E:343:LEU:CB	2.27	0.65
7:U:221:ILE:HD11	7:U:252:LEU:HA	1.76	0.65
7:U:267:ASN:OD1	7:U:268:LEU:N	2.29	0.65
7:U:367:THR:HG23	7:U:403:THR:HG21	1.78	0.65
7:U:619:VAL:HG11	7:U:640:LEU:HD11	1.78	0.65
7:U:880:ASN:HB3	7:U:881:PRO:HD3	1.79	0.65
8:V:438:VAL:O	8:V:442:ILE:HG22	1.96	0.65
9:X:155:ARG:O	9:X:159:LYS:NZ	2.23	0.65
11:Z:241:SER:O	11:Z:242:LEU:HD22	1.95	0.65
14:c:88:ASP:N	14:c:88:ASP:OD1	2.28	0.65
15:d:19:CYS:HB3	15:d:23:LEU:CB	2.26	0.65
15:d:50:LEU:O	15:d:51:ALA:C	2.39	0.65
16:f:38:ASP:HA	16:f:41:LYS:CD	2.26	0.65
16:f:688:ARG:C	16:f:691:PRO:HD2	2.21	0.65
16:f:869:THR:HG23	16:f:885:GLU:H	1.62	0.65
18:W:20:TYR:O	18:W:24:VAL:HG23	1.96	0.65
18:W:264:GLN:HG2	18:W:268:LYS:HE2	1.78	0.65
18:W:272:LEU:HD21	18:W:328:LEU:HD11	1.77	0.65
1:A:54:GLN:HA	1:A:54:GLN:OE1	1.96	0.65
3:C:21:ARG:HE	3:C:25:LEU:HD13	1.61	0.65
5:E:355:ILE:HD11	6:F:211:LYS:HG3	1.77	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:396:CYS:O	6:F:397:LYS:C	2.38	0.65
7:U:8:ILE:HD11	7:U:27:LEU:CD1	2.25	0.65
7:U:616:ARG:HD2	7:U:617:ALA:N	2.11	0.65
7:U:789:ILE:HG22	7:U:911:ILE:HG23	1.79	0.65
11:Z:209:ARG:NH2	12:a:354:GLU:HB2	2.11	0.65
12:a:9:GLN:NE2	12:a:26:GLU:OE1	2.24	0.65
14:c:55:GLY:H	14:c:112:TYR:HB2	1.59	0.65
16:f:813:LYS:CD	16:f:825:MET:HE1	2.27	0.65
21:H:64:VAL:O	21:H:219:ARG:NH1	2.28	0.65
31:r:36:ILE:HD11	31:r:46:MET:SD	2.35	0.65
2:B:71:TYR:O	2:B:75:GLU:HG3	1.96	0.65
3:C:85:VAL:CG2	3:C:97:VAL:HG23	2.27	0.65
5:E:194:ASN:OD1	5:E:228:CYS:HA	1.97	0.65
7:U:243:LEU:HD21	7:U:903:PHE:CB	2.26	0.65
7:U:904:LYS:HD2	7:U:905:PRO:CD	2.23	0.65
10:Y:360:ASP:OD1	10:Y:363:ASN:HB2	1.97	0.65
11:Z:230:LEU:HD11	18:W:438:LEU:HD13	1.79	0.65
12:a:244:ASN:HB2	12:a:246:GLU:OE1	1.97	0.65
13:b:57:ASP:H	13:b:85:THR:HG21	1.60	0.65
14:c:46:ARG:HA	14:c:49:VAL:HG23	1.79	0.65
14:c:216:MET:HA	14:c:220:LEU:HD12	1.78	0.65
16:f:127:SER:HB3	16:f:178:LYS:HD3	1.77	0.65
16:f:131:MET:SD	16:f:170:TRP:HB2	2.36	0.65
18:W:77:ALA:HB3	18:W:79:GLU:OE1	1.96	0.65
18:W:244:CYS:SG	18:W:274:VAL:HG23	2.36	0.65
5:E:91:LYS:HD2	5:E:92:LEU:N	2.12	0.65
5:E:175:PRO:HB3	5:E:338:PHE:CE2	2.31	0.65
7:U:35:TRP:HA	7:U:38:ILE:CG2	2.26	0.65
8:V:68:ASP:OD1	8:V:108:LEU:HA	1.96	0.65
8:V:406:GLY:HA2	8:V:409:MET:HG2	1.77	0.65
10:Y:282:MET:O	10:Y:288:PHE:HB2	1.96	0.65
12:a:7:PHE:CE1	12:a:59:LEU:HD21	2.32	0.65
12:a:207:GLY:HA3	12:a:210:VAL:HG12	1.78	0.65
15:d:45:LYS:O	15:d:49:ILE:N	2.29	0.65
16:f:445:LEU:CG	16:f:466:LEU:HD11	2.24	0.65
19:e:37:HIS:ND1	19:e:39:TRP:HB2	2.12	0.65
1:A:293:ASN:HD21	6:F:296:PHE:HZ	1.45	0.65
2:B:105:THR:HB	2:B:106:PRO:HD2	1.77	0.65
4:D:392:TYR:CZ	18:W:200:ILE:HD11	2.32	0.65
5:E:84:ARG:HD3	5:E:108:MET:HE1	1.79	0.65
7:U:583:MET:SD	7:U:605:VAL:HG11	2.37	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:633:CYS:CA	7:U:636:VAL:HG12	2.23	0.65
8:V:289:LEU:CB	8:V:312:ALA:HB2	2.27	0.65
13:b:97:LEU:O	13:b:100:ARG:HB3	1.97	0.65
16:f:95:PRO:HG2	16:f:96:LEU:CD1	2.27	0.65
16:f:395:GLY:O	16:f:399:LEU:HG	1.96	0.65
16:f:472:HIS:HB2	16:f:477:MET:SD	2.37	0.65
18:W:382:LEU:HD12	18:W:389:SER:HB2	1.79	0.65
1:A:333:ARG:HG2	1:A:334:PRO:CD	2.26	0.65
2:B:372:MET:CE	2:B:414:VAL:HG21	2.27	0.65
4:D:384:MET:HA	4:D:384:MET:CE	2.26	0.65
5:E:185:ARG:NH2	5:E:196:LEU:HG	2.11	0.65
5:E:365:GLU:HG3	5:E:369:LYS:NZ	2.12	0.65
6:F:270:ASP:HA	6:F:273:ALA:HB3	1.79	0.65
7:U:800:VAL:HG22	7:U:801:GLN:H	1.61	0.65
9:X:243:ASP:OD1	9:X:246:LYS:HG2	1.97	0.65
9:X:386:ILE:C	9:X:387:ILE:HD13	2.22	0.65
13:b:28:ALA:O	13:b:31:ASP:N	2.30	0.65
15:d:71:PHE:HA	15:d:74:TYR:HB2	1.77	0.65
16:f:337:LEU:HD12	16:f:852:VAL:HG23	1.78	0.65
16:f:520:LEU:HD12	16:f:560:LEU:CD1	2.27	0.65
16:f:812:GLY:HA3	16:f:879:ARG:HH12	1.62	0.65
22:I:25:MET:C	22:I:25:MET:HE3	2.22	0.65
1:A:99:THR:HG21	1:A:113:ILE:HD12	1.79	0.65
1:A:134:ILE:HD12	1:A:138:MET:HE1	1.78	0.65
2:B:295:TYR:HE1	3:C:263:SER:HB3	1.60	0.65
7:U:198:LEU:HD21	7:U:223:LEU:HD22	1.79	0.65
11:Z:144:VAL:HG22	12:a:178:ARG:HH21	1.62	0.65
12:a:212:ASN:ND2	12:a:241:ASN:HB2	2.10	0.65
16:f:267:ARG:HB3	16:f:272:LEU:CD1	2.27	0.65
16:f:330:PHE:HD1	16:f:333:LEU:HD11	1.62	0.65
16:f:747:GLN:HG3	16:f:751:TYR:CD2	2.28	0.65
1:A:68:SER:N	3:C:81:ASP:OD1	2.28	0.65
4:D:91:GLN:O	4:D:104:GLY:N	2.21	0.65
4:D:316:THR:HG22	4:D:316:THR:O	1.97	0.65
7:U:840:LYS:O	7:U:843:GLU:HG3	1.96	0.65
10:Y:50:MET:HB2	10:Y:74:LYS:HD3	1.77	0.65
10:Y:71:ASN:O	10:Y:74:LYS:HG2	1.97	0.65
11:Z:17:LEU:HD12	14:c:39:LEU:HD12	1.79	0.65
12:a:357:CYS:O	12:a:360:VAL:HG22	1.97	0.65
16:f:245:ASN:CB	16:f:256:PHE:HB2	2.26	0.65
16:f:652:VAL:HG11	16:f:687:ARG:HD2	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:169:LEU:HA	18:W:172:GLU:OE1	1.97	0.65
18:W:186:ILE:HG22	18:W:190:MET:HE1	1.78	0.65
1:A:126:SER:HB2	1:A:148:GLN:CD	2.22	0.64
1:A:286:ASP:OD2	6:F:293:THR:HB	1.97	0.64
3:C:196:LYS:C	3:C:198:LEU:H	2.04	0.64
6:F:301:ALA:HB1	6:F:304:ARG:NH2	2.11	0.64
7:U:377:HIS:ND1	7:U:382:SER:O	2.31	0.64
7:U:574:LYS:HD2	7:U:574:LYS:O	1.97	0.64
7:U:629:THR:O	7:U:631:GLU:N	2.26	0.64
9:X:148:HIS:O	9:X:151:SER:OG	2.12	0.64
10:Y:41:LEU:O	10:Y:45:VAL:HG13	1.97	0.64
10:Y:112:CYS:SG	10:Y:120:ALA:HB1	2.37	0.64
11:Z:25:ARG:O	11:Z:28:LYS:HG2	1.96	0.64
11:Z:90:ARG:HH12	11:Z:91:ILE:HG22	1.62	0.64
11:Z:175:LEU:HD13	14:c:35:SER:HB3	1.79	0.64
11:Z:186:THR:HG23	11:Z:189:GLN:HE21	1.62	0.64
12:a:130:VAL:O	12:a:133:GLU:HG2	1.95	0.64
12:a:216:LEU:O	12:a:219:HIS:HB3	1.97	0.64
15:d:16:LEU:HB2	15:d:22:GLU:HG2	1.79	0.64
16:f:39:LYS:HZ1	16:f:85:SER:HG	1.40	0.64
16:f:380:PHE:HB2	16:f:752:HIS:CE1	2.32	0.64
16:f:794:ALA:HA	16:f:797:LEU:HD21	1.78	0.64
18:W:229:LEU:HA	18:W:232:GLN:OE1	1.96	0.64
19:e:59:GLU:HG2	19:e:60:LEU:H	1.60	0.64
2:B:395:ILE:O	2:B:398:ILE:HG22	1.97	0.64
4:D:127:ASN:OD1	4:D:128:ALA:N	2.30	0.64
7:U:839:ALA:O	7:U:842:LYS:HG3	1.96	0.64
8:V:345:ARG:HH11	19:e:43:TRP:HA	1.61	0.64
9:X:377:ILE:HG22	9:X:388:PHE:HE2	1.63	0.64
16:f:333:LEU:HD21	16:f:810:ILE:CD1	2.27	0.64
18:W:182:ARG:NE	18:W:182:ARG:HA	2.11	0.64
19:e:21:GLU:O	19:e:22:PHE:HB2	1.97	0.64
3:C:297:ARG:O	3:C:300:ILE:HG22	1.96	0.64
5:E:252:GLU:HG2	5:E:255:ARG:CZ	2.27	0.64
5:E:287:PRO:HA	5:E:290:LEU:HD23	1.79	0.64
7:U:714:SER:HA	7:U:717:ILE:HD11	1.77	0.64
11:Z:82:PHE:O	11:Z:85:VAL:HG12	1.97	0.64
13:b:67:ASP:OD1	13:b:68:THR:N	2.30	0.64
15:d:99:LEU:O	15:d:102:ASN:N	2.31	0.64
16:f:640:LYS:O	16:f:640:LYS:HG2	1.97	0.64
16:f:680:ARG:HB2	16:f:680:ARG:HH11	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:M:50:GLU:OE2	26:M:201:HIS:ND1	2.30	0.64
1:A:215:PHE:CZ	1:A:340:LYS:HB3	2.31	0.64
2:B:56:THR:HG21	16:f:835:GLU:HG2	1.78	0.64
2:B:256:ILE:HG12	2:B:305:ILE:HD12	1.77	0.64
2:B:361:LYS:HB3	2:B:384:ILE:HD12	1.80	0.64
2:B:412:MET:HE1	3:C:174:LEU:CD1	2.27	0.64
5:E:261:LEU:HG	5:E:277:MET:HE1	1.79	0.64
7:U:524:LYS:O	7:U:524:LYS:HG2	1.98	0.64
7:U:627:PHE:O	7:U:630:PRO:HG3	1.96	0.64
15:d:118:GLU:C	15:d:120:GLU:H	2.04	0.64
16:f:744:MET:HE1	16:f:748:LEU:HD22	1.79	0.64
18:W:301:LYS:HG2	18:W:327:GLU:OE1	1.97	0.64
21:H:34:SER:OG	21:H:76:SER:OG	2.07	0.64
24:K:133:MET:N	24:K:133:MET:SD	2.70	0.64
1:A:306:LEU:O	1:A:312:ARG:HD3	1.97	0.64
3:C:328:ILE:HG21	3:C:359:VAL:HG21	1.80	0.64
5:E:268:ASP:OD1	5:E:271:HIS:HB3	1.97	0.64
6:F:224:LEU:CD2	6:F:226:TYR:HB3	2.27	0.64
10:Y:182:VAL:HG22	10:Y:212:GLU:OE1	1.98	0.64
12:a:232:TRP:CD1	12:a:232:TRP:H	2.15	0.64
16:f:234:THR:HA	16:f:237:VAL:HG12	1.78	0.64
2:B:76:GLU:OE2	2:B:80:ARG:NH2	2.30	0.64
4:D:271:ALA:CB	4:D:317:LEU:HD22	2.28	0.64
8:V:435:GLU:HG2	8:V:451:ILE:HD11	1.77	0.64
11:Z:237:LEU:N	11:Z:238:PRO:HD3	2.12	0.64
16:f:441:LYS:O	16:f:445:LEU:HD13	1.97	0.64
18:W:98:LYS:HD3	18:W:135:LYS:CD	2.28	0.64
5:E:38:LYS:HD3	5:E:42:LYS:NZ	2.12	0.64
6:F:233:LYS:HA	6:F:354:PHE:CE2	2.32	0.64
7:U:241:ASN:CG	7:U:244:MET:HG2	2.23	0.64
9:X:287:LEU:O	9:X:290:VAL:HG12	1.98	0.64
10:Y:229:ILE:HB	10:Y:295:TYR:HE1	1.61	0.64
10:Y:287:LEU:HB3	10:Y:291:HIS:HE1	1.63	0.64
12:a:27:GLU:O	12:a:31:LYS:HG3	1.98	0.64
16:f:486:GLY:HA2	16:f:525:ILE:HD11	1.79	0.64
16:f:789:SER:HA	16:f:793:VAL:CB	2.22	0.64
16:f:857:GLY:H	16:f:860:LYS:HZ1	1.44	0.64
18:W:307:LYS:O	18:W:310:THR:HG22	1.97	0.64
26:M:25:TYR:O	26:M:28:LYS:N	2.30	0.64
1:A:416:VAL:HG12	1:A:417:ILE:HG22	1.79	0.64
3:C:85:VAL:HG23	3:C:97:VAL:CG2	2.27	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:187:LEU:HD12	3:C:188:LEU:N	2.13	0.64
3:C:219:LEU:HA	3:C:230:MET:HE1	1.80	0.64
4:D:230:VAL:HG11	4:D:246:MET:HE1	1.80	0.64
4:D:392:TYR:HB2	5:E:161:ARG:NH1	2.12	0.64
6:F:415:LEU:HD13	6:F:420:TYR:CE1	2.31	0.64
7:U:583:MET:HE1	7:U:614:VAL:HG13	1.78	0.64
7:U:660:CYS:SG	7:U:694:ILE:HG12	2.38	0.64
11:Z:94:TRP:CE2	11:Z:121:LEU:HD22	2.33	0.64
11:Z:101:LEU:HD21	11:Z:105:ASP:OD2	1.97	0.64
1:A:161:VAL:HG22	1:A:256:MET:SD	2.38	0.64
1:A:238:ILE:HB	1:A:272:ILE:HD13	1.80	0.64
3:C:258:ARG:HG2	3:C:270:GLN:HE21	1.63	0.64
4:D:45:LYS:HB3	7:U:187:LEU:CD1	2.28	0.64
5:E:215:ILE:HB	5:E:216:ARG:NH1	2.13	0.64
7:U:406:ALA:HB3	7:U:777:HIS:CE1	2.33	0.64
9:X:86:ALA:O	9:X:89:VAL:HG12	1.98	0.64
9:X:116:TRP:O	9:X:119:SER:OG	2.13	0.64
11:Z:22:HIS:ND1	11:Z:95:TYR:OH	2.23	0.64
16:f:297:MET:SD	16:f:320:ILE:HB	2.38	0.64
16:f:490:ALA:HA	16:f:525:ILE:CA	2.28	0.64
16:f:815:HIS:NE2	16:f:821:LEU:HD21	2.13	0.64
18:W:254:PRO:O	18:W:258:ALA:HB2	1.97	0.64
1:A:334:PRO:HG2	6:F:395:GLN:HA	1.80	0.64
4:D:210:CYS:SG	4:D:335:LEU:HD23	2.38	0.64
4:D:339:ARG:HG3	9:X:230:SER:HB2	1.80	0.64
6:F:223:VAL:HG13	6:F:350:ARG:HG3	1.80	0.64
7:U:236:LEU:HD21	7:U:245:ALA:HA	1.78	0.64
7:U:545:LEU:HD21	7:U:577:ILE:HG21	1.79	0.64
7:U:681:ASN:HB2	7:U:723:ASP:CG	2.23	0.64
7:U:691:SER:O	7:U:695:MET:HE3	1.98	0.64
11:Z:122:VAL:HG12	11:Z:137:ALA:HB2	1.79	0.64
12:a:362:SER:HA	12:a:365:MET:CE	2.24	0.64
16:f:520:LEU:HD22	16:f:557:TRP:HZ3	1.63	0.64
16:f:659:LEU:O	16:f:660:ILE:HD13	1.97	0.64
16:f:701:ASN:OD1	16:f:704:LEU:HB2	1.98	0.64
18:W:403:PHE:HE1	18:W:405:LYS:HG2	1.63	0.64
6:F:125:LYS:HD2	6:F:129:ARG:HA	1.80	0.63
9:X:332:GLU:O	9:X:336:ILE:HG22	1.98	0.63
12:a:35:HIS:O	12:a:38:THR:OG1	2.09	0.63
12:a:218:MET:SD	12:a:218:MET:N	2.61	0.63
13:b:22:LEU:HB3	13:b:23:PRO:HD2	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:46:GLN:HA	15:d:49:ILE:HB	1.78	0.63
15:d:112:VAL:O	15:d:115:PHE:N	2.32	0.63
16:f:373:ALA:O	16:f:377:VAL:HG22	1.96	0.63
16:f:560:LEU:HB3	16:f:564:LEU:CD1	2.28	0.63
19:e:37:HIS:CE1	19:e:39:TRP:HB2	2.33	0.63
30:q:13:VAL:HG11	30:q:105:ALA:HB1	1.80	0.63
2:B:136:LEU:HD13	2:B:160:ILE:HD13	1.81	0.63
2:B:429:LYS:HD2	3:C:306:LEU:CD2	2.25	0.63
3:C:333:SER:HA	3:C:336:MET:HE3	1.79	0.63
5:E:339:ASN:OD1	5:E:341:ALA:N	2.31	0.63
6:F:269:ARG:N	6:F:312:GLU:OE1	2.31	0.63
6:F:370:SER:O	6:F:371:ARG:HG2	1.98	0.63
7:U:492:ASP:OD1	7:U:493:VAL:HG13	1.98	0.63
8:V:480:ILE:HG21	15:d:249:TYR:CZ	2.33	0.63
10:Y:197:ALA:HB1	10:Y:226:VAL:HG11	1.81	0.63
10:Y:334:LEU:HD13	10:Y:347:ILE:HD11	1.80	0.63
12:a:249:GLN:O	12:a:253:THR:HG23	1.98	0.63
14:c:146:ASP:OD2	14:c:149:GLN:HB3	1.97	0.63
16:f:84:SER:CB	16:f:115:PRO:HB3	2.28	0.63
16:f:131:MET:CE	16:f:173:LEU:HD11	2.26	0.63
16:f:183:PRO:CB	16:f:216:MET:HE1	2.26	0.63
16:f:585:GLU:O	16:f:588:ARG:N	2.26	0.63
16:f:736:THR:OG1	16:f:746:ARG:NE	2.31	0.63
18:W:329:ARG:HG3	18:W:329:ARG:NH1	2.14	0.63
18:W:407:ASP:HB3	18:W:412:ILE:CG1	2.24	0.63
3:C:339:THR:OG1	3:C:340:ARG:N	2.31	0.63
3:C:378:VAL:HG23	3:C:382:ASP:OD2	1.98	0.63
4:D:384:MET:HE1	5:E:164:ILE:HD12	1.79	0.63
7:U:236:LEU:HD21	7:U:245:ALA:HB2	1.80	0.63
7:U:353:LEU:CG	7:U:357:LYS:HE2	2.28	0.63
8:V:311:ASN:HA	8:V:314:ARG:HH21	1.62	0.63
11:Z:81:MET:HE2	14:c:94:LYS:CG	2.29	0.63
11:Z:96:HIS:NE2	11:Z:123:ILE:HD12	2.12	0.63
13:b:1:MET:HE3	13:b:2:VAL:HG13	1.79	0.63
13:b:131:LEU:O	13:b:135:LYS:N	2.31	0.63
5:E:138:LEU:O	5:E:142:ILE:HG23	1.98	0.63
5:E:229:ILE:CG1	5:E:274:LYS:HB2	2.29	0.63
5:E:289:LEU:HD23	5:E:294:ARG:CG	2.29	0.63
5:E:320:ILE:HD12	5:E:321:THR:H	1.63	0.63
6:F:191:LEU:HD22	6:F:194:GLN:HE21	1.63	0.63
7:U:368:ALA:O	7:U:371:ILE:HG22	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:415:HIS:ND1	7:U:415:HIS:O	2.30	0.63
7:U:607:VAL:HG13	7:U:608:SER:OG	1.98	0.63
9:X:299:LEU:HD21	9:X:327:TYR:OH	1.97	0.63
9:X:402:GLU:CG	14:c:249:LEU:HD13	2.27	0.63
10:Y:89:GLU:HA	10:Y:100:ILE:HG21	1.79	0.63
10:Y:279:GLU:CG	10:Y:296:VAL:HG21	2.26	0.63
10:Y:283:LYS:HB2	10:Y:292:TYR:HE1	1.62	0.63
11:Z:10:VAL:HG22	11:Z:161:GLU:OE1	1.98	0.63
12:a:321:LYS:HD3	12:a:336:VAL:CG1	2.29	0.63
13:b:4:GLU:O	13:b:105:HIS:ND1	2.26	0.63
15:d:58:GLY:HA2	15:d:61:TRP:HB3	1.80	0.63
15:d:74:TYR:O	15:d:75:MET:C	2.41	0.63
16:f:87:THR:O	16:f:90:THR:HG22	1.98	0.63
16:f:398:TRP:CE3	16:f:401:LYS:HD2	2.33	0.63
18:W:129:ARG:HD3	18:W:130:MET:N	2.13	0.63
24:K:70:ILE:HD11	24:K:76:CYS:HB2	1.80	0.63
1:A:134:ILE:HG23	1:A:138:MET:CE	2.26	0.63
7:U:623:GLY:O	7:U:627:PHE:HB3	1.98	0.63
9:X:214:SER:HB3	9:X:231:TYR:CD2	2.34	0.63
11:Z:209:ARG:HH21	12:a:354:GLU:HB2	1.63	0.63
15:d:14:PRO:O	15:d:15:ASN:C	2.41	0.63
15:d:68:ILE:HG23	15:d:69:PRO:HD3	1.81	0.63
15:d:161:GLU:O	15:d:162:SER:C	2.42	0.63
16:f:498:LEU:HD11	16:f:533:ASP:OD1	1.97	0.63
18:W:132:THR:HA	18:W:144:ARG:NH1	2.14	0.63
18:W:229:LEU:HB2	18:W:230:MET:HE2	1.81	0.63
25:L:9:ASP:OD1	25:L:11:THR:N	2.31	0.63
26:M:117:MET:HE2	26:M:117:MET:HA	1.80	0.63
2:B:220:LYS:HD2	2:B:322:ARG:NH1	2.13	0.63
4:D:169:GLY:O	4:D:340:GLN:NE2	2.32	0.63
5:E:55:GLN:HB3	5:E:100:LEU:O	1.98	0.63
5:E:59:GLU:HA	5:E:96:THR:O	1.98	0.63
8:V:307:ARG:O	8:V:310:THR:HG22	1.98	0.63
9:X:407:MET:HA	9:X:410:VAL:HG12	1.81	0.63
10:Y:80:GLU:O	10:Y:83:ARG:HG3	1.97	0.63
10:Y:183:TYR:HB3	10:Y:200:LEU:CD2	2.29	0.63
16:f:513:GLU:CD	16:f:513:GLU:H	2.06	0.63
16:f:825:MET:HB3	16:f:863:THR:HA	1.81	0.63
18:W:149:LEU:HD22	18:W:185:PHE:HE2	1.63	0.63
28:O:192:VAL:HG13	28:O:192:VAL:O	1.99	0.63
20:g:174:GLU:OE1	20:g:174:GLU:N	2.29	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:240:VAL:CG2	1:A:272:ILE:HD11	2.29	0.63
2:B:429:LYS:HG2	2:B:429:LYS:O	1.97	0.63
4:D:397:LYS:HA	4:D:400:GLU:OE1	1.98	0.63
5:E:229:ILE:HG23	5:E:274:LYS:CB	2.29	0.63
8:V:399:ARG:NH2	8:V:400:HIS:HB2	2.14	0.63
12:a:219:HIS:HD2	12:a:220:PRO:HD2	1.64	0.63
12:a:274:LEU:HB3	12:a:278:MET:HE3	1.81	0.63
12:a:275:LEU:HD22	12:a:278:MET:CE	2.28	0.63
16:f:431:LYS:HG3	16:f:432:TYR:CD2	2.33	0.63
1:A:78:TRP:CD1	2:B:137:SER:HB2	2.34	0.63
3:C:333:SER:HA	3:C:336:MET:HE1	1.81	0.63
5:E:71:VAL:CG1	5:E:100:LEU:HD21	2.23	0.63
5:E:199:VAL:HB	5:E:234:GLU:CB	2.29	0.63
7:U:573:ASP:OD1	7:U:574:LYS:N	2.32	0.63
8:V:348:PHE:CE2	8:V:361:PHE:HA	2.34	0.63
9:X:144:GLN:HE22	9:X:147:LEU:CD2	2.12	0.63
10:Y:101:ARG:NH2	10:Y:131:THR:HA	2.13	0.63
10:Y:138:LEU:CD1	10:Y:168:ILE:HD12	2.29	0.63
10:Y:389:MET:N	10:Y:389:MET:SD	2.71	0.63
14:c:309:PHE:CD2	18:W:432:LEU:HD11	2.33	0.63
15:d:114:GLU:O	15:d:115:PHE:C	2.41	0.63
16:f:183:PRO:HB3	16:f:216:MET:CE	2.29	0.63
16:f:250:ARG:HH22	16:f:255:VAL:HG13	1.64	0.63
16:f:311:VAL:HG21	16:f:317:LEU:HD12	1.81	0.63
16:f:531:ASN:HA	16:f:534:VAL:HG12	1.79	0.63
16:f:606:VAL:HA	16:f:609:VAL:CG1	2.28	0.63
16:f:809:ILE:HG23	16:f:855:GLN:OE1	1.99	0.63
18:W:219:THR:CG2	18:W:256:ILE:HG21	2.28	0.63
1:A:174:TYR:HD1	1:A:228:ALA:HB1	1.64	0.63
1:A:213:LEU:HD11	1:A:321:THR:HG22	1.80	0.63
2:B:121:ALA:HB3	2:B:135:ILE:HD13	1.79	0.63
3:C:186:VAL:HG13	3:C:315:ILE:HD13	1.80	0.63
4:D:81:ARG:HG2	14:c:152:LYS:HG3	1.80	0.63
4:D:267:ILE:CD1	4:D:270:ILE:HG13	2.29	0.63
5:E:40:TYR:HE2	6:F:72:LYS:HB3	1.63	0.63
5:E:128:GLY:N	5:E:193:CYS:HB3	2.13	0.63
7:U:360:VAL:CG2	7:U:365:CYS:HB2	2.28	0.63
7:U:580:ARG:NH1	7:U:616:ARG:HH22	1.97	0.63
7:U:747:SER:HB2	7:U:749:GLN:HE22	1.64	0.63
10:Y:100:ILE:HG13	10:Y:101:ARG:N	2.14	0.63
14:c:261:GLU:HG2	14:c:262:GLU:HG3	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:266:THR:HB	14:c:270:LEU:HG	1.80	0.63
16:f:450:ILE:CG1	16:f:487:LEU:HD23	2.28	0.63
16:f:509:LYS:HE3	16:f:510:SER:HB3	1.80	0.63
16:f:590:PHE:CD1	16:f:631:LYS:HE3	2.33	0.63
16:f:683:GLU:CD	16:f:686:LEU:HB3	2.24	0.63
18:W:253:THR:HG21	18:W:262:LYS:HD2	1.80	0.63
18:W:366:MET:HE1	18:W:378:MET:SD	2.39	0.63
19:e:56:LEU:O	19:e:59:GLU:HB3	1.98	0.63
20:G:131:MET:SD	20:G:131:MET:N	2.70	0.63
1:A:261:PHE:HD2	1:A:305:GLN:HB3	1.60	0.62
2:B:54:PRO:HG3	2:B:60:LEU:HD23	1.80	0.62
2:B:408:ARG:NH1	3:C:163:GLU:OE1	2.32	0.62
3:C:28:ILE:HD11	4:D:44:TYR:CA	2.29	0.62
3:C:114:VAL:HG12	3:C:126:ILE:HD12	1.81	0.62
3:C:229:ARG:HA	3:C:232:ARG:NH2	2.14	0.62
4:D:349:THR:HG21	4:D:360:LEU:HD11	1.81	0.62
4:D:389:GLU:OE1	4:D:389:GLU:N	2.31	0.62
4:D:412:GLN:O	4:D:413:GLU:HG3	1.98	0.62
5:E:158:LEU:O	5:E:162:VAL:HG12	1.99	0.62
7:U:346:ASN:HD21	7:U:382:SER:HB2	1.63	0.62
7:U:622:LEU:O	7:U:625:ILE:HG12	1.99	0.62
9:X:221:GLU:OE1	9:X:223:LYS:HB2	1.99	0.62
11:Z:35:VAL:HG23	11:Z:97:THR:HG23	1.80	0.62
11:Z:202:ASN:ND2	12:a:361:LYS:HG2	2.14	0.62
12:a:168:ASN:OD1	12:a:171:SER:OG	2.13	0.62
12:a:270:ARG:HE	12:a:313:LYS:HD3	1.62	0.62
13:b:160:LEU:CG	13:b:166:THR:H	2.06	0.62
15:d:162:SER:C	15:d:164:THR:N	2.57	0.62
16:f:341:GLU:OE2	16:f:387:GLN:NE2	2.32	0.62
16:f:673:ARG:NH2	16:f:707:LEU:HG	2.14	0.62
18:W:44:ILE:HA	18:W:47:LEU:HD21	1.78	0.62
24:K:50:VAL:HG11	24:K:66:LYS:HB2	1.81	0.62
1:A:333:ARG:NE	1:A:334:PRO:O	2.31	0.62
2:B:284:ILE:HG21	2:B:287:ILE:HD13	1.81	0.62
4:D:163:MET:HE1	4:D:221:HIS:CE1	2.35	0.62
5:E:258:MET:HE3	5:E:289:LEU:HD11	1.81	0.62
7:U:213:PHE:HB2	7:U:248:ILE:HD11	1.80	0.62
8:V:348:PHE:HD2	8:V:361:PHE:HB2	1.64	0.62
12:a:9:GLN:O	12:a:12:GLN:NE2	2.32	0.62
12:a:169:HIS:NE2	12:a:206:LEU:HD23	2.14	0.62
15:d:100:GLY:O	15:d:103:LEU:HB2	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:114:ALA:HB1	16:f:118:ASN:CG	2.24	0.62
16:f:184:LEU:HD11	16:f:219:LYS:HE3	1.79	0.62
16:f:437:GLU:HB3	16:f:440:ILE:HB	1.80	0.62
18:W:83:LEU:HD12	18:W:84:ASN:N	2.14	0.62
30:Q:141:SER:OG	31:r:139:VAL:HG23	1.99	0.62
1:A:34:LYS:NZ	3:C:174:LEU:HB2	2.14	0.62
1:A:402:LYS:C	1:A:403:ILE:HD13	2.24	0.62
2:B:86:LYS:HD2	16:f:621:ASP:OD2	1.99	0.62
7:U:163:PHE:O	7:U:166:THR:HG22	1.99	0.62
7:U:341:PHE:CE2	7:U:787:CYS:HB3	2.35	0.62
7:U:363:SER:OG	7:U:365:CYS:SG	2.53	0.62
10:Y:30:GLU:OE2	10:Y:31:HIS:ND1	2.32	0.62
15:d:8:GLU:O	15:d:9:TRP:C	2.43	0.62
15:d:62:SER:HA	15:d:67:ASP:HB3	1.82	0.62
22:I:35:LEU:HD12	22:I:163:CYS:HB2	1.81	0.62
2:B:70:ASP:CG	16:f:606:VAL:HG21	2.24	0.62
7:U:65:SER:HB3	7:U:80:TYR:HB3	1.82	0.62
7:U:567:ILE:HG22	7:U:585:THR:HG23	1.80	0.62
7:U:707:ASN:OD1	7:U:708:GLN:N	2.31	0.62
11:Z:67:VAL:HG11	13:b:91:ARG:CB	2.30	0.62
11:Z:73:ASP:CG	13:b:63:THR:HB	2.25	0.62
12:a:32:LYS:NZ	13:b:19:GLY:HA3	2.14	0.62
12:a:193:GLN:HB2	12:a:225:LEU:HG	1.79	0.62
14:c:75:MET:HE2	14:c:86:ALA:HB1	1.81	0.62
16:f:230:CYS:HB3	16:f:232:TYR:HE1	1.63	0.62
16:f:419:LEU:HG	16:f:420:TRP:CD1	2.35	0.62
18:W:378:MET:HE3	18:W:378:MET:O	1.99	0.62
1:A:177:VAL:HG22	1:A:224:LEU:CD2	2.28	0.62
1:A:366:ARG:HE	1:A:366:ARG:C	2.03	0.62
5:E:205:ASP:OD2	5:E:211:SER:N	2.32	0.62
5:E:257:LEU:HA	5:E:260:LEU:HD23	1.80	0.62
7:U:328:ILE:HA	7:U:333:MET:HG2	1.81	0.62
8:V:166:TYR:O	8:V:170:LEU:HG	1.99	0.62
9:X:316:ASP:O	9:X:319:ILE:HG22	2.00	0.62
10:Y:88:LEU:HG	10:Y:100:ILE:CG2	2.27	0.62
10:Y:231:LEU:HB3	10:Y:234:PRO:HG2	1.82	0.62
10:Y:301:ILE:HD13	10:Y:342:ARG:CD	2.30	0.62
14:c:54:MET:HB3	14:c:75:MET:CE	2.29	0.62
16:f:702:PRO:O	16:f:706:ILE:HD12	2.00	0.62
16:f:738:ASN:HA	16:f:743:ALA:HB2	1.81	0.62
18:W:328:LEU:O	18:W:338:THR:HB	2.00	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:43:ARG:O	3:C:47:ALA:N	2.29	0.62
3:C:347:ILE:HD13	3:C:383:PHE:CB	2.30	0.62
4:D:293:LEU:HD21	4:D:320:ALA:CB	2.29	0.62
5:E:213:ARG:NH2	5:E:214:LEU:HB2	2.13	0.62
5:E:302:ASP:C	5:E:304:PRO:HD3	2.24	0.62
7:U:685:GLN:HG3	7:U:725:MET:O	2.00	0.62
8:V:262:SER:HA	8:V:264:TYR:HE1	1.64	0.62
8:V:495:ARG:HD2	8:V:497:PRO:O	2.00	0.62
10:Y:334:LEU:HD22	10:Y:338:ILE:HD11	1.80	0.62
11:Z:272:LEU:O	11:Z:276:ILE:HG12	1.98	0.62
12:a:190:VAL:O	12:a:194:GLN:HG2	2.00	0.62
13:b:39:SER:HA	13:b:42:ARG:HB2	1.81	0.62
14:c:137:SER:OG	14:c:138:GLU:N	2.31	0.62
15:d:14:PRO:CG	15:d:17:SER:HA	2.30	0.62
15:d:78:LEU:HD13	15:d:94:TYR:CE2	2.35	0.62
16:f:14:GLN:O	16:f:17:PRO:HG2	2.00	0.62
16:f:333:LEU:HA	16:f:337:LEU:HD23	1.82	0.62
16:f:446:LEU:HD11	16:f:480:GLY:HA2	1.79	0.62
18:W:329:ARG:O	18:W:331:GLY:N	2.32	0.62
1:A:368:ILE:HD12	1:A:406:GLU:OE1	1.99	0.62
3:C:154:LEU:HD12	3:C:157:GLN:NE2	2.13	0.62
3:C:155:ASP:OD1	3:C:155:ASP:N	2.31	0.62
5:E:124:HIS:O	5:E:196:LEU:HD13	1.99	0.62
6:F:88:TYR:CE2	6:F:161:LEU:HD22	2.35	0.62
7:U:766:PHE:O	7:U:769:PHE:HB2	2.00	0.62
8:V:404:LYS:O	8:V:407:VAL:HG12	1.99	0.62
10:Y:82:LYS:N	10:Y:107:LYS:HD2	2.15	0.62
11:Z:6:VAL:HG23	11:Z:46:LYS:O	2.00	0.62
14:c:27:THR:CG2	14:c:179:SER:HB2	2.29	0.62
15:d:104:LEU:O	15:d:108:SER:N	2.29	0.62
16:f:93:PRO:O	16:f:97:LYS:HB3	1.99	0.62
25:L:72:ILE:HD13	25:L:88:MET:HE1	1.82	0.62
2:B:234:LEU:HD22	34:B:501:ATP:O2'	1.99	0.62
2:B:317:ASP:HB2	2:B:346:ARG:HG3	1.81	0.62
2:B:394:ASP:OD1	3:C:308:PRO:HG3	1.99	0.62
3:C:377:HIS:CG	3:C:377:HIS:O	2.52	0.62
6:F:199:VAL:HG13	6:F:203:VAL:CG2	2.30	0.62
7:U:628:ARG:NH2	7:U:755:THR:OG1	2.33	0.62
8:V:224:LEU:HA	8:V:227:VAL:HG22	1.82	0.62
9:X:251:LEU:CA	9:X:254:MET:HG3	2.28	0.62
10:Y:18:ARG:O	10:Y:22:LEU:HD23	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:145:LEU:HD21	10:Y:160:ASN:HB2	1.82	0.62
12:a:231:GLN:O	12:a:234:ILE:HG22	1.99	0.62
14:c:235:SER:HA	18:W:422:ASN:ND2	2.11	0.62
16:f:174:ASP:N	16:f:178:LYS:HZ1	1.97	0.62
18:W:187:LEU:CD1	18:W:226:TYR:HB3	2.30	0.62
19:e:59:GLU:CG	19:e:65:TYR:HB2	2.29	0.62
30:q:38:MET:HE3	30:q:44:LEU:HD22	1.80	0.62
2:B:102:LEU:HD23	2:B:138:PHE:HZ	1.64	0.62
4:D:101:ALA:HB3	4:D:115:ILE:HD11	1.80	0.62
4:D:402:ALA:O	4:D:405:THR:HG22	1.99	0.62
7:U:82:LEU:HB3	7:U:129:ARG:NH2	2.15	0.62
8:V:443:ARG:HH22	15:d:180:GLY:C	2.08	0.62
9:X:69:LEU:O	9:X:73:VAL:HG13	2.00	0.62
9:X:200:ILE:HD12	9:X:203:PRO:CG	2.26	0.62
11:Z:48:LEU:HD11	11:Z:92:VAL:HG21	1.82	0.62
11:Z:224:HIS:CE1	12:a:215:GLU:HB2	2.34	0.62
12:a:232:TRP:HE3	12:a:253:THR:HG22	1.64	0.62
12:a:239:ALA:O	12:a:243:GLY:N	2.22	0.62
15:d:4:GLN:C	15:d:6:LYS:H	2.07	0.62
16:f:418:LEU:HB3	16:f:421:ASP:OD2	2.00	0.62
16:f:866:GLN:HE21	16:f:868:HIS:HB2	1.64	0.62
18:W:254:PRO:HA	18:W:258:ALA:HA	1.81	0.62
1:A:292:ASP:O	1:A:294:GLU:N	2.32	0.62
1:A:334:PRO:HB3	6:F:398:ALA:HB2	1.81	0.62
2:B:268:ARG:NH2	2:B:311:GLU:OE2	2.33	0.62
5:E:289:LEU:HD23	5:E:294:ARG:HD3	1.81	0.62
7:U:262:SER:HA	7:U:265:ILE:CD1	2.30	0.62
8:V:435:GLU:HG3	8:V:453:HIS:HD2	1.63	0.62
9:X:260:MET:CE	9:X:322:HIS:HB3	2.26	0.62
10:Y:202:LEU:HD12	10:Y:203:ASP:N	2.14	0.62
11:Z:208:ILE:HD13	18:W:446:ILE:CD1	2.26	0.62
12:a:31:LYS:O	12:a:32:LYS:HG2	2.00	0.62
12:a:356:TRP:HZ2	14:c:309:PHE:HD1	1.46	0.62
14:c:181:LEU:O	14:c:181:LEU:HD23	2.00	0.62
16:f:51:GLN:HE22	16:f:54:ASP:CA	2.11	0.62
16:f:95:PRO:HG2	16:f:96:LEU:HD12	1.82	0.62
16:f:265:ALA:HB1	16:f:267:ARG:CZ	2.30	0.62
16:f:268:LEU:N	16:f:272:LEU:HD22	2.14	0.62
16:f:281:ILE:HD11	16:f:286:LYS:HZ1	1.65	0.62
18:W:177:MET:HE2	18:W:178:GLU:N	2.15	0.62
25:L:166:GLN:OE1	25:L:167:SER:N	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:43:ARG:O	3:C:46:GLN:HG2	1.99	0.61
3:C:301:LEU:HB3	3:C:306:LEU:HD11	1.82	0.61
7:U:184:CYS:HA	7:U:188:MET:HG3	1.82	0.61
7:U:264:VAL:HA	7:U:267:ASN:HD21	1.65	0.61
7:U:328:ILE:HA	7:U:333:MET:CG	2.29	0.61
7:U:339:LEU:O	7:U:343:ILE:HG12	2.00	0.61
7:U:556:MET:HE3	7:U:559:ARG:HG3	1.82	0.61
9:X:344:ARG:NH1	18:W:409:LEU:HD23	2.15	0.61
10:Y:93:LYS:O	10:Y:95:LEU:HD23	1.99	0.61
10:Y:101:ARG:O	10:Y:104:MET:SD	2.58	0.61
11:Z:144:VAL:HG23	11:Z:145:HIS:H	1.64	0.61
11:Z:224:HIS:HE2	12:a:340:VAL:HG22	1.65	0.61
14:c:244:VAL:HG11	14:c:291:LEU:HD13	1.80	0.61
15:d:26:LEU:HB2	15:d:30:LEU:HB2	1.82	0.61
15:d:33:LEU:HD22	15:d:47:GLN:HB2	1.80	0.61
15:d:61:TRP:NE1	15:d:65:ARG:HG3	2.15	0.61
16:f:38:ASP:HA	16:f:41:LYS:HD3	1.82	0.61
16:f:701:ASN:ND2	16:f:703:ARG:HG2	2.15	0.61
18:W:55:ARG:CZ	18:W:93:ARG:HD2	2.30	0.61
2:B:59:ARG:H	16:f:184:LEU:HD21	1.63	0.61
4:D:284:GLU:OE1	4:D:287:ARG:NH2	2.31	0.61
7:U:220:LEU:HG	7:U:229:VAL:HG22	1.82	0.61
8:V:284:GLU:OE2	8:V:287:ARG:NH1	2.33	0.61
8:V:349:ARG:HD3	8:V:354:LYS:NZ	2.14	0.61
10:Y:23:ARG:O	10:Y:27:SER:HB3	1.99	0.61
10:Y:38:ARG:O	10:Y:42:MET:HG2	2.00	0.61
10:Y:149:LEU:N	10:Y:157:ILE:HD11	2.15	0.61
10:Y:174:TRP:H	10:Y:176:ARG:HH12	1.49	0.61
12:a:35:HIS:HA	12:a:38:THR:CG2	2.30	0.61
13:b:180:ALA:O	13:b:184:ILE:N	2.33	0.61
14:c:111:TRP:CZ2	14:c:130:GLN:HB3	2.32	0.61
15:d:60:GLN:O	15:d:63:ILE:HG12	2.00	0.61
15:d:75:MET:O	15:d:76:ALA:C	2.42	0.61
16:f:577:LEU:HD23	16:f:580:LEU:HD21	1.81	0.61
18:W:401:THR:OG1	18:W:402:ILE:HG22	2.00	0.61
1:A:238:ILE:O	1:A:272:ILE:HD12	2.00	0.61
1:A:386:ARG:O	1:A:390:THR:HG22	2.01	0.61
5:E:26:LEU:O	5:E:30:ARG:HG2	1.99	0.61
5:E:176:PRO:HB3	5:E:280:ASN:HD22	1.65	0.61
6:F:92:ASN:ND2	6:F:150:LEU:HD13	2.15	0.61
7:U:360:VAL:HG11	7:U:392:TRP:CZ2	2.35	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:331:LEU:O	8:V:334:VAL:HG12	1.98	0.61
9:X:396:THR:HG22	14:c:242:GLU:CD	2.24	0.61
10:Y:43:ALA:O	10:Y:46:ARG:NH2	2.34	0.61
10:Y:66:ASP:OD1	10:Y:69:LEU:HD12	1.99	0.61
13:b:16:MET:HA	13:b:16:MET:HE2	1.81	0.61
15:d:77:GLN:O	15:d:78:LEU:C	2.43	0.61
16:f:701:ASN:OD1	16:f:703:ARG:HG2	2.00	0.61
16:f:809:ILE:HG12	16:f:855:GLN:OE1	2.00	0.61
3:C:49:ARG:HA	4:D:65:GLN:NE2	2.15	0.61
3:C:128:PRO:HA	3:C:130:LYS:NZ	2.15	0.61
4:D:309:MET:SD	4:D:327:LEU:HD11	2.40	0.61
7:U:28:ASN:CG	7:U:63:VAL:HG22	2.26	0.61
7:U:780:SER:HA	7:U:783:TYR:CD2	2.35	0.61
8:V:326:GLN:NE2	8:V:356:SER:OG	2.33	0.61
9:X:386:ILE:O	9:X:387:ILE:HD13	2.01	0.61
11:Z:33:LYS:O	11:Z:33:LYS:CD	2.44	0.61
11:Z:71:ASP:OD2	11:Z:74:TYR:HB2	2.00	0.61
11:Z:208:ILE:CD1	18:W:446:ILE:HD13	2.28	0.61
12:a:180:LEU:O	12:a:183:VAL:HG12	2.00	0.61
16:f:214:VAL:HA	16:f:217:LEU:CD2	2.31	0.61
16:f:759:LEU:HB3	16:f:808:ASN:O	2.00	0.61
16:f:856:ALA:CB	16:f:860:LYS:HG3	2.30	0.61
25:L:81:ALA:O	25:L:85:CYS:N	2.31	0.61
2:B:60:LEU:HD11	2:B:64:LYS:HE3	1.81	0.61
3:C:114:VAL:HB	3:C:123:LEU:HD21	1.82	0.61
3:C:194:THR:HG22	3:C:355:SER:O	2.01	0.61
3:C:307:ARG:HH21	3:C:310:ARG:HG3	1.64	0.61
6:F:393:GLY:O	6:F:396:CYS:N	2.31	0.61
7:U:28:ASN:HD21	7:U:63:VAL:HG22	1.63	0.61
7:U:193:PHE:CZ	7:U:197:VAL:HG21	2.36	0.61
8:V:113:LEU:HD21	8:V:174:PHE:CE2	2.35	0.61
8:V:313:LEU:HD21	8:V:329:HIS:CE1	2.36	0.61
11:Z:104:ASN:ND2	11:Z:108:ILE:HG12	2.15	0.61
13:b:48:ASN:HD21	13:b:64:LEU:HB3	1.66	0.61
13:b:62:THR:HG21	13:b:71:ILE:CG2	2.31	0.61
14:c:50:PRO:HB2	14:c:51:MET:SD	2.39	0.61
15:d:105:PHE:HA	15:d:108:SER:HB3	1.82	0.61
16:f:687:ARG:O	16:f:691:PRO:HG2	2.01	0.61
16:f:791:VAL:HA	16:f:797:LEU:CD2	2.30	0.61
1:A:270:CYS:C	1:A:271:LEU:HD23	2.24	0.61
1:A:292:ASP:HB3	1:A:295:VAL:HB	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:49:ARG:NH2	7:U:642:GLU:O	2.33	0.61
5:E:34:LYS:HD2	5:E:34:LYS:C	2.25	0.61
5:E:100:LEU:H	5:E:100:LEU:HD12	1.65	0.61
5:E:142:ILE:HG22	5:E:183:LEU:CD2	2.31	0.61
5:E:382:SER:C	5:E:384:LEU:HD23	2.26	0.61
7:U:410:VAL:HG22	7:U:448:LEU:HD13	1.81	0.61
7:U:418:GLU:OE2	7:U:418:GLU:HA	1.99	0.61
7:U:532:MET:CE	7:U:555:VAL:HG21	2.28	0.61
8:V:482:PHE:CZ	10:Y:381:GLN:HB2	2.35	0.61
10:Y:104:MET:C	10:Y:104:MET:HE2	2.25	0.61
10:Y:149:LEU:HD21	10:Y:286:TRP:CZ2	2.36	0.61
14:c:261:GLU:OE2	14:c:274:ASN:ND2	2.33	0.61
15:d:55:LEU:O	15:d:59:ALA:N	2.25	0.61
16:f:323:ASN:O	16:f:326:LEU:HB2	2.01	0.61
16:f:499:THR:O	16:f:503:PRO:HD3	2.01	0.61
18:W:15:LYS:HB3	18:W:17:GLU:HG3	1.82	0.61
21:h:73:LEU:HD23	21:h:86:VAL:HG22	1.82	0.61
1:A:44:GLN:H	1:A:44:GLN:CD	2.07	0.61
1:A:241:ILE:HG13	1:A:244:GLU:HB3	1.82	0.61
1:A:395:PHE:CE2	1:A:411:GLU:HG2	2.36	0.61
3:C:384:GLU:O	3:C:387:VAL:HG12	2.00	0.61
6:F:388:THR:HG22	6:F:424:ILE:HG21	1.83	0.61
11:Z:94:TRP:CD1	11:Z:121:LEU:HB2	2.35	0.61
12:a:79:ILE:O	12:a:83:VAL:HG22	2.01	0.61
12:a:286:ALA:HA	12:a:289:ARG:CD	2.30	0.61
12:a:321:LYS:NZ	12:a:336:VAL:HG11	2.15	0.61
15:d:211:LYS:O	15:d:212:LYS:C	2.43	0.61
16:f:45:LEU:HG	16:f:54:ASP:OD1	1.99	0.61
16:f:304:PHE:HZ	16:f:311:VAL:HG22	1.63	0.61
2:B:246:THR:CG2	2:B:280:SER:HB2	2.23	0.61
4:D:267:ILE:HG12	4:D:309:MET:HE2	1.82	0.61
5:E:161:ARG:CZ	5:E:161:ARG:HB3	2.29	0.61
5:E:178:THR:CG2	5:E:301:ILE:HD13	2.30	0.61
7:U:505:ASP:HB3	7:U:508:THR:OG1	2.01	0.61
7:U:556:MET:HE1	7:U:562:GLU:C	2.25	0.61
10:Y:24:PHE:O	10:Y:27:SER:OG	2.10	0.61
10:Y:68:ASP:HA	10:Y:71:ASN:OD1	2.01	0.61
10:Y:226:VAL:HA	10:Y:229:ILE:CG2	2.31	0.61
12:a:25:LEU:CA	12:a:28:LEU:HD23	2.24	0.61
12:a:55:GLY:O	12:a:58:LYS:HG3	2.01	0.61
13:b:32:ALA:C	13:b:36:VAL:H	2.08	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:1:MET:O	15:d:2:TYR:C	2.43	0.61
16:f:159:VAL:O	16:f:162:LEU:HG	2.00	0.61
16:f:221:ILE:HG12	16:f:259:PHE:CE1	2.35	0.61
16:f:408:LEU:HD11	16:f:446:LEU:HD22	1.82	0.61
16:f:479:LEU:HD11	16:f:514:VAL:HA	1.81	0.61
16:f:523:GLY:HA3	16:f:564:LEU:HD13	1.82	0.61
16:f:569:LYS:NZ	16:f:573:ILE:H	1.93	0.61
18:W:98:LYS:HD3	18:W:135:LYS:CE	2.31	0.61
18:W:278:PRO:HG3	18:W:357:ARG:NH2	2.16	0.61
1:A:117:GLN:HE22	2:B:129:SER:HA	1.66	0.61
5:E:371:VAL:O	5:E:374:VAL:HG12	2.00	0.61
7:U:377:HIS:C	7:U:380:THR:HG23	2.26	0.61
7:U:450:HIS:CD2	7:U:457:ILE:HG12	2.35	0.61
8:V:372:LEU:HD23	8:V:372:LEU:N	2.16	0.61
8:V:462:GLU:HG2	8:V:463:MET:N	2.15	0.61
11:Z:11:VAL:HG23	11:Z:162:ILE:HG13	1.82	0.61
12:a:244:ASN:O	12:a:246:GLU:N	2.33	0.61
13:b:182:ALA:O	13:b:186:SER:HB3	2.01	0.61
14:c:151:VAL:H	14:c:154:LYS:HE3	1.66	0.61
16:f:51:GLN:C	16:f:52:LEU:HD22	2.25	0.61
3:C:343:ASN:HD22	3:C:346:LYS:HE2	1.66	0.61
4:D:225:ALA:HB1	4:D:259:PRO:O	2.00	0.61
5:E:382:SER:HB2	5:E:384:LEU:HD23	1.83	0.61
6:F:165:PRO:O	6:F:167:GLU:HG2	2.00	0.61
6:F:408:LEU:HD23	6:F:408:LEU:O	2.01	0.61
7:U:368:ALA:HB1	7:U:731:ILE:HD13	1.82	0.61
7:U:810:THR:OG1	7:U:811:PHE:N	2.34	0.61
7:U:892:LEU:HD21	7:U:906:LEU:HG	1.82	0.61
8:V:131:LEU:HD11	8:V:194:LYS:HZ1	1.66	0.61
8:V:443:ARG:HH22	15:d:181:CYS:N	1.97	0.61
9:X:171:LEU:HD21	9:X:210:LEU:CD2	2.31	0.61
10:Y:78:GLU:OE1	10:Y:111:LEU:HD21	2.01	0.61
14:c:251:LEU:CD1	14:c:283:HIS:HB3	2.30	0.61
16:f:239:TYR:O	16:f:242:GLU:HG2	2.01	0.61
16:f:475:ASN:HA	16:f:478:ARG:NE	2.14	0.61
16:f:520:LEU:HD12	16:f:560:LEU:HD12	1.82	0.61
16:f:813:LYS:O	16:f:821:LEU:HB2	2.01	0.61
18:W:74:CYS:O	18:W:79:GLU:HB2	2.00	0.61
18:W:302:TYR:HE2	18:W:328:LEU:HD21	1.65	0.61
18:W:307:LYS:HD2	18:W:310:THR:HG21	1.81	0.61
20:G:80:MET:HE3	20:G:80:MET:HA	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:157:ASP:H	4:D:159:LYS:NZ	1.99	0.60
5:E:59:GLU:OE1	5:E:97:ARG:HA	2.01	0.60
5:E:155:ASN:ND2	5:E:158:LEU:HB2	2.16	0.60
6:F:252:ALA:HB3	6:F:255:GLN:HB3	1.83	0.60
6:F:369:HIS:NE2	34:F:501:ATP:O2'	2.33	0.60
7:U:556:MET:HE1	7:U:562:GLU:O	2.01	0.60
8:V:429:ASP:O	8:V:430:SER:OG	2.15	0.60
8:V:439:ALA:O	8:V:442:ILE:HG23	2.00	0.60
10:Y:71:ASN:HA	10:Y:74:LYS:CG	2.31	0.60
10:Y:179:ARG:HH21	10:Y:180:LEU:CD2	2.14	0.60
10:Y:286:TRP:CZ3	10:Y:287:LEU:HD21	2.36	0.60
11:Z:145:HIS:ND1	11:Z:146:ASP:O	2.31	0.60
11:Z:186:THR:HG23	11:Z:189:GLN:NE2	2.16	0.60
13:b:132:LYS:O	13:b:135:LYS:HD3	2.01	0.60
14:c:289:ASP:O	14:c:293:THR:HG22	2.01	0.60
16:f:198:HIS:CE1	16:f:202:HIS:HB3	2.35	0.60
16:f:605:ASN:OD1	16:f:609:VAL:HG12	2.01	0.60
16:f:681:TYR:HB2	16:f:858:LYS:HD2	1.82	0.60
18:W:53:GLN:O	18:W:56:THR:OG1	2.16	0.60
18:W:296:LEU:O	18:W:296:LEU:HD23	2.00	0.60
29:P:64:GLN:OE1	30:Q:86:ARG:NH2	2.34	0.60
31:r:81:SER:OG	31:r:121:ARG:NE	2.31	0.60
3:C:77:VAL:HG22	3:C:86:LEU:O	2.00	0.60
3:C:222:LYS:HA	4:D:240:LEU:CD2	2.31	0.60
3:C:327:ASP:O	3:C:331:ILE:HG22	2.01	0.60
3:C:398:ASN:HB2	21:H:166:TYR:OH	2.01	0.60
4:D:110:ASN:N	4:D:110:ASN:OD1	2.33	0.60
4:D:173:GLN:O	4:D:177:VAL:HG12	2.01	0.60
6:F:128:THR:O	6:F:129:ARG:HG2	2.00	0.60
6:F:391:PHE:HD1	6:F:395:GLN:HB3	1.65	0.60
7:U:127:ASP:OD2	7:U:129:ARG:NH2	2.34	0.60
7:U:564:ASP:HA	7:U:567:ILE:CG1	2.30	0.60
9:X:188:ALA:O	9:X:191:THR:HG22	2.00	0.60
9:X:316:ASP:HB3	9:X:319:ILE:CG2	2.30	0.60
11:Z:224:HIS:CD2	12:a:340:VAL:HG13	2.36	0.60
12:a:162:TYR:HE2	12:a:168:ASN:CB	2.13	0.60
13:b:32:ALA:O	13:b:33:VAL:C	2.42	0.60
14:c:116:PRO:HD2	14:c:118:PHE:HE2	1.63	0.60
15:d:2:TYR:CE2	15:d:25:ARG:HA	2.36	0.60
16:f:334:ALA:HA	16:f:338:ASP:HB3	1.82	0.60
1:A:86:THR:HG21	2:B:138:PHE:CZ	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:65:LEU:HB3	4:D:114:ARG:NH2	2.15	0.60
3:C:150:MET:O	3:C:331:ILE:HG12	2.00	0.60
3:C:201:ARG:HG2	4:D:299:PHE:HD1	1.65	0.60
5:E:36:LEU:HB3	6:F:69:MET:CG	2.28	0.60
7:U:230:SER:HB2	7:U:267:ASN:ND2	2.16	0.60
7:U:236:LEU:HD21	7:U:245:ALA:CB	2.32	0.60
7:U:637:VAL:HA	7:U:640:LEU:CD2	2.31	0.60
8:V:348:PHE:CE2	8:V:364:THR:HG21	2.37	0.60
9:X:144:GLN:HE22	9:X:147:LEU:HD22	1.66	0.60
9:X:295:LYS:HE2	9:X:295:LYS:HA	1.82	0.60
10:Y:71:ASN:CA	10:Y:74:LYS:HG2	2.31	0.60
11:Z:166:GLU:OE1	11:Z:166:GLU:HA	2.00	0.60
12:a:51:ALA:CB	12:a:86:GLN:HB3	2.31	0.60
16:f:170:TRP:HZ2	16:f:181:ARG:HE	1.49	0.60
16:f:745:LEU:HD22	16:f:745:LEU:O	2.01	0.60
18:W:135:LYS:HB3	18:W:140:ILE:HD11	1.83	0.60
18:W:307:LYS:CA	18:W:310:THR:HG22	2.28	0.60
2:B:150:VAL:CG2	2:B:159:VAL:HG13	2.32	0.60
6:F:84:LYS:HD2	6:F:161:LEU:HD23	1.82	0.60
6:F:191:LEU:HD22	6:F:194:GLN:NE2	2.14	0.60
6:F:403:ALA:O	6:F:406:ILE:HG22	2.01	0.60
8:V:330:LYS:HD3	8:V:360:TYR:OH	2.01	0.60
10:Y:27:SER:OG	10:Y:28:LEU:N	2.30	0.60
11:Z:12:HIS:NE2	11:Z:165:GLU:HB2	2.16	0.60
15:d:9:TRP:O	15:d:10:ASN:C	2.44	0.60
16:f:72:ARG:O	16:f:83:ARG:NH1	2.31	0.60
16:f:549:GLU:CA	16:f:552:ASP:HB2	2.31	0.60
16:f:643:PRO:HG2	16:f:648:ALA:N	2.16	0.60
18:W:412:ILE:HD12	18:W:414:ASN:ND2	2.15	0.60
19:e:56:LEU:O	19:e:60:LEU:CD1	2.49	0.60
2:B:99:VAL:O	2:B:103:ARG:HG2	2.02	0.60
2:B:210:TYR:HA	2:B:213:GLU:CD	2.27	0.60
5:E:212:ALA:HA	5:E:216:ARG:HH12	1.65	0.60
6:F:288:LEU:HD12	6:F:291:ILE:CG2	2.31	0.60
6:F:418:GLU:HG2	25:L:164:ARG:NH1	2.15	0.60
8:V:394:LEU:H	8:V:394:LEU:HD12	1.65	0.60
10:Y:104:MET:HE1	10:Y:127:THR:HB	1.82	0.60
13:b:9:CYS:HB3	13:b:54:LEU:HD21	1.84	0.60
15:d:26:LEU:O	15:d:29:VAL:N	2.34	0.60
15:d:133:ILE:O	15:d:134:LYS:C	2.43	0.60
16:f:42:GLU:HB2	16:f:89:MET:CE	2.30	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:461:PRO:HB2	16:f:465:LEU:HD12	1.83	0.60
18:W:109:CYS:SG	18:W:147:LYS:HE2	2.42	0.60
18:W:223:LYS:HG2	18:W:226:TYR:CE2	2.30	0.60
18:W:253:THR:HG23	18:W:254:PRO:CD	2.32	0.60
24:K:104:ASN:OD1	31:R:58:ARG:NH2	2.34	0.60
1:A:389:CYS:O	1:A:392:ALA:HB3	2.02	0.60
5:E:310:LEU:HD12	5:E:310:LEU:H	1.67	0.60
5:E:365:GLU:HG3	5:E:369:LYS:HZ2	1.67	0.60
7:U:220:LEU:HG	7:U:229:VAL:CG2	2.31	0.60
9:X:299:LEU:HG	9:X:327:TYR:HE1	1.66	0.60
10:Y:177:ARG:NH2	10:Y:206:SER:OG	2.35	0.60
11:Z:234:PHE:CE2	18:W:435:LEU:HG	2.37	0.60
12:a:18:GLN:HB2	12:a:19:PRO:HD3	1.82	0.60
12:a:279:GLU:OE1	12:a:279:GLU:HA	2.02	0.60
12:a:341:LEU:HD23	12:a:346:ILE:HD13	1.82	0.60
13:b:107:MET:HE2	13:b:107:MET:HA	1.82	0.60
16:f:92:VAL:O	16:f:95:PRO:HD2	2.01	0.60
16:f:107:LYS:HB2	16:f:111:GLU:HB3	1.84	0.60
16:f:233:LEU:HA	16:f:236:CYS:HB2	1.83	0.60
16:f:449:GLY:HA3	16:f:484:GLY:HA3	1.82	0.60
25:L:78:THR:O	25:L:81:ALA:N	2.34	0.60
1:A:99:THR:CG2	1:A:115:VAL:HA	2.31	0.60
1:A:390:THR:C	1:A:392:ALA:H	2.10	0.60
2:B:105:THR:OG1	2:B:106:PRO:HD2	2.02	0.60
2:B:156:VAL:HG23	2:B:156:VAL:O	2.00	0.60
5:E:203:ILE:CA	5:E:214:LEU:HD23	2.30	0.60
12:a:18:GLN:O	12:a:22:TRP:HD1	1.84	0.60
12:a:247:ARG:HA	12:a:247:ARG:NE	2.09	0.60
16:f:90:THR:O	16:f:93:PRO:HD2	2.02	0.60
16:f:466:LEU:HD12	16:f:481:SER:CA	2.28	0.60
18:W:167:GLN:O	18:W:170:GLN:NE2	2.33	0.60
18:W:172:GLU:HG3	18:W:182:ARG:NH1	2.17	0.60
22:I:155:ASN:OD1	22:I:156:TYR:N	2.35	0.60
1:A:219:GLY:HA3	2:B:343:ARG:HD2	1.84	0.60
1:A:322:ASN:HD22	2:B:294:ARG:HH21	1.48	0.60
3:C:256:SER:O	3:C:302:ASP:HB3	2.02	0.60
4:D:53:PHE:CZ	7:U:636:VAL:HB	2.36	0.60
4:D:277:ALA:O	4:D:283:ARG:NH1	2.35	0.60
6:F:191:LEU:HD13	6:F:194:GLN:HE21	1.67	0.60
7:U:793:LYS:HG3	7:U:794:ASP:OD1	2.01	0.60
7:U:890:LYS:HG3	7:U:891:VAL:HG13	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:71:LYS:HA	9:X:74:ARG:CZ	2.31	0.60
11:Z:173:GLU:O	11:Z:177:ARG:HG2	2.02	0.60
12:a:275:LEU:HD22	12:a:278:MET:HE1	1.82	0.60
14:c:75:MET:HE2	14:c:86:ALA:CB	2.31	0.60
14:c:265:MET:SD	14:c:266:THR:N	2.74	0.60
16:f:127:SER:CB	16:f:178:LYS:HD3	2.32	0.60
16:f:655:LEU:HD23	16:f:659:LEU:HD12	1.82	0.60
16:f:814:SER:HB2	16:f:818:LEU:O	2.02	0.60
16:f:869:THR:CG2	16:f:884:THR:HA	2.32	0.60
18:W:69:ALA:HA	18:W:72:LYS:CD	2.24	0.60
18:W:156:ASN:C	18:W:156:ASN:HD22	2.09	0.60
1:A:277:ILE:HD13	1:A:319:MET:HE2	1.84	0.60
3:C:24:TYR:HB3	4:D:40:LEU:CG	2.32	0.60
3:C:197:THR:HG21	34:C:501:ATP:O1B	2.01	0.60
3:C:399:MET:HG3	3:C:402:LYS:HD3	1.84	0.60
4:D:53:PHE:HZ	7:U:636:VAL:HB	1.66	0.60
4:D:228:ILE:HD13	4:D:262:ILE:CD1	2.32	0.60
7:U:221:ILE:HG12	7:U:256:ALA:HB2	1.84	0.60
7:U:789:ILE:CG2	7:U:911:ILE:HG23	2.32	0.60
8:V:106:ARG:HD3	8:V:106:ARG:N	2.17	0.60
8:V:161:PRO:O	8:V:164:GLU:HG2	2.02	0.60
8:V:349:ARG:HA	8:V:354:LYS:NZ	2.16	0.60
9:X:150:GLY:O	9:X:154:LEU:HD23	2.01	0.60
11:Z:245:PHE:HE1	18:W:424:LEU:HD21	1.66	0.60
12:a:290:GLN:HE21	12:a:330:ARG:HE	1.50	0.60
14:c:251:LEU:HD11	14:c:283:HIS:CB	2.32	0.60
15:d:77:GLN:O	15:d:81:TYR:N	2.19	0.60
16:f:238:ASN:O	16:f:241:PRO:HD2	2.01	0.60
16:f:321:MET:HA	16:f:321:MET:CE	2.27	0.60
16:f:459:CYS:SG	16:f:461:PRO:HG3	2.41	0.60
18:W:253:THR:N	18:W:254:PRO:HD2	2.17	0.60
33:T:96:MET:HE2	33:T:110:MET:HE1	1.83	0.60
1:A:73:ALA:O	1:A:75:PRO:HD3	2.02	0.60
1:A:113:ILE:HD13	1:A:142:VAL:HG21	1.84	0.60
2:B:410:ARG:HB3	16:f:53:GLN:CG	2.30	0.60
5:E:142:ILE:HG22	5:E:183:LEU:HD21	1.84	0.60
7:U:583:MET:HE1	7:U:614:VAL:O	2.01	0.60
8:V:224:LEU:O	8:V:227:VAL:HG22	2.02	0.60
9:X:255:LEU:O	9:X:259:ILE:HG23	2.02	0.60
10:Y:309:GLU:HA	10:Y:309:GLU:OE2	2.02	0.60
12:a:25:LEU:O	12:a:28:LEU:HB2	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:224:SER:HB3	14:c:227:GLU:CG	2.31	0.60
15:d:132:TYR:O	15:d:133:ILE:C	2.45	0.60
16:f:190:GLU:O	16:f:194:TYR:HB2	2.02	0.60
16:f:202:HIS:HB2	16:f:206:ASP:CG	2.27	0.60
18:W:17:GLU:HB2	18:W:57:ALA:CB	2.31	0.60
18:W:79:GLU:HB3	18:W:82:LEU:HB2	1.83	0.60
18:W:112:VAL:HG23	18:W:115:ILE:O	2.02	0.60
18:W:198:ASP:C	18:W:199:TYR:HD1	2.09	0.60
2:B:249:ARG:NH2	3:C:284:GLU:OE2	2.35	0.59
3:C:391:MET:HE1	3:C:393:LYS:HE3	1.84	0.59
5:E:298:LYS:NZ	5:E:298:LYS:HB2	2.17	0.59
6:F:249:LEU:HD12	6:F:250:LYS:H	1.67	0.59
6:F:288:LEU:HB3	6:F:332:THR:HG22	1.84	0.59
8:V:313:LEU:HD21	8:V:329:HIS:CD2	2.37	0.59
10:Y:101:ARG:HH22	10:Y:131:THR:HA	1.67	0.59
12:a:40:GLN:OE1	12:a:40:GLN:HA	2.01	0.59
12:a:247:ARG:NH2	12:a:250:THR:HB	2.16	0.59
12:a:278:MET:O	12:a:335:TRP:HH2	1.84	0.59
13:b:2:VAL:HG22	13:b:44:ASN:HD21	1.65	0.59
16:f:159:VAL:HG23	16:f:162:LEU:HD21	1.84	0.59
16:f:490:ALA:HB1	16:f:524:MET:HB2	1.84	0.59
16:f:498:LEU:HD11	16:f:533:ASP:CG	2.27	0.59
16:f:731:MET:SD	16:f:732:VAL:N	2.75	0.59
3:C:196:LYS:O	3:C:198:LEU:N	2.35	0.59
5:E:84:ARG:HD3	5:E:108:MET:CE	2.33	0.59
10:Y:38:ARG:O	10:Y:41:LEU:HG	2.02	0.59
12:a:25:LEU:HD12	12:a:28:LEU:HB2	1.84	0.59
12:a:217:LEU:HD13	12:a:238:TYR:CE1	2.37	0.59
15:d:175:ARG:HB2	15:d:175:ARG:HH11	1.67	0.59
16:f:190:GLU:OE1	16:f:197:ALA:HB2	2.02	0.59
16:f:274:ASP:O	16:f:278:VAL:HG23	2.02	0.59
16:f:482:ILE:HG13	16:f:483:PHE:N	2.18	0.59
18:W:317:TRP:CD2	18:W:355:LYS:HD3	2.36	0.59
18:W:322:GLU:OE1	18:W:322:GLU:HA	2.02	0.59
1:A:249:TYR:HB2	6:F:259:MET:HE3	1.85	0.59
2:B:329:MET:HE1	2:B:341:LEU:HD21	1.84	0.59
2:B:405:MET:HA	2:B:405:MET:CE	2.28	0.59
3:C:156:LYS:O	3:C:160:GLU:HG2	2.02	0.59
5:E:307:GLN:NE2	18:W:13:ILE:HG21	2.18	0.59
5:E:343:LEU:O	5:E:346:VAL:HG12	2.01	0.59
6:F:78:GLU:OE1	6:F:81:LYS:HD2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:134:LEU:HD21	6:F:158:TYR:O	2.02	0.59
6:F:146:LYS:HG3	6:F:147:PRO:HD2	1.83	0.59
7:U:20:LYS:HE3	7:U:54:PHE:CE1	2.37	0.59
7:U:149:GLN:O	7:U:153:ILE:HG22	2.02	0.59
8:V:358:MET:HE3	8:V:359:PRO:CD	2.22	0.59
8:V:430:SER:HB2	8:V:433:ASP:CG	2.27	0.59
11:Z:105:ASP:OD1	11:Z:106:ILE:N	2.33	0.59
15:d:162:SER:O	15:d:164:THR:N	2.34	0.59
16:f:61:GLU:HG3	16:f:97:LYS:HG3	1.84	0.59
16:f:777:THR:C	16:f:780:PRO:HD2	2.27	0.59
1:A:111:TYR:C	1:A:112:ILE:HD13	2.27	0.59
1:A:119:ALA:CB	6:F:127:SER:HB2	2.28	0.59
2:B:250:VAL:HG12	2:B:251:VAL:H	1.67	0.59
5:E:263:GLN:NE2	5:E:263:GLN:O	2.36	0.59
6:F:223:VAL:HB	6:F:329:ILE:HG22	1.84	0.59
7:U:166:THR:O	7:U:169:GLU:HG3	2.02	0.59
7:U:253:TYR:CE1	7:U:331:GLY:HA3	2.37	0.59
8:V:460:SER:OG	8:V:461:LYS:N	2.32	0.59
8:V:471:GLU:N	8:V:472:PRO:HD2	2.17	0.59
10:Y:193:ASP:C	10:Y:197:ALA:HB3	2.28	0.59
12:a:322:GLY:HA3	12:a:333:MET:HA	1.83	0.59
13:b:111:ALA:N	13:b:139:ASP:O	2.21	0.59
14:c:70:ILE:HG13	14:c:71:ASP:N	2.17	0.59
15:d:2:TYR:CE1	15:d:5:LEU:HB2	2.37	0.59
15:d:94:TYR:CD2	15:d:98:LEU:HB3	2.37	0.59
16:f:553:THR:O	16:f:785:ARG:NH2	2.35	0.59
18:W:120:ILE:HG23	18:W:121:LYS:N	2.17	0.59
23:J:132:LEU:HD11	23:J:144:LEU:HD21	1.85	0.59
38:n:301:LDZ:H38	38:n:301:LDZ:H3	1.83	0.59
1:A:161:VAL:HG12	1:A:263:MET:HE1	1.85	0.59
2:B:295:TYR:CE1	3:C:263:SER:HB3	2.38	0.59
6:F:125:LYS:HA	6:F:125:LYS:HE3	1.84	0.59
6:F:314:LEU:HG	6:F:347:ARG:HD3	1.84	0.59
7:U:357:LYS:HD3	7:U:392:TRP:CH2	2.37	0.59
7:U:595:ASN:O	7:U:599:ILE:HG22	2.02	0.59
7:U:646:PRO:CB	7:U:680:VAL:HG21	2.30	0.59
7:U:772:TRP:CZ3	14:c:179:SER:HB3	2.37	0.59
7:U:806:CYS:O	7:U:874:ASN:ND2	2.35	0.59
10:Y:26:LEU:HD21	10:Y:60:SER:HB2	1.85	0.59
11:Z:17:LEU:O	11:Z:20:VAL:HG12	2.01	0.59
11:Z:226:ILE:CG1	18:W:445:LEU:HD21	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:a:333:MET:O	12:a:334:THR:OG1	2.19	0.59
14:c:40:LYS:HG2	14:c:112:TYR:OH	2.02	0.59
16:f:38:ASP:CG	16:f:89:MET:HE2	2.27	0.59
16:f:267:ARG:C	16:f:272:LEU:HD13	2.27	0.59
25:L:24:TYR:O	25:L:27:GLU:N	2.34	0.59
26:M:20:VAL:O	26:M:20:VAL:HG23	2.02	0.59
31:R:46:MET:CE	38:R:301:LDZ:H17	2.31	0.59
3:C:52:LEU:HD23	4:D:65:GLN:OE1	2.02	0.59
3:C:293:MET:HE1	3:C:305:LEU:HD21	1.84	0.59
5:E:97:ARG:NH1	5:E:112:PRO:O	2.36	0.59
6:F:298:SER:OG	6:F:301:ALA:N	2.33	0.59
7:U:145:HIS:HA	7:U:147:TYR:CE1	2.37	0.59
7:U:153:ILE:O	7:U:157:THR:HG23	2.03	0.59
9:X:70:LEU:CA	9:X:73:VAL:HG22	2.31	0.59
10:Y:172:GLY:O	10:Y:176:ARG:NH1	2.35	0.59
10:Y:222:TYR:OH	10:Y:285:ASP:OD2	2.19	0.59
11:Z:17:LEU:HA	11:Z:20:VAL:HG12	1.85	0.59
15:d:82:TYR:CG	15:d:94:TYR:HB2	2.37	0.59
16:f:207:LEU:HA	16:f:210:GLU:OE2	2.03	0.59
16:f:489:TYR:O	16:f:525:ILE:HG12	2.02	0.59
1:A:87:LEU:O	1:A:87:LEU:HD23	2.03	0.59
1:A:174:TYR:CD1	1:A:228:ALA:HB1	2.38	0.59
1:A:388:VAL:O	1:A:392:ALA:HB2	2.02	0.59
3:C:128:PRO:HA	3:C:130:LYS:HZ2	1.67	0.59
3:C:222:LYS:HA	4:D:240:LEU:HD21	1.83	0.59
5:E:155:ASN:HD21	5:E:158:LEU:HB2	1.67	0.59
5:E:163:GLY:O	5:E:164:ILE:HG23	2.03	0.59
8:V:255:LEU:HD11	8:V:271:VAL:CG2	2.32	0.59
8:V:330:LYS:HD3	8:V:360:TYR:CZ	2.37	0.59
9:X:137:TYR:HE2	9:X:145:GLU:HB2	1.67	0.59
9:X:243:ASP:OD1	9:X:245:PRO:HG2	2.02	0.59
10:Y:381:GLN:HG3	10:Y:385:ARG:HH21	1.66	0.59
12:a:65:SER:CA	12:a:68:GLU:HB3	2.32	0.59
12:a:135:ILE:O	12:a:138:VAL:HG23	2.02	0.59
13:b:181:ASP:HA	13:b:184:ILE:HB	1.84	0.59
16:f:294:MET:HE3	16:f:294:MET:O	2.02	0.59
16:f:296:PHE:CE1	16:f:298:LEU:HG	2.38	0.59
16:f:490:ALA:CA	16:f:525:ILE:HA	2.32	0.59
16:f:579:ALA:O	16:f:582:VAL:HG22	2.03	0.59
18:W:314:LEU:HD11	18:W:381:LEU:HD13	1.84	0.59
1:A:95:VAL:HB	1:A:144:ARG:HH22	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:240:VAL:HG22	1:A:272:ILE:HD11	1.84	0.59
1:A:377:CYS:CA	1:A:417:ILE:HD11	2.32	0.59
3:C:342:ILE:HD12	3:C:380:GLN:OE1	2.02	0.59
5:E:34:LYS:HZ1	5:E:38:LYS:HD2	1.67	0.59
5:E:34:LYS:CE	5:E:38:LYS:HG3	2.33	0.59
7:U:521:LEU:HD12	7:U:554:LEU:CD2	2.26	0.59
7:U:804:SER:O	7:U:875:PHE:HA	2.02	0.59
9:X:338:VAL:HG13	9:X:339:ILE:HG23	1.84	0.59
11:Z:125:ASP:OD1	11:Z:126:VAL:N	2.35	0.59
12:a:185:ILE:HB	12:a:187:ASP:OD2	2.02	0.59
12:a:281:THR:HG21	12:a:333:MET:HG3	1.83	0.59
14:c:57:MET:HE3	14:c:72:VAL:HG21	1.85	0.59
15:d:12:LYS:O	15:d:13:SER:C	2.44	0.59
18:W:274:VAL:CG1	18:W:287:VAL:HG22	2.33	0.59
30:Q:168:GLN:NE2	30:Q:175:LEU:O	2.35	0.59
1:A:73:ALA:HB2	2:B:140:ASP:CA	2.33	0.59
2:B:136:LEU:HD11	2:B:158:ALA:CB	2.26	0.59
2:B:261:GLY:O	2:B:265:LYS:HG3	2.02	0.59
5:E:129:ASN:O	5:E:130:VAL:HG23	2.02	0.59
5:E:153:LEU:HD12	5:E:227:PRO:CB	2.33	0.59
5:E:173:TYR:HA	5:E:279:THR:O	2.02	0.59
7:U:583:MET:HA	7:U:586:VAL:HG12	1.85	0.59
8:V:111:TYR:O	8:V:115:LYS:HE3	2.03	0.59
8:V:259:LEU:HD23	8:V:291:TYR:CE1	2.37	0.59
9:X:137:TYR:HB3	9:X:146:ALA:HB2	1.85	0.59
11:Z:156:GLU:OE1	11:Z:157:HIS:N	2.36	0.59
11:Z:224:HIS:ND1	12:a:215:GLU:HG3	2.18	0.59
11:Z:238:PRO:O	11:Z:240:VAL:HG13	2.02	0.59
12:a:69:HIS:HB2	12:a:70:ARG:NH1	2.18	0.59
12:a:290:GLN:HG2	12:a:330:ARG:NE	2.18	0.59
15:d:24:GLY:HA2	15:d:27:LYS:HB2	1.84	0.59
15:d:55:LEU:O	15:d:58:GLY:N	2.35	0.59
15:d:114:GLU:O	15:d:117:THR:N	2.34	0.59
16:f:135:GLY:O	16:f:138:GLU:HG3	2.03	0.59
16:f:250:ARG:HH22	16:f:255:VAL:CG1	2.15	0.59
16:f:616:CYS:HB3	16:f:632:LYS:HE3	1.85	0.59
16:f:797:LEU:N	16:f:797:LEU:HD23	2.17	0.59
16:f:869:THR:HG23	16:f:885:GLU:N	2.17	0.59
18:W:20:TYR:CE1	18:W:53:GLN:HB3	2.28	0.59
18:W:59:ASP:HB2	18:W:62:SER:OG	2.02	0.59
18:W:347:GLY:N	18:W:350:ARG:HH21	2.00	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:403:PHE:CE1	18:W:405:LYS:HG2	2.37	0.59
18:W:451:MET:SD	18:W:452:ILE:N	2.75	0.59
1:A:169:LYS:HG3	1:A:231:ASN:HA	1.84	0.59
3:C:151:ILE:HG12	3:C:198:LEU:HD21	1.83	0.59
3:C:222:LYS:HG3	3:C:223:PHE:HD1	1.65	0.59
5:E:147:GLU:HB2	18:W:174:TYR:CE1	2.38	0.59
5:E:331:ILE:O	5:E:334:LEU:HD12	2.03	0.59
7:U:353:LEU:HD21	7:U:357:LYS:HE2	1.83	0.59
8:V:309:MET:HE1	8:V:335:VAL:CG2	2.33	0.59
10:Y:57:LEU:HD21	10:Y:63:TRP:HA	1.84	0.59
11:Z:213:GLU:HA	12:a:350:LYS:NZ	2.18	0.59
12:a:188:LEU:CG	12:a:189:PRO:HD2	2.32	0.59
14:c:175:ARG:HG2	14:c:201:TYR:CZ	2.38	0.59
15:d:24:GLY:O	15:d:25:ARG:C	2.46	0.59
15:d:69:PRO:O	15:d:70:SER:C	2.46	0.59
15:d:93:ALA:O	15:d:98:LEU:N	2.35	0.59
16:f:473:ASN:OD1	16:f:478:ARG:NH1	2.36	0.59
18:W:342:GLY:HA2	18:W:347:GLY:HA3	1.85	0.59
18:W:403:PHE:CD1	18:W:404:ALA:N	2.70	0.59
27:N:23:THR:O	27:N:23:THR:HG23	2.03	0.59
1:A:124:ASP:OD2	6:F:86:LEU:HG	2.03	0.58
1:A:134:ILE:HA	1:A:138:MET:CE	2.33	0.58
4:D:213:THR:HG22	4:D:265:ASP:OD2	2.03	0.58
4:D:302:ASN:O	4:D:303:VAL:HB	2.03	0.58
5:E:153:LEU:HA	5:E:272:ARG:HD3	1.83	0.58
5:E:312:ILE:HG21	5:E:343:LEU:HB3	1.84	0.58
5:E:354:ALA:HA	5:E:359:HIS:HE1	1.68	0.58
6:F:364:ARG:HA	6:F:364:ARG:HE	1.67	0.58
7:U:436:ALA:HA	7:U:439:GLU:OE1	2.03	0.58
7:U:485:ALA:C	7:U:488:THR:HG23	2.28	0.58
8:V:71:THR:HG23	8:V:107:ARG:HE	1.67	0.58
8:V:169:LEU:HD22	8:V:210:CYS:SG	2.42	0.58
8:V:487:HIS:O	8:V:491:VAL:HG23	2.03	0.58
9:X:166:LEU:CD2	9:X:196:THR:HG21	2.33	0.58
9:X:339:ILE:HG21	9:X:350:ILE:HD11	1.85	0.58
10:Y:161:THR:HG21	10:Y:186:LEU:HD12	1.85	0.58
10:Y:187:TYR:CD2	10:Y:196:GLN:HB3	2.38	0.58
10:Y:290:PRO:HG2	10:Y:291:HIS:CE1	2.37	0.58
11:Z:114:ARG:HG3	11:Z:115:TYR:CD1	2.37	0.58
15:d:50:LEU:O	15:d:53:ASP:N	2.36	0.58
18:W:75:TYR:CZ	18:W:112:VAL:HB	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:120:ILE:HG13	18:W:121:LYS:H	1.68	0.58
1:A:261:PHE:CE2	1:A:305:GLN:HB3	2.38	0.58
3:C:106:ASN:OD1	3:C:107:ASP:N	2.37	0.58
5:E:142:ILE:HG13	5:E:143:ARG:N	2.16	0.58
7:U:220:LEU:HD21	7:U:229:VAL:N	2.18	0.58
7:U:335:ILE:HA	7:U:338:HIS:NE2	2.18	0.58
10:Y:286:TRP:O	10:Y:287:LEU:HD23	2.03	0.58
11:Z:44:GLN:NE2	11:Z:47:VAL:HG22	2.17	0.58
12:a:55:GLY:HA2	12:a:58:LYS:HG2	1.85	0.58
15:d:29:VAL:O	15:d:30:LEU:C	2.46	0.58
15:d:244:LYS:O	15:d:247:ILE:HG22	2.03	0.58
16:f:142:TYR:HD2	16:f:189:LYS:HG2	1.68	0.58
16:f:233:LEU:O	16:f:237:VAL:N	2.25	0.58
16:f:670:MET:HB3	16:f:673:ARG:HH22	1.65	0.58
18:W:92:LYS:HG3	18:W:93:ARG:N	2.19	0.58
18:W:120:ILE:HG23	18:W:122:LEU:H	1.68	0.58
18:W:221:LYS:O	18:W:224:LEU:N	2.34	0.58
2:B:234:LEU:HD22	34:B:501:ATP:H2'	1.85	0.58
2:B:257:GLN:OE1	2:B:257:GLN:HA	2.02	0.58
2:B:380:LEU:HD21	2:B:419:PHE:CE2	2.29	0.58
2:B:429:LYS:HZ2	3:C:306:LEU:HD23	1.66	0.58
3:C:37:ASP:HA	3:C:40:GLN:OE1	2.03	0.58
5:E:93:LYS:C	5:E:95:GLY:H	2.10	0.58
6:F:125:LYS:CD	6:F:126:THR:H	2.14	0.58
7:U:167:ILE:HG12	7:U:204:ILE:HD13	1.85	0.58
7:U:243:LEU:HD12	7:U:913:ILE:CG2	2.29	0.58
7:U:713:TYR:O	7:U:716:VAL:HG12	2.02	0.58
7:U:725:MET:SD	7:U:725:MET:N	2.75	0.58
8:V:258:TYR:CE1	8:V:266:GLN:HB3	2.37	0.58
11:Z:213:GLU:N	12:a:350:LYS:HE2	2.18	0.58
12:a:188:LEU:HD21	12:a:192:GLU:CG	2.30	0.58
13:b:147:GLU:OE2	13:b:150:THR:HG23	2.03	0.58
14:c:72:VAL:CG1	14:c:112:TYR:HE1	2.16	0.58
14:c:224:SER:O	14:c:225:TRP:HB2	2.02	0.58
18:W:178:GLU:CG	18:W:181:GLU:HB3	2.32	0.58
18:W:235:GLN:NE2	18:W:346:GLU:OE1	2.36	0.58
28:o:2:THR:N	28:o:170:SER:HG	2.01	0.58
1:A:56:LEU:CD2	2:B:72:LEU:HD21	2.30	0.58
1:A:115:VAL:HG12	1:A:119:ALA:O	2.02	0.58
1:A:185:GLU:OE1	1:A:185:GLU:HA	2.04	0.58
1:A:213:LEU:HG	1:A:215:PHE:CE1	2.39	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:182:GLU:O	2:B:241:ASN:ND2	2.36	0.58
2:B:271:PHE:CG	2:B:315:GLN:OE1	2.56	0.58
2:B:358:GLU:OE1	2:B:384:ILE:HG21	2.03	0.58
2:B:407:LEU:CD1	3:C:178:LEU:HD22	2.33	0.58
4:D:378:ILE:HD11	4:D:403:TYR:HD1	1.68	0.58
4:D:388:ARG:HH22	5:E:297:ARG:HD3	1.68	0.58
5:E:172:LEU:HD21	5:E:278:ALA:HB2	1.85	0.58
5:E:212:ALA:CB	5:E:216:ARG:NH2	2.66	0.58
6:F:59:VAL:O	6:F:63:THR:N	2.33	0.58
7:U:703:CYS:O	7:U:706:VAL:HG23	2.02	0.58
9:X:145:GLU:O	9:X:148:HIS:HB3	2.03	0.58
10:Y:196:GLN:OE1	10:Y:196:GLN:HA	2.03	0.58
10:Y:262:SER:HB2	10:Y:270:VAL:CG1	2.33	0.58
11:Z:32:GLN:H	11:Z:32:GLN:CD	2.03	0.58
11:Z:208:ILE:HG22	12:a:353:LEU:HD11	1.85	0.58
12:a:190:VAL:HG22	12:a:225:LEU:HD11	1.85	0.58
13:b:53:THR:HG23	13:b:59:GLU:H	1.68	0.58
13:b:147:GLU:OE1	13:b:147:GLU:N	2.32	0.58
14:c:219:ASN:HB2	14:c:223:LYS:HG3	1.85	0.58
16:f:373:ALA:HA	16:f:748:LEU:CD1	2.33	0.58
16:f:617:SER:HB2	16:f:629:LYS:HE3	1.85	0.58
16:f:813:LYS:C	16:f:821:LEU:HD12	2.28	0.58
16:f:857:GLY:H	16:f:860:LYS:NZ	2.00	0.58
18:W:109:CYS:HA	18:W:147:LYS:NZ	2.18	0.58
1:A:34:LYS:HZ3	3:C:174:LEU:HB2	1.68	0.58
1:A:41:TYR:HA	1:A:44:GLN:NE2	2.18	0.58
1:A:354:ILE:CG2	1:A:385:ILE:HG21	2.29	0.58
2:B:224:LEU:HB3	2:B:353:PHE:CE1	2.37	0.58
2:B:384:ILE:HG22	2:B:385:MET:CE	2.34	0.58
5:E:214:LEU:O	5:E:214:LEU:HD12	2.04	0.58
5:E:232:MET:HE2	5:E:257:LEU:HD22	1.86	0.58
5:E:338:PHE:CZ	5:E:384:LEU:HD12	2.37	0.58
7:U:27:LEU:HD11	7:U:38:ILE:CD1	2.33	0.58
7:U:646:PRO:CG	7:U:649:ARG:HH22	2.14	0.58
7:U:759:SER:O	7:U:763:VAL:HG23	2.03	0.58
8:V:372:LEU:H	8:V:372:LEU:CD2	2.16	0.58
11:Z:144:VAL:CG2	12:a:178:ARG:HH21	2.16	0.58
11:Z:280:ILE:HG23	11:Z:283:ARG:NH2	2.17	0.58
12:a:87:MET:CE	12:a:92:VAL:HB	2.31	0.58
12:a:137:ASP:O	12:a:140:GLU:HG2	2.02	0.58
13:b:55:ALA:O	13:b:58:CYS:N	2.35	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:20:ALA:HB3	16:f:21:PRO:HD3	1.84	0.58
16:f:143:ARG:CZ	16:f:143:ARG:HA	2.33	0.58
16:f:224:ASN:OD1	16:f:225:ALA:N	2.36	0.58
16:f:545:LYS:HG2	16:f:548:THR:H	1.66	0.58
16:f:815:HIS:CD2	16:f:821:LEU:HD21	2.38	0.58
18:W:49:SER:HA	18:W:52:LYS:HG2	1.84	0.58
22:I:35:LEU:HD11	22:I:175:LEU:HD11	1.85	0.58
1:A:134:ILE:HD12	1:A:138:MET:CE	2.33	0.58
3:C:87:VAL:HG11	3:C:116:LEU:HD11	1.86	0.58
6:F:276:LYS:H	6:F:276:LYS:CD	2.14	0.58
7:U:759:SER:HA	7:U:782:ALA:HA	1.86	0.58
9:X:340:GLU:OE1	18:W:398:VAL:HG23	2.02	0.58
11:Z:96:HIS:O	11:Z:123:ILE:HG13	2.03	0.58
13:b:49:VAL:HG22	13:b:65:THR:O	2.04	0.58
13:b:132:LYS:HZ2	13:b:160:LEU:HD12	1.67	0.58
14:c:251:LEU:HD21	14:c:283:HIS:ND1	2.18	0.58
15:d:16:LEU:O	15:d:18:LYS:N	2.36	0.58
15:d:80:CYS:HA	15:d:83:PHE:HD1	1.68	0.58
16:f:105:LYS:HB2	16:f:109:ILE:HG12	1.84	0.58
16:f:326:LEU:O	16:f:330:PHE:HB2	2.03	0.58
16:f:467:SER:HA	16:f:470:VAL:CG2	2.33	0.58
16:f:828:ARG:NE	16:f:847:GLY:HA3	2.19	0.58
3:C:404:LEU:C	3:C:406:LYS:HZ2	2.10	0.58
4:D:163:MET:HE2	4:D:163:MET:N	2.17	0.58
4:D:392:TYR:HE1	4:D:393:ILE:HG12	1.66	0.58
7:U:529:ILE:HA	7:U:532:MET:HG2	1.86	0.58
7:U:894:MET:HE1	7:U:902:PRO:CD	2.32	0.58
8:V:147:PHE:HD1	8:V:149:PRO:HD3	1.69	0.58
8:V:348:PHE:CD2	8:V:361:PHE:HB2	2.38	0.58
9:X:261:LEU:O	9:X:263:THR:HG23	2.04	0.58
10:Y:191:ILE:HG13	10:Y:290:PRO:HB2	1.85	0.58
10:Y:232:GLU:OE2	10:Y:306:GLN:HB2	2.03	0.58
10:Y:252:SER:O	10:Y:254:PRO:HD3	2.03	0.58
10:Y:274:SER:O	10:Y:277:VAL:HG12	2.02	0.58
12:a:207:GLY:HA3	12:a:210:VAL:CG1	2.34	0.58
14:c:216:MET:C	14:c:218:LEU:H	2.10	0.58
14:c:303:MET:HE1	15:d:242:LEU:CD1	2.21	0.58
16:f:125:ILE:HG12	16:f:129:LEU:CB	2.33	0.58
16:f:241:PRO:HG2	16:f:259:PHE:CD2	2.35	0.58
16:f:292:LYS:C	16:f:292:LYS:HD3	2.29	0.58
18:W:63:THR:HB	18:W:96:GLN:NE2	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:403:PHE:HE1	18:W:405:LYS:HD3	1.68	0.58
26:m:87:LEU:HD12	26:m:133:CYS:SG	2.44	0.58
1:A:201:PHE:CD2	1:A:208:PRO:HB3	2.39	0.58
1:A:240:VAL:HG21	1:A:274:PHE:CZ	2.38	0.58
2:B:181:GLN:HG3	2:B:181:GLN:O	2.04	0.58
3:C:242:ALA:CB	3:C:243:PRO:CD	2.82	0.58
4:D:163:MET:HE1	4:D:221:HIS:CD2	2.39	0.58
4:D:383:GLY:O	4:D:387:VAL:HG13	2.04	0.58
5:E:91:LYS:CD	5:E:92:LEU:H	2.17	0.58
5:E:104:THR:OG1	5:E:106:THR:HG22	2.03	0.58
5:E:334:LEU:CD2	5:E:372:ARG:HH12	2.15	0.58
7:U:220:LEU:HD21	7:U:228:ALA:C	2.28	0.58
7:U:368:ALA:CB	7:U:731:ILE:HG21	2.32	0.58
8:V:332:LEU:HD23	8:V:332:LEU:C	2.29	0.58
9:X:218:HIS:HA	9:X:221:GLU:HG2	1.85	0.58
9:X:233:TYR:CA	9:X:254:MET:HE1	2.33	0.58
9:X:258:LYS:HE2	9:X:258:LYS:HA	1.86	0.58
10:Y:78:GLU:O	10:Y:107:LYS:NZ	2.36	0.58
10:Y:177:ARG:HH22	10:Y:208:PHE:H	1.51	0.58
12:a:20:ALA:O	12:a:24:ARG:HG2	2.02	0.58
16:f:95:PRO:CB	16:f:133:MET:HG3	2.34	0.58
16:f:180:GLN:O	16:f:184:LEU:HD13	2.04	0.58
16:f:346:ASP:HA	16:f:349:TYR:CZ	2.39	0.58
16:f:706:ILE:HG23	16:f:745:LEU:CG	2.33	0.58
16:f:720:GLU:HG3	16:f:754:LYS:HB3	1.86	0.58
16:f:858:LYS:CB	16:f:859:PRO:HD3	2.34	0.58
18:W:448:LYS:HD3	18:W:452:ILE:HD12	1.86	0.58
19:e:49:GLU:HG2	19:e:50:ASP:N	2.18	0.58
1:A:95:VAL:O	1:A:144:ARG:NH1	2.37	0.58
2:B:78:PHE:HE1	16:f:658:ALA:HB1	1.68	0.58
2:B:214:MET:HE2	2:B:216:ILE:CD1	2.33	0.58
4:D:143:LEU:HB3	4:D:144:PRO:HD2	1.85	0.58
7:U:542:GLU:HG3	7:U:542:GLU:O	2.04	0.58
7:U:549:ALA:HB1	7:U:581:SER:HB3	1.84	0.58
7:U:584:TYR:OH	7:U:768:GLN:OE1	2.07	0.58
10:Y:24:PHE:O	10:Y:29:PRO:HD2	2.04	0.58
10:Y:213:LEU:HD22	10:Y:219:PHE:HB2	1.86	0.58
11:Z:9:VAL:HG12	11:Z:159:THR:O	2.03	0.58
11:Z:67:VAL:HG13	13:b:92:VAL:CG1	2.33	0.58
12:a:172:TYR:CE1	12:a:203:ALA:HB2	2.39	0.58
12:a:226:ARG:NH1	12:a:230:ARG:O	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:121:TRP:CZ3	14:c:123:SER:HB3	2.38	0.58
14:c:210:ASN:HB3	14:c:213:GLU:HG3	1.85	0.58
16:f:94:LYS:HD2	16:f:102:HIS:CE1	2.39	0.58
16:f:267:ARG:HH21	16:f:296:PHE:HB2	1.69	0.58
16:f:640:LYS:NZ	16:f:678:LEU:HD22	2.19	0.58
18:W:294:LYS:O	18:W:297:GLU:HB2	2.04	0.58
2:B:240:ALA:HB2	3:C:283:PHE:HZ	1.69	0.58
5:E:118:LEU:C	5:E:120:TYR:H	2.12	0.58
5:E:175:PRO:HB3	5:E:338:PHE:CZ	2.39	0.58
5:E:309:ARG:NH2	5:E:333:LYS:H	2.02	0.58
7:U:583:MET:SD	7:U:618:ALA:HA	2.43	0.58
8:V:294:ARG:HA	8:V:331:LEU:HD21	1.84	0.58
9:X:233:TYR:HA	9:X:254:MET:CE	2.33	0.58
9:X:364:LYS:HG3	9:X:368:MET:CE	2.33	0.58
9:X:378:LEU:HB3	10:Y:311:TYR:CD1	2.38	0.58
12:a:135:ILE:HA	12:a:138:VAL:CG2	2.34	0.58
12:a:308:GLU:O	12:a:311:VAL:HG12	2.04	0.58
13:b:25:ARG:O	13:b:26:LEU:C	2.46	0.58
14:c:38:LEU:HD11	14:c:42:LEU:HD11	1.86	0.58
14:c:292:MET:HG2	15:d:253:LEU:CD2	2.34	0.58
15:d:102:ASN:O	15:d:106:LEU:N	2.37	0.58
16:f:579:ALA:O	16:f:582:VAL:HG13	2.04	0.58
16:f:642:ALA:HB2	16:f:763:ARG:CZ	2.33	0.58
18:W:92:LYS:CG	18:W:93:ARG:H	2.17	0.58
32:S:199:THR:OG1	32:S:201:GLU:OE2	2.14	0.58
1:A:123:VAL:HG21	1:A:149:ILE:HG13	1.84	0.57
2:B:440:LEU:HD23	23:J:30:SER:CB	2.33	0.57
3:C:220:VAL:O	3:C:221:GLN:NE2	2.36	0.57
5:E:109:ARG:CZ	5:E:109:ARG:HB2	2.33	0.57
5:E:165:ILE:N	5:E:166:PRO:CD	2.67	0.57
7:U:121:GLY:HA2	7:U:123:LYS:HZ2	1.69	0.57
7:U:837:ALA:HA	7:U:840:LYS:HE3	1.85	0.57
8:V:175:MET:HA	8:V:178:SER:HB2	1.85	0.57
8:V:283:ASN:OD1	8:V:283:ASN:N	2.37	0.57
10:Y:32:ARG:CD	10:Y:284:LYS:HD2	2.34	0.57
12:a:130:VAL:HA	12:a:133:GLU:OE2	2.04	0.57
12:a:290:GLN:OE1	12:a:332:HIS:ND1	2.28	0.57
16:f:121:PHE:O	16:f:129:LEU:HD13	2.04	0.57
16:f:784:ASP:OD2	16:f:787:LEU:HD11	2.04	0.57
16:f:817:VAL:HG23	16:f:818:LEU:H	1.68	0.57
31:R:18:ASP:OD2	31:R:34:LYS:NZ	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:k:117:SER:OG	25:l:82:ARG:NH2	2.36	0.57
1:A:99:THR:OG1	1:A:115:VAL:HA	2.04	0.57
1:A:101:ILE:HD11	1:A:104:ALA:HB2	1.87	0.57
2:B:241:ASN:HB3	2:B:242:GLN:OE1	2.04	0.57
2:B:405:MET:HE1	2:B:408:ARG:CZ	2.35	0.57
3:C:57:ARG:O	3:C:61:GLU:HG3	2.04	0.57
3:C:367:GLY:HA3	4:D:196:ILE:CD1	2.22	0.57
4:D:116:LEU:O	4:D:119:ILE:HG13	2.04	0.57
4:D:343:LEU:O	4:D:347:THR:HG22	2.04	0.57
6:F:155:LYS:O	6:F:158:TYR:HE1	1.87	0.57
6:F:356:MET:HE1	6:F:392:ASN:HB3	1.86	0.57
7:U:351:MET:O	7:U:354:LYS:HG2	2.04	0.57
8:V:466:ILE:HD12	8:V:469:THR:OG1	2.04	0.57
9:X:177:TYR:CE2	9:X:185:LYS:HG2	2.39	0.57
9:X:365:LEU:O	9:X:369:ILE:HG12	2.04	0.57
10:Y:177:ARG:HH22	10:Y:208:PHE:N	2.01	0.57
10:Y:224:VAL:HG11	10:Y:256:VAL:HG13	1.86	0.57
11:Z:90:ARG:O	11:Z:92:VAL:HG13	2.05	0.57
11:Z:101:LEU:HD23	11:Z:101:LEU:O	2.03	0.57
11:Z:226:ILE:HD11	18:W:445:LEU:HD11	1.84	0.57
11:Z:259:VAL:CB	14:c:295:ASN:HB3	2.34	0.57
13:b:180:ALA:O	13:b:183:LEU:N	2.33	0.57
16:f:472:HIS:HB3	16:f:477:MET:HE1	1.85	0.57
18:W:243:ILE:HB	18:W:273:TYR:HD2	1.69	0.57
1:A:201:PHE:CE2	1:A:208:PRO:HB3	2.40	0.57
2:B:113:GLU:HG3	2:B:114:GLU:H	1.67	0.57
2:B:334:ILE:HD11	2:B:342:ILE:HG21	1.86	0.57
3:C:123:LEU:HD23	3:C:124:HIS:H	1.70	0.57
4:D:138:ALA:O	4:D:140:VAL:HG13	2.04	0.57
5:E:139:SER:O	5:E:142:ILE:HG13	2.04	0.57
5:E:191:LEU:HD11	18:W:211:THR:O	2.03	0.57
7:U:239:GLU:OE1	7:U:241:ASN:HB2	2.04	0.57
7:U:363:SER:O	7:U:366:HIS:ND1	2.36	0.57
8:V:309:MET:SD	8:V:331:LEU:HG	2.44	0.57
9:X:96:PHE:CD2	9:X:97:LEU:HD22	2.39	0.57
9:X:299:LEU:O	9:X:299:LEU:HD23	2.04	0.57
12:a:280:MET:HE2	12:a:299:SER:HB3	1.85	0.57
13:b:14:GLU:HB2	13:b:82:GLY:H	1.69	0.57
14:c:57:MET:HB2	14:c:110:GLY:H	1.70	0.57
15:d:251:ARG:O	15:d:255:MET:HB2	2.04	0.57
16:f:569:LYS:HG2	16:f:570:GLY:N	2.19	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:167:ILE:HB	4:D:214:MET:HE3	1.86	0.57
4:D:204:MET:HG3	4:D:310:ALA:HB2	1.86	0.57
5:E:122:MET:SD	5:E:122:MET:N	2.77	0.57
5:E:195:PHE:CZ	5:E:276:ILE:HD12	2.39	0.57
5:E:232:MET:HE2	5:E:257:LEU:CD2	2.34	0.57
5:E:336:ASP:OD1	5:E:336:ASP:N	2.37	0.57
6:F:131:THR:O	6:F:132:TYR:HD2	1.88	0.57
7:U:62:LEU:HD22	7:U:87:LEU:CD2	2.34	0.57
9:X:397:TYR:CD2	10:Y:365:GLN:HB3	2.38	0.57
10:Y:28:LEU:HD12	10:Y:28:LEU:H	1.69	0.57
11:Z:52:ASN:OD1	11:Z:53:SER:N	2.37	0.57
12:a:7:PHE:CE2	12:a:59:LEU:HD11	2.39	0.57
12:a:74:LEU:HD12	12:a:75:SER:N	2.19	0.57
13:b:4:GLU:HA	13:b:106:LYS:O	2.04	0.57
15:d:125:LYS:O	15:d:129:THR:N	2.37	0.57
16:f:38:ASP:OD2	16:f:89:MET:HE2	2.05	0.57
18:W:120:ILE:HG23	18:W:121:LYS:H	1.69	0.57
1:A:78:TRP:NE1	2:B:137:SER:HB2	2.19	0.57
2:B:384:ILE:O	2:B:385:MET:HB2	2.03	0.57
3:C:150:MET:HA	3:C:331:ILE:HD11	1.86	0.57
3:C:373:GLU:HB2	3:C:375:ARG:HG2	1.85	0.57
5:E:152:PRO:HB2	5:E:274:LYS:HE3	1.86	0.57
5:E:200:SER:OG	5:E:232:MET:HE3	2.03	0.57
8:V:368:ARG:NE	8:V:368:ARG:HA	2.19	0.57
8:V:435:GLU:HG2	8:V:451:ILE:CD1	2.35	0.57
9:X:251:LEU:HD21	9:X:276:ALA:CB	2.34	0.57
11:Z:26:ILE:O	11:Z:29:VAL:N	2.26	0.57
16:f:725:SER:O	16:f:729:MET:HG3	2.04	0.57
18:W:137:TYR:O	18:W:141:GLU:HG3	2.03	0.57
18:W:196:VAL:HG13	18:W:197:LYS:N	2.18	0.57
18:W:363:ILE:HD12	18:W:366:MET:HE2	1.86	0.57
1:A:191:VAL:HG13	1:A:271:LEU:HD13	1.84	0.57
1:A:191:VAL:HG13	1:A:271:LEU:CD1	2.34	0.57
2:B:247:PHE:HD1	2:B:248:LEU:N	2.03	0.57
2:B:385:MET:HE2	2:B:385:MET:CA	2.34	0.57
3:C:82:LYS:HG2	3:C:83:LYS:HG2	1.86	0.57
3:C:148:TYR:HE1	3:C:202:ALA:HB1	1.70	0.57
5:E:148:VAL:HG11	5:E:170:CYS:SG	2.44	0.57
5:E:218:MET:C	5:E:218:MET:HE2	2.29	0.57
7:U:108:TYR:OH	7:U:159:ARG:NH1	2.35	0.57
7:U:609:ASP:H	7:U:615:ARG:HH21	1.50	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:616:ARG:HD2	7:U:616:ARG:C	2.30	0.57
12:a:188:LEU:HD23	12:a:193:GLN:HG2	1.87	0.57
15:d:113:ALA:O	15:d:117:THR:HG23	2.05	0.57
16:f:719:PRO:CB	16:f:721:VAL:HG13	2.27	0.57
16:f:739:ALA:O	16:f:741:LEU:N	2.38	0.57
18:W:136:ILE:HD13	18:W:136:ILE:N	2.20	0.57
18:W:218:ASN:HB2	18:W:220:GLU:HB2	1.86	0.57
18:W:248:ARG:HH12	18:W:289:ARG:HH21	1.51	0.57
30:q:94:SER:OG	30:q:95:ARG:N	2.37	0.57
5:E:52:SER:HB3	6:F:135:PRO:HG2	1.87	0.57
5:E:166:PRO:O	5:E:168:LYS:N	2.37	0.57
5:E:253:ILE:O	5:E:257:LEU:HG	2.05	0.57
5:E:368:MET:O	5:E:372:ARG:HG2	2.04	0.57
7:U:652:ALA:HA	7:U:655:ALA:HB3	1.85	0.57
8:V:178:SER:HB2	8:V:180:ARG:HG2	1.87	0.57
8:V:300:LEU:HD12	8:V:302:TYR:OH	2.05	0.57
10:Y:14:ASN:HD22	10:Y:146:ARG:HD2	1.70	0.57
11:Z:44:GLN:HE22	11:Z:47:VAL:HG13	1.70	0.57
11:Z:230:LEU:CD1	18:W:438:LEU:HD13	2.34	0.57
11:Z:245:PHE:HA	11:Z:248:ALA:HB3	1.86	0.57
13:b:160:LEU:HD23	13:b:166:THR:HA	1.86	0.57
16:f:728:ALA:HA	16:f:750:GLN:CD	2.29	0.57
18:W:25:ASP:CA	18:W:65:ARG:HH22	2.17	0.57
18:W:180:LYS:HD3	18:W:222:LEU:HD21	1.85	0.57
18:W:206:SER:O	18:W:209:ILE:HG22	2.05	0.57
18:W:251:TYR:CE1	18:W:254:PRO:HG3	2.39	0.57
21:H:187:ILE:O	21:H:191:ILE:HD12	2.04	0.57
1:A:274:PHE:HB3	1:A:277:ILE:CD1	2.33	0.57
2:B:351:ILE:HB	2:B:353:PHE:CE1	2.40	0.57
3:C:151:ILE:HG12	3:C:198:LEU:CD2	2.35	0.57
4:D:384:MET:HE2	5:E:164:ILE:HD12	1.85	0.57
5:E:50:LEU:HD12	6:F:139:LEU:HD11	1.87	0.57
7:U:604:HIS:O	7:U:607:VAL:HG12	2.05	0.57
8:V:260:HIS:O	8:V:260:HIS:ND1	2.35	0.57
9:X:310:ARG:HB2	9:X:314:ARG:HH21	1.69	0.57
9:X:325:LYS:HA	9:X:325:LYS:HE2	1.84	0.57
10:Y:179:ARG:HH21	10:Y:180:LEU:HD23	1.70	0.57
12:a:341:LEU:HD23	12:a:346:ILE:CD1	2.35	0.57
13:b:37:CYS:O	13:b:40:LYS:N	2.38	0.57
13:b:68:THR:HA	13:b:71:ILE:HG12	1.86	0.57
15:d:44:THR:CB	15:d:47:GLN:HB3	2.33	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:716:ASP:C	16:f:719:PRO:HD3	2.29	0.57
18:W:119:PRO:HD2	18:W:123:ARG:HH11	1.70	0.57
22:I:79:ILE:HD12	22:I:79:ILE:N	2.20	0.57
2:B:121:ALA:HB3	2:B:135:ILE:CD1	2.34	0.57
3:C:377:HIS:O	3:C:377:HIS:ND1	2.38	0.57
4:D:79:VAL:O	4:D:82:ILE:HG22	2.05	0.57
5:E:26:LEU:HD12	5:E:30:ARG:NH1	2.17	0.57
6:F:364:ARG:HA	6:F:364:ARG:NE	2.20	0.57
7:U:17:PRO:O	7:U:20:LYS:HG2	2.05	0.57
7:U:374:SER:HB2	7:U:407:SER:OG	2.05	0.57
7:U:602:LEU:O	7:U:605:VAL:HG12	2.03	0.57
7:U:788:VAL:HG13	7:U:884:VAL:HG11	1.87	0.57
9:X:175:LYS:NZ	9:X:213:GLN:OE1	2.38	0.57
10:Y:258:GLN:OE1	10:Y:270:VAL:HG21	2.05	0.57
11:Z:81:MET:HE2	14:c:94:LYS:HG2	1.87	0.57
13:b:9:CYS:C	13:b:54:LEU:HD11	2.30	0.57
14:c:231:LEU:HD11	14:c:302:ALA:HA	1.86	0.57
16:f:70:LEU:O	16:f:74:ALA:HB2	2.04	0.57
16:f:794:ALA:HA	16:f:797:LEU:CG	2.34	0.57
18:W:193:CYS:HB3	18:W:202:THR:HG22	1.84	0.57
18:W:226:TYR:O	18:W:230:MET:HG2	2.05	0.57
18:W:366:MET:O	18:W:370:TYR:HB2	2.04	0.57
25:L:88:MET:SD	25:L:112:ILE:HD11	2.45	0.57
1:A:336:ARG:C	1:A:337:LEU:HD23	2.29	0.57
2:B:38:LYS:HE3	2:B:40:THR:HG23	1.86	0.57
3:C:134:LEU:HD12	3:C:134:LEU:O	2.05	0.57
4:D:348:ILE:CD1	4:D:376:ASN:HA	2.34	0.57
7:U:37:GLU:OE1	7:U:37:GLU:N	2.28	0.57
7:U:527:GLN:OE1	7:U:528:ALA:N	2.38	0.57
7:U:744:VAL:HB	7:U:783:TYR:HB3	1.87	0.57
8:V:479:ARG:HB3	11:Z:261:TYR:CE1	2.40	0.57
14:c:27:THR:HG22	14:c:28:ALA:H	1.69	0.57
15:d:166:PHE:CA	15:d:169:ILE:HB	2.27	0.57
16:f:125:ILE:HB	16:f:129:LEU:HB2	1.87	0.57
16:f:613:LEU:HA	16:f:632:LYS:HD2	1.87	0.57
16:f:776:LEU:HG	16:f:805:ASP:OD2	2.03	0.57
18:W:68:VAL:HG12	18:W:72:LYS:CE	2.15	0.57
18:W:129:ARG:NH1	18:W:130:MET:HA	2.18	0.57
27:N:34:LYS:HG2	38:N:301:LDZ:H20	1.87	0.57
1:A:115:VAL:HG13	1:A:116:LYS:H	1.70	0.56
2:B:236:ALA:O	2:B:239:VAL:HG22	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:150:MET:CA	3:C:331:ILE:HG12	2.35	0.56
3:C:229:ARG:HA	3:C:232:ARG:CZ	2.34	0.56
11:Z:192:THR:HG22	12:a:375:LEU:HD12	1.87	0.56
12:a:74:LEU:O	12:a:77:VAL:HG12	2.04	0.56
12:a:108:ASP:OD1	12:a:110:ALA:HB3	2.05	0.56
12:a:109:GLU:O	12:a:112:ILE:HD11	2.04	0.56
13:b:145:GLU:OE1	13:b:145:GLU:N	2.38	0.56
16:f:45:LEU:HD22	16:f:56:LEU:CD2	2.35	0.56
16:f:672:LEU:HD12	16:f:707:LEU:CB	2.35	0.56
16:f:825:MET:HA	16:f:864:GLY:N	2.20	0.56
16:f:871:PRO:HG2	16:f:874:LEU:HD23	1.87	0.56
18:W:62:SER:O	18:W:66:ILE:HG13	2.04	0.56
18:W:209:ILE:HG23	18:W:210:ASN:H	1.68	0.56
24:K:236:GLU:C	24:K:236:GLU:OE1	2.48	0.56
29:p:35:THR:HG22	29:p:37:ASP:H	1.70	0.56
1:A:122:VAL:CG2	6:F:88:TYR:HB2	2.35	0.56
1:A:274:PHE:CB	1:A:277:ILE:HD13	2.34	0.56
3:C:24:TYR:CE2	4:D:41:TYR:HB2	2.40	0.56
3:C:86:LEU:HD11	3:C:94:LYS:HB2	1.87	0.56
5:E:34:LYS:HE2	5:E:38:LYS:HG3	1.87	0.56
5:E:328:TYR:O	5:E:332:VAL:HG23	2.05	0.56
7:U:62:LEU:CB	7:U:87:LEU:HD23	2.33	0.56
7:U:899:ARG:HD3	7:U:921:ILE:CG2	2.35	0.56
8:V:417:ILE:O	8:V:458:VAL:HG23	2.05	0.56
10:Y:145:LEU:CD2	10:Y:160:ASN:HB2	2.35	0.56
11:Z:9:VAL:HG13	11:Z:160:SER:HB2	1.86	0.56
14:c:278:GLN:OE1	14:c:280:PRO:HD2	2.04	0.56
16:f:142:TYR:O	16:f:142:TYR:HD1	1.87	0.56
16:f:199:ASN:HA	16:f:202:HIS:CD2	2.39	0.56
16:f:688:ARG:O	16:f:688:ARG:HD2	2.05	0.56
16:f:838:ARG:HG3	16:f:840:LEU:HG	1.87	0.56
18:W:209:ILE:HG23	18:W:210:ASN:N	2.20	0.56
1:A:113:ILE:CD1	1:A:142:VAL:HG21	2.35	0.56
1:A:135:GLU:OE1	1:A:135:GLU:N	2.39	0.56
1:A:236:CYS:HB2	1:A:270:CYS:SG	2.46	0.56
2:B:203:LEU:N	2:B:204:PRO:HD2	2.20	0.56
3:C:203:VAL:O	3:C:207:THR:HG23	2.05	0.56
3:C:258:ARG:CG	3:C:270:GLN:HE21	2.18	0.56
4:D:60:TYR:CB	7:U:603:LEU:HD13	2.35	0.56
4:D:203:LEU:HG	4:D:327:LEU:HD13	1.86	0.56
4:D:280:GLY:C	4:D:282:ASP:H	2.13	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:328:ASP:O	4:D:330:LYS:HE2	2.06	0.56
5:E:229:ILE:CG2	5:E:274:LYS:HB2	2.35	0.56
6:F:240:CYS:HA	6:F:243:GLN:NE2	2.21	0.56
6:F:321:GLN:O	6:F:324:THR:HG22	2.04	0.56
7:U:369:THR:HA	7:U:731:ILE:HD11	1.88	0.56
7:U:820:PRO:O	7:U:822:GLU:HG2	2.04	0.56
8:V:131:LEU:HD11	8:V:194:LYS:NZ	2.19	0.56
8:V:218:TYR:CD2	8:V:227:VAL:HG12	2.37	0.56
8:V:238:ALA:HA	8:V:241:ARG:HG2	1.86	0.56
9:X:341:PRO:HG3	18:W:394:SER:OG	2.06	0.56
10:Y:25:LEU:HA	10:Y:29:PRO:HG2	1.87	0.56
10:Y:358:ARG:HH11	10:Y:358:ARG:HB2	1.70	0.56
11:Z:110:GLU:HA	11:Z:113:LYS:NZ	2.21	0.56
11:Z:208:ILE:HG22	12:a:353:LEU:CD1	2.35	0.56
12:a:65:SER:CB	12:a:68:GLU:HB3	2.35	0.56
12:a:280:MET:HE2	12:a:299:SER:CB	2.36	0.56
12:a:313:LYS:O	12:a:317:VAL:HG12	2.05	0.56
13:b:155:ALA:HA	13:b:158:ASN:HB2	1.86	0.56
13:b:157:VAL:O	13:b:160:LEU:HB3	2.05	0.56
16:f:45:LEU:HD22	16:f:56:LEU:HD22	1.86	0.56
16:f:172:GLU:OE2	16:f:179:VAL:HG13	2.03	0.56
18:W:178:GLU:HG3	18:W:181:GLU:H	1.70	0.56
18:W:403:PHE:HE2	18:W:417:ARG:CA	2.19	0.56
1:A:45:ILE:CD1	2:B:62:LEU:HA	2.35	0.56
1:A:70:THR:HB	2:B:164:MET:HE1	1.87	0.56
2:B:234:LEU:HD22	34:B:501:ATP:C2'	2.35	0.56
4:D:103:VAL:HG12	4:D:113:VAL:CG1	2.36	0.56
4:D:132:LEU:HB3	4:D:137:ASN:HA	1.88	0.56
4:D:170:MET:O	4:D:170:MET:CG	2.54	0.56
5:E:111:LEU:CD2	6:F:97:LEU:HD22	2.35	0.56
5:E:218:MET:HE2	5:E:218:MET:O	2.06	0.56
6:F:222:GLY:HA2	6:F:328:VAL:O	2.05	0.56
7:U:39:SER:HB3	8:V:273:LYS:NZ	2.20	0.56
7:U:229:VAL:O	7:U:232:ILE:HG22	2.06	0.56
7:U:353:LEU:HD23	7:U:353:LEU:C	2.31	0.56
7:U:524:LYS:NZ	7:U:562:GLU:HB3	2.20	0.56
11:Z:127:LYS:HB2	11:Z:127:LYS:HZ3	1.70	0.56
12:a:362:SER:CA	12:a:365:MET:HE3	2.27	0.56
14:c:31:VAL:HG12	14:c:204:THR:O	2.06	0.56
16:f:221:ILE:HG12	16:f:259:PHE:CZ	2.40	0.56
16:f:337:LEU:HD21	16:f:819:TYR:CE2	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:425:GLY:O	16:f:429:ILE:HD12	2.03	0.56
16:f:718:ASP:OD2	16:f:758:ASN:HB3	2.05	0.56
28:o:64:LEU:HD22	28:o:75:PRO:HB3	1.87	0.56
1:A:44:GLN:OE1	1:A:44:GLN:N	2.32	0.56
34:A:501:ATP:O1A	2:B:343:ARG:NH2	2.38	0.56
2:B:222:VAL:HG23	2:B:224:LEU:HD21	1.88	0.56
2:B:339:PRO:O	2:B:340:ALA:HB2	2.04	0.56
2:B:429:LYS:HZ2	3:C:306:LEU:HB3	1.71	0.56
3:C:41:ASN:ND2	4:D:58:GLU:OE1	2.38	0.56
3:C:144:PRO:HG2	4:D:299:PHE:CE1	2.41	0.56
3:C:368:MET:HE3	4:D:179:GLU:HG3	1.87	0.56
4:D:130:VAL:HG12	4:D:142:VAL:HG22	1.86	0.56
4:D:181:VAL:HG21	4:D:308:ILE:HD11	1.87	0.56
5:E:76:GLY:N	5:E:77:PRO:HD2	2.20	0.56
5:E:172:LEU:HD12	5:E:301:ILE:HG12	1.88	0.56
7:U:130:LEU:O	7:U:133:ILE:HG22	2.05	0.56
7:U:349:ASP:O	7:U:350:LEU:HD12	2.06	0.56
7:U:423:MET:HG2	7:U:446:LEU:HD12	1.87	0.56
9:X:171:LEU:HD21	9:X:210:LEU:HD21	1.87	0.56
11:Z:38:VAL:HA	11:Z:94:TRP:HA	1.87	0.56
11:Z:126:VAL:O	14:c:212:LEU:HD21	2.06	0.56
13:b:109:ILE:HB	13:b:138:VAL:HG23	1.87	0.56
15:d:6:LYS:C	15:d:8:GLU:H	2.12	0.56
16:f:813:LYS:CE	16:f:825:MET:HE1	2.36	0.56
16:f:827:PRO:O	16:f:828:ARG:HG2	2.06	0.56
18:W:42:GLU:O	18:W:45:GLU:HG2	2.05	0.56
18:W:378:MET:CE	18:W:382:LEU:HG	2.31	0.56
1:A:255:ARG:O	1:A:259:GLU:HG2	2.06	0.56
4:D:228:ILE:HD13	4:D:262:ILE:HD11	1.87	0.56
5:E:281:ARG:HB2	5:E:282:PRO:HD3	1.86	0.56
5:E:305:ASN:HA	5:E:308:ALA:CB	2.14	0.56
11:Z:198:LEU:HD23	14:c:229:LEU:HD11	1.88	0.56
12:a:24:ARG:NH1	12:a:40:GLN:HG2	2.20	0.56
13:b:112:PHE:HD2	13:b:143:PHE:HE1	1.52	0.56
14:c:231:LEU:O	14:c:232:GLN:HB3	2.04	0.56
16:f:90:THR:C	16:f:93:PRO:HD2	2.29	0.56
16:f:323:ASN:HA	16:f:325:GLN:NE2	2.20	0.56
16:f:637:LYS:HE2	16:f:674:THR:C	2.30	0.56
16:f:652:VAL:HG11	16:f:687:ARG:CD	2.36	0.56
2:B:81:ASN:HB3	7:U:828:VAL:HG11	1.88	0.56
3:C:372:ARG:NH2	4:D:179:GLU:OE2	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:220:ALA:HB2	4:D:227:PHE:CE2	2.41	0.56
7:U:65:SER:HB3	7:U:80:TYR:CB	2.36	0.56
7:U:144:ASP:O	7:U:145:HIS:HB3	2.05	0.56
7:U:399:TRP:CZ2	7:U:507:VAL:HG11	2.41	0.56
7:U:757:MET:HB2	7:U:758:PRO:HD3	1.87	0.56
8:V:94:VAL:HG21	8:V:205:LEU:HG	1.87	0.56
8:V:313:LEU:HD21	8:V:329:HIS:CG	2.41	0.56
10:Y:50:MET:CE	10:Y:70:LEU:HB2	2.36	0.56
10:Y:159:ARG:O	10:Y:162:GLU:HG3	2.06	0.56
12:a:321:LYS:HD3	12:a:336:VAL:HG13	1.87	0.56
12:a:332:HIS:C	12:a:333:MET:HE2	2.30	0.56
14:c:120:CYS:SG	14:c:158:ASP:HB3	2.45	0.56
15:d:14:PRO:CB	15:d:17:SER:HA	2.36	0.56
18:W:403:PHE:HE2	18:W:417:ARG:HA	1.71	0.56
19:e:49:GLU:HG2	19:e:50:ASP:H	1.70	0.56
21:H:23:TYR:O	21:H:26:ALA:N	2.39	0.56
2:B:74:MET:HE1	16:f:609:VAL:CG1	2.36	0.56
2:B:316:LEU:CD2	2:B:346:ARG:HG2	2.33	0.56
2:B:440:LEU:HD21	23:J:47:LYS:HA	1.86	0.56
5:E:257:LEU:O	5:E:260:LEU:HG	2.06	0.56
5:E:271:HIS:CG	5:E:272:ARG:H	2.23	0.56
6:F:356:MET:CE	6:F:392:ASN:HA	2.36	0.56
7:U:465:LEU:HD13	7:U:500:ASN:HD21	1.71	0.56
7:U:793:LYS:HG3	7:U:794:ASP:N	2.21	0.56
8:V:113:LEU:HD21	8:V:174:PHE:HE2	1.69	0.56
10:Y:30:GLU:OE1	10:Y:30:GLU:N	2.39	0.56
11:Z:213:GLU:HA	12:a:350:LYS:HZ1	1.71	0.56
12:a:130:VAL:O	12:a:134:THR:HG23	2.06	0.56
12:a:190:VAL:HG22	12:a:225:LEU:CD1	2.36	0.56
12:a:205:LEU:HD12	12:a:268:LEU:CD1	2.35	0.56
16:f:297:MET:HE3	16:f:301:HIS:HB3	1.87	0.56
16:f:527:VAL:HA	16:f:564:LEU:O	2.06	0.56
18:W:180:LYS:O	18:W:183:VAL:HG12	2.05	0.56
18:W:272:LEU:O	18:W:275:ILE:HG12	2.05	0.56
18:W:365:ILE:HG13	18:W:366:MET:N	2.20	0.56
1:A:204:LEU:HB2	1:A:206:ILE:HG23	1.87	0.56
1:A:206:ILE:HG22	6:F:373:MET:CE	2.36	0.56
1:A:433:ASN:HD22	24:K:66:LYS:NZ	2.04	0.56
3:C:187:LEU:HD12	3:C:188:LEU:H	1.71	0.56
4:D:388:ARG:NH2	5:E:297:ARG:HD3	2.21	0.56
5:E:36:LEU:HD12	6:F:69:MET:CB	2.29	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:323:HIS:HB2	5:E:361:PHE:HE1	1.67	0.56
5:E:331:ILE:HA	5:E:334:LEU:HD12	1.88	0.56
7:U:36:ALA:HB1	8:V:269:LYS:HB3	1.87	0.56
7:U:402:PHE:CE1	7:U:441:GLY:HA2	2.41	0.56
8:V:341:GLU:HG2	8:V:408:ARG:HH22	1.71	0.56
9:X:253:TYR:OH	9:X:318:ILE:HG23	2.05	0.56
11:Z:147:ASP:O	12:a:177:LEU:HB3	2.06	0.56
13:b:100:ARG:NH2	13:b:103:LYS:O	2.39	0.56
16:f:65:GLU:HA	16:f:97:LYS:HZ2	1.70	0.56
16:f:490:ALA:CB	16:f:524:MET:HB2	2.36	0.56
18:W:359:VAL:HG23	18:W:382:LEU:HD22	1.87	0.56
1:A:91:GLN:CB	1:A:92:PRO:CD	2.84	0.56
1:A:277:ILE:CD1	1:A:319:MET:HE2	2.36	0.56
1:A:333:ARG:HD3	6:F:230:GLY:HA3	1.88	0.56
1:A:339:ARG:HH22	6:F:409:ARG:NH2	2.04	0.56
4:D:159:LYS:H	4:D:159:LYS:HD3	1.71	0.56
5:E:61:LEU:O	5:E:94:PRO:HB3	2.04	0.56
5:E:320:ILE:HA	6:F:215:LEU:O	2.06	0.56
7:U:127:ASP:HB2	7:U:130:LEU:HD23	1.87	0.56
8:V:71:THR:CG2	8:V:107:ARG:HB2	2.34	0.56
8:V:145:LEU:HD12	8:V:145:LEU:O	2.06	0.56
8:V:363:LEU:O	8:V:367:VAL:HG12	2.06	0.56
8:V:393:THR:O	8:V:397:ARG:HG3	2.06	0.56
10:Y:74:LYS:HG3	10:Y:75:LYS:N	2.21	0.56
10:Y:96:GLY:O	10:Y:101:ARG:HD2	2.05	0.56
10:Y:100:ILE:HG13	10:Y:101:ARG:H	1.70	0.56
13:b:35:ILE:CA	13:b:38:HIS:HB3	2.35	0.56
15:d:75:MET:HA	15:d:78:LEU:CD1	2.34	0.56
16:f:744:MET:SD	16:f:748:LEU:HB2	2.46	0.56
16:f:869:THR:HG22	16:f:883:ALA:O	2.05	0.56
18:W:112:VAL:HG22	18:W:123:ARG:HD3	1.87	0.56
18:W:259:GLU:HG2	18:W:261:GLU:HG3	1.88	0.56
18:W:259:GLU:HG3	18:W:261:GLU:HG3	1.88	0.56
3:C:24:TYR:HB3	4:D:40:LEU:HD21	1.88	0.55
4:D:385:LEU:HA	4:D:388:ARG:HG3	1.86	0.55
5:E:180:LYS:NZ	5:E:301:ILE:HD11	2.17	0.55
8:V:204:ASP:HA	8:V:207:ALA:HB3	1.88	0.55
8:V:495:ARG:HD2	8:V:497:PRO:C	2.31	0.55
11:Z:226:ILE:HD12	18:W:445:LEU:HD21	1.88	0.55
11:Z:230:LEU:HD12	11:Z:230:LEU:O	2.06	0.55
12:a:335:TRP:NE1	12:a:337:GLN:O	2.38	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:25:ARG:O	13:b:28:ALA:N	2.27	0.55
16:f:94:LYS:HD2	16:f:102:HIS:HE1	1.71	0.55
16:f:150:GLU:HG2	16:f:151:LEU:N	2.19	0.55
16:f:558:LEU:O	16:f:560:LEU:N	2.39	0.55
18:W:49:SER:HA	18:W:52:LYS:CG	2.35	0.55
18:W:149:LEU:HB2	18:W:185:PHE:CZ	2.42	0.55
18:W:156:ASN:O	18:W:156:ASN:ND2	2.35	0.55
18:W:307:LYS:HA	18:W:310:THR:CG2	2.31	0.55
32:s:169:ASP:OD1	32:s:173:ARG:NH2	2.37	0.55
1:A:115:VAL:HG11	1:A:118:PHE:HB3	1.87	0.55
1:A:121:PHE:CE2	1:A:147:TYR:HE2	2.24	0.55
2:B:242:GLN:OE1	2:B:242:GLN:N	2.39	0.55
2:B:373:THR:O	2:B:413:LYS:HG3	2.06	0.55
3:C:320:PRO:O	3:C:325:ARG:NH1	2.39	0.55
3:C:394:ASP:OD1	3:C:395:SER:N	2.39	0.55
5:E:153:LEU:HA	5:E:272:ARG:CD	2.36	0.55
5:E:173:TYR:CE2	5:E:298:LYS:HB3	2.41	0.55
5:E:191:LEU:CD1	18:W:211:THR:HB	2.36	0.55
5:E:309:ARG:HH11	5:E:332:VAL:HG22	1.71	0.55
6:F:314:LEU:HD21	6:F:347:ARG:NH1	2.21	0.55
6:F:332:THR:HG21	6:F:338:LEU:CD1	2.35	0.55
7:U:758:PRO:HA	7:U:761:VAL:HG12	1.87	0.55
8:V:123:SER:OG	8:V:158:PRO:HA	2.06	0.55
10:Y:16:ASP:HB3	10:Y:19:ILE:H	1.71	0.55
10:Y:352:GLU:OE1	10:Y:352:GLU:HA	2.06	0.55
12:a:76:LEU:O	12:a:79:ILE:HG22	2.06	0.55
12:a:176:ALA:HB3	12:a:200:LEU:HD13	1.86	0.55
12:a:186:LYS:CD	12:a:188:LEU:H	2.19	0.55
12:a:240:PHE:CD1	12:a:272:ILE:HD13	2.42	0.55
12:a:275:LEU:HD22	12:a:278:MET:SD	2.47	0.55
12:a:320:VAL:HG11	12:a:333:MET:SD	2.46	0.55
14:c:145:VAL:HG22	14:c:157:ILE:HD13	1.88	0.55
15:d:8:GLU:O	15:d:10:ASN:N	2.39	0.55
15:d:166:PHE:O	15:d:167:ILE:C	2.48	0.55
16:f:172:GLU:OE1	16:f:179:VAL:HG22	2.06	0.55
16:f:294:MET:HB3	16:f:807:ARG:HH12	1.72	0.55
16:f:420:TRP:CD1	16:f:420:TRP:N	2.73	0.55
16:f:692:LEU:HB3	16:f:712:LYS:HD3	1.88	0.55
16:f:766:GLN:CD	16:f:768:LEU:HB2	2.30	0.55
16:f:780:PRO:HG3	16:f:803:PHE:CB	2.36	0.55
23:j:121:SER:OG	23:j:124:ARG:NH1	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:365:GLU:CD	1:A:405:THR:HA	2.31	0.55
5:E:323:HIS:HB2	5:E:361:PHE:CD1	2.41	0.55
7:U:325:MET:O	7:U:328:ILE:HG23	2.05	0.55
7:U:510:GLU:HG3	7:U:511:ALA:N	2.20	0.55
9:X:144:GLN:OE1	9:X:147:LEU:HB3	2.07	0.55
10:Y:179:ARG:O	10:Y:179:ARG:HD2	2.07	0.55
11:Z:37:GLY:HA2	11:Z:56:VAL:CG1	2.35	0.55
11:Z:208:ILE:CG2	12:a:353:LEU:HD11	2.36	0.55
12:a:210:VAL:HA	12:a:213:PHE:CE2	2.41	0.55
13:b:22:LEU:CB	13:b:23:PRO:HD2	2.37	0.55
14:c:186:LYS:CB	14:c:187:PRO:HD2	2.36	0.55
15:d:14:PRO:HG2	15:d:17:SER:HA	1.86	0.55
15:d:116:HIS:CE1	15:d:140:GLU:OE1	2.60	0.55
16:f:225:ALA:CB	16:f:644:ALA:HB2	2.37	0.55
16:f:826:GLN:HA	16:f:849:ALA:HA	1.87	0.55
18:W:161:GLU:HG3	18:W:162:ALA:H	1.72	0.55
19:e:17:ASP:CG	19:e:19:PHE:H	2.14	0.55
21:H:169:GLY:O	21:H:172:PHE:N	2.39	0.55
1:A:222:LYS:N	34:A:501:ATP:O1B	2.39	0.55
1:A:256:MET:HE2	1:A:256:MET:CA	2.18	0.55
1:A:391:GLU:HG3	2:B:349:ARG:NH1	2.21	0.55
3:C:82:LYS:HG3	3:C:105:ILE:HD11	1.87	0.55
3:C:398:ASN:HB2	21:H:166:TYR:CZ	2.41	0.55
4:D:393:ILE:O	4:D:395:LEU:HD12	2.06	0.55
5:E:132:TYR:O	5:E:135:ILE:HG12	2.07	0.55
5:E:212:ALA:HB1	5:E:216:ARG:NH2	2.21	0.55
5:E:326:ILE:HD12	5:E:327:ASP:H	1.71	0.55
7:U:406:ALA:HB3	7:U:777:HIS:ND1	2.22	0.55
8:V:121:PHE:HB2	8:V:128:ARG:NH1	2.16	0.55
8:V:223:LYS:O	8:V:227:VAL:HG13	2.06	0.55
8:V:323:GLY:HA2	8:V:326:GLN:OE1	2.07	0.55
8:V:490:SER:OG	11:Z:271:ALA:HB1	2.06	0.55
10:Y:18:ARG:CZ	10:Y:22:LEU:HD21	2.36	0.55
13:b:16:MET:SD	13:b:25:ARG:HG2	2.46	0.55
15:d:125:LYS:HA	15:d:128:GLN:CB	2.32	0.55
1:A:142:VAL:HA	1:A:148:GLN:O	2.06	0.55
1:A:416:VAL:O	1:A:420:TYR:HA	2.05	0.55
2:B:41:LYS:CA	2:B:278:ALA:HB3	2.36	0.55
3:C:198:LEU:HD22	34:C:501:ATP:H2'	1.88	0.55
4:D:378:ILE:CD1	4:D:403:TYR:HD1	2.19	0.55
5:E:30:ARG:NE	5:E:30:ARG:HA	2.22	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:175:PRO:CB	5:E:338:PHE:CE2	2.90	0.55
5:E:339:ASN:O	5:E:343:LEU:HG	2.07	0.55
5:E:354:ALA:HA	5:E:359:HIS:CE1	2.42	0.55
7:U:367:THR:CG2	7:U:403:THR:HG21	2.37	0.55
7:U:545:LEU:HD21	7:U:577:ILE:CB	2.36	0.55
7:U:550:VAL:HG21	7:U:768:GLN:CG	2.35	0.55
7:U:552:ILE:O	7:U:555:VAL:HG12	2.06	0.55
7:U:699:THR:OG1	7:U:700:GLU:N	2.37	0.55
8:V:464:ILE:HD12	8:V:465:ASP:N	2.22	0.55
9:X:172:LEU:O	9:X:176:THR:HG22	2.06	0.55
10:Y:138:LEU:HD22	10:Y:168:ILE:HD12	1.87	0.55
10:Y:220:VAL:CG2	10:Y:249:VAL:HG11	2.27	0.55
12:a:189:PRO:O	12:a:193:GLN:HG3	2.07	0.55
15:d:130:ASN:C	15:d:132:TYR:H	2.14	0.55
15:d:167:ILE:HG13	15:d:168:ASP:N	2.20	0.55
16:f:45:LEU:HD11	16:f:51:GLN:HE21	1.72	0.55
16:f:51:GLN:OE1	16:f:52:LEU:N	2.39	0.55
16:f:535:THR:HA	16:f:538:ILE:HG12	1.87	0.55
18:W:48:LEU:O	18:W:52:LYS:HE3	2.06	0.55
25:L:174:ARG:HG2	25:L:175:HIS:CD2	2.42	0.55
2:B:437:GLY:O	22:I:155:ASN:ND2	2.40	0.55
3:C:226:GLU:OE2	3:C:229:ARG:NH2	2.40	0.55
5:E:98:VAL:HB	5:E:107:ILE:HG23	1.86	0.55
5:E:289:LEU:HD23	5:E:294:ARG:CD	2.37	0.55
5:E:312:ILE:HG21	5:E:343:LEU:HB2	1.88	0.55
6:F:211:LYS:HA	6:F:214:ASN:HB2	1.89	0.55
7:U:236:LEU:HD11	7:U:241:ASN:O	2.06	0.55
7:U:509:GLY:HA3	7:U:544:ILE:CG1	2.31	0.55
7:U:580:ARG:CZ	7:U:616:ARG:HH22	2.19	0.55
7:U:751:ARG:H	7:U:751:ARG:HE	1.55	0.55
10:Y:310:SER:O	10:Y:311:TYR:HD1	1.90	0.55
11:Z:13:PRO:HD3	11:Z:163:GLY:O	2.05	0.55
11:Z:145:HIS:NE2	12:a:181:GLY:HA3	2.22	0.55
12:a:26:GLU:OE2	12:a:29:TYR:OH	2.18	0.55
13:b:150:THR:HG22	13:b:153:LEU:HB2	1.87	0.55
14:c:138:GLU:CD	14:c:139:ARG:HB2	2.32	0.55
15:d:43:LEU:O	15:d:45:LYS:N	2.39	0.55
15:d:45:LYS:CA	15:d:48:LEU:HB2	2.35	0.55
15:d:118:GLU:C	15:d:120:GLU:N	2.63	0.55
16:f:11:VAL:O	16:f:14:GLN:HB3	2.07	0.55
16:f:102:HIS:NE2	16:f:106:LEU:HA	2.21	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:478:ARG:O	16:f:482:ILE:HG12	2.07	0.55
18:W:116:THR:HG21	18:W:123:ARG:CZ	2.36	0.55
18:W:165:ILE:CG1	18:W:189:GLN:HG2	2.33	0.55
18:W:314:LEU:HA	18:W:365:ILE:HD11	1.88	0.55
18:W:359:VAL:O	18:W:363:ILE:HG22	2.06	0.55
1:A:224:LEU:HD22	34:A:501:ATP:C2'	2.18	0.55
2:B:133:VAL:HB	2:B:158:ALA:HA	1.89	0.55
2:B:136:LEU:N	2:B:136:LEU:HD12	2.22	0.55
2:B:276:GLU:OE1	2:B:277:HIS:N	2.39	0.55
5:E:153:LEU:HD12	5:E:227:PRO:HB2	1.89	0.55
7:U:377:HIS:CB	7:U:411:ILE:HG12	2.33	0.55
7:U:448:LEU:HD23	7:U:448:LEU:O	2.07	0.55
7:U:509:GLY:C	7:U:544:ILE:HG23	2.31	0.55
7:U:557:TYR:OH	7:U:760:VAL:HG11	2.07	0.55
7:U:567:ILE:HD12	7:U:601:ARG:NH1	2.22	0.55
11:Z:212:LEU:HB3	12:a:350:LYS:HE3	1.88	0.55
12:a:142:LEU:HD21	12:a:152:HIS:CD2	2.42	0.55
16:f:61:GLU:HG3	16:f:97:LYS:CG	2.36	0.55
16:f:453:SER:HB3	16:f:488:ALA:HA	1.89	0.55
16:f:828:ARG:HD3	16:f:848:GLN:H	1.71	0.55
18:W:112:VAL:HG22	18:W:123:ARG:CD	2.36	0.55
1:A:206:ILE:HG22	6:F:373:MET:HE1	1.88	0.55
2:B:77:GLU:OE2	7:U:831:ALA:N	2.30	0.55
3:C:23:TYR:O	3:C:26:SER:N	2.40	0.55
3:C:89:VAL:HG22	3:C:93:GLY:O	2.06	0.55
4:D:390:ASN:HD22	18:W:169:LEU:HD12	1.72	0.55
5:E:184:ALA:O	5:E:187:VAL:HB	2.06	0.55
6:F:177:VAL:HG23	6:F:248:PHE:O	2.06	0.55
7:U:236:LEU:O	7:U:240:ASP:N	2.39	0.55
7:U:254:GLU:OE2	7:U:750:SER:HB2	2.07	0.55
7:U:884:VAL:HG21	7:U:889:LEU:HD23	1.88	0.55
8:V:106:ARG:HA	8:V:174:PHE:HE1	1.71	0.55
8:V:454:GLU:HG2	8:V:455:LYS:HZ2	1.72	0.55
9:X:67:GLY:O	9:X:71:LYS:HD3	2.07	0.55
10:Y:94:ASN:N	10:Y:94:ASN:OD1	2.40	0.55
10:Y:387:ILE:HG21	11:Z:275:LEU:HD22	1.88	0.55
14:c:175:ARG:HG2	14:c:201:TYR:CE1	2.42	0.55
14:c:303:MET:CA	14:c:306:THR:HG23	2.34	0.55
16:f:374:SER:O	16:f:377:VAL:HG23	2.07	0.55
16:f:466:LEU:HD12	16:f:481:SER:CB	2.36	0.55
16:f:863:THR:HG23	16:f:876:HIS:NE2	2.22	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:342:GLY:HA2	18:W:347:GLY:CA	2.37	0.55
18:W:387:ASP:OD1	18:W:388:GLU:N	2.40	0.55
20:G:136:CYS:SG	20:G:137:CYS:N	2.80	0.55
29:p:177:ASP:OD1	29:p:178:ALA:N	2.40	0.55
2:B:367:ILE:HG13	2:B:367:ILE:O	2.06	0.55
3:C:277:LEU:HD23	3:C:310:ARG:CD	2.37	0.55
4:D:167:ILE:HD13	4:D:214:MET:CE	2.36	0.55
5:E:178:THR:HG21	5:E:301:ILE:HD13	1.86	0.55
5:E:195:PHE:CD1	5:E:229:ILE:HB	2.42	0.55
5:E:218:MET:SD	5:E:219:PHE:N	2.80	0.55
5:E:350:ALA:HA	5:E:370:ALA:HB2	1.88	0.55
7:U:396:ALA:HB1	7:U:400:ALA:HB3	1.87	0.55
7:U:791:LEU:HD11	7:U:793:LYS:O	2.07	0.55
8:V:82:LEU:HD22	8:V:162:GLU:HB3	1.89	0.55
8:V:139:MET:SD	8:V:139:MET:N	2.80	0.55
8:V:364:THR:HA	8:V:367:VAL:HG12	1.89	0.55
10:Y:164:ALA:O	10:Y:168:ILE:HG13	2.07	0.55
10:Y:252:SER:C	10:Y:253:LEU:HD23	2.32	0.55
12:a:113:LEU:HD11	12:a:154:ARG:HG3	1.89	0.55
12:a:192:GLU:HG3	12:a:196:ARG:NH2	2.21	0.55
12:a:216:LEU:HD12	12:a:219:HIS:ND1	2.22	0.55
13:b:26:LEU:C	13:b:28:ALA:N	2.63	0.55
13:b:33:VAL:HG22	13:b:36:VAL:HG11	1.88	0.55
15:d:58:GLY:O	15:d:61:TRP:HB3	2.07	0.55
15:d:132:TYR:O	15:d:136:PRO:HD2	2.05	0.55
16:f:10:PRO:CA	16:f:59:LEU:HD13	2.37	0.55
16:f:210:GLU:HA	16:f:213:GLN:HE21	1.71	0.55
16:f:521:ALA:HA	16:f:524:MET:CG	2.36	0.55
16:f:549:GLU:HA	16:f:552:ASP:CB	2.33	0.55
16:f:549:GLU:HA	16:f:552:ASP:OD2	2.07	0.55
18:W:221:LYS:HA	18:W:224:LEU:CB	2.36	0.55
26:M:202:ASP:OD2	26:M:204:VAL:N	2.39	0.55
1:A:74:PRO:C	1:A:76:ALA:H	2.14	0.55
1:A:97:ARG:NE	1:A:144:ARG:HG2	2.22	0.55
2:B:57:GLN:OE1	2:B:57:GLN:N	2.40	0.55
2:B:74:MET:HE1	16:f:609:VAL:CG2	2.36	0.55
3:C:368:MET:CE	4:D:179:GLU:HG3	2.36	0.55
3:C:403:LYS:HE2	22:I:51:ASN:HB3	1.89	0.55
5:E:329:GLU:HA	5:E:332:VAL:CB	2.37	0.55
6:F:432:LYS:HD2	6:F:433:ALA:N	2.22	0.55
7:U:633:CYS:SG	7:U:634:PRO:HD3	2.47	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:399:ARG:HH22	8:V:400:HIS:HB2	1.72	0.55
10:Y:15:PRO:HG2	10:Y:147:ILE:CD1	2.35	0.55
10:Y:20:ALA:HB2	10:Y:150:PHE:CE1	2.42	0.55
11:Z:240:VAL:HG12	14:c:310:LYS:O	2.07	0.55
14:c:104:ARG:H	14:c:104:ARG:NH1	1.90	0.55
14:c:125:VAL:HG13	14:c:126:ASP:OD1	2.07	0.55
14:c:303:MET:SD	15:d:242:LEU:HB3	2.47	0.55
15:d:107:LEU:O	15:d:110:ASN:N	2.39	0.55
16:f:281:ILE:HD11	16:f:286:LYS:NZ	2.21	0.55
16:f:577:LEU:HA	16:f:580:LEU:CG	2.37	0.55
18:W:132:THR:HG23	18:W:144:ARG:NH2	2.22	0.55
19:e:25:GLU:OE1	19:e:25:GLU:HA	2.06	0.55
21:h:176:ARG:NH1	21:h:176:ARG:HB2	2.22	0.55
1:A:279:ALA:HB2	2:B:310:LEU:HD12	1.88	0.54
2:B:284:ILE:HD13	2:B:327:VAL:HG23	1.88	0.54
4:D:231:VAL:N	4:D:234:GLU:OE2	2.38	0.54
5:E:72:LYS:HG2	5:E:73:ALA:H	1.73	0.54
5:E:309:ARG:CZ	5:E:332:VAL:HA	2.37	0.54
6:F:233:LYS:HA	6:F:354:PHE:HE2	1.72	0.54
7:U:208:LEU:HG	7:U:209:GLU:H	1.72	0.54
7:U:523:SER:C	7:U:559:ARG:HH21	2.15	0.54
8:V:306:ARG:HH22	8:V:341:GLU:CD	2.15	0.54
8:V:317:PRO:O	8:V:325:LYS:NZ	2.23	0.54
9:X:285:GLU:OE2	9:X:285:GLU:HA	2.07	0.54
10:Y:13:LYS:O	10:Y:14:ASN:HB3	2.06	0.54
11:Z:194:GLN:OE1	11:Z:194:GLN:HA	2.05	0.54
11:Z:230:LEU:O	11:Z:233:VAL:HG12	2.07	0.54
12:a:280:MET:SD	12:a:296:ILE:HD13	2.47	0.54
13:b:21:PHE:HA	13:b:177:PRO:HB3	1.90	0.54
14:c:255:TYR:CE1	14:c:280:PRO:HD3	2.41	0.54
15:d:6:LYS:HG2	15:d:16:LEU:CD2	2.37	0.54
16:f:169:GLU:N	16:f:171:GLN:OE1	2.40	0.54
16:f:826:GLN:NE2	16:f:863:THR:O	2.39	0.54
18:W:225:LYS:HG3	18:W:229:LEU:HD21	1.88	0.54
1:A:126:SER:HB3	1:A:149:ILE:O	2.07	0.54
2:B:144:LEU:CD2	2:B:162:VAL:HG22	2.37	0.54
2:B:313:LEU:HD12	2:B:346:ARG:CD	2.38	0.54
3:C:82:LYS:HG3	3:C:105:ILE:CD1	2.38	0.54
3:C:129:ASN:ND2	4:D:102:ILE:HD13	2.22	0.54
3:C:151:ILE:CD1	3:C:198:LEU:HG	2.37	0.54
6:F:257:VAL:O	6:F:258:GLN:NE2	2.28	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:772:TRP:CD1	7:U:774:PRO:HD2	2.42	0.54
9:X:74:ARG:HD2	9:X:116:TRP:CZ3	2.42	0.54
10:Y:192:ARG:CG	10:Y:192:ARG:O	2.55	0.54
10:Y:291:HIS:O	10:Y:293:ARG:N	2.40	0.54
10:Y:301:ILE:CD1	10:Y:342:ARG:HD2	2.37	0.54
11:Z:280:ILE:HD12	11:Z:283:ARG:NH2	2.19	0.54
12:a:22:TRP:CD1	12:a:22:TRP:H	2.24	0.54
13:b:5:SER:OG	13:b:6:THR:N	2.40	0.54
14:c:255:TYR:HE1	14:c:280:PRO:CD	2.19	0.54
15:d:16:LEU:HB2	15:d:22:GLU:CG	2.37	0.54
15:d:70:SER:O	15:d:73:ARG:N	2.40	0.54
15:d:78:LEU:HD13	15:d:94:TYR:HE2	1.72	0.54
16:f:105:LYS:O	16:f:109:ILE:HG12	2.07	0.54
16:f:125:ILE:HG21	16:f:129:LEU:HB2	1.90	0.54
16:f:403:LYS:O	16:f:407:MET:HG3	2.07	0.54
16:f:566:HIS:HB3	16:f:569:LYS:HD3	1.90	0.54
16:f:815:HIS:O	16:f:817:VAL:HG22	2.07	0.54
18:W:111:TYR:O	18:W:113:GLU:N	2.40	0.54
18:W:254:PRO:HA	18:W:258:ALA:CA	2.37	0.54
18:W:293:ASP:OD1	18:W:295:LYS:HE2	2.08	0.54
18:W:399:ASN:O	18:W:401:THR:HG23	2.06	0.54
23:j:115:LYS:O	23:j:119:THR:HG23	2.07	0.54
1:A:391:GLU:HG3	2:B:349:ARG:HH12	1.73	0.54
2:B:82:GLN:OE1	16:f:617:SER:OG	2.08	0.54
2:B:85:MET:HG3	16:f:618:GLU:HG3	1.88	0.54
4:D:130:VAL:CG2	4:D:139:LEU:HD11	2.37	0.54
6:F:366:MET:HA	6:F:396:CYS:SG	2.47	0.54
7:U:396:ALA:HB1	7:U:400:ALA:HB1	1.88	0.54
7:U:770:TRP:CG	7:U:770:TRP:O	2.60	0.54
8:V:378:VAL:HA	8:V:381:GLN:OE1	2.07	0.54
9:X:339:ILE:CG2	9:X:350:ILE:HD11	2.37	0.54
10:Y:241:ILE:HG13	10:Y:264:TYR:CD2	2.42	0.54
13:b:86:PHE:CE1	13:b:90:ILE:HD11	2.42	0.54
16:f:106:LEU:O	16:f:137:ARG:HD2	2.07	0.54
16:f:796:LEU:O	16:f:798:THR:N	2.37	0.54
16:f:818:LEU:HD12	16:f:820:GLY:N	2.23	0.54
1:A:41:TYR:HE2	2:B:59:ARG:HB2	1.73	0.54
1:A:284:ARG:HG2	1:A:296:GLN:CD	2.32	0.54
2:B:284:ILE:HG22	2:B:287:ILE:HD13	1.90	0.54
4:D:330:LYS:HD3	4:D:330:LYS:N	2.23	0.54
5:E:306:GLU:O	5:E:307:GLN:HB2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:483:LEU:HD11	7:U:781:LEU:HD11	1.89	0.54
7:U:532:MET:SD	7:U:552:ILE:HG12	2.48	0.54
7:U:564:ASP:HA	7:U:567:ILE:CD1	2.38	0.54
8:V:298:ILE:HD11	8:V:394:LEU:HD11	1.88	0.54
8:V:466:ILE:HD11	8:V:470:ARG:CB	2.27	0.54
8:V:472:PRO:CG	11:Z:253:THR:HG21	2.29	0.54
10:Y:25:LEU:HD12	10:Y:29:PRO:HG3	1.88	0.54
11:Z:120:VAL:HG22	11:Z:139:ILE:HG13	1.89	0.54
11:Z:174:HIS:HA	11:Z:177:ARG:HG2	1.89	0.54
11:Z:287:LYS:HB3	11:Z:288:LYS:HZ2	1.71	0.54
12:a:311:VAL:HG13	12:a:324:ILE:HD13	1.88	0.54
13:b:14:GLU:N	13:b:82:GLY:O	2.35	0.54
13:b:147:GLU:OE1	13:b:150:THR:OG1	2.24	0.54
16:f:102:HIS:CG	16:f:106:LEU:HD13	2.42	0.54
16:f:184:LEU:CD1	16:f:219:LYS:HE3	2.36	0.54
16:f:198:HIS:NE2	16:f:244:GLU:OE2	2.41	0.54
16:f:288:VAL:HB	16:f:881:GLU:OE1	2.08	0.54
16:f:534:VAL:O	16:f:538:ILE:HG12	2.06	0.54
2:B:50:PRO:O	2:B:51:LEU:HB3	2.06	0.54
5:E:309:ARG:NH1	5:E:332:VAL:HG22	2.23	0.54
7:U:247:GLN:OE1	7:U:247:GLN:HA	2.06	0.54
7:U:438:GLN:OE1	7:U:438:GLN:HA	2.05	0.54
11:Z:85:VAL:HG21	14:c:74:ALA:HB3	1.90	0.54
12:a:275:LEU:HA	12:a:278:MET:SD	2.47	0.54
12:a:342:ASP:O	12:a:346:ILE:HG12	2.08	0.54
13:b:2:VAL:HG22	13:b:44:ASN:ND2	2.22	0.54
16:f:171:GLN:OE1	16:f:171:GLN:N	2.39	0.54
16:f:627:GLU:O	16:f:631:LYS:NZ	2.38	0.54
16:f:744:MET:CE	16:f:748:LEU:HD22	2.36	0.54
18:W:44:ILE:O	18:W:47:LEU:HG	2.08	0.54
18:W:248:ARG:HD3	18:W:290:ILE:CD1	2.38	0.54
18:W:376:LYS:HD3	18:W:376:LYS:N	2.22	0.54
2:B:84:GLN:HG2	7:U:828:VAL:HB	1.90	0.54
2:B:113:GLU:HB3	2:B:122:ILE:HG22	1.89	0.54
4:D:289:LEU:HD23	4:D:289:LEU:O	2.07	0.54
5:E:164:ILE:C	5:E:166:PRO:HD2	2.33	0.54
6:F:205:PRO:O	6:F:209:LYS:HG2	2.07	0.54
6:F:273:ALA:C	6:F:275:ALA:H	2.13	0.54
6:F:356:MET:HE1	6:F:392:ASN:CB	2.37	0.54
7:U:78:LEU:HD12	7:U:104:CYS:HA	1.90	0.54
7:U:602:LEU:HD12	7:U:618:ALA:O	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:696:ILE:O	7:U:698:GLN:HG3	2.07	0.54
8:V:91:PRO:O	8:V:94:VAL:HG22	2.07	0.54
8:V:282:ASN:HD21	10:Y:385:ARG:NH1	2.03	0.54
9:X:253:TYR:HE2	9:X:318:ILE:HD13	1.72	0.54
11:Z:227:ILE:HD13	18:W:445:LEU:HD23	1.89	0.54
12:a:160:SER:O	12:a:163:TYR:HB3	2.07	0.54
12:a:274:LEU:HB3	12:a:278:MET:CE	2.38	0.54
13:b:75:LEU:HD12	13:b:78:VAL:HG21	1.90	0.54
13:b:125:VAL:O	13:b:129:LYS:HB2	2.07	0.54
18:W:74:CYS:SG	18:W:83:LEU:HB3	2.48	0.54
3:C:201:ARG:HA	4:D:299:PHE:HE1	1.73	0.54
3:C:306:LEU:N	3:C:306:LEU:HD12	2.23	0.54
5:E:215:ILE:HA	5:E:218:MET:HG3	1.88	0.54
6:F:228:PRO:O	6:F:231:THR:HG22	2.08	0.54
6:F:234:THR:N	34:F:501:ATP:O2B	2.39	0.54
7:U:638:SER:HA	7:U:671:LEU:HD21	1.89	0.54
8:V:342:ILE:CD1	8:V:368:ARG:HD2	2.38	0.54
8:V:483:CYS:HB2	11:Z:264:SER:HB2	1.90	0.54
9:X:111:LEU:O	9:X:114:ILE:HG22	2.08	0.54
10:Y:124:PHE:HA	10:Y:127:THR:CG2	2.38	0.54
10:Y:311:TYR:HB3	10:Y:314:LEU:HD11	1.89	0.54
12:a:95:THR:O	12:a:99:LYS:HG3	2.07	0.54
13:b:110:ILE:HG22	13:b:112:PHE:CE1	2.41	0.54
15:d:152:PHE:HE1	15:d:174:ILE:HG21	1.71	0.54
16:f:337:LEU:HD12	16:f:852:VAL:CG2	2.38	0.54
16:f:457:ASN:ND2	16:f:459:CYS:SG	2.77	0.54
18:W:360:GLU:OE2	18:W:396:LEU:HD21	2.08	0.54
18:W:375:MET:SD	18:W:413:ILE:HD11	2.48	0.54
18:W:389:SER:O	18:W:393:LEU:HG	2.08	0.54
1:A:32:LEU:HD22	16:f:58:MET:HB2	1.90	0.54
2:B:240:ALA:HB2	2:B:247:PHE:CE2	2.43	0.54
3:C:53:ASN:O	3:C:56:VAL:HG12	2.08	0.54
4:D:202:VAL:HG22	4:D:308:ILE:HG12	1.89	0.54
4:D:212:LYS:HG2	4:D:333:PHE:CD2	2.43	0.54
5:E:153:LEU:O	5:E:156:PRO:HD3	2.07	0.54
5:E:309:ARG:NH1	5:E:332:VAL:HG13	2.23	0.54
5:E:317:ALA:HA	5:E:320:ILE:CG1	2.37	0.54
8:V:426:LEU:O	8:V:427:GLN:HG2	2.07	0.54
10:Y:55:GLU:HA	10:Y:58:CYS:SG	2.48	0.54
10:Y:110:TYR:O	10:Y:114:ILE:HG13	2.08	0.54
10:Y:382:LYS:HG3	10:Y:385:ARG:HH12	1.73	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:63:LYS:CD	13:b:91:ARG:HH22	2.13	0.54
12:a:190:VAL:HG13	12:a:225:LEU:CD1	2.38	0.54
13:b:68:THR:CG2	13:b:71:ILE:HD11	2.19	0.54
14:c:256:ASN:O	14:c:260:GLU:HG3	2.08	0.54
15:d:69:PRO:O	15:d:72:GLU:N	2.37	0.54
16:f:322:SER:O	16:f:324:VAL:HG12	2.08	0.54
16:f:549:GLU:O	16:f:552:ASP:HB2	2.07	0.54
18:W:149:LEU:HB2	18:W:185:PHE:HZ	1.71	0.54
18:W:271:VAL:HG13	18:W:272:LEU:HD22	1.90	0.54
19:e:61:GLU:O	19:e:64:GLY:N	2.32	0.54
22:I:208:ALA:O	22:I:230:GLN:NE2	2.37	0.54
23:J:66:ASP:OD2	23:J:95:ARG:NH2	2.41	0.54
1:A:97:ARG:HH21	1:A:144:ARG:HA	1.72	0.54
1:A:103:ASN:HD22	6:F:167:GLU:CG	2.13	0.54
1:A:240:VAL:HG11	1:A:274:PHE:CE2	2.43	0.54
4:D:57:GLN:OE1	7:U:636:VAL:HA	2.08	0.54
5:E:268:ASP:OD2	5:E:273:VAL:HB	2.08	0.54
5:E:323:HIS:ND1	5:E:362:VAL:O	2.41	0.54
7:U:16:GLU:HB3	7:U:19:LEU:CB	2.35	0.54
7:U:797:MET:HE2	7:U:797:MET:CA	2.38	0.54
7:U:845:GLU:HA	7:U:848:LYS:HE3	1.88	0.54
7:U:894:MET:CE	7:U:902:PRO:HD2	2.36	0.54
7:U:899:ARG:HE	7:U:917:THR:CB	2.21	0.54
8:V:479:ARG:NH1	10:Y:374:ASP:OD1	2.41	0.54
10:Y:325:VAL:HG23	19:e:65:TYR:CD1	2.43	0.54
12:a:169:HIS:O	12:a:172:TYR:HB3	2.07	0.54
12:a:315:LEU:HD12	12:a:320:VAL:O	2.07	0.54
14:c:202:SER:O	14:c:202:SER:OG	2.24	0.54
14:c:222:LYS:HB2	14:c:222:LYS:NZ	2.22	0.54
15:d:109:GLN:O	15:d:110:ASN:HB2	2.08	0.54
16:f:269:ALA:CB	16:f:270:LEU:HD22	2.37	0.54
16:f:379:GLY:CA	16:f:413:SER:HB2	2.23	0.54
16:f:412:ALA:HB1	16:f:801:VAL:HG21	1.88	0.54
16:f:501:LEU:CD2	16:f:518:THR:HG23	2.38	0.54
16:f:520:LEU:HG	16:f:524:MET:CE	2.34	0.54
16:f:535:THR:HA	16:f:538:ILE:CG1	2.38	0.54
18:W:273:TYR:CE1	18:W:340:VAL:HB	2.43	0.54
2:B:163:LEU:HD11	3:C:78:ARG:HH22	1.73	0.54
3:C:209:CYS:O	3:C:210:THR:CB	2.56	0.54
4:D:91:GLN:OE1	4:D:105:SER:N	2.41	0.54
5:E:56:ILE:HG12	6:F:132:TYR:CE2	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:134:GLU:N	5:E:134:GLU:OE2	2.41	0.54
5:E:228:CYS:O	5:E:273:VAL:HG23	2.09	0.54
6:F:75:GLU:O	6:F:78:GLU:HB3	2.07	0.54
6:F:188:ILE:CD1	6:F:191:LEU:HG	2.13	0.54
6:F:198:LEU:HD13	6:F:236:LEU:CG	2.37	0.54
6:F:391:PHE:HA	6:F:395:GLN:OE1	2.07	0.54
7:U:101:ILE:O	7:U:105:ILE:HG23	2.08	0.54
7:U:450:HIS:HB3	7:U:453:HIS:O	2.07	0.54
7:U:483:LEU:CD1	7:U:781:LEU:HD11	2.38	0.54
8:V:164:GLU:HG3	8:V:165:ALA:N	2.23	0.54
8:V:398:LEU:O	8:V:398:LEU:HD12	2.07	0.54
12:a:44:PHE:O	12:a:47:ASP:HB3	2.08	0.54
14:c:193:ILE:HG22	14:c:194:HIS:HD2	1.72	0.54
16:f:71:TYR:OH	16:f:86:THR:OG1	1.95	0.54
18:W:218:ASN:O	18:W:219:THR:HG22	2.07	0.54
18:W:314:LEU:CD1	18:W:381:LEU:HD13	2.38	0.54
22:I:79:ILE:O	22:I:83:ALA:N	2.39	0.54
26:M:87:LEU:HD12	26:M:133:CYS:SG	2.48	0.54
31:R:2:THR:N	31:R:131:SER:OG	2.40	0.54
3:C:191:PRO:CB	3:C:192:PRO:HD2	2.35	0.53
4:D:78:GLU:OE1	4:D:78:GLU:HA	2.08	0.53
4:D:371:SER:OG	4:D:374:ASP:OD1	2.23	0.53
6:F:353:GLU:C	6:F:354:PHE:HD1	2.15	0.53
6:F:358:ASN:OD1	6:F:359:GLU:N	2.41	0.53
6:F:387:CYS:SG	6:F:421:MET:HE1	2.49	0.53
7:U:198:LEU:HD11	7:U:219:CYS:HB3	1.89	0.53
8:V:81:GLN:HB3	8:V:93:PHE:HB3	1.90	0.53
8:V:105:SER:CB	8:V:106:ARG:HD3	2.31	0.53
8:V:123:SER:OG	8:V:150:ARG:NH2	2.36	0.53
8:V:347:GLN:O	8:V:350:GLN:HG2	2.08	0.53
10:Y:25:LEU:HA	10:Y:29:PRO:CG	2.38	0.53
10:Y:192:ARG:O	10:Y:192:ARG:HG3	2.07	0.53
11:Z:67:VAL:HG12	13:b:95:LEU:CD1	2.37	0.53
15:d:122:LEU:O	15:d:123:PRO:C	2.51	0.53
16:f:94:LYS:HZ3	16:f:137:ARG:NH1	1.89	0.53
16:f:407:MET:CE	16:f:440:ILE:HD13	2.37	0.53
16:f:489:TYR:C	16:f:525:ILE:HG12	2.33	0.53
16:f:866:GLN:NE2	16:f:868:HIS:HB2	2.22	0.53
18:W:234:ASP:CB	18:W:243:ILE:HD11	2.38	0.53
18:W:317:TRP:CD1	18:W:355:LYS:HE2	2.43	0.53
18:W:403:PHE:CE2	18:W:417:ARG:HA	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:M:70:ASP:OD1	26:M:71:ARG:N	2.40	0.53
1:A:190:VAL:HA	1:A:194:PRO:HG2	1.89	0.53
3:C:187:LEU:HA	3:C:293:MET:O	2.08	0.53
4:D:330:LYS:C	4:D:331:ILE:HD13	2.33	0.53
6:F:241:ALA:O	6:F:243:GLN:N	2.38	0.53
7:U:66:LYS:HA	7:U:96:TYR:CE1	2.43	0.53
7:U:72:GLY:O	7:U:74:PHE:HD1	1.91	0.53
7:U:772:TRP:CG	7:U:774:PRO:HD2	2.43	0.53
8:V:161:PRO:CA	8:V:164:GLU:HG2	2.35	0.53
8:V:349:ARG:HD3	8:V:354:LYS:HZ1	1.72	0.53
9:X:171:LEU:HD21	9:X:210:LEU:HG	1.90	0.53
10:Y:258:GLN:O	10:Y:262:SER:HB3	2.08	0.53
12:a:112:ILE:HB	12:a:151:VAL:HG21	1.90	0.53
14:c:251:LEU:HG	14:c:283:HIS:HB3	1.90	0.53
16:f:637:LYS:CE	16:f:674:THR:HB	2.38	0.53
20:G:50:ILE:HD11	20:G:69:LEU:HD22	1.90	0.53
25:L:62:LYS:NZ	25:L:74:ILE:O	2.36	0.53
27:n:23:THR:HB	38:n:301:LDZ:H39	1.90	0.53
1:A:368:ILE:HD13	1:A:406:GLU:HA	1.90	0.53
2:B:67:ARG:HD2	2:B:71:TYR:CE1	2.43	0.53
2:B:220:LYS:HD2	2:B:322:ARG:CZ	2.38	0.53
3:C:90:HIS:HB3	3:C:91:PRO:HD3	1.90	0.53
3:C:339:THR:HG22	3:C:378:VAL:O	2.08	0.53
5:E:65:THR:HG23	5:E:68:LYS:HB2	1.91	0.53
6:F:146:LYS:O	6:F:148:GLY:N	2.41	0.53
7:U:545:LEU:HD21	7:U:577:ILE:CG2	2.38	0.53
7:U:889:LEU:HD22	7:U:908:ILE:O	2.08	0.53
9:X:157:LEU:HD11	9:X:165:LEU:HB3	1.91	0.53
10:Y:89:GLU:HG3	10:Y:100:ILE:CB	2.30	0.53
11:Z:122:VAL:HA	11:Z:137:ALA:HA	1.90	0.53
12:a:80:ILE:O	12:a:84:VAL:HG13	2.09	0.53
14:c:219:ASN:HB3	14:c:223:LYS:CG	2.34	0.53
15:d:11:ARG:HB2	15:d:11:ARG:NH1	2.23	0.53
18:W:320:LEU:HD12	18:W:324:TYR:HD2	1.73	0.53
1:A:393:GLY:HA3	2:B:214:MET:CE	2.20	0.53
2:B:186:ASP:O	2:B:367:ILE:HG12	2.09	0.53
2:B:223:ILE:HD11	2:B:334:ILE:HD13	1.90	0.53
4:D:327:LEU:O	4:D:330:LYS:NZ	2.41	0.53
4:D:410:ASP:HB2	4:D:413:GLU:HG2	1.90	0.53
5:E:258:MET:CE	5:E:289:LEU:HD11	2.38	0.53
5:E:307:GLN:OE1	5:E:310:LEU:HD13	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:175:MET:HE1	6:F:251:LEU:HD23	1.90	0.53
7:U:28:ASN:O	7:U:31:VAL:HG12	2.08	0.53
7:U:672:LEU:HD11	7:U:687:ALA:O	2.07	0.53
8:V:397:ARG:HH21	15:d:116:HIS:HB3	1.74	0.53
9:X:335:LEU:CD2	9:X:368:MET:HE1	2.36	0.53
12:a:325:ASP:OD2	12:a:328:ASP:HB2	2.09	0.53
14:c:116:PRO:C	14:c:148:ILE:HD12	2.34	0.53
15:d:179:ALA:O	15:d:181:CYS:SG	2.67	0.53
16:f:39:LYS:NZ	16:f:85:SER:OG	2.18	0.53
16:f:345:PRO:HB2	16:f:348:ILE:HG12	1.89	0.53
16:f:585:GLU:HB2	16:f:586:PRO:CD	2.36	0.53
18:W:25:ASP:HB3	18:W:65:ARG:NH2	2.24	0.53
27:N:168:ASP:OD1	27:N:169:GLY:N	2.42	0.53
1:A:126:SER:HA	1:A:148:GLN:NE2	2.24	0.53
2:B:231:GLY:O	2:B:233:THR:N	2.41	0.53
4:D:362:ASP:OD1	4:D:363:TYR:N	2.41	0.53
5:E:205:ASP:N	5:E:252:GLU:OE2	2.26	0.53
5:E:291:ARG:HB2	5:E:292:PRO:HD2	1.89	0.53
5:E:306:GLU:CD	5:E:306:GLU:H	2.17	0.53
6:F:162:GLU:N	6:F:162:GLU:OE2	2.41	0.53
6:F:169:ASP:OD2	6:F:171:ARG:NH1	2.41	0.53
8:V:175:MET:HE3	8:V:184:ALA:HB2	1.88	0.53
8:V:337:LEU:CD2	8:V:367:VAL:HG11	2.38	0.53
9:X:243:ASP:OD1	9:X:246:LYS:N	2.38	0.53
9:X:337:ARG:O	9:X:340:GLU:HG3	2.09	0.53
10:Y:177:ARG:NH1	10:Y:208:PHE:H	2.07	0.53
10:Y:225:TYR:CZ	10:Y:278:VAL:HG23	2.43	0.53
10:Y:307:LEU:O	10:Y:307:LEU:HD23	2.07	0.53
10:Y:347:ILE:HD13	10:Y:354:VAL:HG13	1.90	0.53
13:b:51:LEU:HD11	13:b:75:LEU:HD13	1.91	0.53
14:c:176:GLN:C	14:c:178:THR:H	2.16	0.53
16:f:278:VAL:HG11	16:f:281:ILE:HD13	1.90	0.53
16:f:448:CYS:SG	16:f:465:LEU:HD13	2.49	0.53
16:f:733:GLY:N	16:f:737:ASN:HB3	2.23	0.53
16:f:820:GLY:C	16:f:821:LEU:HD23	2.33	0.53
25:L:63:ILE:O	25:L:64:LEU:HD23	2.08	0.53
33:T:92:LEU:HD22	33:T:112:ILE:HD11	1.90	0.53
1:A:78:TRP:NE1	1:A:82:ALA:HB2	2.22	0.53
3:C:369:TYR:HE2	3:C:385:MET:HB3	1.74	0.53
6:F:349:ASP:O	6:F:351:LYS:HD3	2.08	0.53
7:U:466:LYS:HZ2	7:U:496:LEU:HD12	1.73	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:492:ASP:HA	7:U:495:ASP:OD1	2.09	0.53
7:U:822:GLU:C	7:U:823:LYS:HD3	2.33	0.53
7:U:893:THR:O	7:U:895:PRO:HD3	2.09	0.53
8:V:185:GLN:HB2	8:V:218:TYR:CE1	2.44	0.53
8:V:198:GLN:CD	8:V:200:ARG:HH12	2.17	0.53
8:V:232:HIS:O	8:V:236:ARG:HD3	2.09	0.53
8:V:348:PHE:HE2	8:V:364:THR:HG21	1.72	0.53
8:V:436:PHE:CZ	15:d:197:ILE:HG13	2.43	0.53
11:Z:94:TRP:O	11:Z:121:LEU:HD12	2.09	0.53
12:a:101:ARG:HG3	12:a:102:GLU:N	2.24	0.53
12:a:249:GLN:O	12:a:252:LYS:HG3	2.08	0.53
12:a:328:ASP:OD2	18:W:372:ARG:NH2	2.41	0.53
13:b:2:VAL:HG22	13:b:44:ASN:OD1	2.08	0.53
15:d:57:ILE:H	15:d:57:ILE:HD12	1.74	0.53
15:d:59:ALA:HA	15:d:74:TYR:CD2	2.43	0.53
15:d:61:TRP:CD1	15:d:65:ARG:HG3	2.43	0.53
15:d:191:PHE:HD1	15:d:192:THR:HG22	1.74	0.53
16:f:217:LEU:HD12	16:f:218:GLU:N	2.23	0.53
16:f:584:SER:HB2	16:f:588:ARG:HB3	1.91	0.53
16:f:646:MET:HE3	16:f:647:GLY:N	2.23	0.53
16:f:761:MET:HG2	16:f:858:LYS:NZ	2.24	0.53
16:f:788:MET:N	16:f:790:GLN:OE1	2.42	0.53
16:f:794:ALA:HA	16:f:797:LEU:CD2	2.38	0.53
16:f:825:MET:HG2	16:f:863:THR:CB	2.33	0.53
18:W:71:VAL:HG12	18:W:111:TYR:CE2	2.44	0.53
18:W:385:SER:O	18:W:387:ASP:N	2.42	0.53
19:e:56:LEU:HA	19:e:59:GLU:HB3	1.90	0.53
20:G:65:THR:HG21	26:M:159:GLY:HA3	1.91	0.53
1:A:303:ILE:HG23	1:A:336:ARG:HE	1.74	0.53
4:D:106:THR:HG21	5:E:78:ARG:H	1.74	0.53
4:D:173:GLN:HG2	4:D:333:PHE:CD1	2.44	0.53
5:E:93:LYS:NZ	5:E:93:LYS:HB3	2.23	0.53
5:E:292:PRO:HA	5:E:296:ASP:CG	2.34	0.53
6:F:432:LYS:NZ	6:F:434:ASN:HA	2.24	0.53
7:U:321:GLN:OE1	7:U:324:LYS:HG2	2.09	0.53
7:U:410:VAL:CG2	7:U:448:LEU:HD13	2.39	0.53
12:a:54:ASP:O	12:a:58:LYS:HG2	2.09	0.53
14:c:72:VAL:HG12	14:c:112:TYR:HE1	1.73	0.53
15:d:28:LEU:HA	15:d:31:LEU:HD13	1.89	0.53
15:d:62:SER:HB2	15:d:70:SER:OG	2.08	0.53
15:d:147:SER:O	15:d:150:LYS:N	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:221:ILE:O	16:f:224:ASN:ND2	2.41	0.53
16:f:281:ILE:HG13	16:f:286:LYS:HD2	1.90	0.53
16:f:500:LEU:O	16:f:503:PRO:HD2	2.09	0.53
16:f:664:GLU:O	16:f:669:GLU:HB2	2.09	0.53
18:W:335:SER:CB	18:W:336:PRO:CD	2.83	0.53
23:J:89:VAL:HG12	30:Q:66:LEU:HD21	1.90	0.53
33:t:69:GLN:NE2	33:t:73:ASP:OD1	2.41	0.53
2:B:62:LEU:O	2:B:62:LEU:HD12	2.09	0.53
2:B:122:ILE:HD13	2:B:131:HIS:O	2.09	0.53
2:B:400:THR:HG23	2:B:401:GLU:N	2.23	0.53
4:D:133:HIS:HB3	4:D:136:SER:HB3	1.89	0.53
4:D:393:ILE:HG22	4:D:395:LEU:CD1	2.38	0.53
5:E:339:ASN:OD1	5:E:341:ALA:HB3	2.08	0.53
6:F:272:PHE:C	6:F:276:LYS:HZ2	2.17	0.53
6:F:362:ARG:NH1	6:F:389:ASP:HA	2.23	0.53
7:U:206:MET:CE	7:U:211:PRO:HB3	2.38	0.53
7:U:219:CYS:O	7:U:223:LEU:HD23	2.08	0.53
7:U:564:ASP:HA	7:U:567:ILE:HD11	1.91	0.53
8:V:345:ARG:HE	8:V:349:ARG:NH2	2.06	0.53
9:X:409:LYS:HE3	14:c:256:ASN:OD1	2.08	0.53
10:Y:201:PHE:HB3	10:Y:223:THR:HG23	1.90	0.53
12:a:246:GLU:HB3	12:a:249:GLN:HE22	1.74	0.53
14:c:116:PRO:O	14:c:148:ILE:HB	2.08	0.53
15:d:62:SER:CA	15:d:67:ASP:HB3	2.38	0.53
15:d:181:CYS:O	15:d:181:CYS:SG	2.67	0.53
16:f:180:GLN:HG3	16:f:835:GLU:OE1	2.09	0.53
16:f:333:LEU:O	16:f:337:LEU:HB2	2.09	0.53
16:f:779:CYS:HA	16:f:782:HIS:NE2	2.24	0.53
16:f:879:ARG:NE	16:f:879:ARG:HA	2.24	0.53
18:W:41:GLN:OE1	18:W:45:GLU:HB3	2.09	0.53
22:I:41:ASP:O	22:I:41:ASP:OD2	2.27	0.53
2:B:321:SER:O	2:B:322:ARG:CB	2.56	0.53
2:B:351:ILE:HB	2:B:353:PHE:HE1	1.74	0.53
4:D:43:ARG:HH11	4:D:43:ARG:HG3	1.73	0.53
6:F:132:TYR:HD1	6:F:158:TYR:HD2	1.57	0.53
6:F:160:ILE:HG22	6:F:160:ILE:O	2.08	0.53
7:U:124:LYS:HD3	7:U:125:PRO:N	2.23	0.53
7:U:595:ASN:HD21	7:U:597:LYS:HG3	1.74	0.53
7:U:883:ARG:HD2	7:U:883:ARG:O	2.08	0.53
8:V:416:ARG:HH21	10:Y:350:VAL:HG22	1.73	0.53
9:X:258:LYS:HA	9:X:258:LYS:CE	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:82:LYS:HA	10:Y:107:LYS:HD2	1.91	0.53
10:Y:165:LYS:HG3	10:Y:166:SER:N	2.23	0.53
11:Z:40:LEU:O	11:Z:40:LEU:HD12	2.09	0.53
11:Z:67:VAL:HG12	13:b:95:LEU:HD11	1.91	0.53
12:a:127:ASP:OD1	12:a:128:LEU:HD12	2.08	0.53
16:f:577:LEU:O	16:f:580:LEU:HG	2.09	0.53
16:f:638:ASP:HA	16:f:641:GLU:OE1	2.09	0.53
16:f:640:LYS:HZ1	16:f:678:LEU:HD22	1.74	0.53
16:f:723:TYR:O	16:f:723:TYR:HD1	1.91	0.53
18:W:98:LYS:HZ2	18:W:138:VAL:CG1	2.22	0.53
18:W:253:THR:OG1	18:W:257:GLN:OE1	2.26	0.53
24:K:206:MET:CE	24:K:210:LEU:HD12	2.39	0.53
26:m:87:LEU:HD13	26:m:135:PHE:CE1	2.44	0.53
1:A:126:SER:HA	1:A:148:GLN:HE21	1.74	0.53
2:B:223:ILE:CD1	2:B:334:ILE:HD13	2.39	0.53
6:F:132:TYR:CE1	6:F:158:TYR:HE2	2.27	0.53
6:F:396:CYS:C	6:F:400:CYS:SG	2.92	0.53
7:U:9:ILE:HG13	7:U:41:SER:OG	2.09	0.53
7:U:261:LEU:O	7:U:265:ILE:HG23	2.09	0.53
7:U:368:ALA:HB3	7:U:731:ILE:HD13	1.90	0.53
7:U:406:ALA:HB2	7:U:444:TYR:CD2	2.44	0.53
7:U:521:LEU:C	7:U:521:LEU:HD23	2.34	0.53
10:Y:138:LEU:HD13	10:Y:168:ILE:HD12	1.91	0.53
11:Z:145:HIS:CE1	12:a:181:GLY:HA3	2.44	0.53
14:c:241:ASN:OD1	14:c:291:LEU:HD11	2.09	0.53
14:c:249:LEU:HD12	14:c:249:LEU:O	2.08	0.53
16:f:79:ARG:HD2	16:f:81:GLN:HB2	1.91	0.53
16:f:465:LEU:O	16:f:466:LEU:HD22	2.09	0.53
16:f:490:ALA:O	16:f:525:ILE:HA	2.08	0.53
20:G:34:GLN:HA	20:G:34:GLN:OE1	2.08	0.53
20:G:112:ASP:OD2	28:O:73:ARG:NH2	2.42	0.53
30:Q:38:MET:HE2	30:Q:38:MET:N	2.24	0.53
3:C:387:VAL:HA	3:C:390:VAL:HG12	1.92	0.52
5:E:264:MET:HE1	5:E:275:MET:HE3	1.91	0.52
7:U:213:PHE:CE2	7:U:214:ILE:HG23	2.44	0.52
7:U:360:VAL:HG23	7:U:365:CYS:HB2	1.89	0.52
7:U:377:HIS:O	7:U:411:ILE:HA	2.08	0.52
7:U:392:TRP:HA	7:U:395:ARG:HG2	1.91	0.52
8:V:106:ARG:HA	8:V:174:PHE:CE1	2.44	0.52
8:V:337:LEU:HD12	8:V:337:LEU:O	2.09	0.52
8:V:426:LEU:O	8:V:428:LEU:HD12	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:496:PHE:HB2	8:V:497:PRO:HD3	1.90	0.52
12:a:186:LYS:HD2	12:a:188:LEU:H	1.73	0.52
15:d:62:SER:HB2	15:d:67:ASP:HB3	1.89	0.52
16:f:171:GLN:HG2	16:f:172:GLU:CG	2.29	0.52
16:f:182:GLU:N	16:f:183:PRO:HD2	2.23	0.52
16:f:191:ILE:HD12	16:f:191:ILE:N	2.24	0.52
16:f:243:PRO:O	16:f:246:SER:OG	2.12	0.52
2:B:384:ILE:HG22	2:B:385:MET:N	2.25	0.52
3:C:342:ILE:O	3:C:342:ILE:HG23	2.09	0.52
5:E:98:VAL:HG11	5:E:107:ILE:HD13	1.91	0.52
6:F:88:TYR:HE2	6:F:161:LEU:HD22	1.74	0.52
6:F:369:HIS:HE1	6:F:397:LYS:HD3	1.73	0.52
7:U:28:ASN:OD1	7:U:63:VAL:HG13	2.09	0.52
7:U:105:ILE:HG13	7:U:106:ASP:N	2.24	0.52
7:U:233:LEU:HD22	7:U:268:LEU:HD11	1.91	0.52
7:U:462:LEU:O	7:U:466:LYS:HG3	2.09	0.52
7:U:800:VAL:HG11	7:U:802:TYR:CE1	2.44	0.52
8:V:295:ILE:HG13	8:V:296:LYS:N	2.24	0.52
9:X:173:GLU:HA	9:X:176:THR:CG2	2.39	0.52
9:X:404:ILE:HD12	11:Z:265:LEU:CD2	2.38	0.52
11:Z:23:PHE:CE2	11:Z:126:VAL:HG21	2.43	0.52
12:a:6:GLY:CA	12:a:9:GLN:HG2	2.39	0.52
16:f:287:ASP:O	16:f:290:VAL:HG22	2.09	0.52
16:f:466:LEU:HD13	16:f:469:TYR:CD2	2.39	0.52
16:f:566:HIS:CE1	16:f:577:LEU:HD11	2.44	0.52
16:f:717:ALA:CB	16:f:760:PHE:HB2	2.39	0.52
16:f:824:ALA:HB2	16:f:851:ASP:OD1	2.09	0.52
18:W:162:ALA:HA	18:W:165:ILE:HG22	1.91	0.52
18:W:308:LEU:O	18:W:315:MET:HE1	2.10	0.52
26:M:17:ASP:O	26:M:17:ASP:OD1	2.27	0.52
23:j:90:GLU:HA	23:j:90:GLU:OE2	2.10	0.52
1:A:273:PHE:HD1	1:A:318:LEU:O	1.92	0.52
1:A:328:ASP:OD1	1:A:329:PRO:HD2	2.09	0.52
1:A:433:ASN:HD22	24:K:66:LYS:HZ1	1.58	0.52
3:C:35:VAL:HG22	4:D:51:LEU:HD22	1.91	0.52
3:C:404:LEU:HD11	21:H:151:SER:HB2	1.92	0.52
4:D:264:ILE:HG22	4:D:267:ILE:HB	1.90	0.52
4:D:372:GLY:HA3	36:D:501:ADP:N7	2.23	0.52
5:E:29:LEU:HB3	5:E:30:ARG:HH22	1.74	0.52
5:E:145:LEU:CD2	5:E:183:LEU:HD22	2.37	0.52
7:U:155:LEU:HG	7:U:193:PHE:HZ	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:446:LEU:HD21	7:U:457:ILE:HD11	1.91	0.52
7:U:456:ASP:N	7:U:456:ASP:OD1	2.42	0.52
7:U:632:GLN:N	7:U:632:GLN:CD	2.67	0.52
8:V:348:PHE:HE2	8:V:361:PHE:HA	1.73	0.52
10:Y:182:VAL:HG22	10:Y:212:GLU:CD	2.34	0.52
10:Y:334:LEU:O	10:Y:338:ILE:HG13	2.09	0.52
12:a:109:GLU:HB3	12:a:112:ILE:HD11	1.91	0.52
12:a:222:LEU:HD12	12:a:226:ARG:CG	2.37	0.52
14:c:53:VAL:HG22	14:c:114:SER:OG	2.10	0.52
14:c:118:PHE:HB3	14:c:121:TRP:NE1	2.24	0.52
15:d:117:THR:OG1	15:d:118:GLU:N	2.43	0.52
16:f:38:ASP:O	16:f:89:MET:HE1	2.10	0.52
16:f:214:VAL:HA	16:f:217:LEU:HD21	1.91	0.52
18:W:124:LEU:HD13	18:W:151:THR:OG1	2.09	0.52
18:W:403:PHE:CD1	18:W:403:PHE:C	2.87	0.52
1:A:122:VAL:HG23	6:F:88:TYR:HB2	1.89	0.52
1:A:195:LEU:HD13	1:A:269:ALA:HB1	1.90	0.52
1:A:432:TYR:CZ	24:K:33:LEU:HD12	2.45	0.52
2:B:112:LEU:HD23	2:B:112:LEU:C	2.33	0.52
2:B:165:ASP:HB2	3:C:78:ARG:NH2	2.23	0.52
2:B:240:ALA:CB	3:C:283:PHE:HZ	2.22	0.52
3:C:249:ASP:O	3:C:250:GLU:C	2.51	0.52
5:E:93:LYS:O	5:E:95:GLY:N	2.40	0.52
7:U:8:ILE:CD1	7:U:27:LEU:HD12	2.30	0.52
7:U:95:GLU:OE1	7:U:96:TYR:N	2.42	0.52
7:U:557:TYR:OH	7:U:760:VAL:HG21	2.10	0.52
9:X:256:LEU:O	9:X:259:ILE:HG13	2.10	0.52
10:Y:81:LEU:C	10:Y:107:LYS:HD2	2.34	0.52
10:Y:82:LYS:CA	10:Y:107:LYS:HD2	2.39	0.52
11:Z:187:LEU:HD12	11:Z:187:LEU:O	2.08	0.52
12:a:24:ARG:HH12	12:a:40:GLN:HG2	1.74	0.52
13:b:151:GLU:HA	13:b:154:THR:OG1	2.08	0.52
14:c:118:PHE:HB3	14:c:121:TRP:HE1	1.73	0.52
15:d:245:GLN:HG3	15:d:246:VAL:N	2.24	0.52
16:f:145:VAL:HG11	16:f:152:ALA:HB2	1.91	0.52
16:f:294:MET:HB3	16:f:807:ARG:NH1	2.25	0.52
16:f:478:ARG:NH1	16:f:510:SER:HA	2.25	0.52
28:O:64:LEU:HD22	28:O:75:PRO:HB3	1.91	0.52
30:Q:38:MET:HE1	30:Q:61:GLN:HB2	1.92	0.52
1:A:117:GLN:HE22	2:B:129:SER:CA	2.21	0.52
1:A:252:GLU:CD	1:A:255:ARG:HH21	2.17	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:41:LYS:CB	2:B:278:ALA:HB3	2.40	0.52
3:C:187:LEU:HD21	3:C:298:ILE:CD1	2.40	0.52
3:C:297:ARG:HB3	3:C:300:ILE:HG22	1.91	0.52
5:E:172:LEU:CD2	5:E:278:ALA:HB2	2.40	0.52
6:F:169:ASP:OD1	6:F:172:VAL:HG12	2.09	0.52
7:U:230:SER:HB2	7:U:267:ASN:CG	2.34	0.52
7:U:464:GLN:O	7:U:468:ALA:HB2	2.10	0.52
7:U:538:GLU:HG3	7:U:539:THR:N	2.25	0.52
7:U:564:ASP:CA	7:U:567:ILE:HG12	2.40	0.52
7:U:647:HIS:N	7:U:682:TYR:OH	2.42	0.52
8:V:119:GLY:O	8:V:122:THR:HG23	2.10	0.52
8:V:377:GLN:O	8:V:381:GLN:HG2	2.10	0.52
10:Y:82:LYS:HD2	10:Y:86:GLU:HG2	1.90	0.52
11:Z:6:VAL:HG13	11:Z:158:VAL:HG11	1.90	0.52
11:Z:28:LYS:HG3	11:Z:29:VAL:HG13	1.90	0.52
11:Z:90:ARG:NH1	11:Z:91:ILE:H	2.07	0.52
11:Z:214:LYS:HD2	11:Z:219:LYS:CE	2.39	0.52
12:a:205:LEU:HD21	12:a:237:LEU:HD22	1.91	0.52
12:a:280:MET:HE1	12:a:296:ILE:HA	1.91	0.52
14:c:167:MET:O	14:c:168:MET:C	2.53	0.52
14:c:279:ASP:HB2	14:c:280:PRO:HD3	1.91	0.52
15:d:53:ASP:O	15:d:54:ILE:C	2.52	0.52
15:d:79:LYS:O	15:d:80:CYS:C	2.51	0.52
16:f:7:ASP:C	16:f:10:PRO:HD2	2.35	0.52
16:f:79:ARG:O	16:f:83:ARG:HB3	2.10	0.52
16:f:82:ILE:HG13	16:f:83:ARG:N	2.24	0.52
16:f:466:LEU:HD12	16:f:481:SER:OG	2.10	0.52
16:f:558:LEU:O	16:f:561:GLY:N	2.35	0.52
18:W:254:PRO:C	18:W:258:ALA:HB2	2.34	0.52
18:W:294:LYS:O	18:W:294:LYS:HD2	2.09	0.52
19:e:22:PHE:HB3	19:e:23:PRO:HD3	1.91	0.52
19:e:59:GLU:CG	19:e:65:TYR:HD2	2.23	0.52
21:h:110:VAL:HG22	21:h:135:ILE:HD13	1.91	0.52
1:A:363:SER:HB3	1:A:403:ILE:CD1	2.39	0.52
2:B:85:MET:HE3	2:B:86:LYS:N	2.00	0.52
2:B:364:ILE:HA	2:B:367:ILE:CG2	2.40	0.52
3:C:134:LEU:HD12	3:C:134:LEU:C	2.33	0.52
5:E:264:MET:HE1	5:E:275:MET:CE	2.40	0.52
7:U:212:ASP:O	7:U:216:VAL:HG22	2.08	0.52
7:U:235:LYS:HG3	7:U:236:LEU:N	2.25	0.52
7:U:340:GLN:HA	7:U:343:ILE:CD1	2.37	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:392:TRP:CD1	7:U:392:TRP:C	2.86	0.52
8:V:466:ILE:HD12	8:V:470:ARG:H	1.74	0.52
11:Z:81:MET:HE2	14:c:94:LYS:HD2	1.92	0.52
12:a:245:VAL:O	12:a:247:ARG:HD2	2.09	0.52
13:b:29:GLN:HE22	13:b:75:LEU:HD21	1.75	0.52
15:d:62:SER:O	15:d:67:ASP:N	2.40	0.52
15:d:116:HIS:HE2	15:d:140:GLU:CD	2.06	0.52
15:d:255:MET:HG3	15:d:256:ILE:H	1.74	0.52
16:f:257:ARG:HH22	16:f:286:LYS:CE	2.21	0.52
1:A:36:TYR:O	1:A:36:TYR:HD1	1.93	0.52
1:A:83:ASP:O	1:A:86:THR:OG1	2.22	0.52
1:A:417:ILE:HG13	1:A:418:LYS:N	2.25	0.52
4:D:184:PRO:HG3	4:D:191:TYR:CE2	2.45	0.52
4:D:355:SER:HB3	4:D:394:VAL:O	2.10	0.52
5:E:55:GLN:NE2	6:F:135:PRO:HG3	2.25	0.52
5:E:85:ARG:HD2	5:E:85:ARG:C	2.35	0.52
5:E:153:LEU:HD13	5:E:192:ASP:OD2	2.09	0.52
5:E:353:PHE:HB3	5:E:366:ASP:OD1	2.09	0.52
6:F:132:TYR:HD1	6:F:158:TYR:CD2	2.28	0.52
7:U:39:SER:HB3	8:V:273:LYS:HZ3	1.74	0.52
7:U:549:ALA:CB	7:U:581:SER:HB3	2.39	0.52
8:V:359:PRO:HB3	8:V:382:PHE:CD2	2.45	0.52
8:V:364:THR:HA	8:V:367:VAL:CG1	2.39	0.52
8:V:415:SER:HB2	10:Y:346:LYS:HZ3	1.73	0.52
10:Y:263:LEU:HD12	10:Y:271:PHE:HE2	1.75	0.52
11:Z:37:GLY:HA3	11:Z:95:TYR:CE1	2.45	0.52
11:Z:64:ASP:O	11:Z:103:LYS:HE3	2.09	0.52
12:a:34:TRP:CD2	12:a:70:ARG:HG3	2.44	0.52
16:f:395:GLY:HA2	16:f:398:TRP:HB3	1.91	0.52
16:f:584:SER:H	16:f:588:ARG:HD3	1.75	0.52
18:W:44:ILE:HA	18:W:47:LEU:HD23	1.91	0.52
18:W:168:GLU:OE2	18:W:185:PHE:HE1	1.93	0.52
18:W:224:LEU:O	18:W:224:LEU:HD22	2.10	0.52
1:A:249:TYR:HB2	6:F:259:MET:CE	2.39	0.52
2:B:106:PRO:CG	3:C:121:TYR:HB2	2.21	0.52
2:B:219:PRO:HB3	2:B:348:ASP:OD2	2.08	0.52
2:B:407:LEU:HD23	3:C:174:LEU:HD21	1.91	0.52
4:D:184:PRO:O	4:D:185:LEU:HB2	2.09	0.52
8:V:172:VAL:HA	8:V:175:MET:SD	2.50	0.52
9:X:97:LEU:HD13	9:X:106:GLU:HG2	1.92	0.52
9:X:411:VAL:CG2	10:Y:376:LEU:HD11	2.33	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:235:ASP:OD1	10:Y:235:ASP:O	2.28	0.52
12:a:217:LEU:HD13	12:a:238:TYR:HE1	1.72	0.52
12:a:219:HIS:CD2	12:a:220:PRO:HD2	2.45	0.52
13:b:10:VAL:HG21	13:b:51:LEU:HD21	1.91	0.52
15:d:82:TYR:C	15:d:84:ASP:N	2.66	0.52
15:d:174:ILE:O	15:d:175:ARG:C	2.53	0.52
15:d:197:ILE:O	15:d:198:LEU:HD23	2.10	0.52
16:f:10:PRO:N	16:f:59:LEU:HD13	2.25	0.52
16:f:125:ILE:CG2	16:f:129:LEU:HB2	2.40	0.52
16:f:297:MET:SD	16:f:321:MET:HB2	2.49	0.52
16:f:467:SER:HA	16:f:470:VAL:HG23	1.92	0.52
19:e:59:GLU:O	19:e:61:GLU:OE2	2.28	0.52
25:L:125:ARG:NH1	25:L:125:ARG:HA	2.25	0.52
25:L:166:GLN:O	25:L:170:THR:N	2.37	0.52
26:m:53:VAL:O	26:m:53:VAL:HG23	2.08	0.52
27:n:2:THR:N	27:n:171:SER:HG	2.08	0.52
2:B:60:LEU:HB2	16:f:219:LYS:NZ	2.25	0.52
3:C:406:LYS:HD3	3:C:406:LYS:N	2.25	0.52
5:E:326:ILE:HD12	5:E:327:ASP:N	2.23	0.52
7:U:475:HIS:HE2	7:U:479:LEU:HD12	1.74	0.52
7:U:543:LYS:HD2	7:U:546:ARG:HD2	1.91	0.52
7:U:580:ARG:HG2	7:U:614:VAL:HA	1.92	0.52
8:V:375:PHE:O	8:V:378:VAL:HG22	2.09	0.52
9:X:167:VAL:HG11	9:X:206:LEU:HD21	1.92	0.52
10:Y:325:VAL:HG21	19:e:63:HIS:CD2	2.45	0.52
10:Y:334:LEU:CD2	10:Y:343:LEU:HD21	2.40	0.52
15:d:68:ILE:O	15:d:70:SER:N	2.42	0.52
16:f:482:ILE:HG13	16:f:483:PHE:H	1.75	0.52
16:f:655:LEU:HB2	16:f:675:PHE:CE1	2.45	0.52
1:A:76:ALA:CA	1:A:79:ASP:HB2	2.31	0.52
1:A:213:LEU:HD11	1:A:321:THR:CG2	2.39	0.52
2:B:364:ILE:HG12	2:B:395:ILE:HG21	1.90	0.52
2:B:407:LEU:CD2	3:C:174:LEU:HD21	2.40	0.52
2:B:411:ARG:HG3	2:B:413:LYS:H	1.75	0.52
4:D:153:MET:CE	4:D:257:ASN:HD22	2.21	0.52
5:E:184:ALA:HB1	5:E:195:PHE:CD2	2.44	0.52
6:F:84:LYS:NZ	6:F:161:LEU:HD23	2.25	0.52
7:U:246:TYR:CE1	7:U:324:LYS:HD3	2.45	0.52
7:U:556:MET:HE1	7:U:563:ALA:CA	2.40	0.52
7:U:836:THR:C	7:U:840:LYS:HE3	2.35	0.52
7:U:880:ASN:CB	7:U:881:PRO:HD3	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:317:PRO:O	9:X:321:THR:HG23	2.09	0.52
10:Y:137:ARG:O	10:Y:141:VAL:HG23	2.10	0.52
11:Z:70:LEU:HD23	11:Z:111:LEU:HD22	1.92	0.52
12:a:192:GLU:HG3	12:a:196:ARG:HH22	1.75	0.52
14:c:46:ARG:O	14:c:46:ARG:HD3	2.09	0.52
14:c:64:ASP:CA	14:c:139:ARG:HH12	2.18	0.52
15:d:94:TYR:HB3	15:d:99:LEU:HB2	1.92	0.52
16:f:159:VAL:HG12	16:f:160:ARG:HH11	1.74	0.52
16:f:401:LYS:NZ	16:f:401:LYS:H	2.07	0.52
16:f:438:ASP:OD1	16:f:476:THR:OG1	2.28	0.52
18:W:248:ARG:HH12	18:W:289:ARG:NH2	2.07	0.52
22:I:177:GLN:C	22:I:177:GLN:OE1	2.53	0.52
1:A:111:TYR:CE1	1:A:125:LEU:HB2	2.45	0.51
1:A:428:ARG:HD2	23:J:146:GLN:CD	2.35	0.51
2:B:392:GLY:HA3	34:B:501:ATP:C8	2.45	0.51
2:B:407:LEU:HD21	3:C:174:LEU:HD11	1.91	0.51
3:C:255:GLY:O	3:C:256:SER:OG	2.14	0.51
5:E:172:LEU:HD23	5:E:172:LEU:N	2.24	0.51
7:U:161:ASP:OD2	7:U:162:VAL:N	2.42	0.51
7:U:554:LEU:HD11	7:U:761:VAL:HG23	1.91	0.51
10:Y:97:GLU:CA	10:Y:101:ARG:HD3	2.29	0.51
10:Y:183:TYR:HB3	10:Y:200:LEU:HD23	1.92	0.51
10:Y:311:TYR:O	10:Y:356:THR:HG21	2.10	0.51
16:f:534:VAL:HG23	16:f:562:LEU:HD22	1.92	0.51
16:f:605:ASN:O	16:f:609:VAL:HG11	2.10	0.51
16:f:685:THR:HG21	16:f:723:TYR:CE2	2.45	0.51
23:J:195:LEU:O	23:J:199:VAL:HG12	2.10	0.51
25:L:65:HIS:CD2	25:L:223:ILE:HD12	2.45	0.51
3:C:277:LEU:HD22	3:C:310:ARG:CZ	2.40	0.51
4:D:45:LYS:CE	7:U:187:LEU:HD12	2.40	0.51
5:E:192:ASP:O	5:E:194:ASN:N	2.43	0.51
5:E:264:MET:HE1	5:E:275:MET:CG	2.40	0.51
6:F:191:LEU:O	6:F:195:ILE:HB	2.10	0.51
6:F:327:LYS:HD3	6:F:327:LYS:N	2.24	0.51
7:U:268:LEU:HB3	7:U:326:ILE:HD11	1.92	0.51
7:U:688:LEU:CD2	7:U:730:ALA:HB2	2.40	0.51
8:V:128:ARG:NH2	8:V:132:LEU:HD11	2.25	0.51
8:V:454:GLU:HG2	8:V:455:LYS:HG3	1.93	0.51
9:X:112:GLU:HG3	9:X:113:CYS:N	2.25	0.51
9:X:286:ALA:HB2	9:X:309:TYR:HD2	1.72	0.51
9:X:309:TYR:HB3	9:X:312:GLU:CB	2.29	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:21:GLN:HA	10:Y:21:GLN:HE21	1.75	0.51
10:Y:31:HIS:HD2	10:Y:32:ARG:HG2	1.75	0.51
10:Y:134:LEU:HA	10:Y:137:ARG:CG	2.41	0.51
10:Y:327:VAL:O	10:Y:331:ASP:OD1	2.27	0.51
10:Y:377:LEU:HD23	11:Z:265:LEU:HD11	1.93	0.51
10:Y:388:ASN:H	11:Z:279:LYS:HZ3	1.57	0.51
11:Z:81:MET:CE	14:c:94:LYS:HD2	2.41	0.51
12:a:15:GLY:O	12:a:18:GLN:HG3	2.09	0.51
13:b:131:LEU:HG	13:b:136:VAL:CB	2.13	0.51
16:f:1:MET:HE3	16:f:3:GLU:OE1	2.10	0.51
16:f:512:MET:HE1	16:f:554:TYR:C	2.34	0.51
16:f:766:GLN:NE2	16:f:768:LEU:HB2	2.25	0.51
16:f:828:ARG:CG	16:f:847:GLY:HA3	2.41	0.51
18:W:355:LYS:O	18:W:359:VAL:HG12	2.10	0.51
20:G:203:SER:O	20:G:207:SER:N	2.43	0.51
30:q:96:THR:O	30:q:96:THR:OG1	2.26	0.51
3:C:186:VAL:HG13	3:C:315:ILE:CD1	2.40	0.51
4:D:304:ASN:OD1	4:D:304:ASN:N	2.44	0.51
5:E:142:ILE:HG13	5:E:143:ARG:H	1.75	0.51
6:F:161:LEU:HB3	6:F:162:GLU:OE2	2.10	0.51
7:U:177:LEU:HD23	7:U:204:ILE:HD11	1.91	0.51
7:U:217:CYS:HB3	7:U:248:ILE:HD12	1.91	0.51
7:U:249:CYS:HB3	7:U:328:ILE:HG12	1.93	0.51
7:U:439:GLU:HG2	7:U:440:GLY:N	2.24	0.51
7:U:646:PRO:HB2	7:U:680:VAL:HG11	1.92	0.51
7:U:769:PHE:C	7:U:769:PHE:CD2	2.87	0.51
8:V:119:GLY:HA2	8:V:148:ARG:NH1	2.25	0.51
8:V:224:LEU:HB3	8:V:257:ASN:HD21	1.75	0.51
8:V:346:LEU:O	8:V:350:GLN:NE2	2.36	0.51
8:V:421:ASP:OD2	10:Y:349:LYS:NZ	2.44	0.51
9:X:147:LEU:HD21	9:X:177:TYR:CE1	2.46	0.51
10:Y:81:LEU:CB	10:Y:107:LYS:HG2	2.40	0.51
10:Y:88:LEU:HD12	10:Y:88:LEU:O	2.10	0.51
12:a:363:MET:O	12:a:367:VAL:HG12	2.10	0.51
15:d:2:TYR:CD2	15:d:25:ARG:HA	2.45	0.51
16:f:370:MET:SD	16:f:370:MET:N	2.83	0.51
16:f:567:LEU:HD12	16:f:568:GLY:N	2.26	0.51
16:f:701:ASN:CG	16:f:703:ARG:HG2	2.35	0.51
16:f:869:THR:HG21	16:f:884:THR:HA	1.91	0.51
18:W:19:ASP:C	18:W:20:TYR:HD2	2.18	0.51
18:W:43:VAL:O	18:W:46:THR:HG22	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:H:37:ILE:HD13	21:H:190:ALA:HB2	1.93	0.51
1:A:161:VAL:CG2	1:A:256:MET:HE1	2.41	0.51
1:A:309:PHE:CE1	6:F:238:ARG:HG2	2.46	0.51
3:C:83:LYS:O	3:C:84:LYS:HG2	2.10	0.51
3:C:123:LEU:HD23	3:C:124:HIS:N	2.25	0.51
5:E:196:LEU:HD23	5:E:198:VAL:HG13	1.92	0.51
7:U:262:SER:HA	7:U:265:ILE:HD11	1.93	0.51
7:U:469:SER:H	7:U:473:VAL:HG11	1.76	0.51
7:U:765:VAL:HG11	7:U:778:PHE:CG	2.46	0.51
8:V:168:GLN:O	8:V:172:VAL:HG23	2.10	0.51
8:V:464:ILE:HD12	8:V:465:ASP:H	1.75	0.51
10:Y:161:THR:HB	10:Y:183:TYR:HE1	1.74	0.51
13:b:4:GLU:C	13:b:105:HIS:HD1	2.13	0.51
13:b:25:ARG:C	13:b:27:GLN:N	2.66	0.51
13:b:33:VAL:CA	13:b:36:VAL:HB	2.41	0.51
13:b:107:MET:HA	13:b:107:MET:CE	2.40	0.51
15:d:175:ARG:HG3	15:d:198:LEU:HD13	1.92	0.51
16:f:597:VAL:HG21	16:f:635:LYS:CB	2.41	0.51
18:W:317:TRP:CG	18:W:355:LYS:HE2	2.45	0.51
1:A:357:ILE:HA	1:A:360:ARG:NH2	2.25	0.51
2:B:119:ASN:O	2:B:120:HIS:CG	2.63	0.51
2:B:225:TYR:HH	2:B:352:GLU:HG2	1.76	0.51
2:B:293:LYS:HA	2:B:338:ASP:HB2	1.91	0.51
2:B:335:GLU:OE1	2:B:335:GLU:N	2.23	0.51
3:C:83:LYS:H	3:C:105:ILE:HD11	1.74	0.51
3:C:185:GLY:O	3:C:186:VAL:HG23	2.10	0.51
3:C:199:LEU:O	3:C:203:VAL:HG23	2.09	0.51
4:D:392:TYR:CE2	18:W:200:ILE:HD11	2.45	0.51
5:E:311:ASP:OD1	5:E:312:ILE:HD13	2.10	0.51
6:F:339:ASP:C	6:F:341:ALA:H	2.18	0.51
7:U:126:ILE:HB	7:U:131:GLU:OE2	2.11	0.51
7:U:708:GLN:OE1	7:U:711:GLN:NE2	2.37	0.51
7:U:799:LYS:NZ	7:U:927:PRO:HD2	2.24	0.51
10:Y:13:LYS:HE3	10:Y:211:TYR:CE1	2.46	0.51
10:Y:144:LEU:HD23	10:Y:160:ASN:ND2	2.26	0.51
11:Z:232:ASP:OD1	11:Z:233:VAL:N	2.43	0.51
13:b:11:ASP:OD1	13:b:12:ASN:N	2.43	0.51
14:c:104:ARG:N	14:c:104:ARG:HD3	2.26	0.51
14:c:127:ILE:HA	14:c:130:GLN:HG2	1.92	0.51
16:f:15:GLN:O	16:f:18:ALA:HB3	2.10	0.51
16:f:80:ARG:NH2	16:f:81:GLN:HA	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:288:VAL:HB	16:f:881:GLU:HB2	1.92	0.51
16:f:318:THR:O	16:f:322:SER:OG	2.29	0.51
16:f:408:LEU:HD11	16:f:446:LEU:CD2	2.41	0.51
16:f:521:ALA:O	16:f:524:MET:HG3	2.11	0.51
16:f:857:GLY:H	16:f:860:LYS:CE	2.24	0.51
18:W:98:LYS:NZ	18:W:140:ILE:HG12	2.26	0.51
18:W:205:ILE:HG13	18:W:206:SER:N	2.25	0.51
23:J:33:VAL:HG22	23:J:160:ALA:HB2	1.93	0.51
2:B:85:MET:HG3	16:f:618:GLU:CG	2.40	0.51
4:D:109:SER:O	4:D:111:TYR:HD1	1.93	0.51
4:D:384:MET:HE2	4:D:384:MET:CA	2.35	0.51
7:U:35:TRP:O	7:U:38:ILE:HG22	2.10	0.51
7:U:567:ILE:HG13	7:U:568:GLU:N	2.26	0.51
10:Y:98:SER:HB2	10:Y:100:ILE:HG12	1.92	0.51
12:a:188:LEU:CD1	12:a:189:PRO:HD2	2.41	0.51
13:b:22:LEU:O	13:b:23:PRO:C	2.53	0.51
13:b:68:THR:HG23	13:b:71:ILE:CD1	2.20	0.51
15:d:103:LEU:O	15:d:104:LEU:C	2.51	0.51
16:f:238:ASN:C	16:f:241:PRO:HD2	2.36	0.51
16:f:350:LYS:HD3	16:f:747:GLN:CD	2.36	0.51
16:f:450:ILE:HG12	16:f:487:LEU:CD2	2.38	0.51
16:f:468:ASP:OD1	16:f:468:ASP:N	2.43	0.51
18:W:325:GLY:C	18:W:327:GLU:H	2.19	0.51
22:I:80:THR:O	22:I:84:ASN:N	2.33	0.51
26:M:34:SER:OG	26:M:65:ARG:NH1	2.39	0.51
1:A:172:VAL:CG1	1:A:227:ARG:HG2	2.40	0.51
2:B:365:PHE:CE2	2:B:395:ILE:HG12	2.46	0.51
3:C:211:PHE:CZ	3:C:247:PHE:HB2	2.46	0.51
3:C:301:LEU:CD2	3:C:306:LEU:HD11	2.41	0.51
4:D:267:ILE:HG12	4:D:309:MET:CE	2.40	0.51
7:U:45:ILE:HD11	7:U:64:ALA:N	2.26	0.51
7:U:371:ILE:HG21	7:U:732:LEU:HD11	1.93	0.51
7:U:483:LEU:HD21	7:U:778:PHE:CZ	2.46	0.51
7:U:574:LYS:HD2	7:U:574:LYS:C	2.35	0.51
7:U:699:THR:HG1	7:U:700:GLU:H	1.56	0.51
8:V:128:ARG:HH21	8:V:132:LEU:HD11	1.75	0.51
11:Z:259:VAL:HB	14:c:295:ASN:CB	2.38	0.51
14:c:29:GLU:OE2	14:c:66:THR:HA	2.10	0.51
14:c:44:HIS:HB3	14:c:112:TYR:HE2	1.75	0.51
15:d:52:ARG:O	15:d:55:LEU:N	2.26	0.51
15:d:114:GLU:HA	15:d:117:THR:OG1	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:130:ASN:O	15:d:131:VAL:HB	2.11	0.51
16:f:731:MET:SD	16:f:732:VAL:HG23	2.51	0.51
16:f:738:ASN:HA	16:f:743:ALA:CB	2.40	0.51
18:W:235:GLN:HG3	18:W:346:GLU:OE2	2.10	0.51
18:W:357:ARG:NH1	18:W:360:GLU:OE1	2.44	0.51
20:G:112:ASP:OD1	20:G:112:ASP:N	2.43	0.51
31:r:43:LEU:N	31:r:43:LEU:HD23	2.26	0.51
1:A:306:LEU:CA	1:A:312:ARG:HD3	2.37	0.51
2:B:385:MET:HE2	2:B:385:MET:N	2.26	0.51
3:C:250:GLU:HG2	3:C:250:GLU:O	2.10	0.51
3:C:404:LEU:O	3:C:406:LYS:NZ	2.28	0.51
6:F:288:LEU:HD23	6:F:338:LEU:HD11	1.91	0.51
6:F:301:ALA:CB	6:F:304:ARG:HH21	2.22	0.51
7:U:405:THR:OG1	7:U:441:GLY:HA3	2.10	0.51
7:U:786:THR:O	7:U:883:ARG:HA	2.11	0.51
8:V:79:VAL:HG22	8:V:163:VAL:CG1	2.38	0.51
8:V:238:ALA:HA	8:V:241:ARG:HE	1.74	0.51
8:V:285:TRP:HZ3	8:V:289:LEU:HD21	1.75	0.51
8:V:416:ARG:HD3	8:V:459:GLN:CD	2.36	0.51
10:Y:231:LEU:HB3	10:Y:234:PRO:HD2	1.93	0.51
10:Y:246:ILE:HG22	10:Y:250:LEU:HD12	1.91	0.51
11:Z:127:LYS:HB2	11:Z:127:LYS:NZ	2.24	0.51
11:Z:149:THR:HG22	11:Z:150:PRO:HD2	1.92	0.51
13:b:161:ASN:ND2	13:b:166:THR:OG1	2.43	0.51
14:c:85:GLU:OE1	14:c:85:GLU:N	2.43	0.51
16:f:281:ILE:HA	16:f:284:SER:HB2	1.92	0.51
16:f:446:LEU:HD12	16:f:480:GLY:CA	2.40	0.51
16:f:501:LEU:O	16:f:501:LEU:HD23	2.11	0.51
16:f:658:ALA:O	16:f:663:GLY:N	2.43	0.51
18:W:275:ILE:HG21	18:W:305:LEU:CD2	2.34	0.51
18:W:307:LYS:O	18:W:311:THR:N	2.42	0.51
27:n:71:LEU:O	27:n:73:GLU:N	2.41	0.51
1:A:195:LEU:HD21	1:A:316:LYS:NZ	2.25	0.51
2:B:372:MET:HE2	2:B:414:VAL:HG21	1.93	0.51
6:F:361:ALA:O	6:F:365:ILE:HG22	2.10	0.51
7:U:241:ASN:OD1	7:U:244:MET:HG2	2.11	0.51
7:U:509:GLY:CA	7:U:544:ILE:HG23	2.41	0.51
8:V:174:PHE:O	8:V:177:ASN:ND2	2.44	0.51
8:V:480:ILE:HD13	11:Z:260:VAL:CA	2.34	0.51
9:X:173:GLU:HA	9:X:176:THR:HG22	1.92	0.51
10:Y:259:TYR:OH	10:Y:299:MET:HG2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:Y:311:TYR:HD2	10:Y:314:LEU:CD2	2.23	0.51
12:a:291:LEU:HG	12:a:331:VAL:HG12	1.91	0.51
15:d:19:CYS:HA	15:d:22:GLU:CB	2.26	0.51
15:d:177:GLU:O	15:d:180:GLY:N	2.43	0.51
16:f:189:LYS:HD3	16:f:190:GLU:HG3	1.92	0.51
16:f:268:LEU:HA	16:f:272:LEU:CD2	2.38	0.51
16:f:300:ARG:CG	16:f:320:ILE:HG21	2.41	0.51
16:f:680:ARG:HH22	16:f:762:VAL:H	1.59	0.51
16:f:701:ASN:CG	16:f:704:LEU:H	2.19	0.51
18:W:98:LYS:NZ	18:W:138:VAL:HG13	2.24	0.51
18:W:257:GLN:O	18:W:257:GLN:CD	2.53	0.51
2:B:136:LEU:HD22	2:B:160:ILE:HD12	1.93	0.51
2:B:197:ILE:HD11	2:B:328:ILE:HD13	1.93	0.51
2:B:429:LYS:NZ	3:C:306:LEU:HB3	2.25	0.51
4:D:91:GLN:OE1	4:D:91:GLN:N	2.44	0.51
5:E:140:GLU:O	5:E:143:ARG:HG3	2.11	0.51
6:F:223:VAL:HA	6:F:350:ARG:O	2.11	0.51
7:U:409:GLY:HA3	7:U:445:ALA:CB	2.39	0.51
7:U:524:LYS:HA	7:U:529:ILE:HD11	1.93	0.51
8:V:258:TYR:O	8:V:262:SER:N	2.44	0.51
8:V:424:GLN:HE22	8:V:425:LYS:HD3	1.75	0.51
11:Z:176:LEU:HD11	14:c:217:LEU:O	2.11	0.51
14:c:100:LYS:O	14:c:101:GLN:C	2.51	0.51
15:d:207:THR:HG23	15:d:210:ALA:HB3	1.92	0.51
18:W:208:LYS:O	18:W:208:LYS:HD2	2.11	0.51
18:W:413:ILE:HG22	18:W:413:ILE:O	2.11	0.51
24:K:171:GLY:O	24:K:174:SER:OG	2.22	0.51
31:R:32:VAL:HG11	38:R:301:LDZ:H19	1.93	0.51
23:j:31:THR:OG1	23:j:163:ARG:O	2.25	0.51
28:o:31:ASN:OD1	28:o:188:ARG:NH2	2.43	0.51
1:A:41:TYR:OH	16:f:188:VAL:HG21	2.12	0.50
2:B:122:ILE:HD13	2:B:132:TYR:HA	1.93	0.50
3:C:340:ARG:HH12	10:Y:175:ASP:N	2.09	0.50
4:D:91:GLN:O	4:D:103:VAL:HG23	2.12	0.50
5:E:257:LEU:HA	5:E:260:LEU:CD2	2.41	0.50
6:F:285:ILE:O	6:F:330:ALA:HB1	2.11	0.50
7:U:50:GLU:OE1	7:U:50:GLU:HA	2.12	0.50
7:U:246:TYR:HE1	7:U:324:LYS:HD3	1.75	0.50
7:U:646:PRO:HB2	7:U:682:TYR:OH	2.11	0.50
7:U:749:GLN:H	7:U:749:GLN:CD	2.16	0.50
8:V:68:ASP:OD2	8:V:112:VAL:HG21	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:417:LYS:NZ	9:X:421:LEU:HB3	2.26	0.50
13:b:32:ALA:O	13:b:36:VAL:N	2.44	0.50
14:c:216:MET:C	14:c:218:LEU:N	2.69	0.50
14:c:242:GLU:HA	14:c:245:VAL:HG12	1.93	0.50
15:d:14:PRO:HA	15:d:65:ARG:HD3	1.92	0.50
15:d:84:ASP:O	15:d:85:TYR:C	2.54	0.50
16:f:288:VAL:HG21	16:f:881:GLU:H	1.74	0.50
16:f:446:LEU:CD1	16:f:480:GLY:CA	2.86	0.50
16:f:672:LEU:HD12	16:f:707:LEU:HB2	1.93	0.50
16:f:846:VAL:HG22	16:f:865:PHE:HE2	1.76	0.50
30:Q:174:ASN:N	30:q:172:ILE:O	2.43	0.50
1:A:124:ASP:C	1:A:124:ASP:OD1	2.55	0.50
1:A:159:PRO:O	1:A:163:MET:HG2	2.11	0.50
1:A:241:ILE:HG13	1:A:241:ILE:O	2.10	0.50
1:A:365:GLU:OE1	1:A:405:THR:HA	2.10	0.50
3:C:32:GLN:OE1	4:D:47:LEU:HD11	2.11	0.50
3:C:33:LEU:HD23	8:V:201:ARG:CZ	2.41	0.50
3:C:201:ARG:HG2	4:D:299:PHE:CD1	2.46	0.50
3:C:396:GLU:OE1	3:C:396:GLU:HA	2.10	0.50
5:E:310:LEU:HB3	5:E:328:TYR:HD2	1.76	0.50
6:F:181:PRO:HB2	6:F:183:GLU:OE1	2.11	0.50
7:U:32:ASN:HA	7:U:70:HIS:CD2	2.46	0.50
9:X:70:LEU:O	9:X:74:ARG:NE	2.33	0.50
10:Y:302:HIS:HA	10:Y:305:SER:OG	2.11	0.50
12:a:99:LYS:O	12:a:103:LYS:HG2	2.11	0.50
12:a:291:LEU:HG	12:a:331:VAL:CG1	2.41	0.50
13:b:28:ALA:O	13:b:29:GLN:C	2.50	0.50
13:b:35:ILE:HD13	13:b:39:SER:HB3	1.93	0.50
15:d:147:SER:O	15:d:148:TYR:C	2.54	0.50
33:t:22:ILE:HD12	33:t:50:MET:HG3	1.93	0.50
1:A:177:VAL:O	1:A:177:VAL:HG12	2.10	0.50
1:A:289:ALA:HA	4:D:239:TYR:OH	2.12	0.50
3:C:24:TYR:HB3	4:D:40:LEU:HG	1.93	0.50
3:C:36:ASN:O	3:C:39:SER:N	2.35	0.50
3:C:43:ARG:HA	3:C:46:GLN:HG2	1.94	0.50
3:C:339:THR:HB	3:C:377:HIS:HD2	1.70	0.50
3:C:371:LEU:HD11	4:D:190:LEU:HG	1.92	0.50
4:D:323:ARG:HG3	4:D:324:PRO:O	2.10	0.50
6:F:339:ASP:O	6:F:341:ALA:N	2.36	0.50
7:U:121:GLY:H	7:U:123:LYS:HZ1	1.58	0.50
7:U:423:MET:CG	7:U:446:LEU:HD12	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:595:ASN:ND2	7:U:597:LYS:HG3	2.26	0.50
8:V:345:ARG:NH1	19:e:43:TRP:HA	2.25	0.50
9:X:57:LEU:HB3	9:X:66:LEU:HD22	1.92	0.50
9:X:153:LEU:HD23	9:X:169:VAL:CG2	2.40	0.50
9:X:244:SER:N	9:X:245:PRO:HD2	2.27	0.50
9:X:299:LEU:CG	9:X:327:TYR:HE1	2.23	0.50
10:Y:38:ARG:HA	10:Y:41:LEU:HD23	1.92	0.50
10:Y:224:VAL:HG11	10:Y:256:VAL:CG1	2.39	0.50
11:Z:104:ASN:HD22	11:Z:108:ILE:HG12	1.77	0.50
11:Z:229:GLN:HE22	12:a:339:ARG:C	2.19	0.50
12:a:216:LEU:HA	12:a:219:HIS:HB3	1.93	0.50
13:b:113:VAL:O	13:b:142:ASN:HA	2.11	0.50
15:d:19:CYS:O	15:d:23:LEU:N	2.44	0.50
15:d:34:ASN:HD21	15:d:44:THR:H	1.59	0.50
15:d:170:LEU:C	15:d:172:ASP:N	2.67	0.50
16:f:188:VAL:O	16:f:191:ILE:HD11	2.12	0.50
16:f:467:SER:O	16:f:470:VAL:HB	2.11	0.50
16:f:549:GLU:HB3	16:f:587:PHE:HD2	1.76	0.50
16:f:641:GLU:C	16:f:643:PRO:HD3	2.36	0.50
16:f:826:GLN:HE22	16:f:865:PHE:N	2.09	0.50
18:W:190:MET:HG3	18:W:205:ILE:HD11	1.92	0.50
18:W:227:TYR:HB3	18:W:250:ILE:HG22	1.94	0.50
23:J:59:VAL:HG13	23:J:59:VAL:O	2.12	0.50
33:t:107:TRP:O	33:t:108:ASN:ND2	2.40	0.50
1:A:41:TYR:HA	1:A:44:GLN:HE22	1.75	0.50
1:A:45:ILE:HD11	2:B:62:LEU:CA	2.42	0.50
4:D:81:ARG:HG2	14:c:152:LYS:CD	2.41	0.50
5:E:156:PRO:CG	5:E:272:ARG:HE	2.20	0.50
7:U:119:PRO:O	7:U:123:LYS:HE3	2.11	0.50
7:U:268:LEU:CB	7:U:326:ILE:HD11	2.42	0.50
7:U:339:LEU:HD22	7:U:414:GLY:O	2.11	0.50
7:U:483:LEU:HD21	7:U:778:PHE:CE2	2.46	0.50
8:V:98:LEU:HD21	8:V:206:VAL:HA	1.94	0.50
8:V:101:LEU:HD23	8:V:209:LYS:CD	2.37	0.50
8:V:170:LEU:N	8:V:170:LEU:HD23	2.25	0.50
8:V:414:TYR:CE1	10:Y:335:SER:HB2	2.46	0.50
8:V:472:PRO:HG2	11:Z:253:THR:CG2	2.32	0.50
9:X:71:LYS:HD2	9:X:112:GLU:OE1	2.11	0.50
9:X:201:TYR:HD2	21:H:176:ARG:NE	2.09	0.50
10:Y:57:LEU:HD23	10:Y:63:TRP:CE2	2.46	0.50
11:Z:36:VAL:HG22	11:Z:96:HIS:HB3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:231:GLN:OE1	18:W:442:THR:HG21	2.12	0.50
12:a:8:LEU:HA	12:a:11:SER:OG	2.11	0.50
12:a:278:MET:O	12:a:281:THR:OG1	2.25	0.50
14:c:210:ASN:OD1	14:c:211:GLU:N	2.45	0.50
15:d:166:PHE:O	15:d:170:LEU:N	2.34	0.50
16:f:8:LYS:O	16:f:11:VAL:HB	2.11	0.50
16:f:413:SER:O	16:f:416:MET:HG2	2.11	0.50
16:f:706:ILE:CG2	16:f:745:LEU:HG	2.39	0.50
16:f:710:LEU:HD12	16:f:713:PHE:HD2	1.77	0.50
18:W:231:ILE:HD11	18:W:246:HIS:HB2	1.94	0.50
18:W:340:VAL:O	18:W:350:ARG:HD2	2.11	0.50
18:W:399:ASN:O	18:W:401:THR:N	2.44	0.50
24:K:163:VAL:HG13	24:K:163:VAL:O	2.09	0.50
27:N:15:LEU:HD23	27:N:45:CYS:SG	2.51	0.50
31:R:18:ASP:OD2	31:R:18:ASP:C	2.55	0.50
1:A:98:CYS:O	1:A:99:THR:OG1	2.22	0.50
1:A:149:ILE:O	1:A:150:HIS:ND1	2.41	0.50
1:A:428:ARG:HD2	23:J:146:GLN:NE2	2.26	0.50
2:B:176:VAL:CG2	2:B:247:PHE:HB3	2.42	0.50
3:C:334:ARG:HD2	3:C:334:ARG:O	2.11	0.50
5:E:104:THR:O	5:E:105:LEU:HB2	2.10	0.50
5:E:192:ASP:C	5:E:194:ASN:H	2.18	0.50
6:F:439:ALA:HA	25:L:78:THR:CA	2.41	0.50
7:U:198:LEU:CD2	7:U:223:LEU:HD22	2.42	0.50
7:U:465:LEU:HD12	7:U:481:LEU:HD12	1.91	0.50
8:V:61:GLU:HB3	8:V:65:ARG:CZ	2.42	0.50
8:V:330:LYS:HG3	8:V:360:TYR:CE2	2.47	0.50
8:V:337:LEU:HD22	8:V:367:VAL:HG11	1.94	0.50
10:Y:114:ILE:HD12	10:Y:115:GLY:N	2.26	0.50
10:Y:181:LYS:HE3	10:Y:213:LEU:CD2	2.42	0.50
12:a:340:VAL:HG12	12:a:341:LEU:H	1.76	0.50
13:b:33:VAL:O	13:b:34:ASN:HB2	2.12	0.50
14:c:299:CYS:O	14:c:303:MET:HG3	2.11	0.50
15:d:60:GLN:O	15:d:64:LEU:N	2.37	0.50
16:f:326:LEU:HA	16:f:329:ASN:OD1	2.11	0.50
16:f:703:ARG:O	16:f:707:LEU:HD23	2.11	0.50
16:f:814:SER:HA	16:f:821:LEU:CD1	2.41	0.50
18:W:187:LEU:HA	18:W:190:MET:HE2	1.93	0.50
18:W:263:TRP:CZ2	18:W:295:LYS:HB2	2.46	0.50
19:e:59:GLU:HG2	19:e:60:LEU:N	2.26	0.50
1:A:99:THR:CG2	1:A:113:ILE:HB	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:ASN:C	2:B:192:ASN:OD1	2.55	0.50
2:B:251:VAL:HG11	3:C:275:GLU:CD	2.37	0.50
3:C:21:ARG:HE	3:C:25:LEU:CD1	2.24	0.50
3:C:301:LEU:HB3	3:C:306:LEU:CD1	2.41	0.50
4:D:178:ARG:HH12	4:D:182:GLU:HG2	1.75	0.50
5:E:266:GLY:C	5:E:268:ASP:H	2.19	0.50
6:F:439:ALA:HA	25:L:78:THR:CB	2.41	0.50
7:U:19:LEU:HD11	15:d:30:LEU:HD13	1.92	0.50
7:U:423:MET:HA	7:U:423:MET:CE	2.42	0.50
7:U:450:HIS:NE2	7:U:457:ILE:HD13	2.27	0.50
9:X:330:LEU:HD23	9:X:330:LEU:C	2.37	0.50
9:X:396:THR:HG22	14:c:242:GLU:OE1	2.12	0.50
10:Y:304:TYR:HE2	10:Y:333:GLU:OE2	1.95	0.50
12:a:81:LEU:O	12:a:84:VAL:HG22	2.12	0.50
12:a:223:GLU:CD	12:a:224:SER:H	2.19	0.50
15:d:94:TYR:CG	15:d:98:LEU:HB3	2.47	0.50
16:f:125:ILE:HB	16:f:129:LEU:CD1	2.40	0.50
16:f:401:LYS:H	16:f:401:LYS:HZ1	1.59	0.50
16:f:685:THR:HA	16:f:689:ALA:CB	2.42	0.50
16:f:717:ALA:HB1	16:f:760:PHE:HB2	1.94	0.50
16:f:787:LEU:O	16:f:792:ALA:HB3	2.12	0.50
18:W:145:LEU:HD21	18:W:171:VAL:CB	2.42	0.50
18:W:307:LYS:O	18:W:310:THR:N	2.40	0.50
27:n:167:ARG:NH1	33:t:34:ALA:O	2.44	0.50
1:A:51:ASP:O	1:A:55:LEU:HD23	2.10	0.50
1:A:177:VAL:CG2	1:A:224:LEU:HG	2.42	0.50
1:A:195:LEU:HD23	1:A:195:LEU:N	2.26	0.50
1:A:206:ILE:CB	6:F:373:MET:HE1	2.42	0.50
1:A:390:THR:C	1:A:392:ALA:N	2.69	0.50
3:C:42:LEU:HD23	3:C:42:LEU:C	2.37	0.50
3:C:178:LEU:HD12	3:C:178:LEU:O	2.12	0.50
3:C:251:ILE:HG23	3:C:251:ILE:O	2.11	0.50
4:D:178:ARG:NH1	4:D:182:GLU:HG2	2.27	0.50
4:D:392:TYR:CD1	4:D:393:ILE:HG12	2.46	0.50
5:E:229:ILE:HG13	5:E:274:LYS:HB2	1.93	0.50
5:E:273:VAL:O	5:E:274:LYS:HE2	2.12	0.50
7:U:353:LEU:HD21	7:U:385:PHE:CD1	2.46	0.50
7:U:519:VAL:HG12	7:U:520:MET:HG3	1.94	0.50
7:U:773:PHE:HZ	14:c:181:LEU:HG	1.77	0.50
8:V:449:ALA:HB1	8:V:459:GLN:O	2.11	0.50
10:Y:325:VAL:CG2	19:e:65:TYR:HD1	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:178:ASP:HA	11:Z:180:LYS:NZ	2.27	0.50
12:a:45:VAL:CG2	12:a:79:ILE:HD11	2.41	0.50
12:a:70:ARG:HA	13:b:17:ARG:CD	2.41	0.50
13:b:33:VAL:HG11	13:b:75:LEU:CD2	2.42	0.50
14:c:57:MET:CE	14:c:72:VAL:HG21	2.41	0.50
14:c:205:ILE:HD13	14:c:207:TYR:HE1	1.76	0.50
14:c:248:MET:HE3	14:c:287:HIS:HB3	1.94	0.50
16:f:334:ALA:O	16:f:338:ASP:HB3	2.11	0.50
16:f:556:ARG:HD3	16:f:785:ARG:HD3	1.94	0.50
16:f:799:VAL:HA	16:f:802:SER:HB3	1.93	0.50
18:W:112:VAL:CG2	18:W:116:THR:HB	2.42	0.50
18:W:178:GLU:HG3	18:W:178:GLU:O	2.11	0.50
18:W:254:PRO:HA	18:W:258:ALA:HB2	1.93	0.50
1:A:139:ARG:HB2	1:A:153:LEU:HB2	1.94	0.50
2:B:281:ILE:HA	2:B:326:LYS:O	2.12	0.50
7:U:171:ASN:HD21	7:U:177:LEU:HD11	1.76	0.50
7:U:341:PHE:CZ	7:U:787:CYS:HB3	2.46	0.50
7:U:745:THR:CG2	7:U:885:MET:HE1	2.42	0.50
8:V:169:LEU:O	8:V:173:ILE:HG13	2.12	0.50
9:X:250:SER:O	9:X:254:MET:HG2	2.12	0.50
10:Y:232:GLU:HB2	10:Y:302:HIS:ND1	2.27	0.50
12:a:186:LYS:HD2	12:a:186:LYS:C	2.37	0.50
12:a:219:HIS:HD2	12:a:220:PRO:CD	2.23	0.50
13:b:3:LEU:O	13:b:106:LYS:HG3	2.11	0.50
14:c:270:LEU:HA	14:c:273:LYS:HG2	1.93	0.50
16:f:183:PRO:HA	16:f:186:THR:HG22	1.94	0.50
18:W:176:SER:OG	18:W:177:MET:N	2.45	0.50
22:I:163:CYS:SG	22:I:164:ILE:N	2.84	0.50
31:R:50:ALA:HA	38:R:301:LDZ:H22	1.94	0.50
1:A:75:PRO:O	1:A:79:ASP:HB2	2.11	0.50
1:A:300:LEU:HB3	6:F:254:PRO:HG3	1.93	0.50
2:B:252:GLY:O	2:B:289:ALA:HB3	2.11	0.50
2:B:314:ASN:C	2:B:314:ASN:OD1	2.54	0.50
3:C:43:ARG:O	3:C:46:GLN:N	2.45	0.50
3:C:213:ARG:O	3:C:214:VAL:HG23	2.12	0.50
7:U:405:THR:HG22	7:U:438:GLN:OE1	2.11	0.50
7:U:646:PRO:CB	7:U:680:VAL:HG11	2.42	0.50
10:Y:311:TYR:HD2	10:Y:314:LEU:HG	1.76	0.50
10:Y:352:GLU:C	10:Y:353:ILE:HD13	2.36	0.50
14:c:222:LYS:HB2	14:c:222:LYS:HZ3	1.75	0.50
16:f:138:GLU:HA	16:f:141:LYS:CE	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:304:PHE:CZ	16:f:311:VAL:HG13	2.47	0.50
16:f:350:LYS:NZ	16:f:747:GLN:HE22	2.10	0.50
16:f:553:THR:OG1	16:f:554:TYR:N	2.45	0.50
16:f:590:PHE:HE1	16:f:628:ASP:HB2	1.76	0.50
16:f:687:ARG:O	16:f:687:ARG:NH1	2.44	0.50
25:L:65:HIS:NE2	25:L:223:ILE:HD12	2.27	0.50
1:A:105:ASP:HB3	1:A:108:ASP:HB2	1.94	0.49
1:A:354:ILE:HA	1:A:357:ILE:HG22	1.93	0.49
2:B:225:TYR:CE2	2:B:352:GLU:HG2	2.46	0.49
2:B:343:ARG:HG2	2:B:343:ARG:HH11	1.77	0.49
3:C:186:VAL:CG1	3:C:315:ILE:HD13	2.41	0.49
3:C:328:ILE:HG23	34:C:501:ATP:C2	2.47	0.49
3:C:376:VAL:O	3:C:377:HIS:HB3	2.12	0.49
4:D:46:LYS:O	4:D:46:LYS:HD2	2.12	0.49
4:D:289:LEU:HD23	4:D:293:LEU:HD13	1.92	0.49
5:E:158:LEU:CD1	5:E:161:ARG:HH21	2.25	0.49
6:F:278:LYS:C	6:F:280:PRO:HD2	2.37	0.49
7:U:69:TYR:CD2	7:U:96:TYR:HD1	2.29	0.49
7:U:264:VAL:O	7:U:268:LEU:HG	2.12	0.49
7:U:595:ASN:CG	7:U:597:LYS:HG3	2.36	0.49
7:U:616:ARG:HE	7:U:770:TRP:HH2	1.60	0.49
8:V:71:THR:CB	8:V:108:LEU:HD11	2.42	0.49
8:V:378:VAL:HA	8:V:381:GLN:HG2	1.94	0.49
8:V:479:ARG:HB3	11:Z:261:TYR:HE1	1.76	0.49
9:X:153:LEU:CD2	9:X:169:VAL:HG21	2.39	0.49
11:Z:16:LEU:HB3	14:c:216:MET:HE3	1.93	0.49
11:Z:40:LEU:HD13	11:Z:89:GLU:HB3	1.93	0.49
11:Z:79:TYR:HE1	11:Z:83:LYS:HE3	1.77	0.49
12:a:179:PHE:O	12:a:183:VAL:HB	2.12	0.49
12:a:210:VAL:HA	12:a:213:PHE:CZ	2.47	0.49
12:a:226:ARG:HH12	12:a:230:ARG:C	2.19	0.49
14:c:261:GLU:HG2	14:c:262:GLU:N	2.27	0.49
15:d:53:ASP:C	15:d:55:LEU:N	2.68	0.49
15:d:81:TYR:OH	15:d:90:PRO:O	2.27	0.49
16:f:61:GLU:HG3	16:f:97:LYS:CB	2.42	0.49
16:f:102:HIS:O	16:f:106:LEU:HD22	2.12	0.49
16:f:170:TRP:HH2	16:f:181:ARG:HB3	1.76	0.49
16:f:173:LEU:CB	16:f:178:LYS:HZ1	2.24	0.49
18:W:25:ASP:HB3	18:W:65:ARG:HH22	1.76	0.49
18:W:395:ASN:O	18:W:398:VAL:HG12	2.12	0.49
26:m:141:SER:O	26:m:145:GLY:N	2.38	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:r:43:LEU:HD22	31:r:185:TRP:CD1	2.47	0.49
1:A:102:ILE:HD11	1:A:112:ILE:HG21	1.94	0.49
1:A:428:ARG:H	23:J:169:ARG:NH2	2.10	0.49
2:B:86:LYS:NZ	16:f:621:ASP:HB2	2.27	0.49
2:B:303:ARG:HG3	2:B:307:ARG:NH2	2.27	0.49
3:C:376:VAL:HG12	3:C:377:HIS:N	2.23	0.49
4:D:221:HIS:HD2	4:D:222:HIS:CD2	2.30	0.49
4:D:355:SER:OG	4:D:358:VAL:HG12	2.12	0.49
4:D:385:LEU:CD2	4:D:388:ARG:HD2	2.39	0.49
5:E:38:LYS:HD3	5:E:42:LYS:HZ1	1.75	0.49
5:E:329:GLU:O	5:E:332:VAL:HB	2.12	0.49
6:F:169:ASP:OD2	6:F:171:ARG:HB3	2.12	0.49
6:F:171:ARG:HD2	6:F:267:LEU:HD22	1.94	0.49
9:X:310:ARG:CB	9:X:314:ARG:HH21	2.25	0.49
9:X:335:LEU:HD23	9:X:368:MET:CE	2.42	0.49
9:X:407:MET:SD	11:Z:269:VAL:HG11	2.52	0.49
10:Y:139:ASP:OD1	10:Y:140:ILE:N	2.45	0.49
10:Y:174:TRP:H	10:Y:176:ARG:NH1	2.09	0.49
10:Y:286:TRP:CH2	10:Y:287:LEU:HD21	2.47	0.49
12:a:100:THR:CA	12:a:103:LYS:HG2	2.42	0.49
13:b:113:VAL:O	13:b:113:VAL:HG13	2.12	0.49
13:b:160:LEU:HG	13:b:166:THR:N	2.09	0.49
14:c:38:LEU:CD1	14:c:42:LEU:HD11	2.42	0.49
15:d:26:LEU:HD12	15:d:27:LYS:H	1.77	0.49
15:d:48:LEU:O	15:d:51:ALA:HB2	2.13	0.49
15:d:148:TYR:CG	15:d:178:ILE:HD11	2.46	0.49
16:f:107:LYS:HB2	16:f:111:GLU:HB2	1.93	0.49
16:f:198:HIS:ND1	16:f:198:HIS:O	2.44	0.49
16:f:487:LEU:O	16:f:487:LEU:HD12	2.12	0.49
16:f:585:GLU:O	16:f:588:ARG:HG2	2.11	0.49
16:f:643:PRO:HB2	16:f:647:GLY:N	2.22	0.49
18:W:120:ILE:CG2	18:W:122:LEU:HG	2.42	0.49
18:W:231:ILE:HG23	18:W:243:ILE:HG23	1.94	0.49
18:W:373:ILE:HG23	18:W:413:ILE:HB	1.93	0.49
23:J:184:ASP:O	23:J:187:THR:OG1	2.22	0.49
1:A:111:TYR:HB2	1:A:123:VAL:HG13	1.94	0.49
1:A:190:VAL:HG22	1:A:209:PRO:O	2.12	0.49
2:B:405:MET:HE1	2:B:408:ARG:NH1	2.27	0.49
2:B:412:MET:H	16:f:52:LEU:HD23	1.77	0.49
3:C:166:GLU:HG3	3:C:170:LYS:HE3	1.94	0.49
4:D:51:LEU:HD12	4:D:51:LEU:O	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:384:MET:O	4:D:388:ARG:HG3	2.11	0.49
5:E:37:THR:CA	6:F:69:MET:HE3	2.38	0.49
6:F:439:ALA:OXT	25:L:79:ALA:HB3	2.12	0.49
7:U:225:ASP:O	7:U:229:VAL:HG23	2.13	0.49
7:U:335:ILE:HD13	7:U:338:HIS:HE2	1.78	0.49
7:U:353:LEU:HD23	7:U:354:LYS:N	2.28	0.49
7:U:796:LYS:O	7:U:797:MET:HE2	2.12	0.49
8:V:355:ARG:HD2	19:e:27:TRP:O	2.11	0.49
8:V:477:HIS:O	8:V:480:ILE:HG22	2.13	0.49
9:X:415:TYR:CD2	10:Y:383:LEU:HD21	2.48	0.49
10:Y:283:LYS:HB2	10:Y:292:TYR:CE1	2.43	0.49
11:Z:6:VAL:HG13	11:Z:158:VAL:CG1	2.43	0.49
11:Z:212:LEU:O	11:Z:215:VAL:HG12	2.13	0.49
11:Z:223:ASN:HB3	11:Z:227:ILE:HB	1.94	0.49
12:a:162:TYR:O	12:a:162:TYR:CG	2.64	0.49
12:a:356:TRP:HZ2	14:c:309:PHE:CD1	2.30	0.49
14:c:218:LEU:C	14:c:220:LEU:N	2.69	0.49
14:c:257:LYS:HA	14:c:260:GLU:OE2	2.12	0.49
15:d:14:PRO:HB2	15:d:17:SER:N	2.27	0.49
15:d:103:LEU:O	15:d:106:LEU:N	2.46	0.49
16:f:162:LEU:HD12	16:f:163:ALA:N	2.27	0.49
16:f:190:GLU:CD	16:f:197:ALA:HB2	2.37	0.49
16:f:278:VAL:HG11	16:f:281:ILE:CD1	2.42	0.49
16:f:678:LEU:C	16:f:679:LEU:HG	2.37	0.49
18:W:170:GLN:O	18:W:174:TYR:HB3	2.12	0.49
18:W:296:LEU:HD23	18:W:296:LEU:C	2.37	0.49
31:R:36:ILE:HD11	31:R:46:MET:SD	2.52	0.49
1:A:428:ARG:HH21	23:J:161:ILE:N	2.11	0.49
2:B:311:GLU:OE1	2:B:311:GLU:HA	2.13	0.49
2:B:332:ASN:OD1	2:B:332:ASN:O	2.30	0.49
3:C:328:ILE:HG23	34:C:501:ATP:N1	2.27	0.49
5:E:74:THR:OG1	6:F:131:THR:HB	2.11	0.49
6:F:180:ARG:CZ	6:F:180:ARG:HB2	2.42	0.49
7:U:260:PHE:O	7:U:264:VAL:HG23	2.13	0.49
7:U:366:HIS:HE1	14:c:172:HIS:HE1	1.61	0.49
7:U:485:ALA:HA	7:U:488:THR:HG21	1.94	0.49
7:U:505:ASP:H	7:U:544:ILE:HD11	1.77	0.49
8:V:172:VAL:O	8:V:175:MET:SD	2.70	0.49
8:V:358:MET:N	8:V:359:PRO:HD2	2.27	0.49
8:V:378:VAL:HA	8:V:381:GLN:CG	2.43	0.49
9:X:74:ARG:HB3	9:X:116:TRP:CE2	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:243:ASP:CG	9:X:245:PRO:HG2	2.37	0.49
9:X:417:LYS:HD2	9:X:417:LYS:O	2.13	0.49
10:Y:117:LYS:HB2	10:Y:151:TYR:HE1	1.73	0.49
13:b:62:THR:HG21	13:b:71:ILE:HG23	1.94	0.49
14:c:155:VAL:CG1	14:c:157:ILE:HG13	2.41	0.49
14:c:191:ALA:O	14:c:196:LEU:HB2	2.13	0.49
15:d:176:ASP:OD1	15:d:212:LYS:NZ	2.40	0.49
18:W:68:VAL:O	18:W:72:LYS:HD2	2.13	0.49
18:W:378:MET:HE3	18:W:378:MET:CA	2.41	0.49
27:N:18:ASP:OD2	27:N:34:LYS:NZ	2.45	0.49
30:q:111:GLU:HA	30:q:111:GLU:OE1	2.13	0.49
1:A:254:ALA:O	1:A:257:VAL:HG23	2.11	0.49
7:U:145:HIS:HA	7:U:147:TYR:CZ	2.47	0.49
7:U:233:LEU:O	7:U:237:VAL:HG13	2.12	0.49
7:U:584:TYR:OH	7:U:616:ARG:NH1	2.45	0.49
7:U:772:TRP:CE2	7:U:774:PRO:HG2	2.47	0.49
7:U:797:MET:HE2	7:U:797:MET:N	2.27	0.49
8:V:259:LEU:HD23	8:V:291:TYR:HE1	1.76	0.49
9:X:263:THR:O	9:X:263:THR:OG1	2.20	0.49
10:Y:165:LYS:HE3	10:Y:166:SER:HB3	1.93	0.49
12:a:62:ASN:O	12:a:66:GLU:HG3	2.12	0.49
12:a:194:GLN:OE1	12:a:194:GLN:HA	2.11	0.49
16:f:304:PHE:CZ	16:f:310:ASP:HB2	2.48	0.49
16:f:633:GLU:OE1	16:f:671:ALA:HB2	2.12	0.49
16:f:651:GLY:O	16:f:655:LEU:HD12	2.12	0.49
18:W:131:VAL:HG23	18:W:140:ILE:HD12	1.94	0.49
18:W:199:TYR:HD2	18:W:236:HIS:ND1	2.10	0.49
19:e:56:LEU:HA	19:e:59:GLU:OE2	2.12	0.49
4:D:41:TYR:CE2	4:D:45:LYS:HG2	2.48	0.49
4:D:153:MET:HG3	4:D:228:ILE:CG1	2.42	0.49
5:E:150:GLU:HB2	5:E:190:GLN:HG2	1.95	0.49
5:E:289:LEU:HD23	5:E:294:ARG:HG2	1.93	0.49
6:F:396:CYS:HA	6:F:399:VAL:HG12	1.94	0.49
7:U:633:CYS:N	7:U:634:PRO:CD	2.76	0.49
9:X:82:LYS:HE3	9:X:122:ARG:NE	2.25	0.49
10:Y:81:LEU:HB3	10:Y:107:LYS:CG	2.42	0.49
10:Y:231:LEU:HD22	10:Y:231:LEU:N	2.28	0.49
10:Y:245:GLU:H	10:Y:245:GLU:CD	2.20	0.49
10:Y:287:LEU:HB3	10:Y:291:HIS:CE1	2.45	0.49
10:Y:387:ILE:CG2	10:Y:388:ASN:N	2.75	0.49
11:Z:31:ASN:N	11:Z:32:GLN:OE1	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:a:296:ILE:HG22	12:a:307:VAL:HG22	1.93	0.49
14:c:221:HIS:CD2	14:c:221:HIS:C	2.90	0.49
14:c:232:GLN:HB3	14:c:298:GLN:HE22	1.76	0.49
14:c:302:ALA:O	14:c:306:THR:CG2	2.60	0.49
15:d:101:LEU:HA	15:d:104:LEU:HG	1.95	0.49
16:f:173:LEU:HB2	16:f:178:LYS:NZ	2.27	0.49
16:f:825:MET:O	16:f:849:ALA:HA	2.12	0.49
22:I:46:ALA:HB1	22:I:197:LEU:HD11	1.93	0.49
25:L:125:ARG:HA	25:L:125:ARG:CZ	2.43	0.49
28:o:98:ALA:HB1	28:o:128:MET:HE3	1.93	0.49
2:B:284:ILE:HD13	2:B:327:VAL:CG2	2.43	0.49
3:C:73:VAL:HG13	3:C:113:ARG:CD	2.43	0.49
4:D:153:MET:HE3	4:D:155:THR:OG1	2.13	0.49
4:D:280:GLY:O	4:D:281:ALA:HB3	2.13	0.49
6:F:157:SER:O	6:F:158:TYR:HB2	2.13	0.49
7:U:78:LEU:HD23	7:U:79:ASN:N	2.28	0.49
7:U:98:GLU:HA	7:U:101:ILE:HD11	1.94	0.49
7:U:220:LEU:HD21	7:U:228:ALA:CB	2.43	0.49
7:U:485:ALA:HA	7:U:488:THR:CG2	2.43	0.49
7:U:836:THR:CG2	16:f:607:LEU:HG	2.42	0.49
8:V:259:LEU:HD12	8:V:259:LEU:C	2.36	0.49
10:Y:286:TRP:CE3	10:Y:287:LEU:HG	2.47	0.49
11:Z:226:ILE:CD1	18:W:445:LEU:HD11	2.43	0.49
14:c:72:VAL:CG1	14:c:112:TYR:CE1	2.96	0.49
14:c:234:TYR:HE2	18:W:425:LEU:HD13	1.78	0.49
14:c:310:LYS:O	14:c:310:LYS:HD3	2.12	0.49
16:f:38:ASP:OD2	16:f:89:MET:HG2	2.12	0.49
16:f:59:LEU:HA	16:f:62:ARG:NH1	2.27	0.49
16:f:125:ILE:HG12	16:f:129:LEU:CA	2.42	0.49
16:f:159:VAL:HA	16:f:162:LEU:HD23	1.95	0.49
16:f:831:VAL:O	16:f:842:VAL:HG12	2.12	0.49
19:e:56:LEU:HG	19:e:59:GLU:OE2	2.12	0.49
25:l:62:LYS:NZ	25:l:74:ILE:O	2.44	0.49
28:o:18:ASP:OD1	28:o:34:LYS:NZ	2.46	0.49
2:B:150:VAL:HG21	2:B:159:VAL:HG22	1.94	0.49
2:B:153:ASN:OD1	2:B:156:VAL:N	2.46	0.49
2:B:202:GLU:OE2	2:B:203:LEU:HD23	2.12	0.49
2:B:248:LEU:HD12	2:B:282:VAL:HG12	1.95	0.49
2:B:431:GLN:NE2	2:B:432:GLU:H	2.11	0.49
3:C:128:PRO:O	3:C:129:ASN:C	2.55	0.49
5:E:366:ASP:HA	5:E:369:LYS:NZ	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:284:PHE:CD1	6:F:330:ALA:HA	2.47	0.49
7:U:556:MET:HE2	7:U:563:ALA:HB2	1.95	0.49
7:U:765:VAL:HG11	7:U:778:PHE:CD2	2.47	0.49
7:U:800:VAL:HG22	7:U:801:GLN:N	2.28	0.49
8:V:256:ARG:NH2	19:e:22:PHE:HB2	2.27	0.49
9:X:166:LEU:HD12	9:X:166:LEU:O	2.12	0.49
9:X:250:SER:O	9:X:254:MET:CG	2.61	0.49
9:X:364:LYS:HG3	9:X:368:MET:HE3	1.94	0.49
10:Y:208:PHE:O	10:Y:210:SER:N	2.46	0.49
11:Z:6:VAL:CG1	11:Z:158:VAL:HG11	2.42	0.49
11:Z:208:ILE:HD12	11:Z:231:GLN:NE2	2.28	0.49
11:Z:230:LEU:HD11	18:W:438:LEU:HD22	1.94	0.49
12:a:6:GLY:HA2	12:a:9:GLN:CG	2.43	0.49
12:a:71:VAL:HG12	12:a:76:LEU:HB2	1.93	0.49
13:b:109:ILE:O	13:b:139:ASP:N	2.25	0.49
15:d:101:LEU:HD12	15:d:104:LEU:HD12	1.94	0.49
16:f:102:HIS:O	16:f:106:LEU:HB2	2.12	0.49
16:f:182:GLU:HG3	16:f:183:PRO:CD	2.42	0.49
16:f:538:ILE:HG22	16:f:581:GLU:OE2	2.13	0.49
18:W:61:VAL:O	18:W:65:ARG:HG2	2.13	0.49
19:e:59:GLU:HG2	19:e:65:TYR:CB	2.37	0.49
1:A:284:ARG:HH21	6:F:334:ARG:HG3	1.78	0.49
2:B:295:TYR:CE1	3:C:263:SER:N	2.81	0.49
2:B:364:ILE:HG23	2:B:395:ILE:HD13	1.94	0.49
3:C:148:TYR:CD1	3:C:202:ALA:HB1	2.47	0.49
4:D:123:LEU:CD1	4:D:124:LEU:HD22	2.36	0.49
5:E:320:ILE:HD12	5:E:321:THR:CG2	2.43	0.49
6:F:191:LEU:HD13	6:F:194:GLN:CG	2.42	0.49
6:F:379:VAL:HG13	6:F:381:TYR:CE2	2.48	0.49
6:F:406:ILE:O	6:F:410:ARG:HG3	2.13	0.49
7:U:64:ALA:HB3	7:U:80:TYR:CD2	2.47	0.49
7:U:250:PHE:CE1	7:U:911:ILE:HD12	2.48	0.49
7:U:371:ILE:HG21	7:U:732:LEU:CD1	2.43	0.49
8:V:120:PHE:HB3	8:V:159:LEU:HD11	1.95	0.49
9:X:138:PHE:HE2	9:X:175:LYS:CB	2.24	0.49
9:X:141:LYS:HD2	9:X:141:LYS:HA	1.64	0.49
11:Z:7:GLN:HB2	11:Z:46:LYS:HD2	1.95	0.49
11:Z:11:VAL:CG2	11:Z:162:ILE:HG13	2.43	0.49
11:Z:231:GLN:OE1	11:Z:231:GLN:HA	2.12	0.49
12:a:100:THR:HA	12:a:103:LYS:CG	2.41	0.49
13:b:2:VAL:H	13:b:44:ASN:HD21	1.60	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:15:TYR:HD2	13:b:115:SER:HG	1.61	0.49
15:d:84:ASP:C	15:d:86:LYS:N	2.68	0.49
16:f:91:SER:O	16:f:94:LYS:HG3	2.13	0.49
16:f:162:LEU:O	16:f:166:VAL:HG12	2.13	0.49
16:f:322:SER:O	16:f:325:GLN:NE2	2.46	0.49
16:f:472:HIS:CB	16:f:477:MET:HE1	2.43	0.49
18:W:121:LYS:HE3	18:W:154:GLU:HB2	1.95	0.49
18:W:192:LEU:O	18:W:195:ALA:HB3	2.13	0.49
18:W:219:THR:HG23	18:W:219:THR:O	2.13	0.49
18:W:332:SER:HB3	18:W:334:GLU:OE2	2.13	0.49
1:A:45:ILE:HD11	2:B:62:LEU:HB2	1.95	0.49
1:A:333:ARG:NH2	1:A:336:ARG:HH11	2.11	0.49
2:B:223:ILE:CG2	2:B:350:LYS:HG2	2.42	0.49
4:D:81:ARG:HG2	14:c:152:LYS:CG	2.42	0.49
6:F:126:THR:HG1	6:F:128:THR:H	1.58	0.49
7:U:607:VAL:O	7:U:615:ARG:NH2	2.46	0.49
7:U:899:ARG:HD3	7:U:921:ILE:HG22	1.95	0.49
8:V:340:GLY:HA3	8:V:404:LYS:NZ	2.27	0.49
8:V:416:ARG:HD2	8:V:457:TYR:CD2	2.48	0.49
10:Y:315:THR:HG22	10:Y:317:GLY:H	1.77	0.49
11:Z:111:LEU:HD23	11:Z:111:LEU:C	2.38	0.49
12:a:12:GLN:O	12:a:18:GLN:HB3	2.12	0.49
13:b:160:LEU:HD12	13:b:161:ASN:H	1.78	0.49
14:c:111:TRP:HZ3	14:c:113:HIS:HD2	1.60	0.49
14:c:121:TRP:CE3	14:c:121:TRP:C	2.91	0.49
14:c:251:LEU:HD21	14:c:283:HIS:HB3	1.95	0.49
14:c:251:LEU:HG	14:c:283:HIS:O	2.13	0.49
14:c:261:GLU:CG	14:c:262:GLU:N	2.76	0.49
16:f:174:ASP:N	16:f:178:LYS:NZ	2.60	0.49
18:W:70:VAL:CA	18:W:73:MET:HE2	2.29	0.49
18:W:199:TYR:CD2	18:W:236:HIS:ND1	2.81	0.49
18:W:226:TYR:HA	18:W:229:LEU:HG	1.95	0.49
26:M:141:SER:O	26:M:145:GLY:N	2.36	0.49
25:l:81:ALA:HB2	25:l:130:VAL:HG21	1.95	0.49
2:B:187:ILE:HD12	34:B:501:ATP:N1	2.28	0.48
3:C:28:ILE:HD11	4:D:44:TYR:N	2.28	0.48
3:C:63:LEU:HD13	4:D:78:GLU:HG3	1.93	0.48
3:C:166:GLU:HG3	3:C:170:LYS:CE	2.43	0.48
3:C:321:ASN:O	3:C:325:ARG:HG3	2.13	0.48
6:F:185:TYR:CG	6:F:195:ILE:HD11	2.48	0.48
7:U:71:LEU:O	7:U:71:LEU:HD23	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:360:VAL:HG13	7:U:360:VAL:O	2.13	0.48
7:U:554:LEU:HD12	7:U:764:LEU:HD23	1.95	0.48
10:Y:382:LYS:HA	10:Y:385:ARG:CZ	2.43	0.48
11:Z:178:ASP:CA	11:Z:180:LYS:HZ2	2.25	0.48
11:Z:217:THR:HG23	11:Z:219:LYS:HD3	1.94	0.48
12:a:321:LYS:CE	12:a:336:VAL:HG11	2.43	0.48
14:c:122:LEU:HG	14:c:160:PHE:HD2	1.78	0.48
15:d:70:SER:O	15:d:71:PHE:C	2.56	0.48
16:f:128:VAL:O	16:f:129:LEU:C	2.54	0.48
16:f:162:LEU:HA	16:f:165:GLU:CG	2.43	0.48
16:f:171:GLN:NE2	16:f:172:GLU:H	2.11	0.48
16:f:688:ARG:O	16:f:692:LEU:HB2	2.13	0.48
18:W:112:VAL:HA	18:W:115:ILE:O	2.13	0.48
18:W:243:ILE:HB	18:W:273:TYR:CD2	2.48	0.48
18:W:383:ASP:C	18:W:384:LEU:HD23	2.37	0.48
22:I:206:LEU:HB2	22:I:237:ILE:HD12	1.95	0.48
1:A:57:LYS:O	1:A:60:ASN:OD1	2.31	0.48
1:A:99:THR:HG23	1:A:114:ASN:C	2.38	0.48
1:A:238:ILE:HB	1:A:272:ILE:CD1	2.43	0.48
3:C:50:ASN:O	3:C:53:ASN:HB3	2.13	0.48
5:E:156:PRO:HG2	5:E:272:ARG:NE	2.22	0.48
5:E:166:PRO:N	5:E:167:PRO:CD	2.76	0.48
5:E:203:ILE:HG22	5:E:214:LEU:HG	1.95	0.48
6:F:356:MET:HE3	6:F:356:MET:HB3	1.66	0.48
7:U:383:ASP:N	7:U:383:ASP:OD1	2.46	0.48
7:U:596:ASN:O	7:U:599:ILE:HG23	2.13	0.48
7:U:777:HIS:CD2	7:U:777:HIS:N	2.81	0.48
9:X:71:LYS:HA	9:X:74:ARG:NE	2.28	0.48
11:Z:22:HIS:HA	11:Z:25:ARG:CG	2.42	0.48
12:a:24:ARG:HG3	12:a:25:LEU:N	2.28	0.48
12:a:220:PRO:HA	12:a:223:GLU:OE2	2.13	0.48
13:b:117:VAL:HG22	13:b:152:LYS:CE	2.43	0.48
13:b:132:LYS:NZ	13:b:160:LEU:HA	2.29	0.48
16:f:156:HIS:O	16:f:160:ARG:HG2	2.13	0.48
16:f:416:MET:HE3	16:f:801:VAL:HG13	1.95	0.48
16:f:616:CYS:HB3	16:f:632:LYS:CD	2.43	0.48
29:P:143:GLU:OE1	29:P:143:GLU:N	2.45	0.48
31:r:43:LEU:HD21	31:r:180:VAL:HG22	1.95	0.48
1:A:349:GLU:HA	1:A:349:GLU:OE1	2.12	0.48
1:A:426:THR:N	1:A:427:PRO:HD2	2.27	0.48
2:B:54:PRO:HG3	2:B:60:LEU:HG	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:134:SER:O	2:B:136:LEU:HD12	2.14	0.48
2:B:201:VAL:HG21	2:B:328:ILE:HD11	1.95	0.48
2:B:285:ASP:OD1	2:B:286:GLU:N	2.47	0.48
3:C:24:TYR:HB3	4:D:40:LEU:CD2	2.43	0.48
3:C:301:LEU:CB	3:C:306:LEU:HD11	2.43	0.48
4:D:203:LEU:HD23	4:D:309:MET:O	2.14	0.48
5:E:310:LEU:CD2	5:E:328:TYR:HD2	2.23	0.48
6:F:258:GLN:NE2	6:F:258:GLN:HA	2.27	0.48
7:U:45:ILE:HG12	7:U:64:ALA:HB2	1.94	0.48
7:U:580:ARG:HH12	7:U:768:GLN:NE2	2.11	0.48
8:V:74:ASP:O	8:V:78:HIS:CE1	2.67	0.48
8:V:300:LEU:HA	8:V:302:TYR:CE1	2.49	0.48
9:X:397:TYR:HD2	10:Y:365:GLN:CB	2.24	0.48
10:Y:311:TYR:CD2	10:Y:314:LEU:HG	2.49	0.48
11:Z:21:ASP:OD1	11:Z:25:ARG:HD2	2.13	0.48
11:Z:37:GLY:CA	11:Z:95:TYR:CE1	2.95	0.48
12:a:100:THR:O	12:a:104:VAL:HG12	2.13	0.48
13:b:33:VAL:HG11	13:b:75:LEU:HD22	1.95	0.48
13:b:156:PHE:O	13:b:159:THR:OG1	2.29	0.48
14:c:57:MET:HB2	14:c:110:GLY:N	2.29	0.48
16:f:170:TRP:HD1	16:f:173:LEU:HD12	1.77	0.48
16:f:202:HIS:HB2	16:f:206:ASP:OD1	2.13	0.48
16:f:367:SER:OG	16:f:740:ARG:NH2	2.47	0.48
16:f:569:LYS:HE2	16:f:573:ILE:CB	2.30	0.48
18:W:109:CYS:HA	18:W:147:LYS:CE	2.44	0.48
18:W:178:GLU:HG3	18:W:181:GLU:CB	2.41	0.48
18:W:294:LYS:HD2	18:W:297:GLU:HB2	1.95	0.48
1:A:347:ASP:OD1	1:A:350:GLY:N	2.35	0.48
2:B:343:ARG:HH21	2:B:346:ARG:NH2	2.12	0.48
2:B:439:TYR:HE1	23:J:76:LEU:CD2	2.26	0.48
3:C:43:ARG:HG2	3:C:46:GLN:OE1	2.14	0.48
5:E:252:GLU:HG2	5:E:255:ARG:NH2	2.29	0.48
6:F:191:LEU:HD12	6:F:236:LEU:HD22	1.95	0.48
6:F:282:ILE:C	6:F:282:ILE:HD13	2.38	0.48
7:U:485:ALA:O	7:U:488:THR:HG23	2.14	0.48
7:U:556:MET:HE1	7:U:563:ALA:HA	1.96	0.48
7:U:758:PRO:HA	7:U:761:VAL:CG1	2.43	0.48
7:U:873:PRO:O	7:U:874:ASN:OD1	2.31	0.48
10:Y:66:ASP:HA	10:Y:69:LEU:HD12	1.95	0.48
10:Y:117:LYS:HB2	10:Y:151:TYR:HD1	1.76	0.48
10:Y:371:LYS:HB2	10:Y:371:LYS:NZ	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:144:VAL:CG2	11:Z:145:HIS:N	2.77	0.48
13:b:44:ASN:O	13:b:46:GLU:N	2.41	0.48
14:c:205:ILE:CD1	14:c:207:TYR:HE1	2.27	0.48
14:c:296:ILE:HD12	15:d:246:VAL:HG23	1.95	0.48
15:d:27:LYS:HG3	15:d:28:LEU:HD12	1.95	0.48
15:d:149:ASN:HD21	15:d:153:LEU:HG	1.77	0.48
16:f:12:GLN:HB3	16:f:13:PRO:HD3	1.95	0.48
16:f:620:PHE:O	16:f:626:GLU:HG3	2.13	0.48
16:f:673:ARG:O	16:f:781:TYR:HE2	1.96	0.48
18:W:39:ARG:HG2	18:W:40:LEU:H	1.77	0.48
19:e:19:PHE:O	19:e:21:GLU:N	2.45	0.48
2:B:58:CYS:SG	2:B:59:ARG:N	2.87	0.48
2:B:144:LEU:HD21	2:B:162:VAL:HG22	1.95	0.48
3:C:360:LYS:HG2	3:C:363:CYS:SG	2.53	0.48
5:E:59:GLU:OE2	5:E:97:ARG:HD2	2.13	0.48
5:E:320:ILE:CD1	5:E:321:THR:H	2.25	0.48
7:U:198:LEU:HD11	7:U:219:CYS:CB	2.44	0.48
7:U:533:VAL:O	7:U:537:GLN:HG3	2.14	0.48
8:V:71:THR:HB	8:V:108:LEU:HD11	1.95	0.48
8:V:178:SER:HB3	8:V:180:ARG:HE	1.79	0.48
8:V:233:ALA:HA	8:V:236:ARG:CZ	2.44	0.48
10:Y:190:ALA:HA	19:e:39:TRP:CD1	2.48	0.48
10:Y:334:LEU:HD13	10:Y:347:ILE:CD1	2.41	0.48
11:Z:250:TYR:CD1	11:Z:250:TYR:C	2.92	0.48
11:Z:287:LYS:HG2	11:Z:288:LYS:NZ	2.29	0.48
12:a:97:LEU:HD23	12:a:118:ILE:HG12	1.95	0.48
13:b:60:VAL:C	13:b:61:LEU:HD22	2.38	0.48
15:d:174:ILE:HG22	15:d:178:ILE:HD13	1.96	0.48
16:f:156:HIS:HA	16:f:160:ARG:NH1	2.29	0.48
16:f:244:GLU:N	16:f:244:GLU:OE1	2.46	0.48
16:f:498:LEU:HD11	16:f:533:ASP:OD2	2.13	0.48
16:f:510:SER:HB2	16:f:514:VAL:HB	1.96	0.48
18:W:132:THR:HA	18:W:144:ARG:CZ	2.43	0.48
1:A:135:GLU:H	1:A:138:MET:HE3	1.78	0.48
1:A:299:MET:HE3	1:A:300:LEU:CD2	2.43	0.48
1:A:377:CYS:CB	1:A:417:ILE:HD11	2.43	0.48
2:B:225:TYR:HE1	2:B:350:LYS:HB3	1.77	0.48
3:C:302:ASP:O	3:C:306:LEU:HD13	2.13	0.48
3:C:406:LYS:HZ3	22:I:80:THR:H	1.61	0.48
4:D:348:ILE:HD13	4:D:376:ASN:HA	1.95	0.48
5:E:84:ARG:HA	5:E:106:THR:OG1	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:180:LYS:HZ2	5:E:301:ILE:CD1	2.16	0.48
5:E:212:ALA:HA	5:E:216:ARG:CZ	2.42	0.48
5:E:332:VAL:HG12	5:E:333:LYS:HG2	1.95	0.48
7:U:212:ASP:O	7:U:216:VAL:HG13	2.14	0.48
7:U:749:GLN:HA	7:U:755:THR:HA	1.96	0.48
7:U:789:ILE:HB	7:U:911:ILE:CG1	2.38	0.48
7:U:802:TYR:HE2	7:U:880:ASN:HA	1.73	0.48
8:V:230:PHE:C	8:V:230:PHE:CD1	2.91	0.48
11:Z:37:GLY:HA3	11:Z:95:TYR:HE1	1.79	0.48
11:Z:84:LYS:O	14:c:76:PRO:HB3	2.13	0.48
12:a:25:LEU:HD11	12:a:37:LEU:HD12	1.95	0.48
13:b:29:GLN:HE22	13:b:75:LEU:HD11	1.78	0.48
13:b:124:LEU:CB	13:b:159:THR:HG21	2.38	0.48
14:c:57:MET:HG3	14:c:111:TRP:N	2.29	0.48
14:c:126:ASP:O	14:c:129:THR:OG1	2.26	0.48
14:c:277:LYS:O	14:c:278:GLN:C	2.57	0.48
15:d:55:LEU:C	15:d:58:GLY:H	2.22	0.48
15:d:179:ALA:O	15:d:180:GLY:C	2.57	0.48
16:f:16:SER:N	16:f:17:PRO:HD2	2.28	0.48
16:f:180:GLN:HG3	16:f:835:GLU:CD	2.39	0.48
16:f:242:GLU:HB2	16:f:243:PRO:HD3	1.94	0.48
16:f:531:ASN:C	16:f:534:VAL:HG12	2.38	0.48
16:f:737:ASN:OD1	16:f:737:ASN:N	2.45	0.48
16:f:833:PHE:CD1	16:f:842:VAL:HG13	2.49	0.48
18:W:49:SER:HA	18:W:52:LYS:CD	2.43	0.48
18:W:72:LYS:HA	18:W:111:TYR:OH	2.13	0.48
20:G:155:ASP:OD2	20:G:155:ASP:N	2.45	0.48
1:A:252:GLU:HA	1:A:252:GLU:OE2	2.13	0.48
3:C:21:ARG:NE	3:C:25:LEU:HD13	2.27	0.48
3:C:298:ILE:O	3:C:298:ILE:HG13	2.12	0.48
3:C:356:GLY:C	3:C:359:VAL:HG22	2.39	0.48
4:D:221:HIS:HD2	4:D:222:HIS:HD2	1.62	0.48
6:F:177:VAL:HG21	6:F:248:PHE:HB3	1.94	0.48
8:V:342:ILE:HD11	8:V:368:ARG:HD2	1.96	0.48
9:X:251:LEU:HD21	9:X:276:ALA:HB1	1.96	0.48
10:Y:177:ARG:CZ	10:Y:206:SER:HA	2.44	0.48
11:Z:114:ARG:HG3	11:Z:115:TYR:CE1	2.49	0.48
12:a:162:TYR:CE2	12:a:168:ASN:CB	2.94	0.48
13:b:31:ASP:OD1	13:b:32:ALA:N	2.47	0.48
14:c:183:HIS:ND1	14:c:183:HIS:O	2.47	0.48
15:d:99:LEU:O	15:d:102:ASN:HB3	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:637:LYS:NZ	16:f:655:LEU:HD21	2.28	0.48
16:f:709:THR:CG2	16:f:746:ARG:HA	2.40	0.48
18:W:158:ASP:O	18:W:161:GLU:HG2	2.12	0.48
18:W:252:ASP:O	18:W:256:ILE:HG12	2.14	0.48
1:A:101:ILE:HG23	1:A:137:GLY:N	2.26	0.48
1:A:292:ASP:CB	1:A:295:VAL:HB	2.43	0.48
3:C:128:PRO:O	3:C:130:LYS:N	2.47	0.48
3:C:386:ALA:O	3:C:390:VAL:HG12	2.14	0.48
6:F:141:ASP:N	6:F:141:ASP:OD1	2.43	0.48
6:F:369:HIS:ND1	6:F:397:LYS:HG3	2.29	0.48
7:U:14:GLU:CB	7:U:19:LEU:HD23	2.44	0.48
7:U:521:LEU:HD23	7:U:522:GLY:N	2.28	0.48
7:U:592:GLY:HA2	7:U:627:PHE:CE1	2.49	0.48
7:U:665:ASN:OD1	7:U:665:ASN:C	2.56	0.48
8:V:101:LEU:N	8:V:102:PRO:HD2	2.28	0.48
10:Y:325:VAL:HG23	19:e:65:TYR:CB	2.43	0.48
10:Y:334:LEU:HD23	10:Y:343:LEU:HD21	1.96	0.48
11:Z:212:LEU:HD23	11:Z:212:LEU:HA	1.75	0.48
11:Z:287:LYS:HG2	11:Z:288:LYS:HZ1	1.79	0.48
12:a:115:LYS:HA	12:a:115:LYS:CE	2.41	0.48
12:a:342:ASP:OD1	12:a:345:GLN:HG3	2.14	0.48
13:b:41:THR:O	13:b:43:SER:N	2.47	0.48
16:f:509:LYS:HG3	16:f:510:SER:N	2.29	0.48
18:W:135:LYS:O	18:W:140:ILE:HD11	2.14	0.48
18:W:165:ILE:HG13	18:W:189:GLN:CG	2.38	0.48
18:W:223:LYS:HE3	18:W:223:LYS:HB3	1.65	0.48
18:W:224:LEU:O	18:W:224:LEU:HD13	2.13	0.48
18:W:403:PHE:HE1	18:W:405:LYS:CG	2.27	0.48
27:n:93:GLU:HA	27:n:93:GLU:OE1	2.13	0.48
1:A:284:ARG:HG2	1:A:296:GLN:NE2	2.29	0.48
1:A:368:ILE:HD12	1:A:406:GLU:CD	2.39	0.48
2:B:109:VAL:HB	3:C:94:LYS:HG3	1.95	0.48
2:B:343:ARG:HG2	2:B:343:ARG:NH1	2.28	0.48
3:C:36:ASN:OD1	3:C:39:SER:OG	2.31	0.48
4:D:116:LEU:HB3	4:D:119:ILE:CD1	2.38	0.48
5:E:34:LYS:NZ	5:E:38:LYS:HG3	2.29	0.48
5:E:191:LEU:HD12	18:W:211:THR:HB	1.95	0.48
5:E:264:MET:CE	5:E:275:MET:HG3	2.44	0.48
6:F:185:TYR:OH	6:F:243:GLN:NE2	2.47	0.48
6:F:221:LYS:HD3	6:F:221:LYS:N	2.28	0.48
7:U:9:ILE:HA	7:U:12:LEU:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:28:ASN:OD1	7:U:63:VAL:HG22	2.14	0.48
7:U:351:MET:HE3	7:U:817:LEU:HG	1.95	0.48
7:U:793:LYS:CG	7:U:794:ASP:H	2.24	0.48
9:X:203:PRO:HB2	9:X:206:LEU:HB3	1.96	0.48
12:a:27:GLU:HG2	12:a:28:LEU:HD22	1.95	0.48
12:a:35:HIS:HE1	13:b:15:TYR:HE1	1.62	0.48
12:a:319:LEU:HD13	12:a:337:GLN:HG2	1.96	0.48
14:c:119:GLY:HA3	14:c:190:GLN:OE1	2.14	0.48
14:c:145:VAL:CG2	14:c:157:ILE:HD13	2.43	0.48
14:c:192:LEU:HD23	14:c:196:LEU:CD2	2.44	0.48
15:d:15:ASN:H	15:d:61:TRP:HD1	1.62	0.48
15:d:168:ASP:O	15:d:169:ILE:C	2.57	0.48
16:f:297:MET:HE1	16:f:319:GLU:O	2.14	0.48
16:f:311:VAL:HG21	16:f:317:LEU:CD1	2.44	0.48
16:f:316:ASP:OD1	16:f:317:LEU:N	2.39	0.48
16:f:376:PHE:CZ	16:f:800:LEU:HD12	2.49	0.48
18:W:149:LEU:HD12	18:W:153:LYS:CE	2.43	0.48
18:W:231:ILE:HD11	18:W:246:HIS:CB	2.44	0.48
26:m:51:LYS:NZ	26:m:62:SER:O	2.41	0.48
1:A:39:SER:O	1:A:40:THR:C	2.56	0.48
1:A:71:GLY:HA3	2:B:162:VAL:O	2.14	0.48
1:A:372:LEU:HD11	24:K:207:GLU:HA	1.96	0.48
2:B:48:LYS:NZ	16:f:653:ALA:HB1	2.29	0.48
2:B:119:ASN:O	2:B:120:HIS:ND1	2.47	0.48
3:C:47:ALA:HB2	8:V:495:ARG:HH12	1.79	0.48
4:D:85:ILE:HG23	4:D:86:PRO:HD2	1.91	0.48
5:E:70:ILE:CD1	5:E:80:VAL:HG22	2.43	0.48
5:E:116:ASP:N	5:E:116:ASP:OD1	2.45	0.48
5:E:147:GLU:HB2	18:W:174:TYR:HE1	1.78	0.48
8:V:406:GLY:O	8:V:409:MET:HG3	2.12	0.48
11:Z:7:GLN:O	11:Z:159:THR:HG23	2.14	0.48
11:Z:13:PRO:HD2	11:Z:168:GLU:CD	2.39	0.48
11:Z:182:THR:OG1	11:Z:183:THR:N	2.43	0.48
11:Z:275:LEU:C	11:Z:275:LEU:HD23	2.39	0.48
12:a:98:GLU:O	12:a:102:GLU:HG2	2.14	0.48
13:b:113:VAL:N	13:b:141:ILE:O	2.47	0.48
14:c:56:LEU:HD21	14:c:133:PHE:CE1	2.48	0.48
14:c:186:LYS:HB3	14:c:187:PRO:CD	2.41	0.48
15:d:166:PHE:HA	15:d:169:ILE:CB	2.32	0.48
16:f:113:MET:SD	16:f:115:PRO:HG3	2.54	0.48
16:f:348:ILE:HG13	16:f:349:TYR:N	2.29	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:640:LYS:NZ	16:f:651:GLY:HA3	2.29	0.48
16:f:696:LEU:HD11	16:f:712:LYS:HZ3	1.78	0.48
16:f:778:LEU:O	16:f:782:HIS:ND1	2.47	0.48
16:f:862:ILE:HA	16:f:876:HIS:NE2	2.28	0.48
18:W:88:MET:HE1	18:W:129:ARG:CD	2.44	0.48
18:W:296:LEU:O	18:W:299:ILE:HG22	2.14	0.48
1:A:41:TYR:CE2	2:B:59:ARG:HB2	2.48	0.47
1:A:112:ILE:CD1	1:A:122:VAL:HG22	2.43	0.47
1:A:309:PHE:HE1	6:F:181:PRO:HG3	1.79	0.47
2:B:46:ALA:O	2:B:47:SER:OG	2.26	0.47
2:B:47:SER:C	2:B:49:LEU:H	2.22	0.47
2:B:86:LYS:HZ3	16:f:621:ASP:HB2	1.77	0.47
4:D:45:LYS:HE2	7:U:187:LEU:HD12	1.96	0.47
4:D:93:LEU:HD21	4:D:104:GLY:HA3	1.96	0.47
6:F:77:SER:HA	6:F:80:ILE:CG2	2.43	0.47
6:F:273:ALA:C	6:F:275:ALA:N	2.72	0.47
7:U:244:MET:O	7:U:248:ILE:HG12	2.14	0.47
7:U:350:LEU:CD2	7:U:384:GLN:HE21	2.27	0.47
7:U:793:LYS:NZ	7:U:794:ASP:H	2.11	0.47
8:V:414:TYR:HD2	8:V:417:ILE:HG12	1.79	0.47
8:V:453:HIS:O	8:V:453:HIS:ND1	2.45	0.47
8:V:470:ARG:HH22	11:Z:249:PHE:C	2.22	0.47
10:Y:177:ARG:NH2	10:Y:208:PHE:H	2.11	0.47
11:Z:238:PRO:O	11:Z:239:ASP:C	2.57	0.47
11:Z:248:ALA:HB1	18:W:424:LEU:HD22	1.96	0.47
12:a:28:LEU:O	12:a:33:LEU:HB2	2.14	0.47
12:a:68:GLU:O	12:a:69:HIS:C	2.57	0.47
12:a:370:GLN:HE22	15:d:244:LYS:HG2	1.77	0.47
13:b:75:LEU:HA	13:b:78:VAL:CG2	2.45	0.47
13:b:132:LYS:HZ1	13:b:160:LEU:HA	1.80	0.47
15:d:147:SER:O	15:d:150:LYS:HB2	2.14	0.47
16:f:174:ASP:H	16:f:178:LYS:HZ1	1.59	0.47
16:f:521:ALA:HA	16:f:524:MET:SD	2.54	0.47
16:f:545:LYS:CE	16:f:547:GLU:HB3	2.25	0.47
16:f:582:VAL:HA	16:f:588:ARG:HD2	1.96	0.47
16:f:584:SER:O	16:f:588:ARG:NE	2.46	0.47
16:f:613:LEU:HA	16:f:632:LYS:CD	2.44	0.47
22:I:232:GLU:OE2	22:I:232:GLU:N	2.44	0.47
33:T:96:MET:CE	33:T:110:MET:HE1	2.43	0.47
1:A:78:TRP:CE2	1:A:82:ALA:HB2	2.50	0.47
1:A:176:ASP:N	1:A:176:ASP:OD1	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:139:VAL:HG22	2:B:161:GLY:HA2	1.96	0.47
2:B:440:LEU:HB2	23:J:61:LYS:NZ	2.29	0.47
3:C:332:HIS:CD2	3:C:360:LYS:HG3	2.49	0.47
4:D:84:SER:O	4:D:85:ILE:HB	2.13	0.47
5:E:119:VAL:HG12	5:E:122:MET:HE2	1.96	0.47
5:E:261:LEU:HD23	5:E:261:LEU:HA	1.78	0.47
6:F:272:PHE:HB2	6:F:316:GLN:OE1	2.14	0.47
7:U:430:ASP:OD1	7:U:430:ASP:N	2.47	0.47
7:U:716:VAL:O	7:U:727:LYS:NZ	2.46	0.47
8:V:383:GLY:O	8:V:387:GLN:HG2	2.14	0.47
9:X:171:LEU:HD21	9:X:210:LEU:CG	2.43	0.47
9:X:233:TYR:HD1	9:X:233:TYR:O	1.97	0.47
9:X:364:LYS:HG3	9:X:368:MET:HE2	1.96	0.47
10:Y:191:ILE:H	19:e:39:TRP:HD1	1.62	0.47
10:Y:202:LEU:HD12	10:Y:202:LEU:C	2.39	0.47
11:Z:69:PHE:CE2	13:b:96:ALA:HA	2.49	0.47
11:Z:178:ASP:HA	11:Z:180:LYS:HZ2	1.79	0.47
11:Z:211:TYR:CD1	11:Z:211:TYR:C	2.92	0.47
15:d:207:THR:C	15:d:209:TYR:N	2.72	0.47
16:f:233:LEU:O	16:f:236:CYS:N	2.47	0.47
16:f:412:ALA:CB	16:f:801:VAL:HG21	2.44	0.47
16:f:605:ASN:ND2	16:f:608:LYS:H	2.04	0.47
16:f:685:THR:HA	16:f:689:ALA:HB2	1.94	0.47
16:f:813:LYS:HD3	16:f:825:MET:CE	2.38	0.47
18:W:87:ILE:HG22	18:W:130:MET:SD	2.54	0.47
18:W:180:LYS:HD2	18:W:222:LEU:HD21	1.94	0.47
18:W:356:ASN:O	18:W:359:VAL:HG13	2.14	0.47
20:G:19:GLU:OE1	20:G:19:GLU:HA	2.14	0.47
22:I:197:LEU:HD13	22:I:211:VAL:CG2	2.44	0.47
23:J:199:VAL:HG11	23:J:206:ILE:CG2	2.44	0.47
31:R:161:ILE:HG21	31:R:175:VAL:HG13	1.95	0.47
1:A:126:SER:HB2	1:A:148:GLN:CG	2.43	0.47
1:A:334:PRO:CB	6:F:398:ALA:HB2	2.43	0.47
2:B:67:ARG:HD2	2:B:71:TYR:HE1	1.77	0.47
2:B:135:ILE:HD11	2:B:159:VAL:HG21	1.95	0.47
3:C:399:MET:CG	3:C:402:LYS:HD3	2.44	0.47
4:D:214:MET:HE1	36:D:501:ADP:C6	2.48	0.47
4:D:293:LEU:HD11	4:D:321:LEU:HB2	1.96	0.47
4:D:321:LEU:HD21	4:D:327:LEU:HD11	1.96	0.47
5:E:153:LEU:HD11	5:E:227:PRO:HG2	1.96	0.47
6:F:69:MET:SD	6:F:72:LYS:NZ	2.87	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:314:LEU:CD2	6:F:347:ARG:HD3	2.45	0.47
6:F:321:GLN:NE2	6:F:322:PRO:HG2	2.29	0.47
7:U:98:GLU:O	7:U:101:ILE:HG12	2.13	0.47
7:U:206:MET:HE1	7:U:211:PRO:HB3	1.96	0.47
7:U:816:PRO:O	7:U:818:GLU:N	2.47	0.47
8:V:295:ILE:HG13	8:V:296:LYS:H	1.78	0.47
9:X:74:ARG:HD2	9:X:116:TRP:CE3	2.50	0.47
10:Y:236:LEU:HD23	10:Y:237:ARG:H	1.80	0.47
11:Z:123:ILE:HG23	11:Z:136:GLU:OE1	2.15	0.47
12:a:323:SER:N	12:a:332:HIS:O	2.38	0.47
14:c:54:MET:HE1	14:c:111:TRP:CB	2.43	0.47
14:c:127:ILE:HG23	14:c:130:GLN:HE21	1.80	0.47
14:c:279:ASP:O	14:c:281:LYS:N	2.47	0.47
16:f:294:MET:O	16:f:294:MET:SD	2.73	0.47
16:f:478:ARG:HD2	16:f:514:VAL:HG11	1.96	0.47
16:f:617:SER:HB3	16:f:632:LYS:CE	2.43	0.47
16:f:659:LEU:C	16:f:660:ILE:HD13	2.39	0.47
16:f:785:ARG:HG3	16:f:786:GLN:N	2.28	0.47
16:f:804:LEU:C	16:f:806:VAL:HG13	2.39	0.47
18:W:60:MET:SD	18:W:97:LEU:HD22	2.54	0.47
18:W:180:LYS:HE3	18:W:222:LEU:HD11	1.95	0.47
25:L:166:GLN:OE1	25:L:166:GLN:N	2.47	0.47
26:M:17:ASP:OD1	26:M:17:ASP:C	2.56	0.47
1:A:102:ILE:HD11	1:A:112:ILE:CG2	2.45	0.47
1:A:215:PHE:HZ	1:A:340:LYS:HB3	1.76	0.47
1:A:348:LEU:HD12	1:A:348:LEU:O	2.14	0.47
1:A:428:ARG:HH12	23:J:132:LEU:HD13	1.79	0.47
3:C:326:LEU:O	3:C:326:LEU:HD23	2.14	0.47
3:C:330:LYS:HZ2	3:C:330:LYS:HB3	1.79	0.47
4:D:173:GLN:HG2	4:D:333:PHE:CE1	2.50	0.47
4:D:393:ILE:HG22	4:D:395:LEU:HG	1.97	0.47
5:E:153:LEU:HD23	5:E:154:THR:CA	2.44	0.47
5:E:176:PRO:HB3	5:E:280:ASN:ND2	2.29	0.47
5:E:226:GLN:HB3	5:E:227:PRO:CD	2.40	0.47
5:E:258:MET:HE3	5:E:289:LEU:CD1	2.43	0.47
5:E:264:MET:O	5:E:265:ASP:C	2.57	0.47
6:F:384:LEU:CD2	6:F:424:ILE:HD11	2.45	0.47
7:U:116:ALA:O	7:U:119:PRO:HG3	2.15	0.47
7:U:347:ASN:HB2	7:U:813:TYR:HE2	1.79	0.47
8:V:207:ALA:HB1	8:V:211:TYR:CZ	2.50	0.47
8:V:345:ARG:O	8:V:345:ARG:HG3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:477:HIS:CG	15:d:249:TYR:HH	2.32	0.47
9:X:138:PHE:O	9:X:138:PHE:HD1	1.97	0.47
10:Y:124:PHE:CE2	10:Y:143:TYR:HB3	2.49	0.47
10:Y:230:ALA:HB3	10:Y:231:LEU:HD22	1.96	0.47
11:Z:237:LEU:N	11:Z:238:PRO:CD	2.78	0.47
12:a:68:GLU:HG2	12:a:69:HIS:N	2.29	0.47
13:b:34:ASN:C	13:b:38:HIS:HB2	2.39	0.47
13:b:86:PHE:CZ	13:b:90:ILE:HD11	2.50	0.47
14:c:48:GLY:O	14:c:51:MET:HE2	2.15	0.47
15:d:1:MET:HB2	15:d:3:GLU:HG3	1.97	0.47
15:d:255:MET:O	15:d:256:ILE:C	2.58	0.47
16:f:13:PRO:HG3	16:f:41:LYS:CE	2.45	0.47
16:f:171:GLN:N	16:f:171:GLN:CD	2.72	0.47
16:f:324:VAL:C	16:f:326:LEU:N	2.73	0.47
16:f:324:VAL:HB	16:f:455:VAL:HB	1.96	0.47
16:f:531:ASN:CA	16:f:534:VAL:HG12	2.44	0.47
18:W:109:CYS:HA	18:W:147:LYS:HE2	1.96	0.47
31:R:4:THR:OG1	31:R:129:VAL:O	2.29	0.47
25:l:47:VAL:HG12	25:l:195:LEU:HD22	1.97	0.47
29:p:112:ASP:C	29:p:112:ASP:OD2	2.56	0.47
1:A:83:ASP:O	1:A:86:THR:N	2.38	0.47
1:A:165:GLN:OE1	1:A:267:LYS:NZ	2.47	0.47
1:A:266:THR:CG2	1:A:267:LYS:HG3	2.44	0.47
1:A:306:LEU:HA	1:A:312:ARG:CD	2.41	0.47
2:B:53:THR:HG1	2:B:54:PRO:HD3	1.77	0.47
4:D:120:ASP:CG	4:D:121:ARG:H	2.23	0.47
5:E:213:ARG:HH22	5:E:214:LEU:HB2	1.77	0.47
5:E:365:GLU:OE1	5:E:369:LYS:HG3	2.14	0.47
6:F:192:ASP:HA	6:F:195:ILE:HG22	1.95	0.47
6:F:384:LEU:HD22	6:F:424:ILE:HD11	1.95	0.47
7:U:183:LEU:HD12	7:U:183:LEU:O	2.14	0.47
7:U:564:ASP:O	7:U:567:ILE:HG13	2.15	0.47
7:U:699:THR:CG2	7:U:701:ILE:HG23	2.39	0.47
7:U:802:TYR:OH	7:U:880:ASN:ND2	2.47	0.47
9:X:396:THR:HA	14:c:242:GLU:OE2	2.15	0.47
10:Y:145:LEU:HD21	10:Y:161:THR:HG23	1.96	0.47
10:Y:291:HIS:O	10:Y:292:TYR:C	2.57	0.47
15:d:43:LEU:H	15:d:43:LEU:HD13	1.79	0.47
16:f:117:GLU:O	16:f:119:LYS:N	2.48	0.47
16:f:166:VAL:HG13	16:f:167:ALA:N	2.29	0.47
16:f:649:HIS:C	16:f:652:VAL:HG22	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:227:TYR:HD2	18:W:250:ILE:HG22	1.79	0.47
18:W:234:ASP:HB2	18:W:243:ILE:HD13	1.92	0.47
18:W:274:VAL:HG13	18:W:287:VAL:CG2	2.44	0.47
23:j:208:LEU:HD23	23:j:209:ALA:N	2.29	0.47
1:A:428:ARG:HE	23:J:161:ILE:HG23	1.78	0.47
2:B:113:GLU:HG3	2:B:114:GLU:OE2	2.15	0.47
2:B:384:ILE:CG2	2:B:385:MET:HE3	2.42	0.47
3:C:172:PRO:HD2	3:C:173:GLU:OE2	2.15	0.47
4:D:39:ASP:CA	4:D:42:SER:OG	2.63	0.47
4:D:348:ILE:HD11	4:D:376:ASN:HA	1.95	0.47
5:E:286:ASP:C	5:E:286:ASP:OD1	2.57	0.47
6:F:121:CYS:O	6:F:137:ILE:HG12	2.15	0.47
6:F:332:THR:HG21	6:F:338:LEU:HD11	1.95	0.47
7:U:336:GLU:OE2	7:U:417:LYS:HE3	2.14	0.47
7:U:556:MET:HE3	7:U:559:ARG:CG	2.43	0.47
8:V:128:ARG:HG3	8:V:129:ASP:N	2.28	0.47
10:Y:18:ARG:NH2	10:Y:22:LEU:HD21	2.30	0.47
10:Y:236:LEU:HD23	10:Y:237:ARG:N	2.30	0.47
10:Y:338:ILE:HG12	10:Y:345:CYS:SG	2.55	0.47
11:Z:149:THR:CG2	11:Z:150:PRO:HD2	2.45	0.47
13:b:54:LEU:HA	13:b:58:CYS:HB2	1.97	0.47
14:c:55:GLY:HA3	14:c:112:TYR:CD1	2.49	0.47
14:c:177:THR:O	14:c:177:THR:HG22	2.14	0.47
14:c:285:GLU:OE1	14:c:286:GLU:N	2.48	0.47
16:f:7:ASP:OD2	16:f:8:LYS:HD3	2.14	0.47
16:f:401:LYS:HZ1	16:f:401:LYS:N	2.12	0.47
16:f:462:ALA:HB3	16:f:489:TYR:CZ	2.49	0.47
16:f:817:VAL:HG23	16:f:818:LEU:N	2.28	0.47
18:W:43:VAL:O	18:W:47:LEU:HD23	2.14	0.47
18:W:119:PRO:O	18:W:120:ILE:HG22	2.15	0.47
18:W:307:LYS:HD2	18:W:310:THR:CG2	2.44	0.47
18:W:363:ILE:HD13	18:W:366:MET:HE2	1.96	0.47
18:W:419:LYS:NZ	18:W:423:ASN:HB3	2.28	0.47
19:e:59:GLU:CG	19:e:60:LEU:H	2.24	0.47
1:A:387:SER:HA	1:A:390:THR:CG2	2.45	0.47
3:C:68:GLU:OE1	3:C:68:GLU:N	2.37	0.47
3:C:175:PHE:HD2	3:C:180:ILE:HG13	1.79	0.47
4:D:220:ALA:HB2	4:D:227:PHE:CZ	2.49	0.47
4:D:315:ASP:OD1	4:D:315:ASP:N	2.48	0.47
4:D:355:SER:HG	4:D:358:VAL:HG12	1.78	0.47
4:D:370:ILE:CG2	4:D:374:ASP:HB2	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:385:LEU:HD23	4:D:385:LEU:HA	1.77	0.47
4:D:412:GLN:C	4:D:413:GLU:HG3	2.40	0.47
5:E:144:GLU:O	5:E:148:VAL:HG23	2.14	0.47
5:E:223:ARG:NH2	5:E:273:VAL:HB	2.29	0.47
5:E:336:ASP:C	5:E:338:PHE:H	2.22	0.47
5:E:382:SER:HB2	5:E:384:LEU:CD2	2.44	0.47
6:F:172:VAL:C	6:F:175:MET:HG3	2.40	0.47
6:F:226:TYR:OH	6:F:353:GLU:HB2	2.15	0.47
7:U:22:PHE:CG	15:d:31:LEU:HG	2.49	0.47
7:U:66:LYS:HA	7:U:96:TYR:HE1	1.80	0.47
7:U:82:LEU:CD1	7:U:129:ARG:HB2	2.44	0.47
7:U:166:THR:C	7:U:169:GLU:HG3	2.39	0.47
7:U:167:ILE:HG12	7:U:204:ILE:HD12	1.95	0.47
7:U:198:LEU:O	7:U:202:VAL:HG13	2.14	0.47
7:U:381:THR:HG23	7:U:412:HIS:CE1	2.49	0.47
7:U:416:GLU:CD	7:U:416:GLU:H	2.22	0.47
7:U:448:LEU:O	7:U:451:ALA:HB2	2.14	0.47
7:U:757:MET:O	7:U:761:VAL:HG12	2.15	0.47
7:U:884:VAL:CG2	7:U:889:LEU:HD23	2.45	0.47
7:U:889:LEU:HD22	7:U:908:ILE:C	2.40	0.47
8:V:106:ARG:HH11	8:V:106:ARG:H	1.63	0.47
9:X:127:GLN:NE2	9:X:156:GLU:OE2	2.48	0.47
9:X:218:HIS:HA	9:X:221:GLU:CG	2.45	0.47
9:X:259:ILE:HG13	9:X:260:MET:N	2.28	0.47
10:Y:117:LYS:HE3	10:Y:153:ASP:OD2	2.15	0.47
11:Z:13:PRO:HD2	11:Z:168:GLU:OE1	2.14	0.47
11:Z:71:ASP:OD1	11:Z:73:ASP:HB2	2.14	0.47
11:Z:71:ASP:CG	11:Z:74:TYR:H	2.21	0.47
11:Z:98:GLY:O	11:Z:100:LYS:N	2.47	0.47
11:Z:287:LYS:HB3	11:Z:288:LYS:NZ	2.30	0.47
11:Z:288:LYS:HA	11:Z:288:LYS:HD3	1.73	0.47
12:a:33:LEU:HD23	12:a:33:LEU:HA	1.68	0.47
12:a:190:VAL:HG13	12:a:225:LEU:HD12	1.95	0.47
12:a:210:VAL:HG23	12:a:213:PHE:CG	2.50	0.47
12:a:290:GLN:NE2	12:a:330:ARG:HE	2.13	0.47
12:a:350:LYS:HE3	12:a:350:LYS:HB2	1.68	0.47
13:b:4:GLU:HA	13:b:106:LYS:N	2.29	0.47
13:b:98:LYS:O	13:b:98:LYS:HD3	2.15	0.47
14:c:87:VAL:O	14:c:87:VAL:HG12	2.14	0.47
15:d:63:ILE:HG13	15:d:165:PHE:CD2	2.49	0.47
15:d:77:GLN:O	15:d:80:CYS:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:4:GLY:O	16:f:6:ARG:N	2.41	0.47
16:f:80:ARG:HG2	16:f:84:SER:HB2	1.96	0.47
16:f:170:TRP:CD1	16:f:173:LEU:HD12	2.50	0.47
16:f:240:VAL:CG2	16:f:241:PRO:HD3	2.44	0.47
16:f:253:LEU:HD23	16:f:256:PHE:CD2	2.49	0.47
16:f:288:VAL:HG21	16:f:881:GLU:N	2.30	0.47
16:f:556:ARG:O	16:f:559:PRO:HD2	2.14	0.47
16:f:603:SER:O	16:f:604:GLY:C	2.58	0.47
16:f:637:LYS:HE2	16:f:674:THR:CB	2.44	0.47
16:f:766:GLN:HE22	16:f:768:LEU:HB2	1.80	0.47
16:f:812:GLY:HA3	16:f:879:ARG:NH1	2.28	0.47
18:W:122:LEU:HA	18:W:125:ILE:HD12	1.95	0.47
18:W:208:LYS:O	18:W:208:LYS:CG	2.62	0.47
18:W:219:THR:HG23	18:W:256:ILE:HG21	1.94	0.47
18:W:302:TYR:CE2	18:W:328:LEU:HD11	2.49	0.47
18:W:403:PHE:CE1	18:W:405:LYS:HD3	2.48	0.47
21:H:37:ILE:CD1	21:H:190:ALA:HB2	2.44	0.47
28:O:109:PRO:O	28:O:110:HIS:ND1	2.47	0.47
30:Q:43:LEU:HD12	30:Q:183:ILE:HD11	1.95	0.47
27:n:48:GLY:O	38:n:301:LDZ:N16	2.45	0.47
1:A:41:TYR:HA	1:A:44:GLN:CD	2.40	0.47
1:A:177:VAL:HG22	1:A:224:LEU:HG	1.96	0.47
1:A:353:HIS:O	1:A:357:ILE:HG22	2.14	0.47
1:A:425:ALA:HB1	1:A:429:TYR:CD2	2.49	0.47
2:B:248:LEU:HD12	2:B:282:VAL:CG1	2.45	0.47
3:C:406:LYS:N	3:C:406:LYS:CD	2.78	0.47
4:D:212:LYS:N	36:D:501:ADP:O1A	2.47	0.47
5:E:195:PHE:CE1	5:E:229:ILE:CG2	2.91	0.47
6:F:154:ASN:HB3	6:F:157:SER:OG	2.15	0.47
6:F:198:LEU:HD23	6:F:198:LEU:C	2.40	0.47
6:F:248:PHE:CE1	6:F:282:ILE:HG23	2.50	0.47
7:U:166:THR:HA	7:U:169:GLU:HG2	1.97	0.47
7:U:567:ILE:C	7:U:601:ARG:HH22	2.23	0.47
7:U:807:LYS:HB2	7:U:808:PRO:HD3	1.97	0.47
8:V:106:ARG:O	8:V:107:ARG:HG2	2.14	0.47
8:V:171:VAL:O	8:V:175:MET:HG3	2.14	0.47
8:V:464:ILE:CD1	8:V:468:SER:HB3	2.32	0.47
9:X:80:ILE:HG22	9:X:81:SER:N	2.28	0.47
9:X:335:LEU:CD1	9:X:354:ILE:HG13	2.45	0.47
10:Y:232:GLU:N	10:Y:234:PRO:HD3	2.29	0.47
10:Y:312:ARG:C	10:Y:356:THR:HG23	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:110:GLU:HA	11:Z:113:LYS:HZ3	1.80	0.47
12:a:269:LEU:HD12	12:a:272:ILE:HG22	1.96	0.47
13:b:180:ALA:O	13:b:181:ASP:C	2.58	0.47
15:d:199:PHE:CE1	15:d:206:MET:HA	2.50	0.47
16:f:670:MET:HE1	16:f:672:LEU:HD11	1.97	0.47
16:f:696:LEU:HD21	16:f:712:LYS:HG3	1.96	0.47
18:W:274:VAL:CG2	18:W:286:LEU:HD21	2.40	0.47
26:m:39:ILE:HD12	26:m:193:VAL:HG22	1.97	0.47
1:A:99:THR:HG23	1:A:115:VAL:CA	2.41	0.47
1:A:177:VAL:HG22	1:A:224:LEU:CG	2.45	0.47
1:A:354:ILE:HG12	34:A:501:ATP:N1	2.30	0.47
1:A:407:LYS:HE2	1:A:407:LYS:HA	1.97	0.47
2:B:133:VAL:HG21	2:B:159:VAL:HG23	1.97	0.47
2:B:283:PHE:HD1	2:B:328:ILE:O	1.98	0.47
3:C:24:TYR:CB	4:D:40:LEU:HD21	2.45	0.47
3:C:118:ASN:O	3:C:120:SER:N	2.47	0.47
4:D:167:ILE:HD13	4:D:214:MET:HE3	1.97	0.47
4:D:230:VAL:HG13	4:D:234:GLU:HG3	1.96	0.47
5:E:83:CYS:HB2	5:E:87:LEU:HB3	1.97	0.47
5:E:174:GLY:HA3	5:E:301:ILE:CD1	2.45	0.47
5:E:195:PHE:CE1	5:E:229:ILE:HB	2.50	0.47
6:F:329:ILE:HD12	6:F:329:ILE:C	2.40	0.47
7:U:327:LYS:O	7:U:330:SER:OG	2.30	0.47
7:U:715:LYS:HD2	7:U:715:LYS:O	2.15	0.47
7:U:802:TYR:HE2	7:U:880:ASN:O	1.98	0.47
7:U:803:LYS:HB3	7:U:877:LEU:HG	1.96	0.47
9:X:236:PHE:HB2	9:X:250:SER:HB2	1.97	0.47
10:Y:232:GLU:CB	10:Y:302:HIS:ND1	2.77	0.47
10:Y:325:VAL:HG11	19:e:63:HIS:CD2	2.50	0.47
11:Z:67:VAL:HG21	13:b:91:ARG:HD3	1.97	0.47
12:a:331:VAL:HG22	12:a:333:MET:CE	2.45	0.47
12:a:336:VAL:HG23	12:a:337:GLN:NE2	2.30	0.47
12:a:362:SER:O	12:a:365:MET:HG2	2.15	0.47
13:b:103:LYS:O	13:b:103:LYS:HG2	2.14	0.47
14:c:210:ASN:OD1	14:c:210:ASN:C	2.57	0.47
14:c:275:VAL:HG22	14:c:276:GLY:H	1.80	0.47
16:f:75:LEU:HD13	16:f:82:ILE:CD1	2.26	0.47
16:f:143:ARG:HA	16:f:143:ARG:NE	2.29	0.47
16:f:175:ASP:CG	16:f:209:MET:HE1	2.39	0.47
16:f:189:LYS:HG2	16:f:190:GLU:H	1.78	0.47
16:f:285:CYS:HA	16:f:288:VAL:HG12	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:286:LYS:O	16:f:290:VAL:HG13	2.14	0.47
16:f:411:ALA:HB3	16:f:443:GLY:HA3	1.97	0.47
16:f:455:VAL:O	16:f:456:ARG:HB2	2.15	0.47
16:f:560:LEU:HD11	16:f:782:HIS:NE2	2.30	0.47
16:f:629:LYS:HD3	16:f:664:GLU:OE2	2.15	0.47
16:f:696:LEU:HD23	16:f:708:ASP:OD1	2.15	0.47
16:f:809:ILE:HG23	16:f:855:GLN:CD	2.39	0.47
18:W:30:GLU:OE2	18:W:34:LEU:HD13	2.15	0.47
18:W:273:TYR:CZ	18:W:340:VAL:HB	2.50	0.47
21:H:187:ILE:HG21	21:H:228:TYR:CD1	2.49	0.47
25:L:166:GLN:CD	25:L:167:SER:N	2.72	0.47
31:r:88:VAL:HG11	31:r:98:MET:HE1	1.97	0.47
2:B:135:ILE:HG22	2:B:135:ILE:O	2.15	0.47
2:B:290:ILE:HG22	2:B:305:ILE:HG23	1.97	0.47
3:C:307:ARG:NH2	3:C:310:ARG:HG3	2.30	0.47
3:C:365:GLU:HA	3:C:368:MET:HB2	1.95	0.47
4:D:81:ARG:CG	4:D:81:ARG:O	2.63	0.47
4:D:235:PHE:CE1	4:D:247:VAL:HG22	2.50	0.47
5:E:60:VAL:HG22	5:E:71:VAL:HG22	1.96	0.47
5:E:221:TYR:CE1	5:E:225:HIS:HE1	2.33	0.47
5:E:379:LYS:HA	5:E:379:LYS:HD2	1.61	0.47
6:F:283:ILE:HG23	6:F:328:VAL:CG2	2.38	0.47
8:V:131:LEU:HD13	8:V:168:GLN:NE2	2.30	0.47
9:X:397:TYR:HB2	10:Y:365:GLN:OE1	2.15	0.47
10:Y:128:TYR:CE1	10:Y:131:THR:HG21	2.49	0.47
10:Y:191:ILE:H	19:e:39:TRP:CD1	2.33	0.47
10:Y:226:VAL:HA	10:Y:229:ILE:HG22	1.96	0.47
11:Z:266:ILE:O	11:Z:269:VAL:HG12	2.15	0.47
12:a:274:LEU:O	12:a:278:MET:HE3	2.14	0.47
15:d:152:PHE:O	15:d:153:LEU:C	2.58	0.47
15:d:206:MET:C	15:d:208:ASP:H	2.22	0.47
16:f:45:LEU:O	16:f:45:LEU:HD12	2.15	0.47
16:f:258:LYS:HG2	16:f:259:PHE:N	2.30	0.47
16:f:713:PHE:CE1	16:f:752:HIS:HB3	2.50	0.47
16:f:739:ALA:HB3	16:f:742:ALA:HB3	1.96	0.47
28:O:105:ASP:OD1	28:O:105:ASP:N	2.46	0.47
31:r:52:ASP:OD1	31:r:52:ASP:N	2.47	0.47
1:A:274:PHE:HB2	1:A:319:MET:HG2	1.97	0.46
1:A:285:PHE:HZ	2:B:303:ARG:HH22	1.63	0.46
5:E:29:LEU:HB3	5:E:30:ARG:NH2	2.30	0.46
5:E:310:LEU:HB3	5:E:328:TYR:CD2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:284:PHE:HD1	6:F:329:ILE:O	1.98	0.46
7:U:557:TYR:O	7:U:559:ARG:N	2.48	0.46
8:V:75:ILE:O	8:V:79:VAL:HG23	2.14	0.46
8:V:147:PHE:CE1	8:V:149:PRO:HG3	2.50	0.46
8:V:439:ALA:HA	8:V:442:ILE:CG2	2.45	0.46
9:X:111:LEU:HA	9:X:114:ILE:HG22	1.97	0.46
9:X:201:TYR:CD2	9:X:202:CYS:HB2	2.50	0.46
9:X:213:GLN:OE1	9:X:213:GLN:HA	2.15	0.46
9:X:256:LEU:HA	9:X:259:ILE:HG12	1.96	0.46
10:Y:14:ASN:ND2	10:Y:146:ARG:HB3	2.30	0.46
10:Y:235:ASP:OD1	10:Y:235:ASP:C	2.57	0.46
11:Z:123:ILE:O	11:Z:135:THR:OG1	2.22	0.46
14:c:67:VAL:O	14:c:67:VAL:HG13	2.15	0.46
16:f:230:CYS:HB3	16:f:232:TYR:CD1	2.50	0.46
16:f:679:LEU:HB3	16:f:681:TYR:CE1	2.50	0.46
16:f:808:ASN:ND2	16:f:810:ILE:HG12	2.27	0.46
16:f:828:ARG:HG3	16:f:847:GLY:HA3	1.96	0.46
18:W:177:MET:CE	18:W:178:GLU:HB2	2.45	0.46
18:W:278:PRO:HA	18:W:357:ARG:NH1	2.30	0.46
18:W:378:MET:HG2	18:W:413:ILE:CD1	2.45	0.46
21:H:74:VAL:HG22	21:H:75:TYR:H	1.79	0.46
25:L:165:SER:OG	25:L:169:ARG:NH2	2.47	0.46
30:q:18:ASP:OD2	30:q:18:ASP:C	2.58	0.46
1:A:395:PHE:HE2	1:A:411:GLU:HG2	1.80	0.46
2:B:74:MET:HE2	16:f:610:GLN:CA	2.45	0.46
2:B:206:THR:C	2:B:207:HIS:HD1	2.22	0.46
2:B:333:ARG:O	2:B:336:THR:HG22	2.15	0.46
3:C:105:ILE:H	3:C:105:ILE:HD12	1.80	0.46
4:D:39:ASP:OD1	4:D:40:LEU:N	2.48	0.46
4:D:207:PRO:CB	4:D:208:PRO:HD2	2.45	0.46
5:E:170:CYS:O	5:E:276:ILE:HA	2.15	0.46
5:E:290:LEU:HD22	5:E:290:LEU:H	1.80	0.46
6:F:59:VAL:O	6:F:62:VAL:N	2.38	0.46
6:F:198:LEU:HD21	6:F:240:CYS:HB2	1.98	0.46
7:U:353:LEU:HG	7:U:357:LYS:HZ1	1.80	0.46
7:U:595:ASN:HD21	7:U:597:LYS:CG	2.29	0.46
7:U:799:LYS:HG2	7:U:925:VAL:HB	1.96	0.46
8:V:150:ARG:O	8:V:155:ALA:HB2	2.16	0.46
8:V:166:TYR:CZ	8:V:170:LEU:HD11	2.50	0.46
8:V:419:LEU:HA	8:V:422:ILE:HG22	1.98	0.46
11:Z:39:LEU:HD13	11:Z:50:VAL:CG1	2.44	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:151:THR:HG21	12:a:149:THR:HG21	1.96	0.46
12:a:61:GLU:O	12:a:64:ILE:HG22	2.15	0.46
12:a:312:MET:HE1	18:W:314:LEU:HG	1.96	0.46
16:f:102:HIS:CD2	16:f:106:LEU:HA	2.49	0.46
16:f:325:GLN:O	16:f:329:ASN:OD1	2.32	0.46
16:f:681:TYR:CB	16:f:858:LYS:HD2	2.46	0.46
16:f:696:LEU:CA	16:f:708:ASP:OD2	2.64	0.46
16:f:733:GLY:HA2	16:f:737:ASN:HB3	1.97	0.46
16:f:755:ASP:OD1	16:f:756:PRO:HD2	2.15	0.46
18:W:234:ASP:HA	18:W:237:GLU:HB2	1.97	0.46
18:W:359:VAL:HG21	18:W:384:LEU:HD11	1.97	0.46
19:e:60:LEU:C	19:e:61:GLU:OE2	2.58	0.46
22:I:48:GLU:HB2	22:I:201:MET:HE2	1.96	0.46
25:L:77:LEU:O	25:L:81:ALA:N	2.42	0.46
1:A:112:ILE:HD13	1:A:122:VAL:HG13	1.98	0.46
1:A:195:LEU:CD1	1:A:269:ALA:HB1	2.44	0.46
1:A:240:VAL:HG21	1:A:274:PHE:CD2	2.51	0.46
1:A:407:LYS:HA	1:A:407:LYS:CE	2.44	0.46
2:B:194:ILE:HG13	2:B:235:LEU:CD1	2.40	0.46
3:C:63:LEU:HD21	4:D:79:VAL:HA	1.97	0.46
3:C:215:SER:OG	3:C:216:GLY:N	2.49	0.46
3:C:242:ALA:CB	3:C:243:PRO:HD2	2.37	0.46
4:D:46:LYS:HG3	4:D:47:LEU:CD2	2.46	0.46
4:D:255:LYS:HD2	4:D:302:ASN:OD1	2.16	0.46
5:E:38:LYS:HD3	5:E:42:LYS:HZ3	1.79	0.46
6:F:95:GLU:O	6:F:96:LEU:C	2.58	0.46
6:F:347:ARG:O	6:F:348:LEU:C	2.54	0.46
7:U:14:GLU:HG3	7:U:19:LEU:HD21	1.98	0.46
7:U:244:MET:HE1	7:U:903:PHE:HD2	1.79	0.46
7:U:542:GLU:O	7:U:542:GLU:CG	2.62	0.46
7:U:758:PRO:O	7:U:761:VAL:HG12	2.15	0.46
8:V:443:ARG:HH12	15:d:180:GLY:C	2.22	0.46
9:X:201:TYR:CG	9:X:202:CYS:N	2.82	0.46
9:X:371:ASP:OD1	10:Y:233:ARG:NH2	2.48	0.46
12:a:7:PHE:CG	12:a:59:LEU:HD11	2.50	0.46
12:a:70:ARG:HD2	13:b:17:ARG:C	2.41	0.46
12:a:148:VAL:CG2	12:a:151:VAL:HG12	2.45	0.46
12:a:290:GLN:HA	12:a:331:VAL:O	2.14	0.46
12:a:335:TRP:HD1	12:a:337:GLN:N	1.97	0.46
12:a:342:ASP:OD1	12:a:342:ASP:C	2.58	0.46
13:b:100:ARG:O	13:b:100:ARG:HG2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:82:VAL:HG23	14:c:82:VAL:O	2.13	0.46
14:c:95:MET:O	14:c:96:LEU:C	2.58	0.46
16:f:128:VAL:O	16:f:128:VAL:HG22	2.14	0.46
16:f:373:ALA:HA	16:f:748:LEU:HD13	1.97	0.46
16:f:374:SER:HA	16:f:377:VAL:CG2	2.45	0.46
16:f:404:ASP:HA	16:f:407:MET:CG	2.46	0.46
16:f:710:LEU:HD12	16:f:713:PHE:CD2	2.50	0.46
22:I:197:LEU:HD13	22:I:211:VAL:HG21	1.96	0.46
38:R:301:LDZ:H21	38:R:301:LDZ:C22	2.45	0.46
33:t:92:LEU:HD23	33:t:112:ILE:HD11	1.97	0.46
1:A:30:ILE:HG12	3:C:171:HIS:CE1	2.51	0.46
1:A:45:ILE:HD11	2:B:62:LEU:HA	1.97	0.46
1:A:95:VAL:HG11	2:B:157:HIS:HB2	1.98	0.46
1:A:111:TYR:HE1	1:A:125:LEU:HB2	1.81	0.46
1:A:122:VAL:HB	6:F:88:TYR:CD1	2.51	0.46
2:B:229:GLY:HA3	3:C:307:ARG:HD2	1.97	0.46
5:E:156:PRO:HG3	5:E:272:ARG:HD3	1.97	0.46
6:F:224:LEU:HD13	6:F:343:LEU:HD21	1.97	0.46
6:F:288:LEU:HD12	6:F:291:ILE:HG23	1.97	0.46
7:U:253:TYR:CZ	7:U:331:GLY:HA3	2.50	0.46
7:U:691:SER:OG	7:U:713:TYR:OH	2.22	0.46
7:U:806:CYS:O	7:U:874:ASN:HB2	2.14	0.46
7:U:899:ARG:HE	7:U:917:THR:HB	1.81	0.46
8:V:302:TYR:HB3	8:V:339:LEU:HD22	1.97	0.46
9:X:347:ILE:HG12	9:X:383:GLY:O	2.15	0.46
10:Y:231:LEU:C	10:Y:234:PRO:HD3	2.40	0.46
11:Z:86:ASN:C	11:Z:86:ASN:OD1	2.58	0.46
11:Z:139:ILE:CG2	11:Z:141:VAL:HG13	2.42	0.46
11:Z:141:VAL:HG23	11:Z:141:VAL:O	2.15	0.46
11:Z:214:LYS:HD2	11:Z:219:LYS:HE3	1.96	0.46
12:a:293:PHE:CD2	12:a:329:LYS:HE3	2.50	0.46
13:b:9:CYS:HA	13:b:52:ILE:O	2.15	0.46
13:b:35:ILE:C	13:b:37:CYS:N	2.71	0.46
14:c:234:TYR:HD1	14:c:234:TYR:HA	1.65	0.46
16:f:95:PRO:HB3	16:f:133:MET:HG3	1.97	0.46
16:f:294:MET:HB3	16:f:807:ARG:CZ	2.45	0.46
16:f:637:LYS:HG3	16:f:677:HIS:HB3	1.97	0.46
16:f:771:LEU:HD23	16:f:774:GLY:CA	2.45	0.46
18:W:13:ILE:O	18:W:13:ILE:HG13	2.16	0.46
18:W:210:ASN:C	18:W:210:ASN:HD22	2.22	0.46
18:W:402:ILE:HD12	18:W:403:PHE:N	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:g:138:MET:HE3	20:g:140:LEU:HD11	1.97	0.46
25:l:35:THR:OG1	25:l:133:LEU:HD12	2.15	0.46
31:r:43:LEU:HD21	31:r:180:VAL:CG2	2.46	0.46
1:A:172:VAL:HG11	1:A:227:ARG:HG2	1.98	0.46
2:B:105:THR:CB	2:B:106:PRO:CD	2.90	0.46
2:B:136:LEU:HD13	2:B:160:ILE:CD1	2.44	0.46
2:B:214:MET:HE3	2:B:214:MET:HB3	1.75	0.46
2:B:269:GLU:O	2:B:273:VAL:HG23	2.15	0.46
2:B:397:ALA:HA	2:B:400:THR:HG22	1.95	0.46
2:B:429:LYS:HB3	2:B:429:LYS:HE2	1.54	0.46
3:C:28:ILE:HD11	4:D:44:TYR:HA	1.96	0.46
3:C:90:HIS:C	3:C:90:HIS:ND1	2.74	0.46
4:D:39:ASP:O	4:D:41:TYR:N	2.49	0.46
5:E:231:PHE:HE2	5:E:233:ASP:HB3	1.81	0.46
6:F:96:LEU:HD12	6:F:122:ALA:HA	1.96	0.46
6:F:138:GLY:CA	6:F:160:ILE:HB	2.45	0.46
6:F:314:LEU:HD21	6:F:347:ARG:CZ	2.45	0.46
7:U:217:CYS:SG	7:U:218:GLN:N	2.88	0.46
7:U:392:TRP:HA	7:U:395:ARG:NH1	2.30	0.46
7:U:837:ALA:N	7:U:840:LYS:HE3	2.31	0.46
8:V:364:THR:HG23	19:e:43:TRP:CH2	2.50	0.46
8:V:426:LEU:C	8:V:428:LEU:HD12	2.40	0.46
8:V:466:ILE:HG23	8:V:471:GLU:OE1	2.15	0.46
9:X:154:LEU:HD21	9:X:169:VAL:HG22	1.97	0.46
9:X:183:LEU:N	9:X:184:PRO:HD2	2.31	0.46
10:Y:71:ASN:HB2	10:Y:74:LYS:HE2	1.97	0.46
10:Y:104:MET:CE	10:Y:127:THR:HB	2.45	0.46
11:Z:89:GLU:HA	11:Z:89:GLU:OE1	2.15	0.46
12:a:327:VAL:HG12	18:W:372:ARG:HE	1.80	0.46
13:b:32:ALA:O	13:b:35:ILE:N	2.47	0.46
14:c:75:MET:SD	14:c:75:MET:C	2.98	0.46
14:c:111:TRP:N	14:c:111:TRP:CD1	2.83	0.46
15:d:15:ASN:HB3	15:d:61:TRP:HD1	1.70	0.46
15:d:74:TYR:O	15:d:76:ALA:N	2.48	0.46
15:d:101:LEU:HD11	15:d:166:PHE:CD2	2.50	0.46
16:f:12:GLN:CB	16:f:13:PRO:HD3	2.45	0.46
16:f:121:PHE:HD2	16:f:129:LEU:HD21	1.80	0.46
16:f:228:LYS:HG2	16:f:233:LEU:HB2	1.96	0.46
16:f:380:PHE:HZ	16:f:800:LEU:O	1.98	0.46
16:f:433:LEU:HD12	16:f:441:LYS:HG2	1.97	0.46
16:f:462:ALA:HB1	16:f:485:LEU:HD23	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:549:GLU:HB3	16:f:587:PHE:CD2	2.50	0.46
16:f:651:GLY:HA2	16:f:654:VAL:HG12	1.98	0.46
16:f:759:LEU:HG	16:f:761:MET:H	1.81	0.46
16:f:826:GLN:O	16:f:826:GLN:HG2	2.15	0.46
18:W:33:LYS:HE3	18:W:33:LYS:HB3	1.71	0.46
18:W:315:MET:HE2	18:W:315:MET:HB3	1.80	0.46
19:e:52:PHE:CE2	19:e:56:LEU:HD13	2.51	0.46
1:A:72:LEU:HD11	2:B:99:VAL:HG11	1.97	0.46
2:B:66:GLU:HG2	7:U:835:ILE:CG2	2.43	0.46
2:B:78:PHE:CD1	2:B:78:PHE:C	2.93	0.46
2:B:127:VAL:O	2:B:127:VAL:HG12	2.14	0.46
2:B:329:MET:CE	2:B:341:LEU:HD21	2.44	0.46
3:C:378:VAL:HG21	3:C:383:PHE:CE1	2.51	0.46
4:D:93:LEU:HD11	4:D:104:GLY:HA2	1.98	0.46
6:F:66:LEU:O	6:F:67:GLN:HB3	2.16	0.46
6:F:66:LEU:C	6:F:68:ALA:H	2.23	0.46
8:V:447:ILE:HD12	8:V:448:GLU:H	1.80	0.46
9:X:295:LYS:O	9:X:295:LYS:HD3	2.16	0.46
9:X:389:ASP:OD1	9:X:389:ASP:N	2.48	0.46
9:X:400:ALA:O	9:X:403:THR:OG1	2.33	0.46
10:Y:162:GLU:O	10:Y:165:LYS:HG3	2.15	0.46
10:Y:228:MET:HE1	10:Y:260:LEU:CB	2.44	0.46
11:Z:228:TYR:OH	12:a:340:VAL:HA	2.16	0.46
13:b:63:THR:O	13:b:64:LEU:C	2.58	0.46
13:b:107:MET:HB2	13:b:136:VAL:HG13	1.97	0.46
13:b:181:ASP:O	13:b:185:SER:N	2.44	0.46
15:d:80:CYS:HA	15:d:83:PHE:CD1	2.49	0.46
15:d:132:TYR:O	15:d:134:LYS:N	2.48	0.46
15:d:163:TYR:O	15:d:167:ILE:HG23	2.15	0.46
16:f:111:GLU:OE1	16:f:141:LYS:HE2	2.15	0.46
16:f:479:LEU:O	16:f:482:ILE:HG13	2.16	0.46
16:f:761:MET:HG2	16:f:858:LYS:HZ1	1.79	0.46
16:f:828:ARG:HD3	16:f:847:GLY:HA3	1.98	0.46
18:W:55:ARG:HB2	18:W:96:GLN:OE1	2.16	0.46
18:W:199:TYR:HE2	18:W:236:HIS:CG	2.33	0.46
18:W:272:LEU:HD11	18:W:328:LEU:HD12	1.98	0.46
18:W:302:TYR:CE2	18:W:328:LEU:HD21	2.47	0.46
19:e:34:GLU:O	19:e:35:ASP:HB3	2.14	0.46
19:e:59:GLU:CD	19:e:65:TYR:HB2	2.40	0.46
1:A:51:ASP:HB2	2:B:69:LYS:HE3	1.97	0.46
1:A:398:ARG:HB2	1:A:398:ARG:NH1	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:220:LYS:NZ	2:B:345:GLY:O	2.49	0.46
4:D:196:ILE:O	4:D:197:ASP:HB2	2.16	0.46
4:D:264:ILE:HB	4:D:309:MET:HG2	1.97	0.46
4:D:267:ILE:HG23	4:D:267:ILE:O	2.16	0.46
5:E:142:ILE:HA	5:E:183:LEU:HD21	1.98	0.46
5:E:317:ALA:HA	5:E:320:ILE:HG12	1.98	0.46
5:E:327:ASP:OD1	5:E:329:GLU:HB2	2.16	0.46
6:F:432:LYS:HD2	6:F:432:LYS:C	2.40	0.46
7:U:16:GLU:CD	7:U:19:LEU:HB2	2.41	0.46
8:V:360:TYR:O	8:V:364:THR:HG22	2.16	0.46
9:X:78:ASN:OD1	9:X:122:ARG:NH1	2.48	0.46
10:Y:24:PHE:C	10:Y:24:PHE:CD2	2.93	0.46
10:Y:164:ALA:HA	10:Y:168:ILE:HD11	1.97	0.46
11:Z:214:LYS:HB3	11:Z:220:LEU:HD23	1.98	0.46
13:b:22:LEU:HB3	13:b:23:PRO:CD	2.46	0.46
14:c:134:GLU:O	14:c:137:SER:O	2.33	0.46
15:d:19:CYS:CA	15:d:22:GLU:HB2	2.27	0.46
16:f:627:GLU:O	16:f:631:LYS:HE2	2.15	0.46
16:f:836:GLU:OE2	16:f:840:LEU:HD12	2.16	0.46
18:W:199:TYR:N	18:W:199:TYR:CD1	2.84	0.46
18:W:268:LYS:O	18:W:271:VAL:HG12	2.16	0.46
18:W:307:LYS:C	18:W:311:THR:HG23	2.41	0.46
22:I:6:ASP:OD1	22:I:7:SER:N	2.49	0.46
32:S:186:ASP:HB3	32:S:189:THR:HG22	1.98	0.46
1:A:73:ALA:HB3	1:A:78:TRP:CH2	2.50	0.46
1:A:433:ASN:HD21	24:K:82:ILE:HG21	1.80	0.46
2:B:250:VAL:HG11	2:B:255:LEU:HD11	1.98	0.46
3:C:28:ILE:CD1	4:D:44:TYR:HA	2.46	0.46
3:C:41:ASN:HD22	4:D:58:GLU:CD	2.23	0.46
3:C:340:ARG:HH21	10:Y:208:PHE:HE2	1.62	0.46
5:E:71:VAL:CG2	5:E:107:ILE:HD11	2.43	0.46
5:E:91:LYS:HB2	5:E:93:LYS:HD3	1.98	0.46
5:E:159:PHE:HA	5:E:162:VAL:CG1	2.46	0.46
6:F:370:SER:O	6:F:371:ARG:CG	2.63	0.46
7:U:82:LEU:CD1	7:U:130:LEU:HD22	2.29	0.46
7:U:878:LEU:HG	7:U:882:ALA:HB3	1.96	0.46
7:U:899:ARG:CD	7:U:921:ILE:HG22	2.46	0.46
9:X:77:LEU:CD2	9:X:85:ALA:HB1	2.46	0.46
10:Y:231:LEU:HB3	10:Y:234:PRO:CG	2.46	0.46
10:Y:286:TRP:O	10:Y:286:TRP:CG	2.69	0.46
11:Z:110:GLU:CD	11:Z:113:LYS:HZ1	2.23	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:127:LYS:HB3	11:Z:128:PRO:CD	2.42	0.46
12:a:7:PHE:CZ	12:a:56:LEU:HB3	2.51	0.46
13:b:26:LEU:O	13:b:27:GLN:C	2.58	0.46
13:b:137:ASN:HD21	13:b:167:GLY:HA3	1.81	0.46
16:f:170:TRP:HZ2	16:f:181:ARG:NE	2.14	0.46
16:f:635:LYS:HE3	16:f:778:LEU:HD11	1.98	0.46
16:f:809:ILE:HD11	16:f:855:GLN:O	2.15	0.46
18:W:251:TYR:O	18:W:251:TYR:CG	2.69	0.46
21:H:13:SER:OG	21:H:17:LYS:O	2.34	0.46
22:I:207:SER:O	22:I:208:ALA:HB3	2.15	0.46
28:O:39:SER:OG	28:O:41:ASN:OD1	2.34	0.46
38:O:301:LDZ:H32	38:O:301:LDZ:O34	2.16	0.46
29:P:141:CYS:SG	29:P:145:MET:HE2	2.56	0.46
22:i:66:TYR:CD2	22:i:87:THR:HG21	2.51	0.46
2:B:144:LEU:HD23	2:B:144:LEU:HA	1.72	0.46
2:B:361:LYS:HB3	2:B:384:ILE:CD1	2.45	0.46
3:C:43:ARG:HA	3:C:46:GLN:CG	2.45	0.46
3:C:89:VAL:HG21	3:C:92:GLU:HB2	1.98	0.46
3:C:187:LEU:C	3:C:188:LEU:HD23	2.41	0.46
3:C:239:ARG:HB3	3:C:239:ARG:CZ	2.45	0.46
4:D:103:VAL:HG12	4:D:113:VAL:HG11	1.97	0.46
4:D:326:ARG:O	4:D:327:LEU:C	2.58	0.46
4:D:355:SER:OG	4:D:356:GLU:N	2.47	0.46
5:E:175:PRO:CD	5:E:301:ILE:HD12	2.33	0.46
5:E:363:VAL:CG1	5:E:365:GLU:HB3	2.45	0.46
6:F:131:THR:C	6:F:132:TYR:HD2	2.24	0.46
6:F:171:ARG:CD	6:F:267:LEU:HD22	2.46	0.46
6:F:393:GLY:O	6:F:395:GLN:N	2.49	0.46
7:U:193:PHE:CD1	7:U:193:PHE:C	2.94	0.46
7:U:250:PHE:CE2	7:U:791:LEU:HD23	2.51	0.46
7:U:559:ARG:O	7:U:560:MET:HB3	2.15	0.46
7:U:685:GLN:HG2	7:U:729:GLY:CA	2.42	0.46
7:U:837:ALA:CA	7:U:840:LYS:HE3	2.46	0.46
8:V:282:ASN:ND2	10:Y:385:ARG:HD2	2.31	0.46
10:Y:233:ARG:N	10:Y:234:PRO:CD	2.78	0.46
12:a:142:LEU:HD11	12:a:152:HIS:CE1	2.51	0.46
13:b:125:VAL:HG13	13:b:126:LYS:HG3	1.96	0.46
15:d:52:ARG:C	15:d:54:ILE:N	2.72	0.46
16:f:95:PRO:HB3	16:f:133:MET:CE	2.40	0.46
16:f:174:ASP:H	16:f:178:LYS:NZ	2.13	0.46
16:f:503:PRO:O	16:f:507:ASP:HB2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:725:SER:HA	16:f:728:ALA:HB3	1.98	0.46
18:W:143:ALA:O	18:W:147:LYS:HG2	2.15	0.46
18:W:169:LEU:HD23	18:W:189:GLN:OE1	2.16	0.46
18:W:251:TYR:O	18:W:254:PRO:HD2	2.15	0.46
22:I:201:MET:SD	22:I:206:LEU:HD23	2.56	0.46
25:L:19:ILE:HD13	25:L:19:ILE:N	2.30	0.46
26:M:202:ASP:OD2	26:M:202:ASP:C	2.57	0.46
31:R:5:LEU:C	31:R:5:LEU:HD23	2.41	0.46
1:A:70:THR:OG1	2:B:164:MET:HE3	2.16	0.46
1:A:95:VAL:HB	1:A:144:ARG:NH2	2.29	0.46
2:B:194:ILE:O	2:B:197:ILE:HG22	2.16	0.46
2:B:319:PHE:C	2:B:319:PHE:CD2	2.92	0.46
4:D:78:GLU:OE2	14:c:152:LYS:NZ	2.32	0.46
5:E:50:LEU:O	5:E:50:LEU:HD23	2.16	0.46
5:E:146:ARG:HD2	5:E:150:GLU:OE1	2.16	0.46
6:F:125:LYS:NZ	6:F:131:THR:OG1	2.41	0.46
7:U:82:LEU:HB3	7:U:129:ARG:HH22	1.80	0.46
7:U:542:GLU:HG3	7:U:546:ARG:NH2	2.24	0.46
7:U:714:SER:O	7:U:717:ILE:HG13	2.16	0.46
8:V:82:LEU:HD23	8:V:94:VAL:HG12	1.98	0.46
8:V:243:ASP:OD2	8:V:246:GLY:HA3	2.16	0.46
10:Y:262:SER:OG	10:Y:271:PHE:HA	2.16	0.46
10:Y:307:LEU:CD1	10:Y:323:PHE:HE1	2.29	0.46
11:Z:236:LEU:HD23	12:a:335:TRP:HB3	1.98	0.46
11:Z:259:VAL:CG2	14:c:295:ASN:HB3	2.45	0.46
13:b:8:VAL:O	13:b:52:ILE:N	2.49	0.46
15:d:63:ILE:C	15:d:65:ARG:H	2.23	0.46
15:d:166:PHE:O	15:d:169:ILE:N	2.49	0.46
16:f:14:GLN:C	16:f:17:PRO:HD2	2.41	0.46
16:f:47:GLU:HG2	16:f:124:ASP:HB3	1.97	0.46
16:f:407:MET:CE	16:f:440:ILE:CD1	2.94	0.46
16:f:513:GLU:O	16:f:517:VAL:HG23	2.15	0.46
16:f:632:LYS:HG3	16:f:633:GLU:N	2.27	0.46
16:f:637:LYS:HE3	16:f:655:LEU:CD1	2.42	0.46
18:W:77:ALA:HB3	18:W:79:GLU:CD	2.41	0.46
18:W:334:GLU:OE1	18:W:337:ALA:HA	2.16	0.46
28:o:50:ALA:HA	38:o:301:LDZ:H19	1.98	0.46
1:A:45:ILE:HD13	2:B:62:LEU:HD13	1.98	0.45
1:A:122:VAL:HB	6:F:88:TYR:HD1	1.80	0.45
1:A:166:VAL:HG23	1:A:167:GLU:N	2.31	0.45
2:B:136:LEU:HD12	2:B:136:LEU:H	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:155:LYS:HE2	2:B:155:LYS:HB2	1.87	0.45
3:C:305:LEU:C	3:C:306:LEU:HD12	2.41	0.45
4:D:96:VAL:HG12	4:D:97:ASP:N	2.27	0.45
4:D:370:ILE:HG22	4:D:371:SER:N	2.31	0.45
4:D:392:TYR:CD1	4:D:392:TYR:C	2.94	0.45
5:E:165:ILE:O	5:E:168:LYS:HG2	2.16	0.45
5:E:236:ASP:C	5:E:282:PRO:HG3	2.41	0.45
6:F:162:GLU:O	6:F:162:GLU:HG2	2.15	0.45
6:F:209:LYS:HZ3	6:F:209:LYS:HB2	1.81	0.45
7:U:221:ILE:HG23	7:U:256:ALA:HB2	1.98	0.45
8:V:79:VAL:HA	8:V:82:LEU:HD12	1.97	0.45
8:V:238:ALA:O	8:V:241:ARG:HG2	2.15	0.45
8:V:254:LEU:HD13	8:V:270:LEU:HD21	1.99	0.45
9:X:160:MET:HB2	9:X:160:MET:HE2	1.80	0.45
9:X:233:TYR:CA	9:X:254:MET:CE	2.93	0.45
10:Y:50:MET:HE3	10:Y:70:LEU:HB2	1.98	0.45
10:Y:205:VAL:HG23	10:Y:205:VAL:O	2.15	0.45
12:a:145:LEU:HD23	12:a:145:LEU:HA	1.74	0.45
13:b:49:VAL:O	13:b:64:LEU:HA	2.16	0.45
13:b:51:LEU:O	13:b:52:ILE:HG13	2.16	0.45
15:d:62:SER:HB2	15:d:67:ASP:O	2.17	0.45
15:d:101:LEU:O	15:d:104:LEU:N	2.49	0.45
16:f:45:LEU:CG	16:f:54:ASP:OD1	2.62	0.45
16:f:333:LEU:CD2	16:f:810:ILE:HD12	2.40	0.45
16:f:407:MET:HE2	16:f:407:MET:HB2	1.86	0.45
16:f:462:ALA:C	16:f:485:LEU:HD21	2.41	0.45
16:f:592:ASN:O	16:f:595:VAL:HG12	2.16	0.45
16:f:617:SER:HB3	16:f:632:LYS:HZ3	1.77	0.45
16:f:677:HIS:HB2	16:f:781:TYR:CE2	2.51	0.45
31:R:51:ALA:HB2	32:s:127:VAL:HG23	1.97	0.45
27:n:15:LEU:HD23	27:n:45:CYS:SG	2.56	0.45
29:p:58:ASP:OD1	30:q:93:ARG:NH2	2.49	0.45
31:r:177:LEU:HD23	31:r:188:VAL:HG21	1.97	0.45
33:t:92:LEU:HD21	33:t:110:MET:HG3	1.98	0.45
1:A:43:ARG:HA	1:A:43:ARG:NE	2.32	0.45
1:A:125:LEU:HD22	1:A:149:ILE:HB	1.98	0.45
1:A:326:THR:O	1:A:326:THR:OG1	2.26	0.45
2:B:110:GLY:O	2:B:150:VAL:HG12	2.17	0.45
3:C:399:MET:O	3:C:403:LYS:N	2.37	0.45
4:D:170:MET:HA	4:D:340:GLN:HE22	1.82	0.45
4:D:392:TYR:HB2	5:E:161:ARG:NH2	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:229:ILE:N	5:E:229:ILE:HD12	2.31	0.45
6:F:60:LEU:O	6:F:65:GLU:HB2	2.16	0.45
6:F:406:ILE:HD13	6:F:410:ARG:HH21	1.82	0.45
6:F:427:VAL:O	6:F:427:VAL:HG22	2.17	0.45
7:U:121:GLY:HA2	7:U:123:LYS:NZ	2.30	0.45
7:U:190:ASN:OD1	7:U:190:ASN:N	2.50	0.45
7:U:234:GLU:O	7:U:237:VAL:HG22	2.16	0.45
7:U:520:MET:HE3	7:U:520:MET:HB2	1.75	0.45
7:U:543:LYS:HA	7:U:546:ARG:HB3	1.97	0.45
7:U:681:ASN:HD21	14:c:183:HIS:HE1	1.63	0.45
7:U:684:ARG:O	7:U:688:LEU:HD13	2.16	0.45
8:V:174:PHE:HA	8:V:177:ASN:ND2	2.32	0.45
8:V:477:HIS:CE1	15:d:249:TYR:HE1	2.34	0.45
9:X:183:LEU:HD21	9:X:221:GLU:HA	1.98	0.45
9:X:240:ASP:O	9:X:242:ILE:HG12	2.17	0.45
10:Y:191:ILE:O	10:Y:191:ILE:HG23	2.16	0.45
12:a:112:ILE:CD1	12:a:151:VAL:HG11	2.42	0.45
12:a:341:LEU:HG	12:a:345:GLN:CB	2.33	0.45
12:a:343:LEU:HD22	12:a:343:LEU:N	2.30	0.45
12:a:366:LEU:O	12:a:366:LEU:HD12	2.16	0.45
15:d:105:PHE:HA	15:d:108:SER:CB	2.44	0.45
16:f:310:ASP:OD1	16:f:310:ASP:N	2.50	0.45
16:f:643:PRO:O	16:f:646:MET:N	2.36	0.45
18:W:19:ASP:HA	18:W:59:ASP:OD2	2.16	0.45
18:W:112:VAL:HG23	18:W:116:THR:HB	1.98	0.45
18:W:182:ARG:NE	18:W:182:ARG:CA	2.79	0.45
1:A:62:LEU:CD2	2:B:79:ILE:HD11	2.43	0.45
1:A:138:MET:SD	1:A:140:VAL:HG12	2.56	0.45
1:A:277:ILE:CG1	1:A:319:MET:HE2	2.47	0.45
1:A:405:THR:HG22	1:A:408:ASP:CG	2.42	0.45
2:B:105:THR:O	2:B:106:PRO:C	2.59	0.45
2:B:378:VAL:O	2:B:378:VAL:HG12	2.16	0.45
2:B:407:LEU:HD21	3:C:174:LEU:CG	2.47	0.45
3:C:80:MET:O	3:C:81:ASP:C	2.59	0.45
3:C:229:ARG:HA	3:C:232:ARG:NH1	2.31	0.45
4:D:228:ILE:HD13	4:D:262:ILE:HD13	1.99	0.45
4:D:292:LEU:O	4:D:296:MET:HG3	2.16	0.45
7:U:423:MET:HG3	7:U:446:LEU:HB2	1.98	0.45
7:U:580:ARG:HD3	7:U:613:ASP:O	2.16	0.45
7:U:712:LEU:C	7:U:712:LEU:HD23	2.41	0.45
8:V:182:LYS:N	8:V:182:LYS:HD2	2.30	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:247:ALA:HA	9:X:250:SER:OG	2.16	0.45
13:b:33:VAL:HA	13:b:36:VAL:HG12	1.97	0.45
13:b:78:VAL:O	13:b:79:GLN:C	2.58	0.45
13:b:160:LEU:O	13:b:161:ASN:HB2	2.15	0.45
14:c:49:VAL:HG22	14:c:147:PRO:HB2	1.98	0.45
14:c:122:LEU:HG	14:c:160:PHE:CD2	2.52	0.45
16:f:29:SER:O	16:f:33:ARG:HG2	2.17	0.45
16:f:65:GLU:HA	16:f:97:LYS:HZ3	1.76	0.45
16:f:330:PHE:CD1	16:f:333:LEU:HD11	2.46	0.45
16:f:420:TRP:N	16:f:420:TRP:HD1	2.15	0.45
16:f:456:ARG:NH2	16:f:491:GLY:HA3	2.31	0.45
16:f:625:LYS:NZ	16:f:626:GLU:O	2.49	0.45
16:f:637:LYS:HE2	16:f:674:THR:CA	2.46	0.45
19:e:46:ASP:OD1	19:e:46:ASP:N	2.41	0.45
1:A:125:LEU:HD13	1:A:126:SER:N	2.30	0.45
2:B:398:ILE:O	2:B:402:ALA:HB2	2.17	0.45
3:C:170:LYS:O	3:C:171:HIS:HD2	1.99	0.45
3:C:277:LEU:HD11	3:C:304:ALA:HB3	1.98	0.45
5:E:49:ALA:HB1	6:F:136:VAL:HG11	1.97	0.45
5:E:355:ILE:CD1	6:F:211:LYS:HG3	2.43	0.45
5:E:363:VAL:HG12	5:E:365:GLU:N	2.31	0.45
6:F:92:ASN:HD21	6:F:150:LEU:HD13	1.79	0.45
6:F:96:LEU:HD12	6:F:96:LEU:HA	1.69	0.45
6:F:132:TYR:CE1	6:F:158:TYR:CE2	3.05	0.45
7:U:221:ILE:HG21	7:U:255:SER:OG	2.17	0.45
7:U:242:LEU:HD12	7:U:246:TYR:OH	2.17	0.45
7:U:701:ILE:HG13	7:U:702:THR:N	2.31	0.45
7:U:719:ASP:OD1	7:U:720:LYS:N	2.50	0.45
8:V:91:PRO:CA	8:V:94:VAL:HG22	2.47	0.45
8:V:218:TYR:HD2	8:V:227:VAL:CG1	2.25	0.45
8:V:424:GLN:NE2	8:V:425:LYS:HD3	2.31	0.45
11:Z:169:GLU:O	11:Z:172:VAL:HG22	2.17	0.45
12:a:35:HIS:CE1	13:b:15:TYR:HE1	2.34	0.45
14:c:234:TYR:HD2	18:W:425:LEU:HB3	1.82	0.45
15:d:1:MET:SD	15:d:1:MET:N	2.88	0.45
16:f:8:LYS:HD3	16:f:8:LYS:N	2.31	0.45
16:f:156:HIS:HA	16:f:160:ARG:HH12	1.82	0.45
16:f:447:ALA:HA	16:f:450:ILE:HD12	1.98	0.45
16:f:655:LEU:HD22	16:f:674:THR:CB	2.47	0.45
16:f:673:ARG:NH1	16:f:785:ARG:O	2.47	0.45
16:f:787:LEU:N	16:f:787:LEU:HD12	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:g:9:PHE:O	20:g:15:ILE:HD11	2.15	0.45
1:A:95:VAL:CB	1:A:144:ARG:HH12	2.20	0.45
1:A:428:ARG:HH12	23:J:132:LEU:CD1	2.30	0.45
4:D:102:ILE:O	4:D:102:ILE:HG13	2.08	0.45
4:D:162:VAL:O	4:D:163:MET:HE2	2.15	0.45
5:E:55:GLN:HE22	6:F:135:PRO:HG3	1.82	0.45
5:E:85:ARG:HD2	5:E:85:ARG:O	2.16	0.45
5:E:153:LEU:CD1	5:E:227:PRO:HG2	2.47	0.45
5:E:231:PHE:CE2	5:E:233:ASP:HB3	2.51	0.45
6:F:358:ASN:O	6:F:362:ARG:NH2	2.50	0.45
7:U:35:TRP:CA	7:U:38:ILE:HG22	2.39	0.45
7:U:339:LEU:HD13	7:U:414:GLY:O	2.16	0.45
7:U:529:ILE:HA	7:U:532:MET:SD	2.56	0.45
7:U:650:TYR:O	7:U:651:GLY:C	2.59	0.45
7:U:708:GLN:O	7:U:711:GLN:HG2	2.16	0.45
7:U:899:ARG:HD3	7:U:921:ILE:HG21	1.98	0.45
8:V:175:MET:HA	8:V:178:SER:CB	2.47	0.45
9:X:58:ALA:O	9:X:99:MET:HE1	2.17	0.45
10:Y:94:ASN:O	10:Y:95:LEU:HD22	2.17	0.45
10:Y:230:ALA:C	10:Y:231:LEU:HD22	2.42	0.45
11:Z:26:ILE:O	11:Z:30:GLY:N	2.49	0.45
11:Z:183:THR:HA	11:Z:189:GLN:NE2	2.28	0.45
13:b:115:SER:HG	13:b:116:PRO:HD2	1.77	0.45
14:c:232:GLN:HE22	14:c:237:HIS:CA	2.30	0.45
14:c:243:SER:HA	14:c:246:LYS:NZ	2.31	0.45
16:f:126:ILE:O	16:f:173:LEU:HD13	2.16	0.45
16:f:637:LYS:HZ1	16:f:655:LEU:HD21	1.82	0.45
16:f:638:ASP:O	16:f:639:LYS:HG2	2.16	0.45
16:f:690:VAL:HG12	16:f:694:LEU:HD13	1.98	0.45
16:f:827:PRO:HA	16:f:861:THR:HG22	1.97	0.45
18:W:160:LYS:HA	18:W:163:ALA:HB3	1.99	0.45
25:L:26:MET:HA	25:L:149:PRO:HG2	1.99	0.45
1:A:51:ASP:CB	2:B:69:LYS:HE3	2.47	0.45
1:A:277:ILE:HG12	1:A:319:MET:HE2	1.98	0.45
2:B:429:LYS:NZ	3:C:306:LEU:HD23	2.29	0.45
2:B:431:GLN:CD	2:B:432:GLU:H	2.25	0.45
4:D:70:LYS:HG3	11:Z:184:VAL:CG1	2.44	0.45
5:E:158:LEU:HD13	18:W:204:ILE:HG23	1.99	0.45
6:F:132:TYR:CD1	6:F:158:TYR:CD2	3.04	0.45
6:F:208:HIS:HB2	6:F:211:LYS:NZ	2.31	0.45
7:U:837:ALA:HA	7:U:840:LYS:CE	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:842:LYS:HD2	7:U:843:GLU:N	2.31	0.45
8:V:276:PHE:HD1	8:V:277:PRO:CD	2.24	0.45
8:V:352:SER:OG	8:V:353:LEU:HG	2.17	0.45
8:V:416:ARG:NH2	10:Y:348:ASP:OD2	2.50	0.45
9:X:255:LEU:HA	9:X:255:LEU:HD13	1.71	0.45
10:Y:15:PRO:HB2	10:Y:150:PHE:CD2	2.51	0.45
10:Y:50:MET:HE2	10:Y:50:MET:CA	2.47	0.45
10:Y:314:LEU:HD12	10:Y:314:LEU:N	2.31	0.45
12:a:70:ARG:NH2	13:b:24:THR:HG22	2.31	0.45
12:a:188:LEU:HD12	12:a:189:PRO:HD2	1.99	0.45
12:a:249:GLN:N	12:a:249:GLN:OE1	2.50	0.45
12:a:311:VAL:CG1	12:a:324:ILE:HD13	2.47	0.45
12:a:341:LEU:HG	12:a:345:GLN:OE1	2.17	0.45
13:b:124:LEU:HD22	13:b:159:THR:HG21	1.98	0.45
14:c:40:LYS:HD2	14:c:72:VAL:O	2.17	0.45
14:c:188:SER:OG	14:c:189:ILE:N	2.48	0.45
15:d:101:LEU:HD11	15:d:166:PHE:HD2	1.82	0.45
15:d:122:LEU:HD13	15:d:133:ILE:HG21	1.98	0.45
16:f:77:GLU:OE1	16:f:77:GLU:O	2.35	0.45
16:f:162:LEU:C	16:f:165:GLU:HG3	2.40	0.45
16:f:634:LYS:HA	16:f:674:THR:HG22	1.97	0.45
16:f:708:ASP:OD1	16:f:708:ASP:C	2.59	0.45
18:W:67:LEU:O	18:W:71:VAL:HG23	2.16	0.45
18:W:121:LYS:O	18:W:124:LEU:HG	2.17	0.45
18:W:271:VAL:CG1	18:W:272:LEU:HD22	2.47	0.45
20:G:10:ASP:OD2	20:G:11:ARG:N	2.50	0.45
23:j:119:THR:HG22	23:j:126:PRO:HB3	1.98	0.45
28:o:79:THR:HG22	28:o:83:MET:HE3	1.98	0.45
28:o:188:ARG:HB3	28:o:189:PRO:CD	2.47	0.45
1:A:33:LEU:HD12	1:A:33:LEU:HA	1.77	0.45
1:A:59:ILE:HG23	1:A:60:ASN:N	2.32	0.45
1:A:73:ALA:HB2	2:B:140:ASP:CB	2.46	0.45
1:A:99:THR:CB	1:A:115:VAL:HA	2.47	0.45
1:A:120:LYS:H	6:F:127:SER:CB	2.30	0.45
1:A:417:ILE:O	1:A:419:SER:N	2.49	0.45
1:A:428:ARG:NH1	23:J:132:LEU:HD13	2.32	0.45
2:B:54:PRO:HG3	2:B:60:LEU:CG	2.46	0.45
2:B:81:ASN:CB	7:U:828:VAL:HG11	2.46	0.45
2:B:176:VAL:HG23	2:B:176:VAL:O	2.16	0.45
3:C:81:ASP:O	3:C:82:LYS:C	2.60	0.45
3:C:147:THR:O	3:C:149:GLU:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:196:LYS:C	3:C:198:LEU:N	2.66	0.45
4:D:157:ASP:H	4:D:159:LYS:HZ2	1.64	0.45
4:D:196:ILE:HD13	4:D:196:ILE:HA	1.81	0.45
4:D:363:TYR:OH	4:D:400:GLU:HB3	2.17	0.45
6:F:205:PRO:HA	6:F:212:PHE:CE1	2.52	0.45
7:U:20:LYS:HE3	7:U:54:PHE:CD1	2.52	0.45
7:U:212:ASP:HB3	7:U:215:ASN:HB2	1.99	0.45
7:U:403:THR:O	7:U:777:HIS:HE1	2.00	0.45
7:U:446:LEU:HD23	7:U:447:GLY:N	2.31	0.45
8:V:121:PHE:HB3	8:V:128:ARG:HD2	1.99	0.45
9:X:356:LEU:HD23	9:X:356:LEU:HA	1.85	0.45
10:Y:27:SER:OG	10:Y:28:LEU:HD12	2.16	0.45
10:Y:129:ASP:OD1	10:Y:130:LYS:N	2.50	0.45
10:Y:382:LYS:HA	10:Y:385:ARG:HH12	1.78	0.45
11:Z:90:ARG:NH1	11:Z:91:ILE:HG22	2.30	0.45
13:b:2:VAL:HG23	13:b:2:VAL:O	2.17	0.45
13:b:132:LYS:HZ3	13:b:160:LEU:HD12	1.81	0.45
13:b:140:ILE:HG13	13:b:170:LEU:HD12	1.99	0.45
14:c:138:GLU:OE1	14:c:139:ARG:HB2	2.17	0.45
15:d:163:TYR:C	15:d:165:PHE:N	2.71	0.45
16:f:94:LYS:CD	16:f:109:ILE:HB	2.46	0.45
16:f:294:MET:O	16:f:294:MET:CE	2.64	0.45
16:f:713:PHE:CD2	16:f:749:ALA:HB1	2.51	0.45
16:f:766:GLN:HE21	16:f:769:THR:HG1	1.64	0.45
16:f:812:GLY:HA3	16:f:879:ARG:HH22	1.82	0.45
18:W:207:LYS:HA	18:W:207:LYS:HD2	1.70	0.45
18:W:267:LEU:HD23	18:W:267:LEU:HA	1.75	0.45
18:W:278:PRO:HG3	18:W:357:ARG:CZ	2.47	0.45
18:W:407:ASP:C	18:W:407:ASP:OD1	2.59	0.45
23:j:42:VAL:CG1	23:j:208:LEU:HD21	2.47	0.45
28:o:30:LYS:NZ	29:p:150:GLU:OE2	2.50	0.45
2:B:206:THR:HG22	2:B:207:HIS:CE1	2.51	0.45
2:B:250:VAL:CG1	2:B:255:LEU:HD11	2.47	0.45
2:B:278:ALA:O	2:B:279:PRO:C	2.59	0.45
3:C:248:MET:HE1	3:C:254:ILE:CD1	2.38	0.45
4:D:76:GLN:O	4:D:79:VAL:HG12	2.17	0.45
4:D:164:TYR:CD1	4:D:218:ALA:HB1	2.52	0.45
7:U:221:ILE:HD13	7:U:255:SER:HB3	1.99	0.45
7:U:233:LEU:HD22	7:U:268:LEU:CD1	2.47	0.45
7:U:250:PHE:HE2	7:U:791:LEU:HD23	1.81	0.45
7:U:357:LYS:CB	7:U:392:TRP:CZ3	2.96	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:414:GLY:HA2	7:U:416:GLU:OE2	2.17	0.45
7:U:597:LYS:HA	7:U:600:ARG:NH2	2.32	0.45
7:U:844:LYS:HA	7:U:844:LYS:HD2	1.75	0.45
7:U:904:LYS:HG3	7:U:905:PRO:O	2.16	0.45
8:V:411:SER:HB2	8:V:447:ILE:CG1	2.43	0.45
9:X:77:LEU:HD11	9:X:89:VAL:HB	1.99	0.45
9:X:335:LEU:HD12	9:X:354:ILE:HG13	1.99	0.45
9:X:344:ARG:NH2	18:W:407:ASP:OD2	2.49	0.45
10:Y:221:THR:O	10:Y:224:VAL:HG12	2.17	0.45
11:Z:114:ARG:HG3	11:Z:114:ARG:O	2.16	0.45
12:a:65:SER:HA	12:a:68:GLU:CA	2.46	0.45
12:a:205:LEU:HD12	12:a:268:LEU:HD11	1.97	0.45
13:b:93:ALA:O	13:b:97:LEU:HG	2.16	0.45
13:b:98:LYS:HD3	13:b:98:LYS:C	2.42	0.45
14:c:145:VAL:HG22	14:c:157:ILE:CD1	2.46	0.45
14:c:255:TYR:HE1	14:c:280:PRO:CG	2.30	0.45
15:d:31:LEU:O	15:d:32:GLU:C	2.60	0.45
16:f:171:GLN:CD	16:f:172:GLU:H	2.24	0.45
16:f:550:LEU:HA	16:f:587:PHE:CE2	2.52	0.45
16:f:640:LYS:HE3	16:f:651:GLY:HA3	1.98	0.45
16:f:733:GLY:H	16:f:737:ASN:HB3	1.82	0.45
16:f:794:ALA:HA	16:f:797:LEU:HD11	1.99	0.45
18:W:116:THR:OG1	18:W:119:PRO:HD3	2.17	0.45
18:W:187:LEU:HD21	18:W:225:LYS:CB	2.42	0.45
22:I:79:ILE:HD12	22:I:79:ILE:H	1.82	0.45
25:L:212:ILE:HD12	25:L:229:VAL:HG13	1.99	0.45
29:P:69:ARG:NH2	29:P:96:GLU:OE1	2.50	0.45
32:S:131:GLN:HB3	38:r:301:LDZ:H4	1.98	0.45
27:n:15:LEU:HD21	27:n:102:ALA:HB3	1.98	0.45
33:t:43:MET:SD	33:t:64:LYS:HG2	2.57	0.45
1:A:62:LEU:HD12	1:A:62:LEU:O	2.17	0.45
2:B:209:GLU:O	2:B:213:GLU:HG2	2.16	0.45
2:B:438:LEU:HD12	2:B:438:LEU:HA	1.78	0.45
3:C:299:ASP:C	3:C:299:ASP:OD1	2.59	0.45
3:C:404:LEU:HD12	3:C:404:LEU:HA	1.72	0.45
5:E:141:GLN:H	5:E:141:GLN:CD	2.19	0.45
6:F:352:ILE:HG13	6:F:354:PHE:CE1	2.52	0.45
7:U:236:LEU:HD12	7:U:241:ASN:H	1.82	0.45
7:U:406:ALA:CB	7:U:777:HIS:ND1	2.80	0.45
7:U:479:LEU:HD23	7:U:479:LEU:HA	1.80	0.45
7:U:832:VAL:O	7:U:833:LEU:HD23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:357:LEU:O	8:V:358:MET:C	2.59	0.45
9:X:74:ARG:N	9:X:75:PRO:HD2	2.31	0.45
10:Y:57:LEU:CD2	10:Y:63:TRP:HA	2.47	0.45
10:Y:231:LEU:HB3	10:Y:234:PRO:CD	2.47	0.45
11:Z:6:VAL:HB	11:Z:43:TRP:CH2	2.51	0.45
11:Z:68:TRP:HE3	11:Z:69:PHE:N	2.14	0.45
11:Z:278:ASN:O	11:Z:282:ASN:ND2	2.50	0.45
12:a:274:LEU:HD23	12:a:310:LEU:HD21	1.99	0.45
14:c:75:MET:HG3	14:c:86:ALA:O	2.17	0.45
15:d:146:GLY:O	15:d:148:TYR:N	2.42	0.45
16:f:293:GLN:O	16:f:295:ALA:N	2.42	0.45
18:W:227:TYR:CD2	18:W:250:ILE:HG22	2.52	0.45
18:W:263:TRP:HZ2	18:W:295:LYS:HB2	1.81	0.45
18:W:307:LYS:C	18:W:310:THR:HG22	2.42	0.45
19:e:31:ASP:OD1	19:e:31:ASP:N	2.49	0.45
1:A:215:PHE:CE2	1:A:340:LYS:HB3	2.52	0.45
2:B:343:ARG:HH12	2:B:345:GLY:HA3	1.81	0.45
3:C:251:ILE:HG22	3:C:295:THR:HB	1.98	0.45
3:C:347:ILE:HD13	3:C:383:PHE:CD2	2.52	0.45
3:C:368:MET:HE1	4:D:191:TYR:OH	2.17	0.45
6:F:292:GLY:HA3	6:F:310:MET:HE3	1.98	0.45
7:U:369:THR:CA	7:U:731:ILE:HD11	2.46	0.45
7:U:633:CYS:N	7:U:634:PRO:HD2	2.32	0.45
7:U:672:LEU:HD23	7:U:672:LEU:C	2.42	0.45
7:U:786:THR:HG21	7:U:885:MET:HE2	1.99	0.45
8:V:347:GLN:HA	8:V:350:GLN:HG2	1.99	0.45
8:V:411:SER:CB	8:V:447:ILE:HG12	2.42	0.45
9:X:264:PRO:CG	9:X:295:LYS:HE2	2.47	0.45
9:X:282:ARG:HG2	9:X:312:GLU:OE2	2.17	0.45
10:Y:14:ASN:ND2	10:Y:146:ARG:HD2	2.32	0.45
10:Y:46:ARG:O	10:Y:47:ASP:HB2	2.16	0.45
10:Y:65:ILE:O	10:Y:69:LEU:HD11	2.17	0.45
10:Y:275:LEU:HD12	10:Y:278:VAL:HG11	1.99	0.45
13:b:119:ASP:HB3	13:b:123:ASP:OD2	2.17	0.45
14:c:28:ALA:HB3	14:c:180:ASN:HD21	1.82	0.45
14:c:255:TYR:HD1	14:c:279:ASP:HB2	1.82	0.45
15:d:79:LYS:O	15:d:83:PHE:N	2.38	0.45
15:d:191:PHE:CD1	15:d:192:THR:HG22	2.52	0.45
16:f:240:VAL:N	16:f:241:PRO:CD	2.80	0.45
16:f:456:ARG:HH21	16:f:491:GLY:HA3	1.82	0.45
16:f:512:MET:SD	16:f:555:ALA:HB2	2.56	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:637:LYS:CE	16:f:655:LEU:HD11	2.44	0.45
16:f:698:SER:N	16:f:705:ASN:HD21	2.15	0.45
16:f:877:GLY:O	16:f:878:GLU:HB2	2.15	0.45
22:i:119:GLN:NE2	23:j:79:ASP:OD1	2.45	0.45
31:r:3:THR:N	31:r:18:ASP:OD1	2.42	0.45
1:A:325:ASP:OD2	1:A:326:THR:N	2.50	0.44
2:B:121:ALA:CB	2:B:135:ILE:HD13	2.45	0.44
2:B:364:ILE:CA	2:B:367:ILE:HG22	2.47	0.44
2:B:400:THR:HG23	2:B:401:GLU:H	1.81	0.44
4:D:151:ILE:O	4:D:151:ILE:CG2	2.64	0.44
5:E:140:GLU:OE1	5:E:140:GLU:C	2.60	0.44
5:E:280:ASN:OD1	5:E:280:ASN:N	2.50	0.44
5:E:321:THR:HG21	6:F:215:LEU:HD23	1.98	0.44
6:F:143:GLU:O	6:F:145:LEU:N	2.45	0.44
6:F:189:GLY:O	6:F:191:LEU:N	2.50	0.44
6:F:227:GLY:N	6:F:233:LYS:NZ	2.65	0.44
6:F:321:GLN:HG2	6:F:322:PRO:HD2	1.99	0.44
6:F:388:THR:O	6:F:388:THR:OG1	2.35	0.44
7:U:177:LEU:CD2	7:U:204:ILE:HD11	2.47	0.44
7:U:342:LEU:HD12	7:U:342:LEU:HA	1.81	0.44
7:U:560:MET:SD	7:U:590:TYR:CD2	3.11	0.44
7:U:790:GLY:H	7:U:880:ASN:HD21	1.64	0.44
8:V:313:LEU:HD22	8:V:328:VAL:HG12	1.99	0.44
9:X:308:ASP:C	9:X:308:ASP:OD2	2.60	0.44
10:Y:74:LYS:CG	10:Y:75:LYS:N	2.80	0.44
10:Y:155:ASP:OD1	10:Y:155:ASP:N	2.48	0.44
10:Y:196:GLN:O	10:Y:200:LEU:HB2	2.17	0.44
12:a:35:HIS:CE1	13:b:15:TYR:CE1	3.05	0.44
12:a:166:ILE:HG23	12:a:167:GLY:N	2.32	0.44
15:d:79:LYS:O	15:d:83:PHE:HB3	2.16	0.44
16:f:29:SER:OG	16:f:33:ARG:NH1	2.50	0.44
16:f:265:ALA:HB1	16:f:267:ARG:NH1	2.32	0.44
16:f:300:ARG:CB	16:f:320:ILE:HG21	2.47	0.44
16:f:549:GLU:C	16:f:552:ASP:HB2	2.43	0.44
16:f:815:HIS:CD2	16:f:821:LEU:HD11	2.51	0.44
18:W:49:SER:HA	18:W:52:LYS:HE3	1.99	0.44
18:W:309:PHE:CE1	18:W:358:VAL:HG22	2.52	0.44
18:W:361:HIS:O	18:W:365:ILE:HG12	2.17	0.44
20:G:167:ALA:CB	20:G:175:SER:HB2	2.47	0.44
2:B:48:LYS:HZ1	16:f:653:ALA:HB1	1.82	0.44
2:B:361:LYS:O	2:B:364:ILE:HG23	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:71:SER:HB2	4:D:112:TYR:CB	2.41	0.44
3:C:184:LYS:O	3:C:184:LYS:HG2	2.17	0.44
3:C:301:LEU:HD22	3:C:306:LEU:HD11	1.99	0.44
3:C:371:LEU:HD21	4:D:183:LEU:HD13	1.98	0.44
5:E:252:GLU:HA	5:E:255:ARG:HG2	1.98	0.44
5:E:271:HIS:CG	5:E:272:ARG:N	2.84	0.44
5:E:293:GLY:O	5:E:294:ARG:HB3	2.17	0.44
6:F:239:ALA:O	6:F:243:GLN:HG3	2.17	0.44
7:U:612:ASP:HB3	7:U:647:HIS:CE1	2.52	0.44
7:U:665:ASN:OD1	7:U:666:LYS:N	2.49	0.44
8:V:443:ARG:NH2	15:d:180:GLY:C	2.75	0.44
8:V:463:MET:HG2	8:V:464:ILE:N	2.22	0.44
9:X:138:PHE:C	9:X:138:PHE:CD1	2.95	0.44
10:Y:181:LYS:HE3	10:Y:213:LEU:HD23	2.00	0.44
10:Y:182:VAL:HG22	10:Y:212:GLU:OE2	2.16	0.44
11:Z:86:ASN:OD1	11:Z:87:ALA:N	2.50	0.44
11:Z:131:LEU:HB2	11:Z:133:LEU:CD2	2.47	0.44
11:Z:144:VAL:CG2	11:Z:145:HIS:H	2.29	0.44
11:Z:224:HIS:CE1	12:a:340:VAL:HG22	2.51	0.44
12:a:65:SER:HA	12:a:68:GLU:HA	1.98	0.44
12:a:65:SER:O	12:a:68:GLU:HB3	2.17	0.44
13:b:166:THR:HG22	13:b:169:HIS:HA	1.99	0.44
18:W:171:VAL:O	18:W:175:GLY:N	2.50	0.44
18:W:268:LYS:HE3	18:W:336:PRO:HG2	1.98	0.44
18:W:384:LEU:HD12	18:W:389:SER:HA	1.98	0.44
24:K:225:ASN:OD1	24:K:225:ASN:N	2.50	0.44
27:N:86:GLU:OE1	27:N:86:GLU:HA	2.16	0.44
30:Q:172:ILE:O	30:q:174:ASN:N	2.47	0.44
27:n:5:MET:HG3	27:n:128:ILE:HG22	1.98	0.44
1:A:25:LEU:HD13	1:A:30:ILE:HD11	1.98	0.44
1:A:95:VAL:HG13	2:B:133:VAL:HA	2.00	0.44
2:B:86:LYS:HD2	16:f:621:ASP:CG	2.43	0.44
2:B:173:VAL:O	2:B:173:VAL:HG22	2.17	0.44
3:C:211:PHE:HZ	3:C:247:PHE:HB2	1.81	0.44
5:E:340:GLY:HA2	5:E:343:LEU:HD12	2.00	0.44
6:F:146:LYS:HG3	6:F:147:PRO:CD	2.48	0.44
7:U:133:ILE:O	7:U:137:MET:HG2	2.18	0.44
7:U:422:LEU:C	7:U:422:LEU:HD23	2.43	0.44
7:U:542:GLU:HA	7:U:542:GLU:OE1	2.17	0.44
7:U:545:LEU:HD21	7:U:577:ILE:HB	1.98	0.44
7:U:588:MET:HE2	7:U:588:MET:HB2	1.58	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:X:143:TYR:CE1	10:Y:251:HIS:HB3	2.44	0.44
9:X:396:THR:HA	14:c:242:GLU:CD	2.43	0.44
10:Y:179:ARG:C	10:Y:179:ARG:NE	2.74	0.44
10:Y:325:VAL:HG23	19:e:65:TYR:HD1	1.82	0.44
12:a:58:LYS:HG3	12:a:59:LEU:N	2.32	0.44
12:a:193:GLN:CD	12:a:225:LEU:HD21	2.42	0.44
14:c:38:LEU:HG	14:c:42:LEU:CD1	2.47	0.44
15:d:60:GLN:O	15:d:64:LEU:HG	2.17	0.44
16:f:163:ALA:HA	16:f:166:VAL:HG12	1.99	0.44
16:f:779:CYS:O	16:f:783:SER:HB3	2.17	0.44
18:W:177:MET:HE2	18:W:178:GLU:HB2	2.00	0.44
18:W:193:CYS:CB	18:W:202:THR:HG22	2.47	0.44
18:W:352:LYS:HA	18:W:352:LYS:HD2	1.65	0.44
18:W:402:ILE:HD12	18:W:403:PHE:H	1.82	0.44
26:M:113:ASP:OD2	26:M:113:ASP:N	2.50	0.44
28:O:164:ILE:HG23	28:O:171:GLY:HA2	1.99	0.44
32:S:145:LEU:HD21	32:S:182:ALA:HB2	1.99	0.44
28:o:164:ILE:HG23	28:o:171:GLY:HA2	2.00	0.44
32:s:28:ARG:NE	32:s:191:ASP:OD2	2.37	0.44
1:A:215:PHE:CD2	1:A:342:GLU:OE2	2.71	0.44
1:A:233:THR:O	1:A:234:ASP:OD1	2.34	0.44
2:B:127:VAL:O	2:B:127:VAL:CG1	2.65	0.44
2:B:184:TYR:HD2	2:B:194:ILE:CD1	2.27	0.44
3:C:24:TYR:HE2	4:D:41:TYR:CB	2.27	0.44
3:C:65:LEU:O	4:D:114:ARG:NE	2.50	0.44
3:C:78:ARG:HH22	3:C:80:MET:HE2	1.82	0.44
5:E:165:ILE:C	5:E:167:PRO:CD	2.89	0.44
5:E:362:VAL:HG21	5:E:367:PHE:CE2	2.52	0.44
6:F:211:LYS:HA	6:F:214:ASN:CB	2.47	0.44
6:F:227:GLY:N	6:F:233:LYS:HZ1	2.15	0.44
7:U:135:ASN:OD1	7:U:159:ARG:NH2	2.51	0.44
7:U:324:LYS:HE2	7:U:324:LYS:HB2	1.89	0.44
7:U:532:MET:HG3	7:U:552:ILE:HG12	2.00	0.44
7:U:711:GLN:HG3	7:U:712:LEU:N	2.31	0.44
7:U:748:LEU:HD23	7:U:760:VAL:CA	2.46	0.44
10:Y:259:TYR:HB2	10:Y:274:SER:HB2	1.99	0.44
11:Z:44:GLN:NE2	11:Z:47:VAL:HG13	2.30	0.44
11:Z:116:CYS:SG	11:Z:119:SER:N	2.90	0.44
11:Z:191:ILE:HG22	12:a:375:LEU:CD1	2.48	0.44
13:b:117:VAL:HG23	13:b:119:ASP:H	1.82	0.44
14:c:33:ILE:O	14:c:33:ILE:HG13	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:100:LYS:HB3	14:c:100:LYS:HE2	1.78	0.44
16:f:102:HIS:O	16:f:106:LEU:HD13	2.18	0.44
16:f:218:GLU:OE2	16:f:834:ASP:HA	2.17	0.44
22:I:41:ASP:OD2	22:I:41:ASP:C	2.60	0.44
28:O:188:ARG:HB3	28:O:189:PRO:CD	2.48	0.44
28:O:203:TYR:OH	32:S:177:ASP:OD2	2.34	0.44
1:A:173:THR:OG1	1:A:174:TYR:N	2.50	0.44
1:A:245:LEU:HD23	1:A:245:LEU:HA	1.83	0.44
1:A:285:PHE:HZ	2:B:303:ARG:NH2	2.14	0.44
2:B:133:VAL:HB	2:B:157:HIS:O	2.18	0.44
2:B:294:ARG:HG2	2:B:294:ARG:HH11	1.81	0.44
2:B:402:ALA:HB1	2:B:419:PHE:CE1	2.53	0.44
3:C:389:LYS:O	3:C:389:LYS:NZ	2.33	0.44
4:D:204:MET:HG2	4:D:309:MET:O	2.17	0.44
5:E:192:ASP:C	5:E:194:ASN:N	2.75	0.44
6:F:396:CYS:O	6:F:398:ALA:N	2.50	0.44
7:U:25:HIS:HA	7:U:59:PHE:CZ	2.52	0.44
7:U:52:GLU:OE1	7:U:57:ARG:NH2	2.51	0.44
7:U:529:ILE:HA	7:U:532:MET:CG	2.47	0.44
7:U:587:ALA:HB2	7:U:621:SER:HB3	2.00	0.44
7:U:773:PHE:HE2	14:c:180:ASN:C	2.24	0.44
8:V:466:ILE:HG13	8:V:471:GLU:HB2	1.99	0.44
10:Y:50:MET:SD	10:Y:67:VAL:HG23	2.57	0.44
11:Z:187:LEU:HD12	11:Z:187:LEU:C	2.43	0.44
12:a:258:GLN:HB2	12:a:259:PRO:HD3	1.99	0.44
12:a:291:LEU:HD23	12:a:291:LEU:H	1.83	0.44
14:c:173:GLU:HB3	14:c:175:ARG:HG3	1.99	0.44
14:c:232:GLN:OE1	14:c:298:GLN:NE2	2.50	0.44
15:d:8:GLU:CD	15:d:12:LYS:H	2.26	0.44
15:d:43:LEU:HD22	15:d:48:LEU:HD12	1.95	0.44
15:d:75:MET:O	15:d:77:GLN:N	2.51	0.44
15:d:103:LEU:C	15:d:106:LEU:H	2.26	0.44
15:d:176:ASP:O	15:d:179:ALA:HB3	2.17	0.44
16:f:45:LEU:CD2	16:f:56:LEU:H	2.31	0.44
16:f:664:GLU:OE1	16:f:667:GLY:HA3	2.18	0.44
16:f:672:LEU:HD12	16:f:707:LEU:HB3	1.99	0.44
16:f:688:ARG:HH12	16:f:689:ALA:HA	1.81	0.44
16:f:814:SER:N	16:f:821:LEU:HD12	2.33	0.44
18:W:27:ARG:NH2	18:W:46:THR:HG21	2.32	0.44
18:W:119:PRO:O	18:W:120:ILE:CG2	2.66	0.44
18:W:149:LEU:CD1	18:W:153:LYS:HE2	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:178:GLU:CG	18:W:181:GLU:CB	2.96	0.44
18:W:235:GLN:HE21	18:W:346:GLU:CD	2.24	0.44
18:W:253:THR:HG21	18:W:262:LYS:CD	2.45	0.44
18:W:276:LEU:HD21	18:W:354:LEU:HA	1.99	0.44
18:W:378:MET:CE	18:W:378:MET:HA	2.47	0.44
25:L:79:ALA:O	25:L:83:LEU:HG	2.18	0.44
26:M:39:ILE:HG12	26:M:176:ILE:HD11	1.99	0.44
30:Q:18:ASP:C	30:Q:18:ASP:OD2	2.61	0.44
24:k:82:ILE:HD13	24:k:82:ILE:N	2.33	0.44
1:A:145:ASN:HB2	1:A:146:LYS:H	1.62	0.44
1:A:195:LEU:HD13	1:A:269:ALA:CB	2.47	0.44
1:A:214:LEU:HD23	1:A:343:PHE:CZ	2.52	0.44
1:A:354:ILE:HA	1:A:357:ILE:CG2	2.48	0.44
2:B:339:PRO:O	2:B:340:ALA:CB	2.65	0.44
2:B:387:LYS:HE3	2:B:387:LYS:HB3	1.69	0.44
2:B:398:ILE:HD11	2:B:422:SER:C	2.43	0.44
4:D:89:ILE:HD11	5:E:79:TYR:C	2.43	0.44
5:E:40:TYR:CA	6:F:73:ILE:HD11	2.39	0.44
5:E:58:GLY:HA3	5:E:72:LYS:O	2.18	0.44
5:E:62:LYS:HE3	5:E:62:LYS:HB3	1.71	0.44
5:E:203:ILE:CG2	5:E:214:LEU:HD23	2.48	0.44
5:E:321:THR:CG2	6:F:215:LEU:HD23	2.48	0.44
6:F:81:LYS:HD3	6:F:81:LYS:C	2.42	0.44
6:F:156:ASP:OD2	6:F:157:SER:N	2.51	0.44
6:F:282:ILE:HD11	6:F:329:ILE:CG1	2.45	0.44
7:U:108:TYR:HE1	7:U:126:ILE:HG21	1.82	0.44
7:U:118:LEU:N	7:U:119:PRO:HD3	2.33	0.44
8:V:381:GLN:O	8:V:382:PHE:HD1	2.01	0.44
9:X:407:MET:C	9:X:410:VAL:HG12	2.43	0.44
10:Y:177:ARG:HH22	10:Y:208:PHE:CA	2.30	0.44
10:Y:179:ARG:C	10:Y:179:ARG:HE	2.26	0.44
10:Y:239:LYS:HE2	10:Y:239:LYS:HB2	1.80	0.44
11:Z:170:VAL:HG13	14:c:42:LEU:HD22	1.99	0.44
11:Z:182:THR:C	11:Z:184:VAL:H	2.25	0.44
11:Z:183:THR:CA	11:Z:189:GLN:HE22	2.28	0.44
12:a:4:VAL:HB	12:a:5:PRO:CD	2.48	0.44
12:a:9:GLN:C	12:a:12:GLN:HE21	2.26	0.44
12:a:24:ARG:O	12:a:27:GLU:HG2	2.17	0.44
12:a:180:LEU:HD13	12:a:221:VAL:HG11	1.99	0.44
12:a:308:GLU:OE1	18:W:370:TYR:OH	2.35	0.44
13:b:43:SER:HB2	13:b:47:ASN:HD21	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:103:LYS:HE3	13:b:103:LYS:HB3	1.86	0.44
14:c:234:TYR:CE2	18:W:425:LEU:HD13	2.52	0.44
15:d:68:ILE:HG23	15:d:69:PRO:CD	2.44	0.44
15:d:149:ASN:C	15:d:151:VAL:N	2.73	0.44
16:f:17:PRO:O	16:f:21:PRO:HD3	2.17	0.44
16:f:114:ALA:HB2	16:f:158:TYR:OH	2.18	0.44
16:f:142:TYR:CE2	16:f:190:GLU:N	2.86	0.44
16:f:341:GLU:N	16:f:342:PRO:HD3	2.33	0.44
16:f:379:GLY:O	16:f:417:ILE:HD13	2.17	0.44
18:W:40:LEU:HG	18:W:41:GLN:H	1.82	0.44
18:W:231:ILE:HD12	18:W:243:ILE:HG23	1.99	0.44
18:W:293:ASP:O	18:W:294:LYS:C	2.60	0.44
25:L:84:LEU:HD23	25:L:132:LEU:HD11	2.00	0.44
28:O:81:ASN:OD1	28:O:120:THR:HG21	2.18	0.44
25:l:47:VAL:HG11	25:l:192:LEU:HD23	2.00	0.44
1:A:115:VAL:HG13	1:A:116:LYS:N	2.31	0.44
1:A:279:ALA:HB1	2:B:307:ARG:HG2	2.00	0.44
2:B:409:GLU:HB2	2:B:411:ARG:NH2	2.32	0.44
3:C:69:GLN:HB3	3:C:118:ASN:HD22	1.82	0.44
4:D:256:GLU:OE1	4:D:256:GLU:HA	2.17	0.44
4:D:381:GLU:HG3	5:E:292:PRO:HB3	2.00	0.44
4:D:387:VAL:HG21	5:E:159:PHE:HE1	1.82	0.44
5:E:86:GLN:O	5:E:86:GLN:HG3	2.17	0.44
6:F:256:LEU:HA	6:F:267:LEU:HD23	2.00	0.44
7:U:583:MET:O	7:U:586:VAL:HG12	2.17	0.44
8:V:105:SER:C	8:V:106:ARG:HD3	2.41	0.44
10:Y:71:ASN:CB	10:Y:74:LYS:HE2	2.48	0.44
10:Y:194:PHE:HA	10:Y:230:ALA:HB2	2.00	0.44
11:Z:39:LEU:HD13	11:Z:50:VAL:HG12	2.00	0.44
11:Z:186:THR:CG2	11:Z:189:GLN:HE21	2.28	0.44
12:a:210:VAL:HG23	12:a:213:PHE:CD2	2.53	0.44
12:a:293:PHE:HD1	12:a:307:VAL:HG11	1.83	0.44
13:b:32:ALA:HB3	13:b:36:VAL:HG23	2.00	0.44
13:b:146:GLU:OE1	13:b:150:THR:HB	2.18	0.44
15:d:2:TYR:HE2	15:d:25:ARG:HA	1.79	0.44
15:d:52:ARG:O	15:d:56:GLU:N	2.50	0.44
16:f:10:PRO:HB3	16:f:59:LEU:HD22	1.99	0.44
16:f:192:VAL:HB	16:f:193:PRO:CD	2.46	0.44
16:f:288:VAL:HB	16:f:881:GLU:CD	2.43	0.44
16:f:642:ALA:N	16:f:643:PRO:HD3	2.32	0.44
16:f:664:GLU:HB3	16:f:668:ALA:CB	2.37	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:678:LEU:HD12	16:f:678:LEU:O	2.18	0.44
16:f:804:LEU:HA	16:f:806:VAL:CG1	2.47	0.44
18:W:294:LYS:O	18:W:297:GLU:N	2.32	0.44
18:W:365:ILE:HG13	18:W:366:MET:H	1.83	0.44
27:N:167:ARG:NH1	33:T:34:ALA:O	2.47	0.44
25:l:100:ASP:OD1	25:l:100:ASP:O	2.36	0.44
1:A:73:ALA:HB3	2:B:138:PHE:O	2.18	0.44
1:A:235:ALA:HB1	1:A:269:ALA:O	2.18	0.44
1:A:333:ARG:CD	6:F:230:GLY:HA3	2.47	0.44
2:B:112:LEU:HD22	2:B:146:PRO:HA	1.99	0.44
2:B:411:ARG:CG	2:B:413:LYS:H	2.30	0.44
3:C:151:ILE:HG12	3:C:198:LEU:HG	2.00	0.44
4:D:395:LEU:O	4:D:398:ASP:OD1	2.36	0.44
5:E:48:LYS:HE2	5:E:49:ALA:N	2.33	0.44
5:E:223:ARG:HH22	5:E:273:VAL:HB	1.83	0.44
6:F:350:ARG:HA	6:F:350:ARG:NE	2.33	0.44
6:F:431:LYS:HD2	6:F:431:LYS:HA	1.72	0.44
7:U:206:MET:HA	7:U:206:MET:CE	2.42	0.44
7:U:236:LEU:CD2	7:U:245:ALA:HA	2.47	0.44
7:U:421:GLN:O	7:U:425:THR:HG23	2.18	0.44
7:U:475:HIS:C	7:U:475:HIS:CD2	2.96	0.44
7:U:813:TYR:HD1	7:U:815:ALA:HB3	1.80	0.44
9:X:147:LEU:CD2	9:X:177:TYR:CE1	3.01	0.44
9:X:299:LEU:HD23	9:X:299:LEU:C	2.43	0.44
10:Y:110:TYR:CE2	10:Y:114:ILE:HG12	2.53	0.44
10:Y:230:ALA:C	10:Y:231:LEU:HD13	2.40	0.44
11:Z:12:HIS:O	11:Z:14:LEU:N	2.51	0.44
11:Z:22:HIS:O	11:Z:25:ARG:HG2	2.18	0.44
11:Z:174:HIS:HA	11:Z:177:ARG:CG	2.46	0.44
11:Z:207:ASP:OD2	18:W:446:ILE:HD11	2.17	0.44
12:a:144:ASN:O	12:a:145:LEU:HD23	2.18	0.44
12:a:162:TYR:O	12:a:164:GLN:N	2.50	0.44
13:b:180:ALA:C	13:b:182:ALA:N	2.74	0.44
14:c:241:ASN:O	14:c:244:VAL:HG12	2.18	0.44
15:d:65:ARG:C	15:d:67:ASP:N	2.74	0.44
15:d:68:ILE:HG12	15:d:69:PRO:N	2.32	0.44
15:d:82:TYR:C	15:d:84:ASP:H	2.24	0.44
15:d:101:LEU:O	15:d:102:ASN:C	2.60	0.44
18:W:22:ALA:O	18:W:25:ASP:OD1	2.35	0.44
18:W:178:GLU:OE1	18:W:178:GLU:HA	2.17	0.44
18:W:221:LYS:O	18:W:222:LEU:C	2.61	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:448:LYS:HD3	18:W:452:ILE:CD1	2.47	0.44
20:G:72:ILE:HG21	20:G:114:LEU:HD21	2.00	0.44
24:K:70:ILE:HD13	24:K:74:ILE:HG22	1.98	0.44
27:N:18:ASP:OD2	27:N:18:ASP:C	2.61	0.44
32:S:83:MET:HE1	32:S:91:MET:HE2	2.00	0.44
29:p:64:GLN:OE1	30:q:86:ARG:NH1	2.51	0.44
1:A:124:ASP:OD1	1:A:124:ASP:O	2.35	0.44
2:B:353:PHE:H	2:B:353:PHE:HD1	1.63	0.44
3:C:350:LEU:HD12	3:C:350:LEU:O	2.17	0.44
4:D:109:SER:O	4:D:110:ASN:C	2.60	0.44
4:D:116:LEU:HD11	4:D:118:THR:HG23	1.99	0.44
4:D:358:VAL:HG13	4:D:358:VAL:O	2.18	0.44
5:E:119:VAL:C	5:E:122:MET:HE2	2.43	0.44
5:E:176:PRO:HD2	5:E:338:PHE:HE2	1.82	0.44
5:E:207:TYR:CZ	5:E:210:GLU:HB2	2.53	0.44
6:F:359:GLU:OE2	6:F:360:GLU:HG2	2.17	0.44
8:V:123:SER:CB	8:V:158:PRO:HA	2.47	0.44
8:V:195:ILE:CG1	8:V:203:LEU:HD21	2.40	0.44
9:X:157:LEU:C	9:X:157:LEU:HD23	2.43	0.44
9:X:287:LEU:HD23	9:X:287:LEU:HA	1.71	0.44
10:Y:267:ARG:O	10:Y:270:VAL:HG12	2.17	0.44
12:a:97:LEU:HD12	12:a:97:LEU:HA	1.81	0.44
12:a:135:ILE:HA	12:a:138:VAL:HG22	1.99	0.44
12:a:267:GLN:H	12:a:267:GLN:CD	2.26	0.44
12:a:290:GLN:HE21	12:a:330:ARG:NE	2.14	0.44
13:b:2:VAL:HG22	13:b:44:ASN:CG	2.43	0.44
13:b:86:PHE:CE2	13:b:90:ILE:HG13	2.53	0.44
14:c:51:MET:HE2	14:c:51:MET:H	1.82	0.44
14:c:75:MET:SD	14:c:76:PRO:O	2.76	0.44
14:c:150:SER:CB	14:c:156:VAL:HG23	2.33	0.44
14:c:177:THR:O	14:c:177:THR:CG2	2.66	0.44
14:c:291:LEU:HD12	14:c:291:LEU:HA	1.78	0.44
15:d:48:LEU:C	15:d:51:ALA:H	2.26	0.44
16:f:346:ASP:O	16:f:349:TYR:CD1	2.71	0.44
16:f:764:LEU:HB2	16:f:769:THR:HB	2.00	0.44
18:W:34:LEU:HG	18:W:37:GLU:OE1	2.17	0.44
18:W:113:GLU:CG	18:W:147:LYS:HZ3	2.30	0.44
18:W:308:LEU:CD1	18:W:315:MET:HE2	2.47	0.44
18:W:435:LEU:HD23	18:W:435:LEU:C	2.43	0.44
22:I:197:LEU:HA	22:I:200:THR:OG1	2.17	0.44
33:T:22:ILE:HB	33:T:50:MET:HE3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:k:121:LEU:HD22	25:l:79:ALA:HB3	1.99	0.44
1:A:36:TYR:O	1:A:36:TYR:CD1	2.71	0.43
1:A:41:TYR:CD2	2:B:59:ARG:HG3	2.53	0.43
1:A:97:ARG:HE	1:A:144:ARG:HG2	1.82	0.43
1:A:124:ASP:HB3	6:F:86:LEU:CD1	2.46	0.43
1:A:138:MET:HG2	1:A:139:ARG:N	2.33	0.43
1:A:179:GLY:HA2	1:A:350:GLY:HA2	2.00	0.43
2:B:86:LYS:O	2:B:88:LEU:N	2.50	0.43
2:B:316:LEU:HD23	2:B:346:ARG:CG	2.37	0.43
3:C:45:LEU:HD11	4:D:62:LYS:HG2	2.00	0.43
3:C:139:MET:SD	3:C:241:HIS:CD2	3.11	0.43
3:C:338:LEU:HD12	3:C:338:LEU:H	1.83	0.43
4:D:45:LYS:HA	4:D:45:LYS:HD2	1.75	0.43
4:D:167:ILE:CD1	4:D:170:MET:HE3	2.47	0.43
4:D:341:LYS:HA	4:D:344:ILE:CG2	2.48	0.43
6:F:129:ARG:CG	6:F:129:ARG:O	2.66	0.43
34:F:501:ATP:H8	34:F:501:ATP:O2A	2.00	0.43
7:U:243:LEU:HD23	7:U:244:MET:SD	2.58	0.43
7:U:371:ILE:HD11	7:U:777:HIS:CD2	2.53	0.43
8:V:321:ALA:HB1	8:V:324:PHE:HD2	1.83	0.43
8:V:348:PHE:CD1	8:V:348:PHE:N	2.86	0.43
9:X:138:PHE:HD1	9:X:138:PHE:C	2.26	0.43
10:Y:50:MET:HE1	10:Y:70:LEU:HB2	2.00	0.43
10:Y:71:ASN:C	10:Y:74:LYS:HG2	2.43	0.43
10:Y:124:PHE:HA	10:Y:127:THR:HG22	1.99	0.43
10:Y:296:VAL:O	10:Y:300:ARG:HG3	2.18	0.43
11:Z:7:GLN:CB	11:Z:46:LYS:HD2	2.47	0.43
11:Z:191:ILE:HG22	12:a:375:LEU:HD13	2.00	0.43
12:a:87:MET:C	12:a:88:THR:HG22	2.43	0.43
12:a:100:THR:O	12:a:103:LYS:HG3	2.17	0.43
12:a:219:HIS:CD2	12:a:219:HIS:C	2.96	0.43
13:b:25:ARG:HB3	13:b:26:LEU:H	1.48	0.43
15:d:61:TRP:O	15:d:62:SER:C	2.60	0.43
15:d:62:SER:CB	15:d:67:ASP:HB3	2.48	0.43
16:f:67:ASP:O	16:f:71:TYR:HB3	2.18	0.43
16:f:135:GLY:HA2	16:f:138:GLU:CG	2.48	0.43
16:f:329:ASN:OD1	16:f:329:ASN:N	2.50	0.43
16:f:584:SER:O	16:f:588:ARG:CD	2.66	0.43
16:f:646:MET:SD	16:f:646:MET:C	3.01	0.43
18:W:302:TYR:OH	18:W:328:LEU:HD13	2.18	0.43
19:e:37:HIS:ND1	19:e:39:TRP:HE3	2.15	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:J:70:CYS:SG	23:J:211:MET:HE2	2.58	0.43
1:A:73:ALA:O	1:A:78:TRP:HH2	2.01	0.43
1:A:433:ASN:C	24:K:66:LYS:HZ1	2.25	0.43
3:C:293:MET:SD	3:C:311:ILE:HD11	2.59	0.43
3:C:328:ILE:HA	3:C:331:ILE:HG22	2.00	0.43
4:D:162:VAL:HG22	4:D:163:MET:O	2.18	0.43
5:E:3:ASP:OD1	5:E:4:PRO:HD2	2.18	0.43
5:E:29:LEU:HD13	6:F:62:VAL:HG11	2.01	0.43
5:E:118:LEU:C	5:E:120:TYR:N	2.76	0.43
6:F:215:LEU:H	6:F:215:LEU:HD12	1.83	0.43
6:F:424:ILE:O	6:F:427:VAL:HG12	2.19	0.43
7:U:71:LEU:HD23	7:U:71:LEU:C	2.42	0.43
7:U:461:LEU:HD23	7:U:461:LEU:HA	1.71	0.43
7:U:545:LEU:HD23	7:U:577:ILE:HG21	1.99	0.43
7:U:557:TYR:HE2	7:U:757:MET:SD	2.41	0.43
7:U:748:LEU:O	7:U:755:THR:HA	2.18	0.43
8:V:313:LEU:HD21	8:V:329:HIS:NE2	2.33	0.43
8:V:414:TYR:HE1	10:Y:335:SER:HB2	1.83	0.43
9:X:255:LEU:HB2	9:X:287:LEU:CD1	2.47	0.43
9:X:274:LYS:H	9:X:274:LYS:HG2	1.50	0.43
9:X:282:ARG:HG2	9:X:312:GLU:CD	2.43	0.43
10:Y:148:GLY:HA3	10:Y:156:LEU:HD22	1.99	0.43
10:Y:273:GLN:H	10:Y:273:GLN:HG2	1.67	0.43
11:Z:142:GLU:OE1	11:Z:152:SER:O	2.36	0.43
11:Z:235:ASN:C	11:Z:238:PRO:HD3	2.43	0.43
12:a:249:GLN:HB3	12:a:252:LYS:HZ2	1.83	0.43
12:a:321:LYS:HD3	12:a:336:VAL:CG2	2.47	0.43
12:a:343:LEU:HD22	12:a:343:LEU:H	1.83	0.43
14:c:70:ILE:HG12	14:c:106:GLU:HG2	1.99	0.43
14:c:287:HIS:O	14:c:290:VAL:HG12	2.19	0.43
16:f:11:VAL:HG12	16:f:12:GLN:N	2.33	0.43
16:f:617:SER:H	16:f:632:LYS:HE2	1.83	0.43
16:f:621:ASP:HA	16:f:626:GLU:OE1	2.17	0.43
16:f:787:LEU:HA	16:f:791:VAL:H	1.82	0.43
16:f:869:THR:CA	16:f:885:GLU:HG2	2.30	0.43
18:W:59:ASP:HB2	18:W:62:SER:HG	1.81	0.43
18:W:121:LYS:C	18:W:125:ILE:HG13	2.42	0.43
23:J:90:GLU:OE1	23:J:90:GLU:HA	2.18	0.43
1:A:62:LEU:HD21	2:B:79:ILE:HG13	1.99	0.43
1:A:119:ALA:HA	6:F:127:SER:HB3	2.01	0.43
1:A:306:LEU:C	1:A:312:ARG:HD3	2.42	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:50:PRO:O	2:B:51:LEU:CB	2.66	0.43
2:B:298:ASN:OD1	2:B:298:ASN:C	2.61	0.43
3:C:127:LEU:CD2	3:C:129:ASN:CB	2.95	0.43
4:D:41:TYR:C	4:D:41:TYR:CD2	2.96	0.43
4:D:60:TYR:OH	7:U:640:LEU:HB3	2.18	0.43
4:D:167:ILE:CB	4:D:214:MET:HE3	2.49	0.43
4:D:370:ILE:HG22	4:D:374:ASP:HB2	2.00	0.43
5:E:93:LYS:HB3	5:E:93:LYS:HZ2	1.83	0.43
6:F:180:ARG:CD	6:F:242:ALA:HA	2.36	0.43
6:F:191:LEU:CD2	6:F:194:GLN:HE21	2.31	0.43
6:F:191:LEU:CD1	6:F:236:LEU:HD22	2.48	0.43
6:F:393:GLY:C	6:F:395:GLN:N	2.75	0.43
7:U:16:GLU:CB	7:U:19:LEU:HB3	2.40	0.43
7:U:177:LEU:H	7:U:177:LEU:HD12	1.84	0.43
7:U:650:TYR:HD1	7:U:651:GLY:H	1.65	0.43
7:U:745:THR:C	7:U:784:THR:HG1	2.26	0.43
8:V:331:LEU:O	8:V:331:LEU:HD12	2.18	0.43
10:Y:190:ALA:C	10:Y:192:ARG:H	2.26	0.43
10:Y:257:ARG:HH11	10:Y:257:ARG:HG2	1.84	0.43
12:a:274:LEU:O	12:a:278:MET:HG3	2.19	0.43
13:b:79:GLN:HA	13:b:80:PRO:HD3	1.90	0.43
14:c:62:VAL:HG21	14:c:66:THR:HG22	1.99	0.43
16:f:94:LYS:HA	16:f:98:PHE:HD1	1.83	0.43
16:f:126:ILE:HG23	16:f:174:ASP:OD2	2.19	0.43
16:f:182:GLU:CG	16:f:183:PRO:HD3	2.44	0.43
16:f:318:THR:O	16:f:322:SER:CB	2.66	0.43
16:f:345:PRO:HB2	16:f:348:ILE:CD1	2.47	0.43
16:f:590:PHE:CE1	16:f:628:ASP:HB2	2.53	0.43
16:f:710:LEU:HD23	16:f:784:ASP:OD2	2.18	0.43
16:f:786:GLN:O	16:f:787:LEU:HB2	2.19	0.43
18:W:177:MET:O	18:W:178:GLU:HB3	2.18	0.43
18:W:413:ILE:O	18:W:414:ASN:C	2.61	0.43
22:I:17:ARG:NH2	22:I:19:TYR:HE1	2.16	0.43
23:J:171:PHE:C	23:J:171:PHE:CD2	2.96	0.43
26:M:87:LEU:HD13	26:M:135:PHE:CE1	2.52	0.43
1:A:81:ALA:O	1:A:83:ASP:N	2.51	0.43
1:A:194:PRO:O	1:A:195:LEU:HD23	2.18	0.43
1:A:238:ILE:HG21	1:A:260:LEU:HD11	2.00	0.43
2:B:190:LEU:O	2:B:194:ILE:HB	2.18	0.43
2:B:430:LYS:HA	2:B:430:LYS:HD2	1.79	0.43
3:C:360:LYS:HE3	3:C:360:LYS:HB3	1.80	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:186:THR:OG1	4:D:187:HIS:N	2.50	0.43
5:E:123:SER:HA	5:E:221:TYR:OH	2.18	0.43
5:E:162:VAL:HG11	5:E:164:ILE:HD11	2.00	0.43
5:E:184:ALA:CB	5:E:231:PHE:HE1	2.32	0.43
6:F:215:LEU:HD12	6:F:215:LEU:N	2.32	0.43
6:F:224:LEU:HD23	6:F:224:LEU:C	2.43	0.43
7:U:405:THR:CG2	7:U:438:GLN:OE1	2.66	0.43
7:U:710:ARG:NH1	7:U:737:LEU:HD23	2.33	0.43
8:V:195:ILE:HG23	8:V:203:LEU:CD2	2.45	0.43
8:V:438:VAL:CG2	8:V:451:ILE:HD12	2.45	0.43
8:V:464:ILE:HD12	8:V:467:TYR:CE1	2.54	0.43
9:X:87:ARG:NH1	9:X:91:SER:HB3	2.34	0.43
9:X:147:LEU:HD21	9:X:177:TYR:HE1	1.83	0.43
9:X:417:LYS:HD2	9:X:417:LYS:C	2.42	0.43
10:Y:24:PHE:HZ	10:Y:288:PHE:CD1	2.36	0.43
11:Z:54:PHE:CD1	11:Z:54:PHE:C	2.95	0.43
11:Z:129:LYS:HG3	14:c:215:LYS:CD	2.31	0.43
11:Z:176:LEU:O	11:Z:178:ASP:N	2.51	0.43
12:a:214:GLY:CA	12:a:340:VAL:HG21	2.49	0.43
13:b:125:VAL:HG13	13:b:126:LYS:CG	2.48	0.43
15:d:117:THR:O	15:d:120:GLU:HG2	2.18	0.43
16:f:39:LYS:HA	16:f:89:MET:SD	2.58	0.43
16:f:236:CYS:O	16:f:240:VAL:HG22	2.18	0.43
16:f:245:ASN:OD1	16:f:255:VAL:HG23	2.18	0.43
16:f:333:LEU:O	16:f:337:LEU:N	2.51	0.43
16:f:576:ILE:O	16:f:580:LEU:HG	2.18	0.43
18:W:14:VAL:O	18:W:15:LYS:HB2	2.17	0.43
18:W:272:LEU:HD21	18:W:328:LEU:CD1	2.44	0.43
18:W:342:GLY:HA2	18:W:347:GLY:C	2.43	0.43
19:e:37:HIS:ND1	19:e:39:TRP:CE3	2.86	0.43
21:H:35:VAL:HG12	21:H:37:ILE:HD11	2.00	0.43
22:I:90:LEU:HG	22:I:114:LEU:HD13	2.00	0.43
22:I:198:ASN:OD1	22:I:206:LEU:HG	2.19	0.43
28:o:60:ILE:HD12	28:o:83:MET:HB3	2.01	0.43
28:o:184:LEU:O	28:o:184:LEU:HD13	2.18	0.43
1:A:212:VAL:HB	1:A:318:LEU:HD22	2.00	0.43
1:A:297:ARG:CD	6:F:257:VAL:HG21	2.41	0.43
2:B:102:LEU:HD23	2:B:138:PHE:CE1	2.52	0.43
2:B:200:SER:OG	2:B:219:PRO:O	2.35	0.43
2:B:406:ALA:C	2:B:408:ARG:H	2.25	0.43
2:B:429:LYS:CE	3:C:306:LEU:HD23	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:379:THR:O	3:C:382:ASP:HB3	2.18	0.43
4:D:275:PHE:O	4:D:276:ASP:C	2.60	0.43
4:D:388:ARG:HG2	4:D:388:ARG:HH11	1.83	0.43
5:E:50:LEU:CD1	6:F:83:ASN:HD22	2.28	0.43
5:E:81:VAL:HG21	5:E:100:LEU:CD2	2.45	0.43
5:E:165:ILE:CG2	5:E:168:LYS:HE2	2.37	0.43
5:E:171:LEU:HD21	5:E:290:LEU:HD11	1.99	0.43
6:F:270:ASP:O	6:F:273:ALA:HB3	2.19	0.43
7:U:789:ILE:HG21	7:U:911:ILE:HD13	2.00	0.43
7:U:812:ALA:HA	7:U:883:ARG:NH1	2.33	0.43
8:V:68:ASP:HA	8:V:71:THR:OG1	2.18	0.43
8:V:99:ARG:HH22	10:Y:389:MET:HG2	1.83	0.43
8:V:337:LEU:HD21	8:V:398:LEU:HD21	2.00	0.43
8:V:358:MET:HE3	8:V:358:MET:HB3	1.85	0.43
12:a:122:LYS:HE3	12:a:122:LYS:HB3	1.82	0.43
12:a:291:LEU:HD12	12:a:296:ILE:HG12	2.01	0.43
12:a:310:LEU:HD23	12:a:310:LEU:O	2.18	0.43
13:b:92:VAL:HA	13:b:95:LEU:HD12	2.00	0.43
14:c:116:PRO:HA	14:c:147:PRO:CD	2.46	0.43
15:d:6:LYS:O	15:d:8:GLU:N	2.44	0.43
16:f:60:VAL:O	16:f:61:GLU:C	2.61	0.43
16:f:77:GLU:OE2	16:f:79:ARG:HB2	2.17	0.43
16:f:100:ARG:N	16:f:101:PRO:HD2	2.32	0.43
16:f:145:VAL:CG1	16:f:152:ALA:HB2	2.48	0.43
16:f:189:LYS:O	16:f:190:GLU:C	2.61	0.43
16:f:268:LEU:HA	16:f:272:LEU:HB2	2.01	0.43
16:f:369:ARG:HD2	16:f:740:ARG:HG3	2.01	0.43
16:f:475:ASN:O	16:f:478:ARG:HG2	2.19	0.43
16:f:803:PHE:CD1	16:f:803:PHE:C	2.95	0.43
18:W:308:LEU:HD12	18:W:315:MET:CE	2.48	0.43
21:H:67:ILE:HD11	21:H:73:LEU:HD22	2.01	0.43
26:M:173:LYS:HA	26:M:176:ILE:HG22	2.00	0.43
20:g:50:ILE:HG23	20:g:141:ILE:HG21	2.00	0.43
28:o:167:ASP:OD1	28:o:168:LEU:N	2.51	0.43
1:A:172:VAL:O	1:A:231:ASN:ND2	2.51	0.43
1:A:354:ILE:HG22	1:A:385:ILE:CG2	2.35	0.43
1:A:428:ARG:HE	23:J:160:ALA:C	2.27	0.43
2:B:103:ARG:HH21	2:B:160:ILE:HG22	1.82	0.43
2:B:176:VAL:HG21	2:B:247:PHE:HB3	2.00	0.43
2:B:284:ILE:CD1	2:B:327:VAL:HG23	2.48	0.43
3:C:23:TYR:O	3:C:26:SER:HB3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:51:GLU:O	3:C:54:ALA:HB3	2.19	0.43
3:C:211:PHE:CD2	3:C:245:ILE:HD11	2.53	0.43
4:D:93:LEU:HG	4:D:104:GLY:N	2.33	0.43
5:E:195:PHE:CE1	5:E:229:ILE:HG22	2.39	0.43
5:E:199:VAL:HB	5:E:234:GLU:HB3	1.99	0.43
5:E:274:LYS:HA	5:E:274:LYS:HD3	1.85	0.43
5:E:323:HIS:CE1	5:E:364:GLN:HB2	2.54	0.43
6:F:235:LEU:HD22	34:F:501:ATP:C4	2.53	0.43
6:F:369:HIS:ND1	6:F:397:LYS:HB2	2.32	0.43
7:U:170:SER:HG	7:U:172:ASP:CG	2.23	0.43
7:U:258:GLN:HG3	7:U:259:GLN:H	1.84	0.43
7:U:620:GLU:OE2	7:U:650:TYR:HE1	2.00	0.43
7:U:736:ILE:HD11	7:U:783:TYR:HE1	1.83	0.43
7:U:739:ALA:O	7:U:744:VAL:HG22	2.18	0.43
7:U:746:ILE:HG23	7:U:746:ILE:O	2.19	0.43
7:U:796:LYS:NZ	7:U:924:LEU:HD22	2.33	0.43
8:V:459:GLN:OE1	8:V:459:GLN:HA	2.18	0.43
9:X:252:LYS:HG2	9:X:287:LEU:HD11	2.00	0.43
9:X:256:LEU:HD11	9:X:260:MET:HE2	2.00	0.43
9:X:385:LEU:HG	9:X:387:ILE:HD11	2.00	0.43
9:X:406:ASN:HD21	14:c:253:LYS:HG2	1.82	0.43
11:Z:11:VAL:CG2	11:Z:162:ILE:HA	2.43	0.43
11:Z:186:THR:O	11:Z:189:GLN:HG2	2.17	0.43
12:a:373:ASP:HB3	15:d:255:MET:HE1	2.00	0.43
13:b:97:LEU:HD13	13:b:107:MET:HE2	2.00	0.43
13:b:168:SER:O	13:b:169:HIS:HB2	2.18	0.43
13:b:168:SER:HB2	13:b:189:LEU:HD11	1.98	0.43
14:c:84:VAL:O	14:c:84:VAL:HG12	2.19	0.43
14:c:218:LEU:HG	14:c:219:ASN:N	2.28	0.43
14:c:251:LEU:CD2	14:c:283:HIS:HB3	2.47	0.43
14:c:277:LYS:HA	14:c:282:ARG:HH21	1.83	0.43
16:f:205:CYS:SG	16:f:206:ASP:N	2.91	0.43
16:f:348:ILE:HG13	16:f:349:TYR:H	1.81	0.43
16:f:537:THR:HA	16:f:540:GLN:CD	2.44	0.43
16:f:560:LEU:HD11	16:f:782:HIS:HE2	1.84	0.43
16:f:569:LYS:O	16:f:600:TYR:HE1	2.01	0.43
16:f:605:ASN:OD1	16:f:605:ASN:C	2.62	0.43
16:f:810:ILE:HG22	16:f:855:GLN:NE2	2.34	0.43
18:W:88:MET:HE1	18:W:129:ARG:NE	2.33	0.43
18:W:120:ILE:HG13	18:W:121:LYS:N	2.31	0.43
18:W:152:ILE:HB	18:W:153:LYS:NZ	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:182:ARG:O	18:W:186:ILE:HD13	2.18	0.43
18:W:189:GLN:HE21	18:W:189:GLN:HB3	1.63	0.43
18:W:238:GLY:HA2	18:W:240:TYR:CE1	2.54	0.43
18:W:403:PHE:CD2	18:W:417:ARG:CZ	3.01	0.43
20:G:123:GLN:O	20:G:126:THR:HG22	2.18	0.43
22:I:119:GLN:CG	23:J:78:ALA:HB1	2.48	0.43
23:J:27:LYS:O	23:J:163:ARG:N	2.50	0.43
26:M:39:ILE:HG21	26:M:189:ILE:HD12	2.01	0.43
28:O:136:MET:HE3	33:T:179:ARG:NH2	2.34	0.43
1:A:53:GLN:OE1	1:A:53:GLN:HA	2.16	0.43
2:B:86:LYS:CD	16:f:621:ASP:HB2	2.48	0.43
2:B:94:GLU:O	2:B:95:GLU:CB	2.67	0.43
2:B:250:VAL:HG12	2:B:251:VAL:N	2.33	0.43
2:B:348:ASP:OD2	2:B:349:ARG:HG3	2.18	0.43
3:C:44:ARG:HH12	8:V:492:LYS:HG3	1.84	0.43
3:C:147:THR:C	3:C:149:GLU:N	2.76	0.43
3:C:205:HIS:O	3:C:205:HIS:CG	2.72	0.43
4:D:89:ILE:HD12	4:D:89:ILE:H	1.83	0.43
4:D:97:ASP:N	4:D:97:ASP:OD1	2.52	0.43
5:E:203:ILE:CG2	5:E:214:LEU:HG	2.48	0.43
5:E:268:ASP:OD2	5:E:273:VAL:N	2.52	0.43
7:U:82:LEU:HD11	7:U:130:LEU:CD2	2.32	0.43
7:U:410:VAL:HG22	7:U:448:LEU:CD1	2.48	0.43
7:U:491:GLN:O	7:U:495:ASP:OD1	2.36	0.43
7:U:505:ASP:HB3	7:U:508:THR:HG23	2.01	0.43
7:U:646:PRO:CG	7:U:680:VAL:HG21	2.49	0.43
8:V:463:MET:O	8:V:464:ILE:C	2.62	0.43
9:X:340:GLU:N	9:X:341:PRO:HD2	2.34	0.43
10:Y:89:GLU:HA	10:Y:100:ILE:CG2	2.48	0.43
10:Y:313:SER:C	10:Y:314:LEU:HD12	2.43	0.43
10:Y:313:SER:HA	10:Y:354:VAL:O	2.19	0.43
12:a:65:SER:HA	12:a:68:GLU:HB3	1.99	0.43
12:a:142:LEU:HD11	12:a:152:HIS:NE2	2.34	0.43
13:b:113:VAL:HG13	13:b:142:ASN:HA	2.01	0.43
13:b:161:ASN:OD1	13:b:165:GLY:CA	2.66	0.43
14:c:219:ASN:O	14:c:222:LYS:C	2.60	0.43
15:d:107:LEU:CD1	15:d:112:VAL:HG12	2.46	0.43
16:f:66:LYS:HA	16:f:66:LYS:HD2	1.81	0.43
16:f:94:LYS:HZ3	16:f:137:ARG:HD2	1.84	0.43
16:f:162:LEU:HD12	16:f:162:LEU:C	2.44	0.43
16:f:350:LYS:CD	16:f:747:GLN:HE22	2.31	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:733:GLY:CA	16:f:737:ASN:HB3	2.48	0.43
16:f:762:VAL:HG13	16:f:763:ARG:CZ	2.49	0.43
18:W:87:ILE:HD12	18:W:90:LEU:HD12	2.00	0.43
18:W:110:THR:HA	18:W:114:GLU:OE1	2.19	0.43
18:W:208:LYS:O	18:W:208:LYS:CD	2.67	0.43
25:l:49:LEU:HD22	25:l:199:LEU:HD11	2.00	0.43
26:m:39:ILE:HD12	26:m:193:VAL:CG2	2.48	0.43
38:n:301:LDZ:H21	38:n:301:LDZ:C22	2.48	0.43
1:A:325:ASP:OD2	1:A:325:ASP:C	2.62	0.43
3:C:128:PRO:O	3:C:130:LYS:HD3	2.19	0.43
3:C:223:PHE:CD1	3:C:223:PHE:N	2.85	0.43
3:C:277:LEU:HD23	3:C:310:ARG:HD2	2.01	0.43
3:C:355:SER:HB2	3:C:358:GLU:OE1	2.19	0.43
5:E:292:PRO:HA	5:E:296:ASP:OD2	2.19	0.43
5:E:305:ASN:O	5:E:308:ALA:N	2.51	0.43
7:U:78:LEU:HD23	7:U:78:LEU:C	2.43	0.43
7:U:129:ARG:HD3	7:U:129:ARG:H	1.84	0.43
7:U:203:LYS:HB3	7:U:203:LYS:HE3	1.80	0.43
7:U:397:THR:N	7:U:400:ALA:HB3	2.09	0.43
7:U:532:MET:CG	7:U:552:ILE:HG12	2.49	0.43
7:U:567:ILE:HG13	7:U:568:GLU:H	1.83	0.43
7:U:823:LYS:HD3	7:U:823:LYS:N	2.32	0.43
8:V:290:TYR:CD1	8:V:290:TYR:C	2.93	0.43
8:V:337:LEU:HD21	8:V:398:LEU:CD2	2.49	0.43
10:Y:82:LYS:HE2	10:Y:86:GLU:OE2	2.19	0.43
10:Y:179:ARG:C	10:Y:179:ARG:CD	2.92	0.43
10:Y:296:VAL:HG12	10:Y:300:ARG:HD2	1.99	0.43
11:Z:283:ARG:CD	11:Z:283:ARG:C	2.92	0.43
12:a:32:LYS:O	12:a:34:TRP:NE1	2.52	0.43
12:a:188:LEU:HG	12:a:189:PRO:CD	2.42	0.43
13:b:128:ALA:O	13:b:130:ARG:N	2.52	0.43
14:c:243:SER:HA	14:c:246:LYS:CE	2.49	0.43
15:d:1:MET:CB	15:d:3:GLU:HG3	2.48	0.43
15:d:45:LYS:C	15:d:48:LEU:HB2	2.43	0.43
16:f:271:MET:HG2	16:f:272:LEU:HD13	2.00	0.43
16:f:327:ASN:HD21	16:f:420:TRP:HB2	1.84	0.43
16:f:541:THR:HG22	16:f:584:SER:OG	2.18	0.43
16:f:666:ILE:HG13	16:f:667:GLY:H	1.84	0.43
18:W:172:GLU:C	18:W:174:TYR:H	2.27	0.43
18:W:225:LYS:O	18:W:229:LEU:N	2.50	0.43
18:W:401:THR:OG1	18:W:402:ILE:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:M:39:ILE:HD12	26:M:193:VAL:HG22	2.01	0.43
26:M:169:ARG:HB3	26:M:169:ARG:CZ	2.49	0.43
26:m:113:ASP:C	26:m:113:ASP:OD2	2.62	0.43
38:o:301:LDZ:H3	29:p:125:LEU:HD21	2.00	0.43
1:A:255:ARG:HD3	1:A:259:GLU:OE2	2.19	0.43
1:A:365:GLU:O	1:A:368:ILE:HG22	2.19	0.43
1:A:428:ARG:NH1	23:J:146:GLN:HG3	2.34	0.43
2:B:93:GLU:O	2:B:94:GLU:C	2.62	0.43
3:C:140:VAL:HG12	3:C:211:PHE:HB3	2.00	0.43
4:D:125:LYS:HB3	4:D:126:PRO:HD2	2.01	0.43
5:E:326:ILE:HG12	5:E:328:TYR:HE1	1.84	0.43
6:F:172:VAL:HA	6:F:175:MET:SD	2.58	0.43
6:F:251:LEU:HD12	6:F:285:ILE:CD1	2.49	0.43
7:U:16:GLU:HG2	7:U:18:GLN:HG2	2.00	0.43
7:U:117:ASP:C	7:U:119:PRO:HD3	2.43	0.43
7:U:571:CYS:HB2	7:U:601:ARG:NH2	2.34	0.43
7:U:786:THR:HG21	7:U:885:MET:CE	2.48	0.43
8:V:175:MET:SD	8:V:175:MET:C	3.02	0.43
8:V:234:ARG:HD3	8:V:234:ARG:HA	1.81	0.43
8:V:283:ASN:HB3	19:e:19:PHE:CZ	2.53	0.43
8:V:375:PHE:HA	8:V:378:VAL:HG22	2.01	0.43
10:Y:258:GLN:HE21	10:Y:258:GLN:HB2	1.70	0.43
11:Z:103:LYS:HB2	11:Z:103:LYS:NZ	2.33	0.43
11:Z:151:THR:OG1	11:Z:152:SER:N	2.52	0.43
12:a:4:VAL:HB	12:a:5:PRO:HD3	2.00	0.43
12:a:148:VAL:HG13	12:a:152:HIS:ND1	2.33	0.43
13:b:28:ALA:HA	13:b:31:ASP:CB	2.40	0.43
15:d:1:MET:O	15:d:3:GLU:N	2.52	0.43
16:f:558:LEU:O	16:f:559:PRO:C	2.62	0.43
16:f:577:LEU:C	16:f:580:LEU:HG	2.43	0.43
16:f:857:GLY:H	16:f:860:LYS:HE3	1.83	0.43
18:W:25:ASP:CB	18:W:65:ARG:HH22	2.31	0.43
18:W:259:GLU:HG3	18:W:261:GLU:N	2.34	0.43
18:W:259:GLU:HG3	18:W:262:LYS:H	1.83	0.43
18:W:286:LEU:C	18:W:286:LEU:HD23	2.44	0.43
22:I:115:CYS:SG	22:I:156:TYR:HB3	2.59	0.43
23:J:121:SER:OG	23:J:122:ASN:N	2.52	0.43
32:S:183:ALA:HA	32:S:189:THR:HG23	2.00	0.43
1:A:237:PHE:CE1	1:A:273:PHE:HB2	2.54	0.43
2:B:80:ARG:HA	2:B:83:GLU:OE2	2.18	0.43
3:C:191:PRO:O	3:C:192:PRO:C	2.61	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:53:PHE:HA	4:D:56:VAL:HG22	2.00	0.43
4:D:372:GLY:HA3	36:D:501:ADP:C8	2.54	0.43
5:E:98:VAL:HG21	5:E:107:ILE:HD13	2.01	0.43
5:E:159:PHE:HA	5:E:162:VAL:HG12	2.00	0.43
6:F:305:GLU:O	6:F:309:THR:HG23	2.19	0.43
6:F:438:TYR:O	25:L:78:THR:OG1	2.35	0.43
7:U:195:ASN:O	7:U:199:ARG:HG2	2.19	0.43
7:U:248:ILE:O	7:U:252:LEU:HD12	2.19	0.43
8:V:91:PRO:O	8:V:94:VAL:CG2	2.67	0.43
8:V:306:ARG:HD2	8:V:306:ARG:C	2.44	0.43
8:V:340:GLY:HA3	8:V:404:LYS:CE	2.48	0.43
8:V:374:LYS:O	8:V:378:VAL:HG13	2.19	0.43
9:X:267:VAL:HG11	9:X:291:ALA:HB3	2.00	0.43
9:X:407:MET:CA	9:X:410:VAL:HG12	2.47	0.43
11:Z:17:LEU:C	11:Z:20:VAL:HG12	2.44	0.43
11:Z:82:PHE:HA	11:Z:85:VAL:HG12	2.00	0.43
11:Z:211:TYR:HH	11:Z:227:ILE:HG21	1.84	0.43
12:a:94:LEU:HD23	12:a:98:GLU:CD	2.44	0.43
12:a:112:ILE:HD12	12:a:151:VAL:CG2	2.46	0.43
12:a:296:ILE:CG2	12:a:307:VAL:HG22	2.48	0.43
14:c:51:MET:H	14:c:51:MET:CE	2.32	0.43
14:c:120:CYS:SG	14:c:120:CYS:O	2.77	0.43
14:c:126:ASP:OD1	14:c:126:ASP:N	2.51	0.43
14:c:255:TYR:CE1	14:c:280:PRO:HG3	2.54	0.43
16:f:95:PRO:HB2	16:f:133:MET:HG3	2.00	0.43
16:f:257:ARG:HD2	16:f:289:VAL:HG11	2.01	0.43
16:f:347:ASP:HA	16:f:350:LYS:HB2	2.00	0.43
16:f:479:LEU:HA	16:f:482:ILE:HG12	1.99	0.43
16:f:587:PHE:O	16:f:590:PHE:HB2	2.19	0.43
16:f:731:MET:O	16:f:736:THR:O	2.37	0.43
18:W:373:ILE:HD11	18:W:377:ARG:HB2	2.01	0.43
18:W:419:LYS:HD2	18:W:419:LYS:HA	1.74	0.43
19:e:60:LEU:O	19:e:61:GLU:O	2.36	0.43
26:M:109:LYS:O	26:M:113:ASP:OD2	2.36	0.43
1:A:139:ARG:NH1	1:A:156:LYS:HB3	2.33	0.42
2:B:62:LEU:HD12	2:B:62:LEU:C	2.44	0.42
2:B:78:PHE:CE2	2:B:82:GLN:HG3	2.54	0.42
2:B:398:ILE:HD11	2:B:423:LYS:N	2.34	0.42
3:C:98:ASP:N	3:C:98:ASP:OD1	2.51	0.42
3:C:105:ILE:O	3:C:106:ASN:C	2.60	0.42
4:D:344:ILE:HD13	4:D:375:ILE:HD12	1.99	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:115:VAL:HG13	5:E:120:TYR:HB3	2.01	0.42
5:E:194:ASN:HD21	5:E:229:ILE:HD12	1.84	0.42
5:E:303:LEU:O	5:E:303:LEU:CG	2.61	0.42
6:F:416:THR:O	6:F:419:ASP:HB2	2.19	0.42
7:U:97:VAL:O	7:U:101:ILE:HG12	2.18	0.42
7:U:258:GLN:C	7:U:259:GLN:HG3	2.44	0.42
7:U:377:HIS:HA	7:U:380:THR:CG2	2.49	0.42
7:U:438:GLN:OE1	7:U:438:GLN:CA	2.66	0.42
7:U:553:ALA:HA	7:U:585:THR:HB	2.01	0.42
7:U:557:TYR:CE2	7:U:757:MET:SD	3.12	0.42
7:U:805:ASN:OD1	7:U:805:ASN:N	2.51	0.42
8:V:348:PHE:N	8:V:348:PHE:HD1	2.17	0.42
10:Y:57:LEU:HA	10:Y:57:LEU:HD12	1.82	0.42
11:Z:59:ASP:HB2	13:b:99:HIS:NE2	2.34	0.42
11:Z:243:GLN:HG2	11:Z:244:GLU:N	2.32	0.42
11:Z:260:VAL:HG12	11:Z:261:TYR:N	2.33	0.42
12:a:55:GLY:HA2	12:a:58:LYS:HE3	2.00	0.42
12:a:169:HIS:HE1	12:a:203:ALA:HA	1.84	0.42
13:b:2:VAL:HG13	13:b:44:ASN:OD1	2.18	0.42
13:b:57:ASP:N	13:b:85:THR:HG21	2.29	0.42
15:d:44:THR:O	15:d:48:LEU:N	2.28	0.42
15:d:77:GLN:HA	15:d:80:CYS:HB2	2.00	0.42
15:d:137:VAL:O	15:d:138:SER:C	2.59	0.42
16:f:59:LEU:HD23	16:f:62:ARG:HH12	1.83	0.42
16:f:98:PHE:HE2	16:f:105:LYS:HD2	1.84	0.42
16:f:407:MET:HE1	16:f:440:ILE:CD1	2.46	0.42
16:f:419:LEU:HG	16:f:420:TRP:HD1	1.84	0.42
16:f:456:ARG:HH21	16:f:492:SER:N	2.16	0.42
16:f:531:ASN:HA	16:f:534:VAL:CG1	2.46	0.42
16:f:745:LEU:HD23	16:f:748:LEU:HD23	2.01	0.42
16:f:777:THR:O	16:f:780:PRO:HD2	2.19	0.42
16:f:866:GLN:HG3	16:f:868:HIS:HB2	2.01	0.42
18:W:199:TYR:HD1	18:W:199:TYR:N	2.17	0.42
18:W:217:GLU:O	18:W:217:GLU:HG2	2.18	0.42
18:W:384:LEU:HD12	18:W:389:SER:CB	2.49	0.42
23:J:27:LYS:HA	23:J:27:LYS:HE2	2.01	0.42
23:J:173:GLU:HA	24:K:58:LEU:HD21	2.00	0.42
24:K:121:LEU:HD12	24:K:123:PHE:HE1	1.84	0.42
33:T:96:MET:HE2	33:T:110:MET:CE	2.48	0.42
24:k:180:SER:CB	24:k:201:ILE:HD12	2.49	0.42
28:o:92:GLN:OE1	28:o:92:GLN:HA	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:200:ARG:HB3	6:F:408:LEU:HD11	2.00	0.42
1:A:268:LYS:HD2	1:A:268:LYS:C	2.43	0.42
1:A:427:PRO:HG2	23:J:27:LYS:HD3	2.00	0.42
3:C:334:ARG:HD2	3:C:334:ARG:C	2.45	0.42
3:C:403:LYS:HD3	3:C:403:LYS:HA	1.92	0.42
4:D:170:MET:O	4:D:174:LYS:HB2	2.19	0.42
4:D:296:MET:HE3	4:D:296:MET:HB3	1.83	0.42
4:D:382:SER:HB2	4:D:399:PHE:HD1	1.84	0.42
5:E:196:LEU:O	5:E:197:LYS:C	2.61	0.42
6:F:317:LEU:HB3	6:F:347:ARG:HG2	2.02	0.42
7:U:22:PHE:HZ	7:U:26:LYS:HZ2	1.66	0.42
7:U:392:TRP:C	7:U:392:TRP:HD1	2.27	0.42
7:U:505:ASP:HB3	7:U:508:THR:CG2	2.49	0.42
7:U:536:ALA:HB2	7:U:548:LEU:HD23	2.00	0.42
7:U:567:ILE:HB	7:U:601:ARG:NH1	2.21	0.42
7:U:914:LEU:HD12	7:U:914:LEU:N	2.34	0.42
8:V:78:HIS:CD2	8:V:100:MET:HE2	2.54	0.42
8:V:461:LYS:HD3	8:V:462:GLU:O	2.18	0.42
9:X:377:ILE:HD12	9:X:378:LEU:H	1.83	0.42
10:Y:38:ARG:HA	10:Y:41:LEU:HD21	2.00	0.42
14:c:121:TRP:C	14:c:121:TRP:HE3	2.27	0.42
14:c:275:VAL:HG22	14:c:276:GLY:N	2.34	0.42
14:c:279:ASP:C	14:c:281:LYS:H	2.26	0.42
15:d:16:LEU:CB	15:d:22:GLU:CG	2.98	0.42
16:f:325:GLN:CD	16:f:325:GLN:H	2.27	0.42
16:f:568:GLY:N	16:f:599:ALA:O	2.38	0.42
16:f:605:ASN:HD21	16:f:608:LYS:N	2.06	0.42
16:f:690:VAL:CG1	16:f:694:LEU:HD13	2.50	0.42
16:f:748:LEU:O	16:f:752:HIS:CD2	2.72	0.42
18:W:25:ASP:N	18:W:65:ARG:HH22	2.17	0.42
18:W:312:MET:N	18:W:312:MET:SD	2.92	0.42
18:W:403:PHE:HE1	18:W:405:LYS:CD	2.30	0.42
22:I:227:VAL:HG23	22:I:227:VAL:O	2.19	0.42
26:M:200:VAL:HG23	26:M:201:HIS:N	2.34	0.42
32:S:172:MET:SD	32:S:197:ILE:HD11	2.58	0.42
23:j:219:ILE:HD12	23:j:219:ILE:N	2.33	0.42
1:A:52:ILE:CD1	2:B:69:LYS:HA	2.40	0.42
1:A:87:LEU:HD23	1:A:87:LEU:C	2.44	0.42
1:A:186:LYS:HD3	1:A:339:ARG:NH2	2.34	0.42
1:A:206:ILE:CG2	6:F:373:MET:HE1	2.48	0.42
1:A:309:PHE:CZ	6:F:181:PRO:HG3	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:86:LYS:HG3	2:B:88:LEU:HG	2.00	0.42
2:B:429:LYS:HZ2	3:C:306:LEU:CD2	2.32	0.42
3:C:28:ILE:HA	3:C:28:ILE:HD13	1.80	0.42
3:C:211:PHE:CE1	3:C:247:PHE:HB3	2.54	0.42
3:C:340:ARG:NH2	10:Y:175:ASP:HA	2.24	0.42
4:D:113:VAL:CG2	4:D:114:ARG:N	2.81	0.42
4:D:252:ARG:HB3	4:D:252:ARG:NH1	2.34	0.42
5:E:158:LEU:HD13	18:W:204:ILE:CG2	2.49	0.42
5:E:288:ALA:HA	5:E:291:ARG:HG2	2.00	0.42
6:F:74:LYS:O	6:F:74:LYS:HD2	2.19	0.42
6:F:362:ARG:HA	6:F:365:ILE:HG22	2.00	0.42
7:U:187:LEU:C	7:U:188:MET:HG2	2.43	0.42
7:U:474:ARG:HH11	7:U:474:ARG:HG3	1.84	0.42
7:U:475:HIS:NE2	7:U:479:LEU:HD12	2.34	0.42
7:U:546:ARG:HD3	7:U:771:PHE:HD2	1.84	0.42
10:Y:32:ARG:HD2	10:Y:284:LYS:HD2	2.01	0.42
10:Y:66:ASP:O	10:Y:70:LEU:HG	2.19	0.42
10:Y:85:ASP:HB3	10:Y:103:ALA:HB1	2.00	0.42
10:Y:213:LEU:CD2	10:Y:219:PHE:HB2	2.49	0.42
10:Y:325:VAL:CG2	19:e:65:TYR:CD1	3.02	0.42
10:Y:328:GLU:HG2	10:Y:329:PHE:N	2.33	0.42
11:Z:112:MET:HE3	11:Z:119:SER:CB	2.49	0.42
12:a:80:ILE:HA	12:a:83:VAL:CG2	2.49	0.42
12:a:195:GLU:O	12:a:199:THR:HG23	2.18	0.42
13:b:15:TYR:HB2	13:b:115:SER:OG	2.19	0.42
13:b:37:CYS:O	13:b:38:HIS:C	2.61	0.42
13:b:75:LEU:HD12	13:b:75:LEU:HA	1.83	0.42
13:b:111:ALA:HB3	13:b:140:ILE:HD13	2.00	0.42
14:c:55:GLY:O	14:c:112:TYR:HD1	2.02	0.42
15:d:1:MET:HB2	15:d:1:MET:HE2	1.90	0.42
15:d:15:ASN:HB3	15:d:61:TRP:HB2	2.02	0.42
15:d:50:LEU:C	15:d:53:ASP:HB2	2.44	0.42
15:d:86:LYS:HD3	15:d:87:GLU:O	2.18	0.42
16:f:53:GLN:HG3	16:f:53:GLN:O	2.19	0.42
16:f:180:GLN:NE2	16:f:180:GLN:HA	2.33	0.42
16:f:189:LYS:C	16:f:191:ILE:HD12	2.44	0.42
16:f:731:MET:HE2	16:f:746:ARG:CB	2.41	0.42
16:f:780:PRO:HG3	16:f:803:PHE:HB3	2.01	0.42
18:W:34:LEU:O	18:W:37:GLU:N	2.52	0.42
18:W:112:VAL:O	18:W:113:GLU:C	2.62	0.42
18:W:227:TYR:HE2	18:W:249:ALA:HB1	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:228:ASN:OD1	18:W:232:GLN:NE2	2.48	0.42
18:W:253:THR:O	18:W:257:GLN:O	2.36	0.42
18:W:257:GLN:HE22	18:W:262:LYS:HG3	1.84	0.42
18:W:361:HIS:ND1	18:W:361:HIS:C	2.77	0.42
18:W:384:LEU:HB2	18:W:389:SER:HB3	2.01	0.42
20:G:19:GLU:OE1	20:G:19:GLU:CA	2.67	0.42
25:L:24:TYR:O	25:L:27:GLU:HB3	2.19	0.42
26:M:200:VAL:O	26:M:201:HIS:C	2.62	0.42
28:O:188:ARG:HB3	28:O:189:PRO:HD3	2.01	0.42
31:R:83:LEU:O	31:R:87:MET:HG3	2.20	0.42
21:h:64:VAL:O	21:h:219:ARG:NH1	2.52	0.42
23:j:116:GLN:NE2	24:k:84:ASP:OD1	2.48	0.42
1:A:69:ASP:N	3:C:81:ASP:OD1	2.51	0.42
1:A:345:LEU:N	1:A:345:LEU:HD12	2.34	0.42
1:A:428:ARG:HH21	23:J:160:ALA:C	2.26	0.42
2:B:60:LEU:HB2	16:f:219:LYS:HZ3	1.83	0.42
2:B:184:TYR:O	2:B:187:ILE:HG22	2.20	0.42
2:B:282:VAL:O	2:B:282:VAL:HG23	2.19	0.42
3:C:175:PHE:CE2	3:C:183:PRO:HD3	2.55	0.42
3:C:187:LEU:HB3	3:C:311:ILE:HG21	2.01	0.42
5:E:50:LEU:CD2	6:F:83:ASN:HD22	2.31	0.42
5:E:194:ASN:HD21	5:E:228:CYS:HA	1.81	0.42
5:E:223:ARG:NE	5:E:268:ASP:OD1	2.53	0.42
5:E:337:GLY:O	5:E:338:PHE:C	2.62	0.42
6:F:59:VAL:HG13	6:F:60:LEU:N	2.34	0.42
6:F:214:ASN:HD22	6:F:215:LEU:CD1	2.32	0.42
7:U:111:GLN:OE1	7:U:124:LYS:HD2	2.20	0.42
7:U:244:MET:HE1	7:U:903:PHE:CD2	2.55	0.42
7:U:439:GLU:O	7:U:443:LEU:HG	2.18	0.42
8:V:371:ASN:OD1	8:V:374:LYS:HB2	2.19	0.42
10:Y:326:GLY:O	10:Y:330:ILE:HG12	2.18	0.42
11:Z:14:LEU:O	11:Z:18:SER:OG	2.28	0.42
11:Z:22:HIS:O	11:Z:25:ARG:CG	2.68	0.42
11:Z:261:TYR:HD1	11:Z:261:TYR:HA	1.62	0.42
12:a:135:ILE:HG23	12:a:136:GLU:OE2	2.20	0.42
12:a:212:ASN:ND2	12:a:237:LEU:O	2.52	0.42
12:a:274:LEU:HD23	12:a:274:LEU:HA	1.88	0.42
12:a:357:CYS:HA	12:a:360:VAL:HG22	2.02	0.42
15:d:58:GLY:CA	15:d:61:TRP:HB3	2.49	0.42
16:f:139:CYS:O	16:f:143:ARG:HG2	2.19	0.42
16:f:183:PRO:CA	16:f:216:MET:HE1	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:228:LYS:HG3	16:f:232:TYR:CZ	2.55	0.42
16:f:456:ARG:HH21	16:f:491:GLY:C	2.27	0.42
16:f:482:ILE:HD13	16:f:518:THR:OG1	2.20	0.42
16:f:705:ASN:O	16:f:708:ASP:OD1	2.37	0.42
18:W:20:TYR:N	18:W:20:TYR:CD2	2.88	0.42
18:W:393:LEU:N	18:W:393:LEU:HD23	2.33	0.42
18:W:414:ASN:HB2	18:W:416:GLN:OE1	2.20	0.42
19:e:59:GLU:OE1	19:e:65:TYR:HB2	2.20	0.42
20:G:40:VAL:HG13	20:G:179:LEU:HD11	2.00	0.42
20:G:154:CYS:HA	20:G:159:TYR:O	2.20	0.42
21:H:79:GLY:N	21:H:80:PRO:HD2	2.35	0.42
24:K:235:GLU:C	24:K:235:GLU:CD	2.87	0.42
22:i:174:MET:HE1	22:i:199:LYS:HB3	2.01	0.42
1:A:297:ARG:HD3	6:F:257:VAL:CG2	2.40	0.42
2:B:343:ARG:HG3	2:B:344:PRO:CD	2.44	0.42
2:B:385:MET:HE2	2:B:385:MET:H	1.84	0.42
3:C:104:ASP:O	3:C:105:ILE:C	2.62	0.42
3:C:311:ILE:O	3:C:311:ILE:HG22	2.18	0.42
5:E:184:ALA:HB2	5:E:231:PHE:HE1	1.83	0.42
5:E:312:ILE:HG13	5:E:343:LEU:HD13	2.02	0.42
5:E:318:GLY:N	5:E:319:PRO:CD	2.82	0.42
5:E:350:ALA:CA	5:E:370:ALA:HB2	2.50	0.42
6:F:86:LEU:HD13	6:F:86:LEU:HA	1.89	0.42
6:F:98:ASP:N	6:F:121:CYS:SG	2.92	0.42
6:F:251:LEU:HD12	6:F:285:ILE:HD11	2.00	0.42
6:F:406:ILE:CD1	6:F:422:GLU:HG2	2.49	0.42
7:U:10:SER:HB3	15:d:73:ARG:HA	2.02	0.42
7:U:514:LEU:HA	7:U:514:LEU:HD12	1.72	0.42
7:U:609:ASP:H	7:U:615:ARG:NH2	2.18	0.42
7:U:681:ASN:HD21	14:c:183:HIS:CE1	2.38	0.42
7:U:761:VAL:O	7:U:765:VAL:HG23	2.20	0.42
7:U:817:LEU:HD12	7:U:817:LEU:HA	1.84	0.42
8:V:132:LEU:N	8:V:133:PRO:HD2	2.34	0.42
9:X:240:ASP:O	9:X:241:SER:OG	2.18	0.42
10:Y:50:MET:HB3	10:Y:74:LYS:NZ	2.34	0.42
10:Y:383:LEU:HD23	10:Y:383:LEU:HA	1.73	0.42
11:Z:112:MET:HE2	11:Z:112:MET:HB3	1.91	0.42
13:b:62:THR:HG21	13:b:71:ILE:HG22	2.00	0.42
14:c:305:ASP:OD1	14:c:309:PHE:HE2	2.03	0.42
15:d:162:SER:O	15:d:163:TYR:HB2	2.19	0.42
16:f:349:TYR:CD1	16:f:349:TYR:C	2.97	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:431:LYS:HD3	16:f:432:TYR:CE2	2.55	0.42
16:f:449:GLY:HA3	16:f:484:GLY:C	2.44	0.42
16:f:487:LEU:HD12	16:f:487:LEU:C	2.44	0.42
16:f:563:GLY:HA3	16:f:598:CYS:CB	2.41	0.42
18:W:190:MET:CG	18:W:205:ILE:HD11	2.49	0.42
23:J:61:LYS:HG2	23:J:73:PHE:CZ	2.55	0.42
25:L:157:ARG:HB3	26:M:59:GLU:OE1	2.19	0.42
29:P:130:MET:HE3	29:P:132:THR:CG2	2.49	0.42
1:A:90:GLU:O	1:A:92:PRO:CD	2.65	0.42
1:A:345:LEU:HD12	1:A:345:LEU:H	1.85	0.42
1:A:395:PHE:CD2	1:A:411:GLU:HG2	2.54	0.42
1:A:400:ARG:HD3	1:A:400:ARG:HA	1.74	0.42
2:B:191:ASP:O	2:B:194:ILE:HG22	2.19	0.42
3:C:151:ILE:HD11	3:C:198:LEU:HG	2.00	0.42
3:C:378:VAL:HG21	3:C:383:PHE:HE1	1.84	0.42
4:D:46:LYS:HG3	4:D:47:LEU:HD22	2.01	0.42
4:D:159:LYS:HE2	4:D:159:LYS:HB2	1.80	0.42
6:F:137:ILE:HG22	6:F:138:GLY:N	2.35	0.42
6:F:350:ARG:HD3	6:F:351:LYS:H	1.84	0.42
6:F:408:LEU:HD23	6:F:408:LEU:C	2.43	0.42
6:F:421:MET:CA	6:F:424:ILE:HD12	2.12	0.42
7:U:360:VAL:O	7:U:360:VAL:CG1	2.67	0.42
7:U:446:LEU:CG	7:U:457:ILE:HD11	2.49	0.42
7:U:455:GLY:O	7:U:457:ILE:N	2.53	0.42
7:U:580:ARG:HD3	7:U:613:ASP:C	2.45	0.42
7:U:622:LEU:O	7:U:622:LEU:HD13	2.20	0.42
9:X:123:THR:HA	9:X:126:ARG:HG2	2.02	0.42
9:X:194:ARG:NH2	9:X:214:SER:OG	2.53	0.42
9:X:248:ILE:HG13	9:X:249:THR:N	2.33	0.42
10:Y:235:ASP:OD1	10:Y:239:LYS:NZ	2.53	0.42
11:Z:43:TRP:CE3	11:Z:43:TRP:HA	2.53	0.42
11:Z:168:GLU:O	11:Z:172:VAL:HG13	2.20	0.42
11:Z:280:ILE:HG23	11:Z:283:ARG:HH22	1.82	0.42
12:a:61:GLU:HA	12:a:64:ILE:HG22	2.01	0.42
12:a:80:ILE:HA	12:a:83:VAL:HG22	2.01	0.42
12:a:194:GLN:NE2	12:a:225:LEU:O	2.51	0.42
12:a:362:SER:HA	12:a:365:MET:HG2	2.01	0.42
14:c:97:ASP:O	14:c:98:MET:C	2.62	0.42
15:d:94:TYR:HA	15:d:98:LEU:C	2.44	0.42
15:d:251:ARG:NH1	15:d:255:MET:HE2	2.35	0.42
16:f:53:GLN:CG	16:f:53:GLN:O	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:225:ALA:HB1	16:f:644:ALA:HB2	2.00	0.42
16:f:668:ALA:C	16:f:670:MET:H	2.27	0.42
16:f:720:GLU:HA	16:f:754:LYS:HA	2.02	0.42
16:f:811:LEU:HB2	16:f:854:GLY:O	2.19	0.42
16:f:813:LYS:NZ	16:f:853:VAL:HA	2.35	0.42
18:W:165:ILE:HG12	18:W:192:LEU:HD22	2.02	0.42
18:W:169:LEU:CA	18:W:172:GLU:OE1	2.67	0.42
18:W:329:ARG:HD3	18:W:342:GLY:H	1.85	0.42
22:I:72:MET:HE3	22:I:107:CYS:HB3	2.00	0.42
20:g:195:VAL:HG12	20:g:199:ILE:HD12	2.02	0.42
25:l:220:GLU:O	25:l:222:THR:HG23	2.18	0.42
1:A:120:LYS:HB3	6:F:90:VAL:CG2	2.50	0.42
1:A:271:LEU:HD23	1:A:271:LEU:N	2.34	0.42
2:B:41:LYS:HE3	2:B:41:LYS:HB3	1.84	0.42
2:B:197:ILE:HD13	2:B:239:VAL:HG11	2.01	0.42
2:B:384:ILE:CG2	2:B:385:MET:N	2.83	0.42
2:B:392:GLY:HA3	34:B:501:ATP:N7	2.35	0.42
3:C:114:VAL:HG12	3:C:126:ILE:CD1	2.47	0.42
3:C:250:GLU:OE1	3:C:250:GLU:N	2.51	0.42
3:C:365:GLU:HG3	4:D:329:ARG:HH12	1.84	0.42
3:C:396:GLU:O	3:C:397:LYS:NZ	2.39	0.42
4:D:53:PHE:C	4:D:56:VAL:HG22	2.44	0.42
4:D:89:ILE:HD11	5:E:79:TYR:O	2.20	0.42
4:D:403:TYR:O	4:D:407:ILE:HG22	2.19	0.42
5:E:140:GLU:OE1	5:E:141:GLN:N	2.53	0.42
6:F:223:VAL:CB	6:F:329:ILE:HG22	2.47	0.42
6:F:227:GLY:H	6:F:233:LYS:HZ1	1.68	0.42
7:U:226:PRO:HB3	7:U:263:SER:OG	2.20	0.42
7:U:236:LEU:O	7:U:236:LEU:HD12	2.20	0.42
7:U:325:MET:O	7:U:328:ILE:CG2	2.68	0.42
7:U:627:PHE:CG	7:U:628:ARG:N	2.86	0.42
8:V:230:PHE:CD1	8:V:230:PHE:O	2.72	0.42
8:V:349:ARG:HD3	8:V:349:ARG:HA	1.75	0.42
8:V:483:CYS:CB	11:Z:264:SER:HB2	2.48	0.42
10:Y:40:GLU:OE1	10:Y:40:GLU:HA	2.20	0.42
11:Z:202:ASN:OD1	11:Z:202:ASN:C	2.63	0.42
14:c:145:VAL:HG22	14:c:157:ILE:CG1	2.50	0.42
15:d:4:GLN:C	15:d:6:LYS:N	2.74	0.42
15:d:114:GLU:C	15:d:116:HIS:N	2.75	0.42
16:f:61:GLU:HG3	16:f:97:LYS:HB2	2.01	0.42
16:f:431:LYS:HG3	16:f:432:TYR:CE2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:520:LEU:HD13	16:f:557:TRP:CE3	2.54	0.42
16:f:655:LEU:HD23	16:f:659:LEU:HD11	2.01	0.42
18:W:52:LYS:HA	18:W:55:ARG:HH21	1.85	0.42
18:W:95:SER:OG	18:W:96:GLN:N	2.51	0.42
18:W:377:ARG:NH2	18:W:381:LEU:HG	2.34	0.42
24:K:210:LEU:HD11	24:K:215:ILE:HD13	2.02	0.42
25:L:76:GLY:HA3	25:L:130:VAL:HA	2.02	0.42
28:o:56:THR:HG23	28:o:87:MET:CE	2.48	0.42
1:A:169:LYS:HG3	1:A:231:ASN:OD1	2.20	0.42
1:A:376:LEU:C	1:A:378:PRO:HD3	2.45	0.42
2:B:385:MET:O	2:B:386:ALA:HB3	2.19	0.42
2:B:429:LYS:HZ2	3:C:306:LEU:CG	2.33	0.42
4:D:164:TYR:H	4:D:222:HIS:CE1	2.38	0.42
4:D:179:GLU:HA	4:D:183:LEU:HB2	2.02	0.42
4:D:302:ASN:O	4:D:304:ASN:OD1	2.37	0.42
5:E:175:PRO:HD2	5:E:301:ILE:O	2.20	0.42
5:E:285:LEU:HD23	5:E:285:LEU:HA	1.74	0.42
5:E:309:ARG:HH12	5:E:332:VAL:HG13	1.84	0.42
5:E:343:LEU:O	5:E:346:VAL:CG1	2.66	0.42
6:F:341:ALA:C	6:F:343:LEU:H	2.28	0.42
7:U:12:LEU:HD21	7:U:24:LEU:HG	2.01	0.42
7:U:220:LEU:CG	7:U:229:VAL:HG22	2.50	0.42
7:U:530:GLU:OE1	7:U:530:GLU:HA	2.19	0.42
7:U:723:ASP:CG	7:U:726:ALA:H	2.25	0.42
8:V:91:PRO:HA	8:V:94:VAL:HG22	2.02	0.42
8:V:169:LEU:HD13	8:V:210:CYS:HA	2.02	0.42
8:V:311:ASN:CA	8:V:314:ARG:HH21	2.28	0.42
8:V:357:LEU:C	8:V:359:PRO:HD2	2.44	0.42
8:V:436:PHE:CE2	15:d:197:ILE:HG13	2.55	0.42
8:V:461:LYS:HD2	8:V:461:LYS:C	2.45	0.42
8:V:471:GLU:N	8:V:472:PRO:CD	2.83	0.42
9:X:79:SER:O	9:X:80:ILE:HD13	2.20	0.42
9:X:277:LEU:H	9:X:277:LEU:HG	1.65	0.42
10:Y:21:GLN:HA	10:Y:21:GLN:NE2	2.35	0.42
10:Y:98:SER:HB2	10:Y:100:ILE:CG1	2.49	0.42
10:Y:308:LEU:HD12	10:Y:308:LEU:HA	1.83	0.42
11:Z:37:GLY:O	11:Z:94:TRP:HB2	2.19	0.42
12:a:359:ASP:OD1	12:a:359:ASP:N	2.53	0.42
13:b:2:VAL:HG21	13:b:47:ASN:CG	2.45	0.42
13:b:15:TYR:CD2	13:b:115:SER:OG	2.72	0.42
13:b:55:ALA:O	13:b:56:ASN:OD1	2.37	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:6:LYS:C	15:d:8:GLU:N	2.74	0.42
15:d:6:LYS:HG3	15:d:21:GLU:O	2.19	0.42
16:f:113:MET:SD	16:f:113:MET:C	3.03	0.42
16:f:173:LEU:HB2	16:f:178:LYS:HZ1	1.83	0.42
16:f:296:PHE:CE2	16:f:298:LEU:HD21	2.55	0.42
16:f:540:GLN:O	16:f:544:GLU:HB2	2.19	0.42
18:W:27:ARG:O	18:W:31:CYS:N	2.43	0.42
18:W:254:PRO:HB3	18:W:263:TRP:HE3	1.84	0.42
23:J:98:VAL:O	23:J:98:VAL:HG12	2.19	0.42
27:N:27:ILE:O	33:T:179:ARG:NH1	2.53	0.42
28:O:167:ASP:OD1	28:O:168:LEU:N	2.53	0.42
30:Q:38:MET:HE2	30:Q:38:MET:CA	2.49	0.42
32:S:72:LEU:HD21	32:S:88:ILE:HG12	2.00	0.42
23:j:59:VAL:HG22	23:j:59:VAL:O	2.19	0.42
1:A:184:ILE:HD13	1:A:184:ILE:HA	1.87	0.42
1:A:428:ARG:NH1	23:J:159:ASN:CB	2.82	0.42
2:B:56:THR:CG2	16:f:835:GLU:HG2	2.49	0.42
2:B:234:LEU:HD12	2:B:234:LEU:O	2.19	0.42
2:B:248:LEU:HD13	2:B:270:LEU:HD11	2.02	0.42
2:B:302:GLU:OE1	2:B:302:GLU:N	2.52	0.42
2:B:439:TYR:HE1	23:J:76:LEU:HD23	1.84	0.42
3:C:280:LEU:HD12	3:C:280:LEU:HA	1.75	0.42
3:C:398:ASN:HB2	21:H:166:TYR:CE1	2.55	0.42
3:C:399:MET:O	3:C:403:LYS:HB2	2.20	0.42
4:D:155:THR:O	4:D:156:SER:HB3	2.19	0.42
4:D:207:PRO:HB3	4:D:208:PRO:HD2	2.02	0.42
5:E:111:LEU:HD23	6:F:97:LEU:HD22	2.01	0.42
6:F:313:LEU:HD23	6:F:313:LEU:C	2.45	0.42
6:F:370:SER:O	6:F:371:ARG:CB	2.68	0.42
7:U:72:GLY:HA2	7:U:74:PHE:HE1	1.84	0.42
7:U:169:GLU:O	7:U:170:SER:C	2.62	0.42
7:U:248:ILE:HD13	7:U:248:ILE:HA	1.91	0.42
7:U:682:TYR:CD2	14:c:184:LEU:HD11	2.55	0.42
7:U:703:CYS:SG	7:U:706:VAL:HG22	2.60	0.42
7:U:807:LYS:CB	7:U:808:PRO:HD3	2.50	0.42
9:X:114:ILE:CD1	9:X:130:GLU:HB2	2.49	0.42
9:X:130:GLU:OE2	9:X:153:LEU:HD13	2.20	0.42
10:Y:47:ASP:HB3	10:Y:113:ARG:NH1	2.35	0.42
10:Y:63:TRP:HD1	10:Y:64:GLN:O	2.03	0.42
10:Y:328:GLU:H	10:Y:328:GLU:CD	2.25	0.42
12:a:104:VAL:O	12:a:104:VAL:HG13	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:147:GLU:OE2	13:b:150:THR:HA	2.20	0.42
14:c:207:TYR:N	14:c:207:TYR:CD1	2.86	0.42
16:f:159:VAL:HG13	16:f:160:ARG:HD3	2.00	0.42
16:f:597:VAL:HG21	16:f:635:LYS:HB2	2.01	0.42
16:f:679:LEU:HB3	16:f:681:TYR:CD1	2.54	0.42
18:W:218:ASN:C	18:W:220:GLU:N	2.77	0.42
18:W:268:LYS:O	18:W:272:LEU:HD23	2.19	0.42
18:W:425:LEU:HD22	18:W:428:TRP:HE3	1.85	0.42
19:e:56:LEU:C	19:e:59:GLU:HB3	2.44	0.42
27:N:15:LEU:HD21	27:N:102:ALA:HB3	2.02	0.42
29:P:115:THR:O	29:P:115:THR:HG22	2.19	0.42
21:h:187:ILE:HD11	21:h:211:ILE:HG21	2.01	0.42
22:i:201:MET:HE3	22:i:206:LEU:HD11	2.01	0.42
32:s:26:ASP:OD2	32:s:26:ASP:C	2.61	0.42
1:A:101:ILE:HG22	1:A:138:MET:O	2.20	0.42
1:A:150:HIS:O	1:A:151:ILE:C	2.63	0.42
1:A:230:ALA:HB2	1:A:237:PHE:CD2	2.55	0.42
1:A:428:ARG:CZ	23:J:161:ILE:HG23	2.49	0.42
2:B:49:LEU:C	2:B:51:LEU:N	2.78	0.42
2:B:359:LYS:HD2	2:B:360:THR:N	2.35	0.42
2:B:371:ARG:O	3:C:179:GLY:HA3	2.20	0.42
2:B:405:MET:CA	2:B:405:MET:CE	2.90	0.42
3:C:164:VAL:O	3:C:290:LYS:HD3	2.20	0.42
3:C:332:HIS:CE1	3:C:360:LYS:HD2	2.55	0.42
4:D:331:ILE:HD13	4:D:331:ILE:N	2.35	0.42
5:E:270:LEU:HD23	5:E:270:LEU:O	2.20	0.42
7:U:16:GLU:HG2	7:U:19:LEU:N	2.12	0.42
7:U:137:MET:HE3	7:U:137:MET:CA	2.44	0.42
7:U:340:GLN:HA	7:U:343:ILE:CG1	2.49	0.42
7:U:346:ASN:ND2	7:U:380:THR:HB	2.34	0.42
7:U:823:LYS:N	7:U:823:LYS:CD	2.82	0.42
7:U:899:ARG:NH2	7:U:918:SER:H	2.18	0.42
9:X:380:GLN:HB3	10:Y:313:SER:O	2.19	0.42
10:Y:28:LEU:N	10:Y:29:PRO:HD2	2.35	0.42
11:Z:228:TYR:OH	12:a:340:VAL:C	2.63	0.42
12:a:182:CYS:C	12:a:184:ASP:H	2.28	0.42
13:b:21:PHE:CA	13:b:177:PRO:HB3	2.50	0.42
13:b:180:ALA:C	13:b:183:LEU:H	2.25	0.42
14:c:61:PHE:CD1	14:c:67:VAL:HG23	2.55	0.42
14:c:234:TYR:CD2	18:W:425:LEU:HB3	2.55	0.42
14:c:255:TYR:HE1	14:c:280:PRO:HG3	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:284:LEU:HD12	14:c:284:LEU:HA	1.81	0.42
16:f:509:LYS:HG3	16:f:510:SER:H	1.85	0.42
16:f:617:SER:HB3	16:f:632:LYS:HZ1	1.83	0.42
16:f:776:LEU:O	16:f:780:PRO:HD2	2.20	0.42
18:W:98:LYS:HE3	18:W:135:LYS:HB3	2.02	0.42
21:H:178:ASN:H	21:H:181:LEU:HD11	1.85	0.42
31:R:50:ALA:CA	38:R:301:LDZ:H22	2.50	0.42
25:l:27:GLU:OE2	25:l:27:GLU:HA	2.19	0.42
25:l:72:ILE:HG21	25:l:88:MET:SD	2.59	0.42
2:B:295:TYR:CZ	2:B:297:SER:HB2	2.55	0.41
2:B:363:ARG:HD2	2:B:363:ARG:HA	1.91	0.41
2:B:429:LYS:HD3	3:C:298:ILE:CG1	2.49	0.41
3:C:137:LEU:HG	3:C:137:LEU:O	2.20	0.41
3:C:189:TYR:OH	3:C:314:LYS:HB3	2.20	0.41
3:C:196:LYS:HG3	3:C:317:PHE:HD2	1.85	0.41
3:C:328:ILE:HA	3:C:331:ILE:CG2	2.49	0.41
4:D:348:ILE:HG23	4:D:379:CYS:SG	2.60	0.41
6:F:151:VAL:HG21	6:F:160:ILE:CG2	2.35	0.41
6:F:180:ARG:HA	6:F:180:ARG:NE	2.35	0.41
6:F:219:PRO:O	6:F:220:PRO:C	2.61	0.41
6:F:350:ARG:HD3	6:F:351:LYS:N	2.35	0.41
7:U:98:GLU:HA	7:U:101:ILE:CD1	2.49	0.41
7:U:159:ARG:CB	7:U:162:VAL:HG12	2.46	0.41
7:U:237:VAL:HG12	7:U:325:MET:HE1	2.02	0.41
7:U:464:GLN:OE1	7:U:464:GLN:HA	2.20	0.41
7:U:556:MET:CE	7:U:563:ALA:HB2	2.50	0.41
7:U:899:ARG:NE	7:U:917:THR:OG1	2.50	0.41
8:V:192:MET:SD	8:V:230:PHE:CE1	3.13	0.41
9:X:74:ARG:HD2	9:X:116:TRP:CH2	2.54	0.41
9:X:183:LEU:HA	9:X:183:LEU:HD12	1.84	0.41
9:X:201:TYR:HB3	21:H:175:LYS:O	2.20	0.41
9:X:292:GLN:OE1	9:X:292:GLN:O	2.37	0.41
9:X:380:GLN:HB3	10:Y:314:LEU:HA	2.02	0.41
9:X:418:ALA:O	9:X:421:LEU:O	2.38	0.41
10:Y:377:LEU:CD2	11:Z:265:LEU:HD11	2.50	0.41
11:Z:134:PRO:HB3	14:c:220:LEU:HD13	2.00	0.41
11:Z:283:ARG:HE	11:Z:284:ASP:N	2.18	0.41
12:a:35:HIS:HE1	13:b:15:TYR:CE1	2.37	0.41
12:a:81:LEU:HA	12:a:84:VAL:HG22	2.01	0.41
12:a:99:LYS:O	12:a:102:GLU:HG2	2.20	0.41
12:a:328:ASP:O	12:a:330:ARG:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:a:343:LEU:H	12:a:343:LEU:CD2	2.32	0.41
13:b:78:VAL:O	13:b:78:VAL:HG12	2.20	0.41
13:b:178:SER:O	13:b:179:LEU:HB2	2.20	0.41
14:c:56:LEU:CD2	14:c:133:PHE:HE1	2.33	0.41
14:c:171:GLY:O	14:c:172:HIS:C	2.63	0.41
15:d:23:LEU:C	15:d:25:ARG:N	2.77	0.41
16:f:107:LYS:HG3	16:f:108:GLU:N	2.35	0.41
16:f:114:ALA:HB2	16:f:158:TYR:CZ	2.55	0.41
16:f:175:ASP:OD1	16:f:209:MET:HE1	2.19	0.41
16:f:210:GLU:CA	16:f:213:GLN:HE21	2.33	0.41
16:f:688:ARG:HD2	16:f:692:LEU:HB2	2.02	0.41
18:W:272:LEU:HD12	18:W:341:PHE:CD1	2.55	0.41
20:G:165:ALA:HB3	21:H:55:LEU:HD22	2.02	0.41
30:Q:85:ARG:NH1	30:Q:122:ALA:O	2.51	0.41
21:h:21:ILE:HD11	21:h:121:THR:OG1	2.20	0.41
24:k:41:GLN:OE1	24:k:164:GLN:NE2	2.53	0.41
27:n:18:ASP:OD1	27:n:34:LYS:NZ	2.51	0.41
2:B:287:ILE:CG2	2:B:337:LEU:HD21	2.50	0.41
2:B:295:TYR:CD2	2:B:295:TYR:N	2.88	0.41
4:D:73:LEU:CD1	11:Z:185:GLY:H	2.27	0.41
5:E:305:ASN:OD1	5:E:305:ASN:N	2.54	0.41
5:E:382:SER:CA	5:E:384:LEU:HD23	2.51	0.41
6:F:352:ILE:HG13	6:F:354:PHE:HE1	1.85	0.41
7:U:363:SER:O	7:U:366:HIS:CE1	2.73	0.41
7:U:452:ASN:ND2	7:U:758:PRO:HG3	2.35	0.41
7:U:583:MET:SD	7:U:618:ALA:CA	3.07	0.41
8:V:311:ASN:CB	8:V:314:ARG:HH21	2.33	0.41
8:V:398:LEU:O	8:V:402:VAL:HG13	2.20	0.41
9:X:84:LYS:HB2	9:X:84:LYS:HE3	1.86	0.41
9:X:265:GLU:HG2	9:X:266:ASP:OD1	2.20	0.41
10:Y:177:ARG:HH22	10:Y:208:PHE:HB2	1.85	0.41
11:Z:73:ASP:OD2	13:b:63:THR:HB	2.18	0.41
12:a:293:PHE:HD2	12:a:329:LYS:HE3	1.85	0.41
12:a:351:ASP:HA	12:a:354:GLU:HG2	2.01	0.41
13:b:3:LEU:O	13:b:106:LYS:CG	2.68	0.41
13:b:57:ASP:HA	13:b:85:THR:HG21	2.02	0.41
13:b:134:GLU:HB2	13:b:136:VAL:HG23	2.01	0.41
15:d:69:PRO:O	15:d:72:GLU:HB2	2.19	0.41
16:f:512:MET:SD	16:f:512:MET:C	3.03	0.41
16:f:546:SER:HA	16:f:585:GLU:OE2	2.20	0.41
16:f:587:PHE:HE1	16:f:625:LYS:HE2	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:804:LEU:HA	16:f:806:VAL:HG13	2.02	0.41
18:W:169:LEU:O	18:W:172:GLU:N	2.53	0.41
18:W:228:ASN:CG	18:W:232:GLN:HE22	2.28	0.41
18:W:436:MET:HE3	18:W:436:MET:HB3	1.69	0.41
22:I:72:MET:SD	22:I:110:LEU:HD23	2.59	0.41
28:O:165:PHE:O	32:S:38:ARG:NH2	2.43	0.41
29:P:48:LEU:CD2	29:P:86:LEU:HD22	2.50	0.41
25:l:38:LEU:HD23	25:l:38:LEU:N	2.36	0.41
32:s:186:ASP:HB3	32:s:189:THR:HG22	2.02	0.41
1:A:241:ILE:O	1:A:242:GLY:C	2.63	0.41
1:A:261:PHE:HD2	1:A:305:GLN:CB	2.30	0.41
1:A:329:PRO:C	1:A:331:LEU:H	2.28	0.41
1:A:389:CYS:SG	1:A:390:THR:N	2.93	0.41
2:B:144:LEU:HD11	2:B:159:VAL:HG11	2.02	0.41
2:B:440:LEU:CA	23:J:61:LYS:HZ1	2.33	0.41
2:B:440:LEU:N	23:J:61:LYS:HZ1	2.18	0.41
3:C:222:LYS:HA	4:D:240:LEU:HD23	2.02	0.41
3:C:315:ILE:H	3:C:315:ILE:HD12	1.85	0.41
4:D:76:GLN:HA	4:D:79:VAL:HG12	2.01	0.41
4:D:103:VAL:HG12	4:D:113:VAL:HG12	2.02	0.41
4:D:230:VAL:HG11	4:D:246:MET:CE	2.49	0.41
5:E:59:GLU:OE1	5:E:97:ARG:HG2	2.19	0.41
5:E:178:THR:HG21	5:E:301:ILE:CD1	2.51	0.41
5:E:327:ASP:HB3	5:E:364:GLN:NE2	2.25	0.41
6:F:145:LEU:HA	6:F:145:LEU:HD23	1.69	0.41
6:F:371:ARG:O	6:F:371:ARG:HG3	2.19	0.41
7:U:14:GLU:HB2	7:U:19:LEU:HD23	2.02	0.41
7:U:225:ASP:HB3	7:U:228:ALA:HB3	2.01	0.41
8:V:161:PRO:C	8:V:164:GLU:HG2	2.46	0.41
8:V:253:LEU:HA	8:V:253:LEU:HD13	1.83	0.41
9:X:69:LEU:O	9:X:73:VAL:HG22	2.19	0.41
9:X:378:LEU:HB3	10:Y:311:TYR:CE1	2.55	0.41
10:Y:311:TYR:HD2	10:Y:314:LEU:CG	2.33	0.41
11:Z:68:TRP:CE3	11:Z:69:PHE:N	2.88	0.41
11:Z:75:LEU:HD12	11:Z:75:LEU:HA	1.71	0.41
11:Z:156:GLU:HA	18:W:448:LYS:HE2	2.01	0.41
11:Z:221:PRO:CG	18:W:453:HIS:HB3	2.51	0.41
11:Z:249:PHE:HD1	11:Z:249:PHE:HA	1.67	0.41
12:a:47:ASP:CG	12:a:48:PRO:HD2	2.45	0.41
12:a:145:LEU:O	12:a:148:VAL:HG12	2.19	0.41
12:a:186:LYS:HE3	12:a:186:LYS:HB3	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:7:MET:CB	13:b:97:LEU:HD21	2.49	0.41
13:b:9:CYS:O	13:b:54:LEU:HD11	2.19	0.41
13:b:100:ARG:NH2	13:b:103:LYS:HA	2.35	0.41
13:b:166:THR:HG22	13:b:166:THR:O	2.20	0.41
15:d:15:ASN:H	15:d:61:TRP:CD1	2.37	0.41
16:f:125:ILE:HG21	16:f:129:LEU:CB	2.50	0.41
16:f:142:TYR:CD1	16:f:142:TYR:C	2.96	0.41
16:f:581:GLU:O	16:f:588:ARG:HB2	2.19	0.41
16:f:635:LYS:HE3	16:f:778:LEU:CD1	2.50	0.41
16:f:782:HIS:CD2	16:f:783:SER:N	2.88	0.41
16:f:865:PHE:O	16:f:866:GLN:CG	2.67	0.41
25:L:78:THR:O	25:L:79:ALA:C	2.64	0.41
22:i:35:LEU:N	22:i:46:ALA:O	2.45	0.41
2:B:429:LYS:HD3	3:C:298:ILE:HD11	2.02	0.41
3:C:82:LYS:CG	3:C:83:LYS:HG2	2.50	0.41
3:C:117:ARG:O	3:C:121:TYR:HD1	2.02	0.41
3:C:151:ILE:HG12	3:C:198:LEU:CG	2.50	0.41
4:D:366:ARG:HG3	4:D:368:ASP:OD1	2.20	0.41
4:D:396:ALA:O	4:D:397:LYS:CG	2.65	0.41
4:D:406:VAL:O	4:D:409:LYS:HG2	2.21	0.41
5:E:76:GLY:N	5:E:77:PRO:CD	2.83	0.41
5:E:298:LYS:HB2	5:E:298:LYS:HZ2	1.83	0.41
5:E:307:GLN:OE1	5:E:310:LEU:CD1	2.68	0.41
5:E:338:PHE:CE2	5:E:384:LEU:HD12	2.55	0.41
5:E:346:VAL:HG13	5:E:347:CYS:N	2.35	0.41
5:E:364:GLN:HA	5:E:367:PHE:HD1	1.82	0.41
6:F:129:ARG:O	6:F:129:ARG:HG3	2.20	0.41
6:F:351:LYS:HE2	6:F:351:LYS:HB2	1.72	0.41
6:F:352:ILE:HG13	6:F:352:ILE:O	2.20	0.41
7:U:72:GLY:O	7:U:74:PHE:CD1	2.71	0.41
7:U:524:LYS:O	7:U:524:LYS:CG	2.65	0.41
7:U:545:LEU:HD23	7:U:546:ARG:N	2.35	0.41
7:U:596:ASN:HA	7:U:599:ILE:CG2	2.50	0.41
7:U:700:GLU:OE1	7:U:700:GLU:N	2.42	0.41
8:V:348:PHE:HE2	8:V:364:THR:CG2	2.34	0.41
8:V:348:PHE:HB3	8:V:349:ARG:NH1	2.36	0.41
9:X:255:LEU:CB	9:X:287:LEU:HD13	2.50	0.41
10:Y:82:LYS:O	10:Y:85:ASP:OD1	2.37	0.41
10:Y:128:TYR:O	10:Y:131:THR:HG22	2.21	0.41
13:b:185:SER:O	13:b:186:SER:C	2.61	0.41
14:c:176:GLN:C	14:c:178:THR:N	2.77	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:20:ALA:HB2	16:f:34:ARG:CZ	2.50	0.41
16:f:577:LEU:HA	16:f:580:LEU:HG	2.02	0.41
16:f:637:LYS:HA	16:f:637:LYS:HD3	1.74	0.41
18:W:74:CYS:HA	18:W:79:GLU:OE1	2.20	0.41
18:W:98:LYS:CD	18:W:135:LYS:HE3	2.45	0.41
19:e:50:ASP:N	19:e:50:ASP:OD1	2.53	0.41
22:I:118:LYS:O	22:I:122:THR:HG23	2.19	0.41
23:J:42:VAL:O	23:J:43:LEU:HD23	2.20	0.41
1:A:181:LYS:HD3	1:A:181:LYS:HA	1.75	0.41
1:A:261:PHE:O	1:A:264:ALA:HB3	2.21	0.41
2:B:76:GLU:O	2:B:79:ILE:HG12	2.21	0.41
2:B:80:ARG:HG2	2:B:80:ARG:HH11	1.85	0.41
2:B:278:ALA:CB	2:B:279:PRO:CD	2.89	0.41
3:C:33:LEU:O	3:C:33:LEU:HD12	2.20	0.41
3:C:147:THR:O	3:C:150:MET:SD	2.78	0.41
4:D:183:LEU:HA	4:D:183:LEU:HD23	1.78	0.41
4:D:311:THR:O	4:D:311:THR:CG2	2.69	0.41
5:E:119:VAL:CG1	5:E:122:MET:CE	2.99	0.41
5:E:380:LEU:HG	5:E:381:GLU:HG3	2.02	0.41
6:F:321:GLN:CG	6:F:322:PRO:HD2	2.50	0.41
7:U:206:MET:HE2	7:U:211:PRO:HB3	2.02	0.41
7:U:256:ALA:HB3	7:U:261:LEU:CD2	2.44	0.41
7:U:256:ALA:HB1	7:U:260:PHE:HD2	1.86	0.41
7:U:793:LYS:CG	7:U:794:ASP:N	2.82	0.41
7:U:879:ASP:CG	7:U:880:ASN:N	2.78	0.41
8:V:296:LYS:HD3	8:V:301:GLU:HG3	2.02	0.41
9:X:365:LEU:HD23	9:X:365:LEU:HA	1.84	0.41
10:Y:124:PHE:CD2	10:Y:140:ILE:HG23	2.55	0.41
10:Y:157:ILE:HG21	10:Y:186:LEU:HG	2.02	0.41
11:Z:17:LEU:CA	11:Z:20:VAL:HG12	2.50	0.41
11:Z:35:VAL:HG23	11:Z:97:THR:CG2	2.48	0.41
12:a:161:LYS:HA	12:a:161:LYS:HD2	1.71	0.41
12:a:201:GLY:HA3	12:a:233:LEU:HD21	2.01	0.41
12:a:214:GLY:HA3	12:a:340:VAL:HG21	2.03	0.41
12:a:340:VAL:HG12	12:a:341:LEU:N	2.35	0.41
13:b:37:CYS:C	13:b:39:SER:N	2.75	0.41
13:b:56:ASN:OD1	13:b:56:ASN:O	2.38	0.41
14:c:56:LEU:HD21	14:c:133:PHE:HE1	1.84	0.41
14:c:73:PHE:CD2	14:c:95:MET:HG2	2.56	0.41
14:c:305:ASP:HB3	18:W:432:LEU:HD21	2.01	0.41
16:f:9:ALA:N	16:f:10:PRO:HD2	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:78:LEU:HD13	16:f:78:LEU:HA	1.91	0.41
16:f:223:GLU:O	16:f:226:TYR:O	2.38	0.41
16:f:272:LEU:CD1	16:f:300:ARG:HH22	2.33	0.41
16:f:477:MET:HE3	16:f:477:MET:HB3	1.70	0.41
16:f:531:ASN:O	16:f:534:VAL:CG1	2.67	0.41
16:f:558:LEU:C	16:f:560:LEU:N	2.79	0.41
16:f:590:PHE:HE1	16:f:628:ASP:CB	2.33	0.41
16:f:606:VAL:HA	16:f:609:VAL:HG11	2.03	0.41
16:f:749:ALA:O	16:f:752:HIS:N	2.53	0.41
16:f:826:GLN:HE22	16:f:864:GLY:C	2.29	0.41
18:W:403:PHE:HE2	18:W:417:ARG:N	2.18	0.41
18:W:432:LEU:HD12	18:W:432:LEU:HA	1.71	0.41
24:K:31:ILE:HD11	24:K:140:ALA:N	2.35	0.41
25:L:90:GLN:NE2	25:L:94:ASP:OD1	2.53	0.41
32:s:169:ASP:OD2	32:s:170:ARG:N	2.53	0.41
1:A:45:ILE:HD11	2:B:62:LEU:CB	2.51	0.41
2:B:41:LYS:CG	2:B:278:ALA:HB3	2.51	0.41
2:B:74:MET:CE	16:f:609:VAL:HG22	2.46	0.41
2:B:320:ASP:O	2:B:321:SER:OG	2.29	0.41
3:C:140:VAL:CG1	3:C:211:PHE:HB3	2.50	0.41
3:C:321:ASN:CG	3:C:322:GLU:N	2.78	0.41
3:C:329:LEU:HA	3:C:329:LEU:HD23	1.81	0.41
3:C:387:VAL:CG1	3:C:388:ALA:N	2.83	0.41
3:C:390:VAL:HG13	3:C:391:MET:N	2.34	0.41
4:D:120:ASP:C	4:D:121:ARG:HE	2.17	0.41
4:D:368:ASP:OD1	4:D:368:ASP:N	2.53	0.41
5:E:139:SER:O	5:E:142:ILE:CG1	2.69	0.41
6:F:204:LEU:N	6:F:205:PRO:HD2	2.35	0.41
7:U:16:GLU:CG	7:U:18:GLN:HG2	2.51	0.41
7:U:381:THR:HA	7:U:412:HIS:ND1	2.33	0.41
8:V:161:PRO:HA	8:V:164:GLU:CG	2.41	0.41
8:V:454:GLU:CG	8:V:455:LYS:HZ2	2.32	0.41
8:V:484:LEU:HD23	8:V:484:LEU:HA	1.93	0.41
9:X:264:PRO:HG2	9:X:295:LYS:HE2	2.03	0.41
12:a:28:LEU:HD13	12:a:28:LEU:HA	1.86	0.41
12:a:210:VAL:HG23	12:a:213:PHE:CD1	2.55	0.41
12:a:274:LEU:HD23	12:a:310:LEU:CD2	2.50	0.41
14:c:134:GLU:OE2	14:c:138:GLU:HA	2.21	0.41
15:d:45:LYS:O	15:d:48:LEU:HB2	2.20	0.41
15:d:128:GLN:O	15:d:129:THR:HG22	2.20	0.41
15:d:237:ILE:HD12	15:d:238:PRO:CD	2.30	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:240:THR:O	15:d:244:LYS:HG3	2.20	0.41
16:f:34:ARG:HD3	16:f:35:ASP:OD1	2.19	0.41
16:f:416:MET:O	16:f:417:ILE:C	2.62	0.41
16:f:437:GLU:OE1	16:f:439:TYR:N	2.54	0.41
16:f:606:VAL:CA	16:f:609:VAL:CG1	2.98	0.41
16:f:635:LYS:HD3	16:f:635:LYS:HA	1.70	0.41
16:f:744:MET:SD	16:f:744:MET:C	3.04	0.41
16:f:794:ALA:HB1	16:f:797:LEU:HG	2.03	0.41
18:W:220:GLU:O	18:W:221:LYS:C	2.63	0.41
18:W:317:TRP:CE3	18:W:355:LYS:HD3	2.55	0.41
19:e:37:HIS:CE1	19:e:39:TRP:O	2.74	0.41
22:I:133:SER:OG	22:I:164:ILE:HD13	2.20	0.41
38:R:301:LDZ:C15	38:R:301:LDZ:H29	2.51	0.41
1:A:419:SER:HB2	1:A:423:PHE:CD2	2.42	0.41
2:B:163:LEU:HD11	3:C:78:ARG:NH2	2.34	0.41
2:B:428:TYR:O	2:B:429:LYS:CB	2.67	0.41
3:C:87:VAL:HG11	3:C:116:LEU:CD1	2.50	0.41
3:C:183:PRO:O	3:C:290:LYS:NZ	2.53	0.41
4:D:96:VAL:O	4:D:97:ASP:C	2.61	0.41
4:D:184:PRO:O	4:D:185:LEU:CB	2.67	0.41
4:D:240:LEU:HD23	4:D:240:LEU:O	2.21	0.41
4:D:282:ASP:O	4:D:285:VAL:HG22	2.20	0.41
5:E:33:LEU:HD22	5:E:33:LEU:HA	1.87	0.41
5:E:90:SER:O	5:E:91:LYS:C	2.63	0.41
5:E:320:ILE:HD12	5:E:321:THR:HG22	2.02	0.41
6:F:57:SER:OG	6:F:58:GLU:N	2.53	0.41
6:F:66:LEU:C	6:F:68:ALA:N	2.78	0.41
6:F:137:ILE:HG22	6:F:138:GLY:H	1.84	0.41
6:F:369:HIS:CE1	6:F:397:LYS:HB2	2.56	0.41
7:U:377:HIS:HA	7:U:380:THR:HG21	2.03	0.41
7:U:701:ILE:HG13	7:U:702:THR:HG23	2.02	0.41
8:V:205:LEU:HD22	8:V:205:LEU:N	2.35	0.41
8:V:260:HIS:HD1	8:V:260:HIS:C	2.25	0.41
8:V:412:LEU:HD12	8:V:412:LEU:O	2.21	0.41
9:X:173:GLU:O	9:X:176:THR:HG23	2.21	0.41
10:Y:177:ARG:NH2	10:Y:208:PHE:HB2	2.36	0.41
10:Y:217:LYS:O	10:Y:220:VAL:HG12	2.20	0.41
11:Z:101:LEU:HD23	11:Z:101:LEU:C	2.46	0.41
12:a:35:HIS:CD2	12:a:38:THR:OG1	2.74	0.41
12:a:64:ILE:HD12	12:a:64:ILE:O	2.20	0.41
14:c:57:MET:N	14:c:110:GLY:O	2.48	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:c:210:ASN:HB3	14:c:213:GLU:CG	2.51	0.41
16:f:159:VAL:CG1	16:f:160:ARG:HH11	2.34	0.41
16:f:542:ILE:HD13	16:f:542:ILE:HA	1.94	0.41
16:f:771:LEU:HG	16:f:774:GLY:N	2.32	0.41
16:f:791:VAL:HG13	16:f:800:LEU:HD11	2.02	0.41
18:W:221:LYS:HD3	18:W:221:LYS:N	2.36	0.41
18:W:276:LEU:HD21	18:W:354:LEU:CA	2.50	0.41
18:W:290:ILE:HD13	18:W:290:ILE:HA	1.88	0.41
19:e:25:GLU:OE1	19:e:25:GLU:CA	2.68	0.41
22:I:28:ILE:HD12	22:I:152:PRO:CG	2.50	0.41
24:K:64:ILE:HG23	24:K:64:ILE:O	2.21	0.41
26:M:38:GLY:HA3	26:M:136:MET:HE1	2.03	0.41
29:P:4:SER:O	29:P:4:SER:OG	2.39	0.41
31:r:5:LEU:C	31:r:5:LEU:HD12	2.46	0.41
1:A:98:CYS:SG	1:A:153:LEU:HD12	2.61	0.41
2:B:44:ASP:OD1	2:B:44:ASP:N	2.54	0.41
3:C:131:VAL:O	3:C:132:ASP:HB2	2.20	0.41
3:C:266:ASP:CG	3:C:269:VAL:HB	2.44	0.41
3:C:274:LEU:HD23	3:C:274:LEU:HA	1.88	0.41
4:D:157:ASP:H	4:D:159:LYS:HZ3	1.69	0.41
5:E:151:LEU:O	5:E:151:LEU:HD12	2.21	0.41
5:E:191:LEU:HD11	18:W:211:THR:HB	2.03	0.41
5:E:224:ASP:HB3	5:E:225:HIS:CE1	2.56	0.41
5:E:277:MET:HB2	5:E:295:LEU:HD21	2.02	0.41
5:E:309:ARG:HE	5:E:335:SER:HG	1.51	0.41
6:F:85:THR:HG22	6:F:87:PRO:CD	2.46	0.41
6:F:158:TYR:N	6:F:158:TYR:CD1	2.89	0.41
6:F:332:THR:HG21	6:F:338:LEU:HD12	2.02	0.41
7:U:115:ASN:OD1	7:U:123:LYS:HG3	2.20	0.41
7:U:258:GLN:HG3	7:U:259:GLN:N	2.35	0.41
7:U:357:LYS:CD	7:U:392:TRP:CH2	3.04	0.41
7:U:656:LEU:HG	7:U:668:ALA:CB	2.51	0.41
7:U:717:ILE:HG12	7:U:717:ILE:H	1.71	0.41
8:V:238:ALA:O	8:V:242:HIS:N	2.50	0.41
8:V:337:LEU:CD2	8:V:398:LEU:HD22	2.51	0.41
9:X:364:LYS:O	9:X:365:LEU:C	2.64	0.41
10:Y:14:ASN:OD1	10:Y:15:PRO:CD	2.69	0.41
10:Y:237:ARG:CA	10:Y:241:ILE:HB	2.48	0.41
10:Y:253:LEU:HD23	10:Y:253:LEU:N	2.35	0.41
10:Y:388:ASN:H	11:Z:279:LYS:HZ1	1.61	0.41
11:Z:141:VAL:O	11:Z:141:VAL:CG2	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:b:24:THR:O	13:b:26:LEU:HD23	2.21	0.41
13:b:100:ARG:HD2	13:b:107:MET:CE	2.51	0.41
13:b:157:VAL:CG2	13:b:166:THR:HA	2.51	0.41
13:b:165:GLY:O	13:b:166:THR:HB	2.21	0.41
15:d:173:THR:O	15:d:174:ILE:C	2.63	0.41
16:f:240:VAL:HG22	16:f:241:PRO:HD3	2.02	0.41
16:f:459:CYS:C	16:f:460:ASP:OD1	2.64	0.41
16:f:461:PRO:O	16:f:465:LEU:HD12	2.20	0.41
16:f:520:LEU:HD22	16:f:557:TRP:CZ3	2.50	0.41
16:f:848:GLN:CD	16:f:850:VAL:HG13	2.46	0.41
18:W:227:TYR:HB3	18:W:250:ILE:CG2	2.51	0.41
21:H:67:ILE:HG21	21:H:109:LEU:HD21	2.01	0.41
25:L:199:LEU:HD23	25:L:200:PRO:N	2.36	0.41
1:A:40:THR:OG1	1:A:41:TYR:N	2.54	0.41
1:A:56:LEU:C	1:A:59:ILE:HG22	2.46	0.41
1:A:62:LEU:CD2	2:B:79:ILE:CD1	2.98	0.41
1:A:250:VAL:HA	1:A:294:GLU:CD	2.46	0.41
1:A:387:SER:HA	1:A:390:THR:HG23	2.02	0.41
2:B:186:ASP:HA	2:B:367:ILE:HD11	2.03	0.41
2:B:223:ILE:HB	2:B:347:ILE:HG21	2.02	0.41
3:C:43:ARG:HA	3:C:46:GLN:OE1	2.20	0.41
3:C:46:GLN:HB2	7:U:639:LEU:CD1	2.51	0.41
3:C:77:VAL:O	3:C:77:VAL:HG23	2.21	0.41
3:C:201:ARG:HA	4:D:299:PHE:CE1	2.53	0.41
3:C:247:PHE:HA	3:C:292:ILE:O	2.20	0.41
3:C:342:ILE:HD11	3:C:347:ILE:CD1	2.51	0.41
3:C:373:GLU:O	3:C:374:ARG:C	2.64	0.41
4:D:46:LYS:HD2	4:D:46:LYS:C	2.45	0.41
4:D:113:VAL:HG22	4:D:114:ARG:N	2.34	0.41
4:D:225:ALA:HB1	4:D:259:PRO:C	2.46	0.41
5:E:162:VAL:HG13	5:E:163:GLY:N	2.36	0.41
5:E:221:TYR:CE1	5:E:225:HIS:CE1	3.09	0.41
5:E:229:ILE:HG12	5:E:274:LYS:HB2	2.01	0.41
5:E:353:PHE:HD1	5:E:353:PHE:HA	1.75	0.41
5:E:363:VAL:HG12	5:E:365:GLU:HB3	2.01	0.41
6:F:314:LEU:O	6:F:314:LEU:HD23	2.21	0.41
6:F:402:GLU:OE2	6:F:426:GLU:HB3	2.20	0.41
6:F:419:ASP:N	6:F:419:ASP:OD1	2.54	0.41
7:U:250:PHE:CZ	7:U:911:ILE:HG21	2.56	0.41
7:U:397:THR:OG1	7:U:398:ASN:N	2.54	0.41
7:U:408:LEU:HD23	7:U:409:GLY:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:U:509:GLY:HA3	7:U:544:ILE:HG23	2.02	0.41
7:U:639:LEU:HD22	7:U:639:LEU:N	2.34	0.41
8:V:121:PHE:HZ	8:V:164:GLU:HA	1.86	0.41
9:X:86:ALA:HA	9:X:89:VAL:HG12	2.03	0.41
9:X:147:LEU:CD2	9:X:177:TYR:HE1	2.33	0.41
9:X:166:LEU:HD12	9:X:166:LEU:C	2.46	0.41
9:X:166:LEU:HD23	9:X:196:THR:HG21	2.02	0.41
9:X:221:GLU:O	9:X:222:GLU:HB3	2.20	0.41
9:X:233:TYR:CB	9:X:254:MET:HE1	2.50	0.41
9:X:267:VAL:HG11	9:X:291:ALA:CB	2.51	0.41
9:X:271:VAL:O	9:X:271:VAL:HG12	2.21	0.41
10:Y:54:TYR:O	10:Y:58:CYS:SG	2.70	0.41
10:Y:241:ILE:HD13	10:Y:241:ILE:HA	1.90	0.41
11:Z:228:TYR:HH	12:a:340:VAL:HA	1.86	0.41
12:a:39:LEU:HA	12:a:42:LEU:HD12	2.03	0.41
12:a:106:SER:C	12:a:108:ASP:H	2.29	0.41
12:a:347:LYS:HD2	12:a:347:LYS:O	2.20	0.41
13:b:12:ASN:O	13:b:80:PRO:HA	2.20	0.41
13:b:124:LEU:HD13	13:b:159:THR:HG22	2.02	0.41
13:b:150:THR:CG2	13:b:153:LEU:HB2	2.50	0.41
14:c:111:TRP:CZ3	14:c:113:HIS:HD2	2.37	0.41
14:c:120:CYS:O	14:c:160:PHE:CE2	2.74	0.41
14:c:120:CYS:O	14:c:160:PHE:HE2	2.04	0.41
14:c:145:VAL:HG22	14:c:157:ILE:HG23	2.02	0.41
14:c:279:ASP:OD1	14:c:279:ASP:N	2.54	0.41
15:d:18:LYS:O	15:d:22:GLU:HG3	2.21	0.41
15:d:98:LEU:HD13	15:d:98:LEU:HA	1.85	0.41
16:f:138:GLU:HA	16:f:141:LYS:CD	2.51	0.41
16:f:142:TYR:HD1	16:f:142:TYR:C	2.28	0.41
16:f:229:VAL:HG22	16:f:606:VAL:H	1.86	0.41
16:f:237:VAL:O	16:f:241:PRO:CG	2.69	0.41
16:f:250:ARG:H	16:f:250:ARG:HG3	1.49	0.41
16:f:288:VAL:HG23	16:f:879:ARG:O	2.20	0.41
16:f:296:PHE:O	16:f:300:ARG:HG3	2.21	0.41
16:f:297:MET:HG3	16:f:297:MET:O	2.21	0.41
16:f:416:MET:HA	16:f:419:LEU:HD13	2.02	0.41
16:f:626:GLU:O	16:f:627:GLU:HB2	2.20	0.41
16:f:627:GLU:O	16:f:631:LYS:CE	2.69	0.41
16:f:648:ALA:O	16:f:652:VAL:HG13	2.20	0.41
16:f:718:ASP:O	16:f:718:ASP:OD1	2.39	0.41
16:f:740:ARG:HD2	16:f:740:ARG:HA	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:855:GLN:OE1	16:f:855:GLN:CA	2.62	0.41
18:W:40:LEU:HD12	18:W:40:LEU:HA	1.86	0.41
18:W:70:VAL:HG22	18:W:73:MET:CE	2.51	0.41
21:H:187:ILE:HG21	21:H:228:TYR:CE1	2.56	0.41
22:I:13:SER:O	22:I:15:GLU:N	2.53	0.41
24:K:121:LEU:HA	24:K:123:PHE:CE1	2.56	0.41
33:T:46:ASN:OD1	33:T:47:ASN:N	2.52	0.41
22:i:208:ALA:O	22:i:230:GLN:NE2	2.44	0.41
1:A:41:TYR:CE2	2:B:59:ARG:HG3	2.56	0.41
1:A:78:TRP:NE1	2:B:137:SER:CB	2.82	0.41
1:A:354:ILE:HG12	34:A:501:ATP:C6	2.56	0.41
1:A:387:SER:HB3	2:B:344:PRO:HB2	2.03	0.41
2:B:66:GLU:CG	7:U:835:ILE:HG23	2.45	0.41
2:B:214:MET:HE2	2:B:216:ILE:HD13	2.02	0.41
2:B:317:ASP:HB3	2:B:346:ARG:NH1	2.36	0.41
2:B:364:ILE:HD13	2:B:395:ILE:HD12	2.03	0.41
3:C:24:TYR:HB3	4:D:40:LEU:HD11	2.03	0.41
3:C:222:LYS:NZ	4:D:239:TYR:HD1	2.19	0.41
3:C:235:PHE:CD2	3:C:279:GLN:HG2	2.56	0.41
3:C:328:ILE:CG2	3:C:359:VAL:HG21	2.47	0.41
4:D:172:ILE:HG23	4:D:173:GLN:N	2.36	0.41
5:E:199:VAL:HB	5:E:233:ASP:O	2.21	0.41
5:E:218:MET:C	5:E:218:MET:SD	3.04	0.41
6:F:60:LEU:CD2	13:b:34:ASN:OD1	2.69	0.41
6:F:91:SER:O	6:F:92:ASN:ND2	2.54	0.41
6:F:272:PHE:HB3	6:F:316:GLN:NE2	2.35	0.41
7:U:88:PHE:HZ	7:U:133:ILE:HG12	1.86	0.41
7:U:145:HIS:O	7:U:145:HIS:CG	2.71	0.41
7:U:250:PHE:HE1	7:U:911:ILE:HD12	1.86	0.41
7:U:337:LEU:HD21	7:U:797:MET:HE3	2.02	0.41
7:U:408:LEU:HD23	7:U:408:LEU:C	2.46	0.41
7:U:446:LEU:HD23	7:U:446:LEU:C	2.45	0.41
7:U:791:LEU:CD1	7:U:796:LYS:O	2.69	0.41
8:V:455:LYS:O	8:V:457:TYR:N	2.54	0.41
9:X:226:LYS:HE2	9:X:226:LYS:HB3	1.95	0.41
11:Z:19:VAL:HG22	11:Z:95:TYR:CD2	2.56	0.41
11:Z:25:ARG:HH22	14:c:104:ARG:NH1	2.19	0.41
11:Z:68:TRP:HH2	11:Z:111:LEU:HD13	1.86	0.41
12:a:70:ARG:H	12:a:70:ARG:HG2	1.62	0.41
13:b:16:MET:HB3	13:b:80:PRO:HB3	2.02	0.41
15:d:2:TYR:HE1	15:d:5:LEU:HB2	1.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:d:98:LEU:O	15:d:100:GLY:N	2.48	0.41
15:d:125:LYS:HE3	15:d:125:LYS:HB3	1.84	0.41
16:f:267:ARG:C	16:f:272:LEU:HD22	2.46	0.41
16:f:318:THR:HG22	16:f:320:ILE:O	2.21	0.41
16:f:380:PHE:CD1	16:f:752:HIS:CE1	3.09	0.41
16:f:634:LYS:HD3	16:f:673:ARG:HD2	2.03	0.41
16:f:683:GLU:CD	16:f:683:GLU:C	2.89	0.41
16:f:799:VAL:O	16:f:800:LEU:C	2.64	0.41
18:W:51:GLU:OE2	18:W:66:ILE:HG22	2.21	0.41
18:W:97:LEU:O	18:W:100:ALA:N	2.54	0.41
18:W:172:GLU:C	18:W:174:TYR:N	2.78	0.41
20:G:109:ILE:O	20:G:109:ILE:HG23	2.21	0.41
38:O:301:LDZ:O32	38:O:301:LDZ:C15	2.68	0.41
2:B:59:ARG:HG2	2:B:63:LEU:HD21	2.03	0.40
2:B:113:GLU:O	2:B:114:GLU:C	2.63	0.40
4:D:41:TYR:OH	7:U:156:GLU:HB2	2.21	0.40
4:D:146:GLU:O	4:D:147:ALA:HB3	2.21	0.40
4:D:207:PRO:HG2	4:D:335:LEU:HG	2.03	0.40
4:D:238:LYS:HD3	4:D:238:LYS:HA	1.85	0.40
4:D:404:LYS:HA	4:D:407:ILE:HG22	2.03	0.40
5:E:103:THR:HG23	14:c:49:VAL:HG11	2.03	0.40
5:E:151:LEU:HG	5:E:159:PHE:CZ	2.56	0.40
6:F:126:THR:OG1	6:F:128:THR:N	2.47	0.40
6:F:191:LEU:HA	6:F:194:GLN:HE21	1.87	0.40
6:F:279:ALA:O	6:F:326:VAL:HG22	2.22	0.40
7:U:10:SER:CB	15:d:76:ALA:HB2	2.44	0.40
7:U:349:ASP:OD1	7:U:349:ASP:C	2.62	0.40
7:U:405:THR:OG1	7:U:441:GLY:CA	2.69	0.40
7:U:462:LEU:HB3	7:U:466:LYS:NZ	2.36	0.40
7:U:650:TYR:CD1	7:U:651:GLY:N	2.89	0.40
7:U:814:PRO:O	7:U:815:ALA:C	2.64	0.40
9:X:205:LYS:O	9:X:208:ALA:N	2.55	0.40
10:Y:28:LEU:O	10:Y:29:PRO:C	2.64	0.40
10:Y:228:MET:SD	10:Y:260:LEU:HD12	2.61	0.40
11:Z:93:GLY:HA3	11:Z:120:VAL:O	2.21	0.40
11:Z:249:PHE:HZ	14:c:302:ALA:HB1	1.86	0.40
11:Z:257:MET:C	11:Z:257:MET:SD	3.04	0.40
11:Z:284:ASP:O	11:Z:288:LYS:HG2	2.21	0.40
12:a:87:MET:HE1	12:a:92:VAL:CB	2.42	0.40
13:b:68:THR:HG22	13:b:72:LEU:HD21	2.03	0.40
15:d:170:LEU:O	15:d:171:LEU:C	2.63	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:95:PRO:HB3	16:f:133:MET:CG	2.51	0.40
16:f:142:TYR:CD2	16:f:189:LYS:HG2	2.52	0.40
18:W:80:TRP:O	18:W:83:LEU:HD12	2.21	0.40
18:W:142:ARG:HA	18:W:145:LEU:HD12	2.02	0.40
18:W:247:TYR:O	18:W:250:ILE:N	2.54	0.40
21:H:19:VAL:HG23	21:H:20:GLN:N	2.36	0.40
25:L:77:LEU:HB2	25:L:80:ASP:CB	2.51	0.40
21:h:6:SER:O	22:i:127:LYS:NZ	2.54	0.40
2:B:235:LEU:HD12	2:B:235:LEU:HA	1.78	0.40
2:B:370:SER:O	2:B:372:MET:N	2.49	0.40
3:C:35:VAL:HG11	4:D:50:GLU:CD	2.46	0.40
3:C:87:VAL:HG21	3:C:116:LEU:HD11	2.02	0.40
4:D:342:ARG:HG3	4:D:342:ARG:HH11	1.86	0.40
5:E:203:ILE:HG22	5:E:214:LEU:CG	2.51	0.40
6:F:65:GLU:CD	13:b:69:GLY:HA2	2.43	0.40
6:F:209:LYS:HB2	6:F:209:LYS:NZ	2.34	0.40
6:F:405:MET:CA	6:F:405:MET:CE	2.94	0.40
7:U:58:GLN:OE1	7:U:58:GLN:C	2.64	0.40
7:U:201:LEU:O	7:U:204:ILE:HG12	2.20	0.40
7:U:603:LEU:HD23	7:U:603:LEU:HA	1.91	0.40
7:U:616:ARG:NE	7:U:770:TRP:CH2	2.89	0.40
7:U:836:THR:HG23	16:f:229:VAL:HG21	2.04	0.40
8:V:409:MET:HG3	8:V:410:ILE:N	2.35	0.40
9:X:214:SER:HB3	9:X:231:TYR:CE2	2.55	0.40
9:X:271:VAL:HG13	9:X:284:THR:HG21	2.02	0.40
9:X:357:SER:OG	9:X:358:LYS:N	2.52	0.40
10:Y:14:ASN:CB	10:Y:146:ARG:HD2	2.52	0.40
10:Y:228:MET:HE1	10:Y:260:LEU:HA	2.03	0.40
11:Z:283:ARG:O	11:Z:286:GLU:HG2	2.21	0.40
12:a:24:ARG:NH2	12:a:28:LEU:HD21	2.36	0.40
12:a:311:VAL:HG13	12:a:324:ILE:CD1	2.51	0.40
12:a:313:LYS:HA	12:a:316:SER:OG	2.22	0.40
13:b:2:VAL:H	13:b:44:ASN:ND2	2.19	0.40
13:b:26:LEU:C	13:b:28:ALA:H	2.29	0.40
15:d:15:ASN:HB3	15:d:61:TRP:CG	2.54	0.40
16:f:446:LEU:HD23	16:f:798:THR:CG2	2.51	0.40
16:f:460:ASP:HB2	16:f:489:TYR:OH	2.21	0.40
18:W:27:ARG:NE	18:W:30:GLU:OE1	2.54	0.40
18:W:132:THR:C	18:W:136:ILE:HD12	2.45	0.40
18:W:162:ALA:O	18:W:165:ILE:HG22	2.21	0.40
18:W:276:LEU:HD23	18:W:276:LEU:HA	1.69	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:W:302:TYR:HE2	18:W:328:LEU:HD11	1.86	0.40
18:W:332:SER:OG	18:W:333:LEU:N	2.53	0.40
19:e:22:PHE:CB	19:e:23:PRO:HD3	2.51	0.40
30:Q:13:VAL:HG11	30:Q:105:ALA:HB1	2.03	0.40
32:S:83:MET:HE3	32:S:87:ALA:HB1	2.03	0.40
28:o:188:ARG:HB3	28:o:189:PRO:HD3	2.02	0.40
1:A:214:LEU:HD23	1:A:343:PHE:CE1	2.56	0.40
2:B:210:TYR:HA	2:B:213:GLU:OE2	2.22	0.40
2:B:258:LYS:O	2:B:258:LYS:HG3	2.21	0.40
3:C:234:LEU:HD23	3:C:234:LEU:O	2.21	0.40
3:C:347:ILE:HG21	3:C:383:PHE:HD2	1.86	0.40
4:D:239:TYR:O	4:D:242:GLU:HB2	2.22	0.40
5:E:55:GLN:N	5:E:55:GLN:CD	2.80	0.40
5:E:152:PRO:HA	5:E:159:PHE:CE2	2.56	0.40
5:E:195:PHE:CE2	5:E:231:PHE:HD1	2.39	0.40
5:E:303:LEU:HD13	5:E:338:PHE:HA	2.03	0.40
7:U:108:TYR:CD2	7:U:134:VAL:HG21	2.57	0.40
7:U:545:LEU:HD23	7:U:545:LEU:C	2.46	0.40
7:U:612:ASP:HB3	7:U:647:HIS:ND1	2.36	0.40
7:U:627:PHE:CD2	7:U:627:PHE:C	2.97	0.40
7:U:650:TYR:HD1	7:U:651:GLY:N	2.18	0.40
7:U:802:TYR:HA	7:U:895:PRO:CG	2.46	0.40
8:V:75:ILE:HG12	8:V:166:TYR:HE2	1.87	0.40
8:V:235:LEU:CD1	8:V:254:LEU:HD12	2.35	0.40
8:V:314:ARG:NH1	10:Y:378:ASN:HD21	2.19	0.40
9:X:358:LYS:O	9:X:361:VAL:HG13	2.20	0.40
11:Z:195:VAL:CG2	12:a:367:VAL:HG22	2.51	0.40
11:Z:198:LEU:HD23	11:Z:198:LEU:HA	1.74	0.40
11:Z:212:LEU:HA	11:Z:215:VAL:HG12	2.03	0.40
12:a:82:HIS:HA	12:a:85:ARG:HE	1.84	0.40
12:a:115:LYS:O	12:a:115:LYS:HD3	2.21	0.40
13:b:21:PHE:HA	13:b:177:PRO:HA	2.03	0.40
13:b:117:VAL:HG22	13:b:152:LYS:HE2	2.03	0.40
13:b:147:GLU:O	13:b:147:GLU:CD	2.65	0.40
14:c:69:VAL:O	14:c:69:VAL:HG23	2.21	0.40
14:c:265:MET:CG	14:c:266:THR:N	2.83	0.40
15:d:63:ILE:C	15:d:65:ARG:N	2.80	0.40
15:d:149:ASN:C	15:d:151:VAL:H	2.29	0.40
16:f:77:GLU:OE2	16:f:79:ARG:CB	2.70	0.40
16:f:173:LEU:CA	16:f:178:LYS:HZ1	2.34	0.40
16:f:376:PHE:O	16:f:752:HIS:HE1	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:f:779:CYS:HB2	16:f:780:PRO:HD3	2.03	0.40
16:f:794:ALA:HA	16:f:797:LEU:HG	2.00	0.40
18:W:44:ILE:O	18:W:48:LEU:HG	2.21	0.40
18:W:242:SER:HA	18:W:245:LYS:HG3	2.04	0.40
18:W:350:ARG:HE	18:W:350:ARG:HB2	1.77	0.40
24:K:107:MET:HG2	24:K:111:SER:HB2	2.02	0.40
31:R:2:THR:CB	31:R:34:LYS:HZ2	2.31	0.40
31:r:39:ASN:HB2	31:r:40:PRO:HD2	2.03	0.40
1:A:270:CYS:O	1:A:271:LEU:HD23	2.20	0.40
2:B:295:TYR:OH	2:B:302:GLU:HB3	2.21	0.40
2:B:309:MET:HE3	2:B:309:MET:HB3	1.83	0.40
2:B:341:LEU:HD12	2:B:341:LEU:HA	1.93	0.40
3:C:144:PRO:HG2	4:D:299:PHE:CZ	2.57	0.40
3:C:196:LYS:O	34:C:501:ATP:O1A	2.39	0.40
3:C:200:ALA:HB2	3:C:247:PHE:CZ	2.56	0.40
4:D:43:ARG:HG3	4:D:43:ARG:NH1	2.36	0.40
4:D:109:SER:O	4:D:111:TYR:CD1	2.73	0.40
4:D:125:LYS:HB2	4:D:127:ASN:O	2.21	0.40
4:D:212:LYS:HG2	4:D:333:PHE:HD2	1.85	0.40
4:D:353:ASN:ND2	4:D:392:TYR:O	2.44	0.40
5:E:83:CYS:SG	5:E:89:LYS:NZ	2.92	0.40
5:E:97:ARG:HG2	5:E:113:ARG:HH11	1.85	0.40
5:E:230:ILE:O	5:E:230:ILE:HG23	2.21	0.40
5:E:321:THR:OG1	5:E:322:LYS:N	2.53	0.40
6:F:125:LYS:HD3	6:F:126:THR:N	2.19	0.40
6:F:184:GLN:C	6:F:186:SER:H	2.30	0.40
6:F:375:VAL:HA	6:F:415:LEU:HB2	2.04	0.40
7:U:22:PHE:CZ	15:d:31:LEU:HA	2.56	0.40
7:U:45:ILE:CD1	7:U:64:ALA:HB2	2.52	0.40
7:U:106:ASP:O	7:U:110:LYS:HG2	2.21	0.40
7:U:590:TYR:CZ	7:U:597:LYS:HE3	2.56	0.40
7:U:758:PRO:CA	7:U:761:VAL:HG12	2.50	0.40
7:U:770:TRP:HB2	14:c:181:LEU:HD13	2.04	0.40
7:U:803:LYS:CA	7:U:877:LEU:HA	2.44	0.40
7:U:807:LYS:HB2	7:U:807:LYS:HE2	1.77	0.40
7:U:821:LYS:HA	7:U:821:LYS:HD2	1.65	0.40
8:V:99:ARG:NH2	10:Y:389:MET:HG2	2.36	0.40
8:V:375:PHE:O	8:V:378:VAL:CG2	2.69	0.40
10:Y:24:PHE:HA	10:Y:27:SER:OG	2.21	0.40
10:Y:177:ARG:HH22	10:Y:208:PHE:CB	2.35	0.40
11:Z:91:ILE:O	11:Z:91:ILE:HG23	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:Z:212:LEU:HB3	12:a:350:LYS:CE	2.50	0.40
11:Z:234:PHE:CE2	18:W:439:VAL:HB	2.56	0.40
14:c:96:LEU:HD11	14:c:108:VAL:HG13	2.02	0.40
14:c:266:THR:O	14:c:270:LEU:HG	2.22	0.40
14:c:285:GLU:CD	14:c:285:GLU:C	2.88	0.40
15:d:14:PRO:O	15:d:16:LEU:N	2.54	0.40
15:d:234:ASP:OD1	15:d:234:ASP:N	2.54	0.40
16:f:285:CYS:CA	16:f:288:VAL:HG12	2.51	0.40
16:f:456:ARG:HH21	16:f:491:GLY:CA	2.35	0.40
16:f:612:LEU:HD12	16:f:612:LEU:HA	1.83	0.40
18:W:92:LYS:CG	18:W:93:ARG:N	2.82	0.40
18:W:122:LEU:HD23	18:W:125:ILE:CD1	2.32	0.40
18:W:177:MET:HE2	18:W:177:MET:C	2.45	0.40
19:e:63:HIS:CE1	19:e:65:TYR:HE1	2.40	0.40
25:L:124:GLY:O	25:L:125:ARG:NH1	2.54	0.40
1:A:196:LEU:HD12	1:A:196:LEU:HA	1.84	0.40
1:A:262:GLU:OE1	1:A:262:GLU:HA	2.20	0.40
2:B:47:SER:C	2:B:49:LEU:N	2.79	0.40
2:B:156:VAL:O	2:B:156:VAL:CG2	2.67	0.40
2:B:365:PHE:CD1	2:B:380:LEU:HD22	2.57	0.40
2:B:380:LEU:C	2:B:382:ASP:H	2.30	0.40
3:C:140:VAL:CG1	3:C:140:VAL:O	2.69	0.40
3:C:154:LEU:HA	3:C:157:GLN:OE1	2.22	0.40
4:D:170:MET:HG2	4:D:174:LYS:HG3	2.04	0.40
4:D:184:PRO:HG3	4:D:191:TYR:HE2	1.82	0.40
4:D:204:MET:HB2	4:D:310:ALA:HA	2.02	0.40
4:D:251:PHE:CD2	4:D:295:GLN:HB3	2.57	0.40
4:D:280:GLY:C	4:D:282:ASP:N	2.78	0.40
4:D:388:ARG:HG2	4:D:388:ARG:NH1	2.36	0.40
5:E:203:ILE:CG2	5:E:214:LEU:CD2	3.00	0.40
6:F:125:LYS:CG	6:F:126:THR:N	2.85	0.40
6:F:320:PHE:CE2	6:F:324:THR:HG21	2.57	0.40
7:U:17:PRO:CA	7:U:20:LYS:HE2	2.30	0.40
7:U:100:ILE:HD13	7:U:100:ILE:HA	1.89	0.40
7:U:353:LEU:HD21	7:U:385:PHE:CE1	2.56	0.40
8:V:178:SER:C	8:V:179:LYS:HG3	2.45	0.40
8:V:255:LEU:HD11	8:V:271:VAL:HG22	2.00	0.40
8:V:288:TYR:O	8:V:292:THR:OG1	2.30	0.40
8:V:307:ARG:NH1	8:V:308:THR:HA	2.36	0.40
8:V:330:LYS:CD	8:V:360:TYR:CZ	3.05	0.40
8:V:342:ILE:HA	8:V:343:PRO:HD3	1.97	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:V:377:GLN:HG2	8:V:381:GLN:OE1	2.21	0.40
8:V:386:PHE:CD1	8:V:395:ILE:CD1	3.04	0.40
8:V:482:PHE:HZ	10:Y:381:GLN:HE21	1.66	0.40
9:X:122:ARG:HB3	9:X:125:LEU:HB3	2.04	0.40
10:Y:57:LEU:HD23	10:Y:63:TRP:CG	2.57	0.40
10:Y:265:GLU:HG2	10:Y:265:GLU:O	2.22	0.40
11:Z:227:ILE:HD11	18:W:445:LEU:HG	2.03	0.40
12:a:270:ARG:HD2	12:a:270:ARG:HA	1.84	0.40
13:b:44:ASN:OD1	13:b:44:ASN:N	2.54	0.40
13:b:157:VAL:O	13:b:160:LEU:N	2.55	0.40
15:d:8:GLU:CD	15:d:8:GLU:C	2.89	0.40
16:f:202:HIS:CB	16:f:206:ASP:OD1	2.69	0.40
16:f:560:LEU:C	16:f:564:LEU:HD12	2.46	0.40
16:f:640:LYS:O	16:f:643:PRO:HG3	2.21	0.40
16:f:811:LEU:C	16:f:853:VAL:HG13	2.47	0.40
18:W:253:THR:CG2	18:W:254:PRO:CD	2.99	0.40
18:W:291:SER:OG	18:W:292:GLY:N	2.54	0.40
25:L:100:ASP:OD1	32:s:66:LYS:NZ	2.55	0.40
33:t:70:MET:HE1	33:t:91:TRP:CE2	2.57	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	411/433 (95%)	335 (82%)	72 (18%)	4 (1%)	13 46
2	B	401/440 (91%)	323 (80%)	70 (18%)	8 (2%)	6 34
3	C	385/406 (95%)	315 (82%)	65 (17%)	5 (1%)	10 41
4	D	378/418 (90%)	312 (82%)	62 (16%)	4 (1%)	12 45
5	E	371/403 (92%)	297 (80%)	71 (19%)	3 (1%)	16 51

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	F	359/439 (82%)	289 (80%)	69 (19%)	1 (0%)	37	70
7	U	845/953 (89%)	738 (87%)	107 (13%)	0	100	100
8	V	442/534 (83%)	418 (95%)	24 (5%)	0	100	100
9	X	378/422 (90%)	355 (94%)	23 (6%)	0	100	100
10	Y	376/389 (97%)	328 (87%)	48 (13%)	0	100	100
11	Z	284/324 (88%)	237 (84%)	45 (16%)	2 (1%)	19	54
12	a	371/376 (99%)	326 (88%)	42 (11%)	3 (1%)	16	51
13	b	187/377 (50%)	143 (76%)	35 (19%)	9 (5%)	2	20
14	c	280/310 (90%)	219 (78%)	55 (20%)	6 (2%)	5	33
15	d	214/350 (61%)	136 (64%)	52 (24%)	26 (12%)	0	5
16	f	887/908 (98%)	730 (82%)	155 (18%)	2 (0%)	44	75
18	W	444/456 (97%)	355 (80%)	79 (18%)	10 (2%)	5	32
19	e	48/70 (69%)	33 (69%)	13 (27%)	2 (4%)	2	22
20	G	238/246 (97%)	227 (95%)	11 (5%)	0	100	100
20	g	238/246 (97%)	232 (98%)	6 (2%)	0	100	100
21	H	227/234 (97%)	225 (99%)	2 (1%)	0	100	100
21	h	227/234 (97%)	224 (99%)	3 (1%)	0	100	100
22	I	245/261 (94%)	235 (96%)	10 (4%)	0	100	100
22	i	245/261 (94%)	239 (98%)	6 (2%)	0	100	100
23	J	230/248 (93%)	219 (95%)	11 (5%)	0	100	100
23	j	230/248 (93%)	219 (95%)	11 (5%)	0	100	100
24	K	231/241 (96%)	219 (95%)	12 (5%)	0	100	100
24	k	231/241 (96%)	227 (98%)	4 (2%)	0	100	100
25	L	231/263 (88%)	221 (96%)	10 (4%)	0	100	100
25	l	231/263 (88%)	228 (99%)	3 (1%)	0	100	100
26	M	237/255 (93%)	230 (97%)	7 (3%)	0	100	100
26	m	237/255 (93%)	232 (98%)	5 (2%)	0	100	100
27	N	200/239 (84%)	196 (98%)	4 (2%)	0	100	100
27	n	200/239 (84%)	195 (98%)	5 (2%)	0	100	100
28	O	218/277 (79%)	210 (96%)	8 (4%)	0	100	100
28	o	218/277 (79%)	213 (98%)	5 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
29	P	202/205 (98%)	197 (98%)	5 (2%)	0	100	100
29	p	202/205 (98%)	192 (95%)	10 (5%)	0	100	100
30	Q	194/201 (96%)	186 (96%)	8 (4%)	0	100	100
30	q	194/201 (96%)	187 (96%)	7 (4%)	0	100	100
31	R	198/263 (75%)	196 (99%)	2 (1%)	0	100	100
31	r	198/263 (75%)	197 (100%)	1 (0%)	0	100	100
32	S	210/241 (87%)	204 (97%)	6 (3%)	0	100	100
32	s	210/241 (87%)	207 (99%)	3 (1%)	0	100	100
33	T	210/264 (80%)	199 (95%)	11 (5%)	0	100	100
33	t	210/264 (80%)	200 (95%)	10 (5%)	0	100	100
All	All	13203/14884 (89%)	11845 (90%)	1273 (10%)	85 (1%)	24	57

All (85) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	91	GLN
2	B	106	PRO
2	B	320	ASP
2	B	321	SER
2	B	340	ALA
3	C	210	THR
4	D	185	LEU
5	E	199	VAL
5	E	338	PHE
6	F	140	VAL
12	a	35	HIS
12	a	69	HIS
13	b	23	PRO
13	b	35	ILE
13	b	163	LYS
14	c	168	MET
15	d	9	TRP
15	d	10	ASN
15	d	32	GLU
15	d	51	ALA
15	d	89	LEU
15	d	110	ASN
15	d	119	LEU

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Mol	Chain	Res	Type
15	d	122	LEU
15	d	123	PRO
15	d	130	ASN
15	d	182	ILE
16	f	740	ARG
18	W	18	VAL
18	W	323	ASP
18	W	335	SER
19	e	22	PHE
19	e	61	GLU
1	A	116	LYS
1	A	293	ASN
2	B	95	GLU
2	B	322	ARG
3	C	242	ALA
5	E	196	LEU
11	Z	127	LYS
12	a	245	VAL
13	b	26	LEU
13	b	179	LEU
15	d	2	TYR
15	d	17	SER
15	d	27	LYS
15	d	43	LEU
15	d	121	ARG
15	d	131	VAL
16	f	320	ILE
18	W	330	LYS
18	W	386	VAL
1	A	426	THR
2	B	232	LYS
4	D	258	ALA
4	D	313	ARG
13	b	34	ASN
13	b	42	ARG
13	b	87	CYS
14	c	106	GLU
14	c	113	HIS
15	d	93	ALA
15	d	133	ILE
18	W	96	GLN
18	W	120	ILE

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Mol	Chain	Res	Type
3	C	131	VAL
4	D	85	ILE
15	d	113	ALA
15	d	132	TYR
15	d	134	LYS
15	d	153	LEU
15	d	212	LYS
18	W	60	MET
2	B	51	LEU
3	C	128	PRO
11	Z	177	ARG
14	c	176	GLN
3	C	129	ASN
13	b	58	CYS
14	c	152	LYS
15	d	7	GLY
15	d	68	ILE
18	W	112	VAL
14	c	173	GLU
18	W	300	PRO

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	354/372 (95%)	323 (91%)	31 (9%)	8	30
2	B	349/385 (91%)	341 (98%)	8 (2%)	45	64
3	C	335/352 (95%)	317 (95%)	18 (5%)	18	45
4	D	333/366 (91%)	308 (92%)	25 (8%)	11	35
5	E	331/353 (94%)	310 (94%)	21 (6%)	15	40
6	F	309/379 (82%)	290 (94%)	19 (6%)	15	41
7	U	727/816 (89%)	690 (95%)	37 (5%)	20	46
8	V	390/460 (85%)	371 (95%)	19 (5%)	21	46

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	X	326/362 (90%)	306 (94%)	20 (6%)	15	41
10	Y	334/344 (97%)	313 (94%)	21 (6%)	15	40
11	Z	257/295 (87%)	236 (92%)	21 (8%)	9	33
12	a	333/336 (99%)	312 (94%)	21 (6%)	15	40
13	b	161/312 (52%)	143 (89%)	18 (11%)	5	21
14	c	249/268 (93%)	226 (91%)	23 (9%)	7	28
15	d	195/294 (66%)	159 (82%)	36 (18%)	1	9
16	f	744/763 (98%)	711 (96%)	33 (4%)	24	49
18	W	410/416 (99%)	391 (95%)	19 (5%)	23	48
19	e	44/63 (70%)	43 (98%)	1 (2%)	45	64
20	G	164/210 (78%)	162 (99%)	2 (1%)	67	78
20	g	168/210 (80%)	165 (98%)	3 (2%)	54	71
21	H	150/191 (78%)	146 (97%)	4 (3%)	40	61
21	h	150/191 (78%)	147 (98%)	3 (2%)	50	68
22	I	166/221 (75%)	161 (97%)	5 (3%)	36	58
22	i	160/221 (72%)	159 (99%)	1 (1%)	84	88
23	J	136/211 (64%)	136 (100%)	0	100	100
23	j	136/211 (64%)	135 (99%)	1 (1%)	81	86
24	K	159/203 (78%)	156 (98%)	3 (2%)	52	70
24	k	158/203 (78%)	158 (100%)	0	100	100
25	L	161/224 (72%)	158 (98%)	3 (2%)	52	70
25	l	161/224 (72%)	159 (99%)	2 (1%)	67	78
26	M	162/212 (76%)	162 (100%)	0	100	100
26	m	163/212 (77%)	161 (99%)	2 (1%)	67	78
27	N	141/181 (78%)	141 (100%)	0	100	100
27	n	140/181 (77%)	138 (99%)	2 (1%)	62	75
28	O	158/228 (69%)	156 (99%)	2 (1%)	65	76
28	o	157/228 (69%)	156 (99%)	1 (1%)	84	88
29	P	159/174 (91%)	158 (99%)	1 (1%)	84	88
29	p	156/174 (90%)	153 (98%)	3 (2%)	52	70
30	Q	149/171 (87%)	147 (99%)	2 (1%)	65	76

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	q	148/171 (86%)	146 (99%)	2 (1%)	62	75
31	R	139/202 (69%)	137 (99%)	2 (1%)	62	75
31	r	138/202 (68%)	137 (99%)	1 (1%)	81	86
32	S	158/199 (79%)	157 (99%)	1 (1%)	84	88
32	s	159/199 (80%)	159 (100%)	0	100	100
33	T	151/215 (70%)	150 (99%)	1 (1%)	81	86
33	t	149/215 (69%)	147 (99%)	2 (1%)	65	76
All	All	10477/12620 (83%)	10037 (96%)	440 (4%)	27	50

All (440) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	26	ASP
1	A	35	THR
1	A	41	TYR
1	A	46	LYS
1	A	53	GLN
1	A	58	LYS
1	A	94	GLN
1	A	95	VAL
1	A	101	ILE
1	A	116	LYS
1	A	125	LEU
1	A	140	VAL
1	A	157	ILE
1	A	158	ASP
1	A	171	ASP
1	A	172	VAL
1	A	176	ASP
1	A	190	VAL
1	A	257	VAL
1	A	285	PHE
1	A	287	ASP
1	A	298	THR
1	A	321	THR
1	A	326	THR
1	A	342	GLU
1	A	361	SER
1	A	376	LEU
1	A	380	SER

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Mol	Chain	Res	Type
1	A	381	THR
1	A	417	ILE
1	A	423	PHE
2	B	40	THR
2	B	62	LEU
2	B	140	ASP
2	B	153	ASN
2	B	165	ASP
2	B	281	ILE
2	B	334	ILE
2	B	372	MET
3	C	33	LEU
3	C	34	ILE
3	C	45	LEU
3	C	99	VAL
3	C	102	ASN
3	C	122	THR
3	C	134	LEU
3	C	154	LEU
3	C	188	LEU
3	C	224	ILE
3	C	272	THR
3	C	286	THR
3	C	321	ASN
3	C	330	LYS
3	C	339	THR
3	C	365	GLU
3	C	377	HIS
3	C	391	MET
4	D	102	ILE
4	D	109	SER
4	D	110	ASN
4	D	113	VAL
4	D	118	THR
4	D	123	LEU
4	D	141	ASP
4	D	142	VAL
4	D	152	MET
4	D	155	THR
4	D	163	MET
4	D	167	ILE
4	D	185	LEU

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Mol	Chain	Res	Type
4	D	196	ILE
4	D	240	LEU
4	D	246	MET
4	D	267	ILE
4	D	274	ARG
4	D	301	GLN
4	D	304	ASN
4	D	350	SER
4	D	380	GLN
4	D	393	ILE
4	D	397	LYS
4	D	415	GLU
5	E	33	LEU
5	E	50	LEU
5	E	91	LYS
5	E	93	LYS
5	E	100	LEU
5	E	104	THR
5	E	150	GLU
5	E	153	LEU
5	E	164	ILE
5	E	172	LEU
5	E	173	TYR
5	E	181	THR
5	E	189	SER
5	E	196	LEU
5	E	225	HIS
5	E	296	ASP
5	E	298	LYS
5	E	334	LEU
5	E	358	ASP
5	E	368	MET
5	E	379	LYS
6	F	58	GLU
6	F	73	ILE
6	F	76	ASN
6	F	90	VAL
6	F	126	THR
6	F	146	LYS
6	F	170	SER
6	F	218	GLN
6	F	224	LEU

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Mol	Chain	Res	Type
6	F	272	PHE
6	F	282	ILE
6	F	289	ASP
6	F	312	GLU
6	F	316	GLN
6	F	337	ILE
6	F	352	ILE
6	F	360	GLU
6	F	366	MET
6	F	386	ARG
7	U	70	HIS
7	U	78	LEU
7	U	128	GLN
7	U	172	ASP
7	U	182	LYS
7	U	193	PHE
7	U	200	VAL
7	U	204	ILE
7	U	235	LYS
7	U	251	ASP
7	U	324	LYS
7	U	325	MET
7	U	330	SER
7	U	356	THR
7	U	412	HIS
7	U	460	TYR
7	U	481	LEU
7	U	508	THR
7	U	538	GLU
7	U	545	LEU
7	U	570	LEU
7	U	599	ILE
7	U	620	GLU
7	U	621	SER
7	U	658	ILE
7	U	659	CYS
7	U	670	ASN
7	U	683	VAL
7	U	736	ILE
7	U	738	ASP
7	U	770	TRP
7	U	810	THR

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Mol	Chain	Res	Type
7	U	811	PHE
7	U	830	THR
7	U	883	ARG
7	U	897	THR
7	U	898	CYS
8	V	105	SER
8	V	106	ARG
8	V	171	VAL
8	V	179	LYS
8	V	214	HIS
8	V	222	ASP
8	V	253	LEU
8	V	283	ASN
8	V	292	THR
8	V	308	THR
8	V	309	MET
8	V	314	ARG
8	V	339	LEU
8	V	361	PHE
8	V	426	LEU
8	V	442	ILE
8	V	455	LYS
8	V	464	ILE
8	V	465	ASP
9	X	123	THR
9	X	141	LYS
9	X	160	MET
9	X	177	TYR
9	X	200	ILE
9	X	217	ILE
9	X	242	ILE
9	X	251	LEU
9	X	255	LEU
9	X	263	THR
9	X	270	LEU
9	X	279	TYR
9	X	309	TYR
9	X	313	LEU
9	X	318	ILE
9	X	333	GLN
9	X	353	LEU
9	X	361	VAL

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Mol	Chain	Res	Type
9	X	375	HIS
9	X	398	GLU
10	Y	27	SER
10	Y	69	LEU
10	Y	73	MET
10	Y	94	ASN
10	Y	125	ARG
10	Y	147	ILE
10	Y	158	THR
10	Y	174	TRP
10	Y	183	TYR
10	Y	191	ILE
10	Y	210	SER
10	Y	220	VAL
10	Y	224	VAL
10	Y	231	LEU
10	Y	241	ILE
10	Y	251	HIS
10	Y	258	GLN
10	Y	272	PHE
10	Y	288	PHE
10	Y	350	VAL
10	Y	387	ILE
11	Z	6	VAL
11	Z	11	VAL
11	Z	21	ASP
11	Z	26	ILE
11	Z	40	LEU
11	Z	47	VAL
11	Z	50	VAL
11	Z	51	SER
11	Z	82	PHE
11	Z	102	HIS
11	Z	118	ASN
11	Z	131	LEU
11	Z	157	HIS
11	Z	159	THR
11	Z	198	LEU
11	Z	224	HIS
11	Z	235	ASN
11	Z	249	PHE
11	Z	261	TYR

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Mol	Chain	Res	Type
11	Z	262	LEU
11	Z	280	ILE
12	a	37	LEU
12	a	64	ILE
12	a	82	HIS
12	a	92	VAL
12	a	106	SER
12	a	112	ILE
12	a	138	VAL
12	a	148	VAL
12	a	162	TYR
12	a	165	THR
12	a	185	ILE
12	a	186	LYS
12	a	205	LEU
12	a	236	THR
12	a	276	CYS
12	a	288	HIS
12	a	304	VAL
12	a	325	ASP
12	a	333	MET
12	a	335	TRP
12	a	361	LYS
13	b	8	VAL
13	b	17	ARG
13	b	24	THR
13	b	25	ARG
13	b	31	ASP
13	b	35	ILE
13	b	36	VAL
13	b	42	ARG
13	b	58	CYS
13	b	63	THR
13	b	76	HIS
13	b	83	LYS
13	b	88	THR
13	b	107	MET
13	b	123	ASP
13	b	136	VAL
13	b	157	VAL
13	b	172	THR
14	c	27	THR

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Mol	Chain	Res	Type
14	c	32	TYR
14	c	52	GLU
14	c	58	LEU
14	c	72	VAL
14	c	78	SER
14	c	88	ASP
14	c	99	LEU
14	c	100	LYS
14	c	102	THR
14	c	104	ARG
14	c	106	GLU
14	c	108	VAL
14	c	111	TRP
14	c	156	VAL
14	c	163	ILE
14	c	183	HIS
14	c	204	THR
14	c	226	MET
14	c	234	TYR
14	c	249	LEU
14	c	251	LEU
14	c	299	CYS
15	d	1	MET
15	d	6	LYS
15	d	11	ARG
15	d	12	LYS
15	d	15	ASN
15	d	16	LEU
15	d	26	LEU
15	d	29	VAL
15	d	33	LEU
15	d	34	ASN
15	d	35	PHE
15	d	43	LEU
15	d	45	LYS
15	d	47	GLN
15	d	63	ILE
15	d	68	ILE
15	d	69	PRO
15	d	70	SER
15	d	77	GLN
15	d	78	LEU

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Mol	Chain	Res	Type
15	d	83	PHE
15	d	89	LEU
15	d	98	LEU
15	d	106	LEU
15	d	122	LEU
15	d	123	PRO
15	d	129	THR
15	d	137	VAL
15	d	151	VAL
15	d	155	LYS
15	d	164	THR
15	d	168	ASP
15	d	169	ILE
15	d	195	THR
15	d	237	ILE
15	d	247	ILE
16	f	38	ASP
16	f	69	SER
16	f	82	ILE
16	f	92	VAL
16	f	106	LEU
16	f	118	ASN
16	f	159	VAL
16	f	179	VAL
16	f	205	CYS
16	f	244	GLU
16	f	281	ILE
16	f	392	THR
16	f	401	LYS
16	f	420	TRP
16	f	428	GLN
16	f	458	GLU
16	f	466	LEU
16	f	544	GLU
16	f	558	LEU
16	f	565	ASN
16	f	569	LYS
16	f	594	LEU
16	f	609	VAL
16	f	666	ILE
16	f	672	LEU
16	f	685	THR

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Mol	Chain	Res	Type
16	f	703	ARG
16	f	709	THR
16	f	713	PHE
16	f	745	LEU
16	f	781	TYR
16	f	784	ASP
16	f	806	VAL
18	W	34	LEU
18	W	111	TYR
18	W	124	LEU
18	W	136	ILE
18	W	148	THR
18	W	156	ASN
18	W	159	VAL
18	W	208	LYS
18	W	217	GLU
18	W	226	TYR
18	W	268	LYS
18	W	309	PHE
18	W	344	THR
18	W	359	VAL
18	W	373	ILE
18	W	402	ILE
18	W	436	MET
18	W	443	THR
18	W	451	MET
19	e	19	PHE
20	G	73	THR
20	G	89	SER
21	H	47	THR
21	H	48	GLU
21	H	155	PHE
21	H	207	ILE
22	I	30	HIS
22	I	163	CYS
22	I	167	ASN
22	I	188	SER
22	I	209	GLU
24	K	82	ILE
24	K	203	LYS
24	K	225	ASN
25	L	78	THR

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Mol	Chain	Res	Type
25	L	156	CYS
25	L	198	THR
28	O	39	SER
28	O	157	SER
29	P	122	SER
30	Q	39	SER
30	Q	76	SER
31	R	3	THR
31	R	5	LEU
32	S	37	THR
33	T	163	THR
20	g	89	SER
20	g	175	SER
20	g	189	TRP
21	h	8	SER
21	h	155	PHE
21	h	170	LYS
22	i	168	SER
23	j	77	THR
25	l	11	THR
25	l	156	CYS
26	m	134	SER
26	m	206	ASP
27	n	68	SER
27	n	94	ASP
28	o	157	SER
29	p	107	VAL
29	p	130	MET
29	p	151	SER
30	q	132	HIS
30	q	141	SER
31	r	43	LEU
33	t	54	SER
33	t	119	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (111) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	197	HIS
1	A	293	ASN
1	A	322	ASN
1	A	433	ASN

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Mol	Chain	Res	Type
2	B	120	HIS
2	B	315	GLN
2	B	431	GLN
3	C	36	ASN
3	C	171	HIS
3	C	205	HIS
3	C	270	GLN
3	C	278	ASN
4	D	295	GLN
4	D	340	GLN
5	E	55	GLN
5	E	300	HIS
5	E	364	GLN
6	F	64	HIS
6	F	83	ASN
6	F	194	GLN
6	F	214	ASN
6	F	243	GLN
6	F	436	GLN
7	U	346	ASN
7	U	384	GLN
7	U	421	GLN
7	U	452	ASN
7	U	500	ASN
7	U	611	ASN
7	U	743	ASN
7	U	777	HIS
7	U	874	ASN
7	U	880	ASN
8	V	177	ASN
8	V	282	ASN
8	V	329	HIS
8	V	473	GLN
9	X	144	GLN
9	X	406	ASN
10	Y	48	ASN
10	Y	280	GLN
11	Z	44	GLN
11	Z	174	HIS
11	Z	189	GLN
11	Z	202	ASN
12	a	35	HIS

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Mol	Chain	Res	Type
12	a	212	ASN
12	a	219	HIS
12	a	344	GLN
12	a	370	GLN
13	b	29	GLN
13	b	149	ASN
14	c	113	HIS
14	c	128	ASN
14	c	172	HIS
14	c	183	HIS
14	c	194	HIS
14	c	221	HIS
14	c	298	GLN
15	d	34	ASN
15	d	97	GLN
15	d	149	ASN
15	d	245	GLN
16	f	12	GLN
16	f	102	HIS
16	f	199	ASN
16	f	457	ASN
16	f	540	GLN
16	f	605	ASN
16	f	747	GLN
16	f	752	HIS
16	f	757	ASN
16	f	826	GLN
16	f	866	GLN
16	f	868	HIS
18	W	167	GLN
18	W	189	GLN
18	W	235	GLN
18	W	423	ASN
19	e	63	HIS
20	G	53	GLN
20	G	150	GLN
21	H	101	GLN
21	H	108	GLN
22	I	102	GLN
24	K	23	GLN
24	K	97	GLN
25	L	175	HIS

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Mol	Chain	Res	Type
26	M	120	HIS
26	M	170	GLN
26	M	180	GLN
29	P	17	ASN
29	P	39	GLN
29	P	172	ASN
32	S	79	ASN
32	S	151	ASN
32	S	157	ASN
21	h	87	HIS
21	h	108	GLN
22	i	88	ASN
22	i	102	GLN
24	k	41	GLN
24	k	164	GLN
25	l	146	GLN
29	p	60	GLN
29	p	172	ASN
31	r	176	ASN
32	s	108	ASN
32	s	151	ASN
32	s	152	GLN
32	s	157	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 15 ligands modelled in this entry, 4 are monoatomic - leaving 11 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
34	ATP	C	501	-	28,33,33	1.03	1 (3%)	34,52,52	0.72	1 (2%)
34	ATP	F	501	-	28,33,33	0.84	0	34,52,52	0.80	2 (5%)
36	ADP	D	501	-	24,29,29	0.85	0	29,45,45	1.30	4 (13%)
38	LDZ	o	301	-	33,34,34	0.47	0	42,44,44	0.67	2 (4%)
38	LDZ	O	301	-	33,34,34	0.53	1 (3%)	42,44,44	0.77	2 (4%)
38	LDZ	R	301	-	33,34,34	0.49	0	42,44,44	0.67	0
34	ATP	B	501	-	28,33,33	0.87	1 (3%)	34,52,52	0.80	2 (5%)
38	LDZ	n	301	-	33,34,34	0.52	1 (3%)	42,44,44	0.68	0
38	LDZ	N	301	-	33,34,34	0.53	1 (3%)	42,44,44	0.66	0
38	LDZ	r	301	-	33,34,34	0.54	1 (3%)	42,44,44	0.92	1 (2%)
34	ATP	A	501	35	28,33,33	0.77	0	34,52,52	0.84	2 (5%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	ATP	C	501	-	-	1/18/38/38	0/3/3/3
34	ATP	F	501	-	-	5/18/38/38	0/3/3/3
36	ADP	D	501	-	-	7/12/32/32	0/3/3/3
38	LDZ	o	301	-	-	8/38/39/39	0/1/1/1
38	LDZ	O	301	-	-	13/38/39/39	0/1/1/1
38	LDZ	R	301	-	-	10/38/39/39	0/1/1/1
34	ATP	B	501	-	-	3/18/38/38	0/3/3/3
38	LDZ	n	301	-	-	4/38/39/39	0/1/1/1
38	LDZ	N	301	-	-	8/38/39/39	0/1/1/1
38	LDZ	r	301	-	-	11/38/39/39	0/1/1/1
34	ATP	A	501	35	-	2/18/38/38	0/3/3/3

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	C	501	ATP	PB-O3B	-3.77	1.55	1.59
34	B	501	ATP	PA-O3A	-2.31	1.57	1.59
38	O	301	LDZ	C17-N16	-2.25	1.43	1.46
38	n	301	LDZ	C17-N16	-2.18	1.43	1.46
38	N	301	LDZ	C17-N16	-2.17	1.43	1.46
38	r	301	LDZ	C17-N16	-2.07	1.43	1.46

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	r	301	LDZ	C14-N13-C12	3.86	129.94	121.65
36	D	501	ADP	N3-C2-N1	-3.43	124.02	128.67
34	A	501	ATP	C4'-O4'-C1'	-3.41	106.80	109.92
34	F	501	ATP	C4'-O4'-C1'	-2.94	107.23	109.92
34	B	501	ATP	C4'-O4'-C1'	-2.81	107.35	109.92
38	O	301	LDZ	C14-N13-C12	2.76	127.57	121.65
38	O	301	LDZ	C18-C17-N16	2.43	114.35	110.69
34	C	501	ATP	C5-C6-N6	2.36	123.90	120.31
34	F	501	ATP	C5-C6-N6	2.32	123.85	120.31
34	B	501	ATP	C5-C6-N6	2.31	123.83	120.31
36	D	501	ADP	C4-C5-N7	-2.29	106.92	109.34
36	D	501	ADP	O4'-C1'-N9	-2.28	105.73	108.75
34	A	501	ATP	C5-C6-N6	2.25	123.73	120.31
38	o	301	LDZ	C18-C17-N16	2.23	114.05	110.69
38	o	301	LDZ	C12-C11-N10	-2.05	105.56	111.11
36	D	501	ADP	C4'-O4'-C1'	2.04	111.80	109.92

There are no chirality outliers.

All (72) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
34	A	501	ATP	PB-O3B-PG-O2G
34	F	501	ATP	PB-O3B-PG-O2G
34	F	501	ATP	C5'-O5'-PA-O3A
34	F	501	ATP	C4'-C5'-O5'-PA
36	D	501	ADP	PA-O3A-PB-O2B
36	D	501	ADP	PA-O3A-PB-O3B
36	D	501	ADP	C5'-O5'-PA-O2A
36	D	501	ADP	C5'-O5'-PA-O3A
38	N	301	LDZ	O8-C9-N10-C11
38	N	301	LDZ	O31-C9-N10-C11

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Mol	Chain	Res	Type	Atoms
38	O	301	LDZ	C15-C14-N13-C12
38	R	301	LDZ	C22-C17-C18-C19
38	n	301	LDZ	O31-C9-O8-C7
38	n	301	LDZ	N10-C9-O8-C7
38	o	301	LDZ	C22-C17-C18-C19
38	r	301	LDZ	O31-C9-O8-C7
38	r	301	LDZ	N10-C9-O8-C7
38	O	301	LDZ	C15-C14-C24-C25
34	B	501	ATP	C3'-C4'-C5'-O5'
34	B	501	ATP	O4'-C4'-C5'-O5'
36	D	501	ADP	O4'-C4'-C5'-O5'
38	r	301	LDZ	C11-C12-N13-C14
38	O	301	LDZ	C11-C30-C31-C33
38	O	301	LDZ	C11-C30-C31-C32
38	r	301	LDZ	O32-C12-N13-C14
38	r	301	LDZ	C14-C24-C25-C27
38	o	301	LDZ	C11-C30-C31-C32
38	r	301	LDZ	C14-C24-C25-C26
38	O	301	LDZ	C17-C18-C19-C21
38	O	301	LDZ	C17-C18-C19-C20
38	o	301	LDZ	C11-C30-C31-C33
38	O	301	LDZ	N10-C9-O8-C7
38	o	301	LDZ	N10-C9-O8-C7
38	O	301	LDZ	O31-C9-O8-C7
38	R	301	LDZ	C11-C30-C31-C33
38	N	301	LDZ	C14-C24-C25-C26
38	N	301	LDZ	C14-C24-C25-C27
38	o	301	LDZ	O31-C9-O8-C7
38	R	301	LDZ	N10-C9-O8-C7
34	B	501	ATP	C4'-C5'-O5'-PA
36	D	501	ADP	C3'-C4'-C5'-O5'
34	F	501	ATP	PB-O3B-PG-O1G
38	O	301	LDZ	C14-C24-C25-C26
38	R	301	LDZ	O31-C9-O8-C7
38	O	301	LDZ	C14-C24-C25-C27
38	o	301	LDZ	C12-C11-C30-C31
34	C	501	ATP	PB-O3B-PG-O1G
38	O	301	LDZ	C18-C17-N16-C15
38	r	301	LDZ	C18-C17-N16-C15
38	R	301	LDZ	N13-C14-C15-O34
38	R	301	LDZ	N13-C14-C15-N16
38	n	301	LDZ	N10-C11-C30-C31

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Mol	Chain	Res	Type	Atoms
38	r	301	LDZ	C30-C11-N10-C9
34	F	501	ATP	C5'-O5'-PA-O1A
36	D	501	ADP	C5'-O5'-PA-O1A
38	N	301	LDZ	C12-C11-C30-C31
38	O	301	LDZ	N13-C14-C24-C25
38	N	301	LDZ	C17-C18-C19-C21
38	R	301	LDZ	C11-C30-C31-C32
38	o	301	LDZ	N10-C11-C30-C31
38	N	301	LDZ	C17-C18-C19-C20
38	o	301	LDZ	N13-C14-C24-C25
38	R	301	LDZ	N16-C17-C18-C19
38	r	301	LDZ	C22-C17-N16-C15
38	n	301	LDZ	C17-C18-C19-C20
38	N	301	LDZ	N10-C11-C30-C31
34	A	501	ATP	PB-O3B-PG-O1G
38	r	301	LDZ	N10-C11-C12-O32
38	r	301	LDZ	N10-C11-C12-N13
38	R	301	LDZ	C14-C24-C25-C27
38	R	301	LDZ	C3-C7-O8-C9
38	O	301	LDZ	C30-C11-C12-O32

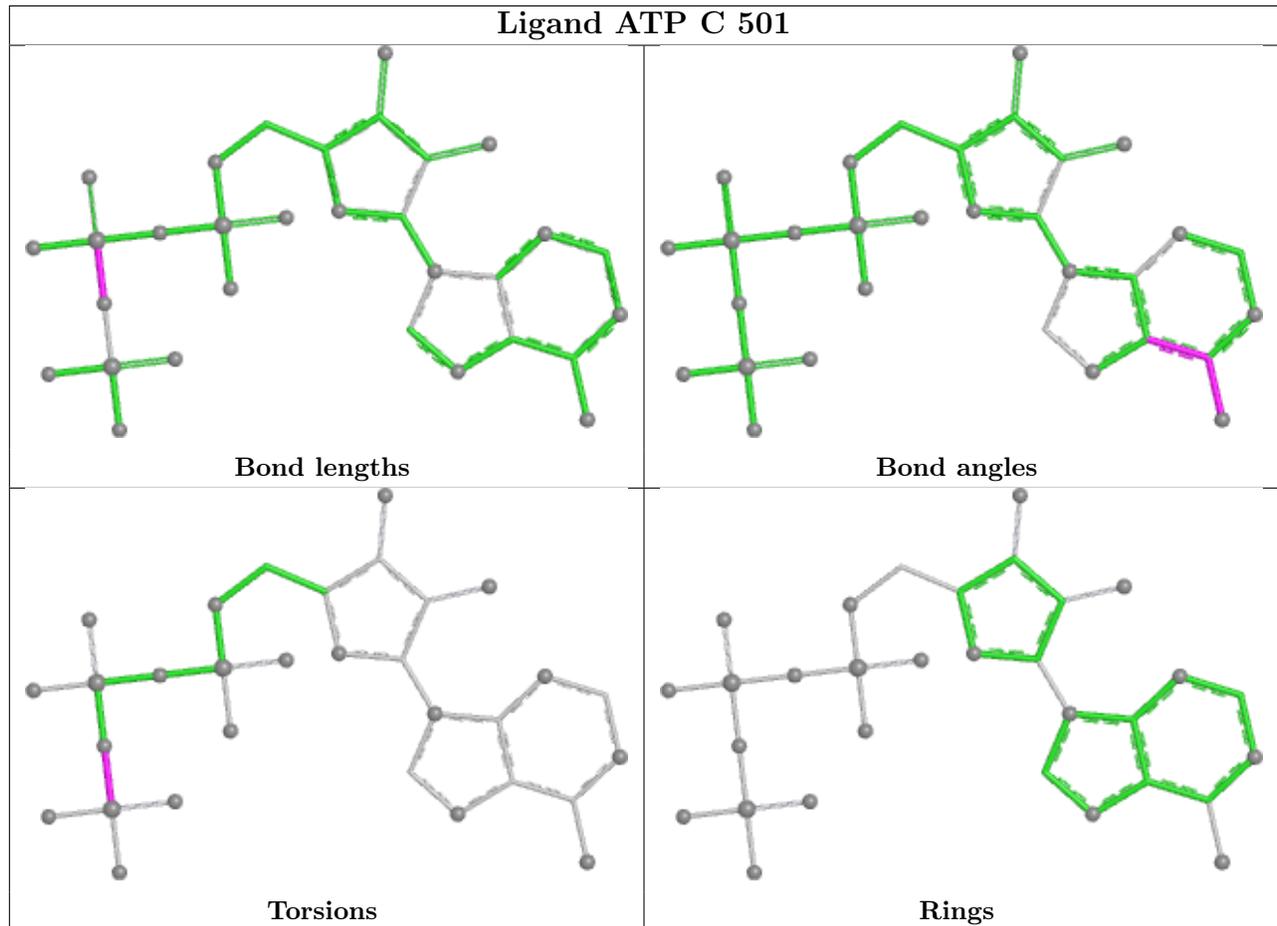
There are no ring outliers.

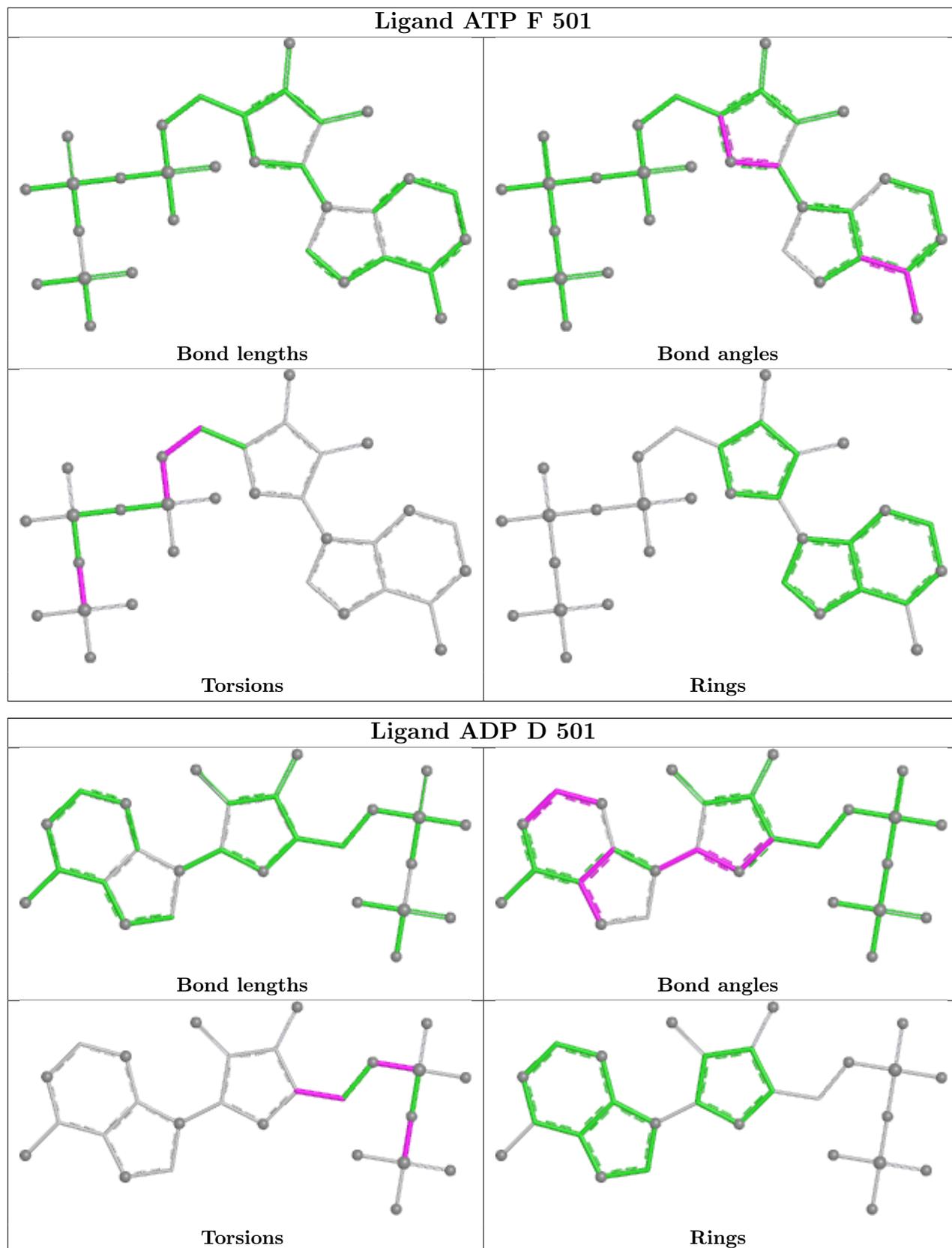
11 monomers are involved in 56 short contacts:

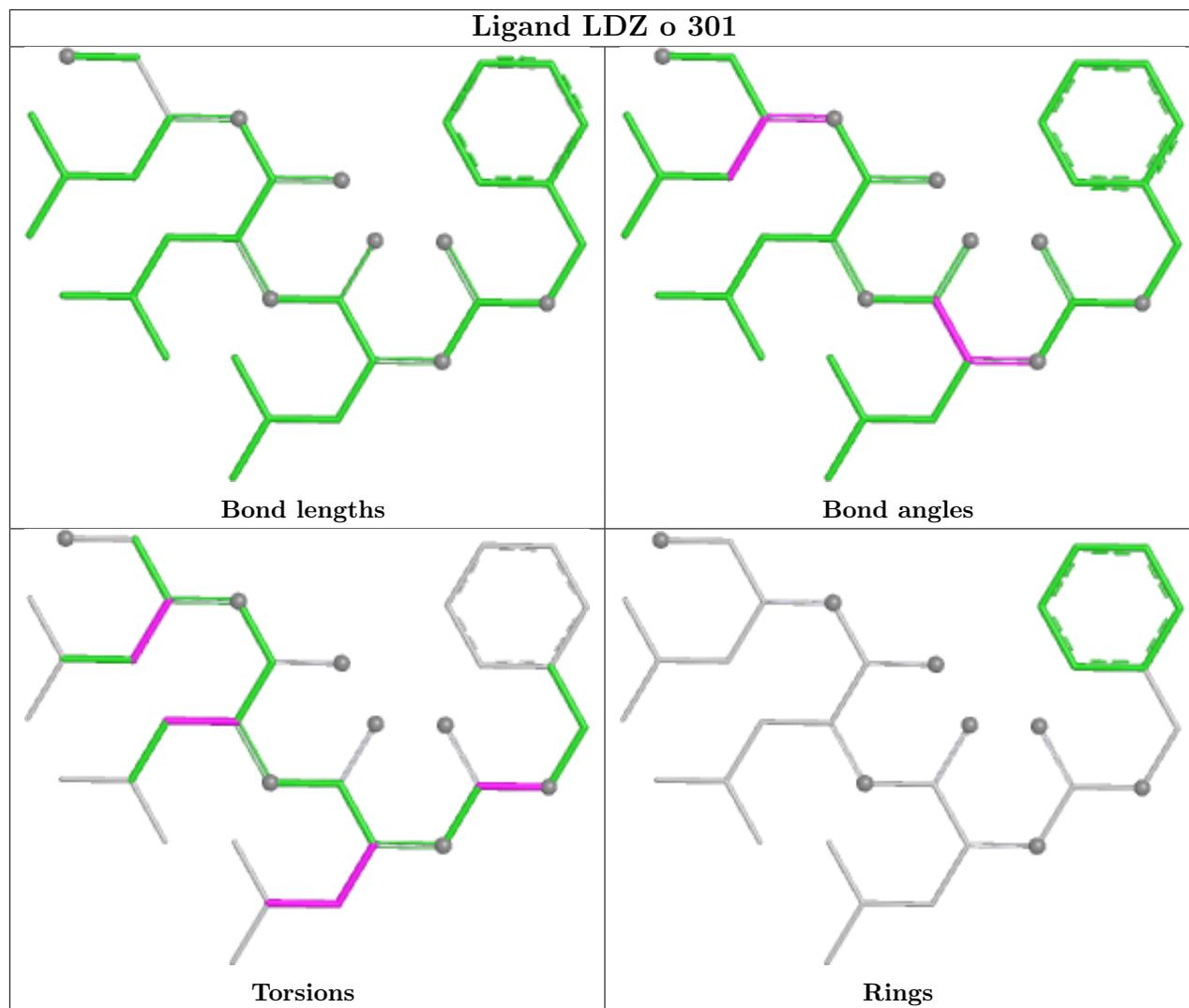
Mol	Chain	Res	Type	Clashes	Symm-Clashes
34	C	501	ATP	6	0
34	F	501	ATP	6	0
36	D	501	ADP	6	0
38	o	301	LDZ	3	0
38	O	301	LDZ	2	0
38	R	301	LDZ	7	0
34	B	501	ATP	7	0
38	n	301	LDZ	5	0
38	N	301	LDZ	2	0
38	r	301	LDZ	1	0
34	A	501	ATP	11	0

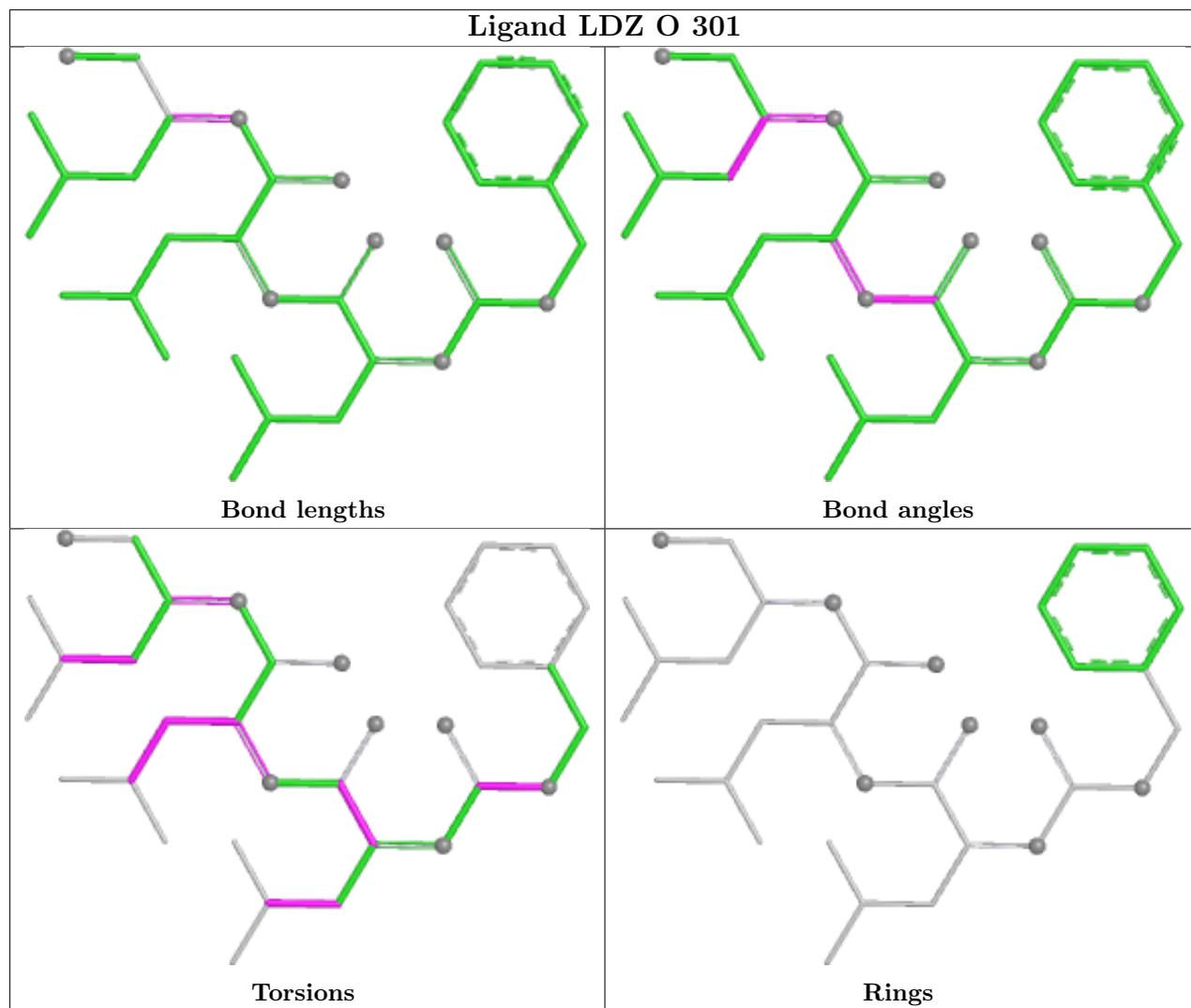
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 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.

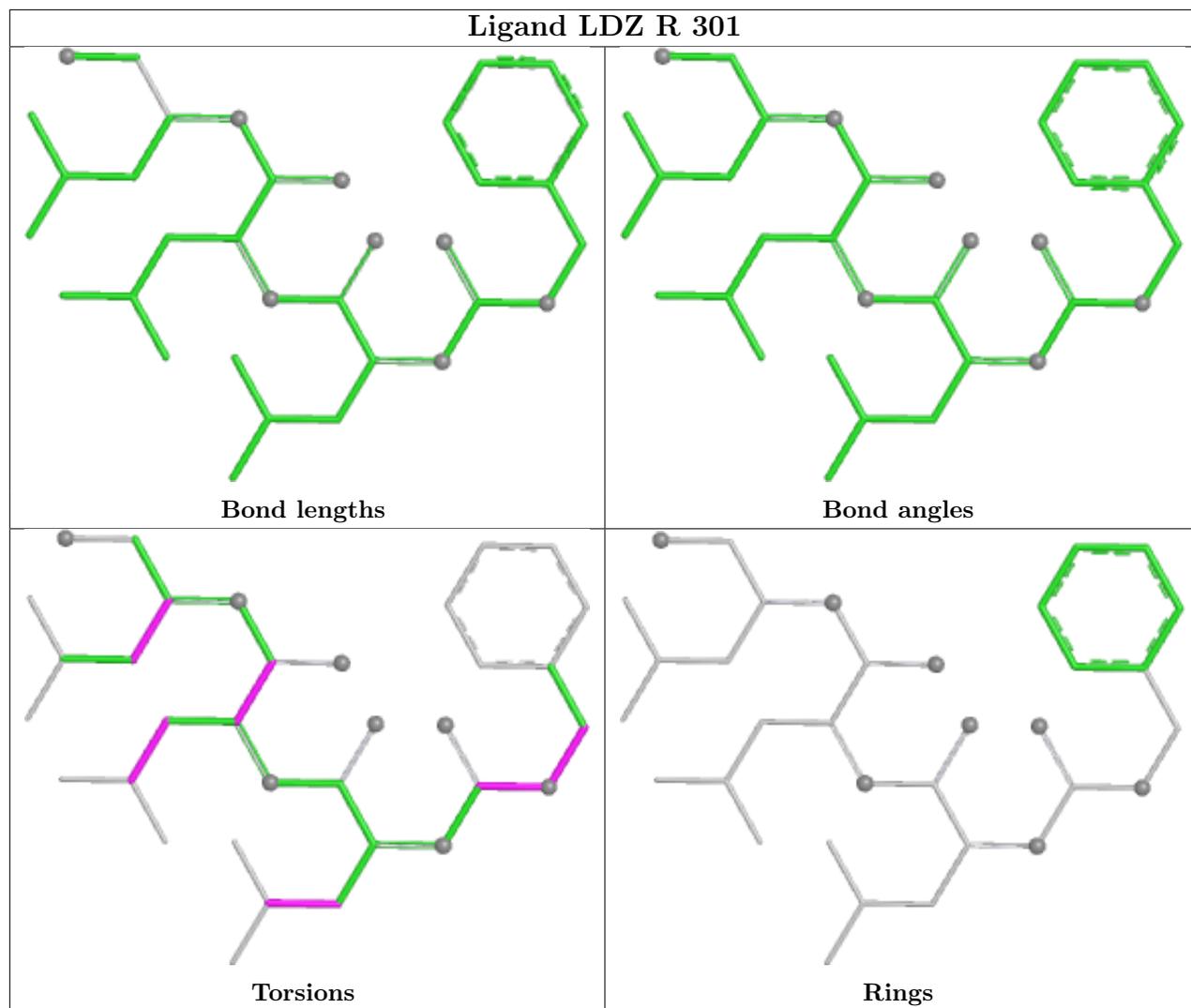
Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD 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.

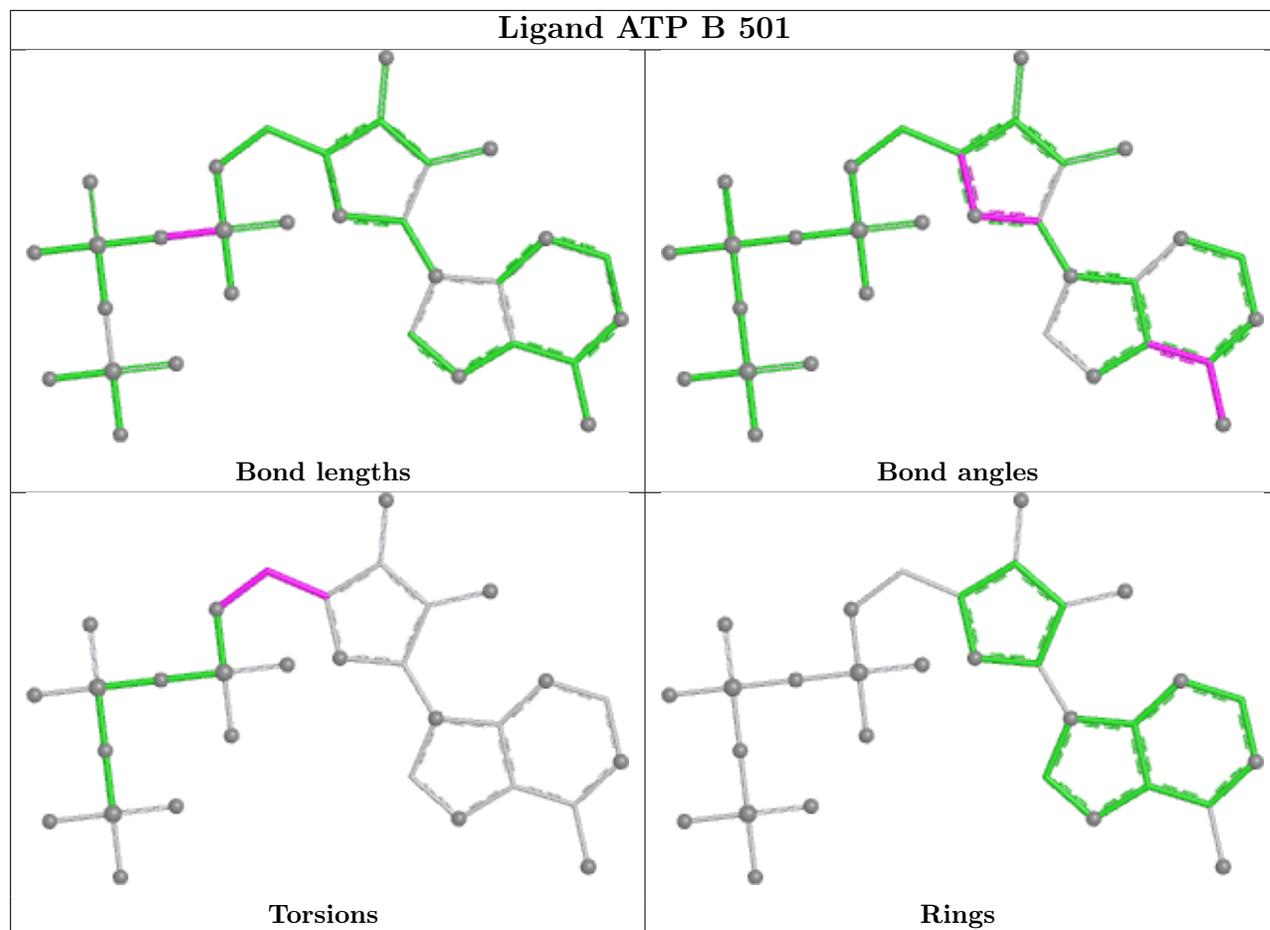


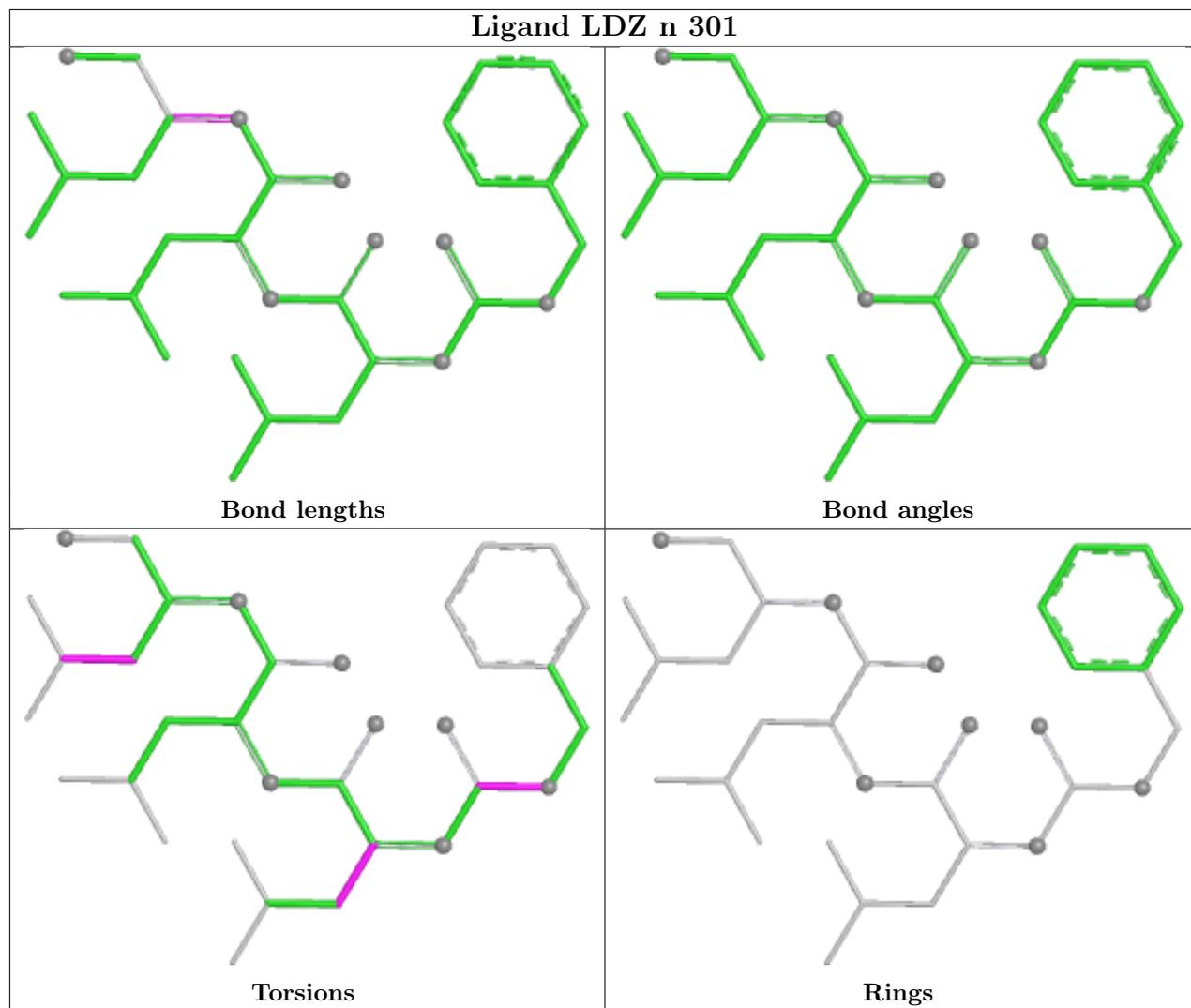


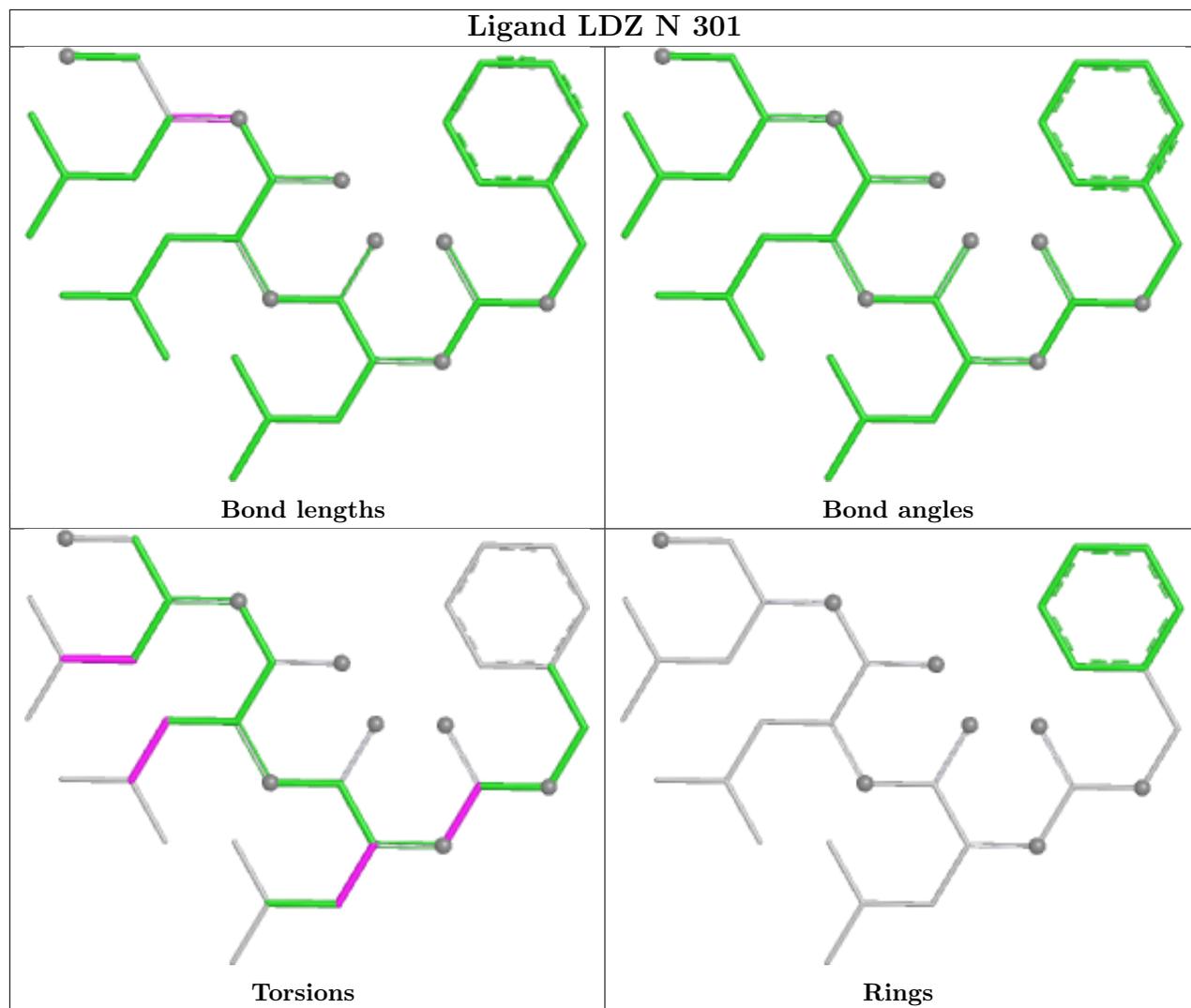


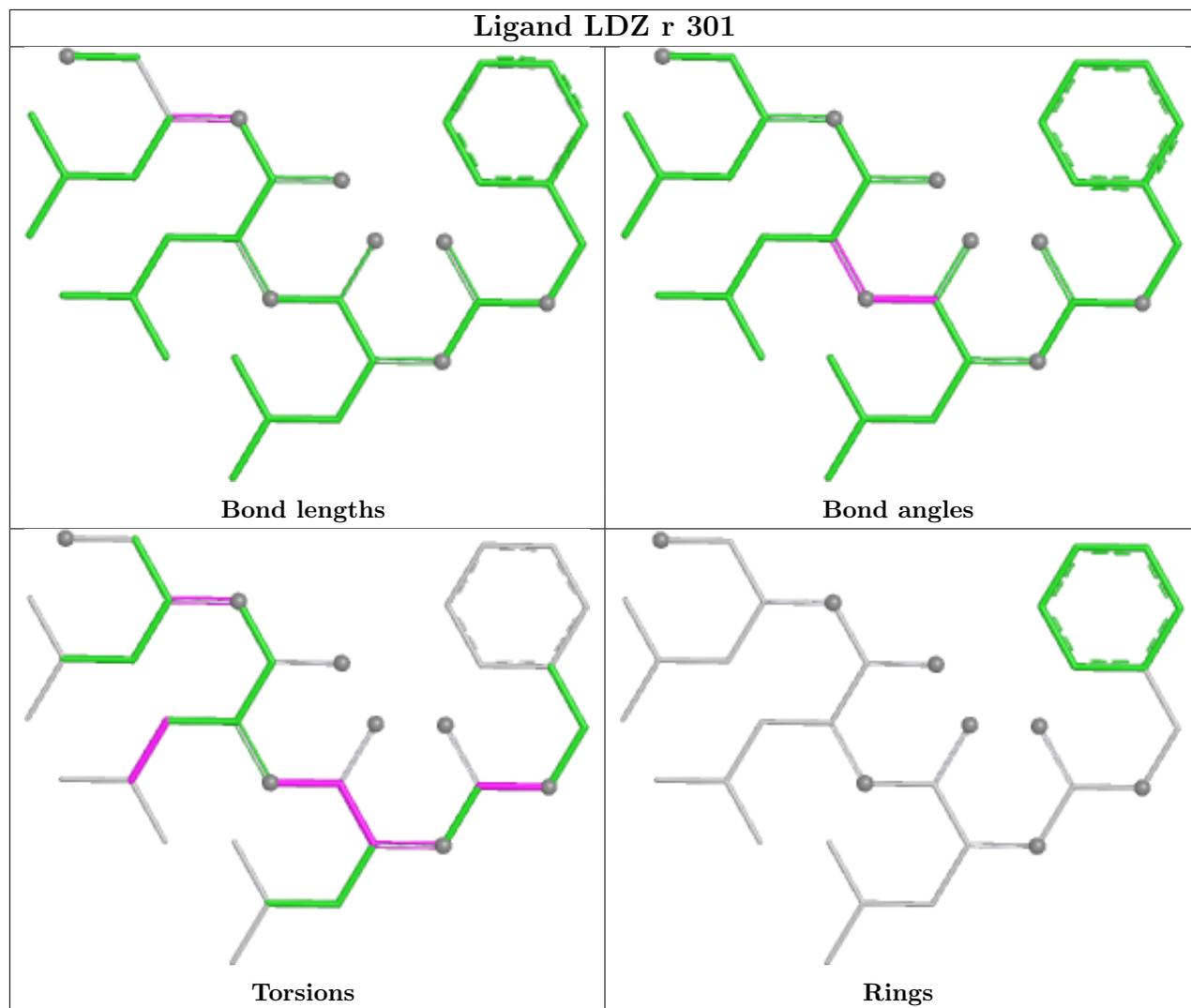


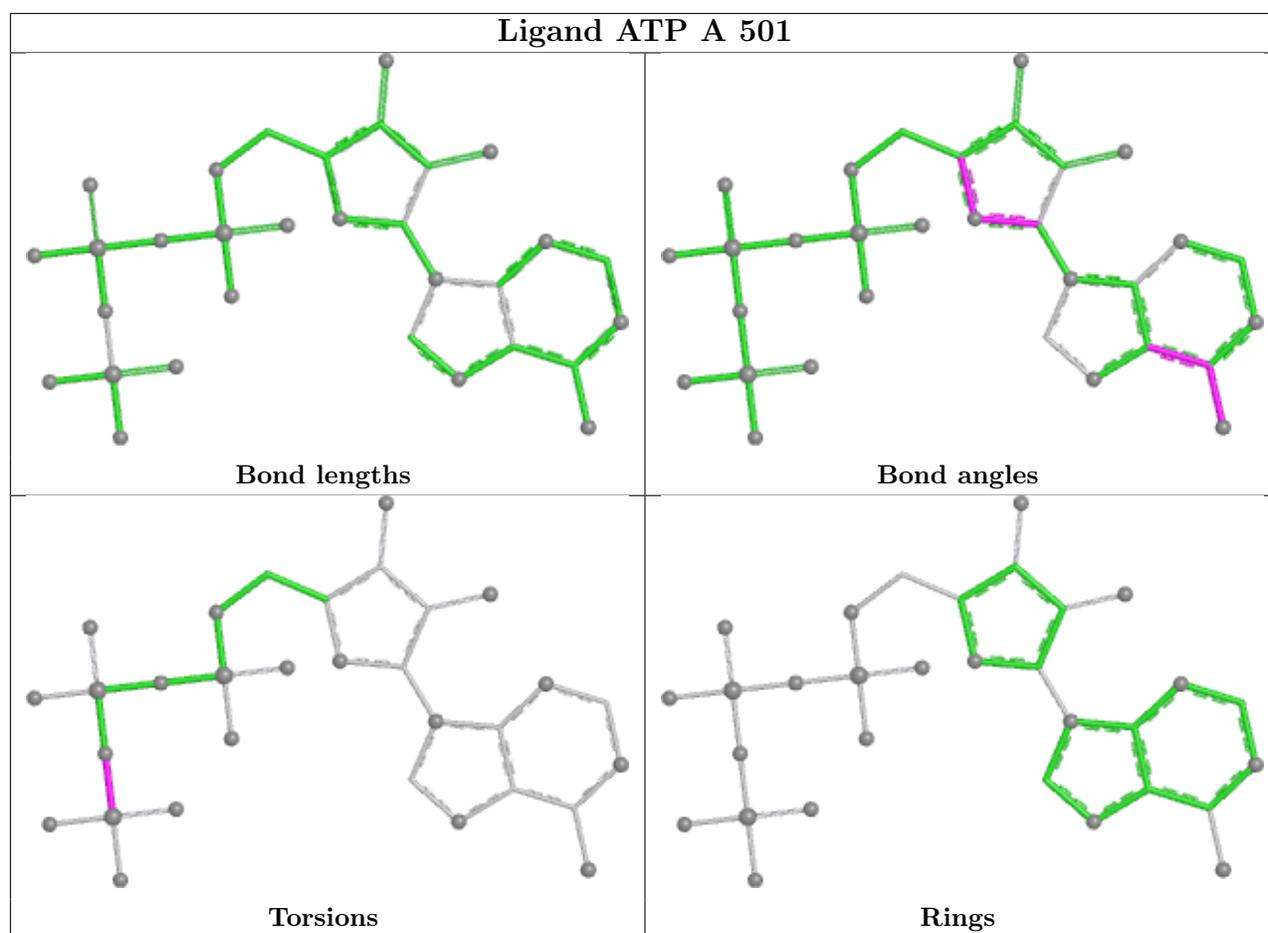












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

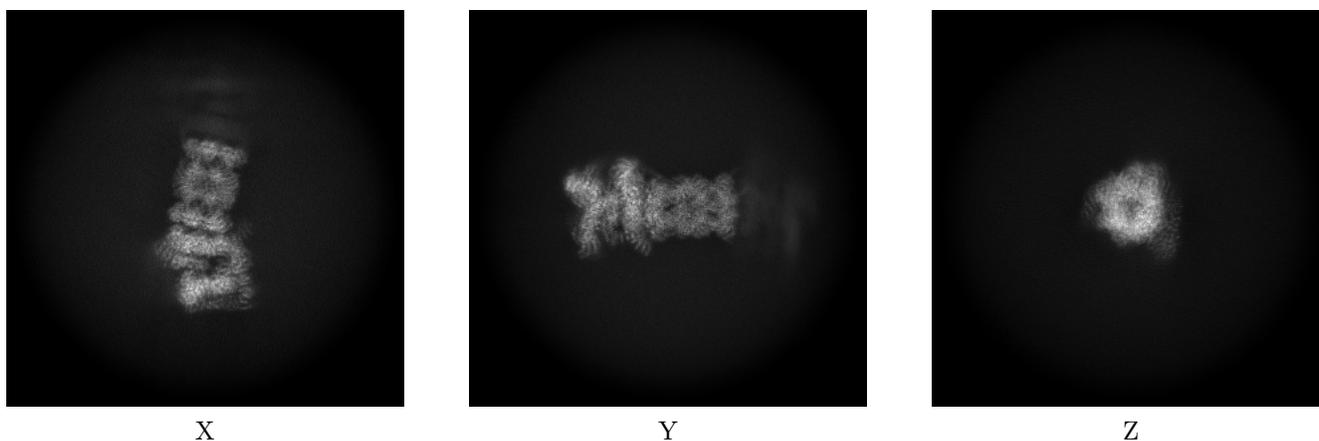
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-49510. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections [i](#)

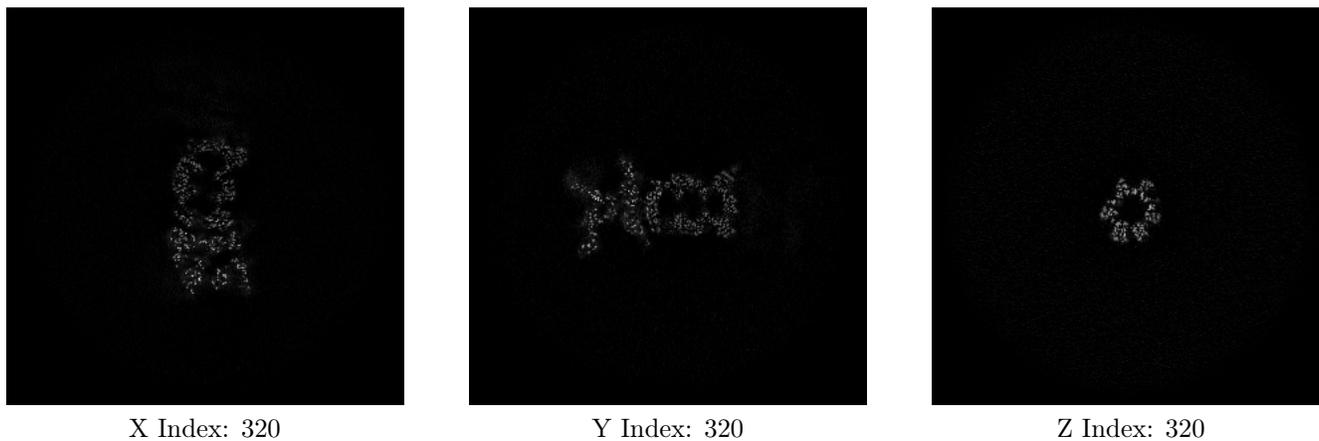
6.1.1 Primary map



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

6.2 Central slices [i](#)

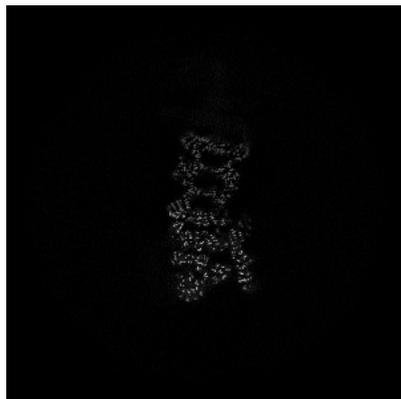
6.2.1 Primary map



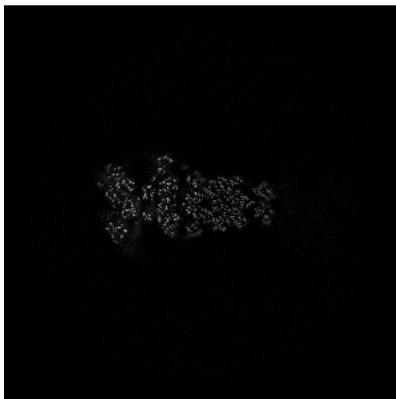
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

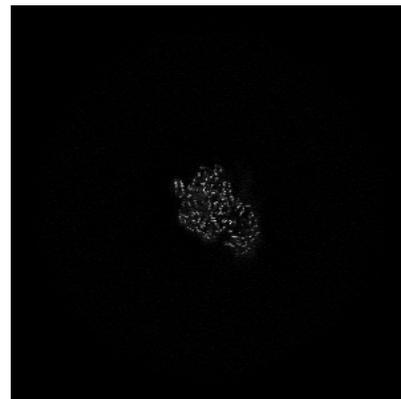
6.3.1 Primary map



X Index: 333



Y Index: 293

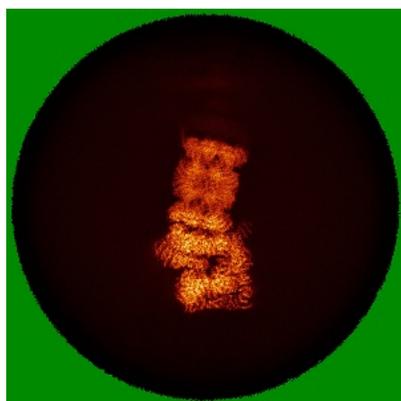


Z Index: 263

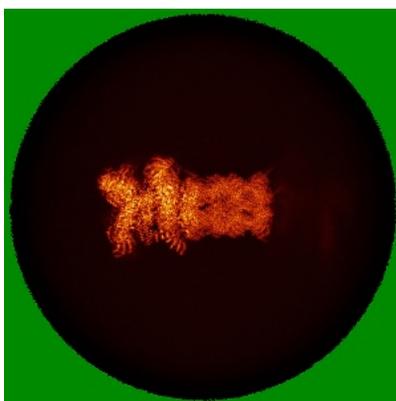
The images above show the largest variance slices of the map in three orthogonal directions.

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

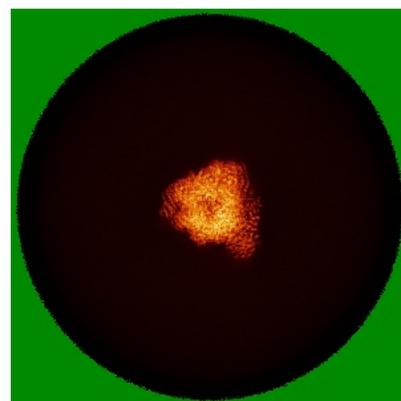
6.4.1 Primary map



X



Y

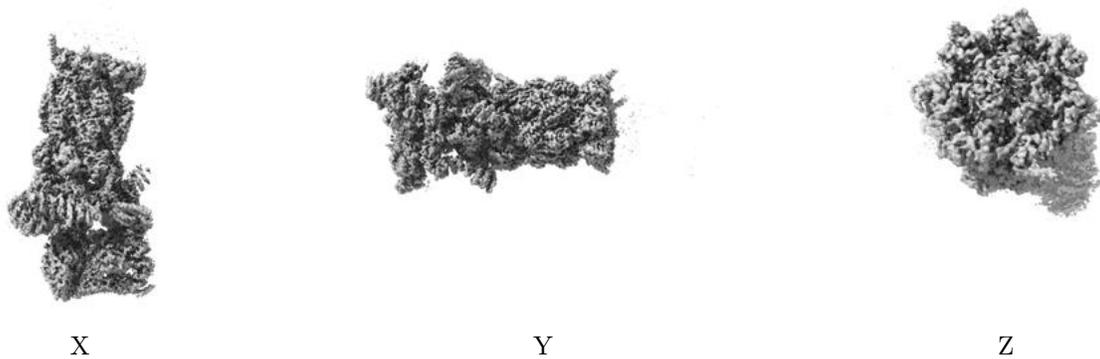


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.165. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

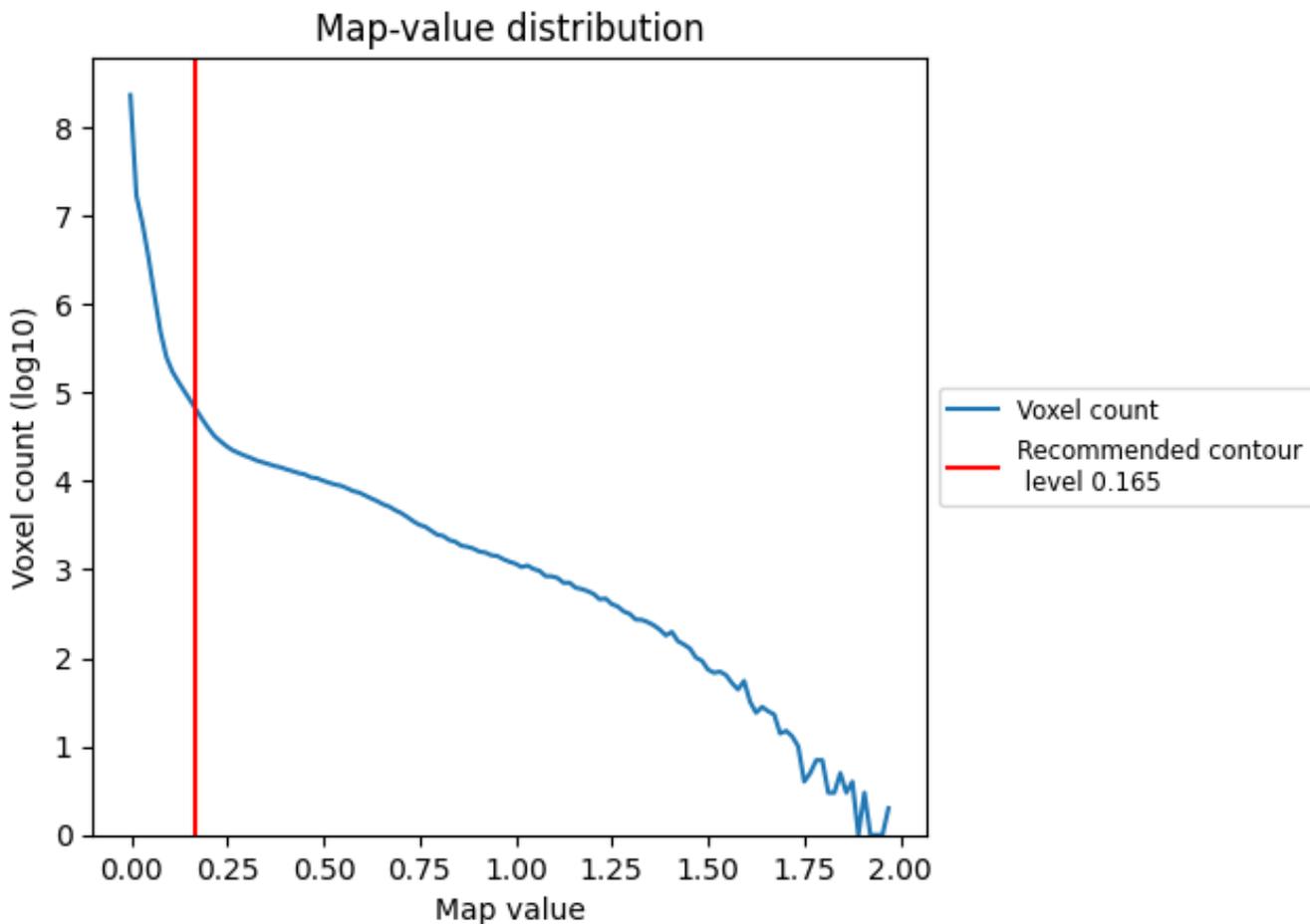
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

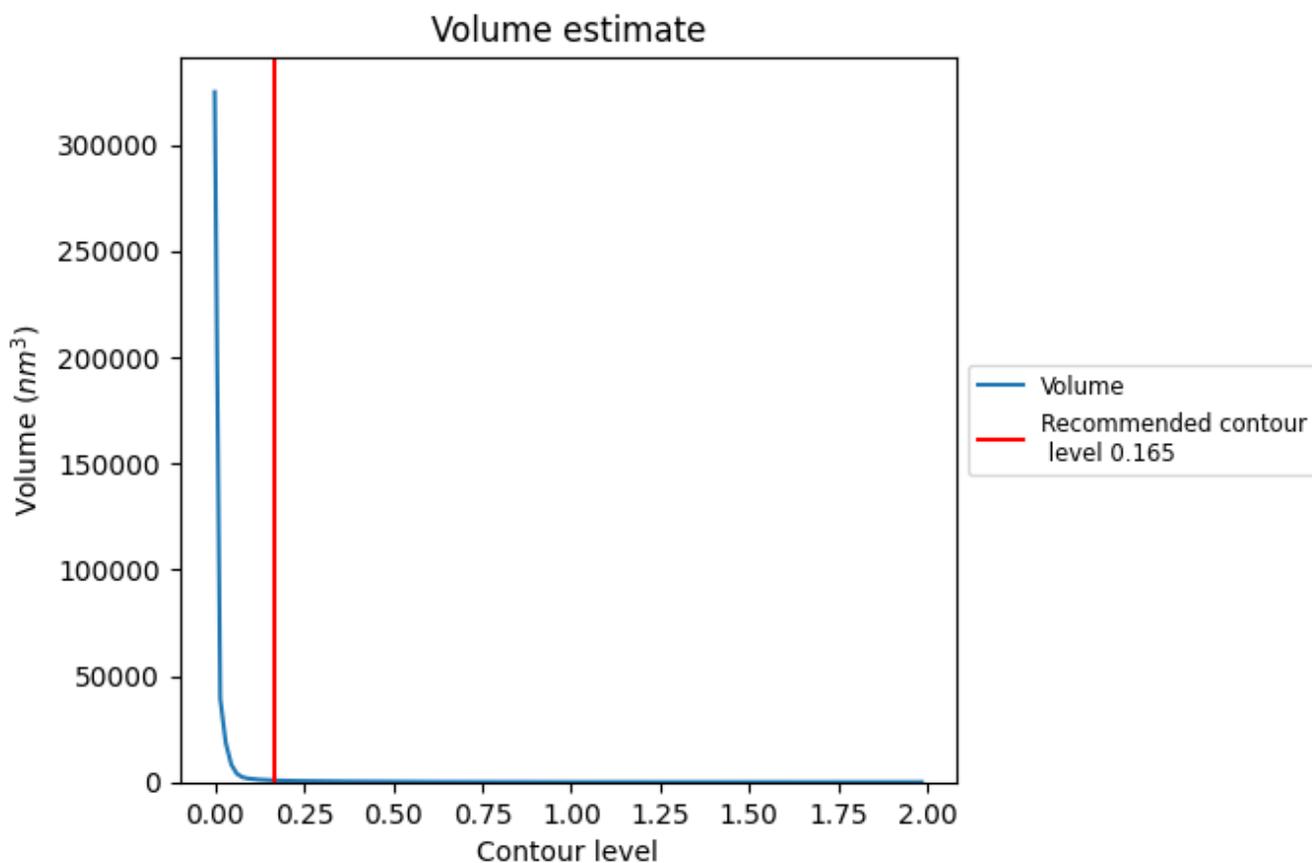
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

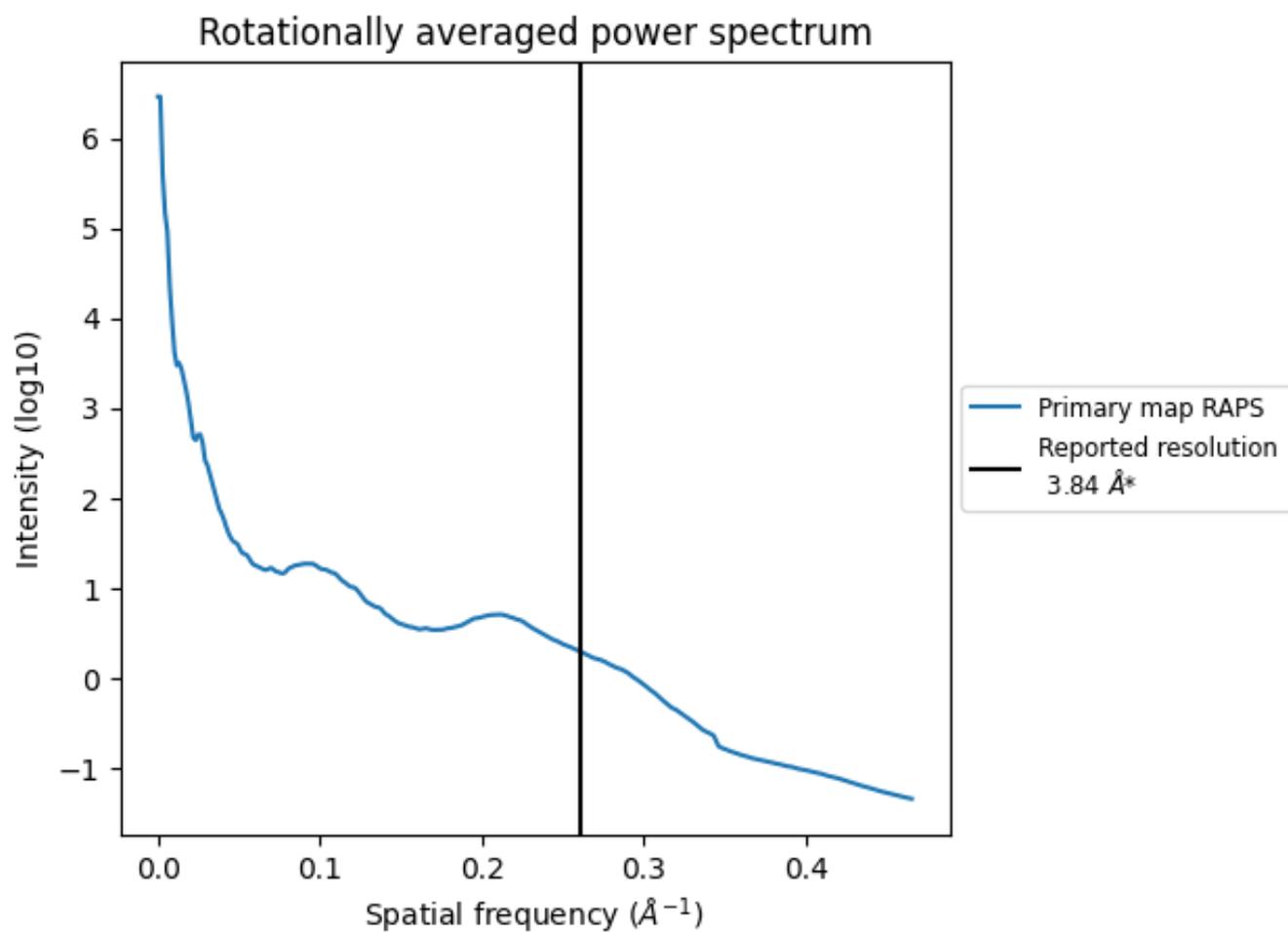
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 806 nm^3 ; this corresponds to an approximate mass of 728 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 0.260 Å⁻¹

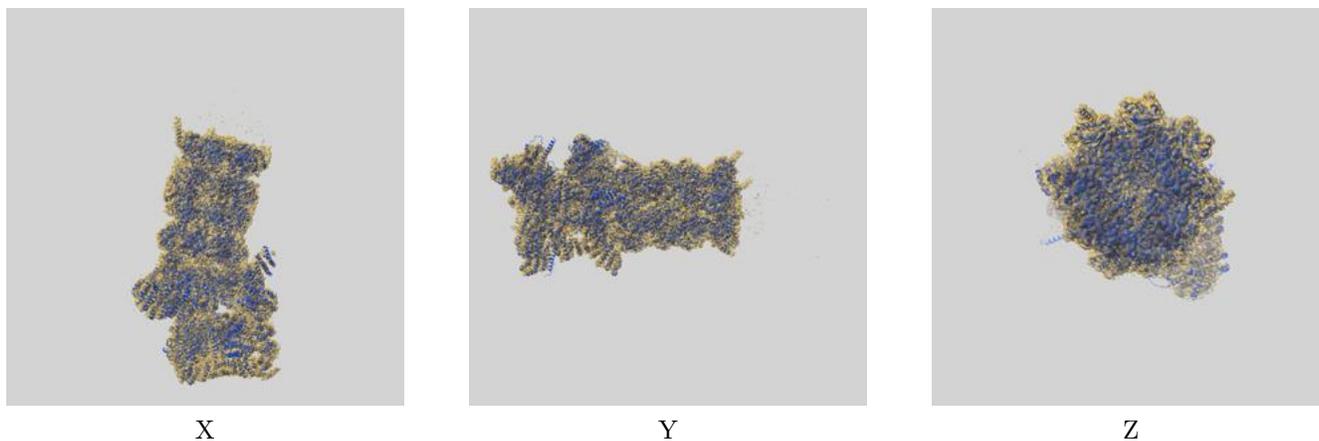
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

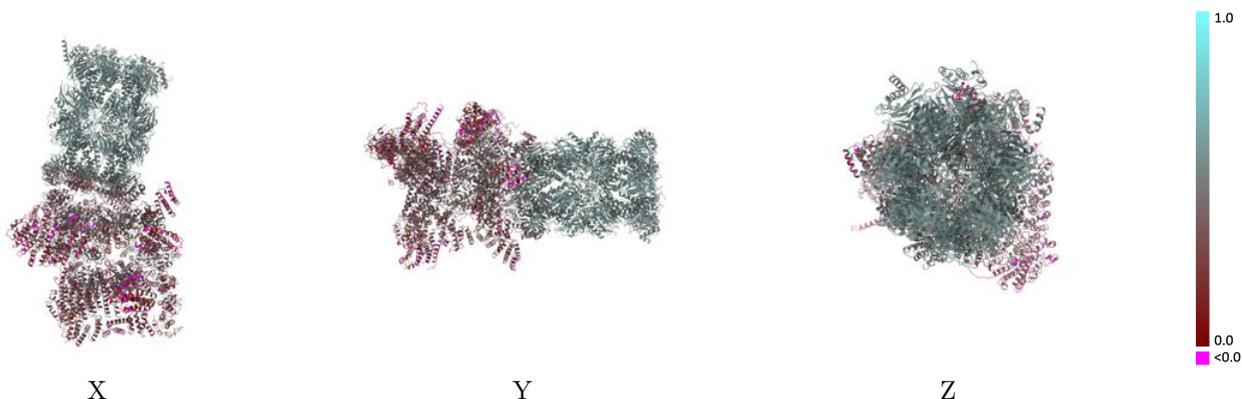
This section contains information regarding the fit between EMDB map EMD-49510 and PDB model 9NKJ. Per-residue inclusion information can be found in section 3 on page 13.

9.1 Map-model overlay [i](#)



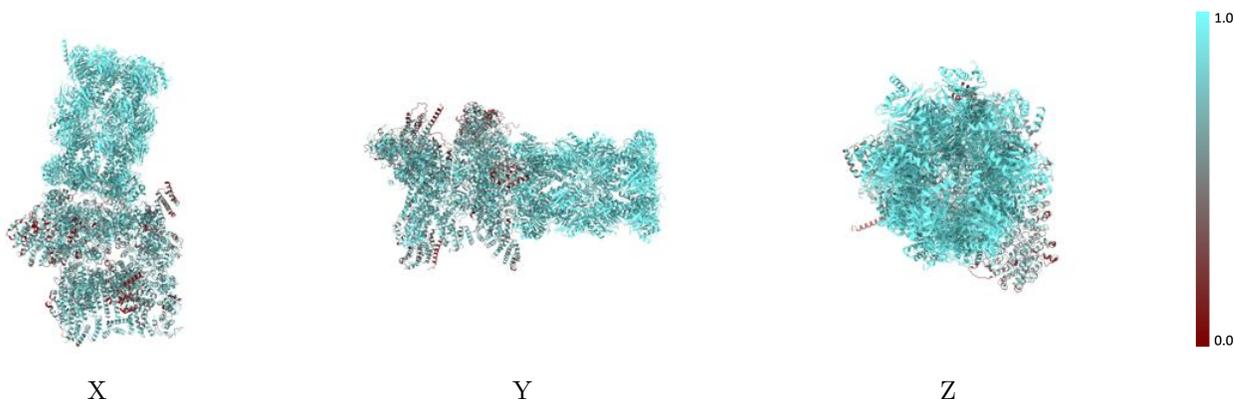
The images above show the 3D surface view of the map at the recommended contour level 0.165 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



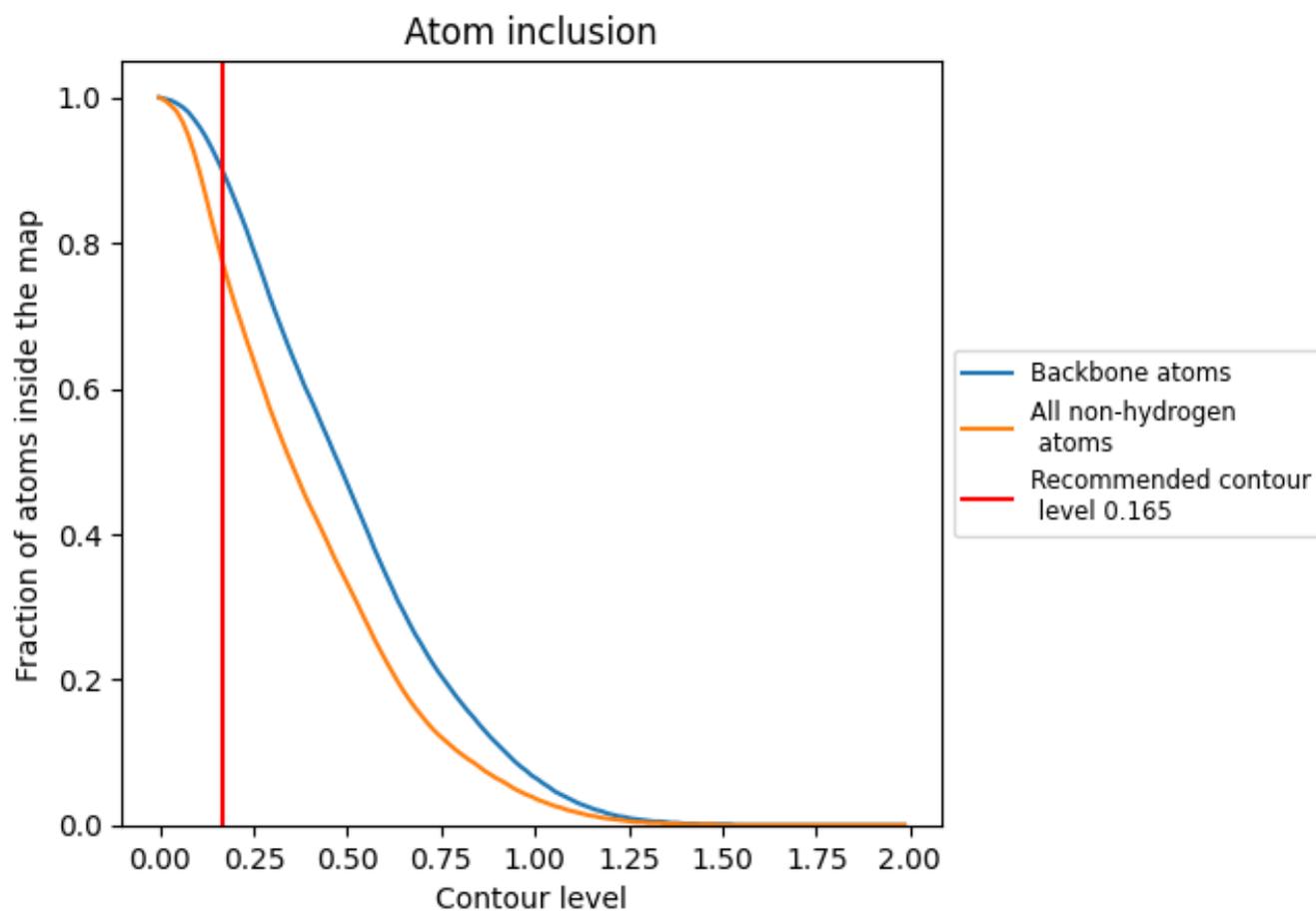
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.165).

9.4 Atom inclusion [i](#)

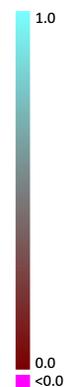


At the recommended contour level, 90% of all backbone atoms, 78% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.165) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.7780	 0.4190
A	 0.7740	 0.3840
B	 0.8010	 0.4170
C	 0.8340	 0.4330
D	 0.8240	 0.4110
E	 0.6170	 0.2560
F	 0.7720	 0.3710
G	 0.9460	 0.4870
H	 0.9520	 0.5110
I	 0.9170	 0.4810
J	 0.9000	 0.4250
K	 0.9030	 0.4600
L	 0.9710	 0.4980
M	 0.9490	 0.5090
N	 0.9700	 0.5620
O	 0.9750	 0.5660
P	 0.9710	 0.5650
Q	 0.9770	 0.5700
R	 0.9790	 0.5730
S	 0.9750	 0.5710
T	 0.9810	 0.5740
U	 0.7320	 0.2840
V	 0.5870	 0.2420
W	 0.6950	 0.3110
X	 0.6620	 0.3290
Y	 0.7190	 0.3150
Z	 0.7950	 0.3600
a	 0.7020	 0.2690
b	 0.7160	 0.3270
c	 0.7670	 0.3730
d	 0.6470	 0.3120
e	 0.5150	 0.2560
f	 0.5510	 0.2220
g	 0.9610	 0.5530
h	 0.9800	 0.5640



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Chain	Atom inclusion	Q-score
i	 0.9620	 0.5540
j	 0.9760	 0.5510
k	 0.9560	 0.5520
l	 0.9690	 0.5590
m	 0.9620	 0.5530
n	 0.9710	 0.5700
o	 0.9800	 0.5720
p	 0.9780	 0.5730
q	 0.9800	 0.5790
r	 0.9830	 0.5750
s	 0.9670	 0.5700
t	 0.9810	 0.5690
v	 0.9000	 0.5410