



## wwPDB EM Map/Model Validation Report ⓘ

Jun 20, 2016 – 02:59 PM EDT

PDB ID : 3JCK  
EMDB ID: : EMD-6479  
Title : Structure of the yeast 26S proteasome lid sub-complex  
Authors : Herzik Jr., M.A.; Dambacher, C.M.; Worden, E.J.; Martin, A.; Lander, G.C.  
Deposited on : 2015-12-20  
Resolution : 3.50 Å(reported)

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.  
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.  
We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at  
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

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MolProbity : 4.02b-467  
Mogul : unknown  
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)  
Validation Pipeline (wwPDB-VP) : rb-20027790



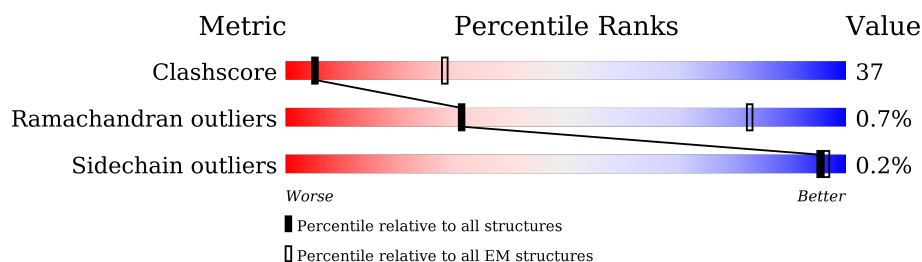
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.50 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	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686




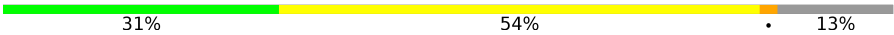
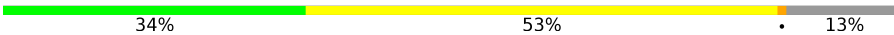
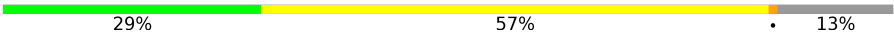
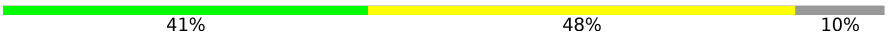
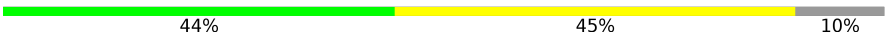
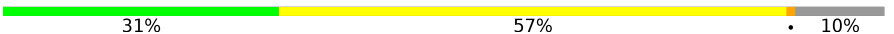
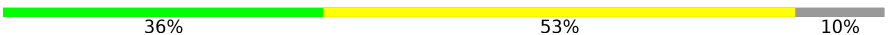
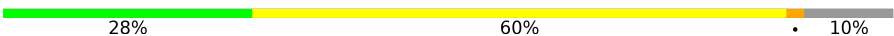

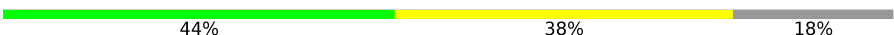
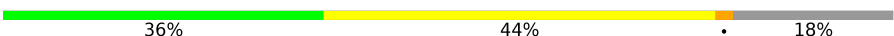











The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	1-A	438	50% 41% 9%
1	2-A	438	49% 40% 9%
1	3-A	438	42% 47% 9%
1	4-A	438	40% 50% 9%
1	5-A	438	35% 54% 9%
2	1-B	445	38% 51% 9%
2	2-B	445	46% 44% 9%
2	3-B	445	27% 60% 9%
2	4-B	445	31% 58% 9%

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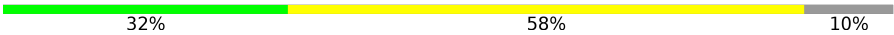
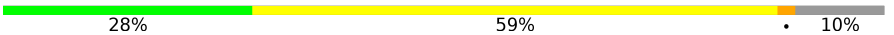
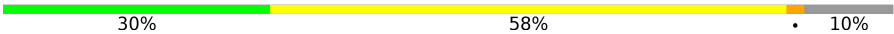
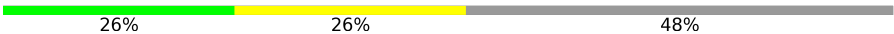

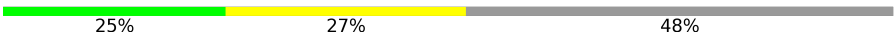


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Mol	Chain	Length	Quality of chain
2	5-B	445	
3	1-C	434	
3	2-C	434	
3	3-C	434	
3	4-C	434	
3	5-C	434	
4	1-D	429	
4	2-D	429	
4	3-D	429	
4	4-D	429	
4	5-D	429	
5	1-E	338	
5	2-E	338	
5	3-E	338	
5	4-E	338	
5	5-E	338	
6	1-F	393	
6	2-F	393	
6	3-F	393	
6	4-F	393	
6	5-F	393	
7	1-G	306	
7	2-G	306	
7	3-G	306	
7	4-G	306	

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Mol	Chain	Length	Quality of chain
7	5-G	306	
8	1-H	274	
8	2-H	274	
8	3-H	274	
8	4-H	274	
8	5-H	274	
9	1-I	89	
9	2-I	89	
9	3-I	89	
9	4-I	89	
9	5-I	89	



## 2 Entry composition

There are 11 unique types of molecules in this entry. The entry contains 112285 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called 26S proteasome regulatory subunit RPN3.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	1-A	397	Total	C	N	O	S	0	0
			3116	1991	528	583	14		
1	2-A	397	Total	C	N	O	S	0	0
			3116	1991	528	583	14		
1	3-A	397	Total	C	N	O	S	0	0
			3116	1991	528	583	14		
1	4-A	397	Total	C	N	O	S	0	0
			3116	1991	528	583	14		
1	5-A	397	Total	C	N	O	S	0	0
			3116	1991	528	583	14		

- Molecule 2 is a protein called 26S proteasome regulatory subunit RPN5.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	1-B	404	Total	C	N	O	S	0	0
			3323	2118	556	640	9		
2	2-B	404	Total	C	N	O	S	0	0
			3323	2118	556	640	9		
2	3-B	404	Total	C	N	O	S	0	0
			3323	2118	556	640	9		
2	4-B	404	Total	C	N	O	S	0	0
			3323	2118	556	640	9		
2	5-B	404	Total	C	N	O	S	0	0
			3323	2118	556	640	9		

- Molecule 3 is a protein called 26S proteasome regulatory subunit RPN6.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	1-C	378	Total	C	N	O	S	0	0
			3060	1959	499	587	15		
3	2-C	378	Total	C	N	O	S	0	0
			3060	1959	499	587	15		
3	3-C	378	Total	C	N	O	S	0	0
			3060	1959	499	587	15		

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Mol	Chain	Residues	Atoms					AltConf	Trace
3	4-C	378	Total	C	N	O	S	0	0
			3060	1959	499	587	15		
3	5-C	378	Total	C	N	O	S	0	0
			3060	1959	499	587	15		

- Molecule 4 is a protein called 26S proteasome regulatory subunit RPN7.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	1-D	384	Total	C	N	O	S	0	0
			3084	1975	503	596	10		
4	2-D	384	Total	C	N	O	S	0	0
			3084	1975	503	596	10		
4	3-D	384	Total	C	N	O	S	0	0
			3084	1975	503	596	10		
4	4-D	384	Total	C	N	O	S	0	0
			3084	1975	503	596	10		
4	5-D	384	Total	C	N	O	S	0	0
			3084	1975	503	596	10		

- Molecule 5 is a protein called 26S proteasome regulatory subunit RPN8.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	1-E	277	Total	C	N	O	S	0	0
			2224	1414	382	422	6		
5	2-E	277	Total	C	N	O	S	0	0
			2224	1414	382	422	6		
5	3-E	277	Total	C	N	O	S	0	0
			2224	1414	382	422	6		
5	4-E	277	Total	C	N	O	S	0	0
			2224	1414	382	422	6		
5	5-E	277	Total	C	N	O	S	0	0
			2224	1414	382	422	6		

- Molecule 6 is a protein called 26S proteasome regulatory subunit RPN9.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	1-F	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		
6	2-F	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		
6	3-F	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		

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Mol	Chain	Residues	Atoms					AltConf	Trace
6	4-F	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		
6	5-F	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		

- Molecule 7 is a protein called Ubiquitin carboxyl-terminal hydrolase RPN11.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	1-G	257	Total	C	N	O	S	0	0
			2036	1285	344	393	14		
7	2-G	257	Total	C	N	O	S	0	0
			2036	1285	344	393	14		
7	3-G	257	Total	C	N	O	S	0	0
			2036	1285	344	393	14		
7	4-G	257	Total	C	N	O	S	0	0
			2036	1285	344	393	14		
7	5-G	257	Total	C	N	O	S	0	0
			2036	1285	344	393	14		

- Molecule 8 is a protein called 26S proteasome regulatory subunit RPN12.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	1-H	246	Total	C	N	O	S	0	0
			2021	1305	321	391	4		
8	2-H	246	Total	C	N	O	S	0	0
			2021	1305	321	391	4		
8	3-H	246	Total	C	N	O	S	0	0
			2021	1305	321	391	4		
8	4-H	246	Total	C	N	O	S	0	0
			2021	1305	321	391	4		
8	5-H	246	Total	C	N	O	S	0	0
			2021	1305	321	391	4		

- Molecule 9 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	1-I	46	Total	C	N	O	0	0
			405	251	62	92		
9	2-I	46	Total	C	N	O	0	0
			405	251	62	92		
9	3-I	46	Total	C	N	O	0	0
			405	251	62	92		

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Mol	Chain	Residues	Atoms				AltConf	Trace
9	4-I	46	Total	C	N	O	0	0
			405	251	62	92		
9	5-I	46	Total	C	N	O	0	0
			405	251	62	92		

- Molecule 10 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
10	4-G	1	Total	Zn	0
			1	1	
10	1-G	1	Total	Zn	0
			1	1	
10	3-G	1	Total	Zn	0
			1	1	
10	5-G	1	Total	Zn	0
			1	1	
10	2-G	1	Total	Zn	0
			1	1	

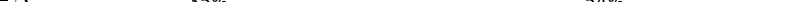
- Molecule 11 is water.

Mol	Chain	Residues	Atoms		AltConf
11	1-B	1	Total	O	0
			1	1	
11	2-B	1	Total	O	0
			1	1	
11	3-B	1	Total	O	0
			1	1	
11	4-B	1	Total	O	0
			1	1	
11	5-B	1	Total	O	0
			1	1	

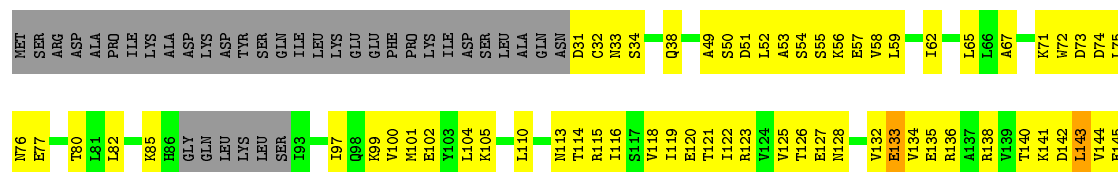




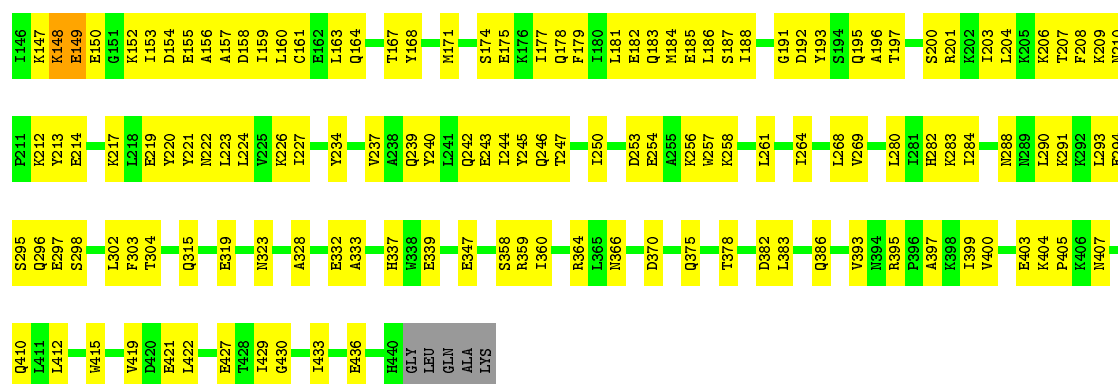


Chain 5-A:  35% 54% 9%



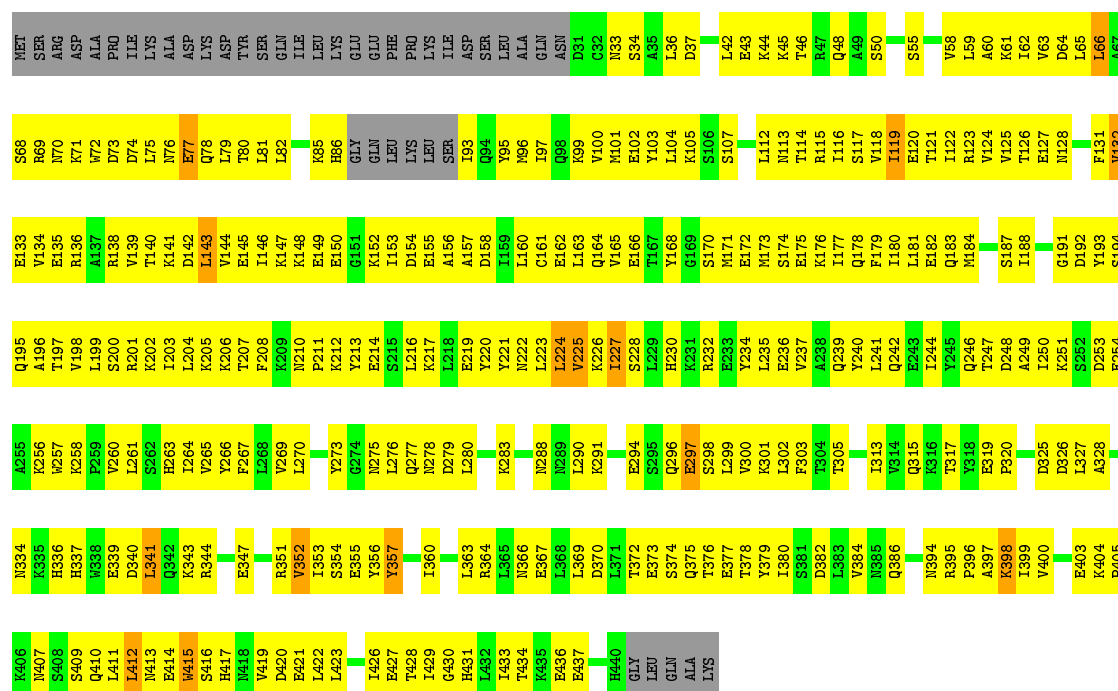






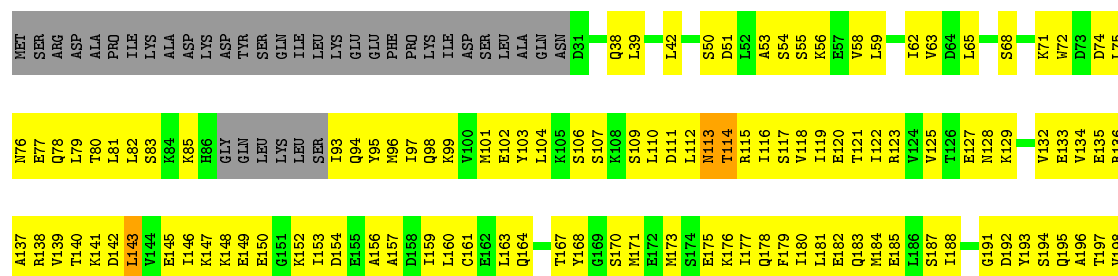
• Molecule 2: 26S proteasome regulatory subunit RPN5

Chain 3-B: 27% 60% 9%

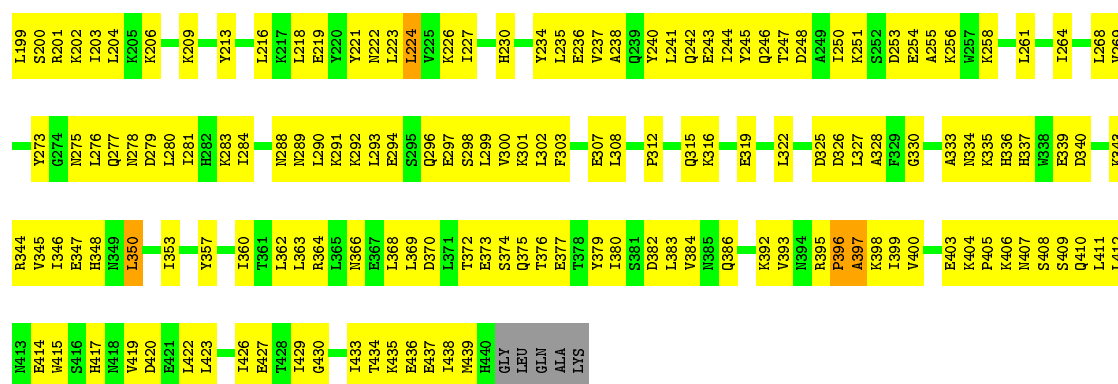


• Molecule 2: 26S proteasome regulatory subunit RPN5

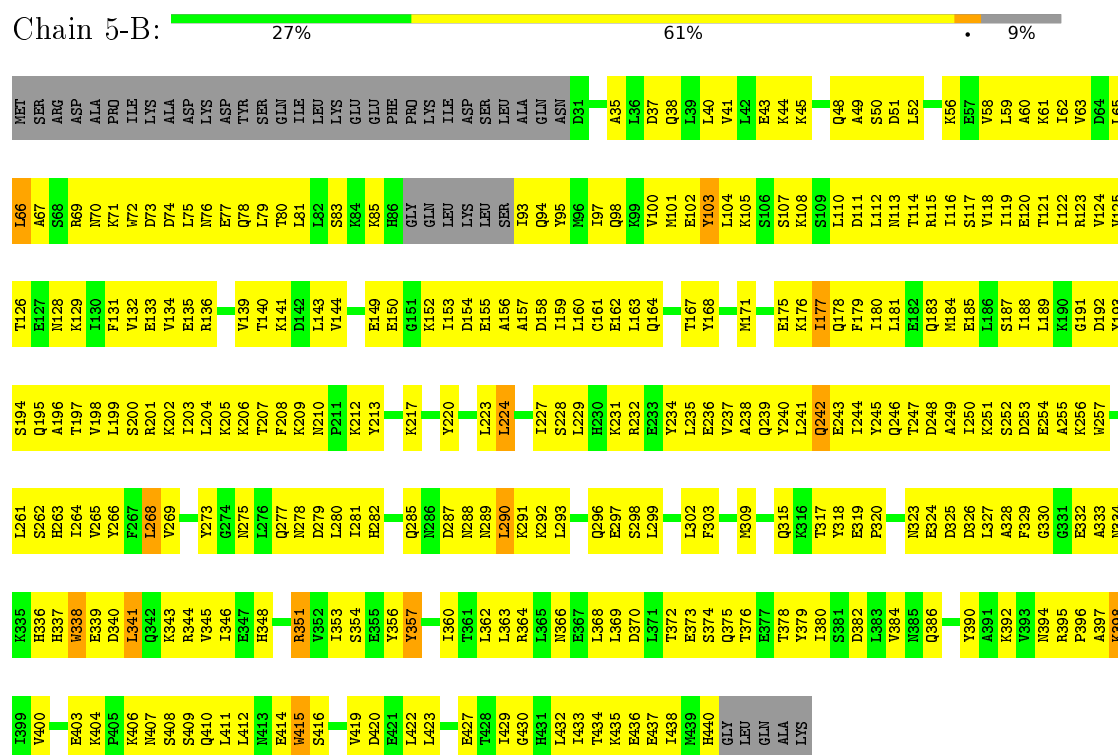
Chain 4-B: 31% 58% 9%



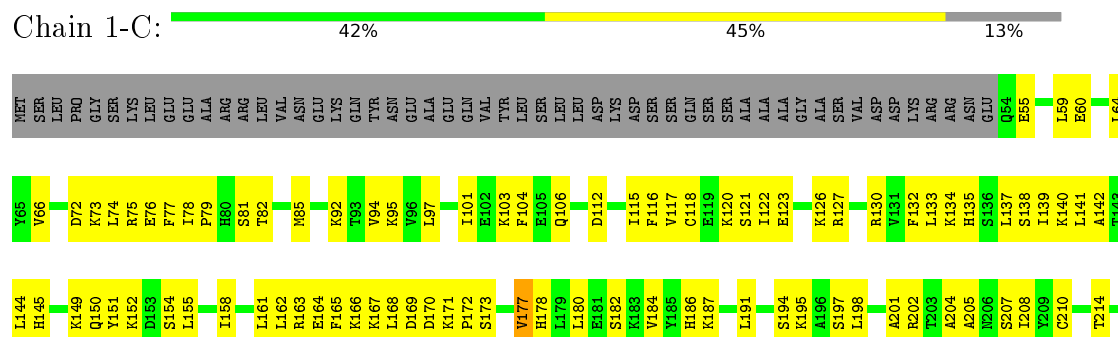




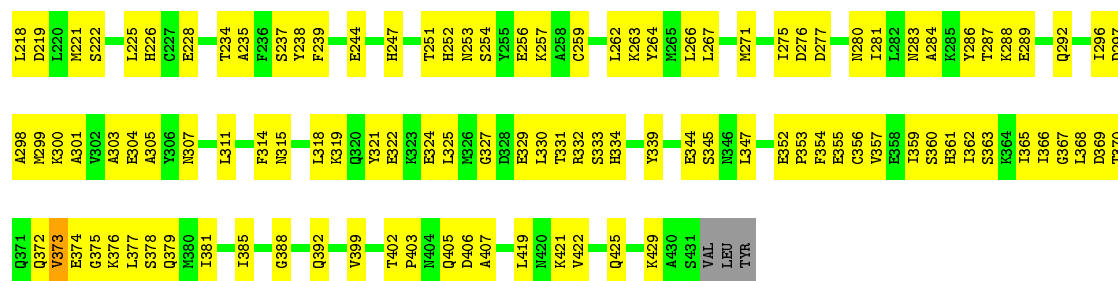
- Molecule 2: 26S proteasome regulatory subunit RPN5



- Molecule 3: 26S proteasome regulatory subunit RPN6

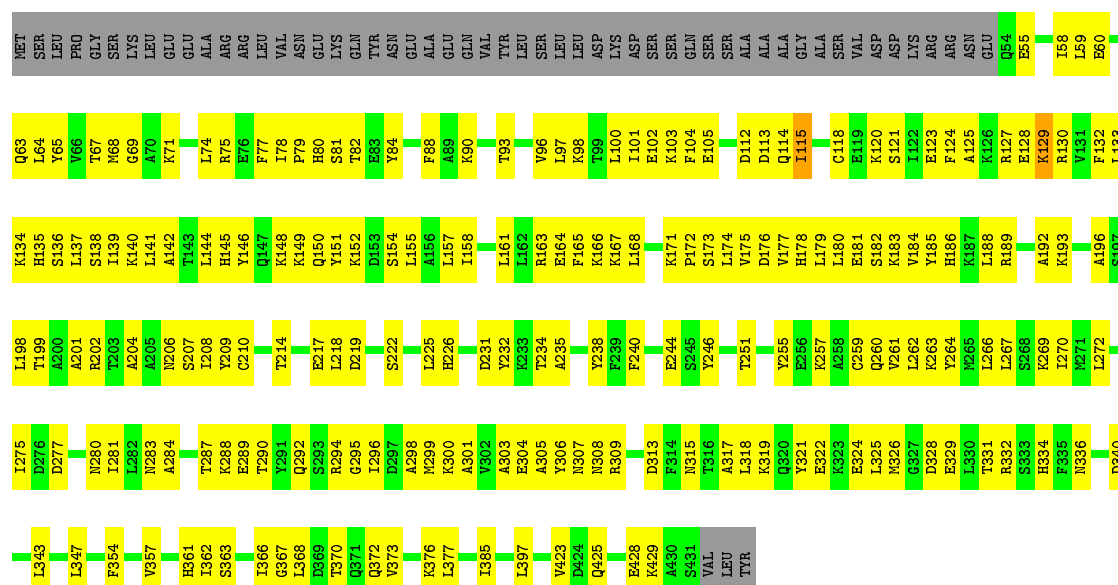






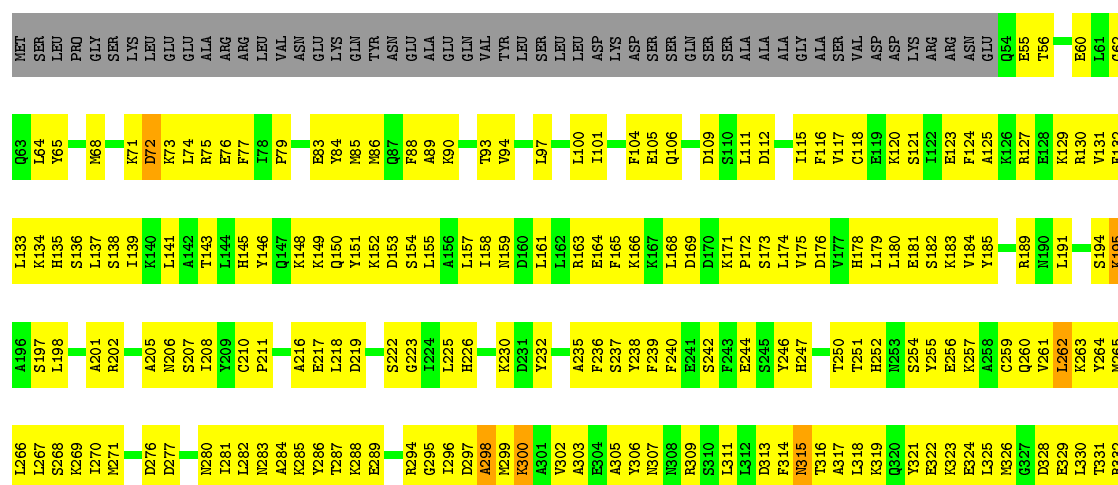
• Molecule 3: 26S proteasome regulatory subunit RPN6

Chain 2-C: 41% 45% 13%

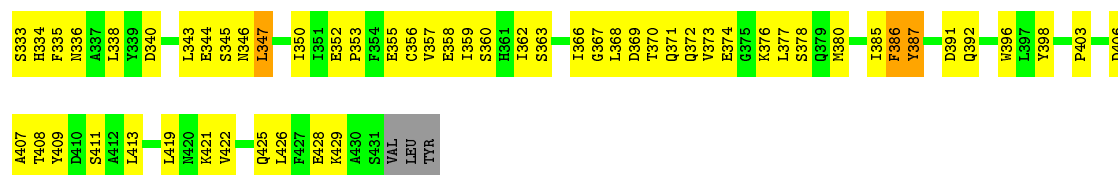


• Molecule 3: 26S proteasome regulatory subunit RPN6

Chain 3-C: 31% 54% 13%

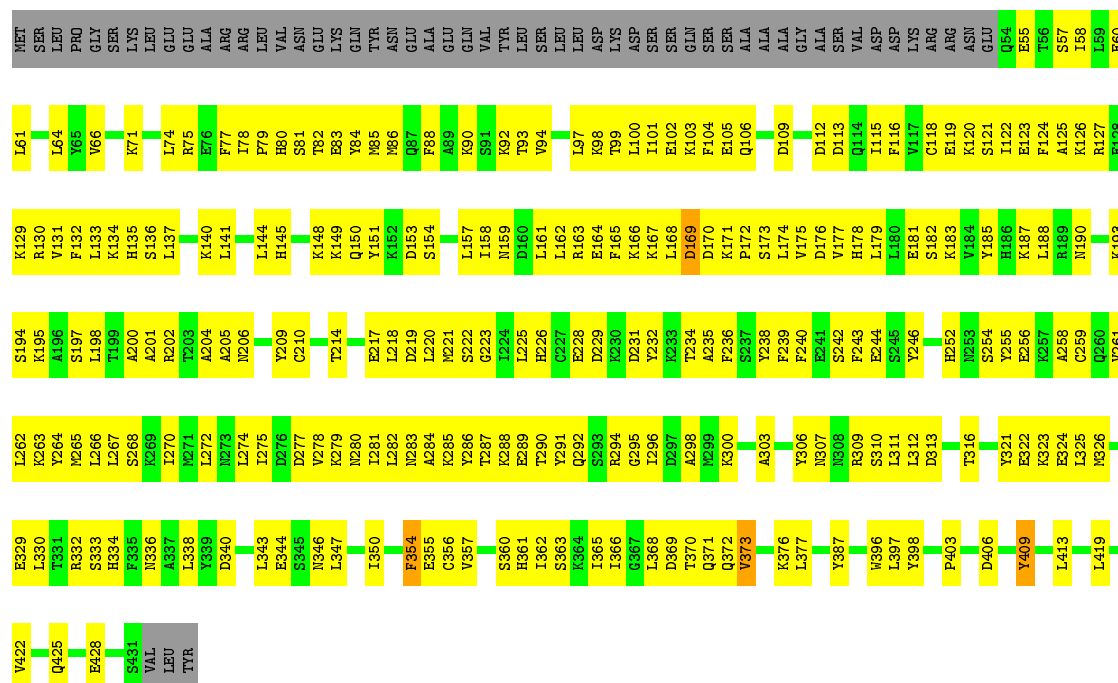






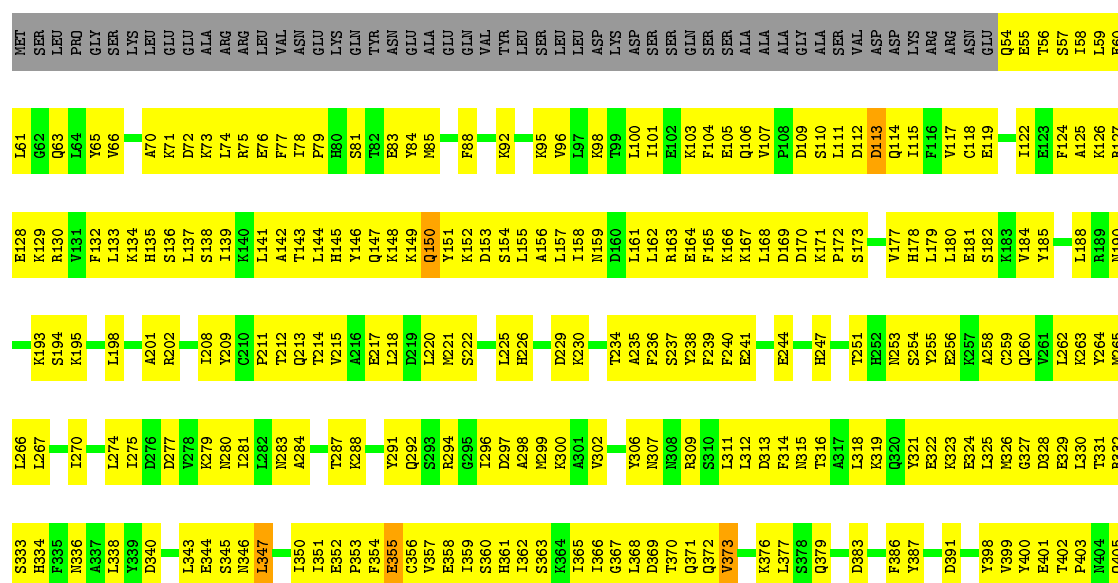
• Molecule 3: 26S proteasome regulatory subunit RPN6

Chain 4-C: 34% 53% 13%



• Molecule 3: 26S proteasome regulatory subunit RPN6

Chain 5-C: 29% 57% 13%

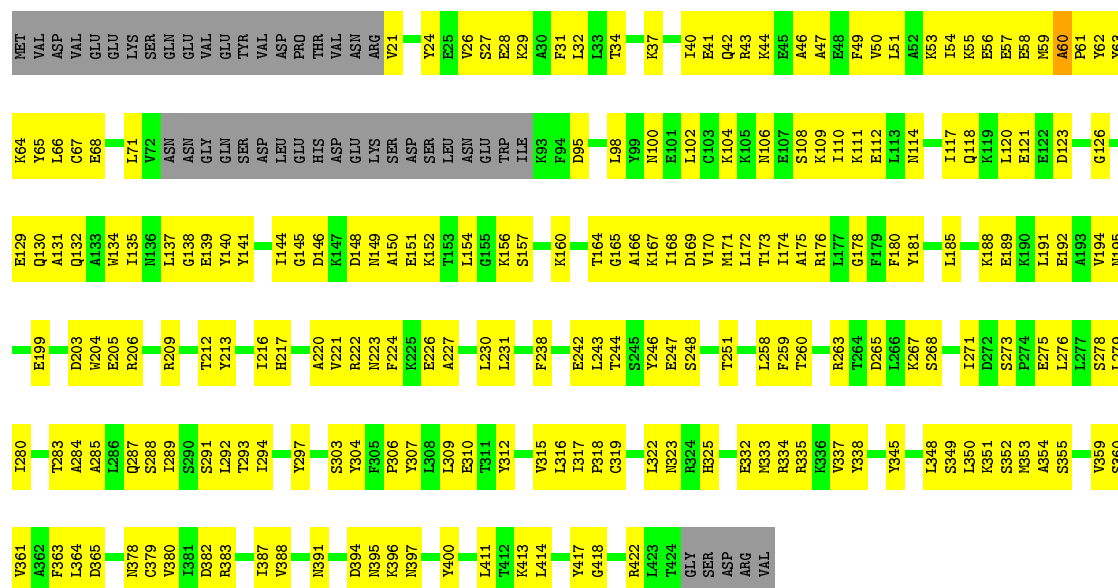






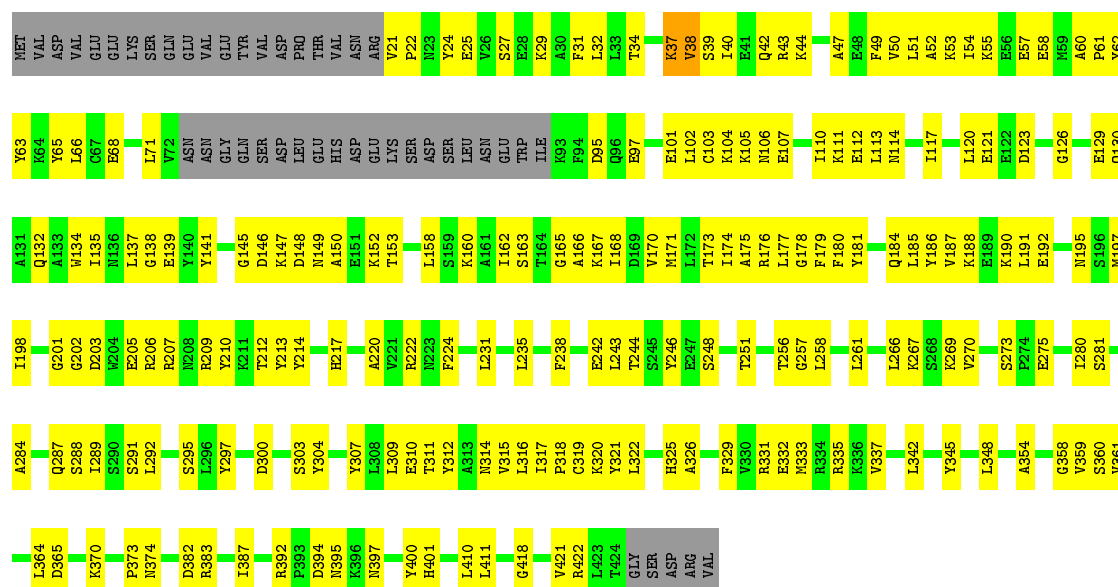
• Molecule 4: 26S proteasome regulatory subunit RPN7

Chain 1-D: 41% 48% 10%



• Molecule 4: 26S proteasome regulatory subunit RPN7

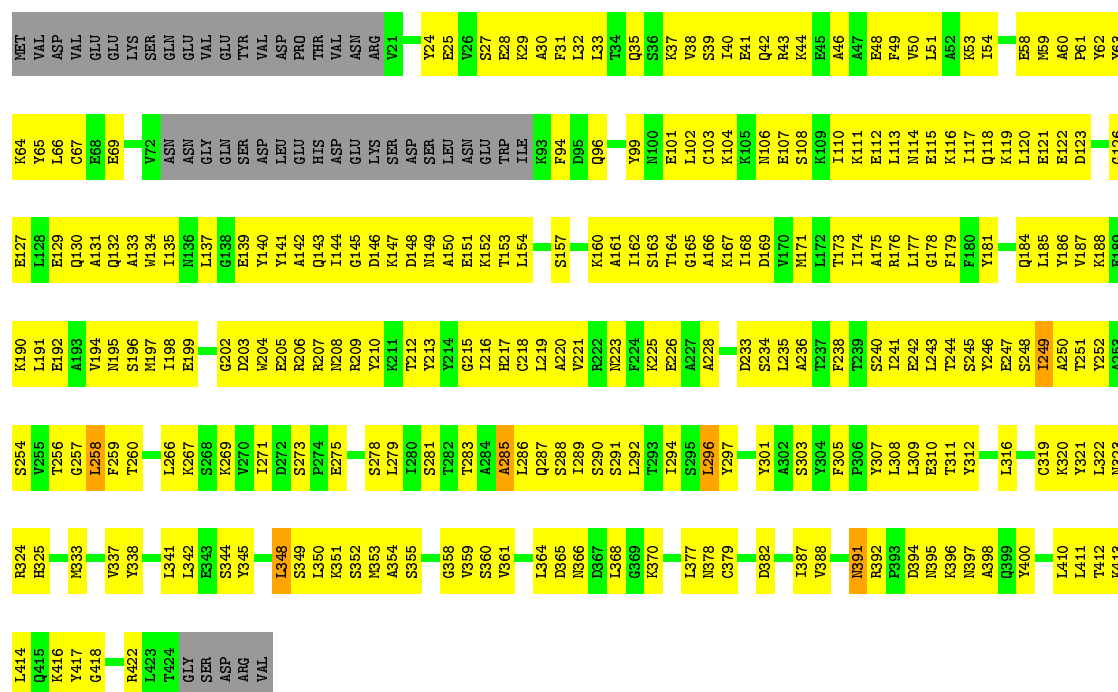
Chain 2-D: 44% 45% 10%



• Molecule 4: 26S proteasome regulatory subunit RPN7

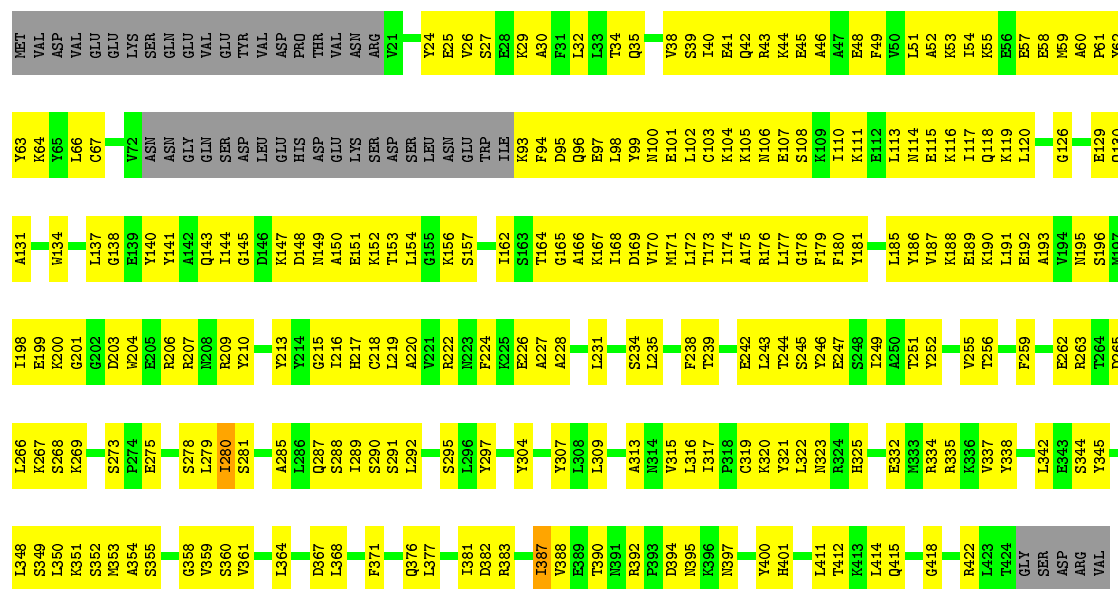
Chain 3-D: 31% 57% 10%





• Molecule 4: 26S proteasome regulatory subunit RPN7

Chain 4-D: 36% 53% 10%

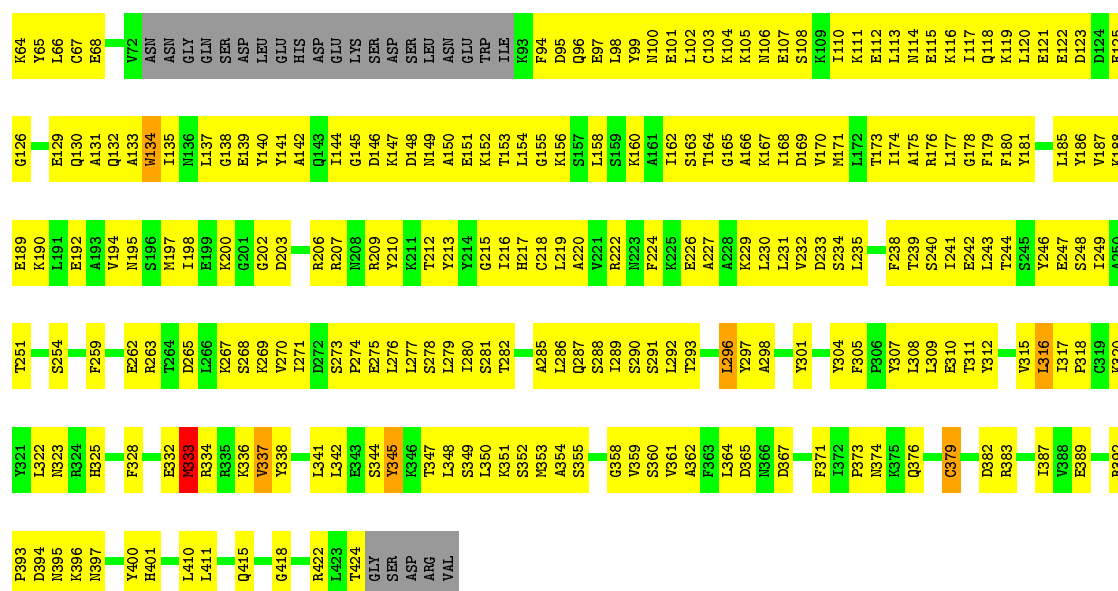


• Molecule 4: 26S proteasome regulatory subunit RPN7

Chain 5-D: 28% 60% 10%

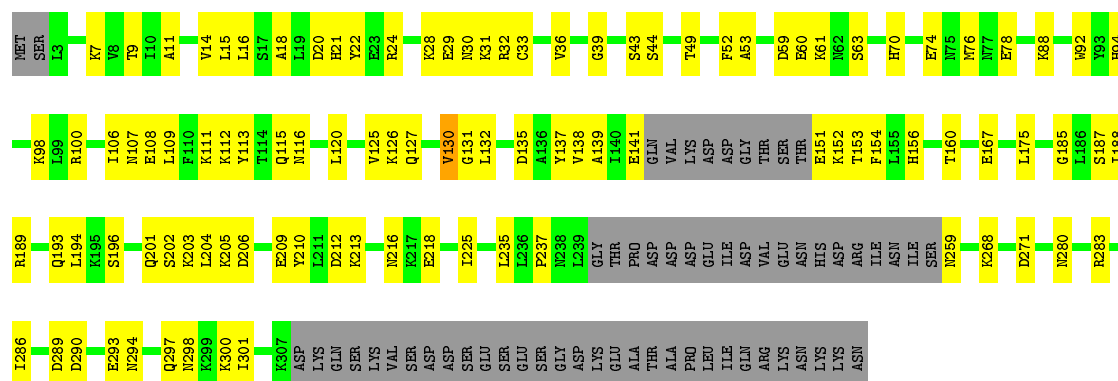






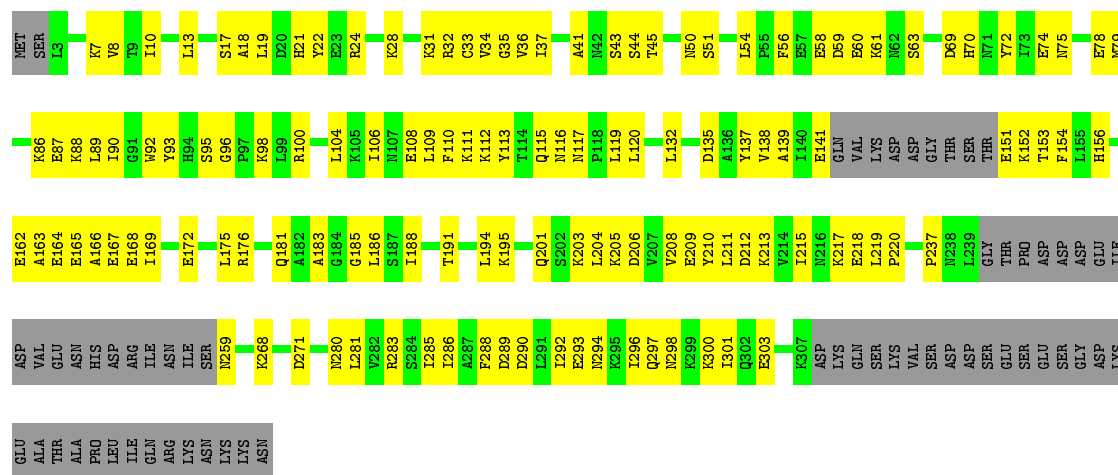
• Molecule 5: 26S proteasome regulatory subunit RPN8

Chain 1-E: 52% 30% 18%



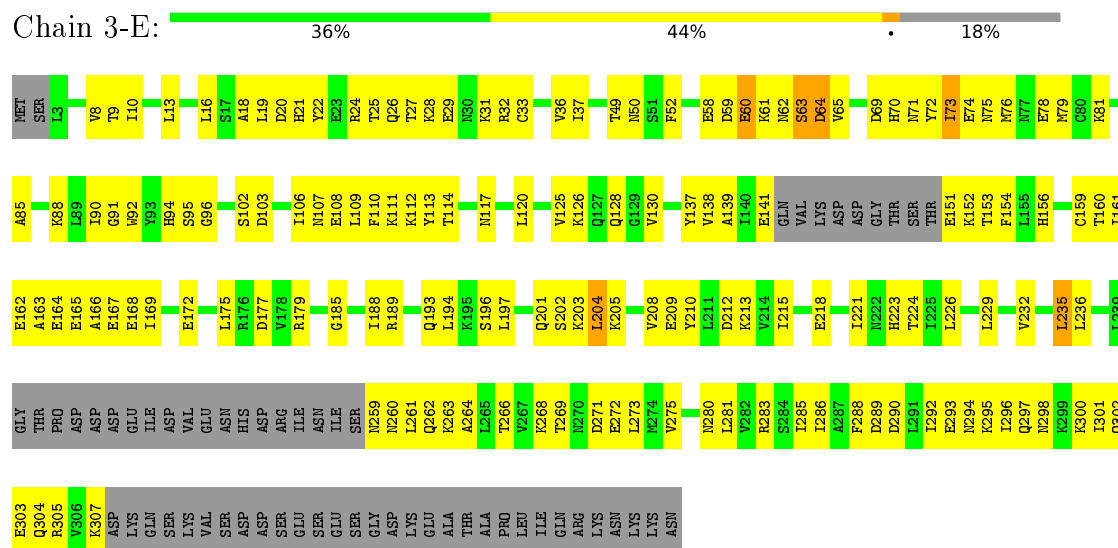
• Molecule 5: 26S proteasome regulatory subunit RPN8

Chain 2-E: 44% 38% 18%

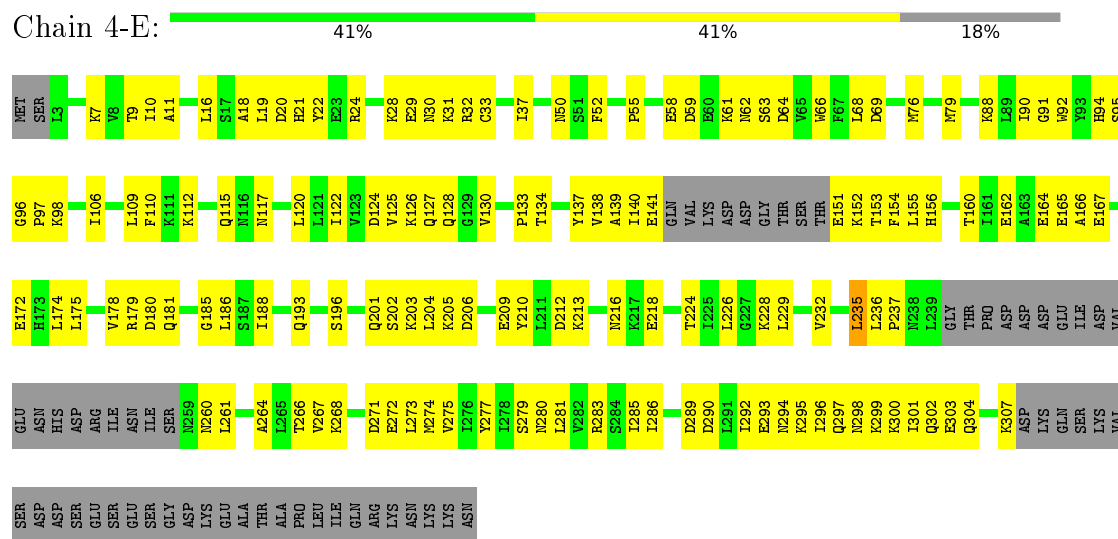




- Molecule 5: 26S proteasome regulatory subunit RPN8



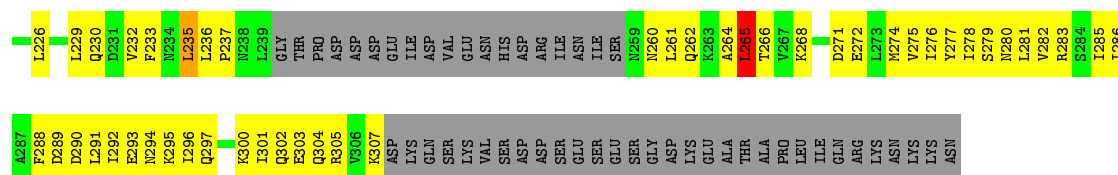
- Molecule 5: 26S proteasome regulatory subunit RPN8



- Molecule 5: 26S proteasome regulatory subunit RPN8

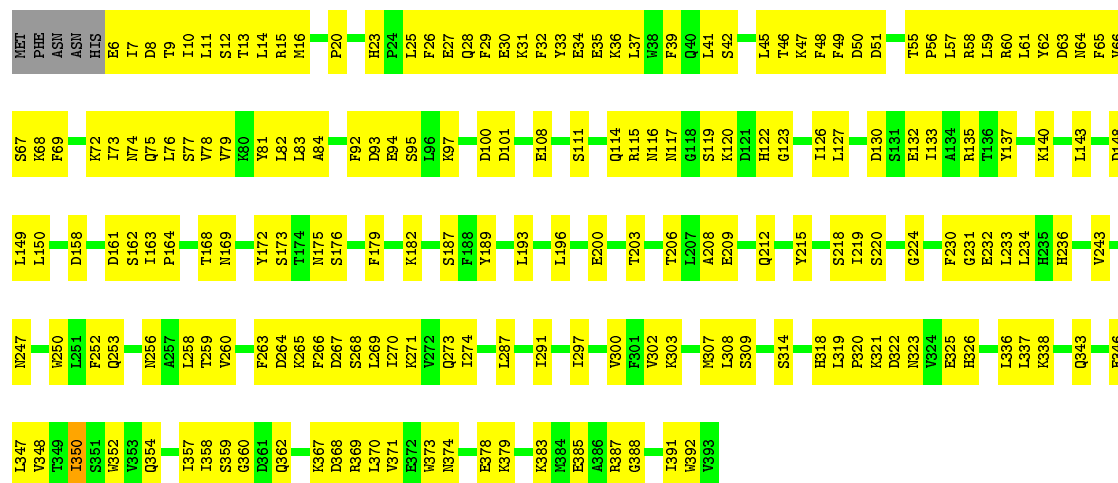






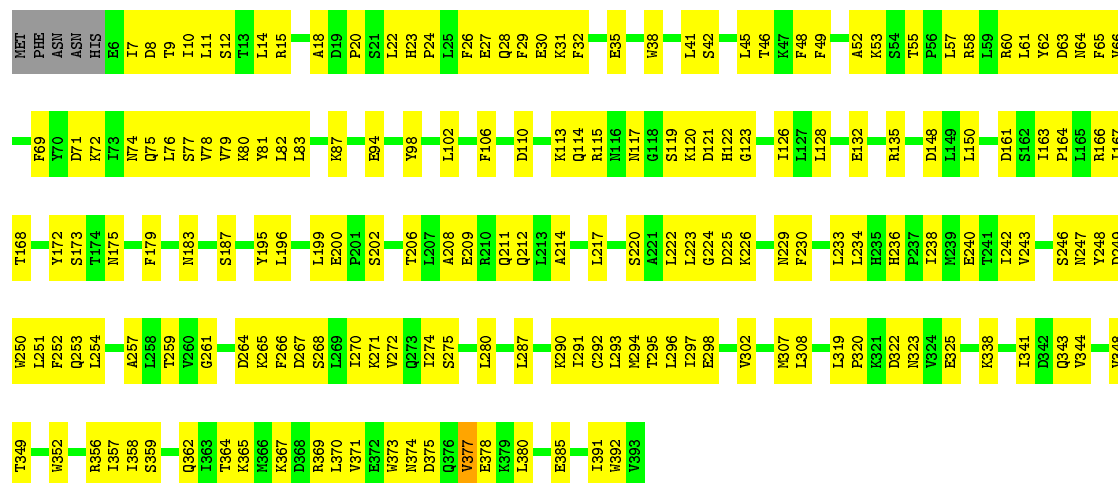
• Molecule 6: 26S proteasome regulatory subunit RPN9

Chain 1-F:



• Molecule 6: 26S proteasome regulatory subunit RPN9

Chain 2-F:

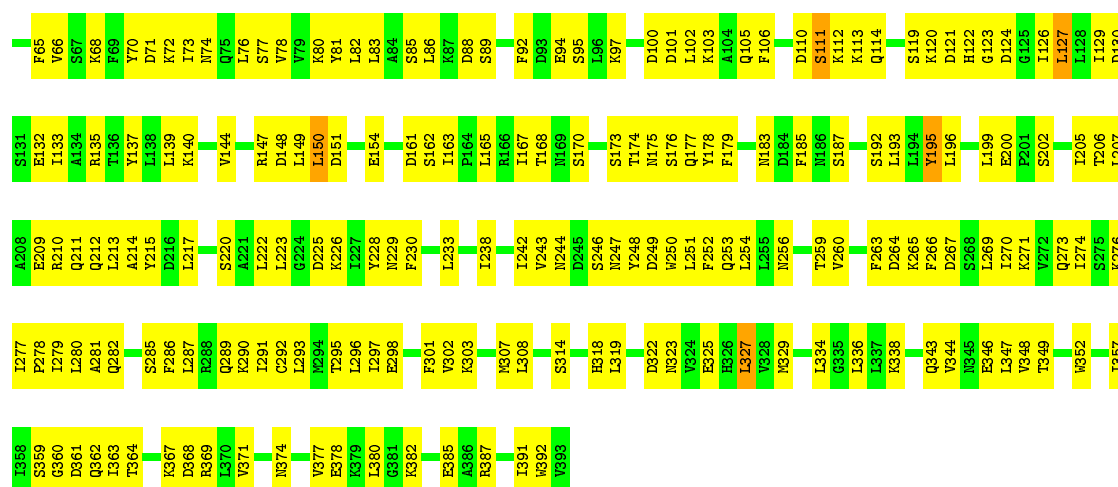


• Molecule 6: 26S proteasome regulatory subunit RPN9

Chain 3-F:

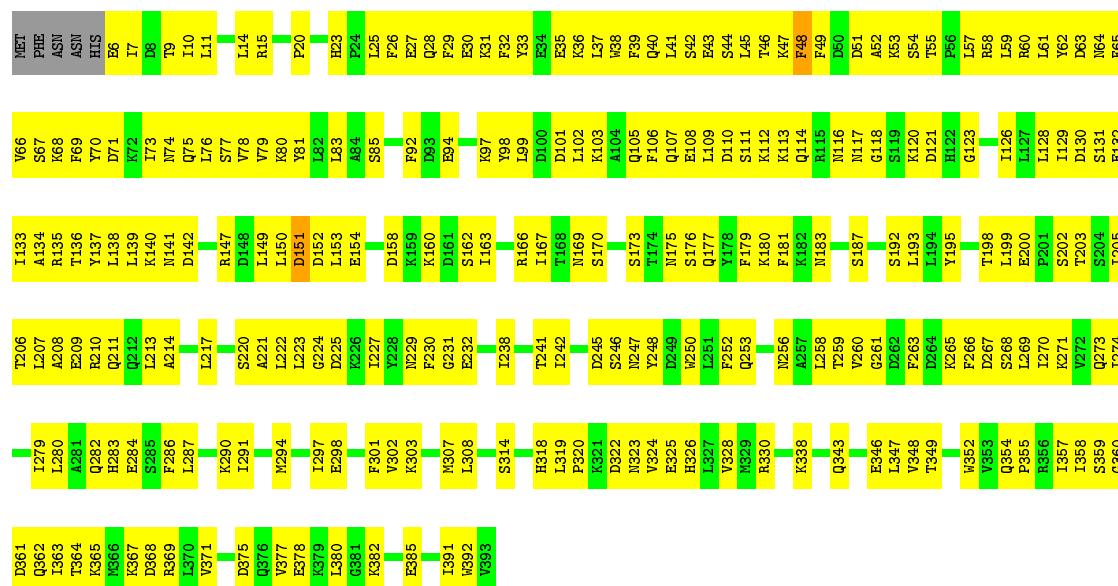






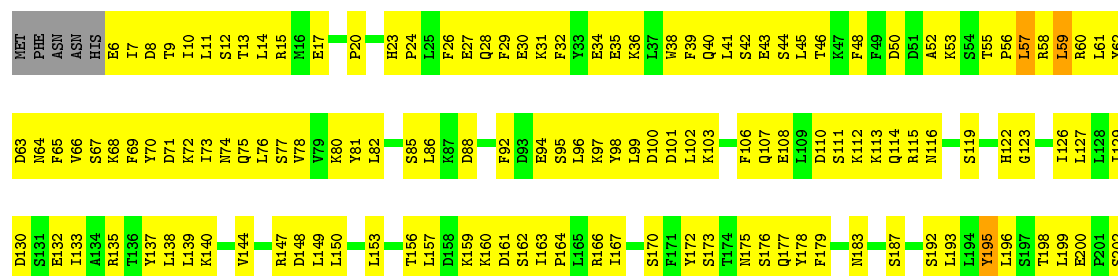
• Molecule 6: 26S proteasome regulatory subunit RPN9

Chain 4-F: 38% 61% ..



• Molecule 6: 26S proteasome regulatory subunit RPN9

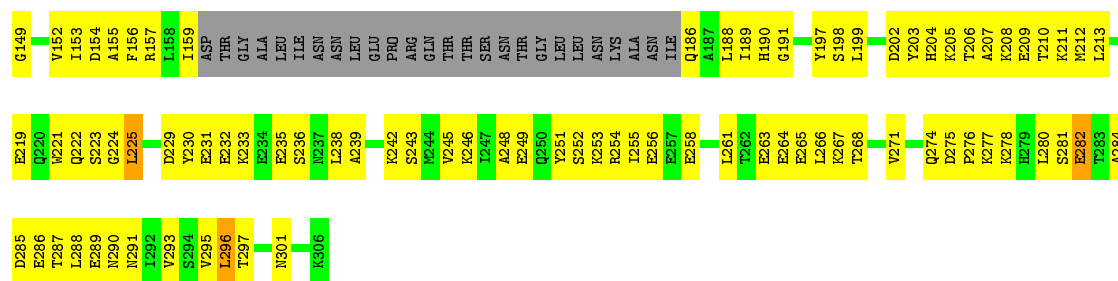
Chain 5-F: 39% 57% ..



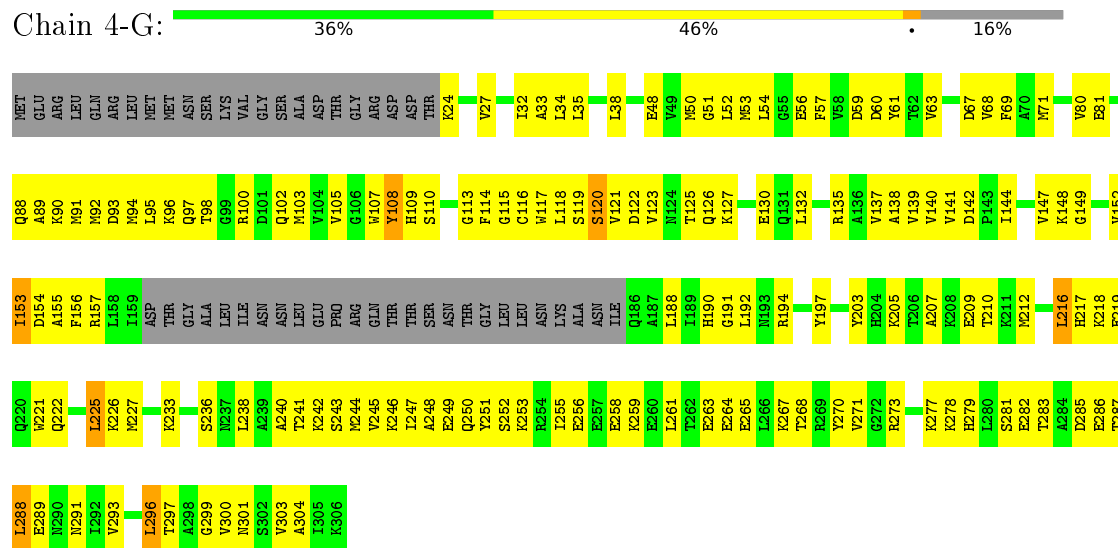




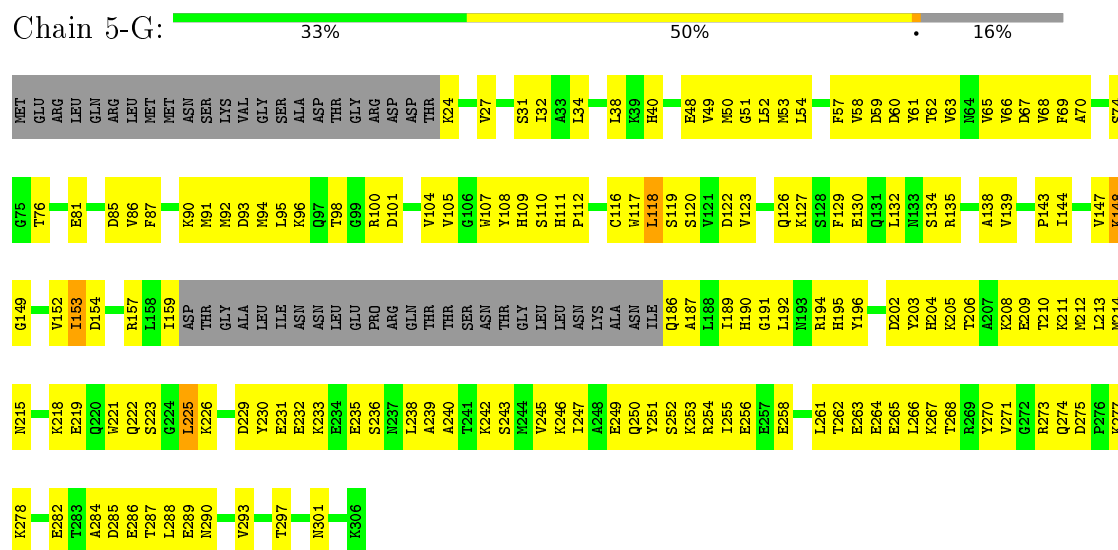




• Molecule 7: Ubiquitin carboxyl-terminal hydrolase RPN11



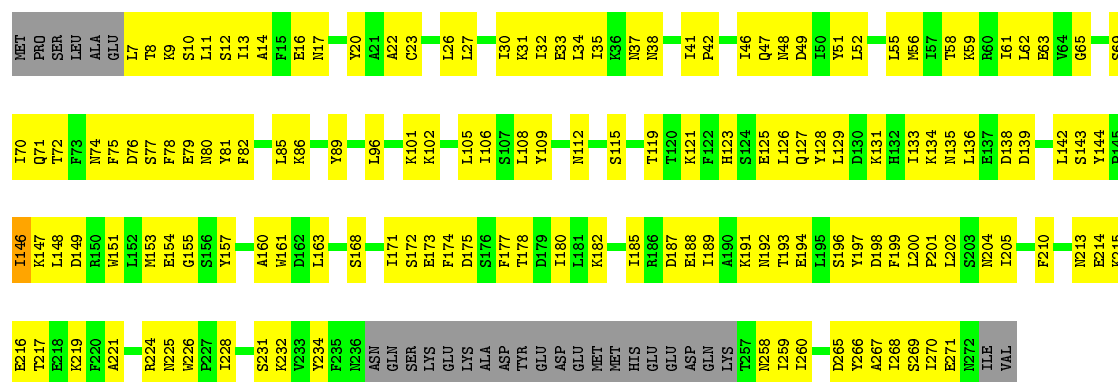
• Molecule 7: Ubiquitin carboxyl-terminal hydrolase RPN11



• Molecule 8: 26S proteasome regulatory subunit RPN12

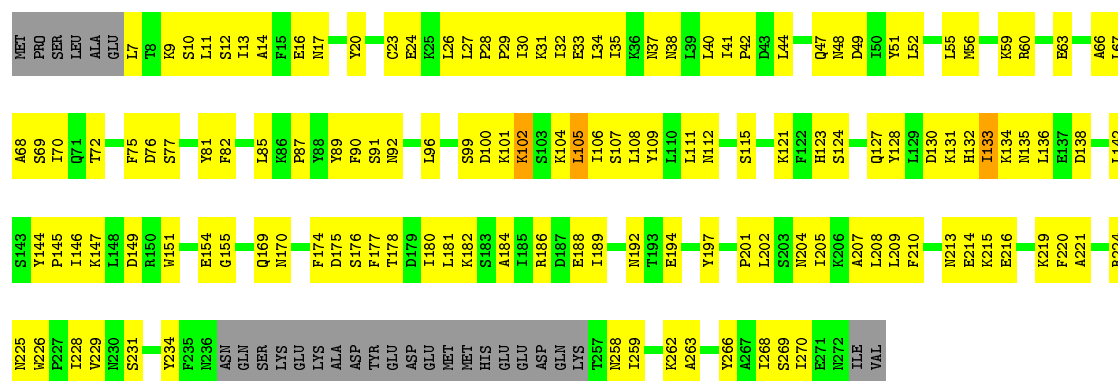






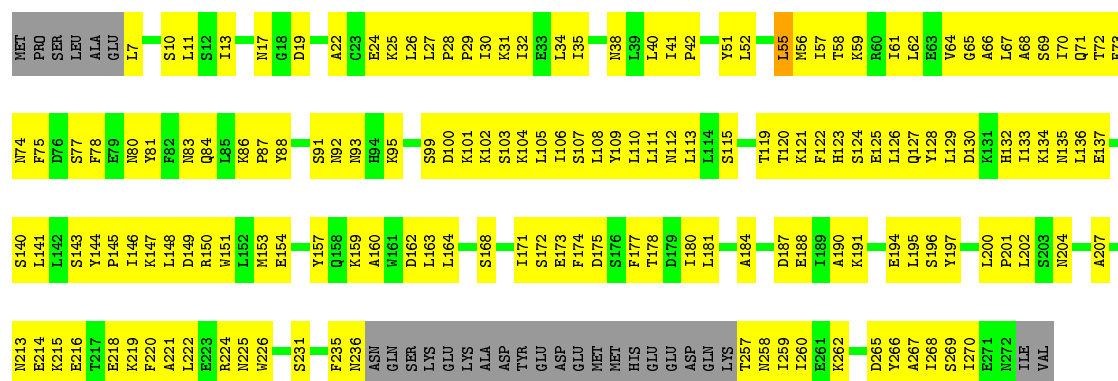
• Molecule 8: 26S proteasome regulatory subunit RPN12

Chain 2-H: 39% 49% 10%



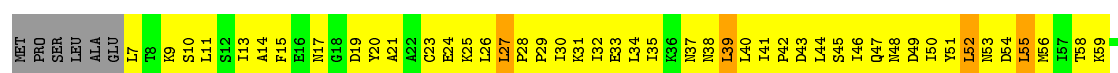
• Molecule 8: 26S proteasome regulatory subunit RPN12

Chain 3-H: 32% 58% 10%

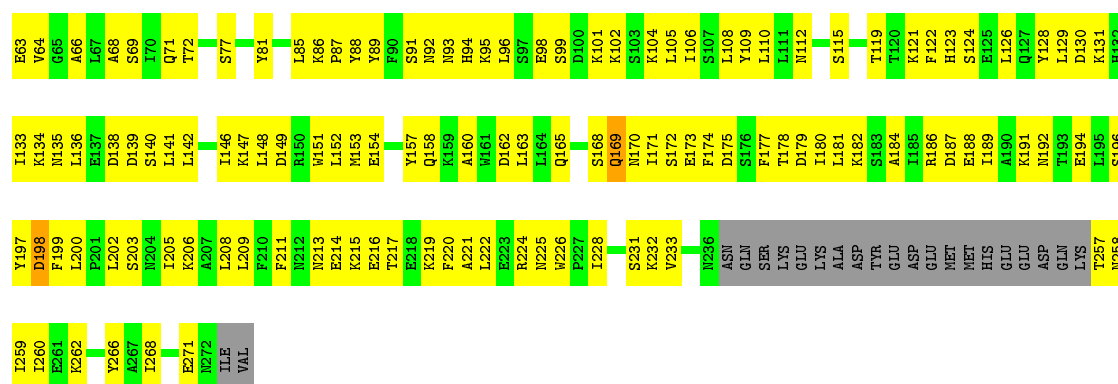


• Molecule 8: 26S proteasome regulatory subunit RPN12

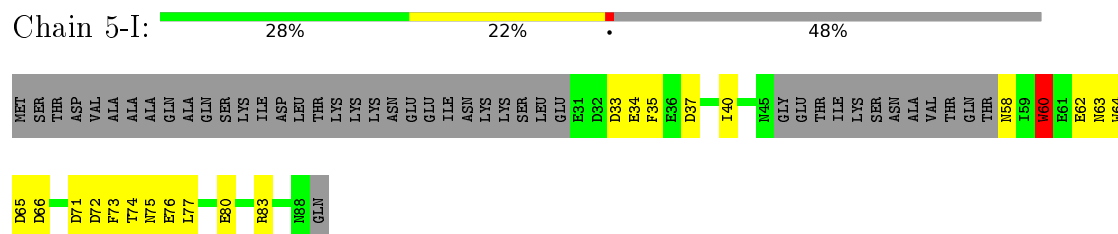
Chain 4-H: 28% 59% 10%













## 4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of particles used	109396	Depositor
Resolution determination method	FSC 0.143	Depositor
CTF correction method	whole micrograph	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	43.8	Depositor
Minimum defocus (nm)	1600	Depositor
Maximum defocus (nm)	3200	Depositor
Magnification	22500	Depositor
Image detector	GATAN K2 (4k x 4k)	Depositor



## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z  > 2$	RMSZ	$\# Z  > 2$
1	1-A	0.52	0/2945	0.60	0/3976
1	2-A	0.45	0/2945	0.56	0/3976
1	3-A	0.89	0/2945	0.80	6/3976 (0.2%)
1	4-A	0.74	0/2945	0.73	1/3976 (0.0%)
1	5-A	0.90	1/2945 (0.0%)	0.82	5/3976 (0.1%)
2	1-B	0.55	0/3373	0.65	1/4550 (0.0%)
2	2-B	0.49	0/3373	0.59	1/4550 (0.0%)
2	3-B	1.00	5/3373 (0.1%)	0.87	8/4550 (0.2%)
2	4-B	0.83	1/3373 (0.0%)	0.78	4/4550 (0.1%)
2	5-B	1.00	5/3373 (0.1%)	0.87	8/4550 (0.2%)
3	1-C	0.47	0/3113	0.60	0/4193
3	2-C	0.42	0/3113	0.56	0/4193
3	3-C	0.81	3/3113 (0.1%)	0.79	4/4193 (0.1%)
3	4-C	0.68	2/3113 (0.1%)	0.70	0/4193
3	5-C	0.82	5/3113 (0.2%)	0.80	3/4193 (0.1%)
4	1-D	0.58	0/3135	0.59	0/4227
4	2-D	0.50	0/3135	0.57	1/4227 (0.0%)
4	3-D	1.00	2/3135 (0.1%)	0.84	7/4227 (0.2%)
4	4-D	0.82	1/3135 (0.0%)	0.72	1/4227 (0.0%)
4	5-D	0.97	3/3135 (0.1%)	0.83	3/4227 (0.1%)
5	1-E	0.53	0/2254	0.61	1/3042 (0.0%)
5	2-E	0.47	0/2254	0.60	1/3042 (0.0%)
5	3-E	0.89	0/2254	0.87	5/3042 (0.2%)
5	4-E	0.74	0/2254	0.73	1/3042 (0.0%)
5	5-E	0.94	1/2254 (0.0%)	0.85	4/3042 (0.1%)
6	1-F	0.53	0/3247	0.60	0/4380
6	2-F	0.48	0/3247	0.55	0/4380
6	3-F	0.93	1/3247 (0.0%)	0.84	5/4380 (0.1%)
6	4-F	0.77	0/3247	0.73	0/4380
6	5-F	0.92	1/3247 (0.0%)	0.82	7/4380 (0.2%)
7	1-G	0.56	0/2069	0.63	0/2786
7	2-G	0.51	0/2069	0.58	0/2786



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >2	RMSZ	# Z  >2
7	3-G	1.00	1/2069 (0.0%)	0.85	4/2786 (0.1%)
7	4-G	0.83	0/2069	0.75	2/2786 (0.1%)
7	5-G	0.98	0/2069	0.85	1/2786 (0.0%)
8	1-H	0.45	0/2061	0.56	0/2785
8	2-H	0.40	0/2061	0.56	2/2785 (0.1%)
8	3-H	0.73	0/2061	0.74	1/2785 (0.0%)
8	4-H	0.61	0/2061	0.69	2/2785 (0.1%)
8	5-H	0.73	0/2061	0.74	2/2785 (0.1%)
9	1-I	0.47	0/414	0.49	0/562
9	2-I	0.44	0/414	0.46	0/562
9	3-I	0.84	0/414	0.81	0/562
9	4-I	0.72	0/414	0.64	0/562
9	5-I	0.84	0/414	0.71	1/562 (0.2%)
All	All	0.74	32/113055 (0.0%)	0.72	92/152505 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	4-A	0	1
3	4-C	0	1
3	5-C	0	1
4	5-D	0	1
7	1-G	0	1
7	4-G	0	1
All	All	0	6

All (32) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	3-C	409	TYR	CD1-CE1	-6.84	1.29	1.39
2	5-B	415	TRP	CB-CG	-5.97	1.39	1.50
3	5-C	409	TYR	CD1-CE1	-5.92	1.30	1.39
5	5-E	72	TYR	CD1-CE1	-5.91	1.30	1.39
7	3-G	107	TRP	CB-CG	-5.65	1.40	1.50
4	5-D	337	VAL	CB-CG2	-5.55	1.41	1.52
3	5-C	355	GLU	CB-CG	-5.52	1.41	1.52
2	4-B	113	ASN	CA-C	5.51	1.67	1.52
4	5-D	379	CYS	CB-SG	-5.49	1.72	1.81
3	4-C	409	TYR	CD1-CE1	-5.43	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	5-B	400	VAL	CB-CG2	-5.43	1.41	1.52
2	5-B	338	TRP	CB-CG	-5.38	1.40	1.50
2	3-B	352	VAL	CB-CG1	-5.33	1.41	1.52
4	3-D	259	PHE	CB-CG	-5.26	1.42	1.51
3	4-C	396	TRP	CB-CG	-5.26	1.40	1.50
4	5-D	345	TYR	CD1-CE1	-5.26	1.31	1.39
6	3-F	195	TYR	CD2-CE2	-5.25	1.31	1.39
2	3-B	297	GLU	CB-CG	-5.19	1.42	1.52
4	4-D	338	TYR	CD2-CE2	-5.19	1.31	1.39
2	3-B	400	VAL	CB-CG2	-5.15	1.42	1.52
3	5-C	409	TYR	CD2-CE2	-5.14	1.31	1.39
2	5-B	357	TYR	CD2-CE2	-5.14	1.31	1.39
2	3-B	415	TRP	CB-CG	-5.13	1.41	1.50
3	5-C	355	GLU	CG-CD	-5.12	1.44	1.51
3	3-C	409	TYR	CD2-CE2	-5.10	1.31	1.39
2	3-B	357	TYR	CD1-CE1	-5.10	1.31	1.39
3	5-C	386	PHE	CB-CG	-5.09	1.42	1.51
3	3-C	386	PHE	CD1-CE1	-5.06	1.29	1.39
4	3-D	379	CYS	CB-SG	-5.06	1.73	1.81
2	5-B	357	TYR	CD1-CE1	-5.05	1.31	1.39
1	5-A	184	TRP	CB-CG	-5.03	1.41	1.50
6	5-F	195	TYR	CD2-CE2	-5.01	1.31	1.39

All (92) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	4-B	143	LEU	CA-CB-CG	8.14	134.02	115.30
2	5-B	290	LEU	CB-CG-CD2	-7.81	97.72	111.00
5	2-E	132	LEU	CA-CB-CG	7.25	131.99	115.30
1	3-A	323	LEU	CA-CB-CG	-6.99	99.22	115.30
2	3-B	224	LEU	CA-CB-CG	-6.97	99.26	115.30
5	5-E	265	LEU	CB-CG-CD2	-6.84	99.37	111.00
6	5-F	269	LEU	CA-CB-CG	-6.63	100.04	115.30
5	3-E	60	GLU	CB-CA-C	-6.48	97.45	110.40
9	5-I	60	TRP	CA-CB-CG	-6.39	101.56	113.70
4	3-D	258	LEU	CB-CG-CD2	-6.38	100.16	111.00
6	5-F	258	LEU	CB-CG-CD2	-6.31	100.27	111.00
6	3-F	327	LEU	CA-CB-CG	-6.31	100.80	115.30
7	3-G	296	LEU	CA-CB-CG	-6.30	100.82	115.30
2	5-B	341	LEU	CA-CB-CG	-6.29	100.82	115.30
5	5-E	235	LEU	CA-CB-CG	-6.28	100.85	115.30
5	3-E	63	SER	N-CA-C	-6.25	94.12	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	4-G	296	LEU	CA-CB-CG	-6.25	100.92	115.30
4	5-D	333	MET	CB-CG-SD	-6.22	93.73	112.40
6	3-F	139	LEU	CA-CB-CG	-6.17	101.11	115.30
6	5-F	223	LEU	CA-CB-CG	-6.16	101.14	115.30
8	5-H	209	LEU	CA-CB-CG	-6.16	101.14	115.30
2	5-B	224	LEU	CA-CB-CG	-6.07	101.33	115.30
1	3-A	178	LEU	CA-CB-CG	-6.04	101.41	115.30
1	4-A	258	GLU	C-N-CA	6.01	136.72	121.70
8	2-H	105	LEU	CA-CB-CG	5.94	128.96	115.30
6	3-F	120	LYS	CB-CA-C	-5.92	98.55	110.40
1	5-A	323	LEU	CA-CB-CG	-5.91	101.71	115.30
4	3-D	348	LEU	CB-CG-CD1	-5.88	101.01	111.00
1	5-A	330	LEU	CA-CB-CG	-5.84	101.86	115.30
3	5-C	351	ILE	C-N-CA	-5.82	107.15	121.70
4	2-D	266	LEU	CA-CB-CG	5.82	128.68	115.30
5	3-E	204	LEU	CA-CB-CG	-5.81	101.94	115.30
2	3-B	143	LEU	CA-CB-CG	5.79	128.63	115.30
1	3-A	383	LEU	CA-CB-CG	-5.74	102.09	115.30
7	5-G	225	LEU	CA-CB-CG	-5.72	102.14	115.30
2	3-B	398	LYS	N-CA-C	5.69	126.36	111.00
4	5-D	296	LEU	CB-CG-CD1	-5.69	101.33	111.00
1	3-A	330	LEU	CA-CB-CG	-5.64	102.33	115.30
8	3-H	55	LEU	CA-CB-CG	-5.63	102.35	115.30
2	3-B	170	SER	CB-CA-C	-5.59	99.47	110.10
2	4-B	350	LEU	CB-CG-CD2	-5.58	101.52	111.00
5	5-E	204	LEU	CA-CB-CG	-5.56	102.51	115.30
2	1-B	329	PHE	C-N-CA	5.55	133.96	122.30
6	3-F	127	LEU	CA-CB-CG	-5.53	102.58	115.30
5	3-E	197	LEU	CB-CG-CD2	-5.52	101.61	111.00
1	5-A	383	LEU	CA-CB-CG	-5.51	102.63	115.30
8	2-H	40	LEU	CA-CB-CG	5.50	127.96	115.30
2	4-B	224	LEU	CA-CB-CG	-5.50	102.65	115.30
2	5-B	66	LEU	CA-CB-CG	5.49	127.93	115.30
6	5-F	327	LEU	CA-CB-CG	-5.49	102.67	115.30
3	5-C	162	LEU	CA-CB-CG	5.47	127.89	115.30
3	3-C	347	LEU	CB-CG-CD2	-5.47	101.70	111.00
4	3-D	296	LEU	CB-CG-CD1	-5.47	101.71	111.00
2	5-B	351	ARG	NE-CZ-NH1	-5.39	117.61	120.30
4	3-D	259	PHE	C-N-CA	-5.38	108.26	121.70
2	3-B	360	ILE	CG1-CB-CG2	-5.37	99.59	111.40
3	3-C	262	LEU	CA-CB-CG	5.36	127.63	115.30
8	4-H	27	LEU	CA-CB-CG	5.34	127.59	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	5-F	287	LEU	CA-CB-CG	-5.33	103.04	115.30
1	3-A	348	LEU	CA-CB-CG	-5.28	103.16	115.30
2	5-B	398	LYS	CD-CE-NZ	-5.28	99.57	111.70
3	3-C	387	TYR	CB-CA-C	-5.27	99.85	110.40
3	3-C	426	LEU	CA-CB-CG	5.25	127.37	115.30
6	3-F	150	LEU	CA-CB-CG	-5.24	103.25	115.30
7	3-G	225	LEU	CA-CB-CG	-5.21	103.33	115.30
5	3-E	235	LEU	CA-CB-CG	-5.19	103.35	115.30
5	1-E	132	LEU	CA-CB-CG	5.18	127.22	115.30
6	5-F	258	LEU	CA-CB-CG	-5.17	103.41	115.30
1	5-A	405	ARG	N-CA-C	-5.16	97.07	111.00
4	5-D	134	TRP	CA-CB-CG	5.14	123.47	113.70
2	3-B	66	LEU	CA-CB-CG	5.14	127.11	115.30
8	4-H	55	LEU	CA-CB-CG	5.13	127.11	115.30
1	3-A	343	LEU	CA-CB-CG	-5.12	103.52	115.30
6	5-F	57	LEU	CA-CB-CG	5.12	127.08	115.30
5	5-E	197	LEU	CB-CG-CD2	-5.11	102.31	111.00
8	5-H	141	LEU	CB-CG-CD2	-5.11	102.31	111.00
4	3-D	259	PHE	CB-CA-C	-5.11	100.18	110.40
2	4-B	114	THR	N-CA-CB	5.09	119.97	110.30
4	4-D	387	ILE	CG1-CB-CG2	-5.09	100.21	111.40
2	2-B	143	LEU	CA-CB-CG	5.08	126.97	115.30
7	3-G	76	THR	C-N-CA	-5.08	111.64	122.30
7	3-G	280	LEU	CA-CB-CG	5.07	126.97	115.30
7	4-G	225	LEU	CA-CB-CG	-5.06	103.67	115.30
2	5-B	280	LEU	CA-CB-CG	-5.06	103.67	115.30
2	5-B	268	LEU	CA-CB-CG	-5.05	103.69	115.30
5	4-E	235	LEU	CA-CB-CG	-5.05	103.69	115.30
3	5-C	347	LEU	CB-CG-CD2	-5.04	102.43	111.00
2	3-B	412	LEU	CA-CB-CG	-5.04	103.71	115.30
4	3-D	377	LEU	CB-CG-CD1	-5.04	102.44	111.00
2	3-B	341	LEU	CA-CB-CG	-5.01	103.77	115.30
1	5-A	348	LEU	CA-CB-CG	-5.01	103.77	115.30
4	3-D	391	ASN	C-N-CA	-5.00	109.19	121.70

There are no chirality outliers.

All (6) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
7	1-G	108	TYR	Peptide
1	4-A	261	HIS	Peptide
3	4-C	354	PHE	Peptide

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Mol	Chain	Res	Type	Group
7	4-G	108	TYR	Peptide
3	5-C	354	PHE	Peptide
4	5-D	333	MET	Peptide

## 5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1-A	3116	0	2979	236	0
1	2-A	3116	0	2977	172	0
1	3-A	3116	0	2977	228	0
1	4-A	3116	0	2980	232	0
1	5-A	3116	0	2979	296	0
2	1-B	3323	0	3398	321	0
2	2-B	3323	0	3398	196	0
2	3-B	3323	0	3398	316	0
2	4-B	3323	0	3398	295	0
2	5-B	3323	0	3398	400	0
3	1-C	3060	0	3091	179	0
3	2-C	3060	0	3091	198	0
3	3-C	3060	0	3091	286	0
3	4-C	3060	0	3091	291	0
3	5-C	3060	0	3091	326	0
4	1-D	3084	0	3112	196	0
4	2-D	3084	0	3112	173	0
4	3-D	3084	0	3112	273	0
4	4-D	3084	0	3112	222	0
4	5-D	3084	0	3112	285	0
5	1-E	2224	0	2290	104	0
5	2-E	2224	0	2290	114	0
5	3-E	2224	0	2290	178	0
5	4-E	2224	0	2290	152	0
5	5-E	2224	0	2290	186	0
6	1-F	3186	0	3213	184	0
6	2-F	3186	0	3213	144	0
6	3-F	3186	0	3213	256	0
6	4-F	3186	0	3213	275	0
6	5-F	3186	0	3213	271	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	1-G	2036	0	2038	106	0
7	2-G	2036	0	2038	90	0
7	3-G	2036	0	2038	163	0
7	4-G	2036	0	2038	148	0
7	5-G	2036	0	2038	167	0
8	1-H	2021	0	2013	139	0
8	2-H	2021	0	2013	124	0
8	3-H	2021	0	2013	157	0
8	4-H	2021	0	2013	236	0
8	5-H	2021	0	2013	184	0
9	1-I	405	0	333	31	0
9	2-I	405	0	333	23	0
9	3-I	405	0	333	35	0
9	4-I	405	0	333	31	0
9	5-I	405	0	333	25	0
10	1-G	1	0	0	0	0
10	2-G	1	0	0	0	0
10	3-G	1	0	0	0	0
10	4-G	1	0	0	0	0
10	5-G	1	0	0	0	0
11	1-B	1	0	0	0	0
11	2-B	1	0	0	1	0
11	3-B	1	0	0	1	0
11	4-B	1	0	0	1	0
11	5-B	1	0	0	1	0
All	All	112285	0	112332	8245	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 37.

All (8245) 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)
3:C:74:LEU:HD22	3:C:104:PHE:CE1	1.21	1.67
1:A:163:VAL:CG1	1:A:167:LEU:HD21	1.29	1.55
2:B:141:LYS:HD2	2:B:179:PHE:CD1	1.37	1.55
3:C:74:LEU:CD2	3:C:104:PHE:CE1	1.90	1.52
2:B:141:LYS:CD	2:B:179:PHE:CD1	1.99	1.44
1:A:146:LEU:CA	1:A:149:SER:OG	1.70	1.39
1:A:136:CYS:SG	1:A:176:LEU:HD11	1.64	1.38
1:A:170:TYR:CB	1:A:176:LEU:HD23	1.54	1.35

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:63:VAL:O	2:B:66:LEU:HG	1.30	1.32
8:H:41:ILE:HD13	8:H:58:THR:OG1	1.14	1.31
1:A:170:TYR:CE2	1:A:171:TYR:CE2	2.20	1.30
2:B:115:ARG:HA	2:B:118:VAL:CG1	1.62	1.28
3:C:170:ASP:O	3:C:174:LEU:HB2	1.33	1.26
5:E:163:ALA:HB3	5:E:168:GLU:OE2	1.32	1.26
8:H:34:LEU:O	8:H:38:ASN:N	1.65	1.26
2:B:72:TRP:CH2	2:B:109:SER:HB3	1.69	1.26
2:B:141:LYS:O	2:B:144:VAL:HG12	1.12	1.25
2:B:141:LYS:HD3	2:B:179:PHE:CE1	1.72	1.23
1:A:162:VAL:O	1:A:165:PRO:HD2	1.36	1.23
1:A:146:LEU:HA	1:A:149:SER:OG	1.11	1.23
1:A:333:PHE:HE1	1:A:346:TYR:CA	1.51	1.22
1:A:163:VAL:O	1:A:167:LEU:HG	1.05	1.22
2:B:114:THR:HB	2:B:118:VAL:CG2	1.70	1.21
2:B:105:LYS:HD3	2:B:142:ASP:OD2	1.38	1.21
8:H:34:LEU:CD2	8:H:38:ASN:HB2	1.70	1.20
2:B:115:ARG:C	2:B:118:VAL:HG12	1.60	1.20
1:A:163:VAL:CG1	1:A:167:LEU:CD2	2.19	1.19
8:H:31:LYS:O	8:H:35:ILE:HG13	1.37	1.19
8:H:34:LEU:O	8:H:38:ASN:HB2	1.45	1.17
2:B:141:LYS:CD	2:B:179:PHE:HD1	1.43	1.17
1:A:333:PHE:HE1	1:A:346:TYR:HA	1.08	1.17
2:B:114:THR:HB	2:B:118:VAL:HG21	1.27	1.17
8:H:28:PRO:O	8:H:32:ILE:HG13	1.41	1.16
2:B:112:LEU:HG	2:B:115:ARG:HH22	1.05	1.16
1:A:146:LEU:C	1:A:149:SER:HG	1.49	1.15
8:H:34:LEU:HD22	8:H:38:ASN:HB2	1.26	1.15
1:A:170:TYR:HB2	1:A:176:LEU:HD23	1.21	1.15
1:A:177:ASN:O	1:A:229:THR:HG21	1.44	1.15
2:B:114:THR:O	2:B:118:VAL:CB	1.94	1.15
1:A:333:PHE:CE1	1:A:346:TYR:HA	1.82	1.14
2:B:115:ARG:O	2:B:118:VAL:HG12	1.44	1.14
2:B:114:THR:O	2:B:118:VAL:N	1.79	1.14
1:A:146:LEU:C	1:A:149:SER:OG	1.85	1.14
2:B:115:ARG:HA	2:B:118:VAL:HG11	1.26	1.14
3:C:74:LEU:CD2	3:C:104:PHE:CZ	2.30	1.14
1:A:170:TYR:CE2	1:A:171:TYR:CD2	2.36	1.14
2:B:115:ARG:CA	2:B:118:VAL:HG12	1.78	1.13
5:E:37:ILE:HB	5:E:91:GLY:O	1.48	1.12
1:A:170:TYR:HE2	1:A:171:TYR:CE2	1.61	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:146:LEU:O	1:A:149:SER:OG	1.68	1.12
1:A:163:VAL:O	1:A:167:LEU:HB2	1.47	1.11
3:C:170:ASP:O	3:C:174:LEU:CB	1.97	1.11
1:A:163:VAL:O	1:A:167:LEU:CG	2.00	1.10
2:B:33:ASN:ND2	2:B:71:LYS:HZ3	1.47	1.10
2:B:63:VAL:HG21	2:B:103:TYR:HD2	1.09	1.09
2:B:72:TRP:CH2	2:B:75:LEU:HD21	1.87	1.09
2:B:72:TRP:HZ2	2:B:108:LYS:HE3	1.15	1.09
2:B:140:THR:HG21	2:B:163:LEU:CD1	1.82	1.09
8:H:34:LEU:O	8:H:38:ASN:HB2	1.52	1.09
3:C:74:LEU:HD22	3:C:104:PHE:CZ	1.88	1.09
2:B:143:LEU:HD13	2:B:156:ALA:HB1	1.35	1.09
2:B:114:THR:CA	2:B:118:VAL:HG23	1.83	1.08
8:H:35:ILE:O	8:H:39:LEU:CD2	2.01	1.08
2:B:72:TRP:CZ2	2:B:108:LYS:HE3	1.89	1.08
2:B:109:SER:HB2	2:B:114:THR:HG22	1.30	1.08
2:B:33:ASN:HD21	2:B:71:LYS:NZ	1.50	1.07
1:A:170:TYR:HE2	1:A:171:TYR:CD2	1.69	1.07
6:F:319:LEU:HD12	6:F:320:PRO:HD2	1.08	1.07
8:H:41:ILE:HG21	8:H:58:THR:HG21	1.29	1.07
1:A:335:GLN:HE21	1:A:338:MET:HG3	1.13	1.07
1:A:159:ASN:O	1:A:163:VAL:HB	1.53	1.07
1:A:163:VAL:HG12	1:A:167:LEU:HD21	1.22	1.06
2:B:74:ASP:O	2:B:78:GLN:N	1.87	1.06
3:C:155:LEU:O	3:C:159:ASN:HB2	1.56	1.06
1:A:163:VAL:HG13	1:A:167:LEU:HD21	1.09	1.06
3:C:169:ASP:HB3	3:C:173:SER:HB2	1.17	1.06
8:H:13:ILE:O	8:H:17:ASN:HB2	1.53	1.06
1:A:163:VAL:C	1:A:167:LEU:HG	1.76	1.05
1:A:177:ASN:O	1:A:229:THR:CG2	2.03	1.05
2:B:66:LEU:HD22	2:B:107:SER:O	1.55	1.05
2:B:298:SER:O	2:B:302:LEU:HB2	1.54	1.05
4:D:126:GLY:HA2	4:D:130:GLN:HB2	1.39	1.05
3:C:181:GLU:O	3:C:185:TYR:HB3	1.57	1.05
3:C:153:ASP:O	3:C:157:LEU:HB2	1.57	1.04
2:B:131:PHE:O	2:B:135:GLU:HB2	1.58	1.04
1:A:163:VAL:HG13	1:A:167:LEU:CD2	1.85	1.03
1:A:146:LEU:HD11	1:A:151:GLU:HB3	1.05	1.03
1:A:146:LEU:CD1	1:A:151:GLU:HB3	1.89	1.03
2:B:50:SER:O	2:B:54:SER:HB2	1.58	1.03
6:F:107:GLN:O	6:F:111:SER:HB3	1.56	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:152:LEU:HA	1:A:155:LEU:HD13	1.34	1.03
2:B:114:THR:O	2:B:118:VAL:HB	1.57	1.03
8:H:41:ILE:CD1	8:H:58:THR:OG1	2.07	1.02
2:B:66:LEU:HB2	2:B:72:TRP:CA	1.90	1.02
1:A:168:LEU:O	1:A:171:TYR:HD2	1.43	1.02
3:C:60:GLU:O	3:C:64:LEU:HB2	1.56	1.02
6:F:319:LEU:HD12	6:F:320:PRO:CD	1.90	1.02
5:E:165:GLU:O	5:E:169:ILE:HG13	1.59	1.02
3:C:151:TYR:O	3:C:155:LEU:HB2	1.60	1.01
3:C:74:LEU:HD21	3:C:104:PHE:CE1	1.96	1.01
2:B:59:LEU:O	2:B:62:ILE:HD11	1.60	1.01
2:B:141:LYS:O	2:B:144:VAL:CG1	2.08	1.01
8:H:12:SER:O	8:H:16:GLU:HB2	1.59	1.01
8:H:35:ILE:HA	8:H:38:ASN:HB3	1.43	1.01
8:H:32:ILE:HA	8:H:35:ILE:CD1	1.90	1.01
3:C:137:LEU:O	3:C:141:LEU:HB2	1.60	1.00
2:B:63:VAL:CG2	2:B:103:TYR:HD2	1.73	1.00
1:A:177:ASN:HD21	1:A:226:ASP:HB3	1.26	1.00
3:C:154:SER:O	3:C:158:ILE:HB	1.61	1.00
8:H:35:ILE:O	8:H:39:LEU:HG	1.62	1.00
4:D:165:GLY:O	4:D:169:ASP:HB2	1.59	1.00
4:D:53:LYS:O	4:D:57:GLU:HB2	1.61	1.00
2:B:115:ARG:O	2:B:119:ILE:HG13	1.61	1.00
2:B:133:GLU:HG3	2:B:134:VAL:H	1.27	0.99
2:B:412:LEU:HD11	5:E:268:LYS:HG3	1.44	0.99
8:H:13:ILE:O	8:H:17:ASN:HB3	1.61	0.99
1:A:167:LEU:HA	1:A:170:TYR:CE1	1.96	0.99
3:C:182:SER:O	3:C:186:HIS:HB3	1.63	0.99
8:H:34:LEU:HA	8:H:37:ASN:HB2	1.44	0.99
2:B:115:ARG:O	2:B:118:VAL:CG1	2.11	0.98
2:B:332:GLU:HG2	2:B:333:ALA:H	1.28	0.98
3:C:256:GLU:O	3:C:260:GLN:HB2	1.63	0.98
2:B:66:LEU:HD11	2:B:110:LEU:HD13	1.44	0.98
2:B:63:VAL:HG21	2:B:103:TYR:CD2	1.99	0.98
2:B:62:ILE:HD12	2:B:63:VAL:H	1.26	0.98
1:A:450:ASN:O	1:A:451:ILE:HG13	1.63	0.98
1:A:168:LEU:HA	1:A:171:TYR:CE2	1.99	0.98
2:B:105:LYS:HB2	2:B:108:LYS:HE3	1.43	0.98
1:A:163:VAL:HG12	1:A:167:LEU:CD2	1.85	0.97
1:A:170:TYR:CB	1:A:176:LEU:CD2	2.41	0.97
2:B:115:ARG:CA	2:B:118:VAL:CG1	2.36	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:169:ASP:O	3:C:172:PRO:HD2	1.63	0.97
2:B:105:LYS:CB	2:B:108:LYS:HE3	1.93	0.97
2:B:58:VAL:O	2:B:62:ILE:HG13	1.65	0.97
1:A:160:ARG:O	1:A:164:ILE:HG13	1.64	0.97
1:A:177:ASN:HA	1:A:180:ASN:ND2	1.79	0.97
1:A:333:PHE:CE1	1:A:346:TYR:CA	2.43	0.96
8:H:30:ILE:O	8:H:34:LEU:HB2	1.65	0.96
6:F:60:ARG:HA	6:F:63:ASP:HB2	1.47	0.96
2:B:112:LEU:HG	2:B:115:ARG:NH2	1.80	0.96
2:B:66:LEU:HD13	2:B:72:TRP:HB2	1.46	0.96
2:B:69:ARG:HG3	2:B:113:ASN:HD21	1.29	0.96
1:A:476:LEU:O	1:A:479:MET:HB2	1.65	0.96
8:H:35:ILE:HG22	8:H:39:LEU:HD21	1.47	0.96
3:C:152:LYS:O	3:C:156:ALA:HB3	1.66	0.96
1:A:168:LEU:HA	1:A:171:TYR:CE1	2.01	0.96
2:B:114:THR:O	2:B:118:VAL:N	1.98	0.95
4:D:120:LEU:HD22	4:D:130:GLN:HA	1.48	0.95
2:B:195:GLN:O	2:B:199:LEU:HB2	1.66	0.95
2:B:33:ASN:ND2	2:B:71:LYS:NZ	2.11	0.95
1:A:146:LEU:HD11	1:A:151:GLU:CB	1.97	0.95
3:C:164:GLU:HG2	3:C:168:LEU:CD1	1.96	0.95
1:A:170:TYR:CA	1:A:176:LEU:HD23	1.95	0.95
1:A:168:LEU:HA	1:A:171:TYR:CD1	2.02	0.95
2:B:412:LEU:HD11	5:E:268:LYS:HG3	1.45	0.95
1:A:336:SER:O	1:A:339:GLN:NE2	2.00	0.95
7:G:206:THR:HG23	7:G:208:LYS:H	1.31	0.94
8:H:40:LEU:HD12	8:H:41:ILE:N	1.82	0.94
4:D:99:TYR:CE2	4:D:103:CYS:SG	2.60	0.94
2:B:101:MET:HA	2:B:104:LEU:HD12	1.48	0.94
3:C:107:VAL:HG21	3:C:111:LEU:N	1.81	0.94
3:C:157:LEU:O	3:C:161:LEU:HB2	1.68	0.94
7:G:28:TYR:HA	7:G:202:ASP:O	1.68	0.94
8:H:31:LYS:O	8:H:35:ILE:CG1	2.16	0.94
8:H:35:ILE:O	8:H:39:LEU:CG	2.16	0.94
4:D:382:ASP:HB3	4:D:387:ILE:HG22	1.48	0.94
5:E:60:GLU:HG2	5:E:60:GLU:O	1.68	0.94
8:H:14:ALA:HB2	8:H:26:LEU:HD12	1.50	0.93
3:C:151:TYR:O	3:C:155:LEU:CB	2.15	0.93
4:D:53:LYS:O	4:D:57:GLU:HB2	1.68	0.93
5:E:127:GLN:HE21	7:G:212:MET:HG3	1.32	0.93
3:C:107:VAL:HG11	3:C:111:LEU:HB2	1.49	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:165:PHE:O	3:C:170:ASP:HA	1.68	0.93
6:F:8:ASP:O	6:F:12:SER:HB3	1.67	0.93
1:A:145:PHE:O	1:A:149:SER:N	2.02	0.93
3:C:74:LEU:HD21	3:C:104:PHE:CZ	2.03	0.92
8:H:41:ILE:HG13	8:H:42:PRO:HD3	1.51	0.92
1:A:480:ARG:HH11	1:A:482:PRO:HD2	1.32	0.92
4:D:196:SER:O	4:D:200:LYS:NZ	2.03	0.92
2:B:66:LEU:HB2	2:B:72:TRP:CB	1.99	0.92
3:C:169:ASP:CB	3:C:173:SER:HB2	1.99	0.92
2:B:63:VAL:O	2:B:66:LEU:CG	2.17	0.92
2:B:115:ARG:HG3	2:B:116:ILE:HD13	1.51	0.92
8:H:34:LEU:HD23	8:H:38:ASN:HB2	1.52	0.92
2:B:140:THR:HG21	2:B:163:LEU:HD11	1.52	0.92
3:C:121:SER:O	3:C:125:ALA:HB3	1.68	0.92
2:B:115:ARG:O	2:B:119:ILE:CG1	2.18	0.92
2:B:72:TRP:HH2	2:B:109:SER:CB	1.81	0.92
1:A:177:ASN:C	1:A:229:THR:HG21	1.89	0.91
6:F:297:ILE:HD11	6:F:336:LEU:HD13	1.52	0.91
2:B:333:ALA:O	2:B:336:HIS:ND1	2.02	0.91
3:C:107:VAL:HG11	3:C:111:LEU:HD23	1.53	0.91
2:B:112:LEU:HD13	2:B:115:ARG:HH21	1.36	0.91
5:E:141:GLU:HA	5:E:152:LYS:H	1.34	0.91
1:A:210:LEU:O	1:A:214:MET:HB2	1.68	0.91
2:B:332:GLU:HG2	2:B:333:ALA:H	1.35	0.91
2:B:114:THR:C	2:B:118:VAL:HG23	1.90	0.91
2:B:59:LEU:O	2:B:62:ILE:CD1	2.19	0.91
2:B:115:ARG:CZ	2:B:116:ILE:HD11	2.01	0.91
3:C:170:ASP:C	3:C:174:LEU:HB2	1.91	0.91
1:A:206:GLN:O	1:A:210:LEU:HB2	1.70	0.91
7:G:263:GLU:O	7:G:267:LYS:HB2	1.69	0.91
3:C:80:HIS:O	3:C:84:TYR:HB2	1.71	0.90
4:D:176:ARG:NH1	4:D:213:TYR:OH	2.03	0.90
8:H:44:LEU:HD11	8:H:88:TYR:CE1	2.05	0.90
2:B:69:ARG:HG2	2:B:110:LEU:HD21	1.53	0.90
2:B:72:TRP:HH2	2:B:109:SER:HB3	1.09	0.90
2:B:396:PRO:HB2	2:B:398:LYS:HZ1	1.34	0.90
2:B:404:LYS:HD2	2:B:405:PRO:HD2	1.52	0.90
2:B:298:SER:O	2:B:302:LEU:HB2	1.71	0.90
5:E:163:ALA:CB	5:E:168:GLU:OE2	2.19	0.90
6:F:20:PRO:O	6:F:23:HIS:ND1	2.04	0.90
1:A:174:ARG:NH2	1:A:224:LYS:HE3	1.88	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:93:THR:O	3:C:97:LEU:HB2	1.72	0.89
6:F:319:LEU:CD1	6:F:320:PRO:HD2	2.00	0.89
4:D:53:LYS:O	4:D:57:GLU:HB2	1.72	0.89
6:F:297:ILE:HD11	6:F:336:LEU:HD13	1.54	0.89
2:B:109:SER:HB2	2:B:114:THR:CG2	2.01	0.89
1:A:176:LEU:O	1:A:179:ILE:HG22	1.72	0.89
6:F:20:PRO:O	6:F:23:HIS:ND1	2.06	0.89
6:F:48:PHE:O	6:F:52:ALA:HB3	1.73	0.89
3:C:107:VAL:CG1	3:C:111:LEU:HB2	2.03	0.89
2:B:133:GLU:HG3	2:B:134:VAL:HG23	1.55	0.89
6:F:32:PHE:HA	6:F:35:GLU:HB2	1.52	0.88
1:A:163:VAL:HG12	1:A:167:LEU:CG	2.01	0.88
2:B:114:THR:CB	2:B:118:VAL:CG2	2.50	0.88
2:B:114:THR:CB	2:B:118:VAL:HG23	2.04	0.88
5:E:33:CYS:HG	5:E:95:SER:HG	1.02	0.88
3:C:121:SER:HB2	3:C:133:LEU:HB3	1.55	0.88
4:D:215:GLY:HA3	4:D:230:LEU:HD11	1.55	0.88
3:C:282:LEU:HB2	3:C:300:LYS:HE3	1.56	0.88
4:D:62:TYR:O	4:D:65:TYR:N	2.07	0.88
5:E:283:ARG:HD2	7:G:288:LEU:HD11	1.56	0.88
2:B:74:ASP:O	2:B:77:GLU:HB2	1.74	0.88
2:B:398:LYS:HB3	2:B:399:ILE:HD12	1.55	0.88
2:B:62:ILE:HD12	2:B:63:VAL:N	1.88	0.87
7:G:202:ASP:OD1	7:G:203:TYR:N	2.05	0.87
3:C:164:GLU:HG2	3:C:168:LEU:HD12	1.53	0.87
2:B:66:LEU:HD13	2:B:72:TRP:CB	2.04	0.87
8:H:101:LYS:O	8:H:105:LEU:HB2	1.74	0.87
1:A:227:ASN:HB2	1:A:263:ASP:HB2	1.56	0.87
2:B:114:THR:O	2:B:118:VAL:CG2	2.22	0.87
8:H:66:ALA:HB3	8:H:105:LEU:HD11	1.55	0.87
2:B:104:LEU:O	2:B:108:LYS:HB3	1.73	0.87
4:D:96:GLN:NE2	4:D:100:ASN:OD1	2.07	0.87
6:F:7:ILE:O	6:F:11:LEU:HB2	1.74	0.87
6:F:7:ILE:O	6:F:11:LEU:HB2	1.73	0.87
3:C:145:HIS:HA	3:C:150:GLN:HE21	1.40	0.87
8:H:7:LEU:N	8:H:10:SER:HG	1.71	0.87
7:G:59:ASP:O	7:G:135:ARG:NH2	2.08	0.87
1:A:168:LEU:O	1:A:171:TYR:CD2	2.27	0.87
1:A:333:PHE:HE1	1:A:346:TYR:CB	1.88	0.87
8:H:41:ILE:HG21	8:H:58:THR:CG2	2.04	0.87
6:F:26:PHE:HA	6:F:29:PHE:HD2	1.38	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:373:VAL:O	3:C:376:LYS:N	2.08	0.86
1:A:479:MET:SD	5:E:294:ASN:ND2	2.48	0.86
3:C:65:TYR:HB3	3:C:73:LYS:HB3	1.57	0.86
6:F:7:ILE:O	6:F:11:LEU:HB3	1.76	0.86
6:F:258:LEU:O	6:F:261:GLY:N	2.07	0.86
2:B:254:GLU:HG3	2:B:258:LYS:HZ2	1.39	0.86
2:B:66:LEU:HD11	2:B:110:LEU:CD1	2.05	0.86
6:F:6:GLU:HG3	6:F:8:ASP:H	1.38	0.86
1:A:146:LEU:HG	1:A:151:GLU:O	1.74	0.86
1:A:218:LEU:HD21	1:A:233:LEU:HB2	1.56	0.86
3:C:170:ASP:O	3:C:174:LEU:N	2.08	0.86
8:H:77:SER:O	8:H:80:ASN:HB2	1.74	0.86
1:A:168:LEU:HA	1:A:171:TYR:HE2	1.41	0.86
1:A:450:ASN:O	1:A:451:ILE:HG12	1.74	0.86
4:D:138:GLY:HA2	4:D:141:TYR:CZ	2.09	0.86
5:E:21:HIS:HA	7:G:100:ARG:HH12	1.39	0.86
4:D:101:GLU:HA	4:D:104:LYS:HE3	1.57	0.86
1:A:136:CYS:SG	1:A:176:LEU:CD1	2.58	0.86
3:C:263:LYS:NZ	3:C:328:ASP:OD2	2.08	0.86
8:H:216:GLU:O	8:H:219:LYS:HB2	1.74	0.86
3:C:226:HIS:ND1	3:C:229:ASP:OD2	2.07	0.86
8:H:32:ILE:HA	8:H:35:ILE:HD11	1.57	0.86
6:F:196:LEU:HD22	6:F:236:HIS:HE1	1.39	0.86
6:F:42:SER:O	6:F:46:THR:OG1	1.93	0.86
1:A:333:PHE:CE1	1:A:346:TYR:CB	2.59	0.85
4:D:222:ARG:HB3	4:D:325:HIS:CD2	2.11	0.85
6:F:123:GLY:O	6:F:126:ILE:HB	1.76	0.85
8:H:14:ALA:HB2	8:H:26:LEU:HD21	1.58	0.85
4:D:382:ASP:HB3	4:D:387:ILE:HG22	1.58	0.85
2:B:396:PRO:HB2	2:B:398:LYS:NZ	1.91	0.85
8:H:34:LEU:CD2	8:H:38:ASN:CB	2.53	0.85
4:D:126:GLY:O	4:D:130:GLN:N	2.08	0.85
1:A:425:ARG:NH1	8:H:153:MET:O	2.09	0.85
8:H:175:ASP:O	8:H:178:THR:HB	1.75	0.85
4:D:24:TYR:O	4:D:27:SER:N	2.07	0.85
5:E:261:LEU:O	5:E:264:ALA:N	2.09	0.85
8:H:213:ASN:OD1	8:H:214:GLU:N	2.09	0.85
1:A:333:PHE:CE1	1:A:346:TYR:HB2	2.12	0.85
1:A:427:ILE:HD11	8:H:196:SER:HA	1.58	0.85
6:F:258:LEU:O	6:F:261:GLY:N	2.09	0.85
2:B:114:THR:O	2:B:118:VAL:CA	2.24	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:396:PRO:O	2:B:398:LYS:HG3	1.77	0.85
2:B:135:GLU:OE1	2:B:138:ARG:NH2	2.10	0.85
6:F:42:SER:HB3	6:F:73:ILE:HD11	1.58	0.85
7:G:206:THR:HG23	7:G:208:LYS:N	1.90	0.85
8:H:31:LYS:HA	8:H:34:LEU:HB3	1.59	0.85
2:B:66:LEU:HB2	2:B:72:TRP:HB2	1.58	0.84
1:A:479:MET:HG3	1:A:480:ARG:H	1.43	0.84
3:C:171:LYS:HG2	3:C:208:ILE:HG12	1.57	0.84
2:B:114:THR:HB	2:B:118:VAL:HG23	1.59	0.84
4:D:131:ALA:HA	4:D:134:TRP:HD1	1.42	0.84
6:F:368:ASP:O	6:F:371:VAL:N	2.09	0.84
1:A:162:VAL:C	1:A:165:PRO:HD2	1.97	0.84
1:A:164:ILE:HA	1:A:167:LEU:HD12	1.57	0.84
2:B:60:ALA:O	2:B:63:VAL:HG22	1.77	0.84
3:C:115:ILE:HD13	3:C:148:LYS:NZ	1.91	0.84
5:E:219:LEU:HD12	5:E:220:PRO:HD2	1.59	0.84
2:B:436:GLU:OE1	2:B:436:GLU:N	2.09	0.84
3:C:157:LEU:O	3:C:161:LEU:CB	2.25	0.84
8:H:34:LEU:HA	8:H:41:ILE:HD11	1.59	0.84
1:A:151:GLU:O	1:A:155:LEU:HD13	1.78	0.84
2:B:199:LEU:HA	2:B:202:LYS:HE3	1.59	0.84
2:B:328:ALA:O	2:B:337:HIS:ND1	2.09	0.84
3:C:165:PHE:HB3	3:C:173:SER:HB2	1.58	0.84
4:D:209:ARG:NH1	4:D:242:GLU:OE1	2.11	0.84
2:B:403:GLU:N	2:B:403:GLU:OE1	2.10	0.84
3:C:57:SER:O	3:C:60:GLU:HB3	1.78	0.84
2:B:70:ASN:O	2:B:73:ASP:HB3	1.78	0.83
3:C:325:LEU:O	3:C:332:ARG:NH1	2.11	0.83
3:C:254:SER:O	3:C:258:ALA:HB3	1.79	0.83
4:D:164:THR:HA	4:D:167:LYS:HD2	1.58	0.83
7:G:49:VAL:HG12	7:G:73:GLN:HE22	1.43	0.83
2:B:103:TYR:O	2:B:107:SER:HB2	1.78	0.83
3:C:373:VAL:O	3:C:376:LYS:N	2.10	0.83
8:H:70:ILE:HD13	8:H:173:GLU:HG3	1.60	0.83
5:E:175:LEU:HD11	7:G:213:LEU:HB3	1.60	0.83
2:B:141:LYS:HD3	2:B:179:PHE:CD1	1.88	0.83
3:C:132:PHE:HA	3:C:135:HIS:CE1	2.13	0.83
2:B:77:GLU:O	2:B:80:THR:HG22	1.77	0.83
4:D:28:GLU:OE1	4:D:28:GLU:N	2.11	0.83
2:B:63:VAL:CG2	2:B:103:TYR:CD2	2.57	0.83
1:A:425:ARG:NH1	8:H:153:MET:O	2.11	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:264:ASP:OD1	6:F:265:LYS:N	2.10	0.83
1:A:180:ASN:O	1:A:183:LEU:HB3	1.78	0.83
5:E:21:HIS:HA	7:G:100:ARG:HH22	1.41	0.83
1:A:478:SER:OG	4:D:422:ARG:NH1	2.11	0.83
1:A:311:GLN:HE21	1:A:341:SER:HB3	1.41	0.82
2:B:180:ILE:HD11	2:B:199:LEU:HB3	1.60	0.82
1:A:206:GLN:O	1:A:210:LEU:N	2.11	0.82
2:B:197:THR:O	2:B:200:SER:OG	1.96	0.82
5:E:92:TRP:HB3	5:E:110:PHE:HE2	1.42	0.82
5:E:98:LYS:O	5:E:100:ARG:NH1	2.12	0.82
2:B:344:ARG:NH1	2:B:347:GLU:OE2	2.12	0.82
4:D:175:ALA:O	4:D:178:GLY:N	2.12	0.82
2:B:112:LEU:HD13	2:B:115:ARG:HE	1.44	0.82
1:A:163:VAL:HG12	1:A:167:LEU:HD11	1.58	0.82
2:B:254:GLU:O	2:B:258:LYS:NZ	2.11	0.82
8:H:41:ILE:HG13	8:H:42:PRO:HD3	1.61	0.82
8:H:175:ASP:O	8:H:178:THR:HB	1.79	0.82
6:F:60:ARG:HA	6:F:63:ASP:HB2	1.61	0.82
1:A:227:ASN:HB2	1:A:263:ASP:HB2	1.59	0.82
2:B:436:GLU:OE1	2:B:436:GLU:N	2.09	0.82
3:C:107:VAL:HG11	3:C:111:LEU:CB	2.09	0.82
2:B:143:LEU:HD21	2:B:159:ILE:HG21	1.61	0.82
4:D:24:TYR:O	4:D:27:SER:N	2.12	0.82
2:B:403:GLU:OE1	2:B:403:GLU:N	2.13	0.82
4:D:51:LEU:HA	4:D:54:ILE:HD12	1.62	0.82
1:A:419:VAL:O	1:A:422:MET:N	2.13	0.82
2:B:58:VAL:HG13	2:B:61:LYS:HE3	1.61	0.82
4:D:220:ALA:O	4:D:325:HIS:NE2	2.10	0.82
8:H:30:ILE:O	8:H:34:LEU:HB2	1.78	0.82
1:A:154:GLN:O	1:A:158:PHE:HB2	1.80	0.82
5:E:138:VAL:O	5:E:154:PHE:HA	1.79	0.82
1:A:187:ILE:O	1:A:190:SER:OG	1.98	0.82
2:B:396:PRO:O	2:B:398:LYS:NZ	2.11	0.82
1:A:157:GLU:HG3	1:A:161:LYS:HE3	1.62	0.82
2:B:104:LEU:O	2:B:108:LYS:HG2	1.78	0.82
2:B:296:GLN:O	2:B:299:LEU:N	2.13	0.82
3:C:121:SER:O	3:C:125:ALA:HB3	1.80	0.82
2:B:330:GLY:H	2:B:334:ASN:HB2	1.41	0.81
3:C:113:ASP:HB3	3:C:148:LYS:HD2	1.60	0.81
3:C:115:ILE:CD1	3:C:148:LYS:HZ1	1.93	0.81
1:A:170:TYR:HB2	1:A:176:LEU:CD2	2.07	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:150:GLU:HG3	2:B:152:LYS:HG2	1.61	0.81
3:C:370:THR:O	3:C:373:VAL:N	2.13	0.81
2:B:395:ARG:O	2:B:397:ALA:N	2.12	0.81
3:C:313:ASP:O	3:C:317:ALA:HB3	1.79	0.81
3:C:155:LEU:O	3:C:159:ASN:CB	2.28	0.81
1:A:311:GLN:HE21	1:A:341:SER:HB3	1.43	0.81
1:A:181:ALA:HB2	1:A:229:THR:HG22	1.62	0.81
3:C:284:ALA:HA	3:C:288:LYS:HB2	1.61	0.81
3:C:60:GLU:O	3:C:64:LEU:CB	2.28	0.81
4:D:119:LYS:O	4:D:123:ASP:HB2	1.78	0.81
2:B:66:LEU:HB2	2:B:72:TRP:HA	1.61	0.81
1:A:161:LYS:HG3	1:A:162:VAL:HG23	1.63	0.81
1:A:333:PHE:CD1	1:A:346:TYR:HB2	2.16	0.81
1:A:480:ARG:HG3	1:A:481:TYR:H	1.44	0.81
2:B:112:LEU:CD1	2:B:115:ARG:HE	1.94	0.81
2:B:290:LEU:HG	2:B:297:GLU:OE2	1.81	0.81
8:H:267:ALA:O	8:H:270:ILE:N	2.14	0.81
3:C:294:ARG:HH12	3:C:324:GLU:HB2	1.44	0.81
4:D:40:ILE:HA	4:D:43:ARG:HD3	1.62	0.81
1:A:163:VAL:HG12	1:A:167:LEU:CD1	2.11	0.81
4:D:317:ILE:HG13	4:D:318:PRO:HD3	1.60	0.81
4:D:365:ASP:OD2	4:D:383:ARG:NH1	2.14	0.81
5:E:296:ILE:HG22	5:E:300:LYS:HE3	1.62	0.81
6:F:11:LEU:HA	6:F:14:LEU:HD12	1.62	0.81
7:G:285:ASP:O	7:G:288:LEU:N	2.13	0.81
1:A:143:GLN:HG3	1:A:155:LEU:HD11	1.60	0.81
2:B:403:GLU:OE1	2:B:403:GLU:N	2.14	0.81
8:H:130:ASP:HA	8:H:136:LEU:HD23	1.63	0.80
1:A:286:TYR:OH	1:A:382:ARG:NH1	2.14	0.80
2:B:326:ASP:OD1	2:B:327:LEU:N	2.14	0.80
1:A:161:LYS:HG3	1:A:162:VAL:HG23	1.61	0.80
3:C:294:ARG:O	3:C:298:ALA:HB2	1.81	0.80
3:C:107:VAL:HG11	3:C:111:LEU:CD2	2.12	0.80
3:C:107:VAL:HG11	3:C:111:LEU:CG	2.10	0.80
8:H:198:ASP:OD1	8:H:235:PHE:N	2.13	0.80
6:F:377:VAL:O	6:F:380:LEU:N	2.14	0.80
7:G:120:SER:O	7:G:123:VAL:N	2.15	0.80
1:A:187:ILE:O	1:A:190:SER:OG	1.98	0.80
2:B:112:LEU:O	2:B:116:ILE:HG12	1.82	0.80
2:B:141:LYS:HD3	2:B:179:PHE:HE1	1.45	0.80
4:D:117:ILE:HA	4:D:120:LEU:HD13	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:172:GLU:OE2	7:G:148:LYS:O	1.99	0.80
6:F:377:VAL:O	6:F:380:LEU:N	2.15	0.80
3:C:178:HIS:HB2	3:C:201:ALA:HB2	1.63	0.80
8:H:34:LEU:HA	8:H:37:ASN:HB2	1.63	0.80
2:B:140:THR:HG21	2:B:163:LEU:CD2	2.11	0.80
4:D:106:ASN:O	4:D:110:ILE:HB	1.81	0.80
6:F:338:LYS:HB2	6:F:352:TRP:HB3	1.61	0.80
2:B:66:LEU:CD1	2:B:72:TRP:HB2	2.11	0.80
3:C:178:HIS:O	3:C:182:SER:CB	2.29	0.80
1:A:333:PHE:CD1	1:A:346:TYR:HD1	1.99	0.80
4:D:59:MET:HG3	4:D:62:TYR:HB3	1.63	0.80
2:B:412:LEU:HD11	5:E:268:LYS:HG3	1.62	0.80
2:B:114:THR:O	2:B:118:VAL:HG23	1.79	0.80
3:C:115:ILE:HG23	3:C:117:VAL:HG22	1.63	0.80
4:D:39:SER:HB3	4:D:42:GLN:HG2	1.63	0.80
4:D:40:ILE:HA	4:D:43:ARG:HD3	1.64	0.80
5:E:289:ASP:OD2	7:G:277:LYS:NZ	2.13	0.80
7:G:211:LYS:O	7:G:215:ASN:ND2	2.15	0.80
7:G:205:LYS:HE3	7:G:210:THR:HG22	1.62	0.80
2:B:197:THR:O	2:B:200:SER:OG	2.00	0.80
6:F:209:GLU:O	6:F:212:GLN:N	2.14	0.80
3:C:171:LYS:HB2	3:C:208:ILE:HG22	1.64	0.80
3:C:178:HIS:O	3:C:182:SER:OG	1.99	0.80
6:F:173:SER:O	6:F:176:SER:OG	2.00	0.80
8:H:40:LEU:HG	8:H:51:TYR:HE1	1.47	0.80
2:B:105:LYS:CB	2:B:108:LYS:CE	2.60	0.80
4:D:175:ALA:O	4:D:178:GLY:N	2.15	0.80
1:A:201:ILE:HD13	8:H:92:ASN:HB3	1.63	0.80
3:C:80:HIS:O	3:C:84:TYR:CB	2.29	0.80
6:F:24:PRO:O	6:F:27:GLU:HB3	1.82	0.79
2:B:62:ILE:CD1	2:B:63:VAL:HG13	2.12	0.79
4:D:123:ASP:O	4:D:130:GLN:NE2	2.14	0.79
5:E:268:LYS:O	5:E:271:ASP:N	2.15	0.79
3:C:107:VAL:HG21	3:C:111:LEU:H	1.46	0.79
1:A:160:ARG:HA	1:A:164:ILE:HD12	1.64	0.79
8:H:51:TYR:HE2	8:H:55:LEU:HB3	1.46	0.79
2:B:136:ARG:O	2:B:140:THR:HG23	1.82	0.79
3:C:171:LYS:HA	3:C:174:LEU:HB3	1.63	0.79
2:B:429:ILE:O	2:B:433:ILE:HB	1.82	0.79
6:F:387:ARG:NH2	8:H:265:ASP:OD1	2.15	0.79
5:E:27:THR:HG1	5:E:33:CYS:HG	1.25	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:25:GLU:OE2	7:G:135:ARG:NH1	2.16	0.79
2:B:101:MET:HA	2:B:104:LEU:HD13	1.65	0.79
1:A:162:VAL:O	1:A:166:ASN:N	2.14	0.79
2:B:253:ASP:OD2	2:B:256:LYS:NZ	2.15	0.79
5:E:98:LYS:O	5:E:100:ARG:NH2	2.16	0.79
3:C:180:LEU:O	3:C:184:VAL:N	2.12	0.79
4:D:222:ARG:HB2	4:D:325:HIS:CE1	2.17	0.79
1:A:384:ARG:NE	8:H:154:GLU:OE2	2.14	0.79
4:D:59:MET:HE3	4:D:62:TYR:H	1.46	0.79
3:C:182:SER:HB3	3:C:198:LEU:HD11	1.65	0.79
3:C:333:SER:O	3:C:336:ASN:N	2.15	0.79
1:A:435:LYS:NZ	8:H:195:LEU:O	2.16	0.79
1:A:151:GLU:O	1:A:155:LEU:CD1	2.31	0.79
2:B:275:ASN:ND2	11:B:501:HOH:O	2.15	0.79
3:C:149:LYS:NZ	3:C:151:TYR:OH	2.13	0.79
3:C:137:LEU:O	3:C:141:LEU:HB3	1.82	0.79
7:G:69:PHE:HE1	7:G:91:MET:HG2	1.46	0.79
2:B:33:ASN:HD21	2:B:71:LYS:HZ3	1.07	0.79
2:B:66:LEU:HD12	2:B:67:ALA:N	1.98	0.79
3:C:163:ARG:HH11	3:C:166:LYS:HG2	1.47	0.79
6:F:302:VAL:O	6:F:369:ARG:NH2	2.16	0.79
5:E:138:VAL:O	5:E:154:PHE:HA	1.82	0.79
6:F:108:GLU:OE2	6:F:112:LYS:NZ	2.15	0.79
8:H:34:LEU:O	8:H:38:ASN:CB	2.30	0.79
8:H:52:LEU:HD12	8:H:55:LEU:HD11	1.64	0.78
1:A:428:ARG:HH12	8:H:191:LYS:HE2	1.47	0.78
3:C:294:ARG:HB3	3:C:296:ILE:HG23	1.64	0.78
1:A:164:ILE:HA	1:A:167:LEU:HG	1.65	0.78
1:A:419:VAL:O	1:A:422:MET:N	2.15	0.78
1:A:267:SER:OG	1:A:271:ARG:NH1	2.16	0.78
3:C:145:HIS:HE1	3:C:157:LEU:HD12	1.47	0.78
4:D:126:GLY:HA2	4:D:129:GLU:HB2	1.65	0.78
6:F:42:SER:O	6:F:81:TYR:OH	2.02	0.78
3:C:138:SER:O	3:C:142:ALA:HB2	1.82	0.78
6:F:322:ASP:OD1	6:F:323:ASN:N	2.16	0.78
2:B:112:LEU:O	2:B:116:ILE:HG13	1.83	0.78
2:B:141:LYS:HD2	2:B:179:PHE:HD1	0.74	0.78
5:E:107:ASN:HD22	5:E:154:PHE:HE1	1.31	0.78
2:B:234:TYR:O	2:B:237:VAL:N	2.16	0.78
1:A:170:TYR:HA	1:A:176:LEU:HD23	1.65	0.78
2:B:63:VAL:HA	2:B:75:LEU:CD2	2.13	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:283:THR:HG23	4:D:285:ALA:H	1.48	0.78
3:C:325:LEU:O	3:C:332:ARG:NH2	2.16	0.78
3:C:164:GLU:CB	3:C:168:LEU:HD12	2.14	0.78
4:D:258:LEU:HD22	4:D:333:MET:HE1	1.64	0.78
7:G:111:HIS:CE1	7:G:122:ASP:OD2	2.37	0.78
2:B:315:GLN:O	2:B:319:GLU:HB2	1.84	0.78
4:D:111:LYS:O	4:D:114:ASN:N	2.16	0.78
4:D:119:LYS:NZ	4:D:130:GLN:OE1	2.16	0.78
9:I:76:GLU:OE1	9:I:76:GLU:N	2.17	0.78
1:A:401:LYS:NZ	1:A:444:GLU:OE1	2.16	0.78
2:B:147:LYS:HD3	2:B:152:LYS:HG3	1.66	0.78
2:B:298:SER:O	2:B:302:LEU:CB	2.32	0.78
2:B:436:GLU:OE1	2:B:436:GLU:N	2.16	0.78
4:D:97:GLU:O	4:D:100:ASN:N	2.15	0.78
2:B:147:LYS:HE3	2:B:148:LYS:HE3	1.66	0.78
6:F:15:ARG:HH22	6:F:30:GLU:HG2	1.47	0.78
7:G:134:SER:O	7:G:157:ARG:NH2	2.17	0.78
2:B:138:ARG:NH1	2:B:142:ASP:OD1	2.17	0.78
3:C:71:LYS:HA	3:C:111:LEU:HD21	1.64	0.78
3:C:164:GLU:CG	3:C:168:LEU:HD12	2.13	0.78
3:C:132:PHE:O	3:C:136:SER:OG	2.02	0.78
6:F:55:THR:O	6:F:58:ARG:NH2	2.17	0.78
2:B:105:LYS:NZ	2:B:139:VAL:HG12	1.98	0.78
6:F:119:SER:O	6:F:123:GLY:N	2.14	0.78
3:C:285:LYS:HA	3:C:289:GLU:HB3	1.63	0.78
6:F:319:LEU:HD11	6:F:323:ASN:HD22	1.49	0.78
4:D:146:ASP:OD2	4:D:149:ASN:ND2	2.17	0.78
1:A:133:GLU:HA	1:A:176:LEU:HD21	1.64	0.78
1:A:322:LEU:HD21	1:A:349:THR:HG22	1.64	0.78
3:C:360:SER:O	3:C:363:SER:OG	2.02	0.78
7:G:141:VAL:HG12	7:G:153:ILE:HD13	1.65	0.78
5:E:268:LYS:O	5:E:271:ASP:N	2.16	0.78
1:A:245:GLY:H	8:H:131:LYS:HZ3	1.31	0.78
1:A:286:TYR:OH	1:A:382:ARG:NH1	2.16	0.78
2:B:177:ILE:HG22	2:B:181:LEU:HD23	1.66	0.78
3:C:65:TYR:HB2	3:C:77:PHE:CZ	2.19	0.78
8:H:213:ASN:OD1	8:H:214:GLU:N	2.17	0.78
4:D:105:LYS:HA	4:D:108:SER:HB2	1.65	0.78
1:A:227:ASN:ND2	1:A:263:ASP:OD1	2.16	0.78
4:D:164:THR:HA	4:D:167:LYS:HD2	1.64	0.77
1:A:476:LEU:O	1:A:479:MET:HB2	1.84	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:120:LYS:O	3:C:123:GLU:HB3	1.84	0.77
2:B:112:LEU:HD13	2:B:115:ARG:NH2	1.98	0.77
3:C:107:VAL:CG1	3:C:111:LEU:HD23	2.15	0.77
3:C:178:HIS:HB3	3:C:201:ALA:HB2	1.66	0.77
8:H:34:LEU:O	8:H:38:ASN:N	2.17	0.77
3:C:373:VAL:O	3:C:376:LYS:N	2.16	0.77
2:B:62:ILE:HB	2:B:78:GLN:HE22	1.48	0.77
2:B:404:LYS:HD2	2:B:405:PRO:HD2	1.66	0.77
6:F:32:PHE:HB3	6:F:41:LEU:HD12	1.66	0.77
6:F:114:GLN:HB3	6:F:119:SER:HB2	1.66	0.77
3:C:369:ASP:HB3	3:C:372:GLN:HE22	1.50	0.77
2:B:157:ALA:HA	2:B:160:LEU:HD12	1.67	0.77
2:B:154:ASP:O	2:B:157:ALA:HB3	1.84	0.77
4:D:195:ASN:OD1	4:D:210:TYR:OH	2.01	0.77
8:H:34:LEU:HD22	8:H:38:ASN:CB	2.09	0.77
2:B:105:LYS:HB3	2:B:108:LYS:CE	2.14	0.77
2:B:327:LEU:O	2:B:334:ASN:ND2	2.16	0.77
3:C:162:LEU:O	3:C:166:LYS:NZ	2.17	0.77
4:D:382:ASP:HB3	4:D:387:ILE:HG22	1.67	0.77
4:D:226:GLU:N	4:D:226:GLU:OE1	2.17	0.77
3:C:124:PHE:HA	3:C:127:ARG:HH11	1.49	0.77
7:G:59:ASP:OD1	7:G:60:ASP:N	2.18	0.77
8:H:51:TYR:O	8:H:54:ASP:N	2.18	0.77
3:C:226:HIS:HB3	3:C:231:ASP:HB2	1.66	0.77
5:E:185:GLY:H	5:E:188:ILE:HD12	1.48	0.77
2:B:65:LEU:HB3	2:B:75:LEU:HD11	1.67	0.77
2:B:143:LEU:CD1	2:B:156:ALA:HB1	2.12	0.77
3:C:114:GLN:C	3:C:115:ILE:HD12	2.05	0.77
5:E:260:ASN:OD1	5:E:261:LEU:N	2.18	0.77
1:A:219:LYS:O	1:A:222:SER:OG	2.00	0.77
2:B:345:VAL:O	2:B:348:HIS:HB3	1.85	0.77
3:C:191:LEU:O	3:C:195:LYS:NZ	2.13	0.77
6:F:57:LEU:HD23	6:F:60:ARG:HH11	1.48	0.77
2:B:136:ARG:O	2:B:140:THR:OG1	2.02	0.77
1:A:425:ARG:NH1	8:H:153:MET:O	2.17	0.77
1:A:479:MET:SD	5:E:294:ASN:ND2	2.58	0.77
2:B:112:LEU:HD12	2:B:112:LEU:O	1.84	0.77
2:B:40:LEU:O	2:B:43:GLU:HB3	1.85	0.77
1:A:157:GLU:HG3	1:A:161:LYS:HE3	1.65	0.76
2:B:427:GLU:OE1	5:E:203:LYS:NZ	2.18	0.76
2:B:250:ILE:HA	2:B:256:LYS:HE2	1.66	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:250:ILE:HD12	2:B:256:LYS:HB3	1.64	0.76
2:B:63:VAL:HA	2:B:66:LEU:HD23	1.67	0.76
6:F:42:SER:O	6:F:46:THR:OG1	2.02	0.76
1:A:333:PHE:CD1	1:A:346:TYR:CD1	2.74	0.76
8:H:175:ASP:O	8:H:178:THR:HB	1.84	0.76
4:D:397:ASN:O	4:D:400:TYR:N	2.18	0.76
5:E:62:ASN:HD22	5:E:65:VAL:HG23	1.50	0.76
8:H:216:GLU:HA	8:H:219:LYS:HD2	1.67	0.76
6:F:10:ILE:O	6:F:13:THR:OG1	2.04	0.76
7:G:206:THR:HG21	7:G:208:LYS:HE2	1.66	0.76
1:A:280:ASN:ND2	1:A:288:THR:OG1	2.18	0.76
4:D:99:TYR:HE2	4:D:103:CYS:SG	2.08	0.76
7:G:285:ASP:O	7:G:288:LEU:N	2.18	0.76
2:B:407:ASN:N	2:B:410:GLN:OE1	2.18	0.76
6:F:58:ARG:O	6:F:62:TYR:N	2.15	0.76
7:G:265:GLU:O	7:G:268:THR:OG1	2.03	0.76
2:B:112:LEU:CG	2:B:115:ARG:HH22	1.93	0.76
6:F:297:ILE:HD11	6:F:336:LEU:HD13	1.67	0.76
1:A:252:ASP:OD1	1:A:253:PHE:N	2.19	0.76
2:B:152:LYS:O	2:B:155:GLU:HB3	1.85	0.76
8:H:216:GLU:HA	8:H:219:LYS:HD2	1.67	0.76
1:A:479:MET:SD	5:E:294:ASN:ND2	2.59	0.76
1:A:245:GLY:HA3	8:H:128:TYR:HA	1.68	0.76
2:B:122:ILE:O	2:B:136:ARG:NH2	2.17	0.76
1:A:170:TYR:CE2	1:A:171:TYR:HE2	2.01	0.76
2:B:79:LEU:O	2:B:83:SER:N	2.14	0.76
4:D:62:TYR:HA	4:D:65:TYR:HB3	1.68	0.76
1:A:313:SER:O	1:A:316:LEU:N	2.19	0.76
2:B:239:GLN:O	2:B:242:GLN:HB3	1.85	0.76
4:D:140:TYR:O	4:D:143:GLN:HB3	1.86	0.76
5:E:117:ASN:ND2	5:E:139:ALA:O	2.18	0.76
2:B:247:THR:HB	2:B:250:ILE:HG22	1.66	0.76
1:A:139:HIS:CD2	1:A:166:ASN:HD22	2.04	0.76
7:G:134:SER:O	7:G:157:ARG:NH1	2.18	0.76
8:H:13:ILE:O	8:H:17:ASN:N	2.19	0.76
4:D:222:ARG:HD3	4:D:325:HIS:HD2	1.48	0.76
1:A:160:ARG:HA	1:A:164:ILE:HD12	1.68	0.76
1:A:338:MET:HB3	1:A:342:LEU:HD13	1.66	0.76
2:B:253:ASP:HB3	2:B:256:LYS:HD3	1.68	0.76
6:F:372:GLU:N	6:F:372:GLU:OE1	2.19	0.76
7:G:81:GLU:OE1	7:G:81:GLU:N	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:461:PHE:O	1:A:465:ILE:N	2.18	0.76
5:E:115:GLN:HE21	6:F:163:ILE:H	1.30	0.76
2:B:140:THR:CG2	2:B:163:LEU:CD1	2.64	0.76
3:C:101:ILE:O	3:C:105:GLU:N	2.19	0.76
4:D:203:ASP:OD2	4:D:206:ARG:NH1	2.19	0.76
6:F:161:ASP:OD1	6:F:162:SER:N	2.19	0.76
2:B:333:ALA:O	2:B:336:HIS:ND1	2.16	0.76
3:C:187:LYS:NZ	3:C:329:GLU:OE1	2.19	0.75
3:C:60:GLU:O	3:C:64:LEU:HB2	1.86	0.75
3:C:121:SER:O	3:C:125:ALA:CB	2.33	0.75
3:C:107:VAL:HG21	3:C:111:LEU:CA	2.16	0.75
5:E:20:ASP:O	5:E:24:ARG:HB2	1.86	0.75
2:B:234:TYR:O	2:B:237:VAL:N	2.18	0.75
2:B:407:ASN:N	2:B:410:GLN:OE1	2.20	0.75
4:D:202:GLY:HA2	4:D:207:ARG:HH21	1.52	0.75
3:C:169:ASP:HB3	3:C:173:SER:HB3	1.69	0.75
8:H:258:ASN:OD1	8:H:259:ILE:N	2.19	0.75
6:F:377:VAL:O	6:F:380:LEU:N	2.20	0.75
7:G:233:LYS:O	7:G:236:SER:N	2.19	0.75
5:E:130:VAL:HG12	5:E:131:GLY:H	1.51	0.75
4:D:203:ASP:OD2	4:D:206:ARG:NH1	2.19	0.75
2:B:328:ALA:O	2:B:337:HIS:ND1	2.18	0.75
1:A:157:GLU:OE1	1:A:160:ARG:NH2	2.18	0.75
2:B:101:MET:HA	2:B:104:LEU:CD1	2.17	0.75
2:B:133:GLU:O	2:B:167:THR:HG23	1.86	0.75
2:B:146:ILE:HG13	2:B:147:LYS:H	1.49	0.75
8:H:40:LEU:HD12	8:H:41:ILE:HG13	1.65	0.75
4:D:246:TYR:HD2	4:D:279:LEU:HD21	1.50	0.75
4:D:289:ILE:O	4:D:292:LEU:N	2.19	0.75
4:D:51:LEU:HA	4:D:54:ILE:HD12	1.66	0.75
1:A:462:ASP:OD1	8:H:266:TYR:OH	2.05	0.75
8:H:35:ILE:O	8:H:39:LEU:HD23	1.86	0.75
1:A:176:LEU:O	1:A:179:ILE:CG2	2.35	0.75
2:B:72:TRP:CZ2	2:B:75:LEU:HD11	2.21	0.75
2:B:236:GLU:N	2:B:236:GLU:OE1	2.19	0.75
5:E:260:ASN:OD1	5:E:261:LEU:N	2.19	0.75
1:A:163:VAL:O	1:A:167:LEU:N	2.19	0.75
8:H:55:LEU:HD21	8:H:96:LEU:HD21	1.66	0.75
5:E:185:GLY:H	5:E:188:ILE:HD12	1.51	0.75
3:C:161:LEU:HA	3:C:164:GLU:HB3	1.67	0.75
7:G:50:MET:HE3	7:G:107:TRP:HE1	1.51	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:30:ILE:O	8:H:34:LEU:CB	2.35	0.75
1:A:177:ASN:ND2	1:A:226:ASP:OD2	2.18	0.75
3:C:104:PHE:CE1	3:C:111:LEU:HG	2.21	0.75
3:C:115:ILE:HD12	3:C:115:ILE:N	2.02	0.75
4:D:288:SER:O	4:D:291:SER:OG	2.05	0.75
4:D:312:TYR:HA	4:D:316:LEU:HD23	1.68	0.75
4:D:273:SER:OG	4:D:276:LEU:N	2.19	0.75
3:C:284:ALA:O	3:C:289:GLU:N	2.19	0.75
1:A:327:ILE:HD13	1:A:353:LYS:HE3	1.69	0.75
2:B:114:THR:C	2:B:118:VAL:CG2	2.55	0.75
2:B:75:LEU:HA	2:B:78:GLN:HB3	1.68	0.74
4:D:120:LEU:HB3	4:D:130:GLN:HG2	1.68	0.74
1:A:162:VAL:O	1:A:166:ASN:N	2.20	0.74
4:D:102:LEU:O	4:D:106:ASN:ND2	2.19	0.74
6:F:9:THR:O	6:F:12:SER:OG	2.05	0.74
3:C:333:SER:O	3:C:336:ASN:N	2.20	0.74
5:E:179:ARG:NH1	7:G:219:GLU:OE2	2.20	0.74
1:A:462:ASP:OD1	8:H:266:TYR:OH	2.05	0.74
8:H:47:GLN:N	8:H:47:GLN:OE1	2.20	0.74
2:B:103:TYR:HA	2:B:106:SER:OG	1.88	0.74
2:B:161:CYS:SG	2:B:195:GLN:NE2	2.60	0.74
4:D:411:LEU:O	4:D:414:LEU:N	2.19	0.74
2:B:140:THR:HG21	2:B:163:LEU:HD13	1.68	0.74
3:C:278:VAL:O	3:C:300:LYS:NZ	2.19	0.74
6:F:39:PHE:O	6:F:42:SER:OG	2.04	0.74
8:H:147:LYS:HE2	8:H:151:TRP:HE1	1.49	0.74
8:H:34:LEU:O	8:H:38:ASN:CB	2.32	0.74
3:C:145:HIS:HA	3:C:150:GLN:HE21	1.53	0.74
5:E:185:GLY:H	5:E:188:ILE:HD12	1.51	0.74
2:B:420:ASP:OD1	2:B:421:GLU:N	2.20	0.74
5:E:59:ASP:OD1	5:E:61:LYS:NZ	2.13	0.74
6:F:92:PHE:O	6:F:95:SER:OG	2.05	0.74
8:H:258:ASN:OD1	8:H:259:ILE:N	2.20	0.74
1:A:420:GLU:OE1	1:A:420:GLU:N	2.19	0.74
5:E:179:ARG:NH1	7:G:219:GLU:OE2	2.20	0.74
1:A:170:TYR:CZ	1:A:171:TYR:CE2	2.76	0.74
2:B:214:GLU:OE1	2:B:214:GLU:N	2.19	0.74
1:A:329:GLU:HA	9:I:64:TRP:HE1	1.52	0.74
2:B:72:TRP:CD1	2:B:75:LEU:HD12	2.21	0.74
6:F:66:VAL:HA	6:F:69:PHE:HB2	1.68	0.74
7:G:297:THR:O	7:G:301:ASN:ND2	2.21	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:146:ILE:HG13	2:B:147:LYS:N	2.02	0.74
3:C:284:ALA:O	3:C:289:GLU:N	2.21	0.74
1:A:244:ASN:HB2	1:A:246:GLU:HG2	1.67	0.74
2:B:236:GLU:OE1	2:B:236:GLU:N	2.19	0.74
6:F:250:TRP:O	6:F:253:GLN:HB3	1.86	0.74
2:B:105:LYS:HZ2	2:B:139:VAL:HG12	1.52	0.74
3:C:164:GLU:HA	3:C:167:LYS:HE2	1.70	0.74
4:D:350:LEU:O	4:D:353:MET:N	2.20	0.74
4:D:209:ARG:HE	4:D:242:GLU:HB3	1.50	0.74
2:B:160:LEU:O	2:B:183:GLN:NE2	2.21	0.74
9:I:80:GLU:OE2	9:I:83:ARG:NH2	2.20	0.74
2:B:396:PRO:O	2:B:398:LYS:NZ	2.18	0.74
2:B:332:GLU:OE1	2:B:332:GLU:N	2.20	0.74
4:D:104:LYS:O	4:D:108:SER:OG	2.03	0.74
9:I:72:ASP:O	9:I:76:GLU:N	2.17	0.74
3:C:122:ILE:O	3:C:126:LYS:CB	2.34	0.74
6:F:60:ARG:O	6:F:64:ASN:N	2.21	0.74
5:E:268:LYS:O	5:E:271:ASP:N	2.20	0.74
6:F:352:TRP:HZ3	6:F:354:GLN:HA	1.50	0.74
2:B:395:ARG:O	2:B:397:ALA:N	2.21	0.74
6:F:265:LYS:O	6:F:268:SER:OG	2.05	0.74
6:F:114:GLN:NE2	6:F:121:ASP:OD1	2.19	0.74
8:H:34:LEU:HD23	8:H:34:LEU:O	1.87	0.74
1:A:170:TYR:HB3	1:A:176:LEU:HD23	1.63	0.74
2:B:112:LEU:HA	2:B:115:ARG:NH1	2.01	0.74
8:H:175:ASP:O	8:H:178:THR:HB	1.86	0.74
8:H:78:PHE:O	8:H:82:PHE:N	2.15	0.74
1:A:462:ASP:OD1	8:H:266:TYR:OH	2.04	0.74
3:C:115:ILE:CD1	3:C:148:LYS:NZ	2.51	0.74
6:F:231:GLY:HA3	6:F:357:ILE:HB	1.70	0.74
2:B:126:THR:HA	2:B:136:ARG:HH12	1.53	0.74
2:B:36:LEU:HD22	2:B:65:LEU:HD13	1.69	0.74
3:C:101:ILE:HG21	3:C:140:LYS:HD3	1.69	0.74
1:A:168:LEU:HA	1:A:171:TYR:CD2	2.22	0.74
1:A:250:ALA:O	1:A:253:PHE:HB3	1.87	0.74
2:B:43:GLU:O	2:B:46:THR:OG1	2.02	0.74
5:E:20:ASP:OD2	7:G:100:ARG:NH2	2.21	0.74
5:E:37:ILE:HB	5:E:91:GLY:O	1.87	0.74
6:F:173:SER:O	6:F:176:SER:OG	2.05	0.74
1:A:174:ARG:HH22	1:A:224:LYS:HA	1.53	0.74
4:D:379:CYS:SG	4:D:380:VAL:N	2.61	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:329:GLU:HA	9:I:64:TRP:CZ2	2.23	0.73
4:D:24:TYR:O	4:D:27:SER:N	2.21	0.73
5:E:135:ASP:OD1	5:E:156:HIS:NE2	2.20	0.73
1:A:170:TYR:OH	1:A:180:ASN:ND2	2.21	0.73
2:B:115:ARG:HG3	2:B:116:ILE:CD1	2.18	0.73
7:G:67:ASP:OD1	7:G:68:VAL:N	2.19	0.73
3:C:200:ALA:O	3:C:204:ALA:HB2	1.87	0.73
2:B:62:ILE:HD12	2:B:63:VAL:HG13	1.70	0.73
1:A:328:PRO:HB2	1:A:333:PHE:HE2	1.53	0.73
4:D:114:ASN:HA	4:D:117:ILE:HD12	1.70	0.73
8:H:39:LEU:O	8:H:42:PRO:HD2	1.87	0.73
2:B:59:LEU:C	2:B:62:ILE:HD11	2.09	0.73
3:C:178:HIS:O	3:C:182:SER:OG	2.06	0.73
3:C:377:LEU:O	3:C:380:MET:N	2.21	0.73
1:A:335:GLN:HE21	1:A:336:SER:HB3	1.52	0.73
2:B:93:ILE:O	2:B:97:ILE:N	2.21	0.73
6:F:62:TYR:HA	6:F:66:VAL:HB	1.69	0.73
2:B:132:VAL:HG13	2:B:136:ARG:HD3	1.69	0.73
5:E:92:TRP:NE1	5:E:107:ASN:OD1	2.20	0.73
7:G:264:GLU:O	7:G:268:THR:OG1	2.04	0.73
1:A:63:UNK:O	1:A:67:UNK:N	2.22	0.73
3:C:301:ALA:O	3:C:305:ALA:HB2	1.87	0.73
6:F:31:LYS:O	6:F:35:GLU:N	2.17	0.73
2:B:249:ALA:O	2:B:256:LYS:NZ	2.21	0.73
2:B:427:GLU:OE1	5:E:203:LYS:NZ	2.22	0.73
1:A:168:LEU:HA	1:A:171:TYR:HE2	1.52	0.73
3:C:102:GLU:HA	3:C:105:GLU:HB3	1.71	0.73
1:A:384:ARG:NH1	8:H:154:GLU:OE2	2.22	0.73
2:B:112:LEU:HD12	2:B:112:LEU:O	1.89	0.73
7:G:69:PHE:HE1	7:G:91:MET:HB3	1.53	0.73
1:A:241:PHE:O	1:A:244:ASN:N	2.22	0.73
2:B:250:ILE:HA	2:B:256:LYS:HE2	1.71	0.73
3:C:107:VAL:CG2	3:C:112:ASP:H	2.00	0.73
8:H:39:LEU:HD12	8:H:40:LEU:HB2	1.71	0.73
4:D:37:LYS:HG3	4:D:38:VAL:H	1.54	0.73
8:H:177:PHE:HA	8:H:180:ILE:HD12	1.69	0.73
2:B:275:ASN:OD1	2:B:276:LEU:N	2.22	0.73
2:B:60:ALA:O	2:B:63:VAL:CG2	2.37	0.73
2:B:75:LEU:O	2:B:79:LEU:HD13	1.89	0.73
2:B:253:ASP:OD2	2:B:256:LYS:NZ	2.21	0.73
1:A:172:ASN:OD1	1:A:173:LEU:N	2.22	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:239:ARG:NH1	1:A:275:TYR:OH	2.22	0.73
1:A:192:GLU:OE2	1:A:196:ARG:NH2	2.22	0.73
6:F:58:ARG:HA	6:F:61:LEU:HB2	1.69	0.73
3:C:83:GLU:O	3:C:86:MET:HG2	1.89	0.73
4:D:176:ARG:NH2	4:D:242:GLU:OE1	2.20	0.73
4:D:175:ALA:O	4:D:178:GLY:N	2.21	0.73
7:G:51:GLY:O	7:G:108:TYR:HB3	1.88	0.73
1:A:174:ARG:HD2	1:A:224:LYS:HE2	1.71	0.73
1:A:303:ASN:OD1	1:A:304:SER:N	2.20	0.73
4:D:209:ARG:O	4:D:212:THR:OG1	2.05	0.73
5:E:165:GLU:O	5:E:169:ILE:CG1	2.36	0.73
6:F:322:ASP:OD1	6:F:323:ASN:N	2.21	0.73
4:D:103:CYS:O	4:D:106:ASN:N	2.20	0.73
1:A:286:TYR:OH	1:A:382:ARG:NH1	2.20	0.73
3:C:263:LYS:O	3:C:267:LEU:HB2	1.88	0.73
2:B:59:LEU:HA	2:B:62:ILE:HD11	1.71	0.73
3:C:171:LYS:NZ	3:C:207:SER:HB3	2.04	0.73
6:F:52:ALA:O	6:F:58:ARG:NH2	2.22	0.73
6:F:62:TYR:HA	6:F:66:VAL:HG22	1.70	0.73
2:B:319:GLU:OE2	2:B:323:ASN:ND2	2.21	0.73
5:E:164:GLU:N	5:E:167:GLU:OE1	2.21	0.73
3:C:134:LYS:O	3:C:138:SER:OG	2.06	0.72
3:C:138:SER:HB3	3:C:161:LEU:HD21	1.70	0.72
3:C:298:ALA:HA	3:C:321:TYR:CE2	2.23	0.72
3:C:271:MET:HE3	3:C:334:HIS:HB3	1.69	0.72
1:A:340:LYS:HA	1:A:343:LEU:HD23	1.69	0.72
4:D:245:SER:OG	4:D:247:GLU:OE1	2.06	0.72
8:H:55:LEU:HD13	8:H:96:LEU:HD13	1.71	0.72
4:D:350:LEU:O	4:D:353:MET:N	2.22	0.72
8:H:32:ILE:HG12	8:H:35:ILE:HD12	1.71	0.72
7:G:148:LYS:HD2	7:G:148:LYS:N	2.03	0.72
2:B:254:GLU:HG3	2:B:258:LYS:NZ	2.05	0.72
3:C:167:LYS:NZ	3:C:168:LEU:HD21	2.03	0.72
3:C:77:PHE:HA	3:C:80:HIS:HB3	1.71	0.72
8:H:206:LYS:HD3	8:H:214:GLU:HG3	1.71	0.72
3:C:260:GLN:O	3:C:263:LYS:N	2.22	0.72
6:F:112:LYS:HG3	6:F:113:LYS:HG3	1.70	0.72
2:B:140:THR:CG2	2:B:163:LEU:HD11	2.19	0.72
3:C:74:LEU:HD13	3:C:104:PHE:CD1	2.24	0.72
3:C:77:PHE:O	3:C:81:SER:OG	2.02	0.72
1:A:248:ASP:O	1:A:251:SER:N	2.22	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:103:TYR:O	2:B:107:SER:HB2	1.90	0.72
2:B:177:ILE:HD12	2:B:203:ILE:HD13	1.71	0.72
2:B:325:ASP:OD1	2:B:326:ASP:N	2.22	0.72
2:B:427:GLU:OE1	5:E:203:LYS:NZ	2.20	0.72
4:D:51:LEU:HA	4:D:54:ILE:HD12	1.70	0.72
2:B:133:GLU:HG3	2:B:134:VAL:H	1.55	0.72
2:B:82:LEU:HA	2:B:85:LYS:HB2	1.68	0.72
4:D:269:LYS:O	4:D:273:SER:OG	2.07	0.72
2:B:287:ASP:OD1	2:B:288:ASN:N	2.22	0.72
3:C:185:TYR:CE2	3:C:193:LYS:HG2	2.23	0.72
3:C:81:SER:O	3:C:85:MET:HG2	1.89	0.72
5:E:22:TYR:OH	5:E:126:LYS:NZ	2.23	0.72
8:H:89:TYR:HB3	8:H:102:LYS:NZ	2.04	0.72
3:C:159:ASN:HA	3:C:162:LEU:HD13	1.71	0.72
1:A:222:SER:HA	1:A:230:LYS:HD3	1.71	0.72
2:B:105:LYS:CD	2:B:142:ASP:OD2	2.28	0.72
4:D:110:ILE:HG23	4:D:114:ASN:HD21	1.54	0.72
5:E:138:VAL:O	5:E:154:PHE:HA	1.89	0.72
5:E:139:ALA:HA	5:E:153:THR:O	1.90	0.72
6:F:32:PHE:HA	6:F:35:GLU:HB2	1.70	0.72
1:A:288:THR:HA	1:A:291:GLU:HG2	1.71	0.72
3:C:107:VAL:HG21	3:C:111:LEU:HB2	1.72	0.72
3:C:158:ILE:HG21	3:C:181:GLU:HB2	1.70	0.72
5:E:141:GLU:OE1	5:E:151:GLU:N	2.22	0.72
5:E:185:GLY:H	5:E:188:ILE:HD12	1.54	0.72
8:H:55:LEU:HB2	8:H:96:LEU:HD21	1.72	0.72
3:C:151:TYR:O	3:C:155:LEU:N	2.23	0.72
3:C:252:HIS:CG	3:C:253:ASN:H	2.08	0.72
4:D:221:VAL:HG23	4:D:223:ASN:H	1.55	0.72
1:A:269:GLU:OE2	1:A:299:LYS:NZ	2.19	0.72
4:D:146:ASP:OD2	4:D:149:ASN:ND2	2.22	0.72
1:A:450:ASN:O	1:A:451:ILE:HG13	1.88	0.72
3:C:298:ALA:HA	3:C:321:TYR:CD2	2.24	0.72
4:D:120:LEU:HD11	4:D:133:ALA:HB3	1.70	0.72
4:D:96:GLN:N	4:D:96:GLN:OE1	2.21	0.72
2:B:145:GLU:O	2:B:148:LYS:NZ	2.17	0.72
6:F:141:ASN:OD1	6:F:142:ASP:N	2.22	0.72
6:F:13:THR:HA	6:F:16:MET:HG2	1.71	0.72
2:B:134:VAL:O	2:B:138:ARG:CB	2.36	0.72
7:G:206:THR:OG1	7:G:209:GLU:OE1	2.07	0.72
1:A:167:LEU:HA	1:A:170:TYR:HE2	1.55	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:208:PHE:CD1	2:B:217:LYS:HB3	2.25	0.72
2:B:433:ILE:HD11	5:E:210:TYR:CG	2.25	0.72
1:A:170:TYR:HA	1:A:176:LEU:CD2	2.20	0.72
2:B:429:ILE:O	2:B:433:ILE:HB	1.90	0.72
3:C:178:HIS:O	3:C:182:SER:HB2	1.90	0.72
6:F:267:ASP:O	6:F:271:LYS:NZ	2.22	0.72
4:D:141:TYR:O	4:D:145:GLY:N	2.23	0.72
2:B:339:GLU:N	2:B:339:GLU:OE1	2.23	0.72
3:C:410:ASP:O	3:C:413:LEU:N	2.23	0.72
3:C:191:LEU:HD22	3:C:228:GLU:HB3	1.71	0.72
3:C:316:THR:O	3:C:319:LYS:N	2.23	0.72
3:C:369:ASP:OD1	3:C:370:THR:N	2.22	0.72
5:E:294:ASN:O	5:E:298:ASN:CB	2.38	0.72
1:A:227:ASN:N	1:A:263:ASP:OD2	2.18	0.72
3:C:158:ILE:HA	3:C:161:LEU:HB2	1.70	0.72
3:C:74:LEU:HD22	3:C:111:LEU:HD12	1.72	0.72
2:B:250:ILE:HD12	2:B:256:LYS:HB3	1.69	0.72
6:F:99:LEU:HD13	6:F:133:ILE:HG22	1.71	0.72
4:D:259:PHE:HD2	4:D:260:THR:HG22	1.55	0.72
8:H:12:SER:O	8:H:16:GLU:HB2	1.90	0.72
7:G:230:TYR:O	7:G:233:LYS:N	2.23	0.72
3:C:178:HIS:O	3:C:182:SER:CB	2.38	0.72
2:B:74:ASP:O	2:B:78:GLN:N	2.13	0.72
7:G:285:ASP:OD1	7:G:286:GLU:N	2.23	0.72
8:H:258:ASN:OD1	8:H:259:ILE:N	2.22	0.72
2:B:63:VAL:HA	2:B:75:LEU:HD21	1.70	0.71
2:B:395:ARG:HH21	3:C:361:HIS:CE1	2.07	0.71
3:C:331:THR:O	3:C:334:HIS:N	2.22	0.71
3:C:137:LEU:O	3:C:141:LEU:CB	2.35	0.71
1:A:138:MET:O	1:A:141:LEU:N	2.22	0.71
6:F:59:LEU:O	6:F:63:ASP:N	2.19	0.71
2:B:404:LYS:HD2	2:B:405:PRO:HD2	1.72	0.71
6:F:27:GLU:OE1	6:F:27:GLU:N	2.21	0.71
7:G:267:LYS:O	7:G:271:VAL:HB	1.89	0.71
1:A:192:GLU:HG2	1:A:196:ARG:HH12	1.54	0.71
4:D:62:TYR:CE1	4:D:180:PHE:HZ	2.08	0.71
3:C:182:SER:O	3:C:186:HIS:CB	2.37	0.71
1:A:152:LEU:CD1	1:A:194:LEU:HD13	2.21	0.71
4:D:354:ALA:O	4:D:358:GLY:N	2.23	0.71
5:E:141:GLU:OE1	5:E:152:LYS:N	2.22	0.71
6:F:361:ASP:O	6:F:365:LYS:NZ	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:178:THR:HG22	8:H:182:LYS:HZ2	1.55	0.71
2:B:122:ILE:HA	2:B:125:VAL:HG12	1.71	0.71
6:F:119:SER:HA	6:F:122:HIS:HD2	1.55	0.71
1:A:415:SER:HG	1:A:418:THR:HG1	1.32	0.71
2:B:326:ASP:OD1	2:B:327:LEU:N	2.24	0.71
2:B:65:LEU:HD23	2:B:74:ASP:HB2	1.72	0.71
6:F:39:PHE:O	6:F:42:SER:OG	2.07	0.71
6:F:361:ASP:O	6:F:365:LYS:NZ	2.23	0.71
4:D:140:TYR:O	4:D:143:GLN:N	2.22	0.71
6:F:74:ASN:O	6:F:77:SER:OG	2.07	0.71
5:E:286:ILE:HD11	7:G:277:LYS:HG3	1.71	0.71
4:D:175:ALA:O	4:D:178:GLY:N	2.23	0.71
3:C:429:LYS:NZ	5:E:293:GLU:OE2	2.23	0.71
2:B:112:LEU:HD13	2:B:115:ARG:NE	2.06	0.71
3:C:284:ALA:HA	3:C:288:LYS:HB2	1.71	0.71
2:B:159:ILE:O	2:B:163:LEU:HB2	1.91	0.71
3:C:329:GLU:OE1	3:C:332:ARG:NH2	2.23	0.71
8:H:163:LEU:HD12	8:H:166:SER:HB3	1.72	0.71
8:H:17:ASN:OD1	8:H:18:GLY:N	2.23	0.71
8:H:41:ILE:CG2	8:H:58:THR:HG21	2.12	0.71
6:F:32:PHE:HA	6:F:35:GLU:HB2	1.71	0.71
1:A:222:SER:HA	1:A:230:LYS:HD3	1.72	0.71
7:G:249:GLU:N	7:G:249:GLU:OE1	2.24	0.71
7:G:85:ASP:OD1	7:G:86:VAL:N	2.23	0.71
1:A:134:ILE:O	1:A:138:MET:HG3	1.90	0.71
3:C:306:TYR:O	3:C:309:ARG:NH1	2.23	0.71
8:H:69:SER:O	8:H:72:THR:OG1	2.07	0.71
9:I:58:ASN:N	9:I:62:GLU:OE2	2.23	0.71
4:D:126:GLY:O	4:D:130:GLN:N	2.16	0.71
2:B:216:LEU:O	2:B:219:GLU:N	2.24	0.71
2:B:297:GLU:N	2:B:297:GLU:OE1	2.22	0.71
1:A:400:LYS:O	1:A:444:GLU:HA	1.91	0.71
2:B:196:ALA:O	2:B:200:SER:HB3	1.90	0.71
6:F:322:ASP:OD1	6:F:323:ASN:N	2.23	0.71
2:B:66:LEU:CG	2:B:72:TRP:HB2	2.20	0.71
2:B:96:MET:SD	2:B:99:LYS:NZ	2.62	0.71
4:D:29:LYS:HG3	4:D:49:PHE:HD2	1.55	0.71
2:B:76:ASN:O	2:B:80:THR:OG1	2.06	0.71
1:A:239:ARG:NH1	1:A:275:TYR:OH	2.24	0.71
3:C:211:PRO:O	3:C:214:THR:N	2.22	0.71
2:B:105:LYS:HA	2:B:108:LYS:CD	2.21	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:58:GLU:HA	4:D:102:LEU:HD22	1.73	0.71
5:E:127:GLN:NE2	7:G:208:LYS:O	2.19	0.71
2:B:290:LEU:HG	2:B:297:GLU:OE2	1.91	0.71
3:C:66:VAL:HG11	3:C:103:LYS:HG2	1.73	0.71
3:C:107:VAL:CG2	3:C:111:LEU:HB2	2.21	0.71
8:H:113:LEU:HD22	8:H:121:LYS:HE2	1.72	0.71
4:D:349:SER:O	4:D:352:SER:OG	2.08	0.71
2:B:432:LEU:O	2:B:435:LYS:N	2.23	0.71
5:E:89:LEU:HD23	5:E:113:TYR:HB3	1.72	0.71
3:C:283:ASN:O	3:C:287:THR:OG1	2.05	0.71
7:G:243:SER:O	7:G:246:LYS:N	2.24	0.71
2:B:197:THR:O	2:B:200:SER:OG	2.06	0.71
1:A:170:TYR:HB3	1:A:176:LEU:CD2	2.18	0.70
2:B:59:LEU:CA	2:B:62:ILE:HD11	2.21	0.70
4:D:126:GLY:O	4:D:130:GLN:N	2.18	0.70
6:F:69:PHE:O	6:F:72:LYS:HG2	1.91	0.70
3:C:60:GLU:O	3:C:64:LEU:CB	2.35	0.70
5:E:110:PHE:O	5:E:113:TYR:N	2.24	0.70
6:F:338:LYS:HB2	6:F:352:TRP:HB3	1.73	0.70
2:B:72:TRP:CZ2	2:B:109:SER:HB3	2.25	0.70
7:G:188:LEU:HD23	7:G:192:LEU:HB3	1.73	0.70
3:C:204:ALA:O	3:C:207:SER:N	2.23	0.70
2:B:160:LEU:HD23	2:B:163:LEU:HD12	1.72	0.70
2:B:396:PRO:HB2	2:B:398:LYS:NZ	2.06	0.70
4:D:33:LEU:O	4:D:43:ARG:NH1	2.24	0.70
5:E:69:ASP:OD1	5:E:71:ASN:N	2.24	0.70
8:H:151:TRP:CE3	8:H:159:LYS:HB3	2.26	0.70
2:B:351:ARG:O	2:B:354:SER:HB3	1.91	0.70
4:D:101:GLU:HB3	4:D:105:LYS:HZ1	1.55	0.70
6:F:167:ILE:O	6:F:170:SER:OG	2.10	0.70
8:H:44:LEU:HD23	8:H:96:LEU:HD13	1.73	0.70
2:B:65:LEU:HD23	2:B:71:LYS:HB2	1.73	0.70
3:C:161:LEU:HD12	3:C:164:GLU:HB2	1.72	0.70
6:F:42:SER:HB3	6:F:73:ILE:HG21	1.72	0.70
7:G:59:ASP:O	7:G:135:ARG:NH2	2.24	0.70
8:H:71:GLN:HG2	8:H:173:GLU:HG2	1.71	0.70
4:D:120:LEU:O	4:D:130:GLN:NE2	2.20	0.70
7:G:243:SER:O	7:G:246:LYS:N	2.24	0.70
2:B:111:ASP:OD1	2:B:112:LEU:N	2.24	0.70
4:D:117:ILE:O	4:D:120:LEU:N	2.24	0.70
4:D:281:SER:O	4:D:287:GLN:NE2	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:96:GLN:HE22	4:D:99:TYR:HD2	1.39	0.70
8:H:14:ALA:O	8:H:17:ASN:ND2	2.24	0.70
4:D:361:VAL:O	4:D:364:LEU:N	2.24	0.70
6:F:58:ARG:HA	6:F:61:LEU:HB2	1.72	0.70
1:A:167:LEU:HA	1:A:170:TYR:CD1	2.26	0.70
4:D:395:ASN:OD1	4:D:396:LYS:N	2.24	0.70
5:E:167:GLU:OE1	5:E:167:GLU:N	2.25	0.70
2:B:41:VAL:O	2:B:45:LYS:N	2.23	0.70
1:A:156:VAL:HG21	1:A:194:LEU:HD22	1.73	0.70
6:F:112:LYS:HE2	6:F:113:LYS:HE3	1.72	0.70
6:F:48:PHE:O	6:F:52:ALA:HB3	1.91	0.70
8:H:34:LEU:O	8:H:38:ASN:CA	2.38	0.70
6:F:6:GLU:O	6:F:10:ILE:N	2.21	0.70
3:C:325:LEU:HD12	3:C:328:ASP:HB3	1.74	0.70
1:A:191:HIS:O	1:A:194:LEU:HB3	1.91	0.70
2:B:114:THR:HA	2:B:118:VAL:HG23	1.71	0.70
4:D:394:ASP:OD1	4:D:395:ASN:N	2.25	0.70
5:E:81:LYS:NZ	5:E:87:GLU:O	2.24	0.70
8:H:51:TYR:O	8:H:53:ASN:N	2.24	0.70
1:A:239:ARG:O	1:A:243:ASN:ND2	2.24	0.70
3:C:191:LEU:CD2	3:C:228:GLU:HB3	2.21	0.70
9:I:82:ASP:OD1	9:I:83:ARG:N	2.24	0.70
4:D:285:ALA:O	4:D:288:SER:N	2.24	0.70
6:F:303:LYS:O	6:F:369:ARG:NH2	2.25	0.70
6:F:28:GLN:O	6:F:31:LYS:HG2	1.91	0.70
3:C:193:LYS:O	3:C:197:SER:OG	2.09	0.70
6:F:173:SER:O	6:F:176:SER:OG	2.10	0.70
6:F:302:VAL:O	6:F:369:ARG:NH2	2.24	0.70
1:A:190:SER:O	1:A:194:LEU:N	2.24	0.70
2:B:277:GLN:HG3	2:B:278:ASN:N	2.06	0.70
2:B:396:PRO:HB2	2:B:398:LYS:HZ1	1.57	0.70
4:D:29:LYS:HA	4:D:32:LEU:HD12	1.73	0.70
6:F:368:ASP:O	6:F:371:VAL:N	2.24	0.70
2:B:158:ASP:OD1	2:B:159:ILE:N	2.25	0.70
3:C:370:THR:O	3:C:373:VAL:N	2.24	0.70
8:H:32:ILE:HA	8:H:35:ILE:HD12	1.73	0.70
6:F:263:PHE:O	6:F:267:ASP:HB2	1.90	0.70
1:A:242:LEU:O	8:H:131:LYS:NZ	2.25	0.70
8:H:87:PRO:O	8:H:91:SER:N	2.25	0.70
6:F:25:LEU:O	6:F:28:GLN:HB2	1.92	0.70
2:B:118:VAL:HG23	2:B:143:LEU:HD12	1.73	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:164:GLN:O	2:B:202:LYS:NZ	2.24	0.70
2:B:76:ASN:OD1	2:B:77:GLU:N	2.25	0.70
4:D:51:LEU:HA	4:D:54:ILE:HD12	1.73	0.70
1:A:152:LEU:O	1:A:156:VAL:N	2.18	0.70
8:H:11:LEU:O	8:H:14:ALA:N	2.25	0.70
1:A:139:HIS:CD2	1:A:166:ASN:ND2	2.60	0.70
1:A:178:LEU:O	1:A:181:ALA:HB3	1.90	0.70
2:B:114:THR:O	2:B:118:VAL:HB	1.91	0.70
4:D:149:ASN:HA	4:D:152:LYS:NZ	2.06	0.70
8:H:139:ASP:O	8:H:143:SER:N	2.21	0.70
2:B:427:GLU:OE1	5:E:203:LYS:NZ	2.24	0.70
3:C:226:HIS:ND1	3:C:229:ASP:OD2	2.24	0.70
3:C:84:TYR:O	3:C:88:PHE:N	2.23	0.70
7:G:258:GLU:N	7:G:258:GLU:OE1	2.23	0.70
8:H:187:ASP:O	8:H:191:LYS:N	2.16	0.70
4:D:246:TYR:CD2	4:D:279:LEU:HD21	2.27	0.70
8:H:188:GLU:O	8:H:191:LYS:N	2.23	0.70
1:A:252:ASP:OD1	1:A:253:PHE:N	2.25	0.70
2:B:315:GLN:O	2:B:319:GLU:HB2	1.92	0.70
3:C:217:GLU:OE2	3:C:246:TYR:OH	2.09	0.70
4:D:101:GLU:HG3	4:D:104:LYS:HZ3	1.57	0.70
1:A:227:ASN:HD22	1:A:263:ASP:HB2	1.56	0.69
1:A:313:SER:O	1:A:316:LEU:N	2.25	0.69
3:C:85:MET:O	3:C:93:THR:OG1	2.10	0.69
2:B:429:ILE:O	2:B:433:ILE:HB	1.92	0.69
3:C:74:LEU:CD1	3:C:104:PHE:CD1	2.75	0.69
3:C:280:ASN:O	3:C:283:ASN:ND2	2.25	0.69
4:D:29:LYS:HA	4:D:32:LEU:HD12	1.73	0.69
6:F:38:TRP:HA	6:F:41:LEU:HD12	1.74	0.69
1:A:187:ILE:O	1:A:190:SER:OG	2.10	0.69
2:B:115:ARG:O	2:B:118:VAL:HB	1.92	0.69
8:H:221:ALA:HB1	8:H:226:TRP:HB2	1.73	0.69
8:H:31:LYS:O	8:H:35:ILE:N	2.25	0.69
8:H:66:ALA:CB	8:H:105:LEU:HD11	2.21	0.69
2:B:140:THR:HA	2:B:143:LEU:HD13	1.74	0.69
3:C:324:GLU:O	3:C:327:GLY:N	2.24	0.69
4:D:395:ASN:OD1	4:D:396:LYS:N	2.25	0.69
4:D:120:LEU:O	4:D:130:GLN:NE2	2.24	0.69
5:E:295:LYS:HA	5:E:298:ASN:HD22	1.56	0.69
4:D:222:ARG:H	9:I:60:TRP:HE1	1.38	0.69
6:F:62:TYR:HA	6:F:66:VAL:HB	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:194:GLU:OE2	8:H:224:ARG:NH2	2.26	0.69
4:D:275:GLU:N	4:D:275:GLU:OE1	2.24	0.69
4:D:275:GLU:OE1	4:D:275:GLU:N	2.24	0.69
7:G:240:ALA:O	7:G:243:SER:OG	2.10	0.69
3:C:307:ASN:O	3:C:309:ARG:NH1	2.25	0.69
5:E:135:ASP:OD1	5:E:156:HIS:NE2	2.25	0.69
5:E:127:GLN:NE2	7:G:212:MET:HG3	2.07	0.69
4:D:158:LEU:HD22	4:D:167:LYS:HG3	1.75	0.69
1:A:149:SER:O	1:A:150:LYS:HG2	1.92	0.69
4:D:141:TYR:HE2	4:D:153:THR:HG1	1.40	0.69
5:E:24:ARG:CZ	7:G:100:ARG:HG2	2.23	0.69
8:H:194:GLU:OE2	8:H:224:ARG:NH2	2.26	0.69
5:E:276:ILE:O	5:E:279:SER:OG	2.10	0.69
3:C:298:ALA:HA	3:C:321:TYR:CD2	2.27	0.69
4:D:292:LEU:O	4:D:295:SER:OG	2.09	0.69
3:C:60:GLU:O	3:C:64:LEU:HB3	1.91	0.69
1:A:191:HIS:O	1:A:194:LEU:HB2	1.92	0.69
3:C:115:ILE:HD11	3:C:141:LEU:HA	1.74	0.69
5:E:63:SER:O	5:E:64:ASP:O	2.10	0.69
5:E:76:MET:O	5:E:79:MET:N	2.26	0.69
2:B:298:SER:OG	2:B:318:TYR:OH	2.06	0.69
7:G:54:LEU:HD11	7:G:67:ASP:HB3	1.73	0.69
2:B:82:LEU:O	2:B:82:LEU:HD23	1.93	0.69
6:F:42:SER:O	6:F:46:THR:CB	2.41	0.69
5:E:28:LYS:H	5:E:31:LYS:HB2	1.56	0.69
7:G:156:PHE:HA	7:G:199:LEU:HG	1.75	0.69
2:B:223:LEU:O	2:B:227:ILE:HG22	1.93	0.69
2:B:261:LEU:O	2:B:264:ILE:N	2.25	0.69
6:F:259:THR:O	6:F:362:GLN:NE2	2.25	0.69
8:H:41:ILE:HG22	8:H:88:TYR:OH	1.92	0.69
1:A:286:TYR:OH	1:A:382:ARG:NH1	2.26	0.69
2:B:392:LYS:HE2	3:C:355:GLU:OE2	1.93	0.69
4:D:21:VAL:O	4:D:176:ARG:NH2	2.26	0.69
8:H:12:SER:O	8:H:16:GLU:HB2	1.93	0.69
5:E:286:ILE:HD11	7:G:277:LYS:HG3	1.75	0.69
1:A:447:GLU:OE1	1:A:447:GLU:N	2.26	0.69
4:D:352:SER:O	4:D:355:SER:OG	2.10	0.69
4:D:212:THR:HG22	4:D:234:SER:HB2	1.73	0.69
4:D:361:VAL:O	4:D:364:LEU:N	2.24	0.69
6:F:123:GLY:HA2	6:F:126:ILE:HD12	1.73	0.69
2:B:223:LEU:O	2:B:226:LYS:N	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:170:ASP:O	3:C:174:LEU:CA	2.41	0.69
1:A:149:SER:O	1:A:150:LYS:HG2	1.91	0.69
2:B:66:LEU:CB	2:B:72:TRP:HB2	2.22	0.69
4:D:205:GLU:O	4:D:209:ARG:NH1	2.26	0.69
1:A:176:LEU:HA	1:A:179:ILE:HG22	1.75	0.69
1:A:327:ILE:HG21	1:A:353:LYS:HD2	1.73	0.69
1:A:450:ASN:HA	4:D:397:ASN:ND2	2.08	0.69
6:F:319:LEU:HD11	6:F:323:ASN:HD22	1.56	0.69
6:F:322:ASP:OD1	6:F:323:ASN:N	2.26	0.69
1:A:346:TYR:O	1:A:349:THR:N	2.26	0.69
2:B:126:THR:HG22	2:B:136:ARG:HE	1.57	0.69
8:H:56:MET:HA	8:H:59:LYS:HE3	1.74	0.69
6:F:360:GLY:HA2	6:F:363:ILE:HD12	1.74	0.69
6:F:40:GLN:HA	6:F:43:GLU:OE2	1.93	0.69
8:H:52:LEU:HD23	8:H:55:LEU:HD12	1.75	0.69
9:I:63:ASN:ND2	9:I:65:ASP:OD1	2.26	0.69
1:A:348:LEU:O	1:A:351:ALA:N	2.26	0.69
1:A:405:ARG:O	1:A:408:CYS:N	2.23	0.69
5:E:268:LYS:O	5:E:271:ASP:N	2.26	0.69
6:F:7:ILE:O	6:F:11:LEU:CB	2.40	0.69
5:E:272:GLU:O	5:E:275:VAL:N	2.25	0.69
2:B:51:ASP:OD1	2:B:55:SER:OG	2.09	0.69
3:C:122:ILE:O	3:C:126:LYS:HB3	1.92	0.69
8:H:177:PHE:HA	8:H:180:ILE:HD12	1.73	0.69
8:H:194:GLU:OE2	8:H:224:ARG:NH2	2.26	0.69
8:H:35:ILE:O	8:H:39:LEU:HD21	1.92	0.69
1:A:217:PHE:O	1:A:221:ALA:N	2.17	0.69
1:A:346:TYR:O	1:A:350:LYS:NZ	2.24	0.69
8:H:216:GLU:HA	8:H:219:LYS:HD2	1.75	0.69
3:C:146:TYR:OH	3:C:183:LYS:NZ	2.22	0.69
3:C:282:LEU:HD23	3:C:287:THR:HG21	1.75	0.69
5:E:20:ASP:O	5:E:24:ARG:HB2	1.92	0.69
1:A:181:ALA:HB2	1:A:229:THR:HA	1.75	0.69
2:B:104:LEU:O	2:B:108:LYS:N	2.25	0.69
5:E:137:TYR:HD1	5:E:156:HIS:HA	1.58	0.69
2:B:433:ILE:HD11	5:E:210:TYR:CG	2.28	0.69
8:H:17:ASN:OD1	8:H:19:ASP:N	2.24	0.69
8:H:101:LYS:O	8:H:105:LEU:CB	2.40	0.69
8:H:14:ALA:HB2	8:H:26:LEU:HD22	1.75	0.69
4:D:222:ARG:HB3	4:D:325:HIS:HD2	1.56	0.69
1:A:414:ASP:OD1	1:A:415:SER:N	2.26	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:217:LYS:HA	2:B:220:TYR:HB3	1.75	0.69
2:B:143:LEU:HA	2:B:146:ILE:HG23	1.74	0.69
3:C:75:ARG:HD2	3:C:116:PHE:HE1	1.58	0.69
3:C:239:PHE:HB2	3:C:261:VAL:HG13	1.74	0.69
8:H:216:GLU:HA	8:H:219:LYS:HD2	1.75	0.69
8:H:31:LYS:NZ	8:H:81:TYR:OH	2.24	0.69
8:H:66:ALA:O	8:H:69:SER:N	2.25	0.69
4:D:166:ALA:O	4:D:170:VAL:HB	1.93	0.68
3:C:75:ARG:NH2	3:C:114:GLN:OE1	2.26	0.68
3:C:340:ASP:O	3:C:343:LEU:N	2.27	0.68
4:D:141:TYR:HB2	4:D:150:ALA:HB2	1.73	0.68
4:D:146:ASP:OD2	4:D:149:ASN:ND2	2.25	0.68
8:H:121:LYS:O	8:H:124:SER:N	2.26	0.68
1:A:132:ALA:O	1:A:135:ASN:N	2.26	0.68
2:B:133:GLU:HG3	2:B:134:VAL:N	2.06	0.68
4:D:115:GLU:HA	4:D:118:GLN:HG2	1.75	0.68
4:D:171:MET:HA	4:D:174:ILE:HD12	1.74	0.68
5:E:92:TRP:HB3	5:E:110:PHE:CE2	2.27	0.68
3:C:154:SER:HA	3:C:157:LEU:HB2	1.75	0.68
4:D:228:ALA:HB2	4:D:256:THR:HG22	1.74	0.68
6:F:229:ASN:ND2	6:F:232:GLU:OE1	2.25	0.68
1:A:375:ASP:HB2	1:A:378:GLN:HE22	1.59	0.68
2:B:62:ILE:CB	2:B:78:GLN:HE22	2.06	0.68
2:B:65:LEU:C	2:B:65:LEU:HD23	2.14	0.68
1:A:384:ARG:NE	8:H:154:GLU:OE2	2.24	0.68
9:I:63:ASN:N	9:I:66:ASP:OD2	2.26	0.68
4:D:133:ALA:O	4:D:137:LEU:N	2.21	0.68
6:F:10:ILE:O	6:F:14:LEU:HG	1.92	0.68
6:F:225:ASP:OD1	6:F:226:LYS:N	2.26	0.68
8:H:51:TYR:CE2	8:H:55:LEU:HD21	2.28	0.68
1:A:248:ASP:O	1:A:251:SER:N	2.27	0.68
3:C:115:ILE:HD12	3:C:148:LYS:HZ1	1.57	0.68
6:F:247:ASN:O	6:F:250:TRP:NE1	2.24	0.68
6:F:9:THR:O	6:F:12:SER:OG	2.09	0.68
2:B:307:GLU:OE2	6:F:330:ARG:NH1	2.26	0.68
4:D:145:GLY:O	4:D:181:TYR:OH	2.12	0.68
6:F:44:SER:O	6:F:47:LYS:N	2.25	0.68
8:H:51:TYR:CE2	8:H:55:LEU:HB3	2.27	0.68
1:A:168:LEU:HD23	1:A:168:LEU:C	2.14	0.68
2:B:250:ILE:HG22	2:B:256:LYS:HD3	1.74	0.68
5:E:116:ASN:OD1	5:E:117:ASN:N	2.22	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:59:LYS:NZ	8:H:99:SER:OG	2.19	0.68
4:D:203:ASP:OD2	4:D:206:ARG:NH1	2.22	0.68
2:B:234:TYR:O	2:B:237:VAL:N	2.26	0.68
5:E:193:GLN:O	5:E:196:SER:N	2.26	0.68
6:F:195:TYR:O	6:F:198:THR:HG22	1.92	0.68
3:C:377:LEU:HD21	3:C:397:LEU:HD22	1.75	0.68
4:D:29:LYS:HD2	4:D:49:PHE:CD2	2.28	0.68
1:A:271:ARG:NH1	9:I:37:ASP:OD2	2.26	0.68
1:A:278:LYS:NZ	1:A:375:ASP:OD2	2.22	0.68
8:H:44:LEU:HA	8:H:51:TYR:HE2	1.58	0.68
6:F:250:TRP:O	6:F:253:GLN:HB2	1.93	0.68
1:A:132:ALA:O	1:A:135:ASN:N	2.26	0.68
6:F:7:ILE:O	6:F:11:LEU:CB	2.40	0.68
6:F:28:GLN:HA	6:F:31:LYS:HE3	1.75	0.68
3:C:373:VAL:O	3:C:376:LYS:N	2.26	0.68
5:E:74:GLU:OE1	6:F:115:ARG:NH1	2.22	0.68
2:B:248:ASP:OD1	2:B:249:ALA:N	2.26	0.68
2:B:433:ILE:HD11	5:E:210:TYR:CD1	2.29	0.68
1:A:248:ASP:OD1	1:A:249:SER:N	2.25	0.68
4:D:59:MET:O	4:D:63:TYR:N	2.26	0.68
8:H:112:ASN:O	8:H:115:SER:OG	2.07	0.68
6:F:20:PRO:HA	6:F:23:HIS:CE1	2.29	0.68
1:A:200:GLU:HG3	1:A:202:ASN:H	1.58	0.68
2:B:404:LYS:HD2	2:B:405:PRO:HD2	1.75	0.68
4:D:197:MET:O	4:D:201:GLY:N	2.27	0.68
9:I:82:ASP:OD1	9:I:83:ARG:N	2.26	0.68
1:A:401:LYS:HA	1:A:443:ILE:O	1.93	0.68
4:D:352:SER:O	4:D:355:SER:OG	2.12	0.68
5:E:127:GLN:NE2	7:G:212:MET:SD	2.67	0.68
5:E:167:GLU:N	5:E:167:GLU:OE1	2.25	0.68
6:F:32:PHE:HA	6:F:35:GLU:HB2	1.73	0.68
6:F:62:TYR:HA	6:F:66:VAL:HB	1.75	0.68
8:H:202:LEU:HA	8:H:205:ILE:HD12	1.74	0.68
8:H:69:SER:O	8:H:72:THR:OG1	2.10	0.68
4:D:184:GLN:HE21	4:D:217:HIS:CD2	2.10	0.68
1:A:479:MET:O	5:E:294:ASN:ND2	2.26	0.68
8:H:133:ILE:HG22	8:H:134:LYS:HG2	1.76	0.68
2:B:221:TYR:O	2:B:224:LEU:N	2.27	0.68
4:D:349:SER:O	4:D:352:SER:OG	2.12	0.68
8:H:216:GLU:N	8:H:216:GLU:OE1	2.18	0.68
2:B:364:ARG:NH1	6:F:325:GLU:OE1	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:95:LYS:HA	3:C:98:LYS:HE3	1.76	0.68
8:H:216:GLU:OE2	8:H:219:LYS:NZ	2.20	0.68
1:A:303:ASN:OD1	1:A:305:LYS:N	2.26	0.68
2:B:197:THR:O	2:B:200:SER:OG	2.08	0.68
2:B:284:ILE:HG22	2:B:290:LEU:HD22	1.75	0.68
3:C:152:LYS:HA	3:C:155:LEU:HB3	1.74	0.68
5:E:301:ILE:HG23	5:E:305:ARG:HH12	1.59	0.68
7:G:147:VAL:HG22	7:G:148:LYS:H	1.59	0.68
8:H:112:ASN:O	8:H:115:SER:OG	2.08	0.68
1:A:425:ARG:NH2	8:H:154:GLU:O	2.27	0.68
2:B:248:ASP:OD1	2:B:249:ALA:N	2.27	0.68
3:C:206:ASN:H	3:C:209:TYR:HE2	1.41	0.68
6:F:26:PHE:O	6:F:30:GLU:N	2.22	0.68
3:C:178:HIS:O	3:C:182:SER:HB3	1.91	0.68
7:G:156:PHE:HB2	7:G:197:TYR:O	1.94	0.68
3:C:125:ALA:HB1	3:C:133:LEU:HD13	1.74	0.68
1:A:431:VAL:HG23	1:A:432:ILE:HG12	1.75	0.68
3:C:282:LEU:HD21	3:C:296:ILE:HG21	1.76	0.68
2:B:159:ILE:O	2:B:163:LEU:CB	2.42	0.68
3:C:179:LEU:HD11	3:C:217:GLU:HB2	1.75	0.68
3:C:270:ILE:HG12	3:C:303:ALA:HB2	1.75	0.68
6:F:48:PHE:O	6:F:52:ALA:CB	2.42	0.68
2:B:101:MET:O	2:B:104:LEU:HB2	1.94	0.68
3:C:266:LEU:HD22	3:C:299:MET:HG2	1.76	0.68
1:A:146:LEU:O	1:A:150:LYS:N	2.26	0.68
2:B:375:GLN:O	2:B:378:THR:N	2.27	0.68
3:C:340:ASP:O	3:C:343:LEU:N	2.27	0.68
6:F:108:GLU:O	6:F:111:SER:OG	2.11	0.68
8:H:40:LEU:CD1	8:H:41:ILE:HG13	2.22	0.68
8:H:42:PRO:HA	8:H:88:TYR:OH	1.93	0.68
1:A:293:ILE:HD11	1:A:313:SER:HB2	1.75	0.67
3:C:298:ALA:HA	3:C:321:TYR:CD2	2.30	0.67
6:F:161:ASP:OD1	6:F:162:SER:N	2.27	0.67
3:C:325:LEU:O	3:C:332:ARG:NH1	2.27	0.67
2:B:33:ASN:O	2:B:36:LEU:HG	1.94	0.67
3:C:294:ARG:HD3	3:C:323:LYS:HE2	1.74	0.67
9:I:74:THR:OG1	9:I:75:ASN:N	2.26	0.67
1:A:434:ALA:HB1	1:A:444:GLU:O	1.94	0.67
2:B:118:VAL:HG11	2:B:143:LEU:HD11	1.75	0.67
3:C:177:VAL:O	3:C:180:LEU:N	2.27	0.67
2:B:110:LEU:O	2:B:114:THR:HG23	1.94	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:ASP:HB3	2:B:195:GLN:HE22	1.59	0.67
4:D:62:TYR:HE1	4:D:180:PHE:HZ	1.42	0.67
2:B:56:LYS:NZ	2:B:57:GLU:OE2	2.28	0.67
2:B:75:LEU:O	2:B:79:LEU:HB3	1.94	0.67
5:E:22:TYR:OH	5:E:126:LYS:NZ	2.20	0.67
6:F:38:TRP:HD1	6:F:41:LEU:HD22	1.58	0.67
7:G:111:HIS:CE1	7:G:122:ASP:OD2	2.43	0.67
1:A:333:PHE:HE2	1:A:346:TYR:HA	1.60	0.67
6:F:29:PHE:O	6:F:33:TYR:N	2.16	0.67
6:F:77:SER:O	6:F:80:LYS:HG2	1.93	0.67
8:H:202:LEU:N	8:H:231:SER:O	2.26	0.67
2:B:105:LYS:HA	2:B:108:LYS:CG	2.24	0.67
5:E:175:LEU:HD11	7:G:213:LEU:HB3	1.75	0.67
3:C:226:HIS:ND1	3:C:231:ASP:OD2	2.27	0.67
2:B:375:GLN:O	2:B:378:THR:N	2.27	0.67
6:F:277:ILE:HD11	6:F:280:LEU:HG	1.76	0.67
3:C:185:TYR:CE1	3:C:193:LYS:HE3	2.29	0.67
8:H:180:ILE:O	8:H:183:SER:OG	2.07	0.67
1:A:291:GLU:OE1	1:A:291:GLU:N	2.24	0.67
1:A:154:GLN:HA	1:A:157:GLU:HB3	1.75	0.67
2:B:290:LEU:HD21	2:B:300:VAL:HG11	1.76	0.67
3:C:171:LYS:HD2	3:C:208:ILE:HA	1.76	0.67
4:D:170:VAL:O	4:D:173:THR:OG1	2.10	0.67
5:E:268:LYS:NZ	7:G:234:GLU:OE2	2.27	0.67
5:E:50:ASN:OD1	5:E:51:SER:N	2.22	0.67
5:E:103:ASP:O	5:E:106:ILE:N	2.27	0.67
2:B:427:GLU:OE1	5:E:203:LYS:NZ	2.26	0.67
3:C:185:TYR:HD1	3:C:188:LEU:HD12	1.58	0.67
4:D:107:GLU:HA	4:D:110:ILE:HG22	1.76	0.67
3:C:71:LYS:O	3:C:75:ARG:N	2.24	0.67
6:F:31:LYS:O	6:F:34:GLU:HB2	1.95	0.67
1:A:173:LEU:HB3	1:A:176:LEU:HD13	1.76	0.67
3:C:121:SER:O	3:C:125:ALA:N	2.27	0.67
4:D:39:SER:HB3	4:D:42:GLN:HB3	1.76	0.67
3:C:217:GLU:OE2	3:C:246:TYR:OH	2.13	0.67
4:D:131:ALA:O	4:D:135:ILE:N	2.18	0.67
2:B:112:LEU:HD13	2:B:115:ARG:HH21	1.59	0.67
4:D:334:ARG:HD3	9:I:73:PHE:CZ	2.29	0.67
6:F:15:ARG:NH1	6:F:23:HIS:O	2.27	0.67
6:F:58:ARG:HH22	6:F:85:SER:HA	1.58	0.67
6:F:15:ARG:NH2	6:F:27:GLU:OE2	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:41:LEU:O	6:F:44:SER:OG	2.08	0.67
1:A:214:MET:O	1:A:218:LEU:HB2	1.93	0.67
1:A:378:GLN:NE2	8:H:127:GLN:OE1	2.28	0.67
3:C:329:GLU:HB2	3:C:332:ARG:NH2	2.10	0.67
5:E:117:ASN:ND2	5:E:139:ALA:O	2.28	0.67
6:F:338:LYS:HB2	6:F:352:TRP:HB3	1.76	0.67
5:E:24:ARG:HG3	7:G:100:ARG:CZ	2.25	0.67
6:F:15:ARG:HH11	6:F:23:HIS:HB2	1.58	0.67
6:F:27:GLU:O	6:F:30:GLU:HG2	1.95	0.67
8:H:34:LEU:O	8:H:38:ASN:N	2.26	0.67
8:H:15:PHE:HB2	8:H:64:VAL:HG11	1.76	0.67
2:B:183:GLN:HB3	2:B:199:LEU:HD23	1.76	0.67
3:C:232:TYR:HA	3:C:235:ALA:HB3	1.77	0.67
2:B:294:GLU:OE1	2:B:294:GLU:N	2.27	0.67
4:D:120:LEU:HB3	4:D:130:GLN:HG3	1.77	0.67
6:F:206:THR:HG22	6:F:208:ALA:H	1.58	0.67
8:H:22:ALA:O	8:H:26:LEU:HB2	1.94	0.67
8:H:13:ILE:HA	8:H:16:GLU:HB3	1.75	0.67
8:H:105:LEU:HA	8:H:108:LEU:HD12	1.76	0.67
1:A:230:LYS:HD3	1:A:260:PRO:HG2	1.77	0.67
2:B:277:GLN:HG3	2:B:278:ASN:N	2.08	0.67
2:B:326:ASP:OD1	2:B:327:LEU:N	2.27	0.67
4:D:163:SER:HB3	4:D:166:ALA:HB2	1.77	0.67
4:D:209:ARG:O	4:D:212:THR:OG1	2.07	0.67
5:E:62:ASN:OD1	5:E:64:ASP:N	2.23	0.67
9:I:74:THR:OG1	9:I:75:ASN:N	2.27	0.67
2:B:336:HIS:O	2:B:339:GLU:HB2	1.95	0.67
3:C:118:CYS:HB3	3:C:141:LEU:HD22	1.76	0.67
6:F:74:ASN:OD1	6:F:76:LEU:N	2.28	0.67
2:B:328:ALA:O	2:B:337:HIS:CD2	2.47	0.67
2:B:66:LEU:HD12	2:B:66:LEU:C	2.15	0.67
8:H:133:ILE:O	8:H:136:LEU:N	2.27	0.67
8:H:258:ASN:OD1	8:H:259:ILE:N	2.27	0.67
2:B:284:ILE:HG22	2:B:290:LEU:HD22	1.77	0.67
6:F:148:ASP:N	6:F:148:ASP:OD1	2.26	0.67
8:H:38:ASN:HA	8:H:42:PRO:HG2	1.77	0.67
7:G:137:VAL:HG12	7:G:157:ARG:HD3	1.76	0.67
3:C:301:ALA:O	3:C:305:ALA:CB	2.43	0.67
4:D:259:PHE:HD2	4:D:260:THR:CG2	2.08	0.67
8:H:201:PRO:HD2	8:H:204:ASN:HD22	1.58	0.67
4:D:231:LEU:O	4:D:235:LEU:N	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:27:SER:O	4:D:31:PHE:N	2.21	0.67
6:F:264:ASP:O	6:F:267:ASP:N	2.28	0.67
3:C:358:GLU:N	3:C:358:GLU:OE1	2.22	0.67
2:B:288:ASN:O	2:B:291:LYS:HG2	1.93	0.67
2:B:95:TYR:O	2:B:99:LYS:NZ	2.28	0.67
6:F:32:PHE:HB3	6:F:41:LEU:HD12	1.75	0.67
8:H:35:ILE:CA	8:H:38:ASN:HB3	2.20	0.67
2:B:192:ASP:O	2:B:195:GLN:NE2	2.28	0.67
8:H:14:ALA:HB1	8:H:23:CYS:HA	1.77	0.67
8:H:194:GLU:OE2	8:H:224:ARG:NH2	2.28	0.67
3:C:300:LYS:O	3:C:303:ALA:N	2.28	0.67
1:A:244:ASN:HA	8:H:131:LYS:NZ	2.10	0.67
1:A:137:PHE:O	1:A:140:LEU:HB3	1.94	0.67
1:A:201:ILE:O	1:A:204:ASP:HB2	1.95	0.67
2:B:395:ARG:C	2:B:397:ALA:N	2.48	0.67
2:B:430:GLY:O	2:B:433:ILE:HG22	1.95	0.67
2:B:50:SER:O	2:B:54:SER:CB	2.40	0.67
6:F:196:LEU:HD22	6:F:236:HIS:CE1	2.28	0.66
6:F:6:GLU:O	6:F:9:THR:OG1	2.12	0.66
3:C:329:GLU:OE1	3:C:332:ARG:NH1	2.28	0.66
4:D:60:ALA:HB2	4:D:102:LEU:HB3	1.78	0.66
1:A:200:GLU:O	1:A:203:SER:OG	2.12	0.66
3:C:66:VAL:HG22	3:C:104:PHE:HE1	1.60	0.66
5:E:21:HIS:HA	7:G:100:ARG:HH22	1.60	0.66
6:F:323:ASN:O	6:F:326:HIS:N	2.28	0.66
6:F:338:LYS:HD2	6:F:352:TRP:NE1	2.10	0.66
2:B:55:SER:O	2:B:59:LEU:CB	2.43	0.66
2:B:377:GLU:OE2	2:B:395:ARG:NH1	2.29	0.66
4:D:186:TYR:O	4:D:190:LYS:NZ	2.22	0.66
6:F:32:PHE:O	6:F:36:LYS:N	2.28	0.66
6:F:74:ASN:O	6:F:77:SER:OG	2.09	0.66
3:C:405:GLN:HE21	4:D:394:ASP:HA	1.59	0.66
6:F:206:THR:N	6:F:209:GLU:OE1	2.28	0.66
1:A:203:SER:O	1:A:207:ASN:N	2.19	0.66
4:D:269:LYS:O	4:D:273:SER:OG	2.11	0.66
1:A:167:LEU:HD23	1:A:170:TYR:HE1	1.60	0.66
2:B:395:ARG:O	2:B:397:ALA:N	2.28	0.66
3:C:251:THR:O	3:C:255:TYR:N	2.22	0.66
1:A:293:ILE:HD12	1:A:316:LEU:HD23	1.77	0.66
2:B:114:THR:HA	2:B:117:SER:OG	1.96	0.66
2:B:34:SER:O	2:B:37:ASP:HB2	1.95	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:120:SER:OG	7:G:121:VAL:N	2.26	0.66
1:A:277:SER:OG	1:A:289:ALA:O	2.09	0.66
1:A:278:LYS:NZ	1:A:375:ASP:OD2	2.26	0.66
3:C:344:GLU:O	3:C:347:LEU:N	2.29	0.66
1:A:154:GLN:O	1:A:158:PHE:HB2	1.95	0.66
3:C:344:GLU:O	3:C:347:LEU:N	2.28	0.66
6:F:387:ARG:NH2	8:H:265:ASP:OD1	2.29	0.66
7:G:285:ASP:O	7:G:288:LEU:N	2.29	0.66
7:G:286:GLU:OE1	7:G:286:GLU:N	2.17	0.66
8:H:38:ASN:HD22	8:H:42:PRO:HG2	1.57	0.66
2:B:111:ASP:O	2:B:115:ARG:HG2	1.95	0.66
1:A:419:VAL:O	1:A:422:MET:N	2.29	0.66
2:B:105:LYS:HA	2:B:108:LYS:HD3	1.76	0.66
2:B:148:LYS:HE2	2:B:152:LYS:NZ	2.10	0.66
5:E:138:VAL:O	5:E:154:PHE:HA	1.94	0.66
6:F:300:VAL:HG11	6:F:350:ILE:HG21	1.75	0.66
8:H:111:LEU:HD21	8:H:144:TYR:HE2	1.61	0.66
2:B:66:LEU:CD2	2:B:107:SER:O	2.41	0.66
1:A:218:LEU:O	1:A:222:SER:N	2.28	0.66
2:B:250:ILE:HA	2:B:256:LYS:HD3	1.78	0.66
3:C:193:LYS:O	3:C:197:SER:CB	2.43	0.66
2:B:105:LYS:HA	2:B:108:LYS:HG2	1.75	0.66
2:B:70:ASN:ND2	2:B:70:ASN:O	2.29	0.66
7:G:27:VAL:HG12	7:G:63:VAL:HB	1.76	0.66
1:A:350:LYS:HG2	9:I:68:GLU:OE2	1.96	0.66
2:B:433:ILE:HD11	5:E:210:TYR:CG	2.31	0.66
6:F:230:PHE:O	6:F:233:LEU:N	2.29	0.66
7:G:258:GLU:N	7:G:258:GLU:OE1	2.23	0.66
1:A:303:ASN:HD21	1:A:305:LYS:HD2	1.60	0.66
2:B:416:SER:O	2:B:419:VAL:N	2.29	0.66
3:C:220:LEU:HB2	3:C:239:PHE:HB3	1.78	0.66
3:C:282:LEU:HB2	3:C:300:LYS:CE	2.26	0.66
6:F:26:PHE:O	6:F:29:PHE:HB2	1.95	0.66
6:F:368:ASP:O	6:F:371:VAL:N	2.27	0.66
8:H:28:PRO:O	8:H:32:ILE:CG1	2.33	0.66
4:D:145:GLY:O	4:D:181:TYR:OH	2.13	0.66
4:D:29:LYS:HG3	4:D:49:PHE:CD2	2.30	0.66
5:E:20:ASP:O	5:E:24:ARG:CB	2.44	0.66
7:G:254:ARG:O	7:G:258:GLU:CB	2.44	0.66
8:H:146:ILE:O	8:H:149:ASP:N	2.28	0.66
3:C:332:ARG:O	3:C:336:ASN:ND2	2.29	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:85:ASP:OD1	7:G:86:VAL:N	2.28	0.66
1:A:211:ARG:NE	1:A:240:ASP:OD2	2.21	0.66
6:F:62:TYR:O	6:F:67:SER:N	2.28	0.66
8:H:49:ASP:HA	8:H:52:LEU:HG	1.78	0.66
8:H:7:LEU:HD12	8:H:33:GLU:OE2	1.96	0.66
1:A:146:LEU:HB2	1:A:155:LEU:HD12	1.78	0.66
5:E:185:GLY:H	5:E:188:ILE:HD12	1.59	0.66
2:B:103:TYR:O	2:B:107:SER:CB	2.43	0.66
2:B:279:ASP:OD1	2:B:279:ASP:N	2.25	0.66
5:E:166:ALA:HB3	5:E:167:GLU:OE1	1.95	0.66
2:B:180:ILE:HD12	2:B:183:GLN:HB2	1.76	0.66
5:E:212:ASP:HA	5:E:215:ILE:HD12	1.77	0.66
1:A:425:ARG:NH2	8:H:154:GLU:O	2.28	0.66
8:H:89:TYR:CE1	8:H:102:LYS:HB3	2.31	0.66
6:F:377:VAL:O	6:F:380:LEU:N	2.29	0.66
4:D:41:GLU:N	4:D:41:GLU:OE1	2.20	0.66
7:G:49:VAL:O	7:G:109:HIS:HA	1.96	0.66
3:C:88:PHE:HE1	3:C:92:LYS:HD3	1.59	0.66
1:A:160:ARG:HA	1:A:164:ILE:HD12	1.77	0.66
5:E:112:LYS:O	6:F:120:LYS:NZ	2.27	0.66
3:C:201:ALA:O	3:C:205:ALA:HB2	1.96	0.66
3:C:306:TYR:O	3:C:309:ARG:NH1	2.25	0.66
2:B:332:GLU:HG2	2:B:333:ALA:N	2.08	0.66
4:D:114:ASN:O	4:D:117:ILE:HB	1.96	0.66
6:F:248:TYR:O	6:F:251:LEU:HB3	1.96	0.66
4:D:101:GLU:HA	4:D:104:LYS:HZ3	1.60	0.66
2:B:262:SER:HB3	2:B:266:TYR:HE2	1.61	0.65
4:D:135:ILE:O	4:D:139:GLU:HB2	1.96	0.65
3:C:145:HIS:HB2	3:C:154:SER:HB3	1.77	0.65
8:H:69:SER:O	8:H:73:PHE:N	2.29	0.65
1:A:439:GLU:N	1:A:439:GLU:OE1	2.22	0.65
3:C:107:VAL:HG21	3:C:111:LEU:CB	2.26	0.65
4:D:65:TYR:O	4:D:68:GLU:HB3	1.96	0.65
8:H:188:GLU:O	8:H:192:ASN:N	2.20	0.65
1:A:161:LYS:HG3	1:A:162:VAL:HG23	1.77	0.65
1:A:162:VAL:O	1:A:165:PRO:CD	2.30	0.65
2:B:162:GLU:O	2:B:165:VAL:N	2.25	0.65
8:H:13:ILE:O	8:H:17:ASN:CB	2.37	0.65
3:C:344:GLU:O	3:C:347:LEU:N	2.30	0.65
6:F:49:PHE:CD1	6:F:58:ARG:HG3	2.31	0.65
2:B:69:ARG:HG2	2:B:110:LEU:CD2	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:126:LYS:HA	3:C:130:ARG:HD3	1.76	0.65
5:E:100:ARG:N	5:E:103:ASP:OD2	2.15	0.65
8:H:177:PHE:HA	8:H:180:ILE:HD12	1.77	0.65
1:A:207:ASN:O	1:A:210:LEU:HB3	1.96	0.65
6:F:199:LEU:HD21	6:F:205:ILE:HG13	1.78	0.65
8:H:174:PHE:HA	8:H:177:PHE:HD2	1.61	0.65
3:C:133:LEU:O	3:C:137:LEU:HB2	1.96	0.65
4:D:259:PHE:CD2	4:D:260:THR:HG22	2.31	0.65
1:A:64:UNK:O	1:A:68:UNK:N	2.29	0.65
2:B:110:LEU:HB3	2:B:113:ASN:HB2	1.79	0.65
2:B:242:GLN:OE1	2:B:246:GLN:NE2	2.25	0.65
4:D:252:TYR:HE1	4:D:319:CYS:HG	1.45	0.65
4:D:365:ASP:OD1	4:D:366:ASN:N	2.28	0.65
3:C:333:SER:OG	3:C:334:HIS:N	2.30	0.65
4:D:113:LEU:O	4:D:117:ILE:HG13	1.97	0.65
2:B:261:LEU:O	2:B:264:ILE:N	2.29	0.65
6:F:200:GLU:HG3	6:F:202:SER:H	1.61	0.65
6:F:222:LEU:O	6:F:290:LYS:HE3	1.96	0.65
7:G:243:SER:O	7:G:246:LYS:N	2.30	0.65
7:G:57:PHE:HB3	7:G:135:ARG:NH2	2.12	0.65
8:H:46:ILE:HB	8:H:48:ASN:OD1	1.96	0.65
8:H:59:LYS:NZ	8:H:99:SER:OG	2.29	0.65
2:B:153:ILE:HG12	2:B:186:LEU:HD22	1.79	0.65
7:G:54:LEU:HB2	7:G:67:ASP:HB2	1.77	0.65
1:A:180:ASN:O	1:A:183:LEU:HB2	1.95	0.65
3:C:298:ALA:HA	3:C:321:TYR:CD2	2.32	0.65
5:E:108:GLU:HA	5:E:111:LYS:HG2	1.78	0.65
7:G:111:HIS:CE1	7:G:140:VAL:HG11	2.31	0.65
2:B:362:LEU:HB2	2:B:398:LYS:O	1.96	0.65
3:C:70:ALA:H	3:C:73:LYS:HD2	1.61	0.65
1:A:393:ARG:O	1:A:396:SER:HB3	1.97	0.65
5:E:92:TRP:NE1	5:E:107:ASN:OD1	2.29	0.65
8:H:185:ILE:O	8:H:188:GLU:HB2	1.96	0.65
2:B:288:ASN:O	2:B:291:LYS:HG2	1.96	0.65
4:D:37:LYS:HG3	4:D:38:VAL:N	2.10	0.65
2:B:249:ALA:O	2:B:256:LYS:NZ	2.27	0.65
7:G:249:GLU:OE1	7:G:249:GLU:N	2.29	0.65
2:B:168:TYR:O	2:B:176:LYS:NZ	2.30	0.65
3:C:158:ILE:O	3:C:161:LEU:N	2.26	0.65
6:F:107:GLN:O	6:F:111:SER:CB	2.41	0.65
9:I:64:TRP:O	9:I:67:VAL:N	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:92:TRP:CE2	5:E:120:LEU:HD13	2.31	0.65
6:F:272:VAL:O	6:F:275:SER:OG	2.15	0.65
7:G:209:GLU:O	7:G:212:MET:N	2.28	0.65
1:A:352:VAL:O	1:A:355:GLY:N	2.28	0.65
3:C:55:GLU:N	3:C:84:TYR:OH	2.29	0.65
3:C:131:VAL:HG22	3:C:135:HIS:HD1	1.60	0.65
4:D:101:GLU:O	4:D:105:LYS:HG2	1.97	0.65
6:F:294:MET:O	6:F:297:ILE:HG22	1.96	0.65
2:B:174:SER:O	2:B:178:GLN:HB2	1.97	0.65
7:G:85:ASP:OD1	7:G:86:VAL:N	2.27	0.65
2:B:214:GLU:N	2:B:214:GLU:OE1	2.25	0.65
2:B:134:VAL:O	2:B:138:ARG:HB3	1.96	0.65
2:B:157:ALA:O	2:B:160:LEU:HB2	1.97	0.65
2:B:261:LEU:O	2:B:264:ILE:N	2.30	0.65
6:F:32:PHE:HB3	6:F:41:LEU:HD12	1.79	0.65
8:H:202:LEU:N	8:H:231:SER:O	2.27	0.65
3:C:236:PHE:HE1	3:C:265:MET:HB3	1.62	0.65
2:B:51:ASP:O	2:B:55:SER:CB	2.45	0.65
2:B:51:ASP:O	2:B:55:SER:OG	2.15	0.65
7:G:240:ALA:O	7:G:243:SER:OG	2.13	0.65
8:H:34:LEU:HD23	8:H:38:ASN:CB	2.23	0.65
8:H:75:PHE:HA	8:H:78:PHE:CE2	2.32	0.65
1:A:251:SER:HB3	1:A:283:GLN:HE22	1.62	0.65
2:B:242:GLN:OE1	2:B:246:GLN:NE2	2.26	0.65
2:B:373:GLU:O	2:B:376:THR:N	2.30	0.65
6:F:151:ASP:O	6:F:154:GLU:N	2.30	0.65
8:H:62:LEU:O	8:H:65:GLY:N	2.29	0.65
1:A:336:SER:O	1:A:339:GLN:NE2	2.28	0.65
6:F:311:GLU:O	6:F:314:SER:N	2.30	0.65
1:A:333:PHE:HD2	1:A:346:TYR:HD1	1.45	0.65
1:A:133:GLU:HG3	1:A:173:LEU:HD13	1.78	0.65
4:D:309:LEU:HD11	9:I:77:LEU:HD23	1.77	0.65
3:C:71:LYS:O	3:C:73:LYS:N	2.29	0.65
1:A:378:GLN:HG3	8:H:127:GLN:HE22	1.61	0.65
3:C:299:MET:O	3:C:302:VAL:HG22	1.96	0.65
6:F:57:LEU:O	6:F:61:LEU:N	2.20	0.65
5:E:22:TYR:OH	5:E:126:LYS:NZ	2.22	0.65
4:D:58:GLU:OE2	4:D:140:TYR:OH	2.15	0.65
7:G:127:LYS:O	7:G:130:GLU:N	2.25	0.65
2:B:141:LYS:CD	2:B:179:PHE:CE1	2.43	0.65
3:C:185:TYR:CZ	3:C:193:LYS:HE3	2.31	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:267:LEU:HD22	3:C:331:THR:HG22	1.79	0.65
5:E:37:ILE:HG22	5:E:51:SER:HB3	1.79	0.65
6:F:11:LEU:HA	6:F:14:LEU:HD12	1.78	0.65
7:G:95:LEU:O	7:G:98:THR:OG1	2.12	0.65
6:F:323:ASN:O	6:F:326:HIS:N	2.30	0.65
7:G:27:VAL:HG12	7:G:63:VAL:HB	1.79	0.64
4:D:145:GLY:O	4:D:181:TYR:OH	2.12	0.64
7:G:156:PHE:HB3	7:G:198:SER:HA	1.78	0.64
8:H:111:LEU:HD12	8:H:145:PRO:HB3	1.79	0.64
6:F:11:LEU:HD21	6:F:30:GLU:HB3	1.78	0.64
6:F:148:ASP:OD1	6:F:148:ASP:N	2.26	0.64
2:B:110:LEU:HD12	2:B:110:LEU:N	2.11	0.64
3:C:287:THR:HA	3:C:292:GLN:HE21	1.62	0.64
1:A:338:MET:O	1:A:341:SER:OG	2.08	0.64
6:F:263:PHE:HA	6:F:266:PHE:HB3	1.79	0.64
1:A:154:GLN:O	1:A:158:PHE:CB	2.44	0.64
2:B:115:ARG:HG2	2:B:147:LYS:HB2	1.79	0.64
3:C:171:LYS:HB2	3:C:208:ILE:CG2	2.27	0.64
4:D:44:LYS:O	4:D:47:ALA:N	2.29	0.64
2:B:399:ILE:HG12	6:F:344:VAL:HG21	1.79	0.64
1:A:335:GLN:NE2	1:A:338:MET:HG3	1.99	0.64
4:D:27:SER:O	4:D:30:ALA:HB3	1.98	0.64
1:A:465:ILE:HG23	5:E:280:ASN:ND2	2.12	0.64
1:A:308:GLY:H	9:I:40:ILE:HG12	1.63	0.64
5:E:24:ARG:NE	7:G:100:ARG:HG2	2.12	0.64
2:B:336:HIS:HA	2:B:339:GLU:CD	2.16	0.64
2:B:74:ASP:OD1	2:B:75:LEU:N	2.31	0.64
3:C:122:ILE:HA	3:C:134:LYS:HG3	1.77	0.64
6:F:135:ARG:NH2	6:F:173:SER:OG	2.31	0.64
8:H:123:HIS:O	8:H:126:LEU:N	2.31	0.64
4:D:365:ASP:OD2	4:D:383:ARG:NH2	2.31	0.64
4:D:141:TYR:O	4:D:145:GLY:N	2.30	0.64
3:C:155:LEU:HG	3:C:159:ASN:HD21	1.62	0.64
5:E:92:TRP:CE2	5:E:120:LEU:HD13	2.33	0.64
9:I:34:GLU:N	9:I:34:GLU:OE1	2.25	0.64
1:A:146:LEU:HD12	1:A:149:SER:OG	1.98	0.64
2:B:45:LYS:O	2:B:49:ALA:N	2.31	0.64
3:C:363:SER:O	3:C:367:GLY:N	2.26	0.64
6:F:28:GLN:HA	6:F:31:LYS:HE3	1.77	0.64
5:E:92:TRP:CH2	5:E:106:ILE:HD11	2.33	0.64
6:F:303:LYS:O	6:F:369:ARG:NH2	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:57:LEU:HA	6:F:60:ARG:NH2	2.12	0.64
1:A:344:PRO:HG2	1:A:370:LEU:HD22	1.79	0.64
5:E:88:LYS:NZ	6:F:158:ASP:O	2.30	0.64
3:C:295:GLY:O	3:C:298:ALA:N	2.21	0.64
3:C:144:LEU:O	3:C:147:GLN:HB2	1.97	0.64
4:D:195:ASN:OD1	4:D:210:TYR:OH	2.10	0.64
6:F:10:ILE:O	6:F:14:LEU:HG	1.97	0.64
1:A:243:ASN:C	8:H:131:LYS:HZ2	2.00	0.64
3:C:66:VAL:HG22	3:C:104:PHE:HE1	1.62	0.64
3:C:294:ARG:NH1	3:C:324:GLU:HB2	2.10	0.64
8:H:105:LEU:HA	8:H:108:LEU:HD12	1.80	0.64
1:A:52:UNK:HA	1:A:55:UNK:CB	2.27	0.64
4:D:165:GLY:O	4:D:169:ASP:CB	2.43	0.64
3:C:277:ASP:O	3:C:280:ASN:HB2	1.98	0.64
2:B:114:THR:O	2:B:118:VAL:CB	2.44	0.64
2:B:156:ALA:O	2:B:160:LEU:HG	1.97	0.64
5:E:77:ASN:OD1	5:E:78:GLU:N	2.30	0.64
6:F:360:GLY:HA2	6:F:363:ILE:HD12	1.79	0.64
8:H:44:LEU:HD11	8:H:88:TYR:CE1	2.32	0.64
4:D:193:ALA:O	4:D:196:SER:OG	2.12	0.64
5:E:193:GLN:O	5:E:196:SER:N	2.30	0.64
7:G:120:SER:OG	7:G:121:VAL:N	2.31	0.64
7:G:69:PHE:CE1	7:G:91:MET:HG2	2.32	0.64
8:H:31:LYS:HA	8:H:34:LEU:CB	2.27	0.64
3:C:178:HIS:HB2	3:C:201:ALA:HB2	1.79	0.64
1:A:479:MET:HE3	5:E:290:ASP:HB3	1.78	0.64
3:C:93:THR:O	3:C:97:LEU:CB	2.44	0.64
6:F:220:SER:O	6:F:223:LEU:N	2.31	0.64
6:F:253:GLN:HG3	6:F:269:LEU:HD21	1.80	0.64
7:G:249:GLU:HG2	7:G:253:LYS:HZ1	1.63	0.64
3:C:266:LEU:O	3:C:270:ILE:HG13	1.97	0.64
1:A:167:LEU:HB3	1:A:217:PHE:CE2	2.33	0.64
3:C:325:LEU:O	3:C:332:ARG:NH2	2.31	0.64
7:G:263:GLU:O	7:G:267:LYS:CB	2.44	0.64
6:F:65:PHE:O	6:F:68:LYS:HB2	1.97	0.64
9:I:82:ASP:OD1	9:I:83:ARG:N	2.31	0.64
1:A:334:HIS:HA	1:A:339:GLN:OE1	1.97	0.64
4:D:225:LYS:HA	4:D:260:THR:HG21	1.79	0.64
6:F:179:PHE:CE2	6:F:187:SER:HB3	2.32	0.64
9:I:74:THR:O	9:I:77:LEU:N	2.30	0.64
1:A:146:LEU:HA	1:A:149:SER:CB	2.23	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:83:ASN:HA	8:H:86:LYS:HD3	1.80	0.64
2:B:206:LYS:HA	2:B:209:LYS:HG2	1.80	0.64
2:B:132:VAL:HG22	2:B:136:ARG:HD3	1.78	0.64
8:H:109:TYR:HA	8:H:112:ASN:ND2	2.13	0.64
4:D:117:ILE:HD11	4:D:137:LEU:HD22	1.79	0.64
7:G:111:HIS:HE1	7:G:140:VAL:HG11	1.61	0.64
1:A:131:THR:O	1:A:135:ASN:N	2.31	0.64
2:B:180:ILE:HD11	2:B:199:LEU:O	1.98	0.64
1:A:287:SER:O	1:A:288:THR:OG1	2.15	0.64
3:C:74:LEU:HD22	3:C:111:LEU:CD1	2.28	0.64
4:D:217:HIS:O	4:D:220:ALA:N	2.31	0.64
3:C:178:HIS:O	3:C:182:SER:OG	2.16	0.64
4:D:267:LYS:HB2	4:D:297:TYR:CE1	2.33	0.64
1:A:31:UNK:O	1:A:35:UNK:N	2.30	0.64
3:C:191:LEU:HD22	3:C:228:GLU:CB	2.26	0.64
6:F:302:VAL:O	6:F:369:ARG:NH2	2.30	0.64
2:B:65:LEU:HB2	2:B:75:LEU:HG	1.79	0.64
3:C:130:ARG:NH2	3:C:164:GLU:OE2	2.29	0.64
8:H:258:ASN:OD1	8:H:259:ILE:N	2.30	0.64
2:B:325:ASP:OD1	2:B:326:ASP:N	2.31	0.64
3:C:267:LEU:HA	3:C:270:ILE:HD12	1.80	0.64
5:E:164:GLU:OE1	5:E:164:GLU:HA	1.96	0.64
1:A:154:GLN:HA	1:A:157:GLU:HB3	1.79	0.64
6:F:100:ASP:HA	6:F:103:LYS:HB3	1.80	0.64
1:A:335:GLN:OE1	1:A:335:GLN:N	2.28	0.64
2:B:407:ASN:O	2:B:410:GLN:N	2.31	0.64
3:C:115:ILE:HG13	3:C:145:HIS:CE1	2.33	0.64
6:F:307:MET:HG3	6:F:349:THR:HG22	1.78	0.64
2:B:183:GLN:HB3	2:B:199:LEU:HD23	1.79	0.64
2:B:315:GLN:O	2:B:319:GLU:HB2	1.98	0.64
5:E:20:ASP:OD2	7:G:100:ARG:NH1	2.30	0.64
5:E:31:LYS:HZ1	5:E:58:GLU:HB3	1.62	0.64
7:G:30:SER:OG	7:G:66:VAL:O	2.16	0.64
8:H:87:PRO:O	8:H:91:SER:N	2.21	0.64
1:A:271:ARG:NE	9:I:37:ASP:OD2	2.25	0.64
6:F:229:ASN:HD21	6:F:357:ILE:HG12	1.63	0.64
1:A:327:ILE:HD13	1:A:353:LYS:HG3	1.80	0.64
2:B:98:GLN:O	2:B:101:MET:HG2	1.98	0.64
6:F:157:LEU:O	6:F:160:LYS:N	2.31	0.64
3:C:282:LEU:HD22	3:C:300:LYS:HG3	1.79	0.64
3:C:370:THR:O	3:C:373:VAL:N	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:294:ASN:O	5:E:297:GLN:N	2.31	0.64
6:F:62:TYR:O	6:F:67:SER:N	2.31	0.63
3:C:139:ILE:HB	3:C:165:PHE:HZ	1.63	0.63
2:B:112:LEU:O	2:B:115:ARG:HG2	1.97	0.63
3:C:210:CYS:SG	3:C:211:PRO:HD2	2.38	0.63
5:E:290:ASP:O	5:E:293:GLU:N	2.30	0.63
8:H:166:SER:O	8:H:169:GLN:NE2	2.29	0.63
3:C:298:ALA:HA	3:C:321:TYR:CE2	2.32	0.63
5:E:268:LYS:O	5:E:271:ASP:N	2.31	0.63
8:H:140:SER:HB2	8:H:142:LEU:HG	1.80	0.63
1:A:259:TYR:O	1:A:261:HIS:ND1	2.31	0.63
6:F:143:LEU:HD21	6:F:182:LYS:HD3	1.78	0.63
2:B:294:GLU:OE1	2:B:294:GLU:N	2.31	0.63
3:C:151:TYR:O	3:C:155:LEU:HB3	1.97	0.63
4:D:228:ALA:HB2	4:D:256:THR:HG22	1.80	0.63
4:D:63:TYR:HE2	4:D:94:PHE:HD1	1.44	0.63
6:F:302:VAL:O	6:F:369:ARG:NH2	2.29	0.63
7:G:205:LYS:HA	7:G:209:GLU:OE1	1.98	0.63
7:G:262:THR:O	7:G:265:GLU:N	2.30	0.63
2:B:247:THR:HB	2:B:250:ILE:HG22	1.79	0.63
3:C:66:VAL:HG21	3:C:103:LYS:HD3	1.81	0.63
3:C:185:TYR:HA	3:C:188:LEU:HB2	1.80	0.63
7:G:207:ALA:O	7:G:210:THR:OG1	2.13	0.63
7:G:257:GLU:HG2	7:G:261:LEU:HD12	1.81	0.63
3:C:315:ASN:O	3:C:319:LYS:HG2	1.99	0.63
4:D:179:PHE:HD2	4:D:243:LEU:HD21	1.63	0.63
6:F:15:ARG:O	6:F:23:HIS:NE2	2.30	0.63
1:A:333:PHE:CD2	1:A:346:TYR:HD1	2.14	0.63
2:B:134:VAL:O	2:B:138:ARG:HB2	1.98	0.63
3:C:222:SER:O	3:C:225:LEU:HG	1.98	0.63
1:A:414:ASP:OD1	1:A:418:THR:OG1	2.13	0.63
3:C:145:HIS:HA	3:C:148:LYS:HB2	1.78	0.63
3:C:185:TYR:HA	3:C:188:LEU:HB2	1.80	0.63
4:D:185:LEU:O	4:D:188:LYS:N	2.32	0.63
4:D:322:LEU:O	4:D:325:HIS:N	2.32	0.63
1:A:308:GLY:O	1:A:312:GLN:N	2.30	0.63
3:C:340:ASP:O	3:C:343:LEU:N	2.30	0.63
4:D:29:LYS:HA	4:D:32:LEU:HD13	1.79	0.63
6:F:167:ILE:O	6:F:170:SER:OG	2.15	0.63
7:G:289:GLU:N	7:G:289:GLU:OE1	2.29	0.63
8:H:40:LEU:HD12	8:H:41:ILE:H	1.62	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:ASN:HA	1:A:180:ASN:HD21	1.58	0.63
6:F:39:PHE:O	6:F:42:SER:OG	2.17	0.63
7:G:263:GLU:HA	7:G:266:LEU:HD12	1.79	0.63
8:H:103:SER:HB2	8:H:141:LEU:HD11	1.80	0.63
3:C:124:PHE:HA	3:C:127:ARG:NH1	2.12	0.63
6:F:58:ARG:HE	6:F:85:SER:HA	1.63	0.63
1:A:404:LEU:HA	1:A:407:ILE:HG22	1.80	0.63
3:C:172:PRO:HA	3:C:208:ILE:HG23	1.80	0.63
3:C:275:ILE:HB	3:C:307:ASN:HD22	1.62	0.63
8:H:44:LEU:HD21	8:H:55:LEU:HD13	1.81	0.63
1:A:206:GLN:O	1:A:210:LEU:CB	2.46	0.63
2:B:66:LEU:HD21	2:B:107:SER:HB3	1.81	0.63
6:F:100:ASP:OD1	6:F:101:ASP:N	2.31	0.63
1:A:153:GLU:O	1:A:157:GLU:CB	2.47	0.63
3:C:116:PHE:HA	3:C:119:GLU:HB2	1.80	0.63
8:H:34:LEU:O	8:H:38:ASN:HB2	1.99	0.63
2:B:185:GLU:HA	2:B:188:ILE:HG22	1.81	0.63
3:C:204:ALA:O	3:C:208:ILE:HG23	1.98	0.63
2:B:101:MET:HE3	2:B:135:GLU:HG3	1.81	0.63
4:D:213:TYR:HE1	4:D:243:LEU:HB2	1.62	0.63
7:G:209:GLU:OE1	7:G:209:GLU:N	2.23	0.63
1:A:134:ILE:HA	1:A:137:PHE:HB3	1.80	0.63
1:A:143:GLN:O	1:A:146:LEU:N	2.31	0.63
5:E:94:HIS:CD2	5:E:96:GLY:H	2.16	0.63
8:H:35:ILE:HA	8:H:38:ASN:ND2	2.14	0.63
3:C:259:CYS:O	3:C:262:LEU:HG	1.99	0.63
4:D:215:GLY:O	4:D:218:CYS:N	2.31	0.63
7:G:286:GLU:OE1	7:G:286:GLU:N	2.18	0.63
7:G:59:ASP:O	7:G:135:ARG:NH1	2.31	0.63
1:A:62:UNK:O	1:A:66:UNK:N	2.31	0.63
3:C:178:HIS:HB2	3:C:201:ALA:HB2	1.80	0.63
4:D:162:ILE:HG23	4:D:166:ALA:HB3	1.80	0.63
8:H:41:ILE:HG23	8:H:51:TYR:OH	1.98	0.63
4:D:171:MET:HA	4:D:174:ILE:HD12	1.81	0.63
2:B:97:ILE:HA	2:B:100:VAL:HG22	1.80	0.63
4:D:360:SER:HB3	9:I:83:ARG:HH22	1.63	0.63
1:A:241:PHE:O	1:A:244:ASN:N	2.23	0.63
2:B:429:ILE:O	2:B:433:ILE:HB	1.99	0.63
3:C:332:ARG:O	3:C:336:ASN:ND2	2.32	0.63
8:H:100:ASP:OD1	8:H:101:LYS:N	2.32	0.63
2:B:175:GLU:O	2:B:178:GLN:HG2	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:253:ASP:OD1	2:B:255:ALA:N	2.32	0.63
3:C:74:LEU:CD2	3:C:104:PHE:HE1	1.62	0.63
8:H:89:TYR:HA	8:H:97:SER:HA	1.81	0.63
9:I:71:ASP:OD1	9:I:72:ASP:N	2.31	0.63
3:C:263:LYS:O	3:C:267:LEU:CB	2.46	0.63
3:C:57:SER:O	3:C:60:GLU:CB	2.47	0.63
6:F:106:PHE:O	6:F:109:LEU:N	2.31	0.63
6:F:75:GLN:HA	6:F:78:VAL:HG22	1.78	0.63
2:B:164:GLN:HG2	2:B:180:ILE:HG12	1.80	0.63
2:B:319:GLU:OE2	2:B:323:ASN:ND2	2.29	0.63
3:C:235:ALA:HB1	3:C:239:PHE:HE2	1.63	0.63
3:C:63:GLN:HE22	3:C:103:LYS:HD3	1.64	0.63
3:C:136:SER:HA	3:C:139:ILE:HG22	1.81	0.63
4:D:139:GLU:O	4:D:143:GLN:N	2.24	0.63
4:D:254:SER:O	4:D:257:GLY:N	2.32	0.63
1:A:249:SER:O	1:A:253:PHE:HB2	1.99	0.63
2:B:110:LEU:HD22	2:B:113:ASN:HD21	1.64	0.63
4:D:62:TYR:O	4:D:66:LEU:HG	1.98	0.63
6:F:209:GLU:O	6:F:212:GLN:N	2.32	0.63
7:G:101:ASP:OD1	7:G:101:ASP:N	2.26	0.63
8:H:160:ALA:O	8:H:163:LEU:N	2.31	0.63
1:A:153:GLU:O	1:A:157:GLU:HB3	1.99	0.63
3:C:333:SER:OG	3:C:334:HIS:N	2.31	0.63
6:F:179:PHE:CE2	6:F:187:SER:HB3	2.34	0.63
4:D:172:LEU:HD21	4:D:194:VAL:HG11	1.79	0.63
6:F:264:ASP:OD1	6:F:265:LYS:N	2.31	0.63
5:E:21:HIS:HA	7:G:100:ARG:NH2	2.14	0.63
7:G:254:ARG:HE	7:G:276:PRO:HD2	1.64	0.63
5:E:32:ARG:HD2	5:E:100:ARG:HE	1.62	0.63
6:F:128:LEU:HG	6:F:167:ILE:HG12	1.81	0.63
2:B:404:LYS:NZ	2:B:405:PRO:O	2.30	0.63
3:C:387:TYR:CE1	3:C:403:PRO:HG3	2.34	0.63
6:F:11:LEU:HA	6:F:14:LEU:HD12	1.80	0.63
3:C:369:ASP:OD1	3:C:370:THR:N	2.31	0.63
4:D:215:GLY:CA	4:D:230:LEU:HD11	2.27	0.63
4:D:41:GLU:O	4:D:45:GLU:HG3	1.99	0.63
6:F:58:ARG:NH2	6:F:85:SER:HA	2.14	0.63
8:H:202:LEU:HA	8:H:205:ILE:HD12	1.80	0.63
2:B:395:ARG:O	2:B:397:ALA:N	2.32	0.63
3:C:97:LEU:O	3:C:101:ILE:N	2.27	0.63
5:E:261:LEU:O	5:E:264:ALA:N	2.29	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:30:UNK:O	1:A:34:UNK:N	2.32	0.62
2:B:76:ASN:ND2	2:B:117:SER:HA	2.14	0.62
2:B:144:VAL:HG13	2:B:156:ALA:HB1	1.81	0.62
2:B:47:ARG:N	2:B:51:ASP:OD2	2.27	0.62
2:B:73:ASP:OD1	2:B:74:ASP:N	2.30	0.62
4:D:120:LEU:O	4:D:130:GLN:NE2	2.31	0.62
1:A:480:ARG:NH1	1:A:482:PRO:HD2	2.11	0.62
6:F:267:ASP:HA	6:F:270:ILE:HD12	1.80	0.62
6:F:307:MET:HG3	6:F:349:THR:HG22	1.81	0.62
1:A:252:ASP:OD1	1:A:253:PHE:N	2.32	0.62
3:C:369:ASP:N	3:C:372:GLN:OE1	2.29	0.62
7:G:273:ARG:HH22	7:G:274:GLN:HB3	1.64	0.62
3:C:122:ILE:O	3:C:126:LYS:HB2	1.98	0.62
3:C:210:CYS:HB3	3:C:214:THR:HG21	1.81	0.62
8:H:30:ILE:O	8:H:34:LEU:N	2.28	0.62
8:H:43:ASP:OD2	8:H:45:SER:HB3	1.99	0.62
9:I:82:ASP:OD1	9:I:83:ARG:N	2.32	0.62
1:A:167:LEU:CD2	1:A:170:TYR:HE1	2.12	0.62
4:D:40:ILE:HA	4:D:43:ARG:HD3	1.81	0.62
6:F:52:ALA:O	6:F:55:THR:N	2.32	0.62
8:H:9:LYS:HG3	8:H:13:ILE:HG13	1.80	0.62
8:H:35:ILE:HG22	8:H:39:LEU:CD2	2.28	0.62
3:C:94:VAL:HA	3:C:97:LEU:HB2	1.80	0.62
2:B:315:GLN:O	2:B:319:GLU:HB2	1.99	0.62
2:B:74:ASP:O	2:B:77:GLU:HG2	1.99	0.62
3:C:102:GLU:HA	3:C:105:GLU:HG2	1.79	0.62
6:F:243:VAL:HG23	6:F:252:PHE:HE2	1.65	0.62
8:H:104:LYS:O	8:H:107:SER:OG	2.17	0.62
8:H:104:LYS:O	8:H:107:SER:OG	2.12	0.62
8:H:110:LEU:O	8:H:113:LEU:N	2.31	0.62
1:A:156:VAL:HG12	1:A:160:ARG:NH1	2.14	0.62
1:A:200:GLU:HG3	1:A:202:ASN:H	1.64	0.62
2:B:395:ARG:O	2:B:395:ARG:HG2	1.99	0.62
7:G:209:GLU:HA	7:G:212:MET:HG2	1.81	0.62
2:B:255:ALA:HA	2:B:258:LYS:HZ3	1.62	0.62
6:F:319:LEU:HD12	6:F:320:PRO:HD2	1.80	0.62
8:H:177:PHE:HA	8:H:180:ILE:HD12	1.80	0.62
8:H:188:GLU:O	8:H:192:ASN:N	2.24	0.62
2:B:240:TYR:O	2:B:243:GLU:N	2.32	0.62
2:B:254:GLU:HA	2:B:257:TRP:CE2	2.34	0.62
4:D:354:ALA:O	4:D:358:GLY:N	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:147:TRP:CZ2	1:A:189:LEU:HD21	2.34	0.62
5:E:59:ASP:HB3	5:E:65:VAL:HG11	1.80	0.62
4:D:185:LEU:O	4:D:188:LYS:N	2.33	0.62
6:F:77:SER:HA	6:F:80:LYS:HE3	1.79	0.62
3:C:277:ASP:O	3:C:281:ILE:HG12	2.00	0.62
1:A:186:TYR:O	1:A:189:LEU:HB3	1.99	0.62
5:E:139:ALA:HA	5:E:153:THR:O	1.99	0.62
5:E:69:ASP:OD1	5:E:70:HIS:N	2.31	0.62
1:A:138:MET:HA	1:A:141:LEU:HD12	1.81	0.62
6:F:205:ILE:HG12	6:F:210:ARG:HG3	1.82	0.62
8:H:266:TYR:O	8:H:269:SER:OG	2.14	0.62
2:B:275:ASN:OD1	7:G:48:GLU:OE2	2.18	0.62
2:B:279:ASP:N	2:B:279:ASP:OD1	2.29	0.62
6:F:263:PHE:CD2	6:F:318:HIS:CD2	2.87	0.62
6:F:264:ASP:O	6:F:267:ASP:N	2.33	0.62
6:F:319:LEU:HD11	6:F:323:ASN:HD22	1.65	0.62
8:H:181:LEU:O	8:H:184:ALA:N	2.32	0.62
6:F:130:ASP:O	6:F:133:ILE:HG13	1.99	0.62
2:B:196:ALA:O	2:B:200:SER:HB3	2.00	0.62
4:D:63:TYR:OH	4:D:95:ASP:N	2.29	0.62
7:G:147:VAL:HG22	7:G:148:LYS:H	1.64	0.62
1:A:479:MET:HB2	5:E:294:ASN:HD22	1.63	0.62
8:H:28:PRO:HA	8:H:31:LYS:HG2	1.81	0.62
4:D:213:TYR:CZ	4:D:243:LEU:HD11	2.33	0.62
6:F:247:ASN:O	6:F:250:TRP:NE1	2.30	0.62
7:G:57:PHE:HE2	7:G:133:ASN:ND2	1.98	0.62
2:B:121:THR:O	2:B:125:VAL:HG23	2.00	0.62
2:B:76:ASN:O	2:B:79:LEU:HB3	2.00	0.62
4:D:173:THR:OG1	4:D:176:ARG:NH2	2.32	0.62
8:H:160:ALA:O	8:H:163:LEU:N	2.32	0.62
1:A:469:ASN:O	1:A:472:HIS:N	2.33	0.62
2:B:59:LEU:HA	2:B:62:ILE:CG1	2.30	0.62
6:F:15:ARG:CZ	6:F:26:PHE:HB3	2.29	0.62
6:F:265:LYS:O	6:F:268:SER:OG	2.14	0.62
5:E:296:ILE:HG22	5:E:300:LYS:HE3	1.80	0.62
1:A:135:ASN:O	1:A:139:HIS:ND1	2.31	0.62
1:A:179:ILE:O	1:A:183:LEU:N	2.31	0.62
1:A:335:GLN:HG2	1:A:336:SER:N	2.14	0.62
4:D:27:SER:OG	4:D:28:GLU:OE1	2.17	0.62
5:E:272:GLU:O	5:E:275:VAL:N	2.32	0.62
5:E:85:ALA:O	5:E:88:LYS:NZ	2.30	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:187:ASP:O	8:H:190:ALA:HB3	2.00	0.62
2:B:419:VAL:O	2:B:422:LEU:HB3	1.99	0.62
3:C:74:LEU:CG	3:C:104:PHE:CE1	2.81	0.62
3:C:287:THR:OG1	3:C:288:LYS:HG3	1.99	0.62
4:D:134:TRP:O	4:D:137:LEU:N	2.31	0.62
3:C:164:GLU:HB3	3:C:168:LEU:HD12	1.81	0.62
3:C:266:LEU:O	3:C:270:ILE:HG13	1.98	0.62
6:F:151:ASP:OD1	6:F:152:ASP:N	2.29	0.62
8:H:199:PHE:HA	8:H:233:VAL:O	1.99	0.62
6:F:7:ILE:O	6:F:11:LEU:HB2	1.99	0.62
7:G:286:GLU:O	7:G:290:ASN:HB2	2.00	0.62
2:B:164:GLN:HE21	2:B:168:TYR:HB3	1.64	0.62
2:B:31:ASP:OD2	2:B:33:ASN:ND2	2.32	0.62
7:G:156:PHE:HB2	7:G:197:TYR:O	1.99	0.62
1:A:335:GLN:HG2	1:A:336:SER:H	1.64	0.62
3:C:329:GLU:N	3:C:329:GLU:OE1	2.33	0.62
3:C:333:SER:OG	3:C:334:HIS:N	2.28	0.62
4:D:242:GLU:HB2	4:D:243:LEU:HD12	1.81	0.62
6:F:19:ASP:OD2	6:F:21:SER:OG	2.15	0.62
1:A:226:ASP:O	1:A:229:THR:OG1	2.17	0.62
2:B:56:LYS:O	2:B:60:ALA:HB2	1.99	0.62
3:C:95:LYS:O	3:C:98:LYS:HB3	1.99	0.62
5:E:92:TRP:CE2	5:E:120:LEU:HD13	2.35	0.62
4:D:106:ASN:OD1	4:D:140:TYR:OH	2.12	0.62
5:E:186:LEU:HD13	7:G:289:GLU:HB2	1.81	0.62
6:F:6:GLU:N	6:F:9:THR:OG1	2.32	0.62
2:B:254:GLU:O	2:B:258:LYS:NZ	2.32	0.62
6:F:75:GLN:HA	6:F:78:VAL:HG22	1.81	0.62
8:H:20:TYR:HA	8:H:23:CYS:HB2	1.82	0.62
6:F:119:SER:OG	6:F:121:ASP:OD1	2.17	0.62
2:B:126:THR:HG22	2:B:136:ARG:NE	2.14	0.62
4:D:392:ARG:O	4:D:394:ASP:N	2.32	0.62
2:B:247:THR:HG22	2:B:249:ALA:H	1.63	0.62
3:C:104:PHE:CE1	3:C:111:LEU:HD12	2.34	0.62
3:C:75:ARG:HH12	3:C:114:GLN:HG3	1.65	0.62
8:H:202:LEU:N	8:H:231:SER:O	2.21	0.62
3:C:165:PHE:CD1	3:C:169:ASP:HB2	2.34	0.62
3:C:369:ASP:OD1	3:C:370:THR:N	2.33	0.62
7:G:244:MET:O	7:G:248:ALA:CB	2.48	0.62
3:C:135:HIS:HB3	3:C:165:PHE:CE1	2.35	0.62
4:D:267:LYS:HB2	4:D:297:TYR:CE1	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:74:SER:OG	7:G:76:THR:O	2.17	0.62
3:C:171:LYS:HZ2	3:C:208:ILE:HG13	1.63	0.62
6:F:319:LEU:HD12	6:F:320:PRO:HD2	1.82	0.62
1:A:425:ARG:HD2	8:H:155:GLY:HA3	1.82	0.62
4:D:113:LEU:O	4:D:117:ILE:HG13	1.99	0.62
4:D:205:GLU:O	4:D:208:ASN:N	2.33	0.62
7:G:108:TYR:HA	7:G:139:VAL:O	2.00	0.62
2:B:420:ASP:O	2:B:423:LEU:N	2.33	0.62
4:D:332:GLU:O	4:D:333:MET:HG2	1.99	0.62
1:A:333:PHE:CD2	1:A:346:TYR:HD1	2.18	0.62
1:A:361:THR:O	1:A:364:ILE:HG13	2.00	0.62
3:C:254:SER:O	3:C:258:ALA:CB	2.48	0.62
6:F:126:ILE:HA	6:F:129:ILE:HD12	1.82	0.62
1:A:174:ARG:HH21	1:A:224:LYS:HE3	1.63	0.61
1:A:177:ASN:O	1:A:181:ALA:N	2.28	0.61
3:C:111:LEU:O	3:C:115:ILE:HG13	2.00	0.61
4:D:262:GLU:N	4:D:262:GLU:OE1	2.25	0.61
1:A:450:ASN:O	1:A:451:ILE:HG13	2.00	0.61
6:F:27:GLU:N	6:F:27:GLU:OE1	2.33	0.61
2:B:133:GLU:HA	2:B:170:SER:HB2	1.81	0.61
2:B:329:PHE:HD1	2:B:338:TRP:NE1	1.97	0.61
8:H:172:SER:OG	8:H:173:GLU:OE1	2.17	0.61
1:A:336:SER:O	1:A:339:GLN:HG2	2.00	0.61
1:A:137:PHE:O	1:A:140:LEU:HB3	2.00	0.61
2:B:72:TRP:CH2	2:B:75:LEU:CD2	2.76	0.61
3:C:283:ASN:HB2	3:C:286:TYR:CD2	2.35	0.61
5:E:294:ASN:O	5:E:298:ASN:HB3	2.00	0.61
5:E:52:PHE:CE1	5:E:76:MET:HG2	2.34	0.61
1:A:467:PHE:HA	1:A:470:GLN:HG2	1.82	0.61
3:C:138:SER:O	3:C:142:ALA:CB	2.48	0.61
6:F:52:ALA:O	6:F:55:THR:N	2.33	0.61
8:H:216:GLU:OE2	8:H:219:LYS:NZ	2.28	0.61
2:B:433:ILE:HD11	5:E:210:TYR:CG	2.34	0.61
6:F:135:ARG:NH2	6:F:173:SER:OG	2.33	0.61
3:C:265:MET:O	3:C:268:SER:OG	2.17	0.61
3:C:294:ARG:O	3:C:298:ALA:CB	2.48	0.61
4:D:322:LEU:O	4:D:324:ARG:N	2.33	0.61
4:D:342:LEU:O	4:D:345:TYR:N	2.33	0.61
7:G:252:SER:HA	7:G:255:ILE:HG22	1.81	0.61
1:A:180:ASN:O	1:A:183:LEU:HB2	2.01	0.61
2:B:48:GLN:O	2:B:51:ASP:N	2.31	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:305:PHE:O	4:D:308:LEU:N	2.33	0.61
6:F:179:PHE:CE2	6:F:187:SER:HB3	2.35	0.61
4:D:382:ASP:OD1	4:D:387:ILE:HG22	1.99	0.61
4:D:62:TYR:CZ	4:D:66:LEU:HD21	2.34	0.61
5:E:94:HIS:CD2	5:E:96:GLY:H	2.18	0.61
2:B:250:ILE:HG22	2:B:256:LYS:HD3	1.81	0.61
3:C:139:ILE:HG13	3:C:165:PHE:HZ	1.64	0.61
1:A:167:LEU:HA	1:A:170:TYR:HE2	1.65	0.61
1:A:329:GLU:HA	9:I:64:TRP:HE1	1.65	0.61
9:I:77:LEU:O	9:I:80:GLU:N	2.32	0.61
3:C:134:LYS:O	3:C:138:SER:OG	2.14	0.61
4:D:132:GLN:HA	4:D:135:ILE:HD12	1.81	0.61
1:A:444:GLU:OE1	1:A:444:GLU:N	2.32	0.61
7:G:115:GLY:H	7:G:117:TRP:HZ3	1.49	0.61
2:B:160:LEU:O	2:B:183:GLN:NE2	2.32	0.61
8:H:144:TYR:O	8:H:148:LEU:HB2	2.00	0.61
2:B:55:SER:O	2:B:59:LEU:HB2	2.01	0.61
1:A:152:LEU:HA	1:A:155:LEU:CD1	2.21	0.61
2:B:203:ILE:HG13	2:B:204:LEU:H	1.66	0.61
2:B:430:GLY:O	2:B:433:ILE:HG22	2.00	0.61
3:C:104:PHE:CZ	3:C:111:LEU:HD12	2.36	0.61
6:F:69:PHE:HD1	6:F:72:LYS:HZ1	1.46	0.61
8:H:50:ILE:O	8:H:53:ASN:N	2.33	0.61
7:G:95:LEU:HB3	7:G:100:ARG:HB3	1.82	0.61
8:H:29:PRO:HA	8:H:32:ILE:HD12	1.81	0.61
8:H:37:ASN:O	8:H:40:LEU:HG	2.00	0.61
2:B:433:ILE:HD11	5:E:210:TYR:CG	2.36	0.61
6:F:298:GLU:OE2	6:F:356:ARG:NH2	2.30	0.61
1:A:462:ASP:OD1	8:H:266:TYR:OH	2.19	0.61
8:H:41:ILE:HG13	8:H:42:PRO:HD3	1.81	0.61
7:G:222:GLN:O	7:G:224:GLY:N	2.34	0.61
1:A:415:SER:OG	1:A:418:THR:OG1	2.17	0.61
1:A:404:LEU:N	1:A:441:GLY:O	2.34	0.61
2:B:325:ASP:OD1	2:B:326:ASP:N	2.34	0.61
3:C:185:TYR:HB3	3:C:190:ASN:OD1	2.01	0.61
4:D:248:SER:O	4:D:251:THR:N	2.34	0.61
4:D:58:GLU:OE1	4:D:140:TYR:OH	2.17	0.61
6:F:268:SER:HA	6:F:271:LYS:NZ	2.14	0.61
6:F:76:LEU:O	6:F:80:LYS:HG3	2.00	0.61
7:G:134:SER:O	7:G:135:ARG:HG2	2.00	0.61
8:H:82:PHE:O	8:H:85:LEU:N	2.33	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:277:SER:HB3	1:A:292:TYR:HB2	1.83	0.61
2:B:407:ASN:O	2:B:410:GLN:N	2.33	0.61
4:D:206:ARG:HA	4:D:209:ARG:HH11	1.65	0.61
2:B:373:GLU:O	2:B:376:THR:N	2.33	0.61
3:C:234:THR:O	3:C:237:SER:HB3	2.01	0.61
3:C:296:ILE:O	3:C:299:MET:HB3	2.01	0.61
4:D:248:SER:OG	4:D:249:ILE:N	2.34	0.61
4:D:309:LEU:HD11	9:I:77:LEU:HD22	1.82	0.61
4:D:360:SER:HB3	9:I:83:ARG:HH22	1.64	0.61
1:A:314:ASN:ND2	1:A:338:MET:SD	2.73	0.61
7:G:54:LEU:HB2	7:G:67:ASP:OD1	2.00	0.61
3:C:151:TYR:CD1	3:C:184:VAL:HG13	2.35	0.61
4:D:164:THR:O	4:D:168:ILE:HB	2.00	0.61
5:E:201:GLN:NE2	6:F:378:GLU:OE1	2.32	0.61
5:E:16:LEU:HB3	7:G:32:ILE:HG22	1.81	0.61
2:B:156:ALA:HA	2:B:159:ILE:HG12	1.82	0.61
3:C:125:ALA:O	3:C:130:ARG:N	2.27	0.61
3:C:283:ASN:HB2	3:C:286:TYR:HD2	1.66	0.61
5:E:261:LEU:O	5:E:264:ALA:N	2.34	0.61
6:F:58:ARG:HE	6:F:85:SER:HA	1.66	0.61
7:G:261:LEU:HD13	7:G:265:GLU:HG2	1.83	0.61
8:H:266:TYR:O	8:H:270:ILE:HD12	2.01	0.61
7:G:204:HIS:O	7:G:205:LYS:HG3	2.01	0.61
1:A:481:TYR:HE2	5:E:297:GLN:HB3	1.65	0.61
6:F:59:LEU:O	6:F:62:TYR:HB3	2.01	0.61
7:G:219:GLU:OE2	7:G:226:LYS:NZ	2.34	0.61
2:B:76:ASN:HD21	2:B:117:SER:HA	1.66	0.61
2:B:142:ASP:O	2:B:146:ILE:HB	2.01	0.61
3:C:284:ALA:HA	3:C:288:LYS:HB2	1.82	0.61
3:C:370:THR:OG1	3:C:371:GLN:N	2.33	0.61
5:E:260:ASN:OD1	5:E:261:LEU:N	2.34	0.61
7:G:117:TRP:HZ3	7:G:119:SER:HB3	1.65	0.61
7:G:86:VAL:O	7:G:90:LYS:HD3	2.00	0.61
1:A:335:GLN:O	1:A:339:GLN:NE2	2.33	0.61
3:C:297:ASP:O	3:C:300:LYS:HB3	2.01	0.61
3:C:355:GLU:OE1	3:C:355:GLU:N	2.33	0.61
1:A:282:ILE:O	1:A:382:ARG:NH2	2.34	0.61
3:C:94:VAL:O	3:C:97:LEU:HB3	2.00	0.61
7:G:284:ALA:O	7:G:287:THR:OG1	2.19	0.61
2:B:141:LYS:HZ2	2:B:179:PHE:HD1	1.48	0.61
5:E:104:LEU:HD22	5:E:152:LYS:HB3	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:264:ASP:OD1	6:F:265:LYS:N	2.34	0.61
5:E:60:GLU:O	5:E:60:GLU:CG	2.45	0.61
8:H:213:ASN:OD1	8:H:215:LYS:N	2.28	0.61
8:H:83:ASN:HA	8:H:86:LYS:HD3	1.83	0.61
1:A:229:THR:OG1	1:A:230:LYS:N	2.33	0.61
1:A:327:ILE:CD1	1:A:353:LYS:HE3	2.31	0.61
4:D:112:GLU:OE1	4:D:112:GLU:N	2.24	0.61
4:D:117:ILE:O	4:D:120:LEU:HB2	2.01	0.61
4:D:342:LEU:O	4:D:345:TYR:N	2.32	0.61
5:E:166:ALA:HB1	7:G:38:LEU:HB3	1.82	0.61
5:E:72:TYR:O	5:E:75:ASN:N	2.32	0.61
1:A:244:ASN:HA	8:H:131:LYS:HZ3	1.63	0.61
1:A:293:ILE:HD11	1:A:313:SER:HB3	1.83	0.61
1:A:384:ARG:O	1:A:388:ILE:HD12	2.01	0.61
4:D:141:TYR:OH	4:D:150:ALA:HA	2.01	0.61
8:H:40:LEU:HD12	8:H:41:ILE:CG1	2.29	0.61
5:E:294:ASN:O	5:E:298:ASN:HB2	1.99	0.60
2:B:373:GLU:OE1	2:B:374:SER:N	2.34	0.60
3:C:267:LEU:HA	3:C:270:ILE:HD12	1.82	0.60
5:E:137:TYR:CD1	5:E:156:HIS:HA	2.35	0.60
5:E:122:ILE:O	5:E:134:THR:HA	2.01	0.60
4:D:135:ILE:O	4:D:139:GLU:CB	2.48	0.60
5:E:112:LYS:NZ	6:F:116:ASN:OD1	2.34	0.60
6:F:373:TRP:NE1	7:G:304:ALA:O	2.26	0.60
1:A:352:VAL:HA	1:A:387:VAL:HG23	1.81	0.60
2:B:187:SER:O	2:B:191:GLY:N	2.33	0.60
7:G:254:ARG:HH12	7:G:266:LEU:HD11	1.66	0.60
3:C:266:LEU:HB3	3:C:299:MET:SD	2.40	0.60
2:B:433:ILE:HD11	5:E:210:TYR:CB	2.31	0.60
6:F:268:SER:HA	6:F:271:LYS:HZ1	1.65	0.60
3:C:246:TYR:HB3	3:C:254:SER:HB2	1.83	0.60
8:H:15:PHE:HB2	8:H:64:VAL:HG11	1.83	0.60
1:A:174:ARG:NH2	1:A:224:LYS:CE	2.63	0.60
3:C:252:HIS:CG	3:C:253:ASN:N	2.69	0.60
6:F:72:LYS:HG3	6:F:73:ILE:HG12	1.83	0.60
1:A:248:ASP:OD2	8:H:121:LYS:NZ	2.33	0.60
3:C:171:LYS:NZ	3:C:207:SER:OG	2.31	0.60
2:B:395:ARG:HE	3:C:361:HIS:CE1	2.18	0.60
8:H:81:TYR:O	8:H:85:LEU:HB2	2.01	0.60
1:A:345:TYR:OH	1:A:374:ASP:OD2	2.18	0.60
5:E:283:ARG:O	5:E:286:ILE:HG22	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:26:PHE:HA	6:F:29:PHE:CD2	2.29	0.60
8:H:32:ILE:HA	8:H:35:ILE:HB	1.83	0.60
8:H:41:ILE:CG1	8:H:42:PRO:HD3	2.28	0.60
8:H:69:SER:OG	8:H:78:PHE:HB3	2.02	0.60
2:B:66:LEU:HA	2:B:72:TRP:HB2	1.83	0.60
5:E:104:LEU:HD11	5:E:152:LYS:HB3	1.83	0.60
8:H:13:ILE:O	8:H:17:ASN:CB	2.46	0.60
3:C:288:LYS:HA	3:C:291:TYR:HB2	1.83	0.60
4:D:199:GLU:OE1	4:D:199:GLU:N	2.30	0.60
1:A:203:SER:O	1:A:207:ASN:N	2.23	0.60
2:B:430:GLY:O	2:B:433:ILE:HG22	2.01	0.60
2:B:50:SER:O	2:B:54:SER:OG	2.13	0.60
3:C:304:GLU:O	3:C:308:ASN:ND2	2.34	0.60
6:F:49:PHE:O	6:F:53:LYS:HG3	2.01	0.60
1:A:167:LEU:HA	1:A:170:TYR:CE2	2.37	0.60
2:B:200:SER:OG	2:B:201:ARG:N	2.35	0.60
2:B:409:SER:O	2:B:412:LEU:N	2.33	0.60
3:C:154:SER:HA	3:C:157:LEU:HD22	1.83	0.60
3:C:277:ASP:HA	3:C:280:ASN:ND2	2.15	0.60
5:E:201:GLN:NE2	6:F:378:GLU:HG3	2.15	0.60
5:E:301:ILE:HD12	5:E:304:GLN:HB3	1.83	0.60
1:A:283:GLN:HB3	8:H:120:THR:HG23	1.83	0.60
8:H:80:ASN:O	8:H:84:GLN:HG2	2.01	0.60
6:F:115:ARG:HG3	6:F:116:ASN:N	2.16	0.60
7:G:270:TYR:O	7:G:273:ARG:N	2.34	0.60
2:B:300:VAL:HG13	2:B:301:LYS:H	1.66	0.60
4:D:141:TYR:O	4:D:145:GLY:N	2.34	0.60
6:F:129:ILE:O	6:F:133:ILE:HG23	2.01	0.60
5:E:78:GLU:OE1	5:E:78:GLU:N	2.35	0.60
6:F:20:PRO:HA	6:F:23:HIS:HB2	1.83	0.60
6:F:267:ASP:O	6:F:271:LYS:NZ	2.29	0.60
8:H:196:SER:OG	8:H:197:TYR:N	2.34	0.60
6:F:250:TRP:O	6:F:253:GLN:HB2	2.01	0.60
6:F:58:ARG:HA	6:F:61:LEU:HD12	1.84	0.60
1:A:132:ALA:O	1:A:135:ASN:N	2.34	0.60
1:A:208:ILE:O	1:A:212:SER:OG	2.12	0.60
2:B:183:GLN:O	2:B:187:SER:OG	2.14	0.60
3:C:189:ARG:O	3:C:189:ARG:HG3	2.02	0.60
4:D:221:VAL:HG23	4:D:223:ASN:H	1.65	0.60
4:D:322:LEU:O	4:D:325:HIS:N	2.29	0.60
2:B:299:LEU:O	2:B:302:LEU:N	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:125:ALA:HB2	3:C:133:LEU:HD12	1.82	0.60
3:C:149:LYS:HG3	3:C:150:GLN:H	1.65	0.60
7:G:273:ARG:NH2	7:G:274:GLN:HB3	2.16	0.60
8:H:88:TYR:O	8:H:91:SER:OG	2.15	0.60
1:A:167:LEU:HB3	1:A:217:PHE:HE2	1.65	0.60
8:H:130:ASP:HA	8:H:136:LEU:HD23	1.81	0.60
1:A:177:ASN:O	1:A:229:THR:HG22	1.97	0.60
4:D:117:ILE:O	4:D:120:LEU:N	2.32	0.60
1:A:392:ILE:HA	1:A:395:ILE:HG22	1.84	0.60
3:C:151:TYR:O	3:C:155:LEU:N	2.34	0.60
8:H:266:TYR:O	8:H:270:ILE:HD12	2.01	0.60
2:B:351:ARG:O	2:B:354:SER:HB3	2.02	0.60
3:C:182:SER:HB2	3:C:198:LEU:HB2	1.84	0.60
3:C:325:LEU:HD11	3:C:332:ARG:HG3	1.83	0.60
5:E:59:ASP:HB3	5:E:62:ASN:CG	2.21	0.60
6:F:71:ASP:OD1	6:F:72:LYS:N	2.34	0.60
8:H:58:THR:HA	8:H:61:ILE:HD12	1.84	0.60
8:H:70:ILE:HD13	8:H:173:GLU:CG	2.30	0.60
1:A:149:SER:O	1:A:150:LYS:HB2	2.01	0.60
2:B:158:ASP:O	2:B:162:GLU:HG2	2.02	0.60
2:B:332:GLU:CG	2:B:333:ALA:H	2.07	0.60
2:B:409:SER:O	2:B:412:LEU:N	2.35	0.60
3:C:408:THR:OG1	3:C:409:TYR:N	2.35	0.60
6:F:231:GLY:HA3	6:F:357:ILE:HB	1.84	0.60
6:F:78:VAL:HA	6:F:81:TYR:CD2	2.36	0.60
2:B:429:ILE:O	2:B:433:ILE:HB	2.00	0.60
5:E:180:ASP:OD1	5:E:181:GLN:N	2.35	0.60
4:D:350:LEU:O	4:D:353:MET:N	2.35	0.60
6:F:135:ARG:NH2	6:F:173:SER:OG	2.33	0.60
7:G:111:HIS:CE1	7:G:117:TRP:O	2.54	0.60
1:A:167:LEU:HA	1:A:170:TYR:CE2	2.36	0.60
1:A:419:VAL:O	1:A:422:MET:N	2.35	0.60
2:B:332:GLU:HG2	2:B:333:ALA:N	2.12	0.60
3:C:318:LEU:O	3:C:322:GLU:HG3	2.02	0.60
4:D:25:GLU:OE1	4:D:53:LYS:NZ	2.34	0.60
6:F:302:VAL:O	6:F:369:ARG:NH2	2.34	0.60
6:F:28:GLN:HA	6:F:31:LYS:HE3	1.84	0.60
2:B:430:GLY:O	2:B:433:ILE:HG22	2.02	0.60
3:C:106:GLN:NE2	3:C:253:ASN:ND2	2.49	0.60
3:C:75:ARG:HA	3:C:78:ILE:HD12	1.84	0.60
6:F:286:PHE:O	6:F:289:GLN:N	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:214:GLU:OE1	8:H:214:GLU:N	2.26	0.60
3:C:132:PHE:CE1	3:C:133:LEU:HG	2.37	0.60
8:H:102:LYS:O	8:H:105:LEU:HB3	2.02	0.60
8:H:49:ASP:O	8:H:52:LEU:HB2	2.01	0.60
5:E:106:ILE:HA	5:E:109:LEU:HD13	1.82	0.60
8:H:214:GLU:O	8:H:217:THR:OG1	2.10	0.60
4:D:267:LYS:HB2	4:D:297:TYR:CE1	2.36	0.60
8:H:12:SER:O	8:H:16:GLU:CB	2.50	0.60
2:B:373:GLU:OE1	2:B:374:SER:N	2.35	0.60
4:D:119:LYS:N	4:D:119:LYS:HD2	2.17	0.60
9:I:66:ASP:OD1	9:I:67:VAL:N	2.34	0.60
1:A:136:CYS:SG	1:A:176:LEU:HD11	2.41	0.60
2:B:132:VAL:HG13	2:B:136:ARG:HD2	1.82	0.60
2:B:329:PHE:HB3	2:B:338:TRP:HE1	1.66	0.60
3:C:181:GLU:OE1	3:C:182:SER:N	2.34	0.60
6:F:38:TRP:CE2	6:F:72:LYS:HD2	2.36	0.60
7:G:120:SER:O	7:G:123:VAL:N	2.34	0.60
8:H:93:ASN:HD21	8:H:95:LYS:HE2	1.65	0.60
6:F:74:ASN:O	6:F:78:VAL:HG13	2.01	0.60
1:A:176:LEU:HD12	1:A:179:ILE:HG21	1.84	0.60
3:C:369:ASP:HB3	3:C:372:GLN:NE2	2.16	0.60
7:G:254:ARG:O	7:G:258:GLU:HB3	2.01	0.60
5:E:302:GLN:HA	5:E:305:ARG:HH11	1.67	0.60
6:F:88:ASP:OD1	6:F:89:SER:N	2.35	0.60
3:C:65:TYR:HB3	3:C:77:PHE:CE2	2.37	0.60
4:D:203:ASP:OD2	4:D:206:ARG:NH1	2.35	0.60
1:A:160:ARG:O	1:A:164:ILE:CG1	2.46	0.60
6:F:270:ILE:O	6:F:274:ILE:HB	2.02	0.60
6:F:314:SER:O	6:F:318:HIS:N	2.34	0.60
7:G:229:ASP:OD1	7:G:230:TYR:N	2.35	0.60
4:D:96:GLN:HG3	4:D:100:ASN:HD21	1.66	0.60
4:D:308:LEU:O	4:D:311:THR:N	2.35	0.60
7:G:264:GLU:N	7:G:264:GLU:OE1	2.27	0.60
5:E:72:TYR:CE1	7:G:94:MET:SD	2.95	0.60
8:H:194:GLU:OE2	8:H:224:ARG:NH2	2.34	0.60
8:H:213:ASN:OD1	8:H:215:LYS:N	2.35	0.60
8:H:199:PHE:CE1	8:H:232:LYS:HD3	2.37	0.60
1:A:241:PHE:O	1:A:245:GLY:N	2.35	0.60
1:A:336:SER:O	1:A:339:GLN:HG3	2.02	0.60
2:B:395:ARG:C	2:B:397:ALA:H	2.05	0.60
5:E:229:LEU:O	5:E:232:VAL:N	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:114:PHE:HB3	7:G:117:TRP:CH2	2.37	0.60
7:G:221:TRP:CE3	7:G:222:GLN:HB3	2.37	0.60
7:G:283:THR:O	7:G:287:THR:OG1	2.13	0.60
1:A:428:ARG:HD2	8:H:191:LYS:HZ2	1.64	0.60
2:B:148:LYS:HE2	2:B:152:LYS:HZ2	1.67	0.59
3:C:419:LEU:O	3:C:422:VAL:N	2.35	0.59
4:D:203:ASP:OD1	4:D:204:TRP:N	2.35	0.59
4:D:213:TYR:OH	4:D:242:GLU:OE1	2.20	0.59
4:D:107:GLU:HA	4:D:110:ILE:HG22	1.84	0.59
6:F:209:GLU:O	6:F:212:GLN:N	2.35	0.59
2:B:112:LEU:HD13	2:B:115:ARG:CZ	2.32	0.59
2:B:150:GLU:OE2	2:B:152:LYS:NZ	2.31	0.59
1:A:384:ARG:O	1:A:388:ILE:HD12	2.02	0.59
2:B:77:GLU:N	2:B:77:GLU:OE1	2.27	0.59
3:C:78:ILE:HG12	3:C:117:VAL:HG23	1.83	0.59
4:D:267:LYS:HB2	4:D:297:TYR:CE1	2.36	0.59
5:E:121:LEU:HA	5:E:135:ASP:O	2.02	0.59
5:E:68:LEU:HD11	5:E:109:LEU:HD21	1.83	0.59
8:H:7:LEU:CD1	8:H:33:GLU:OE2	2.49	0.59
2:B:334:ASN:HB3	2:B:337:HIS:HD2	1.66	0.59
6:F:92:PHE:O	6:F:95:SER:OG	2.15	0.59
5:E:175:LEU:HD11	7:G:213:LEU:HB3	1.83	0.59
7:G:53:MET:HG2	7:G:68:VAL:HG22	1.83	0.59
3:C:250:THR:O	3:C:254:SER:OG	2.14	0.59
5:E:204:LEU:O	5:E:208:VAL:HG23	2.03	0.59
4:D:155:GLY:HA2	4:D:158:LEU:HD12	1.84	0.59
4:D:259:PHE:O	4:D:336:LYS:NZ	2.32	0.59
5:E:201:GLN:CD	6:F:378:GLU:HG3	2.23	0.59
6:F:127:LEU:O	6:F:130:ASP:N	2.35	0.59
2:B:116:ILE:O	2:B:120:GLU:CD	2.41	0.59
2:B:346:ILE:HD11	2:B:379:TYR:CZ	2.37	0.59
2:B:409:SER:O	2:B:412:LEU:N	2.36	0.59
1:A:465:ILE:HG23	5:E:280:ASN:ND2	2.17	0.59
8:H:162:ASP:O	8:H:165:GLN:N	2.35	0.59
1:A:250:ALA:O	1:A:254:ILE:HG12	2.02	0.59
1:A:399:TYR:CD1	1:A:402:ILE:HD11	2.36	0.59
3:C:373:VAL:O	3:C:376:LYS:N	2.35	0.59
9:I:63:ASN:OD1	9:I:64:TRP:N	2.35	0.59
3:C:315:ASN:O	3:C:318:LEU:HG	2.01	0.59
5:E:7:LYS:O	5:E:45:THR:HA	2.02	0.59
8:H:14:ALA:HB1	8:H:23:CYS:HA	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:415:SER:O	1:A:418:THR:OG1	2.21	0.59
1:A:444:GLU:OE1	1:A:444:GLU:N	2.36	0.59
5:E:71:ASN:O	5:E:75:ASN:HB2	2.02	0.59
7:G:186:GLN:O	7:G:189:ILE:HG13	2.02	0.59
2:B:97:ILE:HA	2:B:100:VAL:HG22	1.82	0.59
2:B:273:TYR:O	2:B:273:TYR:CG	2.55	0.59
3:C:422:VAL:O	3:C:425:GLN:N	2.34	0.59
7:G:135:ARG:O	7:G:157:ARG:NH2	2.35	0.59
8:H:32:ILE:O	8:H:35:ILE:HB	2.03	0.59
4:D:209:ARG:NH2	4:D:243:LEU:HB2	2.16	0.59
6:F:15:ARG:NH1	6:F:23:HIS:O	2.33	0.59
7:G:207:ALA:O	7:G:210:THR:OG1	2.20	0.59
8:H:15:PHE:HA	8:H:23:CYS:SG	2.41	0.59
9:I:72:ASP:OD1	9:I:73:PHE:N	2.35	0.59
1:A:323:LEU:HD12	1:A:383:LEU:HD21	1.84	0.59
4:D:44:LYS:O	4:D:47:ALA:N	2.35	0.59
5:E:92:TRP:CH2	5:E:106:ILE:HD11	2.37	0.59
6:F:233:LEU:HD12	6:F:234:LEU:N	2.17	0.59
8:H:89:TYR:CE1	8:H:102:LYS:HB2	2.37	0.59
3:C:210:CYS:SG	3:C:214:THR:OG1	2.57	0.59
4:D:58:GLU:HA	4:D:102:LEU:HD22	1.84	0.59
5:E:128:GLN:N	5:E:128:GLN:OE1	2.35	0.59
8:H:181:LEU:O	8:H:184:ALA:HB3	2.03	0.59
2:B:110:LEU:HD22	2:B:113:ASN:ND2	2.17	0.59
4:D:382:ASP:HB3	4:D:387:ILE:HG13	1.83	0.59
4:D:38:VAL:HG13	4:D:43:ARG:HD2	1.84	0.59
7:G:118:LEU:HD13	7:G:122:ASP:HB2	1.84	0.59
2:B:417:HIS:CD2	7:G:148:LYS:HE3	2.37	0.59
3:C:220:LEU:HB3	3:C:242:SER:HB2	1.84	0.59
4:D:141:TYR:HA	4:D:144:ILE:HG12	1.83	0.59
6:F:203:THR:HG22	6:F:205:ILE:H	1.67	0.59
1:A:311:GLN:HE21	1:A:341:SER:HB2	1.68	0.59
2:B:165:VAL:HG13	2:B:166:GLU:H	1.68	0.59
6:F:57:LEU:HA	6:F:60:ARG:NH1	2.16	0.59
1:A:286:TYR:O	1:A:289:ALA:N	2.35	0.59
2:B:396:PRO:HD3	3:C:356:CYS:O	2.02	0.59
2:B:184:MET:O	2:B:187:SER:N	2.35	0.59
3:C:104:PHE:CE1	3:C:111:LEU:CG	2.86	0.59
3:C:74:LEU:HD22	3:C:104:PHE:HE1	0.72	0.59
3:C:277:ASP:HA	3:C:280:ASN:ND2	2.17	0.59
4:D:315:VAL:HG13	4:D:316:LEU:HD22	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:161:LEU:HD22	3:C:165:PHE:HE2	1.68	0.59
4:D:275:GLU:OE1	4:D:275:GLU:N	2.33	0.59
4:D:35:GLN:HE21	4:D:323:ASN:HD21	1.49	0.59
4:D:411:LEU:O	4:D:414:LEU:N	2.34	0.59
5:E:202:SER:O	5:E:205:LYS:HB3	2.03	0.59
6:F:63:ASP:HA	6:F:67:SER:HB3	1.84	0.59
8:H:38:ASN:O	8:H:42:PRO:HD3	2.02	0.59
2:B:143:LEU:O	2:B:147:LYS:HB3	2.03	0.59
2:B:59:LEU:O	2:B:63:VAL:HG13	2.03	0.59
3:C:330:LEU:O	3:C:333:SER:OG	2.13	0.59
6:F:7:ILE:O	6:F:11:LEU:CB	2.50	0.59
2:B:332:GLU:N	2:B:332:GLU:OE1	2.34	0.59
1:A:469:ASN:O	1:A:473:ASP:N	2.34	0.59
3:C:313:ASP:O	3:C:317:ALA:CB	2.49	0.59
4:D:148:ASP:O	4:D:152:LYS:HG3	2.02	0.59
5:E:64:ASP:CG	5:E:65:VAL:H	2.05	0.59
1:A:142:VAL:O	1:A:145:PHE:HB3	2.03	0.59
2:B:81:LEU:O	2:B:85:LYS:HG2	2.03	0.59
4:D:97:GLU:H	4:D:97:GLU:CD	2.04	0.59
6:F:40:GLN:HA	6:F:43:GLU:HG2	1.84	0.59
7:G:191:GLY:HA2	7:G:194:ARG:HB3	1.84	0.59
7:G:95:LEU:HD23	7:G:98:THR:HG21	1.84	0.59
5:E:24:ARG:HD3	7:G:100:ARG:NH2	2.17	0.59
8:H:172:SER:HB3	8:H:174:PHE:HD2	1.68	0.59
1:A:176:LEU:C	1:A:179:ILE:HG22	2.23	0.59
3:C:267:LEU:HD12	3:C:299:MET:HE1	1.85	0.59
3:C:275:ILE:HB	3:C:307:ASN:ND2	2.18	0.59
4:D:176:ARG:NH2	4:D:242:GLU:OE2	2.35	0.59
4:D:319:CYS:SG	4:D:322:LEU:HB2	2.42	0.59
3:C:277:ASP:O	3:C:281:ILE:HG12	2.03	0.59
3:C:316:THR:HA	3:C:319:LYS:HB2	1.85	0.59
6:F:60:ARG:HB2	6:F:60:ARG:CZ	2.31	0.59
1:A:156:VAL:HG12	1:A:160:ARG:HH11	1.67	0.59
1:A:184:TRP:HA	1:A:187:ILE:HD12	1.83	0.59
2:B:164:GLN:HG3	2:B:176:LYS:HE2	1.84	0.59
3:C:135:HIS:HB3	3:C:168:LEU:HD23	1.84	0.59
5:E:106:ILE:O	5:E:109:LEU:HB3	2.01	0.59
6:F:62:TYR:HA	6:F:66:VAL:CG1	2.32	0.59
8:H:89:TYR:HB3	8:H:102:LYS:HZ2	1.64	0.59
2:B:109:SER:CB	2:B:114:THR:HG22	2.21	0.59
6:F:102:LEU:O	6:F:105:GLN:HB3	2.01	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:27:VAL:HG12	7:G:63:VAL:HB	1.84	0.59
1:A:170:TYR:CD2	1:A:171:TYR:CD2	2.90	0.59
2:B:63:VAL:HA	2:B:75:LEU:HD22	1.82	0.59
6:F:168:THR:HG23	6:F:172:TYR:HE2	1.67	0.59
8:H:221:ALA:HB1	8:H:226:TRP:HB2	1.84	0.59
9:I:77:LEU:O	9:I:80:GLU:N	2.36	0.59
7:G:218:LYS:O	7:G:222:GLN:NE2	2.32	0.59
8:H:140:SER:OG	8:H:141:LEU:N	2.35	0.59
2:B:328:ALA:O	2:B:337:HIS:ND1	2.35	0.59
4:D:170:VAL:O	4:D:173:THR:N	2.36	0.59
4:D:247:GLU:OE1	4:D:247:GLU:N	2.29	0.59
8:H:14:ALA:HB2	8:H:26:LEU:HB2	1.83	0.59
3:C:277:ASP:O	3:C:281:ILE:HG12	2.03	0.59
4:D:173:THR:HA	4:D:176:ARG:HH11	1.67	0.59
5:E:289:ASP:O	5:E:292:ILE:HG13	2.03	0.59
6:F:6:GLU:N	6:F:9:THR:HG1	2.01	0.59
3:C:210:CYS:SG	3:C:214:THR:OG1	2.56	0.59
3:C:146:TYR:CZ	3:C:183:LYS:HB3	2.37	0.59
3:C:217:GLU:OE2	3:C:246:TYR:OH	2.20	0.59
8:H:177:PHE:HA	8:H:180:ILE:HD12	1.85	0.59
8:H:69:SER:O	8:H:72:THR:OG1	2.20	0.59
2:B:69:ARG:HG3	2:B:113:ASN:ND2	2.09	0.59
8:H:134:LYS:O	8:H:135:ASN:ND2	2.36	0.59
2:B:104:LEU:O	2:B:108:LYS:CG	2.48	0.59
8:H:20:TYR:HA	8:H:23:CYS:HB3	1.85	0.59
2:B:65:LEU:HD12	2:B:75:LEU:HD21	1.85	0.59
5:E:140:ILE:HA	5:E:152:LYS:HZ1	1.66	0.59
1:A:330:LEU:O	1:A:333:PHE:N	2.35	0.59
5:E:21:HIS:CD2	5:E:33:CYS:HB3	2.38	0.59
8:H:81:TYR:O	8:H:85:LEU:N	2.34	0.59
1:A:163:VAL:O	1:A:167:LEU:N	2.35	0.59
2:B:269:VAL:HG13	2:B:303:PHE:CE2	2.38	0.59
1:A:230:LYS:HB2	1:A:260:PRO:HG3	1.84	0.59
2:B:223:LEU:O	2:B:226:LYS:N	2.36	0.59
3:C:161:LEU:HD12	3:C:164:GLU:HB2	1.85	0.59
4:D:110:ILE:HG23	4:D:114:ASN:ND2	2.17	0.59
6:F:94:GLU:HG3	6:F:97:LYS:HE3	1.85	0.59
7:G:221:TRP:CE3	7:G:222:GLN:HB3	2.38	0.59
2:B:244:ILE:O	2:B:250:ILE:HG21	2.03	0.59
3:C:135:HIS:CD2	3:C:169:ASP:HB2	2.38	0.59
4:D:165:GLY:O	4:D:169:ASP:N	2.20	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:188:LYS:NZ	4:D:192:GLU:OE2	2.31	0.59
1:A:318:CYS:HG	1:A:332:PHE:HE2	1.51	0.59
6:F:263:PHE:O	6:F:267:ASP:CB	2.51	0.59
8:H:168:SER:O	8:H:170:ASN:N	2.36	0.59
2:B:148:LYS:NZ	2:B:152:LYS:HG2	2.18	0.58
6:F:243:VAL:HA	6:F:252:PHE:CE2	2.37	0.58
7:G:96:LYS:HA	7:G:101:ASP:OD1	2.03	0.58
4:D:62:TYR:HB3	4:D:66:LEU:HG	1.84	0.58
3:C:146:TYR:CD1	3:C:184:VAL:HG22	2.38	0.58
3:C:276:ASP:OD1	3:C:277:ASP:N	2.36	0.58
3:C:419:LEU:O	3:C:422:VAL:N	2.36	0.58
7:G:207:ALA:O	7:G:210:THR:OG1	2.21	0.58
9:I:73:PHE:CE2	9:I:77:LEU:HD22	2.37	0.58
1:A:157:GLU:HG3	1:A:161:LYS:HE3	1.85	0.58
2:B:177:ILE:HG12	2:B:203:ILE:HD11	1.85	0.58
3:C:104:PHE:CE1	3:C:111:LEU:CD1	2.86	0.58
3:C:277:ASP:O	3:C:281:ILE:HG12	2.03	0.58
4:D:24:TYR:CZ	4:D:244:THR:HA	2.38	0.58
7:G:90:LYS:O	7:G:93:ASP:HB3	2.03	0.58
3:C:170:ASP:OD1	3:C:174:LEU:HD13	2.03	0.58
4:D:117:ILE:HD11	4:D:137:LEU:HD22	1.85	0.58
6:F:65:PHE:O	6:F:69:PHE:N	2.27	0.58
8:H:94:HIS:O	8:H:98:GLU:N	2.35	0.58
1:A:248:ASP:OD1	1:A:249:SER:N	2.36	0.58
2:B:263:HIS:CD2	2:B:325:ASP:OD2	2.56	0.58
2:B:294:GLU:HG2	2:B:295:SER:H	1.67	0.58
3:C:145:HIS:HB2	3:C:154:SER:HB3	1.84	0.58
6:F:250:TRP:CE3	6:F:273:GLN:HG3	2.37	0.58
1:A:135:ASN:O	1:A:138:MET:HG2	2.03	0.58
1:A:204:ASP:O	1:A:208:ILE:HD12	2.03	0.58
2:B:112:LEU:CD1	2:B:116:ILE:HD11	2.33	0.58
2:B:144:VAL:HG22	2:B:156:ALA:HB1	1.85	0.58
3:C:134:LYS:O	3:C:138:SER:CB	2.51	0.58
3:C:163:ARG:NH1	3:C:166:LYS:HG2	2.18	0.58
3:C:74:LEU:HA	3:C:77:PHE:CE2	2.38	0.58
4:D:131:ALA:O	4:D:134:TRP:HB2	2.03	0.58
4:D:63:TYR:HE2	4:D:94:PHE:CD1	2.21	0.58
7:G:297:THR:O	7:G:301:ASN:ND2	2.36	0.58
1:A:131:THR:O	1:A:135:ASN:N	2.36	0.58
1:A:152:LEU:CA	1:A:155:LEU:HD13	2.23	0.58
1:A:244:ASN:O	1:A:246:GLU:HG2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:189:ARG:HH11	7:G:293:VAL:HG21	1.68	0.58
6:F:147:ARG:HD3	6:F:178:TYR:CZ	2.39	0.58
7:G:278:LYS:O	7:G:282:GLU:HB2	2.02	0.58
1:A:139:HIS:HD2	1:A:166:ASN:ND2	2.02	0.58
3:C:92:LYS:HE2	3:C:95:LYS:HE3	1.85	0.58
4:D:141:TYR:O	4:D:145:GLY:N	2.35	0.58
3:C:340:ASP:OD1	3:C:376:LYS:NZ	2.29	0.58
8:H:202:LEU:HD23	8:H:205:ILE:HD12	1.86	0.58
1:A:35:UNK:O	1:A:38:UNK:N	2.37	0.58
3:C:237:SER:OG	3:C:238:TYR:N	2.36	0.58
3:C:315:ASN:O	3:C:318:LEU:N	2.31	0.58
3:C:86:MET:SD	3:C:93:THR:HG21	2.44	0.58
4:D:267:LYS:HB2	4:D:297:TYR:CE1	2.39	0.58
6:F:74:ASN:OD1	6:F:76:LEU:N	2.37	0.58
7:G:296:LEU:HD11	8:H:260:ILE:HG23	1.86	0.58
3:C:178:HIS:O	3:C:182:SER:HB2	2.03	0.58
4:D:254:SER:HB3	4:D:289:ILE:HD11	1.85	0.58
5:E:281:LEU:O	5:E:285:ILE:HG22	2.03	0.58
1:A:313:SER:O	1:A:317:HIS:N	2.31	0.58
2:B:395:ARG:HD2	3:C:361:HIS:CD2	2.38	0.58
3:C:135:HIS:HD2	3:C:165:PHE:CE1	2.20	0.58
6:F:360:GLY:HA2	6:F:363:ILE:HD12	1.85	0.58
6:F:49:PHE:CE1	6:F:58:ARG:HB2	2.39	0.58
6:F:75:GLN:HE21	6:F:122:HIS:CE1	2.21	0.58
3:C:204:ALA:HB1	3:C:208:ILE:HD12	1.84	0.58
2:B:351:ARG:HG2	2:B:352:VAL:N	2.18	0.58
4:D:140:TYR:HA	4:D:143:GLN:HB3	1.85	0.58
1:A:346:TYR:O	1:A:350:LYS:NZ	2.31	0.58
6:F:15:ARG:HH12	6:F:27:GLU:HG3	1.68	0.58
6:F:26:PHE:HA	6:F:29:PHE:CZ	2.38	0.58
7:G:148:LYS:HD2	7:G:148:LYS:H	1.68	0.58
1:A:206:GLN:HA	1:A:209:ILE:HB	1.85	0.58
3:C:130:ARG:HB3	3:C:132:PHE:HD2	1.68	0.58
4:D:62:TYR:O	4:D:66:LEU:HG	2.03	0.58
8:H:139:ASP:O	8:H:140:SER:OG	2.19	0.58
1:A:136:CYS:HA	1:A:166:ASN:HD21	1.68	0.58
1:A:286:TYR:CZ	1:A:323:LEU:HD23	2.38	0.58
4:D:222:ARG:HD3	4:D:325:HIS:CD2	2.34	0.58
8:H:213:ASN:OD1	8:H:214:GLU:N	2.35	0.58
7:G:86:VAL:O	7:G:90:LYS:CB	2.51	0.58
3:C:85:MET:HB3	3:C:93:THR:HG23	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:41:LEU:O	6:F:44:SER:OG	2.13	0.58
8:H:214:GLU:OE1	8:H:214:GLU:N	2.29	0.58
1:A:361:THR:O	1:A:364:ILE:HG13	2.02	0.58
2:B:187:SER:HB2	2:B:196:ALA:HB2	1.84	0.58
2:B:236:GLU:HB3	2:B:240:TYR:HE2	1.68	0.58
4:D:317:ILE:HG13	4:D:318:PRO:HD3	1.85	0.58
6:F:32:PHE:O	6:F:36:LYS:N	2.35	0.58
6:F:364:THR:O	6:F:367:LYS:HB3	2.03	0.58
6:F:41:LEU:O	6:F:44:SER:OG	2.17	0.58
1:A:311:GLN:O	1:A:315:LYS:HG2	2.02	0.58
2:B:72:TRP:HZ2	2:B:110:LEU:H	1.50	0.58
2:B:75:LEU:HA	2:B:78:GLN:HG2	1.86	0.58
5:E:281:LEU:O	5:E:285:ILE:HG22	2.04	0.58
6:F:78:VAL:HA	6:F:81:TYR:HD2	1.68	0.58
9:I:77:LEU:O	9:I:80:GLU:N	2.36	0.58
2:B:62:ILE:CG2	2:B:78:GLN:HE22	2.17	0.58
2:B:82:LEU:HD23	2:B:82:LEU:C	2.24	0.58
8:H:202:LEU:N	8:H:231:SER:O	2.36	0.58
1:A:266:SER:O	1:A:270:ALA:HB2	2.04	0.58
3:C:77:PHE:HB2	3:C:104:PHE:HZ	1.68	0.58
4:D:354:ALA:O	4:D:358:GLY:N	2.36	0.58
8:H:89:TYR:CD1	8:H:102:LYS:HD3	2.38	0.58
2:B:118:VAL:O	2:B:122:ILE:HG23	2.03	0.58
2:B:149:GLU:O	2:B:150:GLU:HG3	2.03	0.58
3:C:118:CYS:O	3:C:121:SER:OG	2.14	0.58
3:C:266:LEU:O	3:C:270:ILE:HG13	2.03	0.58
5:E:201:GLN:CD	6:F:378:GLU:HG3	2.24	0.58
6:F:94:GLU:O	6:F:97:LYS:HG2	2.04	0.58
2:B:275:ASN:HA	7:G:114:PHE:CE2	2.39	0.58
7:G:147:VAL:O	7:G:149:GLY:N	2.36	0.58
7:G:156:PHE:HB2	7:G:197:TYR:O	2.03	0.58
1:A:181:ALA:HA	1:A:184:TRP:HD1	1.67	0.58
7:G:267:LYS:O	7:G:271:VAL:HG23	2.04	0.58
6:F:270:ILE:O	6:F:274:ILE:HB	2.02	0.58
8:H:178:THR:HG22	8:H:182:LYS:NZ	2.18	0.58
1:A:401:LYS:HA	1:A:443:ILE:O	2.03	0.58
8:H:168:SER:HA	8:H:171:ILE:HB	1.86	0.58
1:A:317:HIS:HD2	1:A:332:PHE:HE1	1.50	0.58
1:A:450:ASN:O	1:A:451:ILE:HG12	2.03	0.58
3:C:301:ALA:O	3:C:305:ALA:HB2	2.04	0.58
1:A:266:SER:HA	1:A:269:GLU:OE2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:351:ARG:O	2:B:354:SER:N	2.37	0.58
3:C:315:ASN:O	3:C:318:LEU:HG	2.03	0.58
4:D:319:CYS:HB3	4:D:322:LEU:HB2	1.86	0.58
5:E:297:GLN:HA	5:E:300:LYS:HD2	1.85	0.58
6:F:80:LYS:HE2	6:F:166:ARG:HD2	1.85	0.58
7:G:275:ASP:O	7:G:278:LYS:N	2.36	0.58
1:A:384:ARG:NE	8:H:154:GLU:OE2	2.34	0.58
1:A:271:ARG:NH2	9:I:33:ASP:OD2	2.36	0.58
1:A:184:TRP:HA	1:A:187:ILE:HD12	1.85	0.58
2:B:59:LEU:HD11	2:B:96:MET:HB3	1.85	0.58
5:E:139:ALA:HA	5:E:153:THR:O	2.03	0.58
6:F:6:GLU:O	6:F:10:ILE:N	2.28	0.58
2:B:269:VAL:HG13	2:B:303:PHE:CE2	2.39	0.58
4:D:269:LYS:O	4:D:273:SER:N	2.36	0.58
3:C:429:LYS:NZ	5:E:293:GLU:OE2	2.36	0.58
6:F:7:ILE:HG13	6:F:10:ILE:HD12	1.86	0.58
8:H:175:ASP:OD1	8:H:176:SER:N	2.36	0.58
1:A:183:LEU:HG	1:A:187:ILE:HD11	1.85	0.58
1:A:219:LYS:O	1:A:222:SER:OG	2.13	0.58
2:B:352:VAL:O	2:B:355:GLU:N	2.35	0.58
5:E:108:GLU:N	5:E:108:GLU:OE1	2.35	0.58
2:B:210:ASN:HD21	2:B:212:LYS:HB3	1.69	0.58
5:E:201:GLN:NE2	6:F:378:GLU:HG3	2.18	0.58
5:E:304:GLN:HA	5:E:307:LYS:C	2.24	0.58
1:A:350:LYS:HZ1	9:I:64:TRP:HZ3	1.52	0.58
3:C:236:PHE:HA	3:C:239:PHE:CE1	2.38	0.58
2:B:199:LEU:O	2:B:202:LYS:NZ	2.36	0.58
2:B:59:LEU:HA	2:B:62:ILE:CD1	2.34	0.58
2:B:72:TRP:CE3	2:B:73:ASP:N	2.72	0.58
3:C:267:LEU:HD21	3:C:331:THR:HA	1.84	0.58
4:D:209:ARG:O	4:D:212:THR:OG1	2.16	0.58
2:B:250:ILE:HD12	2:B:256:LYS:HG3	1.85	0.58
3:C:151:TYR:HB2	3:C:184:VAL:HG13	1.85	0.58
8:H:220:PHE:O	8:H:224:ARG:N	2.33	0.58
4:D:230:LEU:HD12	4:D:231:LEU:N	2.19	0.58
4:D:342:LEU:O	4:D:345:TYR:N	2.30	0.58
2:B:148:LYS:O	2:B:150:GLU:N	2.37	0.58
4:D:158:LEU:O	4:D:167:LYS:NZ	2.36	0.58
4:D:257:GLY:HA2	4:D:261:LEU:HD23	1.85	0.58
1:A:156:VAL:HG21	1:A:194:LEU:HD22	1.85	0.58
2:B:244:ILE:O	2:B:250:ILE:HG21	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:413:LYS:HG3	4:D:417:TYR:HE2	1.68	0.58
5:E:303:GLU:O	5:E:307:LYS:N	2.32	0.58
6:F:147:ARG:HD3	6:F:178:TYR:CZ	2.38	0.58
6:F:378:GLU:N	6:F:378:GLU:OE1	2.28	0.58
3:C:152:LYS:HA	3:C:156:ALA:H	1.69	0.58
3:C:185:TYR:CD1	3:C:188:LEU:HD12	2.39	0.58
4:D:371:PHE:HB3	4:D:376:GLN:HB2	1.86	0.58
6:F:378:GLU:N	6:F:378:GLU:OE1	2.29	0.58
2:B:148:LYS:O	2:B:150:GLU:N	2.37	0.58
3:C:295:GLY:O	3:C:298:ALA:HB3	2.04	0.58
5:E:117:ASN:HD21	5:E:139:ALA:H	1.49	0.58
6:F:126:ILE:O	6:F:129:ILE:HB	2.03	0.58
3:C:175:VAL:HG13	3:C:201:ALA:HB1	1.86	0.57
4:D:167:LYS:HB3	4:D:197:MET:HE1	1.85	0.57
4:D:284:ALA:HA	4:D:287:GLN:HB2	1.86	0.57
8:H:213:ASN:OD1	8:H:214:GLU:N	2.37	0.57
2:B:148:LYS:HA	2:B:153:ILE:HD12	1.86	0.57
3:C:322:GLU:O	3:C:326:MET:HG3	2.04	0.57
4:D:397:ASN:O	4:D:400:TYR:HB3	2.04	0.57
6:F:6:GLU:HB3	6:F:9:THR:HG23	1.85	0.57
3:C:217:GLU:HA	3:C:220:LEU:HG	1.85	0.57
4:D:134:TRP:O	4:D:137:LEU:HB3	2.04	0.57
5:E:204:LEU:O	5:E:208:VAL:HG23	2.04	0.57
6:F:57:LEU:HD23	6:F:60:ARG:CZ	2.33	0.57
7:G:108:TYR:HA	7:G:139:VAL:O	2.03	0.57
8:H:200:LEU:O	8:H:232:LYS:HA	2.04	0.57
3:C:236:PHE:HE1	3:C:265:MET:HB3	1.69	0.57
4:D:171:MET:HA	4:D:174:ILE:HD12	1.86	0.57
4:D:41:GLU:O	4:D:45:GLU:HG3	2.04	0.57
7:G:288:LEU:O	7:G:291:ASN:N	2.36	0.57
8:H:41:ILE:HD13	8:H:58:THR:CB	2.26	0.57
1:A:170:TYR:HD2	1:A:171:TYR:N	2.02	0.57
1:A:219:LYS:O	1:A:222:SER:OG	2.16	0.57
6:F:42:SER:O	6:F:46:THR:HB	2.04	0.57
7:G:252:SER:O	7:G:255:ILE:HG13	2.04	0.57
2:B:206:LYS:HA	2:B:209:LYS:HZ3	1.67	0.57
6:F:240:GLU:OE1	6:F:240:GLU:N	2.30	0.57
6:F:307:MET:HG3	6:F:349:THR:HG22	1.85	0.57
6:F:75:GLN:HG2	6:F:122:HIS:HA	1.85	0.57
5:E:24:ARG:NH1	7:G:100:ARG:HG2	2.18	0.57
3:C:133:LEU:O	3:C:137:LEU:HB2	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:263:LYS:HE2	3:C:264:TYR:CE2	2.38	0.57
7:G:30:SER:OG	7:G:66:VAL:O	2.19	0.57
3:C:74:LEU:HD13	3:C:104:PHE:HD1	1.69	0.57
9:I:60:TRP:O	9:I:62:GLU:HG2	2.04	0.57
1:A:204:ASP:O	1:A:208:ILE:HG12	2.03	0.57
3:C:193:LYS:O	3:C:197:SER:HB3	2.04	0.57
4:D:275:GLU:O	4:D:278:SER:N	2.37	0.57
6:F:45:LEU:O	6:F:48:PHE:HB2	2.04	0.57
7:G:93:ASP:OD1	7:G:94:MET:N	2.37	0.57
8:H:41:ILE:HG21	8:H:58:THR:CB	2.33	0.57
2:B:37:ASP:O	2:B:40:LEU:HG	2.04	0.57
4:D:164:THR:HA	4:D:167:LYS:HE3	1.86	0.57
3:C:363:SER:O	3:C:367:GLY:N	2.33	0.57
5:E:283:ARG:HH12	8:H:270:ILE:HG13	1.68	0.57
8:H:173:GLU:OE1	8:H:173:GLU:N	2.29	0.57
1:A:293:ILE:HD11	1:A:313:SER:HB2	1.86	0.57
3:C:190:ASN:ND2	3:C:193:LYS:HB3	2.20	0.57
4:D:146:ASP:OD2	4:D:149:ASN:ND2	2.38	0.57
5:E:92:TRP:CZ2	5:E:120:LEU:HD22	2.39	0.57
3:C:145:HIS:HD1	3:C:148:LYS:HD2	1.69	0.57
3:C:176:ASP:OD1	3:C:177:VAL:N	2.37	0.57
6:F:10:ILE:O	6:F:14:LEU:HG	2.05	0.57
6:F:132:GLU:OE2	6:F:135:ARG:HD2	2.03	0.57
6:F:169:ASN:HD21	6:F:199:LEU:HD12	1.70	0.57
3:C:376:LYS:O	3:C:379:GLN:N	2.37	0.57
4:D:379:CYS:SG	4:D:388:VAL:HG13	2.43	0.57
6:F:10:ILE:O	6:F:13:THR:HG22	2.04	0.57
2:B:50:SER:O	2:B:54:SER:CB	2.51	0.57
3:C:151:TYR:CD1	3:C:184:VAL:HG13	2.39	0.57
3:C:77:PHE:HA	3:C:80:HIS:HB2	1.85	0.57
6:F:373:TRP:NE1	7:G:304:ALA:O	2.36	0.57
8:H:24:GLU:HA	8:H:27:LEU:HD13	1.86	0.57
2:B:135:GLU:N	2:B:135:GLU:OE1	2.37	0.57
3:C:363:SER:O	3:C:367:GLY:N	2.30	0.57
7:G:238:LEU:HD11	7:G:242:LYS:HE3	1.85	0.57
2:B:98:GLN:O	2:B:102:GLU:HG2	2.03	0.57
3:C:383:ASP:OD1	4:D:263:ARG:NH1	2.38	0.57
8:H:157:TYR:O	8:H:160:ALA:N	2.38	0.57
9:I:58:ASN:OD1	9:I:58:ASN:O	2.22	0.57
1:A:191:HIS:NE2	1:A:207:ASN:OD1	2.34	0.57
4:D:126:GLY:HA2	4:D:130:GLN:NE2	2.19	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:141:TYR:OH	4:D:153:THR:HB	2.04	0.57
6:F:112:LYS:HG3	6:F:113:LYS:HG3	1.87	0.57
7:G:216:LEU:HD22	7:G:217:HIS:CE1	2.39	0.57
2:B:196:ALA:O	2:B:200:SER:HB2	2.04	0.57
3:C:78:ILE:HG12	3:C:97:LEU:HD11	1.85	0.57
1:A:168:LEU:HA	1:A:171:TYR:HD2	1.67	0.57
2:B:93:ILE:HB	2:B:96:MET:HB2	1.87	0.57
4:D:241:ILE:HG23	4:D:242:GLU:HG3	1.85	0.57
6:F:361:ASP:OD1	6:F:361:ASP:N	2.35	0.57
3:C:185:TYR:HA	3:C:188:LEU:HD12	1.87	0.57
1:A:478:SER:OG	4:D:422:ARG:NE	2.37	0.57
5:E:211:LEU:O	5:E:215:ILE:HG13	2.04	0.57
7:G:86:VAL:O	7:G:90:LYS:HB2	2.04	0.57
2:B:373:GLU:O	2:B:376:THR:N	2.37	0.57
3:C:419:LEU:O	3:C:422:VAL:N	2.37	0.57
4:D:218:CYS:SG	4:D:226:GLU:HB3	2.45	0.57
2:B:126:THR:HG22	2:B:136:ARG:HH22	1.69	0.57
2:B:294:GLU:HG2	2:B:295:SER:N	2.20	0.57
4:D:24:TYR:O	4:D:27:SER:N	2.31	0.57
4:D:275:GLU:N	4:D:275:GLU:OE1	2.38	0.57
6:F:231:GLY:HA3	6:F:357:ILE:HB	1.87	0.57
1:A:449:LEU:O	1:A:451:ILE:HG23	2.04	0.57
6:F:206:THR:OG1	6:F:209:GLU:OE1	2.08	0.57
6:F:360:GLY:O	6:F:363:ILE:N	2.38	0.57
5:E:79:MET:HE1	7:G:91:MET:HB2	1.85	0.57
1:A:406:ASP:N	1:A:406:ASP:OD1	2.36	0.57
4:D:63:TYR:OH	4:D:94:PHE:HA	2.05	0.57
6:F:279:ILE:HA	6:F:282:GLN:OE1	2.05	0.57
3:C:79:PRO:O	3:C:82:THR:OG1	2.10	0.57
1:A:308:GLY:H	9:I:40:ILE:HG12	1.69	0.57
1:A:132:ALA:O	1:A:135:ASN:N	2.37	0.57
4:D:285:ALA:O	4:D:288:SER:N	2.36	0.57
4:D:348:LEU:HD11	4:D:353:MET:HG3	1.87	0.57
4:D:349:SER:HA	4:D:387:ILE:HD12	1.86	0.57
4:D:62:TYR:HE2	4:D:145:GLY:HA3	1.69	0.57
7:G:270:TYR:O	7:G:273:ARG:N	2.32	0.57
2:B:118:VAL:HG22	2:B:143:LEU:HD12	1.86	0.57
2:B:171:MET:O	2:B:176:LYS:HE3	2.04	0.57
2:B:253:ASP:OD1	2:B:256:LYS:HG2	2.05	0.57
4:D:103:CYS:O	4:D:106:ASN:N	2.36	0.57
4:D:271:ILE:HD11	4:D:294:ILE:HD13	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:166:ASN:O	1:A:169:CYS:N	2.36	0.57
1:A:368:LYS:O	1:A:372:LEU:HB2	2.03	0.57
2:B:396:PRO:HD3	3:C:356:CYS:O	2.05	0.57
3:C:368:LEU:HB3	3:C:372:GLN:OE1	2.04	0.57
3:C:368:LEU:HB3	3:C:372:GLN:OE1	2.04	0.57
4:D:204:TRP:HA	4:D:207:ARG:HB3	1.87	0.57
6:F:252:PHE:O	6:F:256:ASN:ND2	2.38	0.57
6:F:27:GLU:O	6:F:30:GLU:HB2	2.05	0.57
8:H:267:ALA:O	8:H:270:ILE:N	2.36	0.57
1:A:170:TYR:O	1:A:173:LEU:N	2.38	0.57
1:A:384:ARG:O	1:A:388:ILE:HD12	2.05	0.57
4:D:202:GLY:HA2	4:D:207:ARG:NH2	2.20	0.57
4:D:213:TYR:O	4:D:216:ILE:HG22	2.05	0.57
5:E:9:THR:OG1	5:E:162:GLU:HG2	2.04	0.57
1:A:144:LEU:O	1:A:148:ASP:CB	2.53	0.57
1:A:177:ASN:O	1:A:180:ASN:HB3	2.05	0.57
2:B:180:ILE:HG21	2:B:202:LYS:HZ3	1.69	0.57
3:C:154:SER:O	3:C:158:ILE:HG12	2.05	0.57
3:C:253:ASN:HA	3:C:255:TYR:CE2	2.40	0.57
3:C:277:ASP:O	3:C:280:ASN:HB2	2.05	0.57
6:F:135:ARG:NH1	6:F:177:GLN:OE1	2.37	0.57
8:H:137:GLU:OE1	8:H:137:GLU:N	2.29	0.57
4:D:354:ALA:O	4:D:358:GLY:N	2.36	0.57
6:F:31:LYS:O	6:F:35:GLU:N	2.29	0.57
9:I:65:ASP:N	9:I:65:ASP:OD1	2.36	0.57
1:A:44:UNK:O	1:A:48:UNK:N	2.37	0.57
2:B:31:ASP:OD1	2:B:32:CYS:N	2.37	0.57
3:C:307:ASN:HA	3:C:309:ARG:HH12	1.70	0.57
4:D:63:TYR:OH	4:D:95:ASP:N	2.30	0.57
6:F:247:ASN:O	6:F:250:TRP:NE1	2.36	0.57
6:F:222:LEU:O	6:F:290:LYS:HE3	2.05	0.57
5:E:286:ILE:HD13	7:G:281:SER:HB2	1.86	0.57
3:C:253:ASN:O	3:C:256:GLU:N	2.38	0.57
4:D:198:ILE:O	4:D:202:GLY:N	2.33	0.57
6:F:263:PHE:CE2	6:F:318:HIS:CD2	2.93	0.57
3:C:387:TYR:CZ	3:C:403:PRO:HD3	2.40	0.57
5:E:140:ILE:O	5:E:152:LYS:HA	2.05	0.57
1:A:421:TYR:OH	8:H:158:GLN:HB2	2.05	0.57
8:H:213:ASN:HD21	8:H:215:LYS:NZ	2.03	0.57
1:A:253:PHE:CE2	1:A:257:LEU:HD11	2.40	0.57
2:B:105:LYS:CA	2:B:108:LYS:HD3	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:81:GLU:OE1	7:G:81:GLU:N	2.32	0.57
8:H:31:LYS:O	8:H:35:ILE:HG13	2.05	0.57
3:C:180:LEU:O	3:C:184:VAL:HB	2.05	0.57
4:D:113:LEU:O	4:D:117:ILE:HG13	2.05	0.57
2:B:194:SER:HA	2:B:197:THR:HG22	1.86	0.57
2:B:232:ARG:NH2	2:B:336:HIS:HB2	2.19	0.57
4:D:139:GLU:O	4:D:142:ALA:HB3	2.05	0.57
4:D:195:ASN:O	4:D:198:ILE:HG22	2.04	0.57
8:H:109:TYR:O	8:H:112:ASN:HB3	2.04	0.57
1:A:479:MET:O	1:A:481:TYR:N	2.38	0.57
3:C:134:LYS:O	3:C:138:SER:CB	2.51	0.57
3:C:198:LEU:HD11	3:C:221:MET:HB3	1.87	0.57
7:G:203:TYR:O	7:G:205:LYS:NZ	2.37	0.57
8:H:162:ASP:O	8:H:165:GLN:N	2.38	0.57
3:C:130:ARG:HB3	3:C:132:PHE:CD2	2.39	0.57
6:F:160:LYS:NZ	6:F:162:SER:O	2.37	0.57
6:F:32:PHE:O	6:F:36:LYS:N	2.38	0.57
9:I:34:GLU:OE1	9:I:34:GLU:N	2.33	0.57
2:B:112:LEU:HA	2:B:115:ARG:CZ	2.34	0.56
2:B:156:ALA:O	2:B:159:ILE:HG12	2.05	0.56
4:D:165:GLY:HA2	4:D:206:ARG:HE	1.69	0.56
2:B:121:THR:O	2:B:125:VAL:HG22	2.05	0.56
4:D:354:ALA:HB1	4:D:359:VAL:O	2.05	0.56
4:D:29:LYS:HG3	4:D:49:PHE:CD2	2.39	0.56
9:I:67:VAL:HG13	9:I:68:GLU:HG3	1.87	0.56
1:A:240:ASP:O	1:A:244:ASN:ND2	2.38	0.56
1:A:384:ARG:NH2	8:H:154:GLU:OE2	2.38	0.56
2:B:101:MET:HA	2:B:104:LEU:HD13	1.87	0.56
2:B:296:GLN:CD	2:B:296:GLN:H	2.08	0.56
3:C:157:LEU:O	3:C:161:LEU:HB3	2.01	0.56
3:C:219:ASP:O	3:C:222:SER:N	2.38	0.56
4:D:119:LYS:HA	4:D:122:GLU:HG2	1.87	0.56
5:E:20:ASP:O	5:E:24:ARG:CB	2.52	0.56
6:F:7:ILE:O	6:F:11:LEU:CB	2.52	0.56
7:G:58:VAL:HB	7:G:62:THR:HG23	1.86	0.56
5:E:175:LEU:HD11	7:G:213:LEU:HB3	1.87	0.56
1:A:333:PHE:CE2	1:A:346:TYR:HA	2.39	0.56
2:B:82:LEU:HA	2:B:85:LYS:HE2	1.87	0.56
1:A:329:GLU:CD	1:A:331:SER:H	2.09	0.56
6:F:11:LEU:O	6:F:15:ARG:HG3	2.04	0.56
8:H:119:THR:HG22	8:H:123:HIS:CD2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:184:MET:O	2:B:187:SER:N	2.37	0.56
2:B:236:GLU:HB3	2:B:240:TYR:HE2	1.70	0.56
4:D:167:LYS:O	4:D:171:MET:HG2	2.05	0.56
4:D:349:SER:HA	4:D:387:ILE:HD12	1.87	0.56
7:G:264:GLU:O	7:G:268:THR:OG1	2.16	0.56
4:D:235:LEU:HD11	4:D:275:GLU:HB2	1.87	0.56
6:F:259:THR:O	6:F:362:GLN:NE2	2.38	0.56
8:H:109:TYR:O	8:H:112:ASN:HB3	2.05	0.56
1:A:209:ILE:O	1:A:212:SER:HB2	2.05	0.56
2:B:102:GLU:O	2:B:106:SER:OG	2.12	0.56
4:D:98:LEU:O	4:D:102:LEU:HG	2.04	0.56
5:E:299:LYS:O	5:E:303:GLU:HB3	2.05	0.56
7:G:120:SER:O	7:G:123:VAL:N	2.38	0.56
8:H:46:ILE:O	8:H:47:GLN:HB2	2.04	0.56
8:H:41:ILE:HA	8:H:51:TYR:OH	2.05	0.56
1:A:167:LEU:HB3	1:A:171:TYR:OH	2.05	0.56
3:C:126:LYS:HB3	3:C:134:LYS:HD2	1.87	0.56
4:D:29:LYS:HA	4:D:32:LEU:HD12	1.86	0.56
2:B:325:ASP:OD1	2:B:326:ASP:N	2.39	0.56
3:C:284:ALA:O	3:C:289:GLU:N	2.28	0.56
7:G:113:GLY:HA2	7:G:144:ILE:HD11	1.86	0.56
2:B:282:HIS:CE1	2:B:304:THR:HG23	2.40	0.56
2:B:49:ALA:HA	2:B:52:LEU:HB3	1.88	0.56
2:B:59:LEU:HA	2:B:62:ILE:HD12	1.88	0.56
4:D:184:GLN:HE21	4:D:217:HIS:HD2	1.53	0.56
1:A:230:LYS:NZ	1:A:260:PRO:HD3	2.21	0.56
1:A:286:TYR:CZ	1:A:323:LEU:HD23	2.40	0.56
2:B:134:VAL:O	2:B:138:ARG:N	2.32	0.56
3:C:63:GLN:OE1	3:C:103:LYS:NZ	2.29	0.56
2:B:181:LEU:HD12	2:B:182:GLU:N	2.19	0.56
4:D:126:GLY:O	4:D:129:GLU:N	2.38	0.56
4:D:213:TYR:O	4:D:216:ILE:N	2.38	0.56
6:F:242:ILE:HD12	6:F:248:TYR:CD2	2.40	0.56
6:F:251:LEU:O	6:F:254:LEU:HB3	2.04	0.56
6:F:31:LYS:HG2	6:F:35:GLU:CD	2.25	0.56
8:H:88:TYR:O	8:H:91:SER:OG	2.24	0.56
1:A:315:LYS:HD3	1:A:374:ASP:OD2	2.05	0.56
2:B:423:LEU:O	2:B:426:ILE:HG12	2.05	0.56
2:B:60:ALA:O	2:B:63:VAL:HB	2.04	0.56
4:D:25:GLU:OE1	4:D:25:GLU:N	2.31	0.56
5:E:102:SER:O	5:E:106:ILE:HG13	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:279:ILE:HA	6:F:282:GLN:OE1	2.05	0.56
1:A:469:ASN:O	1:A:473:ASP:N	2.38	0.56
2:B:287:ASP:OD1	2:B:289:ASN:N	2.39	0.56
2:B:298:SER:O	2:B:318:TYR:OH	2.23	0.56
5:E:202:SER:O	5:E:205:LYS:HB2	2.06	0.56
7:G:221:TRP:CE3	7:G:222:GLN:HB3	2.40	0.56
1:A:177:ASN:ND2	1:A:226:ASP:HB3	2.08	0.56
3:C:184:VAL:HG12	3:C:188:LEU:HD11	1.87	0.56
7:G:261:LEU:HD23	7:G:265:GLU:HG2	1.86	0.56
1:A:479:MET:HA	5:E:294:ASN:ND2	2.19	0.56
2:B:147:LYS:O	2:B:148:LYS:C	2.42	0.56
3:C:98:LYS:HA	3:C:101:ILE:HD12	1.86	0.56
3:C:93:THR:O	3:C:97:LEU:N	2.30	0.56
6:F:131:SER:O	6:F:134:ALA:HB3	2.05	0.56
8:H:14:ALA:HB1	8:H:23:CYS:HA	1.86	0.56
1:A:167:LEU:HA	1:A:170:TYR:CE2	2.40	0.56
2:B:115:ARG:O	2:B:119:ILE:HG23	2.05	0.56
2:B:221:TYR:O	2:B:224:LEU:N	2.39	0.56
9:I:72:ASP:O	9:I:75:ASN:N	2.39	0.56
1:A:174:ARG:HH21	1:A:224:LYS:CE	2.17	0.56
2:B:164:GLN:HB3	2:B:183:GLN:HE22	1.70	0.56
2:B:373:GLU:OE1	2:B:373:GLU:N	2.32	0.56
2:B:66:LEU:HB2	2:B:72:TRP:N	2.21	0.56
6:F:45:LEU:HA	6:F:48:PHE:HB3	1.87	0.56
8:H:213:ASN:HD21	8:H:215:LYS:NZ	2.02	0.56
3:C:163:ARG:HA	3:C:166:LYS:HB2	1.87	0.56
8:H:181:LEU:O	8:H:184:ALA:HB3	2.05	0.56
3:C:201:ALA:O	3:C:205:ALA:CB	2.52	0.56
5:E:209:GLU:O	5:E:212:ASP:HB2	2.05	0.56
8:H:84:GLN:O	8:H:87:PRO:HD2	2.05	0.56
2:B:254:GLU:HA	2:B:257:TRP:CE2	2.41	0.56
3:C:137:LEU:O	3:C:141:LEU:CB	2.52	0.56
2:B:83:SER:HA	2:B:93:ILE:HG23	1.87	0.56
3:C:232:TYR:HB2	3:C:272:LEU:HD21	1.87	0.56
4:D:61:PRO:HG2	4:D:144:ILE:HD12	1.88	0.56
5:E:299:LYS:O	5:E:303:GLU:CB	2.54	0.56
5:E:301:ILE:O	5:E:304:GLN:N	2.38	0.56
3:C:177:VAL:O	3:C:180:LEU:N	2.38	0.56
1:A:399:TYR:OH	4:D:383:ARG:NH2	2.38	0.56
6:F:94:GLU:O	6:F:97:LYS:HB3	2.06	0.56
7:G:216:LEU:HD12	7:G:217:HIS:CD2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:248:ASP:OD1	1:A:249:SER:N	2.38	0.56
3:C:313:ASP:O	3:C:317:ALA:CB	2.53	0.56
4:D:108:SER:O	4:D:111:LYS:HB3	2.06	0.56
4:D:140:TYR:O	4:D:144:ILE:HG12	2.06	0.56
6:F:167:ILE:O	6:F:170:SER:N	2.39	0.56
1:A:52:UNK:O	1:A:56:UNK:CB	2.54	0.56
4:D:27:SER:HB2	4:D:180:PHE:CE1	2.41	0.56
6:F:251:LEU:O	6:F:254:LEU:HB2	2.06	0.56
6:F:103:LYS:O	6:F:106:PHE:N	2.38	0.56
5:E:297:GLN:HA	5:E:300:LYS:NZ	2.21	0.56
8:H:76:ASP:O	8:H:79:GLU:HB2	2.05	0.56
1:A:146:LEU:HD11	1:A:151:GLU:HB3	1.86	0.56
3:C:77:PHE:HB2	3:C:104:PHE:CZ	2.41	0.56
6:F:123:GLY:HA2	6:F:126:ILE:HD12	1.88	0.56
8:H:188:GLU:O	8:H:192:ASN:N	2.28	0.56
8:H:44:LEU:O	8:H:47:GLN:NE2	2.39	0.56
1:A:139:HIS:HD2	1:A:158:PHE:HZ	1.52	0.56
1:A:316:LEU:O	1:A:319:CYS:N	2.39	0.56
3:C:155:LEU:HG	3:C:159:ASN:ND2	2.20	0.56
3:C:240:PHE:O	3:C:244:GLU:HG2	2.05	0.56
4:D:361:VAL:O	4:D:364:LEU:N	2.38	0.56
5:E:165:GLU:OE1	5:E:165:GLU:HA	2.05	0.56
6:F:76:LEU:HD21	6:F:80:LYS:HE3	1.86	0.56
2:B:60:ALA:HA	2:B:63:VAL:HG22	1.86	0.56
4:D:254:SER:HB3	4:D:289:ILE:CD1	2.35	0.56
4:D:46:ALA:O	4:D:49:PHE:HB3	2.06	0.56
6:F:130:ASP:HA	6:F:133:ILE:HD12	1.87	0.56
8:H:21:ALA:O	8:H:25:LYS:HG2	2.05	0.56
2:B:163:LEU:HD21	2:B:179:PHE:HB3	1.87	0.56
3:C:275:ILE:O	3:C:279:LYS:HG2	2.06	0.56
4:D:27:SER:HB3	4:D:180:PHE:CE1	2.41	0.56
4:D:281:SER:HB2	4:D:287:GLN:HB2	1.87	0.56
4:D:51:LEU:O	4:D:54:ILE:HB	2.06	0.56
8:H:109:TYR:HA	8:H:112:ASN:ND2	2.21	0.56
3:C:392:GLN:HB3	4:D:348:LEU:HA	1.87	0.56
3:C:283:ASN:H	3:C:287:THR:HG22	1.70	0.56
4:D:40:ILE:HA	4:D:43:ARG:HG2	1.87	0.56
5:E:229:LEU:O	5:E:232:VAL:N	2.39	0.56
5:E:78:GLU:N	5:E:78:GLU:OE1	2.39	0.56
1:A:384:ARG:HH21	8:H:154:GLU:CD	2.09	0.56
9:I:67:VAL:HG13	9:I:68:GLU:HG3	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:65:LEU:HG	2:B:71:LYS:HE3	1.86	0.56
4:D:140:TYR:O	4:D:144:ILE:HG12	2.05	0.56
7:G:40:HIS:CE1	7:G:70:ALA:HB1	2.41	0.56
8:H:103:SER:HB2	8:H:142:LEU:HD13	1.88	0.56
1:A:472:HIS:CD2	5:E:283:ARG:HH12	2.24	0.56
3:C:277:ASP:HA	3:C:280:ASN:ND2	2.20	0.56
4:D:114:ASN:HA	4:D:117:ILE:HD12	1.88	0.56
4:D:209:ARG:HH21	4:D:243:LEU:HB2	1.70	0.56
5:E:24:ARG:HH11	7:G:100:ARG:NH2	2.04	0.56
3:C:275:ILE:HB	3:C:307:ASN:ND2	2.21	0.56
6:F:46:THR:OG1	6:F:81:TYR:OH	2.22	0.56
1:A:416:GLU:OE1	1:A:417:GLN:NE2	2.39	0.56
2:B:223:LEU:O	2:B:226:LYS:N	2.39	0.56
5:E:112:LYS:HE2	5:E:113:TYR:CZ	2.41	0.56
2:B:415:TRP:CD1	5:E:237:PRO:HB3	2.41	0.56
5:E:34:VAL:HG12	5:E:56:PHE:CE2	2.40	0.56
8:H:37:ASN:HB3	8:H:41:ILE:HD11	1.87	0.56
1:A:184:TRP:HA	1:A:187:ILE:HD12	1.88	0.56
3:C:282:LEU:HD21	3:C:296:ILE:CG2	2.35	0.56
6:F:314:SER:OG	6:F:319:LEU:O	2.16	0.56
6:F:55:THR:HG22	6:F:57:LEU:H	1.70	0.56
6:F:74:ASN:O	6:F:78:VAL:HG23	2.06	0.56
7:G:81:GLU:OE1	7:G:81:GLU:N	2.26	0.56
1:A:174:ARG:NH1	1:A:224:LYS:HG2	2.20	0.56
2:B:140:THR:CG2	2:B:163:LEU:HD13	2.34	0.56
5:E:62:ASN:OD1	5:E:63:SER:N	2.38	0.56
8:H:58:THR:HA	8:H:61:ILE:HD12	1.87	0.56
2:B:51:ASP:O	2:B:55:SER:HB2	2.04	0.56
3:C:98:LYS:O	3:C:101:ILE:HB	2.05	0.56
4:D:111:LYS:O	4:D:114:ASN:HB2	2.04	0.56
6:F:247:ASN:O	6:F:250:TRP:NE1	2.37	0.56
6:F:66:VAL:O	6:F:70:TYR:HB3	2.06	0.56
7:G:244:MET:O	7:G:248:ALA:HB2	2.05	0.56
8:H:51:TYR:O	8:H:52:LEU:C	2.43	0.56
3:C:226:HIS:CD2	3:C:238:TYR:HE2	2.24	0.56
4:D:361:VAL:O	4:D:364:LEU:N	2.39	0.56
1:A:188:TYR:HB2	1:A:236:LEU:HD21	1.88	0.56
2:B:140:THR:O	2:B:143:LEU:HB3	2.06	0.56
6:F:179:PHE:CE2	6:F:187:SER:HB3	2.41	0.56
4:D:59:MET:CG	4:D:62:TYR:HB3	2.35	0.56
6:F:298:GLU:O	6:F:301:PHE:N	2.39	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:122:ILE:O	3:C:126:LYS:HG2	2.05	0.56
4:D:56:GLU:HG2	4:D:57:GLU:HG2	1.88	0.56
4:D:350:LEU:O	4:D:353:MET:N	2.39	0.56
5:E:153:THR:OG1	5:E:154:PHE:N	2.38	0.56
5:E:164:GLU:OE1	5:E:164:GLU:N	2.37	0.56
6:F:200:GLU:HG3	6:F:202:SER:N	2.20	0.56
6:F:52:ALA:O	6:F:58:ARG:NH1	2.39	0.56
1:A:168:LEU:CA	1:A:171:TYR:CE1	2.85	0.56
5:E:187:SER:HB3	8:H:271:GLU:OE1	2.06	0.56
5:E:193:GLN:O	5:E:196:SER:N	2.39	0.56
6:F:32:PHE:O	6:F:36:LYS:N	2.25	0.56
8:H:33:GLU:HG2	8:H:37:ASN:ND2	2.21	0.56
3:C:135:HIS:HD1	3:C:165:PHE:HD1	1.54	0.56
1:A:348:LEU:O	1:A:351:ALA:N	2.39	0.56
2:B:112:LEU:HD11	2:B:116:ILE:HD11	1.86	0.56
3:C:319:LYS:HA	3:C:322:GLU:HG3	1.87	0.56
5:E:128:GLN:HB2	5:E:130:VAL:HG22	1.88	0.56
1:A:177:ASN:CG	1:A:229:THR:HG21	2.27	0.56
1:A:384:ARG:NH2	8:H:154:GLU:OE2	2.36	0.56
2:B:112:LEU:HD13	2:B:115:ARG:HE	1.71	0.56
3:C:58:ILE:O	3:C:61:LEU:HB2	2.06	0.56
4:D:226:GLU:O	4:D:229:LYS:HG2	2.06	0.56
4:D:286:LEU:O	4:D:290:SER:OG	2.09	0.56
4:D:354:ALA:HB1	4:D:359:VAL:O	2.04	0.56
4:D:52:ALA:O	4:D:55:LYS:N	2.39	0.56
7:G:289:GLU:HG2	7:G:290:ASN:N	2.21	0.56
1:A:163:VAL:HA	1:A:166:ASN:HB2	1.88	0.56
2:B:184:MET:O	2:B:187:SER:OG	2.16	0.56
4:D:29:LYS:HD3	4:D:46:ALA:HB1	1.89	0.56
9:I:79:ALA:HB1	9:I:83:ARG:HH21	1.71	0.56
4:D:147:LYS:HB2	4:D:181:TYR:CE2	2.40	0.55
2:B:75:LEU:O	2:B:79:LEU:CB	2.53	0.55
7:G:33:ALA:O	7:G:36:LYS:N	2.38	0.55
8:H:111:LEU:HD12	8:H:145:PRO:HB3	1.87	0.55
1:A:383:LEU:O	1:A:386:ASN:N	2.39	0.55
2:B:247:THR:HG22	2:B:249:ALA:N	2.21	0.55
3:C:74:LEU:O	3:C:77:PHE:N	2.39	0.55
4:D:97:GLU:OE1	4:D:97:GLU:N	2.33	0.55
8:H:30:ILE:O	8:H:34:LEU:CB	2.55	0.55
3:C:165:PHE:HA	3:C:170:ASP:H	1.71	0.55
4:D:397:ASN:O	4:D:400:TYR:HB3	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:298:GLU:O	6:F:301:PHE:N	2.39	0.55
2:B:97:ILE:HA	2:B:100:VAL:HG22	1.88	0.55
3:C:297:ASP:OD1	3:C:298:ALA:N	2.39	0.55
1:A:168:LEU:C	1:A:171:TYR:HD2	2.09	0.55
1:A:402:ILE:HG22	4:D:383:ARG:HB2	1.88	0.55
6:F:199:LEU:HD12	6:F:200:GLU:H	1.71	0.55
1:A:425:ARG:CD	8:H:155:GLY:HA3	2.35	0.55
3:C:181:GLU:OE1	3:C:182:SER:N	2.39	0.55
3:C:358:GLU:OE1	3:C:358:GLU:N	2.34	0.55
4:D:267:LYS:HD3	4:D:297:TYR:CZ	2.41	0.55
5:E:60:GLU:N	5:E:62:ASN:OD1	2.39	0.55
8:H:174:PHE:O	8:H:178:THR:N	2.29	0.55
1:A:228:GLU:CD	1:A:263:ASP:HB3	2.27	0.55
4:D:142:ALA:O	4:D:145:GLY:N	2.38	0.55
1:A:170:TYR:O	1:A:173:LEU:N	2.39	0.55
2:B:255:ALA:HA	2:B:258:LYS:HZ1	1.71	0.55
2:B:366:ASN:O	2:B:370:ASP:N	2.38	0.55
2:B:373:GLU:OE1	2:B:374:SER:N	2.39	0.55
4:D:154:LEU:O	4:D:157:SER:HB2	2.06	0.55
7:G:264:GLU:OE2	7:G:267:LYS:NZ	2.37	0.55
2:B:245:TYR:HA	2:B:250:ILE:HD11	1.88	0.55
4:D:49:PHE:O	4:D:53:LYS:NZ	2.36	0.55
6:F:23:HIS:HA	6:F:26:PHE:CD2	2.42	0.55
1:A:447:GLU:OE1	1:A:447:GLU:N	2.39	0.55
2:B:436:GLU:N	2:B:436:GLU:OE1	2.29	0.55
4:D:117:ILE:HG23	4:D:134:TRP:HE1	1.71	0.55
2:B:247:THR:OG1	2:B:250:ILE:HG22	2.06	0.55
3:C:135:HIS:HA	3:C:165:PHE:HE1	1.72	0.55
3:C:271:MET:CE	3:C:334:HIS:HB3	2.36	0.55
4:D:113:LEU:HD23	4:D:116:LYS:HD2	1.87	0.55
7:G:36:LYS:NZ	7:G:68:VAL:O	2.28	0.55
8:H:174:PHE:O	8:H:177:PHE:HB2	2.06	0.55
8:H:93:ASN:HB3	8:H:95:LYS:HZ3	1.72	0.55
1:A:147:TRP:HE3	1:A:155:LEU:HD21	1.70	0.55
1:A:227:ASN:HD22	1:A:262:THR:HG22	1.71	0.55
6:F:71:ASP:OD1	6:F:72:LYS:HG2	2.07	0.55
1:A:470:GLN:OE1	1:A:470:GLN:N	2.37	0.55
6:F:43:GLU:O	6:F:47:LYS:HG3	2.07	0.55
1:A:204:ASP:O	1:A:208:ILE:HD12	2.07	0.55
4:D:62:TYR:CE1	4:D:180:PHE:HE2	2.24	0.55
5:E:115:GLN:OE1	6:F:163:ILE:N	2.26	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:251:LEU:O	6:F:254:LEU:HB2	2.07	0.55
6:F:23:HIS:HA	6:F:26:PHE:HD2	1.71	0.55
1:A:359:LYS:O	1:A:362:SER:OG	2.23	0.55
3:C:150:GLN:HG3	3:C:153:ASP:H	1.71	0.55
6:F:103:LYS:O	6:F:106:PHE:N	2.39	0.55
6:F:292:CYS:O	6:F:295:THR:OG1	2.22	0.55
2:B:178:GLN:HA	2:B:181:LEU:HD22	1.88	0.55
2:B:37:ASP:OD1	2:B:38:GLN:N	2.39	0.55
4:D:289:ILE:O	4:D:292:LEU:N	2.39	0.55
4:D:62:TYR:CZ	4:D:66:LEU:HD21	2.42	0.55
5:E:113:TYR:O	6:F:162:SER:OG	2.11	0.55
6:F:71:ASP:OD1	6:F:71:ASP:N	2.39	0.55
7:G:186:GLN:O	7:G:189:ILE:N	2.31	0.55
4:D:101:GLU:HA	4:D:104:LYS:NZ	2.21	0.55
4:D:392:ARG:CZ	4:D:392:ARG:HB3	2.36	0.55
5:E:24:ARG:HD3	7:G:100:ARG:CZ	2.37	0.55
8:H:42:PRO:O	8:H:44:LEU:HD12	2.07	0.55
2:B:60:ALA:C	2:B:63:VAL:HG22	2.27	0.55
5:E:32:ARG:HD2	5:E:94:HIS:HB2	1.87	0.55
6:F:15:ARG:NE	6:F:26:PHE:HB3	2.21	0.55
6:F:72:LYS:HG3	6:F:73:ILE:N	2.21	0.55
1:A:336:SER:OG	1:A:337:ASN:N	2.38	0.55
7:G:134:SER:O	7:G:157:ARG:NH1	2.40	0.55
7:G:230:TYR:HA	7:G:233:LYS:HG2	1.89	0.55
3:C:171:LYS:HZ1	3:C:207:SER:HB3	1.71	0.55
2:B:405:PRO:HA	5:E:259:ASN:HD21	1.70	0.55
6:F:126:ILE:HA	6:F:129:ILE:HD12	1.89	0.55
6:F:135:ARG:NH1	6:F:177:GLN:OE1	2.39	0.55
8:H:111:LEU:HD21	8:H:144:TYR:HE2	1.72	0.55
1:A:137:PHE:O	1:A:140:LEU:HB3	2.06	0.55
2:B:119:ILE:O	2:B:123:ARG:HG2	2.07	0.55
2:B:243:GLU:N	2:B:243:GLU:OE1	2.33	0.55
4:D:131:ALA:HA	4:D:134:TRP:CD1	2.33	0.55
4:D:224:PHE:O	4:D:227:ALA:N	2.39	0.55
4:D:397:ASN:O	4:D:400:TYR:HB3	2.06	0.55
8:H:37:ASN:HB3	8:H:41:ILE:HD11	1.89	0.55
2:B:116:ILE:O	2:B:119:ILE:HG13	2.07	0.55
2:B:128:ASN:HB3	2:B:132:VAL:HG21	1.88	0.55
7:G:264:GLU:O	7:G:268:THR:HG23	2.06	0.55
1:A:211:ARG:NH2	1:A:244:ASN:OD1	2.39	0.55
3:C:154:SER:O	3:C:158:ILE:HB	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:322:GLU:HA	3:C:325:LEU:HB2	1.88	0.55
7:G:146:SER:HB2	7:G:152:VAL:HG12	1.89	0.55
1:A:137:PHE:HB2	1:A:179:ILE:HD13	1.88	0.55
2:B:132:VAL:O	2:B:136:ARG:HB3	2.07	0.55
4:D:130:GLN:HB2	4:D:160:LYS:HE2	1.88	0.55
6:F:9:THR:O	6:F:12:SER:HB2	2.06	0.55
7:G:109:HIS:CD2	7:G:110:SER:H	2.25	0.55
8:H:76:ASP:OD1	8:H:77:SER:N	2.40	0.55
6:F:27:GLU:HA	6:F:30:GLU:OE2	2.07	0.55
6:F:8:ASP:O	6:F:12:SER:CB	2.48	0.55
2:B:421:GLU:OE2	7:G:148:LYS:NZ	2.37	0.55
7:G:88:GLN:O	7:G:92:MET:HG2	2.06	0.55
8:H:52:LEU:O	8:H:56:MET:HG2	2.06	0.55
1:A:144:LEU:O	1:A:148:ASP:HB2	2.06	0.55
1:A:312:GLN:O	1:A:315:LYS:N	2.39	0.55
2:B:101:MET:O	2:B:104:LEU:HB2	2.06	0.55
4:D:207:ARG:O	4:D:210:TYR:HB3	2.07	0.55
6:F:45:LEU:HA	6:F:48:PHE:HB3	1.89	0.55
1:A:163:VAL:O	1:A:167:LEU:N	2.38	0.55
2:B:143:LEU:HD13	2:B:156:ALA:CB	2.22	0.55
3:C:148:LYS:HB3	3:C:150:GLN:OE1	2.06	0.55
8:H:215:LYS:O	8:H:219:LYS:HG3	2.05	0.55
8:H:30:ILE:O	8:H:34:LEU:CB	2.53	0.55
2:B:184:MET:O	2:B:187:SER:OG	2.13	0.55
2:B:77:GLU:O	2:B:81:LEU:HG	2.07	0.55
4:D:37:LYS:NZ	4:D:317:ILE:HG21	2.22	0.55
1:A:216:LYS:O	1:A:220:ILE:HG12	2.07	0.55
3:C:178:HIS:HB2	3:C:201:ALA:HB2	1.88	0.55
3:C:414:GLU:OE1	3:C:414:GLU:N	2.40	0.55
7:G:263:GLU:HA	7:G:266:LEU:HD12	1.89	0.55
8:H:31:LYS:O	8:H:35:ILE:HG13	2.05	0.55
8:H:44:LEU:HD11	8:H:88:TYR:CZ	2.40	0.55
5:E:92:TRP:CE2	5:E:120:LEU:HD13	2.42	0.55
6:F:250:TRP:CE3	6:F:273:GLN:HG3	2.42	0.55
7:G:127:LYS:O	7:G:130:GLU:N	2.35	0.55
2:B:353:ILE:HG23	2:B:357:TYR:CD2	2.41	0.55
3:C:276:ASP:OD1	3:C:277:ASP:N	2.40	0.55
7:G:254:ARG:NH1	7:G:266:LEU:HD21	2.22	0.55
1:A:266:SER:HB3	1:A:299:LYS:HE2	1.89	0.55
2:B:294:GLU:HG2	2:B:295:SER:H	1.72	0.55
2:B:412:LEU:O	2:B:415:TRP:N	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:294:ARG:HG2	3:C:295:GLY:H	1.72	0.55
8:H:7:LEU:O	8:H:10:SER:OG	2.19	0.55
1:A:204:ASP:O	1:A:207:ASN:N	2.36	0.55
1:A:423:VAL:O	1:A:427:ILE:HG12	2.07	0.55
3:C:124:PHE:O	3:C:127:ARG:N	2.38	0.55
4:D:267:LYS:HB2	4:D:297:TYR:HE1	1.71	0.55
8:H:119:THR:O	8:H:122:PHE:N	2.40	0.55
2:B:210:ASN:ND2	2:B:212:LYS:HB3	2.21	0.55
2:B:394:ASN:HD22	2:B:398:LYS:HE2	1.71	0.55
3:C:104:PHE:HE1	3:C:111:LEU:CD1	2.20	0.55
3:C:71:LYS:HG3	3:C:72:ASP:H	1.72	0.55
7:G:238:LEU:HD11	7:G:242:LYS:HE3	1.88	0.55
8:H:74:ASN:O	8:H:77:SER:OG	2.24	0.55
2:B:146:ILE:O	2:B:148:LYS:NZ	2.35	0.55
2:B:200:SER:O	2:B:203:ILE:HG22	2.06	0.55
3:C:231:ASP:OD2	3:C:234:THR:OG1	2.21	0.55
6:F:274:ILE:HD12	6:F:280:LEU:HB3	1.89	0.55
2:B:309:MET:HG2	2:B:348:HIS:HD2	1.72	0.55
3:C:283:ASN:C	3:C:288:LYS:HD3	2.28	0.55
4:D:397:ASN:O	4:D:400:TYR:HB3	2.06	0.55
6:F:179:PHE:CE2	6:F:187:SER:HB3	2.42	0.55
8:H:146:ILE:O	8:H:149:ASP:N	2.40	0.55
3:C:149:LYS:HD2	3:C:151:TYR:CE2	2.41	0.55
1:A:252:ASP:HA	1:A:255:SER:HB2	1.89	0.55
1:A:480:ARG:HB3	5:E:294:ASN:CG	2.27	0.55
2:B:216:LEU:HD12	2:B:217:LYS:N	2.22	0.55
2:B:279:ASP:O	2:B:283:LYS:HG3	2.07	0.55
3:C:171:LYS:HZ2	3:C:207:SER:HB3	1.71	0.55
6:F:270:ILE:O	6:F:274:ILE:HB	2.07	0.55
6:F:57:LEU:HA	6:F:60:ARG:HB3	1.89	0.55
7:G:69:PHE:CE1	7:G:91:MET:HB3	2.38	0.55
8:H:133:ILE:HB	8:H:136:LEU:HD21	1.88	0.55
2:B:149:GLU:HB3	2:B:152:LYS:HE3	1.89	0.55
6:F:23:HIS:ND1	6:F:24:PRO:HD3	2.22	0.55
6:F:74:ASN:OD1	6:F:76:LEU:HG	2.06	0.55
2:B:284:ILE:HG22	2:B:290:LEU:HD13	1.88	0.55
3:C:222:SER:HA	3:C:225:LEU:HD23	1.88	0.55
4:D:129:GLU:N	4:D:129:GLU:OE1	2.40	0.55
4:D:60:ALA:HA	4:D:63:TYR:HB3	1.89	0.55
1:A:176:LEU:CA	1:A:179:ILE:HG22	2.36	0.55
2:B:239:GLN:O	2:B:242:GLN:HB3	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:240:TYR:O	2:B:243:GLU:N	2.40	0.55
6:F:358:ILE:HG23	6:F:362:GLN:HB2	1.88	0.55
7:G:57:PHE:CE2	7:G:135:ARG:HB2	2.42	0.55
9:I:62:GLU:OE1	9:I:62:GLU:N	2.40	0.55
1:A:266:SER:O	1:A:270:ALA:CB	2.54	0.55
2:B:319:GLU:OE2	2:B:323:ASN:ND2	2.40	0.55
3:C:167:LYS:HG3	3:C:168:LEU:H	1.72	0.55
4:D:246:TYR:OH	4:D:275:GLU:OE2	2.17	0.55
5:E:31:LYS:NZ	5:E:58:GLU:HB3	2.22	0.55
3:C:79:PRO:O	3:C:83:GLU:CB	2.55	0.55
5:E:289:ASP:O	5:E:292:ILE:HG13	2.06	0.55
6:F:15:ARG:HB3	6:F:26:PHE:CG	2.41	0.55
9:I:73:PHE:HE2	9:I:77:LEU:HD22	1.72	0.55
2:B:164:GLN:HB2	2:B:183:GLN:HE22	1.72	0.55
3:C:275:ILE:O	3:C:279:LYS:HG2	2.07	0.55
4:D:131:ALA:O	4:D:134:TRP:HB2	2.06	0.55
7:G:230:TYR:HA	7:G:233:LYS:HG2	1.88	0.55
3:C:119:GLU:HA	3:C:122:ILE:HD12	1.89	0.55
4:D:289:ILE:HG13	4:D:290:SER:N	2.21	0.55
4:D:309:LEU:HD21	9:I:77:LEU:HD23	1.88	0.54
1:A:330:LEU:HD11	9:I:67:VAL:HG11	1.89	0.54
2:B:82:LEU:HA	2:B:85:LYS:HB3	1.89	0.54
3:C:174:LEU:HB2	3:C:208:ILE:HD11	1.89	0.54
7:G:57:PHE:CE2	7:G:135:ARG:HB2	2.41	0.54
7:G:27:VAL:HA	7:G:63:VAL:O	2.07	0.54
8:H:67:LEU:HD11	8:H:101:LYS:HD2	1.88	0.54
8:H:27:LEU:HB3	8:H:28:PRO:HD3	1.89	0.54
3:C:106:GLN:NE2	3:C:253:ASN:HD21	2.05	0.54
4:D:96:GLN:NE2	4:D:96:GLN:O	2.40	0.54
2:B:360:ILE:HG13	6:F:343:GLN:HG2	1.89	0.54
7:G:148:LYS:HG2	7:G:149:GLY:N	2.22	0.54
8:H:30:ILE:HG21	8:H:61:ILE:HD13	1.89	0.54
3:C:159:ASN:OD1	3:C:185:TYR:OH	2.25	0.54
1:A:167:LEU:HD23	1:A:170:TYR:CE1	2.40	0.54
2:B:119:ILE:O	2:B:123:ARG:HB2	2.08	0.54
5:E:209:GLU:O	5:E:212:ASP:HB2	2.08	0.54
2:B:364:ARG:NH2	6:F:325:GLU:OE2	2.41	0.54
2:B:167:THR:HG21	2:B:171:MET:HE2	1.88	0.54
2:B:294:GLU:HG2	2:B:295:SER:N	2.21	0.54
5:E:75:ASN:O	5:E:78:GLU:HG2	2.07	0.54
6:F:168:THR:HG23	6:F:172:TYR:HE2	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:201:PRO:HD2	8:H:204:ASN:HD22	1.72	0.54
1:A:401:LYS:HA	1:A:443:ILE:O	2.06	0.54
3:C:282:LEU:HA	3:C:287:THR:HG21	1.89	0.54
7:G:103:MET:HE3	7:G:133:ASN:HD22	1.72	0.54
7:G:209:GLU:OE1	7:G:209:GLU:N	2.31	0.54
8:H:11:LEU:HD11	8:H:30:ILE:HG21	1.88	0.54
3:C:217:GLU:O	3:C:221:MET:HB2	2.07	0.54
4:D:100:ASN:O	4:D:104:LYS:HG3	2.07	0.54
5:E:9:THR:HA	5:E:160:THR:HG22	1.89	0.54
6:F:6:GLU:HG2	6:F:8:ASP:H	1.72	0.54
7:G:69:PHE:CD1	7:G:91:MET:HE2	2.42	0.54
3:C:183:LYS:NZ	3:C:221:MET:HB3	2.22	0.54
7:G:281:SER:O	7:G:285:ASP:HB3	2.06	0.54
8:H:200:LEU:O	8:H:232:LYS:HA	2.08	0.54
8:H:40:LEU:CD1	8:H:41:ILE:CG1	2.86	0.54
2:B:65:LEU:CD2	2:B:71:LYS:CB	2.86	0.54
3:C:244:GLU:O	3:C:247:HIS:HB3	2.07	0.54
6:F:206:THR:HG22	6:F:208:ALA:N	2.22	0.54
6:F:49:PHE:HE2	6:F:84:ALA:HB3	1.72	0.54
3:C:148:LYS:HB2	3:C:150:GLN:HG2	1.89	0.54
3:C:120:LYS:O	3:C:124:PHE:HB3	2.08	0.54
4:D:196:SER:O	4:D:199:GLU:HB2	2.08	0.54
7:G:289:GLU:HG2	7:G:290:ASN:N	2.23	0.54
3:C:111:LEU:N	3:C:111:LEU:HD22	2.22	0.54
3:C:208:ILE:HD13	3:C:212:THR:HG22	1.90	0.54
4:D:120:LEU:HG	4:D:130:GLN:HB3	1.88	0.54
4:D:186:TYR:O	4:D:190:LYS:HG2	2.06	0.54
6:F:15:ARG:NH2	6:F:26:PHE:HD2	2.05	0.54
7:G:187:ALA:HB3	7:G:192:LEU:HD12	1.88	0.54
9:I:73:PHE:CZ	9:I:77:LEU:HD12	2.43	0.54
1:A:335:GLN:NE2	1:A:338:MET:SD	2.80	0.54
1:A:436:ILE:HG12	1:A:443:ILE:HD12	1.88	0.54
2:B:238:ALA:O	2:B:241:LEU:N	2.40	0.54
4:D:25:GLU:OE1	4:D:25:GLU:N	2.32	0.54
5:E:216:ASN:O	5:E:218:GLU:HG2	2.07	0.54
5:E:52:PHE:CE1	5:E:76:MET:HG2	2.42	0.54
5:E:37:ILE:HG22	5:E:90:ILE:HB	1.89	0.54
2:B:210:ASN:O	2:B:214:GLU:HG3	2.07	0.54
5:E:60:GLU:HG2	5:E:61:LYS:O	2.08	0.54
6:F:148:ASP:OD1	6:F:149:LEU:N	2.40	0.54
6:F:232:GLU:O	6:F:236:HIS:HB2	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:ASN:HB3	1:A:229:THR:HG21	1.88	0.54
2:B:73:ASP:O	2:B:76:ASN:HB2	2.07	0.54
7:G:186:GLN:O	7:G:189:ILE:HG12	2.07	0.54
3:C:202:ARG:HB2	3:C:218:LEU:HD11	1.88	0.54
5:E:153:THR:OG1	5:E:154:PHE:N	2.40	0.54
6:F:49:PHE:CG	6:F:58:ARG:HG3	2.42	0.54
8:H:40:LEU:O	8:H:51:TYR:OH	2.18	0.54
2:B:168:TYR:CE1	2:B:176:LYS:HE3	2.43	0.54
2:B:427:GLU:O	2:B:430:GLY:N	2.40	0.54
3:C:135:HIS:O	3:C:165:PHE:HE1	1.90	0.54
3:C:74:LEU:CD2	3:C:111:LEU:HD12	2.38	0.54
4:D:140:TYR:CZ	4:D:144:ILE:HD11	2.43	0.54
6:F:34:GLU:O	6:F:36:LYS:NZ	2.28	0.54
1:A:454:SER:O	1:A:457:PRO:HD2	2.08	0.54
3:C:228:GLU:OE1	3:C:228:GLU:N	2.40	0.54
4:D:190:LYS:O	4:D:193:ALA:N	2.40	0.54
7:G:120:SER:O	7:G:123:VAL:HG22	2.08	0.54
2:B:329:PHE:HD1	2:B:338:TRP:CE2	2.25	0.54
5:E:108:GLU:HA	5:E:111:LYS:HE2	1.90	0.54
8:H:112:ASN:O	8:H:115:SER:OG	2.14	0.54
4:D:147:LYS:HA	4:D:177:LEU:HD23	1.87	0.54
4:D:179:PHE:CD2	4:D:243:LEU:HD21	2.42	0.54
8:H:112:ASN:O	8:H:115:SER:OG	2.21	0.54
8:H:48:ASN:OD1	8:H:49:ASP:N	2.40	0.54
1:A:439:GLU:OE1	1:A:439:GLU:N	2.39	0.54
2:B:173:MET:O	2:B:177:ILE:HD12	2.07	0.54
3:C:385:ILE:HG23	3:C:386:PHE:H	1.72	0.54
5:E:189:ARG:HH11	7:G:293:VAL:HG11	1.71	0.54
2:B:77:GLU:O	2:B:80:THR:OG1	2.15	0.54
5:E:116:ASN:N	5:E:116:ASN:OD1	2.40	0.54
5:E:164:GLU:H	5:E:167:GLU:CD	2.10	0.54
6:F:220:SER:O	6:F:223:LEU:N	2.41	0.54
6:F:23:HIS:O	6:F:26:PHE:N	2.41	0.54
6:F:74:ASN:OD1	6:F:76:LEU:N	2.41	0.54
1:A:303:ASN:ND2	1:A:305:LYS:HE2	2.22	0.54
2:B:153:ILE:HG13	2:B:156:ALA:HB3	1.88	0.54
2:B:167:THR:HA	2:B:170:SER:HB3	1.90	0.54
4:D:107:GLU:O	4:D:110:ILE:HG22	2.08	0.54
8:H:44:LEU:HD11	8:H:88:TYR:CZ	2.42	0.54
2:B:204:LEU:HD13	2:B:206:LYS:H	1.73	0.54
2:B:97:ILE:HG22	2:B:101:MET:HE2	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:123:GLU:O	3:C:127:ARG:HG3	2.08	0.54
3:C:139:ILE:HG13	3:C:165:PHE:CZ	2.42	0.54
3:C:97:LEU:HD12	3:C:100:LEU:HD23	1.87	0.54
7:G:156:PHE:HA	7:G:199:LEU:HG	1.88	0.54
6:F:23:HIS:O	6:F:26:PHE:HD2	1.91	0.54
6:F:6:GLU:O	6:F:9:THR:OG1	2.17	0.54
8:H:74:ASN:O	8:H:77:SER:OG	2.12	0.54
2:B:72:TRP:CH2	2:B:113:ASN:HB3	2.42	0.54
3:C:170:ASP:HB2	3:C:172:PRO:HD2	1.88	0.54
4:D:171:MET:CE	4:D:197:MET:HG3	2.38	0.54
9:I:37:ASP:N	9:I:37:ASP:OD1	2.39	0.54
4:D:138:GLY:HA2	4:D:141:TYR:OH	2.07	0.54
2:B:290:LEU:HG	2:B:297:GLU:OE1	2.08	0.54
4:D:106:ASN:O	4:D:110:ILE:HG22	2.07	0.54
2:B:140:THR:HG21	2:B:163:LEU:HD11	1.89	0.54
2:B:407:ASN:O	2:B:410:GLN:N	2.40	0.54
3:C:231:ASP:HB3	3:C:234:THR:OG1	2.08	0.54
3:C:277:ASP:O	3:C:281:ILE:HG12	2.07	0.54
3:C:280:ASN:O	3:C:283:ASN:ND2	2.39	0.54
5:E:37:ILE:HA	5:E:51:SER:HA	1.89	0.54
1:A:157:GLU:O	1:A:161:LYS:HG2	2.08	0.54
1:A:280:ASN:ND2	1:A:288:THR:OG1	2.40	0.54
3:C:239:PHE:O	3:C:242:SER:OG	2.16	0.54
5:E:293:GLU:O	5:E:296:ILE:HG22	2.08	0.54
8:H:140:SER:O	8:H:143:SER:N	2.41	0.54
1:A:167:LEU:HA	1:A:170:TYR:CE2	2.39	0.54
2:B:177:ILE:O	2:B:181:LEU:HD13	2.08	0.54
4:D:145:GLY:O	4:D:181:TYR:OH	2.26	0.54
5:E:165:GLU:CD	5:E:165:GLU:H	2.09	0.54
5:E:167:GLU:OE1	5:E:168:GLU:N	2.41	0.54
5:E:201:GLN:HE21	5:E:205:LYS:NZ	2.06	0.54
5:E:209:GLU:O	5:E:212:ASP:HB3	2.08	0.54
6:F:75:GLN:O	6:F:78:VAL:HG22	2.07	0.54
1:A:68:UNK:HA	1:A:71:UNK:C	2.37	0.54
4:D:209:ARG:HD3	4:D:239:THR:OG1	2.08	0.54
5:E:88:LYS:NZ	6:F:158:ASP:O	2.40	0.54
1:A:217:PHE:HA	1:A:220:ILE:HB	1.89	0.54
2:B:110:LEU:HD12	2:B:111:ASP:N	2.23	0.54
2:B:59:LEU:O	2:B:62:ILE:HD12	2.04	0.54
4:D:413:LYS:HG3	4:D:417:TYR:HE2	1.72	0.54
6:F:7:ILE:HA	6:F:10:ILE:HB	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:138:MET:O	1:A:141:LEU:N	2.41	0.54
8:H:82:PHE:HE1	8:H:106:ILE:HG22	1.72	0.54
2:B:65:LEU:HG	2:B:71:LYS:HB2	1.89	0.54
5:E:281:LEU:O	5:E:285:ILE:HG22	2.08	0.54
2:B:185:GLU:O	2:B:188:ILE:HG22	2.08	0.54
5:E:122:ILE:HB	5:E:135:ASP:HB3	1.89	0.54
5:E:124:ASP:CG	5:E:127:GLN:H	2.11	0.54
5:E:201:GLN:HE21	5:E:205:LYS:HZ3	1.55	0.54
6:F:246:SER:HA	6:F:249:ASP:OD2	2.07	0.54
6:F:65:PHE:O	6:F:68:LYS:HB3	2.08	0.54
7:G:116:CYS:SG	7:G:152:VAL:HG12	2.47	0.54
1:A:245:GLY:H	8:H:131:LYS:CE	2.21	0.54
3:C:131:VAL:HG23	3:C:134:LYS:HE3	1.90	0.54
6:F:319:LEU:HD12	6:F:320:PRO:HD2	1.89	0.54
6:F:11:LEU:HD22	6:F:65:PHE:CZ	2.42	0.54
7:G:118:LEU:HD22	7:G:122:ASP:HB3	1.90	0.54
2:B:157:ALA:HA	2:B:160:LEU:HG	1.90	0.54
4:D:411:LEU:O	4:D:414:LEU:N	2.41	0.54
2:B:261:LEU:O	2:B:264:ILE:N	2.40	0.54
3:C:167:LYS:HG3	3:C:168:LEU:N	2.22	0.54
4:D:292:LEU:O	4:D:295:SER:OG	2.20	0.54
4:D:49:PHE:HZ	4:D:53:LYS:HZ2	1.53	0.54
6:F:222:LEU:O	6:F:290:LYS:NZ	2.33	0.54
6:F:364:THR:O	6:F:367:LYS:HB3	2.08	0.54
7:G:118:LEU:O	7:G:196:TYR:OH	2.22	0.54
8:H:38:ASN:OD1	8:H:42:PRO:HG2	2.08	0.54
2:B:288:ASN:O	2:B:291:LYS:HG2	2.07	0.54
2:B:319:GLU:HB2	2:B:320:PRO:HD3	1.90	0.54
3:C:132:PHE:O	3:C:136:SER:CB	2.56	0.54
3:C:300:LYS:O	3:C:303:ALA:N	2.41	0.54
4:D:147:LYS:HA	4:D:177:LEU:HD23	1.90	0.54
8:H:38:ASN:HA	8:H:42:PRO:HD2	1.90	0.54
1:A:206:GLN:O	1:A:210:LEU:HG	2.08	0.54
1:A:386:ASN:O	1:A:389:LYS:N	2.40	0.54
2:B:122:ILE:HB	2:B:136:ARG:NE	2.23	0.54
3:C:240:PHE:O	3:C:244:GLU:HG2	2.07	0.54
3:C:406:ASP:HB3	3:C:409:TYR:HB2	1.89	0.54
5:E:165:GLU:OE1	5:E:165:GLU:N	2.26	0.54
7:G:219:GLU:O	7:G:223:SER:OG	2.23	0.54
7:G:57:PHE:HE1	7:G:105:VAL:HB	1.73	0.54
1:A:211:ARG:NH2	1:A:244:ASN:HD22	2.05	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:65:UNK:O	1:A:68:UNK:CB	2.56	0.54
3:C:178:HIS:O	3:C:182:SER:CB	2.56	0.54
4:D:213:TYR:O	4:D:216:ILE:N	2.40	0.54
5:E:272:GLU:O	5:E:275:VAL:N	2.41	0.54
8:H:34:LEU:HD23	8:H:38:ASN:CA	2.38	0.54
1:A:170:TYR:HH	1:A:171:TYR:HE2	1.55	0.54
6:F:352:TRP:CZ3	6:F:354:GLN:HA	2.39	0.54
7:G:49:VAL:HG12	7:G:73:GLN:NE2	2.18	0.54
1:A:265:SER:O	1:A:268:LEU:N	2.41	0.54
2:B:315:GLN:O	2:B:319:GLU:HG2	2.08	0.54
3:C:208:ILE:HG22	3:C:210:CYS:HB2	1.89	0.54
4:D:62:TYR:HA	4:D:65:TYR:HB3	1.89	0.54
7:G:135:ARG:O	7:G:157:ARG:NH2	2.37	0.54
1:A:359:LYS:O	1:A:362:SER:OG	2.23	0.54
6:F:295:THR:OG1	6:F:296:LEU:N	2.41	0.54
3:C:118:CYS:HB2	3:C:141:LEU:HB2	1.90	0.54
3:C:135:HIS:HD2	3:C:165:PHE:CZ	2.26	0.54
8:H:52:LEU:HD23	8:H:55:LEU:HD21	1.89	0.54
1:A:137:PHE:O	1:A:140:LEU:HB2	2.09	0.53
3:C:132:PHE:HE1	3:C:168:LEU:HD22	1.72	0.53
5:E:22:TYR:CG	5:E:125:VAL:HG21	2.43	0.53
1:A:209:ILE:O	1:A:212:SER:OG	2.19	0.53
2:B:177:ILE:HG22	2:B:181:LEU:HD23	1.88	0.53
4:D:394:ASP:OD1	4:D:395:ASN:N	2.41	0.53
6:F:164:PRO:HD2	6:F:167:ILE:HD12	1.90	0.53
4:D:188:LYS:NZ	4:D:192:GLU:OE2	2.27	0.53
6:F:15:ARG:NH2	6:F:30:GLU:OE1	2.41	0.53
9:I:80:GLU:OE2	9:I:83:ARG:NH2	2.29	0.53
5:E:297:GLN:HE21	5:E:301:ILE:HG13	1.72	0.53
2:B:433:ILE:HD11	5:E:210:TYR:CB	2.37	0.53
7:G:135:ARG:HA	7:G:157:ARG:NH2	2.22	0.53
2:B:415:TRP:HE1	5:E:237:PRO:HG3	1.72	0.53
3:C:406:ASP:OD2	4:D:396:LYS:NZ	2.41	0.53
7:G:256:GLU:HG3	7:G:257:GLU:H	1.73	0.53
1:A:348:LEU:O	1:A:351:ALA:N	2.41	0.53
2:B:135:GLU:CD	2:B:135:GLU:H	2.11	0.53
3:C:313:ASP:O	3:C:317:ALA:HB3	2.06	0.53
2:B:412:LEU:O	2:B:415:TRP:N	2.41	0.53
3:C:311:LEU:O	3:C:315:ASN:ND2	2.41	0.53
4:D:291:SER:HB3	4:D:307:TYR:CE1	2.43	0.53
4:D:378:ASN:HB3	4:D:391:ASN:O	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:56:PRO:HB2	6:F:60:ARG:HH12	1.73	0.53
7:G:96:LYS:HA	7:G:101:ASP:OD1	2.07	0.53
1:A:135:ASN:O	1:A:138:MET:HB2	2.07	0.53
2:B:336:HIS:O	2:B:339:GLU:HB2	2.09	0.53
4:D:147:LYS:HE3	4:D:186:TYR:CZ	2.43	0.53
8:H:121:LYS:O	8:H:124:SER:N	2.41	0.53
1:A:184:TRP:O	1:A:187:ILE:N	2.41	0.53
2:B:114:THR:O	2:B:117:SER:OG	2.16	0.53
6:F:206:THR:HG1	6:F:209:GLU:H	1.56	0.53
1:A:210:LEU:O	1:A:213:THR:OG1	2.23	0.53
1:A:329:GLU:HA	9:I:64:TRP:HZ2	1.70	0.53
2:B:110:LEU:HD12	2:B:111:ASP:H	1.73	0.53
3:C:66:VAL:HG21	3:C:103:LYS:HD3	1.90	0.53
6:F:45:LEU:O	6:F:49:PHE:HB2	2.09	0.53
7:G:156:PHE:HB3	7:G:198:SER:HA	1.91	0.53
1:A:379:LEU:O	1:A:382:ARG:N	2.41	0.53
4:D:37:LYS:HB2	4:D:38:VAL:HG22	1.90	0.53
5:E:137:TYR:HD1	5:E:156:HIS:HA	1.72	0.53
5:E:163:ALA:HB1	5:E:168:GLU:HB2	1.89	0.53
1:A:180:ASN:HA	1:A:183:LEU:HB3	1.89	0.53
1:A:313:SER:OG	1:A:314:ASN:N	2.40	0.53
1:A:327:ILE:HD11	1:A:353:LYS:HB2	1.90	0.53
2:B:225:VAL:O	2:B:228:SER:N	2.42	0.53
4:D:112:GLU:HB3	4:D:116:LYS:HE3	1.89	0.53
4:D:191:LEU:O	4:D:194:VAL:HG22	2.08	0.53
6:F:34:GLU:O	6:F:36:LYS:NZ	2.38	0.53
5:E:169:ILE:HG12	7:G:148:LYS:HA	1.89	0.53
2:B:242:GLN:O	2:B:246:GLN:HG2	2.09	0.53
7:G:202:ASP:CG	7:G:203:TYR:H	2.10	0.53
1:A:228:GLU:OE1	1:A:228:GLU:N	2.40	0.53
1:A:470:GLN:HA	1:A:473:ASP:HB2	1.90	0.53
2:B:269:VAL:HG13	2:B:303:PHE:CE2	2.43	0.53
2:B:396:PRO:HG2	3:C:356:CYS:SG	2.49	0.53
3:C:79:PRO:HB3	3:C:120:LYS:HE2	1.90	0.53
5:E:62:ASN:OD1	5:E:63:SER:N	2.40	0.53
2:B:412:LEU:O	2:B:415:TRP:N	2.42	0.53
3:C:75:ARG:HG3	3:C:117:VAL:HB	1.90	0.53
3:C:135:HIS:CD2	3:C:164:GLU:HB3	2.43	0.53
7:G:154:ASP:OD1	7:G:155:ALA:N	2.41	0.53
8:H:177:PHE:O	8:H:180:ILE:HB	2.08	0.53
3:C:259:CYS:O	3:C:262:LEU:HG	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:68:GLU:HA	4:D:71:LEU:HD12	1.91	0.53
1:A:278:LYS:NZ	1:A:375:ASP:OD2	2.41	0.53
3:C:294:ARG:HG3	3:C:295:GLY:N	2.23	0.53
4:D:217:HIS:O	4:D:220:ALA:N	2.42	0.53
5:E:201:GLN:HE21	5:E:205:LYS:NZ	2.07	0.53
5:E:22:TYR:O	5:E:26:GLN:N	2.42	0.53
1:A:412:ASN:O	1:A:413:LEU:HD12	2.07	0.53
1:A:481:TYR:OH	5:E:295:LYS:HD3	2.08	0.53
2:B:115:ARG:O	2:B:119:ILE:CD1	2.57	0.53
4:D:62:TYR:CE2	4:D:66:LEU:HD11	2.44	0.53
5:E:137:TYR:HE1	5:E:156:HIS:CD2	2.26	0.53
5:E:21:HIS:HA	7:G:100:ARG:NH1	2.15	0.53
5:E:80:CYS:O	5:E:83:ILE:N	2.31	0.53
5:E:89:LEU:HG	5:E:114:THR:HG22	1.90	0.53
6:F:115:ARG:HG3	6:F:116:ASN:H	1.72	0.53
2:B:175:GLU:O	2:B:178:GLN:HB3	2.09	0.53
3:C:122:ILE:HG23	3:C:134:LYS:HD2	1.91	0.53
3:C:170:ASP:OD1	3:C:171:LYS:N	2.42	0.53
2:B:415:TRP:CD1	5:E:237:PRO:HB3	2.44	0.53
6:F:279:ILE:HA	6:F:282:GLN:OE1	2.07	0.53
6:F:38:TRP:HA	6:F:41:LEU:HB2	1.91	0.53
6:F:70:TYR:CE1	6:F:71:ASP:HB3	2.43	0.53
1:A:167:LEU:CD2	1:A:170:TYR:CE1	2.91	0.53
5:E:29:GLU:N	5:E:29:GLU:OE1	2.36	0.53
6:F:169:ASN:O	6:F:173:SER:HB2	2.09	0.53
6:F:66:VAL:HA	6:F:69:PHE:HB2	1.88	0.53
8:H:121:LYS:O	8:H:125:GLU:HG2	2.08	0.53
2:B:55:SER:O	2:B:59:LEU:HB3	2.06	0.53
5:E:289:ASP:O	5:E:292:ILE:HG13	2.09	0.53
6:F:243:VAL:HA	6:F:252:PHE:CE2	2.43	0.53
6:F:74:ASN:O	6:F:77:SER:OG	2.24	0.53
2:B:175:GLU:HA	2:B:178:GLN:OE1	2.08	0.53
3:C:280:ASN:O	3:C:283:ASN:ND2	2.41	0.53
1:A:480:ARG:HB3	5:E:294:ASN:HB3	1.90	0.53
5:E:303:GLU:N	5:E:303:GLU:OE1	2.36	0.53
6:F:83:LEU:O	6:F:86:LEU:N	2.39	0.53
7:G:118:LEU:HG	7:G:156:PHE:CE1	2.43	0.53
8:H:38:ASN:O	8:H:42:PRO:HD2	2.07	0.53
3:C:151:TYR:C	3:C:155:LEU:HB3	2.28	0.53
4:D:164:THR:HA	4:D:167:LYS:NZ	2.23	0.53
5:E:303:GLU:HB2	5:E:304:GLN:OE1	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:213:ASN:N	8:H:216:GLU:OE1	2.41	0.53
3:C:171:LYS:HD3	3:C:209:TYR:CZ	2.44	0.53
3:C:361:HIS:CE1	3:C:365:ILE:HD11	2.44	0.53
4:D:117:ILE:HA	4:D:120:LEU:HG	1.91	0.53
4:D:381:ILE:HG22	4:D:388:VAL:HG22	1.90	0.53
6:F:48:PHE:O	6:F:52:ALA:CB	2.57	0.53
8:H:32:ILE:HA	8:H:35:ILE:CG1	2.39	0.53
2:B:269:VAL:HG13	2:B:303:PHE:HE2	1.73	0.53
3:C:165:PHE:O	3:C:169:ASP:N	2.42	0.53
7:G:266:LEU:HG	7:G:270:TYR:CD2	2.44	0.53
2:B:210:ASN:HD21	2:B:212:LYS:HE2	1.73	0.53
4:D:112:GLU:OE1	4:D:112:GLU:N	2.35	0.53
7:G:57:PHE:HE1	7:G:105:VAL:HG13	1.74	0.53
2:B:99:LYS:HA	2:B:102:GLU:OE2	2.09	0.53
4:D:215:GLY:O	4:D:218:CYS:N	2.42	0.53
4:D:63:TYR:CE2	4:D:94:PHE:HD1	2.24	0.53
5:E:69:ASP:CG	5:E:72:TYR:H	2.12	0.53
7:G:188:LEU:O	7:G:191:GLY:N	2.35	0.53
7:G:52:LEU:O	7:G:69:PHE:HB3	2.09	0.53
1:A:227:ASN:ND2	1:A:262:THR:HG22	2.24	0.53
3:C:152:LYS:O	3:C:156:ALA:CB	2.49	0.53
2:B:415:TRP:CD1	5:E:237:PRO:HB3	2.44	0.53
1:A:465:ILE:HG23	5:E:280:ASN:ND2	2.24	0.53
7:G:249:GLU:HG2	7:G:253:LYS:NZ	2.22	0.53
7:G:273:ARG:HH21	7:G:274:GLN:H	1.55	0.53
2:B:111:ASP:HB3	2:B:115:ARG:NH1	2.24	0.53
4:D:186:TYR:O	4:D:190:LYS:HG2	2.09	0.53
6:F:265:LYS:O	6:F:268:SER:OG	2.13	0.53
9:I:63:ASN:OD1	9:I:64:TRP:N	2.40	0.53
1:A:388:ILE:HG21	1:A:422:MET:HE1	1.91	0.53
6:F:108:GLU:O	6:F:111:SER:OG	2.20	0.53
5:E:37:ILE:HG23	5:E:93:TYR:HD2	1.73	0.53
2:B:364:ARG:NH2	6:F:325:GLU:OE1	2.32	0.53
6:F:78:VAL:HA	6:F:81:TYR:CD2	2.43	0.53
8:H:134:LYS:HZ3	8:H:138:ASP:HB2	1.73	0.53
1:A:333:PHE:CD2	1:A:346:TYR:CD1	2.97	0.53
2:B:135:GLU:O	2:B:139:VAL:HG22	2.09	0.53
2:B:162:GLU:O	2:B:165:VAL:HG12	2.09	0.53
5:E:218:GLU:OE1	5:E:218:GLU:N	2.39	0.53
5:E:33:CYS:HB2	5:E:95:SER:OG	2.09	0.53
6:F:111:SER:OG	6:F:112:LYS:N	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:289:GLU:O	7:G:293:VAL:HG12	2.09	0.53
3:C:313:ASP:OD1	3:C:314:PHE:N	2.42	0.53
3:C:316:THR:O	3:C:319:LYS:N	2.42	0.53
3:C:75:ARG:NH1	3:C:114:GLN:HG3	2.24	0.53
4:D:365:ASP:OD2	4:D:383:ARG:NH1	2.41	0.53
5:E:29:GLU:OE1	5:E:29:GLU:N	2.32	0.53
8:H:171:ILE:HA	8:H:174:PHE:CZ	2.44	0.53
1:A:366:LYS:HE2	1:A:367:TYR:CE1	2.43	0.53
2:B:38:GLN:O	2:B:42:LEU:HG	2.09	0.53
7:G:116:CYS:SG	7:G:152:VAL:HG22	2.49	0.53
2:B:70:ASN:C	2:B:70:ASN:HD22	2.12	0.53
3:C:369:ASP:OD1	3:C:370:THR:N	2.42	0.53
4:D:275:GLU:O	4:D:278:SER:OG	2.18	0.53
2:B:433:ILE:HD11	5:E:210:TYR:CD1	2.44	0.53
4:D:135:ILE:O	4:D:139:GLU:HB2	2.07	0.53
6:F:233:LEU:HD12	6:F:234:LEU:N	2.24	0.53
2:B:139:VAL:O	2:B:142:ASP:HB2	2.09	0.53
2:B:227:ILE:O	2:B:230:HIS:N	2.42	0.53
3:C:175:VAL:HG22	3:C:205:ALA:HA	1.91	0.53
4:D:40:ILE:O	4:D:44:LYS:HG2	2.09	0.53
5:E:92:TRP:HB3	5:E:110:PHE:CZ	2.43	0.53
5:E:202:SER:O	5:E:205:LYS:HB2	2.09	0.53
5:E:210:TYR:O	5:E:213:LYS:N	2.42	0.53
3:C:118:CYS:HB3	3:C:137:LEU:HB3	1.91	0.53
8:H:193:THR:HA	8:H:196:SER:HB3	1.89	0.53
2:B:153:ILE:O	2:B:157:ALA:N	2.42	0.53
2:B:180:ILE:HA	2:B:183:GLN:OE1	2.09	0.53
3:C:282:LEU:HD11	3:C:288:LYS:HE2	1.91	0.53
5:E:33:CYS:HB2	5:E:95:SER:OG	2.09	0.53
6:F:151:ASP:CG	6:F:152:ASP:H	2.11	0.53
7:G:253:LYS:O	7:G:256:GLU:HG2	2.09	0.53
8:H:119:THR:O	8:H:122:PHE:N	2.42	0.53
1:A:135:ASN:O	1:A:138:MET:HG2	2.08	0.53
2:B:95:TYR:HD1	2:B:98:GLN:HG3	1.73	0.53
2:B:95:TYR:HA	2:B:98:GLN:HG2	1.91	0.53
4:D:319:CYS:HB2	4:D:322:LEU:HB2	1.90	0.53
6:F:247:ASN:O	6:F:250:TRP:NE1	2.41	0.53
6:F:64:ASN:O	6:F:67:SER:OG	2.27	0.53
3:C:185:TYR:HA	3:C:188:LEU:HD12	1.90	0.53
5:E:86:LYS:O	5:E:87:GLU:HG3	2.08	0.53
6:F:38:TRP:CZ2	6:F:72:LYS:HD2	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:34:LEU:O	8:H:38:ASN:CB	2.43	0.53
3:C:226:HIS:HB2	3:C:235:ALA:HB2	1.89	0.53
4:D:39:SER:HA	4:D:41:GLU:OE2	2.08	0.53
5:E:179:ARG:NH1	7:G:219:GLU:OE2	2.42	0.53
2:B:116:ILE:O	2:B:120:GLU:HG2	2.09	0.53
3:C:171:LYS:HB3	3:C:209:TYR:CZ	2.44	0.53
3:C:226:HIS:HD2	3:C:238:TYR:HE2	1.57	0.53
4:D:232:VAL:O	4:D:235:LEU:HB3	2.09	0.53
5:E:211:LEU:HD12	5:E:212:ASP:N	2.24	0.53
5:E:70:HIS:O	5:E:73:ILE:N	2.42	0.53
6:F:319:LEU:HD21	6:F:323:ASN:HB2	1.90	0.53
1:A:359:LYS:O	1:A:362:SER:OG	2.24	0.53
3:C:75:ARG:HD2	3:C:116:PHE:CE1	2.41	0.53
7:G:118:LEU:HG	7:G:156:PHE:CD2	2.44	0.53
7:G:279:HIS:ND1	7:G:282:GLU:OE1	2.41	0.53
8:H:32:ILE:HA	8:H:35:ILE:HD12	1.82	0.53
2:B:55:SER:O	2:B:59:LEU:HB2	2.09	0.53
2:B:98:GLN:HA	2:B:101:MET:HE3	1.91	0.53
3:C:275:ILE:HB	3:C:307:ASN:HD22	1.74	0.53
6:F:74:ASN:OD1	6:F:76:LEU:N	2.38	0.53
8:H:22:ALA:O	8:H:26:LEU:CB	2.56	0.53
8:H:74:ASN:O	8:H:77:SER:OG	2.08	0.53
5:E:162:GLU:N	5:E:162:GLU:OE1	2.36	0.53
1:A:146:LEU:HA	1:A:149:SER:OG	2.09	0.53
1:A:251:SER:O	1:A:254:ILE:HG13	2.08	0.53
2:B:398:LYS:HB2	2:B:399:ILE:HG13	1.89	0.53
2:B:48:GLN:NE2	2:B:50:SER:OG	2.42	0.53
4:D:40:ILE:HG12	4:D:43:ARG:CZ	2.39	0.53
6:F:291:ILE:O	6:F:295:THR:HG23	2.08	0.53
6:F:295:THR:OG1	6:F:296:LEU:N	2.42	0.53
2:B:263:HIS:O	2:B:266:TYR:N	2.41	0.53
3:C:111:LEU:HD22	3:C:111:LEU:H	1.74	0.53
3:C:164:GLU:HG2	3:C:168:LEU:HD11	1.86	0.53
6:F:151:ASP:O	6:F:154:GLU:N	2.42	0.53
6:F:263:PHE:HZ	6:F:318:HIS:CG	2.27	0.53
7:G:109:HIS:HD2	7:G:110:SER:H	1.57	0.53
1:A:170:TYR:CD2	1:A:171:TYR:N	2.76	0.52
2:B:72:TRP:O	2:B:75:LEU:HB3	2.09	0.52
3:C:132:PHE:CE1	3:C:168:LEU:HD22	2.44	0.52
4:D:306:PRO:O	4:D:310:GLU:HG2	2.09	0.52
4:D:332:GLU:OE2	4:D:335:ARG:NH2	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:161:TRP:HZ3	8:H:182:LYS:HG3	1.75	0.52
7:G:156:PHE:CB	7:G:198:SER:HA	2.39	0.52
7:G:238:LEU:HD11	7:G:242:LYS:HE3	1.90	0.52
7:G:86:VAL:O	7:G:90:LYS:HB2	2.08	0.52
2:B:154:ASP:OD1	2:B:155:GLU:N	2.42	0.52
2:B:197:THR:C	2:B:200:SER:HG	2.07	0.52
2:B:394:ASN:ND2	2:B:398:LYS:HE2	2.24	0.52
6:F:61:LEU:HD22	6:F:65:PHE:HB3	1.90	0.52
2:B:112:LEU:HD13	2:B:115:ARG:NH2	2.22	0.52
2:B:114:THR:C	2:B:118:VAL:H	2.04	0.52
2:B:188:ILE:O	2:B:191:GLY:N	2.39	0.52
5:E:76:MET:O	5:E:79:MET:N	2.37	0.52
6:F:196:LEU:HA	6:F:199:LEU:HD13	1.91	0.52
1:A:201:ILE:HB	8:H:92:ASN:HD22	1.73	0.52
1:A:217:PHE:HA	1:A:220:ILE:HB	1.91	0.52
3:C:164:GLU:C	3:C:166:LYS:H	2.12	0.52
3:C:198:LEU:O	3:C:201:ALA:N	2.42	0.52
3:C:179:LEU:HD11	3:C:217:GLU:CB	2.39	0.52
3:C:369:ASP:N	3:C:372:GLN:OE1	2.32	0.52
4:D:371:PHE:HB2	4:D:377:LEU:HD13	1.92	0.52
7:G:123:VAL:O	7:G:126:GLN:N	2.42	0.52
8:H:133:ILE:HB	8:H:136:LEU:HD21	1.90	0.52
2:B:65:LEU:HD21	2:B:71:LYS:HB3	1.90	0.52
6:F:168:THR:HG23	6:F:172:TYR:CE2	2.43	0.52
1:A:333:PHE:CD1	1:A:346:TYR:CB	2.88	0.52
3:C:171:LYS:NZ	3:C:208:ILE:HG13	2.24	0.52
3:C:93:THR:HA	3:C:96:VAL:HG22	1.91	0.52
5:E:31:LYS:NZ	5:E:58:GLU:O	2.32	0.52
2:B:235:LEU:HD21	2:B:276:LEU:HD23	1.91	0.52
3:C:125:ALA:HB1	3:C:130:ARG:HB3	1.91	0.52
3:C:180:LEU:O	3:C:183:LYS:HB3	2.09	0.52
7:G:284:ALA:O	7:G:287:THR:OG1	2.26	0.52
2:B:243:GLU:O	2:B:246:GLN:N	2.36	0.52
2:B:59:LEU:HA	2:B:62:ILE:HG12	1.90	0.52
2:B:70:ASN:O	2:B:73:ASP:CB	2.52	0.52
3:C:235:ALA:HB1	3:C:239:PHE:HE2	1.74	0.52
4:D:51:LEU:O	4:D:54:ILE:HB	2.09	0.52
5:E:78:GLU:N	5:E:78:GLU:OE1	2.41	0.52
6:F:57:LEU:HA	6:F:60:ARG:HE	1.74	0.52
4:D:138:GLY:HA3	4:D:154:LEU:HD21	1.91	0.52
9:I:70:ASP:C	9:I:72:ASP:H	2.12	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:263:LYS:O	3:C:266:LEU:N	2.43	0.52
3:C:300:LYS:O	3:C:303:ALA:N	2.43	0.52
5:E:137:TYR:HD1	5:E:156:HIS:HA	1.73	0.52
1:A:143:GLN:HG3	1:A:155:LEU:HD11	1.91	0.52
3:C:79:PRO:O	3:C:82:THR:OG1	2.17	0.52
5:E:88:LYS:HD2	6:F:161:ASP:HA	1.90	0.52
7:G:192:LEU:HA	7:G:196:TYR:CD2	2.45	0.52
1:A:186:TYR:O	1:A:190:SER:N	2.36	0.52
6:F:349:THR:O	6:F:349:THR:OG1	2.25	0.52
1:A:265:SER:O	1:A:268:LEU:N	2.42	0.52
4:D:174:ILE:O	4:D:177:LEU:HB2	2.09	0.52
5:E:31:LYS:NZ	5:E:58:GLU:H	2.07	0.52
8:H:7:LEU:HD22	8:H:29:PRO:HB3	1.91	0.52
6:F:135:ARG:O	6:F:139:LEU:N	2.38	0.52
6:F:15:ARG:HH12	6:F:23:HIS:HA	1.74	0.52
6:F:57:LEU:HD12	6:F:60:ARG:HH21	1.73	0.52
7:G:54:LEU:HB3	7:G:102:GLN:HB2	1.91	0.52
4:D:62:TYR:HE1	4:D:180:PHE:CZ	2.26	0.52
5:E:137:TYR:CD1	5:E:156:HIS:HA	2.45	0.52
1:A:465:ILE:HG23	5:E:280:ASN:ND2	2.24	0.52
5:E:112:LYS:HE2	6:F:120:LYS:HE3	1.92	0.52
7:G:254:ARG:O	7:G:258:GLU:HB2	2.10	0.52
1:A:134:ILE:O	1:A:138:MET:HG3	2.08	0.52
1:A:420:GLU:OE1	1:A:420:GLU:N	2.36	0.52
3:C:289:GLU:HG2	3:C:290:THR:HG22	1.91	0.52
1:A:448:LEU:HD23	4:D:401:HIS:CD2	2.44	0.52
2:B:143:LEU:HD23	2:B:147:LYS:NZ	2.24	0.52
2:B:366:ASN:O	2:B:370:ASP:N	2.40	0.52
4:D:58:GLU:HB2	4:D:102:LEU:HD22	1.91	0.52
4:D:148:ASP:O	4:D:151:GLU:HB3	2.10	0.52
5:E:22:TYR:HA	5:E:33:CYS:SG	2.50	0.52
6:F:200:GLU:OE1	6:F:202:SER:OG	2.26	0.52
1:A:28:UNK:O	1:A:31:UNK:N	2.42	0.52
1:A:367:TYR:O	1:A:370:LEU:N	2.42	0.52
1:A:439:GLU:HG2	1:A:440:ASP:OD1	2.09	0.52
2:B:115:ARG:O	2:B:119:ILE:CB	2.57	0.52
2:B:288:ASN:HA	2:B:291:LYS:NZ	2.24	0.52
3:C:100:LEU:O	3:C:104:PHE:N	2.42	0.52
4:D:288:SER:OG	4:D:289:ILE:N	2.43	0.52
4:D:289:ILE:O	4:D:292:LEU:HB3	2.09	0.52
1:A:202:ASN:OD1	1:A:203:SER:N	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:62:TYR:CE2	4:D:66:LEU:HD11	2.44	0.52
6:F:15:ARG:NH1	6:F:23:HIS:HA	2.24	0.52
7:G:191:GLY:HA2	7:G:194:ARG:HB2	1.91	0.52
7:G:219:GLU:HA	7:G:222:GLN:NE2	2.24	0.52
8:H:197:TYR:O	8:H:198:ASP:CG	2.48	0.52
3:C:106:GLN:OE1	3:C:253:ASN:ND2	2.43	0.52
4:D:108:SER:O	4:D:111:LYS:HB3	2.10	0.52
8:H:59:LYS:HD3	8:H:96:LEU:HD12	1.91	0.52
5:E:37:ILE:HG22	5:E:51:SER:HB3	1.92	0.52
1:A:156:VAL:HA	1:A:159:ASN:ND2	2.25	0.52
1:A:480:ARG:HB2	1:A:482:PRO:HD3	1.90	0.52
2:B:434:THR:O	2:B:437:GLU:HB3	2.10	0.52
3:C:100:LEU:HB3	3:C:104:PHE:CZ	2.45	0.52
9:I:65:ASP:OD1	9:I:65:ASP:N	2.42	0.52
1:A:133:GLU:OE1	1:A:133:GLU:N	2.34	0.52
2:B:112:LEU:CD1	2:B:115:ARG:HH21	2.22	0.52
2:B:115:ARG:NH1	2:B:116:ILE:HD11	2.25	0.52
2:B:269:VAL:HG13	2:B:303:PHE:CE2	2.44	0.52
3:C:151:TYR:CD1	3:C:184:VAL:HG13	2.44	0.52
5:E:138:VAL:O	5:E:154:PHE:HA	2.10	0.52
1:A:138:MET:O	1:A:141:LEU:N	2.43	0.52
1:A:286:TYR:O	1:A:289:ALA:N	2.37	0.52
2:B:173:MET:HA	2:B:176:LYS:HD3	1.91	0.52
2:B:279:ASP:N	2:B:279:ASP:OD1	2.42	0.52
3:C:329:GLU:HA	3:C:332:ARG:NH1	2.25	0.52
2:B:393:VAL:HB	3:C:354:PHE:HD1	1.74	0.52
6:F:57:LEU:O	6:F:60:ARG:HG2	2.09	0.52
8:H:106:ILE:O	8:H:109:TYR:HB3	2.09	0.52
8:H:41:ILE:C	8:H:88:TYR:HH	2.13	0.52
1:A:201:ILE:HB	8:H:92:ASN:HB2	1.90	0.52
2:B:148:LYS:HZ1	2:B:152:LYS:HG2	1.75	0.52
2:B:405:PRO:HA	5:E:259:ASN:HD21	1.74	0.52
4:D:62:TYR:CE1	4:D:180:PHE:CZ	2.96	0.52
6:F:173:SER:O	6:F:176:SER:OG	2.28	0.52
8:H:199:PHE:CZ	8:H:232:LYS:HD2	2.44	0.52
3:C:332:ARG:O	3:C:336:ASN:ND2	2.35	0.52
3:C:55:GLU:O	3:C:60:GLU:N	2.40	0.52
5:E:213:LYS:O	5:E:217:LYS:HB3	2.09	0.52
6:F:172:TYR:HB3	6:F:195:TYR:HB2	1.92	0.52
8:H:100:ASP:OD1	8:H:101:LYS:N	2.43	0.52
9:I:34:GLU:HB3	9:I:36:GLU:HG3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:202:ARG:HG3	3:C:218:LEU:HD21	1.92	0.52
4:D:126:GLY:C	4:D:130:GLN:H	2.07	0.52
4:D:360:SER:HB3	9:I:83:ARG:HH22	1.73	0.52
1:A:146:LEU:CG	1:A:151:GLU:O	2.54	0.52
2:B:140:THR:HG21	2:B:163:LEU:CG	2.38	0.52
2:B:299:LEU:O	2:B:302:LEU:HB2	2.09	0.52
2:B:76:ASN:ND2	2:B:117:SER:OG	2.42	0.52
3:C:307:ASN:HA	3:C:309:ARG:HH12	1.73	0.52
3:C:79:PRO:O	3:C:83:GLU:HG2	2.08	0.52
4:D:35:GLN:HB2	4:D:38:VAL:HG12	1.90	0.52
6:F:292:CYS:O	6:F:295:THR:OG1	2.23	0.52
9:I:63:ASN:O	9:I:66:ASP:N	2.41	0.52
2:B:200:SER:OG	2:B:201:ARG:N	2.43	0.52
3:C:325:LEU:HD23	3:C:332:ARG:HA	1.92	0.52
4:D:394:ASP:OD1	4:D:395:ASN:N	2.42	0.52
5:E:275:VAL:O	5:E:279:SER:OG	2.26	0.52
6:F:80:LYS:HD3	6:F:166:ARG:HH12	1.74	0.52
7:G:233:LYS:HA	7:G:236:SER:HB3	1.90	0.52
8:H:200:LEU:O	8:H:232:LYS:HA	2.09	0.52
1:A:333:PHE:HD1	1:A:346:TYR:HB2	1.74	0.52
2:B:120:GLU:O	2:B:123:ARG:HB3	2.09	0.52
2:B:145:GLU:HA	2:B:148:LYS:HG2	1.91	0.52
3:C:270:ILE:HG12	3:C:303:ALA:HB2	1.91	0.52
3:C:169:ASP:O	3:C:172:PRO:HD2	2.10	0.52
3:C:182:SER:O	3:C:194:SER:OG	2.26	0.52
6:F:124:ASP:O	6:F:127:LEU:N	2.41	0.52
8:H:64:VAL:O	8:H:68:ALA:HB2	2.09	0.52
1:A:166:ASN:HA	1:A:169:CYS:SG	2.50	0.52
1:A:396:SER:HB3	1:A:432:ILE:HD12	1.91	0.52
2:B:110:LEU:CD1	2:B:110:LEU:N	2.73	0.52
2:B:122:ILE:HB	2:B:136:ARG:HE	1.75	0.52
2:B:238:ALA:O	2:B:241:LEU:N	2.43	0.52
3:C:226:HIS:CD2	3:C:238:TYR:HE2	2.28	0.52
3:C:255:TYR:HB2	3:C:291:TYR:HE1	1.75	0.52
3:C:54:GLN:HB3	3:C:57:SER:OG	2.10	0.52
4:D:64:LYS:HA	4:D:67:CYS:SG	2.50	0.52
5:E:28:LYS:NZ	5:E:31:LYS:HB2	2.25	0.52
6:F:44:SER:OG	6:F:45:LEU:N	2.42	0.52
8:H:104:LYS:O	8:H:107:SER:OG	2.28	0.52
8:H:28:PRO:HA	8:H:31:LYS:HB2	1.92	0.52
9:I:34:GLU:OE1	9:I:34:GLU:N	2.30	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:115:ILE:HG22	3:C:119:GLU:HG3	1.90	0.52
5:E:24:ARG:HH11	7:G:100:ARG:HH21	1.56	0.52
6:F:43:GLU:O	6:F:46:THR:HB	2.10	0.52
7:G:89:ALA:O	7:G:92:MET:N	2.43	0.52
1:A:176:LEU:HA	1:A:179:ILE:CG2	2.40	0.52
2:B:281:ILE:O	2:B:284:ILE:N	2.43	0.52
3:C:379:GLN:OE1	4:D:263:ARG:NH2	2.43	0.52
4:D:238:PHE:CD2	4:D:246:TYR:HD1	2.28	0.52
6:F:215:TYR:O	6:F:218:SER:OG	2.22	0.52
4:D:238:PHE:CD2	4:D:246:TYR:HD1	2.28	0.52
4:D:292:LEU:HD22	4:D:311:THR:HG21	1.90	0.52
7:G:93:ASP:OD1	7:G:94:MET:N	2.43	0.52
1:A:177:ASN:HB3	1:A:229:THR:OG1	2.10	0.52
2:B:273:TYR:CZ	2:B:351:ARG:NH1	2.78	0.52
3:C:223:GLY:HA2	3:C:226:HIS:HD2	1.74	0.52
4:D:66:LEU:HA	4:D:69:GLU:HG2	1.92	0.52
7:G:236:SER:O	7:G:239:ALA:N	2.43	0.52
2:B:65:LEU:HD23	2:B:72:TRP:HA	1.92	0.52
2:B:72:TRP:CZ3	2:B:113:ASN:HB3	2.44	0.52
3:C:132:PHE:HA	3:C:135:HIS:CE1	2.45	0.52
3:C:321:TYR:O	3:C:324:GLU:N	2.42	0.52
4:D:112:GLU:H	4:D:112:GLU:CD	2.10	0.52
3:C:406:ASP:HB2	4:D:396:LYS:HE2	1.90	0.52
6:F:291:ILE:O	6:F:295:THR:HG23	2.10	0.52
6:F:371:VAL:O	6:F:374:ASN:HB3	2.10	0.52
8:H:44:LEU:HD12	8:H:44:LEU:N	2.25	0.52
5:E:124:ASP:N	5:E:133:PRO:O	2.42	0.52
5:E:28:LYS:HB3	5:E:31:LYS:NZ	2.25	0.52
6:F:74:ASN:OD1	6:F:75:GLN:N	2.42	0.52
7:G:296:LEU:HD11	8:H:260:ILE:HG23	1.92	0.52
1:A:140:LEU:HD11	1:A:179:ILE:CG1	2.40	0.52
2:B:101:MET:O	2:B:104:LEU:HG	2.09	0.52
2:B:167:THR:HG1	2:B:170:SER:HG	1.54	0.52
2:B:282:HIS:CE1	2:B:304:THR:HG23	2.44	0.52
3:C:78:ILE:HD13	3:C:101:ILE:HG12	1.90	0.52
4:D:222:ARG:HH12	4:D:325:HIS:HA	1.74	0.52
2:B:185:GLU:HA	2:B:188:ILE:HG22	1.92	0.52
3:C:129:LYS:HE3	3:C:132:PHE:CD2	2.45	0.52
3:C:80:HIS:HB3	3:C:84:TYR:HE2	1.74	0.52
5:E:22:TYR:CD2	5:E:125:VAL:HG11	2.45	0.52
5:E:177:ASP:N	5:E:177:ASP:OD1	2.42	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:42:SER:O	6:F:46:THR:OG1	2.26	0.52
8:H:64:VAL:O	8:H:68:ALA:CB	2.57	0.52
2:B:112:LEU:CD1	2:B:115:ARG:NH2	2.73	0.52
3:C:142:ALA:O	3:C:145:HIS:N	2.43	0.52
5:E:160:THR:O	5:E:161:ILE:HD13	2.10	0.52
6:F:359:SER:O	6:F:363:ILE:HG13	2.09	0.52
8:H:213:ASN:ND2	8:H:215:LYS:HB3	2.25	0.52
1:A:353:LYS:HE2	9:I:64:TRP:HB3	1.91	0.52
2:B:95:TYR:CD1	2:B:96:MET:HG3	2.45	0.52
5:E:21:HIS:HA	5:E:24:ARG:NH2	2.25	0.52
5:E:297:GLN:HE21	5:E:301:ILE:HG23	1.75	0.52
2:B:65:LEU:HD23	2:B:71:LYS:CB	2.39	0.52
3:C:205:ALA:HA	3:C:208:ILE:HG12	1.92	0.52
4:D:345:TYR:CG	4:D:348:LEU:HD23	2.44	0.52
5:E:201:GLN:HE21	5:E:205:LYS:NZ	2.08	0.52
5:E:28:LYS:NZ	5:E:30:ASN:HB2	2.25	0.52
3:C:175:VAL:H	3:C:208:ILE:HD13	1.75	0.52
7:G:53:MET:HE1	7:G:139:VAL:HG13	1.91	0.52
1:A:404:LEU:HD22	1:A:419:VAL:HG11	1.91	0.52
1:A:416:GLU:O	1:A:419:VAL:HB	2.10	0.52
2:B:364:ARG:NH2	6:F:325:GLU:OE2	2.40	0.52
2:B:75:LEU:HD22	2:B:104:LEU:HD11	1.91	0.52
3:C:176:ASP:O	3:C:179:LEU:HB3	2.10	0.52
4:D:131:ALA:HA	4:D:134:TRP:HB2	1.92	0.52
6:F:78:VAL:O	6:F:81:TYR:HB2	2.10	0.52
7:G:274:GLN:OE1	7:G:275:ASP:N	2.43	0.52
2:B:346:ILE:O	2:B:348:HIS:N	2.43	0.52
3:C:322:GLU:HA	3:C:325:LEU:HB3	1.93	0.52
4:D:289:ILE:HG13	4:D:290:SER:N	2.25	0.52
7:G:60:ASP:HA	7:G:135:ARG:HH12	1.75	0.52
1:A:333:PHE:N	1:A:333:PHE:CD1	2.77	0.52
3:C:217:GLU:O	3:C:221:MET:HB2	2.10	0.52
8:H:24:GLU:HA	8:H:27:LEU:HD23	1.92	0.52
2:B:122:ILE:O	2:B:126:THR:HG23	2.10	0.51
3:C:370:THR:O	3:C:373:VAL:N	2.43	0.51
4:D:138:GLY:HA2	4:D:141:TYR:HD2	1.74	0.51
6:F:23:HIS:CD2	6:F:26:PHE:HD2	2.28	0.51
8:H:199:PHE:CE1	8:H:232:LYS:HD2	2.44	0.51
2:B:254:GLU:HA	2:B:257:TRP:CE2	2.45	0.51
3:C:179:LEU:O	3:C:182:SER:N	2.43	0.51
3:C:69:GLY:HA2	3:C:74:LEU:HD11	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:224:GLY:O	6:F:290:LYS:NZ	2.30	0.51
1:A:137:PHE:CZ	1:A:141:LEU:HD21	2.45	0.51
3:C:330:LEU:HD22	3:C:334:HIS:CD2	2.45	0.51
5:E:286:ILE:O	5:E:289:ASP:HB3	2.09	0.51
8:H:27:LEU:O	8:H:31:LYS:HB2	2.10	0.51
1:A:154:GLN:O	1:A:158:PHE:CB	2.58	0.51
2:B:75:LEU:O	2:B:78:GLN:HB2	2.10	0.51
6:F:53:LYS:HA	6:F:58:ARG:CZ	2.40	0.51
8:H:7:LEU:O	8:H:10:SER:OG	2.18	0.51
8:H:94:HIS:HA	8:H:98:GLU:HG2	1.92	0.51
1:A:475:TYR:O	1:A:479:MET:HG2	2.10	0.51
3:C:137:LEU:HD23	3:C:140:LYS:HG3	1.92	0.51
3:C:55:GLU:O	3:C:58:ILE:HB	2.11	0.51
6:F:64:ASN:O	6:F:67:SER:OG	2.25	0.51
7:G:300:VAL:O	7:G:304:ALA:HB3	2.10	0.51
2:B:319:GLU:HB3	2:B:320:PRO:HD3	1.92	0.51
7:G:256:GLU:HG3	7:G:257:GLU:N	2.26	0.51
8:H:7:LEU:O	8:H:10:SER:OG	2.17	0.51
2:B:393:VAL:HG22	2:B:400:VAL:HG12	1.91	0.51
2:B:395:ARG:HD3	3:C:354:PHE:HE1	1.76	0.51
6:F:15:ARG:HH22	6:F:30:GLU:CD	2.13	0.51
1:A:305:LYS:HE2	9:I:34:GLU:HA	1.90	0.51
3:C:270:ILE:HD11	3:C:299:MET:HG2	1.91	0.51
5:E:193:GLN:O	5:E:196:SER:N	2.44	0.51
6:F:266:PHE:CE2	6:F:270:ILE:HD11	2.45	0.51
7:G:209:GLU:H	7:G:209:GLU:CD	2.12	0.51
8:H:69:SER:HB2	8:H:77:SER:OG	2.09	0.51
9:I:74:THR:O	9:I:77:LEU:HB3	2.09	0.51
1:A:276:LEU:O	1:A:279:ILE:N	2.43	0.51
1:A:287:SER:C	1:A:289:ALA:H	2.13	0.51
2:B:132:VAL:HG13	2:B:136:ARG:HB3	1.91	0.51
3:C:184:VAL:O	3:C:188:LEU:HG	2.10	0.51
4:D:351:LYS:O	4:D:355:SER:HB3	2.10	0.51
8:H:110:LEU:O	8:H:113:LEU:N	2.43	0.51
8:H:12:SER:OG	8:H:16:GLU:OE1	2.28	0.51
1:A:168:LEU:HA	1:A:171:TYR:HE2	1.74	0.51
3:C:141:LEU:O	3:C:144:LEU:N	2.43	0.51
3:C:122:ILE:O	3:C:126:LYS:HG2	2.10	0.51
4:D:31:PHE:O	4:D:34:THR:OG1	2.16	0.51
8:H:214:GLU:N	8:H:214:GLU:OE1	2.32	0.51
2:B:421:GLU:OE2	7:G:148:LYS:HE3	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:58:VAL:HB	7:G:62:THR:HB	1.93	0.51
8:H:105:LEU:HA	8:H:108:LEU:HD12	1.93	0.51
1:A:180:ASN:O	1:A:184:TRP:N	2.29	0.51
3:C:194:SER:O	3:C:197:SER:OG	2.25	0.51
3:C:326:MET:HA	3:C:332:ARG:HH21	1.76	0.51
4:D:111:LYS:O	4:D:114:ASN:HB2	2.08	0.51
4:D:288:SER:O	4:D:291:SER:HB2	2.11	0.51
6:F:150:LEU:HD13	6:F:175:ASN:OD1	2.11	0.51
6:F:77:SER:OG	6:F:78:VAL:N	2.44	0.51
5:E:24:ARG:HH21	7:G:100:ARG:HE	1.58	0.51
7:G:126:GLN:OE1	7:G:138:ALA:HB2	2.10	0.51
7:G:28:TYR:HB3	7:G:204:HIS:CD2	2.46	0.51
1:A:227:ASN:HB3	1:A:260:PRO:HB2	1.92	0.51
1:A:211:ARG:NH2	1:A:246:GLU:OE2	2.44	0.51
3:C:259:CYS:HA	3:C:262:LEU:CD2	2.40	0.51
4:D:186:TYR:HA	4:D:189:GLU:OE2	2.10	0.51
4:D:47:ALA:O	4:D:50:VAL:HG22	2.10	0.51
6:F:39:PHE:O	6:F:42:SER:OG	2.27	0.51
7:G:60:ASP:HA	7:G:135:ARG:NH1	2.26	0.51
8:H:186:ARG:NH2	8:H:210:PHE:O	2.43	0.51
2:B:294:GLU:O	2:B:297:GLU:N	2.39	0.51
3:C:97:LEU:O	3:C:101:ILE:HG13	2.11	0.51
3:C:219:ASP:HB2	3:C:242:SER:OG	2.10	0.51
6:F:62:TYR:OH	6:F:102:LEU:HD12	2.10	0.51
6:F:241:THR:OG1	6:F:242:ILE:HG12	2.09	0.51
2:B:141:LYS:HE2	2:B:179:PHE:HB3	1.92	0.51
4:D:108:SER:O	4:D:112:GLU:HG3	2.11	0.51
4:D:26:VAL:HG12	4:D:53:LYS:HE2	1.91	0.51
6:F:49:PHE:CE2	6:F:81:TYR:HA	2.45	0.51
2:B:132:VAL:HG12	2:B:167:THR:HG23	1.92	0.51
3:C:106:GLN:HG2	3:C:252:HIS:CE1	2.46	0.51
7:G:261:LEU:HB2	7:G:266:LEU:CD2	2.40	0.51
1:A:140:LEU:O	1:A:144:LEU:HG	2.10	0.51
2:B:412:LEU:O	2:B:415:TRP:N	2.43	0.51
4:D:213:TYR:CE1	4:D:243:LEU:HD11	2.46	0.51
4:D:39:SER:O	4:D:43:ARG:HG3	2.10	0.51
4:D:42:GLN:HA	4:D:45:GLU:CD	2.31	0.51
5:E:201:GLN:CG	5:E:205:LYS:HZ3	2.23	0.51
6:F:250:TRP:CZ3	6:F:273:GLN:HG2	2.46	0.51
6:F:7:ILE:HD12	6:F:10:ILE:HB	1.93	0.51
3:C:161:LEU:HD22	3:C:165:PHE:CE2	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:65:PHE:HD1	6:F:69:PHE:HE2	1.58	0.51
8:H:221:ALA:HB3	8:H:228:ILE:HD11	1.92	0.51
4:D:352:SER:O	4:D:355:SER:OG	2.25	0.51
5:E:92:TRP:CE2	5:E:120:LEU:HD13	2.45	0.51
1:A:403:SER:HA	1:A:442:PHE:HA	1.92	0.51
3:C:377:LEU:HD13	3:C:397:LEU:HD22	1.91	0.51
4:D:141:TYR:HE2	4:D:153:THR:HG1	1.58	0.51
4:D:342:LEU:HD23	4:D:348:LEU:HD12	1.92	0.51
8:H:174:PHE:O	8:H:177:PHE:HB2	2.11	0.51
3:C:331:THR:HG23	3:C:335:PHE:HE2	1.76	0.51
4:D:147:LYS:HB2	4:D:181:TYR:CE2	2.45	0.51
4:D:39:SER:HB3	4:D:42:GLN:CG	2.37	0.51
5:E:201:GLN:CG	5:E:205:LYS:HZ3	2.23	0.51
2:B:104:LEU:HD22	2:B:108:LYS:NZ	2.26	0.51
5:E:59:ASP:H	5:E:65:VAL:HG12	1.75	0.51
8:H:171:ILE:HA	8:H:174:PHE:CE2	2.44	0.51
1:A:404:LEU:HD12	1:A:405:ARG:N	2.25	0.51
1:A:421:TYR:CD1	8:H:157:TYR:HD2	2.27	0.51
2:B:188:ILE:O	2:B:191:GLY:N	2.43	0.51
3:C:165:PHE:CE1	3:C:173:SER:HB3	2.45	0.51
3:C:178:HIS:HB3	3:C:197:SER:O	2.11	0.51
3:C:330:LEU:O	3:C:333:SER:OG	2.18	0.51
4:D:114:ASN:O	4:D:117:ILE:HB	2.11	0.51
4:D:235:LEU:HD21	4:D:275:GLU:HB2	1.91	0.51
6:F:75:GLN:OE1	6:F:75:GLN:N	2.35	0.51
1:A:428:ARG:NH1	8:H:192:ASN:OD1	2.43	0.51
8:H:41:ILE:HG22	8:H:88:TYR:HH	1.76	0.51
3:C:134:LYS:O	3:C:138:SER:OG	2.17	0.51
3:C:267:LEU:HD12	3:C:299:MET:CE	2.41	0.51
5:E:194:LEU:HD21	6:F:385:GLU:HG3	1.91	0.51
1:A:438:HIS:HB2	8:H:197:TYR:CE1	2.45	0.51
2:B:138:ARG:HH12	2:B:142:ASP:HB2	1.74	0.51
3:C:329:GLU:N	3:C:332:ARG:NH1	2.59	0.51
4:D:205:GLU:OE2	4:D:209:ARG:NH2	2.44	0.51
7:G:263:GLU:HA	7:G:266:LEU:HB3	1.93	0.51
1:A:133:GLU:HG3	1:A:173:LEU:HD13	1.93	0.51
1:A:335:GLN:N	1:A:335:GLN:OE1	2.43	0.51
1:A:357:LEU:O	1:A:360:PHE:HB3	2.11	0.51
2:B:340:ASP:O	2:B:343:LYS:N	2.44	0.51
3:C:322:GLU:HA	3:C:325:LEU:HB3	1.92	0.51
3:C:68:MET:HG3	3:C:73:LYS:HE3	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:59:MET:O	4:D:63:TYR:HB2	2.11	0.51
6:F:391:ILE:O	6:F:392:TRP:CD2	2.64	0.51
8:H:22:ALA:HA	8:H:25:LYS:HG2	1.91	0.51
2:B:290:LEU:HD21	2:B:297:GLU:HG3	1.93	0.51
3:C:262:LEU:HA	3:C:265:MET:SD	2.51	0.51
4:D:150:ALA:O	4:D:154:LEU:HB2	2.10	0.51
4:D:164:THR:HA	4:D:167:LYS:HZ1	1.75	0.51
6:F:150:LEU:HD13	6:F:175:ASN:OD1	2.10	0.51
6:F:60:ARG:HA	6:F:63:ASP:HB2	1.91	0.51
8:H:48:ASN:HB3	8:H:51:TYR:HB2	1.92	0.51
9:I:33:ASP:OD1	9:I:34:GLU:N	2.44	0.51
4:D:213:TYR:O	4:D:216:ILE:HG22	2.11	0.51
6:F:123:GLY:O	6:F:126:ILE:CB	2.56	0.51
1:A:199:GLU:N	1:A:199:GLU:OE1	2.41	0.51
1:A:450:ASN:HA	4:D:397:ASN:HD21	1.76	0.51
1:A:449:LEU:O	1:A:451:ILE:HG23	2.11	0.51
2:B:366:ASN:HD21	2:B:373:GLU:HG3	1.76	0.51
3:C:152:LYS:O	3:C:155:LEU:HB3	2.11	0.51
8:H:213:ASN:OD1	8:H:215:LYS:N	2.38	0.51
1:A:479:MET:HE1	5:E:290:ASP:HB3	1.93	0.51
3:C:289:GLU:HG2	3:C:290:THR:N	2.25	0.51
3:C:292:GLN:HA	3:C:296:ILE:HG21	1.93	0.51
4:D:257:GLY:HA3	4:D:270:VAL:HG11	1.92	0.51
1:A:201:ILE:HG21	8:H:92:ASN:OD1	2.11	0.51
4:D:185:LEU:O	4:D:188:LYS:N	2.44	0.51
4:D:394:ASP:OD1	4:D:395:ASN:N	2.44	0.51
2:B:412:LEU:CD1	5:E:268:LYS:HG3	2.34	0.51
5:E:49:THR:OG1	5:E:50:ASN:N	2.44	0.51
5:E:81:LYS:HE3	5:E:88:LYS:HD3	1.92	0.51
1:A:174:ARG:HH12	1:A:224:LYS:HG2	1.75	0.51
1:A:328:PRO:HB3	1:A:332:PHE:CE2	2.45	0.51
2:B:340:ASP:OD1	2:B:341:LEU:N	2.44	0.51
4:D:125:GLU:O	4:D:129:GLU:N	2.43	0.51
5:E:7:LYS:NZ	5:E:160:THR:HB	2.26	0.51
6:F:132:GLU:OE2	6:F:135:ARG:HD2	2.10	0.51
9:I:71:ASP:O	9:I:73:PHE:N	2.44	0.51
1:A:177:ASN:HA	1:A:180:ASN:ND2	2.25	0.51
6:F:128:LEU:HG	6:F:167:ILE:HG12	1.92	0.51
6:F:359:SER:O	6:F:363:ILE:HG13	2.10	0.51
3:C:311:LEU:HD12	3:C:366:ILE:HD11	1.93	0.51
6:F:114:GLN:HB2	6:F:117:ASN:HB2	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:296:LEU:HD11	8:H:260:ILE:HG23	1.93	0.51
8:H:147:LYS:HZ1	8:H:151:TRP:HE1	1.59	0.51
6:F:74:ASN:OD1	6:F:76:LEU:N	2.41	0.51
7:G:251:TYR:O	7:G:255:ILE:HG12	2.10	0.51
1:A:336:SER:OG	1:A:337:ASN:N	2.42	0.51
3:C:287:THR:HG23	3:C:288:LYS:N	2.26	0.51
3:C:385:ILE:HG23	3:C:386:PHE:N	2.25	0.51
3:C:62:GLY:HA2	3:C:77:PHE:CE1	2.46	0.51
5:E:194:LEU:HD21	6:F:385:GLU:HB3	1.92	0.51
7:G:119:SER:O	7:G:122:ASP:HB2	2.11	0.51
1:A:188:TYR:HB2	1:A:236:LEU:HD11	1.91	0.51
3:C:167:LYS:HG3	3:C:168:LEU:N	2.26	0.51
8:H:125:GLU:O	8:H:129:LEU:HG	2.11	0.51
2:B:198:VAL:HA	2:B:201:ARG:NH1	2.26	0.51
3:C:171:LYS:CD	3:C:209:TYR:CZ	2.94	0.51
4:D:52:ALA:O	4:D:55:LYS:N	2.44	0.51
6:F:109:LEU:HD12	6:F:113:LYS:HD2	1.92	0.51
6:F:250:TRP:O	6:F:253:GLN:HB2	2.11	0.51
1:A:164:ILE:HA	1:A:167:LEU:CD1	2.34	0.51
3:C:315:ASN:O	3:C:319:LYS:HG2	2.11	0.51
4:D:209:ARG:O	4:D:212:THR:OG1	2.25	0.51
4:D:64:LYS:HA	4:D:67:CYS:SG	2.51	0.51
7:G:278:LYS:O	7:G:282:GLU:CB	2.58	0.51
8:H:41:ILE:O	8:H:51:TYR:OH	2.28	0.51
1:A:183:LEU:O	1:A:187:ILE:HG13	2.11	0.51
4:D:370:LYS:O	4:D:374:ASN:ND2	2.44	0.51
7:G:274:GLN:HB3	7:G:279:HIS:HE1	1.76	0.51
8:H:207:ALA:O	8:H:208:LEU:HB2	2.11	0.51
8:H:41:ILE:CG1	8:H:42:PRO:HD3	2.40	0.51
2:B:288:ASN:O	2:B:291:LYS:NZ	2.43	0.51
2:B:68:SER:H	2:B:71:LYS:CG	2.23	0.51
4:D:207:ARG:O	4:D:210:TYR:HB3	2.11	0.51
6:F:147:ARG:NH1	6:F:151:ASP:OD1	2.44	0.51
7:G:154:ASP:OD1	7:G:155:ALA:N	2.44	0.51
8:H:81:TYR:HA	8:H:84:GLN:HG2	1.93	0.51
2:B:110:LEU:CD1	2:B:110:LEU:H	2.24	0.51
2:B:66:LEU:CD1	2:B:110:LEU:HD13	2.30	0.51
2:B:133:GLU:CG	2:B:134:VAL:H	2.12	0.51
2:B:329:PHE:HB3	2:B:338:TRP:NE1	2.26	0.51
4:D:189:GLU:HA	4:D:192:GLU:OE1	2.11	0.51
6:F:113:LYS:HA	6:F:115:ARG:NH1	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:120:SER:O	7:G:123:VAL:HB	2.11	0.51
8:H:25:LYS:O	8:H:28:PRO:HD2	2.11	0.51
2:B:289:ASN:HA	2:B:292:LYS:NZ	2.26	0.51
2:B:39:LEU:HD11	2:B:58:VAL:HG22	1.93	0.51
2:B:415:TRP:HD1	5:E:237:PRO:HB3	1.75	0.51
2:B:395:ARG:NH1	3:C:361:HIS:ND1	2.59	0.51
6:F:25:LEU:HB3	6:F:29:PHE:HE2	1.76	0.51
1:A:329:GLU:HA	9:I:64:TRP:CH2	2.45	0.51
2:B:105:LYS:HB3	2:B:108:LYS:HE2	1.93	0.51
2:B:436:GLU:OE2	5:E:225:ILE:HD11	2.11	0.51
4:D:238:PHE:HD2	4:D:246:TYR:HD1	1.59	0.51
5:E:297:GLN:HA	5:E:300:LYS:HZ3	1.75	0.51
1:A:162:VAL:O	1:A:166:ASN:N	2.43	0.51
6:F:110:ASP:HA	6:F:113:LYS:HG2	1.92	0.51
7:G:91:MET:O	7:G:94:MET:N	2.44	0.51
8:H:134:LYS:NZ	8:H:138:ASP:HB2	2.25	0.51
8:H:229:VAL:HB	8:H:234:TYR:HE2	1.75	0.51
2:B:180:ILE:HD11	2:B:202:LYS:HB3	1.93	0.51
3:C:75:ARG:HD2	3:C:116:PHE:HB2	1.93	0.51
4:D:179:PHE:HB3	4:D:321:TYR:OH	2.11	0.51
6:F:214:ALA:HB2	6:F:238:ILE:HG13	1.93	0.51
3:C:401:GLU:OE1	3:C:401:GLU:HA	2.12	0.51
4:D:120:LEU:HD11	4:D:133:ALA:HB3	1.93	0.51
4:D:61:PRO:HG2	4:D:144:ILE:HG22	1.92	0.51
6:F:27:GLU:HA	6:F:30:GLU:CD	2.31	0.51
6:F:52:ALA:HB1	6:F:55:THR:OG1	2.11	0.51
8:H:21:ALA:O	8:H:25:LYS:NZ	2.38	0.51
8:H:33:GLU:HG2	8:H:37:ASN:ND2	2.26	0.51
2:B:140:THR:HG22	2:B:160:LEU:HD23	1.92	0.51
2:B:296:GLN:O	2:B:299:LEU:HB3	2.09	0.51
2:B:95:TYR:CE1	2:B:96:MET:HG3	2.46	0.51
4:D:252:TYR:O	4:D:255:VAL:N	2.44	0.51
2:B:32:CYS:HA	2:B:35:ALA:HB3	1.92	0.50
1:A:245:GLY:O	8:H:131:LYS:HD3	2.11	0.50
1:A:465:ILE:O	1:A:468:ALA:N	2.41	0.50
2:B:138:ARG:NH1	2:B:142:ASP:HB2	2.25	0.50
2:B:204:LEU:O	2:B:207:THR:HG22	2.11	0.50
3:C:105:GLU:HA	3:C:112:ASP:OD1	2.12	0.50
8:H:147:LYS:HZ1	8:H:151:TRP:HE1	1.59	0.50
4:D:289:ILE:HG13	4:D:290:SER:N	2.27	0.50
5:E:303:GLU:CD	5:E:303:GLU:H	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:57:LEU:O	6:F:61:LEU:HB3	2.10	0.50
7:G:58:VAL:HB	7:G:62:THR:CG2	2.41	0.50
8:H:224:ARG:O	8:H:226:TRP:CD1	2.64	0.50
2:B:49:ALA:HA	2:B:52:LEU:HB2	1.93	0.50
3:C:244:GLU:O	3:C:247:HIS:HB3	2.10	0.50
3:C:256:GLU:O	3:C:260:GLN:CB	2.50	0.50
4:D:111:LYS:HA	4:D:114:ASN:ND2	2.27	0.50
6:F:56:PRO:HG2	6:F:60:ARG:NH2	2.25	0.50
3:C:120:LYS:O	3:C:124:PHE:HB3	2.11	0.50
5:E:137:TYR:HA	5:E:155:LEU:O	2.11	0.50
6:F:151:ASP:OD1	6:F:151:ASP:N	2.44	0.50
1:A:201:ILE:HD12	8:H:92:ASN:H	1.76	0.50
2:B:171:MET:HB3	2:B:176:LYS:HB2	1.93	0.50
2:B:247:THR:HB	2:B:250:ILE:HG12	1.91	0.50
7:G:287:THR:O	7:G:291:ASN:ND2	2.32	0.50
8:H:136:LEU:HD21	8:H:139:ASP:OD1	2.11	0.50
8:H:8:THR:HG23	8:H:9:LYS:HD2	1.93	0.50
1:A:245:GLY:H	8:H:131:LYS:NZ	2.06	0.50
2:B:144:VAL:HG22	2:B:156:ALA:HB1	1.94	0.50
5:E:8:VAL:HG11	5:E:119:LEU:HD11	1.93	0.50
2:B:133:GLU:HG3	2:B:134:VAL:N	2.26	0.50
2:B:269:VAL:HG13	2:B:303:PHE:CE2	2.46	0.50
2:B:59:LEU:HD23	2:B:62:ILE:HD11	1.92	0.50
3:C:155:LEU:HD13	3:C:184:VAL:HG11	1.92	0.50
3:C:246:TYR:HB3	3:C:254:SER:HB2	1.93	0.50
3:C:294:ARG:HA	3:C:297:ASP:OD1	2.11	0.50
3:C:346:ASN:O	3:C:350:ILE:HG13	2.11	0.50
6:F:252:PHE:CD1	6:F:252:PHE:N	2.79	0.50
7:G:116:CYS:SG	7:G:152:VAL:HG12	2.52	0.50
8:H:52:LEU:HA	8:H:55:LEU:HD12	1.93	0.50
1:A:345:TYR:O	1:A:348:LEU:N	2.44	0.50
1:A:465:ILE:HG23	5:E:280:ASN:HD22	1.76	0.50
2:B:136:ARG:O	2:B:139:VAL:CG2	2.60	0.50
2:B:175:GLU:HB3	2:B:179:PHE:CE2	2.46	0.50
2:B:282:HIS:O	2:B:285:GLN:HB3	2.10	0.50
3:C:370:THR:OG1	3:C:371:GLN:N	2.43	0.50
4:D:213:TYR:CZ	4:D:243:LEU:HD21	2.46	0.50
5:E:56:PHE:HD1	5:E:68:LEU:HB3	1.76	0.50
7:G:126:GLN:HE21	7:G:130:GLU:HG3	1.76	0.50
3:C:183:LYS:HE3	3:C:221:MET:HB3	1.93	0.50
3:C:262:LEU:O	3:C:266:LEU:HG	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:289:ILE:O	4:D:292:LEU:N	2.44	0.50
6:F:32:PHE:HD1	6:F:37:LEU:HB2	1.75	0.50
7:G:300:VAL:O	7:G:304:ALA:CB	2.59	0.50
1:A:333:PHE:CD2	1:A:346:TYR:HD1	2.29	0.50
4:D:152:LYS:O	4:D:156:LYS:HG2	2.11	0.50
4:D:291:SER:HB3	4:D:307:TYR:CE1	2.46	0.50
1:A:359:LYS:O	1:A:362:SER:OG	2.24	0.50
4:D:126:GLY:O	4:D:129:GLU:N	2.45	0.50
4:D:191:LEU:HD21	4:D:214:TYR:HB2	1.92	0.50
4:D:29:LYS:HA	4:D:32:LEU:HD12	1.93	0.50
5:E:32:ARG:NH1	5:E:98:LYS:O	2.44	0.50
1:A:168:LEU:HA	1:A:171:TYR:CD2	2.46	0.50
2:B:172:GLU:O	2:B:176:LYS:HG3	2.11	0.50
3:C:143:THR:HA	3:C:180:LEU:HD21	1.94	0.50
3:C:307:ASN:HA	3:C:309:ARG:HH12	1.76	0.50
5:E:262:GLN:O	5:E:266:THR:HG23	2.11	0.50
4:D:247:GLU:O	4:D:251:THR:HG23	2.11	0.50
5:E:124:ASP:OD1	5:E:126:LYS:N	2.44	0.50
5:E:289:ASP:O	5:E:292:ILE:HG13	2.11	0.50
2:B:278:ASN:O	2:B:281:ILE:HG22	2.11	0.50
3:C:78:ILE:HG23	3:C:97:LEU:HD11	1.93	0.50
4:D:238:PHE:HD2	4:D:246:TYR:CD1	2.29	0.50
5:E:286:ILE:O	5:E:289:ASP:HB3	2.11	0.50
8:H:104:LYS:O	8:H:108:LEU:HG	2.12	0.50
3:C:368:LEU:HG	3:C:372:GLN:HE21	1.76	0.50
5:E:185:GLY:N	5:E:188:ILE:HD12	2.26	0.50
7:G:274:GLN:O	7:G:274:GLN:HG2	2.10	0.50
1:A:476:LEU:O	1:A:479:MET:HG2	2.11	0.50
4:D:288:SER:O	4:D:291:SER:OG	2.17	0.50
5:E:92:TRP:HB3	5:E:110:PHE:HE2	1.76	0.50
7:G:120:SER:O	7:G:123:VAL:N	2.44	0.50
8:H:37:ASN:O	8:H:41:ILE:HG12	2.12	0.50
1:A:226:ASP:O	1:A:230:LYS:NZ	2.43	0.50
2:B:210:ASN:HB3	2:B:213:TYR:CD2	2.47	0.50
2:B:351:ARG:CG	2:B:352:VAL:N	2.72	0.50
5:E:36:VAL:HA	5:E:92:TRP:HA	1.93	0.50
6:F:27:GLU:O	6:F:30:GLU:HG2	2.11	0.50
3:C:328:ASP:HB2	3:C:331:THR:OG1	2.12	0.50
5:E:22:TYR:HD1	5:E:33:CYS:SG	2.35	0.50
8:H:213:ASN:OD1	8:H:214:GLU:N	2.44	0.50
1:A:451:ILE:O	1:A:451:ILE:HD12	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:171:MET:HB2	2:B:176:LYS:HG2	1.94	0.50
4:D:58:GLU:O	4:D:144:ILE:HA	2.12	0.50
4:D:198:ILE:O	4:D:201:GLY:N	2.44	0.50
4:D:207:ARG:O	4:D:210:TYR:HB3	2.12	0.50
4:D:26:VAL:HG22	4:D:53:LYS:HE2	1.93	0.50
5:E:92:TRP:HB3	5:E:110:PHE:CZ	2.46	0.50
7:G:59:ASP:CG	7:G:61:TYR:H	2.14	0.50
8:H:14:ALA:HA	8:H:17:ASN:ND2	2.26	0.50
1:A:183:LEU:HG	1:A:187:ILE:HD11	1.93	0.50
1:A:220:ILE:O	1:A:224:LYS:HG2	2.12	0.50
1:A:307:LEU:O	1:A:310:LEU:N	2.44	0.50
2:B:255:ALA:HA	2:B:258:LYS:NZ	2.26	0.50
8:H:232:LYS:NZ	8:H:234:TYR:OH	2.44	0.50
1:A:415:SER:OG	1:A:418:THR:OG1	2.12	0.50
2:B:110:LEU:HD23	2:B:113:ASN:HD22	1.76	0.50
2:B:288:ASN:HA	2:B:291:LYS:HE3	1.92	0.50
1:A:329:GLU:HA	9:I:64:TRP:NE1	2.26	0.50
2:B:112:LEU:HD12	2:B:115:ARG:HE	1.74	0.50
3:C:158:ILE:HD11	3:C:180:LEU:HD13	1.93	0.50
3:C:244:GLU:O	3:C:247:HIS:HB3	2.12	0.50
3:C:294:ARG:NH2	3:C:324:GLU:HB2	2.27	0.50
4:D:192:GLU:HA	4:D:195:ASN:ND2	2.25	0.50
5:E:141:GLU:HB3	5:E:151:GLU:OE1	2.11	0.50
1:A:207:ASN:HA	1:A:210:LEU:HD12	1.94	0.50
2:B:140:THR:HG21	2:B:163:LEU:HD21	1.91	0.50
2:B:180:ILE:HG12	2:B:202:LYS:CE	2.42	0.50
6:F:144:VAL:O	6:F:147:ARG:N	2.45	0.50
7:G:219:GLU:O	7:G:223:SER:N	2.44	0.50
1:A:399:TYR:HE1	4:D:381:ILE:HD11	1.77	0.50
3:C:190:ASN:HB3	4:D:278:SER:HA	1.93	0.50
4:D:134:TRP:CH2	4:D:156:LYS:HE3	2.47	0.50
4:D:280:ILE:HD12	4:D:281:SER:N	2.27	0.50
2:B:416:SER:O	2:B:419:VAL:N	2.45	0.50
3:C:191:LEU:O	3:C:195:LYS:CB	2.60	0.50
2:B:395:ARG:HD3	3:C:354:PHE:HE1	1.76	0.50
4:D:100:ASN:HB3	4:D:104:LYS:NZ	2.27	0.50
4:D:138:GLY:HA2	4:D:141:TYR:CD2	2.46	0.50
4:D:289:ILE:O	4:D:292:LEU:HB3	2.12	0.50
5:E:286:ILE:HD11	7:G:280:LEU:HB3	1.93	0.50
5:E:52:PHE:CE1	5:E:76:MET:HG2	2.47	0.50
6:F:72:LYS:HG3	6:F:73:ILE:H	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:273:ARG:HG2	7:G:274:GLN:H	1.77	0.50
5:E:19:LEU:O	5:E:22:TYR:N	2.44	0.50
6:F:42:SER:O	6:F:46:THR:OG1	2.15	0.50
8:H:216:GLU:OE2	8:H:219:LYS:NZ	2.28	0.50
1:A:217:PHE:HA	1:A:220:ILE:HB	1.94	0.50
1:A:383:LEU:O	1:A:386:ASN:N	2.44	0.50
4:D:397:ASN:O	4:D:398:ALA:C	2.50	0.50
4:D:40:ILE:HA	4:D:43:ARG:NE	2.26	0.50
5:E:110:PHE:O	5:E:112:LYS:N	2.45	0.50
6:F:243:VAL:HA	6:F:252:PHE:CE2	2.46	0.50
7:G:118:LEU:HG	7:G:156:PHE:CZ	2.47	0.50
2:B:303:PHE:HE1	2:B:309:MET:HE3	1.77	0.50
3:C:346:ASN:O	3:C:350:ILE:HG13	2.11	0.50
4:D:25:GLU:N	4:D:25:GLU:OE1	2.37	0.50
7:G:252:SER:O	7:G:255:ILE:HB	2.11	0.50
8:H:27:LEU:CD1	8:H:31:LYS:HE3	2.42	0.50
4:D:198:ILE:HG23	4:D:199:GLU:H	1.75	0.50
5:E:124:ASP:OD1	5:E:126:LYS:N	2.44	0.50
6:F:256:ASN:O	6:F:260:VAL:HG22	2.11	0.50
6:F:51:ASP:HA	6:F:53:LYS:HG2	1.94	0.50
8:H:220:PHE:O	8:H:224:ARG:HG2	2.11	0.50
3:C:363:SER:OG	3:C:368:LEU:O	2.23	0.50
4:D:100:ASN:O	4:D:104:LYS:HG3	2.11	0.50
6:F:200:GLU:O	6:F:203:THR:OG1	2.29	0.50
6:F:263:PHE:CD2	6:F:318:HIS:HD2	2.30	0.50
1:A:481:TYR:HB3	5:E:298:ASN:HD21	1.75	0.50
2:B:122:ILE:O	2:B:126:THR:OG1	2.23	0.50
3:C:158:ILE:O	3:C:161:LEU:N	2.45	0.50
3:C:196:ALA:O	3:C:199:THR:OG1	2.20	0.50
3:C:55:GLU:HA	3:C:59:LEU:HB3	1.94	0.50
5:E:32:ARG:HD3	5:E:96:GLY:HA3	1.93	0.50
6:F:121:ASP:OD1	6:F:122:HIS:N	2.45	0.50
9:I:60:TRP:HE3	9:I:62:GLU:HG2	1.77	0.50
1:A:230:LYS:HE2	1:A:260:PRO:HG3	1.94	0.50
1:A:378:GLN:HG2	8:H:127:GLN:HE22	1.76	0.50
2:B:105:LYS:HE2	2:B:139:VAL:HG12	1.94	0.50
2:B:217:LYS:HA	2:B:220:TYR:HB3	1.93	0.50
3:C:358:GLU:H	3:C:358:GLU:CD	2.14	0.50
7:G:96:LYS:HD2	7:G:101:ASP:OD1	2.10	0.50
8:H:222:LEU:O	8:H:225:ASN:N	2.43	0.50
9:I:37:ASP:OD1	9:I:37:ASP:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:327:ILE:HG13	1:A:328:PRO:O	2.12	0.50
2:B:250:ILE:CD1	2:B:256:LYS:HB3	2.38	0.50
7:G:230:TYR:O	7:G:233:LYS:N	2.45	0.50
2:B:147:LYS:HE2	2:B:152:LYS:HE2	1.94	0.50
3:C:311:LEU:HD12	3:C:366:ILE:HD11	1.94	0.50
4:D:106:ASN:O	4:D:110:ILE:CB	2.58	0.50
4:D:279:LEU:O	4:D:280:ILE:HG13	2.12	0.50
7:G:261:LEU:HD22	7:G:265:GLU:HB3	1.93	0.50
1:A:163:VAL:C	1:A:167:LEU:CG	2.67	0.50
1:A:370:LEU:HA	1:A:373:LYS:NZ	2.27	0.50
2:B:116:ILE:HD13	2:B:119:ILE:HD12	1.94	0.50
2:B:119:ILE:O	2:B:123:ARG:CB	2.60	0.50
2:B:173:MET:HA	2:B:176:LYS:HE2	1.93	0.50
4:D:31:PHE:HZ	4:D:323:ASN:HD22	1.57	0.50
4:D:42:GLN:O	4:D:46:ALA:CB	2.60	0.50
4:D:59:MET:SD	4:D:61:PRO:HD2	2.52	0.50
5:E:33:CYS:O	5:E:94:HIS:HA	2.11	0.50
8:H:14:ALA:HB2	8:H:26:LEU:HD13	1.93	0.50
1:A:247:VAL:HG21	1:A:282:ILE:HG21	1.93	0.50
2:B:395:ARG:O	2:B:397:ALA:N	2.42	0.50
3:C:145:HIS:CE1	3:C:157:LEU:HD12	2.36	0.50
3:C:322:GLU:O	3:C:326:MET:HG3	2.11	0.50
4:D:123:ASP:O	4:D:130:GLN:NE2	2.45	0.50
6:F:274:ILE:HG13	6:F:280:LEU:HB3	1.93	0.50
6:F:46:THR:HA	6:F:81:TYR:HE1	1.77	0.50
7:G:189:ILE:HG13	7:G:190:HIS:ND1	2.27	0.50
4:D:132:GLN:O	4:D:135:ILE:HB	2.11	0.50
6:F:287:LEU:O	6:F:291:ILE:HG22	2.12	0.50
6:F:49:PHE:CD2	6:F:81:TYR:HD1	2.30	0.50
7:G:92:MET:O	7:G:96:LYS:HG2	2.12	0.50
1:A:157:GLU:O	1:A:161:LYS:HG3	2.12	0.50
1:A:228:GLU:OE1	1:A:263:ASP:HB3	2.11	0.50
1:A:336:SER:OG	1:A:337:ASN:N	2.43	0.50
1:A:357:LEU:O	1:A:360:PHE:HB3	2.12	0.50
1:A:388:ILE:HG21	1:A:422:MET:CE	2.41	0.50
3:C:190:ASN:OD1	3:C:194:SER:N	2.45	0.50
3:C:313:ASP:N	3:C:313:ASP:OD1	2.44	0.50
4:D:116:LYS:O	4:D:119:LYS:HB3	2.12	0.50
6:F:126:ILE:O	6:F:129:ILE:HB	2.12	0.50
7:G:159:ILE:HD11	7:G:194:ARG:O	2.12	0.50
1:A:135:ASN:O	1:A:138:MET:HG2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:141:LEU:HG	3:C:145:HIS:CD2	2.47	0.50
3:C:236:PHE:CE2	3:C:240:PHE:HB2	2.47	0.50
4:D:141:TYR:CA	4:D:144:ILE:HG12	2.42	0.50
5:E:21:HIS:HA	5:E:24:ARG:CZ	2.42	0.50
6:F:359:SER:OG	6:F:360:GLY:N	2.44	0.50
8:H:64:VAL:O	8:H:68:ALA:CB	2.59	0.50
1:A:230:LYS:HE3	1:A:260:PRO:HB3	1.94	0.50
1:A:392:ILE:HG22	1:A:432:ILE:HD11	1.93	0.50
2:B:175:GLU:O	2:B:178:GLN:HB3	2.11	0.50
3:C:97:LEU:O	3:C:101:ILE:HG13	2.12	0.50
4:D:275:GLU:O	4:D:278:SER:N	2.44	0.50
1:A:396:SER:HB2	1:A:432:ILE:HD12	1.94	0.50
2:B:65:LEU:HD12	2:B:75:LEU:HD23	1.94	0.50
4:D:312:TYR:HE1	4:D:326:ALA:HB1	1.77	0.50
7:G:249:GLU:OE1	7:G:249:GLU:N	2.44	0.50
1:A:378:GLN:H	1:A:378:GLN:CD	2.16	0.50
4:D:289:ILE:HG13	4:D:290:SER:H	1.77	0.50
7:G:278:LYS:O	7:G:282:GLU:HB2	2.12	0.50
8:H:105:LEU:HD12	8:H:106:ILE:N	2.27	0.50
1:A:420:GLU:OE1	8:H:197:TYR:OH	2.29	0.50
8:H:213:ASN:HB3	8:H:216:GLU:OE2	2.12	0.50
8:H:38:ASN:HA	8:H:42:PRO:CD	2.42	0.50
1:A:343:LEU:HG	1:A:344:PRO:HD3	1.93	0.50
1:A:402:ILE:HG22	1:A:403:SER:O	2.11	0.50
2:B:176:LYS:HA	2:B:179:PHE:HD2	1.76	0.50
3:C:118:CYS:SG	3:C:137:LEU:HD22	2.52	0.50
3:C:324:GLU:C	3:C:327:GLY:H	2.15	0.50
5:E:302:GLN:HA	5:E:305:ARG:HD2	1.94	0.50
6:F:250:TRP:CG	6:F:251:LEU:N	2.79	0.50
6:F:354:GLN:OE1	6:F:355:PRO:HD2	2.12	0.50
1:A:470:GLN:O	1:A:474:GLU:N	2.27	0.50
2:B:103:TYR:O	2:B:107:SER:CB	2.57	0.50
2:B:255:ALA:HA	2:B:258:LYS:NZ	2.27	0.50
3:C:77:PHE:O	3:C:81:SER:N	2.44	0.50
5:E:18:ALA:O	5:E:21:HIS:HB3	2.12	0.50
5:E:226:LEU:HD13	6:F:358:ILE:HD11	1.94	0.50
1:A:170:TYR:C	1:A:170:TYR:CD2	2.85	0.49
2:B:187:SER:HB2	2:B:195:GLN:NE2	2.27	0.49
4:D:259:PHE:C	4:D:259:PHE:CD2	2.86	0.49
6:F:119:SER:HA	6:F:122:HIS:CD2	2.40	0.49
8:H:266:TYR:O	8:H:269:SER:OG	2.24	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:71:LYS:O	2:B:74:ASP:HB3	2.12	0.49
6:F:80:LYS:HD3	6:F:166:ARG:NE	2.27	0.49
4:D:99:TYR:C	4:D:99:TYR:CD2	2.85	0.49
6:F:271:LYS:O	6:F:274:ILE:HG22	2.11	0.49
6:F:382:LYS:O	6:F:385:GLU:HG2	2.11	0.49
2:B:204:LEU:HD12	2:B:207:THR:HG23	1.93	0.49
3:C:63:GLN:HG2	3:C:103:LYS:HE3	1.93	0.49
3:C:113:ASP:OD1	3:C:113:ASP:N	2.44	0.49
3:C:387:TYR:CD1	3:C:403:PRO:HB3	2.47	0.49
4:D:194:VAL:HA	4:D:197:MET:HB2	1.93	0.49
6:F:164:PRO:HD2	6:F:167:ILE:HD13	1.92	0.49
6:F:258:LEU:O	6:F:260:VAL:N	2.45	0.49
6:F:42:SER:O	6:F:46:THR:CB	2.60	0.49
8:H:186:ARG:NE	8:H:209:LEU:O	2.45	0.49
3:C:80:HIS:O	3:C:84:TYR:HB3	2.11	0.49
7:G:119:SER:O	7:G:122:ASP:HB2	2.11	0.49
8:H:21:ALA:HB1	8:H:25:LYS:NZ	2.27	0.49
8:H:51:TYR:C	8:H:51:TYR:CD2	2.86	0.49
8:H:51:TYR:C	8:H:53:ASN:N	2.64	0.49
3:C:122:ILE:HG22	3:C:126:LYS:NZ	2.27	0.49
5:E:141:GLU:HA	5:E:152:LYS:H	1.76	0.49
5:E:216:ASN:O	5:E:218:GLU:HG2	2.12	0.49
5:E:294:ASN:O	5:E:297:GLN:N	2.45	0.49
6:F:374:ASN:O	6:F:378:GLU:HG2	2.12	0.49
7:G:254:ARG:HH22	7:G:270:TYR:HB3	1.77	0.49
2:B:247:THR:HB	2:B:250:ILE:HG12	1.94	0.49
3:C:64:LEU:O	3:C:67:THR:OG1	2.22	0.49
4:D:213:TYR:CE1	4:D:243:LEU:HB2	2.46	0.49
4:D:224:PHE:HD1	4:D:256:THR:HG22	1.76	0.49
6:F:265:LYS:O	6:F:268:SER:OG	2.30	0.49
8:H:221:ALA:HB3	8:H:228:ILE:HD11	1.93	0.49
1:A:142:VAL:O	1:A:145:PHE:HB3	2.12	0.49
3:C:172:PRO:HA	3:C:208:ILE:HG13	1.93	0.49
4:D:24:TYR:CZ	4:D:244:THR:HA	2.47	0.49
4:D:40:ILE:HG12	4:D:43:ARG:NH2	2.28	0.49
4:D:51:LEU:HD23	4:D:54:ILE:HD12	1.94	0.49
5:E:223:HIS:O	5:E:226:LEU:N	2.45	0.49
6:F:185:PHE:CD2	6:F:223:LEU:HB2	2.47	0.49
8:H:172:SER:HB2	8:H:173:GLU:OE1	2.11	0.49
8:H:66:ALA:O	8:H:69:SER:N	2.45	0.49
2:B:248:ASP:HA	2:B:251:LYS:HE2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:222:SER:O	3:C:225:LEU:HG	2.12	0.49
3:C:284:ALA:HA	3:C:288:LYS:HB2	1.93	0.49
2:B:415:TRP:HE1	5:E:237:PRO:HG3	1.76	0.49
5:E:265:LEU:O	5:E:268:LYS:N	2.46	0.49
6:F:308:LEU:O	6:F:347:LEU:HA	2.11	0.49
6:F:64:ASN:O	6:F:67:SER:OG	2.27	0.49
7:G:263:GLU:HA	7:G:266:LEU:HB2	1.94	0.49
7:G:27:VAL:HG12	7:G:63:VAL:HB	1.94	0.49
8:H:89:TYR:HB3	8:H:102:LYS:HZ3	1.75	0.49
1:A:343:LEU:O	1:A:346:TYR:HB3	2.12	0.49
5:E:32:ARG:HH11	5:E:96:GLY:HA3	1.77	0.49
8:H:208:LEU:HB2	8:H:209:LEU:HD12	1.94	0.49
9:I:63:ASN:N	9:I:66:ASP:OD2	2.46	0.49
3:C:141:LEU:HD23	3:C:144:LEU:HD12	1.94	0.49
3:C:201:ALA:O	3:C:205:ALA:N	2.27	0.49
4:D:141:TYR:HB2	4:D:150:ALA:HB2	1.94	0.49
1:A:428:ARG:HD2	8:H:191:LYS:HZ2	1.76	0.49
3:C:266:LEU:HB2	3:C:299:MET:SD	2.53	0.49
6:F:294:MET:O	6:F:297:ILE:HG22	2.13	0.49
2:B:78:GLN:HG3	2:B:79:LEU:N	2.27	0.49
4:D:171:MET:HG3	4:D:197:MET:SD	2.53	0.49
6:F:51:ASP:HA	6:F:53:LYS:NZ	2.28	0.49
7:G:80:VAL:HG13	7:G:125:THR:HG22	1.93	0.49
2:B:206:LYS:O	2:B:209:LYS:HB3	2.12	0.49
2:B:394:ASN:HD21	2:B:398:LYS:NZ	2.10	0.49
3:C:251:THR:N	3:C:254:SER:OG	2.45	0.49
5:E:229:LEU:O	5:E:232:VAL:N	2.42	0.49
5:E:304:GLN:N	5:E:304:GLN:OE1	2.45	0.49
6:F:192:SER:O	6:F:195:TYR:HB3	2.12	0.49
8:H:28:PRO:O	8:H:31:LYS:HB2	2.12	0.49
1:A:204:ASP:HA	1:A:207:ASN:HB2	1.94	0.49
3:C:277:ASP:O	3:C:280:ASN:HB2	2.12	0.49
4:D:147:LYS:HD3	4:D:181:TYR:CD2	2.47	0.49
6:F:220:SER:O	6:F:223:LEU:N	2.45	0.49
6:F:221:ALA:HA	6:F:227:ILE:CD1	2.41	0.49
8:H:135:ASN:HB2	8:H:138:ASP:HB2	1.93	0.49
8:H:221:ALA:HA	8:H:224:ARG:HB2	1.94	0.49
1:A:247:VAL:HG13	1:A:279:ILE:HB	1.94	0.49
1:A:470:GLN:O	1:A:474:GLU:HG2	2.13	0.49
3:C:288:LYS:O	3:C:292:GLN:HG3	2.12	0.49
6:F:130:ASP:HA	6:F:133:ILE:HD12	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:249:GLU:N	7:G:249:GLU:OE1	2.39	0.49
3:C:138:SER:O	3:C:141:LEU:HB3	2.12	0.49
3:C:141:LEU:HD21	3:C:157:LEU:HD13	1.93	0.49
6:F:7:ILE:HD11	6:F:64:ASN:HB3	1.95	0.49
2:B:124:VAL:HA	2:B:127:GLU:CD	2.32	0.49
2:B:184:MET:HG2	2:B:196:ALA:HA	1.94	0.49
2:B:301:LYS:O	2:B:305:THR:HG23	2.13	0.49
2:B:86:HIS:HB2	2:B:97:ILE:HD12	1.94	0.49
3:C:315:ASN:C	3:C:319:LYS:HD3	2.32	0.49
2:B:395:ARG:HB3	3:C:357:VAL:HA	1.93	0.49
4:D:164:THR:HA	4:D:167:LYS:CD	2.39	0.49
4:D:184:GLN:NE2	4:D:217:HIS:CD2	2.80	0.49
4:D:245:SER:O	4:D:249:ILE:HG23	2.12	0.49
6:F:242:ILE:HG23	6:F:248:TYR:HD2	1.77	0.49
6:F:23:HIS:ND1	6:F:24:PRO:HD3	2.28	0.49
7:G:123:VAL:O	7:G:126:GLN:HB3	2.12	0.49
9:I:58:ASN:O	9:I:58:ASN:OD1	2.30	0.49
1:A:331:SER:OG	1:A:332:PHE:N	2.45	0.49
3:C:152:LYS:HD2	3:C:156:ALA:HB2	1.94	0.49
3:C:61:LEU:HB3	3:C:65:TYR:CZ	2.47	0.49
4:D:120:LEU:HA	4:D:130:GLN:HB3	1.94	0.49
4:D:134:TRP:HE1	4:D:160:LYS:HZ2	1.60	0.49
4:D:165:GLY:HA2	4:D:168:ILE:HB	1.94	0.49
6:F:263:PHE:CD2	6:F:318:HIS:HD2	2.29	0.49
6:F:62:TYR:O	6:F:67:SER:N	2.45	0.49
8:H:51:TYR:O	8:H:55:LEU:HB2	2.13	0.49
1:A:180:ASN:O	1:A:184:TRP:HD1	1.95	0.49
2:B:141:LYS:CE	2:B:179:PHE:HA	2.43	0.49
2:B:72:TRP:HZ2	2:B:110:LEU:N	2.10	0.49
3:C:175:VAL:HG22	3:C:204:ALA:CB	2.43	0.49
3:C:239:PHE:CE1	3:C:265:MET:HA	2.47	0.49
4:D:48:GLU:N	4:D:48:GLU:OE1	2.28	0.49
6:F:117:ASN:OD1	6:F:118:GLY:N	2.46	0.49
7:G:127:LYS:HA	7:G:130:GLU:HG2	1.94	0.49
2:B:173:MET:HA	2:B:176:LYS:HB3	1.93	0.49
2:B:401:ASN:OD1	2:B:403:GLU:HG2	2.13	0.49
2:B:66:LEU:HD12	2:B:67:ALA:CA	2.43	0.49
7:G:126:GLN:HG3	7:G:158:LEU:HD23	1.93	0.49
8:H:134:LYS:C	8:H:136:LEU:H	2.15	0.49
8:H:177:PHE:HD1	8:H:180:ILE:HD12	1.75	0.49
1:A:312:GLN:HA	1:A:315:LYS:HE2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:124:PHE:HD1	3:C:127:ARG:HH21	1.58	0.49
7:G:107:TRP:CD1	7:G:129:PHE:HE2	2.30	0.49
1:A:427:ILE:HD13	1:A:432:ILE:HB	1.94	0.49
4:D:104:LYS:HA	4:D:107:GLU:CD	2.33	0.49
4:D:115:GLU:O	4:D:118:GLN:HB3	2.12	0.49
5:E:290:ASP:O	5:E:293:GLU:N	2.45	0.49
6:F:30:GLU:O	6:F:34:GLU:HG2	2.13	0.49
7:G:253:LYS:HG2	7:G:256:GLU:OE2	2.12	0.49
7:G:59:ASP:CG	7:G:61:TYR:H	2.16	0.49
1:A:170:TYR:O	1:A:172:ASN:N	2.45	0.49
1:A:408:CYS:O	1:A:411:LEU:N	2.45	0.49
1:A:462:ASP:O	1:A:466:LYS:N	2.25	0.49
2:B:236:GLU:HB3	2:B:240:TYR:CE2	2.48	0.49
2:B:278:ASN:O	2:B:281:ILE:HG22	2.13	0.49
3:C:74:LEU:CD1	3:C:104:PHE:CE1	2.95	0.49
4:D:265:ASP:HA	4:D:268:SER:HB3	1.95	0.49
3:C:420:ASN:CB	4:D:410:LEU:HD11	2.43	0.49
6:F:102:LEU:HD11	6:F:106:PHE:CZ	2.48	0.49
6:F:15:ARG:CZ	6:F:26:PHE:HB3	2.42	0.49
7:G:127:LYS:O	7:G:130:GLU:N	2.46	0.49
8:H:219:LYS:NZ	8:H:223:GLU:OE2	2.33	0.49
4:D:104:LYS:HA	4:D:107:GLU:OE1	2.11	0.49
7:G:95:LEU:O	7:G:98:THR:OG1	2.20	0.49
1:A:157:GLU:O	1:A:161:LYS:HG2	2.13	0.49
2:B:148:LYS:HZ2	2:B:156:ALA:HB2	1.77	0.49
2:B:177:ILE:HD13	2:B:180:ILE:HD12	1.95	0.49
4:D:61:PRO:HA	4:D:64:LYS:NZ	2.28	0.49
6:F:243:VAL:HG23	6:F:252:PHE:HE2	1.77	0.49
7:G:95:LEU:HD22	7:G:100:ARG:HD2	1.94	0.49
2:B:294:GLU:O	2:B:297:GLU:HB2	2.11	0.49
1:A:137:PHE:O	1:A:141:LEU:HG	2.13	0.49
2:B:69:ARG:NH1	2:B:113:ASN:OD1	2.46	0.49
6:F:102:LEU:O	6:F:105:GLN:HB3	2.12	0.49
9:I:79:ALA:O	9:I:83:ARG:HB2	2.12	0.49
1:A:214:MET:O	1:A:233:LEU:HD11	2.12	0.49
3:C:139:ILE:HB	3:C:165:PHE:CE1	2.47	0.49
4:D:304:TYR:CE2	4:D:337:VAL:HG21	2.48	0.49
4:D:53:LYS:O	4:D:57:GLU:CB	2.52	0.49
5:E:92:TRP:CB	5:E:110:PHE:HE2	2.20	0.49
6:F:391:ILE:O	6:F:392:TRP:CD2	2.65	0.49
2:B:436:GLU:O	2:B:439:MET:HB3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:310:SER:HB3	3:C:313:ASP:OD2	2.12	0.49
1:A:399:TYR:CZ	4:D:383:ARG:HD2	2.47	0.49
8:H:168:SER:O	8:H:170:ASN:C	2.50	0.49
1:A:170:TYR:HD2	1:A:170:TYR:C	2.16	0.49
3:C:120:LYS:HG3	3:C:123:GLU:OE1	2.13	0.49
6:F:62:TYR:CE2	6:F:82:LEU:HD21	2.48	0.49
7:G:267:LYS:O	7:G:271:VAL:HG23	2.11	0.49
8:H:108:LEU:HD11	8:H:177:PHE:HE2	1.78	0.49
1:A:228:GLU:HG2	1:A:263:ASP:HB3	1.95	0.49
2:B:123:ARG:HH12	2:B:127:GLU:CD	2.16	0.49
2:B:73:ASP:HA	2:B:76:ASN:OD1	2.13	0.49
5:E:59:ASP:OD1	5:E:60:GLU:N	2.45	0.49
3:C:347:LEU:O	3:C:350:ILE:N	2.46	0.49
4:D:154:LEU:O	4:D:157:SER:OG	2.22	0.49
4:D:147:LYS:HD2	4:D:186:TYR:CZ	2.48	0.49
5:E:162:GLU:HA	5:E:162:GLU:OE1	2.13	0.49
6:F:263:PHE:CD2	6:F:318:HIS:HD2	2.30	0.49
6:F:277:ILE:HD12	6:F:279:ILE:N	2.28	0.49
2:B:75:LEU:O	2:B:79:LEU:N	2.29	0.49
5:E:165:GLU:O	5:E:169:ILE:HD12	2.12	0.49
7:G:187:ALA:O	7:G:192:LEU:HB2	2.13	0.49
7:G:118:LEU:HB3	7:G:196:TYR:CZ	2.47	0.49
8:H:123:HIS:O	8:H:126:LEU:HB2	2.13	0.49
3:C:239:PHE:HB2	3:C:261:VAL:CG1	2.40	0.49
7:G:138:ALA:O	7:G:155:ALA:HA	2.13	0.49
7:G:238:LEU:HD11	7:G:242:LYS:HE3	1.93	0.49
7:G:279:HIS:HA	7:G:282:GLU:HB3	1.93	0.49
1:A:253:PHE:O	1:A:257:LEU:HG	2.13	0.49
2:B:66:LEU:HA	2:B:71:LYS:HB2	1.94	0.49
5:E:167:GLU:N	5:E:167:GLU:OE1	2.44	0.49
5:E:202:SER:O	5:E:205:LYS:HB2	2.12	0.49
6:F:32:PHE:HB3	6:F:41:LEU:CD1	2.43	0.49
8:H:147:LYS:HG2	8:H:163:LEU:HD11	1.95	0.49
1:A:135:ASN:O	1:A:138:MET:HB2	2.12	0.49
3:C:135:HIS:NE2	3:C:168:LEU:HB2	2.27	0.49
6:F:132:GLU:OE2	6:F:135:ARG:HD2	2.12	0.49
6:F:261:GLY:HA3	6:F:298:GLU:HG3	1.94	0.49
6:F:69:PHE:HA	6:F:72:LYS:NZ	2.28	0.49
7:G:249:GLU:HG2	7:G:253:LYS:NZ	2.28	0.49
3:C:171:LYS:HB3	3:C:172:PRO:HD3	1.95	0.49
7:G:127:LYS:HA	7:G:130:GLU:HG2	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:308:GLY:N	9:I:40:ILE:HG12	2.26	0.49
1:A:193:THR:HA	1:A:196:ARG:HG2	1.95	0.49
1:A:204:ASP:O	1:A:208:ILE:HG12	2.11	0.49
2:B:236:GLU:N	2:B:236:GLU:OE1	2.31	0.49
3:C:419:LEU:O	3:C:422:VAL:N	2.46	0.49
5:E:63:SER:HB2	5:E:101:ALA:HB3	1.95	0.49
7:G:230:TYR:O	7:G:231:GLU:C	2.51	0.49
8:H:56:MET:O	8:H:59:LYS:HB3	2.12	0.49
1:A:191:HIS:CE1	1:A:206:GLN:HE21	2.30	0.49
2:B:353:ILE:HG23	2:B:357:TYR:CD2	2.48	0.49
1:A:481:TYR:CE2	5:E:297:GLN:HB3	2.46	0.49
6:F:314:SER:OG	6:F:319:LEU:O	2.17	0.49
6:F:92:PHE:CD2	6:F:140:LYS:HB3	2.48	0.49
7:G:188:LEU:HA	7:G:192:LEU:HB2	1.95	0.49
8:H:27:LEU:HD13	8:H:31:LYS:NZ	2.28	0.49
2:B:103:TYR:CA	2:B:106:SER:OG	2.61	0.49
3:C:165:PHE:CE2	3:C:173:SER:HB3	2.48	0.49
1:A:190:SER:O	1:A:194:LEU:N	2.44	0.49
1:A:184:TRP:CZ2	1:A:217:PHE:HZ	2.31	0.49
2:B:114:THR:O	2:B:118:VAL:HG22	2.13	0.49
2:B:177:ILE:HG12	2:B:203:ILE:HD11	1.94	0.49
3:C:370:THR:O	3:C:373:VAL:N	2.44	0.49
5:E:211:LEU:O	5:E:215:ILE:HD12	2.12	0.49
6:F:206:THR:HG22	6:F:208:ALA:H	1.78	0.49
6:F:248:TYR:O	6:F:251:LEU:HB3	2.13	0.49
2:B:144:VAL:HA	2:B:147:LYS:HB2	1.95	0.49
2:B:299:LEU:O	2:B:302:LEU:HB3	2.13	0.49
2:B:353:ILE:HG23	2:B:357:TYR:CD2	2.47	0.49
5:E:58:GLU:N	5:E:58:GLU:OE1	2.46	0.49
8:H:128:TYR:CD1	8:H:132:HIS:HE1	2.31	0.49
8:H:201:PRO:HD2	8:H:204:ASN:HD22	1.77	0.49
2:B:363:LEU:O	2:B:366:ASN:N	2.46	0.49
2:B:435:LYS:O	2:B:438:ILE:HB	2.13	0.49
4:D:139:GLU:O	4:D:142:ALA:N	2.46	0.49
4:D:188:LYS:O	4:D:192:GLU:HG3	2.13	0.49
6:F:172:TYR:HB3	6:F:195:TYR:HB2	1.93	0.49
7:G:74:SER:HG	7:G:76:THR:HG22	1.78	0.49
8:H:224:ARG:O	8:H:226:TRP:CD1	2.65	0.49
1:A:203:SER:HA	1:A:206:GLN:HG2	1.95	0.49
2:B:142:ASP:O	2:B:146:ILE:HG23	2.11	0.49
2:B:240:TYR:O	2:B:243:GLU:N	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:362:ILE:O	3:C:366:ILE:HG22	2.13	0.49
5:E:128:GLN:HG3	5:E:130:VAL:HG12	1.95	0.49
6:F:128:LEU:O	6:F:131:SER:OG	2.23	0.49
6:F:152:ASP:OD1	6:F:153:LEU:N	2.45	0.49
8:H:184:ALA:O	8:H:187:ASP:HB2	2.12	0.49
2:B:112:LEU:HG	2:B:115:ARG:CZ	2.40	0.49
2:B:433:ILE:HD11	5:E:210:TYR:CD2	2.48	0.49
2:B:142:ASP:HA	2:B:145:GLU:HG2	1.95	0.49
3:C:139:ILE:HB	3:C:165:PHE:CZ	2.44	0.49
4:D:110:ILE:HG23	4:D:114:ASN:HD21	1.78	0.49
2:B:296:GLN:OE1	2:B:296:GLN:N	2.31	0.49
4:D:118:GLN:HA	4:D:121:GLU:OE2	2.12	0.49
6:F:228:TYR:HE1	6:F:290:LYS:HG3	1.76	0.49
1:A:327:ILE:HD12	1:A:328:PRO:HD2	1.95	0.49
3:C:122:ILE:HD11	3:C:137:LEU:HB2	1.95	0.49
3:C:426:LEU:HD13	5:E:288:PHE:CD2	2.48	0.49
5:E:5:HIS:CG	5:E:46:ILE:HD11	2.48	0.49
6:F:291:ILE:O	6:F:292:CYS:C	2.52	0.49
4:D:280:ILE:HD12	4:D:281:SER:H	1.78	0.49
2:B:293:LEU:HD13	2:B:296:GLN:OE1	2.12	0.48
3:C:375:GLY:O	3:C:378:SER:OG	2.30	0.48
3:C:79:PRO:O	3:C:82:THR:OG1	2.29	0.48
4:D:140:TYR:O	4:D:144:ILE:HG12	2.13	0.48
6:F:323:ASN:HA	6:F:326:HIS:HD2	1.78	0.48
1:A:327:ILE:HG21	1:A:353:LYS:HE3	1.94	0.48
1:A:378:GLN:HG3	8:H:127:GLN:OE1	2.13	0.48
2:B:298:SER:O	2:B:302:LEU:CB	2.54	0.48
3:C:98:LYS:HA	3:C:101:ILE:HD12	1.94	0.48
3:C:226:HIS:HB3	3:C:231:ASP:CB	2.40	0.48
4:D:149:ASN:HA	4:D:152:LYS:NZ	2.28	0.48
8:H:56:MET:HB3	8:H:60:ARG:HH12	1.78	0.48
1:A:177:ASN:O	1:A:229:THR:OG1	2.28	0.48
1:A:412:ASN:O	1:A:413:LEU:HD12	2.12	0.48
3:C:366:ILE:HG23	3:C:368:LEU:H	1.78	0.48
7:G:252:SER:O	7:G:255:ILE:HG22	2.13	0.48
7:G:286:GLU:O	7:G:290:ASN:HB2	2.13	0.48
8:H:31:LYS:O	8:H:35:ILE:HG13	2.13	0.48
4:D:309:LEU:HD11	9:I:77:LEU:CD2	2.42	0.48
1:A:332:PHE:HA	1:A:335:GLN:HB2	1.95	0.48
2:B:251:LYS:HA	2:B:257:TRP:CD1	2.48	0.48
3:C:73:LYS:O	3:C:76:GLU:HG2	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:46:THR:OG1	6:F:81:TYR:OH	2.25	0.48
1:A:356:ASP:OD1	1:A:356:ASP:N	2.45	0.48
2:B:141:LYS:NZ	2:B:182:GLU:HB2	2.27	0.48
2:B:164:GLN:HE22	2:B:177:ILE:HD13	1.77	0.48
2:B:59:LEU:O	2:B:63:VAL:N	2.27	0.48
2:B:68:SER:HB3	2:B:71:LYS:HE3	1.95	0.48
3:C:284:ALA:HA	3:C:288:LYS:HB3	1.94	0.48
4:D:354:ALA:HB1	4:D:359:VAL:O	2.13	0.48
5:E:293:GLU:O	5:E:296:ILE:HG13	2.13	0.48
6:F:11:LEU:HD22	6:F:65:PHE:HZ	1.77	0.48
6:F:59:LEU:O	6:F:63:ASP:N	2.44	0.48
1:A:308:GLY:N	9:I:40:ILE:HG12	2.27	0.48
2:B:65:LEU:CD2	2:B:71:LYS:HB3	2.42	0.48
5:E:206:ASP:HA	5:E:209:GLU:OE2	2.14	0.48
5:E:205:LYS:NZ	6:F:378:GLU:OE2	2.40	0.48
1:A:131:THR:OG1	1:A:132:ALA:N	2.46	0.48
1:A:164:ILE:HA	1:A:167:LEU:HG	1.94	0.48
2:B:399:ILE:H	2:B:399:ILE:HD12	1.76	0.48
2:B:67:ALA:HB3	2:B:71:LYS:NZ	2.27	0.48
5:E:106:ILE:O	5:E:109:LEU:HG	2.14	0.48
5:E:109:LEU:O	5:E:112:LYS:NZ	2.46	0.48
5:E:181:GLN:HE21	5:E:183:ALA:HB2	1.78	0.48
6:F:102:LEU:HG	6:F:106:PHE:CE2	2.48	0.48
1:A:353:LYS:NZ	9:I:64:TRP:CG	2.81	0.48
4:D:27:SER:HA	4:D:30:ALA:HB3	1.94	0.48
4:D:50:VAL:O	4:D:54:ILE:HG13	2.14	0.48
4:D:51:LEU:O	4:D:54:ILE:HB	2.13	0.48
5:E:71:ASN:O	5:E:75:ASN:ND2	2.46	0.48
6:F:126:ILE:O	6:F:129:ILE:HB	2.12	0.48
6:F:43:GLU:O	6:F:47:LYS:NZ	2.37	0.48
7:G:296:LEU:HD12	7:G:296:LEU:HA	1.52	0.48
1:A:200:GLU:O	1:A:203:SER:OG	2.12	0.48
2:B:100:VAL:O	2:B:104:LEU:HG	2.13	0.48
2:B:131:PHE:O	2:B:135:GLU:CB	2.46	0.48
2:B:366:ASN:O	2:B:370:ASP:N	2.45	0.48
3:C:59:LEU:HB2	3:C:84:TYR:HE2	1.77	0.48
4:D:138:GLY:O	4:D:141:TYR:HB2	2.14	0.48
4:D:50:VAL:O	4:D:54:ILE:HG13	2.13	0.48
5:E:46:ILE:HG21	5:E:119:LEU:HD22	1.94	0.48
5:E:69:ASP:OD1	5:E:71:ASN:N	2.46	0.48
6:F:57:LEU:N	6:F:60:ARG:HH21	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:139:ASP:O	8:H:142:LEU:N	2.46	0.48
2:B:110:LEU:O	2:B:114:THR:N	2.44	0.48
2:B:300:VAL:HG13	2:B:301:LYS:N	2.28	0.48
2:B:72:TRP:CH2	2:B:109:SER:CB	2.59	0.48
3:C:205:ALA:HA	3:C:209:TYR:CD2	2.48	0.48
4:D:198:ILE:HG23	4:D:199:GLU:N	2.28	0.48
4:D:291:SER:HB3	4:D:307:TYR:CE1	2.48	0.48
5:E:69:ASP:OD1	5:E:69:ASP:N	2.36	0.48
6:F:30:GLU:O	6:F:33:TYR:HB3	2.13	0.48
6:F:38:TRP:HD1	6:F:41:LEU:HD22	1.78	0.48
7:G:140:VAL:O	7:G:153:ILE:HD12	2.13	0.48
8:H:112:ASN:O	8:H:115:SER:OG	2.18	0.48
2:B:173:MET:HB2	2:B:213:TYR:CZ	2.48	0.48
1:A:146:LEU:HD21	1:A:154:GLN:HB3	1.96	0.48
2:B:403:GLU:OE2	5:E:259:ASN:ND2	2.47	0.48
3:C:154:SER:O	3:C:158:ILE:CB	2.48	0.48
7:G:55:GLY:O	7:G:102:GLN:HB3	2.13	0.48
7:G:86:VAL:O	7:G:90:LYS:HB3	2.13	0.48
8:H:81:TYR:O	8:H:85:LEU:CB	2.61	0.48
1:A:278:LYS:O	1:A:281:ALA:N	2.46	0.48
4:D:173:THR:OG1	4:D:176:ARG:NH2	2.46	0.48
6:F:77:SER:HG	6:F:78:VAL:H	1.60	0.48
5:E:286:ILE:O	5:E:289:ASP:HB3	2.13	0.48
6:F:277:ILE:HB	6:F:280:LEU:HD12	1.95	0.48
6:F:74:ASN:O	6:F:78:VAL:HG13	2.13	0.48
7:G:204:HIS:C	7:G:205:LYS:HZ3	2.15	0.48
3:C:132:PHE:O	3:C:136:SER:HB3	2.13	0.48
3:C:220:LEU:HD23	3:C:242:SER:HB3	1.95	0.48
3:C:288:LYS:O	3:C:292:GLN:N	2.46	0.48
4:D:111:LYS:O	4:D:115:GLU:HG2	2.13	0.48
6:F:137:TYR:O	6:F:141:ASN:N	2.46	0.48
6:F:195:TYR:O	6:F:198:THR:HG22	2.14	0.48
6:F:49:PHE:HE2	6:F:81:TYR:HB3	1.78	0.48
1:A:140:LEU:HD11	1:A:179:ILE:HG12	1.95	0.48
2:B:177:ILE:HA	2:B:180:ILE:HD12	1.94	0.48
4:D:29:LYS:HD3	4:D:32:LEU:HD12	1.93	0.48
4:D:67:CYS:O	4:D:71:LEU:HG	2.13	0.48
6:F:11:LEU:O	6:F:14:LEU:HB2	2.13	0.48
6:F:266:PHE:CE1	6:F:291:ILE:HD11	2.48	0.48
8:H:11:LEU:HB2	8:H:30:ILE:HD13	1.94	0.48
8:H:14:ALA:O	8:H:17:ASN:HB3	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:157:GLU:HB3	1:A:161:LYS:HE3	1.94	0.48
2:B:269:VAL:HG13	2:B:303:PHE:HE2	1.77	0.48
4:D:114:ASN:HA	4:D:117:ILE:HD12	1.94	0.48
5:E:10:ILE:N	5:E:162:GLU:OE1	2.46	0.48
7:G:120:SER:OG	7:G:121:VAL:N	2.47	0.48
8:H:178:THR:O	8:H:182:LYS:HG2	2.13	0.48
1:A:157:GLU:OE1	1:A:160:ARG:NH2	2.44	0.48
2:B:115:ARG:O	2:B:118:VAL:HG13	2.08	0.48
2:B:336:HIS:HA	2:B:339:GLU:OE1	2.13	0.48
2:B:55:SER:O	2:B:59:LEU:HG	2.13	0.48
3:C:148:LYS:HZ2	3:C:149:LYS:HG3	1.79	0.48
3:C:198:LEU:O	3:C:201:ALA:HB3	2.13	0.48
3:C:352:GLU:HG2	3:C:353:PRO:HD3	1.96	0.48
7:G:248:ALA:O	7:G:251:TYR:N	2.45	0.48
2:B:340:ASP:O	2:B:343:LYS:HB2	2.13	0.48
2:B:411:LEU:O	2:B:414:GLU:HB3	2.14	0.48
4:D:147:LYS:HE3	4:D:186:TYR:CE2	2.49	0.48
5:E:92:TRP:CD2	5:E:120:LEU:HD13	2.48	0.48
5:E:210:TYR:O	5:E:213:LYS:N	2.47	0.48
9:I:80:GLU:CD	9:I:83:ARG:HH21	2.16	0.48
1:A:333:PHE:HD2	1:A:346:TYR:CD1	2.29	0.48
3:C:165:PHE:HA	3:C:169:ASP:H	1.78	0.48
4:D:148:ASP:O	4:D:152:LYS:HE3	2.13	0.48
5:E:112:LYS:HE2	6:F:120:LYS:HB2	1.95	0.48
1:A:338:MET:HE2	1:A:342:LEU:HD11	1.95	0.48
1:A:416:GLU:O	1:A:419:VAL:N	2.46	0.48
2:B:139:VAL:O	2:B:143:LEU:HB3	2.14	0.48
5:E:139:ALA:HA	5:E:153:THR:O	2.14	0.48
6:F:8:ASP:O	6:F:11:LEU:HB3	2.13	0.48
7:G:156:PHE:HA	7:G:199:LEU:HG	1.96	0.48
8:H:38:ASN:O	8:H:42:PRO:HD2	2.13	0.48
3:C:231:ASP:HB3	3:C:234:THR:HG1	1.77	0.48
5:E:32:ARG:HD2	5:E:100:ARG:NE	2.28	0.48
6:F:338:LYS:HG2	6:F:352:TRP:CE3	2.48	0.48
7:G:118:LEU:HD22	7:G:122:ASP:HB3	1.95	0.48
7:G:282:GLU:O	7:G:285:ASP:N	2.45	0.48
8:H:215:LYS:O	8:H:219:LYS:HG3	2.13	0.48
2:B:114:THR:HA	2:B:117:SER:HG	1.78	0.48
2:B:198:VAL:HA	2:B:201:ARG:HH11	1.78	0.48
4:D:212:THR:HG22	4:D:234:SER:HB2	1.95	0.48
4:D:248:SER:O	4:D:251:THR:N	2.46	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:126:LYS:HB2	5:E:128:GLN:NE2	2.27	0.48
5:E:189:ARG:NH1	7:G:293:VAL:HG11	2.29	0.48
6:F:252:PHE:HB3	6:F:256:ASN:HD21	1.78	0.48
7:G:225:LEU:HA	7:G:225:LEU:HD23	1.52	0.48
8:H:220:PHE:CE2	8:H:224:ARG:HG3	2.48	0.48
1:A:327:ILE:HB	1:A:353:LYS:HZ2	1.77	0.48
1:A:333:PHE:HE1	1:A:346:TYR:HA	1.78	0.48
2:B:101:MET:HA	2:B:104:LEU:CG	2.42	0.48
2:B:126:THR:CG2	2:B:136:ARG:HH22	2.27	0.48
2:B:139:VAL:O	2:B:143:LEU:HD13	2.13	0.48
3:C:119:GLU:HB2	3:C:141:LEU:HD21	1.94	0.48
3:C:208:ILE:HD11	3:C:212:THR:HA	1.94	0.48
4:D:96:GLN:NE2	4:D:99:TYR:HB3	2.28	0.48
6:F:57:LEU:HA	6:F:60:ARG:NE	2.28	0.48
7:G:148:LYS:N	7:G:148:LYS:CD	2.73	0.48
7:G:232:GLU:O	7:G:235:GLU:HB3	2.14	0.48
8:H:36:LYS:HG2	8:H:39:LEU:HD23	1.96	0.48
1:A:174:ARG:HH12	1:A:224:LYS:HG2	1.79	0.48
6:F:349:THR:O	6:F:349:THR:OG1	2.31	0.48
7:G:91:MET:O	7:G:94:MET:N	2.46	0.48
1:A:333:PHE:HD2	1:A:346:TYR:HD1	1.60	0.48
3:C:171:LYS:CG	3:C:172:PRO:HD3	2.43	0.48
3:C:186:HIS:N	3:C:194:SER:OG	2.46	0.48
3:C:277:ASP:HA	3:C:280:ASN:ND2	2.27	0.48
7:G:156:PHE:CB	7:G:198:SER:HA	2.43	0.48
8:H:221:ALA:HB3	8:H:228:ILE:HD11	1.95	0.48
2:B:122:ILE:O	2:B:126:THR:CB	2.62	0.48
2:B:210:ASN:ND2	2:B:212:LYS:HB2	2.28	0.48
3:C:240:PHE:O	3:C:244:GLU:HG2	2.13	0.48
4:D:185:LEU:O	4:D:188:LYS:N	2.47	0.48
8:H:10:SER:OG	8:H:11:LEU:N	2.45	0.48
8:H:89:TYR:HB3	8:H:102:LYS:HE3	1.96	0.48
1:A:274:PHE:O	1:A:277:SER:OG	2.16	0.48
2:B:171:MET:HG3	2:B:176:LYS:HG2	1.95	0.48
2:B:200:SER:O	2:B:203:ILE:HG22	2.13	0.48
5:E:90:ILE:O	5:E:114:THR:HG21	2.13	0.48
6:F:286:PHE:O	6:F:289:GLN:N	2.47	0.48
7:G:103:MET:CE	7:G:133:ASN:HD22	2.27	0.48
8:H:106:ILE:O	8:H:109:TYR:HB3	2.13	0.48
8:H:19:ASP:O	8:H:22:ALA:HB3	2.14	0.48
8:H:51:TYR:CZ	8:H:55:LEU:HD21	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:144:VAL:HA	2:B:153:ILE:HD11	1.94	0.48
2:B:394:ASN:ND2	2:B:398:LYS:HE2	2.28	0.48
3:C:132:PHE:HA	3:C:135:HIS:HE1	1.77	0.48
3:C:236:PHE:CE1	3:C:265:MET:HB3	2.46	0.48
3:C:315:ASN:O	3:C:319:LYS:HG3	2.14	0.48
3:C:402:THR:OG1	3:C:403:PRO:HD2	2.13	0.48
4:D:120:LEU:HD23	4:D:134:TRP:CE2	2.49	0.48
4:D:141:TYR:HB2	4:D:150:ALA:HB2	1.96	0.48
4:D:277:LEU:O	4:D:280:ILE:HG23	2.13	0.48
5:E:70:HIS:HE1	5:E:109:LEU:HD21	1.79	0.48
6:F:15:ARG:NH1	6:F:26:PHE:HB3	2.28	0.48
7:G:85:ASP:N	7:G:85:ASP:OD1	2.46	0.48
1:A:315:LYS:HD3	1:A:345:TYR:HE2	1.78	0.48
2:B:419:VAL:O	2:B:422:LEU:HB3	2.14	0.48
8:H:172:SER:HB3	8:H:174:PHE:CD2	2.48	0.48
1:A:350:LYS:NZ	9:I:64:TRP:HZ3	2.11	0.48
2:B:430:GLY:O	2:B:433:ILE:HG22	2.14	0.48
3:C:55:GLU:O	3:C:59:LEU:N	2.46	0.48
6:F:123:GLY:O	6:F:127:LEU:HG	2.14	0.48
8:H:133:ILE:O	8:H:135:ASN:N	2.46	0.48
1:A:465:ILE:HG23	5:E:280:ASN:ND2	2.29	0.48
6:F:358:ILE:HG23	6:F:362:GLN:HB2	1.94	0.48
2:B:76:ASN:OD1	2:B:77:GLU:HG3	2.14	0.48
3:C:294:ARG:CD	3:C:323:LYS:HE2	2.43	0.48
2:B:417:HIS:CE1	5:E:172:GLU:OE2	2.67	0.48
3:C:429:LYS:NZ	5:E:292:ILE:HD11	2.29	0.48
6:F:124:ASP:OD1	6:F:124:ASP:N	2.43	0.48
6:F:148:ASP:OD1	6:F:149:LEU:N	2.46	0.48
8:H:257:THR:O	8:H:262:LYS:HE3	2.13	0.48
2:B:192:ASP:OD2	2:B:195:GLN:HB2	2.13	0.48
2:B:268:LEU:HA	2:B:268:LEU:HD23	1.58	0.48
2:B:275:ASN:ND2	11:B:501:HOH:O	2.16	0.48
3:C:376:LYS:HA	3:C:379:GLN:OE1	2.13	0.48
7:G:110:SER:HB2	7:G:143:PRO:HD3	1.96	0.48
8:H:229:VAL:O	8:H:232:LYS:HB3	2.14	0.48
3:C:109:ASP:OD1	3:C:112:ASP:HB2	2.14	0.48
5:E:209:GLU:O	5:E:212:ASP:HB2	2.13	0.48
6:F:110:ASP:OD1	6:F:111:SER:N	2.46	0.48
6:F:121:ASP:OD1	6:F:123:GLY:N	2.26	0.48
6:F:26:PHE:O	6:F:30:GLU:HG2	2.13	0.48
8:H:168:SER:C	8:H:170:ASN:N	2.65	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:24:GLU:HG3	8:H:27:LEU:HD21	1.96	0.48
2:B:120:GLU:HA	2:B:123:ARG:HB3	1.95	0.48
2:B:234:TYR:O	2:B:237:VAL:N	2.47	0.48
2:B:66:LEU:HD22	2:B:72:TRP:HB2	1.95	0.48
3:C:75:ARG:HD2	3:C:116:PHE:HB2	1.95	0.48
4:D:303:SER:O	4:D:307:TYR:HD2	1.96	0.48
6:F:56:PRO:O	6:F:59:LEU:HD13	2.13	0.48
7:G:274:GLN:HB3	7:G:279:HIS:HE1	1.78	0.48
7:G:93:ASP:HA	7:G:96:LYS:HD3	1.96	0.48
4:D:27:SER:HB2	4:D:180:PHE:CE1	2.48	0.48
1:A:214:MET:O	1:A:218:LEU:HB2	2.14	0.48
1:A:399:TYR:CD2	1:A:402:ILE:HD12	2.49	0.48
2:B:95:TYR:O	2:B:99:LYS:NZ	2.43	0.48
3:C:313:ASP:OD1	3:C:314:PHE:N	2.47	0.48
4:D:61:PRO:HG3	4:D:146:ASP:HB2	1.96	0.48
5:E:113:TYR:O	6:F:162:SER:HB3	2.14	0.48
6:F:250:TRP:CZ3	6:F:251:LEU:HD13	2.48	0.48
6:F:23:HIS:HA	6:F:26:PHE:CD2	2.48	0.48
1:A:160:ARG:HA	1:A:164:ILE:HD12	1.96	0.48
1:A:180:ASN:OD1	1:A:184:TRP:NE1	2.46	0.48
1:A:451:ILE:O	1:A:454:SER:N	2.46	0.48
2:B:101:MET:CA	2:B:104:LEU:HD12	2.32	0.48
2:B:293:LEU:HB3	2:B:296:GLN:OE1	2.13	0.48
3:C:107:VAL:CG2	3:C:112:ASP:N	2.73	0.48
3:C:330:LEU:O	3:C:333:SER:OG	2.14	0.48
4:D:29:LYS:HB3	4:D:46:ALA:HB1	1.96	0.48
7:G:49:VAL:O	7:G:109:HIS:HA	2.13	0.48
1:A:312:GLN:O	1:A:315:LYS:HB2	2.14	0.48
1:A:419:VAL:HG22	1:A:423:VAL:HG23	1.94	0.48
2:B:115:ARG:HD2	2:B:146:ILE:HB	1.95	0.48
2:B:376:THR:O	2:B:379:TYR:N	2.47	0.48
4:D:415:GLN:O	4:D:418:GLY:N	2.47	0.48
4:D:29:LYS:HB3	4:D:46:ALA:HB1	1.96	0.48
7:G:135:ARG:HA	7:G:157:ARG:CZ	2.44	0.48
8:H:20:TYR:HA	8:H:23:CYS:HB2	1.95	0.48
1:A:428:ARG:NH1	8:H:192:ASN:OD1	2.47	0.48
2:B:140:THR:HA	2:B:143:LEU:HG	1.96	0.48
2:B:326:ASP:OD1	2:B:327:LEU:N	2.46	0.48
6:F:49:PHE:CE1	6:F:58:ARG:HB2	2.48	0.48
2:B:197:THR:HG22	2:B:201:ARG:NH1	2.28	0.48
1:A:134:ILE:O	1:A:138:MET:HE2	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:170:TYR:HB2	1:A:176:LEU:HD12	1.94	0.48
1:A:479:MET:HG3	1:A:480:ARG:N	2.21	0.48
3:C:112:ASP:HA	3:C:115:ILE:HG13	1.95	0.48
3:C:277:ASP:O	3:C:280:ASN:HB2	2.14	0.48
6:F:207:LEU:O	6:F:211:GLN:HB2	2.13	0.48
1:A:217:PHE:HA	1:A:220:ILE:HG12	1.95	0.48
2:B:353:ILE:HG23	2:B:357:TYR:CD2	2.48	0.48
3:C:65:TYR:HB3	3:C:77:PHE:CD2	2.48	0.48
4:D:27:SER:O	4:D:30:ALA:HB3	2.14	0.48
5:E:7:LYS:HB3	5:E:45:THR:HG22	1.96	0.48
6:F:179:PHE:O	6:F:183:ASN:N	2.46	0.48
7:G:147:VAL:O	7:G:148:LYS:C	2.52	0.48
7:G:289:GLU:OE1	7:G:289:GLU:N	2.45	0.48
8:H:174:PHE:HA	8:H:177:PHE:HD2	1.78	0.48
4:D:63:TYR:OH	4:D:94:PHE:HA	2.14	0.48
5:E:22:TYR:CG	5:E:125:VAL:HG11	2.49	0.48
7:G:205:LYS:HD2	7:G:210:THR:HG22	1.95	0.48
5:E:36:VAL:HA	5:E:92:TRP:HA	1.94	0.48
8:H:198:ASP:O	8:H:234:TYR:HA	2.14	0.48
2:B:141:LYS:NZ	2:B:179:PHE:HD1	2.10	0.48
2:B:360:ILE:HG13	6:F:343:GLN:OE1	2.14	0.48
3:C:260:GLN:HG3	3:C:264:TYR:HE2	1.79	0.48
4:D:303:SER:O	4:D:307:TYR:HD2	1.97	0.48
6:F:266:PHE:CE2	6:F:291:ILE:HG13	2.48	0.48
6:F:319:LEU:HD11	6:F:323:ASN:HD22	1.79	0.48
7:G:186:GLN:O	7:G:188:LEU:N	2.47	0.48
3:C:74:LEU:HA	3:C:77:PHE:HE2	1.78	0.48
4:D:247:GLU:OE1	4:D:248:SER:N	2.47	0.48
6:F:44:SER:HG	6:F:45:LEU:H	1.62	0.48
8:H:159:LYS:O	8:H:162:ASP:HB2	2.13	0.48
1:A:424:SER:HA	1:A:427:ILE:HD12	1.94	0.48
2:B:112:LEU:O	2:B:115:ARG:HG2	2.14	0.48
2:B:168:TYR:HE1	2:B:176:LYS:HE3	1.78	0.48
3:C:115:ILE:HD13	3:C:148:LYS:HZ2	1.79	0.48
6:F:15:ARG:HH11	6:F:23:HIS:CB	2.25	0.48
6:F:160:LYS:HD2	6:F:163:ILE:HG22	1.95	0.48
6:F:252:PHE:N	6:F:252:PHE:CD1	2.81	0.48
7:G:286:GLU:HA	7:G:289:GLU:OE2	2.14	0.48
1:A:337:ASN:N	1:A:337:ASN:OD1	2.46	0.48
2:B:109:SER:CB	2:B:114:THR:CG2	2.86	0.48
2:B:76:ASN:O	2:B:80:THR:N	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:171:LYS:O	3:C:175:VAL:HG23	2.13	0.48
6:F:258:LEU:HD23	6:F:291:ILE:HD13	1.96	0.48
7:G:216:LEU:HD22	7:G:217:HIS:ND1	2.29	0.48
2:B:347:GLU:O	2:B:351:ARG:HB2	2.14	0.47
3:C:283:ASN:HB2	3:C:286:TYR:CD2	2.49	0.47
3:C:381:ILE:HD12	3:C:388:GLY:O	2.13	0.47
4:D:189:GLU:O	4:D:192:GLU:HB2	2.14	0.47
6:F:35:GLU:HB3	6:F:37:LEU:HD13	1.96	0.47
1:A:449:LEU:O	1:A:451:ILE:HG23	2.13	0.47
2:B:315:GLN:O	2:B:319:GLU:CB	2.61	0.47
4:D:117:ILE:O	4:D:121:GLU:HG3	2.14	0.47
8:H:123:HIS:O	8:H:127:GLN:HG2	2.14	0.47
1:A:209:ILE:O	1:A:213:THR:HG23	2.14	0.47
2:B:347:GLU:CD	2:B:347:GLU:C	2.72	0.47
3:C:131:VAL:HG23	3:C:168:LEU:HD22	1.96	0.47
3:C:263:LYS:HG3	3:C:299:MET:HE1	1.95	0.47
4:D:54:ILE:O	4:D:58:GLU:HA	2.14	0.47
7:G:205:LYS:HB2	7:G:205:LYS:HE2	1.73	0.47
1:A:376:THR:O	1:A:379:LEU:N	2.44	0.47
2:B:112:LEU:HD12	2:B:112:LEU:C	2.34	0.47
3:C:347:LEU:O	3:C:350:ILE:N	2.47	0.47
4:D:267:LYS:HA	4:D:271:ILE:HG12	1.96	0.47
4:D:48:GLU:HA	4:D:51:LEU:HD12	1.96	0.47
1:A:333:PHE:N	1:A:333:PHE:HD1	2.12	0.47
3:C:77:PHE:HB2	3:C:104:PHE:CE2	2.49	0.47
3:C:66:VAL:HG22	3:C:104:PHE:CE1	2.47	0.47
4:D:141:TYR:CZ	4:D:150:ALA:HA	2.49	0.47
7:G:51:GLY:HA2	7:G:71:MET:HB2	1.95	0.47
1:A:357:LEU:HD11	1:A:384:ARG:NH1	2.28	0.47
2:B:223:LEU:HD23	2:B:226:LYS:HD2	1.96	0.47
2:B:279:ASP:N	2:B:279:ASP:OD1	2.45	0.47
2:B:280:LEU:O	2:B:284:ILE:HG12	2.14	0.47
4:D:60:ALA:O	4:D:63:TYR:N	2.46	0.47
6:F:29:PHE:O	6:F:33:TYR:N	2.30	0.47
6:F:314:SER:O	6:F:318:HIS:N	2.47	0.47
6:F:57:LEU:O	6:F:60:ARG:HG2	2.15	0.47
6:F:59:LEU:O	6:F:63:ASP:N	2.34	0.47
2:B:347:GLU:HG2	2:B:383:LEU:HD21	1.96	0.47
3:C:164:GLU:HA	3:C:167:LYS:HE3	1.95	0.47
5:E:141:GLU:HG3	5:E:151:GLU:C	2.35	0.47
7:G:118:LEU:HG	7:G:156:PHE:CZ	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:239:PHE:CZ	3:C:264:TYR:HB3	2.49	0.47
3:C:362:ILE:O	3:C:366:ILE:HG22	2.14	0.47
4:D:148:ASP:OD1	4:D:148:ASP:N	2.45	0.47
4:D:195:ASN:O	4:D:199:GLU:HG2	2.14	0.47
4:D:35:GLN:HG2	4:D:323:ASN:ND2	2.29	0.47
1:A:146:LEU:O	1:A:149:SER:N	2.48	0.47
1:A:152:LEU:HD12	1:A:152:LEU:C	2.34	0.47
1:A:201:ILE:C	1:A:204:ASP:H	2.17	0.47
2:B:159:ILE:O	2:B:163:LEU:HB3	2.14	0.47
3:C:133:LEU:HD22	3:C:137:LEU:HD11	1.96	0.47
4:D:119:LYS:HG3	4:D:123:ASP:OD2	2.15	0.47
4:D:280:ILE:HD12	4:D:281:SER:N	2.29	0.47
4:D:96:GLN:NE2	4:D:99:TYR:HD2	2.09	0.47
5:E:223:HIS:O	5:E:226:LEU:N	2.47	0.47
2:B:72:TRP:HB3	2:B:113:ASN:HD22	1.79	0.47
3:C:275:ILE:HB	3:C:307:ASN:HD21	1.79	0.47
3:C:306:TYR:CD1	3:C:338:LEU:HD21	2.48	0.47
4:D:259:PHE:CE1	4:D:332:GLU:HG2	2.48	0.47
5:E:295:LYS:O	5:E:298:ASN:HB2	2.14	0.47
5:E:29:GLU:N	5:E:29:GLU:OE1	2.43	0.47
7:G:24:LYS:O	7:G:61:TYR:HB3	2.14	0.47
7:G:270:TYR:HA	7:G:273:ARG:HB2	1.96	0.47
7:G:50:MET:HG2	7:G:51:GLY:N	2.29	0.47
2:B:127:GLU:O	2:B:129:LYS:HG3	2.14	0.47
3:C:314:PHE:CE2	3:C:339:TYR:HB2	2.50	0.47
2:B:115:ARG:O	2:B:119:ILE:HG13	2.14	0.47
3:C:340:ASP:O	3:C:343:LEU:N	2.47	0.47
3:C:88:PHE:HE2	3:C:90:LYS:HD2	1.79	0.47
4:D:53:LYS:O	4:D:57:GLU:CB	2.49	0.47
6:F:22:LEU:HD13	6:F:48:PHE:HE1	1.78	0.47
6:F:23:HIS:HA	6:F:26:PHE:CD2	2.48	0.47
7:G:29:ILE:HA	7:G:65:VAL:HG13	1.96	0.47
2:B:122:ILE:HG22	2:B:139:VAL:CG2	2.44	0.47
3:C:166:LYS:HD3	3:C:174:LEU:HD21	1.97	0.47
3:C:180:LEU:O	3:C:184:VAL:HG23	2.13	0.47
3:C:261:VAL:HG12	3:C:265:MET:HG3	1.95	0.47
3:C:287:THR:HG23	3:C:288:LYS:H	1.79	0.47
3:C:318:LEU:O	3:C:322:GLU:HG3	2.14	0.47
3:C:55:GLU:HB2	3:C:88:PHE:CE1	2.49	0.47
6:F:48:PHE:O	6:F:52:ALA:HB3	2.14	0.47
1:A:241:PHE:HD1	1:A:246:GLU:HG3	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:238:ALA:O	2:B:240:TYR:N	2.48	0.47
2:B:406:LYS:HE3	2:B:410:GLN:CB	2.43	0.47
3:C:143:THR:O	3:C:146:TYR:N	2.46	0.47
3:C:264:TYR:HA	3:C:267:LEU:HB3	1.97	0.47
5:E:73:ILE:HD11	5:E:113:TYR:CE2	2.49	0.47
6:F:221:ALA:HB1	6:F:230:PHE:CE1	2.49	0.47
6:F:270:ILE:HG13	6:F:271:LYS:H	1.80	0.47
6:F:48:PHE:CE2	6:F:61:LEU:HD13	2.50	0.47
8:H:28:PRO:HA	8:H:31:LYS:HD2	1.96	0.47
4:D:131:ALA:O	4:D:134:TRP:HB2	2.15	0.47
4:D:279:LEU:C	4:D:280:ILE:HG13	2.35	0.47
4:D:390:THR:HG21	4:D:392:ARG:HH12	1.78	0.47
6:F:150:LEU:HD13	6:F:175:ASN:OD1	2.14	0.47
6:F:31:LYS:O	6:F:35:GLU:HG2	2.13	0.47
6:F:57:LEU:HA	6:F:60:ARG:HH21	1.78	0.47
7:G:249:GLU:O	7:G:252:SER:HB3	2.14	0.47
8:H:14:ALA:O	8:H:17:ASN:HB2	2.15	0.47
8:H:27:LEU:HG	8:H:28:PRO:HD3	1.96	0.47
2:B:164:GLN:O	2:B:167:THR:HG22	2.13	0.47
4:D:134:TRP:HE3	4:D:157:SER:HA	1.79	0.47
4:D:154:LEU:HA	4:D:157:SER:HB2	1.96	0.47
6:F:266:PHE:CE2	6:F:291:ILE:HG13	2.49	0.47
6:F:58:ARG:O	6:F:61:LEU:HB3	2.14	0.47
7:G:158:LEU:HA	7:G:196:TYR:CB	2.44	0.47
1:A:244:ASN:HA	8:H:131:LYS:HE2	1.97	0.47
8:H:129:LEU:HB3	8:H:133:ILE:HD12	1.96	0.47
8:H:174:PHE:O	8:H:177:PHE:HB2	2.15	0.47
8:H:65:GLY:O	8:H:69:SER:OG	2.21	0.47
3:C:146:TYR:CE1	3:C:183:LYS:HB3	2.49	0.47
3:C:74:LEU:HA	3:C:77:PHE:HD2	1.78	0.47
4:D:170:VAL:O	4:D:173:THR:N	2.46	0.47
4:D:361:VAL:O	4:D:364:LEU:N	2.46	0.47
2:B:433:ILE:HD11	5:E:210:TYR:CB	2.45	0.47
5:E:209:GLU:O	5:E:212:ASP:HB2	2.14	0.47
6:F:71:ASP:OD1	6:F:72:LYS:NZ	2.43	0.47
1:A:447:GLU:CD	1:A:447:GLU:H	2.18	0.47
2:B:417:HIS:HB3	7:G:148:LYS:NZ	2.29	0.47
3:C:406:ASP:OD1	3:C:407:ALA:N	2.48	0.47
4:D:137:LEU:O	4:D:140:TYR:HB3	2.14	0.47
4:D:174:ILE:O	4:D:177:LEU:HB2	2.14	0.47
6:F:130:ASP:HA	6:F:133:ILE:HD12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:27:GLU:HA	6:F:30:GLU:HG2	1.95	0.47
6:F:38:TRP:CE2	6:F:72:LYS:HE3	2.49	0.47
7:G:289:GLU:OE1	7:G:289:GLU:N	2.40	0.47
8:H:188:GLU:HA	8:H:191:LYS:HZ3	1.79	0.47
1:A:134:ILE:HA	1:A:137:PHE:HB3	1.96	0.47
1:A:146:LEU:O	1:A:149:SER:CB	2.59	0.47
2:B:253:ASP:O	2:B:257:TRP:CD1	2.67	0.47
4:D:200:LYS:HD2	4:D:200:LYS:N	2.29	0.47
4:D:96:GLN:HE21	4:D:100:ASN:CG	2.14	0.47
1:A:201:ILE:HG13	1:A:204:ASP:OD2	2.15	0.47
1:A:318:CYS:SG	1:A:332:PHE:HE2	2.38	0.47
2:B:139:VAL:O	2:B:142:ASP:HB2	2.15	0.47
4:D:148:ASP:HA	4:D:151:GLU:OE2	2.14	0.47
4:D:247:GLU:O	4:D:251:THR:HG23	2.15	0.47
4:D:96:GLN:O	4:D:99:TYR:HB3	2.15	0.47
5:E:92:TRP:CD2	5:E:120:LEU:HD13	2.50	0.47
6:F:83:LEU:HD22	6:F:132:GLU:HG2	1.96	0.47
8:H:63:GLU:OE1	8:H:101:LYS:HD3	2.13	0.47
2:B:80:THR:O	2:B:84:LYS:N	2.39	0.47
4:D:134:TRP:CE3	4:D:157:SER:HA	2.49	0.47
4:D:303:SER:HB2	4:D:307:TYR:HE2	1.79	0.47
6:F:100:ASP:OD1	6:F:101:ASP:N	2.47	0.47
1:A:386:ASN:HA	1:A:389:LYS:HG2	1.96	0.47
3:C:139:ILE:HD11	3:C:176:ASP:HB3	1.96	0.47
3:C:161:LEU:HD11	3:C:165:PHE:CE1	2.49	0.47
4:D:207:ARG:O	4:D:210:TYR:HB3	2.14	0.47
4:D:31:PHE:O	4:D:34:THR:OG1	2.22	0.47
5:E:218:GLU:OE1	5:E:218:GLU:N	2.48	0.47
6:F:338:LYS:HB2	6:F:352:TRP:HB3	1.97	0.47
7:G:126:GLN:OE1	7:G:138:ALA:HB2	2.14	0.47
1:A:467:PHE:HA	1:A:470:GLN:HG2	1.96	0.47
2:B:223:LEU:O	2:B:227:ILE:HG22	2.15	0.47
3:C:198:LEU:HD12	3:C:201:ALA:HB3	1.96	0.47
3:C:377:LEU:O	3:C:378:SER:C	2.52	0.47
4:D:120:LEU:HB3	4:D:130:GLN:CG	2.45	0.47
4:D:233:ASP:O	4:D:236:ALA:N	2.45	0.47
6:F:31:LYS:NZ	6:F:35:GLU:OE1	2.37	0.47
8:H:123:HIS:O	8:H:126:LEU:HB3	2.15	0.47
8:H:93:ASN:HB3	8:H:95:LYS:NZ	2.30	0.47
9:I:37:ASP:OD1	9:I:38:PHE:N	2.46	0.47
2:B:155:GLU:HG2	2:B:156:ALA:N	2.29	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:107:VAL:HG22	3:C:112:ASP:H	1.79	0.47
3:C:128:GLU:OE2	3:C:129:LYS:HE2	2.14	0.47
3:C:150:GLN:O	3:C:151:TYR:C	2.53	0.47
4:D:98:LEU:O	4:D:102:LEU:HG	2.15	0.47
4:D:149:ASN:HA	4:D:152:LYS:HZ1	1.77	0.47
4:D:337:VAL:O	4:D:338:TYR:C	2.51	0.47
5:E:205:LYS:O	5:E:208:VAL:N	2.48	0.47
5:E:46:ILE:HG22	5:E:48:VAL:HG23	1.96	0.47
6:F:42:SER:HB3	6:F:73:ILE:HG12	1.96	0.47
7:G:159:ILE:HG12	7:G:195:HIS:O	2.15	0.47
7:G:50:MET:HG2	7:G:51:GLY:N	2.29	0.47
8:H:12:SER:O	8:H:16:GLU:CB	2.47	0.47
8:H:57:ILE:HG23	8:H:58:THR:HG23	1.96	0.47
1:A:140:LEU:O	1:A:144:LEU:HG	2.15	0.47
2:B:141:LYS:HG2	2:B:179:PHE:CE1	2.49	0.47
3:C:123:GLU:O	3:C:127:ARG:HG3	2.14	0.47
3:C:169:ASP:OD2	3:C:173:SER:OG	2.25	0.47
4:D:108:SER:O	4:D:111:LYS:HB3	2.14	0.47
4:D:120:LEU:CD1	4:D:134:TRP:HE1	2.27	0.47
5:E:61:LYS:HG3	5:E:62:ASN:O	2.14	0.47
6:F:391:ILE:HD11	8:H:271:GLU:HB2	1.96	0.47
7:G:81:GLU:OE1	7:G:81:GLU:N	2.32	0.47
8:H:77:SER:O	8:H:81:TYR:HD2	1.98	0.47
1:A:467:PHE:HA	1:A:470:GLN:HE22	1.79	0.47
2:B:419:VAL:O	2:B:422:LEU:HB3	2.14	0.47
2:B:72:TRP:CE3	2:B:72:TRP:C	2.88	0.47
2:B:66:LEU:CB	2:B:72:TRP:HA	2.39	0.47
3:C:164:GLU:HA	3:C:167:LYS:HE3	1.96	0.47
6:F:47:LYS:O	6:F:50:ASP:HB2	2.15	0.47
3:C:222:SER:O	3:C:225:LEU:HG	2.15	0.47
3:C:80:HIS:HB3	3:C:84:TYR:CE2	2.48	0.47
8:H:134:LYS:HG3	8:H:135:ASN:O	2.14	0.47
2:B:82:LEU:HB3	2:B:97:ILE:HD13	1.95	0.47
1:A:303:ASN:OD1	1:A:304:SER:N	2.48	0.47
2:B:210:ASN:HD21	2:B:212:LYS:HE3	1.78	0.47
3:C:352:GLU:CD	3:C:353:PRO:HD3	2.35	0.47
4:D:189:GLU:O	4:D:192:GLU:HB2	2.14	0.47
4:D:275:GLU:O	4:D:278:SER:OG	2.15	0.47
5:E:137:TYR:CE1	5:E:156:HIS:CD2	3.02	0.47
5:E:33:CYS:O	5:E:94:HIS:HA	2.15	0.47
7:G:286:GLU:O	7:G:290:ASN:HB2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:52:LEU:HA	7:G:52:LEU:HD23	1.67	0.47
1:A:279:ILE:O	1:A:283:GLN:HG2	2.15	0.47
2:B:143:LEU:HA	2:B:146:ILE:HG12	1.96	0.47
2:B:335:LYS:O	2:B:339:GLU:HG3	2.15	0.47
2:B:340:ASP:O	2:B:343:LYS:HB2	2.14	0.47
3:C:97:LEU:HA	3:C:100:LEU:HB2	1.95	0.47
6:F:229:ASN:OD1	6:F:357:ILE:N	2.44	0.47
6:F:354:GLN:HE21	6:F:355:PRO:HD2	1.79	0.47
9:I:59:ILE:HG12	9:I:59:ILE:O	2.15	0.47
2:B:135:GLU:HA	2:B:138:ARG:HG2	1.96	0.47
4:D:191:LEU:O	4:D:195:ASN:HB2	2.14	0.47
1:A:181:ALA:HB2	1:A:229:THR:HG22	1.96	0.47
3:C:222:SER:O	3:C:225:LEU:HG	2.14	0.47
3:C:256:GLU:HA	3:C:259:CYS:HB3	1.96	0.47
4:D:138:GLY:O	4:D:141:TYR:HB2	2.15	0.47
6:F:55:THR:O	6:F:58:ARG:NH2	2.48	0.47
7:G:51:GLY:HA3	7:G:108:TYR:CE2	2.50	0.47
8:H:201:PRO:O	8:H:205:ILE:HD12	2.15	0.47
1:A:246:GLU:OE1	1:A:246:GLU:N	2.48	0.47
7:G:219:GLU:O	7:G:223:SER:OG	2.15	0.47
1:A:329:GLU:N	1:A:329:GLU:OE1	2.46	0.47
2:B:51:ASP:HA	2:B:54:SER:HB2	1.97	0.47
4:D:147:LYS:HB2	4:D:181:TYR:CZ	2.49	0.47
5:E:165:GLU:HG3	5:E:166:ALA:H	1.79	0.47
6:F:114:GLN:HB2	6:F:117:ASN:ND2	2.29	0.47
6:F:28:GLN:HA	6:F:31:LYS:HG2	1.95	0.47
6:F:375:ASP:HA	6:F:378:GLU:OE2	2.15	0.47
7:G:206:THR:HB	7:G:209:GLU:OE1	2.15	0.47
1:A:184:TRP:CD2	1:A:187:ILE:HD12	2.50	0.47
1:A:327:ILE:CD1	1:A:353:LYS:HB2	2.45	0.47
2:B:380:ILE:O	2:B:384:VAL:HG23	2.14	0.47
3:C:139:ILE:HG13	3:C:165:PHE:CZ	2.50	0.47
3:C:296:ILE:O	3:C:299:MET:N	2.48	0.47
4:D:25:GLU:CD	4:D:25:GLU:H	2.15	0.47
6:F:11:LEU:HG	6:F:15:ARG:NH2	2.29	0.47
6:F:278:PRO:O	6:F:281:ALA:N	2.48	0.47
6:F:391:ILE:O	6:F:392:TRP:CG	2.68	0.47
8:H:28:PRO:O	8:H:32:ILE:HG13	2.15	0.47
9:I:64:TRP:O	9:I:67:VAL:HG12	2.15	0.47
1:A:308:GLY:HA2	1:A:311:GLN:OE1	2.15	0.47
1:A:318:CYS:SG	1:A:345:TYR:HB3	2.54	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:160:LEU:HA	2:B:163:LEU:HD12	1.96	0.47
3:C:347:LEU:HA	3:C:347:LEU:HD23	1.60	0.47
5:E:27:THR:OG1	5:E:33:CYS:SG	2.55	0.47
6:F:327:LEU:HD12	6:F:327:LEU:HA	1.61	0.47
6:F:88:ASP:N	6:F:88:ASP:OD1	2.47	0.47
3:C:134:LYS:O	3:C:138:SER:HB2	2.14	0.47
3:C:323:LYS:HA	3:C:326:MET:HE3	1.96	0.47
3:C:70:ALA:HB3	3:C:73:LYS:HD2	1.97	0.47
4:D:61:PRO:HG2	4:D:146:ASP:HB2	1.96	0.47
5:E:20:ASP:OD2	7:G:100:ARG:NE	2.40	0.47
6:F:360:GLY:O	6:F:363:ILE:N	2.47	0.47
8:H:48:ASN:O	8:H:51:TYR:HB3	2.14	0.47
8:H:51:TYR:O	8:H:55:LEU:HD13	2.14	0.47
1:A:201:ILE:O	1:A:204:ASP:HB3	2.15	0.47
1:A:230:LYS:O	1:A:233:LEU:HB3	2.15	0.47
2:B:227:ILE:HG12	2:B:231:LYS:NZ	2.28	0.47
2:B:408:SER:O	2:B:412:LEU:HG	2.15	0.47
2:B:423:LEU:HA	2:B:423:LEU:HD23	1.67	0.47
5:E:235:LEU:HD23	5:E:235:LEU:HA	1.40	0.47
6:F:205:ILE:HG12	6:F:210:ARG:HG3	1.96	0.47
6:F:221:ALA:HB1	6:F:230:PHE:HE1	1.78	0.47
7:G:119:SER:O	7:G:122:ASP:HB2	2.14	0.47
7:G:126:GLN:OE1	7:G:138:ALA:HB2	2.13	0.47
7:G:255:ILE:O	7:G:258:GLU:HG2	2.14	0.47
1:A:268:LEU:HA	1:A:271:ARG:HD2	1.96	0.47
3:C:78:ILE:O	3:C:81:SER:OG	2.14	0.47
4:D:188:LYS:O	4:D:192:GLU:HG2	2.14	0.47
5:E:300:LYS:O	5:E:303:GLU:HB3	2.15	0.47
6:F:253:GLN:HB3	6:F:269:LEU:HD21	1.97	0.47
7:G:80:VAL:HG12	7:G:125:THR:HG23	1.95	0.47
8:H:168:SER:O	8:H:169:GLN:C	2.53	0.47
1:A:132:ALA:HA	1:A:135:ASN:HB2	1.97	0.47
2:B:398:LYS:HB3	2:B:399:ILE:HG23	1.97	0.47
3:C:255:TYR:HA	3:C:291:TYR:OH	2.14	0.47
3:C:66:VAL:HG21	3:C:103:LYS:CD	2.44	0.47
6:F:25:LEU:O	6:F:28:GLN:HB2	2.14	0.47
8:H:48:ASN:HD22	8:H:50:ILE:CG2	2.28	0.47
1:A:201:ILE:HD12	8:H:92:ASN:HB2	1.97	0.47
1:A:205:ASN:HD22	8:H:47:GLN:CD	2.17	0.47
2:B:192:ASP:HB3	2:B:195:GLN:NE2	2.29	0.47
4:D:217:HIS:O	4:D:220:ALA:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:354:ALA:HB1	4:D:359:VAL:O	2.15	0.47
6:F:78:VAL:HA	6:F:81:TYR:CD2	2.50	0.47
7:G:93:ASP:OD1	7:G:94:MET:N	2.48	0.47
6:F:287:LEU:O	6:F:291:ILE:HG12	2.15	0.47
6:F:28:GLN:O	6:F:31:LYS:HG2	2.15	0.47
7:G:109:HIS:CE1	7:G:111:HIS:CE1	2.92	0.47
1:A:142:VAL:O	1:A:146:LEU:HG	2.14	0.47
1:A:165:PRO:O	1:A:168:LEU:HG	2.15	0.47
1:A:416:GLU:O	1:A:420:GLU:HG2	2.13	0.47
1:A:479:MET:CG	1:A:480:ARG:H	2.22	0.47
2:B:375:GLN:O	2:B:376:THR:C	2.51	0.47
2:B:419:VAL:O	2:B:422:LEU:N	2.47	0.47
4:D:113:LEU:HD22	4:D:133:ALA:HB1	1.97	0.47
5:E:201:GLN:HE21	5:E:205:LYS:HZ3	1.62	0.47
7:G:42:ARG:HD3	7:G:42:ARG:O	2.15	0.47
8:H:216:GLU:HA	8:H:219:LYS:CD	2.42	0.47
2:B:251:LYS:HA	2:B:257:TRP:HD1	1.79	0.47
2:B:50:SER:HB2	2:B:93:ILE:HG22	1.95	0.47
3:C:170:ASP:CB	3:C:172:PRO:HD2	2.45	0.47
4:D:209:ARG:HD3	4:D:242:GLU:OE2	2.14	0.47
4:D:317:ILE:O	4:D:323:ASN:ND2	2.48	0.47
4:D:347:THR:OG1	4:D:347:THR:O	2.33	0.47
6:F:293:LEU:O	6:F:296:LEU:N	2.48	0.47
7:G:284:ALA:O	7:G:287:THR:OG1	2.32	0.47
8:H:66:ALA:O	8:H:69:SER:N	2.47	0.47
1:A:396:SER:HB2	1:A:432:ILE:HD12	1.96	0.47
2:B:164:GLN:HG3	2:B:167:THR:OG1	2.14	0.47
2:B:206:LYS:CA	2:B:209:LYS:HG2	2.44	0.47
2:B:279:ASP:O	2:B:283:LYS:HG3	2.14	0.47
4:D:103:CYS:O	4:D:107:GLU:HG3	2.14	0.47
4:D:34:THR:OG1	4:D:35:GLN:N	2.48	0.47
8:H:93:ASN:O	8:H:95:LYS:N	2.48	0.47
1:A:182:LYS:O	1:A:186:TYR:HD2	1.98	0.47
1:A:214:MET:HB3	1:A:233:LEU:HD11	1.97	0.47
1:A:305:LYS:HZ2	9:I:34:GLU:HA	1.80	0.47
2:B:195:GLN:OE1	2:B:195:GLN:N	2.36	0.47
2:B:31:ASP:OD1	2:B:32:CYS:N	2.47	0.47
4:D:134:TRP:O	4:D:137:LEU:N	2.48	0.47
4:D:312:TYR:HA	4:D:316:LEU:HD12	1.96	0.47
2:B:122:ILE:HG13	2:B:136:ARG:NH2	2.29	0.47
2:B:148:LYS:HZ3	2:B:186:LEU:HD13	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:130:ARG:CZ	3:C:134:LYS:HD3	2.45	0.47
3:C:277:ASP:HA	3:C:280:ASN:ND2	2.29	0.47
4:D:281:SER:O	4:D:287:GLN:NE2	2.47	0.47
6:F:230:PHE:HB2	6:F:259:THR:CG2	2.45	0.47
1:A:350:LYS:HG2	9:I:68:GLU:OE2	2.14	0.47
2:B:204:LEU:HB3	2:B:207:THR:HG23	1.96	0.47
2:B:313:ILE:O	2:B:317:THR:HG23	2.15	0.47
3:C:71:LYS:NZ	3:C:72:ASP:OD1	2.47	0.47
4:D:165:GLY:O	4:D:168:ILE:HB	2.15	0.47
4:D:422:ARG:O	5:E:295:LYS:NZ	2.48	0.47
5:E:29:GLU:O	5:E:32:ARG:NE	2.47	0.47
6:F:38:TRP:HA	6:F:41:LEU:HB2	1.97	0.47
11:B:501:HOH:O	7:G:111:HIS:HD2	1.78	0.47
2:B:261:LEU:HD12	2:B:262:SER:N	2.30	0.47
3:C:169:ASP:HB3	3:C:173:SER:CB	2.43	0.47
3:C:340:ASP:OD1	3:C:376:LYS:NZ	2.37	0.47
5:E:18:ALA:O	5:E:21:HIS:HB3	2.14	0.47
6:F:267:ASP:HA	6:F:270:ILE:HD11	1.97	0.47
6:F:98:TYR:O	6:F:101:ASP:HB2	2.15	0.47
8:H:41:ILE:HG22	8:H:54:ASP:HB3	1.96	0.47
8:H:51:TYR:CZ	8:H:55:LEU:HD11	2.50	0.47
1:A:164:ILE:HA	1:A:167:LEU:CG	2.41	0.47
2:B:364:ARG:NH2	6:F:325:GLU:OE2	2.44	0.47
2:B:80:THR:O	2:B:83:SER:OG	2.19	0.47
3:C:219:ASP:O	3:C:238:TYR:HB3	2.15	0.47
3:C:106:GLN:HG3	3:C:252:HIS:NE2	2.29	0.47
4:D:394:ASP:OD1	4:D:394:ASP:N	2.46	0.47
6:F:152:ASP:OD1	6:F:152:ASP:N	2.48	0.47
7:G:93:ASP:O	7:G:96:LYS:HB2	2.15	0.47
8:H:179:ASP:HA	8:H:182:LYS:NZ	2.29	0.47
2:B:326:ASP:OD1	2:B:327:LEU:HG	2.15	0.47
4:D:62:TYR:O	4:D:64:LYS:N	2.48	0.47
8:H:161:TRP:CZ3	8:H:182:LYS:HG3	2.50	0.47
8:H:187:ASP:OD1	8:H:187:ASP:N	2.45	0.47
8:H:58:THR:HA	8:H:61:ILE:HD12	1.97	0.47
1:A:399:TYR:HB3	1:A:402:ILE:HG23	1.97	0.47
6:F:168:THR:HG23	6:F:172:TYR:CE2	2.49	0.47
8:H:186:ARG:NH2	8:H:210:PHE:O	2.48	0.47
1:A:388:ILE:HG21	1:A:422:MET:CE	2.45	0.47
1:A:467:PHE:O	1:A:467:PHE:CG	2.69	0.47
4:D:240:SER:O	4:D:242:GLU:N	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:359:SER:O	6:F:363:ILE:HG13	2.15	0.47
8:H:204:ASN:O	8:H:207:ALA:HB3	2.15	0.47
1:A:167:LEU:HD21	1:A:184:TRP:CH2	2.50	0.47
2:B:94:GLN:HB2	2:B:131:PHE:HZ	1.79	0.47
3:C:112:ASP:O	3:C:115:ILE:HD11	2.15	0.47
4:D:334:ARG:NH1	4:D:367:ASP:OD1	2.40	0.47
6:F:230:PHE:HB2	6:F:259:THR:CG2	2.45	0.47
6:F:24:PRO:O	6:F:27:GLU:HB2	2.14	0.47
6:F:327:LEU:HD12	6:F:327:LEU:HA	1.60	0.47
6:F:59:LEU:HD23	6:F:85:SER:OG	2.14	0.47
1:A:153:GLU:H	1:A:153:GLU:CD	2.14	0.47
1:A:212:SER:O	1:A:216:LYS:N	2.37	0.47
1:A:271:ARG:O	1:A:274:PHE:HB3	2.15	0.47
2:B:137:ALA:O	2:B:140:THR:HB	2.15	0.47
2:B:94:GLN:O	2:B:98:GLN:NE2	2.46	0.47
3:C:425:GLN:O	3:C:428:GLU:HB3	2.15	0.47
6:F:245:ASP:OD1	6:F:246:SER:N	2.48	0.47
6:F:75:GLN:CD	6:F:75:GLN:H	2.15	0.47
8:H:10:SER:O	8:H:13:ILE:HB	2.15	0.47
8:H:121:LYS:O	8:H:124:SER:N	2.48	0.47
1:A:159:ASN:O	1:A:163:VAL:CB	2.45	0.46
2:B:339:GLU:N	2:B:339:GLU:OE1	2.45	0.46
4:D:213:TYR:O	4:D:216:ILE:HG13	2.16	0.46
4:D:284:ALA:C	4:D:287:GLN:HE22	2.18	0.46
8:H:37:ASN:O	8:H:41:ILE:N	2.42	0.46
3:C:301:ALA:HA	3:C:304:GLU:OE2	2.15	0.46
4:D:173:THR:HA	4:D:176:ARG:NH1	2.29	0.46
4:D:317:ILE:HB	4:D:318:PRO:HD3	1.96	0.46
5:E:37:ILE:HD12	5:E:90:ILE:HB	1.98	0.46
6:F:14:LEU:HD13	6:F:61:LEU:CD2	2.45	0.46
7:G:48:GLU:HB2	7:G:110:SER:O	2.15	0.46
8:H:130:ASP:OD1	8:H:136:LEU:HD12	2.14	0.46
1:A:178:LEU:O	1:A:181:ALA:HB3	2.15	0.46
2:B:112:LEU:HD12	2:B:112:LEU:C	2.34	0.46
2:B:423:LEU:HA	2:B:423:LEU:HD23	1.68	0.46
3:C:146:TYR:CE1	3:C:184:VAL:HG22	2.50	0.46
4:D:322:LEU:O	4:D:323:ASN:C	2.53	0.46
1:A:140:LEU:HD12	1:A:183:LEU:HD22	1.96	0.46
1:A:284:LEU:HD22	8:H:123:HIS:CD2	2.50	0.46
1:A:317:HIS:O	1:A:321:GLN:HG2	2.16	0.46
2:B:375:GLN:O	2:B:376:THR:C	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:153:ASP:O	3:C:157:LEU:CB	2.47	0.46
3:C:347:LEU:HA	3:C:347:LEU:HD23	1.60	0.46
4:D:293:THR:O	4:D:296:LEU:N	2.42	0.46
4:D:312:TYR:O	4:D:316:LEU:HB2	2.15	0.46
5:E:164:GLU:O	5:E:168:GLU:HG2	2.15	0.46
5:E:5:HIS:CD2	5:E:46:ILE:HD11	2.49	0.46
6:F:15:ARG:HH22	6:F:27:GLU:CG	2.28	0.46
6:F:321:LYS:NZ	6:F:346:GLU:OE1	2.40	0.46
2:B:139:VAL:HA	2:B:142:ASP:CG	2.34	0.46
2:B:187:SER:OG	2:B:196:ALA:HB2	2.15	0.46
3:C:282:LEU:HB2	3:C:300:LYS:HZ1	1.80	0.46
5:E:172:GLU:OE2	7:G:148:LYS:HD2	2.15	0.46
6:F:220:SER:O	6:F:224:GLY:N	2.48	0.46
8:H:220:PHE:O	8:H:224:ARG:N	2.48	0.46
8:H:29:PRO:O	8:H:33:GLU:HG3	2.16	0.46
8:H:32:ILE:CA	8:H:35:ILE:HG13	2.46	0.46
2:B:165:VAL:HG13	2:B:166:GLU:N	2.28	0.46
3:C:130:ARG:HG3	3:C:133:LEU:H	1.80	0.46
4:D:164:THR:HB	4:D:168:ILE:HD12	1.97	0.46
4:D:169:ASP:HA	4:D:172:LEU:HD12	1.97	0.46
4:D:334:ARG:HB3	4:D:338:TYR:HE2	1.80	0.46
6:F:228:TYR:HE2	6:F:334:LEU:HD13	1.79	0.46
8:H:125:GLU:O	8:H:129:LEU:HG	2.15	0.46
3:C:315:ASN:O	3:C:318:LEU:HG	2.15	0.46
4:D:209:ARG:HG2	4:D:239:THR:HG21	1.97	0.46
4:D:219:LEU:HD21	4:D:322:LEU:HD23	1.96	0.46
4:D:334:ARG:HD3	9:I:73:PHE:HZ	1.80	0.46
6:F:108:GLU:O	6:F:111:SER:N	2.47	0.46
6:F:200:GLU:HB2	6:F:202:SER:O	2.16	0.46
7:G:206:THR:CG2	7:G:208:LYS:HB2	2.45	0.46
8:H:55:LEU:O	8:H:58:THR:N	2.48	0.46
2:B:112:LEU:O	2:B:116:ILE:HG12	2.15	0.46
2:B:182:GLU:HA	2:B:185:GLU:HB3	1.97	0.46
2:B:197:THR:C	2:B:200:SER:HG	2.14	0.46
2:B:392:LYS:O	2:B:400:VAL:HA	2.16	0.46
3:C:219:ASP:O	3:C:222:SER:N	2.47	0.46
4:D:186:TYR:HA	4:D:189:GLU:OE2	2.15	0.46
6:F:11:LEU:HA	6:F:14:LEU:HD12	1.97	0.46
9:I:34:GLU:HG2	9:I:36:GLU:HG3	1.96	0.46
2:B:155:GLU:N	2:B:155:GLU:OE1	2.33	0.46
2:B:173:MET:HB2	2:B:213:TYR:OH	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:74:ASP:O	2:B:78:GLN:CB	2.63	0.46
4:D:231:LEU:HD13	4:D:231:LEU:HA	1.80	0.46
4:D:267:LYS:HA	4:D:271:ILE:HB	1.96	0.46
6:F:209:GLU:O	6:F:212:GLN:N	2.48	0.46
6:F:258:LEU:HD13	6:F:291:ILE:HD13	1.95	0.46
7:G:34:LEU:O	7:G:37:MET:HB3	2.15	0.46
1:A:474:GLU:HB3	4:D:422:ARG:NH1	2.30	0.46
3:C:77:PHE:O	3:C:81:SER:OG	2.17	0.46
6:F:211:GLN:HB3	6:F:242:ILE:HD13	1.97	0.46
6:F:225:ASP:OD1	6:F:226:LYS:N	2.48	0.46
6:F:49:PHE:CE1	6:F:58:ARG:HB3	2.50	0.46
1:A:244:ASN:N	8:H:131:LYS:HZ3	2.14	0.46
8:H:220:PHE:CE2	8:H:224:ARG:HG3	2.50	0.46
4:D:127:GLU:O	4:D:161:ALA:HB3	2.15	0.46
4:D:166:ALA:HA	4:D:169:ASP:OD2	2.16	0.46
5:E:194:LEU:HA	5:E:194:LEU:HD12	1.72	0.46
5:E:19:LEU:HD12	5:E:19:LEU:HA	1.69	0.46
9:I:63:ASN:HB3	9:I:66:ASP:OD2	2.15	0.46
4:D:360:SER:HB3	9:I:83:ARG:NH2	2.30	0.46
1:A:215:MET:HB3	1:A:218:LEU:HD23	1.98	0.46
2:B:120:GLU:O	2:B:124:VAL:HG23	2.15	0.46
2:B:204:LEU:HD21	2:B:206:LYS:HZ1	1.80	0.46
3:C:297:ASP:OD1	3:C:298:ALA:N	2.48	0.46
5:E:102:SER:O	5:E:105:LYS:N	2.47	0.46
5:E:34:VAL:HA	5:E:93:TYR:O	2.14	0.46
5:E:61:LYS:HE3	5:E:65:VAL:HG21	1.98	0.46
6:F:132:GLU:O	6:F:135:ARG:HB3	2.16	0.46
6:F:74:ASN:HB3	6:F:77:SER:OG	2.15	0.46
5:E:24:ARG:CZ	7:G:100:ARG:HG2	2.46	0.46
7:G:54:LEU:CD1	7:G:67:ASP:HB3	2.45	0.46
8:H:104:LYS:O	8:H:108:LEU:HG	2.15	0.46
1:A:277:SER:HB3	1:A:292:TYR:HB2	1.98	0.46
2:B:120:GLU:HA	2:B:123:ARG:HB3	1.96	0.46
2:B:121:THR:O	2:B:125:VAL:HG23	2.15	0.46
2:B:184:MET:O	2:B:187:SER:N	2.47	0.46
4:D:96:GLN:NE2	4:D:100:ASN:OD1	2.44	0.46
4:D:152:LYS:HG3	4:D:153:THR:H	1.80	0.46
1:A:406:ASP:OD2	4:D:383:ARG:NH1	2.48	0.46
5:E:175:LEU:HD12	5:E:178:VAL:HG23	1.97	0.46
2:B:273:TYR:HA	2:B:277:GLN:OE1	2.15	0.46
3:C:333:SER:OG	3:C:334:HIS:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:405:GLN:HA	4:D:394:ASP:O	2.15	0.46
2:B:141:LYS:NZ	2:B:178:GLN:HG3	2.31	0.46
2:B:148:LYS:HZ2	2:B:153:ILE:HG21	1.80	0.46
3:C:100:LEU:HD12	3:C:103:LYS:HD2	1.98	0.46
3:C:267:LEU:HD21	3:C:331:THR:HG22	1.96	0.46
5:E:32:ARG:CD	5:E:96:GLY:HA3	2.46	0.46
1:A:139:HIS:CD2	1:A:158:PHE:HZ	2.32	0.46
1:A:215:MET:O	1:A:219:LYS:HG2	2.15	0.46
1:A:406:ASP:OD1	1:A:406:ASP:N	2.48	0.46
2:B:105:LYS:HE2	2:B:139:VAL:CG1	2.44	0.46
4:D:288:SER:OG	4:D:289:ILE:N	2.49	0.46
6:F:144:VAL:O	6:F:147:ARG:N	2.48	0.46
1:A:328:PRO:HB2	1:A:333:PHE:CE2	2.42	0.46
2:B:253:ASP:OD1	2:B:254:GLU:N	2.48	0.46
4:D:141:TYR:CZ	4:D:149:ASN:HB3	2.50	0.46
6:F:77:SER:OG	6:F:78:VAL:N	2.49	0.46
9:I:73:PHE:HA	9:I:76:GLU:HB3	1.98	0.46
1:A:202:ASN:O	1:A:205:ASN:HB2	2.14	0.46
1:A:431:VAL:HG12	1:A:432:ILE:HD13	1.97	0.46
2:B:268:LEU:HA	2:B:268:LEU:HD23	1.65	0.46
3:C:175:VAL:HG22	3:C:204:ALA:HB1	1.97	0.46
3:C:85:MET:HA	3:C:88:PHE:HB3	1.98	0.46
4:D:38:VAL:HG23	4:D:43:ARG:HD2	1.96	0.46
4:D:59:MET:O	4:D:62:TYR:N	2.48	0.46
6:F:214:ALA:HB2	6:F:238:ILE:HG12	1.96	0.46
6:F:225:ASP:HA	6:F:286:PHE:HZ	1.81	0.46
6:F:51:ASP:HA	6:F:53:LYS:HE2	1.98	0.46
6:F:75:GLN:O	6:F:79:VAL:HG23	2.15	0.46
9:I:83:ARG:HA	9:I:86:ARG:NE	2.30	0.46
1:A:239:ARG:NH1	1:A:275:TYR:OH	2.40	0.46
5:E:297:GLN:HE22	5:E:300:LYS:HE2	1.80	0.46
6:F:307:MET:HA	6:F:348:VAL:O	2.15	0.46
7:G:254:ARG:HH12	7:G:266:LEU:HD21	1.81	0.46
7:G:27:VAL:HA	7:G:63:VAL:O	2.15	0.46
8:H:138:ASP:OD1	8:H:139:ASP:N	2.49	0.46
2:B:34:SER:O	2:B:38:GLN:HG3	2.16	0.46
3:C:232:TYR:HA	3:C:235:ALA:HB3	1.96	0.46
3:C:301:ALA:O	3:C:305:ALA:CB	2.63	0.46
4:D:171:MET:HA	4:D:174:ILE:HD12	1.97	0.46
9:I:73:PHE:CE2	9:I:77:LEU:HD22	2.49	0.46
2:B:239:GLN:O	2:B:242:GLN:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:379:TYR:O	2:B:382:ASP:N	2.48	0.46
2:B:412:LEU:HD23	2:B:412:LEU:HA	1.62	0.46
2:B:422:LEU:C	2:B:422:LEU:HD23	2.36	0.46
7:G:32:ILE:HG23	7:G:33:ALA:N	2.30	0.46
8:H:51:TYR:O	8:H:55:LEU:HG	2.14	0.46
1:A:191:HIS:O	1:A:194:LEU:HB3	2.16	0.46
1:A:348:LEU:HD23	1:A:348:LEU:HA	1.67	0.46
2:B:161:CYS:HB2	2:B:199:LEU:HD21	1.97	0.46
2:B:319:GLU:HB3	2:B:320:PRO:HD3	1.98	0.46
3:C:169:ASP:CB	3:C:173:SER:HB3	2.44	0.46
4:D:42:GLN:HA	4:D:45:GLU:OE1	2.16	0.46
5:E:278:ILE:HG13	5:E:279:SER:N	2.29	0.46
6:F:291:ILE:HD13	6:F:291:ILE:HA	1.67	0.46
7:G:117:TRP:HB3	7:G:187:ALA:HB2	1.97	0.46
8:H:40:LEU:HG	8:H:51:TYR:CE1	2.37	0.46
1:A:210:LEU:O	1:A:213:THR:OG1	2.25	0.46
2:B:146:ILE:HG13	2:B:147:LYS:HG3	1.96	0.46
3:C:370:THR:OG1	3:C:371:GLN:N	2.48	0.46
4:D:217:HIS:O	4:D:220:ALA:N	2.48	0.46
5:E:235:LEU:HA	5:E:235:LEU:HD23	1.53	0.46
1:A:140:LEU:O	1:A:144:LEU:HG	2.16	0.46
1:A:239:ARG:HG2	1:A:243:ASN:HD21	1.81	0.46
3:C:149:LYS:HG2	3:C:149:LYS:O	2.16	0.46
3:C:74:LEU:HD23	3:C:77:PHE:CE2	2.50	0.46
4:D:224:PHE:O	4:D:227:ALA:N	2.49	0.46
4:D:351:LYS:O	4:D:355:SER:HB3	2.16	0.46
1:A:132:ALA:O	1:A:135:ASN:N	2.49	0.46
1:A:180:ASN:HA	1:A:183:LEU:HB2	1.98	0.46
2:B:181:LEU:HD12	2:B:182:GLU:N	2.30	0.46
4:D:186:TYR:O	4:D:190:LYS:HD3	2.16	0.46
5:E:297:GLN:HE21	5:E:301:ILE:HG13	1.79	0.46
7:G:261:LEU:HB3	7:G:265:GLU:HB2	1.98	0.46
2:B:300:VAL:O	2:B:303:PHE:N	2.47	0.46
2:B:81:LEU:O	2:B:85:LYS:HG2	2.16	0.46
3:C:148:LYS:NZ	3:C:149:LYS:HG3	2.30	0.46
1:A:480:ARG:HB3	5:E:294:ASN:CB	2.46	0.46
6:F:322:ASP:OD1	6:F:323:ASN:ND2	2.49	0.46
6:F:57:LEU:O	6:F:61:LEU:CB	2.64	0.46
7:G:205:LYS:HD2	7:G:210:THR:HG22	1.97	0.46
7:G:261:LEU:HD22	7:G:265:GLU:OE2	2.16	0.46
1:A:343:LEU:HA	1:A:346:TYR:HB3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:215:VAL:HA	3:C:218:LEU:HD12	1.97	0.46
3:C:306:TYR:CE1	3:C:338:LEU:HD11	2.50	0.46
3:C:361:HIS:NE2	3:C:365:ILE:HD11	2.31	0.46
3:C:66:VAL:HG21	3:C:103:LYS:HG2	1.97	0.46
3:C:78:ILE:O	3:C:81:SER:HB2	2.16	0.46
6:F:248:TYR:O	6:F:251:LEU:CB	2.63	0.46
7:G:225:LEU:HA	7:G:225:LEU:HD23	1.48	0.46
5:E:72:TYR:HE1	7:G:94:MET:SD	2.38	0.46
8:H:28:PRO:HA	8:H:31:LYS:CG	2.45	0.46
2:B:109:SER:C	2:B:114:THR:HG23	2.36	0.46
2:B:244:ILE:O	2:B:246:GLN:N	2.48	0.46
2:B:58:VAL:O	2:B:62:ILE:HG12	2.16	0.46
3:C:145:HIS:HB2	3:C:154:SER:HB3	1.97	0.46
3:C:163:ARG:HG3	3:C:164:GLU:N	2.30	0.46
3:C:278:VAL:HG12	3:C:300:LYS:NZ	2.31	0.46
4:D:172:LEU:HD22	4:D:213:TYR:CE2	2.50	0.46
4:D:215:GLY:O	4:D:218:CYS:N	2.49	0.46
4:D:238:PHE:HD2	4:D:246:TYR:HD1	1.64	0.46
4:D:289:ILE:O	4:D:292:LEU:HB3	2.16	0.46
5:E:7:LYS:HE3	5:E:160:THR:HG22	1.97	0.46
5:E:193:GLN:NE2	7:G:300:VAL:HG21	2.31	0.46
6:F:78:VAL:O	6:F:81:TYR:HB2	2.16	0.46
7:G:142:ASP:HB3	7:G:152:VAL:HG13	1.98	0.46
7:G:226:LYS:HE3	7:G:226:LYS:HB2	1.70	0.46
8:H:214:GLU:OE1	8:H:214:GLU:N	2.49	0.46
1:A:168:LEU:HD23	1:A:169:CYS:N	2.30	0.46
1:A:211:ARG:NH2	1:A:240:ASP:OD2	2.41	0.46
1:A:388:ILE:HG21	1:A:422:MET:CE	2.46	0.46
2:B:395:ARG:HB3	3:C:357:VAL:HA	1.98	0.46
3:C:352:GLU:N	3:C:353:PRO:HD2	2.31	0.46
3:C:361:HIS:NE2	3:C:365:ILE:HD11	2.31	0.46
4:D:222:ARG:NH1	4:D:325:HIS:HA	2.30	0.46
4:D:334:ARG:HD3	9:I:73:PHE:CZ	2.51	0.46
6:F:31:LYS:HA	6:F:34:GLU:HB2	1.97	0.46
6:F:303:LYS:O	6:F:369:ARG:NH2	2.49	0.46
7:G:254:ARG:HH21	7:G:276:PRO:HD2	1.81	0.46
6:F:292:CYS:O	6:F:295:THR:OG1	2.30	0.46
8:H:85:LEU:HD21	8:H:89:TYR:HE2	1.81	0.46
2:B:407:ASN:ND2	2:B:410:GLN:NE2	2.64	0.46
3:C:161:LEU:HD12	3:C:164:GLU:CB	2.45	0.46
3:C:256:GLU:HA	3:C:259:CYS:SG	2.56	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:295:GLY:O	3:C:298:ALA:HB3	2.16	0.46
3:C:306:TYR:CE1	3:C:338:LEU:HD11	2.51	0.46
2:B:394:ASN:HA	3:C:355:GLU:O	2.16	0.46
5:E:112:LYS:HB3	5:E:112:LYS:HE3	1.70	0.46
6:F:132:GLU:OE2	6:F:135:ARG:HD2	2.16	0.46
6:F:242:ILE:HG23	6:F:248:TYR:CD2	2.51	0.46
6:F:252:PHE:HD1	6:F:252:PHE:N	2.13	0.46
6:F:66:VAL:O	6:F:70:TYR:N	2.48	0.46
6:F:38:TRP:CD2	6:F:72:LYS:HD2	2.50	0.46
7:G:120:SER:O	7:G:123:VAL:HB	2.16	0.46
7:G:59:ASP:OD1	7:G:62:THR:HG22	2.16	0.46
1:A:159:ASN:HA	1:A:163:VAL:HB	1.98	0.46
1:A:218:LEU:HD12	1:A:219:LYS:N	2.31	0.46
2:B:206:LYS:HE2	2:B:206:LYS:HB2	1.72	0.46
2:B:236:GLU:O	2:B:239:GLN:N	2.49	0.46
2:B:298:SER:O	2:B:302:LEU:HG	2.16	0.46
3:C:109:ASP:OD1	3:C:109:ASP:N	2.48	0.46
3:C:169:ASP:OD1	3:C:170:ASP:N	2.39	0.46
4:D:219:LEU:HD21	4:D:322:LEU:CD2	2.46	0.46
3:C:426:LEU:HD13	5:E:288:PHE:HD2	1.79	0.46
5:E:50:ASN:OD1	5:E:50:ASN:C	2.53	0.46
6:F:213:LEU:O	6:F:216:ASP:N	2.48	0.46
7:G:148:LYS:H	7:G:148:LYS:CD	2.27	0.46
7:G:219:GLU:OE2	7:G:226:LYS:NZ	2.49	0.46
1:A:218:LEU:HA	1:A:218:LEU:HD23	1.78	0.46
1:A:171:TYR:HE1	1:A:220:ILE:HG21	1.81	0.46
2:B:213:TYR:O	2:B:216:LEU:N	2.49	0.46
3:C:153:ASP:O	3:C:157:LEU:HD13	2.16	0.46
4:D:152:LYS:HG3	4:D:153:THR:N	2.30	0.46
5:E:115:GLN:HE21	6:F:163:ILE:N	2.07	0.46
5:E:10:ILE:HG22	5:E:11:ALA:O	2.16	0.46
8:H:186:ARG:NE	8:H:209:LEU:O	2.48	0.46
8:H:226:TRP:HB3	8:H:233:VAL:CG2	2.46	0.46
8:H:39:LEU:C	8:H:42:PRO:HD2	2.36	0.46
2:B:66:LEU:HB3	2:B:75:LEU:HD22	1.89	0.46
4:D:148:ASP:OD1	4:D:149:ASN:N	2.49	0.46
4:D:222:ARG:HG2	9:I:60:TRP:CG	2.51	0.46
7:G:289:GLU:HG2	7:G:290:ASN:N	2.31	0.46
8:H:48:ASN:OD1	8:H:49:ASP:N	2.49	0.46
2:B:110:LEU:O	2:B:114:THR:OG1	2.20	0.46
2:B:182:GLU:O	2:B:186:LEU:HG	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:287:THR:HG23	3:C:288:LYS:N	2.29	0.46
6:F:20:PRO:HA	6:F:23:HIS:CG	2.50	0.46
7:G:88:GLN:O	7:G:92:MET:HG2	2.16	0.46
8:H:70:ILE:HG23	8:H:75:PHE:HE1	1.80	0.46
2:B:166:GLU:O	2:B:168:TYR:N	2.49	0.46
2:B:411:LEU:O	2:B:414:GLU:HB3	2.16	0.46
4:D:162:ILE:HG22	4:D:163:SER:O	2.15	0.46
6:F:391:ILE:HD11	8:H:268:ILE:HA	1.98	0.46
7:G:52:LEU:HB2	7:G:69:PHE:HD2	1.81	0.46
2:B:415:TRP:HD1	5:E:237:PRO:HB3	1.80	0.46
3:C:157:LEU:O	3:C:161:LEU:HG	2.16	0.46
3:C:296:ILE:HG13	3:C:297:ASP:N	2.30	0.46
4:D:60:ALA:O	4:D:63:TYR:HB3	2.15	0.46
5:E:31:LYS:HE3	5:E:58:GLU:HB3	1.98	0.46
6:F:230:PHE:CE2	6:F:258:LEU:HD13	2.51	0.46
8:H:204:ASN:O	8:H:207:ALA:HB3	2.16	0.46
8:H:259:ILE:HG23	8:H:260:ILE:N	2.31	0.46
1:A:479:MET:HA	5:E:294:ASN:HD22	1.81	0.46
2:B:180:ILE:O	2:B:183:GLN:HB2	2.15	0.46
2:B:363:LEU:O	2:B:366:ASN:N	2.49	0.46
2:B:395:ARG:HH11	3:C:361:HIS:CG	2.34	0.46
3:C:163:ARG:HG3	3:C:164:GLU:H	1.80	0.46
3:C:185:TYR:HD1	3:C:188:LEU:HD12	1.80	0.46
3:C:294:ARG:HH12	3:C:324:GLU:CB	2.23	0.46
3:C:333:SER:O	3:C:336:ASN:N	2.48	0.46
4:D:209:ARG:NH2	4:D:213:TYR:CE1	2.84	0.46
5:E:97:PRO:C	5:E:98:LYS:HD2	2.36	0.46
7:G:296:LEU:HD12	7:G:296:LEU:HA	1.57	0.46
8:H:224:ARG:HB3	8:H:226:TRP:NE1	2.31	0.46
3:C:78:ILE:HD12	3:C:117:VAL:HG21	1.98	0.46
1:A:478:SER:OG	4:D:422:ARG:NE	2.49	0.46
5:E:21:HIS:CE1	5:E:53:ALA:HB1	2.51	0.46
6:F:150:LEU:HD13	6:F:175:ASN:OD1	2.16	0.46
1:A:313:SER:O	1:A:316:LEU:N	2.49	0.46
2:B:101:MET:HA	2:B:104:LEU:HD13	1.98	0.46
2:B:144:VAL:HA	2:B:147:LYS:HG2	1.97	0.46
2:B:210:ASN:HB3	2:B:213:TYR:CD2	2.51	0.46
2:B:245:TYR:HA	2:B:250:ILE:HD11	1.98	0.46
4:D:360:SER:HB3	9:I:83:ARG:NH2	2.30	0.46
6:F:214:ALA:HB2	6:F:238:ILE:HG12	1.96	0.46
6:F:298:GLU:CD	6:F:356:ARG:HH22	2.17	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:123:ARG:O	2:B:127:GLU:HG3	2.15	0.46
2:B:344:ARG:HA	2:B:344:ARG:HD3	1.80	0.46
2:B:409:SER:O	2:B:410:GLN:C	2.54	0.46
2:B:420:ASP:OD1	2:B:420:ASP:C	2.54	0.46
3:C:109:ASP:HA	3:C:112:ASP:HB2	1.97	0.46
3:C:146:TYR:CZ	3:C:183:LYS:HG3	2.50	0.46
3:C:191:LEU:O	3:C:195:LYS:HG3	2.16	0.46
4:D:368:LEU:O	4:D:370:LYS:N	2.49	0.46
5:E:137:TYR:CD1	5:E:156:HIS:HA	2.51	0.46
7:G:230:TYR:O	7:G:231:GLU:C	2.54	0.46
8:H:24:GLU:O	8:H:28:PRO:HD3	2.15	0.46
8:H:70:ILE:HD12	8:H:71:GLN:N	2.31	0.46
1:A:147:TRP:CE3	1:A:155:LEU:HD21	2.50	0.46
1:A:252:ASP:HA	1:A:255:SER:HB2	1.98	0.46
1:A:399:TYR:CG	1:A:402:ILE:HD11	2.51	0.46
2:B:245:TYR:CE1	2:B:261:LEU:HD23	2.50	0.46
2:B:356:TYR:HD2	6:F:329:MET:SD	2.38	0.46
2:B:437:GLU:O	2:B:440:HIS:N	2.48	0.46
4:D:238:PHE:CD2	4:D:246:TYR:CD1	3.04	0.46
5:E:77:ASN:O	5:E:80:CYS:N	2.49	0.46
6:F:119:SER:HA	6:F:122:HIS:HD2	1.80	0.46
1:A:245:GLY:H	8:H:131:LYS:HE3	1.80	0.46
1:A:154:GLN:O	1:A:158:PHE:CB	2.64	0.46
1:A:184:TRP:HZ2	1:A:217:PHE:HD2	1.63	0.46
2:B:180:ILE:O	2:B:184:MET:HG2	2.15	0.46
2:B:408:SER:O	2:B:412:LEU:HG	2.16	0.46
6:F:109:LEU:O	6:F:113:LYS:HB2	2.16	0.46
2:B:340:ASP:O	2:B:343:LYS:N	2.48	0.46
4:D:213:TYR:CE1	4:D:243:LEU:HD11	2.51	0.46
4:D:315:VAL:O	4:D:318:PRO:HD2	2.16	0.46
6:F:45:LEU:O	6:F:49:PHE:CB	2.64	0.46
6:F:72:LYS:HG3	6:F:73:ILE:HG23	1.98	0.46
7:G:278:LYS:O	7:G:282:GLU:HB3	2.16	0.46
2:B:234:TYR:O	2:B:237:VAL:N	2.49	0.46
4:D:217:HIS:O	4:D:220:ALA:N	2.49	0.46
1:A:174:ARG:O	1:A:177:ASN:ND2	2.49	0.46
3:C:125:ALA:O	3:C:129:LYS:N	2.48	0.46
3:C:56:THR:O	3:C:60:GLU:HG3	2.16	0.46
5:E:160:THR:C	5:E:161:ILE:HD13	2.36	0.46
6:F:267:ASP:O	6:F:270:ILE:HB	2.16	0.46
1:A:156:VAL:O	1:A:159:ASN:N	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:162:VAL:HG13	1:A:163:VAL:N	2.31	0.46
1:A:206:GLN:O	1:A:209:ILE:HB	2.16	0.46
1:A:333:PHE:CD1	1:A:346:TYR:HB2	2.51	0.46
1:A:334:HIS:C	1:A:339:GLN:HE22	2.18	0.46
4:D:155:GLY:O	4:D:158:LEU:HB2	2.15	0.46
1:A:479:MET:CE	5:E:294:ASN:HD22	2.29	0.46
7:G:249:GLU:O	7:G:252:SER:OG	2.24	0.46
1:A:315:LYS:HE3	1:A:341:SER:HB2	1.98	0.46
1:A:383:LEU:HD23	1:A:383:LEU:HA	1.70	0.46
1:A:469:ASN:O	1:A:472:HIS:HB3	2.15	0.46
2:B:164:GLN:NE2	2:B:176:LYS:HB3	2.31	0.46
2:B:299:LEU:O	2:B:302:LEU:HB3	2.16	0.46
4:D:349:SER:HA	4:D:387:ILE:HD12	1.97	0.46
6:F:71:ASP:OD1	6:F:71:ASP:N	2.48	0.46
7:G:56:GLU:HG3	7:G:102:GLN:OE1	2.16	0.46
7:G:263:GLU:O	7:G:267:LYS:HE3	2.16	0.46
8:H:146:ILE:O	8:H:149:ASP:N	2.48	0.46
9:I:73:PHE:O	9:I:77:LEU:CB	2.64	0.46
1:A:293:ILE:HD12	1:A:296:ALA:HB3	1.97	0.45
2:B:162:GLU:O	2:B:164:GLN:N	2.49	0.45
4:D:172:LEU:HD13	4:D:213:TYR:HE2	1.80	0.45
4:D:188:LYS:O	4:D:192:GLU:HG2	2.16	0.45
7:G:110:SER:HA	7:G:141:VAL:O	2.16	0.45
8:H:187:ASP:OD1	8:H:188:GLU:N	2.44	0.45
1:A:230:LYS:HZ1	1:A:260:PRO:HD3	1.81	0.45
3:C:152:LYS:O	3:C:155:LEU:HB3	2.16	0.45
1:A:398:THR:HG22	4:D:373:PRO:HD3	1.98	0.45
5:E:172:GLU:HG3	5:E:176:ARG:HH12	1.80	0.45
6:F:196:LEU:HD11	6:F:238:ILE:HD12	1.98	0.45
2:B:234:TYR:O	2:B:235:LEU:C	2.53	0.45
4:D:41:GLU:HG2	4:D:42:GLN:N	2.31	0.45
5:E:165:GLU:O	5:E:169:ILE:CD1	2.64	0.45
6:F:110:ASP:HA	6:F:114:GLN:CG	2.46	0.45
5:E:24:ARG:NE	7:G:100:ARG:HG2	2.30	0.45
7:G:275:ASP:O	7:G:278:LYS:N	2.43	0.45
7:G:52:LEU:HB2	7:G:69:PHE:CD2	2.51	0.45
8:H:200:LEU:HD23	8:H:200:LEU:HA	1.60	0.45
1:A:333:PHE:HD1	1:A:346:TYR:HB2	1.81	0.45
2:B:72:TRP:HE1	2:B:108:LYS:HZ2	1.64	0.45
4:D:379:CYS:HB2	4:D:389:GLU:O	2.16	0.45
8:H:258:ASN:O	8:H:262:LYS:HG3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:308:GLY:H	9:I:40:ILE:HG12	1.80	0.45
3:C:288:LYS:O	3:C:291:TYR:N	2.50	0.45
4:D:115:GLU:O	4:D:118:GLN:HB3	2.16	0.45
5:E:66:TRP:NE1	5:E:106:ILE:HG22	2.31	0.45
5:E:141:GLU:H	5:E:152:LYS:HZ2	1.64	0.45
5:E:55:PRO:HG2	7:G:97:GLN:HB3	1.98	0.45
6:F:15:ARG:NH1	6:F:26:PHE:CD2	2.84	0.45
6:F:343:GLN:O	6:F:346:GLU:N	2.48	0.45
1:A:421:TYR:HE1	8:H:157:TYR:H	1.63	0.45
1:A:378:GLN:HA	1:A:381:VAL:HG22	1.98	0.45
1:A:383:LEU:O	1:A:386:ASN:N	2.49	0.45
1:A:450:ASN:C	1:A:451:ILE:HG13	2.36	0.45
2:B:329:PHE:CD1	2:B:338:TRP:CE2	3.05	0.45
7:G:93:ASP:O	7:G:96:LYS:HB2	2.16	0.45
9:I:72:ASP:OD1	9:I:76:GLU:HB2	2.16	0.45
1:A:262:THR:HG23	1:A:263:ASP:H	1.80	0.45
2:B:187:SER:OG	2:B:196:ALA:HB2	2.16	0.45
3:C:163:ARG:HD3	3:C:166:LYS:HB2	1.97	0.45
3:C:322:GLU:O	3:C:326:MET:N	2.49	0.45
4:D:111:LYS:O	4:D:114:ASN:HB2	2.15	0.45
4:D:138:GLY:HA2	4:D:141:TYR:CD2	2.51	0.45
4:D:392:ARG:CZ	4:D:392:ARG:HB3	2.46	0.45
6:F:229:ASN:OD1	6:F:357:ILE:N	2.38	0.45
8:H:29:PRO:O	8:H:33:GLU:HB3	2.17	0.45
1:A:133:GLU:HA	1:A:176:LEU:HD21	1.97	0.45
2:B:122:ILE:HG22	2:B:139:VAL:HG23	1.97	0.45
2:B:226:LYS:HE3	2:B:226:LYS:HB2	1.79	0.45
2:B:294:GLU:O	2:B:297:GLU:N	2.49	0.45
4:D:173:THR:HA	4:D:176:ARG:HE	1.82	0.45
4:D:218:CYS:O	4:D:221:VAL:HG22	2.16	0.45
7:G:286:GLU:HA	7:G:289:GLU:OE2	2.16	0.45
8:H:77:SER:OG	8:H:78:PHE:N	2.49	0.45
9:I:79:ALA:O	9:I:83:ARG:CB	2.64	0.45
1:A:323:LEU:HA	1:A:323:LEU:HD23	1.59	0.45
2:B:200:SER:O	2:B:203:ILE:HG22	2.16	0.45
2:B:67:ALA:HB3	2:B:71:LYS:NZ	2.31	0.45
2:B:75:LEU:HA	2:B:78:GLN:HB2	1.98	0.45
5:E:297:GLN:NE2	5:E:300:LYS:HB2	2.32	0.45
5:E:37:ILE:HG22	5:E:51:SER:CB	2.45	0.45
6:F:57:LEU:HB3	6:F:61:LEU:HG	1.96	0.45
7:G:202:ASP:CG	7:G:203:TYR:N	2.70	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:174:LEU:CD1	7:G:31:SER:HB2	2.45	0.45
1:A:132:ALA:C	1:A:135:ASN:H	2.20	0.45
1:A:335:GLN:O	1:A:336:SER:OG	2.29	0.45
1:A:353:LYS:HE2	9:I:64:TRP:CB	2.46	0.45
1:A:398:THR:OG1	1:A:399:TYR:N	2.49	0.45
1:A:416:GLU:O	1:A:419:VAL:HG12	2.16	0.45
2:B:134:VAL:HG22	2:B:171:MET:HG2	1.98	0.45
2:B:183:GLN:HB3	2:B:199:LEU:CD2	2.44	0.45
2:B:273:TYR:HA	2:B:277:GLN:OE1	2.15	0.45
2:B:312:PRO:O	2:B:316:LYS:HG2	2.16	0.45
3:C:131:VAL:O	3:C:135:HIS:ND1	2.50	0.45
3:C:99:THR:O	3:C:103:LYS:N	2.47	0.45
4:D:150:ALA:O	4:D:154:LEU:N	2.34	0.45
4:D:351:LYS:O	4:D:355:SER:HB3	2.16	0.45
6:F:113:LYS:HA	6:F:116:ASN:HB2	1.97	0.45
6:F:314:SER:O	6:F:318:HIS:N	2.49	0.45
8:H:52:LEU:O	8:H:55:LEU:HG	2.16	0.45
9:I:83:ARG:HA	9:I:86:ARG:HE	1.80	0.45
2:B:66:LEU:CD2	2:B:72:TRP:HB2	2.46	0.45
3:C:355:GLU:N	3:C:355:GLU:OE1	2.49	0.45
5:E:92:TRP:CD2	5:E:120:LEU:HD13	2.51	0.45
5:E:141:GLU:HG2	5:E:151:GLU:OE1	2.15	0.45
6:F:115:ARG:HA	6:F:119:SER:O	2.17	0.45
6:F:123:GLY:HA2	6:F:126:ILE:HD12	1.98	0.45
6:F:74:ASN:HB3	6:F:77:SER:OG	2.16	0.45
7:G:109:HIS:CE1	7:G:111:HIS:CE1	2.89	0.45
1:A:254:ILE:HA	1:A:257:LEU:HG	1.98	0.45
2:B:375:GLN:O	2:B:378:THR:N	2.49	0.45
5:E:137:TYR:HB3	5:E:154:PHE:HB3	1.98	0.45
8:H:201:PRO:HD2	8:H:204:ASN:ND2	2.30	0.45
1:A:209:ILE:HG13	1:A:210:LEU:N	2.31	0.45
1:A:323:LEU:HD23	1:A:323:LEU:HA	1.60	0.45
2:B:144:VAL:HG21	2:B:160:LEU:HD11	1.98	0.45
2:B:428:THR:O	2:B:431:HIS:N	2.49	0.45
3:C:124:PHE:O	3:C:127:ARG:HB2	2.16	0.45
3:C:425:GLN:O	3:C:428:GLU:HB3	2.16	0.45
5:E:22:TYR:O	5:E:25:THR:N	2.49	0.45
6:F:308:LEU:HB2	6:F:348:VAL:CG1	2.46	0.45
8:H:235:PHE:O	8:H:236:ASN:HB2	2.16	0.45
2:B:60:ALA:HB1	2:B:103:TYR:CZ	2.52	0.45
2:B:432:LEU:HA	2:B:432:LEU:HD12	1.71	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:60:ALA:HB1	2:B:103:TYR:CE2	2.51	0.45
4:D:424:THR:O	5:E:295:LYS:NZ	2.45	0.45
6:F:137:TYR:O	6:F:140:LYS:N	2.48	0.45
6:F:365:LYS:O	6:F:368:ASP:HB2	2.16	0.45
6:F:61:LEU:HB3	6:F:65:PHE:CZ	2.52	0.45
8:H:68:ALA:O	8:H:71:GLN:N	2.50	0.45
1:A:205:ASN:O	1:A:208:ILE:HB	2.16	0.45
1:A:415:SER:O	1:A:418:THR:HB	2.16	0.45
2:B:204:LEU:HD11	2:B:206:LYS:NZ	2.32	0.45
2:B:241:LEU:HA	2:B:241:LEU:HD23	1.75	0.45
3:C:149:LYS:HA	3:C:151:TYR:CE1	2.51	0.45
4:D:320:LYS:HE3	4:D:321:TYR:CE1	2.51	0.45
6:F:205:ILE:CG2	6:F:210:ARG:HB2	2.47	0.45
6:F:365:LYS:HB2	6:F:365:LYS:HE2	1.81	0.45
7:G:147:VAL:O	7:G:149:GLY:N	2.49	0.45
1:A:254:ILE:HD13	1:A:257:LEU:HD12	1.98	0.45
3:C:135:HIS:CG	3:C:164:GLU:HB3	2.51	0.45
3:C:360:SER:O	3:C:363:SER:HB3	2.17	0.45
4:D:131:ALA:HB2	4:D:160:LYS:HB2	1.97	0.45
4:D:195:ASN:O	4:D:199:GLU:HG3	2.17	0.45
6:F:114:GLN:HB2	6:F:117:ASN:ND2	2.31	0.45
7:G:254:ARG:NE	7:G:276:PRO:HD2	2.29	0.45
7:G:285:ASP:HA	7:G:288:LEU:HD12	1.98	0.45
8:H:189:ILE:O	8:H:192:ASN:HB2	2.16	0.45
9:I:37:ASP:OD1	9:I:38:PHE:N	2.49	0.45
1:A:137:PHE:O	1:A:140:LEU:HB3	2.16	0.45
2:B:50:SER:O	2:B:54:SER:HB2	2.15	0.45
3:C:140:LYS:O	3:C:144:LEU:HG	2.17	0.45
4:D:138:GLY:H	4:D:153:THR:HG21	1.80	0.45
4:D:52:ALA:O	4:D:55:LYS:N	2.49	0.45
6:F:294:MET:HA	6:F:297:ILE:HG22	1.98	0.45
8:H:220:PHE:O	8:H:224:ARG:N	2.49	0.45
1:A:307:LEU:O	1:A:310:LEU:N	2.50	0.45
2:B:147:LYS:HB3	2:B:150:GLU:OE1	2.16	0.45
2:B:210:ASN:HB3	2:B:213:TYR:CE2	2.52	0.45
2:B:412:LEU:O	2:B:413:ASN:C	2.55	0.45
3:C:262:LEU:HD11	3:C:296:ILE:HD11	1.98	0.45
1:A:479:MET:CG	5:E:294:ASN:HD22	2.29	0.45
7:G:267:LYS:O	7:G:271:VAL:HG13	2.16	0.45
8:H:124:SER:O	8:H:127:GLN:N	2.49	0.45
2:B:227:ILE:HG23	2:B:228:SER:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:407:ASN:OD1	2:B:410:GLN:NE2	2.49	0.45
2:B:65:LEU:CD2	2:B:71:LYS:HG2	2.46	0.45
3:C:149:LYS:HG3	3:C:150:GLN:N	2.29	0.45
3:C:262:LEU:HD12	3:C:263:LYS:N	2.31	0.45
3:C:61:LEU:O	3:C:65:TYR:N	2.50	0.45
4:D:179:PHE:CE2	4:D:216:ILE:HD11	2.52	0.45
4:D:322:LEU:O	4:D:323:ASN:C	2.55	0.45
7:G:253:LYS:HA	7:G:256:GLU:HG2	1.97	0.45
3:C:126:LYS:HB2	3:C:134:LYS:HD3	1.98	0.45
3:C:239:PHE:HE1	3:C:265:MET:HA	1.82	0.45
3:C:406:ASP:HB3	3:C:409:TYR:HB2	1.97	0.45
4:D:231:LEU:O	4:D:234:SER:N	2.50	0.45
6:F:319:LEU:HD21	6:F:323:ASN:HB2	1.98	0.45
6:F:391:ILE:O	6:F:392:TRP:CD2	2.69	0.45
9:I:37:ASP:N	9:I:37:ASP:OD1	2.48	0.45
1:A:151:GLU:OE2	1:A:153:GLU:HB2	2.17	0.45
1:A:271:ARG:HH22	9:I:35:PHE:HA	1.79	0.45
1:A:317:HIS:CE1	1:A:321:GLN:HE21	2.34	0.45
3:C:324:GLU:O	3:C:327:GLY:N	2.49	0.45
7:G:253:LYS:HA	7:G:256:GLU:HG2	1.97	0.45
8:H:105:LEU:O	8:H:108:LEU:HB3	2.16	0.45
1:A:140:LEU:HD12	1:A:183:LEU:HD12	1.98	0.45
2:B:184:MET:O	2:B:187:SER:OG	2.14	0.45
2:B:366:ASN:O	2:B:370:ASP:N	2.48	0.45
3:C:130:ARG:HG3	3:C:130:ARG:O	2.17	0.45
3:C:172:PRO:HA	3:C:208:ILE:HG12	1.99	0.45
3:C:65:TYR:HA	3:C:68:MET:HB2	1.97	0.45
7:G:113:GLY:N	7:G:142:ASP:OD1	2.44	0.45
8:H:9:LYS:HA	8:H:12:SER:HB3	1.98	0.45
1:A:134:ILE:O	1:A:138:MET:HB3	2.16	0.45
1:A:218:LEU:O	1:A:222:SER:HB3	2.16	0.45
2:B:61:LYS:HA	2:B:64:ASP:CG	2.37	0.45
3:C:344:GLU:O	3:C:345:SER:C	2.55	0.45
4:D:194:VAL:HA	4:D:197:MET:HG2	1.98	0.45
5:E:235:LEU:HA	5:E:235:LEU:HD23	1.55	0.45
6:F:250:TRP:CE3	6:F:273:GLN:HG3	2.51	0.45
6:F:291:ILE:O	6:F:292:CYS:C	2.55	0.45
6:F:343:GLN:O	6:F:346:GLU:N	2.48	0.45
6:F:361:ASP:O	6:F:364:THR:HB	2.17	0.45
7:G:265:GLU:O	7:G:268:THR:HB	2.17	0.45
7:G:69:PHE:HE1	7:G:91:MET:CB	2.27	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:383:LEU:O	1:A:384:ARG:C	2.55	0.45
3:C:178:HIS:CB	3:C:201:ALA:HB2	2.46	0.45
3:C:357:VAL:HG13	3:C:357:VAL:O	2.15	0.45
3:C:405:GLN:HG2	4:D:394:ASP:O	2.17	0.45
6:F:266:PHE:CE1	6:F:291:ILE:HD11	2.51	0.45
6:F:6:GLU:HG2	6:F:7:ILE:N	2.30	0.45
8:H:44:LEU:HG	8:H:55:LEU:CD2	2.47	0.45
1:A:392:ILE:O	1:A:396:SER:N	2.49	0.45
2:B:157:ALA:O	2:B:161:CYS:N	2.49	0.45
3:C:77:PHE:HB2	3:C:104:PHE:HE2	1.81	0.45
3:C:202:ARG:HD2	3:C:218:LEU:HD21	1.98	0.45
3:C:88:PHE:CE2	3:C:90:LYS:HB3	2.51	0.45
4:D:172:LEU:HB3	4:D:213:TYR:OH	2.16	0.45
4:D:309:LEU:HD12	4:D:309:LEU:HA	1.71	0.45
8:H:121:LYS:O	8:H:124:SER:OG	2.18	0.45
1:A:456:ASP:N	1:A:457:PRO:HD2	2.32	0.45
2:B:294:GLU:O	2:B:297:GLU:HB3	2.16	0.45
4:D:304:TYR:CE2	4:D:337:VAL:HG21	2.51	0.45
4:D:394:ASP:OD1	4:D:395:ASN:N	2.44	0.45
5:E:70:HIS:HB2	5:E:113:TYR:OH	2.16	0.45
6:F:379:LYS:O	6:F:383:LYS:CB	2.65	0.45
1:A:206:GLN:O	1:A:210:LEU:N	2.29	0.45
3:C:114:GLN:O	3:C:115:ILE:HG22	2.16	0.45
3:C:226:HIS:CD2	3:C:238:TYR:HE2	2.34	0.45
4:D:209:ARG:HG2	4:D:213:TYR:CE2	2.51	0.45
4:D:348:LEU:HA	4:D:348:LEU:HD23	1.75	0.45
3:C:65:TYR:HB2	3:C:77:PHE:CE1	2.50	0.45
4:D:29:LYS:O	4:D:33:LEU:HG	2.16	0.45
6:F:163:ILE:HD13	6:F:168:THR:HG23	1.99	0.45
6:F:217:LEU:HA	6:F:217:LEU:HD23	1.71	0.45
7:G:85:ASP:N	7:G:85:ASP:OD1	2.49	0.45
8:H:177:PHE:O	8:H:180:ILE:HB	2.17	0.45
1:A:152:LEU:HD13	1:A:194:LEU:HD13	1.99	0.45
2:B:136:ARG:C	2:B:139:VAL:HG22	2.37	0.45
2:B:158:ASP:HA	2:B:161:CYS:SG	2.56	0.45
2:B:380:ILE:O	2:B:384:VAL:HG23	2.16	0.45
2:B:35:ALA:O	2:B:38:GLN:HB2	2.17	0.45
3:C:101:ILE:HA	3:C:104:PHE:HB3	1.99	0.45
3:C:156:ALA:HA	3:C:159:ASN:HB3	1.99	0.45
3:C:362:ILE:O	3:C:366:ILE:HG22	2.16	0.45
3:C:377:LEU:HD23	3:C:377:LEU:HA	1.60	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:107:GLU:HA	4:D:110:ILE:CG2	2.45	0.45
4:D:129:GLU:O	4:D:132:GLN:HB3	2.16	0.45
1:A:448:LEU:HB3	4:D:401:HIS:CE1	2.52	0.45
5:E:71:ASN:O	5:E:75:ASN:ND2	2.50	0.45
6:F:258:LEU:HD23	6:F:258:LEU:HA	1.68	0.45
8:H:103:SER:OG	8:H:104:LYS:N	2.50	0.45
8:H:220:PHE:O	8:H:224:ARG:HG2	2.16	0.45
8:H:257:THR:O	8:H:262:LYS:HE3	2.17	0.45
1:A:209:ILE:O	1:A:213:THR:N	2.32	0.45
1:A:303:ASN:CG	1:A:305:LYS:HG2	2.36	0.45
2:B:141:LYS:HE2	2:B:179:PHE:HA	1.98	0.45
2:B:78:GLN:O	2:B:81:LEU:HB3	2.16	0.45
3:C:355:GLU:OE1	3:C:355:GLU:N	2.50	0.45
4:D:138:GLY:HA2	4:D:141:TYR:HH	1.82	0.45
1:A:452:TYR:HE2	5:E:267:VAL:HG13	1.81	0.45
7:G:190:HIS:O	7:G:192:LEU:N	2.49	0.45
7:G:238:LEU:O	7:G:241:THR:OG1	2.33	0.45
1:A:132:ALA:HA	1:A:135:ASN:HB2	1.99	0.45
2:B:223:LEU:O	2:B:226:LYS:N	2.49	0.45
2:B:282:HIS:HE1	2:B:304:THR:HG23	1.82	0.45
3:C:344:GLU:OE1	3:C:345:SER:N	2.50	0.45
4:D:62:TYR:HD1	4:D:66:LEU:HD13	1.82	0.45
5:E:210:TYR:O	5:E:213:LYS:N	2.49	0.45
1:A:211:ARG:O	1:A:215:MET:N	2.40	0.45
3:C:325:LEU:HG	3:C:332:ARG:HD3	1.99	0.45
4:D:238:PHE:HD2	4:D:246:TYR:HD1	1.63	0.45
4:D:248:SER:O	4:D:251:THR:N	2.49	0.45
5:E:286:ILE:HD11	7:G:277:LYS:HE3	1.99	0.45
5:E:297:GLN:HA	5:E:300:LYS:HD2	1.98	0.45
8:H:263:ALA:HA	8:H:266:TYR:CD2	2.52	0.45
2:B:114:THR:O	2:B:118:VAL:CA	2.62	0.45
2:B:257:TRP:HA	2:B:260:VAL:HG12	1.98	0.45
2:B:416:SER:O	2:B:419:VAL:N	2.49	0.45
3:C:124:PHE:CD1	3:C:127:ARG:HD2	2.51	0.45
4:D:116:LYS:HA	4:D:119:LYS:HD3	1.98	0.45
4:D:289:ILE:O	4:D:290:SER:C	2.54	0.45
4:D:305:PHE:O	4:D:308:LEU:N	2.50	0.45
5:E:108:GLU:O	5:E:111:LYS:HG2	2.16	0.45
5:E:16:LEU:HA	5:E:16:LEU:HD23	1.65	0.45
5:E:71:ASN:O	5:E:75:ASN:CB	2.64	0.45
7:G:202:ASP:CG	7:G:203:TYR:H	2.11	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:157:TYR:O	8:H:160:ALA:HB3	2.17	0.45
1:A:144:LEU:O	1:A:148:ASP:CG	2.55	0.45
2:B:180:ILE:HG21	2:B:202:LYS:NZ	2.31	0.45
3:C:195:LYS:HD3	3:C:225:LEU:HD13	1.98	0.45
3:C:344:GLU:O	3:C:345:SER:C	2.55	0.45
4:D:121:GLU:HG2	4:D:122:GLU:N	2.31	0.45
4:D:277:LEU:HA	4:D:277:LEU:HD23	1.78	0.45
6:F:14:LEU:HD13	6:F:61:LEU:HD23	1.98	0.45
6:F:391:ILE:O	6:F:392:TRP:CG	2.70	0.45
6:F:52:ALA:O	6:F:55:THR:OG1	2.33	0.45
7:G:206:THR:HG21	7:G:208:LYS:CE	2.44	0.45
8:H:30:ILE:O	8:H:34:LEU:HB3	2.17	0.45
1:A:306:SER:HG	9:I:35:PHE:HE2	1.64	0.45
1:A:303:ASN:OD1	1:A:304:SER:N	2.50	0.45
1:A:329:GLU:O	1:A:332:PHE:N	2.49	0.45
2:B:122:ILE:HG21	2:B:139:VAL:HG21	1.98	0.45
2:B:77:GLU:O	2:B:80:THR:HG22	2.16	0.45
3:C:170:ASP:CG	3:C:171:LYS:H	2.20	0.45
3:C:183:LYS:CE	3:C:221:MET:HB3	2.46	0.45
3:C:223:GLY:HA2	3:C:238:TYR:HD2	1.81	0.45
4:D:39:SER:O	4:D:43:ARG:HG3	2.16	0.45
1:A:177:ASN:C	1:A:229:THR:CG2	2.69	0.45
2:B:254:GLU:HA	2:B:257:TRP:NE1	2.31	0.45
2:B:65:LEU:HD21	2:B:71:LYS:HD3	1.98	0.45
2:B:82:LEU:O	2:B:85:LYS:HB2	2.17	0.45
3:C:262:LEU:HD12	3:C:263:LYS:N	2.31	0.45
5:E:204:LEU:HA	5:E:204:LEU:HD23	1.76	0.45
1:A:481:TYR:CB	5:E:298:ASN:HD21	2.30	0.45
7:G:274:GLN:O	7:G:275:ASP:C	2.55	0.45
9:I:80:GLU:CD	9:I:83:ARG:HH21	2.20	0.45
1:A:157:GLU:O	1:A:161:LYS:HG2	2.17	0.45
1:A:330:LEU:HB3	1:A:334:HIS:HD2	1.81	0.45
2:B:239:GLN:O	2:B:242:GLN:HB3	2.17	0.45
3:C:115:ILE:HG12	3:C:141:LEU:HD12	1.99	0.45
4:D:192:GLU:O	4:D:195:ASN:HB3	2.17	0.45
5:E:108:GLU:HA	5:E:111:LYS:CG	2.46	0.45
5:E:204:LEU:O	5:E:208:VAL:HG23	2.17	0.45
5:E:281:LEU:O	5:E:285:ILE:HG22	2.17	0.45
5:E:294:ASN:O	5:E:297:GLN:N	2.50	0.45
5:E:303:GLU:OE1	5:E:303:GLU:N	2.42	0.45
6:F:308:LEU:HB2	6:F:348:VAL:CG1	2.47	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:207:ALA:O	7:G:211:LYS:HG2	2.17	0.45
1:A:352:VAL:HA	1:A:387:VAL:HG22	1.98	0.45
2:B:254:GLU:OE2	2:B:258:LYS:HD3	2.17	0.45
3:C:340:ASP:OD1	3:C:376:LYS:NZ	2.37	0.45
3:C:380:MET:O	3:C:385:ILE:HG22	2.16	0.45
3:C:79:PRO:O	3:C:83:GLU:HB3	2.16	0.45
4:D:58:GLU:N	4:D:58:GLU:OE1	2.36	0.45
4:D:67:CYS:HG	4:D:94:PHE:HD1	1.58	0.45
2:B:433:ILE:HD11	5:E:210:TYR:CE1	2.52	0.45
5:E:62:ASN:OD1	5:E:63:SER:O	2.35	0.45
7:G:208:LYS:HA	7:G:211:LYS:NZ	2.32	0.45
1:A:137:PHE:O	1:A:141:LEU:HG	2.17	0.45
1:A:278:LYS:O	1:A:281:ALA:HB3	2.16	0.45
1:A:290:ASN:HB3	1:A:324:MET:HE3	1.98	0.45
1:A:404:LEU:HG	1:A:441:GLY:O	2.17	0.45
2:B:156:ALA:O	2:B:159:ILE:HB	2.17	0.45
2:B:248:ASP:O	2:B:252:SER:HB2	2.17	0.45
3:C:363:SER:OG	3:C:368:LEU:O	2.25	0.45
3:C:413:LEU:HD23	3:C:413:LEU:HA	1.72	0.45
4:D:64:LYS:HE3	4:D:99:TYR:CZ	2.51	0.45
6:F:67:SER:O	6:F:70:TYR:HD2	2.00	0.45
8:H:58:THR:O	8:H:61:ILE:HB	2.16	0.45
8:H:78:PHE:O	8:H:81:TYR:N	2.49	0.45
2:B:417:HIS:HD2	7:G:148:LYS:HE3	1.77	0.45
3:C:322:GLU:O	3:C:326:MET:HG3	2.17	0.45
4:D:247:GLU:N	4:D:247:GLU:OE1	2.41	0.45
4:D:27:SER:O	4:D:30:ALA:HB3	2.17	0.45
5:E:29:GLU:HG2	5:E:30:ASN:N	2.31	0.45
5:E:59:ASP:O	5:E:64:ASP:HA	2.17	0.45
6:F:138:LEU:HD11	6:F:181:PHE:HD2	1.81	0.45
6:F:207:LEU:O	6:F:211:GLN:HG2	2.16	0.45
6:F:73:ILE:HG12	6:F:74:ASN:H	1.81	0.45
6:F:94:GLU:O	6:F:97:LYS:HB3	2.17	0.45
7:G:299:GLY:O	7:G:303:VAL:HG22	2.17	0.45
8:H:168:SER:O	8:H:171:ILE:HG12	2.17	0.45
2:B:148:LYS:HB3	2:B:152:LYS:HZ1	1.82	0.45
2:B:360:ILE:HG13	6:F:343:GLN:OE1	2.16	0.45
3:C:182:SER:O	3:C:186:HIS:HB2	2.17	0.45
3:C:202:ARG:HH11	3:C:218:LEU:HG	1.81	0.45
4:D:148:ASP:O	4:D:151:GLU:HB3	2.17	0.45
5:E:115:GLN:HG3	5:E:116:ASN:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:7:LYS:NZ	5:E:160:THR:HB	2.31	0.45
2:B:193:TYR:O	2:B:197:THR:OG1	2.21	0.45
3:C:134:LYS:HA	3:C:137:LEU:HB2	1.98	0.45
3:C:368:LEU:HB3	3:C:372:GLN:OE1	2.17	0.45
4:D:288:SER:OG	4:D:289:ILE:N	2.50	0.45
7:G:253:LYS:HA	7:G:256:GLU:HG2	1.98	0.45
1:A:440:ASP:HB2	1:A:442:PHE:CD2	2.52	0.45
2:B:204:LEU:HG	2:B:206:LYS:H	1.82	0.45
3:C:181:GLU:OE1	3:C:197:SER:HB2	2.16	0.45
3:C:74:LEU:O	3:C:77:PHE:HD2	1.99	0.45
4:D:337:VAL:HG13	4:D:338:TYR:N	2.32	0.45
4:D:40:ILE:HG23	4:D:43:ARG:HE	1.82	0.45
6:F:147:ARG:HD2	6:F:147:ARG:HA	1.69	0.45
1:A:320:ILE:O	1:A:323:LEU:N	2.50	0.45
2:B:110:LEU:HD12	2:B:110:LEU:H	1.79	0.45
2:B:112:LEU:HD13	2:B:115:ARG:NE	2.32	0.45
3:C:106:GLN:HE22	3:C:253:ASN:ND2	2.14	0.45
3:C:363:SER:O	3:C:366:ILE:N	2.49	0.45
3:C:420:ASN:HB2	4:D:410:LEU:HD11	1.99	0.45
6:F:367:LYS:O	6:F:371:VAL:HG23	2.17	0.45
7:G:107:TRP:N	7:G:107:TRP:CD1	2.84	0.45
7:G:236:SER:O	7:G:239:ALA:N	2.50	0.45
8:H:103:SER:OG	8:H:141:LEU:HD21	2.17	0.45
9:I:80:GLU:OE2	9:I:83:ARG:NH2	2.47	0.45
1:A:153:GLU:O	1:A:157:GLU:HB2	2.16	0.45
1:A:220:ILE:O	1:A:223:LEU:HG	2.16	0.45
1:A:419:VAL:O	1:A:422:MET:HB3	2.17	0.45
2:B:77:GLU:O	2:B:81:LEU:N	2.40	0.45
4:D:113:LEU:HD23	4:D:116:LYS:HD2	1.99	0.45
6:F:192:SER:O	6:F:195:TYR:HB3	2.17	0.45
8:H:134:LYS:O	8:H:135:ASN:ND2	2.50	0.45
2:B:63:VAL:HG23	2:B:64:ASP:N	2.31	0.45
2:B:72:TRP:C	2:B:72:TRP:CD2	2.91	0.45
3:C:191:LEU:O	3:C:195:LYS:HB2	2.17	0.45
7:G:118:LEU:HD22	7:G:122:ASP:HB3	1.99	0.45
8:H:62:LEU:HB2	8:H:85:LEU:HD21	1.99	0.45
9:I:79:ALA:O	9:I:83:ARG:CB	2.65	0.45
1:A:174:ARG:NH2	1:A:224:LYS:O	2.50	0.45
2:B:204:LEU:HD13	2:B:206:LYS:H	1.81	0.45
2:B:258:LYS:HG3	2:B:293:LEU:HD21	1.98	0.45
6:F:220:SER:O	6:F:223:LEU:N	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:15:ARG:HD3	6:F:23:HIS:HB3	1.98	0.45
6:F:62:TYR:CE2	6:F:82:LEU:HD21	2.51	0.45
7:G:154:ASP:OD1	7:G:155:ALA:N	2.50	0.45
2:B:363:LEU:O	2:B:366:ASN:N	2.51	0.45
2:B:382:ASP:O	2:B:386:GLN:HG2	2.16	0.45
3:C:101:ILE:O	3:C:105:GLU:N	2.50	0.45
3:C:150:GLN:NE2	3:C:153:ASP:OD1	2.49	0.45
3:C:254:SER:HA	3:C:257:LYS:HB2	1.98	0.45
3:C:236:PHE:CD1	3:C:269:LYS:HE2	2.52	0.45
4:D:267:LYS:O	4:D:271:ILE:HG22	2.16	0.45
4:D:413:LYS:HG3	4:D:417:TYR:CE2	2.52	0.45
8:H:160:ALA:O	8:H:163:LEU:N	2.49	0.45
3:C:202:ARG:HH11	3:C:218:LEU:HB3	1.82	0.45
4:D:361:VAL:HG23	4:D:362:ALA:N	2.32	0.45
6:F:273:GLN:HE21	6:F:276:LYS:HB2	1.81	0.45
6:F:377:VAL:O	6:F:378:GLU:C	2.56	0.45
6:F:96:LEU:HA	6:F:99:LEU:HD12	1.99	0.45
7:G:109:HIS:CE1	7:G:122:ASP:OD2	2.69	0.45
7:G:118:LEU:HD12	7:G:123:VAL:HG23	1.99	0.45
8:H:118:ASN:CG	8:H:121:LYS:HG2	2.38	0.45
1:A:163:VAL:O	1:A:167:LEU:HG	2.17	0.45
1:A:188:TYR:CE2	1:A:239:ARG:HD3	2.52	0.45
1:A:303:ASN:OD1	1:A:305:LYS:HG2	2.17	0.45
1:A:323:LEU:HA	1:A:323:LEU:HD23	1.71	0.45
1:A:419:VAL:O	1:A:420:GLU:C	2.55	0.45
2:B:161:CYS:SG	2:B:195:GLN:NE2	2.89	0.45
2:B:192:ASP:OD2	2:B:195:GLN:HB2	2.17	0.45
2:B:328:ALA:O	2:B:337:HIS:CD2	2.70	0.45
3:C:167:LYS:HZ2	3:C:168:LEU:HD21	1.79	0.45
6:F:323:ASN:O	6:F:325:GLU:N	2.50	0.45
1:A:167:LEU:CA	1:A:170:TYR:CE1	2.85	0.44
1:A:167:LEU:O	1:A:171:TYR:CE1	2.70	0.44
1:A:259:TYR:HB3	1:A:261:HIS:CE1	2.51	0.44
3:C:194:SER:O	3:C:197:SER:OG	2.27	0.44
6:F:15:ARG:HH22	6:F:30:GLU:CG	2.25	0.44
6:F:379:LYS:O	6:F:383:LYS:HB2	2.16	0.44
7:G:256:GLU:O	7:G:259:LYS:HB3	2.17	0.44
1:A:163:VAL:O	1:A:167:LEU:HG	2.17	0.44
1:A:211:ARG:HH21	1:A:240:ASP:CG	2.21	0.44
2:B:155:GLU:O	2:B:158:ASP:N	2.49	0.44
3:C:115:ILE:HG13	3:C:118:CYS:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:185:TYR:CZ	3:C:193:LYS:HG2	2.52	0.44
3:C:294:ARG:NE	3:C:324:GLU:HA	2.32	0.44
6:F:367:LYS:O	6:F:371:VAL:HG23	2.17	0.44
7:G:109:HIS:CD2	7:G:110:SER:N	2.85	0.44
8:H:29:PRO:O	8:H:33:GLU:CB	2.64	0.44
8:H:48:ASN:O	8:H:52:LEU:HG	2.17	0.44
1:A:211:ARG:CZ	1:A:241:PHE:HE1	2.30	0.44
2:B:122:ILE:O	2:B:126:THR:OG1	2.11	0.44
3:C:178:HIS:HB3	3:C:201:ALA:CB	2.41	0.44
3:C:396:TRP:HE3	3:C:398:TYR:HH	1.65	0.44
3:C:85:MET:CB	3:C:93:THR:HG23	2.47	0.44
5:E:92:TRP:O	5:E:120:LEU:HD12	2.17	0.44
6:F:29:PHE:HE1	6:F:45:LEU:N	2.15	0.44
7:G:219:GLU:HA	7:G:222:GLN:NE2	2.32	0.44
8:H:102:LYS:O	8:H:105:LEU:HG	2.16	0.44
1:A:155:LEU:HB3	1:A:190:SER:HB2	1.99	0.44
1:A:303:ASN:OD1	1:A:305:LYS:N	2.32	0.44
1:A:384:ARG:HH21	8:H:154:GLU:CD	2.18	0.44
1:A:402:ILE:HG23	1:A:402:ILE:HD12	1.63	0.44
2:B:356:TYR:CD2	6:F:329:MET:SD	3.10	0.44
4:D:222:ARG:HB2	4:D:325:HIS:CE1	2.52	0.44
6:F:15:ARG:HH22	6:F:27:GLU:CA	2.30	0.44
6:F:192:SER:O	6:F:193:LEU:C	2.55	0.44
6:F:287:LEU:HD23	6:F:287:LEU:HA	1.72	0.44
6:F:62:TYR:O	6:F:67:SER:HB3	2.17	0.44
7:G:34:LEU:HA	7:G:34:LEU:HD12	1.72	0.44
8:H:70:ILE:HG21	8:H:173:GLU:HB3	1.98	0.44
2:B:140:THR:HG21	2:B:163:LEU:HB3	1.98	0.44
2:B:350:LEU:HD23	2:B:383:LEU:HD12	1.98	0.44
3:C:113:ASP:OD1	3:C:144:LEU:HB3	2.17	0.44
3:C:222:SER:O	3:C:225:LEU:HG	2.17	0.44
3:C:287:THR:HG23	3:C:288:LYS:N	2.32	0.44
3:C:312:LEU:O	3:C:316:THR:OG1	2.33	0.44
3:C:347:LEU:HA	3:C:347:LEU:HD23	1.64	0.44
6:F:222:LEU:HA	6:F:222:LEU:HD23	1.75	0.44
6:F:242:ILE:O	6:F:242:ILE:HG22	2.17	0.44
1:A:158:PHE:CE1	1:A:162:VAL:HG21	2.52	0.44
1:A:348:LEU:HA	1:A:348:LEU:HD23	1.77	0.44
1:A:370:LEU:HA	1:A:373:LYS:HZ3	1.82	0.44
3:C:301:ALA:HA	3:C:304:GLU:OE2	2.17	0.44
3:C:402:THR:HB	3:C:403:PRO:HD2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:271:ILE:HD11	4:D:293:THR:HG22	1.99	0.44
4:D:363:PHE:HZ	9:I:73:PHE:CE1	2.35	0.44
6:F:220:SER:O	6:F:224:GLY:N	2.50	0.44
6:F:321:LYS:HG3	6:F:321:LYS:O	2.17	0.44
5:E:212:ASP:OD1	6:F:367:LYS:HD2	2.18	0.44
7:G:126:GLN:OE1	7:G:138:ALA:HB2	2.16	0.44
8:H:133:ILE:HG22	8:H:136:LEU:HB2	1.99	0.44
1:A:201:ILE:O	1:A:204:ASP:HB2	2.17	0.44
1:A:440:ASP:HB2	1:A:442:PHE:CD2	2.52	0.44
3:C:173:SER:O	3:C:177:VAL:HG23	2.18	0.44
5:E:35:GLY:HA2	5:E:54:LEU:HG	1.99	0.44
6:F:57:LEU:O	6:F:61:LEU:HG	2.17	0.44
6:F:62:TYR:CD2	6:F:82:LEU:HD21	2.52	0.44
8:H:221:ALA:O	8:H:225:ASN:N	2.51	0.44
9:I:58:ASN:OD1	9:I:58:ASN:O	2.36	0.44
1:A:164:ILE:HB	1:A:165:PRO:HD3	1.99	0.44
1:A:192:GLU:H	1:A:192:GLU:CD	2.21	0.44
1:A:213:THR:O	1:A:216:LYS:HB3	2.18	0.44
2:B:101:MET:O	2:B:105:LYS:HG2	2.17	0.44
4:D:111:LYS:HA	4:D:114:ASN:HD22	1.81	0.44
4:D:219:LEU:HD21	4:D:322:LEU:HD21	1.99	0.44
4:D:240:SER:C	4:D:242:GLU:H	2.20	0.44
4:D:64:LYS:O	4:D:67:CYS:N	2.50	0.44
5:E:21:HIS:HA	7:G:100:ARG:NH2	2.21	0.44
5:E:9:THR:OG1	5:E:162:GLU:CG	2.65	0.44
1:A:188:TYR:OH	1:A:240:ASP:HA	2.17	0.44
2:B:136:ARG:O	2:B:139:VAL:HG22	2.17	0.44
2:B:434:THR:O	2:B:437:GLU:HB2	2.17	0.44
5:E:32:ARG:HD3	5:E:100:ARG:HG3	1.99	0.44
5:E:21:HIS:HE1	5:E:34:VAL:O	2.00	0.44
6:F:138:LEU:HA	6:F:138:LEU:HD12	1.63	0.44
6:F:205:ILE:CG1	6:F:210:ARG:HG3	2.47	0.44
6:F:314:SER:O	6:F:318:HIS:N	2.51	0.44
8:H:259:ILE:O	8:H:262:LYS:N	2.50	0.44
1:A:467:PHE:HA	1:A:470:GLN:HE22	1.82	0.44
2:B:164:GLN:OE1	2:B:180:ILE:HG13	2.17	0.44
2:B:392:LYS:HB3	3:C:355:GLU:OE1	2.17	0.44
3:C:115:ILE:HA	3:C:141:LEU:HD21	1.99	0.44
3:C:354:PHE:HB3	3:C:357:VAL:HB	1.99	0.44
4:D:42:GLN:HA	4:D:45:GLU:CD	2.37	0.44
7:G:209:GLU:O	7:G:212:MET:HB2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:34:LEU:HD22	7:G:203:TYR:HE1	1.82	0.44
8:H:136:LEU:HA	8:H:136:LEU:HD13	1.77	0.44
8:H:68:ALA:HA	8:H:71:GLN:OE1	2.17	0.44
2:B:242:GLN:OE1	2:B:246:GLN:NE2	2.49	0.44
2:B:433:ILE:HA	2:B:436:GLU:OE1	2.16	0.44
4:D:120:LEU:HB3	4:D:130:GLN:CG	2.45	0.44
6:F:137:TYR:O	6:F:140:LYS:N	2.50	0.44
6:F:48:PHE:O	6:F:51:ASP:N	2.49	0.44
7:G:118:LEU:HG	7:G:156:PHE:CE1	2.51	0.44
3:C:425:GLN:OE1	7:G:255:ILE:HD11	2.17	0.44
8:H:59:LYS:O	8:H:63:GLU:HG3	2.17	0.44
2:B:332:GLU:CG	2:B:333:ALA:H	2.17	0.44
5:E:79:MET:HE1	7:G:91:MET:HB2	1.98	0.44
7:G:221:TRP:CE3	7:G:222:GLN:HB3	2.52	0.44
8:H:20:TYR:O	8:H:23:CYS:HB2	2.17	0.44
1:A:427:ILE:HD11	1:A:434:ALA:HB3	1.98	0.44
2:B:174:SER:O	2:B:178:GLN:HG3	2.16	0.44
2:B:204:LEU:HD21	2:B:206:LYS:HB3	1.99	0.44
2:B:280:LEU:O	2:B:283:LYS:N	2.48	0.44
4:D:106:ASN:O	4:D:110:ILE:HB	2.17	0.44
5:E:107:ASN:O	5:E:110:PHE:N	2.50	0.44
5:E:272:GLU:O	5:E:273:LEU:C	2.56	0.44
6:F:192:SER:O	6:F:193:LEU:C	2.54	0.44
6:F:260:VAL:HG12	6:F:362:GLN:NE2	2.32	0.44
6:F:273:GLN:OE1	6:F:276:LYS:HG3	2.17	0.44
5:E:175:LEU:HD21	7:G:213:LEU:HD23	1.99	0.44
2:B:330:GLY:H	2:B:334:ASN:HB3	1.82	0.44
4:D:411:LEU:HA	4:D:411:LEU:HD23	1.65	0.44
6:F:167:ILE:HD12	6:F:167:ILE:H	1.82	0.44
6:F:269:LEU:HA	6:F:269:LEU:HD23	1.61	0.44
6:F:43:GLU:O	6:F:46:THR:HB	2.18	0.44
1:A:308:GLY:N	9:I:40:ILE:HG12	2.32	0.44
2:B:148:LYS:O	2:B:150:GLU:O	2.36	0.44
3:C:116:PHE:HA	3:C:119:GLU:CB	2.47	0.44
3:C:264:TYR:HA	3:C:267:LEU:HB3	1.99	0.44
4:D:288:SER:O	4:D:291:SER:HB2	2.17	0.44
6:F:283:HIS:O	6:F:286:PHE:HB3	2.18	0.44
6:F:287:LEU:HA	6:F:287:LEU:HD23	1.75	0.44
6:F:59:LEU:HD23	6:F:85:SER:OG	2.18	0.44
7:G:118:LEU:HG	7:G:156:PHE:HD2	1.82	0.44
3:C:74:LEU:HD23	3:C:77:PHE:CD2	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:418:GLY:O	4:D:422:ARG:HG2	2.18	0.44
4:D:53:LYS:HG2	4:D:56:GLU:OE2	2.18	0.44
9:I:80:GLU:OE2	9:I:83:ARG:NH2	2.48	0.44
2:B:101:MET:HA	2:B:104:LEU:HB2	1.99	0.44
2:B:339:GLU:OE1	2:B:339:GLU:N	2.50	0.44
2:B:77:GLU:O	2:B:80:THR:HB	2.17	0.44
5:E:92:TRP:O	5:E:120:LEU:HD12	2.18	0.44
6:F:76:LEU:HB3	6:F:80:LYS:NZ	2.32	0.44
7:G:206:THR:HB	7:G:209:GLU:CD	2.38	0.44
4:D:331:ARG:NE	9:I:65:ASP:OD2	2.50	0.44
1:A:278:LYS:HB3	1:A:278:LYS:HE2	1.68	0.44
2:B:168:TYR:HA	2:B:171:MET:HG2	1.99	0.44
2:B:211:PRO:HA	2:B:214:GLU:OE2	2.17	0.44
4:D:238:PHE:CZ	4:D:240:SER:HA	2.53	0.44
5:E:62:ASN:CG	5:E:63:SER:O	2.55	0.44
6:F:243:VAL:HG13	6:F:244:ASN:OD1	2.17	0.44
6:F:44:SER:OG	6:F:45:LEU:N	2.49	0.44
1:A:164:ILE:O	1:A:167:LEU:HB3	2.18	0.44
1:A:467:PHE:CG	1:A:467:PHE:O	2.71	0.44
2:B:194:SER:O	2:B:197:THR:HB	2.16	0.44
4:D:100:ASN:HB3	4:D:104:LYS:NZ	2.33	0.44
4:D:115:GLU:O	4:D:118:GLN:HB2	2.17	0.44
4:D:392:ARG:HB2	4:D:393:PRO:HD2	1.99	0.44
6:F:243:VAL:HA	6:F:252:PHE:CZ	2.53	0.44
6:F:373:TRP:CD1	6:F:373:TRP:O	2.71	0.44
8:H:83:ASN:HA	8:H:86:LYS:CD	2.47	0.44
1:A:213:THR:O	1:A:216:LYS:HB3	2.17	0.44
1:A:184:TRP:CZ2	1:A:217:PHE:HD2	2.34	0.44
2:B:113:ASN:O	2:B:117:SER:N	2.37	0.44
2:B:435:LYS:O	2:B:438:ILE:HB	2.18	0.44
3:C:185:TYR:CD1	3:C:188:LEU:HD12	2.53	0.44
3:C:283:ASN:HB2	3:C:286:TYR:CE2	2.53	0.44
3:C:289:GLU:HG2	3:C:290:THR:N	2.32	0.44
4:D:304:TYR:CE2	4:D:337:VAL:HG21	2.52	0.44
5:E:274:MET:O	5:E:277:TYR:N	2.49	0.44
5:E:94:HIS:O	5:E:122:ILE:HG12	2.17	0.44
5:E:32:ARG:HD2	5:E:96:GLY:HA3	2.00	0.44
6:F:15:ARG:HH12	6:F:23:HIS:C	2.19	0.44
6:F:53:LYS:HG3	6:F:54:SER:N	2.33	0.44
6:F:57:LEU:HG	6:F:61:LEU:HD11	2.00	0.44
6:F:42:SER:CB	6:F:73:ILE:HD11	2.38	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:144:ILE:HD13	7:G:144:ILE:HA	1.86	0.44
2:B:241:LEU:HA	2:B:244:ILE:HG22	1.99	0.44
2:B:66:LEU:CD1	2:B:67:ALA:N	2.74	0.44
3:C:182:SER:OG	3:C:198:LEU:HG	2.17	0.44
3:C:264:TYR:HA	3:C:267:LEU:HD13	2.00	0.44
3:C:266:LEU:HD23	3:C:266:LEU:HA	1.80	0.44
6:F:206:THR:HB	6:F:209:GLU:HG3	1.98	0.44
6:F:287:LEU:O	6:F:291:ILE:HG12	2.18	0.44
8:H:128:TYR:HD2	8:H:129:LEU:HD23	1.83	0.44
1:A:140:LEU:HD13	1:A:179:ILE:HG23	1.98	0.44
1:A:212:SER:O	1:A:216:LYS:N	2.50	0.44
3:C:232:TYR:HB2	3:C:272:LEU:HD21	1.99	0.44
7:G:261:LEU:HD12	7:G:265:GLU:HG2	2.00	0.44
7:G:81:GLU:OE1	7:G:81:GLU:N	2.43	0.44
8:H:104:LYS:HE3	8:H:170:ASN:HD21	1.82	0.44
1:A:136:CYS:SG	1:A:137:PHE:N	2.91	0.44
1:A:223:LEU:O	1:A:225:HIS:ND1	2.46	0.44
1:A:301:PRO:HG2	9:I:35:PHE:HZ	1.82	0.44
2:B:148:LYS:HG3	2:B:149:GLU:OE1	2.18	0.44
2:B:236:GLU:O	2:B:237:VAL:C	2.55	0.44
3:C:125:ALA:HB2	3:C:133:LEU:HB2	1.99	0.44
3:C:218:LEU:O	3:C:222:SER:OG	2.25	0.44
4:D:283:THR:HG23	4:D:286:LEU:H	1.83	0.44
4:D:309:LEU:HD11	9:I:77:LEU:HD23	2.00	0.44
4:D:40:ILE:HA	4:D:43:ARG:CG	2.47	0.44
4:D:61:PRO:HD2	4:D:144:ILE:HG22	1.99	0.44
6:F:83:LEU:HD22	6:F:132:GLU:HG2	1.99	0.44
6:F:285:SER:OG	6:F:286:PHE:N	2.51	0.44
6:F:371:VAL:O	6:F:374:ASN:HB3	2.17	0.44
6:F:377:VAL:O	6:F:378:GLU:C	2.56	0.44
7:G:285:ASP:O	7:G:286:GLU:C	2.55	0.44
8:H:111:LEU:CD1	8:H:145:PRO:HB3	2.48	0.44
8:H:216:GLU:O	8:H:219:LYS:CB	2.55	0.44
2:B:197:THR:HG22	2:B:201:ARG:NH1	2.33	0.44
2:B:341:LEU:HD12	2:B:341:LEU:HA	1.73	0.44
2:B:379:TYR:O	2:B:382:ASP:N	2.50	0.44
4:D:97:GLU:HA	4:D:100:ASN:ND2	2.32	0.44
5:E:297:GLN:O	5:E:300:LYS:HB2	2.17	0.44
5:E:59:ASP:OD2	5:E:61:LYS:HD3	2.16	0.44
6:F:213:LEU:HA	6:F:213:LEU:HD12	1.54	0.44
8:H:103:SER:O	8:H:142:LEU:HD11	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:439:GLU:N	1:A:439:GLU:OE1	2.35	0.44
3:C:181:GLU:OE1	3:C:182:SER:N	2.50	0.44
4:D:206:ARG:O	4:D:209:ARG:HB3	2.17	0.44
5:E:20:ASP:O	5:E:24:ARG:CB	2.65	0.44
6:F:70:TYR:CG	6:F:71:ASP:N	2.85	0.44
6:F:75:GLN:O	6:F:78:VAL:HG22	2.18	0.44
6:F:98:TYR:O	6:F:101:ASP:HB2	2.17	0.44
8:H:177:PHE:O	8:H:180:ILE:HB	2.17	0.44
8:H:226:TRP:HB3	8:H:233:VAL:HG21	1.98	0.44
8:H:46:ILE:CG2	8:H:48:ASN:CG	2.86	0.44
1:A:167:LEU:O	1:A:170:TYR:CD2	2.71	0.44
1:A:259:TYR:CD1	1:A:260:PRO:HD2	2.52	0.44
2:B:144:VAL:HG11	2:B:160:LEU:HD21	1.98	0.44
2:B:195:GLN:HB2	2:B:199:LEU:HD13	2.00	0.44
3:C:163:ARG:CZ	3:C:166:LYS:HE2	2.48	0.44
3:C:165:PHE:CD2	3:C:173:SER:HB3	2.52	0.44
3:C:330:LEU:HD11	3:C:334:HIS:CE1	2.53	0.44
6:F:79:VAL:HG12	6:F:83:LEU:HD13	1.98	0.44
1:A:174:ARG:NE	1:A:224:LYS:HE3	2.33	0.44
1:A:357:LEU:O	1:A:360:PHE:HB3	2.17	0.44
2:B:222:ASN:O	2:B:226:LYS:HG2	2.17	0.44
4:D:62:TYR:OH	4:D:145:GLY:O	2.35	0.44
5:E:137:TYR:CD1	5:E:156:HIS:HA	2.52	0.44
6:F:200:GLU:HG3	6:F:202:SER:H	1.81	0.44
1:A:465:ILE:HG23	5:E:280:ASN:HD21	1.81	0.44
2:B:117:SER:HA	2:B:120:GLU:OE2	2.17	0.44
2:B:158:ASP:O	2:B:161:CYS:HB2	2.17	0.44
3:C:239:PHE:O	3:C:261:VAL:HG11	2.17	0.44
4:D:107:GLU:O	4:D:111:LYS:HB2	2.17	0.44
5:E:204:LEU:HD23	5:E:204:LEU:HA	1.60	0.44
8:H:99:SER:OG	8:H:101:LYS:HG2	2.17	0.44
2:B:149:GLU:HG2	2:B:150:GLU:HG3	2.00	0.44
2:B:237:VAL:O	2:B:241:LEU:HG	2.17	0.44
2:B:76:ASN:O	2:B:80:THR:HG23	2.16	0.44
3:C:125:ALA:HB1	3:C:130:ARG:HA	2.00	0.44
3:C:259:CYS:HA	3:C:262:LEU:HG	1.99	0.44
4:D:141:TYR:CE2	4:D:149:ASN:HB3	2.53	0.44
4:D:286:LEU:HA	4:D:286:LEU:HD23	1.77	0.44
5:E:92:TRP:CH2	5:E:107:ASN:HA	2.53	0.44
5:E:201:GLN:NE2	5:E:205:LYS:HZ3	2.15	0.44
5:E:262:GLN:O	5:E:266:THR:HG23	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:285:ASP:O	7:G:286:GLU:C	2.55	0.44
7:G:93:ASP:O	7:G:96:LYS:HB2	2.18	0.44
1:A:136:CYS:SG	1:A:137:PHE:N	2.91	0.44
1:A:259:TYR:CD1	1:A:260:PRO:HD2	2.52	0.44
1:A:479:MET:O	1:A:482:PRO:HD2	2.18	0.44
2:B:103:TYR:HA	2:B:106:SER:OG	2.18	0.44
3:C:240:PHE:O	3:C:244:GLU:HG2	2.18	0.44
6:F:151:ASP:CG	6:F:152:ASP:N	2.71	0.44
6:F:227:ILE:HG21	6:F:227:ILE:HD13	1.75	0.44
7:G:153:ILE:O	7:G:154:ASP:HB3	2.18	0.44
1:A:161:LYS:O	1:A:165:PRO:CD	2.66	0.44
2:B:137:ALA:O	2:B:140:THR:OG1	2.21	0.44
2:B:309:MET:HE3	2:B:314:VAL:HG21	1.99	0.44
2:B:72:TRP:HA	2:B:75:LEU:CB	2.48	0.44
3:C:234:THR:O	3:C:237:SER:HB3	2.18	0.44
3:C:81:SER:HA	3:C:85:MET:HG2	2.00	0.44
4:D:360:SER:HB3	9:I:83:ARG:HH22	1.83	0.44
5:E:297:GLN:HE21	5:E:301:ILE:HG13	1.82	0.44
6:F:14:LEU:HG	6:F:57:LEU:HD21	1.99	0.44
1:A:436:ILE:HB	8:H:197:TYR:CD2	2.53	0.44
8:H:46:ILE:HG23	8:H:48:ASN:H	1.83	0.44
8:H:76:ASP:N	8:H:76:ASP:OD1	2.50	0.44
2:B:97:ILE:O	2:B:101:MET:HE2	2.16	0.44
5:E:191:THR:O	5:E:195:LYS:HG2	2.18	0.44
2:B:179:PHE:O	2:B:183:GLN:HG3	2.18	0.44
3:C:165:PHE:HB3	3:C:173:SER:HB3	2.00	0.44
4:D:103:CYS:O	4:D:106:ASN:HB2	2.17	0.44
6:F:222:LEU:HA	6:F:222:LEU:HD23	1.70	0.44
6:F:264:ASP:O	6:F:267:ASP:HB3	2.18	0.44
6:F:267:ASP:O	6:F:271:LYS:HG2	2.17	0.44
6:F:293:LEU:O	6:F:296:LEU:HB3	2.18	0.44
7:G:27:VAL:HG12	7:G:63:VAL:HB	1.98	0.44
8:H:259:ILE:HG23	8:H:260:ILE:N	2.33	0.44
1:A:154:GLN:O	1:A:158:PHE:HB3	2.17	0.44
1:A:191:HIS:NE2	1:A:207:ASN:OD1	2.51	0.44
1:A:398:THR:HG22	4:D:373:PRO:HD3	2.00	0.44
2:B:193:TYR:O	2:B:197:THR:OG1	2.30	0.44
2:B:241:LEU:HA	2:B:244:ILE:HG12	1.99	0.44
4:D:238:PHE:HZ	4:D:244:THR:O	2.01	0.44
5:E:104:LEU:HD21	5:E:152:LYS:HB2	1.99	0.44
5:E:22:TYR:HA	5:E:33:CYS:SG	2.57	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:236:LEU:HA	5:E:236:LEU:HD23	1.74	0.44
4:D:418:GLY:HA2	5:E:288:PHE:HE1	1.83	0.44
5:E:7:LYS:O	5:E:45:THR:HA	2.17	0.44
7:G:107:TRP:HB3	7:G:129:PHE:HE2	1.83	0.44
7:G:219:GLU:HA	7:G:222:GLN:NE2	2.32	0.44
8:H:94:HIS:CE1	8:H:95:LYS:HZ2	2.36	0.44
2:B:65:LEU:O	2:B:71:LYS:HD2	2.18	0.44
3:C:262:LEU:HD12	3:C:263:LYS:N	2.32	0.44
4:D:368:LEU:HD22	4:D:377:LEU:HD21	2.00	0.44
7:G:50:MET:HG3	7:G:108:TYR:O	2.18	0.44
7:G:118:LEU:HA	7:G:118:LEU:HD23	1.81	0.44
7:G:209:GLU:HA	7:G:212:MET:CG	2.46	0.44
2:B:35:ALA:O	2:B:38:GLN:NE2	2.51	0.44
4:D:246:TYR:HD2	4:D:279:LEU:HD21	1.83	0.44
5:E:297:GLN:NE2	5:E:300:LYS:HE2	2.33	0.44
7:G:202:ASP:CG	7:G:203:TYR:H	2.21	0.44
3:C:185:TYR:OH	3:C:192:ALA:N	2.51	0.44
4:D:179:PHE:CE1	4:D:187:VAL:HG11	2.52	0.44
5:E:203:LYS:O	5:E:206:ASP:HB2	2.17	0.44
5:E:32:ARG:HG3	5:E:100:ARG:HH21	1.83	0.44
7:G:219:GLU:HA	7:G:222:GLN:NE2	2.33	0.44
2:B:180:ILE:HA	2:B:183:GLN:OE1	2.18	0.44
3:C:360:SER:O	3:C:363:SER:HB3	2.17	0.44
4:D:316:LEU:HD23	4:D:316:LEU:HA	1.69	0.44
5:E:110:PHE:C	5:E:112:LYS:N	2.71	0.44
6:F:43:GLU:O	6:F:46:THR:HB	2.18	0.44
8:H:62:LEU:HD13	8:H:84:GLN:HB2	1.99	0.44
3:C:107:VAL:HG22	3:C:112:ASP:OD1	2.17	0.44
3:C:182:SER:HB3	3:C:198:LEU:HG	1.99	0.44
4:D:118:GLN:HA	4:D:121:GLU:OE2	2.18	0.44
4:D:304:TYR:CZ	4:D:337:VAL:HG21	2.53	0.44
5:E:12:PRO:HD2	5:E:167:GLU:HG3	2.00	0.44
5:E:210:TYR:CD2	5:E:211:LEU:N	2.86	0.44
5:E:24:ARG:HH22	7:G:66:VAL:CG2	2.31	0.44
2:B:178:GLN:HA	2:B:181:LEU:HG	1.99	0.44
2:B:234:TYR:O	2:B:235:LEU:C	2.56	0.44
2:B:78:GLN:HA	2:B:81:LEU:HB3	2.00	0.44
2:B:75:LEU:O	2:B:78:GLN:HG2	2.17	0.44
3:C:102:GLU:HA	3:C:105:GLU:CB	2.43	0.44
3:C:356:CYS:HG	3:C:398:TYR:HE1	1.65	0.44
6:F:217:LEU:HA	6:F:217:LEU:HD23	1.72	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:136:ARG:O	2:B:140:THR:HG23	2.18	0.44
2:B:145:GLU:O	2:B:149:GLU:HB3	2.18	0.44
3:C:251:THR:N	3:C:254:SER:OG	2.47	0.44
4:D:46:ALA:O	4:D:50:VAL:HG23	2.18	0.44
6:F:9:THR:O	6:F:12:SER:N	2.50	0.44
8:H:41:ILE:HG21	8:H:58:THR:OG1	2.18	0.44
1:A:459:GLN:O	1:A:462:ASP:HB2	2.18	0.44
2:B:116:ILE:O	2:B:119:ILE:N	2.51	0.44
2:B:58:VAL:O	2:B:62:ILE:HG13	2.18	0.44
2:B:72:TRP:CD1	2:B:113:ASN:HB3	2.52	0.44
3:C:142:ALA:O	3:C:145:HIS:HB2	2.17	0.44
3:C:148:LYS:HD3	3:C:150:GLN:OE1	2.18	0.44
4:D:37:LYS:NZ	4:D:38:VAL:O	2.42	0.44
6:F:60:ARG:O	6:F:63:ASP:HB2	2.18	0.44
7:G:249:GLU:O	7:G:252:SER:OG	2.31	0.44
1:A:330:LEU:HA	1:A:330:LEU:HD23	1.60	0.44
2:B:105:LYS:HA	2:B:105:LYS:HD3	1.77	0.44
2:B:70:ASN:O	2:B:73:ASP:HB2	2.18	0.44
5:E:141:GLU:N	5:E:141:GLU:OE1	2.37	0.44
5:E:268:LYS:HA	5:E:268:LYS:HD2	1.72	0.44
6:F:196:LEU:HD21	6:F:213:LEU:CD2	2.48	0.44
7:G:53:MET:HG2	7:G:106:GLY:C	2.38	0.44
8:H:121:LYS:O	8:H:122:PHE:C	2.57	0.44
1:A:308:GLY:HA2	1:A:311:GLN:OE1	2.18	0.44
1:A:333:PHE:CE1	1:A:346:TYR:HA	2.53	0.44
2:B:95:TYR:O	2:B:98:GLN:HB3	2.18	0.44
3:C:104:PHE:O	3:C:104:PHE:CG	2.70	0.44
6:F:11:LEU:HG	6:F:26:PHE:CZ	2.53	0.44
6:F:391:ILE:HD11	8:H:268:ILE:HA	1.99	0.44
6:F:74:ASN:C	6:F:74:ASN:OD1	2.57	0.44
7:G:190:HIS:O	7:G:192:LEU:N	2.50	0.44
8:H:118:ASN:HB3	8:H:121:LYS:HZ3	1.83	0.44
2:B:119:ILE:O	2:B:123:ARG:HB2	2.17	0.44
2:B:146:ILE:CG1	2:B:147:LYS:N	2.79	0.44
2:B:167:THR:HB	2:B:171:MET:HG3	2.00	0.44
2:B:53:ALA:O	2:B:56:LYS:NZ	2.42	0.44
2:B:65:LEU:HB2	2:B:75:LEU:HD11	2.00	0.44
3:C:326:MET:HA	3:C:332:ARG:NH2	2.33	0.44
4:D:120:LEU:HD13	4:D:134:TRP:HE1	1.83	0.44
4:D:252:TYR:HE1	4:D:319:CYS:HG	1.63	0.44
5:E:22:TYR:CD2	5:E:125:VAL:HG11	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:137:TYR:CD1	5:E:156:HIS:HA	2.53	0.44
7:G:117:TRP:HD1	7:G:118:LEU:C	2.21	0.44
7:G:27:VAL:HA	7:G:63:VAL:O	2.18	0.44
5:E:79:MET:HE1	7:G:90:LYS:HG3	2.00	0.44
8:H:48:ASN:OD1	8:H:48:ASN:N	2.45	0.44
1:A:231:ALA:HB2	1:A:260:PRO:HG2	2.00	0.43
2:B:164:GLN:HB2	2:B:179:PHE:CE1	2.53	0.43
2:B:253:ASP:HB2	2:B:256:LYS:HD2	2.00	0.43
4:D:304:TYR:CZ	4:D:337:VAL:HG21	2.53	0.43
6:F:13:THR:HA	6:F:16:MET:CG	2.45	0.43
6:F:337:LEU:HD13	6:F:350:ILE:HD12	2.00	0.43
1:A:388:ILE:O	1:A:391:GLY:N	2.51	0.43
2:B:221:TYR:O	2:B:224:LEU:N	2.51	0.43
2:B:99:LYS:O	2:B:102:GLU:HB3	2.18	0.43
4:D:29:LYS:HD3	4:D:32:LEU:HD12	1.99	0.43
4:D:310:GLU:O	4:D:314:ASN:HB2	2.18	0.43
7:G:107:TRP:O	7:G:139:VAL:HG22	2.17	0.43
8:H:121:LYS:O	8:H:124:SER:N	2.51	0.43
1:A:212:SER:HA	1:A:215:MET:HE2	1.99	0.43
1:A:398:THR:OG1	1:A:399:TYR:N	2.50	0.43
2:B:122:ILE:HG21	2:B:143:LEU:HD11	2.00	0.43
2:B:133:GLU:HG3	2:B:134:VAL:HG23	1.99	0.43
2:B:263:HIS:O	2:B:266:TYR:N	2.51	0.43
2:B:296:GLN:O	2:B:299:LEU:HB3	2.18	0.43
2:B:372:THR:O	2:B:375:GLN:HB2	2.18	0.43
4:D:140:TYR:CZ	4:D:144:ILE:HD11	2.54	0.43
4:D:342:LEU:O	4:D:344:SER:N	2.51	0.43
5:E:141:GLU:N	5:E:152:LYS:HD2	2.33	0.43
5:E:164:GLU:O	5:E:168:GLU:HG2	2.18	0.43
6:F:199:LEU:HA	6:F:199:LEU:HD23	1.56	0.43
7:G:53:MET:HE1	7:G:108:TYR:HB3	2.00	0.43
1:A:145:PHE:O	1:A:149:SER:CB	2.66	0.43
1:A:143:GLN:NE2	1:A:183:LEU:HD13	2.32	0.43
1:A:250:ALA:HA	1:A:253:PHE:HB3	1.99	0.43
1:A:273:PHE:HB3	1:A:292:TYR:O	2.18	0.43
2:B:112:LEU:CD1	2:B:115:ARG:NE	2.81	0.43
2:B:217:LYS:O	2:B:220:TYR:HB3	2.18	0.43
2:B:297:GLU:C	2:B:299:LEU:N	2.71	0.43
3:C:425:GLN:HB3	7:G:255:ILE:HG21	1.99	0.43
5:E:89:LEU:HD23	5:E:113:TYR:HB3	1.99	0.43
5:E:174:LEU:HD13	7:G:31:SER:HB2	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:103:LYS:O	6:F:107:GLN:HG2	2.18	0.43
6:F:122:HIS:O	6:F:126:ILE:HG13	2.18	0.43
6:F:222:LEU:HD23	6:F:222:LEU:HA	1.78	0.43
7:G:74:SER:OG	7:G:74:SER:O	2.29	0.43
8:H:30:ILE:O	8:H:34:LEU:HB2	2.16	0.43
1:A:402:ILE:HG23	1:A:402:ILE:HD12	1.77	0.43
2:B:163:LEU:HD11	2:B:179:PHE:CB	2.48	0.43
2:B:77:GLU:HA	2:B:80:THR:HG22	2.00	0.43
3:C:356:CYS:SG	3:C:398:TYR:HE1	2.41	0.43
4:D:170:VAL:O	4:D:173:THR:N	2.50	0.43
4:D:40:ILE:HD11	4:D:44:LYS:HE2	1.99	0.43
5:E:124:ASP:HB3	5:E:133:PRO:HB3	2.00	0.43
6:F:364:THR:O	6:F:367:LYS:HB3	2.18	0.43
6:F:55:THR:O	6:F:58:ARG:NH1	2.50	0.43
7:G:108:TYR:HA	7:G:139:VAL:O	2.18	0.43
1:A:161:LYS:O	1:A:165:PRO:HD3	2.17	0.43
2:B:131:PHE:HA	2:B:133:GLU:CD	2.38	0.43
2:B:73:ASP:O	2:B:77:GLU:HG3	2.18	0.43
2:B:82:LEU:C	2:B:82:LEU:CD2	2.86	0.43
4:D:315:VAL:HG13	4:D:316:LEU:N	2.33	0.43
4:D:58:GLU:OE2	4:D:109:LYS:HE3	2.17	0.43
5:E:141:GLU:HG3	5:E:151:GLU:HB2	1.99	0.43
5:E:70:HIS:O	5:E:74:GLU:HG2	2.18	0.43
6:F:253:GLN:HB3	6:F:269:LEU:HD21	2.01	0.43
6:F:15:ARG:HG2	6:F:26:PHE:CD2	2.53	0.43
1:A:262:THR:HG23	1:A:263:ASP:N	2.32	0.43
1:A:290:ASN:HA	1:A:293:ILE:HG22	2.00	0.43
1:A:328:PRO:HG2	1:A:333:PHE:HE2	1.83	0.43
2:B:399:ILE:HG12	6:F:344:VAL:CG2	2.46	0.43
4:D:175:ALA:O	4:D:178:GLY:N	2.51	0.43
4:D:24:TYR:CE2	4:D:244:THR:HA	2.53	0.43
4:D:51:LEU:O	4:D:54:ILE:HB	2.18	0.43
5:E:205:LYS:O	5:E:208:VAL:N	2.50	0.43
8:H:63:GLU:OE2	8:H:101:LYS:HE2	2.18	0.43
8:H:106:ILE:HD11	8:H:142:LEU:HD22	2.00	0.43
1:A:322:LEU:HD23	1:A:322:LEU:HA	1.68	0.43
2:B:154:ASP:O	2:B:157:ALA:HB3	2.18	0.43
2:B:250:ILE:O	2:B:257:TRP:HD1	2.01	0.43
2:B:294:GLU:O	2:B:297:GLU:HB2	2.18	0.43
2:B:42:LEU:O	2:B:45:LYS:HG2	2.18	0.43
3:C:104:PHE:CD1	3:C:104:PHE:N	2.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:181:GLU:HG2	3:C:185:TYR:CE2	2.53	0.43
3:C:236:PHE:HE1	3:C:265:MET:HB3	1.82	0.43
4:D:149:ASN:HA	4:D:152:LYS:HD2	2.00	0.43
4:D:290:SER:O	4:D:294:ILE:HG12	2.18	0.43
4:D:296:LEU:HD12	4:D:296:LEU:HA	1.70	0.43
6:F:29:PHE:CE1	6:F:45:LEU:HD23	2.53	0.43
6:F:29:PHE:HZ	6:F:48:PHE:HB2	1.83	0.43
8:H:11:LEU:HD23	8:H:26:LEU:HB3	1.99	0.43
2:B:288:ASN:HA	2:B:291:LYS:HZ3	1.84	0.43
2:B:382:ASP:O	2:B:386:GLN:HG2	2.18	0.43
3:C:425:GLN:O	3:C:428:GLU:HB3	2.18	0.43
4:D:328:PHE:O	4:D:328:PHE:CG	2.71	0.43
5:E:90:ILE:O	5:E:114:THR:HG21	2.18	0.43
5:E:35:GLY:O	5:E:92:TRP:HB2	2.18	0.43
6:F:110:ASP:OD2	6:F:126:ILE:HD11	2.18	0.43
7:G:186:GLN:O	7:G:189:ILE:HD12	2.19	0.43
7:G:87:PHE:O	7:G:90:LYS:HB3	2.18	0.43
1:A:300:ALA:HB2	1:A:309:PHE:HE2	1.83	0.43
3:C:129:LYS:HB3	3:C:132:PHE:CZ	2.52	0.43
4:D:179:PHE:CE2	4:D:213:TYR:HD1	2.35	0.43
4:D:24:TYR:CD2	4:D:243:LEU:O	2.71	0.43
4:D:285:ALA:O	4:D:288:SER:OG	2.29	0.43
4:D:359:VAL:HG23	4:D:360:SER:O	2.19	0.43
6:F:20:PRO:HA	6:F:23:HIS:ND1	2.32	0.43
7:G:32:ILE:HG23	7:G:33:ALA:N	2.34	0.43
1:A:420:GLU:O	1:A:424:SER:OG	2.36	0.43
1:A:438:HIS:HB2	8:H:197:TYR:CE1	2.53	0.43
2:B:181:LEU:O	2:B:184:MET:HB2	2.18	0.43
3:C:118:CYS:O	3:C:121:SER:HB2	2.18	0.43
3:C:161:LEU:HA	3:C:164:GLU:HG2	1.99	0.43
5:E:106:ILE:O	5:E:109:LEU:HB2	2.17	0.43
8:H:78:PHE:HA	8:H:81:TYR:CD2	2.53	0.43
2:B:268:LEU:HD23	2:B:268:LEU:HA	1.85	0.43
3:C:347:LEU:HA	3:C:347:LEU:HD23	1.70	0.43
6:F:370:LEU:O	6:F:374:ASN:HB2	2.18	0.43
6:F:8:ASP:O	6:F:12:SER:OG	2.13	0.43
8:H:13:ILE:O	8:H:17:ASN:N	2.28	0.43
1:A:388:ILE:O	1:A:389:LYS:C	2.54	0.43
2:B:267:PHE:O	2:B:270:LEU:N	2.51	0.43
3:C:118:CYS:HB3	3:C:137:LEU:HB3	2.00	0.43
4:D:235:LEU:HD12	4:D:235:LEU:HA	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:14:LEU:HD13	6:F:61:LEU:HD23	2.00	0.43
7:G:52:LEU:HD23	7:G:52:LEU:HA	1.78	0.43
1:A:438:HIS:HB2	8:H:197:TYR:CE1	2.54	0.43
1:A:435:LYS:HD2	1:A:435:LYS:HA	1.78	0.43
2:B:236:GLU:O	2:B:237:VAL:C	2.56	0.43
2:B:394:ASN:OD1	3:C:356:CYS:HB2	2.19	0.43
4:D:96:GLN:HG3	4:D:100:ASN:ND2	2.33	0.43
5:E:32:ARG:HD2	5:E:94:HIS:CD2	2.53	0.43
7:G:74:SER:O	7:G:76:THR:N	2.51	0.43
1:A:152:LEU:O	1:A:155:LEU:N	2.51	0.43
1:A:322:LEU:HD12	1:A:323:LEU:N	2.33	0.43
1:A:60:UNK:C	1:A:62:UNK:N	2.80	0.43
2:B:280:LEU:HA	2:B:280:LEU:HD23	1.78	0.43
5:E:160:THR:HG23	5:E:160:THR:O	2.19	0.43
6:F:258:LEU:HD23	6:F:258:LEU:HA	1.76	0.43
6:F:57:LEU:HG	6:F:61:LEU:CD1	2.48	0.43
6:F:64:ASN:O	6:F:68:LYS:HG2	2.19	0.43
8:H:55:LEU:HD12	8:H:56:MET:N	2.33	0.43
4:D:222:ARG:H	9:I:60:TRP:HE1	1.65	0.43
1:A:167:LEU:O	1:A:171:TYR:CZ	2.70	0.43
2:B:72:TRP:CZ2	2:B:117:SER:CB	3.01	0.43
3:C:377:LEU:O	3:C:381:ILE:HG12	2.18	0.43
4:D:57:GLU:O	4:D:58:GLU:HG2	2.19	0.43
6:F:308:LEU:O	6:F:347:LEU:HA	2.18	0.43
6:F:93:ASP:O	6:F:97:LYS:HB2	2.19	0.43
8:H:143:SER:O	8:H:147:LYS:HB3	2.18	0.43
8:H:71:GLN:NE2	8:H:173:GLU:OE2	2.48	0.43
9:I:79:ALA:O	9:I:83:ARG:HB2	2.19	0.43
1:A:168:LEU:CA	1:A:171:TYR:CD2	2.97	0.43
3:C:146:TYR:HA	3:C:151:TYR:HB3	1.99	0.43
3:C:134:LYS:NZ	3:C:164:GLU:OE2	2.52	0.43
4:D:141:TYR:HB2	4:D:150:ALA:HB2	2.01	0.43
4:D:300:ASP:OD2	4:D:303:SER:OG	2.22	0.43
5:E:13:LEU:O	5:E:17:SER:HB2	2.18	0.43
8:H:201:PRO:HA	8:H:231:SER:O	2.19	0.43
1:A:171:TYR:O	1:A:174:ARG:NH1	2.51	0.43
1:A:184:TRP:CZ2	1:A:217:PHE:CZ	3.06	0.43
3:C:89:ALA:O	3:C:90:LYS:HB3	2.18	0.43
4:D:322:LEU:HD23	4:D:322:LEU:HA	1.62	0.43
6:F:127:LEU:O	6:F:130:ASP:N	2.51	0.43
6:F:250:TRP:CG	6:F:251:LEU:N	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:156:PHE:CB	7:G:198:SER:HA	2.48	0.43
8:H:78:PHE:HA	8:H:81:TYR:HB2	2.00	0.43
2:B:203:ILE:HG13	2:B:204:LEU:N	2.30	0.43
2:B:368:LEU:HD23	2:B:368:LEU:HA	1.72	0.43
3:C:56:THR:O	3:C:60:GLU:HB3	2.19	0.43
3:C:71:LYS:HG3	3:C:72:ASP:N	2.33	0.43
4:D:138:GLY:HA2	4:D:141:TYR:CD2	2.54	0.43
4:D:192:GLU:HA	4:D:195:ASN:ND2	2.34	0.43
4:D:229:LYS:HG3	4:D:230:LEU:N	2.32	0.43
4:D:309:LEU:H	4:D:309:LEU:HD12	1.82	0.43
5:E:16:LEU:HB3	7:G:32:ILE:HG12	2.00	0.43
6:F:119:SER:HB2	6:F:122:HIS:HB2	2.00	0.43
6:F:370:LEU:O	6:F:374:ASN:HB2	2.19	0.43
6:F:65:PHE:CD1	6:F:66:VAL:N	2.87	0.43
6:F:69:PHE:O	6:F:73:ILE:HG22	2.18	0.43
7:G:154:ASP:N	7:G:154:ASP:OD1	2.49	0.43
7:G:53:MET:O	7:G:105:VAL:N	2.46	0.43
7:G:95:LEU:HA	7:G:98:THR:CG2	2.48	0.43
1:A:262:THR:OG1	1:A:263:ASP:N	2.51	0.43
1:A:28:UNK:O	1:A:31:UNK:N	2.51	0.43
1:A:357:LEU:O	1:A:360:PHE:N	2.51	0.43
1:A:421:TYR:HA	1:A:424:SER:HB2	2.00	0.43
1:A:448:LEU:HD12	4:D:401:HIS:CD2	2.53	0.43
2:B:127:GLU:O	2:B:129:LYS:HD3	2.19	0.43
2:B:330:GLY:HA3	2:B:334:ASN:HD22	1.83	0.43
4:D:192:GLU:O	4:D:195:ASN:HB2	2.18	0.43
4:D:249:ILE:HA	4:D:252:TYR:CD2	2.53	0.43
4:D:335:ARG:HD2	4:D:376:GLN:HB3	2.00	0.43
5:E:16:LEU:HA	5:E:16:LEU:HD23	1.72	0.43
5:E:224:THR:O	5:E:228:LYS:HG2	2.17	0.43
6:F:69:PHE:O	6:F:73:ILE:HG22	2.19	0.43
6:F:6:GLU:HG2	6:F:7:ILE:N	2.33	0.43
6:F:58:ARG:NE	6:F:85:SER:HA	2.31	0.43
8:H:128:TYR:HD2	8:H:129:LEU:HD23	1.83	0.43
4:D:185:LEU:O	4:D:188:LYS:N	2.51	0.43
4:D:271:ILE:HD12	4:D:294:ILE:HD13	2.00	0.43
4:D:348:LEU:C	4:D:348:LEU:HD12	2.39	0.43
4:D:41:GLU:OE1	4:D:41:GLU:N	2.42	0.43
4:D:51:LEU:HA	4:D:54:ILE:HD13	2.01	0.43
6:F:196:LEU:HD23	6:F:196:LEU:HA	1.79	0.43
7:G:57:PHE:HB3	7:G:135:ARG:NH1	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:142:LEU:O	8:H:146:ILE:HG12	2.18	0.43
1:A:271:ARG:O	1:A:274:PHE:HB3	2.17	0.43
5:E:31:LYS:HG3	5:E:32:ARG:H	1.83	0.43
6:F:20:PRO:HA	6:F:23:HIS:ND1	2.34	0.43
1:A:343:LEU:HA	1:A:343:LEU:HD23	1.73	0.43
2:B:132:VAL:HG13	2:B:136:ARG:HH11	1.83	0.43
3:C:202:ARG:O	3:C:206:ASN:N	2.49	0.43
3:C:261:VAL:O	3:C:265:MET:HG3	2.18	0.43
6:F:212:GLN:O	6:F:215:TYR:HB3	2.18	0.43
6:F:242:ILE:HD12	6:F:248:TYR:CE2	2.53	0.43
6:F:55:THR:HG22	6:F:57:LEU:N	2.32	0.43
8:H:69:SER:HA	8:H:72:THR:HB	1.99	0.43
9:I:37:ASP:O	9:I:39:PRO:HD3	2.18	0.43
1:A:144:LEU:O	1:A:148:ASP:N	2.43	0.43
1:A:156:VAL:HA	1:A:159:ASN:ND2	2.34	0.43
2:B:112:LEU:CD1	2:B:115:ARG:HE	2.31	0.43
2:B:128:ASN:OD1	2:B:129:LYS:N	2.52	0.43
3:C:104:PHE:O	3:C:104:PHE:CD2	2.70	0.43
3:C:202:ARG:HD2	3:C:218:LEU:HD22	2.00	0.43
4:D:317:ILE:HG13	4:D:318:PRO:CD	2.47	0.43
5:E:28:LYS:HZ2	5:E:31:LYS:HB2	1.82	0.43
5:E:66:TRP:HE3	5:E:67:PHE:HA	1.84	0.43
5:E:68:LEU:HD11	5:E:109:LEU:HD21	2.00	0.43
6:F:157:LEU:HD23	6:F:157:LEU:HA	1.83	0.43
6:F:23:HIS:O	6:F:26:PHE:HB3	2.19	0.43
6:F:347:LEU:HD23	6:F:347:LEU:HA	1.83	0.43
7:G:92:MET:O	7:G:96:LYS:HG2	2.19	0.43
1:A:159:ASN:HA	1:A:163:VAL:HG22	2.00	0.43
1:A:188:TYR:OH	1:A:243:ASN:ND2	2.52	0.43
1:A:228:GLU:HG3	1:A:264:VAL:HA	2.01	0.43
2:B:254:GLU:OE2	2:B:258:LYS:HD3	2.18	0.43
3:C:171:LYS:CD	3:C:209:TYR:OH	2.66	0.43
3:C:243:PHE:HZ	3:C:287:THR:HB	1.82	0.43
3:C:347:LEU:O	3:C:350:ILE:N	2.51	0.43
3:C:354:PHE:CB	3:C:357:VAL:HB	2.49	0.43
3:C:74:LEU:HD23	3:C:77:PHE:CE2	2.54	0.43
4:D:219:LEU:HD21	4:D:322:LEU:CD2	2.49	0.43
5:E:298:ASN:O	5:E:302:GLN:HB3	2.19	0.43
6:F:177:GLN:OE1	6:F:180:LYS:HE3	2.18	0.43
6:F:28:GLN:O	6:F:32:PHE:HD2	2.02	0.43
8:H:19:ASP:O	8:H:23:CYS:N	2.44	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:222:LEU:O	8:H:225:ASN:N	2.44	0.43
2:B:198:VAL:HG22	2:B:201:ARG:NH1	2.34	0.43
2:B:212:LYS:HE3	2:B:213:TYR:CE1	2.53	0.43
2:B:263:HIS:NE2	2:B:325:ASP:OD2	2.52	0.43
4:D:391:ASN:O	4:D:391:ASN:OD1	2.37	0.43
6:F:391:ILE:O	6:F:392:TRP:CD2	2.71	0.43
1:A:139:HIS:ND1	1:A:158:PHE:HZ	2.17	0.43
2:B:206:LYS:CA	2:B:209:LYS:HZ3	2.31	0.43
4:D:397:ASN:O	4:D:400:TYR:HB3	2.19	0.43
5:E:18:ALA:O	5:E:21:HIS:HB3	2.18	0.43
7:G:209:GLU:O	7:G:212:MET:N	2.52	0.43
8:H:224:ARG:O	8:H:225:ASN:OD1	2.37	0.43
8:H:34:LEU:HD23	8:H:34:LEU:O	2.19	0.43
2:B:253:ASP:CG	2:B:256:LYS:HG2	2.39	0.43
3:C:94:VAL:O	3:C:97:LEU:HB3	2.18	0.43
4:D:140:TYR:O	4:D:144:ILE:N	2.48	0.43
4:D:184:GLN:NE2	4:D:217:HIS:HD2	2.17	0.43
8:H:221:ALA:O	8:H:225:ASN:N	2.51	0.43
1:A:146:LEU:O	1:A:149:SER:CA	2.67	0.43
2:B:323:ASN:OD1	2:B:324:GLU:N	2.52	0.43
3:C:115:ILE:CD1	3:C:115:ILE:N	2.73	0.43
3:C:151:TYR:O	3:C:153:ASP:N	2.52	0.43
3:C:155:LEU:HB2	3:C:184:VAL:HG11	2.00	0.43
4:D:186:TYR:O	4:D:190:LYS:NZ	2.46	0.43
4:D:291:SER:HB2	4:D:307:TYR:HE1	1.83	0.43
4:D:95:ASP:OD2	4:D:98:LEU:HB2	2.18	0.43
5:E:24:ARG:HG3	7:G:100:ARG:NH1	2.33	0.43
6:F:196:LEU:HD21	6:F:213:LEU:CD2	2.49	0.43
7:G:229:ASP:N	7:G:229:ASP:OD1	2.49	0.43
8:H:106:ILE:O	8:H:109:TYR:HB3	2.19	0.43
8:H:163:LEU:HA	8:H:166:SER:HB3	2.01	0.43
1:A:427:ILE:HG22	1:A:432:ILE:HB	2.01	0.43
2:B:147:LYS:HB2	2:B:153:ILE:HB	1.99	0.43
3:C:289:GLU:HG2	3:C:290:THR:HG23	2.01	0.43
3:C:323:LYS:HA	3:C:326:MET:SD	2.59	0.43
4:D:345:TYR:CE1	4:D:348:LEU:HD21	2.53	0.43
5:E:166:ALA:HB1	7:G:38:LEU:HB3	1.99	0.43
1:A:453:ASP:O	5:E:266:THR:HG21	2.18	0.43
6:F:132:GLU:O	6:F:135:ARG:HB3	2.17	0.43
6:F:391:ILE:O	6:F:392:TRP:CG	2.72	0.43
7:G:132:LEU:HA	7:G:132:LEU:HD23	1.76	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:131:LYS:HB2	8:H:131:LYS:HE3	1.79	0.43
8:H:147:LYS:HE2	8:H:151:TRP:NE1	2.26	0.43
1:A:250:ALA:O	1:A:253:PHE:HB3	2.19	0.43
2:B:118:VAL:HG12	2:B:143:LEU:HD22	2.01	0.43
2:B:148:LYS:NZ	2:B:156:ALA:HB2	2.33	0.43
2:B:65:LEU:C	2:B:65:LEU:CD2	2.86	0.43
6:F:132:GLU:OE2	6:F:135:ARG:HD2	2.19	0.43
6:F:338:LYS:HD2	6:F:352:TRP:HE1	1.83	0.43
6:F:367:LYS:O	6:F:371:VAL:HG23	2.19	0.43
7:G:219:GLU:HG2	7:G:226:LYS:NZ	2.33	0.43
1:A:201:ILE:HG21	8:H:92:ASN:HB3	2.00	0.43
1:A:332:PHE:C	1:A:332:PHE:CD2	2.92	0.43
1:A:333:PHE:CE1	1:A:346:TYR:CD1	3.07	0.43
2:B:167:THR:CG2	2:B:171:MET:HE2	2.48	0.43
4:D:162:ILE:HG22	4:D:163:SER:O	2.19	0.43
4:D:37:LYS:NZ	4:D:39:SER:HB2	2.34	0.43
6:F:83:LEU:HG	6:F:87:LYS:NZ	2.34	0.43
8:H:221:ALA:HB1	8:H:226:TRP:HB2	2.00	0.43
8:H:258:ASN:O	8:H:262:LYS:HG3	2.19	0.43
4:D:309:LEU:HD21	9:I:78:LYS:HB2	2.00	0.43
1:A:137:PHE:CE2	1:A:141:LEU:HD11	2.52	0.43
1:A:252:ASP:O	1:A:256:LYS:HG2	2.18	0.43
1:A:388:ILE:HG21	1:A:422:MET:HE1	2.00	0.43
1:A:435:LYS:HA	1:A:435:LYS:HD2	1.82	0.43
3:C:263:LYS:O	3:C:267:LEU:HG	2.19	0.43
5:E:10:ILE:HD13	5:E:159:CYS:SG	2.59	0.43
5:E:59:ASP:HB3	5:E:62:ASN:OD1	2.18	0.43
6:F:149:LEU:HD23	6:F:149:LEU:HA	1.83	0.43
7:G:253:LYS:HA	7:G:256:GLU:HG2	1.99	0.43
1:A:281:ALA:O	1:A:284:LEU:N	2.38	0.43
1:A:333:PHE:CD1	1:A:346:TYR:HD1	2.37	0.43
1:A:436:ILE:HG12	1:A:443:ILE:HD12	2.01	0.43
2:B:210:ASN:HB3	2:B:213:TYR:CD2	2.54	0.43
2:B:232:ARG:CZ	2:B:336:HIS:NE2	2.81	0.43
2:B:336:HIS:HA	2:B:339:GLU:CD	2.39	0.43
3:C:149:LYS:O	3:C:150:GLN:O	2.36	0.43
3:C:184:VAL:HG12	3:C:188:LEU:CD1	2.47	0.43
5:E:43:SER:OG	5:E:44:SER:N	2.51	0.43
5:E:89:LEU:HD12	5:E:90:ILE:H	1.83	0.43
8:H:164:LEU:HD23	8:H:164:LEU:HA	1.70	0.43
8:H:175:ASP:O	8:H:178:THR:HB	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:50:ILE:HG13	8:H:51:TYR:N	2.34	0.43
2:B:227:ILE:O	2:B:230:HIS:N	2.51	0.43
2:B:411:LEU:HA	2:B:411:LEU:HD23	1.78	0.43
3:C:346:ASN:O	3:C:350:ILE:HG13	2.18	0.43
4:D:164:THR:HA	4:D:167:LYS:CD	2.38	0.43
4:D:95:ASP:HB3	4:D:98:LEU:HB3	2.01	0.43
6:F:367:LYS:O	6:F:371:VAL:HG23	2.18	0.43
7:G:247:ILE:HA	7:G:250:GLN:HB3	2.00	0.43
8:H:226:TRP:O	8:H:228:ILE:HG13	2.19	0.43
8:H:85:LEU:HD21	8:H:89:TYR:HE2	1.84	0.43
1:A:183:LEU:O	1:A:187:ILE:HG13	2.19	0.43
1:A:303:ASN:ND2	1:A:306:SER:OG	2.52	0.43
2:B:112:LEU:HD12	2:B:115:ARG:HH12	1.84	0.43
2:B:148:LYS:O	2:B:150:GLU:HG3	2.18	0.43
6:F:69:PHE:HB3	6:F:72:LYS:HD3	2.00	0.43
5:E:24:ARG:HG2	7:G:100:ARG:NH1	2.33	0.43
8:H:161:TRP:CE3	8:H:210:PHE:HD2	2.35	0.43
8:H:32:ILE:O	8:H:35:ILE:N	2.48	0.43
1:A:217:PHE:O	1:A:221:ALA:N	2.30	0.43
2:B:203:ILE:HG21	2:B:220:TYR:CZ	2.54	0.43
3:C:304:GLU:O	3:C:308:ASN:N	2.51	0.43
4:D:197:MET:HE2	4:D:197:MET:HB3	1.91	0.43
4:D:21:VAL:HA	4:D:22:PRO:C	2.39	0.43
4:D:40:ILE:O	4:D:44:LYS:HD3	2.18	0.43
5:E:36:VAL:CG1	5:E:89:LEU:HD11	2.49	0.43
5:E:41:ALA:HB2	5:E:90:ILE:HD12	2.01	0.43
6:F:75:GLN:HG3	6:F:106:PHE:HE1	1.83	0.43
8:H:128:TYR:O	8:H:132:HIS:ND1	2.50	0.43
1:A:269:GLU:O	1:A:272:TYR:HB3	2.19	0.43
2:B:141:LYS:O	2:B:145:GLU:CB	2.66	0.43
2:B:288:ASN:CG	2:B:291:LYS:HZ2	2.22	0.43
3:C:392:GLN:HG2	3:C:392:GLN:O	2.18	0.43
3:C:72:ASP:HB3	3:C:76:GLU:HG3	2.01	0.43
4:D:143:GLN:HG3	4:D:144:ILE:HD13	1.99	0.43
5:E:62:ASN:O	5:E:63:SER:C	2.55	0.43
6:F:100:ASP:O	6:F:103:LYS:HB3	2.18	0.43
7:G:56:GLU:HG2	7:G:57:PHE:O	2.19	0.43
8:H:35:ILE:HA	8:H:38:ASN:CG	2.39	0.43
1:A:154:GLN:HE22	1:A:157:GLU:HG2	1.84	0.43
1:A:159:ASN:O	1:A:164:ILE:N	2.45	0.43
1:A:422:MET:O	1:A:425:ARG:HB3	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:136:ARG:HA	2:B:139:VAL:CG2	2.48	0.43
2:B:141:LYS:CE	2:B:179:PHE:HD1	2.20	0.43
2:B:205:LYS:O	2:B:208:PHE:N	2.52	0.43
3:C:274:LEU:HD23	3:C:274:LEU:HA	1.84	0.43
4:D:107:GLU:CA	4:D:110:ILE:HG22	2.47	0.43
4:D:333:MET:HA	4:D:336:LYS:HB3	1.99	0.43
4:D:342:LEU:HA	4:D:342:LEU:HD23	1.66	0.43
4:D:54:ILE:HA	4:D:59:MET:CG	2.48	0.43
5:E:116:ASN:CG	5:E:117:ASN:H	2.22	0.43
6:F:112:LYS:HB2	6:F:113:LYS:NZ	2.34	0.43
6:F:148:ASP:OD1	6:F:149:LEU:N	2.51	0.43
6:F:157:LEU:O	6:F:159:LYS:N	2.52	0.43
6:F:23:HIS:CG	6:F:24:PRO:HD3	2.53	0.43
1:A:188:TYR:O	1:A:191:HIS:N	2.52	0.43
2:B:253:ASP:HB2	2:B:256:LYS:HD2	2.00	0.43
2:B:362:LEU:HD23	2:B:362:LEU:HA	1.73	0.43
3:C:329:GLU:O	3:C:332:ARG:HB3	2.19	0.43
4:D:238:PHE:CD2	4:D:246:TYR:CD1	3.06	0.43
6:F:308:LEU:HB2	6:F:348:VAL:CG1	2.49	0.43
5:E:201:GLN:NE2	6:F:378:GLU:HB3	2.34	0.43
7:G:113:GLY:H	7:G:144:ILE:HB	1.83	0.43
7:G:225:LEU:HA	7:G:225:LEU:HD23	1.54	0.43
7:G:227:MET:CE	7:G:301:ASN:HD22	2.32	0.43
8:H:203:SER:HA	8:H:206:LYS:HZ1	1.83	0.43
9:I:60:TRP:HE3	9:I:62:GLU:HG2	1.84	0.43
1:A:467:PHE:HA	1:A:470:GLN:NE2	2.34	0.43
2:B:33:ASN:HD21	2:B:71:LYS:HZ2	1.57	0.43
3:C:363:SER:O	3:C:367:GLY:N	2.51	0.43
4:D:114:ASN:HA	4:D:117:ILE:HD12	2.01	0.43
4:D:50:VAL:O	4:D:53:LYS:N	2.52	0.43
6:F:388:GLY:HA2	8:H:268:ILE:HG21	1.99	0.43
9:I:34:GLU:HB3	9:I:36:GLU:OE2	2.18	0.43
2:B:175:GLU:HA	2:B:178:GLN:HB3	2.01	0.43
2:B:208:PHE:CD1	2:B:217:LYS:HB2	2.54	0.43
5:E:201:GLN:CD	6:F:378:GLU:HB3	2.39	0.43
2:B:415:TRP:HD1	5:E:237:PRO:HB3	1.82	0.43
6:F:20:PRO:HA	6:F:23:HIS:CE1	2.53	0.43
8:H:106:ILE:O	8:H:109:TYR:HB3	2.18	0.43
1:A:348:LEU:HD23	1:A:348:LEU:HA	1.59	0.43
1:A:42:UNK:O	1:A:45:UNK:N	2.52	0.43
2:B:253:ASP:N	2:B:253:ASP:OD1	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:230:LYS:HZ2	3:C:232:TYR:HE2	1.63	0.43
4:D:131:ALA:HB1	4:D:157:SER:HB2	2.00	0.43
4:D:37:LYS:CB	4:D:38:VAL:HG13	2.48	0.43
5:E:137:TYR:CE1	5:E:156:HIS:CD2	3.07	0.43
5:E:18:ALA:O	5:E:21:HIS:HB3	2.19	0.43
6:F:24:PRO:O	6:F:27:GLU:HB2	2.19	0.43
1:A:330:LEU:HA	1:A:330:LEU:HD23	1.61	0.43
2:B:114:THR:C	2:B:118:VAL:HB	2.35	0.43
4:D:97:GLU:O	4:D:101:GLU:HG2	2.18	0.43
4:D:148:ASP:HA	4:D:151:GLU:OE2	2.19	0.43
4:D:279:LEU:O	4:D:282:THR:OG1	2.27	0.43
5:E:9:THR:CG2	5:E:162:GLU:HB2	2.49	0.43
5:E:16:LEU:HA	5:E:16:LEU:HD23	1.74	0.43
6:F:266:PHE:CE2	6:F:291:ILE:HG13	2.54	0.43
6:F:86:LEU:O	6:F:88:ASP:N	2.52	0.43
8:H:190:ALA:O	8:H:193:THR:N	2.52	0.43
8:H:209:LEU:HD23	8:H:209:LEU:HA	1.62	0.43
2:B:122:ILE:CG2	2:B:139:VAL:HG21	2.48	0.43
2:B:247:THR:HB	2:B:250:ILE:CG2	2.46	0.43
2:B:322:LEU:O	2:B:325:ASP:N	2.41	0.43
2:B:340:ASP:OD1	2:B:340:ASP:C	2.57	0.43
2:B:434:THR:O	2:B:437:GLU:HB3	2.19	0.43
4:D:149:ASN:HA	4:D:152:LYS:HD2	2.00	0.43
4:D:198:ILE:HD11	4:D:207:ARG:HG3	2.00	0.43
7:G:259:LYS:HB3	7:G:259:LYS:HE2	1.84	0.43
7:G:35:LEU:HA	7:G:35:LEU:HD23	1.79	0.43
8:H:203:SER:HA	8:H:206:LYS:NZ	2.33	0.43
8:H:257:THR:O	8:H:262:LYS:HE3	2.18	0.43
1:A:327:ILE:HG13	1:A:353:LYS:HG2	2.01	0.43
2:B:223:LEU:O	2:B:227:ILE:HD12	2.19	0.43
4:D:98:LEU:O	4:D:102:LEU:HG	2.18	0.43
4:D:387:ILE:HA	4:D:387:ILE:HD12	1.94	0.43
6:F:263:PHE:CD2	6:F:318:HIS:CD2	3.07	0.43
7:G:138:ALA:O	7:G:155:ALA:HA	2.18	0.43
2:B:140:THR:HG21	2:B:163:LEU:CD1	2.49	0.43
3:C:128:GLU:C	3:C:130:ARG:H	2.21	0.43
4:D:312:TYR:CE1	4:D:326:ALA:HB1	2.54	0.43
6:F:233:LEU:HA	6:F:236:HIS:HB2	2.00	0.43
6:F:246:SER:HA	6:F:249:ASP:HB2	2.01	0.43
8:H:109:TYR:O	8:H:112:ASN:HB3	2.19	0.43
8:H:134:LYS:NZ	8:H:135:ASN:O	2.45	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:189:ILE:O	8:H:192:ASN:HB2	2.19	0.43
1:A:156:VAL:HB	1:A:160:ARG:HH12	1.84	0.43
1:A:211:ARG:NH1	1:A:241:PHE:HE1	2.17	0.43
1:A:364:ILE:O	1:A:368:LYS:HB2	2.18	0.43
2:B:224:LEU:H	2:B:224:LEU:HG	1.64	0.43
2:B:63:VAL:O	2:B:65:LEU:N	2.51	0.43
3:C:216:ALA:O	3:C:219:ASP:N	2.52	0.43
3:C:359:ILE:O	3:C:360:SER:C	2.57	0.43
4:D:132:GLN:HA	4:D:135:ILE:HD12	2.01	0.43
4:D:213:TYR:CD1	4:D:243:LEU:HD21	2.53	0.43
4:D:354:ALA:HB1	4:D:359:VAL:O	2.19	0.43
5:E:70:HIS:HD2	5:E:74:GLU:OE2	2.02	0.43
6:F:52:ALA:HB1	6:F:55:THR:HB	2.01	0.43
1:A:152:LEU:HA	1:A:155:LEU:HD22	2.01	0.43
1:A:164:ILE:HB	1:A:165:PRO:HD3	2.00	0.43
1:A:378:GLN:HG3	8:H:127:GLN:NE2	2.31	0.43
2:B:115:ARG:HG3	2:B:116:ILE:N	2.34	0.43
2:B:196:ALA:HA	2:B:199:LEU:HB2	2.01	0.43
2:B:204:LEU:O	2:B:207:THR:OG1	2.17	0.43
3:C:356:CYS:HG	3:C:398:TYR:HE1	1.56	0.43
3:C:88:PHE:CE1	3:C:92:LYS:HD3	2.46	0.43
5:E:7:LYS:HD2	5:E:158:PRO:HB2	2.00	0.43
8:H:20:TYR:O	8:H:24:GLU:HB2	2.19	0.43
9:I:63:ASN:ND2	9:I:65:ASP:OD2	2.52	0.43
1:A:366:LYS:HE2	1:A:367:TYR:CZ	2.54	0.43
2:B:199:LEU:O	2:B:202:LYS:HG2	2.18	0.43
3:C:265:MET:O	3:C:268:SER:OG	2.32	0.43
3:C:61:LEU:HA	3:C:64:LEU:HB3	2.00	0.43
5:E:283:ARG:O	5:E:286:ILE:HG22	2.19	0.43
5:E:50:ASN:C	5:E:50:ASN:OD1	2.57	0.43
8:H:148:LEU:O	8:H:152:LEU:HG	2.18	0.43
1:A:167:LEU:O	1:A:170:TYR:CE2	2.72	0.42
3:C:357:VAL:HG13	3:C:362:ILE:HD11	2.01	0.42
3:C:421:LYS:NZ	7:G:252:SER:OG	2.52	0.42
5:E:268:LYS:HD2	5:E:268:LYS:HA	1.81	0.42
6:F:319:LEU:HD21	6:F:323:ASN:HB2	2.01	0.42
8:H:147:LYS:HG3	8:H:151:TRP:HE1	1.84	0.42
8:H:201:PRO:HD2	8:H:204:ASN:ND2	2.28	0.42
3:C:175:VAL:HG23	3:C:208:ILE:HD12	2.01	0.42
6:F:206:THR:HB	6:F:209:GLU:OE1	2.18	0.42
8:H:35:ILE:HA	8:H:38:ASN:HB3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:345:TYR:O	1:A:348:LEU:HB2	2.19	0.42
2:B:334:ASN:HA	2:B:336:HIS:CE1	2.53	0.42
3:C:377:LEU:HD23	3:C:380:MET:CE	2.49	0.42
4:D:275:GLU:O	4:D:278:SER:N	2.52	0.42
4:D:411:LEU:O	4:D:412:THR:C	2.56	0.42
6:F:286:PHE:O	6:F:287:LEU:C	2.57	0.42
6:F:319:LEU:HD23	6:F:319:LEU:HA	1.75	0.42
7:G:232:GLU:O	7:G:235:GLU:HB3	2.19	0.42
8:H:201:PRO:HD2	8:H:204:ASN:ND2	2.34	0.42
1:A:353:LYS:NZ	9:I:64:TRP:CD2	2.86	0.42
1:A:447:GLU:OE1	1:A:447:GLU:N	2.51	0.42
2:B:234:TYR:O	2:B:235:LEU:C	2.57	0.42
2:B:239:GLN:O	2:B:242:GLN:HB3	2.19	0.42
3:C:182:SER:O	3:C:185:TYR:HB2	2.19	0.42
4:D:269:LYS:O	4:D:273:SER:OG	2.20	0.42
4:D:270:VAL:O	4:D:276:LEU:HD12	2.19	0.42
4:D:364:LEU:HA	4:D:364:LEU:HD23	1.59	0.42
5:E:31:LYS:HZ3	5:E:58:GLU:H	1.66	0.42
7:G:153:ILE:O	7:G:154:ASP:HB3	2.19	0.42
1:A:133:GLU:HA	1:A:176:LEU:HD21	2.01	0.42
2:B:406:LYS:HE3	2:B:410:GLN:HB3	2.01	0.42
4:D:64:LYS:O	4:D:67:CYS:HB3	2.19	0.42
6:F:192:SER:O	6:F:193:LEU:C	2.57	0.42
6:F:78:VAL:HA	6:F:81:TYR:CD2	2.51	0.42
8:H:55:LEU:HD12	8:H:56:MET:HG3	2.01	0.42
2:B:37:ASP:O	2:B:41:VAL:HG23	2.19	0.42
3:C:112:ASP:HA	3:C:115:ILE:HD12	2.00	0.42
4:D:283:THR:OG1	4:D:284:ALA:N	2.52	0.42
4:D:378:ASN:HB3	4:D:391:ASN:O	2.19	0.42
6:F:15:ARG:NH2	6:F:30:GLU:HG2	2.26	0.42
7:G:273:ARG:HG2	7:G:274:GLN:N	2.34	0.42
8:H:109:TYR:O	8:H:112:ASN:HB2	2.18	0.42
3:C:157:LEU:O	3:C:161:LEU:HB2	2.18	0.42
3:C:202:ARG:HD3	3:C:218:LEU:HD21	2.00	0.42
4:D:62:TYR:CE2	4:D:145:GLY:HA3	2.52	0.42
4:D:418:GLY:O	4:D:422:ARG:HG2	2.19	0.42
6:F:150:LEU:HD13	6:F:175:ASN:OD1	2.19	0.42
6:F:293:LEU:O	6:F:296:LEU:HB3	2.19	0.42
1:A:242:LEU:HD23	1:A:242:LEU:HA	1.69	0.42
1:A:346:TYR:HE2	1:A:350:LYS:HZ2	1.65	0.42
1:A:383:LEU:O	1:A:384:ARG:C	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:106:GLN:HG2	3:C:252:HIS:NE2	2.33	0.42
3:C:282:LEU:HA	3:C:282:LEU:HD23	1.82	0.42
4:D:173:THR:HA	4:D:176:ARG:NE	2.33	0.42
4:D:242:GLU:CB	4:D:243:LEU:HD12	2.47	0.42
4:D:46:ALA:O	4:D:49:PHE:HB3	2.19	0.42
5:E:223:HIS:O	5:E:224:THR:C	2.57	0.42
8:H:168:SER:HB2	8:H:171:ILE:HD11	2.00	0.42
2:B:180:ILE:HG12	2:B:202:LYS:NZ	2.34	0.42
2:B:262:SER:HB3	2:B:293:LEU:CD2	2.49	0.42
2:B:362:LEU:HA	2:B:362:LEU:HD12	1.75	0.42
2:B:364:ARG:NH1	2:B:368:LEU:HD11	2.34	0.42
3:C:229:ASP:OD1	3:C:230:LYS:N	2.52	0.42
3:C:251:THR:H	3:C:254:SER:CB	2.32	0.42
3:C:254:SER:O	3:C:258:ALA:N	2.38	0.42
3:C:74:LEU:HA	3:C:77:PHE:CD2	2.54	0.42
4:D:149:ASN:HA	4:D:152:LYS:HZ3	1.81	0.42
4:D:350:LEU:O	4:D:353:MET:HB2	2.19	0.42
5:E:37:ILE:H	5:E:37:ILE:HG13	1.76	0.42
7:G:209:GLU:O	7:G:212:MET:HB3	2.19	0.42
1:A:450:ASN:C	1:A:451:ILE:HG13	2.40	0.42
2:B:157:ALA:HA	2:B:160:LEU:HB2	2.00	0.42
3:C:170:ASP:CG	3:C:171:LYS:N	2.73	0.42
5:E:97:PRO:O	5:E:98:LYS:HD2	2.19	0.42
6:F:242:ILE:CG2	6:F:248:TYR:HD2	2.32	0.42
6:F:57:LEU:HD12	6:F:60:ARG:HD2	2.01	0.42
8:H:44:LEU:HD11	8:H:88:TYR:HE1	1.76	0.42
2:B:159:ILE:HG13	2:B:160:LEU:N	2.35	0.42
2:B:364:ARG:HG2	6:F:343:GLN:OE1	2.19	0.42
2:B:433:ILE:HA	2:B:433:ILE:HD12	1.64	0.42
2:B:75:LEU:HD12	2:B:79:LEU:HD13	2.01	0.42
3:C:77:PHE:HB2	3:C:104:PHE:CE2	2.54	0.42
4:D:129:GLU:OE1	4:D:129:GLU:N	2.52	0.42
4:D:238:PHE:HZ	4:D:244:THR:O	2.02	0.42
5:E:18:ALA:O	5:E:21:HIS:HB3	2.18	0.42
6:F:233:LEU:HD12	6:F:234:LEU:H	1.84	0.42
5:E:189:ARG:HH11	7:G:293:VAL:HG21	1.83	0.42
9:I:63:ASN:O	9:I:66:ASP:HB2	2.20	0.42
3:C:189:ARG:O	3:C:189:ARG:HG3	2.19	0.42
3:C:329:GLU:O	3:C:332:ARG:N	2.53	0.42
4:D:168:ILE:HG13	4:D:197:MET:HE2	2.02	0.42
4:D:209:ARG:HD3	4:D:242:GLU:OE1	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:92:TRP:HB3	5:E:110:PHE:CE2	2.53	0.42
3:C:425:GLN:HB3	7:G:255:ILE:HG21	2.02	0.42
8:H:41:ILE:HA	8:H:51:TYR:CE1	2.54	0.42
9:I:37:ASP:OD1	9:I:38:PHE:N	2.53	0.42
9:I:77:LEU:O	9:I:80:GLU:N	2.45	0.42
1:A:146:LEU:HD23	1:A:146:LEU:HA	1.74	0.42
1:A:170:TYR:HB2	1:A:176:LEU:CD1	2.50	0.42
1:A:245:GLY:C	1:A:247:VAL:H	2.23	0.42
2:B:219:GLU:HA	2:B:222:ASN:ND2	2.33	0.42
2:B:236:GLU:O	2:B:239:GLN:N	2.52	0.42
3:C:316:THR:C	3:C:319:LYS:H	2.19	0.42
3:C:75:ARG:HB3	3:C:75:ARG:CZ	2.49	0.42
4:D:134:TRP:O	4:D:137:LEU:HB3	2.19	0.42
4:D:281:SER:HA	4:D:287:GLN:NE2	2.34	0.42
6:F:293:LEU:O	6:F:296:LEU:N	2.52	0.42
6:F:74:ASN:OD1	6:F:74:ASN:C	2.58	0.42
7:G:242:LYS:O	7:G:245:VAL:HB	2.19	0.42
7:G:24:LYS:HG2	7:G:24:LYS:O	2.19	0.42
7:G:42:ARG:HH21	7:G:144:ILE:HA	1.84	0.42
8:H:164:LEU:HA	8:H:164:LEU:HD23	1.72	0.42
8:H:32:ILE:HA	8:H:35:ILE:HD12	2.02	0.42
1:A:138:MET:HA	1:A:141:LEU:HD12	2.01	0.42
2:B:303:PHE:CD1	2:B:303:PHE:N	2.88	0.42
2:B:372:THR:O	2:B:375:GLN:HB2	2.19	0.42
3:C:211:PRO:HB2	3:C:213:GLN:HG2	2.02	0.42
4:D:117:ILE:HG23	4:D:120:LEU:HD22	2.02	0.42
1:A:467:PHE:HZ	4:D:415:GLN:OE1	2.03	0.42
5:E:160:THR:OG1	5:E:161:ILE:N	2.52	0.42
6:F:252:PHE:HB3	6:F:256:ASN:HD21	1.84	0.42
8:H:21:ALA:O	8:H:24:GLU:HB3	2.19	0.42
2:B:63:VAL:HG11	2:B:103:TYR:CD2	2.54	0.42
4:D:348:LEU:HD23	4:D:348:LEU:HA	1.77	0.42
5:E:106:ILE:O	5:E:109:LEU:HB3	2.19	0.42
5:E:236:LEU:HD23	5:E:236:LEU:HA	1.80	0.42
5:E:37:ILE:HA	5:E:37:ILE:HD13	1.73	0.42
5:E:62:ASN:C	5:E:64:ASP:H	2.20	0.42
5:E:52:PHE:CD1	5:E:76:MET:HG2	2.54	0.42
6:F:297:ILE:HD13	6:F:297:ILE:HG21	1.83	0.42
1:A:140:LEU:HD21	1:A:183:LEU:HB2	2.00	0.42
1:A:313:SER:OG	1:A:314:ASN:N	2.52	0.42
2:B:62:ILE:CD1	2:B:63:VAL:N	2.73	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:118:GLN:HA	4:D:121:GLU:OE1	2.18	0.42
4:D:37:LYS:HZ1	4:D:317:ILE:HG21	1.84	0.42
4:D:65:TYR:O	4:D:68:GLU:HB3	2.19	0.42
2:B:116:ILE:O	2:B:119:ILE:HB	2.20	0.42
2:B:148:LYS:N	2:B:149:GLU:OE1	2.52	0.42
2:B:196:ALA:O	2:B:200:SER:CB	2.67	0.42
2:B:359:ARG:HB3	2:B:399:ILE:HG21	2.02	0.42
3:C:133:LEU:O	3:C:137:LEU:HG	2.20	0.42
3:C:158:ILE:HD11	3:C:180:LEU:HG	2.00	0.42
5:E:166:ALA:HA	5:E:169:ILE:HD12	2.01	0.42
6:F:148:ASP:OD1	6:F:148:ASP:N	2.52	0.42
8:H:146:ILE:O	8:H:149:ASP:N	2.52	0.42
1:A:213:THR:O	1:A:216:LYS:N	2.52	0.42
1:A:234:ILE:O	1:A:237:ILE:HB	2.20	0.42
1:A:427:ILE:HD12	1:A:427:ILE:HG23	1.70	0.42
3:C:166:LYS:NZ	3:C:174:LEU:HD11	2.34	0.42
3:C:251:THR:HA	3:C:255:TYR:HB3	2.00	0.42
3:C:84:TYR:O	3:C:86:MET:N	2.52	0.42
4:D:127:GLU:C	4:D:161:ALA:HB3	2.39	0.42
5:E:64:ASP:CG	5:E:65:VAL:N	2.71	0.42
6:F:82:LEU:O	6:F:85:SER:HB3	2.18	0.42
7:G:107:TRP:CD1	7:G:107:TRP:N	2.84	0.42
7:G:133:ASN:OD1	7:G:134:SER:N	2.52	0.42
1:A:249:SER:O	1:A:253:PHE:CB	2.66	0.42
3:C:225:LEU:HD11	3:C:226:HIS:NE2	2.34	0.42
3:C:229:ASP:O	3:C:230:LYS:HB2	2.18	0.42
4:D:276:LEU:HA	4:D:276:LEU:HD23	1.79	0.42
4:D:342:LEU:O	4:D:344:SER:N	2.53	0.42
5:E:141:GLU:OE1	5:E:151:GLU:HB2	2.19	0.42
5:E:204:LEU:HD23	5:E:204:LEU:HA	1.61	0.42
7:G:264:GLU:HG2	7:G:265:GLU:N	2.34	0.42
8:H:27:LEU:HD12	8:H:28:PRO:CD	2.50	0.42
1:A:177:ASN:HA	1:A:180:ASN:HD21	1.83	0.42
2:B:103:TYR:HA	2:B:106:SER:HG	1.85	0.42
2:B:133:GLU:OE1	2:B:167:THR:HG22	2.18	0.42
2:B:248:ASP:HA	2:B:251:LYS:HE2	2.01	0.42
2:B:350:LEU:HD12	2:B:350:LEU:HA	1.55	0.42
3:C:123:GLU:HG3	3:C:124:PHE:N	2.34	0.42
3:C:141:LEU:O	3:C:144:LEU:HB2	2.20	0.42
3:C:167:LYS:HZ3	3:C:168:LEU:HD21	1.82	0.42
4:D:60:ALA:O	4:D:63:TYR:HB3	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:226:LEU:HA	5:E:226:LEU:HD23	1.82	0.42
2:B:415:TRP:HE1	5:E:237:PRO:HG3	1.84	0.42
5:E:9:THR:HG23	5:E:162:GLU:HG2	2.01	0.42
6:F:208:ALA:HA	6:F:211:GLN:NE2	2.35	0.42
6:F:308:LEU:O	6:F:347:LEU:HA	2.19	0.42
6:F:73:ILE:HG12	6:F:74:ASN:N	2.33	0.42
8:H:129:LEU:O	8:H:133:ILE:N	2.44	0.42
8:H:189:ILE:O	8:H:192:ASN:HB2	2.18	0.42
8:H:9:LYS:HG3	8:H:13:ILE:CG1	2.49	0.42
1:A:317:HIS:HD2	1:A:332:PHE:CE1	2.37	0.42
2:B:411:LEU:O	2:B:414:GLU:HB3	2.19	0.42
3:C:75:ARG:HH11	3:C:116:PHE:HD2	1.68	0.42
4:D:62:TYR:OH	4:D:180:PHE:CZ	2.71	0.42
4:D:247:GLU:O	4:D:251:THR:HG23	2.20	0.42
5:E:39:GLY:HA2	5:E:49:THR:HG22	2.01	0.42
7:G:116:CYS:HA	7:G:140:VAL:HG11	2.01	0.42
1:A:290:ASN:OD1	1:A:291:GLU:N	2.52	0.42
2:B:208:PHE:HB3	2:B:217:LYS:HD2	2.02	0.42
3:C:171:LYS:HB3	3:C:172:PRO:HD3	2.02	0.42
4:D:304:TYR:CZ	4:D:337:VAL:HG21	2.54	0.42
4:D:37:LYS:O	4:D:38:VAL:HG13	2.19	0.42
5:E:194:LEU:HD21	6:F:385:GLU:HG3	2.02	0.42
6:F:94:GLU:HG3	6:F:98:TYR:CE2	2.54	0.42
2:B:119:ILE:O	2:B:122:ILE:HG12	2.19	0.42
2:B:411:LEU:HD23	2:B:411:LEU:HA	1.67	0.42
3:C:175:VAL:HG21	3:C:208:ILE:HB	2.02	0.42
3:C:230:LYS:HD2	3:C:232:TYR:CE2	2.54	0.42
3:C:232:TYR:OH	3:C:334:HIS:CE1	2.73	0.42
3:C:391:ASP:OD1	3:C:391:ASP:C	2.57	0.42
4:D:266:LEU:HD12	4:D:266:LEU:HA	1.75	0.42
4:D:281:SER:HA	4:D:287:GLN:HE21	1.83	0.42
5:E:260:ASN:HB3	5:E:263:LYS:HZ3	1.85	0.42
6:F:119:SER:C	6:F:121:ASP:H	2.23	0.42
6:F:122:HIS:O	6:F:122:HIS:ND1	2.52	0.42
6:F:230:PHE:CD2	6:F:259:THR:HG22	2.55	0.42
6:F:31:LYS:HG2	6:F:35:GLU:OE1	2.19	0.42
4:D:312:TYR:CE2	9:I:74:THR:HG21	2.55	0.42
1:A:277:SER:HB2	1:A:292:TYR:HB2	2.00	0.42
1:A:393:ARG:O	1:A:396:SER:OG	2.24	0.42
1:A:419:VAL:O	1:A:421:TYR:N	2.53	0.42
2:B:344:ARG:HA	2:B:344:ARG:HD3	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:391:ASP:C	3:C:391:ASP:OD1	2.57	0.42
3:C:71:LYS:O	3:C:74:LEU:N	2.52	0.42
4:D:167:LYS:O	4:D:171:MET:HE2	2.19	0.42
5:E:230:GLN:O	5:E:233:PHE:N	2.52	0.42
5:E:274:MET:O	5:E:277:TYR:N	2.51	0.42
6:F:250:TRP:CD2	6:F:251:LEU:N	2.88	0.42
6:F:15:ARG:NH1	6:F:27:GLU:HG3	2.32	0.42
6:F:97:LYS:O	6:F:98:TYR:C	2.57	0.42
8:H:111:LEU:HD21	8:H:181:LEU:HD11	2.00	0.42
1:A:436:ILE:HD12	8:H:196:SER:OG	2.19	0.42
8:H:211:PHE:HD2	8:H:217:THR:OG1	2.02	0.42
1:A:191:HIS:O	1:A:194:LEU:HB3	2.18	0.42
2:B:195:GLN:O	2:B:198:VAL:N	2.53	0.42
2:B:360:ILE:HG13	6:F:343:GLN:OE1	2.20	0.42
3:C:148:LYS:C	3:C:150:GLN:H	2.22	0.42
3:C:413:LEU:HA	3:C:413:LEU:HD23	1.86	0.42
4:D:238:PHE:HZ	4:D:244:THR:O	2.03	0.42
5:E:151:GLU:HG3	5:E:152:LYS:N	2.34	0.42
5:E:212:ASP:O	5:E:216:ASN:N	2.53	0.42
6:F:31:LYS:HG2	6:F:35:GLU:HG2	2.02	0.42
7:G:109:HIS:O	7:G:141:VAL:HG22	2.20	0.42
7:G:293:VAL:O	7:G:297:THR:HG23	2.20	0.42
8:H:221:ALA:O	8:H:225:ASN:N	2.53	0.42
8:H:34:LEU:C	8:H:38:ASN:HB2	2.39	0.42
2:B:135:GLU:HA	2:B:138:ARG:NE	2.35	0.42
2:B:208:PHE:CE1	2:B:217:LYS:HB3	2.54	0.42
2:B:236:GLU:HG3	2:B:240:TYR:CE2	2.54	0.42
4:D:243:LEU:HB3	4:D:244:THR:HG23	2.02	0.42
6:F:230:PHE:HB2	6:F:259:THR:CG2	2.49	0.42
7:G:111:HIS:HD1	7:G:140:VAL:HG11	1.84	0.42
1:A:218:LEU:O	1:A:222:SER:N	2.52	0.42
1:A:360:PHE:CE1	1:A:383:LEU:HD11	2.55	0.42
1:A:439:GLU:N	1:A:439:GLU:OE1	2.48	0.42
2:B:125:VAL:HA	2:B:128:ASN:ND2	2.34	0.42
3:C:354:PHE:HB3	3:C:357:VAL:CG2	2.50	0.42
4:D:303:SER:HB2	4:D:307:TYR:CE2	2.54	0.42
5:E:24:ARG:CZ	7:G:100:ARG:HG2	2.48	0.42
11:B:601:HOH:O	7:G:111:HIS:HD2	2.01	0.42
8:H:52:LEU:HA	8:H:55:LEU:HB3	2.02	0.42
2:B:193:TYR:CD2	2:B:230:HIS:CD2	3.08	0.42
2:B:221:TYR:HD1	2:B:224:LEU:HD12	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:132:PHE:CD1	3:C:168:LEU:HD21	2.55	0.42
3:C:297:ASP:HA	3:C:300:LYS:HB3	2.01	0.42
3:C:79:PRO:O	3:C:83:GLU:HB2	2.18	0.42
4:D:174:ILE:H	4:D:174:ILE:HG13	1.58	0.42
4:D:176:ARG:HD3	4:D:242:GLU:HB3	2.00	0.42
4:D:307:TYR:O	4:D:311:THR:HG22	2.20	0.42
4:D:320:LYS:HE3	4:D:321:TYR:CE1	2.55	0.42
6:F:56:PRO:O	6:F:59:LEU:N	2.53	0.42
8:H:218:GLU:H	8:H:218:GLU:CD	2.21	0.42
2:B:136:ARG:HD3	2:B:163:LEU:HD11	2.00	0.42
2:B:296:GLN:O	2:B:299:LEU:HB3	2.20	0.42
3:C:185:TYR:CZ	3:C:193:LYS:HG2	2.54	0.42
3:C:319:LYS:HA	3:C:322:GLU:OE2	2.20	0.42
3:C:406:ASP:OD2	3:C:408:THR:OG1	2.37	0.42
4:D:296:LEU:O	4:D:298:ALA:N	2.52	0.42
5:E:76:MET:O	5:E:77:ASN:C	2.58	0.42
6:F:45:LEU:O	6:F:48:PHE:HB3	2.19	0.42
7:G:254:ARG:O	7:G:258:GLU:HG2	2.19	0.42
7:G:273:ARG:HD2	7:G:273:ARG:HA	1.83	0.42
7:G:58:VAL:HB	7:G:62:THR:OG1	2.20	0.42
8:H:211:PHE:CE2	8:H:217:THR:HA	2.54	0.42
8:H:38:ASN:HA	8:H:42:PRO:CG	2.48	0.42
1:A:281:ALA:O	1:A:284:LEU:N	2.29	0.42
1:A:313:SER:O	1:A:316:LEU:HB3	2.19	0.42
2:B:101:MET:HG2	2:B:138:ARG:HH22	1.85	0.42
2:B:242:GLN:HA	2:B:245:TYR:HB3	2.02	0.42
2:B:420:ASP:O	2:B:423:LEU:N	2.52	0.42
3:C:255:TYR:CG	3:C:256:GLU:N	2.87	0.42
4:D:166:ALA:HA	4:D:169:ASP:OD2	2.20	0.42
6:F:211:GLN:HB3	6:F:242:ILE:HD11	2.02	0.42
6:F:258:LEU:O	6:F:260:VAL:N	2.52	0.42
6:F:360:GLY:O	6:F:363:ILE:N	2.53	0.42
6:F:38:TRP:CD1	6:F:41:LEU:HD22	2.54	0.42
1:A:302:HIS:O	1:A:306:SER:HB2	2.19	0.42
2:B:144:VAL:HG13	2:B:156:ALA:CB	2.49	0.42
2:B:266:TYR:CE1	2:B:322:LEU:HD23	2.53	0.42
2:B:406:LYS:HG3	2:B:410:GLN:HB2	2.02	0.42
3:C:135:HIS:NE2	3:C:164:GLU:OE1	2.53	0.42
3:C:170:ASP:OD1	3:C:172:PRO:HD2	2.20	0.42
5:E:7:LYS:HZ3	5:E:160:THR:HB	1.85	0.42
6:F:233:LEU:HD12	6:F:234:LEU:HG	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:6:GLU:O	6:F:9:THR:N	2.52	0.42
8:H:193:THR:HA	8:H:196:SER:HB3	2.02	0.42
1:A:141:LEU:O	1:A:145:PHE:HB2	2.19	0.42
2:B:154:ASP:O	2:B:157:ALA:HB3	2.20	0.42
3:C:294:ARG:CZ	3:C:324:GLU:HA	2.50	0.42
6:F:27:GLU:OE2	6:F:31:LYS:HD3	2.20	0.42
6:F:61:LEU:HB3	6:F:65:PHE:CZ	2.54	0.42
1:A:329:GLU:HA	9:I:64:TRP:CZ2	2.55	0.42
1:A:206:GLN:HA	1:A:209:ILE:HG12	2.01	0.42
1:A:32:UNK:O	1:A:36:UNK:CB	2.68	0.42
1:A:404:LEU:HD23	1:A:404:LEU:HA	1.65	0.42
1:A:402:ILE:O	1:A:442:PHE:HB2	2.20	0.42
2:B:416:SER:OG	2:B:417:HIS:N	2.52	0.42
4:D:238:PHE:HB3	4:D:246:TYR:CE1	2.55	0.42
2:B:433:ILE:HD11	5:E:210:TYR:CD2	2.53	0.42
6:F:277:ILE:HD12	6:F:279:ILE:H	1.84	0.42
6:F:308:LEU:O	6:F:347:LEU:HA	2.20	0.42
6:F:367:LYS:O	6:F:371:VAL:HG23	2.19	0.42
6:F:49:PHE:CE2	6:F:81:TYR:HB3	2.55	0.42
7:G:117:TRP:CZ3	7:G:119:SER:HB3	2.51	0.42
7:G:261:LEU:HB2	7:G:266:LEU:HD23	2.01	0.42
1:A:152:LEU:HD11	1:A:194:LEU:HD13	1.99	0.42
1:A:439:GLU:H	1:A:439:GLU:CD	2.17	0.42
3:C:92:LYS:HE2	3:C:96:VAL:HG21	2.01	0.42
5:E:215:ILE:CD1	6:F:367:LYS:HD2	2.49	0.42
6:F:108:GLU:O	6:F:111:SER:OG	2.14	0.42
7:G:205:LYS:HB3	7:G:210:THR:OG1	2.20	0.42
8:H:160:ALA:O	8:H:161:TRP:C	2.57	0.42
8:H:41:ILE:CG1	8:H:42:PRO:HD3	2.41	0.42
8:H:94:HIS:NE2	8:H:95:LYS:HG3	2.34	0.42
2:B:141:LYS:HE2	2:B:179:PHE:CD1	2.55	0.42
2:B:280:LEU:O	2:B:284:ILE:HG12	2.19	0.42
3:C:179:LEU:O	3:C:183:LYS:HG2	2.19	0.42
3:C:205:ALA:HA	3:C:209:TYR:CE2	2.54	0.42
3:C:288:LYS:HD3	3:C:296:ILE:HG13	2.02	0.42
4:D:113:LEU:O	4:D:117:ILE:HG13	2.19	0.42
4:D:265:ASP:HA	4:D:268:SER:HB3	2.02	0.42
5:E:19:LEU:O	5:E:22:TYR:N	2.52	0.42
6:F:25:LEU:O	6:F:29:PHE:HD2	2.03	0.42
6:F:365:LYS:O	6:F:368:ASP:HB2	2.19	0.42
7:G:289:GLU:O	7:G:293:VAL:HG23	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:95:LEU:HA	7:G:95:LEU:HD23	1.75	0.42
8:H:10:SER:HA	8:H:13:ILE:HD12	2.02	0.42
8:H:41:ILE:O	8:H:51:TYR:OH	2.34	0.42
1:A:340:LYS:NZ	9:I:43:TRP:CE2	2.88	0.42
1:A:305:LYS:HE3	9:I:33:ASP:O	2.19	0.42
2:B:396:PRO:HD3	3:C:356:CYS:O	2.19	0.42
2:B:95:TYR:HA	2:B:98:GLN:CG	2.49	0.42
4:D:265:ASP:HA	4:D:268:SER:HB3	2.00	0.42
4:D:62:TYR:O	4:D:63:TYR:C	2.57	0.42
7:G:119:SER:O	7:G:122:ASP:HB2	2.20	0.42
8:H:147:LYS:CG	8:H:151:TRP:HE1	2.32	0.42
8:H:55:LEU:HD12	8:H:56:MET:N	2.34	0.42
8:H:72:THR:OG1	8:H:74:ASN:ND2	2.52	0.42
1:A:161:LYS:O	1:A:165:PRO:HG2	2.20	0.42
2:B:419:VAL:O	2:B:422:LEU:HB3	2.20	0.42
3:C:74:LEU:HB3	3:C:104:PHE:CD1	2.54	0.42
4:D:421:VAL:HG11	5:E:292:ILE:HG22	2.00	0.42
5:E:164:GLU:N	5:E:167:GLU:OE1	2.53	0.42
7:G:116:CYS:HB3	7:G:154:ASP:HB3	2.01	0.42
2:B:341:LEU:HD12	2:B:341:LEU:HA	1.78	0.42
2:B:82:LEU:HD13	2:B:97:ILE:HG12	2.00	0.42
3:C:120:LYS:NZ	3:C:123:GLU:OE1	2.34	0.42
3:C:145:HIS:O	3:C:149:LYS:HB2	2.20	0.42
4:D:307:TYR:HA	4:D:310:GLU:OE2	2.19	0.42
7:G:148:LYS:HG2	7:G:148:LYS:O	2.20	0.42
7:G:153:ILE:HG21	7:G:153:ILE:HD13	1.84	0.42
2:B:115:ARG:O	2:B:119:ILE:HD12	2.19	0.42
2:B:345:VAL:O	2:B:348:HIS:HB3	2.20	0.42
4:D:119:LYS:HE3	4:D:119:LYS:HB3	1.81	0.42
4:D:179:PHE:HE1	4:D:187:VAL:HG11	1.85	0.42
1:A:472:HIS:CD2	5:E:283:ARG:NH2	2.87	0.42
6:F:242:ILE:HD11	6:F:248:TYR:CE2	2.55	0.42
2:B:360:ILE:HA	6:F:343:GLN:HB3	2.01	0.42
6:F:34:GLU:O	6:F:36:LYS:HG3	2.19	0.42
1:A:402:ILE:HD13	1:A:402:ILE:HA	1.81	0.42
2:B:382:ASP:O	2:B:386:GLN:HG2	2.19	0.42
3:C:340:ASP:OD1	3:C:376:LYS:NZ	2.28	0.42
4:D:134:TRP:CZ3	4:D:156:LYS:HE3	2.54	0.42
4:D:322:LEU:HD23	4:D:322:LEU:HA	1.83	0.42
5:E:22:TYR:CD1	5:E:125:VAL:HG21	2.54	0.42
6:F:223:LEU:HD23	6:F:287:LEU:HD21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:40:GLN:OE1	6:F:40:GLN:N	2.45	0.42
7:G:53:MET:HE2	7:G:53:MET:HB3	1.92	0.42
8:H:51:TYR:CE2	8:H:55:LEU:N	2.88	0.42
1:A:168:LEU:CD2	1:A:168:LEU:C	2.85	0.42
1:A:170:TYR:HB3	1:A:176:LEU:HD21	1.98	0.42
2:B:128:ASN:O	2:B:130:ILE:HD12	2.19	0.42
2:B:59:LEU:C	2:B:62:ILE:CD1	2.78	0.42
3:C:73:LYS:O	3:C:76:GLU:N	2.49	0.42
4:D:59:MET:HG2	4:D:62:TYR:CD2	2.55	0.42
5:E:204:LEU:HD22	6:F:370:LEU:HD11	2.02	0.42
6:F:230:PHE:HD2	6:F:259:THR:HG22	1.83	0.42
2:B:184:MET:O	2:B:187:SER:N	2.52	0.42
3:C:71:LYS:O	3:C:75:ARG:HG3	2.19	0.42
4:D:129:GLU:N	4:D:129:GLU:OE1	2.51	0.42
4:D:198:ILE:C	4:D:201:GLY:H	2.22	0.42
4:D:315:VAL:HG23	4:D:316:LEU:N	2.35	0.42
5:E:35:GLY:HA3	5:E:93:TYR:CZ	2.55	0.42
6:F:391:ILE:O	6:F:392:TRP:CG	2.73	0.42
1:A:152:LEU:HD23	1:A:194:LEU:HA	2.00	0.42
1:A:237:ILE:HG21	1:A:253:PHE:CE1	2.55	0.42
4:D:111:LYS:HA	4:D:114:ASN:ND2	2.34	0.42
4:D:243:LEU:N	4:D:243:LEU:HD12	2.34	0.42
4:D:411:LEU:HD23	4:D:411:LEU:HA	1.85	0.42
5:E:209:GLU:HA	5:E:212:ASP:OD2	2.19	0.42
5:E:268:LYS:O	5:E:269:THR:C	2.57	0.42
5:E:8:VAL:O	5:E:159:CYS:HA	2.19	0.42
6:F:265:LYS:HE3	6:F:265:LYS:HB2	1.82	0.42
8:H:146:ILE:O	8:H:147:LYS:C	2.57	0.42
9:I:74:THR:O	9:I:75:ASN:C	2.58	0.42
1:A:184:TRP:HH2	1:A:217:PHE:CE2	2.37	0.42
2:B:198:VAL:HA	2:B:201:ARG:HH11	1.84	0.42
2:B:346:ILE:C	2:B:348:HIS:N	2.72	0.42
2:B:412:LEU:HD23	2:B:412:LEU:HA	1.67	0.42
2:B:66:LEU:HD11	2:B:110:LEU:HD11	1.97	0.42
3:C:215:VAL:O	3:C:218:LEU:HB2	2.19	0.42
4:D:134:TRP:HE1	4:D:160:LYS:NZ	2.18	0.42
4:D:194:VAL:HG12	4:D:198:ILE:HG23	2.02	0.42
6:F:319:LEU:HD11	6:F:323:ASN:HB2	2.01	0.42
6:F:17:GLU:HG3	6:F:57:LEU:HD21	2.01	0.42
7:G:247:ILE:O	7:G:250:GLN:HB3	2.20	0.42
8:H:229:VAL:N	8:H:232:LYS:O	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:289:ALA:O	1:A:293:ILE:HG22	2.19	0.42
1:A:417:GLN:HG3	1:A:420:GLU:OE2	2.20	0.42
1:A:471:LEU:HA	1:A:471:LEU:HD23	1.81	0.42
2:B:237:VAL:O	2:B:241:LEU:HG	2.19	0.42
2:B:423:LEU:HA	2:B:423:LEU:HD23	1.75	0.42
3:C:167:LYS:NZ	3:C:168:LEU:CD2	2.79	0.42
3:C:195:LYS:O	3:C:198:LEU:N	2.47	0.42
5:E:22:TYR:HD1	5:E:33:CYS:HG	1.64	0.42
6:F:323:ASN:O	6:F:324:VAL:C	2.57	0.42
6:F:324:VAL:O	6:F:328:VAL:HG23	2.20	0.42
7:G:286:GLU:HA	7:G:289:GLU:OE1	2.20	0.42
7:G:52:LEU:HB2	7:G:69:PHE:CD2	2.55	0.42
8:H:170:ASN:O	8:H:171:ILE:HD13	2.20	0.42
8:H:21:ALA:O	8:H:24:GLU:N	2.53	0.42
2:B:223:LEU:HA	2:B:223:LEU:HD23	1.81	0.42
2:B:268:LEU:HA	2:B:268:LEU:HD23	1.74	0.42
3:C:163:ARG:HD3	3:C:166:LYS:HG3	2.02	0.42
3:C:198:LEU:HD11	3:C:221:MET:HB3	2.00	0.42
3:C:347:LEU:HD23	3:C:347:LEU:HA	1.70	0.42
3:C:355:GLU:HG3	3:C:399:VAL:HG23	2.01	0.42
5:E:43:SER:OG	5:E:44:SER:N	2.52	0.42
6:F:243:VAL:HG23	6:F:252:PHE:CE2	2.54	0.42
7:G:158:LEU:HA	7:G:196:TYR:HA	2.01	0.42
7:G:275:ASP:O	7:G:278:LYS:N	2.36	0.42
8:H:126:LEU:HA	8:H:126:LEU:HD23	1.76	0.42
8:H:76:ASP:OD1	8:H:77:SER:N	2.52	0.42
1:A:218:LEU:HD13	1:A:233:LEU:HB2	2.02	0.42
2:B:179:PHE:O	2:B:183:GLN:HG3	2.20	0.42
3:C:134:LYS:HA	3:C:137:LEU:HD12	2.02	0.42
3:C:219:ASP:O	3:C:222:SER:HB2	2.20	0.42
3:C:261:VAL:O	3:C:264:TYR:N	2.53	0.42
4:D:345:TYR:CE1	4:D:348:LEU:HD21	2.55	0.42
4:D:37:LYS:CG	4:D:38:VAL:N	2.81	0.42
6:F:179:PHE:O	6:F:183:ASN:N	2.52	0.42
6:F:48:PHE:CE2	6:F:58:ARG:HG2	2.55	0.42
7:G:208:LYS:O	7:G:211:LYS:HB2	2.20	0.42
8:H:32:ILE:O	8:H:35:ILE:HB	2.20	0.42
1:A:211:ARG:NE	1:A:240:ASP:OD2	2.44	0.42
2:B:161:CYS:SG	2:B:195:GLN:NE2	2.93	0.42
2:B:192:ASP:CG	2:B:195:GLN:H	2.23	0.42
2:B:251:LYS:O	2:B:257:TRP:CD1	2.73	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:118:CYS:SG	3:C:137:LEU:HD22	2.60	0.42
4:D:60:ALA:O	4:D:63:TYR:HB3	2.20	0.42
5:E:204:LEU:O	5:E:205:LYS:C	2.59	0.42
6:F:137:TYR:O	6:F:140:LYS:N	2.53	0.42
6:F:148:ASP:O	6:F:151:ASP:N	2.53	0.42
6:F:192:SER:O	6:F:195:TYR:N	2.52	0.42
6:F:43:GLU:C	6:F:47:LYS:HZ3	2.20	0.42
7:G:81:GLU:H	7:G:81:GLU:CD	2.17	0.42
1:A:154:GLN:O	1:A:158:PHE:HB2	2.20	0.42
2:B:154:ASP:O	2:B:157:ALA:HB3	2.19	0.42
2:B:189:LEU:HD23	2:B:189:LEU:HA	1.77	0.42
3:C:179:LEU:HD23	3:C:217:GLU:HB2	2.01	0.42
4:D:195:ASN:O	4:D:198:ILE:HG13	2.19	0.42
4:D:66:LEU:C	4:D:68:GLU:N	2.72	0.42
5:E:279:SER:O	5:E:282:VAL:N	2.52	0.42
6:F:284:GLU:HA	6:F:287:LEU:HD12	2.02	0.42
7:G:273:ARG:HH21	7:G:274:GLN:N	2.16	0.42
7:G:95:LEU:HB3	7:G:100:ARG:O	2.20	0.42
8:H:139:ASP:N	8:H:143:SER:OG	2.53	0.42
8:H:56:MET:O	8:H:60:ARG:HG2	2.20	0.42
1:A:269:GLU:O	1:A:272:TYR:HB3	2.20	0.42
3:C:183:LYS:HA	3:C:183:LYS:HD3	1.82	0.42
3:C:274:LEU:O	3:C:278:VAL:HG23	2.20	0.42
3:C:294:ARG:CD	3:C:323:LYS:HE3	2.50	0.42
3:C:74:LEU:HA	3:C:77:PHE:CD2	2.55	0.42
4:D:165:GLY:O	4:D:168:ILE:HB	2.20	0.42
4:D:42:GLN:HA	4:D:45:GLU:OE1	2.20	0.42
5:E:304:GLN:HE21	5:E:307:LYS:HA	1.85	0.42
6:F:167:ILE:O	6:F:170:SER:N	2.53	0.42
6:F:213:LEU:HD12	6:F:213:LEU:HA	1.77	0.42
7:G:244:MET:O	7:G:248:ALA:HB3	2.20	0.42
8:H:134:LYS:NZ	8:H:135:ASN:HD21	2.18	0.42
1:A:214:MET:O	1:A:218:LEU:CB	2.63	0.41
1:A:357:LEU:O	1:A:360:PHE:HB3	2.20	0.41
2:B:141:LYS:HG2	2:B:179:PHE:HB3	2.02	0.41
2:B:200:SER:O	2:B:203:ILE:HG22	2.20	0.41
2:B:277:GLN:HE21	2:B:281:ILE:HD11	1.86	0.41
2:B:395:ARG:HD3	3:C:354:PHE:CE1	2.54	0.41
4:D:24:TYR:CD2	4:D:243:LEU:O	2.73	0.41
4:D:258:LEU:HD11	4:D:333:MET:HE1	2.01	0.41
6:F:219:ILE:HA	6:F:219:ILE:HD13	1.82	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:258:LEU:HD13	6:F:291:ILE:CD1	2.50	0.41
8:H:157:TYR:O	8:H:160:ALA:N	2.53	0.41
8:H:82:PHE:O	8:H:86:LYS:HG3	2.19	0.41
2:B:118:VAL:HA	2:B:121:THR:HB	2.02	0.41
2:B:244:ILE:O	2:B:250:ILE:HD11	2.20	0.41
2:B:282:HIS:HE1	2:B:304:THR:HG23	1.83	0.41
3:C:329:GLU:OE1	3:C:332:ARG:NE	2.52	0.41
2:B:395:ARG:HH21	3:C:361:HIS:CE1	2.38	0.41
4:D:132:GLN:HA	4:D:135:ILE:HD12	2.02	0.41
4:D:304:TYR:CE2	4:D:337:VAL:HG21	2.55	0.41
6:F:270:ILE:HG13	6:F:271:LYS:H	1.84	0.41
2:B:358:SER:N	6:F:341:ILE:O	2.36	0.41
8:H:266:TYR:O	8:H:269:SER:OG	2.28	0.41
1:A:156:VAL:HB	1:A:160:ARG:NH1	2.35	0.41
2:B:121:THR:O	2:B:125:VAL:HG23	2.20	0.41
2:B:210:ASN:OD1	2:B:212:LYS:N	2.39	0.41
2:B:236:GLU:HB3	2:B:240:TYR:CE2	2.53	0.41
2:B:68:SER:H	2:B:71:LYS:HG3	1.85	0.41
3:C:421:LYS:HE3	3:C:421:LYS:HB3	1.84	0.41
5:E:261:LEU:HA	5:E:261:LEU:HD12	1.84	0.41
6:F:287:LEU:HA	6:F:287:LEU:HD23	1.73	0.41
7:G:198:SER:OG	7:G:199:LEU:N	2.53	0.41
1:A:178:LEU:HA	1:A:229:THR:HG22	2.02	0.41
1:A:237:ILE:O	1:A:240:ASP:N	2.53	0.41
1:A:286:TYR:O	1:A:289:ALA:HB3	2.21	0.41
1:A:428:ARG:NH1	8:H:191:LYS:HE3	2.35	0.41
2:B:236:GLU:H	2:B:236:GLU:CD	2.20	0.41
2:B:262:SER:HB3	2:B:293:LEU:HD21	2.02	0.41
2:B:394:ASN:ND2	2:B:398:LYS:CE	2.82	0.41
2:B:65:LEU:HD21	2:B:71:LYS:HG2	2.01	0.41
4:D:141:TYR:O	4:D:145:GLY:N	2.51	0.41
4:D:274:PRO:O	4:D:277:LEU:HB2	2.20	0.41
4:D:348:LEU:HA	4:D:348:LEU:HD12	1.88	0.41
4:D:374:ASN:HB2	4:D:376:GLN:HG2	2.01	0.41
6:F:179:PHE:HD1	6:F:179:PHE:HA	1.73	0.41
7:G:211:LYS:HD2	7:G:214:MET:HB2	2.01	0.41
8:H:176:SER:O	8:H:180:ILE:HG13	2.20	0.41
8:H:24:GLU:HA	8:H:27:LEU:CD2	2.50	0.41
8:H:48:ASN:OD1	8:H:49:ASP:N	2.53	0.41
8:H:93:ASN:OD1	8:H:95:LYS:N	2.53	0.41
1:A:345:TYR:O	1:A:348:LEU:HB2	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:291:LYS:HE2	2:B:291:LYS:HB3	1.77	0.41
2:B:372:THR:O	2:B:375:GLN:HB2	2.20	0.41
2:B:404:LYS:HD2	2:B:405:PRO:CD	2.38	0.41
4:D:100:ASN:O	4:D:103:CYS:HB2	2.20	0.41
4:D:224:PHE:O	4:D:227:ALA:N	2.53	0.41
6:F:199:LEU:HA	6:F:199:LEU:HD12	1.76	0.41
6:F:26:PHE:HA	6:F:29:PHE:CD2	2.54	0.41
7:G:142:ASP:HB3	7:G:152:VAL:CG1	2.50	0.41
8:H:177:PHE:O	8:H:181:LEU:HG	2.20	0.41
3:C:235:ALA:HB1	3:C:239:PHE:CE2	2.51	0.41
3:C:73:LYS:HG3	3:C:77:PHE:CE1	2.55	0.41
4:D:110:ILE:HG12	4:D:114:ASN:HD21	1.84	0.41
5:E:11:ALA:O	5:E:14:VAL:HG22	2.20	0.41
6:F:189:TYR:CZ	6:F:193:LEU:HD11	2.55	0.41
1:A:307:LEU:HD23	9:I:40:ILE:HD13	2.01	0.41
3:C:307:ASN:HA	3:C:309:ARG:NH1	2.33	0.41
4:D:195:ASN:O	4:D:198:ILE:HG13	2.20	0.41
6:F:29:PHE:CE1	6:F:45:LEU:HD23	2.55	0.41
6:F:48:PHE:HE2	6:F:58:ARG:HG2	1.84	0.41
7:G:274:GLN:HB3	7:G:279:HIS:CE1	2.55	0.41
8:H:77:SER:O	8:H:81:TYR:HD2	2.03	0.41
2:B:124:VAL:HA	2:B:127:GLU:HG3	2.02	0.41
2:B:356:TYR:HD2	6:F:329:MET:SD	2.43	0.41
4:D:40:ILE:HG23	4:D:43:ARG:HH21	1.84	0.41
4:D:53:LYS:HD2	4:D:53:LYS:HA	1.81	0.41
6:F:264:ASP:O	6:F:265:LYS:C	2.58	0.41
7:G:138:ALA:O	7:G:155:ALA:HA	2.19	0.41
7:G:159:ILE:HA	7:G:159:ILE:HD13	1.89	0.41
8:H:22:ALA:HA	8:H:25:LYS:NZ	2.34	0.41
1:A:404:LEU:HA	1:A:404:LEU:HD23	1.79	0.41
2:B:340:ASP:OD1	2:B:340:ASP:C	2.57	0.41
2:B:411:LEU:HA	2:B:411:LEU:HD23	1.68	0.41
4:D:153:THR:HA	4:D:156:LYS:HD2	2.01	0.41
7:G:242:LYS:O	7:G:245:VAL:HB	2.20	0.41
8:H:14:ALA:HA	8:H:26:LEU:HD12	2.02	0.41
1:A:300:ALA:HA	1:A:301:PRO:HD3	1.71	0.41
1:A:395:ILE:HG22	1:A:395:ILE:O	2.21	0.41
2:B:297:GLU:O	2:B:299:LEU:N	2.53	0.41
3:C:113:ASP:CG	3:C:144:LEU:HB3	2.40	0.41
3:C:135:HIS:CD2	3:C:165:PHE:CE1	3.06	0.41
3:C:58:ILE:HG22	3:C:84:TYR:CE1	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:141:TYR:O	4:D:144:ILE:HG12	2.20	0.41
4:D:262:GLU:HG2	4:D:263:ARG:N	2.35	0.41
4:D:289:ILE:HG13	4:D:290:SER:H	1.84	0.41
4:D:53:LYS:O	4:D:57:GLU:CB	2.56	0.41
6:F:242:ILE:HD12	6:F:242:ILE:HG23	1.86	0.41
6:F:70:TYR:CD1	6:F:71:ASP:N	2.88	0.41
8:H:121:LYS:O	8:H:122:PHE:C	2.58	0.41
1:A:417:GLN:HA	1:A:420:GLU:OE2	2.19	0.41
2:B:330:GLY:N	2:B:334:ASN:HB2	2.22	0.41
3:C:287:THR:HG23	3:C:288:LYS:N	2.34	0.41
4:D:338:TYR:HE1	4:D:364:LEU:HD11	1.85	0.41
4:D:42:GLN:O	4:D:46:ALA:HB2	2.20	0.41
6:F:32:PHE:HB3	6:F:41:LEU:HD12	2.02	0.41
7:G:289:GLU:O	7:G:293:VAL:HG22	2.20	0.41
8:H:221:ALA:O	8:H:225:ASN:N	2.53	0.41
1:A:333:PHE:CE1	1:A:346:TYR:HD1	2.36	0.41
2:B:105:LYS:HZ1	2:B:138:ARG:HB3	1.85	0.41
3:C:262:LEU:HD12	3:C:263:LYS:N	2.36	0.41
7:G:225:LEU:HD23	7:G:225:LEU:HA	1.76	0.41
9:I:59:ILE:O	9:I:60:TRP:CD1	2.73	0.41
1:A:261:HIS:CG	1:A:262:THR:N	2.88	0.41
2:B:100:VAL:O	2:B:103:TYR:N	2.53	0.41
2:B:100:VAL:HA	2:B:103:TYR:CD2	2.55	0.41
3:C:208:ILE:HD13	3:C:208:ILE:HA	1.94	0.41
3:C:222:SER:O	3:C:226:HIS:CD2	2.74	0.41
4:D:149:ASN:O	4:D:152:LYS:HB2	2.20	0.41
6:F:179:PHE:O	6:F:183:ASN:N	2.46	0.41
6:F:343:GLN:O	6:F:344:VAL:C	2.59	0.41
7:G:157:ARG:HB3	7:G:197:TYR:CE2	2.55	0.41
1:A:448:LEU:HA	1:A:448:LEU:HD23	1.70	0.41
2:B:143:LEU:HD12	2:B:143:LEU:N	2.35	0.41
2:B:390:TYR:CE2	2:B:404:LYS:HA	2.54	0.41
4:D:307:TYR:HA	4:D:310:GLU:OE2	2.19	0.41
6:F:40:GLN:HA	6:F:43:GLU:CG	2.48	0.41
6:F:38:TRP:CD1	6:F:41:LEU:HD12	2.55	0.41
7:G:251:TYR:O	7:G:255:ILE:HG12	2.19	0.41
7:G:53:MET:HE2	7:G:65:VAL:HG21	2.02	0.41
1:A:252:ASP:HA	1:A:255:SER:OG	2.19	0.41
2:B:167:THR:CA	2:B:170:SER:HB3	2.50	0.41
2:B:293:LEU:HB3	2:B:296:GLN:OE1	2.20	0.41
2:B:369:LEU:HA	2:B:369:LEU:HD23	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:282:LEU:HD22	3:C:300:LYS:HE3	2.01	0.41
4:D:334:ARG:HD2	4:D:367:ASP:OD2	2.20	0.41
5:E:174:LEU:HD21	7:G:203:TYR:CD1	2.55	0.41
5:E:210:TYR:O	5:E:213:LYS:N	2.53	0.41
5:E:295:LYS:HA	5:E:298:ASN:ND2	2.31	0.41
6:F:284:GLU:O	6:F:287:LEU:HB2	2.20	0.41
6:F:37:LEU:O	6:F:41:LEU:HD13	2.21	0.41
7:G:242:LYS:O	7:G:245:VAL:HB	2.21	0.41
9:I:63:ASN:O	9:I:64:TRP:C	2.57	0.41
1:A:191:HIS:O	1:A:194:LEU:HB3	2.20	0.41
1:A:273:PHE:HB3	1:A:292:TYR:O	2.20	0.41
3:C:123:GLU:HG2	3:C:127:ARG:HE	1.84	0.41
5:E:286:ILE:O	5:E:289:ASP:HB3	2.19	0.41
5:E:59:ASP:N	5:E:63:SER:OG	2.53	0.41
2:B:148:LYS:HZ3	2:B:186:LEU:CD1	2.33	0.41
2:B:399:ILE:HG22	2:B:400:VAL:O	2.20	0.41
3:C:97:LEU:O	3:C:101:ILE:HG13	2.19	0.41
4:D:316:LEU:HD21	4:D:329:PHE:CD2	2.55	0.41
1:A:335:GLN:HE22	1:A:339:GLN:HB3	1.86	0.41
2:B:128:ASN:HB3	2:B:131:PHE:HE2	1.86	0.41
2:B:152:LYS:O	2:B:155:GLU:CB	2.64	0.41
3:C:282:LEU:HD12	3:C:300:LYS:NZ	2.34	0.41
3:C:408:THR:O	3:C:411:SER:N	2.54	0.41
4:D:163:SER:O	4:D:167:LYS:HG3	2.20	0.41
4:D:301:TYR:CE2	4:D:341:LEU:HD13	2.54	0.41
6:F:130:ASP:O	6:F:133:ILE:HB	2.21	0.41
6:F:250:TRP:CD1	6:F:250:TRP:N	2.88	0.41
6:F:70:TYR:CD1	6:F:71:ASP:N	2.89	0.41
7:G:135:ARG:C	7:G:157:ARG:HH12	2.23	0.41
7:G:116:CYS:HB3	7:G:154:ASP:HB3	2.02	0.41
7:G:254:ARG:HD2	7:G:276:PRO:HD2	2.01	0.41
7:G:278:LYS:O	7:G:282:GLU:CB	2.68	0.41
7:G:50:MET:HA	7:G:108:TYR:O	2.20	0.41
8:H:157:TYR:O	8:H:160:ALA:N	2.53	0.41
1:A:330:LEU:HD12	9:I:62:GLU:O	2.20	0.41
2:B:140:THR:HG21	2:B:163:LEU:HD22	1.96	0.41
2:B:40:LEU:O	2:B:44:LYS:N	2.45	0.41
4:D:267:LYS:HD3	4:D:271:ILE:HD11	2.03	0.41
5:E:34:VAL:HG11	5:E:56:PHE:CD2	2.55	0.41
6:F:219:ILE:HG13	6:F:220:SER:N	2.35	0.41
1:A:134:ILE:HA	1:A:137:PHE:HB3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:174:ARG:NH1	1:A:224:LYS:HG2	2.36	0.41
1:A:348:LEU:HA	1:A:348:LEU:HD23	1.77	0.41
2:B:194:SER:O	2:B:197:THR:HB	2.20	0.41
4:D:131:ALA:HB1	4:D:162:ILE:HD11	2.01	0.41
6:F:133:ILE:O	6:F:136:THR:HB	2.21	0.41
6:F:147:ARG:HD2	6:F:147:ARG:HA	1.63	0.41
6:F:271:LYS:O	6:F:274:ILE:HG22	2.21	0.41
6:F:49:PHE:N	6:F:49:PHE:CD1	2.87	0.41
6:F:60:ARG:HA	6:F:63:ASP:CB	2.32	0.41
8:H:46:ILE:HG21	8:H:48:ASN:CG	2.40	0.41
8:H:93:ASN:HB2	8:H:95:LYS:NZ	2.34	0.41
9:I:73:PHE:O	9:I:77:LEU:HB2	2.20	0.41
2:B:187:SER:HB2	2:B:195:GLN:HE21	1.85	0.41
5:E:235:LEU:HD23	5:E:235:LEU:HA	1.79	0.41
5:E:28:LYS:HG2	5:E:31:LYS:NZ	2.36	0.41
6:F:359:SER:OG	6:F:360:GLY:N	2.53	0.41
6:F:75:GLN:OE1	6:F:75:GLN:N	2.46	0.41
8:H:27:LEU:HG	8:H:31:LYS:HZ2	1.86	0.41
8:H:46:ILE:HG13	8:H:48:ASN:HB2	2.02	0.41
9:I:73:PHE:CE2	9:I:77:LEU:HD22	2.55	0.41
3:C:206:ASN:O	3:C:209:TYR:OH	2.33	0.41
4:D:174:ILE:O	4:D:177:LEU:HB2	2.20	0.41
4:D:289:ILE:O	4:D:292:LEU:HB3	2.21	0.41
6:F:362:GLN:HA	6:F:365:LYS:NZ	2.36	0.41
6:F:75:GLN:O	6:F:79:VAL:HG22	2.21	0.41
7:G:107:TRP:HB2	7:G:129:PHE:CD2	2.56	0.41
8:H:26:LEU:HA	8:H:26:LEU:HD23	1.81	0.41
8:H:42:PRO:O	8:H:51:TYR:OH	2.38	0.41
1:A:146:LEU:HB2	1:A:155:LEU:HD13	2.03	0.41
1:A:256:LYS:HG3	1:A:257:LEU:HG	2.03	0.41
1:A:424:SER:O	1:A:427:ILE:N	2.54	0.41
1:A:448:LEU:HA	1:A:448:LEU:HD23	1.79	0.41
2:B:205:LYS:O	2:B:208:PHE:HD2	2.02	0.41
2:B:58:VAL:O	2:B:62:ILE:HG12	2.19	0.41
3:C:285:LYS:HA	3:C:289:GLU:HB3	2.02	0.41
4:D:289:ILE:O	4:D:292:LEU:HB3	2.19	0.41
4:D:350:LEU:O	4:D:351:LYS:C	2.59	0.41
5:E:13:LEU:HA	5:E:13:LEU:HD12	1.65	0.41
5:E:73:ILE:HG22	5:E:74:GLU:N	2.36	0.41
7:G:142:ASP:C	7:G:142:ASP:OD1	2.58	0.41
7:G:68:VAL:HG12	7:G:69:PHE:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:207:THR:OG1	2:B:208:PHE:N	2.53	0.41
6:F:113:LYS:HB2	6:F:113:LYS:HE2	1.72	0.41
8:H:146:ILE:O	8:H:147:LYS:C	2.56	0.41
8:H:186:ARG:HH21	8:H:210:PHE:HB2	1.86	0.41
8:H:7:LEU:CD2	8:H:29:PRO:HB3	2.51	0.41
8:H:46:ILE:HG22	8:H:51:TYR:CE2	2.55	0.41
1:A:273:PHE:O	1:A:292:TYR:HB3	2.21	0.41
1:A:432:ILE:HG22	1:A:434:ALA:HB2	2.02	0.41
2:B:111:ASP:HA	2:B:114:THR:OG1	2.21	0.41
3:C:171:LYS:HD2	3:C:209:TYR:CZ	2.55	0.41
3:C:354:PHE:CG	3:C:357:VAL:HB	2.55	0.41
7:G:107:TRP:CD1	7:G:107:TRP:N	2.87	0.41
7:G:205:LYS:HE2	7:G:205:LYS:HB2	1.77	0.41
7:G:48:GLU:HB2	7:G:110:SER:O	2.21	0.41
2:B:128:ASN:HD21	2:B:131:PHE:HE2	1.67	0.41
2:B:122:ILE:HB	2:B:136:ARG:NH2	2.36	0.41
4:D:131:ALA:O	4:D:135:ILE:HG13	2.20	0.41
4:D:226:GLU:HG3	4:D:230:LEU:HD23	2.02	0.41
4:D:411:LEU:HD23	4:D:411:LEU:HA	1.89	0.41
5:E:15:LEU:HA	5:E:15:LEU:HD23	1.79	0.41
5:E:16:LEU:HD23	5:E:16:LEU:HA	1.82	0.41
2:B:206:LYS:HB2	2:B:206:LYS:HE2	1.87	0.41
2:B:291:LYS:HA	2:B:297:GLU:OE2	2.21	0.41
3:C:149:LYS:O	3:C:149:LYS:HG3	2.21	0.41
3:C:362:ILE:O	3:C:366:ILE:HG22	2.19	0.41
5:E:186:LEU:HD13	7:G:289:GLU:HB2	2.02	0.41
4:D:418:GLY:HA2	5:E:288:PHE:HE1	1.85	0.41
5:E:34:VAL:HG12	5:E:56:PHE:CD2	2.55	0.41
5:E:69:ASP:OD2	5:E:72:TYR:HB2	2.21	0.41
6:F:257:ALA:HB2	6:F:265:LYS:NZ	2.36	0.41
6:F:358:ILE:HG22	6:F:359:SER:O	2.21	0.41
6:F:52:ALA:O	6:F:55:THR:N	2.35	0.41
1:A:230:LYS:HB2	1:A:230:LYS:HE2	1.88	0.41
1:A:247:VAL:HG23	1:A:279:ILE:HG12	2.01	0.41
1:A:431:VAL:O	1:A:432:ILE:HD13	2.20	0.41
2:B:146:ILE:C	2:B:148:LYS:H	2.23	0.41
2:B:60:ALA:O	2:B:64:ASP:N	2.53	0.41
3:C:120:LYS:HD3	3:C:120:LYS:HA	1.87	0.41
4:D:160:LYS:O	4:D:162:ILE:HG13	2.21	0.41
6:F:364:THR:O	6:F:367:LYS:HB3	2.19	0.41
6:F:39:PHE:HD2	6:F:40:GLN:NE2	2.17	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:141:LEU:HG	8:H:141:LEU:H	1.65	0.41
1:A:287:SER:O	1:A:289:ALA:N	2.53	0.41
2:B:115:ARG:NH1	2:B:116:ILE:CD1	2.84	0.41
2:B:229:LEU:HA	2:B:229:LEU:HD23	1.70	0.41
4:D:119:LYS:HG2	4:D:130:GLN:OE1	2.21	0.41
4:D:176:ARG:NH1	4:D:213:TYR:HH	2.12	0.41
5:E:186:LEU:HB3	8:H:271:GLU:OE2	2.21	0.41
6:F:266:PHE:CD2	6:F:291:ILE:HG13	2.54	0.41
6:F:285:SER:OG	6:F:286:PHE:N	2.54	0.41
6:F:319:LEU:HD11	6:F:323:ASN:ND2	2.31	0.41
6:F:53:LYS:HA	6:F:58:ARG:NH1	2.35	0.41
6:F:48:PHE:HE2	6:F:61:LEU:HD13	1.85	0.41
7:G:24:LYS:HE3	7:G:61:TYR:CZ	2.55	0.41
1:A:188:TYR:CG	1:A:236:LEU:HD22	2.56	0.41
1:A:318:CYS:O	1:A:321:GLN:HB2	2.19	0.41
2:B:109:SER:C	2:B:114:THR:CG2	2.89	0.41
2:B:335:LYS:HE3	2:B:335:LYS:HB2	1.78	0.41
2:B:380:ILE:O	2:B:384:VAL:HG23	2.20	0.41
3:C:173:SER:O	3:C:176:ASP:OD1	2.38	0.41
4:D:315:VAL:HG13	4:D:316:LEU:H	1.86	0.41
5:E:10:ILE:HD12	5:E:10:ILE:HG23	1.87	0.41
5:E:117:ASN:ND2	5:E:139:ALA:H	2.17	0.41
5:E:203:LYS:O	5:E:206:ASP:HB2	2.21	0.41
5:E:204:LEU:HD12	5:E:205:LYS:N	2.35	0.41
5:E:62:ASN:O	5:E:63:SER:HB3	2.20	0.41
6:F:14:LEU:HD11	6:F:64:ASN:HD22	1.86	0.41
6:F:26:PHE:HA	6:F:29:PHE:HD2	1.86	0.41
6:F:382:LYS:O	6:F:385:GLU:N	2.53	0.41
8:H:141:LEU:HA	8:H:141:LEU:HD13	1.79	0.41
8:H:43:ASP:CG	8:H:45:SER:HB3	2.41	0.41
8:H:71:GLN:HE21	8:H:173:GLU:CD	2.23	0.41
8:H:94:HIS:O	8:H:98:GLU:HG2	2.21	0.41
2:B:211:PRO:HA	2:B:214:GLU:OE1	2.20	0.41
2:B:31:ASP:O	2:B:35:ALA:N	2.44	0.41
4:D:312:TYR:CZ	9:I:74:THR:HG21	2.56	0.41
2:B:280:LEU:O	2:B:284:ILE:HG12	2.20	0.41
4:D:101:GLU:C	4:D:105:LYS:HZ3	2.24	0.41
4:D:162:ILE:HG23	4:D:166:ALA:HB3	2.03	0.41
4:D:258:LEU:HD11	4:D:333:MET:HE1	2.02	0.41
2:B:133:GLU:OE2	2:B:171:MET:HA	2.21	0.41
3:C:413:LEU:HD23	3:C:413:LEU:HA	1.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:177:LEU:N	4:D:177:LEU:HD12	2.36	0.41
4:D:303:SER:O	4:D:307:TYR:HD2	2.04	0.41
5:E:106:ILE:O	5:E:109:LEU:HG	2.21	0.41
5:E:63:SER:C	5:E:64:ASP:O	2.58	0.41
1:A:287:SER:C	1:A:289:ALA:N	2.74	0.41
1:A:314:ASN:ND2	1:A:338:MET:SD	2.92	0.41
2:B:317:THR:O	2:B:320:PRO:HD2	2.20	0.41
3:C:114:GLN:O	3:C:114:GLN:HG3	2.19	0.41
3:C:118:CYS:HB2	3:C:141:LEU:HD13	2.01	0.41
4:D:139:GLU:O	4:D:142:ALA:HB3	2.21	0.41
4:D:289:ILE:HG13	4:D:290:SER:H	1.86	0.41
5:E:290:ASP:O	5:E:291:LEU:C	2.59	0.41
8:H:213:ASN:HB3	8:H:216:GLU:HG3	2.02	0.41
8:H:66:ALA:HA	8:H:81:TYR:HD2	1.85	0.41
1:A:372:LEU:HA	1:A:372:LEU:HD23	1.86	0.41
2:B:97:ILE:HD13	2:B:132:VAL:HG12	2.01	0.41
3:C:178:HIS:O	3:C:182:SER:HB3	2.21	0.41
3:C:219:ASP:C	3:C:238:TYR:HB3	2.41	0.41
3:C:282:LEU:HB2	3:C:300:LYS:NZ	2.35	0.41
4:D:172:LEU:HB3	4:D:213:TYR:CZ	2.56	0.41
4:D:342:LEU:O	4:D:344:SER:N	2.54	0.41
5:E:290:ASP:O	5:E:293:GLU:HB2	2.20	0.41
6:F:149:LEU:HA	6:F:149:LEU:HD23	1.85	0.41
7:G:126:GLN:OE1	7:G:138:ALA:HB2	2.21	0.41
8:H:172:SER:OG	8:H:173:GLU:N	2.54	0.41
8:H:32:ILE:HA	8:H:35:ILE:HG13	2.02	0.41
8:H:39:LEU:N	8:H:39:LEU:HD23	2.36	0.41
8:H:64:VAL:O	8:H:68:ALA:HB3	2.20	0.41
1:A:160:ARG:HH21	1:A:206:GLN:CD	2.24	0.41
2:B:140:THR:HA	2:B:143:LEU:CD2	2.50	0.41
2:B:352:VAL:O	2:B:355:GLU:N	2.41	0.41
4:D:132:GLN:HA	4:D:135:ILE:HD12	2.03	0.41
7:G:109:HIS:CD2	7:G:110:SER:H	2.39	0.41
7:G:107:TRP:CD1	7:G:129:PHE:HD2	2.39	0.41
8:H:106:ILE:O	8:H:109:TYR:N	2.54	0.41
1:A:163:VAL:HA	1:A:166:ASN:HB2	2.03	0.41
1:A:348:LEU:HD23	1:A:348:LEU:HA	1.83	0.41
2:B:193:TYR:HB3	2:B:227:ILE:HD13	2.02	0.41
3:C:145:HIS:HB3	3:C:151:TYR:HA	2.02	0.41
4:D:101:GLU:HB3	4:D:105:LYS:NZ	2.36	0.41
4:D:320:LYS:HE3	4:D:321:TYR:CE1	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:35:GLY:O	5:E:92:TRP:HB2	2.20	0.41
5:E:43:SER:OG	5:E:44:SER:N	2.53	0.41
5:E:61:LYS:H	5:E:63:SER:H	1.67	0.41
6:F:18:ALA:HB1	6:F:22:LEU:HD11	2.02	0.41
7:G:196:TYR:CD1	7:G:196:TYR:N	2.86	0.41
7:G:289:GLU:OE1	7:G:289:GLU:N	2.48	0.41
8:H:68:ALA:O	8:H:72:THR:HG23	2.21	0.41
1:A:138:MET:O	1:A:141:LEU:N	2.54	0.41
1:A:157:GLU:HA	1:A:160:ARG:NH2	2.35	0.41
2:B:188:ILE:O	2:B:191:GLY:N	2.52	0.41
2:B:241:LEU:HA	2:B:244:ILE:HG12	2.03	0.41
3:C:230:LYS:HG3	3:C:230:LYS:O	2.21	0.41
3:C:302:VAL:O	3:C:305:ALA:HB3	2.21	0.41
4:D:25:GLU:O	4:D:28:GLU:HB2	2.21	0.41
4:D:35:GLN:CD	4:D:35:GLN:H	2.23	0.41
5:E:226:LEU:HD23	5:E:226:LEU:HA	1.74	0.41
5:E:236:LEU:HA	5:E:236:LEU:HD23	1.80	0.41
6:F:165:LEU:HD12	6:F:165:LEU:HA	1.79	0.41
7:G:291:ASN:O	7:G:295:VAL:HG23	2.21	0.41
7:G:71:MET:HE3	7:G:72:PRO:HD2	2.02	0.41
8:H:41:ILE:HA	8:H:51:TYR:HE1	1.85	0.41
1:A:317:HIS:CE1	1:A:321:GLN:HE21	2.39	0.41
1:A:400:LYS:HE3	1:A:400:LYS:HB2	1.83	0.41
1:A:411:LEU:HD23	1:A:411:LEU:HA	1.84	0.41
1:A:472:HIS:CE1	1:A:476:LEU:HD11	2.56	0.41
1:A:479:MET:C	1:A:481:TYR:H	2.22	0.41
2:B:125:VAL:HG12	2:B:132:VAL:CG2	2.51	0.41
2:B:296:GLN:OE1	2:B:296:GLN:N	2.53	0.41
2:B:332:GLU:CG	2:B:333:ALA:N	2.76	0.41
3:C:149:LYS:O	3:C:150:GLN:C	2.56	0.41
4:D:213:TYR:CE1	4:D:243:LEU:HD21	2.55	0.41
4:D:322:LEU:HD23	4:D:322:LEU:HA	1.72	0.41
5:E:31:LYS:HG2	5:E:32:ARG:H	1.84	0.41
7:G:104:VAL:O	7:G:104:VAL:HG23	2.21	0.41
7:G:95:LEU:HA	7:G:98:THR:HG23	2.02	0.41
8:H:126:LEU:O	8:H:127:GLN:C	2.58	0.41
8:H:147:LYS:O	8:H:148:LEU:C	2.58	0.41
8:H:64:VAL:HA	8:H:67:LEU:HD12	2.02	0.41
1:A:143:GLN:OE1	1:A:183:LEU:HD12	2.20	0.41
1:A:142:VAL:O	1:A:145:PHE:HB3	2.21	0.41
2:B:346:ILE:HG13	2:B:347:GLU:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:411:LEU:O	2:B:414:GLU:HB3	2.21	0.41
3:C:188:LEU:HD23	3:C:188:LEU:HA	1.83	0.41
3:C:246:TYR:HB3	3:C:258:ALA:HB2	2.03	0.41
3:C:90:LYS:CG	3:C:92:LYS:HG2	2.51	0.41
4:D:219:LEU:HD21	4:D:322:LEU:HD23	2.02	0.41
6:F:138:LEU:HD11	6:F:181:PHE:CD2	2.55	0.41
6:F:138:LEU:HA	6:F:138:LEU:HD12	1.77	0.41
7:G:148:LYS:HG3	7:G:148:LYS:O	2.21	0.41
7:G:218:LYS:HE2	7:G:218:LYS:HB2	1.91	0.41
2:B:104:LEU:HD13	2:B:118:VAL:HG22	2.01	0.41
2:B:178:GLN:O	2:B:181:LEU:HB2	2.21	0.41
2:B:66:LEU:C	2:B:66:LEU:CD1	2.85	0.41
4:D:114:ASN:O	4:D:118:GLN:HG3	2.21	0.41
5:E:130:VAL:HG12	5:E:131:GLY:N	2.29	0.41
5:E:9:THR:HA	5:E:160:THR:HG22	2.03	0.41
8:H:226:TRP:O	8:H:228:ILE:HG13	2.21	0.41
1:A:267:SER:O	1:A:271:ARG:HG3	2.21	0.41
1:A:312:GLN:O	1:A:315:LYS:HB2	2.20	0.41
2:B:334:ASN:HB3	2:B:337:HIS:CD2	2.51	0.41
2:B:81:LEU:O	2:B:85:LYS:HG3	2.20	0.41
3:C:406:ASP:OD1	3:C:407:ALA:N	2.54	0.41
4:D:27:SER:HB2	4:D:180:PHE:CE1	2.55	0.41
5:E:24:ARG:HH11	7:G:100:ARG:HG2	1.86	0.41
6:F:15:ARG:NH2	6:F:30:GLU:OE2	2.54	0.41
6:F:256:ASN:O	6:F:260:VAL:HG22	2.20	0.41
6:F:49:PHE:CE1	6:F:58:ARG:HD2	2.56	0.41
6:F:49:PHE:CE2	6:F:84:ALA:HB3	2.52	0.41
7:G:206:THR:N	7:G:209:GLU:OE1	2.45	0.41
8:H:198:ASP:OD1	8:H:198:ASP:N	2.54	0.41
8:H:215:LYS:O	8:H:219:LYS:HG3	2.21	0.41
2:B:174:SER:O	2:B:178:GLN:HB2	2.21	0.41
2:B:219:GLU:HA	2:B:222:ASN:ND2	2.36	0.41
2:B:296:GLN:H	2:B:296:GLN:CD	2.25	0.41
2:B:412:LEU:HB3	7:G:230:TYR:CD2	2.56	0.41
3:C:246:TYR:OH	3:C:257:LYS:NZ	2.31	0.41
2:B:122:ILE:HG13	2:B:136:ARG:HH22	1.86	0.41
2:B:167:THR:HG22	2:B:171:MET:HB2	2.02	0.41
3:C:231:ASP:O	3:C:234:THR:N	2.54	0.41
3:C:423:VAL:HG21	4:D:410:LEU:HD11	2.03	0.41
3:C:425:GLN:O	3:C:428:GLU:HB3	2.21	0.41
4:D:97:GLU:O	4:D:101:GLU:HG3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:202:GLY:HA2	4:D:207:ARG:HH11	1.86	0.41
1:A:481:TYR:CB	5:E:298:ASN:HD21	2.33	0.41
6:F:26:PHE:HA	6:F:29:PHE:CD2	2.56	0.41
7:G:119:SER:O	7:G:122:ASP:HB2	2.21	0.41
2:B:265:VAL:O	2:B:266:TYR:C	2.58	0.41
2:B:367:GLU:O	2:B:370:ASP:N	2.54	0.41
2:B:369:LEU:HD23	2:B:369:LEU:HA	1.62	0.41
2:B:79:LEU:HD21	2:B:124:VAL:HG11	2.02	0.41
3:C:373:VAL:HG12	3:C:374:GLU:N	2.36	0.41
4:D:145:GLY:O	4:D:181:TYR:OH	2.32	0.41
4:D:418:GLY:HA2	5:E:288:PHE:HE1	1.85	0.41
4:D:48:GLU:H	4:D:48:GLU:HG3	1.73	0.41
6:F:57:LEU:HD23	6:F:60:ARG:HD2	2.03	0.41
7:G:205:LYS:HB3	7:G:210:THR:HG23	2.02	0.41
7:G:229:ASP:HB3	7:G:232:GLU:OE2	2.21	0.41
7:G:27:VAL:HA	7:G:63:VAL:O	2.21	0.41
1:A:293:ILE:O	1:A:296:ALA:N	2.54	0.41
1:A:438:HIS:O	1:A:438:HIS:ND1	2.54	0.41
2:B:250:ILE:HD12	2:B:256:LYS:HE2	2.03	0.41
2:B:372:THR:OG1	2:B:375:GLN:OE1	2.22	0.41
3:C:131:VAL:O	3:C:135:HIS:HB2	2.21	0.41
3:C:153:ASP:O	3:C:157:LEU:HD13	2.21	0.41
3:C:181:GLU:O	3:C:185:TYR:HD2	2.04	0.41
3:C:222:SER:HB2	3:C:238:TYR:CG	2.56	0.41
4:D:160:LYS:HD2	4:D:160:LYS:HA	1.93	0.41
4:D:187:VAL:O	4:D:190:LYS:N	2.54	0.41
4:D:392:ARG:C	4:D:394:ASP:H	2.23	0.41
6:F:127:LEU:HD23	6:F:127:LEU:HA	1.68	0.41
6:F:65:PHE:O	6:F:68:LYS:N	2.38	0.41
7:G:117:TRP:CD2	7:G:190:HIS:CE1	3.08	0.41
7:G:275:ASP:OD2	7:G:277:LYS:HB3	2.20	0.41
8:H:145:PRO:O	8:H:148:LEU:HB3	2.20	0.41
1:A:436:ILE:HD12	8:H:196:SER:HB3	2.02	0.41
8:H:213:ASN:CG	8:H:215:LYS:HG2	2.41	0.41
9:I:82:ASP:HA	9:I:85:LYS:HG2	2.02	0.41
1:A:330:LEU:HD21	1:A:346:TYR:HE1	1.84	0.41
1:A:396:SER:OG	1:A:397:LEU:N	2.54	0.41
2:B:433:ILE:HA	2:B:436:GLU:OE2	2.21	0.41
3:C:241:GLU:O	3:C:244:GLU:N	2.54	0.41
3:C:311:LEU:HA	3:C:314:PHE:HB2	2.03	0.41
4:D:239:THR:HG23	4:D:239:THR:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:42:GLN:O	4:D:45:GLU:HB2	2.21	0.41
6:F:119:SER:HA	6:F:122:HIS:CD2	2.56	0.41
6:F:293:LEU:O	6:F:296:LEU:HB3	2.21	0.41
7:G:144:ILE:HA	7:G:144:ILE:HD13	1.84	0.41
1:A:223:LEU:HD12	1:A:224:LYS:N	2.36	0.41
1:A:479:MET:HE1	5:E:294:ASN:ND2	2.35	0.41
2:B:104:LEU:HD22	2:B:108:LYS:HZ3	1.85	0.41
2:B:167:THR:HG21	2:B:171:MET:SD	2.61	0.41
2:B:369:LEU:HD23	2:B:369:LEU:HA	1.63	0.41
2:B:409:SER:O	2:B:410:GLN:C	2.58	0.41
3:C:312:LEU:H	3:C:312:LEU:HD12	1.85	0.41
3:C:319:LYS:O	3:C:322:GLU:HG2	2.20	0.41
2:B:392:LYS:HE2	3:C:401:GLU:OE2	2.20	0.41
4:D:349:SER:O	4:D:352:SER:HB2	2.20	0.41
4:D:62:TYR:HA	4:D:65:TYR:HB3	2.03	0.41
5:E:276:ILE:C	5:E:279:SER:HG	2.21	0.41
5:E:296:ILE:O	5:E:300:LYS:HG3	2.21	0.41
6:F:12:SER:O	6:F:15:ARG:HB3	2.21	0.41
6:F:192:SER:O	6:F:195:TYR:N	2.53	0.41
6:F:196:LEU:HD23	6:F:196:LEU:HA	1.66	0.41
6:F:74:ASN:OD1	6:F:75:GLN:N	2.54	0.41
6:F:94:GLU:O	6:F:97:LYS:HB3	2.20	0.41
6:F:92:PHE:O	6:F:95:SER:HB2	2.21	0.41
7:G:118:LEU:HB3	7:G:196:TYR:CE2	2.56	0.41
7:G:123:VAL:O	7:G:126:GLN:N	2.54	0.41
7:G:148:LYS:CG	7:G:149:GLY:N	2.83	0.41
8:H:27:LEU:HD12	8:H:28:PRO:HD3	2.03	0.41
2:B:235:LEU:HD21	2:B:276:LEU:HD22	2.03	0.41
2:B:234:TYR:O	2:B:236:GLU:N	2.54	0.41
3:C:200:ALA:O	3:C:204:ALA:CB	2.65	0.41
4:D:390:THR:HG21	4:D:392:ARG:NH1	2.36	0.41
4:D:411:LEU:O	4:D:412:THR:C	2.59	0.41
5:E:137:TYR:CE1	5:E:156:HIS:CD2	3.09	0.41
5:E:272:GLU:O	5:E:273:LEU:C	2.59	0.41
5:E:31:LYS:HE2	5:E:31:LYS:HB2	1.90	0.41
5:E:58:GLU:N	5:E:58:GLU:OE1	2.51	0.41
6:F:179:PHE:O	6:F:183:ASN:N	2.52	0.41
6:F:29:PHE:O	6:F:30:GLU:C	2.59	0.41
6:F:375:ASP:O	6:F:378:GLU:HG2	2.21	0.41
1:A:177:ASN:HB3	1:A:226:ASP:OD2	2.20	0.41
1:A:303:ASN:HD21	1:A:305:LYS:HE2	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:79:LEU:HA	2:B:79:LEU:HD23	1.90	0.41
3:C:116:PHE:HA	3:C:119:GLU:CG	2.51	0.41
5:E:92:TRP:CZ2	5:E:120:LEU:HD22	2.56	0.41
5:E:299:LYS:O	5:E:303:GLU:HB2	2.21	0.41
6:F:230:PHE:HB2	6:F:259:THR:CG2	2.50	0.41
6:F:280:LEU:HA	6:F:280:LEU:HD23	1.82	0.41
7:G:103:MET:O	7:G:105:VAL:HG13	2.21	0.41
9:I:79:ALA:O	9:I:83:ARG:HB3	2.21	0.41
1:A:425:ARG:HH11	8:H:155:GLY:CA	2.34	0.41
2:B:66:LEU:HD12	2:B:67:ALA:HA	2.03	0.41
3:C:135:HIS:O	3:C:138:SER:HB2	2.21	0.41
3:C:257:LYS:HE2	3:C:257:LYS:HB2	1.86	0.41
6:F:243:VAL:HA	6:F:252:PHE:HE2	1.82	0.41
7:G:48:GLU:HB2	7:G:110:SER:O	2.20	0.41
1:A:266:SER:HB2	1:A:299:LYS:O	2.21	0.41
2:B:148:LYS:NZ	2:B:153:ILE:HG21	2.36	0.41
2:B:210:ASN:HD21	2:B:212:LYS:HB2	1.85	0.41
2:B:382:ASP:O	2:B:386:GLN:HG2	2.21	0.41
2:B:53:ALA:O	2:B:56:LYS:HB3	2.21	0.41
3:C:175:VAL:HG23	3:C:208:ILE:CD1	2.51	0.41
3:C:219:ASP:O	3:C:238:TYR:HB3	2.20	0.41
3:C:270:ILE:HG12	3:C:303:ALA:CB	2.51	0.41
3:C:65:TYR:O	3:C:74:LEU:HD21	2.21	0.41
4:D:103:CYS:O	4:D:106:ASN:N	2.53	0.41
4:D:332:GLU:O	4:D:335:ARG:N	2.50	0.41
4:D:40:ILE:HG22	4:D:43:ARG:HH21	1.85	0.41
5:E:210:TYR:O	5:E:213:LYS:N	2.54	0.41
6:F:391:ILE:HD11	8:H:268:ILE:HA	2.03	0.41
7:G:266:LEU:HD22	7:G:270:TYR:CD2	2.55	0.41
1:A:303:ASN:HD21	1:A:305:LYS:HE2	1.85	0.41
2:B:223:LEU:HD23	2:B:226:LYS:NZ	2.36	0.41
2:B:224:LEU:HA	2:B:224:LEU:HD23	1.64	0.41
2:B:298:SER:O	2:B:302:LEU:HB2	2.21	0.41
4:D:348:LEU:HA	4:D:348:LEU:HD12	1.71	0.41
4:D:410:LEU:HA	4:D:410:LEU:HD12	1.87	0.41
4:D:46:ALA:O	4:D:50:VAL:HG23	2.21	0.41
4:D:44:LYS:O	4:D:48:GLU:HG3	2.21	0.41
5:E:194:LEU:HD22	6:F:392:TRP:CH2	2.56	0.41
5:E:215:ILE:HG21	5:E:215:ILE:HD13	1.89	0.41
5:E:24:ARG:HE	7:G:100:ARG:NE	2.19	0.41
6:F:192:SER:O	6:F:195:TYR:HB3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:246:SER:HA	6:F:249:ASP:HB2	2.03	0.41
7:G:55:GLY:O	7:G:102:GLN:HB3	2.21	0.41
8:H:137:GLU:OE2	8:H:150:ARG:NH2	2.48	0.41
8:H:224:ARG:HB3	8:H:226:TRP:CE2	2.56	0.41
8:H:51:TYR:CD2	8:H:55:LEU:HD11	2.56	0.41
1:A:218:LEU:O	1:A:222:SER:HB2	2.20	0.41
1:A:388:ILE:HG21	1:A:422:MET:HE2	2.02	0.41
2:B:80:THR:O	2:B:83:SER:HB3	2.21	0.41
4:D:103:CYS:O	4:D:106:ASN:HB2	2.20	0.41
4:D:338:TYR:OH	4:D:367:ASP:OD2	2.38	0.41
6:F:82:LEU:O	6:F:85:SER:HB3	2.21	0.41
7:G:59:ASP:O	7:G:135:ARG:NH2	2.54	0.41
8:H:188:GLU:O	8:H:189:ILE:C	2.58	0.41
2:B:143:LEU:CA	2:B:146:ILE:HG12	2.50	0.41
2:B:374:SER:HA	2:B:377:GLU:OE2	2.20	0.41
3:C:182:SER:O	3:C:194:SER:OG	2.26	0.41
3:C:187:LYS:HA	3:C:187:LYS:HD3	1.88	0.41
4:D:189:GLU:O	4:D:192:GLU:HB2	2.21	0.41
5:E:128:GLN:HE21	5:E:130:VAL:CG1	2.34	0.41
5:E:164:GLU:CD	5:E:164:GLU:H	2.24	0.41
5:E:20:ASP:O	5:E:24:ARG:HB3	2.21	0.41
7:G:236:SER:O	7:G:238:LEU:N	2.54	0.41
8:H:258:ASN:O	8:H:262:LYS:HG3	2.21	0.41
8:H:42:PRO:C	8:H:44:LEU:HD12	2.41	0.41
1:A:201:ILE:O	1:A:204:ASP:HB2	2.21	0.40
2:B:105:LYS:CA	2:B:108:LYS:CD	2.93	0.40
2:B:222:ASN:O	2:B:225:VAL:HB	2.21	0.40
3:C:368:LEU:HG	3:C:372:GLN:NE2	2.35	0.40
4:D:51:LEU:HD11	4:D:55:LYS:HZ2	1.86	0.40
7:G:141:VAL:HG22	7:G:153:ILE:CD1	2.51	0.40
8:H:199:PHE:O	8:H:200:LEU:HD22	2.20	0.40
9:I:78:LYS:HG3	9:I:79:ALA:N	2.35	0.40
2:B:250:ILE:O	2:B:257:TRP:HD1	2.04	0.40
4:D:165:GLY:HA2	4:D:168:ILE:HD12	2.03	0.40
4:D:280:ILE:HD12	4:D:281:SER:HB3	2.02	0.40
4:D:47:ALA:O	4:D:50:VAL:HB	2.21	0.40
7:G:118:LEU:HG	7:G:156:PHE:CE1	2.56	0.40
8:H:11:LEU:HD13	8:H:30:ILE:HG21	2.03	0.40
8:H:37:ASN:HB3	8:H:41:ILE:CD1	2.50	0.40
2:B:187:SER:O	2:B:192:ASP:N	2.44	0.40
3:C:265:MET:HB2	3:C:265:MET:HE3	1.96	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:370:THR:O	3:C:373:VAL:HB	2.22	0.40
3:C:376:LYS:HD2	3:C:376:LYS:HA	1.78	0.40
4:D:178:GLY:HA3	4:D:187:VAL:HG22	2.04	0.40
4:D:204:TRP:O	4:D:207:ARG:HB3	2.21	0.40
4:D:416:LYS:HB3	4:D:416:LYS:HE2	1.93	0.40
6:F:209:GLU:CD	6:F:209:GLU:H	2.22	0.40
6:F:49:PHE:HE2	6:F:81:TYR:HB3	1.86	0.40
6:F:42:SER:HB3	6:F:73:ILE:HG23	2.03	0.40
6:F:94:GLU:HA	6:F:97:LYS:HE3	2.02	0.40
8:H:67:LEU:HA	8:H:70:ILE:HD11	2.03	0.40
1:A:432:ILE:HG23	1:A:432:ILE:HD12	1.79	0.40
2:B:63:VAL:HG23	2:B:103:TYR:CD2	2.51	0.40
2:B:224:LEU:HA	2:B:224:LEU:HD23	1.66	0.40
3:C:169:ASP:CG	3:C:170:ASP:H	2.24	0.40
3:C:399:VAL:HG12	3:C:400:TYR:N	2.36	0.40
4:D:149:ASN:O	4:D:152:LYS:HB2	2.21	0.40
6:F:153:LEU:O	6:F:156:THR:OG1	2.28	0.40
7:G:108:TYR:O	7:G:108:TYR:CG	2.73	0.40
7:G:112:PRO:HA	7:G:143:PRO:HD2	2.02	0.40
8:H:121:LYS:O	8:H:124:SER:HB2	2.21	0.40
8:H:224:ARG:HB3	8:H:226:TRP:CE2	2.56	0.40
8:H:270:ILE:HD13	8:H:270:ILE:HA	1.87	0.40
1:A:228:GLU:HA	1:A:264:VAL:HG23	2.03	0.40
2:B:188:ILE:HG12	2:B:193:TYR:CE1	2.56	0.40
2:B:194:SER:O	2:B:198:VAL:HG23	2.21	0.40
2:B:235:LEU:O	2:B:238:ALA:HB3	2.21	0.40
2:B:308:LEU:N	2:B:308:LEU:HD12	2.36	0.40
2:B:75:LEU:HD23	2:B:78:GLN:NE2	2.36	0.40
2:B:96:MET:HA	2:B:99:LYS:NZ	2.36	0.40
3:C:140:LYS:O	3:C:144:LEU:HG	2.21	0.40
4:D:179:PHE:HE1	4:D:187:VAL:HG11	1.85	0.40
4:D:192:GLU:HA	4:D:195:ASN:HD22	1.86	0.40
4:D:93:LYS:HG2	4:D:94:PHE:N	2.36	0.40
5:E:289:ASP:O	5:E:290:ASP:C	2.56	0.40
7:G:267:LYS:HE3	7:G:267:LYS:HB2	1.80	0.40
7:G:286:GLU:HA	7:G:289:GLU:OE2	2.22	0.40
2:B:291:LYS:HD2	2:B:291:LYS:HA	1.91	0.40
3:C:267:LEU:O	3:C:271:MET:HG2	2.21	0.40
3:C:283:ASN:HD22	3:C:286:TYR:HE2	1.69	0.40
3:C:325:LEU:O	3:C:332:ARG:HB2	2.21	0.40
3:C:359:ILE:HD11	3:C:374:GLU:HB3	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:172:LEU:HD22	4:D:213:TYR:CE2	2.56	0.40
4:D:395:ASN:N	4:D:395:ASN:OD1	2.51	0.40
5:E:24:ARG:HG2	7:G:100:ARG:HG2	2.03	0.40
7:G:278:LYS:O	7:G:282:GLU:HB2	2.21	0.40
7:G:50:MET:HG2	7:G:51:GLY:N	2.35	0.40
8:H:102:LYS:HE3	8:H:102:LYS:HB3	1.86	0.40
1:A:318:CYS:SG	1:A:345:TYR:HB3	2.61	0.40
1:A:434:ALA:O	1:A:435:LYS:HD2	2.21	0.40
2:B:118:VAL:O	2:B:122:ILE:HG22	2.21	0.40
2:B:415:TRP:HE1	5:E:237:PRO:HG3	1.86	0.40
2:B:51:ASP:O	2:B:55:SER:OG	2.17	0.40
3:C:298:ALA:HA	3:C:321:TYR:CE2	2.54	0.40
4:D:307:TYR:HA	4:D:310:GLU:OE2	2.21	0.40
4:D:411:LEU:HA	4:D:411:LEU:HD23	1.89	0.40
4:D:60:ALA:HB3	4:D:61:PRO:HD3	2.04	0.40
1:A:313:SER:O	1:A:314:ASN:C	2.59	0.40
1:A:327:ILE:HA	1:A:328:PRO:HD3	1.94	0.40
1:A:383:LEU:HA	1:A:383:LEU:HD23	1.61	0.40
3:C:368:LEU:HD12	3:C:368:LEU:HA	1.78	0.40
4:D:309:LEU:O	4:D:312:TYR:N	2.55	0.40
4:D:387:ILE:HG13	4:D:388:VAL:H	1.86	0.40
4:D:62:TYR:O	4:D:66:LEU:HD13	2.21	0.40
6:F:123:GLY:O	6:F:126:ILE:HB	2.22	0.40
7:G:57:PHE:CD1	7:G:63:VAL:HG22	2.56	0.40
8:H:75:PHE:HD1	8:H:78:PHE:HE2	1.67	0.40
1:A:251:SER:O	1:A:254:ILE:HG13	2.21	0.40
1:A:402:ILE:HA	1:A:402:ILE:HD13	1.83	0.40
2:B:136:ARG:O	2:B:139:VAL:HG23	2.22	0.40
2:B:247:THR:CB	2:B:250:ILE:HG22	2.45	0.40
2:B:289:ASN:HA	2:B:292:LYS:NZ	2.36	0.40
3:C:110:SER:OG	3:C:111:LEU:HD22	2.21	0.40
3:C:136:SER:O	3:C:139:ILE:HG22	2.20	0.40
3:C:145:HIS:HB2	3:C:154:SER:HB3	2.03	0.40
3:C:163:ARG:HD3	3:C:166:LYS:HD2	2.03	0.40
4:D:117:ILE:HD11	4:D:137:LEU:HD22	2.04	0.40
4:D:173:THR:HA	4:D:176:ARG:CZ	2.51	0.40
4:D:232:VAL:HG23	4:D:233:ASP:N	2.37	0.40
4:D:240:SER:OG	4:D:241:ILE:N	2.54	0.40
4:D:351:LYS:HB2	4:D:351:LYS:HE2	1.75	0.40
6:F:110:ASP:O	6:F:114:GLN:HB2	2.21	0.40
6:F:265:LYS:HE3	6:F:265:LYS:HB2	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:286:PHE:O	6:F:287:LEU:C	2.60	0.40
6:F:365:LYS:HB2	6:F:365:LYS:HE2	1.77	0.40
1:A:432:ILE:HD12	1:A:432:ILE:HG23	1.71	0.40
1:A:434:ALA:HA	1:A:445:THR:HA	2.03	0.40
2:B:368:LEU:HD23	2:B:368:LEU:HA	1.87	0.40
3:C:136:SER:O	3:C:140:LYS:HG2	2.21	0.40
4:D:174:ILE:O	4:D:177:LEU:HB2	2.21	0.40
6:F:102:LEU:HD21	6:F:106:PHE:HE2	1.87	0.40
6:F:106:PHE:O	6:F:107:GLN:C	2.60	0.40
7:G:157:ARG:HB2	7:G:197:TYR:CE2	2.56	0.40
7:G:240:ALA:O	7:G:244:MET:HG3	2.21	0.40
8:H:86:LYS:HB2	8:H:86:LYS:HE3	1.88	0.40
1:A:156:VAL:HA	1:A:159:ASN:ND2	2.36	0.40
2:B:224:LEU:HD23	2:B:224:LEU:HA	1.88	0.40
3:C:142:ALA:HB1	3:C:158:ILE:HD11	2.03	0.40
3:C:178:HIS:CB	3:C:201:ALA:HB2	2.49	0.40
3:C:315:ASN:O	3:C:318:LEU:N	2.54	0.40
6:F:163:ILE:HD12	6:F:164:PRO:O	2.22	0.40
6:F:212:GLN:O	6:F:215:TYR:N	2.54	0.40
6:F:309:SER:HA	6:F:346:GLU:O	2.20	0.40
6:F:368:ASP:O	6:F:371:VAL:N	2.54	0.40
8:H:119:THR:HG22	8:H:123:HIS:HD2	1.83	0.40
4:D:148:ASP:OD1	4:D:149:ASN:N	2.55	0.40
5:E:28:LYS:HB3	5:E:31:LYS:HB3	2.03	0.40
8:H:209:LEU:HD23	8:H:209:LEU:HA	1.85	0.40
2:B:192:ASP:OD1	2:B:194:SER:OG	2.26	0.40
2:B:297:GLU:C	2:B:299:LEU:N	2.74	0.40
3:C:239:PHE:CE2	3:C:264:TYR:HB3	2.56	0.40
3:C:317:ALA:O	3:C:321:TYR:HD2	2.04	0.40
3:C:352:GLU:CG	3:C:353:PRO:HD3	2.51	0.40
4:D:116:LYS:O	4:D:120:LEU:HG	2.21	0.40
4:D:148:ASP:OD1	4:D:149:ASN:N	2.55	0.40
4:D:163:SER:O	4:D:166:ALA:N	2.54	0.40
4:D:249:ILE:HG13	4:D:250:ALA:N	2.36	0.40
5:E:297:GLN:O	5:E:300:LYS:N	2.54	0.40
6:F:174:THR:O	6:F:177:GLN:N	2.54	0.40
6:F:391:ILE:HD13	6:F:391:ILE:HG21	1.79	0.40
7:G:261:LEU:HB2	7:G:266:LEU:HG	2.04	0.40
8:H:28:PRO:HD2	8:H:29:PRO:HD3	2.03	0.40
2:B:126:THR:HG22	2:B:136:ARG:HH22	1.86	0.40
2:B:240:TYR:C	2:B:242:GLN:N	2.74	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:263:HIS:O	2:B:264:ILE:C	2.59	0.40
3:C:128:GLU:CD	3:C:129:LYS:HE2	2.42	0.40
3:C:179:LEU:HD11	3:C:218:LEU:HD23	2.03	0.40
4:D:148:ASP:O	4:D:152:LYS:NZ	2.47	0.40
4:D:301:TYR:CE2	4:D:341:LEU:HD13	2.56	0.40
7:G:132:LEU:HA	7:G:132:LEU:HD12	1.85	0.40
7:G:192:LEU:O	7:G:192:LEU:HD23	2.21	0.40
7:G:218:LYS:HE2	7:G:218:LYS:HB3	1.90	0.40
8:H:213:ASN:HB3	8:H:216:GLU:CG	2.52	0.40
2:B:218:LEU:HG	2:B:222:ASN:HD21	1.85	0.40
2:B:224:LEU:HA	2:B:224:LEU:HD23	1.75	0.40
2:B:412:LEU:HD23	2:B:412:LEU:HA	1.73	0.40
3:C:75:ARG:CD	3:C:116:PHE:HE1	2.30	0.40
4:D:119:LYS:HE3	4:D:119:LYS:HB3	1.79	0.40
4:D:266:LEU:HD12	4:D:266:LEU:HA	1.85	0.40
5:E:296:ILE:O	5:E:300:LYS:HG3	2.21	0.40
5:E:68:LEU:HD11	5:E:109:LEU:CD2	2.50	0.40
7:G:251:TYR:O	7:G:255:ILE:HG23	2.21	0.40
7:G:68:VAL:HG12	7:G:69:PHE:N	2.37	0.40
8:H:110:LEU:HD23	8:H:110:LEU:HA	1.79	0.40
8:H:198:ASP:O	8:H:200:LEU:HD12	2.20	0.40
9:I:66:ASP:OD1	9:I:67:VAL:N	2.54	0.40
1:A:420:GLU:O	1:A:424:SER:CB	2.70	0.40
1:A:473:ASP:O	1:A:476:LEU:N	2.53	0.40
3:C:133:LEU:O	3:C:137:LEU:CB	2.66	0.40
3:C:72:ASP:N	3:C:72:ASP:OD1	2.54	0.40
4:D:28:GLU:OE1	4:D:28:GLU:N	2.45	0.40
6:F:12:SER:HA	6:F:15:ARG:HD2	2.03	0.40
8:H:144:TYR:O	8:H:148:LEU:CB	2.68	0.40
1:A:398:THR:OG1	1:A:399:TYR:N	2.54	0.40
2:B:145:GLU:HA	2:B:148:LYS:CG	2.51	0.40
2:B:429:ILE:O	2:B:433:ILE:CB	2.62	0.40
3:C:269:LYS:HA	3:C:269:LYS:HD3	1.92	0.40
3:C:306:TYR:O	3:C:309:ARG:NH1	2.53	0.40
3:C:329:GLU:HA	3:C:332:ARG:HB2	2.03	0.40
4:D:198:ILE:HA	4:D:201:GLY:HA3	2.03	0.40
8:H:90:PHE:CD2	8:H:128:TYR:HE2	2.40	0.40
2:B:173:MET:O	2:B:176:LYS:HB2	2.20	0.40
2:B:42:LEU:O	2:B:44:LYS:N	2.54	0.40
3:C:185:TYR:C	3:C:194:SER:HB2	2.42	0.40
3:C:369:ASP:HB3	3:C:372:GLN:OE1	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:84:TYR:HE2	3:C:88:PHE:CE1	2.39	0.40
4:D:309:LEU:O	4:D:312:TYR:HB3	2.22	0.40
4:D:40:ILE:HA	4:D:43:ARG:HE	1.84	0.40
5:E:63:SER:O	5:E:64:ASP:C	2.60	0.40
6:F:161:ASP:OD1	6:F:161:ASP:N	2.54	0.40
6:F:230:PHE:HB2	6:F:259:THR:HG21	2.04	0.40
6:F:72:LYS:HB2	6:F:72:LYS:HE2	1.90	0.40
6:F:62:TYR:CE2	6:F:82:LEU:HD13	2.57	0.40
7:G:57:PHE:HD1	7:G:63:VAL:HG22	1.86	0.40
1:A:214:MET:SD	1:A:236:LEU:HD22	2.61	0.40
1:A:343:LEU:O	1:A:346:TYR:HB3	2.21	0.40
1:A:360:PHE:O	1:A:363:THR:N	2.55	0.40
1:A:404:LEU:CD2	1:A:407:ILE:HD12	2.51	0.40
2:B:205:LYS:HE2	2:B:205:LYS:HB2	1.86	0.40
3:C:154:SER:HA	3:C:157:LEU:HB3	2.03	0.40
3:C:359:ILE:O	3:C:360:SER:C	2.60	0.40
3:C:356:CYS:SG	3:C:398:TYR:CE1	3.09	0.40
4:D:120:LEU:HA	4:D:130:GLN:CG	2.50	0.40
4:D:213:TYR:O	4:D:216:ILE:HG13	2.21	0.40
6:F:139:LEU:HD23	6:F:139:LEU:HA	1.85	0.40
6:F:205:ILE:HG21	6:F:210:ARG:HH11	1.87	0.40
6:F:223:LEU:HA	6:F:223:LEU:HD23	1.74	0.40
1:A:180:ASN:O	1:A:184:TRP:CD1	2.74	0.40
2:B:219:GLU:HA	2:B:222:ASN:ND2	2.36	0.40
4:D:313:ALA:HA	4:D:317:ILE:HD12	2.02	0.40
5:E:37:ILE:CB	5:E:91:GLY:O	2.41	0.40
5:E:92:TRP:CZ3	5:E:94:HIS:HB2	2.56	0.40
6:F:15:ARG:HH12	6:F:23:HIS:CA	2.35	0.40
8:H:211:PHE:CE2	8:H:217:THR:HA	2.56	0.40
8:H:24:GLU:O	8:H:27:LEU:HG	2.21	0.40
1:A:480:ARG:CZ	1:A:481:TYR:HE1	2.35	0.40
3:C:141:LEU:O	3:C:144:LEU:N	2.54	0.40
3:C:219:ASP:O	3:C:222:SER:N	2.54	0.40
3:C:296:ILE:HG13	3:C:297:ASP:N	2.36	0.40
4:D:248:SER:O	4:D:251:THR:N	2.55	0.40
4:D:40:ILE:HD12	4:D:43:ARG:HD3	2.03	0.40
6:F:233:LEU:HA	6:F:236:HIS:HB2	2.04	0.40
6:F:74:ASN:OD1	6:F:75:GLN:N	2.53	0.40
7:G:95:LEU:HA	7:G:95:LEU:HD23	1.93	0.40
1:A:328:PRO:O	9:I:64:TRP:HZ2	2.05	0.40
1:A:184:TRP:HA	1:A:187:ILE:HD12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:ASP:OD2	2:B:195:GLN:HB2	2.21	0.40
3:C:328:ASP:N	3:C:332:ARG:HH12	2.19	0.40
3:C:58:ILE:HG22	3:C:84:TYR:OH	2.22	0.40
6:F:217:LEU:HD23	6:F:217:LEU:HA	1.82	0.40
2:B:283:LYS:HE2	7:G:47:MET:HE3	2.04	0.40
1:A:396:SER:OG	1:A:397:LEU:N	2.54	0.40
2:B:72:TRP:HH2	2:B:75:LEU:HD21	1.70	0.40
4:D:179:PHE:CE1	4:D:187:VAL:HG11	2.56	0.40
4:D:271:ILE:HG21	4:D:271:ILE:HD13	1.84	0.40
6:F:263:PHE:CE2	6:F:318:HIS:HD2	2.39	0.40
7:G:117:TRP:CD2	7:G:190:HIS:ND1	2.89	0.40
7:G:32:ILE:HG23	7:G:33:ALA:H	1.87	0.40
8:H:136:LEU:HA	8:H:136:LEU:HD13	1.73	0.40
8:H:27:LEU:HD11	8:H:81:TYR:OH	2.22	0.40
1:A:269:GLU:CD	1:A:299:LYS:HG2	2.42	0.40
1:A:372:LEU:HA	1:A:372:LEU:HD22	1.86	0.40
2:B:98:GLN:HG3	2:B:135:GLU:OE2	2.20	0.40
2:B:185:GLU:O	2:B:189:LEU:HG	2.22	0.40
2:B:407:ASN:OD1	2:B:410:GLN:CD	2.60	0.40
3:C:157:LEU:HD23	3:C:161:LEU:HD12	2.03	0.40
3:C:360:SER:O	3:C:363:SER:HB3	2.21	0.40
4:D:309:LEU:HD12	4:D:309:LEU:N	2.36	0.40
5:E:70:HIS:O	5:E:71:ASN:C	2.59	0.40
6:F:252:PHE:N	6:F:252:PHE:HD1	2.20	0.40
6:F:264:ASP:O	6:F:267:ASP:HB3	2.21	0.40
6:F:50:ASP:N	6:F:50:ASP:OD1	2.54	0.40
7:G:211:LYS:HG3	7:G:215:ASN:HD21	1.87	0.40
8:H:14:ALA:O	8:H:23:CYS:HB2	2.20	0.40
2:B:179:PHE:O	2:B:183:GLN:HG3	2.21	0.40
2:B:423:LEU:O	2:B:426:ILE:HG12	2.21	0.40
3:C:259:CYS:O	3:C:262:LEU:HG	2.22	0.40
4:D:191:LEU:HD23	4:D:191:LEU:HA	1.80	0.40
4:D:239:THR:OG1	4:D:242:GLU:HG3	2.22	0.40
6:F:354:GLN:NE2	6:F:355:PRO:HD2	2.37	0.40
7:G:50:MET:O	7:G:71:MET:HB3	2.22	0.40
8:H:146:ILE:O	8:H:147:LYS:C	2.60	0.40
4:D:334:ARG:HD3	9:I:73:PHE:CE2	2.56	0.40

There are no symmetry-related clashes.



## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

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

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	1-A	350/438 (80%)	316 (90%)	33 (9%)	1 (0%)	46	84
1	2-A	350/438 (80%)	306 (87%)	38 (11%)	6 (2%)	11	54
1	3-A	350/438 (80%)	305 (87%)	44 (13%)	1 (0%)	46	84
1	4-A	350/438 (80%)	308 (88%)	40 (11%)	2 (1%)	30	75
1	5-A	350/438 (80%)	310 (89%)	37 (11%)	3 (1%)	21	68
2	1-B	400/445 (90%)	353 (88%)	45 (11%)	2 (0%)	34	78
2	2-B	400/445 (90%)	348 (87%)	49 (12%)	3 (1%)	24	70
2	3-B	400/445 (90%)	355 (89%)	41 (10%)	4 (1%)	19	66
2	4-B	400/445 (90%)	333 (83%)	64 (16%)	3 (1%)	24	70
2	5-B	400/445 (90%)	349 (87%)	48 (12%)	3 (1%)	24	70
3	1-C	376/434 (87%)	344 (92%)	29 (8%)	3 (1%)	24	70
3	2-C	376/434 (87%)	323 (86%)	50 (13%)	3 (1%)	24	70
3	3-C	376/434 (87%)	323 (86%)	48 (13%)	5 (1%)	15	60
3	4-C	376/434 (87%)	333 (89%)	42 (11%)	1 (0%)	46	84
3	5-C	376/434 (87%)	325 (86%)	49 (13%)	2 (0%)	34	78
4	1-D	380/429 (89%)	337 (89%)	41 (11%)	2 (0%)	34	78
4	2-D	380/429 (89%)	341 (90%)	37 (10%)	2 (0%)	34	78
4	3-D	380/429 (89%)	334 (88%)	45 (12%)	1 (0%)	46	84
4	4-D	380/429 (89%)	337 (89%)	42 (11%)	1 (0%)	46	84
4	5-D	380/429 (89%)	342 (90%)	33 (9%)	5 (1%)	15	60
5	1-E	271/338 (80%)	243 (90%)	27 (10%)	1 (0%)	39	81
5	2-E	271/338 (80%)	247 (91%)	24 (9%)	0	100	100
5	3-E	271/338 (80%)	245 (90%)	23 (8%)	3 (1%)	17	63
5	4-E	271/338 (80%)	243 (90%)	27 (10%)	1 (0%)	39	81
5	5-E	271/338 (80%)	247 (91%)	22 (8%)	2 (1%)	26	72

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	1-F	386/393 (98%)	352 (91%)	33 (8%)	1 (0%)	46	84
6	2-F	386/393 (98%)	352 (91%)	33 (8%)	1 (0%)	46	84
6	3-F	386/393 (98%)	348 (90%)	37 (10%)	1 (0%)	46	84
6	4-F	386/393 (98%)	349 (90%)	36 (9%)	1 (0%)	46	84
6	5-F	386/393 (98%)	341 (88%)	42 (11%)	3 (1%)	24	70
7	1-G	253/306 (83%)	234 (92%)	19 (8%)	0	100	100
7	2-G	253/306 (83%)	227 (90%)	26 (10%)	0	100	100
7	3-G	253/306 (83%)	227 (90%)	23 (9%)	3 (1%)	16	61
7	4-G	253/306 (83%)	225 (89%)	23 (9%)	5 (2%)	9	51
7	5-G	253/306 (83%)	225 (89%)	26 (10%)	2 (1%)	24	70
8	1-H	242/274 (88%)	213 (88%)	27 (11%)	2 (1%)	24	70
8	2-H	242/274 (88%)	218 (90%)	21 (9%)	3 (1%)	16	61
8	3-H	242/274 (88%)	210 (87%)	31 (13%)	1 (0%)	39	81
8	4-H	242/274 (88%)	213 (88%)	25 (10%)	4 (2%)	11	54
8	5-H	242/274 (88%)	218 (90%)	22 (9%)	2 (1%)	24	70
9	1-I	42/89 (47%)	38 (90%)	4 (10%)	0	100	100
9	2-I	42/89 (47%)	35 (83%)	7 (17%)	0	100	100
9	3-I	42/89 (47%)	38 (90%)	4 (10%)	0	100	100
9	4-I	42/89 (47%)	37 (88%)	5 (12%)	0	100	100
9	5-I	42/89 (47%)	38 (90%)	4 (10%)	0	100	100
All	All	13500/15730 (86%)	11985 (89%)	1426 (11%)	89 (1%)	31	72

All (89) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1-A	451	ILE
2	1-B	132	VAL
5	3-E	64	ASP
2	4-B	396	PRO
8	4-H	198	ASP
1	5-A	451	ILE
1	2-A	451	ILE
2	2-B	148	LYS
2	2-B	149	GLU
4	2-D	38	VAL

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Mol	Chain	Res	Type
1	3-A	451	ILE
3	3-C	72	ASP
5	3-E	221	ILE
2	4-B	149	GLU
8	4-H	52	LEU
8	4-H	169	GLN
1	5-A	480	ARG
1	2-A	216	LYS
1	2-A	480	ARG
6	3-F	111	SER
2	4-B	397	ALA
3	1-C	385	ILE
4	1-D	280	ILE
8	2-H	169	GLN
2	3-B	132	VAL
3	3-C	300	LYS
3	3-C	315	ASN
7	3-G	282	GLU
4	4-D	280	ILE
5	4-E	165	GLU
4	5-D	162	ILE
4	5-D	285	ALA
5	5-E	165	GLU
6	5-F	258	LEU
6	5-F	336	LEU
7	5-G	282	GLU
4	1-D	60	ALA
1	2-A	153	GLU
2	2-B	133	GLU
3	2-C	129	LYS
4	2-D	37	LYS
8	2-H	102	LYS
2	3-B	77	GLU
3	3-C	195	LYS
1	4-A	216	LYS
1	4-A	290	ASN
7	4-G	88	GLN
7	4-G	120	SER
7	4-G	216	LEU
7	4-G	288	LEU
1	5-A	338	MET
2	5-B	242	GLN

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Mol	Chain	Res	Type
3	5-C	150	GLN
4	5-D	316	LEU
4	5-D	320	LYS
5	5-E	265	LEU
7	5-G	153	ILE
8	5-H	102	LYS
3	3-C	298	ALA
4	3-D	285	ALA
7	3-G	223	SER
6	4-F	151	ASP
6	5-F	59	LEU
3	2-C	115	ILE
3	2-C	385	ILE
8	2-H	133	ILE
2	3-B	225	VAL
7	3-G	86	VAL
3	5-C	373	VAL
3	1-C	373	VAL
5	3-E	73	ILE
7	4-G	153	ILE
2	5-B	177	ILE
2	1-B	165	VAL
3	1-C	177	VAL
6	1-F	350	ILE
8	1-H	146	ILE
1	2-A	187	ILE
2	3-B	119	ILE
3	4-C	373	VAL
5	1-E	130	VAL
6	2-F	377	VAL
8	3-H	57	ILE
8	4-H	268	ILE
8	1-H	70	ILE
1	2-A	419	VAL
2	5-B	265	VAL
4	5-D	54	ILE
8	5-H	268	ILE

### 5.3.2 Protein sidechains ⓘ

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



entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	1-A	329/367 (90%)	328 (100%)	1 (0%)	94	99
1	2-A	329/367 (90%)	329 (100%)	0	100	100
1	3-A	329/367 (90%)	329 (100%)	0	100	100
1	4-A	329/367 (90%)	329 (100%)	0	100	100
1	5-A	329/367 (90%)	328 (100%)	1 (0%)	94	99
2	1-B	380/415 (92%)	375 (99%)	5 (1%)	76	91
2	2-B	380/415 (92%)	380 (100%)	0	100	100
2	3-B	380/415 (92%)	379 (100%)	1 (0%)	94	99
2	4-B	380/415 (92%)	380 (100%)	0	100	100
2	5-B	380/415 (92%)	379 (100%)	1 (0%)	94	99
3	1-C	343/391 (88%)	343 (100%)	0	100	100
3	2-C	343/391 (88%)	343 (100%)	0	100	100
3	3-C	343/391 (88%)	343 (100%)	0	100	100
3	4-C	343/391 (88%)	342 (100%)	1 (0%)	94	99
3	5-C	343/391 (88%)	342 (100%)	1 (0%)	94	99
4	1-D	336/379 (89%)	336 (100%)	0	100	100
4	2-D	336/379 (89%)	336 (100%)	0	100	100
4	3-D	336/379 (89%)	334 (99%)	2 (1%)	90	97
4	4-D	336/379 (89%)	336 (100%)	0	100	100
4	5-D	336/379 (89%)	336 (100%)	0	100	100
5	1-E	252/308 (82%)	252 (100%)	0	100	100
5	2-E	252/308 (82%)	252 (100%)	0	100	100
5	3-E	252/308 (82%)	252 (100%)	0	100	100
5	4-E	252/308 (82%)	252 (100%)	0	100	100
5	5-E	252/308 (82%)	252 (100%)	0	100	100
6	1-F	363/368 (99%)	363 (100%)	0	100	100
6	2-F	363/368 (99%)	363 (100%)	0	100	100
6	3-F	363/368 (99%)	363 (100%)	0	100	100
6	4-F	363/368 (99%)	362 (100%)	1 (0%)	94	99

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	5-F	363/368 (99%)	363 (100%)	0	100	100
7	1-G	226/268 (84%)	226 (100%)	0	100	100
7	2-G	226/268 (84%)	225 (100%)	1 (0%)	93	98
7	3-G	226/268 (84%)	226 (100%)	0	100	100
7	4-G	226/268 (84%)	226 (100%)	0	100	100
7	5-G	226/268 (84%)	224 (99%)	2 (1%)	84	94
8	1-H	230/256 (90%)	230 (100%)	0	100	100
8	2-H	230/256 (90%)	230 (100%)	0	100	100
8	3-H	230/256 (90%)	230 (100%)	0	100	100
8	4-H	230/256 (90%)	229 (100%)	1 (0%)	93	98
8	5-H	230/256 (90%)	229 (100%)	1 (0%)	93	98
9	1-I	44/81 (54%)	44 (100%)	0	100	100
9	2-I	44/81 (54%)	44 (100%)	0	100	100
9	3-I	44/81 (54%)	43 (98%)	1 (2%)	58	85
9	4-I	44/81 (54%)	43 (98%)	1 (2%)	58	85
9	5-I	44/81 (54%)	43 (98%)	1 (2%)	58	85
All	All	12515/14165 (88%)	12493 (100%)	22 (0%)	95	99

All (22) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	1-A	170	TYR
2	1-B	65	LEU
2	1-B	66	LEU
2	1-B	70	ASN
2	1-B	72	TRP
2	1-B	79	LEU
7	2-G	196	TYR
2	3-B	227	ILE
4	3-D	101	GLU
4	3-D	249	ILE
9	3-I	60	TRP
3	4-C	169	ASP
6	4-F	48	PHE
8	4-H	39	LEU
9	4-I	60	TRP

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Mol	Chain	Res	Type
1	5-A	372	LEU
2	5-B	103	TYR
3	5-C	113	ASP
7	5-G	118	LEU
7	5-G	148	LYS
8	5-H	175	ASP
9	5-I	60	TRP

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (192) such sidechains are listed below:

Mol	Chain	Res	Type
1	1-A	139	HIS
1	1-A	166	ASN
1	1-A	205	ASN
1	1-A	227	ASN
1	1-A	243	ASN
1	1-A	280	ASN
1	1-A	283	GLN
1	1-A	311	GLN
1	1-A	314	ASN
1	1-A	317	HIS
1	1-A	335	GLN
1	1-A	438	HIS
2	1-B	33	ASN
2	1-B	70	ASN
2	1-B	76	ASN
2	1-B	78	GLN
2	1-B	230	HIS
2	1-B	282	HIS
2	1-B	334	ASN
2	1-B	337	HIS
2	1-B	348	HIS
3	1-C	150	GLN
3	1-C	253	ASN
3	1-C	361	HIS
4	1-D	114	ASN
4	1-D	149	ASN
4	1-D	323	ASN
4	1-D	325	HIS
4	1-D	391	ASN
5	1-E	21	HIS
5	1-E	201	GLN

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Mol	Chain	Res	Type
5	1-E	259	ASN
5	1-E	294	ASN
5	1-E	298	ASN
5	1-E	304	GLN
6	1-F	122	HIS
6	1-F	318	HIS
6	1-F	323	ASN
6	1-F	326	HIS
7	1-G	73	GLN
7	1-G	109	HIS
7	1-G	222	GLN
7	1-G	279	HIS
7	1-G	301	ASN
8	1-H	74	ASN
8	1-H	112	ASN
8	1-H	204	ASN
1	2-A	280	ASN
1	2-A	283	GLN
1	2-A	311	GLN
1	2-A	334	HIS
1	2-A	347	HIS
2	2-B	33	ASN
2	2-B	94	GLN
2	2-B	113	ASN
2	2-B	164	GLN
2	2-B	178	GLN
2	2-B	282	HIS
3	2-C	80	HIS
3	2-C	150	GLN
3	2-C	307	ASN
3	2-C	308	ASN
3	2-C	334	HIS
4	2-D	35	GLN
4	2-D	217	HIS
4	2-D	323	ASN
4	2-D	325	HIS
4	2-D	401	HIS
4	2-D	406	GLN
5	2-E	294	ASN
5	2-E	297	GLN
5	2-E	298	ASN
6	2-F	235	HIS

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Mol	Chain	Res	Type
6	2-F	236	HIS
6	2-F	283	HIS
6	2-F	323	ASN
7	2-G	40	HIS
7	2-G	109	HIS
7	2-G	279	HIS
8	2-H	47	GLN
8	2-H	71	GLN
8	2-H	123	HIS
8	2-H	170	ASN
8	2-H	204	ASN
1	3-A	159	ASN
1	3-A	244	ASN
1	3-A	280	ASN
1	3-A	321	GLN
2	3-B	48	GLN
2	3-B	195	GLN
2	3-B	230	HIS
2	3-B	336	HIS
3	3-C	54	GLN
3	3-C	159	ASN
3	3-C	307	ASN
4	3-D	114	ASN
4	3-D	118	GLN
4	3-D	184	GLN
4	3-D	217	HIS
4	3-D	323	ASN
5	3-E	94	HIS
5	3-E	127	GLN
5	3-E	201	GLN
5	3-E	259	ASN
6	3-F	40	GLN
6	3-F	75	GLN
6	3-F	235	HIS
6	3-F	256	ASN
6	3-F	318	HIS
6	3-F	323	ASN
7	3-G	301	ASN
8	3-H	83	ASN
8	3-H	135	ASN
8	3-H	204	ASN
9	3-I	88	ASN

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Mol	Chain	Res	Type
1	4-A	243	ASN
1	4-A	244	ASN
1	4-A	261	HIS
1	4-A	280	ASN
1	4-A	311	GLN
1	4-A	450	ASN
2	4-B	76	ASN
2	4-B	210	ASN
2	4-B	230	HIS
2	4-B	263	HIS
2	4-B	334	ASN
2	4-B	440	HIS
3	4-C	106	GLN
3	4-C	159	ASN
3	4-C	307	ASN
4	4-D	35	GLN
4	4-D	114	ASN
4	4-D	401	HIS
5	4-E	94	HIS
5	4-E	115	GLN
5	4-E	128	GLN
5	4-E	294	ASN
5	4-E	297	GLN
5	4-E	298	ASN
5	4-E	304	GLN
6	4-F	116	ASN
6	4-F	283	HIS
6	4-F	318	HIS
6	4-F	323	ASN
6	4-F	354	GLN
7	4-G	109	HIS
7	4-G	301	ASN
8	4-H	17	ASN
8	4-H	92	ASN
8	4-H	135	ASN
1	5-A	143	GLN
1	5-A	177	ASN
1	5-A	180	ASN
1	5-A	225	HIS
1	5-A	317	HIS
1	5-A	334	HIS
1	5-A	335	GLN

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Mol	Chain	Res	Type
2	5-B	76	ASN
2	5-B	113	ASN
2	5-B	195	GLN
2	5-B	230	HIS
2	5-B	275	ASN
2	5-B	394	ASN
3	5-C	106	GLN
3	5-C	135	HIS
3	5-C	159	ASN
3	5-C	186	HIS
3	5-C	292	GLN
3	5-C	307	ASN
3	5-C	334	HIS
3	5-C	404	ASN
3	5-C	405	GLN
4	5-D	96	GLN
4	5-D	378	ASN
4	5-D	401	HIS
5	5-E	21	HIS
5	5-E	70	HIS
5	5-E	94	HIS
5	5-E	115	GLN
5	5-E	156	HIS
5	5-E	201	GLN
5	5-E	294	ASN
5	5-E	297	GLN
6	5-F	256	ASN
6	5-F	273	GLN
6	5-F	318	HIS
7	5-G	73	GLN
7	5-G	215	ASN
8	5-H	38	ASN
8	5-H	94	HIS
8	5-H	123	HIS
8	5-H	204	ASN

### 5.3.3 RNA ⓘ

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 carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 5 ligands modelled in this entry, 5 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.