



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 9, 2026 – 08:49 PM UTC

PDB ID : 1J0B / pdb_00001j0b
Title : Crystal Structure Analysis of the ACC deaminase homologue complexed with inhibitor
Authors : Fujino, A.; Ose, T.; Honma, M.; Yao, M.; Tanaka, I.
Deposited on : 2002-11-12
Resolution : 2.70 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	NOT EXECUTED
EDS	:	NOT EXECUTED
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

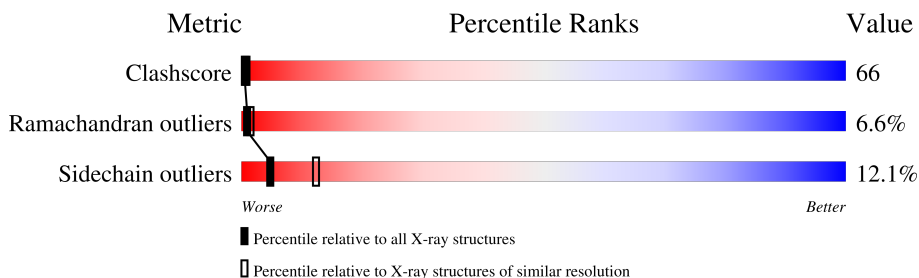
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.70 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	190562	3843 (2.70-2.70)
Ramachandran outliers	187476	3778 (2.70-2.70)
Sidechain outliers	187428	3778 (2.70-2.70)

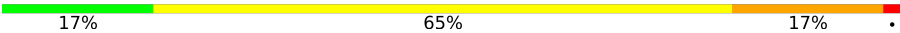
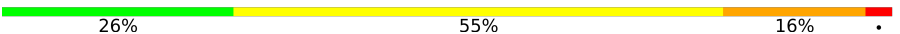
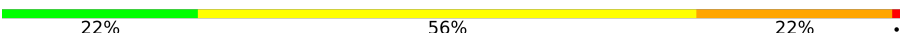
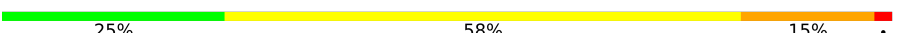
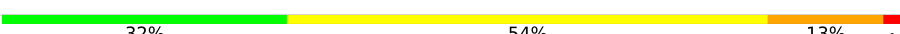
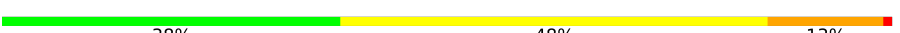
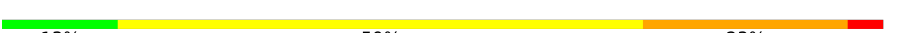
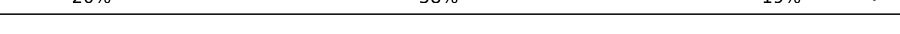
The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively.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

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	325	39% 48% 12% .
1	B	325	29% 55% 14% .
1	C	325	33% 50% 15% .
1	D	325	37% 47% 13% .
1	E	325	35% 52% 11% .
1	F	325	29% 55% 14% .
1	G	325	12% 64% 22% .
1	H	325	26% 56% 17% .

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Mol	Chain	Length	Quality of chain
1	I	325	
1	J	325	
1	K	325	
1	L	325	
1	M	325	
1	N	325	
1	O	325	
1	P	325	
1	Q	325	
1	R	325	
1	S	325	
1	T	325	
1	U	325	
1	V	325	
1	W	325	
1	X	325	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
2	5PA	B	1021	-	-	X	-
2	5PA	C	1031	-	-	X	-
2	5PA	D	1041	-	-	X	-
2	5PA	F	1061	-	-	X	-
2	5PA	H	1081	-	-	X	-
2	5PA	I	1091	-	-	X	-
2	5PA	J	1101	-	-	X	-
2	5PA	K	1111	-	-	X	-
2	5PA	M	1131	-	-	X	-
2	5PA	P	1161	-	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
2	5PA	Q	1171	-	-	X	-
2	5PA	R	1181	-	-	X	-
2	5PA	S	1191	-	-	X	-
2	5PA	T	1201	-	-	X	-
2	5PA	W	1231	-	-	X	-

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 60948 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 1-aminocyclopropane-1-carboxylate deaminase.

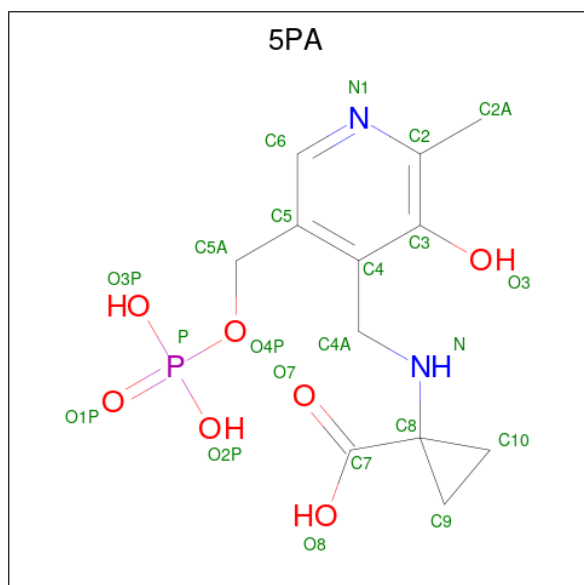
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	B	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	C	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	D	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	E	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	F	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	G	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	H	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	I	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	J	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	K	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	L	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	M	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	N	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	O	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	P	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Q	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	R	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	S	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	T	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	U	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	V	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	W	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			
1	X	325	Total	C	N	O	S	0	0	0
			2484	1604	415	461	4			

- Molecule 2 is N-[3-HYDROXY-2-METHYL-5-PHOSPHONOOXYMETHYL-PYRIDIN-4-Y-LMETHYL]-1-AMINO-CYCLOPROPANECARBOXYLIC ACID (CCD ID: 5PA) (formula: C₁₂H₁₇N₂O₇P).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	A	1	Total	C	N	O	P	0	0
			22	12	2	7	1		
2	B	1	Total	C	N	O	P	0	0
			22	12	2	7	1		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	C	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	D	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	E	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	F	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	G	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	H	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	I	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	J	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	K	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	L	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	M	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	N	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	O	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	P	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	Q	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	R	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	S	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	T	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	U	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	V	1	Total 22	C 12	N 2	O 7	P 1	0	0
2	W	1	Total 22	C 12	N 2	O 7	P 1	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	X	1	Total	C	N	O	P	0	0
			22	12	2	7	1		

- Molecule 3 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	47	Total	O	0	0
			47	47		
3	B	34	Total	O	0	0
			34	34		
3	C	26	Total	O	0	0
			26	26		
3	D	38	Total	O	0	0
			38	38		
3	E	35	Total	O	0	0
			35	35		
3	F	40	Total	O	0	0
			40	40		
3	G	34	Total	O	0	0
			34	34		
3	H	38	Total	O	0	0
			38	38		
3	I	29	Total	O	0	0
			29	29		
3	J	30	Total	O	0	0
			30	30		
3	K	33	Total	O	0	0
			33	33		
3	L	29	Total	O	0	0
			29	29		
3	M	29	Total	O	0	0
			29	29		
3	N	38	Total	O	0	0
			38	38		
3	O	28	Total	O	0	0
			28	28		
3	P	20	Total	O	0	0
			20	20		
3	Q	25	Total	O	0	0
			25	25		
3	R	21	Total	O	0	0
			21	21		

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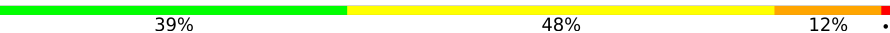
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	S	42	Total 42	O 42	0	0
3	T	40	Total 40	O 40	0	0
3	U	48	Total 48	O 48	0	0
3	V	40	Total 40	O 40	0	0
3	W	34	Total 34	O 34	0	0
3	X	26	Total 26	O 26	0	0

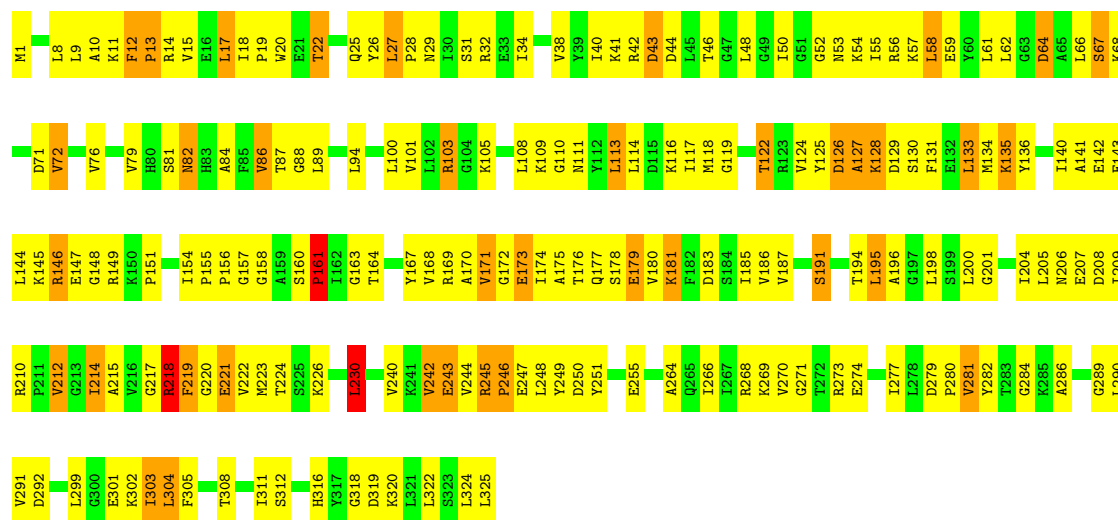
3 Residue-property plots

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

Note EDS was not executed.

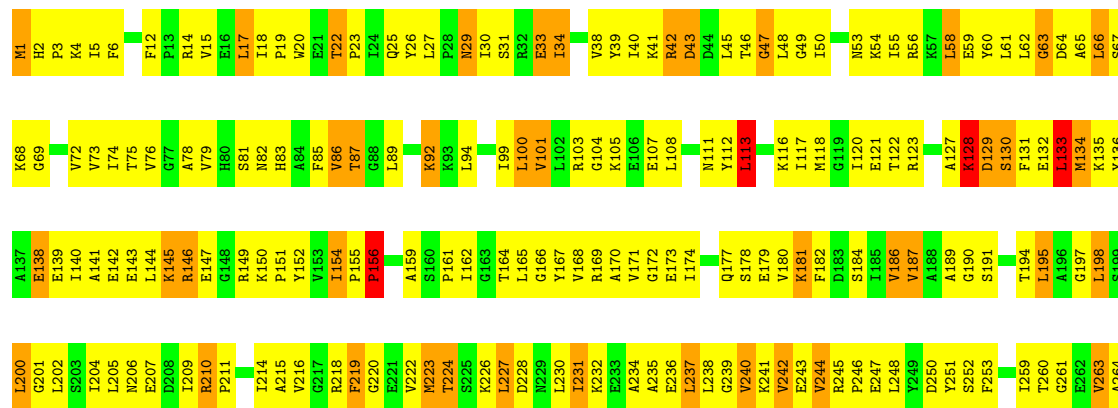
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain A: 



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

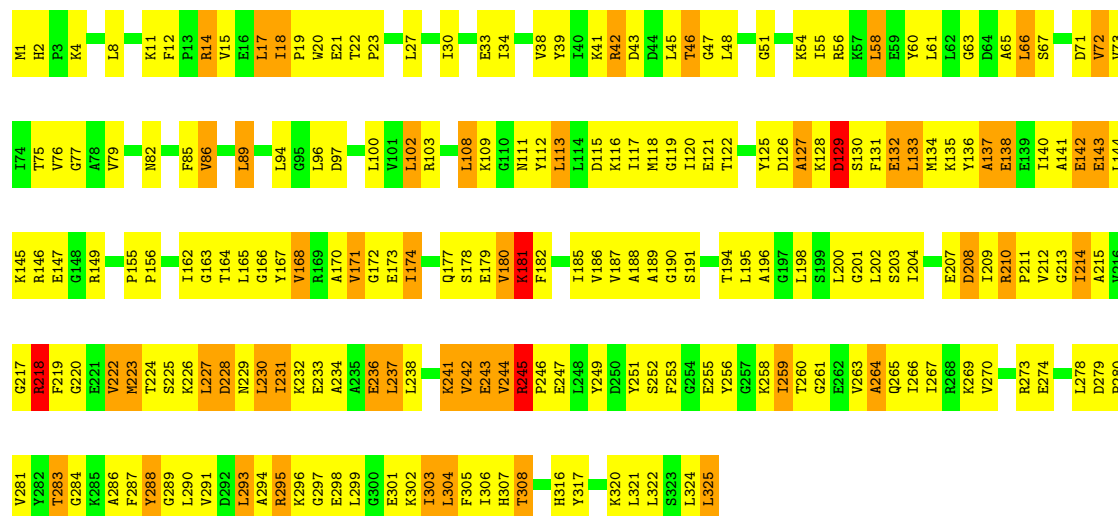
Chain B: 





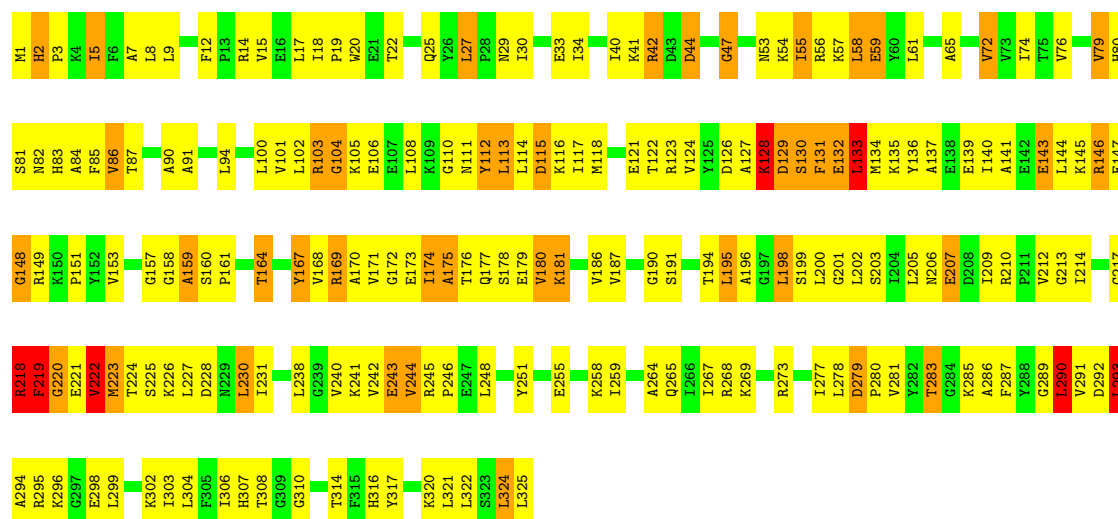
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain C: 33% 50% 15% .



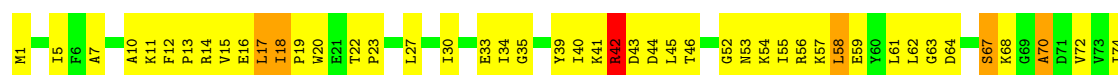
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

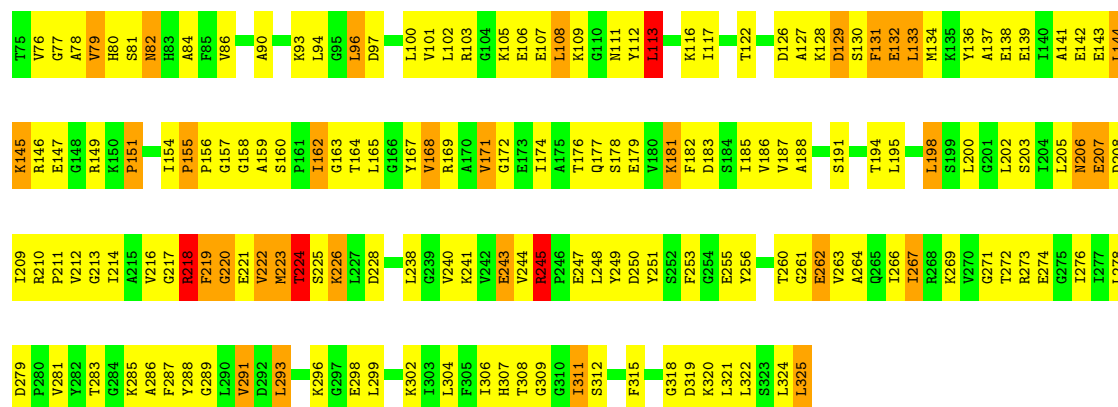
Chain D: 37% 47% 13% .



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

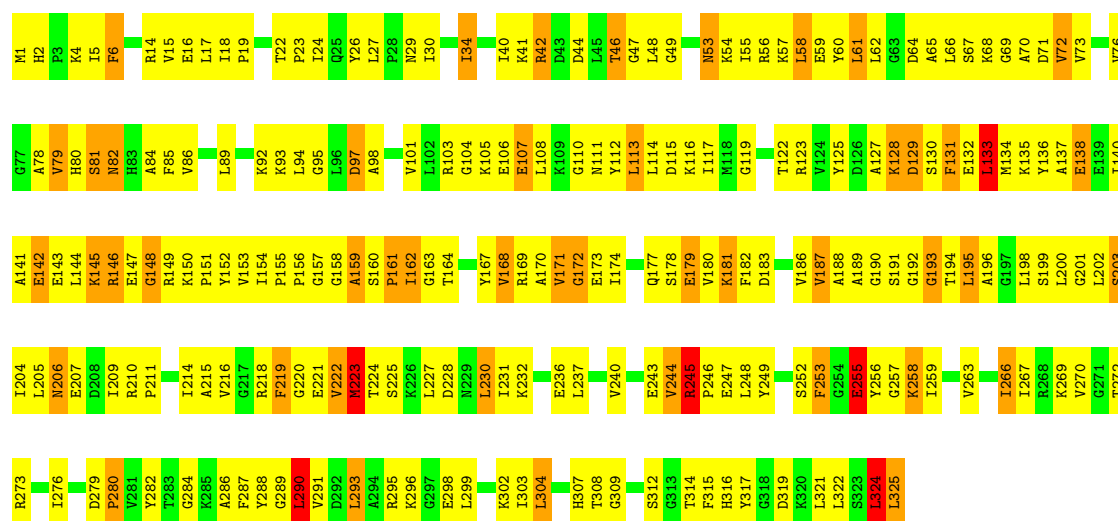
Chain E: 35% 52% 11% .





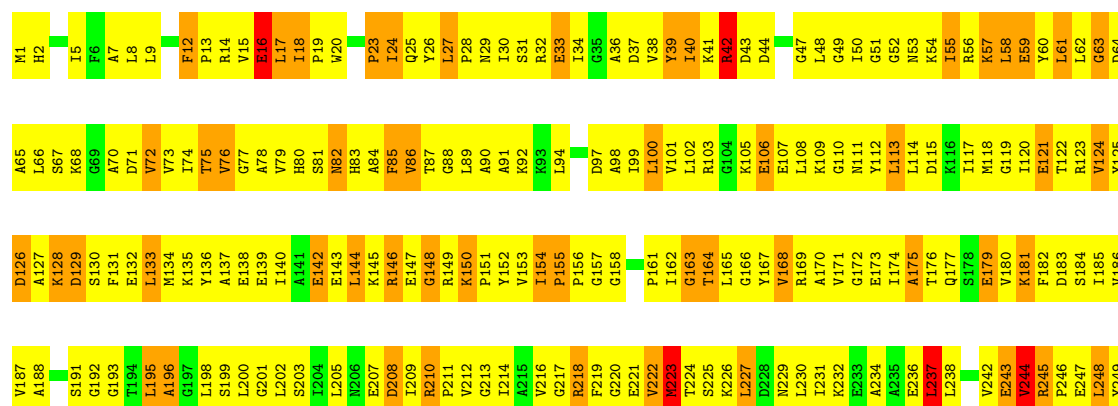
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

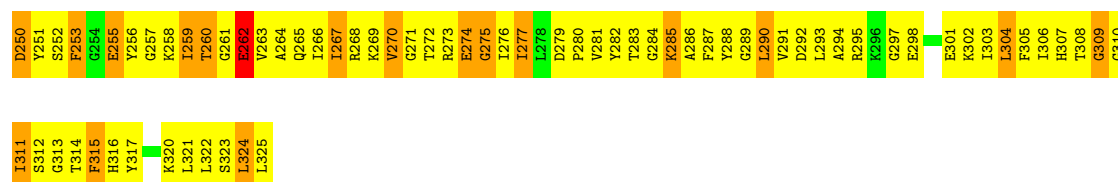
Chain F: 29% 55% 14% .



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

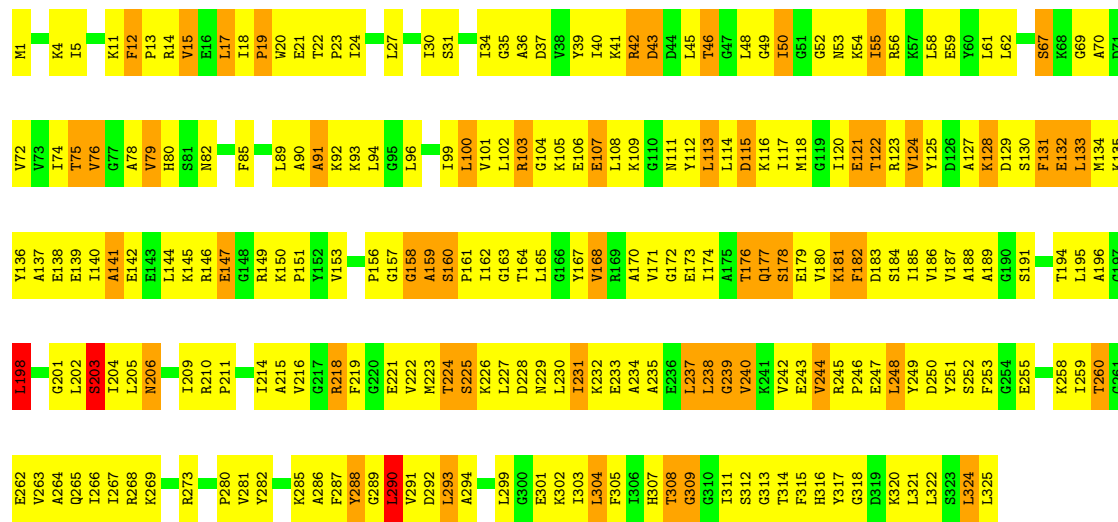
Chain G: 12% 64% 22% .





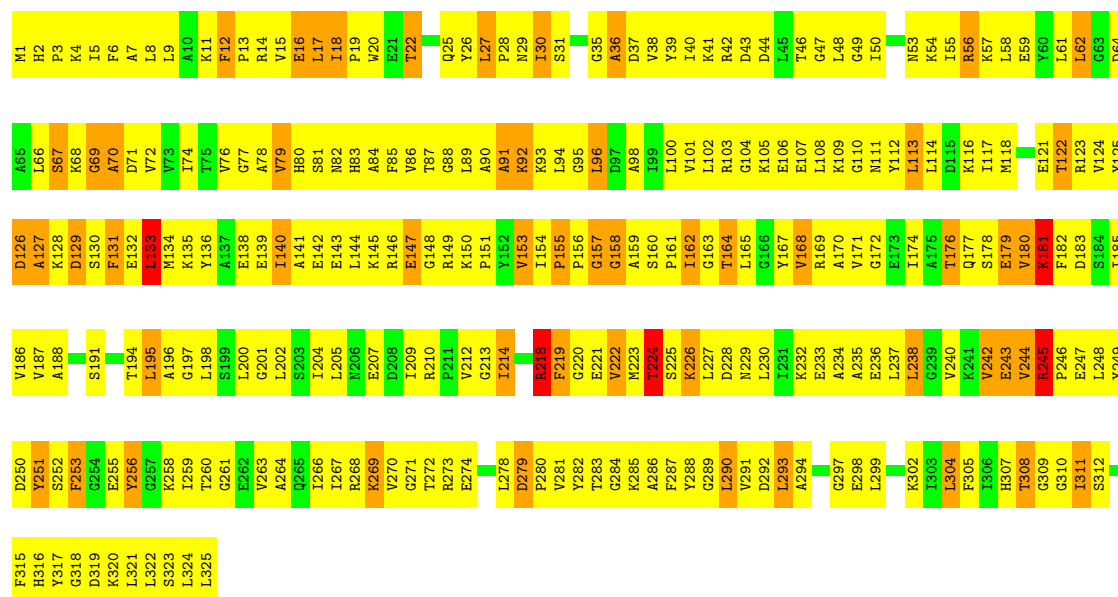
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain H: 26% 56% 17% .

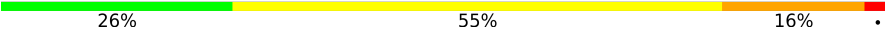


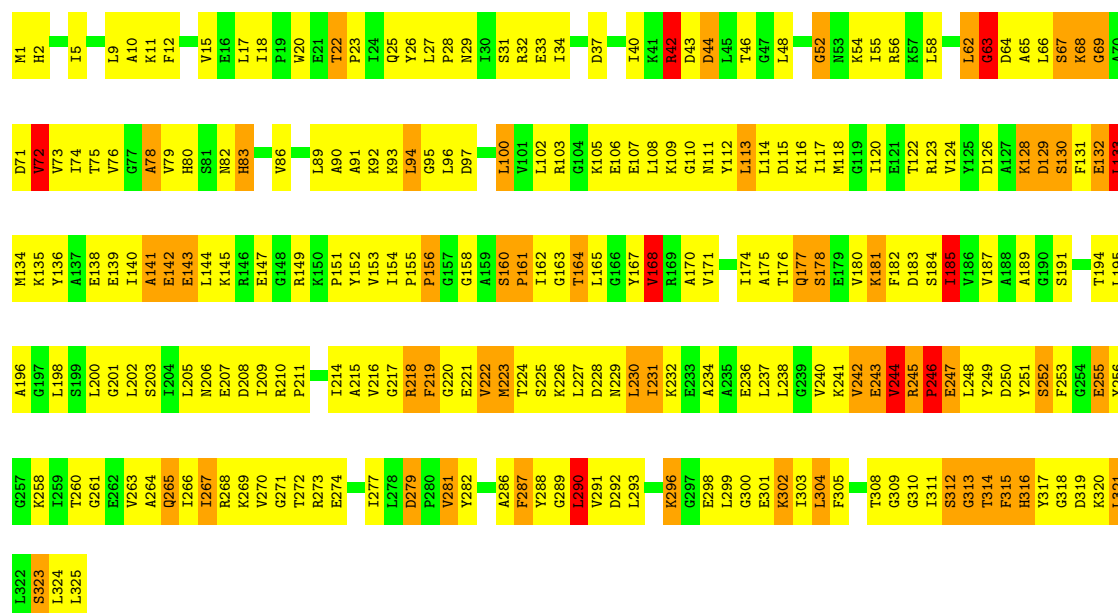
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain I: 17% 65% 17% .

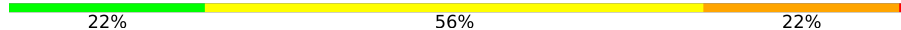


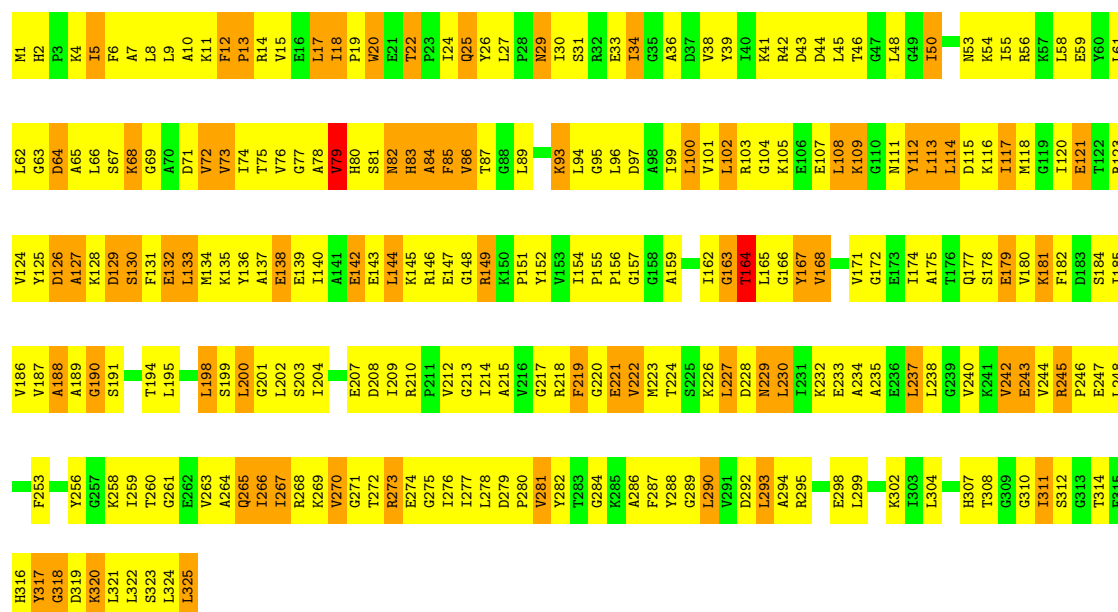
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain J:  26% 55% 16% .



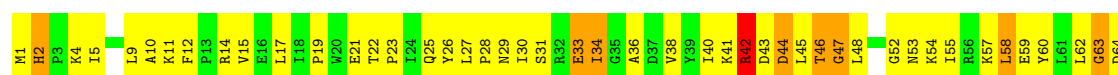
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

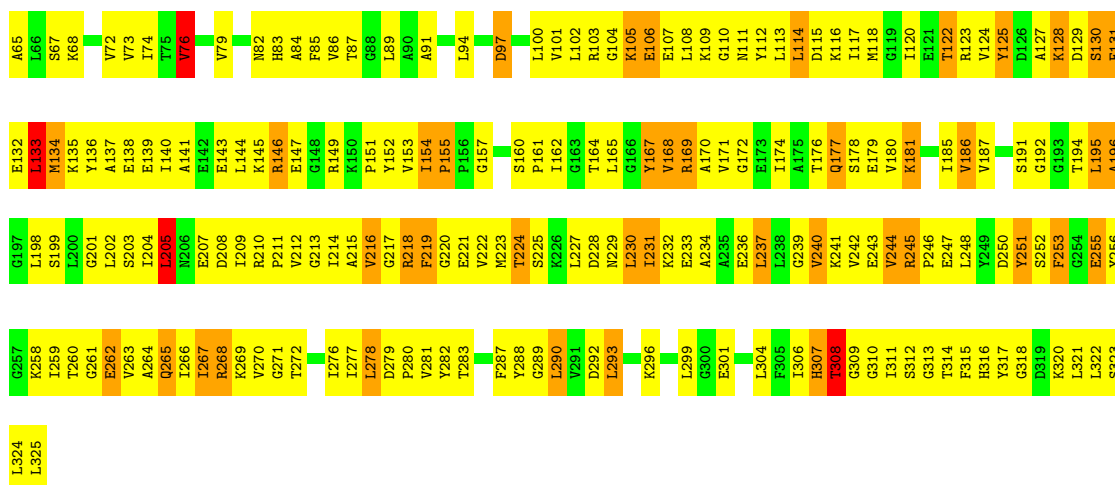
Chain K:  22% 56% 22% .



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

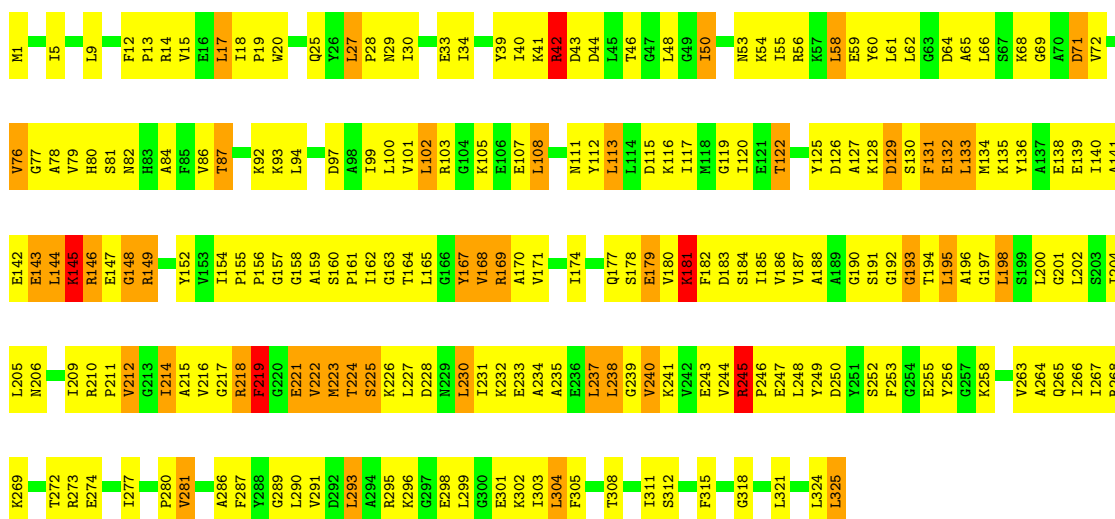
Chain L:  25% 58% 15% .





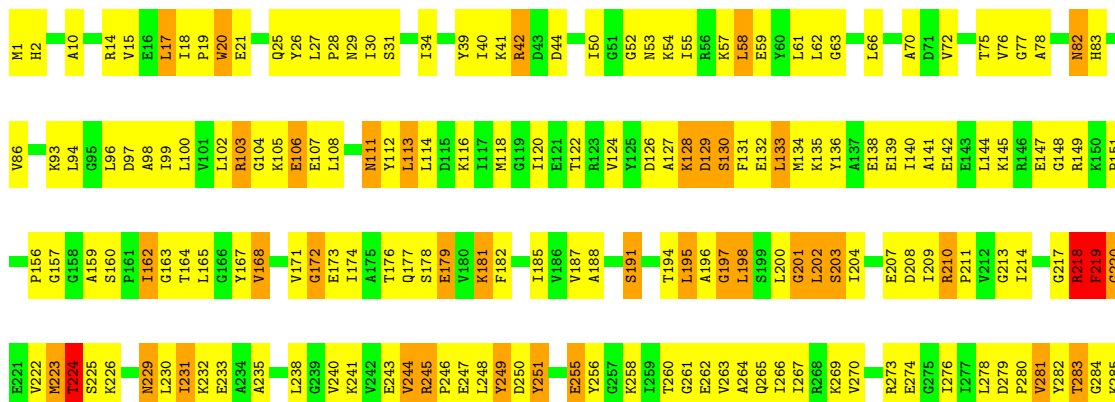
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain M: 32% 54% 13%



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

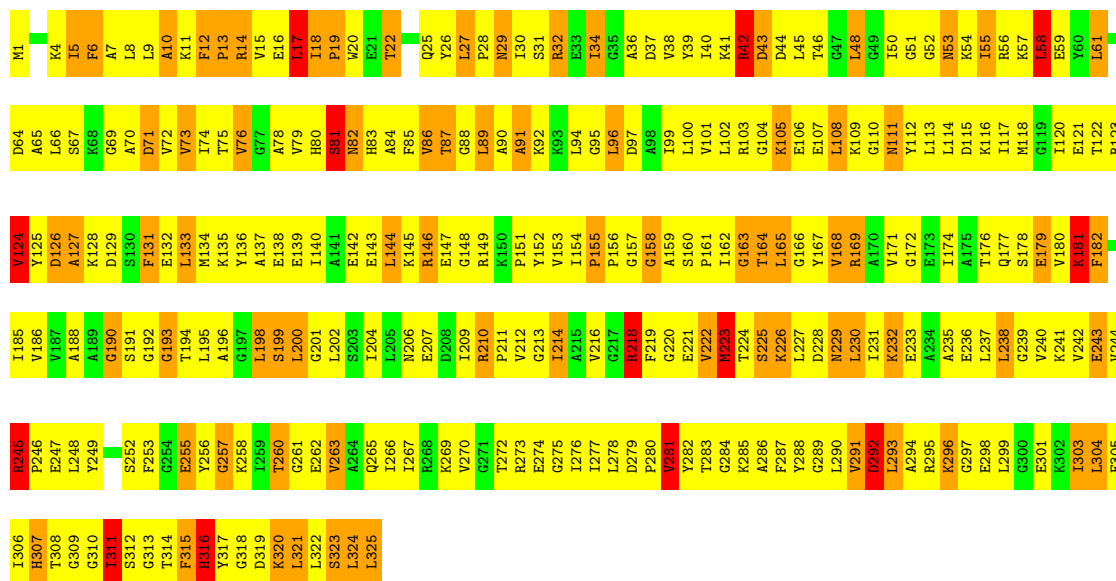
Chain N: 38% 48% 13%





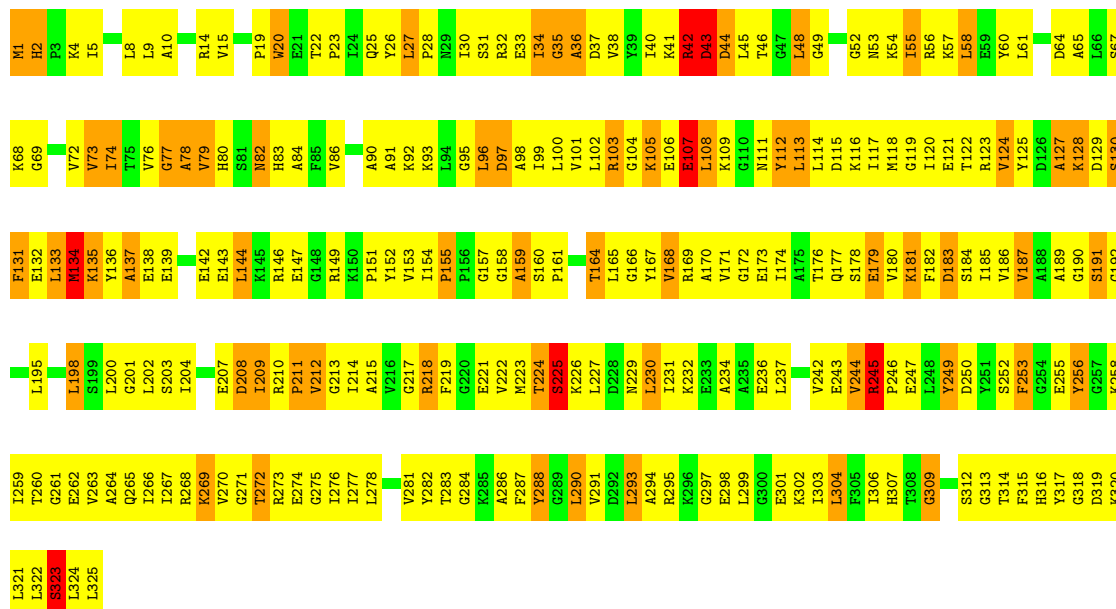
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain O: 13% 59% 23% .



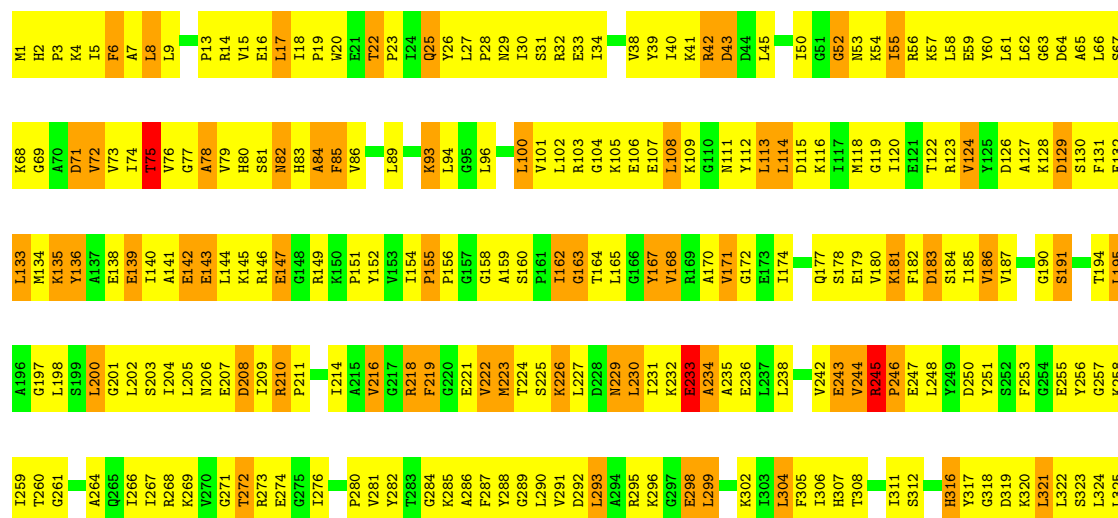
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain P: 22% 57% 19% .



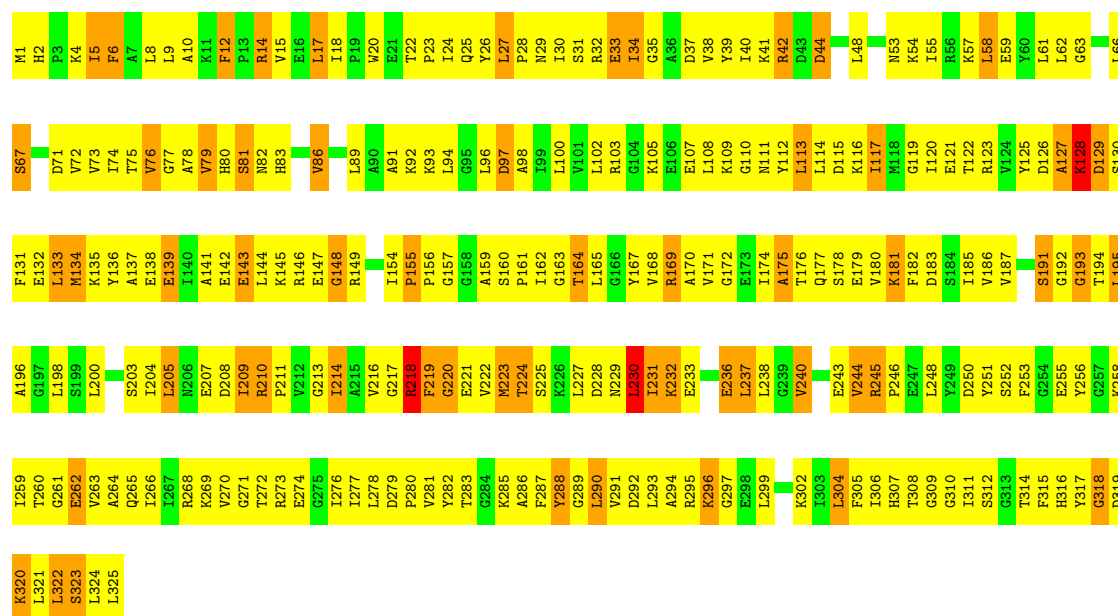
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain Q: 24% 56% 19% .



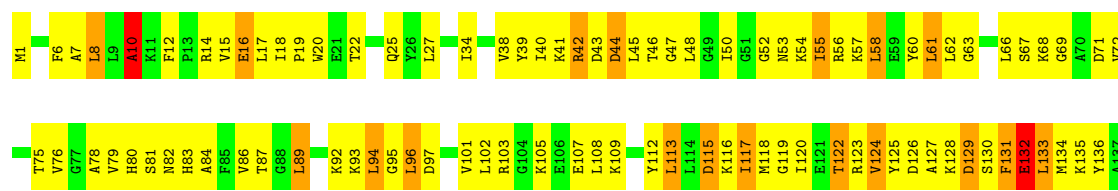
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

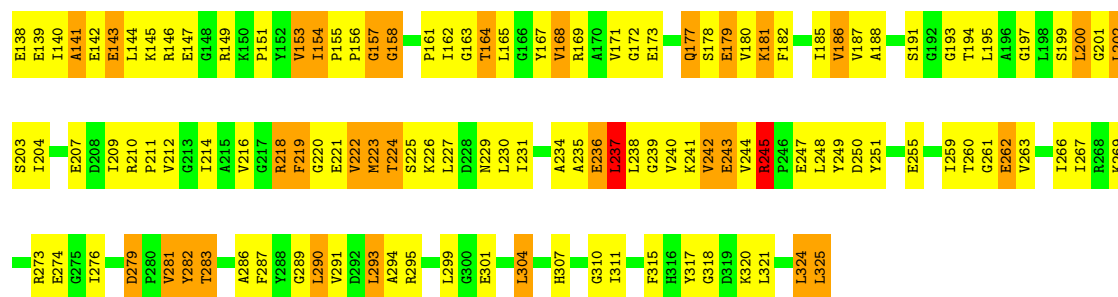
Chain R: 22% 59% 18% .



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

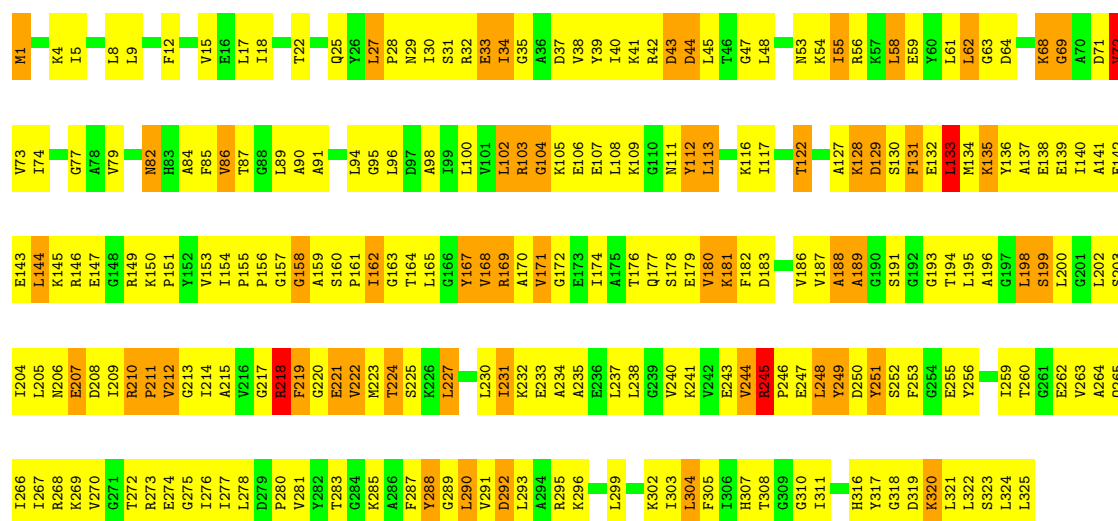
Chain S: 33% 50% 15% .





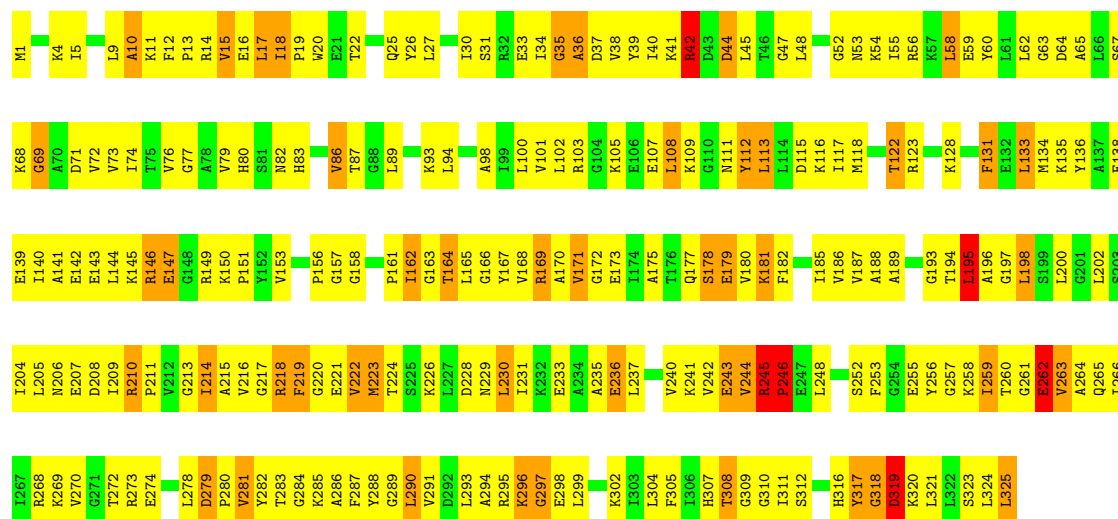
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain T: 27% 55% 17%

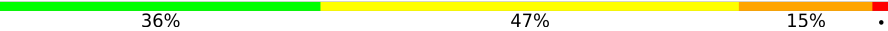


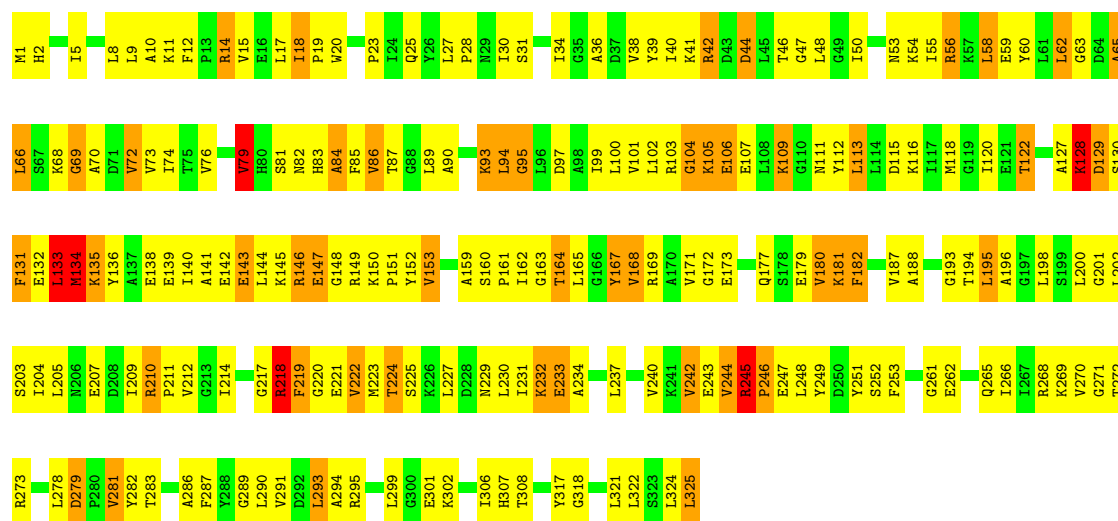
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain U: 28% 56% 14%

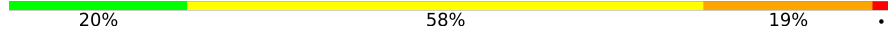


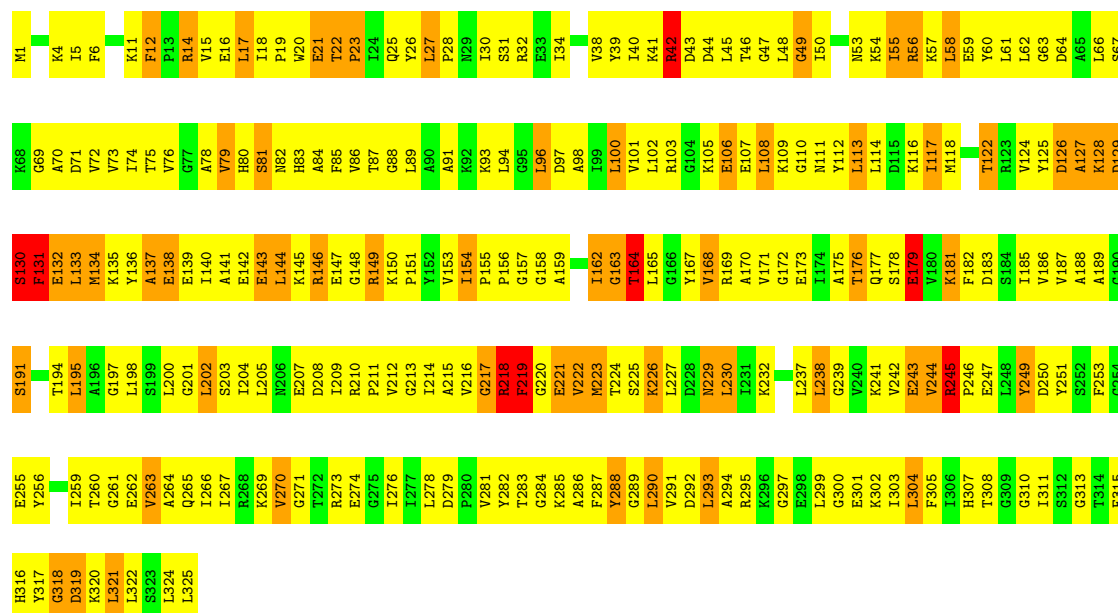
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain V: 

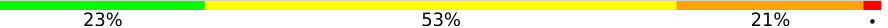


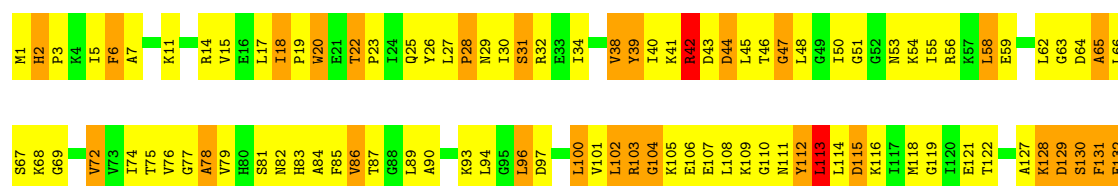
• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain W: 



• Molecule 1: 1-aminocyclopropane-1-carboxylate deaminase

Chain X: 



L324	L259	L198	L133
L325	T260	S199	M134
	G261	L200	K135
	E262	G201	Y136
	V263	L202	A137
	A264	S203	E138
	Q265	L204	E139
	L266	L205	T140
	T267	N206	A141
	R268	E207	E142
	K269	D208	E143
	V270	L209	L144
	G271	R210	K145
	T272	P211	R146
	R273	V212	E147
	E274	G213	G148
	G275	L214	R149
	L276	A215	K150
	L277	V216	P151
	L278	G217	Y152
	D279	R218	V153
	P280	G220	T154
	V281	E221	P155
	Y282	V222	F156
	T283	M223	G157
	G284	T224	F158
	K285	S225	A159
	A286	G226	S160
	T287	L227	P161
	Y288	D228	T162
	G289	N229	G163
	L290	L230	T164
	V291	K231	L165
		K232	G166
	K296	E233	Y167
	G297	A234	V168
	E298	A235	R169
	L299	E236	A170
	G300	L237	V171
		L238	
	L303	G339	L174
	L304	V240	Q177
	F305	K241	S178
		V242	E179
	T308	E243	V180
	G309	V244	K181
	G310	R245	F182
	L311	P246	
	S312	E247	
	G313	L248	V186
	F314	Y249	A188
	F315	D250	A189
	H316	Y251	A190
	G317	S252	G190
	G318	F253	S191
	D319	G254	
	K320	E255	T194
	L321		L195
	L322		A196
	S323		G198

4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α , β , γ	105.87Å 147.28Å 149.07Å 73.18° 90.11° 68.49°	Depositor
Resolution (Å)	10.00 – 2.70	Depositor
% Data completeness (in resolution range)	100.0 (10.00-2.70)	Depositor
R_{merge}	0.06	Depositor
R_{sym}	0.05	Depositor
Refinement program	CNS	Depositor
R, R_{free}	0.291 , 0.342	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	60948	wwPDB-VP
Average B, all atoms (Å ²)	45.0	wwPDB-VP

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 5PA

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.59	0/2526	1.23	27/3407 (0.8%)
1	B	0.55	0/2526	1.19	25/3407 (0.7%)
1	C	0.54	0/2526	1.19	28/3407 (0.8%)
1	D	0.59	0/2526	1.20	32/3407 (0.9%)
1	E	0.56	0/2526	1.15	19/3407 (0.6%)
1	F	0.57	0/2526	1.15	25/3407 (0.7%)
1	G	0.58	0/2526	1.28	40/3407 (1.2%)
1	H	0.57	0/2526	1.17	23/3407 (0.7%)
1	I	0.61	0/2526	1.25	39/3407 (1.1%)
1	J	0.55	0/2526	1.20	40/3407 (1.2%)
1	K	0.58	0/2526	1.23	33/3407 (1.0%)
1	L	0.56	0/2526	1.25	33/3407 (1.0%)
1	M	0.55	0/2526	1.15	25/3407 (0.7%)
1	N	0.56	0/2526	1.20	33/3407 (1.0%)
1	O	0.59	0/2526	1.27	41/3407 (1.2%)
1	P	0.55	0/2526	1.20	32/3407 (0.9%)
1	Q	0.58	0/2526	1.18	24/3407 (0.7%)
1	R	0.57	0/2526	1.22	29/3407 (0.9%)
1	S	0.60	0/2526	1.19	26/3407 (0.8%)
1	T	0.61	1/2526 (0.0%)	1.22	34/3407 (1.0%)
1	U	0.58	0/2526	1.24	38/3407 (1.1%)
1	V	0.58	0/2526	1.22	32/3407 (0.9%)
1	W	0.55	0/2526	1.25	36/3407 (1.1%)
1	X	0.57	0/2526	1.29	45/3407 (1.3%)
All	All	0.57	1/60624 (0.0%)	1.21	759/81768 (0.9%)

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	D	0	1
1	K	0	1
1	L	0	1
1	M	0	1
1	Q	0	1
1	T	0	1
1	V	0	1
All	All	0	7

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	T	1	MET	SD-CE	-5.23	1.66	1.79

All (759) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	W	226	LYS	N-CA-C	-14.44	95.54	111.14
1	E	133	LEU	N-CA-C	-13.66	96.58	113.38
1	N	133	LEU	N-CA-C	-13.19	97.22	113.18
1	O	309	GLY	N-CA-C	12.17	123.86	111.56
1	A	168	VAL	N-CA-C	-11.94	99.31	110.53
1	G	168	VAL	N-CA-C	-11.80	98.81	110.72
1	S	133	LEU	N-CA-C	-11.62	98.62	113.72
1	P	130	SER	N-CA-C	-11.24	96.95	110.44
1	K	126	ASP	N-CA-C	-11.22	99.56	113.02
1	F	133	LEU	N-CA-C	-11.21	99.62	113.18
1	V	133	LEU	N-CA-C	-11.18	99.67	113.20
1	L	133	LEU	N-CA-C	-10.98	99.54	113.16
1	O	137	ALA	N-CA-C	-10.71	101.62	112.97
1	B	133	LEU	N-CA-C	-10.66	100.28	113.18
1	X	168	VAL	N-CA-C	-10.62	100.52	110.82
1	E	226	LYS	N-CA-C	-10.51	100.19	113.23
1	U	146	ARG	N-CA-C	-10.47	101.87	112.97
1	I	168	VAL	N-CA-C	-10.32	99.75	111.00
1	W	146	ARG	N-CA-C	-10.12	102.25	112.97
1	X	315	PHE	N-CA-C	-10.03	100.91	113.55
1	O	71	ASP	N-CA-C	-9.87	101.58	114.31
1	U	133	LEU	N-CA-C	-9.83	100.83	112.92
1	M	133	LEU	N-CA-C	-9.82	99.09	112.94
1	I	18	ILE	CA-C-N	9.80	129.53	119.64
1	I	18	ILE	C-N-CA	9.80	129.53	119.64
1	C	132	GLU	N-CA-C	-9.77	101.57	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	12	PHE	CA-C-N	9.75	132.03	119.84
1	A	12	PHE	C-N-CA	9.75	132.03	119.84
1	I	133	LEU	N-CA-C	-9.74	99.93	113.37
1	X	146	ARG	N-CA-C	-9.73	102.02	113.21
1	J	133	LEU	N-CA-C	-9.71	100.56	111.82
1	Q	133	LEU	N-CA-C	-9.69	100.02	112.23
1	B	154	ILE	CA-C-N	9.64	130.31	120.38
1	B	154	ILE	C-N-CA	9.64	130.31	120.38
1	J	168	VAL	N-CA-C	-9.59	98.87	113.16
1	H	203	SER	N-CA-C	-9.52	99.98	111.69
1	D	133	LEU	N-CA-C	-9.50	102.29	112.93
1	X	47	GLY	N-CA-C	9.49	126.58	114.25
1	T	27	LEU	CA-C-N	9.47	129.12	119.56
1	T	27	LEU	C-N-CA	9.47	129.12	119.56
1	K	133	LEU	N-CA-C	-9.39	100.93	112.38
1	A	133	LEU	N-CA-C	-9.38	101.53	113.16
1	S	168	VAL	N-CA-C	-9.34	100.37	113.07
1	G	277	ILE	N-CA-C	9.29	120.56	107.37
1	F	22	THR	CA-C-N	9.28	129.22	119.85
1	F	22	THR	C-N-CA	9.28	129.22	119.85
1	G	309	GLY	N-CA-C	9.26	120.19	111.67
1	C	133	LEU	N-CA-C	-9.21	101.81	112.87
1	O	229	ASN	N-CA-C	-9.14	101.90	113.23
1	D	47	GLY	N-CA-C	9.10	123.32	113.58
1	B	50	ILE	N-CA-C	-9.06	103.77	112.29
1	N	27	LEU	CA-C-N	9.00	128.33	118.97
1	N	27	LEU	C-N-CA	9.00	128.33	118.97
1	G	135	LYS	N-CA-C	-8.98	99.97	112.45
1	C	168	VAL	N-CA-C	-8.95	101.49	110.62
1	O	321	LEU	N-CA-C	-8.85	101.39	112.72
1	P	15	VAL	N-CA-C	-8.82	95.46	108.87
1	X	2	HIS	CA-C-N	8.73	128.32	119.24
1	X	2	HIS	C-N-CA	8.73	128.32	119.24
1	W	44	ASP	N-CA-C	-8.64	102.65	113.02
1	Q	168	VAL	N-CA-C	-8.60	104.31	112.83
1	I	226	LYS	N-CA-C	-8.59	101.88	111.07
1	M	233	GLU	N-CA-C	8.57	121.70	111.33
1	R	191	SER	N-CA-C	-8.57	102.61	113.23
1	O	12	PHE	N-CA-C	8.56	120.71	109.83
1	Q	22	THR	CA-C-N	8.54	128.56	119.76
1	Q	22	THR	C-N-CA	8.54	128.56	119.76
1	G	82	ASN	N-CA-C	-8.50	102.35	112.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	141	ALA	N-CA-C	-8.42	101.79	110.97
1	U	245	ARG	CA-C-N	8.42	130.36	119.84
1	U	245	ARG	C-N-CA	8.42	130.36	119.84
1	E	168	VAL	N-CA-C	-8.39	101.66	113.07
1	C	127	ALA	N-CA-C	-8.39	100.08	110.65
1	O	133	LEU	N-CA-C	-8.27	103.35	113.19
1	K	2	HIS	CA-C-N	8.26	130.17	119.84
1	K	2	HIS	C-N-CA	8.26	130.17	119.84
1	F	27	LEU	CA-C-N	8.21	127.78	119.24
1	F	27	LEU	C-N-CA	8.21	127.78	119.24
1	I	245	ARG	CA-C-N	8.19	130.08	119.84
1	I	245	ARG	C-N-CA	8.19	130.08	119.84
1	P	112	TYR	N-CA-C	-8.19	102.43	111.36
1	K	50	ILE	N-CA-C	-8.19	103.26	111.77
1	I	12	PHE	CA-C-N	8.18	130.06	119.84
1	I	12	PHE	C-N-CA	8.18	130.06	119.84
1	M	183	ASP	N-CA-C	-8.16	102.91	113.12
1	K	12	PHE	CA-C-N	8.16	130.04	119.84
1	K	12	PHE	C-N-CA	8.16	130.04	119.84
1	X	288	TYR	N-CA-C	-8.12	102.37	111.14
1	O	12	PHE	CA-C-N	8.08	129.94	119.84
1	O	12	PHE	C-N-CA	8.08	129.94	119.84
1	F	138	GLU	N-CA-C	-8.05	101.58	111.40
1	A	27	LEU	CA-C-N	8.03	127.61	118.85
1	A	27	LEU	C-N-CA	8.03	127.61	118.85
1	T	135	LYS	N-CA-C	-8.02	102.13	111.03
1	V	168	VAL	N-CA-C	-7.97	101.13	111.09
1	S	132	GLU	N-CA-C	-7.96	101.89	112.72
1	G	52	GLY	N-CA-C	7.96	122.11	112.48
1	W	131	PHE	N-CA-C	-7.95	103.16	113.17
1	T	207	GLU	N-CA-C	-7.93	99.40	110.35
1	M	298	GLU	N-CA-C	7.92	122.77	113.18
1	H	178	SER	N-CA-C	7.90	121.22	110.55
1	P	10	ALA	N-CA-C	7.89	120.79	111.71
1	R	236	GLU	N-CA-C	-7.89	103.61	113.55
1	U	147	GLU	N-CA-C	-7.87	101.72	112.03
1	L	154	ILE	N-CA-C	7.87	116.46	107.89
1	I	309	GLY	N-CA-C	7.86	118.90	111.67
1	G	133	LEU	N-CA-C	-7.85	103.81	113.15
1	M	131	PHE	N-CA-C	-7.83	103.18	112.89
1	H	133	LEU	N-CA-C	-7.82	103.62	113.01
1	U	12	PHE	CA-C-N	7.82	128.28	119.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	U	12	PHE	C-N-CA	7.82	128.28	119.83
1	U	210	ARG	N-CA-C	7.81	119.48	109.72
1	S	223	MET	N-CA-C	-7.78	104.39	114.04
1	W	22	THR	CA-C-N	7.78	127.80	119.78
1	W	22	THR	C-N-CA	7.78	127.80	119.78
1	H	198	LEU	N-CA-C	-7.78	104.27	114.31
1	N	18	ILE	N-CA-C	7.72	115.19	107.55
1	K	322	LEU	N-CA-C	-7.71	103.14	112.54
1	D	27	LEU	CA-C-N	7.69	129.46	119.84
1	D	27	LEU	C-N-CA	7.69	129.46	119.84
1	D	130	SER	N-CA-C	-7.69	100.99	110.61
1	D	44	ASP	N-CA-C	-7.68	103.94	113.38
1	T	168	VAL	N-CA-C	-7.68	102.97	110.72
1	V	153	VAL	N-CA-C	7.67	118.72	107.37
1	W	154	ILE	N-CA-C	7.65	115.12	107.55
1	G	255	GLU	N-CA-C	7.65	121.37	108.90
1	X	104	GLY	N-CA-C	7.65	121.03	111.85
1	I	269	LYS	N-CA-C	-7.64	102.88	111.14
1	N	210	ARG	N-CA-C	7.64	119.87	109.24
1	T	62	LEU	N-CA-C	-7.63	103.23	112.54
1	W	133	LEU	N-CA-C	-7.62	102.85	113.37
1	G	223	MET	N-CA-C	-7.62	101.69	112.13
1	Q	82	ASN	N-CA-C	-7.61	102.99	111.82
1	T	12	PHE	CA-C-N	7.61	129.35	119.84
1	T	12	PHE	C-N-CA	7.61	129.35	119.84
1	G	231	ILE	N-CA-C	7.60	117.72	110.42
1	G	63	GLY	N-CA-C	-7.59	105.89	115.31
1	B	63	GLY	N-CA-C	-7.59	103.30	112.49
1	P	209	ILE	N-CA-C	7.59	118.83	107.75
1	B	287	PHE	N-CA-C	-7.57	102.69	112.23
1	I	27	LEU	CA-C-N	7.57	127.45	119.05
1	I	27	LEU	C-N-CA	7.57	127.45	119.05
1	N	296	LYS	N-CA-C	-7.57	103.61	112.92
1	R	179	GLU	N-CA-C	-7.54	103.92	113.72
1	S	153	VAL	N-CA-C	7.53	117.15	106.53
1	F	290	LEU	N-CA-C	-7.53	102.77	110.97
1	U	308	THR	N-CA-C	7.51	122.48	113.16
1	U	168	VAL	N-CA-C	-7.51	103.13	110.72
1	O	168	VAL	N-CA-C	-7.51	102.86	113.07
1	W	12	PHE	CA-C-N	7.51	129.22	119.84
1	W	12	PHE	C-N-CA	7.51	129.22	119.84
1	R	133	LEU	N-CA-C	-7.49	103.21	112.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	207	GLU	N-CA-C	-7.49	101.19	110.41
1	N	2	HIS	CA-C-N	7.47	127.01	119.24
1	N	2	HIS	C-N-CA	7.47	127.01	119.24
1	X	321	LEU	N-CA-C	-7.47	104.41	113.97
1	H	158	GLY	N-CA-C	-7.46	105.22	114.92
1	H	168	VAL	N-CA-C	-7.46	101.45	111.44
1	M	168	VAL	N-CA-C	-7.45	101.77	111.09
1	U	65	ALA	N-CA-C	-7.44	102.86	110.97
1	X	296	LYS	N-CA-C	-7.44	104.60	112.93
1	B	104	GLY	N-CA-C	7.42	120.65	110.56
1	K	93	LYS	N-CA-C	-7.42	103.20	111.28
1	Q	226	LYS	N-CA-C	-7.41	103.14	111.07
1	H	132	GLU	N-CA-C	-7.40	104.65	112.93
1	E	144	LEU	N-CA-C	-7.38	104.25	113.55
1	E	10	ALA	N-CA-C	7.37	119.01	110.97
1	I	44	ASP	N-CA-C	-7.37	103.37	112.88
1	A	64	ASP	N-CA-C	-7.35	104.17	113.43
1	R	27	LEU	CA-C-N	7.34	127.99	119.47
1	R	27	LEU	C-N-CA	7.34	127.99	119.47
1	A	18	ILE	CA-C-N	7.33	127.50	119.87
1	A	18	ILE	C-N-CA	7.33	127.50	119.87
1	N	168	VAL	N-CA-C	-7.33	101.92	111.09
1	O	303	ILE	N-CA-C	7.33	118.84	108.36
1	W	27	LEU	CA-C-N	7.32	128.99	119.84
1	W	27	LEU	C-N-CA	7.32	128.99	119.84
1	D	5	ILE	N-CA-C	-7.32	103.02	111.00
1	N	179	GLU	N-CA-C	-7.30	103.68	112.59
1	G	315	PHE	N-CA-C	-7.29	104.20	113.23
1	A	163	GLY	N-CA-C	-7.28	105.63	114.66
1	X	212	VAL	N-CA-C	7.27	118.61	107.99
1	E	97	ASP	N-CA-C	-7.26	99.46	110.14
1	G	27	LEU	CA-C-N	7.25	126.88	119.56
1	G	27	LEU	C-N-CA	7.25	126.88	119.56
1	V	134	MET	N-CA-C	-7.23	102.58	111.33
1	I	244	VAL	N-CA-C	7.23	119.15	108.45
1	P	309	GLY	N-CA-C	7.22	125.46	112.02
1	L	63	GLY	N-CA-C	-7.22	105.71	114.66
1	D	207	GLU	N-CA-C	-7.21	98.62	109.94
1	J	22	THR	CA-C-N	7.16	126.92	119.76
1	J	22	THR	C-N-CA	7.16	126.92	119.76
1	O	223	MET	N-CA-C	-7.15	103.57	112.72
1	V	245	ARG	N-CA-C	7.15	125.61	109.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	T	44	ASP	N-CA-C	-7.14	104.57	112.72
1	J	132	GLU	N-CA-C	-7.13	103.89	112.59
1	T	198	LEU	N-CA-C	-7.12	103.45	111.14
1	X	44	ASP	N-CA-C	-7.11	104.35	113.16
1	T	112	TYR	N-CA-C	-7.10	103.47	111.14
1	T	178	SER	N-CA-C	7.10	120.68	110.24
1	I	251	TYR	N-CA-C	-7.10	102.03	110.41
1	I	224	THR	N-CA-C	-7.08	102.98	111.69
1	R	168	VAL	N-CA-C	-7.07	102.67	112.50
1	T	210	ARG	N-CA-C	7.04	118.95	110.07
1	L	169	ARG	N-CA-C	-7.04	103.54	111.14
1	H	115	ASP	N-CA-C	-7.04	102.67	111.11
1	G	245	ARG	N-CA-C	7.01	125.29	109.81
1	A	191	SER	N-CA-C	-6.99	104.75	113.28
1	M	145	LYS	N-CA-C	-6.98	104.76	113.28
1	W	245	ARG	N-CA-C	6.98	125.24	109.81
1	X	155	PRO	N-CA-C	6.98	117.17	110.47
1	W	245	ARG	CA-C-N	6.97	128.55	119.84
1	W	245	ARG	C-N-CA	6.97	128.55	119.84
1	L	180	VAL	N-CA-C	6.95	118.12	108.12
1	R	169	ARG	N-CA-C	-6.92	103.51	112.23
1	G	76	VAL	N-CA-C	6.92	118.77	108.46
1	F	168	VAL	N-CA-C	-6.92	102.17	111.44
1	W	288	TYR	N-CA-C	-6.89	103.85	111.36
1	F	47	GLY	N-CA-C	6.89	124.39	114.67
1	P	44	ASP	N-CA-C	-6.89	104.49	113.17
1	Q	234	ALA	N-CA-C	-6.88	103.80	111.71
1	T	38	VAL	N-CA-C	6.88	117.95	107.77
1	X	154	ILE	CA-C-N	6.87	124.68	119.66
1	X	154	ILE	C-N-CA	6.87	124.68	119.66
1	X	132	GLU	N-CA-C	-6.87	104.47	112.92
1	K	234	ALA	N-CA-C	-6.86	103.87	111.82
1	N	50	ILE	N-CA-C	-6.84	105.67	112.17
1	H	160	SER	N-CA-C	-6.84	101.45	110.07
1	O	29	ASN	N-CA-C	6.84	121.37	112.89
1	X	178	SER	N-CA-C	6.83	120.54	110.30
1	W	229	ASN	N-CA-C	-6.83	104.95	113.28
1	R	320	LYS	N-CA-C	-6.82	104.06	112.38
1	G	253	PHE	N-CA-C	-6.81	102.79	111.92
1	K	112	TYR	N-CA-C	-6.81	102.36	111.96
1	P	2	HIS	CA-C-N	6.81	127.08	119.32
1	P	2	HIS	C-N-CA	6.81	127.08	119.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	22	THR	CA-C-N	6.79	126.75	120.03
1	I	22	THR	C-N-CA	6.79	126.75	120.03
1	P	191	SER	N-CA-C	-6.78	104.48	112.89
1	R	288	TYR	N-CA-C	-6.78	103.58	110.97
1	M	224	THR	N-CA-C	-6.78	106.89	114.62
1	P	78	ALA	N-CA-C	-6.77	98.69	109.59
1	C	66	LEU	N-CA-C	-6.77	104.89	113.01
1	X	65	ALA	N-CA-C	-6.77	103.91	111.28
1	X	179	GLU	N-CA-C	-6.76	104.91	113.02
1	A	245	ARG	CA-C-N	6.75	128.28	119.84
1	A	245	ARG	C-N-CA	6.75	128.28	119.84
1	V	180	VAL	N-CA-C	6.74	117.79	108.89
1	C	303	ILE	N-CA-C	6.74	118.30	108.53
1	K	64	ASP	N-CA-C	-6.73	105.61	113.88
1	T	281	VAL	N-CA-C	6.72	119.49	111.09
1	C	283	THR	N-CA-C	6.72	118.39	111.14
1	U	112	TYR	N-CA-C	-6.71	103.89	111.07
1	K	168	VAL	N-CA-C	-6.71	103.17	113.16
1	N	130	SER	N-CA-C	-6.70	103.56	113.61
1	D	173	GLU	N-CA-C	-6.69	104.06	111.36
1	M	146	ARG	N-CA-C	-6.69	104.14	113.37
1	X	78	ALA	N-CA-C	-6.69	101.12	110.35
1	L	296	LYS	N-CA-C	-6.67	104.88	113.16
1	L	178	SER	N-CA-C	6.67	119.90	109.96
1	K	221	GLU	N-CA-C	-6.67	102.64	111.24
1	X	32	ARG	N-CA-C	-6.64	105.14	113.18
1	U	63	GLY	N-CA-C	-6.64	106.43	114.66
1	X	113	LEU	N-CA-C	-6.63	104.13	111.36
1	L	27	LEU	CA-C-N	6.63	126.07	118.85
1	L	27	LEU	C-N-CA	6.63	126.07	118.85
1	S	283	THR	N-CA-C	6.61	118.49	111.28
1	I	279	ASP	CA-C-N	6.60	126.73	119.87
1	I	279	ASP	C-N-CA	6.60	126.73	119.87
1	L	114	LEU	N-CA-C	-6.59	105.25	113.55
1	O	178	SER	N-CA-C	6.59	120.23	110.48
1	S	44	ASP	N-CA-C	-6.58	105.13	113.02
1	W	23	PRO	N-CA-C	6.58	121.67	111.21
1	K	18	ILE	N-CA-C	6.57	113.54	107.56
1	S	202	LEU	N-CA-C	-6.56	104.21	111.82
1	G	250	ASP	N-CA-C	6.56	119.53	107.73
1	H	67	SER	N-CA-C	-6.55	103.83	110.97
1	K	311	ILE	N-CA-C	6.55	116.58	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	10	ALA	N-CA-C	6.54	120.12	111.75
1	O	82	ASN	N-CA-C	-6.54	104.33	112.90
1	L	46	THR	N-CA-C	-6.53	104.41	112.38
1	Q	52	GLY	N-CA-C	-6.53	104.97	112.29
1	Q	93	LYS	N-CA-C	-6.53	104.57	112.54
1	K	22	THR	CA-C-N	6.52	126.54	119.89
1	K	22	THR	C-N-CA	6.52	126.54	119.89
1	J	296	LYS	N-CA-C	-6.51	103.66	112.26
1	F	296	LYS	N-CA-C	-6.51	104.97	113.17
1	R	323	SER	N-CA-C	-6.49	105.24	113.02
1	T	288	TYR	N-CA-C	-6.48	104.41	112.90
1	L	186	VAL	N-CA-C	6.48	117.24	108.17
1	E	245	ARG	N-CA-C	6.47	124.11	109.81
1	C	23	PRO	N-CA-C	6.47	121.40	111.11
1	C	14	ARG	N-CA-C	6.46	118.94	108.34
1	J	180	VAL	N-CA-C	6.46	118.01	108.45
1	F	153	VAL	N-CA-C	6.45	116.01	106.85
1	R	139	GLU	N-CA-C	-6.45	103.94	110.97
1	N	82	ASN	N-CA-C	-6.43	103.78	111.69
1	Q	233	GLU	N-CA-C	-6.43	104.13	112.68
1	G	259	ILE	N-CA-C	6.42	113.08	106.21
1	X	112	TYR	N-CA-C	-6.42	104.32	111.71
1	U	18	ILE	CA-C-N	6.41	127.86	119.84
1	U	18	ILE	C-N-CA	6.41	127.86	119.84
1	G	210	ARG	N-CA-C	6.41	121.33	109.10
1	I	198	LEU	N-CA-C	-6.39	104.24	111.14
1	X	228	ASP	N-CA-C	-6.39	104.31	111.28
1	J	44	ASP	N-CA-C	-6.39	105.06	112.92
1	O	22	THR	CA-C-N	6.38	126.14	119.76
1	O	22	THR	C-N-CA	6.38	126.14	119.76
1	Q	245	ARG	N-CA-C	6.38	123.90	109.81
1	L	76	VAL	N-CA-C	6.36	118.24	109.46
1	W	21	GLU	N-CA-C	-6.36	100.63	110.10
1	P	272	THR	N-CA-C	6.35	119.19	111.82
1	H	50	ILE	N-CA-C	-6.34	106.52	113.43
1	I	30	ILE	N-CA-C	-6.34	104.57	110.53
1	F	53	ASN	N-CA-C	6.33	120.26	112.54
1	S	154	ILE	CA-C-N	6.32	126.89	120.38
1	S	154	ILE	C-N-CA	6.32	126.89	120.38
1	U	223	MET	N-CA-C	-6.32	105.33	114.12
1	M	250	ASP	N-CA-C	6.32	119.11	107.99
1	M	27	LEU	CA-C-N	6.32	125.81	119.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	27	LEU	C-N-CA	6.32	125.81	119.24
1	D	178	SER	N-CA-C	6.31	119.62	110.28
1	Q	42	ARG	N-CA-C	6.31	120.07	108.58
1	V	233	GLU	N-CA-C	-6.31	104.03	111.03
1	C	22	THR	CA-C-N	6.29	126.31	119.89
1	C	22	THR	C-N-CA	6.29	126.31	119.89
1	A	245	ARG	N-CA-C	6.29	123.71	109.81
1	O	18	ILE	N-CA-C	-6.29	102.11	108.96
1	B	179	GLU	N-CA-C	-6.28	105.65	113.38
1	D	112	TYR	N-CA-C	-6.28	104.43	111.28
1	L	196	ALA	N-CA-C	-6.28	104.06	111.03
1	D	290	LEU	N-CA-C	-6.27	104.07	111.03
1	K	79	VAL	N-CA-C	6.26	116.38	110.30
1	X	180	VAL	N-CA-C	6.26	117.72	108.45
1	V	179	GLU	N-CA-C	-6.26	103.75	112.45
1	K	5	ILE	N-CA-C	-6.26	104.23	110.30
1	H	288	TYR	N-CA-C	-6.25	103.77	111.33
1	V	44	ASP	N-CA-C	-6.25	105.66	113.28
1	V	232	LYS	N-CA-C	-6.24	104.36	112.23
1	P	104	GLY	N-CA-C	6.24	122.70	112.84
1	N	44	ASP	N-CA-C	-6.24	105.16	112.89
1	V	27	LEU	CA-C-N	6.23	125.45	118.97
1	V	27	LEU	C-N-CA	6.23	125.45	118.97
1	W	321	LEU	N-CA-C	-6.23	106.22	113.88
1	R	262	GLU	N-CA-C	-6.23	104.03	111.69
1	T	232	LYS	N-CA-C	-6.22	104.40	112.68
1	C	245	ARG	CA-C-N	6.22	127.61	119.84
1	C	245	ARG	C-N-CA	6.22	127.61	119.84
1	U	236	GLU	N-CA-C	-6.22	104.76	112.90
1	T	158	GLY	N-CA-C	-6.21	107.11	115.36
1	X	182	PHE	N-CA-C	6.20	118.63	108.52
1	O	169	ARG	N-CA-C	-6.18	105.39	113.12
1	L	2	HIS	CA-C-N	6.18	125.39	118.97
1	L	2	HIS	C-N-CA	6.18	125.39	118.97
1	L	237	LEU	N-CA-C	-6.16	104.64	111.36
1	J	321	LEU	N-CA-C	-6.16	105.56	114.12
1	F	179	GLU	N-CA-C	-6.15	105.72	113.72
1	V	143	GLU	N-CA-C	-6.15	105.87	113.19
1	O	210	ARG	N-CA-C	6.14	119.41	109.15
1	U	245	ARG	N-CA-C	6.14	123.39	109.81
1	J	161	PRO	N-CA-C	-6.14	105.52	113.57
1	N	262	GLU	N-CA-C	-6.14	104.51	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	182	PHE	N-CA-C	6.14	120.27	109.96
1	N	126	ASP	N-CA-C	-6.14	99.16	108.67
1	S	245	ARG	N-CA-C	6.14	123.37	109.81
1	N	197	GLY	N-CA-C	-6.13	105.37	112.73
1	S	236	GLU	N-CA-C	-6.12	103.22	112.04
1	I	104	GLY	N-CA-C	6.10	118.19	110.38
1	J	10	ALA	N-CA-C	6.10	117.73	111.14
1	P	245	ARG	N-CA-C	6.10	123.28	109.81
1	E	44	ASP	N-CA-C	-6.09	105.81	113.18
1	T	144	LEU	N-CA-C	-6.09	104.70	111.71
1	P	137	ALA	N-CA-C	-6.09	104.71	111.71
1	Q	23	PRO	N-CA-C	6.09	120.64	111.14
1	V	173	GLU	N-CA-C	-6.09	104.57	111.14
1	Q	136	TYR	N-CA-C	-6.08	103.81	111.11
1	X	160	SER	CA-C-N	-6.08	112.39	119.32
1	X	160	SER	C-N-CA	-6.08	112.39	119.32
1	J	42	ARG	N-CA-C	6.08	120.12	110.70
1	S	18	ILE	CA-C-N	6.08	125.29	118.97
1	S	18	ILE	C-N-CA	6.08	125.29	118.97
1	I	245	ARG	N-CA-C	6.07	123.23	109.81
1	C	245	ARG	N-CA-C	6.07	123.22	109.81
1	N	105	LYS	N-CA-C	-6.07	101.06	110.10
1	I	253	PHE	N-CA-C	-6.07	104.48	113.40
1	H	147	GLU	N-CA-C	-6.06	103.59	111.71
1	A	22	THR	CA-C-N	6.06	126.02	119.78
1	A	22	THR	C-N-CA	6.06	126.02	119.78
1	X	165	LEU	N-CA-C	-6.04	105.77	113.01
1	H	177	GLN	N-CA-C	6.04	120.19	112.34
1	X	18	ILE	CA-C-N	6.04	127.38	119.84
1	X	18	ILE	C-N-CA	6.04	127.38	119.84
1	T	277	ILE	N-CA-C	6.03	116.55	107.80
1	O	182	PHE	N-CA-C	6.03	119.09	110.10
1	B	29	ASN	N-CA-C	6.03	117.72	111.03
1	P	168	VAL	N-CA-C	-6.03	103.55	111.09
1	D	164	THR	N-CA-C	-6.03	105.89	113.18
1	L	22	THR	CA-C-N	6.02	125.96	119.76
1	L	22	THR	C-N-CA	6.02	125.96	119.76
1	X	31	SER	N-CA-C	-6.02	106.47	113.88
1	F	81	SER	N-CA-C	6.02	118.93	109.96
1	J	279	ASP	CA-C-N	6.02	126.18	119.32
1	J	279	ASP	C-N-CA	6.02	126.18	119.32
1	M	296	LYS	N-CA-C	-6.02	104.59	112.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	U	207	GLU	N-CA-C	-6.02	102.73	110.19
1	W	93	LYS	N-CA-C	-6.02	104.35	111.03
1	X	324	LEU	N-CA-C	6.01	119.36	112.57
1	M	18	ILE	CA-C-N	6.01	127.35	119.84
1	M	18	ILE	C-N-CA	6.01	127.35	119.84
1	D	238	LEU	N-CA-C	-6.01	105.60	113.17
1	R	205	LEU	N-CA-C	-6.01	105.71	113.16
1	G	137	ALA	N-CA-C	-6.01	103.90	111.11
1	L	208	ASP	N-CA-C	-6.01	105.03	113.20
1	S	124	VAL	N-CA-C	5.99	116.32	107.15
1	L	168	VAL	N-CA-C	-5.99	104.47	111.00
1	J	27	LEU	CA-C-N	5.99	127.32	119.84
1	J	27	LEU	C-N-CA	5.99	127.32	119.84
1	V	240	VAL	N-CA-C	5.98	116.14	107.88
1	D	104	GLY	N-CA-C	5.98	120.71	112.52
1	C	259	ILE	N-CA-C	5.97	116.21	107.37
1	K	121	GLU	N-CA-C	5.97	118.86	109.96
1	L	255	GLU	N-CA-C	5.97	118.95	109.81
1	N	320	LYS	N-CA-C	-5.97	104.47	110.97
1	O	163	GLY	N-CA-C	-5.97	107.78	114.40
1	J	281	VAL	N-CA-C	5.96	117.50	111.00
1	R	214	ILE	N-CA-C	5.96	115.19	106.55
1	O	320	LYS	N-CA-C	-5.96	106.66	112.97
1	M	238	LEU	N-CA-C	-5.96	105.15	113.37
1	G	59	GLU	N-CA-C	-5.95	103.57	111.24
1	O	11	LYS	N-CA-C	5.94	119.35	111.75
1	N	104	GLY	N-CA-C	5.94	118.95	110.46
1	P	93	LYS	N-CA-C	-5.93	105.54	112.89
1	G	191	SER	N-CA-C	-5.92	104.77	112.23
1	N	298	GLU	N-CA-C	5.92	120.67	113.38
1	O	315	PHE	N-CA-C	-5.92	104.95	111.82
1	J	126	ASP	N-CA-C	-5.92	100.01	109.96
1	R	209	ILE	N-CA-C	5.92	117.88	108.89
1	P	22	THR	CA-C-N	5.91	126.73	120.11
1	P	22	THR	C-N-CA	5.91	126.73	120.11
1	F	309	GLY	N-CA-C	5.91	121.73	110.86
1	C	231	ILE	N-CA-C	5.90	118.46	111.09
1	I	98	ALA	N-CA-C	5.89	118.83	108.75
1	W	168	VAL	N-CA-C	-5.89	103.41	111.89
1	N	111	ASN	N-CA-C	5.89	118.45	111.33
1	X	130	SER	N-CA-C	-5.88	105.92	112.57
1	W	211	PRO	N-CA-C	-5.88	100.37	112.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	183	ASP	N-CA-C	-5.88	105.00	111.82
1	B	43	ASP	N-CA-C	-5.87	106.08	113.18
1	J	290	LEU	N-CA-C	-5.87	104.88	112.68
1	T	262	GLU	N-CA-C	-5.87	104.57	110.97
1	J	315	PHE	N-CA-C	-5.87	103.69	111.96
1	W	217	GLY	N-CA-C	-5.87	102.48	112.51
1	G	17	LEU	N-CA-C	-5.86	106.16	113.55
1	K	114	LEU	N-CA-C	5.86	117.47	111.14
1	T	104	GLY	N-CA-C	5.86	119.29	110.97
1	U	262	GLU	N-CA-C	-5.85	104.53	111.03
1	U	279	ASP	CA-C-N	5.85	125.53	119.56
1	U	279	ASP	C-N-CA	5.85	125.53	119.56
1	V	104	GLY	N-CA-C	5.85	118.36	111.63
1	L	233	GLU	N-CA-C	-5.84	105.04	111.82
1	E	178	SER	N-CA-C	5.84	119.78	109.96
1	Q	104	GLY	N-CA-C	5.84	118.98	110.63
1	K	104	GLY	N-CA-C	5.84	118.67	110.38
1	M	212	VAL	N-CA-C	5.84	116.84	107.73
1	Q	78	ALA	N-CA-C	-5.83	102.68	110.55
1	C	288	TYR	N-CA-C	-5.83	103.91	111.02
1	W	179	GLU	N-CA-C	-5.82	103.43	110.88
1	X	142	GLU	N-CA-C	5.81	117.42	111.14
1	D	293	LEU	N-CA-C	-5.80	107.19	114.56
1	V	283	THR	N-CA-C	5.80	118.07	111.11
1	L	179	GLU	N-CA-C	-5.80	106.06	113.02
1	J	67	SER	N-CA-C	-5.79	104.87	111.07
1	C	264	ALA	N-CA-C	-5.79	105.48	112.54
1	A	178	SER	N-CA-C	5.78	118.66	109.24
1	C	308	THR	N-CA-C	5.78	119.10	112.57
1	E	163	GLY	N-CA-C	-5.78	107.49	114.66
1	L	205	LEU	N-CA-C	-5.78	105.49	112.54
1	T	212	VAL	N-CA-C	5.78	116.18	107.80
1	U	296	LYS	N-CA-C	-5.77	105.43	112.88
1	J	255	GLU	N-CA-C	5.77	117.84	109.07
1	G	128	LYS	N-CA-C	5.77	117.46	109.15
1	E	82	ASN	N-CA-C	-5.76	104.92	111.14
1	C	137	ALA	N-CA-C	-5.76	104.92	111.14
1	U	52	GLY	N-CA-C	5.76	118.76	111.85
1	V	56	ARG	N-CA-C	-5.76	105.35	112.38
1	B	113	LEU	N-CA-C	-5.75	105.09	111.36
1	D	179	GLU	N-CA-C	-5.75	106.31	113.38
1	X	174	ILE	N-CA-C	-5.74	104.91	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	W	98	ALA	N-CA-C	5.74	117.76	108.41
1	R	210	ARG	N-CA-C	5.74	117.94	109.62
1	F	324	LEU	N-CA-C	5.73	120.41	112.90
1	P	192	GLY	N-CA-C	-5.72	106.27	115.08
1	H	182	PHE	N-CA-C	5.71	119.13	109.76
1	T	145	LYS	N-CA-C	-5.71	104.44	111.75
1	L	44	ASP	N-CA-C	-5.71	106.29	113.20
1	P	20	TRP	N-CA-C	5.71	118.91	110.46
1	V	95	GLY	N-CA-C	5.70	123.22	115.30
1	W	138	GLU	N-CA-C	-5.70	105.10	112.68
1	B	145	LYS	N-CA-C	-5.69	105.83	112.89
1	F	245	ARG	N-CA-C	5.68	122.36	109.81
1	S	282	TYR	N-CA-C	5.68	117.85	108.48
1	N	172	GLY	N-CA-C	-5.68	105.80	113.24
1	V	47	GLY	N-CA-C	5.68	126.64	113.18
1	D	143	GLU	N-CA-C	-5.67	104.74	111.03
1	U	158	GLY	N-CA-C	-5.67	105.12	114.76
1	M	87	THR	N-CA-C	-5.67	104.58	112.45
1	B	223	MET	N-CA-C	5.66	119.00	111.75
1	M	42	ARG	N-CA-C	5.66	118.89	108.58
1	K	273	ARG	N-CA-C	-5.66	107.38	114.56
1	M	237	LEU	N-CA-C	-5.65	105.41	112.93
1	S	320	LYS	N-CA-C	-5.65	104.50	111.40
1	S	224	THR	N-CA-C	-5.65	106.52	113.41
1	N	288	TYR	N-CA-C	-5.65	104.50	111.33
1	Q	225	SER	N-CA-C	-5.65	106.93	113.88
1	X	22	THR	CA-C-N	5.65	125.96	119.92
1	X	22	THR	C-N-CA	5.65	125.96	119.92
1	B	210	ARG	CA-C-N	5.64	126.89	119.84
1	B	210	ARG	C-N-CA	5.64	126.89	119.84
1	J	130	SER	N-CA-C	-5.64	104.02	112.54
1	C	174	ILE	N-CA-C	-5.64	105.12	110.42
1	F	42	ARG	N-CA-C	5.63	119.42	110.70
1	I	178	SER	N-CA-C	5.61	119.07	110.20
1	U	195	LEU	N-CA-C	-5.61	105.16	112.23
1	G	183	ASP	N-CA-C	-5.60	106.12	113.12
1	H	141	ALA	N-CA-C	-5.60	105.17	111.28
1	P	269	LYS	N-CA-C	5.59	117.05	111.07
1	W	164	THR	N-CA-C	-5.58	105.97	112.89
1	G	285	LYS	N-CA-C	-5.58	105.35	111.82
1	F	315	PHE	N-CA-C	-5.58	105.59	112.90
1	K	277	ILE	N-CA-C	5.58	116.76	108.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	191	SER	N-CA-C	-5.58	106.64	113.50
1	O	236	GLU	N-CA-C	-5.57	106.33	113.23
1	O	245	ARG	CA-C-N	5.56	126.80	119.84
1	O	245	ARG	C-N-CA	5.56	126.80	119.84
1	H	79	VAL	N-CA-C	-5.56	105.51	113.07
1	O	87	THR	N-CA-C	5.56	117.78	111.11
1	D	12	PHE	CA-C-N	5.56	126.03	120.14
1	D	12	PHE	C-N-CA	5.56	126.03	120.14
1	L	122	THR	N-CA-C	5.55	117.46	108.41
1	L	177	GLN	N-CA-C	5.55	117.41	111.36
1	A	230	LEU	N-CA-C	-5.54	104.88	111.03
1	Q	135	LYS	N-CA-C	-5.54	105.15	111.07
1	M	82	ASN	N-CA-C	-5.53	105.33	111.36
1	D	180	VAL	N-CA-C	5.53	117.54	108.97
1	P	43	ASP	N-CA-C	-5.53	107.11	112.97
1	L	47	GLY	N-CA-C	5.52	126.27	113.18
1	N	20	TRP	N-CA-C	5.50	118.58	109.94
1	G	237	LEU	N-CA-C	-5.50	106.42	113.02
1	A	320	LYS	N-CA-C	-5.49	105.29	111.28
1	B	92	LYS	N-CA-C	5.49	117.27	111.28
1	N	220	GLY	N-CA-C	5.49	120.96	110.86
1	M	245	ARG	N-CA-C	5.49	121.94	109.81
1	K	178	SER	N-CA-C	5.49	118.42	109.59
1	A	146	ARG	N-CA-C	-5.48	103.92	111.81
1	T	68	LYS	N-CA-C	-5.48	104.05	111.55
1	X	287	PHE	N-CA-C	-5.47	106.11	112.89
1	I	202	LEU	N-CA-C	-5.47	106.45	113.23
1	H	280	PRO	N-CA-C	5.46	121.18	114.35
1	O	238	LEU	N-CA-C	-5.46	106.39	113.16
1	G	12	PHE	CA-C-N	5.45	126.29	120.13
1	G	12	PHE	C-N-CA	5.45	126.29	120.13
1	W	202	LEU	N-CA-C	-5.45	105.44	111.71
1	E	113	LEU	N-CA-C	-5.44	105.43	111.36
1	X	299	LEU	N-CA-C	5.44	118.26	109.83
1	D	169	ARG	N-CA-C	-5.43	105.39	112.23
1	E	22	THR	CA-C-N	5.43	125.37	119.78
1	E	22	THR	C-N-CA	5.43	125.37	119.78
1	O	207	GLU	N-CA-C	-5.43	100.85	109.59
1	U	12	PHE	N-CA-C	5.42	118.10	109.64
1	B	263	VAL	N-CA-C	-5.42	104.31	111.09
1	O	124	VAL	N-CA-C	5.42	115.99	108.84
1	I	47	GLY	N-CA-C	5.41	122.30	115.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	216	VAL	N-CA-C	-5.41	107.20	112.29
1	T	208	ASP	N-CA-C	-5.40	98.46	108.24
1	Q	321	LEU	N-CA-C	-5.40	106.53	113.23
1	G	163	GLY	N-CA-C	-5.40	108.62	115.31
1	U	235	ALA	N-CA-C	-5.40	106.70	113.28
1	V	210	ARG	N-CA-C	5.39	118.16	109.15
1	D	2	HIS	CA-C-N	5.39	126.58	119.84
1	D	2	HIS	C-N-CA	5.39	126.58	119.84
1	G	154	ILE	CA-C-N	5.39	125.93	120.38
1	G	154	ILE	C-N-CA	5.39	125.93	120.38
1	E	35	GLY	N-CA-C	5.39	121.35	113.48
1	L	251	TYR	N-CA-C	-5.39	104.97	112.30
1	A	82	ASN	N-CA-C	-5.39	104.96	112.45
1	F	145	LYS	N-CA-C	-5.38	105.07	111.69
1	K	29	ASN	N-CA-C	5.38	116.83	111.07
1	A	119	GLY	N-CA-C	5.38	121.33	113.48
1	L	130	SER	N-CA-C	-5.36	104.31	111.87
1	A	319	ASP	N-CA-C	-5.36	106.42	113.12
1	F	280	PRO	N-CA-C	5.36	120.59	113.57
1	R	143	GLU	N-CA-C	-5.36	104.49	111.02
1	V	245	ARG	CA-C-N	5.36	126.53	119.84
1	V	245	ARG	C-N-CA	5.36	126.53	119.84
1	V	109	LYS	N-CA-C	5.35	117.11	109.14
1	J	287	PHE	N-CA-C	-5.35	106.43	113.12
1	A	135	LYS	N-CA-C	-5.34	105.50	112.23
1	C	18	ILE	CA-C-N	5.34	125.05	119.82
1	C	18	ILE	C-N-CA	5.34	125.05	119.82
1	P	277	ILE	N-CA-C	5.33	115.27	107.37
1	Q	43	ASP	N-CA-C	-5.33	106.61	113.23
1	U	178	SER	N-CA-C	5.33	118.62	110.20
1	S	158	GLY	N-CA-C	-5.33	107.92	115.43
1	D	65	ALA	N-CA-C	-5.33	105.92	112.90
1	S	42	ARG	N-CA-C	5.32	120.44	113.20
1	U	173	GLU	N-CA-C	-5.32	105.12	111.03
1	V	79	VAL	N-CA-C	-5.32	106.01	112.76
1	K	138	GLU	N-CA-C	-5.31	102.80	111.04
1	O	17	LEU	N-CA-C	-5.31	102.81	111.04
1	B	290	LEU	N-CA-C	-5.30	106.49	113.12
1	X	158	GLY	N-CA-C	-5.30	107.31	116.01
1	U	44	ASP	N-CA-C	-5.30	106.66	113.02
1	A	173	GLU	N-CA-C	-5.30	105.14	111.03
1	I	50	ILE	N-CA-C	-5.29	107.14	112.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	W	55	ILE	N-CA-C	-5.29	105.34	110.42
1	A	212	VAL	N-CA-C	5.29	115.13	106.72
1	B	23	PRO	N-CA-C	5.29	119.62	111.21
1	F	173	GLU	N-CA-C	-5.29	105.65	112.68
1	T	210	ARG	CA-C-N	5.29	126.45	119.84
1	T	210	ARG	C-N-CA	5.29	126.45	119.84
1	O	53	ASN	N-CA-C	5.28	119.57	113.18
1	J	323	SER	N-CA-C	-5.27	106.82	113.20
1	U	244	VAL	N-CA-C	5.27	114.81	108.06
1	H	15	VAL	N-CA-C	-5.27	100.74	108.54
1	I	308	THR	N-CA-C	5.27	119.02	112.59
1	I	179	GLU	N-CA-C	-5.27	99.58	110.80
1	Q	132	GLU	N-CA-C	-5.26	107.16	113.21
1	U	42	ARG	N-CA-C	5.26	117.71	108.56
1	C	89	LEU	N-CA-C	-5.26	105.22	111.69
1	G	175	ALA	N-CA-C	-5.26	104.97	111.33
1	U	15	VAL	N-CA-C	-5.26	98.41	107.24
1	P	179	GLU	N-CA-C	-5.25	105.54	112.94
1	K	281	VAL	N-CA-C	5.25	119.38	112.04
1	Q	163	GLY	N-CA-C	-5.24	106.34	113.37
1	D	283	THR	N-CA-C	5.24	117.74	111.71
1	H	91	ALA	N-CA-C	-5.24	104.63	111.02
1	F	82	ASN	N-CA-C	-5.23	105.49	111.14
1	E	272	THR	N-CA-C	-5.23	107.91	114.56
1	P	314	THR	N-CA-C	-5.23	105.64	112.23
1	N	200	LEU	N-CA-C	-5.22	104.84	111.11
1	G	313	GLY	N-CA-C	-5.22	108.83	115.31
1	R	148	GLY	N-CA-C	5.22	125.55	113.18
1	U	259	ILE	N-CA-C	5.22	115.61	107.99
1	R	296	LYS	N-CA-C	-5.22	106.17	113.37
1	P	74	ILE	N-CA-C	5.22	115.49	107.77
1	V	242	VAL	N-CA-C	5.22	116.21	108.23
1	I	140	ILE	N-CA-C	-5.21	105.30	110.62
1	X	259	ILE	N-CA-C	-5.21	102.36	109.55
1	S	307	HIS	N-CA-C	-5.21	101.48	109.76
1	I	127	ALA	N-CA-C	-5.21	99.71	110.80
1	W	191	SER	N-CA-C	-5.21	106.52	112.92
1	L	21	GLU	N-CA-C	-5.20	100.76	109.24
1	J	288	TYR	N-CA-C	-5.20	105.61	111.28
1	P	127	ALA	N-CA-C	5.20	116.89	109.14
1	U	169	ARG	N-CA-C	-5.20	105.53	111.14
1	X	234	ALA	N-CA-C	-5.20	105.53	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	311	ILE	N-CA-C	5.19	116.54	110.62
1	J	269	LYS	N-CA-C	5.19	116.62	111.07
1	N	208	ASP	N-CA-C	-5.18	104.12	110.65
1	C	241	LYS	N-CA-C	5.18	117.11	107.99
1	D	18	ILE	N-CA-C	5.18	113.08	108.63
1	I	153	VAL	N-CA-C	5.18	115.23	107.51
1	G	245	ARG	CA-C-N	5.17	126.31	119.84
1	G	245	ARG	C-N-CA	5.17	126.31	119.84
1	H	12	PHE	CA-C-N	5.17	125.47	119.93
1	H	12	PHE	C-N-CA	5.17	125.47	119.93
1	N	191	SER	N-CA-C	-5.17	106.23	112.54
1	J	282	TYR	N-CA-C	5.16	117.00	108.48
1	N	283	THR	N-CA-C	5.16	116.99	111.36
1	D	314	THR	N-CA-C	-5.16	105.74	111.36
1	W	32	ARG	N-CA-C	-5.16	106.67	113.12
1	E	70	ALA	N-CA-C	-5.16	101.87	110.17
1	R	18	ILE	CA-C-N	5.15	124.84	119.64
1	R	18	ILE	C-N-CA	5.15	124.84	119.64
1	C	210	ARG	CA-C-N	5.15	126.28	119.84
1	C	210	ARG	C-N-CA	5.15	126.28	119.84
1	O	42	ARG	N-CA-C	5.15	121.76	110.80
1	O	32	ARG	N-CA-C	-5.14	106.14	112.72
1	N	78	ALA	N-CA-C	-5.14	103.25	110.50
1	J	52	GLY	N-CA-C	5.14	118.28	111.70
1	O	226	LYS	N-CA-C	-5.14	105.76	111.36
1	K	267	ILE	N-CA-C	-5.14	106.03	113.07
1	B	22	THR	CA-C-N	5.14	125.07	119.78
1	B	22	THR	C-N-CA	5.14	125.07	119.78
1	B	87	THR	N-CA-C	-5.13	105.38	111.69
1	J	245	ARG	CA-C-N	5.13	126.26	119.84
1	J	245	ARG	C-N-CA	5.13	126.26	119.84
1	U	98	ALA	N-CA-C	5.12	117.60	109.50
1	V	18	ILE	CA-C-N	5.12	124.30	118.97
1	V	18	ILE	C-N-CA	5.12	124.30	118.97
1	M	225	SER	N-CA-C	-5.12	105.15	111.40
1	J	78	ALA	N-CA-C	-5.12	104.11	110.41
1	K	229	ASN	N-CA-C	-5.12	106.55	112.89
1	S	107	GLU	N-CA-C	-5.12	103.78	110.53
1	E	191	SER	N-CA-C	-5.12	106.30	112.54
1	K	163	GLY	N-CA-C	-5.11	108.32	114.66
1	R	2	HIS	CA-C-N	5.11	125.40	119.47
1	R	2	HIS	C-N-CA	5.11	125.40	119.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	10	ALA	N-CA-C	5.11	119.75	111.37
1	X	38	VAL	N-CA-C	5.11	115.48	108.12
1	S	10	ALA	N-CA-C	5.11	121.69	110.80
1	S	229	ASN	N-CA-C	-5.11	105.79	111.36
1	C	295	ARG	N-CA-C	-5.11	105.61	111.07
1	D	42	ARG	N-CA-C	5.11	117.51	109.39
1	P	288	TYR	N-CA-C	-5.11	104.79	111.02
1	U	141	ALA	N-CA-C	-5.11	105.61	111.07
1	I	164	THR	N-CA-C	-5.10	106.56	112.89
1	B	146	ARG	N-CA-C	-5.10	104.56	111.55
1	R	44	ASP	N-CA-C	-5.10	106.83	113.16
1	X	198	LEU	N-CA-C	-5.10	105.63	111.14
1	N	251	TYR	N-CA-C	-5.10	104.88	111.71
1	T	133	LEU	N-CA-C	-5.10	105.71	112.34
1	W	14	ARG	N-CA-C	5.09	116.82	108.52
1	J	63	GLY	N-CA-C	-5.09	101.11	113.18
1	E	159	ALA	N-CA-C	5.09	119.14	111.81
1	S	177	GLN	N-CA-C	5.09	117.72	111.82
1	J	185	ILE	N-CA-C	-5.08	101.06	108.17
1	B	315	PHE	N-CA-C	-5.08	106.78	113.12
1	L	262	GLU	N-CA-C	-5.07	106.78	112.87
1	D	59	GLU	N-CA-C	-5.07	105.83	111.36
1	J	244	VAL	N-CA-C	5.07	119.89	109.34
1	T	82	ASN	N-CA-C	-5.07	105.84	112.23
1	R	31	SER	N-CA-C	-5.07	105.94	111.82
1	F	255	GLU	N-CA-C	5.07	116.22	108.42
1	H	309	GLY	N-CA-C	5.07	119.56	110.95
1	F	172	GLY	N-CA-C	-5.06	108.69	115.32
1	T	179	GLU	N-CA-C	-5.06	106.35	112.88
1	G	236	GLU	N-CA-C	-5.05	107.16	113.38
1	W	223	MET	N-CA-C	-5.05	108.15	114.56
1	M	215	ALA	N-CA-C	5.04	118.11	110.64
1	I	70	ALA	N-CA-C	-5.04	102.60	110.42
1	O	179	GLU	N-CA-C	-5.04	104.39	110.44
1	J	160	SER	CA-C-N	-5.04	113.85	119.19
1	J	160	SER	C-N-CA	-5.04	113.85	119.19
1	V	62	LEU	N-CA-C	-5.04	106.39	112.54
1	M	280	PRO	N-CA-C	5.04	121.07	114.27
1	O	131	PHE	N-CA-C	-5.04	106.98	112.72
1	O	198	LEU	N-CA-C	-5.03	105.69	111.07
1	T	162	ILE	N-CA-C	-5.03	105.49	110.62
1	O	48	LEU	N-CA-C	5.02	121.50	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	T	245	ARG	CA-C-N	5.02	126.12	119.84
1	T	245	ARG	C-N-CA	5.02	126.12	119.84
1	G	39	TYR	N-CA-C	-5.02	102.35	110.14
1	R	22	THR	CA-C-N	5.02	126.12	119.84
1	R	22	THR	C-N-CA	5.02	126.12	119.84
1	W	178	SER	N-CA-C	5.02	117.75	109.72
1	B	47	GLY	N-CA-C	5.02	125.08	113.18
1	S	47	GLY	N-CA-C	5.02	125.08	113.18
1	P	290	LEU	N-CA-C	-5.02	105.89	111.36
1	G	121	GLU	N-CA-C	5.01	117.82	110.30
1	J	62	LEU	N-CA-C	-5.01	106.67	112.89
1	K	164	THR	N-CA-C	-5.01	106.99	113.01
1	D	279	ASP	CA-C-N	5.01	125.08	119.87
1	D	279	ASP	C-N-CA	5.01	125.08	119.87
1	V	93	LYS	N-CA-C	-5.01	105.29	111.40
1	J	153	VAL	N-CA-C	5.00	115.50	108.89
1	W	244	VAL	N-CA-C	5.00	115.48	108.17
1	P	77	GLY	N-CA-C	5.00	117.18	110.43
1	R	178	SER	N-CA-C	5.00	117.55	110.50

There are no chirality outliers.

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	D	167	TYR	Sidechain
1	K	167	TYR	Sidechain
1	L	167	TYR	Sidechain
1	M	167	TYR	Sidechain
1	Q	167	TYR	Sidechain
1	T	167	TYR	Sidechain
1	V	167	TYR	Sidechain

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	A	2484	0	2583	244	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	2484	0	2583	302	0
1	C	2484	0	2583	298	1
1	D	2484	0	2583	274	0
1	E	2484	0	2583	249	0
1	F	2484	0	2583	287	1
1	G	2484	0	2583	522	0
1	H	2484	0	2583	345	0
1	I	2484	0	2583	423	0
1	J	2484	0	2583	381	0
1	K	2484	0	2583	437	0
1	L	2484	0	2583	352	0
1	M	2484	0	2583	331	0
1	N	2484	0	2583	228	0
1	O	2484	0	2583	474	0
1	P	2484	0	2583	382	0
1	Q	2484	0	2583	406	0
1	R	2484	0	2583	360	0
1	S	2484	0	2583	302	0
1	T	2484	0	2583	336	0
1	U	2484	0	2583	285	0
1	V	2484	0	2583	267	0
1	W	2484	0	2583	424	0
1	X	2484	0	2583	351	0
2	A	22	0	13	5	0
2	B	22	0	13	9	0
2	C	22	0	13	7	0
2	D	22	0	13	8	0
2	E	22	0	13	5	0
2	F	22	0	13	15	0
2	G	22	0	13	3	0
2	H	22	0	13	7	0
2	I	22	0	13	12	0
2	J	22	0	13	9	0
2	K	22	0	13	9	0
2	L	22	0	13	5	0
2	M	22	0	13	10	0
2	N	22	0	13	4	0
2	O	22	0	13	5	0
2	P	22	0	13	10	0
2	Q	22	0	13	15	0
2	R	22	0	13	13	0
2	S	22	0	13	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	T	22	0	13	7	0
2	U	22	0	13	6	0
2	V	22	0	13	4	0
2	W	22	0	13	10	0
2	X	22	0	13	6	0
3	A	47	0	0	10	0
3	B	34	0	0	7	0
3	C	26	0	0	3	0
3	D	38	0	0	9	0
3	E	35	0	0	5	0
3	F	40	0	0	6	0
3	G	34	0	0	13	0
3	H	38	0	0	11	0
3	I	29	0	0	8	0
3	J	30	0	0	8	0
3	K	33	0	0	9	0
3	L	29	0	0	12	0
3	M	29	0	0	8	0
3	N	38	0	0	7	0
3	O	28	0	0	9	0
3	P	20	0	0	11	0
3	Q	25	0	0	13	0
3	R	21	0	0	5	0
3	S	42	0	0	10	0
3	T	40	0	0	12	0
3	U	48	0	0	9	0
3	V	40	0	0	6	0
3	W	34	0	0	10	0
3	X	26	0	0	6	0
All	All	60948	0	62304	8068	1

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 66.

All (8068) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:128:LYS:H	1:X:128:LYS:HD3	1.06	1.19
1:S:1:MET:HE1	1:S:172:GLY:HA3	1.26	1.15
1:C:103:ARG:HD3	1:C:133:LEU:HD22	1.21	1.15
1:G:147:GLU:CB	1:I:221:GLU:HA	1.75	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:214:ILE:HD13	1:C:286:ALA:HA	1.29	1.14
1:G:147:GLU:HB3	1:I:221:GLU:HA	1.18	1.14
1:J:181:LYS:H	1:J:181:LYS:HD3	1.03	1.14
1:N:181:LYS:HD3	1:N:181:LYS:H	1.07	1.13
1:X:218:ARG:HG2	1:X:219:PHE:H	1.11	1.12
1:I:181:LYS:H	1:I:181:LYS:HD3	0.95	1.11
1:O:67:SER:HB2	1:S:67:SER:HB2	1.28	1.11
1:G:165:LEU:HD21	1:G:238:LEU:HD21	1.31	1.10
1:O:134:MET:HE1	1:O:155:PRO:HA	1.31	1.10
1:P:265:GLN:HG3	1:P:269:LYS:HE3	1.33	1.10
1:X:218:ARG:HB2	1:X:218:ARG:HH11	1.04	1.10
1:J:128:LYS:HE2	1:J:132:GLU:HB2	1.29	1.10
1:H:128:LYS:H	1:H:128:LYS:HD3	1.14	1.10
1:D:181:LYS:HE2	1:D:181:LYS:H	1.14	1.09
1:O:72:VAL:HG13	1:O:151:PRO:HA	1.33	1.09
1:W:214:ILE:HD13	1:W:286:ALA:HA	1.34	1.09
1:H:218:ARG:HB2	1:H:218:ARG:HH11	1.18	1.09
1:A:214:ILE:HD13	1:A:286:ALA:HA	1.33	1.09
1:F:222:VAL:HG13	1:F:223:MET:H	0.97	1.09
1:Q:319:ASP:HA	1:Q:322:LEU:HD12	1.32	1.08
1:W:229:ASN:ND2	1:W:232:LYS:HE2	1.68	1.08
1:M:134:MET:HE1	1:M:155:PRO:HA	1.36	1.08
1:P:224:THR:HG23	1:P:245:ARG:HH12	1.17	1.08
1:O:261:GLY:HA2	1:O:324:LEU:HB3	1.35	1.08
1:W:171:VAL:HG21	1:W:201:GLY:HA3	1.31	1.07
1:I:76:VAL:HG21	1:I:156:PRO:HG3	1.37	1.07
1:G:217:GLY:HA3	1:G:256:TYR:HB2	1.35	1.07
1:P:144:LEU:HD11	1:P:149:ARG:HD3	1.31	1.07
1:Q:82:ASN:ND2	1:Q:111:ASN:HD21	1.51	1.07
1:L:181:LYS:H	1:L:181:LYS:HD3	0.94	1.06
1:K:253:PHE:HB3	1:K:260:THR:HG21	1.30	1.06
1:Q:181:LYS:H	1:Q:181:LYS:HE2	1.08	1.05
1:Q:1:MET:HE1	1:Q:172:GLY:HA3	1.36	1.05
1:Q:181:LYS:HG2	1:Q:302:LYS:HZ2	1.22	1.05
1:N:218:ARG:HG2	1:N:219:PHE:H	1.17	1.04
1:O:1:MET:HG3	1:O:6:PHE:HB2	1.36	1.04
1:V:218:ARG:HB2	1:V:218:ARG:HH11	1.17	1.04
1:A:41:LYS:NZ	1:A:177:GLN:HE22	1.55	1.04
1:C:117:ILE:HG22	1:C:118:MET:HE2	1.40	1.04
1:E:181:LYS:H	1:E:181:LYS:HE2	1.20	1.04
1:P:27:LEU:HD13	1:P:274:GLU:HG3	1.34	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:15:VAL:HG11	1:J:94:LEU:HD11	1.37	1.03
1:D:34:ILE:HD11	1:D:291:VAL:HG22	1.35	1.03
1:R:181:LYS:HE2	1:R:181:LYS:H	1.17	1.03
1:V:143:GLU:HA	1:V:146:ARG:HD2	1.39	1.03
1:X:128:LYS:HE3	1:X:132:GLU:HB2	1.35	1.03
1:K:66:LEU:HD11	1:K:94:LEU:HD13	1.40	1.03
1:F:128:LYS:HD3	1:F:128:LYS:H	1.22	1.02
1:R:128:LYS:H	1:R:128:LYS:HD3	1.17	1.02
1:Q:214:ILE:HD13	1:Q:286:ALA:HA	1.41	1.02
1:R:41:LYS:NZ	1:R:177:GLN:HE22	1.56	1.02
1:C:1:MET:HE1	1:C:172:GLY:HA3	1.38	1.02
1:E:214:ILE:HD13	1:E:286:ALA:HA	1.41	1.02
1:B:54:LYS:HZ1	2:B:1021:5PA:H91	1.23	1.02
1:U:216:VAL:HB	1:U:285:LYS:HD2	1.40	1.02
1:D:218:ARG:HD3	1:D:222:VAL:HG11	1.39	1.02
1:W:320:LYS:HZ2	1:W:324:LEU:HD11	1.25	1.01
1:C:222:VAL:HG22	1:C:226:LYS:HD2	1.42	1.01
1:L:255:GLU:HG3	1:L:258:LYS:HB2	1.37	1.01
1:D:218:ARG:HH11	1:D:218:ARG:HB2	1.23	1.01
1:J:160:SER:OG	1:J:162:ILE:HG22	1.61	1.01
1:M:146:ARG:O	1:M:147:GLU:HG3	1.60	1.01
1:G:57:LYS:HB3	1:G:163:GLY:O	1.61	1.00
1:N:82:ASN:ND2	1:N:111:ASN:HD21	1.57	1.00
1:L:102:LEU:HB2	1:L:124:VAL:HG22	1.43	1.00
1:S:134:MET:HE1	1:S:155:PRO:HA	1.44	1.00
1:J:222:VAL:HG13	1:J:223:MET:H	1.26	1.00
1:W:217:GLY:HA2	1:W:256:TYR:HB2	1.43	1.00
1:E:1:MET:HE1	1:E:172:GLY:HA3	1.43	1.00
1:P:1:MET:HA	1:P:1:MET:HE3	1.39	1.00
1:S:54:LYS:HE3	2:S:1191:5PA:H91	1.40	1.00
1:I:174:ILE:HA	1:I:177:GLN:HE21	1.23	0.99
1:N:112:TYR:HE1	1:N:122:THR:HG21	1.24	0.99
1:P:112:TYR:HE1	1:P:122:THR:HG21	1.23	0.99
1:W:58:LEU:HD21	1:W:87:THR:HA	1.43	0.99
1:C:219:PHE:HA	1:C:223:MET:HE3	1.44	0.99
1:G:9:LEU:HD21	1:G:165:LEU:HD22	1.42	0.99
1:N:72:VAL:HG11	1:N:144:LEU:HD21	1.43	0.99
1:Q:83:HIS:HB2	2:Q:1171:5PA:H92	1.41	0.99
1:L:17:LEU:HD23	1:L:59:GLU:HG2	1.42	0.99
1:L:134:MET:O	1:L:138:GLU:HG2	1.63	0.99
1:F:34:ILE:HD11	1:F:291:VAL:HA	1.41	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:174:ILE:HA	1:R:177:GLN:HE21	1.25	0.98
1:S:221:GLU:C	1:S:223:MET:H	1.68	0.98
1:B:15:VAL:HG23	1:B:63:GLY:HA2	1.46	0.98
1:F:181:LYS:HD3	1:F:181:LYS:H	1.26	0.98
1:T:222:VAL:HG13	1:T:223:MET:H	1.25	0.98
1:A:19:PRO:HD2	1:A:20:TRP:CZ3	1.99	0.98
1:G:1:MET:HE3	1:G:2:HIS:N	1.78	0.98
1:G:101:VAL:CG1	1:G:133:LEU:HG	1.93	0.98
1:O:54:LYS:NZ	1:O:57:LYS:HZ1	1.59	0.98
1:T:100:LEU:HB3	1:T:102:LEU:HD21	1.41	0.98
1:G:123:ARG:HH11	1:G:140:ILE:HD13	1.27	0.98
1:T:161:PRO:O	1:T:164:THR:HG22	1.64	0.98
1:O:278:LEU:HD22	1:O:283:THR:HB	1.43	0.98
1:U:293:LEU:HD23	1:U:299:LEU:HD21	1.45	0.97
1:S:219:PHE:HA	1:S:223:MET:HE3	1.46	0.97
1:W:219:PHE:CE2	1:W:224:THR:HB	1.99	0.97
1:W:219:PHE:HE2	1:W:224:THR:HB	1.25	0.97
1:G:17:LEU:HD23	1:G:59:GLU:HG2	1.46	0.97
1:K:115:ASP:HB3	1:K:120:ILE:HB	1.43	0.97
1:R:55:ILE:HD11	1:R:86:VAL:HG11	1.42	0.97
1:H:181:LYS:H	1:H:181:LYS:HE2	1.27	0.97
1:H:224:THR:HG23	1:H:245:ARG:HH12	1.25	0.97
1:O:222:VAL:HG22	1:O:226:LYS:HD2	1.47	0.97
1:V:58:LEU:HD12	1:V:62:LEU:HG	1.46	0.97
1:G:84:ALA:HB1	1:G:100:LEU:HD23	1.46	0.97
1:F:222:VAL:HG13	1:F:223:MET:N	1.80	0.97
1:K:200:LEU:HD22	1:K:204:ILE:HD11	1.46	0.97
1:L:181:LYS:H	1:L:181:LYS:CD	1.76	0.97
1:V:41:LYS:NZ	1:V:177:GLN:HE22	1.61	0.97
1:I:181:LYS:H	1:I:181:LYS:CD	1.77	0.97
1:L:181:LYS:HD3	1:L:181:LYS:N	1.78	0.96
1:O:171:VAL:HG11	1:O:201:GLY:HA3	1.43	0.96
1:B:103:ARG:HD3	1:B:133:LEU:HD11	1.45	0.96
1:Q:253:PHE:HB3	1:Q:260:THR:HG21	1.47	0.96
1:P:299:LEU:HB2	1:P:303:ILE:HD11	1.44	0.96
1:K:99:ILE:HG23	1:K:121:GLU:HB3	1.46	0.96
1:Q:41:LYS:NZ	1:Q:177:GLN:HE22	1.62	0.96
1:X:218:ARG:HH11	1:X:218:ARG:CB	1.76	0.96
1:F:222:VAL:CG1	1:F:223:MET:H	1.79	0.96
1:J:211:PRO:HB2	1:J:246:PRO:HB3	1.46	0.96
1:I:181:LYS:HD3	1:I:181:LYS:N	1.81	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:214:ILE:HD13	1:U:286:ALA:HA	1.46	0.96
1:T:218:ARG:O	1:T:219:PHE:HB2	1.61	0.96
1:G:114:LEU:HD23	1:G:117:ILE:HD12	1.45	0.96
1:V:222:VAL:HG13	1:V:223:MET:H	1.27	0.95
1:P:106:GLU:HG3	1:P:124:VAL:HG11	1.47	0.95
1:W:134:MET:SD	1:W:156:PRO:HD3	2.05	0.95
1:B:265:GLN:HG3	1:B:269:LYS:HE3	1.45	0.95
1:K:41:LYS:NZ	1:K:177:GLN:HE22	1.64	0.95
1:R:105:LYS:HG3	1:R:107:GLU:HG3	1.46	0.95
1:F:66:LEU:HD11	1:F:94:LEU:HD22	1.46	0.95
1:J:185:ILE:HG23	1:J:304:LEU:HB3	1.49	0.95
1:O:216:VAL:HG11	1:O:282:TYR:HA	1.48	0.95
1:Q:82:ASN:HD22	1:Q:111:ASN:ND2	1.64	0.95
1:D:218:ARG:O	1:D:219:PHE:HB2	1.64	0.95
1:O:54:LYS:HZ3	1:O:57:LYS:HZ1	0.98	0.95
1:P:72:VAL:HG23	1:P:97:ASP:HB2	1.47	0.95
1:V:103:ARG:HD3	1:V:133:LEU:HD11	1.45	0.95
1:G:41:LYS:NZ	1:G:177:GLN:HE22	1.65	0.95
1:I:41:LYS:NZ	1:I:177:GLN:HE22	1.64	0.95
1:M:162:ILE:HD12	1:M:163:GLY:N	1.82	0.95
1:C:134:MET:HE1	1:C:155:PRO:HA	1.49	0.94
1:K:203:SER:OG	1:K:243:GLU:HB2	1.67	0.94
1:A:41:LYS:HZ1	1:A:177:GLN:HE22	1.08	0.94
2:Q:1171:5PA:H102	3:Q:1172:HOH:O	1.66	0.94
1:G:134:MET:HE1	1:G:155:PRO:HA	1.45	0.94
1:P:106:GLU:HG2	1:P:124:VAL:HG21	1.49	0.94
1:R:195:LEU:HD12	1:R:227:LEU:HD21	1.50	0.94
1:W:15:VAL:O	1:W:17:LEU:HD22	1.67	0.94
1:V:82:ASN:HD22	1:V:111:ASN:HD21	1.13	0.94
1:P:218:ARG:HD3	1:P:222:VAL:HG11	1.49	0.94
1:T:144:LEU:HD11	1:T:149:ARG:HH11	1.32	0.94
1:Q:19:PRO:HD2	1:Q:20:TRP:CZ3	2.02	0.94
1:L:123:ARG:HH11	1:L:140:ILE:HD13	1.32	0.94
1:L:123:ARG:HB3	1:L:125:TYR:HE1	1.31	0.94
1:N:82:ASN:HD22	1:N:111:ASN:HD21	1.11	0.93
1:A:221:GLU:HA	3:A:1012:HOH:O	1.69	0.93
1:I:222:VAL:HG22	1:I:226:LYS:HD2	1.47	0.93
1:O:1:MET:HE1	1:O:172:GLY:HA3	1.50	0.93
1:H:259:ILE:HD12	1:H:320:LYS:HG2	1.49	0.93
1:P:218:ARG:HB2	1:P:218:ARG:HH11	1.32	0.93
1:P:224:THR:HG23	1:P:245:ARG:NH1	1.80	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:41:LYS:NZ	1:D:177:GLN:HE22	1.67	0.93
1:X:112:TYR:HE1	1:X:122:THR:HG21	1.29	0.93
1:W:171:VAL:HG21	1:W:201:GLY:CA	1.98	0.93
1:N:128:LYS:HD3	1:N:128:LYS:H	1.32	0.93
1:W:61:LEU:HD23	1:W:162:ILE:HD11	1.46	0.93
1:Q:264:ALA:O	1:Q:325:LEU:HD21	1.66	0.93
1:I:164:THR:O	1:I:168:VAL:HG23	1.69	0.93
1:O:162:ILE:HG22	1:O:237:LEU:HD11	1.51	0.93
1:M:129:ASP:CG	1:M:130:SER:H	1.74	0.92
1:K:171:VAL:HG21	1:K:201:GLY:HA3	1.50	0.92
1:S:71:ASP:OD2	1:S:72:VAL:HG12	1.70	0.92
1:W:320:LYS:NZ	1:W:324:LEU:HD11	1.83	0.92
1:L:40:ILE:HD13	1:L:276:ILE:HD13	1.49	0.92
1:T:174:ILE:HA	1:T:177:GLN:HE21	1.34	0.92
1:G:147:GLU:HB3	1:I:221:GLU:CA	2.00	0.92
1:X:97:ASP:HB3	3:X:1243:HOH:O	1.69	0.92
1:X:103:ARG:NE	1:X:129:ASP:HA	1.84	0.92
1:Q:41:LYS:HZ1	1:Q:177:GLN:HE22	1.16	0.92
1:Q:82:ASN:HA	1:Q:111:ASN:ND2	1.85	0.92
1:O:219:PHE:HE2	1:O:224:THR:HB	1.31	0.92
1:T:27:LEU:O	1:T:31:SER:HB2	1.69	0.92
1:E:263:VAL:O	1:E:266:ILE:HG22	1.69	0.91
1:I:134:MET:HE1	1:I:156:PRO:HD3	1.50	0.91
1:W:162:ILE:HG13	1:W:163:GLY:H	1.35	0.91
1:G:214:ILE:HD13	1:G:286:ALA:HA	1.52	0.91
1:J:25:GLN:NE2	1:J:42:ARG:HE	1.68	0.91
1:D:106:GLU:HG3	1:D:124:VAL:HG21	1.52	0.91
1:Q:264:ALA:HB1	1:Q:325:LEU:HD22	1.51	0.91
1:T:69:GLY:O	1:T:150:LYS:HD2	1.67	0.91
1:Q:200:LEU:HD22	1:Q:204:ILE:HD11	1.52	0.91
1:G:162:ILE:HD12	1:G:163:GLY:N	1.85	0.91
1:U:181:LYS:HG2	1:U:302:LYS:HZ2	1.34	0.91
1:L:168:VAL:O	1:L:171:VAL:HG22	1.69	0.91
1:E:42:ARG:HH21	1:E:276:ILE:HG12	1.35	0.91
1:Q:207:GLU:OE1	1:Q:207:GLU:HA	1.71	0.91
1:V:41:LYS:HZ3	1:V:177:GLN:HE22	1.09	0.91
1:X:128:LYS:H	1:X:128:LYS:CD	1.84	0.91
1:K:4:LYS:HE2	1:K:204:ILE:HG22	1.52	0.91
1:O:174:ILE:HD13	1:O:304:LEU:HD11	1.52	0.91
1:T:144:LEU:HD21	1:T:149:ARG:NH1	1.86	0.91
1:W:195:LEU:HD11	1:W:213:GLY:HA3	1.52	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:255:GLU:HG3	1:F:258:LYS:HB2	1.53	0.90
1:H:144:LEU:HD11	1:H:149:ARG:HD3	1.52	0.90
1:I:186:VAL:HA	1:I:212:VAL:O	1.71	0.90
1:W:82:ASN:ND2	1:W:111:ASN:HD21	1.69	0.90
1:X:128:LYS:CE	1:X:132:GLU:HB2	2.02	0.90
1:M:134:MET:HE1	1:M:156:PRO:HD3	1.53	0.90
1:T:218:ARG:HG2	1:T:219:PHE:H	1.35	0.90
1:H:224:THR:HG23	1:H:245:ARG:NH1	1.85	0.90
1:I:264:ALA:HB1	1:I:325:LEU:HD21	1.54	0.90
1:M:181:LYS:HE3	1:M:302:LYS:HZ3	1.36	0.90
1:R:128:LYS:HD3	1:R:128:LYS:N	1.85	0.90
1:G:17:LEU:O	1:G:19:PRO:HD3	1.70	0.90
1:L:41:LYS:HZ2	1:L:177:GLN:HE22	1.13	0.90
1:N:265:GLN:HG3	1:N:269:LYS:HE3	1.52	0.90
1:U:135:LYS:HG2	3:U:1218:HOH:O	1.69	0.90
1:B:320:LYS:HE3	1:B:324:LEU:HD11	1.53	0.90
1:F:1:MET:HE1	1:F:172:GLY:HA3	1.52	0.90
1:H:34:ILE:HD11	1:H:291:VAL:HG22	1.52	0.90
1:Q:281:VAL:HG13	1:Q:282:TYR:HD1	1.35	0.90
1:B:25:GLN:NE2	1:B:42:ARG:HE	1.69	0.90
1:G:136:TYR:HA	1:G:139:GLU:HG2	1.52	0.90
1:W:1:MET:HE1	1:W:172:GLY:HA3	1.54	0.90
1:P:187:VAL:HB	1:P:306:ILE:HD12	1.53	0.90
1:U:181:LYS:H	1:U:181:LYS:HD3	1.36	0.90
1:B:82:ASN:HD22	1:B:111:ASN:HD21	1.10	0.89
1:X:218:ARG:HB2	1:X:218:ARG:NH1	1.85	0.89
1:L:185:ILE:HG23	1:L:304:LEU:HD12	1.53	0.89
1:R:203:SER:OG	1:R:243:GLU:HG2	1.70	0.89
1:A:141:ALA:O	1:A:145:LYS:HG2	1.70	0.89
1:G:237:LEU:O	1:G:238:LEU:HD23	1.72	0.89
1:O:138:GLU:O	1:O:142:GLU:HG2	1.73	0.89
1:P:58:LEU:HD13	1:P:61:LEU:HD12	1.52	0.89
1:X:128:LYS:HD3	1:X:128:LYS:N	1.87	0.89
1:M:187:VAL:HG21	1:M:194:THR:HG21	1.53	0.89
1:P:181:LYS:HD3	1:P:181:LYS:H	1.35	0.89
1:Q:109:LYS:HA	1:Q:113:LEU:HD12	1.54	0.89
1:I:113:LEU:HD21	1:J:318:GLY:HA3	1.53	0.89
1:L:103:ARG:CZ	1:L:129:ASP:HA	2.02	0.89
1:S:142:GLU:OE2	1:S:145:LYS:HD3	1.72	0.89
1:G:15:VAL:HG23	1:G:63:GLY:HA2	1.54	0.89
1:G:53:ASN:HB3	1:G:308:THR:HG22	1.52	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:14:ARG:HG3	1:K:59:GLU:HB3	1.55	0.89
1:R:142:GLU:HB3	1:R:146:ARG:NH2	1.88	0.89
1:T:128:LYS:HG2	1:T:130:SER:OG	1.72	0.89
1:T:321:LEU:O	1:T:325:LEU:HD23	1.72	0.89
1:I:74:ILE:O	1:I:153:VAL:HA	1.73	0.89
1:M:218:ARG:HD2	1:M:255:GLU:HA	1.55	0.89
1:F:103:ARG:HE	1:F:133:LEU:HD11	1.34	0.88
1:P:181:LYS:H	1:P:181:LYS:CD	1.85	0.88
1:B:128:LYS:HE2	1:B:132:GLU:HB3	1.55	0.88
1:Q:264:ALA:HB1	1:Q:325:LEU:CD2	2.02	0.88
1:R:147:GLU:O	1:R:149:ARG:HG3	1.73	0.88
1:D:103:ARG:NH2	1:D:131:PHE:H	1.72	0.88
1:D:110:GLY:HA3	1:D:316:HIS:HD2	1.37	0.88
1:E:55:ILE:CD1	1:E:86:VAL:HG11	2.04	0.88
1:L:203:SER:OG	1:L:243:GLU:HG2	1.74	0.88
1:Q:298:GLU:O	1:Q:299:LEU:HG	1.74	0.88
1:V:25:GLN:NE2	1:V:42:ARG:HE	1.70	0.88
1:W:1:MET:HA	1:W:1:MET:HE3	1.54	0.88
1:W:218:ARG:H	1:W:218:ARG:HD2	1.37	0.88
1:O:67:SER:HB2	1:S:67:SER:CB	2.04	0.88
1:A:186:VAL:HG21	1:A:290:LEU:HD22	1.54	0.88
1:J:181:LYS:HD3	1:J:181:LYS:N	1.89	0.88
1:K:214:ILE:HD13	1:K:286:ALA:HA	1.54	0.88
1:P:116:LYS:NZ	1:P:122:THR:HB	1.88	0.88
1:V:245:ARG:HB2	1:V:246:PRO:HD2	1.56	0.88
1:X:26:TYR:O	1:X:28:PRO:HD3	1.74	0.88
1:F:181:LYS:HE3	1:F:302:LYS:HZ2	1.39	0.88
1:T:210:ARG:HD2	1:T:247:GLU:OE2	1.73	0.88
1:C:225:SER:HA	1:C:228:ASP:HB2	1.54	0.87
1:L:58:LEU:HD21	1:L:87:THR:HA	1.54	0.87
1:L:82:ASN:ND2	1:L:111:ASN:HD21	1.72	0.87
1:O:34:ILE:HG21	1:O:291:VAL:HG13	1.54	0.87
1:Q:83:HIS:HB2	2:Q:1171:5PA:C9	2.04	0.87
1:M:20:TRP:CD1	1:N:20:TRP:HZ3	1.92	0.87
1:O:117:ILE:HD13	1:P:321:LEU:HD12	1.54	0.87
1:S:25:GLN:HE22	1:S:42:ARG:HE	1.14	0.87
1:B:218:ARG:HD3	1:B:222:VAL:HG11	1.56	0.87
1:I:186:VAL:HG12	1:I:212:VAL:HB	1.55	0.87
1:H:218:ARG:HD3	1:H:222:VAL:CG1	2.03	0.87
1:J:211:PRO:HB2	1:J:246:PRO:CB	2.04	0.87
1:P:143:GLU:HA	1:P:146:ARG:NH1	1.88	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:253:PHE:O	1:P:258:LYS:HD3	1.74	0.87
1:U:107:GLU:HB3	1:U:109:LYS:HE2	1.55	0.87
1:V:171:VAL:HG11	1:V:201:GLY:HA3	1.54	0.87
1:J:218:ARG:HD3	1:J:222:VAL:HG11	1.56	0.87
1:K:259:ILE:HD11	1:K:317:TYR:HB3	1.56	0.87
1:S:41:LYS:NZ	1:S:177:GLN:HE22	1.72	0.87
1:W:54:LYS:HE3	2:W:1231:5PA:H91	1.56	0.87
1:M:218:ARG:HD2	1:M:256:TYR:H	1.40	0.87
1:X:218:ARG:HD3	1:X:222:VAL:HG11	1.54	0.87
1:R:134:MET:O	1:R:138:GLU:HG2	1.74	0.87
1:S:55:ILE:H	1:S:55:ILE:HD12	1.40	0.87
1:S:181:LYS:H	1:S:181:LYS:HE2	1.35	0.87
1:T:214:ILE:HG23	1:T:251:TYR:HD1	1.37	0.87
1:L:128:LYS:N	1:L:128:LYS:HD3	1.90	0.87
1:Q:171:VAL:HG23	1:Q:205:LEU:HD11	1.57	0.87
1:Q:312:SER:HG	1:R:315:PHE:HZ	0.88	0.87
1:U:162:ILE:HG23	3:U:1245:HOH:O	1.74	0.87
1:V:82:ASN:ND2	1:V:111:ASN:HD21	1.72	0.87
1:E:186:VAL:HG12	1:E:212:VAL:HB	1.55	0.86
1:H:56:ARG:HD2	1:H:167:TYR:CE1	2.10	0.86
1:L:103:ARG:HH22	1:L:129:ASP:CG	1.83	0.86
1:Q:30:ILE:HG22	1:Q:38:VAL:HG11	1.57	0.86
1:Q:268:ARG:NH2	1:Q:325:LEU:HG	1.90	0.86
1:E:17:LEU:HD23	1:E:59:GLU:HG2	1.56	0.86
1:H:53:ASN:HB3	1:H:308:THR:HG22	1.56	0.86
1:A:134:MET:HE1	1:A:155:PRO:HA	1.53	0.86
1:R:181:LYS:HE2	1:R:181:LYS:N	1.90	0.86
1:X:181:LYS:H	1:X:181:LYS:CD	1.88	0.86
1:B:227:LEU:O	1:B:231:ILE:HG22	1.76	0.86
1:J:251:TYR:CE2	1:J:289:GLY:HA2	2.10	0.86
1:K:186:VAL:HG12	1:K:212:VAL:HB	1.55	0.86
1:S:123:ARG:HH11	1:S:140:ILE:HD13	1.41	0.86
1:W:106:GLU:HG2	1:W:124:VAL:HG21	1.54	0.86
1:D:181:LYS:HE3	1:D:302:LYS:HZ3	1.37	0.86
1:R:195:LEU:HD11	1:R:246:PRO:HG3	1.56	0.86
1:S:214:ILE:HD13	1:S:286:ALA:HA	1.56	0.86
1:G:54:LYS:HD3	1:G:57:LYS:HZ3	1.40	0.86
1:I:82:ASN:ND2	1:I:111:ASN:HD21	1.73	0.86
1:N:1:MET:HE1	1:N:172:GLY:HA3	1.55	0.86
1:T:82:ASN:ND2	1:T:111:ASN:HD21	1.74	0.86
1:K:181:LYS:CE	1:K:181:LYS:H	1.88	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:128:LYS:HD3	1:V:128:LYS:N	1.91	0.86
1:K:19:PRO:HD2	1:K:20:TRP:CZ3	2.11	0.86
1:G:82:ASN:HD22	1:G:111:ASN:HD21	1.24	0.86
1:I:268:ARG:HH12	1:I:325:LEU:HB3	1.41	0.86
1:K:79:VAL:HG13	1:K:112:TYR:HB2	1.55	0.86
1:N:181:LYS:HD3	1:N:181:LYS:N	1.90	0.86
1:U:162:ILE:HG22	1:U:237:LEU:HD11	1.57	0.86
1:F:199:SER:O	1:F:203:SER:HB3	1.75	0.85
1:L:103:ARG:HA	1:L:124:VAL:HG13	1.57	0.85
1:E:141:ALA:O	1:E:145:LYS:HB3	1.74	0.85
1:G:149:ARG:O	1:G:151:PRO:HD3	1.76	0.85
1:O:40:ILE:HD11	1:O:307:HIS:HB2	1.57	0.85
1:S:162:ILE:HD12	1:S:163:GLY:N	1.90	0.85
1:S:263:VAL:O	1:S:266:ILE:HG22	1.74	0.85
1:H:265:GLN:HE21	1:H:269:LYS:HE3	1.42	0.85
1:P:214:ILE:HG21	1:P:286:ALA:HA	1.57	0.85
1:G:222:VAL:O	1:G:226:LYS:HD2	1.76	0.85
1:T:218:ARG:HH11	1:T:218:ARG:HB2	1.41	0.85
1:W:76:VAL:CG2	1:W:156:PRO:HG3	2.07	0.85
1:W:181:LYS:H	1:W:181:LYS:CD	1.88	0.85
1:P:112:TYR:CE1	1:P:122:THR:HG21	2.11	0.85
1:R:219:PHE:CE1	1:R:250:ASP:HB2	2.11	0.85
1:I:15:VAL:O	1:I:17:LEU:HD22	1.76	0.85
1:I:61:LEU:HD23	1:I:162:ILE:HD11	1.59	0.85
1:O:195:LEU:HD21	1:O:246:PRO:HB2	1.58	0.85
1:R:103:ARG:HE	1:R:133:LEU:HD11	1.41	0.85
1:U:181:LYS:H	1:U:181:LYS:CD	1.85	0.85
1:H:224:THR:CG2	1:H:245:ARG:HH12	1.89	0.85
1:D:296:LYS:HD2	1:D:298:GLU:OE2	1.77	0.85
1:G:149:ARG:HG3	1:I:221:GLU:H	1.41	0.85
1:W:264:ALA:O	1:W:325:LEU:HD21	1.77	0.85
1:A:223:MET:HE1	1:A:248:LEU:HD21	1.59	0.84
1:H:37:ASP:HB2	1:H:301:GLU:O	1.77	0.84
1:K:72:VAL:HA	1:K:97:ASP:O	1.77	0.84
1:M:134:MET:CE	1:M:156:PRO:HD3	2.06	0.84
1:N:218:ARG:HG2	1:N:219:PHE:N	1.92	0.84
1:O:147:GLU:O	1:O:149:ARG:N	2.08	0.84
1:S:181:LYS:H	1:S:181:LYS:CE	1.89	0.84
1:T:25:GLN:HE21	1:T:42:ARG:NE	1.74	0.84
1:B:116:LYS:HZ3	1:B:122:THR:HB	1.42	0.84
1:E:146:ARG:O	1:E:147:GLU:HG3	1.76	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:146:ARG:O	1:I:147:GLU:HG3	1.77	0.84
1:P:232:LYS:O	1:P:236:GLU:HG3	1.77	0.84
1:B:4:LYS:HE2	1:B:204:ILE:HG23	1.59	0.84
1:P:144:LEU:HD11	1:P:149:ARG:CD	2.06	0.84
1:U:261:GLY:O	1:U:265:GLN:HB2	1.78	0.84
1:W:5:ILE:HD12	1:W:172:GLY:CA	2.08	0.84
1:K:293:LEU:H	1:K:293:LEU:HD12	1.42	0.84
1:L:161:PRO:O	1:L:164:THR:HG22	1.78	0.84
1:N:1:MET:CE	1:N:172:GLY:HA3	2.08	0.84
1:Q:83:HIS:CB	2:Q:1171:5PA:H92	2.06	0.84
1:Q:101:VAL:HG12	1:Q:133:LEU:HD23	1.59	0.84
1:R:141:ALA:O	1:R:145:LYS:HB2	1.77	0.84
1:V:221:GLU:OE2	1:V:225:SER:HB2	1.77	0.84
1:X:200:LEU:O	1:X:204:ILE:HG13	1.77	0.84
1:D:128:LYS:N	1:D:128:LYS:HD3	1.92	0.84
1:E:55:ILE:HD11	1:E:86:VAL:HG11	1.59	0.84
1:R:41:LYS:HZ2	1:R:177:GLN:HE22	1.22	0.84
1:I:25:GLN:HE22	1:I:42:ARG:HE	1.26	0.84
1:O:221:GLU:C	1:O:223:MET:H	1.82	0.84
1:S:58:LEU:HA	1:S:61:LEU:HB2	1.59	0.84
1:X:218:ARG:HD3	1:X:222:VAL:CG1	2.06	0.84
1:H:76:VAL:HG21	1:H:156:PRO:HG3	1.59	0.84
1:I:214:ILE:HD13	1:I:286:ALA:HA	1.60	0.84
1:Q:181:LYS:HE2	1:Q:181:LYS:N	1.90	0.84
1:B:266:ILE:O	1:B:270:VAL:HG23	1.78	0.84
1:G:29:ASN:HB3	1:G:273:ARG:HG2	1.59	0.83
1:F:53:ASN:HB3	1:F:308:THR:HG22	1.60	0.83
1:N:211:PRO:HB2	1:N:246:PRO:HB3	1.58	0.83
1:U:221:GLU:C	1:U:223:MET:H	1.85	0.83
1:X:161:PRO:O	1:X:164:THR:HG22	1.77	0.83
1:V:41:LYS:HZ3	1:V:177:GLN:NE2	1.76	0.83
1:V:136:TYR:O	1:V:140:ILE:HG13	1.78	0.83
1:B:128:LYS:HE2	1:B:132:GLU:CB	2.07	0.83
1:O:67:SER:CB	1:S:67:SER:HB2	2.08	0.83
1:D:144:LEU:HD23	1:D:151:PRO:HB3	1.59	0.83
1:F:147:GLU:O	1:F:149:ARG:HG3	1.78	0.83
1:L:43:ASP:O	1:L:46:THR:HG23	1.79	0.83
1:B:54:LYS:NZ	2:B:1021:5PA:H91	1.92	0.83
1:B:186:VAL:HG21	1:B:290:LEU:HD23	1.59	0.83
1:D:103:ARG:HG2	1:D:103:ARG:HH11	1.44	0.83
1:E:103:ARG:HD2	1:E:128:LYS:HA	1.60	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:144:LEU:CD1	1:F:149:ARG:HD3	2.07	0.83
1:U:185:ILE:HG12	1:U:304:LEU:HB3	1.60	0.83
1:D:103:ARG:HB2	1:D:133:LEU:HD21	1.60	0.83
1:G:216:VAL:HG11	1:G:282:TYR:HA	1.58	0.83
1:S:210:ARG:HH22	1:S:299:LEU:HA	1.44	0.83
1:H:218:ARG:HB2	1:H:218:ARG:NH1	1.93	0.83
1:K:264:ALA:O	1:K:325:LEU:HD11	1.78	0.83
1:W:187:VAL:HG21	1:W:194:THR:HG22	1.60	0.83
1:E:202:LEU:HD12	1:E:211:PRO:HG3	1.60	0.83
1:K:181:LYS:HE2	1:K:181:LYS:N	1.92	0.83
1:W:223:MET:HA	3:W:1248:HOH:O	1.77	0.83
1:I:58:LEU:HD21	1:I:87:THR:HA	1.61	0.83
1:K:200:LEU:HD21	1:K:240:VAL:HG11	1.58	0.83
1:P:113:LEU:HD22	1:P:117:ILE:HD11	1.60	0.82
1:R:107:GLU:HB3	1:R:109:LYS:HG2	1.61	0.82
1:G:145:LYS:C	1:G:147:GLU:H	1.87	0.82
1:H:103:ARG:CZ	1:H:129:ASP:HA	2.09	0.82
1:J:296:LYS:O	1:J:298:GLU:HG3	1.79	0.82
1:T:263:VAL:O	1:T:266:ILE:HG22	1.79	0.82
1:D:105:LYS:HB3	3:D:1053:HOH:O	1.78	0.82
1:D:110:GLY:HA3	1:D:316:HIS:CD2	2.15	0.82
1:M:202:LEU:HD12	1:M:211:PRO:HG3	1.59	0.82
1:Q:1:MET:CE	1:Q:172:GLY:HA3	2.07	0.82
1:V:203:SER:OG	1:V:243:GLU:HG2	1.79	0.82
1:B:228:ASP:OD1	1:B:245:ARG:HD2	1.79	0.82
1:R:40:ILE:HD13	1:R:276:ILE:HD13	1.62	0.82
1:S:143:GLU:HA	1:S:146:ARG:HE	1.45	0.82
1:G:15:VAL:HG21	1:G:66:LEU:HD12	1.62	0.82
1:H:93:LYS:HE2	3:H:1109:HOH:O	1.78	0.82
1:T:265:GLN:HG3	1:T:269:LYS:HE3	1.61	0.82
1:V:181:LYS:HE3	1:V:302:LYS:HZ3	1.44	0.82
1:W:142:GLU:OE1	1:W:145:LYS:HD3	1.78	0.82
1:H:128:LYS:HD3	1:H:128:LYS:N	1.94	0.82
1:J:131:PHE:HA	1:J:133:LEU:CD1	2.09	0.82
1:K:219:PHE:CE2	1:K:224:THR:HB	2.14	0.82
1:M:181:LYS:H	1:M:181:LYS:CD	1.93	0.82
1:Q:82:ASN:HD22	1:Q:111:ASN:HD21	0.84	0.82
1:R:270:VAL:HG21	1:R:278:LEU:HD11	1.60	0.82
1:W:128:LYS:HD2	3:W:1264:HOH:O	1.79	0.82
1:X:82:ASN:ND2	1:X:111:ASN:HD21	1.77	0.82
1:J:171:VAL:HG21	1:J:201:GLY:HA3	1.60	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:54:LYS:HE3	2:P:1161:5PA:H91	1.62	0.82
1:N:103:ARG:HH21	1:N:131:PHE:HA	1.44	0.82
1:O:88:GLY:HA3	1:O:120:ILE:HD13	1.61	0.82
1:S:210:ARG:NH2	1:S:299:LEU:HA	1.94	0.82
1:B:171:VAL:HG12	1:B:198:LEU:HD23	1.60	0.82
1:M:139:GLU:HB2	3:M:1138:HOH:O	1.79	0.82
1:O:72:VAL:HG11	1:O:144:LEU:HD23	1.59	0.82
1:Q:321:LEU:O	1:Q:325:LEU:HD23	1.80	0.82
1:S:181:LYS:H	1:S:181:LYS:CD	1.93	0.82
1:V:20:TRP:H	1:V:20:TRP:HD1	1.28	0.82
1:G:112:TYR:HA	1:G:115:ASP:OD2	1.80	0.82
1:H:113:LEU:CD2	1:H:117:ILE:HD11	2.10	0.82
1:D:171:VAL:HG21	1:D:201:GLY:HA3	1.62	0.81
1:O:116:LYS:NZ	1:O:122:THR:HG22	1.95	0.81
1:R:110:GLY:HA3	1:R:316:HIS:CD2	2.15	0.81
1:H:203:SER:HB2	1:H:243:GLU:HG2	1.62	0.81
1:I:1:MET:HE1	1:I:172:GLY:HA3	1.61	0.81
1:J:247:GLU:HB3	1:J:249:TYR:HE1	1.44	0.81
1:O:72:VAL:CG1	1:O:151:PRO:HA	2.10	0.81
1:P:103:ARG:CZ	1:P:129:ASP:HA	2.11	0.81
1:Q:229:ASN:HB3	3:Q:1194:HOH:O	1.80	0.81
1:X:265:GLN:O	1:X:269:LYS:HG3	1.81	0.81
1:E:210:ARG:HD2	1:E:247:GLU:OE2	1.80	0.81
1:G:123:ARG:NH1	1:G:140:ILE:HD13	1.94	0.81
1:H:251:TYR:OH	1:H:293:LEU:HD13	1.79	0.81
1:H:259:ILE:HD11	1:H:317:TYR:CD2	2.15	0.81
1:I:293:LEU:HD22	1:I:299:LEU:HD21	1.62	0.81
1:M:187:VAL:HG21	1:M:194:THR:CG2	2.10	0.81
1:P:73:VAL:HG21	1:P:91:ALA:HB1	1.62	0.81
1:V:218:ARG:O	1:V:219:PHE:HB2	1.79	0.81
1:B:128:LYS:HG2	1:B:132:GLU:HB2	1.61	0.81
1:B:321:LEU:O	1:B:325:LEU:HD23	1.80	0.81
1:L:41:LYS:NZ	1:L:177:GLN:HE22	1.79	0.81
1:L:131:PHE:HA	1:L:133:LEU:HD13	1.60	0.81
1:R:318:GLY:O	1:R:322:LEU:HG	1.79	0.81
1:T:128:LYS:C	1:T:130:SER:H	1.87	0.81
1:T:144:LEU:HG	1:T:149:ARG:HB2	1.59	0.81
1:U:136:TYR:O	1:U:140:ILE:HG13	1.81	0.81
1:X:157:GLY:HA2	2:X:1241:5PA:H91	1.63	0.81
1:E:221:GLU:C	1:E:223:MET:H	1.87	0.81
1:T:203:SER:OG	1:T:243:GLU:HG2	1.80	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:287:PHE:O	1:T:291:VAL:HG23	1.80	0.81
1:G:214:ILE:HD12	1:G:289:GLY:HA3	1.59	0.81
1:K:64:ASP:HB3	1:K:152:TYR:OH	1.80	0.81
1:M:222:VAL:HG22	1:M:226:LYS:HD2	1.60	0.81
1:O:162:ILE:HD12	1:O:163:GLY:N	1.96	0.81
1:O:214:ILE:HD12	1:O:289:GLY:HA3	1.63	0.81
1:Q:281:VAL:HG13	1:Q:282:TYR:CD1	2.16	0.81
1:R:157:GLY:HA2	2:R:1181:5PA:H92	1.61	0.81
1:U:107:GLU:CB	1:U:109:LYS:HE2	2.11	0.81
1:W:149:ARG:O	1:W:151:PRO:HD3	1.80	0.81
1:X:174:ILE:HA	1:X:177:GLN:HE21	1.45	0.81
1:B:103:ARG:HE	1:B:133:LEU:HD21	1.45	0.81
1:M:218:ARG:HD3	1:M:218:ARG:H	1.46	0.81
1:T:15:VAL:HG11	1:T:94:LEU:HD21	1.62	0.81
1:W:281:VAL:HG13	1:W:282:TYR:CD1	2.16	0.81
1:A:143:GLU:HG3	1:A:144:LEU:N	1.94	0.81
1:U:142:GLU:O	1:U:146:ARG:HB2	1.81	0.81
1:D:181:LYS:HE2	1:D:181:LYS:N	1.95	0.81
1:I:214:ILE:HG21	1:I:286:ALA:HA	1.63	0.81
1:K:73:VAL:HG22	1:K:152:TYR:HB3	1.62	0.81
1:L:263:VAL:O	1:L:267:ILE:HG13	1.81	0.81
1:R:157:GLY:CA	2:R:1181:5PA:H92	2.11	0.81
1:U:58:LEU:HD21	1:U:87:THR:HA	1.63	0.81
1:W:131:PHE:CZ	1:W:226:LYS:NZ	2.48	0.81
1:D:127:ALA:HB1	1:D:128:LYS:NZ	1.94	0.80
1:G:66:LEU:HD11	1:G:94:LEU:HD13	1.60	0.80
1:G:167:TYR:O	1:G:171:VAL:HG13	1.80	0.80
1:G:281:VAL:HG13	1:G:282:TYR:CD1	2.16	0.80
1:H:221:GLU:O	1:H:225:SER:HB2	1.81	0.80
1:I:109:LYS:HA	1:I:113:LEU:HB2	1.63	0.80
1:I:287:PHE:O	1:I:291:VAL:HG23	1.80	0.80
1:K:80:HIS:O	1:K:111:ASN:HB2	1.80	0.80
2:L:1121:5PA:O4P	2:L:1121:5PA:H4A2	1.79	0.80
1:O:145:LYS:HA	1:O:149:ARG:O	1.81	0.80
1:W:293:LEU:HD12	1:W:293:LEU:H	1.46	0.80
1:H:170:ALA:O	1:H:174:ILE:HG13	1.81	0.80
1:H:294:ALA:HB2	1:H:299:LEU:HD12	1.61	0.80
1:M:64:ASP:O	1:M:68:LYS:HG3	1.81	0.80
1:M:79:VAL:HG13	1:M:112:TYR:HB2	1.63	0.80
1:P:218:ARG:HB2	1:P:218:ARG:NH1	1.96	0.80
1:W:165:LEU:HD22	1:W:238:LEU:HD11	1.63	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:133:LEU:HA	1:B:136:TYR:HD2	1.46	0.80
1:T:84:ALA:HB1	1:T:100:LEU:HG	1.63	0.80
1:F:134:MET:O	1:F:138:GLU:HG2	1.81	0.80
1:T:128:LYS:CE	1:T:132:GLU:HB2	2.11	0.80
1:G:147:GLU:OE1	1:I:225:SER:HB3	1.81	0.80
1:J:218:ARG:HG2	1:J:219:PHE:H	1.46	0.80
1:L:72:VAL:HG11	1:L:144:LEU:HD21	1.62	0.80
1:K:121:GLU:HA	3:K:1118:HOH:O	1.82	0.80
1:M:41:LYS:NZ	1:M:177:GLN:HE22	1.79	0.80
1:N:72:VAL:HG11	1:N:144:LEU:CD2	2.10	0.80
1:O:54:LYS:HD3	1:O:57:LYS:HZ3	1.44	0.80
1:W:287:PHE:O	1:W:291:VAL:HG23	1.80	0.80
1:C:47:GLY:O	1:D:42:ARG:NH2	2.14	0.80
1:G:161:PRO:HB2	1:G:237:LEU:HD12	1.64	0.80
1:H:103:ARG:HH22	1:H:131:PHE:H	1.26	0.80
1:W:42:ARG:HB3	1:W:42:ARG:HH11	1.47	0.80
1:A:128:LYS:C	1:A:128:LYS:HD3	2.07	0.80
1:D:103:ARG:CB	1:D:133:LEU:HD21	2.11	0.80
1:H:41:LYS:NZ	1:H:177:GLN:HE22	1.78	0.80
1:L:141:ALA:O	1:L:145:LYS:HG3	1.82	0.80
1:S:8:LEU:HD12	1:S:204:ILE:HD13	1.63	0.80
1:S:41:LYS:HZ1	1:S:177:GLN:HE22	1.30	0.80
1:S:72:VAL:HG11	1:S:144:LEU:HD21	1.62	0.80
1:D:53:ASN:HB3	1:D:308:THR:HG22	1.64	0.80
1:K:219:PHE:CD2	1:K:223:MET:HE3	2.17	0.80
1:T:48:LEU:HB3	1:T:55:ILE:HG13	1.62	0.80
1:B:241:LYS:HG3	1:B:242:VAL:N	1.95	0.79
1:I:41:LYS:HZ1	1:I:177:GLN:HE22	1.26	0.79
1:K:118:MET:HE1	1:L:271:GLY:HA3	1.63	0.79
1:U:82:ASN:HD22	1:U:111:ASN:HD21	1.26	0.79
1:C:145:LYS:C	1:C:147:GLU:H	1.90	0.79
1:D:181:LYS:H	1:D:181:LYS:CE	1.94	0.79
1:I:76:VAL:CG2	1:I:156:PRO:HG3	2.12	0.79
1:I:132:GLU:C	1:I:134:MET:H	1.86	0.79
1:I:181:LYS:HG2	1:I:302:LYS:NZ	1.98	0.79
1:K:181:LYS:H	1:K:181:LYS:HE2	1.44	0.79
1:O:41:LYS:HE2	1:O:177:GLN:HE22	1.47	0.79
1:Q:15:VAL:O	1:Q:17:LEU:HD22	1.82	0.79
1:S:178:SER:HB3	3:S:1217:HOH:O	1.83	0.79
1:U:188:ALA:HB2	1:U:286:ALA:HB2	1.64	0.79
1:W:54:LYS:CE	2:W:1231:5PA:H91	2.11	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:279:ASP:H	1:W:283:THR:HG1	1.25	0.79
1:W:321:LEU:O	1:W:325:LEU:HD23	1.80	0.79
1:O:133:LEU:HD12	1:O:136:TYR:HD2	1.45	0.79
1:R:181:LYS:H	1:R:181:LYS:CE	1.94	0.79
1:T:182:PHE:CE2	1:T:304:LEU:HB2	2.18	0.79
1:F:180:VAL:HG13	1:F:181:LYS:HE2	1.64	0.79
1:G:113:LEU:HD22	1:G:117:ILE:HD11	1.64	0.79
1:G:168:VAL:O	1:G:171:VAL:HG22	1.83	0.79
1:I:129:ASP:CG	1:I:130:SER:H	1.89	0.79
1:M:58:LEU:HD12	1:M:62:LEU:HG	1.64	0.79
1:R:55:ILE:H	1:R:55:ILE:HD12	1.45	0.79
1:H:234:ALA:O	1:H:237:LEU:HB2	1.82	0.79
1:M:181:LYS:H	1:M:181:LYS:HD3	1.47	0.79
1:O:174:ILE:HA	1:O:177:GLN:HG2	1.63	0.79
1:Q:229:ASN:HD21	1:T:319:ASP:HB3	1.46	0.79
1:S:1:MET:HE1	1:S:172:GLY:CA	2.10	0.79
1:T:82:ASN:HD22	1:T:111:ASN:HD21	1.30	0.79
1:X:131:PHE:HA	1:X:133:LEU:HD13	1.63	0.79
1:B:219:PHE:HA	1:B:223:MET:HB3	1.64	0.79
1:C:116:LYS:HB2	1:D:322:LEU:HD21	1.63	0.79
1:N:219:PHE:CE1	1:N:250:ASP:HB2	2.17	0.79
1:A:264:ALA:HB1	1:A:325:LEU:HD21	1.65	0.79
1:C:34:ILE:HD12	1:C:294:ALA:HB1	1.64	0.79
1:V:269:LYS:HB3	1:V:273:ARG:NH1	1.98	0.79
1:W:66:LEU:HD11	1:W:94:LEU:HD13	1.65	0.79
1:X:157:GLY:HA2	2:X:1241:5PA:C9	2.13	0.79
1:E:181:LYS:HE2	1:E:181:LYS:N	1.95	0.79
1:E:262:GLU:OE1	1:E:262:GLU:N	2.15	0.79
1:G:113:LEU:O	1:G:117:ILE:HG13	1.83	0.79
1:N:54:LYS:HE3	2:N:1141:5PA:H91	1.63	0.79
1:V:181:LYS:H	1:V:181:LYS:HE2	1.48	0.79
1:W:34:ILE:HD12	1:W:294:ALA:HB1	1.65	0.79
1:B:34:ILE:HD11	1:B:291:VAL:HG22	1.65	0.79
1:H:54:LYS:HE3	2:H:1081:5PA:H91	1.64	0.79
1:M:116:LYS:HZ1	1:M:122:THR:HG22	1.48	0.79
1:X:41:LYS:NZ	1:X:177:GLN:HE22	1.81	0.79
1:C:103:ARG:HH12	1:C:128:LYS:NZ	1.81	0.79
1:K:111:ASN:OD1	1:K:114:LEU:HD12	1.82	0.79
1:K:202:LEU:CD2	1:K:209:ILE:HD12	2.12	0.79
1:L:79:VAL:HB	1:L:103:ARG:O	1.83	0.79
1:M:136:TYR:O	1:M:140:ILE:HG13	1.83	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:211:PRO:O	1:N:246:PRO:HB2	1.83	0.79
1:R:219:PHE:O	1:R:223:MET:HB3	1.82	0.79
1:S:25:GLN:NE2	1:S:42:ARG:HE	1.81	0.79
1:S:103:ARG:HD3	1:S:133:LEU:HD22	1.64	0.79
1:X:145:LYS:C	1:X:147:GLU:H	1.91	0.79
1:B:82:ASN:ND2	1:B:111:ASN:HD21	1.80	0.78
1:F:181:LYS:H	1:F:181:LYS:CD	1.96	0.78
1:G:101:VAL:HG12	1:G:133:LEU:HG	1.65	0.78
1:I:293:LEU:CD1	1:I:293:LEU:H	1.96	0.78
1:M:15:VAL:HG12	1:M:17:LEU:HD13	1.64	0.78
1:P:182:PHE:CD2	1:P:304:LEU:HB2	2.18	0.78
1:R:55:ILE:CD1	1:R:86:VAL:HG11	2.13	0.78
1:V:19:PRO:HG2	1:V:20:TRP:CD1	2.18	0.78
1:W:132:GLU:HG3	3:W:1235:HOH:O	1.83	0.78
1:E:164:THR:O	1:E:168:VAL:HG23	1.82	0.78
1:H:99:ILE:HG12	1:H:121:GLU:HG2	1.64	0.78
1:Q:73:VAL:HG22	1:Q:152:TYR:HB3	1.64	0.78
1:U:320:LYS:O	1:U:324:LEU:HD13	1.84	0.78
1:X:105:LYS:HG3	1:X:107:GLU:HG3	1.64	0.78
1:D:264:ALA:HB1	1:D:325:LEU:HD21	1.64	0.78
1:K:321:LEU:O	1:K:325:LEU:HD22	1.84	0.78
2:K:1111:5PA:H102	3:K:1112:HOH:O	1.81	0.78
1:O:319:ASP:HA	1:O:322:LEU:HD12	1.63	0.78
1:Q:312:SER:OG	1:R:315:PHE:HZ	1.66	0.78
1:T:25:GLN:HE21	1:T:42:ARG:CD	1.96	0.78
1:W:320:LYS:HZ1	1:W:324:LEU:HD21	1.48	0.78
1:T:128:LYS:N	1:T:128:LYS:HD3	1.98	0.78
1:W:126:ASP:C	1:W:128:LYS:H	1.88	0.78
1:B:128:LYS:CG	1:B:132:GLU:HB2	2.13	0.78
1:C:195:LEU:HD23	1:C:195:LEU:O	1.83	0.78
1:G:147:GLU:HB2	1:I:221:GLU:HA	1.64	0.78
1:G:280:PRO:HA	3:G:1079:HOH:O	1.83	0.78
1:K:200:LEU:O	1:K:204:ILE:HG13	1.83	0.78
1:L:17:LEU:CD2	1:L:59:GLU:HG2	2.12	0.78
1:N:162:ILE:HD11	3:N:1155:HOH:O	1.83	0.78
1:V:128:LYS:HE3	1:V:132:GLU:HB2	1.65	0.78
1:G:147:GLU:OE2	1:I:224:THR:HG22	1.83	0.78
1:I:134:MET:CE	1:I:156:PRO:HD3	2.13	0.78
1:P:74:ILE:HG12	1:P:99:ILE:HB	1.64	0.78
1:Q:54:LYS:HD3	1:Q:57:LYS:NZ	1.99	0.78
1:Q:181:LYS:HG2	1:Q:302:LYS:NZ	1.99	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:54:LYS:HE3	2:U:1211:5PA:H91	1.65	0.78
1:W:133:LEU:HD12	1:W:136:TYR:HD2	1.48	0.78
1:W:318:GLY:O	1:W:321:LEU:N	2.15	0.78
1:C:195:LEU:HD12	1:C:213:GLY:HA3	1.62	0.78
1:G:148:GLY:HA3	1:I:219:PHE:O	1.84	0.78
1:K:13:PRO:O	1:K:63:GLY:HA3	1.84	0.78
1:N:218:ARG:HB2	1:N:218:ARG:HH11	1.46	0.78
1:O:185:ILE:HD12	1:O:202:LEU:HD11	1.65	0.78
1:O:318:GLY:O	1:O:321:LEU:HB2	1.82	0.78
1:W:5:ILE:CD1	1:W:171:VAL:HG23	2.13	0.78
1:X:274:GLU:O	1:X:276:ILE:HG13	1.84	0.78
1:F:269:LYS:HG2	1:F:273:ARG:CZ	2.13	0.78
1:M:179:GLU:O	1:M:179:GLU:HG2	1.83	0.78
1:Q:41:LYS:NZ	1:Q:177:GLN:NE2	2.32	0.78
2:R:1181:5PA:H4A2	2:R:1181:5PA:O4P	1.83	0.78
1:S:14:ARG:HD2	1:S:60:TYR:CE1	2.18	0.78
1:D:222:VAL:HG13	1:D:223:MET:H	1.49	0.78
1:F:144:LEU:HD11	1:F:149:ARG:HD3	1.64	0.78
1:I:14:ARG:HG3	1:I:59:GLU:HB3	1.66	0.78
1:K:118:MET:HA	1:L:268:ARG:HG3	1.66	0.78
1:T:245:ARG:HB2	1:T:246:PRO:HD2	1.64	0.78
1:B:39:TYR:CZ	1:B:180:VAL:HG21	2.18	0.77
1:C:218:ARG:HG3	1:C:255:GLU:HA	1.65	0.77
1:E:42:ARG:HB3	1:E:45:LEU:HD12	1.66	0.77
1:G:30:ILE:O	1:G:34:ILE:HG12	1.83	0.77
1:I:54:LYS:NZ	2:I:1091:5PA:H91	1.98	0.77
1:T:222:VAL:HG13	1:T:223:MET:N	1.99	0.77
1:W:5:ILE:HD12	1:W:172:GLY:HA2	1.64	0.77
1:A:110:GLY:HA3	1:A:316:HIS:CD2	2.20	0.77
1:I:268:ARG:NH1	1:I:325:LEU:HB3	1.99	0.77
1:K:253:PHE:CB	1:K:260:THR:HG21	2.11	0.77
1:O:25:GLN:HE21	1:O:42:ARG:CD	1.96	0.77
1:O:71:ASP:OD1	1:O:149:ARG:HG2	1.84	0.77
1:B:211:PRO:HB2	1:B:246:PRO:HB3	1.67	0.77
1:L:123:ARG:HB3	1:L:125:TYR:CE1	2.19	0.77
1:M:185:ILE:HG12	1:M:304:LEU:HB3	1.66	0.77
1:G:218:ARG:HD2	1:G:256:TYR:HB3	1.66	0.77
1:M:58:LEU:HD11	1:M:87:THR:HG23	1.66	0.77
1:P:106:GLU:CG	1:P:124:VAL:HG21	2.14	0.77
1:T:40:ILE:HG13	3:T:1230:HOH:O	1.84	0.77
1:U:194:THR:O	1:U:198:LEU:HB2	1.84	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:58:LEU:HD11	1:V:87:THR:HG23	1.65	0.77
1:X:128:LYS:C	1:X:130:SER:H	1.91	0.77
1:F:55:ILE:HD12	1:F:86:VAL:HG11	1.65	0.77
1:H:42:ARG:HB3	1:H:45:LEU:HD12	1.66	0.77
1:H:320:LYS:O	1:H:324:LEU:HD22	1.85	0.77
1:J:321:LEU:O	1:J:325:LEU:HD23	1.82	0.77
1:L:25:GLN:HE22	1:L:42:ARG:HE	1.31	0.77
1:P:181:LYS:HD3	1:P:181:LYS:N	1.98	0.77
1:P:263:VAL:O	1:P:266:ILE:HG22	1.84	0.77
1:Q:82:ASN:ND2	1:Q:111:ASN:ND2	2.25	0.77
1:Q:201:GLY:O	1:Q:205:LEU:HG	1.83	0.77
1:T:134:MET:O	1:T:138:GLU:HG2	1.83	0.77
1:U:181:LYS:HG2	1:U:302:LYS:NZ	1.99	0.77
1:V:82:ASN:HD22	1:V:111:ASN:ND2	1.82	0.77
1:X:15:VAL:HG23	1:X:63:GLY:HA2	1.66	0.77
1:X:41:LYS:HZ3	1:X:177:GLN:HE22	1.32	0.77
1:O:116:LYS:HZ3	1:O:122:THR:HG22	1.50	0.77
1:R:253:PHE:CD2	1:R:260:THR:HG21	2.20	0.77
1:U:214:ILE:CD1	1:U:286:ALA:HA	2.14	0.77
1:W:181:LYS:HG2	1:W:302:LYS:HZ2	1.49	0.77
1:X:48:LEU:HD22	1:X:86:VAL:HG13	1.66	0.77
1:A:71:ASP:OD2	1:A:72:VAL:HG12	1.84	0.77
1:H:100:LEU:HB3	1:H:102:LEU:HD21	1.65	0.77
1:L:308:THR:HB	2:L:1121:5PA:N1	2.00	0.77
1:P:245:ARG:HB2	1:P:246:PRO:HD2	1.65	0.77
1:R:287:PHE:O	1:R:290:LEU:HB3	1.84	0.77
1:A:134:MET:HE2	1:A:156:PRO:HD3	1.67	0.77
1:B:265:GLN:O	1:B:269:LYS:HG3	1.85	0.77
1:C:185:ILE:HD12	1:C:202:LEU:HD11	1.64	0.77
1:G:224:THR:HG23	1:G:225:SER:H	1.50	0.77
1:J:66:LEU:HD11	1:J:94:LEU:HD13	1.67	0.77
1:J:128:LYS:CE	1:J:132:GLU:HB2	2.12	0.77
1:J:189:ALA:HB1	1:J:223:MET:HE1	1.64	0.77
1:O:83:HIS:CE1	1:O:158:GLY:H	2.03	0.77
1:X:76:VAL:HG12	1:X:101:VAL:HB	1.67	0.77
1:K:261:GLY:N	1:K:324:LEU:HD23	2.00	0.77
1:L:102:LEU:HD12	1:L:122:THR:HG23	1.66	0.77
1:P:221:GLU:O	1:P:225:SER:HB2	1.84	0.77
1:X:223:MET:HE2	1:X:248:LEU:HD21	1.65	0.77
1:A:186:VAL:HG23	1:A:305:PHE:HD1	1.50	0.77
1:D:146:ARG:NH2	1:F:295:ARG:HD3	2.00	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:218:ARG:HH11	1:D:218:ARG:CB	1.98	0.77
1:D:255:GLU:HG3	1:D:258:LYS:HB2	1.67	0.77
1:K:221:GLU:C	1:K:223:MET:H	1.92	0.77
1:U:18:ILE:HD11	1:U:55:ILE:HG22	1.67	0.77
1:V:181:LYS:HE3	1:V:302:LYS:NZ	2.00	0.77
1:W:76:VAL:HG21	1:W:156:PRO:HG3	1.66	0.77
1:C:181:LYS:HE3	1:C:302:LYS:NZ	2.01	0.76
1:E:19:PRO:HD2	1:E:20:TRP:CZ3	2.20	0.76
1:F:186:VAL:HG21	1:F:290:LEU:HD22	1.67	0.76
1:K:41:LYS:HZ1	1:K:177:GLN:HE22	1.33	0.76
1:N:202:LEU:HD22	1:N:209:ILE:HB	1.67	0.76
1:O:41:LYS:HG3	3:O:1155:HOH:O	1.84	0.76
1:O:317:TYR:HB3	1:O:320:LYS:HB3	1.66	0.76
1:Q:146:ARG:O	1:Q:147:GLU:HG3	1.84	0.76
1:T:202:LEU:HD12	3:T:1204:HOH:O	1.83	0.76
1:U:143:GLU:O	1:U:147:GLU:HG3	1.85	0.76
1:X:20:TRP:H	1:X:20:TRP:HD1	1.33	0.76
1:G:263:VAL:HG21	1:G:285:LYS:HG2	1.67	0.76
1:H:182:PHE:O	1:H:209:ILE:HG23	1.85	0.76
1:P:34:ILE:HD11	1:P:291:VAL:HA	1.68	0.76
1:R:273:ARG:HD2	3:R:1191:HOH:O	1.86	0.76
1:T:128:LYS:HE2	1:T:132:GLU:HB2	1.67	0.76
1:V:20:TRP:H	1:V:20:TRP:CD1	2.01	0.76
1:C:293:LEU:HD23	1:C:299:LEU:HD21	1.67	0.76
1:H:158:GLY:O	1:H:160:SER:N	2.19	0.76
1:C:214:ILE:HD11	1:C:251:TYR:HB2	1.66	0.76
1:H:245:ARG:HB2	1:H:246:PRO:HD2	1.66	0.76
1:I:146:ARG:O	1:U:221:GLU:HB2	1.84	0.76
1:L:103:ARG:CA	1:L:124:VAL:HG13	2.14	0.76
1:N:229:ASN:HD22	1:N:229:ASN:C	1.92	0.76
1:O:202:LEU:CD2	1:O:209:ILE:HD12	2.15	0.76
1:Q:54:LYS:HE3	2:Q:1171:5PA:H91	1.68	0.76
1:D:53:ASN:HB3	1:D:308:THR:CG2	2.16	0.76
1:F:214:ILE:HG21	1:F:286:ALA:HA	1.66	0.76
1:H:185:ILE:HG23	1:H:304:LEU:HD13	1.67	0.76
1:L:123:ARG:NH1	1:L:140:ILE:HD13	1.99	0.76
1:O:72:VAL:HG13	1:O:151:PRO:CA	2.13	0.76
1:P:46:THR:HB	1:P:55:ILE:HG21	1.67	0.76
1:C:125:TYR:C	1:C:127:ALA:H	1.93	0.76
1:F:218:ARG:NH1	3:F:1077:HOH:O	2.17	0.76
1:I:54:LYS:HZ1	2:I:1091:5PA:H91	1.50	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:222:VAL:HG22	1:K:226:LYS:HD2	1.67	0.76
1:Q:174:ILE:O	1:Q:178:SER:HB3	1.86	0.76
1:R:116:LYS:NZ	1:R:122:THR:HB	2.01	0.76
1:S:55:ILE:HD12	1:S:55:ILE:N	2.01	0.76
1:S:165:LEU:HD21	1:S:238:LEU:HD21	1.67	0.76
1:X:218:ARG:CG	1:X:219:PHE:H	1.90	0.76
1:B:270:VAL:HG21	1:B:278:LEU:HD11	1.67	0.76
1:O:323:SER:C	1:O:324:LEU:HD13	2.11	0.76
1:U:134:MET:HE3	1:U:156:PRO:HD3	1.68	0.76
1:W:181:LYS:H	1:W:181:LYS:CE	1.99	0.76
1:X:211:PRO:HG2	1:X:246:PRO:HB3	1.68	0.76
1:B:27:LEU:HB3	1:B:274:GLU:OE2	1.86	0.76
1:H:218:ARG:HD3	1:H:222:VAL:HG13	1.65	0.76
1:L:260:THR:HG22	3:L:1132:HOH:O	1.85	0.76
1:M:142:GLU:C	1:M:144:LEU:H	1.91	0.76
1:O:78:ALA:H	1:O:81:SER:HB3	1.50	0.76
1:S:112:TYR:O	1:S:115:ASP:HB2	1.85	0.76
1:V:181:LYS:H	1:V:181:LYS:CD	1.98	0.76
1:C:265:GLN:HG3	1:C:269:LYS:HE3	1.68	0.76
1:H:269:LYS:HB3	1:H:273:ARG:NH1	2.01	0.76
1:I:113:LEU:HD22	1:I:117:ILE:HD11	1.68	0.76
1:N:112:TYR:CE1	1:N:122:THR:HG21	2.15	0.76
1:P:105:LYS:CG	1:P:107:GLU:HG2	2.15	0.76
1:R:112:TYR:CE1	1:R:122:THR:HG21	2.21	0.76
1:G:217:GLY:CA	1:G:256:TYR:HB2	2.15	0.76
1:J:109:LYS:HA	1:J:113:LEU:HD12	1.67	0.76
1:L:44:ASP:HB3	1:L:309:GLY:HA2	1.68	0.76
1:L:112:TYR:HA	1:L:115:ASP:OD2	1.86	0.76
1:P:1:MET:HA	1:P:1:MET:CE	2.17	0.76
1:Q:304:LEU:HD22	1:Q:305:PHE:N	2.01	0.76
1:W:147:GLU:O	1:W:149:ARG:N	2.19	0.76
1:H:252:SER:HA	1:H:285:LYS:HD3	1.68	0.75
1:K:131:PHE:C	1:K:133:LEU:H	1.91	0.75
1:T:181:LYS:N	1:T:181:LYS:HD3	2.01	0.75
1:X:228:ASP:OD1	1:X:245:ARG:HD3	1.86	0.75
1:G:186:VAL:HG12	1:G:212:VAL:HB	1.67	0.75
1:L:74:ILE:HB	1:L:153:VAL:HG22	1.68	0.75
1:Q:1:MET:HE3	1:Q:1:MET:HA	1.67	0.75
1:T:204:ILE:HG12	1:T:240:VAL:HG21	1.66	0.75
1:X:269:LYS:HB3	1:X:273:ARG:NH1	2.02	0.75
1:A:243:GLU:O	1:A:244:VAL:HG23	1.85	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:131:PHE:C	1:D:133:LEU:H	1.92	0.75
1:G:27:LEU:HD12	1:G:38:VAL:HG22	1.67	0.75
1:G:149:ARG:HG3	1:I:221:GLU:N	2.00	0.75
1:P:180:VAL:HG13	1:P:181:LYS:HE2	1.68	0.75
1:Q:253:PHE:O	1:Q:258:LYS:HD3	1.85	0.75
1:Q:259:ILE:HG21	1:Q:320:LYS:HG3	1.68	0.75
1:T:54:LYS:HE3	2:T:1201:5PA:H91	1.68	0.75
1:V:89:LEU:HD13	1:V:118:MET:HG3	1.68	0.75
1:V:218:ARG:HH11	1:V:218:ARG:CB	1.98	0.75
1:W:217:GLY:CA	1:W:256:TYR:HB2	2.16	0.75
1:I:161:PRO:HB3	1:I:234:ALA:HA	1.69	0.75
1:J:25:GLN:HE21	1:J:42:ARG:HE	1.35	0.75
1:K:171:VAL:HG21	1:K:201:GLY:CA	2.16	0.75
2:M:1131:5PA:O4P	2:M:1131:5PA:H4A2	1.87	0.75
1:R:264:ALA:HB1	1:R:325:LEU:HD21	1.69	0.75
1:U:113:LEU:O	1:U:117:ILE:HG13	1.87	0.75
1:U:255:GLU:HG2	1:U:258:LYS:HB2	1.69	0.75
1:D:116:LYS:HZ3	1:D:122:THR:HB	1.52	0.75
1:M:289:GLY:O	1:M:293:LEU:HD13	1.86	0.75
1:W:186:VAL:HG21	1:W:290:LEU:HD22	1.68	0.75
1:C:320:LYS:NZ	1:C:324:LEU:HD11	2.02	0.75
1:E:40:ILE:HD13	1:E:276:ILE:HD13	1.68	0.75
1:H:196:ALA:CB	1:H:231:ILE:HG22	2.16	0.75
1:H:215:ALA:HB2	1:H:248:LEU:HD11	1.68	0.75
1:M:72:VAL:HA	1:M:97:ASP:O	1.87	0.75
1:Q:13:PRO:O	1:Q:63:GLY:HA3	1.86	0.75
1:Q:20:TRP:HB3	3:Q:1192:HOH:O	1.86	0.75
1:S:139:GLU:HG3	1:S:140:ILE:N	2.01	0.75
1:J:91:ALA:HB1	1:J:96:LEU:HD12	1.68	0.75
1:J:287:PHE:O	1:J:290:LEU:HB3	1.85	0.75
1:M:61:LEU:HD23	1:M:162:ILE:HD11	1.68	0.75
1:T:299:LEU:HB2	1:T:303:ILE:HD11	1.67	0.75
1:D:181:LYS:HE3	1:D:302:LYS:NZ	2.01	0.75
1:E:218:ARG:HG3	1:E:255:GLU:HA	1.69	0.75
1:G:165:LEU:HA	1:G:168:VAL:CG2	2.15	0.75
1:G:212:VAL:HG22	1:G:247:GLU:HB2	1.67	0.75
1:K:134:MET:HG3	1:K:138:GLU:OE2	1.86	0.75
1:M:142:GLU:O	1:M:144:LEU:N	2.20	0.75
1:P:101:VAL:HG13	1:P:125:TYR:HD1	1.52	0.75
1:R:111:ASN:ND2	1:R:312:SER:HB2	2.02	0.75
1:R:147:GLU:O	1:R:149:ARG:N	2.18	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:19:PRO:HD2	1:S:20:TRP:CZ3	2.22	0.75
1:S:25:GLN:HE22	1:S:42:ARG:NE	1.85	0.75
1:T:25:GLN:NE2	1:T:42:ARG:HE	1.85	0.75
1:V:103:ARG:HB2	1:V:133:LEU:HD21	1.69	0.75
1:J:247:GLU:HB3	1:J:249:TYR:CE1	2.21	0.75
1:M:218:ARG:HH11	1:M:256:TYR:HB3	1.50	0.75
1:O:79:VAL:HA	1:O:102:LEU:HD13	1.67	0.75
1:P:102:LEU:O	1:P:124:VAL:HA	1.86	0.75
1:G:72:VAL:HG11	1:G:144:LEU:HD21	1.69	0.74
1:H:30:ILE:HG21	1:H:287:PHE:HZ	1.51	0.74
1:K:50:ILE:HB	1:K:311:ILE:HG22	1.69	0.74
1:N:243:GLU:OE2	1:N:243:GLU:HA	1.85	0.74
1:O:143:GLU:HG3	1:O:144:LEU:N	2.00	0.74
1:P:128:LYS:H	1:P:128:LYS:HD3	1.50	0.74
1:Q:182:PHE:CE2	1:Q:304:LEU:HB2	2.22	0.74
1:U:82:ASN:ND2	1:U:111:ASN:HD21	1.85	0.74
1:V:144:LEU:HD11	1:V:149:ARG:HD3	1.69	0.74
1:X:218:ARG:HG2	1:X:219:PHE:N	1.95	0.74
1:J:54:LYS:HZ1	2:J:1101:5PA:H91	1.51	0.74
1:Q:109:LYS:HA	1:Q:113:LEU:CD1	2.16	0.74
1:G:181:LYS:H	1:G:181:LYS:CD	2.00	0.74
1:I:214:ILE:HD12	1:I:289:GLY:HA3	1.68	0.74
1:M:142:GLU:O	1:M:146:ARG:N	2.17	0.74
1:N:34:ILE:HD11	1:N:291:VAL:HG22	1.68	0.74
1:S:126:ASP:C	1:S:128:LYS:H	1.95	0.74
1:C:1:MET:CE	1:C:172:GLY:HA3	2.16	0.74
1:K:55:ILE:HA	1:K:58:LEU:HD23	1.68	0.74
1:M:164:THR:HG23	1:M:197:GLY:HA2	1.69	0.74
1:O:222:VAL:O	1:O:226:LYS:HB2	1.86	0.74
1:O:263:VAL:O	1:O:266:ILE:HG22	1.87	0.74
1:R:75:THR:OG1	1:R:83:HIS:HE1	1.70	0.74
1:U:41:LYS:NZ	1:U:177:GLN:HE22	1.85	0.74
1:G:33:GLU:OE1	1:G:273:ARG:NH1	2.19	0.74
1:G:41:LYS:HZ3	1:G:177:GLN:HE22	1.35	0.74
1:G:181:LYS:H	1:G:181:LYS:HD3	1.53	0.74
1:J:240:VAL:HG22	1:J:241:LYS:N	2.01	0.74
1:K:207:GLU:HB3	1:K:209:ILE:HG13	1.69	0.74
1:P:34:ILE:HD11	1:P:291:VAL:HG22	1.68	0.74
1:Q:71:ASP:HA	1:Q:96:LEU:HD22	1.68	0.74
1:U:143:GLU:HB3	1:U:146:ARG:NH2	2.02	0.74
1:W:171:VAL:CG2	1:W:201:GLY:HA3	2.14	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:214:ILE:HD12	1:W:289:GLY:HA3	1.70	0.74
1:H:113:LEU:HD22	1:H:117:ILE:HD11	1.69	0.74
1:L:112:TYR:CE1	1:L:122:THR:HG21	2.23	0.74
1:M:54:LYS:HE3	2:M:1131:5PA:H91	1.69	0.74
1:R:232:LYS:HE3	1:R:236:GLU:OE2	1.86	0.74
1:V:128:LYS:HD3	1:V:128:LYS:H	1.53	0.74
1:O:229:ASN:O	1:O:233:GLU:HG3	1.87	0.74
1:R:221:GLU:OE2	1:R:225:SER:HB2	1.86	0.74
1:G:261:GLY:N	1:G:324:LEU:HD23	2.03	0.74
1:J:218:ARG:HG2	1:J:219:PHE:N	2.03	0.74
1:K:182:PHE:CD2	1:K:304:LEU:HB2	2.23	0.74
1:N:39:TYR:CD1	1:N:182:PHE:HE2	2.06	0.74
1:P:224:THR:CG2	1:P:245:ARG:HH12	1.99	0.74
1:W:103:ARG:HD3	1:W:133:LEU:HD22	1.69	0.74
1:D:103:ARG:HH21	1:D:131:PHE:N	1.84	0.74
1:G:92:LYS:HD2	1:G:120:ILE:HG12	1.70	0.74
1:I:25:GLN:NE2	1:I:42:ARG:HE	1.85	0.74
1:I:64:ASP:OD2	1:I:68:LYS:HE3	1.88	0.74
1:K:219:PHE:HE2	1:K:224:THR:HB	1.52	0.74
1:P:218:ARG:HH11	1:P:218:ARG:CB	2.01	0.74
1:V:210:ARG:HD2	1:V:247:GLU:OE2	1.87	0.74
1:W:82:ASN:HA	1:W:111:ASN:ND2	2.02	0.74
1:A:72:VAL:HG21	1:A:144:LEU:HD21	1.70	0.74
1:B:320:LYS:CE	1:B:324:LEU:HD11	2.18	0.74
1:F:157:GLY:HA2	2:F:1061:5PA:C9	2.18	0.74
1:G:15:VAL:CG2	1:G:63:GLY:HA2	2.17	0.74
1:G:221:GLU:C	1:G:223:MET:H	1.94	0.74
1:J:218:ARG:HD3	1:J:222:VAL:CG1	2.18	0.74
1:Q:25:GLN:NE2	1:Q:276:ILE:HD11	2.03	0.74
1:T:134:MET:HA	1:T:134:MET:HE3	1.70	0.74
1:X:107:GLU:O	1:X:112:TYR:HD2	1.71	0.74
1:G:136:TYR:HD1	1:G:139:GLU:OE2	1.71	0.73
1:H:112:TYR:CE1	1:H:122:THR:HG21	2.23	0.73
1:O:216:VAL:HG12	1:O:285:LYS:HB2	1.69	0.73
1:Q:200:LEU:O	1:Q:204:ILE:HG13	1.88	0.73
1:X:134:MET:O	1:X:138:GLU:HG2	1.88	0.73
1:D:103:ARG:HH21	1:D:131:PHE:H	1.37	0.73
1:E:78:ALA:HB3	1:E:80:HIS:CD2	2.23	0.73
1:K:320:LYS:NZ	1:K:324:LEU:HD11	2.03	0.73
1:M:143:GLU:HB3	1:M:146:ARG:NH2	2.04	0.73
1:O:66:LEU:HD11	1:O:94:LEU:HD13	1.69	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:222:VAL:HG13	1:Q:222:VAL:O	1.87	0.73
1:T:17:LEU:HD23	1:T:59:GLU:HG2	1.69	0.73
1:T:94:LEU:O	1:T:96:LEU:HG	1.87	0.73
1:I:109:LYS:CA	1:I:113:LEU:HB2	2.18	0.73
1:I:210:ARG:HD2	1:I:247:GLU:OE2	1.87	0.73
1:Q:182:PHE:CD2	1:Q:304:LEU:HB2	2.23	0.73
1:Q:322:LEU:HD13	1:R:108:LEU:CD2	2.19	0.73
1:X:17:LEU:HD23	1:X:59:GLU:HG2	1.71	0.73
1:X:211:PRO:O	1:X:246:PRO:HB2	1.87	0.73
1:A:179:GLU:HG2	1:A:179:GLU:O	1.88	0.73
1:O:1:MET:HA	1:O:1:MET:HE3	1.69	0.73
1:O:26:TYR:HB2	1:O:39:TYR:CE2	2.24	0.73
1:P:203:SER:OG	1:P:243:GLU:HG2	1.88	0.73
1:G:65:ALA:HB2	1:G:152:TYR:CD2	2.23	0.73
1:H:182:PHE:CD2	1:H:304:LEU:HB2	2.23	0.73
1:H:218:ARG:HD3	1:H:222:VAL:HG11	1.69	0.73
1:L:25:GLN:NE2	1:L:42:ARG:HE	1.85	0.73
1:P:116:LYS:HZ1	1:P:122:THR:HB	1.51	0.73
1:B:116:LYS:NZ	1:B:122:THR:HB	2.04	0.73
1:F:130:SER:O	1:F:132:GLU:N	2.21	0.73
1:L:232:LYS:O	1:L:236:GLU:HG3	1.89	0.73
1:L:270:VAL:HG11	1:L:278:LEU:HD21	1.71	0.73
1:X:25:GLN:NE2	1:X:42:ARG:HE	1.86	0.73
1:C:143:GLU:HA	1:C:146:ARG:HG2	1.70	0.73
1:E:219:PHE:CZ	1:E:248:LEU:HD23	2.24	0.73
1:M:103:ARG:HH11	1:M:128:LYS:HG2	1.53	0.73
1:N:15:VAL:HG21	1:N:66:LEU:HD12	1.70	0.73
1:S:72:VAL:CG1	1:S:144:LEU:HD21	2.18	0.73
1:W:165:LEU:CD2	1:W:238:LEU:HD11	2.18	0.73
1:C:145:LYS:HA	1:C:149:ARG:O	1.89	0.73
1:F:128:LYS:HD3	1:F:128:LYS:N	2.00	0.73
1:G:165:LEU:HA	1:G:168:VAL:HG23	1.71	0.73
1:K:62:LEU:HD13	1:K:94:LEU:HD12	1.70	0.73
1:M:181:LYS:HE3	1:M:302:LYS:NZ	2.02	0.73
1:M:186:VAL:HG21	1:M:290:LEU:CD2	2.18	0.73
1:N:128:LYS:H	1:N:128:LYS:CD	2.02	0.73
1:Q:25:GLN:NE2	1:Q:42:ARG:HE	1.86	0.73
1:W:132:GLU:C	1:W:134:MET:H	1.94	0.73
1:H:229:ASN:ND2	1:H:233:GLU:HG3	2.03	0.73
1:O:214:ILE:HD11	1:O:285:LYS:O	1.89	0.73
1:X:130:SER:O	1:X:132:GLU:HG3	1.89	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:187:VAL:HG21	1:F:194:THR:CG2	2.18	0.72
1:G:324:LEU:H	1:G:324:LEU:HD12	1.54	0.72
1:L:103:ARG:HB2	1:L:133:LEU:HD21	1.71	0.72
1:L:103:ARG:NH2	1:L:129:ASP:HA	2.02	0.72
1:Q:134:MET:HE1	1:Q:155:PRO:HA	1.69	0.72
1:U:210:ARG:NH2	1:U:298:GLU:O	2.22	0.72
1:V:5:ILE:HG22	1:V:9:LEU:HD12	1.71	0.72
1:E:223:MET:C	1:E:225:SER:H	1.97	0.72
1:F:128:LYS:C	1:F:130:SER:H	1.95	0.72
1:I:70:ALA:HB1	1:I:150:LYS:O	1.89	0.72
1:K:50:ILE:HB	1:K:311:ILE:CG2	2.20	0.72
1:O:78:ALA:H	1:O:81:SER:CB	2.02	0.72
1:R:224:THR:HG22	1:R:225:SER:N	2.03	0.72
1:R:262:GLU:N	1:R:262:GLU:OE1	2.22	0.72
1:W:181:LYS:HE2	1:W:181:LYS:N	2.05	0.72
1:B:128:LYS:HD3	1:B:128:LYS:N	2.05	0.72
1:C:181:LYS:HD3	1:C:181:LYS:H	1.54	0.72
1:H:157:GLY:HA2	2:H:1081:5PA:C9	2.19	0.72
1:Q:214:ILE:HD13	1:Q:286:ALA:CA	2.18	0.72
1:R:245:ARG:HB2	1:R:246:PRO:HD2	1.71	0.72
1:T:25:GLN:NE2	1:T:42:ARG:NE	2.37	0.72
1:U:131:PHE:C	1:U:133:LEU:H	1.96	0.72
1:X:131:PHE:HA	1:X:133:LEU:CD1	2.18	0.72
1:B:15:VAL:HG12	1:B:17:LEU:HD13	1.71	0.72
1:H:105:LYS:HG2	1:H:107:GLU:HG3	1.71	0.72
1:H:144:LEU:HG	1:H:149:ARG:HB2	1.72	0.72
1:L:9:LEU:HD21	1:L:165:LEU:HB3	1.72	0.72
1:M:266:ILE:HD12	1:M:269:LYS:HD2	1.70	0.72
1:N:53:ASN:HB3	1:N:308:THR:HG22	1.71	0.72
1:O:103:ARG:NH1	1:O:128:LYS:HZ3	1.87	0.72
1:S:222:VAL:HA	1:S:225:SER:OG	1.88	0.72
1:T:1:MET:HE1	1:T:172:GLY:HA3	1.72	0.72
1:W:134:MET:O	1:W:138:GLU:HG2	1.90	0.72
1:D:277:ILE:HA	3:D:1049:HOH:O	1.88	0.72
1:F:145:LYS:C	1:F:147:GLU:H	1.96	0.72
1:H:1:MET:HE1	1:H:172:GLY:HA3	1.71	0.72
1:U:1:MET:CE	1:U:172:GLY:HA3	2.19	0.72
1:C:133:LEU:O	1:C:136:TYR:HB2	1.89	0.72
1:C:322:LEU:HD12	1:D:108:LEU:HD21	1.70	0.72
1:F:198:LEU:HD12	1:F:211:PRO:HB3	1.71	0.72
1:M:129:ASP:CG	1:M:130:SER:N	2.44	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:274:GLU:OE1	1:N:274:GLU:HA	1.87	0.72
1:O:25:GLN:HE21	1:O:42:ARG:HD3	1.54	0.72
1:Q:66:LEU:O	1:Q:68:LYS:N	2.22	0.72
1:S:143:GLU:O	1:S:143:GLU:HG3	1.89	0.72
1:T:211:PRO:HB3	3:T:1204:HOH:O	1.90	0.72
1:T:223:MET:HE1	1:T:248:LEU:HD11	1.71	0.72
1:A:134:MET:CE	1:A:155:PRO:HA	2.20	0.72
1:B:20:TRP:HD1	1:B:20:TRP:H	1.37	0.72
1:H:312:SER:O	1:H:314:THR:N	2.23	0.72
1:J:128:LYS:O	1:J:130:SER:N	2.22	0.72
1:L:253:PHE:CD2	1:L:260:THR:HG21	2.24	0.72
1:M:19:PRO:HD2	1:M:20:TRP:CZ3	2.24	0.72
1:E:126:ASP:O	1:E:128:LYS:N	2.22	0.72
1:M:113:LEU:HD22	1:M:117:ILE:HD11	1.72	0.72
1:O:54:LYS:HE3	2:O:1151:5PA:H91	1.71	0.72
1:O:145:LYS:C	1:O:147:GLU:H	1.97	0.72
1:P:41:LYS:NZ	1:P:177:GLN:HE22	1.88	0.72
1:A:116:LYS:HZ3	1:A:122:THR:HB	1.55	0.72
1:G:1:MET:HE3	1:G:2:HIS:H	1.53	0.72
1:H:72:VAL:HG11	1:H:144:LEU:HD23	1.72	0.72
1:H:103:ARG:HH22	1:H:131:PHE:N	1.87	0.72
1:J:266:ILE:O	1:J:270:VAL:HG23	1.89	0.72
1:Q:322:LEU:HD13	1:R:108:LEU:HD21	1.71	0.72
1:V:74:ILE:HB	1:V:153:VAL:HG22	1.70	0.72
1:V:84:ALA:HB1	1:V:100:LEU:HD23	1.72	0.72
1:W:222:VAL:O	1:W:226:LYS:HD2	1.90	0.72
1:X:171:VAL:HA	1:X:174:ILE:HD12	1.71	0.72
1:A:103:ARG:NH1	1:A:128:LYS:NZ	2.38	0.72
1:K:269:LYS:HD3	3:K:1128:HOH:O	1.89	0.72
1:L:1:MET:HE3	1:L:1:MET:C	2.15	0.72
1:N:141:ALA:O	1:N:151:PRO:HG3	1.90	0.72
1:N:181:LYS:H	1:N:181:LYS:CD	1.93	0.72
1:R:131:PHE:HA	1:R:133:LEU:HD13	1.71	0.72
1:T:128:LYS:O	1:T:130:SER:N	2.22	0.72
1:O:188:ALA:HA	1:O:214:ILE:HG23	1.71	0.71
1:Q:30:ILE:CG2	1:Q:38:VAL:HG11	2.19	0.71
1:Q:201:GLY:HA2	1:Q:204:ILE:HD12	1.72	0.71
1:S:42:ARG:HB3	1:S:45:LEU:HD12	1.72	0.71
1:X:20:TRP:H	1:X:20:TRP:CD1	2.06	0.71
1:E:34:ILE:HG21	1:E:291:VAL:HG13	1.72	0.71
1:F:159:ALA:HB2	1:F:191:SER:OG	1.90	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:320:LYS:O	1:P:324:LEU:HD13	1.90	0.71
1:S:55:ILE:H	1:S:55:ILE:CD1	2.02	0.71
1:T:58:LEU:HA	1:T:61:LEU:HB2	1.72	0.71
1:X:72:VAL:HB	1:X:149:ARG:HH21	1.53	0.71
1:X:245:ARG:HG3	1:X:246:PRO:HD2	1.71	0.71
1:G:29:ASN:CB	1:G:273:ARG:HG2	2.19	0.71
1:G:167:TYR:HA	1:G:170:ALA:HB3	1.72	0.71
1:J:174:ILE:HA	1:J:177:GLN:HE21	1.55	0.71
1:K:74:ILE:HG21	1:K:137:ALA:HB1	1.72	0.71
1:M:113:LEU:O	1:M:117:ILE:HG13	1.89	0.71
1:M:210:ARG:HD2	1:M:247:GLU:OE2	1.90	0.71
1:O:228:ASP:OD2	1:O:245:ARG:NH1	2.23	0.71
1:T:214:ILE:HG23	1:T:251:TYR:CD1	2.24	0.71
1:V:187:VAL:HG21	1:V:194:THR:HG21	1.71	0.71
1:I:72:VAL:HG11	1:I:144:LEU:HD23	1.72	0.71
1:J:110:GLY:HA3	1:J:316:HIS:HD2	1.53	0.71
1:J:219:PHE:HD1	1:J:250:ASP:OD2	1.74	0.71
1:L:83:HIS:CD2	1:L:157:GLY:HA2	2.25	0.71
1:O:103:ARG:HH12	1:O:128:LYS:HZ3	1.36	0.71
1:R:135:LYS:O	1:R:139:GLU:HG3	1.90	0.71
1:S:123:ARG:NH1	1:S:140:ILE:HD13	2.05	0.71
1:T:116:LYS:HZ3	1:T:122:THR:HB	1.56	0.71
1:I:74:ILE:HD11	1:I:144:LEU:HD22	1.71	0.71
1:J:100:LEU:HD22	1:J:120:ILE:HG21	1.71	0.71
1:L:72:VAL:HG11	1:L:144:LEU:CD2	2.19	0.71
1:M:214:ILE:CD1	1:M:289:GLY:HA3	2.20	0.71
1:M:266:ILE:HA	1:M:269:LYS:HD2	1.72	0.71
1:O:58:LEU:HD21	1:O:87:THR:HA	1.72	0.71
1:P:143:GLU:HA	1:P:146:ARG:HH12	1.56	0.71
1:S:117:ILE:HG13	1:T:322:LEU:HD21	1.71	0.71
1:B:73:VAL:HG22	1:B:152:TYR:HB3	1.72	0.71
1:G:79:VAL:HG21	1:G:105:LYS:O	1.90	0.71
1:L:144:LEU:HD11	1:L:149:ARG:HD3	1.73	0.71
1:X:269:LYS:HB3	1:X:273:ARG:HH12	1.56	0.71
1:K:54:LYS:HE3	2:K:1111:5PA:H91	1.72	0.71
1:P:252:SER:O	1:P:253:PHE:HB2	1.90	0.71
1:Q:162:ILE:C	1:Q:162:ILE:HD12	2.15	0.71
1:R:41:LYS:HZ3	1:R:177:GLN:HE22	1.38	0.71
1:T:240:VAL:HG22	1:T:241:LYS:H	1.56	0.71
1:U:195:LEU:HD12	1:U:213:GLY:HA3	1.73	0.71
1:V:181:LYS:H	1:V:181:LYS:CE	2.03	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:48:LEU:HD23	1:W:49:GLY:N	2.06	0.71
1:C:217:GLY:O	1:C:219:PHE:N	2.23	0.71
1:G:19:PRO:HB2	1:G:20:TRP:CE3	2.26	0.71
1:I:161:PRO:HA	1:I:234:ALA:HB2	1.72	0.71
1:J:232:LYS:O	1:J:236:GLU:HG3	1.91	0.71
1:O:31:SER:HA	1:O:36:ALA:O	1.91	0.71
1:P:191:SER:N	2:P:1161:5PA:O1P	2.23	0.71
1:T:181:LYS:H	1:T:181:LYS:CD	2.01	0.71
1:X:55:ILE:HD11	1:X:86:VAL:HG11	1.70	0.71
1:X:214:ILE:HG21	1:X:286:ALA:HA	1.73	0.71
1:C:39:TYR:CZ	1:C:180:VAL:HG11	2.26	0.71
1:G:253:PHE:HB3	1:G:260:THR:HG21	1.72	0.71
1:I:140:ILE:O	1:I:144:LEU:HD13	1.90	0.71
1:J:210:ARG:HD2	1:J:247:GLU:OE2	1.91	0.71
1:K:279:ASP:HA	1:K:314:THR:OG1	1.91	0.71
1:M:214:ILE:HD12	1:M:289:GLY:HA3	1.71	0.71
1:O:27:LEU:HB3	1:O:274:GLU:OE2	1.91	0.71
1:Q:271:GLY:O	1:R:89:LEU:HD11	1.89	0.71
1:X:112:TYR:CE1	1:X:122:THR:HG21	2.21	0.71
1:B:232:LYS:HE3	1:B:236:GLU:OE2	1.91	0.71
1:G:262:GLU:N	1:G:262:GLU:OE1	2.24	0.71
1:H:173:GLU:O	1:H:177:GLN:HG2	1.90	0.71
1:I:146:ARG:O	1:U:221:GLU:CB	2.38	0.71
1:J:195:LEU:HD12	1:J:227:LEU:HD11	1.71	0.71
1:P:109:LYS:HA	1:P:113:LEU:HD12	1.71	0.71
1:T:270:VAL:HG21	1:T:278:LEU:CD1	2.21	0.71
1:W:139:GLU:HG3	1:W:140:ILE:N	2.06	0.71
1:W:189:ALA:HB2	1:W:195:LEU:HD12	1.73	0.71
1:W:202:LEU:HD22	1:W:209:ILE:HB	1.71	0.71
1:C:42:ARG:HB3	1:C:42:ARG:HH11	1.56	0.70
1:C:320:LYS:O	1:C:324:LEU:HD13	1.91	0.70
1:G:126:ASP:C	1:G:128:LYS:H	1.98	0.70
1:G:216:VAL:HB	1:G:285:LYS:HD2	1.73	0.70
1:L:53:ASN:CG	1:L:308:THR:HG22	2.16	0.70
2:O:1151:5PA:O4P	2:O:1151:5PA:H4A2	1.90	0.70
1:Q:1:MET:HE3	1:Q:2:HIS:H	1.56	0.70
1:U:1:MET:HE1	1:U:172:GLY:HA3	1.73	0.70
1:A:210:ARG:NH2	1:A:299:LEU:HD23	2.06	0.70
1:K:14:ARG:CG	1:K:59:GLU:HB3	2.20	0.70
1:N:103:ARG:HD3	1:N:127:ALA:O	1.91	0.70
1:P:127:ALA:HB1	1:P:128:LYS:NZ	2.06	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:144:LEU:CD1	1:P:149:ARG:HD3	2.17	0.70
1:Q:55:ILE:HD11	1:Q:86:VAL:HG11	1.72	0.70
1:U:182:PHE:CD2	1:U:304:LEU:HB2	2.25	0.70
1:W:133:LEU:HD12	1:W:136:TYR:CD2	2.26	0.70
1:C:117:ILE:CG2	1:C:118:MET:HE2	2.21	0.70
1:G:102:LEU:HD12	1:G:122:THR:OG1	1.91	0.70
1:L:135:LYS:NZ	1:L:136:TYR:CE1	2.59	0.70
1:O:4:LYS:HD3	1:O:204:ILE:HG22	1.73	0.70
1:W:181:LYS:H	1:W:181:LYS:HE2	1.55	0.70
1:A:222:VAL:O	1:A:226:LYS:N	2.18	0.70
1:F:58:LEU:HB3	1:F:62:LEU:HD12	1.72	0.70
1:J:187:VAL:HG21	1:J:194:THR:CG2	2.21	0.70
1:P:54:LYS:HG3	1:P:83:HIS:HB2	1.72	0.70
1:T:318:GLY:O	1:T:321:LEU:HB2	1.92	0.70
1:V:69:GLY:O	1:V:150:LYS:HD3	1.91	0.70
1:W:131:PHE:C	1:W:133:LEU:H	1.97	0.70
1:B:20:TRP:H	1:B:20:TRP:CD1	2.08	0.70
1:C:71:ASP:OD2	1:C:72:VAL:HG12	1.90	0.70
1:F:1:MET:HE3	1:F:2:HIS:N	2.06	0.70
1:F:72:VAL:HB	3:F:1089:HOH:O	1.91	0.70
1:G:15:VAL:HG23	1:G:63:GLY:CA	2.21	0.70
1:N:211:PRO:HB2	1:N:246:PRO:CB	2.21	0.70
1:Q:61:LEU:HD22	1:Q:154:ILE:HG23	1.74	0.70
1:R:12:PHE:HE2	1:R:237:LEU:HD22	1.56	0.70
1:S:156:PRO:C	1:S:158:GLY:H	2.00	0.70
1:W:78:ALA:O	1:W:81:SER:N	2.22	0.70
1:D:231:ILE:HD11	3:D:1058:HOH:O	1.91	0.70
1:E:112:TYR:O	1:E:116:LYS:HG2	1.91	0.70
1:F:259:ILE:HG12	1:F:280:PRO:HB2	1.72	0.70
1:J:289:GLY:O	1:J:293:LEU:HB2	1.91	0.70
1:K:293:LEU:H	1:K:293:LEU:CD1	2.03	0.70
1:O:82:ASN:HB2	2:O:1151:5PA:O3	1.91	0.70
1:O:136:TYR:HA	1:O:139:GLU:HG2	1.71	0.70
1:Q:53:ASN:ND2	1:Q:194:THR:OG1	2.24	0.70
1:R:251:TYR:CZ	1:R:289:GLY:HA2	2.26	0.70
1:W:53:ASN:HB2	1:W:167:TYR:HE1	1.57	0.70
1:I:110:GLY:HA3	1:I:316:HIS:CD2	2.26	0.70
1:I:181:LYS:HG2	1:I:302:LYS:HZ1	1.55	0.70
1:I:243:GLU:HG3	1:I:244:VAL:H	1.55	0.70
1:L:214:ILE:CG2	1:L:251:TYR:HB2	2.21	0.70
1:O:64:ASP:OD1	1:O:152:TYR:OH	2.09	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:103:ARG:HB2	1:R:133:LEU:HD21	1.72	0.70
1:R:128:LYS:H	1:R:128:LYS:CD	2.02	0.70
1:V:222:VAL:HG13	1:V:223:MET:N	2.06	0.70
1:W:101:VAL:HG21	1:W:137:ALA:HB2	1.73	0.70
1:A:8:LEU:HD13	1:A:204:ILE:HD13	1.74	0.70
1:C:212:VAL:HG22	1:C:247:GLU:HB2	1.74	0.70
1:H:316:HIS:ND1	1:H:316:HIS:O	2.21	0.70
1:N:144:LEU:HD23	1:N:151:PRO:HB3	1.73	0.70
1:O:265:GLN:HG3	1:O:269:LYS:HE3	1.74	0.70
1:X:219:PHE:HD2	1:X:220:GLY:H	1.40	0.70
1:B:127:ALA:HB1	1:B:128:LYS:HD3	1.73	0.70
1:B:222:VAL:HG13	1:B:223:MET:H	1.56	0.70
1:G:125:TYR:CE2	1:G:136:TYR:HB3	2.27	0.70
1:G:126:ASP:O	1:G:128:LYS:N	2.20	0.70
1:G:143:GLU:HA	1:G:146:ARG:NE	2.05	0.70
1:H:135:LYS:HG3	1:H:136:TYR:N	2.06	0.70
1:J:218:ARG:NH1	1:J:218:ARG:HB2	2.07	0.70
1:J:249:TYR:CD2	1:J:293:LEU:HD11	2.27	0.70
1:N:135:LYS:O	1:N:139:GLU:HG3	1.91	0.70
1:B:134:MET:HA	1:B:134:MET:HE3	1.73	0.70
1:G:128:LYS:O	1:G:128:LYS:HD3	1.92	0.70
1:G:222:VAL:O	1:G:226:LYS:HB2	1.92	0.70
1:G:259:ILE:O	1:G:324:LEU:HD21	1.92	0.70
1:J:134:MET:HA	1:J:134:MET:HE3	1.73	0.70
1:L:221:GLU:OE2	1:L:225:SER:HB3	1.92	0.70
1:M:154:ILE:CG2	1:M:158:GLY:HA2	2.21	0.70
1:P:82:ASN:HD22	1:P:82:ASN:N	1.87	0.70
1:A:221:GLU:CD	1:A:221:GLU:C	2.58	0.69
1:D:187:VAL:HG21	1:D:194:THR:HG21	1.73	0.69
1:G:165:LEU:CD2	1:G:238:LEU:HD21	2.18	0.69
1:H:82:ASN:ND2	1:H:111:ASN:HD21	1.90	0.69
1:I:142:GLU:OE1	1:I:145:LYS:CD	2.40	0.69
1:J:174:ILE:HA	1:J:177:GLN:NE2	2.07	0.69
1:M:145:LYS:C	1:M:147:GLU:H	1.97	0.69
1:D:103:ARG:CZ	1:D:129:ASP:HA	2.22	0.69
1:J:165:LEU:HA	1:J:168:VAL:HG23	1.73	0.69
1:K:116:LYS:HA	1:K:116:LYS:HE3	1.73	0.69
1:L:101:VAL:CG1	1:L:133:LEU:HB3	2.22	0.69
1:L:111:ASN:HA	1:L:114:LEU:HD12	1.72	0.69
1:N:247:GLU:HB3	1:N:249:TYR:HE1	1.57	0.69
1:W:147:GLU:C	1:W:149:ARG:H	2.00	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:100:LEU:HB3	1:X:102:LEU:HD21	1.74	0.69
1:A:41:LYS:NZ	1:A:177:GLN:NE2	2.35	0.69
1:B:2:HIS:ND1	1:B:3:PRO:HD2	2.07	0.69
1:H:232:LYS:HD2	3:H:1108:HOH:O	1.92	0.69
1:J:26:TYR:HD2	1:K:7:ALA:HB3	1.55	0.69
1:J:222:VAL:HG13	1:J:223:MET:N	2.05	0.69
1:L:112:TYR:CZ	1:L:122:THR:HG21	2.26	0.69
1:S:66:LEU:HD11	1:S:94:LEU:HD13	1.74	0.69
1:A:181:LYS:H	1:A:181:LYS:HE2	1.57	0.69
1:J:191:SER:N	2:J:1101:5PA:O1P	2.26	0.69
1:R:103:ARG:HG2	1:R:103:ARG:HH11	1.56	0.69
1:E:279:ASP:OD1	1:E:283:THR:OG1	2.10	0.69
1:E:287:PHE:O	1:E:291:VAL:HG23	1.93	0.69
1:G:23:PRO:HG2	1:G:42:ARG:HB2	1.74	0.69
1:G:77:GLY:O	1:G:102:LEU:HA	1.91	0.69
1:G:78:ALA:HB3	1:G:80:HIS:CD2	2.28	0.69
1:I:281:VAL:HG13	1:I:282:TYR:CD1	2.28	0.69
1:J:220:GLY:O	1:J:224:THR:HG22	1.91	0.69
1:N:218:ARG:HD3	1:N:222:VAL:HG11	1.75	0.69
1:O:15:VAL:HG11	1:O:94:LEU:HD11	1.74	0.69
1:S:134:MET:CE	1:S:156:PRO:HD3	2.22	0.69
1:W:106:GLU:CG	1:W:124:VAL:HG21	2.21	0.69
1:W:139:GLU:HG3	1:W:140:ILE:H	1.58	0.69
1:X:162:ILE:HG23	1:X:163:GLY:N	2.06	0.69
1:G:255:GLU:HG3	1:G:258:LYS:HB2	1.73	0.69
1:I:116:LYS:HZ3	1:I:122:THR:CG2	2.06	0.69
1:K:145:LYS:C	1:K:147:GLU:H	1.99	0.69
1:P:247:GLU:HB3	1:P:249:TYR:HE1	1.57	0.69
1:D:174:ILE:HA	1:D:177:GLN:HE21	1.56	0.69
1:D:265:GLN:HG3	1:D:269:LYS:HE3	1.74	0.69
1:I:66:LEU:CD2	1:I:96:LEU:HD21	2.23	0.69
1:I:126:ASP:C	1:I:128:LYS:H	1.99	0.69
1:J:140:ILE:O	1:J:144:LEU:HB3	1.92	0.69
1:P:168:VAL:O	1:P:171:VAL:HG22	1.93	0.69
1:P:265:GLN:O	1:P:269:LYS:HG3	1.92	0.69
1:Q:52:GLY:HA2	1:Q:308:THR:O	1.92	0.69
1:S:136:TYR:HA	1:S:139:GLU:HG2	1.74	0.69
1:W:54:LYS:HZ1	1:W:157:GLY:HA2	1.57	0.69
1:C:132:GLU:HB2	3:C:1047:HOH:O	1.91	0.69
1:C:186:VAL:HA	1:C:212:VAL:O	1.93	0.69
1:D:103:ARG:HG3	1:D:104:GLY:N	2.06	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:222:VAL:HG22	1:D:223:MET:N	2.07	0.69
1:E:262:GLU:CD	1:E:262:GLU:H	2.00	0.69
1:I:318:GLY:HA3	1:J:113:LEU:HD21	1.75	0.69
1:J:67:SER:C	1:J:69:GLY:H	2.01	0.69
1:N:210:ARG:HD2	1:N:247:GLU:OE2	1.93	0.69
1:O:39:TYR:CE1	1:O:180:VAL:HG11	2.28	0.69
1:O:54:LYS:NZ	1:O:57:LYS:NZ	2.40	0.69
1:O:142:GLU:OE1	1:O:142:GLU:HA	1.93	0.69
1:O:245:ARG:HG2	1:O:246:PRO:HD2	1.74	0.69
1:P:264:ALA:HB1	1:P:325:LEU:HD22	1.73	0.69
1:R:195:LEU:HD11	1:R:246:PRO:CG	2.23	0.69
1:S:78:ALA:H	1:S:81:SER:HB2	1.57	0.69
1:S:142:GLU:C	1:S:144:LEU:H	2.00	0.69
1:T:211:PRO:HG2	1:T:246:PRO:CB	2.22	0.69
1:W:157:GLY:HA2	2:W:1231:5PA:C9	2.23	0.69
1:B:66:LEU:HD11	1:B:94:LEU:HD13	1.74	0.69
1:B:145:LYS:HD3	3:B:1037:HOH:O	1.92	0.69
1:C:103:ARG:NH1	1:C:128:LYS:HZ2	1.90	0.69
1:C:143:GLU:HA	1:C:146:ARG:HE	1.58	0.69
1:L:218:ARG:HH11	1:L:218:ARG:HB2	1.57	0.69
1:Q:54:LYS:HD3	1:Q:57:LYS:HZ1	1.58	0.69
1:Q:134:MET:O	1:Q:138:GLU:HG2	1.93	0.69
1:V:140:ILE:O	1:V:144:LEU:HB2	1.93	0.69
1:V:306:ILE:HG22	1:V:308:THR:HG23	1.73	0.69
1:W:253:PHE:HD2	1:W:260:THR:HG21	1.56	0.69
1:F:54:LYS:O	1:F:58:LEU:HD13	1.92	0.69
1:G:86:VAL:HG11	3:G:1081:HOH:O	1.93	0.69
1:G:203:SER:OG	1:G:243:GLU:HB2	1.93	0.69
1:I:136:TYR:O	1:I:140:ILE:HG13	1.92	0.69
1:I:230:LEU:HD23	1:I:230:LEU:O	1.93	0.69
1:J:165:LEU:HA	1:J:168:VAL:CG2	2.23	0.69
1:L:218:ARG:HB2	1:L:218:ARG:NH1	2.08	0.69
1:O:174:ILE:HA	1:O:177:GLN:HE21	1.56	0.69
1:T:30:ILE:HG21	1:T:287:PHE:CZ	2.28	0.69
1:T:135:LYS:C	1:T:139:GLU:HG3	2.18	0.69
1:V:162:ILE:HG23	1:V:163:GLY:H	1.58	0.69
1:X:218:ARG:O	1:X:219:PHE:HB2	1.91	0.69
1:C:27:LEU:HB3	1:C:274:GLU:OE2	1.93	0.68
1:E:41:LYS:HZ1	1:E:177:GLN:HE22	1.38	0.68
1:H:181:LYS:H	1:H:181:LYS:CE	2.01	0.68
1:I:259:ILE:O	1:I:259:ILE:HG22	1.91	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:128:LYS:HE2	1:J:132:GLU:CB	2.17	0.68
1:K:266:ILE:HG21	1:K:284:GLY:O	1.92	0.68
2:P:1161:5PA:H4A2	2:P:1161:5PA:O4P	1.93	0.68
1:R:112:TYR:HE1	1:R:122:THR:HG21	1.56	0.68
1:W:84:ALA:HB1	1:W:100:LEU:HG	1.73	0.68
1:B:69:GLY:O	1:B:150:LYS:HD2	1.92	0.68
1:G:322:LEU:CD1	1:H:108:LEU:HD21	2.23	0.68
1:I:258:LYS:HE2	1:I:260:THR:HG22	1.75	0.68
1:L:112:TYR:OH	1:L:122:THR:HG21	1.93	0.68
1:O:48:LEU:HD11	1:O:90:ALA:HA	1.75	0.68
1:S:221:GLU:C	1:S:223:MET:N	2.41	0.68
1:X:278:LEU:HD13	1:X:283:THR:O	1.93	0.68
1:A:187:VAL:HG21	1:A:194:THR:HG21	1.74	0.68
1:A:218:ARG:O	1:A:220:GLY:N	2.25	0.68
1:D:56:ARG:HD2	1:D:167:TYR:CZ	2.27	0.68
1:F:255:GLU:CG	1:F:258:LYS:HB2	2.23	0.68
1:H:101:VAL:HG12	1:H:133:LEU:HB3	1.74	0.68
1:K:214:ILE:HD13	1:K:286:ALA:CA	2.24	0.68
1:L:62:LEU:HD22	1:L:94:LEU:HD12	1.75	0.68
1:M:27:LEU:HD11	1:M:40:ILE:HB	1.75	0.68
1:P:105:LYS:HG3	1:P:107:GLU:HG2	1.75	0.68
1:P:133:LEU:O	1:P:136:TYR:N	2.23	0.68
1:Q:108:LEU:O	1:Q:113:LEU:HD12	1.93	0.68
1:W:131:PHE:HZ	1:W:226:LYS:NZ	1.91	0.68
1:X:103:ARG:HG2	1:X:103:ARG:HH11	1.59	0.68
1:A:128:LYS:HD3	1:A:128:LYS:O	1.94	0.68
1:D:55:ILE:HD12	1:D:55:ILE:N	2.08	0.68
1:E:15:VAL:HG13	1:U:11:LYS:HA	1.75	0.68
1:G:55:ILE:HD12	1:G:86:VAL:CG1	2.24	0.68
1:P:287:PHE:O	1:P:290:LEU:HB3	1.94	0.68
1:Q:218:ARG:NH1	1:Q:256:TYR:HB3	2.09	0.68
1:R:161:PRO:O	1:R:164:THR:HB	1.94	0.68
1:E:109:LYS:HA	1:E:113:LEU:HB2	1.75	0.68
1:F:224:THR:HG23	1:F:225:SER:N	2.09	0.68
1:H:19:PRO:HG2	1:H:20:TRP:H	1.58	0.68
1:P:224:THR:HG22	1:P:225:SER:N	2.08	0.68
1:Q:184:SER:HA	1:Q:210:ARG:H	1.56	0.68
1:R:160:SER:OG	1:R:162:ILE:HG22	1.93	0.68
1:T:270:VAL:HG21	1:T:278:LEU:HD12	1.75	0.68
1:W:220:GLY:O	1:W:223:MET:HB3	1.92	0.68
1:A:181:LYS:HG2	1:A:302:LYS:NZ	2.09	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:101:VAL:CG1	1:H:133:LEU:HB3	2.23	0.68
1:K:316:HIS:C	1:K:318:GLY:H	2.01	0.68
1:M:188:ALA:HB2	1:M:286:ALA:HB2	1.76	0.68
1:P:5:ILE:HG22	1:P:9:LEU:HD12	1.76	0.68
1:S:222:VAL:O	1:S:226:LYS:HB2	1.93	0.68
1:T:169:ARG:NH2	3:T:1207:HOH:O	2.25	0.68
1:U:318:GLY:O	1:U:321:LEU:N	2.25	0.68
1:A:31:SER:OG	1:A:38:VAL:HG12	1.93	0.68
1:A:143:GLU:HG3	1:A:144:LEU:H	1.58	0.68
1:B:54:LYS:HE3	1:B:83:HIS:HB2	1.75	0.68
1:G:187:VAL:HG23	1:G:306:ILE:HB	1.76	0.68
1:I:289:GLY:O	1:I:293:LEU:HD13	1.94	0.68
1:O:182:PHE:CE1	1:O:304:LEU:HG	2.29	0.68
1:Q:82:ASN:CA	1:Q:111:ASN:ND2	2.55	0.68
1:U:55:ILE:HD11	1:U:86:VAL:HG21	1.76	0.68
1:V:19:PRO:HG2	1:V:20:TRP:HD1	1.57	0.68
1:W:125:TYR:C	1:W:127:ALA:H	2.01	0.68
1:X:51:GLY:HA3	3:X:1257:HOH:O	1.92	0.68
1:C:308:THR:OG1	2:C:1031:5PA:N1	2.25	0.68
1:E:214:ILE:HD12	1:E:289:GLY:HA3	1.75	0.68
1:F:55:ILE:CD1	1:F:86:VAL:HG11	2.22	0.68
1:H:115:ASP:HA	1:H:120:ILE:HD12	1.75	0.68
1:J:210:ARG:NH2	1:J:298:GLU:O	2.26	0.68
1:K:219:PHE:HA	1:K:223:MET:HE3	1.75	0.68
1:R:135:LYS:HG3	1:R:136:TYR:H	1.58	0.68
1:S:202:LEU:HD12	1:S:211:PRO:HG3	1.74	0.68
1:T:187:VAL:HG21	1:T:194:THR:HG21	1.76	0.68
1:U:290:LEU:C	1:U:290:LEU:HD12	2.19	0.68
1:V:219:PHE:HA	1:V:223:MET:SD	2.34	0.68
1:B:12:PHE:CZ	1:B:237:LEU:HD22	2.29	0.68
1:G:227:LEU:HD21	1:G:246:PRO:CG	2.23	0.68
1:K:134:MET:O	1:K:138:GLU:HG2	1.93	0.68
1:K:189:ALA:HB3	1:K:215:ALA:HA	1.74	0.68
1:K:271:GLY:HA2	1:K:276:ILE:O	1.93	0.68
1:M:263:VAL:O	1:M:267:ILE:HG13	1.94	0.68
1:N:203:SER:HB2	1:N:243:GLU:HB2	1.74	0.68
1:N:320:LYS:HE3	1:N:324:LEU:HD11	1.76	0.68
1:O:55:ILE:N	1:O:55:ILE:HD12	2.09	0.68
1:S:79:VAL:O	1:S:112:TYR:HB2	1.94	0.68
1:U:188:ALA:HA	1:U:214:ILE:HG23	1.76	0.68
1:W:19:PRO:HG2	1:X:25:GLN:OE1	1.93	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:195:LEU:HD22	1:B:246:PRO:HG3	1.75	0.68
1:M:269:LYS:HG2	1:M:273:ARG:NH1	2.08	0.68
1:E:1:MET:CE	1:E:172:GLY:HA3	2.22	0.67
1:E:261:GLY:N	1:E:324:LEU:HD23	2.09	0.67
1:H:218:ARG:HH11	1:H:218:ARG:CB	2.03	0.67
1:J:72:VAL:HB	1:J:149:ARG:HH21	1.59	0.67
1:L:1:MET:HE1	1:L:5:ILE:HB	1.75	0.67
1:P:269:LYS:HB3	1:P:273:ARG:HH12	1.59	0.67
1:R:260:THR:HB	1:R:262:GLU:OE1	1.94	0.67
1:T:72:VAL:HB	1:T:149:ARG:NH2	2.09	0.67
1:T:103:ARG:HH21	1:T:133:LEU:HD11	1.59	0.67
1:X:220:GLY:O	1:X:224:THR:HG22	1.94	0.67
1:B:26:TYR:CE2	1:R:4:LYS:HG3	2.29	0.67
1:G:195:LEU:HD12	1:G:213:GLY:HA3	1.74	0.67
1:H:30:ILE:HG21	1:H:287:PHE:CZ	2.28	0.67
1:L:253:PHE:O	1:L:258:LYS:HD3	1.94	0.67
1:N:222:VAL:HG13	1:N:223:MET:H	1.58	0.67
1:N:265:GLN:O	1:N:269:LYS:HG3	1.94	0.67
1:O:103:ARG:NH1	1:O:128:LYS:NZ	2.42	0.67
1:O:306:ILE:O	1:O:306:ILE:HG22	1.94	0.67
1:P:268:ARG:NH2	1:P:325:LEU:HB3	2.09	0.67
1:Q:179:GLU:HG2	1:Q:179:GLU:O	1.92	0.67
1:S:187:VAL:HG21	1:S:194:THR:CG2	2.25	0.67
1:F:1:MET:HE2	1:F:5:ILE:HB	1.76	0.67
1:G:142:GLU:CD	1:G:145:LYS:HD3	2.20	0.67
1:H:27:LEU:HD21	1:H:40:ILE:HG22	1.74	0.67
1:T:29:ASN:C	1:T:31:SER:H	2.02	0.67
1:U:167:TYR:HA	1:U:170:ALA:HB3	1.75	0.67
1:W:136:TYR:O	1:W:139:GLU:HG2	1.94	0.67
1:C:77:GLY:O	1:C:102:LEU:HA	1.95	0.67
1:E:131:PHE:C	1:E:133:LEU:H	2.03	0.67
1:F:4:LYS:HE2	1:F:204:ILE:HG23	1.74	0.67
1:F:321:LEU:O	1:F:325:LEU:HD22	1.95	0.67
1:G:15:VAL:O	1:G:15:VAL:HG12	1.92	0.67
1:G:54:LYS:HD3	1:G:57:LYS:NZ	2.08	0.67
1:H:113:LEU:O	1:H:117:ILE:HG13	1.94	0.67
1:J:187:VAL:HG21	1:J:194:THR:HG21	1.75	0.67
1:K:41:LYS:HZ3	1:K:177:GLN:HE22	1.43	0.67
1:K:85:PHE:HA	1:K:115:ASP:OD1	1.95	0.67
1:M:218:ARG:HD2	1:M:256:TYR:N	2.08	0.67
1:P:101:VAL:HG13	1:P:125:TYR:CD1	2.29	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:19:PRO:HB2	1:A:20:TRP:HE3	1.57	0.67
1:C:120:ILE:HG22	1:C:121:GLU:H	1.58	0.67
1:D:25:GLN:NE2	1:D:42:ARG:HE	1.93	0.67
1:G:34:ILE:HG21	1:G:291:VAL:HG13	1.75	0.67
1:G:56:ARG:HD3	1:G:170:ALA:HB2	1.75	0.67
1:G:184:SER:HA	1:G:210:ARG:H	1.58	0.67
1:M:64:ASP:HB3	1:M:152:TYR:OH	1.95	0.67
1:M:79:VAL:CG1	1:M:112:TYR:HB2	2.24	0.67
1:N:128:LYS:O	1:N:130:SER:N	2.27	0.67
1:N:218:ARG:HB2	1:N:218:ARG:NH1	2.09	0.67
1:O:298:GLU:HG2	3:O:1154:HOH:O	1.94	0.67
1:R:180:VAL:HA	1:R:181:LYS:HE2	1.75	0.67
1:T:320:LYS:O	1:T:324:LEU:HD13	1.94	0.67
1:A:125:TYR:C	1:A:127:ALA:H	2.01	0.67
1:C:103:ARG:NH1	1:C:128:LYS:NZ	2.42	0.67
1:C:287:PHE:O	1:C:290:LEU:HB3	1.95	0.67
1:I:12:PHE:HZ	1:I:237:LEU:O	1.77	0.67
1:N:218:ARG:CG	1:N:219:PHE:H	2.03	0.67
1:O:310:GLY:O	1:O:313:GLY:N	2.27	0.67
1:S:144:LEU:HD23	1:S:151:PRO:HB3	1.76	0.67
1:A:34:ILE:HG22	1:A:291:VAL:HG13	1.77	0.67
1:G:84:ALA:HB1	1:G:100:LEU:CD2	2.24	0.67
1:I:1:MET:HE3	1:I:2:HIS:H	1.60	0.67
1:J:76:VAL:CG2	1:J:156:PRO:HG3	2.24	0.67
1:J:268:ARG:O	1:J:272:THR:HG23	1.94	0.67
1:K:4:LYS:HE2	1:K:204:ILE:CG2	2.22	0.67
1:K:207:GLU:OE1	1:K:207:GLU:HA	1.93	0.67
1:K:214:ILE:HD12	1:K:289:GLY:HA3	1.77	0.67
1:K:320:LYS:HZ1	1:K:324:LEU:HD11	1.58	0.67
1:O:45:LEU:HB3	1:P:45:LEU:HD22	1.76	0.67
1:P:234:ALA:O	1:P:237:LEU:HB2	1.95	0.67
1:R:211:PRO:HB2	1:R:246:PRO:HB3	1.76	0.67
1:S:221:GLU:HA	1:S:221:GLU:OE1	1.95	0.67
1:T:217:GLY:O	1:T:218:ARG:O	2.13	0.67
1:V:103:ARG:NH1	1:V:129:ASP:HA	2.10	0.67
1:C:291:VAL:HG12	1:C:295:ARG:HD2	1.75	0.67
1:D:190:GLY:N	2:D:1041:5PA:O3P	2.28	0.67
1:H:101:VAL:O	1:H:133:LEU:HD23	1.94	0.67
1:H:259:ILE:O	1:H:260:THR:HG23	1.94	0.67
1:I:22:THR:HB	1:I:42:ARG:O	1.94	0.67
1:I:243:GLU:HG3	1:I:244:VAL:N	2.09	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:269:LYS:HB3	1:I:273:ARG:NH1	2.10	0.67
1:J:54:LYS:HE3	1:J:83:HIS:HB2	1.77	0.67
1:K:128:LYS:C	1:K:128:LYS:HD3	2.18	0.67
1:K:261:GLY:CA	1:K:324:LEU:HD23	2.24	0.67
1:M:50:ILE:HG21	1:M:312:SER:OG	1.95	0.67
1:O:214:ILE:HD13	1:O:286:ALA:O	1.94	0.67
1:Q:55:ILE:CD1	1:Q:55:ILE:H	2.07	0.67
1:Q:206:ASN:HA	3:Q:1173:HOH:O	1.94	0.67
1:R:295:ARG:C	1:R:297:GLY:H	2.02	0.67
1:T:268:ARG:CZ	1:T:325:LEU:HD12	2.25	0.67
1:U:270:VAL:HG21	1:U:278:LEU:HD12	1.75	0.67
1:X:128:LYS:HE3	1:X:132:GLU:CB	2.20	0.67
1:D:127:ALA:HB1	1:D:128:LYS:HZ3	1.60	0.67
1:G:147:GLU:O	1:I:220:GLY:C	2.37	0.67
1:G:149:ARG:HD3	1:I:221:GLU:HB3	1.75	0.67
1:I:279:ASP:H	1:I:283:THR:HG1	1.40	0.67
1:K:261:GLY:HA2	1:K:324:LEU:HD23	1.75	0.67
1:K:293:LEU:HD12	1:K:293:LEU:N	2.10	0.67
1:Q:71:ASP:OD2	1:Q:72:VAL:HG12	1.93	0.67
1:R:9:LEU:HD23	1:R:238:LEU:HD21	1.77	0.67
1:U:186:VAL:HG23	1:U:305:PHE:HD1	1.59	0.67
1:V:1:MET:HE1	1:V:172:GLY:HA3	1.77	0.67
1:W:181:LYS:HG2	1:W:302:LYS:NZ	2.09	0.67
1:A:277:ILE:HA	3:A:1033:HOH:O	1.95	0.67
1:G:20:TRP:CD1	1:H:20:TRP:HZ3	2.13	0.67
1:G:82:ASN:ND2	1:G:111:ASN:HD21	1.93	0.67
1:H:161:PRO:O	1:H:164:THR:HG22	1.94	0.67
1:K:268:ARG:NH2	1:K:325:LEU:HB3	2.10	0.67
1:P:1:MET:CE	1:P:172:GLY:HA3	2.25	0.67
1:S:200:LEU:HD11	1:S:234:ALA:O	1.95	0.67
1:F:205:LEU:O	1:F:206:ASN:C	2.38	0.66
1:G:214:ILE:HD13	1:G:286:ALA:CA	2.25	0.66
1:J:217:GLY:CA	1:J:252:SER:HB3	2.24	0.66
1:P:213:GLY:O	1:P:214:ILE:HD13	1.95	0.66
1:Q:126:ASP:O	1:Q:128:LYS:N	2.27	0.66
1:G:41:LYS:HD2	1:G:174:ILE:HG12	1.76	0.66
1:G:227:LEU:HD21	1:G:246:PRO:HG3	1.76	0.66
1:I:200:LEU:HD11	1:I:235:ALA:HA	1.78	0.66
1:J:110:GLY:HA3	1:J:316:HIS:CD2	2.29	0.66
1:Q:259:ILE:CD1	1:Q:317:TYR:HB3	2.24	0.66
1:R:55:ILE:HD12	1:R:55:ILE:N	2.09	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:181:LYS:HE2	1:S:181:LYS:N	2.09	0.66
1:S:218:ARG:NE	1:S:255:GLU:HB2	2.10	0.66
1:U:15:VAL:HG11	1:U:94:LEU:HD21	1.77	0.66
1:W:295:ARG:C	1:W:297:GLY:H	2.02	0.66
1:C:125:TYR:O	1:C:127:ALA:N	2.26	0.66
1:G:281:VAL:HG13	1:G:282:TYR:HD1	1.57	0.66
1:H:109:LYS:HA	1:H:113:LEU:HD12	1.78	0.66
1:J:218:ARG:HB2	1:J:218:ARG:HH11	1.59	0.66
1:P:170:ALA:O	1:P:174:ILE:HG13	1.96	0.66
1:U:157:GLY:HA2	2:U:1211:5PA:H92	1.77	0.66
1:U:214:ILE:HD12	1:U:289:GLY:HA3	1.77	0.66
1:A:19:PRO:HD2	1:A:20:TRP:HZ3	1.52	0.66
1:A:20:TRP:CD1	1:B:20:TRP:HZ3	2.13	0.66
1:I:41:LYS:HZ3	1:I:177:GLN:HE22	1.44	0.66
1:J:161:PRO:O	1:J:164:THR:HG22	1.95	0.66
1:M:79:VAL:HA	1:M:102:LEU:HD13	1.77	0.66
1:N:128:LYS:HD3	1:N:128:LYS:N	2.06	0.66
1:T:202:LEU:HD22	1:T:209:ILE:HB	1.76	0.66
1:T:292:ASP:O	1:T:295:ARG:N	2.28	0.66
1:A:19:PRO:HB2	1:A:20:TRP:CE3	2.30	0.66
1:D:116:LYS:NZ	1:D:122:THR:HB	2.10	0.66
1:E:55:ILE:N	1:E:55:ILE:HD12	2.10	0.66
1:F:200:LEU:O	1:F:204:ILE:HG13	1.95	0.66
1:G:224:THR:HG23	1:G:225:SER:N	2.09	0.66
1:S:222:VAL:HG22	1:S:226:LYS:HD2	1.77	0.66
1:V:133:LEU:HA	1:V:136:TYR:HD2	1.59	0.66
1:W:85:PHE:CE2	1:W:114:LEU:HD13	2.31	0.66
1:W:264:ALA:HB1	1:W:325:LEU:CD2	2.25	0.66
1:A:54:LYS:HB2	3:A:1034:HOH:O	1.96	0.66
1:B:129:ASP:C	1:B:131:PHE:H	2.02	0.66
1:G:14:ARG:CG	1:G:59:GLU:HB3	2.25	0.66
1:K:75:THR:HB	1:K:154:ILE:HB	1.76	0.66
1:L:30:ILE:HG21	1:L:287:PHE:HZ	1.59	0.66
1:L:212:VAL:HG22	1:L:247:GLU:HB2	1.78	0.66
1:N:19:PRO:HA	3:N:1160:HOH:O	1.95	0.66
1:O:10:ALA:HA	1:S:16:GLU:HG3	1.76	0.66
1:Q:102:LEU:O	1:Q:133:LEU:HD21	1.96	0.66
1:S:142:GLU:HA	1:S:145:LYS:HG2	1.76	0.66
1:V:53:ASN:HB3	1:V:308:THR:HG22	1.77	0.66
1:W:85:PHE:CZ	1:W:89:LEU:HD22	2.30	0.66
1:E:181:LYS:O	1:E:181:LYS:HG2	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:149:ARG:HD3	1:I:221:GLU:CB	2.25	0.66
1:H:30:ILE:O	1:H:34:ILE:HB	1.95	0.66
1:J:72:VAL:HG13	1:J:151:PRO:HA	1.77	0.66
1:L:225:SER:HA	3:L:1135:HOH:O	1.95	0.66
1:T:72:VAL:HB	1:T:149:ARG:HH22	1.59	0.66
1:U:145:LYS:C	1:U:147:GLU:H	2.03	0.66
1:V:196:ALA:HB1	1:V:231:ILE:HG22	1.78	0.66
1:W:136:TYR:C	1:W:138:GLU:H	2.04	0.66
1:X:19:PRO:HG2	1:X:20:TRP:CD1	2.31	0.66
1:X:191:SER:OG	2:X:1241:5PA:O1P	2.11	0.66
1:A:103:ARG:HH11	1:A:128:LYS:HZ3	1.43	0.66
1:B:25:GLN:NE2	1:B:42:ARG:NE	2.43	0.66
1:C:299:LEU:CD1	1:C:303:ILE:HD13	2.26	0.66
1:D:218:ARG:HB2	1:D:218:ARG:NH1	2.04	0.66
1:H:55:ILE:HD12	1:H:55:ILE:N	2.11	0.66
1:O:25:GLN:NE2	1:O:42:ARG:HE	1.94	0.66
1:P:249:TYR:HD1	1:P:249:TYR:H	1.43	0.66
1:R:207:GLU:O	1:R:209:ILE:N	2.28	0.66
1:T:134:MET:HE3	1:T:137:ALA:HB3	1.76	0.66
1:U:223:MET:HE1	1:U:248:LEU:HD11	1.77	0.66
1:V:128:LYS:HE3	1:V:132:GLU:CB	2.26	0.66
1:V:218:ARG:HG2	1:V:219:PHE:H	1.60	0.66
1:D:55:ILE:HD12	1:D:55:ILE:H	1.61	0.66
1:E:214:ILE:CD1	1:E:289:GLY:HA3	2.26	0.66
1:G:219:PHE:HA	1:G:223:MET:HE3	1.78	0.66
1:I:131:PHE:C	1:I:133:LEU:H	2.03	0.66
1:N:134:MET:O	1:N:138:GLU:HG2	1.95	0.66
1:P:116:LYS:HZ3	1:P:122:THR:HB	1.59	0.66
1:Q:72:VAL:HG13	1:Q:151:PRO:HB3	1.78	0.66
1:Q:85:PHE:CE1	1:Q:114:LEU:HB3	2.31	0.66
1:F:187:VAL:HG21	1:F:194:THR:HG21	1.77	0.66
1:G:114:LEU:HD23	1:G:117:ILE:CD1	2.21	0.66
1:O:54:LYS:HD3	1:O:57:LYS:NZ	2.10	0.66
1:S:95:GLY:O	1:S:96:LEU:O	2.14	0.66
1:T:134:MET:HE2	1:T:153:VAL:HG11	1.78	0.66
1:V:115:ASP:HA	1:V:120:ILE:HD12	1.78	0.66
1:A:210:ARG:HH22	1:A:299:LEU:HD23	1.61	0.65
1:B:287:PHE:O	1:B:290:LEU:HB3	1.96	0.65
1:C:12:PHE:CE2	1:C:237:LEU:HD22	2.30	0.65
1:E:217:GLY:HA3	1:E:256:TYR:HB2	1.77	0.65
1:F:113:LEU:HD22	1:F:117:ILE:HD11	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:210:ARG:NH2	1:F:298:GLU:O	2.29	0.65
1:G:77:GLY:O	1:G:102:LEU:HD23	1.96	0.65
1:G:106:GLU:HG3	1:G:124:VAL:HG21	1.78	0.65
1:G:142:GLU:OE1	1:G:145:LYS:HD3	1.94	0.65
1:I:259:ILE:HG21	1:I:321:LEU:HD23	1.79	0.65
1:J:62:LEU:HD21	1:J:91:ALA:HB2	1.78	0.65
1:K:162:ILE:HD12	1:K:163:GLY:N	2.11	0.65
1:K:219:PHE:CE2	1:K:248:LEU:HD23	2.32	0.65
1:N:135:LYS:HE3	1:N:136:TYR:CE1	2.31	0.65
1:R:30:ILE:HG22	1:R:34:ILE:HD12	1.78	0.65
1:R:210:ARG:NH2	1:R:299:LEU:HA	2.10	0.65
1:T:8:LEU:HD13	1:T:204:ILE:HD13	1.76	0.65
1:T:25:GLN:HE21	1:T:42:ARG:HD3	1.61	0.65
1:U:259:ILE:HG22	1:U:324:LEU:CD2	2.26	0.65
1:X:74:ILE:HD11	1:X:144:LEU:CD2	2.26	0.65
1:B:165:LEU:HD22	1:B:238:LEU:HD21	1.76	0.65
1:D:112:TYR:HE1	1:D:122:THR:HG21	1.58	0.65
1:G:39:TYR:CE1	1:G:180:VAL:HG11	2.31	0.65
1:I:53:ASN:HD22	1:I:57:LYS:HZ1	1.40	0.65
1:I:127:ALA:CB	1:I:136:TYR:HE2	2.08	0.65
1:J:48:LEU:HD11	1:J:90:ALA:HA	1.77	0.65
1:M:164:THR:HG23	1:M:197:GLY:CA	2.27	0.65
1:M:218:ARG:HD2	1:M:255:GLU:CA	2.26	0.65
1:O:30:ILE:O	1:O:34:ILE:HG12	1.97	0.65
1:P:189:ALA:HA	2:P:1161:5PA:O3P	1.96	0.65
1:P:198:LEU:O	1:P:202:LEU:HD12	1.96	0.65
1:P:323:SER:O	1:P:324:LEU:HD12	1.96	0.65
1:T:218:ARG:HG2	1:T:219:PHE:N	2.09	0.65
1:U:41:LYS:HZ3	1:U:177:GLN:HE22	1.44	0.65
1:X:82:ASN:ND2	1:X:111:ASN:ND2	2.43	0.65
1:C:181:LYS:HE3	1:C:302:LYS:HZ3	1.60	0.65
1:D:223:MET:SD	1:D:248:LEU:HD21	2.36	0.65
1:E:84:ALA:O	1:E:100:LEU:HD21	1.96	0.65
1:H:127:ALA:HB1	1:H:128:LYS:NZ	2.11	0.65
1:I:64:ASP:HA	1:I:67:SER:HB3	1.78	0.65
1:O:42:ARG:NH1	1:O:44:ASP:OD1	2.28	0.65
1:Q:74:ILE:HG22	1:Q:75:THR:N	2.12	0.65
1:R:100:LEU:HB2	1:R:121:GLU:O	1.96	0.65
1:R:259:ILE:HG22	1:R:260:THR:N	2.11	0.65
1:S:222:VAL:O	1:S:226:LYS:HD2	1.97	0.65
1:T:25:GLN:HE21	1:T:42:ARG:HE	1.43	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:214:ILE:HD13	1:U:286:ALA:CA	2.24	0.65
1:U:218:ARG:HG3	1:U:255:GLU:HA	1.78	0.65
1:U:226:LYS:O	1:U:230:LEU:HB2	1.96	0.65
1:B:25:GLN:HE22	1:B:42:ARG:HE	1.44	0.65
1:G:173:GLU:O	1:G:176:THR:HB	1.96	0.65
1:H:157:GLY:HA3	1:H:191:SER:HB3	1.78	0.65
1:L:82:ASN:ND2	1:L:111:ASN:ND2	2.44	0.65
1:M:135:LYS:HG3	1:M:136:TYR:N	2.12	0.65
1:O:113:LEU:HD23	1:O:113:LEU:O	1.97	0.65
1:Q:113:LEU:O	1:Q:113:LEU:HD23	1.96	0.65
1:T:146:ARG:O	1:T:147:GLU:HG3	1.97	0.65
1:U:162:ILE:HG22	1:U:237:LEU:CD1	2.25	0.65
1:V:144:LEU:CD2	1:V:151:PRO:HB3	2.27	0.65
1:D:127:ALA:O	1:D:128:LYS:O	2.15	0.65
1:D:130:SER:O	1:D:132:GLU:N	2.30	0.65
1:G:54:LYS:HA	1:G:57:LYS:HZ2	1.61	0.65
1:G:132:GLU:C	1:G:134:MET:H	2.03	0.65
1:I:54:LYS:HG3	1:I:83:HIS:HA	1.77	0.65
1:M:218:ARG:CD	1:M:255:GLU:HA	2.25	0.65
1:O:214:ILE:CD1	1:O:289:GLY:HA3	2.26	0.65
1:O:216:VAL:HG11	1:O:282:TYR:CA	2.24	0.65
1:O:279:ASP:HA	1:O:314:THR:OG1	1.96	0.65
1:P:171:VAL:HG23	1:P:172:GLY:N	2.12	0.65
1:Q:319:ASP:CA	1:Q:322:LEU:HD12	2.19	0.65
1:S:145:LYS:HA	1:S:149:ARG:O	1.96	0.65
1:X:34:ILE:CD1	1:X:291:VAL:HA	2.26	0.65
1:D:149:ARG:O	1:D:151:PRO:HD3	1.97	0.65
1:F:157:GLY:HA2	2:F:1061:5PA:H92	1.79	0.65
1:G:259:ILE:CD1	1:G:317:TYR:HB3	2.26	0.65
1:J:128:LYS:H	1:J:128:LYS:CD	2.08	0.65
1:K:185:ILE:HD12	1:K:198:LEU:HD21	1.79	0.65
1:M:221:GLU:C	1:M:223:MET:H	2.04	0.65
1:N:270:VAL:HG21	1:N:278:LEU:CD1	2.27	0.65
1:O:214:ILE:HD13	1:O:286:ALA:HA	1.78	0.65
1:O:314:THR:HG23	1:O:321:LEU:HD11	1.78	0.65
1:S:134:MET:HE2	1:S:156:PRO:HD3	1.78	0.65
1:U:77:GLY:O	1:U:102:LEU:HA	1.96	0.65
1:X:82:ASN:HD22	1:X:111:ASN:ND2	1.95	0.65
1:D:265:GLN:HG3	1:D:269:LYS:CE	2.27	0.65
1:E:218:ARG:HE	1:E:255:GLU:HB2	1.62	0.65
1:H:41:LYS:HZ1	1:H:177:GLN:HE22	1.43	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:159:ALA:HB2	1:H:191:SER:OG	1.97	0.65
1:J:54:LYS:HG3	1:J:83:HIS:HA	1.78	0.65
1:J:147:GLU:HB3	3:J:1120:HOH:O	1.96	0.65
1:J:221:GLU:OE2	1:J:225:SER:HB2	1.96	0.65
1:P:4:LYS:O	1:P:8:LEU:HD12	1.97	0.65
1:Q:183:ASP:O	1:Q:210:ARG:HG3	1.96	0.65
1:S:117:ILE:HD13	1:T:321:LEU:HD13	1.78	0.65
1:S:214:ILE:HD12	1:S:289:GLY:HA3	1.79	0.65
1:E:181:LYS:HG2	1:E:302:LYS:HZ2	1.62	0.65
1:G:62:LEU:C	1:G:64:ASP:H	2.03	0.65
1:I:293:LEU:HD12	1:I:293:LEU:N	2.11	0.65
1:Q:79:VAL:HG23	1:Q:103:ARG:C	2.21	0.65
1:R:72:VAL:HG23	1:R:97:ASP:HB3	1.78	0.65
1:W:14:ARG:HD2	1:W:60:TYR:CE1	2.31	0.65
1:W:45:LEU:HB3	1:X:45:LEU:HD13	1.78	0.65
1:W:162:ILE:HG13	1:W:163:GLY:N	2.03	0.65
1:A:22:THR:HB	1:A:42:ARG:O	1.96	0.65
1:A:264:ALA:HB1	1:A:325:LEU:CD2	2.26	0.65
1:C:299:LEU:HD12	1:C:303:ILE:HD13	1.78	0.65
2:D:1041:5PA:O4P	2:D:1041:5PA:H4A2	1.97	0.65
1:I:132:GLU:C	1:I:134:MET:N	2.55	0.65
1:I:293:LEU:H	1:I:293:LEU:HD12	1.60	0.65
1:J:128:LYS:CD	1:J:128:LYS:N	2.59	0.65
1:K:202:LEU:HD21	1:K:209:ILE:HD12	1.78	0.65
1:L:143:GLU:HA	1:L:146:ARG:NE	2.12	0.65
1:L:207:GLU:HB3	1:L:209:ILE:HG13	1.79	0.65
1:O:41:LYS:HE2	1:O:177:GLN:NE2	2.11	0.65
1:O:281:VAL:HG22	1:O:282:TYR:CD1	2.31	0.65
1:P:105:LYS:HG2	1:P:107:GLU:HG2	1.79	0.65
1:Q:136:TYR:O	1:Q:139:GLU:HG3	1.97	0.65
1:S:139:GLU:HG3	1:S:140:ILE:H	1.60	0.65
1:S:236:GLU:O	1:S:239:GLY:N	2.29	0.65
1:T:174:ILE:HA	1:T:177:GLN:NE2	2.11	0.65
1:U:221:GLU:OE1	1:U:224:THR:HG22	1.97	0.65
1:A:223:MET:CE	1:A:248:LEU:HD21	2.27	0.65
1:B:269:LYS:HB3	1:B:273:ARG:NH2	2.12	0.65
1:D:196:ALA:CB	1:D:231:ILE:HG22	2.26	0.65
1:D:210:ARG:NH2	1:D:299:LEU:HA	2.12	0.65
1:F:252:SER:O	1:F:253:PHE:HB2	1.96	0.65
1:G:55:ILE:HD12	1:G:86:VAL:HG13	1.78	0.65
1:I:113:LEU:HD21	1:J:318:GLY:CA	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:323:SER:C	1:I:324:LEU:HD12	2.22	0.65
1:M:162:ILE:HD12	1:M:162:ILE:C	2.22	0.65
1:M:214:ILE:HD13	1:M:286:ALA:HA	1.79	0.65
1:N:220:GLY:O	1:N:224:THR:HB	1.97	0.65
1:N:229:ASN:O	1:N:233:GLU:HG3	1.97	0.65
1:P:31:SER:HB3	1:P:36:ALA:O	1.97	0.65
1:P:120:ILE:O	1:P:121:GLU:C	2.40	0.65
1:P:171:VAL:HG23	1:P:172:GLY:H	1.63	0.65
1:Q:118:MET:CE	1:R:271:GLY:HA3	2.26	0.65
1:Q:320:LYS:NZ	1:Q:324:LEU:HD11	2.12	0.65
1:R:1:MET:HE1	1:R:172:GLY:HA3	1.78	0.65
1:T:127:ALA:HB2	1:T:136:TYR:HE2	1.62	0.65
1:T:134:MET:HE3	1:T:137:ALA:CB	2.27	0.65
1:W:182:PHE:O	1:W:209:ILE:HG12	1.97	0.65
1:X:207:GLU:HB3	3:X:1258:HOH:O	1.96	0.65
1:E:203:SER:OG	1:E:243:GLU:HB2	1.97	0.64
1:G:56:ARG:HG2	1:G:56:ARG:HH11	1.62	0.64
1:G:219:PHE:HB3	1:G:250:ASP:OD2	1.97	0.64
1:L:110:GLY:HA3	1:L:316:HIS:CD2	2.32	0.64
1:O:4:LYS:HE2	1:O:204:ILE:O	1.97	0.64
1:P:171:VAL:HG21	1:P:201:GLY:HA3	1.79	0.64
1:V:162:ILE:HG23	1:V:163:GLY:N	2.13	0.64
1:X:181:LYS:HD3	1:X:181:LYS:N	2.11	0.64
1:A:29:ASN:HB2	1:A:274:GLU:OE2	1.98	0.64
1:B:222:VAL:HG13	1:B:223:MET:N	2.12	0.64
1:C:222:VAL:C	1:C:226:LYS:HB2	2.21	0.64
1:C:222:VAL:O	1:C:226:LYS:HD2	1.97	0.64
1:G:198:LEU:C	1:G:198:LEU:HD23	2.21	0.64
1:H:264:ALA:HB1	1:H:325:LEU:HD21	1.80	0.64
1:J:135:LYS:O	1:J:138:GLU:HB2	1.98	0.64
1:K:12:PHE:HE2	1:K:237:LEU:HD13	1.61	0.64
1:K:76:VAL:CG2	1:K:156:PRO:HG3	2.26	0.64
1:K:180:VAL:HA	1:K:181:LYS:NZ	2.13	0.64
1:M:66:LEU:HD11	1:M:94:LEU:HD13	1.80	0.64
1:O:219:PHE:CE2	1:O:224:THR:HB	2.22	0.64
1:P:182:PHE:O	1:P:209:ILE:HG23	1.97	0.64
1:R:128:LYS:O	1:R:130:SER:N	2.29	0.64
1:S:130:SER:C	1:S:132:GLU:H	2.05	0.64
1:T:182:PHE:O	1:T:209:ILE:HG12	1.98	0.64
1:T:223:MET:CE	1:T:248:LEU:HD11	2.28	0.64
1:W:117:ILE:HD11	1:X:318:GLY:HA2	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:260:THR:H	1:X:263:VAL:HB	1.62	0.64
1:B:87:THR:HG21	1:B:154:ILE:HD12	1.78	0.64
1:C:165:LEU:CD2	1:C:238:LEU:HD21	2.26	0.64
1:I:293:LEU:CD2	1:I:299:LEU:HD21	2.27	0.64
1:K:132:GLU:C	1:K:134:MET:N	2.53	0.64
1:K:219:PHE:CZ	1:K:248:LEU:HD23	2.32	0.64
1:S:187:VAL:HG21	1:S:194:THR:HG21	1.79	0.64
1:W:261:GLY:O	1:W:265:GLN:HB2	1.96	0.64
1:W:290:LEU:O	1:W:294:ALA:HB2	1.97	0.64
1:C:129:ASP:OD2	1:C:129:ASP:N	2.27	0.64
1:D:14:ARG:HD2	1:D:59:GLU:HB3	1.78	0.64
1:D:181:LYS:CE	1:D:302:LYS:HZ3	2.10	0.64
1:F:123:ARG:HD2	1:F:140:ILE:HD13	1.80	0.64
1:G:144:LEU:HA	1:I:221:GLU:OE1	1.98	0.64
1:I:91:ALA:O	1:I:93:LYS:N	2.31	0.64
1:I:165:LEU:HA	1:I:168:VAL:HB	1.79	0.64
1:K:61:LEU:HD23	1:K:162:ILE:HD11	1.79	0.64
1:M:41:LYS:HZ1	1:M:177:GLN:HE22	1.44	0.64
1:N:42:ARG:HB3	1:N:42:ARG:HH11	1.62	0.64
1:N:72:VAL:HA	1:N:97:ASP:O	1.97	0.64
1:O:185:ILE:HG22	1:O:198:LEU:HD11	1.77	0.64
1:O:221:GLU:C	1:O:223:MET:N	2.55	0.64
1:P:97:ASP:OD1	1:P:149:ARG:NH2	2.30	0.64
1:Q:55:ILE:CD1	1:Q:86:VAL:HG11	2.27	0.64
1:G:103:ARG:HD2	1:G:129:ASP:H	1.62	0.64
1:G:195:LEU:HD21	1:G:246:PRO:CB	2.27	0.64
1:I:1:MET:HE3	1:I:2:HIS:N	2.11	0.64
1:I:58:LEU:HD11	1:I:87:THR:HG23	1.78	0.64
1:J:37:ASP:OD2	1:K:4:LYS:NZ	2.24	0.64
1:J:86:VAL:O	1:J:90:ALA:HB2	1.97	0.64
1:K:66:LEU:CD1	1:K:94:LEU:HD13	2.23	0.64
1:L:107:GLU:HB3	1:L:109:LYS:HG2	1.78	0.64
1:M:227:LEU:HD21	1:M:246:PRO:CG	2.27	0.64
1:P:80:HIS:HB2	3:P:1165:HOH:O	1.96	0.64
1:P:264:ALA:HB1	1:P:325:LEU:CD2	2.27	0.64
1:R:54:LYS:HZ3	1:R:57:LYS:NZ	1.94	0.64
1:R:100:LEU:HD13	1:R:120:ILE:HG21	1.79	0.64
1:T:180:VAL:HA	1:T:181:LYS:HZ3	1.63	0.64
1:W:181:LYS:H	1:W:181:LYS:HD3	1.59	0.64
1:X:181:LYS:CD	1:X:181:LYS:N	2.59	0.64
1:C:181:LYS:HD3	1:C:181:LYS:N	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:203:SER:OG	1:C:243:GLU:HB2	1.98	0.64
1:D:103:ARG:NH2	1:D:131:PHE:N	2.42	0.64
1:E:179:GLU:O	1:E:179:GLU:HG2	1.97	0.64
1:E:187:VAL:O	1:E:214:ILE:HG22	1.98	0.64
1:G:184:SER:HB3	1:G:210:ARG:HB2	1.79	0.64
1:K:319:ASP:C	1:K:321:LEU:H	2.04	0.64
1:M:72:VAL:HG11	1:M:144:LEU:HD23	1.80	0.64
1:O:244:VAL:O	1:O:245:ARG:O	2.16	0.64
1:S:41:LYS:NZ	1:S:177:GLN:NE2	2.46	0.64
1:T:33:GLU:O	1:T:35:GLY:N	2.31	0.64
1:T:58:LEU:HD12	1:T:62:LEU:HG	1.80	0.64
1:W:5:ILE:HD13	1:W:171:VAL:HG23	1.80	0.64
1:X:86:VAL:O	1:X:90:ALA:HB2	1.96	0.64
1:A:15:VAL:HG12	1:A:17:LEU:HD13	1.79	0.64
1:D:259:ILE:HD12	1:D:320:LYS:HG2	1.80	0.64
1:F:72:VAL:HG11	1:F:144:LEU:HD21	1.78	0.64
1:F:171:VAL:HG11	1:F:201:GLY:HA3	1.80	0.64
1:G:58:LEU:CD2	1:G:86:VAL:HG12	2.27	0.64
1:I:54:LYS:CE	2:I:1091:5PA:H91	2.28	0.64
1:J:131:PHE:HA	1:J:133:LEU:HD13	1.77	0.64
1:J:181:LYS:H	1:J:181:LYS:CD	1.88	0.64
1:L:131:PHE:HA	1:L:133:LEU:CD1	2.28	0.64
1:L:187:VAL:O	1:L:213:GLY:HA2	1.97	0.64
1:O:202:LEU:HD22	1:O:209:ILE:HD12	1.80	0.64
1:P:56:ARG:HD2	1:P:167:TYR:CE1	2.32	0.64
1:Q:102:LEU:HD12	1:Q:122:THR:OG1	1.97	0.64
1:Q:142:GLU:O	1:Q:145:LYS:HG2	1.97	0.64
1:R:27:LEU:HB2	1:R:38:VAL:HG13	1.80	0.64
1:T:222:VAL:CG1	1:T:223:MET:H	2.05	0.64
1:W:54:LYS:NZ	2:W:1231:5PA:H91	2.12	0.64
1:W:106:GLU:HG3	1:W:124:VAL:HG11	1.78	0.64
1:W:215:ALA:HB3	1:W:250:ASP:HA	1.79	0.64
1:X:127:ALA:HB1	1:X:128:LYS:HD3	1.79	0.64
1:A:131:PHE:C	1:A:133:LEU:H	2.06	0.64
1:A:221:GLU:HG3	3:A:1017:HOH:O	1.97	0.64
1:D:147:GLU:C	1:D:149:ARG:H	2.05	0.64
1:H:263:VAL:O	1:H:267:ILE:HG13	1.98	0.64
1:I:37:ASP:HB3	1:I:39:TYR:HE1	1.62	0.64
1:J:71:ASP:O	1:J:97:ASP:HB2	1.98	0.64
1:L:264:ALA:HB1	1:L:325:LEU:HD22	1.80	0.64
1:M:186:VAL:HG21	1:M:290:LEU:HD23	1.79	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:157:GLY:O	1:O:158:GLY:C	2.41	0.64
1:P:27:LEU:CD1	1:P:274:GLU:HG3	2.19	0.64
1:Q:31:SER:OG	1:Q:38:VAL:HG12	1.98	0.64
1:R:54:LYS:HZ3	1:R:57:LYS:HZ1	1.45	0.64
1:W:200:LEU:O	1:W:204:ILE:HG13	1.98	0.64
1:X:65:ALA:HA	1:X:152:TYR:CE1	2.33	0.64
1:C:249:TYR:CD1	1:C:293:LEU:HD21	2.33	0.64
1:F:203:SER:HA	1:F:243:GLU:HG3	1.79	0.64
1:G:237:LEU:C	1:G:238:LEU:HD23	2.22	0.64
1:G:273:ARG:O	1:G:274:GLU:HG2	1.96	0.64
1:I:142:GLU:OE1	1:I:145:LYS:HD3	1.98	0.64
1:J:144:LEU:HD23	1:J:151:PRO:HB3	1.80	0.64
1:K:233:GLU:OE2	1:U:323:SER:HB3	1.98	0.64
1:L:231:ILE:O	1:L:231:ILE:HG13	1.96	0.64
1:P:249:TYR:N	1:P:249:TYR:CD1	2.65	0.64
1:S:219:PHE:HB2	1:S:250:ASP:OD2	1.98	0.64
1:T:181:LYS:N	1:T:181:LYS:CD	2.61	0.64
1:U:118:MET:HE1	1:V:271:GLY:HA3	1.79	0.64
1:U:181:LYS:HD3	1:U:181:LYS:N	2.10	0.64
1:V:244:VAL:HG23	3:V:1234:HOH:O	1.97	0.64
1:W:218:ARG:HG3	1:W:255:GLU:HA	1.79	0.64
1:X:232:LYS:O	1:X:236:GLU:HG3	1.97	0.64
1:B:133:LEU:HA	1:B:136:TYR:CD2	2.32	0.64
1:B:202:LEU:HD13	1:B:211:PRO:HG3	1.79	0.64
1:B:215:ALA:HB3	1:B:250:ASP:HA	1.79	0.64
1:C:128:LYS:C	1:C:128:LYS:HD3	2.22	0.64
1:C:219:PHE:HE2	1:C:224:THR:N	1.96	0.64
1:D:58:LEU:HD21	1:D:87:THR:HA	1.80	0.64
1:E:54:LYS:HE3	2:E:1051:5PA:H91	1.80	0.64
1:I:80:HIS:HE2	1:I:256:TYR:HH	1.46	0.64
1:J:105:LYS:HG3	1:J:107:GLU:HG3	1.80	0.64
1:K:281:VAL:HG13	1:K:282:TYR:HD1	1.63	0.64
1:P:114:LEU:HA	1:P:117:ILE:HD12	1.79	0.64
1:R:321:LEU:O	1:R:324:LEU:N	2.30	0.64
1:T:41:LYS:NZ	1:T:177:GLN:HE22	1.96	0.64
1:U:260:THR:OG1	1:U:263:VAL:HG23	1.97	0.64
1:X:187:VAL:HG21	1:X:194:THR:HG21	1.79	0.64
1:C:179:GLU:O	1:C:179:GLU:HG2	1.96	0.63
1:E:188:ALA:HB2	1:E:286:ALA:HB2	1.79	0.63
1:G:193:GLY:O	1:G:196:ALA:HB3	1.98	0.63
1:G:262:GLU:CD	1:G:262:GLU:H	2.05	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:1:MET:H1	1:I:176:THR:HG21	1.62	0.63
1:J:52:GLY:HA2	1:J:308:THR:O	1.98	0.63
1:J:247:GLU:CB	1:J:249:TYR:HE1	2.11	0.63
1:L:224:THR:CG2	1:L:225:SER:N	2.61	0.63
1:M:20:TRP:CD1	1:N:20:TRP:CZ3	2.82	0.63
1:O:53:ASN:OD1	1:O:308:THR:HB	1.98	0.63
1:P:1:MET:HE1	1:P:172:GLY:HA3	1.79	0.63
1:Q:15:VAL:O	1:Q:15:VAL:HG12	1.97	0.63
1:Q:214:ILE:HD11	1:Q:251:TYR:HB2	1.78	0.63
1:Q:280:PRO:HB3	1:Q:321:LEU:HD21	1.80	0.63
1:R:266:ILE:O	1:R:270:VAL:HG23	1.97	0.63
1:X:181:LYS:H	1:X:181:LYS:HD3	1.63	0.63
1:X:227:LEU:O	1:X:227:LEU:HD12	1.98	0.63
1:B:181:LYS:HE2	1:B:181:LYS:H	1.63	0.63
1:E:210:ARG:HH11	1:E:247:GLU:CD	2.06	0.63
1:E:219:PHE:CE2	1:E:224:THR:HB	2.34	0.63
1:K:81:SER:O	1:K:84:ALA:HB3	1.98	0.63
1:K:253:PHE:O	1:K:258:LYS:HD3	1.98	0.63
1:O:218:ARG:HG3	1:O:255:GLU:HA	1.78	0.63
1:O:269:LYS:HB3	3:O:1174:HOH:O	1.96	0.63
1:P:320:LYS:HE3	1:P:324:LEU:HD21	1.79	0.63
1:B:264:ALA:HB1	1:B:325:LEU:HD21	1.81	0.63
1:F:128:LYS:HG2	1:F:130:SER:OG	1.98	0.63
1:G:216:VAL:HG11	1:G:282:TYR:CA	2.27	0.63
1:G:243:GLU:O	1:G:244:VAL:HG23	1.98	0.63
1:I:48:LEU:HB3	1:I:55:ILE:HG12	1.79	0.63
1:J:218:ARG:CD	1:J:222:VAL:HG11	2.26	0.63
1:J:292:ASP:OD1	1:J:296:LYS:HE3	1.98	0.63
1:K:281:VAL:HB	1:K:317:TYR:HE1	1.64	0.63
1:L:255:GLU:HG2	1:L:258:LYS:HD2	1.79	0.63
1:O:181:LYS:HE2	1:O:181:LYS:N	2.14	0.63
1:O:202:LEU:HD21	1:O:209:ILE:HD12	1.79	0.63
1:P:134:MET:O	1:P:137:ALA:N	2.30	0.63
1:T:135:LYS:O	1:T:139:GLU:HG3	1.97	0.63
1:U:72:VAL:HG11	1:U:144:LEU:HD23	1.80	0.63
1:W:54:LYS:NZ	1:W:157:GLY:HA2	2.12	0.63
1:C:54:LYS:HB2	1:C:86:VAL:HG11	1.80	0.63
1:G:72:VAL:HG13	1:G:151:PRO:HB3	1.79	0.63
1:J:287:PHE:O	1:J:291:VAL:HG23	1.99	0.63
1:N:261:GLY:N	1:N:324:LEU:HD23	2.13	0.63
1:O:89:LEU:O	1:O:90:ALA:C	2.41	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:266:ILE:HG21	1:O:284:GLY:O	1.98	0.63
1:Q:29:ASN:ND2	1:Q:273:ARG:O	2.29	0.63
1:R:123:ARG:HB3	1:R:125:TYR:CE1	2.34	0.63
1:R:210:ARG:HH22	1:R:299:LEU:HA	1.63	0.63
1:T:144:LEU:HD21	1:T:149:ARG:HH12	1.63	0.63
1:U:287:PHE:O	1:U:291:VAL:HG23	1.99	0.63
1:W:271:GLY:O	1:X:89:LEU:HD11	1.99	0.63
1:X:111:ASN:O	1:X:115:ASP:N	2.29	0.63
1:A:196:ALA:CB	1:A:230:LEU:HD13	2.28	0.63
1:B:299:LEU:HD13	1:B:303:ILE:HG21	1.80	0.63
1:I:188:ALA:HB2	1:I:286:ALA:HB2	1.79	0.63
1:K:136:TYR:O	1:K:139:GLU:HG3	1.99	0.63
1:M:142:GLU:C	1:M:144:LEU:N	2.53	0.63
1:O:224:THR:HG23	1:O:224:THR:O	1.98	0.63
1:Q:287:PHE:CD1	1:Q:290:LEU:HD23	2.33	0.63
1:Q:308:THR:HG23	3:Q:1195:HOH:O	1.97	0.63
1:S:210:ARG:HD2	1:S:247:GLU:OE2	1.97	0.63
1:V:144:LEU:HD23	1:V:151:PRO:HB3	1.80	0.63
1:X:143:GLU:C	1:X:145:LYS:H	2.05	0.63
1:A:143:GLU:HA	1:A:146:ARG:NE	2.14	0.63
1:F:189:ALA:O	1:F:216:VAL:HG22	1.99	0.63
1:K:116:LYS:HA	1:K:116:LYS:CE	2.29	0.63
1:L:109:LYS:HA	1:L:113:LEU:HD12	1.80	0.63
1:O:202:LEU:HD13	1:O:209:ILE:HB	1.79	0.63
1:P:195:LEU:HD11	1:P:246:PRO:HG3	1.80	0.63
1:Q:165:LEU:HD22	1:Q:238:LEU:HD21	1.80	0.63
1:Q:181:LYS:H	1:Q:181:LYS:CE	1.99	0.63
1:R:12:PHE:CE2	1:R:237:LEU:HD22	2.33	0.63
1:S:251:TYR:OH	1:S:293:LEU:HD13	1.99	0.63
1:T:182:PHE:CD2	1:T:304:LEU:HB2	2.34	0.63
1:U:55:ILE:HD11	1:U:86:VAL:CG2	2.28	0.63
1:U:56:ARG:HH11	1:U:56:ARG:HG2	1.64	0.63
1:A:41:LYS:HZ3	1:A:177:GLN:HE22	1.46	0.63
1:C:146:ARG:O	1:C:147:GLU:HG2	1.99	0.63
1:D:128:LYS:CE	1:D:132:GLU:HB2	2.28	0.63
1:M:128:LYS:O	1:M:129:ASP:HB3	1.99	0.63
1:N:72:VAL:HG13	1:N:151:PRO:HA	1.81	0.63
1:S:84:ALA:HB3	3:S:1204:HOH:O	1.98	0.63
1:V:127:ALA:HB3	1:V:133:LEU:CD1	2.28	0.63
1:W:5:ILE:HG13	1:W:205:LEU:HD21	1.81	0.63
1:A:103:ARG:NH1	1:A:128:LYS:HZ1	1.96	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:48:LEU:HD23	1:B:49:GLY:N	2.14	0.63
1:B:194:THR:O	1:B:198:LEU:HB2	1.98	0.63
1:H:101:VAL:HG12	1:H:101:VAL:O	1.98	0.63
1:H:265:GLN:NE2	1:H:269:LYS:HE3	2.13	0.63
1:I:308:THR:OG1	2:I:1091:5PA:N1	2.25	0.63
1:M:19:PRO:O	1:M:20:TRP:HB3	1.99	0.63
1:M:25:GLN:HE22	1:M:42:ARG:HE	1.45	0.63
1:T:105:LYS:HG3	1:T:107:GLU:HG3	1.80	0.63
1:U:259:ILE:HG21	1:U:321:LEU:HD23	1.80	0.63
1:X:72:VAL:O	1:X:72:VAL:HG13	1.99	0.63
1:A:1:MET:HE1	1:A:172:GLY:HA3	1.81	0.63
1:F:143:GLU:HA	1:F:146:ARG:HD2	1.81	0.63
1:G:16:GLU:HA	1:G:59:GLU:OE2	1.98	0.63
1:G:27:LEU:HB2	1:G:38:VAL:HG13	1.81	0.63
1:H:229:ASN:O	1:H:233:GLU:HG3	1.98	0.63
1:M:140:ILE:HA	1:M:143:GLU:HG2	1.80	0.63
1:P:42:ARG:HB3	1:P:42:ARG:HH11	1.63	0.63
1:R:218:ARG:HD3	1:R:222:VAL:HG13	1.81	0.63
1:S:125:TYR:C	1:S:127:ALA:H	2.05	0.63
1:S:171:VAL:HG11	1:S:201:GLY:HA3	1.80	0.63
1:A:186:VAL:CG2	1:A:290:LEU:HD22	2.29	0.62
1:G:149:ARG:O	1:G:151:PRO:CD	2.48	0.62
1:I:54:LYS:HZ1	2:I:1091:5PA:H4A2	1.62	0.62
1:K:9:LEU:HD23	1:K:238:LEU:HD21	1.80	0.62
1:O:20:TRP:CD1	1:P:20:TRP:HZ3	2.17	0.62
1:P:123:ARG:O	1:P:124:VAL:C	2.42	0.62
1:Q:143:GLU:HA	1:Q:146:ARG:HG2	1.80	0.62
1:Q:229:ASN:O	1:Q:233:GLU:HG3	1.99	0.62
1:R:321:LEU:O	1:R:323:SER:N	2.33	0.62
1:S:161:PRO:HA	1:S:234:ALA:HB2	1.80	0.62
1:U:260:THR:C	1:U:324:LEU:HD23	2.24	0.62
1:F:54:LYS:HE3	2:F:1061:5PA:H91	1.79	0.62
1:H:214:ILE:HG21	1:H:286:ALA:HA	1.80	0.62
1:I:56:ARG:HD3	3:I:1102:HOH:O	1.99	0.62
1:L:76:VAL:HG12	1:L:101:VAL:HB	1.80	0.62
1:N:219:PHE:CD1	1:N:250:ASP:HB2	2.33	0.62
1:O:76:VAL:HG12	1:O:101:VAL:HB	1.81	0.62
1:R:1:MET:CE	1:R:172:GLY:HA3	2.29	0.62
1:S:186:VAL:HA	1:S:212:VAL:O	1.99	0.62
1:U:195:LEU:CD1	1:U:213:GLY:HA3	2.28	0.62
1:U:293:LEU:HD23	1:U:299:LEU:CD2	2.24	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:58:LEU:HA	1:W:61:LEU:HB2	1.80	0.62
1:W:61:LEU:CD2	1:W:162:ILE:HD11	2.25	0.62
1:W:218:ARG:O	1:W:219:PHE:C	2.42	0.62
1:B:144:LEU:HD11	1:B:149:ARG:HD3	1.80	0.62
1:M:228:ASP:CG	1:M:245:ARG:HD2	2.24	0.62
1:N:130:SER:OG	1:N:132:GLU:HG3	1.99	0.62
1:O:188:ALA:HB2	1:O:286:ALA:HB2	1.81	0.62
1:O:188:ALA:HB2	1:O:286:ALA:CB	2.29	0.62
1:Q:79:VAL:O	1:Q:79:VAL:HG12	1.98	0.62
1:S:15:VAL:HG12	1:S:17:LEU:CD1	2.30	0.62
1:V:103:ARG:CB	1:V:133:LEU:HD21	2.30	0.62
1:B:241:LYS:HG3	1:B:242:VAL:H	1.62	0.62
1:C:210:ARG:NH2	1:C:299:LEU:HA	2.14	0.62
1:D:15:VAL:HG11	1:D:94:LEU:HD21	1.80	0.62
1:G:86:VAL:HG21	3:G:1081:HOH:O	1.99	0.62
1:H:82:ASN:HD22	1:H:111:ASN:HD21	1.46	0.62
1:H:249:TYR:CG	1:H:293:LEU:HD21	2.34	0.62
1:J:203:SER:OG	1:J:243:GLU:HG2	1.99	0.62
1:J:218:ARG:CG	1:J:219:PHE:H	2.12	0.62
1:L:270:VAL:HG12	1:L:276:ILE:O	2.00	0.62
1:M:191:SER:OG	2:M:1131:5PA:O1P	2.15	0.62
1:N:318:GLY:HA2	1:N:321:LEU:HD12	1.82	0.62
1:O:181:LYS:H	1:O:181:LYS:CD	2.12	0.62
1:P:174:ILE:HA	1:P:177:GLN:HG2	1.80	0.62
1:R:174:ILE:HA	1:R:177:GLN:NE2	2.07	0.62
1:R:261:GLY:HA2	1:R:264:ALA:HB3	1.80	0.62
1:T:187:VAL:O	1:T:188:ALA:O	2.17	0.62
1:V:112:TYR:O	1:V:115:ASP:HB2	1.99	0.62
1:A:214:ILE:HD11	1:A:251:TYR:HB2	1.81	0.62
1:J:207:GLU:C	1:J:209:ILE:H	2.07	0.62
1:K:25:GLN:NE2	1:K:276:ILE:HD11	2.14	0.62
1:L:227:LEU:O	1:L:231:ILE:HG23	2.00	0.62
1:O:110:GLY:HA3	1:O:316:HIS:CD2	2.34	0.62
1:P:37:ASP:HB2	1:P:301:GLU:O	2.00	0.62
1:T:180:VAL:HG12	1:T:182:PHE:CE1	2.34	0.62
1:U:72:VAL:O	1:U:151:PRO:HA	1.99	0.62
1:V:127:ALA:HB3	1:V:133:LEU:HD12	1.82	0.62
2:V:1221:5PA:H4A2	2:V:1221:5PA:O4P	1.98	0.62
1:X:141:ALA:O	1:X:145:LYS:HB2	1.99	0.62
1:A:146:ARG:C	1:A:147:GLU:HG3	2.23	0.62
1:B:22:THR:HB	1:B:42:ARG:O	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:65:ALA:C	1:B:67:SER:H	2.07	0.62
1:C:143:GLU:HA	1:C:146:ARG:CG	2.28	0.62
1:C:218:ARG:O	1:C:219:PHE:C	2.42	0.62
1:D:278:LEU:HD22	1:D:283:THR:HB	1.81	0.62
1:H:92:LYS:HA	1:H:96:LEU:O	1.99	0.62
1:I:103:ARG:HD2	1:I:128:LYS:HA	1.81	0.62
1:I:171:VAL:HG21	1:I:201:GLY:C	2.24	0.62
1:J:128:LYS:HG2	1:J:130:SER:OG	1.99	0.62
1:J:219:PHE:O	1:J:222:VAL:HG12	1.99	0.62
1:K:195:LEU:HD21	1:K:246:PRO:HB2	1.81	0.62
1:N:20:TRP:CD1	1:N:20:TRP:H	2.15	0.62
1:Q:15:VAL:HG21	1:Q:66:LEU:HD12	1.81	0.62
1:Q:145:LYS:HA	1:Q:149:ARG:O	2.00	0.62
1:Q:195:LEU:HD21	1:Q:246:PRO:HB2	1.82	0.62
1:R:79:VAL:HG22	1:R:112:TYR:CD1	2.35	0.62
1:R:142:GLU:HB3	1:R:146:ARG:HH21	1.65	0.62
1:T:164:THR:HG21	1:T:234:ALA:HB2	1.82	0.62
1:U:80:HIS:H	1:U:80:HIS:CD2	2.17	0.62
1:A:110:GLY:HA3	1:A:316:HIS:HD2	1.65	0.62
1:C:143:GLU:O	1:C:147:GLU:HG3	2.00	0.62
1:G:140:ILE:O	1:G:143:GLU:HG2	1.98	0.62
1:G:218:ARG:HD2	1:G:256:TYR:H	1.63	0.62
1:G:252:SER:C	1:G:253:PHE:HD1	2.08	0.62
1:H:48:LEU:HD23	1:H:49:GLY:N	2.15	0.62
1:H:100:LEU:HD21	1:H:120:ILE:HG21	1.82	0.62
1:H:135:LYS:O	1:H:138:GLU:HB2	2.00	0.62
1:H:227:LEU:O	1:H:231:ILE:HG23	1.99	0.62
1:J:100:LEU:HD22	1:J:120:ILE:CG2	2.29	0.62
1:J:207:GLU:HB3	1:J:209:ILE:HG13	1.81	0.62
1:K:224:THR:HG21	3:K:1140:HOH:O	2.00	0.62
1:M:269:LYS:HB3	1:M:273:ARG:HH11	1.64	0.62
1:R:264:ALA:HB1	1:R:325:LEU:CD2	2.29	0.62
1:X:74:ILE:HD11	1:X:144:LEU:HD23	1.82	0.62
1:X:128:LYS:HG3	1:X:132:GLU:OE1	1.99	0.62
1:X:227:LEU:HD12	1:X:227:LEU:C	2.24	0.62
1:F:128:LYS:CG	1:F:130:SER:OG	2.48	0.62
1:G:264:ALA:N	3:G:1072:HOH:O	2.33	0.62
1:H:196:ALA:HB2	1:H:231:ILE:HG22	1.80	0.62
1:K:136:TYR:HA	1:K:139:GLU:HG2	1.81	0.62
1:L:103:ARG:NH1	1:L:129:ASP:HA	2.14	0.62
1:L:219:PHE:CD1	1:L:250:ASP:HB2	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:126:ASP:C	1:M:128:LYS:H	2.08	0.62
1:Q:230:LEU:HA	1:Q:233:GLU:OE2	2.00	0.62
1:R:260:THR:OG1	1:R:263:VAL:HG23	2.00	0.62
1:S:218:ARG:HG3	1:S:255:GLU:HA	1.81	0.62
1:W:293:LEU:HD22	1:W:299:LEU:HD21	1.80	0.62
1:X:103:ARG:CZ	1:X:129:ASP:HA	2.30	0.62
1:B:34:ILE:HG12	1:B:291:VAL:HG13	1.80	0.62
1:C:131:PHE:C	1:C:133:LEU:H	2.08	0.62
1:G:214:ILE:HD13	1:G:286:ALA:O	1.99	0.62
1:H:135:LYS:HE3	1:H:136:TYR:CE1	2.35	0.62
1:P:82:ASN:N	1:P:82:ASN:ND2	2.44	0.62
1:R:160:SER:O	1:R:161:PRO:C	2.43	0.62
1:S:131:PHE:C	1:S:133:LEU:H	2.07	0.62
1:S:245:ARG:O	3:S:1227:HOH:O	2.16	0.62
1:T:103:ARG:HH21	1:T:133:LEU:CD1	2.13	0.62
1:T:218:ARG:HD3	1:T:222:VAL:HG11	1.82	0.62
1:V:103:ARG:HH12	1:V:129:ASP:CG	2.08	0.62
1:V:171:VAL:HG22	1:V:205:LEU:HD11	1.82	0.62
1:W:20:TRP:CD1	1:X:20:TRP:HZ3	2.18	0.62
1:W:135:LYS:O	1:W:138:GLU:HB2	1.99	0.62
1:W:200:LEU:O	1:W:200:LEU:HD23	2.00	0.62
1:X:290:LEU:HD21	1:X:303:ILE:HG21	1.81	0.62
1:B:265:GLN:CG	1:B:269:LYS:HE3	2.25	0.62
1:G:54:LYS:HB2	3:G:1081:HOH:O	2.00	0.62
1:G:129:ASP:CG	1:G:130:SER:H	2.07	0.62
1:J:20:TRP:HD1	1:J:20:TRP:H	1.48	0.62
1:L:251:TYR:CE2	1:L:289:GLY:HA2	2.35	0.62
1:O:181:LYS:H	1:O:181:LYS:HD3	1.64	0.62
1:Q:320:LYS:O	1:Q:324:LEU:HD13	1.99	0.62
1:R:186:VAL:O	1:R:305:PHE:HA	1.99	0.62
1:R:207:GLU:C	1:R:209:ILE:H	2.08	0.62
1:T:274:GLU:OE1	1:T:274:GLU:HA	2.00	0.62
1:W:40:ILE:HG13	1:W:305:PHE:O	2.00	0.62
1:X:44:ASP:O	1:X:45:LEU:HD23	1.99	0.62
1:G:113:LEU:HD22	1:G:117:ILE:CD1	2.30	0.61
1:K:259:ILE:HD12	1:K:320:LYS:HG3	1.82	0.61
1:K:281:VAL:HG13	1:K:282:TYR:CD1	2.35	0.61
1:M:56:ARG:HD2	1:M:167:TYR:CE1	2.34	0.61
1:M:252:SER:O	1:M:253:PHE:HB2	1.99	0.61
1:O:61:LEU:HD23	1:O:162:ILE:HD11	1.82	0.61
1:Q:30:ILE:O	1:Q:34:ILE:HG12	1.99	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:155:PRO:HB2	1:Q:159:ALA:HB3	1.82	0.61
1:S:66:LEU:HD23	1:S:96:LEU:HD11	1.80	0.61
1:T:292:ASP:OD1	1:T:296:LYS:HE3	2.00	0.61
1:X:245:ARG:CG	1:X:246:PRO:HD2	2.29	0.61
1:G:306:ILE:O	1:G:307:HIS:C	2.43	0.61
1:H:134:MET:O	1:H:138:GLU:HG2	2.00	0.61
1:L:259:ILE:HD13	1:L:280:PRO:HB2	1.81	0.61
1:M:135:LYS:NZ	3:M:1153:HOH:O	2.34	0.61
1:Q:32:ARG:HD2	3:Q:1187:HOH:O	1.99	0.61
1:T:128:LYS:C	1:T:130:SER:N	2.55	0.61
1:T:200:LEU:HD21	1:T:240:VAL:HG11	1.82	0.61
1:C:130:SER:OG	1:C:132:GLU:HG3	1.99	0.61
1:E:19:PRO:HB2	1:E:20:TRP:HE3	1.65	0.61
1:E:181:LYS:HE3	1:E:302:LYS:HZ2	1.65	0.61
1:F:161:PRO:O	1:F:164:THR:HG22	2.00	0.61
1:O:161:PRO:HA	1:O:230:LEU:HD21	1.82	0.61
1:R:116:LYS:HZ3	1:R:122:THR:HB	1.63	0.61
1:R:219:PHE:CD1	1:R:250:ASP:HB2	2.36	0.61
1:U:293:LEU:HB3	1:U:299:LEU:HD11	1.81	0.61
1:W:54:LYS:HZ1	2:W:1231:5PA:H91	1.64	0.61
1:W:274:GLU:OE1	1:W:274:GLU:HA	2.00	0.61
1:D:76:VAL:HG12	1:D:101:VAL:HB	1.81	0.61
1:G:42:ARG:NH1	1:G:44:ASP:OD2	2.33	0.61
1:G:49:GLY:C	1:G:51:GLY:H	2.08	0.61
1:K:48:LEU:HD12	1:K:93:LYS:HD2	1.81	0.61
1:Q:76:VAL:HG11	1:Q:134:MET:HA	1.81	0.61
1:R:323:SER:O	1:R:324:LEU:HD12	2.00	0.61
1:V:128:LYS:CE	1:V:132:GLU:HB2	2.29	0.61
1:W:75:THR:HB	1:W:154:ILE:HB	1.80	0.61
1:X:72:VAL:HB	1:X:149:ARG:NH2	2.16	0.61
1:X:128:LYS:C	1:X:130:SER:N	2.58	0.61
1:B:207:GLU:HA	1:B:207:GLU:OE1	2.00	0.61
1:B:277:ILE:HA	3:B:1032:HOH:O	1.99	0.61
1:E:222:VAL:HG22	1:E:226:LYS:HD2	1.83	0.61
1:G:323:SER:O	1:G:325:LEU:N	2.33	0.61
1:H:99:ILE:CG1	1:H:121:GLU:HG2	2.31	0.61
1:J:177:GLN:HG2	1:J:178:SER:N	2.14	0.61
1:J:245:ARG:HB2	1:J:246:PRO:HD2	1.83	0.61
1:K:33:GLU:OE1	1:K:273:ARG:NH1	2.33	0.61
1:P:299:LEU:HB2	1:P:303:ILE:CD1	2.25	0.61
1:Q:1:MET:HE3	1:Q:2:HIS:N	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:200:LEU:O	1:S:204:ILE:HG13	2.00	0.61
1:V:20:TRP:CD1	1:V:20:TRP:N	2.67	0.61
1:V:222:VAL:HB	3:V:1227:HOH:O	2.00	0.61
1:W:53:ASN:HB2	1:W:167:TYR:CE1	2.33	0.61
1:X:30:ILE:HG22	1:X:30:ILE:O	1.99	0.61
1:X:147:GLU:C	1:X:149:ARG:H	2.07	0.61
1:X:287:PHE:O	1:X:291:VAL:HG23	2.01	0.61
1:D:41:LYS:NZ	1:D:177:GLN:NE2	2.47	0.61
1:E:19:PRO:HB2	1:E:20:TRP:CE3	2.35	0.61
1:E:205:LEU:O	1:E:207:GLU:HG2	2.01	0.61
1:G:222:VAL:C	1:G:226:LYS:HB2	2.26	0.61
1:H:189:ALA:HB3	1:H:215:ALA:HA	1.81	0.61
1:I:54:LYS:HE3	2:I:1091:5PA:H91	1.82	0.61
1:I:187:VAL:HG21	1:I:194:THR:CG2	2.30	0.61
1:J:107:GLU:HB3	1:J:109:LYS:HG2	1.82	0.61
1:K:132:GLU:C	1:K:134:MET:H	2.07	0.61
1:K:186:VAL:O	1:K:186:VAL:HG23	2.00	0.61
1:L:278:LEU:HB3	1:L:283:THR:OG1	2.00	0.61
1:N:82:ASN:HD22	1:N:111:ASN:ND2	1.92	0.61
1:Q:66:LEU:C	1:Q:68:LYS:H	2.08	0.61
1:S:83:HIS:HB3	2:S:1191:5PA:H92	1.82	0.61
1:T:299:LEU:HB2	1:T:303:ILE:CD1	2.31	0.61
1:X:267:ILE:C	1:X:269:LYS:H	2.09	0.61
1:D:243:GLU:O	1:D:244:VAL:O	2.19	0.61
1:F:113:LEU:O	1:F:117:ILE:HG13	2.01	0.61
1:I:84:ALA:HB1	1:I:100:LEU:HG	1.83	0.61
1:I:319:ASP:OD1	1:J:108:LEU:HD23	2.01	0.61
1:N:15:VAL:HG23	1:N:63:GLY:HA2	1.81	0.61
1:P:133:LEU:O	1:P:134:MET:C	2.44	0.61
1:Q:55:ILE:H	1:Q:55:ILE:HD12	1.66	0.61
1:R:195:LEU:O	1:R:195:LEU:HD22	2.00	0.61
1:T:1:MET:CE	1:T:172:GLY:HA3	2.29	0.61
1:W:136:TYR:HA	1:W:139:GLU:HG2	1.81	0.61
1:W:175:ALA:HA	3:W:1244:HOH:O	2.01	0.61
1:B:15:VAL:O	1:B:59:GLU:HG2	1.99	0.61
1:B:128:LYS:HE2	1:B:132:GLU:HB2	1.82	0.61
1:C:135:LYS:O	1:C:138:GLU:HB2	2.01	0.61
1:C:165:LEU:HD22	1:C:238:LEU:HD21	1.83	0.61
1:C:218:ARG:NH1	1:C:256:TYR:HB3	2.16	0.61
1:F:113:LEU:HD22	1:F:117:ILE:CD1	2.30	0.61
1:I:290:LEU:C	1:I:290:LEU:HD12	2.26	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:195:LEU:C	1:J:195:LEU:HD13	2.26	0.61
1:M:17:LEU:HB2	1:M:59:GLU:HG2	1.81	0.61
1:N:57:LYS:HG2	1:N:163:GLY:O	2.00	0.61
1:O:14:ARG:NH1	1:O:169:ARG:NH2	2.49	0.61
1:Q:55:ILE:HD12	1:Q:55:ILE:N	2.15	0.61
1:S:318:GLY:HA3	1:T:113:LEU:HD11	1.83	0.61
1:T:128:LYS:HE3	1:T:132:GLU:HB2	1.82	0.61
1:T:135:LYS:O	1:T:139:GLU:N	2.29	0.61
1:U:40:ILE:HD11	1:U:307:HIS:HB2	1.82	0.61
1:U:103:ARG:HH11	1:U:128:LYS:HG2	1.66	0.61
1:U:142:GLU:O	1:U:146:ARG:CB	2.49	0.61
1:U:157:GLY:HA2	2:U:1211:5PA:C9	2.30	0.61
1:X:28:PRO:O	1:X:31:SER:HB2	2.00	0.61
1:A:167:TYR:HA	1:A:170:ALA:CB	2.31	0.61
1:E:27:LEU:HB3	1:E:274:GLU:OE2	2.00	0.61
1:E:39:TYR:CD1	1:E:182:PHE:HE2	2.19	0.61
1:E:264:ALA:HB1	1:E:325:LEU:HD22	1.83	0.61
1:G:218:ARG:NH1	1:G:256:TYR:HD2	1.98	0.61
1:G:284:GLY:HA3	3:G:1079:HOH:O	2.01	0.61
1:I:5:ILE:HD12	1:I:172:GLY:HA2	1.83	0.61
1:M:53:ASN:HD21	1:M:54:LYS:HE2	1.66	0.61
1:M:145:LYS:HA	1:M:149:ARG:O	2.00	0.61
1:N:30:ILE:HG21	1:N:287:PHE:HZ	1.66	0.61
1:O:214:ILE:CD1	1:O:286:ALA:HA	2.30	0.61
1:T:165:LEU:CD2	1:T:238:LEU:HD21	2.31	0.61
1:U:82:ASN:HA	1:U:111:ASN:ND2	2.15	0.61
1:U:281:VAL:HA	1:U:285:LYS:HE3	1.82	0.61
1:W:188:ALA:HB2	1:W:286:ALA:HB2	1.83	0.61
1:C:214:ILE:HD12	1:C:289:GLY:HA3	1.83	0.61
1:C:261:GLY:O	1:C:265:GLN:HB2	2.01	0.61
1:G:142:GLU:HA	1:G:145:LYS:HG2	1.82	0.61
1:I:167:TYR:HA	1:I:170:ALA:CB	2.31	0.61
1:J:72:VAL:HB	1:J:149:ARG:NH2	2.16	0.61
1:J:268:ARG:NH1	1:J:325:LEU:HD12	2.16	0.61
1:K:50:ILE:HD11	1:K:82:ASN:HB3	1.83	0.61
1:K:118:MET:CE	1:L:271:GLY:HA3	2.29	0.61
1:L:281:VAL:O	1:L:281:VAL:HG22	2.00	0.61
1:N:222:VAL:HG13	1:N:223:MET:N	2.16	0.61
1:Q:101:VAL:HG12	1:Q:133:LEU:CD2	2.31	0.61
1:T:144:LEU:HD11	1:T:149:ARG:NH1	2.11	0.61
1:T:290:LEU:HD22	1:T:303:ILE:HG21	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:T:1201:5PA:H4A2	2:T:1201:5PA:O4P	2.01	0.61
1:U:252:SER:O	1:U:253:PHE:HB2	2.00	0.61
1:V:74:ILE:HG12	1:V:99:ILE:HB	1.83	0.61
1:W:293:LEU:H	1:W:293:LEU:CD1	2.12	0.61
1:B:149:ARG:O	1:B:151:PRO:HD3	2.01	0.60
1:D:103:ARG:HE	1:D:133:LEU:HD11	1.66	0.60
1:D:219:PHE:HE2	1:D:248:LEU:CD2	2.14	0.60
1:I:266:ILE:HD12	1:I:269:LYS:HD2	1.83	0.60
1:K:126:ASP:C	1:K:128:LYS:H	2.09	0.60
1:K:228:ASP:O	1:K:232:LYS:HG2	2.01	0.60
1:L:54:LYS:HD3	1:L:57:LYS:HZ3	1.66	0.60
1:L:265:GLN:O	1:L:269:LYS:HG3	2.00	0.60
1:N:270:VAL:HG21	1:N:278:LEU:HD11	1.81	0.60
1:O:235:ALA:O	1:O:240:VAL:O	2.19	0.60
1:Q:109:LYS:HE3	1:Q:316:HIS:CE1	2.36	0.60
1:T:73:VAL:O	1:T:98:ALA:HA	2.01	0.60
1:V:135:LYS:HG2	1:V:136:TYR:CD2	2.36	0.60
1:C:317:TYR:O	1:C:321:LEU:HG	2.00	0.60
1:D:264:ALA:HB1	1:D:325:LEU:CD2	2.31	0.60
1:E:55:ILE:HD12	1:E:55:ILE:H	1.67	0.60
1:E:82:ASN:ND2	1:E:111:ASN:HD21	1.98	0.60
1:F:113:LEU:CD2	1:F:117:ILE:HD11	2.30	0.60
1:K:64:ASP:O	1:K:68:LYS:HG3	2.01	0.60
1:O:185:ILE:CG2	1:O:198:LEU:HD11	2.32	0.60
1:R:41:LYS:NZ	1:R:177:GLN:NE2	2.39	0.60
1:S:219:PHE:HA	1:S:223:MET:CE	2.26	0.60
1:W:17:LEU:HD23	1:W:59:GLU:HG2	1.82	0.60
1:X:186:VAL:HG21	1:X:290:LEU:HD23	1.83	0.60
1:C:253:PHE:O	1:C:258:LYS:HD3	2.00	0.60
1:E:162:ILE:O	1:E:162:ILE:HD12	2.01	0.60
1:F:136:TYR:O	1:F:140:ILE:HG13	2.01	0.60
1:G:26:TYR:HB2	1:G:39:TYR:CE2	2.36	0.60
1:H:156:PRO:C	1:H:158:GLY:H	2.09	0.60
1:I:187:VAL:HG21	1:I:194:THR:HG22	1.81	0.60
1:K:65:ALA:HB2	1:K:152:TYR:CD2	2.37	0.60
1:L:113:LEU:O	1:L:117:ILE:HG13	2.01	0.60
1:M:186:VAL:HG21	1:M:290:LEU:HD22	1.82	0.60
1:M:228:ASP:OD2	1:M:245:ARG:HD2	2.01	0.60
1:M:265:GLN:HG3	3:M:1146:HOH:O	1.99	0.60
1:N:280:PRO:HB3	1:N:321:LEU:HD21	1.84	0.60
1:O:112:TYR:CE1	1:O:122:THR:HG21	2.36	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:133:LEU:HD12	1:O:136:TYR:CD2	2.33	0.60
1:P:134:MET:O	1:P:136:TYR:N	2.34	0.60
1:P:144:LEU:HD12	1:P:144:LEU:O	2.00	0.60
1:R:218:ARG:HD3	1:R:222:VAL:CG1	2.31	0.60
1:T:234:ALA:O	1:T:237:LEU:HB2	2.02	0.60
1:U:218:ARG:O	1:U:220:GLY:N	2.35	0.60
1:W:55:ILE:HD12	1:W:86:VAL:HG11	1.83	0.60
1:W:243:GLU:HG3	1:W:244:VAL:H	1.65	0.60
1:X:218:ARG:HH11	1:X:218:ARG:CG	2.14	0.60
1:X:247:GLU:HB3	1:X:249:TYR:CE1	2.36	0.60
1:B:245:ARG:O	3:B:1023:HOH:O	2.16	0.60
1:C:200:LEU:CD2	1:C:204:ILE:HD11	2.32	0.60
1:F:200:LEU:O	1:F:200:LEU:HD23	2.01	0.60
1:G:41:LYS:HZ1	1:G:177:GLN:HE22	1.50	0.60
1:I:103:ARG:HD3	1:I:133:LEU:HD22	1.83	0.60
1:K:139:GLU:HG3	1:K:140:ILE:H	1.67	0.60
1:L:1:MET:CE	1:L:5:ILE:HB	2.32	0.60
1:O:79:VAL:HG21	1:O:105:LYS:O	2.01	0.60
1:O:126:ASP:C	1:O:128:LYS:H	2.09	0.60
1:R:5:ILE:HD11	1:R:205:LEU:HG	1.83	0.60
1:R:74:ILE:HD13	1:R:141:ALA:HB2	1.82	0.60
1:V:270:VAL:HG21	1:V:278:LEU:HD11	1.83	0.60
1:X:50:ILE:HD13	1:X:312:SER:OG	2.00	0.60
1:X:274:GLU:OE1	1:X:274:GLU:HA	2.02	0.60
1:C:131:PHE:CE2	1:C:226:LYS:NZ	2.65	0.60
1:F:180:VAL:HG13	1:F:181:LYS:CE	2.31	0.60
1:G:125:TYR:HD2	1:G:136:TYR:CD2	2.18	0.60
1:G:214:ILE:CD1	1:G:289:GLY:HA3	2.30	0.60
1:G:306:ILE:O	1:G:306:ILE:HG22	2.02	0.60
1:J:29:ASN:HB3	3:J:1108:HOH:O	2.00	0.60
1:K:219:PHE:HA	1:K:223:MET:CE	2.31	0.60
1:L:100:LEU:N	1:L:100:LEU:HD12	2.16	0.60
1:M:161:PRO:O	1:M:164:THR:HB	2.02	0.60
1:V:14:ARG:HD2	1:V:59:GLU:HB3	1.82	0.60
1:V:132:GLU:C	1:V:134:MET:H	2.08	0.60
1:W:264:ALA:HB1	1:W:325:LEU:HD21	1.84	0.60
1:W:293:LEU:HD12	1:W:293:LEU:N	2.15	0.60
1:A:15:VAL:HG12	1:A:17:LEU:CD1	2.31	0.60
1:B:202:LEU:CD1	1:B:211:PRO:HG3	2.31	0.60
1:D:128:LYS:HE3	1:D:132:GLU:HB2	1.83	0.60
1:E:18:ILE:HG23	1:E:46:THR:O	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:15:VAL:HG21	1:K:66:LEU:HD12	1.83	0.60
1:N:26:TYR:O	1:N:28:PRO:HD3	2.00	0.60
1:O:38:VAL:HG21	1:O:290:LEU:HD21	1.84	0.60
1:Q:181:LYS:HG2	1:Q:181:LYS:O	2.02	0.60
1:Q:202:LEU:HD12	1:Q:211:PRO:HG3	1.82	0.60
1:T:132:GLU:C	1:T:134:MET:N	2.56	0.60
1:W:1:MET:CE	1:W:172:GLY:HA3	2.30	0.60
1:W:223:MET:O	1:W:223:MET:SD	2.59	0.60
1:W:292:ASP:HB3	1:W:293:LEU:HD12	1.83	0.60
1:B:64:ASP:O	1:B:67:SER:HB2	2.01	0.60
1:D:128:LYS:HE3	1:D:132:GLU:CB	2.32	0.60
1:I:157:GLY:O	1:I:159:ALA:N	2.34	0.60
1:L:74:ILE:HD11	1:L:151:PRO:HB2	1.82	0.60
1:O:85:PHE:O	1:O:86:VAL:C	2.45	0.60
1:P:103:ARG:NH2	1:P:129:ASP:HA	2.16	0.60
1:Q:80:HIS:NE2	1:Q:256:TYR:OH	2.35	0.60
1:Q:229:ASN:ND2	1:T:319:ASP:HB3	2.15	0.60
1:R:8:LEU:CD1	1:R:204:ILE:HD13	2.32	0.60
1:R:25:GLN:NE2	1:R:42:ARG:CD	2.65	0.60
1:S:117:ILE:HD11	1:T:318:GLY:HA2	1.83	0.60
1:T:181:LYS:HD3	1:T:181:LYS:H	1.64	0.60
1:E:269:LYS:HG2	1:E:273:ARG:NH2	2.16	0.60
1:G:103:ARG:HD2	1:G:129:ASP:N	2.16	0.60
1:G:114:LEU:HA	1:G:117:ILE:HB	1.84	0.60
1:G:210:ARG:NH2	1:G:298:GLU:O	2.33	0.60
1:H:228:ASP:OD1	1:H:245:ARG:HD3	2.01	0.60
1:I:210:ARG:HH22	1:I:298:GLU:C	2.09	0.60
1:J:20:TRP:H	1:J:20:TRP:CD1	2.20	0.60
1:J:54:LYS:NZ	2:J:1101:5PA:H91	2.16	0.60
1:K:56:ARG:O	1:K:166:GLY:HA2	2.02	0.60
1:K:259:ILE:HD12	1:K:320:LYS:CG	2.32	0.60
1:O:41:LYS:HD3	1:O:174:ILE:HD11	1.84	0.60
1:P:67:SER:C	1:P:69:GLY:H	2.10	0.60
1:P:134:MET:HE3	1:P:137:ALA:HB3	1.82	0.60
1:T:158:GLY:O	1:T:160:SER:N	2.34	0.60
1:U:270:VAL:HG21	1:U:278:LEU:CD1	2.32	0.60
1:W:207:GLU:C	1:W:209:ILE:H	2.10	0.60
1:X:140:ILE:O	1:X:144:LEU:HB3	2.01	0.60
1:X:143:GLU:O	1:X:146:ARG:N	2.35	0.60
1:G:70:ALA:HA	1:G:150:LYS:O	2.02	0.60
1:G:99:ILE:HG12	1:G:121:GLU:HB3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:136:TYR:CD1	1:G:139:GLU:OE2	2.55	0.60
1:H:157:GLY:HA2	2:H:1081:5PA:H91	1.82	0.60
1:M:293:LEU:HB3	1:M:299:LEU:HG	1.84	0.60
2:O:1151:5PA:O4P	2:O:1151:5PA:C4A	2.47	0.60
1:P:73:VAL:O	1:P:98:ALA:HA	2.02	0.60
1:P:210:ARG:NH2	1:P:299:LEU:HA	2.16	0.60
1:P:268:ARG:HH22	1:P:325:LEU:HB3	1.65	0.60
1:Q:75:THR:OG1	1:Q:154:ILE:HB	2.01	0.60
1:S:12:PHE:HE2	1:S:237:LEU:HD22	1.66	0.60
1:T:132:GLU:C	1:T:134:MET:H	2.10	0.60
1:U:118:MET:CE	1:V:271:GLY:HA3	2.32	0.60
1:W:18:ILE:HD11	1:W:55:ILE:HG22	1.84	0.60
1:W:116:LYS:HZ3	1:W:122:THR:HB	1.65	0.60
1:X:271:GLY:HA2	1:X:276:ILE:H	1.65	0.60
1:E:162:ILE:HD12	1:E:162:ILE:C	2.27	0.60
1:G:144:LEU:O	1:G:147:GLU:HB2	2.00	0.60
1:H:72:VAL:HG13	1:H:151:PRO:HA	1.84	0.60
1:I:5:ILE:HD11	1:I:205:LEU:HG	1.84	0.60
1:I:191:SER:N	2:I:1091:5PA:O1P	2.34	0.60
1:J:164:THR:HG21	1:J:234:ALA:CB	2.31	0.60
1:M:200:LEU:O	1:M:200:LEU:HD23	2.02	0.60
1:O:134:MET:HG3	1:O:134:MET:O	2.02	0.60
1:O:324:LEU:HD13	1:O:324:LEU:N	2.17	0.60
1:P:57:LYS:O	1:P:61:LEU:HG	2.02	0.60
1:P:142:GLU:O	1:P:146:ARG:CZ	2.49	0.60
1:R:55:ILE:H	1:R:55:ILE:CD1	2.13	0.60
1:U:264:ALA:HB1	1:U:325:LEU:HD13	1.84	0.60
1:W:25:GLN:HE21	1:W:42:ARG:HG3	1.67	0.60
1:W:70:ALA:HB2	3:W:1265:HOH:O	2.02	0.60
1:W:88:GLY:O	1:W:91:ALA:N	2.30	0.60
1:C:39:TYR:CE1	1:C:180:VAL:HG11	2.37	0.59
1:C:82:ASN:HA	1:C:111:ASN:ND2	2.17	0.59
1:G:255:GLU:O	1:G:258:LYS:HB2	2.02	0.59
1:H:5:ILE:HD13	1:H:168:VAL:O	2.02	0.59
1:I:144:LEU:O	1:I:147:GLU:HB2	2.02	0.59
1:J:26:TYR:O	1:J:28:PRO:HD3	2.01	0.59
1:K:82:ASN:HD22	1:K:111:ASN:HD21	1.48	0.59
1:K:281:VAL:HB	1:K:317:TYR:CE1	2.37	0.59
1:M:168:VAL:O	1:M:171:VAL:HG22	2.02	0.59
1:M:185:ILE:HG22	1:M:198:LEU:HD11	1.83	0.59
1:N:53:ASN:OD1	1:N:308:THR:HB	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:213:GLY:O	1:N:214:ILE:HD13	2.02	0.59
1:O:17:LEU:HD22	1:O:59:GLU:HG2	1.84	0.59
1:S:187:VAL:O	1:S:214:ILE:HG22	2.01	0.59
1:S:219:PHE:CE1	1:S:248:LEU:HG	2.37	0.59
1:W:135:LYS:HG3	1:W:136:TYR:N	2.15	0.59
1:W:162:ILE:CG1	1:W:163:GLY:N	2.65	0.59
1:C:144:LEU:O	1:C:149:ARG:HB2	2.02	0.59
1:C:207:GLU:C	1:C:209:ILE:H	2.10	0.59
1:F:128:LYS:H	1:F:128:LYS:CD	2.06	0.59
1:H:74:ILE:HG22	1:H:75:THR:N	2.16	0.59
1:J:171:VAL:CG2	1:J:201:GLY:HA3	2.30	0.59
1:J:222:VAL:HG22	3:J:1113:HOH:O	2.01	0.59
1:K:182:PHE:CE2	1:K:304:LEU:HB2	2.37	0.59
1:O:307:HIS:ND1	1:O:308:THR:N	2.50	0.59
1:P:268:ARG:CZ	1:P:325:LEU:HD12	2.32	0.59
1:Q:168:VAL:HG21	1:Q:200:LEU:HD13	1.84	0.59
1:T:211:PRO:O	1:T:246:PRO:HB2	2.02	0.59
1:U:266:ILE:HD13	1:U:288:TYR:HD1	1.67	0.59
1:W:34:ILE:HD12	1:W:294:ALA:CB	2.32	0.59
1:B:280:PRO:HB3	1:B:321:LEU:HD21	1.84	0.59
1:E:41:LYS:NZ	1:E:177:GLN:HE22	2.00	0.59
1:G:54:LYS:CD	1:G:57:LYS:HZ3	2.14	0.59
1:G:130:SER:OG	1:G:132:GLU:HG3	2.01	0.59
1:G:214:ILE:CD1	1:G:286:ALA:HA	2.29	0.59
2:I:1091:5PA:H4A2	2:I:1091:5PA:O4P	2.01	0.59
1:M:219:PHE:HD2	1:M:219:PHE:C	2.10	0.59
1:O:252:SER:O	1:O:253:PHE:HB2	2.01	0.59
1:P:109:LYS:HA	1:P:113:LEU:CD1	2.33	0.59
1:P:322:LEU:C	1:P:324:LEU:H	2.11	0.59
1:Q:61:LEU:HA	1:Q:162:ILE:HD11	1.84	0.59
1:R:54:LYS:NZ	1:R:57:LYS:NZ	2.50	0.59
1:R:111:ASN:HD21	1:R:312:SER:HB2	1.66	0.59
1:S:19:PRO:HB2	1:S:20:TRP:CE3	2.37	0.59
1:S:116:LYS:O	1:S:119:GLY:N	2.34	0.59
1:W:249:TYR:CD2	1:W:293:LEU:HD21	2.37	0.59
1:A:170:ALA:O	1:A:174:ILE:HG13	2.02	0.59
1:B:243:GLU:HG3	3:B:1027:HOH:O	2.03	0.59
1:C:134:MET:O	1:C:137:ALA:N	2.36	0.59
1:C:142:GLU:OE1	1:C:142:GLU:HA	2.02	0.59
1:E:15:VAL:HG23	1:E:63:GLY:HA2	1.83	0.59
1:E:62:LEU:HD13	1:E:94:LEU:HD12	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:179:GLU:HA	1:F:179:GLU:OE1	2.00	0.59
1:I:7:ALA:HB3	1:L:26:TYR:HD2	1.67	0.59
1:J:34:ILE:CD1	1:J:291:VAL:HA	2.32	0.59
1:J:40:ILE:HG13	1:J:305:PHE:HD2	1.66	0.59
1:J:43:ASP:O	1:J:46:THR:HG23	2.02	0.59
1:J:128:LYS:N	1:J:128:LYS:HD3	2.16	0.59
1:J:144:LEU:O	1:J:147:GLU:HB2	2.02	0.59
1:J:240:VAL:CG2	1:J:241:LYS:N	2.65	0.59
1:J:255:GLU:HG3	1:J:258:LYS:HB2	1.85	0.59
1:K:30:ILE:O	1:K:34:ILE:HG23	2.02	0.59
1:K:82:ASN:ND2	1:K:111:ASN:ND2	2.51	0.59
1:K:94:LEU:C	1:K:96:LEU:H	2.10	0.59
1:K:125:TYR:HB3	1:K:127:ALA:H	1.68	0.59
1:K:195:LEU:HD11	1:K:248:LEU:HD13	1.84	0.59
1:K:268:ARG:NH2	1:K:325:LEU:HG	2.17	0.59
1:K:272:THR:CG2	1:L:118:MET:HB3	2.33	0.59
2:M:1131:5PA:O4P	2:M:1131:5PA:C4A	2.51	0.59
1:N:203:SER:OG	1:N:243:GLU:HG2	2.02	0.59
1:N:223:MET:HE2	1:N:248:LEU:HD21	1.84	0.59
1:Q:206:ASN:ND2	3:Q:1173:HOH:O	2.35	0.59
1:Q:214:ILE:HD11	1:Q:251:TYR:CB	2.32	0.59
1:Q:308:THR:HG21	2:Q:1171:5PA:H6	1.84	0.59
1:T:1:MET:HE2	1:T:5:ILE:CG2	2.33	0.59
1:T:240:VAL:HG22	1:T:241:LYS:N	2.17	0.59
1:X:138:GLU:O	1:X:141:ALA:HB3	2.01	0.59
1:B:211:PRO:HB2	1:B:246:PRO:CB	2.31	0.59
1:C:131:PHE:C	1:C:133:LEU:N	2.59	0.59
1:F:72:VAL:HG11	1:F:144:LEU:CD2	2.31	0.59
1:G:181:LYS:HE3	1:G:302:LYS:HD2	1.83	0.59
1:I:92:LYS:NZ	3:I:1107:HOH:O	2.26	0.59
1:I:264:ALA:HA	1:I:267:ILE:HD12	1.85	0.59
1:I:318:GLY:CA	1:J:113:LEU:HD21	2.32	0.59
1:K:39:TYR:CE1	1:K:180:VAL:HG11	2.38	0.59
1:K:82:ASN:C	1:K:84:ALA:N	2.58	0.59
1:L:251:TYR:OH	1:L:292:ASP:HB3	2.03	0.59
1:M:227:LEU:HD21	1:M:246:PRO:HG2	1.85	0.59
1:O:109:LYS:HA	1:O:113:LEU:HD12	1.84	0.59
1:O:198:LEU:C	1:O:198:LEU:HD23	2.27	0.59
1:P:190:GLY:N	2:P:1161:5PA:O3P	2.32	0.59
1:V:144:LEU:HD12	1:V:144:LEU:O	2.03	0.59
1:V:211:PRO:HB2	1:V:246:PRO:HB3	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:25:GLN:HE21	1:W:42:ARG:CG	2.14	0.59
1:W:281:VAL:HG13	1:W:282:TYR:HD1	1.66	0.59
1:A:53:ASN:HA	1:A:167:TYR:OH	2.02	0.59
1:B:54:LYS:CE	2:B:1021:5PA:H91	2.33	0.59
1:F:145:LYS:O	1:F:147:GLU:N	2.36	0.59
1:H:131:PHE:HA	1:H:133:LEU:HD13	1.85	0.59
1:I:58:LEU:HA	1:I:61:LEU:HD12	1.84	0.59
1:I:293:LEU:HB2	1:I:299:LEU:HG	1.83	0.59
1:K:19:PRO:O	1:K:20:TRP:HB3	2.02	0.59
1:O:136:TYR:C	1:O:138:GLU:H	2.11	0.59
1:O:266:ILE:HG12	1:O:284:GLY:O	2.03	0.59
1:P:79:VAL:HA	1:P:102:LEU:HB3	1.84	0.59
1:P:165:LEU:HA	1:P:168:VAL:CG2	2.32	0.59
1:P:271:GLY:O	1:P:275:GLY:HA2	2.02	0.59
1:Q:57:LYS:HG2	1:Q:163:GLY:O	2.01	0.59
1:Q:138:GLU:O	1:Q:142:GLU:HG2	2.02	0.59
1:S:25:GLN:NE2	1:S:42:ARG:NE	2.48	0.59
1:T:127:ALA:O	1:T:128:LYS:C	2.45	0.59
1:W:259:ILE:HG22	1:W:324:LEU:HD22	1.84	0.59
1:A:42:ARG:NH2	1:B:47:GLY:O	2.36	0.59
1:A:322:LEU:HD21	1:B:116:LYS:HB3	1.83	0.59
1:C:41:LYS:NZ	1:C:177:GLN:HE22	2.00	0.59
1:D:20:TRP:HD1	1:D:20:TRP:H	1.51	0.59
1:E:155:PRO:HG2	1:E:160:SER:HB3	1.85	0.59
1:F:14:ARG:NH2	1:F:16:GLU:HG2	2.18	0.59
2:F:1061:5PA:O4P	2:F:1061:5PA:H4A2	2.02	0.59
1:I:106:GLU:HG2	1:I:124:VAL:HG21	1.84	0.59
1:I:142:GLU:O	1:I:145:LYS:HG2	2.03	0.59
1:J:218:ARG:O	1:J:219:PHE:HB2	2.03	0.59
1:K:108:LEU:O	1:K:109:LYS:HB3	2.03	0.59
1:M:79:VAL:HG22	1:M:102:LEU:HD12	1.84	0.59
1:M:222:VAL:O	1:M:226:LYS:HB3	2.03	0.59
1:O:71:ASP:OD2	1:O:72:VAL:HG12	2.03	0.59
1:T:269:LYS:O	1:T:273:ARG:HB2	2.02	0.59
1:U:103:ARG:HB2	1:U:128:LYS:HA	1.85	0.59
1:U:259:ILE:CD1	1:U:317:TYR:HB3	2.32	0.59
1:V:1:MET:HE2	1:V:5:ILE:HB	1.84	0.59
1:B:54:LYS:O	1:B:58:LEU:HD22	2.02	0.59
1:C:145:LYS:C	1:C:147:GLU:N	2.59	0.59
1:D:72:VAL:HG13	1:D:151:PRO:HA	1.85	0.59
1:D:203:SER:OG	1:D:243:GLU:HG2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:264:ALA:HB1	1:E:325:LEU:CD2	2.33	0.59
1:F:147:GLU:O	1:F:149:ARG:N	2.36	0.59
1:G:184:SER:CB	1:G:210:ARG:HB2	2.32	0.59
1:I:161:PRO:O	1:I:164:THR:HB	2.03	0.59
1:I:171:VAL:HG21	1:I:201:GLY:HA3	1.85	0.59
1:O:106:GLU:CD	1:O:124:VAL:HG21	2.28	0.59
1:Q:171:VAL:HG21	1:Q:201:GLY:C	2.28	0.59
1:Q:214:ILE:HD12	1:Q:289:GLY:HA3	1.83	0.59
1:R:79:VAL:HG23	1:R:102:LEU:HD12	1.85	0.59
1:S:82:ASN:ND2	1:S:310:GLY:HA2	2.17	0.59
1:T:268:ARG:NE	1:T:325:LEU:HD12	2.18	0.59
1:U:25:GLN:NE2	1:U:42:ARG:HE	2.01	0.59
1:V:222:VAL:HG22	1:V:223:MET:N	2.18	0.59
1:W:54:LYS:HD3	1:W:57:LYS:HZ3	1.68	0.59
1:W:182:PHE:CZ	1:W:304:LEU:HG	2.37	0.59
1:C:308:THR:O	2:C:1031:5PA:H2A1	2.02	0.59
1:E:33:GLU:OE1	1:E:273:ARG:NH1	2.35	0.59
1:G:71:ASP:HA	3:G:1099:HOH:O	2.02	0.59
1:H:176:THR:HG22	1:H:177:GLN:N	2.15	0.59
1:I:126:ASP:C	1:I:128:LYS:N	2.59	0.59
1:I:142:GLU:OE1	1:I:145:LYS:HD2	2.03	0.59
1:J:102:LEU:HB2	1:J:124:VAL:HG22	1.84	0.59
1:J:218:ARG:HD3	1:J:222:VAL:HG21	1.85	0.59
1:L:185:ILE:HG23	1:L:304:LEU:CD1	2.31	0.59
1:Q:318:GLY:HA3	1:R:113:LEU:HD21	1.85	0.59
1:R:135:LYS:HG3	1:R:136:TYR:N	2.18	0.59
1:R:204:ILE:HD11	1:R:240:VAL:HG11	1.84	0.59
1:R:304:LEU:O	1:R:304:LEU:HD13	2.01	0.59
1:S:42:ARG:C	1:S:44:ASP:H	2.11	0.59
1:S:214:ILE:CD1	1:S:289:GLY:HA3	2.33	0.59
1:U:76:VAL:HG12	1:U:101:VAL:HB	1.84	0.59
1:U:280:PRO:HB3	1:U:321:LEU:HD21	1.85	0.59
1:V:218:ARG:HG2	1:V:219:PHE:N	2.17	0.59
1:D:19:PRO:HG2	1:D:20:TRP:CD1	2.38	0.59
1:G:265:GLN:HG3	1:G:269:LYS:HE3	1.85	0.59
1:H:61:LEU:HD21	1:H:163:GLY:CA	2.32	0.59
1:M:269:LYS:HB3	1:M:273:ARG:NH1	2.17	0.59
1:O:44:ASP:HA	1:O:52:GLY:H	1.68	0.59
1:O:214:ILE:HD13	1:O:286:ALA:C	2.28	0.59
1:O:228:ASP:CG	1:O:245:ARG:HD2	2.28	0.59
1:O:280:PRO:HG3	1:O:321:LEU:HD21	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:113:LEU:O	1:P:117:ILE:HG13	2.02	0.59
1:R:54:LYS:NZ	1:R:57:LYS:HZ3	2.01	0.59
1:T:227:LEU:HD12	1:T:227:LEU:O	2.03	0.59
1:U:143:GLU:HB3	1:U:146:ARG:HH22	1.66	0.59
1:U:229:ASN:O	1:U:233:GLU:HG3	2.02	0.59
1:V:245:ARG:HB2	1:V:246:PRO:CD	2.32	0.59
1:A:50:ILE:HD13	1:A:312:SER:OG	2.03	0.58
1:B:89:LEU:HD13	1:B:118:MET:HG3	1.85	0.58
1:E:52:GLY:HA2	1:E:308:THR:O	2.02	0.58
1:E:198:LEU:HD11	1:E:306:ILE:CD1	2.33	0.58
1:G:134:MET:O	1:G:138:GLU:HG2	2.03	0.58
1:G:323:SER:C	1:G:325:LEU:H	2.12	0.58
1:H:203:SER:CB	1:H:243:GLU:HG2	2.31	0.58
1:J:234:ALA:O	1:J:237:LEU:HB2	2.03	0.58
1:J:264:ALA:HB1	1:J:325:LEU:HD21	1.85	0.58
1:L:103:ARG:HE	1:L:133:LEU:HD11	1.66	0.58
1:O:108:LEU:HG	1:P:322:LEU:HD11	1.84	0.58
1:Q:81:SER:OG	1:Q:83:HIS:HB3	2.03	0.58
1:Q:82:ASN:HA	1:Q:111:ASN:HD21	1.66	0.58
1:Q:140:ILE:O	1:Q:144:LEU:HD13	2.02	0.58
1:R:134:MET:HE1	1:R:155:PRO:HA	1.85	0.58
1:S:221:GLU:OE1	1:S:224:THR:HG22	2.03	0.58
1:V:181:LYS:CD	1:V:181:LYS:N	2.66	0.58
1:X:62:LEU:C	1:X:64:ASP:H	2.10	0.58
1:C:55:ILE:HD12	1:C:55:ILE:N	2.18	0.58
1:C:109:LYS:HE3	1:C:316:HIS:ND1	2.18	0.58
1:G:17:LEU:CD2	1:G:59:GLU:HG2	2.28	0.58
1:H:27:LEU:HD21	1:H:40:ILE:CG2	2.33	0.58
1:H:216:VAL:C	1:H:252:SER:HB3	2.28	0.58
1:J:247:GLU:HG2	1:J:249:TYR:HE1	1.68	0.58
1:K:214:ILE:HG23	1:K:214:ILE:O	2.02	0.58
1:L:101:VAL:HG11	1:L:133:LEU:HB3	1.84	0.58
1:L:196:ALA:CB	1:L:231:ILE:HG22	2.33	0.58
1:Q:219:PHE:HD1	1:Q:250:ASP:HB2	1.67	0.58
1:U:19:PRO:HG2	1:V:25:GLN:OE1	2.03	0.58
1:W:187:VAL:HG21	1:W:194:THR:CG2	2.30	0.58
1:X:186:VAL:HG21	1:X:290:LEU:CD2	2.33	0.58
1:B:269:LYS:HB3	1:B:273:ARG:HH22	1.69	0.58
1:E:134:MET:O	1:E:138:GLU:HG2	2.03	0.58
1:H:54:LYS:HE3	2:H:1081:5PA:C9	2.33	0.58
1:I:129:ASP:CG	1:I:130:SER:N	2.58	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:181:LYS:HE2	1:J:302:LYS:NZ	2.19	0.58
1:M:174:ILE:HA	1:M:177:GLN:HE21	1.68	0.58
1:N:103:ARG:HG2	1:N:103:ARG:HH11	1.68	0.58
1:O:266:ILE:O	1:O:270:VAL:HG23	2.03	0.58
1:P:127:ALA:HB1	1:P:128:LYS:CE	2.34	0.58
1:Q:129:ASP:OD2	1:Q:130:SER:N	2.37	0.58
1:R:100:LEU:HD23	1:R:102:LEU:HD21	1.84	0.58
1:R:263:VAL:O	1:R:266:ILE:HG22	2.03	0.58
1:T:29:ASN:C	1:T:31:SER:N	2.59	0.58
1:T:82:ASN:HD22	1:T:111:ASN:ND2	1.97	0.58
1:U:79:VAL:HG11	1:U:105:LYS:O	2.03	0.58
1:U:260:THR:O	1:U:324:LEU:HD23	2.04	0.58
1:U:279:ASP:O	1:U:284:GLY:HA3	2.03	0.58
1:W:186:VAL:HA	1:W:212:VAL:O	2.03	0.58
1:W:279:ASP:N	1:W:283:THR:OG1	2.31	0.58
1:G:147:GLU:HG3	1:I:221:GLU:OE2	2.04	0.58
1:H:99:ILE:HG12	1:H:121:GLU:CG	2.32	0.58
1:J:34:ILE:HD11	1:J:291:VAL:HA	1.83	0.58
1:M:218:ARG:CD	1:M:256:TYR:H	2.14	0.58
1:N:218:ARG:HD3	1:N:222:VAL:CG1	2.33	0.58
1:Q:64:ASP:HB3	1:Q:152:TYR:OH	2.03	0.58
1:Q:93:LYS:HA	1:R:272:THR:O	2.03	0.58
1:Q:133:LEU:O	1:Q:136:TYR:HB2	2.03	0.58
1:T:128:LYS:CG	1:T:130:SER:OG	2.47	0.58
1:A:103:ARG:HH11	1:A:128:LYS:NZ	2.01	0.58
1:C:4:LYS:HE2	1:C:8:LEU:HD11	1.86	0.58
1:C:190:GLY:N	2:C:1031:5PA:O3P	2.34	0.58
1:D:72:VAL:HG21	1:D:144:LEU:HD21	1.84	0.58
1:E:221:GLU:OE1	1:E:224:THR:HG23	2.03	0.58
1:G:62:LEU:C	1:G:64:ASP:N	2.61	0.58
1:H:41:LYS:HZ3	1:H:177:GLN:HE22	1.51	0.58
1:H:56:ARG:HG2	1:H:56:ARG:HH11	1.68	0.58
1:H:255:GLU:HG3	1:H:258:LYS:HB2	1.84	0.58
1:I:118:MET:HE1	1:J:271:GLY:HA3	1.85	0.58
1:J:1:MET:CE	1:J:5:ILE:HB	2.33	0.58
1:J:54:LYS:O	1:J:58:LEU:HD23	2.03	0.58
1:M:41:LYS:HZ3	1:M:177:GLN:HE22	1.50	0.58
1:Q:25:GLN:HE21	1:Q:276:ILE:HD11	1.67	0.58
1:U:27:LEU:HB3	1:U:274:GLU:OE2	2.04	0.58
1:W:60:TYR:OH	1:W:169:ARG:HD2	2.03	0.58
1:B:1:MET:HE1	1:B:172:GLY:HA3	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:270:VAL:O	1:G:270:VAL:CG1	2.51	0.58
1:M:221:GLU:OE1	1:M:225:SER:HB3	2.03	0.58
1:O:25:GLN:HE22	1:O:42:ARG:HE	1.49	0.58
1:O:255:GLU:HG3	1:O:258:LYS:HB2	1.86	0.58
1:Q:65:ALA:HB2	1:Q:152:TYR:CD2	2.39	0.58
1:V:82:ASN:ND2	1:V:111:ASN:ND2	2.44	0.58
1:X:55:ILE:CD1	1:X:86:VAL:HG11	2.32	0.58
1:X:223:MET:HE2	1:X:248:LEU:CD2	2.33	0.58
1:A:140:ILE:O	1:A:144:LEU:HB2	2.04	0.58
1:A:147:GLU:O	1:A:149:ARG:N	2.31	0.58
1:A:171:VAL:HG21	1:A:201:GLY:C	2.29	0.58
1:C:19:PRO:HD2	1:C:20:TRP:CZ3	2.38	0.58
1:C:260:THR:C	1:C:324:LEU:HD23	2.27	0.58
1:I:39:TYR:CE2	1:I:180:VAL:HG11	2.39	0.58
1:I:116:LYS:NZ	1:I:122:THR:HG22	2.19	0.58
1:J:147:GLU:C	1:J:149:ARG:H	2.12	0.58
1:J:231:ILE:HD11	1:J:242:VAL:HG21	1.85	0.58
1:L:101:VAL:HG12	1:L:133:LEU:HB3	1.86	0.58
1:M:116:LYS:HZ1	1:M:122:THR:CG2	2.16	0.58
1:N:321:LEU:O	1:N:325:LEU:HD23	2.04	0.58
1:P:133:LEU:O	1:P:136:TYR:HB2	2.03	0.58
1:P:164:THR:C	1:P:166:GLY:N	2.59	0.58
1:P:267:ILE:HG12	1:P:278:LEU:O	2.04	0.58
1:W:187:VAL:HG13	1:W:195:LEU:HG	1.85	0.58
1:W:214:ILE:HD13	1:W:286:ALA:CA	2.20	0.58
1:W:226:LYS:O	1:W:230:LEU:N	2.34	0.58
1:X:200:LEU:HD22	1:X:204:ILE:HD11	1.86	0.58
1:A:116:LYS:NZ	1:A:122:THR:HB	2.19	0.58
1:A:143:GLU:O	1:A:146:ARG:HG2	2.03	0.58
1:A:281:VAL:HG22	1:A:282:TYR:CD1	2.38	0.58
1:B:161:PRO:O	1:B:164:THR:HB	2.03	0.58
1:B:263:VAL:O	1:B:267:ILE:HG13	2.04	0.58
1:C:120:ILE:HG22	1:C:121:GLU:N	2.18	0.58
1:C:195:LEU:CD1	1:C:213:GLY:HA3	2.33	0.58
1:C:230:LEU:HD23	1:C:230:LEU:C	2.29	0.58
1:E:187:VAL:HG21	1:E:194:THR:HG21	1.85	0.58
2:E:1051:5PA:H4A2	2:E:1051:5PA:O4P	2.04	0.58
1:F:40:ILE:HD11	1:F:307:HIS:HB2	1.85	0.58
1:F:103:ARG:NH2	1:F:131:PHE:CD2	2.69	0.58
1:G:1:MET:HE3	1:G:1:MET:C	2.28	0.58
1:G:198:LEU:HD23	1:G:198:LEU:O	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:160:SER:O	1:H:163:GLY:N	2.36	0.58
1:I:66:LEU:HD21	1:I:96:LEU:HD21	1.85	0.58
1:L:287:PHE:O	1:L:290:LEU:HB3	2.04	0.58
1:M:76:VAL:HA	1:M:101:VAL:O	2.02	0.58
1:O:99:ILE:HG12	1:O:121:GLU:OE1	2.03	0.58
1:O:134:MET:CE	1:O:155:PRO:HA	2.21	0.58
1:P:249:TYR:HD1	1:P:249:TYR:N	2.01	0.58
1:Q:264:ALA:CB	1:Q:325:LEU:HD22	2.30	0.58
1:S:92:LYS:HE2	3:S:1219:HOH:O	2.03	0.58
1:T:211:PRO:HG2	1:T:246:PRO:HB3	1.86	0.58
1:V:132:GLU:C	1:V:134:MET:N	2.62	0.58
1:W:42:ARG:HB3	1:W:42:ARG:NH1	2.18	0.58
1:X:82:ASN:OD1	1:X:310:GLY:HA2	2.03	0.58
1:A:222:VAL:O	1:A:226:LYS:HB2	2.04	0.58
1:D:269:LYS:HD3	1:D:273:ARG:HH22	1.67	0.58
1:F:85:PHE:CZ	1:F:89:LEU:HD13	2.39	0.58
1:G:145:LYS:C	1:G:147:GLU:N	2.57	0.58
1:G:253:PHE:CB	1:G:260:THR:HG21	2.34	0.58
1:K:54:LYS:HG3	1:K:83:HIS:HA	1.86	0.58
1:K:131:PHE:C	1:K:133:LEU:N	2.57	0.58
1:P:128:LYS:C	1:P:130:SER:H	2.11	0.58
1:R:195:LEU:CD1	1:R:227:LEU:HD21	2.27	0.58
1:T:113:LEU:HD22	1:T:117:ILE:HG13	1.86	0.58
1:T:302:LYS:HD2	3:T:1219:HOH:O	2.04	0.58
1:U:289:GLY:O	1:U:293:LEU:HB2	2.04	0.58
1:V:79:VAL:HA	1:V:102:LEU:HB3	1.85	0.58
1:X:145:LYS:C	1:X:147:GLU:N	2.61	0.58
1:A:9:LEU:HD13	1:A:169:ARG:HH11	1.68	0.58
1:B:219:PHE:CE2	1:B:248:LEU:HD23	2.38	0.58
1:C:43:ASP:O	1:C:46:THR:HG23	2.04	0.58
1:C:109:LYS:N	1:C:113:LEU:HB2	2.19	0.58
1:C:143:GLU:HA	1:C:146:ARG:NE	2.19	0.58
1:C:178:SER:HG	1:C:182:PHE:HE1	1.52	0.58
1:H:85:PHE:CZ	1:H:89:LEU:HD22	2.39	0.58
1:I:89:LEU:HD11	1:I:118:MET:HE3	1.86	0.58
1:J:54:LYS:C	1:J:58:LEU:HD23	2.29	0.58
1:J:128:LYS:H	1:J:128:LYS:HD2	1.67	0.58
1:J:128:LYS:HG2	1:J:130:SER:HG	1.68	0.58
1:K:1:MET:HA	1:K:1:MET:HE3	1.85	0.58
1:K:25:GLN:HE22	1:K:276:ILE:HD11	1.68	0.58
1:K:71:ASP:O	1:K:97:ASP:HB3	2.04	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:74:ILE:HG22	1:L:137:ALA:HB1	1.85	0.58
1:L:194:THR:O	1:L:198:LEU:HB2	2.04	0.58
1:O:290:LEU:CD1	1:O:303:ILE:HG21	2.33	0.58
1:P:20:TRP:CD1	1:P:20:TRP:H	2.22	0.58
1:P:41:LYS:O	1:P:43:ASP:N	2.36	0.58
1:P:114:LEU:O	1:P:118:MET:HG2	2.04	0.58
1:V:15:VAL:HG23	1:V:63:GLY:HA2	1.85	0.58
1:V:219:PHE:O	1:V:222:VAL:HG13	2.03	0.58
1:V:321:LEU:O	1:V:325:LEU:HD22	2.04	0.58
1:A:8:LEU:HD12	1:A:204:ILE:HG21	1.85	0.57
1:F:123:ARG:HD2	1:F:140:ILE:CD1	2.34	0.57
1:F:181:LYS:CE	1:F:302:LYS:HZ2	2.13	0.57
1:F:183:ASP:OD2	1:F:302:LYS:HB2	2.04	0.57
1:G:101:VAL:HG11	1:G:133:LEU:O	2.04	0.57
1:I:186:VAL:HG23	1:I:305:PHE:HD1	1.69	0.57
1:J:66:LEU:CD2	1:J:96:LEU:HD21	2.34	0.57
1:J:133:LEU:H	1:J:133:LEU:HD12	1.69	0.57
1:N:41:LYS:NZ	1:N:177:GLN:HE22	2.02	0.57
1:N:260:THR:OG1	1:N:263:VAL:HG23	2.04	0.57
1:Q:80:HIS:O	1:Q:111:ASN:HB2	2.04	0.57
1:R:82:ASN:OD1	1:R:310:GLY:HA2	2.04	0.57
1:R:292:ASP:OD1	1:R:296:LYS:HE3	2.04	0.57
1:S:79:VAL:HG11	1:S:105:LYS:O	2.04	0.57
1:S:222:VAL:HG22	1:S:226:LYS:CD	2.34	0.57
1:U:195:LEU:HD21	1:U:246:PRO:HB2	1.86	0.57
1:U:318:GLY:O	1:U:319:ASP:C	2.46	0.57
1:V:14:ARG:HG2	1:V:14:ARG:HH11	1.68	0.57
1:V:14:ARG:HH22	1:V:169:ARG:NH2	2.02	0.57
1:V:54:LYS:HG3	1:V:83:HIS:HB2	1.86	0.57
1:V:141:ALA:O	1:V:145:LYS:HG3	2.04	0.57
1:W:41:LYS:HZ3	1:W:177:GLN:HE22	1.52	0.57
1:D:214:ILE:HG23	1:D:251:TYR:HD1	1.69	0.57
1:F:15:VAL:CG2	1:F:66:LEU:HD12	2.34	0.57
1:H:317:TYR:O	1:H:321:LEU:HG	2.04	0.57
1:I:48:LEU:HD23	1:I:48:LEU:C	2.29	0.57
1:I:71:ASP:OD2	1:I:150:LYS:N	2.37	0.57
1:J:72:VAL:CB	1:J:149:ARG:HH21	2.16	0.57
1:M:197:GLY:O	1:M:198:LEU:C	2.46	0.57
1:O:20:TRP:CE2	1:P:23:PRO:HG3	2.39	0.57
1:O:40:ILE:CD1	1:O:307:HIS:HB2	2.33	0.57
1:P:128:LYS:HE3	1:P:132:GLU:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:54:LYS:CE	2:Q:1171:5PA:H91	2.33	0.57
1:Q:118:MET:HE3	1:R:271:GLY:HA3	1.86	0.57
1:Q:308:THR:CB	2:Q:1171:5PA:N1	2.67	0.57
1:S:41:LYS:HZ1	1:S:177:GLN:NE2	1.98	0.57
1:V:17:LEU:HD23	1:V:59:GLU:HG2	1.86	0.57
1:V:138:GLU:O	1:V:139:GLU:C	2.46	0.57
1:V:180:VAL:HA	1:V:181:LYS:CE	2.34	0.57
1:X:55:ILE:H	1:X:55:ILE:HD12	1.69	0.57
1:X:144:LEU:O	1:X:149:ARG:HB2	2.03	0.57
2:A:1011:5PA:H4A2	2:A:1011:5PA:O4P	2.04	0.57
1:B:186:VAL:HG12	1:B:187:VAL:H	1.69	0.57
1:C:116:LYS:NZ	1:C:122:THR:HG22	2.19	0.57
1:D:34:ILE:HG21	1:D:294:ALA:HB3	1.85	0.57
1:D:169:ARG:NH2	3:D:1044:HOH:O	2.37	0.57
1:E:61:LEU:HA	1:E:162:ILE:HD11	1.86	0.57
1:E:149:ARG:O	1:E:151:PRO:HD3	2.04	0.57
1:E:223:MET:C	1:E:225:SER:N	2.60	0.57
1:F:167:TYR:O	1:F:171:VAL:HG12	2.03	0.57
1:G:101:VAL:HG13	1:G:133:LEU:HG	1.83	0.57
1:I:125:TYR:C	1:I:127:ALA:H	2.10	0.57
1:I:167:TYR:HA	1:I:170:ALA:HB2	1.85	0.57
1:J:145:LYS:C	1:J:147:GLU:H	2.12	0.57
1:K:84:ALA:C	1:K:100:LEU:HD21	2.28	0.57
1:L:15:VAL:O	1:L:17:LEU:HD22	2.03	0.57
1:L:25:GLN:NE2	1:L:42:ARG:NE	2.52	0.57
1:L:255:GLU:CG	1:L:258:LYS:HD2	2.34	0.57
1:M:72:VAL:HG23	1:M:97:ASP:O	2.04	0.57
1:M:182:PHE:CD2	1:M:304:LEU:HB2	2.39	0.57
1:O:58:LEU:HA	1:O:61:LEU:HB2	1.84	0.57
1:Q:306:ILE:O	1:Q:308:THR:N	2.37	0.57
1:R:116:LYS:HZ1	1:R:122:THR:HB	1.69	0.57
1:R:192:GLY:O	1:R:193:GLY:C	2.46	0.57
1:T:260:THR:C	1:T:324:LEU:HD23	2.30	0.57
1:U:263:VAL:O	1:U:266:ILE:HG22	2.04	0.57
1:A:25:GLN:HE21	1:A:42:ARG:CG	2.17	0.57
1:D:127:ALA:C	1:D:128:LYS:HD3	2.29	0.57
1:E:17:LEU:CD2	1:E:59:GLU:HG2	2.33	0.57
1:G:17:LEU:O	1:G:19:PRO:CD	2.49	0.57
1:G:263:VAL:O	1:G:266:ILE:HG22	2.04	0.57
1:J:25:GLN:HE21	1:J:42:ARG:NE	2.02	0.57
1:J:217:GLY:O	1:J:218:ARG:O	2.23	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:226:LYS:O	1:J:229:ASN:HB3	2.04	0.57
1:K:133:LEU:HD12	1:K:136:TYR:HD2	1.68	0.57
1:K:242:VAL:HG23	3:K:1119:HOH:O	2.04	0.57
1:N:245:ARG:NH2	3:N:1148:HOH:O	2.36	0.57
1:P:164:THR:C	1:P:166:GLY:H	2.12	0.57
1:P:255:GLU:HG3	1:P:258:LYS:HB2	1.86	0.57
1:Q:123:ARG:NH1	1:Q:140:ILE:HG23	2.19	0.57
1:S:139:GLU:O	1:S:142:GLU:HB2	2.04	0.57
1:S:181:LYS:CD	1:S:181:LYS:N	2.67	0.57
1:T:227:LEU:O	1:T:231:ILE:HG23	2.04	0.57
1:V:116:LYS:NZ	1:V:122:THR:HB	2.19	0.57
1:W:138:GLU:O	1:W:141:ALA:HB3	2.03	0.57
1:W:167:TYR:C	1:W:169:ARG:N	2.60	0.57
1:W:247:GLU:HB3	1:W:249:TYR:HE1	1.69	0.57
1:A:114:LEU:HD11	1:B:315:PHE:CZ	2.40	0.57
1:B:34:ILE:CG1	1:B:291:VAL:HG13	2.34	0.57
1:B:171:VAL:HG21	1:B:201:GLY:HA3	1.86	0.57
1:C:127:ALA:HB3	1:C:136:TYR:HE2	1.68	0.57
1:D:41:LYS:HZ3	1:D:177:GLN:HE22	1.48	0.57
1:E:30:ILE:O	1:E:34:ILE:HG12	2.04	0.57
1:F:56:ARG:HG2	1:F:56:ARG:HH11	1.69	0.57
1:H:135:LYS:HE3	1:H:136:TYR:CZ	2.38	0.57
1:I:288:TYR:C	1:I:288:TYR:CD2	2.82	0.57
1:J:247:GLU:HG2	1:J:249:TYR:CE1	2.40	0.57
1:M:219:PHE:C	1:M:219:PHE:CD2	2.82	0.57
1:N:141:ALA:O	1:N:145:LYS:HB2	2.05	0.57
1:P:281:VAL:HG13	1:P:282:TYR:CD1	2.39	0.57
1:Q:7:ALA:C	1:Q:9:LEU:H	2.12	0.57
1:Q:134:MET:HE1	1:Q:156:PRO:HD3	1.86	0.57
1:Q:168:VAL:HG22	1:Q:200:LEU:HB3	1.87	0.57
1:Q:231:ILE:HG22	1:Q:231:ILE:O	2.04	0.57
1:S:16:GLU:C	1:S:17:LEU:HD12	2.29	0.57
1:T:133:LEU:CD1	1:T:133:LEU:H	2.18	0.57
1:V:25:GLN:HE22	1:V:42:ARG:HE	1.50	0.57
1:V:76:VAL:HG12	1:V:101:VAL:HB	1.87	0.57
1:C:132:GLU:C	1:C:134:MET:H	2.13	0.57
1:C:142:GLU:O	1:C:146:ARG:HG2	2.04	0.57
1:F:203:SER:CA	1:F:243:GLU:HG3	2.34	0.57
1:G:171:VAL:HG21	1:G:201:GLY:C	2.29	0.57
1:H:30:ILE:HG22	1:H:34:ILE:HD12	1.87	0.57
2:H:1081:5PA:O4P	2:H:1081:5PA:H4A2	2.02	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:58:LEU:HD12	1:I:61:LEU:HD12	1.86	0.57
1:I:78:ALA:O	1:I:102:LEU:HD22	2.04	0.57
1:I:294:ALA:HB2	1:I:299:LEU:HD12	1.86	0.57
1:J:311:ILE:O	1:J:312:SER:C	2.47	0.57
1:K:109:LYS:HA	1:K:113:LEU:HD12	1.86	0.57
1:K:214:ILE:CD1	1:K:289:GLY:HA3	2.35	0.57
1:L:72:VAL:HG12	1:L:151:PRO:HA	1.86	0.57
1:P:109:LYS:HD2	1:P:316:HIS:O	2.04	0.57
1:R:170:ALA:O	1:R:174:ILE:HG13	2.05	0.57
1:T:4:LYS:HE2	1:T:204:ILE:HG23	1.85	0.57
1:T:260:THR:O	1:T:324:LEU:HD23	2.05	0.57
1:U:83:HIS:O	1:U:87:THR:OG1	2.22	0.57
2:U:1211:5PA:O4P	2:U:1211:5PA:H4A2	2.05	0.57
1:X:34:ILE:HD11	1:X:291:VAL:HA	1.86	0.57
1:A:242:VAL:HG23	3:A:1023:HOH:O	2.05	0.57
1:B:25:GLN:HE21	1:B:42:ARG:NE	2.03	0.57
1:B:48:LEU:HD23	1:B:48:LEU:C	2.29	0.57
1:G:98:ALA:C	1:G:99:ILE:HG13	2.29	0.57
1:H:106:GLU:C	1:H:107:GLU:O	2.46	0.57
1:I:7:ALA:HB1	1:L:28:PRO:HG3	1.87	0.57
1:J:62:LEU:HD21	1:J:73:VAL:HG21	1.85	0.57
1:K:75:THR:HA	1:K:154:ILE:O	2.05	0.57
1:K:207:GLU:C	1:K:209:ILE:H	2.13	0.57
1:L:210:ARG:HD2	1:L:247:GLU:OE2	2.04	0.57
1:M:103:ARG:HG3	1:M:128:LYS:HG2	1.87	0.57
2:N:1141:5PA:O4P	2:N:1141:5PA:H4A2	2.04	0.57
1:O:126:ASP:O	1:O:128:LYS:N	2.26	0.57
1:O:190:GLY:N	2:O:1151:5PA:O3P	2.37	0.57
1:P:60:TYR:OH	1:P:169:ARG:NH1	2.37	0.57
1:Q:107:GLU:O	1:Q:112:TYR:HD2	1.87	0.57
1:R:192:GLY:O	1:R:194:THR:N	2.37	0.57
1:R:280:PRO:O	1:R:285:LYS:HE3	2.05	0.57
1:U:20:TRP:CD1	1:V:20:TRP:HZ3	2.22	0.57
1:W:247:GLU:HB3	1:W:249:TYR:CE1	2.40	0.57
1:A:125:TYR:C	1:A:127:ALA:N	2.63	0.57
1:B:75:THR:HG22	1:B:100:LEU:HD12	1.87	0.57
1:B:103:ARG:NH2	1:B:131:PHE:CE2	2.72	0.57
1:C:1:MET:HE3	1:C:2:HIS:N	2.20	0.57
1:C:180:VAL:O	1:C:182:PHE:CD1	2.57	0.57
1:D:171:VAL:HG23	1:D:172:GLY:N	2.20	0.57
1:E:216:VAL:HG12	1:E:285:LYS:HB2	1.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:42:ARG:HD2	1:F:44:ASP:OD1	2.05	0.57
1:F:128:LYS:O	1:F:130:SER:N	2.37	0.57
1:G:103:ARG:HD2	1:G:128:LYS:HA	1.86	0.57
1:G:110:GLY:HA3	1:G:316:HIS:CD2	2.39	0.57
1:H:202:LEU:CD2	1:H:209:ILE:HD12	2.35	0.57
1:I:186:VAL:HG12	1:I:212:VAL:CB	2.31	0.57
1:I:187:VAL:O	1:I:213:GLY:HA2	2.05	0.57
1:J:56:ARG:HG2	1:J:56:ARG:HH11	1.70	0.57
1:L:128:LYS:N	1:L:128:LYS:CD	2.63	0.57
1:O:72:VAL:HG11	1:O:144:LEU:CD2	2.31	0.57
1:Q:109:LYS:HG3	1:Q:316:HIS:CE1	2.40	0.57
1:R:293:LEU:HD23	1:R:299:LEU:HD21	1.87	0.57
1:W:143:GLU:HA	1:W:146:ARG:HG2	1.87	0.57
1:W:145:LYS:C	1:W:147:GLU:H	2.12	0.57
1:C:196:ALA:HA	1:C:231:ILE:HD11	1.87	0.57
1:E:53:ASN:HB3	1:E:308:THR:HG22	1.87	0.57
1:G:72:VAL:HG11	1:G:144:LEU:CD2	2.35	0.57
1:H:74:ILE:HG22	1:H:75:THR:H	1.69	0.57
1:H:85:PHE:CE1	1:H:114:LEU:HB3	2.40	0.57
1:H:103:ARG:HB3	1:H:133:LEU:HD21	1.86	0.57
1:H:252:SER:O	1:H:253:PHE:HB2	2.05	0.57
1:I:8:LEU:CD2	1:L:28:PRO:HB3	2.34	0.57
1:J:15:VAL:HG23	1:J:63:GLY:HA2	1.86	0.57
1:J:162:ILE:HG23	1:J:163:GLY:N	2.20	0.57
1:L:224:THR:HG23	1:L:225:SER:N	2.18	0.57
1:N:20:TRP:H	1:N:20:TRP:HD1	1.53	0.57
1:Q:133:LEU:O	1:Q:136:TYR:N	2.38	0.57
1:S:202:LEU:CD1	1:S:211:PRO:HG3	2.34	0.57
1:V:93:LYS:C	1:V:95:GLY:H	2.11	0.57
1:W:53:ASN:HB3	1:W:167:TYR:OH	2.05	0.57
1:W:320:LYS:O	1:W:324:LEU:HD13	2.04	0.57
1:X:25:GLN:O	1:X:39:TYR:HA	2.04	0.57
1:X:158:GLY:O	1:X:160:SER:N	2.35	0.57
1:X:196:ALA:HB1	1:X:231:ILE:HG22	1.86	0.57
1:X:267:ILE:C	1:X:269:LYS:N	2.57	0.57
1:A:79:VAL:HG11	1:A:105:LYS:O	2.04	0.57
1:A:218:ARG:HG3	1:A:255:GLU:HA	1.87	0.57
1:B:14:ARG:NH1	1:B:169:ARG:CZ	2.68	0.57
1:D:103:ARG:HG2	1:D:103:ARG:NH1	2.14	0.57
1:D:191:SER:OG	2:D:1041:5PA:O1P	2.19	0.57
1:D:306:ILE:HG22	1:D:308:THR:HG23	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:20:TRP:CD1	1:H:20:TRP:CZ3	2.92	0.57
1:G:123:ARG:NH1	1:G:140:ILE:HG21	2.20	0.57
1:H:247:GLU:HB3	1:H:249:TYR:HE1	1.68	0.57
1:I:222:VAL:C	1:I:226:LYS:HB2	2.29	0.57
1:J:9:LEU:HD21	1:J:165:LEU:HD22	1.86	0.57
1:J:214:ILE:HG21	1:J:286:ALA:HA	1.87	0.57
1:L:67:SER:N	3:L:1149:HOH:O	2.37	0.57
1:L:72:VAL:HG23	1:L:97:ASP:HB3	1.87	0.57
1:L:316:HIS:ND1	1:L:316:HIS:O	2.38	0.57
1:M:71:ASP:OD2	1:M:71:ASP:C	2.47	0.57
1:M:116:LYS:NZ	1:M:122:THR:CG2	2.68	0.57
1:P:43:ASP:OD2	1:P:56:ARG:NE	2.37	0.57
1:P:65:ALA:HB2	1:P:152:TYR:CD2	2.39	0.57
1:R:287:PHE:O	1:R:291:VAL:HG23	2.04	0.57
1:S:19:PRO:HB2	1:S:20:TRP:HE3	1.68	0.57
1:S:40:ILE:HD13	1:S:276:ILE:HD13	1.87	0.57
1:U:167:TYR:HA	1:U:170:ALA:CB	2.34	0.57
1:U:221:GLU:O	1:U:223:MET:N	2.38	0.57
1:U:293:LEU:HB3	1:U:299:LEU:CD1	2.34	0.57
1:V:219:PHE:CE2	1:V:248:LEU:HD23	2.40	0.57
1:W:22:THR:HB	1:W:42:ARG:O	2.05	0.57
1:X:162:ILE:HD12	1:X:165:LEU:HD12	1.85	0.57
2:X:1241:5PA:H4A2	2:X:1241:5PA:O4P	2.03	0.57
1:B:142:GLU:HG3	1:B:146:ARG:HE	1.70	0.56
1:C:229:ASN:ND2	1:C:232:LYS:HE2	2.20	0.56
1:E:183:ASP:OD2	1:E:302:LYS:N	2.36	0.56
1:F:202:LEU:HD12	1:F:211:PRO:HG3	1.87	0.56
1:G:157:GLY:O	1:G:158:GLY:C	2.48	0.56
1:G:266:ILE:HG21	1:G:284:GLY:O	2.05	0.56
1:H:223:MET:O	1:H:224:THR:C	2.48	0.56
1:I:179:GLU:HG2	1:I:179:GLU:O	2.04	0.56
1:I:236:GLU:HB2	3:I:1118:HOH:O	2.03	0.56
1:K:181:LYS:HE3	1:K:302:LYS:HZ2	1.70	0.56
1:K:221:GLU:O	1:K:223:MET:N	2.35	0.56
1:L:105:LYS:O	1:L:107:GLU:N	2.35	0.56
1:L:131:PHE:C	1:L:133:LEU:H	2.13	0.56
1:P:255:GLU:HG2	1:P:258:LYS:HD2	1.86	0.56
1:Q:5:ILE:O	1:Q:6:PHE:C	2.48	0.56
1:Q:66:LEU:C	1:Q:68:LYS:N	2.63	0.56
1:R:5:ILE:HD11	1:R:205:LEU:CG	2.35	0.56
1:R:79:VAL:HG11	1:R:105:LYS:O	2.03	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:227:LEU:O	1:R:231:ILE:HG23	2.04	0.56
1:S:142:GLU:O	1:S:146:ARG:HG2	2.05	0.56
1:T:196:ALA:O	1:T:199:SER:HB2	2.05	0.56
1:V:222:VAL:CG1	1:V:223:MET:H	2.04	0.56
1:W:135:LYS:HE3	1:W:136:TYR:CE1	2.40	0.56
1:B:34:ILE:CD1	1:B:291:VAL:HA	2.35	0.56
1:C:296:LYS:HD2	1:C:298:GLU:OE2	2.05	0.56
1:D:41:LYS:CE	1:D:177:GLN:HE22	2.18	0.56
1:I:113:LEU:HD22	1:I:117:ILE:CD1	2.34	0.56
1:I:322:LEU:HD13	1:J:108:LEU:HD21	1.86	0.56
1:K:136:TYR:HA	1:K:139:GLU:CG	2.35	0.56
1:K:181:LYS:HE3	1:K:302:LYS:NZ	2.21	0.56
1:M:30:ILE:O	1:M:34:ILE:HG12	2.06	0.56
1:N:195:LEU:HD13	1:N:195:LEU:O	2.04	0.56
1:O:256:TYR:HE1	1:O:281:VAL:HG23	1.69	0.56
1:O:310:GLY:O	1:O:312:SER:N	2.38	0.56
1:Q:128:LYS:C	1:Q:128:LYS:HD3	2.29	0.56
1:R:142:GLU:O	1:R:146:ARG:HG3	2.06	0.56
1:R:214:ILE:HB	1:R:286:ALA:HA	1.85	0.56
1:U:311:ILE:HG23	1:U:312:SER:N	2.21	0.56
1:W:145:LYS:HB3	1:W:151:PRO:CD	2.35	0.56
1:W:159:ALA:HB1	1:W:230:LEU:HD11	1.86	0.56
1:X:11:LYS:HG2	3:X:1265:HOH:O	2.04	0.56
1:X:261:GLY:N	1:X:324:LEU:HD23	2.20	0.56
1:A:25:GLN:HE21	1:A:42:ARG:HG3	1.69	0.56
1:A:118:MET:CE	1:B:271:GLY:HA3	2.35	0.56
1:A:221:GLU:O	1:A:222:VAL:C	2.49	0.56
1:B:268:ARG:NH1	1:B:325:LEU:HD12	2.20	0.56
1:C:207:GLU:OE1	1:C:207:GLU:HA	2.04	0.56
1:E:260:THR:HB	1:E:262:GLU:OE2	2.05	0.56
1:G:106:GLU:OE2	1:G:124:VAL:HB	2.05	0.56
1:G:107:GLU:HB3	1:G:109:LYS:HG2	1.86	0.56
1:I:77:GLY:O	1:I:102:LEU:HA	2.05	0.56
1:I:128:LYS:O	1:I:129:ASP:HB3	2.06	0.56
1:I:214:ILE:HD11	1:I:251:TYR:HB2	1.86	0.56
1:I:221:GLU:HG3	1:I:222:VAL:N	2.19	0.56
1:J:12:PHE:CE2	1:J:237:LEU:HD22	2.41	0.56
1:J:211:PRO:CB	1:J:246:PRO:HB3	2.28	0.56
1:K:1:MET:CE	1:K:172:GLY:HA3	2.35	0.56
1:K:12:PHE:CE2	1:K:237:LEU:HD13	2.41	0.56
1:K:89:LEU:HG	1:L:271:GLY:O	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:14:ARG:HD2	1:L:60:TYR:CZ	2.39	0.56
1:L:244:VAL:O	1:L:245:ARG:O	2.23	0.56
1:M:15:VAL:CG1	1:M:17:LEU:HD13	2.33	0.56
1:M:50:ILE:HB	1:M:311:ILE:HG22	1.86	0.56
1:N:223:MET:O	1:N:224:THR:C	2.48	0.56
1:Q:4:LYS:HE2	1:Q:204:ILE:O	2.05	0.56
1:Q:77:GLY:O	1:Q:102:LEU:HA	2.04	0.56
1:Q:113:LEU:HD23	1:Q:113:LEU:C	2.30	0.56
1:Q:168:VAL:HG11	1:Q:238:LEU:HD11	1.85	0.56
1:Q:308:THR:HB	2:Q:1171:5PA:N1	2.21	0.56
1:R:53:ASN:HB3	1:R:167:TYR:OH	2.05	0.56
1:R:133:LEU:HD12	1:R:133:LEU:N	2.21	0.56
1:T:22:THR:HG21	1:T:43:ASP:HA	1.86	0.56
1:T:157:GLY:HA2	2:T:1201:5PA:C9	2.35	0.56
1:T:189:ALA:HB3	1:T:215:ALA:HA	1.85	0.56
1:T:263:VAL:HG22	1:T:285:LYS:HG2	1.87	0.56
1:V:18:ILE:HD11	1:V:56:ARG:HA	1.88	0.56
1:W:26:TYR:HB2	1:W:39:TYR:CE2	2.41	0.56
1:W:48:LEU:HD23	1:W:48:LEU:C	2.30	0.56
1:W:126:ASP:C	1:W:128:LYS:N	2.58	0.56
1:W:164:THR:HG23	1:W:197:GLY:CA	2.35	0.56
1:W:259:ILE:O	1:W:324:LEU:HD21	2.04	0.56
1:X:62:LEU:C	1:X:64:ASP:N	2.61	0.56
1:X:181:LYS:H	1:X:181:LYS:CE	2.16	0.56
1:X:238:LEU:N	1:X:238:LEU:HD23	2.19	0.56
1:A:201:GLY:O	1:A:205:LEU:HG	2.05	0.56
1:B:78:ALA:N	1:B:81:SER:HB2	2.20	0.56
1:D:20:TRP:H	1:D:20:TRP:CD1	2.23	0.56
1:D:144:LEU:O	1:D:149:ARG:HB2	2.06	0.56
1:E:146:ARG:O	1:E:146:ARG:HG3	2.06	0.56
1:F:60:TYR:HE1	1:F:169:ARG:HD2	1.70	0.56
1:F:65:ALA:HB2	1:F:152:TYR:CD2	2.40	0.56
1:F:144:LEU:HD12	1:F:149:ARG:HD3	1.86	0.56
1:F:195:LEU:O	1:F:198:LEU:HB3	2.05	0.56
1:G:218:ARG:H	1:G:218:ARG:CD	2.17	0.56
1:G:271:GLY:O	1:H:89:LEU:HD11	2.04	0.56
1:I:113:LEU:CD2	1:J:318:GLY:HA3	2.30	0.56
1:I:171:VAL:HG21	1:I:201:GLY:O	2.05	0.56
1:K:79:VAL:HG12	1:K:80:HIS:N	2.19	0.56
1:K:210:ARG:HD2	1:K:247:GLU:OE2	2.05	0.56
1:M:43:ASP:CG	1:M:56:ARG:HH21	2.11	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:116:LYS:NZ	1:M:122:THR:HG22	2.17	0.56
1:M:247:GLU:OE1	1:M:249:TYR:OH	2.23	0.56
1:P:54:LYS:N	3:P:1162:HOH:O	2.37	0.56
1:Q:304:LEU:HD22	1:Q:304:LEU:C	2.30	0.56
1:R:105:LYS:HG3	1:R:107:GLU:CG	2.28	0.56
1:R:113:LEU:HD23	1:R:113:LEU:O	2.05	0.56
1:R:126:ASP:O	1:R:127:ALA:HB2	2.05	0.56
1:R:261:GLY:N	1:R:262:GLU:OE1	2.38	0.56
1:S:231:ILE:O	1:S:235:ALA:HB2	2.05	0.56
1:S:261:GLY:HA2	1:S:324:LEU:HB3	1.86	0.56
1:V:40:ILE:HD11	1:V:307:HIS:HB2	1.87	0.56
1:V:85:PHE:CZ	1:V:89:LEU:HD22	2.40	0.56
1:X:210:ARG:HD2	1:X:247:GLU:OE2	2.05	0.56
1:A:11:LYS:O	1:A:13:PRO:HD3	2.06	0.56
1:C:34:ILE:HD12	1:C:294:ALA:CB	2.35	0.56
1:C:56:ARG:HD2	1:C:167:TYR:CZ	2.41	0.56
1:C:138:GLU:OE1	1:C:138:GLU:HA	2.04	0.56
1:D:126:ASP:HA	3:D:1059:HOH:O	2.04	0.56
1:D:171:VAL:O	1:D:174:ILE:HB	2.05	0.56
1:D:219:PHE:HE2	1:D:248:LEU:HD23	1.70	0.56
1:E:202:LEU:CD2	1:E:209:ILE:HD12	2.34	0.56
1:F:79:VAL:HG13	1:F:80:HIS:N	2.21	0.56
1:G:216:VAL:CG1	1:G:282:TYR:HA	2.31	0.56
1:H:1:MET:CE	1:H:172:GLY:HA3	2.34	0.56
1:J:82:ASN:OD1	1:J:310:GLY:HA2	2.05	0.56
1:J:240:VAL:HG22	1:J:241:LYS:H	1.70	0.56
1:K:43:ASP:C	1:K:45:LEU:H	2.13	0.56
1:M:19:PRO:C	1:M:20:TRP:HE3	2.14	0.56
1:M:29:ASN:ND2	1:M:273:ARG:O	2.31	0.56
1:M:165:LEU:HD22	1:M:238:LEU:HD21	1.86	0.56
1:M:237:LEU:C	1:M:239:GLY:H	2.11	0.56
1:P:58:LEU:HD21	1:P:86:VAL:HG12	1.86	0.56
1:Q:261:GLY:HA2	1:Q:324:LEU:HD23	1.88	0.56
1:R:61:LEU:HD22	1:R:154:ILE:HG23	1.87	0.56
1:V:103:ARG:NH1	1:V:129:ASP:CG	2.64	0.56
1:V:142:GLU:C	1:V:144:LEU:H	2.12	0.56
1:V:167:TYR:CD2	1:V:194:THR:HG23	2.40	0.56
1:X:29:ASN:HD22	1:X:273:ARG:HB3	1.70	0.56
1:A:54:LYS:HE3	2:A:1011:5PA:H91	1.86	0.56
1:A:210:ARG:HD2	1:A:247:GLU:OE2	2.06	0.56
1:B:170:ALA:O	1:B:174:ILE:HG13	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:222:VAL:HA	3:B:1054:HOH:O	2.04	0.56
1:C:103:ARG:HH12	1:C:128:LYS:HZ2	1.49	0.56
1:D:55:ILE:H	1:D:55:ILE:CD1	2.18	0.56
1:G:41:LYS:HD3	1:G:174:ILE:HD11	1.87	0.56
1:G:99:ILE:HA	1:G:121:GLU:O	2.04	0.56
1:G:229:ASN:ND2	3:G:1100:HOH:O	2.39	0.56
1:H:112:TYR:O	1:H:115:ASP:HB2	2.05	0.56
1:K:17:LEU:HD22	1:K:59:GLU:HG2	1.87	0.56
1:L:252:SER:O	1:L:253:PHE:C	2.48	0.56
1:N:232:LYS:O	1:N:235:ALA:HB3	2.06	0.56
1:O:132:GLU:C	1:O:134:MET:H	2.12	0.56
1:R:225:SER:HA	1:R:228:ASP:OD2	2.05	0.56
1:T:34:ILE:HD11	1:T:291:VAL:HG22	1.88	0.56
1:T:187:VAL:HG21	1:T:194:THR:CG2	2.35	0.56
1:V:218:ARG:NH2	3:V:1258:HOH:O	2.38	0.56
1:A:218:ARG:H	1:A:218:ARG:HD2	1.69	0.56
1:C:287:PHE:CD1	1:C:290:LEU:HD23	2.41	0.56
1:E:54:LYS:CE	2:E:1051:5PA:H91	2.36	0.56
1:E:131:PHE:HD1	1:E:132:GLU:N	2.04	0.56
1:E:181:LYS:HG2	1:E:302:LYS:NZ	2.20	0.56
1:F:54:LYS:HD3	1:F:57:LYS:HZ3	1.70	0.56
1:G:74:ILE:CG2	1:G:153:VAL:HG22	2.35	0.56
1:H:62:LEU:HD13	1:H:94:LEU:HD11	1.87	0.56
1:H:79:VAL:HA	1:H:102:LEU:HB3	1.88	0.56
1:H:181:LYS:HE2	1:H:181:LYS:N	2.09	0.56
1:O:50:ILE:O	1:O:51:GLY:C	2.49	0.56
1:O:165:LEU:HA	1:O:168:VAL:CG2	2.35	0.56
1:O:228:ASP:OD2	1:O:245:ARG:HD2	2.06	0.56
1:Q:103:ARG:NH2	1:Q:130:SER:HA	2.21	0.56
1:R:26:TYR:O	1:R:28:PRO:HD3	2.05	0.56
1:R:157:GLY:CA	2:R:1181:5PA:C9	2.83	0.56
1:W:4:LYS:HE2	1:W:204:ILE:HG23	1.88	0.56
1:X:79:VAL:N	1:X:103:ARG:O	2.39	0.56
1:X:137:ALA:HA	1:X:140:ILE:HD12	1.87	0.56
1:A:146:ARG:O	1:A:147:GLU:HG3	2.06	0.56
1:C:17:LEU:O	1:C:19:PRO:HD3	2.05	0.56
1:C:61:LEU:HD23	1:C:162:ILE:HD11	1.87	0.56
1:G:252:SER:O	1:G:253:PHE:HB2	2.05	0.56
1:I:71:ASP:OD2	1:I:71:ASP:N	2.39	0.56
1:I:85:PHE:CE1	1:I:114:LEU:HB3	2.41	0.56
1:I:117:ILE:HD11	1:J:318:GLY:HA2	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:219:PHE:O	1:J:222:VAL:CG1	2.54	0.56
1:J:253:PHE:O	1:J:258:LYS:HD3	2.05	0.56
1:N:218:ARG:HH11	1:N:218:ARG:CB	2.16	0.56
1:O:40:ILE:HD11	1:O:307:HIS:CB	2.34	0.56
1:P:269:LYS:HB3	1:P:273:ARG:NH1	2.20	0.56
1:R:133:LEU:HA	1:R:136:TYR:CD2	2.41	0.56
1:T:245:ARG:HB2	1:T:246:PRO:CD	2.36	0.56
1:W:62:LEU:HD13	1:W:94:LEU:HD12	1.88	0.56
1:W:290:LEU:O	1:W:290:LEU:HD12	2.06	0.56
1:X:85:PHE:C	1:X:87:THR:H	2.12	0.56
1:A:210:ARG:NH1	1:A:247:GLU:OE1	2.39	0.56
1:A:212:VAL:HG11	1:A:299:LEU:HD21	1.87	0.56
1:C:132:GLU:C	1:C:134:MET:N	2.59	0.56
1:D:269:LYS:HB3	1:D:273:ARG:CZ	2.36	0.56
1:E:188:ALA:HB2	1:E:286:ALA:CB	2.36	0.56
1:F:70:ALA:HA	1:F:150:LYS:O	2.06	0.56
1:G:252:SER:C	1:G:253:PHE:CD1	2.84	0.56
1:H:141:ALA:O	1:H:145:LYS:HB2	2.06	0.56
1:H:299:LEU:HB3	1:H:303:ILE:CD1	2.35	0.56
1:M:210:ARG:NH2	1:M:299:LEU:HA	2.20	0.56
1:N:103:ARG:NH2	1:N:131:PHE:HA	2.17	0.56
1:O:131:PHE:HD1	1:O:131:PHE:O	1.89	0.56
1:O:143:GLU:HA	1:O:146:ARG:CZ	2.35	0.56
1:O:171:VAL:HG11	1:O:201:GLY:CA	2.28	0.56
1:O:262:GLU:O	1:O:265:GLN:N	2.27	0.56
1:R:321:LEU:C	1:R:323:SER:H	2.14	0.56
1:R:323:SER:C	1:R:324:LEU:HD12	2.30	0.56
1:T:133:LEU:HA	3:T:1202:HOH:O	2.05	0.56
1:T:141:ALA:HB1	1:T:151:PRO:HG3	1.87	0.56
1:U:187:VAL:O	1:U:188:ALA:C	2.49	0.56
1:X:39:TYR:N	1:X:39:TYR:CD1	2.74	0.56
1:X:218:ARG:HD3	1:X:222:VAL:HG13	1.88	0.56
1:A:290:LEU:HD11	1:A:303:ILE:HG21	1.87	0.56
1:A:322:LEU:HD21	1:B:116:LYS:CB	2.36	0.56
1:B:99:ILE:HG23	1:B:121:GLU:OE2	2.06	0.56
1:D:292:ASP:OD1	1:D:292:ASP:O	2.24	0.56
1:F:128:LYS:C	1:F:130:SER:N	2.59	0.56
1:I:1:MET:HG3	1:I:6:PHE:HB2	1.87	0.56
1:K:195:LEU:CD1	1:K:213:GLY:HA3	2.36	0.56
1:L:48:LEU:HB3	1:L:55:ILE:HG12	1.88	0.56
1:L:84:ALA:HB1	1:L:100:LEU:HD23	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:215:ALA:O	1:L:217:GLY:N	2.38	0.56
1:Q:74:ILE:O	1:Q:75:THR:HB	2.04	0.56
1:R:39:TYR:CD1	1:R:182:PHE:HE2	2.24	0.56
1:T:136:TYR:O	1:T:140:ILE:HG13	2.05	0.56
1:T:196:ALA:HB1	1:T:231:ILE:HG22	1.88	0.56
1:V:34:ILE:HG23	1:V:294:ALA:HB1	1.88	0.56
1:V:73:VAL:N	1:V:97:ASP:O	2.36	0.56
1:V:210:ARG:NH2	1:V:299:LEU:HA	2.21	0.56
1:A:143:GLU:CG	1:A:144:LEU:N	2.69	0.55
1:B:222:VAL:O	1:B:226:LYS:HB3	2.06	0.55
1:B:268:ARG:O	1:B:272:THR:HG23	2.04	0.55
1:C:118:MET:HE1	1:D:267:ILE:HG22	1.88	0.55
1:E:76:VAL:HG12	1:E:101:VAL:HB	1.87	0.55
1:G:165:LEU:CA	1:G:168:VAL:HG23	2.36	0.55
1:G:259:ILE:HD12	1:G:320:LYS:CG	2.35	0.55
1:H:41:LYS:NZ	1:H:177:GLN:NE2	2.50	0.55
1:H:80:HIS:CD2	1:H:80:HIS:O	2.59	0.55
1:H:186:VAL:HG21	1:H:290:LEU:CD2	2.36	0.55
1:I:253:PHE:CD2	1:I:260:THR:HG21	2.41	0.55
1:J:80:HIS:HB2	3:J:1105:HOH:O	2.05	0.55
1:J:134:MET:O	1:J:138:GLU:HG2	2.07	0.55
1:K:77:GLY:O	1:K:102:LEU:HA	2.05	0.55
1:K:80:HIS:CE1	1:K:317:TYR:HH	2.22	0.55
1:K:101:VAL:HG12	1:K:133:LEU:HG	1.87	0.55
1:K:101:VAL:HG21	1:K:137:ALA:HB2	1.88	0.55
1:K:142:GLU:HA	1:K:145:LYS:HD2	1.88	0.55
1:L:125:TYR:N	1:L:125:TYR:CD1	2.73	0.55
1:L:260:THR:C	1:L:324:LEU:HD23	2.31	0.55
1:M:218:ARG:NH1	1:M:256:TYR:HB3	2.20	0.55
1:M:228:ASP:OD1	1:M:245:ARG:HG2	2.06	0.55
1:N:106:GLU:HG3	1:N:124:VAL:HG21	1.88	0.55
1:O:322:LEU:HD21	1:P:116:LYS:HB2	1.88	0.55
1:P:207:GLU:O	1:P:209:ILE:N	2.39	0.55
1:P:299:LEU:CB	1:P:303:ILE:HD11	2.28	0.55
1:Q:160:SER:OG	1:Q:162:ILE:HG13	2.06	0.55
1:S:218:ARG:O	1:S:220:GLY:N	2.38	0.55
1:T:100:LEU:HB3	1:T:102:LEU:CD2	2.27	0.55
1:W:164:THR:O	1:W:168:VAL:HG23	2.06	0.55
1:W:318:GLY:O	1:W:320:LYS:N	2.39	0.55
1:X:20:TRP:CD1	1:X:20:TRP:N	2.72	0.55
1:X:66:LEU:HD23	1:X:96:LEU:HD21	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:222:VAL:N	3:A:1017:HOH:O	2.40	0.55
1:E:202:LEU:HD22	1:E:209:ILE:HB	1.88	0.55
1:E:269:LYS:HG2	1:E:273:ARG:HH22	1.69	0.55
1:G:277:ILE:HG22	1:G:277:ILE:O	2.06	0.55
1:I:1:MET:HE1	1:I:172:GLY:CA	2.32	0.55
1:I:113:LEU:CD2	1:I:117:ILE:HD11	2.35	0.55
1:I:182:PHE:CD2	1:I:304:LEU:HB2	2.40	0.55
1:K:48:LEU:HD23	1:K:48:LEU:C	2.30	0.55
1:L:258:LYS:HG2	3:L:1132:HOH:O	2.05	0.55
1:P:183:ASP:O	1:P:210:ARG:HB2	2.06	0.55
1:Q:5:ILE:HD12	1:Q:172:GLY:CA	2.37	0.55
1:Q:134:MET:CE	1:Q:156:PRO:HD3	2.37	0.55
1:R:196:ALA:HB1	1:R:231:ILE:HG22	1.87	0.55
1:S:93:LYS:C	1:S:95:GLY:H	2.13	0.55
1:S:179:GLU:HB3	3:S:1226:HOH:O	2.06	0.55
1:W:48:LEU:HB3	1:W:55:ILE:HG12	1.88	0.55
1:W:89:LEU:HD11	1:X:271:GLY:O	2.06	0.55
1:W:210:ARG:HD2	1:W:247:GLU:OE2	2.05	0.55
1:W:221:GLU:HG3	1:W:222:VAL:N	2.21	0.55
1:A:187:VAL:HG21	1:A:194:THR:CG2	2.36	0.55
1:C:229:ASN:O	1:C:230:LEU:C	2.49	0.55
1:D:158:GLY:O	1:D:160:SER:N	2.33	0.55
1:E:103:ARG:NH1	1:E:128:LYS:HG2	2.21	0.55
1:E:129:ASP:CG	1:E:130:SER:H	2.13	0.55
1:F:103:ARG:CG	1:F:104:GLY:N	2.69	0.55
1:G:147:GLU:HG3	1:I:221:GLU:CD	2.30	0.55
1:G:268:ARG:NH2	1:H:116:LYS:O	2.39	0.55
1:H:234:ALA:O	1:H:237:LEU:N	2.38	0.55
1:J:323:SER:C	1:J:324:LEU:HD12	2.31	0.55
1:M:148:GLY:O	1:M:149:ARG:C	2.50	0.55
1:Q:106:GLU:CD	1:Q:124:VAL:HG21	2.31	0.55
1:Q:221:GLU:O	1:Q:224:THR:HG22	2.06	0.55
1:S:125:TYR:C	1:S:127:ALA:N	2.64	0.55
1:S:144:LEU:CD2	1:S:151:PRO:HB3	2.36	0.55
1:S:287:PHE:O	1:S:290:LEU:HB3	2.06	0.55
1:U:262:GLU:OE1	1:U:262:GLU:N	2.40	0.55
1:V:18:ILE:CD1	1:V:56:ARG:HG2	2.35	0.55
1:W:134:MET:CE	1:W:156:PRO:HD3	2.37	0.55
1:X:107:GLU:O	1:X:112:TYR:CD2	2.57	0.55
1:X:196:ALA:CB	1:X:231:ILE:HG22	2.37	0.55
1:A:214:ILE:HD11	1:A:251:TYR:CB	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:112:TYR:CE1	1:B:122:THR:HG21	2.42	0.55
1:C:162:ILE:C	1:C:162:ILE:HD12	2.31	0.55
1:C:210:ARG:HH22	1:C:299:LEU:HA	1.71	0.55
1:C:298:GLU:O	1:C:299:LEU:HD23	2.06	0.55
1:D:127:ALA:HB1	1:D:128:LYS:CE	2.36	0.55
1:F:289:GLY:O	1:F:293:LEU:HB2	2.07	0.55
1:G:61:LEU:HD23	1:G:162:ILE:HD11	1.88	0.55
1:G:234:ALA:O	1:G:238:LEU:HG	2.06	0.55
1:J:218:ARG:HH11	1:J:218:ARG:CB	2.18	0.55
1:K:42:ARG:HB3	1:K:45:LEU:HD12	1.88	0.55
1:K:73:VAL:HG11	1:K:154:ILE:HD11	1.87	0.55
1:K:271:GLY:O	1:L:89:LEU:HD11	2.06	0.55
1:L:34:ILE:HG22	1:L:36:ALA:H	1.71	0.55
1:L:41:LYS:NZ	1:L:177:GLN:NE2	2.54	0.55
1:M:181:LYS:HG2	1:M:302:LYS:NZ	2.21	0.55
1:O:92:LYS:HD2	1:P:272:THR:HG22	1.88	0.55
1:P:20:TRP:H	1:P:20:TRP:HD1	1.55	0.55
1:P:158:GLY:O	1:P:160:SER:N	2.38	0.55
1:Q:202:LEU:CD1	1:Q:211:PRO:HG3	2.37	0.55
1:R:1:MET:HA	1:R:1:MET:HE3	1.89	0.55
1:R:253:PHE:CZ	1:R:262:GLU:HB2	2.41	0.55
1:T:135:LYS:HG3	1:T:136:TYR:N	2.20	0.55
1:W:136:TYR:C	1:W:138:GLU:N	2.64	0.55
1:X:77:GLY:HA3	1:X:81:SER:CB	2.36	0.55
1:X:82:ASN:HD21	1:X:111:ASN:HD21	1.52	0.55
1:X:162:ILE:CG2	1:X:163:GLY:N	2.69	0.55
1:X:229:ASN:O	1:X:233:GLU:HG3	2.06	0.55
1:D:180:VAL:HA	1:D:181:LYS:NZ	2.21	0.55
1:D:187:VAL:HG21	1:D:194:THR:CG2	2.37	0.55
1:G:270:VAL:HG21	1:G:287:PHE:CE2	2.41	0.55
1:H:224:THR:O	1:H:227:LEU:HB3	2.07	0.55
1:K:82:ASN:HD22	1:K:111:ASN:ND2	2.03	0.55
1:K:187:VAL:O	1:K:188:ALA:O	2.25	0.55
1:K:218:ARG:H	1:K:218:ARG:HD2	1.71	0.55
1:K:312:SER:OG	1:L:315:PHE:CZ	2.59	0.55
1:L:54:LYS:O	1:L:58:LEU:HB2	2.07	0.55
1:L:100:LEU:HD11	1:L:120:ILE:CG2	2.37	0.55
1:L:219:PHE:CE1	1:L:250:ASP:HB2	2.42	0.55
1:M:72:VAL:HG11	1:M:144:LEU:CD2	2.37	0.55
1:M:140:ILE:HG23	1:M:143:GLU:OE2	2.07	0.55
1:O:25:GLN:NE2	1:O:42:ARG:NE	2.53	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:212:VAL:HG13	1:O:249:TYR:CE1	2.41	0.55
1:O:214:ILE:HD13	1:O:286:ALA:CA	2.36	0.55
1:P:144:LEU:HD11	1:P:149:ARG:CG	2.35	0.55
1:Q:123:ARG:NH1	1:Q:140:ILE:CG2	2.70	0.55
1:Q:232:LYS:NZ	1:T:319:ASP:OD2	2.40	0.55
1:R:274:GLU:HA	1:R:274:GLU:OE1	2.05	0.55
1:U:217:GLY:O	1:U:219:PHE:N	2.40	0.55
1:U:279:ASP:O	1:U:284:GLY:N	2.39	0.55
1:W:14:ARG:HG3	1:W:59:GLU:HB3	1.88	0.55
1:W:157:GLY:C	1:W:159:ALA:N	2.63	0.55
1:X:288:TYR:C	1:X:290:LEU:H	2.15	0.55
1:A:266:ILE:O	1:A:270:VAL:HG23	2.06	0.55
1:B:128:LYS:C	1:B:130:SER:H	2.13	0.55
1:C:222:VAL:HG22	1:C:226:LYS:CD	2.25	0.55
1:H:265:GLN:O	1:H:269:LYS:HG3	2.07	0.55
1:I:54:LYS:NZ	2:I:1091:5PA:H4A2	2.21	0.55
1:K:72:VAL:HG13	1:K:72:VAL:O	2.06	0.55
1:K:174:ILE:O	1:K:175:ALA:C	2.50	0.55
1:L:143:GLU:HA	1:L:146:ARG:CD	2.37	0.55
1:M:147:GLU:O	1:M:149:ARG:N	2.39	0.55
1:M:218:ARG:CG	1:M:255:GLU:HA	2.37	0.55
1:O:253:PHE:HD2	1:O:260:THR:HG21	1.71	0.55
1:U:257:GLY:H	1:U:285:LYS:NZ	2.05	0.55
1:V:34:ILE:CG2	1:V:294:ALA:HB1	2.37	0.55
1:W:229:ASN:HA	1:W:232:LYS:HD3	1.88	0.55
1:W:262:GLU:HB3	1:W:288:TYR:CE1	2.41	0.55
1:W:279:ASP:OD2	1:W:282:TYR:HD1	1.89	0.55
1:A:181:LYS:HG2	1:A:302:LYS:HZ1	1.70	0.55
1:A:186:VAL:HG12	1:A:212:VAL:HB	1.89	0.55
1:G:74:ILE:N	1:G:152:TYR:O	2.39	0.55
1:J:40:ILE:HG13	1:J:305:PHE:CD2	2.41	0.55
1:J:130:SER:OG	1:J:132:GLU:HG3	2.06	0.55
1:K:1:MET:HE1	1:K:172:GLY:HA3	1.89	0.55
1:N:55:ILE:HD12	1:N:55:ILE:N	2.22	0.55
1:N:103:ARG:NH2	1:N:133:LEU:HD21	2.22	0.55
1:O:26:TYR:HB2	1:O:39:TYR:HE2	1.69	0.55
1:O:51:GLY:O	1:O:55:ILE:HD13	2.07	0.55
1:O:222:VAL:O	1:O:226:LYS:CB	2.55	0.55
1:O:290:LEU:HD11	1:O:303:ILE:HG21	1.86	0.55
1:Q:134:MET:HG3	1:Q:138:GLU:OE2	2.06	0.55
1:Q:293:LEU:HB3	1:Q:298:GLU:O	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:1:MET:CE	1:V:5:ILE:HB	2.36	0.55
1:W:116:LYS:NZ	1:W:122:THR:HB	2.21	0.55
1:X:103:ARG:HG3	1:X:104:GLY:N	2.22	0.55
1:B:219:PHE:HA	1:B:223:MET:CB	2.35	0.55
1:C:8:LEU:CD1	1:C:204:ILE:HG21	2.36	0.55
1:C:39:TYR:O	1:C:304:LEU:HD23	2.07	0.55
1:C:41:LYS:HE3	1:C:43:ASP:OD1	2.06	0.55
1:D:34:ILE:HG21	1:D:294:ALA:CB	2.37	0.55
1:D:196:ALA:HA	1:D:231:ILE:HG22	1.89	0.55
1:D:214:ILE:HG21	1:D:286:ALA:HA	1.88	0.55
1:F:221:GLU:O	1:F:222:VAL:O	2.25	0.55
1:G:54:LYS:HZ1	2:G:1071:5PA:H4A2	1.71	0.55
1:I:14:ARG:CG	1:I:59:GLU:HB3	2.34	0.55
1:L:232:LYS:HE3	1:L:236:GLU:OE2	2.07	0.55
1:O:58:LEU:HD21	1:O:87:THR:CA	2.37	0.55
1:P:149:ARG:HG2	3:P:1181:HOH:O	2.06	0.55
1:R:54:LYS:HD2	1:R:83:HIS:HD2	1.71	0.55
1:R:62:LEU:HD13	1:R:94:LEU:HD12	1.89	0.55
1:R:281:VAL:O	1:R:281:VAL:HG22	2.06	0.55
1:T:210:ARG:HH11	1:T:247:GLU:CD	2.15	0.55
1:V:8:LEU:HD12	1:V:204:ILE:HD13	1.89	0.55
1:V:103:ARG:NH2	1:V:131:PHE:CD2	2.75	0.55
1:X:48:LEU:HD23	1:X:48:LEU:C	2.32	0.55
1:B:103:ARG:HH12	1:B:129:ASP:CG	2.15	0.55
1:C:33:GLU:OE1	1:C:273:ARG:NH1	2.39	0.55
1:C:116:LYS:CB	1:D:322:LEU:HD21	2.35	0.55
1:E:208:ASP:OD2	1:X:146:ARG:NH1	2.40	0.55
1:F:232:LYS:HE3	1:F:236:GLU:OE2	2.06	0.55
1:H:168:VAL:O	1:H:171:VAL:HG22	2.07	0.55
1:I:55:ILE:HD12	1:I:55:ILE:N	2.22	0.55
1:I:251:TYR:CE2	1:I:289:GLY:HA2	2.42	0.55
1:K:82:ASN:O	1:K:84:ALA:N	2.39	0.55
1:M:53:ASN:HB3	1:M:308:THR:HG22	1.88	0.55
1:M:103:ARG:HB2	1:M:128:LYS:HB2	1.89	0.55
1:O:192:GLY:O	1:O:196:ALA:HB2	2.07	0.55
1:P:64:ASP:O	1:P:67:SER:HB2	2.07	0.55
1:S:162:ILE:HG13	3:S:1196:HOH:O	2.05	0.55
1:T:44:ASP:O	1:T:45:LEU:HD23	2.07	0.55
1:U:145:LYS:HA	1:U:149:ARG:O	2.07	0.55
1:V:72:VAL:HB	1:V:97:ASP:HB2	1.89	0.55
1:V:128:LYS:C	1:V:130:SER:H	2.14	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:73:VAL:N	1:W:97:ASP:O	2.35	0.55
1:W:78:ALA:O	1:W:79:VAL:C	2.50	0.55
1:X:167:TYR:HA	1:X:170:ALA:HB2	1.88	0.55
1:X:181:LYS:H	1:X:181:LYS:HE2	1.72	0.55
1:B:129:ASP:C	1:B:131:PHE:N	2.65	0.55
1:C:112:TYR:O	1:C:115:ASP:HB2	2.07	0.55
1:C:182:PHE:CD2	1:C:304:LEU:HB2	2.40	0.55
1:D:290:LEU:HD21	1:D:303:ILE:HG21	1.89	0.55
1:F:127:ALA:HB1	1:F:128:LYS:NZ	2.22	0.55
1:F:224:THR:CG2	1:F:225:SER:N	2.70	0.55
1:G:126:ASP:C	1:G:128:LYS:N	2.62	0.55
1:G:221:GLU:C	1:G:223:MET:N	2.64	0.55
1:H:56:ARG:HD2	1:H:167:TYR:CZ	2.40	0.55
1:L:318:GLY:O	1:L:322:LEU:HG	2.06	0.55
1:O:14:ARG:HG3	1:O:15:VAL:N	2.21	0.55
1:O:193:GLY:O	1:O:196:ALA:HB3	2.07	0.55
1:P:84:ALA:HB1	1:P:102:LEU:HD21	1.89	0.55
1:Q:27:LEU:HB3	1:Q:274:GLU:OE2	2.06	0.55
1:Q:108:LEU:C	1:Q:113:LEU:HB2	2.32	0.55
1:Q:256:TYR:C	1:Q:258:LYS:H	2.13	0.55
1:R:14:ARG:HD3	1:R:169:ARG:NH1	2.22	0.55
1:R:26:TYR:HD1	1:R:39:TYR:CE2	2.25	0.55
1:R:33:GLU:O	1:R:35:GLY:N	2.40	0.55
1:R:128:LYS:C	1:R:130:SER:H	2.14	0.55
1:R:195:LEU:CD1	1:R:246:PRO:HG3	2.32	0.55
1:R:251:TYR:CE2	1:R:289:GLY:HA2	2.42	0.55
1:T:164:THR:HG21	1:T:234:ALA:CB	2.37	0.55
1:U:80:HIS:H	1:U:80:HIS:HD2	1.55	0.55
1:U:211:PRO:HB2	1:U:246:PRO:HB3	1.88	0.55
1:U:259:ILE:HD11	1:U:317:TYR:HB3	1.89	0.55
1:W:217:GLY:O	1:W:219:PHE:N	2.40	0.55
1:W:266:ILE:CG2	1:W:267:ILE:N	2.70	0.55
1:A:53:ASN:HB3	1:A:308:THR:HG22	1.88	0.54
1:B:2:HIS:CE1	1:B:3:PRO:HD2	2.42	0.54
1:C:43:ASP:OD2	1:C:56:ARG:NE	2.36	0.54
1:E:1:MET:HE2	1:E:5:ILE:CG2	2.37	0.54
1:E:154:ILE:CG2	1:E:158:GLY:HA2	2.36	0.54
1:F:221:GLU:O	1:F:225:SER:HB3	2.08	0.54
1:H:103:ARG:NH2	1:H:131:PHE:H	2.01	0.54
1:I:147:GLU:HA	1:U:221:GLU:H	1.72	0.54
1:I:320:LYS:O	1:I:324:LEU:HD13	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:15:VAL:HG11	1:J:94:LEU:CD1	2.25	0.54
1:J:28:PRO:O	1:J:31:SER:HB2	2.07	0.54
1:K:221:GLU:C	1:K:223:MET:N	2.62	0.54
1:L:265:GLN:HB3	1:L:269:LYS:HE3	1.89	0.54
1:M:200:LEU:O	1:M:204:ILE:HG13	2.07	0.54
1:O:4:LYS:HE3	1:O:204:ILE:HG23	1.89	0.54
1:O:321:LEU:HD12	1:P:117:ILE:HD13	1.89	0.54
1:P:1:MET:HE3	1:P:1:MET:CA	2.25	0.54
1:P:159:ALA:HB2	1:P:191:SER:OG	2.07	0.54
1:S:126:ASP:C	1:S:128:LYS:N	2.63	0.54
1:S:227:LEU:O	1:S:231:ILE:HG13	2.06	0.54
1:X:89:LEU:HD13	1:X:118:MET:HG3	1.89	0.54
1:A:169:ARG:NH2	3:A:1030:HOH:O	2.40	0.54
1:B:14:ARG:HB3	1:B:60:TYR:CE2	2.42	0.54
1:B:14:ARG:NE	1:B:59:GLU:OE1	2.37	0.54
1:D:112:TYR:CZ	1:D:116:LYS:HE3	2.42	0.54
1:E:72:VAL:HG13	1:E:151:PRO:HA	1.89	0.54
1:H:127:ALA:HB1	1:H:128:LYS:HZ2	1.71	0.54
1:I:30:ILE:HG12	1:I:274:GLU:HG3	1.89	0.54
1:J:64:ASP:O	1:J:67:SER:HB2	2.07	0.54
1:K:82:ASN:O	1:K:83:HIS:C	2.49	0.54
1:K:203:SER:OG	1:K:243:GLU:CB	2.51	0.54
1:L:30:ILE:HG22	1:L:38:VAL:HG11	1.88	0.54
1:L:241:LYS:HG3	1:L:242:VAL:N	2.20	0.54
2:L:1121:5PA:O4P	2:L:1121:5PA:C4A	2.49	0.54
1:M:145:LYS:C	1:M:147:GLU:N	2.62	0.54
1:M:181:LYS:N	1:M:181:LYS:HE2	2.22	0.54
1:O:322:LEU:HD21	1:P:116:LYS:CB	2.37	0.54
1:P:109:LYS:HA	1:P:113:LEU:CG	2.38	0.54
1:Q:73:VAL:CG1	1:Q:154:ILE:HD11	2.36	0.54
1:S:221:GLU:O	1:S:223:MET:N	2.38	0.54
1:V:109:LYS:HA	1:V:113:LEU:HB2	1.89	0.54
1:W:164:THR:HG23	1:W:197:GLY:HA2	1.89	0.54
1:W:260:THR:C	1:W:324:LEU:HD23	2.32	0.54
1:B:41:LYS:HB2	1:B:304:LEU:HD21	1.89	0.54
1:B:159:ALA:HB2	1:B:191:SER:OG	2.07	0.54
1:B:280:PRO:HG3	1:B:321:LEU:HD11	1.90	0.54
1:D:279:ASP:HB2	1:D:280:PRO:HD2	1.89	0.54
1:D:296:LYS:HB2	1:D:298:GLU:HG3	1.90	0.54
1:H:100:LEU:HD13	1:H:100:LEU:N	2.23	0.54
1:J:217:GLY:HA2	1:J:252:SER:HB3	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:253:PHE:HB3	1:K:260:THR:CG2	2.20	0.54
1:L:10:ALA:N	3:L:1142:HOH:O	2.39	0.54
1:P:121:GLU:OE2	1:P:123:ARG:NE	2.37	0.54
1:P:167:TYR:HA	1:P:170:ALA:CB	2.38	0.54
1:Q:22:THR:HB	1:Q:42:ARG:O	2.07	0.54
1:Q:171:VAL:HG23	1:Q:205:LEU:CD1	2.34	0.54
1:R:78:ALA:HB1	1:R:80:HIS:CE1	2.42	0.54
1:U:17:LEU:HB2	1:U:59:GLU:HG2	1.89	0.54
1:W:41:LYS:NZ	1:W:177:GLN:HE22	2.05	0.54
1:X:44:ASP:C	1:X:45:LEU:HD23	2.32	0.54
1:X:111:ASN:O	1:X:115:ASP:OD1	2.25	0.54
1:B:128:LYS:N	1:B:128:LYS:CD	2.70	0.54
1:C:195:LEU:HD23	1:C:195:LEU:C	2.33	0.54
1:C:320:LYS:HZ1	1:C:324:LEU:HD11	1.72	0.54
1:D:135:LYS:HE3	1:D:139:GLU:OE2	2.08	0.54
1:D:195:LEU:HD13	1:D:227:LEU:HD21	1.89	0.54
1:F:66:LEU:HG	1:F:94:LEU:HD13	1.88	0.54
1:G:31:SER:HA	1:G:36:ALA:O	2.08	0.54
1:G:218:ARG:HD2	1:G:218:ARG:H	1.72	0.54
1:K:187:VAL:C	1:K:188:ALA:O	2.49	0.54
1:L:198:LEU:O	1:L:198:LEU:HD23	2.08	0.54
1:N:103:ARG:HB3	1:N:133:LEU:HD11	1.89	0.54
1:N:195:LEU:HD13	1:N:195:LEU:C	2.32	0.54
1:O:41:LYS:CE	1:O:177:GLN:HE22	2.19	0.54
1:O:232:LYS:HG3	1:O:233:GLU:N	2.21	0.54
1:O:252:SER:C	1:O:253:PHE:HD1	2.15	0.54
1:Q:146:ARG:O	1:Q:146:ARG:HG3	2.06	0.54
1:R:112:TYR:CZ	1:R:116:LYS:HE2	2.42	0.54
1:R:214:ILE:HG13	1:R:286:ALA:O	2.07	0.54
1:S:321:LEU:O	1:S:325:LEU:HD22	2.08	0.54
1:T:263:VAL:CG1	1:T:280:PRO:HA	2.38	0.54
1:V:180:VAL:HA	1:V:181:LYS:HE2	1.89	0.54
1:W:108:LEU:O	1:W:113:LEU:HG	2.08	0.54
1:A:281:VAL:HG22	1:A:282:TYR:CE1	2.43	0.54
1:B:168:VAL:HG23	1:B:197:GLY:HA2	1.89	0.54
1:D:34:ILE:HG12	1:D:291:VAL:HG13	1.88	0.54
1:F:76:VAL:HG12	1:F:101:VAL:HB	1.90	0.54
1:G:56:ARG:CD	1:G:170:ALA:HB2	2.37	0.54
1:G:64:ASP:O	1:G:67:SER:N	2.38	0.54
1:G:131:PHE:CD1	1:G:131:PHE:C	2.85	0.54
1:G:142:GLU:OE1	1:G:145:LYS:CD	2.56	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:165:LEU:HA	1:G:168:VAL:HG21	1.88	0.54
1:H:54:LYS:CE	2:H:1081:5PA:H91	2.36	0.54
1:I:40:ILE:HG13	1:I:305:PHE:O	2.06	0.54
1:I:93:LYS:HE3	1:J:274:GLU:O	2.08	0.54
1:J:247:GLU:CG	1:J:249:TYR:HE1	2.21	0.54
1:K:17:LEU:O	1:K:19:PRO:HD3	2.08	0.54
1:K:125:TYR:C	1:K:127:ALA:H	2.16	0.54
1:K:164:THR:O	1:K:168:VAL:HG23	2.07	0.54
1:L:135:LYS:HZ2	1:L:136:TYR:HE1	1.46	0.54
1:L:261:GLY:C	1:L:263:VAL:H	2.14	0.54
1:N:54:LYS:HD2	1:N:83:HIS:HD2	1.72	0.54
1:N:128:LYS:HG2	1:N:130:SER:OG	2.08	0.54
1:N:142:GLU:OE1	1:N:142:GLU:HA	2.08	0.54
1:O:25:GLN:NE2	1:O:42:ARG:CD	2.70	0.54
1:P:157:GLY:HA2	2:P:1161:5PA:C9	2.37	0.54
1:P:168:VAL:O	1:P:171:VAL:CG2	2.55	0.54
1:P:217:GLY:HA3	1:P:256:TYR:HB2	1.89	0.54
1:S:203:SER:OG	1:S:243:GLU:HB2	2.07	0.54
1:V:31:SER:OG	1:V:38:VAL:HG12	2.07	0.54
1:X:143:GLU:C	1:X:145:LYS:N	2.60	0.54
1:X:160:SER:OG	1:X:162:ILE:HG22	2.08	0.54
1:A:145:LYS:C	1:A:147:GLU:H	2.15	0.54
1:D:1:MET:CE	1:D:5:ILE:HB	2.37	0.54
1:D:41:LYS:HZ1	1:D:177:GLN:HE22	1.51	0.54
1:D:126:ASP:OD1	1:D:126:ASP:O	2.26	0.54
1:E:271:GLY:O	1:F:89:LEU:HD11	2.07	0.54
1:F:257:GLY:O	1:F:258:LYS:C	2.50	0.54
1:G:74:ILE:HG21	1:G:153:VAL:HG22	1.90	0.54
1:G:145:LYS:O	1:G:147:GLU:N	2.36	0.54
1:G:287:PHE:CD1	1:G:290:LEU:HD23	2.41	0.54
1:I:138:GLU:O	1:I:141:ALA:HB3	2.08	0.54
1:I:162:ILE:HG13	1:I:163:GLY:H	1.73	0.54
1:I:278:LEU:HD22	1:I:283:THR:HB	1.88	0.54
1:K:26:TYR:HB2	1:K:39:TYR:CE2	2.41	0.54
1:K:62:LEU:O	1:K:66:LEU:HB2	2.08	0.54
1:L:127:ALA:HB1	1:L:128:LYS:HD3	1.89	0.54
1:L:144:LEU:CD1	1:L:149:ARG:HD3	2.37	0.54
1:M:202:LEU:HD13	1:M:209:ILE:HB	1.89	0.54
1:P:55:ILE:CD1	1:P:86:VAL:HG13	2.37	0.54
1:R:41:LYS:HZ2	1:R:177:GLN:NE2	1.97	0.54
1:T:17:LEU:CD2	1:T:59:GLU:HG2	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:103:ARG:NH2	1:T:133:LEU:HD11	2.23	0.54
1:V:142:GLU:OE2	1:V:145:LYS:HD2	2.07	0.54
1:V:180:VAL:HA	1:V:181:LYS:NZ	2.23	0.54
1:W:317:TYR:O	1:W:318:GLY:O	2.25	0.54
1:W:318:GLY:O	1:W:319:ASP:C	2.50	0.54
1:B:270:VAL:HG21	1:B:278:LEU:CD1	2.38	0.54
2:B:1021:5PA:O4P	2:B:1021:5PA:H4A2	2.06	0.54
1:E:223:MET:O	1:E:225:SER:N	2.41	0.54
1:F:180:VAL:CG1	1:F:181:LYS:HE2	2.36	0.54
1:G:15:VAL:CG2	1:G:66:LEU:HD12	2.36	0.54
1:G:103:ARG:O	1:G:103:ARG:HG3	2.07	0.54
1:G:143:GLU:HA	1:G:146:ARG:CZ	2.37	0.54
1:H:74:ILE:HB	1:H:153:VAL:HA	1.88	0.54
1:H:302:LYS:HE3	3:H:1093:HOH:O	2.08	0.54
1:J:219:PHE:CD1	1:J:250:ASP:OD2	2.58	0.54
1:J:264:ALA:HB1	1:J:325:LEU:CD2	2.38	0.54
1:M:125:TYR:OH	1:M:140:ILE:HD11	2.08	0.54
1:O:222:VAL:C	1:O:226:LYS:HB2	2.32	0.54
1:O:306:ILE:O	1:O:308:THR:HG23	2.08	0.54
1:R:75:THR:OG1	1:R:83:HIS:CE1	2.58	0.54
1:R:308:THR:OG1	2:R:1181:5PA:N1	2.37	0.54
1:R:316:HIS:HB3	1:R:317:TYR:CD1	2.43	0.54
1:T:39:TYR:OH	1:T:180:VAL:HG21	2.07	0.54
1:T:112:TYR:CE1	1:T:122:THR:HG21	2.42	0.54
1:U:135:LYS:O	1:U:139:GLU:HG2	2.08	0.54
1:V:105:LYS:HG3	1:V:107:GLU:HG3	1.90	0.54
1:W:229:ASN:ND2	1:W:229:ASN:O	2.38	0.54
1:X:143:GLU:HA	1:X:146:ARG:HG3	1.90	0.54
1:X:144:LEU:HD21	1:X:151:PRO:HB3	1.89	0.54
1:X:267:ILE:O	1:X:269:LYS:N	2.41	0.54
1:X:299:LEU:O	1:X:300:GLY:O	2.26	0.54
1:B:218:ARG:CD	1:B:222:VAL:HG11	2.35	0.54
1:E:134:MET:HE2	1:E:156:PRO:HG3	1.88	0.54
1:E:210:ARG:NH1	1:E:247:GLU:OE1	2.41	0.54
1:G:26:TYR:HE1	1:G:37:ASP:OD1	1.90	0.54
1:G:42:ARG:NH1	1:G:44:ASP:OD1	2.40	0.54
1:I:53:ASN:HD22	1:I:57:LYS:NZ	2.05	0.54
1:J:23:PRO:O	1:J:42:ARG:HG2	2.08	0.54
1:L:74:ILE:CG2	1:L:137:ALA:HB1	2.37	0.54
1:L:116:LYS:HA	3:L:1145:HOH:O	2.07	0.54
1:M:65:ALA:HB2	1:M:152:TYR:CD2	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:182:PHE:CE1	1:N:304:LEU:HG	2.42	0.54
1:O:19:PRO:HD2	1:O:20:TRP:CE3	2.42	0.54
1:O:221:GLU:OE1	1:O:221:GLU:HA	2.08	0.54
1:P:43:ASP:OD1	1:P:56:ARG:NH2	2.38	0.54
1:Q:62:LEU:HD13	1:Q:94:LEU:HD12	1.88	0.54
1:Q:156:PRO:O	1:Q:159:ALA:HB2	2.08	0.54
1:R:25:GLN:NE2	1:R:42:ARG:HD3	2.22	0.54
1:R:100:LEU:HD13	1:R:120:ILE:CG2	2.36	0.54
1:S:34:ILE:HD12	1:S:294:ALA:CB	2.38	0.54
1:S:218:ARG:HE	1:S:255:GLU:HB2	1.70	0.54
1:U:162:ILE:HG13	1:U:163:GLY:N	2.23	0.54
1:U:243:GLU:O	1:U:244:VAL:HG23	2.08	0.54
1:V:34:ILE:HG23	1:V:294:ALA:CB	2.38	0.54
1:V:41:LYS:NZ	1:V:177:GLN:NE2	2.40	0.54
1:V:160:SER:OG	1:V:162:ILE:HG22	2.07	0.54
1:V:164:THR:HG21	1:V:234:ALA:CB	2.38	0.54
1:W:264:ALA:HB2	1:W:321:LEU:HD23	1.89	0.54
1:X:224:THR:HG23	1:X:225:SER:N	2.22	0.54
1:A:14:ARG:HG3	1:A:59:GLU:HB3	1.90	0.54
1:C:214:ILE:CD1	1:C:251:TYR:HB2	2.34	0.54
1:D:112:TYR:CE1	1:D:122:THR:HG21	2.41	0.54
1:G:146:ARG:C	1:G:147:GLU:HG2	2.32	0.54
1:G:149:ARG:CD	1:I:221:GLU:HB3	2.38	0.54
1:H:268:ARG:NH1	1:H:325:LEU:HB3	2.22	0.54
1:H:312:SER:C	1:H:314:THR:H	2.14	0.54
1:K:44:ASP:HB3	1:K:307:HIS:CE1	2.42	0.54
1:L:48:LEU:HD23	1:L:48:LEU:C	2.33	0.54
1:M:61:LEU:CD2	1:M:162:ILE:HD11	2.38	0.54
1:M:287:PHE:O	1:M:291:VAL:HG23	2.08	0.54
1:N:218:ARG:O	1:N:219:PHE:HB2	2.07	0.54
1:O:9:LEU:HD13	1:O:169:ARG:NH1	2.22	0.54
1:O:162:ILE:O	1:O:165:LEU:HD12	2.08	0.54
1:Q:200:LEU:CD2	1:Q:204:ILE:HD11	2.33	0.54
1:Q:219:PHE:CE2	1:Q:248:LEU:HD23	2.43	0.54
1:R:214:ILE:CB	1:R:286:ALA:HA	2.38	0.54
1:S:42:ARG:CB	1:S:45:LEU:HD12	2.38	0.54
1:U:5:ILE:HD12	1:U:172:GLY:CA	2.38	0.54
1:U:64:ASP:OD2	1:U:68:LYS:HG3	2.08	0.54
1:U:204:ILE:HD11	1:U:240:VAL:HG11	1.88	0.54
1:W:133:LEU:HG	1:W:133:LEU:O	2.07	0.54
1:X:167:TYR:HA	1:X:170:ALA:CB	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:265:GLN:HG3	1:X:269:LYS:HE3	1.89	0.54
1:A:34:ILE:CG2	1:A:291:VAL:HG13	2.37	0.54
1:D:103:ARG:HB3	1:D:133:LEU:HD21	1.88	0.54
1:D:213:GLY:O	1:D:248:LEU:HA	2.08	0.54
1:G:274:GLU:OE1	1:H:93:LYS:NZ	2.41	0.54
1:H:136:TYR:O	1:H:140:ILE:HG13	2.09	0.54
1:I:11:LYS:HE3	1:I:12:PHE:HE1	1.73	0.54
1:J:216:VAL:C	1:J:252:SER:HB3	2.33	0.54
1:J:240:VAL:CG2	1:J:241:LYS:H	2.21	0.54
1:J:267:ILE:O	1:J:268:ARG:C	2.51	0.54
1:K:72:VAL:O	1:K:151:PRO:HA	2.07	0.54
1:K:142:GLU:HA	1:K:145:LYS:CD	2.37	0.54
1:K:195:LEU:CD1	1:K:248:LEU:HD13	2.38	0.54
1:K:312:SER:HG	1:L:315:PHE:HZ	1.51	0.54
1:L:42:ARG:HB3	1:L:42:ARG:NH1	2.23	0.54
1:M:25:GLN:HE21	1:M:42:ARG:CG	2.20	0.54
1:M:214:ILE:CD1	1:M:286:ALA:HA	2.38	0.54
1:M:216:VAL:O	1:M:252:SER:HA	2.08	0.54
1:O:134:MET:CE	1:O:156:PRO:HD3	2.37	0.54
1:R:82:ASN:ND2	1:R:111:ASN:ND2	2.56	0.54
1:R:116:LYS:O	1:R:119:GLY:N	2.35	0.54
1:T:205:LEU:HB3	1:T:207:GLU:HG2	1.90	0.54
1:T:270:VAL:O	1:T:274:GLU:HB2	2.08	0.54
1:W:81:SER:C	1:W:111:ASN:HD22	2.16	0.54
1:W:136:TYR:O	1:W:139:GLU:CG	2.55	0.54
1:W:154:ILE:O	1:W:155:PRO:C	2.51	0.54
1:X:29:ASN:C	1:X:31:SER:H	2.16	0.54
1:X:278:LEU:HB3	1:X:283:THR:OG1	2.07	0.54
1:A:183:ASP:OD2	1:A:301:GLU:N	2.38	0.53
1:A:243:GLU:HG3	1:A:244:VAL:N	2.23	0.53
1:B:167:TYR:O	1:B:171:VAL:HG13	2.08	0.53
1:D:147:GLU:O	1:D:149:ARG:N	2.33	0.53
1:I:1:MET:N	1:I:176:THR:HG21	2.23	0.53
1:I:25:GLN:NE2	1:I:42:ARG:NE	2.55	0.53
1:J:224:THR:HG23	1:J:225:SER:H	1.73	0.53
1:L:103:ARG:NE	1:L:133:LEU:HD11	2.23	0.53
1:M:227:LEU:O	1:M:231:ILE:HG13	2.08	0.53
1:N:159:ALA:HB3	3:N:1179:HOH:O	2.08	0.53
1:Q:218:ARG:H	1:Q:218:ARG:CD	2.21	0.53
1:T:133:LEU:H	1:T:133:LEU:HD13	1.73	0.53
1:W:41:LYS:HZ3	1:W:177:GLN:NE2	2.06	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:71:ASP:OD2	1:W:150:LYS:N	2.41	0.53
1:W:78:ALA:HB3	1:W:80:HIS:CD2	2.43	0.53
1:W:217:GLY:HA2	1:W:256:TYR:CB	2.28	0.53
1:B:82:ASN:ND2	1:B:111:ASN:ND2	2.55	0.53
1:B:134:MET:HA	1:B:134:MET:CE	2.39	0.53
1:E:181:LYS:H	1:E:181:LYS:CE	2.09	0.53
1:E:320:LYS:HE3	1:E:324:LEU:HD11	1.91	0.53
1:F:1:MET:CE	1:F:172:GLY:HA3	2.30	0.53
1:F:15:VAL:HG21	1:F:94:LEU:HD11	1.89	0.53
1:F:53:ASN:HB3	1:F:308:THR:CG2	2.36	0.53
1:F:111:ASN:ND2	1:F:312:SER:HB2	2.23	0.53
1:F:144:LEU:O	1:F:149:ARG:HB2	2.08	0.53
1:G:131:PHE:C	1:G:133:LEU:H	2.16	0.53
1:H:248:LEU:HD12	1:H:249:TYR:H	1.73	0.53
1:I:171:VAL:HG21	1:I:201:GLY:CA	2.39	0.53
1:J:135:LYS:HG3	1:J:136:TYR:H	1.73	0.53
1:L:135:LYS:HA	1:L:138:GLU:CG	2.38	0.53
1:L:251:TYR:OH	1:L:293:LEU:HD13	2.08	0.53
1:L:262:GLU:HB3	1:L:288:TYR:CE1	2.43	0.53
1:M:181:LYS:CE	1:M:302:LYS:NZ	2.70	0.53
1:N:243:GLU:OE2	1:N:243:GLU:CA	2.55	0.53
1:N:258:LYS:HA	3:N:1176:HOH:O	2.08	0.53
1:O:103:ARG:HB2	1:O:128:LYS:HA	1.90	0.53
1:O:195:LEU:HD22	1:O:227:LEU:HD21	1.89	0.53
1:P:266:ILE:CG2	1:P:267:ILE:N	2.71	0.53
1:Q:75:THR:HG22	1:Q:100:LEU:HD12	1.90	0.53
1:R:76:VAL:CG2	1:R:156:PRO:HG3	2.39	0.53
1:S:117:ILE:CG1	1:T:322:LEU:HD21	2.38	0.53
1:S:134:MET:HE1	1:S:156:PRO:HD3	1.91	0.53
1:W:229:ASN:CG	1:W:232:LYS:HE2	2.32	0.53
1:B:5:ILE:HD11	1:B:205:LEU:HG	1.90	0.53
1:C:15:VAL:HG12	1:C:17:LEU:HD13	1.89	0.53
1:E:213:GLY:N	1:E:247:GLU:O	2.41	0.53
1:F:17:LEU:HB2	1:F:59:GLU:HG2	1.91	0.53
1:F:181:LYS:HG2	1:F:181:LYS:O	2.06	0.53
1:F:223:MET:O	1:F:224:THR:C	2.50	0.53
1:G:14:ARG:HG2	1:G:15:VAL:H	1.72	0.53
1:I:210:ARG:NH2	1:I:298:GLU:O	2.37	0.53
1:I:260:THR:OG1	1:I:263:VAL:HG23	2.09	0.53
1:K:133:LEU:HD12	1:K:136:TYR:CD2	2.42	0.53
1:L:261:GLY:C	1:L:263:VAL:N	2.64	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:77:GLY:O	1:M:102:LEU:HA	2.09	0.53
1:O:231:ILE:HG22	1:O:231:ILE:O	2.07	0.53
1:P:302:LYS:NZ	3:P:1163:HOH:O	2.40	0.53
1:Q:31:SER:OG	1:Q:38:VAL:N	2.35	0.53
1:U:72:VAL:O	1:U:72:VAL:HG13	2.09	0.53
1:U:270:VAL:O	1:U:274:GLU:N	2.42	0.53
1:W:82:ASN:HD22	1:W:111:ASN:HD21	1.51	0.53
1:W:142:GLU:HA	1:W:145:LYS:HG2	1.90	0.53
2:W:1231:5PA:O4P	2:W:1231:5PA:H4A2	2.07	0.53
1:X:187:VAL:HG21	1:X:194:THR:CG2	2.37	0.53
1:X:196:ALA:O	1:X:199:SER:N	2.41	0.53
1:B:67:SER:C	1:B:69:GLY:H	2.16	0.53
1:B:85:PHE:CZ	1:B:89:LEU:HD22	2.43	0.53
1:B:216:VAL:C	1:B:252:SER:HB3	2.34	0.53
1:C:42:ARG:NH2	1:D:47:GLY:O	2.41	0.53
1:C:61:LEU:HD23	1:C:162:ILE:CD1	2.37	0.53
1:C:141:ALA:O	1:C:144:LEU:HB2	2.08	0.53
1:D:44:ASP:CG	1:D:307:HIS:CD2	2.86	0.53
1:D:145:LYS:C	1:D:147:GLU:H	2.17	0.53
1:E:221:GLU:C	1:E:223:MET:N	2.57	0.53
1:I:106:GLU:CD	1:I:124:VAL:HB	2.33	0.53
1:I:256:TYR:C	1:I:256:TYR:CD2	2.86	0.53
1:I:308:THR:O	2:I:1091:5PA:H2A2	2.08	0.53
1:J:196:ALA:CB	1:J:230:LEU:HD13	2.38	0.53
1:K:171:VAL:HG21	1:K:201:GLY:C	2.33	0.53
1:L:143:GLU:O	1:L:146:ARG:N	2.41	0.53
1:L:192:GLY:HA3	3:L:1148:HOH:O	2.09	0.53
1:L:215:ALA:C	1:L:217:GLY:H	2.17	0.53
1:O:27:LEU:HB2	1:O:38:VAL:HG13	1.89	0.53
1:P:26:TYR:HB3	1:S:7:ALA:HB3	1.90	0.53
1:R:92:LYS:HE3	1:R:119:GLY:O	2.07	0.53
1:T:40:ILE:HD13	1:T:276:ILE:HD13	1.90	0.53
1:U:219:PHE:C	1:U:219:PHE:CD2	2.85	0.53
1:W:214:ILE:CG1	1:W:251:TYR:HB2	2.39	0.53
1:A:250:ASP:C	1:A:250:ASP:OD1	2.52	0.53
1:B:190:GLY:N	2:B:1021:5PA:O3P	2.38	0.53
1:C:287:PHE:CE1	1:C:290:LEU:HD23	2.44	0.53
1:E:67:SER:O	1:U:67:SER:HB2	2.09	0.53
1:E:78:ALA:O	1:E:102:LEU:HD22	2.09	0.53
1:E:131:PHE:C	1:E:131:PHE:CD1	2.86	0.53
1:F:198:LEU:CD1	1:F:211:PRO:HB3	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:79:VAL:O	1:G:112:TYR:HB2	2.07	0.53
1:H:22:THR:N	3:H:1095:HOH:O	2.41	0.53
1:I:54:LYS:HE3	2:I:1091:5PA:C9	2.37	0.53
1:I:78:ALA:O	1:I:81:SER:HB3	2.08	0.53
1:I:164:THR:HG23	1:I:197:GLY:CA	2.39	0.53
1:I:293:LEU:O	1:I:297:GLY:N	2.42	0.53
1:J:260:THR:OG1	1:J:263:VAL:HG23	2.08	0.53
1:L:2:HIS:CE1	1:L:4:LYS:H	2.27	0.53
1:L:307:HIS:C	1:L:309:GLY:H	2.17	0.53
1:M:134:MET:O	1:M:138:GLU:HG2	2.07	0.53
1:M:179:GLU:O	1:M:179:GLU:CG	2.55	0.53
1:O:4:LYS:CE	1:O:204:ILE:CG2	2.87	0.53
1:O:78:ALA:O	1:O:81:SER:HB3	2.08	0.53
1:O:108:LEU:HD12	1:O:113:LEU:HA	1.89	0.53
1:O:253:PHE:CD2	1:O:260:THR:HG21	2.44	0.53
1:P:25:GLN:NE2	1:P:42:ARG:NE	2.56	0.53
1:P:27:LEU:HD13	1:P:274:GLU:CG	2.23	0.53
1:Q:187:VAL:HG21	1:Q:194:THR:CG2	2.38	0.53
1:R:72:VAL:HG21	1:R:144:LEU:HD21	1.91	0.53
1:R:76:VAL:HG23	1:R:77:GLY:N	2.22	0.53
1:S:164:THR:HG23	1:S:197:GLY:HA2	1.89	0.53
1:X:167:TYR:O	1:X:170:ALA:HB3	2.09	0.53
1:B:34:ILE:HD11	1:B:291:VAL:HA	1.91	0.53
1:B:136:TYR:O	1:B:140:ILE:HG13	2.08	0.53
1:B:180:VAL:HA	1:B:181:LYS:HE2	1.89	0.53
1:E:55:ILE:HD12	1:E:86:VAL:HG11	1.87	0.53
1:F:58:LEU:O	1:F:62:LEU:HB2	2.08	0.53
1:G:20:TRP:CE2	1:H:23:PRO:HG3	2.44	0.53
1:G:192:GLY:N	2:G:1071:5PA:O1P	2.38	0.53
1:G:195:LEU:HD21	1:G:246:PRO:HB2	1.90	0.53
1:H:299:LEU:HB3	1:H:303:ILE:HG12	1.91	0.53
1:I:27:LEU:HD12	1:I:38:VAL:HG13	1.91	0.53
1:I:109:LYS:C	1:I:113:LEU:HB2	2.34	0.53
1:K:115:ASP:CB	1:K:120:ILE:HB	2.28	0.53
1:K:232:LYS:HZ3	1:U:319:ASP:CG	2.16	0.53
1:K:233:GLU:OE2	1:U:323:SER:CB	2.57	0.53
1:L:191:SER:N	2:L:1121:5PA:O1P	2.42	0.53
1:L:218:ARG:HE	1:L:222:VAL:HG11	1.74	0.53
1:M:209:ILE:O	1:M:211:PRO:HD3	2.08	0.53
1:P:80:HIS:O	1:P:111:ASN:ND2	2.32	0.53
1:P:101:VAL:O	1:P:101:VAL:HG12	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:186:VAL:HG12	1:P:187:VAL:N	2.22	0.53
1:Q:233:GLU:O	1:Q:236:GLU:N	2.39	0.53
1:R:25:GLN:HE22	1:R:42:ARG:NE	2.07	0.53
1:S:214:ILE:HD11	1:S:251:TYR:HB2	1.90	0.53
1:S:259:ILE:HG22	1:S:324:LEU:HD21	1.91	0.53
1:U:131:PHE:C	1:U:133:LEU:N	2.67	0.53
1:U:202:LEU:HD12	1:U:211:PRO:HG3	1.91	0.53
1:V:31:SER:HB3	1:V:36:ALA:O	2.09	0.53
1:W:12:PHE:CZ	1:W:238:LEU:HD23	2.44	0.53
1:W:243:GLU:HG3	1:W:244:VAL:N	2.24	0.53
1:X:75:THR:HB	1:X:154:ILE:HB	1.89	0.53
1:A:66:LEU:O	1:A:68:LYS:N	2.41	0.53
1:B:25:GLN:HE21	1:B:42:ARG:HE	1.50	0.53
1:B:127:ALA:HB1	1:B:128:LYS:NZ	2.24	0.53
1:C:290:LEU:HD12	1:C:290:LEU:O	2.09	0.53
1:D:22:THR:O	1:D:41:LYS:NZ	2.42	0.53
1:F:192:GLY:O	1:F:193:GLY:C	2.51	0.53
1:F:266:ILE:O	1:F:270:VAL:HG23	2.09	0.53
1:G:107:GLU:HA	3:G:1096:HOH:O	2.08	0.53
1:G:179:GLU:HG2	1:G:179:GLU:O	2.09	0.53
1:H:123:ARG:O	1:H:125:TYR:HD1	1.92	0.53
1:I:12:PHE:CZ	1:I:237:LEU:O	2.61	0.53
1:I:61:LEU:HD23	1:I:162:ILE:CD1	2.37	0.53
1:J:167:TYR:HA	1:J:170:ALA:CB	2.38	0.53
1:K:103:ARG:HG3	1:K:103:ARG:O	2.09	0.53
1:K:180:VAL:HA	1:K:181:LYS:HZ1	1.71	0.53
1:L:103:ARG:HA	1:L:124:VAL:CG1	2.33	0.53
1:M:76:VAL:HG12	1:M:101:VAL:O	2.07	0.53
1:M:315:PHE:CE2	1:N:114:LEU:HD21	2.43	0.53
1:N:15:VAL:CG2	1:N:66:LEU:HD12	2.39	0.53
1:P:25:GLN:HE21	1:P:42:ARG:CD	2.22	0.53
1:Q:259:ILE:HD11	1:Q:317:TYR:CB	2.39	0.53
1:S:142:GLU:CD	1:S:145:LYS:HD3	2.33	0.53
1:S:200:LEU:O	1:S:203:SER:HB3	2.09	0.53
1:T:82:ASN:ND2	1:T:111:ASN:ND2	2.52	0.53
1:U:1:MET:HE2	1:U:5:ILE:CG2	2.38	0.53
1:U:72:VAL:HG11	1:U:144:LEU:CD2	2.38	0.53
1:W:132:GLU:C	1:W:134:MET:N	2.62	0.53
1:W:145:LYS:HB3	1:W:151:PRO:HD3	1.90	0.53
1:W:188:ALA:HB2	1:W:286:ALA:CB	2.39	0.53
1:X:56:ARG:HD2	1:X:167:TYR:CZ	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:27:LEU:HB2	1:A:38:VAL:HG13	1.90	0.53
1:A:82:ASN:ND2	1:A:111:ASN:HD21	2.07	0.53
1:A:124:VAL:O	1:A:124:VAL:HG12	2.08	0.53
1:B:202:LEU:CD2	1:B:209:ILE:HB	2.38	0.53
1:C:102:LEU:N	1:C:102:LEU:HD23	2.23	0.53
1:E:219:PHE:CZ	1:E:224:THR:HB	2.44	0.53
1:F:142:GLU:O	1:F:145:LYS:N	2.40	0.53
1:G:25:GLN:NE2	1:G:42:ARG:HE	2.06	0.53
1:I:83:HIS:CD2	1:I:157:GLY:H	2.27	0.53
1:J:66:LEU:CD1	1:J:94:LEU:HD13	2.37	0.53
1:L:65:ALA:HB2	1:L:152:TYR:CD2	2.43	0.53
1:L:320:LYS:HD2	1:L:320:LYS:O	2.09	0.53
1:M:43:ASP:O	1:M:46:THR:HG23	2.08	0.53
1:M:105:LYS:C	1:M:107:GLU:H	2.17	0.53
1:M:162:ILE:HA	1:M:165:LEU:HG	1.91	0.53
1:N:136:TYR:O	1:N:140:ILE:HG13	2.09	0.53
1:O:40:ILE:HG13	1:O:305:PHE:HD2	1.74	0.53
1:Q:214:ILE:CG1	1:Q:251:TYR:HB2	2.39	0.53
1:Q:243:GLU:O	1:Q:244:VAL:CG2	2.57	0.53
1:R:128:LYS:O	1:R:128:LYS:HG2	2.09	0.53
1:S:311:ILE:HG13	1:S:315:PHE:HE1	1.73	0.53
1:U:221:GLU:OE1	1:U:221:GLU:CA	2.57	0.53
1:W:251:TYR:CE2	1:W:289:GLY:HA2	2.44	0.53
1:X:219:PHE:CD1	1:X:250:ASP:HB2	2.44	0.53
1:A:318:GLY:O	1:B:113:LEU:HD21	2.07	0.53
1:B:214:ILE:HG21	1:B:286:ALA:HA	1.91	0.53
1:C:72:VAL:HG11	1:C:144:LEU:HD23	1.91	0.53
1:E:251:TYR:OH	1:E:293:LEU:HD13	2.09	0.53
1:G:167:TYR:HA	1:G:170:ALA:CB	2.37	0.53
1:I:82:ASN:ND2	1:I:111:ASN:ND2	2.51	0.53
1:I:181:LYS:O	1:I:302:LYS:NZ	2.40	0.53
1:K:136:TYR:O	1:K:140:ILE:N	2.36	0.53
1:L:106:GLU:O	1:L:106:GLU:HG2	2.09	0.53
1:L:316:HIS:C	1:L:317:TYR:CD1	2.87	0.53
1:N:82:ASN:ND2	1:N:111:ASN:ND2	2.42	0.53
1:O:5:ILE:CD1	1:O:171:VAL:HG23	2.39	0.53
1:O:83:HIS:ND1	1:O:157:GLY:HA2	2.24	0.53
1:Q:264:ALA:O	1:Q:325:LEU:CD2	2.51	0.53
1:Q:268:ARG:O	1:Q:272:THR:OG1	2.23	0.53
1:R:134:MET:CE	1:R:155:PRO:HA	2.39	0.53
1:S:42:ARG:HB3	1:S:45:LEU:CD1	2.37	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:130:SER:O	1:S:132:GLU:N	2.41	0.53
1:T:259:ILE:CD1	1:T:317:TYR:HB3	2.39	0.53
1:U:214:ILE:CD1	1:U:289:GLY:HA3	2.38	0.53
1:V:14:ARG:HG2	1:V:14:ARG:NH1	2.23	0.53
1:V:135:LYS:CG	1:V:136:TYR:N	2.70	0.53
1:V:252:SER:O	1:V:253:PHE:HB2	2.09	0.53
1:X:211:PRO:CG	1:X:246:PRO:HB3	2.38	0.53
1:X:217:GLY:O	1:X:218:ARG:O	2.26	0.53
1:X:245:ARG:HG2	1:X:246:PRO:N	2.23	0.53
1:E:128:LYS:C	1:E:128:LYS:HD3	2.34	0.53
1:J:165:LEU:CA	1:J:168:VAL:HG23	2.38	0.53
1:M:111:ASN:ND2	1:M:312:SER:HB2	2.24	0.53
1:N:25:GLN:NE2	1:N:42:ARG:NE	2.57	0.53
1:N:54:LYS:CE	2:N:1141:5PA:H91	2.36	0.53
1:O:199:SER:OG	1:O:246:PRO:HB3	2.08	0.53
1:P:55:ILE:HD12	1:P:86:VAL:HG13	1.90	0.53
1:P:218:ARG:HD3	1:P:222:VAL:CG1	2.32	0.53
1:R:157:GLY:HA2	2:R:1181:5PA:C9	2.35	0.53
1:R:281:VAL:HG13	1:R:282:TYR:CD1	2.44	0.53
1:S:34:ILE:HD12	1:S:294:ALA:HB3	1.91	0.53
1:S:165:LEU:CD2	1:S:238:LEU:HD21	2.36	0.53
1:T:141:ALA:C	1:T:143:GLU:H	2.16	0.53
1:W:162:ILE:O	1:W:165:LEU:N	2.30	0.53
1:X:48:LEU:HD11	1:X:90:ALA:HA	1.91	0.53
1:B:227:LEU:O	1:B:227:LEU:HD12	2.08	0.52
1:D:141:ALA:O	1:D:145:LYS:N	2.41	0.52
1:D:221:GLU:CG	1:E:108:LEU:HD13	2.39	0.52
1:D:221:GLU:HG3	1:E:108:LEU:HD13	1.90	0.52
1:F:54:LYS:HZ1	2:F:1061:5PA:P	2.32	0.52
1:G:58:LEU:HD11	1:G:87:THR:OG1	2.09	0.52
1:H:103:ARG:NH2	1:H:131:PHE:N	2.56	0.52
1:I:90:ALA:O	1:I:91:ALA:C	2.51	0.52
1:I:229:ASN:ND2	1:I:233:GLU:HG3	2.24	0.52
1:I:292:ASP:HB3	1:I:293:LEU:HD12	1.91	0.52
1:J:72:VAL:CG1	1:J:149:ARG:HH21	2.22	0.52
1:K:134:MET:C	1:K:138:GLU:HG2	2.34	0.52
1:M:19:PRO:C	1:M:20:TRP:CE3	2.86	0.52
1:Q:89:LEU:HD11	1:R:271:GLY:C	2.34	0.52
1:Q:259:ILE:HD11	1:Q:317:TYR:CG	2.44	0.52
1:R:142:GLU:HB3	1:R:146:ARG:CZ	2.40	0.52
1:S:41:LYS:HE3	1:S:43:ASP:OD1	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:15:VAL:O	1:T:17:LEU:HD22	2.09	0.52
1:T:103:ARG:CZ	1:T:129:ASP:HA	2.39	0.52
1:V:144:LEU:CD1	1:V:149:ARG:HD3	2.38	0.52
1:W:53:ASN:O	1:W:56:ARG:HB2	2.09	0.52
1:W:198:LEU:O	1:W:198:LEU:HD23	2.09	0.52
1:W:214:ILE:HG21	1:W:286:ALA:HA	1.91	0.52
1:A:223:MET:HE1	1:A:248:LEU:HD11	1.90	0.52
1:F:1:MET:HE3	1:F:2:HIS:H	1.70	0.52
1:F:110:GLY:HA3	1:F:316:HIS:HD2	1.74	0.52
1:I:8:LEU:HD23	1:L:28:PRO:HB3	1.90	0.52
1:I:165:LEU:CD2	1:I:238:LEU:HD21	2.39	0.52
1:J:89:LEU:HD13	1:J:118:MET:HG3	1.90	0.52
1:J:290:LEU:HD13	1:J:290:LEU:C	2.33	0.52
1:J:311:ILE:O	1:J:312:SER:O	2.27	0.52
1:K:142:GLU:O	1:K:146:ARG:HG2	2.09	0.52
1:M:196:ALA:CB	1:M:230:LEU:HD13	2.38	0.52
1:M:218:ARG:H	1:M:218:ARG:CD	2.19	0.52
1:N:243:GLU:O	1:N:244:VAL:C	2.53	0.52
1:O:112:TYR:HA	1:O:115:ASP:OD2	2.08	0.52
1:P:128:LYS:CE	1:P:132:GLU:HB2	2.39	0.52
1:P:144:LEU:HD11	1:P:149:ARG:HB2	1.90	0.52
1:P:173:GLU:HG2	1:P:177:GLN:NE2	2.23	0.52
1:Q:1:MET:HE1	1:Q:172:GLY:CA	2.25	0.52
1:Q:142:GLU:HA	1:Q:145:LYS:HD3	1.92	0.52
1:Q:168:VAL:O	1:Q:168:VAL:HG12	2.09	0.52
1:R:100:LEU:HB3	1:R:102:LEU:HD21	1.90	0.52
1:U:182:PHE:CG	1:U:304:LEU:HB2	2.44	0.52
1:V:55:ILE:HD12	1:V:55:ILE:N	2.23	0.52
1:A:55:ILE:HD12	1:A:86:VAL:HG11	1.90	0.52
1:A:66:LEU:C	1:A:68:LYS:H	2.17	0.52
1:C:211:PRO:HB2	1:C:246:PRO:CB	2.40	0.52
1:D:56:ARG:HD2	1:D:167:TYR:CE1	2.44	0.52
1:F:103:ARG:HG3	1:F:104:GLY:H	1.75	0.52
1:G:64:ASP:OD2	1:G:68:LYS:HE3	2.08	0.52
1:G:108:LEU:HD21	1:H:322:LEU:HD13	1.91	0.52
1:J:82:ASN:ND2	1:J:111:ASN:HD21	2.08	0.52
1:J:123:ARG:HD2	1:J:140:ILE:HD13	1.91	0.52
1:J:261:GLY:HA2	1:J:324:LEU:HD23	1.92	0.52
1:M:92:LYS:HE3	1:M:119:GLY:O	2.10	0.52
1:P:243:GLU:O	1:P:244:VAL:O	2.27	0.52
1:Q:229:ASN:ND2	1:Q:232:LYS:HE3	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:319:ASP:HA	1:Q:322:LEU:CD1	2.22	0.52
1:R:25:GLN:HE22	1:R:42:ARG:HE	1.57	0.52
1:S:140:ILE:C	1:S:142:GLU:N	2.67	0.52
1:T:171:VAL:HA	1:T:174:ILE:HD12	1.92	0.52
1:U:265:GLN:HG2	3:U:1253:HOH:O	2.10	0.52
1:V:188:ALA:HB3	2:V:1221:5PA:H6	1.90	0.52
1:W:143:GLU:O	1:W:146:ARG:HG2	2.09	0.52
1:X:103:ARG:HG2	1:X:103:ARG:NH1	2.23	0.52
1:A:223:MET:SD	1:A:248:LEU:HD21	2.49	0.52
1:B:142:GLU:OE1	1:B:142:GLU:HA	2.10	0.52
1:C:15:VAL:HG11	1:C:94:LEU:CD1	2.39	0.52
1:C:30:ILE:O	1:C:34:ILE:HG23	2.10	0.52
1:G:39:TYR:HD1	1:G:182:PHE:HE2	1.57	0.52
1:G:181:LYS:HG2	1:G:181:LYS:O	2.09	0.52
1:G:317:TYR:O	1:G:321:LEU:HG	2.09	0.52
1:H:103:ARG:HG2	1:H:103:ARG:HH11	1.74	0.52
1:H:242:VAL:HG13	1:H:242:VAL:O	2.10	0.52
1:H:318:GLY:HA2	1:H:321:LEU:HD12	1.91	0.52
1:I:311:ILE:HG23	1:I:312:SER:N	2.25	0.52
1:K:76:VAL:HG11	1:K:134:MET:HA	1.91	0.52
1:K:181:LYS:HG2	1:K:302:LYS:HZ2	1.74	0.52
1:K:312:SER:OG	1:L:315:PHE:HZ	1.92	0.52
1:L:58:LEU:HD21	1:L:87:THR:CA	2.33	0.52
1:N:103:ARG:NE	1:N:129:ASP:HA	2.25	0.52
1:O:185:ILE:CD1	1:O:209:ILE:HG21	2.39	0.52
1:P:295:ARG:C	1:P:297:GLY:N	2.67	0.52
1:Q:109:LYS:N	1:Q:113:LEU:HB2	2.24	0.52
1:Q:255:GLU:HG2	1:Q:258:LYS:HD2	1.92	0.52
1:R:15:VAL:HG23	1:R:63:GLY:HA2	1.92	0.52
1:R:196:ALA:CB	1:R:231:ILE:HG22	2.39	0.52
1:R:203:SER:HG	1:R:243:GLU:HG2	1.71	0.52
1:S:216:VAL:HG11	1:S:282:TYR:HA	1.90	0.52
1:T:30:ILE:HG21	1:T:287:PHE:CE2	2.44	0.52
1:T:73:VAL:HG12	1:T:74:ILE:N	2.25	0.52
1:T:140:ILE:O	1:T:143:GLU:HB3	2.09	0.52
1:U:193:GLY:O	1:U:196:ALA:HB3	2.09	0.52
1:U:213:GLY:O	1:U:248:LEU:HA	2.09	0.52
1:X:116:LYS:HZ1	1:X:122:THR:HB	1.75	0.52
1:X:251:TYR:CE2	1:X:289:GLY:HA2	2.44	0.52
1:E:103:ARG:HG3	1:E:103:ARG:O	2.09	0.52
1:E:251:TYR:CE2	1:E:289:GLY:HA2	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:58:LEU:HA	1:G:61:LEU:HB2	1.91	0.52
1:H:131:PHE:C	1:H:133:LEU:H	2.17	0.52
1:I:127:ALA:CB	1:I:136:TYR:CE2	2.91	0.52
1:I:266:ILE:CG2	1:I:267:ILE:N	2.71	0.52
1:L:1:MET:HB2	3:L:1133:HOH:O	2.08	0.52
1:L:55:ILE:HD12	1:L:86:VAL:HG11	1.92	0.52
1:N:281:VAL:HG22	1:N:282:TYR:CD1	2.44	0.52
1:O:108:LEU:O	1:O:113:LEU:HD12	2.10	0.52
1:O:167:TYR:CG	1:O:194:THR:HG23	2.45	0.52
1:O:256:TYR:CE1	1:O:281:VAL:HG23	2.45	0.52
1:Q:185:ILE:HG13	1:Q:209:ILE:CG2	2.39	0.52
1:Q:287:PHE:O	1:Q:290:LEU:HB3	2.10	0.52
1:Q:306:ILE:O	1:Q:306:ILE:HG22	2.09	0.52
1:R:211:PRO:HB2	1:R:246:PRO:CB	2.40	0.52
1:R:224:THR:CG2	1:R:225:SER:N	2.70	0.52
1:R:317:TYR:O	1:R:319:ASP:N	2.43	0.52
1:S:54:LYS:CE	2:S:1191:5PA:H91	2.26	0.52
1:S:200:LEU:HD22	1:S:204:ILE:HD11	1.92	0.52
1:T:202:LEU:HB2	3:T:1204:HOH:O	2.08	0.52
1:U:187:VAL:O	1:U:187:VAL:HG13	2.08	0.52
1:W:61:LEU:C	1:W:63:GLY:N	2.67	0.52
1:D:83:HIS:CD2	1:D:87:THR:OG1	2.63	0.52
1:D:146:ARG:HH21	1:F:295:ARG:HD3	1.75	0.52
1:G:274:GLU:OE1	1:G:274:GLU:HA	2.10	0.52
1:H:289:GLY:O	1:H:290:LEU:C	2.51	0.52
1:I:54:LYS:HE3	1:I:83:HIS:HB2	1.90	0.52
1:I:263:VAL:O	1:I:266:ILE:HG22	2.09	0.52
1:J:65:ALA:HB2	1:J:152:TYR:CD2	2.44	0.52
1:J:218:ARG:HD3	1:J:222:VAL:CG2	2.39	0.52
1:K:134:MET:CG	1:K:138:GLU:OE2	2.57	0.52
1:K:174:ILE:HA	1:K:177:GLN:HE21	1.74	0.52
1:K:259:ILE:HG21	1:K:320:LYS:O	2.09	0.52
1:L:42:ARG:HB3	1:L:42:ARG:HH11	1.75	0.52
1:L:111:ASN:HA	1:L:114:LEU:CD1	2.39	0.52
1:M:181:LYS:HG2	1:M:302:LYS:HZ2	1.74	0.52
1:M:186:VAL:HG23	1:M:305:PHE:HD1	1.75	0.52
1:N:136:TYR:HD1	1:N:139:GLU:OE2	1.92	0.52
1:O:42:ARG:HH12	1:O:44:ASP:CG	2.18	0.52
1:O:145:LYS:C	1:O:147:GLU:N	2.67	0.52
1:O:195:LEU:HD23	1:O:199:SER:OG	2.09	0.52
1:O:270:VAL:HG21	1:O:287:PHE:CE2	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:279:ASP:OD2	1:O:281:VAL:N	2.41	0.52
1:O:295:ARG:C	1:O:297:GLY:H	2.18	0.52
1:R:1:MET:HE2	1:R:5:ILE:HB	1.92	0.52
1:R:259:ILE:CG2	1:R:260:THR:N	2.73	0.52
2:R:1181:5PA:O4P	2:R:1181:5PA:C4A	2.51	0.52
1:S:222:VAL:O	1:S:222:VAL:HG22	2.10	0.52
1:T:256:TYR:HA	3:T:1203:HOH:O	2.08	0.52
1:V:221:GLU:O	1:V:222:VAL:C	2.53	0.52
1:W:56:ARG:HG2	1:W:56:ARG:HH11	1.74	0.52
1:W:116:LYS:HZ3	1:W:122:THR:CB	2.22	0.52
1:B:103:ARG:NE	1:B:133:LEU:HD21	2.20	0.52
1:B:200:LEU:HD12	1:B:234:ALA:HB1	1.92	0.52
1:D:74:ILE:HD12	1:D:141:ALA:HB2	1.92	0.52
1:G:123:ARG:HH12	1:G:140:ILE:HG21	1.74	0.52
1:H:17:LEU:HB2	1:H:59:GLU:HG2	1.92	0.52
1:J:216:VAL:O	1:J:252:SER:HA	2.09	0.52
1:K:24:ILE:O	1:K:24:ILE:HG22	2.09	0.52
1:K:61:LEU:HD22	1:K:154:ILE:HG23	1.92	0.52
1:M:1:MET:HE1	1:M:5:ILE:CG2	2.40	0.52
1:N:229:ASN:ND2	1:N:233:GLU:OE2	2.42	0.52
1:N:289:GLY:O	1:N:293:LEU:HB2	2.09	0.52
1:Q:41:LYS:HZ3	1:Q:177:GLN:NE2	2.06	0.52
1:R:54:LYS:HG3	1:R:83:HIS:HA	1.90	0.52
1:S:221:GLU:OE1	1:S:221:GLU:CA	2.54	0.52
1:T:191:SER:OG	2:T:1201:5PA:O1P	2.19	0.52
1:V:245:ARG:CB	1:V:246:PRO:HD2	2.36	0.52
1:W:290:LEU:CD1	1:W:303:ILE:HD13	2.39	0.52
1:X:72:VAL:HG11	1:X:144:LEU:HD11	1.90	0.52
1:C:210:ARG:HD2	1:C:247:GLU:OE2	2.09	0.52
1:C:274:GLU:OE1	1:C:274:GLU:HA	2.10	0.52
1:D:295:ARG:NH1	3:D:1042:HOH:O	2.41	0.52
1:E:185:ILE:CG2	1:E:306:ILE:HD11	2.40	0.52
1:F:81:SER:HB3	1:F:84:ALA:HB3	1.92	0.52
1:G:57:LYS:HB3	1:G:163:GLY:C	2.32	0.52
1:H:31:SER:CB	1:H:36:ALA:O	2.58	0.52
1:J:54:LYS:HE3	2:J:1101:5PA:H91	1.91	0.52
1:J:162:ILE:HG23	1:J:163:GLY:H	1.74	0.52
1:K:84:ALA:HB1	1:K:100:LEU:HD23	1.92	0.52
1:K:139:GLU:O	1:K:142:GLU:HB2	2.10	0.52
1:K:270:VAL:HG21	1:K:278:LEU:HD11	1.91	0.52
1:M:170:ALA:O	1:M:174:ILE:HG13	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:265:GLN:O	1:O:266:ILE:C	2.53	0.52
1:O:295:ARG:O	1:O:297:GLY:N	2.42	0.52
1:R:82:ASN:O	1:R:86:VAL:HG23	2.09	0.52
1:R:252:SER:O	1:R:253:PHE:HB2	2.10	0.52
1:T:15:VAL:HG23	1:T:63:GLY:HA2	1.92	0.52
1:V:128:LYS:HG2	1:V:130:SER:OG	2.10	0.52
1:W:41:LYS:NZ	1:W:177:GLN:NE2	2.57	0.52
1:W:263:VAL:HG12	1:W:264:ALA:N	2.24	0.52
1:W:290:LEU:HD11	1:W:303:ILE:HD13	1.90	0.52
1:X:86:VAL:O	1:X:86:VAL:HG12	2.08	0.52
1:A:88:GLY:O	1:A:89:LEU:C	2.52	0.52
1:C:79:VAL:HA	1:C:102:LEU:HD13	1.91	0.52
1:C:198:LEU:HD11	1:C:306:ILE:CD1	2.39	0.52
1:D:1:MET:HE2	1:D:5:ILE:HB	1.91	0.52
1:G:195:LEU:O	1:G:195:LEU:HD23	2.09	0.52
1:I:19:PRO:HG2	1:J:25:GLN:OE1	2.09	0.52
1:J:164:THR:HG21	1:J:234:ALA:HB1	1.91	0.52
1:J:202:LEU:HD22	1:J:209:ILE:HD12	1.92	0.52
1:K:131:PHE:O	1:K:133:LEU:N	2.42	0.52
1:K:174:ILE:HA	1:K:177:GLN:HG2	1.92	0.52
1:K:202:LEU:HD22	1:K:209:ILE:HD12	1.90	0.52
1:L:127:ALA:HB1	1:L:128:LYS:NZ	2.25	0.52
1:N:25:GLN:NE2	1:N:42:ARG:HE	2.07	0.52
1:O:142:GLU:O	1:O:143:GLU:C	2.51	0.52
1:P:261:GLY:O	1:P:264:ALA:N	2.43	0.52
1:Q:164:THR:HG23	1:Q:197:GLY:HA2	1.92	0.52
1:R:48:LEU:HD11	1:R:93:LYS:HD3	1.92	0.52
1:S:78:ALA:C	1:S:80:HIS:N	2.68	0.52
1:U:25:GLN:HE22	1:U:42:ARG:HE	1.55	0.52
1:V:135:LYS:HG2	1:V:136:TYR:N	2.24	0.52
1:X:240:VAL:CG2	1:X:241:LYS:N	2.72	0.52
1:X:259:ILE:HD12	1:X:320:LYS:HG3	1.91	0.52
1:D:207:GLU:HB2	1:D:209:ILE:HG13	1.91	0.52
1:D:210:ARG:HH22	1:D:299:LEU:HA	1.73	0.52
1:E:133:LEU:O	1:E:136:TYR:HB2	2.10	0.52
1:F:161:PRO:HA	1:F:164:THR:HG22	1.92	0.52
1:G:142:GLU:C	1:G:144:LEU:H	2.17	0.52
2:G:1071:5PA:H4A2	2:G:1071:5PA:O4P	2.09	0.52
1:I:93:LYS:HE3	1:J:274:GLU:C	2.35	0.52
1:J:63:GLY:O	1:J:64:ASP:C	2.52	0.52
1:J:224:THR:HG23	1:J:225:SER:N	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:15:VAL:O	1:K:17:LEU:HD22	2.09	0.52
1:M:143:GLU:CB	1:M:146:ARG:NH2	2.73	0.52
1:O:247:GLU:HB3	1:O:249:TYR:HE1	1.75	0.52
1:P:222:VAL:HG13	1:P:223:MET:N	2.24	0.52
1:R:136:TYR:HA	1:R:139:GLU:OE2	2.09	0.52
1:R:207:GLU:C	1:R:209:ILE:N	2.66	0.52
1:R:259:ILE:HG21	1:R:321:LEU:HD23	1.92	0.52
1:S:58:LEU:HD11	1:S:87:THR:HG23	1.92	0.52
1:S:260:THR:OG1	1:S:262:GLU:HB2	2.09	0.52
1:T:291:VAL:O	1:T:295:ARG:HB2	2.10	0.52
1:W:141:ALA:O	1:W:145:LYS:HG2	2.10	0.52
1:W:157:GLY:C	1:W:159:ALA:H	2.18	0.52
1:W:157:GLY:HA3	1:W:191:SER:OG	2.10	0.52
1:X:89:LEU:O	1:X:89:LEU:HG	2.09	0.52
1:A:214:ILE:CG1	1:A:251:TYR:HB2	2.39	0.51
1:B:141:ALA:O	1:B:145:LYS:HB2	2.09	0.51
1:B:269:LYS:CB	1:B:273:ARG:NH2	2.73	0.51
1:F:14:ARG:HD3	1:F:60:TYR:CZ	2.44	0.51
1:F:207:GLU:HB3	1:F:209:ILE:HG13	1.91	0.51
1:G:83:HIS:ND1	1:G:157:GLY:HA2	2.25	0.51
1:G:103:ARG:HB3	1:G:133:LEU:HD21	1.91	0.51
1:G:280:PRO:HB3	1:G:321:LEU:HD21	1.92	0.51
1:I:106:GLU:HG3	1:I:124:VAL:HG11	1.92	0.51
1:I:125:TYR:C	1:I:127:ALA:N	2.68	0.51
1:I:147:GLU:C	1:I:149:ARG:H	2.18	0.51
1:J:100:LEU:CD2	1:J:120:ILE:HG21	2.39	0.51
1:N:40:ILE:HD13	1:N:276:ILE:HD13	1.92	0.51
1:O:19:PRO:HG2	1:O:20:TRP:CZ3	2.44	0.51
1:O:321:LEU:O	1:O:325:LEU:HD22	2.10	0.51
1:T:234:ALA:HA	1:T:237:LEU:HD12	1.91	0.51
1:A:195:LEU:O	1:A:195:LEU:HD22	2.10	0.51
1:A:214:ILE:CD1	1:A:251:TYR:HB2	2.40	0.51
1:A:271:GLY:HA3	1:B:118:MET:SD	2.50	0.51
1:B:128:LYS:C	1:B:130:SER:N	2.68	0.51
1:B:224:THR:HG21	1:B:245:ARG:HH22	1.76	0.51
1:D:27:LEU:HD11	1:D:40:ILE:HB	1.90	0.51
1:F:266:ILE:HD13	1:F:288:TYR:HA	1.91	0.51
1:G:114:LEU:HA	1:G:117:ILE:HD12	1.91	0.51
1:G:283:THR:O	1:G:286:ALA:HB3	2.10	0.51
1:H:113:LEU:HD22	1:H:117:ILE:CD1	2.37	0.51
1:H:269:LYS:O	1:H:273:ARG:HD2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:217:GLY:N	1:J:252:SER:HB3	2.24	0.51
2:J:1101:5PA:O4P	2:J:1101:5PA:H4A2	2.09	0.51
1:K:55:ILE:H	1:K:55:ILE:HD12	1.75	0.51
1:K:108:LEU:O	1:K:109:LYS:CB	2.58	0.51
1:K:188:ALA:HB3	2:K:1111:5PA:H6	1.93	0.51
1:M:87:THR:HG21	1:M:154:ILE:HD12	1.92	0.51
1:O:319:ASP:OD2	1:P:108:LEU:HD23	2.11	0.51
1:P:101:VAL:CG1	1:P:133:LEU:HB3	2.40	0.51
1:Q:31:SER:HG	1:Q:38:VAL:HG12	1.75	0.51
1:Q:118:MET:HE1	1:R:271:GLY:HA3	1.91	0.51
1:Q:268:ARG:NH2	1:Q:325:LEU:CG	2.70	0.51
1:R:42:ARG:HB3	1:R:42:ARG:HH11	1.75	0.51
1:R:174:ILE:HA	1:R:177:GLN:HG2	1.92	0.51
1:S:8:LEU:CD1	1:S:204:ILE:HD13	2.35	0.51
1:S:156:PRO:C	1:S:158:GLY:N	2.62	0.51
1:S:269:LYS:HG2	1:S:273:ARG:CZ	2.40	0.51
1:U:1:MET:HE3	1:U:172:GLY:HA3	1.90	0.51
1:V:133:LEU:HA	1:V:136:TYR:CD2	2.42	0.51
1:V:202:LEU:HD12	1:V:211:PRO:HG3	1.91	0.51
1:W:218:ARG:O	1:W:220:GLY:N	2.44	0.51
1:X:82:ASN:OD1	1:X:310:GLY:CA	2.58	0.51
1:B:281:VAL:HG13	1:B:282:TYR:CD1	2.45	0.51
1:C:116:LYS:NZ	1:C:122:THR:CG2	2.73	0.51
1:C:181:LYS:N	1:C:181:LYS:CD	2.73	0.51
1:E:218:ARG:O	1:E:220:GLY:N	2.43	0.51
1:F:14:ARG:HB2	1:F:59:GLU:O	2.10	0.51
1:F:92:LYS:HE3	1:F:119:GLY:O	2.10	0.51
1:G:55:ILE:CD1	1:G:86:VAL:HG13	2.40	0.51
1:G:214:ILE:HD13	1:G:286:ALA:C	2.34	0.51
1:H:100:LEU:CB	1:H:102:LEU:HD21	2.39	0.51
1:K:80:HIS:CD2	1:K:81:SER:H	2.28	0.51
1:K:201:GLY:HA2	1:K:204:ILE:HD12	1.93	0.51
1:L:145:LYS:C	1:L:147:GLU:H	2.17	0.51
1:M:295:ARG:NE	3:M:1148:HOH:O	2.44	0.51
1:O:185:ILE:HG13	1:O:209:ILE:CG2	2.41	0.51
1:P:27:LEU:HB2	1:P:38:VAL:O	2.10	0.51
1:P:128:LYS:H	1:P:128:LYS:CD	2.21	0.51
1:P:134:MET:O	1:P:135:LYS:C	2.52	0.51
1:P:142:GLU:O	1:P:146:ARG:HG3	2.10	0.51
1:P:182:PHE:CE2	1:P:304:LEU:HB2	2.45	0.51
1:Q:226:LYS:HG2	3:Q:1185:HOH:O	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:319:ASP:C	1:R:321:LEU:N	2.66	0.51
1:S:118:MET:O	1:S:120:ILE:HG13	2.11	0.51
1:S:156:PRO:O	1:S:158:GLY:N	2.42	0.51
1:S:212:VAL:HG21	1:S:299:LEU:CD2	2.41	0.51
1:U:218:ARG:NH1	1:U:256:TYR:HB3	2.25	0.51
1:X:66:LEU:CD2	1:X:96:LEU:HD21	2.39	0.51
1:X:308:THR:OG1	2:X:1241:5PA:N1	2.41	0.51
1:B:218:ARG:O	1:B:223:MET:SD	2.69	0.51
1:C:219:PHE:CZ	1:C:224:THR:HB	2.45	0.51
1:D:132:GLU:C	1:D:134:MET:H	2.18	0.51
1:G:18:ILE:HD11	1:G:55:ILE:HG22	1.92	0.51
1:H:42:ARG:CB	1:H:45:LEU:HD12	2.39	0.51
1:H:50:ILE:HG23	1:H:85:PHE:HE2	1.74	0.51
1:J:142:GLU:O	1:J:143:GLU:C	2.53	0.51
1:K:5:ILE:HD11	1:K:171:VAL:HG23	1.91	0.51
1:K:259:ILE:CD1	1:K:317:TYR:HB3	2.36	0.51
1:L:100:LEU:HD11	1:L:120:ILE:HG21	1.93	0.51
1:M:54:LYS:CE	2:M:1131:5PA:H91	2.40	0.51
1:M:177:GLN:HG3	1:M:178:SER:N	2.25	0.51
1:M:227:LEU:HD21	1:M:246:PRO:HG3	1.91	0.51
1:M:269:LYS:CG	1:M:273:ARG:NH1	2.73	0.51
1:M:311:ILE:HG23	1:M:312:SER:N	2.24	0.51
1:N:34:ILE:CD1	1:N:291:VAL:HA	2.40	0.51
1:O:81:SER:O	1:O:111:ASN:ND2	2.44	0.51
1:P:90:ALA:C	1:P:92:LYS:N	2.68	0.51
1:Q:131:PHE:C	1:Q:133:LEU:H	2.18	0.51
1:R:127:ALA:HB1	1:R:128:LYS:HD3	1.91	0.51
1:R:307:HIS:CE1	1:R:309:GLY:HA2	2.45	0.51
2:T:1201:5PA:O4P	2:T:1201:5PA:C4A	2.57	0.51
1:W:210:ARG:NH2	1:W:299:LEU:HA	2.26	0.51
1:W:245:ARG:HD3	3:W:1257:HOH:O	2.09	0.51
1:A:66:LEU:C	1:A:68:LYS:N	2.66	0.51
1:A:221:GLU:C	1:A:223:MET:N	2.64	0.51
1:D:146:ARG:C	1:D:147:GLU:HG3	2.36	0.51
1:D:147:GLU:C	1:D:149:ARG:N	2.69	0.51
1:F:18:ILE:HD13	1:F:46:THR:HG22	1.92	0.51
1:F:110:GLY:HA3	1:F:316:HIS:CD2	2.46	0.51
1:G:25:GLN:NE2	1:G:42:ARG:NE	2.58	0.51
1:G:80:HIS:CD2	1:G:80:HIS:C	2.89	0.51
1:G:81:SER:O	1:G:111:ASN:ND2	2.43	0.51
1:G:207:GLU:O	1:G:209:ILE:N	2.37	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:251:TYR:CE2	1:G:289:GLY:HA2	2.44	0.51
1:I:138:GLU:CG	3:I:1096:HOH:O	2.58	0.51
1:J:15:VAL:HG23	1:J:63:GLY:CA	2.40	0.51
1:J:18:ILE:HG23	1:J:46:THR:O	2.10	0.51
1:J:174:ILE:O	1:J:175:ALA:C	2.54	0.51
1:O:221:GLU:O	1:O:223:MET:N	2.44	0.51
1:O:281:VAL:O	1:O:281:VAL:CG2	2.59	0.51
1:O:317:TYR:CB	1:O:320:LYS:HB3	2.39	0.51
1:Q:72:VAL:HG13	1:Q:72:VAL:O	2.11	0.51
1:S:109:LYS:HA	1:S:113:LEU:HB2	1.92	0.51
1:S:123:ARG:HH11	1:S:140:ILE:CD1	2.19	0.51
1:T:270:VAL:HG21	1:T:278:LEU:HD11	1.90	0.51
1:T:305:PHE:CD2	3:T:1230:HOH:O	2.54	0.51
1:V:218:ARG:CG	1:V:219:PHE:H	2.21	0.51
1:W:79:VAL:HA	1:W:102:LEU:HD13	1.92	0.51
1:W:222:VAL:HG22	1:W:226:LYS:CD	2.40	0.51
1:X:260:THR:OG1	1:X:263:VAL:HG23	2.11	0.51
1:B:127:ALA:O	1:B:128:LYS:C	2.53	0.51
1:E:154:ILE:HG22	1:E:158:GLY:HA2	1.92	0.51
1:F:105:LYS:HG2	1:F:107:GLU:HG3	1.92	0.51
1:G:48:LEU:CD2	1:G:89:LEU:HD23	2.41	0.51
1:G:97:ASP:OD2	1:G:98:ALA:N	2.44	0.51
1:H:85:PHE:CZ	1:H:114:LEU:HB3	2.45	0.51
1:I:131:PHE:C	1:I:133:LEU:N	2.68	0.51
1:K:316:HIS:C	1:K:318:GLY:N	2.68	0.51
1:L:58:LEU:HG	1:L:62:LEU:CD1	2.41	0.51
1:L:266:ILE:CG2	1:L:267:ILE:N	2.74	0.51
1:O:40:ILE:HD11	1:O:307:HIS:CD2	2.45	0.51
1:O:295:ARG:C	1:O:297:GLY:N	2.67	0.51
1:O:312:SER:HG	1:P:315:PHE:HZ	1.56	0.51
1:P:134:MET:C	1:P:138:GLU:HG2	2.35	0.51
1:P:302:LYS:HD2	3:P:1163:HOH:O	2.09	0.51
1:Q:38:VAL:HG13	1:Q:38:VAL:O	2.10	0.51
1:S:12:PHE:HB2	1:S:60:TYR:HE2	1.76	0.51
1:S:72:VAL:HB	1:S:97:ASP:HB3	1.93	0.51
1:S:167:TYR:C	1:S:169:ARG:N	2.66	0.51
1:T:211:PRO:CG	1:T:246:PRO:HB3	2.40	0.51
1:T:218:ARG:HH11	1:T:218:ARG:CB	2.19	0.51
1:V:48:LEU:HD23	1:V:48:LEU:C	2.35	0.51
1:V:48:LEU:HD11	1:V:90:ALA:HA	1.93	0.51
1:V:243:GLU:O	1:V:244:VAL:C	2.54	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:34:ILE:O	1:X:34:ILE:HG22	2.10	0.51
1:X:103:ARG:NH2	1:X:131:PHE:CG	2.79	0.51
1:C:39:TYR:HB2	1:C:182:PHE:HE2	1.75	0.51
1:D:131:PHE:HA	1:D:133:LEU:HD13	1.92	0.51
1:D:269:LYS:HB3	1:D:273:ARG:NH1	2.26	0.51
1:E:74:ILE:HG21	1:E:137:ALA:HB1	1.93	0.51
1:E:228:ASP:OD2	1:E:245:ARG:NH1	2.44	0.51
1:F:146:ARG:O	1:F:147:GLU:HG3	2.10	0.51
1:F:221:GLU:O	1:F:222:VAL:C	2.53	0.51
1:G:42:ARG:NH1	1:G:44:ASP:CG	2.69	0.51
1:H:130:SER:O	1:H:132:GLU:HG3	2.11	0.51
1:H:204:ILE:HG12	1:H:240:VAL:HG21	1.92	0.51
1:I:11:LYS:HE3	1:I:12:PHE:CE1	2.44	0.51
1:I:101:VAL:HG12	1:I:133:LEU:HD11	1.92	0.51
1:I:167:TYR:O	1:I:171:VAL:HG13	2.11	0.51
1:I:240:VAL:HA	3:I:1111:HOH:O	2.11	0.51
1:K:80:HIS:CD2	1:K:81:SER:N	2.79	0.51
1:L:17:LEU:CD2	1:L:59:GLU:HA	2.41	0.51
1:L:171:VAL:HG11	1:L:201:GLY:HA3	1.93	0.51
1:O:37:ASP:HB2	1:O:301:GLU:O	2.10	0.51
1:P:210:ARG:HH22	1:P:298:GLU:C	2.19	0.51
1:Q:89:LEU:HD11	1:Q:118:MET:HE3	1.93	0.51
1:R:78:ALA:O	1:R:81:SER:HB2	2.11	0.51
1:U:17:LEU:O	1:U:19:PRO:HD3	2.10	0.51
1:U:82:ASN:HA	1:U:111:ASN:HD21	1.75	0.51
1:U:164:THR:C	1:U:166:GLY:H	2.19	0.51
1:V:100:LEU:HD13	1:V:120:ILE:CG2	2.40	0.51
1:X:147:GLU:C	1:X:149:ARG:N	2.69	0.51
1:A:20:TRP:CD1	1:B:20:TRP:CZ3	2.95	0.51
1:A:171:VAL:HG21	1:A:201:GLY:HA3	1.91	0.51
1:C:127:ALA:O	1:C:129:ASP:OD2	2.28	0.51
1:D:19:PRO:HG2	1:D:20:TRP:HD1	1.76	0.51
1:E:42:ARG:NH1	1:E:45:LEU:HD11	2.26	0.51
1:F:41:LYS:NZ	1:F:177:GLN:HE22	2.09	0.51
1:F:48:LEU:HD23	1:F:49:GLY:N	2.25	0.51
1:F:143:GLU:O	1:F:146:ARG:HB2	2.10	0.51
1:F:218:ARG:HD3	1:F:222:VAL:HG11	1.92	0.51
1:F:224:THR:OG1	1:F:245:ARG:NH2	2.41	0.51
1:G:306:ILE:O	1:G:308:THR:HG23	2.11	0.51
1:H:105:LYS:CG	1:H:107:GLU:HG3	2.38	0.51
1:I:38:VAL:HG13	1:I:38:VAL:O	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:123:ARG:HH12	1:K:140:ILE:HG23	1.76	0.51
1:K:221:GLU:CD	1:V:106:GLU:OE2	2.54	0.51
1:L:43:ASP:C	1:L:45:LEU:H	2.18	0.51
1:L:243:GLU:O	1:L:244:VAL:C	2.53	0.51
1:M:64:ASP:CG	1:M:68:LYS:HZ2	2.16	0.51
1:M:81:SER:HB3	3:M:1137:HOH:O	2.10	0.51
1:M:217:GLY:HA2	1:M:256:TYR:HB2	1.93	0.51
1:M:268:ARG:O	1:M:272:THR:OG1	2.21	0.51
1:M:277:ILE:HG13	3:M:1133:HOH:O	2.10	0.51
1:N:210:ARG:HH11	1:N:247:GLU:CD	2.19	0.51
1:N:224:THR:HG22	1:N:225:SER:N	2.24	0.51
1:O:143:GLU:HA	1:O:146:ARG:NH1	2.26	0.51
1:O:276:ILE:HG22	1:O:277:ILE:N	2.26	0.51
1:Q:214:ILE:CD1	1:Q:251:TYR:HB2	2.41	0.51
1:S:61:LEU:HD23	1:S:162:ILE:CD1	2.41	0.51
1:W:47:GLY:O	1:X:42:ARG:NH2	2.44	0.51
1:X:253:PHE:HZ	1:X:288:TYR:CD2	2.29	0.51
1:X:324:LEU:HD12	1:X:324:LEU:N	2.25	0.51
1:A:52:GLY:HA2	1:A:308:THR:O	2.09	0.51
1:A:167:TYR:HA	1:A:170:ALA:HB3	1.91	0.51
1:A:318:GLY:HA3	1:B:113:LEU:HD11	1.92	0.51
1:B:39:TYR:O	1:B:304:LEU:HA	2.11	0.51
1:B:226:LYS:HB3	3:B:1043:HOH:O	2.10	0.51
1:E:15:VAL:O	1:E:17:LEU:HD22	2.11	0.51
1:E:219:PHE:CE2	1:E:248:LEU:HD23	2.45	0.51
1:F:114:LEU:O	1:F:115:ASP:C	2.53	0.51
1:G:19:PRO:HB2	1:G:20:TRP:HE3	1.76	0.51
1:I:11:LYS:HG3	1:I:12:PHE:CD1	2.46	0.51
1:I:195:LEU:CD1	1:I:213:GLY:HA3	2.41	0.51
1:I:259:ILE:HB	1:I:320:LYS:HE3	1.92	0.51
1:J:54:LYS:CE	2:J:1101:5PA:H91	2.40	0.51
1:K:131:PHE:C	1:K:131:PHE:CD1	2.89	0.51
1:L:74:ILE:CD1	1:L:151:PRO:HB2	2.41	0.51
1:N:55:ILE:HD11	1:N:86:VAL:HG11	1.93	0.51
1:P:179:GLU:HG3	3:P:1179:HOH:O	2.09	0.51
1:Q:65:ALA:HA	1:Q:152:TYR:CE1	2.46	0.51
1:Q:94:LEU:C	1:Q:96:LEU:H	2.17	0.51
1:Q:287:PHE:HD1	1:Q:290:LEU:HD23	1.76	0.51
1:R:213:GLY:O	1:R:248:LEU:HD12	2.11	0.51
1:T:268:ARG:O	1:T:272:THR:OG1	2.21	0.51
1:U:215:ALA:HB2	1:U:223:MET:HE2	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:279:ASP:O	1:U:284:GLY:CA	2.59	0.51
1:U:291:VAL:O	1:U:295:ARG:HB2	2.11	0.51
1:X:164:THR:HG21	1:X:234:ALA:HB2	1.93	0.51
1:A:116:LYS:HZ1	1:A:122:THR:HG22	1.74	0.51
1:C:85:PHE:CZ	1:C:89:LEU:HD22	2.46	0.51
1:G:56:ARG:HD2	1:G:167:TYR:CE1	2.46	0.51
1:G:216:VAL:HG21	1:G:282:TYR:CD2	2.46	0.51
1:H:205:LEU:O	1:H:206:ASN:C	2.54	0.51
1:H:211:PRO:HB2	1:H:246:PRO:HB3	1.92	0.51
1:I:214:ILE:CD1	1:I:285:LYS:O	2.59	0.51
1:I:278:LEU:HB3	1:I:283:THR:OG1	2.11	0.51
1:I:320:LYS:O	1:I:320:LYS:HD2	2.11	0.51
1:J:187:VAL:HG21	1:J:194:THR:HG22	1.91	0.51
1:K:210:ARG:NH2	1:K:299:LEU:HA	2.25	0.51
1:K:221:GLU:OE1	1:V:106:GLU:OE2	2.29	0.51
1:K:294:ALA:O	1:K:295:ARG:C	2.53	0.51
1:M:58:LEU:HD12	1:M:62:LEU:CG	2.39	0.51
1:O:165:LEU:CD2	1:O:238:LEU:HD21	2.41	0.51
1:S:116:LYS:NZ	1:S:122:THR:HG22	2.25	0.51
1:U:19:PRO:HD2	1:U:20:TRP:CZ3	2.46	0.51
1:U:54:LYS:CE	2:U:1211:5PA:H91	2.40	0.51
1:U:71:ASP:OD2	1:U:150:LYS:O	2.28	0.51
1:U:161:PRO:O	1:U:164:THR:HB	2.11	0.51
1:V:262:GLU:H	1:V:262:GLU:CD	2.19	0.51
1:W:75:THR:CB	1:W:154:ILE:HB	2.41	0.51
1:W:222:VAL:HG22	1:W:226:LYS:HE3	1.92	0.51
1:X:77:GLY:HA3	1:X:81:SER:HB2	1.93	0.51
1:X:265:GLN:HG3	1:X:269:LYS:NZ	2.26	0.51
1:B:210:ARG:NH1	1:B:247:GLU:OE2	2.39	0.50
1:D:103:ARG:HH21	1:D:131:PHE:CA	2.22	0.50
1:E:55:ILE:CD1	1:E:55:ILE:H	2.23	0.50
1:H:90:ALA:O	1:H:91:ALA:C	2.52	0.50
1:H:247:GLU:HB3	1:H:249:TYR:CE1	2.46	0.50
1:J:9:LEU:HD23	1:J:238:LEU:HD21	1.93	0.50
1:J:243:GLU:O	1:J:244:VAL:O	2.28	0.50
1:K:54:LYS:CE	2:K:1111:5PA:H91	2.38	0.50
1:K:200:LEU:HD21	1:K:240:VAL:CG1	2.37	0.50
1:L:74:ILE:HD13	1:L:141:ALA:HB2	1.92	0.50
1:L:133:LEU:N	1:L:133:LEU:HD12	2.26	0.50
1:L:157:GLY:HA2	2:L:1121:5PA:H92	1.93	0.50
1:P:283:THR:O	1:P:286:ALA:N	2.31	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:1161:5PA:O4P	2:P:1161:5PA:C4A	2.55	0.50
1:Q:185:ILE:HG13	1:Q:209:ILE:HG21	1.93	0.50
1:Q:222:VAL:O	1:Q:222:VAL:CG1	2.58	0.50
1:S:182:PHE:CE1	1:S:304:LEU:HG	2.47	0.50
1:V:5:ILE:O	1:V:9:LEU:HB2	2.11	0.50
1:V:127:ALA:HB1	1:V:128:LYS:HD3	1.93	0.50
1:V:266:ILE:HA	1:V:269:LYS:HD2	1.93	0.50
1:W:25:GLN:NE2	1:W:42:ARG:HG3	2.26	0.50
1:W:295:ARG:C	1:W:297:GLY:N	2.68	0.50
1:X:210:ARG:NH1	1:X:247:GLU:OE1	2.44	0.50
1:X:259:ILE:HG23	1:X:280:PRO:HB2	1.94	0.50
1:A:81:SER:HB3	1:A:84:ALA:HB3	1.93	0.50
1:A:180:VAL:HA	1:A:181:LYS:NZ	2.25	0.50
1:A:181:LYS:H	1:A:181:LYS:CE	2.23	0.50
1:B:30:ILE:HG21	1:B:287:PHE:CZ	2.46	0.50
1:B:133:LEU:C	1:B:135:LYS:H	2.18	0.50
1:C:279:ASP:H	1:C:283:THR:HG1	1.59	0.50
1:F:186:VAL:HG12	1:F:187:VAL:N	2.26	0.50
1:G:73:VAL:HG21	1:G:91:ALA:HB1	1.93	0.50
1:H:182:PHE:CE2	1:H:304:LEU:HB2	2.47	0.50
1:I:174:ILE:HA	1:I:177:GLN:NE2	2.08	0.50
1:I:183:ASP:OD2	1:I:302:LYS:HB2	2.11	0.50
1:L:4:LYS:HE2	1:L:204:ILE:HG23	1.92	0.50
1:M:308:THR:OG1	2:M:1131:5PA:N1	2.39	0.50
1:N:159:ALA:HB2	1:N:191:SER:OG	2.10	0.50
1:O:195:LEU:HD21	1:O:246:PRO:CB	2.36	0.50
1:O:198:LEU:HD23	1:O:198:LEU:O	2.11	0.50
1:Q:259:ILE:HG22	1:Q:324:LEU:HD22	1.92	0.50
1:R:9:LEU:HD21	1:R:165:LEU:HD22	1.93	0.50
1:R:265:GLN:HG3	1:R:269:LYS:NZ	2.26	0.50
1:S:161:PRO:CB	1:S:237:LEU:HD12	2.41	0.50
1:S:167:TYR:C	1:S:169:ARG:H	2.16	0.50
1:S:269:LYS:HG2	1:S:273:ARG:NH2	2.26	0.50
1:U:317:TYR:O	1:U:321:LEU:HG	2.11	0.50
1:W:125:TYR:C	1:W:127:ALA:N	2.61	0.50
1:B:103:ARG:NH1	1:B:129:ASP:HA	2.25	0.50
1:C:41:LYS:HZ1	1:C:177:GLN:HE22	1.58	0.50
1:D:255:GLU:HA	3:D:1070:HOH:O	2.11	0.50
1:G:55:ILE:HD12	1:G:86:VAL:HG11	1.93	0.50
1:G:212:VAL:HG13	1:G:249:TYR:CE1	2.46	0.50
1:G:255:GLU:CG	1:G:258:LYS:HB2	2.39	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:183:ASP:OD2	1:H:301:GLU:N	2.40	0.50
1:J:268:ARG:CZ	1:J:325:LEU:HD12	2.41	0.50
1:K:61:LEU:HD23	1:K:162:ILE:CD1	2.40	0.50
1:K:102:LEU:C	1:K:133:LEU:HD21	2.37	0.50
1:K:191:SER:N	2:K:1111:5PA:O1P	2.43	0.50
1:L:58:LEU:HG	1:L:62:LEU:HD11	1.93	0.50
1:L:131:PHE:HZ	1:L:256:TYR:HE2	1.58	0.50
1:M:103:ARG:NH1	1:M:128:LYS:HG2	2.24	0.50
1:M:222:VAL:O	1:M:226:LYS:CB	2.59	0.50
1:N:103:ARG:HG2	1:N:103:ARG:NH1	2.25	0.50
1:N:128:LYS:C	1:N:130:SER:N	2.68	0.50
1:P:1:MET:HE2	1:P:2:HIS:H	1.76	0.50
1:P:72:VAL:HB	1:P:149:ARG:NH2	2.26	0.50
1:P:321:LEU:O	1:P:325:LEU:HD23	2.11	0.50
1:Q:164:THR:HG21	1:Q:234:ALA:HB1	1.94	0.50
1:Q:210:ARG:NH1	1:Q:247:GLU:OE2	2.44	0.50
1:R:224:THR:HG22	1:R:225:SER:H	1.77	0.50
1:R:321:LEU:C	1:R:323:SER:N	2.69	0.50
1:T:27:LEU:HB3	1:T:274:GLU:OE2	2.11	0.50
1:T:221:GLU:O	1:T:222:VAL:C	2.54	0.50
1:U:116:LYS:NZ	1:U:122:THR:HG22	2.26	0.50
1:U:167:TYR:O	1:U:171:VAL:HG13	2.10	0.50
1:V:221:GLU:O	1:V:224:THR:HG22	2.11	0.50
1:W:207:GLU:O	1:W:209:ILE:N	2.37	0.50
1:W:253:PHE:HE2	1:W:262:GLU:HB2	1.76	0.50
1:X:40:ILE:HA	1:X:305:PHE:O	2.11	0.50
1:A:53:ASN:HB3	1:A:308:THR:CG2	2.41	0.50
1:A:181:LYS:N	1:A:181:LYS:CD	2.74	0.50
1:B:15:VAL:CG2	1:B:63:GLY:HA2	2.31	0.50
1:B:15:VAL:HG21	1:B:66:LEU:HD12	1.93	0.50
1:C:214:ILE:HD11	1:C:251:TYR:CB	2.38	0.50
1:D:171:VAL:CG1	1:D:198:LEU:HD23	2.41	0.50
1:D:255:GLU:CG	1:D:258:LYS:HB2	2.38	0.50
1:G:100:LEU:N	1:G:100:LEU:CD1	2.75	0.50
1:G:161:PRO:HB2	1:G:237:LEU:CD1	2.39	0.50
1:H:39:TYR:CZ	1:H:180:VAL:HG21	2.47	0.50
1:J:111:ASN:HA	1:J:114:LEU:HD12	1.92	0.50
1:K:42:ARG:NH2	1:L:47:GLY:O	2.44	0.50
1:K:55:ILE:HD12	1:K:55:ILE:N	2.27	0.50
1:K:64:ASP:HB3	1:K:152:TYR:HH	1.75	0.50
1:L:15:VAL:HG23	1:L:63:GLY:HA2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:216:VAL:C	1:L:252:SER:HB3	2.37	0.50
1:L:260:THR:O	1:L:324:LEU:HD23	2.12	0.50
1:M:78:ALA:HB3	1:M:80:HIS:CD2	2.47	0.50
1:M:214:ILE:O	1:M:214:ILE:HG12	2.10	0.50
1:M:227:LEU:HD11	1:M:231:ILE:HD11	1.91	0.50
1:N:42:ARG:HB3	1:N:42:ARG:NH1	2.26	0.50
1:N:245:ARG:HB2	1:N:246:PRO:HD2	1.94	0.50
1:O:132:GLU:O	1:O:135:LYS:HG2	2.11	0.50
1:P:133:LEU:H	1:P:133:LEU:HD13	1.75	0.50
1:P:135:LYS:O	1:P:139:GLU:HG3	2.11	0.50
1:P:262:GLU:H	1:P:262:GLU:CD	2.19	0.50
1:Q:60:TYR:O	1:Q:162:ILE:HD13	2.11	0.50
1:S:15:VAL:HG23	1:S:63:GLY:HA2	1.94	0.50
1:W:249:TYR:O	1:W:251:TYR:HD1	1.95	0.50
1:A:242:VAL:O	1:A:243:GLU:C	2.54	0.50
1:A:268:ARG:NH2	1:A:325:LEU:HG	2.26	0.50
1:F:30:ILE:O	1:F:34:ILE:HB	2.11	0.50
1:F:97:ASP:OD2	1:F:97:ASP:N	2.43	0.50
1:F:111:ASN:HD21	1:F:312:SER:HB2	1.77	0.50
1:G:73:VAL:HG21	1:G:91:ALA:CB	2.42	0.50
1:I:232:LYS:HG2	1:I:233:GLU:N	2.25	0.50
1:K:89:LEU:HD11	1:K:118:MET:HE3	1.92	0.50
1:L:162:ILE:HD12	1:L:165:LEU:HD11	1.93	0.50
1:N:30:ILE:O	1:N:30:ILE:HG22	2.12	0.50
1:O:80:HIS:O	1:O:81:SER:C	2.53	0.50
1:O:138:GLU:HA	1:O:138:GLU:OE1	2.11	0.50
1:P:101:VAL:HG11	1:P:133:LEU:HB3	1.94	0.50
1:P:295:ARG:C	1:P:297:GLY:H	2.18	0.50
1:Q:19:PRO:HD2	1:Q:20:TRP:CE3	2.44	0.50
1:S:145:LYS:C	1:S:147:GLU:H	2.19	0.50
1:S:207:GLU:C	1:S:209:ILE:H	2.18	0.50
1:T:231:ILE:O	1:T:231:ILE:HG13	2.10	0.50
1:T:289:GLY:O	1:T:290:LEU:C	2.54	0.50
1:U:133:LEU:CA	3:U:1218:HOH:O	2.60	0.50
1:V:103:ARG:NH2	1:V:131:PHE:CE2	2.80	0.50
1:X:68:LYS:HD2	1:X:152:TYR:HE1	1.76	0.50
1:A:290:LEU:CD2	1:A:305:PHE:HB2	2.42	0.50
1:B:155:PRO:O	1:B:156:PRO:C	2.55	0.50
1:C:54:LYS:HE3	2:C:1031:5PA:H91	1.94	0.50
1:D:55:ILE:N	1:D:55:ILE:CD1	2.74	0.50
1:G:142:GLU:C	1:G:144:LEU:N	2.68	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:256:TYR:HE1	1:G:281:VAL:CG2	2.24	0.50
1:G:316:HIS:ND1	1:G:317:TYR:CE2	2.79	0.50
1:I:28:PRO:HD2	1:I:274:GLU:OE1	2.12	0.50
1:I:84:ALA:O	1:I:85:PHE:C	2.54	0.50
1:I:165:LEU:HD23	1:I:168:VAL:HG21	1.93	0.50
1:I:218:ARG:HG3	1:I:255:GLU:HA	1.94	0.50
1:J:211:PRO:HB2	1:J:246:PRO:HB2	1.88	0.50
1:K:76:VAL:HG21	1:K:156:PRO:HG3	1.93	0.50
1:K:267:ILE:O	1:L:118:MET:SD	2.70	0.50
1:M:64:ASP:OD2	1:M:68:LYS:NZ	2.39	0.50
1:O:171:VAL:CG1	1:O:201:GLY:HA3	2.28	0.50
1:O:222:VAL:O	1:O:226:LYS:HD2	2.12	0.50
1:O:262:GLU:O	1:O:263:VAL:C	2.54	0.50
1:P:103:ARG:NH2	1:P:131:PHE:HA	2.27	0.50
1:R:24:ILE:HG22	1:R:25:GLN:N	2.27	0.50
1:R:207:GLU:HB3	1:R:209:ILE:HG13	1.93	0.50
1:S:133:LEU:HD12	1:S:136:TYR:HD2	1.76	0.50
1:T:1:MET:N	1:T:176:THR:OG1	2.33	0.50
1:V:14:ARG:NH2	1:V:169:ARG:NH2	2.59	0.50
1:V:42:ARG:C	1:V:44:ASP:H	2.18	0.50
1:W:136:TYR:O	1:W:140:ILE:HG13	2.11	0.50
1:X:189:ALA:HB1	1:X:223:MET:HE1	1.92	0.50
1:B:164:THR:C	1:B:166:GLY:N	2.68	0.50
1:E:23:PRO:HG2	1:E:42:ARG:HB2	1.93	0.50
1:E:273:ARG:O	1:E:274:GLU:HG2	2.12	0.50
1:F:157:GLY:HA2	2:F:1061:5PA:H91	1.92	0.50
1:F:224:THR:HG23	1:F:225:SER:H	1.75	0.50
1:J:196:ALA:HB1	1:J:231:ILE:HG22	1.94	0.50
1:K:181:LYS:H	1:K:181:LYS:CD	2.24	0.50
1:M:54:LYS:O	1:M:58:LEU:HB2	2.12	0.50
1:M:134:MET:HE2	1:M:156:PRO:HD3	1.93	0.50
1:M:154:ILE:HG23	1:M:158:GLY:HA2	1.92	0.50
1:N:34:ILE:HD13	1:N:291:VAL:HA	1.93	0.50
1:O:9:LEU:HD13	1:O:169:ARG:HH11	1.77	0.50
1:O:41:LYS:HB2	1:O:304:LEU:HD21	1.93	0.50
1:O:214:ILE:O	1:O:214:ILE:HG12	2.11	0.50
1:O:282:TYR:O	1:O:286:ALA:HB2	2.11	0.50
1:P:293:LEU:HD13	1:P:293:LEU:N	2.27	0.50
1:Q:233:GLU:OE1	1:T:323:SER:CB	2.59	0.50
1:R:53:ASN:CB	1:R:167:TYR:OH	2.60	0.50
1:R:167:TYR:O	1:R:170:ALA:HB3	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:34:ILE:HD13	1:T:291:VAL:HA	1.93	0.50
1:T:48:LEU:HB3	1:T:55:ILE:CG1	2.36	0.50
1:U:101:VAL:HG12	1:U:133:LEU:HG	1.94	0.50
1:U:134:MET:CE	1:U:156:PRO:HD3	2.41	0.50
1:U:259:ILE:HG22	1:U:324:LEU:HD22	1.94	0.50
1:W:43:ASP:HB2	1:W:307:HIS:O	2.12	0.50
1:A:154:ILE:HG22	1:A:158:GLY:HA2	1.94	0.50
1:B:55:ILE:HD12	1:B:86:VAL:HG11	1.93	0.50
1:B:116:LYS:O	1:B:117:ILE:C	2.55	0.50
1:B:174:ILE:O	1:B:178:SER:HB2	2.12	0.50
1:C:222:VAL:HG22	1:C:222:VAL:O	2.11	0.50
1:G:72:VAL:CG1	1:G:151:PRO:HB3	2.42	0.50
1:G:323:SER:OG	1:G:324:LEU:HD12	2.12	0.50
1:I:9:LEU:HD13	1:I:169:ARG:HH11	1.77	0.50
1:I:78:ALA:O	1:I:79:VAL:C	2.55	0.50
1:J:174:ILE:HG23	1:J:178:SER:HB2	1.94	0.50
1:K:94:LEU:O	1:K:96:LEU:N	2.45	0.50
1:L:316:HIS:ND1	1:L:317:TYR:CE1	2.79	0.50
1:M:146:ARG:C	1:M:147:GLU:HG3	2.35	0.50
1:M:188:ALA:CB	1:M:286:ALA:HB2	2.41	0.50
1:O:181:LYS:HG2	1:O:181:LYS:O	2.12	0.50
1:P:58:LEU:HA	1:P:61:LEU:HB2	1.93	0.50
1:P:195:LEU:C	1:P:195:LEU:HD13	2.37	0.50
1:P:213:GLY:C	1:P:214:ILE:HD13	2.37	0.50
1:R:175:ALA:O	1:R:176:THR:C	2.55	0.50
1:T:79:VAL:N	1:T:103:ARG:O	2.45	0.50
1:T:319:ASP:C	1:T:321:LEU:H	2.20	0.50
1:U:26:TYR:HB2	1:U:39:TYR:CE2	2.47	0.50
1:U:223:MET:CE	1:U:248:LEU:HD21	2.42	0.50
1:V:142:GLU:C	1:V:144:LEU:N	2.69	0.50
1:V:217:GLY:O	1:V:218:ARG:O	2.30	0.50
1:W:116:LYS:HZ3	1:W:122:THR:CG2	2.25	0.50
1:A:72:VAL:HG13	1:A:151:PRO:HA	1.92	0.50
1:C:4:LYS:HE2	1:C:204:ILE:CG2	2.42	0.50
1:C:165:LEU:HD21	1:C:238:LEU:HD21	1.92	0.50
1:C:186:VAL:HG23	1:C:305:PHE:HD1	1.77	0.50
1:F:177:GLN:CG	1:F:178:SER:N	2.75	0.50
1:I:35:GLY:O	1:I:36:ALA:HB2	2.12	0.50
1:I:145:LYS:C	1:I:147:GLU:H	2.19	0.50
1:I:219:PHE:CZ	1:I:248:LEU:HD23	2.47	0.50
1:K:5:ILE:HD13	1:K:168:VAL:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:27:LEU:HB3	1:K:274:GLU:OE2	2.12	0.50
1:L:48:LEU:HB3	1:L:55:ILE:CG1	2.41	0.50
1:M:40:ILE:HG13	1:M:305:PHE:HD2	1.76	0.50
1:N:17:LEU:HD23	1:N:59:GLU:HG2	1.94	0.50
1:P:25:GLN:NE2	1:P:42:ARG:HE	2.10	0.50
1:P:316:HIS:C	1:P:316:HIS:ND1	2.69	0.50
1:Q:40:ILE:HD13	1:Q:276:ILE:HD13	1.92	0.50
1:Q:231:ILE:O	1:Q:235:ALA:HB2	2.11	0.50
1:Q:259:ILE:HD11	1:Q:317:TYR:HB3	1.92	0.50
1:R:8:LEU:HD13	1:R:204:ILE:HD13	1.94	0.50
1:S:52:GLY:O	1:S:55:ILE:HD13	2.11	0.50
1:T:220:GLY:O	1:T:221:GLU:C	2.55	0.50
1:V:25:GLN:HE21	1:V:42:ARG:HE	1.54	0.50
1:V:93:LYS:C	1:V:95:GLY:N	2.70	0.50
1:V:140:ILE:O	1:V:144:LEU:CB	2.60	0.50
1:W:5:ILE:CG1	1:W:205:LEU:HD21	2.41	0.50
1:A:222:VAL:HG22	1:A:226:LYS:HD2	1.94	0.49
1:B:1:MET:HA	1:B:1:MET:HE3	1.93	0.49
1:G:25:GLN:HE21	1:G:42:ARG:CG	2.25	0.49
1:G:61:LEU:O	1:G:64:ASP:N	2.42	0.49
1:H:214:ILE:CG2	1:H:286:ALA:HA	2.42	0.49
1:I:11:LYS:HG3	1:I:12:PHE:CE1	2.47	0.49
1:J:67:SER:C	1:J:69:GLY:N	2.69	0.49
1:J:72:VAL:HG11	1:J:144:LEU:HD21	1.94	0.49
1:J:135:LYS:HG3	1:J:136:TYR:N	2.26	0.49
1:L:229:ASN:O	1:L:229:ASN:ND2	2.45	0.49
1:L:306:ILE:O	1:L:308:THR:N	2.45	0.49
1:M:321:LEU:O	1:M:325:LEU:CD2	2.60	0.49
1:O:4:LYS:CD	1:O:204:ILE:HG22	2.42	0.49
1:O:39:TYR:HD1	1:O:182:PHE:HE2	1.60	0.49
1:O:58:LEU:HD12	1:O:61:LEU:HD12	1.94	0.49
1:P:52:GLY:C	3:P:1162:HOH:O	2.54	0.49
1:P:167:TYR:HA	1:P:170:ALA:HB3	1.94	0.49
1:Q:232:LYS:NZ	1:T:319:ASP:CG	2.70	0.49
1:S:89:LEU:CD1	1:S:120:ILE:HD11	2.42	0.49
1:T:134:MET:O	1:T:138:GLU:CG	2.56	0.49
1:T:135:LYS:CG	1:T:136:TYR:N	2.73	0.49
1:T:259:ILE:HD11	1:T:317:TYR:CB	2.41	0.49
1:U:221:GLU:O	1:U:224:THR:HG22	2.12	0.49
1:A:53:ASN:HD21	1:A:54:LYS:HE2	1.76	0.49
1:A:171:VAL:HG21	1:A:201:GLY:CA	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:142:GLU:C	1:C:144:LEU:H	2.19	0.49
1:C:200:LEU:HD12	1:C:234:ALA:HB3	1.94	0.49
1:D:103:ARG:NE	1:D:133:LEU:HD11	2.27	0.49
1:D:121:GLU:OE2	1:D:123:ARG:NE	2.40	0.49
1:F:224:THR:CG2	1:F:225:SER:H	2.25	0.49
1:F:266:ILE:CD1	1:F:288:TYR:HA	2.42	0.49
1:G:26:TYR:HB2	1:G:39:TYR:CD2	2.47	0.49
1:G:147:GLU:OE1	1:I:225:SER:CB	2.57	0.49
1:G:253:PHE:HZ	1:G:288:TYR:CD2	2.30	0.49
1:H:229:ASN:ND2	1:H:233:GLU:OE2	2.45	0.49
1:I:20:TRP:CE3	1:J:23:PRO:CB	2.96	0.49
1:K:22:THR:HB	1:K:42:ARG:O	2.12	0.49
1:K:181:LYS:CE	1:K:302:LYS:HZ2	2.24	0.49
1:L:128:LYS:HD3	1:L:128:LYS:H	1.70	0.49
1:M:25:GLN:HE22	1:M:42:ARG:NE	2.09	0.49
1:M:227:LEU:O	1:M:227:LEU:HD12	2.12	0.49
1:M:268:ARG:HG3	1:N:118:MET:HA	1.93	0.49
1:N:281:VAL:HG22	1:N:282:TYR:CE1	2.47	0.49
1:O:112:TYR:HE1	1:O:122:THR:HG21	1.77	0.49
1:P:1:MET:HE2	1:P:172:GLY:HA3	1.94	0.49
1:Q:208:ASP:O	1:Q:209:ILE:C	2.55	0.49
1:S:78:ALA:N	1:S:81:SER:HB2	2.26	0.49
1:S:140:ILE:O	1:S:142:GLU:N	2.44	0.49
1:T:62:LEU:HD13	1:T:94:LEU:CD1	2.42	0.49
1:T:266:ILE:CG2	1:T:267:ILE:N	2.75	0.49
1:T:268:ARG:O	1:T:268:ARG:HG2	2.11	0.49
1:T:283:THR:HG21	1:T:307:HIS:ND1	2.27	0.49
1:U:139:GLU:O	1:U:142:GLU:HB2	2.11	0.49
1:V:53:ASN:HB3	1:V:308:THR:CG2	2.40	0.49
1:V:167:TYR:CG	1:V:194:THR:HG23	2.47	0.49
1:W:41:LYS:HE3	1:W:56:ARG:HH21	1.77	0.49
1:W:43:ASP:C	1:W:45:LEU:H	2.21	0.49
1:W:48:LEU:HB3	1:W:55:ILE:CG1	2.42	0.49
1:X:282:TYR:O	1:X:284:GLY:N	2.45	0.49
1:B:164:THR:C	1:B:166:GLY:H	2.20	0.49
1:B:274:GLU:HA	1:B:274:GLU:OE1	2.12	0.49
1:D:264:ALA:HB2	1:D:324:LEU:HD23	1.93	0.49
1:E:311:ILE:HG13	1:E:315:PHE:HE1	1.77	0.49
1:F:168:VAL:O	1:F:171:VAL:HG13	2.11	0.49
1:G:74:ILE:O	1:G:153:VAL:HA	2.12	0.49
1:G:81:SER:C	1:G:111:ASN:HD22	2.19	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:322:LEU:HD13	1:H:108:LEU:HD21	1.94	0.49
1:H:147:GLU:C	1:H:149:ARG:H	2.20	0.49
1:I:116:LYS:HZ3	1:I:122:THR:HG22	1.75	0.49
1:J:55:ILE:H	1:J:55:ILE:HD12	1.77	0.49
1:J:103:ARG:HH21	1:J:131:PHE:HA	1.76	0.49
1:L:322:LEU:C	1:L:324:LEU:H	2.19	0.49
1:O:17:LEU:N	1:O:59:GLU:OE2	2.45	0.49
1:O:281:VAL:HG22	1:O:282:TYR:CE1	2.47	0.49
1:P:42:ARG:C	1:P:44:ASP:H	2.19	0.49
1:Q:160:SER:C	1:Q:162:ILE:N	2.69	0.49
1:Q:296:LYS:HB2	1:Q:298:GLU:OE2	2.12	0.49
1:R:260:THR:CB	1:R:262:GLU:OE1	2.60	0.49
1:S:12:PHE:CE2	1:S:237:LEU:HD22	2.47	0.49
1:S:82:ASN:HD21	1:S:310:GLY:HA2	1.76	0.49
1:T:130:SER:O	1:T:132:GLU:HG3	2.12	0.49
1:U:107:GLU:CD	1:U:109:LYS:HE2	2.37	0.49
1:V:164:THR:HG21	1:V:234:ALA:HB1	1.94	0.49
1:W:221:GLU:C	1:W:223:MET:H	2.20	0.49
1:X:160:SER:O	1:X:161:PRO:C	2.50	0.49
1:A:14:ARG:CG	1:A:59:GLU:HB3	2.42	0.49
1:A:185:ILE:HG13	1:A:209:ILE:CG2	2.43	0.49
1:C:48:LEU:HD23	1:C:48:LEU:C	2.37	0.49
1:C:89:LEU:CD1	1:C:118:MET:HG3	2.42	0.49
1:C:229:ASN:O	1:C:231:ILE:N	2.45	0.49
1:C:266:ILE:HG21	1:C:284:GLY:O	2.12	0.49
1:D:79:VAL:HA	1:D:102:LEU:HB3	1.94	0.49
1:E:222:VAL:O	1:E:226:LYS:HB2	2.12	0.49
1:F:29:ASN:ND2	1:F:273:ARG:O	2.43	0.49
1:G:32:ARG:O	1:G:34:ILE:N	2.45	0.49
1:G:42:ARG:C	1:G:44:ASP:H	2.20	0.49
1:G:119:GLY:CA	1:H:268:ARG:HH21	2.24	0.49
1:G:283:THR:HA	1:G:286:ALA:HB3	1.93	0.49
1:H:224:THR:O	1:H:225:SER:C	2.56	0.49
1:H:259:ILE:HD12	1:H:320:LYS:CG	2.32	0.49
1:I:317:TYR:O	1:I:321:LEU:HG	2.12	0.49
1:K:195:LEU:HD11	1:K:213:GLY:HA3	1.95	0.49
1:K:316:HIS:O	1:K:318:GLY:N	2.45	0.49
1:L:322:LEU:C	1:L:324:LEU:N	2.69	0.49
1:M:174:ILE:HA	1:M:177:GLN:HG2	1.94	0.49
1:N:195:LEU:HD11	1:N:246:PRO:HG3	1.94	0.49
1:O:199:SER:C	1:O:201:GLY:H	2.21	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:253:PHE:CB	1:Q:260:THR:HG21	2.32	0.49
1:R:14:ARG:HA	1:R:59:GLU:O	2.12	0.49
1:S:89:LEU:HD13	1:S:120:ILE:HD11	1.93	0.49
1:U:182:PHE:O	1:U:209:ILE:HG12	2.12	0.49
1:A:41:LYS:HZ3	1:A:177:GLN:NE2	2.04	0.49
1:A:114:LEU:HD11	1:B:315:PHE:HZ	1.77	0.49
1:B:142:GLU:O	1:B:146:ARG:HG3	2.12	0.49
1:D:58:LEU:HA	1:D:61:LEU:HB2	1.93	0.49
1:E:33:GLU:CD	1:E:273:ARG:NH1	2.70	0.49
1:E:210:ARG:NH1	1:E:247:GLU:CD	2.70	0.49
1:G:49:GLY:C	1:G:51:GLY:N	2.67	0.49
1:G:75:THR:OG1	1:G:154:ILE:HB	2.13	0.49
1:G:89:LEU:CD1	1:G:118:MET:HG3	2.43	0.49
1:G:103:ARG:HD3	1:G:133:LEU:HD22	1.94	0.49
1:I:66:LEU:HD23	1:I:96:LEU:HD21	1.95	0.49
1:J:202:LEU:HD12	1:J:211:PRO:HG3	1.95	0.49
1:J:219:PHE:CE1	1:J:250:ASP:HB2	2.47	0.49
1:M:138:GLU:O	1:M:141:ALA:HB3	2.13	0.49
1:M:221:GLU:C	1:M:223:MET:N	2.69	0.49
1:O:1:MET:HE3	1:O:1:MET:CA	2.40	0.49
1:O:162:ILE:C	1:O:164:THR:N	2.67	0.49
1:O:200:LEU:CD2	1:O:200:LEU:O	2.61	0.49
1:O:256:TYR:CD1	1:O:257:GLY:N	2.80	0.49
1:P:212:VAL:HG21	1:P:299:LEU:CD2	2.43	0.49
1:U:268:ARG:O	1:U:272:THR:HG23	2.12	0.49
1:W:130:SER:HB2	1:W:132:GLU:H	1.78	0.49
1:W:167:TYR:C	1:W:169:ARG:H	2.19	0.49
1:A:8:LEU:CD1	1:A:204:ILE:HG21	2.41	0.49
1:A:113:LEU:HD11	1:B:318:GLY:HA3	1.94	0.49
1:A:217:GLY:O	1:A:219:PHE:N	2.45	0.49
1:A:218:ARG:H	1:A:218:ARG:CD	2.25	0.49
1:G:39:TYR:CD1	1:G:182:PHE:HE2	2.30	0.49
1:G:103:ARG:CD	1:G:128:LYS:HA	2.42	0.49
1:G:182:PHE:CE1	1:G:304:LEU:HG	2.48	0.49
1:H:138:GLU:HB2	3:H:1100:HOH:O	2.11	0.49
1:K:56:ARG:O	1:K:166:GLY:CA	2.61	0.49
1:K:89:LEU:O	1:K:93:LYS:HB2	2.12	0.49
1:K:188:ALA:HA	1:K:286:ALA:CB	2.43	0.49
1:K:281:VAL:HG22	1:K:281:VAL:O	2.13	0.49
1:M:192:GLY:O	1:M:193:GLY:C	2.55	0.49
1:N:149:ARG:O	1:N:151:PRO:HD3	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:4:LYS:CE	1:O:204:ILE:HG23	2.42	0.49
1:O:32:ARG:C	1:O:34:ILE:H	2.21	0.49
1:O:52:GLY:HA2	1:O:308:THR:O	2.12	0.49
1:O:55:ILE:N	1:O:55:ILE:CD1	2.74	0.49
1:O:291:VAL:O	1:O:294:ALA:N	2.45	0.49
1:P:72:VAL:CG2	1:P:97:ASP:HB2	2.30	0.49
1:P:130:SER:O	1:P:132:GLU:HG3	2.13	0.49
1:Q:264:ALA:O	1:Q:325:LEU:HD11	2.13	0.49
1:R:288:TYR:O	1:R:289:GLY:C	2.56	0.49
1:S:43:ASP:CG	1:S:56:ARG:HH21	2.19	0.49
1:S:54:LYS:HG3	1:S:83:HIS:HB2	1.94	0.49
1:S:212:VAL:HG13	1:S:249:TYR:HE1	1.77	0.49
1:T:54:LYS:CE	2:T:1201:5PA:H91	2.40	0.49
1:T:316:HIS:ND1	1:T:316:HIS:O	2.44	0.49
1:U:14:ARG:HD2	1:U:60:TYR:CZ	2.48	0.49
1:U:143:GLU:CB	1:U:146:ARG:NH2	2.72	0.49
1:U:175:ALA:HB2	1:U:205:LEU:HD11	1.95	0.49
1:V:130:SER:OG	1:V:132:GLU:HB2	2.12	0.49
1:A:143:GLU:HA	1:A:146:ARG:CZ	2.43	0.49
1:D:111:ASN:OD1	1:D:114:LEU:HD12	2.13	0.49
1:D:127:ALA:O	1:D:128:LYS:C	2.54	0.49
1:E:55:ILE:HD11	1:E:86:VAL:CG1	2.38	0.49
1:F:122:THR:HG22	1:F:123:ARG:N	2.27	0.49
1:F:203:SER:HB2	1:F:243:GLU:CG	2.43	0.49
1:G:125:TYR:OH	1:G:140:ILE:HD11	2.12	0.49
1:G:174:ILE:O	1:G:175:ALA:C	2.55	0.49
1:G:243:GLU:HB3	3:G:1088:HOH:O	2.12	0.49
1:G:323:SER:HB2	3:T:1236:HOH:O	2.13	0.49
1:J:183:ASP:OD2	1:J:302:LYS:O	2.31	0.49
1:L:53:ASN:CB	1:L:308:THR:HG22	2.43	0.49
1:L:287:PHE:O	1:L:290:LEU:N	2.46	0.49
1:O:58:LEU:CD2	1:O:87:THR:HA	2.41	0.49
1:O:91:ALA:O	1:O:94:LEU:N	2.46	0.49
1:P:130:SER:O	1:P:132:GLU:N	2.46	0.49
1:P:230:LEU:O	1:P:232:LYS:N	2.45	0.49
1:Q:74:ILE:CG2	1:Q:75:THR:N	2.75	0.49
1:T:41:LYS:HZ1	1:T:177:GLN:HE22	1.61	0.49
1:T:105:LYS:C	1:T:107:GLU:H	2.21	0.49
1:T:219:PHE:HZ	1:T:248:LEU:O	1.96	0.49
1:U:309:GLY:HA3	3:U:1258:HOH:O	2.12	0.49
1:V:214:ILE:HG23	1:V:251:TYR:HB2	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:106:GLU:OE2	1:W:124:VAL:HB	2.12	0.49
1:W:118:MET:CE	1:X:271:GLY:HA3	2.42	0.49
1:X:19:PRO:HG2	1:X:20:TRP:HD1	1.73	0.49
1:X:20:TRP:HZ2	1:X:45:LEU:HB3	1.77	0.49
1:X:75:THR:OG1	1:X:83:HIS:CE1	2.66	0.49
1:B:209:ILE:O	1:B:211:PRO:HD3	2.12	0.49
1:C:170:ALA:O	1:C:174:ILE:HG13	2.12	0.49
1:E:113:LEU:O	1:E:117:ILE:HG13	2.13	0.49
1:F:24:ILE:HA	1:F:40:ILE:O	2.12	0.49
1:G:181:LYS:H	1:G:181:LYS:CE	2.25	0.49
1:J:143:GLU:C	1:J:143:GLU:CD	2.81	0.49
1:K:39:TYR:HB2	1:K:182:PHE:HE2	1.77	0.49
1:K:66:LEU:HG	1:K:96:LEU:HD11	1.94	0.49
1:L:108:LEU:HD11	1:L:116:LYS:HG3	1.94	0.49
1:M:19:PRO:HB2	1:M:20:TRP:HE3	1.78	0.49
1:M:126:ASP:C	1:M:128:LYS:N	2.71	0.49
1:N:76:VAL:CG2	1:N:156:PRO:HG3	2.42	0.49
1:O:128:LYS:HD3	1:O:128:LYS:O	2.13	0.49
1:T:33:GLU:OE2	1:T:273:ARG:NH1	2.41	0.49
1:U:223:MET:HE3	1:U:248:LEU:HD21	1.95	0.49
1:U:264:ALA:HB1	1:U:325:LEU:CD1	2.42	0.49
1:X:116:LYS:NZ	1:X:122:THR:HB	2.28	0.49
1:X:147:GLU:O	1:X:149:ARG:N	2.46	0.49
1:A:173:GLU:O	1:A:174:ILE:C	2.56	0.49
1:B:181:LYS:CD	1:B:181:LYS:N	2.76	0.49
1:G:114:LEU:O	1:G:117:ILE:N	2.45	0.49
1:G:125:TYR:CD2	1:G:136:TYR:CG	3.01	0.49
1:H:22:THR:HG21	1:H:43:ASP:HA	1.95	0.49
1:H:43:ASP:O	1:H:46:THR:HG23	2.12	0.49
1:I:290:LEU:HD12	1:I:290:LEU:O	2.12	0.49
1:J:219:PHE:HD2	1:J:220:GLY:N	2.11	0.49
1:J:260:THR:C	1:J:324:LEU:HD23	2.37	0.49
1:K:214:ILE:HD13	1:K:286:ALA:C	2.38	0.49
1:L:110:GLY:HA3	1:L:316:HIS:HD2	1.76	0.49
1:L:125:TYR:N	1:L:125:TYR:HD1	2.10	0.49
1:M:184:SER:OG	1:M:303:ILE:HG23	2.11	0.49
1:M:200:LEU:CD2	1:M:204:ILE:HD11	2.42	0.49
1:M:253:PHE:O	1:M:258:LYS:HD3	2.13	0.49
1:O:198:LEU:C	1:O:198:LEU:CD2	2.86	0.49
1:O:278:LEU:HB3	1:O:283:THR:OG1	2.12	0.49
1:O:279:ASP:H	1:O:283:THR:HG1	1.60	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:1:MET:HE3	1:Q:1:MET:CA	2.38	0.49
1:Q:39:TYR:CE1	1:Q:180:VAL:HG11	2.48	0.49
1:Q:106:GLU:OE1	1:Q:112:TYR:OH	2.30	0.49
1:Q:285:LYS:O	1:Q:288:TYR:N	2.46	0.49
2:Q:1171:5PA:O4P	2:Q:1171:5PA:C4A	2.61	0.49
1:R:174:ILE:O	1:R:177:GLN:HG2	2.13	0.49
1:R:229:ASN:O	1:R:233:GLU:HG3	2.12	0.49
1:U:19:PRO:HB2	1:U:20:TRP:HE3	1.77	0.49
1:U:20:TRP:CD2	1:V:23:PRO:HG3	2.48	0.49
1:W:54:LYS:O	1:W:58:LEU:HB2	2.12	0.49
1:W:113:LEU:O	1:W:113:LEU:HD22	2.13	0.49
1:A:214:ILE:HD12	1:A:289:GLY:HA3	1.95	0.49
1:B:322:LEU:C	1:B:324:LEU:H	2.21	0.49
1:C:228:ASP:OD1	1:C:245:ARG:HD2	2.13	0.49
1:F:135:LYS:CE	1:F:136:TYR:CE1	2.95	0.49
1:G:199:SER:OG	1:G:211:PRO:HB3	2.13	0.49
1:G:259:ILE:HD11	1:G:317:TYR:HB3	1.95	0.49
1:H:82:ASN:HD22	1:H:111:ASN:ND2	2.11	0.49
1:H:101:VAL:HG11	1:H:133:LEU:HB3	1.95	0.49
1:I:232:LYS:O	1:I:235:ALA:HB3	2.13	0.49
1:J:31:SER:O	1:J:32:ARG:C	2.56	0.49
1:J:138:GLU:O	1:J:141:ALA:HB3	2.13	0.49
1:K:61:LEU:CD2	1:K:154:ILE:HG23	2.43	0.49
1:K:105:LYS:HB3	1:K:107:GLU:HG3	1.95	0.49
1:L:162:ILE:HD12	1:L:165:LEU:CD1	2.43	0.49
1:M:15:VAL:HG12	1:M:17:LEU:CD1	2.39	0.49
1:N:26:TYR:HB2	1:N:39:TYR:CE2	2.47	0.49
1:O:42:ARG:C	1:O:44:ASP:H	2.21	0.49
1:O:145:LYS:HB3	1:O:151:PRO:HD2	1.95	0.49
1:O:278:LEU:CD2	1:O:283:THR:HB	2.30	0.49
1:Q:136:TYR:O	1:Q:140:ILE:N	2.46	0.49
1:S:290:LEU:C	1:S:290:LEU:HD12	2.37	0.49
1:T:82:ASN:OD1	1:T:310:GLY:HA2	2.13	0.49
1:T:250:ASP:O	1:T:251:TYR:CG	2.65	0.49
1:U:143:GLU:HA	1:U:146:ARG:CZ	2.43	0.49
1:V:10:ALA:C	1:V:12:PHE:H	2.20	0.49
1:W:142:GLU:HA	1:W:145:LYS:CG	2.43	0.49
1:W:226:LYS:O	1:W:227:LEU:C	2.56	0.49
1:W:308:THR:OG1	2:W:1231:5PA:N1	2.45	0.49
1:X:103:ARG:HH21	1:X:131:PHE:H	1.61	0.49
1:X:132:GLU:C	1:X:134:MET:H	2.20	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:265:GLN:HG3	1:X:269:LYS:CE	2.43	0.49
1:B:186:VAL:HG12	1:B:187:VAL:N	2.27	0.48
1:B:320:LYS:O	1:B:324:LEU:HD13	2.12	0.48
1:C:89:LEU:HD13	1:C:118:MET:HG3	1.95	0.48
1:D:157:GLY:HA2	2:D:1041:5PA:C9	2.42	0.48
1:D:168:VAL:O	1:D:171:VAL:HG22	2.13	0.48
1:E:90:ALA:O	1:E:94:LEU:HG	2.13	0.48
1:E:132:GLU:HA	3:E:1067:HOH:O	2.12	0.48
1:F:170:ALA:O	1:F:174:ILE:HG13	2.13	0.48
1:G:37:ASP:O	1:G:303:ILE:HB	2.13	0.48
1:G:41:LYS:O	1:G:43:ASP:N	2.44	0.48
1:G:195:LEU:HD23	1:G:195:LEU:C	2.38	0.48
1:I:74:ILE:HD11	1:I:144:LEU:CD2	2.43	0.48
1:J:66:LEU:HD21	1:J:96:LEU:HD21	1.95	0.48
1:J:211:PRO:O	1:J:246:PRO:HB2	2.12	0.48
1:J:226:LYS:O	1:J:229:ASN:N	2.46	0.48
1:K:199:SER:OG	1:K:246:PRO:HB3	2.13	0.48
1:K:200:LEU:CD2	1:K:204:ILE:HD11	2.31	0.48
1:K:220:GLY:O	1:K:224:THR:HG22	2.13	0.48
1:N:15:VAL:HG23	1:N:63:GLY:CA	2.43	0.48
1:N:320:LYS:O	1:N:321:LEU:C	2.55	0.48
1:O:27:LEU:C	1:O:274:GLU:OE2	2.56	0.48
1:S:14:ARG:CD	1:S:60:TYR:CE1	2.94	0.48
1:S:212:VAL:HG11	1:S:299:LEU:HD21	1.94	0.48
1:T:84:ALA:HB1	1:T:100:LEU:CG	2.39	0.48
1:T:167:TYR:HA	1:T:170:ALA:CB	2.43	0.48
1:T:322:LEU:C	1:T:324:LEU:H	2.20	0.48
1:U:39:TYR:CE1	1:U:180:VAL:HG11	2.48	0.48
1:W:140:ILE:O	1:W:143:GLU:HG3	2.12	0.48
1:X:85:PHE:C	1:X:87:THR:N	2.71	0.48
1:X:142:GLU:O	1:X:145:LYS:HB3	2.13	0.48
1:B:202:LEU:HD21	1:B:209:ILE:HB	1.94	0.48
1:D:81:SER:HB3	1:D:84:ALA:HB3	1.94	0.48
1:G:138:GLU:OE2	1:G:153:VAL:HG11	2.14	0.48
1:I:18:ILE:HD13	1:I:46:THR:HG22	1.95	0.48
1:I:155:PRO:HB2	1:I:159:ALA:HB3	1.96	0.48
1:J:323:SER:OG	1:J:324:LEU:HD12	2.13	0.48
1:K:207:GLU:C	1:K:209:ILE:N	2.71	0.48
1:L:73:VAL:HG21	1:L:91:ALA:HB1	1.95	0.48
1:M:181:LYS:H	1:M:181:LYS:CE	2.25	0.48
1:M:255:GLU:HG2	1:M:258:LYS:HB2	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:171:VAL:HG21	1:O:201:GLY:CA	2.42	0.48
1:P:144:LEU:CD1	1:P:149:ARG:HB2	2.43	0.48
1:P:157:GLY:C	1:P:159:ALA:H	2.21	0.48
1:P:315:PHE:O	1:P:316:HIS:C	2.56	0.48
1:Q:89:LEU:HD13	1:Q:118:MET:HG3	1.94	0.48
1:Q:190:GLY:HA3	3:Q:1172:HOH:O	2.13	0.48
1:Q:266:ILE:HG21	1:Q:284:GLY:O	2.13	0.48
2:Q:1171:5PA:O4P	2:Q:1171:5PA:H4A2	2.12	0.48
1:S:101:VAL:HG12	1:S:133:LEU:HG	1.94	0.48
1:S:182:PHE:O	1:S:209:ILE:HG12	2.13	0.48
1:S:269:LYS:HD3	3:S:1222:HOH:O	2.12	0.48
1:T:103:ARG:NE	1:T:129:ASP:HA	2.28	0.48
1:T:188:ALA:HB3	2:T:1201:5PA:H6	1.95	0.48
1:V:54:LYS:HD2	1:V:83:HIS:HD2	1.76	0.48
1:X:240:VAL:HG22	1:X:241:LYS:N	2.28	0.48
1:B:103:ARG:NH1	1:B:129:ASP:CG	2.72	0.48
1:C:43:ASP:HB2	1:C:307:HIS:O	2.13	0.48
1:C:191:SER:OG	2:C:1031:5PA:O1P	2.29	0.48
1:C:196:ALA:HB1	1:C:230:LEU:HD22	1.95	0.48
1:D:196:ALA:CA	1:D:231:ILE:HG22	2.43	0.48
1:D:279:ASP:OD2	1:D:281:VAL:CG1	2.61	0.48
1:F:106:GLU:O	1:F:107:GLU:C	2.56	0.48
1:F:222:VAL:CG1	1:F:223:MET:N	2.52	0.48
1:G:61:LEU:HD23	1:G:162:ILE:CD1	2.43	0.48
1:G:149:ARG:HD3	1:I:221:GLU:HB2	1.96	0.48
1:H:18:ILE:HG23	1:H:46:THR:O	2.14	0.48
1:H:43:ASP:C	1:H:45:LEU:N	2.71	0.48
1:H:55:ILE:N	1:H:55:ILE:CD1	2.76	0.48
1:H:215:ALA:HB3	1:H:250:ASP:HA	1.95	0.48
1:I:130:SER:C	1:I:132:GLU:H	2.20	0.48
1:I:142:GLU:HA	1:I:145:LYS:CD	2.43	0.48
1:I:185:ILE:HG13	1:I:209:ILE:CG2	2.44	0.48
1:I:266:ILE:C	1:I:268:ARG:H	2.20	0.48
1:I:271:GLY:O	1:J:89:LEU:HD11	2.13	0.48
1:K:187:VAL:HG23	1:K:308:THR:HG23	1.94	0.48
1:L:131:PHE:HZ	1:L:256:TYR:CE2	2.31	0.48
1:L:279:ASP:HB3	1:L:310:GLY:O	2.14	0.48
1:N:19:PRO:HG2	1:N:20:TRP:H	1.77	0.48
1:N:201:GLY:O	1:N:203:SER:N	2.46	0.48
1:N:217:GLY:O	1:N:218:ARG:O	2.32	0.48
1:N:249:TYR:N	1:N:249:TYR:CD1	2.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:255:GLU:OE2	1:N:258:LYS:HB2	2.13	0.48
1:O:116:LYS:HZ2	1:O:122:THR:HG22	1.73	0.48
1:O:229:ASN:HA	3:O:1167:HOH:O	2.13	0.48
1:P:54:LYS:O	1:P:58:LEU:HD22	2.13	0.48
1:P:67:SER:O	1:P:69:GLY:N	2.46	0.48
1:P:293:LEU:HB3	1:P:299:LEU:HG	1.95	0.48
1:Q:256:TYR:C	1:Q:258:LYS:N	2.71	0.48
1:Q:264:ALA:HA	1:Q:321:LEU:HD22	1.96	0.48
1:R:34:ILE:HG23	1:R:294:ALA:HB1	1.96	0.48
1:R:265:GLN:O	1:R:269:LYS:HB2	2.13	0.48
1:S:71:ASP:OD2	1:S:72:VAL:N	2.46	0.48
1:U:39:TYR:CD1	1:U:182:PHE:HE2	2.31	0.48
1:U:215:ALA:CB	1:U:223:MET:HE2	2.42	0.48
1:U:278:LEU:HD22	1:U:283:THR:HB	1.95	0.48
1:V:15:VAL:HG11	1:V:94:LEU:HD11	1.95	0.48
1:X:133:LEU:H	1:X:133:LEU:HD12	1.78	0.48
1:X:144:LEU:O	1:X:144:LEU:HD12	2.13	0.48
1:A:42:ARG:NH1	1:A:44:ASP:OD2	2.47	0.48
1:A:269:LYS:HD3	3:A:1020:HOH:O	2.14	0.48
1:B:251:TYR:OH	1:B:292:ASP:CG	2.56	0.48
1:C:263:VAL:HA	1:C:266:ILE:HG22	1.95	0.48
1:D:143:GLU:O	1:D:146:ARG:N	2.40	0.48
1:G:125:TYR:HE2	1:G:136:TYR:HB3	1.78	0.48
1:H:4:LYS:HE2	1:H:204:ILE:HG23	1.95	0.48
1:I:127:ALA:HB3	1:I:136:TYR:HE2	1.77	0.48
1:I:161:PRO:HB3	1:I:234:ALA:CA	2.42	0.48
1:I:269:LYS:HB3	1:I:273:ARG:HH12	1.77	0.48
1:J:78:ALA:HB3	3:J:1110:HOH:O	2.12	0.48
1:J:177:GLN:HB2	3:J:1119:HOH:O	2.12	0.48
1:J:223:MET:O	1:J:224:THR:C	2.57	0.48
1:K:138:GLU:OE1	1:K:138:GLU:HA	2.12	0.48
1:L:42:ARG:O	1:L:45:LEU:HB2	2.13	0.48
1:L:171:VAL:HG21	1:L:201:GLY:HA3	1.94	0.48
1:O:108:LEU:HG	1:P:322:LEU:CD1	2.43	0.48
1:O:164:THR:HG22	1:O:165:LEU:N	2.29	0.48
1:P:32:ARG:NH2	1:S:239:GLY:CA	2.76	0.48
1:P:42:ARG:NH1	1:P:44:ASP:OD2	2.47	0.48
1:P:134:MET:C	1:P:136:TYR:N	2.70	0.48
1:P:171:VAL:O	1:P:172:GLY:C	2.56	0.48
1:P:255:GLU:CG	1:P:258:LYS:HB2	2.44	0.48
1:Q:56:ARG:HG2	1:Q:56:ARG:HH11	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:243:GLU:O	1:R:244:VAL:C	2.56	0.48
1:S:42:ARG:C	1:S:44:ASP:N	2.71	0.48
1:U:22:THR:HB	1:U:42:ARG:O	2.13	0.48
1:U:149:ARG:O	1:U:151:PRO:HD3	2.13	0.48
1:X:199:SER:O	1:X:200:LEU:C	2.56	0.48
1:A:214:ILE:HD13	1:A:286:ALA:CA	2.23	0.48
1:E:109:LYS:CA	1:E:113:LEU:HB2	2.43	0.48
1:F:101:VAL:HG13	1:F:125:TYR:HE1	1.78	0.48
1:F:195:LEU:HD13	1:F:227:LEU:HD21	1.96	0.48
1:G:143:GLU:O	1:I:221:GLU:OE1	2.31	0.48
1:H:104:GLY:O	1:H:105:LYS:C	2.56	0.48
1:I:117:ILE:O	1:J:268:ARG:NE	2.40	0.48
1:I:149:ARG:O	1:I:151:PRO:HD3	2.13	0.48
1:I:259:ILE:CG2	1:I:321:LEU:HD23	2.42	0.48
1:I:261:GLY:HA2	1:I:324:LEU:HD23	1.94	0.48
1:J:91:ALA:CB	1:J:96:LEU:HD12	2.41	0.48
1:J:103:ARG:HG2	1:J:103:ARG:HH11	1.78	0.48
1:K:312:SER:C	1:K:314:THR:H	2.22	0.48
1:L:195:LEU:CD1	1:L:246:PRO:HG3	2.44	0.48
1:N:58:LEU:HD12	1:N:62:LEU:HG	1.95	0.48
1:N:207:GLU:OE1	1:N:207:GLU:HA	2.14	0.48
1:O:95:GLY:O	1:O:96:LEU:O	2.32	0.48
1:O:265:GLN:CG	1:O:269:LYS:HE3	2.41	0.48
1:Q:20:TRP:CE2	1:R:23:PRO:HG3	2.49	0.48
1:Q:218:ARG:HD2	1:Q:256:TYR:H	1.78	0.48
1:R:218:ARG:HH11	1:R:218:ARG:HB2	1.78	0.48
1:R:251:TYR:OH	1:R:292:ASP:HB3	2.13	0.48
1:R:308:THR:CB	2:R:1181:5PA:N1	2.76	0.48
1:U:113:LEU:HD22	1:U:117:ILE:HD11	1.95	0.48
1:W:15:VAL:O	1:W:15:VAL:HG12	2.12	0.48
1:X:165:LEU:HA	1:X:168:VAL:CG2	2.43	0.48
1:A:76:VAL:HG12	1:A:101:VAL:HB	1.95	0.48
1:A:145:LYS:HB3	1:A:151:PRO:CD	2.44	0.48
1:A:146:ARG:O	1:A:147:GLU:CG	2.62	0.48
1:A:214:ILE:HG13	1:A:251:TYR:HB2	1.96	0.48
1:C:12:PHE:HE2	1:C:237:LEU:HD22	1.75	0.48
1:C:14:ARG:HD2	1:C:60:TYR:CE1	2.49	0.48
1:C:229:ASN:HB2	3:C:1039:HOH:O	2.13	0.48
1:C:295:ARG:C	1:C:297:GLY:H	2.21	0.48
1:E:198:LEU:HD11	1:E:306:ILE:HD11	1.94	0.48
1:F:146:ARG:C	1:F:147:GLU:HG3	2.39	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:160:SER:O	1:F:163:GLY:N	2.46	0.48
1:G:9:LEU:HD13	1:G:60:TYR:CZ	2.49	0.48
1:G:25:GLN:HE21	1:G:42:ARG:HG3	1.79	0.48
1:G:218:ARG:HG3	1:G:255:GLU:HA	1.95	0.48
1:G:310:GLY:C	1:G:312:SER:H	2.22	0.48
1:H:70:ALA:HB1	1:H:150:LYS:O	2.14	0.48
1:I:61:LEU:HA	1:I:162:ILE:CD1	2.43	0.48
1:I:224:THR:O	1:I:227:LEU:HB3	2.13	0.48
1:J:109:LYS:CA	1:J:113:LEU:HB2	2.43	0.48
1:K:5:ILE:O	1:K:6:PHE:C	2.57	0.48
1:K:25:GLN:NE2	1:K:42:ARG:HE	2.12	0.48
1:L:1:MET:HE3	1:L:2:HIS:N	2.29	0.48
1:L:73:VAL:HG21	1:L:91:ALA:CB	2.44	0.48
1:M:9:LEU:HD21	1:M:168:VAL:HG11	1.96	0.48
1:N:321:LEU:O	1:N:325:LEU:CD2	2.62	0.48
1:O:103:ARG:HH12	1:O:128:LYS:NZ	2.04	0.48
1:P:34:ILE:CD1	1:P:291:VAL:HG22	2.41	0.48
1:P:184:SER:HA	1:P:210:ARG:O	2.14	0.48
1:Q:53:ASN:HB2	1:Q:167:TYR:CE1	2.48	0.48
1:Q:134:MET:SD	1:Q:138:GLU:OE2	2.71	0.48
1:R:211:PRO:O	1:R:246:PRO:HB2	2.13	0.48
1:S:6:PHE:O	1:S:10:ALA:HB2	2.13	0.48
1:S:185:ILE:HG23	1:S:304:LEU:HB3	1.95	0.48
1:S:225:SER:OG	1:S:226:LYS:N	2.47	0.48
1:S:279:ASP:OD1	1:S:283:THR:N	2.46	0.48
1:U:202:LEU:HD22	1:U:209:ILE:HB	1.94	0.48
1:V:218:ARG:HD3	1:V:222:VAL:HG11	1.95	0.48
1:V:227:LEU:HG	1:V:227:LEU:O	2.14	0.48
1:V:317:TYR:O	1:V:318:GLY:C	2.56	0.48
1:W:142:GLU:O	1:W:146:ARG:N	2.47	0.48
1:W:143:GLU:CA	1:W:146:ARG:HG2	2.44	0.48
2:W:1231:5PA:O4P	2:W:1231:5PA:C4A	2.61	0.48
1:X:222:VAL:HG13	1:X:223:MET:N	2.28	0.48
1:X:320:LYS:CG	1:X:320:LYS:O	2.61	0.48
1:A:14:ARG:NE	1:A:59:GLU:OE1	2.45	0.48
1:A:157:GLY:HA2	2:A:1011:5PA:H92	1.96	0.48
1:A:214:ILE:O	1:A:214:ILE:HG12	2.12	0.48
1:C:15:VAL:HG21	1:C:66:LEU:HD12	1.95	0.48
1:C:21:GLU:HG2	1:C:173:GLU:CG	2.43	0.48
1:D:159:ALA:HB2	1:D:191:SER:OG	2.14	0.48
1:F:228:ASP:C	1:F:230:LEU:N	2.71	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:12:PHE:CE2	1:H:237:LEU:HD22	2.49	0.48
1:H:123:ARG:O	1:H:125:TYR:CD1	2.67	0.48
1:H:265:GLN:HG3	1:H:269:LYS:CE	2.44	0.48
1:I:266:ILE:C	1:I:268:ARG:N	2.71	0.48
1:J:144:LEU:HD11	1:J:149:ARG:NE	2.28	0.48
1:J:202:LEU:HD22	1:J:209:ILE:HB	1.95	0.48
1:J:207:GLU:C	1:J:209:ILE:N	2.71	0.48
1:J:251:TYR:CZ	1:J:289:GLY:HA2	2.48	0.48
1:K:8:LEU:HD22	1:K:238:LEU:O	2.13	0.48
1:K:99:ILE:HG23	1:K:121:GLU:CB	2.32	0.48
1:K:287:PHE:C	1:K:289:GLY:N	2.70	0.48
1:O:162:ILE:CD1	1:O:163:GLY:N	2.72	0.48
1:P:200:LEU:HD22	1:P:204:ILE:HD11	1.96	0.48
1:Q:103:ARG:CZ	1:Q:130:SER:HA	2.43	0.48
1:R:12:PHE:CD1	1:R:12:PHE:N	2.82	0.48
1:T:252:SER:C	1:T:253:PHE:HD1	2.21	0.48
1:U:222:VAL:O	1:U:226:LYS:HB2	2.13	0.48
1:V:219:PHE:O	1:V:222:VAL:CG1	2.62	0.48
1:W:290:LEU:HD12	1:W:290:LEU:C	2.39	0.48
1:X:15:VAL:HG12	1:X:17:LEU:HD22	1.94	0.48
1:X:218:ARG:NH1	1:X:218:ARG:CG	2.76	0.48
1:B:53:ASN:HA	1:B:167:TYR:OH	2.13	0.48
1:C:181:LYS:HE3	1:C:302:LYS:HZ2	1.78	0.48
1:D:205:LEU:O	1:D:206:ASN:HB3	2.14	0.48
1:D:217:GLY:O	1:D:218:ARG:O	2.31	0.48
1:F:161:PRO:HG3	1:F:230:LEU:HD23	1.96	0.48
1:G:14:ARG:HG2	1:G:15:VAL:N	2.29	0.48
1:G:203:SER:CB	1:G:243:GLU:HB2	2.43	0.48
1:I:143:GLU:HA	1:I:146:ARG:HG2	1.95	0.48
1:J:25:GLN:NE2	1:J:42:ARG:NE	2.50	0.48
1:J:58:LEU:HD12	1:J:62:LEU:CD1	2.44	0.48
1:J:231:ILE:HD11	1:J:242:VAL:CG2	2.44	0.48
1:K:62:LEU:O	1:K:66:LEU:N	2.33	0.48
1:K:94:LEU:C	1:K:96:LEU:N	2.69	0.48
1:K:220:GLY:HA3	3:K:1117:HOH:O	2.14	0.48
1:K:274:GLU:O	1:K:276:ILE:HG13	2.14	0.48
1:L:113:LEU:O	1:L:113:LEU:HD23	2.14	0.48
1:M:187:VAL:CG2	1:M:194:THR:HG21	2.36	0.48
1:N:263:VAL:O	1:N:266:ILE:HG22	2.13	0.48
1:O:73:VAL:O	1:O:73:VAL:HG12	2.14	0.48
1:O:191:SER:HA	3:O:1166:HOH:O	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:239:GLY:O	1:T:32:ARG:HD2	2.14	0.48
1:P:41:LYS:HZ3	1:P:177:GLN:HE22	1.58	0.48
1:P:84:ALA:CB	1:P:102:LEU:HD21	2.43	0.48
1:Q:31:SER:HG	1:Q:38:VAL:N	2.11	0.48
1:R:112:TYR:HA	1:R:115:ASP:OD2	2.14	0.48
1:S:19:PRO:HD2	1:S:20:TRP:CE3	2.48	0.48
1:S:117:ILE:HD11	1:T:318:GLY:CA	2.44	0.48
1:U:221:GLU:HG3	1:U:222:VAL:N	2.28	0.48
1:W:162:ILE:C	1:W:164:THR:N	2.72	0.48
1:X:160:SER:HB3	1:X:163:GLY:H	1.79	0.48
1:A:43:ASP:OD2	1:A:56:ARG:NE	2.40	0.48
1:A:62:LEU:HB3	1:A:94:LEU:CD1	2.44	0.48
1:B:299:LEU:HD12	1:B:303:ILE:HD13	1.96	0.48
1:D:289:GLY:O	1:D:293:LEU:HB2	2.14	0.48
1:E:15:VAL:HG23	1:E:63:GLY:CA	2.44	0.48
1:E:131:PHE:C	1:E:131:PHE:HD1	2.22	0.48
1:G:171:VAL:HG21	1:G:201:GLY:CA	2.44	0.48
1:G:218:ARG:HD2	1:G:256:TYR:CB	2.40	0.48
1:H:31:SER:HB3	1:H:36:ALA:O	2.13	0.48
1:H:184:SER:HB3	1:H:210:ARG:HB2	1.95	0.48
1:I:131:PHE:C	1:I:131:PHE:HD1	2.21	0.48
1:J:107:GLU:O	1:J:112:TYR:HD2	1.96	0.48
1:J:207:GLU:O	1:J:209:ILE:N	2.44	0.48
1:L:103:ARG:HD2	1:L:127:ALA:O	2.13	0.48
1:L:264:ALA:HB1	1:L:325:LEU:CD2	2.43	0.48
1:M:144:LEU:O	1:M:149:ARG:HB2	2.14	0.48
1:O:199:SER:CB	1:O:246:PRO:HB3	2.44	0.48
1:O:310:GLY:C	1:O:312:SER:N	2.72	0.48
1:P:224:THR:CG2	1:P:225:SER:N	2.77	0.48
1:P:293:LEU:N	1:P:293:LEU:CD1	2.76	0.48
1:R:133:LEU:O	1:R:136:TYR:HB2	2.14	0.48
1:T:213:GLY:O	1:T:248:LEU:HD12	2.14	0.48
1:T:253:PHE:CD2	1:T:260:THR:HG21	2.49	0.48
1:U:35:GLY:O	1:U:36:ALA:HB2	2.13	0.48
1:U:138:GLU:OE1	1:U:153:VAL:HG21	2.13	0.48
1:U:162:ILE:HD12	1:U:162:ILE:C	2.39	0.48
1:U:188:ALA:HB2	1:U:286:ALA:CB	2.42	0.48
1:W:1:MET:HE3	1:W:1:MET:CA	2.35	0.48
1:W:283:THR:O	1:W:284:GLY:C	2.56	0.48
1:X:128:LYS:O	1:X:130:SER:N	2.46	0.48
1:A:113:LEU:HD22	1:A:117:ILE:HD11	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:143:GLU:CG	1:A:144:LEU:H	2.24	0.48
1:B:2:HIS:ND1	1:B:3:PRO:CD	2.77	0.48
1:B:12:PHE:CE2	1:B:237:LEU:HD22	2.49	0.48
1:B:135:LYS:HG3	1:B:136:TYR:N	2.28	0.48
1:D:131:PHE:C	1:D:133:LEU:N	2.63	0.48
1:D:171:VAL:HG21	1:D:201:GLY:CA	2.41	0.48
1:E:103:ARG:HG3	1:E:103:ARG:HH11	1.79	0.48
1:E:249:TYR:CD2	1:E:293:LEU:HD11	2.49	0.48
1:F:58:LEU:CD2	1:F:86:VAL:HG12	2.44	0.48
1:F:194:THR:HB	2:F:1061:5PA:O2P	2.14	0.48
1:F:220:GLY:O	1:F:221:GLU:C	2.56	0.48
1:G:9:LEU:CD2	1:G:165:LEU:HD22	2.30	0.48
1:H:134:MET:HE1	1:H:153:VAL:HG12	1.96	0.48
1:I:71:ASP:OD1	1:I:149:ARG:HB3	2.13	0.48
1:I:131:PHE:C	1:I:131:PHE:CD1	2.91	0.48
1:K:103:ARG:HH11	1:K:129:ASP:H	1.60	0.48
1:L:217:GLY:N	1:L:252:SER:HB3	2.29	0.48
1:M:50:ILE:HB	1:M:311:ILE:CG2	2.43	0.48
1:M:158:GLY:O	1:M:160:SER:N	2.42	0.48
1:M:185:ILE:HA	1:M:304:LEU:O	2.14	0.48
1:M:237:LEU:C	1:M:239:GLY:N	2.71	0.48
2:N:1141:5PA:O4P	2:N:1141:5PA:C4A	2.62	0.48
1:O:5:ILE:O	1:O:6:PHE:C	2.56	0.48
1:O:174:ILE:CA	1:O:177:GLN:HE21	2.23	0.48
1:P:73:VAL:CG2	1:P:91:ALA:HB1	2.37	0.48
1:P:133:LEU:N	1:P:133:LEU:CD1	2.76	0.48
1:P:268:ARG:NH2	1:P:325:LEU:CB	2.77	0.48
1:Q:268:ARG:CZ	1:Q:325:LEU:HG	2.41	0.48
1:Q:285:LYS:O	1:Q:288:TYR:HB3	2.14	0.48
1:R:219:PHE:O	1:R:220:GLY:C	2.56	0.48
1:S:212:VAL:HG13	1:S:249:TYR:CE1	2.48	0.48
1:U:133:LEU:HA	3:U:1218:HOH:O	2.14	0.48
1:U:215:ALA:HB2	1:U:223:MET:CE	2.43	0.48
1:W:189:ALA:O	1:W:216:VAL:HG22	2.13	0.48
1:A:125:TYR:O	1:A:127:ALA:N	2.47	0.47
1:B:128:LYS:HD3	1:B:128:LYS:H	1.78	0.47
1:B:133:LEU:C	1:B:135:LYS:N	2.71	0.47
1:C:162:ILE:CG2	1:C:237:LEU:HD11	2.44	0.47
1:C:180:VAL:O	1:C:181:LYS:C	2.56	0.47
1:D:40:ILE:O	1:D:40:ILE:HG23	2.14	0.47
1:D:72:VAL:HG11	1:D:144:LEU:HD21	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:287:PHE:O	1:D:290:LEU:HB3	2.15	0.47
1:E:266:ILE:CG2	1:E:267:ILE:N	2.77	0.47
1:F:135:LYS:HE3	1:F:136:TYR:CE1	2.48	0.47
1:G:54:LYS:NZ	1:G:57:LYS:NZ	2.62	0.47
1:G:287:PHE:CE1	1:G:290:LEU:HD21	2.49	0.47
1:H:61:LEU:HD21	1:H:163:GLY:HA3	1.96	0.47
1:H:120:ILE:O	1:H:121:GLU:C	2.57	0.47
1:H:224:THR:HG22	1:H:225:SER:N	2.27	0.47
1:I:54:LYS:O	1:I:58:LEU:HB2	2.13	0.47
1:K:29:ASN:ND2	1:K:273:ARG:O	2.47	0.47
1:K:93:LYS:HA	1:L:272:THR:O	2.14	0.47
1:L:103:ARG:HH12	1:L:129:ASP:CB	2.27	0.47
1:L:255:GLU:HG3	1:L:258:LYS:CB	2.26	0.47
1:M:181:LYS:CD	1:M:181:LYS:N	2.70	0.47
1:N:164:THR:O	1:N:168:VAL:HG23	2.13	0.47
1:N:219:PHE:HE1	1:N:250:ASP:HB2	1.77	0.47
1:O:1:MET:CG	1:O:6:PHE:HB2	2.26	0.47
1:O:222:VAL:HG22	1:O:222:VAL:O	2.13	0.47
1:O:304:LEU:HD22	1:O:304:LEU:O	2.14	0.47
1:Q:287:PHE:CE1	1:Q:290:LEU:HD23	2.49	0.47
1:S:130:SER:C	1:S:132:GLU:N	2.72	0.47
1:S:135:LYS:HE3	1:S:136:TYR:CE1	2.47	0.47
1:T:186:VAL:CG1	1:T:214:ILE:HG12	2.44	0.47
1:W:1:MET:HG3	1:W:6:PHE:HB2	1.95	0.47
1:W:300:GLY:N	3:W:1240:HOH:O	2.44	0.47
1:X:319:ASP:O	1:X:322:LEU:N	2.43	0.47
1:A:68:LYS:HE2	3:R:1190:HOH:O	2.13	0.47
1:B:243:GLU:O	1:B:244:VAL:O	2.30	0.47
1:B:269:LYS:O	1:B:273:ARG:HB2	2.14	0.47
1:C:217:GLY:O	1:C:218:ARG:C	2.56	0.47
1:E:131:PHE:HE2	1:E:226:LYS:NZ	2.12	0.47
1:E:174:ILE:HA	1:E:177:GLN:HE21	1.79	0.47
1:E:181:LYS:CE	1:E:302:LYS:HZ2	2.27	0.47
1:G:47:GLY:C	1:H:42:ARG:HH22	2.22	0.47
1:H:198:LEU:HD22	1:H:198:LEU:O	2.13	0.47
1:I:30:ILE:HG12	1:I:274:GLU:CG	2.45	0.47
1:I:53:ASN:ND2	1:I:57:LYS:NZ	2.62	0.47
1:I:293:LEU:CD1	1:I:293:LEU:N	2.63	0.47
1:J:274:GLU:HA	1:J:274:GLU:OE1	2.14	0.47
1:J:299:LEU:HB2	1:J:303:ILE:HD11	1.96	0.47
1:K:123:ARG:HH11	1:K:140:ILE:HD13	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:128:LYS:O	1:K:129:ASP:CB	2.62	0.47
1:L:105:LYS:HG3	1:L:107:GLU:HG3	1.96	0.47
1:L:171:VAL:HG21	1:L:201:GLY:CA	2.44	0.47
1:M:185:ILE:CG2	1:M:198:LEU:HD11	2.45	0.47
1:M:200:LEU:CD1	1:M:234:ALA:HB3	2.43	0.47
1:N:100:LEU:HD13	1:N:120:ILE:HG22	1.96	0.47
1:O:165:LEU:HD22	1:O:238:LEU:HD21	1.96	0.47
1:O:311:ILE:O	1:O:315:PHE:CD1	2.67	0.47
1:O:320:LYS:O	1:O:320:LYS:HG3	2.14	0.47
1:P:46:THR:CB	1:P:55:ILE:HG21	2.38	0.47
1:P:61:LEU:HD13	1:P:154:ILE:HD13	1.96	0.47
1:R:54:LYS:HD2	1:R:83:HIS:CD2	2.49	0.47
1:R:103:ARG:HH11	1:R:103:ARG:CG	2.20	0.47
1:S:53:ASN:ND2	1:S:194:THR:OG1	2.35	0.47
1:T:107:GLU:HB2	3:T:1221:HOH:O	2.13	0.47
1:T:131:PHE:HA	1:T:133:LEU:HD13	1.95	0.47
1:V:116:LYS:HZ3	1:V:122:THR:HB	1.77	0.47
1:W:82:ASN:CA	1:W:111:ASN:ND2	2.75	0.47
1:W:134:MET:HE1	1:W:156:PRO:HD3	1.94	0.47
1:W:157:GLY:O	1:W:159:ALA:N	2.46	0.47
1:A:167:TYR:HA	1:A:170:ALA:HB2	1.95	0.47
1:C:168:VAL:HG21	1:C:200:LEU:HD13	1.95	0.47
1:C:233:GLU:O	1:C:236:GLU:N	2.47	0.47
1:D:20:TRP:CD1	1:D:20:TRP:N	2.79	0.47
1:D:103:ARG:HH21	1:D:131:PHE:HA	1.79	0.47
1:E:240:VAL:HG22	1:E:241:LYS:N	2.29	0.47
1:F:5:ILE:O	1:F:6:PHE:C	2.58	0.47
1:F:263:VAL:O	1:F:267:ILE:HG13	2.15	0.47
1:G:212:VAL:HG13	1:G:249:TYR:HE1	1.80	0.47
1:H:52:GLY:CA	1:H:308:THR:O	2.62	0.47
1:I:165:LEU:HA	1:I:168:VAL:CG2	2.44	0.47
1:J:66:LEU:HD23	1:J:96:LEU:HD21	1.96	0.47
1:J:181:LYS:HE2	1:J:302:LYS:HZ3	1.79	0.47
1:K:39:TYR:CZ	1:K:180:VAL:HG21	2.49	0.47
1:K:179:GLU:H	1:K:179:GLU:CD	2.22	0.47
1:L:213:GLY:O	1:L:248:LEU:HD12	2.13	0.47
1:L:223:MET:SD	1:L:248:LEU:HD21	2.54	0.47
1:M:17:LEU:O	1:M:19:PRO:HD3	2.14	0.47
1:M:142:GLU:OE1	1:M:145:LYS:HD2	2.14	0.47
1:O:34:ILE:CG2	1:O:291:VAL:HG13	2.36	0.47
1:O:131:PHE:CZ	1:O:226:LYS:NZ	2.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:79:VAL:O	1:Q:79:VAL:CG1	2.62	0.47
1:S:113:LEU:HD11	1:T:318:GLY:HA3	1.96	0.47
1:S:140:ILE:C	1:S:142:GLU:H	2.22	0.47
1:S:236:GLU:O	1:S:237:LEU:C	2.57	0.47
1:V:181:LYS:N	1:V:181:LYS:HD3	2.29	0.47
1:W:136:TYR:O	1:W:138:GLU:N	2.48	0.47
1:X:53:ASN:HA	1:X:167:TYR:OH	2.14	0.47
1:A:20:TRP:CE3	1:A:20:TRP:N	2.83	0.47
1:B:299:LEU:CD1	1:B:303:ILE:HD13	2.45	0.47
1:C:82:ASN:ND2	1:C:111:ASN:HD21	2.12	0.47
1:D:196:ALA:HB1	1:D:231:ILE:HG22	1.97	0.47
1:E:57:LYS:C	1:E:61:LEU:HD12	2.39	0.47
1:E:131:PHE:C	1:E:133:LEU:N	2.71	0.47
1:E:210:ARG:NH2	1:E:299:LEU:HA	2.30	0.47
1:E:289:GLY:O	1:E:293:LEU:HD22	2.14	0.47
1:F:190:GLY:N	2:F:1061:5PA:O3P	2.41	0.47
1:G:54:LYS:HA	1:G:57:LYS:NZ	2.29	0.47
1:G:85:PHE:CE1	1:G:114:LEU:HB3	2.50	0.47
1:G:132:GLU:C	1:G:134:MET:N	2.70	0.47
1:H:74:ILE:CG2	1:H:137:ALA:HB1	2.44	0.47
1:H:182:PHE:HA	1:H:302:LYS:HB2	1.95	0.47
1:I:93:LYS:C	1:I:95:GLY:H	2.23	0.47
1:K:129:ASP:CG	1:K:130:SER:H	2.22	0.47
1:K:218:ARG:O	1:K:220:GLY:N	2.48	0.47
1:M:321:LEU:O	1:M:325:LEU:HD22	2.14	0.47
1:N:15:VAL:HG11	1:N:94:LEU:HD21	1.96	0.47
1:P:20:TRP:CZ3	1:P:23:PRO:HD3	2.50	0.47
1:P:40:ILE:HD13	1:P:276:ILE:HD13	1.97	0.47
1:P:164:THR:O	1:P:166:GLY:N	2.47	0.47
1:Q:243:GLU:O	1:Q:244:VAL:HG22	2.14	0.47
1:R:37:ASP:HB2	1:R:302:LYS:HG2	1.96	0.47
1:R:53:ASN:HB2	1:R:167:TYR:CE1	2.48	0.47
1:S:78:ALA:HB3	1:S:80:HIS:CD2	2.50	0.47
1:S:182:PHE:CZ	1:S:304:LEU:HG	2.49	0.47
1:T:180:VAL:HG22	1:T:181:LYS:HE2	1.95	0.47
1:T:210:ARG:NH1	1:T:247:GLU:OE1	2.47	0.47
1:U:19:PRO:HB2	1:U:20:TRP:CE3	2.48	0.47
1:V:1:MET:HE3	1:V:2:HIS:N	2.30	0.47
1:V:103:ARG:NH1	1:V:129:ASP:OD2	2.46	0.47
1:W:112:TYR:O	1:W:116:LYS:HG2	2.15	0.47
1:W:186:VAL:CG2	1:W:290:LEU:HD22	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:162:ILE:HG23	1:X:163:GLY:H	1.77	0.47
1:X:299:LEU:N	3:X:1246:HOH:O	2.35	0.47
1:A:179:GLU:O	1:A:179:GLU:CG	2.60	0.47
1:C:79:VAL:HA	1:C:102:LEU:CD1	2.45	0.47
1:F:228:ASP:C	1:F:230:LEU:H	2.22	0.47
1:J:195:LEU:HD13	1:J:195:LEU:O	2.14	0.47
1:K:138:GLU:O	1:K:139:GLU:C	2.56	0.47
1:M:131:PHE:CD1	1:M:131:PHE:C	2.91	0.47
1:N:181:LYS:HE2	1:N:302:LYS:NZ	2.30	0.47
1:O:39:TYR:CD1	1:O:182:PHE:HE2	2.32	0.47
1:O:65:ALA:HB1	1:O:70:ALA:CB	2.45	0.47
1:O:131:PHE:O	1:O:131:PHE:CD1	2.67	0.47
1:O:132:GLU:C	1:O:134:MET:N	2.72	0.47
1:O:240:VAL:HG22	1:O:241:LYS:N	2.30	0.47
1:O:281:VAL:HG23	1:O:281:VAL:O	2.15	0.47
1:P:25:GLN:HE22	1:P:42:ARG:HE	1.61	0.47
1:P:283:THR:O	1:P:284:GLY:C	2.58	0.47
1:Q:320:LYS:HZ1	1:Q:324:LEU:HD11	1.80	0.47
1:Q:323:SER:OG	1:Q:324:LEU:CD1	2.62	0.47
1:S:58:LEU:HD12	1:S:62:LEU:HG	1.95	0.47
1:T:25:GLN:O	1:T:40:ILE:N	2.39	0.47
1:T:160:SER:O	1:T:161:PRO:C	2.57	0.47
1:U:33:GLU:O	1:U:33:GLU:HG2	2.14	0.47
1:U:138:GLU:O	1:U:139:GLU:C	2.57	0.47
1:U:177:GLN:HG3	1:U:178:SER:N	2.29	0.47
1:W:30:ILE:O	1:W:34:ILE:HG23	2.14	0.47
1:A:103:ARG:NE	1:A:130:SER:O	2.38	0.47
1:B:182:PHE:CE1	1:B:304:LEU:HD12	2.50	0.47
1:C:39:TYR:O	1:C:304:LEU:HA	2.15	0.47
1:E:40:ILE:CD1	1:E:276:ILE:HD13	2.41	0.47
1:E:274:GLU:OE1	1:E:274:GLU:HA	2.15	0.47
1:F:188:ALA:HB3	2:F:1061:5PA:H6	1.96	0.47
1:G:33:GLU:O	1:G:33:GLU:HG2	2.14	0.47
1:H:139:GLU:O	1:H:142:GLU:N	2.48	0.47
1:I:2:HIS:CE1	1:I:3:PRO:HG2	2.50	0.47
1:J:62:LEU:CD2	1:J:91:ALA:HB2	2.42	0.47
1:K:85:PHE:CZ	1:K:89:LEU:HD22	2.50	0.47
1:K:179:GLU:OE1	1:K:179:GLU:N	2.39	0.47
1:M:33:GLU:HG2	1:M:295:ARG:HH21	1.79	0.47
1:M:100:LEU:HD13	1:M:120:ILE:CG2	2.45	0.47
1:M:263:VAL:O	1:M:266:ILE:HG22	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:264:ALA:O	1:M:325:LEU:HD11	2.14	0.47
1:O:53:ASN:HB3	1:O:308:THR:HG22	1.95	0.47
1:O:265:GLN:C	1:O:267:ILE:N	2.72	0.47
1:O:287:PHE:O	1:O:290:LEU:HB3	2.14	0.47
1:P:144:LEU:HD12	1:P:147:GLU:HB2	1.96	0.47
1:P:229:ASN:ND2	1:P:229:ASN:O	2.47	0.47
1:Q:218:ARG:CZ	1:Q:256:TYR:HB3	2.44	0.47
1:T:105:LYS:O	1:T:107:GLU:N	2.47	0.47
1:V:187:VAL:HG21	1:V:194:THR:CG2	2.42	0.47
1:W:61:LEU:C	1:W:63:GLY:H	2.23	0.47
1:X:25:GLN:NE2	1:X:42:ARG:NE	2.59	0.47
1:A:103:ARG:HB3	1:A:133:LEU:HD22	1.97	0.47
1:A:181:LYS:HG2	1:A:302:LYS:HZ2	1.77	0.47
1:A:185:ILE:HG23	1:A:304:LEU:HB3	1.96	0.47
1:B:34:ILE:CG2	1:B:294:ALA:HB1	2.45	0.47
1:C:76:VAL:HG11	1:C:134:MET:HA	1.97	0.47
1:D:321:LEU:O	1:D:324:LEU:HB2	2.15	0.47
1:E:142:GLU:C	1:E:144:LEU:H	2.23	0.47
1:E:146:ARG:C	1:E:147:GLU:HG3	2.39	0.47
1:E:262:GLU:HB3	1:E:288:TYR:CE1	2.49	0.47
1:F:78:ALA:O	1:F:81:SER:N	2.48	0.47
1:F:131:PHE:HZ	1:F:256:TYR:CE2	2.32	0.47
1:F:219:PHE:HE2	1:F:248:LEU:HD23	1.80	0.47
1:G:49:GLY:O	1:G:51:GLY:N	2.48	0.47
1:H:17:LEU:N	1:H:59:GLU:OE2	2.48	0.47
1:H:21:GLU:C	3:H:1095:HOH:O	2.58	0.47
1:H:23:PRO:HG2	1:H:42:ARG:HB2	1.96	0.47
1:H:24:ILE:HG13	1:H:177:GLN:OE1	2.15	0.47
1:H:112:TYR:HE1	1:H:122:THR:HG21	1.78	0.47
1:H:265:GLN:HG3	1:H:269:LYS:HE3	1.97	0.47
1:H:302:LYS:HG3	3:H:1093:HOH:O	2.15	0.47
1:J:103:ARG:NH2	1:J:133:LEU:HD11	2.30	0.47
1:J:311:ILE:HG23	1:J:312:SER:N	2.29	0.47
1:J:315:PHE:O	1:J:317:TYR:N	2.48	0.47
1:K:61:LEU:HD13	1:K:154:ILE:HG21	1.96	0.47
1:L:196:ALA:HB1	1:L:231:ILE:HG22	1.97	0.47
1:L:223:MET:HG2	1:L:248:LEU:HD21	1.95	0.47
1:M:19:PRO:HB2	1:M:20:TRP:CE3	2.48	0.47
1:M:107:GLU:O	1:M:112:TYR:CD2	2.67	0.47
1:M:265:GLN:O	1:M:269:LYS:HG3	2.15	0.47
1:N:128:LYS:C	1:N:130:SER:H	2.16	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:223:MET:O	1:N:226:LYS:N	2.43	0.47
1:O:58:LEU:CD1	1:O:61:LEU:HD12	2.45	0.47
1:O:144:LEU:HG	1:O:149:ARG:HD3	1.96	0.47
1:O:171:VAL:HG21	1:O:201:GLY:HA2	1.97	0.47
1:O:230:LEU:C	1:O:232:LYS:H	2.22	0.47
1:O:248:LEU:CB	3:O:1153:HOH:O	2.63	0.47
1:O:274:GLU:O	1:O:276:ILE:N	2.48	0.47
1:O:324:LEU:HD12	1:U:296:LYS:C	2.40	0.47
1:P:135:LYS:O	1:P:138:GLU:HB2	2.15	0.47
1:Q:27:LEU:HD11	1:Q:40:ILE:HB	1.97	0.47
1:Q:65:ALA:HB2	1:Q:152:TYR:CE2	2.49	0.47
1:Q:229:ASN:ND2	1:Q:232:LYS:CE	2.78	0.47
1:R:109:LYS:HA	1:R:113:LEU:HB2	1.96	0.47
1:R:290:LEU:HD13	1:R:290:LEU:C	2.39	0.47
1:R:307:HIS:ND1	1:R:309:GLY:N	2.55	0.47
1:S:27:LEU:HB3	1:S:274:GLU:OE2	2.14	0.47
1:T:68:LYS:O	1:T:69:GLY:C	2.58	0.47
1:T:73:VAL:HG21	1:T:91:ALA:HB1	1.96	0.47
1:T:249:TYR:CD1	1:T:249:TYR:N	2.82	0.47
1:U:9:LEU:O	1:U:10:ALA:C	2.57	0.47
1:U:123:ARG:NH1	3:U:1227:HOH:O	2.39	0.47
1:U:164:THR:HG23	1:U:197:GLY:CA	2.44	0.47
1:U:179:GLU:O	1:U:179:GLU:HG2	2.14	0.47
1:U:221:GLU:OE1	1:U:221:GLU:HA	2.15	0.47
1:W:131:PHE:C	1:W:131:PHE:HD1	2.23	0.47
1:W:143:GLU:C	1:W:146:ARG:HG2	2.39	0.47
1:W:198:LEU:HD23	1:W:198:LEU:C	2.39	0.47
1:X:34:ILE:HD13	1:X:291:VAL:HA	1.95	0.47
1:X:264:ALA:HA	1:X:321:LEU:HD22	1.97	0.47
1:X:319:ASP:C	1:X:321:LEU:H	2.23	0.47
1:A:186:VAL:HA	1:A:212:VAL:O	2.15	0.47
1:B:105:LYS:HG3	1:B:107:GLU:HG3	1.97	0.47
1:B:211:PRO:O	1:B:246:PRO:HB2	2.15	0.47
1:C:142:GLU:OE1	1:C:142:GLU:CA	2.63	0.47
1:C:200:LEU:O	1:C:204:ILE:HG13	2.14	0.47
1:D:7:ALA:O	1:D:9:LEU:N	2.48	0.47
1:D:103:ARG:NH1	1:D:129:ASP:CG	2.73	0.47
1:D:113:LEU:HD22	1:D:117:ILE:HD11	1.96	0.47
1:E:112:TYR:CE1	1:E:122:THR:HG21	2.49	0.47
1:E:128:LYS:O	1:E:129:ASP:HB3	2.15	0.47
1:F:103:ARG:HD3	1:F:127:ALA:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:9:LEU:HD13	1:G:60:TYR:OH	2.13	0.47
1:G:103:ARG:HB2	1:G:128:LYS:HA	1.96	0.47
1:H:74:ILE:HG21	1:H:137:ALA:HB1	1.96	0.47
1:I:293:LEU:H	1:I:293:LEU:HD13	1.77	0.47
1:J:226:LYS:O	1:J:227:LEU:C	2.58	0.47
1:K:168:VAL:HG22	1:K:200:LEU:HB3	1.97	0.47
1:K:214:ILE:HG21	1:K:286:ALA:HA	1.97	0.47
1:L:100:LEU:CD1	1:L:120:ILE:HG22	2.45	0.47
1:M:29:ASN:HB2	1:M:274:GLU:OE2	2.15	0.47
1:M:53:ASN:ND2	1:M:54:LYS:HE2	2.30	0.47
1:M:240:VAL:CG2	1:M:241:LYS:N	2.78	0.47
1:O:200:LEU:O	1:O:200:LEU:HD22	2.15	0.47
1:P:35:GLY:O	1:P:36:ALA:HB2	2.15	0.47
1:Q:14:ARG:CG	1:Q:59:GLU:HB3	2.45	0.47
1:Q:58:LEU:HA	1:Q:61:LEU:HD12	1.97	0.47
1:Q:269:LYS:C	1:Q:271:GLY:H	2.23	0.47
1:S:22:THR:HG21	1:S:43:ASP:HA	1.96	0.47
1:S:142:GLU:HA	1:S:145:LYS:CG	2.41	0.47
1:S:199:SER:O	1:S:203:SER:HB2	2.15	0.47
1:T:207:GLU:CB	1:T:209:ILE:HG13	2.45	0.47
1:B:15:VAL:CG1	1:B:17:LEU:HD13	2.43	0.47
1:B:64:ASP:O	1:B:67:SER:CB	2.63	0.47
1:B:241:LYS:CG	1:B:242:VAL:N	2.74	0.47
1:D:214:ILE:CG2	1:D:251:TYR:HB2	2.45	0.47
1:E:130:SER:C	1:E:132:GLU:H	2.23	0.47
1:F:129:ASP:C	1:F:131:PHE:H	2.23	0.47
1:G:149:ARG:CG	1:I:221:GLU:H	2.21	0.47
1:G:258:LYS:HD3	1:G:260:THR:HG22	1.97	0.47
1:G:312:SER:C	1:G:314:THR:H	2.22	0.47
1:I:95:GLY:O	1:I:96:LEU:O	2.33	0.47
1:I:207:GLU:OE1	1:I:207:GLU:HA	2.15	0.47
1:I:272:THR:HG22	1:J:92:LYS:HD3	1.97	0.47
1:J:42:ARG:NH1	1:J:42:ARG:HB3	2.30	0.47
1:J:196:ALA:HB2	1:J:230:LEU:HD13	1.95	0.47
1:K:227:LEU:HD21	1:K:246:PRO:CG	2.45	0.47
1:K:259:ILE:HD11	1:K:317:TYR:CB	2.39	0.47
1:K:279:ASP:OD2	1:K:310:GLY:O	2.33	0.47
1:M:43:ASP:OD1	1:M:56:ARG:NH2	2.29	0.47
1:M:116:LYS:HZ3	1:M:122:THR:HB	1.79	0.47
1:N:203:SER:CB	1:N:243:GLU:HG2	2.45	0.47
1:P:112:TYR:HA	1:P:115:ASP:HB2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:73:VAL:HG13	1:Q:154:ILE:HD11	1.97	0.47
1:Q:162:ILE:HD12	1:Q:162:ILE:O	2.14	0.47
1:Q:187:VAL:HG23	3:Q:1195:HOH:O	2.15	0.47
1:R:142:GLU:HG3	1:R:146:ARG:HE	1.80	0.47
1:V:60:TYR:HB3	1:V:162:ILE:HG13	1.96	0.47
1:W:106:GLU:OE2	1:W:124:VAL:CG1	2.63	0.47
1:X:75:THR:OG1	1:X:83:HIS:HE1	1.97	0.47
1:X:218:ARG:CD	1:X:222:VAL:HG11	2.37	0.47
1:X:259:ILE:CG2	1:X:321:LEU:HD21	2.45	0.47
1:A:126:ASP:O	1:A:128:LYS:N	2.44	0.47
1:B:20:TRP:CD1	1:B:20:TRP:N	2.75	0.47
1:B:62:LEU:O	1:B:66:LEU:HG	2.15	0.47
1:C:181:LYS:HG2	1:C:302:LYS:HZ2	1.80	0.47
1:C:322:LEU:CD1	1:D:108:LEU:HD21	2.42	0.47
1:E:93:LYS:HA	1:F:272:THR:O	2.15	0.47
1:E:288:TYR:C	1:E:288:TYR:CD2	2.92	0.47
1:F:249:TYR:N	1:F:249:TYR:CD1	2.83	0.47
1:G:53:ASN:CB	1:G:308:THR:HG22	2.37	0.47
1:G:82:ASN:HA	1:G:111:ASN:ND2	2.30	0.47
1:J:103:ARG:NE	1:J:129:ASP:HA	2.30	0.47
1:N:266:ILE:HD12	1:N:266:ILE:HA	1.84	0.47
1:O:78:ALA:O	1:O:79:VAL:C	2.57	0.47
1:S:109:LYS:CA	1:S:113:LEU:HB2	2.45	0.47
1:S:219:PHE:CZ	1:S:248:LEU:HD23	2.49	0.47
1:U:25:GLN:NE2	1:U:42:ARG:NE	2.62	0.47
1:W:253:PHE:HD2	1:W:260:THR:CG2	2.25	0.47
1:B:194:THR:OG1	2:B:1021:5PA:O2P	2.19	0.46
1:B:293:LEU:HB3	1:B:299:LEU:HG	1.98	0.46
1:C:217:GLY:N	1:C:252:SER:HB3	2.30	0.46
1:D:1:MET:HE1	1:D:172:GLY:HA3	1.97	0.46
1:D:34:ILE:CG2	1:D:294:ALA:HB3	2.46	0.46
1:D:140:ILE:O	1:D:144:LEU:HB2	2.15	0.46
1:E:43:ASP:OD2	1:E:56:ARG:NE	2.43	0.46
1:F:72:VAL:HG13	1:F:72:VAL:O	2.15	0.46
1:G:134:MET:HE1	1:G:156:PRO:HD3	1.97	0.46
1:G:310:GLY:C	1:G:312:SER:N	2.73	0.46
1:H:35:GLY:O	1:H:36:ALA:HB2	2.15	0.46
1:H:99:ILE:HG12	1:H:121:GLU:HB3	1.95	0.46
1:J:219:PHE:HD2	1:J:220:GLY:H	1.61	0.46
1:J:319:ASP:C	1:J:321:LEU:H	2.22	0.46
1:J:320:LYS:O	1:J:320:LYS:HG3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:54:LYS:HE3	2:K:1111:5PA:C9	2.42	0.46
1:K:229:ASN:ND2	1:K:232:LYS:HE2	2.29	0.46
1:K:244:VAL:HG12	1:K:245:ARG:N	2.29	0.46
1:L:253:PHE:CG	1:L:260:THR:HG21	2.49	0.46
1:M:72:VAL:O	1:M:72:VAL:HG13	2.15	0.46
1:M:228:ASP:O	1:M:232:LYS:HB2	2.15	0.46
1:N:1:MET:HE3	1:N:172:GLY:HA3	1.95	0.46
1:N:72:VAL:CG1	1:N:151:PRO:HA	2.45	0.46
1:O:78:ALA:H	1:O:81:SER:HB2	1.80	0.46
1:O:109:LYS:N	1:O:113:LEU:HB2	2.30	0.46
1:O:162:ILE:C	1:O:164:THR:H	2.23	0.46
1:P:144:LEU:O	1:P:147:GLU:HB2	2.15	0.46
1:P:247:GLU:HB3	1:P:249:TYR:CE1	2.44	0.46
1:P:286:ALA:O	1:P:290:LEU:N	2.46	0.46
1:Q:116:LYS:NZ	1:Q:122:THR:CG2	2.78	0.46
1:Q:116:LYS:HZ3	1:Q:122:THR:HG22	1.80	0.46
1:Q:139:GLU:HA	1:Q:142:GLU:HG2	1.97	0.46
1:S:291:VAL:O	1:S:295:ARG:HG3	2.15	0.46
1:T:219:PHE:CD2	1:T:220:GLY:N	2.82	0.46
1:U:180:VAL:HA	1:U:181:LYS:NZ	2.30	0.46
1:U:222:VAL:HG22	1:U:226:LYS:HD2	1.97	0.46
1:V:55:ILE:HD11	1:V:86:VAL:HG21	1.97	0.46
1:W:127:ALA:O	1:W:128:LYS:C	2.58	0.46
1:W:143:GLU:HA	1:W:146:ARG:NE	2.31	0.46
1:A:118:MET:HE3	1:B:271:GLY:HA3	1.98	0.46
1:B:92:LYS:HE2	1:B:120:ILE:HG12	1.97	0.46
1:C:108:LEU:N	1:C:108:LEU:CD1	2.78	0.46
1:C:278:LEU:HD22	1:C:283:THR:HB	1.97	0.46
1:D:113:LEU:HD22	1:D:117:ILE:CD1	2.46	0.46
1:F:26:TYR:CZ	1:U:4:LYS:HE3	2.51	0.46
1:G:24:ILE:O	1:G:24:ILE:HG22	2.15	0.46
1:G:78:ALA:O	1:G:102:LEU:HD22	2.15	0.46
1:G:198:LEU:O	1:G:202:LEU:N	2.49	0.46
1:H:243:GLU:O	1:H:244:VAL:O	2.32	0.46
1:I:113:LEU:O	1:I:117:ILE:HG13	2.15	0.46
1:I:134:MET:HE1	1:I:156:PRO:CD	2.34	0.46
1:I:135:LYS:O	1:I:138:GLU:N	2.45	0.46
1:I:200:LEU:HD22	1:I:204:ILE:HD11	1.97	0.46
1:J:184:SER:HB3	1:J:210:ARG:HB2	1.97	0.46
1:K:82:ASN:ND2	1:K:310:GLY:HA2	2.29	0.46
1:K:217:GLY:HA2	1:K:256:TYR:HB2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:321:LEU:C	1:K:323:SER:N	2.69	0.46
1:L:311:ILE:O	1:L:311:ILE:HG12	2.15	0.46
1:N:98:ALA:C	1:N:99:ILE:HG13	2.40	0.46
1:O:66:LEU:CD2	1:O:96:LEU:HD11	2.45	0.46
1:O:299:LEU:HB2	1:O:303:ILE:HD11	1.97	0.46
1:P:30:ILE:O	1:P:34:ILE:HB	2.15	0.46
1:Q:54:LYS:HD3	1:Q:54:LYS:HA	1.77	0.46
1:Q:78:ALA:HB3	1:Q:80:HIS:CD2	2.51	0.46
1:Q:116:LYS:NZ	1:Q:122:THR:HG22	2.30	0.46
1:R:142:GLU:O	1:R:146:ARG:N	2.42	0.46
1:S:15:VAL:HG12	1:S:17:LEU:HD11	1.96	0.46
1:S:39:TYR:CD1	1:S:182:PHE:HE2	2.33	0.46
1:S:42:ARG:NH2	1:T:47:GLY:O	2.44	0.46
1:S:259:ILE:HG22	1:S:324:LEU:CD2	2.46	0.46
1:U:100:LEU:HD12	1:U:100:LEU:N	2.31	0.46
1:V:50:ILE:HD13	1:V:111:ASN:OD1	2.16	0.46
1:V:54:LYS:HE3	2:V:1221:5PA:H91	1.97	0.46
1:V:220:GLY:O	1:V:224:THR:HB	2.15	0.46
1:V:221:GLU:O	1:V:225:SER:N	2.33	0.46
1:W:61:LEU:HD23	1:W:61:LEU:HA	1.82	0.46
1:X:31:SER:OG	1:X:38:VAL:HG12	2.15	0.46
1:X:66:LEU:O	1:X:69:GLY:N	2.47	0.46
1:X:195:LEU:C	1:X:195:LEU:HD13	2.41	0.46
1:X:283:THR:HG22	1:X:308:THR:OG1	2.15	0.46
1:B:40:ILE:HG13	1:B:305:PHE:O	2.15	0.46
1:B:45:LEU:C	1:B:47:GLY:N	2.73	0.46
1:C:291:VAL:HG12	1:C:295:ARG:CD	2.43	0.46
1:D:167:TYR:HA	1:D:170:ALA:HB3	1.96	0.46
1:D:174:ILE:O	1:D:175:ALA:C	2.58	0.46
1:E:17:LEU:O	1:E:19:PRO:HD3	2.15	0.46
1:E:311:ILE:HG23	1:E:312:SER:N	2.31	0.46
1:G:5:ILE:O	1:G:5:ILE:HG22	2.15	0.46
1:G:60:TYR:OH	1:G:169:ARG:NH1	2.49	0.46
1:G:61:LEU:O	1:G:64:ASP:CB	2.64	0.46
1:H:225:SER:O	1:H:228:ASP:HB2	2.15	0.46
1:I:142:GLU:HA	1:I:145:LYS:HD2	1.96	0.46
1:I:249:TYR:HB3	1:I:251:TYR:HE1	1.81	0.46
1:J:308:THR:HB	2:J:1101:5PA:N1	2.30	0.46
1:K:117:ILE:O	1:L:268:ARG:NE	2.39	0.46
1:K:288:TYR:C	1:K:288:TYR:CD2	2.92	0.46
1:M:56:ARG:HH11	1:M:56:ARG:HG2	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:240:VAL:HG22	1:N:241:LYS:N	2.30	0.46
1:O:45:LEU:CB	1:P:45:LEU:HD22	2.44	0.46
1:O:81:SER:HG	1:O:84:ALA:H	1.60	0.46
1:P:30:ILE:HG12	1:P:274:GLU:HG2	1.96	0.46
1:Q:61:LEU:CD2	1:Q:154:ILE:HG23	2.44	0.46
1:Q:142:GLU:HA	1:Q:145:LYS:CD	2.46	0.46
1:Q:214:ILE:HG23	1:Q:214:ILE:O	2.15	0.46
1:Q:243:GLU:C	1:Q:244:VAL:HG23	2.40	0.46
1:R:103:ARG:HH21	1:R:131:PHE:HA	1.79	0.46
1:R:263:VAL:C	1:R:266:ILE:HG22	2.40	0.46
1:S:144:LEU:HD23	1:S:151:PRO:CB	2.45	0.46
1:T:319:ASP:O	1:T:321:LEU:N	2.48	0.46
1:U:30:ILE:O	1:U:34:ILE:HG12	2.15	0.46
1:V:104:GLY:O	1:V:106:GLU:N	2.49	0.46
1:W:20:TRP:CE3	1:X:23:PRO:HG3	2.50	0.46
1:W:110:GLY:HA3	1:W:316:HIS:CD2	2.50	0.46
1:W:131:PHE:C	1:W:131:PHE:CD1	2.93	0.46
1:W:237:LEU:C	1:W:239:GLY:H	2.24	0.46
1:W:289:GLY:O	1:W:292:ASP:N	2.40	0.46
1:W:310:GLY:O	1:W:313:GLY:N	2.48	0.46
1:X:30:ILE:HG21	1:X:287:PHE:CZ	2.51	0.46
1:X:62:LEU:O	1:X:64:ASP:N	2.47	0.46
1:X:219:PHE:HE1	1:X:250:ASP:N	2.13	0.46
1:B:187:VAL:HG21	1:B:194:THR:HG21	1.96	0.46
1:B:200:LEU:O	1:B:204:ILE:HG13	2.15	0.46
1:C:264:ALA:O	1:C:325:LEU:HD11	2.16	0.46
1:F:138:GLU:OE1	1:F:138:GLU:HA	2.15	0.46
1:G:54:LYS:HG3	1:G:83:HIS:HA	1.97	0.46
1:G:147:GLU:C	1:G:149:ARG:H	2.24	0.46
1:K:31:SER:HA	1:K:36:ALA:O	2.15	0.46
1:K:84:ALA:CA	1:K:100:LEU:HD21	2.46	0.46
1:L:25:GLN:NE2	1:L:42:ARG:HD3	2.29	0.46
1:L:240:VAL:HG22	1:L:241:LYS:N	2.31	0.46
1:M:12:PHE:CE1	1:M:238:LEU:HD23	2.50	0.46
1:M:222:VAL:HG22	1:M:222:VAL:O	2.15	0.46
1:N:103:ARG:HH21	1:N:131:PHE:CA	2.23	0.46
1:N:317:TYR:O	1:N:318:GLY:C	2.58	0.46
1:O:104:GLY:O	1:O:105:LYS:C	2.58	0.46
1:P:82:ASN:ND2	1:P:111:ASN:ND2	2.64	0.46
1:P:210:ARG:NH2	1:P:298:GLU:O	2.46	0.46
1:P:252:SER:O	1:P:253:PHE:CB	2.61	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:74:ILE:CD1	1:Q:141:ALA:HB2	2.45	0.46
1:R:30:ILE:HG21	1:R:287:PHE:HZ	1.81	0.46
1:R:162:ILE:HD12	1:R:165:LEU:CD1	2.46	0.46
1:R:196:ALA:HB2	1:R:227:LEU:HD11	1.98	0.46
1:T:22:THR:O	1:T:41:LYS:NZ	2.48	0.46
1:T:162:ILE:HG23	1:T:163:GLY:N	2.31	0.46
1:T:200:LEU:HD12	1:T:234:ALA:HB3	1.98	0.46
1:U:181:LYS:CG	1:U:302:LYS:HZ2	2.16	0.46
1:W:1:MET:H1	1:W:176:THR:HG21	1.80	0.46
1:W:11:LYS:HE3	1:W:12:PHE:CZ	2.50	0.46
1:W:249:TYR:N	1:W:249:TYR:CD1	2.83	0.46
1:W:259:ILE:HG22	1:W:324:LEU:CD2	2.45	0.46
1:W:278:LEU:HB3	1:W:283:THR:OG1	2.15	0.46
1:X:66:LEU:O	1:X:67:SER:C	2.57	0.46
1:X:266:ILE:O	1:X:269:LYS:HB2	2.15	0.46
1:X:314:THR:O	1:X:314:THR:HG22	2.16	0.46
1:B:168:VAL:O	1:B:171:VAL:HG22	2.15	0.46
1:C:187:VAL:HG21	1:C:194:THR:HG21	1.97	0.46
1:D:41:LYS:HZ3	1:D:177:GLN:NE2	2.09	0.46
1:F:287:PHE:O	1:F:290:LEU:HB3	2.15	0.46
1:G:54:LYS:HB2	1:G:86:VAL:HG11	1.96	0.46
1:G:81:SER:OG	1:G:83:HIS:HB3	2.16	0.46
1:G:144:LEU:HD23	1:G:151:PRO:HB3	1.98	0.46
1:H:17:LEU:HG	1:H:48:LEU:HD12	1.97	0.46
1:H:22:THR:HB	1:H:42:ARG:O	2.14	0.46
1:H:214:ILE:HG23	1:H:251:TYR:CD1	2.51	0.46
1:H:269:LYS:HB3	1:H:273:ARG:HH11	1.77	0.46
1:I:157:GLY:O	1:I:158:GLY:C	2.59	0.46
1:I:259:ILE:HG21	1:I:321:LEU:CD2	2.45	0.46
1:K:274:GLU:O	1:K:276:ILE:N	2.49	0.46
1:K:290:LEU:C	1:K:290:LEU:HD12	2.40	0.46
1:L:53:ASN:HB3	1:L:308:THR:HG22	1.96	0.46
1:L:110:GLY:N	3:L:1130:HOH:O	2.46	0.46
1:L:240:VAL:CG2	1:L:241:LYS:N	2.78	0.46
1:O:159:ALA:O	1:O:160:SER:C	2.57	0.46
1:P:165:LEU:HA	1:P:168:VAL:HG23	1.98	0.46
1:P:215:ALA:HB3	1:P:250:ASP:HA	1.97	0.46
1:P:270:VAL:HG12	1:P:276:ILE:O	2.16	0.46
1:Q:141:ALA:HA	1:Q:144:LEU:HD22	1.96	0.46
1:Q:203:SER:OG	1:Q:243:GLU:HB2	2.16	0.46
1:Q:233:GLU:C	1:Q:236:GLU:H	2.22	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:162:ILE:HD12	1:R:165:LEU:HD12	1.97	0.46
1:R:286:ALA:HB2	3:R:1202:HOH:O	2.14	0.46
1:R:308:THR:HB	2:R:1181:5PA:N1	2.31	0.46
1:S:191:SER:OG	2:S:1191:5PA:O1P	2.22	0.46
1:T:218:ARG:CG	1:T:219:PHE:H	2.11	0.46
1:U:100:LEU:N	1:U:100:LEU:CD1	2.79	0.46
1:V:34:ILE:HD11	1:V:291:VAL:HG22	1.97	0.46
1:V:212:VAL:HG11	1:V:299:LEU:HD21	1.98	0.46
1:W:315:PHE:HE2	1:X:110:GLY:O	1.98	0.46
1:B:1:MET:CE	1:B:172:GLY:HA3	2.46	0.46
1:B:214:ILE:O	1:B:215:ALA:C	2.58	0.46
1:C:189:ALA:HB3	1:C:215:ALA:HA	1.97	0.46
1:C:219:PHE:CA	1:C:223:MET:HE3	2.32	0.46
1:D:259:ILE:HD12	1:D:320:LYS:CG	2.46	0.46
1:F:79:VAL:HB	1:F:103:ARG:O	2.15	0.46
1:F:92:LYS:O	1:F:95:GLY:N	2.48	0.46
1:G:15:VAL:O	1:G:16:GLU:C	2.57	0.46
1:G:15:VAL:O	1:G:17:LEU:HD22	2.15	0.46
1:G:218:ARG:CD	1:G:256:TYR:HB3	2.43	0.46
1:G:274:GLU:O	1:G:275:GLY:C	2.58	0.46
1:H:210:ARG:HD2	1:H:247:GLU:OE1	2.16	0.46
1:K:162:ILE:HD12	1:K:162:ILE:C	2.39	0.46
1:L:30:ILE:HG22	1:L:34:ILE:HD12	1.97	0.46
1:L:228:ASP:OD1	1:L:245:ARG:HD2	2.16	0.46
1:O:195:LEU:HD11	1:O:213:GLY:HA3	1.97	0.46
1:Q:299:LEU:HD23	1:Q:299:LEU:HA	1.72	0.46
1:S:108:LEU:HB2	3:S:1231:HOH:O	2.15	0.46
1:S:142:GLU:C	1:S:144:LEU:N	2.69	0.46
1:T:5:ILE:HG22	1:T:9:LEU:HD12	1.97	0.46
1:W:320:LYS:NZ	1:W:324:LEU:CD1	2.69	0.46
1:A:12:PHE:HA	1:A:13:PRO:HD3	1.66	0.46
1:B:56:ARG:HH11	1:B:56:ARG:HG2	1.81	0.46
1:C:132:GLU:CB	3:C:1047:HOH:O	2.58	0.46
1:C:133:LEU:HD12	1:C:136:TYR:HD2	1.80	0.46
1:E:187:VAL:HG22	1:E:188:ALA:H	1.79	0.46
1:F:191:SER:N	2:F:1061:5PA:O3P	2.49	0.46
1:G:256:TYR:CD1	1:G:257:GLY:N	2.84	0.46
1:H:41:LYS:HZ3	1:H:177:GLN:NE2	2.12	0.46
1:I:162:ILE:HG13	1:I:163:GLY:N	2.31	0.46
1:J:315:PHE:C	1:J:317:TYR:N	2.72	0.46
1:K:71:ASP:OD2	1:K:71:ASP:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:73:VAL:CG1	1:K:154:ILE:HD11	2.46	0.46
1:K:134:MET:O	1:K:135:LYS:C	2.59	0.46
1:K:227:LEU:HD21	1:K:246:PRO:HG3	1.98	0.46
1:L:207:GLU:C	1:L:209:ILE:H	2.23	0.46
1:L:280:PRO:HB3	1:L:321:LEU:HD11	1.97	0.46
1:M:14:ARG:HG2	1:M:14:ARG:NH1	2.31	0.46
1:M:25:GLN:NE2	1:M:42:ARG:CG	2.79	0.46
1:M:235:ALA:HB1	1:M:240:VAL:O	2.15	0.46
1:P:82:ASN:ND2	1:P:111:ASN:HD21	2.13	0.46
1:P:259:ILE:HD11	1:P:317:TYR:CD2	2.51	0.46
1:Q:60:TYR:C	1:Q:162:ILE:HD13	2.41	0.46
1:R:216:VAL:CG1	3:R:1202:HOH:O	2.62	0.46
1:S:50:ILE:HD11	1:S:82:ASN:HD22	1.81	0.46
1:S:240:VAL:HG22	1:S:241:LYS:N	2.30	0.46
1:T:109:LYS:HG3	1:T:316:HIS:CD2	2.51	0.46
1:V:103:ARG:HE	1:V:133:LEU:HD21	1.81	0.46
1:W:31:SER:OG	1:W:38:VAL:HG12	2.15	0.46
1:W:181:LYS:O	1:W:302:LYS:NZ	2.43	0.46
1:W:186:VAL:HG12	1:W:212:VAL:HB	1.98	0.46
1:W:269:LYS:HB3	1:W:273:ARG:HH12	1.80	0.46
1:X:34:ILE:CG1	1:X:291:VAL:HG13	2.46	0.46
1:X:43:ASP:O	1:X:46:THR:HG23	2.16	0.46
1:X:143:GLU:O	1:X:145:LYS:N	2.48	0.46
1:B:54:LYS:HE3	2:B:1021:5PA:H91	1.97	0.46
1:B:76:VAL:HG12	1:B:101:VAL:HB	1.98	0.46
1:B:82:ASN:HD22	1:B:111:ASN:ND2	1.94	0.46
1:B:168:VAL:HG22	1:B:200:LEU:HB3	1.97	0.46
1:C:171:VAL:HG12	1:C:198:LEU:HD23	1.96	0.46
1:C:196:ALA:CB	1:C:230:LEU:HD22	2.46	0.46
1:D:40:ILE:HD11	1:D:307:HIS:HB2	1.97	0.46
1:E:202:LEU:CD1	1:E:211:PRO:HG3	2.37	0.46
2:F:1061:5PA:O4P	2:F:1061:5PA:C4A	2.64	0.46
1:G:259:ILE:HD11	1:G:317:TYR:CB	2.45	0.46
1:H:181:LYS:H	1:H:181:LYS:CD	2.29	0.46
1:I:171:VAL:CG2	1:I:172:GLY:N	2.78	0.46
1:I:207:GLU:CB	1:I:209:ILE:HG13	2.46	0.46
1:I:218:ARG:HD2	1:I:256:TYR:H	1.80	0.46
1:J:207:GLU:HA	1:J:207:GLU:OE1	2.16	0.46
1:K:74:ILE:O	1:K:154:ILE:N	2.44	0.46
1:K:126:ASP:C	1:K:128:LYS:N	2.74	0.46
1:K:210:ARG:NH1	1:K:247:GLU:OE1	2.49	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:83:HIS:CD2	1:L:157:GLY:CA	2.96	0.46
1:L:210:ARG:HA	1:L:211:PRO:HD3	1.80	0.46
1:M:60:TYR:OH	1:M:169:ARG:NH1	2.49	0.46
1:M:84:ALA:O	1:M:100:LEU:HD21	2.15	0.46
1:M:112:TYR:HA	1:M:115:ASP:OD2	2.15	0.46
1:N:185:ILE:CG2	1:N:306:ILE:HD11	2.45	0.46
1:N:229:ASN:O	1:N:229:ASN:ND2	2.47	0.46
1:O:143:GLU:HA	1:O:146:ARG:HG2	1.98	0.46
1:P:283:THR:O	1:P:286:ALA:HB3	2.16	0.46
1:Q:76:VAL:HG11	1:Q:134:MET:CA	2.46	0.46
1:Q:253:PHE:HZ	1:Q:288:TYR:CD2	2.33	0.46
1:Q:291:VAL:O	1:Q:295:ARG:HB2	2.16	0.46
1:R:27:LEU:HD12	1:R:38:VAL:HG22	1.97	0.46
1:T:134:MET:CE	1:T:137:ALA:CB	2.92	0.46
1:T:134:MET:CE	1:T:137:ALA:HB3	2.46	0.46
1:T:183:ASP:O	1:T:210:ARG:HG3	2.15	0.46
1:V:81:SER:HB3	1:V:84:ALA:HB2	1.97	0.46
1:W:105:LYS:O	1:W:107:GLU:N	2.47	0.46
1:A:26:TYR:O	1:A:28:PRO:HD3	2.16	0.46
1:B:224:THR:CG2	1:B:245:ARG:HH22	2.28	0.46
1:B:235:ALA:O	1:B:239:GLY:N	2.49	0.46
1:C:116:LYS:N	1:C:116:LYS:HD2	2.30	0.46
1:C:168:VAL:HG22	1:C:200:LEU:HB3	1.98	0.46
1:C:224:THR:O	1:C:228:ASP:OD2	2.34	0.46
1:C:243:GLU:C	1:C:244:VAL:CG2	2.89	0.46
1:D:100:LEU:HB3	1:D:102:LEU:CD2	2.46	0.46
1:F:61:LEU:HD22	1:F:154:ILE:HG12	1.98	0.46
1:F:64:ASP:C	1:F:64:ASP:OD1	2.59	0.46
1:F:144:LEU:HD12	1:F:144:LEU:O	2.15	0.46
1:F:149:ARG:CZ	3:F:1089:HOH:O	2.64	0.46
1:F:244:VAL:O	1:F:245:ARG:O	2.34	0.46
1:G:98:ALA:O	1:G:99:ILE:HG13	2.15	0.46
1:G:129:ASP:CG	1:G:130:SER:N	2.74	0.46
1:H:299:LEU:CB	1:H:303:ILE:CD1	2.94	0.46
1:I:58:LEU:HG	1:I:62:LEU:HG	1.97	0.46
1:I:322:LEU:HD21	1:J:116:LYS:CB	2.46	0.46
1:I:323:SER:O	1:I:324:LEU:HD12	2.16	0.46
1:J:56:ARG:HG2	1:J:56:ARG:NH1	2.31	0.46
1:K:72:VAL:HG13	1:K:151:PRO:HA	1.97	0.46
1:K:115:ASP:HB3	1:K:120:ILE:CB	2.31	0.46
1:K:128:LYS:O	1:K:129:ASP:HB3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:186:VAL:O	1:K:186:VAL:CG2	2.63	0.46
1:N:93:LYS:O	1:N:93:LYS:HG2	2.16	0.46
1:O:5:ILE:HG22	1:O:6:PHE:N	2.30	0.46
1:O:61:LEU:O	1:O:64:ASP:N	2.35	0.46
1:O:78:ALA:O	1:O:81:SER:N	2.46	0.46
1:P:181:LYS:HE3	1:P:302:LYS:NZ	2.30	0.46
1:P:268:ARG:NH2	1:P:325:LEU:HG	2.30	0.46
1:Q:20:TRP:CD1	1:R:20:TRP:HZ3	2.33	0.46
1:Q:149:ARG:O	1:Q:151:PRO:HD3	2.16	0.46
1:Q:232:LYS:HZ1	1:T:319:ASP:CG	2.23	0.46
1:R:210:ARG:HA	1:R:211:PRO:HD3	1.67	0.46
1:S:57:LYS:HE2	1:S:193:GLY:HA3	1.98	0.46
1:S:66:LEU:CD2	1:S:96:LEU:HD11	2.46	0.46
1:T:58:LEU:O	1:T:62:LEU:HB2	2.16	0.46
1:U:56:ARG:HG2	1:U:56:ARG:NH1	2.30	0.46
1:U:252:SER:C	1:U:253:PHE:HD1	2.24	0.46
1:W:162:ILE:C	1:W:164:THR:H	2.23	0.46
1:W:279:ASP:OD2	1:W:281:VAL:HG13	2.16	0.46
1:X:41:LYS:HD2	1:X:174:ILE:HG12	1.97	0.46
1:X:259:ILE:HD12	1:X:320:LYS:CG	2.45	0.46
1:A:22:THR:HG21	1:A:43:ASP:HA	1.98	0.46
1:A:174:ILE:HA	1:A:177:GLN:HE21	1.81	0.46
1:D:115:ASP:O	1:D:118:MET:N	2.49	0.46
1:D:133:LEU:HA	1:D:136:TYR:HD2	1.80	0.46
1:E:42:ARG:CB	1:E:45:LEU:HD12	2.40	0.46
1:E:131:PHE:CE2	1:E:226:LYS:NZ	2.85	0.46
1:F:186:VAL:CG1	1:F:187:VAL:N	2.79	0.46
1:G:25:GLN:HE21	1:G:42:ARG:NE	2.14	0.46
1:G:71:ASP:OD1	1:G:149:ARG:HG2	2.16	0.46
1:G:242:VAL:O	1:G:243:GLU:O	2.34	0.46
1:H:316:HIS:HD1	1:H:316:HIS:C	2.21	0.46
1:H:324:LEU:HD13	1:H:324:LEU:N	2.30	0.46
1:J:215:ALA:HB2	1:J:248:LEU:HD11	1.97	0.46
1:K:140:ILE:O	1:K:143:GLU:HG3	2.16	0.46
1:K:185:ILE:HA	1:K:304:LEU:O	2.16	0.46
1:K:272:THR:HG21	1:L:118:MET:O	2.15	0.46
1:L:5:ILE:HD11	1:L:205:LEU:HD23	1.98	0.46
1:M:42:ARG:NH1	1:M:44:ASP:OD2	2.49	0.46
1:M:130:SER:OG	1:M:132:GLU:HB2	2.16	0.46
1:N:285:LYS:NZ	3:N:1146:HOH:O	2.48	0.46
1:O:126:ASP:N	3:O:1178:HOH:O	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:204:ILE:HD11	1:O:238:LEU:HD12	1.96	0.46
1:P:90:ALA:C	1:P:92:LYS:H	2.22	0.46
1:P:108:LEU:HD12	1:P:112:TYR:CD2	2.51	0.46
1:Q:162:ILE:C	1:Q:162:ILE:CD1	2.84	0.46
1:S:266:ILE:HG23	1:S:267:ILE:N	2.30	0.46
1:T:160:SER:O	1:T:164:THR:N	2.48	0.46
1:T:264:ALA:HB1	1:T:325:LEU:HD22	1.97	0.46
1:U:181:LYS:CG	1:U:302:LYS:NZ	2.75	0.46
1:W:85:PHE:CE1	1:W:114:LEU:HB3	2.51	0.46
1:W:131:PHE:C	1:W:133:LEU:N	2.63	0.46
1:W:289:GLY:O	1:W:290:LEU:C	2.59	0.46
1:X:132:GLU:C	1:X:134:MET:N	2.70	0.46
1:X:316:HIS:O	1:X:316:HIS:ND1	2.46	0.46
1:B:218:ARG:NH1	1:B:218:ARG:HB2	2.31	0.45
1:B:252:SER:O	1:B:253:PHE:HB2	2.15	0.45
1:C:1:MET:HE3	1:C:2:HIS:H	1.81	0.45
1:C:226:LYS:O	1:C:230:LEU:HB2	2.16	0.45
1:D:128:LYS:HE3	1:D:132:GLU:HB3	1.98	0.45
1:D:157:GLY:HA2	2:D:1041:5PA:H92	1.96	0.45
1:D:186:VAL:HG22	1:D:212:VAL:HB	1.98	0.45
1:E:56:ARG:HD2	1:E:167:TYR:CE1	2.51	0.45
1:E:103:ARG:HH11	1:E:128:LYS:HG2	1.81	0.45
1:E:132:GLU:C	3:E:1067:HOH:O	2.58	0.45
1:F:168:VAL:HG22	1:F:200:LEU:HB3	1.98	0.45
1:F:247:GLU:OE1	1:F:249:TYR:OH	2.31	0.45
1:G:129:ASP:OD2	1:G:130:SER:N	2.43	0.45
1:G:181:LYS:HE3	1:G:302:LYS:CD	2.46	0.45
1:G:274:GLU:O	1:G:276:ILE:HG13	2.16	0.45
1:H:56:ARG:HD3	1:H:170:ALA:HB2	1.98	0.45
1:H:62:LEU:HB3	1:H:94:LEU:HD11	1.97	0.45
1:H:100:LEU:CD2	1:H:120:ILE:HG21	2.46	0.45
1:I:68:LYS:O	1:I:69:GLY:C	2.59	0.45
1:I:105:LYS:HB3	1:I:107:GLU:HG3	1.98	0.45
1:I:207:GLU:HB2	1:I:209:ILE:HG13	1.98	0.45
1:J:112:TYR:HE1	1:J:122:THR:HG21	1.82	0.45
1:K:74:ILE:HG22	1:K:75:THR:N	2.30	0.45
1:K:145:LYS:C	1:K:147:GLU:N	2.68	0.45
1:K:200:LEU:CD2	1:K:240:VAL:HG11	2.39	0.45
1:L:123:ARG:HH11	1:L:140:ILE:CD1	2.14	0.45
1:N:177:GLN:HG3	1:N:178:SER:N	2.30	0.45
1:O:12:PHE:HA	1:O:13:PRO:HD3	1.61	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:228:ASP:OD1	1:O:245:ARG:HD2	2.15	0.45
1:O:269:LYS:O	1:O:273:ARG:HG3	2.16	0.45
1:S:78:ALA:C	1:S:80:HIS:H	2.23	0.45
1:T:319:ASP:C	1:T:321:LEU:N	2.73	0.45
1:W:20:TRP:CD1	1:X:20:TRP:CZ3	3.03	0.45
1:W:100:LEU:HD12	1:W:100:LEU:HA	1.79	0.45
1:X:162:ILE:CG2	1:X:163:GLY:H	2.30	0.45
1:A:109:LYS:HB2	3:A:1047:HOH:O	2.15	0.45
1:B:186:VAL:O	1:B:187:VAL:HB	2.16	0.45
1:C:167:TYR:O	1:C:171:VAL:HG13	2.15	0.45
1:C:241:LYS:O	1:C:242:VAL:C	2.59	0.45
1:D:191:SER:N	2:D:1041:5PA:O3P	2.49	0.45
1:E:77:GLY:C	1:E:78:ALA:O	2.56	0.45
1:G:57:LYS:O	1:G:61:LEU:N	2.42	0.45
1:G:85:PHE:O	1:G:88:GLY:N	2.50	0.45
1:G:259:ILE:O	1:G:259:ILE:HG22	2.15	0.45
1:G:274:GLU:O	1:G:276:ILE:N	2.49	0.45
1:H:56:ARG:HG2	1:H:56:ARG:NH1	2.30	0.45
1:H:113:LEU:HD21	1:H:117:ILE:HD11	1.95	0.45
1:H:171:VAL:HG21	1:H:201:GLY:HA3	1.98	0.45
1:H:229:ASN:ND2	1:H:233:GLU:CG	2.77	0.45
1:I:213:GLY:O	1:I:248:LEU:HA	2.17	0.45
1:J:15:VAL:CG2	1:J:63:GLY:HA2	2.45	0.45
1:K:168:VAL:HG21	1:K:200:LEU:HD13	1.98	0.45
1:K:319:ASP:C	1:K:321:LEU:N	2.73	0.45
1:L:234:ALA:C	1:L:236:GLU:H	2.23	0.45
1:M:102:LEU:HB2	1:M:103:ARG:H	1.63	0.45
1:N:229:ASN:C	1:N:229:ASN:ND2	2.63	0.45
1:N:244:VAL:O	1:N:245:ARG:O	2.33	0.45
1:O:165:LEU:O	1:O:166:GLY:C	2.58	0.45
1:P:100:LEU:HD13	1:P:120:ILE:CG2	2.46	0.45
1:Q:85:PHE:CD1	1:Q:114:LEU:HB3	2.50	0.45
1:R:26:TYR:HE2	1:R:28:PRO:HA	1.80	0.45
1:R:251:TYR:CE1	1:R:289:GLY:HA2	2.51	0.45
1:S:58:LEU:O	1:S:62:LEU:HB2	2.16	0.45
1:S:102:LEU:HD12	1:S:112:TYR:CE1	2.50	0.45
1:T:71:ASP:OD1	1:T:150:LYS:N	2.49	0.45
1:U:142:GLU:O	1:U:146:ARG:N	2.49	0.45
1:U:216:VAL:HB	1:U:285:LYS:CD	2.28	0.45
1:X:72:VAL:HG13	1:X:151:PRO:HA	1.98	0.45
1:X:130:SER:OG	1:X:132:GLU:HG3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:259:ILE:HG22	1:X:321:LEU:HD21	1.98	0.45
1:B:26:TYR:CD2	1:R:4:LYS:HG3	2.51	0.45
1:B:181:LYS:H	1:B:181:LYS:CE	2.28	0.45
1:D:2:HIS:HA	1:D:3:PRO:HD3	1.81	0.45
1:D:30:ILE:HG22	1:D:34:ILE:HD12	1.98	0.45
1:D:277:ILE:HG13	3:D:1056:HOH:O	2.16	0.45
1:E:79:VAL:HG11	1:E:105:LYS:O	2.16	0.45
1:E:131:PHE:O	1:E:133:LEU:N	2.41	0.45
1:F:67:SER:C	1:F:69:GLY:H	2.23	0.45
1:F:73:VAL:O	1:F:98:ALA:HA	2.17	0.45
1:G:72:VAL:HG13	1:G:151:PRO:CB	2.45	0.45
1:G:322:LEU:HD21	1:H:116:LYS:HB3	1.99	0.45
1:H:106:GLU:O	1:H:107:GLU:O	2.34	0.45
1:J:296:LYS:HB2	1:J:298:GLU:OE2	2.16	0.45
1:K:66:LEU:CD2	1:K:96:LEU:HD21	2.46	0.45
1:L:1:MET:HE1	1:L:5:ILE:CB	2.46	0.45
1:L:202:LEU:HD13	1:L:209:ILE:HB	1.98	0.45
1:M:113:LEU:HD22	1:M:117:ILE:CD1	2.42	0.45
1:M:187:VAL:HG21	1:M:194:THR:HG22	1.94	0.45
1:N:41:LYS:HZ3	1:N:177:GLN:HE22	1.65	0.45
1:N:132:GLU:C	1:N:134:MET:N	2.67	0.45
1:O:18:ILE:HD11	1:O:56:ARG:HA	1.98	0.45
1:O:72:VAL:CG1	1:O:151:PRO:CA	2.84	0.45
1:O:195:LEU:CD2	1:O:246:PRO:HB2	2.38	0.45
1:P:48:LEU:HD23	1:P:49:GLY:N	2.31	0.45
1:Q:115:ASP:HB3	1:Q:120:ILE:HB	1.99	0.45
1:Q:256:TYR:CG	1:Q:257:GLY:N	2.84	0.45
1:Q:274:GLU:C	1:Q:276:ILE:H	2.24	0.45
1:S:236:GLU:O	1:S:238:LEU:N	2.49	0.45
1:S:289:GLY:O	1:S:293:LEU:HB2	2.17	0.45
1:T:134:MET:HE2	1:T:153:VAL:CG1	2.45	0.45
1:T:200:LEU:HD11	1:T:235:ALA:HA	1.98	0.45
1:U:281:VAL:HG22	1:U:282:TYR:CD1	2.50	0.45
1:V:143:GLU:O	1:V:143:GLU:HG3	2.16	0.45
1:W:20:TRP:CD1	1:W:20:TRP:O	2.70	0.45
1:W:27:LEU:HD21	1:W:276:ILE:HD12	1.98	0.45
1:W:134:MET:SD	1:W:156:PRO:CD	2.94	0.45
1:X:53:ASN:OD1	1:X:308:THR:HB	2.16	0.45
1:X:243:GLU:O	1:X:244:VAL:O	2.33	0.45
1:C:321:LEU:O	1:C:325:LEU:HD22	2.17	0.45
1:D:34:ILE:HD11	1:D:291:VAL:CG2	2.26	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:55:ILE:CD1	1:E:55:ILE:N	2.77	0.45
1:E:296:LYS:HB2	1:E:298:GLU:OE2	2.17	0.45
1:F:78:ALA:O	1:F:81:SER:HB2	2.17	0.45
1:F:137:ALA:O	1:F:141:ALA:HB2	2.16	0.45
1:F:279:ASP:O	1:F:284:GLY:HA3	2.17	0.45
1:F:322:LEU:C	1:F:324:LEU:N	2.73	0.45
1:G:48:LEU:HD11	1:G:90:ALA:HA	1.98	0.45
1:G:80:HIS:NE2	1:G:256:TYR:OH	2.44	0.45
1:G:222:VAL:O	1:G:222:VAL:HG22	2.17	0.45
1:H:125:TYR:CE2	1:H:136:TYR:CD1	3.05	0.45
1:I:111:ASN:O	1:I:114:LEU:HB2	2.16	0.45
1:I:268:ARG:NE	1:J:117:ILE:O	2.46	0.45
1:J:139:GLU:O	1:J:143:GLU:N	2.47	0.45
1:J:181:LYS:O	1:J:181:LYS:HG2	2.15	0.45
1:K:221:GLU:HG3	1:V:116:LYS:HZ2	1.82	0.45
1:L:46:THR:HG21	1:L:52:GLY:O	2.15	0.45
1:L:268:ARG:HD2	1:L:325:LEU:HD12	1.97	0.45
1:O:71:ASP:OD1	1:O:149:ARG:CG	2.62	0.45
1:O:125:TYR:O	1:O:127:ALA:N	2.50	0.45
1:O:279:ASP:OD1	1:O:282:TYR:HB2	2.17	0.45
1:P:174:ILE:HA	1:P:177:GLN:CG	2.46	0.45
1:Q:219:PHE:CD1	1:Q:250:ASP:HB2	2.50	0.45
1:R:279:ASP:HA	1:R:314:THR:OG1	2.17	0.45
1:T:133:LEU:CD1	1:T:133:LEU:N	2.78	0.45
1:U:40:ILE:HA	1:U:305:PHE:O	2.16	0.45
1:V:146:ARG:O	1:V:147:GLU:HG3	2.15	0.45
1:W:116:LYS:NZ	1:W:122:THR:CG2	2.80	0.45
1:X:262:GLU:CD	1:X:262:GLU:H	2.24	0.45
1:A:266:ILE:HG21	1:A:284:GLY:O	2.17	0.45
1:B:34:ILE:CG2	1:B:294:ALA:CB	2.95	0.45
1:C:296:LYS:O	1:R:320:LYS:NZ	2.48	0.45
1:D:131:PHE:O	1:D:133:LEU:N	2.47	0.45
1:F:135:LYS:HE2	1:F:136:TYR:CZ	2.52	0.45
1:G:56:ARG:HH11	1:G:56:ARG:CG	2.28	0.45
1:H:62:LEU:HB3	1:H:94:LEU:CD1	2.46	0.45
1:H:299:LEU:HD13	1:H:303:ILE:HG21	1.98	0.45
1:I:1:MET:HE3	1:I:1:MET:HA	1.98	0.45
1:I:222:VAL:O	1:I:226:LYS:HB2	2.17	0.45
1:J:265:GLN:NE2	3:J:1127:HOH:O	2.49	0.45
1:K:18:ILE:HG12	1:K:46:THR:O	2.16	0.45
1:K:125:TYR:C	1:K:127:ALA:N	2.73	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:222:VAL:C	1:K:226:LYS:HB2	2.41	0.45
1:K:290:LEU:HD12	1:K:290:LEU:O	2.16	0.45
1:M:19:PRO:HD2	1:M:20:TRP:HZ3	1.78	0.45
1:O:27:LEU:HA	1:O:28:PRO:HD2	1.79	0.45
1:O:279:ASP:HB3	1:O:310:GLY:HA3	1.98	0.45
1:R:307:HIS:CE1	1:R:309:GLY:CA	2.99	0.45
1:T:77:GLY:O	1:T:102:LEU:HA	2.16	0.45
1:T:167:TYR:HA	1:T:170:ALA:HB3	1.97	0.45
1:U:185:ILE:HD13	1:U:304:LEU:HD12	1.98	0.45
1:U:252:SER:O	1:U:253:PHE:CB	2.65	0.45
1:V:89:LEU:CD1	1:V:118:MET:HG3	2.44	0.45
1:X:182:PHE:O	1:X:209:ILE:HG12	2.17	0.45
1:X:221:GLU:O	1:X:222:VAL:C	2.60	0.45
1:D:74:ILE:CG2	1:D:137:ALA:HB1	2.47	0.45
1:D:228:ASP:OD1	1:D:245:ARG:HD2	2.16	0.45
1:E:128:LYS:C	1:E:129:ASP:OD2	2.60	0.45
1:G:32:ARG:C	1:G:34:ILE:H	2.25	0.45
1:H:183:ASP:HA	3:H:1103:HOH:O	2.16	0.45
1:H:187:VAL:HG21	1:H:194:THR:HG21	1.98	0.45
1:H:282:TYR:HB3	2:H:1081:5PA:N1	2.32	0.45
1:I:74:ILE:HB	1:I:153:VAL:HG22	1.97	0.45
1:I:270:VAL:HG22	1:I:287:PHE:CE2	2.51	0.45
1:J:174:ILE:HD13	1:J:304:LEU:CD1	2.46	0.45
1:K:128:LYS:HD3	1:K:128:LYS:O	2.15	0.45
1:K:237:LEU:HD23	1:K:237:LEU:HA	1.83	0.45
1:K:267:ILE:O	1:K:267:ILE:HG22	2.16	0.45
1:K:294:ALA:HA	3:K:1122:HOH:O	2.15	0.45
1:M:39:TYR:O	1:M:304:LEU:HD22	2.16	0.45
1:M:217:GLY:O	1:M:219:PHE:N	2.49	0.45
1:O:65:ALA:O	1:O:69:GLY:N	2.50	0.45
1:O:73:VAL:HG22	1:O:152:TYR:HB3	1.98	0.45
1:O:83:HIS:CE1	1:O:158:GLY:N	2.78	0.45
1:O:280:PRO:C	1:O:281:VAL:HG12	2.41	0.45
1:P:27:LEU:HD21	1:P:40:ILE:HG22	1.99	0.45
1:Q:131:PHE:C	1:Q:131:PHE:CD1	2.95	0.45
1:R:157:GLY:HA3	2:R:1181:5PA:C9	2.47	0.45
1:R:295:ARG:C	1:R:297:GLY:N	2.68	0.45
1:R:312:SER:O	1:R:315:PHE:HB2	2.17	0.45
1:S:138:GLU:OE2	1:S:153:VAL:HG11	2.17	0.45
1:S:274:GLU:OE1	1:S:274:GLU:HA	2.16	0.45
1:T:1:MET:HE2	1:T:5:ILE:HB	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:310:GLY:O	1:U:311:ILE:C	2.60	0.45
1:V:130:SER:C	1:V:132:GLU:N	2.73	0.45
1:W:72:VAL:HG23	1:W:97:ASP:HB3	1.99	0.45
1:W:265:GLN:OE1	1:W:325:LEU:HD13	2.17	0.45
1:W:299:LEU:HB2	1:W:303:ILE:HD11	1.98	0.45
1:B:15:VAL:CG2	1:B:66:LEU:HD12	2.46	0.45
1:B:18:ILE:HD11	1:B:55:ILE:HG22	1.99	0.45
1:B:270:VAL:CG2	1:B:278:LEU:HD11	2.44	0.45
1:C:187:VAL:HG22	1:C:188:ALA:N	2.32	0.45
1:D:54:LYS:NZ	1:D:57:LYS:NZ	2.65	0.45
1:D:130:SER:C	1:D:132:GLU:N	2.74	0.45
1:D:171:VAL:HA	1:D:174:ILE:HD12	1.99	0.45
1:E:14:ARG:CZ	1:E:169:ARG:NH2	2.80	0.45
1:E:218:ARG:CG	1:E:255:GLU:HA	2.43	0.45
1:F:103:ARG:CD	1:F:127:ALA:O	2.65	0.45
1:F:269:LYS:HE2	1:F:273:ARG:HH12	1.82	0.45
1:G:124:VAL:O	1:G:124:VAL:HG12	2.15	0.45
1:H:108:LEU:O	1:H:113:LEU:HG	2.16	0.45
1:I:107:GLU:O	1:I:112:TYR:HD2	2.00	0.45
1:I:138:GLU:HG3	3:I:1096:HOH:O	2.16	0.45
1:I:171:VAL:HG23	1:I:172:GLY:N	2.31	0.45
1:I:222:VAL:HG22	1:I:222:VAL:O	2.17	0.45
1:K:72:VAL:HG23	1:K:99:ILE:HG13	1.97	0.45
1:K:222:VAL:O	1:K:226:LYS:HB2	2.17	0.45
1:L:43:ASP:OD2	1:L:167:TYR:OH	2.31	0.45
1:L:323:SER:O	1:L:324:LEU:HD12	2.16	0.45
1:N:196:ALA:HB1	1:N:231:ILE:HG22	1.99	0.45
1:O:15:VAL:O	1:O:17:LEU:N	2.49	0.45
1:O:123:ARG:HH12	1:O:140:ILE:HG23	1.81	0.45
1:O:270:VAL:HG21	1:O:287:PHE:CD2	2.51	0.45
1:O:315:PHE:HZ	1:P:312:SER:HG	1.63	0.45
1:P:56:ARG:HD2	1:P:167:TYR:CZ	2.52	0.45
1:P:291:VAL:O	1:P:294:ALA:HB3	2.16	0.45
1:P:323:SER:C	1:P:324:LEU:HD12	2.41	0.45
1:R:41:LYS:HZ3	1:R:177:GLN:NE2	2.08	0.45
1:R:191:SER:N	2:R:1181:5PA:O1P	2.45	0.45
1:S:157:GLY:HA2	2:S:1191:5PA:C9	2.47	0.45
1:U:68:LYS:O	1:U:69:GLY:C	2.60	0.45
1:W:48:LEU:C	1:W:48:LEU:CD2	2.89	0.45
1:W:179:GLU:HG2	1:W:179:GLU:O	2.17	0.45
1:X:90:ALA:O	1:X:94:LEU:HD12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:180:VAL:HG12	1:A:181:LYS:N	2.32	0.45
1:A:269:LYS:CD	1:A:273:ARG:HH12	2.29	0.45
1:B:253:PHE:CD2	1:B:260:THR:HG21	2.52	0.45
1:C:200:LEU:HD12	1:C:234:ALA:CB	2.47	0.45
1:D:201:GLY:O	1:D:205:LEU:HG	2.17	0.45
1:E:42:ARG:HB3	1:E:45:LEU:CD1	2.44	0.45
1:F:56:ARG:HG2	3:F:1070:HOH:O	2.16	0.45
1:F:62:LEU:O	1:F:66:LEU:HB2	2.17	0.45
1:G:267:ILE:HG22	1:G:268:ARG:N	2.32	0.45
1:G:273:ARG:O	1:G:274:GLU:CG	2.62	0.45
1:H:160:SER:O	1:H:161:PRO:C	2.60	0.45
1:I:114:LEU:O	1:I:118:MET:HG2	2.16	0.45
1:I:146:ARG:O	1:I:146:ARG:HG3	2.16	0.45
1:I:311:ILE:CG2	1:I:312:SER:N	2.80	0.45
1:J:40:ILE:CG1	1:J:305:PHE:HD2	2.29	0.45
1:J:58:LEU:HD12	1:J:62:LEU:HD12	1.98	0.45
1:J:266:ILE:HG23	1:J:267:ILE:N	2.31	0.45
1:K:53:ASN:HB3	1:K:308:THR:HG22	1.98	0.45
1:K:109:LYS:O	1:K:316:HIS:CD2	2.70	0.45
1:K:270:VAL:O	1:K:271:GLY:C	2.60	0.45
1:L:185:ILE:HD11	1:L:209:ILE:HG21	1.99	0.45
1:M:162:ILE:C	1:M:162:ILE:CD1	2.90	0.45
1:M:186:VAL:HG23	1:M:305:PHE:CD1	2.52	0.45
1:M:226:LYS:O	1:M:227:LEU:C	2.58	0.45
1:N:266:ILE:CG2	1:N:267:ILE:N	2.80	0.45
1:O:181:LYS:N	1:O:181:LYS:CD	2.79	0.45
1:Q:33:GLU:OE1	1:Q:273:ARG:NH1	2.50	0.45
1:Q:106:GLU:CG	1:Q:124:VAL:HG11	2.47	0.45
1:Q:113:LEU:C	1:Q:113:LEU:CD2	2.90	0.45
1:Q:160:SER:C	1:Q:162:ILE:H	2.25	0.45
1:R:103:ARG:CG	1:R:103:ARG:NH1	2.77	0.45
1:R:109:LYS:HG3	1:R:316:HIS:CE1	2.51	0.45
1:R:160:SER:C	1:R:162:ILE:N	2.75	0.45
1:R:269:LYS:HE3	1:R:273:ARG:HH12	1.82	0.45
1:R:293:LEU:HB3	1:R:299:LEU:HG	1.98	0.45
1:S:102:LEU:HD12	1:S:112:TYR:CD1	2.52	0.45
1:S:244:VAL:O	1:S:245:ARG:O	2.34	0.45
1:S:247:GLU:OE1	1:S:249:TYR:OH	2.26	0.45
1:W:74:ILE:HD11	1:W:144:LEU:HD23	1.98	0.45
1:W:322:LEU:CD1	1:X:108:LEU:HD21	2.47	0.45
1:X:42:ARG:C	1:X:44:ASP:H	2.25	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:17:LEU:HB2	1:A:59:GLU:HG2	1.99	0.45
1:B:41:LYS:NZ	1:B:177:GLN:HE22	2.15	0.45
1:B:269:LYS:CG	1:B:273:ARG:NH2	2.80	0.45
1:C:243:GLU:O	1:C:244:VAL:HG22	2.17	0.45
1:D:103:ARG:NH2	1:D:131:PHE:HA	2.32	0.45
1:E:107:GLU:HB3	1:E:109:LYS:HG2	1.98	0.45
1:E:169:ARG:HD3	3:E:1054:HOH:O	2.16	0.45
1:F:54:LYS:HZ2	1:F:57:LYS:HE2	1.82	0.45
1:F:232:LYS:HB3	1:F:232:LYS:HE2	1.78	0.45
1:G:255:GLU:C	1:G:256:TYR:O	2.56	0.45
1:H:255:GLU:CG	1:H:258:LYS:HB2	2.47	0.45
1:I:218:ARG:O	1:I:220:GLY:N	2.50	0.45
1:J:76:VAL:HG21	1:J:156:PRO:HG3	1.97	0.45
1:J:263:VAL:O	1:J:266:ILE:HG22	2.17	0.45
1:K:42:ARG:CB	1:K:45:LEU:HD12	2.46	0.45
1:K:185:ILE:HG23	1:K:304:LEU:HD12	1.99	0.45
1:K:312:SER:C	1:K:314:THR:N	2.75	0.45
1:L:270:VAL:HG21	1:L:278:LEU:HD11	1.98	0.45
1:M:157:GLY:HA2	2:M:1131:5PA:H92	1.99	0.45
1:M:217:GLY:CA	1:M:256:TYR:HB2	2.47	0.45
1:M:266:ILE:HD12	1:M:269:LYS:CD	2.43	0.45
1:O:61:LEU:HD11	1:O:158:GLY:CA	2.47	0.45
1:O:161:PRO:HA	1:O:230:LEU:CD2	2.45	0.45
1:O:287:PHE:O	1:O:290:LEU:N	2.50	0.45
1:P:1:MET:HE1	1:P:172:GLY:CA	2.43	0.45
1:Q:5:ILE:HD12	1:Q:172:GLY:HA3	1.99	0.45
1:Q:72:VAL:HG13	1:Q:151:PRO:CB	2.46	0.45
1:S:15:VAL:HG21	1:S:66:LEU:HD12	1.98	0.45
1:S:181:LYS:H	1:S:181:LYS:HD3	1.78	0.45
1:S:222:VAL:C	1:S:226:LYS:HB2	2.41	0.45
1:T:105:LYS:CG	1:T:107:GLU:HG3	2.47	0.45
1:T:268:ARG:NE	1:T:325:LEU:CD1	2.79	0.45
1:V:66:LEU:H	1:V:66:LEU:HG	1.48	0.45
1:W:226:LYS:O	1:W:230:LEU:HB2	2.17	0.45
1:X:81:SER:HB3	1:X:84:ALA:HB2	1.99	0.45
1:X:210:ARG:HA	1:X:211:PRO:HD3	1.78	0.45
1:X:245:ARG:CG	1:X:246:PRO:CD	2.95	0.45
1:B:134:MET:O	1:B:138:GLU:HG2	2.17	0.45
1:B:182:PHE:CE1	1:B:304:LEU:HB2	2.52	0.45
1:B:314:THR:O	1:B:314:THR:HG22	2.16	0.45
1:C:55:ILE:N	1:C:55:ILE:CD1	2.79	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:127:ALA:CB	1:D:136:TYR:HE2	2.30	0.45
1:D:186:VAL:HA	1:D:212:VAL:O	2.17	0.45
1:G:123:ARG:HH11	1:G:140:ILE:CD1	2.14	0.45
1:H:106:GLU:O	1:H:107:GLU:C	2.60	0.45
1:I:48:LEU:HD23	1:I:49:GLY:N	2.32	0.45
1:I:72:VAL:O	1:I:151:PRO:HA	2.17	0.45
1:I:111:ASN:HA	1:I:114:LEU:HD12	1.98	0.45
1:J:67:SER:O	1:J:69:GLY:N	2.49	0.45
1:J:290:LEU:HD21	1:J:303:ILE:HG21	1.99	0.45
1:K:230:LEU:HD23	1:K:230:LEU:O	2.16	0.45
1:L:128:LYS:CD	1:L:128:LYS:H	2.27	0.45
1:M:72:VAL:HG23	1:M:97:ASP:C	2.42	0.45
1:N:162:ILE:HG23	1:N:163:GLY:N	2.32	0.45
1:O:211:PRO:HB2	1:O:246:PRO:CB	2.47	0.45
1:O:228:ASP:O	1:O:232:LYS:HB3	2.16	0.45
1:P:173:GLU:O	1:P:177:GLN:HG2	2.17	0.45
1:Q:43:ASP:C	1:Q:45:LEU:H	2.24	0.45
1:R:44:ASP:HB3	1:R:307:HIS:ND1	2.32	0.45
1:R:79:VAL:HA	1:R:102:LEU:HB3	1.99	0.45
1:S:218:ARG:H	1:S:218:ARG:HD2	1.82	0.45
1:S:237:LEU:HA	1:S:237:LEU:HD23	1.78	0.45
1:T:72:VAL:HG11	1:T:144:LEU:CD2	2.46	0.45
1:U:103:ARG:HD2	1:U:128:LYS:HA	1.98	0.45
1:U:210:ARG:HA	1:U:211:PRO:HD3	1.86	0.45
1:U:221:GLU:C	1:U:223:MET:N	2.54	0.45
1:V:265:GLN:O	1:V:269:LYS:HG3	2.17	0.45
1:W:139:GLU:C	1:W:141:ALA:N	2.74	0.45
1:X:103:ARG:NH2	1:X:131:PHE:CD2	2.85	0.45
1:A:290:LEU:CD1	1:A:303:ILE:HG21	2.47	0.44
1:C:15:VAL:HG11	1:C:94:LEU:HD13	1.99	0.44
1:C:211:PRO:HB2	1:C:246:PRO:HB3	1.99	0.44
1:C:320:LYS:O	1:C:320:LYS:HD2	2.17	0.44
1:D:55:ILE:HD11	1:D:86:VAL:HG21	1.99	0.44
1:D:219:PHE:HZ	1:D:248:LEU:O	2.00	0.44
1:G:243:GLU:OE1	1:G:243:GLU:HA	2.18	0.44
1:H:80:HIS:O	1:H:80:HIS:CG	2.68	0.44
1:H:99:ILE:C	1:H:100:LEU:HD13	2.42	0.44
1:J:64:ASP:O	1:J:65:ALA:C	2.60	0.44
1:J:145:LYS:C	1:J:147:GLU:N	2.75	0.44
1:J:218:ARG:CG	1:J:222:VAL:HG11	2.47	0.44
1:J:263:VAL:O	1:J:267:ILE:HG13	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:48:LEU:HD23	1:K:48:LEU:O	2.16	0.44
1:K:117:ILE:HD11	1:L:318:GLY:HA2	1.98	0.44
1:L:135:LYS:HD2	1:L:135:LYS:C	2.42	0.44
1:L:174:ILE:HA	1:L:177:GLN:HG2	1.99	0.44
1:L:195:LEU:HD11	1:L:246:PRO:HG3	1.98	0.44
1:N:55:ILE:N	1:N:55:ILE:CD1	2.80	0.44
1:N:61:LEU:HD23	1:N:162:ILE:HG23	1.99	0.44
1:N:97:ASP:CG	1:N:149:ARG:HH22	2.24	0.44
1:O:4:LYS:CE	1:O:204:ILE:HG22	2.47	0.44
1:O:41:LYS:O	1:O:43:ASP:N	2.50	0.44
1:O:181:LYS:H	1:O:181:LYS:CE	2.30	0.44
1:O:199:SER:HB3	1:O:246:PRO:HB3	1.98	0.44
1:Q:18:ILE:HD11	1:Q:55:ILE:CG2	2.47	0.44
1:Q:50:ILE:O	1:Q:50:ILE:HG13	2.15	0.44
1:S:80:HIS:ND1	1:S:317:TYR:OH	2.35	0.44
1:S:236:GLU:C	1:S:238:LEU:N	2.73	0.44
1:T:64:ASP:OD1	1:T:68:LYS:HE3	2.17	0.44
1:V:14:ARG:CZ	1:V:169:ARG:CZ	2.95	0.44
1:V:281:VAL:HG22	1:V:282:TYR:CE1	2.52	0.44
1:W:322:LEU:HD21	1:X:116:LYS:HB3	1.99	0.44
1:A:8:LEU:CD1	1:A:204:ILE:HD13	2.45	0.44
1:A:19:PRO:CD	1:A:20:TRP:CZ3	2.86	0.44
1:A:103:ARG:HD2	1:A:128:LYS:HA	1.99	0.44
1:B:162:ILE:HD12	1:B:165:LEU:HD11	1.98	0.44
1:B:189:ALA:O	1:B:216:VAL:HG22	2.17	0.44
1:D:112:TYR:CE2	1:D:116:LYS:HE3	2.52	0.44
1:D:214:ILE:HG23	1:D:251:TYR:CD1	2.51	0.44
1:E:64:ASP:OD2	1:E:68:LYS:HE3	2.17	0.44
1:F:128:LYS:N	1:F:128:LYS:CD	2.72	0.44
1:G:19:PRO:HG2	1:G:20:TRP:CZ3	2.53	0.44
1:G:44:ASP:HB3	1:G:307:HIS:ND1	2.33	0.44
1:G:148:GLY:CA	1:I:219:PHE:O	2.60	0.44
1:G:224:THR:CG2	1:G:225:SER:H	2.23	0.44
1:H:99:ILE:HG12	1:H:121:GLU:CB	2.47	0.44
1:I:38:VAL:HG21	1:I:290:LEU:HD21	1.99	0.44
1:J:222:VAL:HG22	1:J:223:MET:N	2.32	0.44
1:J:308:THR:CB	2:J:1101:5PA:N1	2.81	0.44
1:K:103:ARG:NH1	1:K:129:ASP:O	2.50	0.44
1:K:145:LYS:HA	1:K:149:ARG:O	2.17	0.44
1:L:133:LEU:O	1:L:136:TYR:HB2	2.17	0.44
1:L:312:SER:C	1:L:314:THR:H	2.25	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:111:ASN:HD21	1:M:312:SER:HB2	1.81	0.44
1:M:171:VAL:HG21	1:M:201:GLY:CA	2.47	0.44
1:M:219:PHE:CE2	1:M:224:THR:HB	2.52	0.44
1:M:219:PHE:HE2	1:M:224:THR:HB	1.82	0.44
1:M:228:ASP:OD1	1:M:245:ARG:CD	2.65	0.44
1:M:311:ILE:HG23	1:M:312:SER:H	1.82	0.44
1:N:15:VAL:HG11	1:N:94:LEU:CD2	2.47	0.44
1:N:54:LYS:NZ	1:N:157:GLY:O	2.48	0.44
1:N:187:VAL:HG23	1:N:306:ILE:HB	2.00	0.44
1:N:202:LEU:HD12	1:N:211:PRO:HG3	1.98	0.44
1:O:75:THR:HB	1:O:154:ILE:HB	1.99	0.44
1:P:53:ASN:HD21	1:P:54:LYS:HE2	1.82	0.44
1:Q:7:ALA:O	1:Q:9:LEU:N	2.50	0.44
1:Q:145:LYS:C	1:Q:147:GLU:H	2.25	0.44
1:R:185:ILE:HG23	1:R:304:LEU:CD1	2.47	0.44
1:S:61:LEU:O	1:S:62:LEU:C	2.60	0.44
1:S:221:GLU:OE1	1:S:224:THR:CG2	2.65	0.44
1:T:266:ILE:HG12	1:T:288:TYR:HB2	1.99	0.44
1:U:55:ILE:CD1	1:U:86:VAL:HG21	2.45	0.44
1:U:64:ASP:HA	1:U:67:SER:OG	2.16	0.44
1:U:253:PHE:CD2	1:U:260:THR:HG21	2.52	0.44
1:V:30:ILE:HG21	1:V:287:PHE:CZ	2.52	0.44
1:W:156:PRO:C	1:W:158:GLY:N	2.76	0.44
1:X:113:LEU:O	1:X:113:LEU:HD23	2.17	0.44
2:X:1241:5PA:O4P	2:X:1241:5PA:C4A	2.63	0.44
1:A:174:ILE:O	1:A:176:THR:N	2.51	0.44
1:C:134:MET:HE2	1:C:156:PRO:HD3	1.98	0.44
2:C:1031:5PA:H4A2	2:C:1031:5PA:O4P	2.17	0.44
1:E:12:PHE:HA	1:E:13:PRO:HD3	1.86	0.44
1:E:165:LEU:CD2	1:E:238:LEU:HD21	2.47	0.44
1:E:321:LEU:O	1:E:325:LEU:N	2.48	0.44
1:F:196:ALA:O	1:F:199:SER:HB2	2.17	0.44
1:F:282:TYR:CD1	2:F:1061:5PA:C3	3.00	0.44
1:G:162:ILE:C	1:G:164:THR:H	2.24	0.44
1:G:162:ILE:HG23	1:G:237:LEU:HD11	1.98	0.44
1:G:261:GLY:O	1:G:263:VAL:N	2.51	0.44
1:H:215:ALA:N	1:H:249:TYR:O	2.47	0.44
1:H:229:ASN:ND2	1:H:229:ASN:O	2.50	0.44
1:I:72:VAL:O	1:I:72:VAL:HG13	2.16	0.44
1:I:251:TYR:OH	1:I:293:LEU:CD1	2.65	0.44
1:J:154:ILE:HA	1:J:155:PRO:HD3	1.84	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:182:PHE:CZ	1:J:304:LEU:HG	2.52	0.44
1:J:299:LEU:CB	1:J:303:ILE:HD11	2.47	0.44
1:K:5:ILE:CG2	1:K:9:LEU:HD11	2.47	0.44
1:K:50:ILE:CD1	1:K:82:ASN:HD22	2.30	0.44
2:K:1111:5PA:O4P	2:K:1111:5PA:H4A2	2.18	0.44
1:L:17:LEU:HD23	1:L:59:GLU:CG	2.30	0.44
1:L:82:ASN:HD22	1:L:111:ASN:ND2	2.14	0.44
1:L:112:TYR:CE2	1:L:116:LYS:HE2	2.52	0.44
1:M:127:ALA:O	1:M:129:ASP:OD2	2.35	0.44
1:O:1:MET:HA	1:O:1:MET:CE	2.38	0.44
1:P:95:GLY:C	1:P:96:LEU:HD23	2.43	0.44
1:P:313:GLY:O	1:P:317:TYR:HD1	1.99	0.44
1:R:78:ALA:CB	1:R:80:HIS:CE1	3.01	0.44
1:R:102:LEU:CD1	1:R:122:THR:HG23	2.47	0.44
1:S:266:ILE:CG2	1:S:267:ILE:N	2.80	0.44
1:T:243:GLU:O	1:T:244:VAL:O	2.35	0.44
1:V:149:ARG:O	1:V:151:PRO:HD3	2.17	0.44
1:V:164:THR:O	1:V:168:VAL:HG23	2.17	0.44
1:W:66:LEU:HD23	1:W:96:LEU:HD21	1.98	0.44
1:W:136:TYR:CA	1:W:139:GLU:HG2	2.45	0.44
1:W:147:GLU:C	1:W:149:ARG:N	2.67	0.44
1:X:81:SER:O	1:X:84:ALA:HB3	2.18	0.44
1:B:87:THR:CG2	1:B:154:ILE:HD12	2.45	0.44
1:C:1:MET:HE3	1:C:1:MET:HA	1.98	0.44
1:C:125:TYR:OH	1:C:140:ILE:HD11	2.18	0.44
1:D:195:LEU:HD22	1:D:246:PRO:HG3	1.99	0.44
1:E:11:LYS:HA	1:U:15:VAL:HG13	2.00	0.44
1:E:128:LYS:O	1:E:129:ASP:CB	2.65	0.44
1:E:221:GLU:OE1	1:E:221:GLU:HA	2.18	0.44
1:F:147:GLU:O	1:F:148:GLY:C	2.60	0.44
1:G:219:PHE:CB	1:G:250:ASP:OD2	2.64	0.44
1:H:222:VAL:HG13	1:H:223:MET:N	2.33	0.44
1:J:313:GLY:C	1:J:315:PHE:H	2.25	0.44
1:J:313:GLY:C	1:J:315:PHE:N	2.74	0.44
1:K:42:ARG:HB3	1:K:45:LEU:CD1	2.47	0.44
1:K:81:SER:OG	2:K:1111:5PA:O8	2.32	0.44
1:K:181:LYS:HG2	1:K:181:LYS:O	2.17	0.44
1:L:30:ILE:HG21	1:L:287:PHE:CZ	2.46	0.44
1:L:103:ARG:NH2	1:L:131:PHE:CE2	2.85	0.44
1:L:104:GLY:O	1:L:106:GLU:N	2.50	0.44
1:L:207:GLU:CB	1:L:209:ILE:HG13	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:230:LEU:C	1:L:232:LYS:H	2.24	0.44
1:N:210:ARG:NH1	1:N:247:GLU:OE1	2.50	0.44
1:O:112:TYR:OH	1:O:122:THR:HG21	2.18	0.44
1:O:135:LYS:O	1:O:138:GLU:HB2	2.18	0.44
1:O:142:GLU:OE1	1:O:145:LYS:HD3	2.18	0.44
1:O:243:GLU:OE1	1:O:243:GLU:HA	2.17	0.44
1:O:279:ASP:OD2	1:O:282:TYR:N	2.51	0.44
1:P:78:ALA:O	1:P:80:HIS:N	2.50	0.44
1:P:100:LEU:N	1:P:100:LEU:CD1	2.80	0.44
1:P:287:PHE:O	1:P:288:TYR:C	2.60	0.44
1:P:290:LEU:O	1:P:294:ALA:HB2	2.17	0.44
1:Q:61:LEU:CA	1:Q:162:ILE:HD11	2.45	0.44
1:Q:85:PHE:HA	1:Q:115:ASP:OD1	2.16	0.44
1:Q:260:THR:C	1:Q:324:LEU:HD23	2.43	0.44
1:S:116:LYS:O	1:S:117:ILE:C	2.60	0.44
1:S:162:ILE:HG23	1:S:237:LEU:HD11	1.99	0.44
1:S:247:GLU:HB3	1:S:249:TYR:CE1	2.53	0.44
1:U:257:GLY:H	1:U:285:LYS:HZ3	1.65	0.44
1:V:1:MET:HE3	1:V:2:HIS:H	1.81	0.44
1:W:48:LEU:O	1:W:50:ILE:N	2.50	0.44
1:X:25:GLN:HE21	1:X:42:ARG:NE	2.14	0.44
1:X:85:PHE:O	1:X:87:THR:N	2.51	0.44
2:A:1011:5PA:O4P	2:A:1011:5PA:C4A	2.66	0.44
1:B:112:TYR:HE1	1:B:122:THR:HG21	1.81	0.44
1:C:19:PRO:HD2	1:C:20:TRP:CE3	2.52	0.44
1:C:34:ILE:O	1:C:34:ILE:HG13	2.14	0.44
1:G:72:VAL:HA	1:G:97:ASP:O	2.16	0.44
1:G:103:ARG:HB2	1:G:128:LYS:HB2	1.98	0.44
1:G:224:THR:CG2	1:G:225:SER:N	2.79	0.44
1:G:232:LYS:HE2	3:G:1100:HOH:O	2.16	0.44
1:H:168:VAL:O	1:H:171:VAL:CG2	2.66	0.44
1:J:79:VAL:N	1:J:103:ARG:O	2.51	0.44
1:K:136:TYR:C	1:K:138:GLU:N	2.74	0.44
1:K:265:GLN:O	1:K:268:ARG:N	2.42	0.44
1:L:82:ASN:O	1:L:85:PHE:HB3	2.18	0.44
1:L:321:LEU:O	1:L:324:LEU:N	2.47	0.44
1:M:190:GLY:N	2:M:1131:5PA:O3P	2.40	0.44
1:M:218:ARG:HG3	1:M:255:GLU:HA	1.99	0.44
1:N:130:SER:OG	1:N:132:GLU:OE2	2.19	0.44
1:O:20:TRP:CD1	1:P:20:TRP:CZ3	3.02	0.44
1:O:70:ALA:HB1	1:O:72:VAL:O	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:252:SER:C	1:O:253:PHE:CD1	2.95	0.44
1:P:54:LYS:CE	2:P:1161:5PA:H91	2.42	0.44
1:P:114:LEU:HD23	1:P:117:ILE:HD12	1.97	0.44
1:P:157:GLY:HA2	2:P:1161:5PA:H91	1.97	0.44
1:P:214:ILE:CG2	1:P:286:ALA:HA	2.38	0.44
1:Q:105:LYS:C	1:Q:107:GLU:H	2.25	0.44
1:Q:244:VAL:O	1:Q:245:ARG:O	2.36	0.44
1:Q:308:THR:HG21	2:Q:1171:5PA:C6	2.47	0.44
1:R:66:LEU:HD21	1:R:96:LEU:HD21	1.98	0.44
1:S:76:VAL:CG2	1:S:156:PRO:HG3	2.48	0.44
1:S:136:TYR:CA	1:S:139:GLU:HG2	2.45	0.44
1:T:141:ALA:HB1	1:T:151:PRO:CG	2.47	0.44
1:V:147:GLU:HB2	1:V:149:ARG:HG3	2.00	0.44
1:V:268:ARG:O	1:V:272:THR:HG23	2.18	0.44
1:V:279:ASP:OD2	1:V:281:VAL:HG13	2.17	0.44
1:W:85:PHE:CZ	1:W:114:LEU:HD13	2.52	0.44
1:W:118:MET:HE3	1:X:271:GLY:HA3	1.99	0.44
1:A:61:LEU:O	1:A:64:ASP:HB3	2.18	0.44
1:B:39:TYR:CD1	1:B:182:PHE:HE2	2.35	0.44
1:B:224:THR:CG2	1:B:245:ARG:NH2	2.81	0.44
1:D:90:ALA:O	1:D:91:ALA:C	2.60	0.44
1:D:251:TYR:CD1	1:D:289:GLY:HA3	2.53	0.44
1:D:321:LEU:O	1:D:325:LEU:HD23	2.18	0.44
1:E:139:GLU:O	1:E:143:GLU:HG2	2.18	0.44
1:E:205:LEU:O	1:E:206:ASN:C	2.60	0.44
1:F:187:VAL:CG2	1:F:194:THR:HG21	2.44	0.44
1:F:219:PHE:HE2	1:F:248:LEU:CD2	2.30	0.44
1:G:103:ARG:CD	1:G:129:ASP:H	2.31	0.44
1:I:87:THR:HG21	1:I:154:ILE:HD12	2.00	0.44
1:K:171:VAL:CG2	1:K:201:GLY:HA3	2.33	0.44
1:K:190:GLY:H	2:K:1111:5PA:H5A2	1.82	0.44
1:L:41:LYS:HE3	1:L:43:ASP:OD1	2.17	0.44
1:L:55:ILE:CD1	1:L:86:VAL:HG11	2.47	0.44
1:M:196:ALA:HB2	1:M:230:LEU:HD13	1.99	0.44
1:O:230:LEU:C	1:O:232:LYS:N	2.75	0.44
1:P:157:GLY:C	1:P:159:ALA:N	2.75	0.44
1:P:171:VAL:HG21	1:P:201:GLY:CA	2.47	0.44
1:Q:26:TYR:CD2	1:Q:28:PRO:HD3	2.51	0.44
1:Q:79:VAL:O	1:Q:112:TYR:HB2	2.18	0.44
1:Q:135:LYS:O	1:Q:136:TYR:C	2.61	0.44
1:R:261:GLY:HA2	1:R:264:ALA:CB	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:73:VAL:HG12	1:T:74:ILE:H	1.82	0.44
1:U:93:LYS:O	1:U:93:LYS:HG2	2.18	0.44
1:U:101:VAL:O	1:U:133:LEU:HD21	2.18	0.44
1:V:5:ILE:CG2	1:V:9:LEU:HD12	2.46	0.44
1:V:128:LYS:CE	1:V:132:GLU:CB	2.93	0.44
1:B:65:ALA:C	1:B:67:SER:N	2.72	0.44
1:B:103:ARG:HD3	1:B:133:LEU:CD1	2.32	0.44
1:B:154:ILE:HA	1:B:155:PRO:HD3	1.66	0.44
1:B:202:LEU:O	1:B:206:ASN:N	2.51	0.44
1:C:210:ARG:HA	1:C:211:PRO:HD3	1.67	0.44
1:D:161:PRO:HG3	1:D:230:LEU:HD23	1.99	0.44
1:D:279:ASP:OD2	1:D:281:VAL:HG12	2.17	0.44
1:E:132:GLU:CA	3:E:1067:HOH:O	2.66	0.44
1:E:142:GLU:O	1:E:146:ARG:N	2.50	0.44
1:F:66:LEU:HD11	1:F:94:LEU:CD2	2.33	0.44
1:G:12:PHE:HA	1:G:13:PRO:HD3	1.73	0.44
1:G:103:ARG:HB3	1:G:133:LEU:CD2	2.46	0.44
1:G:162:ILE:HD12	1:G:162:ILE:C	2.40	0.44
1:G:263:VAL:HG22	1:G:285:LYS:HA	1.98	0.44
1:H:111:ASN:O	1:H:115:ASP:OD2	2.35	0.44
1:I:5:ILE:HG13	1:I:205:LEU:HD21	1.99	0.44
1:I:26:TYR:O	1:I:28:PRO:HD3	2.18	0.44
1:I:108:LEU:O	1:I:113:LEU:HG	2.17	0.44
1:I:145:LYS:C	1:I:147:GLU:N	2.76	0.44
1:I:252:SER:O	1:I:253:PHE:HB2	2.17	0.44
1:J:55:ILE:HD12	1:J:86:VAL:HG11	1.98	0.44
1:J:299:LEU:N	3:J:1102:HOH:O	2.34	0.44
1:J:320:LYS:O	1:J:320:LYS:CG	2.66	0.44
1:K:20:TRP:CE3	1:L:23:PRO:HB2	2.52	0.44
1:L:83:HIS:ND1	1:L:83:HIS:C	2.76	0.44
1:M:131:PHE:C	1:M:133:LEU:H	2.25	0.44
1:N:15:VAL:HG21	1:N:66:LEU:CD1	2.43	0.44
1:N:21:GLU:HG2	1:N:173:GLU:OE2	2.17	0.44
1:N:279:ASP:O	1:N:284:GLY:N	2.45	0.44
1:O:42:ARG:NH1	1:O:42:ARG:HB3	2.33	0.44
1:O:92:LYS:HE2	1:O:120:ILE:HG12	1.99	0.44
1:O:247:GLU:HB3	1:O:249:TYR:CE1	2.53	0.44
1:P:127:ALA:HB1	1:P:128:LYS:HE2	2.00	0.44
1:Q:65:ALA:HA	1:Q:152:TYR:CD1	2.53	0.44
1:T:53:ASN:OD1	1:T:308:THR:HB	2.18	0.44
1:U:297:GLY:C	1:U:298:GLU:HG3	2.43	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:61:LEU:O	1:W:63:GLY:N	2.51	0.44
1:X:100:LEU:HD23	1:X:115:ASP:OD2	2.17	0.44
1:X:165:LEU:C	1:X:168:VAL:HG23	2.43	0.44
1:X:230:LEU:O	1:X:232:LYS:N	2.51	0.44
1:A:154:ILE:CG2	1:A:158:GLY:HA2	2.48	0.44
1:B:107:GLU:OE1	1:B:316:HIS:HE1	2.01	0.44
1:D:265:GLN:HG3	1:D:269:LYS:NZ	2.33	0.44
1:E:30:ILE:HG12	1:E:274:GLU:HG3	2.00	0.44
1:E:142:GLU:O	1:E:146:ARG:HB3	2.17	0.44
1:F:134:MET:SD	1:F:156:PRO:HD3	2.58	0.44
1:F:135:LYS:HG3	1:F:136:TYR:N	2.33	0.44
1:F:162:ILE:HD12	1:F:162:ILE:O	2.16	0.44
1:G:58:LEU:HD23	1:G:86:VAL:HG12	1.99	0.44
1:G:114:LEU:HD11	1:H:315:PHE:CE2	2.53	0.44
1:H:188:ALA:HB2	1:H:286:ALA:HB2	1.99	0.44
1:H:248:LEU:HD12	1:H:249:TYR:N	2.32	0.44
1:H:249:TYR:CD2	1:H:293:LEU:HD21	2.52	0.44
1:I:27:LEU:HA	1:I:28:PRO:HD2	1.82	0.44
1:I:102:LEU:HB2	1:I:124:VAL:HG22	2.00	0.44
1:K:54:LYS:HA	1:K:54:LYS:HD3	1.71	0.44
1:L:30:ILE:CG2	1:L:38:VAL:HG11	2.47	0.44
1:L:101:VAL:HG12	1:L:101:VAL:O	2.18	0.44
1:L:133:LEU:CD1	1:L:133:LEU:N	2.81	0.44
1:L:304:LEU:O	1:L:304:LEU:HD13	2.18	0.44
1:N:30:ILE:HG21	1:N:287:PHE:CZ	2.50	0.44
1:O:84:ALA:HB1	1:O:100:LEU:CD2	2.48	0.44
1:O:110:GLY:HA3	1:O:316:HIS:CG	2.53	0.44
1:P:219:PHE:CD1	1:P:250:ASP:HB2	2.53	0.44
1:P:225:SER:O	1:P:226:LYS:C	2.60	0.44
1:Q:73:VAL:HG11	1:Q:154:ILE:HD11	2.00	0.44
1:U:144:LEU:O	1:U:149:ARG:HB2	2.17	0.44
1:U:204:ILE:HG12	1:U:240:VAL:HG21	1.99	0.44
1:U:240:VAL:HG22	1:U:241:LYS:N	2.32	0.44
1:W:70:ALA:N	3:W:1265:HOH:O	2.50	0.44
1:X:210:ARG:NH2	1:X:299:LEU:HA	2.33	0.44
1:X:320:LYS:HG3	1:X:320:LYS:O	2.18	0.44
1:B:26:TYR:CD2	1:R:4:LYS:HA	2.53	0.44
1:B:103:ARG:NH2	1:B:131:PHE:CD2	2.84	0.44
1:D:14:ARG:HB2	1:D:59:GLU:O	2.17	0.44
1:D:103:ARG:NH2	1:D:131:PHE:CA	2.80	0.44
1:D:240:VAL:HG22	1:D:241:LYS:N	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:268:ARG:NH1	1:D:325:LEU:HD12	2.32	0.44
1:D:316:HIS:ND1	1:D:317:TYR:CE1	2.86	0.44
1:E:145:LYS:O	1:E:145:LYS:HG3	2.18	0.44
1:E:243:GLU:HG3	1:E:244:VAL:N	2.33	0.44
1:E:322:LEU:O	1:E:325:LEU:N	2.51	0.44
1:F:112:TYR:O	1:F:115:ASP:HB2	2.17	0.44
1:F:135:LYS:HE2	1:F:136:TYR:CE1	2.53	0.44
1:F:182:PHE:CD2	1:F:304:LEU:HB2	2.52	0.44
1:F:219:PHE:CZ	1:F:248:LEU:HG	2.52	0.44
1:F:243:GLU:O	1:F:244:VAL:C	2.60	0.44
1:G:27:LEU:HD21	1:G:40:ILE:HG21	1.99	0.44
1:H:243:GLU:O	1:H:244:VAL:C	2.61	0.44
1:I:58:LEU:O	1:I:59:GLU:C	2.60	0.44
1:I:131:PHE:HZ	1:I:226:LYS:HZ3	1.64	0.44
1:J:1:MET:H2	1:J:176:THR:CB	2.31	0.44
1:J:71:ASP:C	1:J:72:VAL:HG12	2.42	0.44
1:J:82:ASN:HD21	1:J:111:ASN:HD21	1.66	0.44
1:K:31:SER:CB	1:K:36:ALA:O	2.66	0.44
1:K:74:ILE:CG2	1:K:137:ALA:HB1	2.46	0.44
1:K:185:ILE:HG23	1:K:304:LEU:CD1	2.48	0.44
1:L:12:PHE:HE2	1:L:237:LEU:HD22	1.82	0.44
1:M:76:VAL:CG1	1:M:133:LEU:HD23	2.48	0.44
1:N:204:ILE:HG12	1:N:240:VAL:HG11	2.00	0.44
1:O:71:ASP:O	1:O:97:ASP:HB3	2.17	0.44
1:P:42:ARG:HB3	1:P:42:ARG:NH1	2.31	0.44
1:P:44:ASP:HB3	1:P:307:HIS:CG	2.53	0.44
1:P:320:LYS:HE3	1:P:324:LEU:HD11	1.98	0.44
1:Q:221:GLU:O	1:Q:223:MET:N	2.47	0.44
1:R:127:ALA:HB1	1:R:128:LYS:CE	2.48	0.44
1:R:142:GLU:CB	1:R:146:ARG:HH21	2.31	0.44
1:R:162:ILE:HG23	1:R:163:GLY:N	2.32	0.44
1:S:72:VAL:HA	1:S:97:ASP:O	2.17	0.44
1:S:83:HIS:CB	2:S:1191:5PA:H92	2.47	0.44
1:U:37:ASP:O	1:U:302:LYS:HA	2.18	0.44
1:V:127:ALA:HB3	1:V:133:LEU:HD11	1.99	0.44
1:W:54:LYS:NZ	1:W:157:GLY:CA	2.81	0.44
1:W:125:TYR:O	1:W:127:ALA:N	2.51	0.44
1:W:162:ILE:O	1:W:164:THR:N	2.51	0.44
1:X:129:ASP:OD1	1:X:129:ASP:O	2.35	0.44
1:X:226:LYS:O	1:X:229:ASN:HB3	2.18	0.44
1:A:127:ALA:O	1:A:129:ASP:OD2	2.36	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:194:THR:O	1:D:198:LEU:HB2	2.17	0.43
1:E:33:GLU:OE2	1:E:273:ARG:NH1	2.51	0.43
1:E:54:LYS:NZ	2:E:1051:5PA:H91	2.33	0.43
1:E:219:PHE:O	1:E:220:GLY:O	2.36	0.43
1:E:307:HIS:HE1	1:E:309:GLY:O	2.01	0.43
1:E:320:LYS:O	1:E:321:LEU:C	2.61	0.43
1:F:210:ARG:HH21	1:F:299:LEU:HA	1.83	0.43
1:F:316:HIS:HB3	1:F:317:TYR:CD1	2.52	0.43
1:G:14:ARG:HG3	1:G:59:GLU:HB3	2.00	0.43
1:H:281:VAL:HG13	1:H:282:TYR:CD1	2.53	0.43
1:H:312:SER:C	1:H:314:THR:N	2.75	0.43
1:I:165:LEU:HD21	1:I:238:LEU:HD21	1.99	0.43
1:I:251:TYR:CD2	1:I:289:GLY:HA2	2.53	0.43
1:J:133:LEU:HA	1:J:136:TYR:HD2	1.83	0.43
2:J:1101:5PA:O4P	2:J:1101:5PA:C4A	2.64	0.43
1:K:139:GLU:HG3	1:K:140:ILE:N	2.31	0.43
1:K:266:ILE:HD13	1:K:288:TYR:HB2	1.99	0.43
1:L:250:ASP:OD1	1:L:252:SER:OG	2.36	0.43
1:M:195:LEU:O	1:M:196:ALA:C	2.58	0.43
1:O:122:THR:O	1:O:122:THR:HG23	2.18	0.43
1:O:199:SER:C	1:O:201:GLY:N	2.75	0.43
1:O:274:GLU:O	1:O:276:ILE:HG13	2.18	0.43
1:O:315:PHE:HZ	1:P:312:SER:OG	2.01	0.43
1:Q:186:VAL:HG11	1:Q:290:LEU:HD13	2.00	0.43
1:Q:290:LEU:HD12	1:Q:299:LEU:CD1	2.48	0.43
1:R:5:ILE:HD11	1:R:205:LEU:HD21	2.00	0.43
1:R:131:PHE:HA	1:R:133:LEU:CD1	2.41	0.43
1:T:129:ASP:C	1:T:131:PHE:H	2.26	0.43
1:U:13:PRO:HG3	3:U:1212:HOH:O	2.18	0.43
1:W:84:ALA:HB1	1:W:100:LEU:CG	2.44	0.43
1:X:268:ARG:O	1:X:272:THR:OG1	2.26	0.43
1:A:181:LYS:N	1:A:181:LYS:HD3	2.33	0.43
1:B:61:LEU:HD23	1:B:162:ILE:CG2	2.47	0.43
1:B:269:LYS:HG2	1:B:273:ARG:NH2	2.34	0.43
1:C:109:LYS:CA	1:C:113:LEU:HB2	2.48	0.43
1:C:143:GLU:CA	1:C:146:ARG:HG2	2.44	0.43
1:C:220:GLY:O	1:C:223:MET:CB	2.66	0.43
1:D:100:LEU:HB3	1:D:102:LEU:HD21	1.99	0.43
1:E:250:ASP:C	1:E:250:ASP:OD1	2.60	0.43
1:F:293:LEU:HB3	1:F:299:LEU:HG	2.00	0.43
1:H:52:GLY:HA3	1:H:308:THR:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:186:VAL:HG21	1:H:290:LEU:HD23	2.00	0.43
1:I:88:GLY:O	1:I:89:LEU:C	2.61	0.43
1:K:50:ILE:HD11	1:K:82:ASN:HD22	1.83	0.43
1:K:102:LEU:O	1:K:133:LEU:HD11	2.19	0.43
1:K:214:ILE:HG21	1:K:286:ALA:CA	2.48	0.43
1:M:134:MET:CE	1:M:155:PRO:HA	2.26	0.43
1:M:318:GLY:HA3	1:N:113:LEU:HD11	1.99	0.43
1:N:148:GLY:HA2	3:N:1156:HOH:O	2.18	0.43
1:P:195:LEU:CD1	1:P:246:PRO:HG3	2.45	0.43
1:Q:243:GLU:C	1:Q:244:VAL:CG2	2.91	0.43
1:S:68:LYS:HD2	3:S:1218:HOH:O	2.17	0.43
1:U:290:LEU:O	1:U:294:ALA:N	2.45	0.43
1:W:136:TYR:O	1:W:139:GLU:N	2.51	0.43
1:X:93:LYS:O	1:X:93:LYS:HG2	2.17	0.43
1:A:72:VAL:HG21	1:A:144:LEU:CD2	2.46	0.43
1:B:82:ASN:O	1:B:83:HIS:C	2.59	0.43
1:B:108:LEU:HD12	1:B:108:LEU:HA	1.82	0.43
1:B:259:ILE:HD13	1:B:317:TYR:HB3	2.00	0.43
1:C:39:TYR:HB2	1:C:182:PHE:CE2	2.53	0.43
1:C:180:VAL:HB	1:C:182:PHE:CE1	2.54	0.43
1:E:81:SER:HB3	1:E:84:ALA:HB2	1.99	0.43
1:E:103:ARG:HB3	1:E:133:LEU:HD11	2.00	0.43
1:F:2:HIS:HB3	1:F:5:ILE:HG12	1.99	0.43
1:F:181:LYS:CD	1:F:181:LYS:N	2.72	0.43
1:F:214:ILE:CG2	1:F:286:ALA:HA	2.44	0.43
1:F:287:PHE:O	1:F:291:VAL:HG23	2.18	0.43
1:G:18:ILE:HG12	1:G:55:ILE:CG2	2.48	0.43
1:G:61:LEU:O	1:G:64:ASP:HB3	2.18	0.43
1:H:100:LEU:N	1:H:100:LEU:CD1	2.81	0.43
1:H:103:ARG:HH22	1:H:131:PHE:CA	2.31	0.43
1:H:103:ARG:NE	1:H:129:ASP:HA	2.33	0.43
1:H:106:GLU:CG	1:H:124:VAL:HG21	2.48	0.43
1:I:91:ALA:C	1:I:93:LYS:N	2.75	0.43
1:J:195:LEU:HD12	1:J:227:LEU:CD1	2.43	0.43
1:K:80:HIS:N	1:K:80:HIS:CD2	2.86	0.43
1:L:54:LYS:CD	1:L:57:LYS:HZ3	2.31	0.43
1:L:277:ILE:HG13	3:L:1127:HOH:O	2.19	0.43
1:M:165:LEU:CD2	1:M:238:LEU:HD21	2.48	0.43
1:M:204:ILE:C	1:M:206:ASN:H	2.24	0.43
1:M:269:LYS:HG2	1:M:273:ARG:HH12	1.80	0.43
1:O:1:MET:CE	1:O:172:GLY:HA3	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:134:MET:O	1:P:138:GLU:N	2.43	0.43
1:P:144:LEU:HD11	1:P:149:ARG:CB	2.48	0.43
1:P:181:LYS:CG	3:P:1163:HOH:O	2.66	0.43
1:P:200:LEU:O	1:P:203:SER:HB3	2.17	0.43
1:Q:30:ILE:O	1:Q:34:ILE:HG23	2.18	0.43
1:Q:30:ILE:HG21	1:Q:287:PHE:HZ	1.83	0.43
1:S:127:ALA:CB	1:S:136:TYR:CE2	3.02	0.43
1:S:138:GLU:O	1:S:142:GLU:HG2	2.19	0.43
1:S:180:VAL:HA	1:S:181:LYS:NZ	2.34	0.43
1:V:195:LEU:HB2	3:V:1242:HOH:O	2.17	0.43
1:W:17:LEU:CD2	1:W:59:GLU:HG2	2.48	0.43
1:W:271:GLY:HA3	1:X:118:MET:SD	2.57	0.43
1:X:216:VAL:C	1:X:252:SER:HB3	2.43	0.43
1:X:268:ARG:NH2	1:X:325:LEU:HG	2.33	0.43
1:X:320:LYS:O	1:X:320:LYS:HD2	2.18	0.43
1:D:225:SER:HB3	1:E:108:LEU:CD2	2.49	0.43
1:E:142:GLU:OE1	1:E:145:LYS:HD3	2.19	0.43
1:F:78:ALA:O	1:F:79:VAL:C	2.61	0.43
1:F:187:VAL:HG11	1:F:194:THR:HG22	2.00	0.43
1:F:211:PRO:HB2	1:F:246:PRO:HB3	1.99	0.43
1:G:14:ARG:HG2	1:G:59:GLU:HB3	2.01	0.43
1:G:27:LEU:HD12	1:G:38:VAL:CG2	2.42	0.43
1:G:198:LEU:C	1:G:198:LEU:CD2	2.90	0.43
1:G:279:ASP:OD2	1:G:282:TYR:N	2.47	0.43
1:G:280:PRO:O	1:G:285:LYS:HE3	2.18	0.43
1:H:19:PRO:HG2	1:H:20:TRP:CD1	2.53	0.43
1:I:12:PHE:HA	1:I:13:PRO:HD3	1.51	0.43
1:I:91:ALA:O	1:I:94:LEU:N	2.52	0.43
1:I:143:GLU:HG3	1:I:144:LEU:HD12	2.01	0.43
1:J:65:ALA:HB2	1:J:152:TYR:CE2	2.53	0.43
1:J:103:ARG:HH21	1:J:133:LEU:HD11	1.83	0.43
1:J:251:TYR:O	1:J:253:PHE:HD1	2.02	0.43
1:J:279:ASP:OD2	1:J:281:VAL:HG13	2.18	0.43
1:K:242:VAL:O	1:K:243:GLU:O	2.37	0.43
1:L:194:THR:O	1:L:194:THR:HG22	2.18	0.43
1:N:320:LYS:CE	1:N:324:LEU:HD11	2.46	0.43
1:P:77:GLY:C	1:P:131:PHE:HE2	2.26	0.43
1:P:153:VAL:N	3:P:1175:HOH:O	2.47	0.43
1:P:195:LEU:HD11	1:P:246:PRO:CG	2.45	0.43
1:Q:16:GLU:HA	1:Q:59:GLU:OE2	2.19	0.43
1:Q:83:HIS:CE1	1:Q:158:GLY:N	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:210:ARG:NH2	1:R:299:LEU:CA	2.79	0.43
1:R:251:TYR:OH	1:R:293:LEU:CD1	2.66	0.43
1:T:89:LEU:HD12	1:T:89:LEU:HA	1.90	0.43
1:T:91:ALA:O	1:T:96:LEU:HB2	2.18	0.43
1:T:116:LYS:NZ	1:T:122:THR:HB	2.30	0.43
1:T:180:VAL:HG13	1:T:181:LYS:N	2.33	0.43
1:T:255:GLU:OE2	3:T:1241:HOH:O	2.21	0.43
1:U:53:ASN:HD21	1:U:54:LYS:HE2	1.83	0.43
1:U:274:GLU:HA	1:U:274:GLU:OE1	2.18	0.43
1:A:116:LYS:HZ1	1:A:122:THR:CG2	2.31	0.43
1:B:33:GLU:O	1:B:34:ILE:C	2.62	0.43
1:B:218:ARG:HA	3:B:1025:HOH:O	2.18	0.43
1:E:318:GLY:HA3	1:F:113:LEU:HD21	2.00	0.43
1:F:48:LEU:HD23	1:F:48:LEU:C	2.44	0.43
1:F:107:GLU:O	1:F:112:TYR:CD2	2.72	0.43
1:G:5:ILE:CD1	1:G:205:LEU:HD21	2.48	0.43
1:G:161:PRO:CB	1:G:237:LEU:HD12	2.40	0.43
1:G:312:SER:C	1:G:314:THR:N	2.76	0.43
1:G:322:LEU:HD11	1:H:108:LEU:HD11	2.01	0.43
1:H:127:ALA:HB1	1:H:128:LYS:CE	2.49	0.43
1:H:160:SER:C	1:H:163:GLY:H	2.26	0.43
1:I:61:LEU:HD13	1:I:154:ILE:HG21	2.01	0.43
1:I:109:LYS:HA	1:I:113:LEU:CB	2.43	0.43
1:I:321:LEU:O	1:I:325:LEU:CD2	2.67	0.43
1:J:26:TYR:CE2	1:J:28:PRO:HG3	2.54	0.43
1:J:110:GLY:O	1:J:114:LEU:HG	2.18	0.43
1:J:131:PHE:HZ	1:J:256:TYR:CE2	2.36	0.43
1:K:56:ARG:HG2	1:K:56:ARG:HH11	1.83	0.43
1:K:218:ARG:H	1:K:218:ARG:CD	2.31	0.43
1:K:222:VAL:HG22	1:K:222:VAL:O	2.18	0.43
1:K:263:VAL:HG11	1:K:280:PRO:HA	2.00	0.43
3:K:1141:HOH:O	1:L:118:MET:HE1	2.17	0.43
1:L:127:ALA:O	1:L:128:LYS:C	2.62	0.43
1:L:224:THR:OG1	1:L:245:ARG:NH2	2.51	0.43
1:N:53:ASN:HB3	1:N:167:TYR:OH	2.19	0.43
1:O:210:ARG:HH21	1:O:299:LEU:HA	1.84	0.43
1:P:287:PHE:O	1:P:291:VAL:N	2.45	0.43
1:P:317:TYR:O	1:P:320:LYS:HB3	2.18	0.43
1:Q:195:LEU:O	1:Q:195:LEU:HD23	2.18	0.43
1:R:15:VAL:HG11	1:R:94:LEU:HD21	1.99	0.43
1:R:273:ARG:O	1:R:274:GLU:OE1	2.36	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:48:LEU:HD23	1:T:48:LEU:C	2.43	0.43
1:T:62:LEU:HD13	1:T:94:LEU:HD12	2.01	0.43
2:V:1221:5PA:O4P	2:V:1221:5PA:C4A	2.64	0.43
1:W:66:LEU:CD1	1:W:94:LEU:HD13	2.41	0.43
1:W:106:GLU:OE2	1:W:124:VAL:HG11	2.18	0.43
1:W:185:ILE:HD12	1:W:202:LEU:HD11	2.00	0.43
1:W:259:ILE:CD1	1:W:317:TYR:HB3	2.48	0.43
1:A:53:ASN:ND2	1:A:54:LYS:HZ3	2.17	0.43
1:A:67:SER:HB2	1:R:67:SER:O	2.18	0.43
1:A:186:VAL:HG23	1:A:305:PHE:CD1	2.41	0.43
1:D:226:LYS:O	1:D:230:LEU:HB2	2.18	0.43
1:F:145:LYS:C	1:F:147:GLU:N	2.63	0.43
1:F:200:LEU:HD23	1:F:200:LEU:C	2.43	0.43
1:G:15:VAL:O	1:G:15:VAL:CG1	2.63	0.43
1:G:65:ALA:HB2	1:G:152:TYR:CG	2.54	0.43
1:G:114:LEU:O	1:G:115:ASP:C	2.61	0.43
1:G:131:PHE:C	1:G:131:PHE:HD1	2.26	0.43
1:H:14:ARG:NH2	3:H:1110:HOH:O	2.51	0.43
1:J:165:LEU:HA	1:J:168:VAL:HG21	1.98	0.43
1:J:301:GLU:C	1:J:302:LYS:HG2	2.43	0.43
1:K:5:ILE:HD12	1:K:172:GLY:HA3	2.00	0.43
1:K:19:PRO:C	1:K:20:TRP:CE3	2.97	0.43
1:K:186:VAL:HA	1:K:212:VAL:O	2.18	0.43
1:L:281:VAL:O	1:L:281:VAL:CG2	2.66	0.43
1:M:177:GLN:CG	1:M:178:SER:N	2.81	0.43
1:N:15:VAL:O	1:N:17:LEU:HD22	2.19	0.43
1:N:251:TYR:OH	1:N:292:ASP:OD1	2.36	0.43
1:N:266:ILE:HG21	1:N:284:GLY:O	2.19	0.43
1:O:51:GLY:O	1:O:55:ILE:CD1	2.67	0.43
1:O:155:PRO:HB2	1:O:159:ALA:HB3	1.99	0.43
1:O:252:SER:O	1:O:253:PHE:CB	2.66	0.43
1:P:92:LYS:HE2	1:P:98:ALA:HB3	2.01	0.43
1:P:116:LYS:NZ	1:P:122:THR:CB	2.72	0.43
1:Q:54:LYS:HZ1	2:Q:1171:5PA:H91	1.84	0.43
1:Q:170:ALA:O	1:Q:174:ILE:HG13	2.17	0.43
1:R:33:GLU:O	1:R:34:ILE:C	2.61	0.43
1:R:82:ASN:ND2	1:R:111:ASN:HD21	2.17	0.43
1:R:130:SER:OG	1:R:132:GLU:HG3	2.19	0.43
1:R:187:VAL:HG23	1:R:306:ILE:HB	2.00	0.43
1:S:117:ILE:CD1	1:T:318:GLY:HA2	2.48	0.43
1:S:221:GLU:O	1:S:224:THR:HG22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:132:GLU:O	1:T:134:MET:N	2.52	0.43
1:T:204:ILE:CG1	1:T:240:VAL:HG21	2.42	0.43
1:U:189:ALA:O	1:U:215:ALA:HA	2.18	0.43
1:U:217:GLY:C	1:U:252:SER:HB3	2.44	0.43
1:V:143:GLU:O	1:V:143:GLU:CG	2.67	0.43
1:V:214:ILE:HG21	1:V:286:ALA:HA	2.00	0.43
1:V:322:LEU:C	1:V:324:LEU:N	2.76	0.43
1:W:23:PRO:HD3	1:X:20:TRP:CE3	2.53	0.43
1:W:27:LEU:HD22	1:W:274:GLU:CG	2.49	0.43
1:A:103:ARG:HB3	1:A:133:LEU:CD2	2.49	0.43
1:B:173:GLU:O	1:B:177:GLN:HG2	2.18	0.43
1:B:180:VAL:HG13	1:B:302:LYS:HD3	2.01	0.43
1:C:15:VAL:HG11	1:C:94:LEU:HD11	2.01	0.43
1:D:122:THR:CG2	1:D:123:ARG:N	2.81	0.43
1:F:130:SER:O	1:F:131:PHE:C	2.61	0.43
1:F:203:SER:CB	1:F:243:GLU:HG2	2.49	0.43
1:F:219:PHE:HD2	1:F:219:PHE:HA	1.68	0.43
1:G:76:VAL:HG12	1:G:101:VAL:CG1	2.49	0.43
1:G:302:LYS:HE3	1:G:302:LYS:HB2	1.85	0.43
1:H:30:ILE:CG2	1:H:34:ILE:HD12	2.48	0.43
1:H:100:LEU:HB3	1:H:102:LEU:CD2	2.41	0.43
1:J:9:LEU:CD2	1:J:238:LEU:HD21	2.47	0.43
1:L:25:GLN:NE2	1:L:42:ARG:CD	2.82	0.43
1:L:135:LYS:HA	1:L:138:GLU:HB2	1.99	0.43
1:M:135:LYS:HG3	1:M:136:TYR:H	1.81	0.43
1:M:205:LEU:O	1:M:206:ASN:C	2.61	0.43
1:N:103:ARG:NH2	1:N:131:PHE:CG	2.87	0.43
1:N:131:PHE:HA	1:N:133:LEU:HD22	2.00	0.43
1:O:66:LEU:CD1	1:O:94:LEU:HD13	2.43	0.43
1:O:131:PHE:CD1	1:O:131:PHE:C	2.96	0.43
1:O:135:LYS:HG3	1:O:136:TYR:N	2.33	0.43
1:P:128:LYS:C	1:P:130:SER:N	2.75	0.43
1:R:281:VAL:O	1:R:281:VAL:CG2	2.66	0.43
1:R:319:ASP:C	1:R:321:LEU:H	2.27	0.43
1:S:169:ARG:O	1:S:172:GLY:N	2.51	0.43
1:T:5:ILE:HG13	1:T:172:GLY:HA2	1.99	0.43
1:T:103:ARG:HE	1:T:133:LEU:HD11	1.84	0.43
1:T:290:LEU:C	1:T:290:LEU:CD1	2.92	0.43
1:U:47:GLY:O	1:V:42:ARG:NH2	2.49	0.43
1:U:290:LEU:C	1:U:290:LEU:CD1	2.90	0.43
1:V:11:LYS:O	1:V:11:LYS:HG3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:135:LYS:HG2	1:V:136:TYR:CG	2.53	0.43
1:W:144:LEU:O	1:W:147:GLU:HB2	2.19	0.43
1:W:219:PHE:HE2	1:W:224:THR:CB	2.13	0.43
1:X:34:ILE:HG12	1:X:291:VAL:HG13	2.01	0.43
1:X:39:TYR:CD1	1:X:182:PHE:HE2	2.36	0.43
1:X:103:ARG:NH2	1:X:131:PHE:CD1	2.86	0.43
1:X:320:LYS:O	1:X:320:LYS:CD	2.66	0.43
1:A:32:ARG:NH1	3:A:1050:HOH:O	2.51	0.43
1:A:40:ILE:HG23	1:A:40:ILE:O	2.17	0.43
1:A:135:LYS:HG3	1:A:136:TYR:N	2.34	0.43
1:A:302:LYS:HE3	1:A:302:LYS:HB2	1.91	0.43
1:D:54:LYS:HZ2	1:D:57:LYS:NZ	2.17	0.43
1:E:221:GLU:O	1:E:223:MET:N	2.47	0.43
1:E:278:LEU:HD22	1:E:283:THR:HB	2.01	0.43
1:F:15:VAL:HG11	1:F:94:LEU:HD21	2.00	0.43
1:F:203:SER:CB	1:F:243:GLU:CG	2.95	0.43
1:G:32:ARG:C	1:G:34:ILE:N	2.77	0.43
1:H:11:LYS:HE3	1:H:12:PHE:CZ	2.54	0.43
1:H:194:THR:O	1:H:194:THR:HG22	2.18	0.43
1:H:196:ALA:C	1:H:198:LEU:H	2.26	0.43
1:I:41:LYS:HZ3	1:I:177:GLN:NE2	2.13	0.43
1:I:61:LEU:HD21	1:I:160:SER:OG	2.18	0.43
1:J:111:ASN:O	1:J:115:ASP:OD1	2.37	0.43
1:J:141:ALA:HA	1:J:151:PRO:HG3	1.99	0.43
1:K:135:LYS:HA	1:K:138:GLU:CG	2.48	0.43
1:M:131:PHE:O	1:M:133:LEU:N	2.38	0.43
1:M:269:LYS:CB	1:M:273:ARG:NH1	2.81	0.43
1:N:14:ARG:HG3	1:N:59:GLU:HB3	2.00	0.43
1:N:261:GLY:O	1:N:265:GLN:HB2	2.19	0.43
1:O:48:LEU:HD23	1:O:48:LEU:C	2.44	0.43
1:O:221:GLU:OE2	1:O:225:SER:HB3	2.18	0.43
1:P:127:ALA:HB1	1:P:128:LYS:HZ3	1.80	0.43
1:Q:7:ALA:C	1:Q:9:LEU:N	2.72	0.43
1:Q:38:VAL:O	1:Q:38:VAL:HG22	2.18	0.43
1:Q:171:VAL:HG21	1:Q:201:GLY:CA	2.48	0.43
1:Q:187:VAL:HG21	1:Q:194:THR:HG21	1.99	0.43
1:R:29:ASN:O	1:R:32:ARG:N	2.51	0.43
1:R:40:ILE:HD13	1:R:276:ILE:CD1	2.41	0.43
1:R:58:LEU:HA	1:R:61:LEU:HB2	2.00	0.43
1:R:256:TYR:OH	1:R:282:TYR:OH	2.33	0.43
1:S:102:LEU:O	1:S:133:LEU:HD21	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:117:ILE:HD11	1:T:318:GLY:O	2.19	0.43
1:S:243:GLU:C	1:S:244:VAL:HG23	2.43	0.43
1:T:48:LEU:HD11	1:T:90:ALA:HB2	2.00	0.43
1:T:103:ARG:NH2	1:T:131:PHE:HA	2.33	0.43
1:T:109:LYS:HG3	1:T:316:HIS:CG	2.53	0.43
1:T:221:GLU:HB3	1:T:222:VAL:H	1.51	0.43
1:U:228:ASP:OD1	1:U:245:ARG:HG2	2.18	0.43
1:V:182:PHE:O	1:V:209:ILE:HG12	2.19	0.43
1:V:222:VAL:CG1	1:V:223:MET:N	2.74	0.43
1:X:136:TYR:O	1:X:139:GLU:HB2	2.19	0.43
1:X:287:PHE:O	1:X:290:LEU:HB3	2.19	0.43
1:B:134:MET:SD	1:B:156:PRO:HD3	2.59	0.43
1:C:12:PHE:CZ	1:C:237:LEU:HD22	2.54	0.43
1:C:263:VAL:O	1:C:267:ILE:HG13	2.19	0.43
1:F:181:LYS:HD3	1:F:181:LYS:N	2.09	0.43
1:H:139:GLU:HG3	3:H:1100:HOH:O	2.18	0.43
1:H:234:ALA:O	1:H:235:ALA:C	2.62	0.43
1:J:44:ASP:HB3	1:J:309:GLY:HA2	2.00	0.43
1:K:50:ILE:HD11	1:K:82:ASN:ND2	2.34	0.43
1:K:53:ASN:O	1:K:54:LYS:C	2.61	0.43
1:L:1:MET:HE3	1:L:1:MET:CA	2.48	0.43
1:L:11:LYS:N	3:L:1142:HOH:O	2.51	0.43
1:M:214:ILE:HD13	1:M:286:ALA:O	2.18	0.43
1:O:19:PRO:HD2	1:O:20:TRP:CZ3	2.53	0.43
1:O:44:ASP:HA	1:O:52:GLY:N	2.34	0.43
1:O:118:MET:O	1:P:268:ARG:HG3	2.19	0.43
1:O:126:ASP:C	1:O:128:LYS:N	2.74	0.43
1:O:210:ARG:NH2	1:O:299:LEU:HA	2.34	0.43
1:Q:141:ALA:HB1	1:Q:151:PRO:CG	2.49	0.43
1:Q:141:ALA:HB1	1:Q:151:PRO:HG2	2.01	0.43
1:Q:267:ILE:HD11	1:Q:280:PRO:N	2.33	0.43
1:R:196:ALA:HB2	1:R:227:LEU:CD1	2.48	0.43
1:T:144:LEU:CD1	1:T:149:ARG:HH11	2.16	0.43
1:T:210:ARG:NH2	1:T:299:LEU:HA	2.34	0.43
1:V:162:ILE:HG22	3:V:1229:HOH:O	2.19	0.43
1:V:162:ILE:CG2	1:V:163:GLY:H	2.31	0.43
1:W:109:LYS:N	3:W:1237:HOH:O	2.51	0.43
1:W:139:GLU:O	1:W:140:ILE:C	2.62	0.43
1:W:185:ILE:HD12	1:W:202:LEU:HD21	2.01	0.43
1:X:103:ARG:CD	1:X:129:ASP:HA	2.48	0.43
1:X:135:LYS:O	1:X:138:GLU:HB2	2.17	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:179:GLU:OE1	1:C:179:GLU:N	2.52	0.43
1:C:201:GLY:O	1:C:202:LEU:C	2.61	0.43
1:D:167:TYR:HA	1:D:170:ALA:CB	2.49	0.43
1:D:219:PHE:CZ	1:D:248:LEU:HG	2.54	0.43
1:E:20:TRP:CD2	1:F:23:PRO:HG3	2.54	0.43
1:E:40:ILE:HD11	1:E:307:HIS:HB2	2.00	0.43
1:E:181:LYS:HE3	1:E:302:LYS:NZ	2.30	0.43
1:E:210:ARG:NH1	1:E:247:GLU:OE2	2.34	0.43
1:F:218:ARG:NH1	1:F:218:ARG:HB2	2.34	0.43
1:H:12:PHE:HA	1:H:13:PRO:HD2	1.83	0.43
1:I:1:MET:HE2	1:I:5:ILE:HB	2.01	0.43
1:I:48:LEU:HB3	1:I:55:ILE:CG1	2.48	0.43
1:I:219:PHE:HB2	1:I:250:ASP:OD2	2.19	0.43
1:J:26:TYR:CG	1:K:4:LYS:HA	2.54	0.43
1:J:167:TYR:HA	1:J:170:ALA:HB3	2.01	0.43
1:J:210:ARG:HA	1:J:211:PRO:HD3	1.86	0.43
1:K:82:ASN:ND2	1:K:111:ASN:HD21	2.15	0.43
1:K:134:MET:HE3	1:K:156:PRO:HD3	2.00	0.43
1:K:135:LYS:O	1:K:138:GLU:HB2	2.19	0.43
1:L:33:GLU:O	1:L:34:ILE:C	2.62	0.43
1:L:43:ASP:C	1:L:45:LEU:N	2.77	0.43
1:L:224:THR:OG1	1:L:245:ARG:NH1	2.52	0.43
1:M:13:PRO:HB2	3:M:1136:HOH:O	2.19	0.43
1:M:27:LEU:HA	1:M:28:PRO:HD2	1.78	0.43
1:O:88:GLY:O	1:O:91:ALA:HB3	2.19	0.43
1:Q:15:VAL:O	1:Q:16:GLU:C	2.61	0.43
1:R:112:TYR:C	1:R:114:LEU:N	2.74	0.43
1:S:61:LEU:HD22	1:S:154:ILE:HG12	1.99	0.43
1:S:92:LYS:HD3	1:T:272:THR:HB	2.01	0.43
1:S:146:ARG:HG3	1:S:146:ARG:O	2.18	0.43
1:T:128:LYS:HG2	1:T:128:LYS:O	2.19	0.43
1:T:268:ARG:O	1:T:268:ARG:CG	2.67	0.43
1:U:76:VAL:HB	1:U:133:LEU:HD23	2.01	0.43
1:U:164:THR:O	1:U:166:GLY:N	2.51	0.43
1:U:265:GLN:HG3	1:U:269:LYS:NZ	2.34	0.43
1:V:289:GLY:O	1:V:293:LEU:HB2	2.19	0.43
1:W:171:VAL:HG23	1:W:172:GLY:N	2.34	0.43
1:W:291:VAL:O	1:W:291:VAL:HG12	2.18	0.43
1:X:14:ARG:NH1	1:X:169:ARG:NH2	2.67	0.43
1:X:130:SER:O	1:X:131:PHE:C	2.62	0.43
1:A:58:LEU:HD21	1:A:87:THR:HA	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:126:ASP:O	1:A:126:ASP:OD1	2.37	0.42
1:A:185:ILE:HA	1:A:304:LEU:O	2.19	0.42
1:B:227:LEU:HD12	1:B:227:LEU:C	2.44	0.42
1:B:240:VAL:CG2	1:B:241:LYS:N	2.82	0.42
1:B:322:LEU:C	1:B:324:LEU:N	2.76	0.42
1:C:167:TYR:HA	1:C:170:ALA:CB	2.48	0.42
1:C:214:ILE:HD13	1:C:286:ALA:CA	2.22	0.42
1:D:285:LYS:HD2	3:D:1068:HOH:O	2.19	0.42
1:E:30:ILE:HG21	1:E:287:PHE:CZ	2.53	0.42
1:E:41:LYS:HZ2	1:E:41:LYS:HG3	1.73	0.42
1:G:134:MET:CE	1:G:155:PRO:HA	2.32	0.42
1:G:202:LEU:HD21	1:G:209:ILE:HD12	2.01	0.42
1:I:125:TYR:O	1:I:127:ALA:N	2.52	0.42
1:J:74:ILE:HD12	1:J:151:PRO:HB2	2.01	0.42
1:J:219:PHE:CZ	1:J:248:LEU:HG	2.53	0.42
1:J:221:GLU:O	1:J:222:VAL:C	2.62	0.42
1:K:12:PHE:HA	1:K:13:PRO:HD3	1.72	0.42
1:L:219:PHE:HD1	1:L:250:ASP:HB2	1.82	0.42
1:L:245:ARG:HB2	1:L:246:PRO:HD2	2.01	0.42
1:M:144:LEU:HD12	1:M:144:LEU:HA	1.85	0.42
1:N:255:GLU:O	1:N:256:TYR:C	2.62	0.42
1:O:31:SER:OG	1:O:38:VAL:HG12	2.19	0.42
1:O:53:ASN:HB3	1:O:308:THR:CG2	2.49	0.42
1:O:279:ASP:N	1:O:283:THR:OG1	2.46	0.42
1:O:312:SER:C	1:O:314:THR:N	2.75	0.42
1:Q:54:LYS:NZ	2:Q:1171:5PA:H91	2.34	0.42
1:Q:84:ALA:O	1:Q:85:PHE:C	2.62	0.42
1:R:5:ILE:H	1:R:5:ILE:HG12	1.57	0.42
1:R:282:TYR:CE2	2:R:1181:5PA:H4A1	2.53	0.42
1:S:134:MET:HB3	3:S:1215:HOH:O	2.19	0.42
1:T:187:VAL:C	1:T:188:ALA:O	2.61	0.42
1:T:319:ASP:O	1:T:322:LEU:N	2.33	0.42
1:V:212:VAL:HG13	1:V:249:TYR:HE1	1.84	0.42
1:V:295:ARG:HD2	3:V:1228:HOH:O	2.18	0.42
1:W:1:MET:HE1	1:W:172:GLY:CA	2.37	0.42
1:W:243:GLU:CG	1:W:244:VAL:N	2.81	0.42
1:X:264:ALA:HB1	1:X:325:LEU:CD2	2.49	0.42
1:C:42:ARG:HB3	1:C:42:ARG:NH1	2.29	0.42
1:C:42:ARG:NH1	1:C:45:LEU:HG	2.34	0.42
1:C:210:ARG:HH11	1:C:247:GLU:CD	2.27	0.42
1:E:116:LYS:HA	1:E:116:LYS:HE3	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:214:ILE:HD11	1:E:289:GLY:HA3	2.01	0.42
1:E:319:ASP:O	1:E:320:LYS:C	2.62	0.42
1:G:27:LEU:HA	1:G:28:PRO:HD2	1.90	0.42
1:G:106:GLU:CG	1:G:124:VAL:HG21	2.47	0.42
1:G:185:ILE:HG23	1:G:304:LEU:HB3	2.00	0.42
1:G:255:GLU:O	1:G:256:TYR:C	2.62	0.42
1:H:40:ILE:HA	1:H:305:PHE:O	2.19	0.42
1:H:43:ASP:O	1:H:46:THR:N	2.52	0.42
1:H:289:GLY:O	1:H:292:ASP:N	2.52	0.42
1:H:316:HIS:CE1	1:H:317:TYR:CZ	3.07	0.42
1:I:138:GLU:HG2	3:I:1096:HOH:O	2.19	0.42
1:I:214:ILE:HD13	1:I:286:ALA:CA	2.39	0.42
1:J:167:TYR:HA	1:J:170:ALA:HB2	2.01	0.42
1:L:224:THR:CG2	1:L:225:SER:H	2.32	0.42
1:M:131:PHE:HE2	1:M:222:VAL:HG11	1.85	0.42
1:M:149:ARG:HD2	3:M:1140:HOH:O	2.18	0.42
1:O:38:VAL:CG2	1:O:290:LEU:HD21	2.49	0.42
1:O:48:LEU:HD21	1:O:89:LEU:HB3	2.00	0.42
1:O:155:PRO:CB	1:O:159:ALA:HB3	2.49	0.42
1:O:181:LYS:N	1:O:181:LYS:CE	2.80	0.42
1:O:276:ILE:CG2	1:O:277:ILE:N	2.82	0.42
1:O:287:PHE:O	1:O:288:TYR:C	2.61	0.42
1:O:299:LEU:CB	1:O:303:ILE:HD11	2.49	0.42
1:P:67:SER:C	1:P:69:GLY:N	2.76	0.42
1:Q:218:ARG:HD2	1:Q:256:TYR:N	2.34	0.42
1:R:159:ALA:HB1	1:R:230:LEU:HD11	2.01	0.42
1:R:183:ASP:O	1:R:209:ILE:HG23	2.19	0.42
1:S:185:ILE:HA	1:S:304:LEU:O	2.19	0.42
1:S:243:GLU:O	1:S:244:VAL:CG2	2.67	0.42
1:T:33:GLU:O	1:T:34:ILE:C	2.61	0.42
1:U:112:TYR:O	1:U:115:ASP:HB2	2.18	0.42
1:X:2:HIS:HA	1:X:3:PRO:HD3	1.89	0.42
1:A:62:LEU:HD13	1:A:94:LEU:HD12	2.01	0.42
1:A:205:LEU:O	1:A:206:ASN:CB	2.65	0.42
1:A:279:ASP:HB2	1:A:280:PRO:HD2	2.00	0.42
1:B:184:SER:OG	1:B:299:LEU:HD22	2.19	0.42
1:C:116:LYS:O	1:C:119:GLY:N	2.47	0.42
1:D:158:GLY:C	1:D:160:SER:H	2.25	0.42
1:D:296:LYS:CD	1:D:298:GLU:OE2	2.58	0.42
2:D:1041:5PA:O4P	2:D:1041:5PA:C4A	2.63	0.42
1:F:62:LEU:HD22	1:F:94:LEU:HD12	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:127:ALA:O	1:F:128:LYS:C	2.61	0.42
1:F:190:GLY:O	1:F:223:MET:HE1	2.19	0.42
1:G:164:THR:C	1:G:166:GLY:N	2.75	0.42
1:G:185:ILE:HG23	1:G:304:LEU:HD13	2.01	0.42
1:G:188:ALA:HA	1:G:214:ILE:HG23	2.00	0.42
1:G:253:PHE:CD1	1:G:253:PHE:N	2.88	0.42
1:H:114:LEU:O	1:H:118:MET:HB2	2.20	0.42
1:H:181:LYS:O	1:H:302:LYS:CB	2.68	0.42
1:I:108:LEU:HD12	1:I:108:LEU:HA	1.78	0.42
1:I:134:MET:HE1	1:I:155:PRO:HB3	2.00	0.42
1:I:315:PHE:CE2	1:J:114:LEU:HD11	2.54	0.42
1:J:22:THR:HG21	1:J:43:ASP:HA	2.01	0.42
1:J:133:LEU:HD12	1:J:133:LEU:N	2.34	0.42
1:J:144:LEU:CD2	1:J:151:PRO:HB3	2.48	0.42
1:J:210:ARG:CZ	1:J:247:GLU:OE1	2.67	0.42
1:J:292:ASP:O	1:J:296:LYS:HG3	2.19	0.42
1:K:12:PHE:CD2	1:K:165:LEU:HD11	2.54	0.42
1:K:18:ILE:HD13	1:K:46:THR:HG22	2.01	0.42
1:K:67:SER:O	1:K:69:GLY:N	2.52	0.42
1:K:187:VAL:O	1:K:214:ILE:HG22	2.19	0.42
1:L:264:ALA:HA	1:L:321:LEU:HD22	2.00	0.42
1:L:267:ILE:HD11	1:L:280:PRO:CA	2.49	0.42
1:M:58:LEU:HD13	1:M:58:LEU:HA	1.69	0.42
1:N:29:ASN:C	1:N:31:SER:N	2.76	0.42
1:Q:259:ILE:HD12	1:Q:320:LYS:HG2	2.01	0.42
1:R:277:ILE:HD12	1:R:311:ILE:HD11	2.00	0.42
1:S:53:ASN:HD21	2:S:1191:5PA:H5A1	1.83	0.42
1:S:141:ALA:O	1:S:145:LYS:HG2	2.20	0.42
1:U:48:LEU:HD23	1:U:89:LEU:HD23	2.01	0.42
1:U:237:LEU:HD23	1:U:237:LEU:HA	1.90	0.42
1:W:108:LEU:HD12	1:W:108:LEU:HA	1.66	0.42
1:W:222:VAL:CG2	1:W:226:LYS:HE3	2.49	0.42
1:X:3:PRO:O	1:X:6:PHE:HB3	2.19	0.42
1:X:58:LEU:HD12	1:X:58:LEU:HA	1.83	0.42
1:X:67:SER:C	1:X:69:GLY:H	2.27	0.42
1:X:78:ALA:N	1:X:81:SER:HB2	2.35	0.42
1:A:174:ILE:C	1:A:176:THR:N	2.78	0.42
1:B:29:ASN:C	1:B:31:SER:N	2.76	0.42
1:B:56:ARG:HG2	1:B:56:ARG:NH1	2.35	0.42
1:B:143:GLU:OE1	1:B:146:ARG:NH1	2.53	0.42
1:C:136:TYR:O	1:C:140:ILE:HG13	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:225:SER:O	1:C:226:LYS:C	2.61	0.42
1:F:82:ASN:ND2	1:F:111:ASN:HD21	2.17	0.42
1:F:247:GLU:HB3	1:F:249:TYR:CE1	2.54	0.42
1:G:15:VAL:HG11	1:G:94:LEU:CD1	2.49	0.42
1:G:125:TYR:HD2	1:G:136:TYR:CG	2.38	0.42
1:H:238:LEU:O	1:H:239:GLY:O	2.37	0.42
1:I:16:GLU:HA	1:I:59:GLU:OE2	2.18	0.42
1:I:103:ARG:CD	1:I:133:LEU:HD22	2.50	0.42
1:I:165:LEU:HA	1:I:168:VAL:CB	2.46	0.42
1:I:251:TYR:OH	1:I:293:LEU:HD12	2.19	0.42
1:I:290:LEU:HA	1:I:299:LEU:HD11	2.01	0.42
1:J:11:LYS:HE3	1:J:12:PHE:CZ	2.55	0.42
1:J:20:TRP:CD1	1:J:20:TRP:N	2.83	0.42
1:J:48:LEU:C	1:J:48:LEU:HD23	2.45	0.42
1:J:68:LYS:O	1:J:69:GLY:C	2.62	0.42
1:K:84:ALA:O	1:K:85:PHE:C	2.62	0.42
1:K:210:ARG:HH22	1:K:299:LEU:HA	1.84	0.42
1:K:304:LEU:HD13	1:K:304:LEU:C	2.45	0.42
1:L:280:PRO:CG	1:L:313:GLY:O	2.67	0.42
1:N:40:ILE:HD11	1:N:307:HIS:HB2	2.01	0.42
1:N:52:GLY:HA2	1:N:308:THR:O	2.20	0.42
1:N:317:TYR:O	1:N:320:LYS:N	2.51	0.42
1:O:58:LEU:HA	1:O:58:LEU:HD12	1.79	0.42
1:O:78:ALA:N	1:O:81:SER:HB3	2.26	0.42
1:O:248:LEU:HB2	3:O:1153:HOH:O	2.18	0.42
1:P:32:ARG:NH2	1:S:239:GLY:HA3	2.34	0.42
1:Q:143:GLU:O	1:Q:146:ARG:HG2	2.19	0.42
1:Q:187:VAL:HG21	1:Q:194:THR:HG22	2.01	0.42
1:Q:214:ILE:HG21	1:Q:286:ALA:HA	2.00	0.42
1:S:144:LEU:CD1	1:S:149:ARG:HD3	2.49	0.42
1:S:146:ARG:O	1:S:147:GLU:HG3	2.19	0.42
1:S:149:ARG:O	1:S:151:PRO:HD3	2.19	0.42
1:T:30:ILE:O	1:T:30:ILE:HG22	2.19	0.42
1:V:14:ARG:HH22	1:V:169:ARG:HH21	1.67	0.42
1:V:60:TYR:HB3	1:V:162:ILE:CG1	2.49	0.42
1:W:28:PRO:HD2	1:W:274:GLU:OE2	2.19	0.42
1:W:250:ASP:C	1:W:250:ASP:OD1	2.62	0.42
1:X:15:VAL:O	1:X:17:LEU:HD22	2.20	0.42
1:D:80:HIS:CD2	1:D:80:HIS:C	2.98	0.42
1:D:148:GLY:O	1:D:149:ARG:C	2.63	0.42
1:E:271:GLY:O	1:F:89:LEU:CD1	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:192:GLY:O	1:G:196:ALA:HB2	2.19	0.42
1:G:227:LEU:HD21	1:G:246:PRO:HG2	2.01	0.42
1:I:30:ILE:O	1:I:31:SER:C	2.62	0.42
1:I:49:GLY:O	1:J:277:ILE:HD12	2.20	0.42
1:I:100:LEU:HD12	1:I:100:LEU:N	2.34	0.42
1:I:182:PHE:CZ	1:I:304:LEU:HG	2.55	0.42
1:I:196:ALA:CB	1:I:230:LEU:HD22	2.49	0.42
1:I:266:ILE:O	1:I:268:ARG:N	2.53	0.42
1:J:205:LEU:O	1:J:206:ASN:C	2.61	0.42
1:J:219:PHE:CD2	1:J:220:GLY:N	2.86	0.42
1:J:279:ASP:HA	1:J:314:THR:OG1	2.20	0.42
1:K:83:HIS:CG	1:K:157:GLY:HA2	2.54	0.42
1:K:94:LEU:O	1:K:96:LEU:HG	2.19	0.42
1:L:103:ARG:NH2	1:L:129:ASP:CA	2.80	0.42
1:L:203:SER:CB	1:L:243:GLU:HG2	2.49	0.42
1:L:290:LEU:C	1:L:290:LEU:HD13	2.44	0.42
1:M:5:ILE:CD1	1:M:205:LEU:HD21	2.50	0.42
1:N:317:TYR:O	1:N:319:ASP:N	2.52	0.42
1:O:20:TRP:CE3	1:P:23:PRO:HB2	2.55	0.42
1:O:179:GLU:OE1	1:O:179:GLU:N	2.51	0.42
1:O:220:GLY:O	1:O:224:THR:HG22	2.19	0.42
1:O:293:LEU:HB3	1:O:299:LEU:HG	2.01	0.42
1:P:157:GLY:HA2	2:P:1161:5PA:H92	2.01	0.42
1:Q:32:ARG:NH1	3:Q:1187:HOH:O	2.52	0.42
1:Q:80:HIS:O	1:Q:111:ASN:ND2	2.50	0.42
1:Q:219:PHE:CZ	1:Q:248:LEU:HD23	2.55	0.42
1:R:25:GLN:HE21	1:R:42:ARG:HD3	1.83	0.42
1:R:29:ASN:O	1:R:32:ARG:HB2	2.19	0.42
1:R:76:VAL:HG22	1:R:156:PRO:HG3	2.00	0.42
1:R:91:ALA:HB3	1:R:98:ALA:HB2	2.01	0.42
2:S:1191:5PA:O3	2:S:1191:5PA:N	2.39	0.42
1:T:27:LEU:CA	1:T:274:GLU:OE2	2.68	0.42
1:U:31:SER:OG	1:U:38:VAL:HG12	2.20	0.42
1:U:185:ILE:HA	1:U:304:LEU:O	2.19	0.42
1:U:210:ARG:HH21	1:U:299:LEU:HA	1.84	0.42
1:V:139:GLU:O	1:V:142:GLU:N	2.51	0.42
1:W:79:VAL:O	1:W:112:TYR:HB2	2.19	0.42
1:W:269:LYS:O	1:W:270:VAL:C	2.62	0.42
1:X:202:LEU:HD13	1:X:209:ILE:HG22	2.01	0.42
1:B:201:GLY:O	1:B:202:LEU:C	2.62	0.42
1:B:318:GLY:O	1:B:322:LEU:HG	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:54:LYS:CE	2:C:1031:5PA:H91	2.49	0.42
1:D:202:LEU:HD23	1:D:202:LEU:HA	1.90	0.42
1:D:308:THR:O	2:D:1041:5PA:H2A1	2.19	0.42
1:E:43:ASP:O	1:E:46:THR:HG23	2.19	0.42
1:E:138:GLU:O	1:E:142:GLU:N	2.52	0.42
1:F:269:LYS:HG2	1:F:273:ARG:NH1	2.33	0.42
1:F:291:VAL:O	1:F:295:ARG:HB2	2.19	0.42
1:G:81:SER:C	1:G:111:ASN:ND2	2.77	0.42
1:G:125:TYR:CE2	1:G:136:TYR:CG	3.08	0.42
1:G:320:LYS:O	1:G:324:LEU:CD1	2.68	0.42
1:H:78:ALA:N	1:H:131:PHE:HE2	2.18	0.42
1:H:262:GLU:CD	1:H:262:GLU:H	2.26	0.42
1:I:186:VAL:CA	1:I:212:VAL:O	2.56	0.42
1:I:251:TYR:OH	1:I:292:ASP:HB3	2.20	0.42
1:J:75:THR:OG1	1:J:76:VAL:N	2.52	0.42
1:J:83:HIS:ND1	1:J:83:HIS:C	2.78	0.42
1:K:58:LEU:HD11	1:K:87:THR:HA	2.02	0.42
1:L:130:SER:O	1:L:132:GLU:HG3	2.19	0.42
1:L:187:VAL:HG12	1:L:212:VAL:O	2.20	0.42
1:L:312:SER:C	1:L:314:THR:N	2.77	0.42
1:M:56:ARG:HD2	1:M:167:TYR:CZ	2.54	0.42
1:M:64:ASP:CG	1:M:68:LYS:NZ	2.78	0.42
1:M:72:VAL:CG1	1:M:144:LEU:HD23	2.48	0.42
1:M:103:ARG:HD2	1:M:128:LYS:HA	2.02	0.42
1:N:1:MET:H2	1:N:176:THR:CB	2.30	0.42
1:O:20:TRP:CZ3	1:P:25:GLN:CD	2.98	0.42
1:O:20:TRP:HZ3	1:P:25:GLN:HG2	1.83	0.42
1:O:164:THR:CG2	1:O:165:LEU:N	2.82	0.42
1:O:310:GLY:C	1:O:312:SER:H	2.26	0.42
1:P:116:LYS:O	1:P:119:GLY:N	2.47	0.42
1:P:154:ILE:HA	1:P:155:PRO:HD3	1.88	0.42
1:Q:66:LEU:O	1:Q:69:GLY:N	2.34	0.42
1:Q:233:GLU:OE1	1:T:323:SER:OG	2.27	0.42
1:Q:321:LEU:O	1:Q:325:LEU:CD2	2.61	0.42
1:R:6:PHE:O	1:R:10:ALA:HB2	2.19	0.42
1:R:62:LEU:HD13	1:R:94:LEU:CD1	2.49	0.42
1:R:128:LYS:C	1:R:130:SER:N	2.77	0.42
1:R:165:LEU:HD22	1:R:238:LEU:HD11	2.02	0.42
1:R:180:VAL:CA	1:R:181:LYS:HE2	2.46	0.42
1:S:63:GLY:O	1:S:67:SER:HB3	2.20	0.42
1:S:162:ILE:HD12	1:S:163:GLY:H	1.75	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:266:ILE:HG23	1:T:267:ILE:N	2.35	0.42
1:T:291:VAL:O	1:T:295:ARG:N	2.52	0.42
1:W:1:MET:HA	1:W:1:MET:CE	2.38	0.42
1:W:103:ARG:CZ	1:W:129:ASP:O	2.68	0.42
1:W:251:TYR:OH	1:W:292:ASP:OD1	2.31	0.42
1:X:1:MET:HE3	1:X:5:ILE:HB	2.00	0.42
1:X:261:GLY:CA	1:X:324:LEU:HD23	2.50	0.42
1:A:186:VAL:HG12	1:A:212:VAL:CG1	2.49	0.42
1:B:64:ASP:O	1:B:67:SER:N	2.52	0.42
1:B:279:ASP:OD1	1:B:283:THR:OG1	2.31	0.42
1:C:42:ARG:HH12	1:C:45:LEU:HD21	1.85	0.42
1:C:162:ILE:HD12	1:C:163:GLY:N	2.35	0.42
1:E:102:LEU:C	1:E:133:LEU:HD21	2.45	0.42
1:E:251:TYR:O	1:E:253:PHE:CD1	2.73	0.42
1:F:56:ARG:HG2	1:F:56:ARG:NH1	2.34	0.42
1:F:180:VAL:HG13	1:F:181:LYS:NZ	2.35	0.42
1:F:205:LEU:O	1:F:207:GLU:HG2	2.19	0.42
1:G:25:GLN:HE21	1:G:42:ARG:CD	2.31	0.42
1:G:43:ASP:CG	1:G:56:ARG:HH21	2.27	0.42
1:G:295:ARG:C	1:G:297:GLY:N	2.76	0.42
1:H:31:SER:O	1:H:35:GLY:N	2.53	0.42
1:H:162:ILE:HD12	1:H:165:LEU:HD12	2.02	0.42
1:H:215:ALA:HB2	1:H:248:LEU:CD1	2.46	0.42
1:H:226:LYS:O	1:H:227:LEU:C	2.62	0.42
1:H:229:ASN:ND2	1:H:229:ASN:C	2.76	0.42
1:I:20:TRP:CE3	1:J:23:PRO:HB2	2.55	0.42
1:J:93:LYS:C	1:J:95:GLY:H	2.28	0.42
1:J:158:GLY:O	1:J:160:SER:N	2.45	0.42
1:J:195:LEU:CD1	1:J:227:LEU:HD11	2.44	0.42
1:K:41:LYS:HZ3	1:K:177:GLN:NE2	2.13	0.42
1:L:202:LEU:HD22	1:L:209:ILE:HB	2.01	0.42
1:M:5:ILE:HG13	1:M:205:LEU:HD21	2.00	0.42
1:N:135:LYS:HG3	1:N:136:TYR:N	2.33	0.42
1:O:26:TYR:HB2	1:O:39:TYR:CD2	2.55	0.42
1:O:136:TYR:HD1	1:O:139:GLU:OE2	2.02	0.42
1:P:26:TYR:HB3	1:S:7:ALA:CB	2.49	0.42
1:P:54:LYS:HG3	1:P:83:HIS:CB	2.46	0.42
1:P:318:GLY:O	1:P:319:ASP:C	2.62	0.42
1:Q:285:LYS:O	1:Q:286:ALA:C	2.62	0.42
1:Q:293:LEU:N	1:Q:293:LEU:CD1	2.82	0.42
1:R:251:TYR:HD2	1:R:288:TYR:CD2	2.38	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:233:GLU:O	1:T:237:LEU:HG	2.20	0.42
1:U:58:LEU:O	1:U:62:LEU:HB2	2.20	0.42
1:V:30:ILE:HG21	1:V:287:PHE:HZ	1.84	0.42
1:V:128:LYS:N	1:V:128:LYS:CD	2.70	0.42
1:W:320:LYS:HZ1	1:W:324:LEU:CD2	2.26	0.42
1:X:55:ILE:HD12	1:X:55:ILE:N	2.32	0.42
1:A:160:SER:O	1:A:161:PRO:C	2.62	0.42
1:B:134:MET:O	1:B:134:MET:HG3	2.20	0.42
1:C:112:TYR:HE1	1:C:122:THR:HG21	1.85	0.42
1:C:293:LEU:HB3	1:C:299:LEU:HG	2.01	0.42
1:F:71:ASP:OD1	1:F:150:LYS:N	2.51	0.42
1:F:189:ALA:HB3	1:F:215:ALA:HA	2.01	0.42
1:G:41:LYS:HZ3	1:G:177:GLN:NE2	2.11	0.42
1:G:41:LYS:CD	1:G:174:ILE:HG12	2.46	0.42
1:G:48:LEU:HD23	1:G:89:LEU:HD23	2.02	0.42
1:G:147:GLU:HB3	1:I:221:GLU:C	2.45	0.42
1:G:217:GLY:HA2	1:G:256:TYR:CA	2.50	0.42
1:G:251:TYR:O	1:G:253:PHE:CE1	2.73	0.42
1:G:323:SER:C	1:G:325:LEU:N	2.75	0.42
1:H:41:LYS:HE3	1:H:43:ASP:OD1	2.19	0.42
2:I:1091:5PA:O4P	2:I:1091:5PA:C4A	2.66	0.42
1:J:266:ILE:CG2	1:J:267:ILE:N	2.82	0.42
1:K:108:LEU:HD12	1:K:108:LEU:HA	1.83	0.42
1:K:138:GLU:OE1	1:K:138:GLU:CA	2.68	0.42
1:M:194:THR:O	1:M:198:LEU:HB2	2.20	0.42
1:N:198:LEU:HD23	1:N:198:LEU:HA	1.90	0.42
1:O:8:LEU:HD23	1:T:28:PRO:HB3	2.01	0.42
1:O:43:ASP:OD1	1:O:56:ARG:NH2	2.53	0.42
1:P:107:GLU:O	1:P:108:LEU:HD13	2.20	0.42
1:P:112:TYR:O	1:P:113:LEU:C	2.62	0.42
1:P:210:ARG:HA	1:P:211:PRO:HD3	1.73	0.42
1:P:222:VAL:CG1	1:P:223:MET:N	2.83	0.42
1:P:265:GLN:O	1:P:269:LYS:CG	2.64	0.42
1:P:307:HIS:CE1	1:P:309:GLY:HA2	2.54	0.42
1:R:9:LEU:CD2	1:R:238:LEU:HD21	2.49	0.42
1:R:143:GLU:O	1:R:146:ARG:HB2	2.20	0.42
1:S:41:LYS:HZ3	1:S:177:GLN:HE22	1.60	0.42
1:S:279:ASP:OD2	1:S:281:VAL:HG13	2.20	0.42
1:U:218:ARG:H	1:U:218:ARG:HD2	1.85	0.42
1:U:222:VAL:O	1:U:226:LYS:CB	2.67	0.42
1:V:134:MET:O	1:V:138:GLU:HG2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:265:GLN:HG3	1:V:269:LYS:HE2	2.02	0.42
1:W:5:ILE:HD12	1:W:172:GLY:N	2.35	0.42
1:W:145:LYS:HD2	1:W:151:PRO:CG	2.49	0.42
1:X:268:ARG:O	1:X:272:THR:HG23	2.19	0.42
1:A:171:VAL:CG2	1:A:201:GLY:HA3	2.50	0.42
1:C:27:LEU:CB	1:C:274:GLU:OE2	2.66	0.42
1:C:198:LEU:HD11	1:C:306:ILE:HD12	2.01	0.42
1:C:200:LEU:HD21	1:C:204:ILE:HD11	2.01	0.42
1:C:219:PHE:CZ	1:C:224:THR:HA	2.54	0.42
1:D:243:GLU:O	1:D:244:VAL:C	2.62	0.42
1:E:218:ARG:NE	1:E:255:GLU:HB2	2.31	0.42
1:F:1:MET:O	1:F:2:HIS:C	2.63	0.42
1:F:56:ARG:NH1	3:F:1070:HOH:O	2.43	0.42
1:F:158:GLY:O	1:F:160:SER:N	2.47	0.42
1:G:76:VAL:HG12	1:G:101:VAL:HB	2.02	0.42
1:G:174:ILE:HD13	1:G:304:LEU:HD11	2.01	0.42
1:G:181:LYS:H	1:G:181:LYS:HE2	1.85	0.42
1:G:210:ARG:HA	1:G:211:PRO:HD3	1.87	0.42
1:G:217:GLY:HA2	1:G:256:TYR:HA	2.01	0.42
1:G:258:LYS:HA	3:G:1077:HOH:O	2.19	0.42
1:H:229:ASN:HD21	1:H:233:GLU:CD	2.28	0.42
1:I:106:GLU:OE2	1:I:124:VAL:HB	2.20	0.42
1:I:195:LEU:HD11	1:I:213:GLY:HA3	2.02	0.42
1:I:229:ASN:HD21	1:I:233:GLU:HG3	1.83	0.42
1:J:184:SER:HA	1:J:210:ARG:O	2.20	0.42
1:K:9:LEU:HD23	1:K:238:LEU:CD2	2.47	0.42
1:K:66:LEU:HD21	1:K:96:LEU:HD21	2.00	0.42
1:K:67:SER:C	1:K:69:GLY:N	2.78	0.42
1:K:292:ASP:C	1:K:294:ALA:N	2.78	0.42
1:K:320:LYS:HG3	1:K:320:LYS:O	2.20	0.42
1:L:154:ILE:HA	1:L:155:PRO:HD3	1.93	0.42
1:M:142:GLU:O	1:M:146:ARG:CB	2.67	0.42
1:N:134:MET:O	1:N:138:GLU:CG	2.66	0.42
1:O:114:LEU:O	1:O:115:ASP:C	2.63	0.42
1:P:171:VAL:CG2	1:P:172:GLY:N	2.80	0.42
1:P:230:LEU:HD23	1:P:230:LEU:HA	1.88	0.42
1:R:218:ARG:O	1:R:219:PHE:HB2	2.19	0.42
1:T:141:ALA:C	1:T:143:GLU:N	2.77	0.42
1:V:39:TYR:CD1	1:V:182:PHE:HE2	2.38	0.42
1:V:232:LYS:HE2	1:V:232:LYS:HB3	1.95	0.42
1:W:27:LEU:O	1:W:31:SER:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:54:LYS:HG3	1:W:83:HIS:HB2	2.02	0.42
1:W:281:VAL:HG13	1:W:282:TYR:CE1	2.54	0.42
1:X:15:VAL:HG11	1:X:94:LEU:HD21	2.02	0.42
1:X:177:GLN:CG	1:X:178:SER:N	2.83	0.42
1:B:162:ILE:HD12	1:B:165:LEU:CD1	2.50	0.42
1:C:15:VAL:HG23	1:C:63:GLY:HA2	2.02	0.42
1:C:58:LEU:HD13	1:C:61:LEU:HD12	2.01	0.42
1:C:100:LEU:HB3	1:C:102:LEU:HD21	2.01	0.42
1:C:225:SER:C	1:C:227:LEU:N	2.74	0.42
1:D:181:LYS:HG2	1:D:302:LYS:HZ3	1.85	0.42
1:F:314:THR:O	1:F:314:THR:HG22	2.20	0.42
1:G:181:LYS:HE2	1:G:181:LYS:N	2.35	0.42
1:G:208:ASP:OD1	1:G:208:ASP:N	2.52	0.42
1:H:74:ILE:CG2	1:H:75:THR:N	2.82	0.42
1:H:290:LEU:HD22	1:H:299:LEU:HD13	2.01	0.42
1:H:307:HIS:CE1	1:H:309:GLY:HA2	2.55	0.42
1:I:273:ARG:HD3	3:I:1116:HOH:O	2.19	0.42
1:J:40:ILE:CD1	1:J:305:PHE:HD2	2.33	0.42
1:J:315:PHE:C	1:J:317:TYR:H	2.28	0.42
1:K:147:GLU:O	1:K:149:ARG:N	2.52	0.42
1:K:268:ARG:NH2	1:K:325:LEU:CB	2.79	0.42
1:M:25:GLN:NE2	1:M:42:ARG:HG3	2.35	0.42
1:M:48:LEU:HB3	1:M:55:ILE:CD1	2.49	0.42
1:M:129:ASP:OD2	1:M:130:SER:N	2.44	0.42
1:M:135:LYS:HE3	1:M:136:TYR:CE1	2.54	0.42
1:O:32:ARG:C	1:O:34:ILE:N	2.77	0.42
1:O:58:LEU:CD2	1:O:86:VAL:HG12	2.49	0.42
1:O:145:LYS:O	1:O:147:GLU:N	2.52	0.42
1:O:195:LEU:O	1:O:196:ALA:C	2.61	0.42
1:O:292:ASP:O	1:O:296:LYS:HG3	2.20	0.42
1:P:41:LYS:HZ1	1:P:177:GLN:HE22	1.65	0.42
1:Q:56:ARG:HG2	1:Q:56:ARG:NH1	2.34	0.42
1:R:5:ILE:HD11	1:R:205:LEU:CD2	2.49	0.42
1:R:186:VAL:HB	1:R:290:LEU:HD23	2.02	0.42
1:R:214:ILE:CG2	1:R:251:TYR:HB2	2.50	0.42
1:R:217:GLY:O	1:R:218:ARG:O	2.38	0.42
1:S:168:VAL:HG21	1:S:200:LEU:HD13	2.02	0.42
1:S:290:LEU:C	1:S:290:LEU:CD1	2.93	0.42
1:T:29:ASN:O	1:T:31:SER:N	2.52	0.42
1:T:112:TYR:OH	1:T:122:THR:HG21	2.20	0.42
1:T:130:SER:O	1:T:131:PHE:C	2.63	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:224:THR:HG22	1:T:225:SER:N	2.34	0.42
1:U:53:ASN:HB3	1:U:308:THR:HG22	2.02	0.42
1:U:263:VAL:HA	1:U:266:ILE:HG22	2.02	0.42
1:V:128:LYS:C	1:V:130:SER:N	2.77	0.42
1:V:160:SER:O	1:V:161:PRO:C	2.61	0.42
1:V:162:ILE:CG2	1:V:163:GLY:N	2.82	0.42
1:W:42:ARG:NH2	1:X:47:GLY:O	2.53	0.42
1:W:58:LEU:HA	1:W:58:LEU:HD12	1.86	0.42
1:W:207:GLU:C	1:W:209:ILE:N	2.76	0.42
1:X:65:ALA:HA	1:X:152:TYR:CD1	2.55	0.42
1:X:105:LYS:O	1:X:107:GLU:N	2.45	0.42
1:X:264:ALA:HB1	1:X:325:LEU:HD21	2.02	0.42
1:B:127:ALA:HB3	1:B:133:LEU:CD1	2.50	0.41
1:C:135:LYS:HA	1:C:138:GLU:CG	2.50	0.41
1:C:227:LEU:HD12	1:C:231:ILE:HD12	2.02	0.41
1:C:288:TYR:O	1:C:289:GLY:C	2.62	0.41
1:E:34:ILE:HG21	1:E:291:VAL:CG1	2.46	0.41
1:E:84:ALA:C	1:E:100:LEU:HD21	2.45	0.41
1:E:319:ASP:O	1:E:322:LEU:HB2	2.19	0.41
1:G:41:LYS:CE	1:G:177:GLN:HE22	2.33	0.41
1:G:103:ARG:NE	1:G:130:SER:O	2.52	0.41
1:G:249:TYR:CE2	1:G:293:LEU:HD21	2.55	0.41
1:I:29:ASN:N	1:I:274:GLU:OE2	2.53	0.41
1:I:111:ASN:OD1	1:I:312:SER:CB	2.68	0.41
1:J:34:ILE:CG1	1:J:291:VAL:HG13	2.50	0.41
1:J:54:LYS:HG3	1:J:83:HIS:CA	2.48	0.41
1:J:268:ARG:HD2	1:J:325:LEU:HD12	2.02	0.41
1:J:272:THR:C	1:J:273:ARG:HG3	2.44	0.41
1:K:15:VAL:HG12	1:K:17:LEU:HD13	2.02	0.41
1:K:152:TYR:CD2	1:K:152:TYR:O	2.72	0.41
1:K:235:ALA:O	1:K:240:VAL:O	2.38	0.41
1:K:264:ALA:HA	1:K:321:LEU:HD22	2.02	0.41
1:K:321:LEU:C	1:K:323:SER:H	2.26	0.41
1:L:64:ASP:O	1:L:67:SER:HB2	2.20	0.41
1:L:145:LYS:C	1:L:147:GLU:N	2.78	0.41
1:L:265:GLN:O	1:L:269:LYS:N	2.50	0.41
1:L:293:LEU:HB3	1:L:299:LEU:HG	2.02	0.41
1:M:5:ILE:HG22	1:M:9:LEU:CD1	2.50	0.41
1:M:54:LYS:HE3	2:M:1131:5PA:C9	2.46	0.41
1:M:164:THR:O	1:M:165:LEU:C	2.62	0.41
1:M:226:LYS:O	1:M:230:LEU:N	2.52	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:85:PHE:CE2	1:O:114:LEU:HD13	2.55	0.41
1:O:145:LYS:CB	1:O:151:PRO:HD2	2.49	0.41
1:R:116:LYS:O	1:R:117:ILE:C	2.62	0.41
1:R:214:ILE:N	1:R:214:ILE:HD13	2.34	0.41
1:R:253:PHE:HD2	1:R:260:THR:HG21	1.80	0.41
1:R:260:THR:C	1:R:324:LEU:HD23	2.45	0.41
1:T:243:GLU:N	1:T:243:GLU:OE2	2.53	0.41
1:T:322:LEU:C	1:T:324:LEU:N	2.74	0.41
1:U:279:ASP:OD2	1:U:281:VAL:HG13	2.20	0.41
1:V:5:ILE:HD13	1:V:204:ILE:HG21	2.02	0.41
1:W:139:GLU:CG	1:W:140:ILE:H	2.31	0.41
1:W:156:PRO:C	1:W:158:GLY:H	2.28	0.41
1:W:183:ASP:OD2	1:W:302:LYS:HB2	2.20	0.41
1:W:186:VAL:CG1	1:W:212:VAL:HB	2.49	0.41
1:W:315:PHE:CZ	1:X:114:LEU:HD11	2.55	0.41
1:X:34:ILE:O	1:X:34:ILE:CG2	2.67	0.41
1:X:255:GLU:HG3	1:X:258:LYS:HB2	2.02	0.41
1:A:79:VAL:HG23	1:A:103:ARG:C	2.45	0.41
1:A:82:ASN:HD22	1:A:111:ASN:HD21	1.66	0.41
1:A:196:ALA:HB2	1:A:230:LEU:HD13	2.01	0.41
1:B:25:GLN:HE21	1:B:42:ARG:CD	2.34	0.41
1:B:128:LYS:O	1:B:130:SER:N	2.54	0.41
1:C:21:GLU:HG2	1:C:173:GLU:CD	2.45	0.41
1:C:41:LYS:HB2	1:C:304:LEU:HD21	2.01	0.41
1:C:72:VAL:HG13	1:C:72:VAL:O	2.20	0.41
1:C:219:PHE:CD2	1:C:223:MET:HE3	2.55	0.41
1:C:320:LYS:HZ2	1:C:324:LEU:HD11	1.80	0.41
1:E:80:HIS:CD2	1:E:80:HIS:C	2.98	0.41
1:F:69:GLY:O	1:F:150:LYS:HD2	2.20	0.41
1:F:154:ILE:HA	1:F:155:PRO:HD3	1.91	0.41
1:G:56:ARG:CG	1:G:56:ARG:NH1	2.82	0.41
1:G:78:ALA:C	1:G:80:HIS:H	2.27	0.41
1:G:259:ILE:HD12	1:G:320:LYS:HG2	2.01	0.41
1:I:53:ASN:CB	1:I:167:TYR:OH	2.69	0.41
1:I:230:LEU:HD23	1:I:230:LEU:C	2.45	0.41
1:I:322:LEU:HD21	1:J:116:LYS:HB2	2.01	0.41
1:J:9:LEU:HD11	1:J:168:VAL:HB	2.02	0.41
1:J:82:ASN:ND2	1:J:111:ASN:ND2	2.68	0.41
1:L:112:TYR:O	1:L:115:ASP:HB2	2.20	0.41
1:M:181:LYS:CE	1:M:302:LYS:HZ3	2.18	0.41
1:O:102:LEU:O	1:O:124:VAL:HA	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:125:TYR:C	1:O:127:ALA:N	2.77	0.41
1:P:19:PRO:HG2	1:P:20:TRP:H	1.85	0.41
1:P:203:SER:OG	1:P:243:GLU:CG	2.64	0.41
1:Q:31:SER:HG	1:Q:38:VAL:H	1.62	0.41
1:Q:320:LYS:HA	1:Q:320:LYS:HD2	1.86	0.41
1:R:9:LEU:HD23	1:R:238:LEU:CD2	2.47	0.41
1:S:187:VAL:HG21	1:S:194:THR:HG22	1.99	0.41
1:T:155:PRO:O	1:T:156:PRO:C	2.63	0.41
1:T:165:LEU:O	1:T:168:VAL:HB	2.20	0.41
1:V:14:ARG:NH2	1:V:169:ARG:CZ	2.83	0.41
1:V:261:GLY:O	1:V:265:GLN:HB2	2.21	0.41
1:W:15:VAL:HG23	1:W:63:GLY:HA2	2.01	0.41
1:X:201:GLY:O	1:X:204:ILE:HB	2.20	0.41
1:A:140:ILE:O	1:A:143:GLU:HG2	2.19	0.41
1:B:2:HIS:CG	1:B:3:PRO:HD2	2.55	0.41
1:B:99:ILE:CG2	1:B:123:ARG:HD2	2.50	0.41
1:B:200:LEU:HD22	1:B:204:ILE:HD11	2.02	0.41
1:B:222:VAL:CG1	1:B:223:MET:N	2.82	0.41
1:C:65:ALA:C	1:C:67:SER:N	2.77	0.41
1:C:102:LEU:O	1:C:133:LEU:HD11	2.20	0.41
1:D:320:LYS:O	1:D:324:LEU:HD22	2.20	0.41
1:F:157:GLY:CA	2:F:1061:5PA:C9	2.91	0.41
1:G:17:LEU:HD22	1:G:17:LEU:N	2.35	0.41
1:G:181:LYS:CE	1:G:302:LYS:HD2	2.47	0.41
1:H:156:PRO:C	1:H:158:GLY:N	2.74	0.41
1:H:218:ARG:O	1:H:223:MET:SD	2.78	0.41
1:I:8:LEU:HD21	1:L:28:PRO:HB3	2.02	0.41
1:I:40:ILE:HD11	1:I:307:HIS:HB2	2.01	0.41
1:I:79:VAL:HG13	1:I:112:TYR:CD1	2.55	0.41
1:K:86:VAL:HG12	1:K:87:THR:N	2.35	0.41
1:K:188:ALA:HA	1:K:286:ALA:HB1	2.02	0.41
1:L:186:VAL:HB	1:L:290:LEU:HD23	2.02	0.41
1:M:84:ALA:HB1	1:M:100:LEU:HD23	2.02	0.41
1:M:212:VAL:HG13	1:M:249:TYR:CE1	2.56	0.41
1:M:221:GLU:HG3	1:M:222:VAL:N	2.35	0.41
1:M:248:LEU:C	1:M:249:TYR:CD1	2.98	0.41
1:N:195:LEU:HD11	1:N:246:PRO:CG	2.49	0.41
1:N:222:VAL:CG1	1:N:223:MET:H	2.31	0.41
1:O:30:ILE:HB	1:O:38:VAL:HG11	2.01	0.41
1:O:142:GLU:OE1	1:O:145:LYS:CD	2.68	0.41
1:O:165:LEU:HA	1:O:168:VAL:HG23	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:109:LYS:HA	1:P:113:LEU:HG	2.03	0.41
1:P:135:LYS:HG3	1:P:136:TYR:N	2.35	0.41
1:P:258:LYS:O	1:P:260:THR:HG23	2.20	0.41
1:Q:8:LEU:O	1:Q:238:LEU:HD22	2.20	0.41
1:Q:202:LEU:CD2	1:Q:209:ILE:HD12	2.51	0.41
1:S:181:LYS:N	1:S:181:LYS:HD3	2.35	0.41
1:T:154:ILE:HA	1:T:155:PRO:HD3	1.83	0.41
1:T:207:GLU:HB3	1:T:209:ILE:HG13	2.02	0.41
1:W:21:GLU:HA	1:W:173:GLU:OE1	2.20	0.41
1:W:53:ASN:ND2	1:W:194:THR:OG1	2.53	0.41
1:W:54:LYS:HZ2	1:W:157:GLY:C	2.27	0.41
1:W:131:PHE:O	1:W:133:LEU:N	2.53	0.41
1:X:18:ILE:CG1	1:X:55:ILE:HG22	2.51	0.41
1:X:165:LEU:HA	1:X:168:VAL:HG23	2.02	0.41
1:X:251:TYR:C	1:X:253:PHE:H	2.27	0.41
1:A:54:LYS:HD3	1:A:57:LYS:HZ3	1.86	0.41
1:B:34:ILE:HG21	1:B:294:ALA:CB	2.49	0.41
1:C:11:LYS:O	1:C:11:LYS:CG	2.68	0.41
1:C:266:ILE:O	1:C:270:VAL:HG23	2.20	0.41
1:D:127:ALA:HB2	1:D:136:TYR:HE2	1.84	0.41
1:D:219:PHE:CE2	1:D:248:LEU:CD2	3.00	0.41
1:D:245:ARG:HB2	1:D:246:PRO:HD2	2.02	0.41
1:D:264:ALA:HA	1:D:321:LEU:HD22	2.01	0.41
1:E:30:ILE:HG21	1:E:287:PHE:HZ	1.85	0.41
1:E:103:ARG:HB3	1:E:133:LEU:CD1	2.50	0.41
1:F:103:ARG:HH21	1:F:131:PHE:HA	1.85	0.41
1:F:127:ALA:HB1	1:F:128:LYS:HZ1	1.85	0.41
1:F:174:ILE:O	1:F:178:SER:CB	2.68	0.41
1:H:41:LYS:HZ1	1:H:177:GLN:NE2	2.11	0.41
1:H:43:ASP:OD2	1:H:56:ARG:NE	2.48	0.41
1:H:167:TYR:HA	1:H:170:ALA:HB3	2.01	0.41
1:H:178:SER:OG	1:H:179:GLU:N	2.54	0.41
1:H:185:ILE:HA	1:H:304:LEU:O	2.20	0.41
1:H:311:ILE:O	1:H:312:SER:C	2.62	0.41
1:I:187:VAL:HG12	1:I:195:LEU:HG	2.02	0.41
1:I:259:ILE:O	1:I:324:LEU:HD21	2.20	0.41
1:I:264:ALA:HB1	1:I:325:LEU:CD2	2.38	0.41
1:J:133:LEU:CD1	1:J:133:LEU:H	2.32	0.41
1:K:102:LEU:HD12	1:K:124:VAL:HG22	2.02	0.41
1:L:58:LEU:HD12	1:L:58:LEU:HA	1.82	0.41
1:M:79:VAL:HG23	1:M:103:ARG:O	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:165:LEU:CD2	1:N:238:LEU:HD21	2.50	0.41
1:N:165:LEU:HD21	1:N:238:LEU:HD21	2.03	0.41
1:N:247:GLU:HB3	1:N:249:TYR:CE1	2.45	0.41
1:O:43:ASP:CG	1:O:56:ARG:HH21	2.27	0.41
1:O:54:LYS:HG3	1:O:83:HIS:HA	2.01	0.41
1:O:195:LEU:O	1:O:199:SER:OG	2.33	0.41
1:O:210:ARG:HA	1:O:211:PRO:HD3	1.86	0.41
1:P:26:TYR:C	1:P:27:LEU:HD23	2.45	0.41
1:P:247:GLU:CB	1:P:249:TYR:HE1	2.27	0.41
1:Q:210:ARG:CB	1:Q:210:ARG:HH11	2.33	0.41
1:Q:242:VAL:HG22	1:Q:243:GLU:N	2.36	0.41
1:Q:298:GLU:O	1:Q:299:LEU:CG	2.57	0.41
1:S:58:LEU:O	1:S:62:LEU:N	2.53	0.41
1:U:244:VAL:CG1	1:U:245:ARG:N	2.83	0.41
1:V:218:ARG:HB2	1:V:218:ARG:NH1	2.03	0.41
1:W:106:GLU:CG	1:W:124:VAL:HG11	2.47	0.41
1:W:229:ASN:HA	1:W:232:LYS:CD	2.50	0.41
1:X:22:THR:HA	1:X:23:PRO:HD2	1.90	0.41
1:X:319:ASP:O	1:X:322:LEU:HB2	2.20	0.41
1:C:210:ARG:NH1	1:C:247:GLU:OE1	2.53	0.41
1:C:225:SER:O	1:C:228:ASP:N	2.54	0.41
1:C:295:ARG:C	1:C:297:GLY:N	2.78	0.41
1:D:219:PHE:O	1:D:222:VAL:HG13	2.20	0.41
1:E:224:THR:HG21	3:E:1086:HOH:O	2.19	0.41
1:F:220:GLY:O	1:F:224:THR:HG22	2.20	0.41
1:G:40:ILE:HG13	1:G:305:PHE:HD2	1.85	0.41
1:G:75:THR:HG23	1:G:76:VAL:N	2.35	0.41
1:G:283:THR:O	1:G:286:ALA:N	2.53	0.41
1:G:287:PHE:O	1:G:291:VAL:HG23	2.21	0.41
1:H:74:ILE:CG2	1:H:75:THR:H	2.32	0.41
1:H:229:ASN:HD21	1:H:233:GLU:CG	2.32	0.41
1:H:316:HIS:ND1	1:H:317:TYR:CE1	2.89	0.41
1:I:242:VAL:O	1:I:243:GLU:O	2.38	0.41
1:J:130:SER:OG	1:J:132:GLU:CD	2.64	0.41
1:K:167:TYR:CG	1:K:194:THR:HG23	2.55	0.41
1:K:184:SER:HA	1:K:210:ARG:O	2.20	0.41
1:L:29:ASN:C	1:L:31:SER:N	2.77	0.41
1:L:57:LYS:NZ	1:L:194:THR:OG1	2.51	0.41
1:L:185:ILE:CG2	1:L:306:ILE:HD11	2.50	0.41
1:M:181:LYS:H	1:M:181:LYS:HE2	1.86	0.41
1:N:160:SER:OG	1:N:162:ILE:HG22	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:304:LEU:CD2	1:O:304:LEU:C	2.94	0.41
1:P:76:VAL:HG11	1:P:134:MET:SD	2.60	0.41
1:P:287:PHE:HA	1:P:290:LEU:CB	2.51	0.41
1:Q:168:VAL:HG13	1:Q:204:ILE:HD12	2.02	0.41
1:Q:269:LYS:C	1:Q:271:GLY:N	2.78	0.41
1:Q:316:HIS:HB3	1:Q:317:TYR:CD1	2.55	0.41
1:R:53:ASN:OD1	1:R:53:ASN:N	2.44	0.41
1:S:93:LYS:C	1:S:95:GLY:N	2.78	0.41
1:S:154:ILE:HA	1:S:155:PRO:HD3	1.85	0.41
1:S:188:ALA:HA	1:S:214:ILE:HG23	2.02	0.41
1:T:103:ARG:HH11	1:T:103:ARG:HG2	1.85	0.41
1:U:20:TRP:CD1	1:V:20:TRP:CZ3	3.07	0.41
1:U:30:ILE:O	1:U:34:ILE:HG23	2.20	0.41
1:U:164:THR:C	1:U:166:GLY:N	2.77	0.41
1:V:138:GLU:O	1:V:142:GLU:N	2.52	0.41
1:V:196:ALA:HA	1:V:231:ILE:HG21	2.03	0.41
1:W:53:ASN:OD1	1:W:308:THR:HB	2.20	0.41
1:W:87:THR:HG21	1:W:154:ILE:HD12	2.01	0.41
1:W:285:LYS:C	1:W:287:PHE:N	2.77	0.41
1:X:27:LEU:HA	1:X:274:GLU:OE2	2.20	0.41
1:A:114:LEU:HD21	1:B:315:PHE:CZ	2.55	0.41
1:A:147:GLU:C	1:A:149:ARG:H	2.24	0.41
1:A:185:ILE:HG23	1:A:304:LEU:HD13	2.01	0.41
1:A:222:VAL:HG13	1:A:223:MET:N	2.36	0.41
1:D:42:ARG:C	1:D:44:ASP:H	2.28	0.41
1:D:82:ASN:ND2	1:D:310:GLY:HA2	2.35	0.41
1:D:269:LYS:HD3	1:D:273:ARG:NH2	2.33	0.41
1:F:93:LYS:NZ	3:F:1080:HOH:O	2.53	0.41
1:G:12:PHE:CZ	1:G:237:LEU:O	2.74	0.41
1:G:37:ASP:HB2	1:G:301:GLU:O	2.21	0.41
1:G:220:GLY:C	3:G:1074:HOH:O	2.62	0.41
1:H:15:VAL:HG11	1:H:94:LEU:HD22	2.03	0.41
1:H:74:ILE:O	1:H:75:THR:HB	2.20	0.41
1:H:299:LEU:HB3	1:H:303:ILE:CG1	2.50	0.41
1:J:1:MET:HE3	1:J:2:HIS:N	2.36	0.41
1:J:9:LEU:HD22	1:J:165:LEU:HD13	2.02	0.41
1:K:9:LEU:O	1:K:11:LYS:N	2.53	0.41
1:K:179:GLU:O	1:K:179:GLU:HG2	2.21	0.41
1:L:262:GLU:HA	3:L:1131:HOH:O	2.20	0.41
1:N:274:GLU:OE1	1:N:274:GLU:CA	2.61	0.41
1:O:40:ILE:HD13	1:O:276:ILE:HD13	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:74:ILE:O	1:O:153:VAL:HA	2.21	0.41
1:O:174:ILE:HD13	1:O:304:LEU:CD1	2.38	0.41
1:P:1:MET:CE	1:P:1:MET:CA	2.90	0.41
1:P:72:VAL:HG23	1:P:97:ASP:CB	2.34	0.41
1:P:225:SER:HB3	1:P:226:LYS:H	1.73	0.41
1:P:265:GLN:HG3	1:P:269:LYS:CE	2.25	0.41
1:Q:43:ASP:C	1:Q:45:LEU:N	2.78	0.41
1:Q:158:GLY:C	1:Q:160:SER:H	2.28	0.41
1:Q:195:LEU:CD1	1:Q:248:LEU:HD13	2.50	0.41
1:R:17:LEU:CD2	1:R:59:GLU:HG2	2.51	0.41
1:R:216:VAL:HG11	1:R:282:TYR:HA	2.03	0.41
1:S:48:LEU:HA	1:T:275:GLY:O	2.21	0.41
1:S:53:ASN:CB	1:S:167:TYR:OH	2.69	0.41
1:T:144:LEU:CD2	1:T:149:ARG:NH1	2.71	0.41
1:U:169:ARG:NH2	3:U:1235:HOH:O	2.53	0.41
1:W:71:ASP:OD1	1:W:149:ARG:NH2	2.54	0.41
1:W:181:LYS:CD	1:W:181:LYS:N	2.68	0.41
1:X:279:ASP:OD2	1:X:282:TYR:HD1	2.04	0.41
1:A:269:LYS:HG2	1:A:273:ARG:CZ	2.51	0.41
1:B:74:ILE:HD13	1:B:140:ILE:HG22	2.03	0.41
1:B:138:GLU:O	1:B:139:GLU:C	2.64	0.41
1:B:261:GLY:N	1:B:324:LEU:HD23	2.35	0.41
1:C:164:THR:C	1:C:166:GLY:N	2.77	0.41
1:C:219:PHE:CE2	1:C:224:THR:CA	3.03	0.41
1:D:171:VAL:CG2	1:D:172:GLY:N	2.84	0.41
1:E:146:ARG:O	1:E:146:ARG:CG	2.68	0.41
1:F:66:LEU:HD23	1:F:66:LEU:HA	1.83	0.41
1:F:308:THR:OG1	2:F:1061:5PA:N1	2.50	0.41
1:G:252:SER:O	1:G:253:PHE:CB	2.67	0.41
1:G:295:ARG:C	1:G:297:GLY:H	2.27	0.41
1:I:134:MET:SD	1:I:156:PRO:HD3	2.60	0.41
1:I:228:ASP:OD2	1:I:245:ARG:NH1	2.54	0.41
1:J:249:TYR:CE2	1:J:293:LEU:HD11	2.55	0.41
1:K:38:VAL:CG2	1:K:290:LEU:HD21	2.50	0.41
1:K:146:ARG:O	1:K:146:ARG:HG3	2.21	0.41
1:K:298:GLU:O	1:K:299:LEU:HD23	2.21	0.41
1:N:25:GLN:HE21	1:N:42:ARG:CD	2.33	0.41
1:P:53:ASN:N	3:P:1162:HOH:O	2.53	0.41
1:P:133:LEU:HD13	1:P:133:LEU:N	2.34	0.41
1:P:278:LEU:HB3	1:P:283:THR:OG1	2.21	0.41
1:Q:116:LYS:HZ1	1:Q:122:THR:CG2	2.33	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:15:VAL:HG23	1:R:63:GLY:CA	2.50	0.41
1:R:233:GLU:O	1:R:236:GLU:HB2	2.21	0.41
1:S:78:ALA:O	1:S:80:HIS:N	2.54	0.41
1:T:56:ARG:HD2	1:T:167:TYR:CE1	2.56	0.41
1:T:160:SER:O	1:T:163:GLY:N	2.53	0.41
1:V:70:ALA:CB	1:V:152:TYR:HB2	2.51	0.41
1:V:127:ALA:O	1:V:128:LYS:C	2.64	0.41
1:V:210:ARG:HA	1:V:211:PRO:HD3	1.97	0.41
1:V:210:ARG:HH22	1:V:299:LEU:HA	1.85	0.41
1:W:53:ASN:HD22	1:W:57:LYS:NZ	2.18	0.41
1:W:214:ILE:HD11	1:W:251:TYR:CB	2.51	0.41
1:X:280:PRO:HB3	1:X:321:LEU:HD11	2.02	0.41
1:A:20:TRP:NE1	1:B:20:TRP:CZ3	2.89	0.41
1:A:48:LEU:HB3	1:A:55:ILE:HG13	2.03	0.41
1:B:48:LEU:C	1:B:48:LEU:CD2	2.94	0.41
1:B:103:ARG:HD2	1:B:127:ALA:O	2.21	0.41
1:D:143:GLU:O	1:D:144:LEU:C	2.62	0.41
1:D:186:VAL:HG21	1:D:290:LEU:HD23	2.02	0.41
1:D:195:LEU:O	1:D:199:SER:OG	2.32	0.41
1:E:53:ASN:OD1	1:E:53:ASN:N	2.46	0.41
1:E:187:VAL:HG22	1:E:188:ALA:N	2.36	0.41
1:F:225:SER:O	1:F:228:ASP:HB2	2.21	0.41
1:G:199:SER:OG	1:G:246:PRO:HB3	2.20	0.41
1:G:294:ALA:O	1:G:297:GLY:N	2.53	0.41
1:I:80:HIS:NE2	1:I:256:TYR:OH	2.47	0.41
1:I:128:LYS:O	1:I:129:ASP:CB	2.69	0.41
1:I:279:ASP:O	1:I:284:GLY:N	2.54	0.41
1:J:26:TYR:CD2	1:K:4:LYS:HA	2.56	0.41
1:J:181:LYS:HE2	1:J:302:LYS:HZ2	1.86	0.41
1:J:189:ALA:HB1	1:J:223:MET:CE	2.43	0.41
1:J:263:VAL:O	1:J:263:VAL:HG12	2.21	0.41
1:K:195:LEU:HD11	1:K:248:LEU:CD1	2.50	0.41
1:K:195:LEU:CD1	1:K:248:LEU:CD1	2.99	0.41
1:K:248:LEU:HA	1:K:248:LEU:HD12	1.80	0.41
1:L:36:ALA:HB1	1:L:301:GLU:O	2.21	0.41
1:L:103:ARG:NH1	1:L:129:ASP:CA	2.83	0.41
1:L:195:LEU:HD11	1:L:246:PRO:CG	2.51	0.41
1:L:224:THR:HG22	1:L:225:SER:H	1.86	0.41
1:M:72:VAL:CA	1:M:97:ASP:O	2.65	0.41
1:M:93:LYS:HG3	1:N:273:ARG:O	2.20	0.41
1:N:164:THR:HG23	1:N:197:GLY:N	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:279:ASP:OD1	1:N:283:THR:OG1	2.31	0.41
1:O:41:LYS:HE2	1:O:174:ILE:CG1	2.51	0.41
1:P:5:ILE:HG22	1:P:9:LEU:CD1	2.46	0.41
1:P:106:GLU:HG3	1:P:124:VAL:CG1	2.34	0.41
1:P:128:LYS:O	1:P:130:SER:N	2.47	0.41
1:P:226:LYS:O	1:P:227:LEU:C	2.63	0.41
1:P:321:LEU:O	1:P:325:LEU:CD2	2.68	0.41
1:Q:214:ILE:HD13	1:Q:286:ALA:O	2.21	0.41
1:R:12:PHE:CZ	1:R:238:LEU:HD23	2.55	0.41
1:R:66:LEU:CD2	1:R:96:LEU:HD21	2.50	0.41
1:R:133:LEU:N	1:R:133:LEU:CD1	2.83	0.41
1:T:109:LYS:HB3	1:T:109:LYS:HE2	1.79	0.41
1:T:128:LYS:N	1:T:128:LYS:CD	2.77	0.41
1:U:72:VAL:O	1:U:72:VAL:CG1	2.69	0.41
1:V:53:ASN:HA	1:V:167:TYR:OH	2.21	0.41
1:W:253:PHE:CD2	1:W:260:THR:CG2	3.03	0.41
1:X:29:ASN:C	1:X:31:SER:N	2.75	0.41
1:X:54:LYS:HA	1:X:54:LYS:HD3	1.92	0.41
1:A:41:LYS:HB2	1:A:304:LEU:HD21	2.02	0.41
1:B:138:GLU:O	1:B:142:GLU:N	2.54	0.41
1:B:181:LYS:H	1:B:181:LYS:CD	2.32	0.41
1:B:191:SER:OG	2:B:1021:5PA:O1P	2.34	0.41
1:B:200:LEU:HD22	1:B:204:ILE:CD1	2.51	0.41
1:B:219:PHE:HD1	1:B:250:ASP:HB2	1.86	0.41
1:C:72:VAL:HA	1:C:97:ASP:O	2.21	0.41
1:C:142:GLU:O	1:C:144:LEU:N	2.54	0.41
1:C:244:VAL:O	1:C:245:ARG:O	2.38	0.41
1:C:259:ILE:HG21	1:C:321:LEU:HD23	2.03	0.41
1:C:263:VAL:HG11	1:C:280:PRO:HA	2.02	0.41
1:C:322:LEU:HD21	1:D:117:ILE:N	2.36	0.41
1:D:103:ARG:NH1	1:D:103:ARG:CG	2.79	0.41
1:E:167:TYR:O	1:E:171:VAL:HG13	2.21	0.41
1:E:188:ALA:CB	1:E:286:ALA:HB2	2.49	0.41
1:E:222:VAL:C	1:E:226:LYS:HB2	2.46	0.41
1:G:1:MET:HE1	1:G:172:GLY:HA3	2.01	0.41
1:G:12:PHE:HZ	1:G:237:LEU:O	2.04	0.41
1:G:54:LYS:NZ	1:G:57:LYS:HZ3	2.19	0.41
1:G:79:VAL:HG13	1:G:112:TYR:CD1	2.56	0.41
1:G:261:GLY:O	1:G:262:GLU:C	2.63	0.41
1:G:309:GLY:O	1:G:310:GLY:C	2.63	0.41
1:H:108:LEU:HB2	3:H:1114:HOH:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:144:LEU:HD12	1:H:147:GLU:OE2	2.20	0.41
1:H:144:LEU:C	1:H:146:ARG:N	2.79	0.41
1:H:268:ARG:HH12	1:H:325:LEU:HB3	1.86	0.41
1:I:64:ASP:CA	1:I:67:SER:HB3	2.50	0.41
1:I:134:MET:O	1:I:134:MET:HG3	2.19	0.41
1:I:280:PRO:HB3	1:I:321:LEU:HD21	2.03	0.41
1:J:112:TYR:CE1	1:J:122:THR:HG21	2.55	0.41
1:J:116:LYS:HD3	1:J:116:LYS:HA	1.88	0.41
1:J:228:ASP:OD1	1:J:245:ARG:HD3	2.21	0.41
1:J:253:PHE:HD2	1:J:260:THR:HG21	1.86	0.41
1:J:266:ILE:HD12	1:J:266:ILE:HA	1.88	0.41
1:K:38:VAL:O	1:K:38:VAL:HG13	2.20	0.41
1:K:43:ASP:C	1:K:45:LEU:N	2.78	0.41
1:K:137:ALA:HA	1:K:140:ILE:HB	2.02	0.41
1:K:144:LEU:HD12	1:K:144:LEU:HA	1.92	0.41
1:L:132:GLU:C	1:L:134:MET:H	2.22	0.41
1:L:171:VAL:HG23	1:L:172:GLY:N	2.35	0.41
1:L:185:ILE:HD12	1:L:202:LEU:HD21	2.02	0.41
1:L:266:ILE:HG23	1:L:267:ILE:N	2.36	0.41
1:M:76:VAL:HG12	1:M:133:LEU:HD23	2.02	0.41
1:M:228:ASP:OD1	1:M:245:ARG:HD2	2.20	0.41
1:M:281:VAL:O	1:M:281:VAL:HG23	2.20	0.41
1:N:128:LYS:CG	1:N:130:SER:OG	2.69	0.41
1:N:187:VAL:HG13	1:N:188:ALA:O	2.21	0.41
1:O:9:LEU:O	1:O:10:ALA:C	2.63	0.41
1:O:29:ASN:HB3	3:O:1156:HOH:O	2.19	0.41
1:O:157:GLY:O	1:O:159:ALA:N	2.54	0.41
1:O:204:ILE:HG12	1:O:240:VAL:HG21	2.03	0.41
1:O:319:ASP:C	1:O:321:LEU:H	2.28	0.41
1:P:31:SER:CB	1:P:36:ALA:O	2.66	0.41
1:P:82:ASN:HD22	1:P:111:ASN:ND2	2.19	0.41
1:P:117:ILE:HG13	1:P:117:ILE:H	1.72	0.41
1:P:160:SER:O	1:P:161:PRO:C	2.64	0.41
1:P:181:LYS:HG2	3:P:1163:HOH:O	2.21	0.41
1:Q:141:ALA:O	1:Q:144:LEU:HB2	2.21	0.41
1:Q:146:ARG:O	1:Q:147:GLU:CG	2.63	0.41
1:Q:171:VAL:HG21	1:Q:201:GLY:HA3	2.03	0.41
1:Q:191:SER:N	2:Q:1171:5PA:O1P	2.48	0.41
1:Q:227:LEU:N	3:Q:1185:HOH:O	2.54	0.41
1:R:77:GLY:HA2	1:R:131:PHE:CD2	2.56	0.41
1:T:18:ILE:HG12	1:T:55:ILE:HG21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:103:ARG:HG3	1:T:104:GLY:N	2.36	0.41
1:T:162:ILE:CG2	1:T:163:GLY:N	2.83	0.41
1:T:205:LEU:O	1:T:206:ASN:C	2.63	0.41
1:U:108:LEU:HD12	1:U:108:LEU:HA	1.72	0.41
1:U:216:VAL:CB	1:U:285:LYS:HD2	2.29	0.41
1:U:231:ILE:C	1:U:233:GLU:N	2.79	0.41
1:V:30:ILE:O	1:V:30:ILE:HG22	2.20	0.41
1:V:68:LYS:O	1:V:69:GLY:O	2.39	0.41
1:V:100:LEU:HD13	1:V:120:ILE:HG22	2.03	0.41
1:V:145:LYS:O	1:V:148:GLY:N	2.51	0.41
1:V:163:GLY:C	1:V:165:LEU:H	2.29	0.41
1:V:209:ILE:HG22	1:V:210:ARG:N	2.36	0.41
1:W:71:ASP:O	1:W:97:ASP:HB2	2.20	0.41
1:W:137:ALA:HA	1:W:140:ILE:HD12	2.02	0.41
1:W:143:GLU:OE2	1:W:144:LEU:HD13	2.21	0.41
1:W:146:ARG:C	1:W:147:GLU:HG3	2.45	0.41
1:W:225:SER:O	1:W:229:ASN:N	2.52	0.41
1:W:266:ILE:HG22	1:W:267:ILE:N	2.36	0.41
1:W:310:GLY:O	1:W:311:ILE:C	2.63	0.41
1:X:268:ARG:O	1:X:272:THR:CG2	2.68	0.41
1:A:215:ALA:N	1:A:249:TYR:O	2.53	0.41
1:B:320:LYS:O	1:B:321:LEU:C	2.64	0.41
1:C:18:ILE:HD11	1:C:55:ILE:HG22	2.03	0.41
1:C:82:ASN:HA	1:C:111:ASN:HD21	1.85	0.41
1:D:85:PHE:CE1	1:D:114:LEU:HB3	2.56	0.41
1:D:219:PHE:HB3	1:D:220:GLY:H	1.55	0.41
1:E:187:VAL:HG21	1:E:194:THR:CG2	2.48	0.41
1:G:53:ASN:HB3	1:G:308:THR:CG2	2.37	0.41
1:G:101:VAL:HG12	1:G:101:VAL:O	2.20	0.41
1:G:270:VAL:O	1:G:270:VAL:HG12	2.20	0.41
1:G:320:LYS:HA	1:G:320:LYS:HD2	1.77	0.41
1:I:4:LYS:HG3	1:L:26:TYR:CE2	2.56	0.41
1:I:18:ILE:HA	1:I:19:PRO:HD3	1.68	0.41
1:I:82:ASN:OD1	1:I:310:GLY:HA2	2.21	0.41
1:I:100:LEU:N	1:I:100:LEU:CD1	2.84	0.41
1:I:161:PRO:HB2	1:I:237:LEU:HD11	2.03	0.41
1:I:219:PHE:HE2	1:I:224:THR:CB	2.33	0.41
1:J:42:ARG:HB3	1:J:42:ARG:HH11	1.86	0.41
1:J:221:GLU:O	1:J:225:SER:HB2	2.21	0.41
1:K:84:ALA:HB1	1:K:100:LEU:CD2	2.51	0.41
1:K:103:ARG:CZ	1:K:129:ASP:O	2.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:266:ILE:HD13	1:K:288:TYR:CB	2.51	0.41
1:L:25:GLN:HE22	1:L:42:ARG:NE	2.09	0.41
1:M:5:ILE:HG22	1:M:9:LEU:HD12	2.01	0.41
1:M:108:LEU:HD12	1:M:108:LEU:HA	1.90	0.41
1:N:17:LEU:HD23	1:N:59:GLU:HA	2.03	0.41
1:O:78:ALA:C	1:O:80:HIS:N	2.78	0.41
1:O:296:LYS:HD3	1:O:298:GLU:OE2	2.20	0.41
1:P:261:GLY:O	1:P:262:GLU:C	2.64	0.41
1:Q:143:GLU:CA	1:Q:146:ARG:HG2	2.50	0.41
1:R:127:ALA:HB1	1:R:128:LYS:NZ	2.36	0.41
1:R:157:GLY:HA3	2:R:1181:5PA:H92	1.99	0.41
1:R:218:ARG:HD2	3:R:1188:HOH:O	2.21	0.41
1:R:250:ASP:OD1	1:R:250:ASP:C	2.63	0.41
1:U:58:LEU:HD11	1:U:87:THR:HG23	2.03	0.41
1:V:196:ALA:HB1	1:V:231:ILE:CG2	2.49	0.41
1:W:54:LYS:HZ1	2:W:1231:5PA:C9	2.30	0.41
1:W:56:ARG:HE	1:W:170:ALA:HB2	1.86	0.41
1:W:182:PHE:CD2	1:W:304:LEU:HB2	2.56	0.41
1:A:54:LYS:O	1:A:55:ILE:C	2.64	0.40
1:A:217:GLY:O	1:A:218:ARG:C	2.64	0.40
1:B:5:ILE:O	1:B:6:PHE:C	2.63	0.40
1:C:131:PHE:O	1:C:134:MET:CB	2.69	0.40
1:C:219:PHE:HA	1:C:223:MET:CE	2.33	0.40
1:D:54:LYS:NZ	1:D:57:LYS:HZ1	2.18	0.40
1:E:7:ALA:HB1	1:V:28:PRO:HG3	2.03	0.40
1:E:55:ILE:HA	1:E:58:LEU:HD23	2.03	0.40
1:G:48:LEU:HD23	1:G:49:GLY:N	2.35	0.40
1:G:90:ALA:O	1:G:94:LEU:HG	2.22	0.40
1:G:311:ILE:O	1:G:311:ILE:HG13	2.20	0.40
1:G:315:PHE:CD2	1:H:315:PHE:CD1	3.09	0.40
1:H:67:SER:C	1:H:69:GLY:H	2.27	0.40
1:H:99:ILE:HG23	1:H:121:GLU:HG2	2.03	0.40
1:I:121:GLU:OE2	1:I:123:ARG:NH2	2.54	0.40
1:J:312:SER:O	1:J:313:GLY:C	2.65	0.40
1:J:313:GLY:O	1:J:315:PHE:N	2.54	0.40
1:L:14:ARG:HA	1:L:63:GLY:HA3	2.03	0.40
1:L:64:ASP:OD1	1:L:68:LYS:HE3	2.21	0.40
1:L:265:GLN:CG	1:L:269:LYS:HE3	2.51	0.40
1:M:58:LEU:CD1	1:M:62:LEU:HG	2.41	0.40
1:M:154:ILE:HG22	1:M:158:GLY:HA2	1.98	0.40
1:N:41:LYS:HD2	1:N:174:ILE:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:287:PHE:O	1:N:288:TYR:C	2.64	0.40
1:O:7:ALA:C	1:O:9:LEU:N	2.79	0.40
1:O:14:ARG:HD2	1:O:59:GLU:OE1	2.21	0.40
1:O:80:HIS:CD2	1:O:80:HIS:C	2.99	0.40
1:O:247:GLU:OE1	1:O:249:TYR:OH	2.23	0.40
1:P:34:ILE:HD11	1:P:291:VAL:CG2	2.45	0.40
1:Q:74:ILE:HG22	1:Q:75:THR:H	1.84	0.40
1:Q:115:ASP:O	1:Q:119:GLY:N	2.53	0.40
1:Q:191:SER:N	3:Q:1172:HOH:O	2.54	0.40
1:R:103:ARG:CZ	1:R:103:ARG:HB3	2.51	0.40
1:R:283:THR:HG21	1:R:307:HIS:ND1	2.35	0.40
1:R:290:LEU:C	1:R:290:LEU:CD1	2.94	0.40
1:R:320:LYS:O	1:R:320:LYS:HD2	2.20	0.40
1:S:141:ALA:O	1:S:145:LYS:CG	2.69	0.40
2:S:1191:5PA:O4P	2:S:1191:5PA:H4A2	2.21	0.40
1:U:211:PRO:HB2	1:U:246:PRO:CB	2.48	0.40
1:U:270:VAL:O	1:U:274:GLU:HB2	2.22	0.40
1:V:42:ARG:C	1:V:44:ASP:N	2.77	0.40
1:V:58:LEU:O	1:V:62:LEU:N	2.53	0.40
1:W:127:ALA:CB	1:W:136:TYR:OH	2.69	0.40
1:W:241:LYS:O	1:W:242:VAL:C	2.63	0.40
1:W:263:VAL:C	1:W:265:GLN:H	2.29	0.40
1:X:42:ARG:HB3	1:X:42:ARG:HH11	1.86	0.40
1:X:51:GLY:HA2	1:X:55:ILE:HD13	2.03	0.40
1:X:111:ASN:ND2	3:X:1244:HOH:O	2.54	0.40
1:A:157:GLY:HA2	2:A:1011:5PA:C9	2.51	0.40
1:D:34:ILE:CG2	1:D:294:ALA:CB	2.99	0.40
1:D:128:LYS:HE2	1:D:132:GLU:HB2	2.03	0.40
1:D:134:MET:HE1	1:D:153:VAL:CG1	2.51	0.40
1:D:174:ILE:O	1:D:176:THR:N	2.54	0.40
1:F:116:LYS:O	1:F:117:ILE:C	2.64	0.40
1:G:41:LYS:NZ	1:G:177:GLN:NE2	2.49	0.40
1:H:288:TYR:CD2	1:H:288:TYR:C	2.99	0.40
1:I:38:VAL:O	1:I:38:VAL:CG1	2.69	0.40
1:K:26:TYR:CG	1:K:27:LEU:N	2.88	0.40
1:L:131:PHE:CA	1:L:133:LEU:HD13	2.40	0.40
1:L:228:ASP:OD2	1:L:245:ARG:NH1	2.55	0.40
1:M:143:GLU:CB	1:M:146:ARG:HH21	2.34	0.40
1:M:181:LYS:O	1:M:302:LYS:NZ	2.51	0.40
1:N:77:GLY:O	1:N:102:LEU:HA	2.21	0.40
1:N:264:ALA:HB1	1:N:325:LEU:CD2	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:196:ALA:CB	1:O:230:LEU:HD13	2.51	0.40
1:P:186:VAL:CG1	1:P:187:VAL:N	2.83	0.40
1:Q:119:GLY:HA3	1:R:268:ARG:CZ	2.50	0.40
1:Q:146:ARG:C	1:Q:147:GLU:HG3	2.46	0.40
1:R:25:GLN:HE22	1:R:42:ARG:CD	2.34	0.40
1:R:54:LYS:HD3	1:R:54:LYS:HA	1.76	0.40
1:T:85:PHE:O	1:T:87:THR:N	2.54	0.40
1:U:221:GLU:OE1	1:U:224:THR:CG2	2.66	0.40
1:V:128:LYS:H	1:V:128:LYS:CD	2.27	0.40
1:W:64:ASP:O	1:W:67:SER:OG	2.34	0.40
1:W:108:LEU:HA	3:W:1237:HOH:O	2.20	0.40
1:W:220:GLY:O	1:W:223:MET:CB	2.65	0.40
1:X:75:THR:HG22	1:X:100:LEU:HD12	2.03	0.40
1:X:100:LEU:HB3	1:X:102:LEU:CD2	2.46	0.40
1:C:134:MET:C	1:C:136:TYR:N	2.77	0.40
1:D:265:GLN:CG	1:D:269:LYS:NZ	2.85	0.40
1:F:14:ARG:HB3	1:F:60:TYR:CD2	2.57	0.40
1:F:72:VAL:CG1	1:F:151:PRO:HB3	2.51	0.40
1:F:231:ILE:HG13	1:F:232:LYS:N	2.35	0.40
1:H:134:MET:CE	1:H:153:VAL:CG1	2.99	0.40
1:H:160:SER:OG	1:H:162:ILE:HG22	2.21	0.40
1:J:29:ASN:C	1:J:31:SER:N	2.79	0.40
1:J:229:ASN:O	1:J:229:ASN:ND2	2.54	0.40
1:K:34:ILE:O	1:K:34:ILE:HG13	2.20	0.40
1:L:171:VAL:CG2	1:L:172:GLY:N	2.84	0.40
1:M:71:ASP:OD1	1:M:149:ARG:HB3	2.21	0.40
1:N:145:LYS:C	1:N:147:GLU:H	2.30	0.40
1:O:322:LEU:O	1:O:324:LEU:N	2.54	0.40
1:P:201:GLY:C	1:P:203:SER:N	2.78	0.40
1:Q:50:ILE:HB	1:Q:311:ILE:CG2	2.51	0.40
1:Q:135:LYS:HG3	1:Q:136:TYR:N	2.36	0.40
1:R:100:LEU:HB3	1:R:102:LEU:CD2	2.51	0.40
1:R:129:ASP:C	1:R:131:PHE:H	2.29	0.40
1:S:221:GLU:O	1:S:224:THR:N	2.48	0.40
1:S:231:ILE:O	1:S:235:ALA:CB	2.70	0.40
1:T:85:PHE:O	1:T:86:VAL:C	2.64	0.40
1:T:200:LEU:HD21	1:T:238:LEU:HD12	2.02	0.40
1:U:54:LYS:HE3	2:U:1211:5PA:C9	2.44	0.40
1:U:72:VAL:CG1	1:U:151:PRO:HA	2.51	0.40
1:U:187:VAL:O	1:U:187:VAL:CG1	2.68	0.40
1:V:9:LEU:HD21	1:V:165:LEU:HD22	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:130:SER:O	1:V:132:GLU:N	2.55	0.40
1:W:218:ARG:H	1:W:218:ARG:CD	2.14	0.40
1:W:222:VAL:HG22	1:W:226:LYS:CE	2.52	0.40
1:X:56:ARG:HH11	1:X:56:ARG:HG2	1.87	0.40
1:X:64:ASP:OD2	1:X:68:LYS:HE3	2.21	0.40
1:X:281:VAL:HG22	1:X:282:TYR:CE1	2.56	0.40
1:A:269:LYS:HD3	1:A:273:ARG:HH12	1.86	0.40
1:B:14:ARG:NH1	1:B:169:ARG:NH2	2.69	0.40
1:B:171:VAL:CG1	1:B:198:LEU:HD23	2.42	0.40
1:C:134:MET:HE1	1:C:155:PRO:CA	2.35	0.40
1:C:142:GLU:C	1:C:144:LEU:N	2.79	0.40
1:C:281:VAL:O	1:C:281:VAL:HG22	2.20	0.40
1:D:130:SER:C	1:D:132:GLU:H	2.30	0.40
1:D:219:PHE:O	1:D:220:GLY:O	2.38	0.40
1:E:164:THR:O	1:E:164:THR:HG22	2.22	0.40
1:F:144:LEU:HD11	1:F:149:ARG:CD	2.43	0.40
1:F:181:LYS:HE3	1:F:302:LYS:NZ	2.22	0.40
1:F:204:ILE:O	1:F:204:ILE:HG22	2.22	0.40
1:F:218:ARG:CB	1:F:218:ARG:HH11	2.35	0.40
1:G:9:LEU:CD1	1:G:169:ARG:HB2	2.51	0.40
1:G:186:VAL:HG12	1:G:212:VAL:CB	2.45	0.40
1:G:219:PHE:CE1	1:G:248:LEU:HG	2.55	0.40
1:H:112:TYR:HA	1:H:115:ASP:HB2	2.03	0.40
1:H:134:MET:CE	1:H:153:VAL:HG12	2.51	0.40
1:I:186:VAL:CG1	1:I:212:VAL:HB	2.38	0.40
1:K:268:ARG:CZ	1:K:325:LEU:HG	2.52	0.40
1:L:12:PHE:CD1	1:L:12:PHE:N	2.89	0.40
1:L:167:TYR:HA	1:L:170:ALA:CB	2.52	0.40
1:M:191:SER:N	2:M:1131:5PA:O3P	2.54	0.40
1:N:53:ASN:CB	1:N:167:TYR:OH	2.69	0.40
1:N:70:ALA:O	1:N:96:LEU:HD22	2.22	0.40
1:N:112:TYR:CZ	1:N:116:LYS:HE2	2.57	0.40
1:O:113:LEU:HD23	1:O:117:ILE:HG13	2.03	0.40
1:O:312:SER:O	1:O:313:GLY:C	2.65	0.40
1:Q:76:VAL:HG12	1:Q:101:VAL:HB	2.04	0.40
1:Q:109:LYS:CA	1:Q:113:LEU:HB2	2.52	0.40
1:Q:142:GLU:OE1	1:Q:145:LYS:HD3	2.21	0.40
1:R:26:TYR:CE2	1:R:28:PRO:HA	2.55	0.40
1:R:79:VAL:HG23	1:R:102:LEU:CD1	2.49	0.40
1:S:173:GLU:O	1:S:177:GLN:HG2	2.22	0.40
1:T:55:ILE:HD12	1:T:86:VAL:CG1	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:162:ILE:HA	1:T:165:LEU:HD12	2.03	0.40
1:T:269:LYS:HD3	1:T:273:ARG:HH22	1.87	0.40
1:T:269:LYS:HG2	1:T:273:ARG:NH2	2.37	0.40
1:U:44:ASP:O	1:U:45:LEU:HD23	2.21	0.40
1:U:187:VAL:C	1:U:188:ALA:O	2.62	0.40
1:V:25:GLN:NE2	1:V:42:ARG:NE	2.54	0.40
1:V:30:ILE:O	1:V:34:ILE:HG13	2.22	0.40
1:V:62:LEU:O	1:V:65:ALA:HB3	2.22	0.40
1:V:233:GLU:O	1:V:234:ALA:C	2.63	0.40
1:W:157:GLY:HA2	2:W:1231:5PA:H91	2.02	0.40
1:W:293:LEU:CD2	1:W:299:LEU:HD21	2.50	0.40
1:X:48:LEU:O	1:X:86:VAL:HG13	2.21	0.40
1:X:200:LEU:HD22	1:X:204:ILE:CD1	2.49	0.40
1:X:267:ILE:O	1:X:268:ARG:C	2.62	0.40
1:A:118:MET:HE1	1:B:271:GLY:HA3	2.02	0.40
1:A:167:TYR:O	1:A:171:VAL:HG13	2.22	0.40
1:A:221:GLU:CD	1:A:221:GLU:O	2.64	0.40
1:A:221:GLU:O	1:A:224:THR:N	2.55	0.40
1:B:205:LEU:HD23	1:B:205:LEU:HA	1.91	0.40
1:B:260:THR:C	1:B:324:LEU:HD23	2.47	0.40
2:B:1021:5PA:O4P	2:B:1021:5PA:C4A	2.69	0.40
1:C:229:ASN:O	1:C:232:LYS:N	2.46	0.40
1:C:259:ILE:HD11	1:C:317:TYR:CD1	2.56	0.40
1:D:29:ASN:O	1:D:33:GLU:HG3	2.20	0.40
1:D:131:PHE:N	1:D:131:PHE:CD1	2.89	0.40
1:D:218:ARG:HG2	1:D:219:PHE:H	1.87	0.40
1:E:70:ALA:O	1:E:96:LEU:HD22	2.21	0.40
1:E:157:GLY:HA2	2:E:1051:5PA:H92	2.03	0.40
1:F:40:ILE:HD13	1:F:276:ILE:HD13	2.02	0.40
1:F:54:LYS:NZ	2:F:1061:5PA:P	2.95	0.40
1:F:58:LEU:HD21	1:F:86:VAL:HG12	2.04	0.40
1:G:29:ASN:HB3	1:G:273:ARG:CG	2.41	0.40
1:G:270:VAL:O	1:G:276:ILE:O	2.40	0.40
1:G:272:THR:O	1:H:93:LYS:HA	2.21	0.40
1:G:294:ALA:O	1:G:297:GLY:HA2	2.21	0.40
1:H:287:PHE:O	1:H:288:TYR:C	2.63	0.40
1:H:287:PHE:O	1:H:291:VAL:HG23	2.21	0.40
1:I:15:VAL:O	1:I:17:LEU:N	2.55	0.40
1:I:90:ALA:O	1:I:91:ALA:O	2.39	0.40
1:I:130:SER:C	1:I:132:GLU:N	2.77	0.40
1:I:219:PHE:HE2	1:I:224:THR:HB	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:134:MET:CE	1:K:156:PRO:HD3	2.52	0.40
1:K:265:GLN:HG2	3:K:1123:HOH:O	2.21	0.40
1:K:320:LYS:HA	1:K:320:LYS:HD2	1.81	0.40
1:L:14:ARG:CZ	1:L:169:ARG:NH2	2.84	0.40
1:L:155:PRO:HG2	1:L:160:SER:HB2	2.03	0.40
1:L:185:ILE:CG2	1:L:304:LEU:HD12	2.35	0.40
1:L:281:VAL:HG13	1:L:282:TYR:CD1	2.56	0.40
1:M:103:ARG:HD2	1:M:129:ASP:H	1.86	0.40
1:M:131:PHE:C	1:M:133:LEU:N	2.80	0.40
1:M:228:ASP:OD1	1:M:245:ARG:CG	2.70	0.40
1:P:177:GLN:HG3	1:P:178:SER:N	2.36	0.40
1:P:185:ILE:HG22	1:P:306:ILE:HD11	2.04	0.40
1:P:230:LEU:C	1:P:232:LYS:N	2.78	0.40
1:P:322:LEU:O	1:P:324:LEU:N	2.55	0.40
1:Q:53:ASN:OD1	1:Q:53:ASN:N	2.53	0.40
1:Q:168:VAL:HG13	1:Q:204:ILE:CD1	2.51	0.40
1:R:14:ARG:O	1:R:14:ARG:HG3	2.22	0.40
1:R:32:ARG:O	1:R:33:GLU:O	2.39	0.40
1:R:224:THR:O	1:R:227:LEU:N	2.55	0.40
1:S:6:PHE:C	1:S:8:LEU:N	2.78	0.40
1:T:55:ILE:CD1	1:T:86:VAL:HG11	2.52	0.40
1:U:40:ILE:HG13	1:U:305:PHE:HD2	1.85	0.40
1:U:54:LYS:NZ	1:U:157:GLY:O	2.49	0.40
1:U:73:VAL:HG12	1:U:74:ILE:N	2.36	0.40
1:V:163:GLY:C	1:V:165:LEU:N	2.78	0.40
1:W:118:MET:HA	1:X:268:ARG:HG3	2.02	0.40
1:W:185:ILE:HG13	1:W:209:ILE:CG2	2.52	0.40
1:W:290:LEU:O	1:W:294:ALA:CB	2.69	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:219:PHE:O	1:F:147:GLU:O[1_455]	2.12	0.08

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 X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	323/325 (99%)	268 (83%)	42 (13%)	13 (4%)	2	5
1	B	323/325 (99%)	257 (80%)	50 (16%)	16 (5%)	1	3
1	C	323/325 (99%)	256 (79%)	51 (16%)	16 (5%)	1	3
1	D	323/325 (99%)	273 (84%)	34 (10%)	16 (5%)	1	3
1	E	323/325 (99%)	270 (84%)	36 (11%)	17 (5%)	1	3
1	F	323/325 (99%)	268 (83%)	37 (12%)	18 (6%)	1	2
1	G	323/325 (99%)	232 (72%)	63 (20%)	28 (9%)	0	0
1	H	323/325 (99%)	258 (80%)	51 (16%)	14 (4%)	2	4
1	I	323/325 (99%)	250 (77%)	50 (16%)	23 (7%)	1	1
1	J	323/325 (99%)	242 (75%)	57 (18%)	24 (7%)	1	1
1	K	323/325 (99%)	231 (72%)	61 (19%)	31 (10%)	0	0
1	L	323/325 (99%)	260 (80%)	43 (13%)	20 (6%)	1	2
1	M	323/325 (99%)	263 (81%)	45 (14%)	15 (5%)	2	4
1	N	323/325 (99%)	275 (85%)	37 (12%)	11 (3%)	3	7
1	O	323/325 (99%)	208 (64%)	69 (21%)	46 (14%)	0	0
1	P	323/325 (99%)	241 (75%)	56 (17%)	26 (8%)	1	1
1	Q	323/325 (99%)	241 (75%)	58 (18%)	24 (7%)	1	1
1	R	323/325 (99%)	259 (80%)	43 (13%)	21 (6%)	1	1
1	S	323/325 (99%)	255 (79%)	51 (16%)	17 (5%)	1	3
1	T	323/325 (99%)	259 (80%)	38 (12%)	26 (8%)	1	1
1	U	323/325 (99%)	264 (82%)	40 (12%)	19 (6%)	1	2
1	V	323/325 (99%)	266 (82%)	41 (13%)	16 (5%)	1	3
1	W	323/325 (99%)	234 (72%)	60 (19%)	29 (9%)	0	0
1	X	323/325 (99%)	235 (73%)	59 (18%)	29 (9%)	0	0
All	All	7752/7800 (99%)	6065 (78%)	1172 (15%)	515 (7%)	1	1

All (515) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	219	PHE
1	A	245	ARG
1	B	33	GLU
1	B	72	VAL
1	B	187	VAL
1	B	244	VAL
1	C	96	LEU
1	C	126	ASP
1	C	218	ARG
1	C	245	ARG
1	D	128	LYS
1	D	131	PHE
1	D	218	ARG
1	D	219	PHE
1	D	222	VAL
1	D	244	VAL
1	E	127	ALA
1	E	129	ASP
1	E	245	ARG
1	F	131	PHE
1	F	146	ARG
1	F	222	VAL
1	F	244	VAL
1	F	245	ARG
1	G	16	GLU
1	G	42	ARG
1	G	243	GLU
1	G	245	ARG
1	G	324	LEU
1	H	19	PRO
1	H	131	PHE
1	H	159	ALA
1	H	244	VAL
1	H	313	GLY
1	I	16	GLU
1	I	36	ALA
1	I	92	LYS
1	I	96	LEU
1	I	129	ASP
1	I	219	PHE
1	I	243	GLU
1	I	245	ARG

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Mol	Chain	Res	Type
1	J	72	VAL
1	J	106	GLU
1	J	129	ASP
1	J	218	ARG
1	J	219	PHE
1	J	222	VAL
1	J	244	VAL
1	J	312	SER
1	K	10	ALA
1	K	72	VAL
1	K	109	LYS
1	K	129	ASP
1	K	148	GLY
1	K	188	ALA
1	K	243	GLU
1	L	105	LYS
1	L	131	PHE
1	L	216	VAL
1	L	245	ARG
1	L	267	ILE
1	L	307	HIS
1	M	129	ASP
1	M	243	GLU
1	M	245	ARG
1	N	218	ARG
1	N	244	VAL
1	N	245	ARG
1	O	16	GLU
1	O	42	ARG
1	O	96	LEU
1	O	127	ALA
1	O	148	GLY
1	O	155	PRO
1	O	218	ARG
1	O	245	ARG
1	O	316	HIS
1	P	42	ARG
1	P	107	GLU
1	P	108	LEU
1	P	131	PHE
1	P	225	SER
1	P	244	VAL

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Mol	Chain	Res	Type
1	Q	124	VAL
1	Q	223	MET
1	Q	245	ARG
1	Q	299	LEU
1	Q	307	HIS
1	R	33	GLU
1	R	34	ILE
1	R	129	ASP
1	R	148	GLY
1	R	193	GLY
1	R	218	ARG
1	R	219	PHE
1	S	61	LEU
1	S	96	LEU
1	S	129	ASP
1	S	131	PHE
1	S	219	PHE
1	S	243	GLU
1	S	245	ARG
1	T	33	GLU
1	T	34	ILE
1	T	129	ASP
1	T	159	ALA
1	T	188	ALA
1	T	218	ARG
1	T	219	PHE
1	T	221	GLU
1	T	222	VAL
1	U	36	ALA
1	U	219	PHE
1	U	243	GLU
1	U	245	ARG
1	U	316	HIS
1	U	317	TYR
1	V	105	LYS
1	V	218	ARG
1	V	219	PHE
1	V	222	VAL
1	V	244	VAL
1	V	245	ARG
1	W	149	ARG
1	W	245	ARG

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Mol	Chain	Res	Type
1	W	319	ASP
1	X	42	ARG
1	X	72	VAL
1	X	218	ARG
1	X	219	PHE
1	X	244	VAL
1	X	283	THR
1	A	126	ASP
1	A	148	GLY
1	A	175	ALA
1	A	218	ARG
1	A	243	GLU
1	B	220	GLY
1	C	129	ASP
1	C	143	GLU
1	C	181	LYS
1	C	230	LEU
1	D	8	LEU
1	D	159	ALA
1	D	220	GLY
1	E	219	PHE
1	E	220	GLY
1	E	222	VAL
1	E	224	THR
1	F	107	GLU
1	F	129	ASP
1	F	148	GLY
1	F	159	ALA
1	F	193	GLY
1	G	8	LEU
1	G	18	ILE
1	G	33	GLU
1	G	61	LEU
1	G	124	VAL
1	G	127	ALA
1	G	208	ASP
1	G	222	VAL
1	G	262	GLU
1	G	275	GLY
1	H	206	ASN
1	H	224	THR
1	H	239	GLY

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Mol	Chain	Res	Type
1	I	69	GLY
1	I	91	ALA
1	I	158	GLY
1	I	218	ARG
1	J	69	GLY
1	J	300	GLY
1	J	313	GLY
1	J	316	HIS
1	K	84	ALA
1	K	86	VAL
1	K	190	GLY
1	K	219	PHE
1	K	222	VAL
1	K	275	GLY
1	K	317	TYR
1	K	318	GLY
1	L	33	GLU
1	L	34	ILE
1	L	106	GLU
1	L	146	ARG
1	L	219	PHE
1	L	244	VAL
1	L	253	PHE
1	L	268	ARG
1	M	143	GLU
1	M	148	GLY
1	M	159	ALA
1	M	218	ARG
1	N	201	GLY
1	N	202	LEU
1	N	219	PHE
1	O	19	PRO
1	O	61	LEU
1	O	126	ASP
1	O	181	LYS
1	O	190	GLY
1	O	206	ASN
1	O	214	ILE
1	O	222	VAL
1	O	275	GLY
1	O	281	VAL
1	O	296	LYS

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Mol	Chain	Res	Type
1	O	311	ILE
1	O	323	SER
1	P	79	VAL
1	P	97	ASP
1	P	105	LYS
1	P	135	LYS
1	P	159	ALA
1	P	323	SER
1	Q	67	SER
1	Q	71	ASP
1	Q	72	VAL
1	Q	75	THR
1	Q	84	ALA
1	Q	129	ASP
1	Q	147	GLU
1	Q	219	PHE
1	Q	244	VAL
1	R	220	GLY
1	R	244	VAL
1	R	258	LYS
1	R	318	GLY
1	R	322	LEU
1	S	69	GLY
1	S	141	ALA
1	S	222	VAL
1	T	69	GLY
1	T	72	VAL
1	T	106	GLU
1	T	131	PHE
1	T	244	VAL
1	T	251	TYR
1	T	292	ASP
1	T	320	LYS
1	U	165	LEU
1	U	206	ASN
1	U	218	ARG
1	U	222	VAL
1	U	297	GLY
1	V	69	GLY
1	V	106	GLU
1	V	193	GLY
1	W	16	GLU

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Mol	Chain	Res	Type
1	W	49	GLY
1	W	69	GLY
1	W	96	LEU
1	W	130	SER
1	W	148	GLY
1	W	208	ASP
1	W	222	VAL
1	W	238	LEU
1	W	243	GLU
1	W	318	GLY
1	X	6	PHE
1	X	106	GLU
1	X	222	VAL
1	X	300	GLY
1	A	127	ALA
1	B	66	LEU
1	B	156	PRO
1	C	138	GLU
1	C	243	GLU
1	D	115	ASP
1	D	132	GLU
1	D	146	ARG
1	D	175	ALA
1	E	42	ARG
1	E	132	GLU
1	E	218	ARG
1	F	206	ASN
1	F	258	LYS
1	G	146	ARG
1	G	155	PRO
1	I	181	LYS
1	J	142	GLU
1	J	178	SER
1	J	314	THR
1	K	20	TRP
1	K	78	ALA
1	K	95	GLY
1	K	132	GLU
1	K	208	ASP
1	K	320	LYS
1	L	308	THR
1	M	219	PHE

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Mol	Chain	Res	Type
1	O	58	LEU
1	O	81	SER
1	O	86	VAL
1	O	89	LEU
1	O	105	LYS
1	O	158	GLY
1	O	257	GLY
1	O	292	ASP
1	O	307	HIS
1	P	36	ALA
1	P	68	LYS
1	P	134	MET
1	P	231	ILE
1	P	253	PHE
1	Q	3	PRO
1	Q	8	LEU
1	Q	85	PHE
1	Q	208	ASP
1	R	137	ALA
1	R	175	ALA
1	R	208	ASP
1	S	10	ALA
1	S	117	ILE
1	S	157	GLY
1	T	142	GLU
1	U	16	GLU
1	U	69	GLY
1	V	146	ARG
1	V	147	GLU
1	V	159	ALA
1	W	79	VAL
1	W	81	SER
1	W	106	GLU
1	W	129	ASP
1	W	137	ALA
1	W	219	PHE
1	X	7	ALA
1	X	129	ASP
1	X	131	PHE
1	X	148	GLY
1	X	159	ALA
1	X	190	GLY

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Mol	Chain	Res	Type
1	X	206	ASN
1	X	231	ILE
1	X	253	PHE
1	X	298	GLU
1	A	67	SER
1	A	292	ASP
1	B	68	LYS
1	B	128	LYS
1	B	147	GLU
1	C	208	ASP
1	E	206	ASN
1	F	68	LYS
1	G	85	PHE
1	G	129	ASP
1	G	150	LYS
1	H	107	GLU
1	H	219	PHE
1	I	62	LEU
1	I	79	VAL
1	J	33	GLU
1	J	68	LYS
1	J	94	LEU
1	J	208	ASP
1	J	223	MET
1	K	13	PRO
1	K	68	LYS
1	K	85	PHE
1	K	127	ALA
1	K	245	ARG
1	L	218	ARG
1	M	149	ARG
1	M	180	VAL
1	M	193	GLY
1	N	224	THR
1	O	6	PHE
1	O	146	ARG
1	O	165	LEU
1	O	243	GLU
1	P	28	PRO
1	Q	6	PHE
1	Q	246	PRO
1	R	6	PHE

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Mol	Chain	Res	Type
1	R	230	LEU
1	R	245	ARG
1	S	94	LEU
1	T	199	SER
1	T	245	ARG
1	U	10	ALA
1	U	318	GLY
1	V	84	ALA
1	V	128	LYS
1	V	131	PHE
1	W	126	ASP
1	W	132	GLU
1	W	218	ARG
1	W	221	GLU
1	X	28	PRO
1	X	86	VAL
1	X	119	GLY
1	X	151	PRO
1	B	19	PRO
1	B	219	PHE
1	B	323	SER
1	E	96	LEU
1	E	155	PRO
1	F	223	MET
1	F	253	PHE
1	G	7	ALA
1	G	50	ILE
1	G	196	ALA
1	G	274	GLU
1	H	42	ARG
1	H	75	THR
1	H	290	LEU
1	I	126	ASP
1	I	222	VAL
1	I	246	PRO
1	J	246	PRO
1	K	83	HIS
1	K	149	ARG
1	K	159	ALA
1	L	42	ARG
1	L	239	GLY
1	M	69	GLY

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Mol	Chain	Res	Type
1	M	132	GLU
1	M	181	LYS
1	N	223	MET
1	N	318	GLY
1	O	10	ALA
1	O	34	ILE
1	O	91	ALA
1	O	129	ASP
1	O	225	SER
1	P	33	GLU
1	P	208	ASP
1	P	245	ARG
1	Q	127	ALA
1	Q	243	GLU
1	R	127	ALA
1	T	189	ALA
1	T	193	GLY
1	U	246	PRO
1	U	319	ASP
1	V	65	ALA
1	W	42	ARG
1	W	127	ALA
1	W	128	LYS
1	X	115	ASP
1	X	152	TYR
1	X	199	SER
1	B	34	ILE
1	B	129	ASP
1	B	130	SER
1	C	180	VAL
1	E	243	GLU
1	E	311	ILE
1	F	6	PHE
1	F	79	VAL
1	G	23	PRO
1	G	148	GLY
1	H	76	VAL
1	I	147	GLU
1	N	129	ASP
1	N	194	THR
1	O	13	PRO
1	Q	155	PRO

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Mol	Chain	Res	Type
1	R	117	ILE
1	R	128	LYS
1	S	143	GLU
1	S	237	LEU
1	T	311	ILE
1	X	144	LEU
1	X	268	ARG
1	A	246	PRO
1	C	72	VAL
1	F	72	VAL
1	I	148	GLY
1	K	155	PRO
1	K	270	VAL
1	L	220	GLY
1	M	222	VAL
1	O	5	ILE
1	P	211	PRO
1	T	211	PRO
1	W	163	GLY
1	D	72	VAL
1	E	151	PRO
1	E	291	VAL
1	J	267	ILE
1	L	155	PRO
1	O	27	LEU
1	O	193	GLY
1	O	291	VAL
1	P	124	VAL
1	P	187	VAL
1	T	86	VAL
1	C	51	GLY
1	C	242	VAL
1	G	86	VAL
1	J	63	GLY
1	J	156	PRO
1	O	263	VAL
1	Q	222	VAL
1	A	13	PRO
1	A	161	PRO
1	C	222	VAL
1	D	174	ILE
1	G	244	VAL

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Mol	Chain	Res	Type
1	I	155	PRO
1	I	157	GLY
1	I	180	VAL
1	P	35	GLY
1	P	155	PRO
1	T	95	GLY
1	U	242	VAL
1	W	270	VAL
1	D	148	GLY
1	S	242	VAL
1	U	35	GLY

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	259/259 (100%)	223 (86%)	36 (14%)	3	9
1	B	259/259 (100%)	227 (88%)	32 (12%)	4	11
1	C	259/259 (100%)	231 (89%)	28 (11%)	6	16
1	D	259/259 (100%)	232 (90%)	27 (10%)	7	17
1	E	259/259 (100%)	230 (89%)	29 (11%)	6	15
1	F	259/259 (100%)	227 (88%)	32 (12%)	4	11
1	G	259/259 (100%)	224 (86%)	35 (14%)	4	9
1	H	259/259 (100%)	227 (88%)	32 (12%)	4	11
1	I	259/259 (100%)	235 (91%)	24 (9%)	8	21
1	J	259/259 (100%)	232 (90%)	27 (10%)	7	17
1	K	259/259 (100%)	231 (89%)	28 (11%)	6	16
1	L	259/259 (100%)	235 (91%)	24 (9%)	8	21
1	M	259/259 (100%)	227 (88%)	32 (12%)	4	11
1	N	259/259 (100%)	229 (88%)	30 (12%)	5	13
1	O	259/259 (100%)	221 (85%)	38 (15%)	3	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	P	259/259 (100%)	223 (86%)	36 (14%)	3	9
1	Q	259/259 (100%)	228 (88%)	31 (12%)	5	12
1	R	259/259 (100%)	224 (86%)	35 (14%)	4	9
1	S	259/259 (100%)	225 (87%)	34 (13%)	4	10
1	T	259/259 (100%)	230 (89%)	29 (11%)	6	15
1	U	259/259 (100%)	231 (89%)	28 (11%)	6	16
1	V	259/259 (100%)	224 (86%)	35 (14%)	4	9
1	W	259/259 (100%)	226 (87%)	33 (13%)	4	11
1	X	259/259 (100%)	223 (86%)	36 (14%)	3	9
All	All	6216/6216 (100%)	5465 (88%)	751 (12%)	5	12

All (751) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	17	LEU
1	A	43	ASP
1	A	46	THR
1	A	58	LEU
1	A	72	VAL
1	A	86	VAL
1	A	100	LEU
1	A	103	ARG
1	A	108	LEU
1	A	113	LEU
1	A	122	THR
1	A	128	LYS
1	A	142	GLU
1	A	161	PRO
1	A	164	THR
1	A	171	VAL
1	A	179	GLU
1	A	181	LYS
1	A	191	SER
1	A	195	LEU
1	A	198	LEU
1	A	200	LEU
1	A	207	GLU
1	A	208	ASP
1	A	214	ILE

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Mol	Chain	Res	Type
1	A	218	ARG
1	A	221	GLU
1	A	230	LEU
1	A	240	VAL
1	A	242	VAL
1	A	246	PRO
1	A	281	VAL
1	A	303	ILE
1	A	304	LEU
1	A	311	ILE
1	A	324	LEU
1	B	1	MET
1	B	17	LEU
1	B	38	VAL
1	B	42	ARG
1	B	43	ASP
1	B	46	THR
1	B	58	LEU
1	B	79	VAL
1	B	86	VAL
1	B	100	LEU
1	B	101	VAL
1	B	113	LEU
1	B	128	LYS
1	B	133	LEU
1	B	134	MET
1	B	138	GLU
1	B	156	PRO
1	B	181	LYS
1	B	186	VAL
1	B	195	LEU
1	B	198	LEU
1	B	200	LEU
1	B	224	THR
1	B	227	LEU
1	B	230	LEU
1	B	231	ILE
1	B	237	LEU
1	B	240	VAL
1	B	242	VAL
1	B	278	LEU
1	B	304	LEU

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Mol	Chain	Res	Type
1	B	325	LEU
1	C	17	LEU
1	C	38	VAL
1	C	42	ARG
1	C	46	THR
1	C	58	LEU
1	C	73	VAL
1	C	75	THR
1	C	86	VAL
1	C	102	LEU
1	C	108	LEU
1	C	113	LEU
1	C	129	ASP
1	C	142	GLU
1	C	171	VAL
1	C	181	LYS
1	C	208	ASP
1	C	214	ILE
1	C	218	ARG
1	C	223	MET
1	C	227	LEU
1	C	228	ASP
1	C	236	GLU
1	C	237	LEU
1	C	244	VAL
1	C	293	LEU
1	C	301	GLU
1	C	304	LEU
1	C	325	LEU
1	D	17	LEU
1	D	55	ILE
1	D	58	LEU
1	D	79	VAL
1	D	86	VAL
1	D	103	ARG
1	D	113	LEU
1	D	128	LYS
1	D	129	ASP
1	D	133	LEU
1	D	164	THR
1	D	181	LYS
1	D	195	LEU

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Mol	Chain	Res	Type
1	D	198	LEU
1	D	200	LEU
1	D	218	ARG
1	D	219	PHE
1	D	222	VAL
1	D	223	MET
1	D	224	THR
1	D	230	LEU
1	D	242	VAL
1	D	243	GLU
1	D	290	LEU
1	D	293	LEU
1	D	304	LEU
1	D	324	LEU
1	E	16	GLU
1	E	17	LEU
1	E	18	ILE
1	E	42	ARG
1	E	58	LEU
1	E	67	SER
1	E	79	VAL
1	E	106	GLU
1	E	108	LEU
1	E	113	LEU
1	E	131	PHE
1	E	145	LYS
1	E	162	ILE
1	E	171	VAL
1	E	176	THR
1	E	181	LYS
1	E	195	LEU
1	E	198	LEU
1	E	200	LEU
1	E	207	GLU
1	E	218	ARG
1	E	223	MET
1	E	224	THR
1	E	262	GLU
1	E	267	ILE
1	E	281	VAL
1	E	293	LEU
1	E	304	LEU

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Mol	Chain	Res	Type
1	E	325	LEU
1	F	19	PRO
1	F	34	ILE
1	F	46	THR
1	F	58	LEU
1	F	61	LEU
1	F	97	ASP
1	F	108	LEU
1	F	113	LEU
1	F	128	LYS
1	F	133	LEU
1	F	142	GLU
1	F	161	PRO
1	F	162	ILE
1	F	171	VAL
1	F	181	LYS
1	F	187	VAL
1	F	195	LEU
1	F	203	SER
1	F	219	PHE
1	F	223	MET
1	F	230	LEU
1	F	237	LEU
1	F	240	VAL
1	F	255	GLU
1	F	266	ILE
1	F	290	LEU
1	F	293	LEU
1	F	303	ILE
1	F	304	LEU
1	F	319	ASP
1	F	324	LEU
1	F	325	LEU
1	G	16	GLU
1	G	24	ILE
1	G	40	ILE
1	G	42	ARG
1	G	55	ILE
1	G	57	LYS
1	G	58	LEU
1	G	72	VAL
1	G	75	THR

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Mol	Chain	Res	Type
1	G	100	LEU
1	G	106	GLU
1	G	113	LEU
1	G	126	ASP
1	G	142	GLU
1	G	144	LEU
1	G	164	THR
1	G	179	GLU
1	G	181	LYS
1	G	195	LEU
1	G	200	LEU
1	G	218	ARG
1	G	223	MET
1	G	227	LEU
1	G	230	LEU
1	G	237	LEU
1	G	244	VAL
1	G	248	LEU
1	G	260	THR
1	G	262	GLU
1	G	267	ILE
1	G	270	VAL
1	G	290	LEU
1	G	292	ASP
1	G	304	LEU
1	G	311	ILE
1	H	17	LEU
1	H	43	ASP
1	H	46	THR
1	H	55	ILE
1	H	58	LEU
1	H	100	LEU
1	H	103	ARG
1	H	113	LEU
1	H	121	GLU
1	H	122	THR
1	H	124	VAL
1	H	128	LYS
1	H	176	THR
1	H	181	LYS
1	H	195	LEU
1	H	198	LEU

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Mol	Chain	Res	Type
1	H	203	SER
1	H	218	ARG
1	H	225	SER
1	H	230	LEU
1	H	231	ILE
1	H	237	LEU
1	H	238	LEU
1	H	240	VAL
1	H	248	LEU
1	H	260	THR
1	H	266	ILE
1	H	290	LEU
1	H	293	LEU
1	H	304	LEU
1	H	308	THR
1	H	324	LEU
1	I	17	LEU
1	I	43	ASP
1	I	56	ARG
1	I	67	SER
1	I	86	VAL
1	I	113	LEU
1	I	122	THR
1	I	131	PHE
1	I	133	LEU
1	I	139	GLU
1	I	162	ILE
1	I	176	THR
1	I	181	LYS
1	I	195	LEU
1	I	214	ILE
1	I	218	ARG
1	I	223	MET
1	I	224	THR
1	I	238	LEU
1	I	242	VAL
1	I	256	TYR
1	I	290	LEU
1	I	293	LEU
1	I	304	LEU
1	J	17	LEU
1	J	42	ARG

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Mol	Chain	Res	Type
1	J	72	VAL
1	J	83	HIS
1	J	100	LEU
1	J	113	LEU
1	J	128	LYS
1	J	133	LEU
1	J	143	GLU
1	J	164	THR
1	J	168	VAL
1	J	177	GLN
1	J	181	LYS
1	J	185	ILE
1	J	198	LEU
1	J	200	LEU
1	J	230	LEU
1	J	231	ILE
1	J	242	VAL
1	J	243	GLU
1	J	246	PRO
1	J	247	GLU
1	J	252	SER
1	J	265	GLN
1	J	290	LEU
1	J	302	LYS
1	J	304	LEU
1	K	17	LEU
1	K	25	GLN
1	K	34	ILE
1	K	73	VAL
1	K	79	VAL
1	K	82	ASN
1	K	100	LEU
1	K	102	LEU
1	K	108	LEU
1	K	113	LEU
1	K	117	ILE
1	K	130	SER
1	K	142	GLU
1	K	144	LEU
1	K	164	THR
1	K	179	GLU
1	K	181	LYS

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Mol	Chain	Res	Type
1	K	198	LEU
1	K	200	LEU
1	K	227	LEU
1	K	230	LEU
1	K	237	LEU
1	K	242	VAL
1	K	265	GLN
1	K	266	ILE
1	K	290	LEU
1	K	293	LEU
1	K	325	LEU
1	L	19	PRO
1	L	42	ARG
1	L	58	LEU
1	L	76	VAL
1	L	97	ASP
1	L	125	TYR
1	L	128	LYS
1	L	133	LEU
1	L	134	MET
1	L	139	GLU
1	L	176	THR
1	L	181	LYS
1	L	195	LEU
1	L	199	SER
1	L	205	LEU
1	L	224	THR
1	L	230	LEU
1	L	231	ILE
1	L	240	VAL
1	L	265	GLN
1	L	278	LEU
1	L	290	LEU
1	L	293	LEU
1	L	308	THR
1	M	17	LEU
1	M	42	ARG
1	M	50	ILE
1	M	58	LEU
1	M	71	ASP
1	M	76	VAL
1	M	86	VAL

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Mol	Chain	Res	Type
1	M	99	ILE
1	M	102	LEU
1	M	108	LEU
1	M	113	LEU
1	M	122	THR
1	M	144	LEU
1	M	145	LYS
1	M	169	ARG
1	M	179	GLU
1	M	181	LYS
1	M	195	LEU
1	M	198	LEU
1	M	214	ILE
1	M	219	PHE
1	M	221	GLU
1	M	223	MET
1	M	230	LEU
1	M	240	VAL
1	M	244	VAL
1	M	281	VAL
1	M	293	LEU
1	M	301	GLU
1	M	304	LEU
1	M	324	LEU
1	M	325	LEU
1	N	17	LEU
1	N	42	ARG
1	N	58	LEU
1	N	75	THR
1	N	103	ARG
1	N	106	GLU
1	N	107	GLU
1	N	108	LEU
1	N	113	LEU
1	N	128	LYS
1	N	162	ILE
1	N	171	VAL
1	N	179	GLU
1	N	181	LYS
1	N	195	LEU
1	N	198	LEU
1	N	203	SER

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Mol	Chain	Res	Type
1	N	218	ARG
1	N	219	PHE
1	N	224	THR
1	N	229	ASN
1	N	230	LEU
1	N	231	ILE
1	N	249	TYR
1	N	255	GLU
1	N	281	VAL
1	N	290	LEU
1	N	293	LEU
1	N	304	LEU
1	N	308	THR
1	O	14	ARG
1	O	17	LEU
1	O	22	THR
1	O	42	ARG
1	O	43	ASP
1	O	46	THR
1	O	55	ILE
1	O	58	LEU
1	O	73	VAL
1	O	76	VAL
1	O	81	SER
1	O	107	GLU
1	O	108	LEU
1	O	111	ASN
1	O	124	VAL
1	O	144	LEU
1	O	164	THR
1	O	176	THR
1	O	181	LYS
1	O	186	VAL
1	O	199	SER
1	O	200	LEU
1	O	218	ARG
1	O	223	MET
1	O	230	LEU
1	O	232	LYS
1	O	242	VAL
1	O	255	GLU
1	O	260	THR

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Mol	Chain	Res	Type
1	O	272	THR
1	O	281	VAL
1	O	292	ASP
1	O	293	LEU
1	O	304	LEU
1	O	311	ILE
1	O	316	HIS
1	O	324	LEU
1	O	325	LEU
1	P	1	MET
1	P	14	ARG
1	P	27	LEU
1	P	34	ILE
1	P	42	ARG
1	P	43	ASP
1	P	48	LEU
1	P	55	ILE
1	P	58	LEU
1	P	73	VAL
1	P	82	ASN
1	P	96	LEU
1	P	103	ARG
1	P	107	GLU
1	P	113	LEU
1	P	128	LYS
1	P	133	LEU
1	P	134	MET
1	P	144	LEU
1	P	151	PRO
1	P	164	THR
1	P	176	THR
1	P	181	LYS
1	P	198	LEU
1	P	208	ASP
1	P	212	VAL
1	P	218	ARG
1	P	224	THR
1	P	225	SER
1	P	230	LEU
1	P	242	VAL
1	P	249	TYR
1	P	256	TYR

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Mol	Chain	Res	Type
1	P	293	LEU
1	P	304	LEU
1	P	323	SER
1	Q	17	LEU
1	Q	25	GLN
1	Q	55	ILE
1	Q	75	THR
1	Q	100	LEU
1	Q	108	LEU
1	Q	113	LEU
1	Q	114	LEU
1	Q	139	GLU
1	Q	142	GLU
1	Q	143	GLU
1	Q	162	ILE
1	Q	171	VAL
1	Q	181	LYS
1	Q	183	ASP
1	Q	186	VAL
1	Q	195	LEU
1	Q	198	LEU
1	Q	200	LEU
1	Q	210	ARG
1	Q	216	VAL
1	Q	218	ARG
1	Q	229	ASN
1	Q	230	LEU
1	Q	233	GLU
1	Q	272	THR
1	Q	292	ASP
1	Q	293	LEU
1	Q	298	GLU
1	Q	304	LEU
1	Q	316	HIS
1	R	5	ILE
1	R	12	PHE
1	R	14	ARG
1	R	17	LEU
1	R	42	ARG
1	R	58	LEU
1	R	67	SER
1	R	71	ASP

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Mol	Chain	Res	Type
1	R	73	VAL
1	R	76	VAL
1	R	79	VAL
1	R	81	SER
1	R	86	VAL
1	R	97	ASP
1	R	113	LEU
1	R	128	LYS
1	R	134	MET
1	R	155	PRO
1	R	164	THR
1	R	171	VAL
1	R	181	LYS
1	R	195	LEU
1	R	198	LEU
1	R	200	LEU
1	R	218	ARG
1	R	223	MET
1	R	224	THR
1	R	230	LEU
1	R	231	ILE
1	R	232	LYS
1	R	237	LEU
1	R	240	VAL
1	R	255	GLU
1	R	290	LEU
1	R	304	LEU
1	S	8	LEU
1	S	16	GLU
1	S	38	VAL
1	S	46	THR
1	S	55	ILE
1	S	58	LEU
1	S	75	THR
1	S	86	VAL
1	S	89	LEU
1	S	113	LEU
1	S	115	ASP
1	S	122	THR
1	S	124	VAL
1	S	129	ASP
1	S	132	GLU

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Mol	Chain	Res	Type
1	S	164	THR
1	S	179	GLU
1	S	181	LYS
1	S	186	VAL
1	S	195	LEU
1	S	200	LEU
1	S	218	ARG
1	S	230	LEU
1	S	237	LEU
1	S	242	VAL
1	S	262	GLU
1	S	279	ASP
1	S	281	VAL
1	S	290	LEU
1	S	293	LEU
1	S	301	GLU
1	S	304	LEU
1	S	324	LEU
1	S	325	LEU
1	T	37	ASP
1	T	43	ASP
1	T	55	ILE
1	T	58	LEU
1	T	72	VAL
1	T	102	LEU
1	T	103	ARG
1	T	108	LEU
1	T	113	LEU
1	T	122	THR
1	T	128	LYS
1	T	133	LEU
1	T	169	ARG
1	T	171	VAL
1	T	180	VAL
1	T	181	LYS
1	T	195	LEU
1	T	198	LEU
1	T	212	VAL
1	T	218	ARG
1	T	224	THR
1	T	227	LEU
1	T	230	LEU

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Mol	Chain	Res	Type
1	T	231	ILE
1	T	248	LEU
1	T	249	TYR
1	T	290	LEU
1	T	293	LEU
1	T	304	LEU
1	U	17	LEU
1	U	42	ARG
1	U	58	LEU
1	U	86	VAL
1	U	108	LEU
1	U	113	LEU
1	U	122	THR
1	U	131	PHE
1	U	162	ILE
1	U	164	THR
1	U	171	VAL
1	U	179	GLU
1	U	181	LYS
1	U	195	LEU
1	U	198	LEU
1	U	200	LEU
1	U	208	ASP
1	U	214	ILE
1	U	230	LEU
1	U	236	GLU
1	U	246	PRO
1	U	262	GLU
1	U	263	VAL
1	U	273	ARG
1	U	281	VAL
1	U	290	LEU
1	U	319	ASP
1	U	325	LEU
1	V	14	ARG
1	V	42	ARG
1	V	46	THR
1	V	58	LEU
1	V	66	LEU
1	V	72	VAL
1	V	79	VAL
1	V	86	VAL

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Mol	Chain	Res	Type
1	V	94	LEU
1	V	113	LEU
1	V	122	THR
1	V	128	LYS
1	V	129	ASP
1	V	133	LEU
1	V	134	MET
1	V	135	LYS
1	V	164	THR
1	V	181	LYS
1	V	195	LEU
1	V	198	LEU
1	V	200	LEU
1	V	218	ARG
1	V	224	THR
1	V	229	ASN
1	V	230	LEU
1	V	237	LEU
1	V	242	VAL
1	V	245	ARG
1	V	246	PRO
1	V	279	ASP
1	V	281	VAL
1	V	290	LEU
1	V	293	LEU
1	V	301	GLU
1	V	325	LEU
1	W	17	LEU
1	W	42	ARG
1	W	46	THR
1	W	56	ARG
1	W	58	LEU
1	W	100	LEU
1	W	108	LEU
1	W	113	LEU
1	W	117	ILE
1	W	122	THR
1	W	130	SER
1	W	131	PHE
1	W	134	MET
1	W	143	GLU
1	W	144	LEU

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Mol	Chain	Res	Type
1	W	153	VAL
1	W	162	ILE
1	W	164	THR
1	W	176	THR
1	W	179	GLU
1	W	181	LYS
1	W	195	LEU
1	W	203	SER
1	W	218	ARG
1	W	219	PHE
1	W	230	LEU
1	W	246	PRO
1	W	249	TYR
1	W	263	VAL
1	W	290	LEU
1	W	293	LEU
1	W	301	GLU
1	W	304	LEU
1	X	20	TRP
1	X	39	TYR
1	X	42	ARG
1	X	58	LEU
1	X	96	LEU
1	X	100	LEU
1	X	102	LEU
1	X	103	ARG
1	X	109	LYS
1	X	113	LEU
1	X	121	GLU
1	X	128	LYS
1	X	134	MET
1	X	144	LEU
1	X	168	VAL
1	X	171	VAL
1	X	181	LYS
1	X	195	LEU
1	X	198	LEU
1	X	200	LEU
1	X	203	SER
1	X	205	LEU
1	X	218	ARG
1	X	227	LEU

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Mol	Chain	Res	Type
1	X	229	ASN
1	X	230	LEU
1	X	231	ILE
1	X	240	VAL
1	X	242	VAL
1	X	252	SER
1	X	259	ILE
1	X	265	GLN
1	X	281	VAL
1	X	290	LEU
1	X	304	LEU
1	X	325	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (133) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	25	GLN
1	A	53	ASN
1	A	82	ASN
1	A	177	GLN
1	A	206	ASN
1	B	25	GLN
1	B	82	ASN
1	B	83	HIS
1	B	177	GLN
1	B	229	ASN
1	B	316	HIS
1	C	82	ASN
1	C	177	GLN
1	C	229	ASN
1	D	25	GLN
1	D	82	ASN
1	D	177	GLN
1	D	265	GLN
1	D	307	HIS
1	D	316	HIS
1	E	82	ASN
1	E	111	ASN
1	E	177	GLN
1	E	229	ASN
1	F	25	GLN
1	F	82	ASN

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Mol	Chain	Res	Type
1	F	177	GLN
1	F	229	ASN
1	F	265	GLN
1	F	316	HIS
1	G	25	GLN
1	G	82	ASN
1	G	177	GLN
1	G	316	HIS
1	H	25	GLN
1	H	80	HIS
1	H	82	ASN
1	H	83	HIS
1	H	177	GLN
1	H	229	ASN
1	H	265	GLN
1	I	25	GLN
1	I	53	ASN
1	I	82	ASN
1	I	83	HIS
1	I	177	GLN
1	I	229	ASN
1	I	316	HIS
1	J	25	GLN
1	J	82	ASN
1	J	177	GLN
1	J	229	ASN
1	K	25	GLN
1	K	82	ASN
1	K	111	ASN
1	K	177	GLN
1	K	206	ASN
1	K	229	ASN
1	K	316	HIS
1	L	25	GLN
1	L	82	ASN
1	L	83	HIS
1	L	177	GLN
1	L	229	ASN
1	M	25	GLN
1	M	53	ASN
1	M	82	ASN
1	M	177	GLN

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Mol	Chain	Res	Type
1	M	206	ASN
1	M	229	ASN
1	N	25	GLN
1	N	82	ASN
1	N	83	HIS
1	N	177	GLN
1	N	229	ASN
1	O	25	GLN
1	O	177	GLN
1	O	229	ASN
1	P	25	GLN
1	P	82	ASN
1	P	111	ASN
1	P	177	GLN
1	P	229	ASN
1	Q	25	GLN
1	Q	111	ASN
1	Q	177	GLN
1	Q	229	ASN
1	R	25	GLN
1	R	80	HIS
1	R	83	HIS
1	R	111	ASN
1	R	177	GLN
1	R	229	ASN
1	R	316	HIS
1	S	25	GLN
1	S	29	ASN
1	S	82	ASN
1	S	177	GLN
1	S	206	ASN
1	S	229	ASN
1	S	265	GLN
1	S	316	HIS
1	T	25	GLN
1	T	82	ASN
1	T	83	HIS
1	T	177	GLN
1	T	229	ASN
1	U	25	GLN
1	U	53	ASN
1	U	82	ASN

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Mol	Chain	Res	Type
1	U	111	ASN
1	U	177	GLN
1	U	229	ASN
1	U	316	HIS
1	V	25	GLN
1	V	82	ASN
1	V	83	HIS
1	V	177	GLN
1	V	206	ASN
1	V	229	ASN
1	W	25	GLN
1	W	53	ASN
1	W	82	ASN
1	W	177	GLN
1	W	206	ASN
1	W	229	ASN
1	X	25	GLN
1	X	29	ASN
1	X	53	ASN
1	X	83	HIS
1	X	111	ASN
1	X	177	GLN
1	X	229	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

24 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
2	5PA	Q	1171	-	22,23,23	2.49	6 (27%)	33,35,35	2.10	5 (15%)
2	5PA	A	1011	-	22,23,23	2.47	5 (22%)	33,35,35	2.25	8 (24%)
2	5PA	W	1231	-	22,23,23	2.48	7 (31%)	33,35,35	2.02	5 (15%)
2	5PA	E	1051	-	22,23,23	2.48	6 (27%)	33,35,35	2.14	7 (21%)
2	5PA	G	1071	-	22,23,23	2.46	8 (36%)	33,35,35	2.24	8 (24%)
2	5PA	V	1221	-	22,23,23	2.49	5 (22%)	33,35,35	2.15	7 (21%)
2	5PA	X	1241	-	22,23,23	2.46	5 (22%)	33,35,35	2.10	9 (27%)
2	5PA	U	1211	-	22,23,23	2.46	6 (27%)	33,35,35	2.26	6 (18%)
2	5PA	S	1191	-	22,23,23	2.46	7 (31%)	33,35,35	2.30	9 (27%)
2	5PA	L	1121	-	22,23,23	2.49	7 (31%)	33,35,35	2.20	8 (24%)
2	5PA	I	1091	-	22,23,23	2.45	6 (27%)	33,35,35	2.06	5 (15%)
2	5PA	K	1111	-	22,23,23	2.44	6 (27%)	33,35,35	2.38	6 (18%)
2	5PA	M	1131	-	22,23,23	2.47	6 (27%)	33,35,35	2.16	8 (24%)
2	5PA	B	1021	-	22,23,23	2.47	6 (27%)	33,35,35	2.12	7 (21%)
2	5PA	T	1201	-	22,23,23	2.44	6 (27%)	33,35,35	2.09	6 (18%)
2	5PA	C	1031	-	22,23,23	2.45	6 (27%)	33,35,35	2.22	8 (24%)
2	5PA	D	1041	-	22,23,23	2.47	6 (27%)	33,35,35	2.08	9 (27%)
2	5PA	R	1181	-	22,23,23	2.48	5 (22%)	33,35,35	2.19	7 (21%)
2	5PA	O	1151	-	22,23,23	2.52	7 (31%)	33,35,35	1.91	6 (18%)
2	5PA	P	1161	-	22,23,23	2.47	6 (27%)	33,35,35	2.06	7 (21%)
2	5PA	H	1081	-	22,23,23	2.54	6 (27%)	33,35,35	2.06	9 (27%)
2	5PA	J	1101	-	22,23,23	2.47	7 (31%)	33,35,35	1.98	6 (18%)
2	5PA	F	1061	-	22,23,23	2.47	5 (22%)	33,35,35	2.04	6 (18%)
2	5PA	N	1141	-	22,23,23	2.45	5 (22%)	33,35,35	2.17	6 (18%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	5PA	Q	1171	-	-	6/15/22/22	0/2/2/2
2	5PA	A	1011	-	-	8/15/22/22	0/2/2/2
2	5PA	W	1231	-	-	7/15/22/22	0/2/2/2
2	5PA	E	1051	-	-	6/15/22/22	0/2/2/2
2	5PA	G	1071	-	-	7/15/22/22	0/2/2/2
2	5PA	V	1221	-	-	8/15/22/22	0/2/2/2
2	5PA	X	1241	-	-	7/15/22/22	0/2/2/2
2	5PA	U	1211	-	-	9/15/22/22	0/2/2/2
2	5PA	S	1191	-	-	4/15/22/22	0/2/2/2
2	5PA	L	1121	-	-	10/15/22/22	0/2/2/2
2	5PA	I	1091	-	-	9/15/22/22	0/2/2/2
2	5PA	K	1111	-	-	8/15/22/22	0/2/2/2
2	5PA	M	1131	-	-	7/15/22/22	0/2/2/2
2	5PA	B	1021	-	-	6/15/22/22	0/2/2/2
2	5PA	T	1201	-	-	6/15/22/22	0/2/2/2
2	5PA	C	1031	-	-	7/15/22/22	0/2/2/2
2	5PA	D	1041	-	-	8/15/22/22	0/2/2/2
2	5PA	R	1181	-	-	8/15/22/22	0/2/2/2
2	5PA	O	1151	-	-	9/15/22/22	0/2/2/2
2	5PA	P	1161	-	-	8/15/22/22	0/2/2/2
2	5PA	H	1081	-	-	8/15/22/22	0/2/2/2
2	5PA	J	1101	-	-	12/15/22/22	0/2/2/2
2	5PA	F	1061	-	-	8/15/22/22	0/2/2/2
2	5PA	N	1141	-	-	6/15/22/22	0/2/2/2

All (145) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	1051	5PA	C4A-C4	-8.37	1.39	1.52
2	H	1081	5PA	C4A-C4	-8.37	1.39	1.52
2	V	1221	5PA	C4A-C4	-8.36	1.39	1.52
2	A	1011	5PA	C4A-C4	-8.33	1.39	1.52
2	M	1131	5PA	C4A-C4	-8.32	1.39	1.52
2	F	1061	5PA	C4A-C4	-8.30	1.39	1.52
2	D	1041	5PA	C4A-C4	-8.29	1.39	1.52
2	O	1151	5PA	C4A-C4	-8.28	1.39	1.52
2	L	1121	5PA	C4A-C4	-8.26	1.39	1.52
2	B	1021	5PA	C4A-C4	-8.25	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	R	1181	5PA	C4A-C4	-8.22	1.39	1.52
2	N	1141	5PA	C4A-C4	-8.21	1.39	1.52
2	C	1031	5PA	C4A-C4	-8.21	1.39	1.52
2	W	1231	5PA	C4A-C4	-8.20	1.39	1.52
2	U	1211	5PA	C4A-C4	-8.19	1.39	1.52
2	Q	1171	5PA	C4A-C4	-8.19	1.39	1.52
2	P	1161	5PA	C4A-C4	-8.18	1.39	1.52
2	X	1241	5PA	C4A-C4	-8.18	1.39	1.52
2	T	1201	5PA	C4A-C4	-8.17	1.39	1.52
2	K	1111	5PA	C4A-C4	-8.17	1.39	1.52
2	J	1101	5PA	C4A-C4	-8.13	1.40	1.52
2	I	1091	5PA	C4A-C4	-8.12	1.40	1.52
2	G	1071	5PA	C4A-C4	-8.09	1.40	1.52
2	S	1191	5PA	C4A-C4	-8.07	1.40	1.52
2	X	1241	5PA	C5A-C5	-4.45	1.39	1.50
2	O	1151	5PA	C5A-C5	-4.44	1.39	1.50
2	R	1181	5PA	C5A-C5	-4.42	1.39	1.50
2	D	1041	5PA	C5A-C5	-4.42	1.39	1.50
2	V	1221	5PA	C5A-C5	-4.41	1.39	1.50
2	L	1121	5PA	C5A-C5	-4.40	1.39	1.50
2	S	1191	5PA	C5A-C5	-4.39	1.39	1.50
2	G	1071	5PA	C5A-C5	-4.39	1.39	1.50
2	I	1091	5PA	C5A-C5	-4.38	1.39	1.50
2	J	1101	5PA	C5A-C5	-4.38	1.39	1.50
2	A	1011	5PA	C5A-C5	-4.38	1.39	1.50
2	B	1021	5PA	C5A-C5	-4.37	1.39	1.50
2	F	1061	5PA	C5A-C5	-4.36	1.39	1.50
2	P	1161	5PA	C5A-C5	-4.35	1.39	1.50
2	H	1081	5PA	C5A-C5	-4.35	1.39	1.50
2	W	1231	5PA	C5A-C5	-4.35	1.39	1.50
2	M	1131	5PA	C5A-C5	-4.34	1.39	1.50
2	Q	1171	5PA	C5A-C5	-4.34	1.39	1.50
2	U	1211	5PA	C5A-C5	-4.33	1.39	1.50
2	N	1141	5PA	C5A-C5	-4.32	1.39	1.50
2	E	1051	5PA	C5A-C5	-4.31	1.39	1.50
2	T	1201	5PA	C5A-C5	-4.30	1.39	1.50
2	C	1031	5PA	C5A-C5	-4.27	1.39	1.50
2	K	1111	5PA	C5A-C5	-4.22	1.40	1.50
2	W	1231	5PA	P-O1P	3.49	1.61	1.50
2	O	1151	5PA	P-O1P	3.49	1.61	1.50
2	L	1121	5PA	P-O1P	3.49	1.61	1.50
2	G	1071	5PA	P-O1P	3.48	1.61	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	X	1241	5PA	P-O1P	3.48	1.61	1.50
2	K	1111	5PA	P-O1P	3.48	1.61	1.50
2	R	1181	5PA	P-O1P	3.48	1.61	1.50
2	Q	1171	5PA	P-O1P	3.48	1.61	1.50
2	P	1161	5PA	P-O1P	3.47	1.61	1.50
2	F	1061	5PA	P-O1P	3.45	1.61	1.50
2	J	1101	5PA	P-O1P	3.44	1.61	1.50
2	U	1211	5PA	P-O1P	3.44	1.61	1.50
2	I	1091	5PA	P-O1P	3.43	1.61	1.50
2	B	1021	5PA	P-O1P	3.43	1.61	1.50
2	V	1221	5PA	P-O1P	3.43	1.61	1.50
2	T	1201	5PA	P-O1P	3.43	1.61	1.50
2	H	1081	5PA	P-O1P	3.43	1.61	1.50
2	A	1011	5PA	P-O1P	3.43	1.61	1.50
2	C	1031	5PA	P-O1P	3.42	1.61	1.50
2	N	1141	5PA	P-O1P	3.42	1.61	1.50
2	D	1041	5PA	P-O1P	3.41	1.61	1.50
2	E	1051	5PA	P-O1P	3.41	1.61	1.50
2	S	1191	5PA	P-O1P	3.40	1.61	1.50
2	M	1131	5PA	P-O1P	3.39	1.61	1.50
2	H	1081	5PA	C10-C9	2.66	1.56	1.50
2	M	1131	5PA	C4A-N	-2.49	1.32	1.45
2	H	1081	5PA	C4A-N	-2.44	1.32	1.45
2	P	1161	5PA	C4A-N	-2.43	1.32	1.45
2	F	1061	5PA	C4A-N	-2.43	1.32	1.45
2	O	1151	5PA	C4A-N	-2.42	1.32	1.45
2	Q	1171	5PA	C4A-N	-2.42	1.32	1.45
2	U	1211	5PA	C4A-N	-2.42	1.32	1.45
2	L	1121	5PA	C4A-N	-2.42	1.32	1.45
2	N	1141	5PA	C4A-N	-2.41	1.32	1.45
2	V	1221	5PA	C4A-N	-2.41	1.32	1.45
2	R	1181	5PA	C4A-N	-2.41	1.32	1.45
2	T	1201	5PA	C4A-N	-2.41	1.32	1.45
2	E	1051	5PA	C4A-N	-2.40	1.32	1.45
2	D	1041	5PA	C4A-N	-2.40	1.32	1.45
2	K	1111	5PA	C4A-N	-2.40	1.32	1.45
2	A	1011	5PA	C4A-N	-2.39	1.32	1.45
2	I	1091	5PA	C4A-N	-2.39	1.32	1.45
2	C	1031	5PA	C4A-N	-2.39	1.32	1.45
2	G	1071	5PA	C4A-N	-2.38	1.32	1.45
2	B	1021	5PA	C4A-N	-2.38	1.32	1.45
2	S	1191	5PA	C4A-N	-2.38	1.32	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	X	1241	5PA	C4A-N	-2.38	1.32	1.45
2	J	1101	5PA	C4A-N	-2.37	1.32	1.45
2	W	1231	5PA	C4A-N	-2.37	1.32	1.45
2	O	1151	5PA	O4P-C5A	-2.34	1.36	1.44
2	J	1101	5PA	O4P-C5A	-2.32	1.36	1.44
2	M	1131	5PA	O4P-C5A	-2.31	1.36	1.44
2	E	1051	5PA	O4P-C5A	-2.30	1.36	1.44
2	I	1091	5PA	O4P-C5A	-2.30	1.36	1.44
2	D	1041	5PA	O4P-C5A	-2.30	1.36	1.44
2	C	1031	5PA	O4P-C5A	-2.30	1.36	1.44
2	B	1021	5PA	O4P-C5A	-2.30	1.36	1.44
2	S	1191	5PA	O4P-C5A	-2.28	1.36	1.44
2	N	1141	5PA	O4P-C5A	-2.28	1.36	1.44
2	W	1231	5PA	O4P-C5A	-2.28	1.36	1.44
2	F	1061	5PA	O4P-C5A	-2.28	1.36	1.44
2	X	1241	5PA	O4P-C5A	-2.27	1.36	1.44
2	R	1181	5PA	O4P-C5A	-2.27	1.36	1.44
2	P	1161	5PA	O4P-C5A	-2.27	1.36	1.44
2	G	1071	5PA	O4P-C5A	-2.26	1.36	1.44
2	Q	1171	5PA	O4P-C5A	-2.26	1.36	1.44
2	A	1011	5PA	O4P-C5A	-2.25	1.36	1.44
2	V	1221	5PA	O4P-C5A	-2.25	1.36	1.44
2	H	1081	5PA	O4P-C5A	-2.25	1.36	1.44
2	L	1121	5PA	O4P-C5A	-2.24	1.36	1.44
2	K	1111	5PA	O4P-C5A	-2.22	1.36	1.44
2	T	1201	5PA	O4P-C5A	-2.22	1.36	1.44
2	U	1211	5PA	O4P-C5A	-2.20	1.36	1.44
2	U	1211	5PA	C10-C8	2.17	1.53	1.51
2	T	1201	5PA	C10-C8	2.14	1.53	1.51
2	I	1091	5PA	C10-C8	2.13	1.53	1.51
2	M	1131	5PA	C10-C8	2.12	1.53	1.51
2	S	1191	5PA	C9-C8	2.12	1.53	1.51
2	W	1231	5PA	C10-C8	2.10	1.53	1.51
2	G	1071	5PA	C9-C8	2.10	1.53	1.51
2	Q	1171	5PA	C10-C8	2.09	1.53	1.51
2	S	1191	5PA	C10-C8	2.09	1.53	1.51
2	G	1071	5PA	C10-C8	2.08	1.53	1.51
2	L	1121	5PA	C2A-C2	2.06	1.53	1.50
2	L	1121	5PA	C10-C8	2.05	1.53	1.51
2	O	1151	5PA	C10-C8	2.04	1.53	1.51
2	B	1021	5PA	C10-C8	2.04	1.53	1.51
2	O	1151	5PA	C10-C9	2.03	1.55	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	1101	5PA	C2A-C2	2.03	1.53	1.50
2	E	1051	5PA	C10-C8	2.02	1.53	1.51
2	P	1161	5PA	C10-C8	2.02	1.53	1.51
2	W	1231	5PA	C2A-C2	2.01	1.53	1.50
2	C	1031	5PA	C2A-C2	2.01	1.53	1.50
2	D	1041	5PA	C10-C8	2.01	1.53	1.51
2	J	1101	5PA	C10-C8	2.00	1.53	1.51
2	K	1111	5PA	C10-C8	2.00	1.53	1.51
2	G	1071	5PA	C2A-C2	2.00	1.53	1.50

All (168) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	K	1111	5PA	O4P-C5A-C5	8.12	124.57	109.36
2	C	1031	5PA	O4P-C5A-C5	6.97	122.41	109.36
2	S	1191	5PA	O4P-C5A-C5	6.88	122.25	109.36
2	U	1211	5PA	O4P-C5A-C5	6.79	122.09	109.36
2	G	1071	5PA	O4P-C5A-C5	6.53	121.59	109.36
2	E	1051	5PA	O4P-C5A-C5	6.52	121.57	109.36
2	B	1021	5PA	O4P-C5A-C5	6.37	121.29	109.36
2	Q	1171	5PA	O4P-C5A-C5	6.34	121.24	109.36
2	I	1091	5PA	O4P-C5A-C5	6.30	121.17	109.36
2	A	1011	5PA	O4P-C5A-C5	6.28	121.13	109.36
2	N	1141	5PA	O4P-C5A-C5	6.27	121.12	109.36
2	H	1081	5PA	O4P-C5A-C5	5.98	120.56	109.36
2	W	1231	5PA	C4-C4A-N	5.96	123.84	110.74
2	V	1221	5PA	O4P-C5A-C5	5.92	120.46	109.36
2	W	1231	5PA	O4P-C5A-C5	5.86	120.34	109.36
2	K	1111	5PA	C10-C8-N	5.86	122.86	117.30
2	N	1141	5PA	C10-C8-N	5.85	122.86	117.30
2	L	1121	5PA	C10-C8-N	5.83	122.84	117.30
2	J	1101	5PA	O4P-C5A-C5	5.83	120.28	109.36
2	I	1091	5PA	C4-C4A-N	5.81	123.51	110.74
2	F	1061	5PA	O4P-C5A-C5	5.81	120.25	109.36
2	T	1201	5PA	O4P-C5A-C5	5.74	120.11	109.36
2	M	1131	5PA	C10-C8-N	5.71	122.72	117.30
2	X	1241	5PA	O4P-C5A-C5	5.69	120.02	109.36
2	O	1151	5PA	C4-C4A-N	5.67	123.20	110.74
2	U	1211	5PA	C4-C4A-N	5.66	123.18	110.74
2	A	1011	5PA	C10-C8-N	5.62	122.63	117.30
2	M	1131	5PA	C4-C4A-N	5.58	123.00	110.74
2	Q	1171	5PA	C10-C8-N	5.55	122.57	117.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	S	1191	5PA	C10-C8-N	5.47	122.49	117.30
2	R	1181	5PA	C10-C8-N	5.44	122.47	117.30
2	L	1121	5PA	C4-C4A-N	5.42	122.64	110.74
2	T	1201	5PA	C4-C4A-N	5.40	122.61	110.74
2	R	1181	5PA	C4-C4A-N	5.35	122.49	110.74
2	G	1071	5PA	C10-C8-N	5.31	122.34	117.30
2	U	1211	5PA	C10-C8-N	5.27	122.31	117.30
2	X	1241	5PA	C4-C4A-N	5.23	122.24	110.74
2	D	1041	5PA	O4P-C5A-C5	5.22	119.15	109.36
2	P	1161	5PA	C4-C4A-N	5.20	122.17	110.74
2	E	1051	5PA	C4-C4A-N	5.17	122.10	110.74
2	C	1031	5PA	C10-C8-N	5.16	122.20	117.30
2	V	1221	5PA	C10-C8-N	5.13	122.17	117.30
2	P	1161	5PA	O4P-C5A-C5	5.11	118.94	109.36
2	D	1041	5PA	C10-C8-N	5.09	122.13	117.30
2	B	1021	5PA	C10-C8-N	5.05	122.09	117.30
2	P	1161	5PA	C10-C8-N	5.03	122.08	117.30
2	J	1101	5PA	C4-C4A-N	4.93	121.58	110.74
2	B	1021	5PA	C4-C4A-N	4.87	121.44	110.74
2	V	1221	5PA	C4-C4A-N	4.87	121.44	110.74
2	R	1181	5PA	C9-C8-N	-4.85	112.70	117.30
2	A	1011	5PA	C4-C4A-N	4.85	121.39	110.74
2	S	1191	5PA	C4A-N-C8	4.84	126.05	116.47
2	F	1061	5PA	C4-C4A-N	4.82	121.33	110.74
2	F	1061	5PA	C10-C8-N	4.82	121.87	117.30
2	T	1201	5PA	C10-C8-N	4.81	121.87	117.30
2	E	1051	5PA	C10-C8-N	4.81	121.86	117.30
2	D	1041	5PA	C4-C4A-N	4.78	121.23	110.74
2	M	1131	5PA	O4P-C5A-C5	4.75	118.25	109.36
2	X	1241	5PA	C10-C8-N	4.75	121.81	117.30
2	K	1111	5PA	C4-C4A-N	4.68	121.02	110.74
2	H	1081	5PA	C4-C4A-N	4.68	121.01	110.74
2	R	1181	5PA	O4P-C5A-C5	4.67	118.11	109.36
2	G	1071	5PA	C4A-N-C8	4.65	125.67	116.47
2	N	1141	5PA	C4A-N-C8	4.62	125.62	116.47
2	K	1111	5PA	C4A-N-C8	4.58	125.53	116.47
2	U	1211	5PA	C9-C8-N	-4.58	112.96	117.30
2	O	1151	5PA	O4P-C5A-C5	4.52	117.83	109.36
2	Q	1171	5PA	C4A-N-C8	4.47	125.31	116.47
2	A	1011	5PA	C4A-N-C8	4.44	125.26	116.47
2	Q	1171	5PA	C4-C4A-N	4.42	120.44	110.74
2	C	1031	5PA	C4-C4A-N	4.40	120.41	110.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	I	1091	5PA	C10-C8-N	4.32	121.40	117.30
2	L	1121	5PA	O4P-C5A-C5	4.31	117.43	109.36
2	N	1141	5PA	C4-C4A-N	4.21	119.99	110.74
2	T	1201	5PA	C9-C8-N	-4.02	113.49	117.30
2	J	1101	5PA	C10-C8-N	3.96	121.06	117.30
2	B	1021	5PA	C4A-N-C8	3.89	124.16	116.47
2	J	1101	5PA	C4A-N-C8	3.88	124.14	116.47
2	C	1031	5PA	C4A-N-C8	3.87	124.14	116.47
2	D	1041	5PA	C4A-N-C8	3.86	124.10	116.47
2	G	1071	5PA	C4-C4A-N	3.80	119.10	110.74
2	O	1151	5PA	C10-C8-N	3.80	120.91	117.30
2	S	1191	5PA	C4-C4A-N	3.75	118.98	110.74
2	I	1091	5PA	C4A-N-C8	3.73	123.84	116.47
2	W	1231	5PA	C10-C8-N	3.69	120.81	117.30
2	F	1061	5PA	C4A-N-C8	3.66	123.72	116.47
2	V	1221	5PA	C4A-N-C8	3.66	123.70	116.47
2	P	1161	5PA	C4A-N-C8	3.61	123.61	116.47
2	L	1121	5PA	C9-C8-N	-3.60	113.89	117.30
2	H	1081	5PA	C4A-N-C8	3.53	123.46	116.47
2	E	1051	5PA	C4A-N-C8	3.51	123.42	116.47
2	M	1131	5PA	C9-C8-N	-3.51	113.97	117.30
2	W	1231	5PA	C4A-N-C8	3.48	123.36	116.47
2	K	1111	5PA	C9-C8-N	-3.43	114.05	117.30
2	O	1151	5PA	C4A-N-C8	3.42	123.23	116.47
2	X	1241	5PA	C4A-N-C8	3.28	122.96	116.47
2	H	1081	5PA	C10-C8-N	3.28	120.41	117.30
2	V	1221	5PA	C9-C8-N	-3.17	114.30	117.30
2	L	1121	5PA	O3P-P-O2P	3.17	119.67	107.80
2	T	1201	5PA	C4A-N-C8	3.12	122.65	116.47
2	S	1191	5PA	C9-C8-N	-3.10	114.36	117.30
2	H	1081	5PA	O3P-P-O2P	3.10	119.44	107.80
2	U	1211	5PA	C4A-N-C8	3.09	122.59	116.47
2	R	1181	5PA	C4A-N-C8	2.98	122.36	116.47
2	V	1221	5PA	O3P-P-O2P	2.97	118.94	107.80
2	O	1151	5PA	O3P-P-O2P	2.95	118.86	107.80
2	P	1161	5PA	O3P-P-O2P	2.91	118.72	107.80
2	X	1241	5PA	O3P-P-O2P	2.90	118.68	107.80
2	T	1201	5PA	O3P-P-O2P	2.89	118.65	107.80
2	M	1131	5PA	C4A-N-C8	2.89	122.19	116.47
2	L	1121	5PA	C4A-N-C8	2.89	122.19	116.47
2	F	1061	5PA	O3P-P-O2P	2.88	118.60	107.80
2	J	1101	5PA	O3P-P-O2P	2.88	118.58	107.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	R	1181	5PA	O3P-P-O2P	2.87	118.58	107.80
2	E	1051	5PA	O3P-P-O2P	2.87	118.58	107.80
2	S	1191	5PA	O3P-P-O2P	2.86	118.53	107.80
2	D	1041	5PA	O3P-P-O2P	2.86	118.53	107.80
2	G	1071	5PA	C9-C8-N	-2.86	114.59	117.30
2	M	1131	5PA	O3P-P-O2P	2.85	118.50	107.80
2	N	1141	5PA	O3P-P-O2P	2.82	118.37	107.80
2	G	1071	5PA	O3P-P-O2P	2.79	118.27	107.80
2	A	1011	5PA	O3P-P-O2P	2.79	118.26	107.80
2	I	1091	5PA	O3P-P-O2P	2.79	118.25	107.80
2	Q	1171	5PA	O3P-P-O2P	2.78	118.22	107.80
2	U	1211	5PA	O3P-P-O2P	2.77	118.19	107.80
2	H	1081	5PA	O7-C7-C8	-2.76	116.10	122.93
2	A	1011	5PA	C9-C8-N	-2.76	114.69	117.30
2	K	1111	5PA	O3P-P-O2P	2.74	118.06	107.80
2	W	1231	5PA	O3P-P-O2P	2.74	118.06	107.80
2	X	1241	5PA	C9-C8-N	-2.73	114.72	117.30
2	B	1021	5PA	O3P-P-O2P	2.72	118.00	107.80
2	P	1161	5PA	C9-C8-N	-2.71	114.73	117.30
2	C	1031	5PA	O3P-P-O2P	2.71	117.95	107.80
2	M	1131	5PA	O7-C7-C8	-2.60	116.51	122.93
2	H	1081	5PA	C10-C8-C9	2.58	61.37	59.00
2	R	1181	5PA	C9-C8-C7	-2.53	111.94	117.11
2	C	1031	5PA	C9-C8-N	-2.50	114.93	117.30
2	D	1041	5PA	O4P-P-O1P	-2.50	99.69	106.44
2	B	1021	5PA	C9-C8-N	-2.48	114.95	117.30
2	M	1131	5PA	O4P-P-O1P	-2.47	99.76	106.44
2	D	1041	5PA	C9-C8-N	-2.45	114.97	117.30
2	E	1051	5PA	O7-C7-C8	-2.40	116.99	122.93
2	N	1141	5PA	C9-C8-N	-2.33	115.09	117.30
2	L	1121	5PA	C9-C8-C7	-2.33	112.35	117.11
2	L	1121	5PA	C6-C5-C4	2.30	119.80	118.06
2	S	1191	5PA	C4A-C4-C5	2.29	122.24	119.75
2	G	1071	5PA	C4A-C4-C5	2.27	122.22	119.75
2	A	1011	5PA	O7-C7-C8	-2.26	117.35	122.93
2	F	1061	5PA	C9-C8-N	-2.25	115.17	117.30
2	J	1101	5PA	C4A-C4-C5	2.24	122.19	119.75
2	P	1161	5PA	O7-C7-C8	-2.23	117.41	122.93
2	X	1241	5PA	C6-C5-C4	2.23	119.74	118.06
2	H	1081	5PA	O8-C7-C8	2.22	119.18	113.59
2	A	1011	5PA	C9-C8-C7	-2.22	112.57	117.11
2	C	1031	5PA	O4P-P-O1P	-2.21	100.46	106.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	X	1241	5PA	C4A-C4-C5	2.21	122.16	119.75
2	C	1031	5PA	O7-C7-C8	-2.19	117.53	122.93
2	V	1221	5PA	C9-C8-C7	-2.16	112.68	117.11
2	G	1071	5PA	C9-C8-C7	-2.16	112.69	117.11
2	X	1241	5PA	C9-C8-C7	-2.15	112.72	117.11
2	B	1021	5PA	O4P-P-O1P	-2.13	100.67	106.44
2	D	1041	5PA	C9-C8-C7	-2.13	112.74	117.11
2	D	1041	5PA	O7-C7-C8	-2.12	117.69	122.93
2	H	1081	5PA	C9-C10-C8	-2.12	59.20	60.50
2	E	1051	5PA	C9-C8-N	-2.11	115.31	117.30
2	S	1191	5PA	O4P-P-O1P	-2.08	100.82	106.44
2	O	1151	5PA	O4P-P-O1P	-2.07	100.86	106.44
2	S	1191	5PA	C9-C8-C7	-2.04	112.93	117.11

There are no chirality outliers.

All (182) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	A	1011	5PA	C5-C4-C4A-N
2	A	1011	5PA	C3-C4-C4A-N
2	A	1011	5PA	C4-C5-C5A-O4P
2	A	1011	5PA	C6-C5-C5A-O4P
2	A	1011	5PA	O7-C7-C8-N
2	A	1011	5PA	O8-C7-C8-N
2	A	1011	5PA	O7-C7-C8-C9
2	A	1011	5PA	O8-C7-C8-C9
2	B	1021	5PA	C5-C4-C4A-N
2	B	1021	5PA	C3-C4-C4A-N
2	B	1021	5PA	C4-C5-C5A-O4P
2	B	1021	5PA	C6-C5-C5A-O4P
2	C	1031	5PA	C5-C4-C4A-N
2	C	1031	5PA	C4-C5-C5A-O4P
2	C	1031	5PA	C6-C5-C5A-O4P
2	C	1031	5PA	O8-C7-C8-C9
2	D	1041	5PA	C5-C4-C4A-N
2	D	1041	5PA	C3-C4-C4A-N
2	D	1041	5PA	C4-C5-C5A-O4P
2	D	1041	5PA	C6-C5-C5A-O4P
2	D	1041	5PA	O8-C7-C8-N
2	D	1041	5PA	O7-C7-C8-C9
2	D	1041	5PA	O8-C7-C8-C9
2	E	1051	5PA	C5-C4-C4A-N

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Mol	Chain	Res	Type	Atoms
2	E	1051	5PA	C3-C4-C4A-N
2	E	1051	5PA	C4-C5-C5A-O4P
2	E	1051	5PA	C6-C5-C5A-O4P
2	F	1061	5PA	C5-C4-C4A-N
2	F	1061	5PA	C4-C5-C5A-O4P
2	F	1061	5PA	C6-C5-C5A-O4P
2	F	1061	5PA	O7-C7-C8-N
2	F	1061	5PA	O8-C7-C8-N
2	F	1061	5PA	O7-C7-C8-C9
2	F	1061	5PA	O8-C7-C8-C9
2	G	1071	5PA	C5-C4-C4A-N
2	G	1071	5PA	C4-C5-C5A-O4P
2	G	1071	5PA	C6-C5-C5A-O4P
2	H	1081	5PA	C5-C4-C4A-N
2	H	1081	5PA	C3-C4-C4A-N
2	H	1081	5PA	C4-C5-C5A-O4P
2	H	1081	5PA	C6-C5-C5A-O4P
2	H	1081	5PA	O7-C7-C8-N
2	H	1081	5PA	O8-C7-C8-N
2	H	1081	5PA	O7-C7-C8-C9
2	H	1081	5PA	O8-C7-C8-C9
2	I	1091	5PA	C5-C4-C4A-N
2	I	1091	5PA	C5A-O4P-P-O1P
2	I	1091	5PA	C5A-O4P-P-O2P
2	I	1091	5PA	C5A-O4P-P-O3P
2	I	1091	5PA	C4-C5-C5A-O4P
2	I	1091	5PA	C6-C5-C5A-O4P
2	J	1101	5PA	C5-C4-C4A-N
2	J	1101	5PA	C5A-O4P-P-O1P
2	J	1101	5PA	C5A-O4P-P-O2P
2	J	1101	5PA	C5A-O4P-P-O3P
2	J	1101	5PA	C4-C5-C5A-O4P
2	J	1101	5PA	C6-C5-C5A-O4P
2	J	1101	5PA	O8-C7-C8-N
2	J	1101	5PA	O8-C7-C8-C9
2	K	1111	5PA	C5-C4-C4A-N
2	K	1111	5PA	C3-C4-C4A-N
2	K	1111	5PA	C5A-O4P-P-O1P
2	K	1111	5PA	C5A-O4P-P-O2P
2	K	1111	5PA	C5A-O4P-P-O3P
2	K	1111	5PA	C4-C5-C5A-O4P
2	K	1111	5PA	C6-C5-C5A-O4P

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Mol	Chain	Res	Type	Atoms
2	L	1121	5PA	C5-C4-C4A-N
2	L	1121	5PA	C5A-O4P-P-O1P
2	L	1121	5PA	C5A-O4P-P-O2P
2	L	1121	5PA	C5A-O4P-P-O3P
2	L	1121	5PA	C4-C5-C5A-O4P
2	L	1121	5PA	C6-C5-C5A-O4P
2	M	1131	5PA	C5-C4-C4A-N
2	M	1131	5PA	C3-C4-C4A-N
2	M	1131	5PA	C4-C5-C5A-O4P
2	M	1131	5PA	C6-C5-C5A-O4P
2	M	1131	5PA	O8-C7-C8-C9
2	N	1141	5PA	C5-C4-C4A-N
2	N	1141	5PA	C4-C5-C5A-O4P
2	N	1141	5PA	C6-C5-C5A-O4P
2	O	1151	5PA	C5-C4-C4A-N
2	O	1151	5PA	C3-C4-C4A-N
2	O	1151	5PA	C4-C5-C5A-O4P
2	O	1151	5PA	C6-C5-C5A-O4P
2	O	1151	5PA	O7-C7-C8-N
2	O	1151	5PA	O8-C7-C8-N
2	P	1161	5PA	C5-C4-C4A-N
2	P	1161	5PA	C4-C5-C5A-O4P
2	P	1161	5PA	C6-C5-C5A-O4P
2	P	1161	5PA	O8-C7-C8-N
2	P	1161	5PA	O7-C7-C8-C9
2	P	1161	5PA	O8-C7-C8-C9
2	Q	1171	5PA	C5-C4-C4A-N
2	Q	1171	5PA	C4-C5-C5A-O4P
2	Q	1171	5PA	C6-C5-C5A-O4P
2	R	1181	5PA	C5-C4-C4A-N
2	R	1181	5PA	C3-C4-C4A-N
2	R	1181	5PA	C5A-O4P-P-O2P
2	R	1181	5PA	C4-C5-C5A-O4P
2	R	1181	5PA	C6-C5-C5A-O4P
2	S	1191	5PA	C5-C4-C4A-N
2	S	1191	5PA	C4-C5-C5A-O4P
2	S	1191	5PA	C6-C5-C5A-O4P
2	T	1201	5PA	C5-C4-C4A-N
2	T	1201	5PA	C4-C5-C5A-O4P
2	T	1201	5PA	C6-C5-C5A-O4P
2	U	1211	5PA	C5-C4-C4A-N
2	U	1211	5PA	C5A-O4P-P-O2P

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Mol	Chain	Res	Type	Atoms
2	U	1211	5PA	C5A-O4P-P-O3P
2	U	1211	5PA	C4-C5-C5A-O4P
2	U	1211	5PA	C6-C5-C5A-O4P
2	V	1221	5PA	C5-C4-C4A-N
2	V	1221	5PA	C4-C5-C5A-O4P
2	V	1221	5PA	C6-C5-C5A-O4P
2	W	1231	5PA	C5-C4-C4A-N
2	W	1231	5PA	C5A-O4P-P-O2P
2	W	1231	5PA	C4-C5-C5A-O4P
2	W	1231	5PA	C6-C5-C5A-O4P
2	X	1241	5PA	C5-C4-C4A-N
2	X	1241	5PA	C4-C5-C5A-O4P
2	X	1241	5PA	C6-C5-C5A-O4P
2	X	1241	5PA	O8-C7-C8-C9
2	G	1071	5PA	C3-C4-C4A-N
2	I	1091	5PA	C3-C4-C4A-N
2	V	1221	5PA	C3-C4-C4A-N
2	U	1211	5PA	C5A-O4P-P-O1P
2	C	1031	5PA	C3-C4-C4A-N
2	U	1211	5PA	C3-C4-C4A-N
2	B	1021	5PA	O7-C7-C8-C9
2	C	1031	5PA	O7-C7-C8-C9
2	E	1051	5PA	O7-C7-C8-C9
2	G	1071	5PA	O7-C7-C8-C9
2	I	1091	5PA	O7-C7-C8-C9
2	J	1101	5PA	O7-C7-C8-C9
2	L	1121	5PA	O7-C7-C8-C9
2	L	1121	5PA	O8-C7-C8-C9
2	M	1131	5PA	O7-C7-C8-C9
2	R	1181	5PA	O7-C7-C8-C9
2	U	1211	5PA	O7-C7-C8-C9
2	V	1221	5PA	O7-C7-C8-C9
2	W	1231	5PA	O7-C7-C8-C9
2	X	1241	5PA	O7-C7-C8-C9
2	D	1041	5PA	O7-C7-C8-N
2	P	1161	5PA	O7-C7-C8-N
2	F	1061	5PA	C3-C4-C4A-N
2	J	1101	5PA	C3-C4-C4A-N
2	L	1121	5PA	C3-C4-C4A-N
2	N	1141	5PA	C3-C4-C4A-N
2	P	1161	5PA	C3-C4-C4A-N
2	Q	1171	5PA	C3-C4-C4A-N

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Mol	Chain	Res	Type	Atoms
2	S	1191	5PA	C3-C4-C4A-N
2	T	1201	5PA	C3-C4-C4A-N
2	W	1231	5PA	C3-C4-C4A-N
2	X	1241	5PA	C3-C4-C4A-N
2	R	1181	5PA	C5A-O4P-P-O1P
2	B	1021	5PA	O8-C7-C8-C9
2	C	1031	5PA	O8-C7-C8-C10
2	E	1051	5PA	O8-C7-C8-C9
2	G	1071	5PA	O8-C7-C8-C9
2	G	1071	5PA	O8-C7-C8-C10
2	I	1091	5PA	O8-C7-C8-C9
2	J	1101	5PA	O8-C7-C8-C10
2	K	1111	5PA	O7-C7-C8-C9
2	L	1121	5PA	O8-C7-C8-C10
2	M	1131	5PA	O8-C7-C8-C10
2	N	1141	5PA	O7-C7-C8-C9
2	N	1141	5PA	O8-C7-C8-C9
2	O	1151	5PA	O7-C7-C8-C9
2	O	1151	5PA	O7-C7-C8-C10
2	O	1151	5PA	O8-C7-C8-C10
2	Q	1171	5PA	O7-C7-C8-C9
2	Q	1171	5PA	O8-C7-C8-C9
2	R	1181	5PA	O8-C7-C8-C9
2	T	1201	5PA	O7-C7-C8-C9
2	T	1201	5PA	O8-C7-C8-C9
2	U	1211	5PA	O8-C7-C8-C9
2	V	1221	5PA	O8-C7-C8-C9
2	V	1221	5PA	O7-C7-C8-C10
2	V	1221	5PA	O8-C7-C8-C10
2	W	1231	5PA	O8-C7-C8-C9
2	X	1241	5PA	O8-C7-C8-C10
2	J	1101	5PA	O7-C7-C8-N

There are no ring outliers.

24 monomers are involved in 193 short contacts:

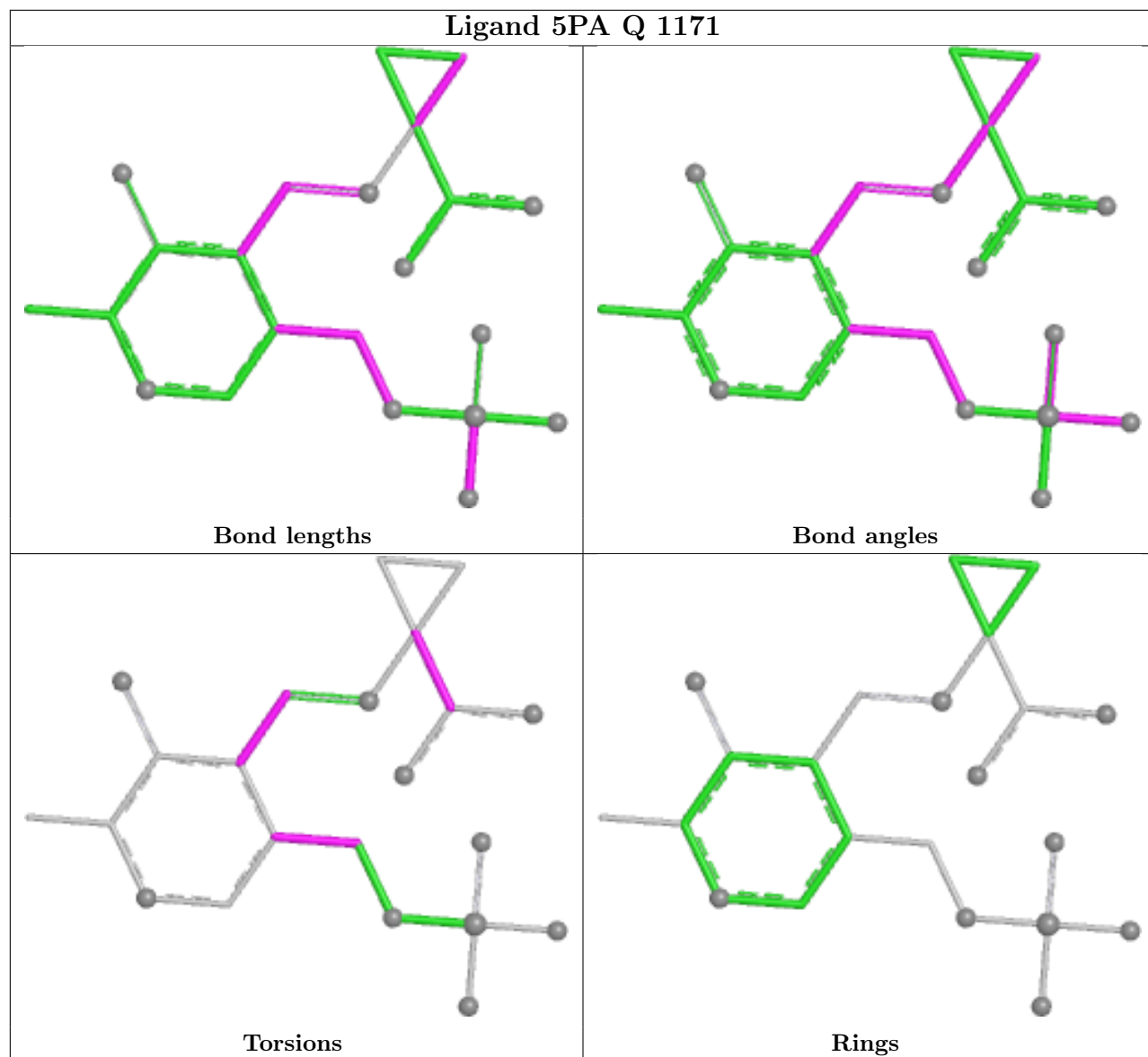
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	Q	1171	5PA	15	0
2	A	1011	5PA	5	0
2	W	1231	5PA	10	0
2	E	1051	5PA	5	0
2	G	1071	5PA	3	0

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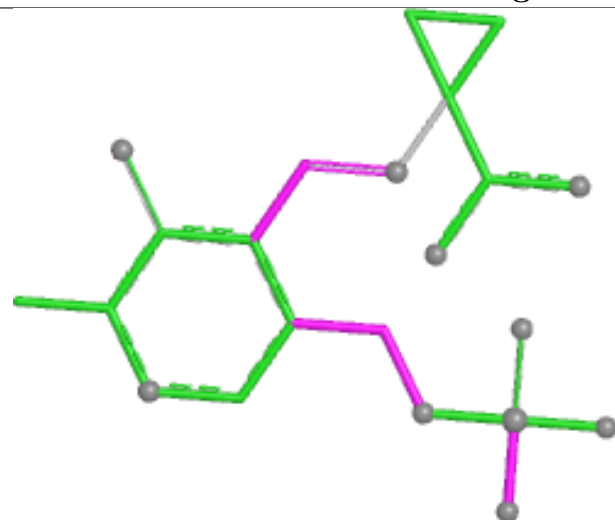
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	V	1221	5PA	4	0
2	X	1241	5PA	6	0
2	U	1211	5PA	6	0
2	S	1191	5PA	9	0
2	L	1121	5PA	5	0
2	I	1091	5PA	12	0
2	K	1111	5PA	9	0
2	M	1131	5PA	10	0
2	B	1021	5PA	9	0
2	T	1201	5PA	7	0
2	C	1031	5PA	7	0
2	D	1041	5PA	8	0
2	R	1181	5PA	13	0
2	O	1151	5PA	5	0
2	P	1161	5PA	10	0
2	H	1081	5PA	7	0
2	J	1101	5PA	9	0
2	F	1061	5PA	15	0
2	N	1141	5PA	4	0

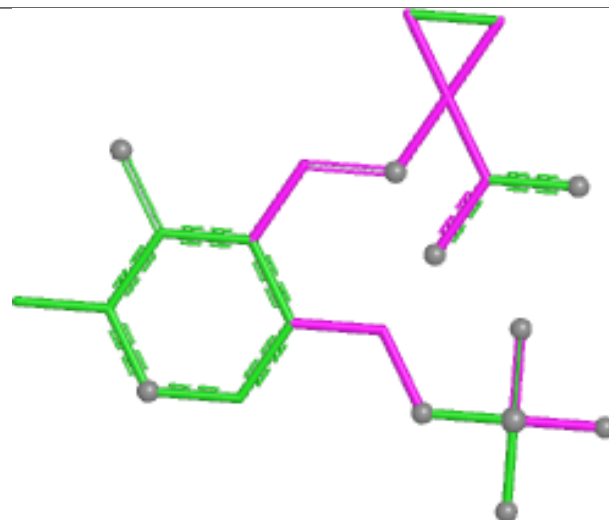
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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



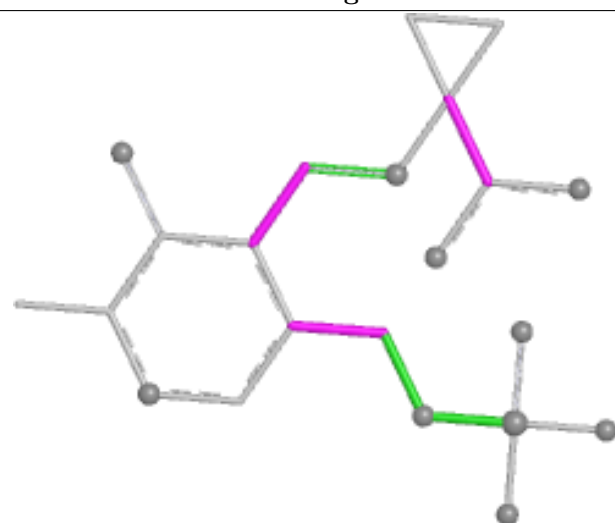
Ligand 5PA A 1011



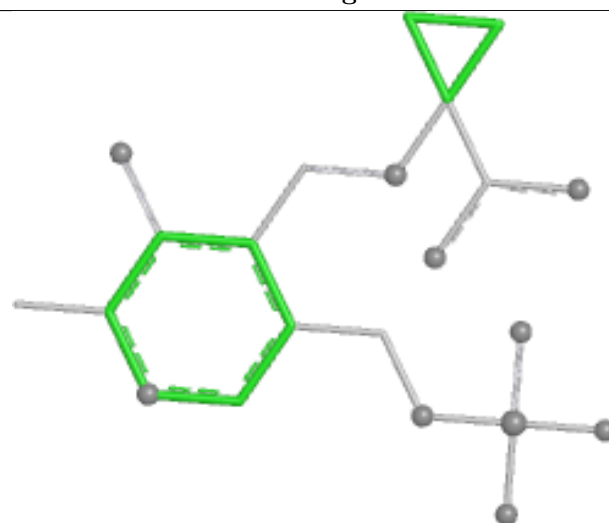
Bond lengths



Bond angles

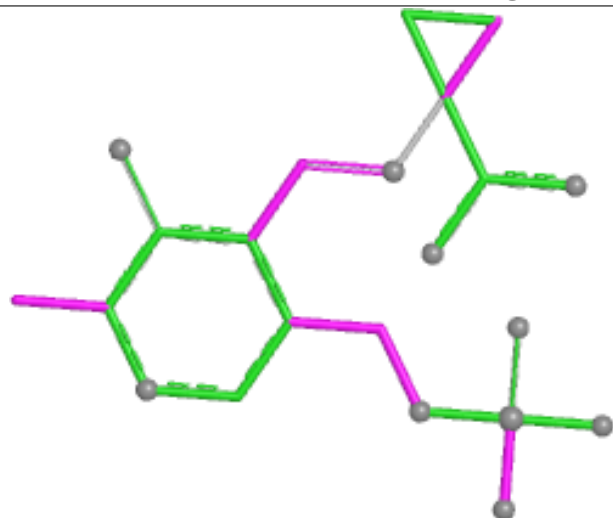


Torsions

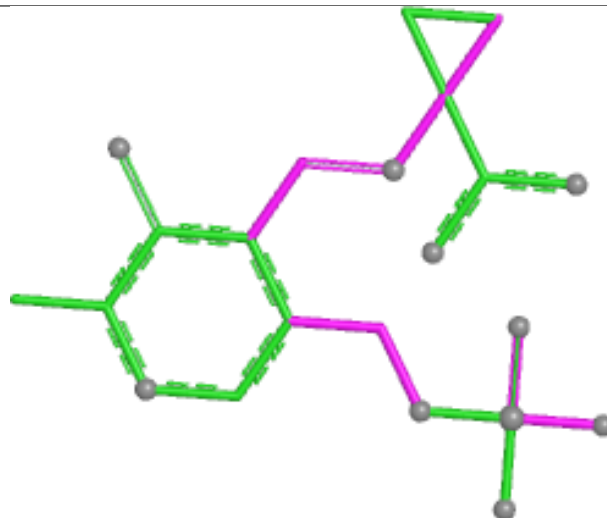


Rings

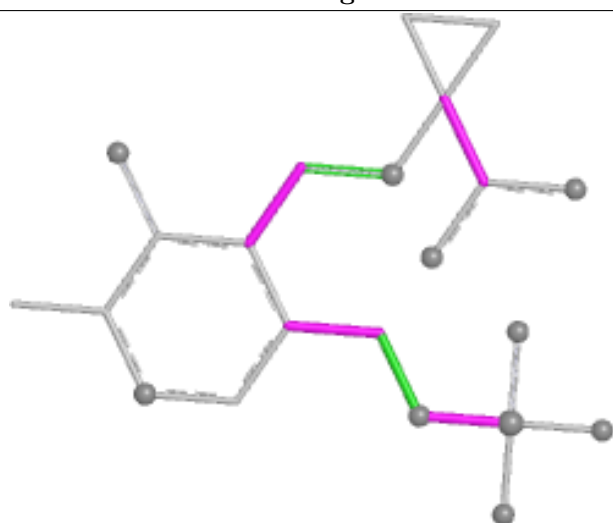
Ligand 5PA W 1231



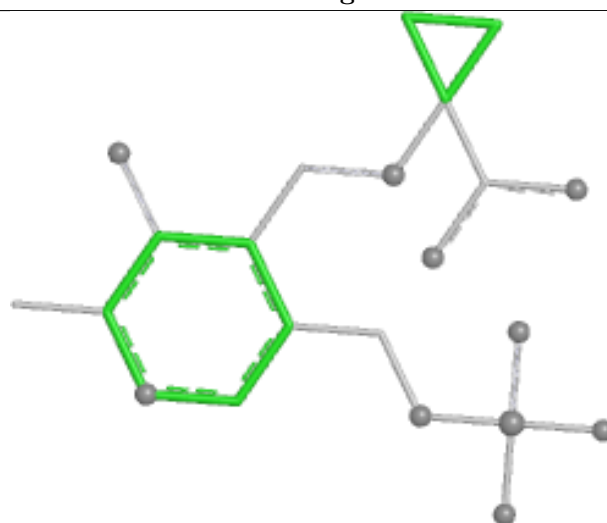
Bond lengths



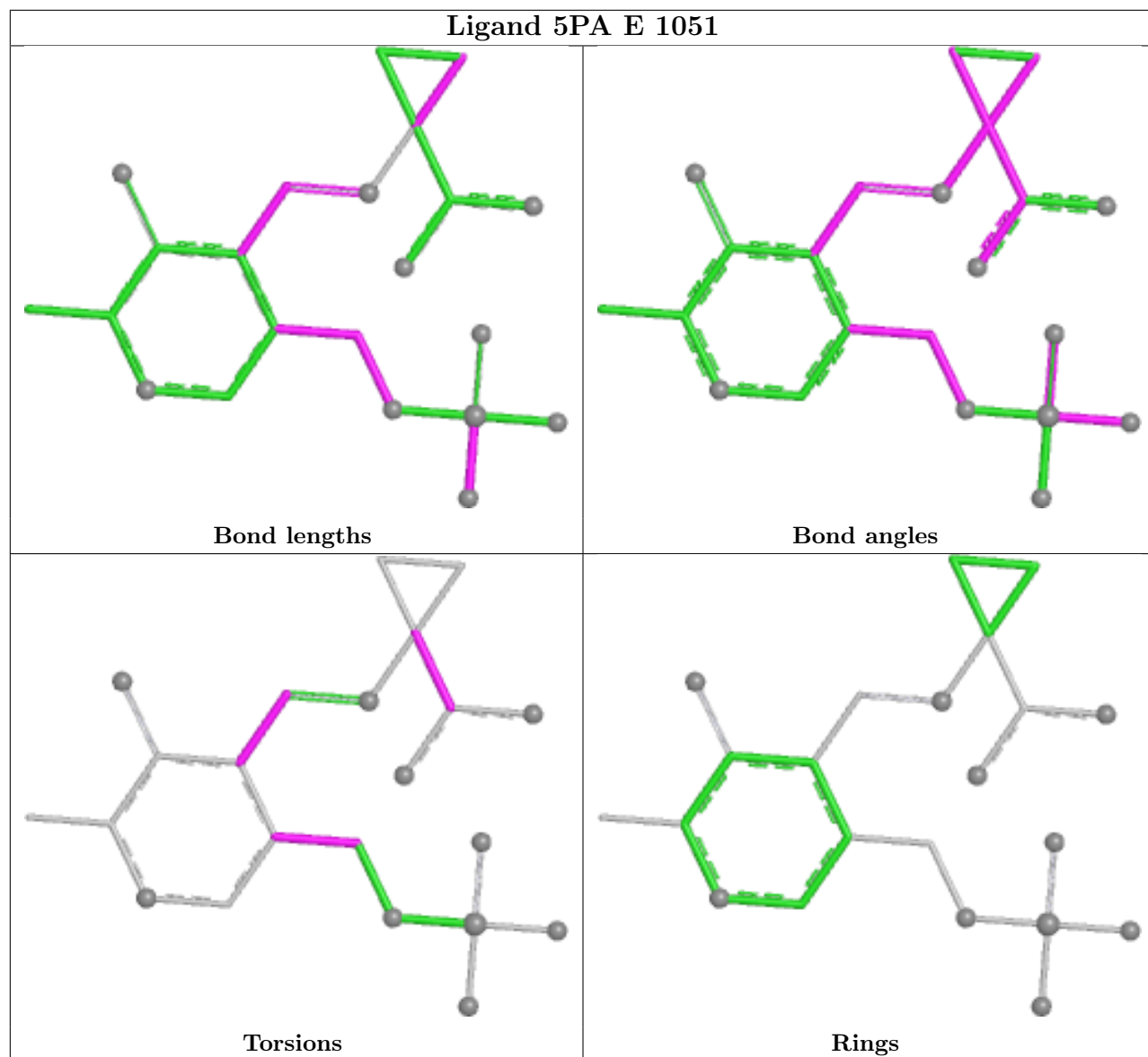
Bond angles

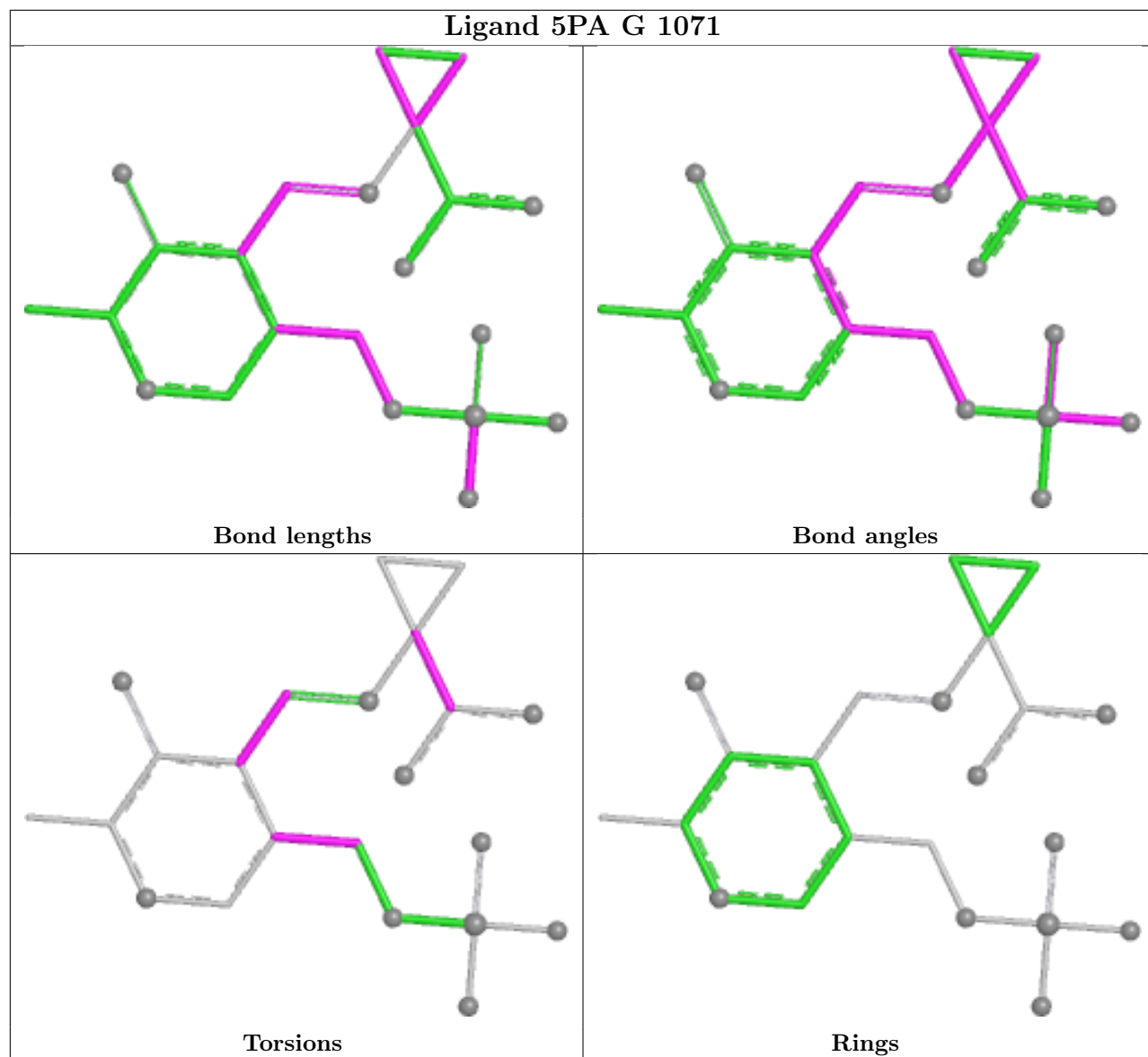


Torsions

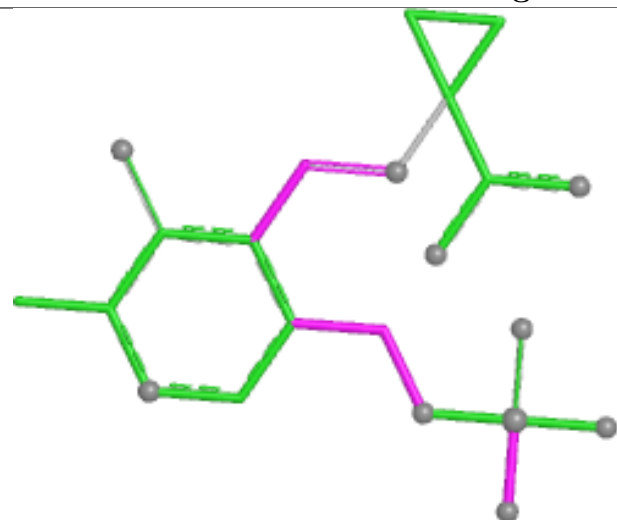


Rings

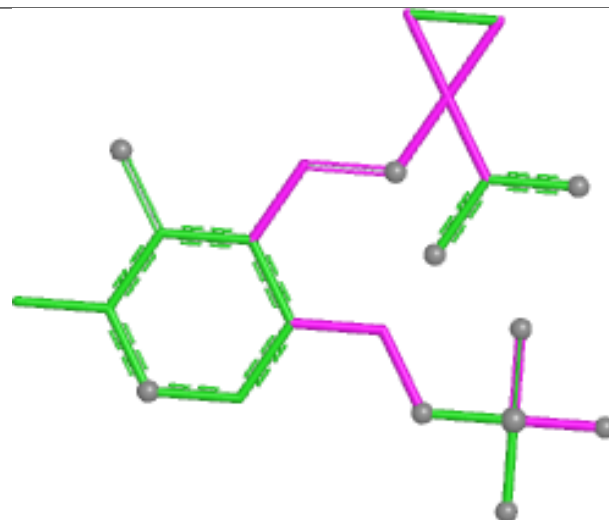




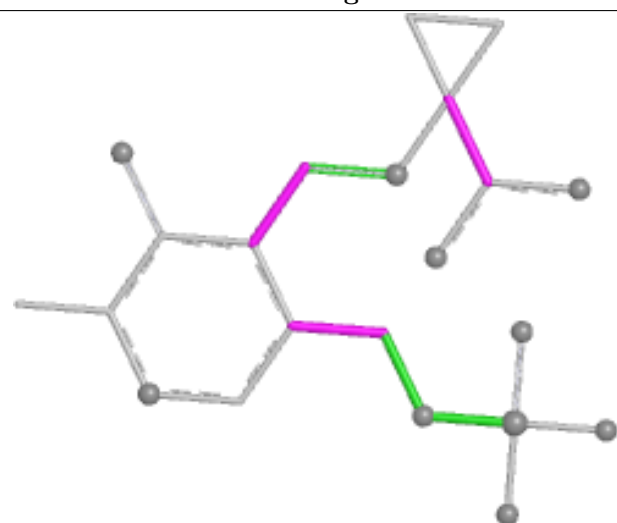
Ligand 5PA V 1221



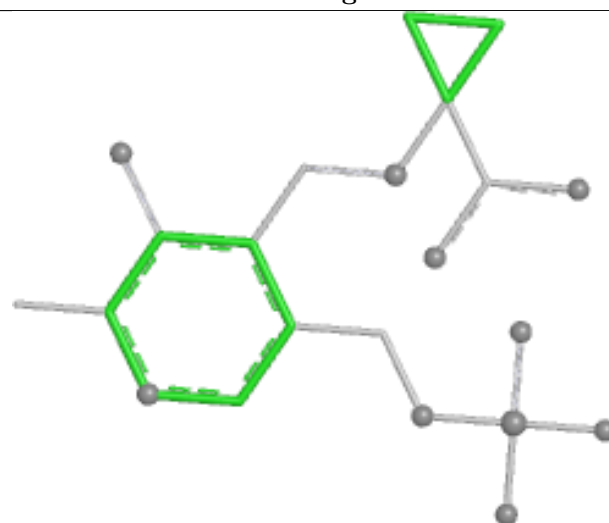
Bond lengths



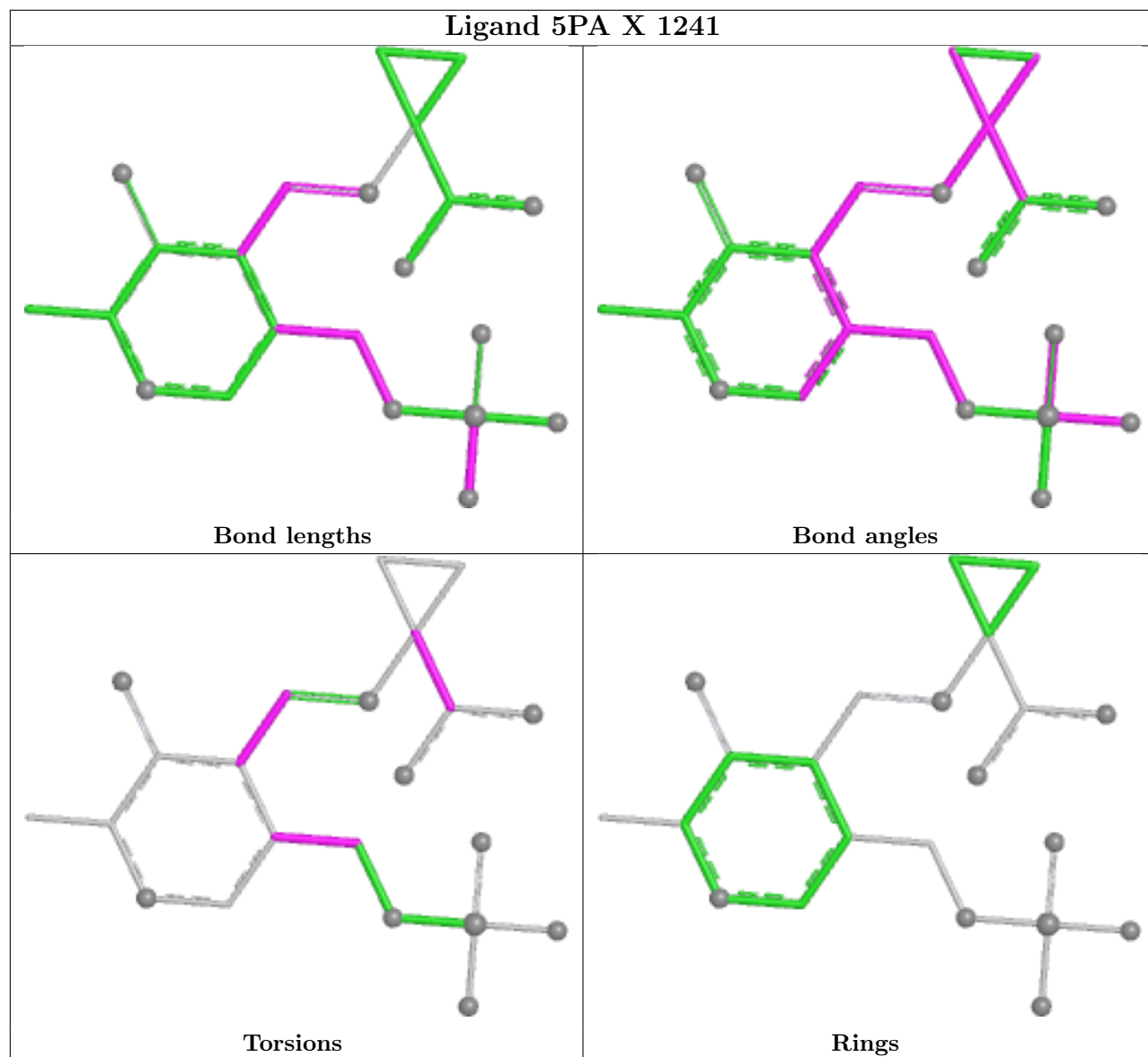
Bond angles

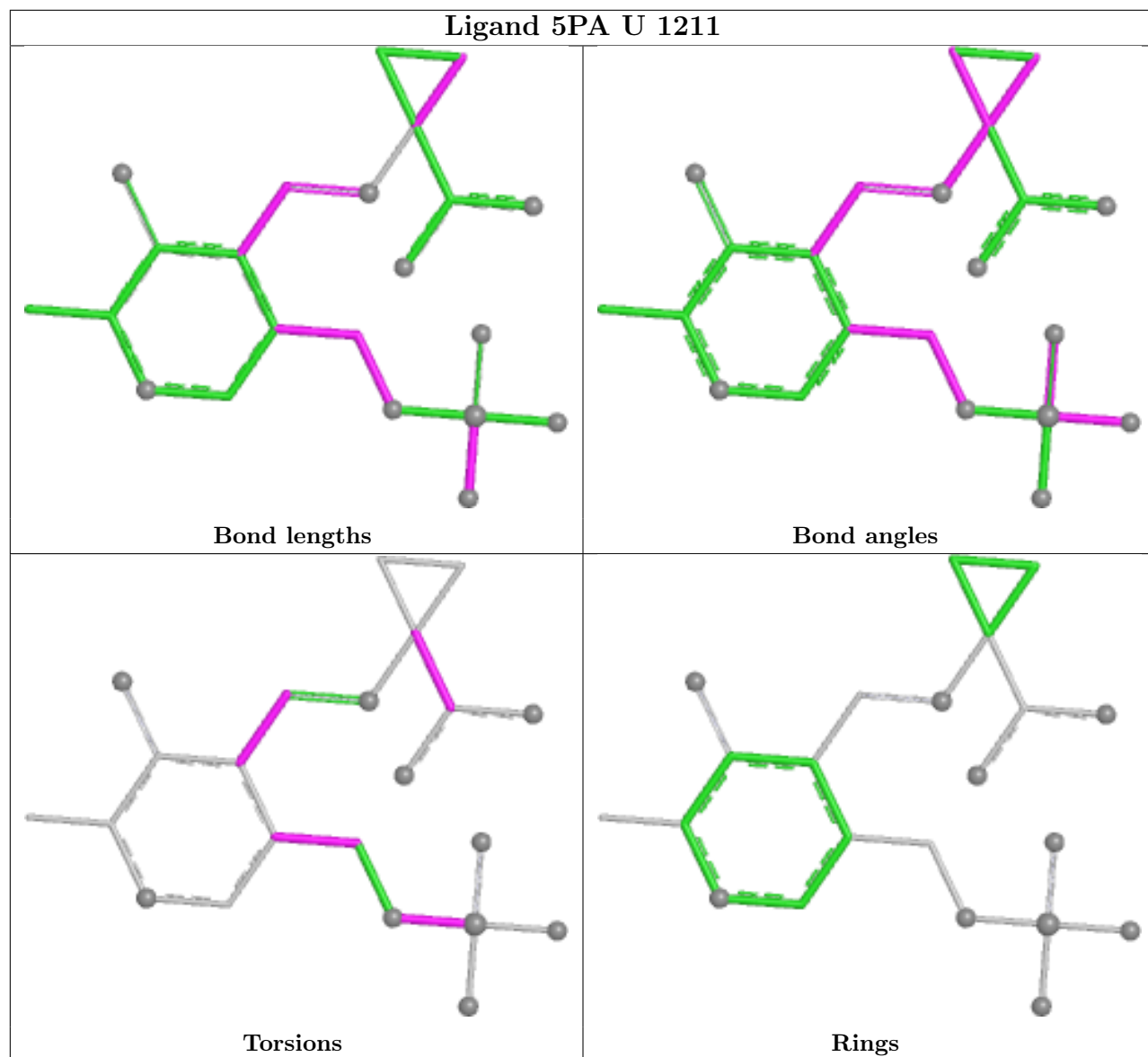


Torsions

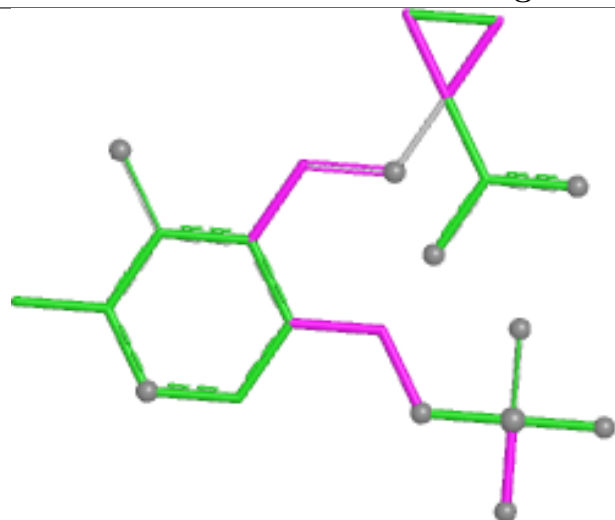


Rings

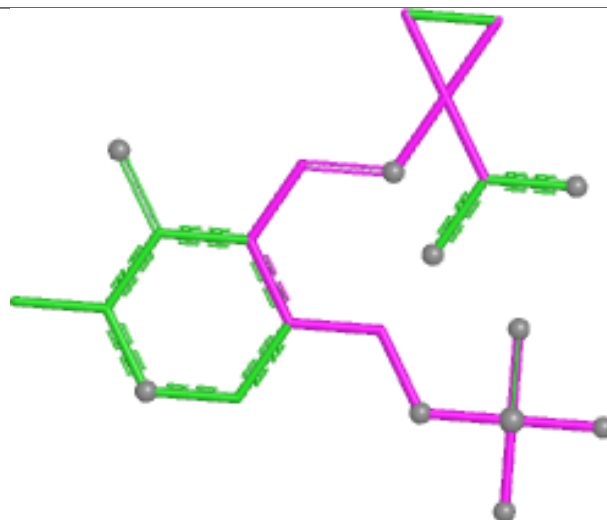




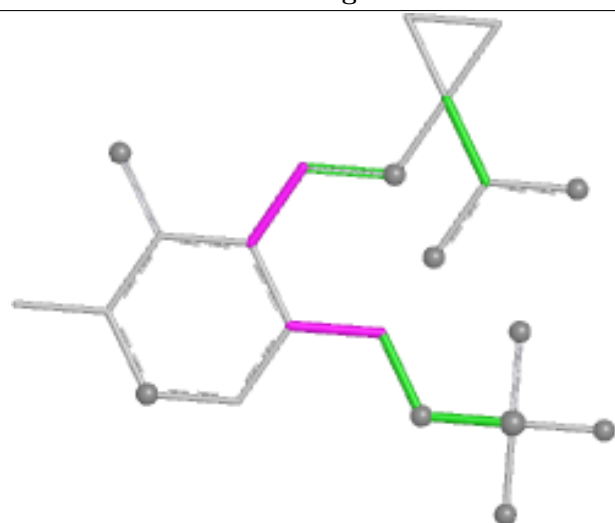
Ligand 5PA S 1191



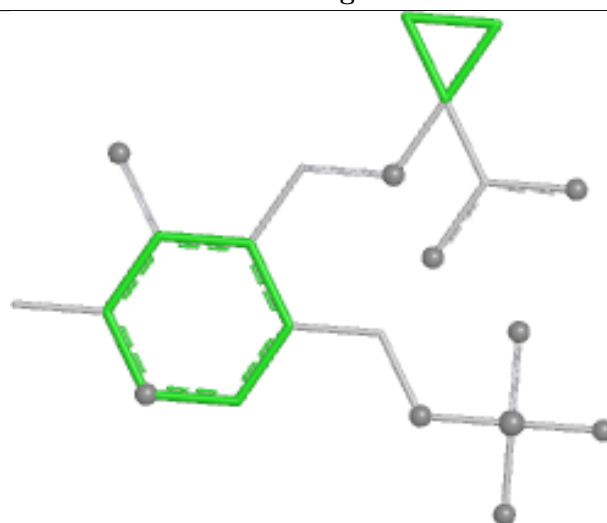
Bond lengths



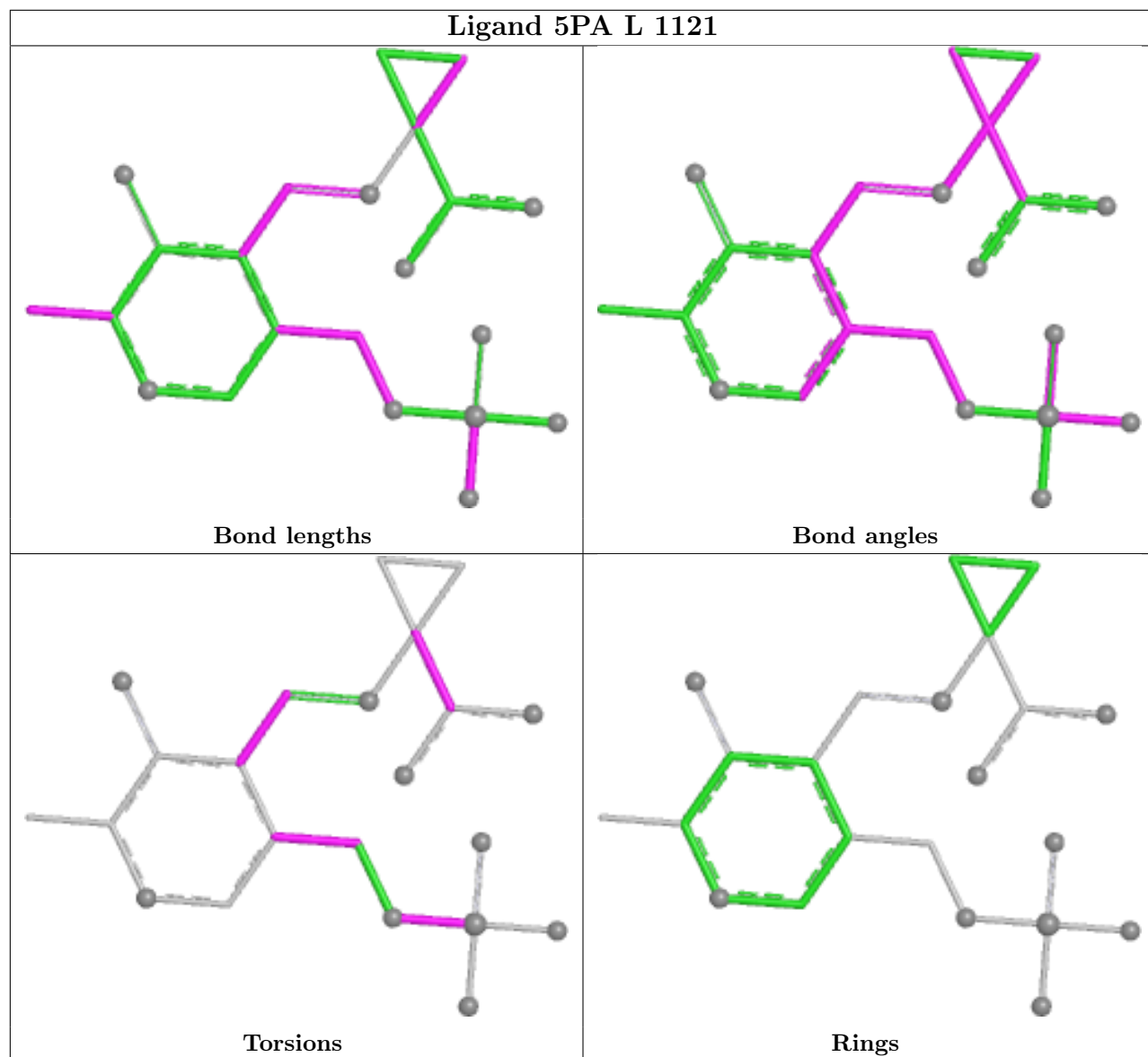
Bond angles



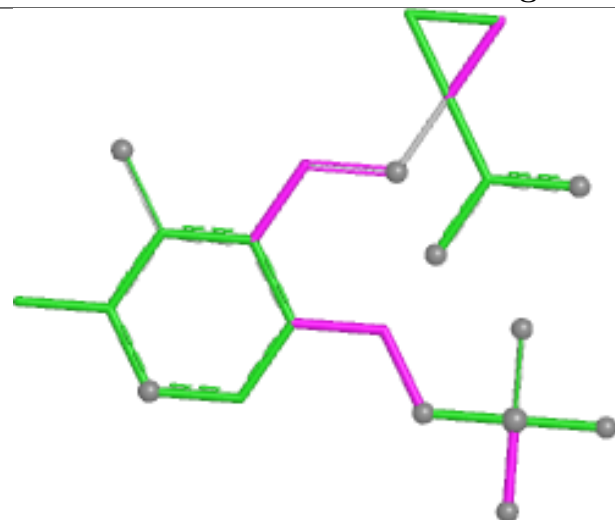
Torsions



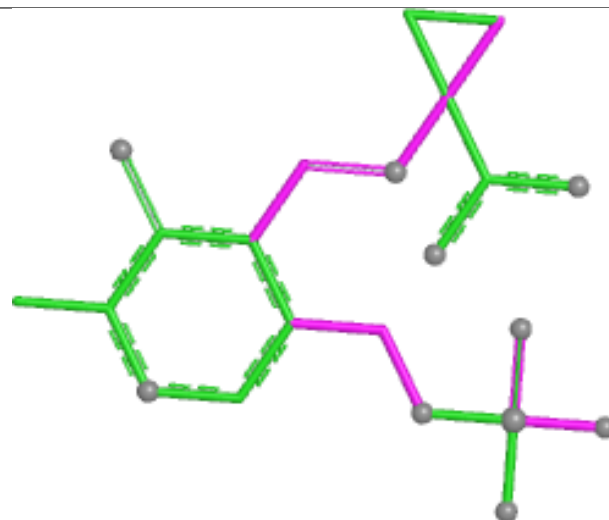
Rings



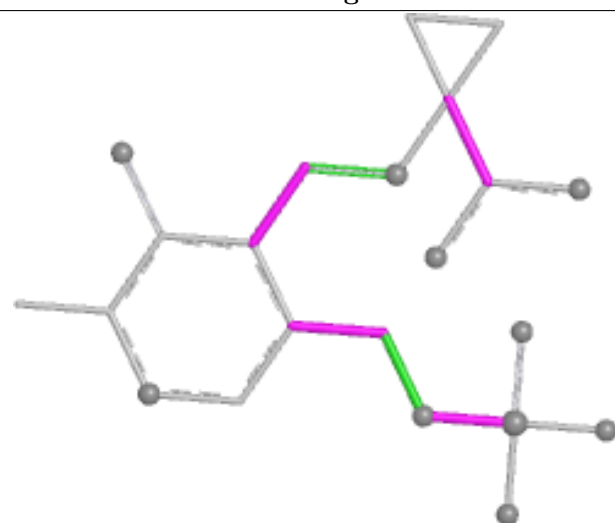
Ligand 5PA I 1091



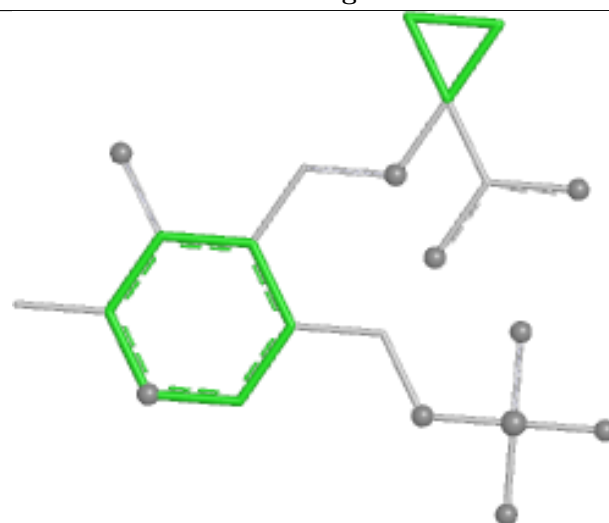
Bond lengths



Bond angles

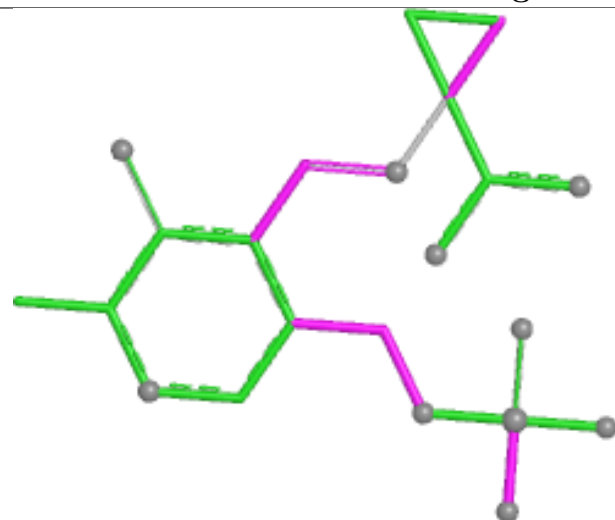


Torsions

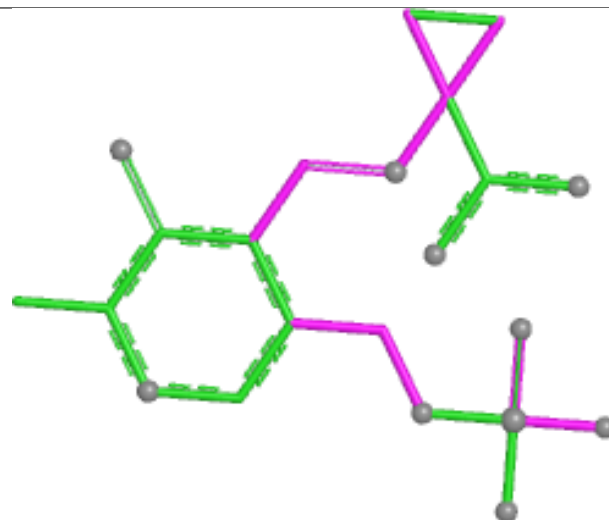


Rings

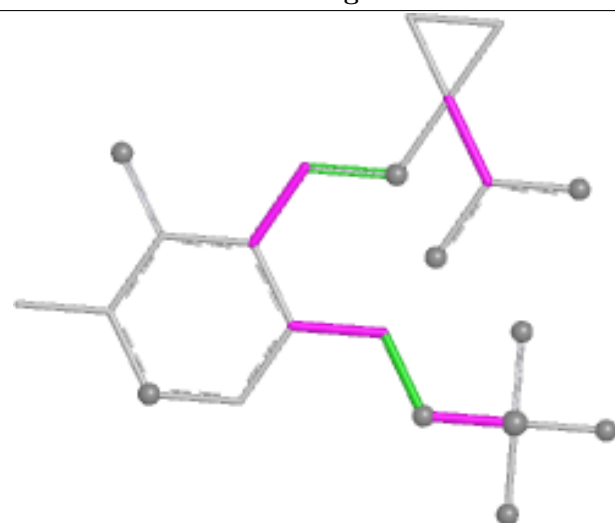
Ligand 5PA K 1111



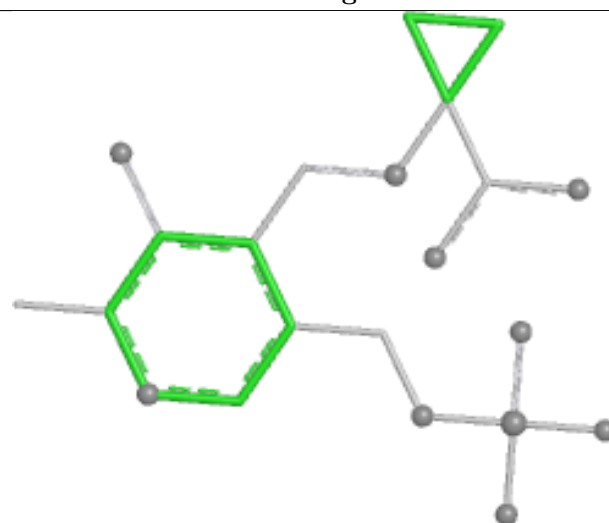
Bond lengths



Bond angles

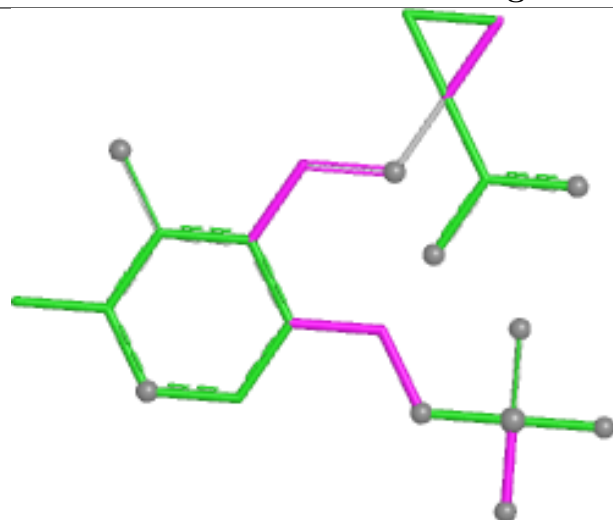


Torsions

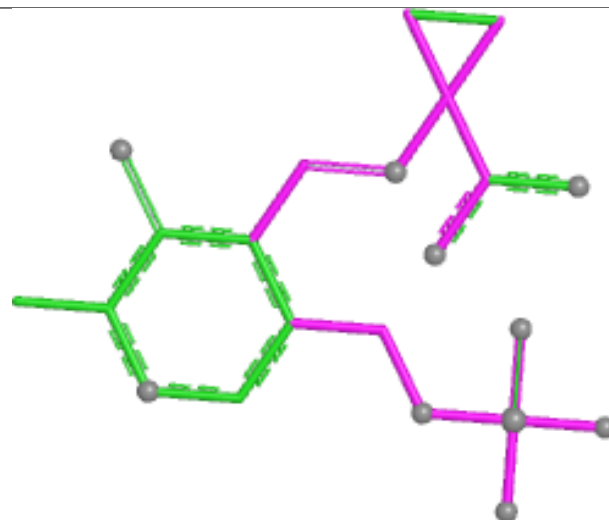


Rings

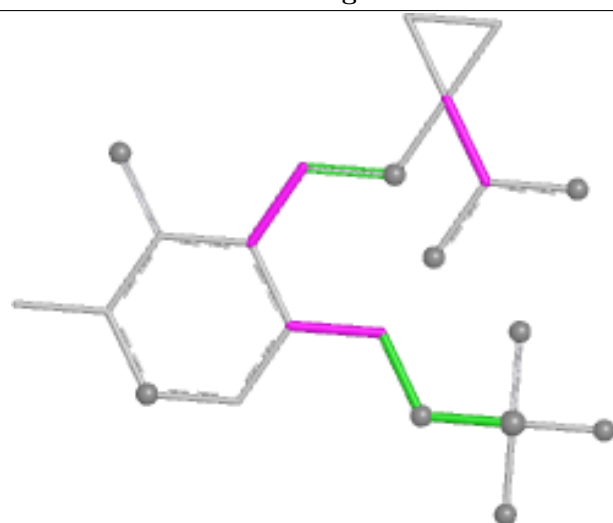
Ligand 5PA M 1131



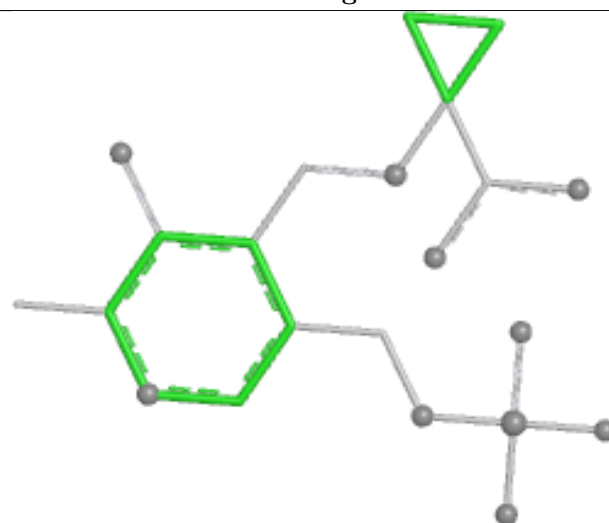
Bond lengths



Bond angles

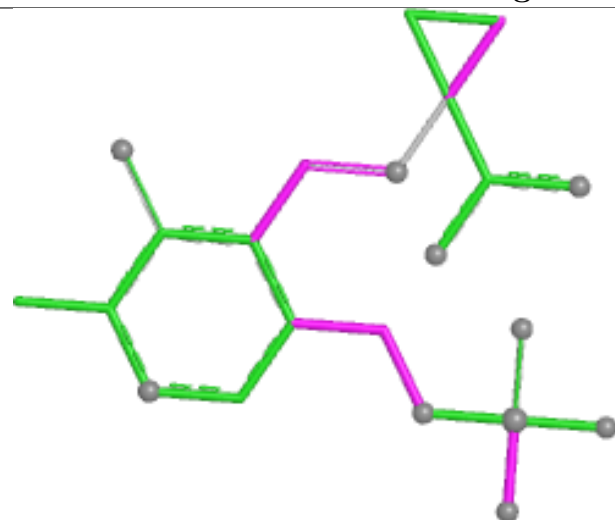


Torsions

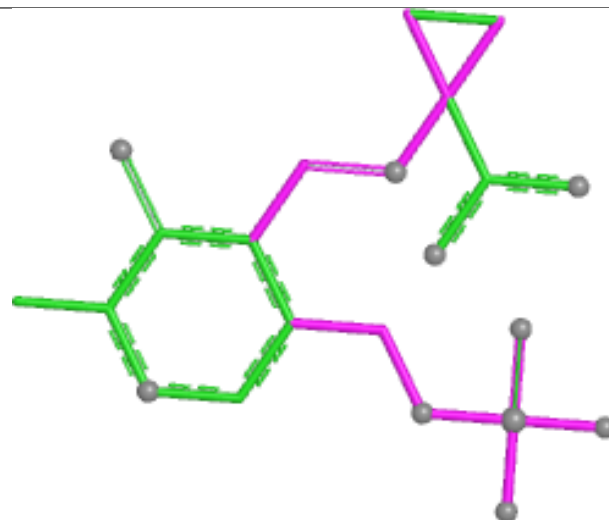


Rings

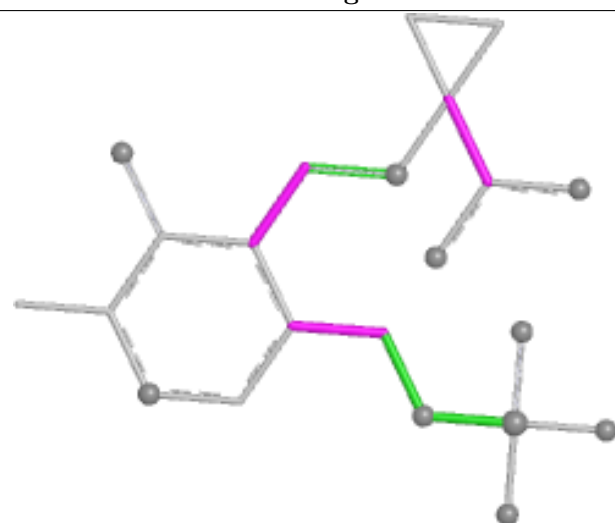
Ligand 5PA B 1021



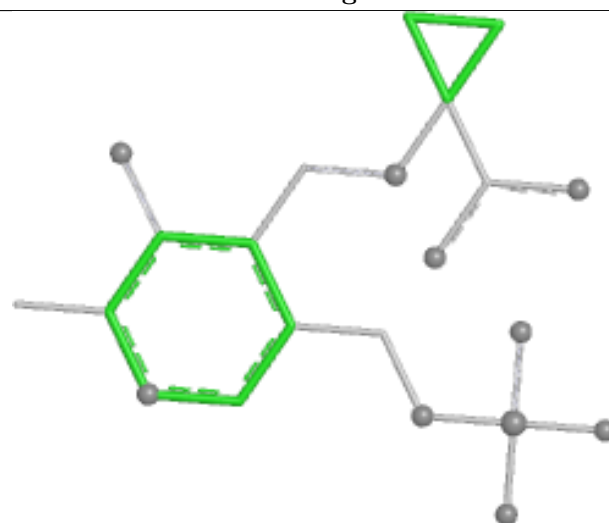
Bond lengths



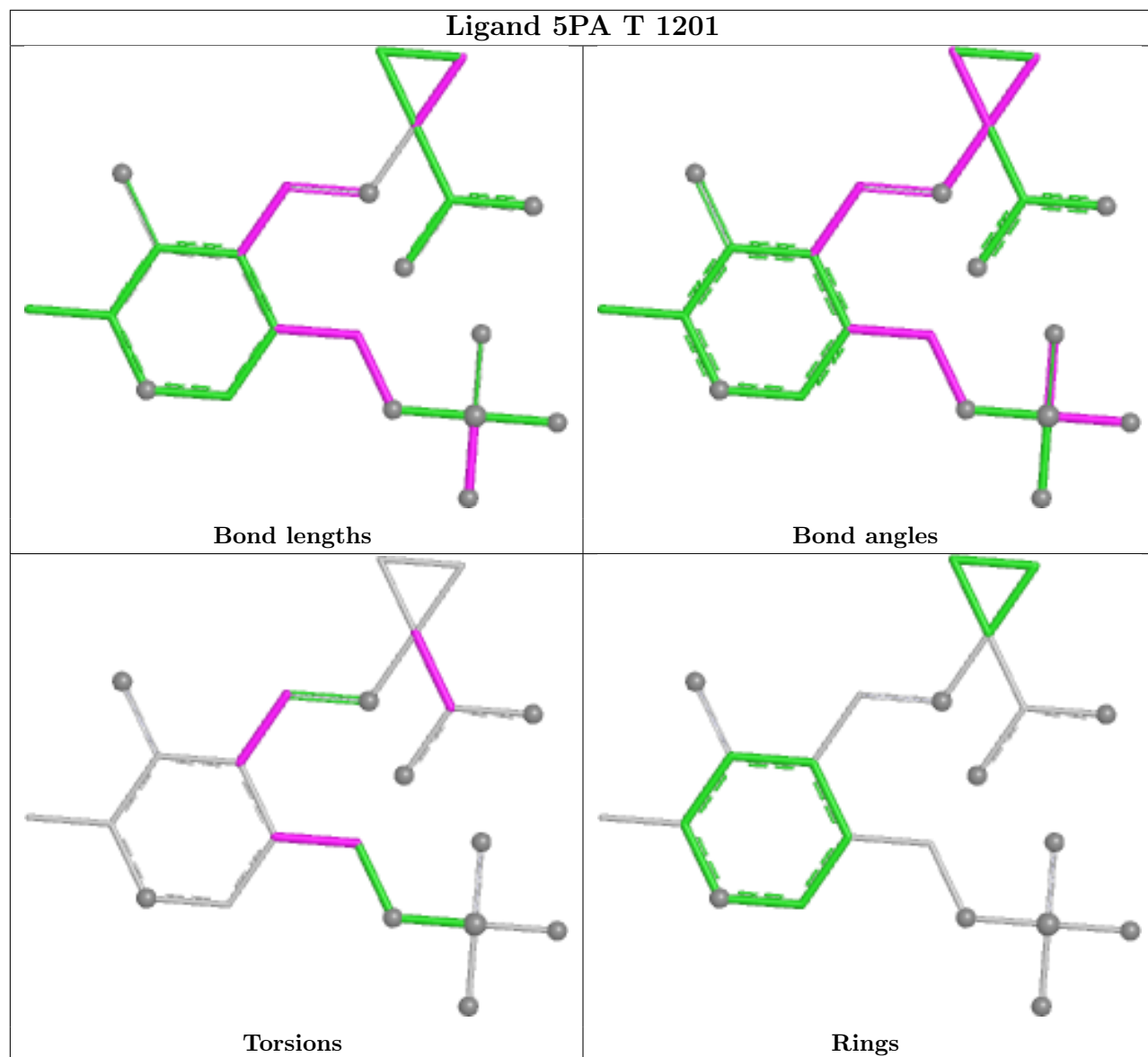
Bond angles



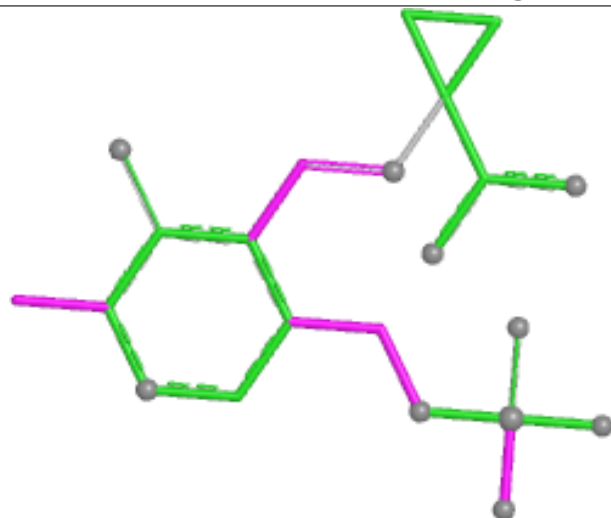
Torsions



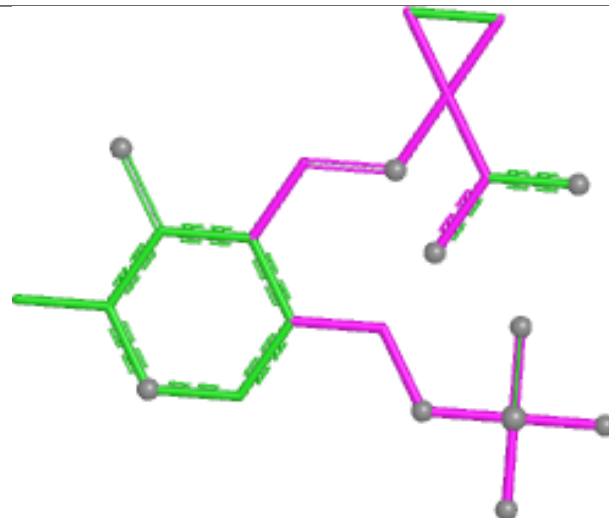
Rings



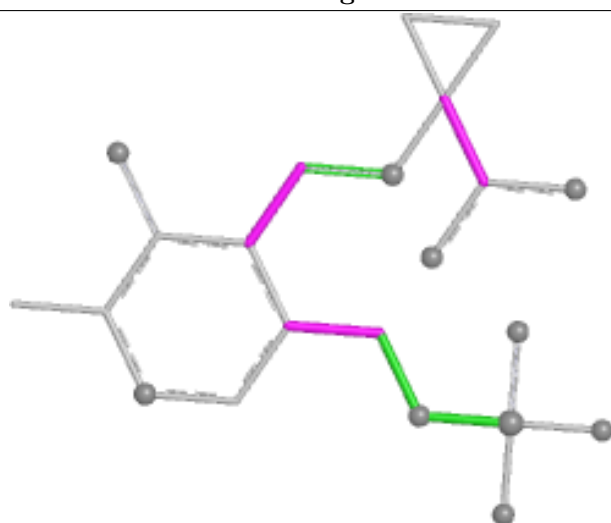
Ligand 5PA C 1031



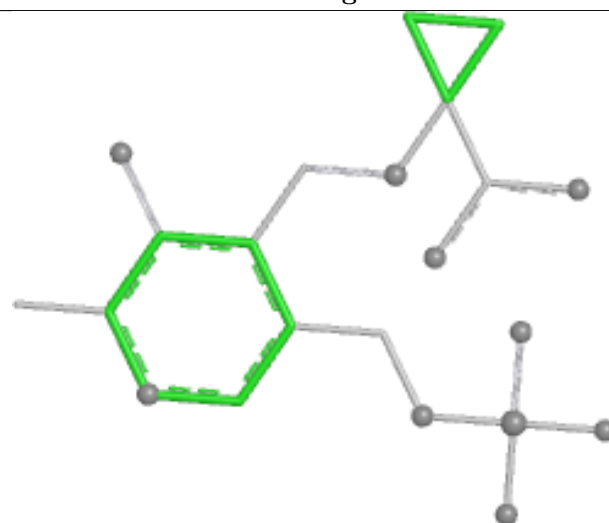
Bond lengths



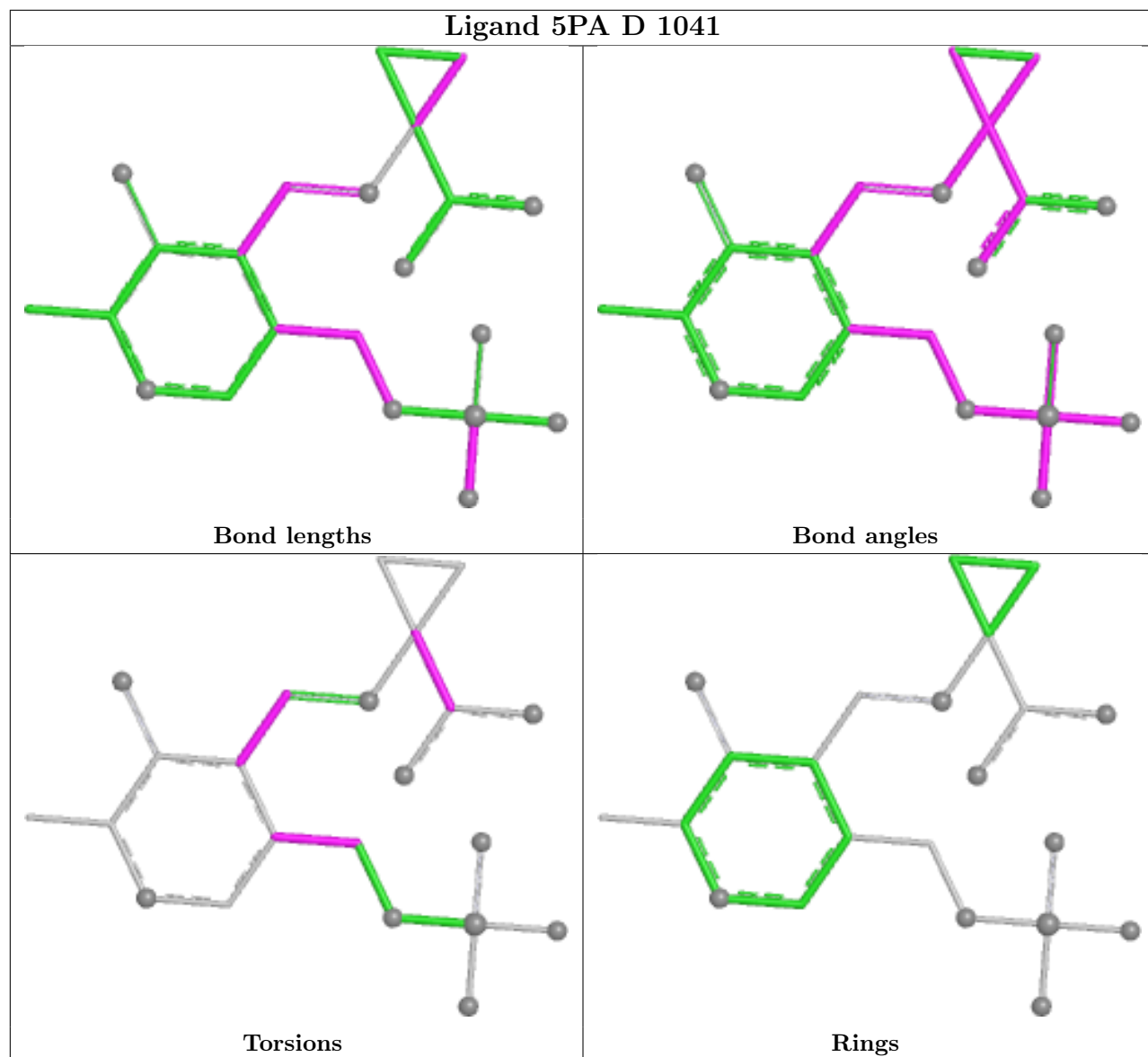
Bond angles



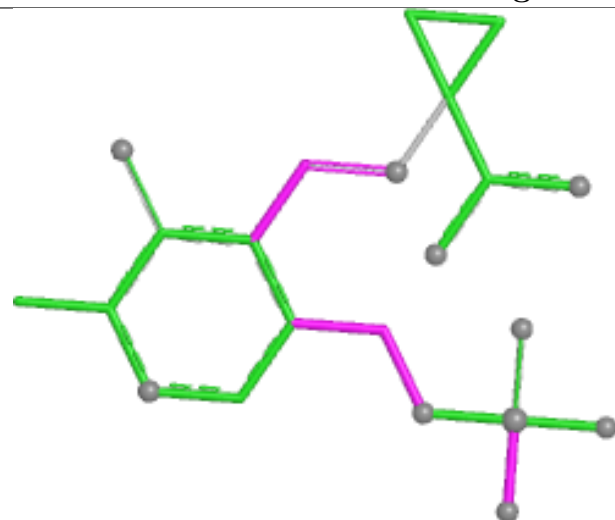
Torsions



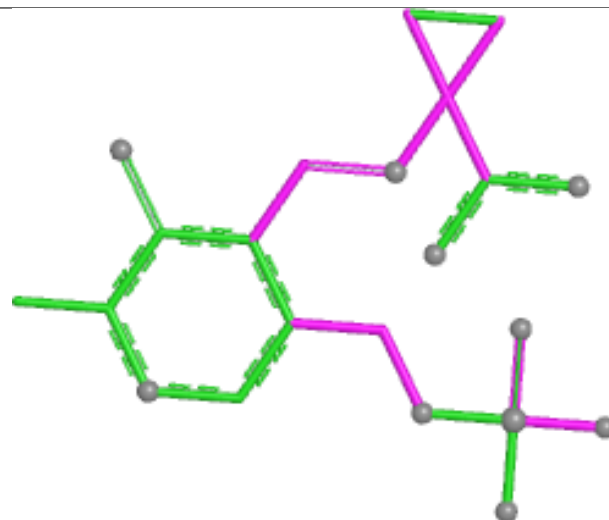
Rings



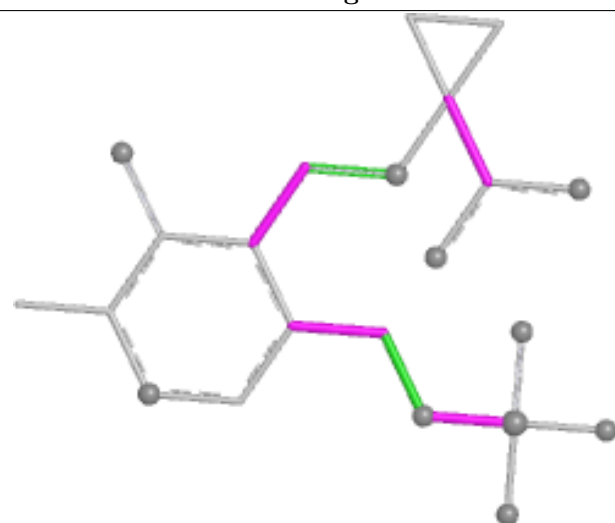
Ligand 5PA R 1181



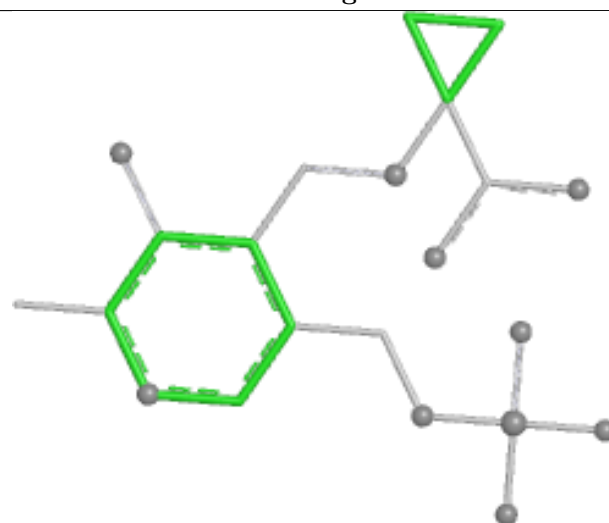
Bond lengths



Bond angles

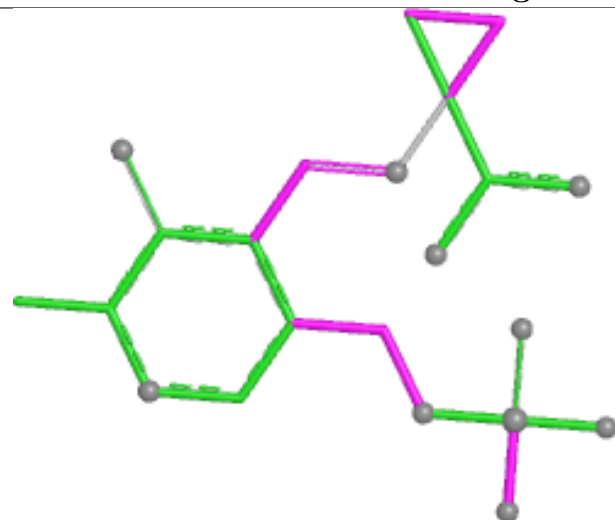


Torsions

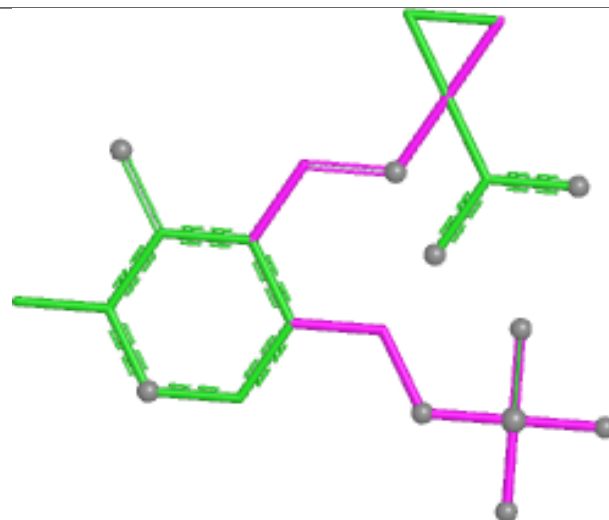


Rings

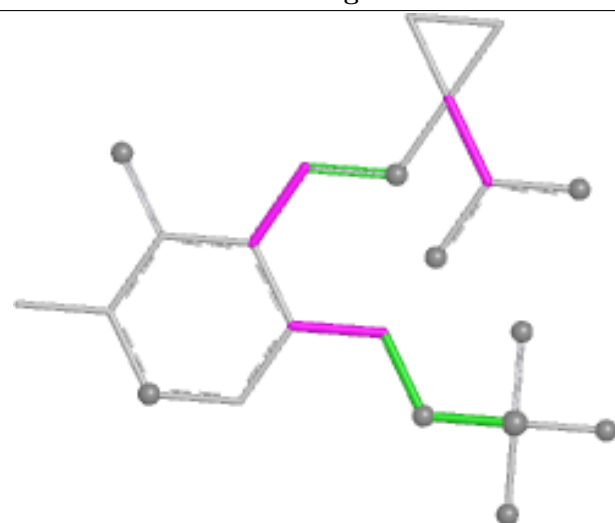
Ligand 5PA O 1151



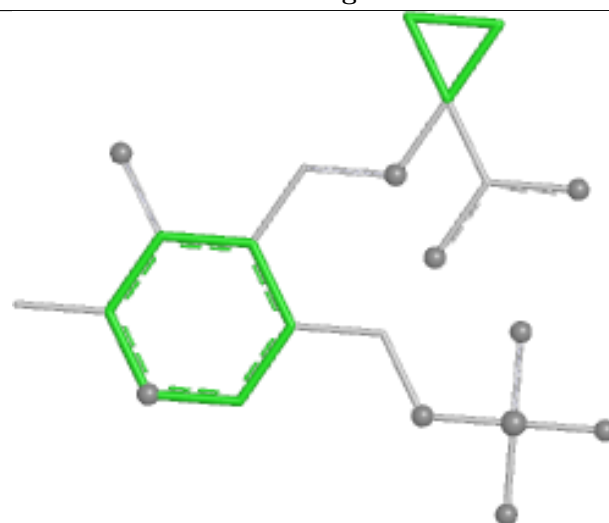
Bond lengths



Bond angles

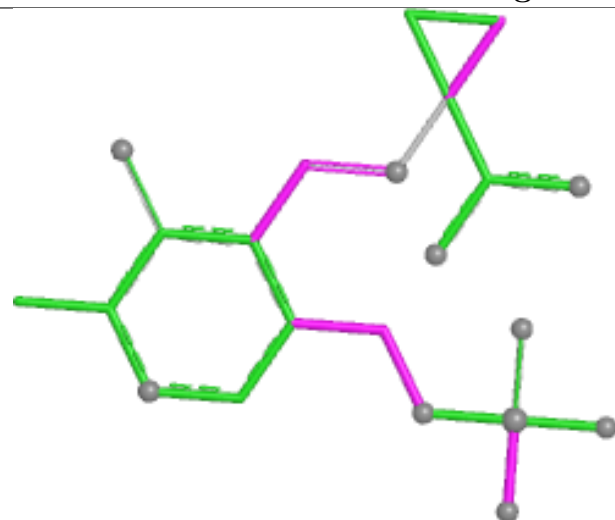


Torsions

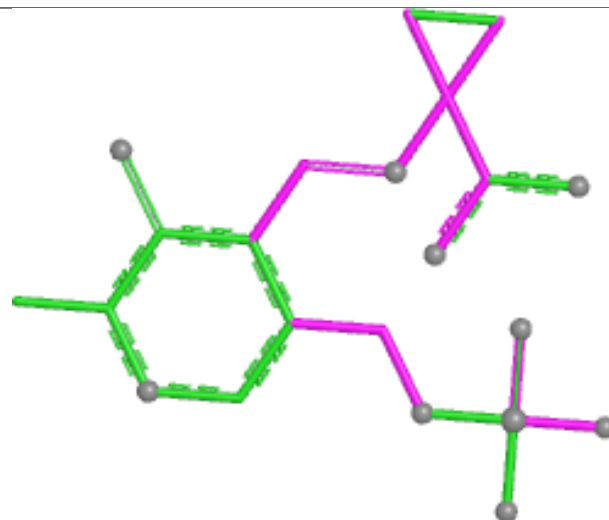


Rings

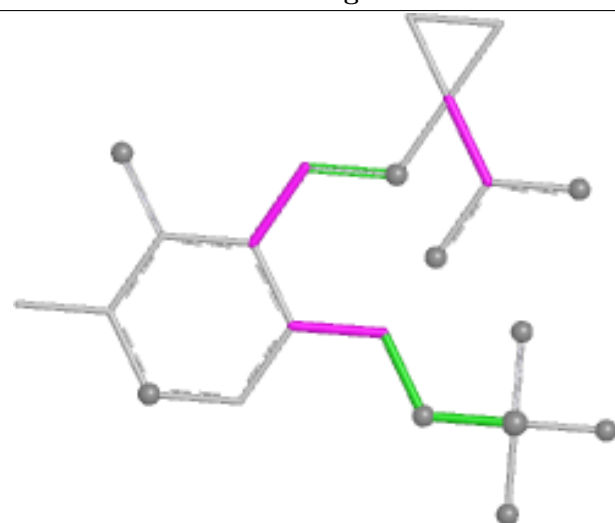
Ligand 5PA P 1161



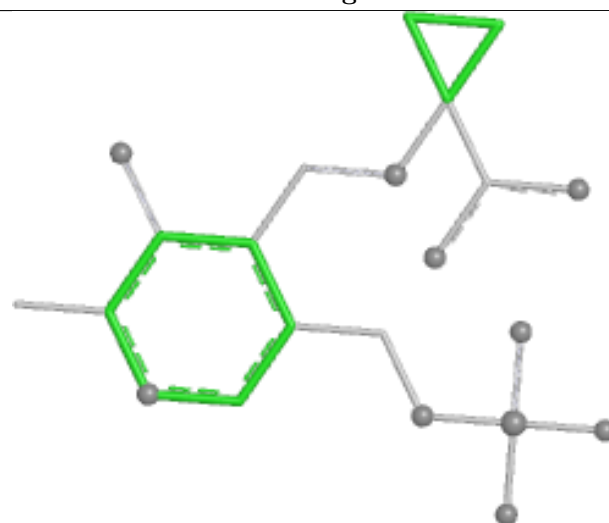
Bond lengths



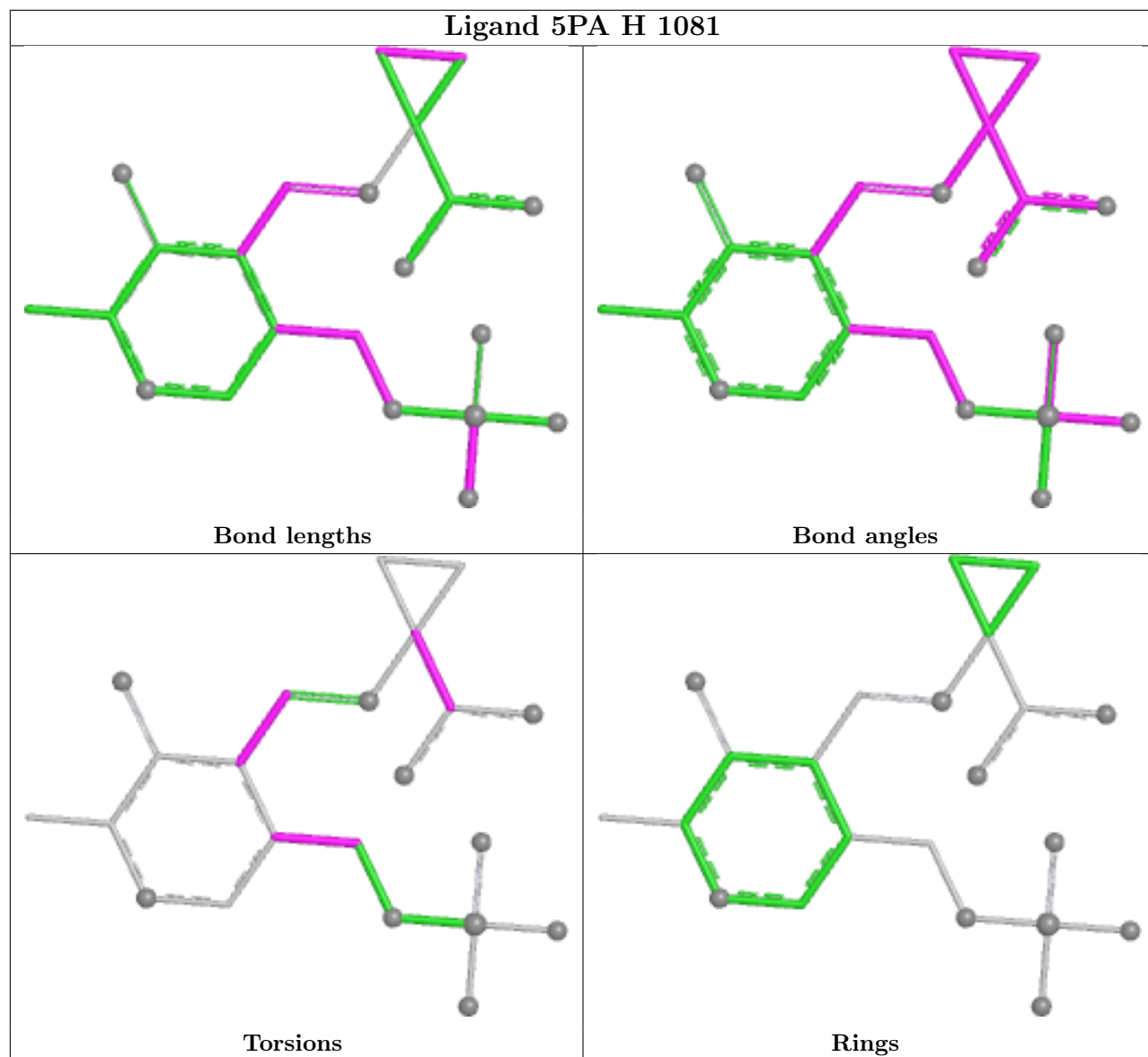
Bond angles



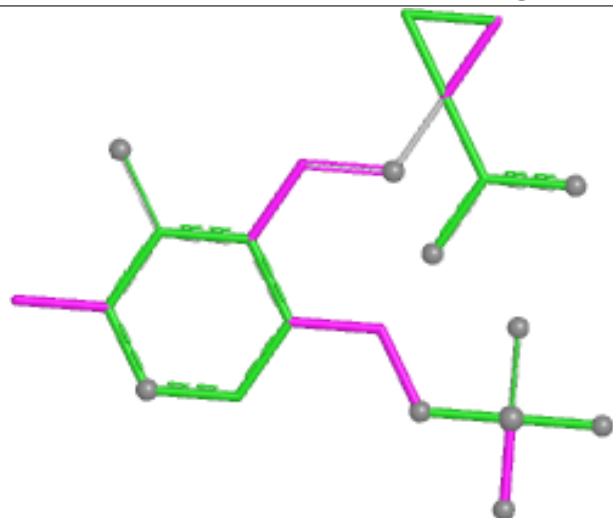
Torsions



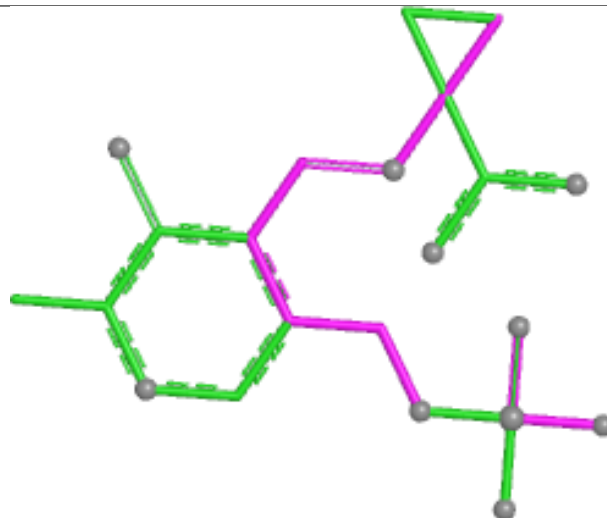
Rings



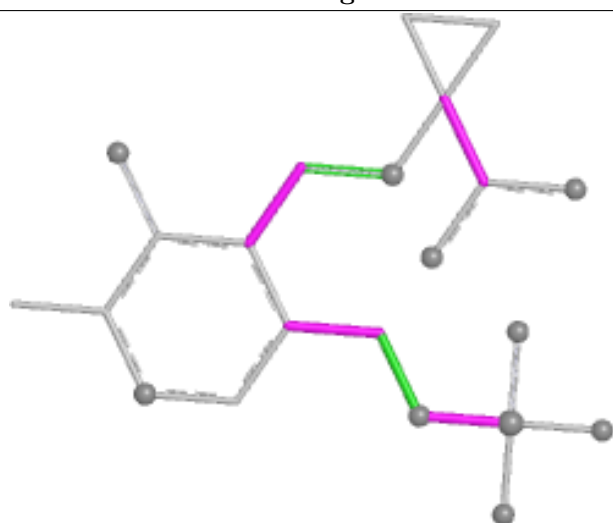
Ligand 5PA J 1101



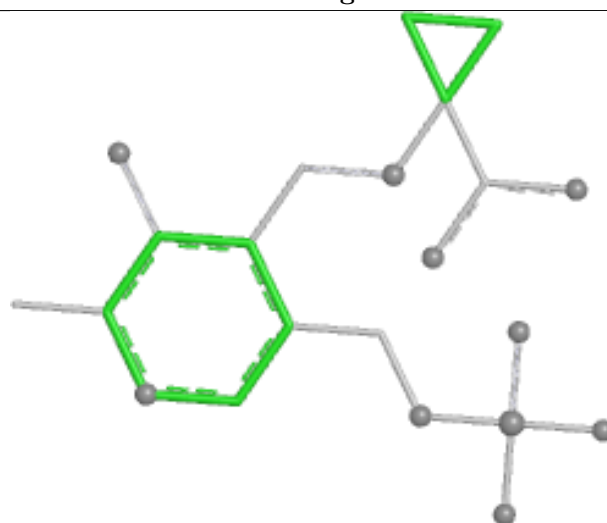
Bond lengths



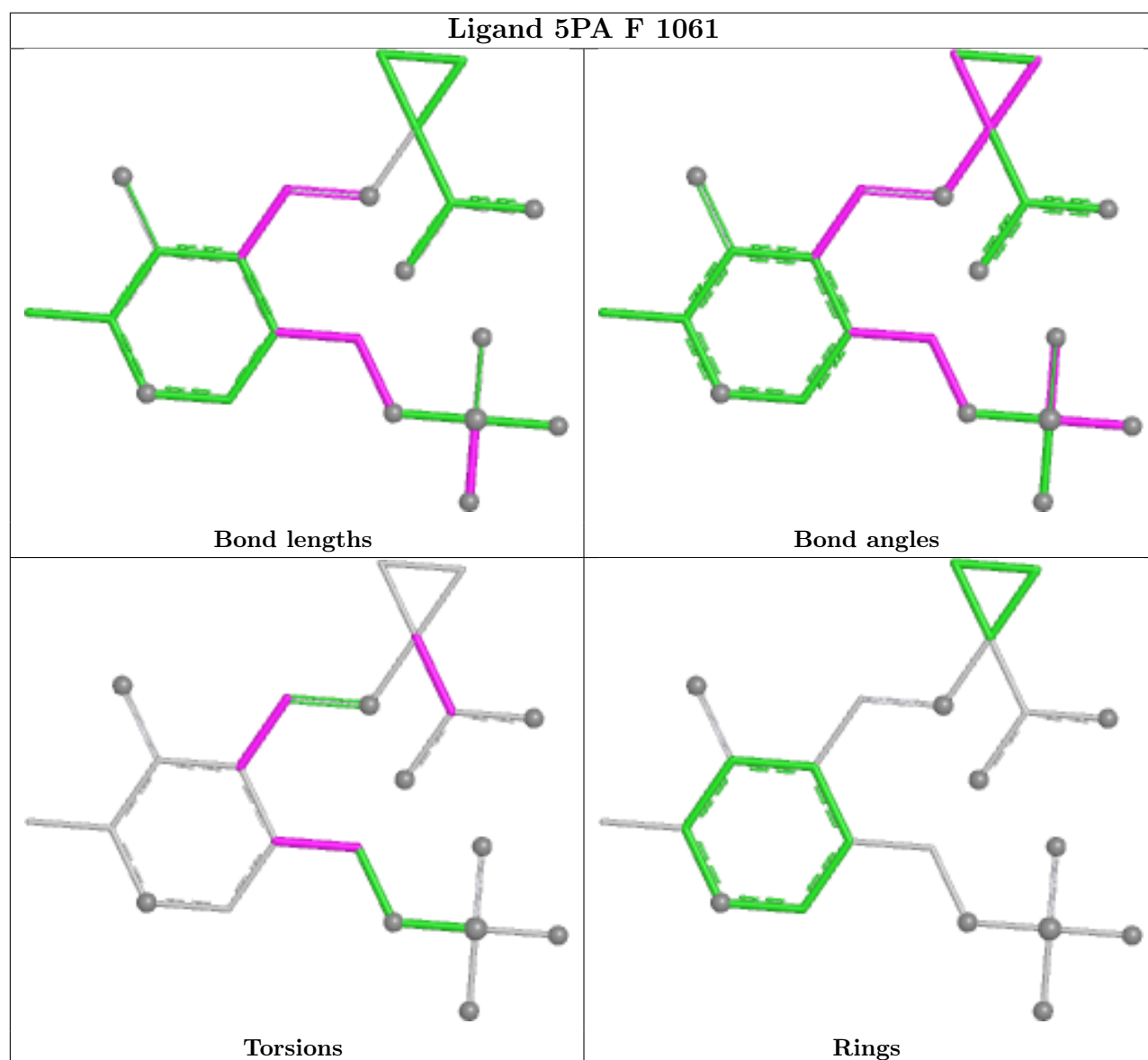
Bond angles

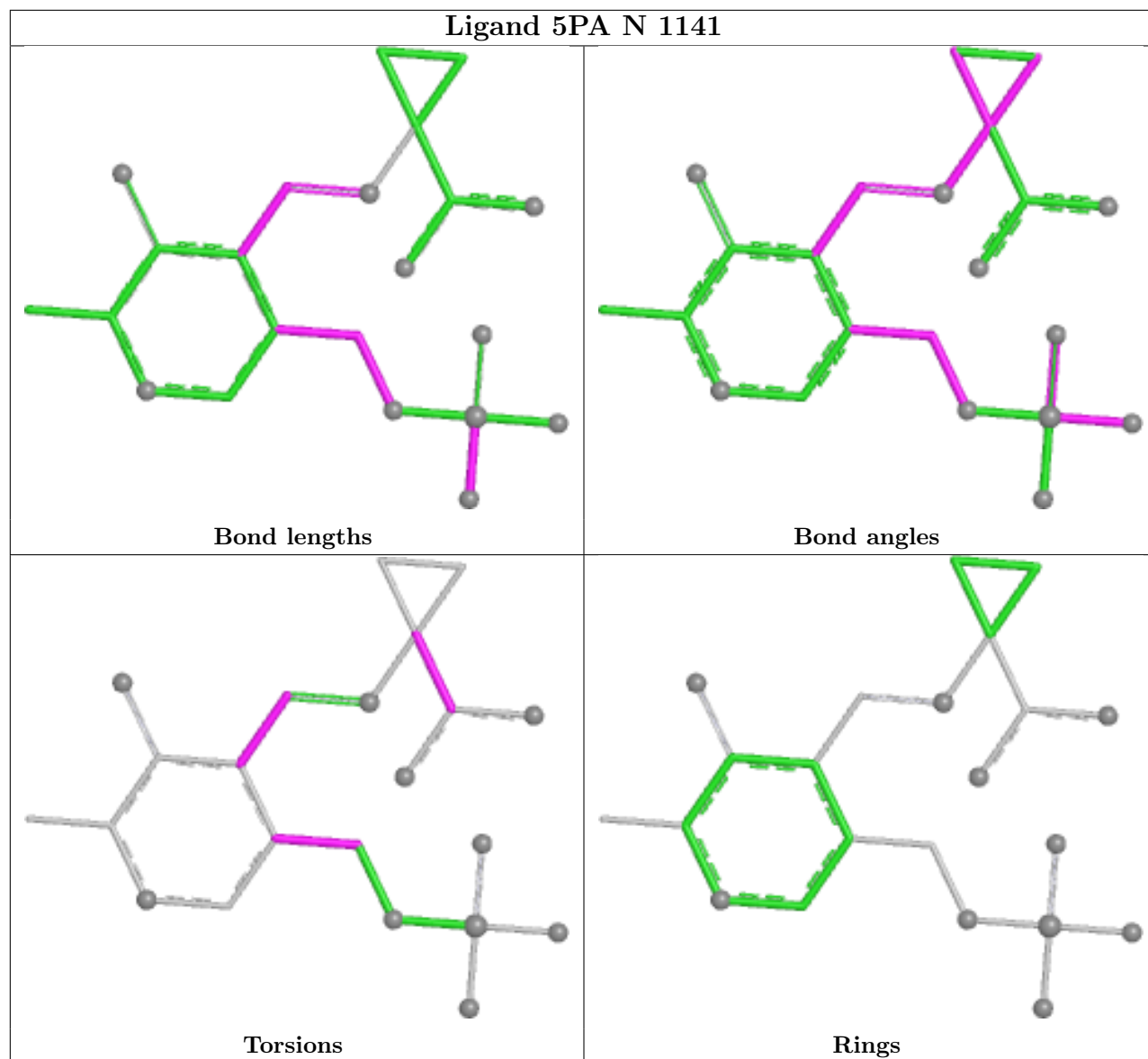


Torsions



Rings





5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

EDS was not executed - this section is therefore empty.

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

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

6.4 Ligands

EDS was not executed - this section is therefore empty.

6.5 Other polymers

EDS was not executed - this section is therefore empty.