Full wwPDB EM Validation Report

Mar 5, 2026 – 06:53 PM UTC

PDB ID	:	4CR3 / pdb_00004cr3
EMDB ID	:	EMD-2595
Title	:	Deep classification of a large cryo-EM dataset defines the conformational landscape of the 26S proteasome
Authors	:	Unverdorben, P.; Beck, F.; Sledz, P.; Schweitzer, A.; Pfeifer, G.; Plitzko, J.M.; Baumeister, W.; Foerster, F.
Deposited on	:	2014-02-25
Resolution	:	9.30 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) 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 (i)) were used in the production of this report:

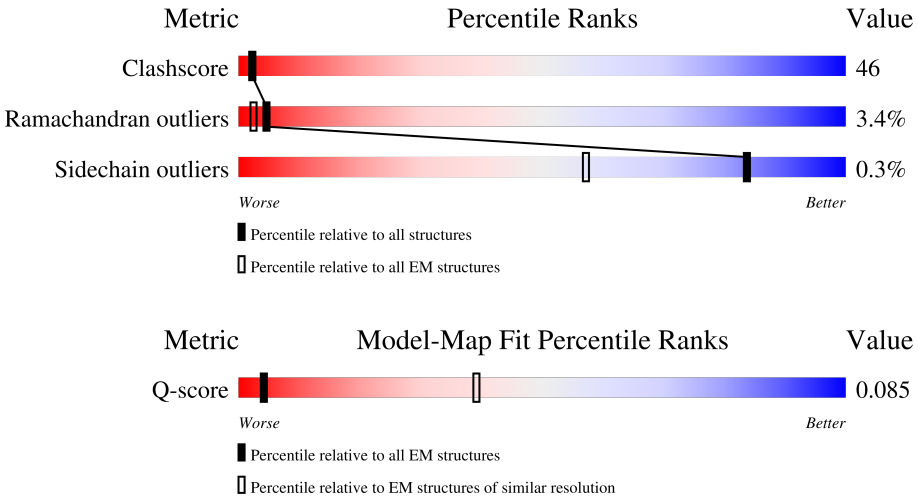
EMDB validation analysis	:	0.0.1.dev132
MolProbity	:	4-5-2 with Phenix2.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 9.30 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	228 (8.80 - 9.80)

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

Mol	Chain	Length	Quality of chain
1	1	215	40% 30% 44% 21% 5%
2	2	261	31% 33% 39% 12% • 15%
3	3	205	44% 38% 49% 13%
4	4	198	28% 37% 48% 14% •

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Mol	Chain	Length	Quality of chain
5	5	287	25% 24% 34% 16% 26%
6	6	241	27% 33% 46% 12% 8%
7	7	266	28% 29% 42% 16% 12%
8	A	252	33% 27% 50% 20%
9	B	250	39% 31% 49% 20%
10	C	258	34% 32% 45% 18% 5%
11	D	254	30% 38% 44% 13% 5%
12	E	260	34% 35% 48% 10% 7%
13	F	234	31% 35% 45% 19%
14	G	288	31% 25% 44% 16% 15%
15	H	467	31% 28% 34% 13% 23%
16	I	437	34% 24% 41% 18% 17%
17	J	405	34% 28% 46% 18% 8%
18	K	428	34% 25% 43% 21% 11%
19	L	437	31% 22% 41% 19% 17%
20	M	434	37% 29% 41% 14% 15%
21	N	945	25% 34% 40% 16% 10%
22	O	393	24% 29% 55% 13%
23	P	445	16% 28% 45% 19% 7%
24	Q	434	34% 31% 45% 23%
25	R	429	18% 27% 44% 21% 7%
26	S	523	20% 22% 32% 13% 33%
27	T	274	27% 30% 43% 24%
28	U	338	21% 25% 35% 13% 25%
29	V	306	29% 30% 37% 13% 19%

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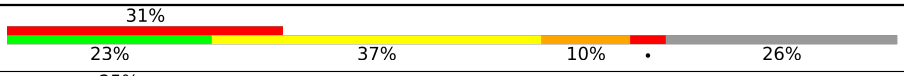
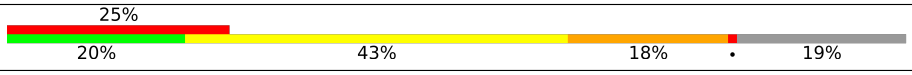
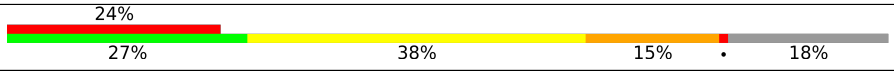
Mol	Chain	Length	Quality of chain
30	W	268	
31	X	156	
32	Y	89	
33	Z	993	

2 Entry composition

There are 33 unique types of molecules in this entry. The entry contains 80139 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called PROTEASOME COMPONENT PRE3.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	1	205	Total	C	N	O	S	0	0
			1576	996	261	312	7		

- Molecule 2 is a protein called PROTEASOME COMPONENT PUP1.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	2	223	Total	C	N	O	S	0	0
			1692	1067	294	324	7		

- Molecule 3 is a protein called PROTEASOME COMPONENT PUP3.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	3	204	Total	C	N	O	S	0	0
			1581	1010	258	305	8		

- Molecule 4 is a protein called PROTEASOME COMPONENT C11.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	4	198	Total	C	N	O	S	0	0
			1585	1005	269	305	6		

- Molecule 5 is a protein called PROTEASOME COMPONENT PRE2.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	5	212	Total	C	N	O	S	0	0
			1646	1045	282	312	7		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
5	33	ARG	LYS	SEE REMARK 999	UNP P30656

- Molecule 6 is a protein called PROTEASOME COMPONENT C5.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	6	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		

- Molecule 7 is a protein called PROTEASOME COMPONENT PRE4.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	7	233	Total	C	N	O	S	0	0
			1824	1154	312	351	7		

- Molecule 8 is a protein called PROTEASOME COMPONENT C7-ALPHA.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	A	243	Total	C	N	O	S	0	0
			1921	1221	322	370	8		

- Molecule 9 is a protein called PROTEASOME COMPONENT Y7.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	B	250	Total	C	N	O	S	0	0
			1915	1219	315	377	4		

- Molecule 10 is a protein called PROTEASOME COMPONENT Y13.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	C	245	Total	C	N	O	S	0	0
			1913	1207	323	380	3		

- Molecule 11 is a protein called PROTEASOME COMPONENT PRE6.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	D	242	Total	C	N	O	S	0	0
			1899	1186	333	376	4		

- Molecule 12 is a protein called PROTEASOME COMPONENT PUP2.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	E	243	Total	C	N	O	S	0	0
			1867	1165	315	380	7		

- Molecule 13 is a protein called PROTEASOME COMPONENT PRE5.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	F	233	Total	C	N	O	S	0	0
			1795	1129	312	350	4		

- Molecule 14 is a protein called PROTEASOME COMPONENT C1.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	G	245	Total	C	N	O	S	0	0
			1900	1207	331	358	4		

- Molecule 15 is a protein called 26S PROTEASE REGULATORY SUBUNIT 7 HOMOLOG.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	H	359	Total	C	N	O	S	0	0
			2792	1755	499	523	15		

- Molecule 16 is a protein called 26S PROTEASE REGULATORY SUBUNIT 4 HOMOLOG.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	I	362	Total	C	N	O	S	0	0
			2822	1773	471	563	15		

- Molecule 17 is a protein called 26S PROTEASE REGULATORY SUBUNIT 8 HOMOLOG.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	J	373	Total	C	N	O	S	0	0
			2928	1837	527	547	17		

- Molecule 18 is a protein called 26S PROTEASE REGULATORY SUBUNIT 6B HOMOLOG.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	K	381	Total	C	N	O	S	0	0
			3019	1898	530	581	10		

- Molecule 19 is a protein called 26S PROTEASE SUBUNIT RPT4.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	L	361	Total	C	N	O	S	0	0
			2853	1798	507	536	12		

- Molecule 20 is a protein called 26S PROTEASE REGULATORY SUBUNIT 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	M	367	Total	C	N	O	S	0	0
			2866	1799	503	553	11		

- Molecule 21 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN2.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	N	849	Total	C	N	O	S	0	0
			6562	4174	1099	1261	28		

- Molecule 22 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN9.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	O	387	Total	C	N	O	S	0	0
			3182	2047	520	606	9		

- Molecule 23 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN5.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	P	415	Total	C	N	O	S	0	0
			3401	2166	571	655	9		

- Molecule 24 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Q	431	Total	C	N	O	S	0	0
			3471	2205	574	676	16		

- Molecule 25 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN7.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	R	400	Total	C	N	O	S	0	0
			3218	2051	527	630	10		

- Molecule 26 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN3.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	S	353	Total	C	N	O	S	0	0
			2893	1857	482	541	13		

- Molecule 27 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN12.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	T	272	Total	C	N	O	S	0	0
			2235	1432	355	441	7		

- Molecule 28 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN8.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	U	255	Total	C	N	O	S	0	0
			2061	1312	352	391	6		

- Molecule 29 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN11.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	V	247	Total	C	N	O	S	0	0
			1942	1225	328	376	13		

- Molecule 30 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN10.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	W	197	Total	C	N	O	S	0	0
			1534	962	269	300	3		

- Molecule 31 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN13.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	X	127	Total	C	N	O	S	0	0
			1032	664	169	195	4		

- Molecule 32 is a protein called 26S PROTEASOME COMPLEX SUBUNIT SEM1.

Mol	Chain	Residues	Atoms				AltConf	Trace
32	Y	19	Total	C	N	O	0	0
			168	101	30	37		

- Molecule 33 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN1.

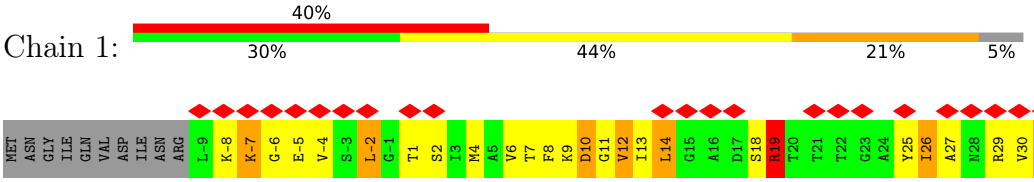
Mol	Chain	Residues	Atoms					AltConf	Trace
33	Z	813	Total	C	N	O	S	0	0
			6289	3995	1029	1236	29		

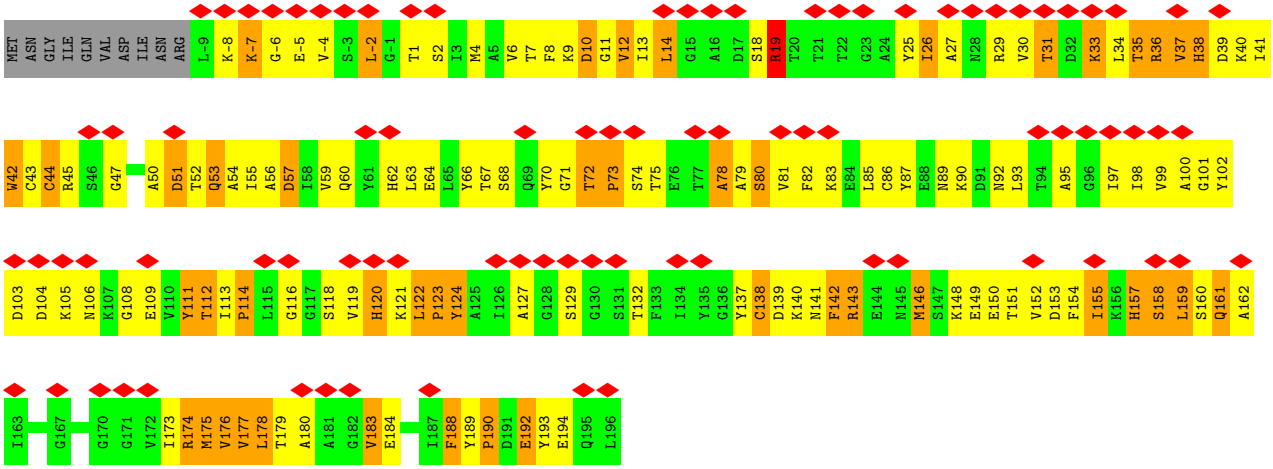
3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: PROTEASOME COMPONENT PRE3

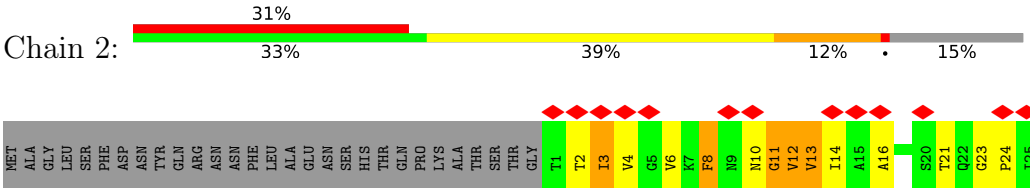
Chain 1:

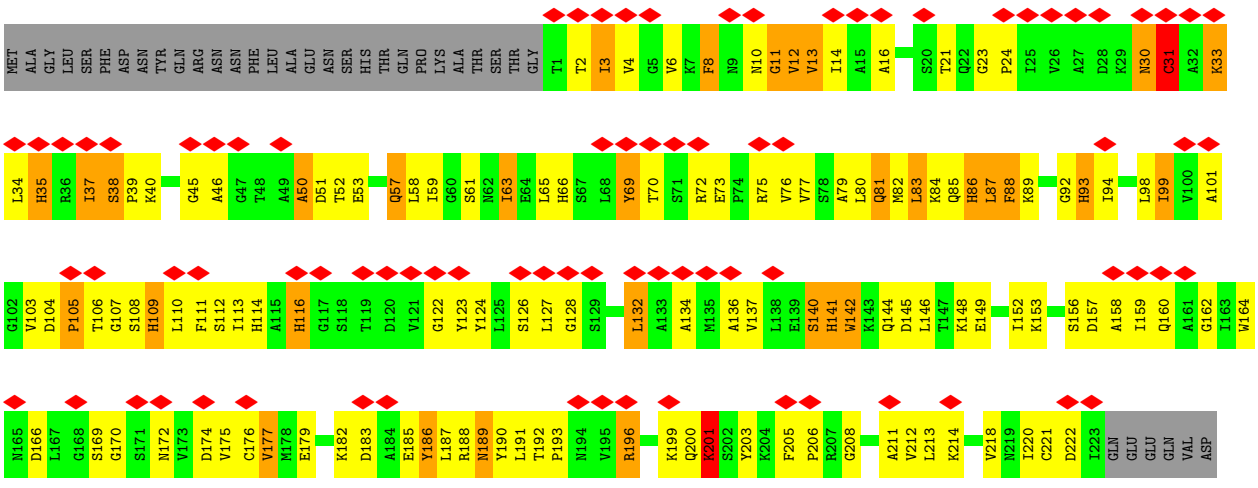




• Molecule 2: PROTEASOME COMPONENT PUP1

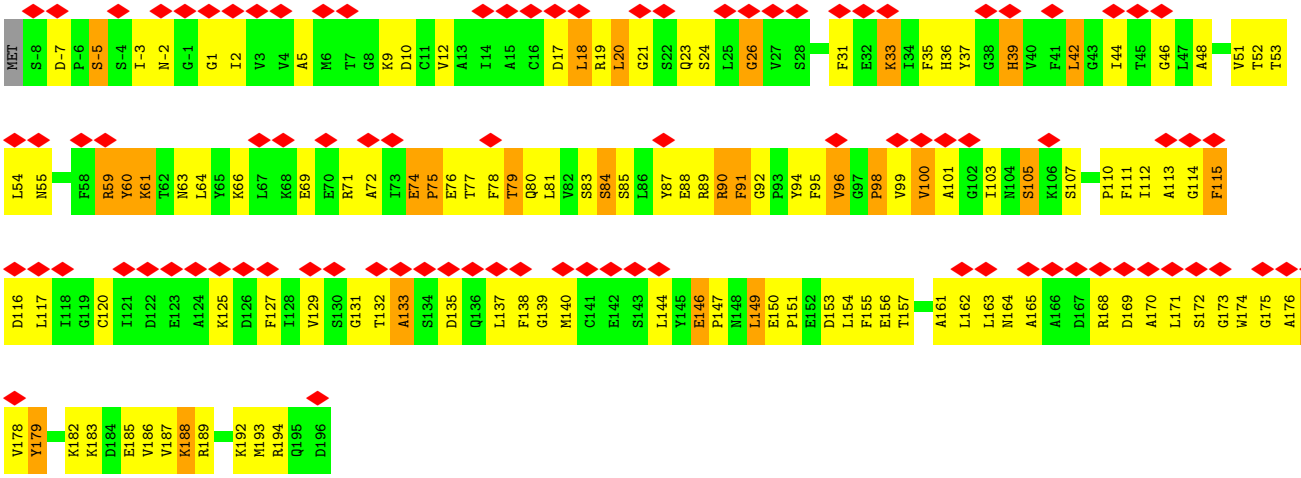
Chain 2:





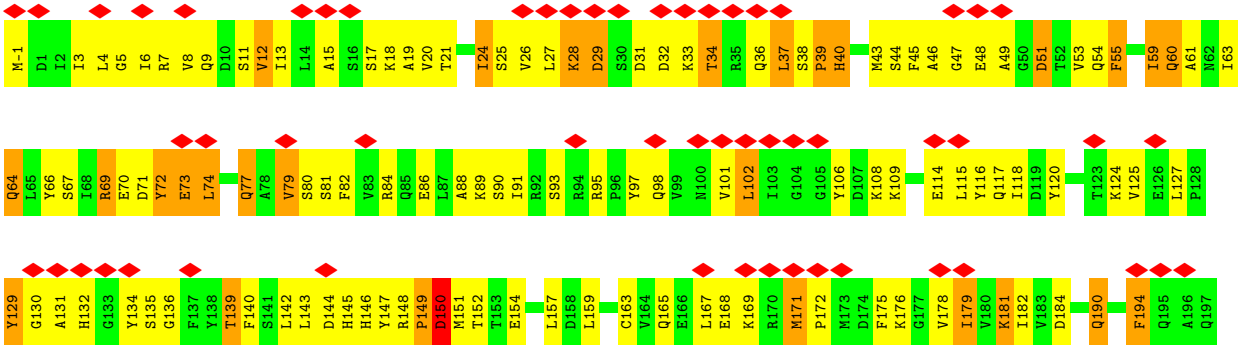
• Molecule 3: PROTEASOME COMPONENT PUP3

Chain 3:



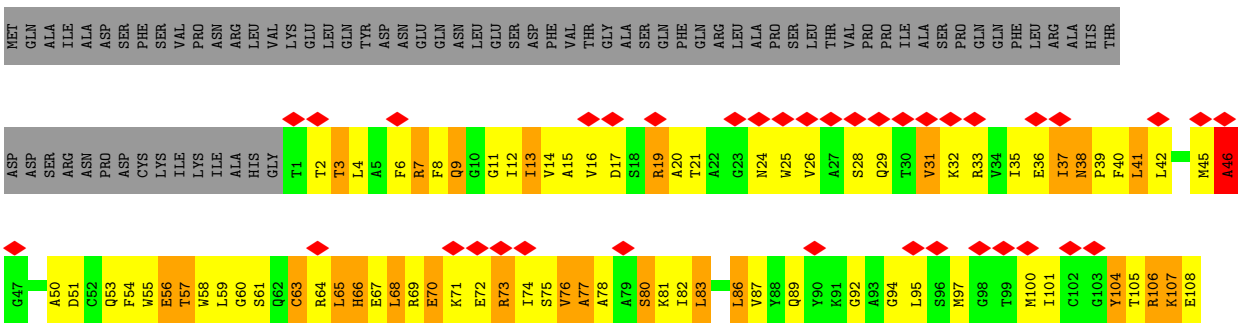
• Molecule 4: PROTEASOME COMPONENT C11

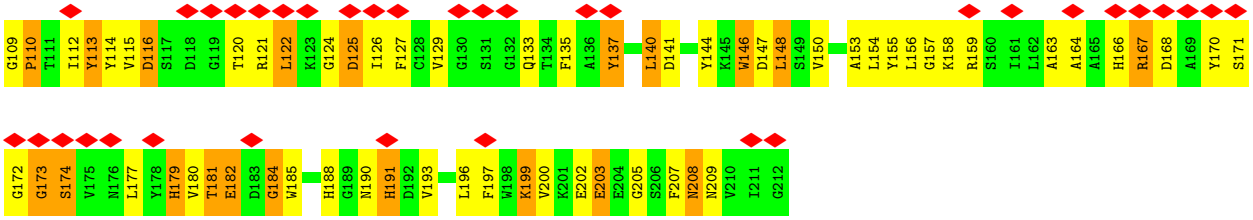
Chain 4:



• Molecule 5: PROTEASOME COMPONENT PRE2

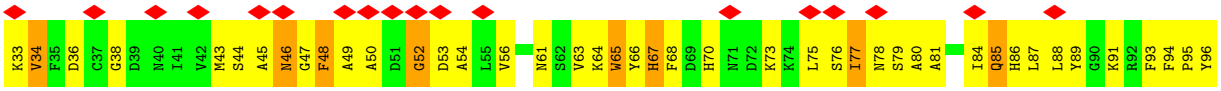
Chain 5:

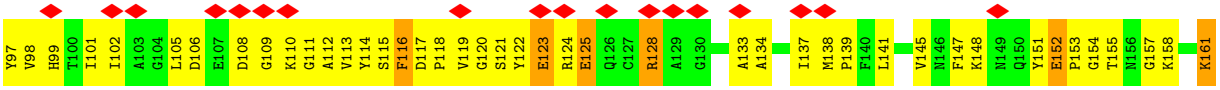


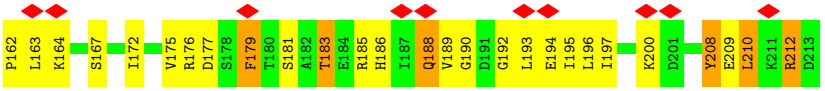


• Molecule 6: PROTEASOME COMPONENT C5

Chain 6:

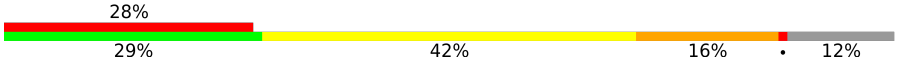


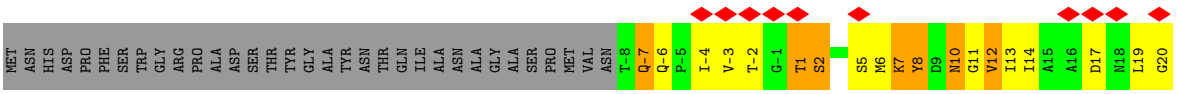


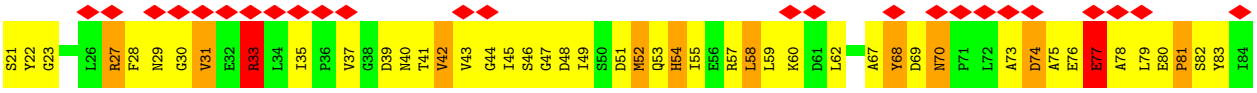


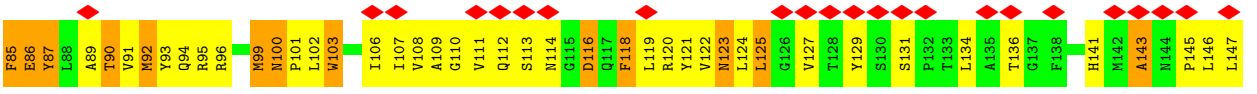
• Molecule 7: PROTEASOME COMPONENT PRE4

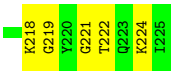
Chain 7:





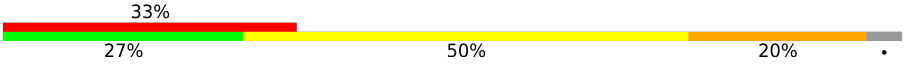


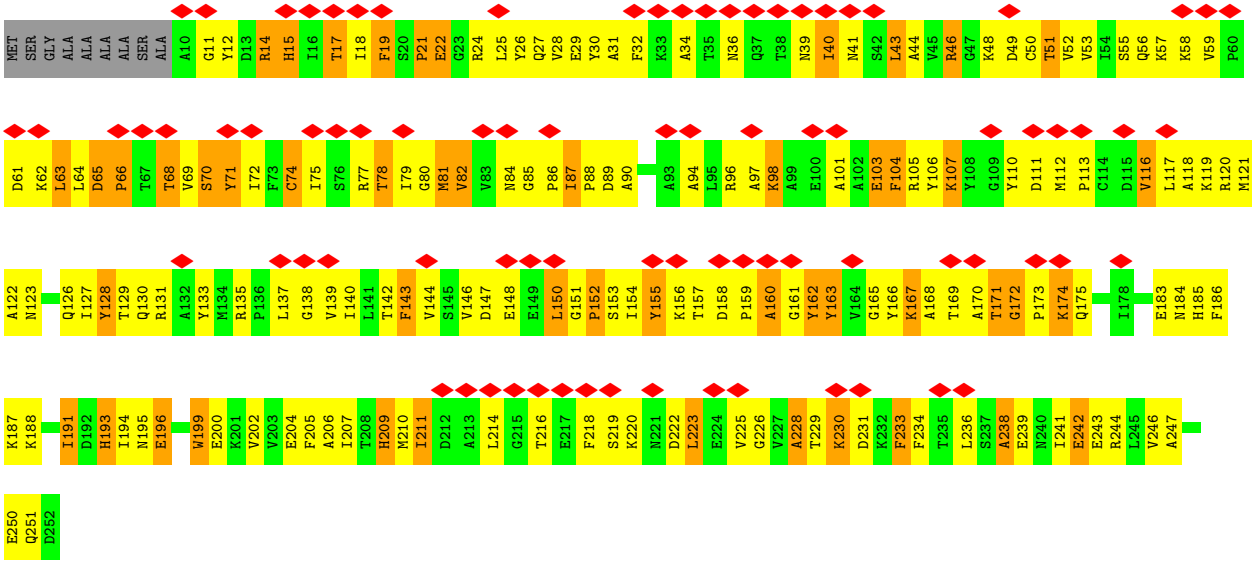




• Molecule 8: PROTEASOME COMPONENT C7-ALPHA

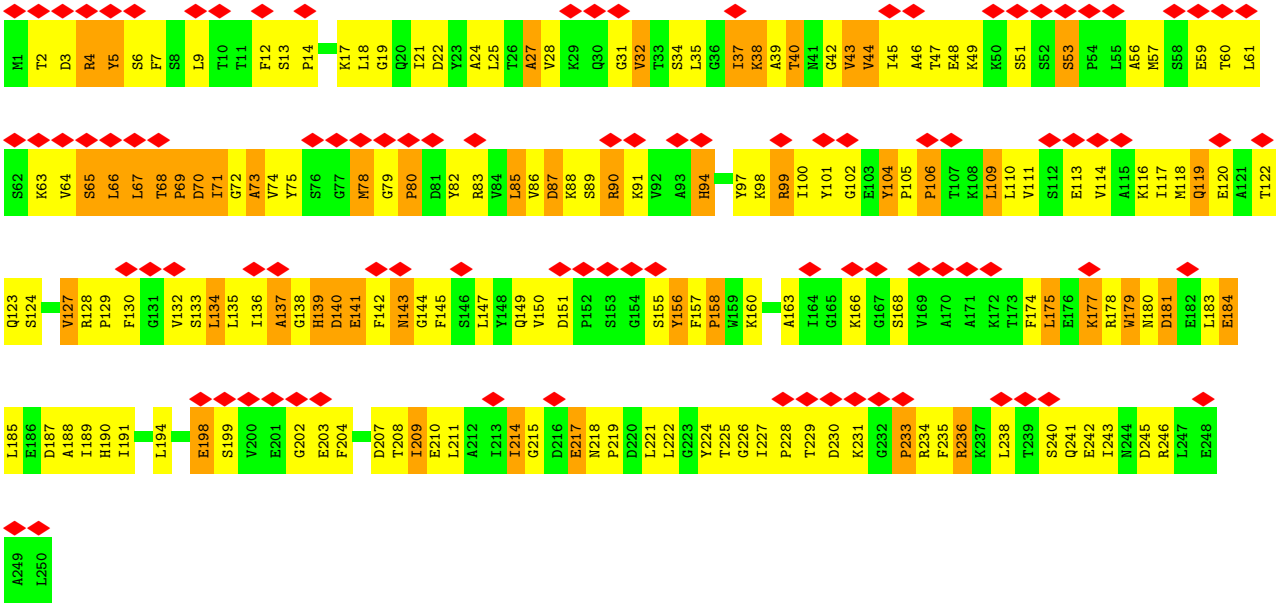
Chain A:





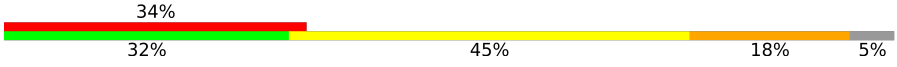
• Molecule 9: PROTEASOME COMPONENT Y7

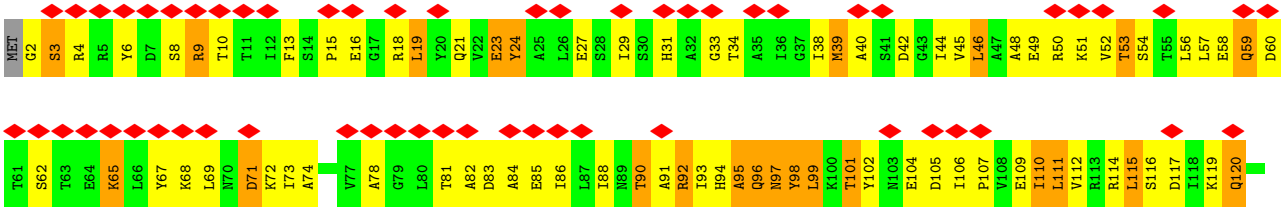
Chain B:

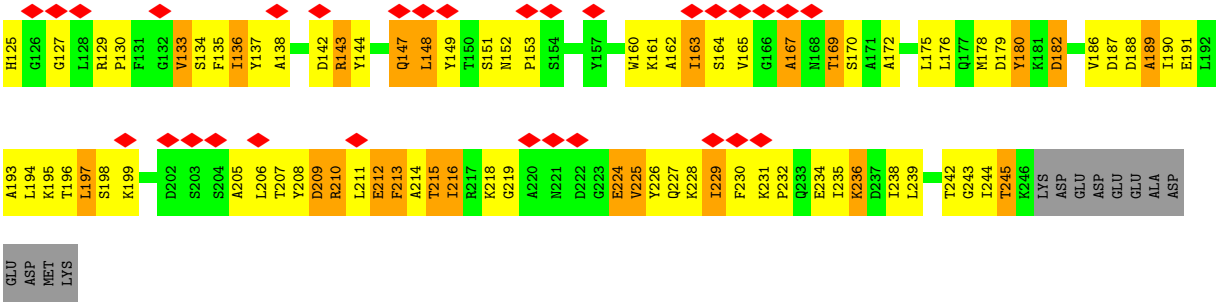


• Molecule 10: PROTEASOME COMPONENT Y13

Chain C:

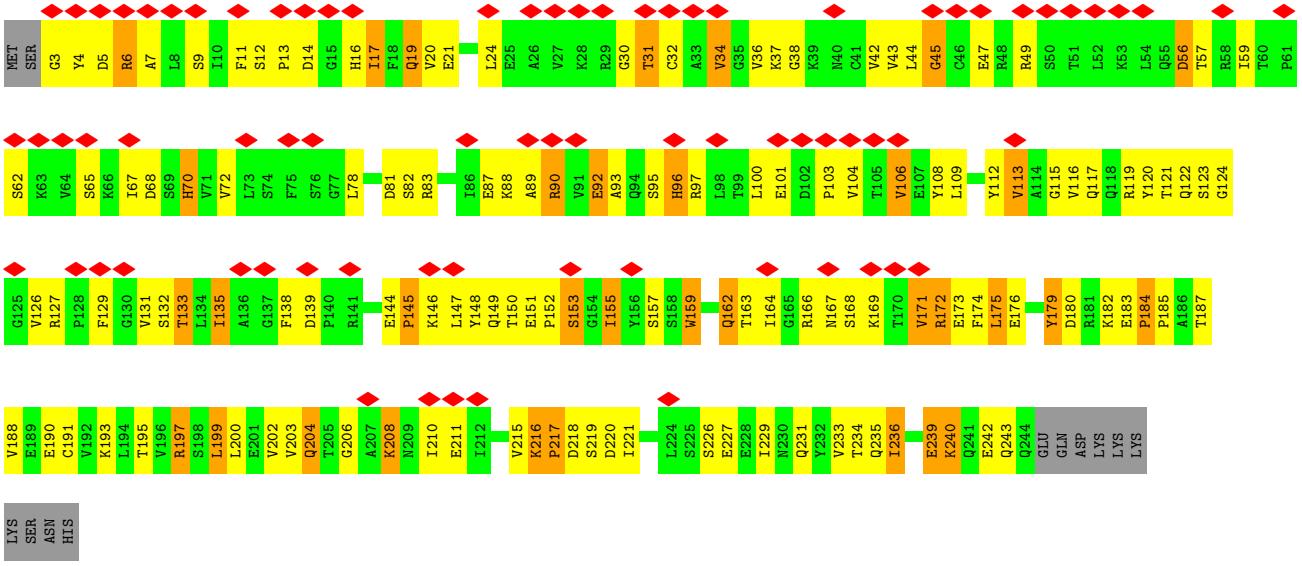






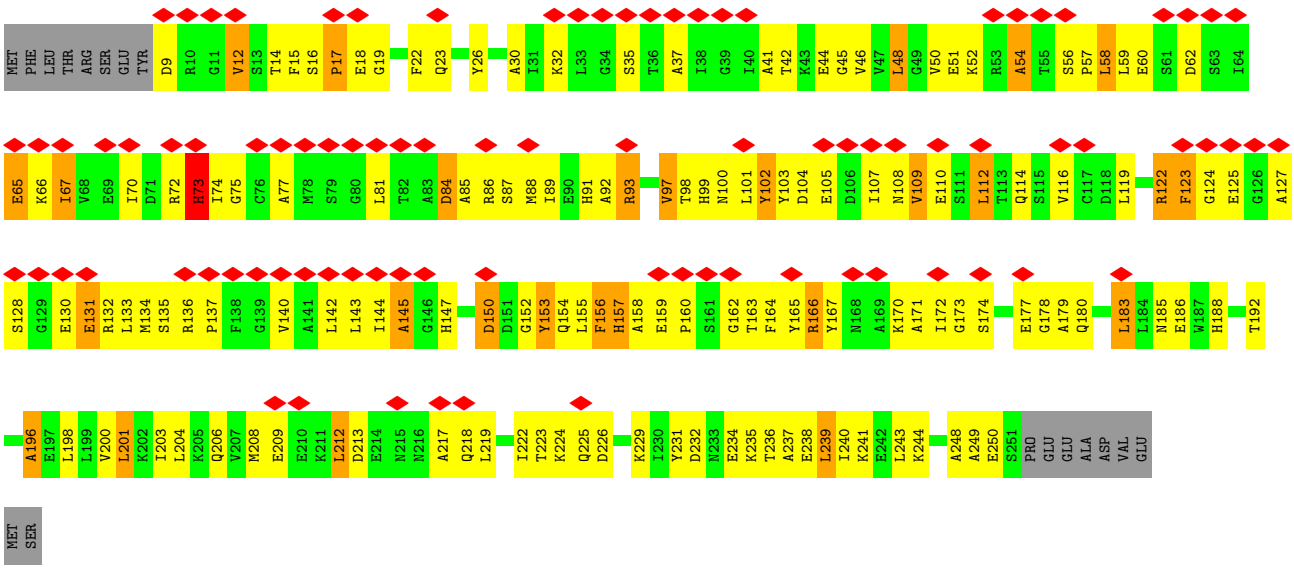
• Molecule 11: PROTEASOME COMPONENT PRE6

Chain D:



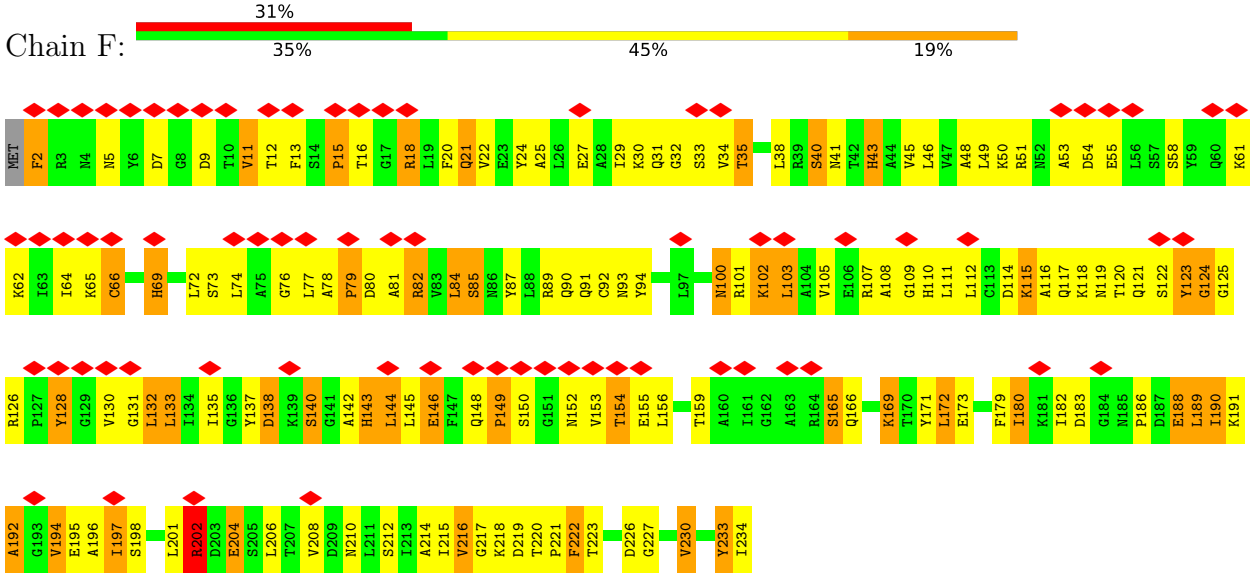
• Molecule 12: PROTEASOME COMPONENT PUP2

Chain E:



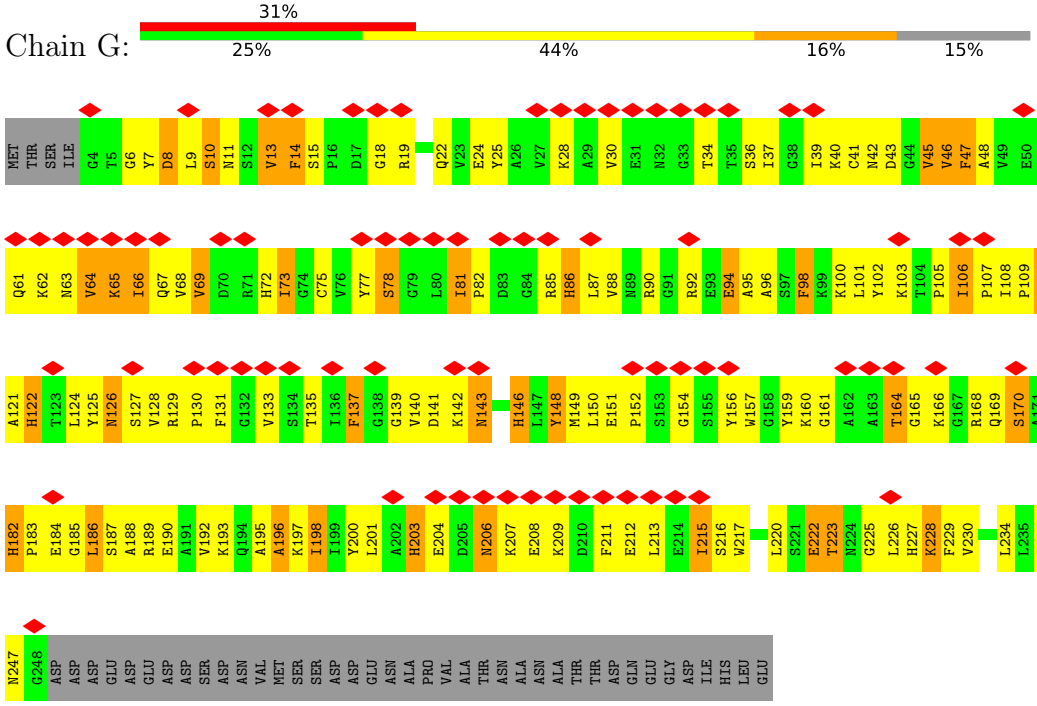
• Molecule 13: PROTEASOME COMPONENT PRE5

Chain F:



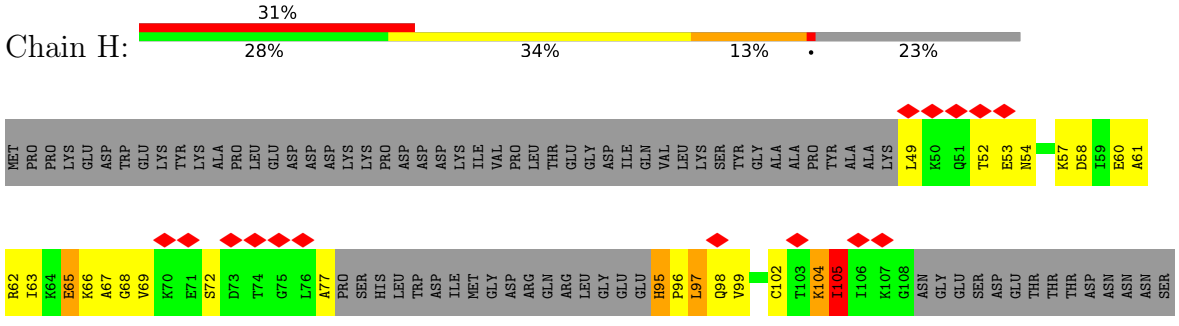
• Molecule 14: PROTEASOME COMPONENT C1

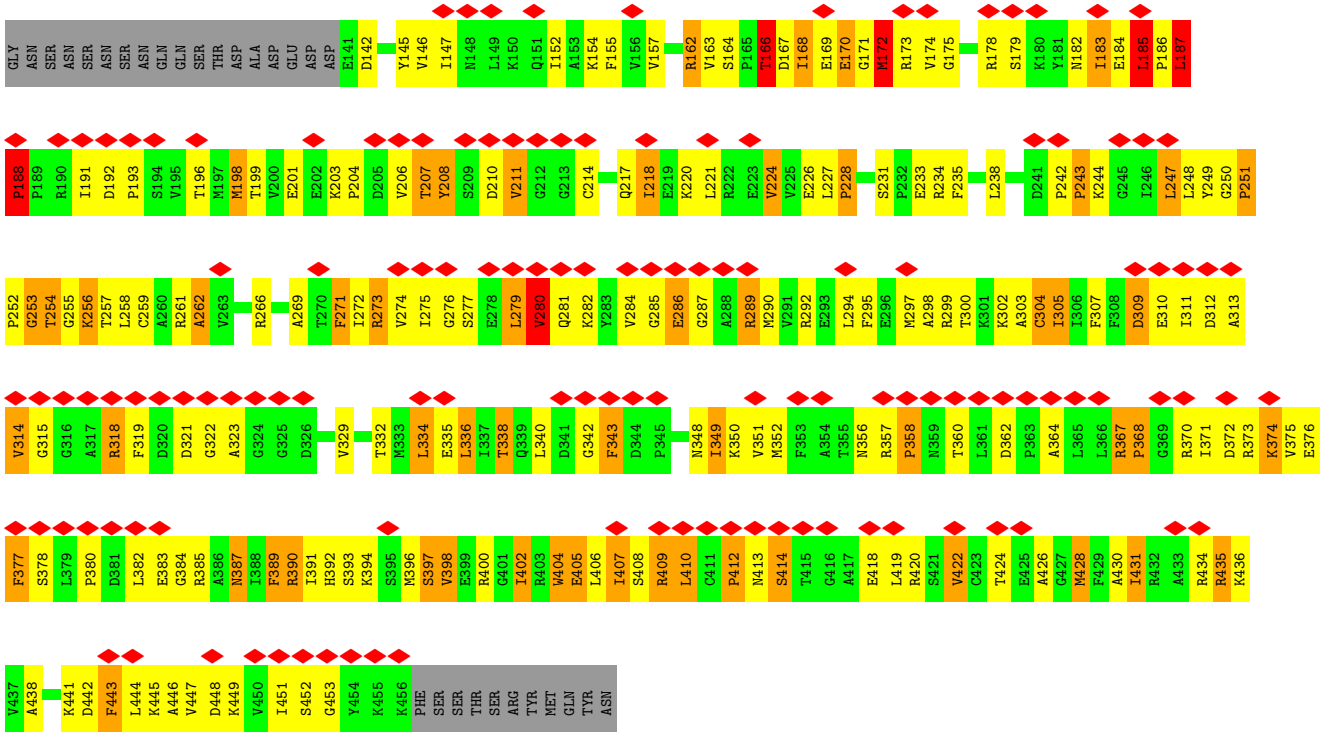
Chain G:



• Molecule 15: 26S PROTEASE REGULATORY SUBUNIT 7 HOMOLOG

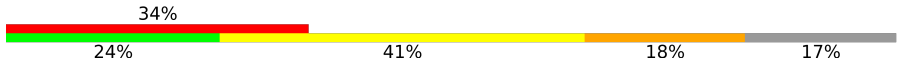
Chain H:

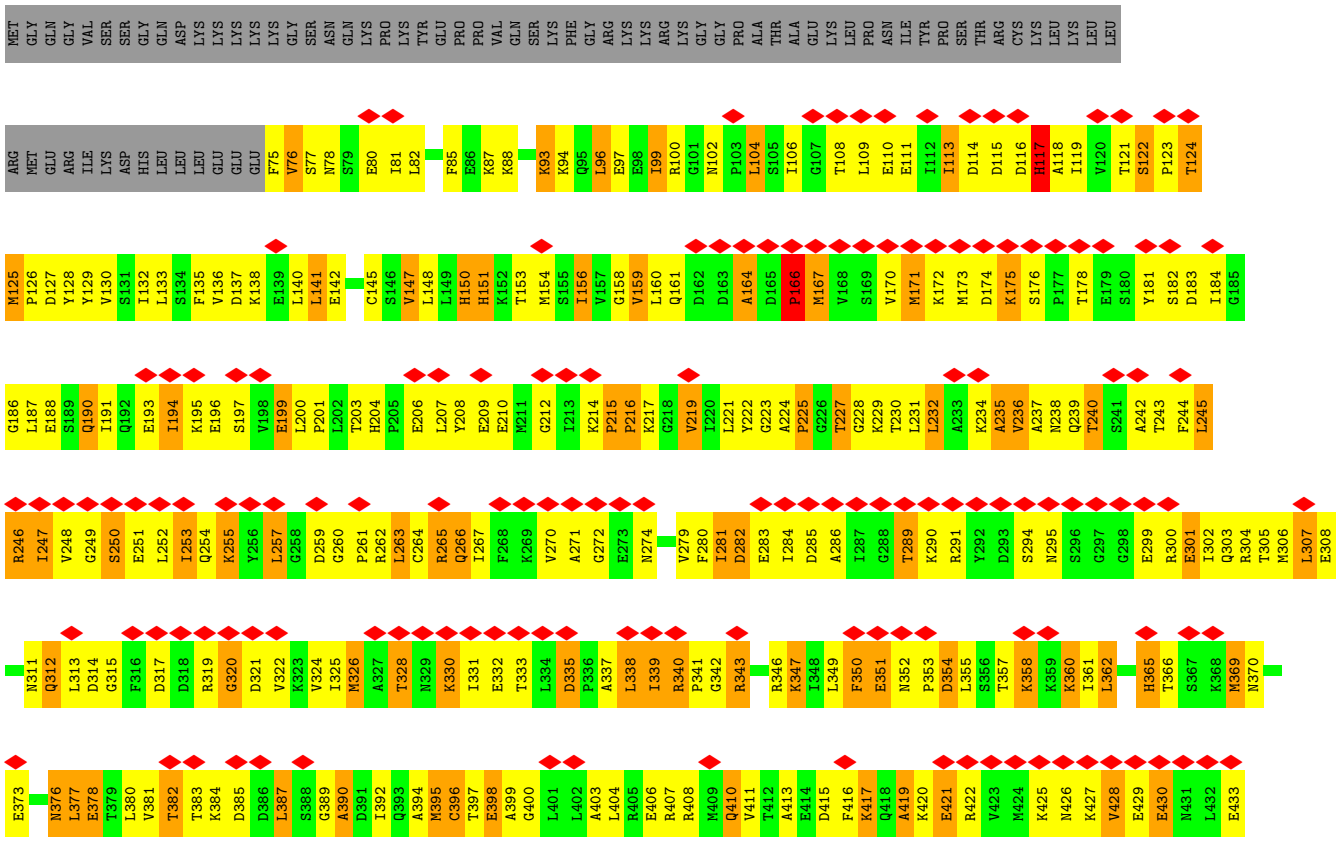




• Molecule 16: 26S PROTEASE REGULATORY SUBUNIT 4 HOMOLOG

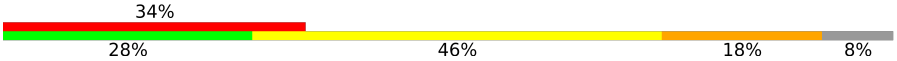
Chain I:

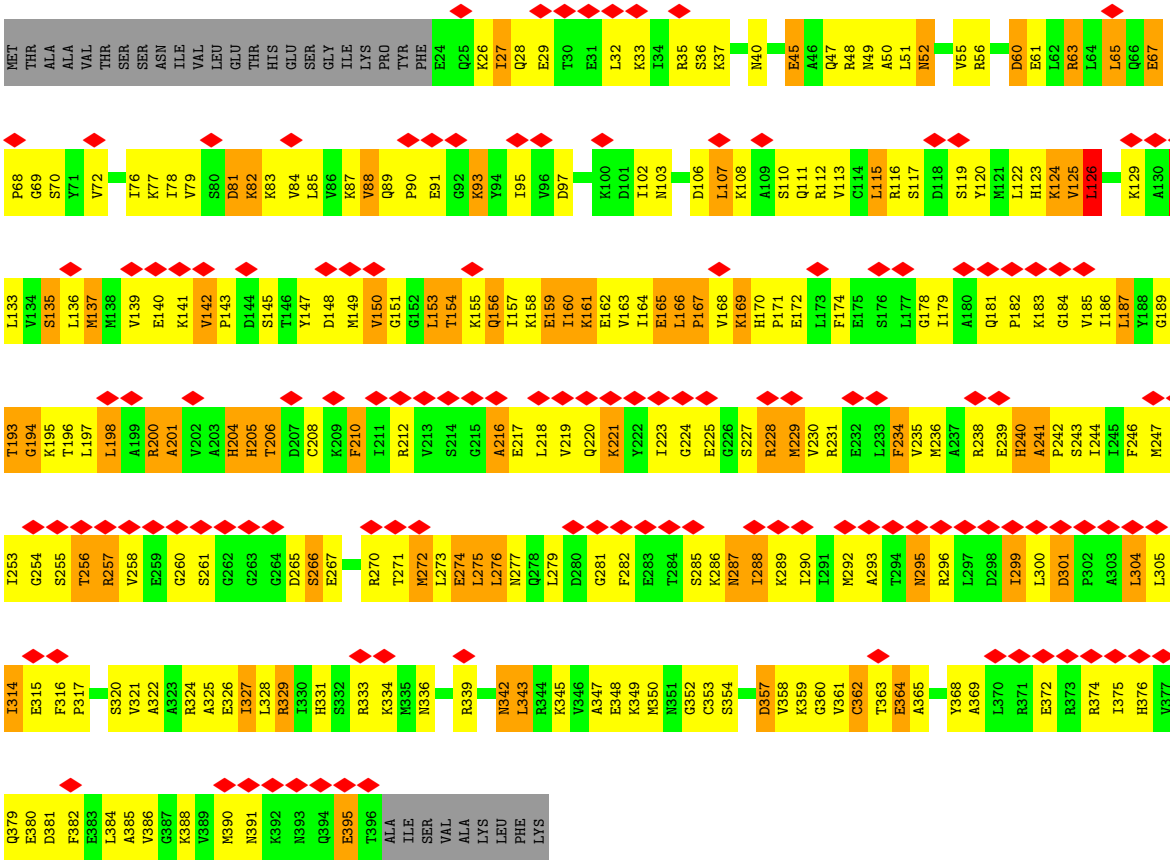




• Molecule 17: 26S PROTEASE REGULATORY SUBUNIT 8 HOMOLOG

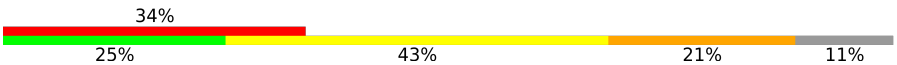
Chain J:

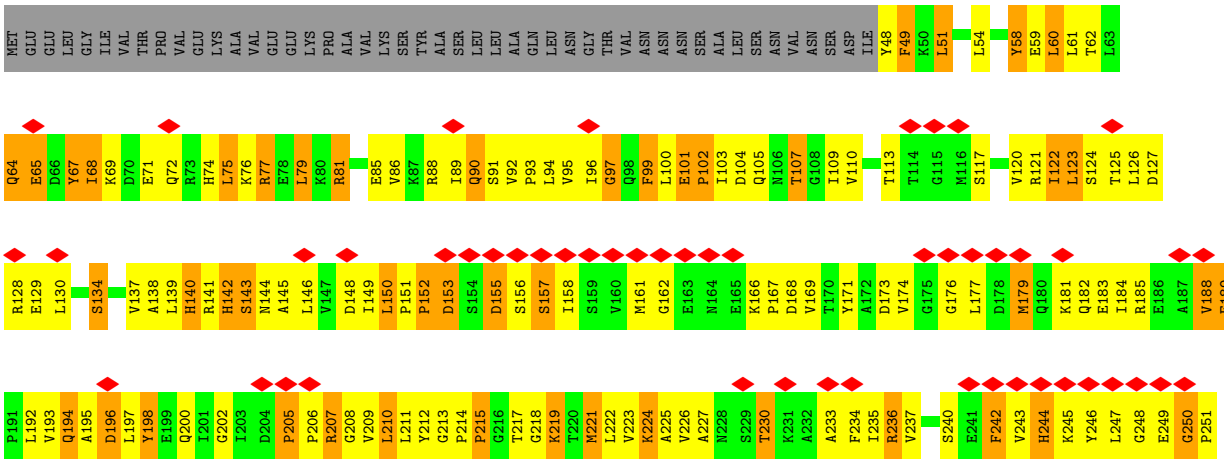


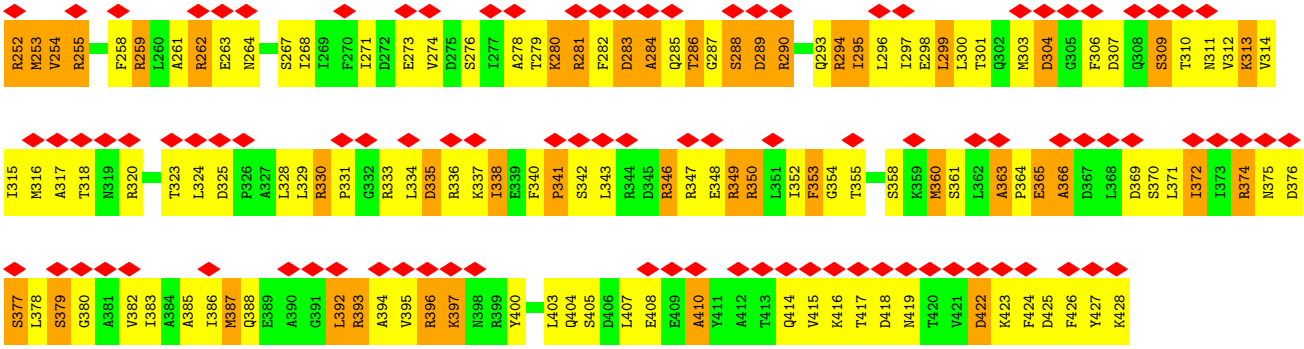


• Molecule 18: 26S PROTEASE REGULATORY SUBUNIT 6B HOMOLOG

Chain K:

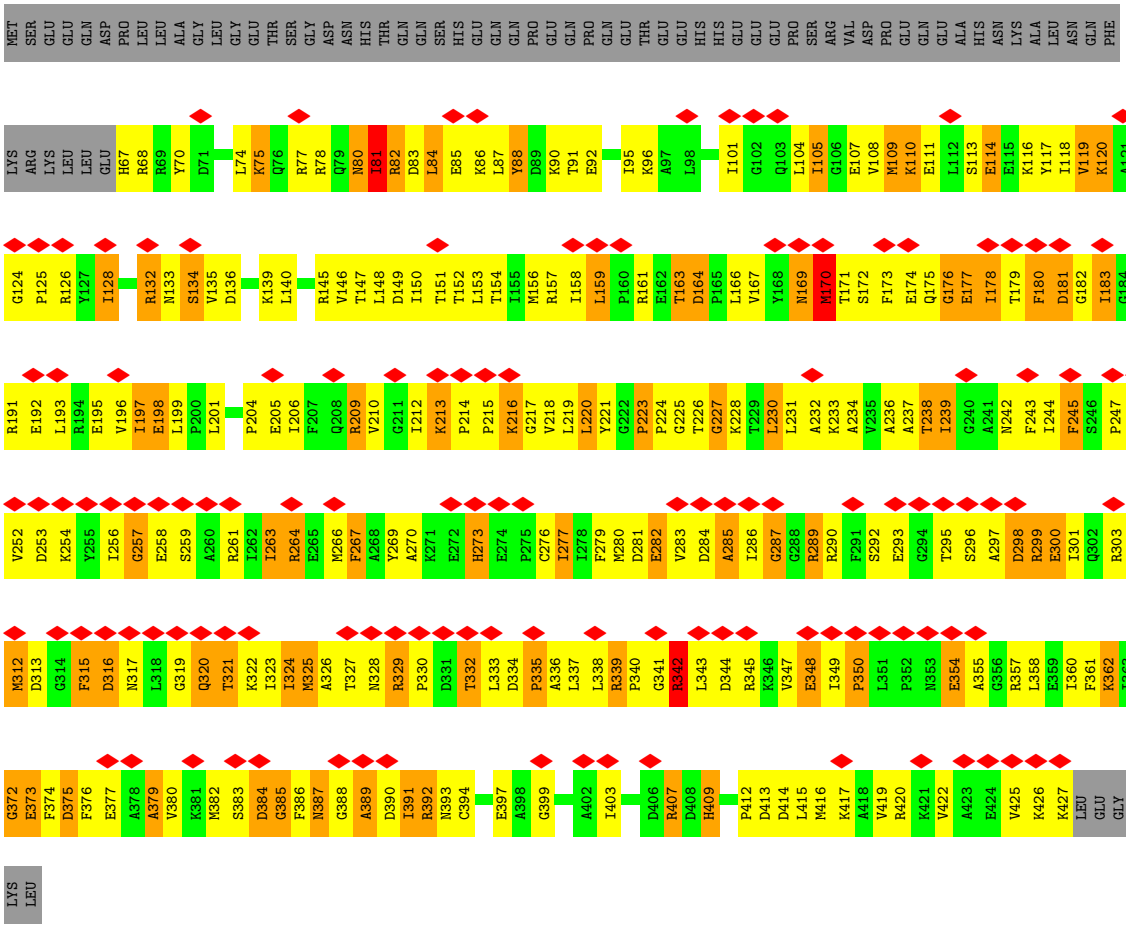






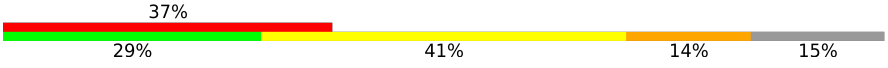
• Molecule 19: 26S PROTEASE SUBUNIT RPT4

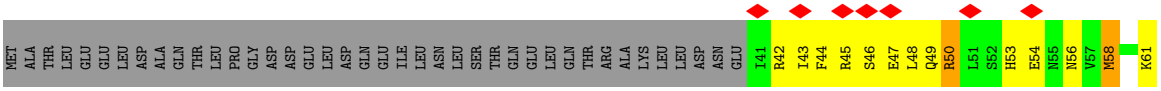
Chain L:

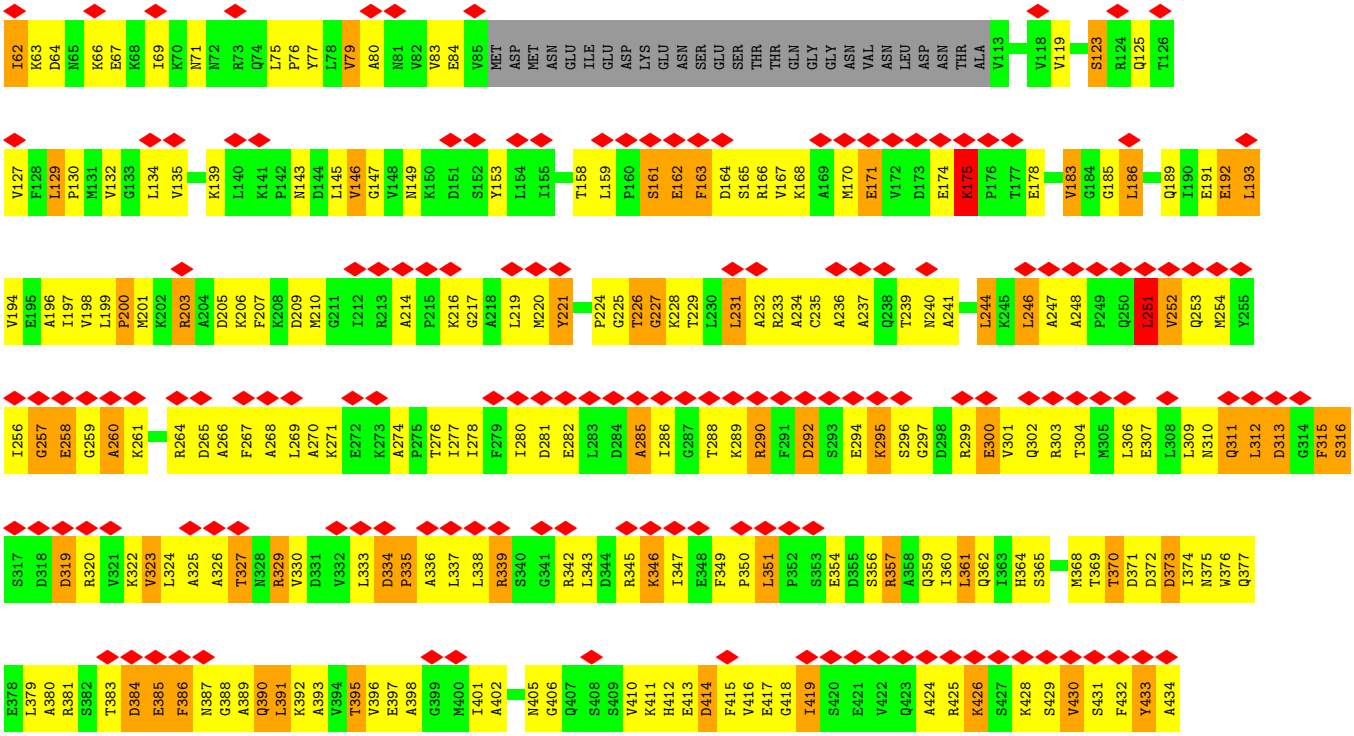


• Molecule 20: 26S PROTEASE REGULATORY SUBUNIT 6A

Chain M:

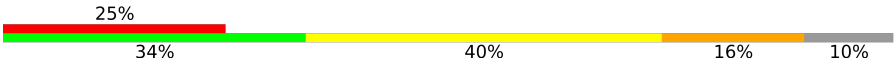


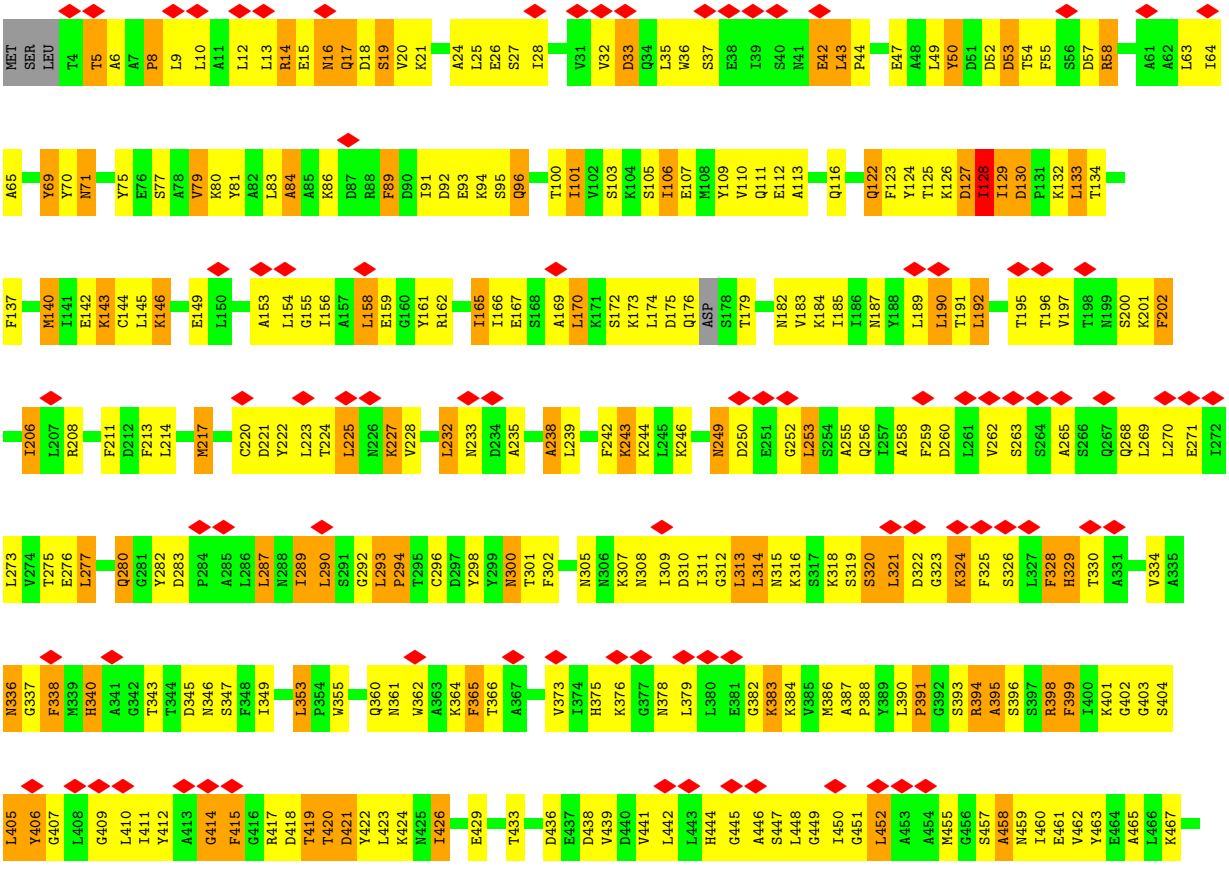


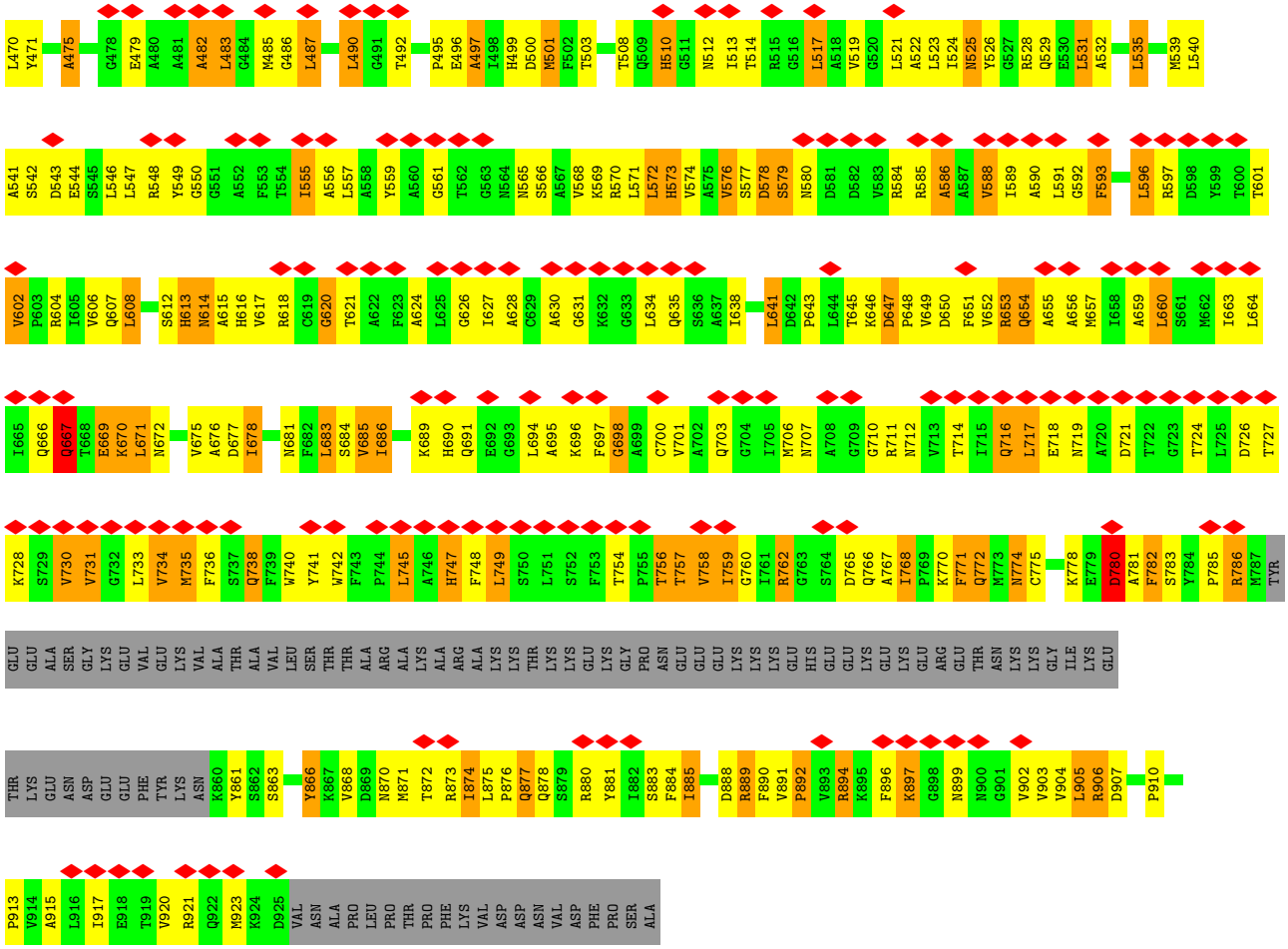


• Molecule 21: 26S PROTEASOME REGULATORY SUBUNIT RPN2

Chain N:

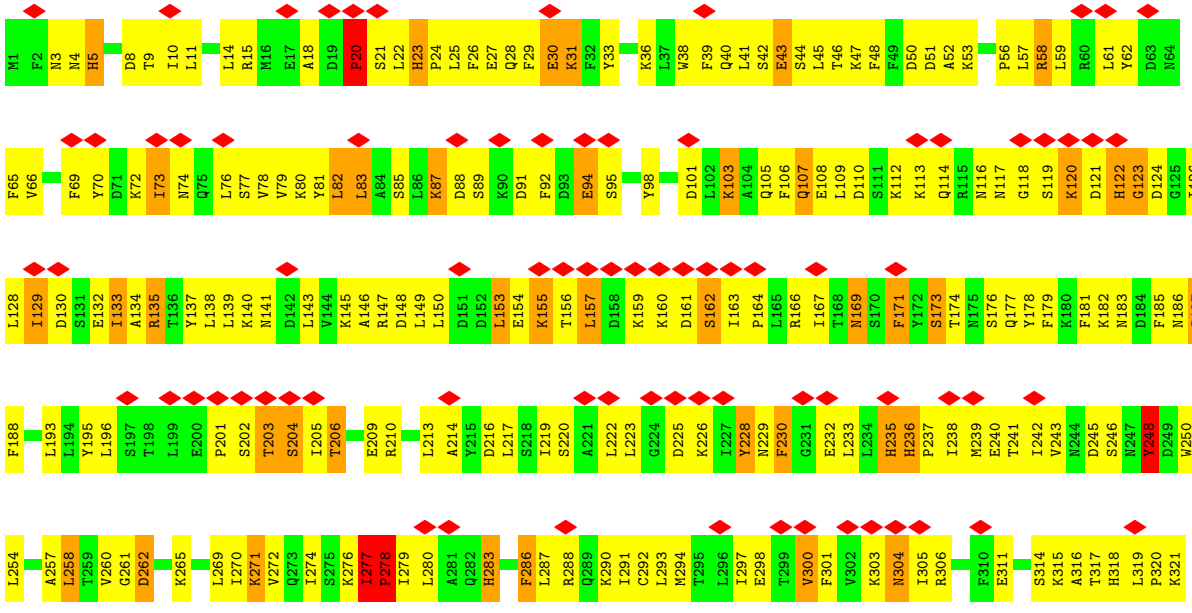


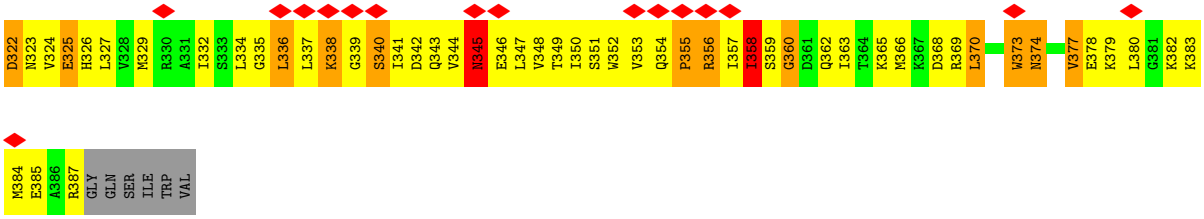




• Molecule 22: 26S PROTEASOME REGULATORY SUBUNIT RPN9

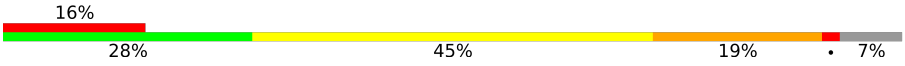
Chain O:

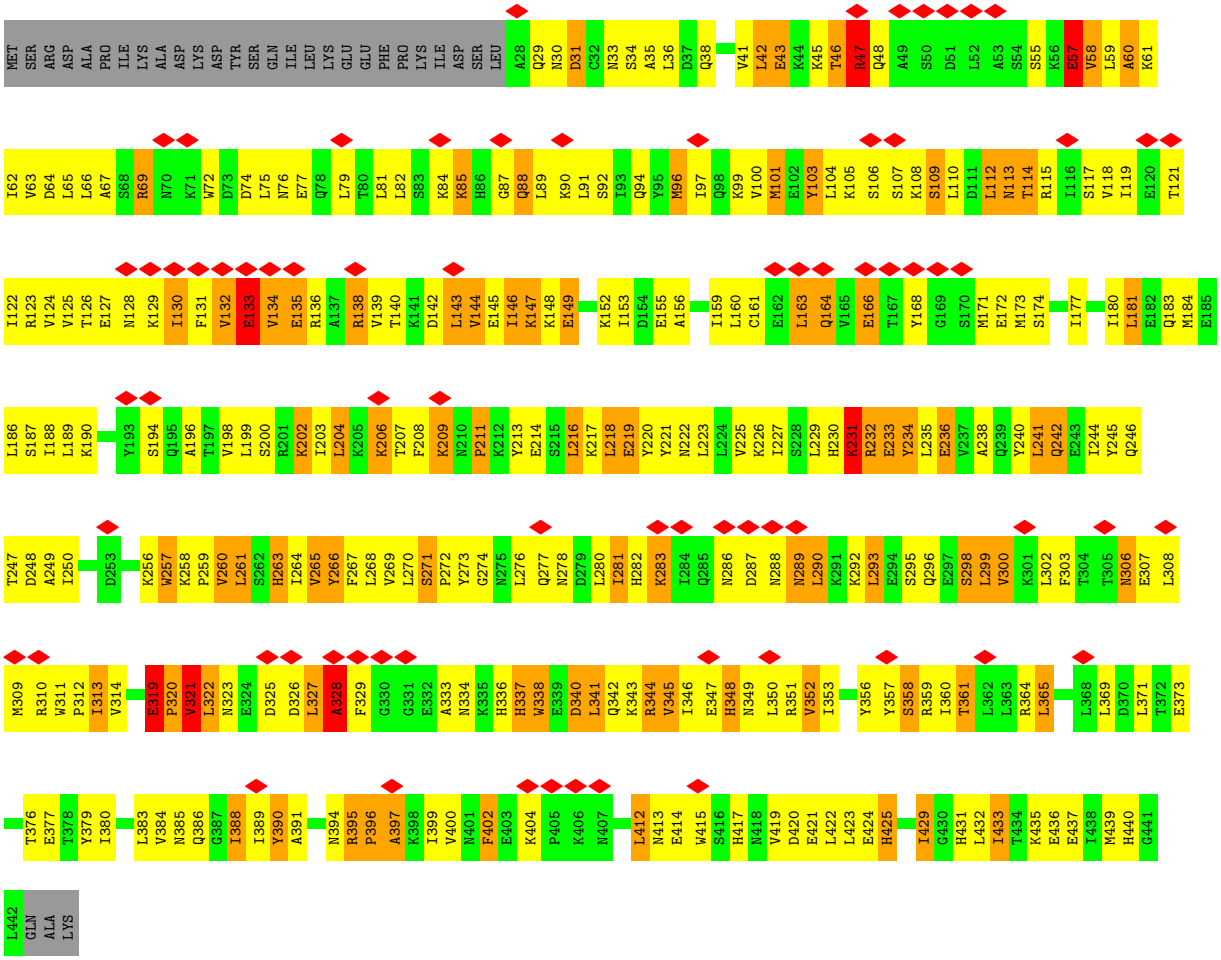




• Molecule 23: 26S PROTEASOME REGULATORY SUBUNIT RPN5

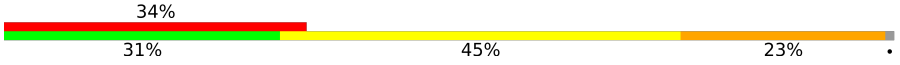
Chain P:

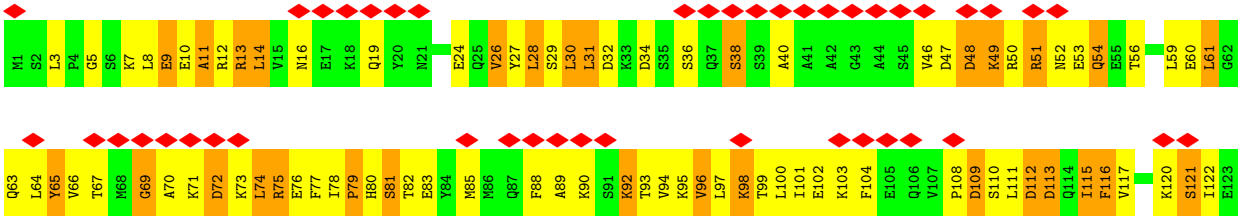


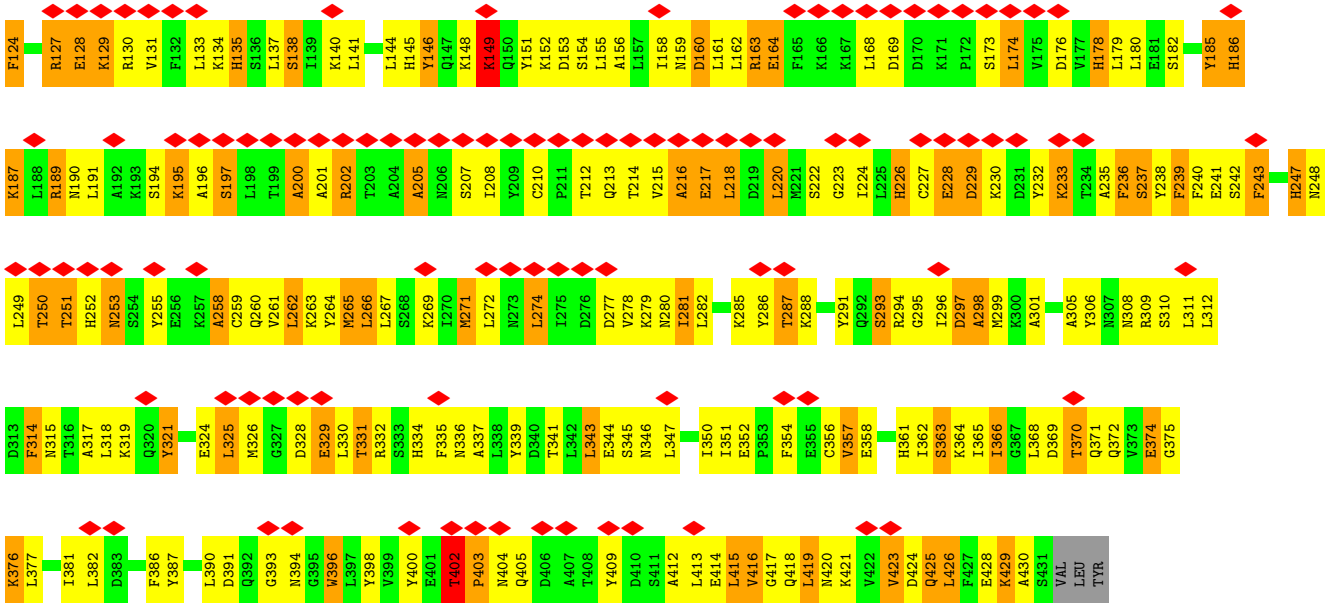


• Molecule 24: 26S PROTEASOME REGULATORY SUBUNIT RPN6

Chain Q:

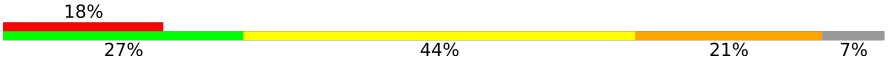


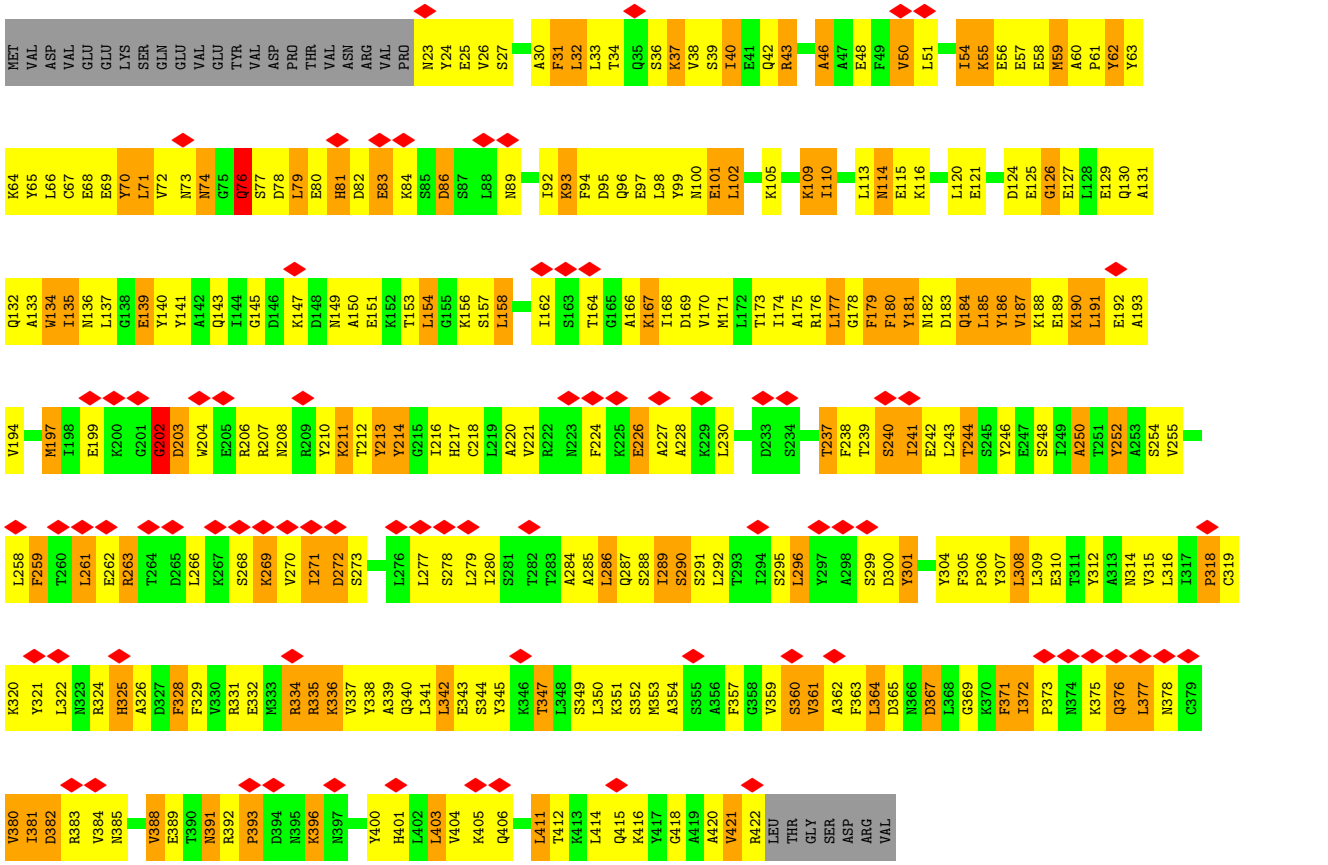




• Molecule 25: 26S PROTEASOME REGULATORY SUBUNIT RPN7

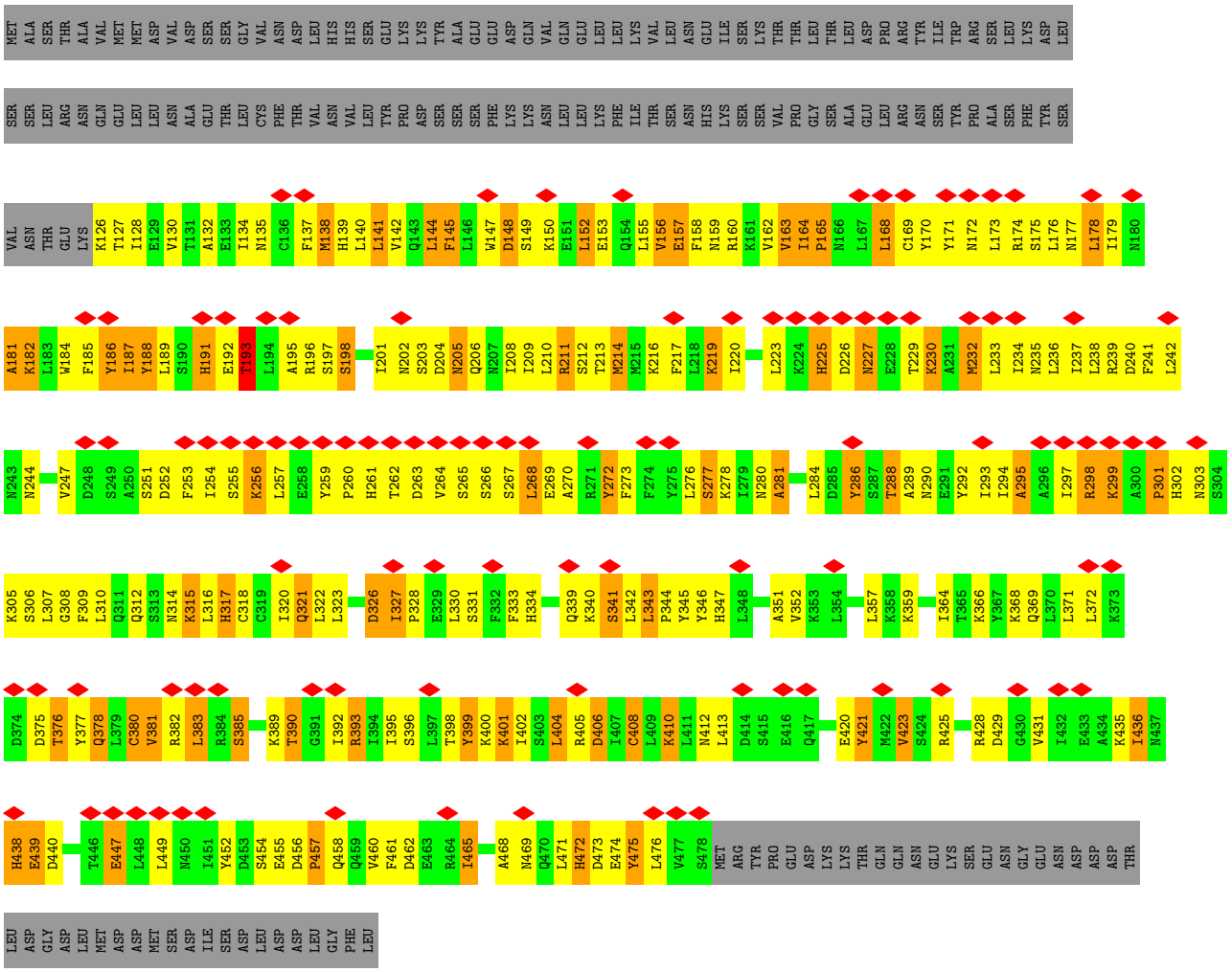
Chain R:





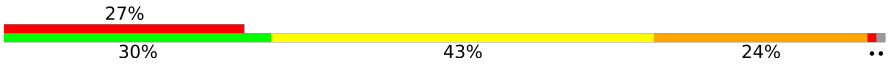
• Molecule 26: 26S PROTEASOME REGULATORY SUBUNIT RPN3

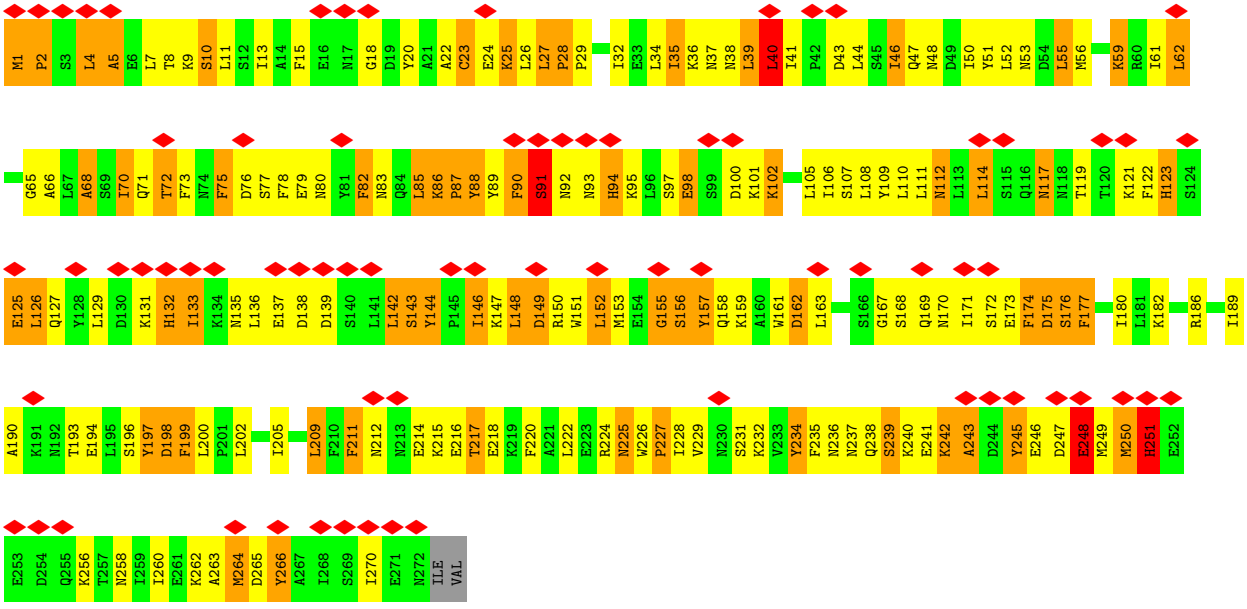
Chain S:



• Molecule 27: 26S PROTEASOME REGULATORY SUBUNIT RPN12

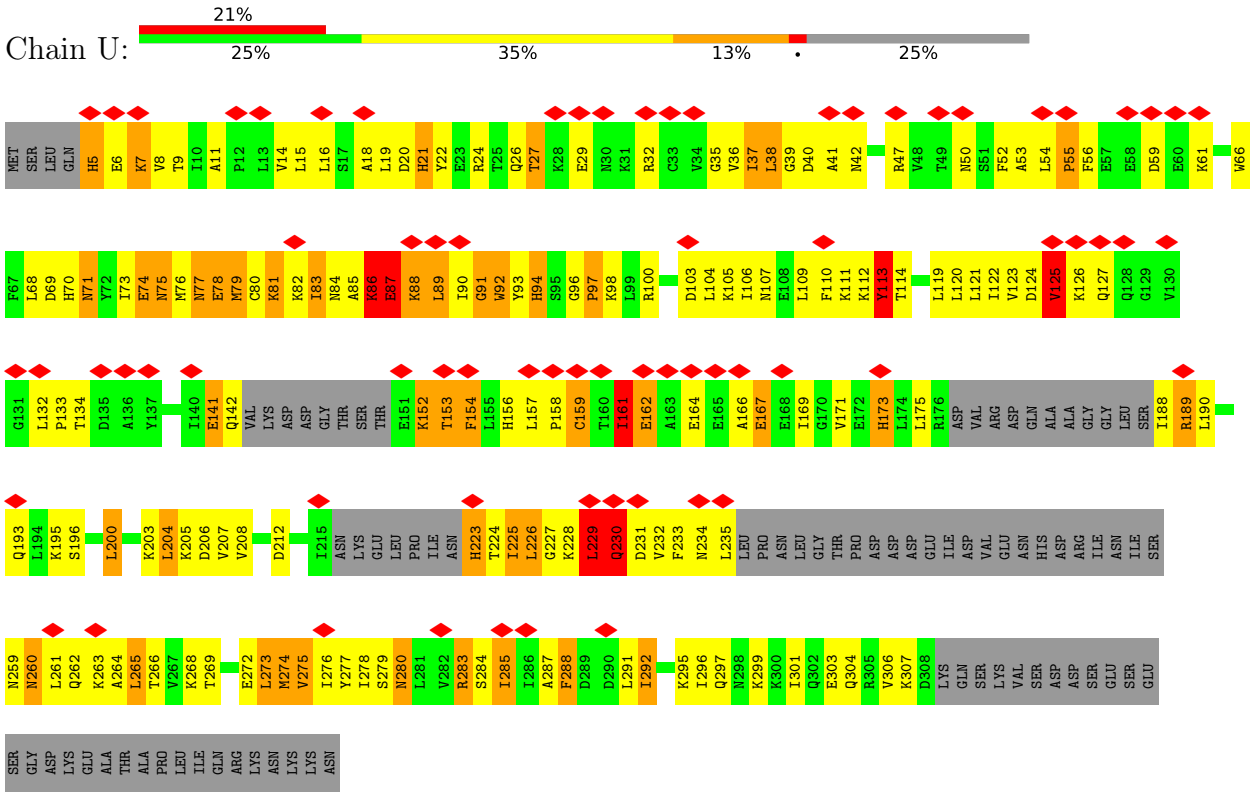
Chain T:





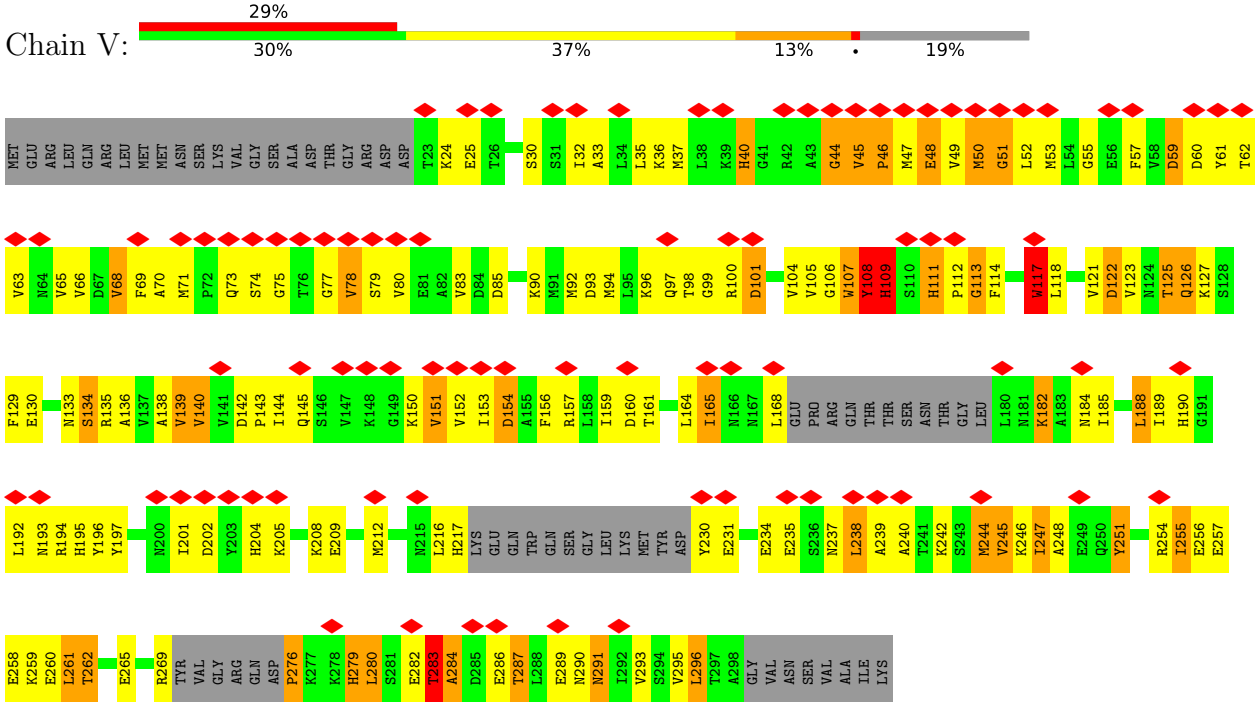
• Molecule 28: 26S PROTEASOME REGULATORY SUBUNIT RPN8

Chain U:



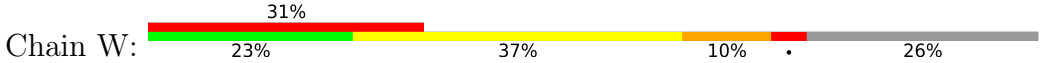
• Molecule 29: 26S PROTEASOME REGULATORY SUBUNIT RPN11

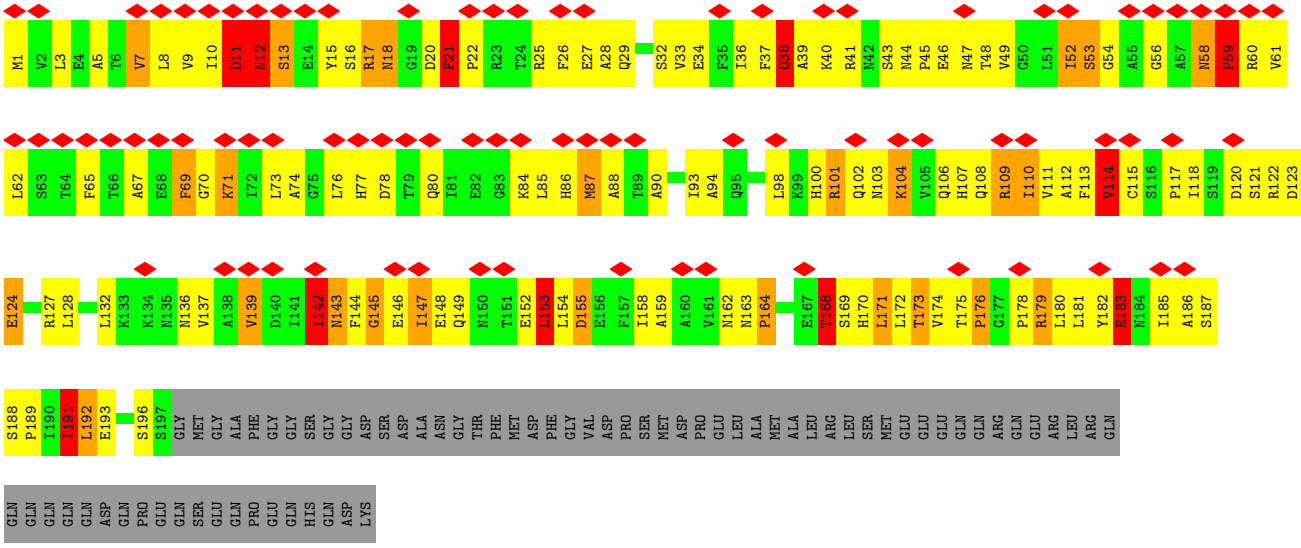
Chain V:



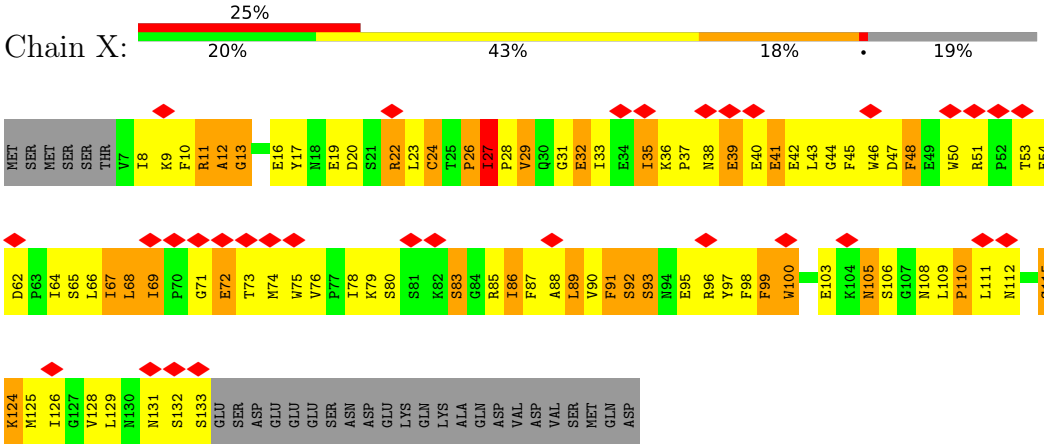
• Molecule 30: 26S PROTEASOME REGULATORY SUBUNIT RPN10

Chain W:

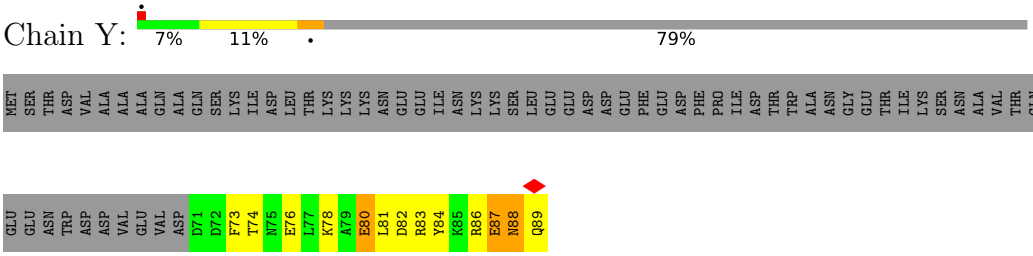




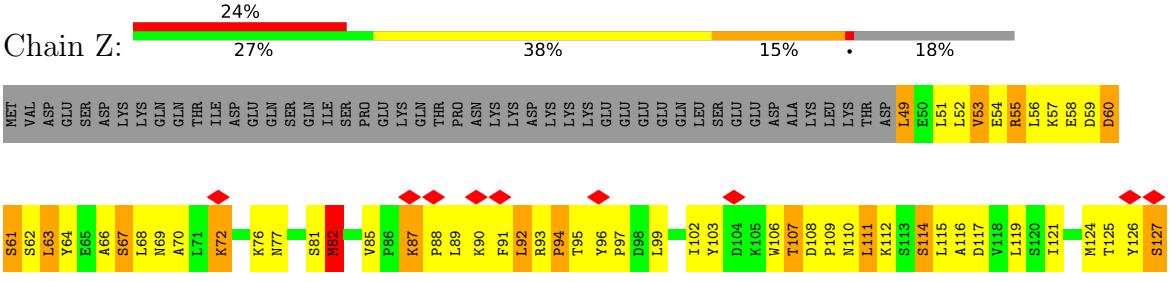
• Molecule 31: 26S PROTEASOME REGULATORY SUBUNIT RPN13

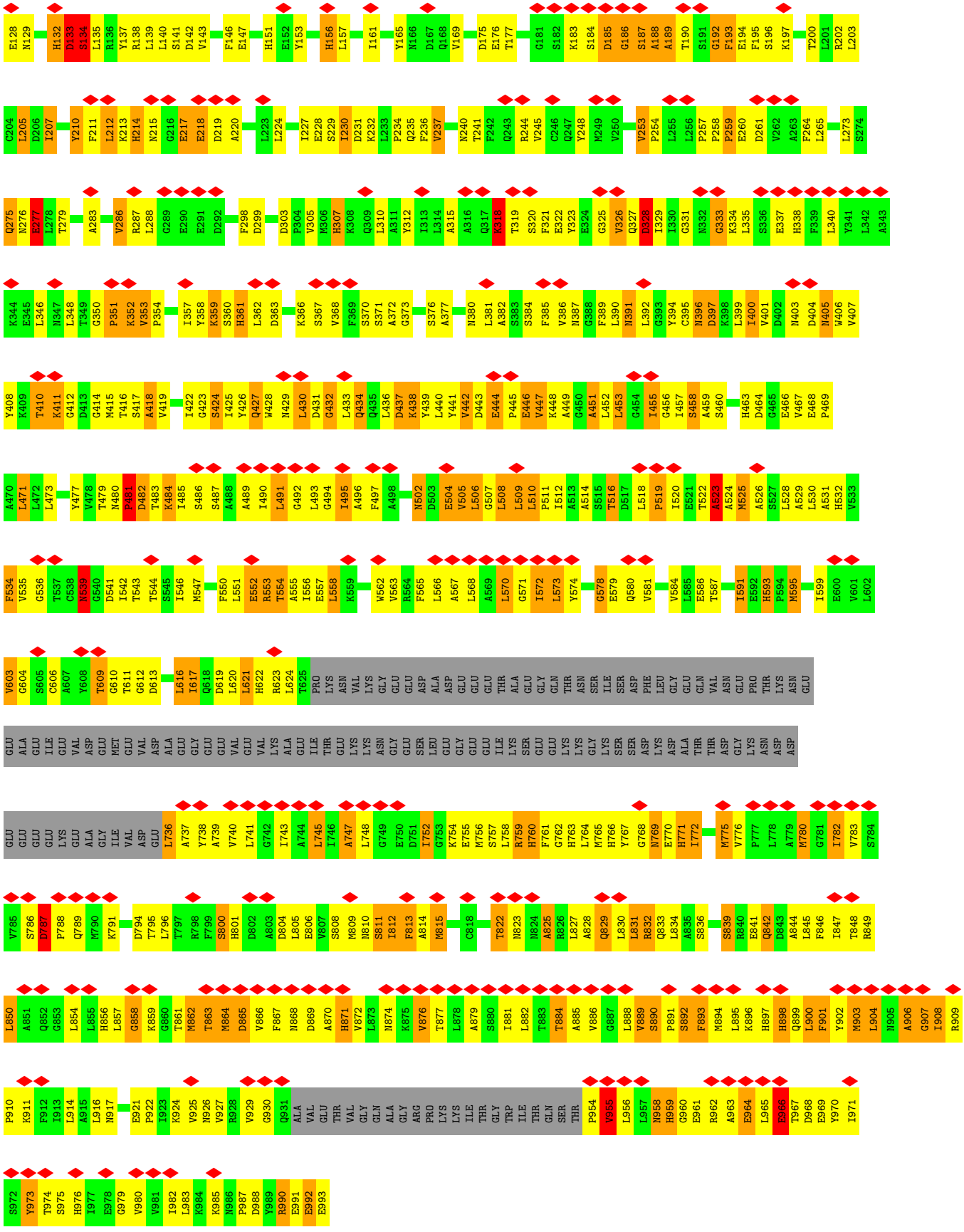


• Molecule 32: 26S PROTEASOME COMPLEX SUBUNIT SEM1



• Molecule 33: 26S PROTEASOME REGULATORY SUBUNIT RPN1





4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	300000	Depositor
Resolution determination method	Not provided	
CTF correction method	MICROGRAPH	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	25	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	Not provided	
Image detector	TVIPS TEMCAM-F816 (8k x 8k)	Depositor
Maximum map value	4.676	Depositor
Minimum map value	-3.278	Depositor
Average map value	0.010	Depositor
Map value standard deviation	0.145	Depositor
Recommended contour level	0.63	Depositor
Map size (Å)	557.2, 557.2, 557.2	wwPDB
Map dimensions	280, 280, 280	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.99, 1.99, 1.99	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	1	1.99	53/1605 (3.3%)	1.98	74/2171 (3.4%)
2	2	2.01	55/1723 (3.2%)	2.05	81/2337 (3.5%)
3	3	1.92	51/1611 (3.2%)	2.04	81/2174 (3.7%)
4	4	1.91	51/1613 (3.2%)	2.07	86/2173 (4.0%)
5	5	1.97	55/1683 (3.3%)	2.07	87/2277 (3.8%)
6	6	1.97	67/1795 (3.7%)	1.93	72/2420 (3.0%)
7	7	1.92	63/1855 (3.4%)	1.92	73/2514 (2.9%)
8	A	1.97	64/1959 (3.3%)	2.02	82/2652 (3.1%)
9	B	1.99	72/1952 (3.7%)	2.06	107/2642 (4.0%)
10	C	1.88	62/1943 (3.2%)	2.06	105/2629 (4.0%)
11	D	1.84	61/1928 (3.2%)	1.91	79/2610 (3.0%)
12	E	1.98	67/1892 (3.5%)	1.97	80/2549 (3.1%)
13	F	1.99	65/1823 (3.6%)	1.97	75/2463 (3.0%)
14	G	2.01	61/1940 (3.1%)	2.11	109/2619 (4.2%)
15	H	1.71	65/2831 (2.3%)	2.17	167/3808 (4.4%)
16	I	1.89	98/2859 (3.4%)	2.14	191/3853 (5.0%)
17	J	1.92	95/2962 (3.2%)	2.07	160/3975 (4.0%)
18	K	2.01	81/3061 (2.6%)	2.35	199/4129 (4.8%)
19	L	1.89	85/2895 (2.9%)	2.03	151/3892 (3.9%)
20	M	1.91	75/2903 (2.6%)	2.11	170/3909 (4.3%)
21	N	1.85	191/6670 (2.9%)	2.09	352/9023 (3.9%)
22	O	1.19	32/3243 (1.0%)	1.77	96/4374 (2.2%)
23	P	1.91	111/3452 (3.2%)	2.14	216/4657 (4.6%)
24	Q	1.87	114/3527 (3.2%)	2.13	228/4748 (4.8%)
25	R	1.74	77/3272 (2.4%)	2.00	173/4412 (3.9%)
26	S	1.82	78/2945 (2.6%)	2.19	197/3976 (5.0%)
27	T	1.74	48/2279 (2.1%)	2.05	137/3077 (4.5%)
28	U	2.85	50/2087 (2.4%)	2.02	111/2811 (3.9%)
29	V	1.90	47/1969 (2.4%)	2.05	97/2652 (3.7%)
30	W	2.21	28/1556 (1.8%)	2.56	82/2108 (3.9%)
31	X	1.93	34/1058 (3.2%)	2.03	52/1432 (3.6%)
32	Y	1.71	4/169 (2.4%)	1.92	8/223 (3.6%)
33	Z	1.69	151/6403 (2.4%)	2.06	327/8686 (3.8%)
All	All	1.90	2311/81463 (2.8%)	2.07	4305/109975 (3.9%)

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	1	0	1
6	6	0	1
7	7	0	2
8	A	0	3
11	D	0	1
13	F	0	1
15	H	0	6
17	J	0	1
19	L	0	4
20	M	0	2
21	N	0	7
22	O	0	2
23	P	0	3
24	Q	0	1
25	R	0	2
26	S	0	1
27	T	0	2
28	U	0	6
29	V	0	6
30	W	0	11
31	X	0	3
33	Z	0	7
All	All	0	73

All (2311) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	U	230	GLN	N-CA	109.05	2.86	1.46
30	W	38	GLN	C-N	-60.15	0.46	1.33
18	K	242	PHE	C-N	36.74	1.83	1.33
20	M	257	GLY	C-N	33.74	1.80	1.33
33	Z	134	SER	N-CA	25.25	1.78	1.46
19	L	257	GLY	C-N	21.68	1.64	1.33
30	W	154	LEU	C-N	-21.67	1.05	1.33
29	V	282	GLU	C-N	21.49	1.62	1.34
29	V	291	ASN	C-N	20.93	1.60	1.34
29	V	99	GLY	C-N	20.81	1.65	1.33
30	W	153	LEU	C-N	15.87	1.55	1.33
7	7	44	GLY	CA-C	-14.22	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	187	LEU	CA-C	-13.73	1.36	1.52
20	M	58	MET	C-N	-12.39	1.16	1.33
27	T	65	GLY	CA-C	-12.03	1.38	1.52
25	R	102	LEU	CA-C	-11.72	1.38	1.52
17	J	190	PRO	CA-C	11.58	1.59	1.52
9	B	135	LEU	CA-C	-11.52	1.39	1.52
19	L	213	LYS	C-N	11.47	1.43	1.33
2	2	174	ASP	CA-C	-11.15	1.39	1.52
19	L	263	ILE	CA-C	-10.83	1.39	1.52
3	3	113	ALA	CA-C	-10.80	1.38	1.52
18	K	97	GLY	CA-C	-10.74	1.40	1.52
5	5	94	GLY	CA-C	-10.69	1.40	1.52
21	N	451	GLY	CA-C	-10.64	1.40	1.52
10	C	53	THR	CA-C	-10.53	1.39	1.52
15	H	305	ILE	CA-C	-10.50	1.38	1.52
33	Z	85	VAL	N-CA	-10.46	1.38	1.46
31	X	76	VAL	N-CA	-10.40	1.36	1.46
30	W	77	HIS	CA-C	10.39	1.66	1.52
31	X	22	ARG	CA-C	-10.29	1.40	1.53
8	A	165	GLY	CA-C	-10.16	1.39	1.52
7	7	222	THR	N-CA	-9.99	1.34	1.46
30	W	188	SER	N-CA	9.94	1.57	1.45
9	B	104	TYR	CA-C	-9.90	1.40	1.53
6	6	194	GLU	CA-C	-9.89	1.40	1.52
1	1	173	ILE	CA-C	-9.78	1.41	1.52
14	G	206	ASN	CA-C	-9.75	1.46	1.52
33	Z	811	SER	CA-C	-9.70	1.40	1.52
18	K	267	SER	CA-C	-9.63	1.40	1.52
5	5	168	ASP	CA-C	-9.61	1.41	1.52
10	C	152	ASN	N-CA	-9.53	1.37	1.45
16	I	145	CYS	N-CA	-9.51	1.33	1.45
1	1	38	HIS	CA-C	-9.47	1.41	1.52
23	P	105	LYS	CA-C	-9.38	1.40	1.52
21	N	671	LEU	CA-C	-9.37	1.41	1.52
23	P	263	HIS	CG-CD2	9.35	1.46	1.35
15	H	392	HIS	CG-CD2	9.35	1.46	1.35
23	P	336	HIS	CG-CD2	9.34	1.46	1.35
24	Q	178	HIS	CG-CD2	9.34	1.46	1.35
6	6	-2	ASN	CA-C	-9.34	1.42	1.52
8	A	209	HIS	CG-CD2	9.33	1.46	1.35
1	1	120	HIS	CG-CD2	9.33	1.46	1.35
2	2	109	HIS	CG-CD2	9.32	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	976	HIS	CG-CD2	9.32	1.46	1.35
17	J	331	HIS	CG-CD2	9.32	1.46	1.35
21	N	444	HIS	CG-CD2	9.32	1.46	1.35
33	Z	307	HIS	CG-CD2	9.32	1.46	1.35
23	P	425	HIS	CG-CD2	9.32	1.46	1.35
5	5	66	HIS	CG-CD2	9.31	1.46	1.35
26	S	347	HIS	CG-CD2	9.31	1.46	1.35
28	U	223	HIS	CG-CD2	9.31	1.46	1.35
4	4	145	HIS	CG-CD2	9.31	1.46	1.35
16	I	150	HIS	CG-CD2	9.31	1.46	1.35
33	Z	771	HIS	CG-CD2	9.31	1.46	1.35
2	2	116	HIS	CG-CD2	9.31	1.46	1.35
11	D	96	HIS	CG-CD2	9.31	1.46	1.35
21	N	340	HIS	CG-CD2	9.31	1.46	1.35
1	1	38	HIS	CG-CD2	9.30	1.46	1.35
3	3	39	HIS	CG-CD2	9.30	1.46	1.35
22	O	326	HIS	CG-CD2	9.30	1.46	1.35
23	P	230	HIS	CG-CD2	9.30	1.46	1.35
29	V	204	HIS	CG-CD2	9.30	1.46	1.35
14	G	122	HIS	CG-CD2	9.30	1.46	1.35
16	I	151	HIS	CG-CD2	9.30	1.46	1.35
22	O	23	HIS	CG-CD2	9.30	1.46	1.35
15	H	95	HIS	CG-CD2	9.30	1.46	1.35
20	M	412	HIS	CG-CD2	9.30	1.46	1.35
33	Z	338	HIS	CG-CD2	9.30	1.46	1.35
33	Z	760	HIS	CG-CD2	9.30	1.46	1.35
19	L	409	HIS	CG-CD2	9.30	1.46	1.35
6	6	86	HIS	CG-CD2	9.30	1.46	1.35
9	B	94	HIS	CG-CD2	9.30	1.46	1.35
27	T	251	HIS	CG-CD2	9.30	1.46	1.35
28	U	21	HIS	CG-CD2	9.30	1.46	1.35
1	1	62	HIS	CG-CD2	9.30	1.46	1.35
17	J	240	HIS	CG-CD2	9.30	1.46	1.35
33	Z	622	HIS	CG-CD2	9.30	1.46	1.35
9	B	139	HIS	CG-CD2	9.29	1.46	1.35
22	O	122	HIS	CG-CD2	9.29	1.46	1.35
24	Q	145	HIS	CG-CD2	9.29	1.46	1.35
29	V	111	HIS	CG-CD2	9.29	1.46	1.35
12	E	91	HIS	CG-CD2	9.29	1.46	1.35
14	G	181	HIS	CG-CD2	9.29	1.46	1.35
21	N	510	HIS	CG-CD2	9.29	1.46	1.35
24	Q	80	HIS	CG-CD2	9.29	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	283	HIS	CG-CD2	9.29	1.46	1.35
8	A	193	HIS	CG-CD2	9.29	1.46	1.35
20	M	364	HIS	CG-CD2	9.29	1.46	1.35
21	N	616	HIS	CG-CD2	9.29	1.46	1.35
6	6	70	HIS	CG-CD2	9.29	1.46	1.35
12	E	99	HIS	CG-CD2	9.29	1.46	1.35
27	T	132	HIS	CG-CD2	9.29	1.46	1.35
28	U	5	HIS	CG-CD2	9.29	1.46	1.35
33	Z	856	HIS	CG-CD2	9.29	1.46	1.35
1	1	157	HIS	CG-CD2	9.28	1.46	1.35
4	4	40	HIS	CG-CD2	9.29	1.46	1.35
17	J	170	HIS	CG-CD2	9.28	1.46	1.35
24	Q	186	HIS	CG-CD2	9.29	1.46	1.35
28	U	156	HIS	CG-CD2	9.28	1.46	1.35
33	Z	897	HIS	CG-CD2	9.28	1.46	1.35
17	J	123	HIS	CG-CD2	9.28	1.46	1.35
21	N	573	HIS	CG-CD2	9.28	1.46	1.35
25	R	325	HIS	CG-CD2	9.28	1.46	1.35
33	Z	593	HIS	CG-CD2	9.28	1.46	1.35
21	N	329	HIS	CG-CD2	9.28	1.46	1.35
22	O	235	HIS	CG-CD2	9.28	1.46	1.35
17	J	376	HIS	CG-CD2	9.28	1.46	1.35
14	G	182	HIS	CG-CD2	9.28	1.46	1.35
14	G	203	HIS	CG-CD2	9.28	1.46	1.35
18	K	244	HIS	CG-CD2	9.28	1.46	1.35
25	R	401	HIS	CG-CD2	9.28	1.46	1.35
33	Z	766	HIS	CG-CD2	9.28	1.46	1.35
8	A	185	HIS	CG-CD2	9.27	1.46	1.35
23	P	431	HIS	CG-CD2	9.27	1.46	1.35
26	S	438	HIS	CG-CD2	9.27	1.46	1.35
33	Z	361	HIS	CG-CD2	9.27	1.46	1.35
33	Z	532	HIS	CG-CD2	9.27	1.46	1.35
33	Z	871	HIS	CG-CD2	9.27	1.46	1.35
2	2	86	HIS	CG-CD2	9.27	1.46	1.35
3	3	36	HIS	CG-CD2	9.27	1.46	1.35
13	F	43	HIS	CG-CD2	9.27	1.46	1.35
13	F	69	HIS	CG-CD2	9.27	1.46	1.35
23	P	282	HIS	CG-CD2	9.27	1.46	1.35
27	T	123	HIS	CG-CD2	9.27	1.46	1.35
20	M	53	HIS	CG-CD2	9.27	1.46	1.35
22	O	318	HIS	CG-CD2	9.27	1.46	1.35
26	S	225	HIS	CG-CD2	9.27	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	132	HIS	CG-CD2	9.27	1.46	1.35
4	4	132	HIS	CG-CD2	9.26	1.46	1.35
12	E	157	HIS	CG-CD2	9.26	1.46	1.35
33	Z	959	HIS	CG-CD2	9.26	1.46	1.35
17	J	204	HIS	CG-CD2	9.26	1.46	1.35
22	O	5	HIS	CG-CD2	9.26	1.46	1.35
23	P	440	HIS	CG-CD2	9.26	1.46	1.35
12	E	188	HIS	CG-CD2	9.26	1.46	1.35
13	F	143	HIS	CG-CD2	9.26	1.46	1.35
29	V	195	HIS	CG-CD2	9.26	1.46	1.35
6	6	186	HIS	CG-CD2	9.26	1.46	1.35
23	P	417	HIS	CG-CD2	9.26	1.46	1.35
24	Q	334	HIS	CG-CD2	9.26	1.46	1.35
33	Z	801	HIS	CG-CD2	9.26	1.46	1.35
2	2	35	HIS	CG-CD2	9.25	1.46	1.35
17	J	205	HIS	CG-CD2	9.25	1.46	1.35
11	D	70	HIS	CG-CD2	9.25	1.46	1.35
14	G	227	HIS	CG-CD2	9.25	1.46	1.35
24	Q	226	HIS	CG-CD2	9.25	1.46	1.35
26	S	302	HIS	CG-CD2	9.25	1.46	1.35
33	Z	763	HIS	CG-CD2	9.25	1.46	1.35
25	R	217	HIS	CG-CD2	9.25	1.46	1.35
26	S	317	HIS	CG-CD2	9.25	1.46	1.35
27	T	94	HIS	CG-CD2	9.25	1.46	1.35
33	Z	898	HIS	CG-CD2	9.25	1.46	1.35
2	2	114	HIS	CG-CD2	9.25	1.46	1.35
18	K	236	ARG	CA-C	-9.25	1.41	1.52
19	L	364	HIS	CG-CD2	9.25	1.46	1.35
29	V	217	HIS	CG-CD2	9.25	1.46	1.35
2	2	66	HIS	CG-CD2	9.24	1.46	1.35
8	A	15	HIS	CG-CD2	9.24	1.46	1.35
16	I	204	HIS	CG-CD2	9.24	1.46	1.35
26	S	139	HIS	CG-CD2	9.24	1.46	1.35
21	N	375	HIS	CG-CD2	9.24	1.46	1.35
28	U	94	HIS	CG-CD2	9.24	1.46	1.35
29	V	190	HIS	CG-CD2	9.24	1.46	1.35
24	Q	247	HIS	CG-CD2	9.24	1.46	1.35
5	5	179	HIS	CG-CD2	9.24	1.46	1.35
16	I	365	HIS	CG-CD2	9.24	1.46	1.35
18	K	140	HIS	CG-CD2	9.24	1.46	1.35
5	5	188	HIS	CG-CD2	9.24	1.46	1.35
6	6	99	HIS	CG-CD2	9.24	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	K	142	HIS	CG-CD2	9.24	1.46	1.35
21	N	499	HIS	CG-CD2	9.24	1.46	1.35
24	Q	135	HIS	CG-CD2	9.24	1.46	1.35
22	O	236	HIS	CG-CD2	9.23	1.46	1.35
13	F	110	HIS	CG-CD2	9.23	1.46	1.35
25	R	82	ASP	CA-C	-9.23	1.41	1.52
26	S	191	HIS	CG-CD2	9.23	1.46	1.35
33	Z	463	HIS	CG-CD2	9.23	1.46	1.35
23	P	337	HIS	CG-CD2	9.23	1.46	1.35
24	Q	361	HIS	CG-CD2	9.23	1.46	1.35
33	Z	151	HIS	CG-CD2	9.23	1.46	1.35
9	B	190	HIS	CG-CD2	9.23	1.46	1.35
25	R	81	HIS	CG-CD2	9.23	1.46	1.35
29	V	40	HIS	CG-CD2	9.22	1.46	1.35
14	G	146	HIS	CG-CD2	9.22	1.46	1.35
26	S	472	HIS	CG-CD2	9.22	1.46	1.35
18	K	74	HIS	CG-CD2	9.22	1.46	1.35
26	S	334	HIS	CG-CD2	9.22	1.46	1.35
5	5	166	HIS	CG-CD2	9.22	1.46	1.35
2	2	93	HIS	CG-CD2	9.21	1.46	1.35
2	2	141	HIS	CG-CD2	9.21	1.46	1.35
14	G	72	HIS	CG-CD2	9.21	1.46	1.35
28	U	173	HIS	CG-CD2	9.21	1.46	1.35
12	E	147	HIS	CG-CD2	9.21	1.46	1.35
16	I	117	HIS	CG-CD2	9.21	1.46	1.35
21	N	690	HIS	CG-CD2	9.21	1.46	1.35
24	Q	252	HIS	CG-CD2	9.21	1.46	1.35
4	4	146	HIS	CG-CD2	9.21	1.46	1.35
12	E	73	HIS	CG-CD2	9.21	1.46	1.35
21	N	613	HIS	CG-CD2	9.21	1.46	1.35
26	S	261	HIS	CG-CD2	9.21	1.46	1.35
33	Z	214	HIS	CG-CD2	9.21	1.46	1.35
6	6	67	HIS	CG-CD2	9.21	1.46	1.35
19	L	67	HIS	CG-CD2	9.21	1.46	1.35
7	7	141	HIS	CG-CD2	9.21	1.46	1.35
14	G	86	HIS	CG-CD2	9.21	1.46	1.35
10	C	94	HIS	CG-CD2	9.20	1.46	1.35
11	D	16	HIS	CG-CD2	9.20	1.46	1.35
23	P	348	HIS	CG-CD2	9.20	1.46	1.35
10	C	125	HIS	CG-CD2	9.20	1.46	1.35
19	L	273	HIS	CG-CD2	9.19	1.46	1.35
30	W	77	HIS	CG-CD2	9.19	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	W	107	HIS	CG-CD2	9.19	1.46	1.35
7	7	54	HIS	CG-CD2	9.19	1.46	1.35
33	Z	156	HIS	CG-CD2	9.18	1.46	1.35
5	5	191	HIS	CG-CD2	9.18	1.46	1.35
6	6	108	ASP	CA-C	9.18	1.64	1.52
10	C	31	HIS	CG-CD2	9.18	1.46	1.35
11	D	159	TRP	N-CA	-9.18	1.34	1.46
21	N	747	HIS	CG-CD2	9.17	1.46	1.35
30	W	100	HIS	CG-CD2	9.16	1.46	1.35
24	Q	127	ARG	C-N	9.14	1.46	1.33
13	F	149	PRO	N-CD	9.13	1.60	1.47
12	E	42	THR	N-CA	-9.11	1.35	1.46
21	N	762	ARG	CD-NE	9.06	1.58	1.46
13	F	85	SER	CA-C	9.01	1.64	1.52
24	Q	207	SER	C-N	8.99	1.45	1.33
15	H	289	ARG	CA-C	-8.99	1.41	1.52
33	Z	580	GLN	C-N	8.96	1.43	1.34
20	M	146	VAL	C-N	8.95	1.38	1.33
14	G	148	TYR	C-N	8.95	1.46	1.33
21	N	646	LYS	N-CA	-8.93	1.36	1.46
19	L	244	ILE	CA-C	-8.92	1.41	1.52
19	L	238	THR	C-N	8.92	1.43	1.34
16	I	250	SER	N-CA	-8.90	1.35	1.46
18	K	161	MET	C-N	8.89	1.39	1.33
3	3	175	GLY	C-N	8.89	1.44	1.33
27	T	28	PRO	N-CD	8.85	1.60	1.47
25	R	214	TYR	CA-C	-8.83	1.41	1.52
12	E	67	ILE	CA-C	-8.83	1.41	1.52
3	3	96	VAL	N-CA	-8.81	1.36	1.46
26	S	326	ASP	C-N	8.80	1.39	1.33
26	S	405	ARG	CA-C	-8.80	1.41	1.52
29	V	290	ASN	C-N	8.79	1.45	1.33
6	6	118	PRO	C-N	8.79	1.43	1.33
18	K	340	PHE	CA-C	8.76	1.62	1.52
13	F	77	LEU	N-CA	-8.75	1.35	1.46
33	Z	279	THR	CA-C	-8.75	1.41	1.52
9	B	38	LYS	CA-C	-8.75	1.42	1.52
17	J	150	VAL	C-N	8.72	1.46	1.33
2	2	137	VAL	C-N	8.71	1.45	1.33
26	S	413	LEU	CA-C	-8.71	1.41	1.52
27	T	175	ASP	CA-C	-8.70	1.41	1.52
21	N	462	VAL	N-CA	-8.70	1.35	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	134	SER	CA-C	8.68	1.64	1.52
18	K	194	GLN	CA-C	-8.68	1.43	1.52
26	S	203	SER	CA-C	-8.66	1.42	1.52
9	B	127	VAL	CA-C	-8.66	1.42	1.52
2	2	6	VAL	CA-C	-8.65	1.42	1.52
5	5	9	GLN	CA-C	-8.64	1.41	1.52
25	R	189	GLU	C-N	8.62	1.45	1.33
8	A	66	PRO	N-CD	8.61	1.59	1.47
31	X	11	ARG	CA-C	-8.60	1.41	1.52
21	N	14	ARG	CA-C	-8.58	1.40	1.52
9	B	217	GLU	CA-C	-8.57	1.42	1.52
9	B	37	ILE	N-CA	-8.56	1.36	1.46
1	1	26	ILE	CA-C	-8.56	1.44	1.53
12	E	12	VAL	CA-C	-8.56	1.41	1.52
12	E	123	PHE	CA-C	-8.52	1.41	1.52
12	E	171	ALA	CA-C	-8.52	1.42	1.52
8	A	40	ILE	CA-C	-8.51	1.42	1.52
9	B	136	ILE	CA-C	-8.51	1.41	1.52
20	M	426	LYS	CA-C	-8.50	1.41	1.52
17	J	216	ALA	C-O	-8.50	1.14	1.24
19	L	304	THR	CA-C	-8.50	1.42	1.52
7	7	35	ILE	N-CA	-8.48	1.39	1.46
13	F	146	GLU	CA-C	-8.48	1.42	1.52
4	4	172	PRO	N-CD	8.46	1.59	1.47
31	X	91	PHE	N-CA	-8.44	1.36	1.46
14	G	247	ASN	N-CA	-8.44	1.36	1.46
14	G	176	GLU	C-N	8.42	1.44	1.33
10	C	232	PRO	CA-C	-8.41	1.40	1.52
29	V	55	GLY	CA-C	-8.41	1.40	1.51
13	F	188	GLU	CA-C	-8.41	1.42	1.52
19	L	264	ARG	C-N	8.38	1.45	1.33
21	N	184	LYS	C-N	8.38	1.44	1.33
21	N	697	PHE	C-N	8.37	1.44	1.34
1	1	35	THR	CA-C	-8.35	1.42	1.52
11	D	243	GLN	N-CA	-8.35	1.36	1.46
31	X	78	ILE	N-CA	-8.35	1.37	1.46
16	I	320	GLY	C-N	8.34	1.45	1.33
1	1	192	GLU	CA-C	-8.33	1.44	1.53
14	G	139	GLY	N-CA	-8.33	1.36	1.45
29	V	160	ASP	CA-C	-8.33	1.42	1.52
18	K	149	ILE	N-CA	-8.29	1.36	1.46
23	P	31	ASP	CA-CB	8.30	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	D	45	GLY	CA-C	-8.26	1.46	1.52
1	1	50	ALA	C-N	8.24	1.44	1.33
21	N	461	GLU	N-CA	-8.23	1.36	1.46
7	7	77	GLU	CA-C	-8.22	1.41	1.52
21	N	716	GLN	CA-C	-8.19	1.42	1.52
7	7	78	ALA	CA-C	-8.15	1.42	1.52
3	3	147	PRO	N-CD	8.15	1.59	1.47
13	F	108	ALA	C-N	8.14	1.43	1.33
24	Q	375	GLY	CA-C	-8.14	1.42	1.52
20	M	276	THR	C-N	8.13	1.43	1.33
23	P	187	SER	CA-C	-8.12	1.42	1.52
18	K	387	MET	C-O	-8.11	1.14	1.24
21	N	906	ARG	CD-NE	8.11	1.57	1.46
6	6	98	VAL	N-CA	-8.11	1.37	1.46
10	C	15	PRO	CA-C	-8.06	1.42	1.53
5	5	13	ILE	N-CA	-8.06	1.36	1.46
14	G	48	ALA	CA-C	-8.04	1.42	1.52
21	N	561	GLY	CA-C	-8.04	1.40	1.51
22	O	315	LYS	CA-C	-8.03	1.42	1.52
24	Q	325	LEU	CA-C	-8.02	1.43	1.52
21	N	541	ALA	C-N	8.02	1.44	1.33
15	H	166	THR	CA-C	-8.02	1.42	1.52
19	L	217	GLY	CA-C	-8.02	1.45	1.51
4	4	-1	MET	C-N	8.01	1.43	1.33
26	S	138	MET	CA-C	-8.00	1.42	1.52
3	3	149	LEU	CA-C	-7.97	1.43	1.52
24	Q	48	ASP	CA-C	-7.96	1.44	1.53
9	B	158	PRO	C-N	7.95	1.43	1.33
18	K	146	LEU	CA-C	-7.94	1.42	1.52
21	N	768	ILE	CA-C	-7.94	1.46	1.53
15	H	297	MET	N-CA	-7.94	1.36	1.46
7	7	101	PRO	CA-C	-7.93	1.44	1.52
24	Q	266	LEU	N-CA	-7.91	1.36	1.46
33	Z	831	LEU	C-O	-7.91	1.14	1.24
22	O	374	ASN	N-CA	-7.88	1.36	1.46
21	N	8	PRO	N-CD	7.88	1.58	1.47
21	N	767	ALA	CA-C	-7.88	1.42	1.52
14	G	58	LEU	N-CA	-7.87	1.35	1.45
17	J	68	PRO	N-CD	7.86	1.58	1.47
4	4	28	LYS	N-CA	-7.86	1.36	1.46
10	C	96	GLN	N-CA	-7.85	1.36	1.46
13	F	214	ALA	CA-C	-7.85	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	X	124	LYS	C-N	7.84	1.44	1.33
24	Q	208	ILE	CA-C	-7.84	1.43	1.52
10	C	232	PRO	N-CD	7.83	1.58	1.47
33	Z	739	ALA	C-N	7.83	1.43	1.33
16	I	347	LYS	N-CA	-7.82	1.37	1.46
24	Q	365	ILE	C-N	7.82	1.43	1.33
8	A	66	PRO	CA-C	-7.79	1.45	1.52
1	1	36	ARG	CA-C	-7.78	1.42	1.52
33	Z	434	GLN	N-CA	-7.78	1.36	1.46
24	Q	134	LYS	CA-C	-7.78	1.41	1.52
21	N	617	VAL	N-CA	-7.77	1.37	1.46
5	5	110	PRO	CA-C	-7.77	1.44	1.52
21	N	890	PHE	C-N	7.77	1.40	1.32
14	G	152	PRO	C-N	-7.77	1.23	1.33
21	N	888	ASP	CA-CB	7.76	1.64	1.53
29	V	113	GLY	C-N	7.76	1.43	1.33
19	L	334	ASP	CA-C	-7.75	1.44	1.53
16	I	430	GLU	N-CA	-7.75	1.36	1.46
20	M	303	ARG	N-CA	-7.74	1.36	1.46
27	T	131	LYS	CA-C	-7.74	1.42	1.53
21	N	445	GLY	CA-C	-7.72	1.42	1.51
16	I	428	VAL	C-N	7.71	1.43	1.33
21	N	189	LEU	C-N	7.71	1.44	1.33
12	E	74	ILE	C-N	7.70	1.41	1.34
20	M	145	LEU	CA-C	-7.70	1.43	1.52
21	N	760	GLY	N-CA	7.70	1.53	1.44
2	2	206	PRO	N-CA	-7.69	1.37	1.47
11	D	42	VAL	CA-C	-7.68	1.43	1.52
23	P	104	LEU	CA-C	-7.68	1.42	1.52
8	A	74	CYS	C-N	7.67	1.43	1.33
25	R	382	ASP	CA-C	-7.66	1.43	1.52
12	E	87	SER	C-N	7.66	1.43	1.33
9	B	61	LEU	CA-C	-7.66	1.43	1.52
13	F	110	HIS	C-N	7.66	1.43	1.33
3	3	114	GLY	CA-C	-7.65	1.45	1.52
15	H	374	LYS	N-CA	-7.65	1.37	1.46
26	S	421	TYR	C-N	7.64	1.44	1.33
18	K	125	THR	CA-C	-7.61	1.42	1.52
33	Z	484	LYS	CA-C	-7.61	1.43	1.52
33	Z	757	SER	N-CA	-7.60	1.37	1.46
25	R	114	ASN	CA-C	-7.59	1.43	1.52
25	R	115	GLU	CA-C	-7.58	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	L	170	MET	N-CA	-7.58	1.36	1.46
19	L	267	PHE	C-N	7.57	1.43	1.33
8	A	70	SER	C-N	7.56	1.44	1.33
11	D	147	LEU	N-CA	-7.56	1.37	1.46
16	I	370	ASN	CA-C	-7.56	1.43	1.52
4	4	157	LEU	N-CA	-7.56	1.37	1.46
9	B	99	ARG	CA-C	-7.56	1.46	1.52
20	M	278	ILE	N-CA	-7.55	1.37	1.46
33	Z	573	LEU	C-N	7.53	1.43	1.33
21	N	543	ASP	C-N	7.53	1.44	1.33
13	F	140	SER	C-N	7.53	1.42	1.33
6	6	190	GLY	CA-C	-7.52	1.43	1.52
1	1	174	ARG	CA-C	-7.51	1.43	1.52
6	6	11	PHE	N-CA	-7.50	1.36	1.45
19	L	171	THR	CA-C	-7.50	1.43	1.52
13	F	132	LEU	CA-C	-7.49	1.43	1.52
3	3	71	ARG	N-CA	-7.49	1.37	1.46
2	2	34	LEU	CA-C	-7.48	1.43	1.52
27	T	51	TYR	CA-C	-7.48	1.43	1.52
13	F	66	CYS	C-N	7.47	1.42	1.33
12	E	234	GLU	N-CA	-7.47	1.37	1.46
28	U	97	PRO	N-CD	7.47	1.58	1.47
2	2	11	GLY	CA-C	-7.47	1.42	1.51
9	B	147	LEU	N-CA	-7.46	1.37	1.46
27	T	72	THR	N-CA	-7.45	1.36	1.46
17	J	329	ARG	C-N	7.44	1.43	1.33
2	2	159	ILE	N-CA	-7.44	1.37	1.46
8	A	162	TYR	CA-C	-7.43	1.43	1.52
4	4	114	GLU	C-N	7.43	1.43	1.33
19	L	415	LEU	C-N	7.42	1.43	1.33
6	6	47	GLY	CA-C	-7.42	1.41	1.51
24	Q	230	LYS	CA-C	-7.42	1.42	1.52
21	N	405	LEU	N-CA	-7.41	1.36	1.46
25	R	59	MET	C-O	-7.41	1.18	1.23
25	R	73	ASN	CA-C	-7.40	1.43	1.53
16	I	123	PRO	N-CD	7.40	1.58	1.47
19	L	218	VAL	CA-C	-7.39	1.43	1.52
8	A	173	PRO	N-CD	7.38	1.58	1.47
14	G	189	ARG	CA-C	-7.38	1.43	1.52
9	B	151	ASP	CA-C	-7.38	1.43	1.52
16	I	263	LEU	CA-C	-7.38	1.43	1.52
26	S	385	SER	C-N	7.37	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	403	ALA	C-N	7.36	1.43	1.33
6	6	30	TYR	CA-C	-7.36	1.43	1.52
21	N	774	ASN	CA-C	-7.36	1.44	1.52
24	Q	321	TYR	N-CA	-7.36	1.36	1.46
33	Z	552	GLU	N-CA	-7.36	1.37	1.46
17	J	285	SER	CA-C	-7.36	1.43	1.52
4	4	86	GLU	N-CA	-7.36	1.37	1.46
12	E	56	SER	C-N	7.36	1.40	1.33
5	5	86	LEU	N-CA	-7.36	1.37	1.46
13	F	58	SER	CA-C	-7.35	1.44	1.52
13	F	40	SER	CA-C	-7.35	1.47	1.52
30	W	124	GLU	CA-C	-7.35	1.43	1.52
7	7	123	ASN	C-N	7.33	1.44	1.33
16	I	353	PRO	N-CD	7.33	1.58	1.47
1	1	9	LYS	CA-C	-7.33	1.42	1.52
6	6	125	GLU	CA-C	-7.33	1.43	1.52
22	O	322	ASP	CA-C	-7.32	1.43	1.52
11	D	184	PRO	N-CD	7.32	1.58	1.47
18	K	69	LYS	CA-C	-7.32	1.43	1.52
11	D	195	THR	C-N	7.32	1.43	1.33
20	M	335	PRO	N-CD	7.32	1.57	1.47
17	J	257	ARG	C-N	7.31	1.41	1.33
25	R	341	LEU	N-CA	-7.31	1.37	1.46
16	I	99	ILE	CA-C	7.31	1.62	1.52
5	5	80	SER	N-CA	-7.30	1.37	1.46
17	J	322	ALA	CA-C	-7.30	1.43	1.52
8	A	144	VAL	CA-C	-7.29	1.44	1.52
31	X	86	ILE	CA-C	-7.29	1.44	1.52
12	E	60	GLU	C-N	7.29	1.43	1.33
11	D	159	TRP	CA-C	-7.28	1.43	1.52
18	K	74	HIS	C-O	-7.28	1.15	1.24
19	L	330	PRO	N-CD	7.28	1.57	1.47
3	3	95	PHE	CA-C	-7.27	1.45	1.53
11	D	116	VAL	C-N	7.26	1.43	1.33
31	X	99	PHE	N-CA	-7.26	1.36	1.45
1	1	42	TRP	CA-C	-7.25	1.43	1.53
1	1	190	PRO	N-CD	7.25	1.57	1.47
9	B	138	GLY	CA-C	-7.24	1.43	1.51
9	B	144	GLY	C-N	7.24	1.43	1.33
19	L	295	THR	CA-C	-7.21	1.43	1.52
6	6	167	SER	CA-C	-7.21	1.43	1.52
21	N	197	VAL	CA-C	-7.20	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	401	HIS	CA-C	-7.20	1.43	1.52
24	Q	341	THR	CA-C	-7.20	1.43	1.52
26	S	475	TYR	N-CA	-7.20	1.37	1.46
27	T	27	LEU	N-CA	-7.20	1.40	1.46
21	N	643	PRO	N-CD	7.18	1.57	1.47
23	P	233	GLU	CA-C	-7.17	1.44	1.52
31	X	108	ASN	C-N	7.17	1.44	1.33
11	D	87	GLU	C-N	7.17	1.43	1.34
24	Q	295	GLY	C-N	7.15	1.42	1.33
18	K	217	THR	CA-C	-7.15	1.44	1.52
24	Q	319	LYS	N-CA	-7.15	1.37	1.46
9	B	150	VAL	CA-C	-7.14	1.43	1.52
17	J	325	ALA	N-CA	-7.14	1.37	1.46
28	U	29	GLU	CA-C	-7.14	1.43	1.52
27	T	162	ASP	CA-C	-7.14	1.43	1.52
21	N	597	ARG	C-N	7.13	1.43	1.33
21	N	238	ALA	CA-C	-7.13	1.43	1.52
21	N	313	LEU	N-CA	7.13	1.54	1.46
17	J	381	ASP	CA-C	-7.13	1.43	1.52
2	2	146	LEU	CA-C	-7.12	1.43	1.52
22	O	314	SER	C-N	7.12	1.43	1.33
18	K	237	VAL	CA-C	-7.12	1.43	1.52
1	1	152	VAL	C-N	7.12	1.43	1.33
21	N	140	MET	C-N	-7.11	1.25	1.33
3	3	60	TYR	CA-C	7.11	1.61	1.52
17	J	70	SER	CA-C	-7.11	1.44	1.52
16	I	394	ALA	C-N	7.10	1.43	1.33
24	Q	363	SER	C-N	7.10	1.43	1.33
25	R	157	SER	CA-C	7.10	1.62	1.52
15	H	350	LYS	C-N	7.09	1.43	1.33
21	N	191	THR	C-N	7.09	1.42	1.33
26	S	306	SER	CA-C	-7.09	1.44	1.52
30	W	128	LEU	CA-C	-7.09	1.43	1.52
4	4	53	VAL	C-N	7.08	1.42	1.33
33	Z	587	THR	N-CA	-7.08	1.38	1.46
12	E	62	ASP	N-CA	-7.08	1.38	1.46
19	L	157	ARG	CA-C	-7.06	1.43	1.52
22	O	378	GLU	N-CA	-7.06	1.37	1.46
16	I	337	ALA	C-N	7.05	1.44	1.33
19	L	237	ALA	C-N	7.05	1.43	1.33
11	D	239	GLU	C-N	7.05	1.44	1.33
16	I	166	PRO	N-CD	7.05	1.57	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	7	109	ALA	CA-C	-7.04	1.44	1.52
15	H	358	PRO	N-CD	7.04	1.57	1.47
13	F	2	PHE	N-CA	7.04	1.59	1.46
24	Q	29	SER	CA-C	-7.04	1.43	1.52
5	5	164	ALA	C-N	7.03	1.43	1.33
12	E	206	GLN	CA-C	-7.03	1.43	1.52
18	K	261	ALA	C-N	7.03	1.43	1.33
21	N	105	SER	CA-C	7.03	1.61	1.52
1	1	95	ALA	N-CA	-7.03	1.38	1.46
9	B	137	ALA	CA-C	-7.02	1.43	1.52
6	6	26	ILE	CA-C	-7.02	1.43	1.52
2	2	4	VAL	CA-C	-7.01	1.45	1.52
27	T	117	ASN	C-N	7.01	1.43	1.33
21	N	268	GLN	CA-C	-7.01	1.43	1.52
11	D	199	LEU	C-N	7.01	1.43	1.33
20	M	295	LYS	C-N	7.00	1.42	1.33
16	I	385	ASP	CA-C	-7.00	1.45	1.53
29	V	165	ILE	CA-C	-7.00	1.43	1.52
20	M	330	VAL	C-N	6.99	1.42	1.33
12	E	174	SER	CA-C	-6.99	1.44	1.52
21	N	626	GLY	N-CA	-6.99	1.37	1.45
33	Z	447	VAL	C-N	6.98	1.42	1.33
5	5	154	LEU	C-N	6.98	1.43	1.33
20	M	280	ILE	CA-C	-6.98	1.43	1.52
25	R	100	ASN	CA-C	-6.98	1.43	1.52
33	Z	772	ILE	N-CA	-6.98	1.38	1.46
5	5	173	GLY	C-N	6.98	1.42	1.33
16	I	308	GLU	CA-C	-6.98	1.43	1.52
25	R	116	LYS	C-N	6.97	1.42	1.33
26	S	457	PRO	N-CD	6.97	1.57	1.47
25	R	121	GLU	C-N	6.97	1.42	1.33
33	Z	623	ARG	CA-C	-6.97	1.43	1.52
14	G	102	TYR	CA-C	-6.97	1.43	1.52
32	Y	78	LYS	CA-C	-6.96	1.43	1.52
17	J	243	SER	CA-C	-6.96	1.44	1.52
20	M	300	GLU	CA-C	-6.96	1.43	1.52
7	7	7	LYS	CA-C	-6.96	1.44	1.52
21	N	379	LEU	N-CA	-6.95	1.38	1.46
29	V	279	HIS	CE1-NE2	6.95	1.39	1.32
21	N	391	PRO	N-CD	6.95	1.57	1.47
15	H	398	VAL	CA-C	-6.95	1.43	1.52
23	P	200	SER	N-CA	-6.94	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	468	GLU	N-CA	-6.94	1.39	1.45
6	6	153	PRO	N-CD	6.94	1.57	1.47
21	N	889	ARG	N-CA	6.93	1.52	1.46
12	E	41	ALA	CA-C	-6.93	1.44	1.52
28	U	273	LEU	C-N	6.93	1.42	1.33
18	K	271	ILE	CA-C	-6.92	1.44	1.52
11	D	174	PHE	CA-C	-6.92	1.44	1.52
28	U	230	GLN	CA-C	6.92	1.62	1.52
21	N	883	SER	C-N	6.92	1.42	1.33
6	6	97	TYR	C-N	6.91	1.43	1.33
23	P	129	LYS	C-N	6.91	1.40	1.33
19	L	91	THR	CA-C	6.90	1.61	1.52
24	Q	26	VAL	N-CA	-6.90	1.38	1.46
8	A	170	ALA	CA-C	-6.90	1.44	1.52
33	Z	506	LEU	C-N	6.90	1.43	1.33
9	B	134	LEU	CA-C	-6.90	1.44	1.52
6	6	44	SER	N-CA	-6.90	1.37	1.46
22	O	89	SER	C-N	6.90	1.43	1.33
15	H	287	GLY	N-CA	-6.88	1.37	1.45
23	P	247	THR	N-CA	-6.88	1.37	1.46
1	1	177	VAL	CA-C	-6.88	1.44	1.52
17	J	260	GLY	N-CA	-6.88	1.35	1.45
29	V	125	THR	C-N	6.88	1.42	1.33
17	J	349	LYS	N-CA	-6.87	1.37	1.46
20	M	311	GLN	N-CA	6.87	1.54	1.46
6	6	148	LYS	N-CA	-6.86	1.37	1.46
16	I	279	VAL	CA-C	-6.86	1.44	1.52
20	M	271	LYS	C-N	6.86	1.43	1.33
25	R	227	ALA	N-CA	-6.86	1.38	1.46
23	P	161	CYS	N-CA	6.85	1.54	1.46
20	M	414	ASP	C-N	6.85	1.43	1.33
11	D	65	SER	CA-C	-6.85	1.44	1.52
13	F	217	GLY	CA-C	-6.84	1.43	1.51
25	R	290	SER	C-N	6.84	1.42	1.33
11	D	220	ASP	CA-C	-6.84	1.44	1.53
21	N	426	ILE	C-N	6.84	1.42	1.33
31	X	74	MET	CA-C	-6.84	1.43	1.52
19	L	285	ALA	CA-C	-6.84	1.43	1.52
31	X	26	PRO	C-N	6.84	1.41	1.33
1	1	143	ARG	N-CA	-6.83	1.36	1.45
23	P	101	MET	N-CA	-6.83	1.38	1.46
33	Z	892	SER	N-CA	-6.83	1.34	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	363	THR	C-N	6.83	1.43	1.34
2	2	179	GLU	N-CA	-6.83	1.37	1.46
9	B	72	GLY	CA-C	-6.83	1.46	1.52
21	N	300	ASN	CA-C	-6.82	1.44	1.52
22	O	278	PRO	N-CD	6.82	1.57	1.47
33	Z	67	SER	CA-C	-6.82	1.44	1.52
33	Z	617	ILE	CA-C	-6.81	1.44	1.52
2	2	214	LYS	CA-C	-6.81	1.44	1.52
19	L	372	GLY	C-N	6.81	1.42	1.33
6	6	65	TRP	CA-C	-6.80	1.43	1.52
10	C	226	TYR	CA-C	-6.80	1.44	1.52
27	T	95	LYS	CA-C	-6.80	1.43	1.52
21	N	33	ASP	N-CA	-6.80	1.38	1.46
26	S	469	ASN	C-N	6.80	1.42	1.33
21	N	409	GLY	CA-C	6.80	1.59	1.52
15	H	402	ILE	CA-C	-6.79	1.44	1.52
33	Z	479	THR	CA-C	-6.79	1.44	1.52
25	R	134	TRP	C-N	6.79	1.42	1.33
23	P	424	GLU	CA-C	-6.79	1.44	1.52
19	L	199	LEU	C-O	-6.79	1.18	1.24
19	L	392	ARG	N-CA	-6.78	1.38	1.46
10	C	15	PRO	N-CD	6.78	1.57	1.47
25	R	181	TYR	CA-C	-6.78	1.44	1.52
3	3	183	LYS	N-CA	-6.77	1.37	1.46
10	C	238	ILE	CA-C	-6.77	1.42	1.52
20	M	246	LEU	CA-C	-6.77	1.44	1.52
21	N	648	PRO	N-CD	6.76	1.57	1.47
29	V	287	THR	C-N	6.76	1.42	1.33
23	P	321	VAL	C-N	6.76	1.43	1.33
23	P	58	VAL	CA-C	-6.76	1.44	1.52
21	N	905	LEU	CA-C	6.76	1.62	1.53
16	I	80	GLU	N-CA	-6.76	1.38	1.46
33	Z	408	TYR	C-N	6.76	1.43	1.34
10	C	71	ASP	N-CA	-6.75	1.37	1.46
21	N	874	ILE	CA-C	-6.75	1.44	1.52
19	L	195	GLU	N-CA	-6.75	1.37	1.46
15	H	368	PRO	CA-C	-6.75	1.45	1.52
23	P	209	LYS	CA-C	-6.75	1.44	1.52
19	L	368	VAL	CA-C	6.74	1.60	1.52
18	K	250	GLY	CA-C	6.74	1.61	1.51
31	X	12	ALA	C-N	6.74	1.40	1.33
21	N	44	PRO	N-CD	6.74	1.57	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	482	ALA	CA-C	-6.73	1.44	1.52
25	R	349	SER	N-CA	-6.72	1.38	1.46
3	3	151	PRO	N-CD	6.72	1.57	1.47
25	R	131	ALA	C-N	6.72	1.42	1.33
27	T	66	ALA	N-CA	6.72	1.54	1.46
8	A	185	HIS	N-CA	-6.72	1.38	1.46
26	S	272	TYR	CA-C	-6.72	1.44	1.52
9	B	71	ILE	N-CA	-6.71	1.38	1.46
29	V	150	LYS	CA-C	-6.71	1.43	1.52
13	F	122	SER	N-CA	-6.71	1.37	1.46
23	P	109	SER	C-N	6.71	1.43	1.34
23	P	113	ASN	CA-C	-6.71	1.44	1.52
21	N	866	TYR	N-CA	6.71	1.54	1.46
28	U	173	HIS	C-N	6.70	1.42	1.33
8	A	200	GLU	N-CA	-6.70	1.38	1.46
28	U	73	ILE	CA-C	6.70	1.61	1.52
29	V	151	VAL	N-CA	-6.70	1.38	1.46
8	A	242	GLU	CA-C	-6.69	1.43	1.52
18	K	185	ARG	N-CA	-6.68	1.38	1.46
16	I	195	LYS	CA-C	-6.68	1.43	1.52
7	7	99	MET	CA-C	-6.68	1.45	1.53
8	A	147	ASP	CA-C	-6.68	1.44	1.52
6	6	77	ILE	C-N	6.67	1.43	1.33
1	1	162	ALA	C-N	6.67	1.42	1.33
5	5	184	GLY	C-O	-6.67	1.17	1.23
14	G	55	SER	N-CA	-6.67	1.38	1.46
21	N	607	GLN	CA-C	-6.67	1.44	1.52
31	X	61	LEU	CA-C	-6.67	1.47	1.53
20	M	418	GLY	CA-C	-6.66	1.44	1.52
29	V	260	GLU	N-CA	-6.66	1.38	1.46
14	G	19	ARG	C-N	6.66	1.42	1.33
25	R	403	LEU	CA-C	-6.66	1.44	1.52
16	I	255	LYS	C-N	6.66	1.41	1.33
17	J	206	THR	C-N	6.66	1.42	1.33
24	Q	357	VAL	C-N	6.65	1.42	1.33
1	1	71	GLY	N-CA	-6.65	1.37	1.45
16	I	248	VAL	CA-C	-6.65	1.46	1.53
21	N	775	CYS	CA-CB	6.65	1.65	1.53
24	Q	19	GLN	N-CA	-6.64	1.37	1.46
16	I	429	GLU	CA-C	-6.64	1.44	1.52
24	Q	13	ARG	CA-C	-6.64	1.43	1.52
33	Z	586	GLU	C-N	6.63	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	5	153	ALA	N-CA	-6.63	1.38	1.46
18	K	371	LEU	CA-C	-6.63	1.44	1.52
2	2	112	SER	CA-C	-6.63	1.44	1.52
15	H	410	LEU	C-N	6.62	1.44	1.33
18	K	198	TYR	N-CA	-6.62	1.38	1.46
2	2	203	TYR	N-CA	-6.62	1.37	1.46
11	D	68	ASP	CA-C	-6.62	1.44	1.52
24	Q	325	LEU	N-CA	-6.61	1.38	1.46
28	U	269	THR	CA-C	-6.61	1.44	1.52
6	6	-8	PHE	N-CA	-6.61	1.37	1.46
17	J	49	ASN	N-CA	-6.61	1.38	1.46
20	M	323	VAL	CA-C	-6.61	1.44	1.52
5	5	167	ARG	CA-C	-6.61	1.44	1.52
20	M	312	LEU	C-N	6.61	1.43	1.33
23	P	133	GLU	C-N	6.61	1.42	1.33
16	I	396	CYS	CA-C	-6.61	1.44	1.52
23	P	425	HIS	CA-C	-6.61	1.44	1.52
26	S	165	PRO	N-CD	6.60	1.56	1.47
33	Z	354	PRO	N-CD	6.60	1.56	1.47
5	5	185	TRP	CA-C	6.60	1.61	1.52
13	F	94	TYR	CA-C	-6.59	1.44	1.52
19	L	412	PRO	N-CD	6.59	1.56	1.47
20	M	327	THR	CA-C	-6.59	1.44	1.52
8	A	152	PRO	N-CD	6.59	1.56	1.47
13	F	154	THR	CA-C	-6.59	1.44	1.52
6	6	34	VAL	CA-C	-6.59	1.44	1.52
23	P	327	LEU	CA-C	-6.58	1.46	1.53
9	B	25	LEU	CA-C	-6.58	1.43	1.52
18	K	337	LYS	CA-C	-6.58	1.45	1.52
18	K	365	GLU	CA-C	-6.57	1.44	1.52
26	S	158	PHE	CA-C	-6.57	1.44	1.52
4	4	134	TYR	C-N	6.57	1.42	1.33
9	B	25	LEU	N-CA	-6.57	1.38	1.46
10	C	205	ALA	CA-C	-6.57	1.44	1.52
16	I	215	PRO	C-O	-6.57	1.17	1.24
10	C	228	LYS	CA-C	-6.56	1.45	1.52
29	V	143	PRO	N-CD	6.56	1.56	1.47
10	C	111	LEU	C-N	6.56	1.42	1.33
24	Q	343	LEU	N-CA	-6.55	1.38	1.46
25	R	71	LEU	CA-C	-6.55	1.44	1.52
24	Q	319	LYS	C-N	6.55	1.42	1.33
20	M	297	GLY	CA-C	6.55	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	391	ALA	CA-C	-6.55	1.44	1.52
15	H	389	PHE	CA-C	-6.54	1.44	1.52
24	Q	195	LYS	CA-C	-6.54	1.44	1.52
33	Z	520	ILE	CA-C	-6.53	1.44	1.52
14	G	245	GLU	CA-C	-6.53	1.44	1.53
13	F	54	ASP	CA-C	-6.53	1.44	1.52
18	K	403	LEU	C-N	6.53	1.42	1.34
33	Z	900	LEU	N-CA	-6.52	1.37	1.46
23	P	281	ILE	N-CA	6.52	1.54	1.46
13	F	146	GLU	N-CA	-6.51	1.38	1.46
30	W	112	ALA	C-N	6.51	1.42	1.33
16	I	124	THR	N-CA	-6.51	1.37	1.46
21	N	568	VAL	C-N	6.51	1.42	1.33
13	F	125	GLY	C-N	6.51	1.41	1.33
26	S	196	ARG	N-CA	-6.50	1.37	1.46
9	B	187	ASP	C-N	6.50	1.43	1.34
33	Z	58	GLU	N-CA	-6.50	1.38	1.46
8	A	113	PRO	CA-C	-6.49	1.44	1.52
23	P	208	PHE	CA-C	-6.49	1.44	1.52
21	N	501	MET	CA-C	-6.49	1.44	1.52
16	I	260	GLY	C-N	-6.49	1.26	1.34
16	I	330	LYS	C-N	6.48	1.40	1.33
24	Q	100	LEU	C-O	-6.48	1.16	1.24
21	N	394	ARG	CA-C	6.48	1.61	1.52
1	1	158	SER	C-N	6.47	1.42	1.33
2	2	69	TYR	CA-C	-6.47	1.44	1.52
6	6	36	ASP	CA-C	-6.47	1.44	1.52
24	Q	73	LYS	N-CA	-6.47	1.38	1.46
21	N	897	LYS	N-CA	-6.47	1.40	1.46
14	G	130	PRO	N-CD	6.46	1.56	1.47
15	H	277	SER	C-N	6.46	1.43	1.33
15	H	387	ASN	CA-C	6.46	1.61	1.52
22	O	385	GLU	CA-C	-6.46	1.44	1.52
9	B	199	SER	N-CA	-6.46	1.37	1.46
9	B	109	LEU	C-N	6.46	1.42	1.33
14	G	15	SER	CA-C	6.46	1.60	1.53
15	H	309	ASP	C-N	6.46	1.42	1.33
21	N	187	ASN	C-N	6.46	1.42	1.33
18	K	361	SER	N-CA	6.45	1.53	1.46
13	F	122	SER	C-N	6.45	1.42	1.34
33	Z	604	GLY	CA-C	-6.45	1.44	1.52
21	N	173	LYS	N-CA	-6.45	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	8	LEU	C-O	-6.45	1.16	1.24
28	U	70	HIS	CE1-NE2	6.45	1.39	1.32
8	A	78	THR	CA-C	-6.44	1.44	1.52
19	L	84	LEU	C-N	6.44	1.42	1.33
14	G	36	SER	CA-C	-6.44	1.44	1.52
15	H	162	ARG	C-N	6.44	1.42	1.33
20	M	312	LEU	CA-C	-6.44	1.44	1.52
25	R	306	PRO	N-CD	6.44	1.56	1.47
31	X	39	GLU	C-N	6.43	1.41	1.33
6	6	162	PRO	N-CD	6.43	1.56	1.47
20	M	294	GLU	C-N	6.43	1.42	1.34
4	4	55	PHE	C-N	6.43	1.42	1.33
13	F	216	VAL	C-N	6.43	1.39	1.33
30	W	117	PRO	N-CD	6.43	1.56	1.47
21	N	175	ASP	CA-C	-6.42	1.45	1.52
21	N	190	LEU	CA-C	-6.42	1.44	1.52
33	Z	437	ASP	CA-C	-6.42	1.44	1.52
26	S	440	ASP	C-N	6.41	1.41	1.33
19	L	247	PRO	CA-C	-6.41	1.46	1.52
20	M	56	ASN	C-N	6.40	1.41	1.34
26	S	280	ASN	C-N	6.40	1.42	1.33
28	U	79	MET	C-N	6.40	1.42	1.33
17	J	295	ASN	CA-C	-6.40	1.44	1.53
24	Q	414	GLU	C-N	6.40	1.41	1.33
9	B	179	TRP	C-N	6.39	1.42	1.33
28	U	82	LYS	C-N	6.39	1.40	1.33
8	A	151	GLY	N-CA	6.39	1.53	1.44
19	L	216	LYS	C-N	6.39	1.40	1.33
28	U	41	ALA	N-CA	6.39	1.52	1.46
6	6	181	SER	CA-C	-6.39	1.44	1.52
19	L	154	THR	C-N	6.39	1.39	1.33
21	N	677	ASP	CA-C	-6.39	1.44	1.52
3	3	2	ILE	CA-C	-6.38	1.45	1.52
18	K	206	PRO	N-CD	6.38	1.56	1.47
23	P	402	PHE	CA-C	6.38	1.60	1.52
27	T	40	LEU	C-N	6.38	1.40	1.33
16	I	183	ASP	CA-C	-6.38	1.44	1.52
13	F	150	SER	C-N	6.37	1.41	1.32
4	4	38	SER	N-CA	-6.36	1.40	1.46
13	F	138	ASP	N-CA	-6.36	1.38	1.46
28	U	196	SER	N-CA	-6.36	1.38	1.46
21	N	759	ILE	CA-C	-6.36	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	259	CYS	CA-C	6.35	1.60	1.52
19	L	388	GLY	CA-C	6.35	1.59	1.52
25	R	301	TYR	CA-C	-6.35	1.44	1.52
7	7	116	ASP	CA-C	-6.34	1.44	1.53
17	J	343	LEU	C-N	6.34	1.42	1.33
26	S	145	PHE	CA-C	-6.34	1.43	1.53
11	D	202	VAL	N-CA	6.34	1.54	1.46
28	U	296	ILE	C-O	-6.34	1.17	1.24
10	C	19	LEU	N-CA	-6.34	1.38	1.46
12	E	234	GLU	CA-C	6.34	1.60	1.52
17	J	164	ILE	CA-C	-6.34	1.44	1.52
21	N	903	VAL	N-CA	-6.34	1.38	1.46
7	7	82	SER	C-O	6.33	1.32	1.24
10	C	153	PRO	N-CD	6.33	1.56	1.47
19	L	335	PRO	N-CD	6.33	1.56	1.47
20	M	406	GLY	CA-C	-6.32	1.42	1.51
21	N	868	VAL	CA-C	6.32	1.59	1.52
18	K	392	LEU	CA-C	6.32	1.60	1.52
23	P	183	GLN	CA-C	-6.32	1.44	1.52
30	W	22	PRO	N-CD	6.32	1.56	1.47
8	A	68	THR	C-N	6.32	1.40	1.33
2	2	79	ALA	C-N	6.31	1.41	1.33
17	J	321	VAL	C-N	6.31	1.42	1.33
17	J	357	ASP	N-CA	-6.31	1.38	1.46
24	Q	216	ALA	CA-C	-6.31	1.44	1.52
29	V	201	ILE	N-CA	-6.31	1.38	1.46
33	Z	926	ASN	CA-C	6.31	1.60	1.52
6	6	116	PHE	CA-C	-6.30	1.45	1.52
17	J	117	SER	CA-C	-6.30	1.44	1.52
8	A	210	MET	CA-C	-6.30	1.44	1.52
29	V	259	LYS	CA-C	-6.30	1.44	1.52
25	R	59	MET	CA-C	6.30	1.58	1.52
21	N	903	VAL	CA-C	-6.29	1.44	1.52
23	P	314	VAL	N-CA	-6.29	1.38	1.46
21	N	657	MET	C-N	6.29	1.41	1.34
24	Q	372	GLN	C-N	6.29	1.41	1.33
26	S	436	ILE	N-CA	-6.29	1.39	1.46
14	G	152	PRO	N-CD	6.29	1.56	1.47
19	L	116	LYS	C-O	-6.28	1.17	1.23
4	4	49	ALA	N-CA	-6.27	1.37	1.46
24	Q	233	LYS	C-N	6.27	1.42	1.33
20	M	214	ALA	C-N	6.27	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	116	PHE	N-CA	-6.27	1.38	1.46
24	Q	370	THR	CA-C	-6.27	1.45	1.52
4	4	21	THR	C-N	6.26	1.41	1.33
1	1	121	LYS	CA-C	-6.26	1.44	1.52
26	S	181	ALA	C-N	6.25	1.41	1.33
1	1	138	CYS	CA-C	-6.25	1.44	1.52
33	Z	572	ILE	N-CA	-6.25	1.39	1.46
7	7	42	VAL	CA-C	-6.25	1.45	1.52
7	7	219	GLY	CA-C	-6.25	1.46	1.52
31	X	89	LEU	N-CA	-6.25	1.39	1.46
16	I	421	GLU	N-CA	6.24	1.53	1.46
21	N	294	PRO	N-CD	6.24	1.56	1.47
3	3	9	LYS	C-N	6.24	1.42	1.33
5	5	56	GLU	N-CA	-6.24	1.38	1.46
21	N	393	SER	C-N	6.24	1.42	1.33
21	N	321	LEU	N-CA	6.24	1.53	1.45
29	V	240	ALA	CA-C	-6.24	1.44	1.52
6	6	64	LYS	N-CA	-6.24	1.39	1.46
6	6	108	ASP	N-CA	-6.23	1.37	1.45
12	E	203	ILE	C-N	6.23	1.42	1.33
6	6	172	ILE	C-N	6.22	1.41	1.33
28	U	50	ASN	CA-C	6.22	1.60	1.52
13	F	132	LEU	C-N	6.22	1.41	1.33
33	Z	411	LYS	N-CA	-6.22	1.38	1.46
20	M	377	GLN	CA-C	-6.22	1.44	1.52
10	C	102	TYR	N-CA	-6.21	1.37	1.46
21	N	470	LEU	N-CA	6.21	1.54	1.46
16	I	295	ASN	C-N	6.21	1.42	1.33
16	I	341	PRO	N-CD	6.21	1.56	1.47
33	Z	825	ALA	N-CA	-6.21	1.38	1.46
24	Q	260	GLN	CA-C	-6.20	1.44	1.52
6	6	148	LYS	C-N	6.20	1.42	1.33
25	R	191	LEU	N-CA	-6.20	1.39	1.46
21	N	770	LYS	CA-C	-6.19	1.44	1.52
18	K	374	ARG	C-N	6.19	1.42	1.33
4	4	54	GLN	N-CA	-6.18	1.39	1.46
7	7	200	PHE	N-CA	-6.18	1.39	1.46
17	J	77	LYS	N-CA	-6.18	1.38	1.46
14	G	66	ILE	CA-C	-6.18	1.45	1.52
30	W	189	PRO	N-CD	6.18	1.56	1.47
25	R	139	GLU	C-N	6.18	1.41	1.33
26	S	266	SER	CA-C	-6.18	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	K	393	ARG	N-CA	-6.18	1.38	1.46
33	Z	366	LYS	N-CA	-6.18	1.38	1.46
16	I	122	SER	C-N	-6.18	1.28	1.33
5	5	2	THR	CA-C	-6.17	1.45	1.52
21	N	557	LEU	CA-C	-6.17	1.45	1.52
10	C	228	LYS	N-CA	-6.17	1.38	1.46
24	Q	69	GLY	CA-C	-6.17	1.43	1.51
29	V	240	ALA	C-N	6.17	1.41	1.33
5	5	41	LEU	CA-C	-6.17	1.44	1.52
10	C	147	GLN	C-N	6.17	1.41	1.33
21	N	43	LEU	N-CA	-6.17	1.40	1.46
12	E	212	LEU	C-N	6.17	1.42	1.33
17	J	359	LYS	CA-C	6.17	1.60	1.52
14	G	110	ALA	C-N	6.16	1.42	1.33
11	D	197	ARG	CA-C	-6.16	1.45	1.52
12	E	177	GLU	C-N	6.16	1.40	1.33
26	S	268	LEU	N-CA	-6.16	1.39	1.46
17	J	110	SER	C-N	6.16	1.41	1.33
18	K	67	TYR	C-N	6.16	1.41	1.33
21	N	132	LYS	N-CA	-6.16	1.39	1.46
28	U	275	VAL	CA-C	6.16	1.60	1.52
6	6	25	SER	CA-C	-6.15	1.45	1.52
7	7	86	GLU	CA-C	-6.15	1.44	1.52
4	4	86	GLU	C-N	6.15	1.41	1.33
33	Z	872	VAL	C-N	6.15	1.41	1.33
25	R	318	PRO	N-CD	6.15	1.56	1.47
12	E	166	ARG	CA-C	-6.14	1.45	1.52
17	J	161	LYS	CA-C	-6.14	1.45	1.52
21	N	384	LYS	CA-C	-6.14	1.44	1.52
28	U	39	GLY	CA-C	-6.14	1.43	1.51
20	M	62	ILE	C-N	6.14	1.42	1.33
17	J	149	MET	C-N	6.14	1.41	1.33
17	J	194	GLY	CA-C	-6.14	1.43	1.51
8	A	28	VAL	CA-C	-6.13	1.44	1.52
24	Q	64	LEU	N-CA	-6.13	1.38	1.46
31	X	50	TRP	NE1-CE2	-6.13	1.30	1.37
5	5	202	GLU	C-N	6.13	1.42	1.33
21	N	175	ASP	N-CA	-6.13	1.39	1.46
33	Z	889	VAL	CA-C	-6.13	1.45	1.52
10	C	224	GLU	N-CA	-6.12	1.38	1.46
17	J	228	ARG	CA-C	-6.12	1.45	1.52
13	F	152	ASN	C-N	6.12	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	80	GLU	C-N	6.12	1.41	1.33
31	X	20	ASP	CA-C	-6.12	1.46	1.53
21	N	897	LYS	CA-C	-6.12	1.46	1.52
25	R	31	PHE	N-CA	-6.12	1.39	1.46
28	U	87	GLU	C-N	6.12	1.41	1.33
23	P	136	ARG	N-CA	-6.12	1.39	1.46
20	M	316	SER	N-CA	-6.12	1.39	1.46
20	M	391	LEU	C-N	6.12	1.42	1.33
7	7	163	GLN	N-CA	-6.11	1.39	1.46
11	D	173	GLU	C-N	6.11	1.41	1.33
1	1	158	SER	CA-C	-6.11	1.45	1.52
9	B	83	ARG	C-O	-6.11	1.17	1.24
5	5	174	SER	C-N	6.11	1.41	1.33
7	7	10	ASN	C-N	6.10	1.39	1.33
15	H	228	PRO	N-CA	-6.10	1.39	1.47
26	S	333	PHE	C-N	6.10	1.42	1.34
1	1	73	PRO	N-CD	6.10	1.56	1.47
24	Q	253	ASN	N-CA	6.10	1.53	1.46
9	B	70	ASP	CA-C	-6.09	1.45	1.52
17	J	265	ASP	N-CA	6.09	1.51	1.46
27	T	101	LYS	CA-C	-6.09	1.44	1.52
30	W	139	VAL	CA-CB	6.09	1.62	1.54
25	R	67	CYS	N-CA	-6.09	1.38	1.46
33	Z	621	LEU	CA-C	-6.09	1.45	1.52
8	A	167	LYS	CA-C	-6.09	1.44	1.52
16	I	351	GLU	C-N	6.09	1.42	1.33
17	J	185	VAL	N-CA	-6.09	1.39	1.46
23	P	236	GLU	CA-C	-6.09	1.45	1.52
2	2	221	CYS	N-CA	-6.09	1.39	1.46
20	M	327	THR	N-CA	6.09	1.53	1.46
24	Q	163	ARG	C-N	6.09	1.42	1.33
10	C	244	ILE	CA-C	-6.08	1.46	1.53
26	S	152	LEU	C-N	6.08	1.42	1.33
9	B	65	SER	C-N	6.08	1.42	1.33
28	U	21	HIS	C-O	-6.08	1.17	1.24
5	5	170	TYR	C-N	6.08	1.41	1.33
15	H	348	ASN	C-O	6.08	1.31	1.24
4	4	5	GLY	CA-C	-6.07	1.43	1.51
29	V	195	HIS	C-N	6.07	1.41	1.33
14	G	101	LEU	CA-C	-6.07	1.44	1.52
21	N	733	LEU	C-N	6.07	1.41	1.33
23	P	389	ILE	C-N	6.07	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	765	MET	CA-C	-6.07	1.44	1.52
33	Z	97	PRO	N-CD	6.07	1.56	1.47
15	H	446	ALA	N-CA	-6.06	1.39	1.46
29	V	202	ASP	CA-C	-6.06	1.44	1.52
24	Q	83	GLU	C-N	6.06	1.41	1.33
27	T	83	ASN	CA-C	-6.05	1.45	1.52
2	2	57	GLN	C-O	-6.05	1.17	1.24
10	C	46	LEU	N-CA	-6.05	1.38	1.46
25	R	364	LEU	N-CA	-6.05	1.39	1.46
24	Q	72	ASP	CA-C	-6.05	1.45	1.52
26	S	289	ALA	CA-C	-6.05	1.45	1.52
33	Z	593	HIS	N-CA	-6.05	1.37	1.46
31	X	93	SER	C-N	6.05	1.42	1.33
19	L	350	PRO	N-CD	6.04	1.56	1.47
21	N	128	ILE	N-CA	-6.04	1.38	1.46
21	N	145	LEU	N-CA	-6.04	1.38	1.46
7	7	30	GLY	C-N	6.04	1.41	1.33
15	H	406	LEU	N-CA	-6.04	1.39	1.46
23	P	261	LEU	CA-C	-6.04	1.45	1.52
25	R	319	CYS	CA-C	-6.04	1.45	1.52
26	S	170	TYR	N-CA	-6.04	1.39	1.46
21	N	899	ASN	C-N	6.04	1.41	1.33
3	3	178	VAL	CA-C	-6.04	1.45	1.52
7	7	152	ASP	CA-C	6.04	1.60	1.52
23	P	101	MET	C-N	6.03	1.42	1.34
16	I	328	THR	N-CA	-6.03	1.38	1.46
18	K	279	THR	C-N	6.03	1.40	1.33
24	Q	306	TYR	CA-C	6.03	1.60	1.52
31	X	115	SER	C-N	6.03	1.42	1.33
3	3	5	ALA	C-N	6.03	1.41	1.33
19	L	220	LEU	N-CA	-6.03	1.38	1.46
20	M	161	SER	C-N	6.03	1.42	1.33
23	P	396	PRO	N-CD	6.03	1.56	1.47
33	Z	869	ASP	CA-C	-6.03	1.44	1.52
16	I	186	GLY	C-N	6.02	1.41	1.33
21	N	296	CYS	C-N	6.02	1.41	1.33
4	4	47	GLY	C-O	6.02	1.27	1.23
21	N	471	TYR	N-CA	6.02	1.53	1.46
21	N	612	SER	CA-C	-6.02	1.45	1.52
18	K	348	GLU	C-O	-6.02	1.17	1.24
29	V	238	LEU	CA-C	-6.02	1.44	1.52
24	Q	238	TYR	CA-C	-6.01	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	E	84	ASP	CA-C	-6.01	1.44	1.52
21	N	185	ILE	C-N	6.01	1.41	1.33
24	Q	34	ASP	C-N	6.01	1.41	1.33
26	S	359	LYS	N-CA	-6.01	1.39	1.46
26	S	383	LEU	CA-C	-6.00	1.44	1.52
27	T	234	TYR	CA-C	-6.00	1.45	1.52
14	G	41	CYS	N-CA	-6.00	1.37	1.46
23	P	47	ARG	CD-NE	6.00	1.54	1.46
14	G	239	ILE	N-CA	-6.00	1.39	1.46
33	Z	864	MET	C-N	6.00	1.41	1.33
4	4	165	GLN	C-N	5.99	1.42	1.33
7	7	73	ALA	CA-C	-5.99	1.45	1.52
20	M	389	ALA	N-CA	-5.99	1.39	1.46
33	Z	858	GLY	CA-C	-5.99	1.45	1.51
5	5	69	ARG	CA-C	-5.99	1.45	1.52
31	X	71	GLY	N-CA	-5.99	1.36	1.45
17	J	304	LEU	C-N	5.98	1.42	1.33
27	T	180	ILE	CA-C	-5.98	1.45	1.52
9	B	151	ASP	C-N	-5.98	1.26	1.33
16	I	225	PRO	N-CD	5.98	1.56	1.47
23	P	42	LEU	CA-CB	5.98	1.62	1.53
29	V	154	ASP	C-N	5.98	1.41	1.33
20	M	386	PHE	C-N	5.97	1.41	1.33
25	R	393	PRO	N-CD	5.97	1.56	1.47
27	T	106	ILE	CA-C	-5.97	1.45	1.52
14	G	213	LEU	CA-C	-5.97	1.45	1.52
10	C	101	THR	N-CA	-5.96	1.39	1.46
29	V	193	ASN	C-N	5.96	1.41	1.33
26	S	187	ILE	CA-C	-5.96	1.45	1.52
13	F	133	LEU	CA-C	-5.96	1.45	1.52
8	A	104	PHE	C-O	-5.96	1.17	1.24
21	N	349	ILE	N-CA	-5.96	1.39	1.46
19	L	152	THR	N-CA	-5.96	1.37	1.46
8	A	138	GLY	N-CA	-5.96	1.38	1.45
20	M	285	ALA	CA-C	-5.96	1.46	1.52
3	3	21	GLY	C-N	5.95	1.42	1.33
21	N	572	LEU	N-CA	5.95	1.53	1.46
24	Q	253	ASN	C-N	5.95	1.41	1.33
15	H	201	GLU	N-CA	-5.95	1.39	1.46
21	N	144	CYS	C-N	5.95	1.42	1.33
16	I	383	THR	N-CA	5.95	1.54	1.46
33	Z	966	GLU	N-CA	-5.95	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	B	210	GLU	CA-C	-5.95	1.45	1.52
16	I	331	ILE	CA-C	-5.95	1.45	1.53
16	I	335	ASP	CA-C	-5.95	1.46	1.53
23	P	72	TRP	CA-C	-5.94	1.44	1.52
2	2	80	LEU	CA-C	5.94	1.60	1.52
18	K	427	TYR	N-CA	5.94	1.52	1.46
1	1	40	LYS	CA-C	-5.93	1.45	1.52
28	U	164	GLU	C-N	5.93	1.41	1.33
6	6	-1	GLY	C-N	5.93	1.41	1.33
7	7	110	GLY	CA-C	-5.93	1.44	1.51
17	J	167	PRO	N-CD	5.93	1.56	1.47
19	L	139	LYS	C-N	5.93	1.41	1.33
24	Q	218	LEU	CA-C	-5.93	1.45	1.52
33	Z	806	GLU	CA-C	5.93	1.60	1.52
11	D	34	VAL	CA-C	-5.93	1.45	1.52
20	M	224	PRO	N-CD	5.93	1.56	1.47
33	Z	788	PRO	N-CD	5.93	1.56	1.47
24	Q	65	TYR	N-CA	5.92	1.53	1.46
26	S	460	VAL	CA-C	-5.92	1.45	1.52
18	K	196	ASP	C-N	5.92	1.42	1.33
21	N	100	THR	N-CA	-5.92	1.39	1.46
29	V	255	ILE	N-CA	-5.92	1.39	1.46
33	Z	987	PRO	C-N	5.92	1.42	1.33
7	7	147	LEU	C-N	5.92	1.42	1.33
10	C	120	GLN	CA-C	-5.91	1.45	1.52
23	P	88	GLN	N-CA	5.91	1.55	1.46
23	P	298	SER	C-N	5.91	1.42	1.34
21	N	420	THR	C-N	5.91	1.41	1.33
24	Q	396	TRP	CA-C	-5.91	1.45	1.52
28	U	113	TYR	N-CA	5.90	1.53	1.46
23	P	352	VAL	C-N	5.90	1.41	1.33
16	I	333	THR	CA-C	-5.89	1.45	1.52
19	L	120	LYS	N-CA	-5.89	1.38	1.46
21	N	654	GLN	N-CA	-5.89	1.39	1.46
14	G	13	VAL	N-CA	-5.89	1.40	1.46
25	R	369	GLY	C-N	5.89	1.42	1.33
27	T	211	PHE	CA-C	-5.89	1.45	1.52
27	T	214	GLU	CA-C	5.89	1.60	1.52
10	C	51	LYS	CA-C	-5.88	1.45	1.52
16	I	238	ASN	CA-C	-5.88	1.45	1.52
21	N	772	GLN	CA-C	-5.88	1.45	1.52
9	B	155	SER	N-CA	-5.88	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	T	91	SER	CA-C	5.88	1.60	1.52
28	U	167	GLU	CA-C	-5.88	1.45	1.52
7	7	181	ALA	CA-C	-5.88	1.44	1.52
33	Z	988	ASP	C-N	5.88	1.41	1.33
10	C	167	ALA	CA-C	-5.88	1.44	1.53
2	2	3	ILE	CA-C	-5.87	1.45	1.52
11	D	90	ARG	C-N	5.87	1.41	1.33
16	I	232	LEU	CA-C	-5.87	1.45	1.52
3	3	133	ALA	C-N	5.87	1.42	1.34
26	S	315	LYS	C-N	5.87	1.42	1.33
15	H	259	CYS	C-N	5.87	1.41	1.33
24	Q	205	ALA	CA-C	-5.87	1.45	1.52
31	X	89	LEU	CA-C	-5.87	1.45	1.52
17	J	296	ARG	C-O	-5.86	1.16	1.23
24	Q	293	SER	C-N	5.86	1.41	1.34
15	H	400	ARG	CA-C	-5.86	1.45	1.52
21	N	244	LYS	C-N	5.86	1.42	1.33
33	Z	955	VAL	CA-C	5.86	1.60	1.52
14	G	238	ALA	C-N	5.86	1.41	1.33
27	T	133	ILE	CA-C	5.86	1.60	1.52
3	3	188	LYS	N-CA	-5.86	1.39	1.46
24	Q	239	PHE	C-O	-5.86	1.16	1.24
23	P	92	SER	CA-C	-5.85	1.45	1.52
2	2	108	SER	CA-C	5.85	1.60	1.52
25	R	375	LYS	N-CA	-5.85	1.37	1.46
3	3	163	LEU	CA-C	-5.85	1.45	1.52
16	I	353	PRO	N-CA	-5.85	1.39	1.47
18	K	350	ARG	N-CA	-5.85	1.39	1.46
1	1	146	MET	CA-C	-5.85	1.45	1.52
1	1	177	VAL	C-N	5.85	1.42	1.33
2	2	14	ILE	C-N	5.85	1.40	1.33
21	N	407	GLY	N-CA	-5.85	1.38	1.45
4	4	148	ARG	CA-C	5.84	1.59	1.52
7	7	92	MET	N-CA	-5.84	1.39	1.46
20	M	357	ARG	CA-C	-5.84	1.45	1.52
30	W	170	HIS	ND1-CE1	-5.84	1.26	1.32
17	J	154	THR	C-N	5.84	1.41	1.33
24	Q	129	LYS	CA-C	-5.84	1.47	1.52
25	R	187	VAL	CA-C	-5.84	1.45	1.52
28	U	26	GLN	C-N	5.84	1.41	1.33
7	7	37	VAL	C-N	5.84	1.42	1.33
13	F	186	PRO	N-CD	5.84	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	221	ASP	N-CA	-5.84	1.39	1.46
24	Q	185	TYR	C-N	5.84	1.41	1.33
17	J	108	LYS	CA-C	-5.84	1.45	1.52
27	T	142	LEU	N-CA	5.84	1.53	1.46
30	W	110	ILE	N-CA	-5.84	1.39	1.46
3	3	26	GLY	CA-C	-5.83	1.42	1.52
26	S	406	ASP	C-O	-5.83	1.17	1.24
18	K	264	ASN	N-CA	5.83	1.53	1.46
18	K	315	ILE	C-N	5.83	1.41	1.33
14	G	58	LEU	C-N	5.83	1.37	1.33
16	I	383	THR	C-N	5.83	1.42	1.33
31	X	88	ALA	CA-C	-5.83	1.45	1.52
15	H	380	PRO	N-CD	5.83	1.55	1.47
17	J	103	ASN	CA-C	-5.83	1.45	1.52
26	S	211	ARG	C-N	5.83	1.41	1.33
18	K	157	SER	C-N	5.83	1.41	1.33
25	R	109	LYS	C-N	5.83	1.41	1.33
33	Z	481	PRO	CA-C	5.83	1.60	1.52
6	6	79	SER	CA-C	-5.83	1.45	1.52
11	D	180	ASP	C-N	5.83	1.42	1.33
15	H	279	LEU	C-N	-5.83	1.25	1.33
23	P	57	GLU	C-N	5.83	1.41	1.33
11	D	62	SER	N-CA	-5.82	1.38	1.45
31	X	35	ILE	CA-C	-5.82	1.45	1.52
15	H	397	SER	CA-C	-5.82	1.45	1.53
16	I	203	THR	N-CA	-5.82	1.39	1.46
23	P	328	ALA	CA-C	-5.82	1.45	1.52
24	Q	358	GLU	C-N	5.82	1.41	1.33
7	7	35	ILE	CA-C	-5.82	1.48	1.53
10	C	216	ILE	C-N	5.82	1.41	1.33
16	I	378	GLU	N-CA	-5.82	1.39	1.46
23	P	166	GLU	C-N	5.82	1.41	1.33
29	V	280	LEU	C-N	5.82	1.41	1.33
33	Z	771	HIS	N-CA	-5.82	1.39	1.46
21	N	111	GLN	CA-C	-5.82	1.45	1.52
33	Z	780	MET	CA-C	-5.82	1.45	1.52
9	B	138	GLY	N-CA	-5.81	1.39	1.45
11	D	162	GLN	CA-C	-5.81	1.45	1.52
16	I	301	GLU	CA-C	-5.81	1.45	1.52
17	J	158	LYS	N-CA	-5.81	1.39	1.46
19	L	425	VAL	C-N	5.81	1.41	1.33
33	Z	400	ILE	CA-C	5.81	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	4	77	GLN	CA-C	-5.81	1.45	1.52
5	5	3	THR	CA-C	-5.81	1.45	1.52
13	F	21	GLN	N-CA	-5.81	1.38	1.46
24	Q	98	LYS	CA-C	-5.81	1.45	1.52
7	7	118	PHE	C-N	5.80	1.41	1.33
10	C	24	TYR	N-CA	-5.80	1.39	1.46
7	7	81	PRO	N-CD	5.80	1.55	1.47
23	P	138	ARG	CA-C	-5.80	1.45	1.52
25	R	69	GLU	N-CA	-5.80	1.39	1.46
33	Z	882	LEU	CA-C	-5.80	1.45	1.52
9	B	222	LEU	C-N	5.80	1.41	1.33
23	P	234	TYR	C-N	5.80	1.41	1.33
33	Z	992	GLU	N-CA	-5.80	1.39	1.46
3	3	131	GLY	CA-C	-5.79	1.45	1.52
17	J	63	ARG	C-N	5.79	1.41	1.33
18	K	110	VAL	N-CA	-5.79	1.39	1.46
20	M	205	ASP	CA-C	-5.79	1.45	1.52
30	W	170	HIS	CE1-NE2	5.79	1.38	1.32
7	7	-2	THR	C-N	5.79	1.40	1.32
3	3	35	PHE	CA-C	-5.78	1.45	1.52
17	J	169	LYS	C-N	5.78	1.38	1.33
24	Q	430	ALA	N-CA	-5.78	1.39	1.46
15	H	226	GLU	CA-C	-5.78	1.45	1.52
16	I	235	ALA	N-CA	-5.78	1.39	1.46
24	Q	301	ALA	N-CA	-5.78	1.39	1.46
15	H	435	ARG	CA-C	-5.78	1.45	1.52
24	Q	115	ILE	N-CA	-5.78	1.39	1.46
30	W	33	VAL	C-N	5.78	1.40	1.33
18	K	296	LEU	N-CA	-5.78	1.39	1.46
18	K	252	ARG	C-N	5.77	1.41	1.33
20	M	233	ARG	C-N	5.77	1.41	1.33
4	4	73	GLU	N-CA	5.77	1.53	1.46
7	7	109	ALA	C-N	5.77	1.40	1.33
2	2	10	ASN	C-N	5.77	1.39	1.33
16	I	325	ILE	C-O	-5.77	1.18	1.24
18	K	117	SER	CA-C	-5.77	1.45	1.52
8	A	40	ILE	C-N	5.77	1.41	1.33
4	4	140	PHE	CA-C	-5.77	1.45	1.52
16	I	395	MET	N-CA	-5.77	1.39	1.46
18	K	207	ARG	CA-C	-5.77	1.44	1.52
5	5	11	GLY	CA-C	-5.76	1.43	1.51
15	H	243	PRO	N-CD	5.76	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	2	93	HIS	C-N	5.76	1.41	1.33
23	P	164	GLN	CA-C	5.76	1.60	1.52
24	Q	38	SER	C-N	5.76	1.41	1.33
11	D	233	VAL	N-CA	5.76	1.53	1.46
3	3	33	LYS	CA-C	5.76	1.60	1.52
8	A	34	ALA	C-N	5.76	1.41	1.33
23	P	144	VAL	N-CA	-5.76	1.39	1.46
26	S	290	ASN	N-CA	-5.76	1.39	1.46
26	S	301	PRO	N-CD	5.76	1.55	1.47
3	3	36	HIS	CA-C	-5.75	1.45	1.52
11	D	168	SER	C-N	5.75	1.41	1.33
18	K	120	VAL	C-N	5.75	1.41	1.33
27	T	98	GLU	C-N	5.75	1.41	1.33
29	V	45	VAL	C-N	5.75	1.41	1.33
9	B	53	SER	N-CA	-5.75	1.40	1.46
3	3	75	PRO	N-CD	5.75	1.55	1.47
12	E	92	ALA	N-CA	-5.75	1.39	1.46
24	Q	32	ASP	C-N	5.75	1.38	1.33
26	S	169	CYS	CA-C	-5.75	1.45	1.52
22	O	92	PHE	CA-C	-5.75	1.45	1.52
33	Z	771	HIS	C-N	5.75	1.41	1.33
5	5	112	ILE	N-CA	5.74	1.53	1.46
8	A	86	PRO	N-CD	5.74	1.55	1.47
20	M	398	ALA	CA-C	5.74	1.60	1.52
6	6	3	ILE	C-N	5.74	1.41	1.33
12	E	158	ALA	CA-C	-5.74	1.45	1.52
24	Q	263	LYS	CA-C	-5.74	1.45	1.52
15	H	242	PRO	C-O	-5.74	1.18	1.24
12	E	135	SER	CA-C	-5.74	1.45	1.52
19	L	159	LEU	C-N	5.74	1.40	1.33
24	Q	129	LYS	C-O	5.74	1.28	1.23
25	R	188	LYS	N-CA	-5.74	1.39	1.46
14	G	229	PHE	N-CA	-5.73	1.38	1.45
7	7	189	LEU	C-N	5.73	1.41	1.33
8	A	82	VAL	CA-C	-5.73	1.45	1.52
5	5	100	MET	N-CA	-5.73	1.39	1.46
26	S	148	ASP	C-N	5.73	1.40	1.33
26	S	266	SER	N-CA	-5.73	1.39	1.46
25	R	308	LEU	C-N	5.72	1.41	1.33
8	A	206	ALA	C-N	5.72	1.41	1.33
9	B	143	ASN	C-N	5.72	1.41	1.33
16	I	382	THR	CA-C	5.72	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	508	LEU	CA-C	-5.72	1.45	1.52
24	Q	149	LYS	CA-C	-5.72	1.45	1.52
6	6	85	GLN	CA-C	-5.71	1.45	1.52
13	F	48	ALA	CA-C	-5.71	1.45	1.52
33	Z	812	ILE	C-N	5.71	1.41	1.33
18	K	102	PRO	C-N	5.71	1.40	1.33
5	5	199	LYS	C-N	5.71	1.41	1.33
22	O	209	GLU	CA-C	-5.71	1.45	1.52
33	Z	584	VAL	CA-C	-5.71	1.45	1.52
21	N	89	PHE	N-CA	-5.71	1.39	1.46
30	W	171	LEU	N-CA	-5.71	1.39	1.46
9	B	122	THR	C-N	5.71	1.41	1.33
5	5	67	GLU	C-N	5.70	1.42	1.33
6	6	111	GLY	CA-C	-5.70	1.47	1.52
7	7	175	VAL	N-CA	-5.70	1.39	1.46
19	L	232	ALA	C-N	5.70	1.41	1.33
24	Q	176	ASP	CA-C	-5.70	1.45	1.52
26	S	310	LEU	C-N	5.70	1.41	1.33
27	T	72	THR	C-N	5.70	1.42	1.33
3	3	53	THR	C-N	5.70	1.41	1.33
13	F	222	PHE	N-CA	5.70	1.53	1.46
17	J	140	GLU	N-CA	-5.70	1.39	1.46
23	P	271	SER	C-N	5.70	1.41	1.34
21	N	223	LEU	CA-C	5.69	1.60	1.52
23	P	433	ILE	C-O	-5.69	1.17	1.24
24	Q	110	SER	CA-C	-5.69	1.45	1.52
7	7	80	GLU	C-N	5.69	1.41	1.34
33	Z	836	SER	C-N	5.69	1.41	1.33
21	N	420	THR	CA-C	-5.69	1.45	1.52
3	3	100	VAL	C-O	-5.68	1.18	1.24
22	O	368	ASP	C-O	-5.68	1.17	1.24
25	R	57	GLU	CA-C	-5.68	1.45	1.52
8	A	154	ILE	C-O	5.68	1.29	1.24
19	L	218	VAL	C-O	-5.68	1.18	1.24
1	1	40	LYS	C-N	5.67	1.40	1.33
14	G	164	THR	CA-C	-5.67	1.45	1.52
21	N	655	ALA	N-CA	-5.67	1.38	1.46
26	S	376	THR	CA-C	-5.67	1.47	1.53
25	R	77	SER	C-N	5.67	1.38	1.33
21	N	446	ALA	CA-C	-5.67	1.45	1.52
8	A	44	ALA	CA-C	-5.67	1.45	1.52
16	I	161	GLN	N-CA	-5.67	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	247	ILE	CA-C	-5.67	1.46	1.52
14	G	19	ARG	CA-C	-5.67	1.46	1.52
13	F	54	ASP	N-CA	-5.66	1.39	1.46
26	S	330	LEU	CA-C	-5.66	1.46	1.52
30	W	53	SER	CA-CB	5.66	1.63	1.53
7	7	174	ARG	C-N	5.66	1.41	1.33
19	L	128	ILE	CA-C	-5.66	1.45	1.52
7	7	40	ASN	N-CA	-5.66	1.38	1.46
12	E	112	LEU	C-N	5.66	1.41	1.33
33	Z	570	LEU	CA-C	-5.65	1.45	1.52
3	3	112	ILE	N-CA	5.65	1.52	1.46
24	Q	89	ALA	CA-C	-5.65	1.45	1.53
11	D	89	ALA	C-N	5.65	1.41	1.33
27	T	10	SER	CA-C	-5.65	1.45	1.52
4	4	88	ALA	C-N	5.65	1.41	1.33
13	F	61	LYS	N-CA	-5.65	1.39	1.46
15	H	443	PHE	N-CA	-5.65	1.39	1.46
27	T	168	SER	C-N	5.65	1.41	1.34
33	Z	516	THR	CA-C	-5.65	1.45	1.53
10	C	212	GLU	N-CA	-5.64	1.39	1.46
11	D	187	THR	CA-C	-5.64	1.45	1.52
17	J	93	LYS	CA-C	-5.64	1.45	1.52
17	J	362	CYS	C-N	5.64	1.41	1.33
11	D	206	GLY	N-CA	-5.64	1.37	1.45
16	I	207	LEU	C-O	-5.64	1.17	1.24
9	B	241	GLN	C-N	5.63	1.41	1.33
15	H	443	PHE	C-N	5.63	1.41	1.33
20	M	80	ALA	CA-C	-5.63	1.45	1.52
6	6	53	ASP	N-CA	-5.63	1.39	1.46
21	N	749	LEU	C-N	5.63	1.41	1.34
33	Z	987	PRO	N-CD	5.63	1.55	1.47
20	M	130	PRO	N-CA	5.63	1.52	1.46
19	L	338	LEU	C-N	5.63	1.43	1.33
21	N	734	VAL	CA-C	-5.63	1.45	1.52
4	4	181	LYS	C-N	5.62	1.40	1.33
18	K	329	LEU	C-N	5.62	1.41	1.33
8	A	80	GLY	C-N	5.62	1.41	1.33
10	C	219	GLY	C-N	5.62	1.41	1.33
21	N	588	VAL	N-CA	5.62	1.53	1.46
23	P	300	VAL	C-N	5.62	1.41	1.33
27	T	61	ILE	C-N	5.62	1.41	1.33
9	B	78	MET	N-CA	-5.62	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	930	GLY	CA-C	5.62	1.61	1.51
25	R	310	GLU	N-CA	-5.62	1.39	1.46
31	X	37	PRO	CA-C	5.62	1.60	1.52
21	N	621	THR	C-N	5.62	1.41	1.33
23	P	132	VAL	N-CA	-5.61	1.39	1.46
12	E	156	PHE	C-N	5.61	1.41	1.33
15	H	69	VAL	N-CA	-5.61	1.40	1.46
21	N	593	PHE	N-CA	-5.61	1.39	1.46
1	1	159	LEU	CA-C	-5.61	1.45	1.52
2	2	191	LEU	N-CA	-5.61	1.39	1.46
13	F	172	LEU	C-O	-5.61	1.17	1.24
28	U	113	TYR	CZ-OH	5.61	1.49	1.38
5	5	50	ALA	C-N	5.60	1.41	1.33
17	J	153	LEU	N-CA	-5.60	1.39	1.46
1	1	97	ILE	N-CA	5.60	1.52	1.46
14	G	64	VAL	C-N	5.60	1.41	1.33
16	I	111	GLU	N-CA	-5.60	1.39	1.46
19	L	230	LEU	N-CA	5.60	1.53	1.46
21	N	225	LEU	CA-C	5.60	1.60	1.52
2	2	201	LYS	CA-C	-5.60	1.45	1.52
3	3	-5	SER	C-N	5.60	1.40	1.33
18	K	90	GLN	CA-C	5.60	1.59	1.53
23	P	74	ASP	C-N	5.60	1.41	1.33
7	7	101	PRO	N-CD	5.59	1.55	1.47
8	A	204	GLU	N-CA	5.59	1.53	1.46
14	G	57	LEU	CA-C	-5.59	1.45	1.52
28	U	55	PRO	N-CD	5.59	1.55	1.47
16	I	245	LEU	N-CA	-5.59	1.39	1.46
12	E	174	SER	N-CA	-5.59	1.39	1.46
26	S	130	VAL	CA-C	5.59	1.59	1.52
31	X	60	GLU	CA-C	-5.59	1.45	1.52
21	N	95	SER	C-N	5.59	1.41	1.33
25	R	129	GLU	N-CA	-5.59	1.39	1.46
17	J	292	MET	CA-C	-5.59	1.45	1.52
33	Z	53	VAL	N-CA	-5.59	1.40	1.46
23	P	103	TYR	C-N	5.59	1.41	1.33
10	C	187	ASP	CA-C	-5.58	1.45	1.52
24	Q	112	ASP	N-CA	-5.58	1.39	1.46
7	7	182	ARG	CA-C	-5.58	1.45	1.52
18	K	202	GLY	C-N	5.58	1.41	1.33
1	1	183	VAL	CA-C	-5.58	1.45	1.52
23	P	429	ILE	CA-C	-5.58	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	H	452	SER	N-CA	-5.58	1.39	1.46
21	N	923	MET	CA-C	-5.58	1.45	1.52
29	V	248	ALA	N-CA	5.58	1.53	1.46
33	Z	879	ALA	C-N	5.57	1.41	1.33
9	B	24	ALA	C-O	-5.57	1.17	1.24
23	P	419	VAL	CA-C	-5.57	1.46	1.52
18	K	301	THR	N-CA	-5.57	1.39	1.46
11	D	72	VAL	N-CA	-5.57	1.39	1.46
33	Z	893	PHE	C-N	5.57	1.39	1.33
17	J	88	VAL	CA-C	-5.56	1.45	1.52
33	Z	539	ASN	CA-C	-5.56	1.46	1.52
8	A	107	LYS	CA-C	-5.56	1.45	1.52
20	M	374	ILE	N-CA	-5.56	1.39	1.46
25	R	126	GLY	N-CA	-5.56	1.38	1.45
25	R	179	PHE	C-N	5.56	1.41	1.33
17	J	347	ALA	CA-C	-5.56	1.45	1.52
16	I	389	GLY	C-N	5.56	1.41	1.33
17	J	124	LYS	CA-C	-5.55	1.45	1.52
17	J	328	LEU	CA-C	-5.55	1.45	1.52
33	Z	901	PHE	N-CA	-5.55	1.39	1.46
2	2	158	ALA	C-N	5.55	1.40	1.33
7	7	90	THR	C-N	5.55	1.41	1.33
33	Z	481	PRO	N-CD	5.55	1.55	1.47
24	Q	426	LEU	CA-C	-5.55	1.45	1.52
25	R	420	ALA	CA-C	-5.55	1.45	1.52
10	C	91	ALA	CA-C	-5.55	1.45	1.52
10	C	180	TYR	C-N	5.55	1.40	1.33
13	F	183	ASP	CA-C	-5.55	1.46	1.52
13	F	233	TYR	CA-C	-5.55	1.45	1.52
15	H	208	TYR	N-CA	-5.55	1.39	1.46
25	R	149	ASN	CA-C	-5.55	1.45	1.52
19	L	342	ARG	CA-C	-5.55	1.44	1.52
8	A	160	ALA	C-N	5.55	1.40	1.33
14	G	228	LYS	N-CA	-5.55	1.39	1.45
21	N	490	LEU	C-N	5.55	1.41	1.33
24	Q	108	PRO	N-CD	5.55	1.55	1.47
24	Q	364	LYS	CA-C	-5.55	1.45	1.52
2	2	76	VAL	C-N	5.54	1.40	1.34
4	4	37	LEU	CA-C	-5.54	1.45	1.52
28	U	37	ILE	C-N	5.54	1.40	1.33
27	T	75	PHE	C-N	5.54	1.41	1.33
1	1	12	VAL	N-CA	-5.54	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	55	VAL	N-CA	5.54	1.53	1.46
6	6	32	PRO	CA-C	-5.54	1.46	1.52
13	F	111	LEU	CA-C	-5.54	1.45	1.52
17	J	288	ILE	C-O	5.54	1.30	1.24
21	N	318	LYS	CA-C	-5.54	1.45	1.52
27	T	7	LEU	N-CA	5.54	1.53	1.46
3	3	24	SER	C-N	5.54	1.41	1.33
10	C	130	PRO	N-CD	5.54	1.55	1.47
12	E	65	GLU	CA-C	-5.54	1.46	1.52
19	L	120	LYS	CA-C	-5.54	1.45	1.52
9	B	83	ARG	C-N	5.53	1.40	1.33
15	H	315	GLY	CA-C	-5.53	1.44	1.51
24	Q	366	ILE	C-N	5.53	1.41	1.33
26	S	127	THR	C-N	5.53	1.40	1.33
28	U	262	GLN	C-N	5.53	1.40	1.33
19	L	214	PRO	CA-C	-5.53	1.48	1.51
8	A	216	THR	N-CA	-5.53	1.39	1.45
5	5	25	TRP	C-N	5.53	1.39	1.33
8	A	81	MET	C-N	5.53	1.40	1.33
15	H	61	ALA	CA-C	-5.53	1.45	1.52
23	P	61	LYS	CA-C	5.53	1.59	1.52
2	2	40	LYS	N-CA	-5.52	1.39	1.46
21	N	227	LYS	CA-C	-5.52	1.45	1.52
28	U	50	ASN	N-CA	-5.52	1.39	1.46
33	Z	966	GLU	CA-C	-5.52	1.45	1.52
21	N	338	PHE	C-N	5.52	1.41	1.33
21	N	738	GLN	C-N	5.52	1.41	1.33
24	Q	63	GLN	C-N	5.52	1.42	1.33
18	K	142	HIS	CA-C	-5.52	1.45	1.52
23	P	181	LEU	N-CA	5.52	1.53	1.46
26	S	423	VAL	CA-C	5.52	1.59	1.52
7	7	45	ILE	N-CA	-5.52	1.39	1.46
19	L	333	LEU	CA-C	-5.51	1.45	1.52
23	P	65	LEU	CA-C	5.51	1.60	1.52
28	U	208	VAL	N-CA	5.51	1.52	1.46
19	L	371	THR	CA-C	-5.51	1.46	1.52
21	N	353	LEU	N-CA	-5.51	1.38	1.46
6	6	3	ILE	CA-C	-5.51	1.46	1.52
7	7	87	TYR	C-N	5.51	1.40	1.33
17	J	229	MET	C-N	5.51	1.40	1.33
33	Z	904	LEU	C-N	5.51	1.41	1.33
33	Z	971	ILE	N-CA	-5.50	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	G	22	GLN	C-N	5.50	1.40	1.33
31	X	9	LYS	N-CA	5.50	1.52	1.46
9	B	208	THR	CA-C	-5.50	1.45	1.53
10	C	48	ALA	N-CA	-5.50	1.39	1.46
11	D	197	ARG	C-N	5.50	1.41	1.33
24	Q	358	GLU	CA-C	-5.50	1.46	1.52
10	C	190	ILE	C-N	5.50	1.40	1.33
12	E	77	ALA	CA-C	-5.49	1.46	1.52
21	N	650	ASP	CA-C	-5.49	1.45	1.52
5	5	20	ALA	CA-C	-5.49	1.45	1.52
23	P	181	LEU	C-N	5.49	1.41	1.33
10	C	39	MET	CA-C	-5.49	1.46	1.52
9	B	5	TYR	CA-C	-5.49	1.45	1.52
12	E	145	ALA	CA-C	-5.49	1.46	1.52
27	T	133	ILE	N-CA	-5.49	1.39	1.46
13	F	114	ASP	C-O	5.49	1.30	1.24
15	H	292	ARG	CA-C	5.49	1.59	1.52
23	P	358	SER	N-CA	-5.49	1.39	1.46
25	R	315	VAL	CA-C	-5.49	1.47	1.52
14	G	241	PHE	CA-C	-5.49	1.45	1.52
19	L	96	LYS	N-CA	-5.49	1.39	1.46
21	N	592	GLY	CA-C	5.48	1.58	1.52
33	Z	862	MET	CA-C	-5.48	1.46	1.52
2	2	140	SER	C-N	5.48	1.42	1.33
16	I	339	ILE	C-N	5.48	1.44	1.33
23	P	166	GLU	N-CA	-5.48	1.39	1.46
32	Y	74	THR	CA-C	-5.48	1.45	1.52
12	E	73	HIS	C-N	5.47	1.40	1.33
21	N	566	SER	C-N	5.47	1.40	1.33
22	O	325	GLU	CA-C	-5.47	1.45	1.52
6	6	-7	ASN	CA-C	-5.47	1.46	1.52
19	L	219	LEU	CA-C	-5.47	1.46	1.52
13	F	79	PRO	N-CD	5.47	1.55	1.47
7	7	175	VAL	CA-C	-5.47	1.45	1.52
19	L	113	SER	CA-C	-5.47	1.46	1.52
29	V	138	ALA	CA-C	-5.47	1.46	1.52
11	D	45	GLY	N-CA	-5.47	1.38	1.46
17	J	314	ILE	N-CA	-5.47	1.39	1.46
29	V	293	VAL	C-N	5.47	1.41	1.33
9	B	139	HIS	CA-C	5.46	1.59	1.52
20	M	306	LEU	CA-C	-5.46	1.45	1.52
23	P	421	GLU	N-CA	-5.46	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	7	180	ASP	CA-C	-5.46	1.46	1.52
10	C	95	ALA	CA-C	-5.46	1.45	1.52
27	T	9	LYS	N-CA	5.46	1.52	1.46
27	T	144	TYR	N-CA	5.46	1.51	1.46
6	6	133	ALA	N-CA	-5.46	1.39	1.46
17	J	193	THR	N-CA	-5.46	1.40	1.46
12	E	97	VAL	CA-C	-5.46	1.45	1.52
23	P	295	SER	N-CA	5.46	1.52	1.46
24	Q	280	ASN	C-N	5.46	1.40	1.33
16	I	294	SER	CA-C	-5.46	1.46	1.52
30	W	86	HIS	CE1-NE2	5.46	1.38	1.32
18	K	107	THR	N-CA	-5.45	1.39	1.46
28	U	283	ARG	CA-C	-5.45	1.45	1.52
16	I	108	THR	CA-C	5.45	1.59	1.52
7	7	179	ARG	C-N	5.45	1.40	1.33
11	D	113	VAL	CA-C	-5.45	1.45	1.52
23	P	344	ARG	CA-C	-5.45	1.45	1.52
25	R	411	LEU	CA-C	-5.45	1.45	1.52
33	Z	850	LEU	CA-C	5.45	1.60	1.52
28	U	229	LEU	C-N	5.45	1.41	1.33
33	Z	469	PRO	C-N	5.45	1.41	1.33
10	C	195	LYS	C-O	-5.44	1.17	1.24
1	1	108	GLY	C-N	5.44	1.41	1.33
3	3	79	THR	C-N	5.44	1.41	1.33
13	F	165	SER	N-CA	-5.44	1.39	1.46
13	F	195	GLU	CA-C	-5.44	1.45	1.52
15	H	58	ASP	N-CA	-5.44	1.39	1.46
21	N	106	ILE	C-N	5.44	1.40	1.33
23	P	173	MET	C-N	5.44	1.41	1.33
19	L	172	SER	N-CA	5.44	1.52	1.46
21	N	891	VAL	CA-C	-5.44	1.48	1.52
33	Z	106	TRP	N-CA	-5.44	1.39	1.46
3	3	127	PHE	N-CA	-5.44	1.39	1.45
6	6	145	VAL	CA-C	-5.44	1.45	1.52
19	L	199	LEU	C-N	5.44	1.40	1.34
7	7	201	LYS	N-CA	-5.44	1.39	1.46
10	C	189	ALA	C-N	5.44	1.40	1.33
4	4	148	ARG	N-CA	-5.43	1.39	1.46
6	6	99	HIS	CA-C	-5.43	1.46	1.52
14	G	117	GLN	C-N	5.43	1.41	1.33
5	5	180	VAL	C-N	5.43	1.40	1.33
1	1	-7	LYS	N-CA	-5.43	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	E	81	LEU	CA-C	-5.43	1.45	1.52
16	I	147	VAL	CA-C	-5.43	1.46	1.52
28	U	307	LYS	CA-C	-5.43	1.45	1.52
12	E	131	GLU	CA-C	-5.43	1.46	1.53
20	M	412	HIS	CA-C	-5.43	1.45	1.52
21	N	579	SER	C-N	5.43	1.41	1.33
23	P	41	VAL	C-N	5.43	1.41	1.33
12	E	225	GLN	C-O	5.43	1.31	1.24
17	J	379	GLN	CA-C	-5.43	1.45	1.52
24	Q	95	LYS	C-N	5.43	1.40	1.33
26	S	273	PHE	C-N	5.43	1.40	1.33
1	1	100	ALA	CA-C	-5.42	1.46	1.52
15	H	357	ARG	N-CA	5.42	1.52	1.45
11	D	146	LYS	CA-C	5.42	1.59	1.52
20	M	290	ARG	N-CA	-5.42	1.39	1.46
21	N	253	LEU	N-CA	-5.42	1.40	1.46
4	4	4	LEU	CA-C	-5.42	1.46	1.52
25	R	55	LYS	CA-C	5.42	1.59	1.52
15	H	287	GLY	CA-C	-5.42	1.46	1.52
21	N	336	ASN	N-CA	-5.42	1.40	1.46
33	Z	847	ILE	C-N	5.42	1.41	1.33
4	4	69	ARG	N-CA	-5.42	1.39	1.46
5	5	146	TRP	CA-C	-5.42	1.45	1.52
17	J	250	ILE	CA-C	-5.42	1.45	1.52
13	F	22	VAL	N-CA	-5.42	1.39	1.46
18	K	99	PHE	CA-C	-5.41	1.45	1.52
9	B	207	ASP	N-CA	-5.41	1.39	1.46
28	U	84	ASN	CA-C	-5.41	1.46	1.52
30	W	69	PHE	N-CA	-5.41	1.39	1.46
13	F	169	LYS	CA-C	-5.41	1.45	1.52
18	K	190	LEU	C-O	-5.41	1.19	1.24
33	Z	432	GLY	N-CA	5.41	1.52	1.45
4	4	171	MET	C-N	5.41	1.38	1.33
17	J	178	GLY	C-N	5.41	1.40	1.33
20	M	79	VAL	CA-C	-5.41	1.46	1.53
24	Q	334	HIS	N-CA	-5.41	1.39	1.46
6	6	12	ALA	N-CA	-5.40	1.39	1.46
8	A	17	THR	C-N	5.40	1.40	1.33
8	A	98	LYS	N-CA	-5.40	1.39	1.46
13	F	226	ASP	N-CA	-5.40	1.39	1.46
23	P	82	LEU	N-CA	5.40	1.53	1.46
9	B	124	SER	CA-C	-5.40	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	6	109	GLY	C-N	5.40	1.40	1.33
15	H	57	LYS	N-CA	-5.40	1.39	1.46
25	R	365	ASP	N-CA	-5.40	1.40	1.46
12	E	85	ALA	N-CA	-5.40	1.39	1.46
28	U	272	GLU	CA-C	5.40	1.59	1.52
1	1	111	TYR	CA-C	-5.39	1.46	1.52
6	6	113	VAL	C-O	-5.39	1.18	1.24
9	B	19	GLY	C-O	-5.39	1.16	1.23
9	B	32	VAL	CA-C	-5.39	1.46	1.52
20	M	193	LEU	C-N	5.39	1.40	1.33
2	2	2	THR	CA-C	-5.39	1.46	1.52
3	3	61	LYS	C-N	5.39	1.41	1.33
10	C	232	PRO	C-N	5.39	1.41	1.34
10	C	209	ASP	N-CA	-5.39	1.40	1.46
11	D	217	PRO	N-CD	5.39	1.55	1.47
10	C	170	SER	N-CA	5.39	1.52	1.46
21	N	586	ALA	C-O	-5.39	1.17	1.24
31	X	68	LEU	C-N	5.39	1.38	1.33
4	4	169	LYS	CA-C	-5.39	1.46	1.52
33	Z	76	LYS	CA-C	-5.39	1.45	1.52
20	M	251	LEU	C-N	-5.39	1.26	1.33
21	N	904	VAL	N-CA	5.39	1.52	1.46
23	P	414	GLU	C-N	5.39	1.40	1.33
17	J	76	ILE	N-CA	-5.38	1.40	1.46
1	1	27	ALA	N-CA	-5.38	1.39	1.46
14	G	14	PHE	C-N	5.38	1.41	1.33
19	L	85	GLU	C-N	5.38	1.41	1.33
23	P	90	LYS	CA-CB	5.38	1.62	1.53
21	N	80	LYS	CA-C	-5.38	1.45	1.52
16	I	167	MET	CA-C	5.38	1.61	1.52
23	P	202	LYS	N-CA	5.38	1.52	1.46
27	T	86	LYS	C-O	-5.38	1.19	1.24
3	3	179	TYR	CA-C	-5.38	1.46	1.52
4	4	17	SER	N-CA	5.38	1.52	1.46
22	O	382	LYS	C-N	5.38	1.40	1.33
33	Z	479	THR	N-CA	5.38	1.52	1.46
2	2	136	ALA	C-N	5.38	1.40	1.33
10	C	188	ASP	N-CA	-5.38	1.39	1.46
12	E	201	LEU	C-N	5.38	1.40	1.33
13	F	118	LYS	CA-C	-5.38	1.45	1.52
19	L	196	VAL	N-CA	-5.38	1.39	1.46
29	V	188	LEU	N-CA	-5.38	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	116	GLY	N-CA	-5.37	1.37	1.45
9	B	114	VAL	CA-C	-5.37	1.45	1.52
15	H	63	ILE	C-N	5.37	1.41	1.33
9	B	66	LEU	C-N	5.37	1.41	1.33
24	Q	365	ILE	N-CA	-5.37	1.40	1.46
21	N	523	LEU	N-CA	5.37	1.52	1.46
33	Z	903	MET	N-CA	-5.37	1.39	1.46
6	6	151	TYR	CA-C	-5.37	1.45	1.52
9	B	218	ASN	N-CA	5.37	1.50	1.45
11	D	67	ILE	CA-C	-5.37	1.45	1.53
24	Q	138	SER	CA-C	5.37	1.60	1.52
29	V	182	LYS	CA-C	-5.37	1.46	1.52
33	Z	927	VAL	CA-C	-5.37	1.46	1.52
11	D	12	SER	CA-C	-5.36	1.44	1.52
25	R	76	GLN	C-N	5.36	1.40	1.33
1	1	10	ASP	C-N	5.36	1.41	1.33
6	6	97	TYR	CA-C	-5.36	1.46	1.53
20	M	200	PRO	N-CD	5.36	1.55	1.47
20	M	346	LYS	CA-C	-5.36	1.46	1.52
20	M	350	PRO	N-CD	5.36	1.55	1.47
1	1	56	ALA	N-CA	-5.36	1.39	1.46
7	7	183	SER	C-N	5.36	1.40	1.33
25	R	367	ASP	CA-C	-5.36	1.45	1.52
33	Z	534	PHE	CA-C	-5.36	1.45	1.52
2	2	24	PRO	N-CD	5.36	1.55	1.47
19	L	239	ILE	CA-C	-5.35	1.44	1.52
2	2	132	LEU	CA-C	-5.35	1.46	1.52
21	N	206	ILE	CA-C	5.35	1.60	1.52
26	S	219	LYS	CA-C	-5.35	1.45	1.52
5	5	146	TRP	N-CA	5.35	1.52	1.46
23	P	219	GLU	C-N	5.35	1.41	1.33
33	Z	966	GLU	C-N	5.35	1.40	1.33
9	B	116	LYS	CA-C	-5.35	1.46	1.52
10	C	73	ILE	C-O	-5.35	1.18	1.24
11	D	19	GLN	C-N	5.35	1.40	1.33
17	J	395	GLU	N-CA	5.35	1.53	1.46
9	B	127	VAL	N-CA	-5.35	1.39	1.46
5	5	205	GLY	CA-C	-5.34	1.44	1.51
8	A	50	CYS	CA-C	-5.34	1.45	1.52
16	I	332	GLU	C-N	5.34	1.41	1.33
16	I	159	VAL	CA-C	5.34	1.58	1.52
23	P	320	PRO	CA-C	-5.34	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	T	86	LYS	N-CA	-5.34	1.40	1.46
30	W	12	ASN	C-N	5.34	1.41	1.33
16	I	313	LEU	CA-C	-5.34	1.46	1.52
17	J	140	GLU	C-N	5.34	1.40	1.33
21	N	414	GLY	CA-C	-5.34	1.44	1.51
33	Z	387	ASN	C-N	5.34	1.41	1.33
2	2	8	PHE	C-N	5.34	1.41	1.33
23	P	241	LEU	CA-C	-5.34	1.45	1.52
3	3	74	GLU	CA-C	5.34	1.59	1.52
12	E	238	GLU	C-N	5.34	1.41	1.33
14	G	98	PHE	C-N	5.34	1.41	1.33
18	K	155	ASP	C-N	5.34	1.40	1.33
18	K	202	GLY	N-CA	-5.34	1.37	1.45
21	N	418	ASP	CA-C	-5.34	1.46	1.52
1	1	55	ILE	CA-C	-5.33	1.46	1.52
7	7	1	THR	CA-C	-5.33	1.46	1.52
12	E	185	ASN	CA-C	-5.33	1.45	1.52
26	S	368	LYS	N-CA	-5.33	1.39	1.46
26	S	380	CYS	C-N	5.33	1.40	1.33
4	4	176	LYS	CA-C	-5.33	1.48	1.53
7	7	193	ASP	N-CA	-5.33	1.39	1.46
9	B	236	ARG	N-CA	-5.33	1.39	1.46
14	G	143	ASN	N-CA	-5.33	1.39	1.46
21	N	410	LEU	N-CA	-5.33	1.40	1.46
33	Z	865	ASP	C-N	5.33	1.39	1.33
20	M	54	GLU	N-CA	5.33	1.52	1.46
24	Q	243	PHE	C-N	5.33	1.41	1.33
29	V	44	GLY	C-N	5.33	1.39	1.33
12	E	153	TYR	C-N	5.33	1.40	1.33
24	Q	295	GLY	CA-C	-5.33	1.46	1.52
2	2	105	PRO	N-CD	5.32	1.55	1.47
6	6	164	LYS	C-N	5.32	1.41	1.33
8	A	193	HIS	CA-C	-5.32	1.46	1.52
11	D	164	ILE	N-CA	-5.32	1.40	1.46
14	G	137	PHE	C-N	5.32	1.38	1.32
21	N	393	SER	CA-C	-5.32	1.46	1.52
10	C	49	GLU	N-CA	-5.32	1.39	1.46
20	M	339	ARG	C-N	5.32	1.41	1.33
21	N	387	ALA	N-CA	5.32	1.51	1.46
25	R	360	SER	C-N	5.32	1.40	1.33
2	2	206	PRO	N-CD	5.32	1.55	1.47
15	H	273	ARG	CA-C	-5.32	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	285	ALA	C-N	5.32	1.40	1.33
32	Y	81	LEU	C-O	-5.32	1.17	1.24
10	C	110	ILE	C-N	5.32	1.41	1.33
11	D	123	SER	C-N	5.32	1.38	1.33
12	E	58	LEU	N-CA	-5.32	1.40	1.46
23	P	69	ARG	CA-C	5.32	1.59	1.52
6	6	95	PRO	N-CD	5.32	1.55	1.47
26	S	193	THR	C-O	-5.32	1.17	1.24
12	E	54	ALA	CA-C	-5.31	1.45	1.52
9	B	163	ALA	N-CA	-5.31	1.39	1.45
18	K	223	VAL	C-N	5.31	1.40	1.33
19	L	214	PRO	C-N	5.31	1.40	1.33
10	C	8	SER	CA-C	-5.31	1.45	1.52
15	H	322	GLY	CA-C	-5.31	1.45	1.52
21	N	641	LEU	N-CA	5.31	1.53	1.46
4	4	51	ASP	C-N	5.31	1.40	1.33
19	L	216	LYS	CA-C	-5.31	1.45	1.52
10	C	109	GLU	CA-C	5.30	1.59	1.52
29	V	117	TRP	C-N	5.30	1.40	1.33
15	H	238	LEU	C-N	5.30	1.40	1.33
17	J	184	GLY	CA-C	-5.30	1.46	1.51
18	K	295	ILE	C-N	5.30	1.40	1.33
4	4	60	GLN	CA-C	-5.30	1.46	1.52
8	A	250	GLU	N-CA	-5.30	1.39	1.46
12	E	100	ASN	N-CA	5.30	1.52	1.46
20	M	241	ALA	CA-C	-5.30	1.46	1.52
21	N	223	LEU	N-CA	-5.30	1.40	1.46
29	V	108	TYR	CA-C	-5.30	1.46	1.52
11	D	44	LEU	CA-C	-5.30	1.46	1.52
11	D	145	PRO	C-N	5.30	1.40	1.33
12	E	237	ALA	C-N	5.30	1.40	1.33
15	H	162	ARG	NE-CZ	5.30	1.38	1.33
21	N	19	SER	CA-C	-5.30	1.45	1.52
23	P	395	ARG	C-N	-5.30	1.28	1.34
21	N	92	ASP	C-N	5.30	1.40	1.33
18	K	230	THR	CA-C	5.29	1.59	1.52
21	N	89	PHE	CA-C	5.29	1.58	1.52
13	F	125	GLY	N-CA	-5.29	1.38	1.45
17	J	132	PRO	C-N	5.29	1.41	1.33
23	P	364	ARG	CA-C	-5.29	1.46	1.52
26	S	302	HIS	N-CA	-5.29	1.39	1.45
5	5	89	GLN	C-O	5.29	1.30	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	X	68	LEU	CA-C	-5.29	1.46	1.52
33	Z	606	CYS	C-O	-5.29	1.18	1.24
4	4	63	ILE	C-N	5.29	1.41	1.34
7	7	20	GLY	C-N	5.29	1.41	1.33
10	C	163	ILE	CA-C	-5.29	1.46	1.52
11	D	103	PRO	N-CA	-5.29	1.40	1.47
21	N	881	TYR	CA-C	5.29	1.59	1.52
23	P	91	LEU	CA-CB	5.29	1.62	1.53
16	I	326	MET	CA-C	-5.28	1.46	1.52
16	I	383	THR	C-O	-5.28	1.17	1.24
25	R	336	LYS	CA-C	-5.28	1.46	1.52
31	X	126	ILE	CA-C	-5.28	1.46	1.52
1	1	184	GLU	CA-C	-5.28	1.46	1.52
8	A	194	ILE	CA-C	-5.28	1.47	1.52
9	B	106	PRO	N-CD	5.28	1.55	1.47
21	N	126	LYS	CA-C	-5.28	1.46	1.52
9	B	219	PRO	N-CD	5.28	1.55	1.47
17	J	76	ILE	CA-C	-5.28	1.46	1.52
20	M	229	THR	CA-C	-5.28	1.46	1.52
25	R	43	ARG	N-CA	-5.28	1.39	1.46
27	T	227	PRO	N-CD	5.28	1.55	1.47
7	7	14	ILE	CA-C	-5.28	1.46	1.52
24	Q	262	LEU	C-N	5.28	1.40	1.33
9	B	105	PRO	CA-C	-5.28	1.47	1.52
13	F	131	GLY	CA-C	5.28	1.59	1.51
17	J	93	LYS	C-N	5.28	1.40	1.33
17	J	141	LYS	C-N	5.28	1.39	1.33
21	N	211	PHE	N-CA	-5.28	1.39	1.46
16	I	175	LYS	CA-C	-5.28	1.46	1.52
2	2	123	TYR	N-CA	-5.27	1.38	1.46
3	3	37	TYR	C-N	5.27	1.41	1.33
20	M	292	ASP	N-CA	-5.27	1.39	1.45
21	N	570	ARG	N-CA	-5.27	1.40	1.46
23	P	250	ILE	N-CA	5.27	1.52	1.46
33	Z	789	GLN	C-N	5.27	1.41	1.34
25	R	252	TYR	C-N	5.27	1.40	1.33
16	I	339	ILE	CA-C	-5.27	1.46	1.52
9	B	73	ALA	N-CA	5.27	1.52	1.45
17	J	274	GLU	CA-C	-5.27	1.46	1.52
21	N	517	LEU	C-N	5.27	1.40	1.33
23	P	257	TRP	CA-C	-5.27	1.46	1.52
3	3	91	PHE	N-CA	-5.26	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	3	105	SER	CA-C	-5.26	1.46	1.53
6	6	209	GLU	C-N	5.26	1.40	1.33
7	7	125	LEU	N-CA	-5.26	1.39	1.46
10	C	189	ALA	CA-C	-5.26	1.46	1.52
11	D	92	GLU	C-O	5.26	1.30	1.24
26	S	141	LEU	N-CA	-5.26	1.40	1.46
19	L	299	ARG	C-N	5.26	1.41	1.33
15	H	338	THR	C-O	-5.26	1.18	1.24
18	K	181	LYS	CA-C	-5.26	1.46	1.52
9	B	43	VAL	C-N	5.26	1.40	1.33
24	Q	375	GLY	N-CA	-5.26	1.39	1.45
26	S	286	TYR	N-CA	-5.26	1.39	1.46
4	4	129	TYR	CA-C	-5.26	1.45	1.52
8	A	146	VAL	CA-C	-5.26	1.47	1.52
18	K	157	SER	CA-C	5.26	1.59	1.52
17	J	305	LEU	CA-C	-5.25	1.45	1.52
2	2	183	ASP	CA-C	-5.25	1.46	1.52
11	D	97	ARG	C-N	5.25	1.40	1.33
12	E	45	GLY	N-CA	-5.25	1.39	1.45
19	L	422	VAL	C-N	5.25	1.41	1.33
29	V	107	TRP	N-CA	-5.25	1.39	1.45
17	J	272	MET	CA-C	-5.25	1.46	1.52
18	K	185	ARG	CA-C	5.25	1.59	1.52
24	Q	92	LYS	C-N	5.25	1.41	1.33
27	T	102	LYS	CA-C	-5.25	1.46	1.52
11	D	208	LYS	CA-C	-5.25	1.45	1.52
14	G	65	LYS	CA-C	-5.25	1.45	1.52
28	U	79	MET	CA-CB	5.25	1.61	1.53
1	1	-4	VAL	N-CA	-5.25	1.40	1.46
24	Q	156	ALA	C-O	-5.25	1.18	1.24
1	1	70	TYR	C-N	5.24	1.41	1.33
3	3	39	HIS	N-CA	-5.24	1.40	1.46
7	7	29	ASN	CA-C	-5.24	1.46	1.52
13	F	194	VAL	N-CA	5.24	1.52	1.46
24	Q	31	LEU	CA-C	-5.24	1.46	1.52
25	R	220	ALA	CA-C	-5.24	1.46	1.52
11	D	234	THR	CA-C	-5.24	1.46	1.52
14	G	69	VAL	C-O	-5.24	1.18	1.24
26	S	269	GLU	CA-C	-5.24	1.46	1.52
8	A	143	PHE	CA-C	5.24	1.59	1.52
33	Z	391	ASN	C-N	5.24	1.41	1.33
12	E	116	VAL	C-N	5.24	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	U	70	HIS	CG-ND1	5.24	1.44	1.38
4	4	163	CYS	N-CA	-5.23	1.40	1.46
24	Q	251	THR	C-N	5.23	1.41	1.33
27	T	2	PRO	N-CD	5.23	1.55	1.47
1	1	138	CYS	C-N	5.23	1.40	1.33
7	7	219	GLY	N-CA	5.23	1.51	1.45
16	I	263	LEU	C-N	5.23	1.40	1.33
15	H	428	MET	CA-C	5.23	1.59	1.52
33	Z	906	ALA	N-CA	-5.23	1.39	1.46
12	E	44	GLU	N-CA	-5.22	1.40	1.46
23	P	231	LYS	C-N	5.22	1.41	1.33
25	R	334	ARG	N-CA	5.22	1.52	1.46
16	I	229	LYS	CA-C	-5.22	1.46	1.52
15	H	220	LYS	C-N	5.22	1.40	1.33
17	J	200	ARG	C-N	5.22	1.40	1.33
21	N	201	LYS	C-N	5.22	1.40	1.33
24	Q	79	PRO	N-CD	5.22	1.55	1.47
27	T	39	LEU	N-CA	-5.22	1.40	1.46
3	3	42	LEU	C-N	5.22	1.39	1.32
18	K	146	LEU	C-O	-5.22	1.17	1.24
3	3	154	LEU	C-N	5.22	1.40	1.33
16	I	231	LEU	C-N	5.22	1.40	1.33
16	I	360	LYS	N-CA	-5.22	1.40	1.46
17	J	293	ALA	C-N	5.22	1.40	1.33
16	I	352	ASN	C-O	-5.21	1.17	1.24
24	Q	121	SER	C-N	5.21	1.40	1.33
10	C	170	SER	C-N	5.21	1.41	1.33
24	Q	429	LYS	N-CA	-5.21	1.40	1.46
3	3	52	THR	N-CA	5.21	1.52	1.46
8	A	41	ASN	CA-C	-5.21	1.46	1.52
33	Z	492	GLY	CA-C	-5.21	1.46	1.52
21	N	388	PRO	N-CA	5.21	1.53	1.47
21	N	782	PHE	C-N	5.21	1.40	1.33
33	Z	571	GLY	C-N	5.21	1.40	1.33
21	N	531	LEU	C-N	5.21	1.41	1.33
21	N	495	PRO	N-CD	5.21	1.55	1.47
30	W	43	SER	N-CA	-5.21	1.40	1.46
5	5	86	LEU	C-N	5.21	1.40	1.34
23	P	41	VAL	CA-C	-5.20	1.46	1.52
33	Z	70	ALA	CA-C	-5.20	1.46	1.52
21	N	735	MET	C-N	5.20	1.40	1.33
15	H	434	ARG	CA-C	-5.20	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	277	LEU	C-N	5.20	1.40	1.33
3	3	176	ALA	CA-C	-5.20	1.45	1.52
21	N	883	SER	CA-C	-5.20	1.46	1.52
13	F	25	ALA	C-N	5.20	1.41	1.33
4	4	59	ILE	C-N	5.19	1.40	1.33
7	7	114	ASN	N-CA	-5.19	1.38	1.46
17	J	348	GLU	CA-C	-5.19	1.45	1.52
20	M	375	ASN	C-O	5.19	1.29	1.24
26	S	372	LEU	N-CA	-5.19	1.40	1.46
15	H	407	ILE	CA-C	5.19	1.59	1.52
10	C	127	GLY	CA-C	-5.19	1.44	1.51
33	Z	511	PRO	C-O	-5.19	1.18	1.24
33	Z	801	HIS	N-CA	-5.19	1.40	1.46
4	4	53	VAL	CA-C	-5.19	1.46	1.52
13	F	119	ASN	CA-C	5.18	1.60	1.52
14	G	195	ALA	CA-C	-5.18	1.46	1.52
21	N	460	ILE	CA-C	5.18	1.60	1.52
4	4	102	LEU	N-CA	-5.18	1.39	1.46
24	Q	78	ILE	N-CA	-5.18	1.40	1.46
21	N	192	LEU	CA-C	-5.18	1.46	1.52
4	4	69	ARG	CA-C	-5.18	1.46	1.52
6	6	188	GLN	CA-C	5.18	1.59	1.52
7	7	103	TRP	N-CA	-5.18	1.38	1.46
7	7	207	GLU	N-CA	-5.18	1.39	1.45
14	G	186	LEU	C-N	5.18	1.40	1.33
19	L	295	THR	C-O	-5.18	1.17	1.23
21	N	913	PRO	N-CA	-5.18	1.41	1.47
22	O	164	PRO	N-CD	5.18	1.55	1.47
17	J	160	ILE	N-CA	-5.18	1.40	1.46
16	I	311	ASN	N-CA	-5.17	1.39	1.46
33	Z	372	ALA	CA-C	-5.17	1.46	1.52
33	Z	456	GLY	CA-C	5.17	1.57	1.52
18	K	233	ALA	N-CA	-5.17	1.39	1.46
1	1	178	LEU	CA-C	-5.17	1.46	1.52
27	T	121	LYS	CA-C	-5.17	1.45	1.52
9	B	7	PHE	C-N	5.17	1.40	1.33
23	P	143	LEU	C-N	5.17	1.40	1.33
23	P	364	ARG	N-CA	-5.17	1.40	1.46
33	Z	234	PRO	C-N	5.17	1.40	1.33
5	5	39	PRO	N-CD	5.17	1.54	1.47
19	L	219	LEU	C-N	5.17	1.40	1.33
22	O	145	LYS	CA-C	5.17	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	A	199	TRP	C-O	-5.17	1.17	1.24
19	L	299	ARG	N-CA	5.17	1.52	1.46
21	N	759	ILE	N-CA	-5.17	1.40	1.46
22	O	315	LYS	N-CA	-5.17	1.40	1.46
14	G	47	PHE	CA-C	-5.16	1.46	1.52
14	G	73	ILE	CA-C	-5.16	1.46	1.52
19	L	324	ILE	N-CA	-5.16	1.40	1.46
23	P	134	VAL	CA-C	-5.16	1.44	1.52
27	T	167	GLY	CA-C	-5.16	1.46	1.52
6	6	128	ARG	N-CA	-5.16	1.40	1.46
17	J	391	ASN	N-CA	-5.16	1.40	1.46
22	O	311	GLU	N-CA	-5.16	1.40	1.46
23	P	211	PRO	C-N	5.16	1.41	1.33
26	S	141	LEU	C-O	-5.16	1.18	1.24
18	K	91	SER	C-N	5.16	1.39	1.33
18	K	151	PRO	N-CD	5.16	1.54	1.47
18	K	224	LYS	C-N	5.16	1.41	1.33
20	M	274	ALA	CA-C	5.16	1.59	1.52
21	N	101	ILE	C-N	5.16	1.40	1.33
14	G	180	ASP	CA-C	-5.16	1.46	1.52
8	A	21	PRO	C-N	5.16	1.41	1.33
9	B	63	LYS	C-N	5.16	1.39	1.33
18	K	134	SER	C-N	5.16	1.40	1.33
23	P	190	LYS	C-N	5.16	1.39	1.32
4	4	48	GLU	N-CA	-5.15	1.39	1.46
33	Z	525	MET	C-N	5.15	1.40	1.34
15	H	253	GLY	C-N	5.15	1.41	1.33
26	S	366	LYS	CA-C	-5.15	1.46	1.52
18	K	341	PRO	CA-C	5.15	1.59	1.52
21	N	37	SER	C-N	-5.15	1.26	1.33
27	T	37	ASN	CA-C	-5.15	1.46	1.53
33	Z	519	PRO	N-CA	5.15	1.53	1.47
12	E	160	PRO	N-CD	5.15	1.54	1.47
17	J	312	ARG	C-N	5.15	1.40	1.33
3	3	194	ARG	CA-C	-5.15	1.46	1.53
18	K	380	GLY	N-CA	-5.15	1.39	1.45
11	D	57	THR	CA-C	-5.14	1.45	1.52
13	F	122	SER	CA-C	-5.14	1.46	1.52
24	Q	214	THR	CA-C	-5.14	1.46	1.52
25	R	145	GLY	CA-C	5.14	1.59	1.51
15	H	390	ARG	C-N	5.14	1.40	1.33
19	L	198	GLU	C-O	-5.14	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	684	SER	CA-C	-5.14	1.46	1.52
3	3	18	LEU	C-N	5.14	1.40	1.33
6	6	18	THR	C-N	5.14	1.40	1.33
7	7	165	ALA	CA-C	-5.14	1.46	1.52
11	D	155	ILE	N-CA	-5.14	1.40	1.46
1	1	142	PHE	CA-C	-5.13	1.46	1.52
6	6	192	GLY	CA-C	-5.13	1.46	1.51
33	Z	908	ILE	N-CA	-5.13	1.40	1.46
11	D	119	ARG	CA-C	-5.13	1.46	1.52
8	A	55	SER	CA-C	-5.13	1.46	1.52
18	K	387	MET	N-CA	-5.13	1.40	1.46
19	L	125	PRO	N-CA	5.13	1.53	1.47
21	N	375	HIS	N-CA	-5.13	1.39	1.46
19	L	177	GLU	C-N	5.13	1.39	1.33
12	E	119	LEU	CA-C	-5.13	1.45	1.52
18	K	77	ARG	N-CA	-5.13	1.40	1.46
21	N	767	ALA	C-N	5.13	1.37	1.33
26	S	214	MET	CA-C	5.13	1.59	1.52
31	X	29	VAL	CA-C	5.13	1.59	1.52
33	Z	539	ASN	C-N	-5.13	1.27	1.33
25	R	335	ARG	N-CA	-5.13	1.40	1.46
31	X	78	ILE	CA-C	5.12	1.58	1.52
3	3	153	ASP	C-N	5.12	1.40	1.33
15	H	300	THR	N-CA	5.12	1.52	1.46
25	R	61	PRO	N-CD	5.12	1.54	1.47
16	I	76	VAL	C-N	5.12	1.40	1.33
21	N	757	THR	CA-C	-5.12	1.46	1.52
33	Z	881	ILE	N-CA	-5.12	1.40	1.46
6	6	212	ARG	C-N	5.12	1.40	1.33
13	F	48	ALA	N-CA	5.12	1.52	1.46
23	P	216	LEU	N-CA	-5.12	1.40	1.46
33	Z	903	MET	CA-C	-5.12	1.45	1.52
2	2	211	ALA	CA-C	-5.12	1.46	1.52
24	Q	413	LEU	CA-C	-5.12	1.46	1.52
5	5	29	GLN	C-N	5.12	1.40	1.33
5	5	72	GLU	CA-C	-5.12	1.46	1.52
11	D	200	LEU	CA-C	-5.12	1.46	1.52
27	T	55	LEU	CA-C	5.12	1.59	1.52
21	N	756	THR	CA-C	-5.11	1.46	1.53
6	6	-2	ASN	N-CA	-5.11	1.41	1.46
6	6	177	ASP	C-N	5.11	1.40	1.33
17	J	334	LYS	CA-C	-5.11	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	239	PHE	C-N	5.11	1.40	1.33
28	U	284	SER	C-N	5.11	1.40	1.33
31	X	110	PRO	N-CD	5.11	1.54	1.47
7	7	12	VAL	CA-C	-5.11	1.46	1.52
19	L	340	PRO	N-CD	5.11	1.54	1.47
26	S	244	ASN	N-CA	-5.11	1.39	1.46
13	F	55	GLU	N-CA	5.11	1.52	1.46
16	I	216	PRO	N-CD	5.11	1.54	1.47
21	N	145	LEU	C-N	5.11	1.41	1.33
23	P	326	ASP	C-N	5.10	1.42	1.34
5	5	31	VAL	CA-C	-5.10	1.46	1.52
18	K	194	GLN	C-N	5.10	1.40	1.33
20	M	234	ALA	C-N	5.10	1.40	1.33
21	N	179	THR	CA-C	-5.10	1.46	1.52
21	N	877	GLN	N-CA	-5.10	1.40	1.46
23	P	163	LEU	CA-C	-5.10	1.46	1.52
15	H	424	THR	N-CA	-5.10	1.39	1.46
2	2	156	SER	CA-C	-5.10	1.46	1.52
22	O	236	HIS	CD2-NE2	-5.10	1.32	1.37
25	R	115	GLU	C-N	5.10	1.40	1.33
33	Z	62	SER	CA-C	-5.10	1.46	1.52
10	C	74	ALA	CA-C	-5.10	1.46	1.52
23	P	348	HIS	CA-C	-5.10	1.45	1.52
25	R	301	TYR	N-CA	-5.10	1.38	1.45
9	B	230	ASP	C-N	5.10	1.40	1.33
21	N	183	VAL	C-O	-5.10	1.18	1.24
28	U	204	LEU	CA-C	-5.10	1.46	1.52
21	N	167	GLU	C-N	5.09	1.40	1.33
5	5	46	ALA	CA-C	-5.09	1.46	1.52
11	D	242	GLU	N-CA	5.09	1.52	1.45
12	E	150	ASP	C-N	5.09	1.40	1.33
30	W	52	ILE	C-N	5.09	1.39	1.33
9	B	94	HIS	CD2-NE2	-5.09	1.32	1.37
15	H	298	ALA	C-N	5.09	1.40	1.33
15	H	298	ALA	C-O	-5.09	1.18	1.24
16	I	317	ASP	CA-C	-5.09	1.46	1.52
16	I	398	GLU	C-N	5.09	1.40	1.33
18	K	354	GLY	CA-C	-5.09	1.46	1.52
17	J	307	PRO	C-N	5.09	1.39	1.33
19	L	365	THR	C-N	5.09	1.40	1.33
20	M	260	ALA	CA-C	-5.09	1.46	1.52
28	U	303	GLU	N-CA	-5.09	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	B	4	ARG	C-N	5.08	1.40	1.33
17	J	72	VAL	C-N	5.08	1.41	1.33
32	Y	87	GLU	C-N	5.08	1.40	1.33
11	D	83	ARG	CA-C	-5.08	1.45	1.52
20	M	428	LYS	CA-C	-5.08	1.46	1.52
3	3	115	PHE	C-N	5.08	1.40	1.33
13	F	118	LYS	C-N	5.08	1.41	1.33
17	J	154	THR	N-CA	5.08	1.52	1.46
22	O	150	LEU	CA-C	-5.08	1.46	1.52
4	4	145	HIS	CD2-NE2	-5.08	1.32	1.37
23	P	147	LYS	CA-C	5.08	1.59	1.52
26	S	342	LEU	C-N	5.08	1.41	1.33
28	U	301	ILE	N-CA	5.08	1.52	1.46
31	X	112	ASN	N-CA	-5.08	1.40	1.45
12	E	14	THR	CA-C	-5.07	1.46	1.52
14	G	146	HIS	CD2-NE2	-5.07	1.32	1.37
20	M	53	HIS	CD2-NE2	-5.07	1.32	1.37
23	P	114	THR	CA-C	-5.07	1.45	1.52
26	S	156	VAL	C-N	5.07	1.40	1.33
33	Z	423	GLY	C-O	5.07	1.29	1.23
25	R	177	LEU	C-N	5.07	1.41	1.33
13	F	100	ASN	C-N	5.07	1.40	1.33
21	N	874	ILE	N-CA	5.07	1.52	1.46
23	P	230	HIS	CD2-NE2	-5.07	1.32	1.37
29	V	248	ALA	CA-C	-5.07	1.46	1.52
17	J	170	HIS	CD2-NE2	-5.07	1.32	1.37
30	W	155	ASP	N-CA	-5.07	1.40	1.46
5	5	115	VAL	CA-C	5.07	1.58	1.52
18	K	145	ALA	CA-C	-5.07	1.46	1.52
20	M	395	THR	C-N	5.07	1.40	1.33
21	N	876	PRO	N-CD	5.07	1.54	1.47
33	Z	338	HIS	CD2-NE2	-5.07	1.32	1.37
2	2	12	VAL	N-CA	5.07	1.52	1.46
8	A	97	ALA	CA-C	-5.07	1.46	1.52
13	F	180	ILE	C-N	5.07	1.41	1.33
23	P	229	LEU	C-N	5.07	1.40	1.33
25	R	284	ALA	C-N	5.07	1.41	1.33
6	6	86	HIS	CD2-NE2	-5.06	1.32	1.37
12	E	48	LEU	CA-C	-5.06	1.46	1.52
13	F	143	HIS	CD2-NE2	-5.06	1.32	1.37
15	H	338	THR	CA-C	-5.06	1.46	1.52
16	I	216	PRO	CA-C	-5.06	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	L	183	ILE	N-CA	-5.06	1.39	1.46
19	L	266	MET	CA-C	-5.06	1.46	1.52
21	N	340	HIS	CD2-NE2	-5.06	1.32	1.37
23	P	440	HIS	CD2-NE2	-5.06	1.32	1.37
26	S	334	HIS	CD2-NE2	-5.06	1.32	1.37
9	B	139	HIS	CD2-NE2	-5.06	1.32	1.37
15	H	65	GLU	CA-C	-5.06	1.46	1.52
23	P	336	HIS	CD2-NE2	-5.06	1.32	1.37
1	1	123	PRO	N-CA	-5.06	1.40	1.47
5	5	68	LEU	CA-C	-5.06	1.46	1.52
8	A	175	GLN	C-N	5.06	1.40	1.33
10	C	125	HIS	CD2-NE2	-5.06	1.32	1.37
16	I	150	HIS	CD2-NE2	-5.06	1.32	1.37
20	M	361	LEU	C-N	-5.06	1.26	1.34
23	P	425	HIS	CD2-NE2	-5.06	1.32	1.37
1	1	38	HIS	CD2-NE2	-5.06	1.32	1.37
3	3	83	SER	C-N	5.06	1.41	1.34
11	D	174	PHE	C-N	5.06	1.40	1.33
12	E	75	GLY	CA-C	-5.06	1.47	1.52
14	G	139	GLY	C-N	5.06	1.40	1.33
19	L	210	VAL	N-CA	-5.06	1.40	1.46
33	Z	591	ILE	C-N	5.06	1.40	1.33
26	S	347	HIS	CD2-NE2	-5.06	1.32	1.37
2	2	114	HIS	CD2-NE2	-5.05	1.32	1.37
5	5	137	TYR	C-N	5.05	1.40	1.33
25	R	405	LYS	C-O	-5.05	1.18	1.24
33	Z	532	HIS	CD2-NE2	-5.05	1.32	1.37
4	4	61	ALA	CA-C	-5.05	1.46	1.52
14	G	72	HIS	CD2-NE2	-5.05	1.32	1.37
23	P	117	SER	CA-C	-5.05	1.46	1.52
4	4	145	HIS	CA-C	-5.05	1.46	1.52
4	4	154	GLU	N-CA	-5.05	1.39	1.46
17	J	204	HIS	CD2-NE2	-5.05	1.32	1.37
19	L	105	ILE	C-N	5.05	1.41	1.33
21	N	616	HIS	CD2-NE2	-5.05	1.32	1.37
24	Q	80	HIS	CD2-NE2	-5.05	1.32	1.37
8	A	63	LEU	CA-C	-5.05	1.46	1.52
10	C	2	GLY	CA-C	-5.05	1.43	1.52
13	F	202	ARG	C-N	5.05	1.40	1.33
15	H	392	HIS	CD2-NE2	-5.05	1.32	1.37
21	N	166	ILE	CA-C	-5.05	1.46	1.52
21	N	573	HIS	CD2-NE2	-5.05	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	438	HIS	CD2-NE2	-5.05	1.32	1.37
29	V	190	HIS	CD2-NE2	-5.05	1.32	1.37
24	Q	329	GLU	CA-C	-5.05	1.46	1.52
33	Z	976	HIS	CD2-NE2	-5.05	1.32	1.37
12	E	57	PRO	N-CD	5.05	1.54	1.47
12	E	105	GLU	C-N	5.05	1.40	1.33
20	M	419	ILE	C-O	-5.05	1.18	1.24
27	T	123	HIS	CD2-NE2	-5.05	1.32	1.37
33	Z	404	ASP	N-CA	5.05	1.52	1.46
10	C	229	ILE	N-CA	-5.04	1.40	1.46
16	I	151	HIS	CD2-NE2	-5.04	1.32	1.37
23	P	30	ASN	C-O	5.04	1.29	1.24
24	Q	241	GLU	C-N	5.04	1.40	1.33
11	D	211	GLU	N-CA	-5.04	1.40	1.46
16	I	212	GLY	N-CA	5.04	1.52	1.45
16	I	246	ARG	CA-C	-5.04	1.46	1.52
33	Z	622	HIS	CD2-NE2	-5.04	1.32	1.37
33	Z	760	HIS	CD2-NE2	-5.04	1.32	1.37
14	G	170	SER	C-N	5.04	1.40	1.33
15	H	53	GLU	C-N	5.04	1.40	1.33
29	V	204	HIS	CD2-NE2	-5.04	1.32	1.37
5	5	71	LYS	CA-C	-5.04	1.47	1.53
16	I	242	ALA	C-O	-5.04	1.17	1.23
21	N	375	HIS	CD2-NE2	-5.04	1.32	1.37
28	U	156	HIS	CD2-NE2	-5.04	1.32	1.37
6	6	95	PRO	CA-C	-5.04	1.47	1.52
8	A	155	TYR	CA-C	5.04	1.58	1.52
10	C	148	LEU	CA-C	-5.04	1.46	1.52
24	Q	178	HIS	CD2-NE2	-5.04	1.32	1.37
33	Z	959	HIS	CD2-NE2	-5.04	1.32	1.37
5	5	83	LEU	CA-C	-5.03	1.46	1.52
9	B	80	PRO	N-CD	5.03	1.54	1.47
14	G	122	HIS	CD2-NE2	-5.03	1.32	1.37
25	R	217	HIS	CD2-NE2	-5.03	1.32	1.37
30	W	100	HIS	CD2-NE2	-5.03	1.32	1.37
1	1	39	ASP	N-CA	-5.03	1.40	1.46
2	2	86	HIS	CD2-NE2	-5.03	1.32	1.37
9	B	97	TYR	N-CA	5.03	1.52	1.46
8	A	185	HIS	CD2-NE2	-5.03	1.32	1.37
9	B	190	HIS	CD2-NE2	-5.03	1.32	1.37
16	I	281	ILE	CA-C	-5.03	1.46	1.52
17	J	240	HIS	CD2-NE2	-5.03	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	149	ASN	N-CA	-5.03	1.39	1.45
20	M	412	HIS	N-CA	-5.03	1.40	1.46
33	Z	156	HIS	CD2-NE2	-5.03	1.32	1.37
3	3	116	ASP	CA-C	-5.03	1.46	1.52
7	7	67	ALA	N-CA	-5.03	1.39	1.46
19	L	267	PHE	CA-C	-5.03	1.46	1.52
24	Q	135	HIS	CD2-NE2	-5.03	1.32	1.37
33	Z	965	LEU	CA-C	-5.03	1.47	1.53
6	6	210	LEU	N-CA	-5.03	1.39	1.45
8	A	71	TYR	C-N	5.03	1.39	1.33
19	L	92	GLU	C-N	5.03	1.40	1.34
24	Q	115	ILE	C-N	5.03	1.40	1.33
26	S	476	LEU	C-N	5.03	1.40	1.33
2	2	116	HIS	CD2-NE2	-5.03	1.32	1.37
4	4	132	HIS	CD2-NE2	-5.03	1.32	1.37
5	5	77	ALA	CA-C	-5.03	1.46	1.52
9	B	65	SER	N-CA	5.03	1.52	1.46
13	F	69	HIS	CD2-NE2	-5.03	1.32	1.37
16	I	117	HIS	CD2-NE2	-5.03	1.32	1.37
17	J	123	HIS	CD2-NE2	-5.03	1.32	1.37
19	L	67	HIS	CD2-NE2	-5.03	1.32	1.37
21	N	483	LEU	N-CA	-5.03	1.40	1.46
12	E	147	HIS	CD2-NE2	-5.02	1.32	1.37
16	I	167	MET	N-CA	5.02	1.52	1.46
21	N	287	LEU	CA-C	5.02	1.59	1.52
22	O	318	HIS	CD2-NE2	-5.02	1.32	1.37
10	C	162	ALA	CA-C	-5.02	1.46	1.52
12	E	73	HIS	CD2-NE2	-5.02	1.32	1.37
23	P	204	LEU	C-N	5.02	1.40	1.33
25	R	81	HIS	CD2-NE2	-5.02	1.32	1.37
17	J	205	HIS	CD2-NE2	-5.02	1.32	1.37
26	S	139	HIS	CD2-NE2	-5.02	1.32	1.37
13	F	9	ASP	CA-C	5.02	1.58	1.52
16	I	209	GLU	C-O	-5.02	1.18	1.24
17	J	115	LEU	CA-C	-5.02	1.46	1.52
18	K	140	HIS	CD2-NE2	-5.02	1.32	1.37
18	K	285	GLN	N-CA	-5.02	1.39	1.45
23	P	66	LEU	C-N	5.02	1.40	1.33
24	Q	285	LYS	CA-C	-5.02	1.46	1.52
33	Z	151	HIS	CD2-NE2	-5.02	1.32	1.37
6	6	70	HIS	CD2-NE2	-5.02	1.32	1.37
11	D	70	HIS	CD2-NE2	-5.02	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	E	157	HIS	CD2-NE2	-5.02	1.32	1.37
19	L	409	HIS	CD2-NE2	-5.02	1.32	1.37
21	N	510	HIS	CD2-NE2	-5.02	1.32	1.37
25	R	50	VAL	C-O	-5.02	1.18	1.24
26	S	128	ILE	N-CA	-5.02	1.40	1.46
33	Z	511	PRO	C-N	5.02	1.40	1.33
33	Z	897	HIS	CD2-NE2	-5.02	1.32	1.37
8	A	15	HIS	CD2-NE2	-5.02	1.32	1.37
26	S	447	GLU	CA-C	-5.02	1.46	1.52
33	Z	307	HIS	CD2-NE2	-5.02	1.32	1.37
1	1	120	HIS	CD2-NE2	-5.01	1.32	1.37
2	2	122	GLY	CA-C	-5.01	1.46	1.51
5	5	191	HIS	N-CA	5.01	1.52	1.46
8	A	209	HIS	CD2-NE2	-5.01	1.32	1.37
11	D	96	HIS	CD2-NE2	-5.01	1.32	1.37
11	D	243	GLN	CA-C	-5.01	1.46	1.52
12	E	186	GLU	CA-C	-5.01	1.45	1.52
14	G	95	ALA	C-N	5.01	1.40	1.33
14	G	100	LYS	CA-C	-5.01	1.46	1.52
17	J	331	HIS	CD2-NE2	-5.01	1.32	1.37
22	O	201	PRO	N-CD	5.01	1.54	1.47
23	P	337	HIS	CD2-NE2	-5.01	1.32	1.37
24	Q	195	LYS	C-N	5.01	1.40	1.33
33	Z	463	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	771	HIS	CD2-NE2	-5.01	1.32	1.37
6	6	186	HIS	CD2-NE2	-5.01	1.32	1.37
12	E	91	HIS	CD2-NE2	-5.01	1.32	1.37
20	M	393	ALA	N-CA	5.01	1.52	1.46
29	V	40	HIS	CD2-NE2	-5.01	1.32	1.37
6	6	99	HIS	CD2-NE2	-5.01	1.32	1.37
7	7	-7	GLN	C-N	5.01	1.39	1.33
8	A	103	GLU	C-N	5.01	1.40	1.33
10	C	114	ARG	C-N	5.01	1.40	1.33
16	I	141	LEU	N-CA	5.01	1.52	1.45
18	K	142	HIS	CD2-NE2	-5.01	1.32	1.37
28	U	173	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	764	LEU	C-N	5.01	1.40	1.34
33	Z	898	HIS	CD2-NE2	-5.01	1.32	1.37
2	2	66	HIS	CD2-NE2	-5.01	1.32	1.37
2	2	109	HIS	CD2-NE2	-5.01	1.32	1.37
4	4	146	HIS	CD2-NE2	-5.01	1.32	1.37
12	E	188	HIS	CD2-NE2	-5.01	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	365	HIS	CD2-NE2	-5.01	1.32	1.37
19	L	179	THR	CA-C	-5.01	1.46	1.52
19	L	364	HIS	CD2-NE2	-5.01	1.32	1.37
22	O	326	HIS	CD2-NE2	-5.01	1.32	1.37
23	P	348	HIS	CD2-NE2	-5.01	1.32	1.37
27	T	94	HIS	CD2-NE2	-5.01	1.32	1.37
28	U	5	HIS	CD2-NE2	-5.01	1.32	1.37
24	Q	423	VAL	C-N	5.01	1.40	1.33
5	5	107	LYS	N-CA	-5.01	1.40	1.46
20	M	231	LEU	C-N	5.01	1.40	1.33
22	O	21	SER	CA-C	-5.01	1.45	1.52
24	Q	236	PHE	CA-C	-5.01	1.46	1.52
29	V	217	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	871	HIS	CD2-NE2	-5.01	1.32	1.37
28	U	79	MET	CA-C	5.00	1.59	1.52
5	5	66	HIS	CD2-NE2	-5.00	1.32	1.37
7	7	111	VAL	CA-C	-5.00	1.46	1.52
8	A	193	HIS	CD2-NE2	-5.00	1.32	1.37
17	J	376	HIS	CD2-NE2	-5.00	1.32	1.37
21	N	604	ARG	C-N	5.00	1.40	1.33
21	N	747	HIS	CD2-NE2	-5.00	1.32	1.37
24	Q	186	HIS	CD2-NE2	-5.00	1.32	1.37
33	Z	410	THR	N-CA	-5.00	1.39	1.45
8	A	196	GLU	CA-C	-5.00	1.46	1.52
12	E	99	HIS	CD2-NE2	-5.00	1.32	1.37
21	N	613	HIS	CD2-NE2	-5.00	1.32	1.37
21	N	736	PHE	CA-C	5.00	1.59	1.52
22	O	24	PRO	N-CD	5.00	1.54	1.47
25	R	325	HIS	CD2-NE2	-5.00	1.32	1.37
26	S	261	HIS	CD2-NE2	-5.00	1.32	1.37
31	X	124	LYS	CA-C	-5.00	1.46	1.52

All (4305) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	W	154	LEU	O-C-N	41.35	177.59	122.59
18	K	242	PHE	CA-C-N	-37.37	54.71	121.97
18	K	242	PHE	C-N-CA	-37.37	54.71	121.97
30	W	154	LEU	CA-C-N	-36.10	71.90	120.28
30	W	154	LEU	C-N-CA	-36.10	71.90	120.28
18	K	242	PHE	O-C-N	35.95	166.48	122.26
20	M	58	MET	O-C-N	-20.33	89.00	121.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	279	LEU	O-C-N	19.05	147.96	122.43
30	W	153	LEU	O-C-N	-18.17	98.42	122.59
18	K	54	LEU	CA-C-N	14.34	139.50	120.28
18	K	54	LEU	C-N-CA	14.34	139.50	120.28
15	H	250	GLY	CA-C-N	13.37	129.28	119.66
15	H	250	GLY	C-N-CA	13.37	129.28	119.66
29	V	290	ASN	O-C-N	-13.27	108.40	122.07
15	H	188	PRO	N-CA-C	13.18	126.78	110.70
20	M	61	LYS	N-CA-C	13.02	125.47	111.28
33	Z	776	VAL	CA-C-O	-12.57	108.17	118.85
4	4	38	SER	N-CA-C	-12.30	97.12	108.07
27	T	47	GLN	N-CA-C	-12.22	100.69	114.62
30	W	11	ASP	CA-C-N	12.11	144.67	121.54
30	W	11	ASP	C-N-CA	12.11	144.67	121.54
28	U	71	ASN	CA-CB-CG	12.06	124.66	112.60
14	G	8	ASP	N-CA-C	-12.03	99.28	114.56
20	M	257	GLY	O-C-N	-11.88	107.25	122.70
15	H	279	LEU	CA-C-N	-11.82	100.70	121.97
15	H	279	LEU	C-N-CA	-11.82	100.70	121.97
23	P	46	THR	N-CA-C	11.68	123.57	111.07
28	U	229	LEU	CA-C-N	11.58	143.65	121.54
28	U	229	LEU	C-N-CA	11.58	143.65	121.54
20	M	132	VAL	N-CA-C	-11.46	101.28	112.17
18	K	214	PRO	N-CA-C	11.35	124.55	110.70
30	W	11	ASP	O-C-N	-11.18	107.72	122.59
29	V	282	GLU	O-C-N	11.17	133.96	122.12
20	M	251	LEU	CA-C-N	-11.13	101.94	121.97
20	M	251	LEU	C-N-CA	-11.13	101.94	121.97
19	L	257	GLY	O-C-N	-11.08	108.40	122.25
12	E	177	GLU	CA-C-N	11.07	132.01	119.94
12	E	177	GLU	C-N-CA	11.07	132.01	119.94
8	A	87	ILE	O-C-N	-10.95	112.30	120.07
33	Z	434	GLN	CA-C-N	10.91	134.91	120.28
33	Z	434	GLN	C-N-CA	10.91	134.91	120.28
33	Z	366	LYS	N-CA-C	10.79	125.45	110.35
9	B	27	ALA	CA-C-N	10.78	135.22	120.46
9	B	27	ALA	C-N-CA	10.78	135.22	120.46
25	R	184	GLN	N-CA-C	-10.64	100.15	113.55
19	L	420	ARG	N-CA-C	10.61	122.84	111.28
29	V	283	THR	CA-C-N	10.57	138.66	120.58
29	V	283	THR	C-N-CA	10.57	138.66	120.58
16	I	285	ASP	N-CA-C	-10.53	102.61	114.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	422	VAL	N-CA-C	10.52	121.35	110.62
21	N	550	GLY	CA-C-N	10.49	131.63	119.98
21	N	550	GLY	C-N-CA	10.49	131.63	119.98
18	K	49	PHE	CA-C-N	10.48	134.33	120.28
18	K	49	PHE	C-N-CA	10.48	134.33	120.28
28	U	83	ILE	N-CA-C	-10.44	101.75	111.67
26	S	351	ALA	CA-C-N	10.42	133.90	120.56
26	S	351	ALA	C-N-CA	10.42	133.90	120.56
24	Q	377	LEU	CA-C-O	-10.39	109.53	120.55
18	K	48	TYR	CA-C-N	10.32	134.12	120.28
18	K	48	TYR	C-N-CA	10.32	134.12	120.28
15	H	251	PRO	CA-C-N	10.32	130.27	119.85
15	H	251	PRO	C-N-CA	10.32	130.27	119.85
21	N	889	ARG	NE-CZ-NH1	10.30	131.80	121.50
23	P	402	PHE	N-CA-C	-10.27	99.54	113.30
10	C	62	SER	N-CA-C	-10.26	97.78	110.61
30	W	58	ASN	C-N-CD	-10.22	83.10	125.00
20	M	313	ASP	CA-C-N	10.18	132.86	120.14
20	M	313	ASP	C-N-CA	10.18	132.86	120.14
2	2	37	ILE	N-CA-C	-10.16	103.07	111.81
33	Z	360	SER	CA-C-N	10.05	133.75	120.28
33	Z	360	SER	C-N-CA	10.05	133.75	120.28
33	Z	400	ILE	N-CA-C	-10.04	101.10	110.53
23	P	397	ALA	N-CA-C	-10.00	101.21	113.41
25	R	213	TYR	CA-C-N	10.00	134.49	120.29
25	R	213	TYR	C-N-CA	10.00	134.49	120.29
20	M	186	LEU	N-CA-C	-9.94	101.39	112.72
16	I	259	ASP	N-CA-C	9.91	121.84	111.14
21	N	133	LEU	CA-C-N	9.89	133.30	120.44
21	N	133	LEU	C-N-CA	9.89	133.30	120.44
21	N	191	THR	CA-C-N	9.87	133.27	120.44
21	N	191	THR	C-N-CA	9.87	133.27	120.44
20	M	205	ASP	CA-C-N	9.85	133.83	120.44
20	M	205	ASP	C-N-CA	9.85	133.83	120.44
27	T	148	LEU	CA-C-N	9.84	133.46	120.28
27	T	148	LEU	C-N-CA	9.84	133.46	120.28
21	N	762	ARG	CD-NE-CZ	-9.83	110.64	124.40
19	L	277	ILE	CA-C-O	-9.81	109.89	120.59
17	J	165	GLU	N-CA-C	9.80	122.04	111.36
28	U	164	GLU	CA-C-N	9.79	133.79	120.38
28	U	164	GLU	C-N-CA	9.79	133.79	120.38
33	Z	787	ASP	CA-C-N	9.76	130.37	119.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	787	ASP	C-N-CA	9.76	130.37	119.93
21	N	580	ASN	CA-C-N	9.75	134.13	120.29
21	N	580	ASN	C-N-CA	9.75	134.13	120.29
19	L	315	PHE	N-CA-C	-9.74	101.40	113.38
24	Q	229	ASP	N-CA-C	-9.71	99.09	112.30
26	S	340	LYS	CA-C-O	-9.70	110.27	120.55
31	X	68	LEU	CA-C-O	-9.70	110.08	120.46
20	M	147	GLY	O-C-N	9.69	129.45	123.35
7	7	114	ASN	N-CA-C	-9.62	102.34	114.56
26	S	307	LEU	CA-C-N	9.60	132.42	120.22
26	S	307	LEU	C-N-CA	9.60	132.42	120.22
22	O	345	ASN	CA-C-N	9.60	139.88	121.54
22	O	345	ASN	C-N-CA	9.60	139.88	121.54
21	N	95	SER	N-CA-C	-9.59	94.86	109.14
18	K	177	LEU	CA-C-N	9.59	135.20	120.82
18	K	177	LEU	C-N-CA	9.59	135.20	120.82
4	4	69	ARG	N-CA-C	9.55	121.69	111.28
4	4	135	SER	CA-C-N	9.52	132.04	120.14
4	4	135	SER	C-N-CA	9.52	132.04	120.14
24	Q	368	LEU	CA-C-N	9.51	134.79	120.82
24	Q	368	LEU	C-N-CA	9.51	134.79	120.82
9	B	100	ILE	N-CA-C	-9.49	103.39	111.56
21	N	781	ALA	CA-C-N	9.48	138.67	122.37
21	N	781	ALA	C-N-CA	9.48	138.67	122.37
23	P	377	GLU	CA-C-N	9.44	133.28	120.44
23	P	377	GLU	C-N-CA	9.44	133.28	120.44
20	M	191	GLU	N-CA-C	9.41	121.53	111.28
25	R	263	ARG	N-CA-C	-9.40	101.94	113.50
21	N	617	VAL	CA-C-N	9.38	133.79	120.28
21	N	617	VAL	C-N-CA	9.38	133.79	120.28
4	4	172	PRO	N-CA-C	-9.35	102.71	114.68
17	J	306	ARG	CA-C-N	9.33	129.90	119.92
17	J	306	ARG	C-N-CA	9.33	129.90	119.92
29	V	47	MET	CA-C-N	9.32	139.34	121.54
29	V	47	MET	C-N-CA	9.32	139.34	121.54
20	M	129	LEU	CA-C-O	-9.31	111.42	120.64
26	S	474	GLU	N-CA-C	9.31	121.42	111.28
19	L	296	SER	N-CA-C	-9.30	104.02	114.62
25	R	371	PHE	CA-C-N	9.30	126.10	120.24
25	R	371	PHE	C-N-CA	9.30	126.10	120.24
23	P	90	LYS	N-CA-C	9.29	123.88	112.54
21	N	647	ASP	O-C-N	-9.29	113.76	121.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	447	VAL	CA-C-N	9.27	132.49	120.44
33	Z	447	VAL	C-N-CA	9.27	132.49	120.44
19	L	189	GLN	CA-C-N	9.27	132.24	120.56
19	L	189	GLN	C-N-CA	9.27	132.24	120.56
5	5	181	THR	CA-C-N	9.26	132.69	120.28
5	5	181	THR	C-N-CA	9.26	132.69	120.28
2	2	189	ASN	CA-C-N	9.24	132.67	120.28
2	2	189	ASN	C-N-CA	9.24	132.67	120.28
15	H	377	PHE	N-CA-C	-9.23	99.94	112.03
28	U	230	GLN	N-CA-C	9.23	130.46	110.80
15	H	187	LEU	C-N-CD	-9.22	87.18	125.00
23	P	309	MET	CA-C-N	9.21	132.62	120.28
23	P	309	MET	C-N-CA	9.21	132.62	120.28
24	Q	180	LEU	CA-C-N	9.20	132.60	120.28
24	Q	180	LEU	C-N-CA	9.20	132.60	120.28
25	R	288	SER	N-CA-C	-9.20	98.66	113.19
20	M	370	THR	N-CA-C	-9.19	95.19	108.60
30	W	111	VAL	O-C-N	-9.19	112.75	122.95
21	N	399	PHE	N-CA-C	-9.16	101.38	111.36
10	C	245	THR	N-CA-C	-9.15	100.62	114.16
33	Z	108	ASP	CA-C-O	-9.15	112.09	120.50
5	5	78	ALA	CA-C-N	9.14	132.32	120.44
5	5	78	ALA	C-N-CA	9.14	132.32	120.44
33	Z	371	SER	N-CA-C	-9.13	95.35	108.96
33	Z	595	MET	CA-C-O	-9.13	110.88	120.55
21	N	496	GLU	CA-C-O	-9.11	111.25	120.82
26	S	267	SER	CA-C-N	9.08	132.45	120.28
26	S	267	SER	C-N-CA	9.08	132.45	120.28
24	Q	74	LEU	CA-C-N	9.06	132.43	120.28
24	Q	74	LEU	C-N-CA	9.06	132.43	120.28
22	O	377	VAL	CA-C-N	9.06	132.43	120.28
22	O	377	VAL	C-N-CA	9.06	132.43	120.28
18	K	143	SER	CA-C-O	-9.05	111.37	120.70
33	Z	133	ASP	CA-C-N	9.05	138.83	121.54
33	Z	133	ASP	C-N-CA	9.05	138.83	121.54
18	K	340	PHE	O-C-N	-9.04	113.91	121.23
23	P	173	MET	CA-C-N	9.04	132.39	120.28
23	P	173	MET	C-N-CA	9.04	132.39	120.28
1	1	124	TYR	N-CA-C	-9.03	94.97	108.79
3	3	21	GLY	O-C-N	9.03	130.90	123.95
16	I	394	ALA	CA-C-N	9.03	132.18	120.44
16	I	394	ALA	C-N-CA	9.03	132.18	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	3	99	VAL	N-CA-C	-9.02	95.92	108.27
18	K	227	ALA	CA-C-N	8.99	133.06	120.29
18	K	227	ALA	C-N-CA	8.99	133.06	120.29
33	Z	92	LEU	O-C-N	8.97	132.71	122.22
18	K	355	THR	CA-C-O	-8.96	111.47	120.70
16	I	85	PHE	CA-C-N	8.93	132.25	120.28
16	I	85	PHE	C-N-CA	8.93	132.25	120.28
33	Z	376	SER	CA-C-N	8.93	132.25	120.28
33	Z	376	SER	C-N-CA	8.93	132.25	120.28
12	E	232	ASP	CA-C-N	8.93	132.61	120.38
12	E	232	ASP	C-N-CA	8.93	132.61	120.38
30	W	191	ILE	CA-C-N	8.92	138.57	121.54
30	W	191	ILE	C-N-CA	8.92	138.57	121.54
18	K	338	ILE	CA-C-O	8.90	129.92	120.48
13	F	107	ARG	O-C-N	8.90	131.70	122.09
28	U	38	LEU	N-CA-C	8.90	122.67	109.24
33	Z	591	ILE	O-C-N	-8.88	114.42	123.03
21	N	217	MET	CA-C-O	-8.87	111.03	120.70
5	5	197	PHE	CA-C-N	8.86	132.16	120.28
5	5	197	PHE	C-N-CA	8.86	132.16	120.28
10	C	210	ARG	N-CA-C	-8.86	99.81	113.02
18	K	242	PHE	N-CA-C	-8.85	101.80	112.59
20	M	417	GLU	CA-C-N	8.85	129.80	119.98
20	M	417	GLU	C-N-CA	8.85	129.80	119.98
22	O	176	SER	CA-C-N	8.85	132.13	120.28
22	O	176	SER	C-N-CA	8.85	132.13	120.28
21	N	35	LEU	CA-C-N	8.84	133.28	120.38
21	N	35	LEU	C-N-CA	8.84	133.28	120.38
19	L	82	ARG	CA-C-N	8.83	132.83	120.29
19	L	82	ARG	C-N-CA	8.83	132.83	120.29
13	F	40	SER	CA-C-O	-8.83	113.41	119.68
16	I	254	GLN	N-CA-C	8.81	124.27	113.17
33	Z	218	GLU	CA-C-N	8.81	132.80	120.29
33	Z	218	GLU	C-N-CA	8.81	132.80	120.29
19	L	348	GLU	CA-C-N	8.80	132.18	123.02
19	L	348	GLU	C-N-CA	8.80	132.18	123.02
16	I	93	LYS	CA-C-N	8.80	132.26	120.65
16	I	93	LYS	C-N-CA	8.80	132.26	120.65
17	J	234	PHE	N-CA-C	8.78	120.85	111.28
2	2	12	VAL	N-CA-C	-8.78	95.87	108.42
11	D	115	GLY	N-CA-C	8.78	124.74	113.24
13	F	64	ILE	N-CA-C	-8.76	94.81	107.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	248	SER	CA-C-N	8.75	132.85	120.42
25	R	248	SER	C-N-CA	8.75	132.85	120.42
26	S	372	LEU	CA-C-N	8.75	131.82	120.44
26	S	372	LEU	C-N-CA	8.75	131.82	120.44
29	V	78	VAL	CA-C-N	8.73	138.10	122.64
29	V	78	VAL	C-N-CA	8.73	138.10	122.64
16	I	147	VAL	N-CA-C	-8.72	94.92	108.44
20	M	84	GLU	N-CA-C	-8.71	95.57	109.59
27	T	137	GLU	N-CA-C	8.70	120.85	111.36
6	6	22	THR	N-CA-C	-8.70	93.82	108.26
31	X	129	LEU	N-CA-C	8.70	120.38	111.07
18	K	235	ILE	N-CA-C	-8.69	95.06	107.75
33	Z	273	LEU	CA-C-N	8.69	131.74	120.44
33	Z	273	LEU	C-N-CA	8.69	131.74	120.44
2	2	103	VAL	N-CA-C	-8.69	95.52	108.46
16	I	164	ALA	CA-C-N	8.69	132.46	120.65
16	I	164	ALA	C-N-CA	8.69	132.46	120.65
10	C	93	ILE	CA-C-N	8.68	131.91	120.28
10	C	93	ILE	C-N-CA	8.68	131.91	120.28
25	R	341	LEU	CA-C-N	8.67	132.26	120.38
25	R	341	LEU	C-N-CA	8.67	132.26	120.38
4	4	82	PHE	CA-C-N	8.67	132.33	120.46
4	4	82	PHE	C-N-CA	8.67	132.33	120.46
20	M	139	LYS	N-CA-C	-8.66	101.69	113.30
17	J	168	VAL	CA-C-N	8.66	132.59	120.29
17	J	168	VAL	C-N-CA	8.66	132.59	120.29
33	Z	453	LEU	CA-C-O	-8.65	111.79	120.70
15	H	390	ARG	CA-C-N	8.64	131.62	120.56
15	H	390	ARG	C-N-CA	8.64	131.62	120.56
21	N	589	ILE	O-C-N	8.64	130.25	121.87
18	K	348	GLU	N-CA-C	8.63	120.77	111.36
25	R	97	GLU	CA-C-N	8.63	132.20	120.38
25	R	97	GLU	C-N-CA	8.63	132.20	120.38
7	7	85	PHE	CA-C-N	8.60	131.80	120.28
7	7	85	PHE	C-N-CA	8.60	131.80	120.28
18	K	395	VAL	CA-C-O	-8.59	111.75	120.85
23	P	126	THR	CA-C-N	8.59	133.01	120.90
23	P	126	THR	C-N-CA	8.59	133.01	120.90
14	G	15	SER	CA-C-O	-8.57	111.36	120.70
33	Z	455	ILE	CA-C-N	8.57	129.49	119.98
33	Z	455	ILE	C-N-CA	8.57	129.49	119.98
14	G	110	ALA	CA-C-N	8.55	131.74	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	G	110	ALA	C-N-CA	8.55	131.74	120.28
14	G	246	ILE	N-CA-C	-8.55	96.26	108.58
17	J	51	LEU	CA-C-N	8.55	131.74	120.28
17	J	51	LEU	C-N-CA	8.55	131.74	120.28
5	5	107	LYS	N-CA-C	-8.55	101.85	112.88
25	R	139	GLU	CA-C-N	8.55	133.64	120.82
25	R	139	GLU	C-N-CA	8.55	133.64	120.82
3	3	-3	ILE	N-CA-C	-8.55	102.50	110.53
23	P	30	ASN	CA-CB-CG	-8.54	104.06	112.60
15	H	54	ASN	O-C-N	-8.54	113.07	122.12
19	L	186	LEU	CA-C-N	8.53	132.07	120.38
19	L	186	LEU	C-N-CA	8.53	132.07	120.38
30	W	114	VAL	CA-C-N	8.52	131.69	120.28
30	W	114	VAL	C-N-CA	8.52	131.69	120.28
19	L	230	LEU	CA-C-O	-8.51	111.89	120.82
2	2	148	LYS	CA-C-O	-8.50	111.94	120.70
15	H	221	LEU	CA-C-N	8.49	131.65	120.28
15	H	221	LEU	C-N-CA	8.49	131.65	120.28
20	M	310	ASN	O-C-N	8.48	131.11	122.12
25	R	38	VAL	N-CA-C	-8.48	104.90	113.47
29	V	260	GLU	CA-C-N	8.47	131.98	120.54
29	V	260	GLU	C-N-CA	8.47	131.98	120.54
6	6	77	ILE	CA-C-N	8.46	132.30	120.29
6	6	77	ILE	C-N-CA	8.46	132.30	120.29
6	6	110	LYS	CA-C-N	8.44	128.12	120.10
6	6	110	LYS	C-N-CA	8.44	128.12	120.10
19	L	223	PRO	N-CA-C	8.44	121.00	110.70
33	Z	849	ARG	CA-C-N	8.44	131.94	120.38
33	Z	849	ARG	C-N-CA	8.44	131.94	120.38
11	D	235	GLN	N-CA-C	8.44	120.47	111.28
22	O	101	ASP	N-CA-C	8.44	120.10	111.07
19	L	167	VAL	N-CA-C	-8.43	105.11	113.20
2	2	175	VAL	N-CA-C	-8.43	95.12	108.86
27	T	167	GLY	N-CA-C	8.43	123.33	112.54
1	1	57	ASP	CA-C-N	8.42	132.38	120.42
1	1	57	ASP	C-N-CA	8.42	132.38	120.42
5	5	157	GLY	CA-C-N	8.42	131.56	120.28
5	5	157	GLY	C-N-CA	8.42	131.56	120.28
21	N	92	ASP	N-CA-C	-8.41	101.47	112.41
18	K	349	ARG	CA-C-N	8.41	131.55	120.28
18	K	349	ARG	C-N-CA	8.41	131.55	120.28
4	4	13	ILE	N-CA-C	-8.40	96.40	108.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	6	54	ALA	N-CA-C	8.39	120.04	111.07
16	I	350	PHE	CA-C-N	8.38	134.49	122.09
16	I	350	PHE	C-N-CA	8.38	134.49	122.09
33	Z	486	SER	CA-C-N	8.37	132.01	120.63
33	Z	486	SER	C-N-CA	8.37	132.01	120.63
26	S	399	TYR	CA-C-N	8.36	132.31	120.28
26	S	399	TYR	C-N-CA	8.36	132.31	120.28
9	B	214	ILE	N-CA-C	-8.35	94.00	107.28
26	S	357	LEU	CA-C-N	8.35	131.46	120.28
26	S	357	LEU	C-N-CA	8.35	131.46	120.28
8	A	246	VAL	CA-C-O	-8.34	112.27	120.95
8	A	82	VAL	N-CA-C	-8.33	96.50	108.17
18	K	360	MET	CA-C-O	-8.32	111.86	121.68
29	V	50	MET	CA-C-N	-8.32	108.41	120.97
29	V	50	MET	C-N-CA	-8.32	108.41	120.97
9	B	69	PRO	N-CA-C	8.30	124.64	113.84
8	A	56	GLN	O-C-N	-8.29	113.34	122.79
2	2	38	SER	N-CA-C	-8.27	98.63	108.14
24	Q	305	ALA	CA-C-N	8.27	131.19	120.44
24	Q	305	ALA	C-N-CA	8.27	131.19	120.44
15	H	280	VAL	O-C-N	-8.27	112.23	122.57
16	I	80	GLU	CA-C-O	-8.24	111.81	120.55
8	A	63	LEU	N-CA-C	-8.24	101.32	112.94
18	K	230	THR	N-CA-C	-8.23	103.02	113.23
26	S	318	CYS	CA-C-N	8.23	131.14	120.44
26	S	318	CYS	C-N-CA	8.23	131.14	120.44
21	N	588	VAL	CA-C-N	8.23	131.74	120.46
21	N	588	VAL	C-N-CA	8.23	131.74	120.46
4	4	152	THR	CA-C-N	8.23	131.31	120.28
4	4	152	THR	C-N-CA	8.23	131.31	120.28
16	I	249	GLY	CA-C-N	8.23	131.30	120.28
16	I	249	GLY	C-N-CA	8.23	131.30	120.28
8	A	242	GLU	CA-CB-CG	8.22	130.54	114.10
33	Z	968	ASP	N-CA-C	-8.22	96.78	109.52
16	I	199	GLU	CA-C-N	8.22	130.36	120.09
16	I	199	GLU	C-N-CA	8.22	130.36	120.09
21	N	731	VAL	O-C-N	8.20	129.93	121.89
24	Q	374	GLU	CA-C-N	8.20	129.02	120.00
24	Q	374	GLU	C-N-CA	8.20	129.02	120.00
18	K	318	THR	N-CA-C	-8.19	96.12	108.99
20	M	294	GLU	N-CA-C	-8.19	102.74	114.12
23	P	439	MET	CA-C-N	8.17	131.89	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	439	MET	C-N-CA	8.17	131.89	120.29
27	T	265	ASP	CA-C-N	8.16	131.04	120.44
27	T	265	ASP	C-N-CA	8.16	131.04	120.44
16	I	167	MET	N-CA-C	-8.15	103.23	113.02
25	R	372	ILE	CA-C-O	-8.15	111.92	118.85
3	3	90	ARG	N-CA-C	-8.15	102.78	112.89
10	C	38	ILE	N-CA-C	-8.14	96.39	108.12
25	R	315	VAL	N-CA-C	-8.14	105.19	111.62
8	A	151	GLY	CA-C-N	8.13	128.63	119.93
8	A	151	GLY	C-N-CA	8.13	128.63	119.93
25	R	187	VAL	N-CA-C	-8.13	102.51	110.72
8	A	28	VAL	N-CA-C	8.12	118.93	110.72
6	6	192	GLY	O-C-N	8.12	131.11	123.56
8	A	72	ILE	N-CA-C	-8.12	96.80	108.17
17	J	166	LEU	CA-C-N	8.12	127.42	118.97
17	J	166	LEU	C-N-CA	8.12	127.42	118.97
21	N	9	LEU	CA-C-N	8.12	131.97	120.28
21	N	9	LEU	C-N-CA	8.12	131.97	120.28
17	J	359	LYS	CA-C-N	8.11	128.98	119.98
17	J	359	LYS	C-N-CA	8.11	128.98	119.98
31	X	83	SER	N-CA-C	-8.11	95.04	108.34
21	N	256	GLN	CA-C-N	8.11	131.57	120.46
21	N	256	GLN	C-N-CA	8.11	131.57	120.46
8	A	87	ILE	CA-C-O	-8.09	111.97	118.85
22	O	206	THR	N-CA-C	-8.09	94.92	108.75
2	2	59	ILE	CA-C-N	8.08	128.89	120.00
2	2	59	ILE	C-N-CA	8.08	128.89	120.00
16	I	274	ASN	CA-C-N	8.08	132.97	120.68
16	I	274	ASN	C-N-CA	8.08	132.97	120.68
22	O	319	LEU	CA-C-N	8.08	127.97	120.21
22	O	319	LEU	C-N-CA	8.08	127.97	120.21
29	V	66	VAL	O-C-N	8.08	132.67	122.57
33	Z	776	VAL	O-C-N	8.08	125.81	120.07
8	A	199	TRP	CA-C-N	8.07	130.93	120.44
8	A	199	TRP	C-N-CA	8.07	130.93	120.44
7	7	174	ARG	CA-C-N	8.07	131.51	120.46
7	7	174	ARG	C-N-CA	8.07	131.51	120.46
17	J	391	ASN	N-CA-C	8.07	120.07	111.28
33	Z	134	SER	CA-C-O	-8.07	108.97	120.51
30	W	109	ARG	NH1-CZ-NH2	-8.05	108.83	119.30
4	4	149	PRO	CA-C-O	-8.05	112.42	121.43
25	R	46	ALA	N-CA-C	8.05	120.77	111.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	703	GLN	CA-C-N	8.04	130.26	120.13
21	N	703	GLN	C-N-CA	8.04	130.26	120.13
2	2	63	ILE	N-CA-C	-8.04	102.24	111.00
29	V	283	THR	O-C-N	-8.04	112.82	122.22
16	I	351	GLU	CA-C-N	8.03	131.55	120.39
16	I	351	GLU	C-N-CA	8.03	131.55	120.39
21	N	555	ILE	N-CA-C	-8.03	102.25	111.00
8	A	174	LYS	CA-C-N	8.02	130.87	120.44
8	A	174	LYS	C-N-CA	8.02	130.87	120.44
10	C	115	LEU	CA-C-N	8.02	131.68	120.29
10	C	115	LEU	C-N-CA	8.02	131.68	120.29
9	B	85	LEU	CA-C-N	8.02	131.44	120.46
9	B	85	LEU	C-N-CA	8.02	131.44	120.46
19	L	105	ILE	O-C-N	8.02	131.43	122.93
26	S	178	LEU	N-CA-C	-8.02	103.71	113.97
9	B	9	LEU	N-CA-C	-8.01	103.08	113.17
15	H	163	VAL	O-C-N	-8.01	112.56	122.57
23	P	307	GLU	N-CA-C	-8.01	101.68	114.09
26	S	204	ASP	CA-C-N	8.00	131.65	120.29
26	S	204	ASP	C-N-CA	8.00	131.65	120.29
23	P	338	TRP	CA-C-N	8.00	130.84	120.44
23	P	338	TRP	C-N-CA	8.00	130.84	120.44
23	P	258	LYS	O-C-N	-7.99	112.14	121.32
29	V	291	ASN	O-C-N	7.99	130.59	122.12
7	7	160	THR	N-CA-C	-7.98	96.39	109.40
2	2	57	GLN	CA-C-N	7.98	130.97	120.28
2	2	57	GLN	C-N-CA	7.98	130.97	120.28
19	L	320	GLN	N-CA-C	-7.98	102.83	114.39
17	J	172	GLU	CA-C-N	7.97	130.80	120.44
17	J	172	GLU	C-N-CA	7.97	130.80	120.44
5	5	57	THR	CA-C-N	7.97	131.28	120.44
5	5	57	THR	C-N-CA	7.97	131.28	120.44
21	N	280	GLN	N-CA-C	-7.96	103.70	113.50
21	N	421	ASP	CA-C-N	7.96	130.78	120.44
21	N	421	ASP	C-N-CA	7.96	130.78	120.44
1	1	74	SER	CA-C-N	7.94	130.92	120.28
1	1	74	SER	C-N-CA	7.94	130.92	120.28
21	N	27	SER	CA-C-N	7.94	131.34	120.46
21	N	27	SER	C-N-CA	7.94	131.34	120.46
27	T	112	ASN	CA-C-N	7.94	130.92	120.28
27	T	112	ASN	C-N-CA	7.94	130.92	120.28
7	7	43	VAL	CA-C-N	7.94	129.74	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	7	43	VAL	C-N-CA	7.94	129.74	122.20
20	M	178	GLU	CA-C-O	-7.94	112.60	121.89
6	6	77	ILE	N-CA-C	7.94	118.72	110.62
22	O	109	LEU	CB-CA-C	-7.93	107.42	116.54
26	S	305	LYS	CA-C-N	7.93	133.62	120.70
26	S	305	LYS	C-N-CA	7.93	133.62	120.70
27	T	76	ASP	CA-C-O	7.93	128.95	120.55
16	I	193	GLU	CA-C-N	7.92	131.67	120.42
16	I	193	GLU	C-N-CA	7.92	131.67	120.42
20	M	414	ASP	CA-C-N	7.92	131.54	120.29
20	M	414	ASP	C-N-CA	7.92	131.54	120.29
17	J	326	GLU	CA-C-N	7.92	131.66	120.42
17	J	326	GLU	C-N-CA	7.92	131.66	120.42
14	G	169	GLN	CA-C-N	7.92	130.89	120.28
14	G	169	GLN	C-N-CA	7.92	130.89	120.28
25	R	289	ILE	N-CA-C	-7.91	103.19	111.58
3	3	87	TYR	CA-C-N	7.91	131.67	120.28
3	3	87	TYR	C-N-CA	7.91	131.67	120.28
19	L	390	ASP	CA-C-N	7.90	131.64	120.42
19	L	390	ASP	C-N-CA	7.90	131.64	120.42
15	H	68	GLY	CA-C-O	-7.90	112.29	120.66
20	M	69	ILE	CA-C-N	7.90	130.86	120.28
20	M	69	ILE	C-N-CA	7.90	130.86	120.28
25	R	79	LEU	N-CA-C	-7.88	105.64	114.62
24	Q	331	THR	N-CA-C	7.88	119.95	111.36
7	7	76	GLU	CA-C-O	-7.87	111.50	120.24
21	N	683	LEU	CA-C-N	7.87	130.83	120.28
21	N	683	LEU	C-N-CA	7.87	130.83	120.28
24	Q	227	CYS	N-CA-C	-7.87	104.20	113.88
26	S	168	LEU	O-C-N	7.87	130.46	122.12
23	P	126	THR	N-CA-C	-7.86	101.73	112.03
33	Z	438	LYS	N-CA-C	7.86	120.94	111.82
33	Z	839	SER	N-CA-C	-7.86	103.26	112.92
4	4	70	GLU	CA-C-N	7.85	133.30	122.07
4	4	70	GLU	C-N-CA	7.85	133.30	122.07
15	H	67	ALA	CA-C-N	7.85	128.64	120.00
15	H	67	ALA	C-N-CA	7.85	128.64	120.00
15	H	251	PRO	CA-C-O	-7.85	114.53	120.73
18	K	64	GLN	CA-C-N	7.85	130.65	120.44
18	K	64	GLN	C-N-CA	7.85	130.65	120.44
28	U	88	LYS	CA-C-N	7.84	132.72	121.50
28	U	88	LYS	C-N-CA	7.84	132.72	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	28	PRO	N-CA-C	7.84	120.26	110.70
27	T	119	THR	N-CA-C	-7.84	102.81	111.36
14	G	223	THR	N-CA-C	-7.83	105.69	114.62
18	K	410	ALA	CA-C-N	7.83	130.63	120.44
18	K	410	ALA	C-N-CA	7.83	130.63	120.44
1	1	113	ILE	CA-C-N	7.83	129.63	119.84
1	1	113	ILE	C-N-CA	7.83	129.63	119.84
29	V	66	VAL	CA-C-N	-7.83	107.53	122.09
29	V	66	VAL	C-N-CA	-7.83	107.53	122.09
33	Z	603	VAL	N-CA-C	7.83	118.60	110.62
17	J	364	GLU	CA-C-N	7.80	130.73	120.28
17	J	364	GLU	C-N-CA	7.80	130.73	120.28
24	Q	298	ALA	O-C-N	-7.80	113.85	122.12
9	B	140	ASP	N-CA-C	-7.80	96.44	108.76
33	Z	846	PHE	O-C-N	7.79	130.38	122.12
31	X	126	ILE	CA-C-N	7.79	128.57	120.00
31	X	126	ILE	C-N-CA	7.79	128.57	120.00
15	H	172	MET	N-CA-C	7.79	127.38	110.80
14	G	216	SER	N-CA-C	-7.78	97.36	108.96
21	N	373	VAL	N-CA-C	-7.78	103.27	110.82
23	P	144	VAL	CA-C-N	7.78	130.71	120.28
23	P	144	VAL	C-N-CA	7.78	130.71	120.28
26	S	458	GLN	CA-C-N	7.78	130.70	120.28
26	S	458	GLN	C-N-CA	7.78	130.70	120.28
33	Z	523	ALA	CA-C-N	7.77	131.32	120.29
33	Z	523	ALA	C-N-CA	7.77	131.32	120.29
24	Q	281	ILE	CA-C-N	7.76	131.31	120.29
24	Q	281	ILE	C-N-CA	7.76	131.31	120.29
8	A	241	ILE	O-C-N	-7.76	113.84	121.83
18	K	263	GLU	N-CA-C	7.76	119.37	111.07
33	Z	822	THR	N-CA-C	-7.76	97.40	108.96
9	B	67	LEU	N-CA-C	-7.75	101.67	112.45
17	J	155	LYS	O-C-N	7.75	130.98	122.15
1	1	27	ALA	CA-C-O	7.75	128.76	120.55
25	R	378	ASN	CA-C-N	7.75	134.11	123.11
25	R	378	ASN	C-N-CA	7.75	134.11	123.11
23	P	395	ARG	CA-C-O	-7.74	111.21	118.33
15	H	426	ALA	N-CA-C	7.74	119.72	111.28
26	S	251	SER	CA-C-N	7.74	130.65	120.28
26	S	251	SER	C-N-CA	7.74	130.65	120.28
30	W	112	ALA	O-C-N	-7.74	113.81	123.17
15	H	164	SER	O-C-N	-7.73	112.50	121.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	544	GLU	CA-C-N	7.73	130.64	120.28
21	N	544	GLU	C-N-CA	7.73	130.64	120.28
12	E	224	LYS	N-CA-C	-7.72	103.92	112.72
25	R	86	ASP	N-CA-C	-7.72	101.69	113.89
27	T	59	LYS	N-CA-C	7.72	119.69	111.28
33	Z	442	VAL	CA-C-N	7.71	130.61	120.28
33	Z	442	VAL	C-N-CA	7.71	130.61	120.28
21	N	874	ILE	N-CA-C	-7.71	96.62	107.80
25	R	151	GLU	O-C-N	7.70	130.00	122.07
20	M	183	VAL	N-CA-C	-7.70	97.33	108.11
5	5	122	LEU	O-C-N	-7.70	113.88	123.27
26	S	334	HIS	CA-C-O	7.70	128.80	120.10
10	C	153	PRO	CA-C-N	7.69	131.21	120.29
10	C	153	PRO	C-N-CA	7.69	131.21	120.29
12	E	159	GLU	CA-C-N	7.69	128.34	120.04
12	E	159	GLU	C-N-CA	7.69	128.34	120.04
23	P	29	GLN	OE1-CD-NE2	-7.68	114.92	122.60
6	6	88	LEU	CA-C-O	7.68	128.88	120.82
15	H	203	LYS	CA-C-O	-7.68	109.64	120.16
33	Z	745	LEU	CA-C-N	7.68	130.98	120.46
33	Z	745	LEU	C-N-CA	7.68	130.98	120.46
13	F	22	VAL	CA-C-N	7.68	131.33	120.28
13	F	22	VAL	C-N-CA	7.68	131.33	120.28
3	3	74	GLU	CA-C-O	-7.67	112.92	120.97
15	H	285	GLY	O-C-N	-7.67	112.82	122.41
27	T	144	TYR	O-C-N	-7.67	113.65	120.48
16	I	209	GLU	N-CA-C	7.66	119.27	111.07
26	S	201	ILE	N-CA-C	-7.66	97.55	108.65
14	G	126	ASN	N-CA-C	-7.66	103.94	113.28
19	L	332	THR	N-CA-C	-7.65	102.50	113.21
23	P	373	GLU	O-C-N	7.65	131.17	122.22
5	5	26	VAL	CA-C-N	7.64	131.14	120.29
5	5	26	VAL	C-N-CA	7.64	131.14	120.29
9	B	160	LYS	N-CA-C	-7.64	104.86	114.56
21	N	398	ARG	CA-C-N	7.64	131.14	120.29
21	N	398	ARG	C-N-CA	7.64	131.14	120.29
16	I	399	ALA	CA-C-N	7.63	129.68	120.14
16	I	399	ALA	C-N-CA	7.63	129.68	120.14
14	G	117	GLN	CA-C-O	-7.63	111.20	119.97
5	5	81	LYS	CA-C-N	7.62	130.16	120.56
5	5	81	LYS	C-N-CA	7.62	130.16	120.56
15	H	426	ALA	CA-C-N	7.62	128.44	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	426	ALA	C-N-CA	7.62	128.44	119.98
26	S	157	GLU	CA-C-N	7.62	130.49	120.28
26	S	157	GLU	C-N-CA	7.62	130.49	120.28
33	Z	88	PRO	O-C-N	7.62	132.56	122.27
15	H	252	PRO	CA-C-O	-7.62	112.38	121.67
24	Q	117	VAL	CA-C-N	7.62	130.48	120.28
24	Q	117	VAL	C-N-CA	7.62	130.48	120.28
18	K	125	THR	N-CA-C	-7.61	103.06	112.88
24	Q	72	ASP	CA-C-N	7.61	131.10	120.29
24	Q	72	ASP	C-N-CA	7.61	131.10	120.29
26	S	352	VAL	CA-C-N	7.61	130.34	120.44
26	S	352	VAL	C-N-CA	7.61	130.34	120.44
18	K	346	ARG	CA-C-N	7.61	130.48	120.28
18	K	346	ARG	C-N-CA	7.61	130.48	120.28
23	P	112	LEU	CA-C-N	7.61	130.48	120.28
23	P	112	LEU	C-N-CA	7.61	130.48	120.28
21	N	109	TYR	CA-C-N	7.61	130.14	120.56
21	N	109	TYR	C-N-CA	7.61	130.14	120.56
33	Z	363	ASP	N-CA-C	7.59	119.46	111.03
3	3	75	PRO	CA-C-N	7.59	130.46	120.28
3	3	75	PRO	C-N-CA	7.59	130.46	120.28
31	X	76	VAL	CA-C-O	-7.59	114.80	119.51
15	H	234	ARG	CA-C-N	7.59	130.45	120.28
15	H	234	ARG	C-N-CA	7.59	130.45	120.28
21	N	96	GLN	CA-C-N	7.58	130.78	120.54
21	N	96	GLN	C-N-CA	7.58	130.78	120.54
27	T	177	PHE	CA-C-N	7.58	130.78	120.54
27	T	177	PHE	C-N-CA	7.58	130.78	120.54
33	Z	61	SER	N-CA-C	7.58	119.63	111.36
26	S	340	LYS	O-C-N	7.58	130.16	122.12
33	Z	397	ASP	CA-C-N	7.58	130.76	120.38
33	Z	397	ASP	C-N-CA	7.58	130.76	120.38
17	J	160	ILE	CA-C-N	7.57	130.28	120.44
17	J	160	ILE	C-N-CA	7.57	130.28	120.44
12	E	23	GLN	CA-C-O	-7.57	112.46	120.63
21	N	365	PHE	CA-C-N	7.56	130.27	120.44
21	N	365	PHE	C-N-CA	7.56	130.27	120.44
21	N	379	LEU	N-CA-C	-7.56	102.59	112.41
20	M	388	GLY	N-CA-C	7.55	122.05	112.83
28	U	69	ASP	O-C-N	-7.55	113.44	122.65
9	B	42	GLY	CA-C-O	7.55	128.59	120.97
16	I	80	GLU	N-CA-C	7.55	119.51	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	344	GLU	CA-C-N	7.54	130.39	120.28
24	Q	344	GLU	C-N-CA	7.54	130.39	120.28
16	I	194	ILE	CA-C-N	7.54	130.71	120.38
16	I	194	ILE	C-N-CA	7.54	130.71	120.38
15	H	275	ILE	CA-C-N	7.54	128.47	120.03
15	H	275	ILE	C-N-CA	7.54	128.47	120.03
29	V	280	LEU	N-CA-C	7.54	119.49	111.28
16	I	264	CYS	CA-C-N	7.53	130.69	120.44
16	I	264	CYS	C-N-CA	7.53	130.69	120.44
25	R	158	LEU	N-CA-C	-7.53	103.15	111.36
9	B	188	ALA	CA-C-N	7.53	131.11	120.42
9	B	188	ALA	C-N-CA	7.53	131.11	120.42
6	6	52	GLY	CA-C-N	7.52	130.22	120.44
6	6	52	GLY	C-N-CA	7.52	130.22	120.44
15	H	409	ARG	N-CA-C	7.52	120.36	111.71
20	M	54	GLU	O-C-N	-7.52	114.15	122.12
21	N	172	SER	CA-C-O	-7.51	112.58	120.55
32	Y	80	GLU	N-CA-C	7.51	119.10	111.07
20	M	412	HIS	CA-C-N	7.50	130.33	120.28
20	M	412	HIS	C-N-CA	7.50	130.33	120.28
33	Z	510	LEU	O-C-N	-7.50	113.66	120.71
17	J	170	HIS	O-C-N	-7.50	115.98	121.23
7	7	113	SER	N-CA-C	-7.49	103.70	112.92
18	K	65	GLU	CA-C-O	-7.49	112.95	120.82
22	O	203	THR	CB-CA-C	-7.49	106.88	115.79
2	2	157	ASP	CA-C-N	7.48	130.17	120.44
2	2	157	ASP	C-N-CA	7.48	130.17	120.44
15	H	335	GLU	CA-C-N	7.48	130.31	120.28
15	H	335	GLU	C-N-CA	7.48	130.31	120.28
7	7	211	TRP	CA-C-N	7.48	130.63	120.38
7	7	211	TRP	C-N-CA	7.48	130.63	120.38
29	V	100	ARG	N-CA-C	-7.48	104.66	114.31
25	R	351	LYS	N-CA-C	-7.46	103.08	111.14
12	E	66	LYS	N-CA-C	-7.46	102.42	112.94
21	N	250	ASP	N-CA-C	-7.46	96.00	108.75
33	Z	108	ASP	O-C-N	-7.46	116.94	121.71
13	F	55	GLU	N-CA-C	-7.46	102.09	112.45
21	N	26	GLU	CA-C-N	7.45	130.57	120.44
21	N	26	GLU	C-N-CA	7.45	130.57	120.44
27	T	18	GLY	CA-C-N	7.45	132.93	122.36
27	T	18	GLY	C-N-CA	7.45	132.93	122.36
26	S	277	SER	CA-C-N	7.44	130.25	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	S	277	SER	C-N-CA	7.44	130.25	120.28
28	U	262	GLN	CA-C-N	7.44	131.14	120.79
28	U	262	GLN	C-N-CA	7.44	131.14	120.79
20	M	398	ALA	CA-C-N	7.44	129.67	120.22
20	M	398	ALA	C-N-CA	7.44	129.67	120.22
12	E	86	ARG	N-CA-C	7.43	119.46	111.36
5	5	82	ILE	CA-C-N	7.43	130.10	120.44
5	5	82	ILE	C-N-CA	7.43	130.10	120.44
27	T	34	LEU	CA-C-N	7.43	130.64	120.46
27	T	34	LEU	C-N-CA	7.43	130.64	120.46
26	S	230	LYS	N-CA-C	7.43	119.02	111.07
28	U	301	ILE	O-C-N	7.42	129.07	121.87
14	G	81	ILE	CB-CA-C	-7.42	104.28	114.00
33	Z	134	SER	N-CA-C	-7.42	95.00	110.80
26	S	233	LEU	CA-C-N	7.42	130.62	120.46
26	S	233	LEU	C-N-CA	7.42	130.62	120.46
7	7	191	ILE	N-CA-C	-7.41	97.73	108.11
3	3	146	GLU	CA-C-O	-7.41	112.13	119.69
17	J	147	TYR	CA-C-O	-7.41	109.62	119.11
14	G	46	VAL	N-CA-C	-7.41	97.42	108.46
14	G	68	VAL	CA-C-O	-7.41	113.63	121.93
33	Z	573	LEU	N-CA-C	7.41	120.23	111.71
12	E	192	THR	CA-C-N	7.40	130.06	120.44
12	E	192	THR	C-N-CA	7.40	130.06	120.44
29	V	255	ILE	N-CA-C	-7.40	103.25	110.72
14	G	45	VAL	O-C-N	-7.40	114.57	123.00
29	V	279	HIS	ND1-CG-CD2	7.39	113.49	106.10
4	4	51	ASP	CA-C-N	7.39	131.06	120.79
4	4	51	ASP	C-N-CA	7.39	131.06	120.79
17	J	244	ILE	N-CA-C	-7.39	97.20	107.99
20	M	58	MET	CA-C-N	7.39	135.65	121.54
20	M	58	MET	C-N-CA	7.39	135.65	121.54
21	N	101	ILE	CA-C-O	-7.39	110.64	119.58
26	S	135	ASN	CA-C-N	7.39	130.04	120.44
26	S	135	ASN	C-N-CA	7.39	130.04	120.44
16	I	377	LEU	CA-C-N	7.38	130.17	120.28
16	I	377	LEU	C-N-CA	7.38	130.17	120.28
23	P	412	LEU	O-C-N	7.38	129.67	122.07
27	T	77	SER	CA-C-O	7.38	128.24	120.42
27	T	227	PRO	CA-C-O	-7.37	112.86	121.86
24	Q	415	LEU	CA-C-N	7.37	130.11	120.60
24	Q	415	LEU	C-N-CA	7.37	130.11	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	157	TYR	CA-C-N	7.37	130.16	120.28
27	T	157	TYR	C-N-CA	7.37	130.16	120.28
33	Z	53	VAL	N-CA-C	7.37	119.02	110.62
18	K	254	VAL	CA-C-N	7.37	130.02	120.44
18	K	254	VAL	C-N-CA	7.37	130.02	120.44
21	N	591	LEU	CA-C-N	7.37	129.35	120.14
21	N	591	LEU	C-N-CA	7.37	129.35	120.14
8	A	14	ARG	N-CA-C	-7.37	102.90	113.21
21	N	717	LEU	N-CA-C	-7.37	101.48	111.87
33	Z	623	ARG	CA-C-N	7.37	130.75	120.29
33	Z	623	ARG	C-N-CA	7.37	130.75	120.29
17	J	365	ALA	CA-C-N	7.36	128.15	119.98
17	J	365	ALA	C-N-CA	7.36	128.15	119.98
25	R	192	GLU	CA-C-N	7.36	130.37	120.65
25	R	192	GLU	C-N-CA	7.36	130.37	120.65
7	7	174	ARG	N-CA-C	-7.35	102.64	111.69
24	Q	89	ALA	CA-C-N	7.35	130.13	120.28
24	Q	89	ALA	C-N-CA	7.35	130.13	120.28
24	Q	301	ALA	CA-C-O	-7.35	112.63	120.42
21	N	398	ARG	N-CA-C	-7.35	104.46	113.50
19	L	214	PRO	O-C-N	-7.34	117.93	121.31
22	O	384	MET	CA-C-N	7.34	130.45	120.54
22	O	384	MET	C-N-CA	7.34	130.45	120.54
25	R	376	GLN	N-CA-C	-7.34	104.35	113.38
9	B	156	TYR	CA-C-O	-7.34	113.11	121.40
27	T	28	PRO	CA-C-N	7.34	127.35	119.28
27	T	28	PRO	C-N-CA	7.34	127.35	119.28
20	M	200	PRO	CA-C-N	7.33	130.41	120.44
20	M	200	PRO	C-N-CA	7.33	130.41	120.44
21	N	907	ASP	CA-CB-CG	-7.33	105.27	112.60
26	S	205	ASN	CA-C-N	7.33	130.41	120.44
26	S	205	ASN	C-N-CA	7.33	130.41	120.44
33	Z	543	THR	N-CA-C	7.33	118.91	111.07
21	N	872	THR	N-CA-C	-7.33	98.22	109.14
10	C	82	ALA	N-CA-C	7.33	119.27	111.28
26	S	181	ALA	CA-C-N	7.32	130.43	120.54
26	S	181	ALA	C-N-CA	7.32	130.43	120.54
18	K	250	GLY	CA-C-O	-7.32	111.05	121.52
18	K	58	TYR	N-CA-C	7.32	119.26	111.28
18	K	221	MET	CA-C-N	7.32	130.09	120.28
18	K	221	MET	C-N-CA	7.32	130.09	120.28
29	V	48	GLU	N-CA-C	7.32	126.38	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	60	LEU	CA-C-N	7.31	130.08	120.28
18	K	60	LEU	C-N-CA	7.31	130.08	120.28
6	6	195	ILE	N-CA-C	-7.31	97.88	108.11
9	B	202	GLY	O-C-N	7.31	132.20	122.70
24	Q	213	GLN	CA-C-N	7.31	129.94	120.44
24	Q	213	GLN	C-N-CA	7.31	129.94	120.44
18	K	253	MET	N-CA-C	7.30	119.32	111.36
26	S	343	LEU	O-C-N	7.30	126.98	120.48
15	H	231	SER	CA-C-N	7.30	126.93	119.19
15	H	231	SER	C-N-CA	7.30	126.93	119.19
20	M	319	ASP	N-CA-C	-7.29	95.09	107.99
33	Z	467	VAL	N-CA-C	7.29	117.71	108.82
9	B	120	GLU	O-C-N	7.28	129.84	122.12
3	3	72	ALA	CA-C-N	7.28	130.26	120.50
3	3	72	ALA	C-N-CA	7.28	130.26	120.50
14	G	113	ASP	CA-C-N	7.28	130.03	120.28
14	G	113	ASP	C-N-CA	7.28	130.03	120.28
6	6	188	GLN	N-CA-C	-7.27	104.66	113.97
3	3	151	PRO	N-CA-C	7.27	124.59	113.75
6	6	117	ASP	N-CA-C	-7.27	100.00	110.40
18	K	69	LYS	CA-C-N	7.27	130.61	120.29
18	K	69	LYS	C-N-CA	7.27	130.61	120.29
17	J	79	VAL	CA-C-N	7.26	136.47	121.94
17	J	79	VAL	C-N-CA	7.26	136.47	121.94
21	N	143	LYS	N-CA-C	7.26	119.83	111.11
29	V	117	TRP	CA-C-N	7.26	130.02	120.28
29	V	117	TRP	C-N-CA	7.26	130.02	120.28
18	K	67	TYR	N-CA-C	7.26	119.20	111.28
29	V	126	GLN	CA-C-N	7.26	130.32	120.38
29	V	126	GLN	C-N-CA	7.26	130.32	120.38
33	Z	815	MET	CA-C-N	7.25	129.21	120.14
33	Z	815	MET	C-N-CA	7.25	129.21	120.14
25	R	224	PHE	CA-C-N	7.24	129.99	120.28
25	R	224	PHE	C-N-CA	7.24	129.99	120.28
33	Z	541	ASP	CA-C-N	7.24	129.69	120.56
33	Z	541	ASP	C-N-CA	7.24	129.69	120.56
14	G	234	LEU	N-CA-C	7.24	119.17	111.28
33	Z	427	GLN	N-CA-C	7.24	119.65	110.24
30	W	80	GLN	N-CA-C	-7.24	97.10	108.90
5	5	109	GLY	CA-C-N	7.24	128.37	119.98
5	5	109	GLY	C-N-CA	7.24	128.37	119.98
19	L	197	ILE	CA-C-N	7.24	130.28	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	L	197	ILE	C-N-CA	7.24	130.28	120.44
30	W	33	VAL	O-C-N	7.24	129.28	121.83
20	M	251	LEU	O-C-N	7.23	130.92	122.17
26	S	327	ILE	CA-C-O	-7.23	115.03	119.51
18	K	148	ASP	CA-C-N	7.23	132.42	123.10
18	K	148	ASP	C-N-CA	7.23	132.42	123.10
24	Q	235	ALA	CA-C-N	7.23	129.84	120.44
24	Q	235	ALA	C-N-CA	7.23	129.84	120.44
4	4	24	ILE	O-C-N	7.22	129.96	121.80
5	5	14	VAL	N-CA-C	-7.22	98.00	108.11
33	Z	570	LEU	CA-C-N	7.22	127.81	119.94
33	Z	570	LEU	C-N-CA	7.22	127.81	119.94
3	3	165	ALA	CA-C-N	7.22	129.96	120.28
3	3	165	ALA	C-N-CA	7.22	129.96	120.28
18	K	193	VAL	CA-C-O	-7.22	113.20	120.85
25	R	120	LEU	CA-C-N	7.22	131.28	120.31
25	R	120	LEU	C-N-CA	7.22	131.28	120.31
24	Q	49	LYS	N-CA-C	-7.22	103.14	112.23
20	M	264	ARG	N-CA-C	7.21	119.14	111.28
33	Z	491	LEU	CA-C-N	7.21	127.95	119.94
33	Z	491	LEU	C-N-CA	7.21	127.95	119.94
7	7	47	GLY	CA-C-N	7.21	130.99	120.82
7	7	47	GLY	C-N-CA	7.21	130.99	120.82
19	L	176	GLY	N-CA-C	-7.21	100.61	111.14
32	Y	88	ASN	N-CA-C	-7.21	104.50	112.72
5	5	50	ALA	CA-C-N	7.21	130.27	120.54
5	5	50	ALA	C-N-CA	7.21	130.27	120.54
4	4	148	ARG	CA-C-N	7.21	127.24	119.89
4	4	148	ARG	C-N-CA	7.21	127.24	119.89
7	7	208	ASN	CA-C-N	7.21	130.94	120.71
7	7	208	ASN	C-N-CA	7.21	130.94	120.71
1	1	19	ARG	N-CA-C	-7.20	95.46	110.80
26	S	128	ILE	CA-C-N	7.20	129.80	120.44
26	S	128	ILE	C-N-CA	7.20	129.80	120.44
8	A	191	ILE	CA-C-N	7.20	133.65	122.49
8	A	191	ILE	C-N-CA	7.20	133.65	122.49
33	Z	69	ASN	CA-C-O	-7.20	113.26	120.82
4	4	31	ASP	CA-C-O	7.20	129.22	121.16
5	5	77	ALA	N-CA-C	7.20	119.12	111.28
13	F	66	CYS	N-CA-C	-7.20	104.63	113.41
15	H	255	GLY	N-CA-C	-7.19	104.67	115.32
21	N	917	ILE	CA-C-N	7.19	132.32	122.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	917	ILE	C-N-CA	7.19	132.32	122.19
9	B	210	GLU	N-CA-C	-7.18	96.62	108.76
24	Q	40	ALA	O-C-N	-7.18	114.60	122.79
9	B	91	LYS	N-CA-C	7.18	118.89	111.14
33	Z	63	LEU	CA-C-N	7.18	129.77	120.44
33	Z	63	LEU	C-N-CA	7.18	129.77	120.44
16	I	264	CYS	N-CA-C	7.18	119.10	111.28
23	P	129	LYS	N-CA-C	-7.18	103.50	112.90
6	6	31	GLU	N-CA-C	-7.17	93.95	109.81
18	K	330	ARG	CA-C-N	7.17	128.81	119.84
18	K	330	ARG	C-N-CA	7.17	128.81	119.84
21	N	170	LEU	CA-C-N	7.17	130.76	120.79
21	N	170	LEU	C-N-CA	7.17	130.76	120.79
16	I	370	ASN	CA-C-O	-7.17	112.64	120.24
6	6	108	ASP	N-CA-C	-7.17	104.40	113.72
12	E	22	PHE	CA-C-N	7.17	130.20	120.38
12	E	22	PHE	C-N-CA	7.17	130.20	120.38
11	D	172	ARG	CA-C-O	7.17	128.08	120.70
26	S	301	PRO	N-CA-C	-7.16	104.60	114.27
26	S	431	VAL	N-CA-C	-7.16	103.49	110.72
27	T	157	TYR	O-C-N	7.16	129.82	122.09
33	Z	405	ASN	CA-C-N	7.16	129.88	120.28
33	Z	405	ASN	C-N-CA	7.16	129.88	120.28
24	Q	217	GLU	N-CA-C	7.16	119.94	111.71
8	A	225	VAL	CA-C-N	7.16	126.52	121.65
8	A	225	VAL	C-N-CA	7.16	126.52	121.65
29	V	77	GLY	O-C-N	-7.15	114.23	122.96
1	1	160	SER	N-CA-C	7.15	120.12	111.82
33	Z	897	HIS	N-CA-C	7.15	120.36	110.35
25	R	254	SER	N-CA-C	7.15	119.08	111.28
1	1	53	GLN	CA-C-N	7.15	129.73	120.44
1	1	53	GLN	C-N-CA	7.15	129.73	120.44
20	M	64	ASP	N-CA-C	7.15	118.72	111.07
17	J	28	GLN	CA-C-O	7.14	128.32	120.82
14	G	69	VAL	N-CA-C	-7.14	97.75	108.17
1	1	111	TYR	CA-C-N	7.13	132.84	123.00
1	1	111	TYR	C-N-CA	7.13	132.84	123.00
16	I	140	LEU	N-CA-C	-7.13	102.88	112.94
18	K	301	THR	N-CA-C	-7.13	103.44	111.14
33	Z	800	SER	O-C-N	7.13	129.68	122.12
19	L	214	PRO	N-CA-C	7.13	117.31	110.47
23	P	41	VAL	CA-C-N	7.13	129.83	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	41	VAL	C-N-CA	7.13	129.83	120.28
10	C	229	ILE	CA-C-N	7.12	130.87	120.82
10	C	229	ILE	C-N-CA	7.12	130.87	120.82
31	X	56	PRO	O-C-N	-7.12	113.03	122.64
21	N	122	GLN	N-CA-C	-7.12	102.17	111.71
24	Q	182	SER	N-CA-C	7.12	118.69	111.07
16	I	151	HIS	CA-C-O	-7.12	113.29	120.90
18	K	378	LEU	N-CA-C	-7.12	98.33	109.72
13	F	217	GLY	CA-C-N	7.11	130.12	120.38
13	F	217	GLY	C-N-CA	7.11	130.12	120.38
16	I	160	LEU	CA-C-N	7.11	131.59	121.42
16	I	160	LEU	C-N-CA	7.11	131.59	121.42
21	N	500	ASP	CA-C-N	7.11	130.39	120.29
21	N	500	ASP	C-N-CA	7.11	130.39	120.29
25	R	388	VAL	N-CA-C	-7.11	97.86	108.46
27	T	144	TYR	CA-C-N	7.11	126.94	119.05
27	T	144	TYR	C-N-CA	7.11	126.94	119.05
27	T	76	ASP	O-C-N	-7.11	114.59	122.12
1	1	194	GLU	CA-C-O	-7.10	113.36	120.82
5	5	181	THR	N-CA-C	-7.10	99.70	110.14
11	D	169	LYS	CA-C-N	7.10	129.67	120.44
11	D	169	LYS	C-N-CA	7.10	129.67	120.44
5	5	140	LEU	CA-C-N	7.10	129.79	120.28
5	5	140	LEU	C-N-CA	7.10	129.79	120.28
24	Q	51	ARG	N-CA-C	7.10	119.10	111.36
24	Q	96	VAL	CA-C-N	7.10	129.67	120.44
24	Q	96	VAL	C-N-CA	7.10	129.67	120.44
9	B	122	THR	N-CA-C	-7.10	104.25	113.12
23	P	278	ASN	CA-C-N	7.10	129.67	120.44
23	P	278	ASN	C-N-CA	7.10	129.67	120.44
21	N	445	GLY	O-C-N	7.10	130.01	122.28
23	P	420	ASP	CA-C-N	7.09	130.37	120.29
23	P	420	ASP	C-N-CA	7.09	130.37	120.29
29	V	230	TYR	CA-C-N	7.09	131.46	120.82
29	V	230	TYR	C-N-CA	7.09	131.46	120.82
28	U	205	LYS	O-C-N	7.09	129.47	122.09
16	I	210	GLU	CA-C-N	7.09	129.78	120.28
16	I	210	GLU	C-N-CA	7.09	129.78	120.28
3	3	139	GLY	CA-C-N	7.09	129.65	120.44
3	3	139	GLY	C-N-CA	7.09	129.65	120.44
3	3	132	THR	N-CA-C	-7.08	103.49	111.14
23	P	390	TYR	CA-C-N	7.08	133.91	121.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	390	TYR	C-N-CA	7.08	133.91	121.80
19	L	397	GLU	CA-C-N	7.08	129.77	120.28
19	L	397	GLU	C-N-CA	7.08	129.77	120.28
15	H	250	GLY	O-C-N	-7.08	114.69	121.77
26	S	298	ARG	CA-C-O	-7.08	113.40	121.19
4	4	32	ASP	O-C-N	-7.08	115.34	123.33
12	E	30	ALA	CA-C-N	7.08	130.15	120.46
12	E	30	ALA	C-N-CA	7.08	130.15	120.46
1	1	70	TYR	N-CA-C	-7.07	103.00	113.61
26	S	150	LYS	CA-C-N	7.07	135.04	121.54
26	S	150	LYS	C-N-CA	7.07	135.04	121.54
33	Z	505	VAL	CA-C-N	7.07	129.75	120.28
33	Z	505	VAL	C-N-CA	7.07	129.75	120.28
27	T	1	MET	CA-C-N	7.07	127.10	119.89
27	T	1	MET	C-N-CA	7.07	127.10	119.89
23	P	380	ILE	CA-C-N	7.06	130.32	120.29
23	P	380	ILE	C-N-CA	7.06	130.32	120.29
25	R	84	LYS	CA-C-O	-7.06	114.06	121.55
17	J	28	GLN	O-C-N	-7.06	114.80	122.07
25	R	39	SER	CA-C-N	7.06	130.44	120.42
25	R	39	SER	C-N-CA	7.06	130.44	120.42
13	F	114	ASP	CA-C-N	7.05	130.30	120.29
13	F	114	ASP	C-N-CA	7.05	130.30	120.29
8	A	118	ALA	CA-C-O	7.05	128.16	120.90
16	I	136	VAL	N-CA-C	-7.05	97.20	108.90
21	N	37	SER	CA-C-N	7.04	130.29	120.29
21	N	37	SER	C-N-CA	7.04	130.29	120.29
20	M	315	PHE	CA-C-N	7.04	129.72	120.28
20	M	315	PHE	C-N-CA	7.04	129.72	120.28
33	Z	979	GLY	N-CA-C	-7.04	102.29	111.52
18	K	75	LEU	N-CA-C	7.04	119.81	111.71
24	Q	376	LYS	CA-C-N	7.04	129.72	120.28
24	Q	376	LYS	C-N-CA	7.04	129.72	120.28
26	S	346	TYR	CA-C-N	7.04	129.59	120.44
26	S	346	TYR	C-N-CA	7.04	129.59	120.44
11	D	229	ILE	CA-C-O	-7.04	113.39	120.85
29	V	286	GLU	CA-C-N	7.04	129.71	120.28
29	V	286	GLU	C-N-CA	7.04	129.71	120.28
33	Z	884	THR	CA-C-O	-7.04	112.96	120.42
18	K	208	GLY	N-CA-C	-7.04	100.13	110.90
21	N	243	LYS	O-C-N	7.04	130.92	122.27
14	G	81	ILE	N-CA-C	7.03	120.79	112.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	63	LEU	N-CA-C	7.03	118.60	111.07
5	5	36	GLU	CA-C-N	7.03	129.97	120.77
5	5	36	GLU	C-N-CA	7.03	129.97	120.77
9	B	136	ILE	CA-C-O	-7.02	113.09	120.39
24	Q	369	ASP	CA-C-N	7.02	129.99	120.44
24	Q	369	ASP	C-N-CA	7.02	129.99	120.44
26	S	378	GLN	N-CA-C	7.02	119.78	111.71
28	U	78	GLU	O-C-N	-7.01	112.19	122.43
10	C	109	GLU	N-CA-C	7.01	118.92	111.28
11	D	229	ILE	O-C-N	7.01	129.05	121.83
23	P	222	ASN	N-CA-C	7.01	118.92	111.28
12	E	32	LYS	N-CA-C	-7.01	104.70	113.18
12	E	173	GLY	CA-C-N	7.01	129.55	120.44
12	E	173	GLY	C-N-CA	7.01	129.55	120.44
8	A	226	GLY	N-CA-C	-7.01	99.20	111.46
29	V	296	LEU	CA-C-N	7.01	129.98	120.38
29	V	296	LEU	C-N-CA	7.01	129.98	120.38
19	L	325	MET	N-CA-C	-7.00	98.81	109.95
21	N	694	LEU	CA-C-N	7.00	129.66	120.28
21	N	694	LEU	C-N-CA	7.00	129.66	120.28
23	P	350	LEU	CA-C-N	7.00	129.66	120.28
23	P	350	LEU	C-N-CA	7.00	129.66	120.28
15	H	252	PRO	O-C-N	7.00	131.67	123.06
11	D	132	SER	N-CA-C	-7.00	98.52	109.72
12	E	102	TYR	N-CA-C	7.00	118.99	111.36
19	L	375	ASP	CA-C-N	7.00	130.36	120.28
19	L	375	ASP	C-N-CA	7.00	130.36	120.28
21	N	293	LEU	CA-C-N	7.00	127.30	119.32
21	N	293	LEU	C-N-CA	7.00	127.30	119.32
7	7	143	ALA	CA-C-N	6.99	128.83	120.09
7	7	143	ALA	C-N-CA	6.99	128.83	120.09
25	R	93	LYS	N-CA-C	6.99	119.85	110.35
20	M	286	ILE	N-CA-C	-6.99	106.00	112.43
22	O	51	ASP	N-CA-C	-6.99	98.40	108.60
12	E	23	GLN	CA-C-N	6.98	129.35	120.56
12	E	23	GLN	C-N-CA	6.98	129.35	120.56
25	R	347	THR	N-CA-C	-6.98	96.97	108.76
10	C	169	THR	O-C-N	6.98	129.62	122.09
21	N	459	ASN	N-CA-C	-6.98	97.15	108.52
22	O	155	LYS	CA-C-N	6.98	129.63	120.28
22	O	155	LYS	C-N-CA	6.98	129.63	120.28
24	Q	16	ASN	O-C-N	6.98	130.10	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	138	ASP	N-CA-C	6.98	118.89	111.28
8	A	242	GLU	CB-CA-C	-6.98	97.28	110.67
33	Z	591	ILE	CA-C-O	6.98	127.15	120.31
13	F	62	LYS	CA-C-N	6.97	132.28	123.14
13	F	62	LYS	C-N-CA	6.97	132.28	123.14
15	H	356	ASN	N-CA-C	-6.97	104.90	113.41
22	O	258	LEU	CA-C-N	6.97	129.92	120.44
22	O	258	LEU	C-N-CA	6.97	129.92	120.44
18	K	289	ASP	N-CA-C	-6.97	101.90	110.61
25	R	250	ALA	CA-C-N	6.97	129.95	120.54
25	R	250	ALA	C-N-CA	6.97	129.95	120.54
18	K	340	PHE	CA-C-N	6.97	128.55	119.84
18	K	340	PHE	C-N-CA	6.97	128.55	119.84
10	C	98	TYR	CA-C-N	6.96	129.49	120.44
10	C	98	TYR	C-N-CA	6.96	129.49	120.44
10	C	191	GLU	CA-C-N	6.96	129.49	120.44
10	C	191	GLU	C-N-CA	6.96	129.49	120.44
10	C	191	GLU	N-CA-C	6.96	118.52	111.07
31	X	89	LEU	N-CA-C	-6.96	95.84	108.02
10	C	40	ALA	N-CA-C	-6.96	98.97	109.96
1	1	114	PRO	CA-C-N	6.96	130.88	120.31
1	1	114	PRO	C-N-CA	6.96	130.88	120.31
30	W	122	ARG	CA-C-N	6.95	129.59	120.28
30	W	122	ARG	C-N-CA	6.95	129.59	120.28
1	1	174	ARG	N-CA-C	-6.95	98.60	109.72
10	C	231	LYS	CA-C-O	-6.95	113.68	120.97
17	J	159	GLU	CA-C-N	6.95	130.28	120.42
17	J	159	GLU	C-N-CA	6.95	130.28	120.42
21	N	758	VAL	O-C-N	-6.94	116.30	123.03
23	P	29	GLN	N-CA-C	6.94	118.93	111.36
18	K	219	LYS	CA-C-O	-6.93	113.54	120.82
26	S	168	LEU	CA-C-N	6.93	129.57	120.28
26	S	168	LEU	C-N-CA	6.93	129.57	120.28
2	2	186	TYR	N-CA-C	6.93	119.86	109.25
10	C	90	THR	CA-C-N	6.93	130.13	120.29
10	C	90	THR	C-N-CA	6.93	130.13	120.29
24	Q	346	ASN	CA-C-N	6.93	129.45	120.44
24	Q	346	ASN	C-N-CA	6.93	129.45	120.44
9	B	90	ARG	O-C-N	6.93	129.47	122.12
11	D	117	GLN	CA-C-N	6.93	129.57	120.28
11	D	117	GLN	C-N-CA	6.93	129.57	120.28
25	R	363	PHE	CA-C-N	6.93	129.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	363	PHE	C-N-CA	6.93	129.57	120.28
9	B	79	GLY	CA-C-N	6.93	126.74	119.05
9	B	79	GLY	C-N-CA	6.93	126.74	119.05
13	F	112	LEU	CA-C-N	6.93	129.90	120.54
13	F	112	LEU	C-N-CA	6.93	129.90	120.54
19	L	266	MET	CA-C-N	6.93	130.13	120.29
19	L	266	MET	C-N-CA	6.93	130.13	120.29
7	7	167	GLU	CA-C-O	-6.93	113.08	120.42
24	Q	194	SER	N-CA-C	6.93	118.91	111.36
13	F	15	PRO	CA-C-N	6.93	130.25	120.28
13	F	15	PRO	C-N-CA	6.93	130.25	120.28
30	W	86	HIS	ND1-CE1-NE2	6.93	115.33	108.40
16	I	82	LEU	CA-C-O	-6.92	113.21	120.55
28	U	266	THR	CA-C-N	6.92	129.53	120.60
28	U	266	THR	C-N-CA	6.92	129.53	120.60
16	I	250	SER	N-CA-C	6.92	118.83	111.28
24	Q	16	ASN	N-CA-C	6.92	118.90	111.36
12	E	85	ALA	CA-C-O	6.92	127.96	119.11
25	R	391	ASN	N-CA-C	-6.92	97.69	109.24
1	1	194	GLU	O-C-N	6.92	129.19	122.07
9	B	119	GLN	CA-C-O	-6.91	113.09	120.42
26	S	170	TYR	N-CA-C	-6.91	103.83	111.36
15	H	233	GLU	N-CA-C	6.91	119.66	111.71
33	Z	363	ASP	O-C-N	-6.91	114.57	122.03
33	Z	443	ASP	N-CA-C	6.91	118.81	111.28
21	N	487	LEU	N-CA-C	6.91	118.81	111.28
29	V	78	VAL	N-CA-C	6.91	123.70	109.34
26	S	182	LYS	CA-C-N	6.90	129.41	120.44
26	S	182	LYS	C-N-CA	6.90	129.41	120.44
26	S	408	CYS	CA-C-N	6.90	129.41	120.44
26	S	408	CYS	C-N-CA	6.90	129.41	120.44
7	7	91	VAL	CA-C-N	6.90	129.41	120.44
7	7	91	VAL	C-N-CA	6.90	129.41	120.44
15	H	367	ARG	CA-C-N	6.90	126.92	119.89
15	H	367	ARG	C-N-CA	6.90	126.92	119.89
28	U	268	LYS	CA-C-N	6.90	129.52	120.28
28	U	268	LYS	C-N-CA	6.90	129.52	120.28
26	S	288	THR	CA-C-N	6.89	130.08	120.29
26	S	288	THR	C-N-CA	6.89	130.08	120.29
14	G	135	THR	CA-C-N	6.89	131.74	123.19
14	G	135	THR	C-N-CA	6.89	131.74	123.19
14	G	151	GLU	CA-C-O	-6.89	114.95	121.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	L	205	GLU	CA-C-N	6.89	129.38	120.56
19	L	205	GLU	C-N-CA	6.89	129.38	120.56
29	V	284	ALA	CA-C-N	6.89	129.40	120.44
29	V	284	ALA	C-N-CA	6.89	129.40	120.44
22	O	300	VAL	N-CA-C	6.89	117.65	110.62
21	N	921	ARG	N-CA-C	-6.89	104.69	113.23
2	2	134	ALA	N-CA-C	6.89	118.58	111.14
18	K	304	ASP	N-CA-C	6.89	119.81	111.82
21	N	626	GLY	CA-C-N	6.88	129.24	120.56
21	N	626	GLY	C-N-CA	6.88	129.24	120.56
33	Z	253	VAL	CB-CA-C	-6.88	107.05	114.35
26	S	297	ILE	N-CA-C	-6.88	105.82	112.29
33	Z	70	ALA	CA-C-N	6.88	129.50	120.28
33	Z	70	ALA	C-N-CA	6.88	129.50	120.28
17	J	201	ALA	O-C-N	6.88	129.16	122.07
17	J	165	GLU	CA-C-N	6.88	128.69	120.09
17	J	165	GLU	C-N-CA	6.88	128.69	120.09
11	D	34	VAL	O-C-N	-6.88	115.44	123.00
20	M	266	ALA	O-C-N	6.88	129.99	122.15
8	A	251	GLN	N-CA-C	-6.87	103.87	111.36
13	F	20	PHE	CA-C-N	6.87	131.59	120.60
13	F	20	PHE	C-N-CA	6.87	131.59	120.60
33	Z	736	LEU	CA-C-N	6.87	129.48	120.28
33	Z	736	LEU	C-N-CA	6.87	129.48	120.28
3	3	113	ALA	CA-C-N	6.87	127.48	121.58
3	3	113	ALA	C-N-CA	6.87	127.48	121.58
8	A	87	ILE	CA-C-N	6.87	126.67	119.05
8	A	87	ILE	C-N-CA	6.87	126.67	119.05
17	J	241	ALA	CA-C-O	-6.86	113.30	119.75
15	H	54	ASN	CA-C-N	6.86	129.47	120.28
15	H	54	ASN	C-N-CA	6.86	129.47	120.28
21	N	154	LEU	CA-C-N	6.86	127.74	119.99
21	N	154	LEU	C-N-CA	6.86	127.74	119.99
6	6	11	PHE	CA-C-O	-6.86	113.83	121.51
15	H	438	ALA	N-CA-C	-6.85	98.61	109.23
1	1	189	TYR	CA-C-N	6.85	126.37	119.24
1	1	189	TYR	C-N-CA	6.85	126.37	119.24
22	O	95	SER	CA-C-N	6.85	130.02	120.29
22	O	95	SER	C-N-CA	6.85	130.02	120.29
25	R	382	ASP	CA-C-O	6.85	127.50	120.24
20	M	268	ALA	N-CA-C	6.85	118.75	111.28
5	5	164	ALA	CA-C-N	6.84	129.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	5	164	ALA	C-N-CA	6.84	129.45	120.28
14	G	60	PRO	CA-C-N	6.84	131.84	122.19
14	G	60	PRO	C-N-CA	6.84	131.84	122.19
16	I	159	VAL	CA-C-O	-6.84	114.27	121.93
21	N	260	ASP	N-CA-C	6.84	118.43	110.97
33	Z	776	VAL	CB-CA-C	-6.84	107.10	114.35
5	5	3	THR	O-C-N	-6.84	115.02	123.36
8	A	11	GLY	N-CA-C	-6.84	96.97	113.18
25	R	271	ILE	N-CA-C	-6.84	105.97	113.43
18	K	388	GLN	CA-C-N	6.83	129.44	120.28
18	K	388	GLN	C-N-CA	6.83	129.44	120.28
21	N	758	VAL	CA-C-O	6.83	127.01	120.31
26	S	214	MET	CA-C-N	6.83	129.43	120.28
26	S	214	MET	C-N-CA	6.83	129.43	120.28
21	N	410	LEU	CA-C-N	6.83	129.24	120.70
21	N	410	LEU	C-N-CA	6.83	129.24	120.70
26	S	213	THR	CA-C-N	6.83	129.43	120.28
26	S	213	THR	C-N-CA	6.83	129.43	120.28
26	S	449	LEU	N-CA-C	-6.83	102.40	113.19
19	L	114	GLU	N-CA-C	-6.83	104.94	113.20
26	S	312	GLN	CA-C-O	-6.83	113.18	120.42
30	W	183	GLU	CA-C-N	6.83	129.43	120.28
30	W	183	GLU	C-N-CA	6.83	129.43	120.28
1	1	188	PHE	N-CA-C	-6.82	97.23	108.76
3	3	185	GLU	O-C-N	-6.82	115.84	123.48
24	Q	191	LEU	CA-C-N	6.82	129.31	120.44
24	Q	191	LEU	C-N-CA	6.82	129.31	120.44
18	K	190	LEU	CA-C-O	-6.82	111.72	118.34
12	E	133	LEU	N-CA-C	-6.82	105.52	114.31
7	7	27	ARG	N-CA-C	6.81	118.36	111.07
24	Q	30	LEU	CA-C-N	6.81	129.30	120.44
24	Q	30	LEU	C-N-CA	6.81	129.30	120.44
29	V	245	VAL	CA-C-O	-6.81	113.86	120.95
22	O	154	GLU	CA-C-O	-6.81	113.67	120.82
27	T	68	ALA	CA-C-N	6.81	129.40	120.28
27	T	68	ALA	C-N-CA	6.81	129.40	120.28
4	4	84	ARG	N-CA-C	6.81	118.35	111.07
33	Z	489	ALA	N-CA-C	6.80	118.35	111.07
5	5	106	ARG	N-CA-C	-6.80	104.98	113.28
18	K	299	LEU	CA-C-N	6.80	129.95	120.29
18	K	299	LEU	C-N-CA	6.80	129.95	120.29
21	N	569	LYS	CA-C-N	6.80	129.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	569	LYS	C-N-CA	6.80	129.39	120.28
11	D	101	GLU	CA-C-O	6.79	129.41	120.98
14	G	63	ASN	CA-C-N	6.79	129.60	120.50
14	G	63	ASN	C-N-CA	6.79	129.60	120.50
26	S	205	ASN	CA-C-O	-6.79	113.22	120.42
17	J	125	VAL	CA-C-O	6.79	127.68	120.48
8	A	72	ILE	O-C-N	6.79	130.31	123.18
30	W	124	GLU	CA-C-N	6.79	129.38	120.28
30	W	124	GLU	C-N-CA	6.79	129.38	120.28
15	H	247	LEU	N-CA-C	-6.79	97.84	108.90
20	M	329	ARG	CA-C-N	6.79	129.66	120.63
20	M	329	ARG	C-N-CA	6.79	129.66	120.63
25	R	62	TYR	N-CA-C	-6.79	104.82	113.23
6	6	145	VAL	N-CA-C	-6.78	105.23	111.67
13	F	191	LYS	CA-C-N	6.78	129.37	120.28
13	F	191	LYS	C-N-CA	6.78	129.37	120.28
31	X	100	TRP	CA-C-N	6.78	132.24	121.66
31	X	100	TRP	C-N-CA	6.78	132.24	121.66
33	Z	453	LEU	O-C-N	6.78	129.41	122.09
21	N	79	VAL	CA-C-O	-6.78	113.98	121.17
28	U	89	LEU	CA-C-O	6.78	128.42	120.69
30	W	191	ILE	N-CA-CB	6.78	122.41	111.23
13	F	102	LYS	CA-C-N	6.78	134.48	121.54
13	F	102	LYS	C-N-CA	6.78	134.48	121.54
18	K	255	ARG	N-CA-C	-6.77	103.82	111.07
10	C	120	GLN	CA-C-N	6.77	127.61	120.03
10	C	120	GLN	C-N-CA	6.77	127.61	120.03
21	N	653	ARG	CA-C-N	6.77	129.68	120.54
21	N	653	ARG	C-N-CA	6.77	129.68	120.54
16	I	217	LYS	CA-C-O	6.76	127.92	120.82
21	N	888	ASP	CA-C-N	6.76	130.59	120.17
21	N	888	ASP	C-N-CA	6.76	130.59	120.17
1	1	80	SER	CA-C-O	-6.76	113.25	120.42
19	L	304	THR	CA-C-N	6.76	129.89	120.29
19	L	304	THR	C-N-CA	6.76	129.89	120.29
18	K	317	ALA	O-C-N	-6.76	115.15	123.33
3	3	182	LYS	CA-C-N	6.75	130.58	120.31
3	3	182	LYS	C-N-CA	6.75	130.58	120.31
25	R	187	VAL	CA-C-O	-6.75	113.69	120.85
4	4	136	GLY	CA-C-O	-6.75	113.11	120.40
24	Q	424	ASP	N-CA-C	6.75	118.29	111.07
23	P	43	GLU	CB-CA-C	6.75	121.99	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	O	173	SER	CA-C-O	6.74	127.57	120.42
33	Z	976	HIS	CA-C-N	6.74	129.53	120.50
33	Z	976	HIS	C-N-CA	6.74	129.53	120.50
32	Y	76	GLU	CA-C-N	6.74	129.64	120.54
32	Y	76	GLU	C-N-CA	6.74	129.64	120.54
26	S	378	GLN	CA-C-N	6.74	129.31	120.28
26	S	378	GLN	C-N-CA	6.74	129.31	120.28
11	D	184	PRO	N-CA-C	-6.74	102.48	110.70
28	U	275	VAL	N-CA-C	6.73	116.89	110.42
25	R	259	PHE	N-CA-C	6.73	118.27	111.07
16	I	343	ARG	N-CA-C	-6.73	96.46	110.80
33	Z	434	GLN	N-CA-C	6.73	118.62	111.28
24	Q	197	SER	CA-C-N	6.73	129.84	120.29
24	Q	197	SER	C-N-CA	6.73	129.84	120.29
24	Q	52	ASN	CA-C-N	6.72	129.29	120.28
24	Q	52	ASN	C-N-CA	6.72	129.29	120.28
33	Z	107	THR	N-CA-C	-6.72	106.95	114.62
27	T	148	LEU	N-CA-C	6.72	118.26	111.07
19	L	95	ILE	N-CA-C	6.72	117.47	110.62
7	7	31	VAL	CA-C-N	6.72	130.29	120.82
7	7	31	VAL	C-N-CA	6.72	130.29	120.82
21	N	17	GLN	CA-C-N	6.72	129.18	120.44
21	N	17	GLN	C-N-CA	6.72	129.18	120.44
29	V	279	HIS	CB-CG-CD2	-6.72	122.47	131.20
23	P	46	THR	CA-C-N	6.72	134.37	121.54
23	P	46	THR	C-N-CA	6.72	134.37	121.54
25	R	216	ILE	CA-C-N	6.71	129.28	120.28
25	R	216	ILE	C-N-CA	6.71	129.28	120.28
3	3	151	PRO	CA-C-N	6.71	129.27	120.28
3	3	151	PRO	C-N-CA	6.71	129.27	120.28
31	X	120	GLU	CA-C-O	-6.71	113.77	120.82
24	Q	274	LEU	N-CA-C	-6.71	99.08	108.54
28	U	272	GLU	CA-C-N	6.71	129.27	120.28
28	U	272	GLU	C-N-CA	6.71	129.27	120.28
13	F	35	THR	N-CA-C	-6.70	97.29	108.75
23	P	35	ALA	N-CA-C	6.70	118.24	111.07
25	R	157	SER	N-CA-C	6.70	118.59	111.28
25	R	202	GLY	CA-C-N	6.70	134.34	121.54
25	R	202	GLY	C-N-CA	6.70	134.34	121.54
26	S	316	LEU	CA-C-N	6.70	129.25	120.28
26	S	316	LEU	C-N-CA	6.70	129.25	120.28
14	G	152	PRO	CA-C-N	6.70	129.80	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	G	152	PRO	C-N-CA	6.70	129.80	120.29
31	X	61	LEU	CB-CA-C	-6.69	108.84	116.54
7	7	164	VAL	CA-C-N	6.69	129.13	120.44
7	7	164	VAL	C-N-CA	6.69	129.13	120.44
8	A	228	ALA	N-CA-C	-6.69	98.50	109.40
20	M	199	LEU	CA-C-N	6.69	126.47	119.05
20	M	199	LEU	C-N-CA	6.69	126.47	119.05
28	U	79	MET	CA-C-N	6.69	129.13	120.44
28	U	79	MET	C-N-CA	6.69	129.13	120.44
33	Z	404	ASP	CA-C-N	6.69	129.78	120.29
33	Z	404	ASP	C-N-CA	6.69	129.78	120.29
8	A	49	ASP	N-CA-C	-6.68	102.45	112.54
1	1	72	THR	N-CA-C	6.68	117.29	109.60
19	L	145	ARG	CA-C-N	6.68	133.24	122.68
19	L	145	ARG	C-N-CA	6.68	133.24	122.68
1	1	173	ILE	N-CA-C	-6.68	98.82	108.17
8	A	211	ILE	N-CA-C	-6.68	104.25	110.53
8	A	163	TYR	O-C-N	-6.68	116.28	123.42
9	B	32	VAL	CA-C-O	6.68	128.46	120.85
26	S	188	TYR	N-CA-C	6.68	119.56	111.82
9	B	101	TYR	N-CA-C	-6.67	104.36	113.30
17	J	55	VAL	CA-C-N	6.67	129.22	120.28
17	J	55	VAL	C-N-CA	6.67	129.22	120.28
21	N	618	ARG	CA-C-O	6.67	127.64	120.10
31	X	57	VAL	O-C-N	-6.67	116.24	123.18
24	Q	111	LEU	N-CA-C	-6.67	104.09	111.36
2	2	170	GLY	N-CA-C	-6.67	100.72	111.59
22	O	163	ILE	CB-CA-C	-6.67	107.28	114.35
11	D	197	ARG	CA-C-O	-6.67	113.82	120.82
24	Q	337	ALA	CA-C-N	6.67	129.21	120.28
24	Q	337	ALA	C-N-CA	6.67	129.21	120.28
26	S	321	GLN	CA-C-N	6.66	129.21	120.28
26	S	321	GLN	C-N-CA	6.66	129.21	120.28
24	Q	321	TYR	O-C-N	6.66	132.15	122.43
9	B	85	LEU	CA-C-O	6.66	127.47	120.42
23	P	419	VAL	CA-C-N	6.66	129.86	120.28
23	P	419	VAL	C-N-CA	6.66	129.86	120.28
27	T	142	LEU	CA-C-N	6.65	129.20	120.28
27	T	142	LEU	C-N-CA	6.65	129.20	120.28
20	M	265	ASP	CA-C-N	6.65	129.74	120.29
20	M	265	ASP	C-N-CA	6.65	129.74	120.29
21	N	337	GLY	CA-C-N	6.65	129.09	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	337	GLY	C-N-CA	6.65	129.09	120.44
26	S	396	SER	CA-C-N	6.65	129.52	120.54
26	S	396	SER	C-N-CA	6.65	129.52	120.54
33	Z	796	LEU	CA-C-O	-6.65	112.32	119.97
17	J	311	ASP	O-C-N	-6.65	115.05	122.10
9	B	177	LYS	CA-C-N	6.65	131.82	120.72
9	B	177	LYS	C-N-CA	6.65	131.82	120.72
33	Z	814	ALA	CA-C-O	-6.65	113.84	120.82
26	S	254	ILE	O-C-N	6.65	128.42	121.91
26	S	310	LEU	CA-C-N	6.64	129.18	120.28
26	S	310	LEU	C-N-CA	6.64	129.18	120.28
19	L	342	ARG	CA-C-N	6.64	133.63	121.94
19	L	342	ARG	C-N-CA	6.64	133.63	121.94
14	G	100	LYS	O-C-N	-6.64	115.23	122.07
21	N	522	ALA	CA-C-N	6.63	129.17	120.28
21	N	522	ALA	C-N-CA	6.63	129.17	120.28
20	M	356	SER	CA-C-N	6.63	129.06	120.44
20	M	356	SER	C-N-CA	6.63	129.06	120.44
21	N	232	LEU	N-CA-C	-6.63	105.16	113.18
25	R	25	GLU	CA-C-N	6.63	129.54	120.46
25	R	25	GLU	C-N-CA	6.63	129.54	120.46
14	G	206	ASN	N-CA-C	-6.63	97.54	108.48
25	R	384	VAL	N-CA-C	-6.63	105.07	113.22
21	N	158	LEU	O-C-N	6.63	128.90	122.07
24	Q	336	ASN	CA-C-N	6.63	129.70	120.29
24	Q	336	ASN	C-N-CA	6.63	129.70	120.29
12	E	174	SER	CA-C-O	-6.62	113.87	120.82
27	T	46	ILE	CA-C-O	-6.62	114.07	121.36
16	I	171	MET	O-C-N	-6.62	115.30	123.44
16	I	253	ILE	O-C-N	-6.62	114.30	122.57
18	K	290	ARG	N-CA-C	-6.62	104.23	112.90
26	S	352	VAL	CA-C-O	-6.62	113.70	121.05
16	I	187	LEU	CA-C-N	6.62	130.75	120.82
16	I	187	LEU	C-N-CA	6.62	130.75	120.82
16	I	331	ILE	O-C-N	-6.62	116.14	122.09
20	M	351	LEU	O-C-N	6.62	127.15	121.20
11	D	172	ARG	CA-C-N	6.61	129.04	120.44
11	D	172	ARG	C-N-CA	6.61	129.04	120.44
31	X	51	ARG	CA-C-N	-6.61	112.18	120.51
31	X	51	ARG	C-N-CA	-6.61	112.18	120.51
33	Z	586	GLU	CA-C-N	6.61	129.03	120.44
33	Z	586	GLU	C-N-CA	6.61	129.03	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	146	MET	CA-C-O	-6.61	114.54	121.55
11	D	153	SER	CA-C-N	6.61	134.36	121.41
11	D	153	SER	C-N-CA	6.61	134.36	121.41
21	N	289	ILE	N-CA-C	6.61	117.30	110.36
27	T	9	LYS	CA-C-O	-6.61	113.88	120.82
27	T	232	LYS	O-C-N	-6.61	115.86	123.33
5	5	116	ASP	CA-C-N	6.60	129.12	120.28
5	5	116	ASP	C-N-CA	6.60	129.12	120.28
23	P	404	LYS	N-CA-C	-6.60	102.20	108.07
20	M	432	PHE	CA-C-N	6.60	134.14	121.54
20	M	432	PHE	C-N-CA	6.60	134.14	121.54
20	M	392	LYS	O-C-N	-6.59	115.13	122.12
28	U	292	ILE	CA-C-O	-6.59	114.18	121.17
30	W	110	ILE	O-C-N	6.59	129.95	123.03
33	Z	929	VAL	N-CA-C	-6.59	97.96	108.90
20	M	186	LEU	CA-C-N	6.59	129.43	120.54
20	M	186	LEU	C-N-CA	6.59	129.43	120.54
15	H	404	TRP	CA-C-N	6.59	129.41	120.38
15	H	404	TRP	C-N-CA	6.59	129.41	120.38
15	H	313	ALA	N-CA-C	6.58	118.11	111.07
33	Z	775	MET	CA-C-N	6.58	124.39	120.24
33	Z	775	MET	C-N-CA	6.58	124.39	120.24
20	M	248	ALA	CA-C-N	6.58	126.27	119.56
20	M	248	ALA	C-N-CA	6.58	126.27	119.56
22	O	129	ILE	CA-C-N	6.58	129.33	120.65
22	O	129	ILE	C-N-CA	6.58	129.33	120.65
27	T	62	LEU	N-CA-C	6.58	118.45	111.28
15	H	397	SER	CA-C-O	-6.57	114.64	121.87
24	Q	414	GLU	CA-C-N	6.57	129.41	120.54
24	Q	414	GLU	C-N-CA	6.57	129.41	120.54
28	U	152	LYS	CA-C-N	6.57	129.09	120.28
28	U	152	LYS	C-N-CA	6.57	129.09	120.28
5	5	164	ALA	N-CA-C	6.57	118.52	111.36
16	I	325	ILE	N-CA-C	-6.57	98.92	108.11
12	E	240	ILE	CA-C-N	6.57	128.98	120.44
12	E	240	ILE	C-N-CA	6.57	128.98	120.44
15	H	453	GLY	CA-C-N	6.57	129.61	120.29
15	H	453	GLY	C-N-CA	6.57	129.61	120.29
3	3	162	LEU	O-C-N	6.56	129.18	122.09
16	I	80	GLU	O-C-N	6.56	129.08	122.12
3	3	59	ARG	CA-C-O	-6.56	113.94	120.70
17	J	317	PRO	N-CA-C	6.56	118.70	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	483	LEU	CA-C-N	6.56	127.38	120.03
21	N	483	LEU	C-N-CA	6.56	127.38	120.03
27	T	121	LYS	CA-C-N	6.56	128.97	120.44
27	T	121	LYS	C-N-CA	6.56	128.97	120.44
20	M	310	ASN	CA-C-N	6.56	129.06	120.28
20	M	310	ASN	C-N-CA	6.56	129.06	120.28
18	K	194	GLN	CA-C-N	6.55	129.60	120.29
18	K	194	GLN	C-N-CA	6.55	129.60	120.29
23	P	389	ILE	N-CA-C	-6.55	98.86	108.23
24	Q	428	GLU	N-CA-C	-6.55	104.06	111.07
25	R	42	GLN	O-C-N	6.55	128.81	122.07
13	F	114	ASP	CA-C-O	-6.54	113.61	120.55
17	J	256	THR	N-CA-C	-6.54	96.86	110.80
19	L	389	ALA	CA-C-N	6.54	129.58	120.29
19	L	389	ALA	C-N-CA	6.54	129.58	120.29
25	R	178	GLY	CA-C-N	6.54	129.58	120.29
25	R	178	GLY	C-N-CA	6.54	129.58	120.29
23	P	293	LEU	CA-C-O	6.54	127.69	120.82
22	O	248	TYR	CA-C-N	6.54	129.93	120.38
22	O	248	TYR	C-N-CA	6.54	129.93	120.38
24	Q	29	SER	O-C-N	-6.54	114.23	122.27
25	R	228	ALA	CA-C-N	6.54	129.34	120.38
25	R	228	ALA	C-N-CA	6.54	129.34	120.38
16	I	417	LYS	CA-C-O	-6.54	113.62	120.55
24	Q	400	TYR	N-CA-C	-6.54	105.32	113.55
15	H	383	GLU	CA-C-N	6.53	127.19	120.00
15	H	383	GLU	C-N-CA	6.53	127.19	120.00
27	T	35	ILE	CA-C-N	6.53	129.03	120.28
27	T	35	ILE	C-N-CA	6.53	129.03	120.28
14	G	160	LYS	CA-C-O	6.53	127.49	119.79
20	M	392	LYS	CA-C-N	6.53	130.23	120.31
20	M	392	LYS	C-N-CA	6.53	130.23	120.31
26	S	211	ARG	O-C-N	6.53	129.04	122.12
25	R	406	GLN	CA-C-N	6.52	128.29	120.14
25	R	406	GLN	C-N-CA	6.52	128.29	120.14
17	J	296	ARG	O-C-N	-6.52	115.31	123.27
20	M	397	GLU	CA-C-N	6.52	129.02	120.28
20	M	397	GLU	C-N-CA	6.52	129.02	120.28
10	C	189	ALA	N-CA-C	6.52	118.39	111.28
12	E	140	VAL	N-CA-C	-6.52	99.10	108.42
16	I	331	ILE	CA-C-O	6.52	127.00	119.89
23	P	380	ILE	N-CA-C	6.52	117.27	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	295	LYS	CA-C-N	6.52	128.77	120.56
28	U	295	LYS	C-N-CA	6.52	128.77	120.56
27	T	149	ASP	CA-C-N	6.51	128.91	120.44
27	T	149	ASP	C-N-CA	6.51	128.91	120.44
19	L	367	LYS	N-CA-C	-6.51	105.30	113.18
24	Q	344	GLU	N-CA-C	6.51	118.46	111.36
33	Z	825	ALA	CA-C-N	6.51	129.66	120.28
33	Z	825	ALA	C-N-CA	6.51	129.66	120.28
9	B	31	GLY	CA-C-O	-6.51	115.77	122.28
20	M	207	PHE	O-C-N	-6.51	115.22	122.12
21	N	872	THR	CA-C-N	6.51	131.16	121.72
21	N	872	THR	C-N-CA	6.51	131.16	121.72
15	H	218	ILE	CA-C-N	6.51	129.53	120.29
15	H	218	ILE	C-N-CA	6.51	129.53	120.29
15	H	334	LEU	CA-C-N	6.51	128.90	120.44
15	H	334	LEU	C-N-CA	6.51	128.90	120.44
13	F	82	ARG	N-CA-C	6.50	118.45	111.36
22	O	148	ASP	N-CA-C	6.50	118.45	111.36
6	6	181	SER	CA-C-N	6.50	128.99	120.28
6	6	181	SER	C-N-CA	6.50	128.99	120.28
16	I	82	LEU	O-C-N	6.50	129.01	122.12
26	S	247	VAL	CA-C-N	6.50	131.41	120.88
26	S	247	VAL	C-N-CA	6.50	131.41	120.88
24	Q	305	ALA	N-CA-C	-6.50	104.19	111.28
25	R	273	SER	O-C-N	-6.50	116.76	121.83
26	S	164	ILE	CA-C-O	-6.50	111.24	119.95
4	4	48	GLU	O-C-N	-6.50	115.62	123.16
14	G	18	GLY	N-CA-C	-6.50	106.27	115.43
8	A	188	LYS	N-CA-C	6.50	118.02	111.07
20	M	119	VAL	CA-C-O	6.50	128.27	120.67
25	R	259	PHE	O-C-N	6.50	128.76	122.07
24	Q	430	ALA	CA-C-O	6.49	127.85	120.90
9	B	114	VAL	CA-C-N	6.49	128.98	120.28
9	B	114	VAL	C-N-CA	6.49	128.98	120.28
14	G	165	GLY	CA-C-N	6.49	128.98	120.28
14	G	165	GLY	C-N-CA	6.49	128.98	120.28
30	W	111	VAL	CA-CB-CG2	6.49	121.44	110.40
33	Z	502	ASN	CA-C-N	6.49	130.18	120.31
33	Z	502	ASN	C-N-CA	6.49	130.18	120.31
6	6	23	ASP	CB-CA-C	-6.49	109.08	116.54
21	N	585	ARG	CA-C-N	6.49	129.62	120.28
21	N	585	ARG	C-N-CA	6.49	129.62	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	189	GLU	N-CA-C	6.49	118.14	111.14
4	4	19	ALA	CA-C-N	6.48	132.19	122.98
4	4	19	ALA	C-N-CA	6.48	132.19	122.98
21	N	422	TYR	N-CA-C	-6.48	104.13	111.07
21	N	201	LYS	CA-C-N	6.48	129.44	120.63
21	N	201	LYS	C-N-CA	6.48	129.44	120.63
17	J	67	GLU	CA-C-N	6.48	128.88	121.04
17	J	67	GLU	C-N-CA	6.48	128.88	121.04
17	J	276	LEU	N-CA-C	6.48	119.16	111.71
24	Q	416	VAL	CA-C-N	6.48	127.13	119.94
24	Q	416	VAL	C-N-CA	6.48	127.13	119.94
1	1	33	LYS	CA-C-N	6.48	131.26	122.84
1	1	33	LYS	C-N-CA	6.48	131.26	122.84
15	H	414	SER	N-CA-C	-6.48	99.80	108.74
24	Q	83	GLU	CA-C-N	6.48	128.86	120.44
24	Q	83	GLU	C-N-CA	6.48	128.86	120.44
7	7	156	ASP	N-CA-C	-6.47	105.38	113.28
20	M	296	SER	N-CA-C	6.47	122.05	111.37
14	G	81	ILE	CA-C-N	6.47	126.23	119.05
14	G	81	ILE	C-N-CA	6.47	126.23	119.05
23	P	164	GLN	O-C-N	6.47	130.23	122.27
33	Z	828	ALA	O-C-N	6.47	128.82	122.09
17	J	274	GLU	CA-C-N	6.47	128.95	120.28
17	J	274	GLU	C-N-CA	6.47	128.95	120.28
27	T	114	LEU	CA-C-O	6.47	127.28	120.42
16	I	373	GLU	N-CA-C	-6.47	104.97	112.92
10	C	234	GLU	N-CA-C	-6.46	105.21	113.23
21	N	202	PHE	CA-C-N	6.46	129.27	120.54
21	N	202	PHE	C-N-CA	6.46	129.27	120.54
27	T	155	GLY	N-CA-C	-6.46	101.84	112.83
9	B	222	LEU	N-CA-C	-6.46	105.22	113.23
7	7	194	LYS	O-C-N	6.46	130.22	122.27
30	W	86	HIS	CB-CG-CD2	-6.46	122.80	131.20
9	B	149	GLN	CA-C-N	6.46	131.60	123.14
9	B	149	GLN	C-N-CA	6.46	131.60	123.14
25	R	102	LEU	CA-C-N	6.46	130.12	120.31
25	R	102	LEU	C-N-CA	6.46	130.12	120.31
17	J	131	ASP	CA-C-O	-6.46	111.32	120.16
26	S	339	GLN	CA-C-N	6.46	128.93	120.28
26	S	339	GLN	C-N-CA	6.46	128.93	120.28
13	F	66	CYS	CA-C-O	-6.45	112.12	119.41
30	W	86	HIS	ND1-CG-CD2	6.45	112.55	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	333	ALA	CA-C-N	6.45	128.92	120.28
23	P	333	ALA	C-N-CA	6.45	128.92	120.28
33	Z	77	ASN	CA-C-N	6.45	128.82	120.44
33	Z	77	ASN	C-N-CA	6.45	128.82	120.44
9	B	168	SER	N-CA-C	6.45	118.10	111.14
11	D	42	VAL	N-CA-C	-6.45	98.76	108.17
20	M	259	GLY	CA-C-N	6.45	128.92	120.28
20	M	259	GLY	C-N-CA	6.45	128.92	120.28
27	T	27	LEU	O-C-N	-6.45	114.74	120.48
1	1	162	ALA	CA-C-O	-6.45	113.72	120.55
1	1	176	VAL	CA-C-N	6.44	130.42	122.37
1	1	176	VAL	C-N-CA	6.44	130.42	122.37
7	7	168	ALA	CA-C-O	-6.44	113.72	120.55
30	W	33	VAL	N-CA-C	6.44	117.23	110.72
8	A	62	LYS	N-CA-C	-6.44	105.17	113.16
17	J	239	GLU	CA-C-O	6.44	127.25	120.42
33	Z	794	ASP	CA-C-N	6.44	129.43	120.29
33	Z	794	ASP	C-N-CA	6.44	129.43	120.29
18	K	396	ARG	CA-C-O	-6.44	113.59	120.42
33	Z	827	LEU	CA-C-N	6.44	129.23	120.54
33	Z	827	LEU	C-N-CA	6.44	129.23	120.54
4	4	59	ILE	CA-C-N	6.44	128.81	120.44
4	4	59	ILE	C-N-CA	6.44	128.81	120.44
23	P	246	GLN	CA-C-N	6.44	129.43	120.29
23	P	246	GLN	C-N-CA	6.44	129.43	120.29
27	T	108	LEU	CA-C-O	-6.44	113.73	120.55
2	2	144	GLN	CA-C-N	6.43	133.83	121.54
2	2	144	GLN	C-N-CA	6.43	133.83	121.54
21	N	130	ASP	CA-C-N	6.43	126.19	119.05
21	N	130	ASP	C-N-CA	6.43	126.19	119.05
6	6	48	PHE	CA-C-N	6.43	128.89	120.28
6	6	48	PHE	C-N-CA	6.43	128.89	120.28
24	Q	352	GLU	CA-C-N	6.43	126.77	119.83
24	Q	352	GLU	C-N-CA	6.43	126.77	119.83
20	M	134	LEU	CA-C-N	6.42	132.10	122.98
20	M	134	LEU	C-N-CA	6.42	132.10	122.98
28	U	167	GLU	N-CA-C	6.42	118.28	111.28
31	X	32	GLU	N-CA-C	-6.42	98.90	108.99
28	U	285	ILE	CA-C-N	6.42	129.26	120.46
28	U	285	ILE	C-N-CA	6.42	129.26	120.46
15	H	431	ILE	O-C-N	-6.42	115.64	121.87
28	U	264	ALA	CA-C-N	6.42	130.07	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	264	ALA	C-N-CA	6.42	130.07	120.31
3	3	187	VAL	O-C-N	-6.42	116.59	123.14
10	C	143	ARG	N-CA-C	-6.42	104.50	112.90
29	V	150	LYS	CA-C-N	6.42	129.83	120.91
29	V	150	LYS	C-N-CA	6.42	129.83	120.91
19	L	163	THR	O-C-N	6.42	128.94	122.08
21	N	384	LYS	N-CA-C	6.42	118.27	111.28
13	F	116	ALA	CA-C-O	-6.41	112.59	119.97
9	B	63	LYS	N-CA-C	-6.41	106.42	114.56
19	L	373	GLU	N-CA-C	-6.41	100.99	110.48
17	J	384	LEU	CA-C-N	6.41	128.77	120.44
17	J	384	LEU	C-N-CA	6.41	128.77	120.44
25	R	361	VAL	N-CA-C	-6.41	104.08	110.62
27	T	126	LEU	N-CA-C	6.41	118.26	111.28
30	W	53	SER	CA-C-N	6.41	133.97	121.41
30	W	53	SER	C-N-CA	6.41	133.97	121.41
2	2	222	ASP	N-CA-C	-6.41	104.16	112.23
7	7	169	ILE	N-CA-C	6.40	117.15	110.62
24	Q	121	SER	CA-C-N	6.40	128.76	120.56
24	Q	121	SER	C-N-CA	6.40	128.76	120.56
16	I	425	LYS	CA-C-O	-6.40	114.10	120.82
15	H	338	THR	CA-C-N	6.40	128.86	120.28
15	H	338	THR	C-N-CA	6.40	128.86	120.28
18	K	137	VAL	CA-C-N	6.40	131.83	123.00
18	K	137	VAL	C-N-CA	6.40	131.83	123.00
2	2	110	LEU	N-CA-C	-6.40	97.13	108.13
3	3	170	ALA	N-CA-C	-6.40	104.17	114.09
15	H	304	CYS	N-CA-C	-6.40	98.80	108.52
4	4	148	ARG	O-C-N	-6.40	117.37	121.85
13	F	64	ILE	CA-C-O	6.40	126.73	120.27
18	K	425	ASP	CA-C-O	6.39	126.31	119.34
21	N	343	THR	CA-C-N	6.39	131.67	122.40
21	N	343	THR	C-N-CA	6.39	131.67	122.40
9	B	59	GLU	CA-C-O	6.39	127.34	120.24
10	C	189	ALA	O-C-N	6.39	128.90	122.12
12	E	41	ALA	CA-C-O	6.39	127.49	120.71
24	Q	173	SER	CA-C-N	6.39	128.85	120.28
24	Q	173	SER	C-N-CA	6.39	128.85	120.28
1	1	78	ALA	N-CA-C	6.39	118.25	111.28
7	7	89	ALA	N-CA-C	6.39	119.06	111.71
11	D	152	PRO	N-CA-C	-6.39	106.36	114.35
14	G	120	GLN	O-C-N	6.39	130.13	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	I	216	PRO	O-C-N	6.39	130.36	123.01
17	J	198	LEU	CA-C-N	6.39	128.74	120.44
17	J	198	LEU	C-N-CA	6.39	128.74	120.44
25	R	164	THR	CA-C-N	6.38	127.20	119.99
25	R	164	THR	C-N-CA	6.38	127.20	119.99
17	J	84	VAL	CA-C-N	6.38	131.26	122.77
17	J	84	VAL	C-N-CA	6.38	131.26	122.77
18	K	386	ILE	N-CA-C	6.38	117.17	110.72
7	7	176	LEU	CA-C-O	-6.38	113.79	120.55
18	K	76	LYS	N-CA-C	-6.38	104.41	111.36
26	S	295	ALA	CA-C-N	6.38	129.12	120.38
26	S	295	ALA	C-N-CA	6.38	129.12	120.38
33	Z	804	ASP	CA-C-N	6.37	128.72	120.44
33	Z	804	ASP	C-N-CA	6.37	128.72	120.44
4	4	8	VAL	CA-C-N	6.37	129.11	120.38
4	4	8	VAL	C-N-CA	6.37	129.11	120.38
13	F	109	GLY	CA-C-N	6.37	128.72	120.44
13	F	109	GLY	C-N-CA	6.37	128.72	120.44
25	R	373	PRO	CA-C-O	-6.37	109.01	120.60
31	X	92	SER	CA-C-N	6.37	131.72	122.36
31	X	92	SER	C-N-CA	6.37	131.72	122.36
3	3	162	LEU	CA-C-O	-6.37	114.14	120.70
16	I	282	ASP	CA-C-O	-6.37	113.35	120.54
12	E	198	LEU	O-C-N	6.36	128.62	122.07
16	I	158	GLY	N-CA-C	-6.36	100.00	110.56
17	J	181	GLN	CA-C-O	-6.36	113.55	120.17
18	K	282	PHE	O-C-N	-6.36	114.69	122.20
20	M	185	GLY	CA-C-N	6.36	132.97	122.73
20	M	185	GLY	C-N-CA	6.36	132.97	122.73
16	I	398	GLU	CA-C-N	6.36	128.80	120.28
16	I	398	GLU	C-N-CA	6.36	128.80	120.28
23	P	96	MET	CA-C-N	6.36	129.17	120.46
23	P	96	MET	C-N-CA	6.36	129.17	120.46
12	E	37	ALA	N-CA-C	-6.36	97.44	108.69
14	G	88	VAL	CA-C-N	6.36	128.80	120.28
14	G	88	VAL	C-N-CA	6.36	128.80	120.28
20	M	327	THR	CA-C-N	6.36	128.71	120.44
20	M	327	THR	C-N-CA	6.36	128.71	120.44
21	N	292	GLY	N-CA-C	-6.36	107.13	114.69
9	B	119	GLN	N-CA-C	6.36	118.29	111.36
23	P	164	GLN	CA-C-N	6.36	128.70	120.56
23	P	164	GLN	C-N-CA	6.36	128.70	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	400	VAL	N-CA-C	-6.35	98.47	107.75
28	U	37	ILE	CA-C-N	6.35	132.50	122.21
28	U	37	ILE	C-N-CA	6.35	132.50	122.21
12	E	239	LEU	CA-C-N	6.35	129.44	120.42
12	E	239	LEU	C-N-CA	6.35	129.44	120.42
17	J	247	MET	CA-C-N	6.35	131.15	122.19
17	J	247	MET	C-N-CA	6.35	131.15	122.19
12	E	186	GLU	CA-C-N	6.35	130.58	121.50
12	E	186	GLU	C-N-CA	6.35	130.58	121.50
19	L	289	ARG	CA-C-N	6.35	133.67	121.54
19	L	289	ARG	C-N-CA	6.35	133.67	121.54
21	N	730	VAL	CA-C-N	6.35	129.48	120.53
21	N	730	VAL	C-N-CA	6.35	129.48	120.53
28	U	269	THR	O-C-N	6.35	128.85	122.12
16	I	419	ALA	CA-C-N	6.35	128.78	120.28
16	I	419	ALA	C-N-CA	6.35	128.78	120.28
18	K	397	LYS	CA-C-N	6.35	131.16	122.34
18	K	397	LYS	C-N-CA	6.35	131.16	122.34
30	W	7	VAL	O-C-N	6.34	130.08	123.04
30	W	33	VAL	CA-C-O	-6.34	114.12	120.85
4	4	139	THR	CA-C-N	6.34	128.78	120.28
4	4	139	THR	C-N-CA	6.34	128.78	120.28
23	P	309	MET	N-CA-C	-6.34	104.10	113.61
33	Z	833	GLN	CA-C-N	6.34	128.68	120.44
33	Z	833	GLN	C-N-CA	6.34	128.68	120.44
33	Z	783	VAL	N-CA-C	-6.34	104.16	110.62
4	4	29	ASP	N-CA-C	-6.33	102.79	112.99
18	K	61	LEU	CA-C-N	6.33	128.68	120.44
18	K	61	LEU	C-N-CA	6.33	128.68	120.44
31	X	109	LEU	N-CA-C	-6.33	98.40	109.48
9	B	242	GLU	CA-C-N	6.33	129.41	120.42
9	B	242	GLU	C-N-CA	6.33	129.41	120.42
18	K	309	SER	N-CA-C	-6.33	105.87	113.97
8	A	90	ALA	N-CA-C	-6.33	104.46	111.36
18	K	86	VAL	CA-C-O	-6.33	114.37	120.95
19	L	329	ARG	O-C-N	-6.33	115.43	121.57
14	G	175	LEU	CA-C-O	-6.33	114.18	120.82
16	I	266	GLN	CA-C-N	6.33	128.53	120.56
16	I	266	GLN	C-N-CA	6.33	128.53	120.56
12	E	209	GLU	N-CA-C	-6.32	104.88	112.59
20	M	161	SER	CA-C-O	6.32	128.83	121.87
16	I	326	MET	N-CA-C	-6.32	99.90	109.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	239	THR	CA-C-N	6.32	133.62	121.54
20	M	239	THR	C-N-CA	6.32	133.62	121.54
22	O	94	GLU	CA-C-O	-6.32	113.72	120.42
24	Q	262	LEU	N-CA-C	6.32	118.17	111.28
14	G	119	VAL	CA-C-O	-6.32	114.15	120.85
21	N	146	LYS	N-CA-C	-6.32	104.27	112.23
5	5	13	ILE	N-CA-C	-6.32	98.64	107.80
11	D	175	LEU	CA-C-N	6.32	130.71	120.60
11	D	175	LEU	C-N-CA	6.32	130.71	120.60
21	N	885	ILE	N-CA-C	-6.32	99.27	108.87
23	P	412	LEU	CA-C-O	-6.32	114.19	120.82
27	T	227	PRO	O-C-N	6.31	131.09	123.13
14	G	142	LYS	CA-C-O	-6.31	111.85	119.49
21	N	396	SER	O-C-N	6.31	128.62	121.93
21	N	197	VAL	CA-C-O	-6.31	114.13	120.31
19	L	227	GLY	O-C-N	6.31	129.47	122.47
1	1	35	THR	O-C-N	6.30	130.80	123.30
24	Q	429	LYS	CA-C-N	6.30	129.05	120.54
24	Q	429	LYS	C-N-CA	6.30	129.05	120.54
12	E	213	ASP	N-CA-C	-6.30	100.23	109.18
12	E	150	ASP	N-CA-C	-6.30	103.23	113.19
14	G	100	LYS	CA-C-O	6.30	127.44	120.82
16	I	181	TYR	N-CA-C	6.30	118.96	111.71
18	K	51	LEU	CA-C-N	6.30	128.72	120.28
18	K	51	LEU	C-N-CA	6.30	128.72	120.28
19	L	81	ILE	O-C-N	-6.30	114.70	122.57
1	1	56	ALA	CA-C-N	6.29	129.00	120.38
1	1	56	ALA	C-N-CA	6.29	129.00	120.38
1	1	140	LYS	O-C-N	-6.29	114.98	122.15
2	2	10	ASN	CA-C-O	-6.29	112.20	119.56
9	B	124	SER	CA-C-N	6.29	130.67	121.67
9	B	124	SER	C-N-CA	6.29	130.67	121.67
11	D	13	PRO	N-CA-C	-6.29	105.78	114.27
8	A	250	GLU	CA-C-N	6.29	129.22	120.29
8	A	250	GLU	C-N-CA	6.29	129.22	120.29
19	L	212	ILE	N-CA-C	-6.29	99.14	108.45
12	E	77	ALA	N-CA-C	-6.29	99.66	109.72
27	T	126	LEU	CA-C-N	6.29	129.22	120.29
27	T	126	LEU	C-N-CA	6.29	129.22	120.29
10	C	175	LEU	CA-C-N	6.28	128.70	120.28
10	C	175	LEU	C-N-CA	6.28	128.70	120.28
16	I	87	LYS	CA-C-O	-6.28	113.76	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	48	GLU	N-CA-C	6.28	118.13	111.28
26	S	226	ASP	CA-C-O	-6.28	114.03	121.32
26	S	393	ARG	N-CA-C	6.28	118.13	111.28
14	G	173	ALA	CA-C-N	6.28	129.21	120.29
14	G	173	ALA	C-N-CA	6.28	129.21	120.29
3	3	125	LYS	N-CA-C	-6.28	103.81	112.03
3	3	31	PHE	N-CA-C	-6.28	97.57	107.93
17	J	154	THR	N-CA-C	6.28	118.92	111.33
24	Q	298	ALA	CA-C-O	6.28	127.20	120.55
6	6	123	GLU	N-CA-C	-6.27	99.53	109.07
19	L	88	TYR	O-C-N	-6.27	115.00	122.15
28	U	195	LYS	CA-C-N	6.27	128.60	120.44
28	U	195	LYS	C-N-CA	6.27	128.60	120.44
33	Z	389	PHE	N-CA-C	6.27	117.78	111.07
5	5	164	ALA	CA-C-O	6.27	127.07	120.42
27	T	125	GLU	CA-C-O	-6.27	113.90	120.55
5	5	37	ILE	N-CA-C	6.27	116.75	110.23
9	B	91	LYS	O-C-N	6.27	128.86	122.09
11	D	121	THR	N-CA-C	-6.27	103.75	111.40
11	D	183	GLU	O-C-N	-6.27	116.23	121.12
28	U	87	GLU	N-CA-C	-6.27	97.45	110.80
18	K	190	LEU	CA-C-N	6.27	125.83	119.19
18	K	190	LEU	C-N-CA	6.27	125.83	119.19
18	K	369	ASP	CA-C-N	6.26	128.58	120.44
18	K	369	ASP	C-N-CA	6.26	128.58	120.44
33	Z	621	LEU	CA-C-N	6.26	128.68	120.28
33	Z	621	LEU	C-N-CA	6.26	128.68	120.28
31	X	42	GLU	O-C-N	6.26	129.75	122.17
31	X	98	PHE	N-CA-C	-6.26	99.70	109.72
33	Z	229	SER	N-CA-C	6.26	118.86	110.35
16	I	355	LEU	O-C-N	6.26	128.52	122.07
21	N	565	ASN	O-C-N	6.26	129.28	122.15
33	Z	976	HIS	N-CA-C	-6.26	103.05	111.87
21	N	754	THR	O-C-N	-6.25	115.82	121.39
4	4	106	TYR	N-CA-C	-6.25	98.33	108.52
25	R	286	LEU	O-C-N	6.25	128.59	122.09
12	E	19	GLY	O-C-N	6.25	130.83	122.70
17	J	45	GLU	N-CA-C	-6.25	104.47	111.28
23	P	292	LYS	CA-C-N	6.25	128.57	120.44
23	P	292	LYS	C-N-CA	6.25	128.57	120.44
26	S	140	LEU	CA-C-N	6.25	128.57	120.44
26	S	140	LEU	C-N-CA	6.25	128.57	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	C	229	ILE	N-CA-C	-6.25	98.12	107.37
21	N	406	TYR	CA-C-N	6.25	128.15	120.22
21	N	406	TYR	C-N-CA	6.25	128.15	120.22
13	F	208	VAL	N-CA-C	6.25	116.99	110.62
33	Z	621	LEU	O-C-N	-6.25	115.03	122.15
1	1	101	GLY	O-C-N	6.24	129.28	123.54
22	O	21	SER	CA-C-O	-6.24	111.43	118.55
23	P	216	LEU	CA-C-N	6.24	129.15	120.29
23	P	216	LEU	C-N-CA	6.24	129.15	120.29
21	N	69	TYR	CA-C-N	6.24	128.97	120.54
21	N	69	TYR	C-N-CA	6.24	128.97	120.54
26	S	227	ASN	N-CA-C	-6.24	105.61	112.72
16	I	123	PRO	N-CA-C	-6.24	106.69	114.68
31	X	55	LYS	CA-C-N	6.24	127.64	119.84
31	X	55	LYS	C-N-CA	6.24	127.64	119.84
22	O	171	PHE	CA-C-O	-6.24	114.28	120.70
4	4	148	ARG	N-CA-C	-6.23	98.13	108.23
20	M	175	LYS	CA-C-N	6.23	127.63	119.84
20	M	175	LYS	C-N-CA	6.23	127.63	119.84
21	N	383	LYS	CA-C-N	6.23	128.63	120.28
21	N	383	LYS	C-N-CA	6.23	128.63	120.28
26	S	156	VAL	N-CA-C	6.23	117.72	110.62
5	5	156	LEU	N-CA-C	6.23	118.07	111.28
6	6	29	ARG	N-CA-C	-6.22	104.27	113.61
3	3	150	GLU	N-CA-C	-6.22	102.30	110.39
12	E	12	VAL	CA-C-N	6.22	130.62	120.23
12	E	12	VAL	C-N-CA	6.22	130.62	120.23
14	G	215	ILE	O-C-N	-6.22	116.13	123.04
24	Q	102	GLU	CA-C-N	6.22	129.13	120.29
24	Q	102	GLU	C-N-CA	6.22	129.13	120.29
28	U	208	VAL	CA-C-N	6.22	128.53	120.44
28	U	208	VAL	C-N-CA	6.22	128.53	120.44
33	Z	967	THR	CA-C-N	6.22	132.36	122.59
33	Z	967	THR	C-N-CA	6.22	132.36	122.59
20	M	50	ARG	N-CA-C	-6.22	104.58	111.36
17	J	137	MET	N-CA-C	-6.22	99.67	109.50
23	P	218	LEU	CA-C-N	6.22	129.12	120.29
23	P	218	LEU	C-N-CA	6.22	129.12	120.29
29	V	35	LEU	N-CA-C	6.22	118.85	111.33
18	K	328	LEU	CA-C-O	6.22	127.01	120.42
29	V	101	ASP	N-CA-C	6.21	119.35	110.10
3	3	131	GLY	CA-C-O	-6.21	115.53	122.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	302	LYS	CA-C-N	6.21	133.40	121.54
15	H	302	LYS	C-N-CA	6.21	133.40	121.54
29	V	293	VAL	N-CA-C	6.21	116.99	110.72
19	L	414	ASP	CA-C-N	6.21	128.60	120.28
19	L	414	ASP	C-N-CA	6.21	128.60	120.28
27	T	23	CYS	CA-C-O	-6.21	113.97	120.55
27	T	85	LEU	CA-C-N	6.20	127.84	120.09
27	T	85	LEU	C-N-CA	6.20	127.84	120.09
8	A	210	MET	CA-C-N	6.20	128.50	120.56
8	A	210	MET	C-N-CA	6.20	128.50	120.56
18	K	149	ILE	N-CA-C	-6.20	99.54	108.53
21	N	535	LEU	O-C-N	-6.20	114.64	122.27
24	Q	120	LYS	N-CA-C	6.20	118.04	111.28
25	R	27	SER	CA-C-N	6.20	128.59	120.28
25	R	27	SER	C-N-CA	6.20	128.59	120.28
15	H	233	GLU	CA-C-N	6.20	128.49	120.44
15	H	233	GLU	C-N-CA	6.20	128.49	120.44
10	C	71	ASP	N-CA-C	-6.19	105.30	112.92
5	5	141	ASP	N-CA-C	6.19	118.03	111.28
12	E	152	GLY	CA-C-N	6.19	129.55	120.82
12	E	152	GLY	C-N-CA	6.19	129.55	120.82
33	Z	49	LEU	CA-C-N	6.19	131.95	122.29
33	Z	49	LEU	C-N-CA	6.19	131.95	122.29
33	Z	175	ASP	CA-C-N	6.19	128.86	120.38
33	Z	175	ASP	C-N-CA	6.19	128.86	120.38
16	I	142	GLU	CA-C-N	6.19	127.57	119.84
16	I	142	GLU	C-N-CA	6.19	127.57	119.84
21	N	612	SER	CA-C-N	6.19	129.62	120.90
21	N	612	SER	C-N-CA	6.19	129.62	120.90
1	1	68	SER	CA-C-O	-6.18	113.99	120.55
4	4	91	ILE	CA-C-O	-6.18	113.79	120.47
13	F	192	ALA	O-C-N	-6.18	115.56	122.12
19	L	307	GLU	CA-C-N	6.18	128.48	120.44
19	L	307	GLU	C-N-CA	6.18	128.48	120.44
21	N	126	LYS	O-C-N	6.18	130.30	123.25
33	Z	237	VAL	N-CA-C	-6.18	105.69	112.80
33	Z	969	GLU	N-CA-C	-6.18	105.01	113.30
21	N	336	ASN	CA-C-O	-6.18	114.51	121.00
21	N	899	ASN	CA-C-O	-6.18	114.42	121.40
23	P	41	VAL	N-CA-C	6.18	116.92	110.62
25	R	131	ALA	CA-C-O	-6.18	112.86	119.97
30	W	33	VAL	CA-C-N	6.18	129.38	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	W	33	VAL	C-N-CA	6.18	129.38	120.79
8	A	51	THR	N-CA-C	-6.18	97.75	108.69
11	D	139	ASP	O-C-N	-6.18	115.05	121.60
1	1	146	MET	N-CA-C	6.17	118.75	110.35
13	F	90	GLN	CA-C-N	6.17	128.55	120.28
13	F	90	GLN	C-N-CA	6.17	128.55	120.28
33	Z	418	ALA	CA-C-O	-6.17	114.34	120.82
16	I	96	LEU	N-CA-C	6.17	117.67	111.07
23	P	106	SER	CA-C-N	6.17	129.69	120.31
23	P	106	SER	C-N-CA	6.17	129.69	120.31
17	J	32	LEU	N-CA-C	6.17	117.67	111.07
22	O	143	LEU	N-CA-C	6.17	118.00	111.28
4	4	55	PHE	CA-C-N	6.17	128.46	120.44
4	4	55	PHE	C-N-CA	6.17	128.46	120.44
25	R	32	LEU	O-C-N	6.17	128.66	122.12
25	R	73	ASN	CA-C-N	6.17	133.32	121.54
25	R	73	ASN	C-N-CA	6.17	133.32	121.54
28	U	189	ARG	CA-C-N	6.17	128.46	120.44
28	U	189	ARG	C-N-CA	6.17	128.46	120.44
33	Z	384	SER	O-C-N	-6.17	115.72	122.07
21	N	187	ASN	N-CA-C	-6.17	104.64	111.36
26	S	351	ALA	CA-C-O	6.17	127.29	120.82
24	Q	146	TYR	CA-C-N	6.16	128.54	120.28
24	Q	146	TYR	C-N-CA	6.16	128.54	120.28
24	Q	160	ASP	CA-C-N	6.16	129.04	120.29
24	Q	160	ASP	C-N-CA	6.16	129.04	120.29
26	S	404	LEU	CA-C-O	-6.16	114.02	120.55
21	N	213	PHE	CA-C-N	6.16	129.04	120.29
21	N	213	PHE	C-N-CA	6.16	129.04	120.29
27	T	88	TYR	CA-C-N	6.16	128.45	120.44
27	T	88	TYR	C-N-CA	6.16	128.45	120.44
21	N	780	ASP	CA-C-O	6.16	127.66	119.59
33	Z	67	SER	O-C-N	6.16	128.74	122.09
4	4	67	SER	N-CA-C	6.16	118.78	111.33
10	C	205	ALA	O-C-N	6.16	130.78	122.59
16	I	215	PRO	CA-C-N	6.16	126.48	119.83
16	I	215	PRO	C-N-CA	6.16	126.48	119.83
16	I	396	CYS	CA-C-N	6.16	129.03	120.29
16	I	396	CYS	C-N-CA	6.16	129.03	120.29
21	N	296	CYS	CA-C-N	6.16	128.53	120.28
21	N	296	CYS	C-N-CA	6.16	128.53	120.28
21	N	222	TYR	CA-C-N	6.16	128.53	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	222	TYR	C-N-CA	6.16	128.53	120.28
11	D	106	VAL	CA-C-O	-6.16	114.33	120.85
13	F	221	PRO	CA-C-O	-6.16	114.35	121.86
33	Z	810	ASN	CA-C-N	6.15	128.53	120.28
33	Z	810	ASN	C-N-CA	6.15	128.53	120.28
2	2	88	PHE	CA-C-N	6.15	128.52	120.28
2	2	88	PHE	C-N-CA	6.15	128.52	120.28
24	Q	258	ALA	CA-C-N	6.15	128.44	120.44
24	Q	258	ALA	C-N-CA	6.15	128.44	120.44
4	4	144	ASP	O-C-N	-6.15	115.60	122.12
13	F	30	LYS	N-CA-C	6.15	119.88	112.38
27	T	20	TYR	CA-C-N	6.15	128.52	120.28
27	T	20	TYR	C-N-CA	6.15	128.52	120.28
27	T	174	PHE	CA-C-N	6.15	128.80	120.38
27	T	174	PHE	C-N-CA	6.15	128.80	120.38
15	H	208	TYR	CA-C-N	6.14	128.51	120.28
15	H	208	TYR	C-N-CA	6.14	128.51	120.28
19	L	139	LYS	N-CA-C	-6.14	105.82	113.38
21	N	578	ASP	N-CA-C	-6.14	99.68	109.76
29	V	109	HIS	CB-CG-ND1	-6.14	113.48	122.70
31	X	76	VAL	N-CA-C	-6.14	100.30	107.61
19	L	124	GLY	O-C-N	-6.14	115.63	121.77
23	P	257	TRP	N-CA-C	6.14	118.05	111.36
3	3	131	GLY	CA-C-N	6.14	128.79	120.44
3	3	131	GLY	C-N-CA	6.14	128.79	120.44
23	P	341	LEU	CA-C-N	6.14	128.78	120.44
23	P	341	LEU	C-N-CA	6.14	128.78	120.44
24	Q	113	ASP	CA-C-N	6.14	129.00	120.29
24	Q	113	ASP	C-N-CA	6.14	129.00	120.29
3	3	131	GLY	O-C-N	6.13	129.54	123.10
12	E	74	ILE	CA-C-N	6.13	127.93	122.47
12	E	74	ILE	C-N-CA	6.13	127.93	122.47
17	J	276	LEU	CA-C-N	6.13	128.50	120.28
17	J	276	LEU	C-N-CA	6.13	128.50	120.28
2	2	87	LEU	N-CA-C	6.13	117.96	111.28
29	V	101	ASP	CA-C-O	-6.13	113.93	120.92
24	Q	153	ASP	N-CA-C	6.13	118.04	111.36
24	Q	10	GLU	CA-C-N	6.13	128.99	120.29
24	Q	10	GLU	C-N-CA	6.13	128.99	120.29
29	V	150	LYS	N-CA-C	-6.13	97.75	110.80
7	7	151	VAL	CA-C-O	-6.13	114.02	120.76
12	E	196	ALA	CA-C-N	6.13	128.41	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	E	196	ALA	C-N-CA	6.13	128.41	120.44
14	G	8	ASP	CA-C-N	6.13	131.85	122.23
14	G	8	ASP	C-N-CA	6.13	131.85	122.23
14	G	53	ILE	N-CA-C	-6.13	99.59	108.17
15	H	61	ALA	CA-C-O	6.13	126.91	120.42
24	Q	49	LYS	CA-C-N	6.13	128.49	120.28
24	Q	49	LYS	C-N-CA	6.13	128.49	120.28
5	5	24	ASN	N-CA-C	-6.12	105.61	114.12
15	H	422	VAL	CB-CA-C	-6.12	103.87	112.14
17	J	281	GLY	CA-C-N	6.12	128.49	120.28
17	J	281	GLY	C-N-CA	6.12	128.49	120.28
21	N	263	SER	N-CA-C	-6.12	103.34	111.24
14	G	127	SER	N-CA-C	-6.12	105.81	113.28
14	G	193	LYS	CA-C-N	6.12	128.48	120.28
14	G	193	LYS	C-N-CA	6.12	128.48	120.28
2	2	10	ASN	CA-C-N	-6.12	113.05	120.51
2	2	10	ASN	C-N-CA	-6.12	113.05	120.51
5	5	113	TYR	CA-C-O	6.12	126.97	120.36
6	6	87	LEU	O-C-N	6.12	128.37	122.07
23	P	43	GLU	CA-C-O	-6.12	114.07	120.55
25	R	65	TYR	N-CA-C	6.12	117.95	111.28
17	J	307	PRO	O-C-N	-6.12	115.51	122.91
23	P	313	ILE	CA-C-O	6.11	127.33	120.85
17	J	169	LYS	CA-C-N	6.11	128.60	122.00
17	J	169	LYS	C-N-CA	6.11	128.60	122.00
5	5	28	SER	N-CA-C	-6.10	99.41	108.99
1	1	43	CYS	CA-C-N	6.10	131.14	122.72
1	1	43	CYS	C-N-CA	6.10	131.14	122.72
14	G	187	SER	O-C-N	6.10	129.77	122.94
29	V	255	ILE	CA-C-N	6.10	128.73	120.44
29	V	255	ILE	C-N-CA	6.10	128.73	120.44
4	4	140	PHE	O-C-N	-6.09	115.66	122.12
4	4	12	VAL	CA-C-O	6.09	126.78	120.39
9	B	110	LEU	CA-C-N	6.09	128.81	120.46
9	B	110	LEU	C-N-CA	6.09	128.81	120.46
26	S	380	CYS	CA-C-N	6.09	128.36	120.56
26	S	380	CYS	C-N-CA	6.09	128.36	120.56
16	I	357	THR	CA-C-N	6.09	128.44	120.28
16	I	357	THR	C-N-CA	6.09	128.44	120.28
25	R	70	TYR	N-CA-C	-6.09	103.97	112.25
26	S	281	ALA	CA-C-N	6.09	128.80	120.46
26	S	281	ALA	C-N-CA	6.09	128.80	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	F	22	VAL	N-CA-C	-6.09	104.37	111.00
21	N	328	PHE	N-CA-C	6.08	117.91	111.28
33	Z	827	LEU	N-CA-C	6.08	119.80	112.38
20	M	233	ARG	O-C-N	-6.08	115.67	122.12
21	N	659	ALA	CA-C-N	6.08	128.35	120.44
21	N	659	ALA	C-N-CA	6.08	128.35	120.44
24	Q	297	ASP	CA-C-N	6.08	128.43	120.28
24	Q	297	ASP	C-N-CA	6.08	128.43	120.28
27	T	26	LEU	N-CA-C	6.08	117.91	111.28
2	2	126	SER	CA-C-N	6.08	132.27	121.75
2	2	126	SER	C-N-CA	6.08	132.27	121.75
25	R	221	VAL	O-C-N	6.08	130.15	121.82
33	Z	848	THR	O-C-N	-6.08	115.22	122.15
16	I	265	ARG	CA-C-N	6.08	129.03	120.28
16	I	265	ARG	C-N-CA	6.08	129.03	120.28
21	N	27	SER	N-CA-C	-6.08	104.58	111.14
23	P	233	GLU	CA-C-N	6.08	129.54	120.31
23	P	233	GLU	C-N-CA	6.08	129.54	120.31
29	V	256	GLU	CA-C-N	6.08	128.74	120.54
29	V	256	GLU	C-N-CA	6.08	128.74	120.54
9	B	139	HIS	N-CA-C	-6.07	99.46	108.99
18	K	324	LEU	N-CA-C	-6.07	100.09	109.14
15	H	170	GLU	CB-CA-C	-6.07	107.88	115.89
2	2	162	GLY	CA-C-N	6.07	128.21	120.56
2	2	162	GLY	C-N-CA	6.07	128.21	120.56
16	I	410	GLN	CA-C-O	-6.07	113.94	120.92
10	C	142	ASP	CA-C-N	6.07	132.69	121.52
10	C	142	ASP	C-N-CA	6.07	132.69	121.52
16	I	332	GLU	N-CA-C	-6.07	105.74	113.02
27	T	171	ILE	CA-C-O	6.07	127.06	120.57
30	W	86	HIS	CE1-NE2-CD2	-6.07	102.93	109.00
19	L	180	PHE	O-C-N	-6.07	114.20	122.33
28	U	288	PHE	CA-C-N	6.07	128.32	120.44
28	U	288	PHE	C-N-CA	6.07	128.32	120.44
26	S	327	ILE	N-CA-C	-6.06	100.39	107.61
30	W	86	HIS	CA-CB-CG	-6.06	107.74	113.80
1	1	176	VAL	O-C-N	-6.06	117.15	123.03
26	S	392	ILE	N-CA-C	-6.06	104.60	110.72
26	S	401	LYS	CA-C-O	6.06	127.25	120.70
11	D	216	LYS	CA-C-O	-6.06	115.69	121.08
12	E	48	LEU	CA-C-N	6.06	126.28	121.61
12	E	48	LEU	C-N-CA	6.06	126.28	121.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	E	93	ARG	N-CA-C	-6.06	104.59	111.14
21	N	768	ILE	O-C-N	-6.06	115.49	121.12
33	Z	214	HIS	N-CA-C	6.06	119.93	112.54
24	Q	190	ASN	CA-C-N	6.06	128.89	120.29
24	Q	190	ASN	C-N-CA	6.06	128.89	120.29
11	D	14	ASP	N-CA-C	-6.05	105.93	113.38
12	E	183	LEU	CA-C-N	6.05	128.39	120.28
12	E	183	LEU	C-N-CA	6.05	128.39	120.28
21	N	223	LEU	O-C-N	6.05	128.54	122.12
33	Z	973	TYR	N-CA-C	-6.05	103.43	111.24
24	Q	423	VAL	CA-C-N	6.05	128.31	120.44
24	Q	423	VAL	C-N-CA	6.05	128.31	120.44
30	W	78	ASP	O-C-N	-6.05	115.25	122.15
21	N	382	GLY	CA-C-N	6.05	128.39	120.28
21	N	382	GLY	C-N-CA	6.05	128.39	120.28
21	N	770	LYS	CA-C-N	6.05	133.10	121.54
21	N	770	LYS	C-N-CA	6.05	133.10	121.54
23	P	202	LYS	CA-C-O	-6.05	114.47	120.82
3	3	66	LYS	O-C-N	6.05	128.30	122.07
8	A	18	ILE	CA-C-O	-6.05	115.40	121.45
21	N	232	LEU	CA-C-N	6.05	133.10	121.54
21	N	232	LEU	C-N-CA	6.05	133.10	121.54
21	N	323	GLY	O-C-N	6.05	129.13	122.96
19	L	306	MET	CA-C-O	-6.05	113.27	120.10
30	W	187	SER	CA-C-N	6.05	129.28	120.51
30	W	187	SER	C-N-CA	6.05	129.28	120.51
21	N	686	ILE	CA-C-N	6.04	128.87	120.29
21	N	686	ILE	C-N-CA	6.04	128.87	120.29
26	S	341	SER	CA-C-N	6.04	128.38	120.28
26	S	341	SER	C-N-CA	6.04	128.38	120.28
13	F	124	GLY	CA-C-N	6.04	128.92	121.06
13	F	124	GLY	C-N-CA	6.04	128.92	121.06
16	I	94	LYS	N-CA-C	-6.04	104.38	110.97
18	K	166	LYS	CA-C-N	6.04	126.00	119.78
18	K	166	LYS	C-N-CA	6.04	126.00	119.78
21	N	127	ASP	O-C-N	6.04	130.14	123.01
21	N	449	GLY	O-C-N	6.04	127.99	122.19
24	Q	352	GLU	CA-C-O	-6.04	111.88	120.16
25	R	309	LEU	N-CA-C	-6.04	104.77	111.36
9	B	144	GLY	CA-C-N	6.04	131.65	122.65
9	B	144	GLY	C-N-CA	6.04	131.65	122.65
11	D	191	CYS	CA-C-N	6.04	128.73	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	D	191	CYS	C-N-CA	6.04	128.73	120.46
20	M	199	LEU	O-C-N	-6.04	115.03	120.71
24	Q	164	GLU	O-C-N	6.04	128.52	122.12
20	M	430	VAL	N-CA-C	6.03	117.07	108.93
23	P	136	ARG	CA-C-N	6.03	128.36	120.28
23	P	136	ARG	C-N-CA	6.03	128.36	120.28
18	K	122	ILE	N-CA-C	-6.03	99.85	109.20
21	N	43	LEU	O-C-N	-6.03	114.73	120.70
21	N	126	LYS	CA-C-O	-6.03	114.82	121.33
21	N	861	TYR	N-CA-C	-6.03	99.89	109.23
14	G	119	VAL	O-C-N	6.03	128.04	121.83
16	I	261	PRO	CA-C-N	6.03	128.64	120.44
16	I	261	PRO	C-N-CA	6.03	128.64	120.44
20	M	270	ALA	CA-C-N	6.03	128.85	120.29
20	M	270	ALA	C-N-CA	6.03	128.85	120.29
21	N	608	LEU	CA-C-N	6.03	129.47	120.31
21	N	608	LEU	C-N-CA	6.03	129.47	120.31
26	S	132	ALA	CA-C-N	6.03	128.68	120.54
26	S	132	ALA	C-N-CA	6.03	128.68	120.54
16	I	362	LEU	CA-C-N	6.02	126.67	119.98
16	I	362	LEU	C-N-CA	6.02	126.67	119.98
15	H	234	ARG	O-C-N	6.02	128.27	122.07
18	K	68	ILE	CA-C-O	-6.02	114.69	120.95
6	6	158	LYS	CA-C-O	6.02	125.83	119.03
5	5	38	ASN	O-C-N	-6.02	114.40	121.32
25	R	362	ALA	CA-C-N	6.02	128.63	120.44
25	R	362	ALA	C-N-CA	6.02	128.63	120.44
23	P	266	TYR	CA-C-N	6.02	128.34	120.28
23	P	266	TYR	C-N-CA	6.02	128.34	120.28
11	D	21	GLU	N-CA-C	-6.01	104.81	111.36
25	R	221	VAL	N-CA-C	6.01	119.50	111.44
33	Z	207	ILE	N-CA-C	6.01	116.75	110.62
4	4	142	LEU	CA-C-N	6.01	128.25	120.44
4	4	142	LEU	C-N-CA	6.01	128.25	120.44
10	C	59	GLN	N-CA-C	-6.01	105.25	113.30
17	J	135	SER	N-CA-C	-6.01	102.71	111.30
17	J	261	SER	N-CA-C	-6.01	100.01	108.96
19	L	264	ARG	CA-C-N	6.01	128.33	120.28
19	L	264	ARG	C-N-CA	6.01	128.33	120.28
24	Q	314	PHE	N-CA-C	6.01	117.83	111.28
16	I	190	GLN	CA-C-N	6.01	128.69	120.46
16	I	190	GLN	C-N-CA	6.01	128.69	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	532	ALA	N-CA-C	-6.01	105.99	113.38
12	E	171	ALA	CA-C-N	6.01	131.22	122.69
12	E	171	ALA	C-N-CA	6.01	131.22	122.69
25	R	150	ALA	CA-C-N	6.01	128.25	120.44
25	R	150	ALA	C-N-CA	6.01	128.25	120.44
5	5	203	GLU	N-CA-C	6.00	117.90	111.36
21	N	311	ILE	CA-C-O	-6.00	112.31	119.58
21	N	449	GLY	CA-C-N	6.00	128.95	120.42
21	N	449	GLY	C-N-CA	6.00	128.95	120.42
28	U	269	THR	CA-C-N	6.00	128.32	120.28
28	U	269	THR	C-N-CA	6.00	128.32	120.28
7	7	77	GLU	O-C-N	-6.00	114.61	122.59
21	N	71	ASN	CA-C-N	6.00	128.81	120.29
21	N	71	ASN	C-N-CA	6.00	128.81	120.29
17	J	210	PHE	O-C-N	-6.00	116.23	123.13
33	Z	609	THR	N-CA-C	6.00	119.18	110.42
18	K	85	GLU	N-CA-C	6.00	117.89	111.36
2	2	52	THR	CA-C-O	5.99	126.77	120.42
7	7	-6	GLN	CA-C-N	5.99	125.90	119.85
7	7	-6	GLN	C-N-CA	5.99	125.90	119.85
10	C	119	LYS	CA-C-N	5.99	128.31	120.28
10	C	119	LYS	C-N-CA	5.99	128.31	120.28
15	H	289	ARG	CA-C-N	5.99	128.31	120.28
15	H	289	ARG	C-N-CA	5.99	128.31	120.28
19	L	258	GLU	CA-C-N	5.99	128.80	120.29
19	L	258	GLU	C-N-CA	5.99	128.80	120.29
28	U	59	ASP	CA-C-N	5.99	128.31	120.28
28	U	59	ASP	C-N-CA	5.99	128.31	120.28
2	2	172	ASN	CA-C-N	5.99	131.07	123.10
2	2	172	ASN	C-N-CA	5.99	131.07	123.10
26	S	217	PHE	N-CA-C	5.99	117.81	111.28
30	W	173	THR	CA-C-O	5.99	126.91	120.32
31	X	13	GLY	O-C-N	-5.99	118.38	123.59
20	M	390	GLN	CA-C-O	-5.99	114.07	120.42
22	O	336	LEU	CA-C-N	5.99	131.63	122.11
22	O	336	LEU	C-N-CA	5.99	131.63	122.11
33	Z	217	GLU	CA-C-N	5.99	129.11	120.79
33	Z	217	GLU	C-N-CA	5.99	129.11	120.79
11	D	92	GLU	N-CA-C	5.99	118.77	111.82
22	O	133	ILE	CA-C-N	5.99	128.58	120.44
22	O	133	ILE	C-N-CA	5.99	128.58	120.44
24	Q	212	THR	CA-C-N	5.99	128.79	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	212	THR	C-N-CA	5.99	128.79	120.29
19	L	186	LEU	N-CA-C	-5.98	104.63	112.41
23	P	429	ILE	CA-C-O	-5.98	114.83	121.17
33	Z	483	THR	CA-C-N	5.98	128.22	120.44
33	Z	483	THR	C-N-CA	5.98	128.22	120.44
16	I	403	ALA	N-CA-C	5.98	117.80	111.28
23	P	242	GLN	CA-C-N	5.98	129.41	120.31
23	P	242	GLN	C-N-CA	5.98	129.41	120.31
33	Z	547	MET	O-C-N	-5.98	115.33	122.15
2	2	30	ASN	CA-C-O	5.98	126.96	120.32
11	D	43	VAL	CA-C-N	5.98	131.20	122.77
11	D	43	VAL	C-N-CA	5.98	131.20	122.77
25	R	42	GLN	CA-C-N	5.98	130.81	120.58
25	R	42	GLN	C-N-CA	5.98	130.81	120.58
28	U	166	ALA	CA-C-N	5.98	128.29	120.28
28	U	166	ALA	C-N-CA	5.98	128.29	120.28
19	L	101	ILE	N-CA-C	5.98	119.23	109.78
6	6	38	GLY	CA-C-N	5.98	132.62	123.47
6	6	38	GLY	C-N-CA	5.98	132.62	123.47
15	H	58	ASP	O-C-N	5.98	128.46	122.12
16	I	77	SER	CA-C-N	5.97	128.77	120.29
16	I	77	SER	C-N-CA	5.97	128.77	120.29
24	Q	14	LEU	N-CA-C	5.97	118.58	111.71
33	Z	917	ASN	CA-C-N	5.97	130.70	120.72
33	Z	917	ASN	C-N-CA	5.97	130.70	120.72
16	I	216	PRO	CA-C-N	5.97	128.20	120.44
16	I	216	PRO	C-N-CA	5.97	128.20	120.44
17	J	36	SER	CA-C-N	5.97	128.77	120.29
17	J	36	SER	C-N-CA	5.97	128.77	120.29
24	Q	345	SER	N-CA-C	5.97	117.79	111.28
29	V	30	SER	CA-C-N	5.97	129.09	120.79
29	V	30	SER	C-N-CA	5.97	129.09	120.79
28	U	303	GLU	CA-C-O	-5.97	114.55	120.82
1	1	62	HIS	CA-C-O	-5.97	114.22	120.55
16	I	312	GLN	CA-C-N	5.97	128.20	120.44
16	I	312	GLN	C-N-CA	5.97	128.20	120.44
5	5	42	LEU	CA-C-N	5.96	127.13	121.46
5	5	42	LEU	C-N-CA	5.96	127.13	121.46
10	C	56	LEU	N-CA-C	-5.96	106.99	114.56
19	L	170	MET	N-CA-C	-5.96	98.10	110.80
22	O	30	GLU	CA-C-N	5.96	128.59	120.54
22	O	30	GLU	C-N-CA	5.96	128.59	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	772	ILE	N-CA-C	5.96	116.74	110.72
5	5	133	GLN	N-CA-C	5.96	118.26	111.11
23	P	186	LEU	N-CA-C	5.96	117.86	111.36
24	Q	187	LYS	CA-C-N	5.96	130.67	120.72
24	Q	187	LYS	C-N-CA	5.96	130.67	120.72
26	S	460	VAL	N-CA-C	5.96	116.14	110.42
18	K	385	ALA	CA-C-N	5.96	128.88	120.42
18	K	385	ALA	C-N-CA	5.96	128.88	120.42
20	M	236	ALA	CA-C-N	5.96	128.75	120.29
20	M	236	ALA	C-N-CA	5.96	128.75	120.29
24	Q	54	GLN	O-C-N	-5.96	115.25	122.22
27	T	264	MET	CA-C-N	5.96	128.18	120.44
27	T	264	MET	C-N-CA	5.96	128.18	120.44
9	B	47	THR	N-CA-C	-5.96	99.91	108.60
5	5	209	ASN	N-CA-C	-5.95	104.70	111.07
14	G	78	SER	CA-C-O	5.95	127.51	120.66
21	N	663	ILE	N-CA-C	-5.95	104.51	111.00
18	K	71	GLU	CA-C-N	5.95	128.74	120.29
18	K	71	GLU	C-N-CA	5.95	128.74	120.29
23	P	149	GLU	O-C-N	5.95	128.42	122.12
19	L	178	ILE	N-CA-C	-5.95	100.50	108.35
33	Z	66	ALA	CA-C-N	5.95	128.53	120.44
33	Z	66	ALA	C-N-CA	5.95	128.53	120.44
3	3	112	ILE	CA-C-O	-5.94	115.75	121.63
21	N	169	ALA	N-CA-C	5.94	118.24	111.11
21	N	620	GLY	CA-C-O	-5.94	113.98	120.40
7	7	8	TYR	CA-C-N	5.94	128.83	120.28
7	7	8	TYR	C-N-CA	5.94	128.83	120.28
14	G	180	ASP	O-C-N	5.94	128.92	122.15
20	M	163	PHE	N-CA-C	-5.94	98.58	108.32
26	S	276	LEU	CA-C-N	5.94	128.24	120.28
26	S	276	LEU	C-N-CA	5.94	128.24	120.28
9	B	6	SER	N-CA-C	-5.94	105.61	114.64
15	H	52	THR	O-C-N	5.94	128.41	122.12
15	H	269	ALA	CA-C-N	5.94	129.30	120.87
15	H	269	ALA	C-N-CA	5.94	129.30	120.87
21	N	84	ALA	CA-C-N	5.94	128.83	120.28
21	N	84	ALA	C-N-CA	5.94	128.83	120.28
33	Z	212	LEU	CA-C-O	-5.93	114.26	120.55
16	I	307	LEU	N-CA-C	-5.93	104.90	111.36
21	N	378	ASN	CA-C-O	-5.93	113.96	120.36
10	C	231	LYS	N-CA-C	-5.93	102.64	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	J	311	ASP	N-CA-C	-5.93	107.03	114.56
33	Z	399	LEU	CA-C-N	5.93	128.15	120.56
33	Z	399	LEU	C-N-CA	5.93	128.15	120.56
33	Z	507	GLY	CA-C-N	5.93	128.71	120.29
33	Z	507	GLY	C-N-CA	5.93	128.71	120.29
9	B	28	VAL	O-C-N	5.92	127.61	121.87
21	N	362	TRP	CA-C-N	5.92	129.31	120.31
21	N	362	TRP	C-N-CA	5.92	129.31	120.31
18	K	142	HIS	CA-C-N	5.92	128.49	120.44
18	K	142	HIS	C-N-CA	5.92	128.49	120.44
28	U	83	ILE	CA-C-O	-5.92	114.48	120.69
33	Z	844	ALA	CA-C-N	5.92	128.13	120.44
33	Z	844	ALA	C-N-CA	5.92	128.13	120.44
21	N	315	ASN	N-CA-C	-5.92	104.74	111.07
24	Q	428	GLU	CA-C-N	5.92	128.21	120.28
24	Q	428	GLU	C-N-CA	5.92	128.21	120.28
25	R	261	LEU	CA-C-N	5.92	132.84	121.54
25	R	261	LEU	C-N-CA	5.92	132.84	121.54
27	T	100	ASP	CA-C-O	5.92	125.65	119.14
31	X	27	ILE	CA-C-N	-5.92	112.44	119.84
31	X	27	ILE	C-N-CA	-5.92	112.44	119.84
24	Q	328	ASP	N-CA-C	-5.92	99.76	109.40
33	Z	368	VAL	CA-C-O	-5.92	114.85	121.36
11	D	135	ILE	N-CA-C	-5.91	99.83	108.11
21	N	602	VAL	CA-C-N	5.91	125.78	119.28
21	N	602	VAL	C-N-CA	5.91	125.78	119.28
28	U	114	THR	N-CA-C	-5.91	100.33	109.14
33	Z	886	VAL	O-C-N	5.91	130.00	122.61
12	E	67	ILE	O-C-N	5.91	129.31	122.99
26	S	404	LEU	CA-C-N	5.91	128.20	120.28
26	S	404	LEU	C-N-CA	5.91	128.20	120.28
27	T	129	LEU	CA-C-N	5.91	130.52	122.07
27	T	129	LEU	C-N-CA	5.91	130.52	122.07
23	P	107	SER	CA-C-O	-5.91	113.18	119.97
33	Z	387	ASN	CA-C-O	-5.91	114.62	120.82
15	H	383	GLU	O-C-N	5.91	128.38	122.12
19	L	267	PHE	N-CA-C	5.91	117.80	111.36
24	Q	152	LYS	O-C-N	5.91	128.15	122.07
33	Z	595	MET	CA-C-N	5.91	128.68	120.29
33	Z	595	MET	C-N-CA	5.91	128.68	120.29
33	Z	417	SER	CA-C-N	5.90	128.12	120.44
33	Z	417	SER	C-N-CA	5.90	128.12	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	J	190	PRO	CA-C-O	-5.90	116.07	120.73
23	P	153	ILE	CA-C-N	5.90	128.11	120.44
23	P	153	ILE	C-N-CA	5.90	128.11	120.44
26	S	381	VAL	CA-C-N	5.90	128.67	120.29
26	S	381	VAL	C-N-CA	5.90	128.67	120.29
14	G	106	ILE	CA-C-O	-5.90	114.22	119.71
16	I	319	ARG	N-CA-C	-5.90	106.08	113.28
18	K	271	ILE	N-CA-C	-5.90	98.72	107.51
20	M	237	ALA	CA-C-N	5.90	128.66	120.29
20	M	237	ALA	C-N-CA	5.90	128.66	120.29
22	O	373	TRP	CA-C-N	5.90	128.46	120.44
22	O	373	TRP	C-N-CA	5.90	128.46	120.44
33	Z	111	LEU	CA-C-N	5.90	128.18	120.28
33	Z	111	LEU	C-N-CA	5.90	128.18	120.28
33	Z	455	ILE	O-C-N	-5.90	115.76	121.83
10	C	59	GLN	CA-C-N	5.89	129.27	120.31
10	C	59	GLN	C-N-CA	5.89	129.27	120.31
21	N	399	PHE	O-C-N	-5.89	115.43	122.15
26	S	400	LYS	O-C-N	5.89	129.12	122.22
27	T	15	PHE	CA-C-N	5.89	128.18	120.28
27	T	15	PHE	C-N-CA	5.89	128.18	120.28
28	U	265	LEU	CA-C-O	-5.89	113.19	119.97
33	Z	210	TYR	O-C-N	5.89	128.37	122.12
18	K	262	ARG	CA-C-N	5.89	128.10	120.44
18	K	262	ARG	C-N-CA	5.89	128.10	120.44
25	R	56	GLU	CA-C-N	5.89	130.19	120.94
25	R	56	GLU	C-N-CA	5.89	130.19	120.94
26	S	232	MET	N-CA-C	5.89	117.70	111.28
20	M	227	GLY	CA-C-N	5.89	128.10	120.44
20	M	227	GLY	C-N-CA	5.89	128.10	120.44
2	2	142	TRP	N-CA-C	-5.89	102.60	110.55
26	S	186	TYR	CA-C-O	-5.89	114.31	120.55
2	2	33	LYS	N-CA-C	-5.89	105.75	113.17
8	A	65	ASP	CA-C-N	-5.89	114.17	121.00
8	A	65	ASP	C-N-CA	-5.89	114.17	121.00
10	C	214	ALA	O-C-N	-5.89	116.68	123.33
11	D	17	ILE	CA-C-N	5.89	128.97	120.79
11	D	17	ILE	C-N-CA	5.89	128.97	120.79
17	J	107	LEU	N-CA-C	-5.89	102.20	110.50
19	L	413	ASP	CA-C-N	5.89	128.49	120.54
19	L	413	ASP	C-N-CA	5.89	128.49	120.54
24	Q	70	ALA	CA-C-O	5.89	126.55	119.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	471	LEU	N-CA-C	5.88	117.37	111.07
24	Q	81	SER	CA-C-N	5.88	128.09	120.44
24	Q	81	SER	C-N-CA	5.88	128.09	120.44
25	R	217	HIS	CA-C-O	5.88	126.78	120.55
11	D	139	ASP	CA-C-O	-5.88	114.40	120.87
24	Q	174	LEU	N-CA-C	5.88	117.69	111.28
16	I	236	VAL	CA-C-O	5.88	127.08	120.85
18	K	72	GLN	N-CA-C	-5.88	104.95	111.36
21	N	452	LEU	CA-C-N	5.88	129.24	120.31
21	N	452	LEU	C-N-CA	5.88	129.24	120.31
3	3	161	ALA	O-C-N	5.87	128.12	122.07
10	C	243	GLY	CA-C-N	5.87	129.82	122.48
10	C	243	GLY	C-N-CA	5.87	129.82	122.48
11	D	231	GLN	N-CA-C	5.87	118.46	111.71
15	H	398	VAL	N-CA-C	-5.87	99.41	107.75
17	J	390	MET	N-CA-C	-5.87	104.88	111.28
18	K	392	LEU	CA-C-N	5.87	128.63	120.29
18	K	392	LEU	C-N-CA	5.87	128.63	120.29
23	P	72	TRP	N-CA-C	5.87	118.63	111.82
31	X	43	LEU	N-CA-C	-5.87	104.31	112.30
11	D	210	ILE	N-CA-C	-5.87	100.02	108.48
29	V	46	PRO	CA-C-O	-5.87	114.75	121.56
30	W	84	LYS	N-CA-C	5.87	118.40	109.95
25	R	291	SER	N-CA-C	5.87	117.35	111.07
22	O	382	LYS	N-CA-C	5.87	118.15	111.11
31	X	69	ILE	O-C-N	-5.87	116.88	121.46
2	2	34	LEU	CA-C-N	5.87	131.74	122.94
2	2	34	LEU	C-N-CA	5.87	131.74	122.94
18	K	188	VAL	CA-C-N	5.87	128.42	120.44
18	K	188	VAL	C-N-CA	5.87	128.42	120.44
27	T	152	LEU	CA-C-N	5.87	128.42	120.44
27	T	152	LEU	C-N-CA	5.87	128.42	120.44
13	F	197	ILE	CA-C-O	-5.86	114.14	120.47
15	H	311	ILE	N-CA-C	-5.86	107.03	112.83
16	I	376	ASN	N-CA-C	-5.86	97.66	107.80
20	M	260	ALA	CA-C-N	5.86	128.14	120.28
20	M	260	ALA	C-N-CA	5.86	128.14	120.28
16	I	302	ILE	CA-C-N	5.86	128.61	120.29
16	I	302	ILE	C-N-CA	5.86	128.61	120.29
19	L	109	MET	N-CA-C	-5.86	104.25	111.40
28	U	71	ASN	CA-C-O	5.86	126.71	119.97
10	C	136	ILE	N-CA-C	-5.86	99.19	107.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	343	LYS	CA-C-N	5.86	128.13	120.28
23	P	343	LYS	C-N-CA	5.86	128.13	120.28
33	Z	509	LEU	O-C-N	-5.86	115.47	122.15
16	I	238	ASN	CA-C-N	5.86	129.21	120.31
16	I	238	ASN	C-N-CA	5.86	129.21	120.31
18	K	375	ASN	N-CA-C	-5.86	98.86	108.76
18	K	394	ALA	CA-C-N	5.86	128.73	120.42
18	K	394	ALA	C-N-CA	5.86	128.73	120.42
20	M	380	ALA	CA-C-O	-5.86	114.34	120.55
12	E	250	GLU	N-CA-C	-5.85	106.18	113.38
9	B	90	ARG	CA-C-O	-5.85	114.35	120.55
16	I	142	GLU	O-C-N	-5.85	117.72	121.88
23	P	287	ASP	N-CA-C	-5.85	106.11	113.72
33	Z	552	GLU	O-C-N	5.85	128.12	122.03
10	C	199	LYS	N-CA-C	-5.85	105.80	113.17
12	E	248	ALA	CA-C-N	5.85	132.71	121.54
12	E	248	ALA	C-N-CA	5.85	132.71	121.54
28	U	283	ARG	O-C-N	-5.85	115.92	122.12
8	A	19	PHE	N-CA-C	5.85	117.84	110.24
9	B	214	ILE	CB-CA-C	5.85	118.59	110.99
31	X	62	ASP	O-C-N	-5.85	115.77	121.38
13	F	189	LEU	CA-C-N	5.84	127.92	120.56
13	F	189	LEU	C-N-CA	5.84	127.92	120.56
17	J	156	GLN	CA-C-N	5.84	127.92	120.56
17	J	156	GLN	C-N-CA	5.84	127.92	120.56
22	O	314	SER	O-C-N	-5.84	116.05	122.07
28	U	92	TRP	CA-C-N	5.84	131.71	122.94
28	U	92	TRP	C-N-CA	5.84	131.71	122.94
26	S	456	ASP	CA-C-N	5.84	125.32	119.24
26	S	456	ASP	C-N-CA	5.84	125.32	119.24
1	1	155	ILE	O-C-N	-5.84	115.81	121.83
18	K	279	THR	N-CA-C	-5.84	98.21	108.20
26	S	266	SER	O-C-N	5.84	128.31	122.12
6	6	93	PHE	N-CA-C	-5.84	105.65	112.89
15	H	162	ARG	CA-CB-CG	5.84	125.78	114.10
9	B	136	ILE	O-C-N	5.84	129.39	123.20
12	E	144	ILE	O-C-N	5.84	129.31	123.18
16	I	221	LEU	N-CA-C	-5.84	99.39	108.90
17	J	385	ALA	O-C-N	-5.83	116.06	122.07
18	K	177	LEU	N-CA-C	-5.83	105.47	112.59
21	N	698	GLY	O-C-N	5.83	129.05	122.34
33	Z	587	THR	N-CA-C	-5.83	104.83	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	373	ASP	CA-C-N	5.83	128.91	120.98
20	M	373	ASP	C-N-CA	5.83	128.91	120.98
1	1	2	SER	CA-C-O	5.83	125.98	120.09
18	K	77	ARG	CA-C-N	5.83	128.57	120.29
18	K	77	ARG	C-N-CA	5.83	128.57	120.29
21	N	910	PRO	N-CA-C	-5.83	105.93	113.57
23	P	160	LEU	CA-C-N	5.83	128.56	120.29
23	P	160	LEU	C-N-CA	5.83	128.56	120.29
26	S	455	GLU	CA-C-N	5.83	127.01	119.78
26	S	455	GLU	C-N-CA	5.83	127.01	119.78
15	H	243	PRO	O-C-N	5.83	130.51	122.64
8	A	229	THR	N-CA-C	-5.83	100.46	109.14
18	K	284	ALA	CA-C-N	5.83	131.90	122.29
18	K	284	ALA	C-N-CA	5.83	131.90	122.29
21	N	149	GLU	N-CA-C	-5.83	98.92	108.41
23	P	132	VAL	N-CA-C	-5.83	100.03	108.36
14	G	10	SER	CA-C-O	-5.82	115.19	121.36
19	L	90	LYS	N-CA-C	5.82	117.71	111.36
33	Z	437	ASP	CA-C-O	5.82	126.72	120.55
3	3	135	ASP	O-C-N	5.82	128.07	122.07
8	A	223	LEU	N-CA-C	-5.82	100.65	109.85
15	H	349	ILE	CA-C-N	5.82	131.67	122.94
15	H	349	ILE	C-N-CA	5.82	131.67	122.94
23	P	117	SER	CA-C-N	5.82	128.69	120.42
23	P	117	SER	C-N-CA	5.82	128.69	120.42
14	G	81	ILE	CA-C-O	-5.82	114.79	118.69
18	K	301	THR	CA-C-O	-5.82	114.71	120.70
7	7	85	PHE	O-C-N	-5.82	116.08	122.07
10	C	60	ASP	CA-C-N	5.82	130.15	121.72
10	C	60	ASP	C-N-CA	5.82	130.15	121.72
19	L	248	ALA	CA-C-N	5.82	128.07	120.28
19	L	248	ALA	C-N-CA	5.82	128.07	120.28
25	R	328	PHE	CA-C-N	5.82	128.07	120.28
25	R	328	PHE	C-N-CA	5.82	128.07	120.28
16	I	370	ASN	N-CA-C	-5.81	98.81	108.34
25	R	308	LEU	CA-C-N	5.81	128.55	120.29
25	R	308	LEU	C-N-CA	5.81	128.55	120.29
25	R	350	LEU	CA-C-N	5.81	128.35	120.44
25	R	350	LEU	C-N-CA	5.81	128.35	120.44
16	I	369	MET	CA-C-O	-5.81	114.95	121.81
25	R	382	ASP	O-C-N	-5.81	116.47	123.27
1	1	37	VAL	CA-C-O	5.81	124.01	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	A	22	GLU	CA-C-O	5.81	126.31	119.28
21	N	107	GLU	CA-C-N	5.81	127.99	120.44
21	N	107	GLU	C-N-CA	5.81	127.99	120.44
26	S	126	LYS	CA-C-N	5.81	127.99	120.44
26	S	126	LYS	C-N-CA	5.81	127.99	120.44
16	I	417	LYS	O-C-N	5.80	128.27	122.12
2	2	65	LEU	CA-C-O	5.80	126.70	120.55
16	I	390	ALA	CA-C-N	5.80	128.05	120.28
16	I	390	ALA	C-N-CA	5.80	128.05	120.28
19	L	132	ARG	CA-C-N	5.80	129.08	120.90
19	L	132	ARG	C-N-CA	5.80	129.08	120.90
25	R	296	LEU	CA-C-O	-5.80	114.27	120.42
33	Z	983	LEU	CA-C-N	5.80	131.67	122.62
33	Z	983	LEU	C-N-CA	5.80	131.67	122.62
19	L	317	ASN	N-CA-C	-5.80	100.34	109.50
20	M	210	MET	N-CA-C	-5.80	104.86	111.07
21	N	6	ALA	CA-C-N	5.80	127.34	120.09
21	N	6	ALA	C-N-CA	5.80	127.34	120.09
27	T	222	LEU	CA-C-N	5.80	128.32	120.38
27	T	222	LEU	C-N-CA	5.80	128.32	120.38
30	W	142	ILE	O-C-N	-5.80	115.32	122.57
33	Z	89	LEU	CA-C-N	5.79	127.97	120.44
33	Z	89	LEU	C-N-CA	5.79	127.97	120.44
15	H	292	ARG	CA-C-N	5.79	128.62	120.28
15	H	292	ARG	C-N-CA	5.79	128.62	120.28
17	J	368	TYR	CA-C-N	5.79	127.97	120.44
17	J	368	TYR	C-N-CA	5.79	127.97	120.44
19	L	344	ASP	O-C-N	5.79	129.08	122.25
13	F	64	ILE	CB-CA-C	5.79	118.24	110.42
30	W	188	SER	N-CA-C	5.79	116.26	109.60
33	Z	210	TYR	CA-C-O	-5.79	114.41	120.55
33	Z	541	ASP	CA-C-O	-5.79	114.74	120.82
14	G	198	ILE	CA-C-O	5.79	126.97	120.95
20	M	333	LEU	CA-C-N	5.78	128.90	120.51
20	M	333	LEU	C-N-CA	5.78	128.90	120.51
30	W	56	GLY	N-CA-C	-5.78	102.44	111.00
3	3	48	ALA	CA-C-O	5.78	126.68	120.55
19	L	105	ILE	CA-C-O	-5.78	114.13	120.84
26	S	273	PHE	O-C-N	-5.78	115.99	122.12
16	I	330	LYS	N-CA-C	-5.78	100.51	109.24
23	P	376	THR	CA-C-N	5.78	128.03	120.28
23	P	376	THR	C-N-CA	5.78	128.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	127	GLN	CA-C-N	5.78	128.03	120.28
27	T	127	GLN	C-N-CA	5.78	128.03	120.28
28	U	280	ASN	N-CA-C	5.78	117.58	111.28
33	Z	442	VAL	N-CA-C	-5.78	100.10	108.89
26	S	266	SER	CA-C-O	-5.78	114.42	120.55
11	D	6	ARG	CA-C-O	-5.78	114.99	121.81
12	E	192	THR	CA-C-O	-5.78	114.86	121.68
26	S	410	LYS	CA-C-N	5.78	129.09	120.31
26	S	410	LYS	C-N-CA	5.78	129.09	120.31
6	6	54	ALA	CA-C-N	5.78	127.95	120.44
6	6	54	ALA	C-N-CA	5.78	127.95	120.44
12	E	128	SER	N-CA-C	-5.78	105.89	113.17
14	G	178	LEU	N-CA-C	5.78	117.58	111.28
15	H	384	GLY	CA-C-N	5.78	128.02	120.28
15	H	384	GLY	C-N-CA	5.78	128.02	120.28
33	Z	865	ASP	O-C-N	-5.78	117.20	123.26
23	P	43	GLU	O-C-N	5.77	128.24	122.12
19	L	209	ARG	O-C-N	-5.77	115.57	122.15
20	M	46	SER	CA-C-O	5.77	126.48	119.38
25	R	310	GLU	N-CA-C	5.77	117.65	111.36
2	2	31	CYS	N-CA-C	-5.77	98.51	110.80
5	5	156	LEU	CA-C-N	5.77	126.35	119.94
5	5	156	LEU	C-N-CA	5.77	126.35	119.94
19	L	415	LEU	O-C-N	-5.77	116.00	122.12
14	G	237	GLU	O-C-N	-5.77	116.00	122.12
33	Z	455	ILE	CA-C-O	5.77	126.97	120.85
16	I	358	LYS	CA-C-N	5.77	127.94	120.44
16	I	358	LYS	C-N-CA	5.77	127.94	120.44
17	J	257	ARG	CA-C-N	5.77	129.69	122.43
17	J	257	ARG	C-N-CA	5.77	129.69	122.43
28	U	200	LEU	CA-C-N	5.77	128.32	120.54
28	U	200	LEU	C-N-CA	5.77	128.32	120.54
2	2	128	GLY	O-C-N	5.76	128.54	123.06
8	A	61	ASP	CA-C-N	5.76	132.81	122.38
8	A	61	ASP	C-N-CA	5.76	132.81	122.38
23	P	352	VAL	CA-C-N	5.76	128.36	120.46
23	P	352	VAL	C-N-CA	5.76	128.36	120.46
4	4	79	VAL	CA-C-N	5.76	128.47	120.29
4	4	79	VAL	C-N-CA	5.76	128.47	120.29
18	K	363	ALA	O-C-N	-5.76	114.69	121.32
5	5	180	VAL	N-CA-C	-5.76	99.58	107.99
16	I	227	THR	N-CA-C	-5.76	107.49	114.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	210	ASP	CA-C-N	5.76	132.34	121.97
15	H	210	ASP	C-N-CA	5.76	132.34	121.97
18	K	123	LEU	CA-C-O	-5.76	115.28	121.56
9	B	60	THR	CA-C-N	5.76	129.02	120.90
9	B	60	THR	C-N-CA	5.76	129.02	120.90
13	F	53	ALA	CA-C-O	5.76	125.23	118.90
17	J	293	ALA	N-CA-C	-5.76	99.27	109.06
22	O	45	LEU	CA-C-N	5.76	128.78	120.38
22	O	45	LEU	C-N-CA	5.76	128.78	120.38
24	Q	419	LEU	N-CA-C	5.76	117.23	111.07
13	F	107	ARG	CA-C-O	-5.75	114.77	120.70
23	P	189	LEU	N-CA-C	5.75	117.55	111.28
24	Q	426	LEU	CA-C-N	5.75	128.26	120.38
24	Q	426	LEU	C-N-CA	5.75	128.26	120.38
28	U	230	GLN	CB-CA-C	-5.75	98.97	110.42
2	2	13	VAL	O-C-N	-5.75	116.97	123.18
21	N	111	GLN	CA-C-N	5.75	127.99	120.28
21	N	111	GLN	C-N-CA	5.75	127.99	120.28
21	N	652	VAL	CA-C-N	5.75	127.92	120.44
21	N	652	VAL	C-N-CA	5.75	127.92	120.44
30	W	90	ALA	N-CA-C	5.75	118.32	111.71
21	N	191	THR	N-CA-C	-5.75	105.01	111.28
2	2	132	LEU	N-CA-C	5.75	117.35	111.14
15	H	390	ARG	O-C-N	5.75	128.70	122.15
26	S	390	THR	CA-C-N	5.75	126.36	119.98
26	S	390	THR	C-N-CA	5.75	126.36	119.98
33	Z	88	PRO	CA-C-N	5.75	127.98	120.28
33	Z	88	PRO	C-N-CA	5.75	127.98	120.28
33	Z	213	LYS	CA-C-N	5.75	130.32	120.72
33	Z	213	LYS	C-N-CA	5.75	130.32	120.72
2	2	34	LEU	CA-C-O	-5.75	114.56	120.54
5	5	73	ARG	O-C-N	-5.75	116.08	122.86
9	B	135	LEU	O-C-N	-5.75	116.60	123.27
29	V	276	PRO	CA-C-N	5.75	127.98	120.28
29	V	276	PRO	C-N-CA	5.75	127.98	120.28
1	1	47	GLY	N-CA-C	-5.75	99.57	113.18
10	C	215	THR	N-CA-C	-5.75	100.56	109.24
22	O	286	PHE	CA-C-N	5.75	127.98	120.28
22	O	286	PHE	C-N-CA	5.75	127.98	120.28
16	I	124	THR	N-CA-C	-5.74	106.32	113.38
18	K	213	GLY	N-CA-C	-5.74	100.62	112.34
33	Z	494	GLY	O-C-N	5.74	127.76	122.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	54	ALA	CA-C-N	5.74	127.80	120.56
1	1	54	ALA	C-N-CA	5.74	127.80	120.56
19	L	218	VAL	N-CA-C	-5.74	99.50	108.86
20	M	360	ILE	CA-C-N	5.74	128.44	120.29
20	M	360	ILE	C-N-CA	5.74	128.44	120.29
24	Q	295	GLY	N-CA-C	-5.74	105.54	112.49
9	B	49	LYS	CA-C-O	-5.74	114.41	120.55
11	D	43	VAL	CA-C-O	-5.74	114.18	120.84
18	K	336	ARG	N-CA-C	-5.74	99.93	109.46
27	T	25	LYS	CA-C-O	5.74	126.61	120.70
29	V	251	TYR	CA-C-N	5.74	128.55	120.28
29	V	251	TYR	C-N-CA	5.74	128.55	120.28
31	X	42	GLU	N-CA-C	-5.74	104.40	111.40
17	J	139	VAL	O-C-N	5.74	128.99	123.14
30	W	39	ALA	CA-C-O	5.74	127.00	120.00
10	C	67	TYR	CA-C-N	5.74	130.28	122.19
10	C	67	TYR	C-N-CA	5.74	130.28	122.19
21	N	607	GLN	CA-C-N	5.74	128.24	120.44
21	N	607	GLN	C-N-CA	5.74	128.24	120.44
23	P	225	VAL	CA-C-O	-5.74	114.77	120.85
3	3	23	GLN	CB-CA-C	-5.73	108.32	115.89
6	6	10	ASP	O-C-N	5.73	130.21	122.59
11	D	36	VAL	N-CA-C	-5.73	99.92	108.46
16	I	291	ARG	CA-C-N	5.73	130.38	120.58
16	I	291	ARG	C-N-CA	5.73	130.38	120.58
9	B	129	PRO	CA-C-O	-5.73	115.01	122.12
26	S	389	LYS	CA-C-N	5.73	127.96	120.28
26	S	389	LYS	C-N-CA	5.73	127.96	120.28
3	3	59	ARG	CA-C-N	5.73	127.88	120.44
3	3	59	ARG	C-N-CA	5.73	127.88	120.44
11	D	242	GLU	N-CA-C	-5.73	106.64	113.97
15	H	163	VAL	CA-C-O	5.72	127.94	120.78
21	N	778	LYS	N-CA-CB	5.72	118.54	110.24
25	R	272	ASP	N-CA-C	-5.72	98.61	110.80
16	I	376	ASN	CA-C-N	5.72	127.95	120.28
16	I	376	ASN	C-N-CA	5.72	127.95	120.28
14	G	96	ALA	CA-C-N	5.72	127.94	120.28
14	G	96	ALA	C-N-CA	5.72	127.94	120.28
10	C	178	MET	N-CA-C	-5.72	104.43	111.40
11	D	126	VAL	CA-C-O	5.72	127.34	121.28
24	Q	266	LEU	CA-C-N	5.72	127.87	120.44
24	Q	266	LEU	C-N-CA	5.72	127.87	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	108	LYS	CA-C-N	5.71	132.72	122.89
23	P	108	LYS	C-N-CA	5.71	132.72	122.89
9	B	156	TYR	O-C-N	5.71	130.08	123.17
15	H	207	THR	CA-C-N	5.71	132.45	121.54
15	H	207	THR	C-N-CA	5.71	132.45	121.54
23	P	48	GLN	OE1-CD-NE2	-5.71	116.89	122.60
5	5	190	ASN	N-CA-C	-5.71	99.88	109.07
6	6	188	GLN	CA-C-N	5.71	130.94	123.06
6	6	188	GLN	C-N-CA	5.71	130.94	123.06
25	R	278	SER	CA-C-N	5.71	128.40	120.29
25	R	278	SER	C-N-CA	5.71	128.40	120.29
28	U	225	ILE	CA-C-O	-5.71	115.12	121.17
19	L	387	ASN	N-CA-C	-5.71	101.51	110.36
23	P	198	VAL	CA-C-N	5.71	127.93	120.28
23	P	198	VAL	C-N-CA	5.71	127.93	120.28
28	U	274	MET	CA-C-O	-5.71	114.83	120.82
33	Z	93	ARG	O-C-N	-5.71	115.05	120.70
3	3	84	SER	CA-C-N	5.71	128.39	120.29
3	3	84	SER	C-N-CA	5.71	128.39	120.29
3	3	-7	ASP	CA-C-N	5.70	126.97	119.84
3	3	-7	ASP	C-N-CA	5.70	126.97	119.84
18	K	59	GLU	CA-C-N	5.70	127.85	120.44
18	K	59	GLU	C-N-CA	5.70	127.85	120.44
19	L	422	VAL	CA-C-N	5.70	128.39	120.29
19	L	422	VAL	C-N-CA	5.70	128.39	120.29
27	T	266	TYR	O-C-N	-5.70	116.19	122.07
2	2	124	TYR	N-CA-C	-5.70	99.31	108.55
33	Z	261	ASP	N-CA-C	5.70	118.06	110.53
2	2	81	GLN	O-C-N	5.70	128.16	122.12
21	N	557	LEU	CA-C-N	5.70	128.19	120.38
21	N	557	LEU	C-N-CA	5.70	128.19	120.38
25	R	271	ILE	O-C-N	5.70	128.00	122.25
33	Z	841	GLU	O-C-N	-5.70	116.54	122.18
12	E	109	VAL	O-C-N	-5.70	116.34	121.87
23	P	29	GLN	CG-CD-OE1	5.70	132.19	120.80
23	P	364	ARG	N-CA-C	5.70	117.57	111.36
9	B	68	THR	CA-C-O	-5.69	115.76	120.71
15	H	314	VAL	N-CA-C	-5.69	99.86	108.17
33	Z	782	ILE	O-C-N	5.69	127.82	121.90
27	T	143	SER	O-C-N	-5.69	116.09	122.12
9	B	229	THR	N-CA-C	-5.69	108.14	114.62
19	L	214	PRO	CA-C-O	-5.69	116.81	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	B	141	GLU	CA-C-N	5.68	131.12	122.37
9	B	141	GLU	C-N-CA	5.68	131.12	122.37
17	J	148	ASP	CA-C-O	5.68	125.92	119.27
12	E	206	GLN	CA-C-O	5.68	127.32	121.07
24	Q	403	PRO	N-CA-C	5.68	124.17	112.47
23	P	199	LEU	N-CA-C	-5.68	105.09	111.28
30	W	15	TYR	N-CA-C	5.68	116.55	108.54
18	K	209	VAL	N-CA-C	-5.68	99.60	108.86
20	M	48	LEU	N-CA-C	5.68	117.15	111.07
18	K	62	THR	CA-C-N	5.67	128.35	120.29
18	K	62	THR	C-N-CA	5.67	128.35	120.29
19	L	379	ALA	CA-C-N	5.67	128.24	120.46
19	L	379	ALA	C-N-CA	5.67	128.24	120.46
28	U	77	ASN	OD1-CG-ND2	5.67	128.27	122.60
2	2	182	LYS	CA-C-N	5.67	128.16	120.44
2	2	182	LYS	C-N-CA	5.67	128.16	120.44
17	J	313	LYS	CA-C-N	-5.67	116.16	123.19
17	J	313	LYS	C-N-CA	-5.67	116.16	123.19
30	W	87	MET	O-C-N	-5.67	116.11	122.12
4	4	98	GLN	N-CA-C	-5.67	103.63	110.44
5	5	199	LYS	O-C-N	5.67	127.93	122.03
8	A	21	PRO	N-CA-C	-5.67	105.65	113.53
10	C	213	PHE	N-CA-C	-5.67	99.42	109.06
12	E	89	ILE	N-CA-C	5.67	116.40	110.62
17	J	327	ILE	CA-C-N	5.67	128.34	120.29
17	J	327	ILE	C-N-CA	5.67	128.34	120.29
28	U	126	LYS	CA-C-N	5.67	130.62	122.40
28	U	126	LYS	C-N-CA	5.67	130.62	122.40
15	H	336	LEU	CA-C-O	-5.67	114.54	120.55
21	N	602	VAL	CA-C-O	-5.67	112.35	119.95
33	Z	829	GLN	CA-C-O	5.67	126.43	120.42
6	6	76	SER	N-CA-C	-5.67	101.31	110.32
21	N	660	LEU	CA-C-N	5.67	128.92	120.31
21	N	660	LEU	C-N-CA	5.67	128.92	120.31
7	7	123	ASN	CA-C-N	5.67	130.18	120.72
7	7	123	ASN	C-N-CA	5.67	130.18	120.72
25	R	154	LEU	O-C-N	-5.66	115.69	122.15
15	H	218	ILE	N-CA-C	5.66	116.39	110.62
18	K	417	THR	N-CA-C	-5.66	106.04	114.64
33	Z	907	GLY	CA-C-N	5.66	129.47	121.66
33	Z	907	GLY	C-N-CA	5.66	129.47	121.66
14	G	95	ALA	CA-C-O	-5.66	114.88	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	I	104	LEU	N-CA-C	-5.66	99.68	108.90
17	J	97	ASP	CA-C-N	5.66	128.30	120.49
17	J	97	ASP	C-N-CA	5.66	128.30	120.49
18	K	379	SER	CA-C-N	5.66	127.40	120.22
18	K	379	SER	C-N-CA	5.66	127.40	120.22
7	7	23	GLY	O-C-N	5.66	130.05	122.70
20	M	209	ASP	CA-C-N	5.66	127.79	120.44
20	M	209	ASP	C-N-CA	5.66	127.79	120.44
16	I	237	ALA	O-C-N	5.65	128.11	122.12
19	L	181	ASP	CA-C-O	5.65	125.89	119.27
9	B	98	LYS	CA-C-N	5.65	128.84	119.35
9	B	98	LYS	C-N-CA	5.65	128.84	119.35
15	H	255	GLY	CA-C-O	5.65	126.08	119.19
16	I	214	LYS	CA-C-N	5.65	126.20	120.38
16	I	214	LYS	C-N-CA	5.65	126.20	120.38
19	L	68	ARG	N-CA-C	5.65	117.44	111.28
29	V	240	ALA	O-C-N	5.65	127.97	122.09
33	Z	759	ARG	CA-C-N	5.65	127.85	120.28
33	Z	759	ARG	C-N-CA	5.65	127.85	120.28
4	4	64	GLN	O-C-N	5.65	128.83	122.22
18	K	403	LEU	CA-C-O	-5.65	115.03	121.58
28	U	196	SER	N-CA-C	-5.65	105.02	111.07
26	S	452	TYR	CA-C-N	5.65	128.73	120.71
26	S	452	TYR	C-N-CA	5.65	128.73	120.71
5	5	2	THR	CA-C-N	5.65	131.82	122.33
5	5	2	THR	C-N-CA	5.65	131.82	122.33
13	F	138	ASP	N-CA-C	-5.65	98.77	110.80
29	V	237	ASN	N-CA-C	5.65	117.11	111.07
9	B	188	ALA	N-CA-C	-5.65	105.27	111.82
33	Z	762	GLY	N-CA-C	5.65	119.72	112.83
16	I	369	MET	CA-C-N	5.64	130.73	122.77
16	I	369	MET	C-N-CA	5.64	130.73	122.77
21	N	429	GLU	N-CA-C	5.64	117.43	111.28
33	Z	967	THR	O-C-N	-5.64	117.38	123.42
17	J	360	GLY	O-C-N	-5.64	116.77	122.19
28	U	225	ILE	O-C-N	5.64	127.44	121.91
3	3	26	GLY	O-C-N	-5.64	118.14	122.99
22	O	20	PRO	N-CA-CB	-5.64	97.33	103.25
23	P	433	ILE	CA-C-O	-5.64	115.09	120.95
26	S	152	LEU	N-CA-C	5.64	117.43	111.28
26	S	252	ASP	CA-C-N	5.64	128.29	120.29
26	S	252	ASP	C-N-CA	5.64	128.29	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1	39	ASP	O-C-N	-5.63	116.15	122.12
15	H	448	ASP	CA-C-O	-5.63	114.58	120.55
17	J	171	PRO	CA-C-N	5.63	127.83	120.28
17	J	171	PRO	C-N-CA	5.63	127.83	120.28
33	Z	848	THR	N-CA-C	-5.63	105.22	111.36
16	I	78	ASN	CA-C-N	5.63	127.83	120.28
16	I	78	ASN	C-N-CA	5.63	127.83	120.28
25	R	325	HIS	N-CA-C	-5.63	105.00	112.94
26	S	256	LYS	O-C-N	5.63	128.81	122.22
27	T	52	LEU	CA-C-N	5.63	130.13	122.19
27	T	52	LEU	C-N-CA	5.63	130.13	122.19
4	4	20	VAL	CA-C-N	-5.63	115.23	123.00
4	4	20	VAL	C-N-CA	-5.63	115.23	123.00
15	H	442	ASP	O-C-N	5.63	128.09	122.12
29	V	254	ARG	N-CA-C	-5.63	105.91	112.89
30	W	84	LYS	N-CA-CB	-5.63	102.05	110.60
4	4	190	GLN	O-C-N	-5.63	116.81	123.22
14	G	13	VAL	CA-C-N	5.63	130.76	123.00
14	G	13	VAL	C-N-CA	5.63	130.76	123.00
20	M	377	GLN	CA-C-N	5.63	127.82	120.28
20	M	377	GLN	C-N-CA	5.63	127.82	120.28
23	P	152	LYS	O-C-N	5.63	128.91	122.55
33	Z	544	THR	CA-C-N	5.63	127.75	120.44
33	Z	544	THR	C-N-CA	5.63	127.75	120.44
32	Y	80	GLU	CA-C-N	5.62	127.81	120.28
32	Y	80	GLU	C-N-CA	5.62	127.81	120.28
4	4	34	THR	N-CA-C	-5.62	100.53	109.07
14	G	77	TYR	N-CA-C	5.62	117.61	109.07
9	B	185	LEU	CA-C-N	5.62	128.13	120.54
9	B	185	LEU	C-N-CA	5.62	128.13	120.54
30	W	78	ASP	CA-C-O	5.62	126.38	120.42
6	6	200	LYS	N-CA-C	-5.62	106.42	113.28
10	C	112	VAL	CA-C-O	-5.62	115.11	120.95
5	5	63	CYS	CA-C-N	5.62	127.81	120.28
5	5	63	CYS	C-N-CA	5.62	127.81	120.28
23	P	62	ILE	CB-CA-C	-5.62	104.66	112.02
8	A	230	LYS	O-C-N	5.62	130.12	122.48
18	K	79	LEU	N-CA-C	5.62	117.40	111.28
21	N	726	ASP	CA-C-N	5.62	127.81	120.28
21	N	726	ASP	C-N-CA	5.62	127.81	120.28
22	O	327	LEU	N-CA-C	5.62	117.40	111.28
6	6	45	ALA	N-CA-C	-5.61	96.41	107.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	4	150	ASP	CA-C-N	5.61	132.02	122.37
4	4	150	ASP	C-N-CA	5.61	132.02	122.37
10	C	84	ALA	CA-C-N	5.61	127.80	120.28
10	C	84	ALA	C-N-CA	5.61	127.80	120.28
24	Q	61	LEU	CA-C-N	5.61	127.35	120.22
24	Q	61	LEU	C-N-CA	5.61	127.35	120.22
24	Q	210	CYS	CA-C-N	5.61	125.59	120.03
24	Q	210	CYS	C-N-CA	5.61	125.59	120.03
7	7	-6	GLN	N-CA-C	-5.61	99.14	108.23
20	M	235	CYS	CA-C-N	5.61	127.80	120.28
20	M	235	CYS	C-N-CA	5.61	127.80	120.28
4	4	74	LEU	CA-C-N	5.61	129.21	120.68
4	4	74	LEU	C-N-CA	5.61	129.21	120.68
11	D	227	GLU	CA-C-N	5.61	127.80	120.28
11	D	227	GLU	C-N-CA	5.61	127.80	120.28
22	O	153	LEU	CA-C-N	5.61	127.73	120.44
22	O	153	LEU	C-N-CA	5.61	127.73	120.44
33	Z	954	PRO	CA-C-N	5.61	132.07	121.97
33	Z	954	PRO	C-N-CA	5.61	132.07	121.97
16	I	322	VAL	N-CA-C	-5.61	100.05	108.12
29	V	153	ILE	CA-C-N	-5.61	113.39	122.36
29	V	153	ILE	C-N-CA	-5.61	113.39	122.36
33	Z	832	ARG	CA-C-O	5.61	126.49	120.55
7	7	173	MET	CA-C-N	5.61	130.17	120.58
7	7	173	MET	C-N-CA	5.61	130.17	120.58
13	F	115	LYS	N-CA-C	-5.61	105.25	111.36
14	G	240	ASP	CA-C-N	5.61	127.79	120.28
14	G	240	ASP	C-N-CA	5.61	127.79	120.28
15	H	224	VAL	CA-C-N	-5.61	117.42	123.08
15	H	224	VAL	C-N-CA	-5.61	117.42	123.08
22	O	325	GLU	CA-C-O	5.61	126.49	120.55
24	Q	248	ASN	O-C-N	-5.61	115.76	122.15
33	Z	434	GLN	O-C-N	-5.61	116.18	122.12
6	6	134	ALA	CA-C-N	5.60	128.83	120.31
6	6	134	ALA	C-N-CA	5.60	128.83	120.31
18	K	152	PRO	O-C-N	5.60	126.71	122.73
21	N	535	LEU	CA-C-N	5.60	127.62	120.56
21	N	535	LEU	C-N-CA	5.60	127.62	120.56
29	V	279	HIS	CA-CB-CG	5.60	119.40	113.80
7	7	-2	THR	CA-C-O	5.60	127.66	121.11
21	N	101	ILE	N-CA-C	5.60	120.28	112.50
21	N	165	ILE	CA-C-N	5.60	128.13	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	165	ILE	C-N-CA	5.60	128.13	120.46
24	Q	265	MET	CA-C-N	5.60	127.78	120.28
24	Q	265	MET	C-N-CA	5.60	127.78	120.28
11	D	146	LYS	CA-C-O	-5.60	114.10	120.32
14	G	109	PRO	CA-C-N	5.60	128.06	120.44
14	G	109	PRO	C-N-CA	5.60	128.06	120.44
16	I	279	VAL	N-CA-C	-5.60	99.17	107.51
21	N	765	ASP	O-C-N	-5.60	115.70	122.48
30	W	193	GLU	N-CA-C	-5.60	99.91	108.76
12	E	239	LEU	CA-C-O	5.60	126.35	120.42
29	V	108	TYR	CA-C-O	-5.60	115.08	121.68
24	Q	315	ASN	N-CA-C	-5.60	105.26	111.36
5	5	105	THR	CA-C-O	-5.59	114.79	121.56
23	P	66	LEU	N-CA-CB	5.59	118.95	110.28
16	I	224	ALA	CA-C-N	5.59	126.83	119.84
16	I	224	ALA	C-N-CA	5.59	126.83	119.84
18	K	320	ARG	N-CA-C	-5.59	98.89	110.80
16	I	338	LEU	N-CA-C	-5.59	106.81	113.97
20	M	244	LEU	N-CA-C	-5.59	98.07	108.02
22	O	262	ASP	CA-C-N	5.59	128.23	120.29
22	O	262	ASP	C-N-CA	5.59	128.23	120.29
2	2	21	THR	CA-C-O	5.59	127.42	121.11
11	D	45	GLY	O-C-N	-5.59	117.34	123.49
14	G	154	GLY	N-CA-C	-5.59	106.85	116.01
20	M	171	GLU	N-CA-C	-5.59	100.59	109.59
23	P	388	ILE	N-CA-C	-5.59	104.11	111.09
15	H	451	ILE	CA-C-N	5.59	128.22	120.29
15	H	451	ILE	C-N-CA	5.59	128.22	120.29
9	B	89	SER	CA-C-N	5.58	127.76	120.28
9	B	89	SER	C-N-CA	5.58	127.76	120.28
17	J	287	ASN	N-CA-C	-5.58	105.90	114.16
18	K	259	ARG	CA-C-O	5.58	126.88	120.90
23	P	437	GLU	N-CA-C	5.58	117.81	111.11
4	4	46	ALA	N-CA-C	-5.58	100.23	108.99
7	7	80	GLU	CA-C-N	5.58	125.25	119.05
7	7	80	GLU	C-N-CA	5.58	125.25	119.05
15	H	203	LYS	CA-C-N	5.58	125.34	119.76
15	H	203	LYS	C-N-CA	5.58	125.34	119.76
17	J	29	GLU	N-CA-C	5.58	117.36	111.28
19	L	185	GLY	CA-C-O	5.58	125.20	119.01
21	N	419	THR	O-C-N	-5.58	115.69	122.22
22	O	374	ASN	N-CA-C	5.58	117.17	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	277	ASP	O-C-N	-5.58	114.95	122.43
26	S	270	ALA	CA-C-N	5.58	128.21	120.29
26	S	270	ALA	C-N-CA	5.58	128.21	120.29
28	U	86	LYS	N-CA-C	-5.58	98.92	110.80
20	M	413	GLU	CA-C-N	5.58	127.75	120.28
20	M	413	GLU	C-N-CA	5.58	127.75	120.28
25	R	185	LEU	O-C-N	-5.58	114.77	122.30
30	W	53	SER	O-C-N	-5.58	117.40	123.26
15	H	321	ASP	N-CA-C	-5.58	103.59	111.56
5	5	203	GLU	O-C-N	-5.57	115.80	122.15
20	M	335	PRO	CA-C-O	-5.57	115.24	121.32
26	S	465	ILE	CA-C-N	5.57	127.68	120.44
26	S	465	ILE	C-N-CA	5.57	127.68	120.44
28	U	190	LEU	O-C-N	-5.57	116.33	122.07
31	X	105	ASN	N-CA-C	-5.57	106.48	113.28
33	Z	990	ARG	CA-C-N	5.57	129.69	120.94
33	Z	990	ARG	C-N-CA	5.57	129.69	120.94
9	B	175	LEU	CA-C-N	5.57	127.75	120.28
9	B	175	LEU	C-N-CA	5.57	127.75	120.28
21	N	780	ASP	O-C-N	-5.57	115.03	122.00
24	Q	239	PHE	CA-C-N	5.57	127.68	120.44
24	Q	239	PHE	C-N-CA	5.57	127.68	120.44
31	X	54	GLU	CA-CB-CG	5.57	125.24	114.10
6	6	152	GLU	N-CA-C	-5.57	102.76	109.72
33	Z	481	PRO	O-C-N	5.57	130.16	122.64
16	I	240	THR	N-CA-C	-5.57	106.53	113.38
18	K	138	ALA	CA-C-N	5.57	131.55	122.81
18	K	138	ALA	C-N-CA	5.57	131.55	122.81
15	H	228	PRO	N-CA-C	5.57	121.16	113.65
6	6	-2	ASN	N-CA-C	-5.56	104.32	113.50
30	W	58	ASN	CA-C-N	5.56	126.79	119.84
30	W	58	ASN	C-N-CA	5.56	126.79	119.84
27	T	199	PHE	CA-C-O	-5.56	114.77	120.89
33	Z	754	LYS	CA-C-N	5.56	128.19	120.29
33	Z	754	LYS	C-N-CA	5.56	128.19	120.29
1	1	122	LEU	O-C-N	-5.56	118.15	121.71
7	7	58	LEU	CA-C-N	5.56	127.73	120.28
7	7	58	LEU	C-N-CA	5.56	127.73	120.28
15	H	412	PRO	O-C-N	5.56	130.15	122.64
26	S	327	ILE	CB-CA-C	5.56	115.52	110.13
29	V	51	GLY	CA-C-N	5.56	130.99	122.93
29	V	51	GLY	C-N-CA	5.56	130.99	122.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	7	41	THR	CA-C-N	5.56	130.81	122.75
7	7	41	THR	C-N-CA	5.56	130.81	122.75
14	G	247	ASN	CA-C-N	5.56	131.70	121.70
14	G	247	ASN	C-N-CA	5.56	131.70	121.70
25	R	295	SER	CA-C-N	5.56	128.18	120.29
25	R	295	SER	C-N-CA	5.56	128.18	120.29
2	2	212	VAL	N-CA-C	-5.56	100.06	108.17
26	S	297	ILE	CA-C-N	5.56	128.60	120.71
26	S	297	ILE	C-N-CA	5.56	128.60	120.71
15	H	259	CYS	CA-C-N	5.55	127.72	120.28
15	H	259	CYS	C-N-CA	5.55	127.72	120.28
24	Q	53	GLU	CA-C-O	-5.55	114.66	120.55
25	R	406	GLN	O-C-N	-5.55	115.44	122.27
27	T	132	HIS	N-CA-C	5.55	117.19	111.03
20	M	337	LEU	N-CA-C	-5.55	105.72	112.88
20	M	384	ASP	CA-C-N	5.55	130.02	122.19
20	M	384	ASP	C-N-CA	5.55	130.02	122.19
31	X	64	ILE	N-CA-C	-5.55	102.05	108.82
33	Z	757	SER	CA-C-O	5.55	126.44	120.55
16	I	387	LEU	CA-C-N	5.55	129.13	120.75
16	I	387	LEU	C-N-CA	5.55	129.13	120.75
24	Q	393	GLY	N-CA-C	-5.55	100.03	113.18
27	T	218	GLU	CA-C-O	-5.55	114.54	120.42
6	6	80	ALA	CA-C-N	5.55	127.65	120.44
6	6	80	ALA	C-N-CA	5.55	127.65	120.44
10	C	8	SER	N-CA-C	-5.55	101.04	108.86
16	I	347	LYS	N-CA-C	-5.55	98.14	108.02
21	N	525	ASN	O-C-N	5.55	130.22	123.01
21	N	624	ALA	CA-C-N	5.55	127.98	120.44
21	N	624	ALA	C-N-CA	5.55	127.98	120.44
5	5	70	GLU	O-C-N	-5.55	115.15	122.42
10	C	6	TYR	N-CA-C	-5.55	104.76	113.02
14	G	94	GLU	N-CA-C	-5.55	105.31	111.36
22	O	271	LYS	N-CA-C	-5.55	100.30	108.79
24	Q	287	THR	N-CA-C	-5.55	104.17	112.54
1	1	79	ALA	CA-C-N	5.54	128.16	120.29
1	1	79	ALA	C-N-CA	5.54	128.16	120.29
9	B	34	SER	N-CA-C	-5.54	100.63	109.23
21	N	503	THR	CA-C-N	5.54	128.74	120.31
21	N	503	THR	C-N-CA	5.54	128.74	120.31
26	S	262	THR	CA-C-N	5.54	130.11	120.68
26	S	262	THR	C-N-CA	5.54	130.11	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	A	246	VAL	CA-CB-CG2	-5.54	100.98	110.40
18	K	72	GLN	CA-C-O	-5.54	114.54	120.42
21	N	243	LYS	CA-C-O	-5.54	113.59	119.97
27	T	209	LEU	CA-C-N	5.54	130.83	122.68
27	T	209	LEU	C-N-CA	5.54	130.83	122.68
28	U	212	ASP	CA-C-N	5.54	127.65	120.44
28	U	212	ASP	C-N-CA	5.54	127.65	120.44
21	N	153	ALA	N-CA-C	5.54	117.32	111.28
23	P	174	SER	O-C-N	5.54	127.99	122.12
25	R	149	ASN	CA-C-N	5.54	128.02	120.54
25	R	149	ASN	C-N-CA	5.54	128.02	120.54
27	T	46	ILE	O-C-N	5.54	128.50	122.63
29	V	45	VAL	O-C-N	-5.54	114.78	121.10
33	Z	444	GLU	CA-C-O	-5.54	114.00	119.49
12	E	16	SER	CA-C-N	5.54	125.37	119.28
12	E	16	SER	C-N-CA	5.54	125.37	119.28
20	M	266	ALA	CA-C-O	-5.54	114.55	120.42
23	P	334	ASN	CA-C-N	5.54	128.15	120.29
23	P	334	ASN	C-N-CA	5.54	128.15	120.29
25	R	110	ILE	CA-C-O	-5.54	114.98	120.85
25	R	212	THR	O-C-N	5.54	127.99	122.12
2	2	23	GLY	O-C-N	-5.53	116.24	121.77
16	I	206	GLU	N-CA-C	5.53	117.31	111.28
20	M	385	GLU	CA-C-O	5.53	127.86	121.28
33	Z	82	MET	CA-C-N	5.53	131.63	122.33
33	Z	82	MET	C-N-CA	5.53	131.63	122.33
17	J	266	SER	CA-C-N	5.53	127.69	120.28
17	J	266	SER	C-N-CA	5.53	127.69	120.28
20	M	248	ALA	CA-C-O	-5.53	112.97	118.34
3	3	46	GLY	CA-C-N	5.53	128.62	120.82
3	3	46	GLY	C-N-CA	5.53	128.62	120.82
18	K	79	LEU	O-C-N	5.53	127.98	122.12
21	N	271	GLU	CA-C-N	5.53	129.21	120.47
21	N	271	GLU	C-N-CA	5.53	129.21	120.47
21	N	565	ASN	CA-C-O	-5.53	114.56	120.42
23	P	307	GLU	CA-C-N	5.53	130.03	122.34
23	P	307	GLU	C-N-CA	5.53	130.03	122.34
12	E	144	ILE	N-CA-C	-5.53	100.43	108.17
20	M	301	VAL	O-C-N	-5.53	115.56	121.80
21	N	113	ALA	N-CA-C	5.53	117.39	111.36
29	V	35	LEU	CA-C-N	5.53	128.14	120.29
29	V	35	LEU	C-N-CA	5.53	128.14	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	188	PRO	CB-CA-C	-5.53	104.18	110.92
17	J	26	LYS	CA-C-N	5.53	128.27	120.42
17	J	26	LYS	C-N-CA	5.53	128.27	120.42
26	S	308	GLY	CA-C-N	5.53	127.68	120.28
26	S	308	GLY	C-N-CA	5.53	127.68	120.28
17	J	243	SER	N-CA-C	5.52	117.66	108.99
5	5	86	LEU	CA-C-N	5.52	128.32	120.53
5	5	86	LEU	C-N-CA	5.52	128.32	120.53
17	J	56	ARG	CA-C-N	5.52	127.62	120.44
17	J	56	ARG	C-N-CA	5.52	127.62	120.44
20	M	246	LEU	N-CA-C	-5.52	99.41	108.41
22	O	169	ASN	CA-C-N	5.52	127.68	120.28
22	O	169	ASN	C-N-CA	5.52	127.68	120.28
33	Z	67	SER	CA-C-N	5.52	127.62	120.44
33	Z	67	SER	C-N-CA	5.52	127.62	120.44
33	Z	286	VAL	O-C-N	-5.52	115.67	122.57
9	B	157	PHE	O-C-N	-5.52	117.99	121.85
11	D	240	LYS	N-CA-C	-5.52	106.55	113.28
12	E	17	PRO	CA-C-N	5.52	127.68	120.28
12	E	17	PRO	C-N-CA	5.52	127.68	120.28
15	H	332	THR	CA-C-N	5.52	127.61	120.44
15	H	332	THR	C-N-CA	5.52	127.61	120.44
28	U	88	LYS	O-C-N	5.52	129.14	122.85
18	K	282	PHE	CA-C-O	5.52	125.69	119.18
20	M	174	GLU	CA-C-O	-5.52	114.67	121.02
27	T	8	THR	CA-C-N	5.52	127.61	120.44
27	T	8	THR	C-N-CA	5.52	127.61	120.44
3	3	150	GLU	CA-C-N	5.52	125.61	119.32
3	3	150	GLU	C-N-CA	5.52	125.61	119.32
6	6	197	ILE	N-CA-C	-5.52	100.45	108.17
6	6	81	ALA	O-C-N	-5.51	116.39	122.07
8	A	123	ASN	O-C-N	5.51	127.97	122.12
2	2	50	ALA	O-C-N	-5.51	115.86	122.15
21	N	785	PRO	N-CA-C	-5.51	102.47	111.68
1	1	27	ALA	O-C-N	-5.51	116.28	122.12
14	G	178	LEU	O-C-N	-5.51	116.28	122.12
14	G	190	GLU	CA-C-N	5.51	128.22	120.28
14	G	190	GLU	C-N-CA	5.51	128.22	120.28
3	3	55	ASN	CA-C-O	-5.51	115.04	120.82
6	6	119	VAL	N-CA-C	-5.51	106.94	112.17
8	A	206	ALA	CA-C-N	5.51	127.61	120.56
8	A	206	ALA	C-N-CA	5.51	127.61	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	B	168	SER	O-C-N	-5.51	116.14	122.09
17	J	325	ALA	N-CA-C	5.51	117.28	111.28
33	Z	901	PHE	N-CA-C	5.51	117.29	111.28
7	7	224	LYS	N-CA-C	-5.51	99.45	108.76
31	X	76	VAL	CB-CA-C	5.51	115.47	110.13
6	6	183	THR	CA-C-O	5.51	126.32	120.10
19	L	177	GLU	N-CA-C	-5.51	105.78	112.88
23	P	194	SER	CA-C-N	5.51	127.66	120.28
23	P	194	SER	C-N-CA	5.51	127.66	120.28
31	X	69	ILE	N-CA-C	-5.51	101.60	107.77
25	R	26	VAL	CA-C-O	5.50	126.67	120.95
26	S	162	VAL	CA-C-O	-5.50	115.22	120.95
3	3	164	ASN	CA-C-O	-5.50	113.64	119.97
24	Q	122	ILE	CA-C-O	-5.50	114.94	121.05
26	S	439	GLU	N-CA-C	-5.50	106.57	113.72
11	D	93	ALA	CA-C-N	5.50	130.03	120.68
11	D	93	ALA	C-N-CA	5.50	130.03	120.68
25	R	190	LYS	N-CA-C	5.50	117.36	111.36
27	T	22	ALA	CA-C-N	5.50	127.65	120.28
27	T	22	ALA	C-N-CA	5.50	127.65	120.28
33	Z	832	ARG	CA-C-N	5.50	127.65	120.28
33	Z	832	ARG	C-N-CA	5.50	127.65	120.28
20	M	232	ALA	CA-C-N	5.50	127.65	120.28
20	M	232	ALA	C-N-CA	5.50	127.65	120.28
16	I	369	MET	N-CA-C	5.50	117.97	110.55
22	O	162	SER	CA-C-N	5.50	123.70	120.24
22	O	162	SER	C-N-CA	5.50	123.70	120.24
33	Z	487	SER	N-CA-C	-5.50	104.93	111.03
21	N	701	VAL	CA-C-N	5.50	127.64	120.28
21	N	701	VAL	C-N-CA	5.50	127.64	120.28
24	Q	56	THR	CA-C-O	-5.50	114.59	120.42
27	T	205	ILE	CA-C-N	5.50	127.59	120.44
27	T	205	ILE	C-N-CA	5.50	127.59	120.44
23	P	97	ILE	O-C-N	-5.50	116.54	121.87
23	P	383	LEU	N-CA-C	5.50	116.95	111.07
26	S	297	ILE	O-C-N	-5.50	117.14	122.09
26	S	473	ASP	CA-C-N	-5.50	112.92	120.28
26	S	473	ASP	C-N-CA	-5.50	112.92	120.28
22	O	370	LEU	CA-C-N	5.49	127.99	120.46
22	O	370	LEU	C-N-CA	5.49	127.99	120.46
25	R	133	ALA	O-C-N	-5.49	115.79	122.22
18	K	371	LEU	CA-C-N	5.49	127.98	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	371	LEU	C-N-CA	5.49	127.98	120.46
27	T	79	GLU	O-C-N	-5.49	115.89	122.15
31	X	37	PRO	CA-C-N	5.49	132.02	121.54
31	X	37	PRO	C-N-CA	5.49	132.02	121.54
20	M	203	ARG	CA-C-N	5.49	127.63	120.28
20	M	203	ARG	C-N-CA	5.49	127.63	120.28
24	Q	310	SER	CA-C-N	5.49	128.08	120.29
24	Q	310	SER	C-N-CA	5.49	128.08	120.29
25	R	259	PHE	CA-C-O	-5.49	115.06	120.82
23	P	199	LEU	CA-C-N	5.48	127.63	120.28
23	P	199	LEU	C-N-CA	5.48	127.63	120.28
11	D	82	SER	O-C-N	-5.48	116.31	122.12
27	T	87	PRO	N-CA-C	5.48	121.05	113.65
29	V	105	VAL	N-CA-C	-5.48	107.64	112.90
18	K	206	PRO	CA-C-O	-5.48	115.35	121.32
10	C	186	VAL	N-CA-C	5.48	116.11	110.36
11	D	171	VAL	O-C-N	-5.48	114.56	122.12
17	J	328	LEU	CA-C-N	5.48	127.62	120.28
17	J	328	LEU	C-N-CA	5.48	127.62	120.28
24	Q	286	TYR	N-CA-C	-5.48	105.96	113.30
18	K	355	THR	O-C-N	5.48	128.00	122.09
33	Z	384	SER	CA-C-N	5.48	127.89	120.44
33	Z	384	SER	C-N-CA	5.48	127.89	120.44
33	Z	458	SER	CA-C-N	5.48	129.87	120.72
33	Z	458	SER	C-N-CA	5.48	129.87	120.72
14	G	54	THR	N-CA-C	-5.47	106.53	113.43
25	R	211	LYS	N-CA-C	5.47	117.25	111.28
31	X	62	ASP	CA-C-N	5.47	125.23	119.76
31	X	62	ASP	C-N-CA	5.47	125.23	119.76
26	S	428	ARG	CA-C-N	5.47	128.06	120.29
26	S	428	ARG	C-N-CA	5.47	128.06	120.29
17	J	321	VAL	CA-C-N	5.47	127.61	120.28
17	J	321	VAL	C-N-CA	5.47	127.61	120.28
23	P	30	ASN	CA-C-N	5.47	127.61	120.28
23	P	30	ASN	C-N-CA	5.47	127.61	120.28
1	1	74	SER	N-CA-C	-5.47	102.10	110.14
17	J	309	ARG	CA-C-N	5.47	131.81	121.97
17	J	309	ARG	C-N-CA	5.47	131.81	121.97
1	1	161	GLN	CA-C-O	-5.46	115.07	120.70
21	N	678	ILE	CA-C-N	5.46	127.60	120.28
21	N	678	ILE	C-N-CA	5.46	127.60	120.28
21	N	759	ILE	N-CA-C	-5.46	99.96	108.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	214	TYR	CA-C-O	-5.46	114.63	120.42
33	Z	762	GLY	CA-C-N	5.46	127.55	120.44
33	Z	762	GLY	C-N-CA	5.46	127.55	120.44
33	Z	863	THR	CA-C-O	-5.46	115.39	121.51
26	S	343	LEU	CA-C-N	5.46	125.29	119.28
26	S	343	LEU	C-N-CA	5.46	125.29	119.28
9	B	91	LYS	CA-C-N	5.46	128.18	120.42
9	B	91	LYS	C-N-CA	5.46	128.18	120.42
15	H	60	GLU	N-CA-C	5.46	117.23	111.28
18	K	150	LEU	CA-C-O	-5.46	113.77	120.05
21	N	200	SER	CA-C-N	5.46	127.60	120.28
21	N	200	SER	C-N-CA	5.46	127.60	120.28
33	Z	359	LYS	N-CA-C	5.46	117.04	111.14
15	H	185	LEU	O-C-N	-5.46	115.04	121.32
18	K	353	PHE	CA-C-O	-5.46	114.76	120.55
2	2	192	THR	N-CA-C	-5.46	98.67	109.10
14	G	56	LYS	N-CA-C	-5.46	106.50	112.72
21	N	156	ILE	N-CA-C	5.46	115.66	110.42
33	Z	509	LEU	CA-C-N	5.46	126.91	120.09
33	Z	509	LEU	C-N-CA	5.46	126.91	120.09
33	Z	606	CYS	CA-C-O	-5.46	115.08	120.70
33	Z	845	LEU	CA-C-O	-5.46	115.09	120.82
6	6	75	LEU	O-C-N	-5.46	116.83	123.16
15	H	53	GLU	CA-C-O	-5.46	114.64	120.42
23	P	299	LEU	CA-C-N	5.46	128.17	120.42
23	P	299	LEU	C-N-CA	5.46	128.17	120.42
10	C	195	LYS	CA-C-N	5.45	127.59	120.28
10	C	195	LYS	C-N-CA	5.45	127.59	120.28
10	C	197	LEU	CA-C-N	5.45	127.59	120.28
10	C	197	LEU	C-N-CA	5.45	127.59	120.28
33	Z	318	LYS	CA-C-N	5.45	131.95	121.54
33	Z	318	LYS	C-N-CA	5.45	131.95	121.54
33	Z	770	GLU	CA-C-N	5.45	127.53	120.44
33	Z	770	GLU	C-N-CA	5.45	127.53	120.44
3	3	95	PHE	CA-C-N	5.45	130.43	122.69
3	3	95	PHE	C-N-CA	5.45	130.43	122.69
23	P	424	GLU	CA-C-O	-5.45	114.77	120.55
18	K	81	ARG	CA-C-N	5.45	127.58	120.28
18	K	81	ARG	C-N-CA	5.45	127.58	120.28
19	L	329	ARG	CA-C-N	5.45	127.15	120.94
19	L	329	ARG	C-N-CA	5.45	127.15	120.94
21	N	93	GLU	O-C-N	-5.45	116.93	123.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	892	PRO	CA-C-N	5.45	129.66	120.29
21	N	892	PRO	C-N-CA	5.45	129.66	120.29
23	P	413	ASN	CA-C-N	5.45	127.85	120.44
23	P	413	ASN	C-N-CA	5.45	127.85	120.44
33	Z	808	SER	CA-C-N	5.45	127.84	120.65
33	Z	808	SER	C-N-CA	5.45	127.84	120.65
20	M	417	GLU	N-CA-C	-5.45	105.50	111.82
23	P	47	ARG	N-CA-CB	5.45	119.69	110.49
24	Q	9	GLU	O-C-N	5.45	128.36	122.15
24	Q	51	ARG	CA-C-O	-5.45	114.65	120.42
8	A	43	LEU	O-C-N	-5.45	117.04	123.25
15	H	286	GLU	CA-C-N	5.45	125.99	120.00
15	H	286	GLU	C-N-CA	5.45	125.99	120.00
16	I	289	THR	O-C-N	5.45	129.16	123.06
30	W	110	ILE	CA-C-N	5.45	130.44	123.03
30	W	110	ILE	C-N-CA	5.45	130.44	123.03
8	A	238	ALA	CA-C-N	5.44	127.58	120.28
8	A	238	ALA	C-N-CA	5.44	127.58	120.28
4	4	32	ASP	CA-C-N	5.44	131.63	122.76
4	4	32	ASP	C-N-CA	5.44	131.63	122.76
21	N	685	VAL	O-C-N	-5.44	116.22	121.83
25	R	82	ASP	O-C-N	-5.44	117.05	123.25
9	B	198	GLU	CA-C-N	5.44	131.53	121.52
9	B	198	GLU	C-N-CA	5.44	131.53	121.52
13	F	128	TYR	N-CA-C	5.44	117.21	111.28
20	M	270	ALA	CA-C-O	-5.44	114.78	120.55
21	N	465	ALA	N-CA-C	5.44	116.89	111.07
1	1	31	THR	O-C-N	5.44	129.35	123.10
18	K	297	ILE	O-C-N	5.44	127.43	121.83
21	N	614	ASN	O-C-N	-5.44	115.36	122.59
18	K	234	PHE	N-CA-C	-5.44	100.43	109.46
21	N	417	ARG	N-CA-C	5.44	117.64	111.11
23	P	200	SER	N-CA-C	5.44	117.21	111.28
24	Q	63	GLN	N-CA-C	5.44	117.21	111.28
29	V	244	MET	CA-C-N	5.44	127.91	120.46
29	V	244	MET	C-N-CA	5.44	127.91	120.46
18	K	195	ALA	CA-C-N	5.44	128.57	120.31
18	K	195	ALA	C-N-CA	5.44	128.57	120.31
22	O	156	THR	N-CA-C	5.44	117.20	111.28
5	5	122	LEU	CA-C-O	5.43	126.91	120.66
14	G	236	GLN	CA-C-N	5.43	127.56	120.28
14	G	236	GLN	C-N-CA	5.43	127.56	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	S	369	GLN	CA-C-N	5.43	127.51	120.44
26	S	369	GLN	C-N-CA	5.43	127.51	120.44
14	G	188	ALA	CA-C-N	5.43	127.50	120.44
14	G	188	ALA	C-N-CA	5.43	127.50	120.44
17	J	27	ILE	CA-C-N	5.43	127.50	120.44
17	J	27	ILE	C-N-CA	5.43	127.50	120.44
23	P	61	LYS	CB-CA-C	-5.43	101.77	110.79
25	R	263	ARG	CA-C-N	5.43	127.56	120.28
25	R	263	ARG	C-N-CA	5.43	127.56	120.28
19	L	169	ASN	N-CA-C	-5.43	104.34	112.54
23	P	345	VAL	CA-C-N	5.43	127.90	120.46
23	P	345	VAL	C-N-CA	5.43	127.90	120.46
28	U	274	MET	O-C-N	5.43	127.66	122.07
2	2	99	ILE	N-CA-C	-5.43	99.83	107.75
4	4	39	PRO	CA-C-N	5.43	129.29	120.23
4	4	39	PRO	C-N-CA	5.43	129.29	120.23
7	7	57	ARG	N-CA-C	5.43	117.19	111.28
28	U	279	SER	N-CA-C	5.43	117.62	111.11
33	Z	277	GLU	CA-C-N	5.43	128.00	120.29
33	Z	277	GLU	C-N-CA	5.43	128.00	120.29
2	2	83	LEU	O-C-N	5.42	127.95	122.09
10	C	182	ASP	O-C-N	-5.42	116.37	122.12
10	C	231	LYS	CA-C-N	5.42	126.62	119.84
10	C	231	LYS	C-N-CA	5.42	126.62	119.84
3	3	156	GLU	CA-C-N	5.42	127.81	120.65
3	3	156	GLU	C-N-CA	5.42	127.81	120.65
21	N	631	GLY	N-CA-C	-5.42	107.05	114.64
21	N	700	CYS	O-C-N	5.42	127.95	122.09
18	K	162	GLY	CA-C-O	-5.42	116.19	120.91
28	U	306	VAL	CA-C-O	-5.42	115.42	121.17
21	N	676	ALA	CA-C-N	5.42	127.54	120.28
21	N	676	ALA	C-N-CA	5.42	127.54	120.28
27	T	266	TYR	CA-C-N	5.42	127.49	120.44
27	T	266	TYR	C-N-CA	5.42	127.49	120.44
2	2	166	ASP	N-CA-C	-5.42	98.37	108.02
12	E	122	ARG	CA-C-N	5.42	131.89	121.54
12	E	122	ARG	C-N-CA	5.42	131.89	121.54
15	H	419	LEU	N-CA-C	5.42	117.27	111.36
25	R	180	PHE	O-C-N	5.42	127.94	122.09
27	T	119	THR	CA-C-N	5.42	127.54	120.28
27	T	119	THR	C-N-CA	5.42	127.54	120.28
31	X	37	PRO	N-CA-C	-5.42	106.65	114.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	845	LEU	CA-C-N	5.42	127.54	120.28
33	Z	845	LEU	C-N-CA	5.42	127.54	120.28
5	5	59	LEU	CA-C-N	5.42	126.91	120.14
5	5	59	LEU	C-N-CA	5.42	126.91	120.14
15	H	271	PHE	N-CA-C	-5.42	100.41	109.24
24	Q	135	HIS	CA-C-N	5.42	127.54	120.28
24	Q	135	HIS	C-N-CA	5.42	127.54	120.28
14	G	176	GLU	CA-C-N	5.42	127.48	120.44
14	G	176	GLU	C-N-CA	5.42	127.48	120.44
25	R	167	LYS	CA-C-N	5.42	128.11	120.42
25	R	167	LYS	C-N-CA	5.42	128.11	120.42
3	3	77	THR	CA-C-N	5.41	127.53	120.28
3	3	77	THR	C-N-CA	5.41	127.53	120.28
9	B	51	SER	O-C-N	-5.41	116.99	123.27
20	M	123	SER	N-CA-C	-5.41	106.45	113.16
33	Z	205	LEU	CA-C-N	5.41	128.31	120.79
33	Z	205	LEU	C-N-CA	5.41	128.31	120.79
10	C	38	ILE	CA-C-O	5.41	126.09	120.36
15	H	299	ARG	CA-C-N	5.41	127.80	120.44
15	H	299	ARG	C-N-CA	5.41	127.80	120.44
19	L	327	THR	CA-C-N	5.41	127.84	120.54
19	L	327	THR	C-N-CA	5.41	127.84	120.54
20	M	135	VAL	N-CA-C	-5.41	99.76	107.77
33	Z	241	THR	N-CA-C	-5.41	100.48	109.46
10	C	9	ARG	CA-C-O	-5.41	114.49	120.33
17	J	60	ASP	CA-C-N	5.41	127.53	120.28
17	J	60	ASP	C-N-CA	5.41	127.53	120.28
23	P	36	LEU	CA-C-N	5.41	127.47	120.44
23	P	36	LEU	C-N-CA	5.41	127.47	120.44
33	Z	876	VAL	N-CA-C	5.41	115.61	110.42
10	C	117	ASP	O-C-N	-5.41	116.39	122.12
1	1	175	MET	O-C-N	5.41	129.71	123.17
9	B	184	GLU	CA-C-O	-5.41	115.67	121.56
19	L	384	ASP	O-C-N	-5.41	116.28	121.85
7	7	100	ASN	CA-C-N	5.40	126.55	120.66
7	7	100	ASN	C-N-CA	5.40	126.55	120.66
22	O	162	SER	O-C-N	-5.40	115.40	122.59
24	Q	73	LYS	CA-C-N	5.40	127.96	120.29
24	Q	73	LYS	C-N-CA	5.40	127.96	120.29
1	1	140	LYS	CA-C-O	5.40	126.15	120.42
25	R	101	GLU	CA-C-N	5.40	127.46	120.44
25	R	101	GLU	C-N-CA	5.40	127.46	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	V	122	ASP	N-CA-C	5.40	117.17	111.28
14	G	6	GLY	N-CA-C	-5.40	107.66	115.27
28	U	77	ASN	CB-CA-C	5.40	120.62	110.63
5	5	125	ASP	N-CA-C	-5.40	99.30	110.80
10	C	23	GLU	CA-C-N	5.40	127.96	120.29
10	C	23	GLU	C-N-CA	5.40	127.96	120.29
21	N	650	ASP	N-CA-C	5.40	117.17	111.28
21	N	667	GLN	N-CA-C	-5.40	99.52	108.75
27	T	217	THR	CA-C-O	5.40	126.14	120.42
6	6	18	THR	N-CA-C	-5.40	105.51	113.61
13	F	204	GLU	N-CA-C	-5.40	101.10	109.14
19	L	191	ARG	CA-C-N	5.40	127.51	120.28
19	L	191	ARG	C-N-CA	5.40	127.51	120.28
22	O	87	LYS	CA-C-N	5.40	127.95	120.29
22	O	87	LYS	C-N-CA	5.40	127.95	120.29
15	H	196	THR	O-C-N	-5.39	116.90	123.27
17	J	380	GLU	CA-C-N	5.39	127.51	120.28
17	J	380	GLU	C-N-CA	5.39	127.51	120.28
24	Q	371	GLN	CA-C-N	5.39	127.51	120.28
24	Q	371	GLN	C-N-CA	5.39	127.51	120.28
26	S	412	ASN	CA-C-N	5.39	127.78	120.44
26	S	412	ASN	C-N-CA	5.39	127.78	120.44
21	N	18	ASP	CA-C-N	5.39	127.50	120.28
21	N	18	ASP	C-N-CA	5.39	127.50	120.28
24	Q	425	GLN	CA-C-N	5.39	127.45	120.44
24	Q	425	GLN	C-N-CA	5.39	127.45	120.44
7	7	218	LYS	N-CA-C	-5.39	105.34	112.94
19	L	330	PRO	N-CA-C	-5.39	107.78	114.68
20	M	153	TYR	N-CA-C	5.39	118.68	111.24
24	Q	26	VAL	CA-C-N	5.39	127.50	120.28
24	Q	26	VAL	C-N-CA	5.39	127.50	120.28
29	V	143	PRO	CA-C-N	5.39	127.55	120.60
29	V	143	PRO	C-N-CA	5.39	127.55	120.60
4	4	19	ALA	O-C-N	-5.39	117.66	123.42
16	I	104	LEU	O-C-N	5.39	129.71	123.30
27	T	176	SER	CA-C-O	5.39	126.48	120.82
2	2	156	SER	CA-C-O	-5.39	115.17	120.82
8	A	15	HIS	CA-C-N	5.39	129.99	122.23
8	A	15	HIS	C-N-CA	5.39	129.99	122.23
18	K	181	LYS	N-CA-C	5.39	117.23	111.36
18	K	323	THR	CA-C-O	-5.39	115.85	121.99
21	N	276	GLU	CA-C-N	5.39	127.77	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	276	GLU	C-N-CA	5.39	127.77	120.44
21	N	451	GLY	CA-C-N	5.39	127.50	120.28
21	N	451	GLY	C-N-CA	5.39	127.50	120.28
3	3	186	VAL	CA-C-O	5.38	125.71	120.27
13	F	27	GLU	CA-C-N	5.38	128.03	120.28
13	F	27	GLU	C-N-CA	5.38	128.03	120.28
15	H	214	CYS	CA-C-N	5.38	127.81	120.54
15	H	214	CYS	C-N-CA	5.38	127.81	120.54
30	W	59	PRO	N-CA-C	5.38	123.56	112.47
21	N	669	GLU	CA-C-O	5.38	127.26	121.55
3	3	177	VAL	O-C-N	5.38	128.76	123.00
21	N	672	ASN	CA-C-N	5.38	125.20	119.28
21	N	672	ASN	C-N-CA	5.38	125.20	119.28
30	W	85	LEU	CA-C-N	-5.38	113.92	121.72
30	W	85	LEU	C-N-CA	-5.38	113.92	121.72
11	D	199	LEU	N-CA-C	-5.38	106.22	112.89
14	G	116	GLY	CA-C-N	5.38	128.49	120.31
14	G	116	GLY	C-N-CA	5.38	128.49	120.31
22	O	139	LEU	CA-C-N	5.38	127.43	120.44
22	O	139	LEU	C-N-CA	5.38	127.43	120.44
23	P	152	LYS	CA-C-N	5.38	127.44	120.56
23	P	152	LYS	C-N-CA	5.38	127.44	120.56
8	A	161	GLY	N-CA-C	-5.38	107.79	115.64
18	K	105	GLN	O-C-N	5.38	129.31	123.13
23	P	429	ILE	N-CA-C	5.38	115.58	110.42
26	S	457	PRO	O-C-N	5.38	127.98	122.18
7	7	159	LYS	N-CA-C	-5.37	106.31	112.92
19	L	145	ARG	O-C-N	-5.37	116.67	123.01
15	H	279	LEU	N-CA-C	5.37	119.09	112.54
28	U	299	LYS	CA-C-N	5.37	127.42	120.44
28	U	299	LYS	C-N-CA	5.37	127.42	120.44
33	Z	412	GLY	CA-C-O	5.37	128.60	121.51
21	N	305	ASN	CA-C-N	-5.37	114.06	122.65
21	N	305	ASN	C-N-CA	-5.37	114.06	122.65
26	S	265	SER	CA-C-N	5.37	127.47	120.28
26	S	265	SER	C-N-CA	5.37	127.47	120.28
5	5	66	HIS	O-C-N	5.37	127.81	122.12
13	F	230	VAL	CA-C-N	5.37	127.42	120.44
13	F	230	VAL	C-N-CA	5.37	127.42	120.44
19	L	385	GLY	CA-C-N	5.37	128.96	121.02
19	L	385	GLY	C-N-CA	5.37	128.96	121.02
20	M	129	LEU	CA-C-N	5.37	126.51	120.66

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	129	LEU	C-N-CA	5.37	126.51	120.66
21	N	765	ASP	CA-C-N	5.37	129.98	122.36
21	N	765	ASP	C-N-CA	5.37	129.98	122.36
33	Z	813	PHE	O-C-N	5.37	127.60	122.07
19	L	220	LEU	N-CA-C	-5.37	100.43	109.07
24	Q	217	GLU	CA-C-N	5.37	127.91	120.29
24	Q	217	GLU	C-N-CA	5.37	127.91	120.29
9	B	209	ILE	N-CA-C	-5.37	100.75	108.48
10	C	92	ARG	CA-C-N	5.37	128.04	120.42
10	C	92	ARG	C-N-CA	5.37	128.04	120.42
23	P	292	LYS	CA-C-O	-5.37	114.73	120.42
30	W	155	ASP	CA-C-N	5.37	127.47	120.28
30	W	155	ASP	C-N-CA	5.37	127.47	120.28
9	B	136	ILE	N-CA-C	-5.36	99.92	107.75
14	G	246	ILE	CB-CA-C	5.36	117.56	110.91
15	H	235	PHE	N-CA-C	5.36	117.13	111.28
17	J	221	LYS	O-C-N	5.36	129.72	122.59
26	S	204	ASP	N-CA-C	-5.36	104.95	112.25
31	X	36	LYS	CA-C-O	-5.36	112.78	119.54
26	S	127	THR	N-CA-C	5.36	116.81	111.07
4	4	69	ARG	CA-C-O	5.36	126.23	120.55
15	H	405	GLU	CA-C-N	5.36	127.90	120.29
15	H	405	GLU	C-N-CA	5.36	127.90	120.29
17	J	391	ASN	CA-C-N	5.36	128.46	120.31
17	J	391	ASN	C-N-CA	5.36	128.46	120.31
23	P	249	ALA	CA-C-O	-5.36	115.19	120.82
31	X	42	GLU	CA-C-O	-5.36	114.81	120.55
23	P	265	VAL	CA-C-N	5.36	128.46	120.31
23	P	265	VAL	C-N-CA	5.36	128.46	120.31
24	Q	75	ARG	CA-C-N	5.36	127.90	120.29
24	Q	75	ARG	C-N-CA	5.36	127.90	120.29
31	X	67	ILE	N-CA-C	5.36	117.58	109.12
4	4	63	ILE	CA-C-N	5.36	127.99	120.28
4	4	63	ILE	C-N-CA	5.36	127.99	120.28
9	B	111	VAL	CA-C-N	5.36	128.45	120.31
9	B	111	VAL	C-N-CA	5.36	128.45	120.31
21	N	698	GLY	CA-C-N	5.36	129.66	120.71
21	N	698	GLY	C-N-CA	5.36	129.66	120.71
23	P	59	LEU	N-CA-C	5.36	117.87	111.71
24	Q	8	LEU	CA-C-N	5.36	127.89	120.29
24	Q	8	LEU	C-N-CA	5.36	127.89	120.29
24	Q	60	GLU	O-C-N	5.36	127.59	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	215	LYS	CA-C-N	5.36	127.46	120.28
27	T	215	LYS	C-N-CA	5.36	127.46	120.28
17	J	235	VAL	N-CA-C	5.35	116.08	110.62
20	M	357	ARG	CA-C-N	5.35	127.45	120.28
20	M	357	ARG	C-N-CA	5.35	127.45	120.28
21	N	129	ILE	CA-C-N	5.35	134.86	121.80
21	N	129	ILE	C-N-CA	5.35	134.86	121.80
33	Z	578	GLY	CA-C-N	5.35	127.45	120.28
33	Z	578	GLY	C-N-CA	5.35	127.45	120.28
10	C	179	ASP	N-CA-C	-5.35	106.72	113.20
13	F	29	ILE	N-CA-C	-5.35	105.31	110.72
21	N	635	GLN	N-CA-C	-5.35	105.61	111.82
28	U	42	ASN	CA-C-O	5.35	126.15	119.78
33	Z	95	THR	CA-C-O	-5.35	112.26	119.11
24	Q	117	VAL	O-C-N	5.35	127.34	121.83
1	1	38	HIS	CA-C-N	5.35	127.71	120.38
1	1	38	HIS	C-N-CA	5.35	127.71	120.38
9	B	245	ASP	N-CA-C	5.35	117.11	111.28
26	S	238	LEU	CA-C-N	5.35	127.39	120.44
26	S	238	LEU	C-N-CA	5.35	127.39	120.44
26	S	369	GLN	O-C-N	-5.35	116.45	122.12
11	D	167	ASN	CA-C-N	5.35	127.44	120.28
11	D	167	ASN	C-N-CA	5.35	127.44	120.28
22	O	356	ARG	CA-C-N	5.35	127.78	120.35
22	O	356	ARG	C-N-CA	5.35	127.78	120.35
2	2	218	VAL	N-CA-C	-5.35	100.54	108.45
11	D	124	GLY	O-C-N	-5.35	118.00	123.35
1	1	44	CYS	CA-C-N	5.34	130.38	123.00
1	1	44	CYS	C-N-CA	5.34	130.38	123.00
30	W	86	HIS	CA-C-N	5.34	127.44	120.28
30	W	86	HIS	C-N-CA	5.34	127.44	120.28
33	Z	114	SER	CA-C-N	5.34	127.44	120.28
33	Z	114	SER	C-N-CA	5.34	127.44	120.28
8	A	116	VAL	N-CA-C	-5.34	105.18	111.00
5	5	182	GLU	O-C-N	5.34	127.78	122.12
20	M	356	SER	CA-C-O	-5.34	114.76	120.42
28	U	304	GLN	CA-C-N	5.34	127.44	120.28
28	U	304	GLN	C-N-CA	5.34	127.44	120.28
30	W	170	HIS	ND1-CG-CD2	5.34	111.44	106.10
12	E	23	GLN	O-C-N	5.34	127.78	122.12
21	N	601	THR	CA-C-O	-5.34	112.69	119.31
23	P	350	LEU	CA-C-O	-5.34	114.89	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	S	454	SER	N-CA-C	-5.34	103.93	110.61
6	6	161	LYS	CA-C-O	-5.34	114.78	120.23
21	N	319	SER	CA-C-N	5.34	127.38	120.44
21	N	319	SER	C-N-CA	5.34	127.38	120.44
6	6	79	SER	O-C-N	5.34	129.17	122.23
17	J	123	HIS	CA-C-O	5.34	125.84	119.60
20	M	61	LYS	CB-CA-C	-5.34	101.93	110.79
21	N	593	PHE	CA-C-N	5.34	127.48	120.60
21	N	593	PHE	C-N-CA	5.34	127.48	120.60
24	Q	38	SER	CA-C-N	5.34	128.81	120.75
24	Q	38	SER	C-N-CA	5.34	128.81	120.75
29	V	290	ASN	N-CA-CB	5.34	117.75	110.01
33	Z	464	ASP	N-CA-C	-5.34	100.81	108.60
23	P	148	LYS	CA-C-N	5.33	127.43	120.28
23	P	148	LYS	C-N-CA	5.33	127.43	120.28
28	U	70	HIS	O-C-N	-5.33	116.47	122.34
30	W	17	ARG	CA-C-N	5.33	131.73	121.54
30	W	17	ARG	C-N-CA	5.33	131.73	121.54
20	M	359	GLN	CA-C-N	5.33	127.76	120.46
20	M	359	GLN	C-N-CA	5.33	127.76	120.46
6	6	185	ARG	O-C-N	-5.33	115.44	122.42
11	D	95	SER	CA-C-N	5.33	127.86	120.29
11	D	95	SER	C-N-CA	5.33	127.86	120.29
15	H	234	ARG	N-CA-C	5.33	116.77	111.07
1	1	150	GLU	N-CA-C	-5.33	105.55	111.36
23	P	126	THR	O-C-N	5.33	127.79	122.30
24	Q	28	LEU	CA-C-N	5.33	128.41	120.31
24	Q	28	LEU	C-N-CA	5.33	128.41	120.31
30	W	145	GLY	N-CA-C	-5.33	103.44	110.74
15	H	69	VAL	CA-C-N	5.33	127.42	120.28
15	H	69	VAL	C-N-CA	5.33	127.42	120.28
15	H	419	LEU	CA-C-N	5.33	127.42	120.28
15	H	419	LEU	C-N-CA	5.33	127.42	120.28
21	N	347	SER	CA-C-N	5.33	127.36	120.44
21	N	347	SER	C-N-CA	5.33	127.36	120.44
27	T	202	LEU	CA-C-O	5.33	126.19	120.55
10	C	44	ILE	N-CA-C	-5.32	100.40	108.17
21	N	340	HIS	CA-C-N	5.32	128.90	121.02
21	N	340	HIS	C-N-CA	5.32	128.90	121.02
23	P	135	GLU	CA-C-N	5.32	127.36	120.44
23	P	135	GLU	C-N-CA	5.32	127.36	120.44
5	5	173	GLY	N-CA-C	-5.32	100.57	113.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	D	113	VAL	CA-C-N	5.32	127.36	120.44
11	D	113	VAL	C-N-CA	5.32	127.36	120.44
16	I	421	GLU	N-CA-C	-5.32	105.48	111.28
21	N	878	GLN	N-CA-CB	-5.32	102.35	110.07
7	7	77	GLU	CA-C-O	5.32	128.12	120.51
9	B	31	GLY	O-C-N	5.32	127.93	122.88
15	H	262	ALA	CA-C-O	5.32	126.41	120.82
11	D	133	THR	CA-C-O	5.32	127.66	121.44
14	G	66	ILE	N-CA-C	-5.32	100.76	108.36
21	N	778	LYS	CB-CG-CD	5.32	123.53	111.30
21	N	783	SER	N-CA-C	-5.32	101.40	108.74
25	R	203	ASP	N-CA-C	5.32	122.13	110.80
20	M	247	ALA	CA-C-N	5.32	126.73	120.09
20	M	247	ALA	C-N-CA	5.32	126.73	120.09
25	R	190	LYS	CA-C-N	5.32	127.35	120.44
25	R	190	LYS	C-N-CA	5.32	127.35	120.44
33	Z	480	ASN	CA-C-N	5.32	126.48	119.84
33	Z	480	ASN	C-N-CA	5.32	126.48	119.84
1	1	153	ASP	CA-C-O	5.31	126.18	120.55
13	F	221	PRO	N-CA-C	-5.31	102.81	111.68
24	Q	70	ALA	CA-C-N	5.31	127.66	120.38
24	Q	70	ALA	C-N-CA	5.31	127.66	120.38
29	V	290	ASN	CA-C-N	5.31	127.40	120.28
29	V	290	ASN	C-N-CA	5.31	127.40	120.28
6	6	208	TYR	N-CA-C	-5.31	101.11	109.50
19	L	119	VAL	N-CA-C	-5.31	100.55	108.46
21	N	277	LEU	CA-C-N	5.31	127.71	120.54
21	N	277	LEU	C-N-CA	5.31	127.71	120.54
23	P	385	ASN	CA-C-N	5.31	127.83	120.29
23	P	385	ASN	C-N-CA	5.31	127.83	120.29
19	L	355	ALA	CA-C-N	5.31	125.88	119.98
19	L	355	ALA	C-N-CA	5.31	125.88	119.98
19	L	399	GLY	CA-C-N	5.31	127.40	120.28
19	L	399	GLY	C-N-CA	5.31	127.40	120.28
10	C	39	MET	O-C-N	-5.31	117.27	123.27
24	Q	293	SER	CA-C-N	5.31	127.93	120.28
24	Q	293	SER	C-N-CA	5.31	127.93	120.28
10	C	10	THR	O-C-N	5.31	128.46	122.20
13	F	18	ARG	CA-C-N	5.31	130.20	121.39
13	F	18	ARG	C-N-CA	5.31	130.20	121.39
20	M	354	GLU	CA-C-N	5.31	127.39	120.28
20	M	354	GLU	C-N-CA	5.31	127.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	63	VAL	CA-C-O	-5.31	115.23	120.85
23	P	250	ILE	CA-C-N	5.31	127.66	120.44
23	P	250	ILE	C-N-CA	5.31	127.66	120.44
16	I	352	ASN	CA-C-N	5.30	126.47	119.84
16	I	352	ASN	C-N-CA	5.30	126.47	119.84
21	N	540	LEU	CA-C-N	5.30	130.42	121.14
21	N	540	LEU	C-N-CA	5.30	130.42	121.14
23	P	281	ILE	N-CA-C	5.30	117.68	111.05
33	Z	451	ALA	N-CA-C	5.30	116.75	111.07
33	Z	446	GLU	CA-C-N	5.30	127.24	120.56
33	Z	446	GLU	C-N-CA	5.30	127.24	120.56
2	2	169	SER	O-C-N	5.30	130.12	123.23
10	C	83	ASP	CA-C-N	5.30	127.38	120.28
10	C	83	ASP	C-N-CA	5.30	127.38	120.28
16	I	207	LEU	O-C-N	5.30	127.81	122.09
15	H	198	MET	CA-C-O	-5.30	115.74	121.36
31	X	27	ILE	O-C-N	-5.30	115.06	121.10
17	J	126	LEU	CA-C-N	5.30	131.12	122.81
17	J	126	LEU	C-N-CA	5.30	131.12	122.81
19	L	172	SER	CA-C-N	5.30	130.58	122.95
19	L	172	SER	C-N-CA	5.30	130.58	122.95
25	R	226	GLU	CA-C-O	5.30	126.06	119.97
29	V	188	LEU	CA-C-O	-5.30	114.81	120.42
4	4	131	ALA	CA-C-N	5.29	131.31	122.73
4	4	131	ALA	C-N-CA	5.29	131.31	122.73
14	G	102	TYR	CA-C-N	5.29	130.08	122.40
14	G	102	TYR	C-N-CA	5.29	130.08	122.40
23	P	130	ILE	CA-C-O	5.29	125.41	120.96
27	T	262	LYS	CA-C-N	5.29	127.38	120.28
27	T	262	LYS	C-N-CA	5.29	127.38	120.28
17	J	67	GLU	CA-C-O	-5.29	115.58	120.13
23	P	282	HIS	CA-C-N	5.29	131.65	121.54
23	P	282	HIS	C-N-CA	5.29	131.65	121.54
3	3	39	HIS	N-CA-C	-5.29	106.13	112.59
15	H	214	CYS	N-CA-C	-5.29	106.13	112.59
18	K	346	ARG	CA-C-O	-5.29	114.94	120.55
28	U	42	ASN	N-CA-C	-5.29	106.69	112.72
5	5	65	LEU	CA-C-N	5.29	127.37	120.28
5	5	65	LEU	C-N-CA	5.29	127.37	120.28
9	B	185	LEU	O-C-N	5.29	127.73	122.12
21	N	308	ASN	CA-C-O	5.29	125.11	119.34
22	O	187	SER	CA-C-N	5.29	127.37	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	O	187	SER	C-N-CA	5.29	127.37	120.28
24	Q	250	THR	CB-CA-C	-5.29	110.50	116.63
33	Z	789	GLN	CA-C-N	5.29	128.35	120.31
33	Z	789	GLN	C-N-CA	5.29	128.35	120.31
2	2	179	GLU	N-CA-C	-5.29	101.09	109.76
3	3	20	LEU	CA-C-N	5.29	126.88	122.17
3	3	20	LEU	C-N-CA	5.29	126.88	122.17
27	T	26	LEU	CA-C-N	5.29	127.34	120.26
27	T	26	LEU	C-N-CA	5.29	127.34	120.26
7	7	211	TRP	N-CA-C	-5.29	104.48	112.99
18	K	205	PRO	CA-C-O	-5.29	112.90	120.56
18	K	313	LYS	N-CA-C	-5.29	101.55	109.95
19	L	146	VAL	CA-C-O	5.29	127.22	121.67
20	M	80	ALA	CA-C-O	-5.29	113.78	120.28
21	N	252	GLY	CA-C-N	5.29	127.31	120.44
21	N	252	GLY	C-N-CA	5.29	127.31	120.44
21	N	415	PHE	N-CA-C	-5.29	99.54	110.80
24	Q	26	VAL	N-CA-C	5.29	116.01	110.62
26	S	226	ASP	N-CA-C	-5.29	104.11	110.88
5	5	153	ALA	CA-C-N	5.28	127.67	120.54
5	5	153	ALA	C-N-CA	5.28	127.67	120.54
16	I	272	GLY	CA-C-N	5.28	127.31	120.44
16	I	272	GLY	C-N-CA	5.28	127.31	120.44
20	M	338	LEU	N-CA-C	-5.28	106.22	113.30
20	M	416	VAL	CA-C-N	5.28	128.34	120.31
20	M	416	VAL	C-N-CA	5.28	128.34	120.31
10	C	21	GLN	CA-C-N	5.28	127.32	120.56
10	C	21	GLN	C-N-CA	5.28	127.32	120.56
16	I	257	LEU	N-CA-CB	5.28	118.31	110.49
22	O	145	LYS	CA-C-N	5.28	127.36	120.28
22	O	145	LYS	C-N-CA	5.28	127.36	120.28
23	P	100	VAL	CA-C-N	5.28	127.36	120.28
23	P	100	VAL	C-N-CA	5.28	127.36	120.28
10	C	65	LYS	CA-C-N	-5.28	115.66	123.05
10	C	65	LYS	C-N-CA	-5.28	115.66	123.05
21	N	42	GLU	CA-C-N	5.28	127.55	120.58
21	N	42	GLU	C-N-CA	5.28	127.55	120.58
22	O	20	PRO	N-CA-C	5.28	123.35	112.47
28	U	303	GLU	CA-C-N	5.28	127.30	120.44
28	U	303	GLU	C-N-CA	5.28	127.30	120.44
31	X	74	MET	CA-C-O	-5.28	115.02	121.36
21	N	320	SER	N-CA-C	5.28	116.72	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	24	GLU	N-CA-C	5.28	117.03	111.28
5	5	155	TYR	CA-C-N	5.28	127.35	120.28
5	5	155	TYR	C-N-CA	5.28	127.35	120.28
19	L	234	ALA	N-CA-C	5.28	117.03	111.28
21	N	684	SER	CA-C-N	5.28	127.92	120.42
21	N	684	SER	C-N-CA	5.28	127.92	120.42
26	S	130	VAL	O-C-N	-5.28	116.74	121.91
28	U	39	GLY	N-CA-C	-5.28	100.67	113.18
30	W	13	SER	N-CA-C	5.28	117.41	109.23
33	Z	59	ASP	O-C-N	5.28	129.61	122.59
22	O	145	LYS	N-CA-C	-5.28	105.61	111.36
11	D	236	ILE	N-CA-C	-5.27	105.39	110.72
21	N	93	GLU	CA-C-O	5.27	126.17	120.32
33	Z	67	SER	N-CA-C	-5.27	105.44	111.14
1	1	183	VAL	N-CA-C	-5.27	100.05	107.75
12	E	48	LEU	N-CA-C	-5.27	99.85	108.76
27	T	2	PRO	N-CA-C	5.27	119.49	111.11
13	F	111	LEU	CA-C-N	5.27	127.34	120.28
13	F	111	LEU	C-N-CA	5.27	127.34	120.28
20	M	288	THR	N-CA-C	5.27	118.66	111.39
21	N	569	LYS	N-CA-C	5.27	116.71	111.07
1	1	51	ASP	CA-C-O	5.27	126.35	120.82
8	A	61	ASP	CA-C-O	-5.27	115.23	121.66
8	A	80	GLY	O-C-N	-5.27	115.85	122.70
9	B	219	PRO	CA-C-N	5.27	130.79	120.99
9	B	219	PRO	C-N-CA	5.27	130.79	120.99
18	K	294	ARG	CA-C-N	5.27	127.90	120.42
18	K	294	ARG	C-N-CA	5.27	127.90	120.42
25	R	237	THR	N-CA-C	-5.27	101.28	109.24
30	W	124	GLU	CA-C-O	5.27	126.00	120.42
4	4	72	TYR	CA-C-O	5.27	126.92	120.60
8	A	120	ARG	CA-C-O	-5.27	115.28	120.70
8	A	186	PHE	CA-C-N	5.27	127.77	120.29
8	A	186	PHE	C-N-CA	5.27	127.77	120.29
24	Q	312	LEU	CA-C-N	5.27	127.77	120.29
24	Q	312	LEU	C-N-CA	5.27	127.77	120.29
32	Y	78	LYS	CA-C-N	5.27	127.65	120.54
32	Y	78	LYS	C-N-CA	5.27	127.65	120.54
15	H	199	THR	N-CA-C	-5.26	100.66	109.24
21	N	548	ARG	CA-C-N	5.26	127.28	120.44
21	N	548	ARG	C-N-CA	5.26	127.28	120.44
23	P	266	TYR	N-CA-C	-5.26	105.71	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	Z	495	ILE	N-CA-C	5.26	116.04	110.72
10	C	109	GLU	O-C-N	5.26	127.70	122.12
24	Q	124	PHE	CA-C-N	5.26	127.86	120.28
24	Q	124	PHE	C-N-CA	5.26	127.86	120.28
33	Z	416	THR	O-C-N	5.26	127.49	122.07
26	S	314	ASN	N-CA-C	5.26	117.01	111.28
5	5	197	PHE	N-CA-C	5.26	116.70	111.07
15	H	351	VAL	O-C-N	-5.26	117.52	123.20
17	J	142	VAL	CA-C-N	5.26	125.24	120.03
17	J	142	VAL	C-N-CA	5.26	125.24	120.03
20	M	48	LEU	CA-C-N	5.26	129.55	121.19
20	M	48	LEU	C-N-CA	5.26	129.55	121.19
21	N	780	ASP	CB-CA-C	5.26	121.00	111.06
23	P	117	SER	O-C-N	5.26	127.77	122.09
25	R	166	ALA	N-CA-C	5.26	118.48	111.75
22	O	305	ILE	N-CA-C	5.26	117.20	109.63
26	S	202	ASN	N-CA-C	5.26	119.66	112.88
28	U	74	GLU	N-CA-C	5.26	117.69	111.33
16	I	181	TYR	CA-C-O	-5.26	114.16	120.10
16	I	230	THR	CA-C-N	5.25	127.27	120.44
16	I	230	THR	C-N-CA	5.25	127.27	120.44
17	J	315	GLU	CA-C-N	5.25	130.90	121.76
17	J	315	GLU	C-N-CA	5.25	130.90	121.76
19	L	393	ASN	CA-C-N	5.25	127.32	120.28
19	L	393	ASN	C-N-CA	5.25	127.32	120.28
24	Q	271	MET	CA-C-N	5.25	129.49	120.72
24	Q	271	MET	C-N-CA	5.25	129.49	120.72
23	P	146	ILE	CA-C-O	-5.25	115.28	120.85
33	Z	752	ILE	CA-C-N	5.25	125.78	120.00
33	Z	752	ILE	C-N-CA	5.25	125.78	120.00
3	3	84	SER	O-C-N	5.25	128.73	122.27
14	G	238	ALA	N-CA-C	5.25	117.08	111.36
33	Z	622	HIS	CA-C-N	5.25	127.31	120.28
33	Z	622	HIS	C-N-CA	5.25	127.31	120.28
4	4	120	TYR	CA-C-N	5.25	127.74	120.29
4	4	120	TYR	C-N-CA	5.25	127.74	120.29
6	6	15	ALA	N-CA-C	-5.25	101.14	109.59
23	P	85	LYS	O-C-N	-5.25	115.61	122.59
29	V	192	LEU	CA-C-N	5.25	131.56	121.54
29	V	192	LEU	C-N-CA	5.25	131.56	121.54
19	L	298	ASP	CA-C-O	5.25	125.70	119.56
21	N	103	SER	CA-C-N	5.25	127.83	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	103	SER	C-N-CA	5.25	127.83	120.28
25	R	393	PRO	CA-C-N	5.25	127.58	120.44
25	R	393	PRO	C-N-CA	5.25	127.58	120.44
28	U	27	THR	N-CA-C	-5.25	100.75	109.46
4	4	9	GLN	N-CA-C	5.25	117.68	111.33
17	J	52	ASN	CA-C-N	5.25	127.31	120.28
17	J	52	ASN	C-N-CA	5.25	127.31	120.28
18	K	150	LEU	CA-C-N	5.25	125.78	120.38
18	K	150	LEU	C-N-CA	5.25	125.78	120.38
21	N	596	LEU	CA-C-O	-5.25	114.99	120.55
33	Z	890	SER	O-C-N	-5.25	115.29	121.32
10	C	97	ASN	CA-C-N	5.24	127.26	120.44
10	C	97	ASN	C-N-CA	5.24	127.26	120.44
33	Z	445	PRO	CA-C-N	5.24	127.31	120.28
33	Z	445	PRO	C-N-CA	5.24	127.31	120.28
33	Z	526	ALA	O-C-N	5.24	128.18	122.20
25	R	385	ASN	CA-C-O	5.24	125.42	119.18
3	3	98	PRO	CA-C-N	5.24	130.72	122.33
3	3	98	PRO	C-N-CA	5.24	130.72	122.33
2	2	99	ILE	O-C-N	5.24	128.75	123.20
14	G	236	GLN	CA-C-O	-5.24	115.00	120.55
15	H	362	ASP	N-CA-C	-5.24	101.02	109.82
22	O	316	ALA	N-CA-C	5.24	116.99	111.28
25	R	361	VAL	CA-C-O	-5.24	115.50	120.95
11	D	112	TYR	CA-C-N	5.24	127.86	120.42
11	D	112	TYR	C-N-CA	5.24	127.86	120.42
20	M	192	GLU	O-C-N	5.24	127.46	122.07
21	N	134	THR	O-C-N	-5.24	116.68	122.07
23	P	146	ILE	N-CA-C	-5.24	105.43	110.72
24	Q	11	ALA	CA-C-N	5.24	127.72	120.29
24	Q	11	ALA	C-N-CA	5.24	127.72	120.29
24	Q	274	LEU	CA-C-N	5.24	128.88	120.30
24	Q	274	LEU	C-N-CA	5.24	128.88	120.30
10	C	133	VAL	N-CA-C	-5.23	101.44	108.35
4	4	90	SER	N-CA-C	5.23	117.89	111.82
7	7	41	THR	N-CA-C	-5.23	100.77	108.99
16	I	413	ALA	N-CA-C	5.23	117.73	111.71
19	L	245	PHE	N-CA-C	-5.23	100.71	109.24
21	N	615	ALA	CA-C-N	5.23	127.81	120.28
21	N	615	ALA	C-N-CA	5.23	127.81	120.28
23	P	79	LEU	CA-C-O	5.23	126.10	120.55
28	U	226	LEU	CA-C-N	5.23	126.68	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	226	LEU	C-N-CA	5.23	126.68	120.14
21	N	314	LEU	CA-C-N	5.23	127.24	120.44
21	N	314	LEU	C-N-CA	5.23	127.24	120.44
12	E	206	GLN	O-C-N	-5.23	116.48	122.08
1	1	112	THR	N-CA-C	-5.23	100.65	109.07
5	5	21	THR	CA-C-O	5.23	127.22	121.11
24	Q	196	ALA	CA-C-O	5.23	126.09	120.55
28	U	42	ASN	CA-C-N	5.23	130.80	122.59
28	U	42	ASN	C-N-CA	5.23	130.80	122.59
2	2	105	PRO	N-CA-C	-5.23	107.22	114.27
16	I	206	GLU	CA-C-N	5.23	127.55	120.44
16	I	206	GLU	C-N-CA	5.23	127.55	120.44
33	Z	380	ASN	CA-C-N	5.23	127.28	120.28
33	Z	380	ASN	C-N-CA	5.23	127.28	120.28
14	G	51	LYS	N-CA-C	-5.22	100.66	109.07
4	4	115	LEU	O-C-N	-5.22	117.20	123.31
23	P	77	GLU	N-CA-C	5.22	117.05	111.36
26	S	303	ASN	CA-C-N	5.22	131.97	123.93
26	S	303	ASN	C-N-CA	5.22	131.97	123.93
7	7	33	ARG	N-CA-C	-5.22	104.89	113.50
13	F	144	LEU	N-CA-C	-5.22	100.18	109.06
16	I	234	LYS	CA-C-O	-5.22	115.34	120.82
28	U	7	LYS	N-CA-C	-5.22	99.68	110.80
5	5	7	ARG	N-CA-C	-5.22	101.19	109.59
9	B	190	HIS	CA-C-N	5.22	127.61	120.46
9	B	190	HIS	C-N-CA	5.22	127.61	120.46
17	J	106	ASP	CA-C-N	5.22	129.14	120.94
17	J	106	ASP	C-N-CA	5.22	129.14	120.94
17	J	342	ASN	CA-C-N	5.22	128.24	120.31
17	J	342	ASN	C-N-CA	5.22	128.24	120.31
19	L	282	GLU	CA-C-O	5.22	127.97	120.51
28	U	188	ILE	CA-C-N	5.22	127.27	120.28
28	U	188	ILE	C-N-CA	5.22	127.27	120.28
33	Z	328	ASP	N-CA-C	5.22	121.92	110.80
1	1	11	GLY	CA-C-N	5.22	130.44	122.25
1	1	11	GLY	C-N-CA	5.22	130.44	122.25
26	S	351	ALA	O-C-N	-5.22	116.70	122.07
8	A	233	PHE	CA-C-O	-5.21	114.66	120.66
19	L	321	THR	O-C-N	-5.21	117.12	123.27
4	4	171	MET	N-CA-C	-5.21	103.12	110.31
20	M	402	ALA	CA-C-N	5.21	127.22	120.44
20	M	402	ALA	C-N-CA	5.21	127.22	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	T	70	ILE	CA-C-O	-5.21	115.26	121.05
5	5	76	VAL	CA-C-N	5.21	127.26	120.28
5	5	76	VAL	C-N-CA	5.21	127.26	120.28
6	6	46	ASN	CA-C-O	5.21	126.59	120.80
10	C	116	SER	N-CA-C	-5.21	105.68	111.36
23	P	108	LYS	CB-CA-C	-5.21	109.01	115.89
30	W	7	VAL	CA-C-O	-5.21	116.20	121.67
27	T	180	ILE	CA-C-N	5.21	127.21	120.44
27	T	180	ILE	C-N-CA	5.21	127.21	120.44
2	2	128	GLY	CA-C-O	-5.21	117.89	122.16
16	I	354	ASP	CA-C-N	5.21	127.21	120.44
16	I	354	ASP	C-N-CA	5.21	127.21	120.44
21	N	778	LYS	CA-C-N	5.21	128.11	120.71
21	N	778	LYS	C-N-CA	5.21	128.11	120.71
23	P	82	LEU	CA-C-N	5.21	128.23	120.31
23	P	82	LEU	C-N-CA	5.21	128.23	120.31
3	3	77	THR	N-CA-C	-5.21	105.68	111.36
3	3	101	ALA	CA-C-O	-5.21	114.35	120.60
19	L	316	ASP	N-CA-C	-5.21	101.21	109.96
26	S	346	TYR	O-C-N	-5.21	116.22	122.15
15	H	394	LYS	CA-C-N	5.21	127.68	120.29
15	H	394	LYS	C-N-CA	5.21	127.68	120.29
21	N	576	VAL	CA-C-O	5.21	126.28	120.71
9	B	37	ILE	CA-C-O	-5.20	114.84	120.67
9	B	44	VAL	N-CA-C	-5.20	100.83	108.11
25	R	135	ILE	CA-C-N	5.20	127.25	120.28
25	R	135	ILE	C-N-CA	5.20	127.25	120.28
33	Z	847	ILE	CA-C-N	5.20	127.68	120.29
33	Z	847	ILE	C-N-CA	5.20	127.68	120.29
25	R	269	LYS	O-C-N	5.20	128.04	121.64
4	4	38	SER	CB-CA-C	5.20	117.11	110.76
19	L	110	LYS	CA-C-O	-5.20	114.93	120.75
22	O	83	LEU	CA-C-N	5.20	127.67	120.29
22	O	83	LEU	C-N-CA	5.20	127.67	120.29
18	K	274	VAL	CA-C-N	5.20	128.92	120.60
18	K	274	VAL	C-N-CA	5.20	128.92	120.60
20	M	361	LEU	O-C-N	-5.20	116.22	122.15
33	Z	862	MET	N-CA-C	-5.20	101.46	109.52
14	G	196	ALA	CA-C-N	5.20	127.24	120.28
14	G	196	ALA	C-N-CA	5.20	127.24	120.28
17	J	369	ALA	CA-C-N	5.20	127.20	120.44
17	J	369	ALA	C-N-CA	5.20	127.20	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	3	187	VAL	CA-C-O	5.20	126.64	120.72
27	T	146	ILE	CA-C-O	-5.20	115.34	120.85
24	Q	67	THR	O-C-N	5.19	128.07	122.15
25	R	286	LEU	CA-C-O	-5.19	115.34	120.90
10	C	99	LEU	CA-C-N	5.19	127.19	120.44
10	C	99	LEU	C-N-CA	5.19	127.19	120.44
16	I	88	LYS	CA-C-N	5.19	127.19	120.44
16	I	88	LYS	C-N-CA	5.19	127.19	120.44
30	W	168	THR	N-CA-C	5.19	117.53	108.76
33	Z	257	PRO	CA-C-O	-5.19	116.63	120.73
33	Z	900	LEU	O-C-N	-5.19	115.64	122.39
6	6	22	THR	CB-CA-C	5.19	118.13	110.14
14	G	238	ALA	CA-C-N	5.19	127.57	120.46
14	G	238	ALA	C-N-CA	5.19	127.57	120.46
9	B	87	ASP	CA-C-O	-5.19	115.37	120.82
21	N	77	SER	N-CA-C	-5.19	105.54	111.14
33	Z	595	MET	O-C-N	5.19	127.62	122.12
7	7	7	LYS	CA-C-O	-5.19	115.21	120.71
21	N	290	LEU	N-CA-C	5.19	119.09	112.87
22	O	322	ASP	CA-C-N	5.19	127.23	120.28
22	O	322	ASP	C-N-CA	5.19	127.23	120.28
19	L	355	ALA	O-C-N	-5.19	116.62	122.12
19	L	407	ARG	N-CA-C	5.19	116.95	108.76
23	P	288	ASN	CA-C-N	5.19	131.44	121.54
23	P	288	ASN	C-N-CA	5.19	131.44	121.54
11	D	16	HIS	N-CA-C	-5.18	101.77	109.96
15	H	407	ILE	O-C-N	5.18	126.90	121.87
21	N	101	ILE	O-C-N	5.18	129.27	122.12
6	6	155	THR	N-CA-C	-5.18	107.51	113.88
15	H	400	ARG	N-CA-C	5.18	117.81	110.50
19	L	242	ASN	O-C-N	-5.18	116.64	123.02
33	Z	53	VAL	CB-CA-C	-5.18	105.25	112.04
19	L	391	ILE	N-CA-C	-5.18	105.49	110.72
33	Z	240	ASN	CA-C-N	-5.18	114.88	122.19
33	Z	240	ASN	C-N-CA	-5.18	114.88	122.19
16	I	340	ARG	CA-C-N	5.18	126.31	119.84
16	I	340	ARG	C-N-CA	5.18	126.31	119.84
18	K	400	TYR	CA-C-N	5.18	128.31	120.75
18	K	400	TYR	C-N-CA	5.18	128.31	120.75
33	Z	94	PRO	N-CA-C	-5.18	101.80	112.47
18	K	235	ILE	CB-CA-C	5.18	118.12	110.77
21	N	467	LYS	N-CA-C	5.18	117.67	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	H	336	LEU	CA-C-N	5.18	127.55	120.46
15	H	336	LEU	C-N-CA	5.18	127.55	120.46
18	K	280	LYS	O-C-N	5.18	128.59	123.46
21	N	634	LEU	CA-C-O	5.18	126.65	120.70
23	P	236	GLU	N-CA-C	5.18	116.61	111.07
19	L	107	GLU	CA-C-N	5.17	128.02	120.98
19	L	107	GLU	C-N-CA	5.17	128.02	120.98
24	Q	402	THR	CA-C-N	5.17	126.31	119.84
24	Q	402	THR	C-N-CA	5.17	126.31	119.84
27	T	146	ILE	O-C-N	5.17	127.16	121.83
29	V	239	ALA	CA-C-N	5.17	127.53	120.54
29	V	239	ALA	C-N-CA	5.17	127.53	120.54
4	4	93	SER	N-CA-C	5.17	117.00	110.33
8	A	26	TYR	CA-C-O	5.17	126.03	120.55
17	J	372	GLU	CA-C-N	5.17	129.48	122.19
17	J	372	GLU	C-N-CA	5.17	129.48	122.19
7	7	190	ALA	O-C-N	5.17	129.59	123.33
8	A	128	TYR	CA-C-N	5.17	128.16	120.31
8	A	128	TYR	C-N-CA	5.17	128.16	120.31
17	J	275	LEU	O-C-N	-5.17	116.64	122.12
18	K	261	ALA	CA-C-N	5.17	127.63	120.29
18	K	261	ALA	C-N-CA	5.17	127.63	120.29
26	S	137	PHE	O-C-N	-5.17	116.64	122.12
2	2	177	VAL	CA-C-N	-5.17	115.53	123.07
2	2	177	VAL	C-N-CA	-5.17	115.53	123.07
8	A	171	THR	CA-C-N	5.17	129.98	121.87
8	A	171	THR	C-N-CA	5.17	129.98	121.87
16	I	271	ALA	CA-C-N	5.17	126.78	120.22
16	I	271	ALA	C-N-CA	5.17	126.78	120.22
18	K	88	ARG	CA-C-N	5.17	128.63	120.47
18	K	88	ARG	C-N-CA	5.17	128.63	120.47
18	K	418	ASP	N-CA-C	-5.17	101.69	109.85
21	N	5	THR	CA-C-N	5.17	131.06	122.54
21	N	5	THR	C-N-CA	5.17	131.06	122.54
23	P	432	LEU	N-CA-C	5.17	116.60	111.07
27	T	247	ASP	CA-C-N	5.17	131.41	121.54
27	T	247	ASP	C-N-CA	5.17	131.41	121.54
18	K	182	GLN	CA-C-N	5.16	127.15	120.44
18	K	182	GLN	C-N-CA	5.16	127.15	120.44
21	N	523	LEU	CA-C-O	5.16	126.02	120.55
30	W	76	LEU	CA-C-N	5.16	130.86	121.41
30	W	76	LEU	C-N-CA	5.16	130.86	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	V	140	VAL	N-CA-C	5.16	116.09	108.45
17	J	65	LEU	N-CA-C	-5.16	107.05	113.19
11	D	179	TYR	N-CA-C	-5.16	100.89	108.99
18	K	276	SER	N-CA-C	5.16	116.59	111.07
24	Q	255	TYR	N-CA-C	5.16	116.98	111.36
25	R	300	ASP	O-C-N	-5.16	117.29	123.27
25	R	136	ASN	N-CA-C	5.16	116.90	111.28
15	H	305	ILE	CA-C-O	-5.16	115.03	120.39
17	J	186	ILE	CA-C-N	-5.16	115.45	122.93
17	J	186	ILE	C-N-CA	-5.16	115.45	122.93
17	J	379	GLN	CA-C-N	5.16	127.14	120.44
17	J	379	GLN	C-N-CA	5.16	127.14	120.44
21	N	390	LEU	CA-C-N	5.16	125.45	119.93
21	N	390	LEU	C-N-CA	5.16	125.45	119.93
24	Q	8	LEU	CA-C-O	-5.16	115.39	120.70
33	Z	927	VAL	CA-C-O	-5.16	116.53	121.63
2	2	45	GLY	O-C-N	-5.15	119.37	123.49
14	G	13	VAL	N-CA-C	-5.15	100.45	108.44
20	M	351	LEU	N-CA-C	-5.15	102.67	110.50
22	O	31	LYS	CA-C-N	5.15	127.61	120.29
22	O	31	LYS	C-N-CA	5.15	127.61	120.29
23	P	361	THR	N-CA-C	-5.15	102.89	110.52
25	R	340	GLN	CA-C-O	5.15	125.72	119.38
2	2	66	HIS	CA-C-N	5.15	127.14	120.44
2	2	66	HIS	C-N-CA	5.15	127.14	120.44
17	J	50	ALA	O-C-N	-5.15	116.66	122.12
6	6	210	LEU	CA-C-N	5.15	131.38	121.54
6	6	210	LEU	C-N-CA	5.15	131.38	121.54
11	D	227	GLU	O-C-N	5.15	127.37	122.07
14	G	226	LEU	O-C-N	-5.15	117.21	123.03
18	K	299	LEU	CA-C-O	-5.15	115.09	120.55
19	L	300	GLU	CA-C-N	5.15	127.51	120.46
19	L	300	GLU	C-N-CA	5.15	127.51	120.46
26	S	255	SER	CA-C-N	5.15	127.69	120.28
26	S	255	SER	C-N-CA	5.15	127.69	120.28
9	B	78	MET	CA-C-O	5.15	125.98	120.32
27	T	82	PHE	CA-C-N	5.15	127.60	120.29
27	T	82	PHE	C-N-CA	5.15	127.60	120.29
30	W	111	VAL	CA-C-O	5.15	126.68	121.64
19	L	230	LEU	O-C-N	5.15	127.37	122.07
24	Q	208	ILE	CA-C-O	-5.15	116.27	121.67
25	R	40	ILE	CA-C-O	-5.15	115.40	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	C	3	SER	CA-C-N	5.14	127.59	120.29
10	C	3	SER	C-N-CA	5.14	127.59	120.29
10	C	94	HIS	CA-C-O	-5.14	115.10	120.55
18	K	101	GLU	CA-C-O	5.14	124.55	120.13
21	N	422	TYR	O-C-N	-5.14	116.77	122.07
14	G	164	THR	N-CA-C	-5.14	100.92	108.79
23	P	206	LYS	N-CA-C	5.14	116.89	111.28
23	P	340	ASP	CA-C-N	5.14	127.17	120.28
23	P	340	ASP	C-N-CA	5.14	127.17	120.28
25	R	277	LEU	CA-C-O	-5.14	115.10	120.55
26	S	238	LEU	CA-C-O	5.14	126.00	120.55
33	Z	616	LEU	O-C-N	-5.14	116.29	122.15
11	D	182	LYS	CA-C-N	5.14	126.80	122.28
11	D	182	LYS	C-N-CA	5.14	126.80	122.28
18	K	138	ALA	N-CA-C	-5.14	100.79	109.07
20	M	192	GLU	CA-C-O	-5.14	115.42	120.82
24	Q	220	LEU	CA-C-N	5.14	127.59	120.29
24	Q	220	LEU	C-N-CA	5.14	127.59	120.29
30	W	45	PRO	CA-C-N	5.14	127.17	120.28
30	W	45	PRO	C-N-CA	5.14	127.17	120.28
23	P	202	LYS	CA-C-N	5.14	128.73	120.30
23	P	202	LYS	C-N-CA	5.14	128.73	120.30
23	P	260	VAL	N-CA-C	5.14	115.91	110.72
33	Z	841	GLU	N-CA-C	-5.14	104.35	110.41
2	2	101	ALA	O-C-N	-5.14	116.96	123.17
4	4	32	ASP	N-CA-C	-5.14	100.93	108.99
25	R	132	GLN	CA-C-N	5.14	127.68	120.28
25	R	132	GLN	C-N-CA	5.14	127.68	120.28
33	Z	896	LYS	CA-C-N	5.13	128.96	121.31
33	Z	896	LYS	C-N-CA	5.13	128.96	121.31
20	M	64	ASP	CA-C-O	-5.13	115.43	120.82
21	N	475	ALA	N-CA-C	5.13	116.87	111.28
24	Q	242	SER	CA-C-O	5.13	125.99	120.55
29	V	139	VAL	O-C-N	-5.13	117.72	123.26
24	Q	420	ASN	CA-C-N	5.13	127.11	120.44
24	Q	420	ASN	C-N-CA	5.13	127.11	120.44
27	T	231	SER	CA-C-O	-5.13	113.98	120.55
33	Z	70	ALA	O-C-N	-5.13	116.30	122.15
33	Z	619	ASP	CA-C-O	-5.13	115.11	120.55
3	3	54	LEU	O-C-N	5.13	128.00	122.15
16	I	113	ILE	CA-C-N	5.13	127.15	120.28
16	I	113	ILE	C-N-CA	5.13	127.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	I	426	ASN	N-CA-C	5.13	117.77	111.82
33	Z	524	ALA	CA-C-N	5.13	128.89	120.63
33	Z	524	ALA	C-N-CA	5.13	128.89	120.63
3	3	149	LEU	N-CA-C	-5.13	101.34	109.59
33	Z	842	GLN	CA-C-O	5.13	125.85	120.42
10	C	85	GLU	N-CA-C	5.12	116.87	111.28
18	K	405	SER	CA-C-O	-5.12	115.12	120.55
9	B	88	LYS	CA-C-N	5.12	127.14	120.28
9	B	88	LYS	C-N-CA	5.12	127.14	120.28
12	E	225	GLN	N-CA-C	-5.12	106.27	112.88
23	P	337	HIS	CA-C-N	5.12	127.14	120.28
23	P	337	HIS	C-N-CA	5.12	127.14	120.28
2	2	192	THR	CB-CA-C	5.12	115.86	110.17
9	B	46	ALA	O-C-N	5.12	129.21	123.27
19	L	354	GLU	CA-C-N	5.12	127.14	120.28
19	L	354	GLU	C-N-CA	5.12	127.14	120.28
29	V	289	GLU	O-C-N	5.12	127.34	122.07
20	M	194	VAL	CA-C-O	-5.12	115.74	121.17
23	P	325	ASP	CA-C-N	5.12	131.32	121.54
23	P	325	ASP	C-N-CA	5.12	131.32	121.54
26	S	138	MET	CA-C-N	5.12	127.10	120.44
26	S	138	MET	C-N-CA	5.12	127.10	120.44
26	S	140	LEU	CA-C-O	-5.12	115.44	120.82
6	6	185	ARG	CA-C-O	5.12	124.99	119.15
18	K	210	LEU	CA-C-O	5.12	125.96	120.38
19	L	108	VAL	N-CA-C	-5.12	102.90	109.30
20	M	221	TYR	N-CA-C	-5.12	101.51	109.24
25	R	54	ILE	N-CA-C	-5.12	106.11	113.07
33	Z	536	GLY	CA-C-O	-5.12	113.33	119.01
21	N	894	ARG	N-CA-C	-5.12	106.97	114.39
27	T	4	LEU	CA-C-N	5.12	131.31	121.54
27	T	4	LEU	C-N-CA	5.12	131.31	121.54
28	U	260	ASN	N-CA-C	5.12	116.55	110.97
28	U	169	ILE	CA-C-N	5.12	125.63	120.00
28	U	169	ILE	C-N-CA	5.12	125.63	120.00
33	Z	51	LEU	N-CA-C	-5.12	101.85	109.11
33	Z	504	GLU	O-C-N	5.12	127.61	122.09
6	6	20	ASN	O-C-N	-5.11	117.33	123.31
17	J	47	GLN	CA-C-N	5.11	127.13	120.28
17	J	47	GLN	C-N-CA	5.11	127.13	120.28
23	P	64	ASP	CA-C-O	-5.11	115.00	120.42
25	R	246	TYR	CA-C-N	5.11	127.09	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	246	TYR	C-N-CA	5.11	127.09	120.44
14	G	30	VAL	O-C-N	-5.11	116.58	121.90
19	L	417	LYS	N-CA-C	-5.11	105.79	111.36
24	Q	156	ALA	CA-C-O	-5.11	115.45	120.82
7	7	188	SER	N-CA-C	-5.11	101.43	109.50
15	H	105	ILE	N-CA-C	5.11	119.97	109.34
29	V	30	SER	N-CA-C	-5.11	102.96	110.52
7	7	60	LYS	CA-C-N	5.11	127.54	120.29
7	7	60	LYS	C-N-CA	5.11	127.54	120.29
17	J	254	GLY	CA-C-N	5.11	128.07	120.31
17	J	254	GLY	C-N-CA	5.11	128.07	120.31
20	M	285	ALA	N-CA-C	-5.11	105.07	113.50
27	T	212	ASN	CA-C-O	5.11	124.76	119.14
9	B	243	ILE	CA-C-O	-5.11	115.44	120.85
16	I	156	ILE	CA-C-N	5.11	129.07	120.29
16	I	156	ILE	C-N-CA	5.11	129.07	120.29
33	Z	532	HIS	N-CA-C	5.10	116.92	111.36
2	2	176	CYS	N-CA-C	-5.10	99.79	108.26
11	D	117	GLN	CA-C-O	5.10	125.83	120.42
18	K	366	ALA	N-CA-C	-5.10	99.93	110.80
22	O	324	VAL	CA-C-N	5.10	127.12	120.28
22	O	324	VAL	C-N-CA	5.10	127.12	120.28
25	R	186	TYR	CA-C-N	5.10	127.67	120.42
25	R	186	TYR	C-N-CA	5.10	127.67	120.42
6	6	141	LEU	N-CA-C	-5.10	105.72	111.28
18	K	65	GLU	O-C-N	5.10	127.32	122.07
13	F	223	THR	CA-C-N	5.10	129.68	123.10
13	F	223	THR	C-N-CA	5.10	129.68	123.10
21	N	590	ALA	N-CA-C	5.10	117.57	111.71
21	N	727	THR	N-CA-C	5.10	116.84	111.28
26	S	331	SER	CA-C-N	5.10	127.53	120.29
26	S	331	SER	C-N-CA	5.10	127.53	120.29
28	U	75	ASN	O-C-N	-5.10	116.31	122.48
15	H	256	LYS	N-CA-C	-5.10	105.64	111.14
22	O	59	LEU	N-CA-C	5.10	116.84	111.28
24	Q	202	ARG	N-CA-C	5.10	116.84	111.28
25	R	24	TYR	O-C-N	5.10	127.60	122.09
9	B	240	SER	CA-C-O	-5.10	115.15	120.55
22	O	358	ILE	N-CA-C	5.10	119.94	109.34
3	3	61	LYS	CA-C-N	5.09	127.53	120.29
3	3	61	LYS	C-N-CA	5.09	127.53	120.29
16	I	321	ASP	N-CA-C	-5.09	105.42	111.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	K	176	GLY	N-CA-C	-5.09	108.20	115.64
27	T	53	ASN	CA-C-O	-5.09	115.22	121.28
29	V	246	LYS	N-CA-C	-5.09	106.91	113.23
33	Z	319	THR	CA-C-N	5.09	131.27	121.54
33	Z	319	THR	C-N-CA	5.09	131.27	121.54
21	N	83	LEU	N-CA-C	5.09	116.83	111.28
29	V	74	SER	CA-C-N	5.09	131.39	121.41
29	V	74	SER	C-N-CA	5.09	131.39	121.41
15	H	226	GLU	N-CA-C	5.09	116.52	110.97
21	N	497	ALA	CA-C-O	-5.09	115.45	120.90
21	N	781	ALA	O-C-N	5.09	128.84	122.22
2	2	58	LEU	CA-C-O	5.09	125.94	120.55
18	K	151	PRO	CA-C-O	-5.09	113.18	120.56
23	P	271	SER	O-C-N	-5.09	116.77	121.30
33	Z	72	LYS	N-CA-C	5.09	117.49	111.33
1	1	149	GLU	N-CA-C	5.09	117.21	111.11
8	A	81	MET	CA-C-O	-5.09	114.02	120.28
21	N	695	ALA	CA-C-O	5.09	125.94	120.55
33	Z	554	THR	N-CA-C	-5.09	99.82	108.26
15	H	319	PHE	CA-C-O	5.08	125.62	119.11
19	L	75	LYS	CA-C-N	5.08	127.05	120.44
19	L	75	LYS	C-N-CA	5.08	127.05	120.44
24	Q	159	ASN	CA-C-N	5.08	127.51	120.29
24	Q	159	ASN	C-N-CA	5.08	127.51	120.29
1	1	132	THR	O-C-N	5.08	127.51	122.12
10	C	130	PRO	N-CA-C	-5.08	102.00	112.47
11	D	126	VAL	O-C-N	-5.08	117.21	123.00
12	E	81	LEU	O-C-N	-5.08	117.01	123.01
13	F	84	LEU	CA-C-N	5.08	128.03	120.31
13	F	84	LEU	C-N-CA	5.08	128.03	120.31
13	F	190	ILE	CA-C-N	5.08	127.05	120.44
13	F	190	ILE	C-N-CA	5.08	127.05	120.44
21	N	649	VAL	CA-C-N	5.08	127.09	120.28
21	N	649	VAL	C-N-CA	5.08	127.09	120.28
8	A	184	ASN	CA-C-N	5.08	127.04	120.44
8	A	184	ASN	C-N-CA	5.08	127.04	120.44
10	C	21	GLN	N-CA-C	5.08	117.55	111.71
13	F	128	TYR	CA-C-O	-5.08	115.17	120.55
13	F	188	GLU	N-CA-C	5.08	116.62	111.14
14	G	40	LYS	O-C-N	-5.08	117.37	123.06
21	N	630	ALA	CA-C-N	5.08	130.77	122.69
21	N	630	ALA	C-N-CA	5.08	130.77	122.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	46	ALA	CA-C-N	5.08	127.09	120.28
25	R	46	ALA	C-N-CA	5.08	127.09	120.28
27	T	39	LEU	CA-C-O	-5.08	116.00	121.38
33	Z	412	GLY	CA-C-N	5.08	128.73	120.60
33	Z	412	GLY	C-N-CA	5.08	128.73	120.60
33	Z	988	ASP	CA-C-O	5.08	125.61	119.31
13	F	142	ALA	CA-C-O	-5.08	115.82	121.81
16	I	305	THR	CA-C-O	5.08	125.80	120.42
25	R	380	VAL	O-C-N	-5.08	116.72	122.36
33	Z	424	SER	CA-C-O	5.08	125.93	120.70
10	C	142	ASP	N-CA-C	-5.07	106.50	113.30
12	E	65	GLU	O-C-N	-5.07	117.93	123.26
13	F	123	TYR	N-CA-C	5.07	117.71	111.82
15	H	171	GLY	CA-C-N	5.07	131.23	121.54
15	H	171	GLY	C-N-CA	5.07	131.23	121.54
27	T	248	GLU	N-CA-C	5.07	121.61	110.80
1	1	14	LEU	N-CA-C	-5.07	101.43	109.59
3	3	163	LEU	CA-C-N	5.07	128.02	120.31
3	3	163	LEU	C-N-CA	5.07	128.02	120.31
6	6	31	GLU	CA-C-O	-5.07	113.21	120.16
14	G	133	VAL	O-C-N	-5.07	117.22	123.00
18	K	218	GLY	CA-C-N	5.07	127.03	120.44
18	K	218	GLY	C-N-CA	5.07	127.03	120.44
21	N	868	VAL	N-CA-C	-5.07	101.30	108.65
23	P	423	LEU	CA-C-N	5.07	127.07	120.28
23	P	423	LEU	C-N-CA	5.07	127.07	120.28
28	U	126	LYS	N-CA-C	-5.07	107.13	113.72
8	A	121	MET	N-CA-C	-5.07	105.88	111.71
11	D	6	ARG	O-C-N	5.07	128.63	122.85
13	F	94	TYR	N-CA-C	-5.07	105.75	111.28
24	Q	394	ASN	N-CA-C	-5.07	106.78	113.12
29	V	101	ASP	O-C-N	5.07	129.24	122.95
30	W	178	PRO	CA-C-N	5.07	131.22	121.54
30	W	178	PRO	C-N-CA	5.07	131.22	121.54
4	4	89	LYS	CA-C-N	5.07	128.01	120.31
4	4	89	LYS	C-N-CA	5.07	128.01	120.31
5	5	59	LEU	O-C-N	-5.07	116.85	122.07
16	I	301	GLU	O-C-N	5.07	127.29	122.07
23	P	365	LEU	CA-C-N	5.07	127.49	120.29
23	P	365	LEU	C-N-CA	5.07	127.49	120.29
23	P	395	ARG	O-C-N	-5.07	115.68	120.70
24	Q	145	HIS	CA-C-N	5.07	127.03	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	145	HIS	C-N-CA	5.07	127.03	120.44
12	E	67	ILE	CA-C-O	-5.07	114.91	120.48
7	7	52	MET	CA-C-N	5.06	127.57	120.28
7	7	52	MET	C-N-CA	5.06	127.57	120.28
10	C	236	LYS	CA-C-O	-5.06	115.18	120.55
19	L	313	ASP	CA-C-N	5.06	131.34	121.41
19	L	313	ASP	C-N-CA	5.06	131.34	121.41
16	I	81	ILE	CA-C-O	5.06	126.13	120.71
16	I	111	GLU	CA-C-N	-5.06	116.91	123.19
16	I	111	GLU	C-N-CA	-5.06	116.91	123.19
18	K	335	ASP	CA-C-N	5.06	129.33	122.19
18	K	335	ASP	C-N-CA	5.06	129.33	122.19
21	N	161	TYR	O-C-N	-5.06	116.63	122.86
23	P	113	ASN	CA-C-N	5.06	128.00	120.31
23	P	113	ASN	C-N-CA	5.06	128.00	120.31
30	W	104	LYS	N-CA-C	5.06	116.80	111.28
4	4	71	ASP	N-CA-C	-5.06	104.66	111.54
4	4	131	ALA	O-C-N	-5.06	118.00	123.42
20	M	396	VAL	O-C-N	5.06	127.04	121.83
24	Q	135	HIS	CA-C-O	5.06	125.79	119.97
25	R	113	LEU	CA-C-N	5.06	127.06	120.28
25	R	113	LEU	C-N-CA	5.06	127.06	120.28
9	B	70	ASP	N-CA-C	-5.06	105.81	112.94
16	I	187	LEU	N-CA-C	-5.06	106.36	112.88
33	Z	484	LYS	N-CA-C	5.06	116.48	111.07
4	4	179	ILE	CA-C-O	-5.06	115.12	120.48
14	G	189	ARG	N-CA-C	5.06	116.48	111.07
16	I	184	ILE	CA-C-N	5.06	131.32	121.41
16	I	184	ILE	C-N-CA	5.06	131.32	121.41
33	Z	277	GLU	N-CA-C	-5.06	100.03	110.80
9	B	243	ILE	N-CA-C	-5.05	105.62	110.72
33	Z	275	GLN	O-C-N	5.05	128.26	122.25
5	5	199	LYS	CA-C-N	5.05	127.38	120.46
5	5	199	LYS	C-N-CA	5.05	127.38	120.46
24	Q	237	SER	CA-C-N	5.05	127.05	120.28
24	Q	237	SER	C-N-CA	5.05	127.05	120.28
2	2	208	GLY	CA-C-N	5.05	130.31	122.49
2	2	208	GLY	C-N-CA	5.05	130.31	122.49
15	H	198	MET	CA-C-N	-5.05	115.75	122.72
15	H	198	MET	C-N-CA	-5.05	115.75	122.72
22	O	135	ARG	CA-C-N	5.05	129.14	120.71
22	O	135	ARG	C-N-CA	5.05	129.14	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	2	16	ALA	CA-C-O	5.05	126.63	121.23
16	I	223	GLY	O-C-N	-5.05	116.14	122.70
23	P	329	PHE	CA-C-O	-5.05	115.55	121.10
11	D	89	ALA	CA-C-O	-5.05	115.07	120.42
24	Q	409	TYR	CA-C-N	5.05	127.04	120.28
24	Q	409	TYR	C-N-CA	5.05	127.04	120.28
31	X	29	VAL	N-CA-C	5.05	119.83	109.34
31	X	51	ARG	N-CA-C	-5.05	100.06	108.23
15	H	254	THR	CA-C-O	5.04	125.38	119.28
22	O	163	ILE	O-C-N	-5.04	116.49	120.07
29	V	240	ALA	CA-C-O	-5.04	115.50	120.90
33	Z	512	ILE	CA-C-N	5.04	127.45	120.29
33	Z	512	ILE	C-N-CA	5.04	127.45	120.29
33	Z	823	ASN	N-CA-C	-5.04	100.95	109.07
5	5	31	VAL	O-C-N	-5.04	117.33	122.82
7	7	22	TYR	N-CA-C	-5.04	100.17	108.49
15	H	448	ASP	CA-C-N	5.04	127.45	120.29
15	H	448	ASP	C-N-CA	5.04	127.45	120.29
18	K	372	ILE	O-C-N	5.04	126.76	121.87
21	N	58	ARG	N-CA-C	5.04	119.64	111.37
22	O	157	LEU	CA-C-N	5.04	127.45	120.29
22	O	157	LEU	C-N-CA	5.04	127.45	120.29
2	2	51	ASP	O-C-N	5.04	127.46	122.12
24	Q	5	GLY	CA-C-O	5.04	126.00	120.66
29	V	234	GLU	CA-C-N	5.04	127.28	120.38
29	V	234	GLU	C-N-CA	5.04	127.28	120.38
13	F	81	ALA	CA-C-N	5.04	127.45	120.29
13	F	81	ALA	C-N-CA	5.04	127.45	120.29
21	N	253	LEU	O-C-N	5.04	127.26	122.07
33	Z	787	ASP	O-C-N	-5.04	115.53	121.32
33	Z	841	GLU	CA-C-O	5.04	125.55	121.02
25	R	396	LYS	N-CA-C	5.04	116.77	111.28
27	T	56	MET	N-CA-C	5.04	116.77	111.28
33	Z	283	ALA	CA-C-O	-5.04	115.21	120.55
17	J	362	CYS	O-C-N	5.04	127.89	122.15
23	P	206	LYS	CA-C-N	5.04	127.44	120.29
23	P	206	LYS	C-N-CA	5.04	127.44	120.29
24	Q	137	LEU	CA-C-N	5.04	129.13	120.72
24	Q	137	LEU	C-N-CA	5.04	129.13	120.72
26	S	413	LEU	CA-C-N	5.04	127.29	120.44
26	S	413	LEU	C-N-CA	5.04	127.29	120.44
31	X	74	MET	CA-C-N	5.04	129.39	122.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	X	74	MET	C-N-CA	5.04	129.39	122.84
33	Z	55	ARG	CA-C-N	5.04	127.53	120.28
33	Z	55	ARG	C-N-CA	5.04	127.53	120.28
6	6	87	LEU	CA-C-O	-5.03	115.53	120.82
11	D	151	GLU	O-C-N	-5.03	116.67	121.20
16	I	430	GLU	CA-C-N	5.03	127.86	120.71
16	I	430	GLU	C-N-CA	5.03	127.86	120.71
17	J	301	ASP	CA-C-N	5.03	124.72	119.64
17	J	301	ASP	C-N-CA	5.03	124.72	119.64
18	K	179	MET	CA-C-O	-5.03	115.52	120.70
24	Q	83	GLU	CA-C-O	5.03	125.44	119.10
33	Z	962	ARG	N-CA-C	5.03	117.17	110.53
11	D	20	VAL	N-CA-C	-5.03	104.70	111.44
19	L	339	ARG	O-C-N	5.03	126.31	121.28
31	X	13	GLY	CA-C-N	5.03	128.09	120.75
31	X	13	GLY	C-N-CA	5.03	128.09	120.75
23	P	189	LEU	CA-C-N	5.03	127.52	120.28
23	P	189	LEU	C-N-CA	5.03	127.52	120.28
27	T	53	ASN	O-C-N	5.03	129.15	122.41
6	6	32	PRO	O-C-N	5.03	128.46	122.98
16	I	282	ASP	O-C-N	5.03	128.95	123.22
17	J	35	ARG	N-CA-C	-5.03	105.80	111.28
24	Q	298	ALA	CA-C-N	5.03	127.42	120.29
24	Q	298	ALA	C-N-CA	5.03	127.42	120.29
30	W	110	ILE	N-CA-C	-5.03	101.11	108.85
18	K	393	ARG	CA-C-O	-5.02	115.09	120.42
6	6	137	ILE	CA-C-N	5.02	128.40	120.97
6	6	137	ILE	C-N-CA	5.02	128.40	120.97
16	I	219	VAL	N-CA-C	-5.02	100.66	108.95
27	T	34	LEU	N-CA-C	5.02	116.75	111.28
8	A	247	ALA	N-CA-C	5.02	117.48	111.71
19	L	362	LYS	CA-C-N	5.02	126.99	120.56
19	L	362	LYS	C-N-CA	5.02	126.99	120.56
21	N	676	ALA	CA-C-O	5.02	125.87	120.70
6	6	190	GLY	CA-C-N	5.02	131.13	121.54
6	6	190	GLY	C-N-CA	5.02	131.13	121.54
10	C	127	GLY	CA-C-N	5.02	129.88	120.95
10	C	127	GLY	C-N-CA	5.02	129.88	120.95
19	L	266	MET	O-C-N	-5.02	116.43	122.15
19	L	339	ARG	CA-C-O	-5.02	114.78	119.80
24	Q	200	ALA	CA-C-O	-5.02	115.23	120.55
24	Q	228	GLU	N-CA-C	-5.02	107.00	113.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	U	261	LEU	O-C-N	5.02	127.44	122.12
28	U	297	GLN	CA-C-N	5.02	126.96	120.44
28	U	297	GLN	C-N-CA	5.02	126.96	120.44
29	V	262	THR	O-C-N	5.02	127.44	122.12
15	H	287	GLY	O-C-N	5.02	127.06	122.19
19	L	312	MET	N-CA-C	5.02	116.44	111.07
23	P	60	ALA	CA-C-O	-5.02	115.23	120.55
2	2	156	SER	CA-C-N	5.02	127.00	120.28
2	2	156	SER	C-N-CA	5.02	127.00	120.28
8	A	28	VAL	CB-CA-C	-5.02	105.30	112.22
24	Q	187	LYS	N-CA-C	5.02	116.83	111.36
25	R	342	LEU	CA-C-N	5.02	127.00	120.28
25	R	342	LEU	C-N-CA	5.02	127.00	120.28
29	V	261	LEU	CA-C-N	5.02	127.00	120.28
29	V	261	LEU	C-N-CA	5.02	127.00	120.28
10	C	27	GLU	CA-C-N	5.01	127.00	120.28
10	C	27	GLU	C-N-CA	5.01	127.00	120.28
15	H	287	GLY	CA-C-O	-5.01	115.34	120.66
21	N	762	ARG	CA-C-O	5.01	126.71	121.19
22	O	109	LEU	N-CA-C	5.01	115.93	108.31
33	Z	747	ALA	CA-C-N	5.01	129.07	122.30
33	Z	747	ALA	C-N-CA	5.01	129.07	122.30
4	4	106	TYR	CA-C-N	5.01	130.29	122.17
4	4	106	TYR	C-N-CA	5.01	130.29	122.17
13	F	62	LYS	N-CA-C	-5.01	106.58	113.30
2	2	59	ILE	N-CA-C	5.01	115.78	110.72
8	A	163	TYR	CA-C-N	-5.01	116.50	122.11
8	A	163	TYR	C-N-CA	-5.01	116.50	122.11
9	B	166	LYS	O-C-N	5.01	129.05	123.19
17	J	81	ASP	N-CA-C	-5.01	106.42	112.88
24	Q	196	ALA	N-CA-C	5.01	116.74	111.28
6	6	179	PHE	CA-C-N	5.01	127.40	120.29
6	6	179	PHE	C-N-CA	5.01	127.40	120.29
17	J	271	THR	N-CA-C	-5.01	105.82	111.28
19	L	87	LEU	CA-C-N	5.01	127.40	120.29
19	L	87	LEU	C-N-CA	5.01	127.40	120.29
4	4	194	PHE	CA-C-N	5.01	127.40	120.29
4	4	194	PHE	C-N-CA	5.01	127.40	120.29
7	7	68	TYR	CA-C-O	-5.01	115.55	121.16
11	D	24	LEU	CA-C-O	5.01	125.73	119.97
16	I	247	ILE	CA-C-N	5.01	128.74	122.48
16	I	247	ILE	C-N-CA	5.01	128.74	122.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	M	334	ASP	CA-C-O	-5.01	115.16	120.02
22	O	22	LEU	CD1-CG-CD2	-5.01	99.79	110.80
23	P	424	GLU	CA-C-N	5.01	126.99	120.28
23	P	424	GLU	C-N-CA	5.01	126.99	120.28
27	T	270	ILE	N-CA-C	5.00	115.22	110.42
28	U	81	LYS	CA-C-N	5.00	129.08	120.72
28	U	81	LYS	C-N-CA	5.00	129.08	120.72
3	3	157	THR	CA-C-N	5.00	127.31	120.46
3	3	157	THR	C-N-CA	5.00	127.31	120.46
25	R	239	THR	O-C-N	5.00	128.77	123.42
21	N	275	THR	N-CA-C	5.00	117.38	111.33
24	Q	180	LEU	O-C-N	-5.00	116.82	122.12
27	T	7	LEU	CA-C-N	5.00	126.94	120.44
27	T	7	LEU	C-N-CA	5.00	126.94	120.44

There are no chirality outliers.

All (73) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	-2	LEU	Peptide
6	6	-9	GLN	Peptide
7	7	100	ASN	Peptide
7	7	33	ARG	Peptide
8	A	172	GLY	Peptide
8	A	46	ARG	Mainchain
8	A	85	GLY	Peptide
11	D	56	ASP	Peptide
13	F	32	GLY	Peptide
15	H	172	MET	Peptide
15	H	182	ASN	Peptide
15	H	188	PRO	Peptide
15	H	192	ASP	Peptide
15	H	204	PRO	Peptide
15	H	280	VAL	Mainchain
17	J	82	LYS	Peptide
19	L	257	GLY	Mainchain
19	L	342	ARG	Mainchain
19	L	80	ASN	Peptide
19	L	81	ILE	Peptide
20	M	251	LEU	Mainchain
20	M	58	MET	Mainchain
21	N	346	ASN	Peptide

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Mol	Chain	Res	Type	Group
21	N	667	GLN	Peptide
21	N	762	ARG	Sidechain
21	N	780	ASP	Peptide
21	N	889	ARG	Sidechain
21	N	892	PRO	Peptide
21	N	906	ARG	Peptide
22	O	123	GLY	Peptide
22	O	277	ILE	Peptide
23	P	319	GLU	Peptide
23	P	45	LYS	Peptide
23	P	47	ARG	Sidechain
24	Q	402	THR	Peptide
25	R	202	GLY	Peptide
25	R	381	ILE	Peptide
26	S	163	VAL	Peptide
27	T	228	ILE	Peptide
27	T	243	ALA	Peptide
28	U	113	TYR	Sidechain
28	U	125	VAL	Peptide
28	U	153	THR	Peptide
28	U	161	ILE	Peptide
28	U	229	LEU	Peptide
28	U	91	GLY	Peptide
29	V	108	TYR	Mainchain
29	V	109	HIS	Sidechain
29	V	117	TRP	Peptide
29	V	216	LEU	Peptide
29	V	283	THR	Mainchain
29	V	46	PRO	Peptide
30	W	109	ARG	Sidechain,Peptide
30	W	13	SER	Peptide
30	W	153	LEU	Mainchain
30	W	168	THR	Peptide
30	W	175	THR	Peptide
30	W	181	LEU	Peptide
30	W	21	PHE	Peptide
30	W	38	GLN	Mainchain
30	W	53	SER	Peptide
30	W	71	LYS	Peptide
31	X	118	ASP	Peptide
31	X	13	GLY	Peptide
31	X	27	ILE	Peptide

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Mol	Chain	Res	Type	Group
33	Z	134	SER	Mainchain
33	Z	328	ASP	Peptide
33	Z	523	ALA	Peptide
33	Z	539	ASN	Peptide
33	Z	60	ASP	Peptide
33	Z	822	THR	Peptide
33	Z	958	ASN	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	1576	0	1555	204	0
2	2	1692	0	1699	96	0
3	3	1581	0	1574	105	0
4	4	1585	0	1590	94	0
5	5	1646	0	1595	128	0
6	6	1757	0	1711	87	0
7	7	1824	0	1832	155	0
8	A	1921	0	1909	165	0
9	B	1915	0	1929	145	0
10	C	1913	0	1914	150	0
11	D	1899	0	1908	111	0
12	E	1867	0	1841	163	0
13	F	1795	0	1797	181	0
14	G	1900	0	1889	197	0
15	H	2792	0	2878	286	0
16	I	2822	0	2869	292	0
17	J	2928	0	3054	363	0
18	K	3019	0	3079	421	0
19	L	2853	0	2925	290	0
20	M	2866	0	2936	287	0
21	N	6562	0	6625	487	0
22	O	3182	0	3207	615	0
23	P	3401	0	3483	323	0
24	Q	3471	0	3494	362	0
25	R	3218	0	3216	412	0
26	S	2893	0	2937	252	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
27	T	2235	0	2206	310	0
28	U	2061	0	2116	383	0
29	V	1942	0	1954	258	0
30	W	1534	0	1539	208	0
31	X	1032	0	1017	181	0
32	Y	168	0	153	17	0
33	Z	6289	0	6233	628	0
All	All	80139	0	80664	7335	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 46.

All (7335) 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)
33:Z:321:PHE:CZ	33:Z:350:GLY:HA2	1.23	1.67
22:O:373:TRP:CD1	28:U:200:LEU:HD21	1.29	1.65
24:Q:243:PHE:HZ	24:Q:287:THR:CA	1.07	1.64
22:O:373:TRP:HD1	28:U:200:LEU:CD2	1.01	1.62
33:Z:321:PHE:CE1	33:Z:350:GLY:HA2	1.26	1.60
18:K:200:GLN:CG	25:R:204:TRP:HH2	1.15	1.60
24:Q:243:PHE:CZ	24:Q:287:THR:CA	1.79	1.60
17:J:69:GLY:CA	18:K:144:ASN:HD21	1.16	1.58
22:O:258:LEU:CD2	22:O:287:LEU:HD21	1.25	1.58
21:N:399:PHE:CE1	21:N:441:VAL:HG21	1.36	1.58
18:K:200:GLN:CB	25:R:204:TRP:CZ2	1.76	1.57
22:O:306:ARG:HD2	22:O:351:SER:C	1.28	1.57
24:Q:14:LEU:CD1	24:Q:26:VAL:HG21	1.33	1.56
27:T:197:TYR:CD2	27:T:235:PHE:CE1	1.90	1.56
29:V:117:TRP:HE1	29:V:196:TYR:CB	0.99	1.56
16:I:281:ILE:CG2	16:I:284:ILE:HD11	1.35	1.56
27:T:197:TYR:CE2	27:T:235:PHE:CE1	1.92	1.54
18:K:200:GLN:HB3	25:R:204:TRP:CZ2	1.03	1.53
19:L:252:VAL:CG1	20:M:256:ILE:CD1	1.80	1.53
17:J:219:VAL:HB	18:K:281:ARG:CD	1.36	1.52
18:K:200:GLN:HB3	25:R:204:TRP:CH2	1.39	1.52
22:O:210:ARG:HH21	22:O:242:ILE:CA	1.14	1.51
24:Q:243:PHE:CZ	24:Q:287:THR:HA	1.00	1.51
22:O:79:VAL:CG2	22:O:122:HIS:HA	1.40	1.51
4:4:66:TYR:CE1	4:4:74:LEU:HD21	1.45	1.50
22:O:124:ASP:CG	22:O:127:LEU:HD13	1.34	1.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:200:GLN:CG	25:R:204:TRP:CH2	1.94	1.49
22:O:373:TRP:CD1	28:U:200:LEU:CD2	1.83	1.49
28:U:275:VAL:HG11	29:V:251:TYR:CE1	1.46	1.49
21:N:399:PHE:CE1	21:N:441:VAL:CG2	1.95	1.48
27:T:193:THR:HG21	27:T:226:TRP:CH2	1.48	1.48
18:K:200:GLN:CB	25:R:204:TRP:CH2	1.95	1.47
18:K:364:PRO:HB3	24:Q:247:HIS:CE1	1.45	1.47
21:N:399:PHE:CD1	21:N:441:VAL:HG21	1.47	1.47
33:Z:321:PHE:CZ	33:Z:350:GLY:CA	1.91	1.46
22:O:277:ILE:CG2	22:O:279:ILE:H	1.27	1.46
22:O:277:ILE:HG21	22:O:279:ILE:CG1	1.44	1.45
33:Z:189:ALA:HB1	33:Z:193:PHE:CB	1.46	1.45
16:I:340:ARG:HH12	16:I:343:ARG:CG	1.27	1.45
29:V:118:LEU:CD1	29:V:140:VAL:HB	1.45	1.44
17:J:336:ASN:HD22	25:R:204:TRP:NE1	1.16	1.44
21:N:406:TYR:CE1	21:N:448:LEU:HD13	1.50	1.43
22:O:210:ARG:NH2	22:O:242:ILE:CA	1.72	1.43
8:A:57:LYS:HE2	8:A:69:VAL:CG1	1.43	1.43
33:Z:193:PHE:CD2	33:Z:196:SER:HB2	1.49	1.43
18:K:210:LEU:CD2	18:K:212:TYR:CE2	2.00	1.42
18:K:364:PRO:CB	24:Q:247:HIS:CE1	2.02	1.42
27:T:193:THR:CG2	27:T:226:TRP:CH2	2.00	1.42
23:P:132:VAL:CA	23:P:171:MET:HE2	1.35	1.42
33:Z:134:SER:N	33:Z:134:SER:CA	1.78	1.42
28:U:275:VAL:HG11	29:V:251:TYR:CZ	1.55	1.42
19:L:309:LEU:CD2	19:L:342:ARG:HD3	1.51	1.41
22:O:153:LEU:CD1	22:O:174:THR:HG21	1.47	1.41
33:Z:133:ASP:HA	33:Z:137:TYR:CD1	1.56	1.41
19:L:161:ARG:NH2	19:L:261:ARG:HH12	1.04	1.41
22:O:250:TRP:CZ2	22:O:270:ILE:HG23	1.56	1.41
24:Q:243:PHE:CE1	24:Q:287:THR:HA	1.52	1.40
18:K:210:LEU:HD21	18:K:212:TYR:CZ	1.55	1.40
22:O:277:ILE:CG2	22:O:279:ILE:HG12	1.52	1.40
15:H:172:MET:HE3	16:I:129:TYR:CD2	1.56	1.39
22:O:80:LYS:HE2	22:O:81:TYR:CZ	1.55	1.39
23:P:425:HIS:CD2	28:U:225:ILE:HG23	1.56	1.39
25:R:422:ARG:NH1	26:S:301:PRO:HB3	1.33	1.39
17:J:69:GLY:N	18:K:144:ASN:ND2	1.69	1.38
20:M:257:GLY:C	20:M:258:GLU:N	1.80	1.38
3:3:59:ARG:NH2	10:C:99:LEU:HD11	1.34	1.38
18:K:200:GLN:CA	25:R:204:TRP:HZ2	1.37	1.38

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:146:HIS:HB3	14:G:148:TYR:CE1	1.57	1.38
16:I:281:ILE:HG21	16:I:284:ILE:CD1	1.54	1.38
17:J:219:VAL:HG11	18:K:284:ALA:CA	1.52	1.38
30:W:37:PHE:CE1	30:W:49:VAL:HG11	1.59	1.38
28:U:189:ARG:HH12	29:V:296:LEU:CD2	1.36	1.37
30:W:5:ALA:HB2	30:W:103:ASN:ND2	1.38	1.37
1:1:75:THR:HG22	1:1:111:TYR:CD1	1.60	1.37
12:E:157:HIS:CE1	12:E:172:ILE:HG21	1.58	1.37
17:J:69:GLY:CA	18:K:144:ASN:ND2	1.84	1.36
9:B:179:TRP:CD1	9:B:183:LEU:HD13	1.58	1.36
27:T:150:ARG:NH2	27:T:151:TRP:CZ2	1.92	1.36
13:F:201:LEU:HD12	13:F:206:LEU:CD1	1.52	1.36
18:K:134:SER:CB	18:K:255:ARG:HH21	1.37	1.36
27:T:1:MET:HB3	27:T:2:PRO:CD	1.55	1.36
27:T:32:ILE:O	27:T:35:ILE:HG22	1.26	1.36
1:1:75:THR:CG2	1:1:111:TYR:HD1	1.37	1.35
21:N:25:LEU:CD1	21:N:57:ASP:HB2	1.54	1.35
25:R:308:LEU:HD12	25:R:334:ARG:CZ	1.54	1.35
25:R:308:LEU:HD12	25:R:334:ARG:NH1	1.08	1.35
27:T:82:PHE:HE1	27:T:109:TYR:CD2	1.41	1.35
15:H:172:MET:CE	16:I:129:TYR:HD2	1.37	1.35
16:I:174:ASP:OD1	17:J:282:PHE:HB2	1.27	1.35
27:T:82:PHE:CE1	27:T:109:TYR:CD2	2.11	1.34
15:H:172:MET:CE	16:I:129:TYR:CD2	2.09	1.34
25:R:308:LEU:HB2	25:R:334:ARG:NH2	1.38	1.34
26:S:371:LEU:HD13	26:S:380:CYS:SG	1.68	1.34
25:R:422:ARG:HH12	26:S:301:PRO:CB	1.39	1.34
17:J:219:VAL:CB	18:K:281:ARG:HD3	1.57	1.33
27:T:197:TYR:CE2	27:T:235:PHE:CD1	2.14	1.33
16:I:340:ARG:NH1	16:I:343:ARG:CG	1.86	1.33
19:L:180:PHE:CD2	19:L:238:THR:OG1	1.82	1.33
18:K:210:LEU:HD21	18:K:212:TYR:CE2	1.62	1.33
19:L:161:ARG:HH21	19:L:261:ARG:NH1	1.25	1.33
28:U:275:VAL:CG1	29:V:251:TYR:CE1	2.11	1.33
25:R:308:LEU:CD1	25:R:334:ARG:CZ	2.07	1.32
33:Z:471:LEU:HA	33:Z:497:PHE:CZ	1.63	1.32
24:Q:61:LEU:HB3	24:Q:65:TYR:CZ	1.64	1.32
14:G:140:VAL:CG2	14:G:220:LEU:HD21	1.60	1.32
16:I:100:ARG:O	16:I:104:LEU:CD1	1.77	1.32
25:R:208:ASN:ND2	25:R:238:PHE:HD1	1.28	1.32
16:I:175:LYS:O	17:J:282:PHE:CZ	1.83	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:96:HIS:CD2	11:D:100:LEU:HD12	1.66	1.31
24:Q:135:HIS:ND1	24:Q:161:LEU:HD23	1.44	1.31
9:B:158:PRO:O	10:C:57:LEU:HD12	1.15	1.31
18:K:200:GLN:CD	25:R:204:TRP:HH2	1.38	1.31
19:L:252:VAL:HG12	20:M:256:ILE:CD1	0.83	1.31
21:N:399:PHE:HE1	21:N:441:VAL:CG2	1.36	1.31
25:R:208:ASN:ND2	25:R:238:PHE:CD1	1.99	1.31
27:T:197:TYR:CD1	27:T:198:ASP:N	1.95	1.30
33:Z:318:LYS:NZ	33:Z:459:ALA:O	1.62	1.30
33:Z:924:LYS:HB2	33:Z:959:HIS:CE1	1.64	1.30
21:N:21:LYS:HG3	21:N:55:PHE:CD2	1.66	1.30
29:V:117:TRP:NE1	29:V:196:TYR:HB3	0.97	1.29
15:H:99:VAL:HG22	15:H:173:ARG:NH2	1.44	1.29
22:O:79:VAL:CB	22:O:122:HIS:HA	1.61	1.29
33:Z:610:GLY:CA	33:Z:748:LEU:HD13	1.63	1.29
1:1:122:LEU:HD11	7:7:28:PHE:CE1	1.68	1.29
20:M:289:LYS:HZ2	20:M:302:GLN:NE2	1.31	1.29
22:O:76:LEU:HD22	22:O:121:ASP:OD1	1.31	1.28
6:6:91:LYS:HD2	6:6:96:TYR:OH	1.16	1.28
22:O:80:LYS:HE2	22:O:81:TYR:CE2	1.69	1.28
1:1:75:THR:CG2	1:1:111:TYR:CD1	2.12	1.28
19:L:252:VAL:CG1	20:M:256:ILE:HD12	1.42	1.28
28:U:223:HIS:CE1	28:U:224:THR:OG1	1.87	1.28
33:Z:318:LYS:HE2	33:Z:496:ALA:O	1.31	1.28
22:O:373:TRP:HZ3	28:U:233:PHE:CB	1.45	1.27
22:O:373:TRP:CZ3	28:U:233:PHE:HB3	1.66	1.27
33:Z:321:PHE:CE1	33:Z:350:GLY:CA	2.08	1.27
16:I:340:ARG:NH1	16:I:343:ARG:HG3	0.96	1.27
20:M:289:LYS:NZ	20:M:302:GLN:HE22	1.32	1.27
16:I:100:ARG:O	16:I:104:LEU:HD11	1.31	1.27
22:O:306:ARG:HD3	22:O:350:ILE:O	1.18	1.27
20:M:75:LEU:CD1	20:M:77:TYR:CE1	2.18	1.26
24:Q:14:LEU:CD1	24:Q:26:VAL:CG2	2.13	1.26
23:P:303:PHE:O	23:P:348:HIS:NE2	1.68	1.26
15:H:99:VAL:CG2	15:H:173:ARG:HH21	1.47	1.26
25:R:125:GLU:CD	25:R:126:GLY:H	1.44	1.26
8:A:19:PHE:CZ	9:B:128:ARG:NH1	2.04	1.26
28:U:275:VAL:CG1	29:V:251:TYR:HE1	1.45	1.26
9:B:158:PRO:O	10:C:57:LEU:CD1	1.83	1.25
22:O:124:ASP:OD2	22:O:127:LEU:HD13	1.35	1.25
18:K:210:LEU:HD21	18:K:212:TYR:OH	1.31	1.25

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:261:LEU:CD2	29:V:283:THR:HG21	1.64	1.25
12:E:125:GLU:OE1	13:F:123:TYR:CE1	1.90	1.25
20:M:75:LEU:HD11	20:M:77:TYR:CE1	1.71	1.25
17:J:219:VAL:CG1	18:K:284:ALA:HA	1.64	1.25
18:K:364:PRO:CA	24:Q:247:HIS:CE1	2.20	1.25
19:L:309:LEU:HD22	19:L:342:ARG:NE	1.50	1.25
19:L:259:SER:CB	19:L:303:ARG:HH22	1.48	1.25
26:S:256:LYS:O	26:S:259:TYR:CE2	1.90	1.25
17:J:219:VAL:O	18:K:281:ARG:HD2	1.25	1.24
27:T:197:TYR:CZ	27:T:235:PHE:HD1	1.53	1.24
30:W:5:ALA:CB	30:W:103:ASN:HD22	1.48	1.24
33:Z:321:PHE:CZ	33:Z:350:GLY:C	2.15	1.24
17:J:193:THR:HB	17:J:316:PHE:CZ	1.72	1.24
28:U:56:PHE:CD1	28:U:68:LEU:HD21	1.70	1.24
17:J:219:VAL:HG21	18:K:284:ALA:CA	1.65	1.24
14:G:140:VAL:HG21	14:G:220:LEU:CD2	1.68	1.24
25:R:308:LEU:CD1	25:R:334:ARG:NH1	1.99	1.24
24:Q:202:ARG:NH2	24:Q:222:SER:OG	1.68	1.24
30:W:21:PHE:CE1	30:W:144:PHE:CZ	2.26	1.24
16:I:252:LEU:N	16:I:253:ILE:N	1.86	1.23
26:S:211:ARG:NH2	26:S:240:ASP:HB3	1.52	1.23
29:V:117:TRP:CE2	29:V:196:TYR:HB3	1.72	1.23
1:1:19:ARG:NH1	1:1:29:ARG:HG3	1.53	1.23
15:H:286:GLU:OE2	15:H:289:ARG:NH2	1.70	1.23
21:N:277:LEU:CD1	21:N:290:LEU:CD1	2.15	1.23
22:O:118:GLY:O	22:O:166:ARG:CG	1.86	1.23
22:O:79:VAL:CG1	22:O:121:ASP:O	1.85	1.23
3:3:96:VAL:O	3:3:117:LEU:HD12	1.32	1.23
20:M:368:MET:SD	20:M:395:THR:CG2	2.26	1.23
25:R:175:ALA:O	25:R:179:PHE:HD1	1.19	1.23
25:R:304:TYR:CE1	25:R:308:LEU:HD11	1.72	1.23
18:K:364:PRO:CA	24:Q:247:HIS:HE1	1.49	1.23
22:O:43:GLU:OE2	22:O:44:SER:HB2	1.32	1.23
22:O:79:VAL:HG21	22:O:122:HIS:CA	1.69	1.23
28:U:21:HIS:CE1	28:U:53:ALA:HB1	1.72	1.23
18:K:349:ARG:NH1	18:K:377:SER:H	1.34	1.22
30:W:59:PRO:HG2	30:W:93:ILE:CG1	1.68	1.22
21:N:421:ASP:HA	21:N:424:LYS:NZ	1.53	1.22
20:M:77:TYR:HE2	20:M:159:LEU:CD1	1.52	1.22
22:O:306:ARG:HD2	22:O:351:SER:O	1.36	1.22
33:Z:924:LYS:CB	33:Z:959:HIS:CE1	2.23	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:385:GLU:HB3	20:M:426:LYS:NZ	1.55	1.21
27:T:197:TYR:CD2	27:T:235:PHE:CD1	2.26	1.21
30:W:21:PHE:HE1	30:W:144:PHE:CZ	1.57	1.21
20:M:75:LEU:CG	20:M:77:TYR:CE1	2.23	1.21
16:I:175:LYS:O	17:J:282:PHE:CE1	1.94	1.21
18:K:210:LEU:CD2	18:K:212:TYR:HE2	1.41	1.21
29:V:92:MET:HG3	29:V:101:ASP:OD1	1.40	1.21
16:I:400:GLY:HA3	17:J:179:ILE:CG1	1.70	1.21
18:K:364:PRO:HA	24:Q:247:HIS:CE1	1.75	1.21
31:X:75:TRP:CD1	31:X:87:PHE:CE1	2.29	1.21
33:Z:81:SER:O	33:Z:82:MET:HG3	1.37	1.21
21:N:24:ALA:O	21:N:28:ILE:HG12	1.38	1.21
22:O:119:SER:O	22:O:166:ARG:NH1	1.71	1.21
22:O:230:PHE:CE1	22:O:251:LEU:HG	1.74	1.21
23:P:425:HIS:CG	28:U:225:ILE:HG23	1.75	1.21
27:T:216:GLU:O	27:T:220:PHE:HD1	1.23	1.21
17:J:60:ASP:OD1	17:J:63:ARG:NH2	1.73	1.20
20:M:75:LEU:HG	20:M:77:TYR:CE1	1.77	1.20
33:Z:189:ALA:CB	33:Z:193:PHE:CB	2.18	1.20
25:R:415:GLN:CG	26:S:471:LEU:HD21	1.71	1.20
26:S:157:GLU:OE2	26:S:160:ARG:NH2	1.72	1.20
15:H:172:MET:HE2	16:I:129:TYR:HB2	1.23	1.20
21:N:25:LEU:HD11	21:N:57:ASP:CB	1.70	1.20
23:P:349:ASN:O	23:P:353:ILE:HG12	1.42	1.20
33:Z:237:VAL:HG12	33:Z:245:VAL:CG1	1.71	1.20
25:R:137:LEU:CD1	25:R:141:TYR:HE2	1.55	1.19
27:T:197:TYR:CZ	27:T:235:PHE:CD1	2.30	1.19
33:Z:189:ALA:HB1	33:Z:193:PHE:HB2	1.20	1.19
20:M:75:LEU:HG	20:M:77:TYR:CD1	1.74	1.19
22:O:42:SER:O	22:O:46:THR:CB	1.90	1.19
22:O:306:ARG:CD	22:O:351:SER:C	2.14	1.19
30:W:40:LYS:HE3	30:W:47:ASN:HB3	1.23	1.19
17:J:193:THR:HG21	17:J:316:PHE:CE1	1.75	1.19
18:K:244:HIS:CE1	18:K:250:GLY:HA3	1.76	1.19
33:Z:321:PHE:HZ	33:Z:350:GLY:C	1.47	1.19
33:Z:767:TYR:CD2	33:Z:772:ILE:HG13	1.77	1.19
18:K:113:THR:HA	18:K:252:ARG:NH1	1.56	1.19
22:O:62:TYR:CE2	22:O:82:LEU:HD22	1.77	1.19
28:U:273:LEU:HD11	28:U:277:TYR:OH	1.42	1.19
33:Z:429:ASN:O	33:Z:430:LEU:HG	1.41	1.19
28:U:56:PHE:HD1	28:U:68:LEU:CD2	1.54	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:281:ARG:HH12	18:K:287:GLY:CA	1.55	1.18
20:M:50:ARG:HB3	30:W:73:LEU:HD13	1.20	1.18
21:N:14:ARG:NH2	21:N:42:GLU:OE2	1.73	1.18
17:J:193:THR:CB	17:J:316:PHE:CZ	2.26	1.18
33:Z:146:PHE:C	33:Z:210:TYR:OH	1.87	1.18
14:G:140:VAL:HG21	14:G:220:LEU:HD21	1.20	1.18
30:W:146:GLU:O	30:W:147:ILE:CG1	1.91	1.18
3:3:18:LEU:HD11	3:3:177:VAL:CG1	1.74	1.18
11:D:203:VAL:O	11:D:204:GLN:OE1	1.62	1.18
19:L:309:LEU:HD22	19:L:342:ARG:CD	1.73	1.18
27:T:89:TYR:OH	27:T:102:LYS:NZ	1.77	1.18
33:Z:471:LEU:HG	33:Z:497:PHE:CE2	1.78	1.18
22:O:373:TRP:CZ3	28:U:233:PHE:CB	2.24	1.17
28:U:189:ARG:NH1	29:V:296:LEU:HD22	1.58	1.17
33:Z:924:LYS:HA	33:Z:959:HIS:ND1	1.57	1.17
22:O:232:GLU:O	22:O:236:HIS:HB2	1.43	1.17
22:O:118:GLY:O	22:O:166:ARG:HD3	1.43	1.17
27:T:1:MET:CB	27:T:2:PRO:CD	2.22	1.17
30:W:120:ASP:C	30:W:121:SER:N	2.02	1.17
17:J:224:GLY:C	17:J:225:GLU:N	2.03	1.17
18:K:364:PRO:HB3	24:Q:247:HIS:NE2	1.60	1.17
24:Q:135:HIS:ND1	24:Q:161:LEU:CD2	2.08	1.17
28:U:21:HIS:CE1	28:U:53:ALA:CB	2.26	1.17
33:Z:218:GLU:HB2	33:Z:248:TYR:CZ	1.79	1.17
33:Z:401:VAL:HG22	33:Z:426:TYR:OH	1.39	1.17
18:K:210:LEU:CG	18:K:212:TYR:CE2	2.28	1.17
22:O:118:GLY:O	22:O:166:ARG:CD	1.93	1.17
24:Q:61:LEU:HB3	24:Q:65:TYR:CE2	1.80	1.17
26:S:188:TYR:OH	26:S:210:LEU:HD22	1.45	1.17
33:Z:321:PHE:CE2	33:Z:351:PRO:HD3	1.78	1.17
33:Z:924:LYS:CB	33:Z:959:HIS:HE1	1.58	1.17
17:J:336:ASN:ND2	25:R:204:TRP:NE1	1.91	1.16
22:O:42:SER:O	22:O:46:THR:HB	1.43	1.16
22:O:277:ILE:HG21	22:O:279:ILE:CB	1.73	1.16
25:R:422:ARG:HH12	26:S:301:PRO:CG	1.56	1.16
28:U:66:TRP:CZ3	28:U:68:LEU:HG	1.80	1.16
21:N:329:HIS:CE1	21:N:355:TRP:CE3	2.32	1.16
22:O:258:LEU:CD2	22:O:287:LEU:CD2	2.22	1.16
31:X:66:LEU:HD13	31:X:99:PHE:CZ	1.79	1.16
6:6:175:VAL:HG13	6:6:179:PHE:CE2	1.79	1.16
15:H:280:VAL:HG21	16:I:304:ARG:HD3	1.24	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:134:SER:CB	18:K:255:ARG:NH2	2.07	1.16
21:N:28:ILE:O	21:N:32:VAL:HG23	1.45	1.16
8:A:57:LYS:CE	8:A:69:VAL:HG12	1.75	1.16
17:J:219:VAL:CB	18:K:284:ALA:HA	1.74	1.16
5:5:135:PHE:CE2	5:5:163:ALA:HB1	1.81	1.16
8:A:131:ARG:NH1	8:A:133:TYR:OH	1.79	1.16
15:H:77:ALA:O	16:I:153:THR:HG22	1.42	1.16
17:J:234:PHE:CZ	17:J:279:LEU:HD21	1.79	1.16
21:N:479:GLU:HB2	21:N:512:ASN:ND2	1.61	1.16
28:U:8:VAL:O	28:U:159:CYS:SG	2.04	1.16
20:M:50:ARG:CB	30:W:73:LEU:HD13	1.76	1.15
25:R:353:MET:CE	25:R:364:LEU:HD21	1.76	1.15
22:O:214:ALA:HB1	22:O:248:TYR:OH	1.43	1.15
23:P:132:VAL:HA	23:P:171:MET:CE	1.76	1.15
18:K:49:PHE:CD1	21:N:192:LEU:HD12	1.80	1.15
20:M:75:LEU:CD1	20:M:77:TYR:CD1	2.30	1.15
31:X:10:PHE:O	31:X:33:ILE:HG22	1.40	1.15
33:Z:401:VAL:CG2	33:Z:426:TYR:OH	1.93	1.15
19:L:309:LEU:CD2	19:L:342:ARG:CD	2.23	1.15
25:R:33:LEU:HD21	25:R:92:ILE:HD13	1.27	1.15
27:T:150:ARG:NH2	27:T:151:TRP:CE2	2.14	1.15
22:O:306:ARG:CD	22:O:350:ILE:O	1.94	1.15
12:E:165:TYR:HB2	12:E:167:TYR:CE1	1.82	1.14
13:F:201:LEU:CD1	13:F:206:LEU:CD1	2.25	1.14
14:G:215:ILE:HG23	14:G:230:VAL:HB	1.26	1.14
15:H:206:VAL:HG11	15:H:258:LEU:HD22	1.28	1.14
21:N:421:ASP:CA	21:N:424:LYS:HZ3	1.59	1.14
28:U:223:HIS:ND1	28:U:224:THR:OG1	1.76	1.14
12:E:178:GLY:HA3	15:H:409:ARG:HH22	1.10	1.14
17:J:216:ALA:O	17:J:219:VAL:N	1.78	1.14
21:N:277:LEU:HD11	21:N:290:LEU:HD11	1.16	1.14
22:O:185:PHE:CG	22:O:223:LEU:HB3	1.82	1.14
22:O:258:LEU:HD22	22:O:287:LEU:CD2	1.77	1.14
30:W:59:PRO:CG	30:W:93:ILE:HG13	1.76	1.14
14:G:73:ILE:HG12	14:G:108:ILE:CD1	1.78	1.14
17:J:375:ILE:HD12	25:R:204:TRP:CE3	1.83	1.14
22:O:69:PHE:CD2	22:O:78:VAL:HG22	1.82	1.14
22:O:250:TRP:CE2	22:O:270:ILE:HG23	1.82	1.14
25:R:280:ILE:HD12	25:R:289:ILE:HG13	1.22	1.14
11:D:88:LYS:NZ	11:D:120:TYR:OH	1.81	1.14
17:J:219:VAL:HG11	18:K:284:ALA:C	1.73	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:49:PHE:CD1	21:N:192:LEU:CD1	2.30	1.14
22:O:214:ALA:CB	22:O:248:TYR:OH	1.94	1.14
25:R:214:TYR:OH	25:R:226:GLU:HB3	1.47	1.14
15:H:390:ARG:HA	15:H:404:TRP:CZ2	1.82	1.13
18:K:134:SER:OG	18:K:255:ARG:NH2	1.79	1.13
22:O:277:ILE:CG2	22:O:279:ILE:N	2.10	1.13
25:R:137:LEU:HD11	25:R:141:TYR:CE2	1.83	1.13
31:X:75:TRP:CD1	31:X:87:PHE:CD1	2.35	1.13
18:K:210:LEU:HG	18:K:212:TYR:CE2	1.84	1.13
21:N:14:ARG:HH21	21:N:42:GLU:CD	1.55	1.13
21:N:253:LEU:HD22	21:N:894:ARG:HH21	1.12	1.13
28:U:161:ILE:HG22	28:U:162:GLU:N	1.52	1.13
8:A:57:LYS:CE	8:A:69:VAL:CG1	2.26	1.13
21:N:277:LEU:HB2	21:N:287:LEU:HD21	1.19	1.13
30:W:5:ALA:CB	30:W:103:ASN:ND2	2.09	1.13
16:I:281:ILE:CG2	16:I:284:ILE:CD1	2.16	1.13
23:P:308:LEU:HD23	23:P:369:LEU:HA	1.28	1.13
25:R:175:ALA:O	25:R:179:PHE:CD1	2.01	1.13
30:W:146:GLU:O	30:W:147:ILE:HG13	0.97	1.13
33:Z:193:PHE:CD2	33:Z:196:SER:CB	2.32	1.13
33:Z:551:LEU:CD1	33:Z:591:ILE:HG22	1.78	1.13
5:5:135:PHE:HE2	5:5:163:ALA:HB1	1.05	1.12
21:N:277:LEU:CD1	21:N:290:LEU:HD12	1.75	1.12
24:Q:423:VAL:HG13	25:R:414:LEU:HD11	1.31	1.12
31:X:11:ARG:CB	31:X:103:GLU:HG3	1.79	1.12
17:J:27:ILE:HA	18:K:51:LEU:CD2	1.78	1.12
17:J:219:VAL:CB	18:K:281:ARG:CD	2.19	1.12
29:V:117:TRP:HZ2	29:V:196:TYR:HA	1.15	1.12
15:H:307:PHE:CZ	15:H:309:ASP:OD1	2.02	1.12
25:R:308:LEU:CB	25:R:334:ARG:NH2	2.13	1.12
25:R:415:GLN:CG	26:S:471:LEU:CD2	2.28	1.12
28:U:35:GLY:CA	28:U:93:TYR:HB3	1.80	1.12
21:N:277:LEU:HD12	21:N:290:LEU:CD1	1.79	1.12
6:6:91:LYS:CD	6:6:96:TYR:OH	1.98	1.12
10:C:160:TRP:CD2	10:C:163:ILE:HD13	1.85	1.12
13:F:105:VAL:HG11	13:F:143:HIS:ND1	1.62	1.12
27:T:82:PHE:CE1	27:T:109:TYR:CG	2.09	1.12
29:V:117:TRP:NE1	29:V:196:TYR:CB	1.68	1.12
33:Z:610:GLY:O	33:Z:748:LEU:HD22	1.50	1.12
3:3:96:VAL:O	3:3:117:LEU:CD1	1.98	1.11
9:B:179:TRP:HD1	9:B:183:LEU:CD1	1.63	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:109:VAL:HG11	12:E:156:PHE:CD1	1.84	1.11
14:G:73:ILE:HG12	14:G:108:ILE:HD11	1.13	1.11
15:H:206:VAL:HG11	15:H:258:LEU:CD2	1.80	1.11
21:N:399:PHE:CD1	21:N:441:VAL:CG2	2.20	1.11
23:P:234:TYR:HA	23:P:267:PHE:CE2	1.84	1.11
17:J:193:THR:CB	17:J:316:PHE:CE1	2.33	1.11
22:O:277:ILE:HG22	22:O:279:ILE:H	1.13	1.11
29:V:261:LEU:HD21	29:V:283:THR:HG21	1.31	1.11
30:W:5:ALA:CB	30:W:103:ASN:HB2	1.78	1.11
16:I:75:PHE:HD2	16:I:76:VAL:HG23	1.16	1.11
22:O:210:ARG:NH2	22:O:242:ILE:HA	0.78	1.11
22:O:230:PHE:HE1	22:O:251:LEU:CG	1.62	1.11
22:O:277:ILE:HG13	22:O:279:ILE:HB	1.23	1.11
3:3:12:VAL:HG22	3:3:103:ILE:HD11	1.26	1.11
10:C:160:TRP:CE3	10:C:163:ILE:HD13	1.85	1.11
27:T:55:LEU:HG	27:T:59:LYS:HE2	1.20	1.11
17:J:219:VAL:HG11	18:K:284:ALA:HA	1.15	1.11
15:H:172:MET:HE1	16:I:129:TYR:HD2	1.04	1.10
16:I:400:GLY:HA3	17:J:179:ILE:CD1	1.80	1.10
17:J:115:LEU:HD21	17:J:120:TYR:HA	1.19	1.10
23:P:245:TYR:HE1	23:P:257:TRP:CZ2	1.67	1.10
24:Q:329:GLU:OE1	24:Q:332:ARG:NH2	1.83	1.10
25:R:137:LEU:CD1	25:R:141:TYR:CE2	2.33	1.10
1:1:119:VAL:CG2	14:G:103:LYS:HZ2	1.64	1.10
23:P:302:LEU:HB3	23:P:310:ARG:HE	0.94	1.10
24:Q:46:VAL:HG23	24:Q:50:ARG:HB2	1.28	1.10
26:S:205:ASN:O	26:S:208:ILE:HG22	1.50	1.10
33:Z:312:TYR:OH	33:Z:348:LEU:HA	1.48	1.10
6:6:34:VAL:HG12	6:6:196:LEU:HD12	1.31	1.10
15:H:168:ILE:HG22	15:H:169:GLU:N	1.66	1.10
24:Q:31:LEU:HG	24:Q:50:ARG:HH21	1.10	1.10
26:S:163:VAL:HG22	26:S:184:TRP:CZ3	1.85	1.10
29:V:118:LEU:HD12	29:V:140:VAL:HB	1.24	1.10
30:W:143:ASN:HB3	30:W:173:THR:HA	1.31	1.10
4:4:80:SER:HB2	4:4:124:LYS:HD2	1.28	1.10
15:H:248:LEU:HD22	15:H:377:PHE:HE2	1.03	1.10
22:O:373:TRP:NE1	28:U:200:LEU:HD21	1.65	1.10
28:U:66:TRP:CZ3	28:U:68:LEU:CG	2.34	1.10
33:Z:87:LYS:HE2	33:Z:90:LYS:HB2	1.34	1.10
4:4:43:MET:HG3	4:4:45:PHE:CZ	1.86	1.09
11:D:96:HIS:NE2	11:D:100:LEU:HD12	1.65	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:48:LEU:HD11	12:E:145:ALA:HB3	1.34	1.09
22:O:30:GLU:OE1	22:O:40:GLN:OE1	1.70	1.09
28:U:92:TRP:HZ3	28:U:106:ILE:HB	1.01	1.09
12:E:201:LEU:HD11	12:E:239:LEU:HG	1.33	1.09
24:Q:249:LEU:O	24:Q:250:THR:HG22	1.51	1.09
30:W:5:ALA:HB2	30:W:103:ASN:CB	1.83	1.09
33:Z:357:ILE:HD11	33:Z:914:LEU:HD13	1.30	1.09
15:H:389:PHE:HB3	15:H:404:TRP:CZ3	1.87	1.09
20:M:361:LEU:HB3	20:M:376:TRP:CD2	1.88	1.09
21:N:19:SER:HB3	27:T:35:ILE:CG2	1.82	1.09
21:N:277:LEU:HD12	21:N:290:LEU:HD12	1.27	1.09
24:Q:46:VAL:O	24:Q:50:ARG:HG2	1.50	1.09
8:A:195:ASN:O	8:A:196:GLU:HG2	1.51	1.09
25:R:415:GLN:HG3	26:S:471:LEU:CD2	1.82	1.09
1:1:119:VAL:HG21	14:G:103:LYS:HZ2	1.10	1.09
21:N:421:ASP:HA	21:N:424:LYS:HZ3	0.94	1.09
14:G:146:HIS:CB	14:G:148:TYR:HE1	1.64	1.08
15:H:99:VAL:CG2	15:H:173:ARG:NH2	2.09	1.08
27:T:35:ILE:HD12	27:T:40:LEU:HD11	1.17	1.08
28:U:161:ILE:CG2	28:U:162:GLU:H	1.65	1.08
1:1:14:LEU:HD11	1:1:44:CYS:SG	1.92	1.08
9:B:38:LYS:O	9:B:179:TRP:CZ2	2.06	1.08
17:J:27:ILE:CA	18:K:51:LEU:HD21	1.82	1.08
17:J:301:ASP:H	17:J:304:LEU:HD12	1.14	1.08
19:L:360:ILE:CG2	19:L:391:ILE:HD13	1.84	1.08
19:L:370:LYS:HB2	19:L:374:PHE:CZ	1.87	1.08
22:O:38:TRP:HE3	22:O:53:LYS:HD3	1.10	1.08
30:W:101:ARG:HH12	30:W:104:LYS:HG2	1.17	1.08
2:2:8:PHE:CZ	2:2:11:GLY:HA3	1.87	1.08
15:H:248:LEU:HD22	15:H:377:PHE:CE2	1.87	1.08
15:H:390:ARG:HA	15:H:404:TRP:CE2	1.88	1.08
18:K:240:SER:H	19:L:306:MET:HE1	1.12	1.08
20:M:75:LEU:CG	20:M:77:TYR:CD1	2.36	1.08
21:N:406:TYR:CE1	21:N:448:LEU:CD1	2.35	1.08
22:O:118:GLY:O	22:O:166:ARG:HG2	1.48	1.08
25:R:353:MET:HE3	25:R:364:LEU:CD2	1.84	1.08
27:T:190:ALA:HB2	27:T:224:ARG:CZ	1.83	1.08
17:J:219:VAL:CG2	18:K:284:ALA:HB2	1.82	1.08
22:O:80:LYS:HE2	22:O:81:TYR:OH	1.52	1.08
22:O:283:HIS:NE2	22:O:287:LEU:HD12	1.66	1.08
28:U:92:TRP:CZ3	28:U:106:ILE:HB	1.88	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:94:HIS:HE1	28:U:96:GLY:HA2	1.12	1.08
30:W:25:ARG:HD2	30:W:144:PHE:CE2	1.88	1.08
33:Z:189:ALA:HB1	33:Z:193:PHE:HB3	1.16	1.08
17:J:219:VAL:CG1	18:K:284:ALA:CA	2.27	1.08
21:N:277:LEU:CB	21:N:287:LEU:HD21	1.82	1.08
24:Q:243:PHE:CZ	24:Q:287:THR:C	2.31	1.08
1:1:8:PHE:CE2	1:1:10:ASP:HB2	1.89	1.07
1:1:75:THR:HG21	1:1:111:TYR:HD1	1.12	1.07
19:L:150:ILE:HG13	19:L:151:THR:HG23	1.33	1.07
22:O:124:ASP:CG	22:O:127:LEU:CD1	2.26	1.07
22:O:358:ILE:HG22	22:O:360:GLY:H	1.11	1.07
27:T:197:TYR:CE2	27:T:235:PHE:HE1	1.46	1.07
27:T:229:VAL:HG22	27:T:234:TYR:HE1	1.19	1.07
30:W:7:VAL:HG23	30:W:110:ILE:HD13	1.09	1.07
33:Z:422:ILE:HB	33:Z:426:TYR:CE2	1.88	1.07
33:Z:510:LEU:HD13	33:Z:542:ILE:HG12	1.34	1.07
33:Z:551:LEU:HD13	33:Z:591:ILE:CG2	1.84	1.07
15:H:280:VAL:HG21	16:I:304:ARG:CD	1.84	1.07
17:J:193:THR:CG2	17:J:316:PHE:CE1	2.36	1.07
24:Q:65:TYR:HD2	24:Q:74:LEU:HB2	1.17	1.07
24:Q:272:LEU:HD23	24:Q:274:LEU:HD12	1.34	1.07
25:R:353:MET:HE3	25:R:364:LEU:HD21	1.23	1.07
28:U:275:VAL:HG11	29:V:251:TYR:OH	1.53	1.07
30:W:5:ALA:HB2	30:W:103:ASN:CG	1.78	1.07
9:B:178:ARG:HH12	9:B:194:LEU:CB	1.66	1.07
12:E:231:TYR:HE2	12:E:236:THR:HA	1.08	1.07
13:F:201:LEU:CD1	13:F:206:LEU:HD12	1.82	1.07
22:O:69:PHE:HD2	22:O:78:VAL:HG22	0.97	1.07
22:O:124:ASP:HB3	22:O:127:LEU:HB2	1.19	1.07
30:W:7:VAL:HG23	30:W:110:ILE:CD1	1.84	1.07
12:E:231:TYR:CE2	12:E:236:THR:HA	1.88	1.07
16:I:361:ILE:HG22	16:I:392:ILE:HG21	1.35	1.07
18:K:210:LEU:CD2	18:K:212:TYR:CZ	2.32	1.07
21:N:47:GLU:O	21:N:50:TYR:HB3	1.52	1.07
22:O:233:LEU:HA	22:O:236:HIS:HB3	1.34	1.07
24:Q:311:LEU:HD12	24:Q:366:ILE:HG12	1.32	1.07
25:R:296:LEU:HD13	25:R:337:VAL:HG23	1.32	1.07
29:V:114:PHE:CD1	29:V:118:LEU:O	2.08	1.07
33:Z:610:GLY:HA2	33:Z:748:LEU:HD13	1.30	1.07
1:1:-6:GLY:HA3	2:2:116:HIS:CD2	1.90	1.07
15:H:168:ILE:HG22	15:H:169:GLU:H	1.13	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:252:LEU:C	16:I:253:ILE:N	2.13	1.07
23:P:181:LEU:HD21	23:P:219:GLU:HB3	1.09	1.07
24:Q:160:ASP:OD1	24:Q:163:ARG:NH2	1.87	1.07
15:H:198:MET:CE	15:H:272:ILE:HG23	1.84	1.06
17:J:234:PHE:CE1	17:J:279:LEU:HD21	1.90	1.06
19:L:252:VAL:HG12	20:M:256:ILE:HD11	1.14	1.06
19:L:360:ILE:HG21	19:L:391:ILE:CD1	1.85	1.06
1:1:8:PHE:HE2	1:1:10:ASP:HB2	0.97	1.06
18:K:423:LYS:HE2	18:K:424:PHE:CE2	1.90	1.06
22:O:134:ALA:HB1	22:O:153:LEU:HD11	1.36	1.06
23:P:245:TYR:CE1	23:P:257:TRP:NE1	2.23	1.06
30:W:182:TYR:O	30:W:183:GLU:HG3	1.53	1.06
33:Z:358:TYR:HD2	33:Z:428:TRP:NE1	1.50	1.06
33:Z:471:LEU:CA	33:Z:497:PHE:CZ	2.38	1.06
15:H:340:LEU:CD1	15:H:370:ARG:HH11	1.66	1.06
20:M:385:GLU:CB	20:M:426:LYS:NZ	2.18	1.06
22:O:153:LEU:HD13	22:O:174:THR:CG2	1.84	1.06
23:P:234:TYR:HA	23:P:267:PHE:CZ	1.90	1.06
24:Q:382:LEU:HD11	25:R:299:SER:HB2	1.32	1.06
25:R:353:MET:HA	25:R:357:PHE:CD1	1.90	1.06
18:K:68:ILE:HG12	21:N:608:LEU:CD2	1.85	1.06
23:P:241:LEU:O	23:P:244:ILE:HG22	1.52	1.06
30:W:124:GLU:OE2	30:W:127:ARG:NH2	1.87	1.06
4:4:66:TYR:CE1	4:4:74:LEU:CD2	2.38	1.06
18:K:281:ARG:HH12	18:K:287:GLY:HA2	1.10	1.06
6:6:115:SER:OG	6:6:128:ARG:NH1	1.89	1.05
24:Q:14:LEU:HD11	24:Q:26:VAL:CG2	1.80	1.05
33:Z:786:SER:O	33:Z:787:ASP:CG	1.99	1.05
6:6:10:ASP:OD1	6:6:11:PHE:HD1	1.38	1.05
16:I:132:ILE:CD1	16:I:138:LYS:HE2	1.86	1.05
18:K:210:LEU:HD23	18:K:212:TYR:HE2	1.18	1.05
19:L:252:VAL:HG12	20:M:256:ILE:HD13	1.14	1.05
22:O:11:LEU:HB3	22:O:43:GLU:OE1	1.56	1.05
22:O:62:TYR:HE2	22:O:82:LEU:CD2	1.69	1.05
22:O:233:LEU:HD22	22:O:238:ILE:HD11	1.31	1.05
24:Q:243:PHE:HZ	24:Q:287:THR:C	1.62	1.05
30:W:21:PHE:CZ	30:W:144:PHE:CE1	2.44	1.05
33:Z:237:VAL:HG12	33:Z:245:VAL:HG11	1.36	1.05
19:L:365:THR:OG1	19:L:376:PHE:HZ	1.40	1.05
25:R:171:MET:HE2	25:R:206:ARG:HG3	1.09	1.05
28:U:283:ARG:HD2	29:V:284:ALA:HA	1.36	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:175:VAL:CG1	6:6:179:PHE:HE2	1.69	1.05
15:H:449:LYS:HZ2	16:I:346:ARG:NH1	1.54	1.05
16:I:369:MET:HE1	16:I:416:PHE:HZ	1.14	1.05
22:O:232:GLU:O	22:O:236:HIS:CB	2.03	1.05
28:U:283:ARG:CD	29:V:284:ALA:HA	1.86	1.05
33:Z:189:ALA:CB	33:Z:193:PHE:HB3	1.81	1.05
17:J:329:ARG:HG3	17:J:333:ARG:NH1	1.70	1.05
18:K:254:VAL:HG11	18:K:299:LEU:HD23	1.39	1.05
20:M:77:TYR:CE2	20:M:159:LEU:CD1	2.39	1.05
22:O:73:ILE:HG23	22:O:74:ASN:H	1.18	1.05
31:X:40:GLU:O	31:X:41:GLU:HG2	1.55	1.05
33:Z:400:ILE:CD1	33:Z:418:ALA:HB1	1.86	1.05
5:5:6:PHE:CE1	5:5:13:ILE:HB	1.92	1.04
13:F:155:GLU:OE1	14:G:62:LYS:HB3	1.56	1.04
17:J:241:ALA:HB1	17:J:287:ASN:HD22	1.20	1.04
19:L:259:SER:CB	19:L:303:ARG:NH2	2.20	1.04
21:N:19:SER:CB	27:T:35:ILE:HG21	1.87	1.04
26:S:286:TYR:HE1	26:S:323:LEU:HD13	1.18	1.04
33:Z:138:ARG:HD2	33:Z:157:LEU:HD13	1.39	1.04
12:E:241:LYS:HA	12:E:244:LYS:HZ2	1.22	1.04
27:T:197:TYR:CZ	27:T:199:PHE:HA	1.93	1.04
33:Z:64:TYR:CE1	33:Z:111:LEU:HB3	1.93	1.04
33:Z:133:ASP:HB3	33:Z:137:TYR:CE2	1.92	1.04
16:I:121:THR:HA	16:I:127:ASP:OD1	1.55	1.04
21:N:253:LEU:HD22	21:N:894:ARG:NH2	1.70	1.04
26:S:163:VAL:CG2	26:S:184:TRP:HZ3	1.69	1.04
31:X:11:ARG:HB3	31:X:103:GLU:HG3	1.40	1.04
17:J:136:LEU:HD22	17:J:217:GLU:HG3	1.35	1.04
18:K:200:GLN:CD	25:R:204:TRP:CH2	2.23	1.04
22:O:79:VAL:HG21	22:O:122:HIS:HA	1.12	1.04
19:L:365:THR:OG1	19:L:376:PHE:CZ	2.11	1.04
21:N:399:PHE:HE1	21:N:441:VAL:HG23	1.10	1.04
22:O:47:LYS:HZ1	22:O:65:PHE:HE2	1.04	1.04
22:O:76:LEU:CD2	22:O:121:ASP:OD1	2.04	1.04
28:U:273:LEU:HD11	28:U:277:TYR:CZ	1.93	1.04
17:J:272:MET:HE3	17:J:290:ILE:HD13	1.36	1.03
22:O:38:TRP:CE3	22:O:53:LYS:HD3	1.94	1.03
22:O:79:VAL:CG2	22:O:122:HIS:CA	2.27	1.03
26:S:471:LEU:CD1	28:U:288:PHE:CZ	2.40	1.03
27:T:226:TRP:CE2	27:T:235:PHE:HE2	1.75	1.03
28:U:275:VAL:HG12	29:V:251:TYR:HE1	1.17	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:52:LEU:HD11	29:V:107:TRP:CZ3	1.93	1.03
31:X:23:LEU:O	31:X:24:CYS:SG	2.16	1.03
33:Z:471:LEU:CA	33:Z:497:PHE:HZ	1.69	1.03
9:B:4:ARG:HH22	11:D:5:ASP:HB2	1.20	1.03
16:I:208:TYR:CE2	16:I:215:PRO:HB3	1.93	1.03
18:K:49:PHE:HE1	21:N:192:LEU:HG	1.23	1.03
18:K:200:GLN:CB	25:R:204:TRP:HZ2	1.32	1.03
21:N:383:LYS:N	21:N:412:TYR:OH	1.90	1.03
22:O:223:LEU:HD11	22:O:277:ILE:HD11	1.33	1.03
27:T:1:MET:CB	27:T:2:PRO:HD3	1.84	1.03
27:T:229:VAL:HG22	27:T:234:TYR:CE1	1.93	1.03
3:3:18:LEU:CD1	3:3:177:VAL:HG13	1.88	1.03
3:3:179:TYR:OH	3:3:188:LYS:HE3	1.57	1.03
17:J:150:VAL:HG23	17:J:153:LEU:HD11	1.37	1.03
17:J:219:VAL:CG2	18:K:284:ALA:CA	2.37	1.03
18:K:200:GLN:HG2	25:R:204:TRP:CH2	1.82	1.03
18:K:236:ARG:HH21	19:L:310:THR:HG23	1.22	1.03
18:K:423:LYS:HE2	18:K:424:PHE:HE2	1.23	1.03
28:U:223:HIS:ND1	28:U:224:THR:N	2.07	1.03
29:V:118:LEU:CD1	29:V:140:VAL:CB	2.36	1.03
33:Z:218:GLU:CB	33:Z:248:TYR:CZ	2.40	1.03
33:Z:551:LEU:CD1	33:Z:591:ILE:CG2	2.36	1.03
10:C:147:GLN:HB3	10:C:149:TYR:HE1	1.22	1.03
17:J:27:ILE:HA	18:K:51:LEU:HD21	1.07	1.03
17:J:333:ARG:HH12	17:J:343:LEU:HD11	1.20	1.03
21:N:33:ASP:HA	21:N:71:ASN:HD21	1.21	1.03
28:U:152:LYS:HB3	28:U:154:PHE:CZ	1.94	1.03
29:V:117:TRP:CE2	29:V:196:TYR:CB	2.36	1.03
33:Z:102:ILE:HG22	33:Z:112:LYS:HG3	1.39	1.03
33:Z:135:LEU:O	33:Z:139:LEU:HG	1.59	1.03
3:3:89:ARG:O	3:3:94:TYR:CE1	2.12	1.02
6:6:48:PHE:CE2	6:6:50:ALA:HB3	1.94	1.02
12:E:125:GLU:HB3	13:F:123:TYR:HE1	1.17	1.02
15:H:389:PHE:HB3	15:H:404:TRP:CE3	1.93	1.02
16:I:250:SER:O	16:I:253:ILE:HB	1.59	1.02
17:J:219:VAL:CG2	18:K:284:ALA:CB	2.37	1.02
22:O:329:MET:HA	23:P:357:TYR:OH	1.59	1.02
28:U:66:TRP:O	30:W:93:ILE:HD12	1.56	1.02
28:U:189:ARG:HH12	29:V:296:LEU:HD22	0.87	1.02
16:I:339:ILE:HG21	16:I:347:LYS:HE2	1.39	1.02
20:M:361:LEU:HD13	20:M:376:TRP:CE3	1.94	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:415:GLN:HG3	26:S:471:LEU:HD21	1.05	1.02
8:A:57:LYS:HE2	8:A:69:VAL:HG11	1.39	1.02
20:M:289:LYS:NZ	20:M:334:ASP:HB2	1.74	1.02
21:N:782:PHE:CD1	21:N:875:LEU:HD22	1.94	1.02
23:P:181:LEU:HA	23:P:223:LEU:HD11	1.40	1.02
1:1:122:LEU:CD1	7:7:28:PHE:CE1	2.43	1.02
25:R:320:LYS:HE3	25:R:324:ARG:HD2	1.41	1.02
13:F:201:LEU:HD12	13:F:206:LEU:HD11	1.04	1.02
17:J:219:VAL:C	18:K:281:ARG:HD2	1.83	1.02
22:O:80:LYS:CE	22:O:81:TYR:CE2	2.42	1.02
1:1:-6:GLY:CA	2:2:116:HIS:CD2	2.42	1.01
6:6:175:VAL:O	6:6:179:PHE:HD2	1.41	1.01
13:F:78:ALA:N	20:M:433:TYR:OH	1.91	1.01
16:I:174:ASP:OD1	17:J:282:PHE:CB	2.08	1.01
22:O:133:ILE:HG12	22:O:137:TYR:CE2	1.95	1.01
25:R:199:GLU:HB3	25:R:206:ARG:NE	1.75	1.01
28:U:56:PHE:HD1	28:U:68:LEU:HD21	0.95	1.01
7:7:86:GLU:HG3	13:F:100:ASN:HB2	1.39	1.01
15:H:96:PRO:HA	15:H:193:PRO:HG2	1.36	1.01
16:I:132:ILE:HD12	16:I:138:LYS:CE	1.90	1.01
18:K:210:LEU:CD2	18:K:212:TYR:OH	2.06	1.01
21:N:28:ILE:O	21:N:32:VAL:CG2	2.09	1.01
22:O:185:PHE:CG	22:O:223:LEU:CB	2.42	1.01
24:Q:7:LYS:HG3	24:Q:30:LEU:HD13	1.39	1.01
25:R:422:ARG:NH1	26:S:301:PRO:CB	2.07	1.01
25:R:422:ARG:HH22	26:S:301:PRO:HD3	1.24	1.01
33:Z:352:LYS:O	33:Z:353:VAL:HG23	1.60	1.01
19:L:253:ASP:C	20:M:256:ILE:HG13	1.85	1.01
26:S:381:VAL:HG11	27:T:123:HIS:NE2	1.76	1.01
14:G:197:LYS:HD2	14:G:241:PHE:CE2	1.96	1.01
17:J:219:VAL:HG21	18:K:284:ALA:CB	1.90	1.01
19:L:161:ARG:NH2	19:L:261:ARG:NH1	1.89	1.01
19:L:178:ILE:HD13	19:L:230:LEU:HD22	1.41	1.01
21:N:329:HIS:CE1	21:N:355:TRP:CZ3	2.47	1.01
22:O:153:LEU:CD1	22:O:174:THR:CG2	2.38	1.01
15:H:99:VAL:HG23	15:H:173:ARG:HH21	1.24	1.01
19:L:221:TYR:CZ	19:L:348:GLU:HB3	1.96	1.01
20:M:50:ARG:CA	30:W:73:LEU:HD13	1.89	1.01
33:Z:767:TYR:CE2	33:Z:772:ILE:HG13	1.95	1.01
33:Z:924:LYS:CA	33:Z:959:HIS:CE1	2.44	1.01
16:I:100:ARG:O	16:I:104:LEU:HD12	1.59	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:25:LEU:HD11	21:N:57:ASP:HB2	1.05	1.00
22:O:185:PHE:CB	22:O:223:LEU:HB3	1.91	1.00
24:Q:51:ARG:HH22	24:Q:92:LYS:HD3	1.16	1.00
27:T:35:ILE:HD12	27:T:40:LEU:CD1	1.91	1.00
27:T:209:LEU:HB3	27:T:211:PHE:CE1	1.96	1.00
6:6:175:VAL:HG13	6:6:179:PHE:HE2	0.87	1.00
12:E:110:GLU:HG3	12:E:164:PHE:HE2	1.23	1.00
15:H:340:LEU:HD12	15:H:370:ARG:HH11	1.26	1.00
16:I:400:GLY:HA3	17:J:179:ILE:HD11	1.38	1.00
19:L:180:PHE:CE2	19:L:238:THR:OG1	2.03	1.00
19:L:221:TYR:OH	19:L:348:GLU:HB3	1.60	1.00
22:O:325:GLU:O	22:O:329:MET:HG3	1.61	1.00
22:O:373:TRP:HD1	28:U:200:LEU:HD22	0.86	1.00
24:Q:61:LEU:CB	24:Q:65:TYR:CZ	2.37	1.00
25:R:174:ILE:HB	25:R:190:LYS:HD3	1.42	1.00
23:P:221:TYR:CE2	23:P:244:ILE:HB	1.96	1.00
24:Q:31:LEU:HG	24:Q:50:ARG:NH2	1.76	1.00
5:5:8:PHE:CE1	5:5:13:ILE:HG12	1.97	1.00
25:R:415:GLN:HG2	26:S:471:LEU:HD22	1.44	1.00
8:A:220:LYS:HD2	8:A:238:ALA:O	1.62	1.00
26:S:371:LEU:CD1	26:S:380:CYS:SG	2.49	1.00
26:S:436:ILE:HG12	27:T:196:SER:O	1.61	1.00
8:A:57:LYS:NZ	8:A:69:VAL:HB	1.77	1.00
18:K:364:PRO:CB	24:Q:247:HIS:HE1	1.50	1.00
22:O:62:TYR:HE2	22:O:82:LEU:HD22	0.84	1.00
18:K:254:VAL:CG1	18:K:299:LEU:HD23	1.91	1.00
20:M:379:LEU:HD22	20:M:415:PHE:CD1	1.97	1.00
25:R:304:TYR:HE1	25:R:308:LEU:HD11	1.11	1.00
27:T:226:TRP:CE2	27:T:235:PHE:CE2	2.50	1.00
28:U:94:HIS:CE1	28:U:96:GLY:HA2	1.95	1.00
12:E:165:TYR:HB2	12:E:167:TYR:CZ	1.97	0.99
20:M:289:LYS:HZ3	20:M:334:ASP:HB2	1.22	0.99
9:B:178:ARG:NH1	9:B:194:LEU:HB2	1.76	0.99
17:J:219:VAL:CG2	18:K:284:ALA:HA	1.91	0.99
22:O:79:VAL:HG12	22:O:121:ASP:O	1.60	0.99
23:P:221:TYR:OH	23:P:240:TYR:O	1.80	0.99
25:R:286:LEU:HD23	25:R:289:ILE:HD11	1.44	0.99
30:W:186:ALA:HA	30:W:192:LEU:HD12	1.44	0.99
13:F:105:VAL:HG11	13:F:143:HIS:CE1	1.96	0.99
20:M:307:GLU:HG3	20:M:311:GLN:NE2	1.76	0.99
21:N:277:LEU:HB2	21:N:287:LEU:CD2	1.91	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:83:LEU:CD1	22:O:128:LEU:HD22	1.91	0.99
22:O:250:TRP:CZ2	22:O:270:ILE:CG2	2.45	0.99
2:2:109:HIS:HB3	2:2:111:PHE:HE2	1.23	0.99
11:D:203:VAL:C	11:D:204:GLN:OE1	2.05	0.99
12:E:125:GLU:HB3	13:F:123:TYR:CE1	1.97	0.99
20:M:385:GLU:HB3	20:M:426:LYS:HZ2	1.24	0.99
2:2:109:HIS:HB3	2:2:111:PHE:CE2	1.96	0.99
6:6:125:GLU:OE1	6:6:128:ARG:HD3	1.61	0.99
10:C:18:ARG:NH1	10:C:23:GLU:OE2	1.94	0.99
12:E:157:HIS:CE1	12:E:172:ILE:CG2	2.44	0.99
17:J:301:ASP:N	17:J:304:LEU:HD12	1.77	0.99
1:1:122:LEU:HD21	7:7:28:PHE:HD1	1.26	0.99
33:Z:610:GLY:HA2	33:Z:748:LEU:CD1	1.91	0.99
33:Z:610:GLY:HA3	33:Z:748:LEU:HD13	1.44	0.99
19:L:132:ARG:NH2	19:L:156:MET:HG3	1.76	0.99
21:N:399:PHE:CD1	21:N:441:VAL:CB	2.44	0.99
23:P:425:HIS:CD2	28:U:225:ILE:CG2	2.45	0.99
24:Q:174:LEU:HD11	24:Q:178:HIS:NE2	1.76	0.99
25:R:353:MET:HE3	25:R:364:LEU:HD11	1.42	0.99
28:U:21:HIS:HE1	28:U:53:ALA:HB1	1.21	0.99
29:V:161:THR:HA	29:V:189:ILE:HD11	1.45	0.99
30:W:21:PHE:CE1	30:W:144:PHE:CE1	2.51	0.99
1:1:122:LEU:HD11	7:7:28:PHE:CD1	1.96	0.99
6:6:94:PHE:HE1	7:7:99:MET:HE2	1.26	0.99
22:O:79:VAL:HB	22:O:122:HIS:HA	1.44	0.99
23:P:140:THR:HG21	23:P:163:LEU:HD22	1.41	0.99
29:V:80:VAL:HG23	29:V:125:THR:HA	1.45	0.99
31:X:12:ALA:HB3	31:X:33:ILE:HB	1.44	0.99
22:O:250:TRP:NE1	22:O:270:ILE:HA	1.76	0.99
27:T:216:GLU:O	27:T:220:PHE:CD1	2.15	0.99
33:Z:189:ALA:CB	33:Z:193:PHE:HB2	1.89	0.99
1:1:19:ARG:NH1	1:1:29:ARG:CG	2.24	0.99
20:M:170:MET:HB3	20:M:244:LEU:HD11	1.42	0.99
12:E:125:GLU:CB	13:F:123:TYR:HE1	1.76	0.98
12:E:201:LEU:CD1	12:E:239:LEU:HG	1.93	0.98
25:R:305:PHE:HA	25:R:334:ARG:HH12	1.23	0.98
26:S:157:GLU:CD	26:S:160:ARG:HH21	1.70	0.98
28:U:275:VAL:CG1	29:V:251:TYR:OH	2.10	0.98
30:W:5:ALA:HB2	30:W:103:ASN:HD22	0.91	0.98
1:1:45:ARG:NH2	1:1:53:GLN:N	2.10	0.98
23:P:135:GLU:HG2	23:P:138:ARG:NH2	1.78	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:66:TRP:HZ3	28:U:68:LEU:CG	1.74	0.98
8:A:57:LYS:HE2	8:A:69:VAL:HG12	1.02	0.98
22:O:277:ILE:HG22	22:O:278:PRO:N	1.74	0.98
22:O:365:LYS:HB3	22:O:369:ARG:HH12	1.26	0.98
24:Q:243:PHE:HE1	24:Q:287:THR:HG22	1.29	0.98
31:X:46:TRP:HB2	31:X:68:LEU:HD13	1.46	0.98
33:Z:471:LEU:HA	33:Z:497:PHE:HZ	0.82	0.98
16:I:400:GLY:CA	17:J:179:ILE:HD11	1.92	0.98
18:K:49:PHE:CE1	21:N:192:LEU:HG	1.98	0.98
23:P:302:LEU:HB3	23:P:310:ARG:NE	1.77	0.98
25:R:263:ARG:HH11	25:R:296:LEU:HG	1.29	0.98
27:T:71:GLN:NE2	27:T:173:GLU:OE2	1.95	0.98
23:P:245:TYR:HE1	23:P:257:TRP:CE2	1.81	0.98
15:H:77:ALA:O	16:I:153:THR:CG2	2.12	0.98
17:J:219:VAL:HG22	18:K:284:ALA:HB2	1.44	0.98
22:O:230:PHE:HE1	22:O:251:LEU:HG	0.84	0.98
22:O:219:ILE:O	22:O:223:LEU:HD13	1.63	0.98
22:O:306:ARG:HB3	22:O:350:ILE:O	1.63	0.98
23:P:234:TYR:CD2	23:P:267:PHE:CE1	2.52	0.98
1:1:83:LYS:HD3	1:1:119:VAL:HG23	1.42	0.98
25:R:320:LYS:CE	25:R:324:ARG:HD2	1.92	0.98
33:Z:889:VAL:HG12	33:Z:894:MET:HE1	1.43	0.98
2:2:82:MET:O	2:2:86:HIS:HD2	1.47	0.97
12:E:241:LYS:HA	12:E:244:LYS:NZ	1.78	0.97
16:I:408:ARG:NH1	16:I:410:GLN:O	1.96	0.97
17:J:67:GLU:HG2	17:J:69:GLY:H	1.27	0.97
26:S:286:TYR:CZ	26:S:323:LEU:HB3	1.99	0.97
28:U:275:VAL:CG1	29:V:251:TYR:CZ	2.43	0.97
33:Z:551:LEU:HA	33:Z:593:HIS:NE2	1.78	0.97
15:H:198:MET:HE2	15:H:272:ILE:HG23	1.45	0.97
23:P:245:TYR:CE1	23:P:257:TRP:CZ2	2.51	0.97
24:Q:51:ARG:NH2	24:Q:92:LYS:HD3	1.79	0.97
33:Z:133:ASP:HA	33:Z:137:TYR:CE1	1.99	0.97
33:Z:857:LEU:HD13	33:Z:908:ILE:HG13	1.44	0.97
28:U:66:TRP:CE3	28:U:68:LEU:HG	1.99	0.97
29:V:261:LEU:HD11	29:V:283:THR:CG2	1.94	0.97
33:Z:392:LEU:HD12	33:Z:424:SER:O	1.63	0.97
15:H:271:PHE:HZ	15:H:307:PHE:HD2	1.00	0.97
17:J:40:ASN:HB3	18:K:65:GLU:OE2	1.64	0.97
21:N:14:ARG:HB2	27:T:80:ASN:HD21	1.29	0.97
21:N:21:LYS:HE3	21:N:55:PHE:CZ	1.99	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:356:ARG:HH21	22:O:362:GLN:HG3	1.27	0.97
22:O:79:VAL:HG12	22:O:118:GLY:HA2	1.42	0.97
24:Q:314:PHE:CE2	24:Q:339:TYR:CD1	2.51	0.97
24:Q:331:THR:HG22	24:Q:335:PHE:CE2	1.99	0.97
32:Y:80:GLU:OE2	32:Y:83:ARG:NH2	1.97	0.97
27:T:193:THR:CB	27:T:226:TRP:HH2	1.77	0.97
33:Z:133:ASP:HA	33:Z:137:TYR:CG	1.98	0.97
1:1:66:TYR:CE2	1:1:73:PRO:HA	2.00	0.97
9:B:4:ARG:HG2	13:F:123:TYR:OH	1.64	0.97
15:H:307:PHE:CE2	15:H:309:ASP:OD1	2.18	0.97
19:L:269:TYR:CE2	19:L:273:HIS:CE1	2.52	0.97
21:N:277:LEU:HD11	21:N:290:LEU:CD1	1.84	0.97
9:B:178:ARG:HH12	9:B:194:LEU:HB2	1.26	0.97
19:L:309:LEU:HD23	19:L:342:ARG:HD3	1.42	0.97
26:S:471:LEU:HD12	28:U:288:PHE:CZ	1.99	0.97
33:Z:321:PHE:HE1	33:Z:350:GLY:HA2	1.20	0.97
13:F:143:HIS:HE1	13:F:145:LEU:HB2	1.29	0.97
26:S:286:TYR:CE1	26:S:323:LEU:HD13	2.00	0.97
28:U:283:ARG:HD2	29:V:284:ALA:CA	1.93	0.97
33:Z:146:PHE:O	33:Z:210:TYR:CZ	2.18	0.97
33:Z:147:GLU:N	33:Z:210:TYR:OH	1.98	0.97
17:J:167:PRO:HA	17:J:174:PHE:CE1	1.99	0.96
23:P:286:ASN:C	23:P:293:LEU:HD11	1.90	0.96
33:Z:889:VAL:HG12	33:Z:894:MET:CE	1.94	0.96
3:3:89:ARG:O	3:3:94:TYR:HE1	1.44	0.96
13:F:105:VAL:CG1	13:F:143:HIS:CE1	2.48	0.96
18:K:281:ARG:NH1	18:K:287:GLY:HA2	1.80	0.96
23:P:196:ALA:HB1	23:P:227:ILE:HD11	1.47	0.96
18:K:200:GLN:CA	25:R:204:TRP:CZ2	2.27	0.96
19:L:252:VAL:CB	20:M:256:ILE:HD12	1.82	0.96
21:N:325:PHE:CA	29:V:182:LYS:HG2	1.95	0.96
22:O:258:LEU:HD23	22:O:287:LEU:HD21	1.46	0.96
24:Q:51:ARG:NH2	24:Q:92:LYS:HB3	1.79	0.96
10:C:149:TYR:OH	11:D:59:ILE:HB	1.64	0.96
13:F:65:LYS:HD3	13:F:222:PHE:CE2	2.01	0.96
33:Z:551:LEU:HG	33:Z:593:HIS:NE2	1.80	0.96
31:X:66:LEU:HD13	31:X:99:PHE:HZ	1.29	0.96
21:N:21:LYS:CG	21:N:55:PHE:CD2	2.48	0.96
21:N:25:LEU:CD1	21:N:57:ASP:CB	2.35	0.96
33:Z:758:LEU:HD22	33:Z:791:LYS:HD3	1.45	0.96
29:V:261:LEU:CD1	29:V:283:THR:HG21	1.94	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:189:ALA:HB3	33:Z:193:PHE:HD2	1.31	0.96
23:P:349:ASN:O	23:P:353:ILE:CG1	2.13	0.96
24:Q:46:VAL:O	24:Q:50:ARG:CG	2.14	0.96
25:R:137:LEU:HD11	25:R:141:TYR:HE2	1.22	0.96
30:W:37:PHE:CZ	30:W:49:VAL:HG11	2.01	0.96
15:H:449:LYS:NZ	16:I:346:ARG:NH1	2.12	0.95
1:1:45:ARG:HH21	1:1:53:GLN:N	1.61	0.95
27:T:62:LEU:CD1	27:T:88:TYR:CE2	2.50	0.95
31:X:66:LEU:HD13	31:X:99:PHE:CE1	2.00	0.95
1:1:124:TYR:OH	1:1:139:ASP:OD1	1.81	0.95
20:M:50:ARG:CA	30:W:73:LEU:CD1	2.43	0.95
22:O:66:VAL:CG1	22:O:106:PHE:CE1	2.49	0.95
22:O:185:PHE:HE2	22:O:219:ILE:HG22	1.28	0.95
24:Q:265:MET:HE3	24:Q:281:ILE:HD13	1.47	0.95
25:R:308:LEU:HB2	25:R:334:ARG:HH22	1.17	0.95
1:1:119:VAL:HB	14:G:103:LYS:NZ	1.82	0.95
17:J:193:THR:OG1	17:J:316:PHE:CZ	2.18	0.95
26:S:211:ARG:HH21	26:S:240:ASP:HB3	1.21	0.95
22:O:373:TRP:CD1	28:U:200:LEU:HD22	1.76	0.95
27:T:197:TYR:CG	27:T:235:PHE:CD1	2.54	0.95
27:T:216:GLU:HG2	27:T:220:PHE:CE1	2.01	0.95
33:Z:321:PHE:HZ	33:Z:350:GLY:CA	1.49	0.95
17:J:166:LEU:C	17:J:174:PHE:CE1	2.43	0.95
21:N:325:PHE:HA	29:V:182:LYS:HG2	1.45	0.95
22:O:134:ALA:CB	22:O:153:LEU:HD11	1.94	0.95
27:T:82:PHE:CE1	27:T:109:TYR:CE2	2.42	0.95
33:Z:218:GLU:CB	33:Z:248:TYR:OH	2.13	0.95
3:3:18:LEU:HD11	3:3:177:VAL:HG13	0.99	0.95
4:4:26:VAL:HG11	4:4:29:ASP:HB3	1.46	0.95
13:F:166:GLN:HA	20:M:381:ARG:NH2	1.82	0.95
22:O:300:VAL:HG12	22:O:301:PHE:CD2	2.01	0.95
28:U:92:TRP:HD1	28:U:119:LEU:O	1.48	0.95
19:L:360:ILE:HG23	19:L:391:ILE:HD13	1.46	0.95
31:X:75:TRP:HD1	31:X:87:PHE:CD1	1.77	0.95
14:G:166:LYS:HZ2	14:G:206:ASN:HA	1.32	0.95
20:M:50:ARG:HA	30:W:73:LEU:HD12	1.46	0.95
33:Z:103:TYR:CD1	33:Z:116:ALA:HB2	2.01	0.95
19:L:259:SER:HB2	19:L:303:ARG:NH1	1.82	0.94
29:V:57:PHE:HB2	29:V:62:THR:O	1.65	0.94
33:Z:305:VAL:HG13	33:Z:982:ILE:HG12	1.45	0.94
4:4:36:GLN:HE21	4:4:39:PRO:HA	1.32	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:138:PHE:HE1	11:D:215:VAL:HG12	1.26	0.94
27:T:193:THR:CG2	27:T:226:TRP:HH2	1.63	0.94
17:J:193:THR:HB	17:J:316:PHE:HZ	1.24	0.94
31:X:75:TRP:CZ2	31:X:125:MET:HG3	2.02	0.94
1:1:119:VAL:CB	14:G:103:LYS:NZ	2.30	0.94
16:I:190:GLN:OE1	16:I:349:LEU:HD12	1.68	0.94
21:N:233:ASN:OD1	21:N:269:LEU:HD22	1.67	0.94
28:U:92:TRP:HZ3	28:U:106:ILE:CB	1.79	0.94
12:E:88:MET:HE2	12:E:142:LEU:CD1	1.97	0.94
17:J:115:LEU:CD2	17:J:120:TYR:HA	1.97	0.94
21:N:399:PHE:HD1	21:N:441:VAL:HG11	1.29	0.94
30:W:120:ASP:O	30:W:121:SER:N	1.99	0.94
33:Z:189:ALA:HB3	33:Z:193:PHE:CD2	2.03	0.94
8:A:52:VAL:HG21	8:A:202:VAL:HG12	1.47	0.94
17:J:167:PRO:N	17:J:174:PHE:CE1	2.36	0.94
22:O:277:ILE:HB	22:O:279:ILE:N	1.83	0.94
27:T:197:TYR:CE1	27:T:235:PHE:HD1	1.85	0.94
29:V:114:PHE:HD1	29:V:118:LEU:O	1.50	0.94
30:W:7:VAL:CG2	30:W:110:ILE:HD13	1.97	0.94
33:Z:510:LEU:HD11	33:Z:542:ILE:HA	1.50	0.94
27:T:197:TYR:HD1	27:T:198:ASP:H	0.97	0.94
28:U:66:TRP:CZ3	28:U:68:LEU:HD12	2.02	0.94
31:X:66:LEU:HD11	31:X:97:TYR:HB2	1.47	0.94
6:6:175:VAL:CG1	6:6:179:PHE:CE2	2.48	0.94
12:E:109:VAL:CG1	12:E:156:PHE:CD1	2.51	0.94
15:H:174:VAL:HG13	15:H:183:ILE:HG13	1.47	0.94
18:K:158:ILE:HG23	19:L:256:ILE:HG23	1.49	0.94
21:N:214:LEU:HD12	21:N:217:MET:CE	1.96	0.94
22:O:223:LEU:CD1	22:O:277:ILE:HD11	1.97	0.94
22:O:341:ILE:HD11	22:O:348:VAL:HG22	1.48	0.94
25:R:137:LEU:CG	25:R:141:TYR:HE2	1.81	0.94
25:R:263:ARG:NH1	25:R:296:LEU:O	2.00	0.94
27:T:193:THR:HG21	27:T:226:TRP:CZ3	2.02	0.94
27:T:226:TRP:HD1	27:T:241:GLU:OE1	1.50	0.94
33:Z:312:TYR:OH	33:Z:348:LEU:CA	2.14	0.94
33:Z:491:LEU:CD1	33:Z:900:LEU:HD12	1.97	0.94
33:Z:767:TYR:HD2	33:Z:772:ILE:HG13	1.29	0.94
12:E:110:GLU:HG3	12:E:164:PHE:CE2	2.03	0.94
12:E:165:TYR:CB	12:E:167:TYR:CE1	2.51	0.94
26:S:188:TYR:CZ	26:S:210:LEU:HD13	2.03	0.94
33:Z:102:ILE:HG12	33:Z:107:THR:OG1	1.66	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:609:THR:HG23	33:Z:745:LEU:HD22	1.48	0.94
17:J:69:GLY:HA2	18:K:144:ASN:HD21	0.79	0.94
21:N:324:LYS:HG3	21:N:325:PHE:CD1	2.02	0.94
23:P:245:TYR:CE1	23:P:257:TRP:CE2	2.55	0.94
24:Q:314:PHE:CD2	24:Q:339:TYR:CD1	2.56	0.94
25:R:33:LEU:CD2	25:R:92:ILE:HD13	1.98	0.94
27:T:35:ILE:CD1	27:T:40:LEU:HD11	1.98	0.94
27:T:245:TYR:HE2	27:T:251:HIS:HE2	1.16	0.94
28:U:66:TRP:CZ3	28:U:68:LEU:CD1	2.50	0.94
31:X:75:TRP:HA	31:X:87:PHE:HE1	1.33	0.94
33:Z:56:LEU:HD22	33:Z:115:LEU:HD13	1.49	0.94
1:1:45:ARG:HH22	1:1:53:GLN:HB2	1.32	0.93
5:5:8:PHE:CZ	5:5:13:ILE:HD11	2.02	0.93
17:J:136:LEU:CD2	17:J:217:GLU:HG3	1.98	0.93
22:O:124:ASP:OD1	22:O:127:LEU:N	2.01	0.93
30:W:172:LEU:HD22	30:W:185:ILE:HA	1.49	0.93
33:Z:867:PHE:HE2	33:Z:871:HIS:HD1	1.10	0.93
1:1:19:ARG:NH1	1:1:29:ARG:HA	1.82	0.93
22:O:258:LEU:HD21	22:O:287:LEU:HD21	1.50	0.93
24:Q:269:LYS:HZ1	24:Q:281:ILE:HD11	1.31	0.93
25:R:308:LEU:HD13	25:R:334:ARG:CZ	1.94	0.93
1:1:1:THR:HG22	1:1:129:SER:H	1.32	0.93
11:D:159:TRP:CZ3	12:E:59:LEU:HD13	2.04	0.93
12:E:157:HIS:HE1	12:E:172:ILE:HG21	1.24	0.93
13:F:31:GLN:HA	20:M:430:VAL:CG1	1.98	0.93
20:M:75:LEU:HD12	20:M:77:TYR:CD1	2.02	0.93
27:T:28:PRO:HB2	27:T:29:PRO:HD3	1.49	0.93
16:I:228:GLY:HA3	16:I:350:PHE:CE1	2.04	0.93
22:O:11:LEU:HD22	22:O:15:ARG:HH12	1.30	0.93
25:R:259:PHE:CD2	25:R:329:PHE:CE1	2.56	0.93
33:Z:146:PHE:O	33:Z:210:TYR:OH	1.85	0.93
33:Z:193:PHE:HD2	33:Z:196:SER:HB2	1.33	0.93
14:G:182:HIS:CE1	14:G:186:LEU:HD12	2.04	0.93
16:I:358:LYS:HZ1	16:I:387:LEU:H	1.14	0.93
17:J:69:GLY:HA2	18:K:144:ASN:ND2	1.59	0.93
24:Q:331:THR:CG2	24:Q:335:PHE:HE2	1.81	0.93
28:U:189:ARG:NH1	29:V:296:LEU:CD2	2.22	0.93
33:Z:924:LYS:CA	33:Z:959:HIS:ND1	2.31	0.93
17:J:336:ASN:ND2	25:R:204:TRP:CD1	2.36	0.93
18:K:349:ARG:NH1	18:K:377:SER:N	2.16	0.93
19:L:325:MET:HE1	19:L:337:LEU:HD13	1.47	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:50:ASP:HA	22:O:53:LYS:NZ	1.84	0.93
22:O:210:ARG:HH22	22:O:242:ILE:HA	1.19	0.93
22:O:258:LEU:HD22	22:O:287:LEU:HD21	0.93	0.93
33:Z:318:LYS:CE	33:Z:496:ALA:O	2.16	0.93
5:5:83:LEU:HD11	5:5:97:MET:HE1	1.51	0.93
6:6:34:VAL:CG1	6:6:196:LEU:HD12	1.98	0.93
16:I:132:ILE:HG12	16:I:156:ILE:HD12	1.49	0.93
25:R:353:MET:HE3	25:R:364:LEU:CD1	1.97	0.93
9:B:139:HIS:CE1	9:B:145:PHE:CE2	2.57	0.93
13:F:201:LEU:HD12	13:F:206:LEU:HD12	1.46	0.93
15:H:271:PHE:HZ	15:H:307:PHE:CD2	1.87	0.93
30:W:5:ALA:HB2	30:W:103:ASN:HB2	1.44	0.93
3:3:-2:ASN:C	3:3:19:ARG:NH1	2.26	0.93
7:7:8:TYR:CZ	7:7:11:GLY:HA3	2.04	0.93
12:E:88:MET:CE	12:E:142:LEU:CD1	2.47	0.93
15:H:261:ARG:NH2	15:H:273:ARG:NH2	2.16	0.93
16:I:380:LEU:HA	16:I:420:LYS:HZ3	1.33	0.93
17:J:193:THR:HG21	17:J:316:PHE:HE1	1.27	0.93
17:J:219:VAL:HG21	18:K:284:ALA:N	1.84	0.93
20:M:390:GLN:NE2	20:M:425:ARG:HB3	1.84	0.93
23:P:302:LEU:HB2	23:P:310:ARG:HH21	1.34	0.93
24:Q:51:ARG:HD2	24:Q:96:VAL:HG21	1.51	0.93
27:T:209:LEU:HD13	27:T:211:PHE:CZ	2.04	0.93
22:O:69:PHE:HD2	22:O:78:VAL:CG2	1.82	0.93
33:Z:506:LEU:HG	33:Z:530:LEU:HD11	1.51	0.93
8:A:77:ARG:HG3	8:A:78:THR:HG23	1.48	0.92
18:K:68:ILE:HG12	21:N:608:LEU:HD23	1.50	0.92
29:V:117:TRP:CZ2	29:V:196:TYR:HA	2.04	0.92
33:Z:325:GLY:O	33:Z:326:VAL:HG22	1.69	0.92
13:F:201:LEU:CD1	13:F:206:LEU:HD11	1.92	0.92
28:U:21:HIS:CE1	28:U:53:ALA:HB2	2.04	0.92
16:I:369:MET:HE1	16:I:416:PHE:CZ	2.05	0.92
24:Q:135:HIS:HB3	24:Q:161:LEU:HD22	1.51	0.92
24:Q:65:TYR:HB2	24:Q:74:LEU:HD22	1.51	0.92
28:U:18:ALA:HB1	28:U:93:TYR:OH	1.69	0.92
18:K:49:PHE:CE1	21:N:192:LEU:CG	2.52	0.92
19:L:370:LYS:HD2	19:L:374:PHE:CE1	2.04	0.92
20:M:385:GLU:CB	20:M:426:LYS:HZ3	1.79	0.92
26:S:175:SER:HB2	26:S:229:THR:OG1	1.68	0.92
27:T:197:TYR:CE1	27:T:235:PHE:CD1	2.57	0.92
28:U:40:ASP:HB3	28:U:47:ARG:NH2	1.84	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:40:ASP:HB3	28:U:47:ARG:HH21	1.31	0.92
31:X:11:ARG:HB2	31:X:103:GLU:HG3	1.49	0.92
31:X:41:GLU:HB2	31:X:45:PHE:H	1.33	0.92
14:G:140:VAL:HG11	14:G:220:LEU:HG	1.50	0.92
19:L:259:SER:HB3	19:L:303:ARG:HH22	1.35	0.92
24:Q:299:MET:CE	24:Q:335:PHE:HZ	1.83	0.92
28:U:35:GLY:N	28:U:93:TYR:HB3	1.84	0.92
33:Z:81:SER:O	33:Z:82:MET:CG	2.16	0.92
1:1:19:ARG:HH12	1:1:29:ARG:CG	1.82	0.92
6:6:91:LYS:HD2	6:6:96:TYR:HH	1.17	0.92
8:A:162:TYR:CZ	18:K:428:LYS:HB2	2.05	0.92
17:J:167:PRO:CA	17:J:174:PHE:CE1	2.51	0.92
26:S:191:HIS:NE2	26:S:206:GLN:HG3	1.85	0.92
26:S:425:ARG:NH1	27:T:155:GLY:HA2	1.83	0.92
27:T:197:TYR:CZ	27:T:199:PHE:CA	2.52	0.92
22:O:277:ILE:CG1	22:O:279:ILE:HB	2.00	0.92
23:P:132:VAL:HA	23:P:171:MET:HE2	0.92	0.92
28:U:66:TRP:CH2	28:U:68:LEU:HD12	2.04	0.92
31:X:10:PHE:CE2	31:X:103:GLU:OE2	2.23	0.92
31:X:41:GLU:CB	31:X:45:PHE:H	1.82	0.92
16:I:75:PHE:CD2	16:I:76:VAL:HG23	2.05	0.92
18:K:353:PHE:CD1	18:K:387:MET:SD	2.63	0.92
27:T:193:THR:CB	27:T:226:TRP:CH2	2.51	0.92
7:7:107:ILE:HD11	7:7:136:THR:HG23	1.51	0.91
16:I:100:ARG:C	16:I:104:LEU:HD11	1.96	0.91
18:K:68:ILE:CD1	21:N:608:LEU:HD21	1.99	0.91
24:Q:47:ASP:CA	24:Q:50:ARG:HB3	1.99	0.91
25:R:312:TYR:HA	25:R:316:LEU:HD12	1.50	0.91
25:R:422:ARG:NH2	26:S:301:PRO:HD3	1.85	0.91
30:W:25:ARG:NH2	30:W:115:CYS:SG	2.43	0.91
21:N:19:SER:HB3	27:T:35:ILE:HG21	1.44	0.91
21:N:43:LEU:HD21	21:N:69:TYR:CE1	2.04	0.91
24:Q:14:LEU:HD12	24:Q:26:VAL:HG21	1.51	0.91
24:Q:174:LEU:HD11	24:Q:178:HIS:HE2	1.34	0.91
27:T:241:GLU:HA	27:T:246:GLU:HB2	1.52	0.91
28:U:76:MET:HE2	29:V:94:MET:HE2	1.50	0.91
29:V:118:LEU:HD13	29:V:140:VAL:HB	1.52	0.91
16:I:361:ILE:HG22	16:I:392:ILE:CG2	1.99	0.91
18:K:240:SER:HB2	19:L:306:MET:HE2	1.50	0.91
26:S:256:LYS:O	26:S:259:TYR:HE2	1.51	0.91
27:T:216:GLU:CG	27:T:220:PHE:CE1	2.54	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:182:TYR:O	30:W:183:GLU:CG	2.17	0.91
33:Z:924:LYS:HB2	33:Z:959:HIS:HE1	0.76	0.91
15:H:172:MET:CE	16:I:129:TYR:HB2	2.00	0.91
17:J:167:PRO:CD	17:J:174:PHE:CZ	2.54	0.91
22:O:277:ILE:HG21	22:O:279:ILE:H	1.31	0.91
28:U:16:LEU:HD22	29:V:209:GLU:OE2	1.68	0.91
20:M:365:SER:HB3	20:M:376:TRP:HZ2	1.33	0.91
24:Q:331:THR:CG2	24:Q:335:PHE:CE2	2.53	0.91
26:S:188:TYR:CE2	26:S:210:LEU:HD13	2.04	0.91
30:W:32:SER:O	30:W:36:ILE:HG12	1.71	0.91
4:4:26:VAL:CG1	4:4:28:LYS:O	2.18	0.91
17:J:166:LEU:C	17:J:174:PHE:HE1	1.77	0.91
19:L:253:ASP:CA	20:M:256:ILE:HG13	2.01	0.91
22:O:66:VAL:HG12	22:O:106:PHE:CE1	2.06	0.91
28:U:19:LEU:HD12	28:U:127:GLN:CD	1.94	0.91
29:V:114:PHE:H	29:V:118:LEU:HD23	1.36	0.91
28:U:5:HIS:ND1	28:U:6:GLU:N	2.19	0.91
22:O:250:TRP:CH2	22:O:270:ILE:HG23	2.05	0.91
24:Q:135:HIS:CB	24:Q:161:LEU:HD22	2.01	0.91
25:R:31:PHE:CZ	25:R:182:ASN:ND2	2.39	0.91
25:R:280:ILE:HD12	25:R:289:ILE:CG1	2.01	0.91
33:Z:318:LYS:HZ3	33:Z:459:ALA:C	1.79	0.91
10:C:160:TRP:CZ3	10:C:163:ILE:HD13	2.05	0.91
22:O:69:PHE:CD2	22:O:78:VAL:CG2	2.53	0.91
24:Q:14:LEU:HD11	24:Q:26:VAL:HG21	0.92	0.91
25:R:125:GLU:CD	25:R:126:GLY:N	2.29	0.91
28:U:94:HIS:CE1	28:U:96:GLY:CA	2.53	0.91
1:1:19:ARG:HH12	1:1:29:ARG:HG3	1.21	0.91
14:G:182:HIS:CG	14:G:186:LEU:HG	2.05	0.91
21:N:479:GLU:HB2	21:N:512:ASN:CG	1.95	0.91
31:X:46:TRP:CZ2	31:X:132:SER:HA	2.06	0.91
33:Z:400:ILE:HD11	33:Z:418:ALA:HB1	1.52	0.91
14:G:53:ILE:HD11	14:G:212:GLU:HB2	1.53	0.90
19:L:309:LEU:HD22	19:L:342:ARG:HE	1.33	0.90
20:M:50:ARG:HB3	30:W:73:LEU:CD1	1.99	0.90
21:N:277:LEU:CD1	21:N:290:LEU:HD11	1.85	0.90
24:Q:269:LYS:NZ	24:Q:281:ILE:HD11	1.85	0.90
33:Z:358:TYR:HD2	33:Z:428:TRP:HE1	0.91	0.90
22:O:202:SER:O	22:O:203:THR:HG22	1.70	0.90
22:O:233:LEU:HD23	22:O:236:HIS:ND1	1.86	0.90
22:O:365:LYS:HB3	22:O:369:ARG:NH1	1.86	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:115:SER:CB	6:6:128:ARG:NH1	2.34	0.90
28:U:283:ARG:HH22	29:V:283:THR:HG22	1.34	0.90
15:H:251:PRO:O	15:H:254:THR:HG23	1.70	0.90
18:K:49:PHE:CE1	21:N:192:LEU:HD12	2.06	0.90
27:T:193:THR:HG22	27:T:226:TRP:CH2	2.06	0.90
3:3:-2:ASN:O	3:3:19:ARG:NH1	2.04	0.90
14:G:7:TYR:CE1	14:G:13:VAL:HG23	2.06	0.90
15:H:105:ILE:HG22	15:H:105:ILE:O	1.70	0.90
24:Q:47:ASP:N	24:Q:50:ARG:HB3	1.86	0.90
25:R:171:MET:CE	25:R:206:ARG:HG3	2.00	0.90
25:R:241:ILE:HG22	25:R:242:GLU:HG3	1.52	0.90
29:V:261:LEU:CD1	29:V:283:THR:CG2	2.48	0.90
30:W:9:VAL:O	30:W:113:PHE:HD2	1.52	0.90
3:3:59:ARG:HH21	10:C:99:LEU:HD11	1.37	0.90
18:K:364:PRO:CB	24:Q:247:HIS:NE2	2.26	0.90
22:O:79:VAL:CG1	22:O:118:GLY:HA2	2.02	0.90
22:O:103:LYS:O	22:O:129:ILE:CG1	2.19	0.90
22:O:133:ILE:CG1	22:O:137:TYR:CE2	2.54	0.90
27:T:216:GLU:CG	27:T:220:PHE:HE1	1.84	0.90
28:U:152:LYS:CB	28:U:154:PHE:CZ	2.51	0.90
33:Z:357:ILE:HG23	33:Z:960:GLY:O	1.72	0.90
12:E:48:LEU:HD11	12:E:145:ALA:CB	2.00	0.90
13:F:145:LEU:HD21	13:F:153:VAL:HG13	1.54	0.90
14:G:204:GLU:HA	14:G:207:LYS:HE2	1.52	0.90
16:I:387:LEU:HA	16:I:427:LYS:HZ2	1.37	0.90
18:K:210:LEU:HD11	18:K:212:TYR:CZ	2.07	0.90
1:1:8:PHE:HE2	1:1:10:ASP:CB	1.85	0.90
1:1:176:VAL:HG13	1:1:183:VAL:CG1	2.01	0.90
4:4:95:ARG:HE	5:5:92:GLY:HA3	1.37	0.90
7:7:-3:VAL:HG11	7:7:49:ILE:HB	1.53	0.90
9:B:178:ARG:NH1	9:B:194:LEU:CB	2.34	0.90
27:T:216:GLU:HG3	27:T:220:PHE:HE1	1.33	0.90
27:T:226:TRP:HA	27:T:241:GLU:OE1	1.72	0.90
28:U:152:LYS:CB	28:U:154:PHE:CE1	2.32	0.90
31:X:41:GLU:CG	31:X:45:PHE:HB2	2.02	0.90
10:C:149:TYR:CE1	11:D:59:ILE:HD12	2.07	0.90
18:K:346:ARG:HE	18:K:372:ILE:HG21	1.37	0.90
22:O:277:ILE:HG21	22:O:279:ILE:HG12	0.90	0.90
22:O:293:LEU:O	22:O:297:ILE:HG13	1.70	0.90
29:V:154:ASP:HB3	29:V:156:PHE:CE1	2.06	0.90
13:F:120:THR:O	14:G:129:ARG:NH2	2.04	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:271:PHE:CZ	15:H:307:PHE:HD2	1.89	0.90
19:L:227:GLY:H	20:M:339:ARG:NH2	1.69	0.90
22:O:358:ILE:HG22	22:O:359:SER:N	1.83	0.90
29:V:53:MET:CE	29:V:65:VAL:HG11	2.02	0.90
30:W:132:LEU:HD22	30:W:137:VAL:HG11	1.52	0.90
13:F:153:VAL:HB	14:G:85:ARG:HH12	1.37	0.89
19:L:362:LYS:HA	19:L:376:PHE:CZ	2.07	0.89
21:N:406:TYR:HE1	21:N:448:LEU:HD13	1.12	0.89
22:O:4:ASN:HB2	22:O:39:PHE:HD1	1.36	0.89
30:W:21:PHE:HE1	30:W:144:PHE:HZ	1.15	0.89
10:C:160:TRP:CE2	10:C:163:ILE:HD13	2.06	0.89
14:G:94:GLU:OE2	14:G:118:TYR:OH	1.90	0.89
18:K:113:THR:CA	18:K:252:ARG:NH1	2.34	0.89
18:K:200:GLN:C	25:R:204:TRP:HZ2	1.78	0.89
21:N:399:PHE:HD1	21:N:441:VAL:CG1	1.85	0.89
22:O:124:ASP:OD2	22:O:127:LEU:CD1	2.20	0.89
25:R:415:GLN:HG2	26:S:471:LEU:CD2	2.00	0.89
31:X:40:GLU:O	31:X:41:GLU:CG	2.19	0.89
19:L:362:LYS:HA	19:L:376:PHE:CE2	2.08	0.89
28:U:38:LEU:HB2	28:U:88:LYS:O	1.72	0.89
29:V:117:TRP:NE1	29:V:196:TYR:HB2	1.82	0.89
31:X:10:PHE:O	31:X:33:ILE:CG2	2.20	0.89
33:Z:103:TYR:O	33:Z:112:LYS:NZ	2.06	0.89
33:Z:133:ASP:HB2	33:Z:137:TYR:CD2	2.07	0.89
16:I:400:GLY:HA3	17:J:179:ILE:HG13	1.53	0.89
25:R:94:PHE:CZ	25:R:99:TYR:CZ	2.61	0.89
25:R:190:LYS:HB2	25:R:213:TYR:OH	1.73	0.89
29:V:126:GLN:NE2	29:V:130:GLU:OE2	2.04	0.89
32:Y:88:ASN:O	32:Y:89:GLN:HB3	1.70	0.89
33:Z:348:LEU:HD11	33:Z:921:GLU:HG2	1.54	0.89
28:U:283:ARG:CZ	29:V:284:ALA:HA	2.01	0.89
6:6:175:VAL:O	6:6:179:PHE:CD2	2.25	0.89
7:7:121:TYR:HE2	7:7:136:THR:HG22	1.36	0.89
19:L:227:GLY:N	20:M:339:ARG:NH2	2.18	0.89
20:M:50:ARG:HA	30:W:73:LEU:CD1	2.02	0.89
27:T:226:TRP:CZ2	27:T:235:PHE:HE2	1.89	0.89
28:U:161:ILE:CG2	28:U:162:GLU:N	2.27	0.89
28:U:273:LEU:CD1	28:U:277:TYR:CZ	2.55	0.89
16:I:106:ILE:CD1	17:J:85:LEU:HD22	2.02	0.89
17:J:69:GLY:H	18:K:144:ASN:ND2	1.69	0.89
17:J:136:LEU:HD22	17:J:217:GLU:CG	2.01	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:181:LEU:CD2	23:P:219:GLU:HB3	2.00	0.89
25:R:208:ASN:HD22	25:R:238:PHE:HD1	0.98	0.89
18:K:347:ARG:NH1	24:Q:205:ALA:CB	2.36	0.89
21:N:421:ASP:OD1	21:N:424:LYS:NZ	2.05	0.89
33:Z:218:GLU:HB2	33:Z:248:TYR:OH	1.68	0.89
33:Z:359:LYS:HZ2	33:Z:429:ASN:HD22	1.18	0.89
11:D:138:PHE:CE1	11:D:215:VAL:HG12	2.08	0.89
15:H:261:ARG:NH2	16:I:315:GLY:O	2.05	0.89
28:U:5:HIS:CG	28:U:6:GLU:H	1.91	0.89
18:K:358:SER:OG	24:Q:240:PHE:CE1	2.26	0.89
33:Z:193:PHE:CE2	33:Z:196:SER:HA	2.08	0.89
21:N:70:TYR:HE2	26:S:219:LYS:HE2	1.36	0.88
22:O:205:ILE:HD12	22:O:210:ARG:HD2	1.55	0.88
3:3:155:PHE:CE1	3:3:189:ARG:HD2	2.08	0.88
15:H:206:VAL:CG1	15:H:258:LEU:HD22	2.02	0.88
17:J:193:THR:CG2	17:J:316:PHE:HE1	1.79	0.88
17:J:301:ASP:HB2	17:J:304:LEU:HG	1.54	0.88
21:N:579:SER:HA	21:N:584:ARG:NH2	1.88	0.88
30:W:180:LEU:HA	30:W:183:GLU:OE1	1.71	0.88
16:I:339:ILE:HD13	16:I:347:LYS:HE2	1.56	0.88
23:P:273:TYR:OH	23:P:386:GLN:OE1	1.90	0.88
28:U:94:HIS:HE1	28:U:96:GLY:CA	1.85	0.88
28:U:283:ARG:NH1	29:V:284:ALA:HA	1.88	0.88
18:K:248:GLY:HA2	18:K:251:PRO:HG2	1.56	0.88
20:M:75:LEU:CG	20:M:77:TYR:HE1	1.84	0.88
25:R:353:MET:HE3	25:R:364:LEU:CG	2.02	0.88
33:Z:358:TYR:CD2	33:Z:428:TRP:NE1	2.38	0.88
18:K:200:GLN:O	25:R:204:TRP:NE1	2.07	0.88
21:N:666:GLN:HG3	21:N:873:ARG:HH21	1.35	0.88
22:O:370:LEU:HD13	28:U:204:LEU:HA	1.53	0.88
24:Q:162:LEU:HD11	24:Q:178:HIS:HE2	1.36	0.88
25:R:191:LEU:HB2	25:R:213:TYR:HE2	1.37	0.88
31:X:68:LEU:HD11	31:X:128:VAL:HB	1.52	0.88
33:Z:868:ASN:HD21	33:Z:870:ALA:HB3	1.36	0.88
14:G:140:VAL:CB	14:G:220:LEU:HD21	2.02	0.88
17:J:167:PRO:N	17:J:174:PHE:CZ	2.42	0.88
20:M:410:VAL:HG13	20:M:414:ASP:CB	2.02	0.88
22:O:277:ILE:CB	22:O:279:ILE:N	2.36	0.88
27:T:197:TYR:CE1	27:T:198:ASP:C	2.52	0.88
7:7:8:TYR:CE2	7:7:10:ASN:OD1	2.26	0.88
17:J:167:PRO:HG3	17:J:174:PHE:CE2	2.09	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:336:ASN:ND2	25:R:204:TRP:HE1	1.60	0.88
18:K:281:ARG:HH12	18:K:287:GLY:N	1.71	0.88
23:P:135:GLU:HG2	23:P:138:ARG:HH21	1.38	0.88
26:S:286:TYR:CE1	26:S:323:LEU:HB3	2.09	0.88
30:W:146:GLU:C	30:W:147:ILE:HG13	1.98	0.88
8:A:57:LYS:HZ1	8:A:69:VAL:HB	1.35	0.88
8:A:162:TYR:CE2	18:K:428:LYS:HB2	2.08	0.88
14:G:121:ALA:O	14:G:125:TYR:HD1	1.56	0.88
18:K:347:ARG:NH1	24:Q:205:ALA:HB3	1.87	0.88
6:6:14:LEU:HD23	6:6:34:VAL:HG13	1.55	0.88
19:L:111:GLU:HG2	19:L:117:TYR:CD2	2.08	0.88
20:M:361:LEU:HB3	20:M:376:TRP:CE2	2.09	0.88
20:M:368:MET:SD	20:M:395:THR:HG22	2.12	0.88
21:N:602:VAL:O	21:N:606:VAL:HG22	1.74	0.88
24:Q:82:THR:O	24:Q:85:MET:HG2	1.73	0.88
30:W:21:PHE:CZ	30:W:144:PHE:CZ	2.61	0.88
33:Z:133:ASP:CB	33:Z:137:TYR:CD2	2.57	0.88
33:Z:237:VAL:HG12	33:Z:245:VAL:HG12	1.56	0.88
20:M:77:TYR:CE2	20:M:159:LEU:HD11	2.07	0.88
25:R:422:ARG:HH12	26:S:301:PRO:HG3	1.37	0.88
27:T:1:MET:HB3	27:T:2:PRO:HD3	0.91	0.88
27:T:62:LEU:HD12	27:T:88:TYR:CE2	2.09	0.88
20:M:50:ARG:CB	30:W:73:LEU:CD1	2.52	0.87
30:W:71:LYS:HA	30:W:74:ALA:HB3	1.57	0.87
33:Z:64:TYR:CE1	33:Z:68:LEU:HD11	2.09	0.87
21:N:479:GLU:CB	21:N:512:ASN:HD21	1.87	0.87
22:O:3:ASN:HB2	22:O:39:PHE:CZ	2.09	0.87
33:Z:359:LYS:NZ	33:Z:429:ASN:HD22	1.72	0.87
1:1:66:TYR:HE2	1:1:73:PRO:HA	1.37	0.87
33:Z:493:LEU:CD1	33:Z:497:PHE:CD2	2.57	0.87
8:A:81:MET:SD	8:A:143:PHE:CE2	2.67	0.87
15:H:66:LYS:HG2	16:I:99:ILE:HD13	1.56	0.87
19:L:259:SER:CB	19:L:303:ARG:HH12	1.88	0.87
16:I:366:THR:HG21	16:I:377:LEU:HD21	1.55	0.87
20:M:368:MET:SD	20:M:395:THR:HG21	2.15	0.87
26:S:145:PHE:O	26:S:149:SER:OG	1.91	0.87
28:U:66:TRP:HZ3	28:U:68:LEU:CB	1.87	0.87
30:W:5:ALA:HB3	30:W:103:ASN:HB2	1.57	0.87
18:K:155:ASP:O	19:L:126:ARG:CZ	2.23	0.87
21:N:579:SER:HA	21:N:584:ARG:CZ	2.04	0.87
22:O:185:PHE:CE2	22:O:219:ILE:HG22	2.09	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:373:TRP:HZ3	28:U:233:PHE:HB3	0.73	0.87
33:Z:133:ASP:CA	33:Z:137:TYR:CD1	2.52	0.87
13:F:166:GLN:CA	20:M:381:ARG:NH2	2.37	0.87
25:R:353:MET:CE	25:R:364:LEU:HD11	2.04	0.87
8:A:130:GLN:HB3	9:B:127:VAL:HG23	1.57	0.87
15:H:253:GLY:HA2	16:I:314:ASP:OD1	1.73	0.87
17:J:115:LEU:HB2	17:J:122:LEU:HD23	1.57	0.87
18:K:169:VAL:H	19:L:315:PHE:HE1	1.23	0.87
22:O:25:LEU:O	22:O:29:PHE:CG	2.28	0.87
28:U:5:HIS:HD1	28:U:6:GLU:H	1.20	0.87
33:Z:321:PHE:CE2	33:Z:351:PRO:CD	2.57	0.87
1:1:119:VAL:CB	14:G:103:LYS:HZ2	1.87	0.87
8:A:220:LYS:HD3	8:A:242:GLU:HB2	1.55	0.87
20:M:410:VAL:HG13	20:M:414:ASP:HB2	1.55	0.87
22:O:66:VAL:HG12	22:O:106:PHE:HE1	1.39	0.87
22:O:153:LEU:HD13	22:O:174:THR:HG21	0.88	0.87
24:Q:65:TYR:CD2	24:Q:74:LEU:HB2	2.08	0.87
27:T:55:LEU:CG	27:T:59:LYS:HE2	2.05	0.87
30:W:147:ILE:O	30:W:147:ILE:HG22	1.74	0.87
33:Z:55:ARG:NH1	33:Z:63:LEU:HD22	1.89	0.87
33:Z:244:ARG:O	33:Z:248:TYR:HD1	1.58	0.87
15:H:155:PHE:HE1	20:M:77:TYR:N	1.73	0.86
16:I:132:ILE:HD12	16:I:138:LYS:HE2	0.94	0.86
22:O:188:PHE:CD2	22:O:220:SER:HB3	2.09	0.86
23:P:203:ILE:CG2	23:P:220:TYR:CE1	2.58	0.86
23:P:369:LEU:HB3	23:P:371:LEU:HD12	1.55	0.86
30:W:168:THR:HG22	30:W:169:SER:HB3	1.57	0.86
16:I:400:GLY:N	17:J:179:ILE:HD11	1.90	0.86
19:L:259:SER:HB2	19:L:303:ARG:HH12	1.35	0.86
21:N:479:GLU:HB2	21:N:512:ASN:HD21	1.34	0.86
22:O:80:LYS:CE	22:O:81:TYR:CZ	2.51	0.86
26:S:163:VAL:CG2	26:S:184:TRP:CZ3	2.50	0.86
31:X:66:LEU:CD1	31:X:99:PHE:CZ	2.58	0.86
4:4:43:MET:CG	4:4:45:PHE:CZ	2.58	0.86
21:N:399:PHE:HD1	21:N:441:VAL:HG21	1.36	0.86
27:T:155:GLY:O	27:T:156:SER:CB	2.23	0.86
28:U:152:LYS:HB3	28:U:154:PHE:CE1	2.06	0.86
29:V:52:LEU:CD1	29:V:107:TRP:CZ3	2.57	0.86
31:X:46:TRP:HZ2	31:X:132:SER:CA	1.86	0.86
2:2:82:MET:O	2:2:86:HIS:CD2	2.28	0.86
3:3:26:GLY:HA3	3:3:174:TRP:CZ2	2.09	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:116:PHE:CE2	6:6:122:TYR:HB3	2.11	0.86
12:E:125:GLU:OE1	13:F:123:TYR:CD1	2.27	0.86
24:Q:46:VAL:C	24:Q:50:ARG:CB	2.47	0.86
25:R:171:MET:SD	25:R:194:VAL:HG21	2.14	0.86
2:2:8:PHE:CE1	2:2:12:VAL:N	2.42	0.86
9:B:27:ALA:CB	18:K:426:PHE:HE1	1.88	0.86
11:D:11:PHE:CZ	12:E:137:PRO:HD2	2.10	0.86
17:J:193:THR:HB	17:J:316:PHE:CE1	2.03	0.86
18:K:49:PHE:HE1	21:N:192:LEU:CG	1.87	0.86
20:M:163:PHE:CE1	20:M:261:LYS:HG2	2.10	0.86
21:N:365:PHE:CZ	21:N:406:TYR:HB2	2.10	0.86
26:S:256:LYS:O	26:S:259:TYR:CZ	2.27	0.86
26:S:436:ILE:HD12	26:S:438:HIS:NE2	1.91	0.86
30:W:21:PHE:CG	30:W:25:ARG:HA	2.10	0.86
30:W:59:PRO:HB2	30:W:93:ILE:HG21	1.55	0.86
31:X:85:ARG:NH2	31:X:116:ALA:H	1.72	0.86
20:M:77:TYR:CE2	20:M:159:LEU:HD13	2.10	0.86
20:M:385:GLU:CB	20:M:426:LYS:HZ2	1.85	0.86
21:N:202:PHE:CE2	21:N:206:ILE:HD11	2.11	0.86
21:N:714:THR:HG23	21:N:756:THR:OG1	1.75	0.86
28:U:283:ARG:NH1	29:V:284:ALA:N	2.23	0.86
30:W:143:ASN:CB	30:W:173:THR:HA	2.05	0.86
13:F:179:PHE:HE1	13:F:188:GLU:OE2	1.59	0.86
17:J:115:LEU:HD21	17:J:120:TYR:CA	2.04	0.86
24:Q:299:MET:HE1	24:Q:335:PHE:CZ	2.11	0.86
30:W:21:PHE:HZ	30:W:144:PHE:CE1	1.93	0.86
30:W:37:PHE:HE1	30:W:49:VAL:HG11	1.36	0.86
18:K:210:LEU:CG	18:K:212:TYR:CZ	2.56	0.86
21:N:514:THR:HG22	21:N:546:LEU:HD13	1.57	0.86
27:T:89:TYR:CZ	27:T:102:LYS:NZ	2.40	0.86
28:U:16:LEU:CD2	29:V:209:GLU:HG2	2.05	0.86
31:X:17:TYR:CE1	31:X:19:GLU:OE1	2.29	0.86
10:C:239:LEU:HB3	10:C:245:THR:HG22	1.55	0.86
13:F:78:ALA:N	20:M:433:TYR:HH	1.71	0.86
14:G:140:VAL:HG21	14:G:220:LEU:HD23	1.57	0.86
18:K:68:ILE:CG1	21:N:608:LEU:CD2	2.54	0.86
18:K:95:VAL:HG13	18:K:139:LEU:HB2	1.58	0.86
19:L:426:LYS:HG3	19:L:427:LYS:H	1.40	0.86
4:4:66:TYR:HE1	4:4:74:LEU:HD21	1.29	0.86
7:7:150:VAL:HG12	7:7:151:VAL:HG23	1.58	0.86
15:H:146:VAL:HG12	15:H:155:PHE:HB3	1.57	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:77:TYR:HE2	20:M:159:LEU:HD13	1.39	0.86
20:M:203:ARG:HB3	20:M:206:LYS:HD2	1.54	0.85
22:O:79:VAL:CB	22:O:121:ASP:O	2.23	0.85
22:O:370:LEU:HD11	28:U:207:VAL:HG21	1.58	0.85
28:U:92:TRP:CD1	28:U:119:LEU:O	2.28	0.85
15:H:271:PHE:HE1	15:H:273:ARG:HB2	1.40	0.85
17:J:115:LEU:HD12	17:J:122:LEU:CD2	2.06	0.85
22:O:42:SER:OG	22:O:50:ASP:HB2	1.75	0.85
22:O:306:ARG:HG3	22:O:351:SER:HA	1.57	0.85
23:P:245:TYR:CD1	23:P:257:TRP:NE1	2.40	0.85
24:Q:202:ARG:HH21	24:Q:222:SER:CB	1.88	0.85
26:S:211:ARG:CZ	26:S:240:ASP:HB3	2.04	0.85
27:T:250:MET:O	27:T:251:HIS:CD2	2.29	0.85
33:Z:419:VAL:O	33:Z:422:ILE:HG12	1.75	0.85
11:D:96:HIS:CD2	11:D:100:LEU:CD1	2.58	0.85
19:L:111:GLU:HG2	19:L:117:TYR:HD2	1.41	0.85
22:O:214:ALA:HB3	22:O:248:TYR:OH	1.75	0.85
24:Q:90:LYS:HD3	24:Q:129:LYS:HZ1	1.41	0.85
24:Q:314:PHE:CD2	24:Q:339:TYR:HD1	1.94	0.85
16:I:222:TYR:CZ	16:I:349:LEU:HA	2.11	0.85
17:J:219:VAL:HB	18:K:281:ARG:NE	1.90	0.85
18:K:113:THR:HA	18:K:252:ARG:HH12	1.40	0.85
24:Q:174:LEU:CD1	24:Q:178:HIS:NE2	2.38	0.85
24:Q:311:LEU:CD1	24:Q:366:ILE:HG12	2.05	0.85
27:T:59:LYS:HD2	27:T:97:SER:O	1.75	0.85
27:T:224:ARG:O	27:T:225:ASN:CB	2.25	0.85
28:U:104:LEU:HB2	28:U:152:LYS:HG2	1.58	0.85
33:Z:737:ALA:CA	33:Z:775:MET:HE2	2.06	0.85
12:E:165:TYR:HB2	12:E:167:TYR:OH	1.75	0.85
17:J:241:ALA:HB1	17:J:287:ASN:ND2	1.91	0.85
6:6:10:ASP:OD1	6:6:11:PHE:CD1	2.28	0.85
13:F:65:LYS:HD3	13:F:222:PHE:HE2	1.42	0.85
16:I:252:LEU:CA	16:I:253:ILE:N	2.38	0.85
30:W:59:PRO:HG2	30:W:93:ILE:HG13	0.88	0.85
31:X:16:GLU:HB3	31:X:27:ILE:HB	1.56	0.85
12:E:157:HIS:CD2	12:E:170:LYS:HZ3	1.95	0.85
33:Z:286:VAL:O	33:Z:287:ARG:HB3	1.74	0.85
33:Z:550:PHE:CD1	33:Z:562:TRP:CZ3	2.64	0.85
4:4:43:MET:SD	4:4:45:PHE:HZ	1.98	0.85
19:L:132:ARG:HH22	19:L:156:MET:HG3	1.38	0.85
23:P:308:LEU:HD23	23:P:369:LEU:HD23	1.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:197:TYR:OH	27:T:199:PHE:HA	1.75	0.85
28:U:161:ILE:HG22	28:U:162:GLU:H	0.75	0.85
29:V:261:LEU:HD21	29:V:283:THR:CG2	2.06	0.85
33:Z:133:ASP:CB	33:Z:137:TYR:CE2	2.58	0.85
22:O:42:SER:O	22:O:46:THR:CG2	2.24	0.85
22:O:358:ILE:CG2	22:O:359:SER:N	2.39	0.85
23:P:311:TRP:HH2	23:P:338:TRP:HE1	1.23	0.85
25:R:320:LYS:HE3	25:R:324:ARG:CD	2.06	0.85
26:S:230:LYS:NZ	26:S:256:LYS:HE3	1.91	0.85
33:Z:737:ALA:HB1	33:Z:775:MET:SD	2.17	0.85
12:E:178:GLY:HA3	15:H:409:ARG:NH2	1.92	0.85
16:I:340:ARG:CZ	16:I:343:ARG:HG3	2.03	0.85
16:I:400:GLY:H	17:J:179:ILE:HD11	1.40	0.85
17:J:234:PHE:CZ	17:J:279:LEU:CD2	2.58	0.85
18:K:158:ILE:CG2	19:L:256:ILE:HG23	2.06	0.85
18:K:244:HIS:CE1	18:K:250:GLY:CA	2.60	0.85
24:Q:46:VAL:O	24:Q:50:ARG:CB	2.24	0.85
28:U:56:PHE:CD1	28:U:68:LEU:CD2	2.45	0.85
23:P:207:THR:OG1	23:P:217:LYS:NZ	2.09	0.84
28:U:19:LEU:CD1	28:U:127:GLN:OE1	2.25	0.84
29:V:165:ILE:HG21	29:V:189:ILE:HG21	1.58	0.84
31:X:35:ILE:CG1	31:X:124:LYS:HE2	2.05	0.84
1:1:66:TYR:HE2	1:1:73:PRO:CA	1.90	0.84
18:K:392:LEU:HG	18:K:396:ARG:NH1	1.92	0.84
22:O:26:PHE:HA	22:O:61:LEU:HD21	1.56	0.84
22:O:79:VAL:CB	22:O:122:HIS:CA	2.52	0.84
27:T:225:ASN:HD22	27:T:241:GLU:HA	1.40	0.84
33:Z:737:ALA:HA	33:Z:775:MET:HE2	1.59	0.84
11:D:78:LEU:HD23	16:I:436:TYR:HE1	1.42	0.84
16:I:281:ILE:HG22	16:I:284:ILE:CD1	2.06	0.84
29:V:238:LEU:HD11	29:V:242:LYS:HE3	1.59	0.84
30:W:37:PHE:CE1	30:W:49:VAL:CG1	2.55	0.84
31:X:41:GLU:HG3	31:X:45:PHE:HB2	1.60	0.84
9:B:139:HIS:ND1	9:B:145:PHE:CE2	2.45	0.84
17:J:69:GLY:N	18:K:144:ASN:HD22	1.72	0.84
24:Q:14:LEU:HD13	24:Q:26:VAL:CG2	2.05	0.84
24:Q:382:LEU:HD11	25:R:299:SER:CB	2.08	0.84
33:Z:55:ARG:CZ	33:Z:63:LEU:HD22	2.07	0.84
8:A:104:PHE:CE2	8:A:110:TYR:O	2.31	0.84
16:I:244:PHE:HE1	16:I:246:ARG:HG2	1.42	0.84
17:J:336:ASN:HD22	25:R:204:TRP:CD1	1.95	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:49:PHE:CE1	21:N:192:LEU:CD1	2.60	0.84
22:O:277:ILE:CB	22:O:279:ILE:H	1.88	0.84
24:Q:146:TYR:CD1	24:Q:151:TYR:HE1	1.95	0.84
24:Q:250:THR:HG23	24:Q:251:THR:N	1.93	0.84
28:U:92:TRP:CE3	28:U:110:PHE:CE2	2.65	0.84
24:Q:85:MET:HE2	24:Q:93:THR:HA	1.60	0.84
24:Q:130:ARG:NH2	24:Q:133:LEU:HD12	1.93	0.84
1:1:176:VAL:CG1	1:1:183:VAL:CG1	2.56	0.84
8:A:119:LYS:HG2	8:A:163:TYR:CE2	2.13	0.84
12:E:201:LEU:HD11	12:E:239:LEU:CG	2.06	0.84
20:M:75:LEU:HD11	20:M:77:TYR:CZ	2.11	0.84
33:Z:805:LEU:HB3	33:Z:893:PHE:CE1	2.13	0.84
9:B:66:LEU:HD12	9:B:71:ILE:O	1.77	0.84
24:Q:46:VAL:HG23	24:Q:50:ARG:CB	2.08	0.84
25:R:63:TYR:HH	25:R:92:ILE:C	1.84	0.84
25:R:342:LEU:HG	25:R:392:ARG:HH21	1.41	0.84
15:H:284:VAL:CG1	20:M:252:VAL:HG12	2.08	0.84
21:N:399:PHE:CD1	21:N:441:VAL:HG11	2.11	0.84
21:N:490:LEU:HD21	21:N:526:TYR:CD2	2.13	0.84
12:E:157:HIS:CD2	12:E:170:LYS:NZ	2.46	0.84
20:M:368:MET:SD	20:M:395:THR:HG23	2.15	0.84
22:O:25:LEU:O	22:O:29:PHE:CD2	2.31	0.84
22:O:233:LEU:CD2	22:O:236:HIS:ND1	2.41	0.84
25:R:308:LEU:HD12	25:R:334:ARG:HH12	1.38	0.84
12:E:88:MET:CE	12:E:142:LEU:HD11	2.07	0.83
15:H:261:ARG:HH22	15:H:273:ARG:NH2	1.74	0.83
21:N:21:LYS:CE	21:N:55:PHE:CE2	2.61	0.83
22:O:124:ASP:CB	22:O:127:LEU:HB2	2.07	0.83
22:O:223:LEU:HD11	22:O:277:ILE:CD1	2.07	0.83
22:O:344:VAL:O	22:O:345:ASN:CG	2.21	0.83
23:P:134:VAL:CG2	23:P:138:ARG:HH12	1.91	0.83
33:Z:400:ILE:HD12	33:Z:418:ALA:HB1	1.58	0.83
33:Z:563:VAL:HG11	33:Z:595:MET:HE3	1.59	0.83
1:1:19:ARG:NH1	1:1:29:ARG:CB	2.40	0.83
21:N:782:PHE:CD1	21:N:875:LEU:CD2	2.61	0.83
22:O:105:GLN:HA	22:O:108:GLU:OE2	1.78	0.83
27:T:264:MET:HE2	29:V:295:VAL:HG12	1.61	0.83
33:Z:72:LYS:HE2	33:Z:117:ASP:OD2	1.77	0.83
7:7:95:ARG:NH1	7:7:102:LEU:HD13	1.93	0.83
11:D:70:HIS:HD2	11:D:138:PHE:O	1.62	0.83
15:H:155:PHE:HE1	20:M:77:TYR:H	1.24	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:55:ILE:HD11	7:7:102:LEU:HD21	1.59	0.83
18:K:188:VAL:HA	18:K:313:LYS:NZ	1.92	0.83
22:O:42:SER:C	22:O:46:THR:HB	2.02	0.83
33:Z:55:ARG:HD3	33:Z:63:LEU:HB3	1.58	0.83
22:O:124:ASP:HB3	22:O:127:LEU:CB	2.07	0.83
22:O:306:ARG:HD2	22:O:352:TRP:N	1.93	0.83
23:P:308:LEU:CD2	23:P:369:LEU:HD23	2.09	0.83
30:W:172:LEU:CD2	30:W:185:ILE:HA	2.07	0.83
31:X:17:TYR:HE1	31:X:19:GLU:CD	1.86	0.83
3:3:59:ARG:NH2	10:C:99:LEU:CD1	2.31	0.83
5:5:6:PHE:CZ	5:5:13:ILE:HB	2.13	0.83
7:7:13:ILE:CG2	7:7:169:ILE:HG13	2.08	0.83
7:7:107:ILE:CD1	7:7:136:THR:HG23	2.07	0.83
19:L:370:LYS:HB2	19:L:374:PHE:HZ	1.38	0.83
23:P:221:TYR:HE2	23:P:244:ILE:HB	1.43	0.83
28:U:189:ARG:HH12	29:V:296:LEU:HD23	1.38	0.83
12:E:231:TYR:CE2	12:E:236:THR:CA	2.62	0.83
15:H:175:GLY:C	15:H:183:ILE:HB	2.02	0.83
18:K:240:SER:N	19:L:306:MET:HE1	1.93	0.83
22:O:306:ARG:CG	22:O:352:TRP:N	2.42	0.83
25:R:208:ASN:HD21	25:R:238:PHE:HB2	1.42	0.83
25:R:280:ILE:CD1	25:R:289:ILE:HG13	2.05	0.83
26:S:471:LEU:HD12	28:U:288:PHE:HZ	1.38	0.83
4:4:66:TYR:CD1	4:4:74:LEU:HD11	2.13	0.83
16:I:244:PHE:CE1	16:I:246:ARG:HG2	2.14	0.83
18:K:113:THR:CA	18:K:252:ARG:HH12	1.92	0.83
24:Q:85:MET:CE	24:Q:93:THR:HA	2.08	0.83
27:T:197:TYR:CD1	27:T:235:PHE:CD1	2.66	0.83
30:W:186:ALA:O	30:W:192:LEU:HB2	1.79	0.83
17:J:375:ILE:O	25:R:204:TRP:CD1	2.32	0.83
20:M:170:MET:HE1	20:M:269:LEU:HD12	1.59	0.83
22:O:43:GLU:CD	22:O:44:SER:HB2	2.02	0.83
27:T:193:THR:CG2	27:T:226:TRP:CZ2	2.62	0.83
33:Z:260:GLU:HG2	33:Z:611:THR:HG21	1.60	0.83
22:O:79:VAL:HG11	22:O:121:ASP:O	1.79	0.83
22:O:83:LEU:HD11	22:O:128:LEU:HD22	1.59	0.83
27:T:1:MET:CB	27:T:2:PRO:HD2	2.08	0.83
27:T:197:TYR:HE2	27:T:235:PHE:HE1	1.27	0.83
16:I:106:ILE:HD11	17:J:85:LEU:HD22	1.57	0.82
21:N:514:THR:HG22	21:N:546:LEU:CD1	2.08	0.82
24:Q:299:MET:CE	24:Q:335:PHE:CZ	2.62	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:176:LEU:HD11	26:S:179:ILE:HB	1.61	0.82
28:U:92:TRP:CE2	28:U:120:LEU:HD13	2.13	0.82
33:Z:924:LYS:HA	33:Z:959:HIS:CE1	2.09	0.82
15:H:167:ASP:HB3	15:H:186:PRO:HG2	1.60	0.82
18:K:254:VAL:HG13	18:K:258:PHE:HE1	1.41	0.82
22:O:358:ILE:HG22	22:O:360:GLY:N	1.92	0.82
23:P:134:VAL:HG23	23:P:138:ARG:HH12	1.43	0.82
31:X:8:ILE:CG2	31:X:124:LYS:HD2	2.08	0.82
10:C:160:TRP:CZ3	10:C:163:ILE:CD1	2.62	0.82
13:F:166:GLN:HB3	20:M:381:ARG:CZ	2.09	0.82
16:I:262:ARG:HB3	17:J:223:ILE:HD12	1.60	0.82
17:J:219:VAL:HG21	18:K:284:ALA:HB2	1.53	0.82
22:O:130:ASP:O	22:O:133:ILE:HG22	1.79	0.82
25:R:31:PHE:HZ	25:R:182:ASN:ND2	1.74	0.82
27:T:197:TYR:CE2	27:T:199:PHE:C	2.58	0.82
5:5:135:PHE:HE2	5:5:163:ALA:CB	1.90	0.82
10:C:29:ILE:HD13	10:C:134:SER:HB3	1.61	0.82
10:C:42:ASP:HA	10:C:218:LYS:NZ	1.94	0.82
11:D:96:HIS:NE2	11:D:100:LEU:CD1	2.42	0.82
12:E:88:MET:HE2	12:E:142:LEU:HD11	1.61	0.82
17:J:183:LYS:HA	17:J:286:LYS:HE3	1.61	0.82
20:M:313:ASP:HA	20:M:316:SER:OG	1.79	0.82
22:O:79:VAL:HB	22:O:122:HIS:CA	2.10	0.82
33:Z:491:LEU:HD11	33:Z:900:LEU:CD1	2.09	0.82
17:J:219:VAL:O	18:K:281:ARG:CD	2.19	0.82
29:V:113:GLY:HA2	29:V:118:LEU:HD22	1.59	0.82
29:V:258:GLU:HA	29:V:261:LEU:HD12	1.60	0.82
33:Z:491:LEU:HD13	33:Z:900:LEU:HD12	1.60	0.82
13:F:198:SER:HB3	13:F:206:LEU:HD22	1.60	0.82
18:K:347:ARG:NE	24:Q:215:VAL:HG13	1.94	0.82
20:M:163:PHE:CD1	20:M:261:LYS:HE3	2.14	0.82
23:P:196:ALA:HB1	23:P:227:ILE:CD1	2.08	0.82
23:P:234:TYR:CD2	23:P:267:PHE:CD1	2.68	0.82
23:P:234:TYR:CE2	23:P:267:PHE:CE1	2.67	0.82
23:P:241:LEU:O	23:P:244:ILE:CG2	2.27	0.82
26:S:421:TYR:CD2	27:T:157:TYR:HB2	2.13	0.82
27:T:23:CYS:O	27:T:27:LEU:HG	1.79	0.82
28:U:223:HIS:ND1	28:U:224:THR:CB	2.42	0.82
29:V:114:PHE:CE1	29:V:118:LEU:O	2.31	0.82
31:X:17:TYR:HE1	31:X:19:GLU:OE1	1.62	0.82
7:7:-3:VAL:CG1	7:7:49:ILE:HB	2.09	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:37:LYS:HE3	18:K:58:TYR:CZ	2.15	0.82
21:N:277:LEU:CB	21:N:287:LEU:CD2	2.54	0.82
23:P:132:VAL:CA	23:P:171:MET:CE	2.31	0.82
24:Q:46:VAL:C	24:Q:50:ARG:HB3	2.05	0.82
25:R:308:LEU:HD13	25:R:334:ARG:NE	1.93	0.82
30:W:5:ALA:CB	30:W:103:ASN:CB	2.50	0.82
12:E:88:MET:CE	12:E:142:LEU:HD12	2.08	0.82
12:E:165:TYR:HB2	12:E:167:TYR:HE1	1.41	0.82
13:F:105:VAL:HG11	13:F:143:HIS:HD1	1.45	0.82
21:N:365:PHE:HZ	21:N:406:TYR:HB2	1.44	0.82
24:Q:382:LEU:CD1	25:R:299:SER:HB2	2.09	0.82
25:R:214:TYR:HH	25:R:226:GLU:HB3	1.45	0.82
27:T:197:TYR:CE2	27:T:200:LEU:N	2.47	0.82
18:K:49:PHE:HD1	21:N:192:LEU:CD1	1.91	0.82
18:K:240:SER:HB2	19:L:306:MET:CE	2.10	0.82
22:O:137:TYR:HB3	22:O:149:LEU:HD11	1.61	0.82
33:Z:446:GLU:HG3	33:Z:484:LYS:HZ2	1.42	0.82
33:Z:471:LEU:HG	33:Z:497:PHE:CZ	2.15	0.82
33:Z:535:VAL:HG23	33:Z:572:ILE:O	1.80	0.82
13:F:65:LYS:CD	13:F:222:PHE:CE2	2.62	0.82
21:N:21:LYS:CE	21:N:55:PHE:CZ	2.62	0.82
23:P:241:LEU:C	23:P:244:ILE:HG22	2.04	0.82
24:Q:186:HIS:O	24:Q:189:ARG:NH2	2.12	0.82
26:S:471:LEU:HD13	28:U:288:PHE:CZ	2.12	0.82
33:Z:397:ASP:HB3	33:Z:425:ILE:HD13	1.61	0.82
1:1:137:TYR:CZ	1:1:157:HIS:HD2	1.96	0.81
22:O:80:LYS:CE	22:O:81:TYR:OH	2.28	0.81
22:O:341:ILE:HG13	22:O:348:VAL:HA	1.60	0.81
23:P:76:ASN:HD21	23:P:118:VAL:HG21	1.43	0.81
23:P:234:TYR:CE2	23:P:267:PHE:CD1	2.68	0.81
23:P:270:LEU:HD22	23:P:340:ASP:HB2	1.62	0.81
31:X:66:LEU:CD1	31:X:99:PHE:HZ	1.91	0.81
33:Z:218:GLU:HB2	33:Z:248:TYR:CE2	2.15	0.81
33:Z:422:ILE:HB	33:Z:426:TYR:HE2	1.45	0.81
1:1:19:ARG:NH2	1:1:26:ILE:HG21	1.95	0.81
23:P:184:MET:SD	23:P:223:LEU:HD13	2.19	0.81
8:A:84:ASN:ND2	8:A:171:THR:HG21	1.95	0.81
19:L:178:ILE:CD1	19:L:230:LEU:HD22	2.09	0.81
20:M:357:ARG:NH2	20:M:386:PHE:H	1.78	0.81
21:N:664:LEU:O	21:N:706:MET:HE1	1.80	0.81
22:O:73:ILE:HG23	22:O:74:ASN:N	1.88	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:7:LYS:HG3	24:Q:30:LEU:CD1	2.10	0.81
25:R:58:GLU:OE2	25:R:105:LYS:HB3	1.80	0.81
25:R:63:TYR:OH	25:R:92:ILE:O	1.97	0.81
26:S:341:SER:O	26:S:344:PRO:HG2	1.80	0.81
28:U:94:HIS:CE1	28:U:96:GLY:H	1.97	0.81
33:Z:493:LEU:HD12	33:Z:497:PHE:CD2	2.16	0.81
33:Z:970:TYR:OH	33:Z:992:GLU:O	1.99	0.81
9:B:139:HIS:ND1	9:B:145:PHE:CZ	2.48	0.81
19:L:309:LEU:HD21	19:L:342:ARG:HD3	1.62	0.81
25:R:422:ARG:NH1	26:S:301:PRO:CG	2.39	0.81
28:U:283:ARG:NH1	29:V:284:ALA:CA	2.43	0.81
33:Z:530:LEU:HD12	33:Z:534:PHE:CD2	2.15	0.81
17:J:142:VAL:HG13	17:J:204:HIS:CE1	2.16	0.81
19:L:227:GLY:N	20:M:339:ARG:HH21	1.76	0.81
20:M:62:ILE:HG13	20:M:66:LYS:HE3	1.63	0.81
25:R:33:LEU:HD12	25:R:43:ARG:HG3	1.62	0.81
26:S:421:TYR:HD2	27:T:157:TYR:HB2	1.45	0.81
25:R:94:PHE:HE2	25:R:96:GLN:HG2	1.45	0.81
28:U:35:GLY:C	28:U:93:TYR:HB3	2.04	0.81
5:5:32:LYS:HD2	5:5:45:MET:HE1	1.61	0.81
10:C:106:ILE:HD13	10:C:111:LEU:HB2	1.62	0.81
14:G:122:HIS:CD2	14:G:128:VAL:HG11	2.15	0.81
22:O:15:ARG:HD3	22:O:72:LYS:O	1.80	0.81
23:P:140:THR:HG21	23:P:163:LEU:CD2	2.10	0.81
24:Q:329:GLU:CD	24:Q:332:ARG:HH21	1.88	0.81
28:U:283:ARG:NE	29:V:284:ALA:HA	1.96	0.81
8:A:39:ASN:HD21	8:A:58:LYS:HD2	1.44	0.81
13:F:65:LYS:CD	13:F:222:PHE:CD2	2.63	0.81
27:T:224:ARG:O	27:T:225:ASN:CG	2.24	0.81
28:U:92:TRP:CZ3	28:U:106:ILE:CG2	2.63	0.81
3:3:26:GLY:HA3	3:3:174:TRP:CE2	2.16	0.81
5:5:6:PHE:CZ	5:5:13:ILE:HG13	2.16	0.81
23:P:308:LEU:CD2	23:P:369:LEU:CD2	2.59	0.81
25:R:396:LYS:HG2	25:R:400:TYR:CE2	2.16	0.81
26:S:230:LYS:CE	26:S:256:LYS:HE3	2.11	0.81
28:U:109:LEU:HD11	30:W:58:ASN:O	1.80	0.81
33:Z:147:GLU:HA	33:Z:210:TYR:CE1	2.16	0.81
10:C:213:PHE:HD2	10:C:230:PHE:CD2	1.99	0.81
18:K:392:LEU:HG	18:K:396:ARG:HH12	1.44	0.81
21:N:124:TYR:HB2	21:N:162:ARG:HG3	1.62	0.81
30:W:20:ASP:O	30:W:21:PHE:HB2	1.81	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:103:TYR:CD1	33:Z:116:ALA:CB	2.63	0.81
2:2:8:PHE:CZ	2:2:11:GLY:CA	2.65	0.80
8:A:52:VAL:CG2	8:A:202:VAL:HG12	2.11	0.80
16:I:251:GLU:C	16:I:253:ILE:N	2.38	0.80
21:N:70:TYR:CE2	26:S:219:LYS:HE2	2.16	0.80
22:O:38:TRP:HE3	22:O:53:LYS:CD	1.91	0.80
22:O:356:ARG:NH2	22:O:362:GLN:HG3	1.95	0.80
24:Q:24:GLU:OE2	24:Q:77:PHE:HE2	1.63	0.80
24:Q:27:TYR:OH	24:Q:54:GLN:HG3	1.81	0.80
33:Z:193:PHE:CG	33:Z:196:SER:HB2	2.15	0.80
9:B:178:ARG:HH12	9:B:194:LEU:HB3	1.45	0.80
15:H:251:PRO:O	15:H:254:THR:CG2	2.29	0.80
22:O:210:ARG:HH21	22:O:242:ILE:C	1.87	0.80
27:T:241:GLU:HA	27:T:246:GLU:CB	2.10	0.80
28:U:223:HIS:CE1	28:U:224:THR:CB	2.64	0.80
33:Z:218:GLU:HB3	33:Z:248:TYR:OH	1.81	0.80
24:Q:243:PHE:CE1	24:Q:287:THR:HG22	2.15	0.80
18:K:346:ARG:NE	18:K:372:ILE:HG21	1.97	0.80
22:O:188:PHE:HZ	22:O:216:ASP:HB3	1.46	0.80
23:P:245:TYR:HE1	23:P:257:TRP:HZ2	1.29	0.80
24:Q:202:ARG:NH2	24:Q:222:SER:CB	2.44	0.80
15:H:172:MET:HE3	16:I:129:TYR:CG	2.16	0.80
17:J:124:LYS:HZ2	18:K:103:ILE:HG21	1.44	0.80
19:L:370:LYS:CB	19:L:374:PHE:CZ	2.64	0.80
22:O:80:LYS:CD	22:O:81:TYR:CE2	2.64	0.80
22:O:119:SER:HB2	22:O:166:ARG:HD3	1.63	0.80
23:P:234:TYR:CD2	23:P:267:PHE:CZ	2.69	0.80
23:P:303:PHE:O	23:P:348:HIS:CD2	2.34	0.80
23:P:395:ARG:HE	24:Q:357:VAL:HA	1.45	0.80
26:S:398:THR:N	26:S:447:GLU:OE1	2.13	0.80
28:U:92:TRP:HE3	28:U:110:PHE:CE2	1.99	0.80
3:3:42:LEU:HD22	3:3:78:PHE:HZ	1.46	0.80
14:G:166:LYS:NZ	14:G:206:ASN:OD1	2.14	0.80
19:L:132:ARG:HH21	19:L:149:ASP:CG	1.90	0.80
22:O:103:LYS:O	22:O:129:ILE:HG13	1.81	0.80
22:O:338:LYS:O	22:O:350:ILE:HG23	1.81	0.80
25:R:208:ASN:ND2	25:R:238:PHE:HB2	1.97	0.80
28:U:19:LEU:HD12	28:U:127:GLN:OE1	1.82	0.80
33:Z:438:LYS:O	33:Z:442:VAL:HG23	1.81	0.80
13:F:143:HIS:CE1	13:F:145:LEU:HB2	2.16	0.80
24:Q:151:TYR:CZ	24:Q:187:LYS:HG3	2.17	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:166:LEU:O	17:J:174:PHE:HE1	1.63	0.80
23:P:281:ILE:HG13	23:P:300:VAL:HG21	1.64	0.80
24:Q:249:LEU:O	24:Q:250:THR:CG2	2.29	0.80
27:T:190:ALA:CB	27:T:224:ARG:CZ	2.60	0.80
15:H:175:GLY:CA	15:H:183:ILE:HB	2.12	0.80
16:I:361:ILE:CG2	16:I:392:ILE:HG21	2.11	0.80
25:R:421:VAL:O	25:R:422:ARG:CB	2.30	0.80
25:R:422:ARG:HH22	26:S:301:PRO:CD	1.94	0.80
30:W:5:ALA:CA	30:W:103:ASN:HD22	1.94	0.80
31:X:75:TRP:HD1	31:X:87:PHE:CE1	1.85	0.80
1:1:19:ARG:NH1	1:1:29:ARG:CA	2.45	0.80
8:A:174:LYS:CD	8:A:214:LEU:HG	2.12	0.80
8:A:174:LYS:HD2	8:A:214:LEU:HG	1.62	0.80
14:G:223:THR:HG23	14:G:228:LYS:HD2	1.63	0.80
16:I:339:ILE:HG21	16:I:347:LYS:CE	2.11	0.80
21:N:190:LEU:HD11	21:N:228:VAL:HG23	1.63	0.80
22:O:344:VAL:HG21	23:P:361:THR:HG22	1.62	0.80
24:Q:272:LEU:HD23	24:Q:274:LEU:CD1	2.10	0.80
33:Z:805:LEU:HD22	33:Z:893:PHE:CE1	2.17	0.80
9:B:32:VAL:HG11	9:B:48:GLU:HB2	1.62	0.79
15:H:318:ARG:NH1	15:H:364:ALA:CB	2.45	0.79
18:K:184:ILE:HD12	18:K:222:LEU:HD13	1.64	0.79
21:N:320:SER:CB	21:N:686:ILE:HG22	2.11	0.79
22:O:79:VAL:HB	22:O:121:ASP:O	1.81	0.79
22:O:196:LEU:HB2	22:O:213:LEU:HD21	1.64	0.79
24:Q:90:LYS:HD3	24:Q:129:LYS:NZ	1.96	0.79
28:U:100:ARG:O	28:U:152:LYS:HD3	1.81	0.79
30:W:1:MET:N	30:W:44:ASN:HD21	1.80	0.79
33:Z:401:VAL:HG22	33:Z:426:TYR:HH	1.46	0.79
8:A:195:ASN:O	8:A:196:GLU:CG	2.31	0.79
24:Q:46:VAL:O	24:Q:47:ASP:OD1	2.00	0.79
33:Z:147:GLU:HA	33:Z:210:TYR:OH	1.82	0.79
21:N:33:ASP:HA	21:N:71:ASN:ND2	1.96	0.79
21:N:326:SER:N	29:V:182:LYS:HG3	1.97	0.79
1:1:176:VAL:CG1	1:1:183:VAL:HG13	2.10	0.79
3:3:61:LYS:NZ	3:3:85:SER:HB3	1.97	0.79
14:G:140:VAL:HB	14:G:220:LEU:HD11	1.64	0.79
15:H:271:PHE:CE1	15:H:273:ARG:HB2	2.17	0.79
16:I:75:PHE:HD2	16:I:76:VAL:CG2	1.93	0.79
20:M:379:LEU:HD22	20:M:415:PHE:HD1	1.47	0.79
21:N:24:ALA:O	21:N:28:ILE:CG1	2.27	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:596:LEU:CD1	21:N:717:LEU:HD22	2.12	0.79
22:O:280:LEU:HA	22:O:283:HIS:HB3	1.62	0.79
1:1:190:PRO:HA	1:1:193:TYR:HE1	1.47	0.79
13:F:198:SER:HA	13:F:206:LEU:HD11	1.64	0.79
15:H:334:LEU:HD23	20:M:282:GLU:HG2	1.65	0.79
23:P:234:TYR:CA	23:P:267:PHE:CE2	2.65	0.79
33:Z:147:GLU:CA	33:Z:210:TYR:OH	2.31	0.79
1:1:122:LEU:HD21	7:7:28:PHE:CD1	2.16	0.79
7:7:-4:ILE:HG13	7:7:-3:VAL:HG23	1.63	0.79
7:7:145:PRO:HA	7:7:148:ARG:HE	1.48	0.79
21:N:112:GLU:O	21:N:116:GLN:HG2	1.83	0.79
23:P:308:LEU:HD23	23:P:369:LEU:CA	2.12	0.79
24:Q:59:LEU:HD13	24:Q:103:LYS:HD2	1.62	0.79
25:R:31:PHE:HZ	25:R:182:ASN:HD22	1.29	0.79
25:R:320:LYS:CD	25:R:324:ARG:HD2	2.13	0.79
27:T:226:TRP:CD1	27:T:241:GLU:OE1	2.36	0.79
28:U:127:GLN:OE1	29:V:208:LYS:HB3	1.83	0.79
1:1:45:ARG:NH2	1:1:53:GLN:CA	2.44	0.79
13:F:145:LEU:HD11	13:F:153:VAL:CG1	2.12	0.79
21:N:25:LEU:HD13	21:N:57:ASP:HB2	1.60	0.79
22:O:344:VAL:HB	23:P:361:THR:HG23	1.63	0.79
22:O:377:VAL:HG13	28:U:193:GLN:NE2	1.96	0.79
22:O:387:ARG:NH2	27:T:258:ASN:HB3	1.97	0.79
27:T:62:LEU:HD12	27:T:88:TYR:HE2	1.46	0.79
15:H:105:ILE:HG21	15:H:145:TYR:O	1.82	0.79
21:N:19:SER:HB3	27:T:35:ILE:HG23	1.63	0.79
21:N:302:PHE:HA	21:N:871:MET:HE1	1.63	0.79
23:P:302:LEU:CB	23:P:310:ARG:HE	1.86	0.79
24:Q:297:ASP:HB3	24:Q:321:TYR:OH	1.83	0.79
26:S:188:TYR:CZ	26:S:210:LEU:HD22	2.18	0.79
27:T:62:LEU:CD1	27:T:88:TYR:HE2	1.95	0.79
30:W:25:ARG:CD	30:W:144:PHE:CE2	2.64	0.79
7:7:93:TYR:HD1	7:7:96:ARG:HE	1.30	0.79
10:C:149:TYR:CZ	11:D:59:ILE:HB	2.18	0.79
17:J:169:LYS:NZ	17:J:206:THR:HA	1.97	0.79
17:J:208:CYS:SG	17:J:242:PRO:HB2	2.22	0.79
19:L:173:PHE:CZ	19:L:177:GLU:HB3	2.17	0.79
22:O:277:ILE:HG22	22:O:278:PRO:CD	2.13	0.79
16:I:244:PHE:CE1	16:I:246:ARG:CZ	2.64	0.79
19:L:132:ARG:NH2	19:L:156:MET:CG	2.46	0.79
22:O:340:SER:HB3	23:P:358:SER:HB2	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:130:GLN:O	25:R:134:TRP:CD1	2.36	0.79
29:V:112:PRO:HB2	29:V:114:PHE:CE1	2.18	0.79
31:X:85:ARG:HH21	31:X:115:SER:CA	1.96	0.79
33:Z:64:TYR:OH	33:Z:115:LEU:HB2	1.82	0.79
18:K:123:LEU:HD12	18:K:126:LEU:CD1	2.13	0.78
20:M:361:LEU:HD13	20:M:376:TRP:HE3	1.46	0.78
22:O:28:GLN:O	22:O:31:LYS:HB3	1.83	0.78
25:R:183:ASP:CG	25:R:185:LEU:H	1.91	0.78
28:U:32:ARG:NH2	28:U:56:PHE:HZ	1.79	0.78
28:U:283:ARG:NH1	29:V:283:THR:C	2.41	0.78
29:V:57:PHE:CB	29:V:63:VAL:HA	2.13	0.78
33:Z:218:GLU:HG2	33:Z:219:ASP:N	1.98	0.78
1:1:80:SER:HB2	14:G:103:LYS:HG3	1.64	0.78
8:A:19:PHE:CE1	9:B:128:ARG:NH1	2.51	0.78
15:H:431:ILE:CG2	16:I:196:GLU:OE2	2.31	0.78
18:K:168:ASP:N	19:L:315:PHE:CE1	2.52	0.78
20:M:75:LEU:HG	20:M:77:TYR:HD1	1.39	0.78
24:Q:7:LYS:CG	24:Q:30:LEU:HD13	2.12	0.78
33:Z:318:LYS:HE2	33:Z:496:ALA:C	2.07	0.78
4:4:69:ARG:HG3	11:D:90:ARG:NH1	1.99	0.78
15:H:249:TYR:CZ	15:H:376:GLU:HA	2.18	0.78
22:O:373:TRP:CZ3	28:U:233:PHE:CG	2.70	0.78
28:U:66:TRP:CZ2	28:U:109:LEU:HD12	2.18	0.78
29:V:117:TRP:HZ2	29:V:196:TYR:CA	1.94	0.78
33:Z:321:PHE:CD2	33:Z:351:PRO:HD3	2.17	0.78
26:S:421:TYR:CZ	27:T:158:GLN:HB2	2.19	0.78
27:T:70:ILE:HG21	27:T:173:GLU:HB3	1.66	0.78
7:7:8:TYR:CZ	7:7:11:GLY:CA	2.67	0.78
15:H:340:LEU:HD11	15:H:370:ARG:HH11	1.47	0.78
15:H:431:ILE:HG21	16:I:196:GLU:OE2	1.84	0.78
17:J:169:LYS:CE	17:J:206:THR:HA	2.14	0.78
17:J:169:LYS:HE2	17:J:206:THR:HA	1.65	0.78
17:J:219:VAL:HG21	18:K:284:ALA:HA	1.51	0.78
18:K:200:GLN:C	25:R:204:TRP:CZ2	2.57	0.78
21:N:508:THR:HG21	21:N:513:ILE:CG2	2.12	0.78
27:T:82:PHE:HA	27:T:109:TYR:OH	1.83	0.78
12:E:201:LEU:HB3	12:E:243:LEU:HD22	1.66	0.78
20:M:77:TYR:HE2	20:M:159:LEU:HD11	1.40	0.78
21:N:421:ASP:CA	21:N:424:LYS:NZ	2.28	0.78
22:O:4:ASN:HB2	22:O:39:PHE:CD1	2.18	0.78
22:O:233:LEU:HD23	22:O:236:HIS:CG	2.18	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:471:LEU:CB	33:Z:497:PHE:CZ	2.67	0.78
33:Z:610:GLY:O	33:Z:748:LEU:CD2	2.32	0.78
22:O:277:ILE:HG23	22:O:279:ILE:HG12	1.65	0.78
24:Q:265:MET:HE3	24:Q:281:ILE:CD1	2.13	0.78
27:T:190:ALA:HB2	27:T:224:ARG:NE	1.97	0.78
29:V:117:TRP:CZ2	29:V:196:TYR:CB	2.65	0.78
1:1:-6:GLY:HA2	2:2:116:HIS:CD2	2.19	0.78
3:3:12:VAL:HG22	3:3:103:ILE:CD1	2.10	0.78
7:7:121:TYR:CE2	7:7:136:THR:HG22	2.18	0.78
10:C:180:TYR:CE2	10:C:182:ASP:HA	2.18	0.78
17:J:375:ILE:HD12	25:R:204:TRP:HE3	1.45	0.78
22:O:306:ARG:CD	22:O:352:TRP:N	2.47	0.78
27:T:193:THR:HG22	27:T:226:TRP:CZ2	2.18	0.78
33:Z:786:SER:O	33:Z:787:ASP:OD2	2.00	0.78
33:Z:985:LYS:HB2	33:Z:991:GLU:OE2	1.83	0.78
8:A:104:PHE:HE2	8:A:111:ASP:O	1.65	0.78
15:H:249:TYR:OH	15:H:376:GLU:HB3	1.84	0.78
15:H:312:ASP:HA	15:H:360:THR:HG21	1.66	0.78
15:H:340:LEU:CD1	15:H:370:ARG:NH1	2.47	0.78
24:Q:405:GLN:O	25:R:396:LYS:HD3	1.84	0.78
29:V:118:LEU:HD11	29:V:140:VAL:HB	1.59	0.78
29:V:231:GLU:O	29:V:235:GLU:CB	2.32	0.78
31:X:46:TRP:CZ2	31:X:132:SER:CA	2.65	0.78
33:Z:218:GLU:HG2	33:Z:219:ASP:H	1.46	0.78
1:1:75:THR:HB	1:1:111:TYR:CE1	2.19	0.78
2:2:87:LEU:CD2	2:2:94:ILE:HD11	2.15	0.78
3:3:-2:ASN:C	3:3:19:ARG:HH11	1.89	0.78
11:D:159:TRP:CE3	12:E:59:LEU:HD13	2.19	0.78
20:M:252:VAL:HG21	20:M:285:ALA:HB1	1.66	0.78
25:R:94:PHE:CE2	25:R:95:ASP:O	2.37	0.78
28:U:92:TRP:CE3	28:U:110:PHE:CD2	2.72	0.78
30:W:21:PHE:CB	30:W:25:ARG:HA	2.13	0.78
8:A:220:LYS:CD	8:A:238:ALA:O	2.32	0.77
18:K:254:VAL:HG11	18:K:299:LEU:CD2	2.12	0.77
21:N:406:TYR:CD1	21:N:448:LEU:CD1	2.66	0.77
24:Q:272:LEU:CD2	24:Q:274:LEU:HD12	2.14	0.77
26:S:181:ALA:O	26:S:236:LEU:HD21	1.84	0.77
31:X:95:GLU:HB3	31:X:97:TYR:CE1	2.19	0.77
33:Z:124:MET:HE1	33:Z:153:TYR:HA	1.66	0.77
1:1:122:LEU:CD1	7:7:28:PHE:HE1	1.97	0.77
4:4:26:VAL:CG1	4:4:29:ASP:HB3	2.14	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:4:43:MET:HG3	4:4:45:PHE:CE2	2.18	0.77
15:H:183:ILE:HG22	15:H:183:ILE:O	1.83	0.77
15:H:198:MET:HE2	15:H:272:ILE:CG2	2.14	0.77
18:K:346:ARG:NH2	18:K:372:ILE:HD13	1.99	0.77
18:K:393:ARG:NH2	18:K:414:GLN:OE1	2.17	0.77
18:K:423:LYS:HG2	18:K:424:PHE:CD2	2.18	0.77
22:O:277:ILE:HG21	22:O:279:ILE:CA	2.13	0.77
27:T:193:THR:HB	27:T:226:TRP:CH2	2.19	0.77
28:U:223:HIS:CG	28:U:224:THR:H	2.02	0.77
14:G:73:ILE:CG1	14:G:108:ILE:CD1	2.61	0.77
14:G:182:HIS:CD2	14:G:186:LEU:HD11	2.19	0.77
15:H:420:ARG:HD2	16:I:343:ARG:HH12	1.49	0.77
17:J:167:PRO:HA	17:J:174:PHE:CD1	2.18	0.77
25:R:208:ASN:HD21	25:R:238:PHE:CB	1.96	0.77
27:T:155:GLY:O	27:T:156:SER:HB2	1.83	0.77
28:U:107:ASN:ND2	28:U:111:LYS:HE3	1.99	0.77
28:U:223:HIS:CE1	28:U:224:THR:HG1	1.85	0.77
33:Z:570:LEU:HD12	33:Z:599:ILE:HG21	1.66	0.77
33:Z:758:LEU:CD2	33:Z:791:LYS:HD3	2.14	0.77
14:G:73:ILE:CD1	14:G:108:ILE:HD13	2.14	0.77
22:O:210:ARG:CZ	22:O:242:ILE:HA	2.02	0.77
22:O:306:ARG:CB	22:O:350:ILE:O	2.33	0.77
25:R:191:LEU:HB2	25:R:213:TYR:CE2	2.18	0.77
29:V:57:PHE:HB3	29:V:63:VAL:HA	1.66	0.77
30:W:180:LEU:HD23	30:W:183:GLU:OE1	1.83	0.77
21:N:479:GLU:CB	21:N:512:ASN:ND2	2.42	0.77
27:T:112:ASN:HA	27:T:177:PHE:HE2	1.50	0.77
28:U:92:TRP:CZ2	28:U:120:LEU:HD13	2.20	0.77
8:A:46:ARG:HE	8:A:152:PRO:HB2	1.50	0.77
14:G:42:ASN:HD21	14:G:183:PRO:HG2	1.49	0.77
19:L:236:ALA:HB2	19:L:277:ILE:HD12	1.64	0.77
20:M:221:TYR:HE1	20:M:346:LYS:CG	1.97	0.77
27:T:240:LYS:HA	27:T:245:TYR:HB3	1.66	0.77
31:X:35:ILE:HG13	31:X:124:LYS:HE2	1.66	0.77
33:Z:518:LEU:HD22	33:Z:562:TRP:HB2	1.65	0.77
16:I:250:SER:O	16:I:253:ILE:CB	2.30	0.77
18:K:90:GLN:HE22	18:K:143:SER:CB	1.97	0.77
18:K:236:ARG:NH2	19:L:310:THR:HG23	1.97	0.77
20:M:361:LEU:HB3	20:M:376:TRP:CE3	2.19	0.77
22:O:66:VAL:CG1	22:O:106:PHE:HE1	1.91	0.77
22:O:250:TRP:CD1	22:O:270:ILE:HA	2.18	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:182:TYR:O	30:W:183:GLU:CB	2.32	0.77
1:1:-8:LYS:HE2	2:2:88:PHE:CE1	2.19	0.77
7:7:13:ILE:HG21	7:7:169:ILE:HG13	1.66	0.77
13:F:76:GLY:O	20:M:433:TYR:CE2	2.36	0.77
15:H:253:GLY:CA	16:I:314:ASP:OD1	2.33	0.77
33:Z:361:HIS:NE2	33:Z:861:THR:HB	1.99	0.77
4:4:149:PRO:O	4:4:150:ASP:HB2	1.85	0.77
12:E:109:VAL:HB	12:E:156:PHE:CE1	2.19	0.77
12:E:165:TYR:CB	12:E:167:TYR:CZ	2.67	0.77
14:G:196:ALA:O	14:G:200:TYR:CD2	2.38	0.77
18:K:155:ASP:O	19:L:126:ARG:NH2	2.18	0.77
18:K:168:ASP:HB2	19:L:315:PHE:CD1	2.18	0.77
23:P:245:TYR:CE1	23:P:257:TRP:HZ2	2.03	0.77
30:W:168:THR:HG22	30:W:169:SER:CB	2.15	0.77
33:Z:429:ASN:O	33:Z:430:LEU:CG	2.31	0.77
7:7:85:PHE:CE2	7:7:120:ARG:HD3	2.19	0.77
16:I:175:LYS:O	17:J:282:PHE:CE2	2.37	0.77
20:M:385:GLU:HB3	20:M:426:LYS:HZ3	1.37	0.77
23:P:135:GLU:CG	23:P:138:ARG:NH2	2.47	0.77
24:Q:331:THR:HG22	24:Q:335:PHE:HE2	1.45	0.77
5:5:6:PHE:CZ	5:5:13:ILE:CG1	2.68	0.76
8:A:220:LYS:HD2	8:A:238:ALA:C	2.10	0.76
21:N:70:TYR:HE2	26:S:219:LYS:CE	1.98	0.76
24:Q:99:THR:CG2	24:Q:103:LYS:HE2	2.14	0.76
25:R:214:TYR:CE2	25:R:230:LEU:HD12	2.20	0.76
25:R:354:ALA:HB2	25:R:364:LEU:HD23	1.67	0.76
26:S:230:LYS:NZ	26:S:256:LYS:CE	2.47	0.76
26:S:471:LEU:HB3	28:U:288:PHE:CE1	2.20	0.76
27:T:93:ASN:ND2	27:T:94:HIS:HD2	1.81	0.76
31:X:66:LEU:CD1	31:X:97:TYR:HB2	2.14	0.76
33:Z:60:ASP:OD1	33:Z:63:LEU:HD12	1.85	0.76
15:H:172:MET:CE	16:I:129:TYR:CG	2.68	0.76
15:H:172:MET:HE1	16:I:129:TYR:CD2	1.96	0.76
16:I:281:ILE:HG22	16:I:284:ILE:HG13	1.67	0.76
24:Q:51:ARG:HH21	24:Q:92:LYS:HB3	1.50	0.76
33:Z:103:TYR:HA	33:Z:112:LYS:HG2	1.66	0.76
33:Z:452:LEU:HD11	33:Z:485:ILE:HG23	1.67	0.76
9:B:224:TYR:OH	9:B:228:PRO:HA	1.84	0.76
18:K:104:ASP:OD1	18:K:107:THR:HB	1.85	0.76
22:O:342:ASP:OD1	23:P:358:SER:HB3	1.84	0.76
24:Q:222:SER:O	24:Q:226:HIS:CD2	2.37	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:229:VAL:CG2	27:T:234:TYR:HE1	1.96	0.76
27:T:250:MET:O	27:T:251:HIS:CG	2.38	0.76
33:Z:857:LEU:HD23	33:Z:858:GLY:N	1.99	0.76
12:E:98:THR:O	12:E:102:TYR:HD1	1.67	0.76
19:L:259:SER:HB2	19:L:303:ARG:CZ	2.16	0.76
28:U:11:ALA:HB3	28:U:14:VAL:HG23	1.68	0.76
29:V:261:LEU:CG	29:V:283:THR:HG21	2.15	0.76
1:1:19:ARG:HH11	1:1:29:ARG:HA	1.47	0.76
6:6:94:PHE:CE1	7:7:99:MET:HE2	2.15	0.76
9:B:119:GLN:HG3	9:B:123:GLN:HE21	1.48	0.76
21:N:265:ALA:HB1	21:N:269:LEU:HD23	1.67	0.76
28:U:66:TRP:O	30:W:93:ILE:CD1	2.33	0.76
31:X:8:ILE:HG21	31:X:124:LYS:HD2	1.65	0.76
33:Z:190:THR:H	33:Z:193:PHE:HB3	1.49	0.76
1:1:137:TYR:CZ	1:1:157:HIS:CD2	2.74	0.76
8:A:135:ARG:NE	14:G:124:LEU:HD23	2.01	0.76
9:B:32:VAL:CG1	9:B:48:GLU:HB2	2.15	0.76
13:F:38:LEU:HG	13:F:189:LEU:HD11	1.66	0.76
15:H:248:LEU:CD2	15:H:377:PHE:HE2	1.94	0.76
16:I:358:LYS:NZ	16:I:387:LEU:H	1.84	0.76
18:K:281:ARG:NH1	18:K:287:GLY:CA	2.40	0.76
21:N:325:PHE:HA	29:V:182:LYS:CG	2.15	0.76
22:O:306:ARG:CG	22:O:351:SER:C	2.59	0.76
24:Q:47:ASP:HA	24:Q:50:ARG:HB3	1.68	0.76
30:W:36:ILE:HD11	30:W:182:TYR:HB2	1.67	0.76
33:Z:767:TYR:CE2	33:Z:772:ILE:CG1	2.68	0.76
5:5:8:PHE:CZ	5:5:13:ILE:CD1	2.67	0.76
8:A:191:ILE:HD12	8:A:193:HIS:O	1.86	0.76
10:C:13:PHE:CZ	11:D:127:ARG:NH1	2.54	0.76
20:M:390:GLN:HE21	20:M:425:ARG:HB3	1.48	0.76
21:N:21:LYS:HE3	21:N:55:PHE:CE2	2.19	0.76
21:N:452:LEU:HD21	21:N:748:PHE:HE1	1.49	0.76
23:P:131:PHE:CE1	23:P:166:GLU:HB3	2.21	0.76
26:S:211:ARG:HH21	26:S:240:ASP:CB	1.98	0.76
27:T:62:LEU:HD11	27:T:88:TYR:CE2	2.20	0.76
28:U:66:TRP:CH2	28:U:109:LEU:HD12	2.20	0.76
33:Z:551:LEU:HG	33:Z:593:HIS:CE1	2.21	0.76
11:D:37:LYS:HG2	11:D:38:GLY:O	1.85	0.76
13:F:201:LEU:HD22	13:F:204:GLU:HB2	1.68	0.76
17:J:375:ILE:O	25:R:204:TRP:NE1	2.19	0.76
21:N:21:LYS:HE3	21:N:55:PHE:CE1	2.21	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:103:LYS:HA	22:O:129:ILE:HD11	1.68	0.76
22:O:233:LEU:CD2	22:O:236:HIS:CE1	2.68	0.76
23:P:213:TYR:HE2	23:P:217:LYS:HE3	1.50	0.76
28:U:112:LYS:HZ3	30:W:60:ARG:HH21	1.32	0.76
28:U:223:HIS:CG	28:U:224:THR:N	2.53	0.76
29:V:154:ASP:HB3	29:V:156:PHE:HE1	1.49	0.76
31:X:45:PHE:CZ	31:X:69:ILE:HG12	2.20	0.76
16:I:243:THR:CG2	16:I:245:LEU:HD21	2.15	0.76
22:O:47:LYS:NZ	22:O:65:PHE:HE2	1.81	0.76
23:P:311:TRP:HH2	23:P:338:TRP:NE1	1.83	0.76
31:X:100:TRP:HZ2	31:X:110:PRO:HG3	1.51	0.76
1:1:66:TYR:CE2	1:1:73:PRO:CA	2.67	0.76
9:B:179:TRP:CD1	9:B:183:LEU:CD1	2.50	0.76
21:N:10:LEU:HD22	21:N:42:GLU:HG3	1.66	0.76
23:P:263:HIS:CE1	23:P:327:LEU:HB2	2.21	0.76
29:V:118:LEU:HD13	29:V:140:VAL:CG1	2.16	0.76
15:H:172:MET:HE2	16:I:129:TYR:CB	2.12	0.75
18:K:155:ASP:OD1	18:K:156:SER:N	2.16	0.75
19:L:253:ASP:CA	20:M:256:ILE:HG21	2.06	0.75
20:M:62:ILE:CG1	20:M:66:LYS:HE3	2.17	0.75
21:N:14:ARG:NH2	21:N:42:GLU:CD	2.35	0.75
24:Q:243:PHE:CE1	24:Q:287:THR:CB	2.69	0.75
22:O:79:VAL:HB	22:O:121:ASP:C	2.11	0.75
27:T:32:ILE:O	27:T:35:ILE:CG2	2.22	0.75
33:Z:321:PHE:CZ	33:Z:351:PRO:CD	2.69	0.75
15:H:410:LEU:HD11	15:H:444:LEU:HD22	1.68	0.75
18:K:49:PHE:CD1	21:N:192:LEU:HD11	2.21	0.75
21:N:666:GLN:HG3	21:N:873:ARG:NH2	2.02	0.75
23:P:101:MET:SD	23:P:139:VAL:HG13	2.26	0.75
24:Q:146:TYR:CE1	24:Q:151:TYR:CE1	2.73	0.75
26:S:163:VAL:HG21	26:S:184:TRP:HZ3	1.50	0.75
1:1:75:THR:HG21	1:1:111:TYR:CD1	2.03	0.75
2:2:8:PHE:HE1	2:2:12:VAL:C	1.95	0.75
16:I:281:ILE:HG22	16:I:284:ILE:CG1	2.16	0.75
19:L:192:GLU:OE1	19:L:347:VAL:HG13	1.86	0.75
21:N:75:TYR:O	21:N:79:VAL:HG23	1.87	0.75
22:O:277:ILE:CG2	22:O:279:ILE:CB	2.60	0.75
29:V:261:LEU:HD22	29:V:283:THR:HG21	1.67	0.75
30:W:44:ASN:HB2	30:W:47:ASN:ND2	2.01	0.75
9:B:4:ARG:NH1	11:D:3:GLY:HA3	2.00	0.75
15:H:261:ARG:NH2	15:H:273:ARG:HH22	1.83	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:214:LEU:HA	21:N:217:MET:HE2	1.69	0.75
21:N:555:ILE:HG23	21:N:559:TYR:CD2	2.21	0.75
24:Q:99:THR:HG23	24:Q:103:LYS:HE2	1.68	0.75
24:Q:146:TYR:CE1	24:Q:151:TYR:HE1	2.03	0.75
25:R:36:SER:O	25:R:43:ARG:NH2	2.18	0.75
25:R:94:PHE:HZ	25:R:99:TYR:CZ	2.03	0.75
25:R:411:LEU:HD13	28:U:285:ILE:HG12	1.67	0.75
25:R:422:ARG:HH11	26:S:301:PRO:HB3	1.49	0.75
10:C:193:ALA:O	10:C:197:LEU:HG	1.86	0.75
18:K:49:PHE:HD1	21:N:192:LEU:HD11	1.50	0.75
19:L:325:MET:SD	19:L:343:LEU:HD11	2.27	0.75
20:M:307:GLU:HG3	20:M:311:GLN:HE21	1.49	0.75
26:S:435:LYS:NZ	27:T:238:GLN:OE1	2.14	0.75
7:7:7:LYS:HE3	7:7:119:LEU:HB3	1.68	0.75
7:7:8:TYR:HE2	7:7:10:ASN:OD1	1.64	0.75
7:7:190:ALA:HB2	7:7:200:PHE:CD2	2.22	0.75
10:C:213:PHE:CD2	10:C:230:PHE:CD2	2.74	0.75
15:H:168:ILE:HG12	15:H:186:PRO:HB2	1.68	0.75
22:O:166:ARG:HH21	22:O:169:ASN:HB3	1.52	0.75
28:U:40:ASP:CB	28:U:47:ARG:HH21	1.98	0.75
3:3:44:ILE:HG12	3:3:98:PRO:HB3	1.67	0.75
11:D:11:PHE:CE2	12:E:137:PRO:HD2	2.21	0.75
12:E:114:GLN:HE21	13:F:82:ARG:HD2	1.50	0.75
18:K:210:LEU:CD1	18:K:212:TYR:CZ	2.69	0.75
18:K:311:ASN:OD1	18:K:312:VAL:HG23	1.85	0.75
22:O:344:VAL:O	22:O:345:ASN:CB	2.34	0.75
24:Q:90:LYS:HD3	24:Q:129:LYS:HE2	1.69	0.75
29:V:257:GLU:O	29:V:261:LEU:HG	1.86	0.75
33:Z:56:LEU:HD22	33:Z:115:LEU:CD1	2.16	0.75
8:A:126:GLN:HE22	8:A:130:GLN:NE2	1.85	0.75
15:H:217:GLN:HG3	15:H:376:GLU:CD	2.12	0.75
15:H:405:GLU:O	15:H:409:ARG:HG2	1.87	0.75
17:J:272:MET:HE3	17:J:290:ILE:CD1	2.14	0.75
18:K:158:ILE:HG23	19:L:256:ILE:CG2	2.17	0.75
25:R:259:PHE:CD2	25:R:329:PHE:HE1	2.01	0.75
27:T:225:ASN:HB3	27:T:241:GLU:HG2	1.68	0.75
33:Z:888:LEU:HG	33:Z:901:PHE:CE1	2.21	0.75
10:C:147:GLN:HB3	10:C:149:TYR:CE1	2.15	0.74
15:H:271:PHE:CZ	15:H:307:PHE:CD2	2.69	0.74
28:U:94:HIS:CE1	28:U:96:GLY:N	2.54	0.74
31:X:46:TRP:HZ2	31:X:132:SER:N	1.86	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:53:VAL:HG12	33:Z:92:LEU:HD23	1.69	0.74
1:1:118:SER:OG	7:7:53:GLN:HG3	1.88	0.74
17:J:27:ILE:CB	18:K:51:LEU:HD21	2.18	0.74
19:L:223:PRO:HB2	19:L:226:THR:HG23	1.69	0.74
20:M:361:LEU:CB	20:M:376:TRP:CD2	2.67	0.74
22:O:271:LYS:HD3	22:O:274:ILE:HD12	1.68	0.74
22:O:277:ILE:CG2	22:O:279:ILE:CG1	2.31	0.74
25:R:137:LEU:CG	25:R:141:TYR:CE2	2.69	0.74
25:R:304:TYR:CE1	25:R:308:LEU:CD1	2.64	0.74
29:V:118:LEU:HD12	29:V:140:VAL:CB	2.06	0.74
29:V:126:GLN:O	29:V:130:GLU:HG2	1.86	0.74
33:Z:87:LYS:CE	33:Z:90:LYS:HB2	2.15	0.74
33:Z:558:LEU:HG	33:Z:558:LEU:O	1.85	0.74
1:1:59:VAL:HG11	1:1:82:PHE:CZ	2.22	0.74
14:G:203:HIS:CE1	14:G:211:PHE:HD1	2.05	0.74
21:N:322:ASP:HB2	21:N:689:LYS:NZ	2.01	0.74
21:N:666:GLN:HG3	21:N:873:ARG:HE	1.52	0.74
22:O:79:VAL:HG21	22:O:122:HIS:C	2.11	0.74
24:Q:90:LYS:HD3	24:Q:129:LYS:CE	2.17	0.74
26:S:163:VAL:HG22	26:S:184:TRP:CH2	2.22	0.74
31:X:85:ARG:NH2	31:X:115:SER:HB2	2.01	0.74
33:Z:510:LEU:HD13	33:Z:542:ILE:CG1	2.16	0.74
15:H:154:LYS:NZ	20:M:164:ASP:O	2.20	0.74
15:H:389:PHE:O	15:H:404:TRP:CH2	2.39	0.74
17:J:219:VAL:CG1	18:K:284:ALA:CB	2.66	0.74
18:K:68:ILE:HD11	21:N:608:LEU:HD21	1.66	0.74
19:L:309:LEU:CD2	19:L:342:ARG:NE	2.39	0.74
24:Q:253:ASN:HD22	24:Q:258:ALA:HB2	1.52	0.74
25:R:94:PHE:CZ	25:R:95:ASP:O	2.40	0.74
4:4:81:SER:N	4:4:124:LYS:NZ	2.36	0.74
9:B:38:LYS:O	9:B:179:TRP:CH2	2.39	0.74
13:F:123:TYR:CD1	13:F:124:GLY:N	2.54	0.74
17:J:69:GLY:H	18:K:144:ASN:HD22	1.28	0.74
18:K:248:GLY:CA	18:K:251:PRO:HG2	2.17	0.74
19:L:279:PHE:HE2	19:L:281:ASP:OD1	1.69	0.74
22:O:106:PHE:O	22:O:107:GLN:HB2	1.87	0.74
25:R:137:LEU:O	25:R:141:TYR:HD2	1.71	0.74
28:U:112:LYS:HZ3	30:W:60:ARG:NH2	1.85	0.74
2:2:187:LEU:HD13	2:2:190:TYR:CD1	2.23	0.74
2:2:196:ARG:HE	2:2:199:LYS:HE3	1.53	0.74
3:3:61:LYS:HD3	3:3:81:LEU:HD11	1.70	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:3:75:PRO:HB2	3:3:111:PHE:CD2	2.23	0.74
10:C:160:TRP:CH2	10:C:163:ILE:CD1	2.70	0.74
18:K:353:PHE:CE1	18:K:387:MET:SD	2.80	0.74
19:L:259:SER:CB	19:L:303:ARG:NH1	2.48	0.74
22:O:373:TRP:CD1	28:U:200:LEU:CD1	2.70	0.74
15:H:175:GLY:O	15:H:183:ILE:HB	1.88	0.74
15:H:430:ALA:HA	15:H:435:ARG:HH21	1.52	0.74
24:Q:267:LEU:HD22	24:Q:331:THR:HG23	1.69	0.74
25:R:353:MET:HE2	25:R:364:LEU:HD21	1.67	0.74
26:S:160:ARG:O	26:S:164:ILE:HG12	1.87	0.74
8:A:103:GLU:OE2	8:A:107:LYS:NZ	2.20	0.74
9:B:119:GLN:HE21	9:B:123:GLN:HG3	1.52	0.74
9:B:183:LEU:HD23	9:B:184:GLU:O	1.88	0.74
12:E:157:HIS:CG	12:E:170:LYS:HZ3	2.05	0.74
15:H:284:VAL:HG13	20:M:252:VAL:HG12	1.69	0.74
19:L:123:SER:HA	20:M:125:GLN:HG2	1.70	0.74
22:O:5:HIS:CE1	22:O:27:GLU:HB3	2.22	0.74
29:V:57:PHE:CD1	29:V:63:VAL:HG13	2.23	0.74
33:Z:530:LEU:HD12	33:Z:534:PHE:HD2	1.53	0.74
13:F:179:PHE:CE1	13:F:188:GLU:OE2	2.40	0.74
13:F:215:ILE:HG13	13:F:220:THR:HG21	1.69	0.74
24:Q:146:TYR:CD1	24:Q:151:TYR:CE1	2.75	0.74
30:W:186:ALA:HA	30:W:192:LEU:CD1	2.16	0.74
4:4:11:SER:HB2	4:4:182:ILE:CG2	2.18	0.74
22:O:276:LYS:O	22:O:277:ILE:HB	1.87	0.74
23:P:140:THR:CG2	23:P:163:LEU:HD22	2.18	0.74
24:Q:396:TRP:HB2	24:Q:398:TYR:CE2	2.23	0.74
24:Q:429:LYS:HE3	29:V:269:ARG:HH22	1.53	0.74
25:R:34:THR:HA	25:R:70:TYR:CD1	2.23	0.74
25:R:137:LEU:HG	25:R:141:TYR:CE2	2.23	0.74
27:T:32:ILE:C	27:T:35:ILE:HG22	2.12	0.74
27:T:211:PHE:HD2	27:T:217:THR:HG1	1.36	0.74
28:U:52:PHE:CE1	28:U:80:CYS:SG	2.80	0.74
33:Z:422:ILE:O	33:Z:426:TYR:CD2	2.41	0.74
33:Z:446:GLU:HG3	33:Z:484:LYS:NZ	2.02	0.74
9:B:174:PHE:CZ	9:B:198:GLU:OE1	2.41	0.73
13:F:105:VAL:CG1	13:F:143:HIS:ND1	2.45	0.73
17:J:142:VAL:CG1	17:J:204:HIS:HE1	2.01	0.73
22:O:303:LYS:O	22:O:304:ASN:HB2	1.87	0.73
24:Q:174:LEU:HG	24:Q:178:HIS:CE1	2.23	0.73
24:Q:250:THR:HG23	24:Q:251:THR:H	1.51	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:272:LEU:CD2	24:Q:274:LEU:CD1	2.66	0.73
25:R:208:ASN:ND2	25:R:238:PHE:CG	2.56	0.73
28:U:92:TRP:CZ3	28:U:106:ILE:CB	2.60	0.73
31:X:35:ILE:HG12	31:X:124:LYS:HE2	1.68	0.73
33:Z:299:ASP:OD1	33:Z:334:LYS:HE2	1.87	0.73
13:F:105:VAL:HG12	13:F:143:HIS:CE1	2.23	0.73
13:F:155:GLU:OE1	14:G:62:LYS:CB	2.35	0.73
15:H:206:VAL:HG11	15:H:258:LEU:HD23	1.67	0.73
16:I:243:THR:HG22	16:I:245:LEU:CD2	2.18	0.73
18:K:140:HIS:HB3	18:K:143:SER:HB3	1.69	0.73
18:K:156:SER:HB2	18:K:253:MET:HE2	1.68	0.73
19:L:84:LEU:HD22	19:L:88:TYR:OH	1.89	0.73
19:L:382:MET:HE1	19:L:416:MET:HA	1.70	0.73
20:M:166:ARG:O	20:M:167:VAL:HG22	1.88	0.73
20:M:351:LEU:HD22	20:M:387:ASN:OD1	1.87	0.73
23:P:286:ASN:O	23:P:293:LEU:HD21	1.87	0.73
26:S:471:LEU:CB	28:U:288:PHE:CE1	2.71	0.73
27:T:112:ASN:HA	27:T:177:PHE:CE2	2.23	0.73
33:Z:392:LEU:HG	33:Z:428:TRP:HZ3	1.53	0.73
5:5:68:LEU:HD13	12:E:70:ILE:O	1.88	0.73
8:A:218:PHE:HB2	8:A:223:LEU:HD21	1.69	0.73
10:C:98:TYR:CE1	10:C:105:ASP:C	2.67	0.73
10:C:213:PHE:CE2	10:C:230:PHE:CE2	2.76	0.73
14:G:197:LYS:HD2	14:G:241:PHE:HE2	1.53	0.73
15:H:155:PHE:CE1	20:M:76:PRO:HA	2.22	0.73
18:K:67:TYR:HE2	21:N:572:LEU:O	1.71	0.73
20:M:385:GLU:HB2	20:M:426:LYS:NZ	2.03	0.73
21:N:84:ALA:O	21:N:86:LYS:HG3	1.88	0.73
33:Z:147:GLU:HA	33:Z:210:TYR:CZ	2.23	0.73
15:H:449:LYS:NZ	16:I:346:ARG:HH11	1.87	0.73
21:N:249:ASN:OD1	21:N:282:TYR:OH	2.04	0.73
21:N:329:HIS:HE1	21:N:355:TRP:CE3	2.02	0.73
2:2:142:TRP:HE1	2:2:145:ASP:HA	1.52	0.73
6:6:66:TYR:CE2	6:6:73:LYS:O	2.42	0.73
8:A:59:VAL:HG21	8:A:66:PRO:HB3	1.71	0.73
9:B:4:ARG:NH2	11:D:5:ASP:HB2	2.01	0.73
17:J:336:ASN:HD22	25:R:204:TRP:HE1	0.75	0.73
18:K:350:ARG:HH21	24:Q:215:VAL:HG11	1.53	0.73
22:O:337:LEU:O	22:O:338:LYS:HB3	1.87	0.73
25:R:130:GLN:O	25:R:134:TRP:HD1	1.70	0.73
30:W:40:LYS:CE	30:W:47:ASN:HB3	2.11	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:45:PHE:CE1	31:X:69:ILE:HG12	2.24	0.73
32:Y:88:ASN:O	32:Y:89:GLN:CB	2.32	0.73
1:1:36:ARG:HB2	1:1:42:TRP:CZ3	2.23	0.73
1:1:83:LYS:CD	1:1:119:VAL:HG23	2.18	0.73
4:4:66:TYR:CZ	4:4:74:LEU:HD21	2.21	0.73
13:F:76:GLY:O	20:M:433:TYR:CZ	2.42	0.73
16:I:106:ILE:HD11	17:J:85:LEU:CD2	2.19	0.73
17:J:27:ILE:CG1	18:K:51:LEU:HD21	2.19	0.73
19:L:357:ARG:O	19:L:361:PHE:CD2	2.41	0.73
21:N:399:PHE:HD1	21:N:441:VAL:CB	1.95	0.73
25:R:60:ALA:CB	25:R:102:LEU:HD22	2.19	0.73
33:Z:800:SER:OG	33:Z:815:MET:HE1	1.89	0.73
1:1:124:TYR:CD1	1:1:142:PHE:CZ	2.76	0.73
17:J:324:ARG:NH2	17:J:352:GLY:H	1.87	0.73
27:T:197:TYR:CD2	27:T:200:LEU:HG	2.24	0.73
29:V:231:GLU:O	29:V:235:GLU:HB2	1.89	0.73
33:Z:321:PHE:CE1	33:Z:350:GLY:HA3	2.20	0.73
33:Z:491:LEU:HD21	33:Z:900:LEU:HD11	1.70	0.73
33:Z:514:ALA:HA	33:Z:546:ILE:HD13	1.71	0.73
1:1:19:ARG:HH21	1:1:26:ILE:HD13	1.53	0.73
1:1:37:VAL:HB	1:1:63:LEU:HD12	1.70	0.73
4:4:72:TYR:OH	4:4:109:LYS:HE3	1.88	0.73
14:G:182:HIS:CE1	14:G:186:LEU:CD1	2.71	0.73
15:H:72:SER:HB3	16:I:153:THR:HG21	1.70	0.73
18:K:392:LEU:HD13	19:L:213:LYS:O	1.88	0.73
21:N:320:SER:HB2	21:N:686:ILE:HG22	1.69	0.73
22:O:185:PHE:HE2	22:O:219:ILE:CG2	2.00	0.73
22:O:210:ARG:NH2	22:O:242:ILE:CB	2.51	0.73
23:P:112:LEU:HD11	23:P:146:ILE:HG21	1.69	0.73
25:R:101:GLU:CG	25:R:105:LYS:HE3	2.18	0.73
25:R:305:PHE:HA	25:R:334:ARG:NH1	2.02	0.73
27:T:224:ARG:O	27:T:225:ASN:HB2	1.88	0.73
28:U:35:GLY:H	28:U:93:TYR:HB3	1.53	0.73
33:Z:811:SER:O	33:Z:815:MET:HG3	1.89	0.73
16:I:358:LYS:HZ1	16:I:387:LEU:N	1.87	0.73
17:J:167:PRO:HD3	17:J:174:PHE:HZ	1.52	0.73
21:N:324:LYS:HG3	21:N:325:PHE:HD1	1.53	0.73
23:P:221:TYR:HE1	23:P:240:TYR:HB3	1.53	0.73
23:P:360:ILE:HG12	23:P:402:PHE:CE2	2.24	0.73
33:Z:133:ASP:HB3	33:Z:137:TYR:CZ	2.24	0.73
4:4:117:GLN:HE22	4:4:130:GLY:HA3	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:78:LEU:HD23	16:I:436:TYR:CE1	2.24	0.73
15:H:147:ILE:CD1	15:H:157:VAL:H	2.00	0.73
15:H:174:VAL:CG1	15:H:183:ILE:HG13	2.19	0.73
24:Q:162:LEU:HD11	24:Q:178:HIS:NE2	2.04	0.73
25:R:199:GLU:CB	25:R:206:ARG:NE	2.51	0.73
28:U:66:TRP:HZ3	28:U:68:LEU:HB2	1.51	0.73
28:U:105:LYS:HB3	30:W:58:ASN:ND2	2.04	0.73
29:V:182:LYS:HB3	29:V:185:ILE:HG22	1.71	0.73
30:W:180:LEU:HA	30:W:183:GLU:CD	2.14	0.73
33:Z:493:LEU:HD11	33:Z:497:PHE:CD2	2.24	0.73
6:6:115:SER:HB3	6:6:128:ARG:NH1	2.04	0.72
13:F:65:LYS:CG	13:F:222:PHE:CE2	2.71	0.72
21:N:14:ARG:HB2	27:T:80:ASN:ND2	2.01	0.72
22:O:223:LEU:CA	22:O:279:ILE:HG21	2.19	0.72
22:O:250:TRP:CD2	22:O:270:ILE:HG12	2.24	0.72
31:X:85:ARG:HH22	31:X:116:ALA:H	1.36	0.72
33:Z:890:SER:HB2	33:Z:891:PRO:HD3	1.71	0.72
3:3:60:TYR:HD1	10:C:96:GLN:HB3	1.54	0.72
12:E:88:MET:HE2	12:E:142:LEU:HD12	1.66	0.72
13:F:179:PHE:CZ	13:F:192:ALA:HB2	2.24	0.72
22:O:347:LEU:HB3	22:O:349:THR:HG23	1.71	0.72
23:P:241:LEU:HA	23:P:244:ILE:HG22	1.71	0.72
28:U:5:HIS:HD1	28:U:6:GLU:N	1.84	0.72
33:Z:397:ASP:HB3	33:Z:425:ILE:CD1	2.19	0.72
33:Z:963:ALA:O	33:Z:964:GLU:CD	2.33	0.72
17:J:234:PHE:HZ	17:J:279:LEU:CD2	2.02	0.72
19:L:174:GLU:HG2	19:L:175:GLN:NE2	2.04	0.72
21:N:669:GLU:O	21:N:670:LYS:HB2	1.87	0.72
24:Q:130:ARG:HH21	24:Q:133:LEU:HD12	1.54	0.72
24:Q:299:MET:SD	24:Q:335:PHE:HZ	2.11	0.72
24:Q:423:VAL:HG13	25:R:414:LEU:CD1	2.16	0.72
25:R:416:LYS:O	26:S:298:ARG:NH1	2.22	0.72
27:T:1:MET:HB2	27:T:2:PRO:HD2	1.69	0.72
27:T:199:PHE:O	27:T:200:LEU:HD23	1.89	0.72
27:T:199:PHE:O	27:T:200:LEU:HG	1.90	0.72
29:V:53:MET:HE2	29:V:65:VAL:HG11	1.71	0.72
29:V:117:TRP:CZ2	29:V:196:TYR:CA	2.72	0.72
10:C:115:LEU:HD13	10:C:137:TYR:OH	1.89	0.72
17:J:167:PRO:HD3	17:J:174:PHE:CZ	2.25	0.72
21:N:685:VAL:HG13	21:N:691:GLN:HG3	1.69	0.72
22:O:343:GLN:HG3	22:O:343:GLN:O	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:433:ILE:HD11	28:U:203:LYS:CD	2.20	0.72
25:R:60:ALA:HB2	25:R:102:LEU:HD22	1.72	0.72
25:R:137:LEU:HG	25:R:141:TYR:HE2	1.55	0.72
33:Z:185:ASP:CG	33:Z:186:GLY:H	1.97	0.72
33:Z:610:GLY:O	33:Z:748:LEU:HB3	1.89	0.72
15:H:95:HIS:HD1	16:I:113:ILE:HD13	1.54	0.72
22:O:303:LYS:O	22:O:304:ASN:CB	2.37	0.72
22:O:303:LYS:NZ	28:U:234:ASN:ND2	2.37	0.72
25:R:59:MET:CE	25:R:143:GLN:O	2.37	0.72
25:R:101:GLU:HG2	25:R:105:LYS:HE3	1.69	0.72
27:T:250:MET:O	27:T:251:HIS:CB	2.37	0.72
11:D:190:GLU:OE1	11:D:193:LYS:NZ	2.22	0.72
14:G:87:LEU:HD11	14:G:115:LEU:HD22	1.70	0.72
18:K:210:LEU:HD11	18:K:212:TYR:OH	1.88	0.72
18:K:242:PHE:HB3	18:K:295:ILE:HD13	1.70	0.72
21:N:399:PHE:CD1	21:N:441:VAL:HB	2.25	0.72
22:O:356:ARG:HH21	22:O:362:GLN:CG	2.01	0.72
25:R:258:LEU:HD12	25:R:266:LEU:HD11	1.70	0.72
26:S:257:LEU:O	26:S:259:TYR:CD2	2.42	0.72
29:V:37:MET:HE1	29:V:139:VAL:HG11	1.72	0.72
29:V:53:MET:HE3	29:V:65:VAL:HG11	1.72	0.72
33:Z:312:TYR:OH	33:Z:348:LEU:CD2	2.38	0.72
33:Z:805:LEU:HD22	33:Z:893:PHE:CZ	2.25	0.72
1:1:8:PHE:HZ	1:1:179:THR:HG22	1.55	0.72
10:C:160:TRP:CE3	10:C:163:ILE:CD1	2.69	0.72
15:H:168:ILE:CG2	15:H:169:GLU:H	1.87	0.72
16:I:433:GLU:HA	16:I:436:TYR:CE1	2.24	0.72
21:N:195:THR:OG1	21:N:196:THR:HG23	1.90	0.72
21:N:366:THR:HG23	21:N:747:HIS:HE1	1.55	0.72
22:O:42:SER:C	22:O:46:THR:CB	2.61	0.72
22:O:233:LEU:CA	22:O:236:HIS:HB3	2.19	0.72
27:T:241:GLU:O	27:T:242:LYS:HB3	1.89	0.72
28:U:141:GLU:O	28:U:142:GLN:HB3	1.88	0.72
31:X:44:GLY:O	31:X:46:TRP:CD1	2.42	0.72
33:Z:491:LEU:HD11	33:Z:900:LEU:HD12	1.70	0.72
7:7:54:HIS:CD2	7:7:95:ARG:HH22	2.08	0.72
17:J:219:VAL:HB	18:K:281:ARG:HD3	0.73	0.72
18:K:240:SER:H	19:L:306:MET:CE	1.96	0.72
20:M:251:LEU:O	20:M:253:GLN:N	2.23	0.72
22:O:300:VAL:HG12	22:O:301:PHE:CE2	2.23	0.72
8:A:17:THR:HG21	8:A:129:THR:O	1.90	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:231:TYR:CE1	12:E:235:LYS:HB3	2.24	0.72
15:H:389:PHE:CB	15:H:404:TRP:CE3	2.72	0.72
16:I:339:ILE:HD13	16:I:347:LYS:CE	2.20	0.72
19:L:132:ARG:CZ	19:L:156:MET:CG	2.68	0.72
19:L:269:TYR:CD2	19:L:273:HIS:CE1	2.78	0.72
19:L:370:LYS:HD2	19:L:374:PHE:CD1	2.25	0.72
21:N:479:GLU:CD	21:N:512:ASN:OD1	2.33	0.72
24:Q:47:ASP:OD1	24:Q:50:ARG:HG2	1.89	0.72
25:R:252:TYR:CD1	25:R:321:TYR:HB3	2.24	0.72
30:W:143:ASN:CG	30:W:173:THR:HG23	2.14	0.72
1:1:18:SER:HB3	1:1:31:THR:OG1	1.90	0.72
5:5:6:PHE:CZ	5:5:13:ILE:CB	2.73	0.72
17:J:142:VAL:CG1	17:J:204:HIS:CE1	2.73	0.72
17:J:183:LYS:HB3	17:J:276:LEU:HD13	1.72	0.72
19:L:328:ASN:HD22	19:L:329:ARG:HG2	1.54	0.72
20:M:307:GLU:CG	20:M:311:GLN:NE2	2.52	0.72
24:Q:391:ASP:OD1	25:R:347:THR:HB	1.90	0.72
26:S:381:VAL:CG1	27:T:123:HIS:NE2	2.51	0.72
33:Z:433:LEU:HD11	33:Z:455:ILE:HG23	1.70	0.72
1:1:119:VAL:HG21	14:G:103:LYS:NZ	1.98	0.71
5:5:51:ASP:OD2	5:5:95:LEU:HA	1.90	0.71
9:B:32:VAL:HG13	9:B:48:GLU:OE1	1.90	0.71
12:E:165:TYR:CB	12:E:167:TYR:OH	2.38	0.71
12:E:231:TYR:OH	12:E:235:LYS:O	2.07	0.71
14:G:197:LYS:CD	14:G:241:PHE:CE2	2.72	0.71
17:J:375:ILE:HD12	25:R:204:TRP:CD2	2.24	0.71
18:K:188:VAL:HA	18:K:313:LYS:HZ1	1.55	0.71
27:T:197:TYR:CE1	27:T:199:PHE:N	2.58	0.71
21:N:421:ASP:N	21:N:424:LYS:HZ3	1.87	0.71
22:O:87:LYS:HD3	22:O:132:GLU:OE1	1.90	0.71
23:P:308:LEU:HD23	23:P:369:LEU:CD2	2.20	0.71
10:C:208:TYR:HA	10:C:235:ILE:HG21	1.73	0.71
15:H:146:VAL:H	15:H:157:VAL:HG21	1.54	0.71
15:H:168:ILE:CG2	15:H:169:GLU:N	2.42	0.71
17:J:115:LEU:HD23	17:J:116:ARG:O	1.91	0.71
19:L:206:ILE:HG12	19:L:209:ARG:NH2	2.05	0.71
33:Z:433:LEU:HD12	33:Z:455:ILE:HG12	1.71	0.71
33:Z:867:PHE:HD2	33:Z:871:HIS:HA	1.53	0.71
15:H:198:MET:SD	15:H:272:ILE:HG23	2.29	0.71
15:H:249:TYR:CE2	15:H:374:LYS:HG2	2.25	0.71
22:O:223:LEU:O	22:O:279:ILE:CG2	2.38	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:306:ARG:HG3	22:O:352:TRP:N	2.03	0.71
25:R:396:LYS:HG2	25:R:400:TYR:HE2	1.55	0.71
28:U:273:LEU:HG	28:U:277:TYR:CE2	2.24	0.71
31:X:40:GLU:O	31:X:41:GLU:CB	2.38	0.71
15:H:340:LEU:HD11	15:H:370:ARG:NH1	2.05	0.71
17:J:329:ARG:CG	17:J:333:ARG:NH1	2.51	0.71
18:K:280:LYS:NZ	18:K:293:GLN:HA	2.05	0.71
19:L:161:ARG:HH21	19:L:261:ARG:CZ	2.02	0.71
23:P:115:ARG:HH22	23:P:142:ASP:HB3	1.55	0.71
23:P:283:LYS:HB3	23:P:286:ASN:HB3	1.72	0.71
23:P:308:LEU:HD13	23:P:345:VAL:HG22	1.73	0.71
24:Q:174:LEU:HD11	24:Q:178:HIS:CE1	2.24	0.71
26:S:188:TYR:OH	26:S:210:LEU:CD2	2.31	0.71
33:Z:609:THR:CG2	33:Z:745:LEU:HD22	2.21	0.71
9:B:104:TYR:OH	9:B:140:ASP:HA	1.90	0.71
9:B:158:PRO:O	10:C:57:LEU:HD11	1.88	0.71
16:I:282:ASP:OD1	16:I:283:GLU:HG3	1.90	0.71
19:L:177:GLU:OE2	19:L:233:LYS:NZ	2.19	0.71
19:L:221:TYR:CZ	19:L:348:GLU:CB	2.74	0.71
21:N:391:PRO:HA	21:N:401:LYS:HD3	1.72	0.71
22:O:117:ASN:HD22	22:O:167:ILE:HA	1.55	0.71
23:P:221:TYR:CZ	23:P:244:ILE:HB	2.26	0.71
23:P:425:HIS:CG	28:U:225:ILE:CG2	2.67	0.71
24:Q:61:LEU:O	24:Q:65:TYR:CD1	2.44	0.71
24:Q:266:LEU:HD21	24:Q:281:ILE:HG21	1.71	0.71
28:U:37:ILE:HD13	28:U:121:LEU:CD1	2.20	0.71
29:V:24:LYS:NZ	29:V:197:TYR:CE2	2.58	0.71
17:J:273:LEU:HD11	17:J:304:LEU:HD23	1.71	0.71
19:L:189:GLN:OE1	19:L:349:ILE:HG12	1.90	0.71
23:P:177:ILE:CD1	23:P:216:LEU:HD13	2.20	0.71
31:X:12:ALA:HB3	31:X:33:ILE:CB	2.20	0.71
33:Z:312:TYR:OH	33:Z:348:LEU:CB	2.38	0.71
17:J:131:ASP:H	17:J:132:PRO:HD2	1.55	0.71
17:J:375:ILE:CD1	25:R:204:TRP:CE3	2.69	0.71
18:K:67:TYR:CE2	21:N:576:VAL:HB	2.26	0.71
21:N:89:PHE:CE1	21:N:101:ILE:HD11	2.26	0.71
22:O:78:VAL:HG11	22:O:106:PHE:CE2	2.24	0.71
22:O:339:GLY:O	22:O:340:SER:HB2	1.91	0.71
23:P:369:LEU:HB3	23:P:371:LEU:CD1	2.21	0.71
26:S:323:LEU:HD23	26:S:383:LEU:CD2	2.21	0.71
27:T:156:SER:HB3	27:T:159:LYS:HB2	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:197:TYR:CD1	27:T:198:ASP:CA	2.74	0.71
13:F:50:LYS:HE3	13:F:212:SER:CB	2.21	0.71
15:H:412:PRO:O	15:H:413:ASN:ND2	2.24	0.71
16:I:366:THR:HG21	16:I:377:LEU:CD2	2.21	0.71
22:O:230:PHE:CD1	22:O:251:LEU:CD1	2.73	0.71
22:O:232:GLU:O	22:O:236:HIS:HB3	1.90	0.71
22:O:306:ARG:HG3	22:O:351:SER:CA	2.21	0.71
23:P:184:MET:HB2	23:P:223:LEU:HD22	1.72	0.71
23:P:308:LEU:HD22	23:P:369:LEU:CD2	2.20	0.71
28:U:107:ASN:HD21	28:U:111:LYS:HE3	1.55	0.71
33:Z:138:ARG:CD	33:Z:157:LEU:HD13	2.19	0.71
33:Z:862:MET:HE2	33:Z:910:PRO:HG3	1.72	0.71
12:E:88:MET:HE1	12:E:142:LEU:CD1	2.19	0.71
21:N:21:LYS:HE2	21:N:55:PHE:CE2	2.25	0.71
24:Q:46:VAL:CG2	24:Q:50:ARG:HB2	2.14	0.71
24:Q:135:HIS:CG	24:Q:161:LEU:CD2	2.74	0.71
24:Q:243:PHE:CE1	24:Q:287:THR:CA	2.39	0.71
28:U:280:ASN:HD21	29:V:291:ASN:CG	1.99	0.71
31:X:10:PHE:C	31:X:33:ILE:HG22	2.16	0.71
33:Z:64:TYR:CD1	33:Z:111:LEU:HB3	2.26	0.71
33:Z:551:LEU:HD12	33:Z:591:ILE:HG22	1.72	0.71
33:Z:868:ASN:ND2	33:Z:870:ALA:HB3	2.05	0.71
6:6:-6:PRO:HA	7:7:125:LEU:HD22	1.71	0.70
6:6:91:LYS:HB2	6:6:96:TYR:CZ	2.26	0.70
13:F:74:LEU:HA	13:F:132:LEU:HD23	1.72	0.70
15:H:99:VAL:HG22	15:H:173:ARG:HH22	1.52	0.70
16:I:228:GLY:HA3	16:I:350:PHE:CZ	2.26	0.70
19:L:279:PHE:CE2	19:L:281:ASP:OD1	2.43	0.70
21:N:666:GLN:HA	21:N:873:ARG:NH2	2.06	0.70
22:O:303:LYS:HZ2	28:U:234:ASN:ND2	1.88	0.70
22:O:373:TRP:CH2	28:U:233:PHE:CB	2.73	0.70
24:Q:351:ILE:HG22	24:Q:362:ILE:HD13	1.71	0.70
4:4:43:MET:CG	4:4:45:PHE:HZ	2.03	0.70
9:B:27:ALA:HA	18:K:426:PHE:CE1	2.26	0.70
17:J:27:ILE:HG12	18:K:51:LEU:HD21	1.73	0.70
23:P:181:LEU:CA	23:P:223:LEU:HD11	2.21	0.70
24:Q:314:PHE:CE2	24:Q:339:TYR:HD1	2.03	0.70
27:T:198:ASP:OD1	27:T:199:PHE:N	2.24	0.70
4:4:55:PHE:CZ	4:4:59:ILE:HG13	2.26	0.70
11:D:106:VAL:CG1	11:D:148:TYR:CE2	2.74	0.70
18:K:113:THR:HA	18:K:252:ARG:CZ	2.20	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:113:THR:C	18:K:252:ARG:HH12	1.98	0.70
20:M:289:LYS:NZ	20:M:302:GLN:NE2	2.07	0.70
21:N:293:LEU:HB3	21:N:294:PRO:HD3	1.73	0.70
23:P:311:TRP:CH2	23:P:338:TRP:NE1	2.58	0.70
24:Q:179:LEU:HD13	24:Q:218:LEU:HD23	1.73	0.70
28:U:53:ALA:HB3	29:V:98:THR:HB	1.74	0.70
30:W:20:ASP:O	30:W:21:PHE:CB	2.39	0.70
33:Z:305:VAL:HG13	33:Z:982:ILE:CG1	2.20	0.70
33:Z:352:LYS:O	33:Z:353:VAL:CG2	2.37	0.70
1:1:124:TYR:CD1	1:1:142:PHE:CE2	2.79	0.70
2:2:104:ASP:CG	2:2:106:THR:HG1	2.00	0.70
10:C:136:ILE:HD11	10:C:165:VAL:HG22	1.73	0.70
23:P:266:TYR:OH	23:P:322:LEU:HA	1.91	0.70
24:Q:243:PHE:HE1	24:Q:287:THR:CG2	2.03	0.70
28:U:35:GLY:CA	28:U:93:TYR:CB	2.64	0.70
1:1:80:SER:CB	14:G:103:LYS:HG3	2.22	0.70
9:B:27:ALA:CA	18:K:426:PHE:HE1	2.04	0.70
12:E:109:VAL:HG11	12:E:156:PHE:HD1	1.53	0.70
12:E:231:TYR:CD2	12:E:236:THR:OG1	2.44	0.70
17:J:236:MET:O	17:J:240:HIS:ND1	2.15	0.70
20:M:410:VAL:HG13	20:M:414:ASP:HB3	1.73	0.70
22:O:43:GLU:OE2	22:O:44:SER:CB	2.26	0.70
25:R:263:ARG:HD3	25:R:296:LEU:HG	1.71	0.70
33:Z:133:ASP:CA	33:Z:137:TYR:CE1	2.72	0.70
1:1:190:PRO:HA	1:1:193:TYR:CE1	2.25	0.70
4:4:26:VAL:HG12	4:4:28:LYS:O	1.89	0.70
6:6:115:SER:OG	6:6:128:ARG:CZ	2.38	0.70
11:D:49:ARG:HG2	11:D:203:VAL:HG13	1.72	0.70
12:E:98:THR:CG2	12:E:102:TYR:HE1	2.05	0.70
17:J:111:GLN:NE2	17:J:125:VAL:CG1	2.54	0.70
19:L:259:SER:OG	19:L:303:ARG:NH2	2.22	0.70
26:S:159:ASN:HB2	26:S:187:ILE:HD11	1.74	0.70
27:T:85:LEU:HD21	27:T:105:LEU:HD13	1.73	0.70
13:F:69:HIS:CE1	13:F:102:LYS:HB3	2.26	0.70
17:J:33:LYS:O	17:J:37:LYS:HG2	1.92	0.70
17:J:219:VAL:CA	18:K:281:ARG:HD3	2.21	0.70
21:N:14:ARG:NE	21:N:42:GLU:OE1	2.23	0.70
22:O:352:TRP:HZ3	28:U:228:LYS:HG3	1.56	0.70
24:Q:51:ARG:CD	24:Q:96:VAL:HG21	2.20	0.70
24:Q:65:TYR:CB	24:Q:74:LEU:HD22	2.22	0.70
26:S:425:ARG:HH11	27:T:155:GLY:HA2	1.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:38:LEU:HB2	28:U:88:LYS:C	2.17	0.70
33:Z:786:SER:O	33:Z:787:ASP:CB	2.39	0.70
9:B:17:LYS:HD2	9:B:22:ASP:OD2	1.92	0.70
13:F:49:LEU:CD1	13:F:210:ASN:HB3	2.22	0.70
13:F:120:THR:O	14:G:129:ARG:CZ	2.39	0.70
14:G:197:LYS:CD	14:G:241:PHE:HE2	2.04	0.70
16:I:281:ILE:CG2	16:I:284:ILE:CG1	2.69	0.70
17:J:162:GLU:HA	17:J:166:LEU:HD12	1.73	0.70
18:K:347:ARG:HH11	24:Q:205:ALA:CB	2.01	0.70
20:M:146:VAL:HG12	20:M:158:THR:HG23	1.72	0.70
21:N:19:SER:CB	27:T:35:ILE:CG2	2.55	0.70
24:Q:243:PHE:CZ	24:Q:287:THR:CB	2.72	0.70
25:R:94:PHE:CZ	25:R:99:TYR:CE2	2.80	0.70
29:V:52:LEU:O	29:V:108:TYR:HE1	1.75	0.70
30:W:3:LEU:HB3	30:W:106:GLN:HG2	1.74	0.70
30:W:32:SER:O	30:W:36:ILE:CG1	2.40	0.70
31:X:46:TRP:CE2	31:X:132:SER:HA	2.26	0.70
33:Z:183:LYS:NZ	33:Z:579:GLU:OE2	2.16	0.70
33:Z:193:PHE:CE2	33:Z:200:THR:HG21	2.26	0.70
7:7:170:VAL:HG12	7:7:174:ARG:HH22	1.55	0.70
19:L:227:GLY:H	20:M:339:ARG:HH22	1.40	0.70
22:O:223:LEU:O	22:O:279:ILE:HG21	1.92	0.70
24:Q:351:ILE:HG22	24:Q:362:ILE:CD1	2.22	0.70
2:2:94:ILE:CG2	3:3:90:ARG:HH21	2.05	0.70
4:4:81:SER:HA	4:4:124:LYS:HZ3	1.57	0.70
17:J:216:ALA:O	17:J:219:VAL:HG23	1.90	0.70
18:K:300:LEU:O	18:K:333:ARG:NH2	2.19	0.70
20:M:307:GLU:CG	20:M:311:GLN:HE21	2.05	0.70
22:O:373:TRP:CD1	28:U:200:LEU:CG	2.74	0.70
24:Q:85:MET:HE2	24:Q:93:THR:HG23	1.73	0.70
7:7:8:TYR:OH	7:7:11:GLY:HA3	1.92	0.69
15:H:95:HIS:HE1	16:I:117:HIS:ND1	1.88	0.69
18:K:123:LEU:HD12	18:K:126:LEU:HD11	1.73	0.69
19:L:259:SER:CB	19:L:303:ARG:CZ	2.69	0.69
19:L:336:ALA:HA	19:L:339:ARG:HE	1.57	0.69
21:N:21:LYS:HG3	21:N:55:PHE:CG	2.26	0.69
21:N:49:LEU:HD13	21:N:57:ASP:OD2	1.92	0.69
21:N:137:PHE:HE2	21:N:165:ILE:HG13	1.55	0.69
21:N:771:PHE:HE2	21:N:885:ILE:CB	2.05	0.69
22:O:203:THR:O	22:O:204:SER:HB2	1.92	0.69
25:R:308:LEU:HD12	25:R:334:ARG:HH11	1.50	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:339:ALA:HB2	25:R:377:LEU:HD22	1.74	0.69
7:7:85:PHE:HE2	7:7:120:ARG:CZ	2.05	0.69
9:B:85:LEU:HD21	9:B:118:MET:HE3	1.73	0.69
11:D:106:VAL:HG11	11:D:148:TYR:CE2	2.27	0.69
19:L:253:ASP:HA	20:M:256:ILE:HG21	1.73	0.69
22:O:358:ILE:CG2	22:O:359:SER:H	2.04	0.69
25:R:312:TYR:CE2	32:Y:73:PHE:CD1	2.80	0.69
27:T:197:TYR:O	27:T:198:ASP:HB3	1.92	0.69
27:T:249:MET:O	27:T:250:MET:HB3	1.90	0.69
29:V:117:TRP:CE2	29:V:196:TYR:HB2	2.24	0.69
30:W:20:ASP:O	30:W:21:PHE:HD1	1.76	0.69
33:Z:126:TYR:O	33:Z:127:SER:CB	2.38	0.69
33:Z:924:LYS:HD3	33:Z:958:ASN:OD1	1.92	0.69
11:D:203:VAL:O	11:D:204:GLN:HB2	1.91	0.69
14:G:140:VAL:CG2	14:G:220:LEU:CD2	2.41	0.69
16:I:244:PHE:HE1	16:I:246:ARG:CG	2.04	0.69
17:J:350:MET:HG2	17:J:386:VAL:HG13	1.72	0.69
21:N:414:GLY:HA3	21:N:728:LYS:NZ	2.07	0.69
23:P:265:VAL:HG22	23:P:280:LEU:CD2	2.22	0.69
28:U:223:HIS:HE1	28:U:224:THR:OG1	1.67	0.69
31:X:41:GLU:HB2	31:X:45:PHE:N	2.06	0.69
33:Z:397:ASP:OD2	33:Z:426:TYR:CE1	2.45	0.69
16:I:128:TYR:CD2	16:I:154:MET:HG3	2.27	0.69
17:J:37:LYS:HE3	18:K:58:TYR:CE1	2.26	0.69
17:J:136:LEU:HD22	17:J:217:GLU:CD	2.17	0.69
17:J:167:PRO:CG	17:J:174:PHE:CZ	2.75	0.69
17:J:191:PRO:HA	17:J:295:ASN:ND2	2.07	0.69
18:K:254:VAL:CG1	18:K:299:LEU:CD2	2.65	0.69
18:K:254:VAL:HG13	18:K:258:PHE:CE1	2.25	0.69
22:O:177:GLN:O	22:O:181:PHE:CD2	2.45	0.69
22:O:344:VAL:CG2	23:P:361:THR:CG2	2.70	0.69
24:Q:253:ASN:ND2	24:Q:258:ALA:HB2	2.06	0.69
30:W:1:MET:H2	30:W:44:ASN:HD21	1.39	0.69
33:Z:193:PHE:HE2	33:Z:200:THR:HG21	1.57	0.69
4:4:37:LEU:HD21	4:4:43:MET:CE	2.23	0.69
14:G:164:THR:HA	14:G:168:ARG:HE	1.56	0.69
16:I:110:GLU:HB3	16:I:119:ILE:HG23	1.74	0.69
20:M:228:LYS:HE2	20:M:326:ALA:HB1	1.75	0.69
22:O:188:PHE:HD2	22:O:220:SER:HB3	1.53	0.69
24:Q:416:VAL:HG21	25:R:403:LEU:HD22	1.74	0.69
27:T:197:TYR:CD2	27:T:235:PHE:CZ	2.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:16:LEU:HD22	29:V:209:GLU:CG	2.22	0.69
33:Z:318:LYS:NZ	33:Z:459:ALA:C	2.45	0.69
9:B:179:TRP:HD1	9:B:183:LEU:HD13	0.69	0.69
15:H:102:CYS:SG	15:H:174:VAL:HG22	2.33	0.69
15:H:168:ILE:HG12	15:H:186:PRO:CB	2.23	0.69
17:J:150:VAL:CG2	17:J:153:LEU:HD11	2.18	0.69
19:L:132:ARG:CZ	19:L:156:MET:HG2	2.23	0.69
25:R:343:GLU:HG2	25:R:392:ARG:HH12	1.58	0.69
28:U:38:LEU:HB3	28:U:89:LEU:HD23	1.75	0.69
28:U:92:TRP:CE3	28:U:106:ILE:CG2	2.76	0.69
30:W:114:VAL:O	30:W:114:VAL:HG12	1.92	0.69
33:Z:189:ALA:CB	33:Z:193:PHE:CD2	2.74	0.69
33:Z:854:LEU:HD22	33:Z:904:LEU:HD13	1.75	0.69
8:A:32:PHE:CZ	18:K:428:LYS:NZ	2.59	0.69
8:A:104:PHE:CD2	8:A:110:TYR:O	2.45	0.69
17:J:219:VAL:CA	18:K:281:ARG:CD	2.71	0.69
19:L:426:LYS:HG3	19:L:427:LYS:N	2.08	0.69
21:N:49:LEU:CD2	21:N:55:PHE:CD1	2.76	0.69
21:N:421:ASP:HA	21:N:424:LYS:CE	2.23	0.69
23:P:133:GLU:HG3	23:P:135:GLU:H	1.57	0.69
25:R:33:LEU:CD1	25:R:43:ARG:HG3	2.23	0.69
31:X:85:ARG:NH1	31:X:106:SER:HB3	2.07	0.69
4:4:43:MET:HG3	4:4:45:PHE:HZ	1.56	0.69
4:4:69:ARG:HG3	11:D:90:ARG:HH11	1.55	0.69
8:A:40:ILE:HD13	8:A:84:ASN:HA	1.75	0.69
10:C:53:THR:OG1	10:C:210:ARG:HG2	1.92	0.69
15:H:95:HIS:CE1	16:I:117:HIS:ND1	2.60	0.69
15:H:382:LEU:HD12	15:H:408:SER:HB3	1.72	0.69
16:I:244:PHE:CE1	16:I:246:ARG:CG	2.75	0.69
17:J:167:PRO:HG3	17:J:174:PHE:CZ	2.27	0.69
18:K:134:SER:HB3	18:K:255:ARG:NH2	2.01	0.69
20:M:163:PHE:CG	20:M:261:LYS:HE3	2.27	0.69
22:O:5:HIS:ND1	22:O:27:GLU:HB3	2.08	0.69
22:O:66:VAL:CG1	22:O:106:PHE:CZ	2.75	0.69
22:O:230:PHE:CE1	22:O:251:LEU:CG	2.50	0.69
22:O:293:LEU:HG	22:O:297:ILE:HD11	1.74	0.69
28:U:16:LEU:HD22	29:V:209:GLU:HG2	1.73	0.69
30:W:163:ASN:HB3	30:W:164:PRO:HD2	1.73	0.69
1:1:45:ARG:HH22	1:1:53:GLN:CB	2.03	0.69
8:A:53:VAL:HG11	8:A:82:VAL:HG21	1.74	0.69
10:C:160:TRP:CH2	10:C:163:ILE:HD13	2.27	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:157:SER:HB3	11:D:159:TRP:HE1	1.57	0.69
14:G:98:PHE:CE2	14:G:106:ILE:HA	2.28	0.69
14:G:174:GLU:HB2	14:G:201:LEU:HD23	1.74	0.69
18:K:347:ARG:HH11	24:Q:205:ALA:HB3	1.55	0.69
21:N:399:PHE:CE1	21:N:441:VAL:HG23	1.94	0.69
22:O:79:VAL:CG2	22:O:122:HIS:CG	2.76	0.69
22:O:119:SER:C	22:O:166:ARG:HD3	2.18	0.69
23:P:425:HIS:CD2	28:U:225:ILE:HG12	2.28	0.69
24:Q:51:ARG:HH22	24:Q:92:LYS:CD	2.00	0.69
28:U:35:GLY:HA3	28:U:93:TYR:HB3	1.73	0.69
29:V:118:LEU:HD13	29:V:140:VAL:CB	2.15	0.69
30:W:9:VAL:O	30:W:113:PHE:CD2	2.41	0.69
33:Z:64:TYR:OH	33:Z:115:LEU:HD22	1.92	0.69
20:M:162:GLU:HB2	20:M:166:ARG:HE	1.58	0.69
22:O:79:VAL:HG21	22:O:123:GLY:N	2.08	0.69
24:Q:14:LEU:HD13	24:Q:26:VAL:HG23	1.73	0.69
25:R:353:MET:HA	25:R:357:PHE:CG	2.27	0.69
28:U:37:ILE:HD13	28:U:121:LEU:HD12	1.75	0.69
7:7:-3:VAL:HG12	7:7:49:ILE:CG1	2.22	0.68
13:F:49:LEU:HD12	13:F:210:ASN:HB3	1.75	0.68
23:P:241:LEU:HD13	23:P:264:ILE:HG12	1.75	0.68
23:P:303:PHE:C	23:P:348:HIS:NE2	2.50	0.68
24:Q:174:LEU:CD1	24:Q:178:HIS:CE1	2.76	0.68
10:C:115:LEU:CD1	10:C:137:TYR:OH	2.41	0.68
14:G:140:VAL:HB	14:G:220:LEU:HD21	1.76	0.68
16:I:222:TYR:CE1	16:I:349:LEU:HA	2.28	0.68
23:P:203:ILE:HG21	23:P:220:TYR:CE1	2.27	0.68
26:S:230:LYS:HE3	26:S:234:ILE:HD11	1.75	0.68
26:S:471:LEU:HB2	28:U:288:PHE:CZ	2.28	0.68
28:U:158:PRO:O	28:U:159:CYS:HB2	1.92	0.68
29:V:53:MET:HE2	29:V:65:VAL:CG1	2.23	0.68
29:V:114:PHE:HD1	29:V:118:LEU:C	2.01	0.68
30:W:71:LYS:HA	30:W:74:ALA:CB	2.22	0.68
33:Z:230:ILE:HG22	33:Z:231:ASP:N	2.07	0.68
6:6:116:PHE:CD2	6:6:122:TYR:HB3	2.28	0.68
10:C:42:ASP:HA	10:C:218:LYS:HZ2	1.56	0.68
19:L:251:ILE:C	19:L:252:VAL:N	2.52	0.68
21:N:365:PHE:CZ	21:N:406:TYR:CB	2.75	0.68
24:Q:419:LEU:HD23	24:Q:419:LEU:C	2.18	0.68
25:R:259:PHE:CD2	25:R:329:PHE:CD1	2.82	0.68
25:R:418:GLY:O	26:S:475:TYR:HE1	1.77	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:109:HIS:CE1	29:V:122:ASP:OD1	2.46	0.68
30:W:101:ARG:NH1	30:W:104:LYS:HG2	2.02	0.68
33:Z:312:TYR:HH	33:Z:348:LEU:HA	1.57	0.68
7:7:92:MET:CE	7:7:102:LEU:HD23	2.24	0.68
9:B:231:LYS:HD3	9:B:234:ARG:HH22	1.58	0.68
12:E:204:LEU:O	12:E:208:MET:HG3	1.92	0.68
14:G:114:ARG:O	14:G:118:TYR:CD2	2.47	0.68
17:J:37:LYS:HE3	18:K:58:TYR:OH	1.94	0.68
17:J:40:ASN:CB	18:K:65:GLU:OE2	2.40	0.68
20:M:216:LYS:NZ	20:M:320:ARG:H	1.92	0.68
22:O:230:PHE:CD1	22:O:251:LEU:HD11	2.29	0.68
22:O:325:GLU:O	22:O:329:MET:CG	2.40	0.68
25:R:422:ARG:NH1	26:S:301:PRO:HG3	2.04	0.68
33:Z:103:TYR:HA	33:Z:112:LYS:CG	2.23	0.68
5:5:83:LEU:O	5:5:87:VAL:HG23	1.93	0.68
10:C:213:PHE:HE2	10:C:230:PHE:CE2	2.11	0.68
16:I:182:SER:O	16:I:360:LYS:HE2	1.93	0.68
17:J:333:ARG:HH12	17:J:343:LEU:CD1	2.04	0.68
18:K:331:PRO:HA	18:K:335:ASP:OD1	1.93	0.68
19:L:132:ARG:NH2	19:L:149:ASP:OD1	2.27	0.68
21:N:52:ASP:O	21:N:53:ASP:CB	2.41	0.68
33:Z:133:ASP:CG	33:Z:134:SER:H	2.00	0.68
33:Z:193:PHE:CE2	33:Z:196:SER:CA	2.76	0.68
33:Z:312:TYR:CE1	33:Z:348:LEU:O	2.46	0.68
33:Z:321:PHE:CZ	33:Z:351:PRO:HD3	2.27	0.68
33:Z:325:GLY:O	33:Z:326:VAL:CG2	2.41	0.68
4:4:36:GLN:NE2	4:4:39:PRO:HA	2.06	0.68
9:B:75:TYR:HB3	9:B:134:LEU:HD23	1.73	0.68
17:J:119:SER:O	17:J:120:TYR:CG	2.47	0.68
19:L:379:ALA:HA	19:L:382:MET:CE	2.24	0.68
20:M:75:LEU:CD2	20:M:77:TYR:HE1	2.06	0.68
20:M:415:PHE:CE1	20:M:419:ILE:HD11	2.27	0.68
21:N:405:LEU:HD11	21:N:426:ILE:HD13	1.76	0.68
22:O:230:PHE:CE1	22:O:251:LEU:CD1	2.76	0.68
23:P:147:LYS:NZ	23:P:159:ILE:HG13	2.09	0.68
31:X:33:ILE:HG13	31:X:48:PHE:CZ	2.28	0.68
5:5:83:LEU:HD11	5:5:97:MET:CE	2.23	0.68
6:6:66:TYR:HE2	6:6:73:LYS:O	1.77	0.68
15:H:187:LEU:HD22	16:I:115:ASP:OD1	1.94	0.68
15:H:243:PRO:HG2	15:H:373:ARG:HE	1.58	0.68
18:K:254:VAL:HG13	18:K:299:LEU:HD23	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:238:ALA:O	21:N:242:PHE:CD2	2.46	0.68
21:N:525:ASN:ND2	21:N:535:LEU:HD23	2.09	0.68
25:R:191:LEU:CB	25:R:213:TYR:HE2	2.06	0.68
26:S:465:ILE:HG13	27:T:266:TYR:HE2	1.56	0.68
27:T:199:PHE:O	27:T:200:LEU:CD2	2.41	0.68
29:V:113:GLY:HA2	29:V:118:LEU:CD2	2.23	0.68
30:W:20:ASP:O	30:W:21:PHE:CD1	2.47	0.68
33:Z:924:LYS:CB	33:Z:959:HIS:ND1	2.57	0.68
15:H:155:PHE:CD1	20:M:76:PRO:HA	2.28	0.68
18:K:68:ILE:CD1	21:N:608:LEU:CD2	2.72	0.68
18:K:350:ARG:NH2	24:Q:215:VAL:CG1	2.57	0.68
19:L:252:VAL:CG1	20:M:256:ILE:HD11	1.87	0.68
23:P:134:VAL:HG23	23:P:138:ARG:NH1	2.08	0.68
26:S:185:PHE:HD1	26:S:239:ARG:CZ	2.07	0.68
26:S:286:TYR:OH	26:S:323:LEU:HD22	1.94	0.68
29:V:133:ASN:O	29:V:134:SER:CB	2.42	0.68
33:Z:737:ALA:HB1	33:Z:775:MET:CE	2.24	0.68
1:1:19:ARG:HH11	1:1:29:ARG:HG3	1.53	0.68
3:3:179:TYR:HE2	3:3:188:LYS:HD2	1.58	0.68
8:A:21:PRO:HB2	8:A:22:GLU:OE2	1.93	0.68
18:K:99:PHE:CE1	18:K:101:GLU:O	2.47	0.68
22:O:205:ILE:HD12	22:O:210:ARG:CD	2.22	0.68
22:O:306:ARG:CG	22:O:350:ILE:O	2.41	0.68
23:P:302:LEU:CB	23:P:310:ARG:HH21	2.07	0.68
31:X:41:GLU:HG3	31:X:45:PHE:CB	2.23	0.68
2:2:8:PHE:CE2	2:2:11:GLY:HA3	2.27	0.68
4:4:80:SER:CB	4:4:124:LYS:HD2	2.15	0.68
5:5:40:PHE:CD2	5:5:41:LEU:HG	2.29	0.68
7:7:17:ASP:O	7:7:33:ARG:HD3	1.94	0.68
9:B:221:LEU:O	9:B:233:PRO:HD2	1.93	0.68
15:H:207:THR:CG2	15:H:208:TYR:CD2	2.77	0.68
21:N:14:ARG:CB	27:T:80:ASN:HD21	2.06	0.68
26:S:404:LEU:HG	26:S:408:CYS:SG	2.34	0.68
28:U:283:ARG:NH2	29:V:283:THR:HG22	2.07	0.68
32:Y:80:GLU:CD	32:Y:83:ARG:HH21	2.01	0.68
33:Z:510:LEU:CD1	33:Z:542:ILE:HG12	2.18	0.68
7:7:8:TYR:CE2	7:7:11:GLY:N	2.62	0.67
8:A:135:ARG:HE	14:G:124:LEU:HD23	1.57	0.67
12:E:107:ILE:HD13	12:E:112:LEU:HD21	1.76	0.67
17:J:113:VAL:HG21	17:J:122:LEU:HD22	1.76	0.67
21:N:574:VAL:HG13	21:N:578:ASP:OD2	1.94	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:185:PHE:HD2	22:O:220:SER:HA	1.58	0.67
27:T:245:TYR:O	27:T:246:GLU:HB3	1.92	0.67
31:X:75:TRP:CH2	31:X:125:MET:HG3	2.29	0.67
33:Z:321:PHE:CZ	33:Z:351:PRO:N	2.62	0.67
33:Z:329:ILE:HD11	33:Z:335:LEU:HB3	1.74	0.67
4:4:81:SER:CA	4:4:124:LYS:HZ3	2.07	0.67
7:7:119:LEU:HG	7:7:134:LEU:HD12	1.76	0.67
9:B:27:ALA:HB1	18:K:426:PHE:HE1	1.57	0.67
13:F:80:ASP:CG	13:F:126:ARG:HH22	2.02	0.67
23:P:302:LEU:HB2	23:P:310:ARG:NH2	2.08	0.67
29:V:244:MET:O	29:V:247:ILE:HG22	1.93	0.67
30:W:37:PHE:CZ	30:W:49:VAL:CG1	2.77	0.67
33:Z:133:ASP:CA	33:Z:137:TYR:CG	2.73	0.67
4:4:43:MET:SD	4:4:45:PHE:CZ	2.85	0.67
4:4:81:SER:N	4:4:124:LYS:HZ3	1.92	0.67
7:7:85:PHE:CE2	7:7:120:ARG:CD	2.77	0.67
13:F:201:LEU:HD13	13:F:206:LEU:HD12	1.71	0.67
15:H:105:ILE:HD13	15:H:146:VAL:HA	1.76	0.67
18:K:346:ARG:CZ	18:K:372:ILE:HD13	2.25	0.67
20:M:257:GLY:O	20:M:260:ALA:HB3	1.95	0.67
20:M:410:VAL:CG1	20:M:414:ASP:HB2	2.24	0.67
21:N:596:LEU:HD23	21:N:628:ALA:HA	1.75	0.67
22:O:366:MET:HE3	28:U:226:LEU:CD1	2.24	0.67
22:O:373:TRP:CZ3	28:U:233:PHE:HB2	2.25	0.67
23:P:121:THR:HG22	23:P:122:ILE:HG23	1.75	0.67
25:R:135:ILE:HA	25:R:154:LEU:HD13	1.76	0.67
33:Z:401:VAL:HG21	33:Z:426:TYR:OH	1.92	0.67
33:Z:758:LEU:HD22	33:Z:791:LYS:CD	2.20	0.67
1:1:14:LEU:CD1	1:1:44:CYS:SG	2.78	0.67
3:3:179:TYR:CZ	3:3:188:LYS:HE3	2.30	0.67
7:7:39:ASP:HA	7:7:198:LEU:HD22	1.76	0.67
13:F:84:LEU:HD21	13:F:128:TYR:CE2	2.29	0.67
14:G:121:ALA:O	14:G:125:TYR:CD1	2.44	0.67
16:I:247:ILE:HD13	16:I:267:ILE:HD13	1.75	0.67
19:L:370:LYS:HD2	19:L:374:PHE:CZ	2.28	0.67
22:O:124:ASP:CB	22:O:127:LEU:HD13	2.21	0.67
23:P:433:ILE:HD11	28:U:203:LYS:HD2	1.76	0.67
26:S:223:LEU:HD13	26:S:259:TYR:HE1	1.59	0.67
28:U:16:LEU:HD23	29:V:209:GLU:HG2	1.75	0.67
1:1:124:TYR:CE1	1:1:142:PHE:CD2	2.83	0.67
6:6:48:PHE:CZ	6:6:50:ALA:HB3	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:11:PHE:CE1	12:E:136:ARG:HB2	2.29	0.67
16:I:176:SER:O	17:J:282:PHE:CD1	2.48	0.67
17:J:45:GLU:OE1	21:N:608:LEU:HD11	1.94	0.67
18:K:200:GLN:HA	25:R:204:TRP:CZ2	2.29	0.67
20:M:50:ARG:N	30:W:73:LEU:HD13	2.09	0.67
22:O:362:GLN:O	22:O:366:MET:HG3	1.94	0.67
2:2:104:ASP:CG	2:2:106:THR:OG1	2.36	0.67
8:A:104:PHE:CE2	8:A:111:ASP:O	2.47	0.67
13:F:198:SER:HB3	13:F:206:LEU:CD2	2.23	0.67
19:L:379:ALA:HA	19:L:382:MET:HE3	1.76	0.67
22:O:137:TYR:CB	22:O:149:LEU:HD11	2.23	0.67
22:O:166:ARG:HH21	22:O:169:ASN:CB	2.08	0.67
24:Q:429:LYS:CE	29:V:269:ARG:HH22	2.08	0.67
33:Z:126:TYR:O	33:Z:127:SER:OG	2.10	0.67
13:F:117:GLN:NE2	13:F:121:GLN:HE21	1.92	0.67
21:N:19:SER:HB2	27:T:35:ILE:HG21	1.75	0.67
22:O:306:ARG:HG3	22:O:351:SER:C	2.20	0.67
26:S:191:HIS:CD2	26:S:206:GLN:HG3	2.30	0.67
33:Z:471:LEU:HD23	33:Z:471:LEU:C	2.19	0.67
6:6:63:VAL:O	6:6:67:HIS:HD2	1.78	0.67
8:A:46:ARG:NE	8:A:152:PRO:HB2	2.09	0.67
10:C:149:TYR:OH	11:D:59:ILE:CB	2.42	0.67
11:D:92:GLU:OE2	11:D:108:TYR:HE2	1.77	0.67
12:E:18:GLU:HB3	13:F:31:GLN:HE22	1.60	0.67
14:G:8:ASP:OD1	14:G:9:LEU:HG	1.95	0.67
18:K:350:ARG:HH21	24:Q:215:VAL:CG1	2.07	0.67
19:L:193:LEU:HD21	19:L:220:LEU:HD21	1.76	0.67
21:N:15:GLU:O	21:N:16:ASN:CB	2.43	0.67
22:O:41:LEU:HD11	22:O:47:LYS:HE2	1.76	0.67
22:O:269:LEU:CD2	22:O:270:ILE:HG13	2.24	0.67
25:R:207:ARG:NH1	25:R:211:LYS:NZ	2.43	0.67
28:U:18:ALA:HB3	28:U:125:VAL:HG11	1.76	0.67
33:Z:146:PHE:O	33:Z:210:TYR:CE2	2.48	0.67
2:2:186:TYR:CE2	2:2:188:ARG:HB2	2.29	0.67
10:C:33:GLY:HA3	10:C:65:LYS:NZ	2.10	0.67
10:C:106:ILE:HG12	10:C:107:PRO:O	1.95	0.67
12:E:17:PRO:HA	13:F:24:TYR:CE1	2.30	0.67
15:H:172:MET:CE	16:I:129:TYR:CB	2.70	0.67
17:J:220:GLN:HE22	18:K:293:GLN:HE22	1.39	0.67
20:M:44:PHE:HE2	22:O:110:ASP:O	1.76	0.67
21:N:52:ASP:OD1	21:N:54:THR:HG23	1.95	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:298:TYR:OH	21:N:766:GLN:OE1	2.13	0.67
22:O:185:PHE:CB	22:O:223:LEU:CB	2.66	0.67
23:P:286:ASN:CA	23:P:293:LEU:HD11	2.25	0.67
25:R:181:TYR:CD2	25:R:183:ASP:HB2	2.30	0.67
26:S:435:LYS:HZ1	27:T:238:GLN:CD	2.01	0.67
27:T:199:PHE:O	27:T:200:LEU:CG	2.42	0.67
31:X:66:LEU:CD1	31:X:97:TYR:CB	2.73	0.67
1:1:-8:LYS:HE3	1:1:51:ASP:OD1	1.94	0.67
10:C:160:TRP:CZ2	10:C:163:ILE:HD13	2.30	0.67
20:M:357:ARG:HG2	20:M:391:LEU:HD11	1.77	0.67
22:O:42:SER:O	22:O:46:THR:HG21	1.89	0.67
23:P:347:GLU:O	23:P:351:ARG:HG3	1.95	0.67
25:R:125:GLU:OE1	25:R:127:GLU:N	2.27	0.67
27:T:197:TYR:O	27:T:198:ASP:CB	2.43	0.67
27:T:224:ARG:HG2	27:T:242:LYS:HG2	1.77	0.67
30:W:143:ASN:O	30:W:174:VAL:O	2.12	0.67
33:Z:134:SER:N	33:Z:134:SER:C	2.53	0.67
33:Z:236:PHE:CE2	33:Z:245:VAL:HG22	2.30	0.67
3:3:179:TYR:CE2	3:3:188:LYS:HG3	2.31	0.66
9:B:66:LEU:HD13	9:B:235:PHE:CG	2.30	0.66
17:J:27:ILE:HG12	18:K:51:LEU:CG	2.25	0.66
20:M:200:PRO:HB2	20:M:319:ASP:OD2	1.95	0.66
25:R:238:PHE:HD2	25:R:244:THR:HG21	1.61	0.66
26:S:471:LEU:CB	28:U:288:PHE:CZ	2.78	0.66
27:T:242:LYS:HG3	27:T:242:LYS:O	1.94	0.66
33:Z:889:VAL:HG22	33:Z:891:PRO:HD2	1.77	0.66
1:1:57:ASP:OD2	8:A:106:TYR:OH	1.95	0.66
8:A:207:ILE:CG2	8:A:211:ILE:HD11	2.25	0.66
18:K:124:SER:O	18:K:127:ASP:OD1	2.13	0.66
18:K:244:HIS:HB2	19:L:256:ILE:HG12	1.76	0.66
20:M:379:LEU:HD13	20:M:415:PHE:CD1	2.30	0.66
21:N:190:LEU:HD13	21:N:224:THR:HG23	1.77	0.66
22:O:62:TYR:CE2	22:O:82:LEU:CD2	2.58	0.66
23:P:221:TYR:HE2	23:P:244:ILE:CB	2.08	0.66
23:P:245:TYR:HD1	23:P:257:TRP:HE1	1.32	0.66
24:Q:138:SER:CB	24:Q:161:LEU:HD11	2.26	0.66
24:Q:138:SER:HB3	24:Q:161:LEU:HD11	1.76	0.66
25:R:137:LEU:HD11	25:R:141:TYR:CZ	2.29	0.66
26:S:315:LYS:HG2	26:S:345:TYR:OH	1.94	0.66
27:T:107:SER:HG	27:T:174:PHE:HZ	1.43	0.66
27:T:169:GLN:CD	27:T:174:PHE:CZ	2.73	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:51:GLY:HA2	29:V:71:MET:HG2	1.75	0.66
30:W:20:ASP:C	30:W:21:PHE:HD1	2.02	0.66
4:4:26:VAL:HG13	4:4:28:LYS:O	1.93	0.66
15:H:410:LEU:HB2	15:H:447:VAL:HG11	1.77	0.66
21:N:508:THR:HG21	21:N:513:ILE:HB	1.77	0.66
22:O:366:MET:HE3	28:U:226:LEU:HD13	1.76	0.66
23:P:241:LEU:CA	23:P:244:ILE:HG22	2.25	0.66
27:T:227:PRO:HD3	27:T:241:GLU:OE2	1.95	0.66
27:T:241:GLU:CA	27:T:246:GLU:HB2	2.22	0.66
30:W:52:ILE:HD13	30:W:94:ALA:HB2	1.77	0.66
33:Z:491:LEU:CD1	33:Z:900:LEU:CD1	2.67	0.66
1:1:13:ILE:HD12	1:1:177:VAL:HG22	1.76	0.66
1:1:19:ARG:HH11	1:1:29:ARG:CA	2.06	0.66
7:7:8:TYR:CD2	7:7:10:ASN:OD1	2.47	0.66
10:C:53:THR:HB	10:C:59:GLN:NE2	2.09	0.66
11:D:106:VAL:HG11	11:D:148:TYR:HE2	1.59	0.66
17:J:301:ASP:H	17:J:304:LEU:CD1	2.02	0.66
18:K:99:PHE:CZ	18:K:101:GLU:C	2.73	0.66
18:K:314:VAL:CG1	18:K:316:MET:HE2	2.24	0.66
21:N:514:THR:CG2	21:N:546:LEU:CD1	2.73	0.66
23:P:213:TYR:CE2	23:P:217:LYS:HE3	2.30	0.66
28:U:16:LEU:HD22	29:V:209:GLU:CD	2.19	0.66
31:X:46:TRP:CB	31:X:68:LEU:HD13	2.24	0.66
33:Z:867:PHE:CD2	33:Z:871:HIS:HA	2.31	0.66
11:D:172:ARG:O	11:D:176:GLU:HG3	1.96	0.66
16:I:199:GLU:HG3	16:I:236:VAL:HG13	1.77	0.66
18:K:281:ARG:NH1	18:K:287:GLY:N	2.43	0.66
20:M:123:SER:O	20:M:125:GLN:HG3	1.96	0.66
21:N:458:ALA:HB2	21:N:492:THR:OG1	1.95	0.66
21:N:771:PHE:CD2	21:N:772:GLN:O	2.49	0.66
29:V:79:SER:HA	29:V:121:VAL:CG1	2.26	0.66
30:W:52:ILE:HG22	30:W:61:VAL:HG22	1.77	0.66
33:Z:146:PHE:C	33:Z:210:TYR:HH	2.01	0.66
7:7:10:ASN:HD22	7:7:195:ASN:ND2	1.94	0.66
12:E:219:LEU:CD1	12:E:239:LEU:HD23	2.26	0.66
15:H:244:LYS:HE2	15:H:340:LEU:O	1.94	0.66
18:K:353:PHE:HD1	18:K:387:MET:SD	2.14	0.66
21:N:514:THR:CG2	21:N:546:LEU:HD12	2.25	0.66
22:O:225:ASP:O	22:O:226:LYS:HG3	1.96	0.66
24:Q:269:LYS:NZ	24:Q:281:ILE:CD1	2.57	0.66
25:R:176:ARG:HB2	25:R:243:LEU:HD11	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:66:LEU:CD1	31:X:99:PHE:CE1	2.79	0.66
33:Z:72:LYS:CE	33:Z:117:ASP:OD2	2.43	0.66
33:Z:192:GLY:O	33:Z:193:PHE:HB2	1.96	0.66
33:Z:312:TYR:CE1	33:Z:348:LEU:C	2.73	0.66
33:Z:427:GLN:HG2	33:Z:428:TRP:CD2	2.31	0.66
5:5:181:THR:OG1	5:5:184:GLY:O	2.11	0.66
13:F:50:LYS:HE3	13:F:212:SER:HB3	1.77	0.66
13:F:65:LYS:HD3	13:F:222:PHE:CD2	2.29	0.66
15:H:96:PRO:HA	15:H:193:PRO:CG	2.19	0.66
20:M:379:LEU:HD22	20:M:415:PHE:CE1	2.31	0.66
22:O:106:PHE:O	22:O:107:GLN:CB	2.43	0.66
22:O:214:ALA:HB1	22:O:248:TYR:CZ	2.29	0.66
24:Q:151:TYR:CE2	24:Q:187:LYS:HB3	2.29	0.66
25:R:36:SER:C	25:R:43:ARG:NH2	2.53	0.66
25:R:208:ASN:ND2	25:R:238:PHE:CB	2.56	0.66
28:U:18:ALA:CB	28:U:93:TYR:OH	2.41	0.66
33:Z:562:TRP:CH2	33:Z:566:LEU:HD22	2.31	0.66
1:1:-5:GLU:H	2:2:116:HIS:CE1	2.14	0.66
3:3:75:PRO:CB	3:3:111:PHE:CD2	2.79	0.66
7:7:85:PHE:CE2	7:7:120:ARG:NE	2.63	0.66
7:7:201:LYS:CB	7:7:204:LEU:HD11	2.26	0.66
15:H:249:TYR:HE2	15:H:374:LYS:HG2	1.61	0.66
22:O:202:SER:O	22:O:203:THR:CG2	2.44	0.66
24:Q:331:THR:HG22	24:Q:335:PHE:CD2	2.30	0.66
27:T:241:GLU:N	27:T:246:GLU:HB2	2.10	0.66
31:X:46:TRP:CZ2	31:X:132:SER:N	2.64	0.66
33:Z:357:ILE:HG12	33:Z:960:GLY:HA3	1.78	0.66
5:5:55:TRP:NE1	6:6:89:TYR:OH	2.28	0.66
14:G:60:PRO:HB2	14:G:61:GLN:OE1	1.96	0.66
15:H:174:VAL:HG12	15:H:183:ILE:HG21	1.76	0.66
16:I:96:LEU:O	16:I:99:ILE:HG22	1.96	0.66
16:I:362:LEU:HG	16:I:377:LEU:HD22	1.77	0.66
26:S:214:MET:CE	26:S:236:LEU:HD13	2.26	0.66
29:V:106:GLY:C	29:V:107:TRP:CD1	2.74	0.66
31:X:46:TRP:CZ2	31:X:131:ASN:C	2.73	0.66
33:Z:610:GLY:C	33:Z:748:LEU:HB3	2.21	0.66
33:Z:756:MET:CE	33:Z:759:ARG:HE	2.08	0.66
1:1:1:THR:HG22	1:1:129:SER:N	2.09	0.66
7:7:-3:VAL:HG12	7:7:49:ILE:HG12	1.77	0.66
9:B:180:ASN:O	9:B:181:ASP:HB2	1.95	0.66
16:I:135:PHE:CD2	16:I:159:VAL:HG22	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:68:ILE:CG1	21:N:608:LEU:HD21	2.24	0.66
20:M:379:LEU:HD13	20:M:415:PHE:CE1	2.31	0.66
21:N:176:GLN:HE21	21:N:182:ASN:ND2	1.93	0.66
26:S:188:TYR:CZ	26:S:210:LEU:CD1	2.77	0.66
26:S:237:ILE:HG21	26:S:253:PHE:CE1	2.31	0.66
27:T:89:TYR:CE1	27:T:102:LYS:NZ	2.62	0.66
33:Z:357:ILE:HD11	33:Z:914:LEU:CD1	2.18	0.66
33:Z:862:MET:SD	33:Z:910:PRO:HG3	2.36	0.66
1:1:102:TYR:OH	1:1:180:ALA:HB2	1.96	0.65
9:B:189:ILE:HG21	9:B:246:ARG:HD3	1.77	0.65
12:E:165:TYR:C	12:E:167:TYR:CE1	2.74	0.65
17:J:37:LYS:HG3	18:K:58:TYR:CE1	2.32	0.65
18:K:140:HIS:HE1	18:K:142:HIS:HB2	1.60	0.65
19:L:270:ALA:HB1	19:L:276:CYS:SG	2.36	0.65
21:N:17:GLN:O	21:N:20:VAL:HG22	1.97	0.65
22:O:223:LEU:CD1	22:O:277:ILE:CD1	2.71	0.65
22:O:300:VAL:CG1	22:O:301:PHE:CE2	2.79	0.65
24:Q:61:LEU:CB	24:Q:65:TYR:CE2	2.70	0.65
24:Q:195:LYS:HE3	24:Q:229:ASP:OD2	1.96	0.65
28:U:40:ASP:CB	28:U:47:ARG:NH2	2.59	0.65
31:X:87:PHE:CE2	31:X:125:MET:SD	2.89	0.65
1:1:45:ARG:HH21	1:1:52:THR:C	2.03	0.65
7:7:201:LYS:HB2	7:7:204:LEU:HD11	1.77	0.65
9:B:4:ARG:HH11	11:D:3:GLY:HA3	1.60	0.65
15:H:167:ASP:HB3	15:H:186:PRO:CG	2.26	0.65
16:I:122:SER:HB3	16:I:126:PRO:O	1.96	0.65
17:J:27:ILE:HG12	18:K:51:LEU:CD2	2.26	0.65
21:N:300:ASN:HD22	21:N:920:VAL:HG11	1.59	0.65
21:N:406:TYR:HE1	21:N:448:LEU:CD1	1.92	0.65
22:O:269:LEU:HD22	22:O:270:ILE:HG13	1.78	0.65
23:P:296:GLN:O	23:P:300:VAL:HG23	1.96	0.65
28:U:275:VAL:HG13	29:V:251:TYR:OH	1.94	0.65
5:5:114:TYR:CE1	5:5:129:VAL:HG21	2.31	0.65
14:G:61:GLN:HA	14:G:64:VAL:HG23	1.79	0.65
17:J:37:LYS:CE	18:K:58:TYR:OH	2.44	0.65
18:K:156:SER:HA	19:L:126:ARG:NH1	2.11	0.65
19:L:249:SER:O	19:L:252:VAL:N	2.29	0.65
20:M:163:PHE:CD1	20:M:261:LYS:HG2	2.31	0.65
21:N:202:PHE:CZ	21:N:206:ILE:HD11	2.32	0.65
22:O:50:ASP:HA	22:O:53:LYS:HZ1	1.60	0.65
22:O:76:LEU:HD22	22:O:121:ASP:CG	2.20	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:31:LEU:CG	24:Q:50:ARG:NH2	2.55	0.65
26:S:468:ALA:O	26:S:472:HIS:HB2	1.96	0.65
30:W:87:MET:HB3	30:W:120:ASP:OD2	1.97	0.65
33:Z:286:VAL:O	33:Z:287:ARG:CB	2.37	0.65
33:Z:453:LEU:HD11	33:Z:899:GLN:CG	2.26	0.65
11:D:37:LYS:HE2	11:D:145:PRO:HB2	1.77	0.65
15:H:410:LEU:HD11	15:H:444:LEU:CD2	2.26	0.65
18:K:158:ILE:N	19:L:256:ILE:HG22	2.10	0.65
19:L:132:ARG:NH1	19:L:156:MET:HG2	2.11	0.65
20:M:217:GLY:HA3	20:M:343:LEU:HD23	1.78	0.65
21:N:329:HIS:ND1	21:N:355:TRP:CE3	2.65	0.65
21:N:399:PHE:CE1	21:N:441:VAL:CB	2.72	0.65
21:N:405:LEU:CD1	21:N:426:ILE:HD13	2.26	0.65
22:O:43:GLU:CD	22:O:44:SER:CB	2.70	0.65
22:O:196:LEU:HD13	22:O:213:LEU:HD23	1.78	0.65
28:U:283:ARG:HH11	29:V:284:ALA:CA	2.10	0.65
28:U:288:PHE:HA	28:U:291:LEU:HD12	1.79	0.65
30:W:44:ASN:HB2	30:W:47:ASN:HD21	1.62	0.65
33:Z:493:LEU:HD11	33:Z:497:PHE:HD2	1.60	0.65
33:Z:970:TYR:OH	33:Z:992:GLU:C	2.39	0.65
9:B:14:PRO:HA	10:C:24:TYR:CZ	2.32	0.65
13:F:165:SER:O	13:F:169:LYS:HG3	1.96	0.65
16:I:176:SER:HB2	17:J:282:PHE:CE1	2.31	0.65
22:O:11:LEU:CB	22:O:43:GLU:OE1	2.40	0.65
22:O:124:ASP:HB2	22:O:127:LEU:HD22	1.79	0.65
22:O:347:LEU:HB3	22:O:349:THR:CG2	2.26	0.65
25:R:94:PHE:HE2	25:R:96:GLN:CG	2.08	0.65
27:T:55:LEU:HG	27:T:59:LYS:CE	2.12	0.65
27:T:209:LEU:HB3	27:T:211:PHE:CZ	2.30	0.65
9:B:4:ARG:CG	13:F:123:TYR:OH	2.43	0.65
12:E:157:HIS:HB2	12:E:170:LYS:HD3	1.78	0.65
14:G:98:PHE:HE2	14:G:105:PRO:O	1.78	0.65
15:H:77:ALA:C	16:I:153:THR:HG22	2.20	0.65
19:L:357:ARG:O	19:L:360:ILE:HG22	1.97	0.65
20:M:161:SER:O	20:M:166:ARG:NH2	2.30	0.65
20:M:379:LEU:CD2	20:M:415:PHE:CD1	2.77	0.65
21:N:127:ASP:C	21:N:128:ILE:HG13	2.22	0.65
22:O:48:PHE:CE1	22:O:80:LYS:HD3	2.32	0.65
22:O:119:SER:CB	22:O:166:ARG:HD3	2.26	0.65
24:Q:425:GLN:OE1	29:V:265:GLU:OE1	2.14	0.65
25:R:194:VAL:HG13	25:R:206:ARG:HH21	1.60	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:66:TRP:C	30:W:93:ILE:HD12	2.21	0.65
29:V:104:VAL:HG11	29:V:107:TRP:NE1	2.11	0.65
33:Z:453:LEU:HD11	33:Z:899:GLN:HG2	1.78	0.65
2:2:205:PHE:HZ	3:3:144:LEU:HD22	1.62	0.65
5:5:8:PHE:HZ	5:5:13:ILE:HD11	1.56	0.65
6:6:115:SER:CB	6:6:128:ARG:HH11	2.08	0.65
15:H:430:ALA:HA	15:H:435:ARG:NH2	2.11	0.65
21:N:50:TYR:O	21:N:58:ARG:HG3	1.97	0.65
21:N:329:HIS:CE1	21:N:355:TRP:HE3	2.05	0.65
21:N:338:PHE:CZ	21:N:749:LEU:HB3	2.32	0.65
25:R:183:ASP:OD2	25:R:186:TYR:N	2.26	0.65
25:R:259:PHE:O	25:R:259:PHE:CD1	2.50	0.65
33:Z:862:MET:CE	33:Z:910:PRO:HG3	2.26	0.65
33:Z:963:ALA:C	33:Z:964:GLU:CD	2.65	0.65
10:C:106:ILE:CD1	10:C:111:LEU:HB2	2.25	0.65
12:E:72:ARG:HG3	12:E:72:ARG:O	1.96	0.65
13:F:13:PHE:CE2	14:G:129:ARG:HG2	2.31	0.65
15:H:307:PHE:CE1	15:H:309:ASP:OD1	2.48	0.65
18:K:349:ARG:HH11	18:K:377:SER:H	1.42	0.65
18:K:352:ILE:CG2	18:K:383:ILE:HG22	2.27	0.65
19:L:77:ARG:HD3	19:L:80:ASN:HD22	1.61	0.65
20:M:361:LEU:O	20:M:376:TRP:CZ2	2.50	0.65
22:O:105:GLN:HG3	22:O:108:GLU:OE1	1.95	0.65
23:P:260:VAL:HG22	23:P:328:ALA:HB2	1.79	0.65
23:P:286:ASN:HA	23:P:293:LEU:HD11	1.79	0.65
2:2:104:ASP:OD2	2:2:106:THR:OG1	2.14	0.65
8:A:57:LYS:NZ	8:A:69:VAL:CB	2.57	0.65
14:G:174:GLU:HB2	14:G:201:LEU:CD2	2.26	0.65
16:I:75:PHE:CD2	16:I:76:VAL:CG2	2.74	0.65
20:M:357:ARG:NH2	20:M:386:PHE:N	2.44	0.65
21:N:239:LEU:HD11	21:N:243:LYS:HE3	1.78	0.65
21:N:666:GLN:HA	21:N:873:ARG:HH21	1.59	0.65
22:O:79:VAL:HG21	22:O:122:HIS:CG	2.31	0.65
23:P:203:ILE:HG21	23:P:220:TYR:CD1	2.32	0.65
23:P:207:THR:CB	23:P:217:LYS:HZ3	2.10	0.65
24:Q:162:LEU:CD1	24:Q:178:HIS:HE2	2.08	0.65
33:Z:133:ASP:OD1	33:Z:134:SER:N	2.29	0.65
1:1:98:ILE:HD11	1:1:127:ALA:HB3	1.79	0.65
4:4:11:SER:HB2	4:4:182:ILE:HG23	1.78	0.65
4:4:80:SER:C	4:4:124:LYS:NZ	2.55	0.65
8:A:48:LYS:HD2	8:A:195:ASN:CG	2.22	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:111:GLN:NE2	17:J:125:VAL:HG13	2.11	0.65
18:K:303:MET:HB3	18:K:333:ARG:NH1	2.11	0.65
26:S:321:GLN:HG3	26:S:326:ASP:O	1.96	0.65
29:V:40:HIS:ND1	29:V:70:ALA:HB2	2.12	0.65
30:W:21:PHE:HB2	30:W:25:ARG:HA	1.79	0.65
31:X:24:CYS:HB2	31:X:80:SER:HA	1.77	0.65
33:Z:427:GLN:HG2	33:Z:428:TRP:CE3	2.32	0.65
33:Z:433:LEU:CD1	33:Z:455:ILE:HG12	2.27	0.65
33:Z:737:ALA:C	33:Z:775:MET:HE2	2.22	0.65
1:1:119:VAL:CG1	14:G:103:LYS:HZ3	2.09	0.64
1:1:176:VAL:HG12	1:1:178:LEU:HD21	1.78	0.64
2:2:87:LEU:HD23	2:2:94:ILE:HD11	1.78	0.64
3:3:79:THR:HG23	3:3:115:PHE:CZ	2.32	0.64
4:4:80:SER:C	4:4:124:LYS:HZ3	2.05	0.64
12:E:107:ILE:HD13	12:E:112:LEU:CD2	2.27	0.64
15:H:280:VAL:HG21	16:I:304:ARG:HD2	1.77	0.64
21:N:399:PHE:CD1	21:N:441:VAL:CG1	2.68	0.64
21:N:731:VAL:O	21:N:734:VAL:HG12	1.97	0.64
26:S:223:LEU:HD13	26:S:259:TYR:CE1	2.33	0.64
28:U:5:HIS:ND1	28:U:6:GLU:O	2.29	0.64
29:V:79:SER:HA	29:V:121:VAL:HG13	1.79	0.64
30:W:52:ILE:CD1	30:W:94:ALA:HB2	2.28	0.64
8:A:153:SER:HB2	8:A:155:TYR:HE1	1.62	0.64
14:G:67:GLN:HE22	14:G:85:ARG:HG2	1.62	0.64
17:J:119:SER:O	17:J:120:TYR:CD2	2.50	0.64
19:L:325:MET:HE1	19:L:337:LEU:CD1	2.25	0.64
21:N:483:LEU:HD13	21:N:735:MET:HE1	1.79	0.64
23:P:101:MET:HE1	23:P:139:VAL:HG22	1.78	0.64
23:P:422:LEU:HD22	28:U:229:LEU:HD12	1.80	0.64
24:Q:112:ASP:O	24:Q:116:PHE:CD2	2.50	0.64
33:Z:188:ALA:O	33:Z:189:ALA:HB3	1.96	0.64
33:Z:889:VAL:CG2	33:Z:891:PRO:HD2	2.27	0.64
7:7:145:PRO:HB3	7:7:148:ARG:HH21	1.63	0.64
10:C:172:ALA:O	10:C:176:LEU:HG	1.97	0.64
14:G:87:LEU:CD1	14:G:115:LEU:HD22	2.27	0.64
15:H:147:ILE:HD13	15:H:157:VAL:H	1.61	0.64
16:I:102:ASN:HD21	17:J:83:LYS:NZ	1.93	0.64
16:I:243:THR:HG22	16:I:245:LEU:HD21	1.77	0.64
16:I:400:GLY:CA	17:J:179:ILE:HG13	2.27	0.64
17:J:115:LEU:HD12	17:J:122:LEU:HD21	1.77	0.64
22:O:79:VAL:HB	22:O:122:HIS:N	2.12	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:116:ASN:HD22	22:O:121:ASP:HB3	1.61	0.64
22:O:118:GLY:C	22:O:166:ARG:HD3	2.20	0.64
22:O:344:VAL:HG21	23:P:361:THR:CG2	2.28	0.64
25:R:422:ARG:HH21	26:S:299:LYS:CB	2.11	0.64
26:S:286:TYR:CE1	26:S:323:LEU:CD1	2.80	0.64
28:U:167:GLU:O	28:U:171:VAL:HG23	1.98	0.64
33:Z:446:GLU:CG	33:Z:484:LYS:NZ	2.61	0.64
14:G:200:TYR:OH	14:G:239:ILE:HA	1.97	0.64
21:N:127:ASP:O	21:N:128:ILE:HG13	1.98	0.64
21:N:313:LEU:HD22	21:N:786:ARG:NH2	2.13	0.64
22:O:155:LYS:O	22:O:159:LYS:HG3	1.97	0.64
22:O:250:TRP:CE2	22:O:270:ILE:CG2	2.72	0.64
25:R:207:ARG:NH1	25:R:211:LYS:HZ2	1.95	0.64
26:S:230:LYS:HZ3	26:S:256:LYS:CE	2.10	0.64
27:T:197:TYR:OH	27:T:234:TYR:HA	1.97	0.64
30:W:46:GLU:HB3	30:W:106:GLN:NE2	2.13	0.64
31:X:85:ARG:HH21	31:X:115:SER:HA	1.61	0.64
33:Z:68:LEU:HD22	33:Z:115:LEU:HA	1.78	0.64
1:1:176:VAL:HG12	1:1:178:LEU:CD2	2.28	0.64
4:4:66:TYR:CD1	4:4:74:LEU:HD21	2.26	0.64
4:4:117:GLN:NE2	4:4:127:LEU:HD12	2.12	0.64
10:C:208:TYR:CB	10:C:235:ILE:HG22	2.27	0.64
12:E:125:GLU:CD	13:F:123:TYR:CE1	2.74	0.64
13:F:85:SER:O	13:F:89:ARG:HG3	1.96	0.64
15:H:248:LEU:HD23	15:H:375:VAL:HB	1.79	0.64
17:J:119:SER:C	17:J:120:TYR:CG	2.76	0.64
20:M:361:LEU:HD22	20:M:376:TRP:CZ3	2.32	0.64
21:N:320:SER:HB3	21:N:686:ILE:HG22	1.79	0.64
21:N:707:ASN:HD21	21:N:786:ARG:HH11	1.46	0.64
23:P:203:ILE:HG23	23:P:220:TYR:CE1	2.31	0.64
33:Z:471:LEU:CG	33:Z:497:PHE:CZ	2.80	0.64
33:Z:809:MET:HB2	33:Z:893:PHE:CD2	2.32	0.64
14:G:220:LEU:HD23	14:G:225:GLY:HA2	1.79	0.64
17:J:78:ILE:HD11	17:J:107:LEU:CB	2.28	0.64
22:O:342:ASP:OD1	23:P:358:SER:CB	2.45	0.64
23:P:218:LEU:HD21	23:P:256:LYS:NZ	2.12	0.64
25:R:263:ARG:NH1	25:R:296:LEU:HG	2.09	0.64
28:U:94:HIS:ND1	28:U:96:GLY:N	2.44	0.64
29:V:231:GLU:O	29:V:235:GLU:HB3	1.98	0.64
30:W:20:ASP:C	30:W:21:PHE:CD1	2.75	0.64
33:Z:207:ILE:O	33:Z:210:TYR:HB2	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:119:VAL:CG2	14:G:103:LYS:NZ	2.47	0.64
8:A:89:ASP:OD1	8:A:135:ARG:NH2	2.31	0.64
8:A:126:GLN:NE2	8:A:130:GLN:NE2	2.45	0.64
10:C:53:THR:HB	10:C:59:GLN:CD	2.23	0.64
14:G:7:TYR:HE1	14:G:13:VAL:HG23	1.58	0.64
16:I:113:ILE:HG22	16:I:115:ASP:H	1.62	0.64
22:O:277:ILE:HG21	22:O:279:ILE:N	1.92	0.64
23:P:422:LEU:HD23	28:U:229:LEU:HA	1.80	0.64
27:T:209:LEU:CD1	27:T:211:PHE:CZ	2.80	0.64
28:U:223:HIS:ND1	28:U:224:THR:CA	2.60	0.64
2:2:94:ILE:HG22	3:3:90:ARG:HH21	1.61	0.64
3:3:60:TYR:HD1	10:C:96:GLN:CB	2.10	0.64
10:C:69:LEU:CD2	10:C:88:ILE:HG23	2.27	0.64
13:F:31:GLN:HA	20:M:430:VAL:HG12	1.78	0.64
15:H:390:ARG:CA	15:H:404:TRP:CE2	2.75	0.64
17:J:124:LYS:HZ2	18:K:103:ILE:CG2	2.11	0.64
21:N:190:LEU:HD11	21:N:228:VAL:CG2	2.28	0.64
21:N:666:GLN:CG	21:N:873:ARG:HH21	2.10	0.64
22:O:337:LEU:O	22:O:338:LYS:CB	2.45	0.64
23:P:207:THR:HB	23:P:217:LYS:HE2	1.80	0.64
31:X:85:ARG:NH2	31:X:116:ALA:N	2.44	0.64
33:Z:955:VAL:HG22	33:Z:956:LEU:N	2.12	0.64
3:3:96:VAL:O	3:3:117:LEU:HD11	1.97	0.64
6:6:-6:PRO:HA	7:7:125:LEU:CD2	2.26	0.64
8:A:156:LYS:HB3	8:A:166:TYR:CE1	2.32	0.64
23:P:412:LEU:HD13	29:V:245:VAL:HA	1.80	0.64
27:T:197:TYR:HD2	27:T:235:PHE:CE1	2.05	0.64
28:U:141:GLU:O	28:U:142:GLN:CB	2.45	0.64
33:Z:865:ASP:O	33:Z:877:THR:HG21	1.98	0.64
10:C:149:TYR:CZ	11:D:59:ILE:HD12	2.33	0.64
10:C:208:TYR:HA	10:C:235:ILE:CG2	2.26	0.64
16:I:253:ILE:HD11	16:I:286:ALA:HB3	1.80	0.64
16:I:400:GLY:HA3	17:J:179:ILE:HG12	1.76	0.64
16:I:400:GLY:CA	17:J:179:ILE:CD1	2.60	0.64
17:J:166:LEU:C	17:J:174:PHE:CZ	2.75	0.64
25:R:74:ASN:HA	25:R:86:ASP:OD2	1.96	0.64
30:W:59:PRO:CB	30:W:93:ILE:HG21	2.27	0.64
33:Z:737:ALA:CB	33:Z:775:MET:SD	2.85	0.64
1:1:6:VAL:HB	1:1:155:ILE:HD11	1.79	0.63
2:2:8:PHE:CE1	2:2:11:GLY:C	2.76	0.63
12:E:241:LYS:CA	12:E:244:LYS:NZ	2.58	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:324:ARG:HH21	17:J:353:CYS:H	1.46	0.63
22:O:140:LYS:HG2	22:O:141:ASN:CG	2.22	0.63
22:O:233:LEU:HD22	22:O:238:ILE:CD1	2.19	0.63
22:O:358:ILE:CG2	22:O:360:GLY:H	1.99	0.63
22:O:373:TRP:CH2	28:U:233:PHE:HB2	2.32	0.63
27:T:225:ASN:HB2	27:T:241:GLU:CB	2.26	0.63
30:W:21:PHE:HB3	30:W:28:ALA:HB3	1.81	0.63
33:Z:581:VAL:HG21	33:Z:603:VAL:HG12	1.80	0.63
33:Z:963:ALA:C	33:Z:964:GLU:OE1	2.41	0.63
7:7:95:ARG:HH11	7:7:102:LEU:HD13	1.63	0.63
12:E:98:THR:HG23	12:E:102:TYR:HE1	1.63	0.63
15:H:257:THR:CG2	15:H:261:ARG:HE	2.11	0.63
21:N:641:LEU:CB	21:N:660:LEU:HD21	2.28	0.63
23:P:303:PHE:C	23:P:348:HIS:HE2	2.02	0.63
24:Q:174:LEU:CG	24:Q:178:HIS:CE1	2.81	0.63
24:Q:269:LYS:HZ1	24:Q:281:ILE:CD1	2.09	0.63
25:R:335:ARG:HA	25:R:371:PHE:CZ	2.34	0.63
33:Z:352:LYS:C	33:Z:353:VAL:HG23	2.23	0.63
14:G:108:ILE:CG2	14:G:148:TYR:CD1	2.81	0.63
15:H:187:LEU:HD22	16:I:115:ASP:CG	2.24	0.63
15:H:430:ALA:HA	15:H:435:ARG:HE	1.64	0.63
21:N:406:TYR:CD1	21:N:448:LEU:HD12	2.34	0.63
22:O:79:VAL:HG11	22:O:123:GLY:N	2.12	0.63
27:T:197:TYR:CZ	27:T:199:PHE:C	2.77	0.63
28:U:18:ALA:HB1	28:U:125:VAL:HG21	1.81	0.63
33:Z:391:ASN:OD1	33:Z:394:TYR:HD2	1.80	0.63
1:1:80:SER:HB3	14:G:103:LYS:CD	2.29	0.63
8:A:17:THR:CG2	8:A:129:THR:O	2.46	0.63
8:A:57:LYS:CE	8:A:69:VAL:CB	2.76	0.63
8:A:81:MET:SD	8:A:143:PHE:CZ	2.92	0.63
10:C:97:ASN:O	10:C:101:THR:HG23	1.97	0.63
12:E:46:VAL:HB	12:E:222:ILE:HD12	1.79	0.63
15:H:146:VAL:H	15:H:157:VAL:CG2	2.10	0.63
18:K:365:GLU:HG2	18:K:404:GLN:H	1.62	0.63
19:L:252:VAL:HG11	20:M:299:ARG:NH2	2.13	0.63
21:N:190:LEU:HD13	21:N:224:THR:CG2	2.27	0.63
21:N:479:GLU:OE1	21:N:512:ASN:OD1	2.15	0.63
22:O:185:PHE:CD1	22:O:279:ILE:HG13	2.34	0.63
24:Q:243:PHE:CE1	24:Q:287:THR:CG2	2.80	0.63
26:S:399:TYR:HD2	26:S:401:LYS:O	1.80	0.63
33:Z:189:ALA:CB	33:Z:193:PHE:CG	2.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:119:VAL:HG11	14:G:103:LYS:HZ3	1.64	0.63
18:K:281:ARG:NH2	18:K:286:THR:C	2.56	0.63
21:N:214:LEU:HD12	21:N:217:MET:HE2	1.81	0.63
23:P:147:LYS:HZ2	23:P:159:ILE:HG13	1.64	0.63
27:T:190:ALA:CB	27:T:224:ARG:NE	2.62	0.63
33:Z:877:THR:HG23	33:Z:907:GLY:HA2	1.80	0.63
9:B:27:ALA:HB1	18:K:426:PHE:CE1	2.32	0.63
9:B:82:TYR:HE1	9:B:134:LEU:HD22	1.64	0.63
16:I:340:ARG:NH1	16:I:343:ARG:CB	2.59	0.63
18:K:210:LEU:CD1	18:K:212:TYR:OH	2.47	0.63
21:N:277:LEU:CD1	21:N:287:LEU:HD23	2.28	0.63
22:O:188:PHE:CZ	22:O:216:ASP:HB3	2.30	0.63
27:T:1:MET:HB2	27:T:2:PRO:CD	2.23	0.63
28:U:32:ARG:HH21	28:U:56:PHE:HZ	1.45	0.63
31:X:89:LEU:HG	31:X:91:PHE:CZ	2.34	0.63
33:Z:244:ARG:O	33:Z:248:TYR:CD1	2.46	0.63
33:Z:551:LEU:HD13	33:Z:591:ILE:HG22	1.56	0.63
1:1:112:THR:CG2	7:7:27:ARG:HH21	2.12	0.63
15:H:318:ARG:HH12	15:H:364:ALA:CB	2.12	0.63
18:K:244:HIS:CE1	18:K:295:ILE:HD11	2.34	0.63
22:O:341:ILE:HD12	22:O:348:VAL:HG13	1.80	0.63
23:P:263:HIS:CE1	23:P:327:LEU:O	2.51	0.63
24:Q:46:VAL:C	24:Q:50:ARG:HB2	2.22	0.63
25:R:94:PHE:HZ	25:R:99:TYR:CE2	2.16	0.63
27:T:147:LYS:O	27:T:151:TRP:CD1	2.52	0.63
28:U:16:LEU:CD2	29:V:209:GLU:CG	2.77	0.63
33:Z:407:VAL:HG12	33:Z:415:MET:HG3	1.79	0.63
5:5:32:LYS:HD2	5:5:45:MET:CE	2.26	0.63
11:D:197:ARG:NH2	11:D:239:GLU:OE1	2.32	0.63
15:H:155:PHE:CE1	20:M:76:PRO:CA	2.82	0.63
16:I:262:ARG:CB	17:J:223:ILE:HD12	2.29	0.63
18:K:240:SER:O	19:L:303:ARG:HG3	1.99	0.63
22:O:223:LEU:HA	22:O:279:ILE:HG21	1.79	0.63
23:P:207:THR:HB	23:P:217:LYS:CE	2.28	0.63
24:Q:51:ARG:NH2	24:Q:92:LYS:CD	2.57	0.63
24:Q:299:MET:HE1	24:Q:335:PHE:CE2	2.34	0.63
27:T:250:MET:O	27:T:251:HIS:HB2	1.98	0.63
28:U:85:ALA:O	28:U:86:LYS:HB2	1.98	0.63
30:W:25:ARG:NE	30:W:144:PHE:CD2	2.66	0.63
31:X:8:ILE:CG2	31:X:124:LYS:CD	2.77	0.63
1:1:45:ARG:HE	1:1:52:THR:HB	1.63	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:243:THR:HG21	16:I:245:LEU:HD21	1.80	0.63
17:J:154:THR:HA	17:J:157:ILE:HD12	1.80	0.63
18:K:349:ARG:HH12	18:K:377:SER:H	1.44	0.63
19:L:192:GLU:HB3	19:L:345:ARG:HH21	1.62	0.63
19:L:357:ARG:HE	19:L:380:VAL:HG13	1.63	0.63
21:N:325:PHE:N	29:V:182:LYS:HG2	2.14	0.63
22:O:322:ASP:O	22:O:325:GLU:HB2	1.98	0.63
24:Q:264:TYR:OH	24:Q:330:LEU:HD12	1.98	0.63
24:Q:326:MET:HE2	24:Q:332:ARG:HD2	1.80	0.63
30:W:21:PHE:CE2	30:W:25:ARG:HG3	2.34	0.63
33:Z:55:ARG:NE	33:Z:63:LEU:HD13	2.14	0.63
33:Z:958:ASN:N	33:Z:961:GLU:OE1	2.30	0.63
1:1:80:SER:HB3	14:G:103:LYS:HD3	1.81	0.62
3:3:-2:ASN:C	3:3:19:ARG:HH12	2.07	0.62
11:D:104:VAL:HG11	11:D:109:LEU:HD11	1.81	0.62
12:E:88:MET:HE1	12:E:142:LEU:HD12	1.80	0.62
13:F:117:GLN:HE21	13:F:121:GLN:HE21	1.47	0.62
15:H:97:LEU:HD13	15:H:174:VAL:C	2.23	0.62
15:H:155:PHE:CE1	20:M:77:TYR:N	2.60	0.62
21:N:768:ILE:HG21	21:N:871:MET:SD	2.39	0.62
23:P:181:LEU:HG	23:P:223:LEU:HD11	1.81	0.62
24:Q:54:GLN:HE22	24:Q:81:SER:HB2	1.62	0.62
31:X:46:TRP:O	31:X:68:LEU:HB2	2.00	0.62
3:3:1:GLY:HA3	3:3:33:LYS:NZ	2.14	0.62
7:7:69:ASP:O	7:7:70:ASN:HB2	1.99	0.62
12:E:154:GLN:OE1	12:E:166:ARG:HD2	1.99	0.62
15:H:49:LEU:C	15:H:49:LEU:HD13	2.25	0.62
21:N:596:LEU:CD2	21:N:717:LEU:HD22	2.29	0.62
22:O:332:ILE:HD11	22:O:341:ILE:HG21	1.80	0.62
25:R:54:ILE:HD12	25:R:54:ILE:C	2.24	0.62
25:R:353:MET:O	25:R:357:PHE:HB2	1.99	0.62
28:U:19:LEU:HD11	29:V:208:LYS:CB	2.29	0.62
29:V:182:LYS:HE2	29:V:185:ILE:HG21	1.81	0.62
30:W:5:ALA:CB	30:W:103:ASN:CG	2.60	0.62
33:Z:449:ALA:HB1	33:Z:899:GLN:HE22	1.64	0.62
1:1:-7:LYS:HD3	2:2:92:GLY:O	2.00	0.62
3:3:1:GLY:HA2	3:3:17:ASP:OD2	1.99	0.62
5:5:33:ARG:HD3	5:5:45:MET:O	1.99	0.62
20:M:192:GLU:OE1	20:M:347:ILE:HG23	2.00	0.62
21:N:366:THR:HG23	21:N:747:HIS:CE1	2.34	0.62
22:O:80:LYS:CE	22:O:81:TYR:HE2	2.10	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:133:ILE:HG12	22:O:137:TYR:CD2	2.34	0.62
24:Q:97:LEU:HD11	24:Q:121:SER:HB3	1.81	0.62
28:U:90:ILE:C	28:U:90:ILE:HD12	2.25	0.62
33:Z:914:LEU:HB3	33:Z:980:VAL:HG22	1.81	0.62
5:5:73:ARG:HH12	5:5:106:ARG:CD	2.12	0.62
8:A:153:SER:HB2	8:A:155:TYR:CE1	2.34	0.62
10:C:18:ARG:NH1	10:C:23:GLU:CD	2.57	0.62
12:E:130:GLU:CD	12:E:132:ARG:HE	2.08	0.62
15:H:261:ARG:HH22	15:H:273:ARG:HH21	1.46	0.62
19:L:309:LEU:CD2	19:L:342:ARG:HE	2.10	0.62
20:M:189:GLN:O	20:M:193:LEU:HG	1.98	0.62
21:N:596:LEU:CD1	21:N:717:LEU:CD2	2.77	0.62
23:P:221:TYR:CE2	23:P:244:ILE:CB	2.76	0.62
25:R:335:ARG:HA	25:R:371:PHE:HZ	1.64	0.62
29:V:37:MET:HE1	29:V:139:VAL:CG1	2.29	0.62
30:W:16:SER:HA	30:W:25:ARG:HH11	1.63	0.62
30:W:87:MET:H	30:W:118:ILE:HD11	1.62	0.62
31:X:8:ILE:HG21	31:X:124:LYS:CD	2.28	0.62
31:X:41:GLU:HG3	31:X:45:PHE:CA	2.28	0.62
33:Z:211:PHE:CD2	33:Z:220:ALA:HB2	2.35	0.62
2:2:196:ARG:NE	2:2:199:LYS:HE3	2.13	0.62
3:3:59:ARG:HH22	10:C:99:LEU:HD11	1.52	0.62
7:7:62:LEU:HD11	7:7:87:TYR:CD2	2.35	0.62
11:D:96:HIS:HD2	11:D:100:LEU:HB2	1.63	0.62
15:H:390:ARG:HG3	15:H:404:TRP:NE1	2.14	0.62
16:I:252:LEU:C	16:I:253:ILE:CA	2.72	0.62
16:I:252:LEU:H	16:I:253:ILE:N	1.96	0.62
17:J:219:VAL:HG11	18:K:284:ALA:CB	2.25	0.62
23:P:119:ILE:HD12	23:P:143:LEU:HD22	1.80	0.62
23:P:132:VAL:O	23:P:133:GLU:HB2	1.99	0.62
24:Q:9:GLU:OE2	24:Q:12:ARG:NH2	2.32	0.62
24:Q:278:VAL:O	24:Q:282:LEU:HG	2.00	0.62
25:R:59:MET:HE2	25:R:143:GLN:O	1.98	0.62
27:T:225:ASN:ND2	27:T:241:GLU:HA	2.13	0.62
31:X:8:ILE:HG22	31:X:124:LYS:HD2	1.79	0.62
13:F:123:TYR:CD1	13:F:123:TYR:C	2.77	0.62
21:N:52:ASP:O	21:N:53:ASP:HB2	1.98	0.62
21:N:322:ASP:HB2	21:N:689:LYS:HZ1	1.63	0.62
22:O:222:LEU:HD22	22:O:270:ILE:HD11	1.81	0.62
23:P:308:LEU:CD2	23:P:369:LEU:HD22	2.29	0.62
24:Q:382:LEU:HB3	25:R:263:ARG:HH22	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:40:ILE:CG2	25:R:89:ASN:HD22	2.13	0.62
25:R:154:LEU:HD21	25:R:173:THR:HG21	1.82	0.62
25:R:421:VAL:O	25:R:422:ARG:HB2	1.99	0.62
30:W:143:ASN:OD1	30:W:173:THR:HG23	1.99	0.62
33:Z:161:ILE:CD1	33:Z:207:ILE:HD11	2.29	0.62
9:B:119:GLN:HG3	9:B:123:GLN:NE2	2.14	0.62
16:I:135:PHE:HD2	16:I:159:VAL:HG22	1.64	0.62
17:J:193:THR:HG21	17:J:316:PHE:CD1	2.33	0.62
22:O:9:THR:HG23	22:O:27:GLU:OE2	2.00	0.62
22:O:119:SER:CA	22:O:166:ARG:HD3	2.30	0.62
23:P:308:LEU:HD22	23:P:369:LEU:HD22	1.82	0.62
24:Q:90:LYS:O	24:Q:94:VAL:HG23	2.00	0.62
24:Q:222:SER:O	24:Q:226:HIS:HD2	1.79	0.62
25:R:258:LEU:HD12	25:R:266:LEU:CD1	2.30	0.62
28:U:98:LYS:HZ2	28:U:124:ASP:HB2	1.63	0.62
33:Z:767:TYR:HE2	33:Z:772:ILE:CG1	2.11	0.62
33:Z:889:VAL:CG1	33:Z:894:MET:CE	2.74	0.62
1:1:92:ASN:OD1	1:1:93:LEU:HG	2.00	0.62
11:D:81:ASP:HB3	11:D:129:PHE:HD1	1.64	0.62
12:E:153:TYR:HE1	12:E:222:ILE:HG22	1.65	0.62
15:H:97:LEU:HB2	15:H:173:ARG:HG2	1.82	0.62
15:H:390:ARG:HG3	15:H:404:TRP:HE1	1.65	0.62
18:K:128:ARG:HD3	29:V:276:PRO:HD3	1.82	0.62
18:K:169:VAL:N	19:L:315:PHE:HE1	1.94	0.62
22:O:277:ILE:HG22	22:O:279:ILE:N	1.94	0.62
26:S:323:LEU:HD23	26:S:383:LEU:HD21	1.82	0.62
27:T:229:VAL:CG2	27:T:234:TYR:CE1	2.76	0.62
31:X:85:ARG:HH21	31:X:115:SER:CB	2.11	0.62
33:Z:81:SER:C	33:Z:82:MET:HG3	2.19	0.62
33:Z:312:TYR:CZ	33:Z:348:LEU:O	2.53	0.62
1:1:4:MET:HE3	1:1:159:LEU:CD2	2.30	0.62
1:1:103:ASP:HB2	1:1:106:ASN:OD1	1.98	0.62
5:5:177:LEU:HD12	5:5:191:HIS:NE2	2.15	0.62
7:7:83:TYR:CZ	13:F:101:ARG:HG2	2.35	0.62
12:E:180:GLN:HA	12:E:183:LEU:HD12	1.80	0.62
12:E:201:LEU:HD11	12:E:239:LEU:CD2	2.28	0.62
15:H:410:LEU:CB	15:H:447:VAL:HG11	2.30	0.62
17:J:111:GLN:CD	17:J:125:VAL:HG13	2.24	0.62
20:M:197:ILE:HG13	20:M:198:VAL:N	2.14	0.62
21:N:277:LEU:HB3	21:N:287:LEU:HD21	1.76	0.62
24:Q:90:LYS:CD	24:Q:129:LYS:HZ1	2.11	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:279:LYS:HA	24:Q:282:LEU:HD12	1.81	0.62
25:R:101:GLU:OE2	25:R:105:LYS:NZ	2.28	0.62
26:S:257:LEU:O	26:S:259:TYR:HD2	1.83	0.62
31:X:10:PHE:HE2	31:X:103:GLU:OE2	1.78	0.62
33:Z:258:PRO:HB2	33:Z:259:PRO:HD3	1.82	0.62
33:Z:493:LEU:CD1	33:Z:497:PHE:CE2	2.83	0.62
33:Z:831:LEU:HA	33:Z:834:LEU:HD12	1.81	0.62
14:G:146:HIS:CB	14:G:148:TYR:CE1	2.50	0.62
17:J:78:ILE:HD11	17:J:107:LEU:HB2	1.81	0.62
19:L:357:ARG:HB3	19:L:361:PHE:HE2	1.64	0.62
23:P:241:LEU:HA	23:P:244:ILE:CG2	2.30	0.62
26:S:188:TYR:CE1	26:S:210:LEU:HD13	2.35	0.62
31:X:95:GLU:HB3	31:X:97:TYR:HE1	1.63	0.62
33:Z:260:GLU:CG	33:Z:611:THR:HG21	2.29	0.62
33:Z:431:ASP:OD2	33:Z:458:SER:HB3	1.99	0.62
1:1:19:ARG:HH12	1:1:29:ARG:CB	2.08	0.61
9:B:27:ALA:HA	18:K:426:PHE:HE1	1.64	0.61
19:L:372:GLY:O	19:L:374:PHE:CE1	2.52	0.61
21:N:596:LEU:HD13	21:N:717:LEU:HD22	1.81	0.61
22:O:26:PHE:CA	22:O:61:LEU:HD21	2.29	0.61
22:O:124:ASP:CB	22:O:127:LEU:HD22	2.30	0.61
24:Q:326:MET:HE3	24:Q:332:ARG:HG3	1.81	0.61
26:S:191:HIS:NE2	26:S:206:GLN:CG	2.61	0.61
27:T:236:ASN:ND2	27:T:240:LYS:HE3	2.15	0.61
30:W:21:PHE:HZ	30:W:144:PHE:CD1	2.17	0.61
30:W:158:ILE:HG13	30:W:171:LEU:HB2	1.82	0.61
1:1:19:ARG:HH11	1:1:29:ARG:CG	2.10	0.61
5:5:8:PHE:CE1	5:5:13:ILE:CG1	2.79	0.61
9:B:140:ASP:OD1	9:B:143:ASN:HB2	2.00	0.61
11:D:34:VAL:CG2	11:D:199:LEU:HD21	2.30	0.61
11:D:92:GLU:OE2	11:D:108:TYR:CE2	2.53	0.61
15:H:146:VAL:HG11	20:M:75:LEU:HB3	1.81	0.61
17:J:219:VAL:C	18:K:281:ARG:CD	2.66	0.61
17:J:250:ILE:HA	17:J:299:ILE:CD1	2.29	0.61
20:M:225:GLY:O	20:M:226:THR:CG2	2.48	0.61
24:Q:46:VAL:HB	24:Q:48:ASP:OD1	2.00	0.61
24:Q:412:ALA:HB2	25:R:400:TYR:HE1	1.65	0.61
25:R:79:LEU:HD13	25:R:93:LYS:CE	2.28	0.61
26:S:185:PHE:CE1	26:S:239:ARG:HD2	2.35	0.61
27:T:170:ASN:HA	27:T:174:PHE:HB2	1.83	0.61
8:A:156:LYS:HE3	8:A:169:THR:HG21	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:176:SER:O	17:J:282:PHE:CE1	2.54	0.61
21:N:12:LEU:HD13	27:T:40:LEU:HD13	1.82	0.61
22:O:373:TRP:CZ3	28:U:233:PHE:CD2	2.88	0.61
25:R:199:GLU:HB3	25:R:206:ARG:CD	2.30	0.61
25:R:335:ARG:HG3	25:R:371:PHE:CE1	2.35	0.61
31:X:41:GLU:CD	31:X:45:PHE:HB2	2.25	0.61
33:Z:361:HIS:CE1	33:Z:861:THR:HB	2.35	0.61
33:Z:550:PHE:CD1	33:Z:562:TRP:HZ3	2.18	0.61
33:Z:970:TYR:CE1	33:Z:993:GLU:N	2.69	0.61
3:3:61:LYS:NZ	3:3:85:SER:CB	2.63	0.61
8:A:135:ARG:NH1	8:A:137:LEU:HD23	2.15	0.61
15:H:247:LEU:HD22	15:H:371:ILE:HD13	1.81	0.61
15:H:248:LEU:CD2	15:H:375:VAL:HB	2.31	0.61
17:J:115:LEU:HD12	17:J:122:LEU:HD23	1.81	0.61
25:R:243:LEU:O	25:R:244:THR:HB	2.00	0.61
31:X:85:ARG:HH12	31:X:106:SER:HB3	1.64	0.61
33:Z:68:LEU:CD2	33:Z:115:LEU:HA	2.30	0.61
33:Z:857:LEU:HD23	33:Z:857:LEU:C	2.25	0.61
1:1:143:ARG:H	1:1:146:MET:HE3	1.64	0.61
5:5:207:PHE:O	5:5:208:ASN:OD1	2.18	0.61
8:A:207:ILE:HG22	8:A:211:ILE:CD1	2.30	0.61
17:J:45:GLU:OE1	21:N:608:LEU:CG	2.49	0.61
22:O:140:LYS:HG2	22:O:141:ASN:OD1	2.00	0.61
22:O:344:VAL:CG2	23:P:361:THR:HG22	2.30	0.61
23:P:360:ILE:HG12	23:P:402:PHE:CZ	2.35	0.61
24:Q:291:TYR:OH	24:Q:293:SER:CB	2.49	0.61
27:T:193:THR:HG21	27:T:226:TRP:HH2	1.20	0.61
27:T:193:THR:O	27:T:197:TYR:HB2	2.00	0.61
33:Z:298:PHE:O	33:Z:307:HIS:NE2	2.33	0.61
33:Z:805:LEU:HD22	33:Z:893:PHE:HE1	1.65	0.61
9:B:178:ARG:NH1	9:B:194:LEU:HB3	2.10	0.61
12:E:72:ARG:O	12:E:73:HIS:CG	2.53	0.61
14:G:166:LYS:NZ	14:G:206:ASN:HA	2.11	0.61
17:J:45:GLU:OE1	21:N:608:LEU:CD1	2.49	0.61
18:K:90:GLN:HE22	18:K:143:SER:HB2	1.64	0.61
18:K:94:LEU:HB2	19:L:128:ILE:HB	1.83	0.61
18:K:134:SER:HB2	18:K:255:ARG:NH2	2.12	0.61
21:N:21:LYS:O	21:N:25:LEU:HG	2.01	0.61
21:N:328:PHE:HZ	21:N:696:LYS:HD2	1.65	0.61
21:N:452:LEU:HD21	21:N:748:PHE:CE1	2.33	0.61
28:U:85:ALA:O	28:U:86:LYS:CB	2.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:153:SER:OG	11:D:155:ILE:HG12	2.01	0.61
15:H:312:ASP:OD1	15:H:360:THR:HG21	2.01	0.61
17:J:224:GLY:O	17:J:227:SER:HB2	2.01	0.61
20:M:361:LEU:CD1	20:M:376:TRP:CE3	2.80	0.61
21:N:214:LEU:HD12	21:N:217:MET:HE3	1.81	0.61
21:N:666:GLN:HG3	21:N:873:ARG:NE	2.14	0.61
22:O:58:ARG:HD2	22:O:58:ARG:C	2.26	0.61
25:R:270:VAL:O	25:R:270:VAL:HG12	2.01	0.61
27:T:149:ASP:O	27:T:153:MET:HG2	2.00	0.61
29:V:50:MET:HB2	29:V:78:VAL:HG13	1.83	0.61
6:6:115:SER:HB3	6:6:128:ARG:HH11	1.66	0.61
8:A:126:GLN:HE22	8:A:130:GLN:CD	2.08	0.61
12:E:15:PHE:HZ	13:F:126:ARG:HD2	1.65	0.61
18:K:194:GLN:HG2	18:K:197:LEU:HG	1.83	0.61
21:N:325:PHE:CA	29:V:182:LYS:CG	2.74	0.61
21:N:420:THR:O	21:N:424:LYS:HG3	2.01	0.61
22:O:10:ILE:O	22:O:14:LEU:HG	2.01	0.61
23:P:181:LEU:HA	23:P:223:LEU:CD1	2.24	0.61
24:Q:135:HIS:CB	24:Q:161:LEU:CD2	2.77	0.61
24:Q:154:SER:O	24:Q:158:ILE:HG13	2.01	0.61
25:R:33:LEU:HB2	25:R:46:ALA:HB1	1.83	0.61
25:R:263:ARG:NH1	25:R:296:LEU:C	2.58	0.61
25:R:396:LYS:CG	25:R:400:TYR:CE2	2.84	0.61
28:U:5:HIS:CG	28:U:6:GLU:N	2.62	0.61
31:X:75:TRP:CZ3	31:X:125:MET:HB2	2.36	0.61
5:5:114:TYR:HE1	5:5:129:VAL:HG11	1.65	0.61
8:A:117:LEU:HD23	8:A:143:PHE:CD2	2.36	0.61
16:I:126:PRO:HB2	16:I:128:TYR:CE2	2.36	0.61
17:J:45:GLU:OE1	21:N:608:LEU:HG	2.00	0.61
18:K:347:ARG:HG3	24:Q:215:VAL:HG11	1.83	0.61
19:L:357:ARG:O	19:L:361:PHE:HD2	1.83	0.61
23:P:181:LEU:CG	23:P:223:LEU:HD11	2.31	0.61
23:P:412:LEU:HB3	29:V:245:VAL:HG22	1.83	0.61
25:R:64:LYS:O	25:R:68:GLU:HG3	2.00	0.61
27:T:190:ALA:HA	27:T:224:ARG:NH1	2.15	0.61
28:U:235:LEU:O	28:U:263:LYS:HD3	2.00	0.61
30:W:25:ARG:HD2	30:W:144:PHE:HE2	1.56	0.61
31:X:46:TRP:NE1	31:X:132:SER:HA	2.15	0.61
31:X:48:PHE:CD1	31:X:48:PHE:C	2.78	0.61
31:X:75:TRP:CZ3	31:X:125:MET:CB	2.84	0.61
33:Z:551:LEU:HD13	33:Z:591:ILE:HG21	1.80	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:75:THR:HG22	1:1:111:TYR:CG	2.29	0.61
13:F:46:LEU:HD21	13:F:73:SER:HB3	1.82	0.61
15:H:412:PRO:O	15:H:413:ASN:CG	2.44	0.61
16:I:408:ARG:NH2	16:I:415:ASP:OD2	2.33	0.61
18:K:67:TYR:CE2	21:N:572:LEU:O	2.54	0.61
18:K:246:TYR:HB3	19:L:256:ILE:HD11	1.83	0.61
18:K:303:MET:HB3	18:K:333:ARG:HH12	1.64	0.61
19:L:132:ARG:HD2	19:L:133:ASN:N	2.16	0.61
21:N:21:LYS:HG3	21:N:55:PHE:HD2	1.54	0.61
22:O:196:LEU:CB	22:O:213:LEU:HD21	2.31	0.61
25:R:194:VAL:O	25:R:199:GLU:OE1	2.19	0.61
26:S:188:TYR:CD2	26:S:210:LEU:HD13	2.36	0.61
28:U:35:GLY:HA3	28:U:93:TYR:CB	2.29	0.61
29:V:78:VAL:C	29:V:121:VAL:HG11	2.26	0.61
33:Z:188:ALA:O	33:Z:189:ALA:CB	2.49	0.61
33:Z:551:LEU:CA	33:Z:593:HIS:NE2	2.59	0.61
33:Z:809:MET:HB2	33:Z:893:PHE:HD2	1.66	0.61
1:1:98:ILE:HD11	1:1:127:ALA:CB	2.31	0.60
6:6:68:PHE:CZ	13:F:66:CYS:O	2.54	0.60
10:C:160:TRP:CZ2	10:C:163:ILE:CD1	2.84	0.60
14:G:34:THR:OG1	14:G:65:LYS:NZ	2.33	0.60
22:O:219:ILE:HG22	22:O:223:LEU:HD22	1.78	0.60
24:Q:178:HIS:CB	24:Q:201:ALA:HB2	2.31	0.60
26:S:385:SER:OG	27:T:153:MET:HE3	2.01	0.60
28:U:112:LYS:NZ	30:W:60:ARG:NH2	2.49	0.60
33:Z:567:ALA:CB	33:Z:599:ILE:HG12	2.31	0.60
1:1:-6:GLY:HA3	2:2:116:HIS:CG	2.35	0.60
5:5:40:PHE:CE2	5:5:41:LEU:HG	2.36	0.60
7:7:8:TYR:CE1	7:7:11:GLY:C	2.79	0.60
18:K:273:GLU:OE1	19:L:306:MET:HB2	2.01	0.60
20:M:227:GLY:O	20:M:231:LEU:HG	2.00	0.60
21:N:579:SER:HA	21:N:584:ARG:NE	2.14	0.60
23:P:203:ILE:CG2	23:P:220:TYR:CD1	2.84	0.60
23:P:422:LEU:CD2	28:U:229:LEU:HA	2.30	0.60
25:R:305:PHE:CA	25:R:334:ARG:HH12	2.06	0.60
26:S:436:ILE:CG1	27:T:196:SER:O	2.45	0.60
29:V:104:VAL:HG13	29:V:106:GLY:O	2.01	0.60
33:Z:52:LEU:HD13	33:Z:67:SER:HA	1.83	0.60
33:Z:194:GLU:HG2	33:Z:195:PHE:CD2	2.36	0.60
33:Z:854:LEU:HD21	33:Z:864:MET:SD	2.41	0.60
2:2:8:PHE:CE2	2:2:11:GLY:CA	2.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:-8:PHE:HE1	7:7:124:LEU:HD13	1.66	0.60
11:D:4:TYR:O	11:D:4:TYR:CD1	2.54	0.60
18:K:350:ARG:NH2	24:Q:215:VAL:HG12	2.16	0.60
20:M:170:MET:HB3	20:M:244:LEU:CD1	2.24	0.60
21:N:43:LEU:HD21	21:N:69:TYR:CZ	2.35	0.60
21:N:414:GLY:HA3	21:N:728:LYS:HZ3	1.65	0.60
21:N:475:ALA:HB1	21:N:510:HIS:NE2	2.16	0.60
23:P:231:LYS:O	23:P:232:ARG:HB2	2.01	0.60
23:P:235:LEU:HD21	23:P:276:LEU:HD11	1.81	0.60
25:R:208:ASN:CG	25:R:238:PHE:CD1	2.77	0.60
28:U:132:LEU:HG	28:U:134:THR:H	1.66	0.60
29:V:24:LYS:NZ	29:V:197:TYR:OH	2.34	0.60
29:V:182:LYS:HE2	29:V:185:ILE:CG2	2.31	0.60
33:Z:102:ILE:CG2	33:Z:112:LYS:HG3	2.21	0.60
33:Z:539:ASN:O	33:Z:574:TYR:OH	2.18	0.60
3:3:59:ARG:CZ	10:C:99:LEU:HD11	2.23	0.60
5:5:73:ARG:NH1	5:5:106:ARG:HD2	2.16	0.60
19:L:253:ASP:HA	20:M:256:ILE:CB	2.31	0.60
22:O:240:GLU:C	22:O:241:THR:HG23	2.26	0.60
25:R:125:GLU:OE1	25:R:126:GLY:N	2.32	0.60
26:S:288:THR:HG22	26:S:292:TYR:CE2	2.36	0.60
27:T:209:LEU:CB	27:T:211:PHE:CE1	2.80	0.60
6:6:22:THR:OG1	6:6:27:ASN:ND2	2.31	0.60
12:E:17:PRO:HA	13:F:24:TYR:CD1	2.36	0.60
16:I:253:ILE:HB	17:J:267:GLU:OE2	2.02	0.60
21:N:320:SER:HB2	21:N:686:ILE:CG2	2.31	0.60
22:O:329:MET:CA	23:P:357:TYR:OH	2.45	0.60
25:R:308:LEU:CB	25:R:334:ARG:CZ	2.79	0.60
27:T:59:LYS:HD3	27:T:97:SER:HB2	1.83	0.60
27:T:225:ASN:HB2	27:T:241:GLU:CA	2.31	0.60
30:W:172:LEU:CD2	30:W:185:ILE:CA	2.80	0.60
33:Z:863:THR:OG1	33:Z:911:LYS:HE2	2.01	0.60
33:Z:867:PHE:HE2	33:Z:871:HIS:ND1	1.92	0.60
5:5:83:LEU:HD21	5:5:97:MET:SD	2.41	0.60
8:A:148:GLU:HG2	8:A:230:LYS:HE3	1.82	0.60
17:J:142:VAL:O	17:J:142:VAL:HG12	2.01	0.60
20:M:166:ARG:O	20:M:167:VAL:CG2	2.50	0.60
21:N:398:ARG:HD2	21:N:438:ASP:HB3	1.83	0.60
21:N:402:GLY:HA2	21:N:442:LEU:HD12	1.84	0.60
21:N:771:PHE:CE2	21:N:772:GLN:O	2.55	0.60
22:O:373:TRP:CD1	28:U:200:LEU:HD11	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:234:TYR:HA	23:P:267:PHE:HE2	1.55	0.60
23:P:293:LEU:HD23	23:P:293:LEU:C	2.25	0.60
24:Q:85:MET:HE2	24:Q:93:THR:CA	2.29	0.60
25:R:134:TRP:CH2	25:R:156:LYS:NZ	2.66	0.60
25:R:320:LYS:HD2	25:R:324:ARG:HD2	1.84	0.60
26:S:153:GLU:HA	26:S:156:VAL:HG23	1.83	0.60
26:S:286:TYR:CE1	26:S:323:LEU:CB	2.83	0.60
26:S:420:GLU:O	26:S:423:VAL:HG12	2.01	0.60
31:X:100:TRP:HZ2	31:X:110:PRO:CG	2.14	0.60
33:Z:193:PHE:CE2	33:Z:196:SER:CB	2.84	0.60
1:1:75:THR:CB	1:1:111:TYR:CD1	2.83	0.60
17:J:133:LEU:HD23	17:J:137:MET:CE	2.32	0.60
17:J:219:VAL:CG1	18:K:284:ALA:HB1	2.31	0.60
27:T:35:ILE:CD1	27:T:40:LEU:CD1	2.69	0.60
33:Z:186:GLY:O	33:Z:187:SER:CB	2.49	0.60
1:1:36:ARG:HG3	1:1:38:HIS:O	2.01	0.60
8:A:130:GLN:HB3	9:B:127:VAL:CG2	2.31	0.60
10:C:208:TYR:HB2	10:C:235:ILE:CG2	2.32	0.60
14:G:73:ILE:HG12	14:G:108:ILE:HD13	1.80	0.60
17:J:143:PRO:O	17:J:204:HIS:ND1	2.35	0.60
21:N:528:ARG:NH2	21:N:531:LEU:O	2.27	0.60
22:O:223:LEU:HG	22:O:279:ILE:HG13	1.84	0.60
26:S:471:LEU:HB2	28:U:288:PHE:CE1	2.36	0.60
27:T:93:ASN:ND2	27:T:94:HIS:CD2	2.67	0.60
27:T:245:TYR:HE2	27:T:251:HIS:NE2	1.92	0.60
33:Z:471:LEU:HG	33:Z:497:PHE:CD2	2.35	0.60
33:Z:970:TYR:CE1	33:Z:993:GLU:HB2	2.36	0.60
1:1:4:MET:HE1	1:1:158:SER:OG	2.02	0.60
3:3:173:GLY:HA2	3:3:193:MET:HE2	1.83	0.60
5:5:126:ILE:HD11	5:5:144:TYR:CZ	2.37	0.60
8:A:48:LYS:NZ	8:A:195:ASN:HD21	1.99	0.60
8:A:172:GLY:H	18:K:419:ASN:ND2	2.00	0.60
14:G:182:HIS:CD2	14:G:186:LEU:CD1	2.85	0.60
15:H:249:TYR:OH	15:H:376:GLU:CB	2.49	0.60
15:H:340:LEU:HD12	15:H:370:ARG:NH1	2.09	0.60
17:J:111:GLN:CD	17:J:125:VAL:CG1	2.74	0.60
18:K:68:ILE:HD11	21:N:608:LEU:CD2	2.31	0.60
20:M:335:PRO:O	20:M:342:ARG:NH1	2.35	0.60
21:N:47:GLU:O	21:N:50:TYR:CB	2.41	0.60
21:N:490:LEU:HD23	21:N:490:LEU:C	2.26	0.60
22:O:335:GLY:O	22:O:336:LEU:HB2	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:51:ARG:NH2	24:Q:92:LYS:CB	2.58	0.60
28:U:226:LEU:HD23	28:U:226:LEU:C	2.27	0.60
28:U:283:ARG:CZ	29:V:283:THR:C	2.75	0.60
31:X:75:TRP:CG	31:X:87:PHE:CE1	2.88	0.60
33:Z:60:ASP:CG	33:Z:63:LEU:HD12	2.26	0.60
12:E:226:ASP:OD2	12:E:229:LYS:HD2	2.02	0.60
13:F:166:GLN:O	20:M:381:ARG:NH2	2.35	0.60
17:J:167:PRO:CD	17:J:174:PHE:HZ	2.06	0.60
18:K:156:SER:CB	18:K:253:MET:HE2	2.32	0.60
22:O:179:PHE:CZ	22:O:187:SER:HB3	2.37	0.60
22:O:217:LEU:HD21	22:O:236:HIS:HE1	1.67	0.60
22:O:373:TRP:CH2	28:U:233:PHE:CG	2.90	0.60
25:R:37:LYS:HA	25:R:43:ARG:HH22	1.67	0.60
25:R:421:VAL:O	25:R:422:ARG:HB3	2.01	0.60
26:S:138:MET:SD	26:S:179:ILE:HG12	2.42	0.60
26:S:237:ILE:HG21	26:S:253:PHE:HE1	1.67	0.60
28:U:19:LEU:HD23	28:U:19:LEU:C	2.26	0.60
29:V:261:LEU:CD2	29:V:283:THR:CG2	2.57	0.60
30:W:98:LEU:O	30:W:98:LEU:HG	2.00	0.60
33:Z:102:ILE:HG22	33:Z:112:LYS:CG	2.24	0.60
1:1:38:HIS:HE1	1:1:67:THR:CG2	2.14	0.59
1:1:85:LEU:HD12	1:1:89:ASN:ND2	2.17	0.59
2:2:8:PHE:CE1	2:2:12:VAL:C	2.78	0.59
4:4:37:LEU:HD23	4:4:60:GLN:OE1	2.02	0.59
15:H:104:LYS:HB3	15:H:170:GLU:OE1	2.02	0.59
16:I:306:MET:SD	16:I:338:LEU:HD11	2.42	0.59
21:N:202:PHE:CE2	21:N:206:ILE:CD1	2.83	0.59
25:R:101:GLU:HG2	25:R:105:LYS:CE	2.31	0.59
27:T:197:TYR:CD1	27:T:198:ASP:C	2.79	0.59
30:W:65:PHE:CD2	30:W:65:PHE:O	2.54	0.59
31:X:8:ILE:HB	31:X:124:LYS:HE3	1.83	0.59
33:Z:551:LEU:CG	33:Z:593:HIS:NE2	2.60	0.59
1:1:80:SER:HB3	14:G:103:LYS:CG	2.32	0.59
2:2:77:VAL:O	2:2:81:GLN:HG2	2.02	0.59
8:A:52:VAL:CG2	8:A:202:VAL:CG1	2.80	0.59
11:D:106:VAL:HG12	11:D:148:TYR:CE2	2.37	0.59
13:F:145:LEU:HD23	13:F:146:GLU:C	2.27	0.59
15:H:244:LYS:HE3	15:H:340:LEU:HD22	1.84	0.59
21:N:436:ASP:O	21:N:439:VAL:HG12	2.02	0.59
22:O:43:GLU:O	22:O:46:THR:HB	2.02	0.59
22:O:196:LEU:HD13	22:O:213:LEU:CD2	2.31	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:269:VAL:HA	23:P:277:GLN:NE2	2.17	0.59
24:Q:266:LEU:HD21	24:Q:281:ILE:CG2	2.31	0.59
25:R:137:LEU:O	25:R:141:TYR:CD2	2.53	0.59
26:S:159:ASN:HB2	26:S:187:ILE:CD1	2.32	0.59
26:S:185:PHE:CD1	26:S:239:ARG:CZ	2.84	0.59
27:T:28:PRO:HB2	27:T:29:PRO:CD	2.29	0.59
28:U:16:LEU:C	29:V:32:ILE:HD11	2.27	0.59
28:U:280:ASN:ND2	29:V:291:ASN:CG	2.59	0.59
29:V:144:ILE:HG22	29:V:145:GLN:HE21	1.66	0.59
29:V:184:ASN:O	29:V:188:LEU:HG	2.01	0.59
31:X:10:PHE:CD2	31:X:11:ARG:O	2.54	0.59
1:1:13:ILE:CD1	1:1:177:VAL:HG22	2.32	0.59
4:4:81:SER:CA	4:4:124:LYS:NZ	2.65	0.59
10:C:16:GLU:OE1	10:C:18:ARG:NH2	2.36	0.59
14:G:7:TYR:CD1	14:G:13:VAL:HG23	2.37	0.59
14:G:150:LEU:HD12	14:G:156:TYR:HB3	1.84	0.59
15:H:208:TYR:OH	15:H:266:ARG:HD2	2.02	0.59
16:I:384:LYS:HZ1	16:I:395:MET:CE	2.14	0.59
19:L:328:ASN:ND2	19:L:329:ARG:NE	2.50	0.59
19:L:360:ILE:CG2	19:L:391:ILE:CD1	2.51	0.59
22:O:119:SER:C	22:O:166:ARG:CD	2.75	0.59
23:P:231:LYS:O	23:P:232:ARG:CB	2.49	0.59
24:Q:112:ASP:O	24:Q:116:PHE:HD2	1.85	0.59
24:Q:135:HIS:NE2	24:Q:164:GLU:HG3	2.16	0.59
25:R:63:TYR:OH	25:R:92:ILE:C	2.42	0.59
25:R:353:MET:HA	25:R:357:PHE:CE1	2.37	0.59
26:S:421:TYR:CE1	27:T:158:GLN:HB2	2.37	0.59
27:T:224:ARG:CG	27:T:242:LYS:HG2	2.32	0.59
28:U:105:LYS:HB3	30:W:58:ASN:HD21	1.65	0.59
30:W:21:PHE:CZ	30:W:25:ARG:HG3	2.37	0.59
1:1:109:GLU:HB3	1:1:111:TYR:CE1	2.37	0.59
6:6:147:PHE:CD2	6:6:163:LEU:HA	2.37	0.59
11:D:149:GLN:CD	11:D:162:GLN:HG2	2.27	0.59
14:G:140:VAL:HG21	14:G:225:GLY:HA2	1.84	0.59
14:G:141:ASP:OD1	14:G:143:ASN:N	2.22	0.59
17:J:69:GLY:N	18:K:144:ASN:CG	2.57	0.59
19:L:276:CYS:SG	19:L:321:THR:HG23	2.42	0.59
22:O:33:TYR:CE1	22:O:57:LEU:HB2	2.38	0.59
24:Q:76:GLU:C	24:Q:79:PRO:HD2	2.27	0.59
26:S:186:TYR:OH	26:S:309:PHE:HZ	1.85	0.59
28:U:287:ALA:O	28:U:291:LEU:HG	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:261:LEU:CD1	29:V:283:THR:HG22	2.30	0.59
30:W:88:ALA:HB2	30:W:120:ASP:HB3	1.84	0.59
33:Z:189:ALA:HB3	33:Z:193:PHE:HB3	1.82	0.59
1:1:119:VAL:CG1	14:G:103:LYS:NZ	2.64	0.59
3:3:89:ARG:NE	3:3:94:TYR:OH	2.29	0.59
7:7:81:PRO:HD2	7:7:112:GLN:HG2	1.84	0.59
15:H:102:CYS:SG	15:H:174:VAL:CG2	2.90	0.59
17:J:219:VAL:HG13	18:K:284:ALA:HB1	1.85	0.59
19:L:164:ASP:O	19:L:166:LEU:HD12	2.02	0.59
20:M:383:THR:HB	20:M:386:PHE:CD1	2.37	0.59
21:N:555:ILE:HG23	21:N:559:TYR:CE2	2.38	0.59
22:O:140:LYS:HD3	22:O:141:ASN:HD21	1.66	0.59
25:R:360:SER:HA	32:Y:86:ARG:NH2	2.18	0.59
28:U:275:VAL:HG12	29:V:251:TYR:CE1	2.04	0.59
31:X:35:ILE:HG12	31:X:124:LYS:CE	2.32	0.59
31:X:66:LEU:HD12	31:X:97:TYR:CG	2.37	0.59
1:1:176:VAL:HG13	1:1:183:VAL:HG12	1.83	0.59
3:3:20:LEU:HD13	4:4:125:VAL:HG21	1.84	0.59
12:E:153:TYR:OH	12:E:223:THR:HA	2.02	0.59
13:F:120:THR:HB	14:G:129:ARG:HH22	1.67	0.59
21:N:238:ALA:O	21:N:242:PHE:HD2	1.83	0.59
21:N:542:SER:HB3	21:N:547:LEU:HD12	1.84	0.59
22:O:66:VAL:HG11	22:O:106:PHE:CE1	2.37	0.59
22:O:140:LYS:HD3	22:O:141:ASN:ND2	2.16	0.59
26:S:232:MET:HE2	26:S:268:LEU:HD13	1.85	0.59
31:X:41:GLU:CB	31:X:45:PHE:N	2.62	0.59
4:4:7:ARG:HG3	4:4:12:VAL:HG22	1.84	0.59
4:4:95:ARG:NE	5:5:92:GLY:HA3	2.14	0.59
5:5:4:LEU:HD11	5:5:15:ALA:HB3	1.83	0.59
7:7:10:ASN:HD22	7:7:195:ASN:HD21	1.49	0.59
8:A:119:LYS:HG2	8:A:163:TYR:CZ	2.37	0.59
8:A:130:GLN:CB	9:B:127:VAL:HG23	2.32	0.59
12:E:162:GLY:O	13:F:82:ARG:NH2	2.36	0.59
14:G:111:PHE:CE2	14:G:115:LEU:HD11	2.38	0.59
14:G:122:HIS:CD2	14:G:128:VAL:CG1	2.85	0.59
16:I:362:LEU:CD2	16:I:377:LEU:HD22	2.31	0.59
18:K:158:ILE:N	19:L:256:ILE:CG2	2.65	0.59
21:N:338:PHE:CE1	21:N:749:LEU:HB3	2.37	0.59
21:N:719:ASN:HB3	21:N:721:ASP:OD1	2.02	0.59
22:O:62:TYR:CE2	22:O:82:LEU:HD13	2.37	0.59
22:O:185:PHE:HB3	22:O:223:LEU:CB	2.32	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:293:LEU:O	22:O:297:ILE:CG1	2.47	0.59
24:Q:382:LEU:HD21	25:R:344:SER:HB3	1.84	0.59
26:S:242:LEU:HD21	26:S:278:LYS:HG2	1.85	0.59
27:T:225:ASN:HB2	27:T:241:GLU:HB3	1.83	0.59
33:Z:800:SER:OG	33:Z:815:MET:CE	2.50	0.59
4:4:34:THR:OG1	4:4:181:LYS:NZ	2.36	0.59
16:I:102:ASN:HD21	17:J:83:LYS:HZ1	1.50	0.59
16:I:113:ILE:HG22	16:I:114:ASP:N	2.18	0.59
17:J:219:VAL:CG1	18:K:281:ARG:NE	2.66	0.59
19:L:259:SER:HB2	19:L:303:ARG:NH2	2.09	0.59
21:N:324:LYS:HG3	21:N:325:PHE:CE1	2.37	0.59
21:N:596:LEU:HD11	21:N:717:LEU:CD2	2.32	0.59
21:N:641:LEU:HB2	21:N:660:LEU:HD21	1.85	0.59
25:R:110:ILE:HD11	25:R:140:TYR:OH	2.02	0.59
25:R:415:GLN:CG	26:S:471:LEU:HD22	2.08	0.59
33:Z:970:TYR:HH	33:Z:992:GLU:C	2.11	0.59
8:A:14:ARG:HA	8:A:27:GLN:NE2	2.18	0.59
9:B:27:ALA:CB	18:K:426:PHE:CE1	2.79	0.59
11:D:96:HIS:CD2	11:D:100:LEU:HB2	2.38	0.59
13:F:38:LEU:HD13	13:F:172:LEU:HD22	1.83	0.59
15:H:105:ILE:CD1	15:H:146:VAL:HA	2.33	0.59
20:M:75:LEU:HG	20:M:77:TYR:HE1	1.46	0.59
22:O:306:ARG:CD	22:O:351:SER:O	2.29	0.59
27:T:175:ASP:OD1	27:T:176:SER:N	2.34	0.59
31:X:11:ARG:O	31:X:103:GLU:OE2	2.20	0.59
4:4:40:HIS:HD2	4:4:184:ASP:O	1.86	0.59
6:6:9:GLU:HG2	6:6:11:PHE:HE1	1.67	0.59
8:A:122:ALA:CB	8:A:163:TYR:CD1	2.86	0.59
13:F:65:LYS:HG3	13:F:222:PHE:CE2	2.38	0.59
13:F:194:VAL:HG11	13:F:234:ILE:HA	1.84	0.59
16:I:378:GLU:O	16:I:382:THR:HG23	2.02	0.59
16:I:398:GLU:CD	16:I:422:ARG:HH21	2.11	0.59
17:J:113:VAL:CG2	17:J:122:LEU:HD22	2.33	0.59
20:M:365:SER:HB3	20:M:376:TRP:CZ2	2.25	0.59
21:N:298:TYR:OH	21:N:766:GLN:HB3	2.02	0.59
21:N:641:LEU:CD1	21:N:660:LEU:HD23	2.33	0.59
21:N:667:GLN:HG3	21:N:671:LEU:HD23	1.82	0.59
22:O:82:LEU:HD23	22:O:98:TYR:OH	2.02	0.59
23:P:221:TYR:HE2	23:P:244:ILE:CG1	2.16	0.59
31:X:35:ILE:CG1	31:X:124:LYS:CE	2.79	0.59
33:Z:321:PHE:HE1	33:Z:350:GLY:CA	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:924:LYS:CG	33:Z:959:HIS:CE1	2.85	0.59
1:1:75:THR:HB	1:1:111:TYR:HE1	1.65	0.58
7:7:7:LYS:CE	7:7:119:LEU:HB3	2.32	0.58
9:B:4:ARG:HH22	11:D:5:ASP:CB	2.07	0.58
10:C:98:TYR:CE1	10:C:105:ASP:O	2.56	0.58
18:K:173:ASP:HB2	18:K:221:MET:SD	2.43	0.58
20:M:251:LEU:C	20:M:253:GLN:N	2.61	0.58
22:O:229:ASN:CG	22:O:287:LEU:HG	2.28	0.58
23:P:369:LEU:O	23:P:371:LEU:HG	2.03	0.58
23:P:433:ILE:HD11	28:U:203:LYS:HD3	1.85	0.58
25:R:167:LYS:O	25:R:171:MET:HG2	2.03	0.58
29:V:109:HIS:HE1	29:V:122:ASP:OD1	1.85	0.58
33:Z:542:ILE:O	33:Z:546:ILE:HG12	2.04	0.58
7:7:1:THR:HG22	7:7:2:SER:OG	2.03	0.58
13:F:65:LYS:HD2	13:F:222:PHE:CD2	2.37	0.58
13:F:153:VAL:HB	14:G:85:ARG:NH1	2.14	0.58
18:K:150:LEU:HD11	19:L:128:ILE:HD11	1.84	0.58
21:N:25:LEU:HD11	21:N:57:ASP:CG	2.28	0.58
21:N:326:SER:N	29:V:182:LYS:CG	2.65	0.58
21:N:671:LEU:HD22	21:N:782:PHE:CE1	2.38	0.58
22:O:80:LYS:HD3	22:O:81:TYR:CE2	2.38	0.58
22:O:228:TYR:CD1	22:O:294:MET:HG3	2.39	0.58
22:O:250:TRP:CE2	22:O:270:ILE:HA	2.38	0.58
22:O:340:SER:O	23:P:358:SER:HB2	2.03	0.58
24:Q:48:ASP:HB3	24:Q:88:PHE:CE1	2.38	0.58
30:W:145:GLY:HA3	30:W:148:GLU:OE1	2.03	0.58
1:1:119:VAL:CB	14:G:103:LYS:HZ3	2.16	0.58
8:A:87:ILE:CG2	8:A:88:PRO:HD3	2.32	0.58
15:H:98:GLN:OE1	15:H:178:ARG:NE	2.34	0.58
15:H:105:ILE:HA	15:H:170:GLU:OE2	2.03	0.58
15:H:274:VAL:HG21	15:H:294:LEU:HD13	1.85	0.58
18:K:281:ARG:NH2	18:K:287:GLY:N	2.51	0.58
18:K:314:VAL:HG11	18:K:316:MET:HE2	1.85	0.58
19:L:197:ILE:HA	19:L:322:LYS:HE3	1.85	0.58
21:N:707:ASN:HD21	21:N:786:ARG:NH1	2.01	0.58
22:O:137:TYR:CB	22:O:149:LEU:CD1	2.81	0.58
24:Q:297:ASP:HB3	24:Q:321:TYR:CZ	2.37	0.58
25:R:193:ALA:O	25:R:197:MET:HG3	2.03	0.58
27:T:39:LEU:O	27:T:40:LEU:CB	2.51	0.58
33:Z:325:GLY:C	33:Z:326:VAL:HG22	2.28	0.58
1:1:90:LYS:HE2	7:7:-7:GLN:OE1	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:119:VAL:HG11	14:G:103:LYS:NZ	2.18	0.58
10:C:68:LYS:HG3	10:C:229:ILE:HD11	1.85	0.58
16:I:339:ILE:O	16:I:340:ARG:HB3	2.04	0.58
17:J:163:VAL:HG13	17:J:182:PRO:HG2	1.84	0.58
17:J:273:LEU:HD22	17:J:309:ARG:O	2.02	0.58
17:J:327:ILE:HG22	17:J:358:VAL:HG11	1.85	0.58
21:N:316:LYS:HE2	21:N:683:LEU:HD11	1.86	0.58
21:N:328:PHE:HE1	21:N:696:LYS:HB2	1.67	0.58
21:N:479:GLU:HB3	21:N:512:ASN:HD21	1.69	0.58
21:N:884:PHE:CD2	21:N:896:PHE:HB2	2.38	0.58
22:O:345:ASN:O	22:O:347:LEU:HG	2.02	0.58
23:P:260:VAL:HG22	23:P:328:ALA:CB	2.33	0.58
23:P:286:ASN:O	23:P:293:LEU:HD11	2.03	0.58
30:W:98:LEU:HD11	30:W:108:GLN:CG	2.33	0.58
33:Z:265:LEU:HD13	33:Z:288:LEU:HD21	1.85	0.58
17:J:250:ILE:HA	17:J:299:ILE:HD13	1.84	0.58
19:L:136:ASP:O	19:L:158:ILE:HD13	2.03	0.58
19:L:389:ALA:HA	19:L:392:ARG:CZ	2.33	0.58
20:M:289:LYS:HD2	20:M:295:LYS:HE3	1.85	0.58
21:N:52:ASP:O	21:N:53:ASP:CG	2.47	0.58
21:N:641:LEU:HD12	21:N:660:LEU:HD23	1.85	0.58
23:P:94:GLN:HG3	23:P:125:VAL:HG12	1.84	0.58
23:P:327:LEU:O	23:P:328:ALA:HB3	2.04	0.58
24:Q:3:LEU:HD23	24:Q:36:SER:HA	1.86	0.58
28:U:92:TRP:CE3	28:U:110:PHE:HE2	2.20	0.58
33:Z:624:LEU:HD13	33:Z:736:LEU:O	2.04	0.58
4:4:77:GLN:OE1	4:4:116:TYR:OH	2.05	0.58
9:B:82:TYR:HE1	9:B:134:LEU:CD2	2.17	0.58
10:C:194:LEU:HD23	10:C:197:LEU:HD12	1.86	0.58
14:G:98:PHE:CD2	14:G:106:ILE:HA	2.37	0.58
15:H:295:PHE:CE1	15:H:336:LEU:HD12	2.38	0.58
17:J:329:ARG:HB2	17:J:343:LEU:HD13	1.85	0.58
19:L:259:SER:HB3	19:L:303:ARG:NH2	2.03	0.58
21:N:329:HIS:ND1	21:N:355:TRP:HE3	2.00	0.58
23:P:298:SER:O	23:P:302:LEU:HG	2.02	0.58
29:V:24:LYS:HZ2	29:V:197:TYR:HE2	1.44	0.58
31:X:75:TRP:HA	31:X:87:PHE:CE1	2.26	0.58
31:X:100:TRP:CZ2	31:X:110:PRO:HD3	2.39	0.58
5:5:58:TRP:CH2	5:5:86:LEU:HD11	2.38	0.58
8:A:112:MET:HE1	8:A:116:VAL:HG12	1.85	0.58
10:C:4:ARG:HG3	10:C:9:ARG:NH2	2.18	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:147:ILE:HD11	15:H:157:VAL:O	2.04	0.58
15:H:166:THR:O	15:H:186:PRO:HB3	2.03	0.58
17:J:329:ARG:HG3	17:J:333:ARG:HH12	1.61	0.58
18:K:262:ARG:NH1	18:K:311:ASN:ND2	2.51	0.58
18:K:306:PHE:O	18:K:307:ASP:HB2	2.03	0.58
21:N:94:LYS:HE3	21:N:143:LYS:HZ3	1.68	0.58
22:O:133:ILE:O	22:O:137:TYR:CG	2.56	0.58
22:O:205:ILE:CD1	22:O:210:ARG:HD2	2.31	0.58
22:O:235:HIS:NE2	22:O:358:ILE:HG23	2.19	0.58
23:P:360:ILE:CD1	23:P:365:LEU:HD13	2.34	0.58
24:Q:419:LEU:HD23	24:Q:419:LEU:O	2.02	0.58
26:S:176:LEU:CD1	26:S:179:ILE:HB	2.33	0.58
31:X:85:ARG:HE	31:X:115:SER:HB3	1.68	0.58
2:2:84:LYS:HE3	2:2:85:GLN:HE21	1.68	0.58
2:2:152:ILE:CD1	2:2:177:VAL:HG21	2.34	0.58
5:5:66:HIS:CE1	5:5:70:GLU:CD	2.82	0.58
16:I:190:GLN:NE2	16:I:351:GLU:HB3	2.19	0.58
19:L:81:ILE:O	19:L:83:ASP:N	2.37	0.58
22:O:105:GLN:HA	22:O:108:GLU:CD	2.29	0.58
25:R:237:THR:HG22	25:R:250:ALA:HA	1.86	0.58
25:R:292:LEU:HD21	25:R:307:TYR:CB	2.34	0.58
27:T:46:ILE:CD1	27:T:94:HIS:NE2	2.67	0.58
27:T:241:GLU:H	27:T:246:GLU:HB2	1.68	0.58
28:U:157:LEU:HD23	28:U:157:LEU:C	2.29	0.58
8:A:48:LYS:HZ1	8:A:195:ASN:HD21	1.50	0.58
10:C:120:GLN:NE2	11:D:81:ASP:OD1	2.37	0.58
16:I:167:MET:CG	16:I:270:VAL:HG11	2.33	0.58
16:I:387:LEU:HA	16:I:427:LYS:NZ	2.15	0.58
18:K:254:VAL:CG1	18:K:258:PHE:HE1	2.11	0.58
18:K:347:ARG:HH12	24:Q:205:ALA:CB	2.13	0.58
21:N:300:ASN:ND2	21:N:920:VAL:HG11	2.19	0.58
24:Q:65:TYR:HD2	24:Q:74:LEU:CB	2.04	0.58
26:S:343:LEU:N	26:S:344:PRO:HD2	2.17	0.58
27:T:241:GLU:O	27:T:242:LYS:CB	2.51	0.58
33:Z:490:ILE:HG23	33:Z:529:ALA:HB2	1.86	0.58
15:H:389:PHE:CE2	15:H:407:ILE:HG22	2.39	0.58
17:J:27:ILE:HG13	18:K:51:LEU:HD11	1.86	0.58
17:J:192:GLY:HA2	17:J:253:ILE:HG13	1.84	0.58
17:J:276:LEU:HD22	17:J:286:LYS:HE2	1.86	0.58
18:K:200:GLN:O	25:R:204:TRP:CE2	2.56	0.58
21:N:738:GLN:NE2	21:N:742:TRP:CH2	2.72	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:119:ILE:CD1	23:P:143:LEU:HD22	2.33	0.58
23:P:271:SER:O	23:P:344:ARG:HD3	2.03	0.58
25:R:412:THR:HG22	25:R:416:LYS:HE3	1.86	0.58
28:U:280:ASN:HD21	29:V:291:ASN:CB	2.17	0.58
6:6:-2:ASN:HD22	6:6:49:ALA:H	1.52	0.57
22:O:240:GLU:O	22:O:241:THR:OG1	2.20	0.57
24:Q:314:PHE:CZ	24:Q:339:TYR:HB2	2.39	0.57
33:Z:394:TYR:CD2	33:Z:395:CYS:N	2.67	0.57
12:E:165:TYR:O	12:E:167:TYR:CE1	2.58	0.57
16:I:303:GLN:O	16:I:307:LEU:HG	2.04	0.57
17:J:27:ILE:HG12	18:K:51:LEU:HG	1.85	0.57
17:J:166:LEU:HB2	17:J:174:PHE:HZ	1.68	0.57
18:K:200:GLN:CG	25:R:204:TRP:CZ2	2.54	0.57
21:N:508:THR:HG21	21:N:513:ILE:CB	2.33	0.57
22:O:166:ARG:NH2	22:O:169:ASN:HB3	2.19	0.57
22:O:217:LEU:HD21	22:O:236:HIS:CE1	2.38	0.57
23:P:238:ALA:O	23:P:242:GLN:HG3	2.04	0.57
24:Q:61:LEU:HB3	24:Q:65:TYR:CE1	2.31	0.57
27:T:226:TRP:CD2	27:T:235:PHE:CE2	2.92	0.57
28:U:92:TRP:NE1	28:U:120:LEU:HB2	2.20	0.57
28:U:283:ARG:HH11	29:V:284:ALA:HA	1.63	0.57
33:Z:56:LEU:HB3	33:Z:99:LEU:HD21	1.85	0.57
4:4:37:LEU:HD21	4:4:43:MET:SD	2.44	0.57
10:C:9:ARG:HD3	12:E:9:ASP:OD1	2.03	0.57
16:I:106:ILE:HD13	17:J:85:LEU:HD22	1.82	0.57
16:I:222:TYR:OH	16:I:349:LEU:HB3	2.04	0.57
17:J:45:GLU:OE2	17:J:48:ARG:NH2	2.27	0.57
23:P:164:GLN:HE22	23:P:202:LYS:NZ	2.01	0.57
24:Q:326:MET:CE	24:Q:332:ARG:HD2	2.35	0.57
25:R:208:ASN:CG	25:R:238:PHE:HB2	2.30	0.57
25:R:292:LEU:HD21	25:R:307:TYR:HB3	1.85	0.57
26:S:471:LEU:CD1	28:U:288:PHE:CE2	2.87	0.57
28:U:92:TRP:CE3	28:U:106:ILE:HG21	2.38	0.57
29:V:52:LEU:O	29:V:108:TYR:CE1	2.57	0.57
30:W:16:SER:HA	30:W:25:ARG:NH1	2.19	0.57
1:1:8:PHE:HD2	1:1:10:ASP:H	1.50	0.57
7:7:62:LEU:HD21	7:7:87:TYR:CZ	2.39	0.57
16:I:300:ARG:HG2	16:I:304:ARG:HH11	1.69	0.57
17:J:169:LYS:HZ1	17:J:206:THR:HA	1.67	0.57
18:K:254:VAL:CG1	18:K:258:PHE:CE1	2.87	0.57
20:M:225:GLY:C	20:M:226:THR:HG23	2.28	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:510:HIS:CE1	21:N:512:ASN:HB3	2.39	0.57
22:O:26:PHE:HD1	22:O:61:LEU:CD2	2.16	0.57
22:O:230:PHE:HD1	22:O:251:LEU:CD1	2.16	0.57
23:P:131:PHE:CD1	23:P:166:GLU:HB3	2.40	0.57
23:P:342:GLN:HE21	23:P:346:ILE:HD11	1.70	0.57
24:Q:294:ARG:NH2	24:Q:324:GLU:HB2	2.20	0.57
24:Q:390:LEU:HD23	25:R:345:TYR:CE1	2.39	0.57
27:T:38:ASN:O	27:T:39:LEU:HD23	2.03	0.57
27:T:93:ASN:HD21	27:T:94:HIS:HD2	1.50	0.57
27:T:173:GLU:HA	27:T:175:ASP:OD1	2.04	0.57
33:Z:510:LEU:CD1	33:Z:542:ILE:HA	2.31	0.57
8:A:220:LYS:CD	8:A:242:GLU:HB2	2.32	0.57
15:H:62:ARG:HG2	15:H:66:LYS:HE3	1.86	0.57
16:I:196:GLU:O	16:I:208:TYR:OH	2.21	0.57
16:I:358:LYS:CE	16:I:387:LEU:H	2.17	0.57
16:I:380:LEU:HA	16:I:420:LYS:NZ	2.12	0.57
19:L:394:CYS:SG	19:L:419:VAL:HA	2.45	0.57
21:N:158:LEU:HD13	21:N:192:LEU:CD2	2.34	0.57
22:O:50:ASP:HA	22:O:53:LYS:HZ3	1.69	0.57
22:O:81:TYR:O	22:O:82:LEU:CB	2.51	0.57
23:P:180:ILE:HD11	23:P:206:LYS:HZ2	1.69	0.57
24:Q:61:LEU:HD13	24:Q:65:TYR:CE2	2.39	0.57
27:T:189:ILE:HG21	27:T:209:LEU:HD23	1.85	0.57
29:V:50:MET:CB	29:V:78:VAL:HG13	2.35	0.57
33:Z:312:TYR:OH	33:Z:348:LEU:HD23	2.05	0.57
33:Z:407:VAL:CG1	33:Z:415:MET:HG3	2.33	0.57
33:Z:415:MET:HE1	33:Z:444:GLU:CD	2.29	0.57
7:7:8:TYR:CE2	7:7:10:ASN:C	2.82	0.57
7:7:68:TYR:CE2	14:G:92:ARG:HB3	2.39	0.57
8:A:24:ARG:NE	8:A:29:GLU:OE2	2.37	0.57
9:B:139:HIS:HB2	9:B:145:PHE:CE1	2.39	0.57
10:C:208:TYR:HB2	10:C:235:ILE:HG22	1.87	0.57
13:F:137:TYR:CE2	13:F:218:LYS:HA	2.39	0.57
15:H:367:ARG:HH21	20:M:225:GLY:HA2	1.69	0.57
17:J:301:ASP:N	17:J:304:LEU:CD1	2.61	0.57
18:K:303:MET:HE1	18:K:316:MET:CE	2.35	0.57
19:L:403:ILE:HG23	20:M:203:ARG:HH11	1.70	0.57
20:M:220:MET:HB3	20:M:349:PHE:HE1	1.69	0.57
21:N:399:PHE:CE2	21:N:438:ASP:OD1	2.58	0.57
22:O:79:VAL:CG2	22:O:122:HIS:CB	2.82	0.57
22:O:79:VAL:HG23	22:O:122:HIS:CG	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:415:TRP:CG	28:U:265:LEU:HD11	2.39	0.57
27:T:139:ASP:HB2	27:T:142:LEU:HD12	1.86	0.57
30:W:17:ARG:O	30:W:18:ASN:CG	2.48	0.57
33:Z:124:MET:CE	33:Z:153:TYR:HA	2.32	0.57
33:Z:394:TYR:CG	33:Z:395:CYS:N	2.72	0.57
33:Z:889:VAL:H	33:Z:894:MET:CE	2.18	0.57
4:4:24:ILE:HG23	4:4:25:SER:HB3	1.86	0.57
7:7:85:PHE:CE2	7:7:120:ARG:CZ	2.86	0.57
9:B:53:SER:HB3	9:B:56:ALA:HB2	1.86	0.57
11:D:49:ARG:CG	11:D:203:VAL:HG13	2.33	0.57
14:G:42:ASN:ND2	14:G:183:PRO:HG2	2.19	0.57
14:G:108:ILE:HG22	14:G:148:TYR:CD1	2.38	0.57
15:H:286:GLU:CD	15:H:289:ARG:HH21	1.94	0.57
16:I:253:ILE:HG22	16:I:253:ILE:O	2.05	0.57
18:K:134:SER:OG	18:K:255:ARG:CZ	2.52	0.57
22:O:133:ILE:HG13	22:O:137:TYR:CZ	2.40	0.57
22:O:137:TYR:HB2	22:O:149:LEU:HD13	1.86	0.57
22:O:369:ARG:HE	28:U:226:LEU:HD22	1.68	0.57
25:R:43:ARG:NE	25:R:70:TYR:OH	2.28	0.57
33:Z:52:LEU:HB3	33:Z:67:SER:OG	2.05	0.57
2:2:187:LEU:HD13	2:2:190:TYR:CE1	2.40	0.57
4:4:69:ARG:HA	11:D:90:ARG:NH1	2.19	0.57
5:5:159:ARG:NH2	5:5:203:GLU:OE1	2.35	0.57
6:6:9:GLU:HG2	6:6:11:PHE:CE1	2.39	0.57
18:K:350:ARG:NH2	24:Q:215:VAL:HG11	2.18	0.57
25:R:72:VAL:HA	25:R:76:GLN:OE1	2.05	0.57
25:R:199:GLU:HB3	25:R:206:ARG:CZ	2.35	0.57
26:S:323:LEU:HD23	26:S:383:LEU:HD23	1.85	0.57
28:U:283:ARG:NH2	29:V:283:THR:O	2.37	0.57
29:V:79:SER:CA	29:V:121:VAL:CG1	2.83	0.57
29:V:80:VAL:CG2	29:V:125:THR:HA	2.28	0.57
33:Z:185:ASP:CG	33:Z:186:GLY:N	2.63	0.57
33:Z:756:MET:HE3	33:Z:759:ARG:HE	1.68	0.57
33:Z:906:ALA:O	33:Z:909:ARG:NH1	2.34	0.57
1:1:78:ALA:O	1:1:82:PHE:CD2	2.58	0.57
1:1:124:TYR:CE1	1:1:142:PHE:CE2	2.93	0.57
1:1:148:LYS:HE3	1:1:177:VAL:HG11	1.87	0.57
4:4:117:GLN:NE2	4:4:130:GLY:HA3	2.19	0.57
7:7:33:ARG:NH2	7:7:52:MET:HE1	2.20	0.57
9:B:85:LEU:HD21	9:B:118:MET:CE	2.35	0.57
10:C:16:GLU:OE1	10:C:18:ARG:CZ	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:217:GLN:HG2	15:H:376:GLU:O	2.04	0.57
15:H:318:ARG:NH1	15:H:364:ALA:HB3	2.18	0.57
16:I:190:GLN:OE1	16:I:349:LEU:CD1	2.48	0.57
17:J:350:MET:SD	17:J:361:VAL:HG21	2.45	0.57
22:O:79:VAL:HG21	22:O:123:GLY:H	1.69	0.57
22:O:276:LYS:O	22:O:277:ILE:CB	2.53	0.57
23:P:213:TYR:CE2	23:P:217:LYS:CE	2.88	0.57
25:R:176:ARG:HB2	25:R:243:LEU:CD1	2.34	0.57
30:W:101:ARG:CZ	30:W:104:LYS:HA	2.33	0.57
31:X:48:PHE:C	31:X:48:PHE:HD1	2.12	0.57
31:X:85:ARG:CZ	31:X:115:SER:HB2	2.34	0.57
3:3:44:ILE:HG12	3:3:98:PRO:CB	2.33	0.57
5:5:73:ARG:HH12	5:5:106:ARG:HD2	1.70	0.57
9:B:65:SER:HB2	9:B:90:ARG:HH21	1.70	0.57
10:C:213:PHE:CZ	10:C:215:THR:CG2	2.88	0.57
14:G:73:ILE:CG1	14:G:108:ILE:HD13	2.33	0.57
14:G:137:PHE:CZ	14:G:148:TYR:HB2	2.40	0.57
15:H:420:ARG:CD	16:I:343:ARG:HH12	2.17	0.57
18:K:173:ASP:CB	18:K:221:MET:SD	2.92	0.57
20:M:183:VAL:HG12	20:M:186:LEU:HD12	1.87	0.57
20:M:372:ASP:O	20:M:373:ASP:OD1	2.23	0.57
22:O:79:VAL:HG21	22:O:122:HIS:CB	2.34	0.57
22:O:366:MET:HG2	28:U:226:LEU:HD13	1.85	0.57
29:V:96:LYS:N	29:V:101:ASP:HB2	2.19	0.57
29:V:161:THR:HA	29:V:189:ILE:CD1	2.29	0.57
6:6:34:VAL:HG12	6:6:196:LEU:CD1	2.21	0.56
6:6:48:PHE:CZ	6:6:50:ALA:CB	2.88	0.56
6:6:73:LYS:HD3	12:E:150:ASP:OD2	2.05	0.56
10:C:18:ARG:HH11	10:C:23:GLU:CD	2.08	0.56
14:G:122:HIS:NE2	14:G:128:VAL:HG11	2.20	0.56
14:G:182:HIS:ND1	14:G:186:LEU:HG	2.19	0.56
18:K:140:HIS:CE1	18:K:142:HIS:HB2	2.38	0.56
18:K:363:ALA:HB1	18:K:364:PRO:HD2	1.86	0.56
19:L:253:ASP:HA	20:M:256:ILE:CG2	2.34	0.56
21:N:277:LEU:HD12	21:N:287:LEU:HD23	1.86	0.56
21:N:588:VAL:HG12	21:N:620:GLY:O	2.04	0.56
22:O:294:MET:SD	22:O:357:ILE:HG23	2.45	0.56
22:O:352:TRP:CH2	28:U:227:GLY:HA3	2.39	0.56
25:R:80:GLU:HG3	25:R:81:HIS:CD2	2.40	0.56
25:R:101:GLU:O	25:R:105:LYS:HG3	2.05	0.56
25:R:259:PHE:CD1	25:R:259:PHE:C	2.82	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:304:TYR:CZ	25:R:337:VAL:HG21	2.40	0.56
25:R:342:LEU:CG	25:R:392:ARG:HH21	2.17	0.56
26:S:138:MET:HB3	26:S:179:ILE:HD11	1.87	0.56
26:S:223:LEU:HD21	26:S:230:LYS:HE2	1.86	0.56
30:W:10:ILE:HA	30:W:113:PHE:CD2	2.40	0.56
31:X:16:GLU:CB	31:X:27:ILE:HB	2.33	0.56
31:X:44:GLY:O	31:X:46:TRP:HD1	1.85	0.56
33:Z:169:VAL:HG22	33:Z:192:GLY:HA3	1.87	0.56
33:Z:394:TYR:CE2	33:Z:395:CYS:O	2.58	0.56
33:Z:422:ILE:HD11	33:Z:436:LEU:CD2	2.35	0.56
33:Z:433:LEU:CD1	33:Z:455:ILE:HG23	2.36	0.56
1:1:141:ASN:HB2	1:1:154:PHE:HE1	1.69	0.56
8:A:57:LYS:CE	8:A:69:VAL:HB	2.35	0.56
8:A:94:ALA:O	8:A:98:LYS:HG3	2.05	0.56
12:E:84:ASP:OD1	12:E:136:ARG:NH2	2.26	0.56
17:J:350:MET:CG	17:J:386:VAL:HG13	2.35	0.56
20:M:75:LEU:HD21	20:M:77:TYR:HE1	1.68	0.56
22:O:4:ASN:HD21	22:O:30:GLU:HB3	1.69	0.56
24:Q:370:THR:O	24:Q:374:GLU:HG3	2.04	0.56
25:R:263:ARG:HD3	25:R:296:LEU:CG	2.35	0.56
27:T:25:LYS:O	27:T:28:PRO:HD2	2.05	0.56
31:X:32:GLU:HG3	31:X:53:THR:OG1	2.05	0.56
1:1:36:ARG:HB2	1:1:42:TRP:CH2	2.40	0.56
1:1:38:HIS:CE1	1:1:67:THR:OG1	2.59	0.56
2:2:140:SER:OG	2:2:141:HIS:CD2	2.59	0.56
2:2:220:ILE:CD1	3:3:39:HIS:CE1	2.88	0.56
3:3:60:TYR:CD1	10:C:96:GLN:CB	2.88	0.56
5:5:57:THR:HG22	12:E:101:LEU:CD1	2.35	0.56
5:5:66:HIS:CE1	5:5:70:GLU:OE2	2.58	0.56
9:B:82:TYR:CE1	9:B:134:LEU:CD2	2.89	0.56
13:F:138:ASP:OD1	13:F:140:SER:HB2	2.05	0.56
13:F:166:GLN:CB	20:M:381:ARG:NH2	2.67	0.56
13:F:197:ILE:HG23	13:F:206:LEU:HD21	1.87	0.56
15:H:105:ILE:CD1	15:H:147:ILE:H	2.18	0.56
15:H:249:TYR:CE1	15:H:376:GLU:HA	2.40	0.56
15:H:393:SER:HB2	15:H:404:TRP:CH2	2.41	0.56
16:I:167:MET:HG3	16:I:270:VAL:HG11	1.85	0.56
16:I:172:LYS:HD3	17:J:275:LEU:HD21	1.88	0.56
16:I:201:PRO:HG3	16:I:208:TYR:CZ	2.40	0.56
18:K:169:VAL:HB	18:K:224:LYS:HD2	1.86	0.56
18:K:188:VAL:HA	18:K:313:LYS:HZ3	1.65	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:196:ALA:HB2	20:M:345:ARG:HE	1.70	0.56
20:M:221:TYR:HE1	20:M:346:LYS:HG3	1.67	0.56
21:N:28:ILE:O	21:N:32:VAL:HG22	2.02	0.56
21:N:326:SER:H	29:V:182:LYS:HG3	1.70	0.56
21:N:771:PHE:HE2	21:N:885:ILE:HB	1.69	0.56
22:O:117:ASN:HD22	22:O:167:ILE:CA	2.18	0.56
22:O:250:TRP:CH2	22:O:270:ILE:CG2	2.79	0.56
22:O:344:VAL:O	22:O:345:ASN:HB2	2.04	0.56
23:P:67:ALA:HB2	23:P:75:LEU:HD22	1.87	0.56
23:P:241:LEU:HB3	23:P:264:ILE:HD11	1.86	0.56
25:R:296:LEU:CD1	25:R:337:VAL:HG23	2.20	0.56
26:S:462:ASP:O	26:S:465:ILE:HG22	2.04	0.56
28:U:92:TRP:CZ3	28:U:106:ILE:HG22	2.39	0.56
33:Z:49:LEU:HD12	33:Z:55:ARG:NH1	2.20	0.56
33:Z:64:TYR:HE1	33:Z:68:LEU:HD11	1.70	0.56
33:Z:506:LEU:HD23	33:Z:506:LEU:C	2.30	0.56
33:Z:866:VAL:HA	33:Z:877:THR:CG2	2.35	0.56
10:C:4:ARG:HA	10:C:9:ARG:HH22	1.69	0.56
12:E:98:THR:O	12:E:102:TYR:CD1	2.55	0.56
14:G:64:VAL:HG12	14:G:66:ILE:H	1.70	0.56
14:G:182:HIS:NE2	14:G:186:LEU:CD1	2.68	0.56
17:J:143:PRO:HD2	17:J:204:HIS:HA	1.88	0.56
18:K:157:SER:C	19:L:256:ILE:HG22	2.31	0.56
18:K:244:HIS:HE1	18:K:295:ILE:HD11	1.71	0.56
18:K:248:GLY:HA2	18:K:251:PRO:CG	2.27	0.56
22:O:277:ILE:HG22	22:O:278:PRO:HD2	1.83	0.56
23:P:257:TRP:CZ3	23:P:290:LEU:HD11	2.40	0.56
29:V:159:ILE:HG23	29:V:164:LEU:HD12	1.87	0.56
30:W:60:ARG:O	30:W:60:ARG:HD2	2.05	0.56
30:W:149:GLN:HG2	30:W:152:GLU:HG3	1.88	0.56
31:X:95:GLU:HB3	31:X:97:TYR:CD1	2.40	0.56
33:Z:452:LEU:CD1	33:Z:485:ILE:HG23	2.33	0.56
33:Z:481:PRO:O	33:Z:482:ASP:HB2	2.06	0.56
33:Z:889:VAL:HG22	33:Z:890:SER:N	2.19	0.56
12:E:98:THR:CG2	12:E:102:TYR:CE1	2.87	0.56
12:E:157:HIS:CB	12:E:170:LYS:HD3	2.36	0.56
13:F:146:GLU:OE2	13:F:148:GLN:NE2	2.38	0.56
14:G:90:ARG:HH12	14:G:122:HIS:HE1	1.54	0.56
16:I:148:LEU:HD11	17:J:95:ILE:CG2	2.35	0.56
19:L:370:LYS:HB2	19:L:374:PHE:CE1	2.39	0.56
21:N:433:THR:CG2	21:N:439:VAL:HG21	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:651:PHE:CG	21:N:740:TRP:HH2	2.23	0.56
22:O:80:LYS:HG2	22:O:81:TYR:CE2	2.41	0.56
22:O:186:ASN:HD21	22:O:226:LYS:HD2	1.71	0.56
22:O:339:GLY:O	22:O:340:SER:CB	2.53	0.56
23:P:286:ASN:O	23:P:293:LEU:CG	2.54	0.56
23:P:369:LEU:CB	23:P:371:LEU:HD12	2.31	0.56
24:Q:85:MET:HE3	24:Q:93:THR:HA	1.87	0.56
24:Q:135:HIS:CA	24:Q:161:LEU:HD22	2.35	0.56
25:R:207:ARG:CZ	25:R:211:LYS:HZ1	2.19	0.56
25:R:259:PHE:CG	25:R:329:PHE:CE1	2.94	0.56
25:R:382:ASP:OD2	26:S:402:ILE:HA	2.05	0.56
27:T:211:PHE:HD2	27:T:217:THR:OG1	1.88	0.56
33:Z:812:ILE:HA	33:Z:815:MET:HE3	1.87	0.56
3:3:78:PHE:HE2	3:3:100:VAL:HG22	1.70	0.56
3:3:179:TYR:CE2	3:3:188:LYS:HD2	2.39	0.56
4:4:95:ARG:HH21	5:5:92:GLY:CA	2.18	0.56
6:6:52:GLY:O	6:6:56:VAL:HG23	2.05	0.56
6:6:179:PHE:O	6:6:183:THR:HG23	2.05	0.56
9:B:119:GLN:CG	9:B:123:GLN:HE21	2.18	0.56
13:F:179:PHE:CD1	13:F:188:GLU:HG3	2.40	0.56
17:J:67:GLU:HG2	18:K:144:ASN:HD22	1.70	0.56
17:J:253:ILE:HG12	17:J:255:SER:H	1.70	0.56
19:L:328:ASN:ND2	19:L:329:ARG:HG2	2.20	0.56
22:O:269:LEU:HD23	22:O:269:LEU:C	2.30	0.56
22:O:358:ILE:HG23	22:O:359:SER:H	1.71	0.56
26:S:232:MET:HE2	26:S:268:LEU:CD1	2.34	0.56
27:T:264:MET:HE2	29:V:295:VAL:CG1	2.34	0.56
28:U:283:ARG:HD2	29:V:284:ALA:CB	2.36	0.56
28:U:283:ARG:HH22	29:V:283:THR:CG2	2.14	0.56
30:W:70:GLY:O	30:W:73:LEU:HB2	2.06	0.56
31:X:69:ILE:HB	31:X:73:THR:HG23	1.86	0.56
33:Z:805:LEU:HB3	33:Z:893:PHE:CZ	2.41	0.56
2:2:220:ILE:HD11	3:3:39:HIS:CE1	2.41	0.56
7:7:124:LEU:HD12	7:7:124:LEU:C	2.31	0.56
9:B:38:LYS:NZ	9:B:145:PHE:O	2.37	0.56
9:B:179:TRP:HE1	9:B:183:LEU:HB3	1.71	0.56
15:H:191:ILE:HG22	15:H:191:ILE:O	2.04	0.56
16:I:384:LYS:HG3	16:I:420:LYS:HD2	1.88	0.56
17:J:327:ILE:HG22	17:J:358:VAL:CG1	2.36	0.56
18:K:169:VAL:HB	18:K:224:LYS:CD	2.36	0.56
20:M:49:GLN:HG3	30:W:73:LEU:HD11	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:183:VAL:CG1	20:M:186:LEU:HD12	2.36	0.56
25:R:396:LYS:CG	25:R:400:TYR:HE2	2.19	0.56
28:U:92:TRP:CE3	28:U:106:ILE:HG22	2.41	0.56
30:W:16:SER:HA	30:W:25:ARG:HD3	1.88	0.56
31:X:93:SER:CB	31:X:96:ARG:HH21	2.19	0.56
33:Z:258:PRO:HB2	33:Z:259:PRO:CD	2.36	0.56
7:7:170:VAL:HG12	7:7:174:ARG:NH2	2.19	0.56
8:A:207:ILE:HG22	8:A:211:ILE:HD12	1.88	0.56
13:F:201:LEU:O	13:F:202:ARG:HG3	2.06	0.56
14:G:182:HIS:HB3	14:G:183:PRO:HD2	1.88	0.56
15:H:430:ALA:HA	15:H:435:ARG:NE	2.21	0.56
17:J:200:ARG:HG3	17:J:210:PHE:CZ	2.40	0.56
17:J:357:ASP:O	17:J:361:VAL:HG23	2.05	0.56
21:N:514:THR:HG21	21:N:546:LEU:HD12	1.87	0.56
21:N:525:ASN:ND2	21:N:535:LEU:CD2	2.68	0.56
22:O:69:PHE:CZ	22:O:73:ILE:HG21	2.41	0.56
22:O:277:ILE:CB	22:O:279:ILE:HB	2.36	0.56
24:Q:88:PHE:HB3	24:Q:92:LYS:HD2	1.87	0.56
28:U:98:LYS:HE2	28:U:122:ILE:HG22	1.87	0.56
29:V:69:PHE:C	29:V:108:TYR:OH	2.49	0.56
33:Z:771:HIS:O	33:Z:775:MET:HG2	2.06	0.56
2:2:185:GLU:HG2	9:B:225:THR:OG1	2.06	0.56
5:5:66:HIS:HE1	5:5:70:GLU:CD	2.14	0.56
8:A:36:ASN:HD21	8:A:140:ILE:CD1	2.19	0.56
10:C:207:THR:O	10:C:211:LEU:HG	2.05	0.56
15:H:314:VAL:HG13	15:H:329:VAL:HG13	1.87	0.56
15:H:338:THR:HG21	20:M:281:ASP:CG	2.31	0.56
16:I:167:MET:HG2	16:I:171:MET:SD	2.45	0.56
17:J:200:ARG:CG	17:J:210:PHE:CZ	2.89	0.56
21:N:424:LYS:HG2	21:N:450:ILE:HD11	1.87	0.56
22:O:250:TRP:CD1	22:O:269:LEU:O	2.59	0.56
22:O:258:LEU:HB3	22:O:291:ILE:HG13	1.87	0.56
26:S:188:TYR:CE1	26:S:210:LEU:CD1	2.89	0.56
27:T:39:LEU:O	27:T:40:LEU:HG	2.06	0.56
33:Z:96:TYR:HE1	33:Z:119:LEU:HD22	1.70	0.56
2:2:8:PHE:CE2	2:2:11:GLY:N	2.74	0.56
2:2:83:LEU:HD21	2:2:98:LEU:HD12	1.87	0.56
3:3:60:TYR:HA	10:C:96:GLN:OE1	2.05	0.56
5:5:120:THR:HG22	5:5:122:LEU:HG	1.87	0.56
8:A:174:LYS:HD3	8:A:214:LEU:HG	1.86	0.56
14:G:182:HIS:CG	14:G:186:LEU:CG	2.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:167:ASP:OD2	15:H:183:ILE:HD12	2.06	0.56
15:H:276:GLY:O	15:H:314:VAL:HG21	2.06	0.56
16:I:362:LEU:HD21	16:I:377:LEU:CD2	2.36	0.56
18:K:90:GLN:NE2	18:K:143:SER:OG	2.36	0.56
21:N:122:GLN:HA	21:N:124:TYR:CE2	2.41	0.56
21:N:246:LYS:NZ	21:N:280:GLN:HB2	2.21	0.56
22:O:30:GLU:OE1	22:O:40:GLN:CD	2.48	0.56
22:O:66:VAL:HG12	22:O:106:PHE:CZ	2.41	0.56
22:O:258:LEU:HD21	22:O:287:LEU:HD11	1.87	0.56
22:O:277:ILE:HB	22:O:278:PRO:C	2.31	0.56
23:P:177:ILE:HD12	23:P:216:LEU:HD13	1.86	0.56
24:Q:9:GLU:CD	24:Q:12:ARG:HH21	2.13	0.56
24:Q:99:THR:HG22	24:Q:103:LYS:HG2	1.86	0.56
25:R:71:LEU:HG	25:R:72:VAL:HG23	1.86	0.56
29:V:111:HIS:HD2	29:V:140:VAL:HG21	1.71	0.56
6:6:176:ARG:HD2	6:6:208:TYR:CE2	2.41	0.55
9:B:37:ILE:HD11	9:B:175:LEU:HD22	1.88	0.55
13:F:92:CYS:SG	13:F:103:LEU:HD23	2.46	0.55
14:G:86:HIS:NE2	14:G:90:ARG:NH2	2.53	0.55
14:G:182:HIS:NE2	14:G:186:LEU:HD11	2.21	0.55
17:J:375:ILE:HB	25:R:204:TRP:CD2	2.41	0.55
19:L:358:LEU:HD12	19:L:376:PHE:HB3	1.87	0.55
21:N:36:TRP:HB3	21:N:71:ASN:HD22	1.71	0.55
21:N:596:LEU:HD11	21:N:717:LEU:HD22	1.89	0.55
23:P:260:VAL:O	23:P:264:ILE:HG13	2.05	0.55
26:S:159:ASN:CB	26:S:187:ILE:CD1	2.84	0.55
27:T:163:LEU:HD13	27:T:163:LEU:C	2.31	0.55
27:T:193:THR:HB	27:T:226:TRP:CZ2	2.40	0.55
28:U:97:PRO:HG2	28:U:100:ARG:HH21	1.70	0.55
30:W:7:VAL:O	30:W:110:ILE:HD12	2.05	0.55
33:Z:737:ALA:O	33:Z:775:MET:HE2	2.06	0.55
2:2:99:ILE:HG13	2:2:127:LEU:HD12	1.87	0.55
7:7:145:PRO:CB	7:7:148:ARG:HH21	2.18	0.55
14:G:116:GLY:O	14:G:120:GLN:HG3	2.06	0.55
14:G:215:ILE:HG23	14:G:230:VAL:CB	2.18	0.55
15:H:428:MET:CE	15:H:431:ILE:HD12	2.36	0.55
17:J:115:LEU:HB2	17:J:122:LEU:CD2	2.33	0.55
19:L:283:VAL:HG11	19:L:325:MET:CE	2.36	0.55
23:P:177:ILE:HG23	23:P:203:ILE:HD11	1.88	0.55
24:Q:426:LEU:HD23	24:Q:426:LEU:C	2.31	0.55
25:R:194:VAL:HG13	25:R:206:ARG:NH2	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:404:VAL:HG22	28:U:278:ILE:HG12	1.88	0.55
26:S:256:LYS:HD2	26:S:259:TYR:OH	2.06	0.55
27:T:39:LEU:O	27:T:40:LEU:HB2	2.05	0.55
28:U:19:LEU:HD11	29:V:208:LYS:HB3	1.89	0.55
28:U:35:GLY:C	28:U:93:TYR:CB	2.77	0.55
28:U:38:LEU:CD1	28:U:87:GLU:HG2	2.37	0.55
33:Z:440:LEU:HD21	33:Z:477:TYR:OH	2.06	0.55
3:3:69:GLU:OE2	9:B:109:LEU:HD22	2.06	0.55
3:3:179:TYR:CE2	3:3:188:LYS:CD	2.90	0.55
4:4:81:SER:HA	4:4:124:LYS:NZ	2.21	0.55
8:A:12:TYR:HB2	8:A:15:HIS:HD2	1.71	0.55
8:A:150:LEU:CD2	8:A:155:TYR:OH	2.55	0.55
10:C:42:ASP:HA	10:C:218:LYS:HZ3	1.70	0.55
22:O:119:SER:HB2	22:O:166:ARG:CD	2.34	0.55
22:O:137:TYR:HB2	22:O:149:LEU:CD1	2.37	0.55
22:O:223:LEU:C	22:O:279:ILE:HG21	2.31	0.55
23:P:76:ASN:ND2	23:P:118:VAL:HG21	2.17	0.55
23:P:283:LYS:HB3	23:P:286:ASN:CB	2.36	0.55
23:P:286:ASN:O	23:P:293:LEU:CD2	2.53	0.55
24:Q:51:ARG:HA	24:Q:54:GLN:HB3	1.89	0.55
24:Q:291:TYR:OH	24:Q:293:SER:HB3	2.07	0.55
26:S:186:TYR:HH	26:S:309:PHE:HZ	1.51	0.55
33:Z:318:LYS:HZ1	33:Z:459:ALA:HB1	1.69	0.55
33:Z:392:LEU:HG	33:Z:428:TRP:CZ3	2.39	0.55
33:Z:889:VAL:HG22	33:Z:891:PRO:CD	2.35	0.55
2:2:152:ILE:HD11	2:2:177:VAL:HG21	1.88	0.55
4:4:60:GLN:HE21	4:4:64:GLN:NE2	2.04	0.55
10:C:144:TYR:HB2	10:C:147:GLN:NE2	2.22	0.55
24:Q:178:HIS:HB3	24:Q:201:ALA:HB2	1.89	0.55
25:R:60:ALA:HB3	25:R:102:LEU:CD2	2.36	0.55
25:R:177:LEU:HB2	25:R:190:LYS:NZ	2.21	0.55
25:R:207:ARG:NH2	25:R:211:LYS:HZ1	2.05	0.55
26:S:159:ASN:CB	26:S:187:ILE:HD13	2.37	0.55
27:T:46:ILE:HD13	27:T:94:HIS:NE2	2.21	0.55
27:T:82:PHE:CZ	27:T:109:TYR:CG	2.87	0.55
27:T:245:TYR:O	27:T:246:GLU:CB	2.51	0.55
31:X:100:TRP:CZ2	31:X:110:PRO:HG3	2.37	0.55
33:Z:169:VAL:CG2	33:Z:192:GLY:HA3	2.36	0.55
33:Z:551:LEU:CD1	33:Z:591:ILE:HG23	2.35	0.55
5:5:7:ARG:HG3	5:5:110:PRO:HB2	1.87	0.55
9:B:27:ALA:CA	18:K:426:PHE:CE1	2.85	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:81:ILE:HB	14:G:82:PRO:HD3	1.89	0.55
20:M:170:MET:HG2	20:M:246:LEU:HD13	1.87	0.55
22:O:83:LEU:HD13	22:O:128:LEU:HD22	1.85	0.55
22:O:344:VAL:HB	23:P:361:THR:CG2	2.35	0.55
26:S:185:PHE:CE1	26:S:239:ARG:NH1	2.75	0.55
26:S:465:ILE:HG13	27:T:266:TYR:CE2	2.39	0.55
30:W:29:GLN:O	30:W:32:SER:HB3	2.06	0.55
1:1:45:ARG:NH2	1:1:52:THR:OG1	2.39	0.55
4:4:149:PRO:O	4:4:150:ASP:CB	2.52	0.55
8:A:239:GLU:O	8:A:243:GLU:HG3	2.06	0.55
9:B:12:PHE:HZ	10:C:129:ARG:HH21	1.52	0.55
14:G:108:ILE:HG21	14:G:148:TYR:CD1	2.42	0.55
16:I:113:ILE:HD11	16:I:119:ILE:HB	1.89	0.55
17:J:333:ARG:NH1	17:J:343:LEU:HD11	2.05	0.55
20:M:197:ILE:O	20:M:200:PRO:HD2	2.07	0.55
20:M:415:PHE:HE1	20:M:419:ILE:HD11	1.70	0.55
21:N:91:ILE:HD12	21:N:140:MET:SD	2.46	0.55
21:N:758:VAL:HB	21:N:874:ILE:HD13	1.87	0.55
22:O:377:VAL:O	28:U:193:GLN:NE2	2.34	0.55
23:P:213:TYR:CD2	23:P:217:LYS:HE2	2.41	0.55
25:R:312:TYR:CD2	32:Y:73:PHE:HD1	2.25	0.55
26:S:188:TYR:CZ	26:S:210:LEU:CD2	2.88	0.55
28:U:21:HIS:ND1	28:U:53:ALA:HB2	2.21	0.55
28:U:66:TRP:CH2	28:U:109:LEU:CD1	2.88	0.55
28:U:92:TRP:CD1	28:U:120:LEU:HA	2.42	0.55
31:X:40:GLU:C	31:X:41:GLU:HG2	2.31	0.55
33:Z:829:GLN:HG2	33:Z:832:ARG:NH2	2.21	0.55
9:B:65:SER:HB2	9:B:90:ARG:NH2	2.22	0.55
10:C:68:LYS:CG	10:C:229:ILE:HD11	2.36	0.55
16:I:121:THR:CA	16:I:127:ASP:OD1	2.45	0.55
16:I:380:LEU:HD23	16:I:420:LYS:NZ	2.22	0.55
18:K:153:ASP:HB2	19:L:110:LYS:NZ	2.22	0.55
20:M:225:GLY:O	20:M:226:THR:HG23	2.05	0.55
22:O:26:PHE:HA	22:O:61:LEU:CD2	2.34	0.55
22:O:233:LEU:HD23	22:O:236:HIS:CE1	2.40	0.55
23:P:234:TYR:HD2	23:P:267:PHE:CG	2.25	0.55
28:U:109:LEU:CD2	30:W:60:ARG:HB2	2.37	0.55
28:U:133:PRO:HD3	29:V:212:MET:SD	2.47	0.55
29:V:117:TRP:CZ2	29:V:196:TYR:HB3	2.35	0.55
30:W:180:LEU:O	30:W:183:GLU:HB2	2.06	0.55
33:Z:361:HIS:CE1	33:Z:861:THR:O	2.60	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:171:MET:HE1	16:I:270:VAL:HB	1.89	0.55
16:I:175:LYS:O	17:J:282:PHE:CD1	2.56	0.55
18:K:254:VAL:HG13	18:K:299:LEU:CD2	2.36	0.55
22:O:58:ARG:HD2	22:O:58:ARG:O	2.06	0.55
25:R:286:LEU:HD23	25:R:289:ILE:CD1	2.28	0.55
26:S:471:LEU:HD13	28:U:288:PHE:CE2	2.41	0.55
27:T:126:LEU:HD21	27:T:136:LEU:HD21	1.89	0.55
27:T:155:GLY:O	27:T:156:SER:OG	2.22	0.55
28:U:92:TRP:HE3	28:U:110:PHE:HE2	1.53	0.55
33:Z:195:PHE:HB3	33:Z:197:LYS:NZ	2.22	0.55
33:Z:348:LEU:CD1	33:Z:921:GLU:HG2	2.33	0.55
1:1:80:SER:CB	14:G:103:LYS:CG	2.85	0.55
3:3:61:LYS:HZ2	3:3:85:SER:HB3	1.71	0.55
9:B:38:LYS:HE3	9:B:145:PHE:HB2	1.89	0.55
11:D:159:TRP:CE3	12:E:59:LEU:CD1	2.90	0.55
14:G:203:HIS:CE1	14:G:211:PHE:CD1	2.91	0.55
15:H:280:VAL:HG11	16:I:304:ARG:CZ	2.37	0.55
16:I:244:PHE:HE1	16:I:246:ARG:CZ	2.20	0.55
17:J:166:LEU:HB2	17:J:167:PRO:HD3	1.88	0.55
17:J:166:LEU:CB	17:J:174:PHE:HZ	2.19	0.55
22:O:107:GLN:O	22:O:107:GLN:HG2	2.07	0.55
23:P:429:ILE:HG23	28:U:203:LYS:HD3	1.88	0.55
24:Q:85:MET:HE2	24:Q:93:THR:CG2	2.37	0.55
24:Q:351:ILE:HD12	24:Q:386:PHE:CE1	2.41	0.55
27:T:197:TYR:CE1	27:T:199:PHE:CA	2.89	0.55
31:X:66:LEU:HD11	31:X:97:TYR:CB	2.27	0.55
31:X:125:MET:O	31:X:128:VAL:HG22	2.07	0.55
33:Z:551:LEU:HD11	33:Z:591:ILE:CG2	2.31	0.55
2:2:50:ALA:HB2	3:3:120:CYS:SG	2.47	0.55
8:A:234:PHE:HE2	8:A:236:LEU:HD21	1.71	0.55
12:E:98:THR:HG22	12:E:102:TYR:CE1	2.42	0.55
13:F:65:LYS:HB2	13:F:222:PHE:CE2	2.42	0.55
15:H:167:ASP:CG	15:H:168:ILE:N	2.65	0.55
20:M:44:PHE:CE2	22:O:110:ASP:O	2.58	0.55
21:N:155:GLY:O	21:N:159:GLU:HG3	2.07	0.55
21:N:399:PHE:HD1	21:N:441:VAL:CG2	1.90	0.55
22:O:80:LYS:HG2	22:O:81:TYR:CD2	2.42	0.55
22:O:341:ILE:CG1	22:O:348:VAL:HA	2.33	0.55
24:Q:98:LYS:O	24:Q:140:LYS:NZ	2.40	0.55
29:V:127:LYS:NZ	29:V:194:ARG:NH2	2.55	0.55
1:1:176:VAL:HG12	1:1:183:VAL:HG13	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:160:TRP:CE2	10:C:163:ILE:CD1	2.86	0.54
13:F:215:ILE:CG1	13:F:220:THR:HG21	2.37	0.54
18:K:93:PRO:HB3	19:L:153:LEU:HB2	1.89	0.54
19:L:252:VAL:CG1	20:M:256:ILE:HD13	1.92	0.54
21:N:420:THR:HG22	21:N:424:LYS:HZ2	1.71	0.54
21:N:666:GLN:NE2	21:N:712:ASN:HA	2.22	0.54
22:O:48:PHE:CD1	22:O:81:TYR:HE2	2.24	0.54
22:O:203:THR:O	22:O:204:SER:CB	2.55	0.54
22:O:370:LEU:HD11	28:U:207:VAL:CG2	2.33	0.54
23:P:221:TYR:OH	23:P:244:ILE:HB	2.07	0.54
25:R:422:ARG:NH2	26:S:299:LYS:CB	2.70	0.54
28:U:66:TRP:N	30:W:93:ILE:HD11	2.22	0.54
28:U:173:HIS:HE1	29:V:151:VAL:H	1.55	0.54
5:5:104:TYR:C	5:5:104:TYR:CD1	2.86	0.54
12:E:179:ALA:O	12:E:183:LEU:HG	2.08	0.54
16:I:362:LEU:CG	16:I:377:LEU:HD22	2.38	0.54
17:J:131:ASP:H	17:J:132:PRO:CD	2.20	0.54
21:N:549:TYR:CE2	21:N:586:ALA:HB2	2.42	0.54
21:N:573:HIS:O	21:N:576:VAL:HG12	2.07	0.54
21:N:771:PHE:CE2	21:N:885:ILE:HB	2.43	0.54
21:N:774:ASN:ND2	21:N:885:ILE:HD11	2.21	0.54
22:O:366:MET:CE	28:U:226:LEU:CD1	2.85	0.54
26:S:147:TRP:O	26:S:148:ASP:HB2	2.07	0.54
28:U:283:ARG:CZ	29:V:283:THR:O	2.55	0.54
29:V:133:ASN:O	29:V:134:SER:HB3	2.07	0.54
33:Z:752:ILE:O	33:Z:755:GLU:HB2	2.07	0.54
33:Z:830:LEU:O	33:Z:834:LEU:HG	2.07	0.54
1:1:122:LEU:CD1	7:7:28:PHE:CD1	2.81	0.54
2:2:142:TRP:NE1	2:2:145:ASP:H	2.06	0.54
4:4:147:TYR:HE1	4:4:151:MET:HB2	1.73	0.54
6:6:14:LEU:CD2	6:6:34:VAL:HG13	2.31	0.54
6:6:61:ASN:O	6:6:65:TRP:CD1	2.61	0.54
8:A:183:GLU:O	8:A:187:LYS:HG3	2.07	0.54
9:B:139:HIS:CE1	9:B:145:PHE:CZ	2.92	0.54
9:B:142:PHE:O	9:B:143:ASN:OD1	2.24	0.54
12:E:110:GLU:CG	12:E:164:PHE:HE2	2.09	0.54
13:F:166:GLN:C	20:M:381:ARG:HH21	2.15	0.54
15:H:280:VAL:CG2	16:I:304:ARG:CD	2.73	0.54
17:J:81:ASP:O	17:J:82:LYS:HB2	2.08	0.54
17:J:89:GLN:N	17:J:90:PRO:CD	2.70	0.54
17:J:219:VAL:HB	18:K:284:ALA:HA	1.83	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:422:ASP:OD2	18:K:428:LYS:HD3	2.08	0.54
20:M:385:GLU:HB2	20:M:426:LYS:HZ3	1.60	0.54
21:N:94:LYS:HE3	21:N:143:LYS:NZ	2.23	0.54
21:N:214:LEU:CD1	21:N:217:MET:CE	2.79	0.54
21:N:483:LEU:HD21	21:N:519:VAL:HB	1.89	0.54
22:O:222:LEU:HD22	22:O:270:ILE:CD1	2.36	0.54
23:P:289:ASN:O	23:P:293:LEU:HD13	2.07	0.54
23:P:429:ILE:CG2	28:U:203:LYS:HD3	2.37	0.54
24:Q:272:LEU:HD21	24:Q:274:LEU:HD11	1.89	0.54
25:R:187:VAL:O	25:R:213:TYR:OH	2.17	0.54
26:S:241:PHE:CZ	26:S:253:PHE:CE2	2.95	0.54
26:S:436:ILE:HD12	26:S:438:HIS:CD2	2.41	0.54
27:T:197:TYR:HD1	27:T:198:ASP:N	1.60	0.54
29:V:154:ASP:CB	29:V:156:PHE:HE1	2.18	0.54
30:W:159:ALA:HA	30:W:162:ASN:ND2	2.21	0.54
33:Z:491:LEU:HD22	33:Z:903:MET:SD	2.46	0.54
3:3:75:PRO:HB3	3:3:111:PHE:HD2	1.73	0.54
4:4:167:LEU:HD22	4:4:171:MET:CE	2.38	0.54
11:D:70:HIS:CD2	11:D:138:PHE:O	2.53	0.54
13:F:145:LEU:HD23	13:F:146:GLU:N	2.22	0.54
14:G:140:VAL:HG23	14:G:220:LEU:HD21	1.78	0.54
15:H:62:ARG:HG3	16:I:133:LEU:HD11	1.89	0.54
18:K:141:ARG:NH1	19:L:153:LEU:CD1	2.71	0.54
22:O:41:LEU:HG	22:O:43:GLU:H	1.72	0.54
27:T:209:LEU:HD13	27:T:211:PHE:CE2	2.42	0.54
28:U:233:PHE:CE1	28:U:260:ASN:HB2	2.42	0.54
31:X:16:GLU:CD	31:X:27:ILE:HG21	2.33	0.54
33:Z:357:ILE:HG23	33:Z:960:GLY:CA	2.36	0.54
1:1:34:LEU:HD13	1:1:176:VAL:HG23	1.89	0.54
3:3:98:PRO:HG2	3:3:115:PHE:HB2	1.89	0.54
4:4:139:THR:O	4:4:143:LEU:HG	2.06	0.54
8:A:195:ASN:C	8:A:196:GLU:HG2	2.29	0.54
8:A:207:ILE:CG2	8:A:211:ILE:CD1	2.84	0.54
15:H:224:VAL:O	15:H:228:PRO:HG3	2.07	0.54
19:L:111:GLU:HG2	19:L:117:TYR:CE2	2.43	0.54
20:M:197:ILE:HB	20:M:322:LYS:HD3	1.90	0.54
21:N:15:GLU:O	21:N:16:ASN:HB3	2.07	0.54
21:N:433:THR:HG22	21:N:439:VAL:HG21	1.90	0.54
23:P:308:LEU:HD13	23:P:345:VAL:CG2	2.36	0.54
27:T:110:LEU:HD22	27:T:122:PHE:CE1	2.42	0.54
28:U:9:THR:HB	28:U:162:GLU:HB3	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:24:LYS:NZ	29:V:197:TYR:CZ	2.74	0.54
30:W:123:ASP:HB3	30:W:127:ARG:HH12	1.72	0.54
31:X:38:ASN:HD21	31:X:47:ASP:HB2	1.71	0.54
31:X:85:ARG:NH2	31:X:115:SER:CB	2.70	0.54
33:Z:331:GLY:HA3	33:Z:346:LEU:HD13	1.89	0.54
33:Z:985:LYS:HB2	33:Z:991:GLU:CD	2.33	0.54
6:6:175:VAL:HG12	6:6:179:PHE:CE2	2.42	0.54
7:7:106:ILE:HB	7:7:122:VAL:CG1	2.37	0.54
8:A:234:PHE:HE2	8:A:236:LEU:CD2	2.21	0.54
13:F:145:LEU:HD11	13:F:153:VAL:HG11	1.90	0.54
15:H:207:THR:HG22	15:H:208:TYR:CD2	2.41	0.54
16:I:380:LEU:CD1	16:I:416:PHE:HB3	2.38	0.54
17:J:183:LYS:C	17:J:276:LEU:HD13	2.32	0.54
18:K:300:LEU:HA	18:K:333:ARG:NH1	2.22	0.54
19:L:169:ASN:O	19:L:170:MET:HB2	2.07	0.54
22:O:377:VAL:HG21	28:U:200:LEU:CD1	2.37	0.54
24:Q:311:LEU:HD11	24:Q:366:ILE:HD11	1.90	0.54
25:R:158:LEU:HD13	25:R:170:VAL:CG2	2.38	0.54
26:S:171:TYR:HE2	26:S:176:LEU:HA	1.72	0.54
27:T:97:SER:OG	27:T:98:GLU:HG3	2.08	0.54
29:V:83:VAL:HG11	29:V:107:TRP:CH2	2.42	0.54
30:W:60:ARG:CZ	30:W:62:LEU:HD21	2.38	0.54
33:Z:318:LYS:HG2	33:Z:496:ALA:O	2.07	0.54
33:Z:812:ILE:HA	33:Z:815:MET:CE	2.37	0.54
1:1:114:PRO:HG2	1:1:118:SER:HB3	1.89	0.54
11:D:188:VAL:HG21	11:D:216:LYS:CE	2.37	0.54
16:I:170:VAL:HG23	16:I:171:MET:HG3	1.88	0.54
18:K:244:HIS:HE1	18:K:250:GLY:HA3	1.60	0.54
19:L:253:ASP:HA	20:M:256:ILE:HG13	1.85	0.54
22:O:103:LYS:O	22:O:129:ILE:CD1	2.55	0.54
22:O:343:GLN:HB3	23:P:360:ILE:HG22	1.90	0.54
25:R:320:LYS:O	25:R:324:ARG:HG3	2.08	0.54
25:R:389:GLU:OE2	26:S:399:TYR:HE1	1.90	0.54
33:Z:741:LEU:HD22	33:Z:782:ILE:CD1	2.36	0.54
2:2:37:ILE:HG22	2:2:63:ILE:HG21	1.89	0.54
4:4:80:SER:HB2	4:4:124:LYS:CD	2.20	0.54
6:6:1:GLY:C	6:6:46:ASN:HD21	2.15	0.54
9:B:139:HIS:ND1	9:B:145:PHE:CD2	2.71	0.54
12:E:143:LEU:CD2	12:E:157:HIS:ND1	2.71	0.54
13:F:80:ASP:OD2	13:F:126:ARG:NH1	2.39	0.54
15:H:174:VAL:HG13	15:H:183:ILE:CG1	2.28	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:124:THR:O	16:I:125:MET:HB2	2.08	0.54
16:I:194:ILE:CG2	16:I:236:VAL:HG21	2.37	0.54
17:J:160:ILE:CD1	17:J:314:ILE:HG21	2.37	0.54
18:K:156:SER:OG	18:K:249:GLU:HB3	2.08	0.54
19:L:267:PHE:CZ	19:L:311:GLN:NE2	2.76	0.54
20:M:171:GLU:O	20:M:244:LEU:HD12	2.08	0.54
21:N:70:TYR:HE2	26:S:219:LYS:CD	2.20	0.54
23:P:181:LEU:HG	23:P:223:LEU:CD1	2.38	0.54
25:R:191:LEU:CA	25:R:213:TYR:HE2	2.21	0.54
25:R:404:VAL:CG2	28:U:278:ILE:HD11	2.38	0.54
26:S:185:PHE:CD1	26:S:239:ARG:HD2	2.42	0.54
27:T:190:ALA:HB1	27:T:224:ARG:HD3	1.90	0.54
27:T:193:THR:HB	27:T:226:TRP:HH2	1.57	0.54
30:W:98:LEU:HD11	30:W:108:GLN:HG3	1.90	0.54
30:W:147:ILE:O	30:W:147:ILE:CG2	2.47	0.54
33:Z:970:TYR:CZ	33:Z:993:GLU:HB2	2.43	0.54
13:F:145:LEU:CD2	13:F:153:VAL:HG13	2.34	0.54
13:F:154:THR:HG22	13:F:156:LEU:CD1	2.38	0.54
18:K:99:PHE:CZ	18:K:102:PRO:N	2.76	0.54
18:K:342:SER:OG	18:K:343:LEU:HG	2.08	0.54
19:L:132:ARG:CZ	19:L:156:MET:HG3	2.35	0.54
19:L:204:PRO:HG3	19:L:320:GLN:NE2	2.23	0.54
19:L:206:ILE:HG12	19:L:209:ARG:HH22	1.73	0.54
22:O:277:ILE:CG2	22:O:278:PRO:N	2.48	0.54
22:O:366:MET:CE	28:U:226:LEU:HD13	2.38	0.54
25:R:312:TYR:HE2	32:Y:73:PHE:HB2	1.72	0.54
29:V:117:TRP:CE3	29:V:123:VAL:HG22	2.43	0.54
31:X:24:CYS:HB2	31:X:79:LYS:O	2.08	0.54
33:Z:737:ALA:HB2	33:Z:771:HIS:CE1	2.43	0.54
5:5:6:PHE:HZ	5:5:13:ILE:HG13	1.68	0.54
10:C:39:MET:HE1	11:D:56:ASP:OD2	2.07	0.54
11:D:113:VAL:HG11	11:D:135:ILE:HD11	1.90	0.54
18:K:300:LEU:C	18:K:333:ARG:HH22	2.15	0.54
18:K:346:ARG:HE	18:K:372:ILE:CG2	2.16	0.54
18:K:353:PHE:HD1	18:K:387:MET:CG	2.21	0.54
18:K:364:PRO:HB2	24:Q:247:HIS:NE2	2.22	0.54
19:L:197:ILE:O	19:L:322:LYS:HE3	2.08	0.54
20:M:43:ILE:HG21	30:W:26:PHE:CE2	2.42	0.54
21:N:641:LEU:HB3	21:N:660:LEU:HD21	1.90	0.54
23:P:425:HIS:HE1	28:U:228:LYS:HB2	1.72	0.54
24:Q:299:MET:SD	24:Q:335:PHE:CZ	2.99	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:238:PHE:CD2	25:R:244:THR:HG21	2.42	0.54
30:W:11:ASP:OD1	30:W:12:ASN:N	2.34	0.54
33:Z:54:GLU:O	33:Z:57:LYS:HB3	2.08	0.54
1:1:78:ALA:O	1:1:82:PHE:HD2	1.90	0.53
3:3:96:VAL:H	3:3:117:LEU:HG	1.73	0.53
5:5:45:MET:HE1	5:5:53:GLN:OE1	2.08	0.53
8:A:142:THR:OG1	8:A:156:LYS:HE2	2.07	0.53
12:E:157:HIS:HB3	12:E:170:LYS:HZ3	1.72	0.53
12:E:231:TYR:CZ	12:E:235:LYS:HB3	2.42	0.53
18:K:152:PRO:CB	18:K:259:ARG:HD2	2.38	0.53
18:K:379:SER:OG	18:K:382:VAL:HG23	2.07	0.53
23:P:306:ASN:HD22	23:P:310:ARG:HD3	1.73	0.53
24:Q:418:GLN:HB3	29:V:262:THR:HG21	1.90	0.53
25:R:304:TYR:CD1	25:R:308:LEU:HD11	2.39	0.53
28:U:18:ALA:HB2	28:U:93:TYR:HE2	1.73	0.53
33:Z:193:PHE:CD2	33:Z:196:SER:CA	2.91	0.53
33:Z:495:ILE:HD12	33:Z:906:ALA:HB2	1.90	0.53
7:7:48:ASP:CG	7:7:103:TRP:CD1	2.86	0.53
11:D:203:VAL:C	11:D:204:GLN:CD	2.76	0.53
13:F:91:GLN:NE2	13:F:115:LYS:NZ	2.56	0.53
16:I:137:ASP:O	16:I:141:LEU:HG	2.08	0.53
18:K:262:ARG:NH1	18:K:311:ASN:CG	2.66	0.53
19:L:269:TYR:CZ	19:L:273:HIS:CE1	2.95	0.53
21:N:89:PHE:HE1	21:N:101:ILE:HD11	1.73	0.53
22:O:283:HIS:CD2	22:O:287:LEU:HD12	2.39	0.53
22:O:300:VAL:CG1	22:O:301:PHE:CD2	2.85	0.53
23:P:234:TYR:CG	23:P:267:PHE:CZ	2.96	0.53
28:U:92:TRP:HE1	28:U:120:LEU:HB2	1.73	0.53
33:Z:312:TYR:CZ	33:Z:348:LEU:CA	2.91	0.53
1:1:18:SER:OG	1:1:33:LYS:HG2	2.08	0.53
1:1:176:VAL:CG1	1:1:178:LEU:HD21	2.37	0.53
5:5:33:ARG:HH11	5:5:46:ALA:HB2	1.72	0.53
9:B:12:PHE:CE2	9:B:18:LEU:HD21	2.43	0.53
11:D:171:VAL:O	11:D:175:LEU:HG	2.08	0.53
16:I:172:LYS:HA	17:J:231:ARG:CZ	2.37	0.53
16:I:194:ILE:HG21	16:I:236:VAL:HG21	1.89	0.53
17:J:37:LYS:CE	18:K:58:TYR:CE1	2.92	0.53
17:J:133:LEU:HD23	17:J:137:MET:HE1	1.88	0.53
21:N:322:ASP:HB2	21:N:689:LYS:HZ2	1.70	0.53
22:O:185:PHE:CE1	22:O:279:ILE:HG13	2.44	0.53
22:O:277:ILE:HG21	22:O:279:ILE:HB	1.79	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:373:TRP:HE1	28:U:200:LEU:HD21	1.67	0.53
24:Q:258:ALA:O	24:Q:261:VAL:HG12	2.08	0.53
25:R:214:TYR:CZ	25:R:218:CYS:SG	3.01	0.53
26:S:212:SER:O	26:S:216:LYS:HG3	2.08	0.53
3:3:60:TYR:CD1	10:C:96:GLN:HG3	2.43	0.53
8:A:19:PHE:HZ	9:B:128:ARG:HH12	1.51	0.53
18:K:243:VAL:O	18:K:243:VAL:HG12	2.09	0.53
20:M:75:LEU:CD2	20:M:77:TYR:CE1	2.85	0.53
20:M:277:ILE:HG21	20:M:324:LEU:HD12	1.90	0.53
20:M:357:ARG:HH22	20:M:385:GLU:N	2.06	0.53
22:O:250:TRP:CG	22:O:270:ILE:HG12	2.41	0.53
23:P:257:TRP:CZ2	23:P:261:LEU:HD22	2.43	0.53
24:Q:99:THR:CG2	24:Q:103:LYS:CE	2.86	0.53
26:S:371:LEU:HD13	26:S:380:CYS:HG	1.67	0.53
29:V:52:LEU:HD11	29:V:107:TRP:HZ3	1.66	0.53
29:V:80:VAL:HG23	29:V:125:THR:CA	2.29	0.53
31:X:41:GLU:HG3	31:X:45:PHE:C	2.33	0.53
33:Z:460:SER:HB2	33:Z:495:ILE:HG22	1.90	0.53
10:C:106:ILE:HG23	10:C:106:ILE:O	2.08	0.53
10:C:194:LEU:HA	10:C:197:LEU:HD12	1.91	0.53
12:E:109:VAL:CB	12:E:156:PHE:CE1	2.90	0.53
14:G:86:HIS:HD2	14:G:131:PHE:HZ	1.55	0.53
15:H:147:ILE:HD11	15:H:157:VAL:HB	1.91	0.53
18:K:171:TYR:CE2	18:K:225:ALA:HB1	2.44	0.53
19:L:161:ARG:HH12	19:L:264:ARG:NH2	2.06	0.53
21:N:28:ILE:HG21	21:N:64:ILE:HD13	1.91	0.53
22:O:337:LEU:HB3	22:O:350:ILE:HG21	1.91	0.53
23:P:221:TYR:CZ	23:P:240:TYR:O	2.62	0.53
24:Q:155:LEU:CD1	24:Q:185:TYR:HE1	2.21	0.53
28:U:36:VAL:HB	28:U:89:LEU:HD22	1.90	0.53
33:Z:218:GLU:HB3	33:Z:248:TYR:CZ	2.35	0.53
4:4:66:TYR:HE1	4:4:74:LEU:CD2	2.02	0.53
6:6:115:SER:HB2	6:6:128:ARG:HG2	1.89	0.53
9:B:18:LEU:HD12	9:B:21:ILE:HD12	1.90	0.53
14:G:192:VAL:HG13	14:G:215:ILE:HD13	1.89	0.53
14:G:215:ILE:CG2	14:G:230:VAL:HB	2.18	0.53
15:H:420:ARG:CZ	16:I:343:ARG:NH1	2.72	0.53
18:K:200:GLN:O	25:R:204:TRP:CZ2	2.62	0.53
20:M:50:ARG:N	30:W:73:LEU:CD1	2.70	0.53
21:N:877:GLN:OE1	21:N:880:ARG:NH2	2.42	0.53
22:O:195:TYR:HD2	22:O:213:LEU:HD13	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:217:LEU:CD2	22:O:238:ILE:HD13	2.38	0.53
24:Q:249:LEU:C	24:Q:250:THR:HG22	2.31	0.53
27:T:197:TYR:CG	27:T:198:ASP:N	2.44	0.53
28:U:283:ARG:HE	29:V:287:THR:HB	1.74	0.53
29:V:261:LEU:HD13	29:V:283:THR:CG2	2.38	0.53
32:Y:84:TYR:O	32:Y:88:ASN:ND2	2.41	0.53
33:Z:218:GLU:HA	33:Z:248:TYR:CE1	2.44	0.53
33:Z:554:THR:O	33:Z:555:ALA:HB3	2.07	0.53
33:Z:610:GLY:CA	33:Z:748:LEU:CD1	2.52	0.53
33:Z:617:ILE:HG23	33:Z:743:ILE:HG23	1.91	0.53
33:Z:621:LEU:HD13	33:Z:760:HIS:NE2	2.24	0.53
1:1:75:THR:CB	1:1:111:TYR:CE1	2.91	0.53
1:1:109:GLU:HB3	1:1:111:TYR:HE1	1.72	0.53
3:3:179:TYR:CE2	3:3:188:LYS:CG	2.92	0.53
7:7:54:HIS:CD2	7:7:58:LEU:HD11	2.43	0.53
13:F:166:GLN:CA	20:M:381:ARG:HH21	2.21	0.53
13:F:179:PHE:CE1	13:F:192:ALA:HB2	2.44	0.53
14:G:73:ILE:HD13	14:G:108:ILE:HD13	1.91	0.53
15:H:318:ARG:NH1	15:H:364:ALA:HB2	2.24	0.53
21:N:106:ILE:O	21:N:110:VAL:HG23	2.09	0.53
21:N:383:LYS:H	21:N:412:TYR:HH	1.52	0.53
21:N:457:SER:O	21:N:458:ALA:HB3	2.09	0.53
22:O:73:ILE:CG2	22:O:74:ASN:H	2.07	0.53
22:O:82:LEU:CD2	22:O:98:TYR:OH	2.56	0.53
22:O:87:LYS:CD	22:O:135:ARG:HD2	2.39	0.53
22:O:103:LYS:O	22:O:129:ILE:HD11	2.09	0.53
24:Q:162:LEU:CD1	24:Q:178:HIS:NE2	2.68	0.53
25:R:360:SER:CB	32:Y:86:ARG:HH22	2.21	0.53
27:T:256:LYS:O	27:T:260:ILE:HG12	2.08	0.53
33:Z:385:PHE:HZ	33:Z:898:HIS:ND1	2.06	0.53
1:1:8:PHE:CE2	1:1:10:ASP:CB	2.74	0.53
2:2:72:ARG:NH1	8:A:116:VAL:HG21	2.23	0.53
2:2:142:TRP:NE1	2:2:145:ASP:HA	2.21	0.53
3:3:63:ASN:HD22	10:C:96:GLN:HE22	1.57	0.53
7:7:48:ASP:OD2	7:7:103:TRP:CD1	2.62	0.53
12:E:157:HIS:CB	12:E:170:LYS:HZ3	2.22	0.53
17:J:67:GLU:O	18:K:144:ASN:HB2	2.09	0.53
18:K:68:ILE:HG12	21:N:608:LEU:HD21	1.77	0.53
20:M:362:GLN:HA	20:M:376:TRP:HE1	1.72	0.53
21:N:328:PHE:CZ	21:N:696:LYS:HD2	2.42	0.53
23:P:202:LYS:HE2	23:P:206:LYS:NZ	2.23	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:286:ASN:HA	23:P:293:LEU:CD1	2.38	0.53
24:Q:217:GLU:HA	24:Q:220:LEU:HD12	1.91	0.53
25:R:78:ASP:O	25:R:93:LYS:HG3	2.09	0.53
28:U:152:LYS:CG	28:U:154:PHE:CZ	2.92	0.53
6:6:28:SER:OG	6:6:31:GLU:HB2	2.09	0.53
6:6:31:GLU:OE1	6:6:33:LYS:NZ	2.32	0.53
9:B:156:TYR:CE1	10:C:81:THR:HG21	2.44	0.53
10:C:206:LEU:HD11	10:C:211:LEU:HD11	1.91	0.53
13:F:80:ASP:OD2	13:F:126:ARG:NH2	2.42	0.53
18:K:167:PRO:HB2	19:L:315:PHE:HZ	1.74	0.53
21:N:176:GLN:NE2	21:N:182:ASN:ND2	2.56	0.53
22:O:47:LYS:NZ	22:O:69:PHE:CD1	2.68	0.53
23:P:384:VAL:HG13	23:P:390:TYR:HA	1.90	0.53
27:T:169:GLN:OE1	27:T:174:PHE:CZ	2.61	0.53
27:T:249:MET:O	27:T:250:MET:CB	2.57	0.53
28:U:66:TRP:H	30:W:93:ILE:HD11	1.73	0.53
28:U:94:HIS:HB3	28:U:122:ILE:HG12	1.89	0.53
30:W:179:ARG:O	30:W:180:LEU:HB2	2.08	0.53
33:Z:236:PHE:CE2	33:Z:245:VAL:CG2	2.92	0.53
33:Z:359:LYS:NZ	33:Z:429:ASN:ND2	2.51	0.53
1:1:104:ASP:OD1	1:1:105:LYS:HG3	2.09	0.53
4:4:3:ILE:HD11	4:4:44:SER:OG	2.08	0.53
5:5:124:GLY:N	5:5:127:PHE:HZ	2.07	0.53
5:5:135:PHE:HB2	5:5:167:ARG:NH1	2.24	0.53
10:C:216:ILE:HG12	10:C:227:GLN:HG2	1.91	0.53
16:I:166:PRO:HG2	16:I:270:VAL:HG21	1.90	0.53
16:I:433:GLU:HA	16:I:436:TYR:CZ	2.43	0.53
17:J:115:LEU:HD23	17:J:115:LEU:C	2.34	0.53
21:N:89:PHE:CZ	21:N:101:ILE:HD11	2.44	0.53
21:N:158:LEU:HD13	21:N:192:LEU:HD21	1.90	0.53
21:N:741:TYR:H	21:N:742:TRP:HE3	1.57	0.53
22:O:120:LYS:CB	22:O:166:ARG:HD2	2.39	0.53
22:O:210:ARG:NE	22:O:242:ILE:O	2.36	0.53
24:Q:429:LYS:NZ	29:V:269:ARG:HH22	2.07	0.53
26:S:197:SER:O	26:S:198:SER:CB	2.57	0.53
29:V:114:PHE:CD1	29:V:118:LEU:C	2.80	0.53
31:X:86:ILE:HG12	31:X:100:TRP:CD1	2.44	0.53
33:Z:49:LEU:CD1	33:Z:55:ARG:CZ	2.87	0.53
33:Z:81:SER:O	33:Z:82:MET:CB	2.57	0.53
6:6:11:PHE:HA	6:6:105:LEU:HD21	1.90	0.52
8:A:220:LYS:HD3	8:A:242:GLU:CB	2.36	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:174:PHE:CE1	24:Q:169:ASP:OD2	2.62	0.52
10:C:19:LEU:HD11	11:D:127:ARG:NH2	2.24	0.52
13:F:49:LEU:HD23	13:F:51:ARG:NH2	2.23	0.52
16:I:150:HIS:ND1	16:I:151:HIS:N	2.58	0.52
23:P:308:LEU:O	23:P:308:LEU:HG	2.08	0.52
24:Q:308:ASN:C	24:Q:309:ARG:HD3	2.34	0.52
24:Q:343:LEU:CD2	24:Q:376:LYS:HG2	2.39	0.52
24:Q:418:GLN:O	24:Q:421:LYS:HB2	2.09	0.52
25:R:125:GLU:CG	25:R:126:GLY:H	2.13	0.52
25:R:268:SER:OG	25:R:269:LYS:HG3	2.09	0.52
26:S:186:TYR:OH	26:S:309:PHE:CZ	2.62	0.52
27:T:190:ALA:HB2	27:T:224:ARG:NH2	2.20	0.52
1:1:37:VAL:HB	1:1:63:LEU:CD1	2.39	0.52
5:5:76:VAL:HG12	5:5:113:TYR:HD1	1.74	0.52
9:B:82:TYR:CD1	9:B:134:LEU:HD21	2.44	0.52
10:C:107:PRO:HD2	10:C:110:ILE:HD12	1.91	0.52
15:H:284:VAL:HG13	20:M:252:VAL:CG1	2.39	0.52
17:J:374:ARG:NH1	17:J:378:THR:HG21	2.23	0.52
19:L:81:ILE:HG22	19:L:82:ARG:N	2.23	0.52
19:L:328:ASN:HD21	19:L:329:ARG:NE	2.07	0.52
22:O:117:ASN:C	22:O:166:ARG:HG2	2.33	0.52
22:O:286:PHE:HE1	22:O:334:LEU:HD11	1.74	0.52
23:P:99:LYS:O	23:P:103:TYR:HD1	1.92	0.52
25:R:240:SER:OG	25:R:244:THR:HG22	2.10	0.52
33:Z:748:LEU:HD23	33:Z:748:LEU:C	2.34	0.52
8:A:110:TYR:CD2	8:A:111:ASP:O	2.62	0.52
10:C:98:TYR:CD1	10:C:104:GLU:O	2.62	0.52
17:J:189:GLY:O	17:J:295:ASN:OD1	2.26	0.52
18:K:141:ARG:NH1	19:L:153:LEU:HD11	2.23	0.52
20:M:410:VAL:HG12	20:M:411:LYS:O	2.09	0.52
21:N:49:LEU:HD21	21:N:55:PHE:CD1	2.44	0.52
22:O:66:VAL:HG13	22:O:106:PHE:CZ	2.44	0.52
23:P:395:ARG:NE	24:Q:357:VAL:HA	2.20	0.52
24:Q:47:ASP:O	24:Q:51:ARG:HB2	2.09	0.52
24:Q:291:TYR:CZ	24:Q:293:SER:HB2	2.44	0.52
24:Q:417:GLY:O	24:Q:421:LYS:HG3	2.09	0.52
27:T:11:LEU:HD21	27:T:27:LEU:CD2	2.40	0.52
27:T:227:PRO:CD	27:T:241:GLU:OE2	2.58	0.52
28:U:132:LEU:HG	28:U:134:THR:N	2.24	0.52
30:W:34:GLU:O	30:W:38:GLN:HG3	2.08	0.52
33:Z:312:TYR:CZ	33:Z:348:LEU:HA	2.39	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:33:ARG:HH22	7:7:52:MET:HE1	1.74	0.52
8:A:36:ASN:HD21	8:A:140:ILE:HD12	1.73	0.52
8:A:48:LYS:NZ	8:A:195:ASN:ND2	2.57	0.52
8:A:183:GLU:HG2	8:A:187:LYS:HE2	1.90	0.52
12:E:219:LEU:HD11	12:E:239:LEU:HD23	1.91	0.52
13:F:135:ILE:HG22	13:F:144:LEU:HD13	1.91	0.52
15:H:207:THR:HG23	15:H:208:TYR:CD2	2.44	0.52
16:I:281:ILE:HG21	16:I:284:ILE:HD11	0.57	0.52
18:K:289:ASP:O	18:K:293:GLN:HG3	2.09	0.52
21:N:360:GLN:O	21:N:364:LYS:HG3	2.10	0.52
22:O:306:ARG:HD3	22:O:350:ILE:C	2.19	0.52
24:Q:11:ALA:O	24:Q:14:LEU:HB2	2.09	0.52
24:Q:31:LEU:CG	24:Q:50:ARG:HH21	2.00	0.52
24:Q:75:ARG:HH21	24:Q:113:ASP:HA	1.74	0.52
26:S:256:LYS:HD2	26:S:259:TYR:HH	1.72	0.52
31:X:33:ILE:CD1	31:X:48:PHE:CZ	2.93	0.52
31:X:83:SER:HB3	31:X:86:ILE:HD11	1.91	0.52
33:Z:889:VAL:HB	33:Z:901:PHE:CZ	2.44	0.52
33:Z:916:LEU:HD23	33:Z:922:PRO:CA	2.39	0.52
33:Z:973:TYR:HD2	33:Z:974:THR:HG22	1.75	0.52
7:7:13:ILE:HG22	7:7:169:ILE:HG13	1.90	0.52
18:K:75:LEU:O	18:K:79:LEU:HG	2.10	0.52
19:L:173:PHE:HD1	19:L:175:GLN:O	1.93	0.52
20:M:50:ARG:CB	30:W:73:LEU:HB3	2.39	0.52
22:O:11:LEU:CD2	22:O:15:ARG:HH12	2.13	0.52
22:O:137:TYR:HB3	22:O:149:LEU:CD1	2.37	0.52
22:O:369:ARG:HE	28:U:226:LEU:CD2	2.22	0.52
23:P:234:TYR:CA	23:P:267:PHE:CZ	2.80	0.52
25:R:137:LEU:HD23	25:R:153:THR:HB	1.90	0.52
28:U:66:TRP:CZ3	28:U:68:LEU:HB2	2.40	0.52
29:V:182:LYS:CB	29:V:185:ILE:HG22	2.40	0.52
30:W:25:ARG:NE	30:W:144:PHE:CE2	2.77	0.52
2:2:220:ILE:CD1	3:3:39:HIS:ND1	2.73	0.52
5:5:125:ASP:OD1	5:5:126:ILE:N	2.42	0.52
8:A:46:ARG:HG3	8:A:152:PRO:HB2	1.91	0.52
12:E:241:LYS:HA	12:E:244:LYS:HZ3	1.73	0.52
15:H:167:ASP:CG	15:H:168:ILE:H	2.18	0.52
16:I:252:LEU:HD22	16:I:263:LEU:CD2	2.39	0.52
20:M:302:GLN:OE1	20:M:302:GLN:HA	2.09	0.52
21:N:421:ASP:N	21:N:424:LYS:NZ	2.52	0.52
22:O:166:ARG:NH2	22:O:169:ASN:CB	2.72	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:11:ALA:HA	24:Q:14:LEU:HD12	1.91	0.52
26:S:205:ASN:O	26:S:208:ILE:CG2	2.39	0.52
26:S:315:LYS:HA	26:S:345:TYR:OH	2.08	0.52
27:T:82:PHE:HE1	27:T:109:TYR:CE2	1.95	0.52
31:X:22:ARG:HE	31:X:96:ARG:HH12	1.58	0.52
33:Z:335:LEU:HG	33:Z:335:LEU:O	2.09	0.52
2:2:30:ASN:O	2:2:31:CYS:HB2	2.09	0.52
9:B:70:ASP:O	9:B:214:ILE:HG21	2.10	0.52
10:C:144:TYR:CB	10:C:147:GLN:HE21	2.23	0.52
11:D:218:ASP:O	11:D:219:SER:HB2	2.09	0.52
17:J:219:VAL:CA	18:K:281:ARG:HD2	2.33	0.52
18:K:189:GLU:HG3	18:K:230:THR:HG22	1.91	0.52
19:L:407:ARG:HD3	19:L:409:HIS:CD2	2.45	0.52
22:O:87:LYS:HD2	22:O:135:ARG:CD	2.40	0.52
24:Q:311:LEU:CD1	24:Q:366:ILE:CG1	2.86	0.52
25:R:354:ALA:HB1	25:R:361:VAL:HA	1.91	0.52
28:U:76:MET:HB2	29:V:94:MET:HE1	1.91	0.52
29:V:57:PHE:CD2	29:V:63:VAL:HG22	2.44	0.52
1:1:85:LEU:HD12	1:1:89:ASN:HD22	1.75	0.52
1:1:120:HIS:NE2	7:7:49:ILE:HG21	2.25	0.52
2:2:70:THR:OG1	2:2:72:ARG:HG3	2.10	0.52
9:B:45:ILE:HD12	9:B:74:VAL:HG13	1.92	0.52
18:K:349:ARG:CZ	18:K:376:ASP:HA	2.40	0.52
21:N:21:LYS:CG	21:N:55:PHE:CE2	2.93	0.52
21:N:277:LEU:HB3	21:N:287:LEU:CD2	2.36	0.52
22:O:52:ALA:HB3	22:O:85:SER:HB3	1.90	0.52
22:O:140:LYS:CD	22:O:141:ASN:HD21	2.23	0.52
25:R:60:ALA:HB3	25:R:102:LEU:HD22	1.91	0.52
25:R:94:PHE:CG	25:R:95:ASP:N	2.77	0.52
25:R:252:TYR:CE1	25:R:321:TYR:HB3	2.45	0.52
28:U:100:ARG:O	28:U:152:LYS:CD	2.55	0.52
28:U:123:VAL:HG12	28:U:125:VAL:HG13	1.92	0.52
30:W:59:PRO:CB	30:W:93:ILE:HG13	2.38	0.52
30:W:182:TYR:O	30:W:183:GLU:HB2	2.06	0.52
33:Z:128:GLU:OE2	33:Z:132:HIS:HB2	2.10	0.52
33:Z:187:SER:O	33:Z:188:ALA:HB3	2.10	0.52
5:5:158:LYS:HE3	5:5:196:LEU:HD11	1.92	0.52
6:6:-8:PHE:CE1	7:7:124:LEU:HD13	2.44	0.52
7:7:185:ARG:HG2	7:7:205:GLN:HG3	1.92	0.52
13:F:166:GLN:HA	20:M:381:ARG:HH22	1.70	0.52
14:G:60:PRO:HB3	14:G:212:GLU:OE2	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:66:LYS:HE2	16:I:99:ILE:HB	1.92	0.52
15:H:249:TYR:CZ	15:H:376:GLU:CA	2.91	0.52
15:H:389:PHE:C	15:H:404:TRP:CZ3	2.88	0.52
18:K:95:VAL:CG1	18:K:139:LEU:HB2	2.34	0.52
18:K:254:VAL:O	18:K:258:PHE:HD1	1.92	0.52
18:K:347:ARG:NH1	24:Q:205:ALA:HB1	2.23	0.52
18:K:352:ILE:HG21	18:K:383:ILE:HG22	1.91	0.52
19:L:407:ARG:HD3	19:L:409:HIS:NE2	2.25	0.52
21:N:645:THR:HG21	21:N:660:LEU:HD11	1.91	0.52
22:O:260:VAL:HG11	22:O:262:ASP:OD2	2.10	0.52
22:O:335:GLY:O	22:O:336:LEU:CB	2.58	0.52
23:P:268:LEU:HD12	23:P:280:LEU:HD23	1.91	0.52
23:P:273:TYR:HE2	23:P:388:ILE:HG13	1.75	0.52
23:P:352:VAL:HB	23:P:356:TYR:CE2	2.45	0.52
24:Q:243:PHE:CE2	24:Q:287:THR:C	2.84	0.52
24:Q:266:LEU:HD23	24:Q:281:ILE:CD1	2.40	0.52
25:R:137:LEU:HD12	25:R:141:TYR:CE2	2.35	0.52
26:S:237:ILE:CG2	26:S:253:PHE:CE1	2.92	0.52
27:T:86:LYS:HB3	27:T:87:PRO:HD3	1.90	0.52
28:U:132:LEU:HD21	28:U:134:THR:O	2.10	0.52
33:Z:391:ASN:OD1	33:Z:394:TYR:CD2	2.62	0.52
33:Z:424:SER:OG	33:Z:457:ILE:HG21	2.10	0.52
33:Z:557:GLU:O	33:Z:558:LEU:HB3	2.09	0.52
33:Z:955:VAL:HG22	33:Z:956:LEU:HG	1.90	0.52
33:Z:955:VAL:O	33:Z:956:LEU:HB2	2.09	0.52
1:1:-6:GLY:CA	2:2:116:HIS:CG	2.91	0.52
1:1:122:LEU:CG	7:7:28:PHE:CE1	2.93	0.52
5:5:37:ILE:HG22	5:5:38:ASN:HB2	1.90	0.52
7:7:54:HIS:HD2	7:7:95:ARG:HH22	1.56	0.52
13:F:65:LYS:CD	13:F:222:PHE:HD2	2.22	0.52
15:H:168:ILE:HD13	15:H:174:VAL:CG1	2.40	0.52
16:I:132:ILE:CG1	16:I:156:ILE:HD12	2.29	0.52
18:K:262:ARG:NH1	18:K:311:ASN:OD1	2.43	0.52
19:L:360:ILE:HG21	19:L:391:ILE:HD12	1.83	0.52
20:M:50:ARG:HB3	30:W:73:LEU:HB3	1.90	0.52
20:M:196:ALA:HB2	20:M:345:ARG:NE	2.24	0.52
20:M:289:LYS:HZ1	20:M:334:ASP:HB2	1.67	0.52
21:N:277:LEU:HD23	21:N:280:GLN:NE2	2.25	0.52
21:N:508:THR:HG21	21:N:513:ILE:HG22	1.90	0.52
27:T:224:ARG:HB3	27:T:242:LYS:CB	2.40	0.52
33:Z:147:GLU:HA	33:Z:210:TYR:HE1	1.70	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:620:LEU:HD23	33:Z:743:ILE:CG1	2.40	0.52
2:2:87:LEU:HD21	2:2:94:ILE:HD11	1.92	0.51
6:6:61:ASN:O	6:6:65:TRP:HD1	1.92	0.51
11:D:203:VAL:O	11:D:204:GLN:CB	2.58	0.51
12:E:143:LEU:HD21	12:E:157:HIS:ND1	2.25	0.51
12:E:157:HIS:HD2	12:E:170:LYS:NZ	2.07	0.51
13:F:51:ARG:NH2	13:F:204:GLU:OE1	2.33	0.51
15:H:162:ARG:HH21	15:H:167:ASP:CG	2.18	0.51
15:H:402:ILE:HD13	15:H:443:PHE:HE2	1.75	0.51
22:O:47:LYS:NZ	22:O:65:PHE:CE2	2.61	0.51
23:P:135:GLU:CG	23:P:138:ARG:HH22	2.24	0.51
25:R:110:ILE:HG22	25:R:114:ASN:ND2	2.25	0.51
27:T:197:TYR:HE2	27:T:200:LEU:N	2.04	0.51
28:U:15:LEU:HD12	28:U:125:VAL:HG12	1.92	0.51
28:U:273:LEU:O	28:U:277:TYR:CG	2.62	0.51
30:W:25:ARG:HD2	30:W:144:PHE:CZ	2.43	0.51
8:A:174:LYS:HD3	8:A:214:LEU:HA	1.91	0.51
9:B:4:ARG:NH2	11:D:5:ASP:H	2.06	0.51
12:E:165:TYR:CB	12:E:167:TYR:HE1	2.09	0.51
14:G:7:TYR:CE1	14:G:13:VAL:CG2	2.89	0.51
18:K:89:ILE:HG22	18:K:90:GLN:HE21	1.75	0.51
18:K:127:ASP:OD1	18:K:128:ARG:N	2.42	0.51
20:M:163:PHE:CD1	20:M:261:LYS:CE	2.90	0.51
20:M:290:ARG:NE	20:M:292:ASP:OD2	2.38	0.51
22:O:69:PHE:HZ	22:O:77:SER:HB3	1.75	0.51
23:P:147:LYS:HD3	23:P:155:GLU:HG3	1.91	0.51
24:Q:65:TYR:CD2	24:Q:74:LEU:HD13	2.44	0.51
24:Q:74:LEU:HD21	24:Q:104:PHE:HE1	1.75	0.51
29:V:108:TYR:O	29:V:109:HIS:CD2	2.63	0.51
29:V:168:LEU:CD1	29:V:182:LYS:HD2	2.41	0.51
30:W:142:ILE:CG2	30:W:185:ILE:HD12	2.40	0.51
33:Z:220:ALA:O	33:Z:224:LEU:HG	2.10	0.51
33:Z:437:ASP:O	33:Z:441:TYR:CD2	2.64	0.51
2:2:72:ARG:CZ	2:2:75:ARG:HH12	2.23	0.51
6:6:120:GLY:O	6:6:121:SER:HB2	2.10	0.51
11:D:34:VAL:HG21	11:D:199:LEU:HD21	1.92	0.51
14:G:98:PHE:CZ	14:G:107:PRO:HD3	2.45	0.51
17:J:169:LYS:HE2	17:J:206:THR:HG22	1.93	0.51
21:N:433:THR:HG22	21:N:439:VAL:HG11	1.93	0.51
21:N:490:LEU:HD21	21:N:526:TYR:CG	2.46	0.51
21:N:555:ILE:HB	21:N:571:LEU:HD21	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:41:LEU:CD1	22:O:47:LYS:HG2	2.41	0.51
22:O:217:LEU:HD21	22:O:238:ILE:HD13	1.92	0.51
22:O:373:TRP:CH2	28:U:229:LEU:O	2.64	0.51
23:P:234:TYR:CD2	23:P:267:PHE:CE2	2.99	0.51
24:Q:74:LEU:HD21	24:Q:104:PHE:CE1	2.45	0.51
24:Q:351:ILE:HD12	24:Q:386:PHE:CD1	2.45	0.51
24:Q:351:ILE:CG2	24:Q:362:ILE:HD13	2.40	0.51
26:S:168:LEU:HD13	26:S:184:TRP:CZ2	2.45	0.51
29:V:40:HIS:CE1	29:V:70:ALA:HB2	2.44	0.51
29:V:79:SER:CA	29:V:121:VAL:HG13	2.39	0.51
30:W:71:LYS:CA	30:W:74:ALA:HB3	2.34	0.51
31:X:46:TRP:HE1	31:X:132:SER:HA	1.75	0.51
33:Z:64:TYR:OH	33:Z:115:LEU:CB	2.57	0.51
3:3:44:ILE:HG22	3:3:51:VAL:HG22	1.92	0.51
4:4:27:LEU:HD12	5:5:137:TYR:CE1	2.45	0.51
4:4:28:LYS:HE2	5:5:127:PHE:CE2	2.44	0.51
13:F:65:LYS:HD2	13:F:222:PHE:HD2	1.73	0.51
15:H:198:MET:CE	15:H:272:ILE:CG2	2.72	0.51
15:H:198:MET:HE1	15:H:272:ILE:HG12	1.92	0.51
15:H:428:MET:HE2	15:H:431:ILE:HD12	1.93	0.51
17:J:219:VAL:CB	18:K:281:ARG:NE	2.63	0.51
17:J:220:GLN:HE22	18:K:293:GLN:NE2	2.07	0.51
17:J:339:ARG:HH12	25:R:168:ILE:HG13	1.76	0.51
18:K:353:PHE:HD1	18:K:387:MET:HG3	1.74	0.51
19:L:254:LYS:N	20:M:256:ILE:HG13	2.23	0.51
21:N:386:MET:CE	21:N:404:SER:HA	2.40	0.51
21:N:669:GLU:O	21:N:670:LYS:CB	2.54	0.51
22:O:133:ILE:HG13	22:O:137:TYR:CE2	2.42	0.51
26:S:232:MET:HA	26:S:272:TYR:OH	2.11	0.51
26:S:465:ILE:HG12	27:T:266:TYR:CD2	2.46	0.51
28:U:283:ARG:HH12	29:V:283:THR:C	2.18	0.51
29:V:261:LEU:HD11	29:V:283:THR:HG22	1.83	0.51
31:X:10:PHE:CE2	31:X:11:ARG:O	2.64	0.51
1:1:120:HIS:CB	7:7:28:PHE:CE1	2.93	0.51
3:3:155:PHE:CE1	3:3:189:ARG:CD	2.89	0.51
5:5:74:ILE:HG12	5:5:75:SER:O	2.10	0.51
9:B:139:HIS:ND1	9:B:145:PHE:CE1	2.77	0.51
11:D:138:PHE:HE1	11:D:215:VAL:CG1	2.09	0.51
13:F:198:SER:HA	13:F:206:LEU:CD1	2.36	0.51
14:G:106:ILE:HG23	14:G:106:ILE:O	2.10	0.51
23:P:234:TYR:CD2	23:P:267:PHE:CG	2.98	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:277:SER:OG	26:S:293:ILE:HG13	2.11	0.51
26:S:288:THR:CG2	26:S:292:TYR:CE2	2.93	0.51
31:X:75:TRP:CE3	31:X:125:MET:HB3	2.45	0.51
33:Z:254:PRO:HB3	33:Z:287:ARG:HH12	1.75	0.51
33:Z:505:VAL:O	33:Z:509:LEU:HG	2.10	0.51
3:3:75:PRO:CB	3:3:111:PHE:HD2	2.23	0.51
5:5:32:LYS:HB2	6:6:123:GLU:OE2	2.10	0.51
5:5:159:ARG:HH12	5:5:200:VAL:HA	1.76	0.51
8:A:135:ARG:NH2	14:G:124:LEU:HD21	2.25	0.51
9:B:178:ARG:CD	9:B:191:ILE:HG23	2.40	0.51
11:D:159:TRP:CH2	12:E:59:LEU:HD13	2.45	0.51
15:H:146:VAL:N	15:H:157:VAL:HG21	2.24	0.51
19:L:161:ARG:HH21	19:L:261:ARG:HH12	0.52	0.51
21:N:542:SER:HB3	21:N:547:LEU:CD1	2.41	0.51
21:N:641:LEU:O	21:N:645:THR:HG23	2.10	0.51
22:O:254:LEU:O	22:O:258:LEU:HG	2.11	0.51
23:P:308:LEU:HD22	23:P:369:LEU:HD23	1.86	0.51
24:Q:250:THR:CG2	24:Q:251:THR:N	2.62	0.51
26:S:141:LEU:O	26:S:145:PHE:CE2	2.64	0.51
26:S:425:ARG:NH1	27:T:155:GLY:CA	2.66	0.51
31:X:85:ARG:HE	31:X:115:SER:CB	2.23	0.51
31:X:91:PHE:O	31:X:92:SER:HB2	2.11	0.51
33:Z:403:ASN:OD1	33:Z:405:ASN:HB2	2.11	0.51
10:C:161:LYS:HD2	10:C:180:TYR:OH	2.10	0.51
13:F:12:THR:HG22	13:F:13:PHE:O	2.10	0.51
13:F:155:GLU:CD	14:G:62:LYS:HB3	2.33	0.51
14:G:90:ARG:HH12	14:G:122:HIS:CE1	2.28	0.51
17:J:234:PHE:HE1	17:J:279:LEU:HD21	1.69	0.51
17:J:286:LYS:NZ	17:J:289:LYS:HG2	2.26	0.51
21:N:395:ALA:HB3	21:N:401:LYS:HE3	1.93	0.51
21:N:771:PHE:CG	21:N:772:GLN:N	2.78	0.51
22:O:138:LEU:CD2	22:O:146:ALA:CB	2.89	0.51
22:O:173:SER:HB3	22:O:195:TYR:CE1	2.46	0.51
22:O:387:ARG:HH22	27:T:258:ASN:HB3	1.72	0.51
25:R:259:PHE:HD2	25:R:329:PHE:HE1	1.57	0.51
25:R:381:ILE:HG22	25:R:388:VAL:HG22	1.92	0.51
27:T:111:LEU:HD21	27:T:177:PHE:HB2	1.91	0.51
28:U:68:LEU:HD13	28:U:110:PHE:CZ	2.46	0.51
31:X:73:THR:CG2	31:X:91:PHE:CE1	2.94	0.51
33:Z:970:TYR:CD1	33:Z:993:GLU:HB2	2.45	0.51
5:5:77:ALA:HA	5:5:121:ARG:HH21	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:38:LYS:CE	9:B:145:PHE:O	2.59	0.51
9:B:75:TYR:HB3	9:B:134:LEU:CD2	2.41	0.51
15:H:342:GLY:O	15:H:343:PHE:HB2	2.09	0.51
17:J:329:ARG:CB	17:J:343:LEU:HD13	2.40	0.51
21:N:596:LEU:HD21	21:N:627:ILE:HG22	1.93	0.51
21:N:666:GLN:HG3	21:N:873:ARG:CZ	2.40	0.51
26:S:214:MET:HE2	26:S:236:LEU:HD13	1.93	0.51
26:S:439:GLU:OE2	27:T:199:PHE:HB2	2.11	0.51
28:U:154:PHE:CD1	28:U:154:PHE:N	2.78	0.51
30:W:59:PRO:CG	30:W:93:ILE:CG1	2.58	0.51
31:X:46:TRP:O	31:X:68:LEU:CB	2.59	0.51
10:C:71:ASP:OD1	10:C:72:LYS:HG3	2.11	0.51
12:E:46:VAL:HG11	12:E:145:ALA:HB1	1.93	0.51
16:I:148:LEU:HD11	17:J:95:ILE:HG21	1.92	0.51
16:I:235:ALA:O	16:I:239:GLN:HG2	2.10	0.51
17:J:187:LEU:C	17:J:195:LYS:HZ2	2.18	0.51
18:K:60:LEU:O	18:K:64:GLN:HG3	2.11	0.51
18:K:283:ASP:O	18:K:284:ALA:HB3	2.11	0.51
19:L:245:PHE:CZ	19:L:281:ASP:OD2	2.64	0.51
21:N:47:GLU:CD	21:N:81:TYR:OH	2.54	0.51
21:N:542:SER:CB	21:N:547:LEU:HD13	2.40	0.51
21:N:579:SER:CA	21:N:584:ARG:NH2	2.69	0.51
23:P:425:HIS:CE1	28:U:228:LYS:HB2	2.46	0.51
26:S:465:ILE:HG12	27:T:266:TYR:HD2	1.76	0.51
28:U:98:LYS:NZ	28:U:124:ASP:HB2	2.25	0.51
31:X:39:GLU:HA	31:X:133:SER:OG	2.11	0.51
33:Z:924:LYS:CG	33:Z:959:HIS:ND1	2.74	0.51
4:4:72:TYR:HB2	10:C:143:ARG:NH2	2.25	0.51
12:E:157:HIS:ND1	12:E:172:ILE:HG21	2.15	0.51
14:G:114:ARG:O	14:G:118:TYR:HD2	1.94	0.51
16:I:113:ILE:CG2	16:I:114:ASP:N	2.73	0.51
16:I:222:TYR:OH	16:I:349:LEU:CB	2.59	0.51
16:I:361:ILE:CG2	16:I:392:ILE:CG2	2.79	0.51
17:J:219:VAL:HG22	18:K:284:ALA:CB	2.17	0.51
19:L:283:VAL:HG11	19:L:325:MET:HE2	1.92	0.51
20:M:228:LYS:HE2	20:M:326:ALA:CB	2.40	0.51
21:N:33:ASP:O	21:N:36:TRP:HD1	1.94	0.51
21:N:738:GLN:NE2	21:N:742:TRP:CZ3	2.80	0.51
22:O:103:LYS:O	22:O:129:ILE:HG12	2.07	0.51
23:P:248:ASP:OD1	23:P:256:LYS:NZ	2.41	0.51
23:P:268:LEU:HD12	23:P:280:LEU:CD2	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:311:LEU:HD11	24:Q:366:ILE:CD1	2.41	0.51
25:R:263:ARG:HD3	25:R:296:LEU:CD2	2.41	0.51
26:S:343:LEU:HB2	26:S:344:PRO:CD	2.41	0.51
33:Z:165:TYR:O	33:Z:169:VAL:HG23	2.11	0.51
5:5:65:LEU:HD13	12:E:97:VAL:HG21	1.92	0.50
7:7:-3:VAL:HG12	7:7:49:ILE:HB	1.92	0.50
10:C:13:PHE:CE1	11:D:127:ARG:HD2	2.46	0.50
18:K:316:MET:HG3	18:K:334:LEU:HD21	1.92	0.50
19:L:197:ILE:HG23	19:L:322:LYS:HD2	1.92	0.50
19:L:228:LYS:NZ	19:L:326:ALA:HB1	2.27	0.50
21:N:273:LEU:O	21:N:277:LEU:HG	2.11	0.50
21:N:330:THR:O	21:N:334:VAL:HG23	2.10	0.50
22:O:70:TYR:OH	22:O:113:LYS:HE3	2.11	0.50
22:O:222:LEU:CD2	22:O:270:ILE:CD1	2.90	0.50
22:O:379:LYS:HE2	22:O:383:LYS:NZ	2.26	0.50
23:P:353:ILE:HG22	23:P:402:PHE:CZ	2.46	0.50
24:Q:294:ARG:HB2	24:Q:324:GLU:OE1	2.11	0.50
24:Q:429:LYS:HG2	28:U:292:ILE:HG22	1.92	0.50
27:T:114:LEU:HD13	27:T:148:LEU:HD23	1.92	0.50
28:U:127:GLN:HG2	29:V:212:MET:HB3	1.92	0.50
30:W:41:ARG:CZ	30:W:67:ALA:O	2.60	0.50
30:W:159:ALA:HA	30:W:162:ASN:HD21	1.76	0.50
1:1:124:TYR:HD1	1:1:142:PHE:CZ	2.29	0.50
4:4:51:ASP:HB3	4:4:97:TYR:HD1	1.76	0.50
5:5:3:THR:HG23	5:5:16:VAL:HG12	1.92	0.50
8:A:52:VAL:HG23	8:A:202:VAL:CG1	2.41	0.50
13:F:12:THR:HG21	14:G:9:LEU:HD23	1.93	0.50
16:I:300:ARG:HG2	16:I:304:ARG:NH1	2.26	0.50
17:J:342:ASN:HB2	17:J:345:LYS:HD2	1.94	0.50
18:K:158:ILE:CG2	19:L:256:ILE:CG2	2.82	0.50
18:K:300:LEU:HA	18:K:333:ARG:HH12	1.76	0.50
21:N:91:ILE:O	21:N:94:LYS:HE2	2.11	0.50
21:N:253:LEU:HD13	21:N:894:ARG:NE	2.25	0.50
22:O:226:LYS:HB3	22:O:226:LYS:NZ	2.26	0.50
23:P:265:VAL:HG22	23:P:280:LEU:HD23	1.93	0.50
24:Q:390:LEU:HD23	25:R:345:TYR:HE1	1.76	0.50
25:R:36:SER:C	25:R:43:ARG:HH21	2.15	0.50
25:R:416:LYS:NZ	26:S:294:ILE:HG21	2.26	0.50
27:T:194:GLU:OE2	27:T:239:SER:N	2.43	0.50
30:W:20:ASP:OD2	30:W:176:PRO:HB3	2.11	0.50
31:X:11:ARG:HG2	31:X:103:GLU:HA	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:80:SER:OG	31:X:83:SER:HB3	2.11	0.50
31:X:100:TRP:HZ2	31:X:110:PRO:HD3	1.76	0.50
33:Z:312:TYR:CZ	33:Z:348:LEU:C	2.88	0.50
33:Z:617:ILE:HD11	33:Z:747:ALA:HB2	1.93	0.50
3:3:84:SER:O	3:3:88:GLU:HG3	2.12	0.50
6:6:17:ASP:OD2	6:6:189:VAL:HA	2.11	0.50
7:7:129:TYR:CE2	7:7:134:LEU:HD22	2.45	0.50
8:A:40:ILE:CD1	8:A:84:ASN:HA	2.41	0.50
9:B:35:LEU:C	9:B:35:LEU:HD12	2.36	0.50
15:H:62:ARG:HA	16:I:133:LEU:HD11	1.94	0.50
17:J:115:LEU:CB	17:J:122:LEU:HD23	2.35	0.50
17:J:196:THR:HA	17:J:246:PHE:CZ	2.46	0.50
22:O:81:TYR:O	22:O:82:LEU:HB2	2.10	0.50
23:P:272:PRO:HG2	23:P:273:TYR:CD1	2.47	0.50
26:S:322:LEU:CD2	26:S:327:ILE:HG22	2.41	0.50
27:T:161:TRP:HE3	27:T:162:ASP:OD1	1.93	0.50
27:T:209:LEU:CD1	27:T:211:PHE:CE2	2.94	0.50
27:T:240:LYS:HA	27:T:245:TYR:CB	2.38	0.50
29:V:32:ILE:O	29:V:36:LYS:HG2	2.11	0.50
33:Z:232:LYS:HA	33:Z:235:GLN:HB3	1.93	0.50
33:Z:357:ILE:CD1	33:Z:914:LEU:HD13	2.22	0.50
33:Z:862:MET:HE2	33:Z:910:PRO:CG	2.40	0.50
1:1:138:CYS:HA	1:1:154:PHE:HZ	1.75	0.50
2:2:61:SER:OG	9:B:94:HIS:HB3	2.10	0.50
6:6:3:ILE:CD1	6:6:101:ILE:HD12	2.40	0.50
6:6:73:LYS:NZ	12:E:108:ASN:ND2	2.59	0.50
7:7:121:TYR:CE1	7:7:123:ASN:HB3	2.46	0.50
8:A:156:LYS:HB3	8:A:166:TYR:HE1	1.75	0.50
18:K:192:LEU:HD21	18:K:313:LYS:HG2	1.92	0.50
19:L:104:LEU:HD13	20:M:127:VAL:HG12	1.94	0.50
19:L:140:LEU:CD2	19:L:158:ILE:HG12	2.42	0.50
20:M:345:ARG:NH2	20:M:347:ILE:HG12	2.26	0.50
21:N:328:PHE:HE1	21:N:696:LYS:CB	2.24	0.50
22:O:15:ARG:HD2	22:O:43:GLU:OE2	2.11	0.50
22:O:138:LEU:CD2	22:O:146:ALA:HB1	2.41	0.50
22:O:258:LEU:HD13	22:O:291:ILE:HD11	1.94	0.50
23:P:127:GLU:OE2	23:P:130:ILE:HG22	2.12	0.50
23:P:184:MET:CB	23:P:223:LEU:HD22	2.39	0.50
27:T:32:ILE:HA	27:T:35:ILE:CG2	2.42	0.50
27:T:225:ASN:CB	27:T:241:GLU:HA	2.41	0.50
27:T:246:GLU:HG3	27:T:246:GLU:O	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:963:ALA:O	33:Z:964:GLU:CG	2.58	0.50
2:2:85:GLN:O	2:2:89:LYS:HG3	2.12	0.50
5:5:104:TYR:C	5:5:104:TYR:HD1	2.20	0.50
9:B:82:TYR:O	9:B:86:VAL:HG23	2.11	0.50
10:C:57:LEU:HG	10:C:58:GLU:O	2.12	0.50
14:G:217:TRP:HE1	14:G:228:LYS:HB2	1.76	0.50
15:H:168:ILE:HA	15:H:174:VAL:HG11	1.94	0.50
19:L:119:VAL:HG11	19:L:148:LEU:HD11	1.93	0.50
19:L:147:THR:OG1	19:L:159:LEU:HD11	2.11	0.50
21:N:220:CYS:HB3	21:N:225:LEU:HD11	1.93	0.50
25:R:181:TYR:HD2	25:R:183:ASP:HB2	1.75	0.50
25:R:259:PHE:HZ	25:R:332:GLU:OE1	1.95	0.50
29:V:117:TRP:HH2	29:V:157:ARG:C	2.20	0.50
30:W:38:GLN:HG2	30:W:69:PHE:HZ	1.76	0.50
33:Z:422:ILE:HD11	33:Z:436:LEU:HD23	1.94	0.50
33:Z:888:LEU:HG	33:Z:901:PHE:HE1	1.71	0.50
4:4:27:LEU:HD12	5:5:137:TYR:CZ	2.46	0.50
12:E:208:MET:SD	12:E:212:LEU:HD13	2.52	0.50
16:I:176:SER:HB2	17:J:282:PHE:HE1	1.76	0.50
17:J:187:LEU:HD13	17:J:198:LEU:HD23	1.93	0.50
17:J:374:ARG:NH1	17:J:378:THR:CG2	2.74	0.50
18:K:107:THR:OG1	18:K:121:ARG:NH1	2.44	0.50
20:M:376:TRP:CE3	20:M:376:TRP:HA	2.47	0.50
21:N:21:LYS:HE2	21:N:55:PHE:CZ	2.40	0.50
21:N:321:LEU:HD22	21:N:328:PHE:CD1	2.47	0.50
22:O:233:LEU:HD22	22:O:236:HIS:ND1	2.25	0.50
22:O:306:ARG:CD	22:O:351:SER:CA	2.88	0.50
22:O:340:SER:CB	23:P:358:SER:HB2	2.38	0.50
23:P:134:VAL:CG2	23:P:138:ARG:NH1	2.68	0.50
24:Q:195:LYS:NZ	24:Q:229:ASP:HB3	2.27	0.50
24:Q:282:LEU:HD23	24:Q:288:LYS:HE3	1.93	0.50
25:R:301:TYR:HD2	25:R:357:PHE:O	1.95	0.50
25:R:308:LEU:HB3	25:R:334:ARG:NH2	2.18	0.50
25:R:404:VAL:HG21	28:U:274:MET:SD	2.51	0.50
27:T:248:GLU:O	27:T:248:GLU:HG2	2.11	0.50
31:X:23:LEU:O	31:X:24:CYS:CB	2.59	0.50
31:X:33:ILE:HD11	31:X:48:PHE:CE2	2.46	0.50
33:Z:854:LEU:HD11	33:Z:864:MET:SD	2.51	0.50
33:Z:985:LYS:HB2	33:Z:991:GLU:HG3	1.94	0.50
3:3:63:ASN:ND2	10:C:96:GLN:HE22	2.09	0.50
3:3:85:SER:HA	3:3:88:GLU:OE1	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:6:PHE:CE1	5:5:13:ILE:CB	2.79	0.50
5:5:76:VAL:HG13	5:5:101:ILE:HG22	1.92	0.50
12:E:143:LEU:HG	12:E:172:ILE:CD1	2.40	0.50
13:F:43:HIS:NE2	13:F:219:ASP:OD1	2.27	0.50
13:F:166:GLN:C	20:M:381:ARG:NH2	2.70	0.50
15:H:402:ILE:HD13	15:H:443:PHE:CE2	2.47	0.50
16:I:176:SER:C	17:J:282:PHE:CD1	2.90	0.50
17:J:150:VAL:CG1	17:J:197:LEU:HD13	2.42	0.50
17:J:212:ARG:HH12	18:K:330:ARG:HD3	1.77	0.50
17:J:224:GLY:O	17:J:228:ARG:N	2.43	0.50
18:K:158:ILE:HG22	19:L:256:ILE:HG23	1.91	0.50
20:M:175:LYS:NZ	20:M:240:ASN:HB3	2.27	0.50
22:O:153:LEU:HD11	22:O:174:THR:HG21	1.75	0.50
23:P:311:TRP:HB3	23:P:312:PRO:HD3	1.93	0.50
25:R:383:ARG:HD3	26:S:406:ASP:OD1	2.10	0.50
29:V:113:GLY:HA3	29:V:142:ASP:OD2	2.11	0.50
3:3:44:ILE:HG12	3:3:98:PRO:HA	1.94	0.50
4:4:18:LYS:HB3	4:4:179:ILE:HG13	1.93	0.50
9:B:117:ILE:HG22	9:B:130:PHE:CE2	2.46	0.50
10:C:98:TYR:CD1	10:C:106:ILE:N	2.80	0.50
10:C:208:TYR:CB	10:C:235:ILE:CG2	2.89	0.50
13:F:45:VAL:HG13	13:F:189:LEU:HD23	1.93	0.50
13:F:179:PHE:HD1	13:F:188:GLU:HG3	1.76	0.50
13:F:215:ILE:CD1	13:F:220:THR:HG21	2.41	0.50
14:G:86:HIS:HD2	14:G:131:PHE:CZ	2.29	0.50
14:G:140:VAL:CG1	14:G:220:LEU:HG	2.34	0.50
15:H:295:PHE:HE1	15:H:336:LEU:HD12	1.76	0.50
16:I:335:ASP:HB2	16:I:338:LEU:HG	1.94	0.50
17:J:143:PRO:O	17:J:204:HIS:CG	2.64	0.50
17:J:256:THR:O	17:J:257:ARG:HB2	2.12	0.50
18:K:244:HIS:ND1	18:K:250:GLY:HA3	2.24	0.50
20:M:289:LYS:HZ3	20:M:302:GLN:HE22	1.46	0.50
20:M:309:LEU:HD22	20:M:342:ARG:HG2	1.93	0.50
21:N:123:PHE:HZ	21:N:129:ILE:HB	1.77	0.50
22:O:287:LEU:C	22:O:287:LEU:HD23	2.36	0.50
24:Q:178:HIS:HB2	24:Q:201:ALA:HB2	1.94	0.50
24:Q:331:THR:HG21	24:Q:335:PHE:HE2	1.68	0.50
25:R:83:GLU:HG3	25:R:83:GLU:O	2.12	0.50
4:4:27:LEU:CD1	5:5:137:TYR:CE1	2.95	0.50
7:7:62:LEU:HD11	7:7:87:TYR:CE2	2.47	0.50
7:7:193:ASP:OD2	7:7:195:ASN:HB2	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:162:TYR:CZ	18:K:428:LYS:CB	2.86	0.50
10:C:98:TYR:CE1	10:C:104:GLU:O	2.65	0.50
11:D:157:SER:HB3	11:D:159:TRP:NE1	2.26	0.50
13:F:51:ARG:HH21	13:F:204:GLU:CD	2.19	0.50
15:H:145:TYR:HB2	15:H:162:ARG:CZ	2.42	0.50
15:H:284:VAL:HB	20:M:254:MET:HB3	1.92	0.50
16:I:244:PHE:CE1	16:I:246:ARG:NE	2.78	0.50
18:K:211:LEU:HD23	18:K:338:ILE:HB	1.94	0.50
18:K:314:VAL:HG12	18:K:316:MET:HE2	1.91	0.50
20:M:175:LYS:HZ3	20:M:240:ASN:HB3	1.77	0.50
20:M:379:LEU:HB3	20:M:415:PHE:CE1	2.46	0.50
23:P:320:PRO:O	23:P:321:VAL:HB	2.12	0.50
28:U:127:GLN:HB3	29:V:212:MET:HB2	1.94	0.50
30:W:101:ARG:HH12	30:W:104:LYS:CG	2.04	0.50
31:X:10:PHE:C	31:X:33:ILE:CG2	2.82	0.50
33:Z:124:MET:SD	33:Z:153:TYR:HA	2.52	0.50
33:Z:401:VAL:CG2	33:Z:426:TYR:HH	2.08	0.50
1:1:176:VAL:HG13	1:1:183:VAL:HG13	1.79	0.49
3:3:140:MET:HE3	3:3:144:LEU:HD11	1.94	0.49
6:6:114:TYR:CE2	6:6:124:ARG:HB2	2.46	0.49
7:7:13:ILE:HG12	7:7:191:ILE:HG12	1.94	0.49
7:7:95:ARG:HH12	7:7:102:LEU:HD13	1.73	0.49
16:I:361:ILE:O	16:I:365:HIS:CD2	2.65	0.49
18:K:179:MET:O	18:K:183:GLU:HG3	2.12	0.49
18:K:360:MET:HE1	18:K:407:LEU:HD21	1.94	0.49
20:M:203:ARG:CB	20:M:206:LYS:HD2	2.37	0.49
21:N:486:GLY:HA2	21:N:524:ILE:CG2	2.42	0.49
21:N:542:SER:CB	21:N:547:LEU:CD1	2.90	0.49
21:N:671:LEU:HD22	21:N:782:PHE:HE1	1.76	0.49
22:O:69:PHE:CE2	22:O:78:VAL:CG2	2.94	0.49
22:O:293:LEU:HG	22:O:297:ILE:CD1	2.42	0.49
22:O:374:ASN:HA	28:U:200:LEU:HD13	1.93	0.49
25:R:263:ARG:HH11	25:R:296:LEU:C	2.20	0.49
25:R:301:TYR:HE2	25:R:359:VAL:CG1	2.25	0.49
25:R:334:ARG:O	25:R:338:TYR:CD2	2.65	0.49
27:T:28:PRO:CB	27:T:29:PRO:HD3	2.34	0.49
27:T:189:ILE:HG21	27:T:209:LEU:CD2	2.42	0.49
27:T:225:ASN:CB	27:T:241:GLU:HG2	2.41	0.49
28:U:20:ASP:O	28:U:24:ARG:HG3	2.11	0.49
29:V:114:PHE:N	29:V:118:LEU:HD23	2.16	0.49
29:V:145:GLN:HB3	29:V:152:VAL:HG21	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:228:GLU:OE2	33:Z:259:PRO:HG3	2.12	0.49
33:Z:442:VAL:O	33:Z:448:LYS:HE3	2.12	0.49
33:Z:502:ASN:CG	33:Z:505:VAL:HG23	2.36	0.49
33:Z:857:LEU:HD22	33:Z:908:ILE:HG21	1.94	0.49
33:Z:866:VAL:HA	33:Z:877:THR:HG22	1.93	0.49
2:2:104:ASP:OD1	2:2:106:THR:OG1	2.24	0.49
4:4:168:GLU:OE2	4:4:175:PHE:CD1	2.65	0.49
5:5:66:HIS:HE1	5:5:70:GLU:OE2	1.94	0.49
7:7:8:TYR:CE1	7:7:12:VAL:N	2.81	0.49
9:B:43:VAL:CG1	9:B:214:ILE:HB	2.42	0.49
9:B:140:ASP:OD1	9:B:140:ASP:O	2.30	0.49
12:E:123:PHE:O	12:E:123:PHE:CD1	2.65	0.49
13:F:49:LEU:HD11	13:F:210:ASN:HB3	1.93	0.49
13:F:65:LYS:HG3	13:F:222:PHE:CD2	2.47	0.49
17:J:219:VAL:CG1	18:K:281:ARG:CD	2.89	0.49
18:K:198:TYR:CB	18:K:205:PRO:HG3	2.42	0.49
18:K:352:ILE:HG22	18:K:383:ILE:HG22	1.94	0.49
18:K:353:PHE:CD1	18:K:387:MET:CG	2.94	0.49
19:L:174:GLU:HG2	19:L:175:GLN:CD	2.38	0.49
19:L:403:ILE:CG2	20:M:203:ARG:HH11	2.25	0.49
22:O:283:HIS:NE2	22:O:287:LEU:CD1	2.56	0.49
23:P:289:ASN:O	23:P:290:LEU:HB2	2.10	0.49
24:Q:326:MET:HE3	24:Q:332:ARG:CG	2.43	0.49
25:R:308:LEU:HD13	25:R:334:ARG:CD	2.41	0.49
25:R:312:TYR:CD2	32:Y:73:PHE:CD1	3.00	0.49
26:S:144:LEU:C	26:S:155:LEU:HD13	2.37	0.49
26:S:227:ASN:OD1	26:S:263:ASP:CG	2.55	0.49
31:X:8:ILE:HG22	31:X:124:LYS:CE	2.42	0.49
31:X:67:ILE:HG12	31:X:95:GLU:OE2	2.12	0.49
33:Z:142:ASP:OD2	33:Z:202:ARG:HB2	2.11	0.49
33:Z:429:ASN:C	33:Z:430:LEU:HG	2.31	0.49
1:1:142:PHE:HA	1:1:146:MET:CE	2.42	0.49
7:7:33:ARG:NH1	7:7:52:MET:HE1	2.26	0.49
8:A:87:ILE:HG23	8:A:88:PRO:HD3	1.92	0.49
8:A:128:TYR:HD1	8:A:131:ARG:HD2	1.76	0.49
10:C:9:ARG:CZ	11:D:6:ARG:HH12	2.25	0.49
10:C:176:LEU:HD21	10:C:196:THR:HG21	1.94	0.49
13:F:166:GLN:CB	20:M:381:ARG:CZ	2.86	0.49
14:G:86:HIS:NE2	14:G:90:ARG:CZ	2.74	0.49
17:J:27:ILE:HA	18:K:51:LEU:HD22	1.87	0.49
21:N:137:PHE:CE2	21:N:165:ILE:HG13	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:192:LEU:C	21:N:192:LEU:HD23	2.36	0.49
21:N:782:PHE:HD1	21:N:875:LEU:CD2	2.20	0.49
22:O:157:LEU:HD22	22:O:171:PHE:CG	2.47	0.49
22:O:179:PHE:CE2	22:O:187:SER:HB3	2.47	0.49
24:Q:162:LEU:CD1	24:Q:178:HIS:CD2	2.95	0.49
26:S:187:ILE:HG23	26:S:188:TYR:N	2.27	0.49
30:W:182:TYR:C	30:W:183:GLU:HG3	2.31	0.49
31:X:66:LEU:HD12	31:X:97:TYR:CB	2.42	0.49
33:Z:531:ALA:HA	33:Z:573:LEU:HG	1.93	0.49
1:1:-2:LEU:C	1:1:-2:LEU:HD12	2.37	0.49
1:1:178:LEU:HD23	1:1:183:VAL:HG13	1.94	0.49
2:2:83:LEU:HD23	2:2:113:ILE:HG12	1.93	0.49
3:3:146:GLU:O	3:3:149:LEU:HD11	2.12	0.49
5:5:177:LEU:HD12	5:5:191:HIS:HE2	1.76	0.49
6:6:147:PHE:CE2	6:6:163:LEU:HA	2.48	0.49
8:A:74:CYS:HG	8:A:233:PHE:HD2	1.58	0.49
11:D:34:VAL:HG22	11:D:163:THR:OG1	2.12	0.49
12:E:208:MET:HE1	12:E:212:LEU:HA	1.95	0.49
14:G:206:ASN:HD21	14:G:209:LYS:HB2	1.76	0.49
17:J:193:THR:OG1	17:J:316:PHE:CE1	2.51	0.49
18:K:392:LEU:CG	18:K:396:ARG:HH12	2.18	0.49
20:M:43:ILE:HD13	30:W:26:PHE:HE2	1.77	0.49
20:M:129:LEU:C	20:M:129:LEU:HD12	2.37	0.49
21:N:14:ARG:NH2	21:N:42:GLU:OE1	2.42	0.49
21:N:43:LEU:HD11	21:N:69:TYR:CZ	2.47	0.49
21:N:208:ARG:HG2	21:N:232:LEU:HD13	1.94	0.49
21:N:253:LEU:HD13	21:N:894:ARG:HE	1.78	0.49
22:O:196:LEU:HD21	22:O:242:ILE:HD11	1.93	0.49
23:P:394:ASN:OD1	23:P:396:PRO:HD2	2.13	0.49
24:Q:291:TYR:CZ	24:Q:293:SER:CB	2.95	0.49
25:R:320:LYS:HE3	25:R:324:ARG:CZ	2.42	0.49
26:S:234:ILE:HG22	26:S:257:LEU:HD13	1.94	0.49
27:T:143:SER:O	27:T:146:ILE:HG22	2.12	0.49
28:U:276:ILE:HB	29:V:291:ASN:HD22	1.78	0.49
29:V:108:TYR:HA	29:V:139:VAL:O	2.12	0.49
31:X:73:THR:HG21	31:X:91:PHE:HE1	1.76	0.49
33:Z:133:ASP:CB	33:Z:137:TYR:CG	2.94	0.49
1:1:83:LYS:CE	1:1:119:VAL:HG23	2.42	0.49
1:1:87:TYR:OH	7:7:51:ASP:OD1	2.16	0.49
7:7:6:MET:HE1	7:7:165:ALA:HA	1.93	0.49
7:7:169:ILE:HG21	7:7:189:LEU:HD11	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:F:2:PHE:HB2	13:F:5:ASN:ND2	2.27	0.49
14:G:10:SER:O	14:G:11:ASN:OD1	2.30	0.49
15:H:96:PRO:O	15:H:97:LEU:HB3	2.11	0.49
15:H:271:PHE:CE1	15:H:273:ARG:CZ	2.95	0.49
16:I:244:PHE:CZ	16:I:280:PHE:CG	3.01	0.49
16:I:376:ASN:OD1	16:I:378:GLU:HB2	2.12	0.49
18:K:198:TYR:HB3	18:K:205:PRO:HG3	1.95	0.49
18:K:304:ASP:HB2	18:K:333:ARG:CZ	2.43	0.49
21:N:326:SER:H	29:V:182:LYS:CG	2.24	0.49
22:O:222:LEU:CD2	22:O:270:ILE:HD12	2.42	0.49
24:Q:7:LYS:HB3	24:Q:30:LEU:HD22	1.94	0.49
25:R:271:ILE:O	25:R:272:ASP:HB2	2.11	0.49
33:Z:265:LEU:HB3	33:Z:288:LEU:HD11	1.93	0.49
33:Z:424:SER:OG	33:Z:457:ILE:HD13	2.13	0.49
33:Z:471:LEU:CG	33:Z:497:PHE:CE2	2.71	0.49
3:3:80:GLN:HG2	9:B:102:GLY:CA	2.42	0.49
5:5:124:GLY:HA3	5:5:127:PHE:CZ	2.48	0.49
8:A:167:LYS:HE3	9:B:57:MET:HG2	1.94	0.49
13:F:13:PHE:CZ	14:G:129:ARG:HG2	2.48	0.49
15:H:168:ILE:CG1	15:H:186:PRO:HB2	2.40	0.49
16:I:361:ILE:HB	16:I:392:ILE:HD13	1.93	0.49
17:J:166:LEU:CB	17:J:174:PHE:CZ	2.95	0.49
17:J:236:MET:HE3	17:J:240:HIS:CE1	2.47	0.49
17:J:324:ARG:HH22	17:J:352:GLY:H	1.60	0.49
18:K:153:ASP:HB2	19:L:110:LYS:HZ2	1.78	0.49
19:L:286:ILE:HB	19:L:304:THR:HG21	1.94	0.49
22:O:76:LEU:HD21	22:O:121:ASP:OD1	2.08	0.49
28:U:85:ALA:O	28:U:86:LYS:HG3	2.13	0.49
31:X:66:LEU:CD1	31:X:97:TYR:CG	2.95	0.49
33:Z:129:ASN:OD1	33:Z:156:HIS:NE2	2.46	0.49
33:Z:551:LEU:HD23	33:Z:551:LEU:C	2.38	0.49
2:2:35:HIS:HE1	2:2:53:GLU:HG2	1.78	0.49
3:3:129:VAL:HG22	3:3:138:PHE:CE1	2.48	0.49
3:3:133:ALA:O	3:3:137:LEU:HG	2.12	0.49
7:7:86:GLU:HG3	13:F:100:ASN:CB	2.28	0.49
10:C:68:LYS:HD2	10:C:229:ILE:CD1	2.42	0.49
13:F:169:LYS:O	13:F:173:GLU:HG3	2.13	0.49
21:N:238:ALA:HB1	21:N:242:PHE:HE2	1.78	0.49
22:O:69:PHE:CD2	22:O:78:VAL:HG23	2.45	0.49
22:O:303:LYS:O	22:O:304:ASN:CG	2.55	0.49
23:P:310:ARG:O	23:P:313:ILE:HB	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:99:THR:HG22	24:Q:103:LYS:CG	2.43	0.49
25:R:301:TYR:CD2	25:R:357:PHE:O	2.65	0.49
25:R:404:VAL:HG23	28:U:278:ILE:HD11	1.94	0.49
28:U:22:TYR:CE1	28:U:27:THR:HG22	2.48	0.49
31:X:121:ILE:O	31:X:125:MET:HG2	2.13	0.49
33:Z:184:SER:OG	33:Z:185:ASP:N	2.43	0.49
6:6:-6:PRO:CA	7:7:125:LEU:HD22	2.42	0.49
8:A:135:ARG:NE	14:G:124:LEU:CD2	2.74	0.49
10:C:149:TYR:OH	11:D:59:ILE:CG2	2.60	0.49
12:E:231:TYR:HD2	12:E:236:THR:OG1	1.90	0.49
13:F:38:LEU:CG	13:F:189:LEU:HD11	2.40	0.49
16:I:109:LEU:HD11	16:I:147:VAL:HG11	1.95	0.49
16:I:428:VAL:HG12	16:I:428:VAL:O	2.12	0.49
17:J:133:LEU:CD2	17:J:137:MET:HE1	2.43	0.49
18:K:192:LEU:HD11	18:K:268:ILE:HD11	1.94	0.49
18:K:258:PHE:HE1	18:K:299:LEU:HD23	1.77	0.49
20:M:307:GLU:CD	20:M:311:GLN:HE21	2.19	0.49
21:N:19:SER:C	27:T:35:ILE:HG12	2.36	0.49
24:Q:54:GLN:NE2	24:Q:81:SER:HB2	2.27	0.49
27:T:132:HIS:CG	27:T:133:ILE:N	2.81	0.49
33:Z:567:ALA:HB1	33:Z:738:TYR:CE2	2.48	0.49
1:1:6:VAL:CG2	1:1:155:ILE:HD11	2.43	0.49
2:2:38:SER:HB3	2:2:39:PRO:HD2	1.95	0.49
2:2:72:ARG:HD3	2:2:73:GLU:O	2.13	0.49
4:4:37:LEU:HD13	4:4:79:VAL:HG11	1.95	0.49
5:5:147:ASP:O	5:5:148:LEU:HB2	2.13	0.49
7:7:33:ARG:NH2	7:7:46:SER:HA	2.28	0.49
9:B:3:ASP:OD1	9:B:3:ASP:O	2.31	0.49
9:B:174:PHE:CE2	9:B:198:GLU:OE1	2.66	0.49
11:D:216:LYS:HB3	11:D:217:PRO:CD	2.43	0.49
12:E:93:ARG:O	12:E:97:VAL:HG23	2.13	0.49
13:F:120:THR:HB	14:G:129:ARG:NH2	2.28	0.49
17:J:200:ARG:HG2	17:J:210:PHE:CZ	2.48	0.49
18:K:99:PHE:HZ	18:K:102:PRO:N	2.11	0.49
18:K:210:LEU:HG	18:K:212:TYR:CD2	2.43	0.49
19:L:84:LEU:HD22	19:L:88:TYR:CZ	2.47	0.49
19:L:132:ARG:CG	19:L:133:ASN:H	2.26	0.49
21:N:710:GLY:O	21:N:711:ARG:HB2	2.11	0.49
24:Q:162:LEU:HD13	24:Q:178:HIS:CD2	2.47	0.49
26:S:138:MET:SD	26:S:178:LEU:HB2	2.52	0.49
27:T:226:TRP:CZ2	27:T:235:PHE:CE2	2.82	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:283:ARG:HH12	29:V:283:THR:HG22	1.77	0.49
33:Z:298:PHE:CZ	33:Z:310:LEU:HD13	2.48	0.49
33:Z:756:MET:HE3	33:Z:759:ARG:HH21	1.77	0.49
2:2:35:HIS:CE1	2:2:53:GLU:HG2	2.48	0.49
5:5:55:TRP:CZ3	5:5:86:LEU:HD13	2.47	0.49
5:5:63:CYS:SG	5:5:74:ILE:HD13	2.53	0.49
6:6:91:LYS:HB2	6:6:96:TYR:OH	2.12	0.49
11:D:188:VAL:HG21	11:D:216:LYS:HE2	1.94	0.49
14:G:183:PRO:HD2	14:G:186:LEU:HD23	1.94	0.49
16:I:104:LEU:O	17:J:95:ILE:HG22	2.13	0.49
16:I:408:ARG:HH12	16:I:411:VAL:HA	1.76	0.49
17:J:88:VAL:HG21	17:J:91:GLU:HB2	1.95	0.49
17:J:161:LYS:HG3	17:J:165:GLU:OE1	2.13	0.49
18:K:240:SER:CB	19:L:306:MET:CE	2.88	0.49
20:M:371:ASP:OD2	20:M:411:LYS:HG2	2.12	0.49
22:O:377:VAL:CG1	28:U:193:GLN:NE2	2.72	0.49
24:Q:314:PHE:CD2	24:Q:339:TYR:CE1	2.99	0.49
25:R:79:LEU:HD13	25:R:93:LYS:NZ	2.28	0.49
26:S:235:ASN:HB2	26:S:272:TYR:CE1	2.48	0.49
26:S:322:LEU:HD21	26:S:327:ILE:HG22	1.94	0.49
27:T:85:LEU:CD2	27:T:105:LEU:HD13	2.43	0.49
27:T:209:LEU:HD13	27:T:211:PHE:HZ	1.67	0.49
28:U:19:LEU:HD12	28:U:127:GLN:NE2	2.25	0.49
28:U:32:ARG:HG3	28:U:100:ARG:NH1	2.27	0.49
29:V:168:LEU:HD12	29:V:182:LYS:NZ	2.28	0.49
33:Z:55:ARG:HG2	33:Z:60:ASP:OD2	2.13	0.49
33:Z:392:LEU:CD1	33:Z:424:SER:O	2.50	0.49
3:3:64:LEU:CD2	10:C:92:ARG:HB3	2.43	0.48
10:C:13:PHE:HA	10:C:19:LEU:HD23	1.95	0.48
16:I:387:LEU:CD2	16:I:427:LYS:HD3	2.43	0.48
18:K:173:ASP:HB3	18:K:221:MET:SD	2.52	0.48
18:K:200:GLN:CD	25:R:204:TRP:CZ3	2.88	0.48
19:L:75:LYS:HG2	19:L:78:ARG:NH2	2.28	0.48
19:L:336:ALA:HA	19:L:339:ARG:NE	2.27	0.48
19:L:383:SER:O	19:L:384:ASP:OD1	2.31	0.48
20:M:193:LEU:HD23	20:M:347:ILE:HD13	1.95	0.48
21:N:124:TYR:CE1	21:N:125:THR:HG22	2.47	0.48
21:N:338:PHE:CE2	21:N:749:LEU:HD23	2.48	0.48
22:O:112:LYS:O	22:O:113:LYS:HB2	2.13	0.48
22:O:188:PHE:CE2	22:O:220:SER:HB3	2.47	0.48
22:O:320:PRO:HD2	22:O:323:ASN:HD22	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:209:LYS:O	23:P:211:PRO:HD3	2.13	0.48
25:R:79:LEU:HB2	25:R:93:LYS:HE2	1.95	0.48
31:X:31:GLY:HA2	31:X:53:THR:H	1.78	0.48
31:X:41:GLU:HG3	31:X:45:PHE:O	2.13	0.48
8:A:75:ILE:HD11	8:A:81:MET:HE2	1.95	0.48
11:D:179:TYR:CE1	11:D:184:PRO:HB3	2.48	0.48
12:E:103:TYR:O	12:E:104:ASP:HB2	2.12	0.48
12:E:162:GLY:HA3	13:F:79:PRO:HG3	1.95	0.48
13:F:145:LEU:HD11	13:F:153:VAL:HG13	1.92	0.48
14:G:45:VAL:HG23	14:G:47:PHE:HE1	1.78	0.48
16:I:349:LEU:HD12	16:I:349:LEU:C	2.39	0.48
16:I:380:LEU:O	16:I:384:LYS:HG3	2.12	0.48
19:L:364:HIS:O	19:L:368:VAL:HG23	2.13	0.48
21:N:406:TYR:CE1	21:N:448:LEU:HB3	2.48	0.48
21:N:433:THR:HB	21:N:439:VAL:HG21	1.96	0.48
21:N:656:ALA:O	21:N:660:LEU:HG	2.14	0.48
22:O:277:ILE:CG2	22:O:279:ILE:HB	2.40	0.48
22:O:354:GLN:HG3	22:O:355:PRO:HD2	1.94	0.48
24:Q:318:LEU:HD11	24:Q:326:MET:SD	2.53	0.48
25:R:60:ALA:CB	25:R:102:LEU:CD2	2.91	0.48
25:R:214:TYR:CE1	25:R:218:CYS:SG	3.06	0.48
25:R:292:LEU:CD2	25:R:307:TYR:HB2	2.43	0.48
25:R:389:GLU:OE2	26:S:399:TYR:CE1	2.66	0.48
26:S:144:LEU:O	26:S:155:LEU:HD13	2.13	0.48
27:T:75:PHE:O	27:T:78:PHE:HB3	2.13	0.48
27:T:225:ASN:HB2	27:T:241:GLU:HA	1.95	0.48
29:V:161:THR:CA	29:V:189:ILE:HD11	2.32	0.48
29:V:168:LEU:HD13	29:V:182:LYS:HD2	1.95	0.48
31:X:40:GLU:O	31:X:41:GLU:HB2	2.13	0.48
33:Z:91:PHE:O	33:Z:94:PRO:HD2	2.14	0.48
33:Z:400:ILE:HD12	33:Z:407:VAL:HG22	1.94	0.48
33:Z:581:VAL:CG2	33:Z:603:VAL:HG12	2.42	0.48
7:7:170:VAL:CG1	7:7:174:ARG:HH22	2.24	0.48
9:B:68:THR:OG1	9:B:71:ILE:HD12	2.14	0.48
9:B:177:LYS:NZ	24:Q:168:LEU:HA	2.28	0.48
10:C:208:TYR:CE1	10:C:209:ASP:HB3	2.48	0.48
15:H:257:THR:HG22	15:H:261:ARG:HE	1.77	0.48
15:H:397:SER:C	15:H:398:VAL:HG13	2.37	0.48
16:I:102:ASN:ND2	17:J:83:LYS:HZ1	2.11	0.48
17:J:115:LEU:HD23	17:J:116:ARG:N	2.28	0.48
17:J:375:ILE:O	25:R:204:TRP:CE2	2.66	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:80:LYS:CG	22:O:81:TYR:CE2	2.97	0.48
22:O:185:PHE:HB2	22:O:223:LEU:HB3	1.86	0.48
24:Q:48:ASP:CG	24:Q:49:LYS:H	2.22	0.48
24:Q:232:TYR:OH	24:Q:271:MET:HE2	2.13	0.48
25:R:241:ILE:CG2	25:R:242:GLU:HG3	2.36	0.48
26:S:230:LYS:HZ1	26:S:256:LYS:CE	2.23	0.48
26:S:471:LEU:HD12	28:U:288:PHE:CE2	2.48	0.48
29:V:106:GLY:O	29:V:107:TRP:CD1	2.66	0.48
29:V:212:MET:HG3	29:V:212:MET:O	2.13	0.48
30:W:179:ARG:O	30:W:180:LEU:CB	2.61	0.48
33:Z:612:GLY:C	33:Z:616:LEU:HD12	2.38	0.48
1:1:122:LEU:CD2	7:7:28:PHE:HD1	2.12	0.48
5:5:8:PHE:CZ	5:5:13:ILE:CG1	2.96	0.48
7:7:201:LYS:HB3	7:7:204:LEU:HD11	1.94	0.48
10:C:45:VAL:HG21	10:C:189:ALA:CB	2.43	0.48
12:E:35:SER:OG	12:E:51:GLU:HB2	2.14	0.48
12:E:122:ARG:HD3	12:E:131:GLU:O	2.13	0.48
13:F:190:ILE:HG21	13:F:233:TYR:CD1	2.49	0.48
15:H:168:ILE:HD13	15:H:174:VAL:HG11	1.94	0.48
16:I:124:THR:O	16:I:125:MET:CB	2.60	0.48
18:K:49:PHE:CD1	21:N:192:LEU:HG	2.45	0.48
19:L:375:ASP:OD1	19:L:377:GLU:HB2	2.14	0.48
20:M:401:ILE:HG22	20:M:405:ASN:ND2	2.28	0.48
23:P:101:MET:CE	23:P:139:VAL:HG22	2.43	0.48
23:P:204:LEU:HD22	23:P:240:TYR:CE2	2.48	0.48
24:Q:350:ILE:HG22	24:Q:362:ILE:HG12	1.96	0.48
26:S:461:PHE:HE2	27:T:263:ALA:HB1	1.77	0.48
28:U:38:LEU:HD11	28:U:87:GLU:HG2	1.95	0.48
30:W:143:ASN:HD21	30:W:149:GLN:HG3	1.78	0.48
33:Z:551:LEU:HD23	33:Z:551:LEU:O	2.13	0.48
1:1:-8:LYS:HE2	2:2:88:PHE:CD1	2.48	0.48
8:A:19:PHE:HE1	9:B:78:MET:HE1	1.77	0.48
8:A:25:LEU:HD11	9:B:128:ARG:NH2	2.28	0.48
8:A:111:ASP:OD1	8:A:112:MET:N	2.45	0.48
9:B:109:LEU:O	9:B:113:GLU:HG2	2.13	0.48
9:B:180:ASN:O	9:B:181:ASP:CB	2.61	0.48
12:E:114:GLN:NE2	13:F:82:ARG:HD2	2.22	0.48
12:E:231:TYR:CE2	12:E:236:THR:N	2.81	0.48
15:H:368:PRO:HA	15:H:372:ASP:OD1	2.13	0.48
17:J:124:LYS:NZ	18:K:103:ILE:HG21	2.23	0.48
17:J:300:LEU:C	17:J:304:LEU:HD12	2.35	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:67:TYR:CD1	18:K:67:TYR:C	2.92	0.48
18:K:77:ARG:HB3	18:K:81:ARG:HH12	1.78	0.48
18:K:97:GLY:HA3	18:K:139:LEU:HD11	1.94	0.48
18:K:246:TYR:CG	18:K:247:LEU:N	2.81	0.48
19:L:177:GLU:HG2	19:L:233:LYS:HD3	1.95	0.48
20:M:166:ARG:C	20:M:167:VAL:HG22	2.39	0.48
21:N:556:ALA:HB1	21:N:593:PHE:HB2	1.94	0.48
22:O:366:MET:O	22:O:370:LEU:HG	2.13	0.48
23:P:415:TRP:CD2	28:U:265:LEU:HD11	2.49	0.48
24:Q:47:ASP:HA	24:Q:50:ARG:CB	2.42	0.48
24:Q:76:GLU:O	24:Q:79:PRO:HD2	2.14	0.48
25:R:354:ALA:HA	25:R:364:LEU:HD22	1.95	0.48
2:2:104:ASP:HB2	2:2:105:PRO:HD2	1.95	0.48
3:3:17:ASP:C	3:3:17:ASP:OD1	2.56	0.48
4:4:60:GLN:HE21	4:4:64:GLN:CD	2.21	0.48
8:A:135:ARG:CZ	14:G:124:LEU:CD2	2.92	0.48
10:C:206:LEU:CD1	10:C:211:LEU:HD11	2.43	0.48
17:J:78:ILE:HD11	17:J:107:LEU:HB3	1.95	0.48
21:N:69:TYR:CE2	21:N:81:TYR:CE2	3.01	0.48
21:N:714:THR:CG2	21:N:756:THR:OG1	2.57	0.48
22:O:42:SER:O	22:O:46:THR:OG1	2.31	0.48
23:P:274:GLY:HA3	23:P:344:ARG:NH2	2.28	0.48
25:R:105:LYS:O	25:R:109:LYS:HG2	2.14	0.48
31:X:100:TRP:HZ2	31:X:110:PRO:CD	2.26	0.48
33:Z:358:TYR:CE1	33:Z:910:PRO:HG2	2.48	0.48
3:3:69:GLU:OE2	9:B:109:LEU:HB2	2.14	0.48
7:7:108:VAL:CG1	7:7:118:PHE:HE2	2.27	0.48
9:B:189:ILE:HG21	9:B:246:ARG:CD	2.43	0.48
11:D:215:VAL:HG13	11:D:221:ILE:HG12	1.96	0.48
15:H:312:ASP:OD1	15:H:360:THR:CG2	2.61	0.48
17:J:119:SER:C	17:J:120:TYR:CD1	2.91	0.48
18:K:415:VAL:HG13	18:K:416:LYS:HG2	1.94	0.48
20:M:383:THR:HB	20:M:386:PHE:CG	2.48	0.48
21:N:262:VAL:HA	21:N:270:LEU:HD21	1.95	0.48
21:N:771:PHE:CE2	21:N:885:ILE:HG21	2.48	0.48
22:O:48:PHE:CD1	22:O:81:TYR:CE2	3.01	0.48
23:P:233:GLU:HG3	23:P:236:GLU:H	1.78	0.48
24:Q:66:VAL:HG23	24:Q:109:ASP:HB3	1.96	0.48
24:Q:151:TYR:CE2	24:Q:187:LYS:CB	2.96	0.48
25:R:312:TYR:CE2	32:Y:73:PHE:HD1	2.27	0.48
29:V:261:LEU:HB3	29:V:280:LEU:CD1	2.43	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:48:THR:H	30:W:103:ASN:HD21	1.62	0.48
33:Z:318:LYS:CE	33:Z:459:ALA:O	2.58	0.48
33:Z:357:ILE:HG23	33:Z:960:GLY:C	2.38	0.48
33:Z:955:VAL:CG2	33:Z:956:LEU:N	2.76	0.48
1:1:13:ILE:HG21	1:1:151:THR:HG22	1.96	0.48
1:1:175:MET:CE	1:1:188:PHE:CE1	2.96	0.48
5:5:35:ILE:HG21	5:5:56:GLU:HB2	1.95	0.48
10:C:86:ILE:O	10:C:90:THR:HG23	2.13	0.48
10:C:213:PHE:CD2	10:C:230:PHE:CE2	2.99	0.48
10:C:224:GLU:O	10:C:225:VAL:HB	2.14	0.48
13:F:130:VAL:O	13:F:149:PRO:HB3	2.13	0.48
13:F:135:ILE:HG22	13:F:144:LEU:CD1	2.43	0.48
14:G:108:ILE:HG22	14:G:148:TYR:CE1	2.49	0.48
19:L:277:ILE:HG23	19:L:324:ILE:HD12	1.96	0.48
20:M:228:LYS:NZ	20:M:327:THR:H	2.12	0.48
22:O:233:LEU:HD13	22:O:251:LEU:HD13	1.95	0.48
23:P:241:LEU:HB3	23:P:264:ILE:CD1	2.44	0.48
26:S:223:LEU:CD2	26:S:230:LYS:HG2	2.44	0.48
26:S:376:THR:HG23	26:S:378:GLN:HG2	1.95	0.48
27:T:86:LYS:NZ	27:T:125:GLU:HG3	2.27	0.48
28:U:18:ALA:CB	28:U:125:VAL:HG11	2.41	0.48
33:Z:740:VAL:HA	33:Z:743:ILE:HD12	1.96	0.48
1:1:19:ARG:NH2	1:1:26:ILE:HD13	2.27	0.48
5:5:4:LEU:C	5:5:4:LEU:HD12	2.39	0.48
8:A:126:GLN:NE2	8:A:130:GLN:CD	2.72	0.48
10:C:144:TYR:HB2	10:C:147:GLN:HE21	1.79	0.48
10:C:198:SER:CA	10:C:206:LEU:HD22	2.44	0.48
14:G:45:VAL:HG23	14:G:47:PHE:CE1	2.49	0.48
14:G:115:LEU:HB3	14:G:150:LEU:CD2	2.44	0.48
14:G:182:HIS:CB	14:G:186:LEU:HG	2.43	0.48
15:H:105:ILE:H	15:H:170:GLU:CD	2.22	0.48
16:I:328:THR:HG23	16:I:330:LYS:O	2.13	0.48
18:K:294:ARG:HH12	18:K:298:GLU:HB2	1.79	0.48
19:L:280:MET:HE3	19:L:323:ILE:CG2	2.44	0.48
20:M:252:VAL:CG2	20:M:285:ALA:HB1	2.41	0.48
21:N:479:GLU:HB2	21:N:512:ASN:OD1	2.11	0.48
21:N:742:TRP:HB3	21:N:745:LEU:HD22	1.96	0.48
22:O:120:LYS:HB2	22:O:166:ARG:HD2	1.96	0.48
23:P:234:TYR:CE2	23:P:267:PHE:O	2.66	0.48
25:R:34:THR:HA	25:R:70:TYR:CE1	2.48	0.48
25:R:301:TYR:CZ	25:R:338:TYR:CE1	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:39:LEU:O	27:T:40:LEU:CG	2.61	0.48
31:X:11:ARG:HB2	31:X:103:GLU:CG	2.32	0.48
33:Z:868:ASN:OD1	33:Z:871:HIS:N	2.46	0.48
7:7:83:TYR:CD2	13:F:101:ARG:NE	2.81	0.48
8:A:57:LYS:HE3	8:A:69:VAL:HG12	1.83	0.48
8:A:131:ARG:NH1	8:A:133:TYR:HH	2.04	0.48
9:B:12:PHE:HZ	10:C:129:ARG:NH2	2.12	0.48
11:D:32:CYS:SG	11:D:166:ARG:O	2.68	0.48
11:D:129:PHE:HB3	11:D:131:VAL:HG12	1.96	0.48
13:F:156:LEU:HD22	13:F:159:THR:HB	1.95	0.48
13:F:216:VAL:HG12	13:F:222:PHE:HA	1.95	0.48
16:I:265:ARG:HA	16:I:312:GLN:HE22	1.79	0.48
16:I:362:LEU:HD21	16:I:377:LEU:HD23	1.95	0.48
21:N:321:LEU:C	21:N:321:LEU:HD12	2.39	0.48
21:N:365:PHE:CE2	21:N:403:GLY:HA2	2.49	0.48
22:O:269:LEU:HD23	22:O:270:ILE:HG13	1.96	0.48
23:P:218:LEU:HD21	23:P:256:LYS:HZ3	1.76	0.48
24:Q:261:VAL:HG13	24:Q:262:LEU:N	2.29	0.48
25:R:167:LYS:HD3	25:R:202:GLY:HA2	1.94	0.48
25:R:320:LYS:HE3	25:R:324:ARG:NE	2.28	0.48
25:R:339:ALA:HA	25:R:377:LEU:HD11	1.95	0.48
26:S:293:ILE:HG21	26:S:317:HIS:HB2	1.96	0.48
27:T:89:TYR:CE1	27:T:102:LYS:CE	2.97	0.48
30:W:132:LEU:CD2	30:W:137:VAL:HG21	2.44	0.48
31:X:90:VAL:HG12	31:X:92:SER:H	1.79	0.48
32:Y:82:ASP:HB3	32:Y:86:ARG:NH1	2.29	0.48
33:Z:546:ILE:HG21	33:Z:566:LEU:HD21	1.96	0.48
33:Z:737:ALA:CB	33:Z:775:MET:CE	2.91	0.48
1:1:82:PHE:CD2	1:1:99:VAL:HG21	2.49	0.47
4:4:33:LYS:O	4:4:34:THR:CG2	2.62	0.47
14:G:39:ILE:HD11	14:G:198:ILE:HD12	1.96	0.47
15:H:142:ASP:HB3	15:H:157:VAL:HG13	1.95	0.47
17:J:160:ILE:HD11	17:J:314:ILE:HG21	1.96	0.47
19:L:373:GLU:C	19:L:374:PHE:HD1	2.21	0.47
25:R:93:LYS:HG2	25:R:94:PHE:N	2.29	0.47
26:S:138:MET:HE1	26:S:178:LEU:CD1	2.44	0.47
26:S:390:THR:HA	26:S:393:ARG:NH2	2.29	0.47
31:X:89:LEU:HG	31:X:91:PHE:CE2	2.48	0.47
33:Z:237:VAL:CG1	33:Z:245:VAL:HG11	2.26	0.47
33:Z:370:SER:OG	33:Z:390:LEU:CD1	2.61	0.47
33:Z:466:GLU:OE1	33:Z:466:GLU:N	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:54:PHE:HB2	6:6:85:GLN:HE22	1.79	0.47
6:6:106:ASP:C	6:6:106:ASP:OD1	2.57	0.47
7:7:172:ALA:O	7:7:175:VAL:HB	2.14	0.47
11:D:190:GLU:OE1	11:D:193:LYS:CE	2.62	0.47
17:J:52:ASN:HD21	21:N:613:HIS:H	1.61	0.47
19:L:370:LYS:CD	19:L:374:PHE:CZ	2.96	0.47
19:L:372:GLY:O	19:L:374:PHE:HE1	1.95	0.47
21:N:596:LEU:HD13	21:N:717:LEU:CD2	2.42	0.47
27:T:107:SER:OG	27:T:174:PHE:HZ	1.96	0.47
28:U:38:LEU:HG	28:U:87:GLU:HG2	1.96	0.47
33:Z:406:TRP:O	33:Z:410:THR:HG23	2.14	0.47
33:Z:552:GLU:O	33:Z:553:ARG:CB	2.61	0.47
1:1:66:TYR:HE2	1:1:73:PRO:N	2.11	0.47
2:2:8:PHE:HE1	2:2:12:VAL:O	1.95	0.47
5:5:77:ALA:CA	5:5:121:ARG:HH21	2.28	0.47
6:6:77:ILE:CD1	6:6:102:ILE:HD12	2.44	0.47
8:A:57:LYS:NZ	8:A:69:VAL:CG1	2.77	0.47
14:G:78:SER:HB2	14:G:164:THR:HG23	1.96	0.47
15:H:431:ILE:HG22	16:I:196:GLU:OE2	2.14	0.47
17:J:112:ARG:HD3	17:J:129:LYS:HD2	1.96	0.47
17:J:224:GLY:O	17:J:227:SER:N	2.47	0.47
18:K:129:GLU:O	18:K:130:LEU:HD23	2.14	0.47
19:L:253:ASP:HA	20:M:256:ILE:CG1	2.44	0.47
20:M:77:TYR:CE2	20:M:79:VAL:HG12	2.49	0.47
21:N:771:PHE:CE2	21:N:885:ILE:HG13	2.49	0.47
22:O:76:LEU:CD2	22:O:121:ASP:CG	2.82	0.47
23:P:109:SER:O	23:P:112:LEU:HB3	2.14	0.47
23:P:234:TYR:HD2	23:P:267:PHE:CD2	2.32	0.47
23:P:299:LEU:HD23	23:P:302:LEU:HD12	1.95	0.47
24:Q:308:ASN:O	24:Q:309:ARG:HB2	2.12	0.47
25:R:292:LEU:CD2	25:R:307:TYR:CB	2.91	0.47
33:Z:312:TYR:OH	33:Z:348:LEU:HB3	2.12	0.47
33:Z:446:GLU:CD	33:Z:484:LYS:HZ3	2.22	0.47
33:Z:813:PHE:CE2	33:Z:885:ALA:HB2	2.49	0.47
2:2:220:ILE:HD12	3:3:39:HIS:ND1	2.29	0.47
6:6:21:ILE:HD11	6:6:188:GLN:HG2	1.97	0.47
8:A:89:ASP:HB3	8:A:139:VAL:HG13	1.96	0.47
12:E:12:VAL:HG11	12:E:124:GLY:HA3	1.96	0.47
13:F:80:ASP:OD1	13:F:126:ARG:NH2	2.48	0.47
16:I:289:THR:O	16:I:306:MET:SD	2.72	0.47
17:J:135:SER:O	17:J:136:LEU:HB2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:200:ARG:HG2	17:J:210:PHE:CE2	2.49	0.47
17:J:225:GLU:OE2	17:J:228:ARG:NH2	2.25	0.47
19:L:183:ILE:HD12	19:L:231:LEU:HD23	1.94	0.47
19:L:224:PRO:HA	19:L:228:LYS:HE2	1.97	0.47
21:N:539:MET:HE3	21:N:547:LEU:O	2.14	0.47
22:O:79:VAL:HG23	22:O:122:HIS:CD2	2.49	0.47
24:Q:233:LYS:O	24:Q:236:PHE:HB3	2.14	0.47
29:V:107:TRP:CE2	29:V:129:PHE:CZ	3.02	0.47
1:1:4:MET:HE3	1:1:159:LEU:HD23	1.96	0.47
7:7:77:GLU:O	7:7:77:GLU:HG3	2.15	0.47
8:A:12:TYR:HB2	8:A:15:HIS:CD2	2.48	0.47
8:A:140:ILE:HG12	8:A:159:PRO:HD3	1.96	0.47
10:C:50:ARG:HD2	10:C:212:GLU:OE2	2.14	0.47
11:D:149:GLN:OE1	11:D:162:GLN:HG2	2.15	0.47
12:E:226:ASP:O	12:E:226:ASP:OD1	2.32	0.47
14:G:37:ILE:C	14:G:37:ILE:HD12	2.40	0.47
14:G:47:PHE:O	14:G:215:ILE:HG13	2.15	0.47
15:H:65:GLU:HG3	16:I:133:LEU:CB	2.44	0.47
15:H:217:GLN:CG	15:H:376:GLU:CD	2.87	0.47
19:L:206:ILE:CG1	19:L:209:ARG:NH2	2.76	0.47
20:M:165:SER:OG	20:M:168:LYS:HB2	2.14	0.47
21:N:771:PHE:HE2	21:N:885:ILE:HG13	1.79	0.47
23:P:327:LEU:O	23:P:328:ALA:CB	2.61	0.47
23:P:342:GLN:O	23:P:345:VAL:HG12	2.14	0.47
24:Q:266:LEU:HD23	24:Q:281:ILE:HD12	1.96	0.47
25:R:62:TYR:CE2	25:R:180:PHE:CZ	3.02	0.47
25:R:208:ASN:OD1	25:R:238:PHE:HB2	2.14	0.47
26:S:234:ILE:CG2	26:S:257:LEU:HD13	2.44	0.47
28:U:54:LEU:HD12	28:U:55:PRO:HD2	1.95	0.47
28:U:83:ILE:HD13	29:V:70:ALA:HB3	1.95	0.47
28:U:127:GLN:CG	29:V:212:MET:CB	2.93	0.47
29:V:57:PHE:HE2	29:V:59:ASP:HB3	1.78	0.47
30:W:25:ARG:NH2	30:W:115:CYS:HA	2.30	0.47
1:1:25:TYR:HE2	2:2:132:LEU:HB2	1.80	0.47
1:1:59:VAL:HG22	1:1:81:VAL:HG12	1.95	0.47
2:2:72:ARG:NH2	2:2:75:ARG:HH12	2.11	0.47
3:3:61:LYS:HZ2	3:3:85:SER:CB	2.26	0.47
9:B:13:SER:HB3	9:B:14:PRO:HD2	1.97	0.47
13:F:65:LYS:CB	13:F:222:PHE:CE2	2.98	0.47
16:I:324:VAL:HG12	16:I:326:MET:HG3	1.97	0.47
17:J:236:MET:HE3	17:J:240:HIS:HE1	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:277:ASN:HB2	17:J:309:ARG:NH1	2.30	0.47
20:M:196:ALA:HB1	20:M:345:ARG:HG3	1.96	0.47
21:N:158:LEU:CD1	21:N:192:LEU:HD22	2.45	0.47
22:O:257:ALA:HA	22:O:265:LYS:HG2	1.95	0.47
22:O:258:LEU:HD23	22:O:287:LEU:CD2	2.22	0.47
24:Q:109:ASP:O	24:Q:109:ASP:OD1	2.32	0.47
24:Q:135:HIS:CG	24:Q:161:LEU:HD23	2.33	0.47
24:Q:272:LEU:CD2	24:Q:274:LEU:HD11	2.41	0.47
24:Q:423:VAL:CG1	25:R:414:LEU:HD11	2.22	0.47
26:S:159:ASN:HB3	26:S:187:ILE:HD13	1.96	0.47
29:V:52:LEU:CD1	29:V:107:TRP:CE3	2.97	0.47
33:Z:351:PRO:O	33:Z:352:LYS:HB2	2.14	0.47
33:Z:446:GLU:CG	33:Z:484:LYS:HZ3	2.26	0.47
33:Z:737:ALA:O	33:Z:740:VAL:HG12	2.15	0.47
1:1:137:TYR:CE1	1:1:157:HIS:CD2	3.03	0.47
3:3:179:TYR:OH	3:3:188:LYS:CE	2.46	0.47
4:4:15:ALA:HB1	4:4:178:VAL:HG21	1.96	0.47
4:4:26:VAL:HG12	4:4:28:LYS:C	2.39	0.47
7:7:-3:VAL:CG1	7:7:49:ILE:CB	2.87	0.47
7:7:1:THR:O	7:7:2:SER:HB2	2.14	0.47
8:A:31:ALA:HA	14:G:14:PHE:CE2	2.50	0.47
8:A:71:TYR:OH	14:G:157:TRP:CZ2	2.67	0.47
8:A:87:ILE:HG22	8:A:88:PRO:HD3	1.96	0.47
9:B:67:LEU:HD11	9:B:73:ALA:HB2	1.97	0.47
10:C:115:LEU:HD12	10:C:137:TYR:OH	2.15	0.47
12:E:219:LEU:HB2	12:E:231:TYR:CD2	2.50	0.47
13:F:182:ILE:CD1	13:F:188:GLU:HG2	2.45	0.47
13:F:227:GLY:O	13:F:230:VAL:HG22	2.14	0.47
14:G:108:ILE:CG2	14:G:148:TYR:CE1	2.97	0.47
15:H:62:ARG:HA	16:I:133:LEU:CD1	2.45	0.47
15:H:420:ARG:NH1	16:I:343:ARG:NH2	2.63	0.47
16:I:380:LEU:HD11	16:I:416:PHE:CB	2.45	0.47
16:I:396:CYS:O	17:J:179:ILE:CD1	2.63	0.47
17:J:219:VAL:O	17:J:219:VAL:HG12	2.15	0.47
17:J:220:GLN:OE1	18:K:290:ARG:HD3	2.15	0.47
18:K:49:PHE:CE1	21:N:192:LEU:CB	2.98	0.47
18:K:92:VAL:HA	18:K:94:LEU:HG	1.97	0.47
18:K:222:LEU:O	18:K:226:VAL:HG23	2.15	0.47
19:L:133:ASN:O	19:L:134:SER:CB	2.63	0.47
20:M:361:LEU:CB	20:M:376:TRP:CE3	2.96	0.47
21:N:190:LEU:HD23	21:N:190:LEU:C	2.40	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:576:VAL:HG13	21:N:577:SER:N	2.30	0.47
21:N:741:TYR:HD2	21:N:742:TRP:CZ3	2.33	0.47
22:O:129:ILE:O	22:O:133:ILE:HB	2.15	0.47
24:Q:9:GLU:O	24:Q:13:ARG:HG3	2.14	0.47
25:R:59:MET:HE1	25:R:143:GLN:O	2.13	0.47
25:R:380:VAL:HG21	25:R:391:ASN:HD22	1.79	0.47
27:T:93:ASN:HD21	27:T:94:HIS:CD2	2.32	0.47
27:T:209:LEU:CB	27:T:211:PHE:CZ	2.97	0.47
28:U:79:MET:CE	29:V:90:LYS:HE2	2.45	0.47
28:U:104:LEU:HD13	28:U:152:LYS:HA	1.97	0.47
31:X:11:ARG:HH22	31:X:105:ASN:HD22	1.63	0.47
33:Z:768:GLY:O	33:Z:769:ASN:CB	2.63	0.47
33:Z:874:ASN:OD1	33:Z:876:VAL:HB	2.14	0.47
33:Z:982:ILE:HD12	33:Z:982:ILE:N	2.29	0.47
8:A:77:ARG:CG	8:A:78:THR:HG23	2.33	0.47
15:H:334:LEU:CD2	20:M:282:GLU:HG2	2.42	0.47
16:I:93:LYS:O	16:I:97:GLU:HG2	2.15	0.47
16:I:301:GLU:CD	16:I:304:ARG:HH21	2.22	0.47
19:L:223:PRO:CB	19:L:226:THR:HG23	2.42	0.47
19:L:263:ILE:HD13	19:L:307:GLU:HB2	1.97	0.47
20:M:327:THR:HG21	20:M:329:ARG:O	2.15	0.47
20:M:385:GLU:HB2	20:M:426:LYS:HD3	1.96	0.47
21:N:757:THR:OG1	21:N:759:ILE:HG23	2.15	0.47
22:O:173:SER:O	22:O:177:GLN:HG3	2.15	0.47
23:P:42:LEU:O	23:P:46:THR:HG23	2.15	0.47
23:P:123:ARG:NH1	23:P:128:ASN:HD22	2.12	0.47
24:Q:115:ILE:HG23	24:Q:141:LEU:HD11	1.95	0.47
25:R:94:PHE:CE1	25:R:98:LEU:HD23	2.50	0.47
25:R:187:VAL:HA	25:R:213:TYR:OH	2.15	0.47
26:S:152:LEU:O	26:S:156:VAL:HG23	2.15	0.47
26:S:390:THR:HA	26:S:393:ARG:CZ	2.44	0.47
31:X:46:TRP:H	31:X:68:LEU:HB3	1.80	0.47
33:Z:381:LEU:HD23	33:Z:414:GLY:HA2	1.97	0.47
4:4:73:GLU:CD	4:4:108:LYS:HZ1	2.21	0.47
5:5:150:VAL:HG21	5:5:179:HIS:ND1	2.30	0.47
7:7:17:ASP:C	7:7:17:ASP:OD1	2.57	0.47
9:B:39:ALA:O	9:B:40:THR:HB	2.15	0.47
12:E:107:ILE:HG21	12:E:112:LEU:HD21	1.95	0.47
13:F:80:ASP:CG	13:F:126:ARG:NH2	2.72	0.47
18:K:123:LEU:HD12	18:K:126:LEU:HD12	1.91	0.47
18:K:156:SER:CA	19:L:126:ARG:NH1	2.76	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:314:LEU:HD11	21:N:340:HIS:HE1	1.80	0.47
21:N:579:SER:HA	21:N:584:ARG:HH21	1.74	0.47
22:O:69:PHE:CE2	22:O:78:VAL:HG23	2.50	0.47
22:O:195:TYR:CD2	22:O:213:LEU:HD13	2.49	0.47
22:O:338:LYS:H	22:O:350:ILE:HG23	1.80	0.47
23:P:272:PRO:HA	23:P:344:ARG:HD3	1.97	0.47
23:P:290:LEU:HB2	23:P:293:LEU:HB2	1.97	0.47
24:Q:101:ILE:CG2	24:Q:140:LYS:HD3	2.45	0.47
26:S:343:LEU:HB2	26:S:344:PRO:HD3	1.97	0.47
27:T:224:ARG:O	27:T:242:LYS:HB2	2.15	0.47
28:U:90:ILE:HD12	28:U:91:GLY:N	2.30	0.47
28:U:109:LEU:HD22	30:W:60:ARG:HB2	1.97	0.47
29:V:144:ILE:HG22	29:V:145:GLN:NE2	2.30	0.47
31:X:66:LEU:HD21	31:X:91:PHE:CZ	2.50	0.47
32:Y:89:GLN:HG3	32:Y:89:GLN:O	2.14	0.47
33:Z:99:LEU:HD22	33:Z:115:LEU:HD11	1.97	0.47
33:Z:522:THR:HG22	33:Z:525:MET:HE2	1.96	0.47
33:Z:558:LEU:O	33:Z:558:LEU:CG	2.58	0.47
33:Z:780:MET:HE1	33:Z:795:THR:HB	1.95	0.47
10:C:54:SER:H	10:C:59:GLN:NE2	2.13	0.47
19:L:166:LEU:HD22	19:L:169:ASN:OD1	2.15	0.47
19:L:216:LYS:NZ	19:L:341:GLY:HA2	2.30	0.47
19:L:292:SER:O	19:L:293:GLU:HB2	2.15	0.47
21:N:176:GLN:HG3	21:N:182:ASN:HD22	1.80	0.47
22:O:229:ASN:HB2	22:O:258:LEU:HD13	1.95	0.47
23:P:81:LEU:HA	23:P:84:LYS:HE2	1.97	0.47
28:U:5:HIS:HD1	28:U:6:GLU:C	2.21	0.47
28:U:38:LEU:HD23	28:U:38:LEU:H	1.80	0.47
3:3:10:ASP:HA	3:3:110:PRO:HD3	1.96	0.46
6:6:17:ASP:C	6:6:17:ASP:OD1	2.58	0.46
9:B:178:ARG:HD2	9:B:191:ILE:HG23	1.96	0.46
11:D:38:GLY:HA2	11:D:185:PRO:HD2	1.96	0.46
16:I:194:ILE:HD11	16:I:232:LEU:HD13	1.97	0.46
17:J:143:PRO:HD2	17:J:204:HIS:CA	2.45	0.46
17:J:252:SER:HA	17:J:258:VAL:HG22	1.97	0.46
18:K:347:ARG:HH12	24:Q:205:ALA:HB3	1.74	0.46
19:L:285:ALA:O	19:L:301:ILE:HG12	2.15	0.46
20:M:225:GLY:C	20:M:226:THR:CG2	2.88	0.46
21:N:771:PHE:HE2	21:N:885:ILE:CG1	2.27	0.46
22:O:25:LEU:HB3	22:O:29:PHE:CE2	2.50	0.46
22:O:69:PHE:HZ	22:O:77:SER:CB	2.29	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:286:PHE:CE1	22:O:334:LEU:HD11	2.50	0.46
23:P:144:VAL:HG13	23:P:156:ALA:HB1	1.96	0.46
25:R:62:TYR:O	25:R:66:LEU:HG	2.15	0.46
26:S:256:LYS:O	26:S:259:TYR:OH	2.31	0.46
26:S:457:PRO:HG3	28:U:274:MET:HB2	1.96	0.46
27:T:11:LEU:HD21	27:T:27:LEU:HD21	1.97	0.46
28:U:79:MET:HE3	29:V:90:LYS:HE2	1.97	0.46
31:X:93:SER:HB2	31:X:96:ARG:NH2	2.30	0.46
33:Z:312:TYR:OH	33:Z:348:LEU:HD22	2.13	0.46
3:3:92:GLY:O	3:3:94:TYR:CD1	2.68	0.46
5:5:77:ALA:HB1	5:5:121:ARG:NH2	2.30	0.46
10:C:194:LEU:HD12	10:C:242:THR:HG21	1.96	0.46
12:E:65:GLU:HB2	12:E:218:GLN:OE1	2.14	0.46
13:F:13:PHE:CE2	14:G:129:ARG:CG	2.99	0.46
14:G:203:HIS:ND1	14:G:211:PHE:CD1	2.83	0.46
15:H:62:ARG:CG	15:H:66:LYS:HE3	2.45	0.46
15:H:389:PHE:C	15:H:404:TRP:CH2	2.93	0.46
15:H:393:SER:CB	15:H:404:TRP:HH2	2.27	0.46
20:M:50:ARG:HB3	30:W:73:LEU:CB	2.46	0.46
20:M:163:PHE:HE1	20:M:261:LYS:HG2	1.77	0.46
20:M:219:LEU:HD12	20:M:325:ALA:HB3	1.96	0.46
20:M:300:GLU:O	20:M:304:THR:HG23	2.15	0.46
21:N:399:PHE:HA	21:N:441:VAL:CG1	2.45	0.46
22:O:321:LYS:O	22:O:325:GLU:HG3	2.15	0.46
22:O:365:LYS:HE3	22:O:369:ARG:HH12	1.80	0.46
24:Q:51:ARG:HH21	24:Q:92:LYS:CB	2.22	0.46
24:Q:216:ALA:O	24:Q:220:LEU:HG	2.15	0.46
25:R:174:ILE:CB	25:R:190:LYS:HD3	2.29	0.46
25:R:191:LEU:HD13	25:R:213:TYR:HD2	1.80	0.46
25:R:250:ALA:HB1	25:R:279:LEU:HD21	1.96	0.46
25:R:325:HIS:O	25:R:328:PHE:HB2	2.15	0.46
26:S:465:ILE:CG1	27:T:266:TYR:CE2	2.98	0.46
29:V:117:TRP:HE1	29:V:196:TYR:HB3	0.58	0.46
33:Z:218:GLU:CA	33:Z:248:TYR:CZ	2.98	0.46
33:Z:491:LEU:HD21	33:Z:900:LEU:CD1	2.44	0.46
1:1:120:HIS:HB3	7:7:28:PHE:CE1	2.50	0.46
2:2:93:HIS:HB3	3:3:91:PHE:CE1	2.50	0.46
3:3:80:GLN:HG2	9:B:102:GLY:N	2.30	0.46
3:3:169:ASP:CG	3:3:171:LEU:H	2.23	0.46
8:A:63:LEU:HD21	14:G:179:VAL:HG11	1.97	0.46
8:A:101:ALA:O	8:A:105:ARG:HG3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:204:PHE:CZ	9:B:209:ILE:HD11	2.49	0.46
14:G:222:GLU:HG3	14:G:222:GLU:O	2.14	0.46
15:H:430:ALA:HA	15:H:435:ARG:CZ	2.44	0.46
16:I:227:THR:OG1	16:I:390:ALA:HB2	2.15	0.46
16:I:354:ASP:C	16:I:354:ASP:OD1	2.57	0.46
19:L:287:GLY:HA2	19:L:305:LEU:HD13	1.96	0.46
22:O:341:ILE:HB	22:O:350:ILE:HG13	1.96	0.46
25:R:183:ASP:OD2	25:R:185:LEU:HB2	2.14	0.46
25:R:252:TYR:HD1	25:R:321:TYR:HB3	1.79	0.46
28:U:85:ALA:O	28:U:86:LYS:CG	2.63	0.46
28:U:92:TRP:NE1	28:U:120:LEU:HA	2.30	0.46
28:U:280:ASN:HD21	29:V:291:ASN:HB3	1.80	0.46
33:Z:471:LEU:C	33:Z:471:LEU:CD2	2.88	0.46
9:B:177:LYS:HZ3	24:Q:168:LEU:HA	1.81	0.46
17:J:375:ILE:CD1	25:R:204:TRP:HB3	2.45	0.46
18:K:124:SER:O	18:K:127:ASP:CG	2.58	0.46
20:M:63:LYS:O	20:M:67:GLU:HG2	2.16	0.46
21:N:277:LEU:HA	21:N:280:GLN:HG2	1.97	0.46
22:O:260:VAL:HG12	22:O:262:ASP:CG	2.41	0.46
23:P:433:ILE:HD13	28:U:203:LYS:HA	1.96	0.46
23:P:436:GLU:OE1	28:U:206:ASP:OD2	2.33	0.46
24:Q:396:TRP:HB2	24:Q:398:TYR:CZ	2.49	0.46
25:R:320:LYS:HE3	25:R:324:ARG:NH1	2.29	0.46
28:U:19:LEU:HD11	28:U:127:GLN:OE1	2.13	0.46
30:W:123:ASP:HB3	30:W:127:ARG:NH1	2.31	0.46
31:X:38:ASN:HD21	31:X:47:ASP:CB	2.28	0.46
31:X:95:GLU:O	31:X:96:ARG:HB3	2.16	0.46
33:Z:610:GLY:C	33:Z:748:LEU:HD13	2.35	0.46
4:4:45:PHE:HD1	4:4:101:VAL:HG12	1.80	0.46
6:6:112:ALA:HB1	6:6:114:TYR:CE1	2.51	0.46
7:7:17:ASP:OD2	7:7:183:SER:HA	2.16	0.46
7:7:33:ARG:CZ	7:7:52:MET:HE1	2.46	0.46
7:7:190:ALA:HB2	7:7:200:PHE:HD2	1.75	0.46
7:7:195:ASN:C	7:7:196:THR:HG23	2.40	0.46
8:A:119:LYS:HG2	8:A:163:TYR:HE2	1.74	0.46
12:E:72:ARG:C	12:E:73:HIS:CG	2.94	0.46
12:E:196:ALA:O	12:E:200:VAL:HG23	2.15	0.46
13:F:35:THR:HG23	13:F:133:LEU:HD12	1.96	0.46
14:G:94:GLU:CD	14:G:118:TYR:OH	2.56	0.46
15:H:227:LEU:N	15:H:228:PRO:HD2	2.30	0.46
16:I:182:SER:O	16:I:360:LYS:CE	2.62	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:241:ALA:CB	17:J:287:ASN:HD22	2.09	0.46
18:K:245:LYS:HE3	19:L:300:GLU:OE2	2.15	0.46
19:L:186:LEU:CD2	19:L:387:ASN:OD1	2.64	0.46
22:O:91:ASP:HB3	22:O:94:GLU:HB2	1.96	0.46
22:O:233:LEU:HA	22:O:236:HIS:CB	2.25	0.46
22:O:306:ARG:HG3	22:O:352:TRP:H	1.78	0.46
25:R:285:ALA:CB	25:R:314:ASN:HD22	2.28	0.46
26:S:264:VAL:HG11	26:S:272:TYR:HE2	1.79	0.46
28:U:76:MET:HB2	29:V:94:MET:CE	2.46	0.46
33:Z:133:ASP:CB	33:Z:137:TYR:CZ	2.95	0.46
5:5:8:PHE:CZ	5:5:13:ILE:HG12	2.49	0.46
5:5:8:PHE:HA	5:5:146:TRP:CD1	2.51	0.46
5:5:45:MET:O	5:5:46:ALA:HB2	2.16	0.46
5:5:158:LYS:HG2	5:5:196:LEU:HD21	1.98	0.46
6:6:91:LYS:CB	6:6:96:TYR:OH	2.64	0.46
9:B:224:TYR:HD2	9:B:226:GLY:H	1.63	0.46
13:F:65:LYS:CG	13:F:222:PHE:CD2	2.97	0.46
13:F:117:GLN:HE21	13:F:121:GLN:HG3	1.80	0.46
15:H:375:VAL:HG12	15:H:377:PHE:CE2	2.51	0.46
16:I:128:TYR:CD2	16:I:154:MET:CG	2.97	0.46
18:K:141:ARG:HH12	19:L:153:LEU:HD11	1.81	0.46
18:K:346:ARG:NH2	18:K:372:ILE:CD1	2.76	0.46
20:M:186:LEU:HB2	20:M:231:LEU:HD21	1.97	0.46
21:N:654:GLN:HG3	21:N:698:GLY:CA	2.45	0.46
22:O:87:LYS:HD2	22:O:135:ARG:HD2	1.96	0.46
22:O:117:ASN:O	22:O:166:ARG:HG2	2.16	0.46
24:Q:269:LYS:CE	24:Q:281:ILE:HD11	2.46	0.46
25:R:285:ALA:O	25:R:287:GLN:HG3	2.15	0.46
28:U:78:GLU:CD	28:U:81:LYS:HZ3	2.23	0.46
33:Z:427:GLN:CG	33:Z:428:TRP:CE3	2.99	0.46
33:Z:534:PHE:O	33:Z:573:LEU:CD2	2.64	0.46
33:Z:563:VAL:HG11	33:Z:595:MET:CE	2.38	0.46
1:1:80:SER:CB	14:G:103:LYS:CD	2.94	0.46
2:2:160:GLN:O	2:2:164:TRP:CD1	2.68	0.46
11:D:11:PHE:CZ	12:E:137:PRO:CD	2.93	0.46
12:E:231:TYR:CZ	12:E:235:LYS:C	2.94	0.46
15:H:336:LEU:HG	15:H:370:ARG:HH12	1.80	0.46
17:J:27:ILE:CG1	18:K:51:LEU:HD11	2.46	0.46
19:L:173:PHE:O	19:L:243:PHE:HB3	2.16	0.46
22:O:23:HIS:CB	22:O:26:PHE:HB3	2.46	0.46
22:O:23:HIS:HB3	22:O:26:PHE:HB3	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:225:ASP:HB3	22:O:290:LYS:HE2	1.96	0.46
22:O:344:VAL:CB	23:P:361:THR:CG2	2.94	0.46
23:P:140:THR:CB	23:P:163:LEU:HD22	2.46	0.46
24:Q:128:GLU:HG3	24:Q:129:LYS:HG2	1.98	0.46
25:R:353:MET:CA	25:R:357:PHE:CD1	2.82	0.46
29:V:78:VAL:C	29:V:121:VAL:CG1	2.89	0.46
29:V:79:SER:N	29:V:121:VAL:HG11	2.30	0.46
33:Z:805:LEU:CD2	33:Z:893:PHE:CZ	2.97	0.46
4:4:66:TYR:CD1	4:4:74:LEU:CD1	2.92	0.46
10:C:46:LEU:HD11	10:C:138:ALA:CB	2.46	0.46
14:G:140:VAL:HG11	14:G:220:LEU:CG	2.34	0.46
16:I:199:GLU:HA	16:I:240:THR:HG22	1.96	0.46
17:J:248:ASP:O	17:J:249:GLU:CB	2.64	0.46
18:K:49:PHE:CD1	21:N:192:LEU:CG	2.86	0.46
19:L:328:ASN:ND2	19:L:329:ARG:HE	2.12	0.46
19:L:332:THR:HG21	20:M:295:LYS:HD3	1.97	0.46
21:N:195:THR:C	21:N:196:THR:HG23	2.40	0.46
21:N:681:ASN:O	21:N:685:VAL:HG23	2.16	0.46
22:O:260:VAL:CG1	22:O:262:ASP:CG	2.88	0.46
22:O:377:VAL:HG13	28:U:193:GLN:CD	2.40	0.46
23:P:218:LEU:HD11	23:P:256:LYS:CE	2.46	0.46
25:R:360:SER:HB3	32:Y:86:ARG:HH22	1.81	0.46
26:S:390:THR:OG1	26:S:393:ARG:NH2	2.49	0.46
28:U:21:HIS:HE1	28:U:53:ALA:CB	1.92	0.46
28:U:92:TRP:NE1	28:U:120:LEU:CA	2.78	0.46
30:W:41:ARG:NH1	30:W:67:ALA:O	2.49	0.46
30:W:144:PHE:HE1	30:W:176:PRO:HA	1.80	0.46
30:W:172:LEU:HD21	30:W:185:ILE:N	2.31	0.46
31:X:8:ILE:CG2	31:X:124:LYS:CE	2.93	0.46
31:X:22:ARG:HG2	31:X:96:ARG:NH1	2.31	0.46
31:X:85:ARG:HH21	31:X:116:ALA:N	2.13	0.46
33:Z:212:LEU:HD13	33:Z:217:GLU:OE2	2.15	0.46
5:5:57:THR:HG22	12:E:101:LEU:HD12	1.97	0.46
9:B:43:VAL:HG21	9:B:137:ALA:HB1	1.98	0.46
9:B:78:MET:HG2	9:B:80:PRO:HD2	1.98	0.46
12:E:157:HIS:CG	12:E:170:LYS:NZ	2.81	0.46
13:F:74:LEU:C	13:F:74:LEU:HD12	2.41	0.46
15:H:280:VAL:CG2	16:I:304:ARG:HD2	2.42	0.46
21:N:647:ASP:O	21:N:653:ARG:NE	2.49	0.46
21:N:666:GLN:CG	21:N:873:ARG:HE	2.23	0.46
23:P:308:LEU:CD2	23:P:369:LEU:HA	2.20	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:304:TYR:CE2	25:R:337:VAL:HG21	2.50	0.46
26:S:281:ALA:HB2	26:S:320:ILE:HD11	1.97	0.46
26:S:471:LEU:CD1	28:U:288:PHE:HZ	2.00	0.46
27:T:59:LYS:HD3	27:T:97:SER:CB	2.45	0.46
27:T:89:TYR:CE1	27:T:102:LYS:HE3	2.51	0.46
27:T:193:THR:CB	27:T:226:TRP:CZ2	2.94	0.46
28:U:273:LEU:O	28:U:277:TYR:CD2	2.69	0.46
33:Z:96:TYR:CE1	33:Z:119:LEU:HD22	2.51	0.46
33:Z:340:LEU:C	33:Z:340:LEU:HD12	2.41	0.46
1:1:122:LEU:CG	7:7:28:PHE:HE1	2.29	0.46
5:5:150:VAL:CG2	5:5:179:HIS:CE1	2.99	0.46
7:7:92:MET:HE2	7:7:102:LEU:HD23	1.97	0.46
7:7:129:TYR:HE2	7:7:134:LEU:CD2	2.30	0.46
9:B:140:ASP:CG	9:B:143:ASN:HB2	2.41	0.46
10:C:39:MET:HE2	10:C:161:LYS:CB	2.46	0.46
12:E:165:TYR:C	12:E:167:TYR:HE1	2.20	0.46
13:F:72:LEU:C	13:F:72:LEU:HD12	2.40	0.46
13:F:155:GLU:C	13:F:156:LEU:HD12	2.41	0.46
15:H:217:GLN:HG3	15:H:376:GLU:OE2	2.15	0.46
18:K:99:PHE:CE1	18:K:101:GLU:C	2.92	0.46
18:K:347:ARG:HH11	24:Q:205:ALA:HB1	1.77	0.46
20:M:42:ARG:HB2	30:W:27:GLU:HB3	1.98	0.46
20:M:175:LYS:NZ	20:M:240:ASN:CB	2.79	0.46
20:M:201:MET:HE2	20:M:319:ASP:OD1	2.15	0.46
21:N:870:ASN:OD1	21:N:871:MET:HG2	2.16	0.46
23:P:132:VAL:HA	23:P:171:MET:SD	2.55	0.46
23:P:145:GLU:O	23:P:149:GLU:HG3	2.16	0.46
24:Q:115:ILE:HG23	24:Q:141:LEU:CD1	2.46	0.46
26:S:323:LEU:CD2	26:S:383:LEU:HD21	2.45	0.46
28:U:94:HIS:HD1	28:U:96:GLY:H	1.60	0.46
29:V:33:ALA:O	29:V:37:MET:HG3	2.16	0.46
33:Z:312:TYR:HH	33:Z:348:LEU:HD23	1.80	0.46
1:1:59:VAL:HG21	1:1:82:PHE:CE1	2.51	0.45
3:3:63:ASN:HD22	10:C:96:GLN:NE2	2.14	0.45
15:H:280:VAL:O	15:H:280:VAL:HG12	2.16	0.45
15:H:387:ASN:O	15:H:391:ILE:HG13	2.16	0.45
16:I:178:THR:HG23	17:J:282:PHE:HA	1.98	0.45
16:I:250:SER:O	16:I:253:ILE:CG1	2.63	0.45
17:J:375:ILE:HB	25:R:204:TRP:CE3	2.51	0.45
19:L:269:TYR:CE2	19:L:273:HIS:NE2	2.84	0.45
21:N:49:LEU:HD21	21:N:55:PHE:CE1	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:707:ASN:HB3	21:N:711:ARG:CZ	2.46	0.45
23:P:235:LEU:CD2	23:P:276:LEU:HD11	2.46	0.45
23:P:293:LEU:HD23	23:P:293:LEU:O	2.16	0.45
24:Q:90:LYS:CD	24:Q:129:LYS:NZ	2.70	0.45
27:T:38:ASN:O	27:T:39:LEU:CD2	2.64	0.45
28:U:154:PHE:N	28:U:154:PHE:HD1	2.14	0.45
28:U:223:HIS:CE1	28:U:224:THR:HB	2.49	0.45
30:W:60:ARG:HD2	30:W:60:ARG:C	2.40	0.45
31:X:73:THR:HG22	31:X:91:PHE:CD1	2.52	0.45
33:Z:318:LYS:CD	33:Z:496:ALA:O	2.62	0.45
33:Z:434:GLN:O	33:Z:437:ASP:HB2	2.16	0.45
33:Z:552:GLU:O	33:Z:553:ARG:HB2	2.15	0.45
1:1:7:THR:HA	1:1:12:VAL:HA	1.98	0.45
6:6:43:MET:HE2	6:6:84:ILE:HD11	1.98	0.45
11:D:37:LYS:CE	11:D:145:PRO:HB2	2.46	0.45
12:E:48:LEU:CD1	12:E:145:ALA:HB3	2.25	0.45
12:E:48:LEU:HD21	12:E:155:LEU:HD13	1.98	0.45
12:E:165:TYR:O	12:E:167:TYR:CD1	2.69	0.45
12:E:166:ARG:C	12:E:167:TYR:CD1	2.94	0.45
15:H:251:PRO:O	15:H:254:THR:HG21	2.13	0.45
15:H:393:SER:OG	15:H:404:TRP:HH2	1.99	0.45
17:J:88:VAL:HG23	17:J:91:GLU:H	1.80	0.45
17:J:336:ASN:ND2	18:K:200:GLN:O	2.47	0.45
18:K:190:LEU:HB2	18:K:198:TYR:OH	2.15	0.45
19:L:389:ALA:HA	19:L:392:ARG:NH2	2.31	0.45
22:O:73:ILE:CG2	22:O:74:ASN:N	2.63	0.45
22:O:214:ALA:HB3	22:O:248:TYR:HH	1.79	0.45
28:U:19:LEU:HD11	29:V:208:LYS:HB2	1.96	0.45
29:V:104:VAL:HG11	29:V:107:TRP:HE1	1.81	0.45
33:Z:64:TYR:HE1	33:Z:111:LEU:O	2.00	0.45
33:Z:452:LEU:HD11	33:Z:485:ILE:CG2	2.44	0.45
33:Z:502:ASN:ND2	33:Z:505:VAL:HG23	2.31	0.45
33:Z:567:ALA:HB1	33:Z:599:ILE:HG12	1.97	0.45
33:Z:756:MET:HE1	33:Z:759:ARG:HE	1.80	0.45
1:1:8:PHE:CZ	1:1:179:THR:HG22	2.44	0.45
1:1:45:ARG:NH2	1:1:52:THR:C	2.70	0.45
2:2:220:ILE:HD12	3:3:39:HIS:CE1	2.50	0.45
4:4:28:LYS:CE	5:5:127:PHE:CE2	3.00	0.45
9:B:68:THR:HB	9:B:69:PRO:HD2	1.98	0.45
9:B:236:ARG:NH1	9:B:238:LEU:CD2	2.79	0.45
10:C:50:ARG:HD2	10:C:212:GLU:CD	2.42	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:11:PHE:HD2	12:E:26:TYR:HB2	1.82	0.45
13:F:117:GLN:HE21	13:F:121:GLN:NE2	2.14	0.45
15:H:397:SER:OG	15:H:436:LYS:HE2	2.17	0.45
17:J:274:GLU:HA	17:J:309:ARG:NH1	2.32	0.45
18:K:49:PHE:HE1	21:N:192:LEU:CB	2.29	0.45
18:K:303:MET:HE1	18:K:316:MET:HE3	1.99	0.45
19:L:206:ILE:CG1	19:L:209:ARG:HH22	2.28	0.45
19:L:311:GLN:NE2	19:L:316:ASP:HB2	2.32	0.45
20:M:50:ARG:CB	30:W:73:LEU:CB	2.95	0.45
22:O:341:ILE:CD1	22:O:348:VAL:HA	2.47	0.45
26:S:141:LEU:O	26:S:145:PHE:CZ	2.70	0.45
26:S:227:ASN:ND2	26:S:260:PRO:HD2	2.31	0.45
27:T:250:MET:O	27:T:251:HIS:HD2	1.93	0.45
28:U:288:PHE:O	28:U:291:LEU:HB2	2.16	0.45
29:V:185:ILE:HA	29:V:188:LEU:HD12	1.98	0.45
33:Z:361:HIS:HE1	33:Z:861:THR:O	1.98	0.45
33:Z:620:LEU:HD23	33:Z:743:ILE:HG13	1.98	0.45
1:1:119:VAL:HB	14:G:103:LYS:HZ3	1.71	0.45
3:3:79:THR:HG23	3:3:115:PHE:HZ	1.81	0.45
5:5:19:ARG:H	5:5:31:VAL:HG12	1.81	0.45
5:5:159:ARG:HH11	5:5:200:VAL:HG13	1.81	0.45
7:7:83:TYR:CE1	13:F:101:ARG:HG2	2.51	0.45
7:7:85:PHE:CD2	7:7:120:ARG:HD3	2.50	0.45
7:7:116:ASP:C	7:7:116:ASP:OD1	2.58	0.45
9:B:44:VAL:CG2	9:B:211:LEU:HD11	2.47	0.45
14:G:73:ILE:HG22	14:G:75:CYS:SG	2.57	0.45
16:I:397:THR:O	17:J:179:ILE:HD12	2.16	0.45
18:K:258:PHE:CE1	18:K:299:LEU:HD23	2.52	0.45
19:L:132:ARG:CD	19:L:133:ASN:H	2.29	0.45
22:O:230:PHE:CE1	22:O:251:LEU:HD11	2.48	0.45
25:R:207:ARG:HH12	25:R:211:LYS:NZ	2.15	0.45
25:R:259:PHE:O	25:R:259:PHE:HD1	1.98	0.45
26:S:185:PHE:CD1	26:S:239:ARG:NH1	2.85	0.45
26:S:435:LYS:NZ	27:T:238:GLN:CD	2.68	0.45
27:T:46:ILE:HD11	27:T:94:HIS:NE2	2.31	0.45
27:T:156:SER:HB3	27:T:159:LYS:CB	2.44	0.45
27:T:226:TRP:NE1	27:T:235:PHE:CD2	2.85	0.45
29:V:133:ASN:HD22	29:V:136:ALA:HB2	1.81	0.45
1:1:18:SER:O	1:1:19:ARG:HB2	2.17	0.45
7:7:8:TYR:CZ	7:7:11:GLY:N	2.84	0.45
7:7:74:ASP:HA	7:7:79:LEU:HD12	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:190:GLU:OE1	11:D:193:LYS:HE2	2.16	0.45
12:E:109:VAL:CG1	12:E:156:PHE:CG	2.99	0.45
15:H:175:GLY:H	15:H:183:ILE:HG13	1.82	0.45
15:H:382:LEU:HD13	15:H:385:ARG:HH21	1.82	0.45
16:I:196:GLU:OE2	16:I:200:LEU:HD23	2.16	0.45
16:I:299:GLU:O	16:I:303:GLN:HG2	2.16	0.45
18:K:171:TYR:CD2	18:K:225:ALA:HB1	2.52	0.45
18:K:262:ARG:NH1	18:K:311:ASN:HD21	2.13	0.45
20:M:327:THR:CG2	20:M:329:ARG:O	2.65	0.45
22:O:270:ILE:HG22	22:O:271:LYS:N	2.31	0.45
22:O:306:ARG:CG	22:O:351:SER:CA	2.89	0.45
23:P:110:LEU:O	23:P:113:ASN:HB2	2.17	0.45
23:P:352:VAL:HG23	23:P:353:ILE:N	2.31	0.45
23:P:360:ILE:CD1	23:P:402:PHE:HZ	2.29	0.45
27:T:55:LEU:HD22	27:T:94:HIS:CD2	2.51	0.45
29:V:113:GLY:O	29:V:114:PHE:CG	2.69	0.45
33:Z:546:ILE:CG2	33:Z:566:LEU:HD21	2.46	0.45
33:Z:973:TYR:CD2	33:Z:974:THR:HG22	2.51	0.45
1:1:-5:GLU:O	2:2:116:HIS:CE1	2.69	0.45
3:3:69:GLU:OE1	9:B:106:PRO:HG2	2.17	0.45
5:5:199:LYS:HG2	5:5:203:GLU:OE1	2.16	0.45
10:C:180:TYR:HE2	10:C:182:ASP:HA	1.76	0.45
12:E:15:PHE:CZ	13:F:126:ARG:HD2	2.50	0.45
14:G:45:VAL:CG2	14:G:47:PHE:HE1	2.30	0.45
14:G:98:PHE:CE2	14:G:105:PRO:O	2.63	0.45
16:I:173:MET:H	17:J:231:ARG:NH2	2.13	0.45
16:I:417:LYS:O	16:I:421:GLU:HG3	2.16	0.45
17:J:153:LEU:O	17:J:157:ILE:HG13	2.16	0.45
17:J:329:ARG:CA	17:J:343:LEU:HD13	2.47	0.45
20:M:384:ASP:O	20:M:386:PHE:CD1	2.70	0.45
21:N:521:LEU:HD13	21:N:539:MET:SD	2.56	0.45
22:O:118:GLY:C	22:O:166:ARG:HG2	2.32	0.45
22:O:140:LYS:CD	22:O:141:ASN:ND2	2.78	0.45
22:O:196:LEU:HD21	22:O:242:ILE:CD1	2.46	0.45
22:O:344:VAL:O	22:O:345:ASN:ND2	2.49	0.45
23:P:213:TYR:HD2	23:P:217:LYS:HG2	1.82	0.45
23:P:433:ILE:CD1	28:U:203:LYS:HA	2.47	0.45
24:Q:65:TYR:HB2	24:Q:74:LEU:CD2	2.36	0.45
24:Q:381:ILE:HG21	25:R:344:SER:HA	1.97	0.45
24:Q:426:LEU:HD21	28:U:292:ILE:HD11	1.98	0.45
25:R:301:TYR:HE2	25:R:359:VAL:HG13	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:471:LEU:CB	28:U:288:PHE:HE1	2.24	0.45
27:T:59:LYS:HD3	27:T:97:SER:HA	1.98	0.45
30:W:162:ASN:O	30:W:163:ASN:CG	2.60	0.45
31:X:83:SER:OG	31:X:110:PRO:HG3	2.17	0.45
33:Z:103:TYR:CG	33:Z:116:ALA:HB2	2.48	0.45
33:Z:362:LEU:CD2	33:Z:858:GLY:O	2.65	0.45
1:1:119:VAL:HB	14:G:103:LYS:HZ1	1.76	0.45
2:2:8:PHE:CZ	2:2:11:GLY:C	2.95	0.45
4:4:66:TYR:CG	4:4:74:LEU:HD11	2.49	0.45
5:5:95:LEU:HD13	5:5:95:LEU:C	2.41	0.45
7:7:-3:VAL:HG12	7:7:49:ILE:CB	2.45	0.45
9:B:127:VAL:HG22	9:B:128:ARG:O	2.17	0.45
11:D:122:GLN:HG3	12:E:134:MET:SD	2.56	0.45
14:G:45:VAL:CG2	14:G:47:PHE:CE1	2.99	0.45
14:G:113:ASP:OD1	14:G:156:TYR:OH	2.30	0.45
16:I:225:PRO:HB3	17:J:309:ARG:HH21	1.80	0.45
18:K:226:VAL:O	18:K:230:THR:HG23	2.17	0.45
18:K:347:ARG:HG3	24:Q:215:VAL:CG1	2.46	0.45
19:L:379:ALA:HA	19:L:382:MET:HE2	1.96	0.45
20:M:219:LEU:CD1	20:M:325:ALA:HB3	2.47	0.45
21:N:328:PHE:CE1	21:N:696:LYS:HB2	2.50	0.45
21:N:399:PHE:HE2	21:N:438:ASP:OD1	2.00	0.45
22:O:193:LEU:HD13	22:O:236:HIS:CD2	2.51	0.45
23:P:397:ALA:HB1	23:P:399:ILE:HD12	1.98	0.45
25:R:34:THR:HG22	25:R:70:TYR:HB2	1.98	0.45
26:S:173:LEU:O	26:S:174:ARG:NH1	2.43	0.45
26:S:189:LEU:HD12	26:S:193:THR:HB	1.99	0.45
26:S:364:ILE:HD13	26:S:380:CYS:HB3	1.99	0.45
33:Z:528:LEU:HD11	33:Z:565:PHE:CD1	2.51	0.45
33:Z:551:LEU:CB	33:Z:593:HIS:NE2	2.80	0.45
33:Z:624:LEU:CD1	33:Z:736:LEU:O	2.64	0.45
1:1:38:HIS:NE2	1:1:73:PRO:HD2	2.31	0.45
3:3:140:MET:CG	3:3:168:ARG:HH22	2.30	0.45
5:5:33:ARG:NH1	5:5:46:ALA:HB2	2.31	0.45
7:7:42:VAL:HG23	7:7:192:ILE:HD11	1.99	0.45
7:7:62:LEU:HD21	7:7:87:TYR:CE2	2.52	0.45
8:A:104:PHE:HE2	8:A:111:ASP:C	2.24	0.45
11:D:34:VAL:HB	11:D:199:LEU:HD21	1.97	0.45
11:D:45:GLY:HA3	11:D:199:LEU:CD1	2.47	0.45
12:E:50:VAL:HG22	12:E:67:ILE:HD11	1.99	0.45
13:F:40:SER:O	13:F:41:ASN:CG	2.60	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:88:VAL:HB	17:J:90:PRO:HD2	1.97	0.45
17:J:364:GLU:CD	17:J:388:LYS:HD3	2.42	0.45
21:N:774:ASN:ND2	21:N:885:ILE:CD1	2.80	0.45
24:Q:426:LEU:HD23	24:Q:426:LEU:O	2.16	0.45
25:R:147:LYS:HD3	25:R:181:TYR:CZ	2.52	0.45
25:R:153:THR:O	25:R:156:LYS:HB2	2.17	0.45
25:R:422:ARG:HH22	26:S:301:PRO:CG	2.30	0.45
29:V:25:GLU:OE2	29:V:157:ARG:NH1	2.50	0.45
29:V:118:LEU:HD12	29:V:140:VAL:CG2	2.47	0.45
31:X:8:ILE:HG22	31:X:124:LYS:CD	2.44	0.45
33:Z:53:VAL:O	33:Z:56:LEU:HB2	2.17	0.45
33:Z:132:HIS:C	33:Z:137:TYR:CE1	2.95	0.45
33:Z:303:ASP:OD1	33:Z:303:ASP:C	2.59	0.45
33:Z:570:LEU:CD1	33:Z:599:ILE:HG21	2.43	0.45
1:1:120:HIS:HB2	7:7:28:PHE:CZ	2.52	0.45
2:2:200:GLN:O	2:2:201:LYS:HB2	2.17	0.45
3:3:-2:ASN:CA	3:3:19:ARG:NH1	2.80	0.45
8:A:57:LYS:NZ	8:A:66:PRO:O	2.47	0.45
10:C:208:TYR:CA	10:C:235:ILE:HG21	2.44	0.45
11:D:45:GLY:HA3	11:D:199:LEU:HD11	1.99	0.45
13:F:128:TYR:HB3	13:F:130:VAL:HG12	1.99	0.45
13:F:166:GLN:HA	20:M:381:ARG:HH21	1.72	0.45
14:G:161:GLY:HA3	14:G:175:LEU:HD21	1.97	0.45
14:G:217:TRP:O	14:G:217:TRP:HD1	2.00	0.45
15:H:271:PHE:CZ	15:H:273:ARG:CZ	3.00	0.45
17:J:87:LYS:HD2	17:J:93:LYS:HE2	1.99	0.45
17:J:165:GLU:OE2	17:J:205:HIS:CD2	2.70	0.45
20:M:369:THR:C	20:M:370:THR:HG23	2.42	0.45
21:N:745:LEU:O	21:N:748:PHE:HD2	1.99	0.45
21:N:758:VAL:H	21:N:874:ILE:HD12	1.82	0.45
22:O:366:MET:HE3	28:U:226:LEU:HD12	1.96	0.45
23:P:180:ILE:HD11	23:P:206:LYS:NZ	2.31	0.45
23:P:286:ASN:O	23:P:293:LEU:CD1	2.65	0.45
26:S:163:VAL:HG21	26:S:184:TRP:CZ3	2.37	0.45
27:T:143:SER:O	27:T:147:LYS:HG3	2.16	0.45
28:U:40:ASP:HB2	28:U:47:ARG:HE	1.82	0.45
28:U:40:ASP:HB2	28:U:47:ARG:NE	2.32	0.45
29:V:261:LEU:HD11	29:V:283:THR:HG21	1.67	0.45
30:W:132:LEU:HD22	30:W:137:VAL:HG21	1.99	0.45
33:Z:315:ALA:CA	33:Z:327:GLN:HE22	2.29	0.45
1:1:29:ARG:HE	1:1:30:VAL:HG23	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:66:TYR:HE2	1:1:72:THR:C	2.25	0.45
11:D:236:ILE:O	11:D:240:LYS:HG3	2.17	0.45
12:E:231:TYR:HH	12:E:235:LYS:C	2.15	0.45
20:M:186:LEU:CD1	20:M:231:LEU:HD21	2.47	0.45
21:N:70:TYR:CE2	26:S:219:LYS:CE	2.86	0.45
21:N:227:LYS:HA	21:N:724:THR:HG21	1.99	0.45
22:O:185:PHE:CE2	22:O:219:ILE:CG2	2.86	0.45
24:Q:288:LYS:NZ	24:Q:296:ILE:HG21	2.32	0.45
25:R:72:VAL:O	25:R:72:VAL:HG12	2.16	0.45
26:S:211:ARG:NE	26:S:240:ASP:HB3	2.30	0.45
27:T:4:LEU:O	27:T:5:ALA:HB3	2.17	0.45
27:T:224:ARG:HB3	27:T:242:LYS:HB2	1.98	0.45
28:U:37:ILE:HD13	28:U:121:LEU:HD11	1.97	0.45
31:X:41:GLU:CB	31:X:45:PHE:HB2	2.47	0.45
1:1:82:PHE:O	1:1:86:CYS:SG	2.72	0.44
3:3:74:GLU:CD	3:3:105:SER:HB2	2.42	0.44
5:5:150:VAL:HG23	5:5:179:HIS:CE1	2.52	0.44
5:5:159:ARG:NH1	5:5:200:VAL:HG13	2.32	0.44
7:7:-3:VAL:CG1	7:7:49:ILE:CG1	2.93	0.44
7:7:103:TRP:CD1	7:7:103:TRP:O	2.70	0.44
8:A:57:LYS:CE	8:A:69:VAL:HG11	2.21	0.44
9:B:12:PHE:CZ	9:B:18:LEU:HD21	2.52	0.44
9:B:179:TRP:NE1	9:B:183:LEU:HB3	2.32	0.44
15:H:98:GLN:NE2	15:H:193:PRO:O	2.50	0.44
16:I:75:PHE:CD2	16:I:76:VAL:N	2.85	0.44
17:J:234:PHE:HZ	17:J:279:LEU:HD21	1.49	0.44
18:K:349:ARG:HH11	18:K:377:SER:N	2.01	0.44
19:L:336:ALA:HA	19:L:339:ARG:HH21	1.82	0.44
19:L:362:LYS:CA	19:L:376:PHE:CE2	2.93	0.44
21:N:759:ILE:HG12	21:N:902:VAL:HG12	1.99	0.44
22:O:373:TRP:NE1	28:U:200:LEU:HD11	2.32	0.44
23:P:425:HIS:CD2	28:U:225:ILE:CB	3.00	0.44
24:Q:124:PHE:CD1	24:Q:127:ARG:NH2	2.85	0.44
26:S:185:PHE:HE1	26:S:239:ARG:NH1	2.14	0.44
28:U:152:LYS:HG2	28:U:154:PHE:CZ	2.53	0.44
30:W:142:ILE:HG22	30:W:185:ILE:HD12	1.99	0.44
1:1:82:PHE:CE2	1:1:99:VAL:HG21	2.53	0.44
3:3:80:GLN:HG2	9:B:102:GLY:HA3	1.99	0.44
4:4:55:PHE:CE2	4:4:59:ILE:HG13	2.52	0.44
5:5:40:PHE:CE2	5:5:41:LEU:CG	3.00	0.44
7:7:119:LEU:HD23	7:7:131:SER:O	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:121:TYR:HE1	7:7:123:ASN:HB3	1.82	0.44
8:A:39:ASN:ND2	8:A:58:LYS:HD2	2.21	0.44
9:B:82:TYR:CE1	9:B:134:LEU:HD21	2.53	0.44
12:E:165:TYR:O	12:E:167:TYR:HE1	1.98	0.44
13:F:38:LEU:CD2	13:F:189:LEU:CD1	2.96	0.44
16:I:408:ARG:NH1	16:I:410:GLN:C	2.73	0.44
17:J:61:GLU:O	17:J:65:LEU:HG	2.17	0.44
17:J:248:ASP:O	17:J:249:GLU:HB3	2.18	0.44
18:K:281:ARG:HH12	18:K:286:THR:C	2.24	0.44
20:M:163:PHE:CE1	20:M:261:LYS:HE3	2.52	0.44
21:N:5:THR:HG23	21:N:8:PRO:CD	2.47	0.44
21:N:17:GLN:H	21:N:20:VAL:CG2	2.29	0.44
21:N:170:LEU:O	21:N:174:LEU:HG	2.17	0.44
21:N:258:ALA:CB	21:N:289:ILE:HG21	2.46	0.44
21:N:300:ASN:HD22	21:N:920:VAL:HG21	1.82	0.44
22:O:210:ARG:NH2	22:O:242:ILE:CG1	2.80	0.44
23:P:221:TYR:HE2	23:P:244:ILE:HD13	1.82	0.44
25:R:126:GLY:O	25:R:127:GLU:HB2	2.16	0.44
25:R:331:ARG:NH2	25:R:367:ASP:HB3	2.33	0.44
30:W:120:ASP:O	30:W:121:SER:O	2.35	0.44
31:X:33:ILE:CG1	31:X:48:PHE:CZ	2.99	0.44
31:X:46:TRP:CH2	31:X:131:ASN:HB2	2.52	0.44
1:1:120:HIS:HB2	7:7:28:PHE:CE1	2.53	0.44
3:3:59:ARG:NE	10:C:99:LEU:HD21	2.32	0.44
5:5:19:ARG:HD2	5:5:171:SER:C	2.42	0.44
7:7:123:ASN:HD21	7:7:127:VAL:HB	1.81	0.44
8:A:51:THR:HB	8:A:228:ALA:HB3	1.98	0.44
10:C:68:LYS:HD2	10:C:229:ILE:HD11	1.98	0.44
13:F:33:SER:HA	13:F:51:ARG:NH1	2.32	0.44
16:I:243:THR:HG22	16:I:245:LEU:CG	2.47	0.44
17:J:133:LEU:HD23	17:J:137:MET:SD	2.57	0.44
17:J:142:VAL:HG12	17:J:204:HIS:CE1	2.51	0.44
18:K:281:ARG:NH1	18:K:286:THR:C	2.74	0.44
19:L:335:PRO:O	19:L:339:ARG:HG3	2.16	0.44
22:O:69:PHE:HE2	22:O:78:VAL:N	2.15	0.44
23:P:214:GLU:O	23:P:218:LEU:HG	2.18	0.44
26:S:176:LEU:HG	26:S:179:ILE:O	2.18	0.44
26:S:395:ILE:HD12	26:S:410:LYS:HD3	1.98	0.44
26:S:471:LEU:HB2	28:U:288:PHE:HZ	1.76	0.44
29:V:108:TYR:O	29:V:109:HIS:CG	2.70	0.44
30:W:16:SER:CB	30:W:25:ARG:NH1	2.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:65:PHE:CZ	30:W:102:GLN:OE1	2.71	0.44
1:1:45:ARG:HE	1:1:52:THR:CB	2.29	0.44
8:A:79:ILE:CD1	8:A:112:MET:HB3	2.47	0.44
10:C:137:TYR:HE1	10:C:151:SER:OG	2.01	0.44
11:D:188:VAL:CG2	11:D:216:LYS:HE2	2.48	0.44
14:G:140:VAL:CB	14:G:220:LEU:CD2	2.84	0.44
16:I:300:ARG:O	16:I:304:ARG:HG3	2.17	0.44
16:I:380:LEU:HD11	16:I:416:PHE:HB3	1.98	0.44
17:J:364:GLU:OE1	17:J:388:LYS:HD3	2.18	0.44
20:M:49:GLN:CG	30:W:73:LEU:HD11	2.48	0.44
21:N:419:THR:O	21:N:423:LEU:HG	2.16	0.44
22:O:179:PHE:HB3	22:O:188:PHE:HB2	1.99	0.44
24:Q:138:SER:HB2	24:Q:161:LEU:HD11	1.96	0.44
24:Q:326:MET:HB3	24:Q:332:ARG:HD3	1.99	0.44
27:T:245:TYR:CE2	27:T:251:HIS:NE2	2.76	0.44
29:V:117:TRP:NE1	29:V:196:TYR:CG	2.49	0.44
1:1:6:VAL:CB	1:1:155:ILE:HD11	2.46	0.44
7:7:13:ILE:HD12	7:7:165:ALA:HB1	2.00	0.44
8:A:133:TYR:HB3	9:B:5:TYR:CE2	2.53	0.44
13:F:7:ASP:HA	13:F:21:GLN:HE21	1.83	0.44
15:H:105:ILE:CG2	15:H:145:TYR:O	2.61	0.44
16:I:102:ASN:ND2	17:J:83:LYS:NZ	2.62	0.44
17:J:102:ILE:HD11	17:J:122:LEU:HB2	2.00	0.44
19:L:105:ILE:HG12	19:L:159:LEU:CD1	2.47	0.44
20:M:292:ASP:C	20:M:292:ASP:OD1	2.59	0.44
21:N:255:ALA:O	21:N:259:PHE:CD2	2.70	0.44
21:N:884:PHE:CE2	21:N:896:PHE:HB2	2.53	0.44
22:O:226:LYS:C	22:O:290:LYS:HE3	2.43	0.44
22:O:261:GLY:CA	22:O:288:ARG:HH22	2.30	0.44
22:O:292:CYS:HG	22:O:317:THR:HG1	1.64	0.44
23:P:218:LEU:HD21	23:P:256:LYS:HZ1	1.81	0.44
25:R:78:ASP:C	25:R:93:LYS:HG3	2.43	0.44
25:R:241:ILE:HG22	25:R:242:GLU:N	2.33	0.44
25:R:339:ALA:O	25:R:342:LEU:HB3	2.18	0.44
29:V:127:LYS:HZ1	29:V:194:ARG:NH2	2.15	0.44
30:W:16:SER:CA	30:W:25:ARG:HH11	2.29	0.44
31:X:26:PRO:O	31:X:27:ILE:HD13	2.18	0.44
31:X:45:PHE:CD1	31:X:68:LEU:O	2.71	0.44
33:Z:612:GLY:HA2	33:Z:616:LEU:HD12	1.99	0.44
33:Z:850:LEU:HD21	33:Z:901:PHE:CE1	2.53	0.44
2:2:8:PHE:CE1	2:2:13:VAL:HG23	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:60:GLY:O	5:5:64:ARG:HG3	2.18	0.44
7:7:85:PHE:CZ	7:7:120:ARG:HG2	2.53	0.44
17:J:145:SER:OG	17:J:201:ALA:HB2	2.18	0.44
19:L:81:ILE:HG22	19:L:82:ARG:HA	2.00	0.44
19:L:135:VAL:HB	19:L:158:ILE:HD11	2.00	0.44
19:L:374:PHE:HD1	19:L:374:PHE:N	2.15	0.44
20:M:383:THR:HB	20:M:386:PHE:CE1	2.53	0.44
22:O:228:TYR:HB2	22:O:294:MET:HE3	1.98	0.44
23:P:290:LEU:HB2	23:P:293:LEU:CB	2.48	0.44
24:Q:363:SER:O	24:Q:366:ILE:HG22	2.17	0.44
25:R:110:ILE:CG2	25:R:114:ASN:ND2	2.80	0.44
26:S:295:ALA:HA	26:S:298:ARG:NE	2.32	0.44
27:T:182:LYS:HG2	27:T:186:ARG:NE	2.33	0.44
28:U:52:PHE:CZ	28:U:80:CYS:SG	3.10	0.44
29:V:71:MET:HE2	29:V:71:MET:HA	1.99	0.44
33:Z:189:ALA:HB3	33:Z:196:SER:HB2	1.99	0.44
33:Z:448:LYS:O	33:Z:451:ALA:HB3	2.17	0.44
33:Z:457:ILE:HD11	33:Z:902:TYR:CD1	2.52	0.44
33:Z:610:GLY:O	33:Z:748:LEU:CB	2.62	0.44
33:Z:613:ASP:H	33:Z:616:LEU:HB2	1.83	0.44
1:1:19:ARG:CZ	1:1:26:ILE:HG21	2.48	0.44
4:4:147:TYR:CE1	4:4:151:MET:HB2	2.51	0.44
5:5:55:TRP:NE1	6:6:89:TYR:HH	2.14	0.44
8:A:79:ILE:HD11	8:A:112:MET:O	2.18	0.44
14:G:140:VAL:HB	14:G:220:LEU:CD1	2.42	0.44
15:H:155:PHE:CE1	20:M:77:TYR:O	2.71	0.44
16:I:366:THR:HA	16:I:369:MET:SD	2.58	0.44
18:K:236:ARG:HH21	19:L:310:THR:CG2	2.11	0.44
19:L:374:PHE:CD1	19:L:374:PHE:N	2.84	0.44
20:M:196:ALA:CB	20:M:345:ARG:HG3	2.47	0.44
21:N:96:GLN:HE22	26:S:220:ILE:HD13	1.83	0.44
21:N:406:TYR:HD1	21:N:448:LEU:HB2	1.83	0.44
21:N:510:HIS:NE2	29:V:60:ASP:HB2	2.33	0.44
22:O:11:LEU:HB3	22:O:43:GLU:CD	2.37	0.44
22:O:26:PHE:CD1	22:O:61:LEU:CD2	3.00	0.44
22:O:359:SER:O	22:O:363:ILE:HD12	2.18	0.44
23:P:115:ARG:HH22	23:P:142:ASP:CB	2.29	0.44
23:P:302:LEU:CB	23:P:310:ARG:NE	2.62	0.44
24:Q:7:LYS:CB	24:Q:30:LEU:HD13	2.47	0.44
24:Q:250:THR:CG2	24:Q:251:THR:H	2.14	0.44
24:Q:298:ALA:HB1	24:Q:325:LEU:HD22	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:429:LYS:HE3	29:V:269:ARG:NH2	2.27	0.44
25:R:353:MET:CE	25:R:364:LEU:CD2	2.61	0.44
26:S:175:SER:HB2	26:S:229:THR:HG1	1.78	0.44
28:U:132:LEU:CD2	28:U:134:THR:O	2.66	0.44
1:1:66:TYR:CD2	1:1:73:PRO:HB3	2.53	0.44
2:2:149:GLU:CG	2:2:153:LYS:HE3	2.48	0.44
3:3:59:ARG:HE	10:C:99:LEU:HD21	1.81	0.44
5:5:17:ASP:C	5:5:17:ASP:OD1	2.61	0.44
7:7:170:VAL:CG1	7:7:174:ARG:NH2	2.81	0.44
16:I:400:GLY:C	17:J:179:ILE:HG13	2.43	0.44
17:J:150:VAL:CG1	17:J:197:LEU:CD1	2.95	0.44
18:K:370:SER:O	18:K:374:ARG:HG3	2.18	0.44
19:L:259:SER:HB3	19:L:303:ARG:HH12	1.77	0.44
22:O:203:THR:OG1	22:O:204:SER:N	2.49	0.44
22:O:341:ILE:CD1	22:O:348:VAL:HG22	2.35	0.44
22:O:377:VAL:HG21	28:U:200:LEU:HD11	2.00	0.44
23:P:188:ILE:HD13	23:P:226:LYS:HB3	1.99	0.44
24:Q:48:ASP:CG	24:Q:49:LYS:N	2.75	0.44
25:R:261:LEU:O	25:R:336:LYS:NZ	2.49	0.44
27:T:197:TYR:CG	27:T:198:ASP:H	1.73	0.44
28:U:276:ILE:HB	29:V:291:ASN:ND2	2.32	0.44
33:Z:121:ILE:O	33:Z:125:THR:HG23	2.18	0.44
33:Z:315:ALA:HA	33:Z:327:GLN:HE22	1.83	0.44
1:1:175:MET:CE	1:1:188:PHE:HE1	2.30	0.44
1:1:188:PHE:HA	1:1:192:GLU:OE1	2.17	0.44
5:5:77:ALA:CB	5:5:121:ARG:NH2	2.81	0.44
7:7:68:TYR:CZ	14:G:92:ARG:HG2	2.52	0.44
11:D:133:THR:OG1	11:D:150:THR:OG1	2.36	0.44
12:E:127:ALA:HB3	12:E:130:GLU:HG2	2.00	0.44
14:G:98:PHE:HE2	14:G:105:PRO:C	2.25	0.44
15:H:390:ARG:CA	15:H:404:TRP:CZ2	2.75	0.44
19:L:173:PHE:HZ	19:L:177:GLU:HB3	1.75	0.44
20:M:50:ARG:HB3	30:W:73:LEU:CG	2.48	0.44
20:M:267:PHE:CZ	20:M:315:PHE:CD2	3.06	0.44
21:N:399:PHE:HA	21:N:441:VAL:HG11	2.00	0.44
21:N:510:HIS:CE1	21:N:512:ASN:CB	3.00	0.44
21:N:771:PHE:HE2	21:N:885:ILE:CG2	2.30	0.44
24:Q:279:LYS:O	24:Q:282:LEU:HB2	2.18	0.44
26:S:241:PHE:CZ	26:S:253:PHE:CZ	3.06	0.44
33:Z:839:SER:O	33:Z:842:GLN:HG3	2.18	0.44
5:5:19:ARG:HD2	5:5:172:GLY:N	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:107:LYS:O	5:5:108:GLU:HG3	2.18	0.43
7:7:33:ARG:HH12	7:7:52:MET:HE1	1.83	0.43
8:A:46:ARG:HH21	8:A:152:PRO:HD2	1.83	0.43
8:A:48:LYS:HZ2	8:A:195:ASN:CG	2.25	0.43
8:A:219:SER:HB2	8:A:222:ASP:OD2	2.18	0.43
12:E:122:ARG:CD	12:E:131:GLU:O	2.66	0.43
15:H:154:LYS:HZ2	20:M:162:GLU:HG2	1.82	0.43
15:H:183:ILE:O	15:H:183:ILE:CG2	2.54	0.43
15:H:248:LEU:HB2	15:H:256:LYS:HD3	2.00	0.43
16:I:208:TYR:CE2	16:I:215:PRO:CB	2.84	0.43
17:J:126:LEU:HD21	18:K:103:ILE:HD13	2.00	0.43
21:N:25:LEU:CD2	21:N:64:ILE:HD12	2.48	0.43
21:N:258:ALA:HB1	21:N:289:ILE:HG21	2.00	0.43
22:O:245:ASP:O	22:O:246:SER:HB2	2.18	0.43
22:O:258:LEU:HB3	22:O:291:ILE:CD1	2.48	0.43
22:O:345:ASN:HD21	23:P:359:ARG:HH11	1.66	0.43
23:P:133:GLU:N	23:P:171:MET:SD	2.82	0.43
23:P:202:LYS:HG2	23:P:206:LYS:HE3	1.99	0.43
25:R:259:PHE:CE2	25:R:329:PHE:CD1	3.05	0.43
31:X:46:TRP:HB2	31:X:68:LEU:CD1	2.32	0.43
31:X:72:GLU:O	31:X:72:GLU:HG2	2.18	0.43
33:Z:72:LYS:NZ	33:Z:117:ASP:OD2	2.49	0.43
33:Z:426:TYR:CD2	33:Z:432:GLY:HA3	2.53	0.43
33:Z:884:THR:HG22	33:Z:888:LEU:HD13	1.99	0.43
1:1:8:PHE:CE2	1:1:10:ASP:CA	3.01	0.43
1:1:36:ARG:N	1:1:42:TRP:CE3	2.85	0.43
8:A:74:CYS:SG	8:A:233:PHE:HD2	2.41	0.43
10:C:208:TYR:CA	10:C:235:ILE:CG2	2.95	0.43
14:G:182:HIS:HB3	14:G:186:LEU:HG	1.99	0.43
15:H:393:SER:HA	15:H:396:MET:CE	2.48	0.43
16:I:167:MET:CG	16:I:270:VAL:CG1	2.96	0.43
17:J:329:ARG:HA	17:J:343:LEU:CD1	2.48	0.43
19:L:163:THR:O	19:L:164:ASP:HB2	2.16	0.43
19:L:225:GLY:C	20:M:339:ARG:NH2	2.76	0.43
19:L:236:ALA:CB	19:L:277:ILE:HD12	2.41	0.43
20:M:357:ARG:HH22	20:M:385:GLU:H	1.65	0.43
22:O:134:ALA:HB3	22:O:153:LEU:HD21	2.00	0.43
22:O:137:TYR:HD2	22:O:149:LEU:HD21	1.83	0.43
22:O:365:LYS:CB	22:O:369:ARG:HH12	2.14	0.43
25:R:23:ASN:HD21	25:R:143:GLN:NE2	2.16	0.43
25:R:316:LEU:HD23	25:R:322:LEU:HD13	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:187:ILE:HG23	26:S:188:TYR:CD1	2.54	0.43
27:T:197:TYR:CG	27:T:235:PHE:CG	3.04	0.43
28:U:231:ASP:OD1	28:U:232:VAL:N	2.51	0.43
28:U:283:ARG:HD2	29:V:284:ALA:C	2.42	0.43
29:V:40:HIS:CG	29:V:70:ALA:HB2	2.52	0.43
31:X:85:ARG:O	31:X:100:TRP:CD1	2.70	0.43
33:Z:140:LEU:O	33:Z:141:SER:OG	2.25	0.43
33:Z:491:LEU:CD2	33:Z:900:LEU:CD1	2.95	0.43
33:Z:504:GLU:O	33:Z:508:LEU:HG	2.18	0.43
4:4:101:VAL:C	4:4:102:LEU:HD12	2.44	0.43
7:7:8:TYR:CE1	7:7:11:GLY:CA	3.01	0.43
13:F:34:VAL:H	13:F:51:ARG:HH12	1.64	0.43
15:H:290:MET:O	15:H:294:LEU:HG	2.19	0.43
16:I:148:LEU:CD1	17:J:95:ILE:HG21	2.47	0.43
17:J:111:GLN:NE2	17:J:125:VAL:HG12	2.33	0.43
18:K:99:PHE:CZ	18:K:102:PRO:HD3	2.53	0.43
18:K:141:ARG:HH11	19:L:153:LEU:CD1	2.30	0.43
18:K:245:LYS:NZ	19:L:299:ARG:HE	2.16	0.43
19:L:132:ARG:NH1	19:L:156:MET:CG	2.79	0.43
23:P:132:VAL:O	23:P:133:GLU:CB	2.66	0.43
23:P:425:HIS:CD2	28:U:225:ILE:CG1	3.00	0.43
24:Q:151:TYR:CZ	24:Q:187:LYS:CG	2.94	0.43
27:T:43:ASP:OD1	27:T:44:LEU:N	2.48	0.43
30:W:1:MET:H3	30:W:44:ASN:HD21	1.62	0.43
31:X:73:THR:CG2	31:X:91:PHE:HE1	2.30	0.43
31:X:85:ARG:O	31:X:100:TRP:HD1	2.01	0.43
33:Z:64:TYR:CD1	33:Z:111:LEU:HD22	2.53	0.43
33:Z:367:SER:OG	33:Z:859:LYS:O	2.35	0.43
33:Z:491:LEU:CD2	33:Z:900:LEU:HD11	2.44	0.43
33:Z:760:HIS:HD1	33:Z:761:PHE:HD1	1.65	0.43
1:1:122:LEU:CD2	7:7:28:PHE:CD1	2.95	0.43
2:2:81:GLN:HA	2:2:84:LYS:HE2	2.00	0.43
7:7:54:HIS:O	7:7:58:LEU:HG	2.18	0.43
8:A:46:ARG:CG	8:A:152:PRO:HB2	2.48	0.43
9:B:156:TYR:CD1	10:C:81:THR:HG21	2.52	0.43
13:F:156:LEU:HG	14:G:58:LEU:HD23	2.01	0.43
14:G:98:PHE:CE2	14:G:105:PRO:C	2.96	0.43
14:G:137:PHE:CE2	14:G:148:TYR:HB2	2.53	0.43
14:G:149:MET:HB3	14:G:159:TYR:CE1	2.53	0.43
15:H:65:GLU:HG3	16:I:133:LEU:HB2	2.00	0.43
16:I:243:THR:HG22	16:I:245:LEU:HG	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:329:ARG:HA	17:J:343:LEU:HD13	2.00	0.43
19:L:383:SER:OG	19:L:386:PHE:CG	2.67	0.43
21:N:65:ALA:O	21:N:69:TYR:CD2	2.72	0.43
21:N:158:LEU:CD1	21:N:192:LEU:CD2	2.96	0.43
22:O:41:LEU:HD11	22:O:47:LYS:HG2	2.01	0.43
22:O:377:VAL:HG21	28:U:200:LEU:HD12	2.00	0.43
22:O:377:VAL:HA	28:U:193:GLN:HE22	1.83	0.43
24:Q:46:VAL:O	24:Q:50:ARG:HB2	2.10	0.43
25:R:154:LEU:HD21	25:R:173:THR:CG2	2.46	0.43
26:S:182:LYS:HE3	26:S:309:PHE:CZ	2.53	0.43
27:T:197:TYR:CD1	27:T:235:PHE:CG	3.05	0.43
27:T:250:MET:C	27:T:251:HIS:CG	2.96	0.43
28:U:61:LYS:NZ	30:W:127:ARG:HB3	2.34	0.43
30:W:9:VAL:C	30:W:113:PHE:HD2	2.23	0.43
30:W:46:GLU:HB3	30:W:106:GLN:HE22	1.81	0.43
31:X:85:ARG:NE	31:X:115:SER:CB	2.81	0.43
33:Z:49:LEU:HD11	33:Z:55:ARG:CZ	2.48	0.43
33:Z:516:THR:HB	33:Z:554:THR:HB	1.99	0.43
1:1:4:MET:O	1:1:14:LEU:HD12	2.19	0.43
2:2:3:ILE:HD13	2:2:46:ALA:HB2	2.00	0.43
4:4:69:ARG:CA	11:D:90:ARG:NH1	2.82	0.43
4:4:72:TYR:HH	4:4:109:LYS:HE3	1.80	0.43
4:4:118:ILE:HG12	4:4:124:LYS:HG3	2.01	0.43
5:5:51:ASP:CG	5:5:95:LEU:HD22	2.43	0.43
5:5:135:PHE:HB2	5:5:167:ARG:NH2	2.33	0.43
5:5:135:PHE:HB2	5:5:167:ARG:HH12	1.84	0.43
8:A:48:LYS:HD2	8:A:195:ASN:HA	2.00	0.43
8:A:81:MET:SD	8:A:143:PHE:HE2	2.36	0.43
9:B:117:ILE:HG22	9:B:130:PHE:HE2	1.83	0.43
12:E:163:THR:HB	12:E:165:TYR:CE1	2.53	0.43
13:F:31:GLN:HA	20:M:430:VAL:HG11	1.93	0.43
13:F:49:LEU:HD23	13:F:51:ARG:CZ	2.49	0.43
14:G:69:VAL:HG11	14:G:111:PHE:CE1	2.53	0.43
15:H:271:PHE:CZ	15:H:273:ARG:NH2	2.87	0.43
18:K:194:GLN:CD	18:K:196:ASP:HB2	2.43	0.43
18:K:294:ARG:NH1	18:K:298:GLU:HB2	2.33	0.43
19:L:186:LEU:HD23	19:L:387:ASN:OD1	2.17	0.43
19:L:259:SER:HB3	19:L:303:ARG:NH1	2.33	0.43
20:M:228:LYS:CE	20:M:326:ALA:HB1	2.45	0.43
21:N:208:ARG:CG	21:N:232:LEU:HD13	2.48	0.43
21:N:307:LYS:NZ	21:N:345:ASP:OD2	2.50	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:103:LYS:CA	22:O:129:ILE:HD11	2.43	0.43
23:P:425:HIS:NE2	28:U:225:ILE:HA	2.33	0.43
24:Q:90:LYS:HZ1	24:Q:129:LYS:HD3	1.83	0.43
25:R:32:LEU:CD2	25:R:318:PRO:HA	2.48	0.43
25:R:252:TYR:CD1	25:R:321:TYR:CB	2.98	0.43
26:S:197:SER:O	26:S:198:SER:HB3	2.19	0.43
27:T:59:LYS:HZ3	27:T:97:SER:HA	1.83	0.43
28:U:123:VAL:CG1	28:U:125:VAL:HG13	2.49	0.43
29:V:111:HIS:CD2	29:V:140:VAL:HG21	2.51	0.43
33:Z:138:ARG:NE	33:Z:203:LEU:HD11	2.34	0.43
33:Z:427:GLN:O	33:Z:428:TRP:HB2	2.19	0.43
1:1:59:VAL:HG21	1:1:82:PHE:CD1	2.53	0.43
3:3:61:LYS:HZ3	3:3:85:SER:HB3	1.83	0.43
6:6:193:LEU:HB2	6:6:210:LEU:HD11	2.01	0.43
7:7:129:TYR:CE2	7:7:134:LEU:CD2	3.01	0.43
11:D:144:GLU:HA	11:D:145:PRO:HD3	1.64	0.43
12:E:165:TYR:CG	12:E:167:TYR:OH	2.71	0.43
12:E:241:LYS:O	12:E:244:LYS:HG2	2.19	0.43
15:H:175:GLY:HA2	15:H:183:ILE:HB	1.94	0.43
15:H:393:SER:HB2	15:H:404:TRP:CZ2	2.53	0.43
16:I:148:LEU:HD11	17:J:95:ILE:HG22	1.99	0.43
16:I:380:LEU:HD13	16:I:416:PHE:HB3	2.00	0.43
16:I:433:GLU:O	16:I:436:TYR:CE2	2.71	0.43
17:J:324:ARG:NH2	17:J:352:GLY:N	2.61	0.43
19:L:181:ASP:OD1	19:L:182:GLY:N	2.52	0.43
21:N:716:GLN:HG3	21:N:718:GLU:H	1.84	0.43
22:O:303:LYS:HZ3	28:U:234:ASN:ND2	2.14	0.43
25:R:259:PHE:HD2	25:R:329:PHE:CE1	2.29	0.43
25:R:357:PHE:CD1	25:R:357:PHE:N	2.87	0.43
27:T:226:TRP:NE1	27:T:235:PHE:CE2	2.85	0.43
28:U:35:GLY:HA3	28:U:93:TYR:CG	2.53	0.43
33:Z:192:GLY:O	33:Z:193:PHE:CB	2.64	0.43
33:Z:862:MET:HG2	33:Z:910:PRO:HA	1.99	0.43
5:5:135:PHE:HB2	5:5:167:ARG:CZ	2.49	0.43
7:7:169:ILE:CG2	7:7:189:LEU:HD11	2.48	0.43
8:A:69:VAL:HA	14:G:157:TRP:CZ3	2.54	0.43
8:A:96:ARG:HH12	8:A:137:LEU:HD11	1.82	0.43
10:C:45:VAL:HG21	10:C:189:ALA:HB3	1.98	0.43
15:H:389:PHE:HE1	15:H:422:VAL:HB	1.84	0.43
16:I:340:ARG:HH12	16:I:343:ARG:CD	2.17	0.43
18:K:393:ARG:HD2	18:K:410:ALA:HB1	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:221:TYR:HE1	20:M:346:LYS:HG2	1.81	0.43
20:M:312:LEU:HD11	20:M:323:VAL:HG21	2.00	0.43
20:M:385:GLU:O	20:M:426:LYS:HD2	2.18	0.43
21:N:310:ASP:OD1	21:N:312:GLY:N	2.48	0.43
21:N:383:LYS:CA	21:N:412:TYR:OH	2.65	0.43
21:N:433:THR:CB	21:N:439:VAL:HG21	2.49	0.43
22:O:69:PHE:CZ	22:O:77:SER:CB	3.02	0.43
22:O:344:VAL:CB	23:P:361:THR:HG23	2.42	0.43
27:T:149:ASP:HA	27:T:152:LEU:HD12	2.00	0.43
28:U:142:GLN:O	28:U:142:GLN:HG3	2.19	0.43
28:U:283:ARG:CZ	29:V:284:ALA:CA	2.83	0.43
31:X:41:GLU:HG3	31:X:45:PHE:N	2.33	0.43
31:X:111:LEU:HD23	31:X:115:SER:HA	2.00	0.43
33:Z:546:ILE:HG21	33:Z:566:LEU:CD2	2.48	0.43
33:Z:985:LYS:HD2	33:Z:991:GLU:OE2	2.18	0.43
6:6:63:VAL:O	6:6:67:HIS:CD2	2.66	0.43
7:7:143:ALA:O	7:7:146:LEU:HB2	2.18	0.43
10:C:208:TYR:CD2	10:C:236:LYS:HG2	2.54	0.43
11:D:176:GLU:HG2	12:E:58:LEU:CD1	2.49	0.43
19:L:174:GLU:HG2	19:L:175:GLN:HE22	1.77	0.43
22:O:270:ILE:HG22	22:O:271:LYS:HG2	2.01	0.43
23:P:241:LEU:CD1	23:P:264:ILE:HG12	2.45	0.43
23:P:337:HIS:O	23:P:341:LEU:HG	2.18	0.43
23:P:360:ILE:HD12	23:P:365:LEU:HD13	2.01	0.43
25:R:171:MET:SD	25:R:194:VAL:CG2	2.99	0.43
25:R:422:ARG:NH2	26:S:299:LYS:HB2	2.34	0.43
27:T:48:ASN:OD1	27:T:50:ILE:HB	2.19	0.43
28:U:18:ALA:HB2	28:U:93:TYR:CE2	2.53	0.43
28:U:230:GLN:HG3	28:U:231:ASP:N	2.32	0.43
28:U:283:ARG:NE	29:V:287:THR:HB	2.33	0.43
33:Z:61:SER:OG	33:Z:111:LEU:HD11	2.19	0.43
33:Z:333:GLY:O	33:Z:334:LYS:HB2	2.19	0.43
8:A:119:LYS:CG	8:A:163:TYR:CE2	2.94	0.43
11:D:96:HIS:CE1	11:D:100:LEU:HD12	2.46	0.43
12:E:143:LEU:HG	12:E:172:ILE:HD13	1.99	0.43
13:F:123:TYR:C	13:F:123:TYR:HD1	2.23	0.43
15:H:389:PHE:CE1	15:H:422:VAL:HB	2.54	0.43
15:H:420:ARG:HE	16:I:342:GLY:HA3	1.83	0.43
18:K:67:TYR:CD2	21:N:572:LEU:HB3	2.53	0.43
19:L:197:ILE:O	19:L:201:LEU:HG	2.18	0.43
19:L:357:ARG:HB3	19:L:361:PHE:CE2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:77:TYR:CE2	20:M:79:VAL:CG1	3.02	0.43
20:M:256:ILE:O	20:M:258:GLU:N	2.51	0.43
21:N:325:PHE:HA	29:V:182:LYS:CD	2.48	0.43
21:N:721:ASP:O	21:N:897:LYS:NZ	2.52	0.43
22:O:26:PHE:HD1	22:O:61:LEU:HG	1.82	0.43
22:O:380:LEU:HD22	28:U:259:ASN:HD22	1.84	0.43
24:Q:14:LEU:HD12	24:Q:26:VAL:CG2	2.23	0.43
24:Q:51:ARG:NH2	24:Q:92:LYS:CG	2.82	0.43
24:Q:298:ALA:CB	24:Q:325:LEU:HD22	2.48	0.43
27:T:10:SER:O	27:T:13:ILE:HG22	2.19	0.43
27:T:110:LEU:O	27:T:114:LEU:HG	2.18	0.43
33:Z:64:TYR:OH	33:Z:115:LEU:CD2	2.64	0.43
33:Z:99:LEU:HD22	33:Z:115:LEU:HD21	1.99	0.43
33:Z:193:PHE:HE2	33:Z:200:THR:CG2	2.29	0.43
33:Z:205:LEU:HA	33:Z:232:LYS:HD3	2.00	0.43
33:Z:377:ALA:HB2	33:Z:411:LYS:HD3	2.00	0.43
33:Z:610:GLY:O	33:Z:748:LEU:CG	2.66	0.43
33:Z:889:VAL:CG2	33:Z:890:SER:N	2.82	0.43
33:Z:890:SER:CB	33:Z:891:PRO:HD3	2.45	0.43
1:1:38:HIS:HB3	1:1:41:ILE:HB	2.00	0.43
4:4:33:LYS:C	4:4:34:THR:HG23	2.44	0.43
5:5:124:GLY:N	5:5:127:PHE:CZ	2.86	0.43
6:6:138:MET:HB3	6:6:139:PRO:HD3	2.00	0.43
7:7:68:TYR:O	7:7:69:ASP:HB2	2.19	0.43
8:A:46:ARG:CZ	8:A:152:PRO:O	2.67	0.43
15:H:168:ILE:HG12	15:H:186:PRO:HB3	2.01	0.43
15:H:305:ILE:CG2	15:H:352:MET:SD	3.07	0.43
15:H:430:ALA:HB1	15:H:435:ARG:HB2	2.01	0.43
18:K:96:ILE:HG13	19:L:128:ILE:HG13	2.01	0.43
18:K:303:MET:HE2	18:K:314:VAL:HG11	2.01	0.43
21:N:406:TYR:CE1	21:N:448:LEU:CB	3.01	0.43
21:N:482:ALA:HB1	21:N:517:LEU:HD23	2.01	0.43
23:P:299:LEU:O	23:P:303:PHE:CD2	2.71	0.43
24:Q:356:CYS:SG	24:Q:398:TYR:CE1	3.07	0.43
24:Q:415:LEU:HD21	28:U:278:ILE:CG2	2.48	0.43
25:R:194:VAL:CG2	25:R:199:GLU:CD	2.92	0.43
25:R:301:TYR:HA	25:R:304:TYR:HB3	2.01	0.43
33:Z:422:ILE:HD11	33:Z:436:LEU:HD21	2.01	0.43
1:1:122:LEU:HB3	1:1:123:PRO:HD2	2.01	0.42
4:4:11:SER:CB	4:4:182:ILE:CG2	2.94	0.42
8:A:43:LEU:C	8:A:43:LEU:HD12	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:68:THR:O	14:G:157:TRP:CZ3	2.72	0.42
8:A:158:ASP:C	8:A:158:ASP:OD1	2.60	0.42
9:B:132:VAL:HG22	9:B:133:SER:N	2.33	0.42
10:C:176:LEU:CD2	10:C:196:THR:HG21	2.49	0.42
13:F:171:TYR:CE1	13:F:196:ALA:HB2	2.53	0.42
17:J:37:LYS:CG	18:K:58:TYR:CE1	3.01	0.42
17:J:156:GLN:HG2	17:J:160:ILE:CG1	2.49	0.42
24:Q:351:ILE:HG22	24:Q:362:ILE:HD11	2.00	0.42
25:R:110:ILE:CG2	25:R:114:ASN:HD21	2.32	0.42
28:U:19:LEU:HD13	29:V:209:GLU:HG3	2.00	0.42
30:W:162:ASN:O	30:W:163:ASN:ND2	2.52	0.42
33:Z:68:LEU:HD13	33:Z:114:SER:HB2	2.01	0.42
33:Z:568:LEU:HG	33:Z:738:TYR:OH	2.18	0.42
33:Z:581:VAL:CG2	33:Z:603:VAL:CG1	2.97	0.42
33:Z:889:VAL:HG11	33:Z:892:SER:HB3	2.01	0.42
2:2:33:LYS:O	2:2:35:HIS:CD2	2.72	0.42
2:2:57:GLN:HB3	9:B:99:ARG:HD3	2.01	0.42
3:3:76:GLU:HA	3:3:111:PHE:CZ	2.54	0.42
7:7:42:VAL:CG2	7:7:192:ILE:HD11	2.49	0.42
9:B:141:GLU:OE2	9:B:231:LYS:HD2	2.19	0.42
10:C:34:THR:OG1	10:C:167:ALA:O	2.31	0.42
10:C:133:VAL:HG13	10:C:135:PHE:CE1	2.54	0.42
15:H:430:ALA:CA	15:H:435:ARG:HH21	2.28	0.42
16:I:252:LEU:CD2	16:I:263:LEU:HD21	2.49	0.42
17:J:167:PRO:CA	17:J:174:PHE:CZ	2.93	0.42
18:K:99:PHE:CE2	18:K:102:PRO:HD3	2.54	0.42
19:L:75:LYS:HA	19:L:78:ARG:HH21	1.83	0.42
19:L:173:PHE:HE1	19:L:176:GLY:C	2.28	0.42
19:L:174:GLU:O	19:L:175:GLN:HB2	2.19	0.42
19:L:227:GLY:CA	20:M:339:ARG:NH2	2.82	0.42
19:L:269:TYR:CZ	19:L:273:HIS:CD2	3.06	0.42
21:N:13:LEU:HD12	21:N:21:LYS:HD3	2.00	0.42
21:N:420:THR:C	21:N:424:LYS:HZ3	2.27	0.42
21:N:675:VAL:HA	21:N:678:ILE:HD12	2.01	0.42
22:O:30:GLU:OE2	22:O:58:ARG:HD3	2.19	0.42
22:O:185:PHE:CD1	22:O:279:ILE:CD1	3.02	0.42
22:O:210:ARG:HH22	22:O:242:ILE:CG1	2.32	0.42
22:O:226:LYS:HB3	22:O:226:LYS:HZ3	1.84	0.42
23:P:60:ALA:HA	23:P:96:MET:CE	2.49	0.42
24:Q:149:LYS:HG2	24:Q:149:LYS:O	2.19	0.42
25:R:93:LYS:CG	25:R:94:PHE:N	2.81	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:284:LEU:HD13	26:S:382:ARG:NH2	2.34	0.42
28:U:19:LEU:HD22	28:U:20:ASP:OD1	2.19	0.42
31:X:93:SER:CB	31:X:96:ARG:NH2	2.82	0.42
33:Z:506:LEU:HD23	33:Z:506:LEU:O	2.20	0.42
1:1:157:HIS:NE2	1:1:161:GLN:NE2	2.67	0.42
3:3:42:LEU:HD22	3:3:78:PHE:CZ	2.38	0.42
3:3:44:ILE:HG12	3:3:98:PRO:CA	2.48	0.42
3:3:172:SER:O	3:3:193:MET:HE1	2.18	0.42
4:4:95:ARG:HH21	5:5:92:GLY:HA3	1.83	0.42
5:5:116:ASP:C	5:5:116:ASP:OD1	2.62	0.42
10:C:92:ARG:O	10:C:95:ALA:HB3	2.19	0.42
11:D:104:VAL:HG11	11:D:109:LEU:CD1	2.49	0.42
13:F:154:THR:CG2	13:F:156:LEU:HD11	2.49	0.42
18:K:236:ARG:HE	19:L:310:THR:HG23	1.85	0.42
19:L:74:LEU:HD11	20:M:47:GLU:HB3	2.00	0.42
21:N:12:LEU:HD11	27:T:40:LEU:HB3	2.01	0.42
21:N:314:LEU:CD1	21:N:336:ASN:OD1	2.67	0.42
22:O:62:TYR:CE2	22:O:82:LEU:CD1	3.01	0.42
22:O:117:ASN:ND2	22:O:167:ILE:HA	2.29	0.42
23:P:127:GLU:CD	23:P:130:ILE:HG22	2.45	0.42
24:Q:71:LYS:NZ	24:Q:72:ASP:OD1	2.50	0.42
24:Q:90:LYS:CD	24:Q:129:LYS:HE2	2.46	0.42
24:Q:223:GLY:HA3	24:Q:239:PHE:CZ	2.54	0.42
25:R:139:GLU:O	25:R:143:GLN:HG2	2.19	0.42
25:R:158:LEU:HD13	25:R:170:VAL:HG23	2.01	0.42
25:R:382:ASP:HB2	26:S:399:TYR:HB3	2.01	0.42
25:R:422:ARG:HH21	26:S:299:LYS:HG3	1.84	0.42
26:S:185:PHE:CD1	26:S:239:ARG:CD	3.03	0.42
26:S:421:TYR:CE2	27:T:158:GLN:HB2	2.53	0.42
27:T:25:LYS:C	27:T:28:PRO:HD2	2.45	0.42
28:U:5:HIS:CE1	28:U:6:GLU:O	2.71	0.42
28:U:38:LEU:HD21	28:U:52:PHE:HE1	1.83	0.42
29:V:261:LEU:HD13	29:V:283:THR:HG22	2.00	0.42
33:Z:741:LEU:CD2	33:Z:782:ILE:HD12	2.48	0.42
1:1:31:THR:O	1:1:174:ARG:HD2	2.18	0.42
3:3:75:PRO:HB3	3:3:111:PHE:CD2	2.49	0.42
7:7:93:TYR:O	7:7:96:ARG:HG2	2.19	0.42
15:H:152:ILE:O	15:H:152:ILE:HG22	2.18	0.42
15:H:184:GLU:HG2	15:H:185:LEU:HG	2.00	0.42
19:L:365:THR:OG1	19:L:376:PHE:CE1	2.55	0.42
22:O:161:ASP:O	22:O:162:SER:HB2	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:345:ASN:ND2	23:P:359:ARG:HD2	2.34	0.42
26:S:439:GLU:OE1	26:S:439:GLU:N	2.53	0.42
27:T:41:ILE:HG23	27:T:43:ASP:H	1.83	0.42
29:V:279:HIS:O	29:V:283:THR:N	2.42	0.42
30:W:41:ARG:CZ	30:W:67:ALA:C	2.92	0.42
31:X:46:TRP:HH2	31:X:131:ASN:CB	2.33	0.42
31:X:69:ILE:H	31:X:73:THR:HG21	1.83	0.42
4:4:129:TYR:CD2	4:4:143:LEU:HD13	2.55	0.42
6:6:65:TRP:CZ2	13:F:93:ASN:ND2	2.86	0.42
7:7:5:SER:OG	7:7:119:LEU:HD11	2.19	0.42
9:B:64:VAL:HG22	9:B:74:VAL:HG12	2.02	0.42
12:E:52:LYS:HE2	12:E:217:ALA:C	2.45	0.42
12:E:178:GLY:H	15:H:409:ARG:HH12	1.66	0.42
14:G:146:HIS:HB3	14:G:148:TYR:HE1	0.84	0.42
16:I:398:GLU:OE1	16:I:419:ALA:HB1	2.20	0.42
17:J:48:ARG:HD3	18:K:68:ILE:HG23	2.00	0.42
17:J:250:ILE:HA	17:J:299:ILE:HD11	2.01	0.42
18:K:96:ILE:HD11	19:L:118:ILE:HG12	2.01	0.42
19:L:135:VAL:HB	19:L:158:ILE:CD1	2.49	0.42
19:L:328:ASN:HD22	19:L:329:ARG:CG	2.28	0.42
21:N:25:LEU:CD1	21:N:57:ASP:HB3	2.43	0.42
21:N:414:GLY:HA3	21:N:728:LYS:HZ1	1.82	0.42
21:N:455:MET:HG2	21:N:487:LEU:O	2.19	0.42
21:N:555:ILE:O	21:N:559:TYR:HD2	2.03	0.42
21:N:641:LEU:HB2	21:N:660:LEU:CD2	2.48	0.42
22:O:345:ASN:HD21	23:P:359:ARG:NH1	2.17	0.42
23:P:114:THR:O	23:P:118:VAL:HG23	2.19	0.42
23:P:181:LEU:HD12	23:P:223:LEU:CD1	2.49	0.42
23:P:207:THR:CB	23:P:217:LYS:CE	2.95	0.42
24:Q:419:LEU:C	24:Q:419:LEU:CD2	2.88	0.42
25:R:191:LEU:HD12	25:R:210:TYR:CE1	2.55	0.42
25:R:372:ILE:HD11	25:R:381:ILE:HG12	2.00	0.42
29:V:36:LYS:HB3	29:V:68:VAL:HG12	2.01	0.42
31:X:12:ALA:HB3	31:X:33:ILE:CG2	2.49	0.42
33:Z:329:ILE:HG12	33:Z:334:LYS:O	2.20	0.42
33:Z:768:GLY:O	33:Z:769:ASN:HB3	2.19	0.42
1:1:138:CYS:O	1:1:142:PHE:HB2	2.20	0.42
2:2:188:ARG:H	9:B:227:ILE:HD12	1.84	0.42
5:5:80:SER:HA	5:5:101:ILE:CD1	2.50	0.42
8:A:104:PHE:CE2	8:A:112:MET:HA	2.55	0.42
8:A:127:ILE:O	8:A:131:ARG:HG3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:165:TYR:OH	20:M:434:ALA:HB3	2.19	0.42
15:H:279:LEU:O	15:H:281:GLN:N	2.52	0.42
17:J:111:GLN:CG	17:J:125:VAL:HG13	2.50	0.42
18:K:244:HIS:CE1	18:K:250:GLY:N	2.87	0.42
18:K:309:SER:O	18:K:310:THR:HB	2.20	0.42
20:M:186:LEU:CB	20:M:231:LEU:HD21	2.49	0.42
21:N:309:ILE:HD12	21:N:340:HIS:HD2	1.83	0.42
21:N:376:LYS:HA	21:N:411:ILE:HG12	2.02	0.42
22:O:230:PHE:HD1	22:O:251:LEU:HD12	1.83	0.42
22:O:254:LEU:HA	22:O:269:LEU:HD11	2.00	0.42
23:P:34:SER:O	23:P:38:GLN:HB2	2.19	0.42
24:Q:24:GLU:O	24:Q:28:LEU:HG	2.19	0.42
24:Q:27:TYR:OH	24:Q:54:GLN:CG	2.62	0.42
24:Q:115:ILE:HD11	24:Q:148:LYS:HD2	2.01	0.42
26:S:320:ILE:HD13	26:S:323:LEU:HD12	2.00	0.42
27:T:59:LYS:CD	27:T:97:SER:HA	2.49	0.42
28:U:22:TYR:CE1	28:U:27:THR:CG2	3.02	0.42
30:W:9:VAL:HG22	30:W:52:ILE:HD11	2.01	0.42
33:Z:850:LEU:CD2	33:Z:901:PHE:CE1	3.02	0.42
33:Z:985:LYS:HB2	33:Z:991:GLU:CG	2.50	0.42
1:1:-5:GLU:N	2:2:116:HIS:ND1	2.67	0.42
3:3:1:GLY:HA3	3:3:33:LYS:HZ3	1.84	0.42
4:4:81:SER:N	4:4:124:LYS:HZ2	2.13	0.42
5:5:124:GLY:CA	5:5:127:PHE:CZ	3.03	0.42
10:C:33:GLY:HA3	10:C:65:LYS:HZ1	1.83	0.42
12:E:52:LYS:HE2	12:E:218:GLN:HB2	2.02	0.42
15:H:166:THR:O	15:H:166:THR:HG22	2.20	0.42
15:H:224:VAL:HG22	15:H:243:PRO:HG2	2.02	0.42
17:J:350:MET:CG	17:J:386:VAL:HG22	2.49	0.42
19:L:109:MET:HE3	19:L:120:LYS:HB3	2.01	0.42
19:L:354:GLU:HG2	19:L:357:ARG:NH2	2.35	0.42
20:M:197:ILE:C	20:M:200:PRO:HD2	2.45	0.42
21:N:142:GLU:O	21:N:146:LYS:HG3	2.19	0.42
21:N:510:HIS:HD1	21:N:512:ASN:N	2.17	0.42
22:O:5:HIS:HE1	22:O:27:GLU:OE1	2.02	0.42
23:P:196:ALA:CB	23:P:227:ILE:CD1	2.91	0.42
23:P:319:GLU:O	23:P:323:ASN:CG	2.62	0.42
24:Q:61:LEU:HD13	24:Q:65:TYR:HE2	1.81	0.42
27:T:224:ARG:O	27:T:225:ASN:ND2	2.52	0.42
28:U:92:TRP:CD1	28:U:119:LEU:C	2.97	0.42
31:X:47:ASP:OD2	31:X:65:SER:HB3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:66:LEU:HD21	31:X:91:PHE:HZ	1.84	0.42
33:Z:916:LEU:HD22	33:Z:921:GLU:C	2.45	0.42
5:5:8:PHE:HE1	5:5:12:ILE:C	2.27	0.42
5:5:76:VAL:HG12	5:5:113:TYR:CD1	2.53	0.42
6:6:152:GLU:HB2	6:6:161:LYS:HG3	2.02	0.42
10:C:54:SER:H	10:C:59:GLN:HE21	1.67	0.42
12:E:219:LEU:HB2	12:E:231:TYR:HD2	1.85	0.42
13:F:78:ALA:HB3	13:F:79:PRO:HD3	2.02	0.42
14:G:183:PRO:O	14:G:184:GLU:HG2	2.20	0.42
15:H:304:CYS:SG	15:H:349:ILE:HG12	2.60	0.42
15:H:441:LYS:O	15:H:445:LYS:HG3	2.19	0.42
16:I:188:GLU:HA	16:I:191:ILE:HD12	2.02	0.42
16:I:196:GLU:CD	16:I:200:LEU:HD23	2.45	0.42
18:K:122:ILE:HD12	18:K:127:ASP:HA	2.01	0.42
20:M:309:LEU:HD22	20:M:342:ARG:CG	2.49	0.42
20:M:361:LEU:C	20:M:376:TRP:CE2	2.98	0.42
21:N:361:ASN:ND2	21:N:399:PHE:CZ	2.87	0.42
21:N:641:LEU:CB	21:N:660:LEU:CD2	2.96	0.42
22:O:258:LEU:HB3	22:O:291:ILE:CG1	2.49	0.42
22:O:261:GLY:HA3	22:O:288:ARG:HH12	1.85	0.42
24:Q:24:GLU:OE2	24:Q:77:PHE:CE2	2.55	0.42
24:Q:429:LYS:HG2	28:U:292:ILE:CG2	2.49	0.42
25:R:34:THR:O	25:R:70:TYR:CE1	2.73	0.42
25:R:312:TYR:HE2	32:Y:73:PHE:CD1	2.33	0.42
27:T:82:PHE:HB2	27:T:109:TYR:HE1	1.64	0.42
27:T:135:ASN:O	27:T:142:LEU:HD12	2.19	0.42
29:V:251:TYR:O	29:V:255:ILE:HG12	2.18	0.42
29:V:280:LEU:HA	29:V:283:THR:HB	2.01	0.42
30:W:58:ASN:HA	30:W:59:PRO:HD3	1.61	0.42
31:X:75:TRP:CZ3	31:X:125:MET:HB3	2.55	0.42
33:Z:188:ALA:O	33:Z:193:PHE:HD2	2.02	0.42
33:Z:237:VAL:CG1	33:Z:245:VAL:HG12	2.40	0.42
33:Z:321:PHE:CE2	33:Z:351:PRO:N	2.87	0.42
1:1:138:CYS:HA	1:1:154:PHE:CZ	2.54	0.42
2:2:8:PHE:CE1	2:2:12:VAL:CA	3.02	0.42
4:4:37:LEU:HA	4:4:60:GLN:HE22	1.85	0.42
4:4:95:ARG:HH21	5:5:92:GLY:C	2.27	0.42
6:6:77:ILE:HD11	6:6:102:ILE:HD12	2.02	0.42
8:A:64:LEU:C	8:A:64:LEU:HD23	2.44	0.42
9:B:37:ILE:HD11	9:B:175:LEU:CD2	2.49	0.42
10:C:78:ALA:HB3	10:C:165:VAL:HG23	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:32:CYS:SG	11:D:166:ARG:HB3	2.59	0.42
12:E:143:LEU:HD23	12:E:157:HIS:ND1	2.34	0.42
13:F:15:PRO:HG3	14:G:25:TYR:CZ	2.55	0.42
14:G:24:GLU:O	14:G:28:LYS:HG3	2.20	0.42
14:G:217:TRP:C	14:G:217:TRP:CD1	2.98	0.42
15:H:420:ARG:NE	16:I:343:ARG:NH1	2.68	0.42
16:I:252:LEU:HD22	16:I:263:LEU:HD23	2.00	0.42
16:I:262:ARG:CG	17:J:223:ILE:HD12	2.50	0.42
17:J:182:PRO:O	17:J:286:LYS:NZ	2.45	0.42
17:J:238:ARG:HA	17:J:288:ILE:HD11	2.01	0.42
18:K:207:ARG:NE	18:K:307:ASP:O	2.53	0.42
18:K:347:ARG:CD	24:Q:215:VAL:HG13	2.49	0.42
19:L:309:LEU:HD23	19:L:342:ARG:CD	2.21	0.42
19:L:392:ARG:HH21	20:M:339:ARG:HG3	1.85	0.42
21:N:14:ARG:CZ	21:N:42:GLU:OE1	2.68	0.42
21:N:21:LYS:HE3	21:N:49:LEU:HD21	2.02	0.42
21:N:123:PHE:CZ	21:N:129:ILE:HB	2.55	0.42
22:O:292:CYS:SG	22:O:317:THR:OG1	2.72	0.42
23:P:263:HIS:NE2	23:P:327:LEU:HB2	2.35	0.42
24:Q:197:SER:O	24:Q:200:ALA:HB3	2.20	0.42
25:R:199:GLU:CB	25:R:206:ARG:HE	2.28	0.42
26:S:142:VAL:HA	26:S:145:PHE:CE2	2.54	0.42
27:T:90:PHE:O	27:T:91:SER:HB3	2.20	0.42
28:U:97:PRO:CG	28:U:100:ARG:HH21	2.31	0.42
29:V:24:LYS:NZ	29:V:197:TYR:HE2	2.09	0.42
29:V:106:GLY:C	29:V:107:TRP:HD1	2.26	0.42
33:Z:49:LEU:HD11	33:Z:55:ARG:NH2	2.34	0.42
33:Z:276:ASN:O	33:Z:277:GLU:HB2	2.18	0.42
33:Z:889:VAL:H	33:Z:894:MET:HE3	1.82	0.42
5:5:9:GLN:HA	5:5:146:TRP:CZ2	2.54	0.42
5:5:174:SER:HA	5:5:193:VAL:HG13	2.02	0.42
11:D:179:TYR:CE1	11:D:184:PRO:CB	3.03	0.42
12:E:157:HIS:CD2	12:E:170:LYS:CE	3.03	0.42
15:H:410:LEU:HB3	15:H:447:VAL:HG11	2.02	0.42
17:J:336:ASN:CG	25:R:204:TRP:CD1	2.96	0.42
20:M:71:ASN:HB3	29:V:75:GLY:HA3	2.02	0.42
20:M:170:MET:CB	20:M:244:LEU:HD11	2.30	0.42
21:N:246:LYS:HE2	21:N:282:TYR:CB	2.50	0.42
21:N:280:GLN:HG3	21:N:282:TYR:H	1.85	0.42
22:O:83:LEU:CD1	22:O:128:LEU:CD2	2.82	0.42
22:O:116:ASN:HD22	22:O:121:ASP:CB	2.31	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:185:PHE:HB3	22:O:223:LEU:HB2	2.01	0.42
22:O:202:SER:C	22:O:203:THR:HG22	2.39	0.42
22:O:277:ILE:CG2	22:O:279:ILE:CA	2.82	0.42
22:O:304:ASN:HB3	22:O:352:TRP:CD1	2.55	0.42
24:Q:115:ILE:HG13	24:Q:144:LEU:HD13	2.02	0.42
26:S:468:ALA:O	26:S:472:HIS:CB	2.66	0.42
27:T:198:ASP:O	27:T:199:PHE:CD1	2.73	0.42
28:U:158:PRO:O	28:U:159:CYS:CB	2.62	0.42
1:1:-5:GLU:N	2:2:116:HIS:CE1	2.86	0.41
5:5:126:ILE:HG23	5:5:140:LEU:HD21	2.02	0.41
7:7:19:LEU:HD21	7:7:21:SER:OG	2.20	0.41
11:D:31:THR:OG1	11:D:47:GLU:HB2	2.19	0.41
15:H:168:ILE:CD1	15:H:186:PRO:HB2	2.50	0.41
16:I:118:ALA:O	16:I:130:VAL:HG22	2.20	0.41
16:I:250:SER:HA	16:I:253:ILE:CD1	2.50	0.41
18:K:155:ASP:C	19:L:126:ARG:CZ	2.91	0.41
18:K:304:ASP:HB2	18:K:333:ARG:NH2	2.34	0.41
19:L:111:GLU:CG	19:L:117:TYR:CD2	2.94	0.41
19:L:198:GLU:HG3	19:L:239:ILE:HD11	2.01	0.41
19:L:372:GLY:O	19:L:374:PHE:CD1	2.73	0.41
21:N:479:GLU:CG	21:N:512:ASN:OD1	2.68	0.41
21:N:782:PHE:CE1	21:N:875:LEU:HD22	2.50	0.41
22:O:88:ASP:OD2	22:O:206:THR:HG21	2.20	0.41
23:P:180:ILE:CG2	23:P:184:MET:HE3	2.50	0.41
23:P:241:LEU:HD13	23:P:264:ILE:CG1	2.46	0.41
25:R:352:SER:O	25:R:357:PHE:CD1	2.73	0.41
25:R:415:GLN:CD	26:S:471:LEU:HD21	2.40	0.41
28:U:92:TRP:CD1	28:U:92:TRP:N	2.88	0.41
28:U:127:GLN:CG	29:V:212:MET:HB3	2.50	0.41
33:Z:126:TYR:O	33:Z:127:SER:HB3	2.16	0.41
33:Z:357:ILE:HG12	33:Z:960:GLY:CA	2.47	0.41
4:4:179:ILE:HG21	4:4:190:GLN:NE2	2.35	0.41
5:5:83:LEU:HD11	5:5:97:MET:SD	2.60	0.41
8:A:199:TRP:HH2	8:A:244:ARG:HH11	1.68	0.41
14:G:107:PRO:HD2	14:G:110:ALA:CB	2.50	0.41
15:H:211:VAL:HA	15:H:218:ILE:CD1	2.50	0.41
16:I:290:LYS:HB3	16:I:335:ASP:OD2	2.19	0.41
18:K:99:PHE:CZ	18:K:102:PRO:CD	3.04	0.41
19:L:82:ARG:NH1	19:L:86:LYS:NZ	2.69	0.41
20:M:189:GLN:OE1	20:M:189:GLN:N	2.47	0.41
20:M:361:LEU:CB	20:M:376:TRP:CE2	2.94	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:246:LYS:HZ1	21:N:280:GLN:HB2	1.83	0.41
22:O:69:PHE:CZ	22:O:77:SER:HB3	2.55	0.41
22:O:117:ASN:HB3	22:O:166:ARG:HB3	2.01	0.41
24:Q:237:SER:O	24:Q:240:PHE:HB3	2.19	0.41
24:Q:412:ALA:HB2	25:R:400:TYR:CE1	2.51	0.41
25:R:292:LEU:CD2	25:R:307:TYR:HB3	2.49	0.41
26:S:182:LYS:HE3	26:S:309:PHE:CE2	2.56	0.41
26:S:208:ILE:HG23	26:S:209:ILE:N	2.34	0.41
29:V:44:GLY:HA3	29:V:49:VAL:HG22	2.02	0.41
30:W:69:PHE:O	30:W:73:LEU:HG	2.20	0.41
30:W:152:GLU:O	30:W:155:ASP:HB2	2.20	0.41
33:Z:534:PHE:O	33:Z:573:LEU:HD22	2.19	0.41
33:Z:809:MET:SD	33:Z:893:PHE:HB2	2.61	0.41
33:Z:864:MET:O	33:Z:865:ASP:CG	2.63	0.41
5:5:12:ILE:O	5:5:179:HIS:HD2	2.03	0.41
5:5:61:SER:HA	5:5:64:ARG:NH2	2.36	0.41
6:6:-7:ASN:OD1	6:6:-5:TYR:HB2	2.20	0.41
8:A:87:ILE:HD13	14:G:157:TRP:CH2	2.55	0.41
9:B:139:HIS:CG	9:B:145:PHE:CE1	3.07	0.41
14:G:204:GLU:HA	14:G:207:LYS:CE	2.37	0.41
16:I:167:MET:HG2	16:I:270:VAL:HG11	2.00	0.41
16:I:176:SER:C	17:J:282:PHE:CE1	2.99	0.41
17:J:320:SER:O	17:J:324:ARG:HG3	2.20	0.41
18:K:152:PRO:HB3	18:K:259:ARG:HD2	2.02	0.41
18:K:280:LYS:HE2	18:K:325:ASP:OD2	2.19	0.41
19:L:163:THR:HG21	19:L:269:TYR:CD2	2.55	0.41
21:N:510:HIS:HD1	21:N:512:ASN:H	1.67	0.41
21:N:517:LEU:O	21:N:521:LEU:HG	2.20	0.41
24:Q:326:MET:HE2	24:Q:332:ARG:CD	2.48	0.41
24:Q:416:VAL:CG2	25:R:403:LEU:HD22	2.44	0.41
25:R:63:TYR:CZ	25:R:92:ILE:O	2.72	0.41
25:R:71:LEU:HD12	25:R:76:GLN:HB2	2.01	0.41
26:S:223:LEU:HD22	26:S:259:TYR:CE1	2.55	0.41
26:S:364:ILE:HG23	26:S:371:LEU:CD1	2.50	0.41
26:S:377:TYR:CD2	27:T:132:HIS:CD2	3.08	0.41
26:S:398:THR:OG1	26:S:402:ILE:HD11	2.20	0.41
28:U:32:ARG:NH1	28:U:103:ASP:OD1	2.46	0.41
31:X:75:TRP:CE2	31:X:125:MET:HG3	2.50	0.41
32:Y:83:ARG:O	32:Y:87:GLU:HG3	2.20	0.41
33:Z:189:ALA:O	33:Z:190:THR:HB	2.20	0.41
33:Z:214:HIS:O	33:Z:214:HIS:CG	2.72	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:322:GLU:HG2	33:Z:323:TYR:CD2	2.56	0.41
2:2:82:MET:C	2:2:86:HIS:HD2	2.22	0.41
2:2:104:ASP:OD1	2:2:104:ASP:C	2.62	0.41
2:2:213:LEU:HB2	3:3:192:LYS:HB2	2.03	0.41
11:D:9:SER:HA	11:D:19:GLN:CD	2.45	0.41
13:F:11:VAL:HG21	14:G:126:ASN:O	2.21	0.41
13:F:215:ILE:HG13	13:F:220:THR:CG2	2.45	0.41
15:H:318:ARG:HH11	15:H:364:ALA:HB3	1.85	0.41
15:H:414:SER:HA	15:H:418:GLU:OE2	2.20	0.41
16:I:266:GLN:NE2	17:J:223:ILE:HG21	2.35	0.41
17:J:374:ARG:HH11	17:J:378:THR:CG2	2.34	0.41
18:K:173:ASP:C	18:K:174:VAL:HG13	2.45	0.41
21:N:325:PHE:C	29:V:182:LYS:CG	2.94	0.41
22:O:356:ARG:CZ	22:O:362:GLN:HG3	2.48	0.41
24:Q:69:GLY:C	24:Q:71:LYS:H	2.28	0.41
25:R:30:ALA:O	25:R:34:THR:HG23	2.20	0.41
25:R:207:ARG:HH12	25:R:211:LYS:HZ2	1.65	0.41
27:T:35:ILE:HA	27:T:40:LEU:HD11	2.02	0.41
29:V:59:ASP:C	29:V:59:ASP:OD1	2.62	0.41
29:V:133:ASN:HD22	29:V:136:ALA:CB	2.32	0.41
29:V:168:LEU:HD12	29:V:182:LYS:HZ3	1.85	0.41
31:X:46:TRP:CH2	31:X:131:ASN:CB	3.03	0.41
33:Z:161:ILE:HD13	33:Z:207:ILE:HD11	2.00	0.41
33:Z:253:VAL:HG13	33:Z:264:PHE:HE2	1.86	0.41
33:Z:473:LEU:O	33:Z:477:TYR:CD2	2.72	0.41
33:Z:617:ILE:CD1	33:Z:747:ALA:HB2	2.50	0.41
1:1:35:THR:C	1:1:42:TRP:HE3	2.29	0.41
5:5:104:TYR:CD1	5:5:182:GLU:HA	2.56	0.41
8:A:205:PHE:CZ	8:A:209:HIS:NE2	2.88	0.41
10:C:98:TYR:CE1	10:C:106:ILE:N	2.88	0.41
10:C:198:SER:HA	10:C:206:LEU:HD22	2.03	0.41
11:D:208:LYS:HG2	11:D:226:SER:HB3	2.02	0.41
12:E:123:PHE:CD1	12:E:123:PHE:C	2.98	0.41
12:E:165:TYR:HB3	12:E:167:TYR:CZ	2.52	0.41
13:F:40:SER:HA	13:F:180:ILE:HA	2.02	0.41
14:G:197:LYS:HD3	14:G:241:PHE:HE2	1.83	0.41
18:K:244:HIS:CE1	18:K:250:GLY:H	2.39	0.41
18:K:268:ILE:HD13	18:K:313:LYS:HB2	2.03	0.41
21:N:406:TYR:CD1	21:N:448:LEU:CB	3.04	0.41
22:O:188:PHE:CD2	22:O:220:SER:CB	2.93	0.41
23:P:135:GLU:HG3	23:P:138:ARG:HH22	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:143:LEU:HG	23:P:147:LYS:HE3	2.02	0.41
23:P:269:VAL:HA	23:P:277:GLN:HE21	1.86	0.41
25:R:183:ASP:CG	25:R:184:GLN:H	2.28	0.41
26:S:134:ILE:HG22	26:S:138:MET:HE2	2.02	0.41
26:S:211:ARG:NE	26:S:240:ASP:CB	2.83	0.41
26:S:211:ARG:HE	26:S:240:ASP:CG	2.29	0.41
27:T:38:ASN:C	27:T:39:LEU:HG	2.45	0.41
27:T:68:ALA:O	27:T:72:THR:HG23	2.21	0.41
28:U:141:GLU:HG2	28:U:142:GLN:N	2.35	0.41
29:V:108:TYR:C	29:V:109:HIS:CG	2.98	0.41
30:W:143:ASN:CG	30:W:173:THR:HA	2.44	0.41
33:Z:64:TYR:CE1	33:Z:111:LEU:O	2.73	0.41
33:Z:381:LEU:O	33:Z:385:PHE:HD2	2.04	0.41
2:2:104:ASP:OD1	2:2:107:GLY:N	2.54	0.41
2:2:186:TYR:CZ	2:2:188:ARG:HB2	2.56	0.41
2:2:188:ARG:HG2	2:2:189:ASN:ND2	2.36	0.41
5:5:32:LYS:CD	5:5:45:MET:CE	2.97	0.41
7:7:59:LEU:HD23	7:7:62:LEU:HD12	2.01	0.41
9:B:217:GLU:OE2	9:B:234:ARG:NH2	2.54	0.41
11:D:11:PHE:HE1	12:E:136:ARG:HD2	1.85	0.41
15:H:393:SER:HA	15:H:396:MET:HE3	2.03	0.41
16:I:199:GLU:HA	16:I:240:THR:CG2	2.51	0.41
16:I:262:ARG:CG	17:J:223:ILE:HG21	2.50	0.41
16:I:358:LYS:HG2	16:I:392:ILE:HD11	2.00	0.41
16:I:406:GLU:O	16:I:407:ARG:HB2	2.21	0.41
17:J:339:ARG:NH1	25:R:168:ILE:HG13	2.35	0.41
18:K:104:ASP:OD1	18:K:104:ASP:C	2.63	0.41
18:K:215:PRO:HA	18:K:219:LYS:HE2	2.00	0.41
19:L:111:GLU:CG	19:L:117:TYR:CE2	3.03	0.41
21:N:158:LEU:HD13	21:N:192:LEU:HD22	2.01	0.41
21:N:717:LEU:HD23	21:N:730:VAL:HG22	2.03	0.41
22:O:25:LEU:O	22:O:29:PHE:CB	2.69	0.41
22:O:340:SER:C	23:P:358:SER:HB2	2.45	0.41
23:P:132:VAL:C	23:P:171:MET:HE2	2.28	0.41
23:P:203:ILE:HG23	23:P:220:TYR:CD1	2.53	0.41
23:P:213:TYR:CD2	23:P:217:LYS:CE	3.04	0.41
24:Q:347:LEU:O	24:Q:351:ILE:HG12	2.21	0.41
24:Q:419:LEU:O	24:Q:423:VAL:HG23	2.21	0.41
25:R:316:LEU:HD22	25:R:322:LEU:HB3	2.02	0.41
26:S:341:SER:O	26:S:344:PRO:CG	2.62	0.41
27:T:197:TYR:CD1	27:T:235:PHE:HB2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:216:GLU:HG3	27:T:220:PHE:CE1	2.23	0.41
28:U:175:LEU:HD23	29:V:205:LYS:NZ	2.36	0.41
33:Z:916:LEU:HD23	33:Z:922:PRO:HB3	2.03	0.41
2:2:69:TYR:CE2	9:B:87:ASP:OD2	2.74	0.41
3:3:-2:ASN:CA	3:3:19:ARG:HH12	2.33	0.41
8:A:162:TYR:CD1	18:K:428:LYS:HD2	2.56	0.41
15:H:295:PHE:CZ	15:H:336:LEU:HD12	2.56	0.41
15:H:382:LEU:HD21	15:H:409:ARG:CZ	2.51	0.41
16:I:255:LYS:NZ	17:J:267:GLU:OE1	2.51	0.41
19:L:382:MET:CE	19:L:416:MET:HA	2.44	0.41
20:M:162:GLU:HB2	20:M:166:ARG:HH21	1.86	0.41
20:M:379:LEU:CD1	20:M:415:PHE:CD1	3.01	0.41
21:N:497:ALA:O	21:N:501:MET:HG3	2.20	0.41
21:N:771:PHE:HE2	21:N:885:ILE:HG21	1.85	0.41
22:O:124:ASP:OD1	22:O:126:ILE:N	2.54	0.41
22:O:240:GLU:O	22:O:241:THR:CB	2.69	0.41
23:P:360:ILE:HG12	23:P:402:PHE:HE2	1.77	0.41
25:R:255:VAL:HG11	25:R:322:LEU:HD13	2.03	0.41
27:T:38:ASN:O	27:T:39:LEU:HG	2.20	0.41
29:V:83:VAL:HG11	29:V:107:TRP:HH2	1.85	0.41
30:W:1:MET:N	30:W:44:ASN:ND2	2.58	0.41
30:W:21:PHE:HE1	30:W:144:PHE:CE1	2.07	0.41
33:Z:176:GLU:HB3	33:Z:177:THR:HG23	2.03	0.41
33:Z:188:ALA:HB1	33:Z:200:THR:HG22	2.02	0.41
33:Z:888:LEU:N	33:Z:894:MET:SD	2.90	0.41
33:Z:966:GLU:C	33:Z:966:GLU:CD	2.88	0.41
33:Z:970:TYR:CZ	33:Z:993:GLU:N	2.89	0.41
1:1:64:GLU:OE1	8:A:105:ARG:HD2	2.21	0.41
10:C:148:LEU:HB3	10:C:160:TRP:O	2.21	0.41
10:C:160:TRP:CZ2	10:C:163:ILE:HD11	2.54	0.41
10:C:164:SER:HB2	10:C:169:THR:HG23	2.03	0.41
11:D:179:TYR:CZ	11:D:184:PRO:HB3	2.55	0.41
13:F:91:GLN:NE2	13:F:115:LYS:HZ1	2.18	0.41
14:G:150:LEU:CD1	14:G:156:TYR:HB3	2.48	0.41
16:I:197:SER:OG	16:I:219:VAL:HG11	2.20	0.41
17:J:37:LYS:CG	18:K:58:TYR:HE1	2.34	0.41
17:J:159:GLU:O	17:J:163:VAL:HG23	2.20	0.41
18:K:96:ILE:CG1	19:L:128:ILE:HG13	2.51	0.41
19:L:308:LEU:HG	19:L:312:MET:HE3	2.02	0.41
21:N:645:THR:CG2	21:N:660:LEU:HD11	2.50	0.41
22:O:87:LYS:HD3	22:O:135:ARG:HD2	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:87:LYS:HD2	22:O:135:ARG:HD3	2.03	0.41
25:R:50:VAL:O	25:R:54:ILE:HG23	2.21	0.41
25:R:79:LEU:HB2	25:R:93:LYS:CE	2.51	0.41
26:S:185:PHE:CD1	26:S:239:ARG:NE	2.89	0.41
28:U:92:TRP:CE2	28:U:120:LEU:CD1	2.96	0.41
30:W:101:ARG:NH1	30:W:104:LYS:HA	2.36	0.41
30:W:168:THR:CG2	30:W:169:SER:HB3	2.39	0.41
31:X:22:ARG:NE	31:X:96:ARG:HH12	2.17	0.41
33:Z:60:ASP:OD2	33:Z:63:LEU:HD12	2.21	0.41
33:Z:453:LEU:HD11	33:Z:899:GLN:CB	2.51	0.41
33:Z:471:LEU:HD23	33:Z:471:LEU:O	2.20	0.41
33:Z:490:ILE:HD11	33:Z:523:ALA:HA	2.02	0.41
33:Z:493:LEU:CD1	33:Z:497:PHE:HD2	2.18	0.41
33:Z:612:GLY:HA2	33:Z:616:LEU:CD1	2.50	0.41
1:1:90:LYS:NZ	7:7:-7:GLN:HB3	2.35	0.41
4:4:6:ILE:CD1	4:4:159:LEU:HD23	2.50	0.41
6:6:-2:ASN:ND2	6:6:48:PHE:CD1	2.89	0.41
7:7:51:ASP:OD2	7:7:103:TRP:HB3	2.20	0.41
8:A:135:ARG:CZ	14:G:124:LEU:HD23	2.51	0.41
10:C:39:MET:HE2	10:C:161:LYS:HB3	2.02	0.41
10:C:209:ASP:C	10:C:209:ASP:OD1	2.63	0.41
11:D:47:GLU:OE2	11:D:203:VAL:HG22	2.20	0.41
12:E:201:LEU:CD1	12:E:239:LEU:CG	2.78	0.41
13:F:87:TYR:O	13:F:91:GLN:HG3	2.21	0.41
13:F:154:THR:HG22	13:F:156:LEU:HD11	2.01	0.41
14:G:43:ASP:OD1	14:G:43:ASP:C	2.63	0.41
14:G:140:VAL:CG2	14:G:225:GLY:HA2	2.48	0.41
14:G:146:HIS:ND1	14:G:148:TYR:OH	2.41	0.41
14:G:170:SER:HB3	14:G:201:LEU:HG	2.02	0.41
14:G:176:GLU:O	14:G:179:VAL:HG12	2.21	0.41
15:H:208:TYR:H	15:H:262:ALA:CB	2.33	0.41
15:H:249:TYR:C	15:H:256:LYS:HZ1	2.29	0.41
16:I:100:ARG:HH21	17:J:95:ILE:CD1	2.33	0.41
17:J:252:SER:CA	17:J:258:VAL:HG22	2.51	0.41
17:J:266:SER:O	17:J:270:ARG:HG3	2.21	0.41
18:K:100:LEU:HB2	18:K:109:ILE:HG23	2.03	0.41
18:K:280:LYS:HG2	18:K:325:ASP:OD2	2.20	0.41
19:L:298:ASP:HA	19:L:301:ILE:HD12	2.03	0.41
20:M:75:LEU:HD12	20:M:77:TYR:CG	2.52	0.41
20:M:75:LEU:HD21	20:M:77:TYR:CE1	2.50	0.41
20:M:162:GLU:CB	20:M:166:ARG:HE	2.32	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:447:SER:O	21:N:450:ILE:HG22	2.21	0.41
22:O:8:ASP:OD1	22:O:41:LEU:HD23	2.21	0.41
22:O:47:LYS:CE	22:O:65:PHE:HE2	2.32	0.41
22:O:79:VAL:CG1	22:O:118:GLY:CA	2.87	0.41
22:O:159:LYS:C	22:O:160:LYS:HG2	2.46	0.41
22:O:362:GLN:NE2	28:U:223:HIS:N	2.69	0.41
23:P:234:TYR:O	23:P:267:PHE:HE2	2.04	0.41
23:P:281:ILE:CG1	23:P:300:VAL:HG21	2.43	0.41
23:P:311:TRP:CH2	23:P:338:TRP:CD1	3.08	0.41
23:P:345:VAL:HG13	23:P:346:ILE:N	2.36	0.41
23:P:435:LYS:NZ	28:U:153:THR:HA	2.36	0.41
24:Q:317:ALA:O	24:Q:321:TYR:HB2	2.21	0.41
24:Q:326:MET:CE	24:Q:332:ARG:CD	2.99	0.41
25:R:304:TYR:CE1	25:R:337:VAL:HG11	2.55	0.41
25:R:416:LYS:C	26:S:298:ARG:HH11	2.29	0.41
25:R:416:LYS:HZ3	26:S:294:ILE:HG21	1.86	0.41
26:S:230:LYS:HZ1	26:S:256:LYS:HE2	1.86	0.41
27:T:72:THR:O	27:T:73:PHE:HB2	2.20	0.41
29:V:93:ASP:O	29:V:97:GLN:HG3	2.21	0.41
29:V:265:GLU:HG2	29:V:269:ARG:HE	1.86	0.41
31:X:24:CYS:CB	31:X:79:LYS:O	2.69	0.41
33:Z:237:VAL:HB	33:Z:275:GLN:OE1	2.20	0.41
33:Z:396:ASN:OD1	33:Z:396:ASN:O	2.38	0.41
33:Z:439:TYR:O	33:Z:447:VAL:HG12	2.21	0.41
33:Z:737:ALA:CA	33:Z:775:MET:CE	2.89	0.41
33:Z:857:LEU:CD1	33:Z:908:ILE:HG13	2.32	0.41
1:1:6:VAL:O	1:1:13:ILE:HG22	2.21	0.41
7:7:121:TYR:CD1	7:7:129:TYR:CE1	3.08	0.41
8:A:70:SER:O	8:A:71:TYR:CG	2.74	0.41
10:C:111:LEU:O	10:C:115:LEU:HG	2.21	0.41
15:H:175:GLY:N	15:H:183:ILE:HB	2.36	0.41
15:H:449:LYS:HZ3	16:I:346:ARG:HH11	1.62	0.41
16:I:215:PRO:HA	16:I:216:PRO:HD3	1.94	0.41
16:I:362:LEU:CD2	16:I:377:LEU:CD2	2.96	0.41
16:I:377:LEU:O	16:I:381:VAL:HG23	2.21	0.41
17:J:115:LEU:CD2	17:J:116:ARG:O	2.66	0.41
17:J:362:CYS:HA	17:J:382:PHE:HE1	1.85	0.41
20:M:257:GLY:CA	20:M:258:GLU:N	2.72	0.41
22:O:62:TYR:CE2	22:O:66:VAL:CG2	3.04	0.41
22:O:356:ARG:HE	22:O:362:GLN:HG3	1.85	0.41
23:P:425:HIS:HD2	28:U:225:ILE:HG12	1.81	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:51:LEU:O	25:R:55:LYS:HG2	2.21	0.41
26:S:457:PRO:HG3	28:U:274:MET:HE2	2.03	0.41
27:T:132:HIS:O	27:T:136:LEU:HG	2.21	0.41
28:U:94:HIS:HD1	28:U:96:GLY:N	2.18	0.41
28:U:107:ASN:O	28:U:111:LYS:HG3	2.20	0.41
33:Z:382:ALA:O	33:Z:386:VAL:HG23	2.20	0.41
1:1:8:PHE:CE2	1:1:10:ASP:N	2.88	0.40
1:1:72:THR:O	1:1:72:THR:HG23	2.21	0.40
5:5:120:THR:CG2	5:5:122:LEU:HG	2.49	0.40
8:A:157:THR:HG22	8:A:163:TYR:HB2	2.03	0.40
13:F:201:LEU:O	13:F:202:ARG:CG	2.69	0.40
15:H:389:PHE:CB	15:H:404:TRP:CZ3	2.80	0.40
16:I:361:ILE:O	16:I:365:HIS:HD2	2.04	0.40
17:J:286:LYS:HZ1	17:J:289:LYS:HG2	1.85	0.40
18:K:280:LYS:NZ	18:K:293:GLN:HG2	2.36	0.40
19:L:336:ALA:CB	19:L:339:ARG:HH21	2.34	0.40
21:N:28:ILE:CG2	21:N:64:ILE:HD13	2.51	0.40
21:N:638:ILE:HD12	21:N:664:LEU:HD11	2.03	0.40
21:N:782:PHE:CE1	21:N:875:LEU:CD2	3.04	0.40
22:O:287:LEU:HD23	22:O:287:LEU:O	2.21	0.40
22:O:303:LYS:HZ2	28:U:234:ASN:HD22	1.66	0.40
22:O:359:SER:O	22:O:363:ILE:CD1	2.69	0.40
23:P:218:LEU:O	23:P:221:TYR:HB2	2.22	0.40
24:Q:135:HIS:HB3	24:Q:161:LEU:CD2	2.36	0.40
24:Q:135:HIS:CD2	24:Q:164:GLU:HG3	2.56	0.40
24:Q:186:HIS:HE1	24:Q:228:GLU:HG3	1.85	0.40
25:R:169:ASP:O	25:R:173:THR:HG23	2.21	0.40
26:S:315:LYS:CG	26:S:345:TYR:OH	2.64	0.40
30:W:139:VAL:HG13	30:W:169:SER:HA	2.01	0.40
33:Z:741:LEU:HD22	33:Z:782:ILE:HD12	2.03	0.40
6:6:77:ILE:HG23	6:6:78:ASN:N	2.35	0.40
7:7:28:PHE:HB3	7:7:31:VAL:HG23	2.04	0.40
11:D:176:GLU:CG	12:E:58:LEU:CD1	3.00	0.40
15:H:271:PHE:HE1	15:H:273:ARG:CB	2.20	0.40
19:L:249:SER:O	19:L:252:VAL:HB	2.21	0.40
19:L:357:ARG:NE	19:L:380:VAL:HG13	2.32	0.40
20:M:167:VAL:HG23	20:M:167:VAL:O	2.21	0.40
20:M:257:GLY:O	20:M:260:ALA:CB	2.68	0.40
21:N:463:TYR:CE2	21:N:485:MET:SD	3.14	0.40
22:O:294:MET:SD	22:O:357:ILE:CG2	3.10	0.40
23:P:202:LYS:HE2	23:P:206:LYS:CE	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:270:LEU:HD22	23:P:340:ASP:CB	2.41	0.40
24:Q:31:LEU:CD2	24:Q:50:ARG:NH2	2.84	0.40
24:Q:138:SER:HB2	24:Q:161:LEU:CD1	2.50	0.40
25:R:376:GLN:O	25:R:377:LEU:HB2	2.21	0.40
25:R:422:ARG:NH2	26:S:299:LYS:HB3	2.36	0.40
27:T:144:TYR:HD2	27:T:169:GLN:HE21	1.68	0.40
1:1:60:GLN:O	1:1:64:GLU:HG3	2.22	0.40
2:2:104:ASP:OD1	2:2:106:THR:N	2.54	0.40
2:2:109:HIS:CB	2:2:111:PHE:HE2	2.12	0.40
2:2:149:GLU:HG2	2:2:153:LYS:HE3	2.03	0.40
5:5:114:TYR:CE1	5:5:129:VAL:HG11	2.51	0.40
6:6:20:ASN:HB3	6:6:28:SER:HB3	2.03	0.40
7:7:90:THR:O	7:7:94:GLN:HG3	2.21	0.40
11:D:11:PHE:HA	11:D:17:ILE:HD13	2.02	0.40
13:F:91:GLN:CD	13:F:115:LYS:NZ	2.80	0.40
14:G:46:VAL:CG1	14:G:215:ILE:HD11	2.51	0.40
16:I:380:LEU:HD23	16:I:420:LYS:HZ3	1.86	0.40
17:J:220:GLN:HG3	17:J:229:MET:HE2	2.03	0.40
19:L:70:TYR:CD2	20:M:45:ARG:HG3	2.56	0.40
19:L:104:LEU:HD12	20:M:127:VAL:HA	2.03	0.40
19:L:140:LEU:HD23	19:L:158:ILE:HG12	2.03	0.40
21:N:19:SER:HB3	27:T:35:ILE:CG1	2.52	0.40
21:N:235:ALA:O	21:N:238:ALA:HB3	2.21	0.40
21:N:399:PHE:CE1	21:N:441:VAL:HB	2.50	0.40
21:N:490:LEU:CD1	21:N:731:VAL:HG21	2.51	0.40
23:P:259:PRO:O	23:P:263:HIS:ND1	2.23	0.40
23:P:293:LEU:C	23:P:293:LEU:CD2	2.95	0.40
24:Q:51:ARG:O	24:Q:54:GLN:HB3	2.22	0.40
25:R:258:LEU:CD1	25:R:266:LEU:CD1	2.98	0.40
25:R:285:ALA:HB3	25:R:314:ASN:HD22	1.86	0.40
27:T:216:GLU:HG2	27:T:220:PHE:CD1	2.53	0.40
30:W:7:VAL:C	30:W:110:ILE:HD12	2.46	0.40
30:W:88:ALA:H	30:W:120:ASP:CG	2.29	0.40
33:Z:357:ILE:O	33:Z:361:HIS:HB2	2.21	0.40
33:Z:963:ALA:O	33:Z:964:GLU:HG3	2.21	0.40
33:Z:970:TYR:CZ	33:Z:993:GLU:CA	3.05	0.40
3:3:60:TYR:CD1	10:C:96:GLN:CG	3.05	0.40
6:6:3:ILE:HG13	6:6:101:ILE:HD12	2.03	0.40
8:A:65:ASP:OD1	8:A:65:ASP:C	2.64	0.40
9:B:3:ASP:OD1	9:B:3:ASP:C	2.62	0.40
9:B:178:ARG:HD3	9:B:191:ILE:HG23	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:30:GLY:HA2	16:I:436:TYR:CD2	2.56	0.40
14:G:140:VAL:HB	14:G:220:LEU:CD2	2.50	0.40
15:H:49:LEU:C	15:H:49:LEU:CD1	2.93	0.40
15:H:340:LEU:CD1	15:H:370:ARG:HD2	2.51	0.40
16:I:404:LEU:HD21	17:J:166:LEU:HD13	2.03	0.40
17:J:218:LEU:HG	17:J:230:VAL:HG22	2.04	0.40
18:K:404:GLN:O	18:K:408:GLU:HG3	2.22	0.40
19:L:114:GLU:HA	19:L:117:TYR:OH	2.22	0.40
21:N:301:THR:OG1	21:N:920:VAL:HG13	2.21	0.40
22:O:30:GLU:CD	22:O:40:GLN:OE1	2.57	0.40
23:P:55:SER:OG	23:P:57:GLU:HB3	2.22	0.40
23:P:177:ILE:CD1	23:P:216:LEU:HD22	2.52	0.40
23:P:265:VAL:HA	23:P:280:LEU:HD23	2.03	0.40
23:P:346:ILE:HG21	23:P:379:TYR:CD2	2.57	0.40
23:P:369:LEU:C	23:P:371:LEU:HG	2.45	0.40
25:R:71:LEU:HA	25:R:76:GLN:HB2	2.04	0.40
26:S:425:ARG:HG3	26:S:429:ASP:OD2	2.21	0.40
27:T:193:THR:HG22	27:T:235:PHE:CE2	2.56	0.40
28:U:92:TRP:NE1	28:U:120:LEU:CB	2.84	0.40
29:V:109:HIS:H	29:V:140:VAL:HG22	1.87	0.40
33:Z:227:ILE:O	33:Z:227:ILE:HG22	2.21	0.40
33:Z:551:LEU:HD11	33:Z:591:ILE:HG23	1.98	0.40
1:1:19:ARG:CZ	1:1:29:ARG:HA	2.49	0.40
1:1:112:THR:CG2	7:7:27:ARG:NH2	2.84	0.40
2:2:75:ARG:NH2	8:A:110:TYR:HB3	2.37	0.40
5:5:8:PHE:CE1	5:5:13:ILE:CD1	3.05	0.40
5:5:150:VAL:CG2	5:5:179:HIS:ND1	2.84	0.40
6:6:29:ARG:HB3	6:6:212:ARG:HH12	1.86	0.40
8:A:30:TYR:O	14:G:14:PHE:HE2	2.04	0.40
9:B:12:PHE:CZ	10:C:129:ARG:NH2	2.79	0.40
11:D:11:PHE:HD2	12:E:26:TYR:CB	2.33	0.40
13:F:16:THR:OG1	13:F:18:ARG:O	2.40	0.40
18:K:184:ILE:CD1	18:K:222:LEU:HD13	2.43	0.40
18:K:396:ARG:HH11	19:L:215:PRO:HG3	1.86	0.40
19:L:198:GLU:HA	19:L:239:ILE:HD11	2.03	0.40
19:L:201:LEU:HG	19:L:322:LYS:HE2	2.03	0.40
20:M:186:LEU:HD13	20:M:231:LEU:HG	2.03	0.40
20:M:221:TYR:CE1	20:M:346:LYS:HG3	2.53	0.40
20:M:361:LEU:O	20:M:376:TRP:CE2	2.74	0.40
21:N:130:ASP:HB3	21:N:133:LEU:HD12	2.03	0.40
21:N:738:GLN:HG2	21:N:742:TRP:CE3	2.57	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:147:ARG:NH2	22:O:178:TYR:OH	2.53	0.40
22:O:178:TYR:CZ	22:O:182:LYS:HD2	2.57	0.40
22:O:298:GLU:O	22:O:365:LYS:NZ	2.50	0.40
23:P:342:GLN:O	23:P:346:ILE:HG13	2.21	0.40
24:Q:220:LEU:O	24:Q:224:ILE:HG13	2.21	0.40
26:S:364:ILE:HG23	26:S:371:LEU:HD12	2.03	0.40
27:T:35:ILE:HG23	27:T:36:LYS:N	2.36	0.40
27:T:190:ALA:HB1	27:T:224:ARG:CD	2.51	0.40
28:U:226:LEU:HD23	28:U:226:LEU:O	2.20	0.40
28:U:273:LEU:CG	28:U:277:TYR:CZ	3.03	0.40
31:X:75:TRP:CA	31:X:87:PHE:HE1	2.17	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	1	203/215 (94%)	189 (93%)	13 (6%)	1 (0%)	24 63
2	2	221/261 (85%)	207 (94%)	10 (4%)	4 (2%)	6 34
3	3	202/205 (98%)	188 (93%)	12 (6%)	2 (1%)	12 49
4	4	196/198 (99%)	181 (92%)	13 (7%)	2 (1%)	12 49
5	5	210/287 (73%)	194 (92%)	11 (5%)	5 (2%)	4 27
6	6	220/241 (91%)	206 (94%)	11 (5%)	3 (1%)	9 40
7	7	231/266 (87%)	208 (90%)	16 (7%)	7 (3%)	3 23
8	A	241/252 (96%)	217 (90%)	20 (8%)	4 (2%)	7 36
9	B	248/250 (99%)	227 (92%)	15 (6%)	6 (2%)	4 27
10	C	243/258 (94%)	224 (92%)	16 (7%)	3 (1%)	10 44
11	D	240/254 (94%)	221 (92%)	16 (7%)	3 (1%)	9 42

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
12	E	241/260 (93%)	225 (93%)	13 (5%)	3 (1%)	10 44
13	F	231/234 (99%)	209 (90%)	19 (8%)	3 (1%)	9 42
14	G	243/288 (84%)	224 (92%)	16 (7%)	3 (1%)	10 44
15	H	353/467 (76%)	298 (84%)	36 (10%)	19 (5%)	1 15
16	I	358/437 (82%)	326 (91%)	25 (7%)	7 (2%)	6 31
17	J	367/405 (91%)	337 (92%)	21 (6%)	9 (2%)	4 26
18	K	377/428 (88%)	336 (89%)	29 (8%)	12 (3%)	3 21
19	L	357/437 (82%)	326 (91%)	18 (5%)	13 (4%)	2 20
20	M	363/434 (84%)	322 (89%)	29 (8%)	12 (3%)	3 21
21	N	843/945 (89%)	786 (93%)	37 (4%)	20 (2%)	4 27
22	O	385/393 (98%)	309 (80%)	44 (11%)	32 (8%)	0 9
23	P	413/445 (93%)	374 (91%)	22 (5%)	17 (4%)	2 18
24	Q	429/434 (99%)	390 (91%)	28 (6%)	11 (3%)	4 25
25	R	398/429 (93%)	345 (87%)	36 (9%)	17 (4%)	2 17
26	S	351/523 (67%)	308 (88%)	31 (9%)	12 (3%)	3 21
27	T	270/274 (98%)	235 (87%)	16 (6%)	19 (7%)	1 11
28	U	245/338 (72%)	226 (92%)	9 (4%)	10 (4%)	2 18
29	V	239/306 (78%)	212 (89%)	18 (8%)	9 (4%)	2 19
30	W	193/268 (72%)	156 (81%)	17 (9%)	20 (10%)	0 6
31	X	125/156 (80%)	101 (81%)	19 (15%)	5 (4%)	2 18
32	Y	17/89 (19%)	17 (100%)	0	0	100 100
33	Z	807/993 (81%)	690 (86%)	68 (8%)	49 (6%)	1 13
All	All	10060/11670 (86%)	9014 (90%)	704 (7%)	342 (3%)	4 21

All (342) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	4	150	ASP
9	B	203	GLU
11	D	31	THR
11	D	204	GLN
15	H	183	ILE
15	H	185	LEU
15	H	188	PRO

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Mol	Chain	Res	Type
15	H	303	ALA
16	I	125	MET
16	I	430	GLU
17	J	151	GLY
17	J	249	GLU
17	J	310	ILE
18	K	281	ARG
18	K	283	ASP
18	K	366	ALA
19	L	81	ILE
19	L	134	SER
19	L	170	MET
19	L	282	GLU
19	L	297	ALA
20	M	252	VAL
20	M	258	GLU
20	M	433	TYR
21	N	16	ASN
21	N	53	ASP
21	N	415	PHE
21	N	915	ALA
22	O	20	PRO
22	O	43	GLU
22	O	73	ILE
22	O	82	LEU
22	O	103	LYS
22	O	107	GLN
22	O	243	VAL
22	O	277	ILE
22	O	304	ASN
22	O	338	LYS
22	O	340	SER
22	O	345	ASN
22	O	358	ILE
23	P	232	ARG
24	Q	149	LYS
24	Q	402	THR
24	Q	404	ASN
25	R	203	ASP
25	R	240	SER
26	S	328	PRO
27	T	5	ALA

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Mol	Chain	Res	Type
27	T	156	SER
27	T	239	SER
27	T	245	TYR
27	T	251	HIS
28	U	7	LYS
28	U	86	LYS
28	U	87	GLU
28	U	113	TYR
28	U	161	ILE
29	V	45	VAL
29	V	48	GLU
29	V	61	TYR
29	V	117	TRP
29	V	135	ARG
30	W	11	ASP
30	W	12	ASN
30	W	18	ASN
30	W	59	PRO
30	W	147	ILE
30	W	179	ARG
30	W	183	GLU
30	W	192	LEU
31	X	29	VAL
31	X	41	GLU
33	Z	82	MET
33	Z	127	SER
33	Z	134	SER
33	Z	187	SER
33	Z	189	ALA
33	Z	193	PHE
33	Z	277	GLU
33	Z	318	LYS
33	Z	337	GLU
33	Z	353	VAL
33	Z	430	LEU
33	Z	553	ARG
33	Z	558	LEU
33	Z	787	ASP
33	Z	825	ALA
33	Z	955	VAL
33	Z	966	GLU
2	2	31	CYS

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Mol	Chain	Res	Type
5	5	19	ARG
5	5	46	ALA
5	5	208	ASN
7	7	77	GLU
7	7	152	ASP
8	A	160	ALA
9	B	181	ASP
11	D	7	ALA
12	E	249	ALA
13	F	11	VAL
13	F	103	LEU
15	H	179	SER
15	H	323	ALA
17	J	354	SER
17	J	395	GLU
18	K	422	ASP
19	L	290	ARG
21	N	50	TYR
21	N	128	ILE
21	N	249	ASN
21	N	324	LYS
21	N	394	ARG
21	N	395	ALA
21	N	745	LEU
22	O	18	ALA
22	O	58	ARG
22	O	120	LYS
22	O	346	GLU
23	P	47	ARG
23	P	133	GLU
23	P	231	LYS
23	P	283	LYS
23	P	289	ASN
23	P	321	VAL
23	P	328	ALA
24	Q	38	SER
24	Q	128	GLU
24	Q	131	VAL
24	Q	189	ARG
24	Q	387	TYR
24	Q	403	PRO
25	R	162	ILE

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Mol	Chain	Res	Type
25	R	197	MET
25	R	244	THR
25	R	290	SER
25	R	421	VAL
26	S	193	THR
27	T	117	ASN
27	T	197	TYR
27	T	198	ASP
27	T	225	ASN
27	T	243	ALA
27	T	248	GLU
27	T	250	MET
28	U	141	GLU
28	U	159	CYS
29	V	134	SER
30	W	21	PHE
30	W	54	GLY
30	W	114	VAL
30	W	153	LEU
30	W	191	ILE
31	X	72	GLU
33	Z	110	ASN
33	Z	185	ASP
33	Z	188	ALA
33	Z	320	SER
33	Z	482	ASP
33	Z	769	ASN
33	Z	990	ARG
1	1	19	ARG
2	2	193	PRO
2	2	196	ARG
5	5	148	LEU
6	6	10	ASP
7	7	2	SER
7	7	74	ASP
7	7	75	ALA
8	A	150	LEU
9	B	40	THR
9	B	215	GLY
10	C	52	VAL
12	E	54	ALA
12	E	73	HIS

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Mol	Chain	Res	Type
14	G	208	GLU
15	H	97	LEU
15	H	172	MET
15	H	310	GLU
15	H	343	PHE
16	I	164	ALA
16	I	320	GLY
17	J	131	ASP
17	J	194	GLY
18	K	153	ASP
18	K	288	SER
18	K	377	SER
19	L	319	GLY
20	M	162	GLU
20	M	336	ALA
20	M	424	ALA
20	M	429	SER
21	N	529	GLN
21	N	614	ASN
21	N	863	SER
22	O	56	PRO
22	O	183	ASN
22	O	228	TYR
22	O	248	TYR
23	P	168	TYR
23	P	319	GLU
24	Q	109	ASP
25	R	37	LYS
25	R	76	GLN
25	R	124	ASP
25	R	326	ALA
25	R	377	LEU
26	S	172	ASN
26	S	177	ASN
26	S	195	ALA
26	S	225	HIS
26	S	299	LYS
27	T	40	LEU
27	T	91	SER
27	T	92	ASN
27	T	237	ASN
29	V	59	ASP

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Mol	Chain	Res	Type
29	V	73	GLN
30	W	101	ARG
30	W	136	ASN
30	W	143	ASN
30	W	164	PRO
31	X	28	PRO
33	Z	186	GLY
33	Z	230	ILE
33	Z	333	GLY
33	Z	352	LYS
33	Z	396	ASN
33	Z	523	ALA
33	Z	895	LEU
3	3	-5	SER
6	6	157	GLY
7	7	221	GLY
8	A	231	ASP
9	B	2	THR
14	G	222	GLU
15	H	166	THR
15	H	168	ILE
15	H	318	ARG
15	H	358	PRO
16	I	166	PRO
18	K	341	PRO
19	L	164	ASP
19	L	289	ARG
19	L	385	GLY
21	N	283	ASP
21	N	458	ALA
21	N	670	LYS
22	O	36	LYS
22	O	114	GLN
22	O	204	SER
22	O	353	VAL
23	P	87	GLY
23	P	322	LEU
24	Q	354	PHE
25	R	83	GLU
25	R	241	ILE
25	R	262	GLU
26	S	144	LEU

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Mol	Chain	Res	Type
26	S	192	GLU
26	S	375	ASP
27	T	90	PHE
28	U	230	GLN
33	Z	133	ASP
33	Z	215	ASN
33	Z	259	PRO
33	Z	964	GLU
2	2	201	LYS
3	3	107	SER
8	A	168	ALA
9	B	233	PRO
14	G	185	GLY
15	H	104	LYS
16	I	117	HIS
17	J	126	LEU
18	K	286	THR
18	K	397	LYS
20	M	431	SER
21	N	771	PHE
21	N	786	ARG
22	O	239	MET
23	P	89	LEU
23	P	172	GLU
23	P	306	ASN
26	S	198	SER
27	T	172	SER
27	T	242	LYS
28	U	162	GLU
29	V	247	ILE
30	W	142	ILE
33	Z	143	VAL
33	Z	556	ILE
33	Z	975	SER
4	4	194	PHE
10	C	3	SER
13	F	202	ARG
15	H	187	LEU
15	H	378	SER
16	I	116	ASP
18	K	278	ALA
19	L	284	ASP

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Mol	Chain	Res	Type
20	M	143	ASN
20	M	226	THR
22	O	230	PHE
22	O	272	VAL
23	P	290	LEU
25	R	74	ASN
25	R	393	PRO
30	W	196	SER
31	X	24	CYS
33	Z	109	PRO
33	Z	328	ASP
33	Z	351	PRO
33	Z	578	GLY
5	5	173	GLY
15	H	211	VAL
19	L	350	PRO
20	M	175	LYS
22	O	355	PRO
23	P	124	VAL
33	Z	87	LYS
33	Z	326	VAL
7	7	70	ASN
10	C	225	VAL
28	U	125	VAL
33	Z	373	GLY
17	J	299	ILE
18	K	215	PRO
20	M	83	VAL
22	O	237	PRO
22	O	278	PRO
22	O	360	GLY
26	S	165	PRO
33	Z	192	GLY
15	H	105	ILE
19	L	287	GLY
21	N	353	LEU
33	Z	481	PRO
33	Z	925	VAL
6	6	154	GLY
30	W	176	PRO
33	Z	519	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	1	169/178 (95%)	169 (100%)	0	100	100
2	2	182/214 (85%)	182 (100%)	0	100	100
3	3	172/173 (99%)	172 (100%)	0	100	100
4	4	175/175 (100%)	175 (100%)	0	100	100
5	5	169/235 (72%)	168 (99%)	1 (1%)	78	83
6	6	185/201 (92%)	185 (100%)	0	100	100
7	7	199/224 (89%)	199 (100%)	0	100	100
8	A	207/210 (99%)	207 (100%)	0	100	100
9	B	209/209 (100%)	209 (100%)	0	100	100
10	C	204/216 (94%)	204 (100%)	0	100	100
11	D	214/226 (95%)	214 (100%)	0	100	100
12	E	199/215 (93%)	199 (100%)	0	100	100
13	F	192/193 (100%)	192 (100%)	0	100	100
14	G	201/239 (84%)	201 (100%)	0	100	100
15	H	303/399 (76%)	302 (100%)	1 (0%)	86	86
16	I	319/385 (83%)	318 (100%)	1 (0%)	86	86
17	J	325/352 (92%)	324 (100%)	1 (0%)	86	86
18	K	334/374 (89%)	333 (100%)	1 (0%)	86	86
19	L	308/377 (82%)	308 (100%)	0	100	100
20	M	315/375 (84%)	315 (100%)	0	100	100
21	N	713/797 (90%)	710 (100%)	3 (0%)	84	84
22	O	363/368 (99%)	362 (100%)	1 (0%)	86	86
23	P	388/415 (94%)	380 (98%)	8 (2%)	47	65
24	Q	388/391 (99%)	388 (100%)	0	100	100
25	R	351/379 (93%)	351 (100%)	0	100	100
26	S	330/489 (68%)	330 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
27	T	254/256 (99%)	254 (100%)	0	100 100
28	U	234/308 (76%)	229 (98%)	5 (2%)	47 65
29	V	217/268 (81%)	214 (99%)	3 (1%)	59 72
30	W	171/230 (74%)	169 (99%)	2 (1%)	63 75
31	X	116/144 (81%)	115 (99%)	1 (1%)	70 79
32	Y	18/81 (22%)	18 (100%)	0	100 100
33	Z	692/850 (81%)	692 (100%)	0	100 100
All	All	8816/10146 (87%)	8788 (100%)	28 (0%)	84 86

All (28) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	5	104	TYR
15	H	282	LYS
16	I	257	LEU
17	J	221	LYS
18	K	288	SER
21	N	780	ASP
21	N	866	TYR
21	N	905	LEU
22	O	20	PRO
23	P	31	ASP
23	P	33	ASN
23	P	43	GLU
23	P	57	GLU
23	P	58	VAL
23	P	69	ARG
23	P	85	LYS
23	P	88	GLN
28	U	71	ASN
28	U	74	GLU
28	U	75	ASN
28	U	77	ASN
28	U	154	PHE
29	V	68	VAL
29	V	85	ASP
29	V	109	HIS
30	W	8	LEU
30	W	191	ILE
31	X	48	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (213) such sidechains are listed below:

Mol	Chain	Res	Type
1	1	38	HIS
1	1	89	ASN
1	1	157	HIS
1	1	161	GLN
2	2	35	HIS
2	2	66	HIS
2	2	85	GLN
2	2	86	HIS
2	2	114	HIS
2	2	116	HIS
2	2	141	HIS
2	2	189	ASN
3	3	63	ASN
4	4	36	GLN
4	4	60	GLN
4	4	64	GLN
4	4	117	GLN
4	4	132	HIS
4	4	145	HIS
4	4	146	HIS
5	5	179	HIS
6	6	-2	ASN
6	6	27	ASN
6	6	46	ASN
6	6	67	HIS
6	6	70	HIS
6	6	85	GLN
7	7	53	GLN
7	7	70	ASN
7	7	144	ASN
7	7	186	ASN
7	7	195	ASN
7	7	205	GLN
8	A	37	GLN
8	A	39	ASN
8	A	56	GLN
8	A	126	GLN
8	A	130	GLN
8	A	193	HIS
9	B	20	GLN
9	B	119	GLN

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Mol	Chain	Res	Type
9	B	123	GLN
10	C	59	GLN
10	C	147	GLN
11	D	70	HIS
11	D	96	HIS
11	D	149	GLN
11	D	162	GLN
11	D	204	GLN
11	D	241	GLN
12	E	108	ASN
12	E	114	GLN
12	E	157	HIS
13	F	31	GLN
13	F	69	HIS
13	F	91	GLN
13	F	117	GLN
13	F	199	GLN
14	G	42	ASN
14	G	67	GLN
14	G	89	ASN
14	G	120	GLN
14	G	122	HIS
14	G	182	HIS
14	G	227	HIS
14	G	247	ASN
15	H	95	HIS
15	H	265	ASN
15	H	339	GLN
15	H	413	ASN
16	I	102	ASN
16	I	312	GLN
16	I	365	HIS
17	J	181	GLN
17	J	204	HIS
17	J	205	HIS
17	J	287	ASN
17	J	295	ASN
17	J	336	ASN
17	J	342	ASN
17	J	376	HIS
18	K	90	GLN
18	K	144	ASN

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Mol	Chain	Res	Type
18	K	180	GLN
18	K	264	ASN
18	K	293	GLN
18	K	302	GLN
18	K	419	ASN
19	L	67	HIS
19	L	73	GLN
19	L	79	GLN
19	L	80	ASN
19	L	311	GLN
19	L	320	GLN
19	L	328	ASN
20	M	55	ASN
20	M	253	GLN
20	M	302	GLN
20	M	311	GLN
20	M	328	ASN
20	M	364	HIS
20	M	390	GLN
21	N	71	ASN
21	N	96	GLN
21	N	116	GLN
21	N	176	GLN
21	N	182	ASN
21	N	280	GLN
21	N	300	ASN
21	N	306	ASN
21	N	329	HIS
21	N	360	GLN
21	N	361	ASN
21	N	375	HIS
21	N	459	ASN
21	N	667	GLN
21	N	707	ASN
21	N	738	GLN
21	N	747	HIS
22	O	4	ASN
22	O	5	HIS
22	O	28	GLN
22	O	40	GLN
22	O	116	ASN
22	O	117	ASN

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Mol	Chain	Res	Type
22	O	141	ASN
22	O	169	ASN
22	O	186	ASN
22	O	211	GLN
22	O	229	ASN
22	O	323	ASN
22	O	326	HIS
22	O	343	GLN
22	O	345	ASN
22	O	362	GLN
22	O	376	GLN
23	P	76	ASN
23	P	164	GLN
23	P	285	GLN
23	P	306	ASN
23	P	315	GLN
23	P	342	GLN
23	P	401	ASN
23	P	425	HIS
23	P	431	HIS
24	Q	54	GLN
24	Q	114	GLN
24	Q	226	HIS
24	Q	247	HIS
24	Q	252	HIS
24	Q	253	ASN
25	R	81	HIS
25	R	89	ASN
25	R	114	ASN
25	R	132	GLN
25	R	143	GLN
25	R	182	ASN
25	R	208	ASN
25	R	314	ASN
25	R	391	ASN
26	S	143	GLN
26	S	202	ASN
26	S	302	HIS
27	T	47	GLN
27	T	80	ASN
27	T	93	ASN
27	T	94	HIS

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Mol	Chain	Res	Type
27	T	112	ASN
27	T	192	ASN
27	T	225	ASN
27	T	236	ASN
27	T	272	ASN
28	U	21	HIS
28	U	107	ASN
28	U	117	ASN
28	U	128	GLN
28	U	173	HIS
28	U	201	GLN
28	U	234	ASN
28	U	259	ASN
28	U	270	ASN
28	U	280	ASN
29	V	64	ASN
29	V	73	GLN
29	V	109	HIS
29	V	133	ASN
29	V	145	GLN
29	V	186	GLN
29	V	204	HIS
29	V	291	ASN
30	W	44	ASN
30	W	58	ASN
30	W	103	ASN
30	W	136	ASN
30	W	143	ASN
30	W	162	ASN
30	W	163	ASN
31	X	38	ASN
31	X	105	ASN
33	Z	168	GLN
33	Z	309	GLN
33	Z	361	HIS
33	Z	391	ASN
33	Z	429	ASN
33	Z	435	GLN
33	Z	532	HIS
33	Z	771	HIS
33	Z	824	ASN
33	Z	856	HIS

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Mol	Chain	Res	Type
33	Z	899	GLN
33	Z	931	GLN
33	Z	959	HIS
33	Z	976	HIS

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
30	W	3
17	J	2
18	K	2
19	L	2
20	M	2
29	V	2
16	I	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	J	218:LEU	C	219:VAL	N	3.99
1	K	248:GLY	C	249:GLU	N	3.09
1	L	251:ILE	C	252:VAL	N	2.52
1	I	252:LEU	C	253:ILE	N	2.13
1	J	224:GLY	C	225:GLU	N	2.03
1	W	120:ASP	C	121:SER	N	2.02
1	K	242:PHE	C	243:VAL	N	1.83
1	M	257:GLY	C	258:GLU	N	1.80
1	V	99:GLY	C	100:ARG	N	1.65
1	L	257:GLY	C	258:GLU	N	1.64
1	V	282:GLU	C	283:THR	N	1.62
1	M	58:MET	C	59:LEU	N	1.16
1	W	154:LEU	C	155:ASP	N	1.05
1	W	38:GLN	C	39:ALA	N	0.46

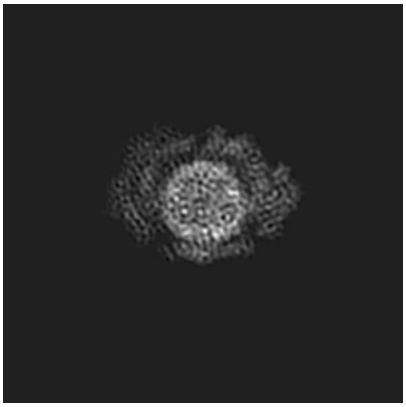
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-2595. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections

6.1.1 Primary map



X

Y

Z

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

6.2 Central slices

6.2.1 Primary map

X Index: 140

Y Index: 140

Z Index: 140

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

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 91

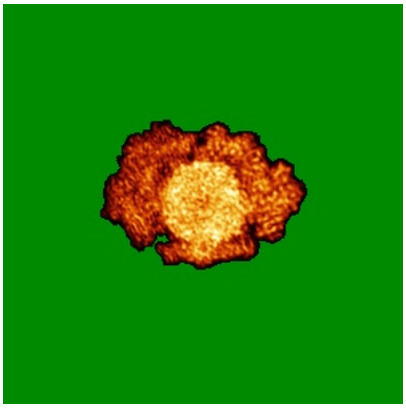
Y Index: 149

Z Index: 147

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

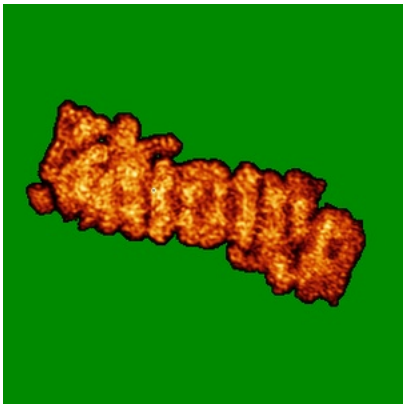
6.4 Orthogonal standard-deviation projections (False-color) (i)

6.4.1 Primary map



X

Y

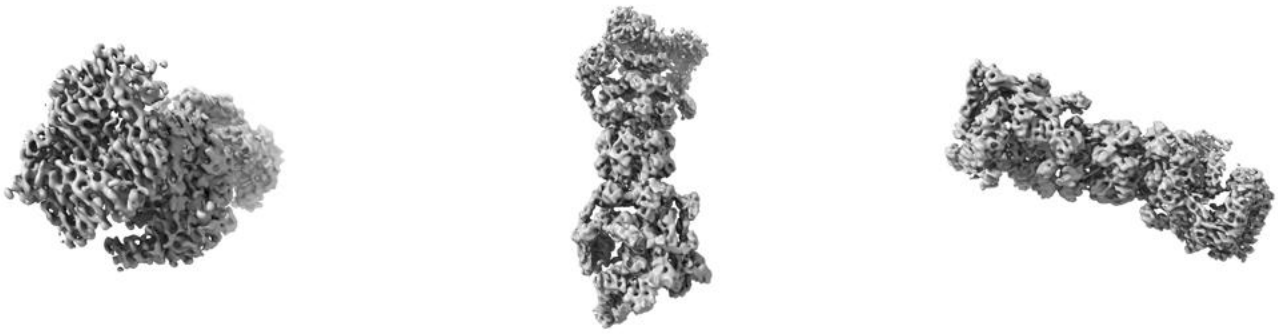


Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.63. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

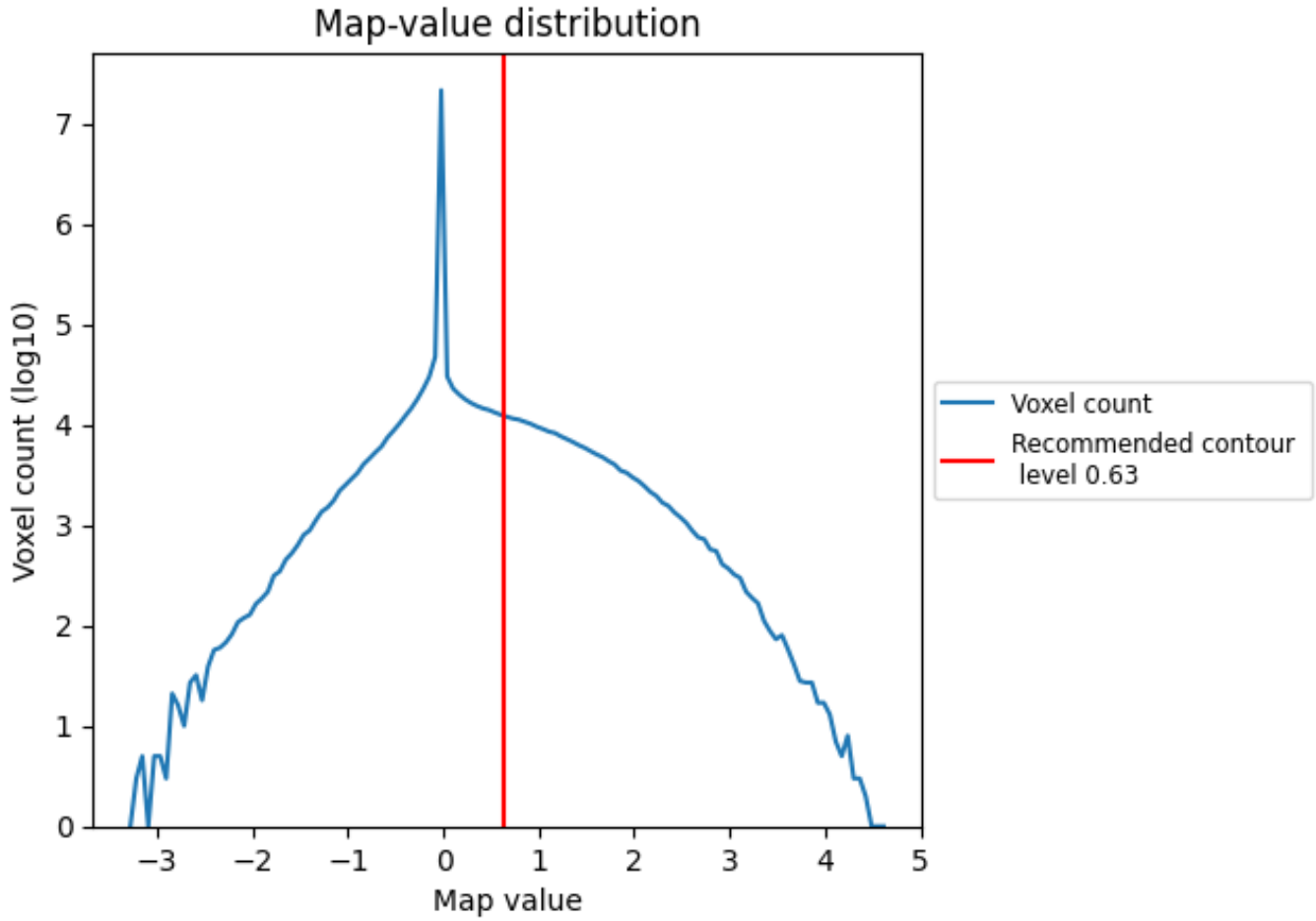
6.6 Mask visualisation (i)

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

7 Map analysis

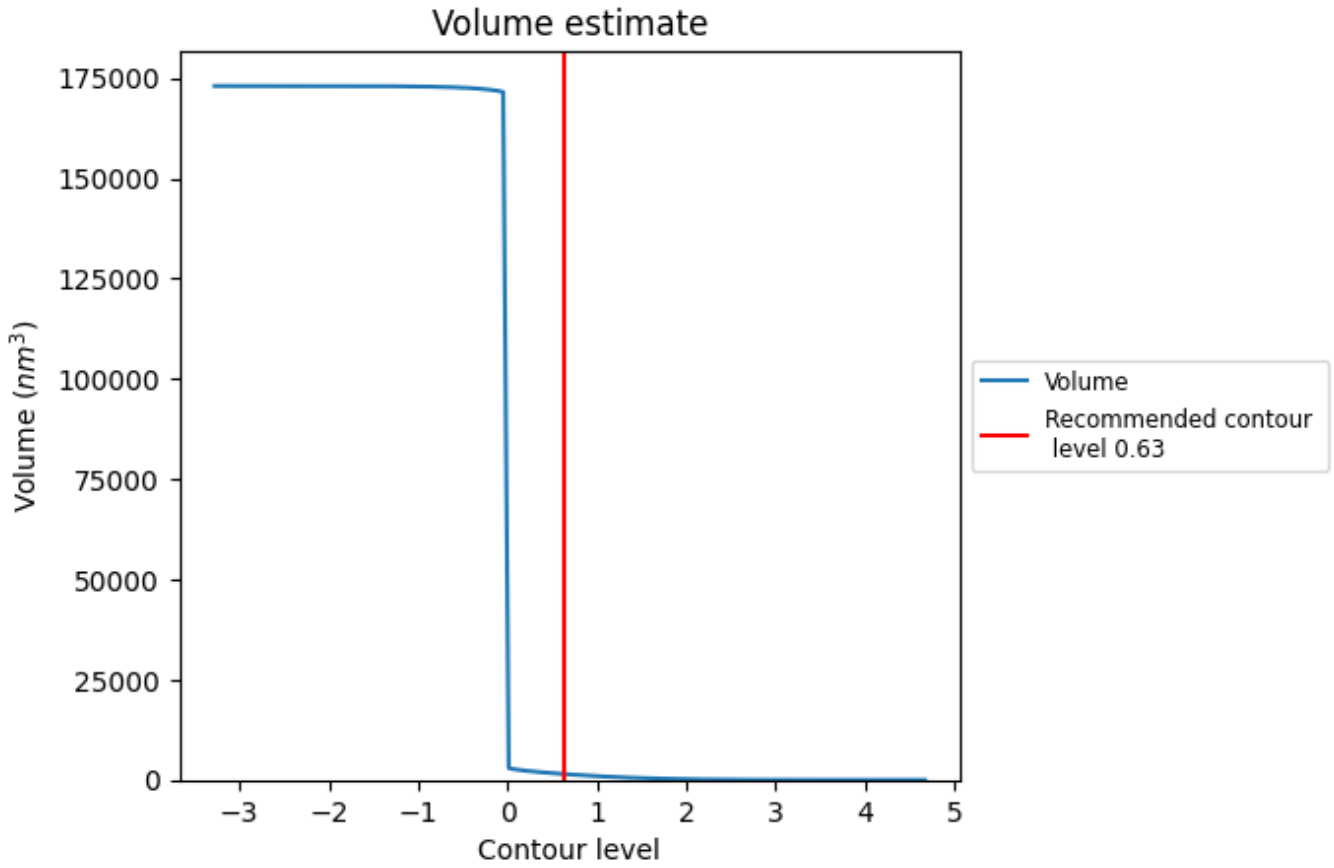
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

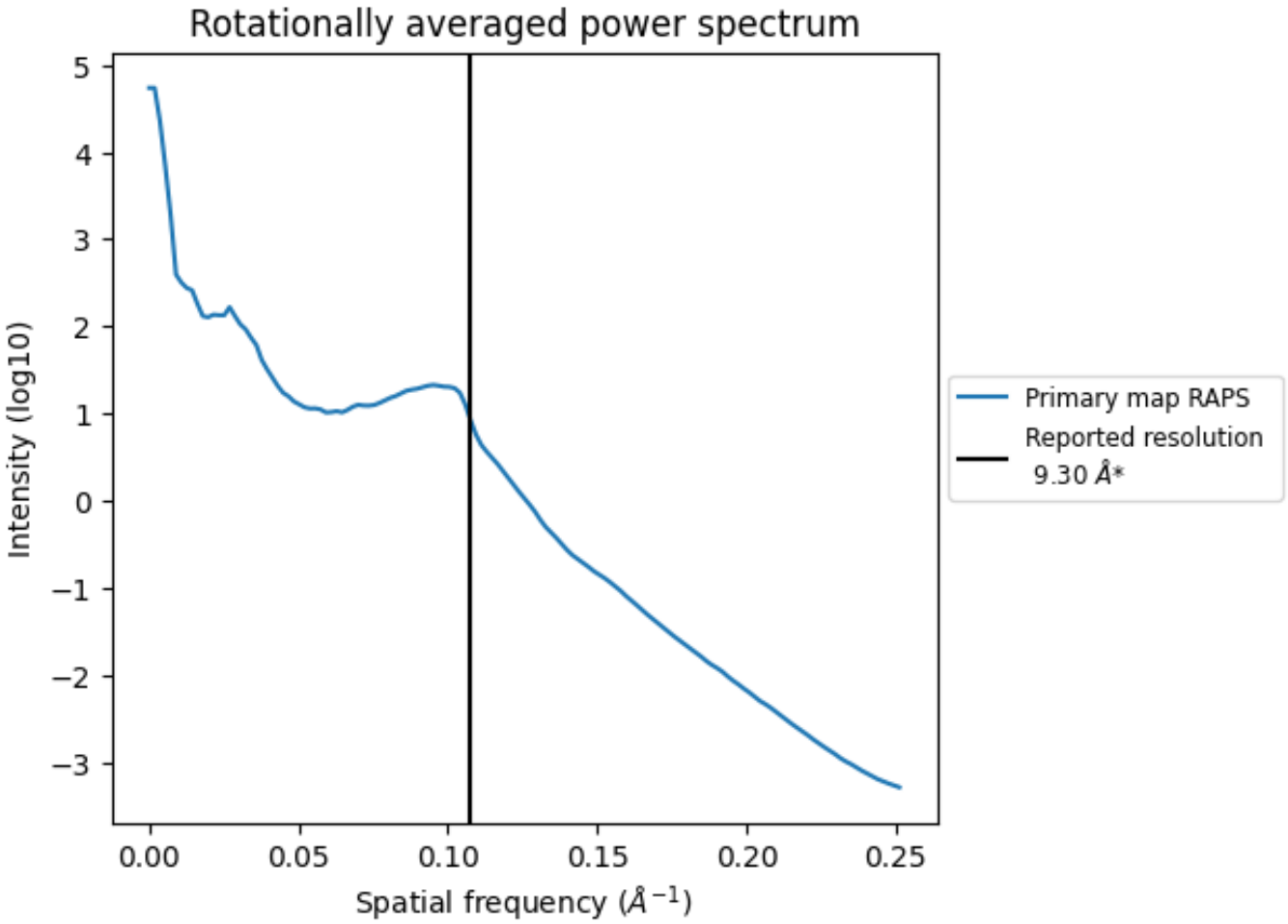
7.2 Volume estimate



The volume at the recommended contour level is 1478 nm^3; this corresponds to an approximate mass of 1335 kDa.

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

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.108 Å^{-1}

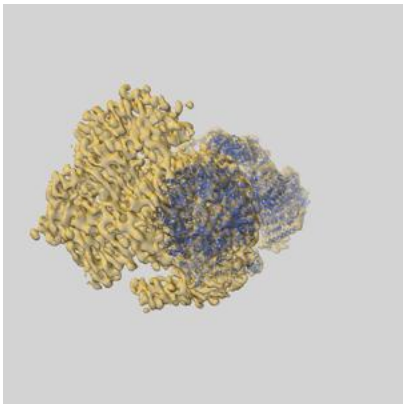
8 Fourier-Shell correlation

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

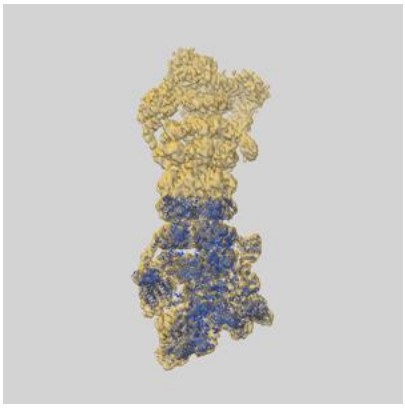
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-2595 and PDB model 4CR3. Per-residue inclusion information can be found in section 3 on page 10.

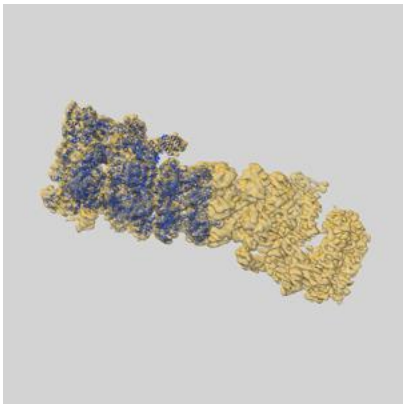
9.1 Map-model overlay



X



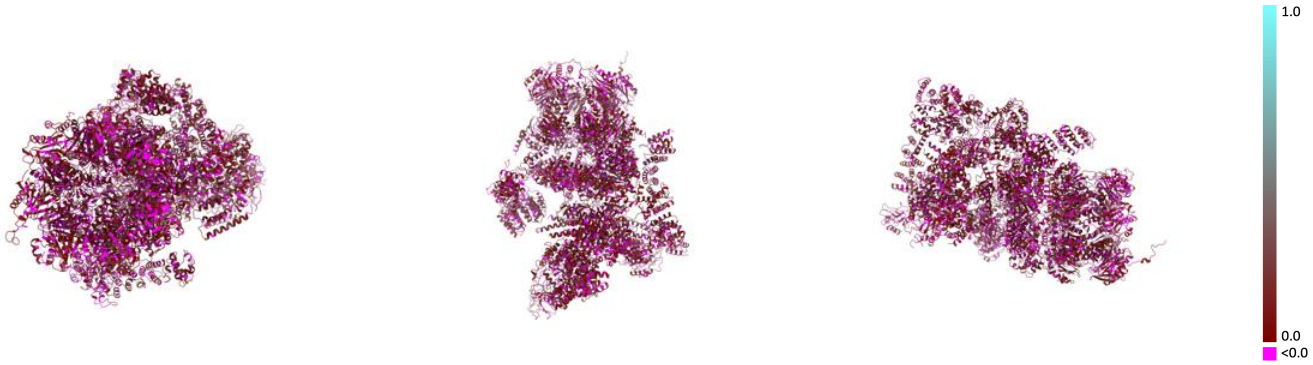
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.63 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model



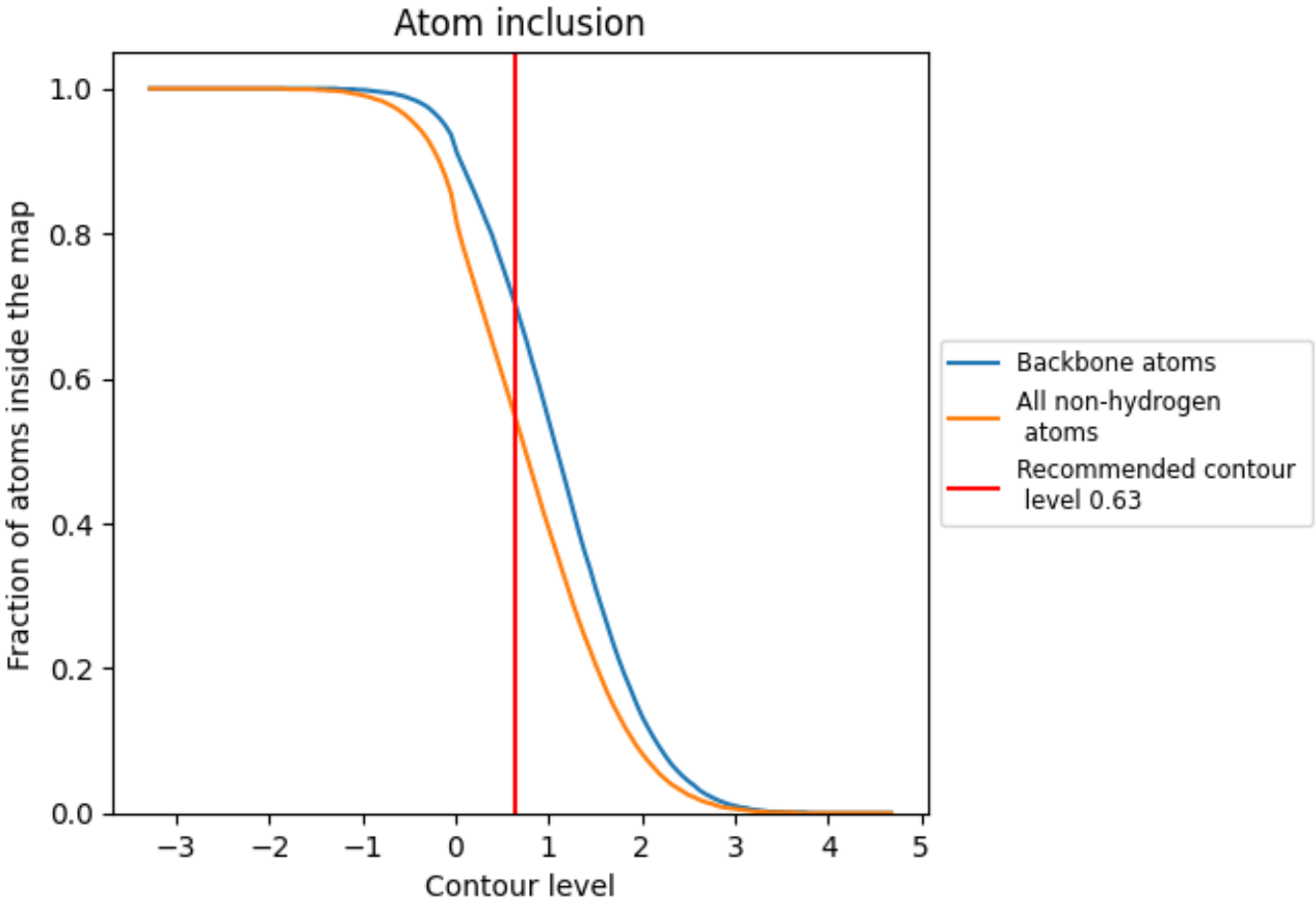
X Y Z

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

9.3 Atom inclusion mapped to coordinate model

This section was not generated.

9.4 Atom inclusion (i)



At the recommended contour level, 71% of all backbone atoms, 55% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.63) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5520	0.0850
1	0.4930	0.0560
2	0.5390	0.0770
3	0.4800	0.0750
4	0.5740	0.0900
5	0.5560	0.0850
6	0.5590	0.0830
7	0.5710	0.0810
A	0.5390	0.0930
B	0.5030	0.0800
C	0.5250	0.0980
D	0.5520	0.1030
E	0.5390	0.0860
F	0.5550	0.0850
G	0.5110	0.0800
H	0.4880	0.0680
I	0.4580	0.0790
J	0.4930	0.0720
K	0.4850	0.0820
L	0.5080	0.0920
M	0.4690	0.0700
N	0.5960	0.0980
O	0.6220	0.0860
P	0.6590	0.0990
Q	0.5470	0.0830
R	0.6440	0.0940
S	0.5600	0.0990
T	0.6200	0.0790
U	0.5800	0.1030
V	0.4930	0.0830
W	0.4900	0.0650
X	0.6000	0.0740
Y	0.7610	0.1240
Z	0.5980	0.0860