



Full wwPDB EM Validation Report ⓘ

Mar 6, 2026 – 05:12 PM UTC

PDB ID : 4CR4 / pdb_00004cr4
EMDB ID : EMD-2596
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 : 8.80 Å(reported)

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev132
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

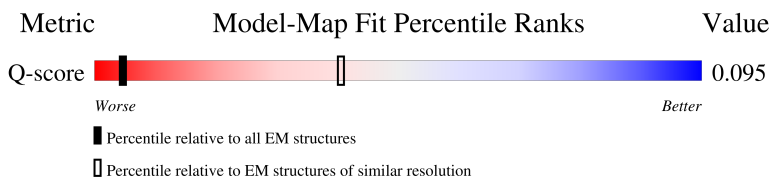
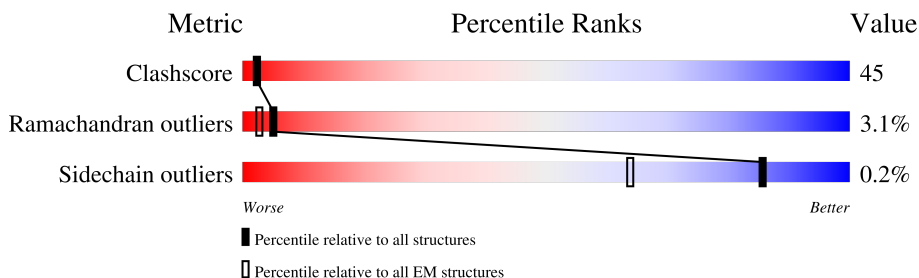
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 8.80 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	265 (8.30 - 9.30)

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

Mol	Chain	Length	Quality of chain
1	1	215	
2	2	261	
3	3	205	
4	4	198	

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Mol	Chain	Length	Quality of chain
5	5	287	
6	6	241	
7	7	266	
8	A	252	
9	B	250	
10	C	258	
11	D	254	
12	E	260	
13	F	234	
14	G	288	
15	H	467	
16	I	437	
17	J	405	
18	K	428	
19	L	437	
20	M	434	
21	N	945	
22	O	393	
23	P	445	
24	Q	434	
25	R	429	
26	S	523	
27	T	274	
28	U	338	
29	V	306	

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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 [i](#)

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		

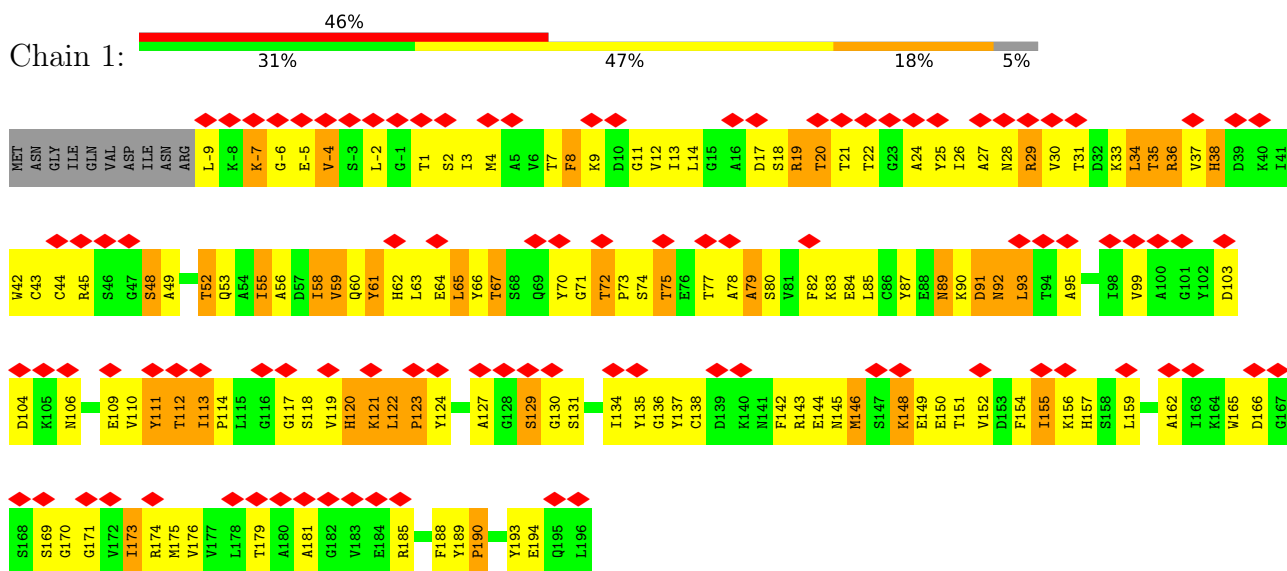
- Molecule 33 is a protein called 26S PROTEASOME REGULATORY SUBUNIT RPN1.

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

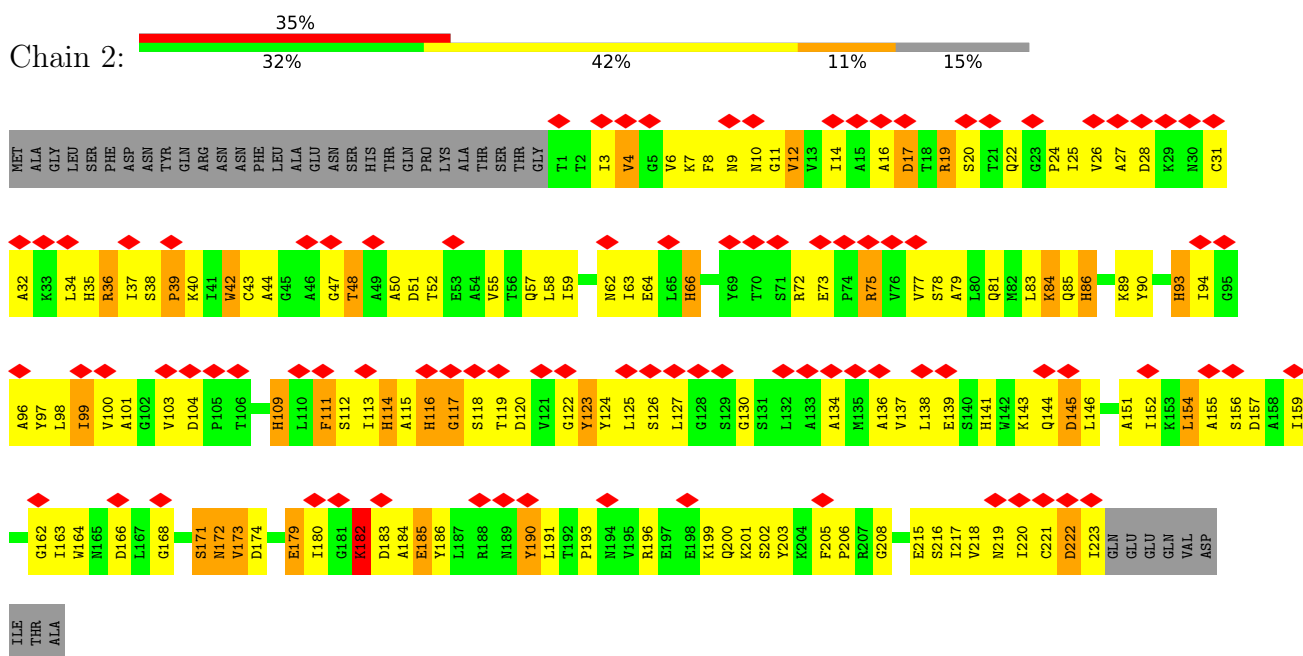
3 Residue-property plots

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.

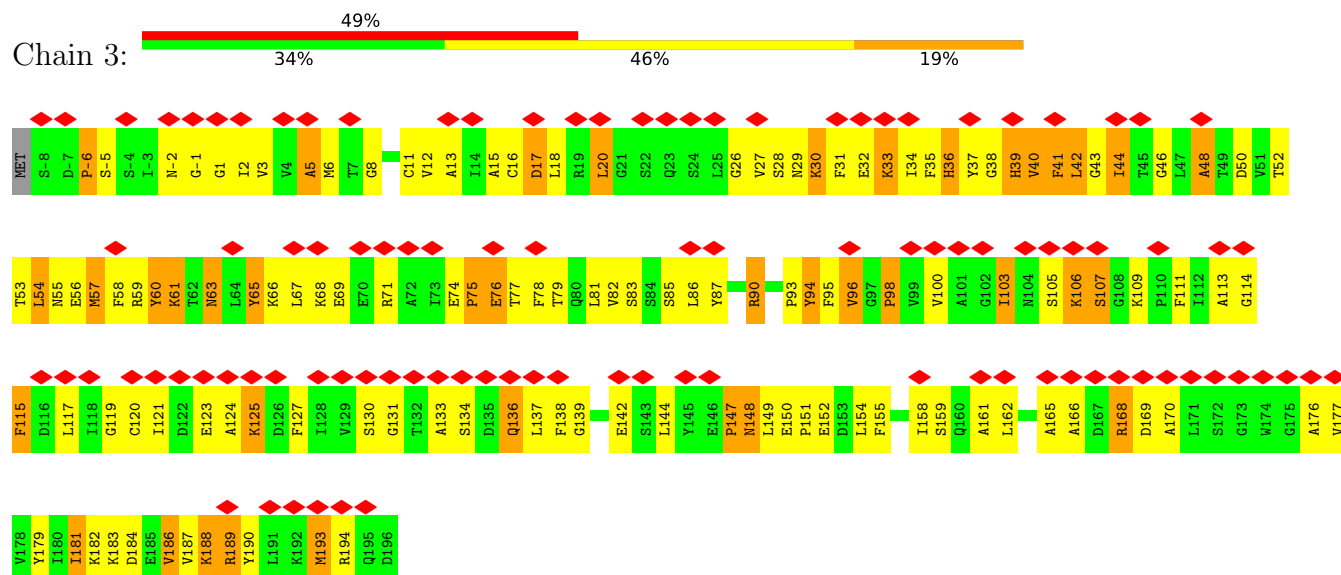
• Molecule 1: PROTEASOME COMPONENT PRE3



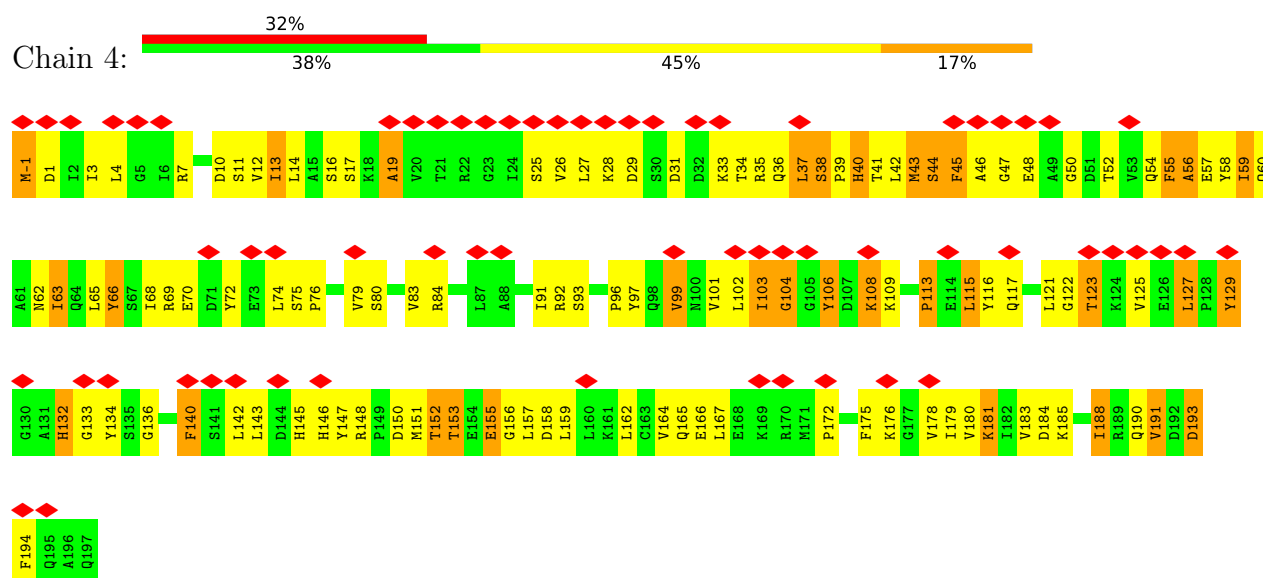
• Molecule 2: PROTEASOME COMPONENT PUP1



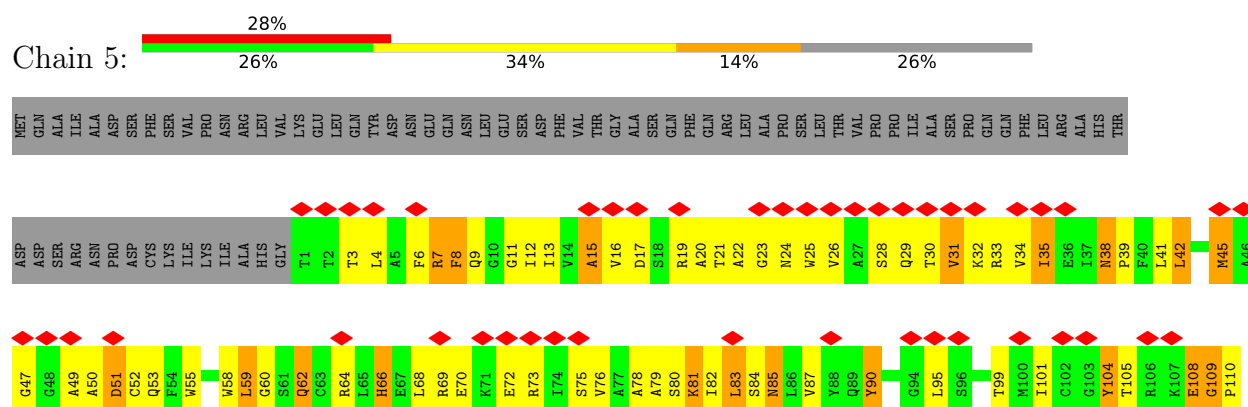
• Molecule 3: PROTEASOME COMPONENT PUP3

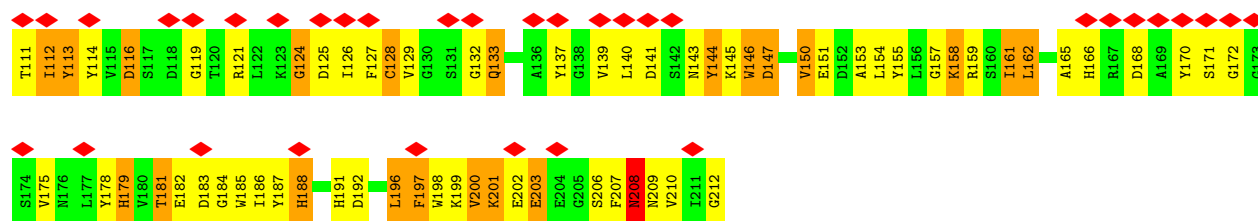


• Molecule 4: PROTEASOME COMPONENT C11

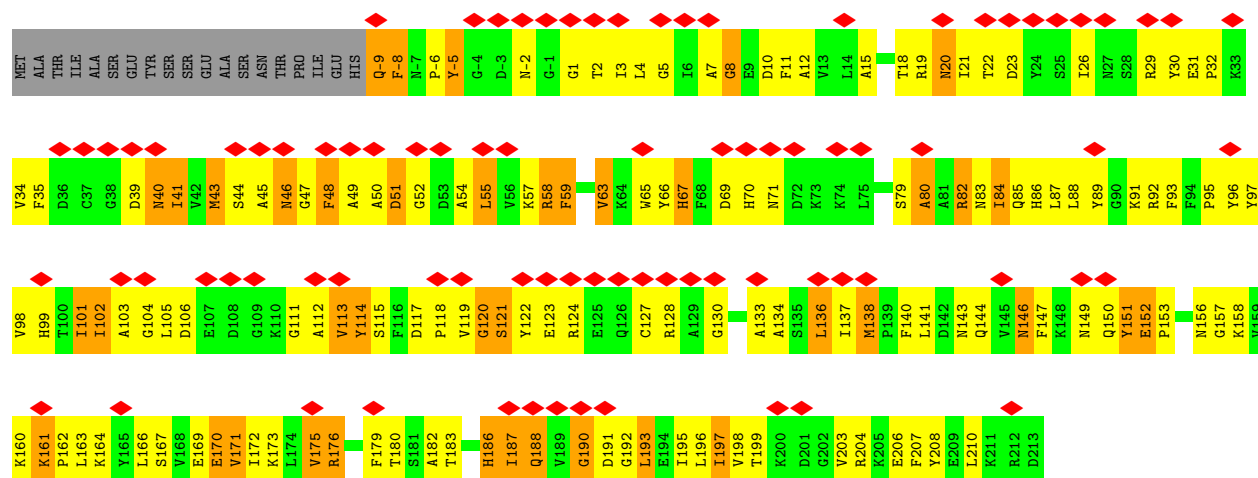


• Molecule 5: PROTEASOME COMPONENT PRE2

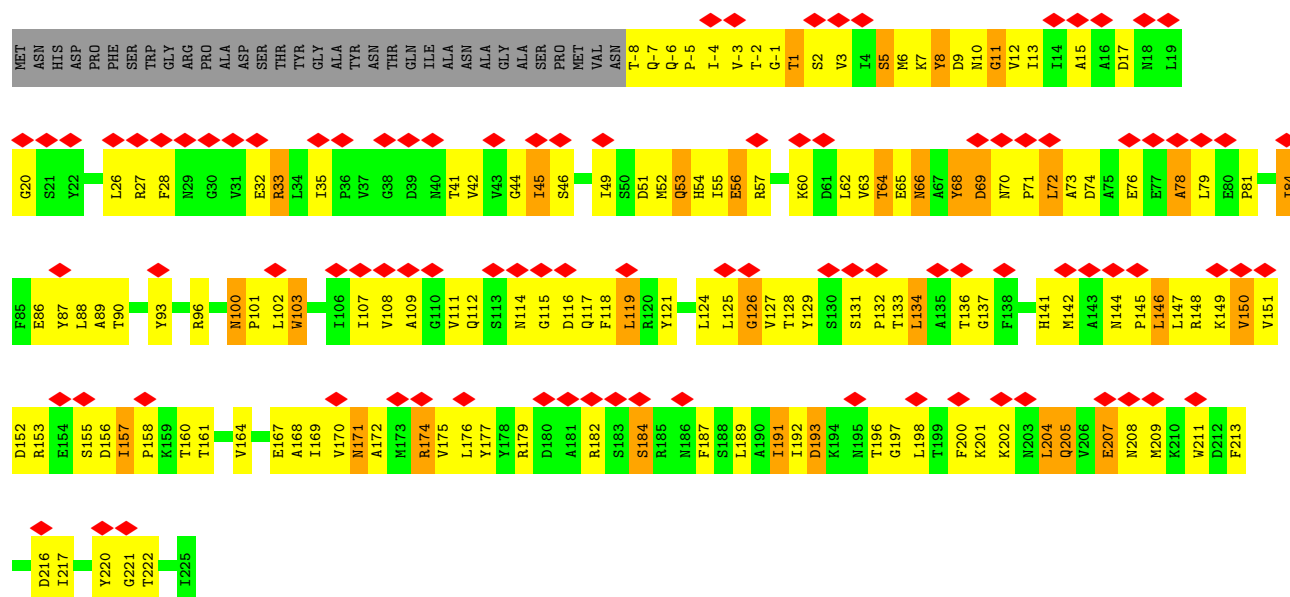




• Molecule 6: PROTEASOME COMPONENT C5

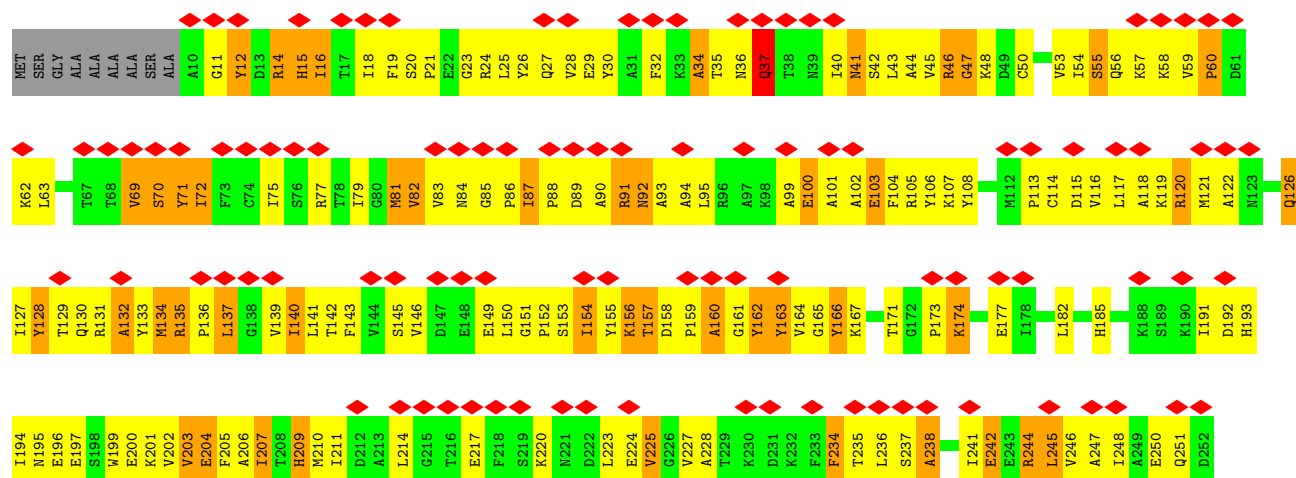


• Molecule 7: PROTEASOME COMPONENT PRE4

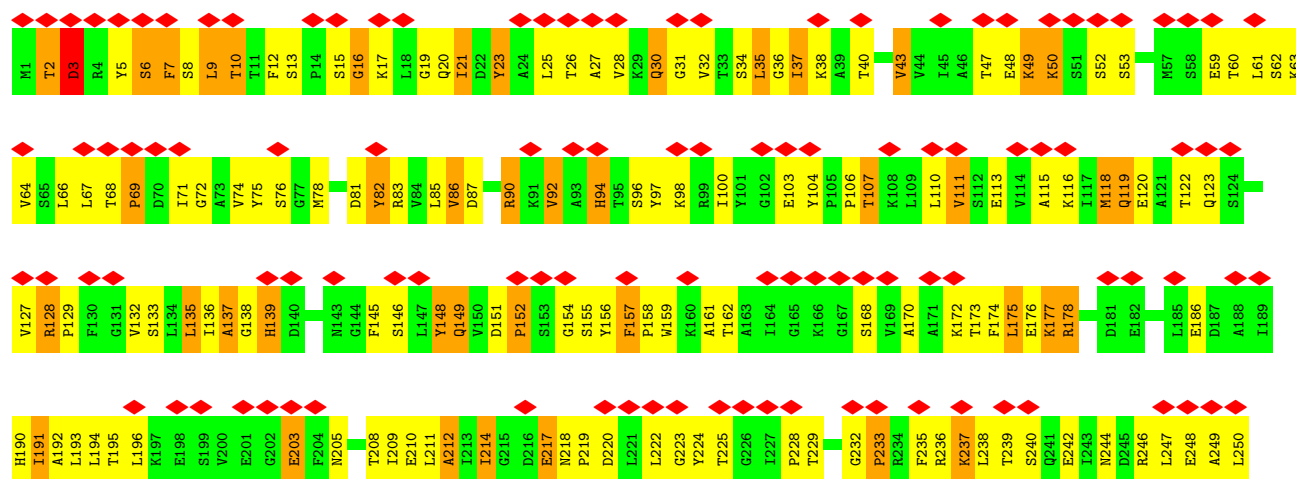
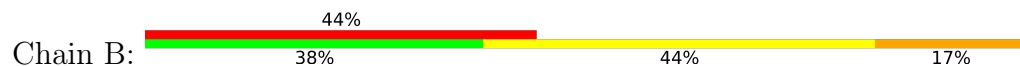


• Molecule 8: PROTEASOME COMPONENT C7-ALPHA

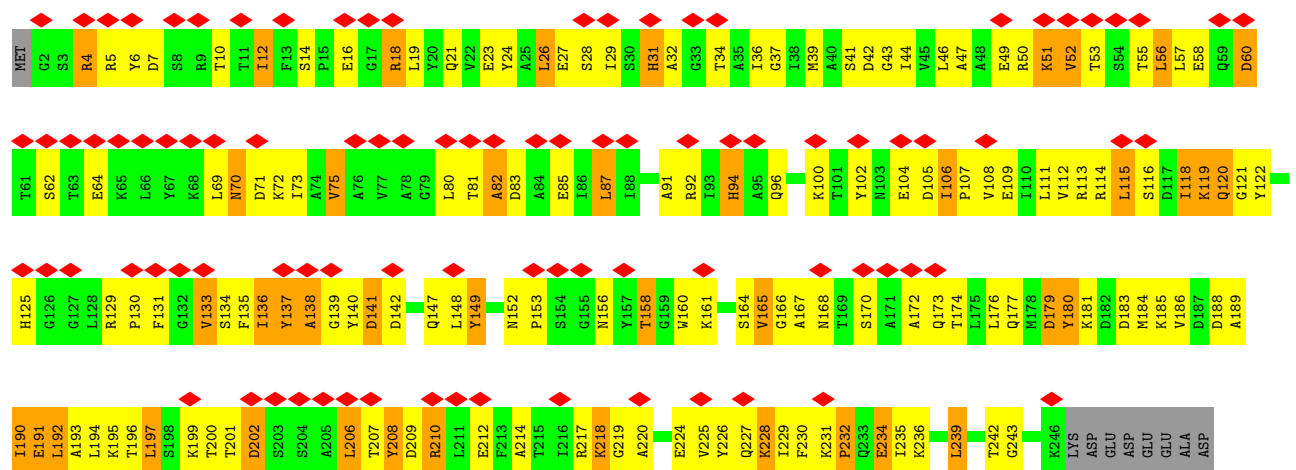




• Molecule 9: PROTEASOME COMPONENT Y7

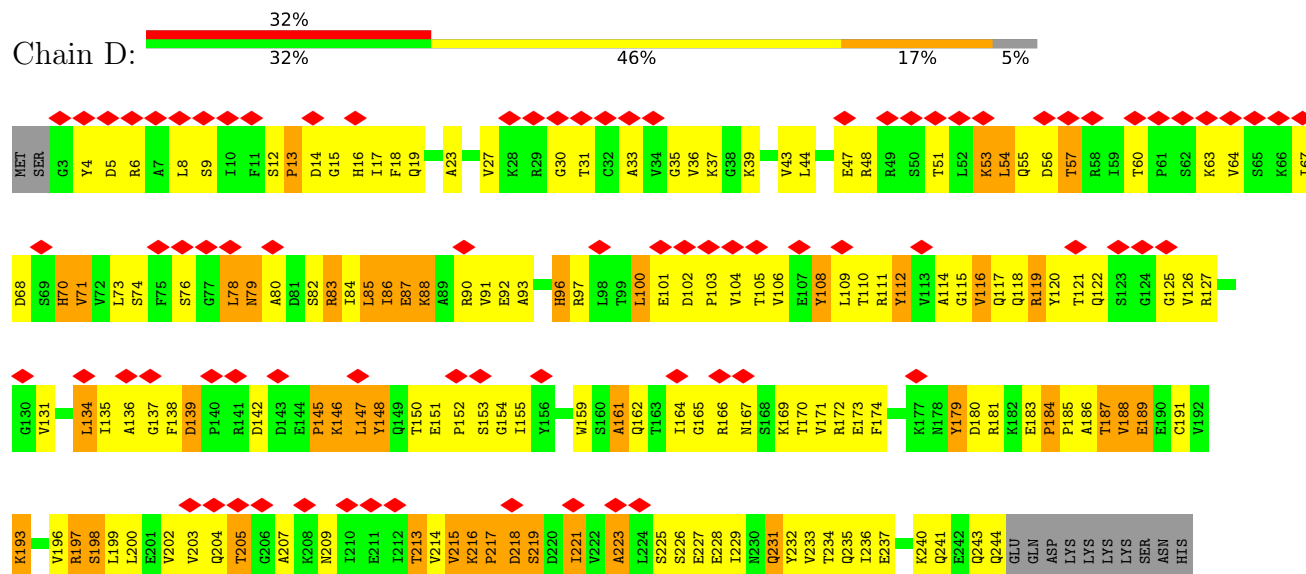


• Molecule 10: PROTEASOME COMPONENT Y13

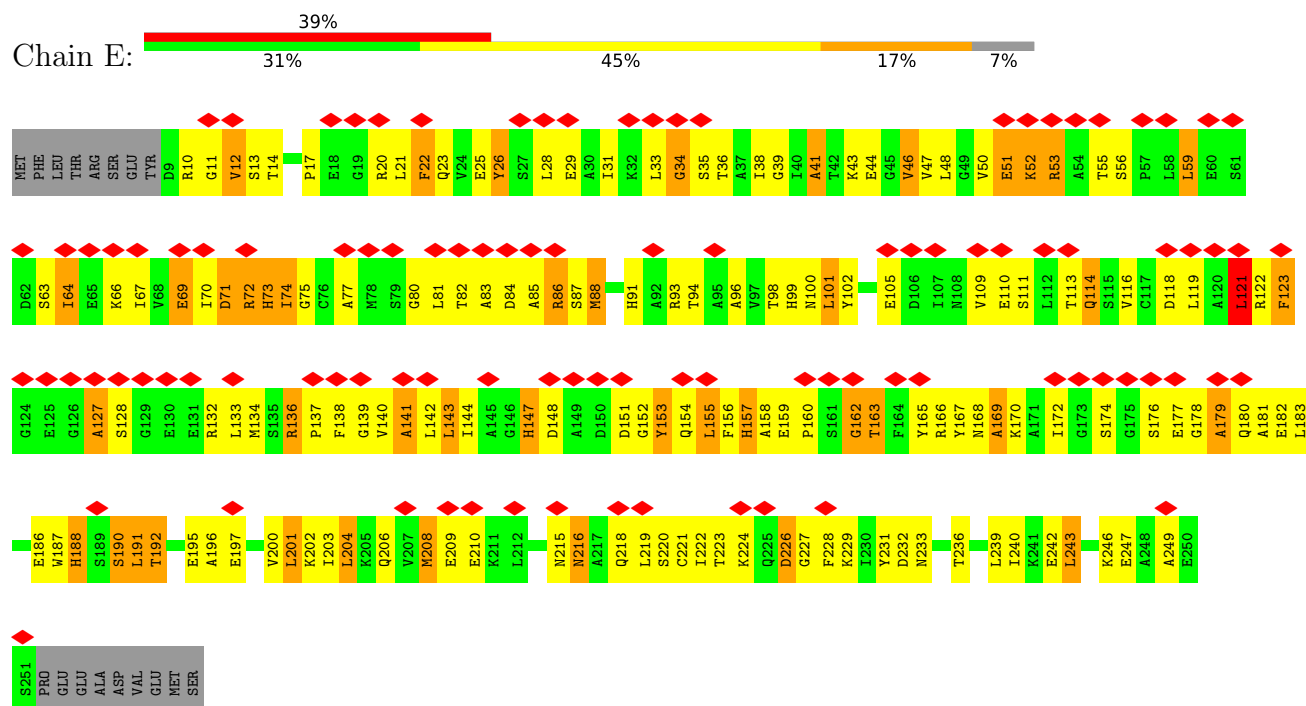


GLU
ASP
MET
LYS

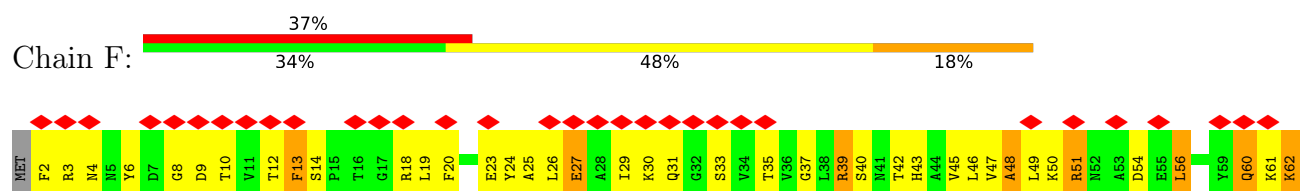
• Molecule 11: PROTEASOME COMPONENT PRE6

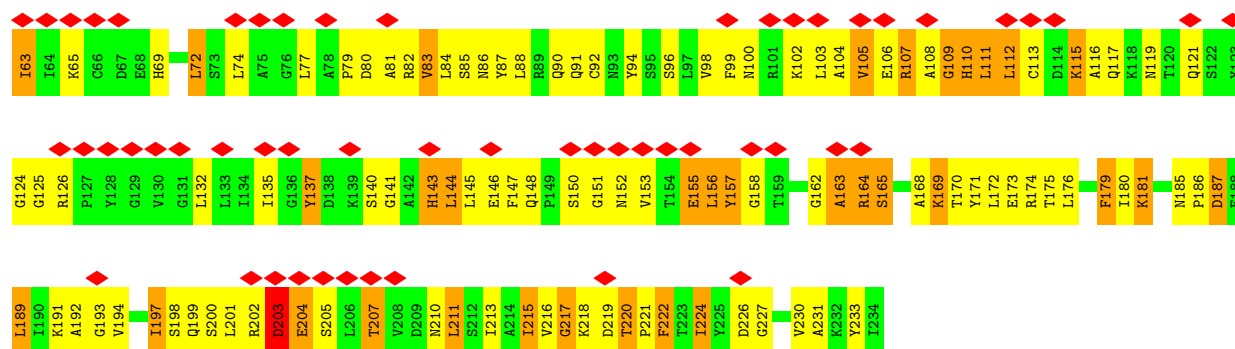


• Molecule 12: PROTEASOME COMPONENT PUP2

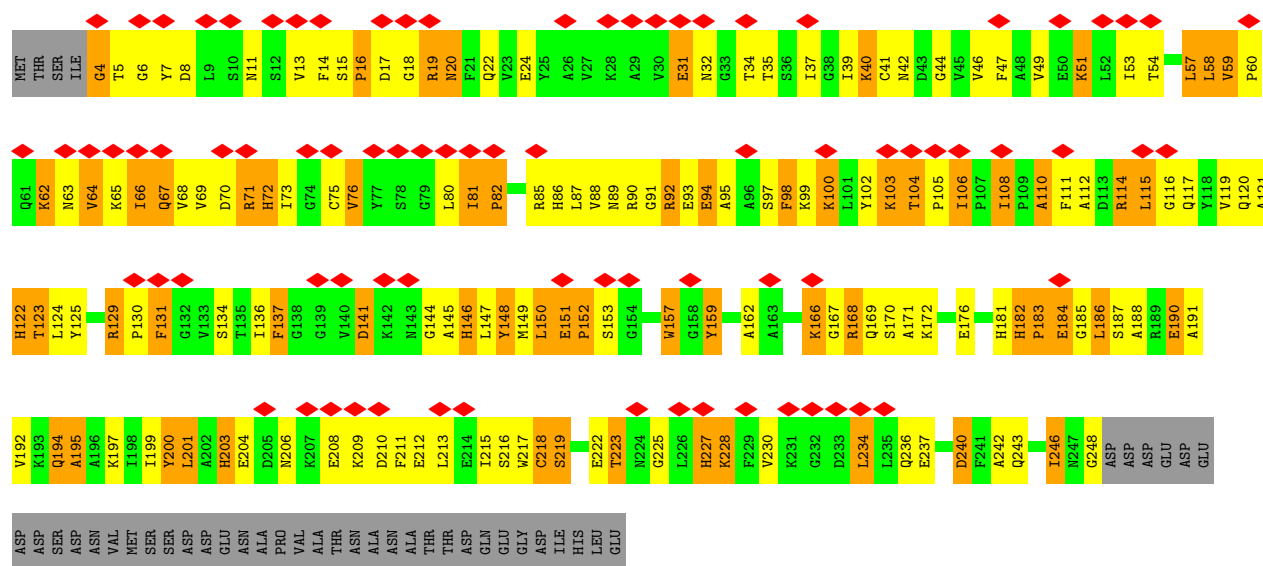
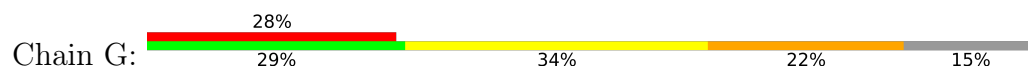


• Molecule 13: PROTEASOME COMPONENT PRE5

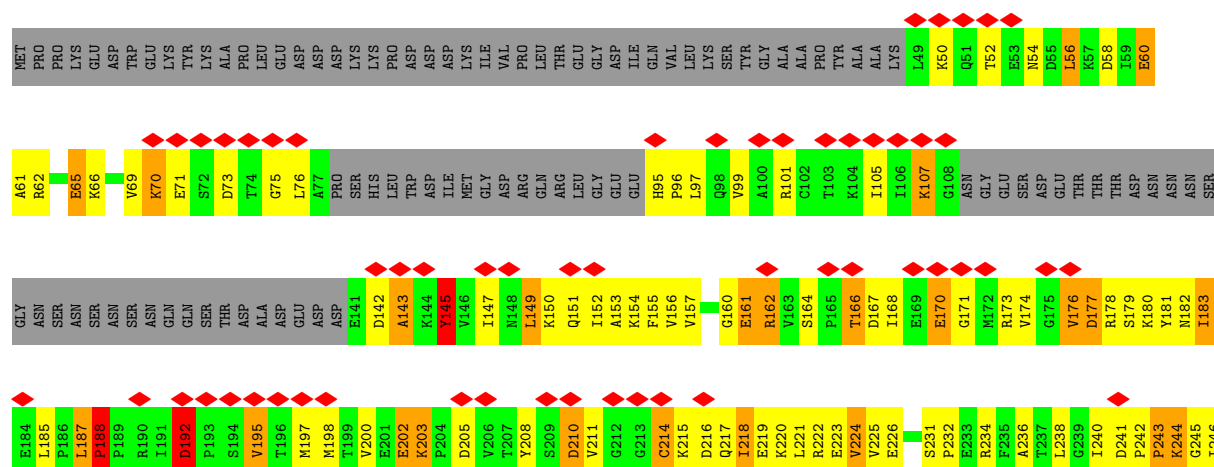
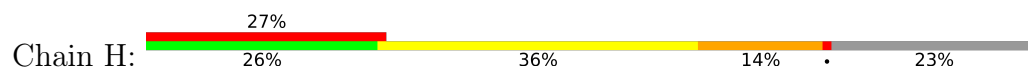


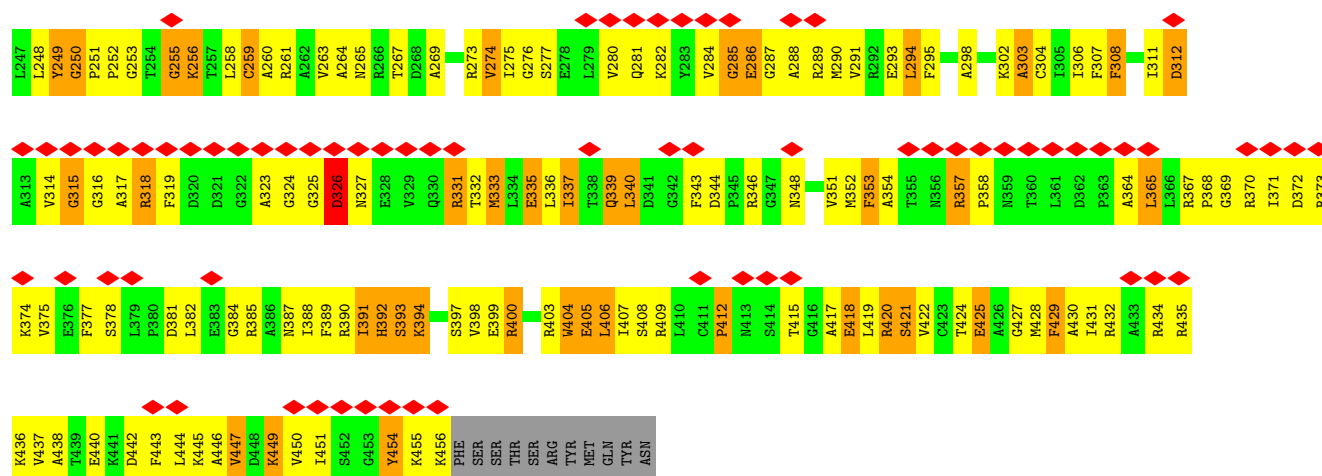


• Molecule 14: PROTEASOME COMPONENT C1

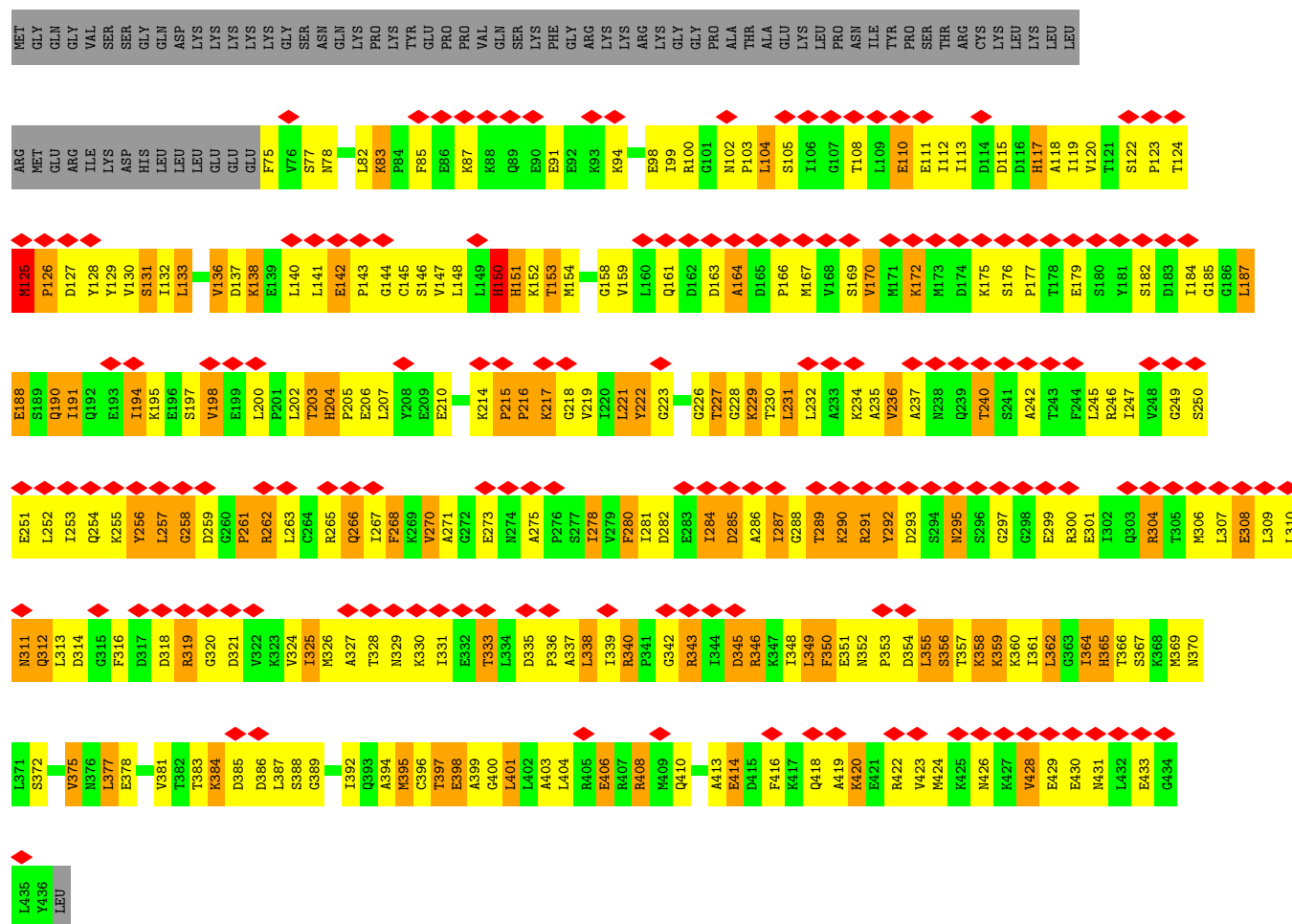
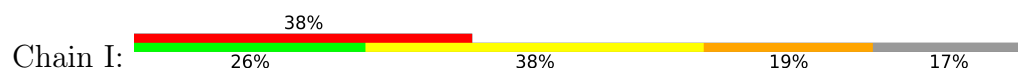


• Molecule 15: 26S PROTEASE REGULATORY SUBUNIT 7 HOMOLOG



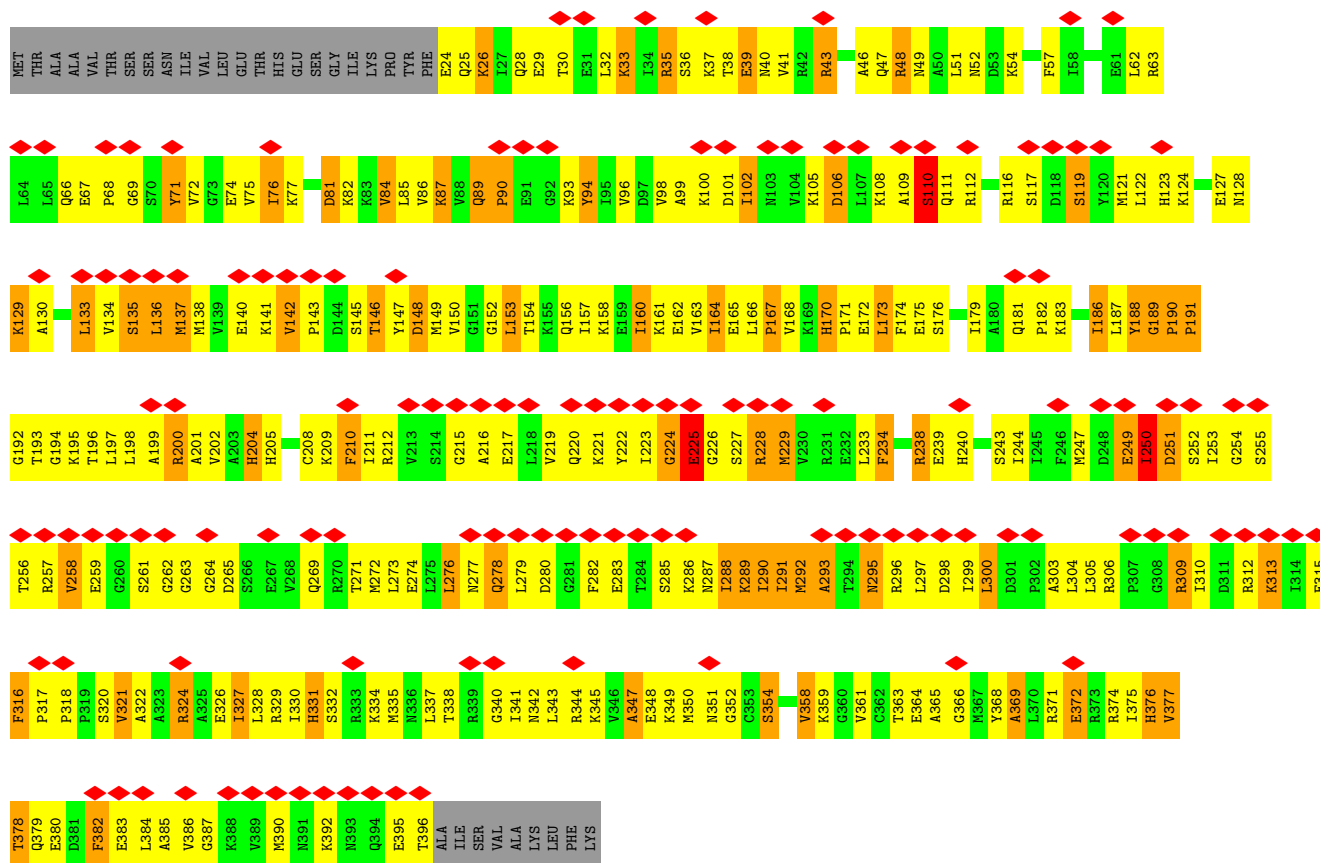


• Molecule 16: 26S PROTEASE REGULATORY SUBUNIT 4 HOMOLOG

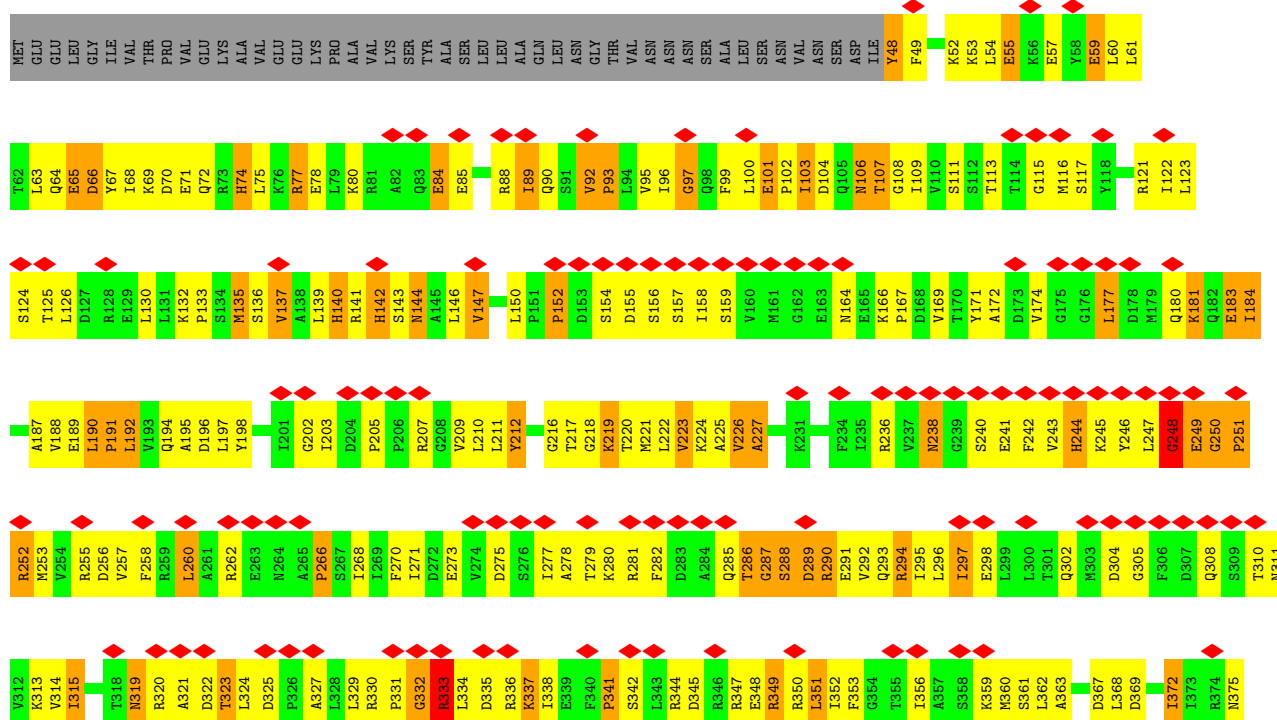


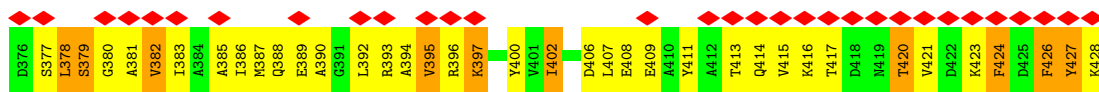
• Molecule 17: 26S PROTEASE REGULATORY SUBUNIT 8 HOMOLOG



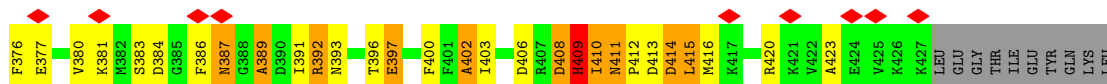
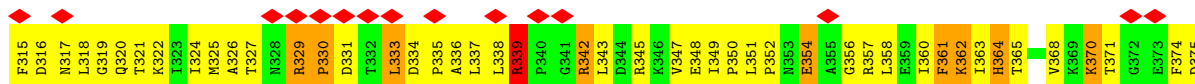
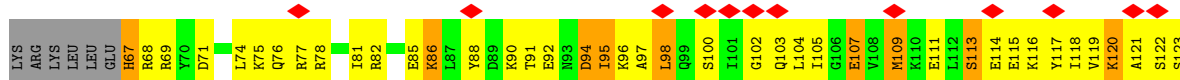
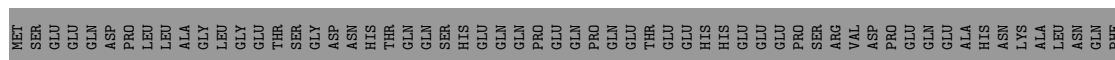


• Molecule 18: 26S PROTEASE REGULATORY SUBUNIT 6B HOMOLOG

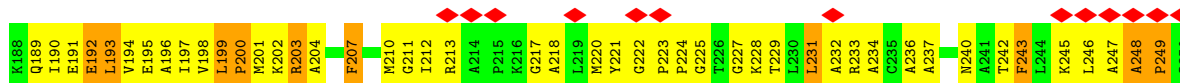
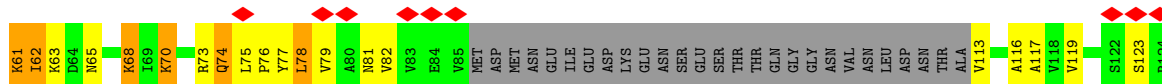
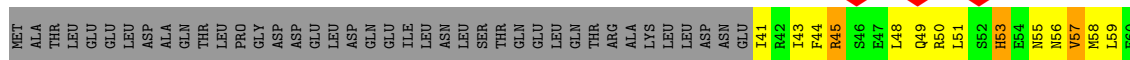




• Molecule 19: 26S PROTEASE SUBUNIT RPT4

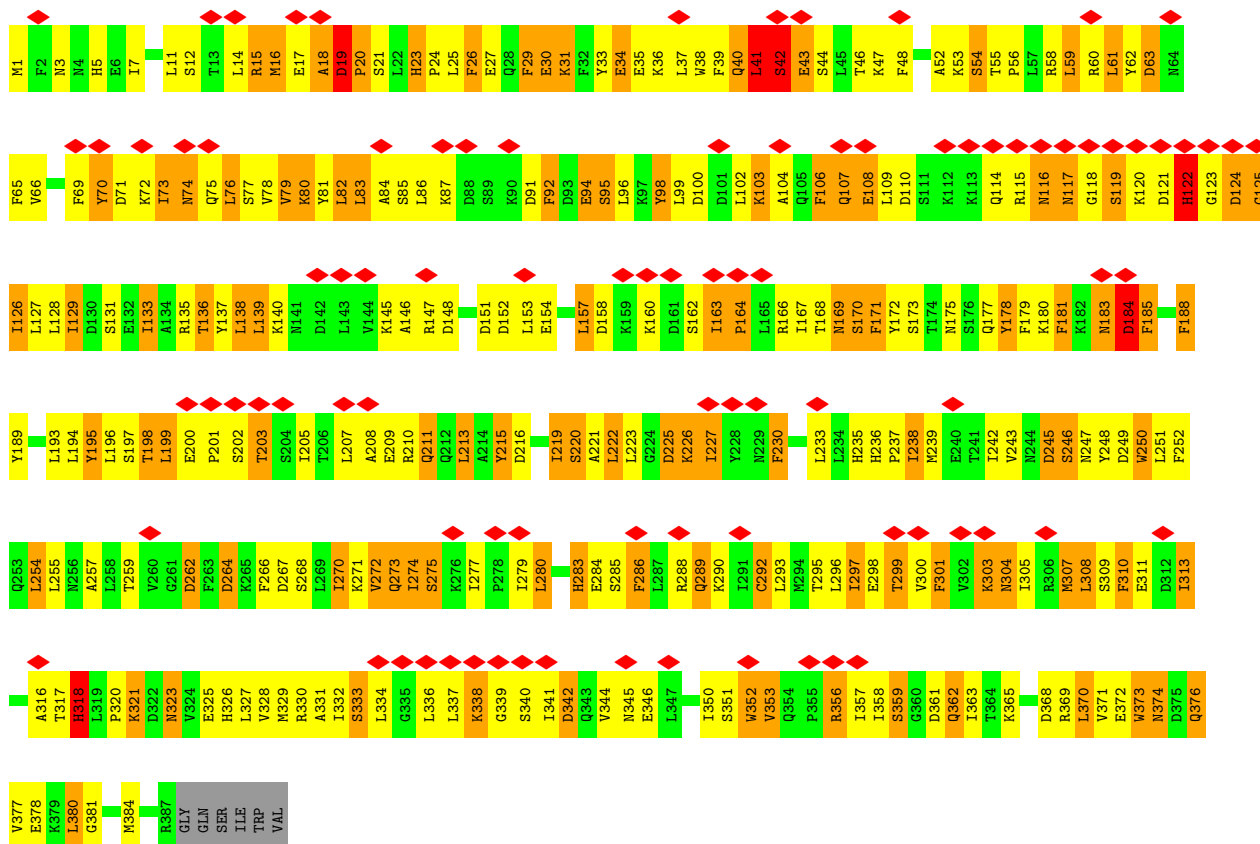


• Molecule 20: 26S PROTEASE REGULATORY SUBUNIT 6A



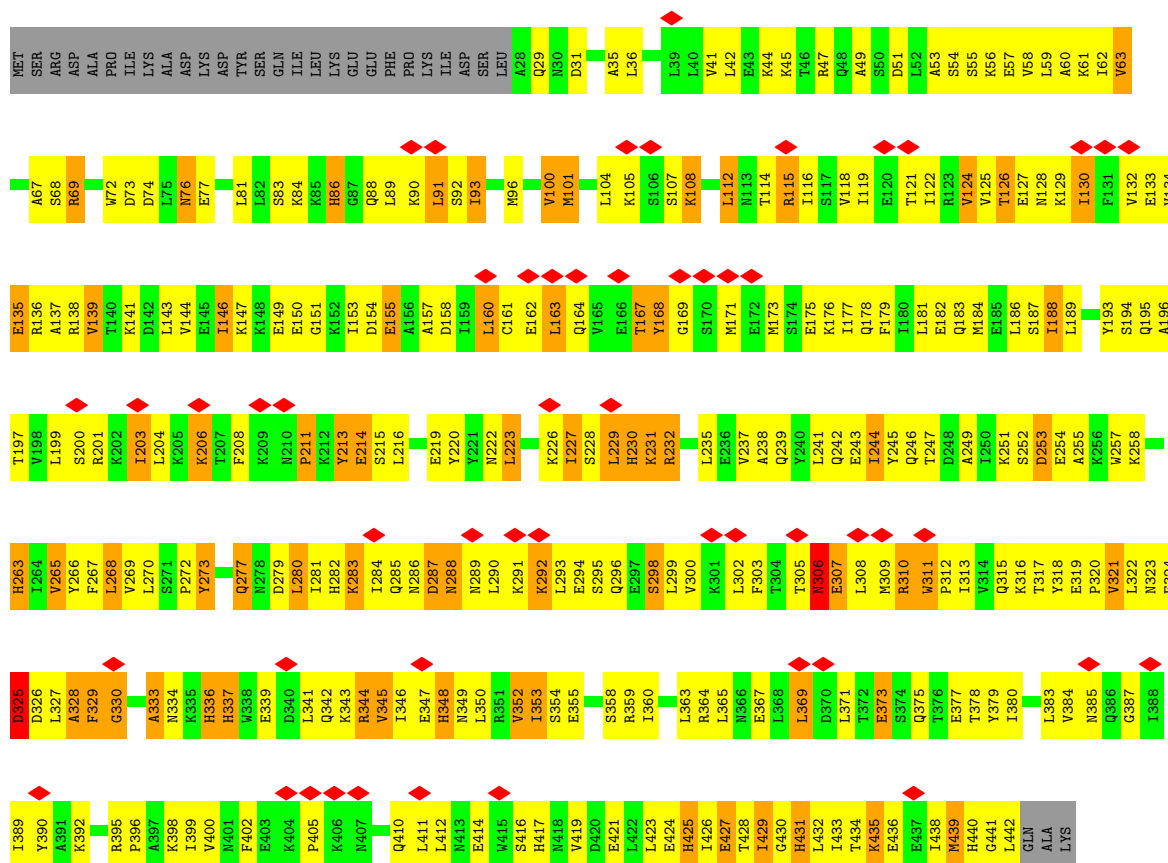


- Molecule 22: 26S PROTEASOME REGULATORY SUBUNIT RPN9

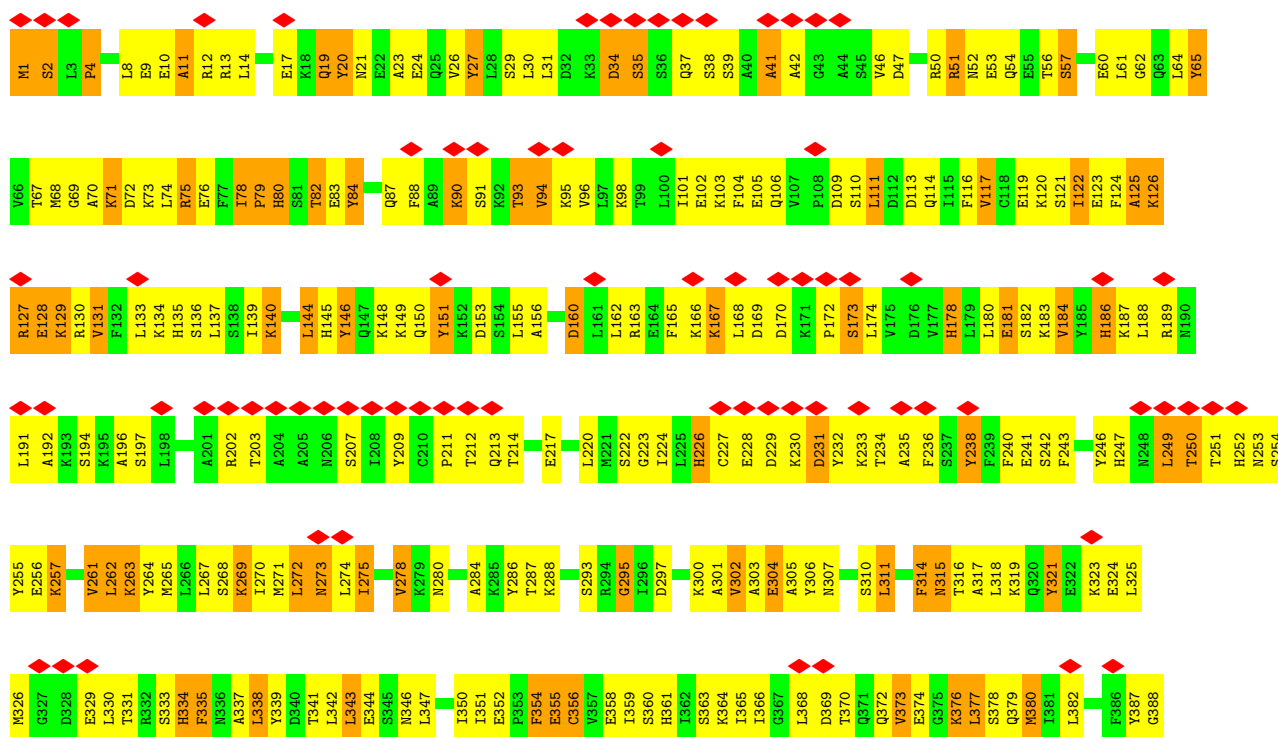


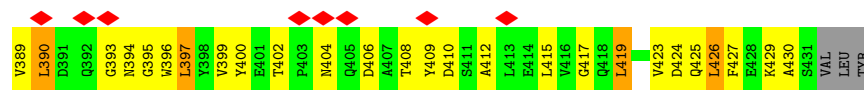
- Molecule 23: 26S PROTEASOME REGULATORY SUBUNIT RPN5



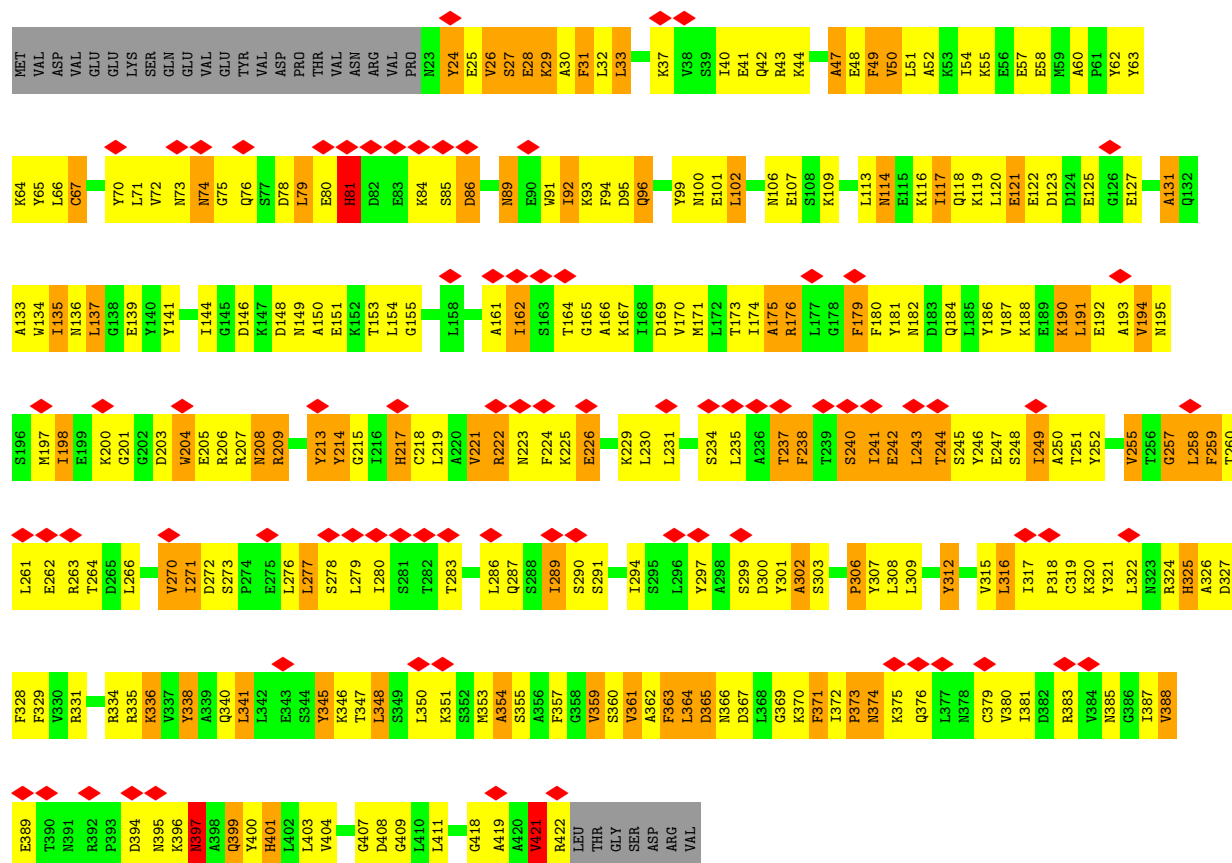


• Molecule 24: 26S PROTEASOME REGULATORY SUBUNIT RPN6

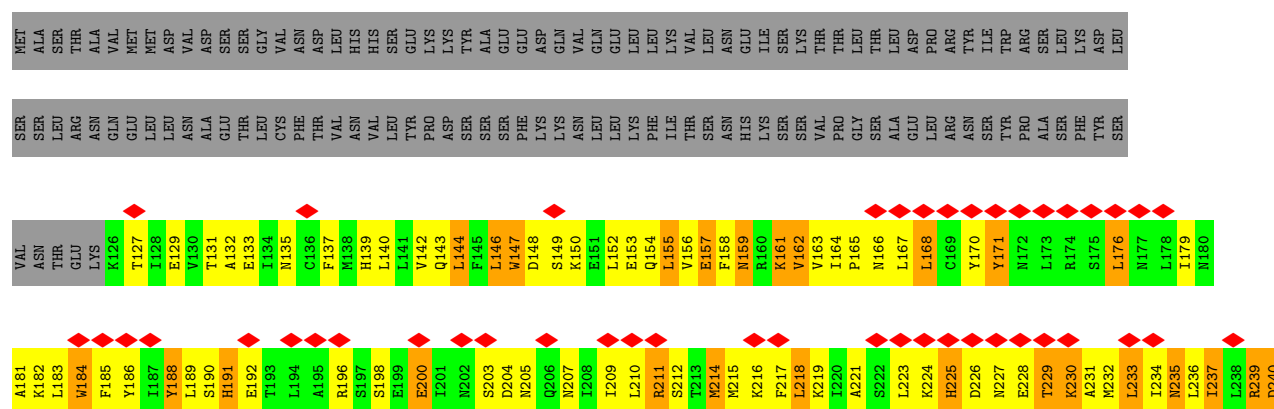
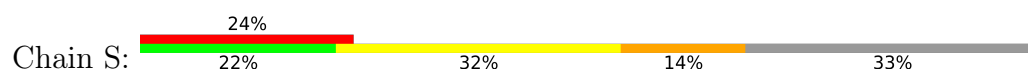


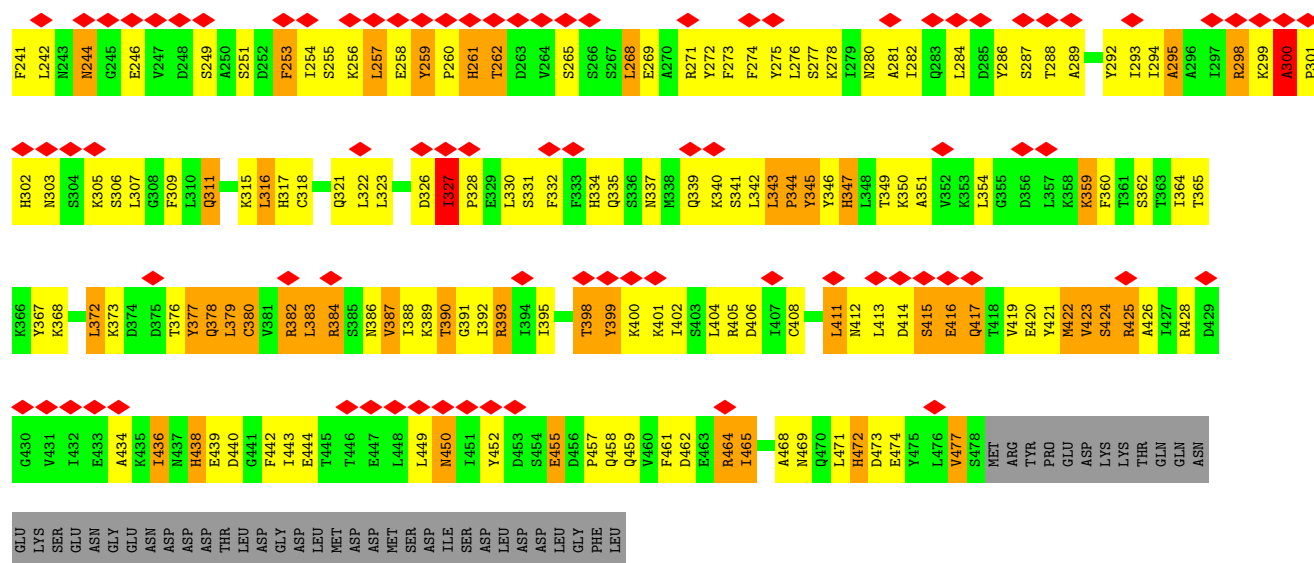


• Molecule 25: 26S PROTEASOME REGULATORY SUBUNIT RPN7

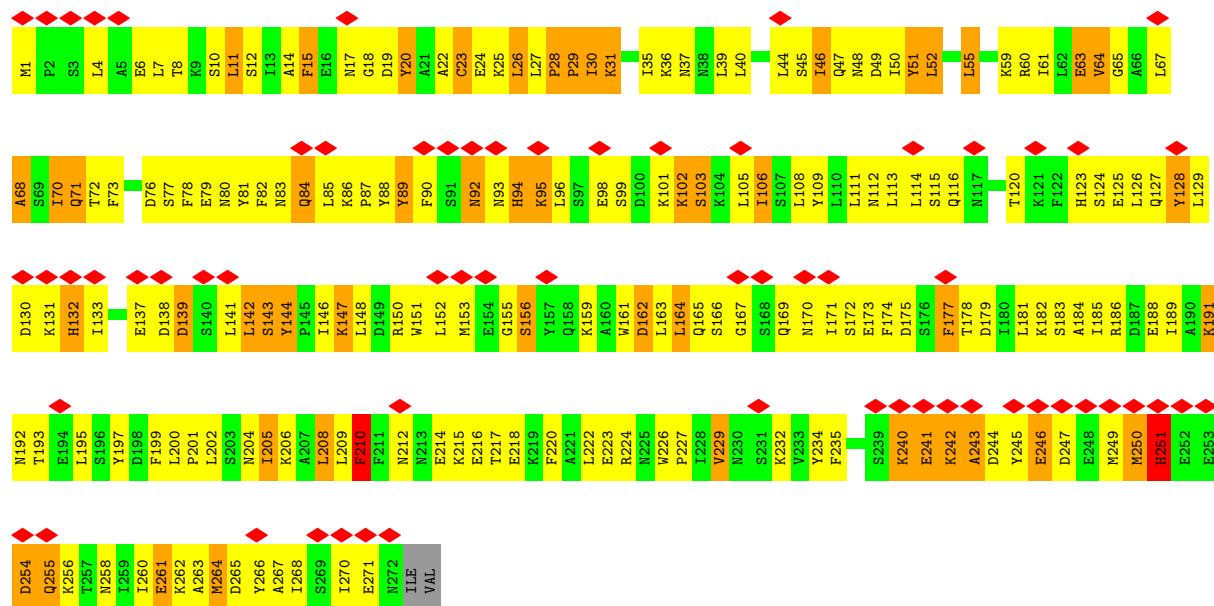


• Molecule 26: 26S PROTEASOME REGULATORY SUBUNIT RPN3

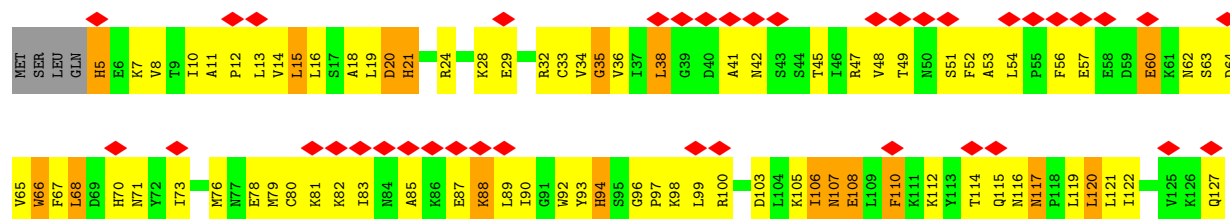
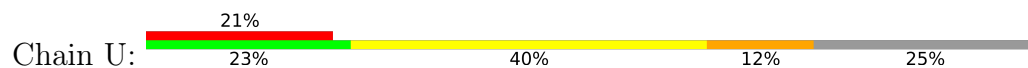


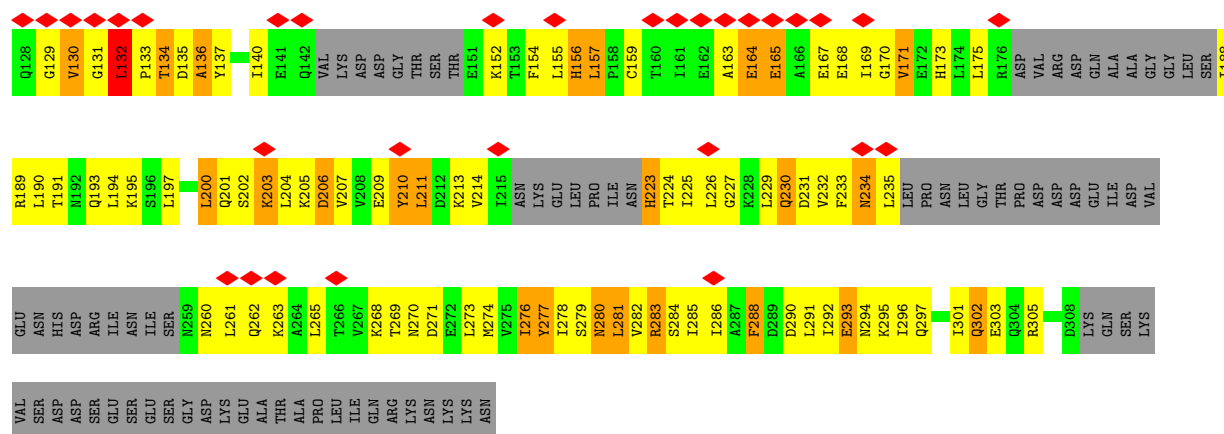


• Molecule 27: 26S PROTEASOME REGULATORY SUBUNIT RPN12

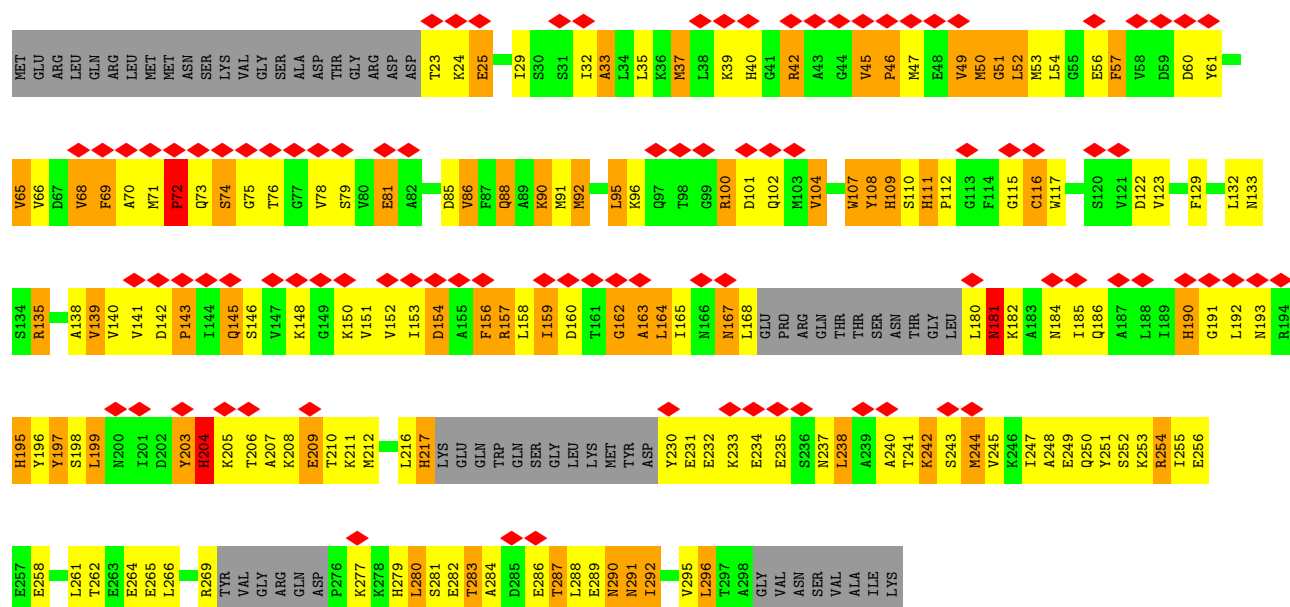
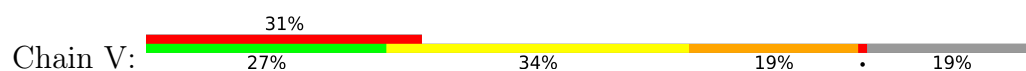


• Molecule 28: 26S PROTEASOME REGULATORY SUBUNIT RPN8

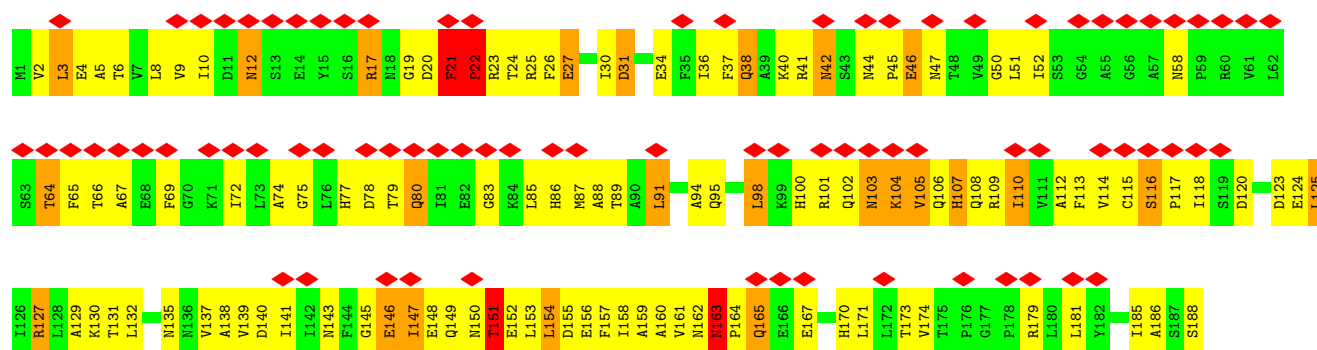
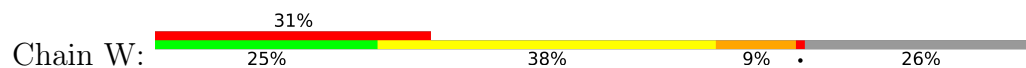


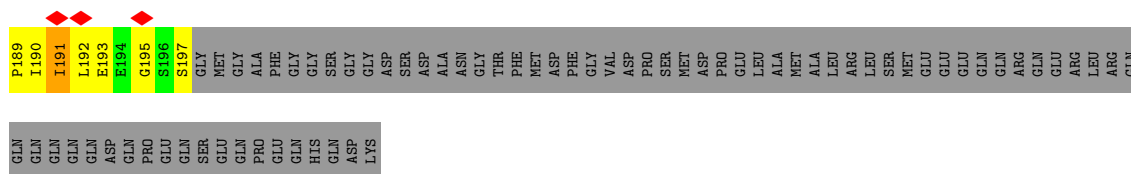


• Molecule 29: 26S PROTEASOME REGULATORY SUBUNIT RPN11

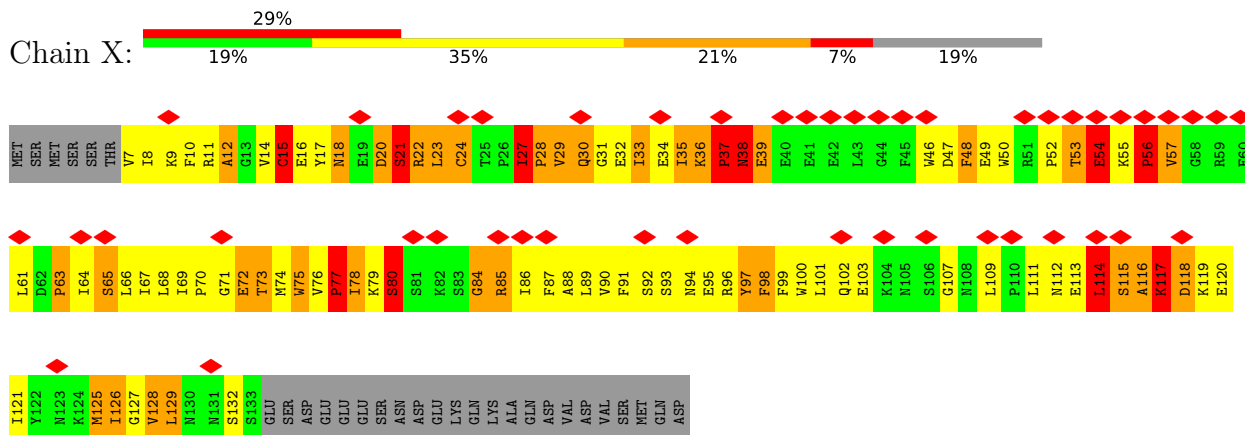


• Molecule 30: 26S PROTEASOME REGULATORY SUBUNIT RPN10

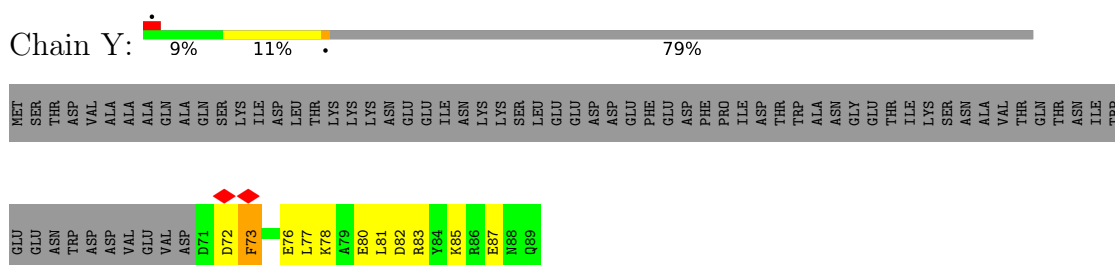




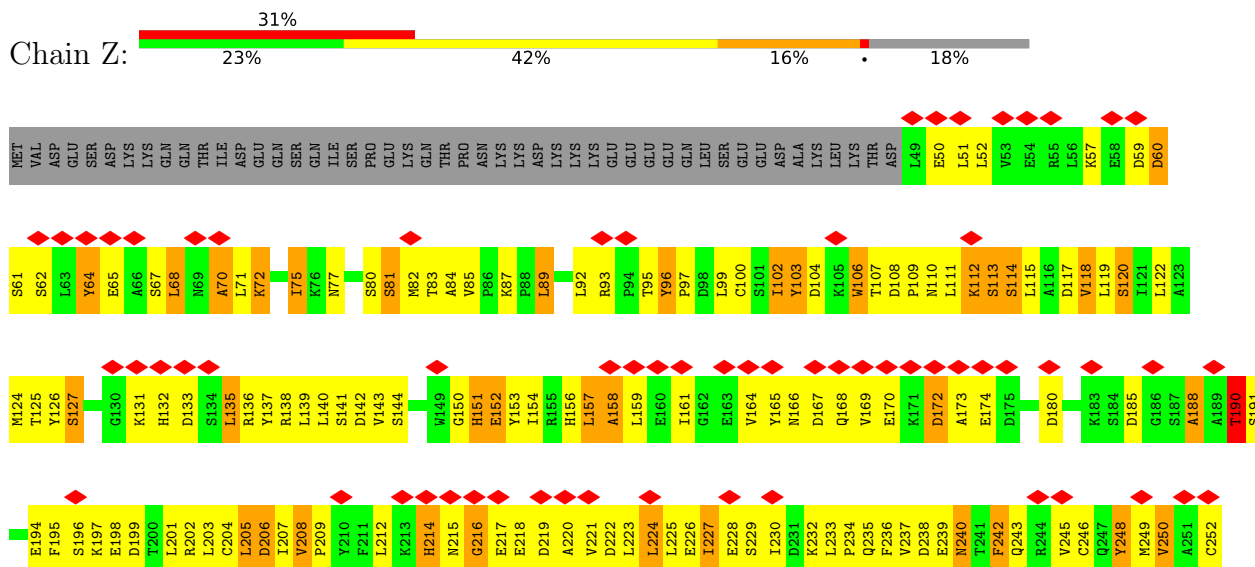
• Molecule 31: 26S PROTEASOME REGULATORY SUBUNIT RPN13



• Molecule 32: 26S PROTEASOME COMPLEX SUBUNIT SEM1



• Molecule 33: 26S PROTEASOME REGULATORY SUBUNIT RPN1





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	560000	Depositor
Resolution determination method	Not provided	
CTF correction method	MICROGRAPH	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/\text{\AA}^2$)	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	5.177	Depositor
Minimum map value	-3.208	Depositor
Average map value	0.012	Depositor
Map value standard deviation	0.149	Depositor
Recommended contour level	0.81	Depositor
Map size ($\text{\AA}$)	557.2, 557.2, 557.2	wwPDB
Map dimensions	280, 280, 280	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.99, 1.99, 1.99	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	1.94	46/1605 (2.9%)	2.03	77/2171 (3.5%)
2	2	1.98	61/1723 (3.5%)	2.02	81/2337 (3.5%)
3	3	1.84	52/1611 (3.2%)	1.96	80/2174 (3.7%)
4	4	1.85	42/1613 (2.6%)	1.96	86/2173 (4.0%)
5	5	1.94	57/1683 (3.4%)	2.09	92/2277 (4.0%)
6	6	1.90	66/1795 (3.7%)	2.02	77/2420 (3.2%)
7	7	1.82	43/1855 (2.3%)	2.02	95/2514 (3.8%)
8	A	1.89	65/1959 (3.3%)	1.98	90/2652 (3.4%)
9	B	1.85	48/1952 (2.5%)	2.04	116/2642 (4.4%)
10	C	1.90	56/1943 (2.9%)	1.92	82/2629 (3.1%)
11	D	1.87	64/1928 (3.3%)	2.05	91/2610 (3.5%)
12	E	1.99	65/1892 (3.4%)	2.09	92/2549 (3.6%)
13	F	1.98	63/1823 (3.5%)	2.10	100/2463 (4.1%)
14	G	2.09	76/1940 (3.9%)	2.06	99/2619 (3.8%)
15	H	1.91	62/2830 (2.2%)	2.10	144/3805 (3.8%)
16	I	1.93	103/2859 (3.6%)	2.11	162/3853 (4.2%)
17	J	1.97	99/2964 (3.3%)	2.12	176/3981 (4.4%)
18	K	1.84	84/3061 (2.7%)	2.08	170/4129 (4.1%)
19	L	1.86	71/2895 (2.5%)	2.03	135/3892 (3.5%)
20	M	1.94	87/2903 (3.0%)	2.11	173/3909 (4.4%)
21	N	1.87	200/6670 (3.0%)	2.15	414/9023 (4.6%)
22	O	1.79	94/3243 (2.9%)	2.07	190/4374 (4.3%)
23	P	1.87	113/3452 (3.3%)	2.12	195/4657 (4.2%)
24	Q	1.82	87/3527 (2.5%)	2.13	200/4748 (4.2%)
25	R	1.80	84/3272 (2.6%)	2.02	174/4412 (3.9%)
26	S	2.09	85/2945 (2.9%)	2.18	182/3976 (4.6%)
27	T	1.83	72/2279 (3.2%)	2.09	121/3077 (3.9%)
28	U	1.81	68/2087 (3.3%)	2.10	122/2811 (4.3%)
29	V	2.19	68/1969 (3.5%)	2.14	97/2652 (3.7%)
30	W	1.58	24/1557 (1.5%)	1.84	50/2111 (2.4%)
31	X	1.57	16/1058 (1.5%)	1.93	47/1432 (3.3%)
32	Y	1.76	3/169 (1.8%)	1.94	5/223 (2.2%)
33	Z	1.88	193/6403 (3.0%)	2.11	358/8686 (4.1%)
All	All	1.89	2417/81465 (3.0%)	2.07	4373/109981 (4.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	1	0	1
2	2	0	1
9	B	0	1
14	G	0	1
15	H	0	7
16	I	0	1
17	J	0	4
18	K	0	2
19	L	0	4
20	M	0	2
21	N	0	1
22	O	0	2
23	P	0	2
24	Q	0	1
25	R	0	2
26	S	0	1
27	T	0	1
28	U	0	1
29	V	0	1
30	W	0	6
31	X	0	4
33	Z	0	7
All	All	0	53

All (2417) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	H	285	GLY	C-N	45.89	1.98	1.33
26	S	257	LEU	CA-C	42.25	2.10	1.52
29	V	290	ASN	C-N	39.38	1.83	1.33
26	S	257	LEU	N-CA	-30.00	1.06	1.46
20	M	257	GLY	C-N	25.90	1.69	1.33
29	V	282	GLU	C-N	-22.10	1.03	1.33
29	V	283	THR	C-N	17.01	1.56	1.33
14	G	7	TYR	N-CA	-12.14	1.32	1.46
21	N	693	GLY	CA-C	-11.89	1.38	1.52
18	K	250	GLY	CA-C	11.75	1.59	1.51
13	F	40	SER	CA-C	-11.52	1.47	1.53
10	C	140	TYR	CA-C	-11.46	1.38	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	770	LYS	CA-C	-11.45	1.40	1.52
27	T	37	ASN	CA-C	-10.79	1.38	1.52
21	N	730	VAL	C-N	10.51	1.46	1.33
5	5	147	ASP	CA-C	-10.45	1.39	1.52
14	G	218	CYS	CA-C	-10.40	1.41	1.52
21	N	359	ALA	CA-C	-10.37	1.39	1.52
27	T	52	LEU	CA-C	-10.18	1.39	1.52
17	J	57	PHE	CA-C	-10.09	1.40	1.52
20	M	251	LEU	C-N	-9.92	1.20	1.33
16	I	83	LYS	CA-C	9.67	1.64	1.52
2	2	35	HIS	CA-C	-9.56	1.41	1.52
14	G	64	VAL	N-CA	-9.48	1.35	1.46
12	E	160	PRO	N-CD	9.40	1.60	1.47
20	M	425	ARG	C-N	9.38	1.47	1.33
19	L	154	THR	C-N	9.37	1.42	1.33
25	R	226	GLU	CA-C	-9.36	1.40	1.52
33	Z	338	HIS	CG-CD2	9.34	1.46	1.35
33	Z	373	GLY	C-N	9.34	1.43	1.32
9	B	139	HIS	CG-CD2	9.34	1.46	1.35
17	J	331	HIS	CG-CD2	9.33	1.46	1.35
18	K	142	HIS	CG-CD2	9.33	1.46	1.35
33	Z	132	HIS	CG-CD2	9.33	1.46	1.35
2	2	66	HIS	CG-CD2	9.33	1.46	1.35
29	V	234	GLU	CA-C	-9.33	1.41	1.52
11	D	16	HIS	CG-CD2	9.33	1.46	1.35
16	I	151	HIS	CG-CD2	9.33	1.46	1.35
33	Z	760	HIS	CG-CD2	9.33	1.46	1.35
27	T	132	HIS	CG-CD2	9.32	1.46	1.35
11	D	96	HIS	CG-CD2	9.32	1.46	1.35
16	I	117	HIS	CG-CD2	9.32	1.46	1.35
19	L	67	HIS	CG-CD2	9.32	1.46	1.35
14	G	86	HIS	CG-CD2	9.32	1.46	1.35
18	K	74	HIS	CG-CD2	9.32	1.46	1.35
21	N	573	HIS	CG-CD2	9.32	1.46	1.35
30	W	86	HIS	CG-CD2	9.31	1.46	1.35
33	Z	361	HIS	CG-CD2	9.31	1.46	1.35
6	6	67	HIS	CG-CD2	9.31	1.46	1.35
12	E	99	HIS	CG-CD2	9.31	1.46	1.35
29	V	40	HIS	CG-CD2	9.31	1.46	1.35
33	Z	976	HIS	CG-CD2	9.31	1.46	1.35
2	2	109	HIS	CG-CD2	9.31	1.46	1.35
6	6	70	HIS	CG-CD2	9.31	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	C	31	HIS	CG-CD2	9.31	1.46	1.35
21	N	340	HIS	CG-CD2	9.31	1.46	1.35
23	P	425	HIS	CG-CD2	9.31	1.46	1.35
24	Q	135	HIS	CG-CD2	9.31	1.46	1.35
24	Q	145	HIS	CG-CD2	9.31	1.46	1.35
6	6	186	HIS	CG-CD2	9.31	1.46	1.35
1	1	120	HIS	CG-CD2	9.30	1.46	1.35
16	I	150	HIS	CG-CD2	9.30	1.46	1.35
25	R	401	HIS	CG-CD2	9.30	1.46	1.35
26	S	139	HIS	CG-CD2	9.30	1.46	1.35
21	N	690	HIS	CG-CD2	9.30	1.46	1.35
27	T	123	HIS	CG-CD2	9.30	1.46	1.35
30	W	170	HIS	CG-CD2	9.30	1.46	1.35
12	E	91	HIS	CG-CD2	9.30	1.46	1.35
23	P	86	HIS	CG-CD2	9.30	1.46	1.35
23	P	348	HIS	CG-CD2	9.30	1.46	1.35
28	U	223	HIS	CG-CD2	9.30	1.46	1.35
24	Q	252	HIS	CG-CD2	9.30	1.46	1.35
30	W	107	HIS	CG-CD2	9.30	1.46	1.35
6	6	8	GLY	CA-C	-9.30	1.42	1.52
12	E	157	HIS	CG-CD2	9.29	1.46	1.35
30	W	77	HIS	CG-CD2	9.29	1.46	1.35
1	1	38	HIS	CG-CD2	9.29	1.46	1.35
2	2	35	HIS	CG-CD2	9.29	1.46	1.35
2	2	114	HIS	CG-CD2	9.29	1.46	1.35
17	J	123	HIS	CG-CD2	9.29	1.46	1.35
25	R	81	HIS	CG-CD2	9.29	1.46	1.35
4	4	132	HIS	CG-CD2	9.29	1.46	1.35
25	R	217	HIS	CG-CD2	9.29	1.46	1.35
3	3	39	HIS	CG-CD2	9.29	1.46	1.35
10	C	94	HIS	CG-CD2	9.29	1.46	1.35
33	Z	214	HIS	CG-CD2	9.29	1.46	1.35
13	F	69	HIS	CG-CD2	9.29	1.46	1.35
13	F	110	HIS	CG-CD2	9.29	1.46	1.35
17	J	204	HIS	CG-CD2	9.29	1.46	1.35
27	T	94	HIS	CG-CD2	9.28	1.46	1.35
28	U	5	HIS	CG-CD2	9.29	1.46	1.35
33	Z	856	HIS	CG-CD2	9.28	1.46	1.35
5	5	166	HIS	CG-CD2	9.28	1.46	1.35
12	E	73	HIS	CG-CD2	9.28	1.46	1.35
15	H	392	HIS	CG-CD2	9.28	1.46	1.35
22	O	236	HIS	CG-CD2	9.28	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	326	HIS	CG-CD2	9.28	1.46	1.35
8	A	185	HIS	CG-CD2	9.28	1.46	1.35
22	O	318	HIS	CG-CD2	9.28	1.46	1.35
26	S	472	HIS	CG-CD2	9.28	1.46	1.35
33	Z	156	HIS	CG-CD2	9.28	1.46	1.35
18	K	140	HIS	CG-CD2	9.28	1.46	1.35
24	Q	361	HIS	CG-CD2	9.28	1.46	1.35
33	Z	801	HIS	CG-CD2	9.28	1.46	1.35
2	2	141	HIS	CG-CD2	9.28	1.46	1.35
9	B	94	HIS	CG-CD2	9.28	1.46	1.35
13	F	143	HIS	CG-CD2	9.28	1.46	1.35
14	G	146	HIS	CG-CD2	9.28	1.46	1.35
14	G	181	HIS	CG-CD2	9.28	1.46	1.35
23	P	282	HIS	CG-CD2	9.28	1.46	1.35
7	7	141	HIS	CG-CD2	9.27	1.46	1.35
16	I	204	HIS	CG-CD2	9.27	1.46	1.35
19	L	364	HIS	CG-CD2	9.27	1.46	1.35
19	L	409	HIS	CG-CD2	9.27	1.46	1.35
24	Q	334	HIS	CG-CD2	9.27	1.46	1.35
28	U	94	HIS	CG-CD2	9.27	1.46	1.35
17	J	376	HIS	CG-CD2	9.27	1.46	1.35
29	V	109	HIS	CG-CD2	9.27	1.46	1.35
30	W	100	HIS	CG-CD2	9.27	1.46	1.35
33	Z	307	HIS	CG-CD2	9.27	1.46	1.35
33	Z	622	HIS	CG-CD2	9.27	1.46	1.35
15	H	95	HIS	CG-CD2	9.27	1.46	1.35
20	M	117	ALA	CA-C	-9.27	1.41	1.52
21	N	616	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
17	J	205	HIS	CG-CD2	9.27	1.46	1.35
29	V	195	HIS	CG-CD2	9.27	1.46	1.35
21	N	329	HIS	CG-CD2	9.27	1.46	1.35
21	N	747	HIS	CG-CD2	9.27	1.46	1.35
24	Q	80	HIS	CG-CD2	9.27	1.46	1.35
24	Q	226	HIS	CG-CD2	9.27	1.46	1.35
28	U	21	HIS	CG-CD2	9.27	1.46	1.35
1	1	62	HIS	CG-CD2	9.26	1.46	1.35
2	2	93	HIS	CG-CD2	9.26	1.46	1.35
14	G	122	HIS	CG-CD2	9.26	1.46	1.35
21	N	375	HIS	CG-CD2	9.26	1.46	1.35
23	P	417	HIS	CG-CD2	9.26	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	191	HIS	CG-CD2	9.26	1.46	1.35
8	A	209	HIS	CG-CD2	9.26	1.46	1.35
14	G	72	HIS	CG-CD2	9.26	1.46	1.35
33	Z	771	HIS	CG-CD2	9.26	1.46	1.35
22	O	235	HIS	CG-CD2	9.26	1.46	1.35
33	Z	897	HIS	CG-CD2	9.26	1.46	1.35
33	Z	959	HIS	CG-CD2	9.26	1.46	1.35
26	S	261	HIS	CG-CD2	9.26	1.46	1.35
23	P	263	HIS	CG-CD2	9.26	1.46	1.35
28	U	173	HIS	CG-CD2	9.26	1.46	1.35
29	V	217	HIS	CG-CD2	9.26	1.46	1.35
26	S	225	HIS	CG-CD2	9.25	1.46	1.35
20	M	53	HIS	CG-CD2	9.25	1.46	1.35
24	Q	186	HIS	CG-CD2	9.25	1.46	1.35
24	Q	247	HIS	CG-CD2	9.25	1.46	1.35
33	Z	898	HIS	CG-CD2	9.25	1.46	1.35
5	5	191	HIS	CG-CD2	9.25	1.46	1.35
6	6	86	HIS	CG-CD2	9.25	1.46	1.35
11	D	70	HIS	CG-CD2	9.25	1.46	1.35
13	F	43	HIS	CG-CD2	9.25	1.46	1.35
2	2	166	ASP	C-N	9.25	1.45	1.33
4	4	40	HIS	CG-CD2	9.25	1.46	1.35
20	M	364	HIS	CG-CD2	9.25	1.46	1.35
21	N	510	HIS	CG-CD2	9.25	1.46	1.35
1	1	157	HIS	CG-CD2	9.24	1.46	1.35
5	5	188	HIS	CG-CD2	9.24	1.46	1.35
17	J	170	HIS	CG-CD2	9.24	1.46	1.35
26	S	317	HIS	CG-CD2	9.24	1.46	1.35
33	Z	763	HIS	CG-CD2	9.24	1.46	1.35
26	S	334	HIS	CG-CD2	9.24	1.46	1.35
3	3	36	HIS	CG-CD2	9.24	1.46	1.35
7	7	54	HIS	CG-CD2	9.24	1.46	1.35
14	G	227	HIS	CG-CD2	9.24	1.46	1.35
22	O	283	HIS	CG-CD2	9.24	1.46	1.35
28	U	70	HIS	CG-CD2	9.24	1.46	1.35
33	Z	593	HIS	CG-CD2	9.24	1.46	1.35
8	A	60	PRO	N-CA	-9.24	1.39	1.47
9	B	190	HIS	CG-CD2	9.24	1.46	1.35
2	2	116	HIS	CG-CD2	9.23	1.46	1.35
22	O	23	HIS	CG-CD2	9.23	1.46	1.35
23	P	230	HIS	CG-CD2	9.23	1.46	1.35
23	P	440	HIS	CG-CD2	9.23	1.46	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	V	190	HIS	CG-CD2	9.23	1.46	1.35
33	Z	871	HIS	CG-CD2	9.23	1.46	1.35
6	6	99	HIS	CG-CD2	9.23	1.46	1.35
14	G	19	ARG	CA-C	-9.23	1.41	1.52
26	S	347	HIS	CG-CD2	9.23	1.46	1.35
33	Z	532	HIS	CG-CD2	9.23	1.46	1.35
5	5	66	HIS	CG-CD2	9.23	1.46	1.35
8	A	15	HIS	CG-CD2	9.23	1.46	1.35
21	N	613	HIS	CG-CD2	9.23	1.46	1.35
27	T	251	HIS	CG-CD2	9.23	1.46	1.35
33	Z	151	HIS	CG-CD2	9.23	1.46	1.35
19	L	273	HIS	CG-CD2	9.23	1.46	1.35
22	O	122	HIS	CG-CD2	9.22	1.46	1.35
23	P	337	HIS	CG-CD2	9.22	1.46	1.35
5	5	179	HIS	CG-CD2	9.22	1.46	1.35
21	N	499	HIS	CG-CD2	9.22	1.46	1.35
10	C	125	HIS	CG-CD2	9.22	1.46	1.35
18	K	244	HIS	CG-CD2	9.22	1.46	1.35
33	Z	766	HIS	CG-CD2	9.22	1.46	1.35
4	4	146	HIS	CG-CD2	9.22	1.46	1.35
33	Z	463	HIS	CG-CD2	9.22	1.46	1.35
26	S	302	HIS	CG-CD2	9.22	1.46	1.35
21	N	444	HIS	CG-CD2	9.22	1.46	1.35
28	U	156	HIS	CG-CD2	9.22	1.46	1.35
24	Q	178	HIS	CG-CD2	9.21	1.46	1.35
8	A	193	HIS	CG-CD2	9.21	1.46	1.35
14	G	182	HIS	CG-CD2	9.21	1.46	1.35
17	J	240	HIS	CG-CD2	9.21	1.46	1.35
22	O	5	HIS	CG-CD2	9.21	1.46	1.35
12	E	188	HIS	CG-CD2	9.21	1.46	1.35
16	I	365	HIS	CG-CD2	9.21	1.46	1.35
25	R	325	HIS	CG-CD2	9.21	1.46	1.35
29	V	204	HIS	CG-CD2	9.21	1.46	1.35
26	S	162	VAL	CA-C	-9.20	1.41	1.52
12	E	147	HIS	CG-CD2	9.19	1.46	1.35
2	2	86	HIS	CG-CD2	9.19	1.46	1.35
20	M	412	HIS	CG-CD2	9.19	1.46	1.35
4	4	145	HIS	CG-CD2	9.18	1.46	1.35
14	G	203	HIS	CG-CD2	9.18	1.46	1.35
29	V	111	HIS	CG-CD2	9.18	1.46	1.35
23	P	336	HIS	CG-CD2	9.18	1.46	1.35
16	I	146	SER	CA-C	-9.17	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	Z	252	CYS	N-CA	9.15	1.57	1.46
2	2	221	CYS	CA-C	-9.14	1.41	1.52
19	L	362	LYS	C-N	9.12	1.45	1.33
8	A	60	PRO	N-CD	9.11	1.60	1.47
23	P	352	VAL	C-N	9.11	1.45	1.34
15	H	397	SER	CA-C	9.11	1.61	1.53
24	Q	250	THR	CA-C	-9.11	1.45	1.53
21	N	503	THR	CA-C	-9.06	1.41	1.52
3	3	43	GLY	CA-C	-9.05	1.45	1.52
21	N	556	ALA	CA-C	-9.04	1.41	1.52
26	S	387	VAL	CA-C	-9.03	1.41	1.52
27	T	139	ASP	CA-C	-9.01	1.41	1.52
21	N	104	LYS	N-CA	-8.96	1.35	1.46
15	H	225	VAL	CA-C	-8.95	1.43	1.52
1	1	-4	VAL	CA-C	-8.93	1.42	1.52
33	Z	418	ALA	C-N	8.93	1.45	1.33
14	G	159	TYR	CA-C	-8.93	1.42	1.52
21	N	529	GLN	C-O	-8.93	1.16	1.24
27	T	137	GLU	CA-C	-8.88	1.41	1.52
27	T	46	ILE	C-O	-8.88	1.15	1.24
1	1	29	ARG	CA-C	-8.88	1.41	1.52
33	Z	93	ARG	C-N	8.85	1.44	1.34
7	7	15	ALA	CA-C	-8.79	1.41	1.52
33	Z	810	ASN	CA-C	-8.77	1.41	1.52
3	3	17	ASP	CA-C	-8.76	1.41	1.53
7	7	44	GLY	CA-C	-8.72	1.46	1.52
20	M	305	MET	CA-C	-8.67	1.41	1.52
17	J	37	LYS	C-N	8.66	1.45	1.33
8	A	87	ILE	CA-C	8.62	1.60	1.52
4	4	115	LEU	N-CA	-8.62	1.35	1.46
33	Z	50	GLU	CA-C	8.59	1.60	1.52
30	W	78	ASP	CA-C	-8.58	1.43	1.53
4	4	156	GLY	CA-C	-8.56	1.42	1.52
4	4	66	TYR	C-N	8.55	1.45	1.33
22	O	84	ALA	CA-C	-8.55	1.41	1.52
17	J	208	CYS	CA-C	-8.55	1.42	1.52
21	N	612	SER	CA-C	-8.54	1.42	1.52
33	Z	507	GLY	CA-C	-8.54	1.42	1.52
22	O	170	SER	N-CA	-8.53	1.36	1.46
29	V	142	ASP	C-N	-8.50	1.26	1.33
26	S	368	LYS	CA-C	-8.46	1.41	1.52
31	X	56	PRO	N-CD	8.45	1.59	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	83	LYS	N-CA	-8.43	1.38	1.46
22	O	211	GLN	CA-C	-8.42	1.42	1.52
21	N	551	GLY	C-N	8.42	1.44	1.33
21	N	294	PRO	N-CD	8.40	1.59	1.47
25	R	101	GLU	CA-C	-8.38	1.42	1.52
4	4	106	TYR	CA-C	-8.38	1.42	1.52
12	E	86	ARG	C-N	8.37	1.45	1.34
26	S	295	ALA	C-N	8.36	1.44	1.33
13	F	217	GLY	CA-C	-8.35	1.42	1.51
25	R	354	ALA	N-CA	-8.35	1.36	1.46
30	W	6	THR	CA-C	-8.35	1.42	1.52
19	L	326	ALA	CA-C	-8.33	1.42	1.52
30	W	143	ASN	CA-CB	8.33	1.66	1.53
33	Z	395	CYS	CA-C	-8.32	1.42	1.52
2	2	101	ALA	CA-C	-8.31	1.42	1.52
8	A	41	ASN	N-CA	-8.29	1.35	1.46
25	R	318	PRO	N-CD	8.25	1.59	1.47
16	I	123	PRO	N-CD	8.24	1.59	1.47
17	J	341	ILE	C-N	8.24	1.44	1.33
11	D	55	GLN	CA-C	-8.23	1.42	1.52
27	T	28	PRO	CA-C	-8.22	1.44	1.52
17	J	191	PRO	CA-C	-8.21	1.43	1.52
5	5	143	ASN	CA-C	-8.20	1.42	1.52
11	D	31	THR	C-N	8.20	1.44	1.33
11	D	83	ARG	C-N	8.20	1.44	1.33
15	H	354	ALA	CA-C	-8.19	1.42	1.52
23	P	318	TYR	CA-C	-8.18	1.43	1.52
6	6	197	ILE	N-CA	-8.17	1.36	1.46
3	3	151	PRO	N-CD	8.16	1.59	1.47
18	K	70	ASP	C-N	8.16	1.44	1.33
28	U	105	LYS	N-CA	-8.15	1.36	1.46
18	K	142	HIS	CA-C	-8.14	1.43	1.52
17	J	127	GLU	CA-C	-8.12	1.43	1.52
19	L	350	PRO	N-CD	8.11	1.59	1.47
22	O	220	SER	CA-C	-8.11	1.42	1.52
24	Q	121	SER	N-CA	-8.08	1.36	1.46
4	4	121	LEU	CA-C	-8.08	1.42	1.52
10	C	29	ILE	CA-C	-8.07	1.42	1.52
27	T	28	PRO	N-CD	8.07	1.59	1.47
4	4	35	ARG	CA-C	-8.05	1.42	1.52
29	V	256	GLU	C-N	8.05	1.44	1.33
8	A	146	VAL	CA-C	-8.04	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	247	GLU	N-CA	-8.04	1.36	1.46
30	W	189	PRO	N-CD	8.02	1.58	1.47
12	E	69	GLU	C-N	8.01	1.41	1.33
3	3	115	PHE	CA-C	-7.99	1.42	1.52
19	L	203	ASN	N-CA	-7.99	1.37	1.46
29	V	143	PRO	N-CD	7.99	1.58	1.47
23	P	227	ILE	C-N	7.98	1.45	1.34
29	V	57	PHE	C-N	7.96	1.43	1.33
24	Q	207	SER	CA-C	-7.95	1.42	1.52
23	P	41	VAL	N-CA	-7.95	1.36	1.46
14	G	41	CYS	N-CA	-7.95	1.35	1.45
1	1	169	SER	C-N	7.94	1.41	1.32
33	Z	51	LEU	CA-C	-7.91	1.42	1.52
3	3	71	ARG	CA-C	-7.90	1.42	1.52
25	R	179	PHE	C-N	7.89	1.43	1.33
26	S	188	TYR	C-N	7.87	1.43	1.33
15	H	307	PHE	CA-C	-7.86	1.43	1.52
27	T	1	MET	C-N	7.86	1.43	1.33
13	F	224	ILE	CA-C	-7.86	1.43	1.52
3	3	68	LYS	CA-C	-7.86	1.42	1.52
7	7	119	LEU	CA-C	7.86	1.61	1.52
29	V	100	ARG	CA-C	-7.85	1.42	1.52
33	Z	757	SER	N-CA	7.85	1.55	1.46
4	4	48	GLU	C-N	7.84	1.44	1.33
9	B	62	SER	CA-C	-7.84	1.43	1.52
33	Z	504	GLU	C-O	-7.83	1.15	1.24
15	H	151	GLN	N-CA	-7.82	1.37	1.46
3	3	114	GLY	N-CA	7.82	1.53	1.45
9	B	37	ILE	CA-C	-7.81	1.43	1.52
21	N	64	ILE	N-CA	-7.81	1.37	1.46
4	4	167	LEU	CA-C	-7.79	1.43	1.52
33	Z	615	LEU	CA-C	-7.78	1.42	1.52
1	1	190	PRO	N-CD	7.77	1.58	1.47
33	Z	891	PRO	N-CD	7.77	1.58	1.47
33	Z	334	LYS	N-CA	-7.77	1.37	1.46
12	E	26	TYR	N-CA	-7.75	1.36	1.46
25	R	372	ILE	CA-C	-7.74	1.45	1.52
9	B	38	LYS	N-CA	-7.74	1.36	1.46
20	M	142	PRO	CA-C	7.73	1.62	1.52
10	C	232	PRO	N-CD	7.73	1.58	1.47
16	I	346	ARG	CA-C	-7.73	1.43	1.52
27	T	36	LYS	N-CA	-7.73	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	172	PRO	N-CA	-7.72	1.36	1.47
19	L	415	LEU	CA-C	-7.72	1.42	1.52
14	G	152	PRO	N-CD	7.71	1.58	1.47
15	H	274	VAL	C-N	7.71	1.43	1.33
4	4	65	LEU	CA-C	-7.71	1.42	1.52
21	N	286	LEU	CA-C	-7.70	1.42	1.52
23	P	68	SER	CA-C	7.69	1.62	1.52
11	D	56	ASP	CA-C	-7.69	1.43	1.52
27	T	267	ALA	C-N	7.69	1.43	1.33
19	L	363	ILE	CA-C	-7.69	1.43	1.52
11	D	91	VAL	N-CA	7.67	1.55	1.46
25	R	373	PRO	N-CD	7.67	1.58	1.47
7	7	-5	PRO	N-CD	7.67	1.58	1.47
28	U	11	ALA	CA-C	-7.67	1.43	1.53
25	R	51	LEU	C-N	7.66	1.43	1.33
12	E	72	ARG	N-CA	7.63	1.57	1.46
24	Q	339	TYR	CA-C	-7.63	1.42	1.52
16	I	216	PRO	N-CD	7.63	1.58	1.47
11	D	214	VAL	C-N	7.62	1.42	1.33
21	N	643	PRO	N-CD	7.62	1.58	1.47
33	Z	159	LEU	N-CA	-7.61	1.37	1.46
33	Z	318	LYS	N-CA	-7.60	1.37	1.46
2	2	75	ARG	CA-C	-7.59	1.43	1.52
17	J	252	SER	N-CA	-7.59	1.36	1.46
20	M	137	PRO	N-CD	7.59	1.58	1.47
33	Z	481	PRO	N-CD	7.58	1.58	1.47
23	P	164	GLN	C-N	7.57	1.43	1.33
20	M	393	ALA	CA-C	-7.57	1.43	1.52
1	1	72	THR	CA-C	7.56	1.61	1.53
9	B	107	THR	CA-C	-7.56	1.42	1.52
14	G	134	SER	N-CA	-7.56	1.36	1.46
33	Z	354	PRO	N-CD	7.54	1.58	1.47
21	N	145	LEU	CA-C	-7.54	1.42	1.52
28	U	38	LEU	N-CA	-7.53	1.36	1.45
4	4	172	PRO	N-CD	7.53	1.58	1.47
23	P	435	LYS	CA-C	7.53	1.62	1.52
29	V	255	ILE	CA-C	-7.52	1.43	1.52
15	H	378	SER	N-CA	-7.51	1.37	1.46
20	M	196	ALA	CA-C	-7.51	1.43	1.52
6	6	35	PHE	CA-C	-7.50	1.43	1.52
25	R	306	PRO	N-CD	7.50	1.58	1.47
23	P	151	GLY	CA-C	-7.49	1.40	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	E	158	ALA	CA-C	-7.49	1.43	1.52
19	L	75	LYS	CA-C	-7.49	1.43	1.52
15	H	406	LEU	CA-C	-7.47	1.43	1.52
21	N	302	PHE	N-CA	-7.47	1.37	1.46
21	N	573	HIS	C-N	7.47	1.43	1.33
28	U	41	ALA	N-CA	-7.46	1.37	1.46
19	L	82	ARG	CA-C	-7.46	1.43	1.52
26	S	253	PHE	CA-C	-7.45	1.43	1.52
14	G	188	ALA	C-N	7.44	1.43	1.33
10	C	190	ILE	CA-C	-7.43	1.43	1.52
30	W	117	PRO	N-CD	7.42	1.58	1.47
8	A	225	VAL	CA-C	-7.42	1.43	1.52
12	E	133	LEU	C-N	7.42	1.43	1.33
27	T	222	LEU	CA-C	-7.42	1.43	1.52
12	E	39	GLY	CA-C	7.41	1.58	1.51
14	G	47	PHE	CA-C	-7.41	1.43	1.52
15	H	245	GLY	CA-C	-7.41	1.44	1.51
22	O	209	GLU	N-CA	-7.41	1.37	1.46
5	5	158	LYS	C-N	7.40	1.43	1.33
6	6	11	PHE	N-CA	-7.39	1.37	1.46
21	N	433	THR	C-N	7.39	1.44	1.33
19	L	71	ASP	CA-C	-7.38	1.43	1.52
28	U	98	LYS	N-CA	-7.38	1.37	1.45
11	D	23	ALA	CA-C	-7.37	1.43	1.52
22	O	87	LYS	C-N	7.37	1.44	1.33
33	Z	404	ASP	C-N	-7.37	1.24	1.33
28	U	170	GLY	CA-C	-7.37	1.43	1.52
21	N	127	ASP	N-CA	-7.37	1.36	1.46
7	7	182	ARG	C-N	7.35	1.43	1.33
3	3	82	VAL	C-N	7.35	1.43	1.33
10	C	39	MET	N-CA	-7.35	1.37	1.46
21	N	95	SER	CA-C	-7.34	1.43	1.52
3	3	130	SER	CA-C	-7.34	1.43	1.52
20	M	362	GLN	C-N	7.33	1.43	1.33
2	2	152	ILE	C-O	-7.33	1.15	1.24
9	B	38	LYS	CA-C	-7.33	1.43	1.52
17	J	291	ILE	CA-C	-7.33	1.43	1.52
17	J	210	PHE	C-N	7.32	1.42	1.33
29	V	132	LEU	C-N	7.32	1.42	1.33
26	S	231	ALA	C-N	7.31	1.43	1.33
25	R	297	TYR	CA-C	7.30	1.62	1.52
9	B	186	GLU	C-N	7.30	1.44	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	30	THR	CA-C	-7.30	1.43	1.52
23	P	292	LYS	C-N	7.29	1.43	1.33
21	N	367	ALA	C-N	7.29	1.43	1.33
11	D	161	ALA	CA-C	-7.29	1.43	1.52
6	6	-9	GLN	C-N	7.29	1.43	1.33
9	B	203	GLU	C-N	7.29	1.44	1.33
20	M	430	VAL	CA-C	-7.28	1.45	1.53
3	3	193	MET	CA-C	-7.28	1.43	1.52
18	K	126	LEU	CA-C	-7.28	1.43	1.53
28	U	282	VAL	CA-C	7.28	1.62	1.52
9	B	138	GLY	N-CA	-7.27	1.37	1.45
10	C	192	LEU	N-CA	-7.27	1.37	1.46
22	O	181	PHE	N-CA	-7.27	1.37	1.46
16	I	235	ALA	CA-C	-7.27	1.43	1.52
7	7	63	VAL	CA-C	-7.27	1.43	1.52
25	R	308	LEU	CA-C	-7.25	1.43	1.52
15	H	372	ASP	CA-C	-7.25	1.46	1.52
8	A	88	PRO	N-CD	7.25	1.57	1.47
14	G	68	VAL	CA-C	-7.25	1.44	1.52
16	I	326	MET	CA-C	-7.24	1.44	1.52
26	S	281	ALA	C-N	7.24	1.43	1.33
26	S	301	PRO	N-CD	7.24	1.57	1.47
9	B	82	TYR	N-CA	-7.22	1.37	1.46
9	B	217	GLU	C-N	7.22	1.40	1.33
24	Q	96	VAL	N-CA	-7.21	1.38	1.46
12	E	223	THR	N-CA	-7.21	1.36	1.45
12	E	137	PRO	N-CD	7.21	1.57	1.47
29	V	46	PRO	N-CD	7.20	1.57	1.47
24	Q	430	ALA	CA-C	-7.20	1.43	1.52
20	M	259	GLY	CA-C	-7.20	1.44	1.52
22	O	35	GLU	CA-C	-7.20	1.42	1.52
33	Z	298	PHE	CA-C	-7.19	1.43	1.52
21	N	647	ASP	C-N	7.19	1.44	1.33
24	Q	96	VAL	CA-C	-7.19	1.43	1.52
19	L	107	GLU	CA-C	-7.18	1.43	1.52
20	M	315	PHE	CA-C	-7.18	1.43	1.52
25	R	240	SER	N-CA	-7.18	1.40	1.47
31	X	75	TRP	C-N	-7.18	1.26	1.33
10	C	4	ARG	CA-C	-7.17	1.43	1.52
27	T	131	LYS	N-CA	-7.17	1.37	1.46
8	A	182	LEU	CA-C	-7.16	1.43	1.52
29	V	135	ARG	N-CA	-7.16	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	127	GLU	N-CA	-7.16	1.38	1.46
33	Z	991	GLU	N-CA	-7.16	1.37	1.46
25	R	139	GLU	CA-C	-7.15	1.44	1.52
20	M	291	PHE	N-CA	7.14	1.52	1.46
33	Z	294	ILE	C-N	7.14	1.43	1.33
14	G	40	LYS	C-N	7.12	1.43	1.33
10	C	133	VAL	C-N	7.11	1.44	1.33
1	1	2	SER	CA-C	-7.11	1.45	1.53
3	3	169	ASP	N-CA	-7.10	1.35	1.46
13	F	14	SER	CA-C	-7.10	1.45	1.52
13	F	140	SER	N-CA	-7.09	1.38	1.46
33	Z	843	ASP	CA-C	-7.09	1.43	1.52
5	5	45	MET	N-CA	-7.09	1.37	1.46
33	Z	505	VAL	N-CA	-7.09	1.37	1.46
15	H	65	GLU	CA-C	-7.08	1.43	1.52
26	S	140	LEU	C-N	7.08	1.42	1.33
16	I	147	VAL	CA-C	-7.08	1.44	1.52
27	T	106	ILE	C-O	-7.08	1.15	1.24
15	H	358	PRO	N-CD	7.07	1.57	1.47
17	J	96	VAL	CA-C	-7.07	1.45	1.52
31	X	67	ILE	CA-C	-7.07	1.43	1.52
8	A	86	PRO	N-CD	7.07	1.57	1.47
27	T	11	LEU	N-CA	-7.07	1.37	1.46
33	Z	255	LEU	N-CA	-7.07	1.38	1.46
25	R	287	GLN	CA-C	-7.07	1.44	1.53
22	O	135	ARG	CA-C	-7.06	1.43	1.52
3	3	166	ALA	C-N	7.06	1.43	1.33
15	H	71	GLU	N-CA	-7.06	1.37	1.46
23	P	343	LYS	C-N	7.06	1.42	1.33
30	W	91	LEU	C-N	7.05	1.42	1.33
20	M	286	ILE	C-N	7.05	1.42	1.33
8	A	93	ALA	C-N	7.05	1.43	1.33
11	D	115	GLY	N-CA	7.04	1.55	1.45
6	6	22	THR	C-N	7.04	1.42	1.33
16	I	301	GLU	CA-C	-7.04	1.43	1.52
26	S	219	LYS	C-N	7.04	1.42	1.33
13	F	9	ASP	N-CA	-7.03	1.37	1.46
21	N	648	PRO	N-CD	7.03	1.57	1.47
33	Z	609	THR	CA-C	-7.02	1.43	1.52
12	E	102	TYR	CA-C	-7.02	1.43	1.52
2	2	183	ASP	N-CA	-7.02	1.37	1.46
31	X	107	GLY	CA-C	-7.01	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	6	207	PHE	N-CA	-7.01	1.37	1.46
10	C	135	PHE	CA-C	-7.01	1.44	1.52
27	T	163	LEU	C-N	7.01	1.43	1.33
24	Q	397	LEU	C-N	7.00	1.43	1.33
12	E	50	VAL	N-CA	-7.00	1.38	1.46
20	M	173	ASP	CA-C	-7.00	1.45	1.53
20	M	168	LYS	N-CA	-6.99	1.37	1.46
21	N	543	ASP	N-CA	-6.99	1.37	1.46
23	P	108	LYS	C-N	6.99	1.43	1.33
11	D	170	THR	C-N	6.98	1.41	1.34
2	2	12	VAL	N-CA	-6.97	1.38	1.46
22	O	63	ASP	CA-C	6.97	1.61	1.52
19	L	113	SER	CA-C	-6.96	1.43	1.52
14	G	171	ALA	N-CA	-6.96	1.38	1.46
27	T	4	LEU	N-CA	-6.96	1.37	1.45
16	I	136	VAL	CA-C	-6.96	1.44	1.52
24	Q	217	GLU	C-N	6.95	1.43	1.33
24	Q	426	LEU	N-CA	-6.95	1.38	1.46
17	J	94	TYR	CA-C	-6.95	1.44	1.52
23	P	249	ALA	C-N	6.95	1.42	1.33
12	E	190	SER	C-N	6.95	1.42	1.33
6	6	117	ASP	C-N	6.94	1.40	1.33
15	H	145	TYR	CA-C	6.94	1.62	1.52
21	N	331	ALA	CA-C	-6.93	1.43	1.52
16	I	343	ARG	C-N	6.93	1.40	1.33
26	S	209	ILE	N-CA	-6.93	1.38	1.46
18	K	252	ARG	N-CA	-6.93	1.37	1.46
18	K	331	PRO	N-CD	6.93	1.57	1.47
6	6	15	ALA	C-N	6.93	1.42	1.33
16	I	142	GLU	CA-C	-6.93	1.46	1.52
6	6	26	ILE	CA-C	-6.92	1.44	1.52
21	N	292	GLY	C-N	6.92	1.43	1.33
21	N	482	ALA	N-CA	-6.92	1.38	1.46
21	N	622	ALA	C-N	6.92	1.43	1.33
21	N	668	THR	CA-C	-6.92	1.43	1.52
10	C	70	ASN	C-O	-6.92	1.17	1.24
20	M	411	LYS	CA-C	-6.91	1.43	1.53
26	S	166	ASN	CA-C	-6.91	1.44	1.53
23	P	175	GLU	C-N	6.91	1.43	1.33
13	F	150	SER	C-N	6.89	1.43	1.33
16	I	406	GLU	N-CA	6.89	1.55	1.46
21	N	308	ASN	CA-C	-6.89	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	437	GLU	N-CA	-6.89	1.37	1.46
26	S	275	TYR	CA-C	-6.89	1.44	1.52
15	H	333	MET	CA-C	-6.89	1.43	1.52
26	S	254	ILE	CA-C	-6.89	1.44	1.52
12	E	197	GLU	CA-C	-6.88	1.43	1.52
33	Z	753	GLY	CA-C	6.88	1.59	1.52
29	V	207	ALA	CA-C	-6.88	1.44	1.52
3	3	42	LEU	N-CA	-6.88	1.38	1.46
16	I	126	PRO	N-CD	6.88	1.57	1.47
8	A	201	LYS	C-N	6.87	1.42	1.33
15	H	331	ARG	C-N	6.87	1.43	1.33
22	O	359	SER	CA-C	-6.87	1.44	1.52
26	S	328	PRO	N-CD	6.87	1.57	1.47
28	U	45	THR	CA-C	-6.86	1.44	1.52
14	G	75	CYS	CA-C	-6.85	1.44	1.52
27	T	22	ALA	CA-C	-6.85	1.43	1.52
25	R	418	GLY	C-N	6.85	1.43	1.33
21	N	199	ASN	C-N	6.85	1.43	1.33
33	Z	883	THR	CA-C	6.84	1.61	1.52
28	U	284	SER	N-CA	6.84	1.54	1.46
29	V	107	TRP	N-CA	-6.84	1.37	1.45
6	6	120	GLY	C-O	6.84	1.29	1.23
6	6	101	ILE	N-CA	-6.84	1.38	1.46
3	3	105	SER	C-N	6.83	1.43	1.33
16	I	229	LYS	CA-C	6.83	1.61	1.52
25	R	221	VAL	C-N	6.83	1.43	1.33
24	Q	168	LEU	N-CA	-6.83	1.37	1.46
8	A	163	TYR	CA-C	-6.83	1.43	1.52
8	A	228	ALA	CA-C	-6.83	1.44	1.52
19	L	148	LEU	CA-C	-6.83	1.44	1.52
24	Q	11	ALA	N-CA	-6.82	1.38	1.46
7	7	15	ALA	C-N	6.82	1.42	1.33
17	J	385	ALA	CA-C	-6.82	1.44	1.52
13	F	60	GLN	CA-C	-6.82	1.44	1.52
23	P	144	VAL	CA-C	-6.81	1.44	1.52
23	P	146	ILE	CA-C	-6.81	1.44	1.52
1	1	36	ARG	N-CA	-6.80	1.37	1.46
15	H	60	GLU	CA-C	-6.80	1.44	1.52
16	I	345	ASP	CA-C	-6.80	1.43	1.52
26	S	399	TYR	C-N	6.80	1.42	1.33
21	N	780	ASP	CA-C	6.80	1.58	1.52
33	Z	309	GLN	C-N	6.80	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	74	GLU	C-N	6.80	1.43	1.33
18	K	101	GLU	CA-C	-6.80	1.44	1.52
19	L	145	ARG	CA-C	-6.80	1.44	1.52
20	M	50	ARG	C-N	6.80	1.43	1.33
31	X	63	PRO	N-CD	6.80	1.57	1.47
23	P	316	LYS	N-CA	-6.79	1.37	1.46
3	3	60	TYR	CA-C	6.79	1.61	1.52
14	G	116	GLY	N-CA	-6.79	1.37	1.45
7	7	78	ALA	CA-C	-6.78	1.44	1.52
10	C	139	GLY	N-CA	-6.78	1.38	1.45
21	N	611	LYS	CA-CB	6.78	1.65	1.53
33	Z	540	GLY	C-N	6.78	1.42	1.33
17	J	48	ARG	CD-NE	6.78	1.55	1.46
7	7	222	THR	N-CA	6.78	1.54	1.46
14	G	94	GLU	N-CA	-6.78	1.38	1.46
21	N	775	CYS	CA-C	-6.78	1.44	1.52
25	R	307	TYR	C-N	6.78	1.43	1.33
27	T	45	SER	C-N	6.77	1.42	1.33
24	Q	256	GLU	N-CA	-6.77	1.38	1.46
7	7	201	LYS	N-CA	-6.77	1.37	1.46
26	S	186	TYR	CA-C	-6.77	1.44	1.52
12	E	195	GLU	N-CA	6.76	1.54	1.46
17	J	38	THR	CA-C	-6.76	1.44	1.52
14	G	46	VAL	N-CA	-6.76	1.38	1.46
16	I	364	ILE	C-N	6.75	1.43	1.34
27	T	63	GLU	CA-C	-6.75	1.44	1.52
13	F	124	GLY	N-CA	-6.75	1.36	1.45
21	N	169	ALA	C-N	6.75	1.42	1.33
2	2	172	ASN	CA-C	-6.75	1.44	1.52
33	Z	159	LEU	CA-C	6.74	1.61	1.52
33	Z	104	ASP	CA-C	-6.74	1.44	1.52
12	E	46	VAL	C-O	-6.73	1.17	1.24
27	T	113	LEU	CA-C	-6.73	1.44	1.52
11	D	184	PRO	N-CD	6.73	1.57	1.47
17	J	68	PRO	N-CD	6.72	1.57	1.47
16	I	284	ILE	CA-C	-6.72	1.46	1.53
25	R	316	LEU	C-N	6.72	1.41	1.33
33	Z	537	THR	CA-C	-6.72	1.43	1.52
11	D	16	HIS	CA-C	-6.72	1.43	1.53
21	N	310	ASP	CA-C	-6.71	1.43	1.52
21	N	615	ALA	CA-C	-6.71	1.43	1.52
11	D	146	LYS	CA-C	-6.71	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	L	309	LEU	CA-C	6.71	1.61	1.52
29	V	157	ARG	N-CA	-6.71	1.37	1.46
14	G	110	ALA	C-N	6.70	1.42	1.33
3	3	-1	GLY	C-N	6.70	1.40	1.32
5	5	139	VAL	C-N	6.69	1.42	1.33
29	V	51	GLY	CA-C	-6.68	1.44	1.51
5	5	42	LEU	N-CA	-6.68	1.37	1.45
24	Q	91	SER	C-N	6.68	1.43	1.33
17	J	280	ASP	CA-C	6.68	1.62	1.52
6	6	-8	PHE	C-N	6.67	1.42	1.33
29	V	104	VAL	C-N	6.67	1.41	1.33
12	E	10	ARG	CA-C	-6.67	1.44	1.52
33	Z	485	ILE	C-N	6.67	1.43	1.33
4	4	99	VAL	CA-C	-6.67	1.44	1.52
17	J	124	LYS	CA-C	-6.67	1.44	1.52
20	M	194	VAL	CA-C	-6.67	1.44	1.52
21	N	29	ASN	N-CA	-6.67	1.38	1.46
17	J	250	ILE	N-CA	-6.67	1.38	1.46
18	K	71	GLU	CA-C	6.67	1.61	1.52
19	L	291	PHE	N-CA	-6.67	1.38	1.46
24	Q	84	TYR	C-N	6.66	1.43	1.33
10	C	196	THR	CA-C	-6.66	1.44	1.52
16	I	312	GLN	CA-C	-6.66	1.44	1.52
33	Z	97	PRO	CA-C	6.66	1.61	1.52
12	E	152	GLY	CA-C	-6.66	1.43	1.52
14	G	4	GLY	N-CA	6.66	1.56	1.45
5	5	104	TYR	C-N	6.65	1.42	1.33
16	I	319	ARG	C-N	6.65	1.43	1.33
17	J	375	ILE	C-N	6.65	1.42	1.33
9	B	13	SER	N-CA	-6.64	1.36	1.46
15	H	308	PHE	CA-C	-6.64	1.44	1.52
22	O	309	SER	C-N	6.64	1.42	1.33
18	K	117	SER	CA-C	-6.64	1.44	1.52
33	Z	429	ASN	CA-C	-6.63	1.44	1.52
14	G	37	ILE	CA-C	-6.63	1.47	1.52
33	Z	290	GLU	C-N	6.63	1.43	1.33
16	I	98	GLU	C-N	6.63	1.42	1.33
17	J	289	LYS	N-CA	-6.63	1.37	1.45
20	M	261	LYS	N-CA	-6.63	1.38	1.46
5	5	171	SER	C-N	6.62	1.42	1.33
17	J	337	LEU	N-CA	-6.62	1.37	1.45
27	T	64	VAL	CA-C	-6.62	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	238	PHE	C-N	6.62	1.41	1.33
23	P	333	ALA	C-O	-6.61	1.17	1.24
17	J	51	LEU	CA-C	-6.61	1.44	1.52
3	3	182	LYS	CA-C	-6.61	1.44	1.52
21	N	469	VAL	C-N	6.61	1.43	1.33
8	A	15	HIS	CA-C	-6.61	1.42	1.52
21	N	339	MET	C-N	6.60	1.42	1.33
4	4	191	VAL	N-CA	-6.60	1.39	1.46
12	E	176	SER	CA-C	-6.60	1.43	1.52
7	7	-5	PRO	N-CA	-6.60	1.39	1.47
21	N	486	GLY	N-CA	-6.60	1.37	1.45
25	R	192	GLU	C-O	-6.60	1.16	1.24
25	R	169	ASP	CA-C	-6.59	1.44	1.52
33	Z	172	ASP	CA-C	-6.59	1.43	1.52
33	Z	812	ILE	N-CA	-6.59	1.38	1.46
10	C	226	TYR	N-CA	-6.59	1.38	1.46
13	F	56	LEU	CA-C	-6.59	1.43	1.52
1	1	194	GLU	CA-C	-6.59	1.44	1.52
5	5	196	LEU	C-N	6.58	1.42	1.33
10	C	130	PRO	N-CD	6.58	1.56	1.47
21	N	272	ILE	C-N	6.58	1.42	1.33
23	P	203	ILE	CA-C	-6.58	1.43	1.52
19	L	161	ARG	C-N	6.57	1.42	1.33
21	N	671	LEU	CA-C	-6.57	1.44	1.52
33	Z	812	ILE	CA-C	-6.57	1.44	1.52
5	5	114	TYR	C-N	6.56	1.42	1.33
21	N	570	ARG	CA-C	6.56	1.61	1.52
22	O	245	ASP	CA-C	-6.56	1.44	1.52
33	Z	320	SER	CA-C	-6.56	1.44	1.52
33	Z	470	ALA	C-N	6.56	1.42	1.33
4	4	165	GLN	CA-C	-6.56	1.44	1.52
22	O	264	ASP	C-N	6.56	1.42	1.33
9	B	50	LYS	CA-C	-6.55	1.44	1.52
33	Z	207	ILE	N-CA	-6.55	1.38	1.46
10	C	49	GLU	C-N	6.54	1.43	1.33
22	O	193	LEU	N-CA	6.54	1.54	1.46
33	Z	191	SER	CA-C	-6.54	1.44	1.52
21	N	913	PRO	N-CD	6.54	1.56	1.47
3	3	166	ALA	CA-C	-6.53	1.43	1.52
5	5	129	VAL	CA-C	-6.53	1.44	1.52
21	N	44	PRO	N-CD	6.53	1.56	1.47
1	1	144	GLU	C-N	6.53	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	291	PHE	CA-C	-6.53	1.45	1.52
13	F	179	PHE	C-N	6.53	1.41	1.34
28	U	63	SER	CA-C	-6.53	1.43	1.52
29	V	40	HIS	CA-C	-6.53	1.44	1.52
11	D	147	LEU	C-N	6.52	1.42	1.33
20	M	299	ARG	CA-C	-6.52	1.44	1.52
16	I	399	ALA	CA-C	-6.52	1.44	1.52
28	U	108	GLU	CA-C	-6.52	1.44	1.52
20	M	297	GLY	C-N	6.52	1.42	1.33
7	7	5	SER	CA-C	-6.51	1.44	1.52
23	P	55	SER	N-CA	-6.51	1.37	1.45
33	Z	357	ILE	CA-C	-6.51	1.44	1.52
13	F	25	ALA	N-CA	-6.51	1.38	1.46
25	R	102	LEU	CA-C	-6.51	1.44	1.52
11	D	12	SER	C-N	-6.51	1.27	1.34
21	N	237	LEU	C-N	6.50	1.42	1.33
6	6	32	PRO	CA-C	6.50	1.59	1.52
25	R	200	LYS	C-N	6.50	1.43	1.33
6	6	162	PRO	N-CD	6.50	1.56	1.47
8	A	139	VAL	CA-C	-6.50	1.44	1.52
19	L	389	ALA	CA-C	-6.50	1.44	1.52
20	M	134	LEU	CA-C	6.49	1.61	1.52
23	P	107	SER	C-N	6.49	1.42	1.33
24	Q	105	GLU	N-CA	6.49	1.54	1.46
18	K	394	ALA	N-CA	-6.49	1.38	1.46
11	D	30	GLY	C-N	6.49	1.42	1.33
21	N	175	ASP	N-CA	6.49	1.53	1.46
22	O	301	PHE	CA-C	-6.49	1.44	1.52
31	X	35	ILE	CA-C	-6.49	1.44	1.52
15	H	412	PRO	N-CD	6.48	1.56	1.47
20	M	62	ILE	C-N	6.48	1.42	1.33
13	F	9	ASP	CA-C	-6.48	1.44	1.52
17	J	390	MET	C-N	6.48	1.42	1.34
23	P	68	SER	N-CA	-6.48	1.38	1.46
16	I	103	PRO	N-CD	6.47	1.56	1.47
28	U	136	ALA	N-CA	-6.47	1.38	1.46
10	C	153	PRO	CA-C	-6.47	1.42	1.52
33	Z	591	ILE	CA-C	-6.47	1.45	1.52
1	1	95	ALA	CA-C	-6.47	1.45	1.52
2	2	174	ASP	CA-C	-6.47	1.45	1.52
15	H	429	PHE	CA-C	-6.47	1.44	1.52
19	L	308	LEU	CA-C	6.47	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	343	LEU	N-CA	-6.47	1.40	1.46
33	Z	167	ASP	N-CA	-6.46	1.38	1.46
27	T	8	THR	CA-C	-6.46	1.44	1.52
29	V	206	THR	C-N	6.46	1.42	1.33
1	1	25	TYR	N-CA	-6.46	1.37	1.46
21	N	269	LEU	CA-C	-6.46	1.44	1.52
25	R	24	TYR	CA-C	-6.45	1.44	1.52
30	W	125	LEU	C-N	6.45	1.42	1.33
33	Z	502	ASN	N-CA	-6.45	1.37	1.45
20	M	223	PRO	CA-C	-6.45	1.46	1.52
13	F	92	CYS	CA-C	-6.44	1.44	1.52
33	Z	64	TYR	CA-C	-6.44	1.44	1.52
33	Z	291	GLU	CA-C	-6.44	1.44	1.52
8	A	45	VAL	CA-C	-6.43	1.45	1.52
18	K	260	LEU	C-N	6.43	1.42	1.33
33	Z	431	ASP	N-CA	-6.42	1.39	1.46
20	M	228	LYS	N-CA	-6.42	1.38	1.46
12	E	70	ILE	CA-C	-6.42	1.46	1.52
22	O	103	LYS	CA-C	-6.42	1.46	1.53
16	I	430	GLU	N-CA	6.41	1.54	1.45
24	Q	144	LEU	N-CA	6.41	1.54	1.46
26	S	439	GLU	N-CA	-6.41	1.38	1.46
2	2	22	GLN	CA-C	-6.41	1.45	1.53
16	I	177	PRO	N-CA	6.41	1.54	1.47
28	U	294	ASN	C-O	-6.41	1.16	1.24
33	Z	109	PRO	N-CA	-6.41	1.39	1.47
16	I	242	ALA	CA-C	-6.41	1.45	1.52
17	J	35	ARG	C-N	6.41	1.42	1.33
16	I	395	MET	C-N	6.41	1.42	1.33
15	H	387	ASN	C-N	6.40	1.41	1.33
28	U	234	ASN	CA-C	-6.40	1.44	1.52
33	Z	471	LEU	N-CA	-6.40	1.38	1.46
23	P	194	SER	C-N	6.40	1.42	1.33
10	C	134	SER	N-CA	-6.40	1.38	1.46
15	H	243	PRO	N-CD	6.39	1.56	1.47
20	M	266	ALA	C-N	6.38	1.42	1.33
7	7	182	ARG	N-CA	-6.38	1.38	1.46
28	U	115	GLN	CA-C	-6.38	1.43	1.52
7	7	184	SER	CA-C	-6.37	1.44	1.53
21	N	28	ILE	CA-C	-6.37	1.45	1.52
21	N	136	ILE	CA-C	6.37	1.60	1.52
2	2	40	LYS	CA-C	-6.37	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	390	MET	C-O	-6.37	1.16	1.24
9	B	155	SER	CA-C	-6.37	1.44	1.53
4	4	155	GLU	CA-C	-6.36	1.44	1.52
17	J	384	LEU	C-O	-6.36	1.16	1.24
22	O	361	ASP	N-CA	-6.36	1.38	1.46
18	K	195	ALA	CA-C	-6.36	1.44	1.52
2	2	111	PHE	CA-C	-6.36	1.44	1.52
12	E	191	LEU	CA-C	-6.36	1.44	1.52
24	Q	319	LYS	N-CA	-6.36	1.38	1.46
33	Z	602	LEU	CA-C	-6.36	1.44	1.52
16	I	166	PRO	C-N	6.36	1.42	1.33
22	O	377	VAL	CA-C	-6.36	1.45	1.52
23	P	84	LYS	C-N	6.36	1.42	1.33
29	V	287	THR	C-N	6.36	1.42	1.33
31	X	29	VAL	N-CA	-6.36	1.38	1.46
8	A	235	THR	C-N	6.35	1.42	1.33
29	V	112	PRO	N-CD	6.35	1.56	1.47
14	G	94	GLU	CA-C	-6.35	1.44	1.52
3	3	127	PHE	CA-C	-6.34	1.44	1.52
22	O	345	ASN	N-CA	-6.34	1.37	1.46
33	Z	143	VAL	C-O	-6.34	1.17	1.24
1	1	154	PHE	C-N	6.34	1.41	1.33
12	E	163	THR	N-CA	-6.34	1.38	1.46
27	T	114	LEU	C-N	6.34	1.42	1.34
11	D	189	GLU	N-CA	-6.33	1.38	1.46
16	I	179	GLU	C-N	6.33	1.41	1.33
25	R	117	ILE	CA-C	-6.33	1.44	1.52
26	S	387	VAL	C-N	6.33	1.41	1.33
19	L	215	PRO	CA-C	6.33	1.61	1.52
19	L	409	HIS	CA-C	-6.33	1.44	1.52
4	4	91	ILE	C-N	6.32	1.43	1.33
9	B	8	SER	N-CA	-6.32	1.38	1.45
13	F	186	PRO	N-CD	6.32	1.56	1.47
22	O	146	ALA	N-CA	-6.32	1.38	1.46
12	E	139	GLY	C-N	6.32	1.41	1.33
20	M	396	VAL	CA-C	6.32	1.61	1.52
18	K	372	ILE	N-CA	-6.31	1.39	1.46
21	N	226	ASN	C-N	6.31	1.42	1.33
21	N	707	ASN	C-N	6.31	1.42	1.33
13	F	169	LYS	CA-C	-6.30	1.44	1.52
26	S	372	LEU	CA-C	-6.30	1.44	1.52
20	M	157	ASP	C-N	6.30	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	K	386	ILE	CA-C	-6.30	1.44	1.52
26	S	148	ASP	CA-C	-6.30	1.45	1.53
27	T	263	ALA	C-N	6.30	1.41	1.33
8	A	136	PRO	N-CD	6.30	1.56	1.47
26	S	204	ASP	C-N	6.30	1.42	1.33
6	6	104	GLY	CA-C	-6.30	1.42	1.51
3	3	150	GLU	N-CA	-6.29	1.36	1.45
9	B	136	ILE	CA-C	-6.29	1.44	1.52
10	C	220	ALA	N-CA	-6.29	1.38	1.46
13	F	23	GLU	CA-C	-6.29	1.44	1.52
30	W	75	GLY	CA-C	-6.29	1.45	1.52
13	F	102	LYS	CA-C	-6.29	1.45	1.52
14	G	184	GLU	N-CA	-6.29	1.38	1.46
16	I	304	ARG	N-CA	-6.29	1.38	1.46
12	E	216	ASN	CA-C	-6.29	1.45	1.53
14	G	150	LEU	CA-C	-6.29	1.45	1.52
19	L	213	LYS	CA-C	-6.29	1.46	1.53
17	J	187	LEU	N-CA	-6.29	1.38	1.46
19	L	339	ARG	CA-C	-6.28	1.46	1.53
5	5	25	TRP	N-CA	-6.28	1.38	1.46
28	U	281	LEU	CA-C	-6.28	1.44	1.52
33	Z	261	ASP	CA-C	-6.28	1.44	1.52
22	O	352	TRP	C-O	-6.28	1.16	1.23
23	P	139	VAL	CA-C	-6.28	1.44	1.52
27	T	116	GLN	C-N	6.27	1.42	1.33
21	N	165	ILE	N-CA	-6.27	1.38	1.46
15	H	200	VAL	N-CA	-6.27	1.38	1.46
22	O	116	ASN	CA-C	-6.27	1.45	1.52
18	K	191	PRO	C-N	6.26	1.42	1.33
25	R	408	ASP	C-N	6.26	1.41	1.33
21	N	88	ARG	CA-C	-6.26	1.43	1.52
13	F	157	TYR	C-O	-6.25	1.16	1.24
11	D	186	ALA	N-CA	-6.25	1.37	1.45
24	Q	249	LEU	N-CA	6.25	1.54	1.46
1	1	48	SER	CA-C	-6.25	1.45	1.52
5	5	49	ALA	C-O	-6.25	1.16	1.24
9	B	237	LYS	C-N	6.25	1.41	1.33
21	N	650	ASP	CA-C	-6.25	1.44	1.52
26	S	171	TYR	C-O	-6.25	1.16	1.24
16	I	351	GLU	CA-C	-6.25	1.44	1.52
6	6	134	ALA	CA-C	-6.25	1.44	1.52
8	A	116	VAL	C-N	6.24	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	196	ARG	C-N	6.24	1.42	1.33
11	D	218	ASP	CA-C	-6.24	1.46	1.53
19	L	414	ASP	C-N	6.24	1.42	1.33
22	O	215	TYR	CA-C	-6.24	1.44	1.52
1	1	22	THR	C-N	6.24	1.42	1.33
6	6	156	ASN	CA-C	-6.23	1.45	1.53
24	Q	70	ALA	CA-C	-6.23	1.43	1.52
8	A	156	LYS	CA-C	-6.23	1.44	1.52
21	N	221	ASP	CA-C	-6.23	1.45	1.52
10	C	164	SER	CA-C	-6.23	1.45	1.52
20	M	200	PRO	N-CD	6.23	1.56	1.47
17	J	318	PRO	C-N	6.22	1.41	1.33
22	O	270	ILE	C-N	6.22	1.42	1.33
21	N	362	TRP	C-N	6.22	1.42	1.34
33	Z	750	GLU	CA-C	-6.22	1.44	1.52
22	O	151	ASP	C-N	6.21	1.42	1.33
23	P	342	GLN	N-CA	-6.21	1.38	1.46
11	D	134	LEU	CA-C	6.21	1.59	1.52
14	G	144	GLY	CA-C	-6.21	1.44	1.51
1	1	111	TYR	N-CA	-6.21	1.38	1.46
19	L	248	ALA	C-N	6.21	1.42	1.33
5	5	162	LEU	N-CA	-6.21	1.39	1.46
23	P	105	LYS	N-CA	-6.20	1.38	1.46
26	S	383	LEU	CA-C	-6.20	1.44	1.52
33	Z	389	PHE	CA-C	-6.20	1.45	1.52
11	D	74	SER	C-N	6.20	1.41	1.33
25	R	250	ALA	N-CA	-6.20	1.39	1.46
33	Z	395	CYS	C-N	6.20	1.42	1.33
21	N	8	PRO	N-CD	6.20	1.56	1.47
24	Q	304	GLU	C-N	6.20	1.42	1.34
15	H	145	TYR	N-CA	-6.19	1.38	1.46
16	I	301	GLU	CA-CB	6.19	1.62	1.53
18	K	68	ILE	CA-C	6.19	1.60	1.52
1	1	129	SER	CA-C	6.19	1.60	1.52
22	O	327	LEU	C-N	6.19	1.41	1.33
25	R	79	LEU	C-N	6.19	1.42	1.33
33	Z	592	GLU	C-N	6.19	1.40	1.33
28	U	140	ILE	C-N	6.19	1.41	1.33
17	J	234	PHE	CA-C	6.18	1.60	1.52
23	P	124	VAL	C-N	6.18	1.42	1.33
13	F	117	GLN	N-CA	-6.18	1.39	1.46
17	J	84	VAL	C-N	6.18	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	119	LYS	CA-C	-6.18	1.45	1.52
28	U	171	VAL	N-CA	6.18	1.53	1.46
2	2	17	ASP	N-CA	-6.17	1.38	1.45
18	K	227	ALA	CA-C	-6.17	1.44	1.52
14	G	123	THR	CA-C	6.17	1.60	1.52
21	N	883	SER	CA-C	-6.17	1.45	1.52
33	Z	235	GLN	N-CA	6.17	1.53	1.46
2	2	50	ALA	N-CA	-6.17	1.38	1.46
33	Z	250	VAL	C-N	6.16	1.42	1.33
21	N	192	LEU	N-CA	-6.16	1.39	1.46
22	O	138	LEU	N-CA	-6.16	1.39	1.46
1	1	20	THR	CA-C	-6.16	1.45	1.52
15	H	164	SER	CA-C	6.16	1.58	1.52
26	S	260	PRO	N-CA	-6.16	1.39	1.47
10	C	152	ASN	C-N	-6.16	1.28	1.34
19	L	249	SER	N-CA	-6.16	1.39	1.46
24	Q	393	GLY	CA-C	-6.15	1.44	1.52
25	R	363	PHE	CA-C	-6.15	1.45	1.52
10	C	21	GLN	CA-C	-6.15	1.44	1.52
23	P	239	GLN	C-N	6.15	1.42	1.33
22	O	384	MET	N-CA	6.14	1.53	1.46
33	Z	180	ASP	CA-C	-6.14	1.45	1.52
10	C	87	LEU	CA-C	-6.14	1.44	1.52
21	N	266	SER	CA-C	-6.14	1.44	1.53
24	Q	145	HIS	C-N	6.14	1.41	1.33
25	R	25	GLU	C-N	6.14	1.41	1.33
22	O	331	ALA	CA-C	-6.14	1.44	1.52
2	2	4	VAL	CA-C	-6.13	1.46	1.52
15	H	264	ALA	N-CA	-6.13	1.39	1.46
16	I	289	THR	N-CA	6.13	1.53	1.45
33	Z	394	TYR	CA-C	-6.13	1.45	1.52
21	N	86	LYS	CA-C	-6.13	1.44	1.52
5	5	192	ASP	C-N	6.13	1.41	1.34
8	A	207	ILE	C-N	6.13	1.41	1.33
21	N	231	ASN	N-CA	-6.13	1.39	1.46
25	R	327	ASP	CA-C	6.13	1.61	1.52
13	F	37	GLY	CA-C	-6.12	1.43	1.51
13	F	103	LEU	CA-C	-6.12	1.44	1.52
29	V	50	MET	C-N	6.12	1.41	1.33
20	M	68	LYS	C-O	-6.12	1.17	1.24
28	U	79	MET	CA-C	-6.12	1.44	1.52
28	U	279	SER	CA-C	-6.12	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	D	235	GLN	N-CA	-6.12	1.38	1.46
21	N	663	ILE	CA-C	-6.12	1.44	1.52
22	O	59	LEU	N-CA	-6.12	1.39	1.46
13	F	72	LEU	CA-C	-6.11	1.45	1.52
19	L	206	ILE	CA-C	-6.11	1.44	1.52
25	R	302	ALA	CA-C	-6.11	1.44	1.52
3	3	125	LYS	CA-C	-6.11	1.45	1.52
21	N	552	ALA	CA-C	-6.11	1.45	1.52
6	6	102	ILE	N-CA	-6.11	1.39	1.46
18	K	80	LYS	CA-C	-6.11	1.45	1.52
21	N	567	ALA	C-N	6.10	1.41	1.33
3	3	193	MET	C-N	6.10	1.42	1.33
21	N	626	GLY	CA-C	6.10	1.58	1.51
26	S	345	TYR	C-N	6.10	1.42	1.33
33	Z	881	ILE	CA-C	-6.10	1.45	1.52
8	A	71	TYR	CA-C	-6.10	1.45	1.52
11	D	121	THR	CA-C	-6.10	1.45	1.52
19	L	410	ILE	C-N	6.10	1.39	1.33
19	L	157	ARG	C-N	6.10	1.41	1.33
5	5	38	ASN	C-N	-6.09	1.26	1.34
20	M	271	LYS	N-CA	-6.09	1.38	1.46
18	K	189	GLU	N-CA	-6.09	1.39	1.46
21	N	173	LYS	C-N	6.09	1.41	1.33
3	3	165	ALA	C-O	-6.09	1.17	1.24
6	6	10	ASP	N-CA	-6.08	1.39	1.46
21	N	895	LYS	C-N	6.08	1.42	1.33
4	4	76	PRO	CA-C	-6.08	1.43	1.52
22	O	213	LEU	CA-C	-6.08	1.45	1.52
20	M	350	PRO	N-CD	6.07	1.56	1.47
17	J	87	LYS	N-CA	-6.06	1.38	1.46
18	K	386	ILE	N-CA	6.06	1.53	1.46
33	Z	989	TYR	C-N	6.06	1.41	1.33
5	5	153	ALA	N-CA	-6.05	1.39	1.46
23	P	309	MET	C-N	6.05	1.42	1.33
26	S	190	SER	C-N	6.05	1.42	1.33
3	3	37	TYR	N-CA	-6.05	1.39	1.46
6	6	158	LYS	CA-C	-6.05	1.43	1.52
23	P	324	GLU	N-CA	-6.05	1.39	1.46
24	Q	372	GLN	CA-C	-6.05	1.45	1.52
21	N	147	ALA	N-CA	-6.05	1.38	1.46
6	6	138	MET	N-CA	-6.04	1.40	1.46
21	N	113	ALA	N-CA	-6.04	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	427	SER	C-N	6.04	1.41	1.33
4	4	50	GLY	CA-C	-6.04	1.43	1.51
29	V	102	GLN	C-N	6.04	1.42	1.33
5	5	90	TYR	C-N	6.04	1.41	1.33
12	E	147	HIS	N-CA	-6.04	1.38	1.46
30	W	74	ALA	C-N	6.03	1.41	1.33
1	1	61	TYR	N-CA	-6.03	1.39	1.46
16	I	122	SER	C-N	-6.03	1.29	1.33
20	M	204	ALA	CA-C	-6.03	1.45	1.52
23	P	63	VAL	CA-C	-6.03	1.45	1.52
23	P	353	ILE	N-CA	-6.02	1.38	1.46
29	V	101	ASP	N-CA	-6.02	1.39	1.46
19	L	233	LYS	CA-C	6.02	1.60	1.52
22	O	220	SER	C-N	6.02	1.41	1.33
23	P	188	ILE	CA-C	-6.02	1.45	1.52
22	O	128	LEU	CA-C	-6.02	1.45	1.52
25	R	359	VAL	N-CA	6.02	1.54	1.46
11	D	223	ALA	N-CA	-6.01	1.38	1.46
15	H	218	ILE	N-CA	-6.01	1.39	1.46
10	C	106	ILE	C-N	6.01	1.41	1.33
23	P	116	ILE	C-N	6.01	1.41	1.33
13	F	230	VAL	N-CA	-6.01	1.39	1.46
25	R	303	SER	CA-C	-6.01	1.44	1.52
9	B	3	ASP	C-N	6.00	1.43	1.33
18	K	116	MET	CA-C	-6.00	1.45	1.52
21	N	906	ARG	C-O	-6.00	1.16	1.24
2	2	84	LYS	CA-C	-6.00	1.45	1.52
15	H	54	ASN	C-N	6.00	1.42	1.33
20	M	352	PRO	N-CD	6.00	1.56	1.47
14	G	176	GLU	CA-C	-6.00	1.45	1.52
23	P	92	SER	C-N	6.00	1.41	1.33
24	Q	417	GLY	CA-C	6.00	1.58	1.51
33	Z	605	SER	CA-C	-6.00	1.45	1.52
24	Q	137	LEU	N-CA	-6.00	1.38	1.46
22	O	236	HIS	CA-C	6.00	1.60	1.53
24	Q	82	THR	CA-C	-6.00	1.45	1.52
2	2	173	VAL	CA-C	-6.00	1.44	1.52
16	I	204	HIS	C-O	-5.99	1.18	1.24
6	6	5	GLY	CA-C	-5.99	1.47	1.52
12	E	162	GLY	CA-C	-5.99	1.43	1.51
19	L	176	GLY	CA-C	-5.99	1.46	1.52
28	U	32	ARG	C-O	-5.99	1.16	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	5	183	ASP	C-N	5.99	1.40	1.33
22	O	337	LEU	CA-C	-5.99	1.45	1.52
9	B	2	THR	C-N	5.98	1.42	1.33
18	K	368	LEU	N-CA	-5.98	1.38	1.46
20	M	242	THR	C-O	-5.98	1.16	1.24
27	T	79	GLU	C-N	5.98	1.41	1.33
33	Z	342	LEU	N-CA	-5.98	1.38	1.45
17	J	29	GLU	CA-C	5.98	1.60	1.52
4	4	56	ALA	N-CA	5.98	1.53	1.46
9	B	156	TYR	CA-C	-5.98	1.45	1.52
23	P	74	ASP	C-N	5.98	1.41	1.33
25	R	359	VAL	CA-C	-5.98	1.47	1.52
3	3	131	GLY	C-N	5.97	1.41	1.33
28	U	28	LYS	C-N	5.97	1.41	1.33
14	G	106	ILE	CA-C	5.97	1.57	1.53
18	K	111	SER	CA-C	-5.97	1.45	1.52
19	L	307	GLU	N-CA	-5.97	1.39	1.46
24	Q	257	LYS	C-N	5.97	1.41	1.33
27	T	61	ILE	N-CA	5.97	1.53	1.46
27	T	120	THR	N-CA	5.97	1.53	1.46
20	M	185	GLY	C-N	5.97	1.41	1.33
21	N	569	LYS	C-N	5.97	1.41	1.33
18	K	341	PRO	N-CD	5.97	1.56	1.47
9	B	90	ARG	CA-C	-5.96	1.45	1.52
1	1	104	ASP	C-N	5.96	1.42	1.33
9	B	97	TYR	CA-C	-5.96	1.44	1.52
21	N	293	LEU	N-CA	-5.96	1.41	1.46
21	N	575	ALA	C-N	5.96	1.41	1.33
22	O	356	ARG	CA-C	-5.96	1.45	1.52
22	O	358	ILE	C-N	5.96	1.41	1.33
23	P	369	LEU	C-N	5.96	1.42	1.33
13	F	112	LEU	N-CA	-5.96	1.39	1.46
27	T	65	GLY	CA-C	-5.96	1.45	1.52
33	Z	157	LEU	CA-C	-5.96	1.45	1.52
26	S	412	ASN	N-CA	-5.96	1.38	1.46
10	C	72	LYS	CA-C	-5.96	1.44	1.52
24	Q	268	SER	N-CA	-5.96	1.39	1.46
6	6	182	ALA	C-N	5.96	1.42	1.34
33	Z	746	ILE	CA-C	5.96	1.60	1.52
3	3	75	PRO	N-CD	5.95	1.56	1.47
33	Z	375	ASP	N-CA	-5.95	1.41	1.46
2	2	136	ALA	CA-C	-5.95	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	K	324	LEU	CA-C	-5.95	1.45	1.53
19	L	381	LYS	CA-C	-5.95	1.44	1.52
21	N	90	ASP	CA-C	-5.95	1.45	1.52
31	X	37	PRO	N-CD	5.95	1.56	1.47
8	A	104	PHE	C-N	5.94	1.42	1.33
21	N	374	ILE	C-N	5.94	1.41	1.33
24	Q	65	TYR	C-N	5.94	1.41	1.33
29	V	152	VAL	N-CA	-5.94	1.39	1.46
23	P	60	ALA	C-N	5.94	1.41	1.33
4	4	123	THR	CA-C	-5.94	1.45	1.52
2	2	27	ALA	N-CA	-5.93	1.38	1.46
1	1	149	GLU	C-N	5.93	1.42	1.33
14	G	186	LEU	C-N	5.93	1.41	1.33
17	J	102	ILE	N-CA	-5.93	1.39	1.46
11	D	13	PRO	N-CD	5.93	1.56	1.47
28	U	120	LEU	N-CA	-5.93	1.39	1.46
6	6	122	TYR	CA-C	-5.92	1.45	1.52
13	F	107	ARG	N-CA	-5.92	1.39	1.46
14	G	184	GLU	CA-C	-5.92	1.44	1.52
18	K	77	ARG	N-CA	-5.92	1.39	1.46
21	N	415	PHE	N-CA	-5.92	1.39	1.46
33	Z	416	THR	CA-C	5.92	1.60	1.52
21	N	55	PHE	CA-C	-5.92	1.45	1.52
33	Z	536	GLY	CA-C	-5.92	1.43	1.51
1	1	155	ILE	N-CA	-5.92	1.39	1.46
12	E	201	LEU	N-CA	-5.92	1.39	1.46
2	2	22	GLN	N-CA	5.92	1.53	1.46
3	3	63	ASN	N-CA	-5.92	1.39	1.46
13	F	54	ASP	CA-C	-5.92	1.45	1.52
10	C	172	ALA	C-N	5.91	1.41	1.33
18	K	152	PRO	N-CD	5.91	1.56	1.47
21	N	64	ILE	CA-C	5.91	1.60	1.52
33	Z	400	ILE	C-N	5.91	1.41	1.33
3	3	40	VAL	CA-C	-5.91	1.45	1.52
19	L	408	ASP	C-N	5.91	1.42	1.33
29	V	235	GLU	CA-C	-5.91	1.45	1.52
22	O	26	PHE	N-CA	5.91	1.53	1.46
33	Z	869	ASP	C-N	5.91	1.41	1.33
2	2	31	CYS	N-CA	-5.91	1.38	1.46
8	A	122	ALA	CA-C	-5.91	1.45	1.52
12	E	21	LEU	CA-C	-5.91	1.45	1.52
17	J	68	PRO	N-CA	5.91	1.52	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	418	ASP	C-N	5.91	1.41	1.34
22	O	137	TYR	N-CA	-5.91	1.39	1.46
26	S	406	ASP	CA-C	-5.91	1.45	1.52
19	L	191	ARG	CD-NE	5.90	1.54	1.46
33	Z	912	PHE	N-CA	-5.90	1.39	1.46
16	I	280	PHE	CA-C	-5.90	1.45	1.52
25	R	30	ALA	N-CA	-5.90	1.39	1.46
12	E	242	GLU	N-CA	5.90	1.53	1.46
21	N	185	ILE	C-N	5.90	1.41	1.33
23	P	425	HIS	CA-C	-5.90	1.45	1.52
25	R	372	ILE	C-O	5.90	1.31	1.24
21	N	686	ILE	CA-C	-5.90	1.45	1.52
2	2	185	GLU	CA-C	-5.89	1.45	1.52
23	P	126	THR	N-CA	5.89	1.52	1.46
12	E	13	SER	N-CA	-5.89	1.39	1.46
20	M	395	THR	CA-C	-5.89	1.45	1.52
10	C	58	GLU	CA-C	-5.89	1.45	1.52
16	I	349	LEU	CA-C	-5.89	1.45	1.52
18	K	427	TYR	CA-C	-5.89	1.44	1.52
10	C	83	ASP	N-CA	-5.89	1.39	1.46
11	D	5	ASP	C-N	5.89	1.40	1.33
20	M	130	PRO	N-CD	5.88	1.55	1.47
29	V	164	LEU	N-CA	-5.88	1.39	1.46
20	M	61	LYS	N-CA	-5.88	1.39	1.46
4	4	11	SER	C-N	5.88	1.41	1.33
8	A	192	ASP	N-CA	5.88	1.52	1.46
28	U	68	LEU	CA-C	-5.88	1.45	1.52
29	V	151	VAL	C-N	5.88	1.41	1.33
4	4	34	THR	CA-C	-5.88	1.45	1.52
14	G	183	PRO	N-CD	5.88	1.55	1.47
29	V	291	ASN	C-N	-5.88	1.26	1.33
17	J	86	VAL	N-CA	5.88	1.53	1.46
22	O	254	LEU	N-CA	-5.88	1.39	1.46
33	Z	817	LEU	CA-C	-5.88	1.45	1.52
16	I	428	VAL	C-N	5.87	1.41	1.33
27	T	83	ASN	N-CA	5.87	1.53	1.46
11	D	226	SER	C-N	5.87	1.41	1.33
16	I	158	GLY	N-CA	-5.87	1.38	1.45
13	F	204	GLU	C-O	-5.87	1.16	1.24
33	Z	135	LEU	CA-C	-5.87	1.45	1.52
17	J	365	ALA	CA-C	-5.87	1.45	1.52
33	Z	534	PHE	CA-C	-5.87	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	250	TRP	C-N	5.87	1.41	1.33
5	5	60	GLY	CA-C	-5.86	1.44	1.52
10	C	149	TYR	CA-C	-5.86	1.45	1.52
21	N	46	ILE	C-N	5.86	1.42	1.34
8	A	211	ILE	CA-C	-5.86	1.45	1.52
27	T	89	TYR	N-CA	-5.86	1.39	1.46
28	U	280	ASN	N-CA	5.86	1.53	1.46
5	5	58	TRP	N-CA	-5.86	1.39	1.46
23	P	227	ILE	CA-C	-5.86	1.45	1.52
16	I	343	ARG	CA-C	-5.86	1.45	1.52
33	Z	96	TYR	C-O	-5.85	1.19	1.24
33	Z	751	ASP	CA-C	-5.85	1.45	1.52
20	M	424	ALA	N-CA	-5.85	1.38	1.46
28	U	87	GLU	CA-C	-5.85	1.44	1.52
2	2	96	ALA	CA-C	-5.84	1.45	1.52
22	O	79	VAL	N-CA	5.84	1.53	1.46
25	R	244	THR	CA-C	-5.84	1.45	1.52
21	N	193	ALA	N-CA	-5.84	1.39	1.46
6	6	40	ASN	CA-C	-5.84	1.45	1.52
16	I	340	ARG	CA-C	-5.84	1.45	1.52
20	M	360	ILE	CA-C	5.84	1.60	1.52
33	Z	927	VAL	N-CA	-5.84	1.39	1.46
3	3	15	ALA	N-CA	-5.84	1.38	1.45
6	6	66	TYR	CA-C	-5.84	1.45	1.52
8	A	191	ILE	CA-C	-5.83	1.46	1.52
8	A	46	ARG	CA-C	-5.83	1.45	1.52
21	N	565	ASN	C-N	5.83	1.41	1.33
25	R	176	ARG	C-N	5.83	1.41	1.33
28	U	32	ARG	C-N	5.83	1.41	1.33
8	A	91	ARG	N-CA	-5.83	1.38	1.46
10	C	170	SER	CA-C	-5.83	1.45	1.52
20	M	68	LYS	C-N	5.83	1.41	1.33
29	V	37	MET	C-O	-5.83	1.17	1.24
18	K	65	GLU	C-N	5.83	1.41	1.33
21	N	606	VAL	C-N	5.83	1.41	1.33
29	V	107	TRP	CA-C	-5.83	1.45	1.52
30	W	37	PHE	N-CA	5.83	1.53	1.46
1	1	123	PRO	N-CD	5.83	1.55	1.47
22	O	154	GLU	N-CA	-5.83	1.39	1.46
33	Z	876	VAL	CA-C	-5.83	1.45	1.52
19	L	217	GLY	CA-C	-5.82	1.46	1.51
33	Z	87	LYS	N-CA	-5.82	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	125	GLU	N-CA	-5.82	1.38	1.46
25	R	217	HIS	N-CA	-5.82	1.39	1.46
17	J	292	MET	CA-C	-5.82	1.45	1.52
33	Z	259	PRO	N-CD	5.82	1.55	1.47
27	T	60	ARG	CA-C	-5.82	1.45	1.52
8	A	152	PRO	N-CD	5.81	1.55	1.47
21	N	42	GLU	C-N	5.81	1.41	1.33
23	P	54	SER	N-CA	-5.81	1.38	1.46
26	S	326	ASP	CA-C	-5.81	1.44	1.52
28	U	155	LEU	CA-C	-5.81	1.45	1.52
21	N	699	ALA	N-CA	-5.80	1.39	1.46
24	Q	146	TYR	C-N	5.80	1.41	1.33
33	Z	782	ILE	C-N	5.80	1.41	1.33
20	M	326	ALA	CA-C	-5.80	1.45	1.52
5	5	59	LEU	C-N	5.80	1.42	1.33
18	K	327	ALA	N-CA	-5.80	1.38	1.46
16	I	78	ASN	CA-C	-5.80	1.45	1.52
16	I	262	ARG	N-CA	-5.80	1.39	1.46
4	4	157	LEU	CA-C	-5.80	1.45	1.52
17	J	110	SER	CA-C	-5.80	1.45	1.52
19	L	402	ALA	C-N	5.80	1.41	1.33
21	N	729	SER	N-CA	-5.79	1.39	1.46
22	O	23	HIS	N-CA	-5.79	1.38	1.46
8	A	14	ARG	CA-C	-5.79	1.44	1.52
26	S	273	PHE	C-O	-5.79	1.17	1.24
9	B	92	VAL	N-CA	-5.79	1.39	1.46
18	K	72	GLN	CA-CB	5.79	1.62	1.53
24	Q	119	GLU	CA-C	-5.79	1.45	1.52
26	S	235	ASN	CA-C	-5.79	1.45	1.52
26	S	477	VAL	C-O	-5.79	1.17	1.24
27	T	70	ILE	C-O	-5.79	1.17	1.24
21	N	459	ASN	CA-C	-5.78	1.46	1.52
23	P	214	GLU	CA-C	-5.78	1.45	1.52
7	7	88	LEU	CA-C	-5.78	1.45	1.52
24	Q	133	LEU	C-N	5.78	1.42	1.33
11	D	229	ILE	N-CA	-5.78	1.39	1.46
17	J	204	HIS	N-CA	-5.78	1.39	1.46
33	Z	828	ALA	N-CA	-5.78	1.39	1.46
33	Z	268	ALA	CA-C	-5.78	1.45	1.52
3	3	103	ILE	C-N	5.77	1.41	1.33
25	R	184	GLN	CA-C	-5.77	1.45	1.52
27	T	184	ALA	CA-C	-5.77	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	324	VAL	CA-C	-5.77	1.45	1.52
1	1	112	THR	C-N	5.76	1.38	1.33
21	N	356	LEU	CA-C	-5.76	1.45	1.52
28	U	97	PRO	N-CD	5.76	1.55	1.47
27	T	142	LEU	C-N	5.76	1.41	1.33
12	E	178	GLY	CA-C	-5.76	1.43	1.51
21	N	380	LEU	N-CA	5.76	1.53	1.46
23	P	390	TYR	C-N	5.76	1.40	1.33
9	B	69	PRO	N-CD	5.76	1.55	1.47
28	U	64	ASP	C-N	5.76	1.40	1.33
6	6	118	PRO	N-CD	5.75	1.55	1.47
10	C	236	LYS	CA-C	-5.75	1.45	1.52
33	Z	199	ASP	CA-C	-5.75	1.44	1.52
16	I	215	PRO	N-CD	5.75	1.55	1.47
33	Z	558	LEU	C-O	-5.75	1.16	1.24
33	Z	606	CYS	C-N	5.75	1.41	1.33
20	M	158	THR	CA-C	5.74	1.59	1.52
25	R	328	PHE	N-CA	-5.74	1.39	1.46
27	T	29	PRO	C-N	5.74	1.41	1.33
33	Z	616	LEU	N-CA	-5.74	1.39	1.46
2	2	101	ALA	C-N	5.74	1.40	1.33
9	B	208	THR	C-N	5.74	1.41	1.33
15	H	251	PRO	N-CD	5.74	1.55	1.47
15	H	314	VAL	C-O	-5.74	1.18	1.24
22	O	94	GLU	C-N	5.73	1.41	1.33
22	O	131	SER	CA-C	5.73	1.60	1.52
23	P	231	LYS	CA-C	-5.73	1.45	1.52
1	1	52	THR	C-N	5.73	1.41	1.33
27	T	68	ALA	C-N	5.73	1.41	1.33
29	V	280	LEU	C-N	5.73	1.41	1.33
10	C	21	GLN	C-O	-5.73	1.17	1.24
28	U	210	TYR	C-N	5.73	1.41	1.33
11	D	227	GLU	C-O	-5.72	1.17	1.24
20	M	199	LEU	CA-C	5.72	1.60	1.52
20	M	337	LEU	CA-C	5.72	1.60	1.52
21	N	206	ILE	C-O	-5.72	1.17	1.24
13	F	81	ALA	CA-C	5.72	1.60	1.52
21	N	96	GLN	C-N	5.72	1.41	1.33
21	N	22	THR	CA-C	-5.72	1.45	1.52
2	2	20	SER	C-N	5.72	1.41	1.33
22	O	339	GLY	CA-C	-5.72	1.44	1.51
24	Q	415	LEU	N-CA	5.71	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	142	VAL	N-CA	5.71	1.53	1.46
26	S	154	GLN	CA-C	-5.71	1.45	1.52
15	H	259	CYS	C-N	5.71	1.41	1.33
24	Q	238	TYR	CA-C	5.71	1.60	1.52
25	R	270	VAL	CA-C	-5.71	1.45	1.52
7	7	66	ASN	N-CA	-5.71	1.38	1.46
6	6	143	ASN	C-N	5.71	1.42	1.33
11	D	207	ALA	CA-C	-5.71	1.43	1.52
15	H	421	SER	C-N	5.71	1.41	1.33
18	K	319	ASN	C-N	5.71	1.41	1.33
33	Z	736	LEU	C-N	5.71	1.41	1.33
5	5	206	SER	N-CA	-5.71	1.39	1.46
21	N	149	GLU	N-CA	-5.71	1.39	1.46
24	Q	211	PRO	CA-C	5.71	1.59	1.52
18	K	341	PRO	CA-C	-5.71	1.46	1.52
15	H	250	GLY	C-N	5.70	1.40	1.33
27	T	215	LYS	C-N	5.70	1.41	1.33
11	D	148	TYR	N-CA	-5.70	1.38	1.45
18	K	382	VAL	CA-C	-5.70	1.45	1.52
22	O	195	TYR	N-CA	-5.70	1.39	1.46
26	S	465	ILE	C-N	5.70	1.41	1.33
31	X	73	THR	C-N	5.70	1.41	1.33
33	Z	922	PRO	N-CD	5.70	1.55	1.47
10	C	202	ASP	CA-C	-5.70	1.46	1.52
19	L	232	ALA	CA-C	-5.70	1.45	1.52
19	L	330	PRO	N-CD	5.70	1.55	1.47
11	D	93	ALA	CA-C	-5.70	1.45	1.52
13	F	18	ARG	C-N	5.70	1.41	1.33
20	M	424	ALA	CA-C	-5.70	1.45	1.52
10	C	200	THR	C-O	-5.70	1.16	1.24
21	N	171	LYS	CA-C	-5.69	1.45	1.52
25	R	361	VAL	CA-C	-5.69	1.45	1.52
27	T	138	ASP	C-N	5.69	1.41	1.33
18	K	169	VAL	CA-C	-5.69	1.45	1.52
24	Q	326	MET	N-CA	-5.69	1.39	1.46
23	P	421	GLU	C-N	5.69	1.41	1.33
26	S	442	PHE	N-CA	-5.69	1.38	1.45
3	3	12	VAL	CA-C	-5.68	1.46	1.52
13	F	39	ARG	CA-C	-5.68	1.45	1.52
1	1	110	VAL	N-CA	-5.68	1.39	1.46
5	5	109	GLY	C-N	5.68	1.40	1.33
23	P	57	GLU	C-N	5.68	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	7	146	LEU	C-N	5.68	1.41	1.33
10	C	119	LYS	C-N	5.68	1.41	1.33
21	N	630	ALA	CA-C	-5.68	1.45	1.52
23	P	84	LYS	CA-C	5.68	1.60	1.52
25	R	169	ASP	C-N	5.68	1.41	1.33
33	Z	367	SER	C-O	5.68	1.31	1.24
11	D	173	GLU	CA-C	-5.68	1.45	1.52
17	J	371	ARG	C-N	5.68	1.42	1.33
23	P	247	THR	C-N	5.68	1.41	1.33
29	V	81	GLU	N-CA	-5.67	1.38	1.46
12	E	137	PRO	N-CA	-5.67	1.40	1.47
20	M	330	VAL	C-N	5.67	1.41	1.33
6	6	193	LEU	CA-C	-5.67	1.45	1.52
21	N	249	ASN	C-N	5.67	1.40	1.33
23	P	405	PRO	N-CD	5.67	1.55	1.47
25	R	419	ALA	C-N	5.67	1.41	1.33
16	I	282	ASP	N-CA	-5.67	1.38	1.46
18	K	248	GLY	C-O	-5.67	1.16	1.23
21	N	752	SER	CA-C	5.67	1.59	1.53
2	2	78	SER	CA-C	-5.67	1.45	1.52
16	I	309	LEU	N-CA	-5.67	1.39	1.46
6	6	171	VAL	C-N	5.67	1.41	1.33
7	7	86	GLU	C-N	5.67	1.41	1.33
26	S	342	LEU	CA-C	-5.67	1.45	1.52
25	R	249	ILE	C-N	5.66	1.41	1.33
12	E	36	THR	CA-C	-5.66	1.45	1.52
1	1	27	ALA	N-CA	-5.66	1.39	1.46
7	7	174	ARG	CA-C	-5.66	1.45	1.52
17	J	335	MET	CA-C	-5.66	1.45	1.52
23	P	280	LEU	N-CA	-5.66	1.39	1.46
33	Z	558	LEU	N-CA	-5.66	1.38	1.46
16	I	375	VAL	CA-C	-5.66	1.46	1.52
26	S	203	SER	N-CA	-5.66	1.38	1.45
1	1	3	ILE	CA-C	-5.66	1.45	1.52
31	X	29	VAL	CA-C	-5.65	1.45	1.52
4	4	59	ILE	C-N	5.65	1.41	1.33
20	M	288	THR	N-CA	5.65	1.53	1.46
33	Z	565	PHE	C-O	5.65	1.30	1.24
1	1	79	ALA	CA-C	-5.65	1.45	1.52
28	U	12	PRO	N-CD	5.65	1.55	1.47
22	O	125	GLY	CA-C	-5.65	1.45	1.52
28	U	291	LEU	N-CA	5.65	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	V	25	GLU	CA-C	-5.65	1.45	1.52
33	Z	533	VAL	C-N	5.65	1.40	1.33
11	D	142	ASP	CA-C	-5.65	1.45	1.52
18	K	236	ARG	C-O	-5.65	1.17	1.24
2	2	184	ALA	N-CA	-5.64	1.39	1.46
23	P	45	LYS	N-CA	-5.64	1.39	1.46
22	O	122	HIS	CA-C	5.64	1.60	1.52
11	D	119	ARG	N-CA	-5.63	1.39	1.46
33	Z	152	GLU	CA-C	-5.63	1.45	1.52
26	S	469	ASN	C-N	5.63	1.41	1.33
5	5	206	SER	C-N	5.63	1.41	1.33
15	H	394	LYS	C-O	-5.63	1.17	1.24
14	G	148	TYR	CA-C	-5.63	1.45	1.52
11	D	14	ASP	CA-C	-5.62	1.45	1.52
15	H	202	GLU	C-O	-5.62	1.17	1.23
20	M	176	PRO	CA-C	-5.62	1.45	1.52
9	B	52	SER	C-N	5.62	1.40	1.33
20	M	218	ALA	CA-C	-5.62	1.45	1.52
21	N	578	ASP	CA-C	-5.62	1.45	1.52
23	P	129	LYS	C-N	5.62	1.38	1.33
32	Y	77	LEU	C-N	5.62	1.41	1.33
3	3	8	GLY	CA-C	-5.61	1.44	1.51
10	C	142	ASP	CA-C	-5.61	1.45	1.52
14	G	227	HIS	N-CA	-5.61	1.38	1.46
18	K	156	SER	CA-C	-5.61	1.46	1.52
33	Z	956	LEU	CA-C	-5.61	1.45	1.52
18	K	408	GLU	N-CA	-5.61	1.39	1.46
29	V	108	TYR	N-CA	-5.61	1.39	1.45
5	5	133	GLN	C-N	5.61	1.41	1.33
18	K	324	LEU	C-N	5.61	1.42	1.33
25	R	372	ILE	C-N	-5.61	1.29	1.33
18	K	207	ARG	C-N	5.61	1.39	1.33
33	Z	781	GLY	C-N	5.61	1.40	1.33
9	B	244	ASN	C-N	5.61	1.41	1.34
26	S	468	ALA	CA-C	-5.61	1.45	1.52
25	R	385	ASN	CA-C	-5.60	1.45	1.52
30	W	115	CYS	N-CA	-5.60	1.40	1.46
6	6	43	MET	C-O	-5.60	1.17	1.23
9	B	133	SER	N-CA	-5.60	1.39	1.46
4	4	68	ILE	C-N	5.60	1.41	1.33
10	C	75	VAL	CA-C	-5.60	1.46	1.52
19	L	213	LYS	C-N	5.60	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	H	220	LYS	CA-C	-5.60	1.45	1.52
33	Z	790	MET	N-CA	-5.60	1.39	1.46
16	I	312	GLN	C-N	5.59	1.41	1.33
23	P	130	ILE	N-CA	-5.59	1.40	1.46
19	L	78	ARG	C-N	5.59	1.41	1.33
16	I	307	LEU	C-N	5.59	1.41	1.33
30	W	127	ARG	N-CA	-5.59	1.39	1.46
3	3	186	VAL	N-CA	-5.59	1.39	1.46
21	N	390	LEU	CA-C	-5.59	1.45	1.53
4	4	28	LYS	C-N	5.59	1.41	1.33
14	G	76	VAL	N-CA	5.58	1.52	1.46
14	G	240	ASP	C-N	5.58	1.41	1.33
23	P	208	PHE	CA-C	5.58	1.60	1.52
25	R	252	TYR	C-N	5.58	1.41	1.33
14	G	8	ASP	C-N	5.58	1.43	1.33
15	H	335	GLU	N-CA	-5.58	1.39	1.46
15	H	348	ASN	CA-C	-5.58	1.45	1.52
17	J	130	ALA	C-O	-5.58	1.17	1.23
18	K	210	LEU	CA-C	-5.58	1.46	1.52
33	Z	545	SER	CA-C	-5.58	1.45	1.52
8	A	47	GLY	CA-C	-5.58	1.44	1.52
2	2	19	ARG	C-N	5.58	1.41	1.33
16	I	170	VAL	CA-C	-5.58	1.46	1.52
18	K	181	LYS	CA-C	-5.58	1.45	1.52
23	P	92	SER	CA-C	-5.58	1.45	1.52
10	C	43	GLY	C-N	5.57	1.40	1.33
20	M	371	ASP	C-N	5.57	1.41	1.33
23	P	312	PRO	C-N	5.57	1.40	1.33
29	V	156	PHE	CA-C	-5.57	1.45	1.52
2	2	215	GLU	CA-C	-5.57	1.45	1.52
8	A	55	SER	CA-C	-5.57	1.45	1.52
14	G	209	LYS	CA-C	-5.57	1.45	1.52
24	Q	365	ILE	C-N	5.57	1.40	1.33
6	6	84	ILE	CA-C	5.57	1.60	1.52
8	A	137	LEU	N-CA	5.57	1.52	1.45
23	P	208	PHE	C-N	5.57	1.41	1.33
24	Q	1	MET	C-N	5.57	1.41	1.33
26	S	287	SER	CA-C	-5.57	1.45	1.52
12	E	210	GLU	C-N	5.57	1.41	1.33
17	J	243	SER	C-N	5.56	1.40	1.33
8	A	154	ILE	N-CA	-5.56	1.39	1.46
18	K	125	THR	C-N	5.56	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	28	GLU	N-CA	-5.56	1.39	1.46
15	H	256	LYS	C-N	5.56	1.41	1.33
21	N	454	ALA	C-N	5.56	1.41	1.33
2	2	218	VAL	N-CA	5.55	1.52	1.46
13	F	197	ILE	C-N	5.55	1.41	1.33
15	H	367	ARG	CA-C	-5.55	1.47	1.53
9	B	195	THR	C-N	5.55	1.41	1.34
17	J	290	ILE	CA-C	-5.55	1.46	1.52
20	M	277	ILE	N-CA	-5.55	1.39	1.46
4	4	178	VAL	CA-C	-5.55	1.46	1.52
7	7	149	LYS	C-N	5.55	1.39	1.33
18	K	192	LEU	C-N	5.55	1.40	1.33
22	O	368	ASP	CA-C	-5.55	1.45	1.52
24	Q	197	SER	C-N	5.55	1.41	1.33
17	J	182	PRO	N-CD	5.55	1.55	1.47
23	P	430	GLY	CA-C	-5.55	1.46	1.52
27	T	15	PHE	N-CA	-5.55	1.39	1.46
21	N	459	ASN	N-CA	-5.54	1.40	1.46
11	D	33	ALA	C-N	-5.54	1.27	1.33
16	I	245	LEU	CA-C	-5.54	1.46	1.52
17	J	196	THR	N-CA	-5.54	1.39	1.46
23	P	56	LYS	C-N	5.54	1.41	1.33
4	4	99	VAL	N-CA	-5.54	1.39	1.46
6	6	32	PRO	N-CD	5.54	1.55	1.47
24	Q	79	PRO	N-CD	5.54	1.55	1.47
5	5	208	ASN	C-N	5.54	1.41	1.34
14	G	169	GLN	N-CA	5.54	1.52	1.46
15	H	224	VAL	CA-C	-5.54	1.45	1.52
7	7	167	GLU	C-N	5.54	1.41	1.33
3	3	188	LYS	CA-C	-5.53	1.46	1.52
4	4	97	TYR	N-CA	5.53	1.52	1.46
11	D	226	SER	CA-C	-5.53	1.45	1.52
13	F	146	GLU	C-N	5.53	1.41	1.33
25	R	121	GLU	C-N	-5.53	1.26	1.33
33	Z	977	ILE	C-N	5.53	1.40	1.33
22	O	126	ILE	CA-C	5.53	1.59	1.52
13	F	219	ASP	CA-C	-5.53	1.45	1.52
33	Z	371	SER	C-N	5.53	1.40	1.33
11	D	100	LEU	C-N	5.53	1.41	1.33
12	E	196	ALA	C-N	5.52	1.41	1.33
3	3	61	LYS	C-N	5.52	1.41	1.33
21	N	139	ARG	CA-C	-5.52	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	582	ASP	N-CA	-5.52	1.39	1.46
14	G	87	LEU	CA-C	-5.52	1.45	1.52
20	M	190	ILE	CA-C	-5.52	1.45	1.52
22	O	200	GLU	CA-C	5.52	1.58	1.52
26	S	345	TYR	N-CA	-5.52	1.39	1.46
21	N	539	MET	CA-C	-5.52	1.45	1.52
27	T	31	LYS	CA-C	-5.52	1.45	1.52
29	V	198	SER	CA-C	-5.52	1.45	1.52
11	D	169	LYS	C-O	-5.52	1.17	1.24
33	Z	264	PHE	CA-C	-5.51	1.45	1.52
5	5	15	ALA	C-N	5.51	1.40	1.33
16	I	127	ASP	CA-C	-5.51	1.46	1.52
18	K	93	PRO	N-CD	5.51	1.55	1.47
21	N	271	GLU	N-CA	-5.51	1.39	1.46
24	Q	316	THR	C-N	5.51	1.41	1.33
31	X	20	ASP	CA-C	-5.51	1.45	1.52
11	D	116	VAL	C-N	5.51	1.41	1.33
20	M	202	LYS	CA-C	-5.51	1.45	1.52
26	S	262	THR	N-CA	-5.51	1.41	1.46
33	Z	474	LEU	CA-C	-5.51	1.45	1.52
10	C	217	ARG	CA-C	-5.51	1.46	1.52
21	N	713	VAL	N-CA	5.51	1.52	1.46
18	K	249	GLU	N-CA	-5.51	1.39	1.46
2	2	32	ALA	CA-C	-5.50	1.45	1.52
19	L	285	ALA	CA-C	-5.50	1.45	1.52
23	P	31	ASP	CA-C	-5.50	1.45	1.52
6	6	69	ASP	C-N	5.50	1.40	1.33
11	D	71	VAL	C-N	5.50	1.41	1.33
25	R	101	GLU	N-CA	-5.50	1.39	1.46
28	U	175	LEU	C-N	5.50	1.41	1.33
33	Z	787	ASP	CA-C	-5.50	1.45	1.52
20	M	336	ALA	CA-C	-5.50	1.45	1.52
22	O	197	SER	CA-C	-5.50	1.45	1.52
5	5	159	ARG	C-O	-5.50	1.17	1.24
8	A	142	THR	N-CA	-5.50	1.39	1.46
13	F	14	SER	N-CA	-5.50	1.38	1.45
13	F	215	ILE	C-N	5.50	1.40	1.33
7	7	141	HIS	N-CA	-5.50	1.39	1.46
15	H	276	GLY	CA-C	-5.50	1.45	1.51
18	K	388	GLN	CA-C	-5.50	1.46	1.52
25	R	387	ILE	CA-C	-5.50	1.45	1.52
16	I	108	THR	N-CA	-5.49	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	219	VAL	CA-CB	-5.49	1.47	1.54
20	M	198	VAL	CA-C	-5.49	1.45	1.52
28	U	117	ASN	C-N	5.49	1.40	1.33
12	E	204	LEU	C-N	5.49	1.40	1.33
22	O	136	THR	C-N	5.49	1.41	1.34
2	2	24	PRO	N-CD	5.49	1.55	1.47
12	E	48	LEU	C-N	5.49	1.39	1.33
14	G	34	THR	N-CA	-5.49	1.39	1.45
28	U	233	PHE	N-CA	-5.49	1.39	1.46
19	L	109	MET	CA-C	-5.48	1.45	1.52
21	N	173	LYS	CA-C	-5.48	1.44	1.52
26	S	373	LYS	CA-C	-5.48	1.45	1.52
6	6	150	GLN	C-N	5.48	1.40	1.33
11	D	165	GLY	CA-C	-5.48	1.44	1.51
21	N	153	ALA	C-O	5.48	1.30	1.24
22	O	154	GLU	C-O	-5.48	1.17	1.24
33	Z	68	LEU	CA-C	-5.48	1.45	1.52
21	N	76	GLU	C-N	5.48	1.41	1.33
24	Q	263	LYS	C-N	5.48	1.41	1.34
5	5	145	LYS	CA-C	-5.48	1.45	1.52
33	Z	862	MET	CA-C	-5.48	1.46	1.52
7	7	32	GLU	N-CA	-5.47	1.39	1.46
16	I	112	ILE	CA-C	-5.47	1.46	1.52
16	I	325	ILE	C-O	-5.47	1.18	1.24
16	I	91	GLU	C-N	5.47	1.41	1.33
31	X	80	SER	N-CA	-5.47	1.39	1.46
15	H	58	ASP	CA-C	5.47	1.59	1.52
22	O	219	ILE	CA-C	5.47	1.59	1.52
9	B	21	ILE	N-CA	-5.47	1.39	1.46
18	K	382	VAL	C-N	5.47	1.40	1.33
21	N	111	GLN	CA-C	-5.47	1.45	1.52
26	S	230	LYS	N-CA	-5.47	1.39	1.46
6	6	180	THR	N-CA	-5.47	1.39	1.46
1	1	185	ARG	N-CA	-5.46	1.39	1.46
6	6	115	SER	C-N	5.46	1.41	1.33
33	Z	271	ILE	C-N	5.46	1.41	1.33
25	R	345	TYR	CA-C	-5.46	1.46	1.52
6	6	49	ALA	CA-C	-5.46	1.45	1.52
14	G	228	LYS	C-N	5.46	1.40	1.33
27	T	10	SER	N-CA	-5.46	1.39	1.46
27	T	171	ILE	N-CA	-5.46	1.40	1.46
14	G	248	GLY	CA-C	5.46	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	232	MET	C-N	5.46	1.41	1.33
27	T	166	SER	CA-C	-5.46	1.45	1.52
15	H	339	GLN	N-CA	-5.46	1.39	1.46
16	I	330	LYS	C-N	5.46	1.40	1.33
31	X	112	ASN	N-CA	-5.46	1.40	1.46
1	1	2	SER	N-CA	-5.46	1.39	1.46
17	J	238	ARG	N-CA	5.45	1.53	1.46
22	O	140	LYS	CA-C	-5.45	1.45	1.52
6	6	41	ILE	C-N	5.45	1.42	1.33
17	J	321	VAL	CA-C	5.45	1.59	1.52
21	N	639	ASP	C-N	5.45	1.40	1.33
23	P	149	GLU	CA-C	-5.45	1.45	1.52
12	E	43	LYS	C-N	5.45	1.42	1.33
32	Y	82	ASP	N-CA	5.45	1.52	1.46
21	N	655	ALA	C-N	5.44	1.41	1.33
11	D	213	THR	C-N	5.44	1.41	1.33
17	J	287	ASN	C-N	5.44	1.40	1.33
24	Q	101	ILE	N-CA	-5.44	1.39	1.46
27	T	210	PHE	C-N	5.44	1.40	1.33
33	Z	274	SER	N-CA	-5.44	1.40	1.46
3	3	123	GLU	C-N	5.44	1.40	1.33
4	4	93	SER	N-CA	-5.44	1.39	1.45
16	I	420	LYS	CA-C	-5.44	1.46	1.52
21	N	727	THR	C-N	5.44	1.40	1.33
14	G	190	GLU	C-N	5.44	1.41	1.34
28	U	234	ASN	C-N	5.44	1.41	1.33
7	7	222	THR	CA-C	-5.43	1.46	1.52
9	B	6	SER	N-CA	5.43	1.52	1.46
17	J	46	ALA	CA-C	5.43	1.59	1.52
17	J	221	LYS	C-N	5.43	1.41	1.33
20	M	41	ILE	N-CA	5.43	1.56	1.46
28	U	106	ILE	N-CA	-5.43	1.39	1.46
2	2	111	PHE	C-N	-5.43	1.26	1.33
21	N	102	VAL	C-N	5.43	1.40	1.33
21	N	345	ASP	N-CA	-5.43	1.39	1.46
33	Z	893	PHE	C-O	-5.43	1.16	1.23
2	2	113	ILE	CA-C	-5.43	1.46	1.52
18	K	136	SER	CA-C	-5.43	1.45	1.52
24	Q	376	LYS	C-N	5.43	1.41	1.33
25	R	67	CYS	C-N	5.43	1.41	1.33
5	5	113	TYR	CA-C	-5.43	1.46	1.52
15	H	447	VAL	C-O	-5.43	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	I	275	ALA	N-CA	5.43	1.53	1.45
6	6	47	GLY	C-N	5.43	1.41	1.33
21	N	535	LEU	C-N	5.43	1.40	1.33
23	P	441	GLY	CA-C	-5.43	1.46	1.52
27	T	218	GLU	C-N	5.43	1.41	1.33
23	P	91	LEU	CA-C	-5.42	1.45	1.52
24	Q	31	LEU	N-CA	-5.42	1.39	1.46
20	M	423	GLN	N-CA	5.42	1.51	1.47
24	Q	39	SER	CA-C	-5.42	1.46	1.52
3	3	20	LEU	N-CA	-5.42	1.39	1.46
19	L	69	ARG	C-N	5.42	1.41	1.33
21	N	210	SER	C-N	5.42	1.41	1.33
28	U	62	ASN	CA-C	-5.42	1.46	1.52
24	Q	305	ALA	C-N	5.42	1.41	1.33
25	R	381	ILE	CA-C	5.42	1.59	1.52
33	Z	921	GLU	N-CA	-5.42	1.40	1.45
5	5	137	TYR	N-CA	-5.41	1.39	1.46
11	D	233	VAL	C-N	5.41	1.40	1.33
14	G	87	LEU	N-CA	-5.41	1.40	1.46
21	N	718	GLU	C-N	5.41	1.41	1.33
19	L	130	GLY	N-CA	-5.41	1.40	1.45
3	3	44	ILE	CA-C	5.41	1.59	1.52
9	B	190	HIS	C-N	5.41	1.40	1.33
8	A	48	LYS	C-N	5.41	1.43	1.34
10	C	197	LEU	CA-C	-5.41	1.45	1.52
33	Z	589	SER	C-O	5.41	1.30	1.24
11	D	125	GLY	C-N	5.41	1.40	1.33
12	E	114	GLN	C-N	5.41	1.41	1.33
16	I	235	ALA	C-N	5.41	1.40	1.33
7	7	217	ILE	N-CA	-5.40	1.40	1.46
17	J	153	LEU	C-O	-5.40	1.16	1.24
18	K	352	ILE	CA-C	-5.40	1.46	1.52
10	C	104	GLU	C-N	5.40	1.40	1.33
16	I	143	PRO	CA-C	-5.40	1.44	1.52
4	4	155	GLU	C-N	5.40	1.40	1.33
8	A	26	TYR	C-N	5.40	1.41	1.33
23	P	344	ARG	N-CA	-5.39	1.40	1.46
24	Q	220	LEU	CA-C	-5.39	1.45	1.52
16	I	226	GLY	CA-C	-5.39	1.44	1.51
19	L	173	PHE	N-CA	-5.39	1.39	1.46
21	N	105	SER	CA-C	-5.39	1.45	1.52
20	M	428	LYS	C-N	5.39	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	M	304	THR	CA-C	5.39	1.59	1.52
21	N	448	LEU	C-N	5.39	1.41	1.33
23	P	336	HIS	N-CA	-5.39	1.39	1.46
26	S	402	ILE	N-CA	-5.39	1.40	1.46
27	T	143	SER	N-CA	-5.39	1.39	1.46
31	X	39	GLU	N-CA	-5.39	1.38	1.46
6	6	144	GLN	C-N	5.39	1.38	1.33
13	F	35	THR	N-CA	-5.39	1.39	1.46
24	Q	127	ARG	C-N	5.39	1.41	1.33
29	V	56	GLU	C-N	5.39	1.41	1.33
33	Z	900	LEU	C-N	5.39	1.41	1.33
15	H	232	PRO	N-CD	5.38	1.55	1.47
8	A	100	GLU	C-N	5.38	1.41	1.33
14	G	225	GLY	CA-C	-5.38	1.44	1.51
1	1	26	ILE	CA-C	-5.38	1.47	1.53
7	7	131	SER	C-N	5.38	1.39	1.34
21	N	599	TYR	N-CA	-5.38	1.39	1.46
23	P	195	GLN	CA-C	-5.38	1.45	1.52
29	V	242	LYS	CA-C	-5.38	1.45	1.52
5	5	108	GLU	CA-C	-5.38	1.45	1.52
15	H	450	VAL	C-N	5.38	1.40	1.33
16	I	400	GLY	C-N	5.38	1.41	1.34
26	S	367	TYR	CA-C	-5.38	1.45	1.52
33	Z	206	ASP	C-N	5.38	1.40	1.34
22	O	267	ASP	CA-C	-5.38	1.45	1.52
7	7	71	PRO	N-CA	-5.37	1.42	1.47
17	J	374	ARG	C-N	5.37	1.40	1.34
7	7	44	GLY	C-N	5.37	1.40	1.33
16	I	110	GLU	CA-C	-5.37	1.46	1.52
28	U	205	LYS	C-N	5.37	1.40	1.33
13	F	91	GLN	C-N	5.37	1.40	1.33
12	E	64	ILE	CA-C	-5.37	1.46	1.52
12	E	80	GLY	N-CA	-5.37	1.37	1.45
28	U	78	GLU	CA-C	-5.37	1.45	1.52
7	7	100	ASN	CA-C	-5.37	1.46	1.52
10	C	168	ASN	C-N	5.37	1.40	1.33
16	I	265	ARG	N-CA	-5.37	1.40	1.46
15	H	242	PRO	CA-C	5.36	1.55	1.52
20	M	78	LEU	C-O	-5.36	1.17	1.23
21	N	391	PRO	N-CD	5.36	1.55	1.47
29	V	256	GLU	CA-C	-5.36	1.46	1.52
20	M	379	LEU	N-CA	-5.36	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	283	THR	CA-C	-5.36	1.46	1.52
12	E	153	TYR	CA-C	-5.36	1.45	1.52
16	I	293	ASP	N-CA	-5.36	1.39	1.46
11	D	215	VAL	N-CA	-5.36	1.39	1.46
14	G	104	THR	C-N	5.36	1.40	1.33
21	N	409	GLY	C-N	5.36	1.40	1.33
24	Q	73	LYS	CA-C	-5.36	1.45	1.52
2	2	193	PRO	N-CD	5.36	1.55	1.47
6	6	167	SER	C-N	-5.36	1.27	1.33
20	M	224	PRO	N-CD	5.36	1.55	1.47
6	6	51	ASP	CA-C	-5.35	1.45	1.52
16	I	295	ASN	CA-C	5.35	1.60	1.53
18	K	194	GLN	CA-C	-5.35	1.46	1.53
21	N	738	GLN	CA-C	-5.35	1.46	1.52
33	Z	361	HIS	CA-C	-5.35	1.45	1.52
21	N	687	THR	C-N	5.35	1.40	1.33
24	Q	280	ASN	CA-C	5.35	1.59	1.52
5	5	209	ASN	N-CA	-5.35	1.39	1.46
17	J	233	LEU	CA-C	-5.35	1.46	1.52
24	Q	181	GLU	N-CA	-5.35	1.39	1.46
1	1	84	GLU	C-N	5.34	1.41	1.33
6	6	114	TYR	CA-C	-5.34	1.46	1.52
9	B	61	LEU	CA-C	-5.34	1.46	1.52
9	B	240	SER	CA-C	-5.34	1.45	1.52
17	J	309	ARG	CA-C	-5.34	1.45	1.52
22	O	371	VAL	N-CA	-5.34	1.40	1.46
25	R	213	TYR	C-N	5.34	1.41	1.33
27	T	51	TYR	C-N	5.34	1.40	1.33
14	G	197	LYS	C-N	5.34	1.40	1.33
18	K	238	ASN	C-N	5.34	1.40	1.33
30	W	6	THR	N-CA	-5.34	1.40	1.46
33	Z	577	GLN	N-CA	-5.34	1.40	1.46
7	7	220	TYR	N-CA	-5.34	1.39	1.46
25	R	40	ILE	C-O	5.34	1.30	1.24
13	F	187	ASP	CA-C	-5.34	1.45	1.52
19	L	96	LYS	C-N	5.34	1.41	1.33
25	R	336	LYS	N-CA	5.34	1.52	1.46
10	C	133	VAL	C-O	-5.34	1.18	1.24
20	M	116	ALA	CA-C	-5.34	1.46	1.52
23	P	81	LEU	N-CA	-5.34	1.39	1.46
26	S	345	TYR	CA-C	5.34	1.59	1.52
28	U	302	GLN	CA-C	-5.34	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	D	136	ALA	N-CA	-5.33	1.39	1.45
25	R	66	LEU	C-N	5.33	1.41	1.33
5	5	58	TRP	C-N	5.33	1.41	1.33
20	M	398	ALA	C-N	5.33	1.41	1.33
3	3	32	GLU	CA-C	-5.33	1.45	1.52
6	6	146	ASN	CA-C	-5.33	1.45	1.52
7	7	216	ASP	CA-C	5.33	1.60	1.52
16	I	133	LEU	C-O	-5.33	1.17	1.24
16	I	251	GLU	C-N	5.33	1.40	1.33
18	K	302	GLN	C-N	5.33	1.41	1.33
21	N	350	LYS	N-CA	-5.33	1.40	1.46
21	N	465	ALA	N-CA	-5.33	1.40	1.46
21	N	475	ALA	CA-C	5.33	1.59	1.52
28	U	107	ASN	CA-C	-5.33	1.45	1.52
33	Z	307	HIS	CA-C	-5.33	1.46	1.52
16	I	219	VAL	C-N	5.33	1.41	1.33
10	C	10	THR	N-CA	5.32	1.52	1.46
21	N	551	GLY	CA-C	-5.32	1.46	1.52
33	Z	855	LEU	C-N	5.32	1.41	1.33
13	F	219	ASP	C-N	5.32	1.38	1.33
25	R	131	ALA	N-CA	-5.32	1.39	1.46
10	C	137	TYR	CA-C	-5.32	1.46	1.52
16	I	263	LEU	C-N	5.32	1.41	1.33
18	K	305	GLY	C-N	5.32	1.41	1.33
25	R	33	LEU	C-O	-5.32	1.18	1.24
8	A	185	HIS	N-CA	-5.32	1.40	1.46
15	H	399	GLU	C-N	5.32	1.41	1.33
17	J	239	GLU	C-N	5.32	1.41	1.33
33	Z	442	VAL	C-N	5.32	1.41	1.33
2	2	190	TYR	C-O	-5.32	1.17	1.24
8	A	250	GLU	CA-C	-5.32	1.46	1.52
6	6	101	ILE	C-O	-5.31	1.18	1.24
7	7	1	THR	CA-C	5.31	1.58	1.52
2	2	134	ALA	N-CA	-5.31	1.40	1.46
16	I	190	GLN	CA-C	-5.31	1.45	1.52
18	K	298	GLU	C-N	5.31	1.40	1.33
22	O	275	SER	CA-C	5.31	1.59	1.52
27	T	76	ASP	N-CA	-5.31	1.40	1.46
6	6	48	PHE	C-N	5.31	1.40	1.33
8	A	28	VAL	N-CA	-5.31	1.40	1.46
8	A	248	ILE	C-N	5.31	1.41	1.33
29	V	86	VAL	C-N	5.31	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	A	217	GLU	N-CA	-5.30	1.39	1.46
14	G	51	LYS	N-CA	5.30	1.52	1.46
17	J	372	GLU	N-CA	5.30	1.53	1.46
5	5	186	ILE	C-N	5.30	1.40	1.33
1	1	63	LEU	CA-C	-5.30	1.45	1.52
15	H	427	GLY	CA-C	5.30	1.58	1.52
21	N	110	VAL	C-N	5.30	1.40	1.33
21	N	584	ARG	CA-C	-5.30	1.46	1.52
33	Z	258	PRO	C-N	5.30	1.39	1.33
22	O	226	LYS	N-CA	-5.30	1.39	1.45
33	Z	270	SER	N-CA	-5.30	1.40	1.46
17	J	204	HIS	CA-C	-5.30	1.46	1.52
33	Z	403	ASN	CA-C	-5.30	1.44	1.53
8	A	120	ARG	CA-C	-5.30	1.46	1.52
16	I	354	ASP	CA-C	-5.30	1.46	1.53
21	N	168	SER	N-CA	5.30	1.52	1.46
21	N	534	ASP	C-N	5.30	1.41	1.34
26	S	395	ILE	CA-C	5.30	1.59	1.52
13	F	45	VAL	CA-C	-5.29	1.46	1.52
19	L	312	MET	C-N	5.29	1.41	1.34
21	N	180	SER	CA-C	-5.29	1.45	1.52
21	N	374	ILE	CA-C	-5.29	1.46	1.52
22	O	239	MET	CA-C	-5.29	1.45	1.52
5	5	81	LYS	CA-C	-5.29	1.45	1.52
28	U	213	LYS	C-N	5.29	1.40	1.33
33	Z	597	SER	C-N	5.29	1.40	1.33
23	P	187	SER	N-CA	-5.29	1.39	1.46
14	G	201	LEU	C-N	5.29	1.41	1.34
24	Q	125	ALA	CA-C	-5.29	1.45	1.52
3	3	42	LEU	C-N	5.29	1.39	1.33
7	7	89	ALA	C-N	5.29	1.41	1.33
11	D	196	VAL	CA-C	-5.29	1.46	1.52
27	T	165	GLN	C-O	-5.29	1.18	1.24
28	U	295	LYS	C-N	5.29	1.40	1.33
33	Z	215	ASN	N-CA	5.29	1.54	1.46
26	S	386	ASN	CA-C	5.29	1.59	1.52
33	Z	240	ASN	N-CA	-5.29	1.39	1.46
21	N	430	ASN	C-N	5.29	1.41	1.34
28	U	82	LYS	N-CA	5.29	1.53	1.46
33	Z	190	THR	N-CA	-5.29	1.39	1.46
3	3	30	LYS	CA-C	-5.28	1.46	1.52
5	5	8	PHE	C-O	-5.28	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	221	ALA	N-CA	-5.28	1.40	1.46
23	P	255	ALA	N-CA	-5.28	1.40	1.46
14	G	59	VAL	N-CA	-5.28	1.40	1.46
19	L	368	VAL	N-CA	-5.28	1.39	1.46
27	T	150	ARG	C-N	5.28	1.41	1.34
27	T	270	ILE	C-N	5.28	1.40	1.33
33	Z	57	LYS	CA-C	-5.28	1.46	1.52
1	1	169	SER	CA-C	-5.28	1.46	1.52
16	I	359	LYS	N-CA	-5.28	1.40	1.46
2	2	36	ARG	CA-C	-5.28	1.46	1.52
11	D	76	SER	CA-C	-5.28	1.46	1.52
20	M	303	ARG	CA-C	-5.28	1.46	1.52
18	K	124	SER	CA-C	-5.28	1.45	1.52
19	L	381	LYS	N-CA	-5.28	1.39	1.46
21	N	877	GLN	N-CA	-5.28	1.40	1.46
33	Z	827	LEU	C-N	5.28	1.40	1.33
18	K	106	ASN	N-CA	-5.27	1.38	1.46
21	N	247	GLU	CA-C	-5.27	1.46	1.52
17	J	271	THR	CA-C	-5.27	1.46	1.52
18	K	266	PRO	N-CD	5.27	1.55	1.47
19	L	207	PHE	CA-C	5.27	1.59	1.52
22	O	273	GLN	CA-C	-5.27	1.46	1.52
5	5	11	GLY	C-N	5.27	1.41	1.33
12	E	246	LYS	N-CA	-5.27	1.39	1.46
18	K	126	LEU	N-CA	5.27	1.51	1.45
18	K	406	ASP	N-CA	5.27	1.52	1.46
27	T	19	ASP	CA-C	-5.27	1.45	1.52
20	M	222	GLY	C-O	-5.27	1.16	1.24
33	Z	912	PHE	CA-C	5.27	1.58	1.52
6	6	190	GLY	N-CA	-5.26	1.39	1.45
10	C	64	GLU	CA-C	-5.26	1.45	1.52
10	C	218	LYS	N-CA	-5.26	1.40	1.46
10	C	225	VAL	CA-C	-5.26	1.45	1.52
13	F	207	THR	C-O	-5.26	1.17	1.24
21	N	167	GLU	C-O	-5.26	1.18	1.24
22	O	198	THR	C-N	-5.26	1.27	1.33
33	Z	218	GLU	CA-C	-5.26	1.46	1.52
21	N	674	GLN	CA-C	-5.26	1.45	1.52
21	N	141	ILE	C-N	5.26	1.40	1.33
24	Q	427	PHE	C-N	5.26	1.40	1.33
26	S	277	SER	N-CA	-5.26	1.40	1.46
8	A	113	PRO	N-CD	5.26	1.55	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	E	141	ALA	CA-C	5.26	1.59	1.52
21	N	115	LYS	C-O	-5.26	1.18	1.24
11	D	243	GLN	CA-C	-5.25	1.46	1.52
21	N	545	SER	C-N	-5.25	1.27	1.33
23	P	81	LEU	C-N	5.25	1.40	1.33
13	F	198	SER	C-N	5.25	1.41	1.33
22	O	61	LEU	CA-C	-5.25	1.45	1.52
21	N	327	LEU	CA-C	-5.25	1.46	1.52
27	T	223	GLU	C-N	5.25	1.41	1.33
31	X	56	PRO	C-O	-5.25	1.17	1.24
33	Z	84	ALA	N-CA	-5.25	1.39	1.46
18	K	367	ASP	N-CA	-5.25	1.39	1.46
21	N	529	GLN	CA-C	5.25	1.57	1.52
21	N	780	ASP	C-O	-5.25	1.20	1.23
16	I	227	THR	N-CA	-5.24	1.39	1.46
20	M	357	ARG	N-CA	-5.24	1.40	1.46
21	N	69	TYR	CA-C	-5.24	1.46	1.52
24	Q	242	SER	CA-C	5.24	1.59	1.52
25	R	31	PHE	N-CA	-5.24	1.40	1.46
28	U	297	GLN	N-CA	-5.24	1.40	1.46
33	Z	455	ILE	C-O	-5.24	1.18	1.24
17	J	29	GLU	N-CA	-5.24	1.40	1.46
21	N	205	SER	N-CA	-5.24	1.40	1.46
22	O	338	LYS	CA-C	-5.24	1.46	1.52
19	L	165	PRO	N-CD	5.24	1.55	1.47
22	O	30	GLU	C-O	-5.24	1.18	1.24
2	2	186	TYR	N-CA	-5.24	1.39	1.46
13	F	158	GLY	CA-C	5.24	1.56	1.51
8	A	251	GLN	CA-C	-5.24	1.46	1.52
18	K	75	LEU	CA-CB	5.24	1.61	1.53
5	5	22	ALA	CA-C	-5.24	1.46	1.53
5	5	116	ASP	C-N	5.24	1.40	1.33
21	N	506	GLN	C-N	5.24	1.40	1.33
12	E	33	LEU	N-CA	-5.23	1.39	1.46
9	B	9	LEU	N-CA	-5.23	1.39	1.46
9	B	168	SER	N-CA	5.23	1.52	1.46
16	I	431	ASN	C-N	5.23	1.41	1.33
24	Q	128	GLU	C-O	5.23	1.30	1.24
27	T	78	PHE	C-N	5.23	1.41	1.33
27	T	164	LEU	C-N	5.23	1.40	1.33
1	1	21	THR	CA-C	-5.23	1.46	1.52
16	I	336	PRO	CA-C	5.23	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	W	66	THR	C-N	5.23	1.40	1.33
33	Z	883	THR	N-CA	-5.23	1.40	1.46
5	5	104	TYR	CA-C	-5.23	1.47	1.53
17	J	105	LYS	N-CA	-5.23	1.39	1.46
20	M	177	THR	CA-C	5.23	1.59	1.52
20	M	391	LEU	N-CA	-5.23	1.40	1.46
21	N	907	ASP	N-CA	-5.23	1.40	1.46
16	I	336	PRO	N-CD	5.23	1.55	1.47
33	Z	494	GLY	C-N	5.23	1.40	1.33
26	S	405	ARG	C-N	5.23	1.40	1.33
2	2	151	ALA	C-N	5.22	1.40	1.33
11	D	145	PRO	CA-C	-5.22	1.46	1.52
15	H	454	TYR	CA-C	5.22	1.59	1.52
31	X	73	THR	N-CA	-5.22	1.40	1.46
13	F	204	GLU	CA-C	-5.22	1.46	1.52
33	Z	968	ASP	CA-C	-5.22	1.46	1.52
13	F	26	LEU	CA-C	-5.22	1.45	1.52
28	U	284	SER	C-N	-5.22	1.27	1.33
6	6	57	LYS	N-CA	5.21	1.52	1.46
12	E	121	LEU	C-N	5.21	1.41	1.33
16	I	339	ILE	N-CA	-5.21	1.40	1.46
19	L	118	ILE	CA-C	-5.21	1.46	1.52
19	L	126	ARG	C-N	5.21	1.40	1.33
21	N	783	SER	C-O	-5.21	1.18	1.23
23	P	326	ASP	C-N	5.21	1.40	1.33
24	Q	356	CYS	C-O	-5.21	1.17	1.24
26	S	469	ASN	C-O	-5.21	1.18	1.24
23	P	334	ASN	N-CA	-5.21	1.40	1.46
8	A	174	LYS	C-N	5.21	1.40	1.33
27	T	36	LYS	CA-C	-5.21	1.46	1.52
5	5	47	GLY	CA-C	-5.21	1.46	1.52
8	A	92	ASN	C-N	5.21	1.41	1.33
23	P	206	LYS	C-O	-5.21	1.18	1.24
27	T	39	LEU	N-CA	-5.21	1.39	1.46
10	C	165	VAL	C-N	5.21	1.39	1.33
12	E	247	GLU	C-N	5.21	1.39	1.33
21	N	172	SER	N-CA	-5.21	1.39	1.46
21	N	699	ALA	C-N	5.21	1.40	1.33
3	3	3	VAL	CA-C	-5.21	1.46	1.52
23	P	135	GLU	N-CA	-5.21	1.39	1.46
24	Q	337	ALA	CA-C	-5.21	1.46	1.52
29	V	139	VAL	CA-C	-5.21	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	58	ILE	CA-C	-5.21	1.46	1.52
21	N	117	TYR	C-N	5.20	1.40	1.33
22	O	178	TYR	N-CA	-5.20	1.40	1.46
7	7	197	GLY	C-N	5.20	1.41	1.33
13	F	221	PRO	CA-C	5.20	1.58	1.52
17	J	293	ALA	CA-C	-5.20	1.46	1.52
5	5	132	GLY	CA-C	-5.20	1.45	1.51
13	F	162	GLY	CA-C	-5.20	1.45	1.52
21	N	511	GLY	N-CA	-5.20	1.39	1.45
33	Z	980	VAL	CA-C	-5.20	1.47	1.52
16	I	188	GLU	CA-C	5.19	1.60	1.52
23	P	167	THR	N-CA	-5.19	1.40	1.46
25	R	418	GLY	CA-C	-5.19	1.44	1.51
29	V	29	ILE	N-CA	-5.19	1.40	1.46
23	P	435	LYS	C-N	5.19	1.40	1.33
23	P	197	THR	CA-C	-5.19	1.46	1.52
25	R	264	THR	C-N	5.19	1.40	1.33
29	V	35	LEU	C-O	5.19	1.30	1.24
11	D	83	ARG	CA-C	-5.19	1.45	1.52
26	S	413	LEU	C-N	5.19	1.40	1.33
22	O	96	LEU	C-N	5.19	1.40	1.33
16	I	236	VAL	CA-C	-5.18	1.46	1.52
29	V	51	GLY	C-N	5.18	1.40	1.33
17	J	225	GLU	C-N	-5.18	1.25	1.33
17	J	313	LYS	CA-C	-5.18	1.46	1.52
33	Z	984	LYS	CA-C	5.18	1.58	1.52
6	6	18	THR	CA-C	-5.18	1.45	1.52
29	V	237	ASN	CA-C	-5.18	1.46	1.52
6	6	169	GLU	N-CA	-5.18	1.40	1.46
8	A	104	PHE	CA-C	5.18	1.59	1.52
15	H	312	ASP	C-N	5.18	1.41	1.33
16	I	273	GLU	N-CA	-5.18	1.40	1.46
16	I	398	GLU	CA-C	5.18	1.59	1.52
17	J	317	PRO	N-CD	5.18	1.54	1.47
8	A	137	LEU	CA-C	-5.17	1.46	1.52
10	C	208	TYR	C-N	5.17	1.41	1.33
20	M	331	ASP	CA-C	-5.17	1.45	1.52
22	O	180	LYS	N-CA	-5.17	1.40	1.46
26	S	376	THR	CA-C	-5.17	1.45	1.52
33	Z	765	MET	CA-C	-5.17	1.45	1.52
15	H	249	TYR	N-CA	-5.17	1.38	1.46
21	N	78	ALA	C-N	5.17	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	300	ASN	C-O	-5.17	1.18	1.24
26	S	442	PHE	C-N	5.17	1.40	1.33
5	5	72	GLU	CA-C	5.17	1.58	1.52
33	Z	758	LEU	N-CA	-5.17	1.40	1.46
15	H	332	THR	CA-C	-5.17	1.46	1.52
21	N	324	LYS	C-N	5.17	1.41	1.33
16	I	401	LEU	N-CA	-5.17	1.39	1.46
26	S	218	LEU	C-N	5.17	1.40	1.33
18	K	271	ILE	C-N	5.17	1.40	1.33
19	L	406	ASP	C-N	5.17	1.40	1.33
21	N	165	ILE	CA-C	5.17	1.59	1.52
23	P	268	LEU	CA-C	-5.17	1.46	1.52
33	Z	485	ILE	N-CA	-5.17	1.40	1.46
22	O	201	PRO	C-N	5.17	1.40	1.33
11	D	225	SER	C-N	5.16	1.40	1.33
17	J	225	GLU	N-CA	5.16	1.52	1.46
22	O	280	LEU	CA-C	-5.16	1.46	1.52
24	Q	160	ASP	CA-C	-5.16	1.46	1.52
24	Q	355	GLU	CA-C	-5.16	1.46	1.53
26	S	129	GLU	CA-C	5.16	1.59	1.52
11	D	183	GLU	N-CA	-5.16	1.41	1.46
13	F	124	GLY	CA-C	-5.16	1.44	1.51
18	K	122	ILE	N-CA	-5.16	1.39	1.46
23	P	211	PRO	N-CD	5.16	1.54	1.47
6	6	204	ARG	C-O	-5.16	1.17	1.24
17	J	168	VAL	C-N	5.16	1.41	1.33
25	R	346	LYS	N-CA	-5.16	1.40	1.46
5	5	145	LYS	N-CA	-5.16	1.39	1.46
6	6	20	ASN	N-CA	-5.16	1.39	1.46
17	J	71	TYR	C-N	5.16	1.42	1.33
28	U	203	LYS	N-CA	-5.16	1.40	1.46
14	G	162	ALA	CA-C	-5.15	1.46	1.52
25	R	252	TYR	N-CA	5.15	1.52	1.46
20	M	360	ILE	N-CA	5.15	1.52	1.46
29	V	52	LEU	N-CA	-5.15	1.39	1.46
4	4	10	ASP	CA-C	-5.15	1.45	1.52
18	K	187	ALA	CA-C	-5.15	1.46	1.52
20	M	380	ALA	C-N	5.15	1.41	1.33
29	V	288	LEU	CA-C	-5.15	1.46	1.52
12	E	75	GLY	C-N	5.15	1.40	1.33
17	J	262	GLY	CA-C	-5.15	1.43	1.51
27	T	153	MET	C-N	5.15	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1	25	TYR	C-N	5.14	1.39	1.33
10	C	37	GLY	CA-C	-5.14	1.44	1.51
18	K	372	ILE	C-N	5.14	1.40	1.33
9	B	30	GLN	C-N	5.14	1.39	1.33
12	E	186	GLU	N-CA	-5.14	1.39	1.46
27	T	60	ARG	N-CA	-5.14	1.40	1.46
33	Z	106	TRP	N-CA	-5.14	1.40	1.46
6	6	113	VAL	CA-C	-5.14	1.46	1.52
21	N	63	LEU	C-N	5.14	1.40	1.33
21	N	318	LYS	N-CA	5.14	1.52	1.46
28	U	205	LYS	N-CA	5.14	1.52	1.46
23	P	442	LEU	N-CA	-5.14	1.36	1.46
2	2	137	VAL	N-CA	-5.13	1.40	1.46
12	E	202	LYS	C-N	5.13	1.40	1.33
18	K	378	LEU	CA-C	-5.13	1.46	1.52
24	Q	56	THR	N-CA	-5.13	1.40	1.46
24	Q	339	TYR	N-CA	-5.13	1.40	1.46
26	S	359	LYS	CA-C	5.13	1.59	1.52
1	1	55	ILE	N-CA	-5.13	1.40	1.46
23	P	257	TRP	CA-C	5.13	1.59	1.52
23	P	398	LYS	CA-C	-5.13	1.47	1.53
28	U	159	CYS	N-CA	-5.13	1.39	1.45
29	V	296	LEU	C-N	5.13	1.40	1.33
7	7	107	ILE	C-N	5.13	1.40	1.33
3	3	35	PHE	C-N	5.12	1.40	1.33
13	F	193	GLY	C-N	5.12	1.40	1.33
14	G	35	THR	CA-C	-5.12	1.46	1.52
19	L	195	GLU	C-N	5.12	1.40	1.33
26	S	342	LEU	N-CA	-5.12	1.40	1.46
33	Z	143	VAL	CA-C	-5.12	1.46	1.52
7	7	136	THR	C-N	5.12	1.41	1.33
9	B	27	ALA	CA-C	-5.12	1.46	1.52
14	G	100	LYS	CA-C	5.12	1.59	1.52
18	K	169	VAL	C-O	-5.12	1.18	1.24
27	T	235	PHE	C-N	5.12	1.40	1.33
22	O	321	LYS	C-O	-5.12	1.18	1.24
25	R	47	ALA	C-N	5.12	1.40	1.33
32	Y	85	LYS	N-CA	5.12	1.52	1.46
7	7	68	TYR	CA-C	-5.12	1.46	1.52
17	J	158	LYS	N-CA	5.12	1.52	1.46
21	N	257	ILE	CA-C	-5.12	1.46	1.52
24	Q	278	VAL	C-N	5.12	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	U	201	GLN	C-N	5.12	1.40	1.33
13	F	137	TYR	CA-C	-5.12	1.46	1.52
23	P	427	GLU	CA-C	-5.12	1.46	1.52
2	2	185	GLU	N-CA	-5.11	1.39	1.46
8	A	195	ASN	C-N	5.11	1.40	1.33
21	N	252	GLY	N-CA	-5.11	1.39	1.45
15	H	317	ALA	CA-C	-5.11	1.46	1.52
33	Z	204	CYS	C-N	5.11	1.40	1.33
7	7	46	SER	CA-C	-5.11	1.46	1.52
7	7	133	THR	CA-C	-5.11	1.46	1.52
33	Z	784	SER	N-CA	-5.11	1.39	1.46
14	G	195	ALA	N-CA	-5.11	1.40	1.46
23	P	168	TYR	CA-C	-5.11	1.46	1.52
24	Q	317	ALA	CA-C	-5.11	1.46	1.52
25	R	29	LYS	C-N	5.11	1.40	1.33
33	Z	390	LEU	CA-C	-5.11	1.45	1.52
33	Z	923	ILE	CA-C	-5.11	1.46	1.52
4	4	47	GLY	CA-C	-5.11	1.46	1.52
5	5	154	LEU	C-O	-5.11	1.18	1.24
12	E	82	THR	CA-C	-5.11	1.45	1.52
17	J	108	LYS	C-O	5.11	1.29	1.24
21	N	262	VAL	C-N	5.11	1.40	1.33
3	3	149	LEU	N-CA	5.10	1.52	1.45
17	J	111	GLN	CA-C	-5.10	1.46	1.52
18	K	184	ILE	CA-C	-5.10	1.46	1.52
23	P	337	HIS	CA-C	-5.10	1.45	1.52
23	P	359	ARG	C-O	5.10	1.30	1.23
9	B	16	GLY	C-N	5.10	1.40	1.33
28	U	201	GLN	C-O	-5.10	1.18	1.24
29	V	255	ILE	C-N	5.10	1.40	1.33
12	E	182	GLU	C-N	5.10	1.40	1.33
16	I	175	LYS	CA-C	-5.10	1.46	1.52
17	J	251	ASP	CA-C	-5.10	1.46	1.53
21	N	122	GLN	C-N	5.10	1.40	1.33
33	Z	414	GLY	CA-C	-5.10	1.45	1.52
14	G	71	ARG	N-CA	-5.10	1.39	1.46
33	Z	242	PHE	CA-C	-5.10	1.46	1.52
12	E	203	ILE	C-N	5.10	1.40	1.33
11	D	234	THR	C-O	-5.09	1.18	1.24
18	K	183	GLU	N-CA	5.09	1.52	1.46
22	O	381	GLY	C-N	5.09	1.40	1.33
24	Q	360	SER	N-CA	5.09	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	W	79	THR	CA-C	-5.09	1.46	1.52
14	G	75	CYS	N-CA	-5.09	1.39	1.46
19	L	176	GLY	N-CA	-5.09	1.39	1.45
24	Q	341	THR	C-O	5.09	1.30	1.24
13	F	56	LEU	N-CA	5.09	1.52	1.46
17	J	188	TYR	CA-C	-5.09	1.46	1.52
20	M	369	THR	N-CA	-5.09	1.40	1.45
24	Q	30	LEU	C-O	-5.09	1.17	1.24
9	B	212	ALA	CA-C	-5.09	1.46	1.52
6	6	160	LYS	N-CA	-5.09	1.39	1.45
16	I	392	ILE	C-N	5.09	1.40	1.33
19	L	234	ALA	C-N	5.09	1.40	1.33
15	H	424	THR	N-CA	5.08	1.52	1.46
18	K	222	LEU	CA-C	-5.08	1.46	1.52
18	K	278	ALA	CA-C	5.08	1.59	1.52
15	H	269	ALA	CA-C	-5.08	1.46	1.52
20	M	228	LYS	CA-C	-5.08	1.46	1.52
21	N	908	ARG	C-N	5.08	1.40	1.33
26	S	380	CYS	CA-C	5.08	1.59	1.52
33	Z	338	HIS	CD2-NE2	-5.08	1.32	1.37
4	4	17	SER	C-N	5.08	1.40	1.33
8	A	82	VAL	CA-C	-5.08	1.46	1.52
12	E	127	ALA	CA-C	5.08	1.58	1.52
20	M	281	ASP	C-N	-5.08	1.26	1.33
33	Z	866	VAL	CA-C	-5.08	1.44	1.52
16	I	85	PHE	C-N	5.08	1.40	1.33
2	2	126	SER	CA-C	-5.08	1.46	1.52
9	B	146	SER	N-CA	-5.07	1.39	1.45
14	G	170	SER	N-CA	-5.07	1.40	1.46
21	N	887	ASP	C-N	5.07	1.37	1.33
33	Z	463	HIS	CD2-NE2	-5.07	1.32	1.37
3	3	161	ALA	C-N	5.07	1.40	1.33
8	A	103	GLU	C-N	5.07	1.40	1.33
21	N	241	LEU	CA-C	-5.07	1.46	1.52
13	F	132	LEU	C-O	-5.07	1.17	1.23
17	J	72	VAL	N-CA	-5.07	1.40	1.46
20	M	333	LEU	C-N	5.07	1.39	1.33
11	D	205	THR	C-N	5.07	1.41	1.33
29	V	199	LEU	CA-C	-5.07	1.46	1.52
16	I	375	VAL	C-N	5.07	1.40	1.33
21	N	613	HIS	CD2-NE2	-5.07	1.32	1.37
25	R	229	LYS	N-CA	5.07	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	294	ILE	C-N	5.07	1.40	1.33
33	Z	97	PRO	N-CD	5.07	1.54	1.47
17	J	176	SER	C-N	5.07	1.40	1.33
20	M	184	GLY	CA-C	-5.07	1.45	1.52
22	O	188	PHE	C-N	5.07	1.40	1.33
29	V	292	ILE	N-CA	-5.07	1.40	1.46
22	O	318	HIS	CD2-NE2	-5.06	1.32	1.37
2	2	78	SER	C-N	5.06	1.40	1.33
9	B	192	ALA	CA-C	-5.06	1.46	1.52
14	G	181	HIS	CD2-NE2	-5.06	1.32	1.37
16	I	117	HIS	CD2-NE2	-5.06	1.32	1.37
16	I	311	ASN	C-N	5.06	1.40	1.33
21	N	294	PRO	N-CA	-5.06	1.40	1.47
17	J	331	HIS	CD2-NE2	-5.06	1.32	1.37
25	R	217	HIS	CD2-NE2	-5.06	1.32	1.37
27	T	177	PHE	C-N	5.06	1.40	1.33
29	V	195	HIS	CD2-NE2	-5.06	1.32	1.37
1	1	157	HIS	CD2-NE2	-5.06	1.32	1.37
6	6	186	HIS	CD2-NE2	-5.06	1.32	1.37
17	J	123	HIS	CD2-NE2	-5.06	1.32	1.37
21	N	661	SER	CA-C	-5.06	1.45	1.52
22	O	26	PHE	C-N	5.06	1.40	1.33
23	P	282	HIS	CD2-NE2	-5.06	1.32	1.37
9	B	35	LEU	C-O	5.06	1.30	1.23
18	K	137	VAL	CA-C	-5.06	1.46	1.52
19	L	363	ILE	C-N	5.06	1.40	1.33
21	N	150	LEU	CA-C	-5.06	1.45	1.52
21	N	673	PRO	C-N	5.06	1.41	1.33
25	R	67	CYS	N-CA	-5.06	1.40	1.46
25	R	401	HIS	CD2-NE2	-5.06	1.32	1.37
28	U	152	LYS	C-N	5.06	1.40	1.33
3	3	39	HIS	CD2-NE2	-5.06	1.32	1.37
8	A	210	MET	N-CA	-5.05	1.40	1.46
13	F	110	HIS	CD2-NE2	-5.05	1.32	1.37
18	K	48	TYR	N-CA	5.05	1.55	1.46
23	P	395	ARG	CA-C	5.05	1.58	1.52
8	A	135	ARG	CA-C	-5.05	1.46	1.52
17	J	112	ARG	C-N	5.05	1.40	1.33
19	L	292	SER	C-N	5.05	1.41	1.33
24	Q	186	HIS	CD2-NE2	-5.05	1.32	1.37
26	S	225	HIS	CD2-NE2	-5.05	1.32	1.37
8	A	193	HIS	CD2-NE2	-5.05	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	A	209	HIS	CD2-NE2	-5.05	1.32	1.37
17	J	191	PRO	N-CD	5.05	1.54	1.47
18	K	140	HIS	CD2-NE2	-5.05	1.32	1.37
27	T	20	TYR	N-CA	5.05	1.52	1.46
27	T	79	GLU	CA-C	-5.05	1.46	1.52
33	Z	312	TYR	CA-C	-5.05	1.46	1.52
1	1	127	ALA	CA-C	-5.05	1.46	1.52
2	2	109	HIS	CD2-NE2	-5.05	1.32	1.37
2	2	116	HIS	CD2-NE2	-5.05	1.32	1.37
13	F	96	SER	C-O	5.05	1.30	1.24
19	L	189	GLN	C-N	5.05	1.40	1.33
26	S	334	HIS	CD2-NE2	-5.05	1.32	1.37
28	U	173	HIS	CD2-NE2	-5.05	1.32	1.37
29	V	109	HIS	CA-C	-5.05	1.46	1.52
33	Z	388	GLY	CA-C	5.05	1.57	1.52
4	4	92	ARG	C-N	5.05	1.40	1.33
17	J	75	VAL	CA-C	-5.05	1.47	1.52
22	O	235	HIS	CD2-NE2	-5.05	1.32	1.37
23	P	150	GLU	C-N	5.05	1.39	1.33
24	Q	17	GLU	C-N	5.05	1.40	1.33
24	Q	361	HIS	CD2-NE2	-5.05	1.32	1.37
28	U	94	HIS	CD2-NE2	-5.05	1.32	1.37
14	G	88	VAL	CA-C	-5.05	1.46	1.52
19	L	214	PRO	N-CD	5.05	1.54	1.47
21	N	396	SER	N-CA	5.05	1.52	1.46
23	P	230	HIS	CD2-NE2	-5.05	1.32	1.37
26	S	191	HIS	CD2-NE2	-5.05	1.32	1.37
14	G	110	ALA	CA-C	-5.04	1.46	1.52
2	2	118	SER	C-O	-5.04	1.18	1.23
11	D	17	ILE	CA-C	-5.04	1.46	1.52
11	D	70	HIS	CD2-NE2	-5.04	1.32	1.37
21	N	409	GLY	C-O	-5.04	1.17	1.23
23	P	440	HIS	CD2-NE2	-5.04	1.32	1.37
8	A	69	VAL	N-CA	5.04	1.51	1.46
16	I	327	ALA	CA-C	-5.04	1.46	1.52
21	N	728	LYS	C-N	5.04	1.40	1.33
29	V	109	HIS	CD2-NE2	-5.04	1.32	1.37
30	W	104	LYS	C-N	5.04	1.40	1.33
33	Z	263	ALA	N-CA	-5.04	1.40	1.46
1	1	120	HIS	CD2-NE2	-5.04	1.32	1.37
14	G	86	HIS	CD2-NE2	-5.04	1.32	1.37
18	K	331	PRO	N-CA	-5.04	1.40	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	141	ILE	N-CA	-5.04	1.40	1.46
22	O	213	LEU	N-CA	-5.04	1.40	1.46
23	P	263	HIS	CD2-NE2	-5.04	1.32	1.37
23	P	348	HIS	CD2-NE2	-5.04	1.32	1.37
26	S	347	HIS	CD2-NE2	-5.04	1.32	1.37
28	U	5	HIS	CD2-NE2	-5.04	1.32	1.37
33	Z	383	SER	C-N	5.04	1.40	1.33
17	J	170	HIS	CD2-NE2	-5.04	1.32	1.37
4	4	55	PHE	CA-C	-5.04	1.46	1.52
7	7	168	ALA	N-CA	-5.04	1.40	1.46
12	E	91	HIS	CD2-NE2	-5.04	1.32	1.37
16	I	377	LEU	CA-C	-5.04	1.46	1.52
18	K	359	LYS	N-CA	-5.04	1.39	1.46
22	O	225	ASP	CA-C	-5.04	1.46	1.52
23	P	237	VAL	C-N	5.04	1.40	1.33
28	U	60	GLU	N-CA	-5.04	1.40	1.46
33	Z	440	LEU	CA-C	-5.04	1.46	1.52
2	2	93	HIS	CD2-NE2	-5.03	1.32	1.37
3	3	151	PRO	C-N	5.03	1.40	1.33
8	A	185	HIS	CD2-NE2	-5.03	1.32	1.37
16	I	151	HIS	CD2-NE2	-5.03	1.32	1.37
21	N	484	GLY	C-N	5.03	1.40	1.34
24	Q	252	HIS	CD2-NE2	-5.03	1.32	1.37
25	R	190	LYS	CA-C	5.03	1.59	1.52
14	G	234	LEU	N-CA	5.03	1.52	1.46
5	5	66	HIS	CD2-NE2	-5.03	1.32	1.37
10	C	31	HIS	CD2-NE2	-5.03	1.32	1.37
11	D	96	HIS	CD2-NE2	-5.03	1.32	1.37
14	G	182	HIS	CD2-NE2	-5.03	1.32	1.37
19	L	364	HIS	CD2-NE2	-5.03	1.32	1.37
24	Q	145	HIS	CD2-NE2	-5.03	1.32	1.37
5	5	52	CYS	C-N	5.03	1.40	1.33
10	C	225	VAL	N-CA	-5.03	1.40	1.46
14	G	146	HIS	CD2-NE2	-5.03	1.32	1.37
16	I	182	SER	CA-C	-5.03	1.46	1.52
19	L	67	HIS	CD2-NE2	-5.03	1.32	1.37
10	C	219	GLY	CA-C	-5.03	1.44	1.52
12	E	147	HIS	CD2-NE2	-5.03	1.32	1.37
15	H	444	LEU	N-CA	-5.03	1.40	1.46
18	K	142	HIS	CD2-NE2	-5.03	1.32	1.37
19	L	192	GLU	C-N	5.03	1.40	1.33
20	M	307	GLU	C-N	5.03	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	U	156	HIS	CD2-NE2	-5.03	1.32	1.37
28	U	168	GLU	C-N	5.03	1.40	1.33
30	W	151	THR	N-CA	-5.03	1.39	1.46
33	Z	760	HIS	CD2-NE2	-5.03	1.32	1.37
2	2	163	ILE	C-N	5.03	1.40	1.33
3	3	48	ALA	CA-C	-5.03	1.46	1.52
3	3	67	LEU	CA-C	-5.03	1.46	1.52
11	D	36	VAL	CA-C	-5.03	1.46	1.52
12	E	73	HIS	CD2-NE2	-5.03	1.32	1.37
13	F	163	ALA	C-N	5.03	1.41	1.33
15	H	95	HIS	CD2-NE2	-5.03	1.32	1.37
17	J	322	ALA	C-N	5.03	1.40	1.33
23	P	298	SER	N-CA	-5.03	1.39	1.46
23	P	369	LEU	N-CA	-5.03	1.39	1.46
30	W	107	HIS	CD2-NE2	-5.03	1.32	1.37
33	Z	136	ARG	C-N	5.03	1.40	1.33
24	Q	247	HIS	CD2-NE2	-5.02	1.32	1.37
6	6	67	HIS	CD2-NE2	-5.02	1.32	1.37
18	K	361	SER	N-CA	5.02	1.52	1.45
21	N	510	HIS	CD2-NE2	-5.02	1.32	1.37
26	S	317	HIS	CD2-NE2	-5.02	1.32	1.37
33	Z	532	HIS	CD2-NE2	-5.02	1.32	1.37
33	Z	838	TYR	C-N	5.02	1.39	1.33
2	2	206	PRO	N-CD	5.02	1.54	1.47
3	3	40	VAL	C-N	5.02	1.40	1.33
6	6	63	VAL	C-N	5.02	1.40	1.33
7	7	141	HIS	CD2-NE2	-5.02	1.32	1.37
8	A	15	HIS	CD2-NE2	-5.02	1.32	1.37
14	G	72	HIS	CD2-NE2	-5.02	1.32	1.37
19	L	317	ASN	N-CA	-5.02	1.40	1.46
23	P	395	ARG	C-O	-5.02	1.19	1.24
27	T	144	TYR	C-O	-5.02	1.19	1.24
27	T	179	ASP	CA-C	-5.02	1.46	1.52
29	V	291	ASN	CA-C	-5.02	1.46	1.52
33	Z	235	GLN	C-N	5.02	1.40	1.33
1	1	62	HIS	CD2-NE2	-5.02	1.32	1.37
5	5	188	HIS	CD2-NE2	-5.02	1.32	1.37
14	G	16	PRO	N-CD	5.02	1.54	1.47
14	G	203	HIS	CD2-NE2	-5.02	1.32	1.37
16	I	191	ILE	C-O	-5.02	1.18	1.24
23	P	285	GLN	CA-CB	5.02	1.60	1.53
24	Q	333	SER	CA-C	-5.02	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	J	376	HIS	CD2-NE2	-5.02	1.32	1.37
22	O	5	HIS	CD2-NE2	-5.02	1.32	1.37
23	P	425	HIS	CD2-NE2	-5.02	1.32	1.37
4	4	113	PRO	N-CD	5.01	1.54	1.47
17	J	204	HIS	CD2-NE2	-5.01	1.32	1.37
21	N	444	HIS	CD2-NE2	-5.01	1.32	1.37
27	T	123	HIS	CD2-NE2	-5.01	1.32	1.37
29	V	50	MET	N-CA	-5.01	1.39	1.45
29	V	90	LYS	CA-C	5.01	1.59	1.52
29	V	190	HIS	CD2-NE2	-5.01	1.32	1.37
30	W	86	HIS	CD2-NE2	-5.01	1.32	1.37
4	4	146	HIS	CD2-NE2	-5.01	1.32	1.37
23	P	385	ASN	C-N	5.01	1.40	1.34
6	6	86	HIS	CD2-NE2	-5.01	1.32	1.37
17	J	347	ALA	C-O	-5.01	1.18	1.24
27	T	132	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	260	GLU	CA-C	-5.01	1.46	1.52
2	2	112	SER	C-O	5.01	1.30	1.23
5	5	35	ILE	C-O	5.01	1.29	1.24
14	G	181	HIS	C-O	-5.01	1.18	1.24
16	I	350	PHE	CA-C	-5.01	1.46	1.52
19	L	95	ILE	CA-C	5.01	1.59	1.52
21	N	573	HIS	CD2-NE2	-5.01	1.32	1.37
22	O	326	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	361	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	898	HIS	CD2-NE2	-5.01	1.32	1.37
9	B	60	THR	CA-C	-5.01	1.46	1.52
13	F	43	HIS	CD2-NE2	-5.01	1.32	1.37
13	F	211	LEU	C-N	5.01	1.40	1.33
26	S	472	HIS	CD2-NE2	-5.01	1.32	1.37
33	Z	976	HIS	CD2-NE2	-5.01	1.32	1.37
4	4	40	HIS	CD2-NE2	-5.01	1.32	1.37
6	6	70	HIS	CD2-NE2	-5.01	1.32	1.37
12	E	157	HIS	CD2-NE2	-5.01	1.32	1.37
12	E	180	GLN	C-O	-5.01	1.18	1.24
13	F	146	GLU	CA-C	-5.01	1.46	1.52
17	J	167	PRO	CA-C	-5.01	1.44	1.52
17	J	352	GLY	CA-C	-5.01	1.44	1.51
24	Q	135	HIS	CD2-NE2	-5.01	1.32	1.37
26	S	211	ARG	N-CA	-5.01	1.40	1.46
28	U	34	VAL	CA-C	5.01	1.58	1.52
29	V	54	LEU	N-CA	-5.01	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	B	94	HIS	CD2-NE2	-5.00	1.32	1.37
9	B	78	MET	CA-C	-5.00	1.46	1.52
14	G	227	HIS	CD2-NE2	-5.00	1.32	1.37
2	2	51	ASP	C-O	-5.00	1.18	1.24
5	5	191	HIS	CD2-NE2	-5.00	1.32	1.37
17	J	66	GLN	CA-C	-5.00	1.46	1.52
22	O	80	LYS	C-O	-5.00	1.18	1.24
23	P	431	HIS	CD2-NE2	-5.00	1.32	1.37
25	R	74	ASN	N-CA	-5.00	1.41	1.46
33	Z	214	HIS	CD2-NE2	-5.00	1.32	1.37
33	Z	801	HIS	CD2-NE2	-5.00	1.32	1.37

All (4373) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	V	291	ASN	O-C-N	26.64	149.51	122.07
15	H	285	GLY	CA-C-N	-17.70	87.74	121.54
15	H	285	GLY	C-N-CA	-17.70	87.74	121.54
15	H	187	LEU	C-N-CD	-17.57	52.98	125.00
29	V	291	ASN	CA-C-N	-15.29	99.51	120.46
29	V	291	ASN	C-N-CA	-15.29	99.51	120.46
12	E	70	ILE	N-CA-C	-14.91	98.98	111.81
15	H	285	GLY	O-C-N	14.72	140.66	122.25
13	F	40	SER	CA-C-O	13.75	125.92	117.94
31	X	27	ILE	C-N-CD	-13.42	69.98	125.00
25	R	289	ILE	N-CA-C	-13.21	99.75	112.96
7	7	-2	THR	CA-C-N	13.11	131.22	122.18
7	7	-2	THR	C-N-CA	13.11	131.22	122.18
17	J	76	ILE	N-CA-C	-12.90	98.31	110.82
27	T	270	ILE	N-CA-C	12.89	122.79	110.42
26	S	257	LEU	N-CA-C	-12.82	97.34	113.23
33	Z	607	ALA	N-CA-C	12.32	124.26	111.07
26	S	440	ASP	N-CA-C	-12.01	100.93	114.62
24	Q	329	GLU	CA-C-N	11.55	136.16	120.44
24	Q	329	GLU	C-N-CA	11.55	136.16	120.44
6	6	140	PHE	CA-C-N	11.37	135.51	120.28
6	6	140	PHE	C-N-CA	11.37	135.51	120.28
25	R	315	VAL	N-CA-C	-11.13	102.83	111.62
33	Z	775	MET	CA-C-N	11.04	127.19	120.24
33	Z	775	MET	C-N-CA	11.04	127.19	120.24
16	I	170	VAL	N-CA-C	-10.94	91.47	107.78
29	V	283	THR	CA-C-N	10.86	134.84	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	V	283	THR	C-N-CA	10.86	134.84	120.28
7	7	150	VAL	N-CA-C	-10.77	101.44	111.67
6	6	79	SER	CA-C-N	10.76	134.70	120.28
6	6	79	SER	C-N-CA	10.76	134.70	120.28
16	I	198	VAL	CA-C-N	10.71	135.01	120.44
16	I	198	VAL	C-N-CA	10.71	135.01	120.44
33	Z	204	CYS	CA-C-N	10.55	134.16	120.44
33	Z	204	CYS	C-N-CA	10.55	134.16	120.44
23	P	115	ARG	CA-C-N	10.51	133.81	120.56
23	P	115	ARG	C-N-CA	10.51	133.81	120.56
26	S	229	THR	CA-C-N	10.47	134.31	120.28
26	S	229	THR	C-N-CA	10.47	134.31	120.28
11	D	60	THR	CA-C-O	-10.46	107.89	119.61
28	U	293	GLU	CA-C-N	10.44	134.01	120.44
28	U	293	GLU	C-N-CA	10.44	134.01	120.44
17	J	276	LEU	CA-C-N	10.37	134.18	120.28
17	J	276	LEU	C-N-CA	10.37	134.18	120.28
33	Z	826	ARG	CA-C-N	10.35	137.16	120.60
33	Z	826	ARG	C-N-CA	10.35	137.16	120.60
12	E	51	GLU	CA-C-N	10.32	134.48	120.44
12	E	51	GLU	C-N-CA	10.32	134.48	120.44
16	I	205	PRO	CA-C-N	10.32	134.10	120.28
16	I	205	PRO	C-N-CA	10.32	134.10	120.28
5	5	210	VAL	N-CA-C	-10.29	92.73	107.75
13	F	77	LEU	CA-C-N	10.27	134.03	120.26
13	F	77	LEU	C-N-CA	10.27	134.03	120.26
5	5	26	VAL	CA-C-N	10.24	134.82	120.29
5	5	26	VAL	C-N-CA	10.24	134.82	120.29
26	S	240	ASP	CA-C-O	-10.23	109.70	120.55
33	Z	343	ALA	CA-C-N	10.14	134.88	120.28
33	Z	343	ALA	C-N-CA	10.14	134.88	120.28
23	P	56	LYS	CA-C-N	10.10	134.21	120.38
23	P	56	LYS	C-N-CA	10.10	134.21	120.38
26	S	131	THR	CA-C-N	10.09	133.80	120.28
26	S	131	THR	C-N-CA	10.09	133.80	120.28
11	D	8	LEU	N-CA-C	-10.08	100.85	113.55
22	O	230	PHE	N-CA-C	-10.05	100.69	113.16
29	V	145	GLN	N-CA-C	-10.03	100.36	112.59
16	I	123	PRO	N-CA-C	-9.99	101.89	114.68
21	N	123	PHE	N-CA-C	9.97	123.39	111.33
22	O	133	ILE	N-CA-C	-9.95	100.67	110.72
6	6	22	THR	N-CA-C	-9.92	91.79	108.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	Z	404	ASP	CA-C-N	9.88	133.52	120.28
33	Z	404	ASP	C-N-CA	9.88	133.52	120.28
24	Q	410	ASP	CA-C-N	9.86	133.85	120.54
24	Q	410	ASP	C-N-CA	9.86	133.85	120.54
21	N	864	LYS	CA-C-N	9.85	129.94	119.89
21	N	864	LYS	C-N-CA	9.85	129.94	119.89
33	Z	782	ILE	CA-C-N	9.85	133.17	120.56
33	Z	782	ILE	C-N-CA	9.85	133.17	120.56
24	Q	93	THR	CA-C-N	9.84	132.95	120.56
24	Q	93	THR	C-N-CA	9.84	132.95	120.56
33	Z	151	HIS	CA-C-N	9.82	133.84	120.38
33	Z	151	HIS	C-N-CA	9.82	133.84	120.38
13	F	217	GLY	CA-C-N	9.79	133.16	120.44
13	F	217	GLY	C-N-CA	9.79	133.16	120.44
33	Z	358	TYR	CA-C-N	9.75	133.11	120.44
33	Z	358	TYR	C-N-CA	9.75	133.11	120.44
18	K	250	GLY	O-C-N	9.74	124.58	121.07
27	T	264	MET	CA-C-N	9.73	133.09	120.44
27	T	264	MET	C-N-CA	9.73	133.09	120.44
5	5	78	ALA	CA-C-N	9.72	133.08	120.44
5	5	78	ALA	C-N-CA	9.72	133.08	120.44
12	E	215	ASN	N-CA-C	-9.72	100.34	112.88
9	B	86	VAL	CA-C-O	-9.72	110.84	120.95
17	J	106	ASP	N-CA-C	-9.71	99.79	114.16
20	M	363	ILE	N-CA-C	9.71	120.52	110.62
19	L	302	GLN	CA-C-N	9.68	133.25	120.28
19	L	302	GLN	C-N-CA	9.68	133.25	120.28
19	L	329	ARG	CA-C-N	9.68	130.50	120.04
19	L	329	ARG	C-N-CA	9.68	130.50	120.04
15	H	357	ARG	CA-C-O	-9.64	112.07	119.59
14	G	115	LEU	CA-C-N	9.61	130.61	119.94
14	G	115	LEU	C-N-CA	9.61	130.61	119.94
24	Q	131	VAL	N-CA-C	-9.60	103.98	113.20
17	J	220	GLN	N-CA-C	9.57	122.88	110.53
8	A	87	ILE	O-C-N	-9.55	113.29	120.07
6	6	93	PHE	N-CA-C	-9.53	100.42	112.90
25	R	223	ASN	N-CA-C	-9.52	103.76	114.62
20	M	376	TRP	O-C-N	9.50	132.19	122.12
22	O	274	ILE	N-CA-C	9.48	120.30	110.72
20	M	251	LEU	CA-C-N	9.47	139.03	121.97
20	M	251	LEU	C-N-CA	9.47	139.03	121.97
31	X	22	ARG	N-CA-C	-9.43	95.73	109.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	F	85	SER	N-CA-C	-9.41	100.90	111.82
17	J	291	ILE	N-CA-C	-9.41	94.93	108.11
17	J	378	THR	CA-C-N	9.41	132.89	120.28
17	J	378	THR	C-N-CA	9.41	132.89	120.28
18	K	380	GLY	CA-C-N	9.40	132.66	120.44
18	K	380	GLY	C-N-CA	9.40	132.66	120.44
33	Z	263	ALA	CA-C-N	9.33	132.57	120.44
33	Z	263	ALA	C-N-CA	9.33	132.57	120.44
21	N	550	GLY	CA-C-N	9.31	130.32	119.98
21	N	550	GLY	C-N-CA	9.31	130.32	119.98
33	Z	741	LEU	CA-C-N	9.31	131.78	120.14
33	Z	741	LEU	C-N-CA	9.31	131.78	120.14
19	L	192	GLU	CB-CA-C	9.31	126.24	109.29
21	N	506	GLN	N-CA-C	-9.30	100.25	111.69
33	Z	72	LYS	N-CA-C	9.27	121.38	111.28
27	T	15	PHE	CA-C-N	9.25	132.68	120.28
27	T	15	PHE	C-N-CA	9.25	132.68	120.28
21	N	740	TRP	N-CA-C	-9.24	102.82	114.56
15	H	275	ILE	CA-C-N	9.24	130.43	119.99
15	H	275	ILE	C-N-CA	9.24	130.43	119.99
19	L	199	LEU	CA-C-O	-9.23	109.38	118.34
11	D	78	LEU	CA-C-N	9.23	132.44	120.44
11	D	78	LEU	C-N-CA	9.23	132.44	120.44
11	D	9	SER	CA-C-N	9.23	132.45	122.11
11	D	9	SER	C-N-CA	9.23	132.45	122.11
14	G	208	GLU	N-CA-C	-9.23	101.54	113.17
16	I	275	ALA	O-C-N	-9.21	111.21	121.53
15	H	344	ASP	O-C-N	-9.21	112.88	121.35
27	T	109	TYR	CA-C-N	9.20	132.41	120.44
27	T	109	TYR	C-N-CA	9.20	132.41	120.44
26	S	417	GLN	N-CA-C	-9.20	102.45	114.31
14	G	57	LEU	N-CA-C	-9.17	102.22	113.50
23	P	423	LEU	CA-C-N	9.17	132.57	120.28
23	P	423	LEU	C-N-CA	9.17	132.57	120.28
24	Q	27	TYR	O-C-N	9.17	132.60	122.15
16	I	102	ASN	N-CA-C	-9.15	99.98	108.22
18	K	125	THR	N-CA-C	-9.14	100.25	111.40
16	I	138	LYS	N-CA-C	-9.14	101.66	113.17
7	7	174	ARG	CA-C-N	9.13	132.06	120.56
7	7	174	ARG	C-N-CA	9.13	132.06	120.56
2	2	171	SER	CB-CA-C	-9.11	104.95	115.79
23	P	430	GLY	N-CA-C	9.11	123.06	112.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	424	GLU	CA-C-O	9.10	130.20	120.55
24	Q	94	VAL	N-CA-C	-9.10	101.68	110.42
20	M	360	ILE	CA-C-N	9.10	133.21	120.29
20	M	360	ILE	C-N-CA	9.10	133.21	120.29
17	J	316	PHE	CA-C-O	-9.09	110.43	120.25
17	J	160	ILE	N-CA-C	9.08	119.89	110.62
19	L	387	ASN	N-CA-C	-9.08	96.88	109.95
27	T	144	TYR	CA-C-O	-9.08	109.83	118.73
3	3	36	HIS	CA-C-N	9.07	136.01	122.95
3	3	36	HIS	C-N-CA	9.07	136.01	122.95
8	A	85	GLY	CA-C-N	9.06	129.14	119.90
8	A	85	GLY	C-N-CA	9.06	129.14	119.90
16	I	266	GLN	CA-C-N	9.05	132.15	120.56
16	I	266	GLN	C-N-CA	9.05	132.15	120.56
25	R	117	ILE	CA-C-N	9.03	132.18	120.44
25	R	117	ILE	C-N-CA	9.03	132.18	120.44
23	P	238	ALA	CA-C-N	9.01	132.69	120.44
23	P	238	ALA	C-N-CA	9.01	132.69	120.44
22	O	200	GLU	O-C-N	-9.00	113.27	120.38
26	S	305	LYS	N-CA-C	-8.96	100.30	112.94
26	S	389	LYS	CA-C-N	8.95	132.27	120.28
26	S	389	LYS	C-N-CA	8.95	132.27	120.28
16	I	200	LEU	CA-C-O	-8.94	110.10	118.33
16	I	217	LYS	N-CA-C	-8.94	102.10	113.72
33	Z	909	ARG	O-C-N	-8.94	112.96	121.72
27	T	155	GLY	CA-C-N	8.93	134.48	122.06
27	T	155	GLY	C-N-CA	8.93	134.48	122.06
8	A	72	ILE	N-CA-C	-8.93	95.61	108.11
33	Z	767	TYR	CA-C-N	8.91	130.06	119.99
33	Z	767	TYR	C-N-CA	8.91	130.06	119.99
21	N	494	LYS	CA-C-N	8.91	128.63	119.19
21	N	494	LYS	C-N-CA	8.91	128.63	119.19
21	N	483	LEU	CA-C-N	8.90	130.00	120.03
21	N	483	LEU	C-N-CA	8.90	130.00	120.03
13	F	10	THR	N-CA-C	-8.89	102.17	113.72
14	G	240	ASP	CA-C-O	8.87	129.83	120.70
15	H	195	VAL	N-CA-C	-8.86	104.28	112.43
33	Z	384	SER	CA-C-N	8.85	131.94	120.44
33	Z	384	SER	C-N-CA	8.85	131.94	120.44
12	E	56	SER	CA-C-O	-8.84	112.53	120.13
25	R	264	THR	CA-C-N	8.82	132.10	120.28
25	R	264	THR	C-N-CA	8.82	132.10	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	J	298	ASP	N-CA-C	-8.81	102.67	112.72
14	G	151	GLU	CA-C-N	8.80	130.84	119.84
14	G	151	GLU	C-N-CA	8.80	130.84	119.84
21	N	269	LEU	CA-C-N	8.79	132.41	120.54
21	N	269	LEU	C-N-CA	8.79	132.41	120.54
18	K	385	ALA	O-C-N	8.78	131.11	122.07
23	P	363	LEU	CA-C-N	8.77	132.03	120.28
23	P	363	LEU	C-N-CA	8.77	132.03	120.28
26	S	181	ALA	CA-C-N	8.77	132.38	120.54
26	S	181	ALA	C-N-CA	8.77	132.38	120.54
20	M	248	ALA	CA-C-N	8.76	128.50	119.56
20	M	248	ALA	C-N-CA	8.76	128.50	119.56
21	N	111	GLN	CA-C-N	8.76	132.02	120.28
21	N	111	GLN	C-N-CA	8.76	132.02	120.28
23	P	305	THR	N-CA-C	8.73	123.20	112.54
19	L	76	GLN	CA-C-N	8.73	131.97	120.28
19	L	76	GLN	C-N-CA	8.73	131.97	120.28
20	M	322	LYS	N-CA-C	-8.72	95.76	109.72
21	N	654	GLN	O-C-N	8.72	131.16	122.09
23	P	249	ALA	N-CA-C	8.71	120.77	111.28
5	5	132	GLY	CA-C-N	8.67	131.71	120.44
5	5	132	GLY	C-N-CA	8.67	131.71	120.44
31	X	63	PRO	CA-C-N	8.66	137.56	121.97
31	X	63	PRO	C-N-CA	8.66	137.56	121.97
29	V	88	GLN	CA-C-N	8.65	132.21	120.44
29	V	88	GLN	C-N-CA	8.65	132.21	120.44
33	Z	220	ALA	N-CA-C	8.65	120.32	111.07
33	Z	313	ILE	O-C-N	-8.65	112.92	121.83
16	I	321	ASP	N-CA-C	-8.64	102.66	113.55
25	R	102	LEU	CA-C-N	8.64	131.85	120.28
25	R	102	LEU	C-N-CA	8.64	131.85	120.28
22	O	164	PRO	CA-C-N	8.63	135.36	120.68
22	O	164	PRO	C-N-CA	8.63	135.36	120.68
12	E	12	VAL	N-CA-C	-8.63	102.79	111.77
26	S	205	ASN	CA-C-N	8.63	131.66	120.44
26	S	205	ASN	C-N-CA	8.63	131.66	120.44
24	Q	169	ASP	CA-C-N	8.62	133.06	120.90
24	Q	169	ASP	C-N-CA	8.62	133.06	120.90
14	G	54	THR	N-CA-C	-8.61	103.62	114.56
25	R	372	ILE	CB-CA-C	-8.61	105.22	114.35
33	Z	219	ASP	CA-C-O	8.61	129.80	120.24
5	5	112	ILE	N-CA-C	-8.61	95.73	108.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	F	40	SER	N-CA-C	-8.61	101.72	108.78
20	M	284	ASP	N-CA-C	-8.61	103.21	114.31
10	C	231	LYS	CA-C-N	8.60	130.59	119.84
10	C	231	LYS	C-N-CA	8.60	130.59	119.84
28	U	211	LEU	CA-C-N	8.60	132.15	120.54
28	U	211	LEU	C-N-CA	8.60	132.15	120.54
20	M	204	ALA	N-CA-C	-8.59	101.87	111.07
22	O	208	ALA	CA-C-N	8.58	132.47	120.29
22	O	208	ALA	C-N-CA	8.58	132.47	120.29
25	R	131	ALA	CA-C-N	8.56	132.45	120.29
25	R	131	ALA	C-N-CA	8.56	132.45	120.29
33	Z	455	ILE	N-CA-C	-8.55	102.49	110.53
1	1	113	ILE	CA-C-O	-8.55	115.07	120.88
22	O	252	PHE	CA-C-N	8.53	132.40	120.29
22	O	252	PHE	C-N-CA	8.53	132.40	120.29
23	P	307	GLU	N-CA-C	-8.52	102.69	113.43
6	6	51	ASP	CA-C-N	8.52	129.40	119.94
6	6	51	ASP	C-N-CA	8.52	129.40	119.94
33	Z	306	MET	CA-C-N	8.51	131.50	120.44
33	Z	306	MET	C-N-CA	8.51	131.50	120.44
15	H	394	LYS	CA-C-O	-8.51	111.53	120.55
12	E	48	LEU	CA-C-N	8.49	128.15	121.61
12	E	48	LEU	C-N-CA	8.49	128.15	121.61
28	U	283	ARG	CA-C-O	-8.48	111.56	120.55
9	B	157	PHE	CA-C-N	8.48	129.13	120.14
9	B	157	PHE	C-N-CA	8.48	129.13	120.14
23	P	68	SER	CA-C-N	8.47	131.45	120.44
23	P	68	SER	C-N-CA	8.47	131.45	120.44
23	P	378	THR	N-CA-C	-8.47	102.13	111.36
15	H	326	ASP	CA-C-N	8.46	135.05	120.58
15	H	326	ASP	C-N-CA	8.46	135.05	120.58
6	6	161	LYS	N-CA-C	-8.46	97.55	110.32
33	Z	401	VAL	CA-C-N	8.46	131.44	120.44
33	Z	401	VAL	C-N-CA	8.46	131.44	120.44
14	G	81	ILE	CA-C-O	-8.45	113.03	118.69
16	I	240	THR	CA-C-N	8.44	134.78	122.63
16	I	240	THR	C-N-CA	8.44	134.78	122.63
2	2	62	ASN	N-CA-C	8.43	121.41	111.71
25	R	273	SER	N-CA-C	-8.43	97.20	110.10
2	2	25	ILE	CA-C-N	8.43	133.01	122.48
2	2	25	ILE	C-N-CA	8.43	133.01	122.48
23	P	395	ARG	CA-C-O	-8.42	110.17	118.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	M	194	VAL	O-C-N	-8.41	113.71	121.87
21	N	314	LEU	CA-C-N	8.40	131.54	120.28
21	N	314	LEU	C-N-CA	8.40	131.54	120.28
18	K	251	PRO	CA-C-N	8.40	132.21	120.29
18	K	251	PRO	C-N-CA	8.40	132.21	120.29
33	Z	169	VAL	N-CA-C	8.40	119.20	110.72
15	H	162	ARG	NE-CZ-NH2	8.39	126.76	119.20
26	S	168	LEU	CA-C-O	8.39	129.32	120.42
17	J	173	LEU	CA-C-N	8.39	131.85	120.44
17	J	173	LEU	C-N-CA	8.39	131.85	120.44
20	M	257	GLY	CA-C-N	8.38	132.19	120.29
20	M	257	GLY	C-N-CA	8.38	132.19	120.29
21	N	260	ASP	CA-C-N	8.38	132.35	120.28
21	N	260	ASP	C-N-CA	8.38	132.35	120.28
33	Z	222	ASP	CA-C-O	8.36	129.41	120.55
9	B	15	SER	CA-C-O	8.36	129.13	119.35
33	Z	318	LYS	N-CA-C	8.35	120.16	111.14
24	Q	126	LYS	CA-C-N	8.35	132.31	120.28
24	Q	126	LYS	C-N-CA	8.35	132.31	120.28
33	Z	362	LEU	CA-C-N	8.35	131.79	120.44
33	Z	362	LEU	C-N-CA	8.35	131.79	120.44
21	N	399	PHE	CA-C-N	8.34	132.26	120.42
21	N	399	PHE	C-N-CA	8.34	132.26	120.42
10	C	52	VAL	N-CA-C	-8.34	96.11	108.12
21	N	29	ASN	O-C-N	8.33	130.95	122.12
8	A	140	ILE	N-CA-C	-8.32	96.46	108.11
24	Q	70	ALA	CA-C-N	8.32	132.53	120.38
24	Q	70	ALA	C-N-CA	8.32	132.53	120.38
26	S	214	MET	CA-C-N	8.32	132.11	120.29
26	S	214	MET	C-N-CA	8.32	132.11	120.29
17	J	368	TYR	CA-C-N	8.31	131.75	120.44
17	J	368	TYR	C-N-CA	8.31	131.75	120.44
25	R	100	ASN	N-CA-C	-8.31	102.12	113.18
24	Q	343	LEU	CA-C-O	-8.30	111.62	120.42
28	U	288	PHE	CA-C-N	8.29	131.22	120.44
28	U	288	PHE	C-N-CA	8.29	131.22	120.44
6	6	117	ASP	N-CA-C	-8.29	100.36	110.31
11	D	79	ASN	CA-C-N	8.29	131.22	120.44
11	D	79	ASN	C-N-CA	8.29	131.22	120.44
13	F	187	ASP	N-CA-C	8.28	120.31	111.28
15	H	150	LYS	N-CA-C	-8.28	93.16	110.80
23	P	116	ILE	N-CA-C	-8.27	102.48	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	166	ASP	O-C-N	-8.26	113.69	122.94
21	N	355	TRP	CA-C-N	8.26	131.34	120.28
21	N	355	TRP	C-N-CA	8.26	131.34	120.28
26	S	200	GLU	N-CA-C	-8.26	102.23	113.30
22	O	297	ILE	CA-C-N	8.25	132.00	120.29
22	O	297	ILE	C-N-CA	8.25	132.00	120.29
19	L	392	ARG	CA-C-N	8.23	131.31	120.28
19	L	392	ARG	C-N-CA	8.23	131.31	120.28
6	6	55	LEU	O-C-N	8.23	130.55	122.07
24	Q	321	TYR	CA-C-N	8.23	133.17	120.82
24	Q	321	TYR	C-N-CA	8.23	133.17	120.82
19	L	322	LYS	N-CA-C	-8.22	96.35	109.59
14	G	151	GLU	CA-C-O	-8.21	113.77	121.08
25	R	204	TRP	CA-C-N	8.21	131.63	120.54
25	R	204	TRP	C-N-CA	8.21	131.63	120.54
6	6	176	ARG	CA-C-N	8.21	131.29	120.28
6	6	176	ARG	C-N-CA	8.21	131.29	120.28
33	Z	409	LYS	CA-C-N	8.21	133.15	120.75
33	Z	409	LYS	C-N-CA	8.21	133.15	120.75
18	K	103	ILE	N-CA-C	-8.21	102.86	110.82
10	C	189	ALA	N-CA-C	8.21	120.23	111.28
22	O	152	ASP	CA-C-N	8.21	131.28	120.28
22	O	152	ASP	C-N-CA	8.21	131.28	120.28
28	U	20	ASP	CA-C-N	8.21	131.28	120.28
28	U	20	ASP	C-N-CA	8.21	131.28	120.28
8	A	87	ILE	CB-CA-C	-8.20	105.66	114.35
11	D	104	VAL	N-CA-C	8.20	120.16	109.58
17	J	63	ARG	N-CA-C	8.19	120.21	111.28
33	Z	95	THR	CA-C-N	8.19	131.39	120.58
33	Z	95	THR	C-N-CA	8.19	131.39	120.58
11	D	217	PRO	N-CA-C	8.19	123.64	111.03
24	Q	280	ASN	CA-C-O	-8.19	111.87	120.55
18	K	212	TYR	N-CA-C	-8.18	95.58	109.24
16	I	377	LEU	CA-C-N	8.18	131.24	120.28
16	I	377	LEU	C-N-CA	8.18	131.24	120.28
16	I	338	LEU	N-CA-C	-8.17	103.51	113.97
16	I	231	LEU	N-CA-C	8.17	119.81	111.07
28	U	103	ASP	CA-C-N	8.17	131.57	120.38
28	U	103	ASP	C-N-CA	8.17	131.57	120.38
30	W	24	THR	CA-CB-OG1	8.17	121.85	109.60
10	C	210	ARG	N-CA-C	-8.16	102.88	112.92
24	Q	135	HIS	CA-C-N	8.16	131.22	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	135	HIS	C-N-CA	8.16	131.22	120.28
25	R	86	ASP	CA-C-N	8.15	132.40	120.90
25	R	86	ASP	C-N-CA	8.15	132.40	120.90
17	J	240	HIS	CA-C-N	8.15	132.49	120.83
17	J	240	HIS	C-N-CA	8.15	132.49	120.83
21	N	781	ALA	N-CA-C	-8.15	102.38	113.30
7	7	172	ALA	CA-C-N	8.14	132.00	120.28
7	7	172	ALA	C-N-CA	8.14	132.00	120.28
17	J	190	PRO	N-CA-C	8.13	120.62	110.70
21	N	398	ARG	N-CA-C	-8.12	103.16	113.23
17	J	26	LYS	CA-C-O	8.12	129.03	120.42
15	H	445	LYS	CA-C-O	8.12	129.31	119.97
27	T	28	PRO	N-CA-C	8.12	120.60	110.70
3	3	165	ALA	CA-C-N	8.12	131.97	120.28
3	3	165	ALA	C-N-CA	8.12	131.97	120.28
14	G	31	GLU	N-CA-C	8.11	122.28	112.38
2	2	39	PRO	CA-C-O	-8.11	108.29	118.99
26	S	276	LEU	CA-C-N	8.09	130.96	120.44
26	S	276	LEU	C-N-CA	8.09	130.96	120.44
33	Z	223	LEU	CA-C-N	8.08	131.11	120.28
33	Z	223	LEU	C-N-CA	8.08	131.11	120.28
17	J	347	ALA	N-CA-C	8.07	120.08	111.28
25	R	194	VAL	N-CA-C	8.07	121.18	111.09
33	Z	773	ARG	N-CA-C	8.07	120.07	111.28
26	S	303	ASN	N-CA-C	-8.06	103.01	113.17
29	V	95	LEU	CA-C-N	8.06	131.43	120.38
29	V	95	LEU	C-N-CA	8.06	131.43	120.38
11	D	172	ARG	CA-C-N	8.06	130.92	120.44
11	D	172	ARG	C-N-CA	8.06	130.92	120.44
25	R	33	LEU	O-C-N	8.05	130.36	122.07
13	F	213	ILE	N-CA-C	-8.05	96.89	108.48
24	Q	87	GLN	CA-C-N	8.04	131.29	121.64
24	Q	87	GLN	C-N-CA	8.04	131.29	121.64
20	M	56	ASN	CA-C-N	8.04	130.69	120.56
20	M	56	ASN	C-N-CA	8.04	130.69	120.56
12	E	100	ASN	N-CA-C	8.04	120.95	111.71
21	N	343	THR	N-CA-C	-8.04	103.07	113.12
17	J	189	GLY	CA-C-N	8.03	128.65	120.38
17	J	189	GLY	C-N-CA	8.03	128.65	120.38
18	K	147	VAL	N-CA-C	-8.03	103.98	111.45
28	U	112	LYS	N-CA-C	8.03	120.11	111.36
19	L	349	ILE	N-CA-C	-8.03	100.20	108.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	C	41	SER	N-CA-C	-8.01	103.07	113.17
15	H	244	LYS	CA-C-N	8.01	129.07	121.46
15	H	244	LYS	C-N-CA	8.01	129.07	121.46
14	G	194	GLN	CA-C-N	8.01	131.01	120.28
14	G	194	GLN	C-N-CA	8.01	131.01	120.28
22	O	311	GLU	CA-C-N	8.00	131.32	120.44
22	O	311	GLU	C-N-CA	8.00	131.32	120.44
2	2	57	GLN	CA-C-N	8.00	130.84	120.44
2	2	57	GLN	C-N-CA	8.00	130.84	120.44
21	N	637	ALA	CA-C-O	8.00	128.89	120.42
21	N	730	VAL	CA-C-N	7.99	130.91	120.60
21	N	730	VAL	C-N-CA	7.99	130.91	120.60
33	Z	601	VAL	CA-C-O	-7.98	112.39	120.85
22	O	310	PHE	N-CA-C	7.98	119.97	111.28
18	K	296	LEU	CA-C-N	7.96	131.72	120.42
18	K	296	LEU	C-N-CA	7.96	131.72	120.42
24	Q	64	LEU	CA-C-N	7.96	130.95	120.28
24	Q	64	LEU	C-N-CA	7.96	130.95	120.28
21	N	112	GLU	CA-C-N	7.96	132.41	120.31
21	N	112	GLU	C-N-CA	7.96	132.41	120.31
21	N	765	ASP	CA-C-N	7.96	132.52	120.82
21	N	765	ASP	C-N-CA	7.96	132.52	120.82
20	M	203	ARG	CA-C-N	7.95	130.78	120.44
20	M	203	ARG	C-N-CA	7.95	130.78	120.44
29	V	279	HIS	CA-CB-CG	-7.94	105.86	113.80
8	A	244	ARG	O-C-N	7.94	130.66	122.09
17	J	309	ARG	N-CA-C	-7.93	93.91	110.80
26	S	161	LYS	CA-C-N	7.93	130.71	120.56
26	S	161	LYS	C-N-CA	7.93	130.71	120.56
22	O	371	VAL	N-CA-C	7.92	118.68	110.36
20	M	211	GLY	N-CA-C	-7.91	103.03	116.01
26	S	211	ARG	CA-C-N	7.91	130.73	120.44
26	S	211	ARG	C-N-CA	7.91	130.73	120.44
33	Z	465	GLY	N-CA-C	-7.91	101.10	112.81
26	S	422	MET	CA-C-O	-7.91	112.17	120.55
16	I	348	ILE	N-CA-C	-7.90	97.08	108.53
7	7	167	GLU	CA-C-N	7.89	130.70	120.44
7	7	167	GLU	C-N-CA	7.89	130.70	120.44
33	Z	243	GLN	N-CA-C	7.89	119.67	111.14
25	R	67	CYS	CA-C-N	7.88	131.48	120.29
25	R	67	CYS	C-N-CA	7.88	131.48	120.29
21	N	184	LYS	CA-C-N	7.88	130.49	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	184	LYS	C-N-CA	7.88	130.49	120.56
19	L	411	ASN	CA-C-N	7.88	128.61	119.47
19	L	411	ASN	C-N-CA	7.88	128.61	119.47
8	A	12	TYR	N-CA-C	-7.87	94.03	110.80
23	P	244	ILE	CA-C-N	7.87	132.63	120.82
23	P	244	ILE	C-N-CA	7.87	132.63	120.82
8	A	149	GLU	N-CA-C	-7.87	104.20	113.88
22	O	25	LEU	N-CA-C	-7.87	103.90	113.97
29	V	292	ILE	CA-C-O	-7.87	112.77	120.95
31	X	126	ILE	CA-C-N	7.87	128.66	120.00
31	X	126	ILE	C-N-CA	7.87	128.66	120.00
27	T	30	ILE	O-C-N	7.87	129.93	121.83
21	N	726	ASP	CA-C-N	7.86	130.66	120.44
21	N	726	ASP	C-N-CA	7.86	130.66	120.44
6	6	55	LEU	CA-C-O	-7.86	112.56	120.82
20	M	408	SER	N-CA-C	-7.86	100.67	112.54
33	Z	897	HIS	CA-C-N	7.86	131.45	120.29
33	Z	897	HIS	C-N-CA	7.86	131.45	120.29
26	S	300	ALA	CA-C-N	7.85	130.39	120.89
26	S	300	ALA	C-N-CA	7.85	130.39	120.89
9	B	85	LEU	CA-C-N	7.84	131.21	120.46
9	B	85	LEU	C-N-CA	7.84	131.21	120.46
4	4	134	TYR	N-CA-C	-7.83	103.86	113.50
27	T	39	LEU	CA-C-N	7.83	130.77	120.28
27	T	39	LEU	C-N-CA	7.83	130.77	120.28
22	O	342	ASP	CA-C-N	7.83	130.76	120.28
22	O	342	ASP	C-N-CA	7.83	130.76	120.28
33	Z	921	GLU	CA-C-O	-7.83	113.30	120.50
1	1	7	THR	O-C-N	-7.81	114.31	123.06
17	J	152	GLY	CA-C-O	7.81	128.04	119.06
5	5	157	GLY	CA-C-N	7.81	130.74	120.28
5	5	157	GLY	C-N-CA	7.81	130.74	120.28
21	N	749	LEU	CA-C-N	7.80	131.77	120.38
21	N	749	LEU	C-N-CA	7.80	131.77	120.38
18	K	247	LEU	CB-CA-C	7.79	122.61	109.75
22	O	195	TYR	CA-C-N	7.78	130.56	120.44
22	O	195	TYR	C-N-CA	7.78	130.56	120.44
25	R	41	GLU	CA-C-N	7.78	130.56	120.44
25	R	41	GLU	C-N-CA	7.78	130.56	120.44
7	7	3	VAL	N-CA-C	-7.78	96.92	108.12
18	K	282	PHE	N-CA-C	-7.78	104.95	114.75
28	U	224	THR	CA-C-N	7.78	131.11	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	U	224	THR	C-N-CA	7.78	131.11	120.46
16	I	308	GLU	CA-C-N	7.77	130.69	120.28
16	I	308	GLU	C-N-CA	7.77	130.69	120.28
1	1	67	THR	N-CA-C	7.77	120.43	111.11
7	7	161	THR	N-CA-C	-7.77	98.02	108.74
21	N	729	SER	N-CA-C	7.77	119.83	111.36
20	M	409	SER	N-CA-C	-7.77	96.91	108.79
4	4	42	LEU	CA-C-O	-7.76	112.03	121.11
6	6	1	GLY	N-CA-C	-7.76	104.58	111.95
22	O	332	ILE	O-C-N	7.76	130.57	121.80
21	N	256	GLN	CA-C-N	7.76	130.34	120.56
21	N	256	GLN	C-N-CA	7.76	130.34	120.56
16	I	358	LYS	CA-C-N	7.75	130.66	120.28
16	I	358	LYS	C-N-CA	7.75	130.66	120.28
2	2	143	LYS	N-CA-C	-7.74	97.30	109.07
27	T	95	LYS	CA-C-O	7.74	126.94	118.65
31	X	31	GLY	N-CA-C	7.74	121.34	110.74
26	S	411	LEU	CA-C-N	7.74	131.42	120.28
26	S	411	LEU	C-N-CA	7.74	131.42	120.28
20	M	391	LEU	CA-C-N	7.74	130.65	120.28
20	M	391	LEU	C-N-CA	7.74	130.65	120.28
26	S	294	ILE	CA-C-N	7.74	131.27	120.29
26	S	294	ILE	C-N-CA	7.74	131.27	120.29
28	U	132	LEU	C-N-CD	-7.73	93.29	125.00
21	N	695	ALA	N-CA-C	7.73	119.71	111.28
12	E	111	SER	CA-C-N	7.73	130.63	120.28
12	E	111	SER	C-N-CA	7.73	130.63	120.28
18	K	53	LYS	CA-C-O	7.73	128.94	120.82
8	A	248	ILE	N-CA-C	-7.72	101.77	112.50
20	M	376	TRP	CA-C-O	-7.72	112.37	120.55
21	N	653	ARG	CA-C-N	7.71	130.95	120.54
21	N	653	ARG	C-N-CA	7.71	130.95	120.54
19	L	233	LYS	CA-C-N	7.70	130.60	120.28
19	L	233	LYS	C-N-CA	7.70	130.60	120.28
20	M	198	VAL	CA-C-O	-7.70	112.69	120.85
9	B	154	GLY	N-CA-C	-7.70	104.58	115.43
17	J	186	ILE	CA-C-O	7.70	129.29	120.67
20	M	357	ARG	N-CA-C	7.69	119.66	111.28
27	T	141	LEU	CA-C-N	7.68	130.58	120.28
27	T	141	LEU	C-N-CA	7.68	130.58	120.28
25	R	252	TYR	CA-C-N	7.68	130.43	120.44
25	R	252	TYR	C-N-CA	7.68	130.43	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	65	LEU	CA-C-N	7.67	130.78	120.65
1	1	65	LEU	C-N-CA	7.67	130.78	120.65
20	M	234	ALA	CA-C-N	7.67	130.56	120.28
20	M	234	ALA	C-N-CA	7.67	130.56	120.28
15	H	71	GLU	N-CA-C	7.67	119.64	111.28
21	N	545	SER	CA-C-N	7.67	130.56	120.28
21	N	545	SER	C-N-CA	7.67	130.56	120.28
1	1	146	MET	CA-C-N	7.67	132.74	121.31
1	1	146	MET	C-N-CA	7.67	132.74	121.31
15	H	384	GLY	O-C-N	7.67	129.63	122.19
19	L	216	LYS	CA-C-N	7.67	127.51	121.61
19	L	216	LYS	C-N-CA	7.67	127.51	121.61
16	I	359	LYS	CA-C-N	7.66	130.86	120.44
16	I	359	LYS	C-N-CA	7.66	130.86	120.44
16	I	431	ASN	N-CA-C	-7.66	97.07	108.79
3	3	77	THR	CA-C-N	7.66	130.54	120.28
3	3	77	THR	C-N-CA	7.66	130.54	120.28
2	2	98	LEU	CA-C-N	7.65	133.39	123.13
2	2	98	LEU	C-N-CA	7.65	133.39	123.13
23	P	31	ASP	O-C-N	7.65	130.23	122.12
26	S	240	ASP	O-C-N	7.65	130.23	122.12
28	U	279	SER	CA-C-N	7.64	130.53	120.28
28	U	279	SER	C-N-CA	7.64	130.53	120.28
4	4	127	LEU	CA-C-N	7.64	127.18	118.85
4	4	127	LEU	C-N-CA	7.64	127.18	118.85
21	N	460	ILE	CA-C-N	7.64	131.14	120.29
21	N	460	ILE	C-N-CA	7.64	131.14	120.29
23	P	290	LEU	N-CA-C	-7.63	97.45	109.50
13	F	191	LYS	CA-C-N	7.63	130.50	120.28
13	F	191	LYS	C-N-CA	7.63	130.50	120.28
16	I	416	PHE	CA-C-N	7.63	130.50	120.28
16	I	416	PHE	C-N-CA	7.63	130.50	120.28
24	Q	430	ALA	O-C-N	-7.62	114.16	122.09
27	T	130	ASP	N-CA-C	7.62	119.66	111.36
7	7	86	GLU	CA-C-O	-7.60	112.49	120.55
21	N	206	ILE	CA-C-N	7.59	130.31	120.44
21	N	206	ILE	C-N-CA	7.59	130.31	120.44
5	5	42	LEU	CA-C-O	-7.59	112.54	121.11
32	Y	73	PHE	CA-C-N	7.58	130.78	120.54
32	Y	73	PHE	C-N-CA	7.58	130.78	120.54
4	4	76	PRO	CA-C-N	7.58	130.44	120.28
4	4	76	PRO	C-N-CA	7.58	130.44	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	341	LEU	CA-C-N	7.58	130.77	120.54
25	R	341	LEU	C-N-CA	7.58	130.77	120.54
21	N	443	LEU	CA-C-N	7.58	133.36	120.71
21	N	443	LEU	C-N-CA	7.58	133.36	120.71
19	L	122	SER	N-CA-C	-7.57	103.11	112.88
30	W	34	GLU	CA-C-N	7.57	131.04	120.29
30	W	34	GLU	C-N-CA	7.57	131.04	120.29
8	A	113	PRO	CA-C-N	7.57	130.76	120.54
8	A	113	PRO	C-N-CA	7.57	130.76	120.54
18	K	219	LYS	N-CA-C	7.57	119.31	111.14
31	X	128	VAL	CA-C-N	7.57	130.28	120.44
31	X	128	VAL	C-N-CA	7.57	130.28	120.44
12	E	127	ALA	O-C-N	-7.56	115.33	123.42
21	N	475	ALA	N-CA-C	-7.56	103.12	111.36
27	T	162	ASP	CA-C-O	-7.56	112.54	120.55
11	D	18	PHE	N-CA-C	7.56	120.24	111.02
1	1	148	LYS	CA-C-N	7.54	130.72	120.54
1	1	148	LYS	C-N-CA	7.54	130.72	120.54
5	5	124	GLY	CA-C-N	7.54	131.77	120.31
5	5	124	GLY	C-N-CA	7.54	131.77	120.31
14	G	73	ILE	CA-C-N	7.54	127.83	122.33
14	G	73	ILE	C-N-CA	7.54	127.83	122.33
5	5	79	ALA	CA-C-N	7.54	130.38	120.28
5	5	79	ALA	C-N-CA	7.54	130.38	120.28
8	A	174	LYS	CA-C-N	7.54	130.72	120.54
8	A	174	LYS	C-N-CA	7.54	130.72	120.54
10	C	138	ALA	CA-C-O	-7.54	112.48	120.40
1	1	74	SER	CA-C-N	7.53	130.37	120.28
1	1	74	SER	C-N-CA	7.53	130.37	120.28
17	J	271	THR	CA-C-N	7.53	130.37	120.28
17	J	271	THR	C-N-CA	7.53	130.37	120.28
15	H	368	PRO	CA-C-O	-7.53	112.45	121.03
23	P	243	GLU	N-CA-CB	7.53	120.99	110.07
24	Q	145	HIS	CA-C-N	7.53	130.23	120.44
24	Q	145	HIS	C-N-CA	7.53	130.23	120.44
6	6	80	ALA	N-CA-C	-7.53	103.08	111.28
22	O	374	ASN	CA-C-N	7.52	130.69	120.54
22	O	374	ASN	C-N-CA	7.52	130.69	120.54
28	U	262	GLN	CA-C-N	7.52	130.69	120.54
28	U	262	GLN	C-N-CA	7.52	130.69	120.54
20	M	236	ALA	CA-C-N	7.51	130.66	120.44
20	M	236	ALA	C-N-CA	7.51	130.66	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	136	SER	CA-C-N	7.51	131.73	120.31
24	Q	136	SER	C-N-CA	7.51	131.73	120.31
21	N	602	VAL	CA-C-O	-7.51	112.47	118.85
8	A	121	MET	N-CA-C	7.51	120.53	111.82
22	O	268	SER	N-CA-C	7.51	119.54	111.36
6	6	187	ILE	N-CA-C	-7.51	103.92	111.88
18	K	279	THR	N-CA-C	-7.51	97.16	109.40
22	O	298	GLU	CA-C-O	7.51	128.38	120.42
24	Q	325	LEU	N-CA-C	7.50	119.36	111.03
18	K	394	ALA	CA-C-N	7.50	130.74	120.46
18	K	394	ALA	C-N-CA	7.50	130.74	120.46
17	J	228	ARG	CA-C-N	7.50	130.94	120.29
17	J	228	ARG	C-N-CA	7.50	130.94	120.29
29	V	240	ALA	N-CA-C	7.49	120.09	111.11
33	Z	61	SER	N-CA-C	7.49	119.52	111.36
7	7	157	ILE	O-C-N	-7.48	112.57	121.10
29	V	122	ASP	N-CA-C	7.48	119.43	111.28
24	Q	250	THR	CB-CA-C	-7.48	107.96	116.63
21	N	867	LYS	O-C-N	-7.48	113.63	122.15
11	D	108	TYR	CA-C-N	7.47	130.29	120.28
11	D	108	TYR	C-N-CA	7.47	130.29	120.28
26	S	426	ALA	CA-C-N	7.47	131.03	120.42
26	S	426	ALA	C-N-CA	7.47	131.03	120.42
21	N	745	LEU	N-CA-C	-7.47	105.34	114.75
17	J	100	LYS	N-CA-C	-7.47	103.43	112.54
24	Q	71	LYS	CA-C-N	7.47	130.29	120.28
24	Q	71	LYS	C-N-CA	7.47	130.29	120.28
23	P	387	GLY	N-CA-C	-7.46	104.74	115.64
33	Z	477	TYR	CA-C-N	7.46	130.69	120.46
33	Z	477	TYR	C-N-CA	7.46	130.69	120.46
13	F	181	LYS	CA-C-N	7.46	132.71	122.93
13	F	181	LYS	C-N-CA	7.46	132.71	122.93
19	L	284	ASP	CA-C-O	7.46	126.64	118.65
26	S	219	LYS	CA-C-N	7.46	129.96	120.56
26	S	219	LYS	C-N-CA	7.46	129.96	120.56
21	N	424	LYS	CA-C-O	7.46	128.46	120.55
17	J	49	ASN	CB-CG-ND2	7.46	127.58	116.40
27	T	226	TRP	CA-C-O	-7.46	113.93	120.19
30	W	174	VAL	CA-C-N	7.46	131.08	120.49
30	W	174	VAL	C-N-CA	7.46	131.08	120.49
33	Z	96	TYR	CA-C-O	-7.46	111.47	118.33
13	F	125	GLY	N-CA-C	-7.45	101.23	112.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	M	307	GLU	CA-C-N	7.43	130.10	120.44
20	M	307	GLU	C-N-CA	7.43	130.10	120.44
26	S	362	SER	O-C-N	-7.42	114.25	122.12
21	N	115	LYS	N-CA-C	7.42	119.37	111.28
24	Q	388	GLY	N-CA-C	-7.42	100.06	111.12
25	R	200	LYS	N-CA-C	-7.42	103.19	114.16
33	Z	316	ALA	N-CA-C	-7.41	104.24	113.28
26	S	311	GLN	CA-C-N	7.41	130.21	120.28
26	S	311	GLN	C-N-CA	7.41	130.21	120.28
33	Z	476	ASP	CA-C-N	7.41	130.21	120.28
33	Z	476	ASP	C-N-CA	7.41	130.21	120.28
20	M	197	ILE	N-CA-C	7.41	117.93	111.56
16	I	222	TYR	N-CA-C	-7.41	98.04	109.52
18	K	172	ALA	CA-C-N	7.41	130.07	120.44
18	K	172	ALA	C-N-CA	7.41	130.07	120.44
33	Z	254	PRO	O-C-N	7.41	131.12	122.23
21	N	432	GLY	N-CA-C	-7.39	103.92	112.50
12	E	218	GLN	N-CA-C	-7.39	96.50	109.06
8	A	59	VAL	N-CA-C	-7.39	99.69	107.60
17	J	68	PRO	N-CA-C	-7.38	105.23	114.68
25	R	27	SER	CA-C-N	7.38	130.49	120.38
25	R	27	SER	C-N-CA	7.38	130.49	120.38
33	Z	779	ALA	CA-C-N	7.38	130.77	120.29
33	Z	779	ALA	C-N-CA	7.38	130.77	120.29
9	B	17	LYS	N-CA-C	7.38	120.38	110.35
17	J	349	LYS	CA-C-O	7.37	128.45	119.97
27	T	229	VAL	CA-C-O	-7.36	115.86	121.68
27	T	200	LEU	N-CA-C	-7.36	101.60	108.22
33	Z	756	MET	CA-C-N	7.36	130.01	120.44
33	Z	756	MET	C-N-CA	7.36	130.01	120.44
21	N	6	ALA	N-CA-C	-7.36	103.90	113.17
12	E	192	THR	CA-C-N	7.35	130.13	120.28
12	E	192	THR	C-N-CA	7.35	130.13	120.28
24	Q	417	GLY	CA-C-O	-7.35	113.48	121.05
5	5	155	TYR	CA-C-N	7.35	129.99	120.44
5	5	155	TYR	C-N-CA	7.35	129.99	120.44
11	D	183	GLU	CA-C-N	7.34	127.94	120.38
11	D	183	GLU	C-N-CA	7.34	127.94	120.38
23	P	298	SER	CA-C-N	7.34	130.71	120.29
23	P	298	SER	C-N-CA	7.34	130.71	120.29
28	U	169	ILE	N-CA-C	-7.34	103.31	110.72
7	7	26	LEU	CA-C-N	7.33	129.98	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	7	26	LEU	C-N-CA	7.33	129.98	120.44
19	L	288	GLY	O-C-N	7.33	130.52	122.68
23	P	61	LYS	N-CA-C	-7.33	103.23	111.07
21	N	666	GLN	N-CA-C	7.33	121.80	112.86
9	B	71	ILE	N-CA-C	-7.32	97.62	108.45
16	I	297	GLY	O-C-N	7.32	131.56	122.41
9	B	209	ILE	N-CA-C	-7.32	97.94	108.48
5	5	84	SER	N-CA-C	7.32	119.25	111.28
24	Q	180	LEU	CA-C-N	7.32	130.08	120.28
24	Q	180	LEU	C-N-CA	7.32	130.08	120.28
15	H	210	ASP	CA-C-N	7.31	132.91	121.35
15	H	210	ASP	C-N-CA	7.31	132.91	121.35
1	1	58	ILE	CA-C-N	7.31	129.92	120.56
1	1	58	ILE	C-N-CA	7.31	129.92	120.56
22	O	76	LEU	CA-C-N	7.31	131.05	120.38
22	O	76	LEU	C-N-CA	7.31	131.05	120.38
23	P	193	TYR	CA-C-N	7.31	129.94	120.44
23	P	193	TYR	C-N-CA	7.31	129.94	120.44
3	3	154	LEU	CA-C-N	7.31	130.41	120.54
3	3	154	LEU	C-N-CA	7.31	130.41	120.54
7	7	68	TYR	CA-C-N	7.31	135.50	121.54
7	7	68	TYR	C-N-CA	7.31	135.50	121.54
26	S	384	ARG	CA-C-N	7.31	130.07	120.28
26	S	384	ARG	C-N-CA	7.31	130.07	120.28
14	G	237	GLU	N-CA-C	7.30	119.24	111.28
25	R	243	LEU	CA-C-N	7.29	135.47	121.54
25	R	243	LEU	C-N-CA	7.29	135.47	121.54
19	L	159	LEU	CA-C-N	7.29	127.33	119.89
19	L	159	LEU	C-N-CA	7.29	127.33	119.89
17	J	282	PHE	N-CA-C	7.29	119.22	111.28
33	Z	922	PRO	O-C-N	7.28	131.73	122.85
20	M	286	ILE	N-CA-C	-7.27	105.92	112.90
22	O	213	LEU	CA-C-N	7.27	130.03	120.28
22	O	213	LEU	C-N-CA	7.27	130.03	120.28
28	U	194	LEU	N-CA-C	7.27	119.21	111.28
15	H	149	LEU	N-CA-C	-7.27	95.30	108.02
24	Q	379	GLN	CA-C-N	7.27	130.02	120.28
24	Q	379	GLN	C-N-CA	7.27	130.02	120.28
24	Q	254	SER	CA-C-N	7.27	130.32	120.44
24	Q	254	SER	C-N-CA	7.27	130.32	120.44
26	S	423	VAL	O-C-N	-7.26	114.35	121.83
27	T	244	ASP	CB-CA-C	-7.26	107.15	115.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	I	85	PHE	CA-C-N	7.26	130.01	120.28
16	I	85	PHE	C-N-CA	7.26	130.01	120.28
10	C	217	ARG	CA-C-N	7.26	130.01	120.28
10	C	217	ARG	C-N-CA	7.26	130.01	120.28
15	H	417	ALA	CA-C-N	7.26	130.73	120.28
15	H	417	ALA	C-N-CA	7.26	130.73	120.28
24	Q	192	ALA	CA-C-N	7.26	131.34	120.31
24	Q	192	ALA	C-N-CA	7.26	131.34	120.31
27	T	167	GLY	CA-C-N	7.26	130.31	120.44
27	T	167	GLY	C-N-CA	7.26	130.31	120.44
17	J	343	LEU	N-CA-C	7.26	119.27	111.36
22	O	248	TYR	N-CA-C	-7.25	102.43	113.89
22	O	259	THR	CA-C-O	-7.25	113.20	120.82
5	5	78	ALA	O-C-N	-7.25	113.88	122.15
15	H	192	ASP	CA-C-O	-7.25	112.20	120.03
27	T	217	THR	N-CA-C	7.25	119.26	111.36
12	E	177	GLU	O-C-N	7.24	129.53	122.07
23	P	187	SER	CA-C-N	7.24	129.68	120.56
23	P	187	SER	C-N-CA	7.24	129.68	120.56
2	2	205	PHE	CA-C-O	-7.24	113.18	120.64
9	B	192	ALA	CA-C-O	7.24	128.22	120.55
2	2	58	LEU	CA-C-N	7.24	130.38	120.46
2	2	58	LEU	C-N-CA	7.24	130.38	120.46
14	G	190	GLU	CA-C-N	7.24	130.70	120.28
14	G	190	GLU	C-N-CA	7.24	130.70	120.28
14	G	114	ARG	O-C-N	-7.23	114.45	122.12
28	U	263	LYS	N-CA-C	7.23	119.79	111.11
13	F	23	GLU	N-CA-C	7.23	120.03	111.71
21	N	622	ALA	N-CA-C	-7.23	103.33	111.07
22	O	129	ILE	CA-C-N	7.23	130.55	120.29
22	O	129	ILE	C-N-CA	7.23	130.55	120.29
12	E	233	ASN	N-CA-C	7.23	120.07	111.33
20	M	273	LYS	CA-C-N	7.23	130.99	120.51
20	M	273	LYS	C-N-CA	7.23	130.99	120.51
26	S	343	LEU	CA-C-O	-7.22	111.65	118.73
24	Q	364	LYS	CA-C-O	-7.22	113.24	120.82
15	H	188	PRO	N-CA-C	7.22	119.51	110.70
22	O	198	THR	CA-C-N	7.22	129.95	120.28
22	O	198	THR	C-N-CA	7.22	129.95	120.28
21	N	320	SER	CA-C-O	-7.21	112.91	120.55
23	P	343	LYS	CA-C-O	-7.21	112.91	120.55
25	R	257	GLY	CA-C-N	7.21	129.81	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	257	GLY	C-N-CA	7.21	129.81	120.44
5	5	200	VAL	CA-C-O	-7.21	113.45	120.95
28	U	285	ILE	CA-C-N	7.21	130.33	120.46
28	U	285	ILE	C-N-CA	7.21	130.33	120.46
21	N	290	LEU	CA-C-N	7.20	130.52	120.29
21	N	290	LEU	C-N-CA	7.20	130.52	120.29
26	S	184	TRP	CA-C-N	7.20	129.80	120.44
26	S	184	TRP	C-N-CA	7.20	129.80	120.44
7	7	35	ILE	O-C-N	-7.19	114.43	121.12
11	D	105	THR	CA-C-N	7.19	130.63	120.42
11	D	105	THR	C-N-CA	7.19	130.63	120.42
21	N	328	PHE	CA-C-N	7.19	130.50	120.29
21	N	328	PHE	C-N-CA	7.19	130.50	120.29
24	Q	360	SER	CA-C-O	-7.19	112.93	120.55
2	2	50	ALA	N-CA-C	7.19	119.11	111.28
15	H	215	LYS	N-CA-C	7.18	119.73	111.11
15	H	403	ARG	CA-C-N	7.18	129.91	120.28
15	H	403	ARG	C-N-CA	7.18	129.91	120.28
11	D	198	SER	N-CA-C	7.18	118.76	111.07
12	E	77	ALA	N-CA-C	-7.18	98.23	109.72
1	1	113	ILE	CA-C-N	7.18	128.81	119.84
1	1	113	ILE	C-N-CA	7.18	128.81	119.84
21	N	529	GLN	CB-CA-C	-7.18	107.47	117.23
10	C	185	LYS	N-CA-C	-7.18	98.83	109.81
19	L	420	ARG	N-CA-C	7.18	119.10	111.28
9	B	123	GLN	CA-C-N	7.17	131.06	120.87
9	B	123	GLN	C-N-CA	7.17	131.06	120.87
14	G	103	LYS	O-C-N	-7.17	112.80	122.41
24	Q	423	VAL	N-CA-C	7.17	117.30	110.42
28	U	233	PHE	N-CA-C	7.17	119.72	111.11
1	1	114	PRO	CA-C-N	7.17	131.04	120.87
1	1	114	PRO	C-N-CA	7.17	131.04	120.87
33	Z	274	SER	CA-C-O	-7.16	113.30	120.82
7	7	155	SER	N-CA-C	7.16	119.95	111.71
33	Z	871	HIS	CA-C-N	-7.16	113.13	122.51
33	Z	871	HIS	C-N-CA	-7.16	113.13	122.51
18	K	409	GLU	CA-C-N	7.16	130.46	120.29
18	K	409	GLU	C-N-CA	7.16	130.46	120.29
26	S	424	SER	O-C-N	7.16	129.45	122.07
33	Z	858	GLY	O-C-N	7.16	129.09	122.57
21	N	649	VAL	CA-C-N	7.16	129.87	120.28
21	N	649	VAL	C-N-CA	7.16	129.87	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	310	ARG	CA-C-N	7.16	129.85	120.26
23	P	310	ARG	C-N-CA	7.16	129.85	120.26
33	Z	958	ASN	CA-C-N	7.16	130.87	120.71
33	Z	958	ASN	C-N-CA	7.16	130.87	120.71
7	7	205	GLN	N-CA-C	-7.15	96.90	109.06
15	H	447	VAL	N-CA-C	7.15	117.29	110.42
27	T	223	GLU	CA-C-O	-7.15	112.97	120.55
14	G	32	ASN	N-CA-C	-7.15	104.29	113.16
24	Q	191	LEU	CA-C-N	7.15	129.74	120.44
24	Q	191	LEU	C-N-CA	7.15	129.74	120.44
33	Z	89	LEU	CA-C-N	7.15	129.86	120.28
33	Z	89	LEU	C-N-CA	7.15	129.86	120.28
16	I	367	SER	O-C-N	7.15	129.69	122.12
21	N	133	LEU	CA-C-N	7.14	129.73	120.44
21	N	133	LEU	C-N-CA	7.14	129.73	120.44
25	R	316	LEU	N-CA-C	7.14	118.86	111.14
29	V	65	VAL	CA-C-N	7.14	130.78	122.35
29	V	65	VAL	C-N-CA	7.14	130.78	122.35
24	Q	213	GLN	CA-C-O	7.14	127.99	120.42
29	V	283	THR	O-C-N	-7.14	114.01	122.15
9	B	192	ALA	O-C-N	-7.14	114.56	122.12
10	C	158	THR	CA-C-N	7.14	130.09	122.38
10	C	158	THR	C-N-CA	7.14	130.09	122.38
21	N	726	ASP	CA-C-O	7.13	128.24	120.32
22	O	369	ARG	N-CA-C	7.13	118.70	111.07
33	Z	842	GLN	N-CA-C	7.13	119.05	111.28
19	L	248	ALA	CA-C-N	7.12	129.83	120.28
19	L	248	ALA	C-N-CA	7.12	129.83	120.28
19	L	251	ILE	N-CA-C	-7.12	103.74	113.00
27	T	162	ASP	O-C-N	7.12	129.67	122.12
9	B	59	GLU	CA-C-N	7.12	134.04	122.14
9	B	59	GLU	C-N-CA	7.12	134.04	122.14
7	7	152	ASP	N-CA-C	-7.12	103.62	114.16
21	N	867	LYS	CA-C-O	7.12	127.97	120.42
26	S	165	PRO	CA-C-N	7.12	132.83	122.36
26	S	165	PRO	C-N-CA	7.12	132.83	122.36
17	J	171	PRO	CA-C-N	7.12	129.82	120.28
17	J	171	PRO	C-N-CA	7.12	129.82	120.28
18	K	223	VAL	CA-C-O	7.12	128.71	121.17
23	P	279	ASP	CA-C-N	7.12	130.40	120.29
23	P	279	ASP	C-N-CA	7.12	130.40	120.29
20	M	411	LYS	N-CA-C	-7.12	99.44	109.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	S	268	LEU	O-C-N	7.12	129.66	122.12
28	U	190	LEU	CA-C-N	7.11	129.81	120.28
28	U	190	LEU	C-N-CA	7.11	129.81	120.28
22	O	83	LEU	CA-C-N	7.11	131.12	120.31
22	O	83	LEU	C-N-CA	7.11	131.12	120.31
33	Z	813	PHE	CA-C-N	7.11	129.81	120.28
33	Z	813	PHE	C-N-CA	7.11	129.81	120.28
12	E	21	LEU	CA-C-N	7.11	130.67	120.79
12	E	21	LEU	C-N-CA	7.11	130.67	120.79
18	K	124	SER	N-CA-C	-7.11	102.95	113.61
15	H	164	SER	CB-CA-C	-7.10	97.79	109.15
22	O	100	ASP	CA-C-N	7.10	130.09	120.44
22	O	100	ASP	C-N-CA	7.10	130.09	120.44
23	P	112	LEU	N-CA-C	7.10	119.01	111.28
20	M	274	ALA	N-CA-C	7.09	117.76	109.60
33	Z	205	LEU	CA-C-O	-7.09	113.37	120.82
22	O	222	LEU	CA-C-N	7.09	129.78	120.28
22	O	222	LEU	C-N-CA	7.09	129.78	120.28
26	S	389	LYS	N-CA-C	7.09	119.00	111.28
15	H	162	ARG	CD-NE-CZ	7.08	134.32	124.40
17	J	303	ALA	CA-C-N	7.08	131.07	120.31
17	J	303	ALA	C-N-CA	7.08	131.07	120.31
27	T	183	SER	CA-C-N	7.08	130.07	120.44
27	T	183	SER	C-N-CA	7.08	130.07	120.44
18	K	143	SER	O-C-N	7.08	130.75	122.19
27	T	20	TYR	N-CA-C	-7.08	103.64	111.36
11	D	87	GLU	CA-C-O	-7.08	113.39	120.82
27	T	87	PRO	CA-C-N	7.08	129.76	120.28
27	T	87	PRO	C-N-CA	7.08	129.76	120.28
27	T	147	LYS	CA-C-O	7.07	127.92	120.42
25	R	245	SER	N-CA-C	-7.07	99.75	110.14
26	S	327	ILE	N-CA-C	7.07	124.15	108.88
1	1	194	GLU	CA-C-N	7.07	130.05	120.44
1	1	194	GLU	C-N-CA	7.07	130.05	120.44
5	5	85	ASN	CA-C-O	-7.07	112.93	120.42
7	7	72	LEU	N-CA-C	-7.06	104.67	113.28
5	5	182	GLU	O-C-N	7.06	129.34	122.07
17	J	327	ILE	CA-C-N	7.06	129.74	120.28
17	J	327	ILE	C-N-CA	7.06	129.74	120.28
21	N	683	LEU	CA-C-N	7.06	130.05	120.38
21	N	683	LEU	C-N-CA	7.06	130.05	120.38
19	L	370	LYS	CA-C-N	7.06	131.41	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	L	370	LYS	C-N-CA	7.06	131.41	120.75
25	R	30	ALA	CA-C-N	7.06	129.62	120.44
25	R	30	ALA	C-N-CA	7.06	129.62	120.44
26	S	239	ARG	N-CA-C	7.06	119.58	111.11
31	X	95	GLU	N-CA-C	-7.06	104.60	112.57
3	3	189	ARG	O-C-N	7.05	131.56	123.31
24	Q	78	ILE	CA-C-N	7.05	126.88	119.05
24	Q	78	ILE	C-N-CA	7.05	126.88	119.05
28	U	207	VAL	CA-C-N	7.05	129.70	120.60
28	U	207	VAL	C-N-CA	7.05	129.70	120.60
18	K	194	GLN	CA-C-N	7.05	130.31	120.29
18	K	194	GLN	C-N-CA	7.05	130.31	120.29
19	L	186	LEU	CA-C-N	7.05	130.43	120.28
19	L	186	LEU	C-N-CA	7.05	130.43	120.28
4	4	156	GLY	CA-C-N	7.05	130.03	120.38
4	4	156	GLY	C-N-CA	7.05	130.03	120.38
2	2	126	SER	CA-C-N	7.04	134.51	121.62
2	2	126	SER	C-N-CA	7.04	134.51	121.62
10	C	82	ALA	CA-C-N	7.04	129.72	120.28
10	C	82	ALA	C-N-CA	7.04	129.72	120.28
14	G	108	ILE	CA-C-O	-7.04	110.51	119.95
13	F	105	VAL	CA-C-N	7.04	129.71	120.28
13	F	105	VAL	C-N-CA	7.04	129.71	120.28
21	N	606	VAL	CA-C-N	7.04	129.71	120.28
21	N	606	VAL	C-N-CA	7.04	129.71	120.28
33	Z	143	VAL	N-CA-C	-7.04	98.04	108.45
16	I	148	LEU	N-CA-C	-7.03	97.78	109.24
16	I	204	HIS	CA-C-N	7.03	126.64	119.19
16	I	204	HIS	C-N-CA	7.03	126.64	119.19
23	P	263	HIS	CA-C-N	7.03	129.42	120.56
23	P	263	HIS	C-N-CA	7.03	129.42	120.56
18	K	66	ASP	CA-C-O	-7.03	112.97	120.42
21	N	742	TRP	N-CA-C	-7.03	97.17	108.55
2	2	157	ASP	CA-C-N	7.03	129.57	120.44
2	2	157	ASP	C-N-CA	7.03	129.57	120.44
4	4	194	PHE	CA-C-N	7.03	130.26	120.29
4	4	194	PHE	C-N-CA	7.03	130.26	120.29
22	O	170	SER	CA-C-O	7.03	128.00	120.55
17	J	194	GLY	CA-C-N	7.02	129.57	120.44
17	J	194	GLY	C-N-CA	7.02	129.57	120.44
17	J	136	LEU	O-C-N	7.02	131.93	122.59
19	L	191	ARG	N-CA-CB	7.02	120.44	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	372	ILE	O-C-N	-7.02	115.08	120.07
21	N	400	ILE	CA-C-O	7.02	128.29	120.85
26	S	335	GLN	O-C-N	-7.02	113.21	122.20
18	K	66	ASP	CA-C-N	7.02	129.68	120.28
18	K	66	ASP	C-N-CA	7.02	129.68	120.28
31	X	98	PHE	CA-C-O	-7.02	113.27	120.71
33	Z	593	HIS	N-CA-C	-7.01	101.83	108.07
12	E	136	ARG	N-CA-C	-7.01	99.07	108.11
7	7	125	LEU	CA-C-O	-7.01	110.76	119.38
19	L	190	ILE	CA-C-N	7.01	129.67	120.28
19	L	190	ILE	C-N-CA	7.01	129.67	120.28
18	K	71	GLU	O-C-N	-7.00	114.69	122.12
2	2	190	TYR	N-CA-C	7.00	118.91	111.28
7	7	76	GLU	N-CA-C	-7.00	103.87	113.18
28	U	35	GLY	CA-C-N	7.00	132.13	123.10
28	U	35	GLY	C-N-CA	7.00	132.13	123.10
16	I	170	VAL	CB-CA-C	7.00	119.64	110.12
26	S	423	VAL	CA-C-O	7.00	128.27	120.85
22	O	370	LEU	CA-C-O	-6.99	113.42	120.90
3	3	95	PHE	N-CA-C	-6.99	95.91	110.80
9	B	116	LYS	CA-C-O	-6.99	113.01	120.42
21	N	721	ASP	CA-C-O	6.99	126.93	119.03
7	7	208	ASN	O-C-N	6.98	130.56	122.67
28	U	15	LEU	N-CA-C	6.98	118.97	111.36
16	I	318	ASP	CA-C-O	-6.98	113.98	121.45
18	K	74	HIS	CA-C-N	6.98	130.33	120.28
18	K	74	HIS	C-N-CA	6.98	130.33	120.28
21	N	424	LYS	O-C-N	-6.98	114.72	122.12
5	5	29	GLN	N-CA-C	-6.97	104.34	112.92
7	7	174	ARG	N-CA-C	-6.97	103.11	111.69
25	R	278	SER	CA-C-N	6.97	129.92	120.44
25	R	278	SER	C-N-CA	6.97	129.92	120.44
27	T	115	SER	CA-C-N	6.97	132.36	120.72
27	T	115	SER	C-N-CA	6.97	132.36	120.72
23	P	187	SER	N-CA-C	6.97	118.96	111.36
3	3	27	VAL	N-CA-C	-6.97	106.26	111.90
23	P	135	GLU	CA-C-N	6.96	129.49	120.44
23	P	135	GLU	C-N-CA	6.96	129.49	120.44
20	M	198	VAL	N-CA-C	6.96	117.75	110.72
26	S	340	LYS	O-C-N	6.96	129.50	122.12
28	U	229	LEU	CA-C-N	6.96	129.93	120.54
28	U	229	LEU	C-N-CA	6.96	129.93	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	7	10	ASN	CA-C-N	-6.96	112.02	120.51
7	7	10	ASN	C-N-CA	-6.96	112.02	120.51
29	V	211	LYS	O-C-N	6.96	129.49	122.12
15	H	323	ALA	CA-C-O	6.96	128.06	119.78
6	6	87	LEU	CA-C-N	6.95	129.48	120.44
6	6	87	LEU	C-N-CA	6.95	129.48	120.44
23	P	175	GLU	N-CA-C	6.95	118.94	111.36
33	Z	190	THR	CA-C-O	6.95	130.45	120.51
33	Z	339	PHE	CA-C-N	6.95	134.81	121.54
33	Z	339	PHE	C-N-CA	6.95	134.81	121.54
1	1	99	VAL	CA-C-O	-6.95	113.02	120.59
22	O	272	VAL	N-CA-C	6.95	119.74	111.05
33	Z	782	ILE	N-CA-C	6.95	117.09	110.42
33	Z	208	VAL	CB-CA-C	-6.95	104.90	114.00
15	H	241	ASP	N-CA-C	-6.95	99.83	110.32
6	6	152	GLU	CA-C-N	6.94	128.52	119.84
6	6	152	GLU	C-N-CA	6.94	128.52	119.84
21	N	384	LYS	CA-C-O	6.94	127.91	120.55
22	O	289	GLN	N-CA-C	6.94	118.84	111.28
23	P	101	MET	N-CA-C	6.94	118.84	111.28
3	3	142	GLU	CA-C-O	-6.94	113.19	120.55
29	V	151	VAL	N-CA-C	-6.94	98.49	108.48
27	T	270	ILE	CB-CA-C	-6.94	103.09	111.97
28	U	157	LEU	N-CA-C	-6.93	100.75	110.31
1	1	38	HIS	CA-C-N	6.93	130.49	120.38
1	1	38	HIS	C-N-CA	6.93	130.49	120.38
1	1	61	TYR	CA-C-O	-6.93	113.57	120.70
11	D	84	ILE	CA-C-N	6.93	129.56	120.28
11	D	84	ILE	C-N-CA	6.93	129.56	120.28
27	T	138	ASP	CA-C-N	-6.93	112.95	122.30
27	T	138	ASP	C-N-CA	-6.93	112.95	122.30
7	7	119	LEU	N-CA-C	-6.92	95.56	107.61
14	G	166	LYS	CA-C-O	6.92	127.76	120.42
28	U	213	LYS	CA-C-N	6.92	129.53	120.60
28	U	213	LYS	C-N-CA	6.92	129.53	120.60
28	U	169	ILE	CA-C-O	-6.92	113.51	120.85
15	H	145	TYR	CA-C-O	6.92	130.40	120.51
26	S	344	PRO	CA-C-N	6.92	130.11	120.29
26	S	344	PRO	C-N-CA	6.92	130.11	120.29
1	1	34	LEU	N-CA-C	-6.91	96.38	108.20
2	2	81	GLN	N-CA-C	6.91	118.82	111.28
24	Q	51	ARG	CA-C-N	6.91	129.43	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	51	ARG	C-N-CA	6.91	129.43	120.44
9	B	106	PRO	CA-C-O	-6.91	113.83	121.23
19	L	397	GLU	CA-C-N	6.91	129.54	120.28
19	L	397	GLU	C-N-CA	6.91	129.54	120.28
17	J	135	SER	N-CA-C	-6.91	102.98	112.03
24	Q	67	THR	CA-C-N	6.91	130.81	120.31
24	Q	67	THR	C-N-CA	6.91	130.81	120.31
29	V	296	LEU	CA-C-N	6.91	129.85	120.38
29	V	296	LEU	C-N-CA	6.91	129.85	120.38
8	A	70	SER	CA-C-O	-6.91	113.59	121.40
24	Q	140	LYS	CA-C-O	6.91	127.87	120.55
33	Z	746	ILE	N-CA-C	6.91	117.67	110.62
21	N	190	LEU	N-CA-C	6.90	118.59	111.14
21	N	465	ALA	N-CA-C	6.90	118.45	111.07
22	O	19	ASP	N-CA-C	6.90	125.07	109.81
24	Q	224	ILE	N-CA-C	6.90	117.66	110.62
24	Q	234	THR	CA-C-N	6.90	129.53	120.28
24	Q	234	THR	C-N-CA	6.90	129.53	120.28
23	P	116	ILE	O-C-N	6.90	128.67	121.91
9	B	232	GLY	CA-C-N	6.90	128.46	119.84
9	B	232	GLY	C-N-CA	6.90	128.46	119.84
21	N	251	GLU	N-CA-C	-6.90	103.82	111.82
21	N	168	SER	CA-C-N	6.89	129.85	120.54
21	N	168	SER	C-N-CA	6.89	129.85	120.54
24	Q	110	SER	CA-C-O	6.89	129.07	121.56
29	V	248	ALA	CA-C-O	-6.89	113.19	120.63
4	4	183	VAL	CA-C-O	6.89	127.90	120.53
21	N	715	ILE	N-CA-C	-6.89	97.81	107.80
28	U	7	LYS	O-C-N	-6.89	115.40	123.25
20	M	127	VAL	CA-C-N	6.89	131.79	122.84
20	M	127	VAL	C-N-CA	6.89	131.79	122.84
30	W	27	GLU	CA-C-N	6.89	129.51	120.28
30	W	27	GLU	C-N-CA	6.89	129.51	120.28
6	6	170	GLU	CA-C-N	6.89	129.89	120.46
6	6	170	GLU	C-N-CA	6.89	129.89	120.46
7	7	213	PHE	N-CA-C	6.89	120.78	112.38
1	1	120	HIS	CA-C-N	6.88	131.90	122.19
1	1	120	HIS	C-N-CA	6.88	131.90	122.19
12	E	21	LEU	N-CA-C	6.88	119.71	110.35
25	R	118	GLN	CA-C-O	-6.88	113.59	120.82
11	D	200	LEU	CA-C-O	-6.88	113.26	120.55
19	L	67	HIS	CA-C-N	6.88	129.49	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	L	67	HIS	C-N-CA	6.88	129.49	120.28
27	T	108	LEU	CA-C-N	6.88	130.06	120.29
27	T	108	LEU	C-N-CA	6.88	130.06	120.29
28	U	168	GLU	CA-C-N	6.88	130.19	120.42
28	U	168	GLU	C-N-CA	6.88	130.19	120.42
26	S	140	LEU	O-C-N	-6.88	114.99	122.07
33	Z	222	ASP	O-C-N	-6.88	114.83	122.12
5	5	146	TRP	N-CA-C	6.87	119.65	111.33
21	N	31	VAL	CA-C-N	6.87	129.22	120.56
21	N	31	VAL	C-N-CA	6.87	129.22	120.56
3	3	65	TYR	CA-C-N	6.87	129.37	120.44
3	3	65	TYR	C-N-CA	6.87	129.37	120.44
24	Q	350	ILE	CA-C-O	-6.87	113.57	120.85
23	P	439	MET	CA-C-O	-6.86	113.14	120.42
25	R	250	ALA	O-C-N	-6.86	114.68	122.09
15	H	344	ASP	CA-C-O	6.86	124.39	119.32
3	3	66	LYS	CA-C-N	6.86	130.03	120.29
3	3	66	LYS	C-N-CA	6.86	130.03	120.29
20	M	233	ARG	N-CA-C	6.86	118.75	111.28
24	Q	183	LYS	CA-C-N	6.86	129.20	120.56
24	Q	183	LYS	C-N-CA	6.86	129.20	120.56
17	J	119	SER	CA-C-N	6.85	132.55	122.82
17	J	119	SER	C-N-CA	6.85	132.55	122.82
21	N	24	ALA	CA-C-N	6.85	129.35	120.44
21	N	24	ALA	C-N-CA	6.85	129.35	120.44
12	E	227	GLY	CA-C-O	-6.85	113.29	122.33
33	Z	748	LEU	N-CA-C	6.85	120.74	112.38
33	Z	906	ALA	CA-C-N	6.85	128.92	120.22
33	Z	906	ALA	C-N-CA	6.85	128.92	120.22
18	K	349	ARG	CA-C-N	6.85	129.76	120.38
18	K	349	ARG	C-N-CA	6.85	129.76	120.38
28	U	32	ARG	N-CA-C	-6.85	97.42	109.06
29	V	86	VAL	CA-C-O	-6.85	113.59	120.85
17	J	225	GLU	N-CA-C	6.84	118.82	111.36
8	A	242	GLU	CA-C-N	6.84	129.45	120.28
8	A	242	GLU	C-N-CA	6.84	129.45	120.28
19	L	124	GLY	CA-C-N	6.84	128.39	119.84
19	L	124	GLY	C-N-CA	6.84	128.39	119.84
26	S	346	TYR	CA-C-N	6.84	129.33	120.44
26	S	346	TYR	C-N-CA	6.84	129.33	120.44
21	N	277	LEU	CA-C-N	6.84	129.33	120.44
21	N	277	LEU	C-N-CA	6.84	129.33	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	183	ASN	N-CA-C	-6.84	98.95	109.14
26	S	464	ARG	N-CA-C	6.84	118.39	111.07
21	N	92	ASP	N-CA-C	-6.83	104.69	113.16
26	S	233	LEU	N-CA-C	-6.83	103.76	111.14
33	Z	205	LEU	CA-C-N	6.83	129.44	120.28
33	Z	205	LEU	C-N-CA	6.83	129.44	120.28
25	R	44	LYS	CA-C-N	6.83	129.44	120.28
25	R	44	LYS	C-N-CA	6.83	129.44	120.28
4	4	109	LYS	N-CA-C	-6.83	105.23	113.97
15	H	242	PRO	CA-C-N	6.83	128.38	119.84
15	H	242	PRO	C-N-CA	6.83	128.38	119.84
15	H	353	PHE	CA-C-O	-6.83	113.44	121.16
16	I	333	THR	O-C-N	6.83	130.75	122.35
8	A	203	VAL	CA-C-N	6.82	129.31	120.44
8	A	203	VAL	C-N-CA	6.82	129.31	120.44
33	Z	573	LEU	N-CA-C	6.82	119.73	111.82
33	Z	754	LYS	N-CA-C	6.82	118.71	111.28
33	Z	293	MET	CA-C-N	6.82	129.80	120.46
33	Z	293	MET	C-N-CA	6.82	129.80	120.46
29	V	72	PRO	N-CA-C	6.82	126.52	112.47
29	V	281	SER	N-CA-C	6.81	118.36	111.07
22	O	376	GLN	CA-C-N	6.80	129.13	120.56
22	O	376	GLN	C-N-CA	6.80	129.13	120.56
22	O	307	MET	CA-C-N	6.80	134.07	122.37
22	O	307	MET	C-N-CA	6.80	134.07	122.37
20	M	258	GLU	CA-C-N	6.80	127.48	120.00
20	M	258	GLU	C-N-CA	6.80	127.48	120.00
22	O	41	LEU	CA-C-N	6.80	134.52	121.54
22	O	41	LEU	C-N-CA	6.80	134.52	121.54
12	E	43	LYS	N-CA-C	-6.79	104.30	112.59
17	J	300	LEU	N-CA-C	-6.79	99.12	109.85
27	T	261	GLU	O-C-N	6.79	129.89	122.15
6	6	45	ALA	CA-C-O	6.79	129.13	120.57
15	H	205	ASP	O-C-N	6.79	129.43	122.09
13	F	231	ALA	N-CA-C	6.79	118.68	111.28
16	I	339	ILE	N-CA-C	-6.79	104.15	110.53
21	N	147	ALA	CA-C-N	6.79	132.51	122.74
21	N	147	ALA	C-N-CA	6.79	132.51	122.74
23	P	183	GLN	CA-C-N	6.79	129.93	120.29
23	P	183	GLN	C-N-CA	6.79	129.93	120.29
28	U	80	CYS	CA-C-N	6.79	129.38	120.28
28	U	80	CYS	C-N-CA	6.79	129.38	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	405	GLU	CA-C-N	6.79	129.92	120.29
15	H	405	GLU	C-N-CA	6.79	129.92	120.29
6	6	195	ILE	N-CA-C	-6.78	98.67	108.17
15	H	260	ALA	CA-C-N	6.78	129.37	120.28
15	H	260	ALA	C-N-CA	6.78	129.37	120.28
18	K	64	GLN	O-C-N	-6.78	114.93	122.12
28	U	136	ALA	CA-C-N	6.78	133.20	122.21
28	U	136	ALA	C-N-CA	6.78	133.20	122.21
14	G	66	ILE	N-CA-C	-6.78	98.67	108.36
22	O	286	PHE	CA-C-N	6.78	129.37	120.28
22	O	286	PHE	C-N-CA	6.78	129.37	120.28
14	G	213	LEU	N-CA-C	-6.78	98.57	109.96
23	P	134	VAL	CA-C-O	6.78	127.57	120.25
24	Q	212	THR	CA-C-N	6.78	129.91	120.29
24	Q	212	THR	C-N-CA	6.78	129.91	120.29
8	A	161	GLY	N-CA-C	-6.77	104.90	116.01
18	K	363	ALA	CA-C-N	6.77	126.73	119.28
18	K	363	ALA	C-N-CA	6.77	126.73	119.28
33	Z	106	TRP	N-CA-C	-6.77	103.61	112.41
18	K	290	ARG	CA-C-N	6.77	129.90	120.29
18	K	290	ARG	C-N-CA	6.77	129.90	120.29
21	N	730	VAL	N-CA-C	-6.77	103.73	110.30
30	W	67	ALA	N-CA-C	-6.77	104.15	112.88
6	6	134	ALA	CA-C-N	6.77	132.02	120.72
6	6	134	ALA	C-N-CA	6.77	132.02	120.72
31	X	21	SER	CA-C-N	6.77	130.98	121.24
31	X	21	SER	C-N-CA	6.77	130.98	121.24
25	R	215	GLY	CA-C-N	6.76	129.33	120.60
25	R	215	GLY	C-N-CA	6.76	129.33	120.60
27	T	266	TYR	CA-C-N	6.76	129.24	120.44
27	T	266	TYR	C-N-CA	6.76	129.24	120.44
5	5	7	ARG	N-CA-C	-6.76	98.67	109.76
11	D	148	TYR	CA-C-N	6.76	133.15	122.74
11	D	148	TYR	C-N-CA	6.76	133.15	122.74
13	F	205	SER	CA-C-N	6.76	132.53	123.00
13	F	205	SER	C-N-CA	6.76	132.53	123.00
21	N	625	LEU	CA-C-N	6.76	127.63	119.99
21	N	625	LEU	C-N-CA	6.76	127.63	119.99
33	Z	424	SER	CA-C-N	6.76	129.72	120.46
33	Z	424	SER	C-N-CA	6.76	129.72	120.46
13	F	143	HIS	CA-C-N	6.76	133.99	122.37
13	F	143	HIS	C-N-CA	6.76	133.99	122.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	I	290	LYS	CA-C-O	6.76	125.95	118.52
17	J	57	PHE	CA-C-N	6.76	129.07	120.56
17	J	57	PHE	C-N-CA	6.76	129.07	120.56
16	I	394	ALA	CA-C-N	6.75	129.22	120.44
16	I	394	ALA	C-N-CA	6.75	129.22	120.44
30	W	22	PRO	N-CA-C	6.75	126.39	112.47
29	V	284	ALA	CA-C-N	6.75	129.22	120.44
29	V	284	ALA	C-N-CA	6.75	129.22	120.44
12	E	105	GLU	CA-C-O	6.75	128.53	121.31
15	H	264	ALA	N-CA-C	6.75	118.64	111.28
10	C	191	GLU	CA-C-N	6.75	129.21	120.44
10	C	191	GLU	C-N-CA	6.75	129.21	120.44
16	I	140	LEU	N-CA-C	-6.75	104.36	112.59
21	N	304	LEU	CA-C-N	6.75	132.12	120.58
21	N	304	LEU	C-N-CA	6.75	132.12	120.58
21	N	626	GLY	CA-C-N	6.75	129.06	120.56
21	N	626	GLY	C-N-CA	6.75	129.06	120.56
6	6	198	VAL	N-CA-C	-6.75	98.67	108.11
25	R	92	ILE	N-CA-C	-6.74	104.73	111.88
5	5	197	PHE	O-C-N	-6.74	115.13	122.07
16	I	210	GLU	N-CA-C	6.74	118.28	111.07
17	J	63	ARG	CA-C-N	6.74	129.86	120.29
17	J	63	ARG	C-N-CA	6.74	129.86	120.29
17	J	67	GLU	O-C-N	-6.74	115.58	121.71
9	B	110	LEU	CA-C-N	6.74	129.69	120.46
9	B	110	LEU	C-N-CA	6.74	129.69	120.46
18	K	322	ASP	N-CA-C	-6.74	104.27	113.30
2	2	138	LEU	N-CA-C	6.73	118.62	111.28
23	P	399	ILE	N-CA-C	-6.73	98.78	108.48
26	S	331	SER	CA-C-N	6.73	129.85	120.29
26	S	331	SER	C-N-CA	6.73	129.85	120.29
33	Z	971	ILE	O-C-N	-6.73	115.56	123.03
7	7	45	ILE	CA-C-O	-6.73	113.23	120.36
15	H	340	LEU	N-CA-C	6.73	118.50	111.03
13	F	221	PRO	CA-C-O	-6.73	113.65	121.86
17	J	224	GLY	O-C-N	-6.73	113.84	122.25
17	J	338	THR	N-CA-C	-6.73	98.27	109.24
9	B	193	LEU	CA-C-N	6.72	129.59	120.44
9	B	193	LEU	C-N-CA	6.72	129.59	120.44
24	Q	307	ASN	O-C-N	6.72	129.82	122.15
14	G	240	ASP	CA-C-N	6.72	129.29	120.28
14	G	240	ASP	C-N-CA	6.72	129.29	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	230	PHE	CA-C-N	6.72	128.54	120.14
22	O	230	PHE	C-N-CA	6.72	128.54	120.14
5	5	150	VAL	N-CA-C	6.72	119.45	111.05
18	K	217	THR	N-CA-C	-6.72	105.37	113.97
2	2	179	GLU	CA-C-N	6.71	130.00	120.53
2	2	179	GLU	C-N-CA	6.71	130.00	120.53
21	N	127	ASP	N-CA-C	-6.71	104.83	113.16
33	Z	377	ALA	CA-C-N	6.71	129.82	120.29
33	Z	377	ALA	C-N-CA	6.71	129.82	120.29
33	Z	595	MET	O-C-N	6.71	129.24	122.12
3	3	54	LEU	CA-C-N	6.71	129.16	120.44
3	3	54	LEU	C-N-CA	6.71	129.16	120.44
24	Q	423	VAL	O-C-N	6.71	128.49	121.91
26	S	422	MET	O-C-N	6.71	129.23	122.12
28	U	197	LEU	N-CA-C	6.71	118.25	111.07
33	Z	492	GLY	O-C-N	-6.71	115.74	122.18
1	1	7	THR	CA-C-O	6.71	129.41	121.36
5	5	23	GLY	N-CA-C	-6.71	103.20	111.45
13	F	56	LEU	N-CA-C	-6.71	105.13	113.38
16	I	259	ASP	CA-CB-CG	-6.71	105.89	112.60
26	S	280	ASN	CA-C-N	6.71	129.16	120.44
26	S	280	ASN	C-N-CA	6.71	129.16	120.44
27	T	170	ASN	CA-C-N	6.71	129.65	120.46
27	T	170	ASN	C-N-CA	6.71	129.65	120.46
21	N	638	ILE	O-C-N	6.70	128.37	121.87
16	I	423	VAL	CA-C-N	6.70	129.26	120.28
16	I	423	VAL	C-N-CA	6.70	129.26	120.28
14	G	182	HIS	CA-C-O	-6.70	113.94	120.97
3	3	100	VAL	N-CA-C	-6.70	98.84	108.48
18	K	311	ASN	N-CA-C	-6.70	103.57	113.61
21	N	157	ALA	CA-C-N	6.70	129.14	120.44
21	N	157	ALA	C-N-CA	6.70	129.14	120.44
21	N	433	THR	N-CA-C	-6.70	98.55	108.79
20	M	81	ASN	N-CA-C	-6.69	100.30	110.14
25	R	289	ILE	CA-C-O	-6.69	113.67	119.29
1	1	136	GLY	O-C-N	6.69	128.61	122.19
19	L	246	SER	O-C-N	6.69	127.34	121.39
22	O	384	MET	CA-C-N	6.69	129.25	120.28
22	O	384	MET	C-N-CA	6.69	129.25	120.28
18	K	136	SER	N-CA-C	-6.69	98.72	109.96
21	N	331	ALA	N-CA-C	6.69	118.57	111.28
33	Z	798	ARG	CA-C-N	6.69	131.88	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	Z	798	ARG	C-N-CA	6.69	131.88	120.72
12	E	56	SER	CA-C-N	6.68	126.37	119.82
12	E	56	SER	C-N-CA	6.68	126.37	119.82
29	V	211	LYS	CA-C-O	-6.68	113.46	120.55
26	S	471	LEU	CA-C-N	6.68	129.53	120.44
26	S	471	LEU	C-N-CA	6.68	129.53	120.44
33	Z	453	LEU	N-CA-C	-6.68	103.92	111.07
2	2	44	ALA	N-CA-C	-6.68	99.33	109.95
3	3	96	VAL	CA-C-O	-6.68	115.02	121.63
13	F	116	ALA	CA-C-N	6.68	129.12	120.44
13	F	116	ALA	C-N-CA	6.68	129.12	120.44
14	G	121	ALA	CA-C-O	6.68	127.50	120.42
1	1	131	SER	N-CA-C	6.68	119.39	111.71
14	G	167	GLY	CA-C-N	6.67	129.52	120.38
14	G	167	GLY	C-N-CA	6.67	129.52	120.38
3	3	41	PHE	CA-C-O	6.67	127.78	120.71
31	X	33	ILE	N-CA-C	-6.67	98.75	108.89
1	1	157	HIS	CA-C-N	6.67	129.11	120.44
1	1	157	HIS	C-N-CA	6.67	129.11	120.44
22	O	184	ASP	N-CA-C	-6.67	96.59	110.80
29	V	211	LYS	CA-C-N	6.67	129.51	120.44
29	V	211	LYS	C-N-CA	6.67	129.51	120.44
8	A	244	ARG	CA-C-N	6.67	129.21	120.28
8	A	244	ARG	C-N-CA	6.67	129.21	120.28
5	5	165	ALA	N-CA-C	6.66	118.54	111.28
8	A	126	GLN	CA-C-N	6.66	129.59	120.46
8	A	126	GLN	C-N-CA	6.66	129.59	120.46
15	H	259	CYS	CA-C-N	6.66	129.10	120.44
15	H	259	CYS	C-N-CA	6.66	129.10	120.44
30	W	130	LYS	CA-C-N	6.66	129.20	120.28
30	W	130	LYS	C-N-CA	6.66	129.20	120.28
16	I	161	GLN	CA-C-O	-6.66	114.50	121.55
5	5	210	VAL	CA-C-N	6.65	129.48	120.63
5	5	210	VAL	C-N-CA	6.65	129.48	120.63
26	S	380	CYS	CA-C-N	6.65	129.07	120.56
26	S	380	CYS	C-N-CA	6.65	129.07	120.56
17	J	382	PHE	O-C-N	-6.65	114.57	122.15
22	O	323	ASN	CA-C-N	6.65	131.20	120.30
22	O	323	ASN	C-N-CA	6.65	131.20	120.30
9	B	36	GLY	N-CA-C	-6.65	97.43	113.18
15	H	304	CYS	N-CA-C	6.65	118.62	108.52
24	Q	117	VAL	CA-C-O	6.64	128.21	121.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	26	GLU	CA-C-N	6.64	129.47	120.44
21	N	26	GLU	C-N-CA	6.64	129.47	120.44
21	N	142	GLU	CA-C-N	6.64	129.50	120.54
21	N	142	GLU	C-N-CA	6.64	129.50	120.54
33	Z	968	ASP	CA-C-N	6.64	129.72	120.29
33	Z	968	ASP	C-N-CA	6.64	129.72	120.29
1	1	25	TYR	CA-C-N	-6.64	114.18	122.48
1	1	25	TYR	C-N-CA	-6.64	114.18	122.48
21	N	317	SER	O-C-N	6.64	128.91	122.07
20	M	293	SER	CA-C-O	6.64	127.42	119.59
31	X	55	LYS	O-C-N	-6.64	114.00	121.43
8	A	136	PRO	CA-C-O	-6.64	113.39	122.15
12	E	218	GLN	CA-C-O	6.63	128.56	120.60
18	K	225	ALA	CA-C-O	-6.63	113.39	120.42
21	N	428	VAL	CA-C-N	6.63	129.17	120.28
21	N	428	VAL	C-N-CA	6.63	129.17	120.28
18	K	294	ARG	N-CA-C	6.63	118.51	111.28
14	G	197	LYS	CA-C-N	6.63	129.54	120.46
14	G	197	LYS	C-N-CA	6.63	129.54	120.46
11	D	57	THR	N-CA-C	-6.63	105.19	113.28
23	P	258	LYS	O-C-N	-6.63	114.48	120.71
3	3	187	VAL	N-CA-C	-6.62	98.93	108.53
23	P	67	ALA	O-C-N	-6.62	115.10	122.12
27	T	102	LYS	CA-C-N	6.62	129.15	120.28
27	T	102	LYS	C-N-CA	6.62	129.15	120.28
21	N	520	GLY	N-CA-C	6.62	120.91	112.83
8	A	16	ILE	O-C-N	-6.62	117.21	122.97
11	D	216	LYS	N-CA-C	-6.62	100.26	110.58
31	X	120	GLU	N-CA-C	6.61	118.15	111.07
18	K	57	GLU	CA-C-O	6.61	127.56	120.55
17	J	168	VAL	CA-C-N	6.61	129.67	120.29
17	J	168	VAL	C-N-CA	6.61	129.67	120.29
7	7	45	ILE	O-C-N	6.61	130.34	123.20
9	B	19	GLY	CA-C-N	6.61	129.43	120.38
9	B	19	GLY	C-N-CA	6.61	129.43	120.38
10	C	206	LEU	N-CA-C	-6.61	98.21	109.24
11	D	235	GLN	N-CA-C	6.60	119.30	111.71
11	D	179	TYR	N-CA-C	-6.60	99.00	109.23
9	B	61	LEU	O-C-N	6.60	131.41	123.36
24	Q	255	TYR	N-CA-C	-6.60	104.01	111.14
3	3	68	LYS	CA-C-O	6.60	127.56	120.24
21	N	620	GLY	O-C-N	6.60	129.80	122.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	602	VAL	CB-CA-C	-6.60	107.36	114.35
22	O	70	TYR	CA-C-N	6.59	129.12	120.28
22	O	70	TYR	C-N-CA	6.59	129.12	120.28
26	S	209	ILE	O-C-N	6.59	128.37	121.91
9	B	120	GLU	N-CA-C	6.59	118.46	111.28
20	M	259	GLY	CA-C-N	6.59	129.01	120.44
20	M	259	GLY	C-N-CA	6.59	129.01	120.44
4	4	75	SER	CA-C-N	6.59	126.36	119.05
4	4	75	SER	C-N-CA	6.59	126.36	119.05
11	D	35	GLY	N-CA-C	-6.58	97.58	113.18
19	L	234	ALA	N-CA-C	6.58	118.46	111.28
16	I	384	LYS	CA-C-N	6.58	132.87	122.60
16	I	384	LYS	C-N-CA	6.58	132.87	122.60
21	N	57	ASP	CA-C-N	6.58	129.39	120.38
21	N	57	ASP	C-N-CA	6.58	129.39	120.38
26	S	419	VAL	N-CA-C	-6.58	104.35	110.53
27	T	138	ASP	O-C-N	6.58	129.09	122.12
9	B	49	LYS	N-CA-C	-6.57	98.19	108.90
31	X	54	GLU	N-CA-C	-6.57	96.80	110.80
33	Z	216	GLY	O-C-N	6.57	131.24	122.70
14	G	223	THR	N-CA-C	-6.57	104.44	114.16
16	I	195	LYS	CA-C-O	-6.56	113.93	120.82
11	D	197	ARG	O-C-N	6.56	129.08	122.12
16	I	396	CYS	N-CA-C	6.56	118.43	111.28
6	6	69	ASP	CA-C-O	-6.56	111.17	119.31
13	F	51	ARG	O-C-N	-6.56	115.59	123.27
1	1	134	ILE	CA-C-N	6.56	129.60	120.29
1	1	134	ILE	C-N-CA	6.56	129.60	120.29
21	N	440	ASP	O-C-N	6.55	129.17	122.09
21	N	703	GLN	N-CA-C	6.55	118.08	111.07
8	A	251	GLN	N-CA-C	-6.55	99.50	109.85
29	V	252	SER	N-CA-C	6.55	120.13	111.75
33	Z	112	LYS	N-CA-C	6.55	118.42	111.28
10	C	115	LEU	CA-C-O	6.55	127.49	120.55
22	O	169	ASN	CA-C-N	6.54	129.05	120.28
22	O	169	ASN	C-N-CA	6.54	129.05	120.28
6	6	136	LEU	N-CA-C	-6.54	104.33	112.90
17	J	33	LYS	N-CA-C	6.54	119.23	111.71
21	N	75	TYR	CA-C-N	6.54	129.04	120.28
21	N	75	TYR	C-N-CA	6.54	129.04	120.28
21	N	192	LEU	CA-C-O	-6.54	113.95	120.82
11	D	109	LEU	CA-C-O	-6.54	113.62	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	F	63	ILE	N-CA-C	-6.54	98.96	108.11
11	D	64	VAL	N-CA-C	-6.53	98.33	107.80
21	N	298	TYR	CA-C-N	6.53	129.57	120.29
21	N	298	TYR	C-N-CA	6.53	129.57	120.29
23	P	203	ILE	N-CA-C	6.53	119.22	111.05
12	E	63	SER	N-CA-C	-6.53	104.92	114.39
23	P	208	PHE	O-C-N	6.53	129.04	122.12
2	2	162	GLY	CA-C-N	6.53	128.78	120.56
2	2	162	GLY	C-N-CA	6.53	128.78	120.56
20	M	284	ASP	O-C-N	6.52	129.52	122.34
13	F	20	PHE	CA-C-N	6.52	129.67	120.28
13	F	20	PHE	C-N-CA	6.52	129.67	120.28
24	Q	90	LYS	CA-C-N	6.52	129.55	120.29
24	Q	90	LYS	C-N-CA	6.52	129.55	120.29
12	E	144	ILE	N-CA-C	-6.52	98.98	108.11
19	L	416	MET	CA-C-N	6.52	129.55	120.29
19	L	416	MET	C-N-CA	6.52	129.55	120.29
26	S	339	GLN	CA-C-N	6.51	129.01	120.28
26	S	339	GLN	C-N-CA	6.51	129.01	120.28
33	Z	775	MET	N-CA-C	6.51	118.46	111.36
16	I	194	ILE	CA-C-N	6.51	128.91	120.44
16	I	194	ILE	C-N-CA	6.51	128.91	120.44
22	O	42	SER	N-CA-C	6.51	124.67	110.80
2	2	37	ILE	CA-C-N	6.51	131.45	122.07
2	2	37	ILE	C-N-CA	6.51	131.45	122.07
13	F	2	PHE	CA-C-N	6.51	129.24	120.65
13	F	2	PHE	C-N-CA	6.51	129.24	120.65
17	J	49	ASN	CA-CB-CG	-6.51	106.09	112.60
29	V	146	SER	N-CA-C	-6.51	104.97	113.17
33	Z	283	ALA	CA-C-N	6.51	129.53	120.29
33	Z	283	ALA	C-N-CA	6.51	129.53	120.29
8	A	166	TYR	CA-C-N	6.51	128.90	120.44
8	A	166	TYR	C-N-CA	6.51	128.90	120.44
8	A	211	ILE	CA-C-N	6.51	129.29	120.38
8	A	211	ILE	C-N-CA	6.51	129.29	120.38
14	G	6	GLY	CA-C-O	6.50	127.07	119.13
24	Q	184	VAL	CA-C-O	-6.50	114.28	121.17
9	B	53	SER	O-C-N	-6.50	116.76	121.83
33	Z	266	LYS	N-CA-C	6.50	119.36	111.82
5	5	161	ILE	CA-C-N	6.50	128.89	120.44
5	5	161	ILE	C-N-CA	6.50	128.89	120.44
15	H	200	VAL	N-CA-C	-6.50	99.10	108.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	T	55	LEU	N-CA-C	6.50	118.37	111.28
4	4	44	SER	O-C-N	-6.50	115.69	123.03
13	F	227	GLY	CA-C-N	6.50	130.57	120.82
13	F	227	GLY	C-N-CA	6.50	130.57	120.82
21	N	754	THR	CA-C-N	6.50	126.26	119.76
21	N	754	THR	C-N-CA	6.50	126.26	119.76
33	Z	84	ALA	CA-C-O	6.50	129.80	120.51
13	F	215	ILE	CA-C-O	-6.50	114.39	121.28
28	U	301	ILE	CA-C-N	6.50	128.89	120.44
28	U	301	ILE	C-N-CA	6.50	128.89	120.44
23	P	373	GLU	CA-C-O	6.50	127.44	120.10
16	I	352	ASN	N-CA-C	-6.49	101.35	110.31
1	1	106	ASN	CA-C-O	6.49	126.19	119.05
33	Z	588	ILE	O-C-N	6.49	128.16	121.87
10	C	18	ARG	CA-C-N	6.49	129.92	120.71
10	C	18	ARG	C-N-CA	6.49	129.92	120.71
14	G	106	ILE	N-CA-C	6.49	114.21	108.63
21	N	574	VAL	CA-C-N	6.49	128.97	120.28
21	N	574	VAL	C-N-CA	6.49	128.97	120.28
25	R	251	THR	CA-C-N	6.49	128.87	120.44
25	R	251	THR	C-N-CA	6.49	128.87	120.44
17	J	39	GLU	CA-C-N	6.49	128.97	120.28
17	J	39	GLU	C-N-CA	6.49	128.97	120.28
26	S	191	HIS	CA-C-O	6.49	127.36	119.38
3	3	55	ASN	N-CA-C	-6.48	104.13	111.07
21	N	12	LEU	CA-C-O	6.48	127.36	119.38
27	T	10	SER	N-CA-C	6.48	118.35	111.28
21	N	742	TRP	CA-C-O	6.48	128.08	120.43
30	W	165	GLN	CA-C-N	6.48	128.97	120.28
30	W	165	GLN	C-N-CA	6.48	128.97	120.28
12	E	206	GLN	N-CA-C	6.48	118.88	111.11
21	N	280	GLN	N-CA-C	-6.48	105.53	113.50
5	5	99	THR	O-C-N	-6.48	115.33	123.17
30	W	124	GLU	CA-C-N	6.48	128.96	120.28
30	W	124	GLU	C-N-CA	6.48	128.96	120.28
8	A	185	HIS	N-CA-C	6.47	118.00	111.07
12	E	152	GLY	CA-C-N	6.47	130.01	120.95
12	E	152	GLY	C-N-CA	6.47	130.01	120.95
20	M	400	MET	CA-C-O	6.47	127.41	120.10
21	N	731	VAL	CA-C-N	6.47	127.12	119.94
21	N	731	VAL	C-N-CA	6.47	127.12	119.94
17	J	368	TYR	CA-C-O	6.47	127.28	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	U	110	PHE	CA-C-N	6.47	129.83	120.38
28	U	110	PHE	C-N-CA	6.47	129.83	120.38
24	Q	252	HIS	N-CA-C	-6.47	105.39	113.28
20	M	262	LEU	CA-C-N	6.46	129.32	120.46
20	M	262	LEU	C-N-CA	6.46	129.32	120.46
27	T	44	LEU	N-CA-C	-6.46	105.40	113.55
29	V	286	GLU	CA-C-N	6.46	128.84	120.44
29	V	286	GLU	C-N-CA	6.46	128.84	120.44
33	Z	226	GLU	CA-C-O	6.46	127.27	120.42
9	B	168	SER	N-CA-C	6.46	118.12	111.14
15	H	73	ASP	CA-C-N	6.46	130.58	121.02
15	H	73	ASP	C-N-CA	6.46	130.58	121.02
26	S	159	ASN	CA-C-N	6.46	128.94	120.28
26	S	159	ASN	C-N-CA	6.46	128.94	120.28
17	J	161	LYS	CA-C-O	6.46	127.60	120.82
18	K	72	GLN	OE1-CD-NE2	-6.46	116.14	122.60
3	3	74	GLU	CA-C-N	6.46	126.68	119.32
3	3	74	GLU	C-N-CA	6.46	126.68	119.32
20	M	320	ARG	N-CA-C	-6.46	105.03	113.17
25	R	237	THR	N-CA-C	-6.46	104.61	114.16
23	P	132	VAL	N-CA-C	-6.45	95.12	106.61
8	A	177	GLU	CA-C-N	6.45	128.69	120.56
8	A	177	GLU	C-N-CA	6.45	128.69	120.56
13	F	13	PHE	N-CA-C	-6.45	99.35	108.96
21	N	494	LYS	N-CA-C	-6.45	100.77	108.25
33	Z	580	GLN	CA-C-N	6.45	131.35	120.64
33	Z	580	GLN	C-N-CA	6.45	131.35	120.64
19	L	188	GLU	N-CA-CB	-6.45	100.72	110.07
18	K	135	MET	N-CA-C	-6.45	98.93	108.79
3	3	182	LYS	N-CA-C	-6.45	99.95	109.81
16	I	94	LYS	CA-C-O	-6.45	114.05	120.82
10	C	121	GLY	CA-C-O	-6.44	114.11	120.75
14	G	20	ASN	CA-C-N	6.44	129.21	120.38
14	G	20	ASN	C-N-CA	6.44	129.21	120.38
30	W	50	GLY	N-CA-C	-6.44	100.36	111.57
5	5	83	LEU	N-CA-C	6.44	117.96	111.07
1	1	65	LEU	N-CA-C	-6.43	103.77	111.69
22	O	199	LEU	CA-C-N	6.43	127.76	119.78
22	O	199	LEU	C-N-CA	6.43	127.76	119.78
32	Y	76	GLU	O-C-N	6.43	129.04	122.09
33	Z	605	SER	O-C-N	6.43	128.69	122.07
24	Q	286	TYR	N-CA-C	-6.43	105.74	113.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	E	143	LEU	N-CA-C	-6.43	98.04	108.52
21	N	514	THR	CA-C-N	6.43	129.42	120.29
21	N	514	THR	C-N-CA	6.43	129.42	120.29
12	E	168	ASN	N-CA-C	-6.43	106.02	114.31
15	H	323	ALA	O-C-N	-6.43	114.44	122.35
18	K	96	ILE	CA-C-N	6.43	130.26	122.03
18	K	96	ILE	C-N-CA	6.43	130.26	122.03
24	Q	88	PHE	O-C-N	6.43	127.84	120.58
16	I	91	GLU	CA-C-O	6.42	127.36	120.55
25	R	154	LEU	CA-C-O	-6.42	113.61	120.42
25	R	155	GLY	CA-C-N	6.42	129.21	120.54
25	R	155	GLY	C-N-CA	6.42	129.21	120.54
33	Z	832	ARG	CA-C-O	6.42	127.36	120.55
7	7	127	VAL	N-CA-C	-6.42	101.28	109.30
4	4	104	GLY	CA-C-N	6.42	127.96	121.35
4	4	104	GLY	C-N-CA	6.42	127.96	121.35
31	X	27	ILE	CA-C-N	6.42	127.86	119.84
31	X	27	ILE	C-N-CA	6.42	127.86	119.84
33	Z	452	LEU	N-CA-C	6.42	118.27	111.28
19	L	186	LEU	O-C-N	6.42	130.41	122.20
12	E	181	ALA	CA-C-N	6.41	128.87	120.28
12	E	181	ALA	C-N-CA	6.41	128.87	120.28
5	5	24	ASN	CA-C-N	6.41	129.92	120.95
5	5	24	ASN	C-N-CA	6.41	129.92	120.95
5	5	34	VAL	N-CA-C	-6.41	99.14	108.11
21	N	675	VAL	CA-C-N	6.41	128.77	120.44
21	N	675	VAL	C-N-CA	6.41	128.77	120.44
33	Z	985	LYS	CA-C-N	6.41	129.80	120.51
33	Z	985	LYS	C-N-CA	6.41	129.80	120.51
28	U	188	ILE	CA-C-N	6.41	128.87	120.28
28	U	188	ILE	C-N-CA	6.41	128.87	120.28
14	G	129	ARG	CA-C-N	6.41	127.85	119.84
14	G	129	ARG	C-N-CA	6.41	127.85	119.84
20	M	198	VAL	O-C-N	6.40	128.43	121.83
24	Q	188	LEU	CA-C-N	6.40	133.77	121.54
24	Q	188	LEU	C-N-CA	6.40	133.77	121.54
33	Z	265	LEU	CA-C-O	-6.40	114.10	120.82
1	1	171	GLY	CA-C-N	6.40	129.25	120.35
1	1	171	GLY	C-N-CA	6.40	129.25	120.35
19	L	226	THR	CA-C-O	6.40	127.05	119.56
22	O	292	CYS	CA-C-O	-6.40	113.63	120.42
22	O	60	ARG	CA-C-N	6.40	130.04	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	60	ARG	C-N-CA	6.40	130.04	120.31
1	1	129	SER	N-CA-C	-6.40	105.63	113.50
19	L	296	SER	O-C-N	6.40	128.44	121.85
33	Z	400	ILE	CA-C-N	6.40	128.62	120.56
33	Z	400	ILE	C-N-CA	6.40	128.62	120.56
3	3	150	GLU	CA-C-N	6.39	125.89	119.24
3	3	150	GLU	C-N-CA	6.39	125.89	119.24
33	Z	429	ASN	CA-C-N	6.39	128.75	120.44
33	Z	429	ASN	C-N-CA	6.39	128.75	120.44
12	E	200	VAL	O-C-N	6.39	128.17	121.91
26	S	332	PHE	CA-C-N	6.39	131.39	120.72
26	S	332	PHE	C-N-CA	6.39	131.39	120.72
8	A	81	MET	N-CA-C	-6.39	97.38	108.69
17	J	320	SER	CA-C-N	6.39	128.61	120.56
17	J	320	SER	C-N-CA	6.39	128.61	120.56
29	V	68	VAL	N-CA-C	-6.39	99.28	108.42
1	1	59	VAL	O-C-N	6.39	128.54	121.90
16	I	198	VAL	N-CA-C	-6.39	106.07	111.56
20	M	329	ARG	N-CA-C	-6.39	97.83	108.75
27	T	205	ILE	CA-C-O	-6.39	113.74	120.57
23	P	282	HIS	CA-C-O	-6.38	113.78	120.55
12	E	59	LEU	CA-C-N	6.38	129.93	120.87
12	E	59	LEU	C-N-CA	6.38	129.93	120.87
26	S	204	ASP	CA-C-N	6.38	129.12	120.44
26	S	204	ASP	C-N-CA	6.38	129.12	120.44
27	T	200	LEU	O-C-N	-6.38	115.91	121.71
12	E	98	THR	N-CA-C	6.38	118.23	111.28
21	N	364	LYS	N-CA-C	-6.38	104.41	111.36
28	U	114	THR	N-CA-C	-6.38	99.25	109.96
20	M	82	VAL	CA-C-O	-6.38	113.60	120.36
33	Z	488	ALA	CA-C-N	6.38	128.73	120.44
33	Z	488	ALA	C-N-CA	6.38	128.73	120.44
20	M	335	PRO	CA-C-N	6.37	130.00	120.31
20	M	335	PRO	C-N-CA	6.37	130.00	120.31
22	O	164	PRO	O-C-N	6.37	130.36	122.71
1	1	173	ILE	N-CA-C	-6.37	99.25	108.17
11	D	225	SER	CA-C-N	6.37	129.11	120.38
11	D	225	SER	C-N-CA	6.37	129.11	120.38
13	F	29	ILE	CA-C-N	6.37	130.80	120.60
13	F	29	ILE	C-N-CA	6.37	130.80	120.60
22	O	369	ARG	CA-C-N	6.37	129.14	120.54
22	O	369	ARG	C-N-CA	6.37	129.14	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	M	192	GLU	CA-C-N	6.37	129.10	120.44
20	M	192	GLU	C-N-CA	6.37	129.10	120.44
18	K	189	GLU	CA-C-N	6.37	128.05	120.09
18	K	189	GLU	C-N-CA	6.37	128.05	120.09
23	P	129	LYS	N-CA-C	-6.37	106.73	114.75
1	1	21	THR	N-CA-C	-6.36	99.37	109.23
3	3	46	GLY	CA-C-N	6.36	129.75	120.71
3	3	46	GLY	C-N-CA	6.36	129.75	120.71
17	J	137	MET	CA-C-N	6.36	132.28	120.95
17	J	137	MET	C-N-CA	6.36	132.28	120.95
21	N	20	VAL	CA-C-N	6.36	128.81	120.28
21	N	20	VAL	C-N-CA	6.36	128.81	120.28
21	N	36	TRP	N-CA-C	6.36	119.03	111.71
22	O	137	TYR	CA-C-N	6.36	128.71	120.44
22	O	137	TYR	C-N-CA	6.36	128.71	120.44
29	V	123	VAL	N-CA-C	6.36	117.11	110.62
16	I	153	THR	CA-C-N	6.36	133.69	121.54
16	I	153	THR	C-N-CA	6.36	133.69	121.54
23	P	175	GLU	CA-C-O	6.36	127.16	120.42
21	N	494	LYS	O-C-N	-6.36	117.01	121.65
12	E	196	ALA	CA-C-O	-6.36	114.15	120.82
24	Q	256	GLU	CA-C-N	6.36	128.70	120.44
24	Q	256	GLU	C-N-CA	6.36	128.70	120.44
31	X	72	GLU	N-CA-C	-6.36	104.31	113.21
18	K	292	VAL	CA-C-N	6.35	128.79	120.28
18	K	292	VAL	C-N-CA	6.35	128.79	120.28
19	L	333	LEU	O-C-N	-6.35	115.16	123.16
31	X	53	THR	N-CA-C	-6.35	97.27	110.80
21	N	672	ASN	N-CA-C	-6.35	99.74	109.64
11	D	161	ALA	N-CA-C	-6.35	99.02	108.99
29	V	235	GLU	O-C-N	-6.35	115.29	122.08
18	K	327	ALA	CA-C-N	6.34	129.07	120.44
18	K	327	ALA	C-N-CA	6.34	129.07	120.44
26	S	182	LYS	O-C-N	-6.34	115.49	122.09
26	S	275	TYR	CA-C-N	6.34	129.30	120.29
26	S	275	TYR	C-N-CA	6.34	129.30	120.29
33	Z	107	THR	N-CA-C	-6.34	105.29	113.16
20	M	293	SER	O-C-N	-6.34	114.70	122.25
27	T	255	GLN	CA-C-N	6.34	129.10	120.54
27	T	255	GLN	C-N-CA	6.34	129.10	120.54
22	O	213	LEU	N-CA-C	6.34	118.27	111.36
25	R	214	TYR	CA-C-N	6.34	127.02	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	R	214	TYR	C-N-CA	6.34	127.02	119.98
33	Z	899	GLN	N-CA-C	6.34	119.00	111.71
1	1	56	ALA	CA-C-N	6.34	128.77	120.28
1	1	56	ALA	C-N-CA	6.34	128.77	120.28
21	N	690	HIS	CA-C-O	6.34	126.76	119.35
23	P	424	GLU	O-C-N	-6.34	115.40	122.12
31	X	20	ASP	N-CA-C	-6.34	99.44	109.07
33	Z	751	ASP	N-CA-C	-6.34	104.45	111.36
5	5	155	TYR	N-CA-C	6.33	118.18	111.28
17	J	375	ILE	N-CA-C	-6.33	105.43	113.22
26	S	198	SER	CA-C-N	6.33	131.14	122.34
26	S	198	SER	C-N-CA	6.33	131.14	122.34
16	I	115	ASP	CA-C-N	6.33	131.86	122.74
16	I	115	ASP	C-N-CA	6.33	131.86	122.74
26	S	393	ARG	CA-C-N	6.33	129.13	120.46
26	S	393	ARG	C-N-CA	6.33	129.13	120.46
7	7	-1	GLY	N-CA-C	-6.33	100.11	111.19
27	T	128	TYR	CA-C-O	6.33	127.26	120.55
18	K	155	ASP	O-C-N	-6.33	115.17	122.89
28	U	261	LEU	N-CA-C	6.33	118.18	111.28
12	E	242	GLU	CA-C-N	6.33	129.04	120.44
12	E	242	GLU	C-N-CA	6.33	129.04	120.44
14	G	153	SER	CA-C-O	-6.33	111.94	119.15
27	T	18	GLY	CA-C-N	6.33	133.62	121.54
27	T	18	GLY	C-N-CA	6.33	133.62	121.54
21	N	29	ASN	CA-C-O	-6.33	113.80	120.63
28	U	76	MET	N-CA-C	-6.32	103.91	111.69
21	N	318	LYS	CA-C-N	6.32	132.20	121.14
21	N	318	LYS	C-N-CA	6.32	132.20	121.14
4	4	103	ILE	N-CA-C	-6.32	98.64	107.80
17	J	366	GLY	CA-C-O	-6.32	113.96	120.66
17	J	198	LEU	CA-C-N	6.32	128.65	120.44
17	J	198	LEU	C-N-CA	6.32	128.65	120.44
20	M	387	ASN	CA-C-N	6.32	126.99	119.98
20	M	387	ASN	C-N-CA	6.32	126.99	119.98
25	R	309	LEU	CA-C-N	6.32	129.03	120.44
25	R	309	LEU	C-N-CA	6.32	129.03	120.44
9	B	43	VAL	N-CA-C	-6.32	99.10	108.45
17	J	152	GLY	N-CA-C	-6.32	106.53	115.43
6	6	54	ALA	N-CA-C	6.31	118.16	111.28
12	E	151	ASP	CA-C-N	6.31	130.55	120.07
12	E	151	ASP	C-N-CA	6.31	130.55	120.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	M	400	MET	CA-C-N	6.31	129.38	120.42
20	M	400	MET	C-N-CA	6.31	129.38	120.42
22	O	308	LEU	N-CA-C	-6.31	98.33	109.06
27	T	8	THR	N-CA-C	6.31	117.82	111.07
24	Q	98	LYS	CA-C-O	-6.31	113.73	120.42
1	1	113	ILE	N-CA-C	-6.31	101.91	108.15
17	J	288	ILE	N-CA-C	-6.30	98.44	107.77
19	L	129	VAL	CA-C-N	-6.30	116.56	122.17
19	L	129	VAL	C-N-CA	-6.30	116.56	122.17
14	G	153	SER	N-CA-C	-6.30	105.63	113.38
20	M	294	GLU	CA-C-N	6.30	129.58	120.38
20	M	294	GLU	C-N-CA	6.30	129.58	120.38
12	E	147	HIS	N-CA-C	-6.30	98.35	109.06
26	S	218	LEU	CA-C-N	6.30	128.63	120.44
26	S	218	LEU	C-N-CA	6.30	128.63	120.44
15	H	373	ARG	CA-C-O	-6.30	113.42	120.54
21	N	84	ALA	CA-C-N	6.30	129.88	120.31
21	N	84	ALA	C-N-CA	6.30	129.88	120.31
28	U	140	ILE	O-C-N	-6.30	117.49	122.97
33	Z	885	ALA	CA-C-N	6.29	129.36	120.42
33	Z	885	ALA	C-N-CA	6.29	129.36	120.42
18	K	315	ILE	N-CA-C	-6.29	99.06	108.12
21	N	533	ASP	CA-C-N	6.29	128.62	120.44
21	N	533	ASP	C-N-CA	6.29	128.62	120.44
19	L	195	GLU	O-C-N	-6.29	113.78	122.46
21	N	12	LEU	N-CA-C	6.29	120.21	112.54
23	P	63	VAL	N-CA-C	6.29	116.44	110.53
9	B	23	TYR	CA-C-O	6.29	127.22	120.55
14	G	68	VAL	CA-C-N	6.29	131.73	122.99
14	G	68	VAL	C-N-CA	6.29	131.73	122.99
20	M	375	ASN	CA-C-N	6.29	128.71	120.28
20	M	375	ASN	C-N-CA	6.29	128.71	120.28
21	N	875	LEU	CA-C-N	6.29	126.03	119.05
21	N	875	LEU	C-N-CA	6.29	126.03	119.05
24	Q	84	TYR	N-CA-C	-6.29	104.34	111.07
18	K	192	LEU	CA-C-O	6.29	127.17	120.70
21	N	479	GLU	CA-C-N	6.29	128.61	120.44
21	N	479	GLU	C-N-CA	6.29	128.61	120.44
23	P	241	LEU	O-C-N	-6.29	114.87	122.22
27	T	191	LYS	O-C-N	-6.29	114.98	122.15
1	1	162	ALA	CA-C-N	6.28	129.06	120.46
1	1	162	ALA	C-N-CA	6.28	129.06	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	J	322	ALA	O-C-N	-6.28	115.46	122.12
23	P	92	SER	CA-C-N	6.28	128.47	120.56
23	P	92	SER	C-N-CA	6.28	128.47	120.56
30	W	42	ASN	CA-C-N	6.28	129.21	120.29
30	W	42	ASN	C-N-CA	6.28	129.21	120.29
18	K	333	ARG	N-CA-C	-6.28	97.42	110.80
33	Z	508	LEU	CA-C-O	6.28	127.17	120.70
33	Z	744	ALA	CA-C-O	6.28	127.41	120.82
3	3	136	GLN	CA-C-N	6.28	128.69	120.28
3	3	136	GLN	C-N-CA	6.28	128.69	120.28
23	P	213	TYR	N-CA-C	-6.28	98.76	109.24
5	5	172	GLY	O-C-N	-6.28	115.10	122.38
2	2	199	LYS	N-CA-C	-6.27	99.59	109.50
3	3	147	PRO	N-CA-C	6.27	122.16	111.68
33	Z	875	LYS	CA-C-N	6.27	128.46	120.56
33	Z	875	LYS	C-N-CA	6.27	128.46	120.56
4	4	38	SER	N-CA-C	-6.27	102.58	108.22
29	V	49	VAL	CA-C-O	-6.27	113.65	120.67
12	E	179	ALA	CA-C-O	-6.27	113.90	120.55
22	O	31	LYS	CA-C-N	6.27	129.19	120.29
22	O	31	LYS	C-N-CA	6.27	129.19	120.29
23	P	423	LEU	O-C-N	6.27	128.53	122.07
33	Z	305	VAL	N-CA-C	6.27	117.01	110.62
33	Z	429	ASN	N-CA-C	-6.27	99.78	109.24
26	S	391	GLY	CA-C-O	-6.26	114.30	120.75
22	O	243	VAL	CA-C-N	6.26	133.04	121.52
22	O	243	VAL	C-N-CA	6.26	133.04	121.52
5	5	203	GLU	N-CA-C	6.26	118.18	111.36
9	B	152	PRO	CA-C-N	6.26	131.32	120.68
9	B	152	PRO	C-N-CA	6.26	131.32	120.68
16	I	115	ASP	N-CA-C	-6.26	104.95	112.59
7	7	134	LEU	N-CA-C	-6.26	98.42	109.06
23	P	258	LYS	CA-C-O	6.26	124.41	118.34
4	4	19	ALA	CA-C-N	6.26	131.86	122.98
4	4	19	ALA	C-N-CA	6.26	131.86	122.98
16	I	362	LEU	O-C-N	6.26	129.28	122.15
17	J	25	GLN	N-CA-C	-6.26	104.46	111.28
17	J	354	SER	CA-C-N	6.26	126.92	119.98
17	J	354	SER	C-N-CA	6.26	126.92	119.98
25	R	338	TYR	CA-C-N	6.26	129.17	120.29
25	R	338	TYR	C-N-CA	6.26	129.17	120.29
30	W	156	GLU	CA-C-N	6.26	128.66	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	W	156	GLU	C-N-CA	6.26	128.66	120.28
19	L	307	GLU	O-C-N	-6.25	115.02	122.15
23	P	241	LEU	N-CA-CB	6.25	119.85	110.22
16	I	414	GLU	N-CA-C	6.25	118.10	111.28
10	C	80	LEU	CA-C-N	6.25	128.66	120.28
10	C	80	LEU	C-N-CA	6.25	128.66	120.28
19	L	305	LEU	CA-C-O	-6.25	113.79	120.42
22	O	362	GLN	O-C-N	6.25	128.75	122.12
23	P	380	ILE	N-CA-C	-6.25	104.24	110.62
21	N	140	MET	CA-C-O	6.25	127.17	120.55
20	M	264	ARG	CA-C-N	6.25	129.81	120.31
20	M	264	ARG	C-N-CA	6.25	129.81	120.31
29	V	292	ILE	CA-CB-CG2	6.25	121.12	110.50
33	Z	598	ALA	N-CA-C	6.25	118.09	111.28
3	3	26	GLY	CA-C-O	-6.25	115.11	120.98
9	B	123	GLN	CA-C-O	-6.25	114.27	120.70
28	U	190	LEU	N-CA-C	6.25	117.75	111.07
31	X	38	ASN	CA-C-N	6.25	132.65	121.66
31	X	38	ASN	C-N-CA	6.25	132.65	121.66
33	Z	70	ALA	CA-C-N	6.25	129.16	120.29
33	Z	70	ALA	C-N-CA	6.25	129.16	120.29
5	5	191	HIS	CA-C-N	6.25	129.62	120.82
5	5	191	HIS	C-N-CA	6.25	129.62	120.82
28	U	164	GLU	CA-C-N	6.24	129.50	120.38
28	U	164	GLU	C-N-CA	6.24	129.50	120.38
21	N	17	GLN	CA-C-N	6.24	128.65	120.28
21	N	17	GLN	C-N-CA	6.24	128.65	120.28
4	4	13	ILE	N-CA-C	-6.24	99.44	108.17
11	D	234	THR	O-C-N	6.24	128.50	122.07
19	L	186	LEU	CA-C-O	-6.24	113.00	120.55
3	3	152	GLU	N-CA-C	6.24	118.08	111.28
15	H	242	PRO	CA-C-O	-6.24	115.80	120.73
12	E	200	VAL	N-CA-C	6.24	116.41	110.42
18	K	190	LEU	CA-C-N	6.24	125.80	119.19
18	K	190	LEU	C-N-CA	6.24	125.80	119.19
12	E	243	LEU	N-CA-C	-6.23	104.41	111.14
20	M	207	PHE	O-C-N	-6.23	115.51	122.12
16	I	258	GLY	O-C-N	-6.23	115.61	122.65
24	Q	269	LYS	N-CA-C	6.23	118.07	111.28
8	A	26	TYR	O-C-N	6.23	128.72	122.12
15	H	315	GLY	CA-C-N	6.23	133.62	121.41
15	H	315	GLY	C-N-CA	6.23	133.62	121.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	W	116	SER	O-C-N	-6.23	117.46	121.88
33	Z	986	ASN	CA-C-O	-6.23	113.98	120.02
12	E	239	LEU	N-CA-C	6.22	118.06	111.28
17	J	36	SER	N-CA-C	6.22	118.06	111.28
26	S	436	ILE	N-CA-C	-6.22	99.24	108.45
6	6	175	VAL	CA-C-N	6.22	129.12	120.29
6	6	175	VAL	C-N-CA	6.22	129.12	120.29
21	N	207	LEU	O-C-N	-6.22	115.66	122.07
33	Z	977	ILE	CA-C-N	6.22	130.15	120.75
33	Z	977	ILE	C-N-CA	6.22	130.15	120.75
4	4	59	ILE	N-CA-C	6.22	117.00	110.72
10	C	60	ASP	N-CA-C	-6.22	105.27	112.92
29	V	57	PHE	N-CA-C	-6.22	99.52	109.96
18	K	323	THR	N-CA-C	-6.21	104.87	112.88
21	N	137	PHE	O-C-N	-6.21	115.53	122.12
7	7	11	GLY	CA-C-O	6.21	128.03	121.08
16	I	397	THR	N-CA-C	6.21	118.13	111.36
20	M	48	LEU	CA-C-N	6.21	128.60	120.28
20	M	48	LEU	C-N-CA	6.21	128.60	120.28
21	N	330	THR	N-CA-C	-6.21	104.51	111.28
7	7	204	LEU	O-C-N	-6.21	115.77	122.85
13	F	204	GLU	CA-C-N	6.21	131.36	120.87
13	F	204	GLU	C-N-CA	6.21	131.36	120.87
23	P	45	LYS	CA-C-N	6.21	128.88	120.44
23	P	45	LYS	C-N-CA	6.21	128.88	120.44
7	7	157	ILE	CA-C-N	6.21	125.90	119.82
7	7	157	ILE	C-N-CA	6.21	125.90	119.82
8	A	209	HIS	CA-C-N	6.21	129.10	120.29
8	A	209	HIS	C-N-CA	6.21	129.10	120.29
21	N	28	ILE	CA-C-N	6.20	128.88	120.38
21	N	28	ILE	C-N-CA	6.20	128.88	120.38
24	Q	417	GLY	O-C-N	6.20	128.27	122.13
30	W	80	GLN	CA-C-O	-6.20	114.21	121.16
33	Z	894	MET	CA-C-N	6.20	133.39	121.54
33	Z	894	MET	C-N-CA	6.20	133.39	121.54
11	D	71	VAL	N-CA-C	-6.20	99.27	108.45
18	K	63	LEU	CA-C-N	6.20	128.59	120.28
18	K	63	LEU	C-N-CA	6.20	128.59	120.28
23	P	132	VAL	CB-CA-C	6.20	117.97	111.09
29	V	203	TYR	CA-C-N	6.20	133.38	121.54
29	V	203	TYR	C-N-CA	6.20	133.38	121.54
33	Z	313	ILE	CA-C-O	6.20	127.42	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	5	24	ASN	N-CA-C	-6.20	104.31	113.61
11	D	135	ILE	N-CA-C	-6.20	99.43	108.11
20	M	243	PHE	N-CA-C	-6.20	99.17	109.46
33	Z	614	VAL	CA-C-N	6.19	128.58	120.28
33	Z	614	VAL	C-N-CA	6.19	128.58	120.28
21	N	441	VAL	O-C-N	-6.19	115.86	121.87
22	O	106	PHE	CA-C-N	6.19	128.58	120.28
22	O	106	PHE	C-N-CA	6.19	128.58	120.28
9	B	68	THR	CA-C-O	-6.19	111.68	120.16
6	6	117	ASP	O-C-N	-6.19	115.11	120.99
20	M	429	SER	CA-C-O	6.19	127.91	121.10
4	4	180	VAL	N-CA-C	-6.18	99.58	108.48
10	C	69	LEU	N-CA-C	-6.18	104.80	112.90
12	E	29	GLU	CA-C-N	6.18	129.71	120.31
12	E	29	GLU	C-N-CA	6.18	129.71	120.31
15	H	294	LEU	CA-C-O	-6.18	114.33	120.82
22	O	98	TYR	CA-C-N	6.18	128.48	120.44
22	O	98	TYR	C-N-CA	6.18	128.48	120.44
25	R	144	ILE	O-C-N	-6.18	114.81	121.80
33	Z	403	ASN	CA-C-N	6.18	129.07	120.29
33	Z	403	ASN	C-N-CA	6.18	129.07	120.29
6	6	48	PHE	CA-C-N	6.18	128.56	120.28
6	6	48	PHE	C-N-CA	6.18	128.56	120.28
7	7	109	ALA	N-CA-C	-6.18	99.32	109.40
9	B	127	VAL	CA-C-O	6.18	127.75	121.63
21	N	370	SER	CA-C-N	6.18	129.71	120.31
21	N	370	SER	C-N-CA	6.18	129.71	120.31
26	S	377	TYR	CA-C-N	6.18	129.41	120.38
26	S	377	TYR	C-N-CA	6.18	129.41	120.38
33	Z	164	VAL	CA-C-N	6.18	128.47	120.44
33	Z	164	VAL	C-N-CA	6.18	128.47	120.44
7	7	177	TYR	N-CA-C	-6.18	104.44	112.23
9	B	135	LEU	N-CA-C	-6.18	98.34	108.41
17	J	138	MET	CA-C-O	-6.18	115.05	122.03
21	N	289	ILE	N-CA-C	6.18	116.35	110.42
5	5	181	THR	CA-C-N	6.18	128.47	120.44
5	5	181	THR	C-N-CA	6.18	128.47	120.44
13	F	47	VAL	CA-C-O	6.18	126.88	120.39
6	6	183	THR	CA-C-N	6.18	129.06	120.29
6	6	183	THR	C-N-CA	6.18	129.06	120.29
19	L	356	GLY	CA-C-N	6.18	128.56	120.28
19	L	356	GLY	C-N-CA	6.18	128.56	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	163	LEU	CA-C-N	6.18	128.56	120.28
23	P	163	LEU	C-N-CA	6.18	128.56	120.28
24	Q	335	PHE	CA-C-N	6.18	128.47	120.44
24	Q	335	PHE	C-N-CA	6.18	128.47	120.44
25	R	165	GLY	CA-C-N	6.18	128.56	120.28
25	R	165	GLY	C-N-CA	6.18	128.56	120.28
23	P	317	THR	N-CA-C	6.17	118.01	111.28
8	A	23	GLY	CA-C-O	-6.17	112.85	119.27
15	H	145	TYR	O-C-N	-6.17	114.38	122.59
21	N	756	THR	CA-C-N	6.17	130.51	121.31
21	N	756	THR	C-N-CA	6.17	130.51	121.31
25	R	71	LEU	CA-C-O	-6.17	114.37	121.47
11	D	86	ILE	CA-C-N	6.17	128.46	120.44
11	D	86	ILE	C-N-CA	6.17	128.46	120.44
7	7	176	LEU	N-CA-C	6.17	118.00	111.28
11	D	188	VAL	CA-C-N	6.17	128.46	120.44
11	D	188	VAL	C-N-CA	6.17	128.46	120.44
24	Q	425	GLN	CA-C-N	6.17	128.54	120.28
24	Q	425	GLN	C-N-CA	6.17	128.54	120.28
33	Z	384	SER	N-CA-C	6.17	117.67	111.07
33	Z	430	LEU	CA-C-O	-6.17	114.34	120.82
18	K	286	THR	CB-CA-C	-6.17	108.45	115.79
27	T	25	LYS	CA-C-N	6.17	128.54	120.28
27	T	25	LYS	C-N-CA	6.17	128.54	120.28
14	G	236	GLN	CA-C-N	6.16	128.54	120.28
14	G	236	GLN	C-N-CA	6.16	128.54	120.28
16	I	333	THR	CA-C-O	-6.16	112.27	119.05
25	R	65	TYR	CA-C-N	6.16	128.45	120.44
25	R	65	TYR	C-N-CA	6.16	128.45	120.44
8	A	157	THR	N-CA-C	-6.16	100.60	110.14
18	K	126	LEU	N-CA-C	-6.16	101.34	110.46
13	F	115	LYS	CA-C-N	6.16	129.03	120.29
13	F	115	LYS	C-N-CA	6.16	129.03	120.29
4	4	54	GLN	CA-C-N	6.16	128.44	120.44
4	4	54	GLN	C-N-CA	6.16	128.44	120.44
6	6	1	GLY	CA-C-O	-6.16	118.22	122.22
10	C	186	VAL	O-C-N	6.16	128.09	121.94
8	A	118	ALA	CA-C-O	6.15	127.28	120.82
17	J	81	ASP	CA-C-O	6.15	126.76	119.56
18	K	314	VAL	N-CA-C	-6.15	99.50	108.11
2	2	154	LEU	CA-C-N	6.15	128.52	120.28
2	2	154	LEU	C-N-CA	6.15	128.52	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	V	254	ARG	CA-C-N	6.15	129.15	120.42
29	V	254	ARG	C-N-CA	6.15	129.15	120.42
10	C	217	ARG	N-CA-C	-6.15	100.41	109.81
21	N	379	LEU	N-CA-C	-6.15	105.06	113.30
29	V	74	SER	N-CA-C	-6.15	98.61	109.06
3	3	98	PRO	CA-C-O	-6.14	114.22	122.08
18	K	190	LEU	CA-C-O	-6.14	112.38	118.34
21	N	905	LEU	CA-C-N	-6.14	114.24	122.72
21	N	905	LEU	C-N-CA	-6.14	114.24	122.72
33	Z	103	TYR	CA-C-N	6.14	128.51	120.28
33	Z	103	TYR	C-N-CA	6.14	128.51	120.28
15	H	449	LYS	CA-C-O	-6.14	114.37	120.70
17	J	327	ILE	N-CA-C	-6.14	104.35	110.62
20	M	383	THR	CA-C-O	-6.14	114.56	121.81
3	3	56	GLU	CA-C-N	6.14	129.01	120.29
3	3	56	GLU	C-N-CA	6.14	129.01	120.29
20	M	45	ARG	N-CA-C	6.14	117.64	111.07
22	O	346	GLU	CA-C-N	6.14	132.15	122.94
22	O	346	GLU	C-N-CA	6.14	132.15	122.94
25	R	259	PHE	N-CA-C	6.14	117.64	111.07
7	7	73	ALA	N-CA-C	-6.14	98.28	108.34
16	I	77	SER	CA-C-O	-6.14	114.05	120.55
21	N	221	ASP	CA-C-N	6.14	128.50	120.28
21	N	221	ASP	C-N-CA	6.14	128.50	120.28
21	N	510	HIS	CA-C-N	6.14	126.63	119.94
21	N	510	HIS	C-N-CA	6.14	126.63	119.94
33	Z	538	CYS	N-CA-C	-6.14	98.90	108.90
5	5	170	TYR	N-CA-C	-6.13	104.29	112.94
16	I	236	VAL	CA-C-N	6.13	129.00	120.29
16	I	236	VAL	C-N-CA	6.13	129.00	120.29
21	N	703	GLN	CA-C-N	6.13	126.90	120.03
21	N	703	GLN	C-N-CA	6.13	126.90	120.03
28	U	18	ALA	CA-C-N	6.13	128.41	120.44
28	U	18	ALA	C-N-CA	6.13	128.41	120.44
15	H	393	SER	CA-C-N	6.13	128.49	120.28
15	H	393	SER	C-N-CA	6.13	128.49	120.28
20	M	301	VAL	CA-C-N	6.13	128.99	120.29
20	M	301	VAL	C-N-CA	6.13	128.99	120.29
23	P	385	ASN	N-CA-C	6.13	117.96	111.28
24	Q	156	ALA	CA-C-N	6.13	128.78	120.44
24	Q	156	ALA	C-N-CA	6.13	128.78	120.44
20	M	139	LYS	CA-C-O	6.13	126.02	119.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	294	GLU	CA-C-N	6.13	128.49	120.28
23	P	294	GLU	C-N-CA	6.13	128.49	120.28
29	V	138	ALA	N-CA-C	-6.13	98.53	108.52
15	H	400	ARG	N-CA-C	-6.12	105.09	113.30
22	O	79	VAL	CA-C-N	6.12	128.81	120.54
22	O	79	VAL	C-N-CA	6.12	128.81	120.54
18	K	217	THR	CA-C-O	6.12	125.52	118.97
28	U	42	ASN	N-CA-C	-6.12	103.93	111.40
30	W	38	GLN	CA-C-N	6.12	128.40	120.44
30	W	38	GLN	C-N-CA	6.12	128.40	120.44
2	2	93	HIS	CA-C-O	6.12	126.94	119.11
2	2	42	TRP	N-CA-C	-6.12	100.19	109.85
2	2	99	ILE	N-CA-C	-6.12	97.56	107.28
26	S	351	ALA	CA-C-N	6.12	128.39	120.56
26	S	351	ALA	C-N-CA	6.12	128.39	120.56
6	6	20	ASN	N-CA-C	-6.11	98.94	108.90
22	O	361	ASP	N-CA-C	-6.11	104.89	112.72
15	H	56	LEU	O-C-N	6.11	128.60	122.12
24	Q	295	GLY	CA-C-O	6.11	127.60	121.00
15	H	344	ASP	N-CA-C	-6.11	100.75	109.24
19	L	381	LYS	N-CA-C	6.11	118.73	111.71
20	M	183	VAL	CA-C-O	6.11	126.84	120.36
21	N	421	ASP	CA-C-N	6.11	128.38	120.44
21	N	421	ASP	C-N-CA	6.11	128.38	120.44
33	Z	262	VAL	CA-C-O	-6.11	113.14	120.78
16	I	261	PRO	CA-C-N	6.11	128.74	120.44
16	I	261	PRO	C-N-CA	6.11	128.74	120.44
20	M	394	VAL	CA-C-N	6.11	128.96	120.29
20	M	394	VAL	C-N-CA	6.11	128.96	120.29
14	G	188	ALA	CA-C-N	6.10	128.37	120.44
14	G	188	ALA	C-N-CA	6.10	128.37	120.44
21	N	381	GLU	CA-C-N	6.10	126.59	119.94
21	N	381	GLU	C-N-CA	6.10	126.59	119.94
28	U	164	GLU	CA-C-O	-6.10	115.08	121.55
33	Z	832	ARG	O-C-N	-6.10	115.65	122.12
8	A	135	ARG	CA-C-O	-6.10	114.35	120.63
11	D	231	GLN	CA-C-N	6.10	128.95	120.29
11	D	231	GLN	C-N-CA	6.10	128.95	120.29
18	K	351	LEU	CA-C-N	6.10	128.81	120.46
18	K	351	LEU	C-N-CA	6.10	128.81	120.46
22	O	188	PHE	CA-C-N	6.10	128.45	120.28
22	O	188	PHE	C-N-CA	6.10	128.45	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	B	138	GLY	CA-C-O	-6.09	115.21	121.61
33	Z	473	LEU	CA-C-N	6.09	128.45	120.28
33	Z	473	LEU	C-N-CA	6.09	128.45	120.28
33	Z	601	VAL	O-C-N	6.09	128.11	121.83
18	K	107	THR	O-C-N	-6.09	115.84	123.27
12	E	22	PHE	O-C-N	6.09	128.60	122.08
26	S	340	LYS	CA-C-O	-6.09	114.09	120.55
33	Z	510	LEU	CA-C-O	-6.09	112.76	118.73
3	3	142	GLU	N-CA-C	-6.09	104.64	111.28
8	A	200	GLU	CA-C-N	6.09	128.93	120.29
8	A	200	GLU	C-N-CA	6.09	128.93	120.29
17	J	146	THR	CA-C-N	6.09	132.58	122.54
17	J	146	THR	C-N-CA	6.09	132.58	122.54
19	L	363	ILE	CA-C-N	6.09	128.93	120.29
19	L	363	ILE	C-N-CA	6.09	128.93	120.29
24	Q	423	VAL	CA-C-N	6.09	128.35	120.44
24	Q	423	VAL	C-N-CA	6.09	128.35	120.44
26	S	462	ASP	N-CA-C	6.09	117.91	111.28
21	N	718	GLU	N-CA-C	-6.08	97.84	110.80
16	I	392	ILE	CA-C-N	6.08	128.35	120.44
16	I	392	ILE	C-N-CA	6.08	128.35	120.44
33	Z	880	SER	O-C-N	6.08	128.34	122.07
17	J	219	VAL	CA-C-O	6.08	128.38	120.78
21	N	53	ASP	N-CA-C	-6.08	103.17	111.56
21	N	201	LYS	O-C-N	6.08	128.57	122.12
24	Q	326	MET	N-CA-C	-6.08	106.52	112.97
28	U	13	LEU	CA-C-N	6.08	128.22	120.56
28	U	13	LEU	C-N-CA	6.08	128.22	120.56
28	U	209	GLU	CA-C-N	6.08	128.35	120.44
28	U	209	GLU	C-N-CA	6.08	128.35	120.44
33	Z	570	LEU	O-C-N	6.08	129.08	122.15
7	7	184	SER	N-CA-C	6.08	118.56	110.53
31	X	112	ASN	N-CA-C	-6.08	101.78	111.02
21	N	69	TYR	CA-C-O	-6.08	114.11	120.55
25	R	421	VAL	N-CA-C	6.08	121.98	109.34
6	6	21	ILE	O-C-N	-6.08	116.30	123.04
5	5	62	GLN	N-CA-C	6.08	118.70	111.71
17	J	217	GLU	CA-C-O	6.07	126.78	119.43
23	P	253	ASP	CA-C-N	6.07	128.42	120.28
23	P	253	ASP	C-N-CA	6.07	128.42	120.28
23	P	305	THR	CA-C-N	6.07	133.14	121.54
23	P	305	THR	C-N-CA	6.07	133.14	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	235	ALA	O-C-N	6.07	128.56	122.12
25	R	52	ALA	CA-C-N	6.07	128.91	120.29
25	R	52	ALA	C-N-CA	6.07	128.91	120.29
21	N	488	CYS	N-CA-C	6.07	117.56	111.07
23	P	241	LEU	CA-C-O	6.07	126.96	120.10
25	R	137	LEU	CA-C-N	6.07	126.68	120.00
25	R	137	LEU	C-N-CA	6.07	126.68	120.00
10	C	120	GLN	CA-C-N	6.07	126.71	119.98
10	C	120	GLN	C-N-CA	6.07	126.71	119.98
17	J	105	LYS	N-CA-C	-6.07	105.80	112.72
21	N	397	SER	CA-C-O	-6.07	114.74	121.23
21	N	410	LEU	CA-C-O	6.07	127.19	120.82
24	Q	377	LEU	CA-C-N	6.07	128.41	120.28
24	Q	377	LEU	C-N-CA	6.07	128.41	120.28
29	V	296	LEU	CA-C-O	-6.07	114.45	120.82
2	2	155	ALA	CA-C-N	6.07	128.32	120.44
2	2	155	ALA	C-N-CA	6.07	128.32	120.44
21	N	480	ALA	CA-C-N	6.07	128.32	120.44
21	N	480	ALA	C-N-CA	6.07	128.32	120.44
11	D	139	ASP	N-CA-C	-6.06	101.92	110.29
16	I	210	GLU	CA-C-O	-6.06	114.45	120.82
23	P	178	GLN	CA-C-N	6.06	128.90	120.29
23	P	178	GLN	C-N-CA	6.06	128.90	120.29
18	K	256	ASP	CA-C-N	6.06	128.32	120.56
18	K	256	ASP	C-N-CA	6.06	128.32	120.56
21	N	594	VAL	CA-C-N	6.06	132.71	122.65
21	N	594	VAL	C-N-CA	6.06	132.71	122.65
7	7	184	SER	CA-C-N	6.06	128.31	120.44
7	7	184	SER	C-N-CA	6.06	128.31	120.44
10	C	228	LYS	CA-C-N	6.06	131.35	123.11
10	C	228	LYS	C-N-CA	6.06	131.35	123.11
21	N	198	THR	CA-C-O	6.06	125.45	118.97
9	B	148	TYR	CA-C-N	6.05	131.71	122.93
9	B	148	TYR	C-N-CA	6.05	131.71	122.93
14	G	114	ARG	N-CA-C	6.05	117.88	111.28
22	O	30	GLU	CA-C-N	6.05	128.39	120.28
22	O	30	GLU	C-N-CA	6.05	128.39	120.28
25	R	250	ALA	CA-C-N	6.05	128.71	120.54
25	R	250	ALA	C-N-CA	6.05	128.71	120.54
33	Z	226	GLU	O-C-N	-6.05	115.25	122.15
18	K	48	TYR	CA-C-N	6.05	128.39	120.28
18	K	48	TYR	C-N-CA	6.05	128.39	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	K	195	ALA	CA-C-N	6.05	129.00	120.28
18	K	195	ALA	C-N-CA	6.05	129.00	120.28
25	R	55	LYS	N-CA-C	-6.05	105.85	113.72
3	3	30	LYS	CA-C-N	6.05	133.09	121.54
3	3	30	LYS	C-N-CA	6.05	133.09	121.54
8	A	162	TYR	N-CA-C	-6.05	100.43	110.17
9	B	137	ALA	N-CA-C	-6.05	99.54	109.40
15	H	440	GLU	O-C-N	6.05	128.53	122.12
20	M	382	SER	CA-C-O	-6.05	113.01	119.97
26	S	135	ASN	CA-C-N	6.05	128.30	120.44
26	S	135	ASN	C-N-CA	6.05	128.30	120.44
30	W	31	ASP	N-CA-C	6.05	117.88	111.28
4	4	132	HIS	CA-C-O	-6.05	113.83	120.30
22	O	333	SER	CA-C-N	6.05	128.38	120.28
22	O	333	SER	C-N-CA	6.05	128.38	120.28
33	Z	588	ILE	CA-C-N	6.05	128.99	120.28
33	Z	588	ILE	C-N-CA	6.05	128.99	120.28
13	F	47	VAL	N-CA-C	-6.04	99.65	108.11
33	Z	208	VAL	N-CA-C	6.04	119.60	112.35
5	5	186	ILE	CA-C-O	6.04	126.37	120.27
4	4	162	LEU	CA-C-N	6.04	128.29	120.44
4	4	162	LEU	C-N-CA	6.04	128.29	120.44
24	Q	69	GLY	N-CA-C	-6.04	106.98	115.32
7	7	71	PRO	N-CA-C	-6.04	107.73	114.92
4	4	63	ILE	CA-C-N	6.04	128.97	120.28
4	4	63	ILE	C-N-CA	6.04	128.97	120.28
11	D	187	THR	CA-C-O	6.04	127.50	120.80
16	I	356	SER	N-CA-C	6.04	117.94	111.36
18	K	319	ASN	CA-C-N	6.04	130.80	122.77
18	K	319	ASN	C-N-CA	6.04	130.80	122.77
21	N	621	THR	CA-C-N	6.04	128.29	120.44
21	N	621	THR	C-N-CA	6.04	128.29	120.44
21	N	634	LEU	CA-C-N	6.03	128.97	120.28
21	N	634	LEU	C-N-CA	6.03	128.97	120.28
18	K	108	GLY	N-CA-C	-6.03	101.97	110.96
7	7	11	GLY	O-C-N	-6.03	116.77	123.58
33	Z	118	VAL	CA-C-O	-6.03	114.68	120.95
14	G	168	ARG	CA-C-N	6.03	128.27	120.44
14	G	168	ARG	C-N-CA	6.03	128.27	120.44
19	L	171	THR	CA-C-O	-6.03	113.81	120.38
27	T	218	GLU	CA-C-O	-6.03	114.16	120.55
15	H	267	THR	CA-C-N	6.02	131.30	122.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	267	THR	C-N-CA	6.02	131.30	122.63
21	N	582	ASP	CA-C-N	6.02	129.98	120.47
21	N	582	ASP	C-N-CA	6.02	129.98	120.47
33	Z	113	SER	O-C-N	-6.02	115.74	122.12
21	N	607	GLN	CA-C-O	6.02	126.93	120.55
23	P	60	ALA	CA-C-N	6.02	128.26	120.44
23	P	60	ALA	C-N-CA	6.02	128.26	120.44
24	Q	122	ILE	CA-C-N	6.02	128.26	120.44
24	Q	122	ILE	C-N-CA	6.02	128.26	120.44
33	Z	798	ARG	O-C-N	-6.02	115.29	122.15
33	Z	884	THR	CA-C-N	6.02	128.94	120.28
33	Z	884	THR	C-N-CA	6.02	128.94	120.28
23	P	257	TRP	CE2-CD2-CE3	6.01	124.81	118.80
23	P	277	GLN	N-CA-C	6.01	117.92	111.36
15	H	264	ALA	O-C-N	6.01	128.49	122.12
16	I	144	GLY	N-CA-C	-6.01	106.95	115.43
18	K	337	LYS	N-CA-C	-6.01	97.32	108.02
20	M	431	SER	CA-C-N	6.01	130.66	122.07
20	M	431	SER	C-N-CA	6.01	130.66	122.07
21	N	29	ASN	CA-C-N	6.01	128.33	120.28
21	N	29	ASN	C-N-CA	6.01	128.33	120.28
21	N	607	GLN	O-C-N	-6.01	115.75	122.12
21	N	624	ALA	CA-C-N	6.01	128.25	120.44
21	N	624	ALA	C-N-CA	6.01	128.25	120.44
33	Z	293	MET	O-C-N	6.01	128.49	122.12
15	H	365	LEU	CA-C-N	6.01	128.25	120.44
15	H	365	LEU	C-N-CA	6.01	128.25	120.44
20	M	379	LEU	CA-C-O	6.01	126.79	120.42
33	Z	752	ILE	CA-C-N	6.01	126.61	120.00
33	Z	752	ILE	C-N-CA	6.01	126.61	120.00
16	I	278	ILE	N-CA-C	-6.00	99.09	107.80
10	C	106	ILE	CA-C-N	6.00	125.91	119.85
10	C	106	ILE	C-N-CA	6.00	125.91	119.85
16	I	398	GLU	O-C-N	6.00	128.99	122.15
25	R	360	SER	CA-C-O	-6.00	114.44	121.46
33	Z	167	ASP	O-C-N	-6.00	115.89	122.07
17	J	36	SER	CA-C-N	6.00	128.32	120.28
17	J	36	SER	C-N-CA	6.00	128.32	120.28
22	O	40	GLN	N-CA-C	-6.00	106.12	113.50
20	M	193	LEU	CA-C-N	6.00	128.68	120.46
20	M	193	LEU	C-N-CA	6.00	128.68	120.46
22	O	148	ASP	CA-C-N	6.00	128.32	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	148	ASP	C-N-CA	6.00	128.32	120.28
14	G	44	GLY	CA-C-N	6.00	131.46	122.58
14	G	44	GLY	C-N-CA	6.00	131.46	122.58
18	K	54	LEU	CA-C-O	-6.00	114.19	120.55
12	E	158	ALA	CA-C-O	-6.00	113.94	120.36
13	F	116	ALA	N-CA-C	-6.00	104.82	111.36
21	N	263	SER	CA-C-N	6.00	128.59	120.44
21	N	263	SER	C-N-CA	6.00	128.59	120.44
29	V	290	ASN	O-C-N	-6.00	115.20	122.22
26	S	309	PHE	CA-C-N	6.00	128.31	120.28
26	S	309	PHE	C-N-CA	6.00	128.31	120.28
16	I	262	ARG	CA-C-N	5.99	128.31	120.28
16	I	262	ARG	C-N-CA	5.99	128.31	120.28
11	D	17	ILE	N-CA-C	-5.99	99.78	108.17
20	M	289	LYS	N-CA-C	-5.99	105.29	114.16
15	H	259	CYS	CA-C-O	5.99	126.77	120.42
27	T	6	GLU	CA-C-N	5.99	128.79	120.29
27	T	6	GLU	C-N-CA	5.99	128.79	120.29
33	Z	905	ASN	N-CA-C	5.99	117.81	111.28
7	7	208	ASN	CA-C-N	5.99	132.97	121.54
7	7	208	ASN	C-N-CA	5.99	132.97	121.54
13	F	48	ALA	CA-C-O	5.99	127.78	120.60
14	G	37	ILE	N-CA-C	-5.99	101.23	108.53
21	N	343	THR	CA-C-N	5.99	132.97	121.54
21	N	343	THR	C-N-CA	5.99	132.97	121.54
21	N	520	GLY	O-C-N	5.99	127.98	122.17
14	G	62	LYS	N-CA-C	-5.98	105.31	114.16
33	Z	854	LEU	CA-C-N	5.98	128.22	120.44
33	Z	854	LEU	C-N-CA	5.98	128.22	120.44
5	5	35	ILE	N-CA-C	-5.98	99.26	107.99
15	H	145	TYR	CB-CA-C	5.98	122.32	110.42
19	L	120	LYS	N-CA-C	-5.98	97.97	108.20
1	1	135	TYR	CA-C-N	5.98	126.46	119.94
1	1	135	TYR	C-N-CA	5.98	126.46	119.94
8	A	20	SER	O-C-N	-5.98	115.77	121.57
9	B	175	LEU	O-C-N	5.98	128.96	122.15
16	I	389	GLY	O-C-N	5.98	128.79	122.28
22	O	299	THR	CA-C-N	5.98	128.65	120.46
22	O	299	THR	C-N-CA	5.98	128.65	120.46
25	R	371	PHE	CA-C-N	5.98	124.00	120.24
25	R	371	PHE	C-N-CA	5.98	124.00	120.24
13	F	94	TYR	CA-C-O	-5.97	114.22	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	F	156	LEU	CA-C-N	5.97	130.79	120.58
13	F	156	LEU	C-N-CA	5.97	130.79	120.58
16	I	403	ALA	N-CA-C	5.97	117.87	111.36
21	N	296	CYS	CA-C-O	-5.97	114.22	120.55
30	W	64	THR	N-CA-C	-5.97	102.11	110.35
6	6	161	LYS	CB-CA-C	5.97	116.94	108.76
10	C	129	ARG	O-C-N	-5.97	114.84	121.53
20	M	264	ARG	CA-C-O	-5.97	114.09	120.42
14	G	86	HIS	CA-C-N	5.96	128.19	120.44
14	G	86	HIS	C-N-CA	5.96	128.19	120.44
21	N	640	VAL	N-CA-C	5.96	116.15	110.42
28	U	292	ILE	N-CA-C	5.96	116.14	110.42
16	I	287	ILE	N-CA-C	-5.96	107.32	113.10
17	J	338	THR	CA-C-O	5.96	126.93	120.43
33	Z	118	VAL	CA-C-N	5.96	128.27	120.28
33	Z	118	VAL	C-N-CA	5.96	128.27	120.28
16	I	161	GLN	N-CA-C	5.96	118.46	110.35
31	X	39	GLU	N-CA-C	-5.96	105.84	113.23
9	B	115	ALA	N-CA-C	5.96	117.77	111.28
2	2	171	SER	N-CA-C	5.96	120.28	109.32
14	G	199	ILE	CA-C-N	5.96	128.18	120.44
14	G	199	ILE	C-N-CA	5.96	128.18	120.44
9	B	34	SER	N-CA-C	-5.96	100.09	109.50
18	K	130	LEU	N-CA-C	-5.96	104.68	113.61
15	H	281	GLN	CA-C-N	5.95	132.36	122.66
15	H	281	GLN	C-N-CA	5.95	132.36	122.66
17	J	186	ILE	N-CA-C	-5.95	99.59	108.46
28	U	276	ILE	CA-C-N	5.95	128.74	120.29
28	U	276	ILE	C-N-CA	5.95	128.74	120.29
5	5	151	GLU	CA-C-O	5.95	126.73	120.42
10	C	94	HIS	CA-C-N	5.95	128.57	120.54
10	C	94	HIS	C-N-CA	5.95	128.57	120.54
27	T	67	LEU	N-CA-C	5.95	117.77	111.28
33	Z	971	ILE	CA-C-O	5.95	126.94	120.57
3	3	55	ASN	CA-C-O	-5.95	114.57	120.82
16	I	172	LYS	N-CA-C	-5.95	99.03	108.73
21	N	672	ASN	CB-CA-C	5.95	116.49	109.47
25	R	57	GLU	CA-C-O	5.95	127.65	120.99
12	E	113	THR	CA-C-N	5.95	128.25	120.28
12	E	113	THR	C-N-CA	5.95	128.25	120.28
23	P	88	GLN	CA-C-N	5.95	132.90	121.54
23	P	88	GLN	C-N-CA	5.95	132.90	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	2	216	SER	N-CA-C	-5.95	100.96	108.45
8	A	167	LYS	N-CA-C	-5.95	104.71	111.07
25	R	262	GLU	CA-C-O	5.95	128.60	121.88
2	2	203	TYR	CA-C-N	5.94	129.82	121.02
2	2	203	TYR	C-N-CA	5.94	129.82	121.02
17	J	327	ILE	O-C-N	-5.94	116.10	121.87
19	L	96	LYS	O-C-N	5.94	128.42	122.12
21	N	274	VAL	CA-C-N	5.94	128.52	120.38
21	N	274	VAL	C-N-CA	5.94	128.52	120.38
29	V	209	GLU	CA-C-N	5.94	128.52	120.44
29	V	209	GLU	C-N-CA	5.94	128.52	120.44
30	W	188	SER	CA-C-O	-5.94	115.25	120.60
33	Z	451	ALA	N-CA-C	5.94	117.75	111.28
21	N	699	ALA	N-CA-C	-5.94	104.89	111.36
28	U	190	LEU	O-C-N	5.94	128.19	122.07
11	D	204	GLN	CA-C-N	5.94	131.96	121.80
11	D	204	GLN	C-N-CA	5.94	131.96	121.80
21	N	226	ASN	CA-C-N	5.94	129.73	120.82
21	N	226	ASN	C-N-CA	5.94	129.73	120.82
33	Z	255	LEU	CA-C-O	-5.94	114.78	120.90
5	5	141	ASP	N-CA-C	5.93	117.75	111.28
9	B	177	LYS	N-CA-C	-5.93	104.16	111.40
19	L	143	GLY	CA-C-N	5.93	128.45	120.50
19	L	143	GLY	C-N-CA	5.93	128.45	120.50
26	S	474	GLU	N-CA-C	5.93	117.75	111.28
27	T	64	VAL	CA-C-N	5.93	126.57	119.98
27	T	64	VAL	C-N-CA	5.93	126.57	119.98
29	V	79	SER	CA-C-N	5.93	129.85	120.47
29	V	79	SER	C-N-CA	5.93	129.85	120.47
8	A	210	MET	CA-C-N	5.93	128.03	120.56
8	A	210	MET	C-N-CA	5.93	128.03	120.56
19	L	244	ILE	CA-C-O	-5.93	114.50	120.31
13	F	42	THR	N-CA-C	-5.93	106.67	114.31
13	F	176	LEU	CA-C-N	5.93	128.50	120.38
13	F	176	LEU	C-N-CA	5.93	128.50	120.38
15	H	154	LYS	CA-C-O	-5.93	114.18	120.40
20	M	158	THR	N-CA-C	-5.93	100.05	109.59
24	Q	153	ASP	N-CA-C	5.93	117.82	111.36
25	R	67	CYS	N-CA-C	5.93	117.74	111.28
25	R	149	ASN	CA-C-N	5.93	128.22	120.28
25	R	149	ASN	C-N-CA	5.93	128.22	120.28
2	2	205	PHE	CA-C-N	5.92	127.25	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	2	205	PHE	C-N-CA	5.92	127.25	119.84
9	B	174	PHE	CA-C-O	5.92	126.83	120.55
10	C	44	ILE	N-CA-C	-5.92	99.52	108.17
4	4	80	SER	N-CA-C	5.92	117.81	111.36
4	4	158	ASP	CA-C-N	5.92	128.70	120.29
4	4	158	ASP	C-N-CA	5.92	128.70	120.29
18	K	218	GLY	CA-C-N	5.92	128.49	120.44
18	K	218	GLY	C-N-CA	5.92	128.49	120.44
28	U	202	SER	N-CA-C	5.92	117.73	111.28
5	5	66	HIS	O-C-N	5.92	128.17	122.07
18	K	49	PHE	CA-C-N	5.92	128.21	120.28
18	K	49	PHE	C-N-CA	5.92	128.21	120.28
21	N	383	LYS	CA-C-N	5.92	128.21	120.28
21	N	383	LYS	C-N-CA	5.92	128.21	120.28
29	V	129	PHE	N-CA-C	5.92	117.41	111.07
11	D	44	LEU	O-C-N	-5.92	116.41	123.27
19	L	130	GLY	O-C-N	-5.92	119.39	123.95
19	L	169	ASN	N-CA-C	-5.92	106.10	113.38
24	Q	278	VAL	N-CA-C	-5.92	104.74	110.72
33	Z	87	LYS	CA-C-N	5.92	125.46	119.19
33	Z	87	LYS	C-N-CA	5.92	125.46	119.19
2	2	182	LYS	O-C-N	-5.92	114.72	122.59
20	M	324	LEU	O-C-N	-5.92	116.26	123.30
25	R	221	VAL	N-CA-C	-5.92	103.70	111.09
23	P	235	LEU	O-C-N	5.91	128.39	122.12
28	U	173	HIS	O-C-N	5.91	128.89	122.15
19	L	232	ALA	CA-C-O	-5.91	114.61	120.82
16	I	131	SER	N-CA-C	-5.91	100.56	109.95
22	O	53	LYS	N-CA-C	5.91	117.80	111.36
28	U	230	GLN	CA-C-N	5.91	128.12	120.44
28	U	230	GLN	C-N-CA	5.91	128.12	120.44
33	Z	540	GLY	CA-C-O	-5.91	114.02	120.40
9	B	64	VAL	CA-C-O	-5.91	113.77	120.74
16	I	292	TYR	N-CA-C	-5.91	105.42	114.16
23	P	325	ASP	N-CA-C	-5.91	98.22	110.80
16	I	187	LEU	CA-C-N	5.90	129.67	120.82
16	I	187	LEU	C-N-CA	5.90	129.67	120.82
28	U	168	GLU	CA-C-O	5.90	126.68	120.42
4	4	108	LYS	CA-C-O	5.90	126.25	119.35
16	I	360	LYS	CA-C-N	5.90	128.54	120.46
16	I	360	LYS	C-N-CA	5.90	128.54	120.46
18	K	377	SER	N-CA-C	5.90	119.56	111.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	3	186	VAL	O-C-N	-5.90	116.83	123.20
21	N	515	ARG	CA-C-N	5.90	126.49	120.00
21	N	515	ARG	C-N-CA	5.90	126.49	120.00
33	Z	413	ASP	CA-C-N	5.90	127.51	120.14
33	Z	413	ASP	C-N-CA	5.90	127.51	120.14
9	B	119	GLN	CA-C-N	5.89	128.18	120.28
9	B	119	GLN	C-N-CA	5.89	128.18	120.28
12	E	179	ALA	N-CA-C	5.89	117.70	111.28
21	N	917	ILE	CA-C-N	5.89	129.49	120.82
21	N	917	ILE	C-N-CA	5.89	129.49	120.82
25	R	107	GLU	CA-C-O	-5.89	114.63	120.82
23	P	344	ARG	CA-C-N	5.89	128.79	120.42
23	P	344	ARG	C-N-CA	5.89	128.79	120.42
30	W	44	ASN	O-C-N	-5.89	117.72	121.85
33	Z	64	TYR	O-C-N	5.89	128.14	122.07
33	Z	93	ARG	N-CA-C	5.89	121.64	113.45
33	Z	804	ASP	CA-C-N	5.89	128.18	120.28
33	Z	804	ASP	C-N-CA	5.89	128.18	120.28
5	5	9	GLN	N-CA-C	5.89	117.70	111.28
21	N	481	ALA	N-CA-C	-5.89	104.77	111.07
30	W	124	GLU	O-C-N	-5.89	115.44	122.15
8	A	151	GLY	N-CA-C	-5.88	100.33	112.34
13	F	181	LYS	N-CA-C	-5.88	105.75	113.17
29	V	92	MET	CA-C-N	5.88	128.16	120.28
29	V	92	MET	C-N-CA	5.88	128.16	120.28
20	M	422	VAL	N-CA-C	5.88	116.65	109.30
12	E	148	ASP	CA-C-O	-5.88	114.24	121.06
21	N	364	LYS	O-C-N	-5.88	115.45	122.15
27	T	72	THR	CA-C-N	5.88	132.77	121.54
27	T	72	THR	C-N-CA	5.88	132.77	121.54
20	M	186	LEU	CA-C-N	5.88	129.64	120.82
20	M	186	LEU	C-N-CA	5.88	129.64	120.82
15	H	365	LEU	CA-C-O	5.88	126.65	120.42
7	7	33	ARG	CA-C-N	5.88	131.28	123.05
7	7	33	ARG	C-N-CA	5.88	131.28	123.05
20	M	247	ALA	N-CA-C	-5.87	99.16	108.73
27	T	26	LEU	CA-C-N	5.87	128.13	120.26
27	T	26	LEU	C-N-CA	5.87	128.13	120.26
27	T	265	ASP	N-CA-C	-5.87	104.79	111.07
21	N	743	PHE	CA-C-O	-5.87	112.12	120.16
10	C	82	ALA	N-CA-C	5.87	117.35	111.07
4	4	167	LEU	N-CA-C	5.87	117.35	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	K	216	GLY	CA-C-N	5.87	131.73	122.11
18	K	216	GLY	C-N-CA	5.87	131.73	122.11
24	Q	301	ALA	CA-C-O	-5.87	114.20	120.42
18	K	353	PHE	CA-C-N	5.86	126.45	120.00
18	K	353	PHE	C-N-CA	5.86	126.45	120.00
26	S	301	PRO	N-CA-C	-5.86	106.47	114.80
14	G	168	ARG	O-C-N	5.86	128.33	122.12
14	G	171	ALA	CA-C-N	5.86	128.13	120.28
14	G	171	ALA	C-N-CA	5.86	128.13	120.28
5	5	201	LYS	N-CA-C	-5.86	104.89	111.28
19	L	387	ASN	CA-C-N	5.86	127.46	120.14
19	L	387	ASN	C-N-CA	5.86	127.46	120.14
22	O	248	TYR	CA-C-N	5.86	128.13	120.28
22	O	248	TYR	C-N-CA	5.86	128.13	120.28
33	Z	218	GLU	N-CA-C	5.86	117.67	111.28
19	L	278	ILE	N-CA-C	-5.86	98.78	107.51
29	V	154	ASP	CA-C-O	5.86	128.07	121.51
25	R	345	TYR	CA-C-N	5.85	128.12	120.28
25	R	345	TYR	C-N-CA	5.85	128.12	120.28
17	J	142	VAL	N-CA-C	5.85	121.52	108.88
24	Q	94	VAL	CA-C-O	5.85	127.37	121.17
11	D	169	LYS	CA-C-N	5.85	128.40	120.44
11	D	169	LYS	C-N-CA	5.85	128.40	120.44
26	S	182	LYS	CA-C-O	5.85	127.16	120.90
33	Z	363	ASP	CA-C-O	-5.85	114.67	120.70
4	4	48	GLU	N-CA-C	-5.85	102.65	110.55
5	5	210	VAL	CB-CA-C	5.85	119.08	110.77
10	C	225	VAL	O-C-N	-5.85	116.30	123.03
11	D	229	ILE	CA-C-N	5.85	128.40	120.38
11	D	229	ILE	C-N-CA	5.85	128.40	120.38
2	2	216	SER	CA-C-N	5.85	130.65	122.23
2	2	216	SER	C-N-CA	5.85	130.65	122.23
13	F	231	ALA	O-C-N	5.85	128.32	122.12
14	G	82	PRO	O-C-N	5.85	129.25	122.23
25	R	85	SER	N-CA-C	-5.85	104.81	112.41
2	2	64	GLU	N-CA-C	-5.85	104.99	111.71
9	B	49	LYS	O-C-N	-5.84	116.34	123.30
16	I	205	PRO	N-CA-C	-5.84	105.91	113.57
17	J	332	SER	CA-C-O	5.84	126.14	119.18
33	Z	220	ALA	CA-C-N	5.84	128.47	120.46
33	Z	220	ALA	C-N-CA	5.84	128.47	120.46
25	R	118	GLN	O-C-N	5.84	128.09	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	E	74	ILE	CA-C-N	-5.84	116.92	121.82
12	E	74	ILE	C-N-CA	-5.84	116.92	121.82
33	Z	300	ALA	CA-C-N	5.84	129.85	121.50
33	Z	300	ALA	C-N-CA	5.84	129.85	121.50
2	2	47	GLY	N-CA-C	-5.84	99.35	113.18
1	1	91	ASP	N-CA-C	-5.83	106.07	112.72
9	B	28	VAL	N-CA-C	-5.83	104.82	110.42
17	J	383	GLU	CA-C-N	5.83	128.57	120.29
17	J	383	GLU	C-N-CA	5.83	128.57	120.29
21	N	636	SER	CA-C-N	5.83	128.57	120.29
21	N	636	SER	C-N-CA	5.83	128.57	120.29
3	3	161	ALA	O-C-N	5.83	128.08	122.07
9	B	214	ILE	N-CA-C	-5.83	98.01	107.28
23	P	223	LEU	CA-C-N	5.83	128.57	120.29
23	P	223	LEU	C-N-CA	5.83	128.57	120.29
14	G	92	ARG	CA-C-N	5.83	128.09	120.28
14	G	92	ARG	C-N-CA	5.83	128.09	120.28
16	I	369	MET	CA-C-O	5.83	128.60	121.72
21	N	96	GLN	CA-C-N	5.83	128.02	120.44
21	N	96	GLN	C-N-CA	5.83	128.02	120.44
9	B	103	GLU	CA-C-N	5.83	129.51	120.60
9	B	103	GLU	C-N-CA	5.83	129.51	120.60
6	6	-2	ASN	O-C-N	-5.83	115.62	122.96
25	R	348	LEU	O-C-N	5.83	130.03	123.27
33	Z	815	MET	CA-C-N	5.83	126.45	119.98
33	Z	815	MET	C-N-CA	5.83	126.45	119.98
33	Z	866	VAL	N-CA-C	-5.83	107.31	112.90
16	I	163	ASP	CA-C-N	5.82	128.36	120.44
16	I	163	ASP	C-N-CA	5.82	128.36	120.44
33	Z	459	ALA	CA-C-N	5.82	129.11	120.90
33	Z	459	ALA	C-N-CA	5.82	129.11	120.90
27	T	37	ASN	N-CA-C	5.82	117.70	111.36
18	K	59	GLU	CA-C-N	5.82	128.08	120.28
18	K	59	GLU	C-N-CA	5.82	128.08	120.28
1	1	121	LYS	N-CA-C	-5.82	99.80	109.46
11	D	53	LYS	N-CA-C	-5.82	96.00	107.69
13	F	27	GLU	CA-C-N	5.82	128.66	120.28
13	F	27	GLU	C-N-CA	5.82	128.66	120.28
19	L	362	LYS	CA-C-N	5.82	127.89	120.56
19	L	362	LYS	C-N-CA	5.82	127.89	120.56
28	U	33	CYS	N-CA-C	-5.82	101.01	110.20
7	7	211	TRP	CA-C-N	5.81	128.07	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	7	211	TRP	C-N-CA	5.81	128.07	120.28
24	Q	186	HIS	O-C-N	5.81	128.28	122.12
10	C	87	LEU	N-CA-C	5.81	117.69	111.36
18	K	181	LYS	N-CA-C	-5.81	105.03	111.36
13	F	100	ASN	CA-C-N	5.81	129.73	121.42
13	F	100	ASN	C-N-CA	5.81	129.73	121.42
22	O	209	GLU	N-CA-C	-5.81	105.03	111.36
24	Q	323	LYS	CA-C-O	-5.81	114.72	120.70
27	T	208	LEU	CA-C-N	5.81	132.91	121.58
27	T	208	LEU	C-N-CA	5.81	132.91	121.58
3	3	5	ALA	N-CA-C	-5.81	100.23	109.23
25	R	125	GLU	CA-C-N	5.81	132.79	121.41
25	R	125	GLU	C-N-CA	5.81	132.79	121.41
29	V	264	GLU	CA-C-N	5.81	128.38	120.54
29	V	264	GLU	C-N-CA	5.81	128.38	120.54
6	6	103	ALA	N-CA-C	-5.80	100.47	109.24
33	Z	306	MET	CA-C-O	5.80	126.57	120.42
22	O	310	PHE	CA-C-N	5.80	128.53	120.29
22	O	310	PHE	C-N-CA	5.80	128.53	120.29
9	B	81	ASP	CA-C-O	-5.80	114.40	120.55
20	M	236	ALA	N-CA-C	5.80	117.60	111.28
33	Z	962	ARG	CA-C-N	5.80	132.62	121.54
33	Z	962	ARG	C-N-CA	5.80	132.62	121.54
18	K	71	GLU	N-CA-CB	5.80	118.65	110.12
19	L	107	GLU	CA-C-O	5.80	126.96	120.70
13	F	199	GLN	CA-C-O	5.80	125.76	119.15
33	Z	296	SER	CA-C-O	-5.80	114.27	120.42
20	M	334	ASP	CA-C-N	5.80	125.47	119.56
20	M	334	ASP	C-N-CA	5.80	125.47	119.56
22	O	23	HIS	CA-C-O	-5.80	114.00	119.91
26	S	382	ARG	CA-C-N	5.80	129.12	120.31
26	S	382	ARG	C-N-CA	5.80	129.12	120.31
9	B	161	ALA	N-CA-C	-5.79	99.60	108.76
14	G	137	PHE	N-CA-C	-5.79	100.14	108.60
7	7	103	TRP	CA-C-O	-5.79	115.16	122.63
20	M	222	GLY	CA-C-N	5.79	126.35	120.38
20	M	222	GLY	C-N-CA	5.79	126.35	120.38
20	M	350	PRO	N-CA-C	-5.79	102.09	111.77
22	O	185	PHE	N-CA-C	5.79	118.37	111.71
20	M	197	ILE	CB-CA-C	-5.79	105.94	111.44
33	Z	114	SER	CA-C-N	5.79	128.51	120.29
33	Z	114	SER	C-N-CA	5.79	128.51	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	4	140	PHE	O-C-N	-5.79	115.45	122.22
7	7	87	TYR	CA-C-N	5.79	127.96	120.44
7	7	87	TYR	C-N-CA	5.79	127.96	120.44
10	C	118	ILE	CA-C-O	-5.79	114.71	120.85
14	G	145	ALA	CA-C-O	-5.79	114.45	121.28
18	K	64	GLN	CA-C-N	5.79	128.04	120.28
18	K	64	GLN	C-N-CA	5.79	128.04	120.28
24	Q	339	TYR	CA-C-N	5.79	127.96	120.44
24	Q	339	TYR	C-N-CA	5.79	127.96	120.44
25	R	362	ALA	O-C-N	-5.79	115.15	122.27
26	S	162	VAL	CA-C-N	5.79	127.94	120.70
26	S	162	VAL	C-N-CA	5.79	127.94	120.70
26	S	434	ALA	CA-C-N	5.79	132.11	122.73
26	S	434	ALA	C-N-CA	5.79	132.11	122.73
19	L	98	LEU	N-CA-C	5.79	119.60	112.54
6	6	22	THR	CB-CA-C	5.79	119.05	110.14
25	R	139	GLU	CA-C-N	5.79	129.50	120.82
25	R	139	GLU	C-N-CA	5.79	129.50	120.82
31	X	97	TYR	CA-C-O	5.79	126.95	120.70
5	5	52	CYS	N-CA-C	-5.78	104.88	111.07
21	N	677	ASP	CA-C-O	-5.78	114.42	120.55
22	O	171	PHE	CA-C-N	5.78	128.03	120.28
22	O	171	PHE	C-N-CA	5.78	128.03	120.28
24	Q	95	LYS	CA-C-N	5.78	128.38	120.46
24	Q	95	LYS	C-N-CA	5.78	128.38	120.46
1	1	137	TYR	N-CA-C	-5.78	104.89	111.07
20	M	279	PHE	O-C-N	5.78	130.09	123.27
22	O	158	ASP	N-CA-C	-5.78	105.06	111.36
23	P	160	LEU	CA-C-N	5.78	128.49	120.29
23	P	160	LEU	C-N-CA	5.78	128.49	120.29
24	Q	338	LEU	O-C-N	-5.77	116.00	122.12
4	4	16	SER	N-CA-C	-5.77	99.25	109.06
9	B	90	ARG	CA-C-N	5.77	128.29	120.44
9	B	90	ARG	C-N-CA	5.77	128.29	120.44
18	K	325	ASP	O-C-N	5.77	127.08	121.66
23	P	76	ASN	CA-C-O	-5.77	114.76	120.82
24	Q	203	THR	CA-C-N	5.77	128.48	120.29
24	Q	203	THR	C-N-CA	5.77	128.48	120.29
26	S	258	GLU	O-C-N	5.77	129.91	122.81
5	5	128	CYS	CA-C-O	5.77	127.29	120.66
17	J	215	GLY	N-CA-C	5.77	119.62	112.64
28	U	11	ALA	CA-C-O	-5.77	114.70	120.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	S	424	SER	CA-C-O	-5.77	114.77	120.82
3	3	120	CYS	N-CA-C	-5.76	99.89	109.46
19	L	199	LEU	O-C-N	5.76	126.13	120.71
26	S	161	LYS	O-C-N	5.76	128.23	122.12
17	J	153	LEU	CA-C-N	5.76	128.28	120.38
17	J	153	LEU	C-N-CA	5.76	128.28	120.38
21	N	76	GLU	CA-C-N	5.76	128.28	120.44
21	N	76	GLU	C-N-CA	5.76	128.28	120.44
22	O	321	LYS	O-C-N	5.76	128.31	122.09
8	A	238	ALA	N-CA-C	5.76	117.23	111.07
19	L	361	PHE	CA-C-O	-5.76	114.77	120.70
30	W	152	GLU	CA-C-N	5.76	128.00	120.28
30	W	152	GLU	C-N-CA	5.76	128.00	120.28
33	Z	969	GLU	CA-C-O	5.76	126.53	120.42
8	A	20	SER	CA-C-N	5.76	125.86	119.87
8	A	20	SER	C-N-CA	5.76	125.86	119.87
20	M	374	ILE	O-C-N	-5.76	116.33	122.61
24	Q	83	GLU	CA-C-O	-5.76	112.30	119.38
19	L	172	SER	CA-C-N	5.76	132.10	123.23
19	L	172	SER	C-N-CA	5.76	132.10	123.23
11	D	88	LYS	O-C-N	5.76	128.22	122.12
21	N	604	ARG	CA-C-O	-5.76	114.39	120.55
27	T	84	GLN	CA-C-N	5.76	128.46	120.29
27	T	84	GLN	C-N-CA	5.76	128.46	120.29
33	Z	360	SER	CA-C-N	5.76	128.46	120.29
33	Z	360	SER	C-N-CA	5.76	128.46	120.29
8	A	102	ALA	CA-C-N	5.75	127.92	120.44
8	A	102	ALA	C-N-CA	5.75	127.92	120.44
33	Z	404	ASP	N-CA-C	-5.75	105.09	111.36
16	I	119	ILE	N-CA-C	-5.75	100.13	108.87
17	J	54	LYS	CA-C-N	5.75	127.81	120.56
17	J	54	LYS	C-N-CA	5.75	127.81	120.56
25	R	365	ASP	O-C-N	-5.75	115.88	122.09
27	T	175	ASP	N-CA-C	5.75	118.29	111.33
15	H	425	GLU	CA-C-N	5.75	127.99	120.28
15	H	425	GLU	C-N-CA	5.75	127.99	120.28
29	V	289	GLU	N-CA-C	5.75	117.22	111.07
4	4	188	ILE	N-CA-C	-5.75	99.36	107.75
9	B	2	THR	N-CA-C	5.75	117.74	110.33
29	V	266	LEU	O-C-N	-5.75	116.15	122.07
14	G	200	TYR	CA-C-N	5.75	127.98	120.28
14	G	200	TYR	C-N-CA	5.75	127.98	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	7	222	THR	N-CA-C	-5.74	99.83	108.96
15	H	437	VAL	N-CA-C	-5.74	99.50	108.86
22	O	292	CYS	O-C-N	5.74	128.70	122.15
33	Z	553	ARG	CA-C-N	5.74	129.42	120.75
33	Z	553	ARG	C-N-CA	5.74	129.42	120.75
33	Z	871	HIS	CA-C-O	-5.74	114.45	121.28
5	5	104	TYR	CA-C-N	5.74	133.02	122.92
5	5	104	TYR	C-N-CA	5.74	133.02	122.92
17	J	164	ILE	O-C-N	5.74	127.09	121.98
19	L	192	GLU	CA-C-N	5.74	127.97	120.28
19	L	192	GLU	C-N-CA	5.74	127.97	120.28
20	M	376	TRP	CA-C-N	5.74	128.24	120.38
20	M	376	TRP	C-N-CA	5.74	128.24	120.38
20	M	413	GLU	CA-C-N	5.74	128.24	120.38
20	M	413	GLU	C-N-CA	5.74	128.24	120.38
21	N	479	GLU	CA-C-O	5.74	126.61	120.70
23	P	243	GLU	CB-CG-CD	5.74	122.35	112.60
28	U	170	GLY	CA-C-N	5.74	128.00	120.60
28	U	170	GLY	C-N-CA	5.74	128.00	120.60
18	K	139	LEU	CA-C-O	5.74	127.59	121.11
26	S	281	ALA	N-CA-C	5.74	117.21	111.07
9	B	87	ASP	CA-C-O	-5.73	114.79	120.70
18	K	115	GLY	N-CA-C	-5.73	107.27	115.64
24	Q	19	GLN	CA-C-N	5.73	128.24	120.38
24	Q	19	GLN	C-N-CA	5.73	128.24	120.38
24	Q	52	ASN	O-C-N	5.73	127.97	122.07
11	D	193	LYS	CA-C-O	-5.73	114.80	120.82
23	P	201	ARG	CA-C-N	5.73	128.23	120.44
23	P	201	ARG	C-N-CA	5.73	128.23	120.44
6	6	167	SER	N-CA-C	-5.73	98.95	108.75
16	I	268	PHE	CA-C-N	5.73	127.95	120.28
16	I	268	PHE	C-N-CA	5.73	127.95	120.28
1	1	43	CYS	CA-C-O	5.73	127.87	121.40
21	N	185	ILE	N-CA-C	-5.73	104.92	110.42
27	T	101	LYS	CA-C-N	5.73	127.88	120.44
27	T	101	LYS	C-N-CA	5.73	127.88	120.44
28	U	163	ALA	CA-C-N	5.73	129.40	120.75
28	U	163	ALA	C-N-CA	5.73	129.40	120.75
29	V	279	HIS	CA-C-O	-5.72	114.81	120.82
17	J	175	GLU	CA-C-N	5.72	128.42	120.29
17	J	175	GLU	C-N-CA	5.72	128.42	120.29
22	O	163	ILE	CA-C-O	-5.72	113.99	118.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	2	162	GLY	CA-C-O	-5.72	114.60	120.66
9	B	239	THR	CA-C-N	5.72	127.94	120.28
9	B	239	THR	C-N-CA	5.72	127.94	120.28
21	N	31	VAL	CA-C-O	-5.72	113.63	120.78
13	F	220	THR	O-C-N	-5.72	113.53	121.47
16	I	429	GLU	O-C-N	-5.72	116.18	122.07
21	N	324	LYS	N-CA-C	5.71	119.52	111.52
33	Z	595	MET	CA-C-O	-5.71	114.49	120.55
9	B	40	THR	CA-C-N	5.71	128.95	119.35
9	B	40	THR	C-N-CA	5.71	128.95	119.35
11	D	112	TYR	O-C-N	-5.71	115.26	122.17
18	K	89	ILE	N-CA-C	5.71	116.45	110.62
25	R	374	ASN	N-CA-C	-5.71	105.19	111.82
15	H	52	THR	N-CA-C	5.71	117.51	111.28
15	H	203	LYS	CA-C-O	-5.71	112.34	120.16
29	V	33	ALA	O-C-N	5.71	128.17	122.12
2	2	130	GLY	CA-C-N	5.70	128.19	120.38
2	2	130	GLY	C-N-CA	5.70	128.19	120.38
19	L	268	ALA	CA-C-N	5.70	128.98	120.31
19	L	268	ALA	C-N-CA	5.70	128.98	120.31
9	B	173	THR	CA-C-N	5.70	127.92	120.28
9	B	173	THR	C-N-CA	5.70	127.92	120.28
12	E	94	THR	CA-C-N	5.70	128.39	120.29
12	E	94	THR	C-N-CA	5.70	128.39	120.29
20	M	305	MET	CA-C-N	5.70	127.92	120.28
20	M	305	MET	C-N-CA	5.70	127.92	120.28
20	M	363	ILE	CB-CA-C	-5.70	104.44	112.14
25	R	208	ASN	CA-C-N	5.70	128.19	120.44
25	R	208	ASN	C-N-CA	5.70	128.19	120.44
8	A	130	GLN	CA-C-N	5.70	131.35	120.97
8	A	130	GLN	C-N-CA	5.70	131.35	120.97
13	F	102	LYS	N-CA-C	-5.70	100.41	109.59
33	Z	613	ASP	CA-C-N	5.70	128.27	120.46
33	Z	613	ASP	C-N-CA	5.70	128.27	120.46
10	C	82	ALA	CA-C-O	5.70	126.80	120.82
11	D	243	GLN	N-CA-C	-5.70	105.26	114.09
18	K	93	PRO	CA-C-N	5.70	131.54	122.59
18	K	93	PRO	C-N-CA	5.70	131.54	122.59
21	N	229	VAL	CA-C-O	-5.70	114.81	120.85
33	Z	368	VAL	O-C-N	-5.70	116.75	122.62
2	2	117	GLY	N-CA-C	-5.70	106.67	116.01
9	B	61	LEU	CA-C-O	-5.70	113.28	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	J	81	ASP	N-CA-C	-5.70	105.92	112.92
21	N	322	ASP	N-CA-C	-5.70	105.07	113.61
27	T	227	PRO	N-CA-C	-5.70	101.53	112.01
21	N	717	LEU	N-CA-C	-5.69	98.53	107.93
26	S	189	LEU	CA-C-O	-5.69	114.84	120.82
17	J	200	ARG	N-CA-C	5.69	117.48	111.28
24	Q	83	GLU	CA-C-N	5.69	127.84	120.44
24	Q	83	GLU	C-N-CA	5.69	127.84	120.44
3	3	76	GLU	CA-C-N	5.69	128.37	120.29
3	3	76	GLU	C-N-CA	5.69	128.37	120.29
15	H	316	GLY	N-CA-C	-5.69	99.69	113.18
10	C	24	TYR	CA-C-N	5.69	127.90	120.28
10	C	24	TYR	C-N-CA	5.69	127.90	120.28
15	H	187	LEU	N-CA-C	5.69	122.38	109.81
16	I	164	ALA	N-CA-C	5.69	117.28	111.14
19	L	361	PHE	O-C-N	5.69	128.23	122.09
26	S	390	THR	CA-C-N	5.69	126.29	119.98
26	S	390	THR	C-N-CA	5.69	126.29	119.98
3	3	90	ARG	N-CA-C	-5.69	105.60	112.54
30	W	110	ILE	N-CA-C	-5.68	99.93	108.12
32	Y	76	GLU	CA-C-O	-5.68	114.84	120.70
25	R	123	ASP	N-CA-C	-5.68	105.17	111.36
21	N	245	LEU	CA-C-O	5.68	126.37	119.38
10	C	51	LYS	N-CA-C	5.68	117.15	111.07
21	N	427	ILE	N-CA-C	5.68	115.87	110.53
22	O	120	LYS	CA-C-N	5.68	128.78	120.71
22	O	120	LYS	C-N-CA	5.68	128.78	120.71
26	S	226	ASP	N-CA-C	-5.68	99.15	108.41
13	F	80	ASP	CA-C-N	5.68	127.89	120.28
13	F	80	ASP	C-N-CA	5.68	127.89	120.28
16	I	144	GLY	O-C-N	-5.68	115.81	122.45
18	K	297	ILE	N-CA-C	-5.68	104.99	110.72
21	N	299	TYR	CA-C-O	5.68	126.44	120.42
33	Z	391	ASN	N-CA-C	-5.68	104.77	112.26
2	2	123	TYR	CA-C-O	5.67	125.14	118.90
6	6	137	ILE	N-CA-C	-5.67	105.31	110.82
8	A	132	ALA	N-CA-C	-5.67	104.58	112.30
15	H	408	SER	N-CA-C	5.67	118.20	111.33
17	J	165	GLU	O-C-N	5.67	128.62	122.15
25	R	245	SER	CA-C-O	5.67	129.04	121.78
7	7	55	ILE	CA-C-N	5.67	127.81	120.44
7	7	55	ILE	C-N-CA	5.67	127.81	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	4	52	THR	CA-C-N	5.67	128.47	120.42
4	4	52	THR	C-N-CA	5.67	128.47	120.42
21	N	152	LEU	CA-C-O	-5.67	114.48	120.55
23	P	228	SER	O-C-N	-5.67	115.30	122.27
23	P	330	GLY	N-CA-C	-5.67	105.92	115.62
23	P	429	ILE	N-CA-C	-5.67	104.98	110.42
28	U	96	GLY	N-CA-C	-5.67	100.77	112.34
23	P	62	ILE	O-C-N	5.67	127.37	121.87
12	E	229	LYS	N-CA-C	-5.67	99.18	108.76
12	E	246	LYS	CA-C-N	5.67	128.34	120.29
12	E	246	LYS	C-N-CA	5.67	128.34	120.29
13	F	189	LEU	O-C-N	-5.67	116.11	122.12
18	K	55	GLU	CA-C-N	5.67	127.81	120.44
18	K	55	GLU	C-N-CA	5.67	127.81	120.44
2	2	16	ALA	CA-C-O	-5.67	115.17	121.23
21	N	130	ASP	N-CA-C	5.67	122.33	109.81
26	S	298	ARG	CA-C-N	5.67	131.70	122.81
26	S	298	ARG	C-N-CA	5.67	131.70	122.81
1	1	122	LEU	N-CA-C	-5.66	101.68	108.25
33	Z	376	SER	O-C-N	-5.66	115.82	122.96
7	7	42	VAL	N-CA-C	-5.66	99.90	108.17
2	2	206	PRO	N-CA-C	-5.66	100.81	112.47
6	6	79	SER	O-C-N	5.66	129.59	122.23
22	O	338	LYS	CA-C-O	5.66	127.51	121.11
33	Z	621	LEU	CA-C-O	-5.66	114.55	120.55
33	Z	435	GLN	N-CA-C	5.66	117.45	111.28
9	B	229	THR	N-CA-C	-5.66	104.73	111.69
4	4	153	THR	CA-C-N	5.65	128.42	120.28
4	4	153	THR	C-N-CA	5.65	128.42	120.28
19	L	227	GLY	N-CA-C	-5.65	106.95	115.32
21	N	681	ASN	CA-C-N	5.65	128.13	120.38
21	N	681	ASN	C-N-CA	5.65	128.13	120.38
15	H	214	CYS	CA-C-N	5.65	128.17	120.54
15	H	214	CYS	C-N-CA	5.65	128.17	120.54
25	R	225	LYS	CA-C-N	5.65	127.85	120.28
25	R	225	LYS	C-N-CA	5.65	127.85	120.28
4	4	183	VAL	O-C-N	-5.65	116.49	123.10
16	I	120	VAL	CA-C-O	-5.65	114.73	121.28
20	M	225	GLY	N-CA-C	-5.65	107.52	115.32
26	S	455	GLU	N-CA-C	5.65	118.21	111.71
31	X	27	ILE	O-C-N	-5.65	114.66	121.10
9	B	7	PHE	O-C-N	-5.65	116.35	123.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	422	VAL	CA-C-N	5.65	128.31	120.29
15	H	422	VAL	C-N-CA	5.65	128.31	120.29
18	K	75	LEU	CD1-CG-CD2	-5.65	98.37	110.80
26	S	378	GLN	CA-C-N	5.65	127.85	120.28
26	S	378	GLN	C-N-CA	5.65	127.85	120.28
1	1	24	ALA	CA-C-N	5.65	130.15	122.19
1	1	24	ALA	C-N-CA	5.65	130.15	122.19
13	F	107	ARG	CA-C-N	5.65	127.84	120.28
13	F	107	ARG	C-N-CA	5.65	127.84	120.28
20	M	308	LEU	CA-C-O	-5.65	114.89	120.82
3	3	50	ASP	CA-C-N	5.64	127.67	120.56
3	3	50	ASP	C-N-CA	5.64	127.67	120.56
25	R	26	VAL	CA-C-N	5.64	128.12	120.44
25	R	26	VAL	C-N-CA	5.64	128.12	120.44
25	R	255	VAL	N-CA-C	5.64	115.83	110.53
28	U	134	THR	CA-C-N	5.64	131.87	122.73
28	U	134	THR	C-N-CA	5.64	131.87	122.73
30	W	154	LEU	CA-C-N	5.64	127.78	120.44
30	W	154	LEU	C-N-CA	5.64	127.78	120.44
13	F	111	LEU	CA-C-N	5.64	127.78	120.44
13	F	111	LEU	C-N-CA	5.64	127.78	120.44
17	J	239	GLU	N-CA-C	5.64	117.51	111.36
23	P	196	ALA	CA-C-N	5.64	127.84	120.28
23	P	196	ALA	C-N-CA	5.64	127.84	120.28
10	C	16	GLU	N-CA-C	-5.64	106.38	113.20
25	R	133	ALA	CA-C-O	-5.64	113.73	120.10
29	V	153	ILE	CA-C-O	-5.64	114.87	120.90
33	Z	365	SER	CA-C-N	5.64	132.31	121.54
33	Z	365	SER	C-N-CA	5.64	132.31	121.54
24	Q	274	LEU	CA-C-N	5.64	128.43	120.42
24	Q	274	LEU	C-N-CA	5.64	128.43	120.42
27	T	205	ILE	O-C-N	5.64	127.56	121.87
9	B	9	LEU	CA-C-O	5.64	126.24	119.59
29	V	96	LYS	CA-C-O	-5.64	114.54	120.63
29	V	139	VAL	N-CA-C	-5.64	100.28	108.17
21	N	409	GLY	CA-C-O	-5.63	115.28	120.80
26	S	342	LEU	N-CA-C	5.63	117.10	111.07
21	N	638	ILE	CA-C-O	-5.63	115.09	120.95
23	P	83	SER	CA-C-N	5.63	128.87	120.31
23	P	83	SER	C-N-CA	5.63	128.87	120.31
8	A	185	HIS	O-C-N	5.63	127.87	122.07
16	I	285	ASP	CA-C-N	5.63	132.29	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	I	285	ASP	C-N-CA	5.63	132.29	121.54
33	Z	825	ALA	CA-C-N	5.63	129.61	120.60
33	Z	825	ALA	C-N-CA	5.63	129.61	120.60
10	C	26	LEU	N-CA-C	5.63	118.18	111.71
21	N	109	TYR	CA-C-O	-5.63	114.45	120.42
33	Z	802	ASP	N-CA-C	5.63	117.22	111.14
4	4	37	LEU	CA-C-O	5.62	126.38	120.42
17	J	261	SER	N-CA-C	-5.62	99.97	108.52
33	Z	133	ASP	N-CA-C	-5.62	106.38	113.18
18	K	287	GLY	CA-C-N	5.62	132.28	121.54
18	K	287	GLY	C-N-CA	5.62	132.28	121.54
21	N	440	ASP	CA-C-N	5.62	128.16	120.46
21	N	440	ASP	C-N-CA	5.62	128.16	120.46
26	S	132	ALA	CA-C-N	5.62	128.13	120.54
26	S	132	ALA	C-N-CA	5.62	128.13	120.54
21	N	357	GLY	CA-C-N	5.62	127.81	120.28
21	N	357	GLY	C-N-CA	5.62	127.81	120.28
33	Z	279	THR	O-C-N	5.62	127.86	122.07
28	U	81	LYS	O-C-N	-5.62	116.17	122.12
10	C	179	ASP	CA-C-N	5.62	128.68	120.71
10	C	179	ASP	C-N-CA	5.62	128.68	120.71
25	R	44	LYS	N-CA-C	-5.62	105.06	111.07
26	S	255	SER	CA-C-O	-5.62	114.47	120.42
27	T	229	VAL	O-C-N	5.61	127.34	122.12
17	J	334	LYS	CA-C-N	5.61	129.22	120.75
17	J	334	LYS	C-N-CA	5.61	129.22	120.75
6	6	195	ILE	CA-C-O	5.61	126.43	120.48
16	I	270	VAL	CA-C-N	5.61	127.73	120.44
16	I	270	VAL	C-N-CA	5.61	127.73	120.44
20	M	249	PRO	N-CA-C	5.61	121.14	113.84
21	N	706	MET	O-C-N	5.61	128.07	122.12
22	O	107	GLN	CA-C-O	-5.61	114.60	120.55
26	S	127	THR	O-C-N	5.61	127.85	122.07
12	E	174	SER	N-CA-C	-5.61	106.48	113.38
16	I	342	GLY	N-CA-C	-5.61	107.27	115.63
21	N	293	LEU	CA-C-N	5.61	125.71	119.32
21	N	293	LEU	C-N-CA	5.61	125.71	119.32
24	Q	197	SER	O-C-N	-5.61	115.76	122.15
2	2	164	TRP	CA-C-O	-5.61	114.92	120.70
5	5	66	HIS	CA-C-O	-5.61	114.93	120.82
13	F	124	GLY	CA-C-N	5.61	127.82	122.27
13	F	124	GLY	C-N-CA	5.61	127.82	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	G	141	ASP	CA-C-N	5.61	132.25	121.54
14	G	141	ASP	C-N-CA	5.61	132.25	121.54
15	H	327	ASN	CA-C-N	5.61	127.79	120.28
15	H	327	ASN	C-N-CA	5.61	127.79	120.28
28	U	303	GLU	CA-C-O	-5.61	114.90	120.90
10	C	92	ARG	O-C-N	-5.60	116.18	122.12
4	4	1	ASP	N-CA-C	-5.60	99.15	108.34
16	I	210	GLU	O-C-N	5.60	127.84	122.07
33	Z	312	TYR	N-CA-C	5.60	117.06	111.07
33	Z	907	GLY	CA-C-N	5.60	129.39	121.66
33	Z	907	GLY	C-N-CA	5.60	129.39	121.66
3	3	20	LEU	N-CA-C	-5.60	98.78	108.69
17	J	328	LEU	O-C-N	5.60	128.06	122.12
21	N	38	GLU	CA-C-O	5.60	126.49	120.55
11	D	164	ILE	N-CA-C	-5.60	99.76	108.44
17	J	354	SER	N-CA-C	-5.60	102.17	110.46
5	5	144	TYR	CA-C-O	-5.60	115.03	121.19
12	E	48	LEU	CA-C-O	5.60	126.53	120.32
17	J	40	ASN	CA-C-O	-5.60	114.62	120.55
24	Q	91	SER	O-C-N	5.60	128.53	122.15
33	Z	120	SER	CA-C-N	5.60	128.13	120.46
33	Z	120	SER	C-N-CA	5.60	128.13	120.46
28	U	233	PHE	O-C-N	5.59	127.91	122.09
5	5	51	ASP	CA-C-N	5.59	127.71	120.44
5	5	51	ASP	C-N-CA	5.59	127.71	120.44
15	H	307	PHE	O-C-N	-5.59	116.84	123.22
20	M	140	LEU	O-C-N	5.59	129.75	122.87
29	V	102	GLN	CA-C-O	-5.59	115.08	121.40
29	V	290	ASN	CA-C-N	5.59	127.71	120.44
29	V	290	ASN	C-N-CA	5.59	127.71	120.44
8	A	26	TYR	CA-C-O	-5.59	114.62	120.55
33	Z	972	SER	CA-C-O	-5.59	116.14	122.01
21	N	257	ILE	N-CA-C	5.59	115.79	110.42
21	N	608	LEU	CB-CA-C	-5.59	101.35	110.85
21	N	659	ALA	CA-C-N	5.59	127.71	120.44
21	N	659	ALA	C-N-CA	5.59	127.71	120.44
23	P	229	LEU	N-CA-C	-5.59	105.27	111.36
20	M	385	GLU	CA-C-O	5.59	127.91	120.98
23	P	51	ASP	N-CA-C	-5.59	106.39	113.43
25	R	399	GLN	N-CA-C	5.59	117.05	111.07
3	3	170	ALA	N-CA-C	-5.59	106.29	114.39
23	P	169	GLY	N-CA-C	-5.59	99.94	113.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	V	206	THR	CA-C-N	5.58	128.22	120.29
29	V	206	THR	C-N-CA	5.58	128.22	120.29
33	Z	482	ASP	CA-C-N	5.58	128.23	120.63
33	Z	482	ASP	C-N-CA	5.58	128.23	120.63
5	5	119	GLY	N-CA-C	-5.58	107.40	115.27
5	5	168	ASP	CA-C-O	5.58	126.73	120.70
6	6	203	VAL	O-C-N	5.58	129.04	123.18
7	7	207	GLU	CA-C-N	5.58	130.57	122.36
7	7	207	GLU	C-N-CA	5.58	130.57	122.36
28	U	165	GLU	CA-C-O	-5.58	113.95	120.20
30	W	22	PRO	O-C-N	-5.58	115.10	122.64
33	Z	516	THR	N-CA-C	5.58	122.69	110.80
17	J	147	TYR	N-CA-C	-5.58	106.14	113.17
25	R	29	LYS	CA-C-O	5.58	125.80	119.27
29	V	193	ASN	N-CA-C	-5.58	100.64	108.96
2	2	79	ALA	CA-C-N	5.58	128.01	120.65
2	2	79	ALA	C-N-CA	5.58	128.01	120.65
16	I	258	GLY	N-CA-C	5.58	121.33	114.69
22	O	91	ASP	CA-C-N	5.58	127.69	120.44
22	O	91	ASP	C-N-CA	5.58	127.69	120.44
9	B	128	ARG	O-C-N	-5.58	116.18	121.20
12	E	216	ASN	O-C-N	-5.58	115.64	122.05
2	2	57	GLN	CA-C-O	-5.58	114.51	120.42
15	H	388	ILE	CA-C-N	5.58	127.75	120.28
15	H	388	ILE	C-N-CA	5.58	127.75	120.28
18	K	64	GLN	OE1-CD-NE2	-5.58	117.02	122.60
18	K	97	GLY	N-CA-C	-5.58	102.81	111.12
20	M	162	GLU	N-CA-C	-5.58	107.48	114.56
7	7	108	VAL	N-CA-C	-5.57	99.85	107.99
15	H	236	ALA	O-C-N	-5.57	116.33	122.07
17	J	211	ILE	CA-C-N	-5.57	115.36	122.77
17	J	211	ILE	C-N-CA	-5.57	115.36	122.77
22	O	107	GLN	O-C-N	5.57	128.03	122.12
4	4	57	GLU	CA-C-N	5.57	128.02	120.44
4	4	57	GLU	C-N-CA	5.57	128.02	120.44
4	4	164	VAL	O-C-N	5.57	127.27	121.87
15	H	161	GLU	N-CA-C	5.57	118.30	110.23
23	P	169	GLY	CA-C-N	5.57	130.48	122.35
23	P	169	GLY	C-N-CA	5.57	130.48	122.35
6	6	58	ARG	CA-C-O	-5.57	114.52	120.42
15	H	203	LYS	O-C-N	5.57	127.72	121.32
15	H	323	ALA	CA-C-N	5.57	130.47	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	323	ALA	C-N-CA	5.57	130.47	121.00
17	J	101	ASP	N-CA-C	-5.57	105.84	113.30
33	Z	248	TYR	CA-C-N	5.57	127.74	120.28
33	Z	248	TYR	C-N-CA	5.57	127.74	120.28
23	P	36	LEU	O-C-N	5.57	128.02	122.12
27	T	82	PHE	N-CA-C	5.56	118.11	111.71
8	A	227	VAL	N-CA-C	-5.56	100.17	108.46
13	F	165	SER	CA-C-N	5.56	129.50	120.60
13	F	165	SER	C-N-CA	5.56	129.50	120.60
21	N	564	ASN	CA-C-N	5.56	128.19	120.29
21	N	564	ASN	C-N-CA	5.56	128.19	120.29
25	R	245	SER	CA-C-N	5.56	127.67	120.44
25	R	245	SER	C-N-CA	5.56	127.67	120.44
7	7	84	ILE	N-CA-C	-5.56	105.10	110.72
21	N	59	GLU	N-CA-C	-5.56	105.30	111.36
25	R	150	ALA	N-CA-C	5.56	117.34	111.28
26	S	251	SER	N-CA-C	5.56	117.02	111.07
21	N	486	GLY	CA-C-N	5.56	127.66	120.44
21	N	486	GLY	C-N-CA	5.56	127.66	120.44
26	S	176	LEU	O-C-N	5.55	128.93	122.99
30	W	186	ALA	N-CA-C	5.55	117.33	111.28
5	5	21	THR	CA-C-O	5.55	127.05	120.66
16	I	324	VAL	N-CA-C	-5.55	100.48	108.48
17	J	48	ARG	O-C-N	-5.55	116.23	122.12
24	Q	360	SER	O-C-N	5.55	128.01	122.12
10	C	180	TYR	CA-C-O	5.55	127.30	121.19
22	O	274	ILE	CB-CA-C	-5.55	104.56	112.22
5	5	62	GLN	CA-C-N	5.55	127.98	120.44
5	5	62	GLN	C-N-CA	5.55	127.98	120.44
7	7	193	ASP	N-CA-C	-5.55	100.66	109.76
9	B	249	ALA	CA-C-O	5.55	126.50	119.95
12	E	163	THR	CA-C-O	-5.55	114.71	120.70
24	Q	412	ALA	CA-C-N	5.55	127.71	120.28
24	Q	412	ALA	C-N-CA	5.55	127.71	120.28
25	R	331	ARG	O-C-N	-5.55	115.83	122.15
6	6	12	ALA	O-C-N	-5.54	117.27	123.48
10	C	116	SER	CA-C-N	5.54	128.74	120.31
10	C	116	SER	C-N-CA	5.54	128.74	120.31
18	K	421	VAL	CA-C-N	5.54	130.44	122.35
18	K	421	VAL	C-N-CA	5.54	130.44	122.35
21	N	401	LYS	O-C-N	5.54	129.09	122.27
23	P	214	GLU	CA-C-N	5.54	127.71	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	214	GLU	C-N-CA	5.54	127.71	120.28
25	R	150	ALA	CA-C-N	5.54	127.70	120.28
25	R	150	ALA	C-N-CA	5.54	127.70	120.28
7	7	53	GLN	CA-C-N	5.54	128.16	120.29
7	7	53	GLN	C-N-CA	5.54	128.16	120.29
12	E	116	VAL	N-CA-C	5.54	115.74	110.53
20	M	350	PRO	CA-C-N	5.54	128.54	120.51
20	M	350	PRO	C-N-CA	5.54	128.54	120.51
23	P	311	TRP	CA-C-O	-5.54	113.30	118.73
24	Q	235	ALA	N-CA-C	5.54	117.32	111.28
9	B	87	ASP	CA-C-N	5.54	127.70	120.28
9	B	87	ASP	C-N-CA	5.54	127.70	120.28
14	G	97	SER	CA-C-N	5.54	127.64	120.44
14	G	97	SER	C-N-CA	5.54	127.64	120.44
21	N	317	SER	N-CA-C	5.54	117.00	111.07
20	M	421	GLU	CA-C-N	5.54	128.51	120.98
20	M	421	GLU	C-N-CA	5.54	128.51	120.98
26	S	170	TYR	N-CA-C	-5.54	105.33	111.36
28	U	189	ARG	CA-C-N	5.54	127.64	120.44
28	U	189	ARG	C-N-CA	5.54	127.64	120.44
1	1	71	GLY	N-CA-C	-5.54	105.63	112.33
13	F	96	SER	CA-C-O	-5.54	114.55	120.42
29	V	74	SER	CA-C-O	-5.54	113.96	120.60
9	B	195	THR	CA-C-N	5.53	128.72	120.31
9	B	195	THR	C-N-CA	5.53	128.72	120.31
25	R	119	LYS	CA-C-N	5.53	127.63	120.44
25	R	119	LYS	C-N-CA	5.53	127.63	120.44
33	Z	970	TYR	O-C-N	5.53	129.62	122.81
13	F	109	GLY	CA-C-N	5.53	127.69	120.28
13	F	109	GLY	C-N-CA	5.53	127.69	120.28
16	I	388	SER	O-C-N	-5.53	116.48	122.79
16	I	324	VAL	CA-C-O	5.53	127.14	120.67
22	O	153	LEU	CA-C-O	-5.53	114.69	120.55
11	D	18	PHE	CA-C-N	5.53	128.24	120.28
11	D	18	PHE	C-N-CA	5.53	128.24	120.28
28	U	206	ASP	N-CA-C	5.53	116.99	111.07
15	H	404	TRP	CA-C-N	5.53	127.95	120.38
15	H	404	TRP	C-N-CA	5.53	127.95	120.38
19	L	258	GLU	CA-C-N	5.53	128.14	120.29
19	L	258	GLU	C-N-CA	5.53	128.14	120.29
26	S	147	TRP	CA-C-N	5.53	130.02	122.34
26	S	147	TRP	C-N-CA	5.53	130.02	122.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	L	351	LEU	CA-C-N	5.53	126.75	119.84
19	L	351	LEU	C-N-CA	5.53	126.75	119.84
33	Z	258	PRO	CA-C-N	5.53	125.84	119.93
33	Z	258	PRO	C-N-CA	5.53	125.84	119.93
33	Z	268	ALA	CA-C-N	5.53	127.68	120.28
33	Z	268	ALA	C-N-CA	5.53	127.68	120.28
4	4	25	SER	O-C-N	-5.52	115.97	123.15
33	Z	599	ILE	CA-C-O	-5.52	113.00	119.85
1	1	-7	LYS	N-CA-C	-5.52	99.41	108.41
33	Z	904	LEU	CA-C-N	5.52	127.68	120.28
33	Z	904	LEU	C-N-CA	5.52	127.68	120.28
2	2	217	ILE	N-CA-C	-5.52	100.53	108.42
21	N	160	GLY	CA-C-O	-5.52	110.96	120.57
8	A	142	THR	N-CA-C	-5.52	98.22	107.99
16	I	259	ASP	CB-CA-C	5.52	118.90	109.24
24	Q	123	GLU	CA-C-O	5.52	126.61	120.82
16	I	352	ASN	CA-C-N	5.52	125.51	120.21
16	I	352	ASN	C-N-CA	5.52	125.51	120.21
18	K	226	VAL	CA-C-O	-5.52	115.00	120.85
33	Z	258	PRO	N-CA-C	5.52	117.43	110.70
3	3	187	VAL	O-C-N	-5.52	117.51	123.14
4	4	148	ARG	N-CA-C	-5.52	99.50	108.82
27	T	156	SER	CA-C-N	5.51	127.67	120.28
27	T	156	SER	C-N-CA	5.51	127.67	120.28
23	P	29	GLN	CA-C-N	5.51	127.61	120.44
23	P	29	GLN	C-N-CA	5.51	127.61	120.44
10	C	225	VAL	CA-C-N	5.51	130.76	123.05
10	C	225	VAL	C-N-CA	5.51	130.76	123.05
25	R	198	ILE	N-CA-C	-5.51	101.08	108.35
26	S	183	LEU	N-CA-C	-5.51	105.17	111.07
27	T	83	ASN	CA-C-O	-5.51	114.71	120.55
27	T	156	SER	CA-C-O	-5.51	115.13	122.51
12	E	162	GLY	N-CA-C	-5.51	107.17	115.32
22	O	380	LEU	CA-C-N	5.51	126.05	119.94
22	O	380	LEU	C-N-CA	5.51	126.05	119.94
25	R	135	ILE	N-CA-C	-5.51	105.16	110.72
9	B	118	MET	CA-C-O	5.51	126.26	120.42
22	O	246	SER	O-C-N	5.51	129.91	122.59
24	Q	75	ARG	CA-C-N	5.51	128.11	120.29
24	Q	75	ARG	C-N-CA	5.51	128.11	120.29
24	Q	315	ASN	CA-C-O	5.51	126.26	120.42
9	B	10	THR	N-CA-C	-5.50	100.73	109.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	E	47	VAL	N-CA-C	-5.50	100.55	108.53
21	N	392	GLY	N-CA-C	-5.50	107.65	115.30
4	4	45	PHE	O-C-N	5.50	129.64	123.48
21	N	211	PHE	CA-C-N	5.50	127.59	120.44
21	N	211	PHE	C-N-CA	5.50	127.59	120.44
23	P	149	GLU	CA-C-N	5.50	128.67	120.31
23	P	149	GLU	C-N-CA	5.50	128.67	120.31
21	N	511	GLY	CA-C-N	5.50	127.65	120.28
21	N	511	GLY	C-N-CA	5.50	127.65	120.28
23	P	258	LYS	N-CA-C	5.50	120.97	113.16
27	T	114	LEU	CA-C-N	5.50	128.20	120.28
27	T	114	LEU	C-N-CA	5.50	128.20	120.28
33	Z	180	ASP	N-CA-C	-5.50	100.94	109.24
3	3	82	VAL	CA-C-O	-5.49	115.35	121.17
21	N	43	LEU	CA-C-O	-5.49	113.28	118.33
9	B	149	GLN	N-CA-C	-5.49	100.75	109.59
11	D	137	GLY	N-CA-C	-5.49	103.22	110.74
13	F	26	LEU	N-CA-C	5.49	118.02	111.71
17	J	369	ALA	CA-C-N	5.49	127.64	120.28
17	J	369	ALA	C-N-CA	5.49	127.64	120.28
3	3	113	ALA	CA-C-N	5.49	125.84	121.61
3	3	113	ALA	C-N-CA	5.49	125.84	121.61
15	H	241	ASP	CA-C-N	5.49	123.61	119.66
15	H	241	ASP	C-N-CA	5.49	123.61	119.66
16	I	408	ARG	N-CA-C	-5.49	100.39	108.79
17	J	363	THR	CA-C-N	5.49	128.08	120.29
17	J	363	THR	C-N-CA	5.49	128.08	120.29
21	N	657	MET	CA-C-N	5.49	128.27	120.53
21	N	657	MET	C-N-CA	5.49	128.27	120.53
30	W	5	ALA	N-CA-C	-5.49	100.76	109.76
6	6	52	GLY	O-C-N	5.49	127.45	122.18
7	7	137	GLY	CA-C-N	5.49	127.89	120.38
7	7	137	GLY	C-N-CA	5.49	127.89	120.38
15	H	195	VAL	O-C-N	-5.49	116.11	122.09
21	N	170	LEU	CA-C-N	5.49	128.41	120.79
21	N	170	LEU	C-N-CA	5.49	128.41	120.79
25	R	409	GLY	O-C-N	5.48	127.56	122.13
6	6	188	GLN	CA-C-O	5.48	125.76	119.35
24	Q	192	ALA	N-CA-C	5.48	116.94	111.07
33	Z	824	ASN	CA-C-O	5.48	128.35	120.51
5	5	105	THR	CA-C-N	5.48	128.17	120.28
5	5	105	THR	C-N-CA	5.48	128.17	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	K	379	SER	N-CA-C	-5.48	103.15	110.55
24	Q	122	ILE	N-CA-C	5.48	116.25	110.72
24	Q	214	THR	CA-C-N	5.48	127.97	120.46
24	Q	214	THR	C-N-CA	5.48	127.97	120.46
33	Z	765	MET	CA-C-O	5.48	126.29	120.10
9	B	196	LEU	CA-C-O	5.48	126.27	119.97
25	R	364	LEU	CA-C-O	-5.48	115.07	120.82
25	R	388	VAL	N-CA-C	-5.48	100.34	108.45
31	X	15	CYS	CA-C-N	5.48	132.00	121.54
31	X	15	CYS	C-N-CA	5.48	132.00	121.54
4	4	38	SER	CA-C-O	-5.48	115.06	120.26
12	E	204	LEU	CA-C-N	5.48	127.56	120.44
12	E	204	LEU	C-N-CA	5.48	127.56	120.44
4	4	55	PHE	CA-C-N	5.47	127.56	120.44
4	4	55	PHE	C-N-CA	5.47	127.56	120.44
7	7	126	GLY	CA-C-N	5.47	128.42	120.98
7	7	126	GLY	C-N-CA	5.47	128.42	120.98
15	H	420	ARG	N-CA-C	5.47	117.25	111.28
27	T	222	LEU	CA-C-N	5.47	127.61	120.28
27	T	222	LEU	C-N-CA	5.47	127.61	120.28
28	U	45	THR	O-C-N	5.47	129.56	123.05
22	O	52	ALA	N-CA-C	5.47	117.79	110.35
27	T	51	TYR	O-C-N	5.47	129.87	122.59
33	Z	539	ASN	CA-C-N	5.47	126.98	120.14
33	Z	539	ASN	C-N-CA	5.47	126.98	120.14
8	A	247	ALA	CA-C-N	5.47	129.61	120.64
8	A	247	ALA	C-N-CA	5.47	129.61	120.64
17	J	278	GLN	CA-C-N	5.47	127.61	120.28
17	J	278	GLN	C-N-CA	5.47	127.61	120.28
8	A	234	PHE	CA-C-N	5.47	130.80	122.65
8	A	234	PHE	C-N-CA	5.47	130.80	122.65
26	S	398	THR	N-CA-C	-5.47	104.85	112.45
27	T	128	TYR	O-C-N	-5.47	116.32	122.12
29	V	208	LYS	O-C-N	5.47	128.38	122.15
21	N	657	MET	CA-C-O	5.47	126.56	120.82
23	P	100	VAL	O-C-N	5.46	127.46	121.83
28	U	60	GLU	CA-C-O	5.46	126.04	119.59
33	Z	132	HIS	N-CA-C	-5.46	99.16	110.80
25	R	273	SER	CB-CA-C	5.46	117.09	108.84
5	5	132	GLY	N-CA-C	-5.46	106.56	115.46
11	D	27	VAL	CA-C-N	5.46	128.14	120.28
11	D	27	VAL	C-N-CA	5.46	128.14	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	F	112	LEU	N-CA-C	5.46	116.91	111.07
20	M	414	ASP	CA-C-N	5.46	127.87	120.44
20	M	414	ASP	C-N-CA	5.46	127.87	120.44
24	Q	155	LEU	CA-C-N	5.46	127.54	120.44
24	Q	155	LEU	C-N-CA	5.46	127.54	120.44
27	T	36	LYS	N-CA-C	5.46	117.23	111.28
14	G	144	GLY	N-CA-C	5.46	118.67	111.52
19	L	85	GLU	N-CA-C	5.46	117.23	111.28
8	A	204	GLU	CA-C-N	5.46	127.53	120.44
8	A	204	GLU	C-N-CA	5.46	127.53	120.44
15	H	71	GLU	CA-C-O	5.46	126.33	120.55
15	H	412	PRO	CA-C-N	5.46	129.10	121.02
15	H	412	PRO	C-N-CA	5.46	129.10	121.02
28	U	231	ASP	N-CA-C	5.46	116.91	111.07
3	3	124	ALA	CA-C-N	5.46	130.13	121.18
3	3	124	ALA	C-N-CA	5.46	130.13	121.18
8	A	139	VAL	CA-C-N	5.46	130.29	123.14
8	A	139	VAL	C-N-CA	5.46	130.29	123.14
16	I	388	SER	CA-C-N	5.46	127.15	120.22
16	I	388	SER	C-N-CA	5.46	127.15	120.22
23	P	291	LYS	CA-C-N	5.46	128.04	120.29
23	P	291	LYS	C-N-CA	5.46	128.04	120.29
8	A	62	LYS	N-CA-C	-5.46	105.84	112.88
14	G	147	LEU	N-CA-C	-5.46	100.01	108.90
17	J	371	ARG	O-C-N	5.46	127.90	122.12
22	O	199	LEU	CA-C-O	5.46	126.33	120.55
24	Q	394	ASN	CA-C-N	5.46	129.75	120.91
24	Q	394	ASN	C-N-CA	5.46	129.75	120.91
1	1	136	GLY	CA-C-O	-5.45	114.79	120.90
23	P	107	SER	N-CA-C	5.45	118.15	111.82
28	U	106	ILE	N-CA-C	-5.45	105.21	110.72
18	K	395	VAL	CA-C-N	5.45	128.03	120.29
18	K	395	VAL	C-N-CA	5.45	128.03	120.29
21	N	548	ARG	CA-C-N	5.45	127.53	120.44
21	N	548	ARG	C-N-CA	5.45	127.53	120.44
26	S	376	THR	CA-C-O	5.45	128.31	120.51
18	K	420	THR	CA-C-N	5.45	130.34	122.77
18	K	420	THR	C-N-CA	5.45	130.34	122.77
21	N	711	ARG	O-C-N	5.45	128.84	121.97
22	O	254	LEU	CA-C-N	5.45	127.85	120.44
22	O	254	LEU	C-N-CA	5.45	127.85	120.44
23	P	222	ASN	CA-C-N	5.45	127.58	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	P	222	ASN	C-N-CA	5.45	127.58	120.28
33	Z	419	VAL	CA-C-N	5.45	128.13	120.28
33	Z	419	VAL	C-N-CA	5.45	128.13	120.28
11	D	193	LYS	N-CA-C	-5.45	105.24	111.07
17	J	216	ALA	N-CA-C	-5.45	106.47	113.23
25	R	289	ILE	CB-CA-C	5.45	115.85	111.06
16	I	357	THR	CA-C-N	5.45	127.58	120.28
16	I	357	THR	C-N-CA	5.45	127.58	120.28
18	K	136	SER	CA-C-N	-5.45	114.96	122.69
18	K	136	SER	C-N-CA	-5.45	114.96	122.69
21	N	324	LYS	CA-C-N	5.45	131.94	121.54
21	N	324	LYS	C-N-CA	5.45	131.94	121.54
25	R	277	LEU	O-C-N	5.45	127.89	122.12
25	R	367	ASP	N-CA-C	-5.45	106.48	113.23
3	3	56	GLU	N-CA-C	5.45	117.97	111.71
12	E	236	THR	N-CA-C	5.45	117.30	111.36
21	N	180	SER	CA-C-N	5.45	127.85	120.44
21	N	180	SER	C-N-CA	5.45	127.85	120.44
22	O	351	SER	CA-C-N	5.45	130.15	122.09
22	O	351	SER	C-N-CA	5.45	130.15	122.09
2	2	78	SER	CA-C-N	5.44	127.58	120.28
2	2	78	SER	C-N-CA	5.44	127.58	120.28
14	G	67	GLN	N-CA-C	-5.44	100.79	109.23
19	L	177	GLU	O-C-N	5.44	128.35	122.15
23	P	273	TYR	N-CA-C	-5.44	100.80	109.07
33	Z	560	THR	CA-C-N	5.44	127.57	120.28
33	Z	560	THR	C-N-CA	5.44	127.57	120.28
10	C	6	TYR	O-C-N	-5.44	115.81	122.34
16	I	309	LEU	CA-C-N	5.44	128.02	120.29
16	I	309	LEU	C-N-CA	5.44	128.02	120.29
24	Q	382	LEU	CA-C-O	-5.44	114.78	120.55
33	Z	545	SER	O-C-N	5.44	127.67	122.07
7	7	76	GLU	CA-C-N	5.44	129.31	120.23
7	7	76	GLU	C-N-CA	5.44	129.31	120.23
33	Z	578	GLY	CA-C-N	5.44	127.57	120.28
33	Z	578	GLY	C-N-CA	5.44	127.57	120.28
1	1	99	VAL	O-C-N	5.44	130.15	122.97
17	J	199	ALA	CA-C-N	5.44	127.57	120.28
17	J	199	ALA	C-N-CA	5.44	127.57	120.28
24	Q	302	VAL	N-CA-C	5.44	116.17	110.62
20	M	391	LEU	CA-C-O	-5.44	114.79	120.55
27	T	223	GLU	N-CA-C	-5.44	105.36	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	4	164	VAL	CA-C-O	-5.43	115.30	120.95
12	E	41	ALA	CA-C-O	5.43	126.30	120.38
25	R	50	VAL	O-C-N	-5.43	116.60	121.87
5	5	128	CYS	N-CA-C	-5.43	100.17	109.24
23	P	223	LEU	N-CA-C	5.43	117.20	111.28
29	V	244	MET	N-CA-C	5.43	117.20	111.28
15	H	188	PRO	CA-C-O	-5.43	112.69	120.56
10	C	12	ILE	N-CA-C	-5.43	101.58	109.29
24	Q	150	GLN	CA-C-O	-5.43	115.23	122.51
1	1	151	THR	CA-C-N	5.43	128.13	120.42
1	1	151	THR	C-N-CA	5.43	128.13	120.42
10	C	193	ALA	N-CA-C	-5.43	105.26	111.07
11	D	30	GLY	O-C-N	-5.43	118.14	122.81
17	J	229	MET	CA-C-O	-5.43	114.67	120.42
23	P	134	VAL	CA-C-N	5.43	128.56	120.31
23	P	134	VAL	C-N-CA	5.43	128.56	120.31
24	Q	8	LEU	N-CA-C	5.43	116.88	111.07
24	Q	314	PHE	CA-C-N	5.43	128.00	120.29
24	Q	314	PHE	C-N-CA	5.43	128.00	120.29
33	Z	606	CYS	N-CA-C	-5.43	105.01	111.03
6	6	52	GLY	CA-C-N	5.42	127.49	120.44
6	6	52	GLY	C-N-CA	5.42	127.49	120.44
16	I	177	PRO	CA-C-O	-5.42	115.17	121.95
21	N	18	ASP	CA-C-N	5.42	127.55	120.28
21	N	18	ASP	C-N-CA	5.42	127.55	120.28
22	O	200	GLU	CA-C-N	5.42	124.76	118.85
22	O	200	GLU	C-N-CA	5.42	124.76	118.85
27	T	212	ASN	N-CA-C	-5.42	104.22	111.87
33	Z	374	LEU	CB-CA-C	-5.42	109.33	115.79
21	N	67	LYS	N-CA-C	5.42	117.89	111.33
23	P	93	ILE	CA-C-N	5.42	127.55	120.28
23	P	93	ILE	C-N-CA	5.42	127.55	120.28
17	J	49	ASN	O-C-N	-5.42	116.37	122.12
17	J	160	ILE	CB-CA-C	-5.42	104.82	112.14
18	K	124	SER	CA-C-N	5.42	129.76	120.71
18	K	124	SER	C-N-CA	5.42	129.76	120.71
21	N	898	GLY	CA-C-O	5.42	125.16	119.04
24	Q	304	GLU	CA-C-O	5.42	126.16	120.42
18	K	177	LEU	N-CA-C	-5.42	105.98	112.59
29	V	210	THR	CA-C-O	-5.42	115.12	120.70
3	3	168	ARG	CA-C-O	5.42	126.22	119.78
8	A	94	ALA	CA-C-N	5.42	127.48	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	A	94	ALA	C-N-CA	5.42	127.48	120.44
11	D	105	THR	O-C-N	-5.42	117.05	123.22
20	M	346	LYS	O-C-N	5.42	130.27	123.12
24	Q	293	SER	N-CA-C	-5.42	100.89	108.96
25	R	122	GLU	CA-C-N	5.42	127.98	120.29
25	R	122	GLU	C-N-CA	5.42	127.98	120.29
18	K	342	SER	N-CA-C	-5.41	105.49	113.61
21	N	137	PHE	CA-C-N	5.41	128.54	120.31
21	N	137	PHE	C-N-CA	5.41	128.54	120.31
25	R	306	PRO	CA-C-N	5.41	127.53	120.28
25	R	306	PRO	C-N-CA	5.41	127.53	120.28
33	Z	986	ASN	CA-C-N	5.41	125.50	119.87
33	Z	986	ASN	C-N-CA	5.41	125.50	119.87
21	N	576	VAL	CA-C-N	-5.41	112.90	122.26
21	N	576	VAL	C-N-CA	-5.41	112.90	122.26
29	V	284	ALA	N-CA-CB	5.41	118.07	110.12
1	1	67	THR	O-C-N	5.41	127.71	122.09
19	L	159	LEU	N-CA-C	-5.41	102.28	110.50
10	C	165	VAL	O-C-N	5.41	128.71	122.82
11	D	150	THR	N-CA-C	-5.41	100.21	109.24
17	J	170	HIS	O-C-N	5.41	124.51	121.27
21	N	163	LEU	N-CA-C	-5.41	105.42	112.23
26	S	365	THR	O-C-N	-5.41	116.50	122.07
30	W	79	THR	CA-C-O	-5.41	114.49	120.38
23	P	252	SER	O-C-N	-5.40	115.30	122.59
9	B	191	ILE	CA-C-N	5.40	127.52	120.28
9	B	191	ILE	C-N-CA	5.40	127.52	120.28
26	S	306	SER	N-CA-C	-5.40	106.69	113.28
4	4	181	LYS	O-C-N	-5.40	116.80	123.33
7	7	171	ASN	N-CA-C	-5.40	105.47	111.36
9	B	223	GLY	CA-C-O	5.40	126.43	119.68
15	H	337	ILE	CA-C-N	5.40	127.96	120.29
15	H	337	ILE	C-N-CA	5.40	127.96	120.29
24	Q	111	LEU	CA-C-N	5.40	127.52	120.28
24	Q	111	LEU	C-N-CA	5.40	127.52	120.28
22	O	92	PHE	O-C-N	5.40	127.63	122.07
29	V	289	GLU	O-C-N	5.40	127.63	122.07
9	B	195	THR	N-CA-C	5.39	117.16	111.28
11	D	196	VAL	N-CA-C	-5.39	105.27	110.72
2	2	141	HIS	N-CA-C	-5.39	106.62	114.12
3	3	71	ARG	O-C-N	-5.39	117.59	123.52
7	7	84	ILE	CA-C-N	5.39	127.77	120.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
7	7	84	ILE	C-N-CA	5.39	127.77	120.65
13	F	96	SER	CA-C-N	5.39	127.95	120.29
13	F	96	SER	C-N-CA	5.39	127.95	120.29
16	I	340	ARG	CA-C-N	5.39	126.58	119.84
16	I	340	ARG	C-N-CA	5.39	126.58	119.84
20	M	199	LEU	CA-C-O	-5.39	112.77	120.16
23	P	132	VAL	CA-C-O	5.39	126.17	120.51
24	Q	424	ASP	CA-C-N	5.39	127.45	120.44
24	Q	424	ASP	C-N-CA	5.39	127.45	120.44
21	N	204	SER	CA-C-N	5.39	127.50	120.28
21	N	204	SER	C-N-CA	5.39	127.50	120.28
33	Z	448	LYS	CA-C-N	5.39	127.77	120.44
33	Z	448	LYS	C-N-CA	5.39	127.77	120.44
1	1	75	THR	CA-C-O	5.39	126.26	120.55
7	7	164	VAL	N-CA-C	-5.39	105.12	110.62
13	F	3	ARG	CA-C-N	5.39	131.84	121.54
13	F	3	ARG	C-N-CA	5.39	131.84	121.54
17	J	387	GLY	CA-C-N	5.39	127.77	120.44
17	J	387	GLY	C-N-CA	5.39	127.77	120.44
33	Z	75	ILE	CB-CA-C	5.39	116.55	110.41
33	Z	268	ALA	N-CA-C	5.39	117.16	111.28
33	Z	575	MET	CA-C-O	5.39	126.90	120.70
4	4	68	ILE	CA-C-O	-5.39	114.95	120.71
10	C	166	GLY	N-CA-C	-5.39	104.33	112.84
18	K	106	ASN	CA-C-O	-5.39	114.13	120.81
23	P	195	GLN	CA-C-O	-5.39	114.84	120.55
23	P	199	LEU	CA-C-N	5.39	127.50	120.28
23	P	199	LEU	C-N-CA	5.39	127.50	120.28
25	R	289	ILE	O-C-N	5.39	127.80	122.04
10	C	232	PRO	CA-C-N	5.38	128.50	120.31
10	C	232	PRO	C-N-CA	5.38	128.50	120.31
15	H	245	GLY	CA-C-O	-5.38	116.62	121.47
22	O	295	THR	CA-C-N	5.38	127.94	120.29
22	O	295	THR	C-N-CA	5.38	127.94	120.29
2	2	123	TYR	N-CA-C	-5.38	106.64	114.12
4	4	68	ILE	O-C-N	5.38	128.94	121.84
18	K	252	ARG	N-CA-C	-5.38	105.49	111.36
28	U	291	LEU	O-C-N	-5.38	116.41	122.12
5	5	209	ASN	CA-C-N	-5.38	115.94	123.10
5	5	209	ASN	C-N-CA	-5.38	115.94	123.10
9	B	176	GLU	CA-C-N	5.38	129.70	120.71
9	B	176	GLU	C-N-CA	5.38	129.70	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	K	368	LEU	O-C-N	5.38	128.89	122.27
26	S	214	MET	N-CA-C	5.38	117.14	111.28
13	F	185	ASN	CA-C-N	5.38	126.56	119.84
13	F	185	ASN	C-N-CA	5.38	126.56	119.84
17	J	87	LYS	CA-C-O	5.38	126.13	120.54
21	N	276	GLU	CA-C-N	5.38	127.76	120.44
21	N	276	GLU	C-N-CA	5.38	127.76	120.44
30	W	25	ARG	CG-CD-NE	-5.38	100.17	112.00
33	Z	784	SER	N-CA-C	-5.38	106.56	113.02
28	U	277	TYR	N-CA-C	-5.38	105.50	111.36
19	L	269	TYR	CA-C-N	5.38	127.92	120.29
19	L	269	TYR	C-N-CA	5.38	127.92	120.29
21	N	704	GLY	CA-C-O	-5.37	115.53	120.80
23	P	54	SER	N-CA-C	-5.37	99.93	109.06
25	R	148	ASP	N-CA-C	-5.37	105.86	112.90
33	Z	833	GLN	CA-C-N	5.37	127.92	120.29
33	Z	833	GLN	C-N-CA	5.37	127.92	120.29
24	Q	194	SER	O-C-N	5.37	128.27	122.15
33	Z	361	HIS	CA-C-N	5.37	127.92	120.29
33	Z	361	HIS	C-N-CA	5.37	127.92	120.29
33	Z	794	ASP	CA-C-N	5.37	127.48	120.28
33	Z	794	ASP	C-N-CA	5.37	127.48	120.28
9	B	52	SER	N-CA-C	-5.37	105.77	114.09
20	M	137	PRO	N-CA-C	-5.37	108.53	114.92
24	Q	4	PRO	CA-C-N	5.37	131.93	121.41
24	Q	4	PRO	C-N-CA	5.37	131.93	121.41
25	R	240	SER	N-CA-C	-5.37	105.69	113.21
25	R	408	ASP	CA-C-N	5.37	126.06	119.99
25	R	408	ASP	C-N-CA	5.37	126.06	119.99
22	O	145	LYS	CA-C-N	5.37	127.47	120.28
22	O	145	LYS	C-N-CA	5.37	127.47	120.28
33	Z	776	VAL	O-C-N	-5.37	116.26	120.07
5	5	151	GLU	CA-C-N	5.37	127.91	120.29
5	5	151	GLU	C-N-CA	5.37	127.91	120.29
15	H	399	GLU	CA-C-O	-5.37	115.15	121.16
7	7	176	LEU	CA-C-O	-5.36	114.86	120.55
22	O	145	LYS	CA-C-O	-5.36	114.73	120.42
10	C	55	THR	CA-C-N	5.36	127.90	120.29
10	C	55	THR	C-N-CA	5.36	127.90	120.29
13	F	62	LYS	N-CA-C	-5.36	105.01	112.30
20	M	70	LYS	N-CA-C	5.36	117.12	111.28
21	N	62	ALA	N-CA-C	5.36	117.54	111.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	J	33	LYS	CA-C-N	5.36	127.80	120.46
17	J	33	LYS	C-N-CA	5.36	127.80	120.46
21	N	527	GLY	CA-C-N	5.36	127.73	120.44
21	N	527	GLY	C-N-CA	5.36	127.73	120.44
18	K	278	ALA	N-CA-C	-5.36	105.97	112.88
21	N	545	SER	CA-C-O	-5.36	114.87	120.55
24	Q	182	SER	CA-C-O	-5.36	115.20	120.82
24	Q	262	LEU	CA-C-O	-5.36	114.87	120.55
33	Z	624	LEU	N-CA-C	5.35	116.80	111.07
3	3	40	VAL	N-CA-C	-5.35	100.71	108.36
5	5	101	ILE	N-CA-C	-5.35	99.53	107.51
27	T	125	GLU	CA-C-O	-5.35	114.88	120.55
9	B	27	ALA	CA-C-N	5.35	127.30	120.56
9	B	27	ALA	C-N-CA	5.35	127.30	120.56
20	M	155	ILE	N-CA-C	5.35	114.97	107.37
21	N	153	ALA	CA-C-N	5.35	127.89	120.29
21	N	153	ALA	C-N-CA	5.35	127.89	120.29
22	O	95	SER	CA-C-N	5.35	127.89	120.29
22	O	95	SER	C-N-CA	5.35	127.89	120.29
22	O	154	GLU	O-C-N	5.35	127.58	122.07
22	O	326	HIS	CA-C-O	-5.35	115.19	120.70
25	R	300	ASP	O-C-N	5.35	129.25	123.10
31	X	77	PRO	N-CA-C	-5.35	101.45	112.47
33	Z	185	ASP	N-CA-C	-5.35	106.62	112.72
33	Z	485	ILE	CA-C-O	-5.35	114.99	120.71
3	3	150	GLU	N-CA-C	-5.35	103.40	110.40
10	C	136	ILE	CA-C-N	5.35	129.73	122.19
10	C	136	ILE	C-N-CA	5.35	129.73	122.19
27	T	185	ILE	CA-C-O	-5.35	115.18	120.85
33	Z	62	SER	CA-C-N	5.35	127.88	120.29
33	Z	62	SER	C-N-CA	5.35	127.88	120.29
26	S	157	GLU	CA-C-N	5.35	127.88	120.29
26	S	157	GLU	C-N-CA	5.35	127.88	120.29
10	C	32	ALA	N-CA-C	-5.34	101.59	109.18
15	H	290	MET	N-CA-C	5.34	117.11	111.28
18	K	84	GLU	CA-C-N	5.34	127.39	120.44
18	K	84	GLU	C-N-CA	5.34	127.39	120.44
17	J	160	ILE	CA-C-O	5.34	126.51	120.95
20	M	141	LYS	CA-C-O	5.34	125.33	120.26
21	N	892	PRO	N-CA-C	5.34	119.58	111.19
9	B	94	HIS	N-CA-C	-5.34	105.58	112.68
17	J	303	ALA	N-CA-C	-5.34	106.27	112.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	M	57	VAL	O-C-N	-5.34	116.68	121.91
21	N	571	LEU	N-CA-C	-5.34	105.12	111.69
9	B	26	THR	CA-C-N	5.34	127.43	120.28
9	B	26	THR	C-N-CA	5.34	127.43	120.28
20	M	372	ASP	O-C-N	5.34	128.99	122.58
26	S	280	ASN	O-C-N	5.34	128.23	122.15
4	4	-1	MET	CA-C-N	5.33	130.29	122.77
4	4	-1	MET	C-N-CA	5.33	130.29	122.77
18	K	71	GLU	CA-C-N	5.33	127.43	120.28
18	K	71	GLU	C-N-CA	5.33	127.43	120.28
18	K	260	LEU	CA-C-O	5.33	126.10	119.97
25	R	114	ASN	CA-C-O	-5.33	114.90	120.55
29	V	235	GLU	CA-C-N	5.33	127.37	120.44
29	V	235	GLU	C-N-CA	5.33	127.37	120.44
20	M	348	GLU	N-CA-C	-5.33	101.47	109.95
4	4	4	LEU	CA-C-N	-5.33	114.88	121.38
4	4	4	LEU	C-N-CA	-5.33	114.88	121.38
14	G	242	ALA	CA-C-N	5.33	130.90	120.99
14	G	242	ALA	C-N-CA	5.33	130.90	120.99
27	T	255	GLN	N-CA-C	-5.33	105.92	112.90
2	2	168	GLY	CA-C-N	5.33	130.28	122.77
2	2	168	GLY	C-N-CA	5.33	130.28	122.77
21	N	235	ALA	CA-C-N	5.33	125.89	119.98
21	N	235	ALA	C-N-CA	5.33	125.89	119.98
26	S	349	THR	CA-C-N	5.33	127.42	120.28
26	S	349	THR	C-N-CA	5.33	127.42	120.28
30	W	159	ALA	CA-C-N	5.33	127.42	120.28
30	W	159	ALA	C-N-CA	5.33	127.42	120.28
33	Z	491	LEU	CA-C-N	5.33	125.85	119.94
33	Z	491	LEU	C-N-CA	5.33	125.85	119.94
12	E	208	MET	CA-C-N	5.33	131.03	121.66
12	E	208	MET	C-N-CA	5.33	131.03	121.66
17	J	217	GLU	O-C-N	-5.33	115.52	122.39
33	Z	131	LYS	CA-C-O	5.33	126.39	120.43
18	K	251	PRO	CA-C-O	-5.32	111.51	119.34
21	N	52	ASP	N-CA-C	-5.32	101.79	110.20
21	N	152	LEU	O-C-N	5.32	128.61	122.17
3	3	139	GLY	CA-C-N	5.32	127.36	120.44
3	3	139	GLY	C-N-CA	5.32	127.36	120.44
9	B	248	GLU	CA-C-O	5.32	125.91	119.31
21	N	512	ASN	CA-C-N	5.32	127.98	120.42
21	N	512	ASN	C-N-CA	5.32	127.98	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	905	LEU	CA-C-O	-5.32	115.15	121.16
19	L	175	GLN	CA-C-N	5.32	126.83	121.35
19	L	175	GLN	C-N-CA	5.32	126.83	121.35
22	O	80	LYS	N-CA-C	5.32	117.49	111.11
27	T	103	SER	CA-C-N	5.32	127.67	120.44
27	T	103	SER	C-N-CA	5.32	127.67	120.44
12	E	169	ALA	N-CA-C	-5.32	100.64	108.99
13	F	141	GLY	N-CA-C	-5.32	104.44	112.84
15	H	373	ARG	O-C-N	5.32	129.28	123.22
17	J	133	LEU	O-C-N	-5.32	117.09	123.31
19	L	208	GLN	CA-C-N	5.32	127.84	120.29
19	L	208	GLN	C-N-CA	5.32	127.84	120.29
25	R	106	ASN	CA-C-N	5.32	127.35	120.44
25	R	106	ASN	C-N-CA	5.32	127.35	120.44
33	Z	271	ILE	CA-C-N	5.32	127.41	120.28
33	Z	271	ILE	C-N-CA	5.32	127.41	120.28
6	6	12	ALA	N-CA-C	-5.32	100.36	108.76
6	6	23	ASP	CB-CA-C	-5.32	110.46	116.63
9	B	72	GLY	N-CA-C	-5.32	102.99	111.18
11	D	109	LEU	O-C-N	5.32	127.75	122.12
21	N	217	MET	N-CA-C	5.32	121.56	109.81
14	G	110	ALA	CA-C-N	5.31	127.40	120.28
14	G	110	ALA	C-N-CA	5.31	127.40	120.28
15	H	250	GLY	CA-C-N	5.31	125.85	120.38
15	H	250	GLY	C-N-CA	5.31	125.85	120.38
21	N	872	THR	CA-C-O	-5.31	112.91	120.51
8	A	167	LYS	CA-C-O	5.31	126.40	120.82
13	F	203	ASP	CA-C-N	5.31	130.91	122.94
13	F	203	ASP	C-N-CA	5.31	130.91	122.94
20	M	229	THR	CA-C-N	5.31	127.83	120.29
20	M	229	THR	C-N-CA	5.31	127.83	120.29
10	C	28	SER	O-C-N	5.31	127.75	122.12
20	M	323	VAL	N-CA-C	-5.31	100.68	108.11
21	N	238	ALA	CA-C-N	5.31	127.71	120.54
21	N	238	ALA	C-N-CA	5.31	127.71	120.54
30	W	72	ILE	CA-C-N	5.31	127.40	120.28
30	W	72	ILE	C-N-CA	5.31	127.40	120.28
21	N	771	PHE	N-CA-C	-5.31	100.67	108.79
22	O	254	LEU	CA-C-O	5.31	126.18	120.55
23	P	155	GLU	CA-C-N	5.31	127.83	120.29
23	P	155	GLU	C-N-CA	5.31	127.83	120.29
33	Z	174	GLU	CA-C-N	5.31	130.04	122.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	Z	174	GLU	C-N-CA	5.31	130.04	122.08
9	B	228	PRO	CA-C-O	-5.31	115.50	122.19
8	A	134	MET	O-C-N	-5.30	117.74	123.42
9	B	170	ALA	O-C-N	-5.30	116.10	122.15
13	F	104	ALA	CA-C-N	5.30	127.73	120.46
13	F	104	ALA	C-N-CA	5.30	127.73	120.46
16	I	176	SER	CA-C-N	5.30	125.60	119.92
16	I	176	SER	C-N-CA	5.30	125.60	119.92
21	N	555	ILE	O-C-N	5.30	128.84	121.84
22	O	102	LEU	CA-C-N	5.30	130.27	122.63
22	O	102	LEU	C-N-CA	5.30	130.27	122.63
27	T	40	LEU	N-CA-C	5.30	117.06	111.28
15	H	223	GLU	N-CA-C	-5.30	105.58	111.36
21	N	158	LEU	O-C-N	5.30	127.53	122.07
24	Q	364	LYS	O-C-N	5.30	127.53	122.07
9	B	239	THR	O-C-N	-5.30	116.48	122.68
11	D	180	ASP	O-C-N	-5.30	116.72	123.24
16	I	312	GLN	CA-C-O	5.30	126.17	120.55
16	I	352	ASN	CA-C-O	-5.30	115.26	120.19
22	O	54	SER	O-C-N	5.30	129.52	122.95
26	S	317	HIS	CA-C-N	5.30	127.38	120.28
26	S	317	HIS	C-N-CA	5.30	127.38	120.28
33	Z	816	GLY	O-C-N	-5.30	117.10	122.19
2	2	12	VAL	CA-C-O	5.30	126.65	121.19
4	4	179	ILE	N-CA-C	-5.30	100.75	108.17
25	R	42	GLN	N-CA-C	-5.30	105.40	111.07
26	S	387	VAL	O-C-N	-5.30	116.73	121.87
20	M	389	ALA	N-CA-C	5.30	117.06	111.28
22	O	373	TRP	N-CA-C	5.30	117.47	111.11
23	P	162	GLU	CA-C-N	5.30	127.64	120.44
23	P	162	GLU	C-N-CA	5.30	127.64	120.44
23	P	182	GLU	CA-C-N	5.30	127.81	120.29
23	P	182	GLU	C-N-CA	5.30	127.81	120.29
10	C	165	VAL	CA-C-O	-5.30	116.15	121.45
16	I	271	ALA	CA-C-N	5.30	125.83	120.00
16	I	271	ALA	C-N-CA	5.30	125.83	120.00
21	N	890	PHE	N-CA-C	-5.30	100.77	109.40
23	P	257	TRP	O-C-N	-5.30	116.31	122.03
25	R	351	LYS	CA-C-O	-5.30	115.24	120.70
27	T	14	ALA	CA-C-N	5.30	127.81	120.29
27	T	14	ALA	C-N-CA	5.30	127.81	120.29
15	H	318	ARG	CA-C-N	5.29	131.12	122.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	318	ARG	C-N-CA	5.29	131.12	122.65
16	I	299	GLU	N-CA-C	-5.29	99.81	108.76
4	4	58	TYR	CA-C-N	5.29	127.94	120.42
4	4	58	TYR	C-N-CA	5.29	127.94	120.42
4	4	178	VAL	CA-C-O	5.29	127.42	121.28
13	F	140	SER	N-CA-C	-5.29	106.13	112.59
14	G	69	VAL	N-CA-C	-5.29	100.50	108.12
3	3	33	LYS	CA-C-N	-5.29	116.63	123.19
3	3	33	LYS	C-N-CA	-5.29	116.63	123.19
24	Q	267	LEU	CA-C-N	5.29	127.37	120.28
24	Q	267	LEU	C-N-CA	5.29	127.37	120.28
30	W	20	ASP	CA-CB-CG	5.29	117.89	112.60
5	5	73	ARG	CA-C-O	-5.29	115.09	120.80
10	C	231	LYS	N-CA-C	-5.29	99.89	109.09
23	P	228	SER	CA-C-N	5.29	127.80	120.29
23	P	228	SER	C-N-CA	5.29	127.80	120.29
2	2	156	SER	CA-C-O	-5.29	115.27	120.82
11	D	56	ASP	CA-C-N	5.29	131.90	122.06
11	D	56	ASP	C-N-CA	5.29	131.90	122.06
18	K	332	GLY	O-C-N	-5.29	115.80	122.41
20	M	423	GLN	CA-C-O	5.29	125.57	118.38
21	N	405	LEU	N-CA-C	-5.29	106.33	112.89
21	N	591	LEU	CA-C-N	5.29	125.85	119.98
21	N	591	LEU	C-N-CA	5.29	125.85	119.98
24	Q	173	SER	CA-C-N	5.29	127.37	120.28
24	Q	173	SER	C-N-CA	5.29	127.37	120.28
21	N	663	ILE	N-CA-C	5.29	116.76	111.00
6	6	188	GLN	N-CA-C	-5.29	106.51	113.17
7	7	8	TYR	N-CA-C	-5.29	101.68	109.18
8	A	101	ALA	N-CA-C	5.29	117.04	111.28
16	I	378	GLU	N-CA-C	5.29	117.04	111.28
19	L	331	ASP	CA-C-N	5.29	132.51	121.94
19	L	331	ASP	C-N-CA	5.29	132.51	121.94
20	M	149	ASN	O-C-N	5.29	128.93	122.96
11	D	137	GLY	O-C-N	-5.28	118.86	123.88
15	H	265	ASN	CA-C-N	5.28	127.36	120.28
15	H	265	ASN	C-N-CA	5.28	127.36	120.28
21	N	580	ASN	CA-C-N	5.28	128.34	120.31
21	N	580	ASN	C-N-CA	5.28	128.34	120.31
23	P	76	ASN	O-C-N	5.28	127.51	122.07
28	U	105	LYS	CA-C-O	5.28	126.11	120.24
5	5	49	ALA	N-CA-C	5.28	116.73	110.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	2	215	GLU	CA-C-O	5.28	126.40	120.70
7	7	56	GLU	CA-C-N	5.28	127.36	120.28
7	7	56	GLU	C-N-CA	5.28	127.36	120.28
23	P	339	GLU	CA-C-N	5.28	127.79	120.29
23	P	339	GLU	C-N-CA	5.28	127.79	120.29
29	V	116	CYS	N-CA-C	-5.28	104.79	113.50
30	W	94	ALA	CA-C-O	-5.28	114.95	120.55
9	B	139	HIS	N-CA-C	-5.28	100.70	108.99
14	G	60	PRO	CA-C-O	-5.28	115.58	121.23
33	Z	285	ALA	CA-C-N	-5.28	113.40	120.95
33	Z	285	ALA	C-N-CA	-5.28	113.40	120.95
9	B	173	THR	N-CA-C	5.28	116.72	111.07
11	D	80	ALA	CA-C-N	5.28	127.78	120.29
11	D	80	ALA	C-N-CA	5.28	127.78	120.29
19	L	228	LYS	CA-C-O	5.28	126.36	120.82
24	Q	57	SER	CA-C-N	5.28	127.21	120.56
24	Q	57	SER	C-N-CA	5.28	127.21	120.56
4	4	96	PRO	CA-C-O	-5.28	115.54	122.19
7	7	177	TYR	CA-C-O	5.28	126.02	119.79
9	B	111	VAL	N-CA-C	-5.28	105.24	110.62
27	T	92	ASN	CA-C-O	5.28	125.02	118.43
16	I	255	LYS	CA-C-N	-5.27	114.62	122.74
16	I	255	LYS	C-N-CA	-5.27	114.62	122.74
19	L	264	ARG	CA-C-N	5.27	127.35	120.28
19	L	264	ARG	C-N-CA	5.27	127.35	120.28
12	E	59	LEU	N-CA-C	-5.27	100.58	108.96
18	K	395	VAL	O-C-N	-5.27	116.75	121.87
18	K	397	LYS	CA-C-O	-5.27	112.97	120.51
26	S	390	THR	CA-C-O	5.27	126.14	120.55
29	V	152	VAL	CA-C-N	5.27	130.53	122.25
29	V	152	VAL	C-N-CA	5.27	130.53	122.25
4	4	11	SER	CA-C-N	-5.27	115.66	122.99
4	4	11	SER	C-N-CA	-5.27	115.66	122.99
7	7	35	ILE	N-CA-C	-5.27	101.72	107.73
17	J	324	ARG	CA-C-N	5.27	127.34	120.28
17	J	324	ARG	C-N-CA	5.27	127.34	120.28
26	S	191	HIS	O-C-N	-5.27	115.37	122.43
6	6	169	GLU	N-CA-C	5.27	117.10	111.36
11	D	181	ARG	N-CA-C	-5.27	105.62	111.36
12	E	52	LYS	CA-C-O	-5.27	115.28	120.70
16	I	237	ALA	N-CA-C	-5.27	105.62	111.36
21	N	782	PHE	N-CA-C	-5.27	106.87	113.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	Z	964	GLU	N-CA-C	-5.27	100.52	108.52
4	4	175	PHE	O-C-N	5.26	127.83	122.09
9	B	90	ARG	N-CA-C	-5.26	105.54	111.28
16	I	397	THR	CA-C-N	5.26	127.77	120.29
16	I	397	THR	C-N-CA	5.26	127.77	120.29
16	I	433	GLU	CA-C-O	5.26	126.69	120.69
19	L	364	HIS	CA-C-O	-5.26	114.84	120.42
21	N	578	ASP	CA-C-N	5.26	127.77	120.29
21	N	578	ASP	C-N-CA	5.26	127.77	120.29
29	V	238	LEU	CA-C-N	5.26	127.28	120.44
29	V	238	LEU	C-N-CA	5.26	127.28	120.44
2	2	208	GLY	N-CA-C	-5.26	108.43	115.32
8	A	44	ALA	N-CA-C	-5.26	100.11	109.06
21	N	393	SER	CA-C-N	5.26	133.37	121.53
21	N	393	SER	C-N-CA	5.26	133.37	121.53
23	P	73	ASP	O-C-N	-5.26	116.15	122.15
15	H	384	GLY	CA-C-O	-5.26	115.08	120.66
23	P	67	ALA	CA-C-N	5.26	127.33	120.28
23	P	67	ALA	C-N-CA	5.26	127.33	120.28
15	H	367	ARG	N-CA-C	5.26	116.51	109.83
25	R	33	LEU	CA-C-O	-5.26	115.30	120.82
26	S	140	LEU	CA-C-N	5.26	127.64	120.54
26	S	140	LEU	C-N-CA	5.26	127.64	120.54
33	Z	381	LEU	CA-C-N	5.26	127.28	120.44
33	Z	381	LEU	C-N-CA	5.26	127.28	120.44
33	Z	903	MET	CA-C-O	5.26	125.86	119.49
21	N	167	GLU	O-C-N	5.26	127.48	122.07
18	K	202	GLY	CA-C-N	5.26	131.43	121.97
18	K	202	GLY	C-N-CA	5.26	131.43	121.97
21	N	202	PHE	CA-C-N	5.26	127.58	120.38
21	N	202	PHE	C-N-CA	5.26	127.58	120.38
24	Q	186	HIS	CA-C-O	-5.26	114.98	120.55
16	I	102	ASN	CA-C-O	-5.25	115.27	120.26
28	U	120	LEU	N-CA-C	-5.25	99.95	108.52
3	3	41	PHE	O-C-N	-5.25	116.54	123.21
19	L	312	MET	N-CA-C	5.25	116.69	111.07
23	P	265	VAL	CA-C-N	5.25	127.75	120.29
23	P	265	VAL	C-N-CA	5.25	127.75	120.29
25	R	242	GLU	CA-C-O	-5.25	113.16	119.15
33	Z	206	ASP	CA-C-O	-5.25	114.98	120.55
18	K	400	TYR	N-CA-C	-5.25	105.20	113.02
21	N	758	VAL	N-CA-C	-5.25	98.42	107.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	U	210	TYR	N-CA-C	-5.25	105.45	111.07
33	Z	188	ALA	CA-C-O	5.25	124.30	118.52
9	B	205	ASN	N-CA-C	-5.25	101.32	109.14
28	U	68	LEU	CA-C-N	-5.25	115.70	123.05
28	U	68	LEU	C-N-CA	-5.25	115.70	123.05
4	4	43	MET	CA-C-O	5.25	126.73	120.28
33	Z	621	LEU	O-C-N	5.25	127.68	122.12
13	F	155	GLU	N-CA-C	-5.25	100.75	109.46
21	N	423	LEU	CA-C-N	5.25	127.31	120.28
21	N	423	LEU	C-N-CA	5.25	127.31	120.28
21	N	448	LEU	O-C-N	5.25	127.47	122.07
21	N	910	PRO	CA-C-O	-5.25	115.56	121.43
25	R	243	LEU	N-CA-C	-5.25	106.56	113.17
29	V	140	VAL	N-CA-C	-5.25	100.56	108.12
22	O	262	ASP	CA-C-N	5.25	127.74	120.29
22	O	262	ASP	C-N-CA	5.25	127.74	120.29
24	Q	408	THR	CA-C-N	5.25	127.31	120.28
24	Q	408	THR	C-N-CA	5.25	127.31	120.28
5	5	202	GLU	CA-C-N	5.24	127.73	120.29
5	5	202	GLU	C-N-CA	5.24	127.73	120.29
18	K	61	LEU	CA-C-N	5.24	127.26	120.44
18	K	61	LEU	C-N-CA	5.24	127.26	120.44
26	S	237	ILE	CA-C-N	5.24	127.31	120.28
26	S	237	ILE	C-N-CA	5.24	127.31	120.28
33	Z	259	PRO	CA-C-O	-5.24	115.60	121.32
18	K	325	ASP	CA-C-O	-5.24	113.75	120.04
22	O	259	THR	O-C-N	5.24	127.47	122.07
31	X	127	GLY	CA-C-N	5.24	128.90	120.30
31	X	127	GLY	C-N-CA	5.24	128.90	120.30
9	B	170	ALA	CA-C-N	5.24	127.25	120.44
9	B	170	ALA	C-N-CA	5.24	127.25	120.44
7	7	-6	GLN	CA-C-N	5.24	125.24	119.90
7	7	-6	GLN	C-N-CA	5.24	125.24	119.90
7	7	191	ILE	CA-C-O	5.24	125.89	120.39
9	B	90	ARG	O-C-N	-5.24	116.57	122.12
21	N	684	SER	CA-C-N	5.24	127.86	120.42
21	N	684	SER	C-N-CA	5.24	127.86	120.42
22	O	257	ALA	O-C-N	-5.24	116.57	122.12
11	D	15	GLY	N-CA-C	-5.24	108.00	115.64
15	H	369	GLY	N-CA-C	-5.24	107.56	114.95
19	L	300	GLU	CA-C-N	5.24	127.86	120.42
19	L	300	GLU	C-N-CA	5.24	127.86	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	4	132	HIS	O-C-N	5.24	129.34	123.27
21	N	429	GLU	N-CA-C	5.24	116.99	111.28
22	O	29	PHE	CA-C-O	-5.24	115.00	120.55
27	T	171	ILE	O-C-N	5.24	126.95	121.87
15	H	198	MET	CA-C-O	-5.23	115.63	121.81
22	O	373	TRP	O-C-N	5.23	127.53	122.09
6	6	59	PHE	CA-C-N	5.23	127.29	120.28
6	6	59	PHE	C-N-CA	5.23	127.29	120.28
22	O	275	SER	N-CA-C	-5.23	105.66	111.36
17	J	219	VAL	CB-CA-C	-5.23	102.71	111.29
26	S	140	LEU	CA-C-O	5.23	126.31	120.82
31	X	27	ILE	CA-C-O	-5.23	112.94	119.95
33	Z	396	ASN	N-CA-C	-5.23	99.66	110.80
15	H	251	PRO	N-CA-C	5.23	117.08	110.70
15	H	418	GLU	CA-C-O	-5.23	114.19	120.10
25	R	175	ALA	N-CA-C	-5.23	105.26	111.69
29	V	69	PHE	N-CA-C	-5.23	101.34	109.24
3	3	44	ILE	N-CA-C	-5.22	100.54	108.17
11	D	134	LEU	O-C-N	-5.22	117.08	123.30
16	I	355	LEU	O-C-N	5.22	127.45	122.07
17	J	225	GLU	CA-C-N	5.22	131.65	121.41
17	J	225	GLU	C-N-CA	5.22	131.65	121.41
25	R	49	PHE	CA-C-N	5.22	127.61	120.46
25	R	49	PHE	C-N-CA	5.22	127.61	120.46
14	G	195	ALA	CA-C-N	5.22	127.28	120.28
14	G	195	ALA	C-N-CA	5.22	127.28	120.28
16	I	218	GLY	O-C-N	5.22	127.96	123.37
29	V	248	ALA	O-C-N	5.22	127.65	122.12
21	N	539	MET	N-CA-C	5.22	117.05	111.36
23	P	246	GLN	N-CA-CB	5.22	117.79	110.12
23	P	154	ASP	CA-C-N	5.22	127.27	120.28
23	P	154	ASP	C-N-CA	5.22	127.27	120.28
4	4	62	ASN	CA-C-O	5.22	126.08	120.55
11	D	221	ILE	CA-C-O	-5.22	114.83	120.36
21	N	400	ILE	CA-C-N	5.22	128.24	120.31
21	N	400	ILE	C-N-CA	5.22	128.24	120.31
26	S	423	VAL	N-CA-C	5.22	115.99	110.72
11	D	114	ALA	CA-C-O	-5.21	115.02	120.55
21	N	556	ALA	CA-C-N	5.21	129.42	120.71
21	N	556	ALA	C-N-CA	5.21	129.42	120.71
23	P	313	ILE	CA-C-N	5.21	127.83	120.42
23	P	313	ILE	C-N-CA	5.21	127.83	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	8	PHE	N-CA-C	-5.21	99.70	110.80
21	N	373	VAL	N-CA-C	-5.21	105.32	111.00
32	Y	77	LEU	CA-C-O	-5.21	115.35	120.82
21	N	109	TYR	CA-C-N	5.21	127.23	120.56
21	N	109	TYR	C-N-CA	5.21	127.23	120.56
22	O	178	TYR	CA-C-N	5.21	127.69	120.29
22	O	178	TYR	C-N-CA	5.21	127.69	120.29
22	O	219	ILE	N-CA-C	-5.21	105.63	110.53
26	S	411	LEU	N-CA-C	5.21	117.86	111.82
29	V	129	PHE	O-C-N	-5.21	116.70	122.07
4	4	193	ASP	CA-C-N	5.21	128.10	119.35
4	4	193	ASP	C-N-CA	5.21	128.10	119.35
9	B	178	ARG	CA-C-N	5.21	129.27	121.72
9	B	178	ARG	C-N-CA	5.21	129.27	121.72
20	M	123	SER	CA-C-N	5.21	130.34	122.68
20	M	123	SER	C-N-CA	5.21	130.34	122.68
26	S	379	LEU	CA-C-N	5.21	127.26	120.28
26	S	379	LEU	C-N-CA	5.21	127.26	120.28
27	T	61	ILE	CA-C-O	-5.21	115.33	120.85
14	G	112	ALA	CA-C-O	-5.21	115.33	120.90
19	L	342	ARG	N-CA-C	-5.21	99.70	110.80
25	R	64	LYS	N-CA-C	-5.21	105.50	111.07
27	T	83	ASN	O-C-N	5.21	127.64	122.12
14	G	76	VAL	N-CA-C	-5.21	100.38	108.81
21	N	254	SER	O-C-N	-5.21	116.60	122.12
23	P	369	LEU	CA-C-N	5.21	129.95	122.40
23	P	369	LEU	C-N-CA	5.21	129.95	122.40
24	Q	151	TYR	CA-C-N	5.21	127.26	120.28
24	Q	151	TYR	C-N-CA	5.21	127.26	120.28
14	G	98	PHE	CA-C-O	-5.21	115.36	120.82
5	5	198	TRP	CA-C-O	-5.20	115.03	120.55
16	I	229	LYS	N-CA-C	5.20	116.64	111.07
23	P	69	ARG	N-CA-C	5.20	116.64	111.07
4	4	184	ASP	CA-C-O	-5.20	115.78	121.14
1	1	35	THR	N-CA-C	-5.20	100.42	108.90
3	3	165	ALA	CA-C-O	5.20	126.28	120.82
6	6	22	THR	CA-C-O	5.20	126.54	120.20
7	7	90	THR	CA-C-N	5.20	127.11	120.56
7	7	90	THR	C-N-CA	5.20	127.11	120.56
7	7	146	LEU	CA-C-N	5.20	127.25	120.28
7	7	146	LEU	C-N-CA	5.20	127.25	120.28
17	J	33	LYS	CA-C-O	-5.20	114.22	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
17	J	317	PRO	N-CA-C	-5.20	104.36	110.70
6	6	82	ARG	CA-C-N	5.20	127.25	120.28
6	6	82	ARG	C-N-CA	5.20	127.25	120.28
10	C	116	SER	N-CA-C	5.20	117.03	111.36
13	F	9	ASP	N-CA-C	-5.20	100.05	108.52
33	Z	607	ALA	CB-CA-C	-5.20	102.72	110.88
33	Z	976	HIS	CA-C-O	-5.20	114.73	120.60
16	I	203	THR	CA-C-N	-5.20	116.49	122.52
16	I	203	THR	C-N-CA	-5.20	116.49	122.52
24	Q	103	LYS	CA-C-O	-5.20	115.04	120.55
31	X	92	SER	CA-C-N	5.20	129.52	122.19
31	X	92	SER	C-N-CA	5.20	129.52	122.19
33	Z	857	LEU	O-C-N	-5.20	116.55	122.89
6	6	173	LYS	CA-C-N	5.20	127.24	120.28
6	6	173	LYS	C-N-CA	5.20	127.24	120.28
19	L	222	GLY	O-C-N	-5.20	116.58	121.77
21	N	66	SER	O-C-N	-5.20	116.69	122.09
21	N	369	ALA	O-C-N	5.20	129.39	122.43
24	Q	243	PHE	CA-C-N	5.20	127.67	120.29
24	Q	243	PHE	C-N-CA	5.20	127.67	120.29
31	X	27	ILE	N-CA-C	5.20	120.10	108.88
16	I	287	ILE	CA-C-N	5.19	131.59	121.41
16	I	287	ILE	C-N-CA	5.19	131.59	121.41
17	J	52	ASN	N-CA-CB	-5.19	102.27	110.06
18	K	195	ALA	N-CA-C	-5.19	105.70	111.36
33	Z	465	GLY	CA-C-O	-5.19	117.79	122.57
21	N	419	THR	O-C-N	-5.19	116.14	122.22
22	O	313	ILE	CA-C-N	5.19	127.24	120.28
22	O	313	ILE	C-N-CA	5.19	127.24	120.28
31	X	23	LEU	CA-C-O	5.19	126.49	121.14
15	H	324	GLY	N-CA-C	5.19	123.86	114.46
24	Q	265	MET	N-CA-C	5.19	116.94	111.28
33	Z	791	LYS	N-CA-C	5.19	116.94	111.28
15	H	415	THR	CA-C-O	-5.19	115.97	121.94
21	N	668	THR	N-CA-C	-5.19	102.38	110.42
10	C	176	LEU	N-CA-C	5.19	116.62	111.07
19	L	104	LEU	O-C-N	-5.19	117.25	123.06
33	Z	321	PHE	CA-C-N	5.19	127.48	120.38
33	Z	321	PHE	C-N-CA	5.19	127.48	120.38
33	Z	595	MET	N-CA-C	-5.19	105.63	111.28
19	L	293	GLU	CA-C-O	-5.18	114.55	120.98
6	6	104	GLY	N-CA-C	-5.18	103.60	111.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	Q	20	TYR	N-CA-C	5.18	117.60	111.33
25	R	359	VAL	CA-C-N	5.18	131.52	122.81
25	R	359	VAL	C-N-CA	5.18	131.52	122.81
33	Z	537	THR	CA-C-N	5.18	130.30	122.99
33	Z	537	THR	C-N-CA	5.18	130.30	122.99
24	Q	223	GLY	CA-C-N	5.18	127.56	120.46
24	Q	223	GLY	C-N-CA	5.18	127.56	120.46
30	W	88	ALA	O-C-N	5.18	127.61	122.12
7	7	64	THR	CA-C-O	-5.18	115.38	120.82
16	I	112	ILE	CA-C-O	5.18	125.97	120.48
25	R	317	ILE	CA-C-N	5.18	126.31	119.84
25	R	317	ILE	C-N-CA	5.18	126.31	119.84
33	Z	64	TYR	CA-C-O	-5.18	115.38	120.82
8	A	245	LEU	CA-C-N	5.18	127.55	120.46
8	A	245	LEU	C-N-CA	5.18	127.55	120.46
15	H	241	ASP	CB-CA-C	5.18	115.85	108.76
22	O	139	LEU	CA-C-N	5.18	127.17	120.44
22	O	139	LEU	C-N-CA	5.18	127.17	120.44
18	K	411	TYR	CA-C-N	5.18	128.18	120.31
18	K	411	TYR	C-N-CA	5.18	128.18	120.31
21	N	28	ILE	CA-C-O	-5.18	115.89	121.27
22	O	334	LEU	CA-C-N	5.18	130.34	121.07
22	O	334	LEU	C-N-CA	5.18	130.34	121.07
30	W	191	ILE	N-CA-C	-5.18	100.41	108.95
33	Z	152	GLU	CA-C-N	5.17	127.17	120.44
33	Z	152	GLU	C-N-CA	5.17	127.17	120.44
20	M	258	GLU	O-C-N	5.17	128.05	122.15
20	M	388	GLY	CA-C-N	5.17	127.21	120.28
20	M	388	GLY	C-N-CA	5.17	127.21	120.28
23	P	306	ASN	N-CA-C	5.17	121.82	110.80
12	E	88	MET	CA-C-N	5.17	127.55	120.46
12	E	88	MET	C-N-CA	5.17	127.55	120.46
27	T	40	LEU	O-C-N	5.17	127.60	122.12
29	V	237	ASN	CA-C-N	5.17	127.52	120.54
29	V	237	ASN	C-N-CA	5.17	127.52	120.54
4	4	129	TYR	N-CA-C	-5.17	100.87	108.99
14	G	191	ALA	CA-C-N	5.17	127.07	120.56
14	G	191	ALA	C-N-CA	5.17	127.07	120.56
15	H	70	LYS	CA-C-N	5.17	127.21	120.28
15	H	70	LYS	C-N-CA	5.17	127.21	120.28
20	M	181	SER	CA-C-N	5.17	127.63	120.29
20	M	181	SER	C-N-CA	5.17	127.63	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	Z	224	LEU	O-C-N	5.17	127.60	122.12
4	4	116	TYR	CA-C-O	-5.17	114.58	120.32
29	V	95	LEU	N-CA-C	5.17	116.91	111.28
1	1	165	TRP	N-CA-C	-5.17	105.72	112.23
21	N	898	GLY	N-CA-C	-5.17	107.88	114.85
29	V	265	GLU	CA-C-N	5.17	127.15	120.44
29	V	265	GLU	C-N-CA	5.17	127.15	120.44
23	P	158	ASP	N-CA-C	5.16	116.59	111.07
24	Q	213	GLN	O-C-N	-5.16	116.26	122.15
26	S	415	SER	O-C-N	5.16	129.46	122.59
8	A	137	LEU	CA-C-N	5.16	131.52	121.41
8	A	137	LEU	C-N-CA	5.16	131.52	121.41
16	I	104	LEU	O-C-N	-5.16	116.92	123.17
16	I	370	ASN	CA-C-O	-5.16	115.13	120.70
33	Z	259	PRO	O-C-N	5.16	129.15	122.85
4	4	156	GLY	O-C-N	-5.16	117.19	122.19
22	O	151	ASP	O-C-N	-5.16	116.65	122.12
20	M	217	GLY	N-CA-C	-5.16	103.01	110.90
2	2	48	THR	CA-C-N	5.16	127.50	120.54
2	2	48	THR	C-N-CA	5.16	127.50	120.54
4	4	72	TYR	CA-C-N	5.16	128.87	121.50
4	4	72	TYR	C-N-CA	5.16	128.87	121.50
6	6	83	ASN	CA-C-N	5.16	127.74	120.42
6	6	83	ASN	C-N-CA	5.16	127.74	120.42
13	F	156	LEU	N-CA-C	-5.16	101.57	109.41
14	G	17	ASP	N-CA-C	-5.16	106.23	112.88
20	M	320	ARG	CA-C-O	-5.16	113.32	119.35
26	S	382	ARG	N-CA-C	5.16	116.98	111.36
27	T	23	CYS	CA-C-N	5.15	127.19	120.28
27	T	23	CYS	C-N-CA	5.15	127.19	120.28
15	H	243	PRO	CA-C-N	5.15	127.19	120.28
15	H	243	PRO	C-N-CA	5.15	127.19	120.28
25	R	258	LEU	CA-C-N	5.15	127.14	120.44
25	R	258	LEU	C-N-CA	5.15	127.14	120.44
19	L	334	ASP	CA-C-N	5.15	126.28	119.84
19	L	334	ASP	C-N-CA	5.15	126.28	119.84
31	X	48	PHE	CA-C-N	5.15	129.19	121.72
31	X	48	PHE	C-N-CA	5.15	129.19	121.72
10	C	234	GLU	CA-C-N	5.15	127.73	120.42
10	C	234	GLU	C-N-CA	5.15	127.73	120.42
22	O	163	ILE	CA-C-N	5.15	125.88	120.11
22	O	163	ILE	C-N-CA	5.15	125.88	120.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	H	391	ILE	CA-C-N	5.15	129.32	120.72
15	H	391	ILE	C-N-CA	5.15	129.32	120.72
17	J	358	VAL	CA-C-O	-5.15	115.60	120.95
33	Z	501	LYS	N-CA-C	5.15	117.93	110.42
6	6	46	ASN	CA-C-O	-5.15	114.82	120.43
28	U	233	PHE	CA-C-N	5.15	127.13	120.44
28	U	233	PHE	C-N-CA	5.15	127.13	120.44
6	6	138	MET	N-CA-C	5.14	120.60	113.45
24	Q	311	LEU	CA-C-N	5.14	127.43	120.38
24	Q	311	LEU	C-N-CA	5.14	127.43	120.38
18	K	402	ILE	O-C-N	-5.14	116.67	122.94
21	N	263	SER	CA-C-O	5.14	126.20	120.80
21	N	438	ASP	N-CA-C	5.14	116.89	111.28
23	P	257	TRP	CD2-CE2-CZ2	-5.14	117.26	122.40
3	3	98	PRO	CA-C-N	5.14	130.11	122.71
3	3	98	PRO	C-N-CA	5.14	130.11	122.71
6	6	49	ALA	N-CA-C	5.14	116.88	111.28
21	N	380	LEU	N-CA-C	-5.14	106.09	112.93
24	Q	419	LEU	CA-C-N	5.14	127.17	120.28
24	Q	419	LEU	C-N-CA	5.14	127.17	120.28
25	R	360	SER	O-C-N	5.14	130.00	123.11
28	U	66	TRP	N-CA-C	-5.14	101.30	108.96
13	F	164	ARG	CA-C-N	5.14	127.17	120.28
13	F	164	ARG	C-N-CA	5.14	127.17	120.28
17	J	148	ASP	O-C-N	5.14	128.36	122.25
18	K	78	GLU	CA-C-N	5.14	127.17	120.28
18	K	78	GLU	C-N-CA	5.14	127.17	120.28
28	U	290	ASP	CA-C-N	5.14	127.17	120.28
28	U	290	ASP	C-N-CA	5.14	127.17	120.28
33	Z	75	ILE	N-CA-C	-5.14	98.29	107.18
18	K	197	LEU	CA-C-O	-5.14	114.97	120.42
20	M	281	ASP	N-CA-C	-5.14	101.59	109.76
21	N	19	SER	CA-C-N	5.14	127.71	120.42
21	N	19	SER	C-N-CA	5.14	127.71	120.42
30	W	98	LEU	N-CA-C	5.14	117.62	111.71
33	Z	602	LEU	N-CA-C	5.14	116.96	111.36
4	4	75	SER	O-C-N	-5.13	115.42	121.32
17	J	377	VAL	N-CA-C	-5.13	100.73	108.12
21	N	523	LEU	N-CA-C	5.13	116.88	111.28
23	P	432	LEU	CA-C-O	-5.13	115.43	120.82
24	Q	346	ASN	CA-C-N	5.13	127.16	120.28
24	Q	346	ASN	C-N-CA	5.13	127.16	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	4	46	ALA	O-C-N	-5.13	117.53	123.33
18	K	92	VAL	O-C-N	-5.13	115.25	121.10
1	1	181	ALA	N-CA-C	-5.13	106.53	112.89
20	M	191	GLU	CA-C-N	5.13	127.11	120.44
20	M	191	GLU	C-N-CA	5.13	127.11	120.44
25	R	219	LEU	O-C-N	5.13	128.58	122.27
26	S	132	ALA	CA-C-O	-5.13	115.11	120.55
5	5	159	ARG	CA-C-N	5.13	127.15	120.28
5	5	159	ARG	C-N-CA	5.13	127.15	120.28
26	S	242	LEU	N-CA-C	5.13	117.77	111.82
26	S	282	ILE	CA-C-N	5.13	131.58	121.58
26	S	282	ILE	C-N-CA	5.13	131.58	121.58
28	U	57	GLU	N-CA-C	-5.13	100.09	108.76
9	B	67	LEU	CA-C-O	-5.13	113.58	119.78
22	O	157	LEU	CA-C-N	5.13	127.57	120.29
22	O	157	LEU	C-N-CA	5.13	127.57	120.29
19	L	354	GLU	O-C-N	5.13	127.99	122.15
21	N	43	LEU	CA-C-N	5.13	125.17	119.32
21	N	43	LEU	C-N-CA	5.13	125.17	119.32
25	R	327	ASP	CA-C-N	5.13	127.10	120.44
25	R	327	ASP	C-N-CA	5.13	127.10	120.44
33	Z	169	VAL	CB-CA-C	-5.13	105.14	112.22
27	T	22	ALA	CA-C-O	5.12	125.98	120.55
28	U	200	LEU	CA-C-O	-5.12	115.44	120.82
33	Z	774	ARG	N-CA-C	5.12	116.67	111.14
6	6	18	THR	O-C-N	-5.12	116.04	122.24
27	T	71	GLN	CA-C-O	-5.12	115.12	120.55
31	X	125	MET	N-CA-C	5.12	116.55	111.07
15	H	216	ASP	CA-C-N	5.12	127.14	120.28
15	H	216	ASP	C-N-CA	5.12	127.14	120.28
17	J	43	ARG	CA-C-N	5.12	127.56	120.29
17	J	43	ARG	C-N-CA	5.12	127.56	120.29
21	N	672	ASN	O-C-N	-5.12	115.56	121.60
21	N	727	THR	CA-C-N	5.12	127.10	120.44
21	N	727	THR	C-N-CA	5.12	127.10	120.44
3	3	182	LYS	CA-C-O	5.12	127.72	121.68
8	A	37	GLN	CA-C-N	5.12	131.11	122.26
8	A	37	GLN	C-N-CA	5.12	131.11	122.26
11	D	12	SER	CA-C-N	5.12	125.57	120.04
11	D	12	SER	C-N-CA	5.12	125.57	120.04
12	E	71	ASP	N-CA-C	-5.12	101.13	108.60
13	F	169	LYS	O-C-N	5.12	128.56	122.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	V	181	ASN	CA-C-N	5.12	129.82	122.35
29	V	181	ASN	C-N-CA	5.12	129.82	122.35
21	N	254	SER	N-CA-C	5.12	116.86	111.28
25	R	194	VAL	CB-CA-C	-5.12	103.97	112.26
15	H	56	LEU	CA-C-O	-5.12	115.13	120.55
5	5	112	ILE	CB-CA-C	5.11	117.80	110.33
14	G	219	SER	CA-C-N	5.11	127.09	120.44
14	G	219	SER	C-N-CA	5.11	127.09	120.44
31	X	30	GLN	CA-C-N	-5.11	113.92	120.72
31	X	30	GLN	C-N-CA	-5.11	113.92	120.72
31	X	32	GLU	O-C-N	5.11	129.20	123.27
1	1	20	THR	N-CA-C	-5.11	101.55	109.72
2	2	219	ASN	CA-C-O	-5.11	115.69	121.72
8	A	128	TYR	CA-C-O	-5.11	113.76	119.79
12	E	155	LEU	O-C-N	-5.11	117.14	123.33
19	L	94	ASP	CA-C-N	5.11	127.46	120.46
19	L	94	ASP	C-N-CA	5.11	127.46	120.46
23	P	90	LYS	CA-C-N	5.11	127.13	120.28
23	P	90	LYS	C-N-CA	5.11	127.13	120.28
33	Z	418	ALA	CA-C-N	5.11	127.00	120.56
33	Z	418	ALA	C-N-CA	5.11	127.00	120.56
1	1	93	LEU	O-C-N	5.11	129.87	123.23
14	G	153	SER	O-C-N	5.11	129.11	122.42
24	Q	275	ILE	N-CA-C	5.11	115.88	110.72
15	H	256	LYS	O-C-N	5.11	127.61	122.09
19	L	284	ASP	O-C-N	-5.11	115.81	121.84
21	N	647	ASP	CA-C-N	5.11	125.14	119.32
21	N	647	ASP	C-N-CA	5.11	125.14	119.32
26	S	237	ILE	N-CA-C	5.11	115.83	110.62
25	R	271	ILE	N-CA-C	-5.11	107.44	113.42
27	T	262	LYS	O-C-N	-5.11	116.71	122.12
6	6	206	GLU	N-CA-C	-5.10	101.32	109.23
16	I	125	MET	CA-C-O	-5.10	113.17	120.16
17	J	368	TYR	O-C-N	-5.10	116.33	122.15
21	N	917	ILE	CA-C-O	-5.10	114.40	120.78
25	R	247	GLU	O-C-N	5.10	127.54	122.08
30	W	3	LEU	N-CA-C	-5.10	98.94	108.02
2	2	222	ASP	CA-C-O	5.10	124.82	119.51
12	E	221	CYS	CA-C-O	5.10	126.91	121.45
17	J	340	GLY	O-C-N	5.10	128.24	122.42
18	K	115	GLY	CA-C-N	5.10	130.04	123.00
18	K	115	GLY	C-N-CA	5.10	130.04	123.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	318	LYS	CA-C-O	5.10	125.96	120.55
22	O	39	PHE	CA-C-N	5.10	130.75	121.92
22	O	39	PHE	C-N-CA	5.10	130.75	121.92
26	S	425	ARG	CA-C-N	5.10	127.12	120.28
26	S	425	ARG	C-N-CA	5.10	127.12	120.28
31	X	36	LYS	N-CA-C	-5.10	100.59	108.55
6	6	151	TYR	N-CA-C	-5.10	100.03	108.75
19	L	423	ALA	CA-C-N	5.10	127.38	120.44
19	L	423	ALA	C-N-CA	5.10	127.38	120.44
20	M	357	ARG	CA-C-O	-5.10	115.14	120.55
17	J	291	ILE	CB-CA-C	5.10	118.18	110.63
2	2	24	PRO	O-C-N	5.10	129.35	122.37
11	D	110	THR	O-C-N	5.10	127.32	122.07
22	O	173	SER	CA-C-N	5.10	127.07	120.44
22	O	173	SER	C-N-CA	5.10	127.07	120.44
24	Q	272	LEU	CA-C-N	5.10	131.28	121.54
24	Q	272	LEU	C-N-CA	5.10	131.28	121.54
23	P	121	THR	CA-C-O	-5.10	115.02	120.42
26	S	439	GLU	O-C-N	5.10	128.36	122.19
28	U	169	ILE	CA-C-N	5.10	125.61	120.00
28	U	169	ILE	C-N-CA	5.10	125.61	120.00
9	B	137	ALA	O-C-N	-5.09	116.61	123.23
17	J	380	GLU	CA-C-N	5.09	127.11	120.28
17	J	380	GLU	C-N-CA	5.09	127.11	120.28
18	K	381	ALA	CA-C-N	5.09	127.65	120.42
18	K	381	ALA	C-N-CA	5.09	127.65	120.42
20	M	140	LEU	CA-C-O	-5.09	115.34	120.84
7	7	20	GLY	N-CA-C	-5.09	101.11	113.18
33	Z	102	ILE	CA-C-O	5.09	126.25	120.85
2	2	183	ASP	N-CA-C	-5.09	99.96	110.80
5	5	81	LYS	CA-C-N	5.09	126.97	120.56
5	5	81	LYS	C-N-CA	5.09	126.97	120.56
18	K	49	PHE	N-CA-C	-5.09	105.73	111.28
20	M	159	LEU	O-C-N	-5.09	116.62	121.20
4	4	16	SER	O-C-N	-5.09	117.17	123.33
25	R	191	LEU	CA-C-N	5.09	127.10	120.28
25	R	191	LEU	C-N-CA	5.09	127.10	120.28
30	W	21	PHE	CA-CB-CG	5.09	118.89	113.80
33	Z	358	TYR	N-CA-C	-5.09	105.81	111.36
17	J	315	GLU	CA-C-N	5.09	127.71	120.49
17	J	315	GLU	C-N-CA	5.09	127.71	120.49
19	L	349	ILE	CA-C-N	5.09	126.20	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	L	349	ILE	C-N-CA	5.09	126.20	119.84
27	T	12	SER	O-C-N	5.09	127.58	122.09
19	L	123	SER	CA-C-N	-5.08	113.89	121.87
19	L	123	SER	C-N-CA	-5.08	113.89	121.87
21	N	233	ASN	CA-C-O	-5.08	115.70	121.65
28	U	88	LYS	CA-C-N	5.08	128.56	121.24
28	U	88	LYS	C-N-CA	5.08	128.56	121.24
33	Z	318	LYS	CA-C-O	-5.08	115.46	120.70
5	5	154	LEU	N-CA-C	5.08	117.48	111.33
10	C	105	ASP	CA-C-O	-5.08	116.16	121.55
3	3	-6	PRO	N-CA-C	-5.08	102.00	112.47
8	A	238	ALA	CA-C-O	-5.08	115.48	120.82
18	K	132	LYS	N-CA-C	-5.08	103.74	110.40
24	Q	380	MET	CA-C-N	5.08	127.42	120.46
24	Q	380	MET	C-N-CA	5.08	127.42	120.46
11	D	102	ASP	CB-CA-C	5.08	116.92	110.16
20	M	407	GLN	CA-C-O	-5.08	115.82	121.81
22	O	303	LYS	N-CA-C	-5.08	106.92	114.64
16	I	419	ALA	N-CA-C	5.08	116.90	111.36
21	N	298	TYR	O-C-N	5.08	127.50	122.12
24	Q	310	SER	CA-C-N	5.08	127.50	120.29
24	Q	310	SER	C-N-CA	5.08	127.50	120.29
10	C	141	ASP	N-CA-C	-5.08	101.36	109.07
19	L	268	ALA	CA-C-O	-5.08	115.04	120.42
22	O	250	TRP	N-CA-C	5.08	117.55	111.71
1	1	103	ASP	N-CA-C	-5.07	101.66	109.52
17	J	48	ARG	CA-C-N	5.07	127.08	120.28
17	J	48	ARG	C-N-CA	5.07	127.08	120.28
17	J	49	ASN	CA-C-N	5.07	127.49	120.29
17	J	49	ASN	C-N-CA	5.07	127.49	120.29
20	M	63	LYS	CA-C-N	5.07	127.08	120.28
20	M	63	LYS	C-N-CA	5.07	127.08	120.28
20	M	284	ASP	CA-C-O	-5.07	113.14	118.77
20	M	398	ALA	O-C-N	-5.07	116.74	122.12
21	N	904	VAL	CA-C-N	5.07	131.04	122.87
21	N	904	VAL	C-N-CA	5.07	131.04	122.87
23	P	239	GLN	CA-C-N	5.07	127.49	120.29
23	P	239	GLN	C-N-CA	5.07	127.49	120.29
3	3	181	ILE	CA-C-O	5.07	125.86	120.48
22	O	255	LEU	CA-C-N	5.07	127.49	120.29
22	O	255	LEU	C-N-CA	5.07	127.49	120.29
33	Z	811	SER	N-CA-C	5.07	116.50	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	D	56	ASP	N-CA-C	-5.07	102.05	109.81
16	I	352	ASN	CB-CA-C	5.07	115.73	108.68
20	M	231	LEU	CA-C-O	5.07	125.80	120.42
21	N	6	ALA	CA-C-N	5.07	126.43	120.09
21	N	6	ALA	C-N-CA	5.07	126.43	120.09
24	Q	373	VAL	CA-C-N	5.07	127.49	120.29
24	Q	373	VAL	C-N-CA	5.07	127.49	120.29
25	R	89	ASN	N-CA-C	-5.07	101.58	109.24
31	X	129	LEU	N-CA-C	5.07	116.50	111.07
2	2	39	PRO	O-C-N	5.07	130.63	122.17
2	2	222	ASP	N-CA-C	-5.07	104.89	112.54
17	J	89	GLN	CA-C-N	-5.07	113.51	119.84
17	J	89	GLN	C-N-CA	-5.07	113.51	119.84
19	L	223	PRO	CA-C-O	-5.07	113.22	120.56
23	P	345	VAL	CA-C-N	5.07	127.04	120.56
23	P	345	VAL	C-N-CA	5.07	127.04	120.56
25	R	203	ASP	O-C-N	5.07	128.61	122.68
27	T	17	ASN	N-CA-C	-5.07	106.79	113.17
25	R	362	ALA	CA-C-O	5.06	125.79	119.97
33	Z	752	ILE	CA-C-O	-5.06	115.48	120.85
17	J	321	VAL	N-CA-C	-5.06	105.56	110.42
23	P	203	ILE	O-C-N	5.06	126.98	121.87
26	S	289	ALA	CA-C-N	5.06	127.02	120.44
26	S	289	ALA	C-N-CA	5.06	127.02	120.44
26	S	316	LEU	CA-C-N	5.06	127.06	120.28
26	S	316	LEU	C-N-CA	5.06	127.06	120.28
15	H	251	PRO	CA-C-O	-5.06	113.22	120.56
7	7	119	LEU	CB-CA-C	5.06	117.82	110.79
3	3	144	LEU	CA-C-O	-5.05	115.06	120.42
5	5	140	LEU	N-CA-C	5.05	116.48	111.07
10	C	56	LEU	CA-C-N	5.05	129.41	120.87
10	C	56	LEU	C-N-CA	5.05	129.41	120.87
14	G	58	LEU	CA-C-O	-5.05	116.05	121.56
14	G	136	ILE	CA-C-N	-5.05	113.16	121.80
14	G	136	ILE	C-N-CA	-5.05	113.16	121.80
18	K	414	GLN	N-CA-C	-5.05	105.85	111.36
21	N	538	LYS	CA-C-N	5.05	127.47	120.29
21	N	538	LYS	C-N-CA	5.05	127.47	120.29
17	J	47	GLN	OE1-CD-NE2	-5.05	117.55	122.60
20	M	390	GLN	CA-C-O	-5.05	115.07	120.42
21	N	889	ARG	N-CA-C	5.05	119.16	113.15
18	K	217	THR	O-C-N	-5.05	116.37	122.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	285	SER	CA-C-N	5.05	127.46	120.29
22	O	285	SER	C-N-CA	5.05	127.46	120.29
24	Q	390	LEU	N-CA-C	-5.05	101.46	109.59
26	S	316	LEU	O-C-N	-5.05	116.39	122.15
28	U	73	ILE	CA-C-N	5.05	127.31	120.44
28	U	73	ILE	C-N-CA	5.05	127.31	120.44
33	Z	50	GLU	O-C-N	-5.05	117.16	121.85
23	P	295	SER	O-C-N	5.05	127.47	122.12
10	C	243	GLY	CA-C-N	5.04	129.54	122.93
10	C	243	GLY	C-N-CA	5.04	129.54	122.93
12	E	101	LEU	O-C-N	-5.04	116.87	122.07
24	Q	382	LEU	O-C-N	5.04	127.47	122.12
2	2	104	ASP	CA-C-N	5.04	125.49	120.04
2	2	104	ASP	C-N-CA	5.04	125.49	120.04
16	I	343	ARG	N-CA-C	-5.04	100.06	110.80
18	K	196	ASP	N-CA-C	5.04	117.51	111.71
27	T	155	GLY	CA-C-O	5.04	125.41	119.46
33	Z	436	LEU	CA-C-N	5.04	127.04	120.28
33	Z	436	LEU	C-N-CA	5.04	127.04	120.28
13	F	83	VAL	O-C-N	5.04	126.76	121.87
16	I	273	GLU	N-CA-C	5.04	116.78	111.28
17	J	188	TYR	CA-C-O	-5.04	114.34	120.54
17	J	295	ASN	CA-C-N	5.04	130.72	122.81
17	J	295	ASN	C-N-CA	5.04	130.72	122.81
18	K	166	LYS	CA-C-N	5.04	126.14	119.84
18	K	166	LYS	C-N-CA	5.04	126.14	119.84
19	L	86	LYS	O-C-N	5.04	127.46	122.12
20	M	265	ASP	CA-C-N	5.04	126.99	120.44
20	M	265	ASP	C-N-CA	5.04	126.99	120.44
23	P	73	ASP	CA-C-N	5.04	127.03	120.28
23	P	73	ASP	C-N-CA	5.04	127.03	120.28
27	T	37	ASN	O-C-N	5.04	127.90	122.15
8	A	107	LYS	N-CA-C	5.04	116.85	111.36
23	P	324	GLU	CA-C-O	-5.04	114.90	120.24
12	E	96	ALA	CA-C-N	5.04	127.01	120.56
12	E	96	ALA	C-N-CA	5.04	127.01	120.56
20	M	201	MET	CA-C-O	5.04	126.11	120.82
21	N	180	SER	N-CA-C	5.04	116.77	111.28
23	P	337	HIS	CA-C-N	5.04	127.03	120.28
23	P	337	HIS	C-N-CA	5.04	127.03	120.28
23	P	355	GLU	CA-C-N	5.04	129.12	120.71
23	P	355	GLU	C-N-CA	5.04	129.12	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	U	283	ARG	CA-C-N	5.04	127.03	120.28
28	U	283	ARG	C-N-CA	5.04	127.03	120.28
33	Z	989	TYR	N-CA-C	-5.04	102.02	109.83
3	3	82	VAL	O-C-N	5.04	126.85	121.91
21	N	224	THR	N-CA-C	5.04	116.85	111.36
24	Q	426	LEU	CA-C-O	5.04	125.89	120.55
29	V	57	PHE	CA-C-O	5.04	126.71	120.92
1	1	84	GLU	CA-C-N	5.04	127.03	120.28
1	1	84	GLU	C-N-CA	5.04	127.03	120.28
10	C	239	LEU	O-C-N	5.04	128.47	122.27
15	H	340	LEU	CA-C-O	5.04	126.09	120.90
21	N	306	ASN	CA-C-N	5.04	131.16	121.54
21	N	306	ASN	C-N-CA	5.04	131.16	121.54
23	P	367	GLU	N-CA-C	5.04	116.85	111.36
24	Q	170	ASP	O-C-N	-5.04	116.83	122.97
33	Z	544	THR	CA-C-N	5.04	126.99	120.44
33	Z	544	THR	C-N-CA	5.04	126.99	120.44
9	B	74	VAL	CA-C-O	-5.03	116.42	121.45
21	N	253	LEU	CA-C-N	5.03	127.03	120.28
21	N	253	LEU	C-N-CA	5.03	127.03	120.28
21	N	447	SER	CA-C-N	5.03	126.98	120.44
21	N	447	SER	C-N-CA	5.03	126.98	120.44
16	I	221	LEU	N-CA-C	-5.03	100.70	108.90
19	L	77	ARG	CA-C-N	5.03	127.02	120.28
19	L	77	ARG	C-N-CA	5.03	127.02	120.28
1	1	130	GLY	N-CA-C	-5.03	108.73	115.32
2	2	28	ASP	O-C-N	-5.03	117.25	123.44
14	G	131	PHE	O-C-N	5.03	128.57	122.94
14	G	146	HIS	O-C-N	5.03	129.30	123.41
17	J	274	GLU	O-C-N	5.03	127.52	122.09
19	L	237	ALA	CA-C-N	5.03	127.96	120.31
19	L	237	ALA	C-N-CA	5.03	127.96	120.31
25	R	96	GLN	CA-C-N	5.03	127.53	120.28
25	R	96	GLN	C-N-CA	5.03	127.53	120.28
28	U	159	CYS	CA-C-O	5.03	127.34	121.46
9	B	97	TYR	N-CA-C	-5.03	108.41	114.75
22	O	371	VAL	CB-CA-C	-5.03	105.44	111.88
5	5	42	LEU	N-CA-C	-5.03	101.67	109.72
11	D	85	LEU	CA-C-N	5.03	126.89	120.56
11	D	85	LEU	C-N-CA	5.03	126.89	120.56
25	R	312	TYR	N-CA-C	5.03	117.14	111.11
26	S	186	TYR	O-C-N	5.03	127.45	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	B	53	SER	CA-C-N	5.03	124.64	119.56
9	B	53	SER	C-N-CA	5.03	124.64	119.56
12	E	232	ASP	CA-C-N	5.03	127.27	120.38
12	E	232	ASP	C-N-CA	5.03	127.27	120.38
13	F	144	LEU	N-CA-C	-5.03	100.52	109.06
20	M	207	PHE	CA-C-N	5.03	126.97	120.44
20	M	207	PHE	C-N-CA	5.03	126.97	120.44
23	P	352	VAL	CA-C-N	5.03	128.41	120.47
23	P	352	VAL	C-N-CA	5.03	128.41	120.47
2	2	73	GLU	CA-C-O	-5.02	115.22	120.70
33	Z	227	ILE	CA-C-N	5.02	130.06	122.68
33	Z	227	ILE	C-N-CA	5.02	130.06	122.68
6	6	-5	TYR	CA-C-O	-5.02	115.03	120.81
33	Z	761	PHE	CA-C-N	5.02	125.56	119.98
33	Z	761	PHE	C-N-CA	5.02	125.56	119.98
19	L	226	THR	N-CA-C	-5.02	106.74	112.92
24	Q	11	ALA	N-CA-C	5.02	116.75	111.28
28	U	193	GLN	CA-C-N	5.02	127.01	120.28
28	U	193	GLN	C-N-CA	5.02	127.01	120.28
33	Z	584	VAL	CA-C-O	5.02	126.17	120.95
10	C	158	THR	CA-C-O	5.02	127.07	121.40
16	I	136	VAL	CA-C-O	-5.02	116.66	121.63
24	Q	261	VAL	CA-C-N	5.02	127.01	120.28
24	Q	261	VAL	C-N-CA	5.02	127.01	120.28
26	S	258	GLU	CA-C-O	-5.02	116.23	121.55
33	Z	848	THR	CA-C-O	5.02	125.74	120.42
8	A	237	SER	CA-C-N	5.02	126.96	120.44
8	A	237	SER	C-N-CA	5.02	126.96	120.44
24	Q	395	GLY	N-CA-C	-5.02	106.23	114.76
18	K	375	ASN	CA-C-N	5.01	130.09	121.87
18	K	375	ASN	C-N-CA	5.01	130.09	121.87
20	M	278	ILE	O-C-N	5.01	130.13	122.76
26	S	277	SER	N-CA-C	-5.01	105.70	111.07
5	5	151	GLU	O-C-N	-5.01	116.44	122.15
1	1	89	ASN	O-C-N	-5.01	115.48	122.20
7	7	136	THR	O-C-N	5.01	129.94	122.97
13	F	137	TYR	O-C-N	5.01	129.73	123.12
20	M	287	GLY	O-C-N	5.01	127.05	122.19
24	Q	315	ASN	O-C-N	-5.01	116.44	122.15
31	X	22	ARG	CB-CA-C	5.01	117.78	110.26
20	M	177	THR	N-CA-C	-5.01	100.99	108.96
21	N	127	ASP	O-C-N	-5.01	115.46	122.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	N	327	LEU	CA-C-N	5.01	126.99	120.28
21	N	327	LEU	C-N-CA	5.01	126.99	120.28
21	N	333	SER	CA-C-N	5.01	128.56	120.55
21	N	333	SER	C-N-CA	5.01	128.56	120.55
26	S	155	LEU	N-CA-C	5.01	118.65	112.54
29	V	42	ARG	N-CA-C	5.01	116.82	111.36
20	M	416	VAL	O-C-N	5.01	126.73	121.87
23	P	77	GLU	CA-C-N	5.01	127.40	120.29
23	P	77	GLU	C-N-CA	5.01	127.40	120.29
33	Z	158	ALA	CA-C-O	-5.01	115.24	120.55
33	Z	405	ASN	CA-C-N	5.01	126.95	120.44
33	Z	405	ASN	C-N-CA	5.01	126.95	120.44
19	L	277	ILE	N-CA-C	-5.00	101.20	108.36
33	Z	778	LEU	CA-C-N	5.00	126.98	120.28
33	Z	778	LEU	C-N-CA	5.00	126.98	120.28
3	3	57	MET	CA-C-O	5.00	125.72	120.42
14	G	157	TRP	N-CA-C	-5.00	101.51	108.96
19	L	415	LEU	N-CA-C	5.00	116.81	111.36
25	R	209	ARG	N-CA-C	-5.00	105.74	111.14
26	S	327	ILE	CB-CA-C	-5.00	102.26	111.36

There are no chirality outliers.

All (53) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	-2	LEU	Peptide
2	2	202	SER	Peptide
9	B	9	LEU	Peptide
14	G	246	ILE	Peptide
15	H	101	ARG	Peptide
15	H	107	LYS	Peptide
15	H	145	TYR	Sidechain
15	H	161	GLU	Peptide
15	H	166	THR	Peptide
15	H	167	ASP	Peptide
15	H	192	ASP	Peptide
16	I	256	TYR	Sidechain
17	J	189	GLY	Peptide
17	J	222	TYR	Sidechain
17	J	225	GLU	Peptide
17	J	48	ARG	Sidechain
18	K	246	TYR	Sidechain

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Mol	Chain	Res	Type	Group
18	K	248	GLY	Peptide
19	L	191	ARG	Sidechain
19	L	194	ARG	Sidechain
19	L	274	GLU	Peptide
19	L	339	ARG	Peptide
20	M	159	LEU	Peptide
20	M	320	ARG	Peptide
21	N	904	VAL	Peptide
22	O	124	ASP	Peptide
22	O	19	ASP	Peptide
23	P	242	GLN	Peptide
23	P	245	TYR	Sidechain
24	Q	352	GLU	Peptide
25	R	355	SER	Peptide
25	R	397	ASN	Peptide
26	S	256	LYS	Peptide
27	T	247	ASP	Peptide
28	U	117	ASN	Peptide
29	V	45	VAL	Peptide
30	W	145	GLY	Peptide
30	W	146	GLU	Peptide
30	W	163	ASN	Peptide
30	W	17	ARG	Peptide
30	W	179	ARG	Sidechain
30	W	21	PHE	Peptide
31	X	114	LEU	Peptide
31	X	117	LYS	Peptide
31	X	118	ASP	Peptide
31	X	27	ILE	Peptide
33	Z	242	PHE	Peptide
33	Z	258	PRO	Peptide
33	Z	322	GLU	Peptide
33	Z	374	LEU	Peptide
33	Z	516	THR	Peptide
33	Z	752	ILE	Peptide
33	Z	912	PHE	Peptide

5.2 Too-close contacts

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

the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	1576	0	1554	150	0
2	2	1692	0	1698	97	0
3	3	1581	0	1573	104	0
4	4	1585	0	1590	80	0
5	5	1646	0	1595	141	0
6	6	1757	0	1711	130	0
7	7	1824	0	1832	158	0
8	A	1921	0	1910	225	0
9	B	1915	0	1929	138	0
10	C	1913	0	1914	148	0
11	D	1899	0	1908	134	0
12	E	1867	0	1841	165	0
13	F	1795	0	1796	205	0
14	G	1900	0	1889	218	0
15	H	2792	0	2875	269	0
16	I	2822	0	2869	278	0
17	J	2928	0	3056	284	0
18	K	3019	0	3082	335	0
19	L	2853	0	2925	334	0
20	M	2866	0	2937	306	0
21	N	6562	0	6624	574	0
22	O	3182	0	3207	546	0
23	P	3401	0	3483	353	0
24	Q	3471	0	3491	313	0
25	R	3218	0	3216	394	0
26	S	2893	0	2937	264	0
27	T	2235	0	2207	208	0
28	U	2061	0	2114	269	0
29	V	1942	0	1948	263	0
30	W	1534	0	1542	143	0
31	X	1032	0	1015	252	0
32	Y	168	0	153	6	0
33	Z	6289	0	6233	692	0
All	All	80139	0	80654	7171	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 45.

All (7171) 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)
23:P:427:GLU:HA	29:V:230:TYR:CE1	1.27	1.67
22:O:185:PHE:CE2	22:O:223:LEU:HD13	1.30	1.66
22:O:310:PHE:HZ	22:O:341:ILE:CG2	1.04	1.62
12:E:12:VAL:HG12	12:E:123:PHE:CE2	1.37	1.60
33:Z:233:LEU:HD22	33:Z:268:ALA:CB	1.32	1.59
33:Z:120:SER:HB2	33:Z:153:TYR:CZ	1.28	1.58
22:O:310:PHE:CZ	22:O:341:ILE:CG2	1.80	1.58
21:N:514:THR:CB	21:N:546:LEU:HD13	1.28	1.57
25:R:396:LYS:HA	26:S:452:TYR:CE1	1.39	1.55
17:J:259:GLU:CB	18:K:280:LYS:HE2	1.26	1.55
20:M:221:TYR:CZ	20:M:348:GLU:HB3	1.40	1.54
29:V:197:TYR:CE1	29:V:199:LEU:HD21	1.40	1.53
19:L:252:VAL:CG1	20:M:256:ILE:HD12	1.32	1.53
21:N:759:ILE:CG2	21:N:903:VAL:HG11	1.34	1.52
21:N:144:CYS:SG	21:N:152:LEU:HD22	1.50	1.52
21:N:761:ILE:HG21	21:N:904:VAL:CA	1.39	1.52
31:X:85:ARG:NH1	31:X:87:PHE:CE2	1.76	1.51
33:Z:233:LEU:CD2	33:Z:268:ALA:HB2	1.41	1.50
22:O:26:PHE:CZ	22:O:43:GLU:CG	1.95	1.50
20:M:257:GLY:C	20:M:258:GLU:N	1.69	1.49
22:O:26:PHE:CZ	22:O:43:GLU:HG3	1.48	1.49
22:O:59:LEU:O	22:O:62:TYR:CE1	1.64	1.49
7:7:129:TYR:CE1	7:7:134:LEU:HD22	1.46	1.48
33:Z:298:PHE:CZ	33:Z:341:TYR:OH	1.64	1.48
22:O:26:PHE:CE1	22:O:58:ARG:NH1	1.82	1.47
33:Z:233:LEU:CD2	33:Z:268:ALA:CB	1.92	1.46
21:N:514:THR:HB	21:N:546:LEU:CD1	1.45	1.46
22:O:72:LYS:NZ	22:O:73:ILE:CD1	1.78	1.46
21:N:329:HIS:CD2	21:N:355:TRP:CD1	2.04	1.45
3:3:54:LEU:HD11	3:3:94:TYR:CE1	1.51	1.44
31:X:28:PRO:HB3	31:X:57:VAL:CG2	0.98	1.44
31:X:28:PRO:CB	31:X:57:VAL:CG2	1.93	1.44
18:K:291:GLU:HG3	18:K:294:ARG:NH2	1.14	1.43
12:E:157:HIS:HB3	12:E:167:TYR:CE2	1.53	1.43
31:X:17:TYR:O	31:X:98:PHE:CD1	1.68	1.42
25:R:62:TYR:CG	25:R:180:PHE:CZ	2.04	1.42
7:7:129:TYR:HE1	7:7:134:LEU:CD2	1.30	1.41
22:O:30:GLU:CA	22:O:40:GLN:HE22	1.32	1.41
12:E:12:VAL:CG1	12:E:123:PHE:CE2	2.01	1.40
21:N:329:HIS:CD2	21:N:355:TRP:NE1	1.88	1.40
28:U:19:LEU:HD11	29:V:212:MET:SD	1.60	1.40
21:N:761:ILE:CG2	21:N:904:VAL:HA	1.53	1.39

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:120:SER:HB2	33:Z:153:TYR:CE2	1.54	1.39
16:I:82:LEU:HD13	33:Z:622:HIS:NE2	1.37	1.39
17:J:259:GLU:HB2	18:K:280:LYS:CE	1.49	1.39
25:R:335:ARG:NH2	25:R:371:PHE:HA	1.36	1.39
25:R:396:LYS:HA	26:S:452:TYR:CD1	1.58	1.39
14:G:108:ILE:HG22	14:G:148:TYR:CE2	1.56	1.38
23:P:346:ILE:HD13	23:P:379:TYR:CE2	1.56	1.38
22:O:189:TYR:HE2	22:O:227:ILE:CB	1.36	1.38
22:O:72:LYS:HZ3	22:O:73:ILE:CD1	1.33	1.37
17:J:273:LEU:HB3	17:J:309:ARG:NH2	1.38	1.37
21:N:514:THR:CG2	21:N:546:LEU:CD1	2.02	1.37
28:U:19:LEU:HD12	29:V:209:GLU:OE1	1.20	1.37
8:A:95:LEU:CD2	14:G:117:GLN:HG3	1.55	1.36
29:V:47:MET:CE	29:V:74:SER:O	1.69	1.36
18:K:242:PHE:N	18:K:243:VAL:N	1.67	1.36
14:G:108:ILE:CG2	14:G:148:TYR:CE2	2.07	1.36
22:O:254:LEU:HD21	22:O:266:PHE:CZ	1.61	1.35
31:X:27:ILE:CG2	31:X:61:LEU:HD21	1.55	1.35
8:A:220:LYS:HD2	8:A:238:ALA:O	1.26	1.35
11:D:159:TRP:NE1	11:D:161:ALA:O	1.57	1.35
31:X:87:PHE:O	31:X:99:PHE:HD1	1.02	1.35
22:O:189:TYR:CE2	22:O:227:ILE:HG21	1.59	1.35
25:R:396:LYS:CA	26:S:452:TYR:CE1	2.10	1.34
33:Z:570:LEU:O	33:Z:574:TYR:CD2	1.78	1.34
33:Z:970:TYR:CE1	33:Z:985:LYS:HD3	1.63	1.34
13:F:30:LYS:HZ1	13:F:164:ARG:N	1.21	1.34
25:R:400:TYR:O	25:R:404:VAL:HG23	1.23	1.34
21:N:514:THR:CB	21:N:546:LEU:CD1	1.99	1.34
4:4:66:TYR:CE1	10:C:102:TYR:OH	1.79	1.34
30:W:118:ILE:HG13	30:W:154:LEU:CD1	1.59	1.33
29:V:290:ASN:C	29:V:291:ASN:N	1.83	1.33
17:J:190:PRO:HD2	17:J:316:PHE:CD2	1.64	1.33
24:Q:227:CYS:CB	24:Q:334:HIS:CE1	2.10	1.32
29:V:261:LEU:HB3	29:V:280:LEU:CD2	1.58	1.32
29:V:158:LEU:HD12	29:V:195:HIS:O	1.24	1.32
31:X:78:ILE:CG2	31:X:114:LEU:O	1.78	1.32
10:C:122:TYR:HE2	10:C:131:PHE:CZ	1.48	1.31
33:Z:578:GLY:O	33:Z:581:VAL:HG22	1.22	1.31
6:6:-8:PHE:CE2	6:6:-6:PRO:HB3	1.64	1.31
22:O:59:LEU:O	22:O:62:TYR:CD1	1.81	1.31
31:X:87:PHE:O	31:X:99:PHE:CD1	1.81	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:85:LEU:HD21	11:D:117:GLN:NE2	1.44	1.30
25:R:421:VAL:CG1	25:R:422:ARG:H	1.37	1.30
33:Z:120:SER:CB	33:Z:153:TYR:CZ	2.12	1.30
18:K:349:ARG:NH2	18:K:378:LEU:H	1.24	1.30
19:L:125:PRO:HD2	19:L:127:TYR:OH	1.25	1.30
31:X:72:GLU:HB2	31:X:91:PHE:CE2	1.66	1.30
9:B:218:ASN:HB2	9:B:236:ARG:CZ	1.60	1.30
22:O:33:TYR:CZ	22:O:40:GLN:CB	2.14	1.30
28:U:19:LEU:CD1	29:V:209:GLU:OE1	1.78	1.30
23:P:329:PHE:HE2	23:P:337:HIS:CD2	1.49	1.29
23:P:329:PHE:CE2	23:P:337:HIS:CD2	2.20	1.29
24:Q:264:TYR:OH	24:Q:330:LEU:HB2	1.26	1.29
33:Z:574:TYR:CE2	33:Z:584:VAL:HG11	1.66	1.29
18:K:244:HIS:CE1	18:K:251:PRO:HD3	1.67	1.29
20:M:221:TYR:CZ	20:M:348:GLU:CB	2.12	1.29
28:U:66:TRP:CZ3	28:U:68:LEU:HB3	1.66	1.29
5:5:7:ARG:NH2	5:5:125:ASP:OD1	1.63	1.28
19:L:221:TYR:OH	19:L:348:GLU:CB	1.80	1.28
24:Q:249:LEU:O	24:Q:250:THR:HG22	1.33	1.28
18:K:241:GLU:C	18:K:243:VAL:N	1.90	1.28
22:O:299:THR:CA	22:O:365:LYS:HZ3	1.44	1.28
21:N:759:ILE:HG22	21:N:903:VAL:CG1	1.62	1.28
33:Z:426:TYR:OH	33:Z:435:GLN:CB	1.82	1.28
33:Z:970:TYR:CE1	33:Z:985:LYS:CD	2.16	1.28
23:P:115:ARG:NH1	23:P:146:ILE:HG13	1.46	1.27
25:R:62:TYR:CD2	25:R:180:PHE:CZ	2.22	1.27
25:R:335:ARG:NH1	25:R:371:PHE:HB3	1.49	1.27
7:7:101:PRO:CB	7:7:124:LEU:HD11	1.63	1.27
21:N:144:CYS:SG	21:N:152:LEU:CD2	2.22	1.27
33:Z:68:LEU:HD11	33:Z:115:LEU:CD1	1.64	1.27
22:O:26:PHE:CZ	22:O:58:ARG:NH1	2.02	1.27
18:K:349:ARG:HH22	18:K:378:LEU:N	1.28	1.26
31:X:77:PRO:O	31:X:78:ILE:CG1	1.83	1.26
22:O:310:PHE:CZ	22:O:341:ILE:HG21	1.51	1.26
33:Z:516:THR:O	33:Z:556:ILE:HG22	1.34	1.26
19:L:290:ARG:NH2	19:L:293:GLU:HB3	1.48	1.26
33:Z:336:SER:O	33:Z:340:LEU:HD23	1.29	1.26
18:K:242:PHE:C	18:K:243:VAL:HA	1.61	1.25
16:I:398:GLU:HA	17:J:312:ARG:NH1	1.50	1.25
25:R:401:HIS:HB2	26:S:452:TYR:OH	1.29	1.25
23:P:431:HIS:ND1	28:U:156:HIS:HB2	1.50	1.25

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:383:LYS:HB2	21:N:412:TYR:OH	1.37	1.24
26:S:257:LEU:CA	26:S:257:LEU:C	2.10	1.24
7:7:64:THR:HG22	7:7:68:TYR:CE2	1.71	1.24
15:H:382:LEU:HD23	15:H:385:ARG:NH2	1.47	1.24
22:O:189:TYR:CD2	22:O:227:ILE:HG13	1.73	1.24
25:R:335:ARG:HH22	25:R:371:PHE:CA	1.46	1.24
15:H:107:LYS:HB2	15:H:143:ALA:CB	1.64	1.24
1:1:190:PRO:HA	1:1:193:TYR:CE1	1.71	1.24
21:N:294:PRO:HG3	21:N:921:ARG:NH2	1.51	1.24
20:M:220:MET:HE3	20:M:324:LEU:CD1	1.66	1.24
24:Q:174:LEU:CD1	24:Q:178:HIS:HE1	1.51	1.24
10:C:122:TYR:CE2	10:C:131:PHE:CZ	2.25	1.23
22:O:33:TYR:O	22:O:34:GLU:HG3	1.35	1.23
18:K:347:ARG:HD2	24:Q:238:TYR:CE1	1.72	1.23
21:N:633:GLY:O	21:N:634:LEU:HD23	1.35	1.23
25:R:266:LEU:CD2	25:R:270:VAL:HG21	1.68	1.23
28:U:19:LEU:HB2	29:V:209:GLU:OE2	1.36	1.23
16:I:215:PRO:CD	16:I:319:ARG:HH11	1.50	1.22
22:O:185:PHE:CE2	22:O:223:LEU:CD1	2.21	1.22
22:O:189:TYR:CE2	22:O:227:ILE:CG2	2.22	1.22
1:1:75:THR:HG22	1:1:111:TYR:CD1	1.74	1.22
15:H:285:GLY:C	15:H:286:GLU:N	1.97	1.22
20:M:221:TYR:OH	20:M:348:GLU:HB3	1.10	1.22
22:O:189:TYR:HE2	22:O:227:ILE:CG2	1.51	1.22
31:X:17:TYR:O	31:X:98:PHE:CG	1.92	1.22
21:N:761:ILE:CG1	21:N:904:VAL:H	1.53	1.22
22:O:76:LEU:O	22:O:79:VAL:HG12	1.34	1.22
23:P:427:GLU:CA	29:V:230:TYR:CE1	2.22	1.22
31:X:85:ARG:HH21	31:X:101:LEU:CD1	1.50	1.22
22:O:66:VAL:HG11	22:O:106:PHE:CE1	1.72	1.22
22:O:70:TYR:OH	22:O:75:GLN:NE2	1.71	1.22
26:S:472:HIS:ND1	28:U:288:PHE:HE1	1.35	1.22
22:O:33:TYR:CE2	22:O:40:GLN:HB3	1.73	1.22
22:O:72:LYS:HD3	22:O:73:ILE:CG1	1.68	1.22
24:Q:227:CYS:HB3	24:Q:334:HIS:CE1	1.71	1.22
7:7:102:LEU:O	7:7:124:LEU:CD1	1.87	1.21
14:G:108:ILE:CG2	14:G:148:TYR:CD2	2.23	1.21
15:H:173:ARG:HH21	16:I:128:TYR:CA	1.51	1.21
22:O:299:THR:HA	22:O:365:LYS:NZ	1.54	1.21
9:B:218:ASN:HB2	9:B:236:ARG:NH1	1.54	1.21
20:M:319:ASP:HB2	20:M:322:LYS:NZ	1.54	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:15:ARG:O	22:O:16:MET:HG3	1.36	1.21
22:O:16:MET:HB3	22:O:19:ASP:OD1	1.05	1.21
15:H:312:ASP:O	16:I:300:ARG:NH2	1.72	1.21
17:J:392:LYS:HG2	18:K:337:LYS:NZ	1.55	1.21
22:O:30:GLU:HA	22:O:40:GLN:NE2	1.55	1.21
19:L:252:VAL:CG1	20:M:256:ILE:CD1	2.18	1.20
19:L:365:THR:OG1	19:L:376:PHE:HE1	1.23	1.20
33:Z:68:LEU:CD1	33:Z:115:LEU:HD13	1.69	1.20
33:Z:426:TYR:OH	33:Z:435:GLN:CG	1.88	1.20
13:F:179:PHE:CZ	13:F:192:ALA:CB	2.25	1.20
15:H:425:GLU:HG3	15:H:429:PHE:CE2	1.75	1.20
21:N:874:ILE:CG2	21:N:875:LEU:H	1.54	1.20
16:I:215:PRO:HD3	16:I:319:ARG:NH1	1.57	1.20
21:N:514:THR:HG22	21:N:546:LEU:CB	1.71	1.20
22:O:16:MET:HE2	22:O:19:ASP:CG	1.67	1.20
25:R:396:LYS:CA	26:S:452:TYR:HE1	1.50	1.20
7:7:129:TYR:CE1	7:7:134:LEU:CD2	2.13	1.20
19:L:132:ARG:NH1	19:L:156:MET:SD	2.14	1.20
28:U:94:HIS:NE2	28:U:120:LEU:HD21	1.56	1.20
33:Z:394:TYR:CE2	33:Z:858:GLY:HA2	1.76	1.20
33:Z:867:PHE:CD1	33:Z:873:LEU:HD23	1.76	1.20
8:A:19:PHE:CE1	9:B:128:ARG:NH1	2.09	1.19
12:E:157:HIS:CB	12:E:167:TYR:CE2	2.26	1.19
33:Z:120:SER:CB	33:Z:153:TYR:CE2	2.26	1.19
15:H:173:ARG:HH21	16:I:128:TYR:C	1.50	1.19
19:L:164:ASP:HB2	19:L:261:ARG:NH1	1.56	1.19
19:L:252:VAL:HG12	20:M:256:ILE:CD1	1.70	1.19
31:X:28:PRO:HB3	31:X:57:VAL:CB	1.71	1.19
33:Z:474:LEU:HG	33:Z:493:LEU:CD1	1.72	1.19
18:K:140:HIS:CD2	18:K:147:VAL:HG21	1.76	1.19
22:O:72:LYS:NZ	22:O:73:ILE:HD11	0.86	1.18
30:W:118:ILE:CG1	30:W:154:LEU:HD11	1.73	1.18
26:S:286:TYR:CE2	26:S:323:LEU:HB3	1.76	1.18
33:Z:307:HIS:NE2	33:Z:341:TYR:CD1	2.11	1.18
22:O:26:PHE:CZ	22:O:43:GLU:HG2	1.69	1.18
9:B:172:LYS:HE3	10:C:56:LEU:HD13	1.26	1.17
13:F:30:LYS:NZ	13:F:164:ARG:H	1.41	1.17
16:I:217:LYS:CE	16:I:343:ARG:HD2	1.73	1.17
21:N:329:HIS:NE2	21:N:355:TRP:CD1	2.10	1.17
25:R:421:VAL:HG12	25:R:422:ARG:N	1.36	1.17
28:U:129:GLY:O	28:U:130:VAL:CG1	1.91	1.17

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:291:GLU:CG	18:K:294:ARG:NH2	2.05	1.17
25:R:117:ILE:HD13	25:R:134:TRP:CH2	1.80	1.17
19:L:290:ARG:CZ	19:L:293:GLU:HA	1.75	1.17
22:O:310:PHE:CZ	22:O:341:ILE:HG23	1.71	1.17
28:U:280:ASN:ND2	29:V:291:ASN:OD1	1.77	1.17
23:P:431:HIS:CE1	28:U:156:HIS:HB2	1.80	1.17
26:S:163:VAL:HG22	26:S:184:TRP:HZ2	1.07	1.17
28:U:122:ILE:HD12	28:U:137:TYR:CE1	1.80	1.17
30:W:4:GLU:OE2	30:W:40:LYS:NZ	1.75	1.17
31:X:53:THR:O	31:X:54:GLU:HG2	1.44	1.17
6:6:-8:PHE:CZ	6:6:-6:PRO:HA	1.79	1.16
24:Q:20:TYR:CE2	24:Q:68:MET:HG3	1.80	1.16
25:R:266:LEU:HA	25:R:270:VAL:CG2	1.75	1.16
28:U:129:GLY:O	28:U:130:VAL:HG13	1.02	1.16
15:H:312:ASP:CA	16:I:300:ARG:HH22	1.58	1.16
19:L:132:ARG:NH1	19:L:156:MET:CE	2.08	1.16
22:O:16:MET:CB	22:O:19:ASP:OD1	1.92	1.16
31:X:28:PRO:HB3	31:X:57:VAL:HG21	1.22	1.16
5:5:8:PHE:CE1	5:5:13:ILE:HG12	1.81	1.16
13:F:13:PHE:CE1	14:G:130:PRO:HD2	1.79	1.16
19:L:252:VAL:HB	20:M:256:ILE:HG23	1.23	1.16
22:O:189:TYR:CE2	22:O:227:ILE:CB	2.27	1.16
22:O:72:LYS:CD	22:O:73:ILE:HG13	1.76	1.16
25:R:214:TYR:CD2	25:R:230:LEU:HG	1.80	1.16
22:O:70:TYR:CE1	22:O:75:GLN:HB2	1.81	1.15
24:Q:10:GLU:O	24:Q:14:LEU:HD23	1.41	1.15
17:J:273:LEU:HB3	17:J:309:ARG:CZ	1.72	1.15
19:L:114:GLU:O	19:L:137:ARG:NH2	1.78	1.15
27:T:51:TYR:HA	27:T:55:LEU:HD13	1.26	1.15
31:X:29:VAL:HG11	31:X:61:LEU:HB2	1.28	1.15
33:Z:478:VAL:HG23	33:Z:489:ALA:HB1	1.28	1.15
6:6:-8:PHE:CE2	6:6:-6:PRO:CB	2.30	1.15
13:F:179:PHE:HZ	13:F:192:ALA:CB	1.60	1.15
18:K:291:GLU:CG	18:K:294:ARG:HH22	1.58	1.15
22:O:359:SER:OG	28:U:223:HIS:NE2	1.76	1.15
4:4:1:MET:HE1	4:4:133:GLY:HA3	1.27	1.15
13:F:105:VAL:HG22	13:F:145:LEU:CD2	1.75	1.15
20:M:220:MET:CE	20:M:324:LEU:HD11	1.76	1.15
13:F:30:LYS:NZ	13:F:164:ARG:N	1.92	1.15
33:Z:574:TYR:CZ	33:Z:584:VAL:HG11	1.80	1.15
33:Z:970:TYR:HE1	33:Z:985:LYS:NZ	1.45	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:70:GLU:HA	11:D:111:ARG:HH12	1.01	1.14
12:E:12:VAL:CG1	12:E:123:PHE:HE2	1.46	1.14
17:J:278:GLN:NE2	17:J:283:GLU:OE2	1.80	1.14
31:X:28:PRO:HG3	31:X:57:VAL:HB	1.26	1.14
31:X:75:TRP:HH2	31:X:125:MET:HE2	1.12	1.14
12:E:119:LEU:CD2	12:E:122:ARG:HH21	1.60	1.14
15:H:285:GLY:C	15:H:286:GLU:C	2.15	1.14
31:X:35:ILE:HG21	31:X:128:VAL:HG22	1.28	1.14
12:E:165:TYR:HB2	12:E:167:TYR:CZ	1.80	1.14
15:H:219:GLU:OE2	15:H:222:ARG:NH2	1.78	1.14
15:H:429:PHE:CD1	15:H:432:ARG:NH2	2.14	1.14
20:M:192:GLU:HB3	20:M:347:ILE:HD12	1.16	1.14
21:N:245:LEU:HD13	21:N:253:LEU:HD22	1.22	1.14
22:O:188:PHE:HD2	22:O:220:SER:HB3	1.08	1.14
29:V:261:LEU:CB	29:V:280:LEU:CD2	2.25	1.14
25:R:62:TYR:CD2	25:R:180:PHE:CE1	2.36	1.14
26:S:234:ILE:HG13	26:S:257:LEU:CD2	1.77	1.14
26:S:392:ILE:HD11	26:S:411:LEU:HD21	1.24	1.14
33:Z:381:LEU:HD11	33:Z:385:PHE:CZ	1.82	1.14
33:Z:571:GLY:HA2	33:Z:574:TYR:CE2	1.83	1.14
8:A:95:LEU:HD22	14:G:117:GLN:HG3	1.19	1.14
26:S:343:LEU:CG	26:S:347:HIS:HE1	1.60	1.14
29:V:261:LEU:CB	29:V:280:LEU:HD21	1.77	1.14
33:Z:426:TYR:OH	33:Z:435:GLN:HG3	1.40	1.14
18:K:242:PHE:C	18:K:244:HIS:H	1.53	1.13
31:X:27:ILE:O	31:X:27:ILE:HG22	1.31	1.13
12:E:119:LEU:HD22	12:E:122:ARG:HH21	1.06	1.13
13:F:49:LEU:O	20:M:433:TYR:OH	1.65	1.13
22:O:44:SER:OG	22:O:72:LYS:HE3	1.49	1.13
26:S:163:VAL:HG22	26:S:184:TRP:CZ2	1.82	1.13
6:6:175:VAL:HG13	6:6:179:PHE:HE2	1.03	1.13
16:I:291:ARG:HG3	16:I:292:TYR:H	1.03	1.13
24:Q:227:CYS:HB2	24:Q:334:HIS:CE1	1.74	1.13
21:N:666:GLN:OE1	21:N:873:ARG:HG2	1.49	1.13
18:K:249:GLU:OE2	18:K:252:ARG:NH2	1.82	1.13
22:O:79:VAL:HG11	22:O:123:GLY:O	1.47	1.13
23:P:431:HIS:ND1	28:U:156:HIS:CB	2.12	1.13
29:V:168:LEU:HD21	29:V:184:ASN:HB2	1.19	1.12
29:V:203:TYR:O	29:V:204:HIS:CD2	2.01	1.13
3:3:18:LEU:HD11	3:3:177:VAL:HG13	1.21	1.12
11:D:159:TRP:CD1	11:D:161:ALA:O	2.02	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:215:ILE:HG23	14:G:230:VAL:HB	1.16	1.12
19:L:290:ARG:NH1	19:L:299:ARG:HH22	1.44	1.12
26:S:472:HIS:HB2	28:U:288:PHE:CZ	1.84	1.12
15:H:173:ARG:NH2	16:I:129:TYR:N	1.97	1.12
15:H:285:GLY:C	15:H:287:GLY:N	2.07	1.12
19:L:286:ILE:HB	19:L:304:THR:HG21	1.31	1.12
28:U:19:LEU:CD1	29:V:212:MET:SD	2.37	1.12
5:5:55:TRP:HZ2	5:5:90:TYR:CE2	1.66	1.12
23:P:181:LEU:HG	23:P:223:LEU:HD21	1.21	1.12
26:S:428:ARG:HD2	27:T:192:ASN:OD1	1.49	1.12
31:X:28:PRO:CB	31:X:57:VAL:HG23	1.67	1.12
31:X:75:TRP:CH2	31:X:125:MET:HE2	1.84	1.12
33:Z:161:ILE:HG13	33:Z:203:LEU:HD13	1.25	1.12
33:Z:233:LEU:CD2	33:Z:268:ALA:HB1	1.76	1.12
11:D:118:GLN:HE22	12:E:86:ARG:HD2	1.06	1.12
20:M:221:TYR:OH	20:M:348:GLU:CB	1.94	1.12
22:O:33:TYR:CD2	22:O:40:GLN:HB3	1.83	1.12
25:R:70:TYR:HE2	25:R:75:GLY:N	1.47	1.12
30:W:125:LEU:HD11	30:W:157:PHE:HB2	1.15	1.12
31:X:28:PRO:CG	31:X:57:VAL:HB	1.79	1.12
22:O:116:ASN:HB3	22:O:127:LEU:CD2	1.79	1.11
25:R:24:TYR:OH	25:R:248:SER:HB2	1.45	1.11
27:T:106:ILE:HG23	27:T:142:LEU:HD21	1.32	1.11
31:X:24:CYS:SG	31:X:86:ILE:HG12	1.89	1.11
8:A:135:ARG:NH2	14:G:14:PHE:HD1	1.45	1.11
18:K:242:PHE:C	18:K:243:VAL:CA	2.21	1.11
24:Q:202:ARG:NH2	24:Q:222:SER:OG	1.80	1.11
17:J:170:HIS:CE1	17:J:173:LEU:HG	1.85	1.11
19:L:221:TYR:OH	19:L:348:GLU:HB3	0.94	1.11
31:X:78:ILE:HG21	31:X:114:LEU:C	1.72	1.11
26:S:153:GLU:HB2	26:S:191:HIS:CE1	1.86	1.11
26:S:343:LEU:HG	26:S:347:HIS:CE1	1.83	1.11
28:U:19:LEU:HD21	29:V:212:MET:SD	1.90	1.11
28:U:66:TRP:CZ3	28:U:68:LEU:CB	2.33	1.11
31:X:87:PHE:HB2	31:X:99:PHE:HB2	1.22	1.11
33:Z:307:HIS:CE1	33:Z:341:TYR:CE1	2.38	1.11
22:O:122:HIS:CE1	22:O:163:ILE:H	1.69	1.11
33:Z:531:ALA:O	33:Z:573:LEU:HD23	1.49	1.11
19:L:290:ARG:HH12	19:L:299:ARG:NH2	1.49	1.10
23:P:427:GLU:HG3	29:V:230:TYR:CZ	1.86	1.10
28:U:122:ILE:HD12	28:U:137:TYR:CD1	1.86	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:85:ARG:NH2	31:X:101:LEU:CD1	2.13	1.10
5:5:55:TRP:HZ2	5:5:90:TYR:CD2	1.68	1.10
7:7:101:PRO:HB2	7:7:124:LEU:HD11	1.23	1.10
15:H:173:ARG:HH21	16:I:129:TYR:N	1.50	1.10
16:I:418:GLN:HB3	16:I:422:ARG:HH12	1.12	1.10
18:K:140:HIS:CD2	18:K:147:VAL:CG2	2.35	1.10
21:N:114:SER:HA	21:N:161:TYR:CE2	1.84	1.10
21:N:711:ARG:O	21:N:873:ARG:HD2	1.49	1.10
31:X:73:THR:HG21	31:X:129:LEU:HD22	1.33	1.10
1:1:75:THR:CG2	1:1:111:TYR:CD1	2.34	1.10
21:N:514:THR:HG21	21:N:546:LEU:HD12	1.11	1.10
21:N:890:PHE:HB3	21:N:905:LEU:HD23	1.20	1.10
29:V:158:LEU:CD1	29:V:195:HIS:O	1.99	1.10
31:X:87:PHE:HB2	31:X:99:PHE:CB	1.80	1.10
18:K:140:HIS:CE1	18:K:147:VAL:HG22	1.86	1.10
23:P:133:GLU:HG3	23:P:167:THR:HG23	1.33	1.10
26:S:286:TYR:CZ	26:S:323:LEU:HB3	1.86	1.10
31:X:78:ILE:HB	31:X:113:GLU:O	1.52	1.10
12:E:109:VAL:HG11	12:E:156:PHE:CE1	1.87	1.10
19:L:164:ASP:CB	19:L:261:ARG:HH12	1.63	1.10
19:L:251:ILE:C	19:L:252:VAL:N	2.09	1.10
22:O:254:LEU:CD2	22:O:266:PHE:CZ	2.35	1.10
31:X:46:TRP:HB2	31:X:68:LEU:HD23	1.12	1.10
19:L:290:ARG:NH2	19:L:293:GLU:CB	2.14	1.09
23:P:429:ILE:HD12	28:U:203:LYS:HE3	1.11	1.09
22:O:303:LYS:O	22:O:304:ASN:CG	1.95	1.09
31:X:85:ARG:NH1	31:X:87:PHE:CZ	2.19	1.09
13:F:33:SER:HB3	20:M:433:TYR:CD2	1.86	1.09
17:J:99:ALA:HB3	17:J:102:ILE:HG12	1.28	1.09
22:O:70:TYR:HE1	22:O:75:GLN:CB	1.65	1.09
24:Q:160:ASP:OD1	24:Q:163:ARG:NH2	1.85	1.09
25:R:335:ARG:NH2	25:R:371:PHE:CD1	2.19	1.09
31:X:78:ILE:HG13	31:X:115:SER:HB3	1.29	1.09
31:X:85:ARG:HH21	31:X:101:LEU:HD12	0.97	1.09
7:7:102:LEU:O	7:7:124:LEU:HD13	0.92	1.09
13:F:143:HIS:ND1	13:F:155:GLU:OE2	1.85	1.09
14:G:98:PHE:HB2	14:G:114:ARG:HH12	0.95	1.09
21:N:588:VAL:HG11	21:N:621:THR:HG22	1.34	1.09
21:N:759:ILE:CG2	21:N:903:VAL:CG1	2.26	1.09
22:O:33:TYR:CZ	22:O:40:GLN:HB2	1.79	1.09
33:Z:139:LEU:HD21	33:Z:161:ILE:CD1	1.82	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:147:PHE:CD2	6:6:163:LEU:HA	1.86	1.09
11:D:88:LYS:HB3	11:D:112:TYR:HE2	1.10	1.09
20:M:220:MET:HE3	20:M:324:LEU:HD11	1.10	1.09
21:N:114:SER:HA	21:N:161:TYR:HE2	1.06	1.09
26:S:234:ILE:HG13	26:S:257:LEU:HD22	1.14	1.09
31:X:77:PRO:O	31:X:78:ILE:HG12	0.93	1.09
33:Z:99:LEU:HD11	33:Z:115:LEU:HD11	1.32	1.09
22:O:15:ARG:O	22:O:16:MET:CG	2.01	1.08
25:R:266:LEU:HA	25:R:270:VAL:HG22	1.15	1.08
6:6:-8:PHE:HE2	6:6:-6:PRO:CB	1.66	1.08
17:J:259:GLU:HB3	18:K:280:LYS:HE2	1.34	1.08
19:L:290:ARG:NH1	19:L:299:ARG:NH2	2.01	1.08
23:P:429:ILE:CD1	28:U:203:LYS:HE3	1.81	1.08
24:Q:227:CYS:HB2	24:Q:334:HIS:HE1	1.00	1.08
33:Z:473:LEU:HG	33:Z:477:TYR:CE2	1.86	1.08
11:D:96:HIS:CE1	11:D:100:LEU:HD12	1.87	1.08
16:I:398:GLU:CA	17:J:312:ARG:NH1	2.15	1.08
22:O:77:SER:HA	22:O:80:LYS:CG	1.83	1.08
24:Q:264:TYR:OH	24:Q:330:LEU:CB	2.00	1.08
33:Z:493:LEU:HG	33:Z:497:PHE:CZ	1.88	1.08
14:G:108:ILE:HG21	14:G:148:TYR:CE2	1.86	1.08
22:O:77:SER:HA	22:O:80:LYS:HG3	1.33	1.08
26:S:215:MET:HA	26:S:218:LEU:HD12	1.35	1.08
1:1:59:VAL:HG11	1:1:82:PHE:CZ	1.88	1.08
17:J:258:VAL:HB	18:K:297:ILE:HD11	1.12	1.08
17:J:326:GLU:OE2	17:J:329:ARG:NH2	1.84	1.08
17:J:392:LYS:HG2	18:K:337:LYS:HZ2	0.96	1.08
22:O:33:TYR:CZ	22:O:40:GLN:HB3	1.80	1.08
33:Z:958:ASN:HB2	33:Z:961:GLU:OE2	1.54	1.08
3:3:54:LEU:CD1	3:3:94:TYR:HE1	1.67	1.07
24:Q:174:LEU:HD11	24:Q:178:HIS:HE1	1.04	1.07
33:Z:474:LEU:HG	33:Z:493:LEU:HD11	1.35	1.07
12:E:119:LEU:HD22	12:E:122:ARG:NH2	1.67	1.07
24:Q:186:HIS:HE1	24:Q:228:GLU:OE1	1.34	1.07
33:Z:233:LEU:HD21	33:Z:268:ALA:HB1	1.35	1.07
33:Z:426:TYR:CE2	33:Z:435:GLN:HB2	1.88	1.07
33:Z:534:PHE:HB2	33:Z:573:LEU:HD22	1.09	1.07
4:4:66:TYR:CZ	10:C:102:TYR:OH	2.07	1.07
19:L:252:VAL:HG12	20:M:256:ILE:HD12	1.17	1.07
8:A:69:VAL:HA	14:G:157:TRP:CZ3	1.90	1.07
12:E:109:VAL:HG11	12:E:156:PHE:CD1	1.90	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:354:SER:HB3	23:P:402:PHE:CE1	1.88	1.07
24:Q:61:LEU:CD1	24:Q:65:TYR:CE1	2.37	1.07
24:Q:275:ILE:HG23	24:Q:303:ALA:HB1	1.36	1.07
25:R:301:TYR:CE2	25:R:359:VAL:HG11	1.88	1.07
26:S:286:TYR:CE1	26:S:323:LEU:HD13	1.89	1.07
5:5:55:TRP:CZ2	5:5:90:TYR:CE2	2.41	1.07
16:I:222:TYR:CE1	16:I:329:ASN:HA	1.89	1.07
22:O:30:GLU:CA	22:O:40:GLN:NE2	2.15	1.07
29:V:261:LEU:HD13	29:V:280:LEU:HD23	1.37	1.07
33:Z:578:GLY:O	33:Z:581:VAL:CG2	2.02	1.07
11:D:179:TYR:HE1	11:D:185:PRO:HD2	1.16	1.06
12:E:59:LEU:HD21	12:E:64:ILE:HD11	1.37	1.06
13:F:12:THR:HB	14:G:22:GLN:NE2	1.70	1.06
29:V:47:MET:HE3	29:V:74:SER:O	0.90	1.06
31:X:78:ILE:HG21	31:X:114:LEU:O	0.90	1.06
31:X:85:ARG:NH2	31:X:101:LEU:HD12	1.70	1.06
33:Z:394:TYR:HE2	33:Z:858:GLY:HA2	1.07	1.06
11:D:205:THR:HG21	11:D:209:ASN:HB2	1.31	1.06
15:H:97:LEU:HD21	16:I:129:TYR:HB2	1.37	1.06
21:N:633:GLY:O	21:N:634:LEU:CD2	2.01	1.06
21:N:666:GLN:CD	21:N:873:ARG:HG2	1.78	1.06
21:N:759:ILE:HG23	21:N:903:VAL:HG11	1.30	1.06
26:S:234:ILE:CG1	26:S:257:LEU:HD22	1.84	1.06
29:V:197:TYR:CE1	29:V:199:LEU:CD2	2.37	1.06
31:X:16:GLU:O	31:X:98:PHE:HB2	1.53	1.06
1:1:75:THR:CG2	1:1:111:TYR:HD1	1.67	1.06
22:O:188:PHE:CD2	22:O:220:SER:HB3	1.89	1.06
23:P:270:LEU:HD13	23:P:329:PHE:CE1	1.90	1.06
25:R:266:LEU:HD23	25:R:270:VAL:CG2	1.84	1.06
31:X:93:SER:HB3	31:X:96:ARG:HH21	1.19	1.06
16:I:214:LYS:HA	16:I:319:ARG:NH1	1.70	1.06
16:I:247:ILE:HD11	16:I:281:ILE:HG12	1.33	1.06
21:N:208:ARG:NH2	21:N:234:ASP:OD2	1.86	1.06
21:N:434:SER:HB3	21:N:439:VAL:HG11	1.32	1.06
21:N:874:ILE:HG22	21:N:875:LEU:N	1.61	1.06
22:O:33:TYR:CE1	22:O:40:GLN:CB	2.38	1.06
26:S:163:VAL:CG2	26:S:184:TRP:CZ2	2.37	1.06
33:Z:68:LEU:HD13	33:Z:115:LEU:HA	1.26	1.06
4:4:66:TYR:CD1	10:C:102:TYR:OH	2.00	1.06
11:D:179:TYR:CE1	11:D:185:PRO:HD2	1.91	1.06
21:N:890:PHE:HB3	21:N:905:LEU:CD2	1.85	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:283:LYS:HG3	23:P:286:ASN:HB2	1.38	1.06
29:V:261:LEU:HB3	29:V:280:LEU:HD21	1.24	1.06
33:Z:151:HIS:CE1	33:Z:152:GLU:CB	2.39	1.06
16:I:215:PRO:CD	16:I:319:ARG:NH1	2.11	1.05
17:J:224:GLY:O	17:J:227:SER:HB2	1.56	1.05
19:L:336:ALA:O	19:L:342:ARG:HD3	1.54	1.05
21:N:514:THR:HG22	21:N:546:LEU:HB3	1.31	1.05
21:N:514:THR:HG21	21:N:546:LEU:CD1	1.76	1.05
22:O:189:TYR:CE2	22:O:227:ILE:HG13	1.90	1.05
12:E:12:VAL:HG12	12:E:123:PHE:CZ	1.91	1.05
21:N:761:ILE:HG13	21:N:904:VAL:H	0.94	1.05
22:O:33:TYR:CE2	22:O:40:GLN:CB	2.35	1.05
23:P:270:LEU:CD1	23:P:329:PHE:CE1	2.38	1.05
25:R:263:ARG:HH11	25:R:340:GLN:HG3	1.18	1.05
26:S:343:LEU:HG	26:S:347:HIS:HE1	1.14	1.05
31:X:27:ILE:HG21	31:X:61:LEU:CD2	1.86	1.05
23:P:153:ILE:HG21	23:P:189:LEU:HB3	1.32	1.05
28:U:92:TRP:CZ2	28:U:120:LEU:CD1	2.40	1.05
33:Z:827:LEU:HG	33:Z:831:LEU:HG	1.39	1.05
2:2:222:ASP:OD2	3:3:36:HIS:HE1	1.38	1.05
11:D:85:LEU:HD21	11:D:117:GLN:HE21	0.91	1.05
16:I:167:MET:HE2	16:I:270:VAL:HG22	1.39	1.05
22:O:189:TYR:CZ	22:O:227:ILE:HG21	1.92	1.05
24:Q:126:LYS:HG2	24:Q:134:LYS:HZ2	0.95	1.05
31:X:85:ARG:HE	31:X:101:LEU:HB2	1.17	1.05
17:J:183:LYS:HE3	17:J:286:LYS:HB3	1.34	1.05
19:L:132:ARG:HH12	19:L:156:MET:HE3	1.22	1.05
26:S:343:LEU:CD1	26:S:347:HIS:HE1	1.68	1.05
27:T:111:LEU:HD13	27:T:174:PHE:CD1	1.92	1.05
19:L:354:GLU:OE1	19:L:357:ARG:NH2	1.89	1.04
24:Q:174:LEU:CD1	24:Q:178:HIS:CE1	2.40	1.04
33:Z:867:PHE:HD1	33:Z:873:LEU:HD23	1.09	1.04
16:I:217:LYS:HE2	16:I:343:ARG:CD	1.87	1.04
19:L:98:LEU:HD23	20:M:154:LEU:CD2	1.86	1.04
21:N:514:THR:CG2	21:N:546:LEU:HD13	1.73	1.04
21:N:245:LEU:CD1	21:N:253:LEU:HD22	1.88	1.04
22:O:33:TYR:CE1	22:O:40:GLN:CG	2.40	1.04
33:Z:68:LEU:HD13	33:Z:115:LEU:CA	1.87	1.04
33:Z:138:ARG:HB2	33:Z:157:LEU:HD13	1.39	1.04
17:J:163:VAL:HG13	17:J:164:ILE:HG13	1.33	1.04
18:K:140:HIS:NE2	18:K:147:VAL:HG22	1.72	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:206:ARG:HH21	25:R:209:ARG:NE	1.56	1.04
33:Z:553:ARG:HA	33:Z:557:GLU:OE1	1.57	1.04
21:N:664:LEU:O	21:N:668:THR:HG23	1.59	1.03
22:O:310:PHE:HZ	22:O:341:ILE:HG22	1.22	1.03
23:P:115:ARG:HH12	23:P:146:ILE:CG1	1.69	1.03
24:Q:174:LEU:HD11	24:Q:178:HIS:CE1	1.93	1.03
25:R:70:TYR:CE2	25:R:75:GLY:N	2.26	1.03
31:X:46:TRP:HB2	31:X:68:LEU:CD2	1.88	1.03
33:Z:139:LEU:HD21	33:Z:161:ILE:HD11	1.37	1.03
21:N:424:LYS:NZ	21:N:461:GLU:HB3	1.73	1.03
22:O:44:SER:HB3	22:O:72:LYS:HZ1	1.19	1.03
22:O:58:ARG:HG2	22:O:61:LEU:HD12	1.04	1.03
22:O:185:PHE:CZ	22:O:223:LEU:HD13	1.93	1.03
27:T:51:TYR:CA	27:T:55:LEU:HD13	1.87	1.03
1:I:61:TYR:OH	8:A:103:GLU:CG	2.06	1.03
4:4:3:ILE:HG22	4:4:102:LEU:HD12	1.36	1.03
13:F:179:PHE:HZ	13:F:192:ALA:HB2	1.23	1.03
25:R:353:MET:HG3	25:R:357:PHE:CD2	1.93	1.03
29:V:47:MET:HE3	29:V:74:SER:C	1.83	1.03
33:Z:827:LEU:CD2	33:Z:831:LEU:HD21	1.87	1.03
2:2:222:ASP:CG	3:3:36:HIS:CE1	2.37	1.03
8:A:220:LYS:HD3	8:A:242:GLU:HB2	1.35	1.03
13:F:13:PHE:CZ	14:G:130:PRO:HD2	1.93	1.03
17:J:190:PRO:CD	17:J:316:PHE:HD2	1.72	1.03
19:L:196:VAL:HG13	19:L:197:ILE:HG13	1.40	1.03
21:N:514:THR:CG2	21:N:546:LEU:HD12	1.74	1.03
26:S:428:ARG:CD	27:T:192:ASN:OD1	2.06	1.03
7:7:103:TRP:HA	7:7:124:LEU:HD22	1.33	1.03
21:N:761:ILE:HG13	21:N:904:VAL:N	1.73	1.03
22:O:33:TYR:O	22:O:34:GLU:CG	2.07	1.03
22:O:44:SER:HB3	22:O:72:LYS:NZ	1.71	1.03
23:P:419:VAL:HG21	29:V:241:THR:OG1	1.59	1.03
28:U:15:LEU:HB3	29:V:212:MET:HE2	1.36	1.03
31:X:27:ILE:CG2	31:X:27:ILE:O	2.04	1.03
2:2:222:ASP:OD2	3:3:36:HIS:CE1	2.12	1.02
5:5:121:ARG:NH2	11:D:101:GLU:OE1	1.92	1.02
10:C:136:ILE:HD11	10:C:165:VAL:HG22	1.38	1.02
15:H:107:LYS:HB2	15:H:143:ALA:HB3	1.02	1.02
17:J:82:LYS:O	17:J:98:VAL:HG22	1.59	1.02
5:5:104:TYR:CE1	5:5:110:PRO:HD3	1.95	1.02
6:6:96:TYR:CE2	6:6:98:VAL:HG22	1.93	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:17:ASP:O	7:7:33:ARG:HD3	1.59	1.02
7:7:102:LEU:C	7:7:124:LEU:HD13	1.84	1.02
21:N:383:LYS:CB	21:N:412:TYR:OH	2.06	1.02
33:Z:298:PHE:CE2	33:Z:341:TYR:OH	2.11	1.02
33:Z:763:HIS:NE2	33:Z:767:TYR:OH	1.92	1.02
19:L:114:GLU:C	19:L:137:ARG:HH21	1.66	1.02
22:O:185:PHE:CD2	22:O:223:LEU:HD13	1.94	1.02
24:Q:126:LYS:HG2	24:Q:134:LYS:NZ	1.74	1.02
28:U:94:HIS:CD2	28:U:120:LEU:HD21	1.93	1.02
33:Z:740:VAL:HG13	33:Z:761:PHE:CE1	1.94	1.02
14:G:108:ILE:HG22	14:G:148:TYR:CD2	1.91	1.02
22:O:169:ASN:HB2	22:O:198:THR:HG21	1.40	1.02
30:W:9:VAL:HG22	30:W:52:ILE:HD11	1.36	1.02
31:X:29:VAL:HG11	31:X:61:LEU:CB	1.88	1.02
33:Z:394:TYR:CE1	33:Z:859:LYS:CG	2.42	1.02
11:D:6:ARG:HH22	12:E:11:GLY:HA2	1.23	1.02
18:K:372:ILE:HG21	24:Q:240:PHE:CE2	1.94	1.02
21:N:190:LEU:HD13	21:N:224:THR:HG23	1.41	1.02
21:N:362:TRP:CH2	21:N:742:TRP:CZ2	2.48	1.02
22:O:185:PHE:CZ	22:O:223:LEU:CD1	2.43	1.02
23:P:346:ILE:CD1	23:P:379:TYR:CE2	2.42	1.02
29:V:47:MET:CE	29:V:74:SER:C	2.31	1.02
31:X:28:PRO:CB	31:X:57:VAL:CB	2.32	1.02
12:E:165:TYR:HB2	12:E:167:TYR:OH	1.56	1.01
33:Z:138:ARG:CB	33:Z:157:LEU:HD13	1.90	1.01
8:A:135:ARG:HD3	14:G:124:LEU:HD23	1.43	1.01
16:I:418:GLN:HB3	16:I:422:ARG:NH1	1.72	1.01
20:M:246:LEU:HD21	20:M:251:LEU:HD11	1.39	1.01
22:O:72:LYS:CE	22:O:73:ILE:HD11	1.90	1.01
22:O:328:VAL:HG12	22:O:341:ILE:HD11	1.37	1.01
23:P:157:ALA:HA	23:P:186:LEU:CD1	1.90	1.01
28:U:66:TRP:HZ3	28:U:68:LEU:CB	1.70	1.01
31:X:75:TRP:CH2	31:X:125:MET:CE	2.42	1.01
1:1:61:TYR:OH	8:A:103:GLU:HG2	1.60	1.01
3:3:94:TYR:CE1	3:3:96:VAL:HG11	1.94	1.01
19:L:111:GLU:HG3	19:L:117:TYR:CD2	1.96	1.01
22:O:58:ARG:HG2	22:O:61:LEU:CD1	1.90	1.01
33:Z:570:LEU:O	33:Z:574:TYR:CE2	2.14	1.01
18:K:164:ASN:ND2	19:L:315:PHE:CE2	2.27	1.01
20:M:221:TYR:CE1	20:M:348:GLU:CB	2.42	1.01
21:N:89:PHE:CZ	21:N:136:ILE:HG21	1.94	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:501:MET:CB	21:N:521:LEU:HD21	1.91	1.01
23:P:329:PHE:CE2	23:P:337:HIS:HD2	1.69	1.01
6:6:175:VAL:HG13	6:6:179:PHE:CE2	1.95	1.01
8:A:220:LYS:CD	8:A:242:GLU:HB2	1.90	1.01
17:J:259:GLU:CB	18:K:280:LYS:CE	2.23	1.01
33:Z:151:HIS:CE1	33:Z:152:GLU:HB3	1.96	1.01
16:I:398:GLU:CA	17:J:312:ARG:HH11	1.71	1.00
17:J:76:ILE:HB	17:J:85:LEU:HD22	1.43	1.00
20:M:183:VAL:HG11	20:M:186:LEU:HD11	1.40	1.00
33:Z:297:VAL:HG12	33:Z:310:LEU:HD22	1.41	1.00
10:C:147:GLN:HB3	10:C:149:TYR:HE1	1.22	1.00
19:L:252:VAL:HG11	20:M:256:ILE:HD12	1.04	1.00
21:N:89:PHE:CZ	21:N:136:ILE:CG2	2.44	1.00
21:N:669:GLU:HG2	21:N:784:TYR:H	1.25	1.00
22:O:250:TRP:O	22:O:254:LEU:HG	1.62	1.00
23:P:157:ALA:CA	23:P:186:LEU:HD13	1.90	1.00
33:Z:758:LEU:HD22	33:Z:787:ASP:OD1	1.62	1.00
8:A:220:LYS:HD3	8:A:242:GLU:CB	1.90	1.00
12:E:109:VAL:CG1	12:E:156:PHE:CD1	2.44	1.00
22:O:44:SER:O	22:O:47:LYS:HG2	1.59	1.00
22:O:299:THR:HA	22:O:365:LYS:HZ3	0.83	1.00
25:R:117:ILE:HD13	25:R:134:TRP:CZ2	1.95	1.00
26:S:269:GLU:OE1	26:S:299:LYS:NZ	1.93	1.00
28:U:165:GLU:HB3	29:V:42:ARG:NH1	1.77	1.00
31:X:28:PRO:CB	31:X:57:VAL:HB	1.89	1.00
21:N:114:SER:CA	21:N:161:TYR:HE2	1.74	1.00
22:O:26:PHE:CE2	22:O:43:GLU:HG3	1.97	1.00
22:O:95:SER:O	22:O:98:TYR:CE2	2.14	1.00
10:C:62:SER:HB2	10:C:212:GLU:HG2	1.40	1.00
20:M:221:TYR:CE1	20:M:348:GLU:HB2	1.95	1.00
22:O:33:TYR:CD1	22:O:40:GLN:CD	2.40	1.00
31:X:14:VAL:HG23	31:X:50:TRP:CD1	1.97	1.00
12:E:119:LEU:HB3	12:E:122:ARG:NH2	1.75	1.00
17:J:190:PRO:HD2	17:J:316:PHE:HD2	0.84	1.00
18:K:242:PHE:C	18:K:244:HIS:N	2.20	1.00
26:S:192:GLU:OE1	26:S:239:ARG:NH1	1.95	1.00
24:Q:306:TYR:HE1	24:Q:342:LEU:CD2	1.75	1.00
31:X:22:ARG:HH12	31:X:88:ALA:HB2	1.27	1.00
5:5:7:ARG:CZ	5:5:125:ASP:OD1	2.10	0.99
12:E:109:VAL:CG1	12:E:156:PHE:CE1	2.44	0.99
16:I:214:LYS:HA	16:I:319:ARG:HH12	0.85	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:185:GLY:HA3	19:L:360:ILE:HG13	1.42	0.99
31:X:10:PHE:O	31:X:33:ILE:HG22	1.62	0.99
33:Z:426:TYR:CZ	33:Z:435:GLN:HB2	1.96	0.99
1:1:91:ASP:O	1:1:92:ASN:OD1	1.80	0.99
7:7:119:LEU:HG	7:7:134:LEU:HD12	1.44	0.99
15:H:312:ASP:C	16:I:300:ARG:NH2	2.20	0.99
16:I:398:GLU:HA	17:J:312:ARG:HH11	0.85	0.99
22:O:116:ASN:HB3	22:O:127:LEU:CB	1.90	0.99
24:Q:50:ARG:HG3	24:Q:54:GLN:HE21	1.23	0.99
25:R:62:TYR:CE2	25:R:180:PHE:CE1	2.49	0.99
7:7:66:ASN:HD22	7:7:79:LEU:HD23	1.25	0.99
21:N:302:PHE:CE2	21:N:712:ASN:HB3	1.96	0.99
8:A:95:LEU:CD2	14:G:117:GLN:CG	2.39	0.99
23:P:431:HIS:CE1	28:U:156:HIS:CB	2.46	0.99
33:Z:571:GLY:HA2	33:Z:574:TYR:CZ	1.97	0.99
13:F:105:VAL:HG22	13:F:145:LEU:HD22	1.02	0.99
21:N:352:ASN:HB3	21:N:355:TRP:HB2	1.39	0.99
21:N:434:SER:HB3	21:N:439:VAL:CG1	1.92	0.99
23:P:283:LYS:CB	23:P:286:ASN:HB2	1.93	0.99
25:R:78:ASP:OD1	25:R:94:PHE:CD1	2.16	0.99
27:T:111:LEU:HD13	27:T:174:PHE:HD1	1.25	0.99
28:U:19:LEU:CB	29:V:209:GLU:OE2	2.11	0.99
12:E:157:HIS:CE1	12:E:170:LYS:HZ3	1.80	0.99
15:H:107:LYS:CB	15:H:143:ALA:HB3	1.92	0.99
22:O:44:SER:CB	22:O:72:LYS:NZ	2.26	0.99
25:R:325:HIS:HD1	25:R:329:PHE:HB2	1.23	0.99
1:1:190:PRO:HA	1:1:193:TYR:HE1	1.03	0.99
16:I:401:LEU:HD12	17:J:312:ARG:HD3	1.42	0.99
26:S:343:LEU:O	26:S:347:HIS:ND1	1.95	0.99
33:Z:151:HIS:ND1	33:Z:152:GLU:N	2.10	0.99
14:G:98:PHE:HB2	14:G:114:ARG:NH1	1.78	0.99
25:R:276:LEU:HB3	25:R:289:ILE:CD1	1.92	0.99
8:A:91:ARG:HH12	8:A:95:LEU:HB2	1.23	0.99
8:A:220:LYS:HD3	8:A:242:GLU:CA	1.93	0.99
10:C:118:ILE:CG2	10:C:122:TYR:CE1	2.46	0.99
19:L:252:VAL:CB	20:M:256:ILE:HG23	1.93	0.99
33:Z:534:PHE:CB	33:Z:573:LEU:HD22	1.92	0.99
12:E:134:MET:HE2	12:E:136:ARG:O	1.62	0.99
16:I:214:LYS:CA	16:I:319:ARG:HH12	1.76	0.99
33:Z:151:HIS:CG	33:Z:152:GLU:H	1.80	0.99
2:2:8:PHE:HD1	2:2:10:ASN:H	0.99	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:147:GLN:HB3	10:C:149:TYR:CE1	1.97	0.98
18:K:244:HIS:HB3	19:L:256:ILE:HD13	1.45	0.98
1:1:61:TYR:HE1	8:A:103:GLU:HA	1.28	0.98
16:I:362:LEU:HD21	16:I:384:LYS:NZ	1.79	0.98
21:N:490:LEU:HD21	21:N:727:THR:HG21	1.42	0.98
22:O:30:GLU:HA	22:O:40:GLN:HE22	0.83	0.98
22:O:116:ASN:HB3	22:O:127:LEU:HD22	1.43	0.98
24:Q:306:TYR:CE1	24:Q:342:LEU:CD2	2.46	0.98
24:Q:378:SER:OG	25:R:345:TYR:OH	1.79	0.98
33:Z:394:TYR:HE2	33:Z:858:GLY:CA	1.75	0.98
6:6:-8:PHE:CE2	6:6:-6:PRO:CA	2.45	0.98
13:F:51:ARG:HH11	20:M:430:VAL:HG11	1.28	0.98
14:G:108:ILE:HG21	14:G:148:TYR:CD2	1.96	0.98
20:M:319:ASP:HB2	20:M:322:LYS:HZ3	1.18	0.98
23:P:283:LYS:CG	23:P:286:ASN:HB2	1.92	0.98
8:A:27:GLN:HE21	14:G:13:VAL:HA	1.26	0.98
19:L:252:VAL:HG12	20:M:256:ILE:CG1	1.93	0.98
27:T:27:LEU:HD13	27:T:81:TYR:OH	1.62	0.98
29:V:261:LEU:CD1	29:V:280:LEU:HD23	1.92	0.98
26:S:153:GLU:HB2	26:S:191:HIS:HE1	1.26	0.98
29:V:157:ARG:HB3	29:V:197:TYR:CE1	1.99	0.98
8:A:220:LYS:CE	8:A:242:GLU:HB2	1.93	0.98
21:N:424:LYS:HZ1	21:N:461:GLU:HB3	1.26	0.98
1:1:-7:LYS:O	2:2:116:HIS:NE2	1.94	0.98
25:R:62:TYR:CG	25:R:180:PHE:HZ	1.71	0.98
33:Z:570:LEU:C	33:Z:574:TYR:CE2	2.42	0.98
15:H:405:GLU:OE2	15:H:409:ARG:NH2	1.96	0.98
19:L:336:ALA:C	19:L:342:ARG:HH11	1.70	0.98
22:O:66:VAL:CG1	22:O:106:PHE:CE1	2.45	0.98
25:R:335:ARG:NH1	25:R:371:PHE:CB	2.26	0.98
21:N:514:THR:CG2	21:N:546:LEU:CB	2.40	0.98
4:4:181:LYS:HZ3	4:4:190:GLN:HB2	1.27	0.97
22:O:44:SER:OG	22:O:72:LYS:CE	2.12	0.97
21:N:89:PHE:HZ	21:N:136:ILE:HG21	1.25	0.97
31:X:75:TRP:CZ3	31:X:125:MET:HE3	1.99	0.97
33:Z:60:ASP:O	33:Z:64:TYR:HD1	1.47	0.97
33:Z:763:HIS:CD2	33:Z:767:TYR:OH	2.17	0.97
11:D:88:LYS:HB3	11:D:112:TYR:CE2	1.97	0.97
33:Z:897:HIS:CE1	33:Z:899:GLN:NE2	2.31	0.97
8:A:135:ARG:NH2	14:G:14:PHE:CD1	2.31	0.97
15:H:248:LEU:HD13	15:H:352:MET:HG3	1.46	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:347:ARG:HD2	24:Q:238:TYR:HE1	1.19	0.97
19:L:132:ARG:HH12	19:L:156:MET:CE	1.73	0.97
21:N:318:LYS:NZ	21:N:348:PHE:CD1	2.33	0.97
22:O:359:SER:OG	28:U:223:HIS:CD2	2.16	0.97
33:Z:68:LEU:CD1	33:Z:115:LEU:CD1	2.31	0.97
2:2:36:ARG:HB2	2:2:42:TRP:CZ3	2.00	0.97
19:L:98:LEU:HD23	20:M:154:LEU:HD21	1.42	0.97
26:S:343:LEU:CD1	26:S:347:HIS:CE1	2.46	0.97
31:X:29:VAL:CG1	31:X:61:LEU:HB2	1.94	0.97
22:O:117:ASN:H	22:O:127:LEU:HB3	1.29	0.97
22:O:189:TYR:CE2	22:O:227:ILE:CG1	2.47	0.97
25:R:400:TYR:O	25:R:404:VAL:CG2	2.11	0.97
26:S:286:TYR:OH	26:S:323:LEU:HD22	1.64	0.97
33:Z:233:LEU:HD21	33:Z:268:ALA:CB	1.86	0.97
33:Z:322:GLU:HG3	33:Z:323:TYR:HB3	1.43	0.97
11:D:48:ARG:NH2	11:D:57:THR:HG22	1.79	0.97
15:H:173:ARG:NH2	16:I:128:TYR:CA	2.26	0.97
24:Q:72:ASP:CG	24:Q:75:ARG:HH21	1.72	0.97
18:K:67:TYR:CE1	21:N:572:LEU:HD22	1.99	0.97
23:P:429:ILE:HG23	28:U:203:LYS:HE2	1.45	0.97
8:A:220:LYS:CD	8:A:238:ALA:O	2.12	0.97
22:O:71:ASP:OD1	30:W:23:ARG:HB2	1.65	0.97
25:R:209:ARG:HH22	25:R:240:SER:CB	1.76	0.97
30:W:118:ILE:HG13	30:W:154:LEU:HD11	0.97	0.97
13:F:51:ARG:HD3	20:M:430:VAL:HG11	1.43	0.96
20:M:200:PRO:HA	20:M:207:PHE:HE2	1.28	0.96
21:N:501:MET:HB2	21:N:521:LEU:HD21	1.45	0.96
29:V:180:LEU:O	29:V:181:ASN:ND2	1.97	0.96
19:L:164:ASP:HB2	19:L:261:ARG:HH12	0.82	0.96
21:N:329:HIS:HD2	21:N:355:TRP:CD1	1.79	0.96
14:G:215:ILE:HG23	14:G:230:VAL:CB	1.94	0.96
5:5:81:LYS:HZ2	5:5:85:ASN:HD21	1.12	0.96
8:A:19:PHE:HE1	9:B:128:ARG:NH1	1.52	0.96
23:P:346:ILE:HD13	23:P:379:TYR:CZ	2.00	0.96
28:U:195:LYS:HD3	29:V:233:LYS:HB2	1.47	0.96
8:A:91:ARG:NH1	8:A:95:LEU:HB2	1.80	0.96
22:O:33:TYR:CE1	22:O:40:GLN:HB3	1.97	0.96
22:O:303:LYS:O	22:O:304:ASN:OD1	1.84	0.96
31:X:28:PRO:HG3	31:X:57:VAL:CB	1.95	0.96
33:Z:970:TYR:HE1	33:Z:985:LYS:CE	1.78	0.96
13:F:105:VAL:CG2	13:F:145:LEU:HD22	1.95	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:34:GLN:HA	26:S:215:MET:HG2	1.47	0.96
21:N:245:LEU:HD13	21:N:253:LEU:CD2	1.94	0.96
21:N:348:PHE:HZ	21:N:355:TRP:CD1	1.83	0.96
22:O:69:PHE:CE2	22:O:74:ASN:O	2.19	0.96
6:6:175:VAL:CG1	6:6:179:PHE:HE2	1.79	0.96
8:A:220:LYS:HD3	8:A:242:GLU:N	1.81	0.96
19:L:114:GLU:HB3	19:L:137:ARG:NH2	1.81	0.96
21:N:874:ILE:HG22	21:N:875:LEU:H	0.81	0.96
24:Q:249:LEU:O	24:Q:250:THR:CG2	2.12	0.96
6:6:30:TYR:OH	7:7:153:ARG:HB2	1.65	0.96
8:A:95:LEU:HD22	14:G:117:GLN:CG	1.95	0.96
9:B:139:HIS:CE1	9:B:145:PHE:CE2	2.54	0.96
24:Q:146:TYR:CE1	24:Q:151:TYR:HE1	1.83	0.96
26:S:461:PHE:HE2	28:U:274:MET:CB	1.78	0.96
22:O:147:ARG:HB2	22:O:178:TYR:OH	1.66	0.96
25:R:263:ARG:NH1	25:R:340:GLN:HG3	1.79	0.96
33:Z:827:LEU:HD23	33:Z:831:LEU:HD21	1.47	0.96
1:1:4:MET:HE3	1:1:159:LEU:CD2	1.96	0.96
17:J:99:ALA:HB3	17:J:102:ILE:CG1	1.95	0.96
22:O:72:LYS:HZ2	22:O:73:ILE:HD11	1.16	0.96
28:U:165:GLU:HB3	29:V:42:ARG:HH12	1.30	0.96
31:X:27:ILE:CG2	31:X:61:LEU:CD2	2.42	0.96
31:X:28:PRO:HB2	31:X:56:PRO:O	1.66	0.96
12:E:119:LEU:CG	12:E:122:ARG:HH21	1.78	0.95
31:X:85:ARG:NH2	31:X:101:LEU:HD13	1.81	0.95
33:Z:394:TYR:CE2	33:Z:858:GLY:CA	2.46	0.95
16:I:310:LEU:HD13	16:I:338:LEU:HB2	1.45	0.95
18:K:249:GLU:CD	18:K:252:ARG:HH21	1.73	0.95
1:1:61:TYR:CE1	8:A:103:GLU:HA	2.01	0.95
11:D:138:PHE:HE1	11:D:215:VAL:HG12	1.31	0.95
24:Q:409:TYR:HB2	25:R:399:GLN:HG3	1.48	0.95
28:U:164:GLU:OE1	29:V:39:LYS:HA	1.63	0.95
33:Z:970:TYR:OH	33:Z:991:GLU:OE2	1.82	0.95
11:D:6:ARG:NH2	12:E:11:GLY:HA2	1.81	0.95
13:F:13:PHE:CE1	14:G:130:PRO:CD	2.50	0.95
15:H:208:TYR:CE2	15:H:391:ILE:HD11	2.00	0.95
15:H:425:GLU:HG3	15:H:429:PHE:HE2	1.15	0.95
19:L:254:LYS:HE3	20:M:256:ILE:HG12	1.46	0.95
19:L:370:LYS:HG2	19:L:410:ILE:HB	1.46	0.95
21:N:122:GLN:O	21:N:125:THR:OG1	1.84	0.95
21:N:759:ILE:HG22	21:N:903:VAL:HG11	0.95	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:59:VAL:HG21	1:1:82:PHE:CD1	2.00	0.95
9:B:222:LEU:HD13	9:B:233:PRO:HD2	1.49	0.95
14:G:31:GLU:HG2	14:G:168:ARG:NH2	1.79	0.95
19:L:98:LEU:HD22	20:M:156:LEU:HD23	1.46	0.95
19:L:221:TYR:CZ	19:L:348:GLU:CB	2.49	0.95
22:O:33:TYR:CG	22:O:40:GLN:HB3	2.01	0.95
23:P:137:ALA:HB1	23:P:179:PHE:CZ	2.01	0.95
28:U:302:GLN:NE2	28:U:305:ARG:HH21	1.63	0.95
31:X:27:ILE:HG21	31:X:61:LEU:HD21	0.98	0.95
15:H:412:PRO:HD2	15:H:451:ILE:HD13	1.49	0.95
19:L:221:TYR:CZ	19:L:348:GLU:HB3	1.99	0.95
23:P:283:LYS:HB2	23:P:286:ASN:HB3	1.49	0.95
33:Z:407:VAL:HG11	33:Z:439:TYR:CZ	2.01	0.95
8:A:134:MET:HE1	14:G:125:TYR:CZ	2.02	0.95
16:I:82:LEU:CD1	33:Z:622:HIS:NE2	2.29	0.95
18:K:240:SER:C	18:K:243:VAL:HG23	1.90	0.95
22:O:127:LEU:HD21	22:O:167:ILE:HG13	1.46	0.95
22:O:245:ASP:HB2	22:O:249:ASP:OD1	1.67	0.95
25:R:325:HIS:ND1	25:R:329:PHE:HB2	1.81	0.95
6:6:55:LEU:HD22	6:6:96:TYR:OH	1.64	0.95
6:6:147:PHE:HE2	6:6:164:LYS:H	1.15	0.95
7:7:170:VAL:HG12	7:7:174:ARG:NH2	1.81	0.95
27:T:127:GLN:HA	27:T:132:HIS:CE1	2.02	0.95
28:U:92:TRP:HZ2	28:U:120:LEU:HD12	1.31	0.95
33:Z:138:ARG:HB2	33:Z:157:LEU:CD1	1.96	0.95
3:3:54:LEU:CD1	3:3:94:TYR:CE1	2.45	0.95
22:O:328:VAL:CG1	22:O:341:ILE:HD11	1.95	0.95
33:Z:151:HIS:CE1	33:Z:152:GLU:HB2	2.00	0.95
8:A:220:LYS:HG2	8:A:241:ILE:HG22	1.48	0.95
13:F:49:LEU:O	20:M:433:TYR:CZ	2.20	0.95
15:H:312:ASP:CA	16:I:300:ARG:NH2	2.28	0.95
22:O:172:TYR:OH	22:O:194:LEU:HD13	1.67	0.95
25:R:299:SER:HB3	25:R:341:LEU:HD21	1.49	0.95
27:T:106:ILE:CG2	27:T:142:LEU:HD21	1.97	0.95
15:H:62:ARG:NH2	16:I:100:ARG:HA	1.82	0.94
26:S:472:HIS:HB2	28:U:288:PHE:HZ	1.30	0.94
33:Z:307:HIS:CD2	33:Z:345:GLU:OE1	2.19	0.94
33:Z:473:LEU:HD11	33:Z:477:TYR:CZ	2.01	0.94
33:Z:534:PHE:HB2	33:Z:573:LEU:CD2	1.97	0.94
6:6:-5:TYR:HE2	6:6:51:ASP:OD1	1.49	0.94
21:N:778:LYS:HE3	21:N:780:ASP:OD2	1.67	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:329:PHE:HE2	23:P:337:HIS:HD2	0.95	0.94
31:X:46:TRP:CB	31:X:68:LEU:HD23	1.97	0.94
8:A:36:ASN:O	8:A:37:GLN:HG3	1.67	0.94
15:H:208:TYR:HE2	15:H:391:ILE:HD11	1.28	0.94
23:P:299:LEU:HD11	23:P:311:TRP:CZ3	2.00	0.94
23:P:286:ASN:O	23:P:287:ASP:HB2	1.64	0.94
1:1:83:LYS:HE2	1:1:118:SER:HA	1.50	0.94
23:P:181:LEU:HG	23:P:223:LEU:CD2	1.97	0.94
29:V:261:LEU:CB	29:V:280:LEU:HD23	1.96	0.94
11:D:85:LEU:CD2	11:D:117:GLN:HE21	1.79	0.94
21:N:89:PHE:HZ	21:N:136:ILE:CG2	1.79	0.94
23:P:396:PRO:HB2	24:Q:396:TRP:CZ3	2.02	0.94
24:Q:306:TYR:CE1	24:Q:342:LEU:HD21	2.02	0.94
26:S:472:HIS:ND1	28:U:288:PHE:CE1	2.26	0.94
33:Z:229:SER:O	33:Z:264:PHE:HE1	1.49	0.94
2:2:84:LYS:NZ	2:2:117:GLY:O	2.00	0.94
31:X:18:ASN:O	31:X:98:PHE:CZ	2.21	0.94
33:Z:113:SER:HB3	33:Z:142:ASP:OD1	1.67	0.94
33:Z:748:LEU:HD23	33:Z:754:LYS:HE2	1.48	0.94
33:Z:867:PHE:CD1	33:Z:873:LEU:CD2	2.50	0.94
7:7:64:THR:CG2	7:7:68:TYR:CE2	2.50	0.94
12:E:12:VAL:CG1	12:E:123:PHE:CZ	2.50	0.94
21:N:321:LEU:HG	21:N:323:GLY:H	1.31	0.94
21:N:348:PHE:CZ	21:N:355:TRP:CD1	2.56	0.94
21:N:669:GLU:OE1	21:N:785:PRO:HA	1.68	0.94
23:P:270:LEU:HD13	23:P:329:PHE:CZ	2.01	0.94
25:R:396:LYS:CB	26:S:452:TYR:HE1	1.81	0.94
29:V:45:VAL:HG13	29:V:46:PRO:HA	1.46	0.94
33:Z:336:SER:O	33:Z:340:LEU:CD2	2.15	0.94
33:Z:516:THR:O	33:Z:556:ILE:CG2	2.16	0.94
3:3:18:LEU:HD11	3:3:177:VAL:CG1	1.96	0.94
16:I:222:TYR:HE1	16:I:329:ASN:HA	1.24	0.94
22:O:26:PHE:CE1	22:O:43:GLU:CG	2.51	0.94
26:S:461:PHE:HE2	28:U:274:MET:HB3	1.32	0.94
31:X:17:TYR:O	31:X:98:PHE:CE1	2.21	0.94
8:A:71:TYR:CE1	8:A:87:ILE:HD11	2.02	0.94
23:P:137:ALA:CB	23:P:179:PHE:CZ	2.50	0.94
1:1:33:LYS:HA	1:1:45:ARG:NH2	1.83	0.93
22:O:188:PHE:HD2	22:O:220:SER:CB	1.82	0.93
33:Z:297:VAL:CG1	33:Z:310:LEU:HD22	1.98	0.93
15:H:429:PHE:CG	15:H:432:ARG:NH2	2.36	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:215:PRO:HD3	16:I:319:ARG:HH11	0.76	0.93
22:O:210:ARG:NH2	22:O:238:ILE:HG22	1.82	0.93
24:Q:20:TYR:CE2	24:Q:68:MET:CG	2.51	0.93
33:Z:452:LEU:HD22	33:Z:474:LEU:HD12	1.50	0.93
21:N:9:LEU:CD2	21:N:27:SER:HB3	1.98	0.93
22:O:58:ARG:CG	22:O:61:LEU:HD12	1.97	0.93
22:O:115:ARG:HB2	22:O:124:ASP:OD2	1.68	0.93
25:R:214:TYR:HD2	25:R:230:LEU:HG	1.30	0.93
8:A:242:GLU:O	8:A:246:VAL:HG23	1.69	0.93
28:U:280:ASN:HD21	29:V:291:ASN:CG	1.76	0.93
30:W:118:ILE:HG13	30:W:154:LEU:CG	1.98	0.93
7:7:101:PRO:CB	7:7:124:LEU:CD1	2.47	0.93
15:H:382:LEU:HD23	15:H:385:ARG:HH22	1.27	0.93
18:K:212:TYR:CZ	18:K:321:ALA:HB2	2.02	0.93
21:N:736:PHE:CE1	21:N:749:LEU:HD11	2.04	0.93
28:U:66:TRP:HZ3	28:U:68:LEU:HB3	1.14	0.93
16:I:362:LEU:HD21	16:I:384:LYS:HZ2	1.31	0.93
29:V:51:GLY:HA3	29:V:108:TYR:CZ	2.02	0.93
19:L:290:ARG:HH21	19:L:293:GLU:CB	1.76	0.93
24:Q:390:LEU:HD23	24:Q:397:LEU:CD1	1.99	0.93
5:5:3:THR:HG23	5:5:16:VAL:HG12	1.51	0.93
24:Q:378:SER:OG	25:R:345:TYR:CZ	2.18	0.93
25:R:206:ARG:HH21	25:R:209:ARG:HE	1.07	0.93
30:W:95:GLN:CD	30:W:132:LEU:HD23	1.93	0.93
31:X:121:ILE:O	31:X:125:MET:HG2	1.68	0.93
11:D:70:HIS:CE1	11:D:97:ARG:HH22	1.87	0.93
15:H:285:GLY:C	15:H:286:GLU:CA	2.41	0.93
30:W:38:GLN:HE22	30:W:41:ARG:NH2	1.66	0.93
4:4:43:MET:HG2	4:4:103:ILE:HG12	1.48	0.92
5:5:178:TYR:CE2	5:5:187:TYR:CD1	2.57	0.92
25:R:179:PHE:CZ	25:R:213:TYR:CE1	2.56	0.92
28:U:92:TRP:CZ2	28:U:120:LEU:HD12	2.04	0.92
29:V:261:LEU:HB3	29:V:280:LEU:HD23	1.49	0.92
30:W:87:MET:HE1	30:W:112:ALA:HB1	1.50	0.92
31:X:77:PRO:C	31:X:78:ILE:HG12	1.93	0.92
17:J:224:GLY:O	17:J:227:SER:CB	2.17	0.92
25:R:301:TYR:CE1	25:R:338:TYR:OH	2.23	0.92
6:6:-8:PHE:HE2	6:6:-6:PRO:HB3	0.79	0.92
10:C:118:ILE:HG23	10:C:122:TYR:CE1	2.03	0.92
17:J:71:TYR:HE2	17:J:117:SER:CB	1.81	0.92
19:L:286:ILE:HB	19:L:304:THR:CG2	1.98	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:283:LYS:HB2	23:P:286:ASN:CB	1.98	0.92
25:R:354:ALA:HB2	25:R:364:LEU:HD23	1.51	0.92
31:X:85:ARG:NH1	31:X:87:PHE:HE2	1.66	0.92
4:4:13:ILE:HD11	4:4:153:THR:HG23	1.51	0.92
13:F:179:PHE:CZ	13:F:192:ALA:HB1	2.04	0.92
15:H:425:GLU:CG	15:H:429:PHE:HE2	1.81	0.92
17:J:71:TYR:HE2	17:J:117:SER:HB2	1.35	0.92
31:X:53:THR:O	31:X:54:GLU:CG	2.16	0.92
15:H:244:LYS:HD3	15:H:346:ARG:HE	1.33	0.92
5:5:70:GLU:HA	11:D:111:ARG:NH1	1.83	0.92
33:Z:103:TYR:OH	33:Z:140:LEU:HD12	1.67	0.92
17:J:84:VAL:HG11	17:J:122:LEU:HD11	1.49	0.92
21:N:761:ILE:HG21	21:N:904:VAL:C	1.93	0.92
22:O:189:TYR:HE2	22:O:227:ILE:HB	1.33	0.92
16:I:401:LEU:CD1	17:J:312:ARG:HD3	1.97	0.92
22:O:70:TYR:HE1	22:O:75:GLN:HB2	1.15	0.92
29:V:45:VAL:CG1	29:V:46:PRO:HA	1.98	0.92
33:Z:298:PHE:HZ	33:Z:341:TYR:OH	1.37	0.92
14:G:108:ILE:CG2	14:G:148:TYR:HE2	1.72	0.92
15:H:382:LEU:CD2	15:H:385:ARG:NH2	2.32	0.92
19:L:111:GLU:HG3	19:L:117:TYR:CE2	2.03	0.92
33:Z:60:ASP:O	33:Z:64:TYR:CD1	2.22	0.92
9:B:6:SER:OG	11:D:4:TYR:HD2	1.52	0.92
16:I:398:GLU:HG3	17:J:312:ARG:NH1	1.84	0.92
24:Q:61:LEU:HD11	24:Q:65:TYR:CE1	2.03	0.92
33:Z:887:GLY:O	33:Z:889:VAL:HG13	1.70	0.92
1:1:-6:GLY:C	2:2:116:HIS:CE1	2.48	0.91
16:I:291:ARG:HG3	16:I:292:TYR:N	1.84	0.91
18:K:48:TYR:CE2	21:N:152:LEU:HG	2.03	0.91
22:O:66:VAL:HG11	22:O:106:PHE:HE1	1.33	0.91
30:W:38:GLN:OE1	30:W:41:ARG:NH2	2.03	0.91
6:6:147:PHE:CE2	6:6:164:LYS:N	2.38	0.91
25:R:335:ARG:HH12	25:R:371:PHE:HB3	1.23	0.91
9:B:139:HIS:CE1	9:B:145:PHE:CZ	2.58	0.91
17:J:273:LEU:CB	17:J:309:ARG:CZ	2.41	0.91
10:C:50:ARG:HH12	10:C:53:THR:HA	1.31	0.91
12:E:35:SER:HA	12:E:53:ARG:NH2	1.85	0.91
16:I:217:LYS:HE2	16:I:343:ARG:HD2	0.94	0.91
33:Z:307:HIS:CE1	33:Z:341:TYR:CD1	2.58	0.91
6:6:-8:PHE:CZ	6:6:-6:PRO:CA	2.53	0.91
22:O:26:PHE:CE1	22:O:58:ARG:CZ	2.53	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:80:LYS:NZ	22:O:121:ASP:CG	2.27	0.91
22:O:189:TYR:HD2	22:O:227:ILE:HG13	1.31	0.91
25:R:266:LEU:HD23	25:R:270:VAL:HG21	0.92	0.91
28:U:165:GLU:CB	29:V:42:ARG:HH12	1.81	0.91
28:U:302:GLN:HE22	28:U:305:ARG:HH21	0.91	0.91
29:V:145:GLN:HB3	29:V:150:LYS:HE3	1.52	0.91
33:Z:474:LEU:CG	33:Z:493:LEU:HD12	2.00	0.91
33:Z:571:GLY:CA	33:Z:574:TYR:CE2	2.53	0.91
10:C:115:LEU:HD13	10:C:137:TYR:OH	1.71	0.91
11:D:70:HIS:HE1	11:D:97:ARG:HH22	1.10	0.91
17:J:134:VAL:HG12	18:K:255:ARG:NH2	1.86	0.91
25:R:321:TYR:CE1	25:R:324:ARG:NH1	2.38	0.91
25:R:396:LYS:C	26:S:452:TYR:CE1	2.49	0.91
26:S:416:GLU:CD	26:S:417:GLN:HE21	1.78	0.91
5:5:178:TYR:CE2	5:5:187:TYR:HD1	1.89	0.91
15:H:284:VAL:C	15:H:286:GLU:N	2.29	0.91
21:N:509:GLN:O	21:N:510:HIS:ND1	2.03	0.91
22:O:26:PHE:HZ	22:O:43:GLU:HG2	1.12	0.91
25:R:63:TYR:HE2	25:R:94:PHE:CD1	1.89	0.91
25:R:241:ILE:HG22	25:R:242:GLU:HG2	1.51	0.91
31:X:72:GLU:HB2	31:X:91:PHE:CZ	2.05	0.91
13:F:105:VAL:HG21	13:F:145:LEU:HB2	1.53	0.91
16:I:290:LYS:HZ2	16:I:333:THR:C	1.78	0.91
22:O:33:TYR:CD1	22:O:40:GLN:HB3	2.06	0.91
22:O:62:TYR:HA	22:O:65:PHE:HD2	1.36	0.91
23:P:412:LEU:HD22	29:V:245:VAL:CG2	2.01	0.91
33:Z:237:VAL:HG11	33:Z:272:TYR:HE1	1.33	0.91
22:O:266:PHE:CE1	22:O:270:ILE:HG21	2.05	0.91
22:O:284:GLU:OE2	22:O:288:ARG:NH2	2.04	0.91
22:O:299:THR:CA	22:O:365:LYS:NZ	2.23	0.91
33:Z:919:GLU:HG3	33:Z:921:GLU:HG2	1.53	0.91
31:X:35:ILE:HB	31:X:128:VAL:HG21	1.52	0.91
33:Z:151:HIS:ND1	33:Z:152:GLU:CB	2.34	0.91
33:Z:394:TYR:CE1	33:Z:859:LYS:HG3	2.04	0.91
25:R:206:ARG:NH2	25:R:209:ARG:HE	1.69	0.90
25:R:401:HIS:CB	26:S:452:TYR:OH	2.18	0.90
28:U:19:LEU:CG	29:V:212:MET:SD	2.58	0.90
31:X:14:VAL:HG11	31:X:61:LEU:O	1.69	0.90
31:X:22:ARG:HH12	31:X:88:ALA:CB	1.83	0.90
1:1:4:MET:HE3	1:1:159:LEU:HD21	1.52	0.90
19:L:336:ALA:C	19:L:342:ARG:NH1	2.30	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:137:PHE:CD1	26:S:162:VAL:HG13	2.06	0.90
28:U:19:LEU:CD2	29:V:212:MET:SD	2.59	0.90
31:X:76:VAL:HG21	31:X:90:VAL:HG21	1.53	0.90
33:Z:319:THR:O	33:Z:322:GLU:HG2	1.70	0.90
33:Z:474:LEU:CG	33:Z:493:LEU:CD1	2.49	0.90
5:5:76:VAL:HG12	5:5:113:TYR:CD2	2.05	0.90
5:5:104:TYR:HE1	5:5:109:GLY:HA2	1.35	0.90
18:K:140:HIS:NE2	18:K:147:VAL:CG2	2.33	0.90
22:O:59:LEU:O	22:O:62:TYR:HE1	1.36	0.90
5:5:76:VAL:HG12	5:5:113:TYR:CE2	2.05	0.90
16:I:246:ARG:HH12	17:J:277:ASN:HD22	1.15	0.90
20:M:183:VAL:HG11	20:M:186:LEU:CD1	2.02	0.90
22:O:127:LEU:CD2	22:O:167:ILE:HG13	2.01	0.90
33:Z:452:LEU:HD21	33:Z:477:TYR:CB	2.02	0.90
23:P:308:LEU:HD23	23:P:369:LEU:HG	1.53	0.90
30:W:118:ILE:HG21	30:W:154:LEU:HG	1.54	0.90
33:Z:358:TYR:OH	33:Z:914:LEU:HB2	1.71	0.90
19:L:198:GLU:HG3	19:L:202:LYS:HZ2	1.36	0.90
31:X:35:ILE:HG21	31:X:128:VAL:CG2	2.01	0.90
33:Z:758:LEU:HD11	33:Z:789:GLN:HB2	1.50	0.90
21:N:352:ASN:HB3	21:N:355:TRP:CB	2.02	0.90
23:P:299:LEU:HD11	23:P:311:TRP:HZ3	1.37	0.90
33:Z:151:HIS:ND1	33:Z:152:GLU:HB3	1.85	0.90
33:Z:426:TYR:OH	33:Z:435:GLN:HB3	1.71	0.90
5:5:15:ALA:HB1	5:5:161:ILE:HD11	1.52	0.90
8:A:95:LEU:HD21	14:G:117:GLN:HG3	1.51	0.90
12:E:157:HIS:CB	12:E:167:TYR:HE2	1.75	0.90
15:H:425:GLU:CG	15:H:429:PHE:CE2	2.53	0.90
16:I:418:GLN:CB	16:I:422:ARG:HH12	1.84	0.90
24:Q:227:CYS:C	24:Q:334:HIS:NE2	2.30	0.90
29:V:197:TYR:HE1	29:V:199:LEU:HD21	1.15	0.90
3:3:52:THR:HG21	4:4:84:ARG:HE	1.37	0.90
9:B:50:LYS:NZ	9:B:203:GLU:OE2	2.04	0.90
15:H:306:ILE:HG21	15:H:308:PHE:CZ	2.07	0.90
26:S:274:PHE:CE2	26:S:278:LYS:HE3	2.06	0.90
27:T:99:SER:H	27:T:102:LYS:HD3	1.34	0.90
33:Z:531:ALA:HA	33:Z:573:LEU:CD2	2.02	0.90
16:I:250:SER:O	16:I:253:ILE:HG22	1.72	0.90
22:O:254:LEU:CD2	22:O:266:PHE:CE1	2.55	0.90
23:P:115:ARG:NH1	23:P:146:ILE:CG1	2.32	0.90
25:R:62:TYR:CB	25:R:180:PHE:CZ	2.54	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:436:ILE:CG2	26:S:438:HIS:CE1	2.55	0.89
29:V:70:ALA:HA	29:V:108:TYR:OH	1.70	0.89
31:X:75:TRP:CZ3	31:X:125:MET:CE	2.55	0.89
20:M:193:LEU:HD22	20:M:220:MET:HE2	1.53	0.89
20:M:200:PRO:HA	20:M:207:PHE:CE2	2.07	0.89
31:X:8:ILE:HG22	31:X:10:PHE:CE2	2.07	0.89
6:6:3:ILE:CD1	6:6:101:ILE:HD12	2.02	0.89
15:H:173:ARG:NH2	16:I:128:TYR:C	2.29	0.89
15:H:173:ARG:NH2	16:I:129:TYR:H	1.65	0.89
33:Z:161:ILE:HG13	33:Z:203:LEU:CD1	2.01	0.89
33:Z:474:LEU:HG	33:Z:493:LEU:HD12	1.54	0.89
8:A:69:VAL:HA	14:G:157:TRP:CE3	2.06	0.89
18:K:212:TYR:CE1	18:K:321:ALA:HB2	2.07	0.89
18:K:244:HIS:HB3	19:L:256:ILE:CD1	2.02	0.89
22:O:72:LYS:CD	22:O:73:ILE:CD1	2.50	0.89
24:Q:75:ARG:HD3	24:Q:113:ASP:HB3	1.54	0.89
6:6:147:PHE:HD2	6:6:163:LEU:HA	1.32	0.89
13:F:33:SER:HB3	20:M:433:TYR:CE2	2.05	0.89
19:L:290:ARG:HH21	19:L:293:GLU:HB3	1.05	0.89
22:O:310:PHE:CE1	22:O:341:ILE:HG21	2.07	0.89
26:S:436:ILE:HG21	26:S:438:HIS:NE2	1.88	0.89
28:U:14:VAL:HG21	28:U:48:VAL:HG12	1.53	0.89
29:V:159:ILE:HG22	29:V:160:ASP:N	1.88	0.89
14:G:216:SER:HA	14:G:230:VAL:HG23	1.53	0.89
15:H:312:ASP:CB	16:I:300:ARG:HH22	1.84	0.89
16:I:132:ILE:HB	16:I:138:LYS:HZ1	1.37	0.89
21:N:9:LEU:HD22	21:N:27:SER:HB3	1.52	0.89
22:O:33:TYR:CE1	22:O:40:GLN:HG3	2.06	0.89
9:B:172:LYS:CE	10:C:56:LEU:HD13	2.02	0.89
17:J:133:LEU:HD23	17:J:228:ARG:HH22	1.38	0.89
25:R:301:TYR:CZ	25:R:338:TYR:OH	2.26	0.89
28:U:19:LEU:HD13	29:V:209:GLU:OE1	1.73	0.89
9:B:122:THR:OG1	9:B:129:PRO:HG3	1.71	0.89
23:P:115:ARG:HH12	23:P:146:ILE:HG13	1.10	0.89
23:P:431:HIS:CE1	28:U:156:HIS:H	1.89	0.89
24:Q:409:TYR:CA	25:R:399:GLN:HG3	2.02	0.89
19:L:221:TYR:CZ	19:L:348:GLU:HA	2.07	0.89
8:A:19:PHE:CZ	9:B:128:ARG:HD2	2.08	0.89
17:J:392:LYS:CG	18:K:337:LYS:HZ2	1.85	0.89
21:N:329:HIS:NE2	21:N:355:TRP:HD1	1.69	0.89
22:O:116:ASN:HD21	22:O:160:LYS:HB3	1.38	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:52:LEU:HD11	29:V:107:TRP:CZ3	2.08	0.89
17:J:350:MET:HE2	17:J:361:VAL:HG21	1.53	0.88
19:L:301:ILE:HD11	20:M:299:ARG:HH21	1.36	0.88
21:N:514:THR:CG2	21:N:546:LEU:HB2	2.03	0.88
12:E:12:VAL:HG11	12:E:123:PHE:CE2	2.08	0.88
19:L:290:ARG:HH12	19:L:299:ARG:HH22	0.91	0.88
22:O:16:MET:HE2	22:O:19:ASP:OD1	1.72	0.88
22:O:116:ASN:CB	22:O:127:LEU:HB2	2.04	0.88
22:O:310:PHE:HZ	22:O:341:ILE:HG21	0.83	0.88
25:R:62:TYR:CB	25:R:180:PHE:HZ	1.85	0.88
25:R:208:ASN:ND2	25:R:235:LEU:HD12	1.89	0.88
25:R:335:ARG:NH2	25:R:371:PHE:HD1	1.64	0.88
30:W:147:ILE:HG22	30:W:148:GLU:H	1.36	0.88
33:Z:574:TYR:CD2	33:Z:584:VAL:HG21	2.09	0.88
33:Z:970:TYR:CE1	33:Z:985:LYS:NZ	2.27	0.88
1:1:61:TYR:HE1	8:A:103:GLU:CA	1.86	0.88
5:5:81:LYS:NZ	5:5:85:ASN:HD21	1.71	0.88
14:G:240:ASP:HA	14:G:243:GLN:HE21	1.35	0.88
15:H:312:ASP:HA	16:I:300:ARG:HH22	1.38	0.88
19:L:290:ARG:CZ	19:L:293:GLU:CA	2.52	0.88
25:R:276:LEU:HB3	25:R:289:ILE:HD13	1.55	0.88
7:7:200:PHE:HE2	7:7:202:LYS:HE2	1.37	0.88
11:D:70:HIS:HE1	11:D:97:ARG:NH2	1.71	0.88
17:J:326:GLU:CD	17:J:329:ARG:HH21	1.81	0.88
23:P:263:HIS:O	23:P:267:PHE:CD2	2.27	0.88
29:V:180:LEU:O	29:V:181:ASN:CG	2.17	0.88
2:2:9:ASN:HD21	2:2:145:ASP:HA	1.36	0.88
22:O:48:PHE:CD1	22:O:81:TYR:CD1	2.62	0.88
24:Q:263:LYS:NZ	24:Q:324:GLU:OE2	2.07	0.88
30:W:147:ILE:HG22	30:W:148:GLU:N	1.89	0.88
13:F:105:VAL:HG21	13:F:145:LEU:CB	2.04	0.88
22:O:82:LEU:H	22:O:85:SER:HB2	1.38	0.88
7:7:64:THR:CG2	7:7:68:TYR:CZ	2.56	0.88
17:J:210:PHE:HE2	17:J:212:ARG:HD3	1.37	0.88
28:U:94:HIS:HE2	28:U:120:LEU:HD21	1.28	0.88
17:J:321:VAL:HG22	17:J:324:ARG:NH2	1.88	0.88
1:1:112:THR:HG21	7:7:27:ARG:HH21	1.37	0.88
6:6:112:ALA:HB1	6:6:114:TYR:CE1	2.09	0.88
15:H:306:ILE:CG2	15:H:308:PHE:CZ	2.58	0.88
18:K:60:LEU:HD13	21:N:601:THR:OG1	1.73	0.88
22:O:26:PHE:HZ	22:O:43:GLU:CG	1.64	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:427:GLU:HA	29:V:230:TYR:HE1	1.05	0.88
2:2:7:LYS:O	2:2:146:LEU:HD23	1.73	0.87
6:6:34:VAL:HG22	6:6:44:SER:HB2	1.55	0.87
21:N:884:PHE:CB	21:N:905:LEU:HD13	2.04	0.87
23:P:138:ARG:HA	23:P:141:LYS:HZ2	1.36	0.87
25:R:179:PHE:CZ	25:R:213:TYR:HE1	1.90	0.87
33:Z:570:LEU:C	33:Z:574:TYR:HE2	1.81	0.87
24:Q:390:LEU:HD23	24:Q:397:LEU:HD13	1.56	0.87
6:6:176:ARG:NH1	6:6:208:TYR:HB3	1.89	0.87
16:I:150:HIS:ND1	16:I:151:HIS:N	2.21	0.87
22:O:16:MET:HE3	22:O:72:LYS:HG3	1.55	0.87
25:R:117:ILE:CD1	25:R:134:TRP:CH2	2.57	0.87
25:R:263:ARG:HH11	25:R:340:GLN:CG	1.87	0.87
25:R:380:VAL:HA	26:S:398:THR:HG21	1.56	0.87
28:U:92:TRP:HZ2	28:U:120:LEU:CD1	1.83	0.87
7:7:129:TYR:HE1	7:7:134:LEU:HD23	1.37	0.87
13:F:156:LEU:CD2	14:G:58:LEU:HD23	2.03	0.87
22:O:92:PHE:CE1	22:O:136:THR:HB	2.08	0.87
23:P:412:LEU:CD2	29:V:245:VAL:HA	2.04	0.87
33:Z:797:THR:HG23	33:Z:833:GLN:NE2	1.90	0.87
13:F:13:PHE:HE1	14:G:130:PRO:CD	1.87	0.87
23:P:431:HIS:HD1	28:U:156:HIS:HB2	1.37	0.87
25:R:209:ARG:HH22	25:R:240:SER:HB2	1.38	0.87
33:Z:357:ILE:O	33:Z:361:HIS:ND1	2.06	0.87
33:Z:874:ASN:HD21	33:Z:876:VAL:HB	1.39	0.87
18:K:244:HIS:HE1	18:K:251:PRO:HD3	1.12	0.87
18:K:273:GLU:HB2	19:L:306:MET:HE2	1.57	0.87
19:L:337:LEU:N	19:L:342:ARG:NH1	2.21	0.87
19:L:365:THR:OG1	19:L:376:PHE:CE1	2.06	0.87
20:M:319:ASP:HB2	20:M:322:LYS:HZ1	1.36	0.87
22:O:223:LEU:HD22	22:O:277:ILE:HG21	1.57	0.87
24:Q:74:LEU:CD2	24:Q:104:PHE:HZ	1.87	0.87
25:R:179:PHE:HZ	25:R:213:TYR:HE1	1.21	0.87
5:5:59:LEU:HD11	5:5:83:LEU:HD13	1.56	0.87
26:S:372:LEU:HD13	27:T:133:ILE:HD12	1.56	0.87
33:Z:493:LEU:HG	33:Z:497:PHE:CE1	2.08	0.87
33:Z:970:TYR:CZ	33:Z:985:LYS:HD3	2.10	0.87
17:J:250:ILE:HG21	17:J:292:MET:CE	2.04	0.87
8:A:46:ARG:HG3	8:A:154:ILE:CD1	2.05	0.87
15:H:173:ARG:CZ	16:I:129:TYR:H	1.86	0.87
19:L:290:ARG:NH2	19:L:293:GLU:CA	2.36	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:153:ILE:HG21	23:P:189:LEU:CB	2.03	0.87
23:P:157:ALA:HA	23:P:186:LEU:HD13	0.95	0.87
26:S:461:PHE:CE2	28:U:274:MET:HB3	2.09	0.87
29:V:116:CYS:O	29:V:117:TRP:HD1	1.57	0.87
18:K:240:SER:CA	18:K:243:VAL:HG23	2.05	0.86
21:N:902:VAL:O	21:N:903:VAL:HG22	1.75	0.86
22:O:106:PHE:HD2	22:O:109:LEU:H	0.92	0.86
22:O:116:ASN:HB3	22:O:127:LEU:HB2	1.56	0.86
23:P:268:LEU:CD1	23:P:280:LEU:HD12	2.04	0.86
24:Q:250:THR:HG23	24:Q:251:THR:N	1.89	0.86
25:R:397:ASN:ND2	25:R:400:TYR:CD2	2.43	0.86
8:A:91:ARG:HB3	14:G:120:GLN:HE22	1.39	0.86
20:M:362:GLN:HG3	20:M:376:TRP:CZ2	2.10	0.86
22:O:189:TYR:CE2	22:O:227:ILE:HB	2.03	0.86
25:R:301:TYR:HE2	25:R:359:VAL:HG21	1.40	0.86
10:C:158:THR:OG1	10:C:160:TRP:NE1	2.07	0.86
17:J:269:GLN:O	17:J:273:LEU:HG	1.75	0.86
19:L:252:VAL:HB	20:M:256:ILE:CG2	2.03	0.86
24:Q:409:TYR:CB	25:R:399:GLN:HG3	2.05	0.86
33:Z:68:LEU:CD1	33:Z:115:LEU:HB2	2.06	0.86
33:Z:970:TYR:HE1	33:Z:985:LYS:CD	1.70	0.86
21:N:348:PHE:HZ	21:N:355:TRP:NE1	1.72	0.86
22:O:188:PHE:HZ	22:O:216:ASP:HB3	1.39	0.86
23:P:427:GLU:HA	29:V:230:TYR:CZ	2.10	0.86
24:Q:75:ARG:CD	24:Q:113:ASP:HB3	2.03	0.86
27:T:178:THR:CG2	27:T:182:LYS:HE3	2.05	0.86
33:Z:307:HIS:HE1	33:Z:341:TYR:CE1	1.92	0.86
8:A:117:LEU:HD23	8:A:143:PHE:CE2	2.11	0.86
10:C:115:LEU:CD1	10:C:137:TYR:OH	2.23	0.86
21:N:294:PRO:HG3	21:N:921:ARG:HH21	1.38	0.86
23:P:268:LEU:HD11	23:P:280:LEU:CD1	2.04	0.86
15:H:157:VAL:HB	15:H:183:ILE:HD11	1.54	0.86
17:J:273:LEU:CD2	17:J:309:ARG:HD3	2.05	0.86
18:K:238:ASN:HB2	18:K:241:GLU:CG	2.05	0.86
21:N:669:GLU:HG2	21:N:784:TYR:N	1.90	0.86
9:B:30:GLN:HB3	18:K:426:PHE:CE2	2.10	0.86
12:E:157:HIS:ND1	12:E:159:GLU:OE2	2.08	0.86
21:N:318:LYS:HZ2	21:N:348:PHE:HD1	1.18	0.86
19:L:201:LEU:HD12	19:L:239:ILE:HD13	1.57	0.86
22:O:80:LYS:HB3	22:O:81:TYR:CD1	2.10	0.86
25:R:78:ASP:OD1	25:R:94:PHE:HD1	1.56	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:24:ARG:CZ	29:V:100:ARG:HH12	1.88	0.86
33:Z:250:VAL:HA	33:Z:265:LEU:HD21	1.56	0.86
8:A:135:ARG:HH22	14:G:14:PHE:HD1	1.18	0.86
11:D:179:TYR:HE1	11:D:185:PRO:CD	1.88	0.86
20:M:362:GLN:HG3	20:M:376:TRP:CH2	2.11	0.86
22:O:223:LEU:CD2	22:O:277:ILE:HG21	2.06	0.86
33:Z:793:PHE:CZ	33:Z:830:LEU:HD22	2.11	0.86
9:B:7:PHE:CE2	10:C:7:ASP:HB3	2.11	0.85
21:N:207:LEU:HB3	21:N:228:VAL:HG13	1.57	0.85
30:W:109:ARG:NH1	30:W:140:ASP:OD2	2.08	0.85
33:Z:440:LEU:HD21	33:Z:477:TYR:CZ	2.10	0.85
3:3:54:LEU:HD11	3:3:94:TYR:HE1	0.86	0.85
8:A:119:LYS:NZ	9:B:83:ARG:HB3	1.91	0.85
21:N:779:GLU:O	21:N:780:ASP:OD1	1.93	0.85
23:P:268:LEU:HD11	23:P:280:LEU:HD12	1.58	0.85
8:A:71:TYR:HE1	8:A:87:ILE:HD11	1.41	0.85
9:B:69:PRO:HD2	9:B:104:TYR:CE1	2.11	0.85
13:F:179:PHE:CZ	13:F:192:ALA:HB2	2.01	0.85
16:I:184:ILE:HG21	16:I:231:LEU:HD22	1.57	0.85
21:N:329:HIS:HE2	21:N:355:TRP:CD1	1.93	0.85
24:Q:186:HIS:CE1	24:Q:228:GLU:OE1	2.26	0.85
16:I:246:ARG:HH12	17:J:277:ASN:ND2	1.75	0.85
17:J:156:GLN:HE21	17:J:160:ILE:HG13	1.41	0.85
20:M:313:ASP:HB2	20:M:342:ARG:HE	1.40	0.85
23:P:396:PRO:HB2	24:Q:396:TRP:CH2	2.11	0.85
31:X:87:PHE:CB	31:X:99:PHE:HB2	2.04	0.85
5:5:55:TRP:CH2	5:5:90:TYR:CZ	2.63	0.85
15:H:107:LYS:CB	15:H:143:ALA:CB	2.50	0.85
17:J:392:LYS:CG	18:K:337:LYS:NZ	2.40	0.85
25:R:335:ARG:HH12	25:R:371:PHE:CB	1.89	0.85
26:S:436:ILE:HG21	26:S:438:HIS:CE1	2.12	0.85
29:V:24:LYS:HD2	29:V:167:ASN:HD21	1.40	0.85
8:A:24:ARG:HH11	18:K:424:PHE:H	1.24	0.85
21:N:113:ALA:O	21:N:161:TYR:CD2	2.30	0.85
22:O:117:ASN:N	22:O:127:LEU:HB3	1.91	0.85
22:O:188:PHE:CZ	22:O:216:ASP:HB3	2.12	0.85
23:P:270:LEU:CD1	23:P:329:PHE:CZ	2.58	0.85
31:X:28:PRO:HB3	31:X:57:VAL:HG23	0.87	0.85
22:O:30:GLU:N	22:O:40:GLN:NE2	2.25	0.85
22:O:359:SER:HG	28:U:223:HIS:CD2	1.90	0.85
29:V:159:ILE:HG22	29:V:160:ASP:H	1.42	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:29:VAL:CG1	31:X:61:LEU:HD22	2.05	0.85
8:A:117:LEU:CD2	8:A:143:PHE:CE2	2.59	0.85
16:I:126:PRO:HG2	16:I:128:TYR:HE1	1.41	0.85
18:K:244:HIS:O	18:K:291:GLU:HG2	1.76	0.85
22:O:359:SER:CB	28:U:223:HIS:CD2	2.59	0.85
23:P:412:LEU:HD22	29:V:245:VAL:HG22	1.57	0.85
24:Q:378:SER:CB	25:R:345:TYR:OH	2.25	0.85
25:R:380:VAL:HA	26:S:398:THR:CG2	2.07	0.85
13:F:50:LYS:HA	20:M:433:TYR:CE1	2.12	0.85
17:J:71:TYR:CE2	17:J:117:SER:CB	2.60	0.85
19:L:371:THR:HG23	19:L:409:HIS:HD2	1.40	0.85
22:O:352:TRP:CB	28:U:235:LEU:HD21	2.06	0.85
24:Q:10:GLU:O	24:Q:14:LEU:CD2	2.24	0.85
27:T:51:TYR:HA	27:T:55:LEU:CD1	2.05	0.85
29:V:109:HIS:HB3	29:V:111:HIS:NE2	1.91	0.85
7:7:57:ARG:HD2	14:G:100:LYS:HG3	1.56	0.85
9:B:66:LEU:HD21	9:B:235:PHE:CE1	2.12	0.85
11:D:70:HIS:CE1	11:D:97:ARG:NH2	2.45	0.85
24:Q:65:TYR:HD2	24:Q:74:LEU:HD22	1.42	0.85
28:U:71:ASN:ND2	30:W:64:THR:HG23	1.90	0.85
30:W:4:GLU:OE2	30:W:40:LYS:CE	2.25	0.85
3:3:28:SER:HB2	4:4:127:LEU:HD21	1.59	0.84
14:G:182:HIS:CG	14:G:186:LEU:HG	2.12	0.84
21:N:329:HIS:CD2	21:N:355:TRP:HE1	1.94	0.84
31:X:35:ILE:CG2	31:X:128:VAL:HG22	2.07	0.84
11:D:118:GLN:NE2	12:E:86:ARG:HD2	1.91	0.84
15:H:75:GLY:O	15:H:105:ILE:HG12	1.77	0.84
21:N:666:GLN:CD	21:N:873:ARG:CG	2.50	0.84
22:O:15:ARG:O	22:O:16:MET:CB	2.25	0.84
23:P:425:HIS:HD2	28:U:232:VAL:HG12	1.41	0.84
30:W:38:GLN:NE2	30:W:41:ARG:NH2	2.24	0.84
21:N:761:ILE:CG2	21:N:904:VAL:CA	2.28	0.84
27:T:48:ASN:O	27:T:49:ASP:OD1	1.95	0.84
30:W:125:LEU:HD11	30:W:157:PHE:CB	2.06	0.84
5:5:55:TRP:CZ2	5:5:90:TYR:CD2	2.61	0.84
8:A:205:PHE:CZ	8:A:209:HIS:CE1	2.65	0.84
9:B:90:ARG:O	9:B:94:HIS:ND1	2.08	0.84
23:P:181:LEU:CG	23:P:223:LEU:HD21	2.05	0.84
7:7:101:PRO:HB2	7:7:124:LEU:CD1	2.08	0.84
9:B:118:MET:CE	9:B:152:PRO:HA	2.07	0.84
19:L:252:VAL:CB	20:M:256:ILE:CG2	2.56	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:319:ASP:O	20:M:322:LYS:HE2	1.77	0.84
22:O:359:SER:OG	28:U:223:HIS:CE1	2.30	0.84
23:P:431:HIS:CE1	28:U:156:HIS:N	2.46	0.84
33:Z:763:HIS:CD2	33:Z:767:TYR:CZ	2.66	0.84
21:N:711:ARG:C	21:N:873:ARG:HD2	2.03	0.84
33:Z:574:TYR:CE2	33:Z:584:VAL:CG1	2.56	0.84
13:F:51:ARG:HH11	20:M:430:VAL:CG1	1.91	0.84
17:J:141:LYS:HE2	17:J:209:LYS:HE2	1.58	0.84
18:K:273:GLU:HB2	19:L:306:MET:CE	2.08	0.84
19:L:105:ILE:HD11	20:M:128:PHE:HB2	1.60	0.84
22:O:72:LYS:CD	22:O:73:ILE:CG1	2.46	0.84
23:P:429:ILE:HG23	28:U:203:LYS:CE	2.07	0.84
24:Q:20:TYR:CE2	24:Q:68:MET:SD	2.71	0.84
24:Q:264:TYR:HH	24:Q:330:LEU:HB2	1.38	0.84
25:R:395:ASN:O	26:S:452:TYR:HD1	1.60	0.84
27:T:89:TYR:CE1	27:T:90:PHE:HE1	1.95	0.84
18:K:60:LEU:HD11	21:N:598:ASP:HB3	1.58	0.84
23:P:329:PHE:CD2	23:P:337:HIS:CD2	2.65	0.84
26:S:253:PHE:O	26:S:257:LEU:HB2	1.76	0.84
16:I:126:PRO:HG2	16:I:128:TYR:CE1	2.12	0.84
17:J:350:MET:CE	17:J:361:VAL:HG21	2.07	0.84
18:K:99:PHE:CZ	18:K:101:GLU:C	2.56	0.84
19:L:125:PRO:HD2	19:L:127:TYR:CZ	2.13	0.84
21:N:890:PHE:CB	21:N:905:LEU:HD23	2.07	0.84
23:P:176:LYS:HD3	23:P:206:LYS:HZ1	1.43	0.84
33:Z:68:LEU:HD13	33:Z:115:LEU:CB	2.06	0.84
33:Z:782:ILE:HG23	33:Z:864:MET:HG2	1.58	0.84
15:H:173:ARG:HH21	16:I:128:TYR:HA	1.40	0.84
17:J:273:LEU:HB3	17:J:309:ARG:HH22	1.39	0.84
17:J:276:LEU:HD21	17:J:290:ILE:HD12	1.60	0.84
21:N:92:ASP:OD1	21:N:139:ARG:NH2	2.10	0.84
21:N:381:GLU:HG3	21:N:384:LYS:HD2	1.57	0.84
22:O:95:SER:O	22:O:98:TYR:CD2	2.31	0.84
1:1:112:THR:CG2	7:7:27:ARG:HH21	1.90	0.83
13:F:157:TYR:OH	14:G:59:VAL:HG23	1.76	0.83
15:H:107:LYS:HD2	15:H:143:ALA:HB1	1.59	0.83
17:J:369:ALA:HB2	17:J:377:VAL:HG22	1.58	0.83
25:R:179:PHE:HE2	25:R:213:TYR:HH	0.86	0.83
31:X:28:PRO:CB	31:X:57:VAL:HG21	1.83	0.83
33:Z:89:LEU:HD12	33:Z:125:THR:HG21	1.58	0.83
33:Z:120:SER:HB2	33:Z:153:TYR:CE1	2.12	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:F:6:TYR:CE1	13:F:13:PHE:O	2.30	0.83
17:J:250:ILE:HG21	17:J:292:MET:HE3	1.59	0.83
20:M:384:ASP:N	20:M:386:PHE:CD1	2.46	0.83
25:R:312:TYR:HA	25:R:316:LEU:HD12	1.57	0.83
33:Z:307:HIS:HE1	33:Z:341:TYR:CZ	1.95	0.83
11:D:48:ARG:HH22	11:D:57:THR:HG22	1.41	0.83
19:L:252:VAL:HG11	20:M:256:ILE:CD1	1.90	0.83
22:O:189:TYR:HE2	22:O:227:ILE:CG1	1.87	0.83
33:Z:68:LEU:CD1	33:Z:115:LEU:CB	2.57	0.83
1:1:-4:VAL:HG23	1:1:49:ALA:H	1.43	0.83
2:2:8:PHE:HD1	2:2:10:ASN:N	1.77	0.83
10:C:174:THR:HA	10:C:177:GLN:HE21	1.42	0.83
18:K:159:SER:OG	18:K:242:PHE:HE1	1.61	0.83
31:X:15:CYS:HB3	31:X:100:TRP:HB2	1.57	0.83
33:Z:797:THR:HG23	33:Z:833:GLN:HE22	1.44	0.83
3:3:65:TYR:O	3:3:69:GLU:HG2	1.78	0.83
6:6:58:ARG:NH1	6:6:91:LYS:NZ	2.26	0.83
8:A:19:PHE:CZ	9:B:128:ARG:NH1	2.38	0.83
8:A:56:GLN:HE21	8:A:214:LEU:HD13	1.41	0.83
9:B:218:ASN:CB	9:B:236:ARG:CZ	2.52	0.83
14:G:64:VAL:HG23	14:G:67:GLN:NE2	1.92	0.83
17:J:99:ALA:CB	17:J:102:ILE:HG12	2.07	0.83
18:K:85:GLU:OE1	18:K:88:ARG:NH2	2.12	0.83
23:P:435:LYS:HG3	28:U:154:PHE:CZ	2.13	0.83
29:V:197:TYR:O	29:V:197:TYR:CD1	2.31	0.83
16:I:310:LEU:HD13	16:I:338:LEU:CB	2.08	0.83
25:R:396:LYS:O	26:S:452:TYR:CE1	2.32	0.83
28:U:283:ARG:NH2	29:V:254:ARG:HB3	1.93	0.83
20:M:119:VAL:HG11	20:M:155:ILE:HD11	1.59	0.83
22:O:81:TYR:O	22:O:82:LEU:HB2	1.77	0.83
22:O:116:ASN:ND2	22:O:160:LYS:HB3	1.94	0.83
22:O:222:LEU:HA	22:O:230:PHE:CZ	2.13	0.83
24:Q:35:SER:HB3	24:Q:46:VAL:O	1.78	0.83
26:S:236:LEU:HD11	26:S:239:ARG:HH21	1.44	0.83
33:Z:99:LEU:O	33:Z:102:ILE:HG22	1.78	0.83
1:1:83:LYS:CE	1:1:118:SER:HA	2.08	0.83
15:H:66:LYS:HE2	15:H:70:LYS:NZ	1.94	0.83
15:H:75:GLY:C	15:H:105:ILE:HG12	2.03	0.83
22:O:299:THR:N	22:O:365:LYS:HZ3	1.76	0.83
24:Q:167:LYS:HG3	24:Q:167:LYS:O	1.77	0.83
33:Z:229:SER:C	33:Z:264:PHE:HE1	1.87	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:426:TYR:CZ	33:Z:435:GLN:CB	2.58	0.83
33:Z:795:THR:CG2	33:Z:799:PHE:CE2	2.62	0.83
10:C:12:ILE:HB	11:D:19:GLN:HE22	1.43	0.83
10:C:136:ILE:CD1	10:C:165:VAL:HG22	2.09	0.83
13:F:201:LEU:HD22	13:F:204:GLU:HB2	1.61	0.83
18:K:347:ARG:HD2	24:Q:238:TYR:CD1	2.13	0.83
21:N:70:TYR:CE1	21:N:75:TYR:HE1	1.96	0.83
23:P:283:LYS:CB	23:P:286:ASN:CB	2.55	0.83
24:Q:20:TYR:CD2	24:Q:68:MET:SD	2.71	0.83
25:R:179:PHE:HE2	25:R:213:TYR:OH	1.61	0.83
29:V:203:TYR:O	29:V:204:HIS:CG	2.31	0.83
33:Z:120:SER:CB	33:Z:153:TYR:OH	2.26	0.83
33:Z:570:LEU:O	33:Z:574:TYR:HD2	1.27	0.83
33:Z:888:LEU:HD22	33:Z:904:LEU:HD11	1.61	0.83
11:D:159:TRP:CD1	11:D:162:GLN:HB3	2.14	0.83
17:J:99:ALA:H	17:J:102:ILE:HD11	1.44	0.83
17:J:249:GLU:HG2	18:K:297:ILE:HG13	1.61	0.83
20:M:220:MET:SD	20:M:324:LEU:HD11	2.18	0.83
12:E:157:HIS:CD2	12:E:170:LYS:HD3	2.13	0.82
23:P:176:LYS:HD3	23:P:206:LYS:NZ	1.93	0.82
30:W:38:GLN:CD	30:W:41:ARG:HH21	1.87	0.82
33:Z:737:ALA:HB1	33:Z:775:MET:SD	2.19	0.82
9:B:6:SER:HG	11:D:4:TYR:HD2	0.87	0.82
15:H:455:LYS:HB2	16:I:331:ILE:HD11	1.60	0.82
28:U:302:GLN:HE22	28:U:305:ARG:NH2	1.75	0.82
33:Z:809:MET:HA	33:Z:847:ILE:HD13	1.61	0.82
33:Z:824:ASN:OD1	33:Z:825:ALA:N	2.09	0.82
5:5:124:GLY:HA3	5:5:127:PHE:CZ	2.14	0.82
6:6:-5:TYR:CE2	6:6:51:ASP:OD1	2.32	0.82
6:6:175:VAL:CG1	6:6:179:PHE:CE2	2.59	0.82
12:E:157:HIS:HB3	12:E:167:TYR:HE2	1.01	0.82
13:F:164:ARG:HH21	13:F:201:LEU:HD23	1.45	0.82
19:L:221:TYR:CZ	19:L:348:GLU:CA	2.62	0.82
22:O:80:LYS:HZ1	22:O:121:ASP:CG	1.84	0.82
24:Q:20:TYR:HE2	24:Q:68:MET:HE3	1.44	0.82
33:Z:765:MET:HE1	33:Z:777:PRO:HG3	1.62	0.82
7:7:1:THR:H	7:7:33:ARG:HH12	1.25	0.82
22:O:116:ASN:CB	22:O:127:LEU:HD22	2.09	0.82
28:U:132:LEU:HD12	29:V:231:GLU:OE2	1.78	0.82
6:6:3:ILE:HD11	6:6:101:ILE:HD12	1.61	0.82
21:N:358:LYS:HD3	29:V:181:ASN:HD22	1.43	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:396:PRO:CB	24:Q:396:TRP:CH2	2.63	0.82
24:Q:146:TYR:CD1	24:Q:151:TYR:HE1	1.96	0.82
31:X:14:VAL:O	31:X:29:VAL:HG23	1.79	0.82
33:Z:358:TYR:O	33:Z:362:LEU:HG	1.79	0.82
3:3:94:TYR:CE1	3:3:96:VAL:CG1	2.63	0.82
15:H:156:VAL:HG22	15:H:181:TYR:CD1	2.13	0.82
17:J:71:TYR:CE2	17:J:117:SER:HB3	2.14	0.82
23:P:157:ALA:CB	23:P:186:LEU:HB3	2.10	0.82
25:R:117:ILE:CD1	25:R:134:TRP:CZ3	2.62	0.82
20:M:246:LEU:HD11	20:M:251:LEU:HD21	1.61	0.82
22:O:59:LEU:C	22:O:62:TYR:CD1	2.58	0.82
23:P:96:MET:O	23:P:100:VAL:HG23	1.79	0.82
24:Q:409:TYR:HB2	25:R:399:GLN:CG	2.10	0.82
9:B:218:ASN:HD22	9:B:236:ARG:NH2	1.78	0.82
26:S:392:ILE:CD1	26:S:411:LEU:HD21	2.08	0.82
3:3:179:TYR:CZ	3:3:188:LYS:HG3	2.14	0.82
21:N:214:LEU:HB3	21:N:225:LEU:HD21	1.62	0.82
25:R:63:TYR:CE2	25:R:94:PHE:CE1	2.68	0.82
25:R:84:LYS:HE2	25:R:86:ASP:HB2	1.61	0.82
13:F:13:PHE:CE1	14:G:130:PRO:CG	2.63	0.82
13:F:65:LYS:HE3	13:F:222:PHE:HB3	1.60	0.82
16:I:281:ILE:CG2	16:I:284:ILE:HD11	2.08	0.82
14:G:182:HIS:CD2	14:G:186:LEU:HD11	2.14	0.81
17:J:133:LEU:CD2	17:J:228:ARG:HH22	1.92	0.81
19:L:98:LEU:CD2	20:M:154:LEU:CD2	2.58	0.81
21:N:190:LEU:HD13	21:N:224:THR:CG2	2.10	0.81
23:P:138:ARG:CB	23:P:141:LYS:NZ	2.42	0.81
26:S:236:LEU:CD1	26:S:239:ARG:HH21	1.93	0.81
33:Z:407:VAL:HB	33:Z:439:TYR:OH	1.79	0.81
8:A:69:VAL:HA	14:G:157:TRP:HZ3	1.43	0.81
21:N:585:ARG:HH21	21:N:616:HIS:HA	1.44	0.81
22:O:72:LYS:HD3	22:O:73:ILE:HG13	0.84	0.81
11:D:138:PHE:CE1	11:D:215:VAL:HG12	2.15	0.81
12:E:55:THR:OG1	12:E:59:LEU:HD22	1.80	0.81
16:I:124:THR:O	16:I:125:MET:HG3	1.81	0.81
16:I:136:VAL:HG21	16:I:141:LEU:HD21	1.61	0.81
21:N:276:GLU:O	21:N:280:GLN:HG2	1.80	0.81
22:O:30:GLU:N	22:O:40:GLN:HE22	1.78	0.81
25:R:62:TYR:CD1	25:R:180:PHE:CZ	2.69	0.81
30:W:132:LEU:HD11	30:W:157:PHE:HZ	1.45	0.81
33:Z:282:ILE:CD1	33:Z:974:THR:HG23	2.10	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:394:TYR:CE1	33:Z:859:LYS:HG2	2.13	0.81
13:F:13:PHE:CE1	14:G:130:PRO:HG2	2.15	0.81
17:J:273:LEU:HD23	17:J:309:ARG:HD3	1.61	0.81
18:K:159:SER:HA	19:L:256:ILE:HG13	1.61	0.81
21:N:666:GLN:OE1	21:N:873:ARG:CG	2.28	0.81
22:O:254:LEU:HD23	22:O:266:PHE:CE1	2.15	0.81
24:Q:34:ASP:O	24:Q:35:SER:CB	2.28	0.81
30:W:132:LEU:HD11	30:W:157:PHE:CZ	2.15	0.81
31:X:30:GLN:O	31:X:50:TRP:HZ2	1.63	0.81
31:X:72:GLU:CB	31:X:91:PHE:CE2	2.60	0.81
33:Z:524:ALA:HA	33:Z:562:TRP:CZ3	2.15	0.81
8:A:24:ARG:HH11	18:K:424:PHE:N	1.78	0.81
8:A:174:LYS:HD2	8:A:214:LEU:HD22	1.61	0.81
10:C:4:ARG:CZ	10:C:5:ARG:HH12	1.91	0.81
13:F:202:ARG:HH12	20:M:416:VAL:HG12	1.44	0.81
33:Z:150:GLY:HA3	33:Z:154:ILE:HD12	1.61	0.81
33:Z:531:ALA:HA	33:Z:573:LEU:HD21	1.60	0.81
33:Z:601:VAL:HB	33:Z:616:LEU:HD22	1.62	0.81
11:D:37:LYS:HD2	11:D:147:LEU:HB3	1.63	0.81
16:I:398:GLU:CG	17:J:312:ARG:NH1	2.43	0.81
20:M:354:GLU:HG2	20:M:357:ARG:NH2	1.94	0.81
33:Z:413:ASP:OD2	33:Z:897:HIS:HB2	1.81	0.81
33:Z:99:LEU:HD11	33:Z:115:LEU:CD1	2.11	0.81
33:Z:284:LEU:HD13	33:Z:293:MET:CE	2.10	0.81
8:A:83:VAL:HG22	8:A:141:LEU:CD2	2.10	0.81
21:N:490:LEU:HD21	21:N:727:THR:CG2	2.11	0.81
24:Q:50:ARG:O	24:Q:54:GLN:HG3	1.81	0.81
26:S:171:TYR:CZ	26:S:176:LEU:HD12	2.16	0.81
33:Z:161:ILE:CG1	33:Z:203:LEU:HD13	2.09	0.81
33:Z:531:ALA:O	33:Z:573:LEU:CD2	2.29	0.81
16:I:426:ASN:HB3	17:J:313:LYS:NZ	1.94	0.81
23:P:286:ASN:O	23:P:287:ASP:CB	2.28	0.81
25:R:24:TYR:OH	25:R:248:SER:CB	2.27	0.81
26:S:235:ASN:OD1	26:S:272:TYR:HD1	1.61	0.81
15:H:210:ASP:HB2	15:H:258:LEU:CD1	2.11	0.81
18:K:164:ASN:ND2	19:L:315:PHE:CZ	2.47	0.81
22:O:233:LEU:HD23	22:O:251:LEU:CD2	2.11	0.81
30:W:45:PRO:O	30:W:46:GLU:HB3	1.80	0.81
31:X:27:ILE:HG22	31:X:61:LEU:HD21	1.57	0.81
21:N:59:GLU:HG2	21:N:85:ALA:O	1.80	0.80
21:N:408:LEU:HD11	21:N:412:TYR:CE1	2.16	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:95:SER:HA	22:O:98:TYR:CE2	2.15	0.80
25:R:63:TYR:CD2	25:R:94:PHE:CZ	2.69	0.80
25:R:335:ARG:NH2	25:R:371:PHE:CA	2.21	0.80
27:T:151:TRP:CZ3	27:T:159:LYS:HD2	2.15	0.80
30:W:23:ARG:HE	30:W:27:GLU:HG3	1.46	0.80
33:Z:284:LEU:HD13	33:Z:293:MET:HE3	1.61	0.80
33:Z:288:LEU:HB3	33:Z:290:GLU:HG3	1.61	0.80
5:5:7:ARG:NE	5:5:125:ASP:OD1	2.14	0.80
22:O:40:GLN:O	22:O:41:LEU:CB	2.29	0.80
25:R:271:ILE:O	25:R:272:ASP:OD1	1.98	0.80
26:S:184:TRP:O	26:S:188:TYR:CD2	2.34	0.80
29:V:261:LEU:HB2	29:V:280:LEU:HD21	1.62	0.80
9:B:242:GLU:HB3	9:B:246:ARG:HH12	1.45	0.80
24:Q:390:LEU:CD2	24:Q:397:LEU:HD13	2.10	0.80
1:1:-5:GLU:N	2:2:116:HIS:HE1	1.80	0.80
7:7:5:SER:OG	7:7:119:LEU:HD11	1.80	0.80
18:K:99:PHE:CD2	18:K:133:PRO:O	2.34	0.80
27:T:86:LYS:HE2	27:T:128:TYR:CE1	2.15	0.80
33:Z:748:LEU:HD11	33:Z:866:VAL:HG23	1.62	0.80
2:2:36:ARG:CZ	9:B:222:LEU:O	2.30	0.80
18:K:240:SER:O	18:K:243:VAL:HG23	1.80	0.80
21:N:124:TYR:HB2	21:N:162:ARG:NH1	1.96	0.80
24:Q:246:TYR:HE2	24:Q:261:VAL:HG21	1.47	0.80
30:W:9:VAL:HG22	30:W:52:ILE:CD1	2.11	0.80
33:Z:119:LEU:HD13	33:Z:137:TYR:CE1	2.16	0.80
5:5:32:LYS:HE2	5:5:35:ILE:HG12	1.63	0.80
10:C:137:TYR:O	10:C:148:LEU:HD12	1.81	0.80
13:F:110:HIS:CB	14:G:85:ARG:NH1	2.45	0.80
19:L:114:GLU:CB	19:L:137:ARG:NH2	2.44	0.80
21:N:761:ILE:HG21	21:N:904:VAL:HA	0.82	0.80
30:W:123:ASP:HB3	30:W:127:ARG:HH12	1.47	0.80
21:N:329:HIS:HE2	21:N:355:TRP:HD1	1.24	0.80
22:O:363:ILE:HD13	28:U:211:LEU:HD13	1.61	0.80
29:V:197:TYR:CD1	29:V:199:LEU:HD21	2.14	0.80
9:B:218:ASN:CB	9:B:236:ARG:NH1	2.43	0.80
20:M:192:GLU:HB3	20:M:347:ILE:CD1	2.06	0.80
25:R:301:TYR:OH	25:R:363:PHE:CE2	2.34	0.80
27:T:148:LEU:CD1	27:T:164:LEU:HD21	2.11	0.80
29:V:47:MET:HE1	29:V:74:SER:C	2.04	0.80
5:5:178:TYR:CZ	5:5:187:TYR:CD1	2.70	0.80
12:E:157:HIS:CG	12:E:170:LYS:HZ3	1.99	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:291:ARG:CG	16:I:292:TYR:H	1.85	0.80
17:J:24:GLU:OE1	18:K:48:TYR:OH	1.98	0.80
18:K:164:ASN:ND2	19:L:315:PHE:CD2	2.50	0.80
19:L:198:GLU:HG3	19:L:202:LYS:NZ	1.97	0.80
21:N:434:SER:CB	21:N:439:VAL:HG11	2.10	0.80
21:N:736:PHE:CD1	21:N:749:LEU:HD11	2.16	0.80
25:R:62:TYR:CG	25:R:180:PHE:CE2	2.68	0.80
33:Z:970:TYR:CE1	33:Z:985:LYS:HD2	2.17	0.80
2:2:6:VAL:HG21	2:2:154:LEU:HD23	1.64	0.80
7:7:64:THR:HG22	7:7:68:TYR:CZ	2.15	0.80
16:I:184:ILE:HD12	16:I:187:LEU:HD12	1.63	0.80
17:J:273:LEU:CD2	17:J:309:ARG:CD	2.59	0.80
19:L:290:ARG:CZ	19:L:299:ARG:HH22	1.95	0.80
22:O:40:GLN:O	22:O:41:LEU:HB2	1.80	0.80
30:W:3:LEU:HA	30:W:47:ASN:HD21	1.46	0.80
33:Z:286:VAL:HA	33:Z:317:GLN:HE22	1.45	0.80
2:2:190:TYR:CD2	2:2:191:LEU:HG	2.17	0.79
13:F:49:LEU:C	20:M:433:TYR:OH	2.25	0.79
16:I:222:TYR:HE1	16:I:329:ASN:CA	1.95	0.79
17:J:264:GLY:O	17:J:265:ASP:OD1	2.00	0.79
19:L:180:PHE:CD2	19:L:238:THR:HB	2.17	0.79
20:M:53:HIS:HE2	30:W:69:PHE:HD2	1.29	0.79
25:R:179:PHE:HZ	25:R:213:TYR:CE1	1.98	0.79
26:S:153:GLU:CB	26:S:191:HIS:CE1	2.64	0.79
33:Z:278:LEU:HD12	33:Z:297:VAL:HA	1.64	0.79
1:1:122:LEU:HD11	7:7:28:PHE:CE1	2.17	0.79
5:5:7:ARG:HH21	5:5:125:ASP:CG	1.90	0.79
10:C:118:ILE:HG23	10:C:122:TYR:HE1	1.44	0.79
14:G:31:GLU:HG2	14:G:168:ARG:CZ	2.12	0.79
25:R:335:ARG:CZ	25:R:371:PHE:CB	2.61	0.79
27:T:50:ILE:HG13	27:T:51:TYR:CD2	2.17	0.79
33:Z:282:ILE:HD13	33:Z:974:THR:CG2	2.12	0.79
18:K:60:LEU:CD1	21:N:598:ASP:HB3	2.13	0.79
19:L:336:ALA:CB	19:L:342:ARG:NH1	2.45	0.79
20:M:383:THR:HB	20:M:386:PHE:CD1	2.16	0.79
21:N:70:TYR:CE1	21:N:75:TYR:CE1	2.70	0.79
33:Z:318:LYS:HD2	33:Z:874:ASN:OD1	1.81	0.79
11:D:187:THR:HG22	11:D:189:GLU:H	1.46	0.79
13:F:6:TYR:HE1	14:G:22:GLN:HE22	1.31	0.79
15:H:173:ARG:NH2	16:I:128:TYR:HB3	1.98	0.79
19:L:374:PHE:CE2	19:L:415:LEU:HD22	2.17	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:310:PHE:CZ	22:O:341:ILE:HG22	2.01	0.79
23:P:138:ARG:CA	23:P:141:LYS:HZ2	1.93	0.79
23:P:371:LEU:HD13	23:P:375:GLN:NE2	1.98	0.79
24:Q:74:LEU:HD23	24:Q:104:PHE:CZ	2.17	0.79
24:Q:166:LYS:O	24:Q:167:LYS:HB2	1.83	0.79
24:Q:306:TYR:CE1	24:Q:342:LEU:HD22	2.16	0.79
29:V:52:LEU:CD1	29:V:107:TRP:CZ3	2.66	0.79
31:X:28:PRO:CG	31:X:57:VAL:CB	2.49	0.79
1:1:66:TYR:HE2	1:1:73:PRO:HA	1.47	0.79
1:1:112:THR:HG21	7:7:27:ARG:NH2	1.97	0.79
2:2:222:ASP:OD1	3:3:36:HIS:CE1	2.36	0.79
14:G:192:VAL:HG13	14:G:215:ILE:HD13	1.65	0.79
21:N:207:LEU:HB3	21:N:228:VAL:CG1	2.12	0.79
33:Z:392:LEU:CD2	33:Z:857:LEU:HD21	2.13	0.79
21:N:761:ILE:CG1	21:N:904:VAL:N	2.39	0.79
33:Z:452:LEU:HD21	33:Z:477:TYR:HB3	1.62	0.79
33:Z:473:LEU:CG	33:Z:477:TYR:CE2	2.64	0.79
33:Z:761:PHE:HD1	33:Z:764:LEU:HD12	1.46	0.79
33:Z:888:LEU:CD2	33:Z:904:LEU:HD11	2.13	0.79
9:B:82:TYR:O	9:B:86:VAL:HG23	1.82	0.79
12:E:59:LEU:HD21	12:E:64:ILE:CD1	2.12	0.79
21:N:919:THR:HG23	21:N:921:ARG:H	1.47	0.79
25:R:151:GLU:HG2	25:R:190:LYS:NZ	1.98	0.79
10:C:51:LYS:HG2	10:C:52:VAL:HG23	1.65	0.79
12:E:165:TYR:HB2	12:E:167:TYR:HH	1.46	0.79
18:K:372:ILE:HG21	24:Q:240:PHE:CZ	2.17	0.79
21:N:50:TYR:CD1	21:N:62:ALA:HB2	2.17	0.79
21:N:270:LEU:HD11	21:N:290:LEU:HD22	1.64	0.79
23:P:308:LEU:HD13	23:P:345:VAL:HG12	1.65	0.79
26:S:343:LEU:CG	26:S:347:HIS:CE1	2.49	0.79
27:T:245:TYR:O	27:T:246:GLU:HB2	1.80	0.79
14:G:146:HIS:HB3	14:G:148:TYR:CE2	2.18	0.79
23:P:431:HIS:ND1	28:U:156:HIS:HB3	1.97	0.79
26:S:461:PHE:CE2	28:U:274:MET:CB	2.64	0.79
9:B:217:GLU:OE2	9:B:219:PRO:HD3	1.83	0.79
17:J:258:VAL:O	18:K:280:LYS:HD2	1.83	0.79
22:O:169:ASN:OD1	22:O:195:TYR:CE2	2.35	0.79
27:T:249:MET:HG2	27:T:250:MET:HG3	1.65	0.79
29:V:86:VAL:CG1	29:V:90:LYS:HE3	2.12	0.79
1:1:1:THR:HG22	1:1:129:SER:H	1.47	0.78
5:5:8:PHE:CZ	5:5:13:ILE:HD11	2.17	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:104:TYR:CE1	5:5:109:GLY:HA2	2.18	0.78
7:7:192:ILE:HG12	7:7:198:LEU:HD12	1.64	0.78
8:A:56:GLN:NE2	8:A:214:LEU:HD13	1.98	0.78
11:D:179:TYR:CE1	11:D:185:PRO:CD	2.63	0.78
14:G:31:GLU:HG2	14:G:168:ARG:HH22	1.46	0.78
22:O:72:LYS:HZ2	22:O:73:ILE:CD1	1.68	0.78
23:P:329:PHE:CD2	23:P:337:HIS:NE2	2.50	0.78
28:U:106:ILE:CG2	28:U:110:PHE:HE2	1.95	0.78
31:X:50:TRP:CH2	31:X:52:PRO:HB3	2.18	0.78
33:Z:407:VAL:CB	33:Z:439:TYR:OH	2.32	0.78
8:A:153:SER:HB3	8:A:155:TYR:CE1	2.18	0.78
20:M:357:ARG:NE	20:M:383:THR:OG1	2.16	0.78
26:S:472:HIS:HD1	28:U:288:PHE:HE1	0.80	0.78
8:A:87:ILE:HG13	14:G:157:TRP:HZ2	1.47	0.78
16:I:202:LEU:HD23	16:I:240:THR:HB	1.66	0.78
23:P:425:HIS:CD2	28:U:232:VAL:HG12	2.17	0.78
15:H:173:ARG:NH2	16:I:128:TYR:HA	1.95	0.78
15:H:312:ASP:HA	16:I:300:ARG:NH2	1.95	0.78
19:L:125:PRO:CD	19:L:127:TYR:OH	2.21	0.78
24:Q:12:ARG:HE	24:Q:60:GLU:CD	1.90	0.78
24:Q:61:LEU:HD11	24:Q:65:TYR:HE1	1.48	0.78
26:S:461:PHE:CE1	28:U:278:ILE:HG13	2.18	0.78
12:E:179:ALA:O	12:E:183:LEU:HG	1.84	0.78
15:H:382:LEU:CD2	15:H:385:ARG:HH22	1.96	0.78
17:J:258:VAL:CB	18:K:297:ILE:HD11	2.06	0.78
25:R:209:ARG:NH2	25:R:240:SER:CB	2.47	0.78
26:S:464:ARG:CZ	28:U:281:LEU:HD13	2.14	0.78
33:Z:139:LEU:HD21	33:Z:161:ILE:HD12	1.64	0.78
33:Z:513:ALA:O	33:Z:516:THR:OG1	2.01	0.78
12:E:17:PRO:HA	13:F:24:TYR:CD1	2.19	0.78
15:H:62:ARG:NH1	16:I:99:ILE:HG22	1.98	0.78
16:I:82:LEU:HB2	33:Z:622:HIS:CE1	2.19	0.78
17:J:224:GLY:O	17:J:227:SER:N	2.17	0.78
20:M:264:ARG:HG2	20:M:311:GLN:NE2	1.97	0.78
1:1:61:TYR:OH	8:A:103:GLU:HG3	1.81	0.78
11:D:47:GLU:OE2	11:D:166:ARG:NH2	2.17	0.78
13:F:13:PHE:CZ	14:G:130:PRO:CD	2.66	0.78
19:L:221:TYR:HH	19:L:348:GLU:HB3	0.97	0.78
21:N:903:VAL:O	21:N:904:VAL:HG23	1.83	0.78
22:O:29:PHE:O	22:O:33:TYR:HD1	1.67	0.78
25:R:396:LYS:CA	26:S:452:TYR:CD1	2.51	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2:59:ILE:HG13	2:2:83:LEU:HD23	1.66	0.78
10:C:181:LYS:HE3	10:C:184:MET:HA	1.65	0.78
15:H:285:GLY:O	15:H:286:GLU:C	2.25	0.78
17:J:141:LYS:HE2	17:J:209:LYS:CE	2.13	0.78
19:L:358:LEU:CD1	19:L:380:VAL:HG21	2.13	0.78
25:R:246:TYR:CE2	25:R:279:LEU:HD13	2.19	0.78
26:S:234:ILE:CG1	26:S:257:LEU:CD2	2.54	0.78
1:1:75:THR:HG21	1:1:111:TYR:HD1	1.47	0.78
20:M:221:TYR:OH	20:M:348:GLU:OE1	2.01	0.78
22:O:44:SER:CB	22:O:72:LYS:HZ2	1.95	0.78
5:5:126:ILE:HD11	5:5:144:TYR:CE1	2.18	0.78
18:K:177:LEU:O	18:K:181:LYS:HG3	1.84	0.78
18:K:308:GLN:HE21	18:K:333:ARG:NH1	1.82	0.78
28:U:283:ARG:HH21	29:V:254:ARG:HB3	1.49	0.78
16:I:428:VAL:HG12	16:I:428:VAL:O	1.82	0.77
17:J:170:HIS:CE1	17:J:173:LEU:CG	2.66	0.77
20:M:220:MET:HE3	20:M:324:LEU:HD13	1.63	0.77
23:P:427:GLU:HG3	29:V:230:TYR:OH	1.84	0.77
33:Z:574:TYR:HE2	33:Z:584:VAL:HG11	1.48	0.77
10:C:122:TYR:CE2	10:C:131:PHE:CE2	2.72	0.77
13:F:50:LYS:HA	20:M:433:TYR:HE1	1.50	0.77
13:F:105:VAL:CG2	13:F:145:LEU:CD2	2.56	0.77
15:H:157:VAL:CG1	15:H:183:ILE:HD11	2.13	0.77
19:L:360:ILE:CG2	19:L:364:HIS:CE1	2.67	0.77
21:N:617:VAL:O	21:N:621:THR:HG23	1.84	0.77
25:R:276:LEU:HB3	25:R:289:ILE:HD12	1.65	0.77
29:V:116:CYS:HG	29:V:117:TRP:CD1	2.02	0.77
10:C:207:THR:OG1	10:C:210:ARG:NH1	2.17	0.77
14:G:216:SER:CA	14:G:230:VAL:HG23	2.14	0.77
23:P:429:ILE:HD12	28:U:203:LYS:CE	2.05	0.77
27:T:182:LYS:HB3	27:T:186:ARG:HH12	1.50	0.77
33:Z:278:LEU:CD1	33:Z:297:VAL:HA	2.15	0.77
33:Z:531:ALA:HA	33:Z:573:LEU:CG	2.14	0.77
33:Z:624:LEU:HD22	33:Z:740:VAL:HG22	1.64	0.77
33:Z:897:HIS:CD2	33:Z:899:GLN:HG2	2.19	0.77
1:1:190:PRO:CA	1:1:193:TYR:CE1	2.64	0.77
10:C:122:TYR:CE2	10:C:131:PHE:HZ	2.02	0.77
11:D:37:LYS:O	11:D:179:TYR:OH	2.00	0.77
13:F:113:CYS:CB	14:G:85:ARG:HD2	2.13	0.77
21:N:302:PHE:HE2	21:N:712:ASN:HB3	1.47	0.77
24:Q:65:TYR:CD2	24:Q:74:LEU:HD22	2.20	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:38:GLN:CD	30:W:41:ARG:NH2	2.42	0.77
2:2:17:ASP:OD1	2:2:173:VAL:HG22	1.84	0.77
5:5:181:THR:OG1	5:5:184:GLY:O	2.02	0.77
12:E:119:LEU:HB3	12:E:122:ARG:CZ	2.14	0.77
12:E:119:LEU:CB	12:E:122:ARG:NH2	2.48	0.77
12:E:143:LEU:HG	12:E:155:LEU:HD11	1.67	0.77
23:P:263:HIS:CE1	23:P:328:ALA:CB	2.68	0.77
24:Q:390:LEU:HD12	25:R:345:TYR:CE1	2.19	0.77
26:S:234:ILE:CB	26:S:257:LEU:HD22	2.14	0.77
1:1:18:SER:HB2	1:1:31:THR:OG1	1.85	0.77
8:A:162:TYR:CE1	18:K:428:LYS:HB3	2.19	0.77
10:C:118:ILE:HG22	10:C:122:TYR:CE1	2.20	0.77
17:J:141:LYS:HG2	17:J:209:LYS:HE3	1.66	0.77
21:N:889:ARG:HD3	21:N:913:PRO:O	1.84	0.77
27:T:99:SER:H	27:T:102:LYS:CD	1.97	0.77
31:X:8:ILE:HG22	31:X:10:PHE:CZ	2.19	0.77
33:Z:394:TYR:CE2	33:Z:858:GLY:C	2.61	0.77
6:6:65:TRP:CH2	13:F:90:GLN:HA	2.19	0.77
9:B:50:LYS:HE3	9:B:203:GLU:OE1	1.84	0.77
10:C:228:LYS:HE2	10:C:230:PHE:CZ	2.20	0.77
12:E:88:MET:CE	12:E:142:LEU:HD13	2.15	0.77
17:J:183:LYS:HE3	17:J:286:LYS:CB	2.15	0.77
18:K:74:HIS:CE1	18:K:77:ARG:NH2	2.53	0.77
21:N:413:ALA:HB2	21:N:452:LEU:HG	1.66	0.77
24:Q:227:CYS:HA	24:Q:232:TYR:CE1	2.19	0.77
25:R:266:LEU:CA	25:R:270:VAL:CG2	2.59	0.77
31:X:35:ILE:CG2	31:X:128:VAL:CG2	2.62	0.77
6:6:65:TRP:CZ2	13:F:90:GLN:HA	2.20	0.77
8:A:24:ARG:NH1	18:K:424:PHE:N	2.32	0.77
8:A:134:MET:HE1	14:G:125:TYR:OH	1.84	0.77
10:C:194:LEU:HD12	10:C:242:THR:HG21	1.67	0.77
15:H:390:ARG:HA	15:H:404:TRP:NE1	2.00	0.77
16:I:215:PRO:HD2	16:I:319:ARG:NH1	1.99	0.77
20:M:43:ILE:HD11	30:W:23:ARG:NH1	2.00	0.77
20:M:221:TYR:HE2	20:M:346:LYS:HG2	1.48	0.77
23:P:147:LYS:HD3	23:P:155:GLU:OE1	1.83	0.77
28:U:56:PHE:HD1	28:U:68:LEU:HD13	1.50	0.77
31:X:28:PRO:HB2	31:X:56:PRO:C	2.09	0.77
33:Z:926:ASN:HB2	33:Z:993:GLU:HG3	1.65	0.77
20:M:135:VAL:HG12	20:M:158:THR:HG23	1.67	0.77
21:N:70:TYR:CD1	21:N:75:TYR:CE1	2.73	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:383:LYS:HB2	21:N:412:TYR:CZ	2.20	0.77
28:U:19:LEU:HB2	29:V:209:GLU:CD	2.09	0.77
28:U:273:LEU:HD22	29:V:295:VAL:HG13	1.67	0.77
29:V:51:GLY:CA	29:V:108:TYR:CE1	2.68	0.77
29:V:51:GLY:CA	29:V:108:TYR:CZ	2.67	0.77
33:Z:473:LEU:HD21	33:Z:477:TYR:OH	1.83	0.77
15:H:157:VAL:CB	15:H:183:ILE:HD11	2.14	0.77
16:I:340:ARG:HD3	16:I:343:ARG:HG3	1.67	0.77
17:J:327:ILE:HG22	17:J:358:VAL:HG11	1.66	0.77
18:K:242:PHE:CA	18:K:243:VAL:N	2.48	0.77
21:N:361:ASN:OD1	21:N:399:PHE:CE2	2.38	0.77
21:N:540:LEU:CD2	21:N:574:VAL:HG21	2.14	0.77
22:O:80:LYS:NZ	22:O:121:ASP:OD1	2.18	0.77
22:O:106:PHE:HD2	22:O:108:GLU:H	1.31	0.77
24:Q:35:SER:CB	24:Q:46:VAL:O	2.33	0.77
33:Z:929:VAL:HG13	33:Z:956:LEU:CD1	2.15	0.77
2:2:86:HIS:CE1	2:2:90:TYR:HE2	2.03	0.76
5:5:199:LYS:NZ	5:5:203:GLU:OE1	2.17	0.76
19:L:248:ALA:HB3	20:M:303:ARG:NH2	1.99	0.76
25:R:266:LEU:CD2	25:R:270:VAL:CG2	2.52	0.76
28:U:36:VAL:HG23	28:U:54:LEU:HD11	1.67	0.76
33:Z:410:THR:O	33:Z:415:MET:HE2	1.85	0.76
5:5:55:TRP:HH2	5:5:90:TYR:CZ	2.02	0.76
11:D:86:ILE:HG22	11:D:90:ARG:NH1	2.00	0.76
33:Z:408:TYR:O	33:Z:415:MET:HE1	1.85	0.76
12:E:12:VAL:HG12	12:E:123:PHE:HE2	0.77	0.76
18:K:95:VAL:HG13	18:K:141:ARG:HG2	1.67	0.76
18:K:99:PHE:HZ	18:K:102:PRO:N	1.83	0.76
22:O:59:LEU:HD12	22:O:62:TYR:CE1	2.20	0.76
22:O:202:SER:O	22:O:203:THR:OG1	2.02	0.76
33:Z:138:ARG:HH21	33:Z:141:SER:CB	1.97	0.76
33:Z:473:LEU:HD11	33:Z:477:TYR:OH	1.85	0.76
6:6:48:PHE:CE2	6:6:50:ALA:HB3	2.21	0.76
14:G:14:PHE:CZ	14:G:18:GLY:HA2	2.19	0.76
14:G:98:PHE:CB	14:G:114:ARG:HH12	1.89	0.76
18:K:415:VAL:HG23	18:K:416:LYS:HG3	1.68	0.76
23:P:72:TRP:CD2	23:P:104:LEU:HD21	2.20	0.76
31:X:9:LYS:HG2	31:X:34:GLU:HG2	1.65	0.76
33:Z:809:MET:HG2	33:Z:847:ILE:HD11	1.67	0.76
1:1:-7:LYS:O	2:2:116:HIS:CD2	2.38	0.76
8:A:91:ARG:HH12	8:A:95:LEU:CB	1.97	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:36:ILE:HD12	10:C:197:LEU:HD21	1.66	0.76
24:Q:74:LEU:HD23	24:Q:104:PHE:HZ	1.48	0.76
33:Z:237:VAL:HG11	33:Z:272:TYR:CE1	2.20	0.76
33:Z:795:THR:HG22	33:Z:799:PHE:CE2	2.19	0.76
1:1:37:VAL:HG11	1:1:82:PHE:HZ	1.49	0.76
1:1:59:VAL:HG11	1:1:82:PHE:CE1	2.20	0.76
12:E:169:ALA:HB3	13:F:56:LEU:HD13	1.68	0.76
22:O:44:SER:OG	22:O:72:LYS:NZ	2.18	0.76
26:S:428:ARG:NH1	27:T:188:GLU:O	2.18	0.76
31:X:35:ILE:CB	31:X:128:VAL:HG21	2.14	0.76
31:X:79:LYS:O	31:X:80:SER:HB2	1.86	0.76
33:Z:763:HIS:NE2	33:Z:767:TYR:CZ	2.54	0.76
4:4:3:ILE:HG22	4:4:102:LEU:CD1	2.14	0.76
14:G:200:TYR:CE2	14:G:246:ILE:HB	2.21	0.76
21:N:9:LEU:HD22	21:N:27:SER:CB	2.16	0.76
21:N:433:THR:O	21:N:434:SER:OG	2.03	0.76
26:S:269:GLU:HB3	26:S:299:LYS:HZ2	1.50	0.76
30:W:118:ILE:O	30:W:118:ILE:HG22	1.84	0.76
33:Z:758:LEU:CD2	33:Z:787:ASP:OD1	2.34	0.76
33:Z:827:LEU:HD21	33:Z:831:LEU:HD21	1.66	0.76
2:2:59:ILE:O	2:2:63:ILE:HG12	1.85	0.76
8:A:46:ARG:HG3	8:A:154:ILE:HD11	1.67	0.76
15:H:248:LEU:CD1	15:H:352:MET:HG3	2.16	0.76
18:K:113:THR:HG21	19:L:126:ARG:HD2	1.67	0.76
23:P:303:PHE:O	23:P:348:HIS:CD2	2.38	0.76
27:T:106:ILE:HG23	27:T:142:LEU:CD2	2.14	0.76
31:X:28:PRO:O	31:X:29:VAL:HG22	1.85	0.76
6:6:175:VAL:O	6:6:179:PHE:HD2	1.68	0.76
20:M:384:ASP:N	20:M:386:PHE:CE1	2.53	0.76
22:O:66:VAL:CG1	22:O:106:PHE:CZ	2.69	0.76
23:P:299:LEU:HD22	23:P:322:LEU:HD22	1.68	0.76
25:R:63:TYR:OH	25:R:92:ILE:C	2.29	0.76
29:V:51:GLY:HA3	29:V:108:TYR:CE1	2.21	0.76
30:W:155:ASP:OD1	30:W:171:LEU:HD21	1.86	0.76
5:5:104:TYR:CE1	5:5:110:PRO:CD	2.69	0.76
8:A:234:PHE:HE2	8:A:236:LEU:HD21	1.51	0.76
20:M:74:GLN:O	20:M:77:TYR:CZ	2.39	0.76
21:N:192:LEU:HD12	21:N:196:THR:HG21	1.68	0.76
23:P:229:LEU:HD22	23:P:330:GLY:HA2	1.68	0.76
27:T:260:ILE:HG21	28:U:277:TYR:OH	1.85	0.76
5:5:62:GLN:HG2	5:5:82:ILE:HD13	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:240:SER:O	19:L:303:ARG:HD3	1.87	0.75
18:K:243:VAL:HB	19:L:303:ARG:HH11	1.49	0.75
23:P:137:ALA:CB	23:P:179:PHE:CE2	2.68	0.75
30:W:101:ARG:NH1	30:W:108:GLN:HE21	1.84	0.75
31:X:12:ALA:HB3	31:X:33:ILE:CG2	2.15	0.75
33:Z:475:GLN:O	33:Z:478:VAL:HG12	1.86	0.75
3:3:179:TYR:CE2	3:3:188:LYS:HD2	2.21	0.75
7:7:171:ASN:HA	7:7:174:ARG:NH1	2.00	0.75
13:F:30:LYS:HE3	13:F:163:ALA:HA	1.69	0.75
19:L:290:ARG:HD2	19:L:298:ASP:HB3	1.69	0.75
25:R:24:TYR:CZ	25:R:248:SER:HB2	2.21	0.75
25:R:70:TYR:OH	25:R:74:ASN:HB2	1.86	0.75
13:F:110:HIS:HB2	14:G:85:ARG:NH1	2.01	0.75
13:F:222:PHE:HE1	13:F:224:ILE:HG13	1.51	0.75
21:N:633:GLY:C	21:N:634:LEU:CD2	2.58	0.75
22:O:76:LEU:O	22:O:79:VAL:CG1	2.27	0.75
22:O:189:TYR:CD2	22:O:227:ILE:CG1	2.61	0.75
25:R:70:TYR:HE2	25:R:75:GLY:CA	2.00	0.75
4:4:36:GLN:NE2	4:4:188:ILE:HD12	2.01	0.75
12:E:119:LEU:CB	12:E:122:ARG:HH21	1.99	0.75
15:H:248:LEU:HD13	15:H:352:MET:CG	2.14	0.75
23:P:427:GLU:CG	29:V:230:TYR:CZ	2.67	0.75
24:Q:20:TYR:CE2	24:Q:68:MET:HE3	2.21	0.75
25:R:137:LEU:HD11	25:R:141:TYR:CZ	2.22	0.75
25:R:255:VAL:HG11	25:R:322:LEU:HD22	1.67	0.75
25:R:347:THR:HG23	25:R:389:GLU:OE2	1.86	0.75
25:R:397:ASN:HB2	25:R:400:TYR:H	1.52	0.75
33:Z:422:ILE:CD1	33:Z:439:TYR:CE2	2.70	0.75
33:Z:553:ARG:HA	33:Z:557:GLU:CD	2.11	0.75
21:N:408:LEU:CD1	21:N:412:TYR:CE1	2.69	0.75
23:P:308:LEU:HD13	23:P:345:VAL:CG1	2.17	0.75
25:R:258:LEU:HA	25:R:266:LEU:HD21	1.68	0.75
25:R:380:VAL:HG13	26:S:398:THR:HG22	1.66	0.75
28:U:92:TRP:CZ2	28:U:120:LEU:HD11	2.18	0.75
29:V:24:LYS:HD2	29:V:167:ASN:ND2	2.00	0.75
15:H:431:ILE:HD13	16:I:207:LEU:HB3	1.67	0.75
22:O:29:PHE:O	22:O:33:TYR:CD1	2.40	0.75
24:Q:146:TYR:CD1	24:Q:151:TYR:CE1	2.74	0.75
25:R:280:ILE:HD13	25:R:286:LEU:HB2	1.68	0.75
2:2:182:LYS:NZ	2:2:185:GLU:OE2	2.18	0.75
14:G:31:GLU:CG	14:G:168:ARG:HH22	2.00	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:168:ILE:HD11	15:H:183:ILE:HG23	1.68	0.75
15:H:244:LYS:HD3	15:H:346:ARG:NE	2.00	0.75
19:L:306:MET:O	19:L:310:THR:HG23	1.87	0.75
21:N:536:ILE:HD13	21:N:555:ILE:HG12	1.68	0.75
22:O:33:TYR:O	22:O:34:GLU:CB	2.35	0.75
22:O:41:LEU:HD23	22:O:41:LEU:O	1.86	0.75
27:T:89:TYR:CZ	27:T:90:PHE:HE1	2.05	0.75
31:X:85:ARG:CZ	31:X:101:LEU:HD13	2.17	0.75
3:3:52:THR:HG21	4:4:84:ARG:NE	2.00	0.75
12:E:109:VAL:HG12	12:E:156:PHE:CD1	2.21	0.75
33:Z:913:ILE:HG12	33:Z:964:GLU:HA	1.67	0.75
13:F:145:LEU:HD11	13:F:153:VAL:CG1	2.17	0.75
25:R:271:ILE:O	25:R:272:ASP:CG	2.30	0.75
29:V:51:GLY:C	29:V:108:TYR:CE1	2.65	0.75
31:X:78:ILE:O	31:X:78:ILE:HG22	1.87	0.75
33:Z:120:SER:HB3	33:Z:153:TYR:OH	1.87	0.75
8:A:42:SER:HB2	8:A:171:THR:CG2	2.17	0.74
8:A:163:TYR:O	8:A:164:VAL:HG23	1.87	0.74
15:H:107:LYS:HB2	15:H:143:ALA:HB1	1.66	0.74
21:N:60:MET:HE2	21:N:88:ARG:HH22	1.52	0.74
22:O:95:SER:HA	22:O:98:TYR:HE2	1.52	0.74
28:U:195:LYS:HD3	29:V:233:LYS:CB	2.16	0.74
29:V:116:CYS:O	29:V:117:TRP:CD1	2.40	0.74
33:Z:574:TYR:OH	33:Z:584:VAL:HG11	1.86	0.74
8:A:135:ARG:HD3	14:G:124:LEU:CD2	2.16	0.74
15:H:393:SER:HG	15:H:404:TRP:HZ2	1.33	0.74
15:H:447:VAL:HG13	15:H:451:ILE:HD12	1.68	0.74
23:P:157:ALA:HB2	23:P:186:LEU:HB3	1.69	0.74
26:S:343:LEU:HD11	26:S:347:HIS:CE1	2.22	0.74
27:T:98:GLU:HG2	27:T:102:LYS:HZ3	1.52	0.74
30:W:147:ILE:CG2	30:W:148:GLU:H	1.99	0.74
33:Z:473:LEU:CD1	33:Z:477:TYR:CZ	2.70	0.74
33:Z:792:VAL:O	33:Z:796:LEU:HG	1.87	0.74
2:2:36:ARG:HD2	2:2:42:TRP:CH2	2.21	0.74
8:A:225:VAL:HG11	8:A:236:LEU:HD12	1.69	0.74
9:B:98:LYS:HE2	9:B:104:TYR:CD1	2.22	0.74
13:F:65:LYS:HG3	13:F:222:PHE:CD2	2.23	0.74
18:K:238:ASN:HB2	18:K:241:GLU:HG3	1.68	0.74
22:O:225:ASP:OD1	22:O:226:LYS:HG3	1.86	0.74
26:S:234:ILE:HG21	26:S:257:LEU:HD22	1.67	0.74
31:X:20:ASP:O	31:X:21:SER:HB2	1.85	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:337:GLU:HA	33:Z:340:LEU:HD21	1.67	0.74
8:A:153:SER:HB3	8:A:155:TYR:HE1	1.50	0.74
17:J:190:PRO:CD	17:J:316:PHE:CD2	2.55	0.74
18:K:52:LYS:HZ1	21:N:159:GLU:CG	2.01	0.74
19:L:301:ILE:CD1	20:M:299:ARG:HH21	1.99	0.74
21:N:238:ALA:CB	21:N:273:LEU:HD22	2.17	0.74
22:O:359:SER:HG	28:U:223:HIS:CE1	2.02	0.74
24:Q:318:LEU:HD13	24:Q:335:PHE:CE2	2.22	0.74
25:R:379:CYS:SG	25:R:388:VAL:HG11	2.27	0.74
33:Z:150:GLY:HA3	33:Z:154:ILE:CD1	2.16	0.74
33:Z:239:GLU:O	33:Z:240:ASN:HB2	1.84	0.74
5:5:55:TRP:CZ2	5:5:90:TYR:CZ	2.75	0.74
7:7:187:PHE:CE2	7:7:204:LEU:HB2	2.22	0.74
15:H:285:GLY:C	15:H:287:GLY:H	1.93	0.74
18:K:350:ARG:HH21	24:Q:236:PHE:HE2	1.34	0.74
25:R:421:VAL:CG1	25:R:422:ARG:N	2.11	0.74
7:7:101:PRO:HB3	7:7:124:LEU:CD1	2.14	0.74
10:C:50:ARG:NH1	10:C:53:THR:HA	2.01	0.74
13:F:179:PHE:CE2	13:F:192:ALA:HB1	2.23	0.74
15:H:284:VAL:O	15:H:286:GLU:N	2.20	0.74
21:N:329:HIS:HD2	21:N:355:TRP:NE1	1.69	0.74
25:R:353:MET:HG3	25:R:357:PHE:HD2	1.48	0.74
3:3:18:LEU:CD1	3:3:177:VAL:HG13	2.10	0.74
12:E:12:VAL:CB	12:E:123:PHE:HE2	2.01	0.74
13:F:110:HIS:HA	14:G:85:ARG:NH1	2.02	0.74
15:H:407:ILE:CD1	15:H:443:PHE:HB3	2.18	0.74
18:K:372:ILE:CG2	24:Q:240:PHE:CZ	2.71	0.74
19:L:286:ILE:CB	19:L:304:THR:HG21	2.15	0.74
23:P:229:LEU:HD22	23:P:330:GLY:CA	2.18	0.74
24:Q:94:VAL:HG22	24:Q:130:ARG:HD2	1.70	0.74
24:Q:226:HIS:HA	24:Q:229:ASP:OD1	1.87	0.74
26:S:163:VAL:HG21	26:S:184:TRP:CZ2	2.22	0.74
26:S:241:PHE:CZ	26:S:249:SER:OG	2.41	0.74
28:U:122:ILE:CD1	28:U:137:TYR:CD1	2.68	0.74
31:X:7:VAL:HG11	31:X:36:LYS:HB3	1.70	0.74
31:X:48:PHE:CZ	31:X:68:LEU:HD13	2.22	0.74
1:1:83:LYS:HD2	1:1:119:VAL:HG23	1.70	0.74
5:5:150:VAL:CG1	5:5:179:HIS:HE1	2.00	0.74
7:7:101:PRO:HB3	7:7:124:LEU:HD11	1.63	0.74
8:A:81:MET:SD	8:A:143:PHE:CZ	2.81	0.74
10:C:181:LYS:HE3	10:C:184:MET:CA	2.18	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:F:13:PHE:HE1	14:G:130:PRO:HD2	1.36	0.74
18:K:288:SER:O	18:K:289:ASP:OD1	2.06	0.74
20:M:170:MET:HG2	20:M:246:LEU:HD13	1.70	0.74
21:N:539:MET:HE1	21:N:554:THR:OG1	1.88	0.74
22:O:44:SER:CB	22:O:72:LYS:HZ1	1.91	0.74
22:O:299:THR:HA	22:O:365:LYS:CE	2.17	0.74
26:S:428:ARG:HD3	27:T:192:ASN:OD1	1.87	0.74
1:1:-5:GLU:N	2:2:116:HIS:CE1	2.55	0.74
17:J:276:LEU:HD21	17:J:290:ILE:CD1	2.18	0.74
17:J:345:LYS:HD3	17:J:379:GLN:HE22	1.51	0.74
20:M:312:LEU:HD21	20:M:323:VAL:HG21	1.69	0.74
21:N:238:ALA:HB1	21:N:273:LEU:HD22	1.69	0.74
23:P:263:HIS:CE1	23:P:328:ALA:HB1	2.22	0.74
33:Z:229:SER:O	33:Z:264:PHE:CE1	2.38	0.74
33:Z:322:GLU:HG3	33:Z:323:TYR:CB	2.18	0.74
33:Z:985:LYS:HG2	33:Z:991:GLU:HG2	1.70	0.74
1:1:53:GLN:HG3	2:2:84:LYS:HE2	1.69	0.74
9:B:69:PRO:HD2	9:B:104:TYR:HE1	1.50	0.74
16:I:398:GLU:C	17:J:312:ARG:HH12	1.95	0.74
17:J:181:GLN:HG2	17:J:286:LYS:HD2	1.67	0.74
19:L:371:THR:CG2	19:L:409:HIS:HD2	2.01	0.74
21:N:642:ASP:HB2	21:N:643:PRO:HD3	1.70	0.74
21:N:717:LEU:O	21:N:718:GLU:HB3	1.88	0.74
23:P:292:LYS:HE2	23:P:320:PRO:O	1.87	0.74
23:P:325:ASP:O	23:P:337:HIS:CE1	2.41	0.74
25:R:208:ASN:HD21	25:R:235:LEU:HD12	1.49	0.74
31:X:24:CYS:HB3	31:X:86:ILE:HG21	1.70	0.74
33:Z:237:VAL:HG21	33:Z:272:TYR:OH	1.87	0.74
33:Z:958:ASN:HB2	33:Z:961:GLU:CD	2.13	0.74
12:E:12:VAL:CB	12:E:123:PHE:CE2	2.70	0.73
16:I:310:LEU:CD1	16:I:338:LEU:HA	2.18	0.73
22:O:147:ARG:HB2	22:O:178:TYR:CZ	2.23	0.73
23:P:137:ALA:HB1	23:P:179:PHE:CE2	2.23	0.73
24:Q:75:ARG:CA	24:Q:117:VAL:HG22	2.18	0.73
24:Q:146:TYR:CE1	24:Q:151:TYR:CE1	2.73	0.73
33:Z:250:VAL:HA	33:Z:265:LEU:CD2	2.18	0.73
33:Z:412:GLY:HA2	33:Z:446:GLU:OE2	1.88	0.73
11:D:85:LEU:CD2	11:D:117:GLN:NE2	2.39	0.73
12:E:28:LEU:HA	12:E:31:ILE:HD12	1.71	0.73
17:J:76:ILE:CB	17:J:85:LEU:HD22	2.19	0.73
24:Q:227:CYS:O	24:Q:334:HIS:NE2	2.21	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:275:ILE:HD11	24:Q:306:TYR:CD2	2.23	0.73
17:J:174:PHE:CD2	17:J:179:ILE:HD11	2.22	0.73
17:J:297:LEU:HD13	17:J:305:LEU:HD11	1.70	0.73
20:M:183:VAL:CG1	20:M:186:LEU:CD1	2.66	0.73
23:P:427:GLU:HA	29:V:230:TYR:CD1	2.16	0.73
25:R:399:GLN:NE2	25:R:403:LEU:HD22	2.03	0.73
27:T:241:GLU:O	27:T:242:LYS:CB	2.36	0.73
33:Z:574:TYR:CZ	33:Z:584:VAL:CG1	2.67	0.73
33:Z:774:ARG:O	33:Z:777:PRO:HD2	1.88	0.73
1:1:66:TYR:CZ	1:1:77:THR:HG21	2.23	0.73
16:I:290:LYS:NZ	16:I:333:THR:C	2.46	0.73
22:O:233:LEU:HD23	22:O:251:LEU:HD22	1.69	0.73
25:R:266:LEU:CA	25:R:270:VAL:HG22	2.07	0.73
7:7:200:PHE:CE2	7:7:202:LYS:HE2	2.21	0.73
15:H:244:LYS:CD	15:H:346:ARG:HE	2.02	0.73
18:K:74:HIS:CE1	18:K:77:ARG:HH21	2.05	0.73
20:M:246:LEU:CD2	20:M:251:LEU:HD11	2.16	0.73
20:M:379:LEU:HG	20:M:412:HIS:CE1	2.23	0.73
21:N:761:ILE:CG2	21:N:905:LEU:H	2.02	0.73
22:O:69:PHE:CZ	22:O:77:SER:HB2	2.23	0.73
23:P:333:ALA:HB3	23:P:336:HIS:HD2	1.53	0.73
28:U:56:PHE:CD1	28:U:68:LEU:HD13	2.22	0.73
30:W:110:ILE:HD12	30:W:139:VAL:HG22	1.69	0.73
1:1:8:PHE:CE1	1:1:12:VAL:N	2.56	0.73
2:2:124:TYR:CZ	2:2:139:GLU:HA	2.23	0.73
19:L:198:GLU:CG	19:L:202:LYS:HZ2	2.01	0.73
21:N:540:LEU:HD22	21:N:574:VAL:CG2	2.18	0.73
22:O:42:SER:O	22:O:43:GLU:HB2	1.88	0.73
24:Q:343:LEU:HD23	24:Q:376:LYS:HZ2	1.53	0.73
29:V:168:LEU:CD2	29:V:184:ASN:HB2	2.09	0.73
31:X:29:VAL:HG11	31:X:61:LEU:HD22	1.70	0.73
33:Z:307:HIS:HD2	33:Z:345:GLU:CD	1.97	0.73
1:1:75:THR:HG22	1:1:111:TYR:HD1	1.26	0.73
1:1:148:LYS:O	1:1:152:VAL:HG23	1.89	0.73
14:G:149:MET:HB3	14:G:159:TYR:CE1	2.22	0.73
15:H:173:ARG:NH2	16:I:128:TYR:CB	2.51	0.73
22:O:380:LEU:HD22	27:T:258:ASN:HD21	1.52	0.73
23:P:411:LEU:HD11	28:U:269:THR:OG1	1.88	0.73
28:U:21:HIS:CD2	28:U:53:ALA:HB2	2.23	0.73
30:W:95:GLN:NE2	30:W:132:LEU:CD2	2.51	0.73
33:Z:426:TYR:HH	33:Z:435:GLN:HG3	1.51	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:F:13:PHE:HD1	14:G:22:GLN:HB3	1.54	0.73
21:N:669:GLU:OE1	21:N:785:PRO:CA	2.37	0.73
22:O:116:ASN:CB	22:O:127:LEU:CB	2.61	0.73
23:P:412:LEU:HD22	29:V:245:VAL:HA	1.68	0.73
31:X:85:ARG:HH12	31:X:87:PHE:HE2	1.24	0.73
33:Z:89:LEU:HB3	33:Z:122:LEU:HG	1.69	0.73
2:2:55:VAL:HG21	2:2:94:ILE:HG21	1.70	0.73
8:A:117:LEU:CD2	8:A:143:PHE:HE2	2.00	0.73
13:F:145:LEU:HD11	13:F:153:VAL:HG12	1.71	0.73
13:F:179:PHE:CE2	13:F:192:ALA:CB	2.71	0.73
14:G:98:PHE:CE1	14:G:104:THR:HG23	2.24	0.73
18:K:242:PHE:C	18:K:243:VAL:N	2.46	0.73
21:N:70:TYR:CD1	21:N:75:TYR:HE1	2.06	0.73
21:N:514:THR:HB	21:N:546:LEU:HD13	0.73	0.73
24:Q:75:ARG:HA	24:Q:117:VAL:HG22	1.70	0.73
25:R:70:TYR:CE2	25:R:75:GLY:CA	2.72	0.73
27:T:23:CYS:O	27:T:27:LEU:HG	1.89	0.73
4:4:3:ILE:CG2	4:4:102:LEU:HD12	2.15	0.73
6:6:176:ARG:NH1	6:6:208:TYR:CB	2.52	0.73
16:I:188:GLU:HA	16:I:191:ILE:HD12	1.71	0.73
16:I:252:LEU:O	16:I:254:GLN:HB2	1.89	0.73
17:J:259:GLU:HB2	18:K:280:LYS:HE2	0.73	0.73
21:N:294:PRO:CG	21:N:921:ARG:NH2	2.44	0.73
21:N:540:LEU:HD22	21:N:574:VAL:HG21	1.68	0.73
27:T:129:LEU:O	27:T:132:HIS:CD2	2.41	0.73
31:X:14:VAL:O	31:X:29:VAL:CG2	2.37	0.73
1:1:190:PRO:CA	1:1:193:TYR:HE1	1.93	0.72
7:7:103:TRP:CA	7:7:124:LEU:HD22	2.16	0.72
7:7:200:PHE:CE2	7:7:202:LYS:HG2	2.24	0.72
17:J:148:ASP:O	17:J:330:ILE:HD13	1.89	0.72
19:L:92:GLU:HB2	20:M:65:ASN:HD21	1.54	0.72
21:N:761:ILE:HG21	21:N:905:LEU:N	2.03	0.72
26:S:465:ILE:HG13	28:U:281:LEU:HD21	1.70	0.72
27:T:51:TYR:N	27:T:55:LEU:HD13	2.04	0.72
27:T:193:THR:HG21	27:T:205:ILE:HD13	1.71	0.72
28:U:129:GLY:C	28:U:130:VAL:HG13	2.06	0.72
31:X:79:LYS:O	31:X:80:SER:CB	2.34	0.72
33:Z:246:CYS:SG	33:Z:272:TYR:CZ	2.78	0.72
33:Z:390:LEU:HD12	33:Z:856:HIS:O	1.89	0.72
8:A:19:PHE:CE1	9:B:128:ARG:HD2	2.24	0.72
19:L:150:ILE:HG23	19:L:151:THR:HG23	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:95:SER:OG	21:N:98:VAL:HG23	1.89	0.72
22:O:26:PHE:CE1	22:O:43:GLU:HG2	2.20	0.72
23:P:137:ALA:HB3	23:P:179:PHE:CZ	2.23	0.72
26:S:157:GLU:HG2	26:S:161:LYS:HE3	1.71	0.72
29:V:197:TYR:O	29:V:197:TYR:HD1	1.69	0.72
6:6:112:ALA:HB1	6:6:114:TYR:HE1	1.52	0.72
7:7:119:LEU:HG	7:7:134:LEU:CD1	2.17	0.72
15:H:393:SER:OG	15:H:404:TRP:HZ2	1.72	0.72
19:L:201:LEU:CD1	19:L:239:ILE:HD13	2.19	0.72
20:M:384:ASP:H	20:M:386:PHE:HD1	1.35	0.72
21:N:113:ALA:C	21:N:161:TYR:CD2	2.67	0.72
21:N:619:CYS:SG	21:N:651:PHE:CD2	2.82	0.72
22:O:77:SER:O	22:O:80:LYS:HB2	1.88	0.72
25:R:179:PHE:CE2	25:R:213:TYR:CE1	2.77	0.72
25:R:206:ARG:NH2	25:R:209:ARG:NE	2.32	0.72
7:7:170:VAL:CG1	7:7:174:ARG:NH2	2.51	0.72
11:D:189:GLU:HG2	11:D:193:LYS:HE3	1.70	0.72
13:F:156:LEU:HD23	14:G:58:LEU:HD23	1.71	0.72
17:J:273:LEU:CB	17:J:309:ARG:NH2	2.34	0.72
18:K:240:SER:HA	18:K:243:VAL:HG23	1.70	0.72
19:L:336:ALA:HB3	19:L:342:ARG:NH1	2.03	0.72
22:O:26:PHE:HE1	22:O:58:ARG:NH1	1.81	0.72
29:V:57:PHE:CZ	29:V:135:ARG:HG3	2.25	0.72
29:V:159:ILE:CG2	29:V:160:ASP:H	2.03	0.72
30:W:9:VAL:CG2	30:W:52:ILE:HD11	2.17	0.72
33:Z:574:TYR:CE2	33:Z:584:VAL:HG21	2.25	0.72
6:6:127:CYS:SG	6:6:146:ASN:ND2	2.63	0.72
13:F:137:TYR:OH	13:F:218:LYS:HB2	1.90	0.72
17:J:188:TYR:CD1	17:J:295:ASN:HA	2.23	0.72
25:R:208:ASN:HD21	25:R:235:LEU:CD1	2.02	0.72
16:I:414:GLU:HG3	16:I:418:GLN:HE21	1.54	0.72
21:N:207:LEU:HD22	21:N:228:VAL:HG22	1.70	0.72
21:N:361:ASN:CG	21:N:399:PHE:CZ	2.67	0.72
22:O:69:PHE:CE2	22:O:77:SER:HB2	2.25	0.72
22:O:106:PHE:CD2	22:O:109:LEU:N	2.56	0.72
26:S:421:TYR:OH	27:T:208:LEU:HA	1.90	0.72
31:X:93:SER:HB3	31:X:96:ARG:NH2	2.00	0.72
33:Z:60:ASP:H	33:Z:64:TYR:HE1	1.35	0.72
8:A:117:LEU:HD21	8:A:143:PHE:HE2	1.54	0.72
8:A:119:LYS:HZ2	9:B:83:ARG:HB3	1.51	0.72
9:B:50:LYS:HE3	9:B:203:GLU:CD	2.14	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:408:ASP:OD1	19:L:409:HIS:ND1	2.19	0.72
26:S:401:LYS:HG2	26:S:444:GLU:HG2	1.71	0.72
31:X:85:ARG:HE	31:X:101:LEU:CB	2.01	0.72
4:4:36:GLN:CD	4:4:188:ILE:HD12	2.14	0.72
21:N:6:ALA:HB2	21:N:35:LEU:HD13	1.70	0.72
21:N:768:ILE:HG13	21:N:919:THR:N	2.04	0.72
22:O:199:LEU:O	22:O:199:LEU:HD23	1.90	0.72
22:O:304:ASN:HB2	28:U:234:ASN:O	1.89	0.72
23:P:138:ARG:CA	23:P:141:LYS:NZ	2.53	0.72
23:P:350:LEU:HD12	23:P:383:LEU:CD1	2.20	0.72
26:S:428:ARG:HH12	27:T:188:GLU:CA	2.01	0.72
28:U:71:ASN:HD22	30:W:64:THR:HG23	1.52	0.72
33:Z:392:LEU:HD23	33:Z:857:LEU:HD21	1.70	0.72
33:Z:531:ALA:HA	33:Z:573:LEU:HG	1.70	0.72
33:Z:531:ALA:CA	33:Z:573:LEU:HD21	2.20	0.72
2:2:220:ILE:HG22	3:3:186:VAL:HG23	1.71	0.72
11:D:86:ILE:CG2	11:D:90:ARG:HH12	2.03	0.72
18:K:52:LYS:HZ3	21:N:159:GLU:CD	1.97	0.72
22:O:202:SER:O	22:O:203:THR:CB	2.37	0.72
27:T:24:GLU:HA	27:T:27:LEU:HD12	1.71	0.72
6:6:96:TYR:CE2	6:6:98:VAL:CG2	2.69	0.72
7:7:129:TYR:CD1	7:7:134:LEU:CD2	2.72	0.72
12:E:157:HIS:CD2	12:E:170:LYS:HZ3	2.07	0.72
22:O:106:PHE:CD2	22:O:109:LEU:CB	2.73	0.72
25:R:62:TYR:CD1	25:R:180:PHE:CE2	2.78	0.72
25:R:301:TYR:OH	25:R:363:PHE:HE2	1.72	0.72
27:T:164:LEU:HD22	27:T:174:PHE:CZ	2.24	0.72
33:Z:422:ILE:CG2	33:Z:426:TYR:CE2	2.72	0.72
33:Z:452:LEU:CD2	33:Z:474:LEU:HD12	2.19	0.72
15:H:312:ASP:HB3	16:I:300:ARG:HH22	1.54	0.71
16:I:383:THR:OG1	16:I:420:LYS:NZ	2.23	0.71
18:K:99:PHE:CE2	18:K:102:PRO:HD3	2.25	0.71
21:N:34:GLN:O	26:S:215:MET:HE3	1.88	0.71
21:N:222:TYR:CE1	21:N:253:LEU:HG	2.24	0.71
23:P:93:ILE:HG22	23:P:124:VAL:HG21	1.70	0.71
23:P:412:LEU:HD22	29:V:245:VAL:CA	2.20	0.71
25:R:29:LYS:HA	25:R:32:LEU:HD12	1.71	0.71
33:Z:474:LEU:CD2	33:Z:493:LEU:HD12	2.20	0.71
33:Z:572:ILE:HG12	33:Z:882:LEU:HD23	1.71	0.71
2:2:114:HIS:CE1	2:2:120:ASP:OD2	2.43	0.71
4:4:181:LYS:HZ3	4:4:190:GLN:CB	2.02	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:347:ARG:CD	24:Q:238:TYR:CE1	2.66	0.71
22:O:116:ASN:HB3	22:O:127:LEU:CG	2.19	0.71
22:O:116:ASN:OD1	22:O:127:LEU:HB2	1.90	0.71
24:Q:166:LYS:O	24:Q:167:LYS:CB	2.39	0.71
24:Q:377:LEU:HD12	24:Q:380:MET:HE2	1.71	0.71
24:Q:429:LYS:HE2	28:U:296:ILE:CG2	2.20	0.71
25:R:47:ALA:HB2	25:R:89:ASN:HD21	1.54	0.71
25:R:63:TYR:HE2	25:R:94:PHE:CE1	2.04	0.71
27:T:178:THR:HG22	27:T:182:LYS:HE3	1.72	0.71
29:V:47:MET:HE2	29:V:73:GLN:HB3	1.71	0.71
33:Z:138:ARG:NH2	33:Z:141:SER:OG	2.17	0.71
5:5:8:PHE:CZ	5:5:13:ILE:CD1	2.73	0.71
10:C:173:GLN:NE2	11:D:54:LEU:HD23	2.05	0.71
12:E:20:ARG:NE	12:E:25:GLU:OE2	2.23	0.71
18:K:99:PHE:CZ	18:K:102:PRO:N	2.58	0.71
21:N:501:MET:HB3	21:N:521:LEU:HD21	1.71	0.71
24:Q:72:ASP:OD1	24:Q:75:ARG:NH2	2.21	0.71
24:Q:174:LEU:HD12	24:Q:178:HIS:CE1	2.24	0.71
25:R:397:ASN:CG	25:R:400:TYR:CD2	2.69	0.71
27:T:241:GLU:O	27:T:242:LYS:HB2	1.89	0.71
8:A:27:GLN:NE2	14:G:13:VAL:HA	2.02	0.71
13:F:164:ARG:HD3	20:M:428:LYS:HD3	1.70	0.71
16:I:398:GLU:O	17:J:312:ARG:NH1	2.21	0.71
22:O:59:LEU:O	22:O:62:TYR:HD1	1.68	0.71
33:Z:370:SER:H	33:Z:390:LEU:CD2	2.03	0.71
33:Z:381:LEU:HD11	33:Z:385:PHE:CE2	2.24	0.71
33:Z:973:TYR:CD1	33:Z:982:ILE:HG22	2.25	0.71
8:A:70:SER:H	14:G:157:TRP:HZ3	1.37	0.71
8:A:117:LEU:HD23	8:A:143:PHE:CD2	2.26	0.71
10:C:118:ILE:CG2	10:C:122:TYR:CZ	2.73	0.71
15:H:285:GLY:N	15:H:286:GLU:N	2.38	0.71
20:M:195:GLU:HA	20:M:199:LEU:HD12	1.72	0.71
20:M:200:PRO:CA	20:M:207:PHE:HE2	2.01	0.71
21:N:761:ILE:CD1	21:N:904:VAL:H	2.02	0.71
22:O:70:TYR:CE1	22:O:75:GLN:CB	2.53	0.71
25:R:301:TYR:CE2	25:R:359:VAL:CG1	2.69	0.71
28:U:19:LEU:HD13	29:V:209:GLU:HA	1.71	0.71
31:X:16:GLU:O	31:X:98:PHE:CB	2.35	0.71
33:Z:297:VAL:CG1	33:Z:310:LEU:CD2	2.68	0.71
33:Z:426:TYR:CZ	33:Z:435:GLN:HG3	2.25	0.71
11:D:96:HIS:HE1	11:D:100:LEU:HD12	1.55	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:205:THR:CG2	11:D:209:ASN:HB2	2.14	0.71
20:M:379:LEU:HD13	20:M:415:PHE:HB3	1.71	0.71
21:N:214:LEU:CB	21:N:225:LEU:HD21	2.20	0.71
21:N:329:HIS:CD2	21:N:355:TRP:CE2	2.77	0.71
21:N:514:THR:CG2	21:N:546:LEU:CG	2.69	0.71
22:O:169:ASN:HB2	22:O:198:THR:CG2	2.19	0.71
28:U:167:GLU:OE2	29:V:39:LYS:HB2	1.91	0.71
33:Z:233:LEU:HD13	33:Z:264:PHE:O	1.90	0.71
23:P:143:LEU:HG	23:P:147:LYS:HE3	1.71	0.71
26:S:215:MET:HA	26:S:218:LEU:CD1	2.17	0.71
29:V:261:LEU:HB2	29:V:280:LEU:CD2	2.20	0.71
33:Z:506:LEU:HD11	33:Z:542:ILE:HD13	1.73	0.71
3:3:83:SER:OG	3:3:121:ILE:HD11	1.90	0.71
5:5:17:ASP:O	5:5:33:ARG:HG3	1.90	0.71
21:N:208:ARG:HG2	21:N:237:LEU:HD11	1.72	0.71
22:O:117:ASN:CG	22:O:118:GLY:H	1.99	0.71
25:R:276:LEU:HD13	25:R:289:ILE:HG21	1.72	0.71
3:3:65:TYR:CZ	3:3:69:GLU:OE1	2.43	0.71
14:G:182:HIS:CD2	14:G:186:LEU:CD1	2.73	0.71
16:I:314:ASP:OD1	16:I:340:ARG:HD2	1.90	0.71
19:L:336:ALA:CB	19:L:342:ARG:HH11	2.04	0.71
22:O:41:LEU:HD11	22:O:82:LEU:HD23	1.73	0.71
23:P:344:ARG:HH12	23:P:348:HIS:HB2	1.55	0.71
25:R:335:ARG:CZ	25:R:371:PHE:CG	2.74	0.71
28:U:130:VAL:HG23	28:U:131:GLY:N	2.06	0.71
31:X:113:GLU:O	31:X:114:LEU:HB2	1.90	0.71
5:5:201:LYS:HE3	5:5:212:GLY:O	1.91	0.71
8:A:63:LEU:HD11	14:G:172:LYS:HD2	1.73	0.71
9:B:69:PRO:HG2	9:B:104:TYR:OH	1.91	0.71
19:L:248:ALA:HB3	20:M:303:ARG:HH21	1.52	0.71
22:O:16:MET:HE2	22:O:19:ASP:CB	2.20	0.71
24:Q:387:TYR:CD2	24:Q:402:THR:OG1	2.43	0.71
33:Z:357:ILE:HG23	33:Z:361:HIS:HE1	1.56	0.71
33:Z:382:ALA:O	33:Z:386:VAL:HG23	1.90	0.71
17:J:146:THR:HG23	17:J:149:MET:HG3	1.73	0.70
19:L:140:LEU:HD21	19:L:158:ILE:HG12	1.72	0.70
19:L:167:VAL:O	19:L:168:TYR:CD1	2.43	0.70
23:P:427:GLU:HG3	29:V:230:TYR:CE2	2.24	0.70
25:R:175:ALA:HB1	25:R:213:TYR:OH	1.91	0.70
30:W:23:ARG:NE	30:W:27:GLU:HG3	2.06	0.70
33:Z:68:LEU:HD11	33:Z:115:LEU:HD13	0.80	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:357:ILE:HG23	33:Z:361:HIS:CE1	2.25	0.70
33:Z:524:ALA:HA	33:Z:562:TRP:HZ3	1.55	0.70
10:C:208:TYR:CE1	10:C:232:PRO:HB3	2.26	0.70
17:J:62:LEU:HD11	18:K:89:ILE:HD12	1.73	0.70
18:K:242:PHE:H	18:K:243:VAL:N	1.85	0.70
21:N:190:LEU:HD23	21:N:190:LEU:C	2.16	0.70
21:N:466:LEU:HD22	21:N:481:ALA:HA	1.72	0.70
26:S:234:ILE:HG13	26:S:257:LEU:CD1	2.21	0.70
33:Z:530:LEU:O	33:Z:573:LEU:HD21	1.91	0.70
10:C:62:SER:CB	10:C:212:GLU:HG2	2.20	0.70
10:C:174:THR:O	10:C:177:GLN:HG2	1.91	0.70
19:L:283:VAL:O	19:L:284:ASP:OD1	2.08	0.70
23:P:138:ARG:O	23:P:141:LYS:HG2	1.92	0.70
25:R:62:TYR:CD2	25:R:180:PHE:HZ	1.93	0.70
25:R:325:HIS:CE1	25:R:329:PHE:HB2	2.25	0.70
33:Z:874:ASN:ND2	33:Z:876:VAL:HB	2.06	0.70
10:C:122:TYR:HE2	10:C:131:PHE:HZ	1.31	0.70
15:H:217:GLN:NE2	15:H:377:PHE:HA	2.07	0.70
15:H:357:ARG:HH21	16:I:290:LYS:C	2.00	0.70
21:N:657:MET:HG2	21:N:682:PHE:HE1	1.57	0.70
26:S:234:ILE:CG2	26:S:257:LEU:HD22	2.22	0.70
28:U:66:TRP:CH2	28:U:68:LEU:HB3	2.24	0.70
29:V:52:LEU:HD11	29:V:107:TRP:HZ3	1.55	0.70
33:Z:298:PHE:CE1	33:Z:310:LEU:HD23	2.26	0.70
9:B:30:GLN:HB3	18:K:426:PHE:CD2	2.25	0.70
10:C:91:ALA:HB2	10:C:115:LEU:HD21	1.72	0.70
13:F:222:PHE:C	13:F:222:PHE:HD1	1.99	0.70
14:G:70:ASP:OD1	14:G:99:LYS:HE3	1.91	0.70
15:H:280:VAL:HG21	16:I:304:ARG:HE	1.57	0.70
17:J:259:GLU:HG2	17:J:259:GLU:O	1.90	0.70
18:K:92:VAL:CG2	18:K:93:PRO:HA	2.22	0.70
20:M:220:MET:HB3	20:M:349:PHE:HE2	1.55	0.70
21:N:348:PHE:CZ	21:N:355:TRP:NE1	2.59	0.70
21:N:362:TRP:CH2	21:N:742:TRP:HZ2	2.04	0.70
23:P:63:VAL:HG21	23:P:96:MET:SD	2.31	0.70
23:P:211:PRO:HB2	23:P:213:TYR:CE1	2.25	0.70
27:T:148:LEU:HD11	27:T:164:LEU:CD2	2.21	0.70
28:U:164:GLU:OE2	29:V:39:LYS:HG3	1.91	0.70
30:W:45:PRO:O	30:W:46:GLU:CB	2.38	0.70
31:X:78:ILE:HG13	31:X:115:SER:CB	2.15	0.70
1:1:1:THR:HG22	1:1:1:THR:O	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2:72:ARG:NH2	8:A:115:ASP:HB3	2.07	0.70
5:5:150:VAL:CG1	5:5:179:HIS:CE1	2.75	0.70
8:A:19:PHE:HE2	9:B:129:PRO:HD2	1.57	0.70
16:I:246:ARG:HG3	16:I:280:PHE:HD2	1.55	0.70
16:I:310:LEU:HD11	16:I:337:ALA:O	1.91	0.70
21:N:294:PRO:HG3	21:N:921:ARG:CZ	2.20	0.70
25:R:63:TYR:HD2	25:R:94:PHE:CZ	2.07	0.70
31:X:14:VAL:HB	31:X:29:VAL:HB	1.73	0.70
5:5:104:TYR:CD1	5:5:109:GLY:C	2.70	0.70
5:5:121:ARG:CZ	11:D:101:GLU:OE1	2.40	0.70
7:7:200:PHE:HE2	7:7:202:LYS:CE	2.04	0.70
8:A:24:ARG:NH1	18:K:424:PHE:CA	2.54	0.70
16:I:246:ARG:NH1	17:J:277:ASN:HD22	1.88	0.70
19:L:361:PHE:CE2	19:L:376:PHE:HD1	2.09	0.70
20:M:192:GLU:CB	20:M:347:ILE:HD12	2.09	0.70
21:N:192:LEU:HD12	21:N:196:THR:CG2	2.22	0.70
22:O:72:LYS:CE	22:O:73:ILE:CD1	2.58	0.70
23:P:346:ILE:HG21	23:P:379:TYR:CD2	2.26	0.70
25:R:117:ILE:HD13	25:R:134:TRP:CZ3	2.24	0.70
25:R:397:ASN:ND2	25:R:400:TYR:CE2	2.59	0.70
31:X:17:TYR:CZ	31:X:66:LEU:HD22	2.26	0.70
31:X:76:VAL:CG2	31:X:90:VAL:HG21	2.21	0.70
18:K:389:GLU:OE2	18:K:393:ARG:NH2	2.24	0.70
26:S:257:LEU:C	26:S:257:LEU:N	2.47	0.70
2:2:59:ILE:HG13	2:2:83:LEU:CD2	2.22	0.70
4:4:40:HIS:HE1	4:4:185:LYS:O	1.74	0.70
13:F:222:PHE:C	13:F:222:PHE:CD1	2.69	0.70
15:H:62:ARG:CZ	16:I:100:ARG:HA	2.22	0.70
19:L:98:LEU:CD2	20:M:154:LEU:HD22	2.22	0.70
19:L:196:VAL:CG1	19:L:197:ILE:HG13	2.21	0.70
20:M:270:ALA:HB1	20:M:276:THR:HG21	1.74	0.70
21:N:514:THR:CB	21:N:546:LEU:HD12	2.04	0.70
22:O:82:LEU:H	22:O:85:SER:CB	2.04	0.70
22:O:293:LEU:O	22:O:297:ILE:HG13	1.91	0.70
23:P:371:LEU:HD13	23:P:375:GLN:HE22	1.55	0.70
24:Q:250:THR:HG23	24:Q:251:THR:H	1.55	0.70
33:Z:297:VAL:HG12	33:Z:310:LEU:CD2	2.21	0.70
5:5:32:LYS:CE	5:5:35:ILE:HG12	2.20	0.70
9:B:172:LYS:HE3	10:C:56:LEU:CD1	2.16	0.70
20:M:73:ARG:HA	20:M:77:TYR:OH	1.92	0.70
21:N:324:LYS:HE2	21:N:691:GLN:O	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:62:TYR:O	22:O:65:PHE:HB2	1.92	0.70
22:O:63:ASP:HA	22:O:66:VAL:HG23	1.73	0.70
22:O:80:LYS:HZ3	22:O:121:ASP:CG	1.97	0.70
25:R:396:LYS:O	26:S:452:TYR:CZ	2.45	0.70
27:T:55:LEU:C	27:T:55:LEU:HD23	2.17	0.70
33:Z:230:ILE:HA	33:Z:264:PHE:CE1	2.26	0.70
33:Z:929:VAL:HG13	33:Z:956:LEU:HD12	1.73	0.70
6:6:147:PHE:CZ	6:6:164:LYS:HB2	2.27	0.69
19:L:294:GLY:O	19:L:299:ARG:NH1	2.24	0.69
21:N:258:ALA:HB3	21:N:289:ILE:HD13	1.74	0.69
22:O:70:TYR:HE1	22:O:75:GLN:CG	2.04	0.69
23:P:203:ILE:HG23	23:P:220:TYR:CD1	2.27	0.69
23:P:280:LEU:O	23:P:283:LYS:HE2	1.91	0.69
24:Q:20:TYR:HE2	24:Q:68:MET:CE	2.05	0.69
24:Q:275:ILE:CG2	24:Q:303:ALA:HB1	2.20	0.69
26:S:472:HIS:CG	28:U:288:PHE:HE1	2.07	0.69
33:Z:575:MET:HE1	33:Z:878:LEU:HD22	1.74	0.69
19:L:218:VAL:CG2	19:L:324:ILE:HG12	2.22	0.69
22:O:62:TYR:HA	22:O:65:PHE:CD2	2.23	0.69
29:V:159:ILE:CG2	29:V:160:ASP:N	2.55	0.69
33:Z:516:THR:O	33:Z:516:THR:HG22	1.92	0.69
33:Z:827:LEU:CD2	33:Z:831:LEU:CD2	2.68	0.69
1:1:8:PHE:HE1	1:1:12:VAL:N	1.90	0.69
10:C:208:TYR:CD1	10:C:232:PRO:O	2.45	0.69
18:K:242:PHE:C	18:K:243:VAL:C	2.60	0.69
18:K:332:GLY:O	18:K:333:ARG:HG2	1.93	0.69
20:M:308:LEU:O	20:M:312:LEU:HG	1.92	0.69
21:N:318:LYS:NZ	21:N:348:PHE:HD1	1.81	0.69
23:P:311:TRP:CH2	23:P:315:GLN:NE2	2.60	0.69
23:P:396:PRO:HB3	24:Q:396:TRP:CZ2	2.26	0.69
24:Q:358:GLU:HG3	24:Q:396:TRP:CD1	2.27	0.69
25:R:63:TYR:OH	25:R:93:LYS:C	2.34	0.69
25:R:369:GLY:HA3	25:R:383:ARG:NH2	2.08	0.69
29:V:109:HIS:CB	29:V:111:HIS:NE2	2.54	0.69
30:W:98:LEU:HD13	30:W:108:GLN:HB3	1.75	0.69
10:C:181:LYS:HD2	10:C:183:ASP:OD1	1.92	0.69
15:H:315:GLY:HA2	16:I:300:ARG:HH21	1.56	0.69
16:I:82:LEU:HD13	33:Z:622:HIS:CE1	2.25	0.69
18:K:285:GLN:O	18:K:286:THR:HG22	1.92	0.69
21:N:174:LEU:HA	21:N:182:ASN:ND2	2.08	0.69
21:N:884:PHE:HB3	21:N:905:LEU:HD13	1.72	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:254:LEU:HD21	22:O:266:PHE:CE2	2.25	0.69
25:R:80:GLU:OE1	25:R:99:TYR:OH	2.10	0.69
27:T:148:LEU:HD11	27:T:164:LEU:HD21	1.74	0.69
1:1:124:TYR:HB3	1:1:142:PHE:CE1	2.28	0.69
3:3:36:HIS:HB3	3:3:41:PHE:CD2	2.27	0.69
11:D:88:LYS:HD2	11:D:112:TYR:OH	1.92	0.69
15:H:390:ARG:HB2	15:H:404:TRP:CD1	2.27	0.69
17:J:89:GLN:HB3	17:J:90:PRO:HD3	1.73	0.69
17:J:258:VAL:C	18:K:280:LYS:HD2	2.17	0.69
19:L:95:ILE:HD11	20:M:65:ASN:O	1.91	0.69
21:N:490:LEU:CD2	21:N:727:THR:HG21	2.19	0.69
23:P:133:GLU:CG	23:P:167:THR:HG23	2.19	0.69
23:P:425:HIS:CE1	23:P:429:ILE:HG13	2.27	0.69
24:Q:311:LEU:HD22	24:Q:343:LEU:CD1	2.22	0.69
26:S:274:PHE:CE2	26:S:278:LYS:CE	2.75	0.69
26:S:343:LEU:C	26:S:347:HIS:HD1	1.96	0.69
28:U:19:LEU:CB	29:V:209:GLU:CD	2.64	0.69
29:V:53:MET:SD	29:V:139:VAL:HG21	2.31	0.69
5:5:66:HIS:CE1	5:5:70:GLU:OE1	2.44	0.69
5:5:81:LYS:NZ	5:5:85:ASN:ND2	2.39	0.69
10:C:4:ARG:NH2	10:C:5:ARG:HH12	1.90	0.69
13:F:110:HIS:CG	14:G:85:ARG:HH11	2.11	0.69
14:G:51:LYS:HG3	14:G:65:LYS:HE3	1.74	0.69
18:K:241:GLU:CA	18:K:243:VAL:N	2.55	0.69
21:N:373:VAL:HG22	21:N:750:SER:OG	1.93	0.69
22:O:80:LYS:NZ	22:O:121:ASP:OD2	2.22	0.69
22:O:106:PHE:HD2	22:O:109:LEU:N	1.77	0.69
23:P:138:ARG:HA	23:P:141:LYS:NZ	2.07	0.69
23:P:263:HIS:O	23:P:267:PHE:HD2	1.73	0.69
27:T:216:GLU:O	27:T:220:PHE:HD2	1.75	0.69
33:Z:386:VAL:HG21	33:Z:849:ARG:HG3	1.74	0.69
1:1:59:VAL:HG21	1:1:82:PHE:CE1	2.26	0.69
2:2:72:ARG:NH2	8:A:115:ASP:CB	2.55	0.69
5:5:179:HIS:HB3	5:5:188:HIS:NE2	2.08	0.69
13:F:12:THR:CB	14:G:22:GLN:NE2	2.54	0.69
18:K:60:LEU:CD1	21:N:601:THR:OG1	2.39	0.69
21:N:353:LEU:H	21:N:354:PRO:CD	2.05	0.69
23:P:431:HIS:CG	28:U:156:HIS:HB3	2.27	0.69
25:R:70:TYR:HE2	25:R:74:ASN:C	1.99	0.69
33:Z:407:VAL:CG1	33:Z:439:TYR:CZ	2.75	0.69
2:2:8:PHE:CE2	2:2:11:GLY:C	2.71	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:3:133:ALA:O	3:3:137:LEU:HG	1.93	0.69
6:6:29:ARG:HH21	7:7:148:ARG:HH21	1.40	0.69
14:G:111:PHE:CE2	14:G:115:LEU:HD11	2.28	0.69
17:J:71:TYR:CE2	17:J:117:SER:HB2	2.23	0.69
17:J:170:HIS:CD2	17:J:172:GLU:HB3	2.28	0.69
17:J:186:ILE:CD1	17:J:305:LEU:HD21	2.23	0.69
19:L:111:GLU:CD	19:L:117:TYR:HE2	2.01	0.69
20:M:151:ASP:O	29:V:46:PRO:HG2	1.92	0.69
20:M:264:ARG:HG2	20:M:311:GLN:HE22	1.54	0.69
21:N:459:ASN:ND2	21:N:462:VAL:HG23	2.08	0.69
23:P:138:ARG:CB	23:P:141:LYS:HZ2	2.05	0.69
24:Q:227:CYS:HA	24:Q:232:TYR:HE1	1.56	0.69
25:R:396:LYS:HZ2	26:S:449:LEU:HB3	1.57	0.69
27:T:151:TRP:CZ3	27:T:159:LYS:CD	2.75	0.69
27:T:260:ILE:CG2	28:U:277:TYR:OH	2.40	0.69
28:U:280:ASN:ND2	29:V:291:ASN:CG	2.43	0.69
31:X:22:ARG:NH1	31:X:88:ALA:HB2	2.04	0.69
33:Z:89:LEU:CD1	33:Z:125:THR:CB	2.71	0.69
33:Z:542:ILE:HG13	33:Z:546:ILE:HD12	1.75	0.69
33:Z:897:HIS:CE1	33:Z:899:GLN:HE21	2.08	0.69
2:2:8:PHE:CZ	2:2:11:GLY:C	2.53	0.69
4:4:31:ASP:OD2	4:4:33:LYS:HE2	1.93	0.69
7:7:13:ILE:CG2	7:7:169:ILE:HG13	2.22	0.69
13:F:151:GLY:HA3	14:G:82:PRO:HG3	1.75	0.69
15:H:285:GLY:CA	15:H:286:GLU:N	2.56	0.69
19:L:301:ILE:HD11	20:M:299:ARG:NH2	2.07	0.69
21:N:602:VAL:HG12	21:N:625:LEU:HD13	1.75	0.69
22:O:169:ASN:CG	22:O:195:TYR:CE2	2.71	0.69
26:S:452:TYR:O	28:U:274:MET:HE1	1.93	0.69
30:W:150:ASN:O	30:W:151:THR:HB	1.93	0.69
12:E:157:HIS:HB2	12:E:167:TYR:CE2	2.26	0.69
16:I:312:GLN:O	16:I:316:PHE:HD2	1.76	0.69
21:N:299:TYR:CE2	21:N:303:LEU:HD11	2.28	0.69
21:N:424:LYS:HZ2	21:N:461:GLU:HB3	1.58	0.69
21:N:654:GLN:NE2	21:N:697:PHE:HD2	1.91	0.69
24:Q:390:LEU:HD23	24:Q:397:LEU:HD12	1.75	0.69
25:R:63:TYR:HH	25:R:92:ILE:C	2.00	0.69
28:U:19:LEU:CD1	29:V:209:GLU:CD	2.66	0.69
28:U:24:ARG:NH2	29:V:66:VAL:HG13	2.08	0.69
33:Z:253:VAL:HB	33:Z:254:PRO:HD3	1.74	0.69
13:F:215:ILE:HG23	13:F:220:THR:HG21	1.73	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:358:LEU:HD13	19:L:380:VAL:HG21	1.75	0.68
23:P:333:ALA:HB3	23:P:336:HIS:CD2	2.28	0.68
25:R:301:TYR:CZ	25:R:359:VAL:HG11	2.29	0.68
13:F:202:ARG:HH12	20:M:416:VAL:CG1	2.05	0.68
21:N:353:LEU:H	21:N:354:PRO:HD2	1.57	0.68
21:N:575:ALA:O	21:N:584:ARG:HG2	1.93	0.68
22:O:95:SER:CA	22:O:98:TYR:HE2	2.05	0.68
30:W:103:ASN:HB3	30:W:106:GLN:HE22	1.58	0.68
33:Z:233:LEU:HD13	33:Z:264:PHE:C	2.18	0.68
33:Z:474:LEU:HD23	33:Z:497:PHE:HE1	1.59	0.68
15:H:429:PHE:CE1	15:H:432:ARG:NH2	2.57	0.68
16:I:395:MET:SD	16:I:420:LYS:HB2	2.34	0.68
17:J:192:GLY:HA3	18:K:330:ARG:CZ	2.23	0.68
18:K:245:LYS:HE3	18:K:288:SER:HA	1.75	0.68
19:L:125:PRO:HD2	19:L:127:TYR:HH	1.57	0.68
19:L:384:ASP:H	19:L:386:PHE:HE1	1.40	0.68
19:L:410:ILE:HD11	20:M:210:MET:SD	2.32	0.68
25:R:279:LEU:HD23	25:R:286:LEU:HD11	1.74	0.68
25:R:411:LEU:HD11	26:S:464:ARG:HE	1.59	0.68
26:S:234:ILE:HG21	26:S:257:LEU:CD2	2.22	0.68
29:V:261:LEU:CG	29:V:280:LEU:HD23	2.22	0.68
30:W:132:LEU:CD1	30:W:157:PHE:CZ	2.76	0.68
33:Z:381:LEU:CD1	33:Z:385:PHE:CZ	2.71	0.68
5:5:32:LYS:O	5:5:33:ARG:HG2	1.93	0.68
8:A:19:PHE:HZ	9:B:128:ARG:HH11	1.34	0.68
8:A:24:ARG:NH1	18:K:424:PHE:H	1.91	0.68
14:G:183:PRO:HD2	14:G:186:LEU:HD23	1.76	0.68
19:L:98:LEU:HD23	20:M:154:LEU:HD22	1.72	0.68
21:N:89:PHE:CZ	21:N:136:ILE:HG23	2.29	0.68
21:N:192:LEU:CD1	21:N:196:THR:HG21	2.22	0.68
27:T:229:VAL:CG2	27:T:232:LYS:HB2	2.22	0.68
8:A:220:LYS:HG2	8:A:241:ILE:CG2	2.23	0.68
12:E:122:ARG:HA	12:E:132:ARG:HG2	1.76	0.68
12:E:157:HIS:CG	12:E:170:LYS:NZ	2.61	0.68
13:F:98:VAL:HG12	13:F:99:PHE:CD1	2.28	0.68
20:M:283:LEU:CD1	20:M:286:ILE:HD11	2.23	0.68
23:P:396:PRO:HB3	24:Q:396:TRP:CH2	2.29	0.68
33:Z:282:ILE:HD13	33:Z:974:THR:HG23	1.73	0.68
33:Z:307:HIS:HD2	33:Z:345:GLU:OE2	1.76	0.68
3:3:111:PHE:HA	3:3:125:LYS:NZ	2.07	0.68
13:F:110:HIS:HB2	14:G:85:ARG:HH12	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:202:LEU:CD2	16:I:240:THR:HB	2.23	0.68
18:K:52:LYS:NZ	21:N:159:GLU:CG	2.56	0.68
21:N:640:VAL:O	21:N:643:PRO:HD2	1.94	0.68
22:O:222:LEU:HA	22:O:230:PHE:HZ	1.55	0.68
23:P:138:ARG:HB3	23:P:141:LYS:NZ	2.08	0.68
24:Q:343:LEU:HB3	24:Q:376:LYS:NZ	2.09	0.68
25:R:335:ARG:HH12	25:R:371:PHE:C	2.02	0.68
25:R:396:LYS:HA	26:S:452:TYR:HD1	1.46	0.68
26:S:234:ILE:HD12	26:S:253:PHE:HB3	1.75	0.68
26:S:390:THR:HG23	26:S:393:ARG:NH2	2.09	0.68
26:S:428:ARG:HH12	27:T:188:GLU:HA	1.58	0.68
27:T:245:TYR:O	27:T:246:GLU:CB	2.41	0.68
28:U:21:HIS:CE1	28:U:53:ALA:HB2	2.29	0.68
28:U:66:TRP:CZ3	28:U:68:LEU:HB2	2.29	0.68
29:V:51:GLY:HA3	29:V:108:TYR:OH	1.93	0.68
15:H:306:ILE:CG2	15:H:308:PHE:CE1	2.76	0.68
22:O:11:LEU:HD13	22:O:15:ARG:HH21	1.58	0.68
31:X:121:ILE:O	31:X:125:MET:CG	2.41	0.68
1:1:33:LYS:HD3	1:1:45:ARG:HH22	1.59	0.68
13:F:137:TYR:CZ	13:F:218:LYS:HB2	2.29	0.68
21:N:768:ILE:HG13	21:N:919:THR:HB	1.75	0.68
22:O:15:ARG:C	22:O:16:MET:HG3	2.19	0.68
22:O:59:LEU:C	22:O:62:TYR:HD1	1.98	0.68
23:P:346:ILE:CD1	23:P:379:TYR:CZ	2.73	0.68
27:T:11:LEU:HD22	27:T:30:ILE:CD1	2.24	0.68
33:Z:139:LEU:CD2	33:Z:161:ILE:CD1	2.68	0.68
1:1:61:TYR:HB2	8:A:106:TYR:CD1	2.28	0.68
8:A:83:VAL:HG11	8:A:90:ALA:HA	1.76	0.68
10:C:136:ILE:HD11	10:C:165:VAL:CG2	2.18	0.68
15:H:425:GLU:HG3	15:H:429:PHE:CD2	2.28	0.68
21:N:668:THR:O	21:N:669:GLU:HB3	1.91	0.68
23:P:438:ILE:HD13	28:U:99:LEU:HB2	1.76	0.68
24:Q:34:ASP:O	24:Q:35:SER:OG	2.10	0.68
25:R:78:ASP:CG	25:R:94:PHE:CD1	2.71	0.68
26:S:234:ILE:HG13	26:S:257:LEU:HD13	1.76	0.68
28:U:283:ARG:NE	29:V:287:THR:OG1	2.26	0.68
30:W:91:LEU:HD21	30:W:157:PHE:CZ	2.29	0.68
33:Z:230:ILE:HA	33:Z:264:PHE:CD1	2.28	0.68
33:Z:282:ILE:CD1	33:Z:974:THR:CG2	2.72	0.68
33:Z:286:VAL:O	33:Z:287:ARG:HB2	1.93	0.68
14:G:182:HIS:CE1	14:G:186:LEU:HD12	2.29	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:66:LYS:HE2	15:H:70:LYS:HZ2	1.58	0.68
19:L:157:ARG:HH22	20:M:113:VAL:HG23	1.57	0.68
33:Z:624:LEU:CD2	33:Z:740:VAL:HG22	2.23	0.68
1:1:91:ASP:O	1:1:92:ASN:CG	2.37	0.67
6:6:65:TRP:HH2	13:F:90:GLN:N	1.91	0.67
12:E:119:LEU:CG	12:E:122:ARG:NH2	2.56	0.67
15:H:365:LEU:O	15:H:371:ILE:HD12	1.94	0.67
19:L:111:GLU:CG	19:L:117:TYR:CE2	2.77	0.67
20:M:407:GLN:HE22	20:M:411:LYS:NZ	1.92	0.67
21:N:641:LEU:HB2	21:N:660:LEU:HD21	1.76	0.67
21:N:768:ILE:HD11	21:N:919:THR:CG2	2.24	0.67
22:O:16:MET:CE	22:O:19:ASP:CG	2.58	0.67
22:O:92:PHE:HE1	22:O:136:THR:CA	2.07	0.67
24:Q:409:TYR:N	25:R:399:GLN:HG3	2.09	0.67
27:T:182:LYS:HB3	27:T:186:ARG:NH1	2.08	0.67
33:Z:68:LEU:HD13	33:Z:115:LEU:CD1	2.22	0.67
33:Z:929:VAL:CG1	33:Z:956:LEU:HD12	2.23	0.67
8:A:19:PHE:CE2	9:B:128:ARG:HB2	2.30	0.67
17:J:249:GLU:HG3	18:K:297:ILE:HG21	1.76	0.67
19:L:140:LEU:HD11	19:L:155:ILE:HD13	1.76	0.67
20:M:384:ASP:N	20:M:386:PHE:HD1	1.90	0.67
22:O:16:MET:HE3	22:O:20:PRO:HD2	1.75	0.67
23:P:287:ASP:H	23:P:293:LEU:HD21	1.59	0.67
26:S:163:VAL:HG21	26:S:184:TRP:CE2	2.30	0.67
26:S:234:ILE:CB	26:S:257:LEU:CD2	2.71	0.67
26:S:360:PHE:CZ	26:S:364:ILE:HD11	2.29	0.67
27:T:89:TYR:O	27:T:90:PHE:CD1	2.47	0.67
33:Z:170:GLU:HG3	33:Z:228:GLU:OE1	1.94	0.67
33:Z:973:TYR:CE1	33:Z:982:ILE:HG22	2.29	0.67
2:2:38:SER:HB2	2:2:39:PRO:HD2	1.76	0.67
6:6:58:ARG:NH1	6:6:91:LYS:HZ2	1.91	0.67
8:A:199:TRP:O	8:A:203:VAL:HG23	1.95	0.67
13:F:13:PHE:HE1	14:G:130:PRO:CG	2.04	0.67
21:N:874:ILE:HG22	21:N:875:LEU:O	1.93	0.67
22:O:79:VAL:HG22	22:O:118:GLY:HA3	1.76	0.67
25:R:206:ARG:HH21	25:R:209:ARG:CD	2.06	0.67
25:R:334:ARG:NH1	25:R:338:TYR:HE2	1.92	0.67
32:Y:83:ARG:NH1	32:Y:87:GLU:OE2	2.27	0.67
16:I:358:LYS:HD3	16:I:384:LYS:HD2	1.75	0.67
17:J:133:LEU:CD2	17:J:228:ARG:NH2	2.58	0.67
19:L:221:TYR:HH	19:L:348:GLU:CB	1.87	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:138:ARG:HG2	23:P:141:LYS:NZ	2.09	0.67
23:P:283:LYS:HG3	23:P:286:ASN:CB	2.21	0.67
26:S:163:VAL:HG13	26:S:184:TRP:CH2	2.29	0.67
27:T:129:LEU:O	27:T:132:HIS:HD2	1.75	0.67
29:V:85:ASP:O	29:V:88:GLN:HG3	1.94	0.67
7:7:187:PHE:CZ	7:7:204:LEU:HB3	2.29	0.67
8:A:24:ARG:NH1	18:K:424:PHE:HA	2.09	0.67
10:C:4:ARG:NE	10:C:5:ARG:HH12	1.92	0.67
15:H:210:ASP:HB2	15:H:258:LEU:HD12	1.75	0.67
21:N:302:PHE:CD1	21:N:306:ASN:ND2	2.62	0.67
21:N:358:LYS:HD3	29:V:181:ASN:ND2	2.10	0.67
21:N:717:LEU:HD22	21:N:733:LEU:HD12	1.75	0.67
21:N:902:VAL:O	21:N:903:VAL:CG2	2.42	0.67
24:Q:76:GLU:HG2	24:Q:80:HIS:CD2	2.30	0.67
27:T:148:LEU:HD13	27:T:164:LEU:HD21	1.75	0.67
1:1:75:THR:HG21	1:1:111:TYR:CD1	2.22	0.67
1:1:124:TYR:CD1	1:1:142:PHE:CZ	2.82	0.67
4:4:14:LEU:HD11	4:4:104:GLY:HA3	1.77	0.67
5:5:12:ILE:O	5:5:179:HIS:HD2	1.76	0.67
8:A:220:LYS:NZ	8:A:242:GLU:HB2	2.08	0.67
13:F:110:HIS:CA	14:G:85:ARG:NH1	2.58	0.67
19:L:198:GLU:CG	19:L:202:LYS:NZ	2.58	0.67
23:P:350:LEU:CD1	23:P:383:LEU:HD12	2.24	0.67
25:R:137:LEU:HG	25:R:141:TYR:CE2	2.29	0.67
31:X:29:VAL:HG13	31:X:61:LEU:HD22	1.77	0.67
33:Z:278:LEU:HD11	33:Z:297:VAL:HG13	1.77	0.67
33:Z:394:TYR:CZ	33:Z:859:LYS:HG2	2.29	0.67
33:Z:452:LEU:HD21	33:Z:477:TYR:HB2	1.76	0.67
33:Z:745:LEU:HD22	33:Z:878:LEU:HG	1.77	0.67
3:3:155:PHE:CE1	3:3:189:ARG:HD2	2.29	0.67
5:5:80:SER:CB	5:5:121:ARG:HD2	2.25	0.67
14:G:70:ASP:HA	14:G:99:LYS:HZ2	1.59	0.67
16:I:426:ASN:HB3	17:J:313:LYS:HZ1	1.59	0.67
21:N:889:ARG:HG2	21:N:912:GLU:HB2	1.76	0.67
26:S:159:ASN:O	26:S:163:VAL:HG23	1.93	0.67
27:T:143:SER:O	27:T:146:ILE:HG22	1.94	0.67
33:Z:779:ALA:O	33:Z:783:VAL:HG23	1.94	0.67
3:3:98:PRO:HG2	3:3:115:PHE:HB2	1.76	0.67
4:4:38:SER:OG	4:4:41:THR:HB	1.95	0.67
7:7:129:TYR:CE1	7:7:134:LEU:HD23	2.19	0.67
8:A:24:ARG:HD2	8:A:32:PHE:HE2	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:159:SER:OG	18:K:242:PHE:CE1	2.45	0.67
18:K:211:LEU:HD23	18:K:338:ILE:HB	1.76	0.67
21:N:463:TYR:OH	21:N:501:MET:HE3	1.95	0.67
25:R:28:GLU:O	25:R:32:LEU:HG	1.95	0.67
31:X:87:PHE:CZ	31:X:121:ILE:HG21	2.30	0.67
2:2:36:ARG:NH2	9:B:222:LEU:O	2.28	0.67
6:6:175:VAL:O	6:6:179:PHE:CD2	2.48	0.67
15:H:173:ARG:NE	16:I:129:TYR:H	1.93	0.67
17:J:150:VAL:HB	17:J:153:LEU:HD12	1.76	0.67
18:K:99:PHE:CZ	18:K:102:PRO:HD3	2.30	0.67
19:L:252:VAL:HG12	20:M:256:ILE:HG13	1.74	0.67
22:O:17:GLU:O	22:O:18:ALA:CB	2.42	0.67
22:O:115:ARG:HB2	22:O:124:ASP:CG	2.19	0.67
22:O:183:ASN:O	22:O:184:ASP:CG	2.38	0.67
22:O:277:ILE:HG22	22:O:279:ILE:H	1.59	0.67
24:Q:387:TYR:CZ	24:Q:402:THR:HG23	2.30	0.67
25:R:379:CYS:SG	25:R:388:VAL:CG1	2.83	0.67
31:X:85:ARG:HG3	31:X:87:PHE:CE1	2.29	0.67
31:X:85:ARG:NE	31:X:101:LEU:HB2	2.01	0.67
33:Z:89:LEU:CD1	33:Z:125:THR:HB	2.24	0.67
8:A:14:ARG:HD2	14:G:5:THR:O	1.95	0.67
13:F:98:VAL:CG1	13:F:99:PHE:CE1	2.78	0.67
13:F:112:LEU:HB3	13:F:147:PHE:CZ	2.30	0.67
16:I:398:GLU:HG3	17:J:312:ARG:CZ	2.24	0.67
20:M:43:ILE:HD11	30:W:23:ARG:HH12	1.60	0.67
20:M:78:LEU:HG	20:M:150:LYS:HE2	1.77	0.67
23:P:263:HIS:HB3	23:P:267:PHE:HE2	1.58	0.67
23:P:427:GLU:CG	29:V:230:TYR:OH	2.42	0.67
24:Q:78:ILE:HB	24:Q:79:PRO:HD3	1.77	0.67
25:R:47:ALA:CB	25:R:89:ASN:HD21	2.07	0.67
26:S:392:ILE:HD11	26:S:411:LEU:CD2	2.15	0.67
29:V:25:GLU:OE2	29:V:163:ALA:HB2	1.94	0.67
33:Z:221:VAL:O	33:Z:225:LEU:HG	1.95	0.67
4:4:37:LEU:HD23	4:4:41:THR:HG21	1.77	0.66
10:C:118:ILE:HG22	10:C:122:TYR:CZ	2.28	0.66
11:D:86:ILE:CG2	11:D:90:ARG:NH1	2.57	0.66
14:G:98:PHE:HE1	14:G:104:THR:HG23	1.60	0.66
19:L:290:ARG:NE	19:L:293:GLU:HA	2.10	0.66
21:N:884:PHE:HB2	21:N:905:LEU:HD13	1.77	0.66
22:O:310:PHE:CE1	22:O:341:ILE:CG2	2.68	0.66
23:P:308:LEU:CD2	23:P:369:LEU:HG	2.24	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:435:LYS:HG3	28:U:154:PHE:HZ	1.58	0.66
24:Q:61:LEU:HD11	24:Q:65:TYR:CZ	2.26	0.66
26:S:179:ILE:HG23	26:S:229:THR:HG21	1.77	0.66
30:W:125:LEU:HD21	30:W:153:LEU:O	1.95	0.66
33:Z:233:LEU:HD23	33:Z:233:LEU:C	2.20	0.66
33:Z:496:ALA:HB3	33:Z:497:PHE:HD1	1.59	0.66
33:Z:765:MET:CE	33:Z:777:PRO:HG3	2.24	0.66
3:3:40:VAL:HG22	3:3:75:PRO:HG3	1.76	0.66
5:5:150:VAL:HG12	5:5:179:HIS:CE1	2.29	0.66
7:7:56:GLU:HG2	7:7:60:LYS:HE3	1.77	0.66
14:G:108:ILE:CG2	14:G:148:TYR:HD2	2.03	0.66
16:I:246:ARG:HG3	16:I:280:PHE:CD2	2.30	0.66
18:K:349:ARG:HH12	18:K:378:LEU:HB2	1.59	0.66
20:M:375:ASN:OD1	20:M:377:GLN:HG2	1.94	0.66
24:Q:20:TYR:HE2	24:Q:68:MET:HG3	1.53	0.66
31:X:28:PRO:CG	31:X:57:VAL:CG2	2.73	0.66
33:Z:212:LEU:HA	33:Z:236:PHE:CE2	2.30	0.66
3:3:1:GLY:HA3	3:3:33:LYS:NZ	2.09	0.66
5:5:8:PHE:CE1	5:5:13:ILE:CG1	2.68	0.66
7:7:129:TYR:CD1	7:7:134:LEU:HD22	2.23	0.66
15:H:389:PHE:CE1	15:H:419:LEU:HD22	2.30	0.66
17:J:186:ILE:HD12	17:J:305:LEU:HD21	1.77	0.66
18:K:159:SER:HA	19:L:256:ILE:CG1	2.24	0.66
18:K:227:ALA:HB2	18:K:268:ILE:HD12	1.77	0.66
21:N:903:VAL:O	21:N:904:VAL:CG2	2.44	0.66
25:R:246:TYR:OH	25:R:279:LEU:HB2	1.95	0.66
26:S:295:ALA:HA	26:S:298:ARG:HH21	1.60	0.66
27:T:90:PHE:O	27:T:128:TYR:OH	2.07	0.66
33:Z:68:LEU:HD12	33:Z:115:LEU:HB2	1.77	0.66
7:7:192:ILE:HG12	7:7:198:LEU:CD1	2.26	0.66
7:7:193:ASP:HB3	7:7:196:THR:OG1	1.95	0.66
9:B:211:LEU:HD22	9:B:238:LEU:HD12	1.77	0.66
10:C:94:HIS:HB3	10:C:114:ARG:HH11	1.59	0.66
14:G:19:ARG:NH2	14:G:24:GLU:HG3	2.10	0.66
15:H:107:LYS:HD2	15:H:143:ALA:CB	2.23	0.66
17:J:188:TYR:CE1	17:J:295:ASN:HA	2.30	0.66
21:N:12:LEU:HD23	21:N:15:GLU:OE1	1.96	0.66
23:P:265:VAL:HG11	23:P:296:GLN:HG3	1.78	0.66
26:S:472:HIS:HB2	28:U:288:PHE:CE1	2.28	0.66
30:W:36:ILE:HD11	30:W:113:PHE:HZ	1.61	0.66
33:Z:926:ASN:HB2	33:Z:993:GLU:CG	2.25	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:190:PRO:HA	1:1:193:TYR:CD1	2.28	0.66
5:5:81:LYS:HZ3	5:5:85:ASN:CG	2.03	0.66
7:7:70:ASN:ND2	13:F:107:ARG:HG3	2.11	0.66
8:A:24:ARG:NH1	18:K:424:PHE:CD1	2.63	0.66
21:N:890:PHE:CB	21:N:905:LEU:CD2	2.69	0.66
23:P:122:ILE:HG22	23:P:124:VAL:HG22	1.78	0.66
23:P:168:TYR:HE1	23:P:171:MET:HE2	1.59	0.66
23:P:177:ILE:HB	23:P:203:ILE:HD11	1.77	0.66
25:R:335:ARG:CZ	25:R:371:PHE:CD1	2.78	0.66
28:U:293:GLU:HG2	29:V:277:LYS:HZ2	1.60	0.66
4:4:26:VAL:CG1	4:4:29:ASP:HB2	2.25	0.66
4:4:181:LYS:NZ	4:4:190:GLN:HB2	2.07	0.66
8:A:81:MET:SD	8:A:143:PHE:CE2	2.88	0.66
12:E:44:GLU:OE2	12:E:190:SER:HB2	1.96	0.66
15:H:261:ARG:NH2	15:H:273:ARG:HH11	1.94	0.66
15:H:392:HIS:CE1	15:H:420:ARG:HG2	2.30	0.66
24:Q:24:GLU:OE1	24:Q:68:MET:HE1	1.95	0.66
26:S:286:TYR:CE2	26:S:323:LEU:CB	2.69	0.66
30:W:87:MET:HE1	30:W:112:ALA:CB	2.24	0.66
33:Z:212:LEU:HD21	33:Z:239:GLU:HG2	1.77	0.66
33:Z:426:TYR:CZ	33:Z:435:GLN:CG	2.79	0.66
33:Z:740:VAL:HG13	33:Z:761:PHE:CD1	2.31	0.66
1:1:61:TYR:HH	8:A:103:GLU:HG2	1.58	0.66
16:I:150:HIS:CG	16:I:151:HIS:H	2.11	0.66
17:J:278:GLN:HE22	17:J:283:GLU:CD	1.95	0.66
18:K:351:LEU:HD22	24:Q:233:LYS:NZ	2.11	0.66
21:N:10:LEU:HD22	21:N:42:GLU:HG3	1.78	0.66
21:N:665:ILE:CD1	21:N:715:ILE:HG12	2.25	0.66
22:O:38:TRP:HE3	22:O:54:SER:HB3	1.61	0.66
22:O:223:LEU:O	22:O:283:HIS:ND1	2.28	0.66
23:P:229:LEU:O	23:P:232:ARG:NH1	2.25	0.66
23:P:412:LEU:HD21	29:V:245:VAL:HA	1.76	0.66
24:Q:343:LEU:HD23	24:Q:376:LYS:NZ	2.10	0.66
33:Z:138:ARG:HB3	33:Z:157:LEU:HD13	1.74	0.66
33:Z:352:LYS:HB3	33:Z:466:GLU:OE1	1.96	0.66
33:Z:591:ILE:HG22	33:Z:593:HIS:NE2	2.11	0.66
11:D:83:ARG:HH12	11:D:87:GLU:HB2	1.61	0.66
14:G:72:HIS:NE2	14:G:105:PRO:HB3	2.10	0.66
19:L:360:ILE:HG23	19:L:364:HIS:CE1	2.29	0.66
21:N:619:CYS:HG	21:N:651:PHE:HD2	1.42	0.66
22:O:116:ASN:CB	22:O:127:LEU:CD2	2.65	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:317:THR:O	22:O:318:HIS:HB2	1.94	0.66
23:P:327:LEU:O	23:P:328:ALA:CB	2.44	0.66
25:R:214:TYR:CD2	25:R:230:LEU:CG	2.69	0.66
28:U:36:VAL:CG2	28:U:54:LEU:HD11	2.25	0.66
33:Z:307:HIS:HD2	33:Z:345:GLU:OE1	1.77	0.66
7:7:144:ASN:ND2	7:7:148:ARG:HD2	2.11	0.66
7:7:170:VAL:HG12	7:7:174:ARG:HH22	1.57	0.66
15:H:208:TYR:CE2	15:H:391:ILE:CD1	2.78	0.66
17:J:191:PRO:HG2	18:K:330:ARG:HH22	1.61	0.66
17:J:210:PHE:CE2	17:J:212:ARG:CG	2.79	0.66
21:N:761:ILE:HG23	21:N:904:VAL:HA	1.69	0.66
22:O:7:ILE:HG23	22:O:11:LEU:HD12	1.77	0.66
22:O:183:ASN:O	22:O:184:ASP:CB	2.44	0.66
25:R:70:TYR:CE2	25:R:75:GLY:HA3	2.30	0.66
25:R:259:PHE:O	25:R:259:PHE:CD1	2.48	0.66
28:U:35:GLY:HA3	28:U:93:TYR:CZ	2.31	0.66
33:Z:194:GLU:O	33:Z:195:PHE:CD1	2.49	0.66
33:Z:361:HIS:HD2	33:Z:961:GLU:HG2	1.60	0.66
33:Z:422:ILE:CD1	33:Z:439:TYR:HE2	2.08	0.66
5:5:8:PHE:HZ	5:5:179:HIS:NE2	1.94	0.66
6:6:30:TYR:OH	7:7:153:ARG:CB	2.44	0.66
6:6:30:TYR:CE2	7:7:153:ARG:HA	2.30	0.66
9:B:66:LEU:HD21	9:B:235:PHE:CD1	2.30	0.66
11:D:92:GLU:OE2	11:D:108:TYR:CE2	2.49	0.66
11:D:228:GLU:O	11:D:231:GLN:HG2	1.96	0.66
13:F:13:PHE:HE1	14:G:130:PRO:HG2	1.61	0.66
19:L:180:PHE:CE2	19:L:238:THR:OG1	2.49	0.66
21:N:633:GLY:C	21:N:634:LEU:HD22	2.20	0.66
22:O:162:SER:OG	22:O:164:PRO:HD2	1.96	0.66
23:P:265:VAL:HG12	23:P:296:GLN:NE2	2.11	0.66
24:Q:174:LEU:HD12	24:Q:178:HIS:HE1	1.53	0.66
24:Q:249:LEU:C	24:Q:250:THR:HG22	2.19	0.66
25:R:335:ARG:HH12	25:R:371:PHE:CA	2.09	0.66
25:R:354:ALA:CB	25:R:364:LEU:HD23	2.25	0.66
26:S:286:TYR:CZ	26:S:323:LEU:CB	2.74	0.66
29:V:243:SER:O	29:V:247:ILE:HG23	1.95	0.66
31:X:29:VAL:HG11	31:X:61:LEU:CD2	2.25	0.66
33:Z:511:PRO:O	33:Z:514:ALA:HB3	1.94	0.66
3:3:179:TYR:CE2	3:3:188:LYS:CD	2.79	0.65
5:5:80:SER:HB3	5:5:121:ARG:HD2	1.78	0.65
10:C:173:GLN:HE22	11:D:54:LEU:HD23	1.60	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:62:LEU:HD11	18:K:89:ILE:CD1	2.26	0.65
19:L:370:LYS:HE2	19:L:410:ILE:HG21	1.76	0.65
21:N:113:ALA:C	21:N:161:TYR:HD2	2.03	0.65
21:N:309:ILE:HD11	21:N:343:THR:HG21	1.76	0.65
21:N:909:GLU:HB3	21:N:912:GLU:CD	2.21	0.65
25:R:80:GLU:O	25:R:81:HIS:CG	2.49	0.65
33:Z:471:LEU:HD23	33:Z:471:LEU:C	2.21	0.65
33:Z:889:VAL:HA	33:Z:892:SER:OG	1.96	0.65
12:E:119:LEU:HD13	12:E:122:ARG:NH2	2.10	0.65
12:E:165:TYR:CB	12:E:167:TYR:CZ	2.69	0.65
22:O:38:TRP:HZ3	22:O:54:SER:H	1.42	0.65
23:P:354:SER:CB	23:P:402:PHE:CE1	2.75	0.65
23:P:411:LEU:HA	28:U:265:LEU:HD22	1.78	0.65
24:Q:306:TYR:HE1	24:Q:342:LEU:HD21	1.45	0.65
27:T:89:TYR:CE1	27:T:90:PHE:CE1	2.81	0.65
28:U:15:LEU:HB3	29:V:212:MET:CE	2.18	0.65
28:U:165:GLU:H	29:V:42:ARG:HH12	1.44	0.65
30:W:4:GLU:H	30:W:47:ASN:ND2	1.94	0.65
3:3:179:TYR:CE2	3:3:188:LYS:HG3	2.31	0.65
6:6:96:TYR:OH	6:6:98:VAL:HG21	1.97	0.65
7:7:112:GLN:HG2	7:7:114:ASN:H	1.60	0.65
10:C:27:GLU:O	10:C:31:HIS:CD2	2.49	0.65
13:F:110:HIS:ND1	14:G:85:ARG:NH1	2.44	0.65
16:I:184:ILE:CG2	16:I:231:LEU:HD22	2.25	0.65
17:J:62:LEU:CD1	18:K:89:ILE:HD12	2.25	0.65
20:M:379:LEU:HG	20:M:412:HIS:HE1	1.58	0.65
21:N:501:MET:HB2	21:N:521:LEU:CD2	2.25	0.65
22:O:106:PHE:CD2	22:O:109:LEU:HB3	2.30	0.65
22:O:362:GLN:HE21	28:U:230:GLN:HG2	1.62	0.65
25:R:78:ASP:OD2	25:R:94:PHE:CE1	2.48	0.65
25:R:161:ALA:O	25:R:162:ILE:HG23	1.96	0.65
6:6:147:PHE:HE2	6:6:164:LYS:N	1.87	0.65
15:H:96:PRO:HG2	16:I:113:ILE:HD11	1.78	0.65
16:I:253:ILE:HG23	16:I:253:ILE:O	1.95	0.65
21:N:768:ILE:O	21:N:768:ILE:HG22	1.96	0.65
25:R:301:TYR:CE2	25:R:359:VAL:HG21	2.27	0.65
33:Z:112:LYS:HE3	33:Z:140:LEU:O	1.96	0.65
33:Z:392:LEU:O	33:Z:394:TYR:CD2	2.50	0.65
3:3:65:TYR:CD2	3:3:69:GLU:OE2	2.50	0.65
11:D:37:LYS:HE2	11:D:145:PRO:HG2	1.78	0.65
13:F:51:ARG:NH1	20:M:430:VAL:HG21	2.12	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:I:132:ILE:HD12	16:I:138:LYS:NZ	2.11	0.65
20:M:167:VAL:HG21	20:M:265:ASP:OD2	1.96	0.65
24:Q:50:ARG:HG3	24:Q:54:GLN:NE2	2.06	0.65
24:Q:162:LEU:O	24:Q:166:LYS:HG3	1.96	0.65
33:Z:361:HIS:CD2	33:Z:961:GLU:HG2	2.32	0.65
33:Z:506:LEU:HD11	33:Z:542:ILE:CD1	2.27	0.65
5:5:20:ALA:HB3	5:5:28:SER:OG	1.96	0.65
5:5:76:VAL:HG12	5:5:113:TYR:HD2	1.61	0.65
12:E:154:GLN:CD	12:E:166:ARG:HH21	2.05	0.65
15:H:382:LEU:HD23	15:H:385:ARG:HH21	1.53	0.65
19:L:114:GLU:O	19:L:137:ARG:CZ	2.43	0.65
22:O:30:GLU:HA	22:O:40:GLN:CD	2.21	0.65
22:O:33:TYR:CE2	22:O:40:GLN:HB2	2.18	0.65
28:U:20:ASP:OD2	29:V:100:ARG:NH2	2.29	0.65
31:X:14:VAL:HG23	31:X:50:TRP:CG	2.31	0.65
31:X:30:GLN:HB3	31:X:54:GLU:HB3	1.79	0.65
33:Z:478:VAL:HG21	33:Z:493:LEU:HD22	1.78	0.65
33:Z:496:ALA:HB3	33:Z:497:PHE:CD1	2.31	0.65
33:Z:815:MET:HE1	33:Z:833:GLN:HG2	1.78	0.65
2:2:36:ARG:NH1	9:B:224:TYR:CE2	2.64	0.65
5:5:179:HIS:CB	5:5:188:HIS:NE2	2.60	0.65
12:E:165:TYR:CB	12:E:167:TYR:HH	2.10	0.65
18:K:238:ASN:HB2	18:K:241:GLU:HG2	1.79	0.65
20:M:78:LEU:HG	20:M:150:LYS:HG2	1.79	0.65
24:Q:297:ASP:HB2	24:Q:321:TYR:CE1	2.31	0.65
24:Q:306:TYR:CD1	24:Q:342:LEU:HD22	2.31	0.65
25:R:116:LYS:NZ	25:R:136:ASN:ND2	2.44	0.65
30:W:104:LYS:O	30:W:105:VAL:HB	1.97	0.65
2:2:8:PHE:CD1	2:2:10:ASN:N	2.58	0.65
4:4:66:TYR:CE2	10:C:102:TYR:OH	2.49	0.65
5:5:104:TYR:CZ	5:5:110:PRO:HD3	2.31	0.65
8:A:163:TYR:O	8:A:164:VAL:CG2	2.45	0.65
11:D:118:GLN:HG2	12:E:83:ALA:HB1	1.79	0.65
17:J:183:LYS:CE	17:J:286:LYS:HB3	2.19	0.65
18:K:60:LEU:HD11	21:N:598:ASP:CB	2.25	0.65
18:K:93:PRO:HG2	18:K:141:ARG:CZ	2.26	0.65
19:L:294:GLY:C	19:L:299:ARG:HH12	2.05	0.65
21:N:302:PHE:CZ	21:N:712:ASN:HB3	2.32	0.65
24:Q:75:ARG:HD2	24:Q:113:ASP:O	1.96	0.65
25:R:421:VAL:HG12	25:R:422:ARG:H	0.56	0.65
26:S:472:HIS:CB	28:U:288:PHE:CZ	2.72	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:829:GLN:HG2	33:Z:832:ARG:HH22	1.61	0.65
8:A:16:ILE:HD11	8:A:18:ILE:HD13	1.78	0.65
8:A:24:ARG:HH11	18:K:424:PHE:CA	2.10	0.65
9:B:6:SER:CB	11:D:4:TYR:HD2	2.10	0.65
9:B:7:PHE:HE2	10:C:7:ASP:HB3	1.61	0.65
17:J:250:ILE:HG21	17:J:292:MET:HE1	1.78	0.65
19:L:107:GLU:O	19:L:119:VAL:HG13	1.97	0.65
19:L:277:ILE:CG2	19:L:324:ILE:HD12	2.27	0.65
22:O:12:SER:CB	22:O:19:ASP:OD2	2.44	0.65
23:P:181:LEU:CB	23:P:223:LEU:HD11	2.26	0.65
24:Q:139:ILE:HD11	24:Q:165:PHE:HE2	1.62	0.65
24:Q:146:TYR:HE1	24:Q:184:VAL:HA	1.62	0.65
25:R:241:ILE:CG2	25:R:242:GLU:HG2	2.25	0.65
26:S:235:ASN:OD1	26:S:272:TYR:CD1	2.47	0.65
27:T:86:LYS:HE2	27:T:128:TYR:CD1	2.32	0.65
33:Z:202:ARG:HD3	33:Z:205:LEU:HD12	1.78	0.65
2:2:222:ASP:OD1	3:3:36:HIS:NE2	2.30	0.65
6:6:65:TRP:HH2	13:F:90:GLN:CA	2.10	0.65
7:7:13:ILE:HG12	7:7:191:ILE:HG12	1.77	0.65
14:G:89:ASN:ND2	14:G:90:ARG:NH2	2.44	0.65
16:I:227:THR:HG21	17:J:306:ARG:CZ	2.27	0.65
17:J:99:ALA:HB3	17:J:102:ILE:CD1	2.26	0.65
19:L:290:ARG:HE	19:L:293:GLU:HG2	1.62	0.65
21:N:63:LEU:HB2	21:N:88:ARG:HD2	1.79	0.65
21:N:761:ILE:CG2	21:N:905:LEU:N	2.59	0.65
25:R:63:TYR:HD2	25:R:94:PHE:CE2	2.14	0.65
25:R:335:ARG:NH2	25:R:371:PHE:CB	2.60	0.65
25:R:335:ARG:NH2	25:R:371:PHE:CG	2.63	0.65
26:S:327:ILE:O	26:S:327:ILE:HG13	1.96	0.65
27:T:26:LEU:O	27:T:29:PRO:HD2	1.96	0.65
4:4:152:THR:HG22	4:4:153:THR:N	2.10	0.64
8:A:135:ARG:CD	14:G:124:LEU:HD23	2.24	0.64
15:H:178:ARG:HG2	15:H:284:VAL:O	1.97	0.64
15:H:246:ILE:HD11	15:H:375:VAL:HG21	1.77	0.64
16:I:398:GLU:OE2	16:I:422:ARG:HD2	1.96	0.64
17:J:141:LYS:HG2	17:J:209:LYS:HG3	1.79	0.64
18:K:243:VAL:HB	19:L:303:ARG:NH1	2.12	0.64
22:O:95:SER:CA	22:O:98:TYR:CE2	2.79	0.64
25:R:263:ARG:NH1	25:R:340:GLN:CG	2.53	0.64
27:T:181:LEU:HD23	27:T:181:LEU:C	2.22	0.64
31:X:27:ILE:HG22	31:X:61:LEU:CD2	2.19	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:4:45:PHE:CD2	4:4:101:VAL:HG12	2.33	0.64
5:5:150:VAL:HG11	5:5:179:HIS:HE1	1.61	0.64
14:G:31:GLU:CD	14:G:168:ARG:HH12	2.05	0.64
14:G:66:ILE:HG12	14:G:76:VAL:HB	1.79	0.64
19:L:132:ARG:NH1	19:L:156:MET:HE1	2.11	0.64
19:L:140:LEU:CD1	19:L:155:ILE:HD13	2.26	0.64
20:M:220:MET:HB3	20:M:349:PHE:CE2	2.31	0.64
21:N:50:TYR:OH	21:N:84:ALA:HB3	1.97	0.64
22:O:116:ASN:CG	22:O:127:LEU:HB2	2.23	0.64
23:P:427:GLU:CA	29:V:230:TYR:HE1	1.86	0.64
26:S:472:HIS:NE2	27:T:271:GLU:HA	2.11	0.64
28:U:24:ARG:CZ	29:V:100:ARG:NH1	2.60	0.64
33:Z:269:TYR:CG	33:Z:293:MET:HE1	2.33	0.64
33:Z:422:ILE:HG22	33:Z:426:TYR:CE2	2.32	0.64
12:E:128:SER:HB3	13:F:119:ASN:HD21	1.63	0.64
18:K:423:LYS:O	18:K:428:LYS:NZ	2.29	0.64
19:L:254:LYS:HG3	20:M:256:ILE:CG1	2.28	0.64
26:S:244:ASN:ND2	27:T:92:ASN:HB2	2.13	0.64
29:V:145:GLN:HB3	29:V:150:LYS:CE	2.26	0.64
30:W:38:GLN:HE22	30:W:41:ARG:CZ	2.09	0.64
33:Z:322:GLU:HG2	33:Z:323:TYR:HD1	1.63	0.64
3:3:54:LEU:O	3:3:58:PHE:HD2	1.79	0.64
6:6:96:TYR:CZ	6:6:98:VAL:HG22	2.33	0.64
6:6:147:PHE:CD2	6:6:163:LEU:CA	2.74	0.64
7:7:6:MET:SD	7:7:147:LEU:HD22	2.37	0.64
9:B:32:VAL:HG21	9:B:63:LYS:HE2	1.80	0.64
9:B:92:VAL:HG11	9:B:113:GLU:HG2	1.78	0.64
13:F:98:VAL:HG11	13:F:99:PHE:CE1	2.32	0.64
16:I:310:LEU:CD1	16:I:338:LEU:CA	2.75	0.64
18:K:356:ILE:HG21	18:K:387:MET:HB3	1.79	0.64
19:L:336:ALA:HB3	19:L:342:ARG:HH12	1.60	0.64
21:N:113:ALA:O	21:N:161:TYR:HD2	1.77	0.64
28:U:271:ASP:HA	28:U:274:MET:CE	2.27	0.64
33:Z:991:GLU:HG3	33:Z:993:GLU:O	1.97	0.64
8:A:36:ASN:O	8:A:37:GLN:CG	2.43	0.64
11:D:118:GLN:HG3	11:D:154:GLY:HA3	1.80	0.64
13:F:50:LYS:NZ	13:F:61:LYS:HA	2.11	0.64
18:K:273:GLU:CB	19:L:306:MET:HE2	2.27	0.64
18:K:424:PHE:O	18:K:427:TYR:CE2	2.50	0.64
19:L:402:ALA:HB2	19:L:414:ASP:OD2	1.97	0.64
20:M:55:ASN:O	20:M:59:LEU:HG	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:270:LEU:HD11	23:P:329:PHE:CE1	2.31	0.64
18:K:211:LEU:HB3	18:K:219:LYS:HE3	1.78	0.64
20:M:74:GLN:N	20:M:77:TYR:OH	2.31	0.64
21:N:761:ILE:HG21	21:N:904:VAL:N	2.11	0.64
24:Q:250:THR:CG2	24:Q:251:THR:H	2.10	0.64
25:R:209:ARG:HH12	25:R:243:LEU:HB2	1.62	0.64
25:R:221:VAL:O	25:R:222:ARG:HB2	1.97	0.64
2:2:19:ARG:NH2	2:2:26:VAL:HG22	2.12	0.64
6:6:20:ASN:HD22	6:6:31:GLU:HB3	1.61	0.64
7:7:57:ARG:HD2	14:G:100:LYS:CG	2.27	0.64
18:K:347:ARG:CD	24:Q:238:TYR:HE1	2.05	0.64
18:K:351:LEU:HD22	24:Q:233:LYS:HZ2	1.63	0.64
19:L:371:THR:CG2	19:L:409:HIS:CD2	2.80	0.64
21:N:190:LEU:HD11	21:N:228:VAL:CG2	2.28	0.64
22:O:80:LYS:HB3	22:O:81:TYR:HD1	1.57	0.64
31:X:76:VAL:HG21	31:X:90:VAL:CG2	2.24	0.64
4:4:142:LEU:HD11	4:4:166:GLU:HG3	1.79	0.64
7:7:17:ASP:O	7:7:33:ARG:CD	2.43	0.64
9:B:139:HIS:NE2	9:B:145:PHE:CZ	2.65	0.64
15:H:107:LYS:HD3	29:V:81:GLU:CD	2.23	0.64
21:N:669:GLU:O	21:N:669:GLU:HG3	1.97	0.64
21:N:773:MET:HE3	21:N:884:PHE:HD1	1.61	0.64
28:U:71:ASN:HD22	30:W:64:THR:CG2	2.09	0.64
33:Z:286:VAL:HA	33:Z:317:GLN:NE2	2.13	0.64
1:1:75:THR:HB	1:1:111:TYR:CE1	2.32	0.64
4:4:36:GLN:HG3	4:4:188:ILE:CD1	2.28	0.64
6:6:30:TYR:HE2	7:7:153:ARG:HA	1.62	0.64
11:D:82:SER:OG	11:D:131:VAL:HG11	1.98	0.64
17:J:369:ALA:CB	17:J:377:VAL:HG22	2.28	0.64
19:L:152:THR:HG22	19:L:154:THR:HG23	1.79	0.64
21:N:190:LEU:HD11	21:N:228:VAL:HG23	1.80	0.64
22:O:117:ASN:OD1	22:O:118:GLY:N	2.27	0.64
22:O:362:GLN:OE1	28:U:226:LEU:HB3	1.98	0.64
24:Q:20:TYR:CZ	24:Q:68:MET:HG3	2.32	0.64
24:Q:306:TYR:CD1	24:Q:342:LEU:CD2	2.80	0.64
26:S:153:GLU:CB	26:S:191:HIS:HE1	2.03	0.64
26:S:171:TYR:CZ	26:S:176:LEU:CD1	2.81	0.64
27:T:77:SER:O	27:T:81:TYR:HD1	1.81	0.64
33:Z:72:LYS:HE2	33:Z:117:ASP:HB3	1.79	0.64
33:Z:120:SER:HB3	33:Z:153:TYR:CZ	2.26	0.64
33:Z:151:HIS:HE1	33:Z:152:GLU:CB	2.08	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:341:TYR:HA	33:Z:345:GLU:OE1	1.96	0.64
33:Z:495:ILE:HD11	33:Z:903:MET:HA	1.80	0.64
33:Z:506:LEU:CD1	33:Z:542:ILE:HD13	2.28	0.64
14:G:94:GLU:OE1	14:G:114:ARG:HD3	1.98	0.64
15:H:285:GLY:O	15:H:287:GLY:N	2.31	0.64
15:H:298:ALA:HB2	15:H:306:ILE:HD11	1.80	0.64
16:I:358:LYS:HD3	16:I:384:LYS:CD	2.27	0.64
16:I:398:GLU:C	17:J:312:ARG:NH1	2.56	0.64
19:L:132:ARG:HH11	19:L:156:MET:CE	1.89	0.64
20:M:53:HIS:NE2	30:W:69:PHE:HD2	1.96	0.64
21:N:903:VAL:O	21:N:904:VAL:CB	2.45	0.64
22:O:12:SER:HB2	22:O:19:ASP:OD2	1.98	0.64
23:P:299:LEU:CD1	23:P:311:TRP:HZ3	2.08	0.64
28:U:135:ASP:HB3	28:U:137:TYR:CE1	2.33	0.64
30:W:147:ILE:CG2	30:W:148:GLU:N	2.57	0.64
31:X:30:GLN:O	31:X:50:TRP:CZ2	2.49	0.64
31:X:46:TRP:O	31:X:68:LEU:CB	2.46	0.64
31:X:85:ARG:HD2	31:X:85:ARG:C	2.23	0.64
13:F:60:GLN:HG3	13:F:62:LYS:HE2	1.80	0.63
17:J:174:PHE:HD2	17:J:179:ILE:HD11	1.60	0.63
21:N:498:ILE:HG23	21:N:535:LEU:HD13	1.80	0.63
22:O:330:ARG:O	22:O:333:SER:HB2	1.97	0.63
25:R:151:GLU:HG2	25:R:190:LYS:HZ2	1.61	0.63
3:3:54:LEU:HD11	3:3:94:TYR:CZ	2.24	0.63
5:5:7:ARG:NH2	5:5:125:ASP:CG	2.53	0.63
5:5:80:SER:HB3	5:5:121:ARG:CD	2.28	0.63
8:A:24:ARG:NH2	18:K:424:PHE:CE1	2.66	0.63
15:H:210:ASP:OD2	15:H:258:LEU:HD11	1.99	0.63
17:J:26:LYS:HG2	21:N:107:GLU:OE1	1.96	0.63
17:J:273:LEU:HD22	17:J:309:ARG:CD	2.09	0.63
18:K:390:ALA:CB	18:K:407:LEU:HD23	2.28	0.63
23:P:76:ASN:OD1	23:P:118:VAL:HA	1.98	0.63
24:Q:12:ARG:NE	24:Q:60:GLU:OE2	2.29	0.63
27:T:216:GLU:O	27:T:220:PHE:CD2	2.52	0.63
28:U:293:GLU:HG2	29:V:277:LYS:NZ	2.13	0.63
30:W:123:ASP:HB3	30:W:127:ARG:NH1	2.11	0.63
33:Z:307:HIS:CD2	33:Z:345:GLU:CD	2.73	0.63
33:Z:394:TYR:CD1	33:Z:859:LYS:HG3	2.33	0.63
33:Z:758:LEU:HD22	33:Z:787:ASP:CG	2.23	0.63
2:2:7:LYS:O	2:2:146:LEU:CD2	2.46	0.63
9:B:118:MET:HE1	9:B:152:PRO:HA	1.78	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:D:120:TYR:CD2	11:D:126:VAL:HG11	2.34	0.63
22:O:33:TYR:CE1	22:O:40:GLN:CD	2.75	0.63
22:O:48:PHE:CZ	22:O:77:SER:HB3	2.33	0.63
23:P:329:PHE:HD2	23:P:337:HIS:NE2	1.95	0.63
25:R:47:ALA:HB2	25:R:89:ASN:ND2	2.13	0.63
25:R:334:ARG:CZ	25:R:338:TYR:HE2	2.11	0.63
25:R:348:LEU:HD11	25:R:353:MET:HE3	1.80	0.63
26:S:461:PHE:CE2	28:U:274:MET:CA	2.81	0.63
33:Z:474:LEU:HD21	33:Z:493:LEU:HD12	1.80	0.63
33:Z:550:PHE:CD1	33:Z:587:THR:HG23	2.34	0.63
5:5:124:GLY:CA	5:5:127:PHE:CZ	2.82	0.63
7:7:121:TYR:CD2	7:7:129:TYR:CE2	2.87	0.63
13:F:113:CYS:HB2	14:G:85:ARG:HD2	1.80	0.63
14:G:64:VAL:HG23	14:G:67:GLN:HE22	1.60	0.63
15:H:285:GLY:O	15:H:288:ALA:N	2.31	0.63
19:L:371:THR:HG23	19:L:409:HIS:CD2	2.29	0.63
20:M:166:ARG:HH11	20:M:172:VAL:HG21	1.63	0.63
21:N:294:PRO:CG	21:N:921:ARG:HH21	2.10	0.63
21:N:514:THR:HG21	21:N:546:LEU:HB2	1.78	0.63
22:O:92:PHE:CE1	22:O:136:THR:CB	2.80	0.63
23:P:211:PRO:HB2	23:P:213:TYR:HE1	1.64	0.63
25:R:33:LEU:HD23	25:R:33:LEU:C	2.23	0.63
25:R:80:GLU:CD	25:R:99:TYR:HH	2.06	0.63
26:S:286:TYR:CZ	26:S:323:LEU:HD13	2.33	0.63
33:Z:202:ARG:HA	33:Z:205:LEU:HD12	1.80	0.63
33:Z:571:GLY:N	33:Z:574:TYR:CE2	2.67	0.63
33:Z:824:ASN:CG	33:Z:825:ALA:H	2.05	0.63
33:Z:970:TYR:CE1	33:Z:985:LYS:CE	2.62	0.63
1:1:55:ILE:HD11	1:1:93:LEU:HD13	1.81	0.63
1:1:59:VAL:HG11	1:1:82:PHE:CE2	2.31	0.63
7:7:65:GLU:HA	7:7:68:TYR:CD2	2.33	0.63
10:C:12:ILE:HB	11:D:19:GLN:NE2	2.13	0.63
11:D:86:ILE:HG22	11:D:90:ARG:HH12	1.60	0.63
18:K:244:HIS:CE1	18:K:251:PRO:CD	2.63	0.63
20:M:334:ASP:OD1	20:M:335:PRO:HD2	1.99	0.63
21:N:238:ALA:CB	21:N:273:LEU:CD2	2.76	0.63
21:N:494:LYS:HG3	21:N:497:ALA:H	1.63	0.63
22:O:121:ASP:O	22:O:122:HIS:CB	2.47	0.63
24:Q:311:LEU:CD1	24:Q:343:LEU:HD13	2.28	0.63
24:Q:429:LYS:HE2	28:U:296:ILE:HG21	1.78	0.63
25:R:335:ARG:CZ	25:R:371:PHE:HB3	2.22	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:416:GLU:OE2	26:S:417:GLN:NE2	2.21	0.63
26:S:436:ILE:CG2	26:S:438:HIS:NE2	2.59	0.63
31:X:23:LEU:O	31:X:24:CYS:HB3	1.98	0.63
3:3:134:SER:O	3:3:138:PHE:CD2	2.51	0.63
11:D:171:VAL:HG13	11:D:198:SER:OG	1.98	0.63
15:H:261:ARG:HH22	15:H:273:ARG:HH11	1.45	0.63
24:Q:75:ARG:HA	24:Q:117:VAL:CG2	2.27	0.63
24:Q:227:CYS:HB3	24:Q:334:HIS:ND1	2.10	0.63
26:S:472:HIS:CB	28:U:288:PHE:CE1	2.82	0.63
28:U:106:ILE:CG2	28:U:110:PHE:CE2	2.80	0.63
1:1:75:THR:CG2	1:1:111:TYR:CE1	2.81	0.63
5:5:76:VAL:HG12	5:5:113:TYR:HE2	1.62	0.63
12:E:17:PRO:HA	13:F:24:TYR:CE1	2.34	0.63
12:E:38:ILE:HD12	12:E:204:LEU:HD23	1.79	0.63
13:F:33:SER:CB	20:M:433:TYR:CD2	2.74	0.63
14:G:108:ILE:HG21	14:G:148:TYR:HD2	1.61	0.63
16:I:310:LEU:HD11	16:I:337:ALA:C	2.22	0.63
18:K:93:PRO:HG2	18:K:141:ARG:NH1	2.13	0.63
21:N:778:LYS:CE	21:N:780:ASP:OD2	2.46	0.63
22:O:296:LEU:O	22:O:300:VAL:HG23	1.99	0.63
25:R:62:TYR:HB3	25:R:180:PHE:HZ	1.63	0.63
28:U:21:HIS:NE2	28:U:53:ALA:HB2	2.14	0.63
30:W:150:ASN:O	30:W:151:THR:CB	2.46	0.63
1:1:61:TYR:HE1	8:A:103:GLU:N	1.96	0.63
1:1:61:TYR:CZ	8:A:103:GLU:HG2	2.34	0.63
3:3:59:ARG:NH2	10:C:100:LYS:HA	2.14	0.63
4:4:37:LEU:CD1	4:4:60:GLN:HA	2.28	0.63
8:A:128:TYR:HE1	8:A:131:ARG:HH11	1.44	0.63
12:E:20:ARG:NH2	12:E:25:GLU:OE2	2.31	0.63
13:F:51:ARG:NH1	20:M:430:VAL:HG11	2.10	0.63
15:H:244:LYS:HB3	15:H:346:ARG:HD2	1.81	0.63
21:N:255:ALA:HB1	21:N:259:PHE:CE2	2.34	0.63
21:N:619:CYS:SG	21:N:651:PHE:HD2	2.21	0.63
21:N:627:ILE:HG12	21:N:733:LEU:HD13	1.80	0.63
24:Q:311:LEU:CD2	24:Q:343:LEU:CD1	2.77	0.63
25:R:167:LYS:HE3	25:R:195:ASN:HA	1.81	0.63
25:R:354:ALA:HB1	25:R:361:VAL:HA	1.80	0.63
30:W:125:LEU:HD22	30:W:153:LEU:HB3	1.79	0.63
33:Z:196:SER:OG	33:Z:201:LEU:HD21	1.97	0.63
3:3:1:GLY:HA2	3:3:17:ASP:OD2	1.99	0.63
8:A:133:TYR:OH	9:B:5:TYR:N	2.30	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:20:ARG:NE	12:E:25:GLU:CG	2.62	0.63
21:N:217:MET:SD	21:N:248:GLU:HG3	2.39	0.63
22:O:69:PHE:HE2	22:O:74:ASN:O	1.74	0.63
23:P:181:LEU:CG	23:P:223:LEU:HD11	2.29	0.63
23:P:298:SER:O	23:P:302:LEU:HG	1.98	0.63
24:Q:61:LEU:HD12	24:Q:65:TYR:CE1	2.31	0.63
26:S:163:VAL:CG2	26:S:184:TRP:CE2	2.82	0.63
28:U:271:ASP:HA	28:U:274:MET:HE2	1.81	0.63
2:2:190:TYR:HD2	2:2:191:LEU:HG	1.64	0.62
3:3:42:LEU:HD22	3:3:78:PHE:HZ	1.64	0.62
8:A:83:VAL:HG22	8:A:141:LEU:HD22	1.81	0.62
9:B:132:VAL:O	9:B:152:PRO:HG3	1.99	0.62
9:B:139:HIS:CE1	9:B:145:PHE:CD2	2.87	0.62
17:J:210:PHE:CE2	17:J:212:ARG:HD3	2.28	0.62
18:K:240:SER:O	18:K:243:VAL:CG2	2.47	0.62
20:M:193:LEU:CD2	20:M:220:MET:HE2	2.27	0.62
22:O:26:PHE:CE1	22:O:43:GLU:CD	2.77	0.62
23:P:435:LYS:HG3	28:U:154:PHE:CE2	2.33	0.62
24:Q:126:LYS:CG	24:Q:134:LYS:HZ2	1.90	0.62
29:V:110:SER:O	29:V:111:HIS:CG	2.52	0.62
31:X:85:ARG:HD2	31:X:85:ARG:O	1.99	0.62
6:6:71:ASN:HD21	12:E:110:GLU:HB3	1.63	0.62
7:7:56:GLU:O	7:7:60:LYS:HG3	1.99	0.62
7:7:187:PHE:HE1	7:7:205:GLN:C	2.07	0.62
14:G:108:ILE:HG21	14:G:148:TYR:HE2	1.43	0.62
15:H:210:ASP:HB2	15:H:258:LEU:HD13	1.79	0.62
18:K:389:GLU:HG2	18:K:393:ARG:HE	1.64	0.62
22:O:66:VAL:CG1	22:O:106:PHE:HE1	1.98	0.62
26:S:214:MET:O	26:S:218:LEU:HG	1.99	0.62
26:S:472:HIS:CG	28:U:288:PHE:CE1	2.85	0.62
5:5:126:ILE:HD11	5:5:144:TYR:CZ	2.35	0.62
19:L:410:ILE:HG13	20:M:212:ILE:HD11	1.81	0.62
21:N:11:ALA:O	21:N:15:GLU:HG3	2.00	0.62
21:N:509:GLN:O	21:N:510:HIS:CG	2.51	0.62
22:O:33:TYR:CD1	22:O:40:GLN:CG	2.78	0.62
25:R:137:LEU:HD11	25:R:141:TYR:OH	2.00	0.62
25:R:166:ALA:O	25:R:170:VAL:HG23	1.98	0.62
30:W:105:VAL:O	30:W:105:VAL:HG12	1.97	0.62
33:Z:82:MET:HG3	33:Z:85:VAL:HA	1.82	0.62
33:Z:394:TYR:CD1	33:Z:859:LYS:CG	2.82	0.62
33:Z:422:ILE:HD11	33:Z:439:TYR:CE2	2.33	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:2:19:ARG:HH21	2:2:26:VAL:HG22	1.64	0.62
8:A:36:ASN:ND2	8:A:173:PRO:HD3	2.13	0.62
11:D:97:ARG:NH1	11:D:103:PRO:HA	2.14	0.62
11:D:188:VAL:HG21	11:D:216:LYS:HE2	1.80	0.62
12:E:123:PHE:CD1	12:E:136:ARG:N	2.66	0.62
15:H:107:LYS:HD3	29:V:81:GLU:OE2	1.99	0.62
18:K:188:VAL:O	18:K:313:LYS:NZ	2.32	0.62
22:O:233:LEU:HD23	22:O:251:LEU:HD21	1.80	0.62
23:P:72:TRP:CD2	23:P:104:LEU:CD2	2.82	0.62
24:Q:429:LYS:HG2	28:U:296:ILE:HG21	1.81	0.62
26:S:221:ALA:HB1	26:S:230:LYS:HD2	1.80	0.62
27:T:240:LYS:O	27:T:240:LYS:HG3	1.99	0.62
31:X:50:TRP:HH2	31:X:52:PRO:HB3	1.61	0.62
2:2:171:SER:OG	2:2:172:ASN:N	2.30	0.62
6:6:58:ARG:NH1	6:6:91:LYS:HZ3	1.96	0.62
6:6:176:ARG:CZ	6:6:208:TYR:HB3	2.29	0.62
7:7:93:TYR:OH	7:7:128:THR:HG21	1.99	0.62
16:I:185:GLY:HA2	16:I:364:ILE:HD12	1.81	0.62
17:J:98:VAL:HG12	17:J:122:LEU:HD12	1.81	0.62
18:K:99:PHE:CZ	18:K:102:PRO:CD	2.83	0.62
18:K:183:GLU:CG	18:K:338:ILE:HG12	2.28	0.62
18:K:320:ARG:NH1	19:L:293:GLU:O	2.33	0.62
19:L:192:GLU:HB3	19:L:345:ARG:NH2	2.15	0.62
22:O:250:TRP:HZ2	22:O:271:LYS:HB2	1.65	0.62
22:O:254:LEU:CD2	22:O:266:PHE:CE2	2.82	0.62
23:P:127:GLU:C	23:P:136:ARG:NH1	2.58	0.62
23:P:371:LEU:HB3	23:P:375:GLN:CD	2.24	0.62
33:Z:407:VAL:CG1	33:Z:439:TYR:OH	2.47	0.62
33:Z:789:GLN:HE22	33:Z:791:LYS:HB2	1.64	0.62
3:3:111:PHE:HA	3:3:125:LYS:HZ2	1.65	0.62
7:7:187:PHE:CZ	7:7:204:LEU:CB	2.82	0.62
17:J:376:HIS:HE2	25:R:204:TRP:CG	2.18	0.62
18:K:244:HIS:HE1	18:K:251:PRO:CD	2.02	0.62
18:K:277:ILE:HD12	18:K:295:ILE:HG22	1.79	0.62
22:O:199:LEU:HD23	22:O:199:LEU:C	2.24	0.62
23:P:307:GLU:HG3	23:P:310:ARG:NH1	2.14	0.62
24:Q:34:ASP:O	24:Q:35:SER:HB2	1.98	0.62
27:T:199:PHE:HD2	27:T:234:TYR:CD1	2.17	0.62
31:X:28:PRO:O	31:X:29:VAL:CG2	2.48	0.62
31:X:53:THR:O	31:X:54:GLU:CB	2.47	0.62
18:K:74:HIS:HE1	18:K:77:ARG:NH2	1.97	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:358:LEU:HD12	19:L:380:VAL:HG21	1.81	0.62
22:O:109:LEU:HG	22:O:125:GLY:HA3	1.81	0.62
22:O:286:PHE:O	22:O:290:LYS:HG3	1.98	0.62
24:Q:253:ASN:OD1	24:Q:257:LYS:HD3	1.99	0.62
27:T:89:TYR:HD1	27:T:102:LYS:HE2	1.65	0.62
33:Z:531:ALA:HB1	33:Z:572:ILE:HB	1.82	0.62
1:1:66:TYR:HE2	1:1:73:PRO:CA	2.12	0.62
3:3:54:LEU:O	3:3:58:PHE:CD2	2.53	0.62
8:A:164:VAL:HG12	8:A:165:GLY:N	2.15	0.62
10:C:208:TYR:HE1	10:C:232:PRO:CB	2.12	0.62
17:J:258:VAL:HA	18:K:280:LYS:HD2	1.80	0.62
17:J:378:THR:O	17:J:382:PHE:CD2	2.53	0.62
20:M:143:ASN:OD1	20:M:164:ASP:HB3	2.00	0.62
21:N:410:LEU:HA	21:N:452:LEU:CD2	2.30	0.62
22:O:359:SER:HB3	28:U:223:HIS:CD2	2.34	0.62
23:P:436:GLU:OE1	28:U:206:ASP:HB3	1.99	0.62
25:R:353:MET:HA	25:R:357:PHE:CG	2.35	0.62
26:S:274:PHE:HE2	26:S:278:LYS:HZ1	1.47	0.62
26:S:457:PRO:HG2	28:U:274:MET:SD	2.40	0.62
28:U:121:LEU:HD11	28:U:134:THR:CG2	2.30	0.62
30:W:162:ASN:HD21	30:W:165:GLN:HG2	1.64	0.62
31:X:78:ILE:CG2	31:X:114:LEU:HB2	2.30	0.62
31:X:111:LEU:HD23	31:X:114:LEU:HD21	1.81	0.62
5:5:55:TRP:O	5:5:59:LEU:HG	2.00	0.62
5:5:104:TYR:CD1	5:5:110:PRO:N	2.67	0.62
7:7:200:PHE:CE2	7:7:202:LYS:CE	2.82	0.62
20:M:221:TYR:CZ	20:M:348:GLU:CA	2.82	0.62
22:O:122:HIS:CE1	22:O:163:ILE:N	2.54	0.62
25:R:113:LEU:HD22	25:R:137:LEU:HD13	1.80	0.62
31:X:96:ARG:HB3	31:X:98:PHE:HE1	1.65	0.62
33:Z:392:LEU:O	33:Z:394:TYR:CE2	2.52	0.62
33:Z:888:LEU:HD12	33:Z:901:PHE:CE1	2.34	0.62
8:A:162:TYR:CZ	18:K:428:LYS:HB3	2.35	0.62
8:A:174:LYS:CD	8:A:214:LEU:HD22	2.30	0.62
13:F:48:ALA:HB3	13:F:63:ILE:HD11	1.81	0.62
15:H:407:ILE:CD1	15:H:443:PHE:CB	2.78	0.62
15:H:407:ILE:HD11	15:H:443:PHE:HB2	1.80	0.62
16:I:250:SER:O	16:I:253:ILE:CG2	2.38	0.62
22:O:177:GLN:O	22:O:181:PHE:CD2	2.53	0.62
25:R:179:PHE:HE2	25:R:213:TYR:CZ	2.17	0.62
31:X:17:TYR:C	31:X:98:PHE:CG	2.77	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:28:PRO:HG3	31:X:57:VAL:CG1	2.30	0.62
33:Z:85:VAL:O	33:Z:85:VAL:HG12	1.99	0.62
10:C:36:ILE:HD12	10:C:197:LEU:CD2	2.30	0.61
12:E:153:TYR:OH	12:E:224:LYS:N	2.33	0.61
13:F:6:TYR:HE1	13:F:13:PHE:O	1.82	0.61
14:G:203:HIS:CD2	14:G:211:PHE:HD1	2.16	0.61
17:J:321:VAL:HG22	17:J:324:ARG:HH22	1.65	0.61
21:N:519:VAL:HG11	21:N:735:MET:HE1	1.81	0.61
21:N:654:GLN:NE2	21:N:697:PHE:CD2	2.68	0.61
22:O:82:LEU:O	22:O:86:LEU:HG	2.00	0.61
27:T:161:TRP:CE3	27:T:162:ASP:OD1	2.53	0.61
27:T:241:GLU:O	27:T:242:LYS:HG3	1.99	0.61
30:W:46:GLU:O	30:W:46:GLU:HG2	2.00	0.61
8:A:63:LEU:HD11	14:G:172:LYS:CD	2.30	0.61
8:A:220:LYS:HD3	8:A:242:GLU:H	1.60	0.61
11:D:151:GLU:HB3	11:D:152:PRO:HD2	1.82	0.61
17:J:135:SER:O	17:J:136:LEU:HB2	1.99	0.61
19:L:256:ILE:HG23	19:L:256:ILE:O	1.98	0.61
20:M:283:LEU:HD12	20:M:286:ILE:HD11	1.81	0.61
21:N:888:ASP:OD1	21:N:890:PHE:N	2.28	0.61
22:O:69:PHE:HZ	22:O:77:SER:CB	2.13	0.61
22:O:95:SER:C	22:O:98:TYR:CE2	2.78	0.61
24:Q:232:TYR:CZ	24:Q:271:MET:SD	2.92	0.61
26:S:379:LEU:HB3	26:S:383:LEU:HD12	1.83	0.61
28:U:66:TRP:HZ3	28:U:68:LEU:N	1.98	0.61
29:V:197:TYR:HE1	29:V:199:LEU:CD2	1.96	0.61
31:X:76:VAL:CG2	31:X:90:VAL:CG2	2.77	0.61
33:Z:571:GLY:N	33:Z:574:TYR:HE2	1.97	0.61
4:4:19:ALA:HB3	4:4:176:LYS:HB2	1.83	0.61
11:D:187:THR:HG22	11:D:189:GLU:N	2.13	0.61
17:J:191:PRO:HG2	18:K:330:ARG:NH2	2.15	0.61
19:L:221:TYR:CE1	19:L:348:GLU:HA	2.34	0.61
19:L:290:ARG:CZ	19:L:299:ARG:NH2	2.60	0.61
19:L:290:ARG:HH12	19:L:299:ARG:CZ	2.13	0.61
21:N:711:ARG:NH1	21:N:785:PRO:O	2.34	0.61
22:O:338:LYS:HD2	22:O:353:VAL:HB	1.81	0.61
24:Q:125:ALA:HB2	24:Q:130:ARG:NH2	2.15	0.61
25:R:373:PRO:O	25:R:375:LYS:HG3	1.99	0.61
30:W:95:GLN:NE2	30:W:132:LEU:HD21	2.15	0.61
31:X:57:VAL:O	31:X:57:VAL:HG12	2.00	0.61
33:Z:298:PHE:HE1	33:Z:310:LEU:HD23	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:98:PHE:CE1	14:G:104:THR:O	2.54	0.61
19:L:103:GLN:OE1	19:L:149:ASP:HA	1.99	0.61
21:N:204:SER:HB3	21:N:208:ARG:HH12	1.63	0.61
23:P:160:LEU:HD23	23:P:186:LEU:HD12	1.82	0.61
24:Q:35:SER:CB	24:Q:47:ASP:HB3	2.31	0.61
28:U:165:GLU:N	29:V:42:ARG:HH12	1.98	0.61
31:X:8:ILE:CG2	31:X:10:PHE:CZ	2.83	0.61
33:Z:89:LEU:HD13	33:Z:125:THR:HB	1.82	0.61
6:6:193:LEU:HB2	6:6:210:LEU:HD11	1.81	0.61
13:F:12:THR:HB	14:G:22:GLN:HE22	1.61	0.61
17:J:193:THR:HG21	17:J:316:PHE:CZ	2.36	0.61
19:L:301:ILE:CG1	20:M:299:ARG:HH21	2.13	0.61
22:O:16:MET:SD	22:O:72:LYS:HG2	2.40	0.61
22:O:77:SER:CA	22:O:80:LYS:CG	2.72	0.61
23:P:392:LYS:HG3	24:Q:354:PHE:CB	2.30	0.61
24:Q:369:ASP:O	24:Q:373:VAL:HG23	1.99	0.61
31:X:30:GLN:HB3	31:X:54:GLU:CB	2.30	0.61
31:X:72:GLU:CB	31:X:91:PHE:CZ	2.83	0.61
33:Z:763:HIS:NE2	33:Z:767:TYR:CE1	2.69	0.61
33:Z:981:VAL:HG11	33:Z:983:LEU:HD21	1.83	0.61
3:3:134:SER:HA	3:3:137:LEU:HD12	1.82	0.61
4:4:63:ILE:HG23	4:4:74:LEU:HD12	1.82	0.61
11:D:134:LEU:HD22	11:D:162:GLN:NE2	2.16	0.61
13:F:110:HIS:CB	14:G:85:ARG:HH11	2.13	0.61
17:J:69:GLY:HA3	18:K:144:ASN:HD22	1.66	0.61
18:K:423:LYS:N	18:K:428:LYS:NZ	2.47	0.61
20:M:170:MET:SD	20:M:266:ALA:HB2	2.39	0.61
22:O:169:ASN:ND2	22:O:195:TYR:CD2	2.68	0.61
22:O:352:TRP:HB2	28:U:235:LEU:HD21	1.80	0.61
24:Q:311:LEU:CD2	24:Q:343:LEU:HD13	2.30	0.61
27:T:98:GLU:HG2	27:T:102:LYS:NZ	2.15	0.61
30:W:2:VAL:HG11	30:W:4:GLU:OE1	2.00	0.61
33:Z:229:SER:C	33:Z:264:PHE:CE1	2.76	0.61
33:Z:486:SER:O	33:Z:490:ILE:HG13	2.00	0.61
3:3:177:VAL:HG12	3:3:190:TYR:CD1	2.35	0.61
11:D:159:TRP:CD1	11:D:161:ALA:C	2.77	0.61
12:E:87:SER:HB2	12:E:138:PHE:CZ	2.36	0.61
15:H:407:ILE:HD12	15:H:443:PHE:HB3	1.81	0.61
16:I:184:ILE:HD12	16:I:187:LEU:CD1	2.30	0.61
17:J:210:PHE:HE2	17:J:212:ARG:CD	2.12	0.61
18:K:141:ARG:NH1	19:L:153:LEU:HD12	2.14	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:114:SER:N	21:N:161:TYR:HE2	1.97	0.61
21:N:668:THR:O	21:N:669:GLU:CB	2.48	0.61
23:P:268:LEU:CD1	23:P:280:LEU:CD1	2.72	0.61
25:R:179:PHE:CE2	25:R:213:TYR:CZ	2.89	0.61
26:S:234:ILE:HG13	26:S:257:LEU:CG	2.29	0.61
27:T:250:MET:O	27:T:251:HIS:HB2	2.01	0.61
28:U:66:TRP:HZ3	28:U:68:LEU:CA	2.14	0.61
29:V:60:ASP:O	29:V:61:TYR:CD2	2.53	0.61
29:V:250:GLN:HB3	29:V:254:ARG:NH1	2.15	0.61
30:W:151:THR:HG22	30:W:151:THR:O	2.00	0.61
31:X:7:VAL:HG21	31:X:34:GLU:HB3	1.81	0.61
33:Z:126:TYR:O	33:Z:127:SER:CB	2.49	0.61
33:Z:426:TYR:HE2	33:Z:435:GLN:HB2	1.57	0.61
6:6:20:ASN:ND2	6:6:31:GLU:HB3	2.14	0.61
7:7:189:LEU:HB3	7:7:204:LEU:HD12	1.83	0.61
10:C:235:ILE:O	10:C:239:LEU:HG	2.01	0.61
11:D:218:ASP:O	11:D:219:SER:HB2	1.99	0.61
18:K:240:SER:O	18:K:243:VAL:N	2.34	0.61
18:K:310:THR:HB	18:K:313:LYS:HE3	1.82	0.61
18:K:349:ARG:NH1	18:K:383:ILE:HD11	2.15	0.61
20:M:135:VAL:HG11	20:M:155:ILE:CG2	2.31	0.61
22:O:69:PHE:CD2	22:O:74:ASN:O	2.53	0.61
22:O:172:TYR:CE2	22:O:194:LEU:HB3	2.36	0.61
23:P:137:ALA:HB3	23:P:179:PHE:CE2	2.34	0.61
23:P:360:ILE:HG13	23:P:364:ARG:HG2	1.82	0.61
27:T:27:LEU:CD1	27:T:81:TYR:OH	2.44	0.61
33:Z:282:ILE:HD11	33:Z:974:THR:HG23	1.82	0.61
15:H:62:ARG:HH11	16:I:99:ILE:HG22	1.64	0.61
17:J:186:ILE:HG23	17:J:313:LYS:HG3	1.83	0.61
17:J:197:LEU:O	17:J:197:LEU:HD23	2.01	0.61
21:N:633:GLY:O	21:N:634:LEU:HB2	2.00	0.61
21:N:761:ILE:HB	21:N:905:LEU:H	1.65	0.61
22:O:69:PHE:CD2	22:O:78:VAL:HG23	2.36	0.61
23:P:184:MET:CE	23:P:200:SER:HB3	2.31	0.61
25:R:63:TYR:CE2	25:R:94:PHE:CD1	2.80	0.61
25:R:397:ASN:HD22	25:R:397:ASN:N	1.99	0.61
26:S:274:PHE:HE2	26:S:278:LYS:NZ	1.98	0.61
33:Z:138:ARG:CB	33:Z:157:LEU:CD1	2.68	0.61
33:Z:392:LEU:HD22	33:Z:857:LEU:HD21	1.83	0.61
6:6:34:VAL:HG22	6:6:44:SER:CB	2.29	0.61
9:B:118:MET:HE1	9:B:151:ASP:O	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:170:HIS:ND1	17:J:173:LEU:HG	2.14	0.61
18:K:281:ARG:HD3	18:K:293:GLN:NE2	2.16	0.61
23:P:270:LEU:HD11	23:P:329:PHE:CZ	2.35	0.61
25:R:113:LEU:HD12	25:R:114:ASN:N	2.15	0.61
25:R:176:ARG:HG2	25:R:243:LEU:HD21	1.82	0.61
27:T:189:ILE:CG2	27:T:209:LEU:HD23	2.31	0.61
27:T:209:LEU:O	27:T:210:PHE:HB2	2.00	0.61
29:V:47:MET:SD	29:V:75:GLY:HA2	2.40	0.61
29:V:250:GLN:HB3	29:V:254:ARG:HH12	1.66	0.61
4:4:40:HIS:CE1	4:4:185:LYS:O	2.52	0.60
6:6:65:TRP:CH2	13:F:90:GLN:CA	2.84	0.60
9:B:119:GLN:HG3	10:C:82:ALA:HB1	1.83	0.60
11:D:13:PRO:HB3	12:E:26:TYR:CE1	2.36	0.60
12:E:38:ILE:HD12	12:E:204:LEU:CD2	2.30	0.60
16:I:313:LEU:HD23	16:I:338:LEU:HD12	1.82	0.60
19:L:374:PHE:HE1	19:L:376:PHE:CD1	2.19	0.60
23:P:427:GLU:CA	29:V:230:TYR:CZ	2.79	0.60
26:S:158:PHE:O	26:S:162:VAL:HG23	2.00	0.60
29:V:196:TYR:O	29:V:197:TYR:HB3	2.00	0.60
30:W:95:GLN:NE2	30:W:132:LEU:HD23	2.16	0.60
33:Z:474:LEU:CG	33:Z:493:LEU:HD11	2.18	0.60
33:Z:598:ALA:O	33:Z:601:VAL:HG22	1.99	0.60
17:J:392:LYS:HG2	18:K:337:LYS:CE	2.31	0.60
22:O:79:VAL:HG21	22:O:124:ASP:HA	1.82	0.60
24:Q:20:TYR:CE2	24:Q:68:MET:CE	2.83	0.60
24:Q:284:ALA:HB3	24:Q:287:THR:OG1	2.01	0.60
25:R:63:TYR:CD2	25:R:94:PHE:CE2	2.89	0.60
25:R:396:LYS:HB3	26:S:452:TYR:HE1	1.64	0.60
27:T:229:VAL:CG1	27:T:234:TYR:CE2	2.84	0.60
28:U:127:GLN:NE2	29:V:212:MET:HA	2.16	0.60
30:W:26:PHE:CE2	30:W:30:ILE:HD11	2.36	0.60
31:X:29:VAL:HG11	31:X:61:LEU:CG	2.31	0.60
33:Z:797:THR:HG23	33:Z:833:GLN:CD	2.27	0.60
4:4:79:VAL:O	4:4:83:VAL:HG23	2.02	0.60
7:7:66:ASN:HD22	7:7:79:LEU:CD2	2.06	0.60
9:B:118:MET:HE2	9:B:152:PRO:HA	1.83	0.60
18:K:209:VAL:HG12	18:K:336:ARG:HB2	1.83	0.60
19:L:212:ILE:HG13	19:L:213:LYS:N	2.16	0.60
19:L:254:LYS:CE	20:M:256:ILE:HG12	2.24	0.60
21:N:329:HIS:HD2	21:N:355:TRP:CE2	2.17	0.60
21:N:514:THR:HG22	21:N:546:LEU:CG	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:79:VAL:HG21	22:O:124:ASP:CA	2.31	0.60
22:O:117:ASN:ND2	22:O:166:ARG:HG3	2.17	0.60
22:O:254:LEU:HD23	22:O:266:PHE:CD1	2.36	0.60
23:P:163:LEU:C	23:P:163:LEU:HD13	2.26	0.60
23:P:425:HIS:CD2	28:U:232:VAL:CG1	2.84	0.60
25:R:301:TYR:OH	25:R:363:PHE:CD2	2.54	0.60
26:S:311:GLN:HE22	26:S:337:ASN:HA	1.66	0.60
26:S:415:SER:HB2	27:T:159:LYS:NZ	2.15	0.60
33:Z:89:LEU:HD12	33:Z:125:THR:CG2	2.32	0.60
33:Z:827:LEU:HG	33:Z:831:LEU:CG	2.24	0.60
33:Z:829:GLN:HG2	33:Z:832:ARG:NH2	2.16	0.60
1:1:122:LEU:HD11	7:7:28:PHE:CD1	2.35	0.60
3:3:179:TYR:CE2	3:3:188:LYS:CG	2.84	0.60
17:J:253:ILE:HG22	17:J:295:ASN:ND2	2.16	0.60
18:K:97:GLY:HA2	18:K:113:THR:HG23	1.82	0.60
20:M:200:PRO:CA	20:M:207:PHE:CE2	2.81	0.60
23:P:411:LEU:C	23:P:411:LEU:HD23	2.26	0.60
24:Q:151:TYR:OH	24:Q:187:LYS:HG3	2.00	0.60
25:R:78:ASP:CG	25:R:94:PHE:HD1	2.06	0.60
31:X:53:THR:C	31:X:54:GLU:HG2	2.25	0.60
33:Z:150:GLY:CA	33:Z:154:ILE:HD12	2.31	0.60
33:Z:407:VAL:HG11	33:Z:439:TYR:OH	2.00	0.60
6:6:58:ARG:CZ	6:6:91:LYS:HZ2	2.15	0.60
14:G:42:ASN:HD21	14:G:183:PRO:HB2	1.67	0.60
14:G:166:LYS:HZ2	14:G:206:ASN:ND2	2.00	0.60
19:L:403:ILE:HG23	20:M:203:ARG:HH11	1.64	0.60
20:M:212:ILE:HG22	20:M:213:ARG:O	2.02	0.60
21:N:318:LYS:HD2	21:N:348:PHE:CE1	2.36	0.60
21:N:362:TRP:HH2	21:N:742:TRP:CZ2	2.16	0.60
23:P:266:TYR:CE2	23:P:270:LEU:HD11	2.37	0.60
23:P:392:LYS:NZ	24:Q:399:VAL:HG11	2.16	0.60
27:T:89:TYR:CZ	27:T:90:PHE:CE1	2.87	0.60
30:W:95:GLN:CD	30:W:132:LEU:CD2	2.70	0.60
2:2:124:TYR:OH	2:2:139:GLU:HB2	2.02	0.60
9:B:177:LYS:HE2	24:Q:209:TYR:O	2.01	0.60
13:F:30:LYS:CE	13:F:163:ALA:HA	2.30	0.60
14:G:70:ASP:OD1	14:G:95:ALA:HB1	2.02	0.60
19:L:180:PHE:HD2	19:L:238:THR:HB	1.66	0.60
19:L:354:GLU:OE2	19:L:380:VAL:HG12	2.01	0.60
21:N:596:LEU:CG	21:N:718:GLU:HB2	2.32	0.60
21:N:768:ILE:CD1	21:N:919:THR:HB	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:777:ALA:O	21:N:866:TYR:CE1	2.54	0.60
23:P:72:TRP:CE3	23:P:104:LEU:HD21	2.36	0.60
23:P:181:LEU:HG	23:P:223:LEU:CG	2.30	0.60
24:Q:37:GLN:O	24:Q:46:VAL:HG12	2.01	0.60
31:X:28:PRO:CB	31:X:56:PRO:O	2.46	0.60
31:X:78:ILE:HG22	31:X:114:LEU:HB2	1.84	0.60
33:Z:473:LEU:CG	33:Z:477:TYR:CZ	2.84	0.60
33:Z:765:MET:HE1	33:Z:777:PRO:CG	2.29	0.60
1:1:53:GLN:CG	2:2:84:LYS:HE2	2.31	0.60
13:F:105:VAL:CG2	13:F:145:LEU:CB	2.80	0.60
14:G:31:GLU:HG2	14:G:168:ARG:NH1	2.16	0.60
14:G:40:LYS:HE2	14:G:184:GLU:OE2	2.02	0.60
15:H:178:ARG:NH1	15:H:289:ARG:HD2	2.16	0.60
18:K:349:ARG:NH2	18:K:378:LEU:N	2.08	0.60
21:N:194:ILE:HG12	21:N:203:ARG:HD2	1.82	0.60
23:P:181:LEU:HG	23:P:223:LEU:HD11	1.83	0.60
27:T:241:GLU:O	27:T:242:LYS:CG	2.50	0.60
28:U:277:TYR:O	28:U:281:LEU:HG	2.02	0.60
30:W:8:LEU:HD11	30:W:113:PHE:HE2	1.65	0.60
33:Z:297:VAL:HG11	33:Z:310:LEU:HD13	1.84	0.60
1:1:8:PHE:CD2	1:1:9:LYS:N	2.69	0.60
2:2:85:GLN:O	2:2:89:LYS:HG3	2.02	0.60
9:B:30:GLN:CB	18:K:426:PHE:CD2	2.85	0.60
14:G:215:ILE:HG23	14:G:230:VAL:CG1	2.32	0.60
15:H:160:GLY:O	15:H:182:ASN:ND2	2.35	0.60
15:H:306:ILE:HG22	15:H:308:PHE:CZ	2.36	0.60
18:K:277:ILE:HD12	18:K:295:ILE:CG2	2.31	0.60
21:N:144:CYS:SG	21:N:152:LEU:HD21	2.35	0.60
21:N:233:ASN:OD1	21:N:269:LEU:HD22	2.01	0.60
21:N:602:VAL:HG12	21:N:625:LEU:CD1	2.31	0.60
23:P:203:ILE:HG23	23:P:220:TYR:HD1	1.67	0.60
23:P:303:PHE:O	23:P:348:HIS:NE2	2.34	0.60
24:Q:409:TYR:HB2	25:R:399:GLN:HB2	1.83	0.60
24:Q:426:LEU:HD23	29:V:269:ARG:NH2	2.17	0.60
25:R:24:TYR:HH	25:R:248:SER:CB	2.15	0.60
26:S:472:HIS:CD2	27:T:271:GLU:HA	2.37	0.60
27:T:50:ILE:C	27:T:55:LEU:HD13	2.27	0.60
33:Z:124:MET:HE3	33:Z:153:TYR:HA	1.84	0.60
11:D:96:HIS:CE1	11:D:100:LEU:CD1	2.77	0.60
18:K:241:GLU:OE1	19:L:303:ARG:HD2	2.01	0.60
18:K:423:LYS:N	18:K:428:LYS:HZ1	1.99	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:277:ILE:HG23	19:L:324:ILE:HD12	1.83	0.60
20:M:220:MET:CE	20:M:324:LEU:CD1	2.53	0.60
21:N:761:ILE:CD1	21:N:904:VAL:N	2.63	0.60
22:O:199:LEU:HD11	22:O:205:ILE:HD13	1.83	0.60
23:P:168:TYR:CE1	23:P:171:MET:HE2	2.37	0.60
23:P:350:LEU:HD12	23:P:383:LEU:HD11	1.84	0.60
23:P:396:PRO:CB	24:Q:396:TRP:CZ3	2.80	0.60
25:R:63:TYR:CE2	25:R:94:PHE:CZ	2.90	0.60
26:S:455:GLU:HG2	27:T:256:LYS:NZ	2.16	0.60
28:U:65:VAL:HG22	30:W:89:THR:HG23	1.84	0.60
29:V:33:ALA:HA	29:V:68:VAL:HG12	1.82	0.60
29:V:261:LEU:HD13	29:V:280:LEU:HA	1.83	0.60
6:6:-8:PHE:CD2	6:6:-6:PRO:HD3	2.37	0.60
7:7:101:PRO:CA	7:7:124:LEU:HD11	2.31	0.60
12:E:157:HIS:CD2	12:E:170:LYS:CD	2.85	0.60
12:E:157:HIS:CD2	12:E:170:LYS:CE	2.84	0.60
16:I:82:LEU:HB2	33:Z:622:HIS:HE1	1.65	0.60
17:J:395:GLU:HG2	17:J:396:THR:HG23	1.83	0.60
19:L:370:LYS:HD3	19:L:374:PHE:CD2	2.37	0.60
21:N:530:GLU:HA	21:N:533:ASP:OD2	2.01	0.60
21:N:903:VAL:O	21:N:904:VAL:HB	2.02	0.60
22:O:16:MET:HE3	22:O:72:LYS:CG	2.30	0.60
22:O:189:TYR:OH	22:O:227:ILE:HG21	2.02	0.60
23:P:299:LEU:CD1	23:P:311:TRP:CZ3	2.80	0.60
31:X:12:ALA:HB3	31:X:33:ILE:HB	1.84	0.60
33:Z:52:LEU:HB3	33:Z:67:SER:OG	2.02	0.60
33:Z:574:TYR:OH	33:Z:584:VAL:CG1	2.50	0.60
6:6:164:LYS:HZ3	6:6:170:GLU:HB3	1.67	0.59
15:H:107:LYS:CD	15:H:143:ALA:HB1	2.31	0.59
19:L:383:SER:HA	19:L:386:PHE:CE1	2.37	0.59
20:M:119:VAL:CG1	20:M:155:ILE:HD11	2.31	0.59
20:M:384:ASP:H	20:M:386:PHE:HE1	1.40	0.59
21:N:413:ALA:CB	21:N:452:LEU:HG	2.30	0.59
22:O:63:ASP:HA	22:O:66:VAL:CG2	2.31	0.59
22:O:373:TRP:HB3	28:U:200:LEU:HD13	1.83	0.59
23:P:93:ILE:CG2	23:P:124:VAL:HG21	2.31	0.59
23:P:333:ALA:CB	23:P:336:HIS:HD2	2.15	0.59
23:P:412:LEU:CD2	29:V:245:VAL:CA	2.76	0.59
25:R:175:ALA:HB2	25:R:213:TYR:HE2	1.67	0.59
25:R:209:ARG:HH12	25:R:243:LEU:CB	2.15	0.59
25:R:369:GLY:HA3	25:R:383:ARG:HH21	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:315:LYS:HE2	26:S:345:TYR:OH	2.02	0.59
31:X:12:ALA:HB3	31:X:33:ILE:HG21	1.82	0.59
1:1:38:HIS:CD2	1:1:67:THR:HG1	2.20	0.59
7:7:144:ASN:O	7:7:148:ARG:HG3	2.02	0.59
8:A:57:LYS:HE2	8:A:223:LEU:O	2.03	0.59
8:A:135:ARG:NH1	8:A:137:LEU:HD23	2.17	0.59
8:A:135:ARG:CG	14:G:124:LEU:HD22	2.32	0.59
9:B:162:THR:HA	9:B:172:LYS:NZ	2.17	0.59
12:E:85:ALA:HB2	12:E:140:VAL:HG21	1.84	0.59
13:F:224:ILE:HG22	13:F:226:ASP:OD2	2.01	0.59
19:L:290:ARG:HH11	19:L:298:ASP:HB3	1.67	0.59
19:L:358:LEU:HD11	19:L:362:LYS:HE3	1.84	0.59
22:O:226:LYS:O	22:O:227:ILE:HB	2.02	0.59
25:R:214:TYR:HD2	25:R:230:LEU:CG	2.08	0.59
26:S:223:LEU:O	26:S:259:TYR:CE1	2.55	0.59
26:S:425:ARG:NH1	27:T:152:LEU:O	2.32	0.59
29:V:238:LEU:HD11	29:V:242:LYS:HE3	1.83	0.59
33:Z:307:HIS:NE2	33:Z:341:TYR:CG	2.58	0.59
33:Z:531:ALA:CA	33:Z:573:LEU:CD2	2.75	0.59
33:Z:611:THR:HG23	33:Z:749:GLY:HA3	1.84	0.59
1:1:61:TYR:CD1	8:A:106:TYR:HB2	2.37	0.59
21:N:204:SER:HB3	21:N:208:ARG:NH1	2.17	0.59
21:N:627:ILE:HG23	21:N:717:LEU:CD2	2.32	0.59
22:O:21:SER:HA	22:O:43:GLU:OE1	2.01	0.59
22:O:33:TYR:CD1	22:O:40:GLN:CB	2.77	0.59
23:P:308:LEU:HD23	23:P:369:LEU:CG	2.31	0.59
23:P:419:VAL:HG21	29:V:241:THR:HG1	1.61	0.59
24:Q:4:PRO:O	24:Q:50:ARG:NH1	2.35	0.59
24:Q:9:GLU:CG	24:Q:13:ARG:HE	2.15	0.59
25:R:167:LYS:HG3	25:R:194:VAL:HG22	1.83	0.59
27:T:11:LEU:HD22	27:T:30:ILE:HD13	1.84	0.59
29:V:251:TYR:HD1	29:V:254:ARG:NH2	2.00	0.59
33:Z:793:PHE:CE2	33:Z:830:LEU:HD22	2.37	0.59
5:5:15:ALA:CB	5:5:161:ILE:HD11	2.30	0.59
7:7:1:THR:N	7:7:33:ARG:HH12	1.99	0.59
7:7:101:PRO:C	7:7:124:LEU:HD11	2.28	0.59
11:D:184:PRO:HB2	11:D:185:PRO:HD2	1.83	0.59
16:I:361:ILE:O	16:I:365:HIS:ND1	2.22	0.59
21:N:903:VAL:C	21:N:904:VAL:HG23	2.27	0.59
22:O:301:PHE:CD2	22:O:305:ILE:O	2.56	0.59
27:T:31:LYS:NZ	27:T:84:GLN:OE1	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:17:TYR:CE1	31:X:66:LEU:HD22	2.37	0.59
33:Z:246:CYS:O	33:Z:250:VAL:HG23	2.00	0.59
33:Z:748:LEU:HD13	33:Z:867:PHE:HB2	1.84	0.59
2:2:97:TYR:CZ	2:2:115:ALA:HB3	2.37	0.59
10:C:208:TYR:CE1	10:C:232:PRO:CB	2.85	0.59
12:E:209:GLU:HG3	15:H:406:LEU:HD22	1.83	0.59
18:K:123:LEU:H	18:K:146:LEU:HD23	1.67	0.59
22:O:1:MET:HG3	22:O:37:LEU:CD1	2.33	0.59
22:O:69:PHE:CZ	22:O:77:SER:CB	2.85	0.59
23:P:138:ARG:CG	23:P:141:LYS:NZ	2.65	0.59
25:R:403:LEU:HD21	28:U:278:ILE:HG21	1.84	0.59
26:S:341:SER:HB2	26:S:345:TYR:CE2	2.36	0.59
29:V:186:GLN:O	29:V:190:HIS:CD2	2.56	0.59
29:V:261:LEU:HD11	29:V:283:THR:HG21	1.83	0.59
30:W:8:LEU:HD11	30:W:113:PHE:CE2	2.37	0.59
30:W:65:PHE:CZ	30:W:98:LEU:HD23	2.37	0.59
30:W:103:ASN:HB3	30:W:106:GLN:NE2	2.17	0.59
30:W:146:GLU:O	30:W:147:ILE:HB	2.02	0.59
31:X:9:LYS:HE2	31:X:34:GLU:OE2	2.03	0.59
33:Z:139:LEU:CD2	33:Z:161:ILE:HD12	2.31	0.59
4:4:3:ILE:HB	4:4:132:HIS:CD2	2.37	0.59
22:O:290:LYS:HD2	22:O:336:LEU:HD21	1.84	0.59
24:Q:14:LEU:HG	24:Q:26:VAL:HG21	1.84	0.59
24:Q:275:ILE:CD1	24:Q:306:TYR:HD2	2.16	0.59
26:S:416:GLU:OE2	26:S:417:GLN:HG2	2.02	0.59
26:S:461:PHE:HE2	28:U:274:MET:CG	2.16	0.59
28:U:24:ARG:HH22	29:V:66:VAL:HG13	1.67	0.59
28:U:129:GLY:O	28:U:130:VAL:CB	2.51	0.59
31:X:75:TRP:NE1	31:X:77:PRO:HB3	2.16	0.59
12:E:121:LEU:HD21	13:F:126:ARG:NH2	2.18	0.59
17:J:33:LYS:HZ2	26:S:224:LYS:HZ2	1.50	0.59
17:J:234:PHE:CZ	17:J:238:ARG:HD2	2.37	0.59
20:M:337:LEU:O	20:M:338:LEU:HD23	2.02	0.59
21:N:253:LEU:HD23	21:N:253:LEU:C	2.28	0.59
21:N:633:GLY:O	21:N:634:LEU:CB	2.50	0.59
25:R:335:ARG:CZ	25:R:371:PHE:CA	2.79	0.59
26:S:343:LEU:HB3	26:S:344:PRO:HD3	1.84	0.59
21:N:365:PHE:HZ	21:N:406:TYR:HB2	1.68	0.59
22:O:38:TRP:CE3	22:O:54:SER:CB	2.85	0.59
22:O:71:ASP:OD1	30:W:23:ARG:CB	2.47	0.59
22:O:117:ASN:ND2	22:O:170:SER:HB2	2.18	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:157:LEU:HD22	22:O:171:PHE:CD1	2.37	0.59
23:P:263:HIS:CE1	23:P:328:ALA:HB2	2.38	0.59
25:R:335:ARG:CZ	25:R:371:PHE:HA	2.27	0.59
28:U:90:ILE:HA	28:U:116:ASN:HD21	1.68	0.59
33:Z:740:VAL:CG1	33:Z:761:PHE:CE1	2.79	0.59
33:Z:745:LEU:CD2	33:Z:878:LEU:HG	2.32	0.59
3:3:79:THR:HG23	3:3:115:PHE:HZ	1.67	0.59
6:6:147:PHE:HD2	6:6:163:LEU:HD12	1.66	0.59
8:A:14:ARG:HG3	8:A:15:HIS:CD2	2.37	0.59
9:B:10:THR:HG23	9:B:20:GLN:OE1	2.03	0.59
18:K:67:TYR:CZ	21:N:572:LEU:HD22	2.38	0.59
18:K:248:GLY:O	18:K:251:PRO:HD2	2.02	0.59
21:N:773:MET:HE3	21:N:884:PHE:CD1	2.37	0.59
22:O:16:MET:CE	22:O:72:LYS:HG3	2.29	0.59
22:O:199:LEU:HA	22:O:203:THR:CB	2.33	0.59
25:R:399:GLN:NE2	25:R:403:LEU:CD2	2.65	0.59
25:R:403:LEU:HD23	28:U:278:ILE:HD13	1.84	0.59
26:S:377:TYR:CD1	27:T:133:ILE:HD11	2.38	0.59
33:Z:457:ILE:HD11	33:Z:902:TYR:HB3	1.84	0.59
12:E:109:VAL:HG12	12:E:156:PHE:CE1	2.35	0.59
12:E:143:LEU:CG	12:E:155:LEU:HD11	2.32	0.59
14:G:89:ASN:ND2	14:G:90:ARG:HH22	2.00	0.59
17:J:192:GLY:HA3	18:K:330:ARG:NH1	2.18	0.59
17:J:258:VAL:CA	18:K:280:LYS:HD2	2.32	0.59
19:L:86:LYS:O	19:L:90:LYS:HG3	2.03	0.59
21:N:641:LEU:CB	21:N:660:LEU:HD21	2.33	0.59
21:N:738:GLN:HG2	21:N:741:TYR:HD2	1.65	0.59
24:Q:74:LEU:HD21	24:Q:104:PHE:HZ	1.66	0.59
25:R:176:ARG:CG	25:R:243:LEU:HD21	2.32	0.59
26:S:269:GLU:HB3	26:S:299:LYS:NZ	2.18	0.59
7:7:70:ASN:HD21	13:F:107:ARG:HG3	1.68	0.58
12:E:17:PRO:HA	13:F:24:TYR:CG	2.38	0.58
14:G:201:LEU:HD12	14:G:204:GLU:OE1	2.03	0.58
17:J:141:LYS:CG	17:J:209:LYS:HE3	2.33	0.58
18:K:140:HIS:CG	18:K:147:VAL:CG2	2.86	0.58
19:L:370:LYS:HE2	19:L:410:ILE:CG2	2.33	0.58
20:M:371:ASP:OD1	20:M:373:ASP:HB2	2.03	0.58
24:Q:104:PHE:HB3	24:Q:114:GLN:HE22	1.68	0.58
24:Q:236:PHE:CZ	24:Q:269:LYS:HD3	2.37	0.58
29:V:86:VAL:HG13	29:V:90:LYS:HE3	1.83	0.58
33:Z:138:ARG:HG2	33:Z:157:LEU:CB	2.33	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:433:LEU:HD13	33:Z:473:LEU:CD2	2.32	0.58
7:7:200:PHE:CE2	7:7:202:LYS:CG	2.85	0.58
9:B:212:ALA:HB2	9:B:237:LYS:HG3	1.84	0.58
11:D:215:VAL:HG22	11:D:221:ILE:HG12	1.85	0.58
15:H:429:PHE:CE2	15:H:446:ALA:HA	2.38	0.58
17:J:170:HIS:NE2	17:J:172:GLU:HB3	2.17	0.58
19:L:263:ILE:HD12	19:L:307:GLU:OE1	2.02	0.58
21:N:110:VAL:HG13	21:N:159:GLU:HB3	1.85	0.58
22:O:40:GLN:HE21	22:O:58:ARG:NH2	2.01	0.58
22:O:169:ASN:ND2	22:O:195:TYR:CE2	2.71	0.58
24:Q:387:TYR:CE1	24:Q:402:THR:HG23	2.38	0.58
25:R:60:ALA:HB2	25:R:102:LEU:CD1	2.33	0.58
25:R:175:ALA:CB	25:R:213:TYR:CE2	2.86	0.58
29:V:91:MET:O	29:V:95:LEU:HG	2.03	0.58
31:X:64:ILE:O	31:X:65:SER:OG	2.18	0.58
5:5:111:THR:CG2	5:5:113:TYR:CE2	2.87	0.58
6:6:146:ASN:O	6:6:163:LEU:HD13	2.02	0.58
7:7:7:LYS:HE2	7:7:132:PRO:HA	1.85	0.58
8:A:220:LYS:CD	8:A:242:GLU:N	2.62	0.58
9:B:162:THR:HA	9:B:172:LYS:HZ2	1.67	0.58
15:H:277:SER:O	15:H:280:VAL:N	2.36	0.58
15:H:390:ARG:HA	15:H:404:TRP:HE1	1.65	0.58
18:K:223:VAL:HG11	18:K:270:PHE:CE1	2.38	0.58
19:L:393:ASN:O	19:L:397:GLU:HG2	2.03	0.58
21:N:253:LEU:HD23	21:N:257:ILE:HD12	1.84	0.58
21:N:890:PHE:CE2	21:N:914:VAL:HG22	2.38	0.58
22:O:41:LEU:O	22:O:41:LEU:CD2	2.49	0.58
22:O:372:GLU:HG3	22:O:376:GLN:NE2	2.18	0.58
23:P:307:GLU:HG3	23:P:310:ARG:HH12	1.67	0.58
28:U:94:HIS:HE2	28:U:120:LEU:CD2	2.09	0.58
30:W:65:PHE:HZ	30:W:98:LEU:HD23	1.67	0.58
31:X:126:ILE:O	31:X:129:LEU:HB2	2.02	0.58
33:Z:608:TYR:C	33:Z:609:THR:HG23	2.28	0.58
33:Z:815:MET:CE	33:Z:833:GLN:HG2	2.33	0.58
1:1:38:HIS:CD2	1:1:67:THR:OG1	2.56	0.58
2:2:8:PHE:CE2	2:2:12:VAL:N	2.71	0.58
3:3:87:TYR:CD1	3:3:90:ARG:CZ	2.86	0.58
8:A:220:LYS:NZ	8:A:242:GLU:CG	2.66	0.58
12:E:147:HIS:ND1	12:E:153:TYR:CG	2.68	0.58
17:J:253:ILE:HG22	17:J:295:ASN:HD21	1.69	0.58
18:K:52:LYS:HZ1	21:N:159:GLU:HG3	1.67	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:L:164:ASP:OD2	19:L:261:ARG:NH2	2.33	0.58
22:O:20:PRO:C	22:O:43:GLU:OE1	2.46	0.58
24:Q:74:LEU:CD2	24:Q:104:PHE:CZ	2.74	0.58
25:R:79:LEU:HD22	25:R:93:LYS:HE2	1.83	0.58
26:S:152:LEU:O	26:S:156:VAL:HG23	2.04	0.58
26:S:153:GLU:CA	26:S:191:HIS:CE1	2.86	0.58
31:X:75:TRP:HE1	31:X:77:PRO:HB3	1.69	0.58
33:Z:793:PHE:CD2	33:Z:830:LEU:HB2	2.39	0.58
33:Z:926:ASN:HB2	33:Z:993:GLU:CD	2.29	0.58
1:I:156:LYS:CE	1:I:175:MET:HE1	2.34	0.58
10:C:228:LYS:CE	10:C:230:PHE:CZ	2.86	0.58
16:I:289:THR:HG22	16:I:290:LYS:N	2.18	0.58
16:I:398:GLU:CB	17:J:312:ARG:NH1	2.67	0.58
17:J:116:ARG:HE	17:J:119:SER:HB2	1.68	0.58
19:L:198:GLU:OE2	19:L:202:LYS:NZ	2.31	0.58
21:N:726:ASP:OD2	21:N:728:LYS:HB2	2.04	0.58
22:O:117:ASN:CG	22:O:118:GLY:N	2.62	0.58
30:W:4:GLU:OE2	30:W:40:LYS:HE2	2.01	0.58
19:L:157:ARG:HH22	20:M:113:VAL:CG2	2.17	0.58
21:N:113:ALA:C	21:N:161:TYR:CE2	2.82	0.58
22:O:266:PHE:CE1	22:O:270:ILE:CG2	2.82	0.58
22:O:380:LEU:CD2	27:T:258:ASN:HD21	2.17	0.58
23:P:303:PHE:CE1	23:P:345:VAL:HG22	2.38	0.58
28:U:302:GLN:NE2	28:U:305:ARG:NH2	2.42	0.58
29:V:157:ARG:NH1	29:V:197:TYR:CE2	2.70	0.58
30:W:26:PHE:CZ	30:W:30:ILE:HD11	2.38	0.58
31:X:125:MET:O	31:X:128:VAL:HG12	2.04	0.58
32:Y:83:ARG:O	32:Y:87:GLU:HG3	2.03	0.58
33:Z:888:LEU:HD12	33:Z:901:PHE:CD1	2.39	0.58
7:7:189:LEU:CB	7:7:204:LEU:HD12	2.34	0.58
13:F:165:SER:HB3	13:F:169:LYS:HE3	1.84	0.58
16:I:414:GLU:HG3	16:I:418:GLN:NE2	2.19	0.58
17:J:285:SER:HB3	17:J:288:ILE:HD12	1.85	0.58
18:K:310:THR:HB	18:K:313:LYS:CE	2.33	0.58
19:L:111:GLU:CD	19:L:117:TYR:CE2	2.81	0.58
19:L:254:LYS:HG3	20:M:256:ILE:HG12	1.86	0.58
21:N:321:LEU:HG	21:N:323:GLY:N	2.12	0.58
23:P:184:MET:HE3	23:P:200:SER:HB3	1.85	0.58
27:T:169:GLN:HG3	27:T:174:PHE:HB2	1.86	0.58
33:Z:430:LEU:C	33:Z:430:LEU:HD23	2.29	0.58
33:Z:827:LEU:CG	33:Z:831:LEU:HG	2.26	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:E:20:ARG:HE	12:E:25:GLU:CD	2.09	0.58
13:F:98:VAL:CG1	13:F:99:PHE:CD1	2.87	0.58
17:J:134:VAL:HG12	18:K:255:ARG:HH22	1.68	0.58
20:M:135:VAL:HG11	20:M:155:ILE:HG22	1.85	0.58
21:N:361:ASN:OD1	21:N:399:PHE:CZ	2.56	0.58
21:N:913:PRO:O	21:N:914:VAL:HB	2.04	0.58
24:Q:35:SER:OG	24:Q:47:ASP:HB3	2.03	0.58
24:Q:409:TYR:HB2	25:R:399:GLN:CB	2.34	0.58
25:R:175:ALA:HB1	25:R:213:TYR:CE2	2.39	0.58
26:S:293:ILE:HD13	26:S:316:LEU:HG	1.84	0.58
29:V:60:ASP:O	29:V:61:TYR:HD2	1.86	0.58
5:5:111:THR:HG21	5:5:113:TYR:CZ	2.39	0.58
6:6:96:TYR:CZ	6:6:98:VAL:CG2	2.87	0.58
7:7:13:ILE:HG22	7:7:169:ILE:HG13	1.85	0.58
10:C:4:ARG:HH22	13:F:8:GLY:HA3	1.67	0.58
15:H:357:ARG:NH2	16:I:290:LYS:O	2.32	0.58
16:I:222:TYR:CD1	16:I:329:ASN:HA	2.38	0.58
19:L:95:ILE:HD13	20:M:68:LYS:HB2	1.85	0.58
21:N:270:LEU:CD1	21:N:290:LEU:HD22	2.33	0.58
21:N:410:LEU:HA	21:N:452:LEU:HD21	1.86	0.58
22:O:338:LYS:HE3	22:O:353:VAL:HG21	1.86	0.58
23:P:112:LEU:HD22	23:P:146:ILE:HG21	1.86	0.58
23:P:311:TRP:NE1	23:P:315:GLN:HG3	2.19	0.58
30:W:17:ARG:HG2	30:W:17:ARG:O	2.04	0.58
30:W:163:ASN:HB3	30:W:164:PRO:HD2	1.85	0.58
33:Z:89:LEU:CD1	33:Z:125:THR:HG21	2.30	0.58
33:Z:138:ARG:HG2	33:Z:157:LEU:HB3	1.86	0.58
2:2:9:ASN:ND2	2:2:146:LEU:H	2.00	0.58
4:4:26:VAL:HG11	4:4:29:ASP:HB2	1.85	0.58
5:5:12:ILE:HG13	5:5:110:PRO:HB3	1.86	0.58
8:A:220:LYS:HZ1	8:A:242:GLU:CD	2.12	0.58
12:E:51:GLU:HG3	12:E:216:ASN:O	2.04	0.58
17:J:197:LEU:HD23	17:J:197:LEU:C	2.28	0.58
17:J:278:GLN:NE2	17:J:283:GLU:CD	2.58	0.58
20:M:221:TYR:HE1	20:M:348:GLU:HB2	1.65	0.58
21:N:768:ILE:CG2	21:N:917:ILE:O	2.51	0.58
23:P:115:ARG:HH11	23:P:146:ILE:HG13	1.58	0.58
23:P:311:TRP:CZ2	23:P:315:GLN:CD	2.82	0.58
24:Q:275:ILE:HD11	24:Q:306:TYR:HD2	1.69	0.58
24:Q:318:LEU:HD13	24:Q:335:PHE:CZ	2.38	0.58
25:R:70:TYR:HA	25:R:73:ASN:ND2	2.19	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:209:ARG:NH2	25:R:240:SER:HB3	2.18	0.58
26:S:378:GLN:HB3	26:S:382:ARG:HH12	1.68	0.58
27:T:24:GLU:HA	27:T:27:LEU:CD1	2.34	0.58
33:Z:117:ASP:O	33:Z:120:SER:OG	2.20	0.58
33:Z:151:HIS:ND1	33:Z:152:GLU:CA	2.65	0.58
33:Z:531:ALA:C	33:Z:573:LEU:CD2	2.76	0.58
6:6:101:ILE:HD11	6:6:130:GLY:HA3	1.85	0.57
9:B:6:SER:CB	11:D:4:TYR:CD2	2.86	0.57
15:H:390:ARG:CA	15:H:404:TRP:NE1	2.67	0.57
18:K:157:SER:H	19:L:120:LYS:NZ	2.02	0.57
18:K:191:PRO:HG3	18:K:198:TYR:OH	2.04	0.57
22:O:48:PHE:CE1	22:O:81:TYR:CD1	2.92	0.57
26:S:241:PHE:CE2	26:S:249:SER:OG	2.57	0.57
27:T:50:ILE:C	27:T:55:LEU:CD1	2.76	0.57
28:U:38:LEU:HD23	28:U:89:LEU:HA	1.84	0.57
28:U:167:GLU:O	28:U:171:VAL:HG23	2.04	0.57
29:V:57:PHE:CE1	29:V:135:ARG:HG3	2.38	0.57
30:W:2:VAL:CG1	30:W:4:GLU:OE1	2.51	0.57
31:X:66:LEU:HD11	31:X:97:TYR:CE1	2.39	0.57
1:1:-4:VAL:HG23	1:1:49:ALA:N	2.18	0.57
8:A:225:VAL:CG1	8:A:236:LEU:HD12	2.34	0.57
10:C:147:GLN:CB	10:C:149:TYR:HE1	2.08	0.57
21:N:408:LEU:CD1	21:N:412:TYR:HE1	2.13	0.57
22:O:33:TYR:C	22:O:34:GLU:HG3	2.23	0.57
23:P:138:ARG:HG2	23:P:141:LYS:HZ2	1.67	0.57
25:R:78:ASP:OD2	25:R:94:PHE:HE1	1.87	0.57
26:S:428:ARG:NH2	27:T:191:LYS:HD2	2.19	0.57
28:U:66:TRP:CZ3	28:U:68:LEU:N	2.72	0.57
33:Z:89:LEU:HD13	33:Z:122:LEU:HA	1.86	0.57
33:Z:203:LEU:HD23	33:Z:203:LEU:C	2.28	0.57
33:Z:795:THR:HG22	33:Z:799:PHE:CD2	2.39	0.57
5:5:75:SER:HB2	5:5:108:GLU:OE2	2.04	0.57
7:7:68:TYR:HB3	14:G:92:ARG:CZ	2.33	0.57
9:B:75:TYR:CD1	9:B:82:TYR:CZ	2.92	0.57
11:D:118:GLN:NE2	12:E:83:ALA:HB1	2.19	0.57
13:F:51:ARG:HD3	20:M:430:VAL:CG1	2.26	0.57
14:G:91:GLY:HA2	14:G:115:LEU:HD21	1.86	0.57
14:G:98:PHE:CE1	14:G:106:ILE:HA	2.39	0.57
16:I:172:LYS:NZ	17:J:278:GLN:HA	2.19	0.57
21:N:110:VAL:CG1	21:N:159:GLU:HB3	2.34	0.57
22:O:270:ILE:HB	22:O:274:ILE:HG21	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:322:LEU:O	23:P:341:LEU:HD11	2.04	0.57
25:R:113:LEU:CD2	25:R:137:LEU:HD13	2.35	0.57
25:R:161:ALA:O	25:R:162:ILE:CG2	2.52	0.57
28:U:276:ILE:HG21	29:V:295:VAL:CG2	2.34	0.57
29:V:203:TYR:O	29:V:204:HIS:HD2	1.82	0.57
31:X:10:PHE:O	31:X:33:ILE:CG2	2.47	0.57
33:Z:72:LYS:HE2	33:Z:117:ASP:OD2	2.05	0.57
6:6:147:PHE:CE2	6:6:164:LYS:HB2	2.39	0.57
17:J:372:GLU:OE1	24:Q:196:ALA:HB1	2.04	0.57
18:K:212:TYR:CZ	18:K:321:ALA:CB	2.82	0.57
21:N:83:LEU:HD22	21:N:132:LYS:HB3	1.85	0.57
21:N:106:ILE:HD11	21:N:140:MET:HE2	1.86	0.57
22:O:55:THR:OG1	22:O:94:GLU:HG3	2.04	0.57
22:O:114:GLN:O	22:O:116:ASN:ND2	2.36	0.57
24:Q:131:VAL:HG12	24:Q:134:LYS:NZ	2.19	0.57
25:R:175:ALA:HB1	25:R:213:TYR:CZ	2.38	0.57
26:S:378:GLN:HB3	26:S:382:ARG:NH1	2.19	0.57
31:X:93:SER:CA	31:X:96:ARG:HE	2.16	0.57
17:J:247:MET:CE	17:J:272:MET:HE2	2.34	0.57
18:K:242:PHE:HB2	18:K:295:ILE:HD11	1.85	0.57
18:K:268:ILE:HG23	18:K:315:ILE:HD12	1.86	0.57
19:L:102:GLY:C	19:L:103:GLN:HG2	2.30	0.57
21:N:92:ASP:CG	21:N:139:ARG:NH2	2.62	0.57
21:N:256:GLN:OE1	21:N:904:VAL:HG11	2.05	0.57
21:N:408:LEU:HD12	21:N:412:TYR:CE1	2.40	0.57
21:N:514:THR:HG22	21:N:546:LEU:CD1	2.16	0.57
21:N:768:ILE:HB	21:N:917:ILE:O	2.04	0.57
22:O:23:HIS:ND1	22:O:24:PRO:HD2	2.20	0.57
23:P:203:ILE:CG2	23:P:220:TYR:HD1	2.17	0.57
25:R:335:ARG:NH1	25:R:371:PHE:CA	2.66	0.57
31:X:75:TRP:CH2	31:X:125:MET:HE3	2.23	0.57
9:B:96:SER:HA	9:B:100:ILE:HD12	1.86	0.57
16:I:252:LEU:N	16:I:253:ILE:N	2.53	0.57
16:I:290:LYS:HB3	16:I:306:MET:HE2	1.87	0.57
21:N:669:GLU:CG	21:N:784:TYR:N	2.65	0.57
22:O:72:LYS:HD2	22:O:73:ILE:HD12	1.85	0.57
24:Q:23:ALA:HB1	24:Q:27:TYR:CE2	2.40	0.57
25:R:134:TRP:HZ3	25:R:137:LEU:HD22	1.69	0.57
25:R:276:LEU:HD13	25:R:289:ILE:CG2	2.34	0.57
33:Z:337:GLU:HA	33:Z:340:LEU:CD2	2.33	0.57
9:B:148:TYR:CE1	9:B:158:PRO:HB3	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:115:LEU:HD12	10:C:137:TYR:OH	2.04	0.57
16:I:252:LEU:O	16:I:254:GLN:CB	2.53	0.57
17:J:324:ARG:HE	17:J:350:MET:HB2	1.68	0.57
18:K:142:HIS:HB3	29:V:145:GLN:HE21	1.70	0.57
20:M:174:GLU:OE2	20:M:175:LYS:HG3	2.03	0.57
20:M:246:LEU:HD11	20:M:251:LEU:CD2	2.35	0.57
21:N:761:ILE:CB	21:N:905:LEU:H	2.18	0.57
25:R:70:TYR:CE2	25:R:74:ASN:C	2.80	0.57
33:Z:72:LYS:HZ1	33:Z:114:SER:HA	1.69	0.57
33:Z:394:TYR:CZ	33:Z:859:LYS:CG	2.88	0.57
6:6:96:TYR:C	6:6:97:TYR:CD1	2.83	0.57
10:C:120:GLN:HE22	11:D:127:ARG:HH22	1.53	0.57
12:E:88:MET:HE1	12:E:142:LEU:HD13	1.87	0.57
15:H:407:ILE:HD11	15:H:443:PHE:CB	2.35	0.57
16:I:414:GLU:CG	16:I:418:GLN:HE21	2.17	0.57
21:N:129:ILE:CG2	21:N:133:LEU:HD23	2.35	0.57
21:N:540:LEU:HD21	21:N:574:VAL:HG21	1.86	0.57
25:R:113:LEU:HD12	25:R:113:LEU:C	2.29	0.57
27:T:28:PRO:HB2	27:T:29:PRO:HD3	1.87	0.57
33:Z:319:THR:O	33:Z:323:TYR:HD1	1.88	0.57
33:Z:422:ILE:HD11	33:Z:439:TYR:HE2	1.69	0.57
4:4:102:LEU:HG	4:4:132:HIS:NE2	2.20	0.57
6:6:172:ILE:HD11	6:6:197:ILE:HD11	1.87	0.57
10:C:42:ASP:OD1	10:C:218:LYS:HD2	2.04	0.57
16:I:353:PRO:HD2	16:I:387:LEU:O	2.04	0.57
16:I:426:ASN:HB3	17:J:313:LYS:HZ3	1.70	0.57
18:K:55:GLU:O	18:K:59:GLU:HG3	2.05	0.57
19:L:309:LEU:CD1	19:L:342:ARG:HD2	2.35	0.57
21:N:50:TYR:OH	21:N:84:ALA:CB	2.53	0.57
21:N:365:PHE:CZ	21:N:406:TYR:HB2	2.40	0.57
22:O:185:PHE:CD2	22:O:223:LEU:CD1	2.69	0.57
22:O:210:ARG:NH2	22:O:237:PRO:O	2.38	0.57
24:Q:9:GLU:HG2	24:Q:13:ARG:HE	1.70	0.57
27:T:89:TYR:CD2	27:T:90:PHE:HD1	2.22	0.57
31:X:87:PHE:HB2	31:X:99:PHE:HB3	1.81	0.57
6:6:105:LEU:HD23	6:6:111:GLY:HA2	1.86	0.57
10:C:174:THR:HA	10:C:177:GLN:NE2	2.17	0.57
13:F:88:LEU:HD21	13:F:112:LEU:HD21	1.87	0.57
13:F:164:ARG:HD3	20:M:428:LYS:CD	2.35	0.57
15:H:238:LEU:HD23	20:M:408:SER:C	2.30	0.57
15:H:392:HIS:CE1	15:H:420:ARG:CG	2.87	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:431:ILE:CD1	16:I:207:LEU:HB3	2.34	0.57
16:I:118:ALA:O	16:I:130:VAL:HG22	2.05	0.57
21:N:433:THR:O	21:N:434:SER:CB	2.53	0.57
22:O:77:SER:HA	22:O:80:LYS:HG2	1.78	0.57
23:P:181:LEU:HD23	23:P:181:LEU:C	2.30	0.57
27:T:169:GLN:NE2	27:T:173:GLU:H	2.02	0.57
28:U:106:ILE:HG22	28:U:110:PHE:HE2	1.68	0.57
30:W:85:LEU:HD23	30:W:85:LEU:C	2.30	0.57
30:W:91:LEU:HD21	30:W:157:PHE:HZ	1.69	0.57
33:Z:558:LEU:C	33:Z:558:LEU:HD12	2.30	0.57
33:Z:888:LEU:CD1	33:Z:901:PHE:CD1	2.88	0.57
1:1:4:MET:HE3	1:1:159:LEU:HD23	1.83	0.56
4:4:43:MET:O	4:4:45:PHE:CE1	2.58	0.56
14:G:39:ILE:HD12	14:G:195:ALA:HB2	1.87	0.56
14:G:217:TRP:CH2	14:G:234:LEU:HD13	2.41	0.56
16:I:362:LEU:HD21	16:I:384:LYS:HZ1	1.67	0.56
21:N:270:LEU:O	21:N:274:VAL:HG23	2.04	0.56
21:N:299:TYR:CZ	21:N:303:LEU:HD11	2.40	0.56
22:O:196:LEU:CD1	22:O:210:ARG:HH12	2.18	0.56
26:S:184:TRP:O	26:S:188:TYR:HD2	1.84	0.56
28:U:15:LEU:O	28:U:19:LEU:HG	2.04	0.56
33:Z:72:LYS:NZ	33:Z:114:SER:HA	2.19	0.56
33:Z:793:PHE:CE1	33:Z:830:LEU:HD22	2.38	0.56
12:E:114:GLN:NE2	12:E:118:ASP:OD1	2.38	0.56
18:K:253:MET:O	18:K:257:VAL:HG23	2.05	0.56
21:N:174:LEU:HA	21:N:182:ASN:HD22	1.68	0.56
21:N:902:VAL:C	21:N:903:VAL:HG22	2.30	0.56
25:R:205:GLU:HG2	25:R:206:ARG:NH2	2.20	0.56
26:S:163:VAL:CG1	26:S:184:TRP:CH2	2.88	0.56
31:X:14:VAL:HG12	31:X:15:CYS:N	2.20	0.56
33:Z:740:VAL:HG13	33:Z:761:PHE:HE1	1.61	0.56
1:1:80:SER:OG	14:G:102:TYR:HA	2.04	0.56
7:7:8:TYR:CZ	7:7:11:GLY:HA3	2.40	0.56
10:C:156:ASN:HD21	11:D:78:LEU:HD12	1.70	0.56
11:D:205:THR:HG21	11:D:209:ASN:CB	2.21	0.56
12:E:157:HIS:CD2	12:E:170:LYS:NZ	2.73	0.56
13:F:84:LEU:O	13:F:88:LEU:HG	2.04	0.56
15:H:340:LEU:HD23	15:H:370:ARG:NH1	2.20	0.56
15:H:425:GLU:O	15:H:429:PHE:CD2	2.59	0.56
17:J:137:MET:SD	17:J:229:MET:HE3	2.45	0.56
17:J:258:VAL:O	17:J:259:GLU:HB3	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:157:SER:H	19:L:120:LYS:HZ2	1.52	0.56
18:K:349:ARG:HH11	18:K:383:ILE:HD11	1.70	0.56
18:K:420:THR:HG22	18:K:423:LYS:HD3	1.87	0.56
19:L:249:SER:O	19:L:252:VAL:N	2.38	0.56
19:L:361:PHE:HE2	19:L:376:PHE:HD1	1.54	0.56
23:P:138:ARG:CG	23:P:141:LYS:HZ2	2.18	0.56
23:P:319:GLU:HG3	23:P:319:GLU:O	2.05	0.56
24:Q:139:ILE:HD11	24:Q:165:PHE:CE2	2.38	0.56
25:R:369:GLY:CA	25:R:383:ARG:HH21	2.19	0.56
26:S:163:VAL:CG1	26:S:184:TRP:CZ2	2.89	0.56
26:S:212:SER:O	26:S:216:LYS:HG3	2.04	0.56
26:S:322:LEU:HA	26:S:327:ILE:CG2	2.36	0.56
27:T:169:GLN:HE21	27:T:173:GLU:H	1.52	0.56
29:V:45:VAL:HG12	29:V:46:PRO:HA	1.84	0.56
31:X:46:TRP:O	31:X:68:LEU:HB3	2.05	0.56
33:Z:357:ILE:CG2	33:Z:361:HIS:CE1	2.88	0.56
33:Z:789:GLN:NE2	33:Z:791:LYS:HB2	2.21	0.56
33:Z:878:LEU:C	33:Z:878:LEU:HD23	2.29	0.56
1:1:109:GLU:HB3	1:1:111:TYR:CE1	2.40	0.56
7:7:6:MET:HE1	7:7:150:VAL:HB	1.88	0.56
11:D:67:ILE:HD11	11:D:73:LEU:HB2	1.87	0.56
18:K:244:HIS:CB	19:L:256:ILE:HD13	2.28	0.56
19:L:192:GLU:C	19:L:345:ARG:HH21	2.13	0.56
19:L:389:ALA:HB2	20:M:339:ARG:HH11	1.71	0.56
21:N:666:GLN:HE22	21:N:784:TYR:HB2	1.69	0.56
22:O:48:PHE:HZ	22:O:77:SER:HB3	1.69	0.56
22:O:226:LYS:O	22:O:227:ILE:CB	2.53	0.56
22:O:352:TRP:HB3	28:U:235:LEU:HD21	1.88	0.56
25:R:146:ASP:C	25:R:181:TYR:OH	2.49	0.56
26:S:144:LEU:HD22	26:S:155:LEU:HD13	1.88	0.56
26:S:274:PHE:CE2	26:S:278:LYS:NZ	2.73	0.56
28:U:165:GLU:H	29:V:42:ARG:NH1	2.03	0.56
31:X:73:THR:CG2	31:X:129:LEU:HD22	2.22	0.56
33:Z:740:VAL:O	33:Z:761:PHE:CZ	2.59	0.56
6:6:-8:PHE:CE2	6:6:-6:PRO:N	2.73	0.56
9:B:139:HIS:ND1	9:B:145:PHE:CD1	2.73	0.56
10:C:4:ARG:NH2	13:F:8:GLY:HA3	2.19	0.56
13:F:207:THR:HG21	13:F:210:ASN:HB2	1.87	0.56
15:H:280:VAL:HB	16:I:304:ARG:HH21	1.69	0.56
16:I:312:GLN:O	16:I:316:PHE:CD2	2.58	0.56
17:J:364:GLU:OE2	18:K:335:ASP:HB3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:99:PHE:HZ	18:K:102:PRO:CD	2.17	0.56
20:M:309:LEU:HD13	20:M:336:ALA:HB1	1.87	0.56
21:N:510:HIS:HB2	21:N:513:ILE:HD12	1.87	0.56
21:N:585:ARG:NH2	21:N:616:HIS:CD2	2.74	0.56
22:O:86:LEU:HD13	22:O:98:TYR:CD2	2.39	0.56
22:O:299:THR:N	22:O:365:LYS:NZ	2.50	0.56
22:O:352:TRP:CG	28:U:235:LEU:HD21	2.40	0.56
24:Q:71:LYS:HE2	24:Q:75:ARG:HD3	1.87	0.56
33:Z:572:ILE:CG1	33:Z:882:LEU:HD23	2.35	0.56
8:A:70:SER:N	14:G:157:TRP:HZ3	2.03	0.56
12:E:51:GLU:OE2	12:E:208:MET:SD	2.64	0.56
16:I:278:ILE:HG21	16:I:325:ILE:HD12	1.88	0.56
16:I:385:ASP:O	16:I:386:ASP:HB2	2.04	0.56
17:J:258:VAL:O	18:K:280:LYS:CD	2.54	0.56
22:O:79:VAL:CG2	22:O:124:ASP:HA	2.34	0.56
22:O:172:TYR:CZ	22:O:194:LEU:HD13	2.41	0.56
22:O:189:TYR:OH	22:O:227:ILE:CG2	2.53	0.56
24:Q:227:CYS:O	24:Q:334:HIS:CD2	2.59	0.56
24:Q:230:LYS:O	24:Q:231:ASP:HB2	2.06	0.56
29:V:258:GLU:O	29:V:262:THR:HG23	2.06	0.56
33:Z:197:LYS:O	33:Z:201:LEU:HG	2.05	0.56
33:Z:446:GLU:OE2	33:Z:484:LYS:NZ	2.34	0.56
33:Z:552:GLU:O	33:Z:553:ARG:CB	2.53	0.56
1:1:-4:VAL:HG21	1:1:49:ALA:HB3	1.87	0.56
6:6:89:TYR:CD1	6:6:92:ARG:HD3	2.40	0.56
17:J:254:GLY:O	18:K:330:ARG:HD2	2.06	0.56
18:K:332:GLY:O	18:K:333:ARG:NH1	2.34	0.56
22:O:284:GLU:CD	22:O:288:ARG:HH22	2.13	0.56
25:R:50:VAL:O	25:R:54:ILE:HG23	2.06	0.56
33:Z:269:TYR:CD1	33:Z:293:MET:HE1	2.40	0.56
33:Z:532:HIS:O	33:Z:535:VAL:HG23	2.05	0.56
2:2:36:ARG:NH1	9:B:222:LEU:O	2.38	0.56
2:2:220:ILE:HG22	3:3:186:VAL:CG2	2.36	0.56
5:5:8:PHE:CZ	5:5:179:HIS:NE2	2.74	0.56
12:E:20:ARG:NE	12:E:25:GLU:HG2	2.20	0.56
13:F:51:ARG:NH1	20:M:430:VAL:CG2	2.68	0.56
13:F:113:CYS:HB2	14:G:85:ARG:CD	2.36	0.56
13:F:173:GLU:HG3	14:G:57:LEU:HD11	1.87	0.56
15:H:142:ASP:O	15:H:143:ALA:HB3	2.05	0.56
15:H:202:GLU:HG2	15:H:203:LYS:HG3	1.87	0.56
15:H:449:LYS:NZ	16:I:346:ARG:NH1	2.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:100:LEU:HB2	18:K:109:ILE:HG23	1.88	0.56
19:L:361:PHE:CZ	19:L:365:THR:HG21	2.41	0.56
19:L:364:HIS:ND1	19:L:391:ILE:CG2	2.69	0.56
21:N:190:LEU:CD1	21:N:224:THR:HG23	2.28	0.56
22:O:106:PHE:CE2	22:O:109:LEU:HB2	2.40	0.56
23:P:119:ILE:O	23:P:126:THR:CG2	2.54	0.56
23:P:306:ASN:ND2	23:P:349:ASN:HB2	2.20	0.56
25:R:218:CYS:SG	25:R:226:GLU:HG3	2.45	0.56
25:R:363:PHE:HD1	32:Y:78:LYS:HD3	1.70	0.56
26:S:380:CYS:O	26:S:384:ARG:HG3	2.06	0.56
27:T:261:GLU:OE2	29:V:296:LEU:O	2.24	0.56
28:U:24:ARG:NE	29:V:100:ARG:HH12	2.02	0.56
28:U:164:GLU:CD	29:V:39:LYS:HG3	2.31	0.56
28:U:283:ARG:NH1	29:V:258:GLU:HG3	2.21	0.56
29:V:51:GLY:N	29:V:108:TYR:CZ	2.74	0.56
31:X:28:PRO:CA	31:X:57:VAL:HG21	2.35	0.56
33:Z:297:VAL:HG11	33:Z:310:LEU:CD1	2.35	0.56
2:2:103:VAL:HG11	2:2:180:ILE:HA	1.88	0.56
5:5:76:VAL:CG1	5:5:113:TYR:CD2	2.84	0.56
8:A:133:TYR:CD1	9:B:2:THR:HA	2.41	0.56
10:C:27:GLU:O	10:C:31:HIS:HD2	1.88	0.56
13:F:51:ARG:CD	20:M:430:VAL:HG11	2.28	0.56
14:G:203:HIS:CD2	14:G:211:PHE:CD1	2.94	0.56
15:H:282:LYS:HG3	16:I:262:ARG:HE	1.71	0.56
17:J:255:SER:HA	18:K:304:ASP:OD2	2.06	0.56
17:J:258:VAL:C	18:K:280:LYS:CE	2.79	0.56
18:K:106:ASN:O	18:K:121:ARG:HG3	2.06	0.56
22:O:30:GLU:CB	22:O:40:GLN:HE22	2.13	0.56
22:O:70:TYR:CE1	22:O:75:GLN:CG	2.87	0.56
22:O:72:LYS:HD2	22:O:73:ILE:CD1	2.36	0.56
24:Q:20:TYR:HE2	24:Q:68:MET:CG	2.12	0.56
24:Q:75:ARG:NE	24:Q:113:ASP:HB3	2.19	0.56
24:Q:297:ASP:CB	24:Q:321:TYR:CE1	2.89	0.56
25:R:259:PHE:CD1	25:R:259:PHE:C	2.82	0.56
27:T:89:TYR:O	27:T:90:PHE:CG	2.58	0.56
27:T:229:VAL:HG11	27:T:234:TYR:CE2	2.40	0.56
28:U:92:TRP:CZ2	28:U:120:LEU:CG	2.89	0.56
28:U:130:VAL:HG23	28:U:131:GLY:H	1.69	0.56
31:X:28:PRO:C	31:X:29:VAL:HG22	2.31	0.56
31:X:93:SER:HA	31:X:96:ARG:HE	1.71	0.56
1:1:156:LYS:HE2	1:1:188:PHE:CE1	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:H:145:TYR:O	15:H:168:ILE:HG22	2.06	0.56
15:H:182:ASN:CG	15:H:183:ILE:H	2.14	0.56
15:H:340:LEU:HB3	15:H:370:ARG:HH12	1.70	0.56
19:L:140:LEU:HD21	19:L:158:ILE:CD1	2.36	0.56
19:L:174:GLU:HG2	19:L:175:GLN:NE2	2.21	0.56
20:M:379:LEU:HD11	20:M:415:PHE:HB2	1.87	0.56
21:N:70:TYR:CD1	21:N:75:TYR:CD1	2.93	0.56
21:N:380:LEU:O	21:N:384:LYS:HG3	2.05	0.56
22:O:41:LEU:HD23	22:O:41:LEU:C	2.29	0.56
24:Q:61:LEU:CG	24:Q:65:TYR:CE1	2.57	0.56
25:R:70:TYR:CD2	25:R:75:GLY:HA3	2.41	0.56
25:R:193:ALA:O	25:R:197:MET:HG2	2.06	0.56
31:X:35:ILE:HD12	31:X:48:PHE:CE1	2.41	0.56
33:Z:297:VAL:HG11	33:Z:310:LEU:CD2	2.36	0.56
1:1:13:ILE:HG22	1:1:155:ILE:CD1	2.36	0.55
7:7:6:MET:HG2	7:7:169:ILE:HD11	1.88	0.55
10:C:120:GLN:NE2	11:D:127:ARG:NH2	2.54	0.55
13:F:105:VAL:HG21	13:F:145:LEU:HB3	1.86	0.55
15:H:180:LYS:HD3	15:H:185:LEU:HD21	1.87	0.55
19:L:252:VAL:HG12	19:L:252:VAL:O	2.05	0.55
22:O:196:LEU:HD13	22:O:210:ARG:HH12	1.71	0.55
22:O:362:GLN:HG3	28:U:230:GLN:OE1	2.06	0.55
23:P:350:LEU:HD12	23:P:383:LEU:HD12	1.85	0.55
26:S:415:SER:CB	27:T:159:LYS:NZ	2.69	0.55
29:V:53:MET:HE2	29:V:65:VAL:HG11	1.88	0.55
33:Z:389:PHE:O	33:Z:857:LEU:HG	2.06	0.55
8:A:42:SER:HB2	8:A:171:THR:HG21	1.88	0.55
13:F:13:PHE:HZ	14:G:130:PRO:HD2	1.65	0.55
13:F:222:PHE:CE1	13:F:224:ILE:HG13	2.37	0.55
14:G:217:TRP:HE1	14:G:228:LYS:HB2	1.70	0.55
18:K:154:SER:OG	18:K:260:LEU:HD22	2.06	0.55
19:L:345:ARG:NH1	19:L:347:VAL:HG22	2.20	0.55
20:M:45:ARG:NH2	30:W:31:ASP:OD1	2.40	0.55
20:M:221:TYR:HH	20:M:348:GLU:CB	2.15	0.55
20:M:362:GLN:CG	20:M:376:TRP:CH2	2.87	0.55
21:N:619:CYS:SG	21:N:652:VAL:HG22	2.46	0.55
21:N:740:TRP:H	21:N:740:TRP:HD1	1.53	0.55
23:P:119:ILE:HD11	23:P:139:VAL:CG1	2.37	0.55
23:P:433:ILE:HG23	28:U:206:ASP:OD2	2.06	0.55
24:Q:429:LYS:HE2	28:U:296:ILE:HG22	1.88	0.55
27:T:201:PRO:HD2	27:T:204:ASN:HD22	1.70	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:246:GLU:OE1	27:T:246:GLU:O	2.25	0.55
30:W:23:ARG:HE	30:W:27:GLU:CG	2.17	0.55
3:3:28:SER:HB2	4:4:127:LEU:CD2	2.35	0.55
4:4:43:MET:CG	4:4:103:ILE:HG12	2.28	0.55
5:5:178:TYR:CZ	5:5:187:TYR:HD1	2.15	0.55
15:H:176:VAL:HG21	15:H:183:ILE:HB	1.88	0.55
18:K:242:PHE:CD1	19:L:256:ILE:HD11	2.41	0.55
19:L:361:PHE:HD1	19:L:391:ILE:HD12	1.70	0.55
20:M:76:PRO:HG2	20:M:150:LYS:HZ1	1.69	0.55
21:N:300:ASN:O	21:N:304:LEU:HG	2.07	0.55
22:O:122:HIS:CG	22:O:164:PRO:HD3	2.41	0.55
22:O:297:ILE:CG1	22:O:308:LEU:HD11	2.37	0.55
25:R:399:GLN:HE21	25:R:403:LEU:HD22	1.70	0.55
26:S:343:LEU:HD12	26:S:347:HIS:CE1	2.39	0.55
29:V:92:MET:HA	29:V:95:LEU:HD12	1.86	0.55
29:V:230:TYR:N	29:V:231:GLU:OE1	2.39	0.55
5:5:50:ALA:HB2	6:6:119:VAL:HG23	1.89	0.55
6:6:3:ILE:HD11	6:6:101:ILE:CD1	2.36	0.55
8:A:14:ARG:NE	8:A:15:HIS:NE2	2.54	0.55
13:F:65:LYS:HB2	13:F:222:PHE:CZ	2.41	0.55
14:G:219:SER:O	14:G:223:THR:OG1	2.21	0.55
16:I:281:ILE:HG22	16:I:284:ILE:HD11	1.84	0.55
16:I:397:THR:O	16:I:401:LEU:HG	2.05	0.55
17:J:160:ILE:HG21	17:J:202:VAL:HG21	1.89	0.55
18:K:268:ILE:CG2	18:K:315:ILE:HD12	2.36	0.55
25:R:27:SER:OG	25:R:180:PHE:HA	2.06	0.55
26:S:438:HIS:CD2	27:T:197:TYR:HE1	2.24	0.55
26:S:461:PHE:CE2	28:U:274:MET:HA	2.42	0.55
29:V:157:ARG:N	29:V:197:TYR:CD1	2.75	0.55
30:W:4:GLU:H	30:W:47:ASN:HD22	1.53	0.55
31:X:113:GLU:O	31:X:114:LEU:CB	2.55	0.55
1:1:61:TYR:HD1	8:A:106:TYR:HB2	1.70	0.55
7:7:49:ILE:O	7:7:53:GLN:HG2	2.07	0.55
12:E:119:LEU:HA	12:E:122:ARG:HE	1.71	0.55
12:E:209:GLU:HG3	15:H:406:LEU:HB3	1.89	0.55
15:H:168:ILE:H	15:H:174:VAL:HG13	1.72	0.55
21:N:70:TYR:OH	21:N:100:THR:HG21	2.07	0.55
21:N:360:GLN:O	21:N:364:LYS:HG3	2.06	0.55
22:O:185:PHE:CZ	22:O:223:LEU:HD12	2.39	0.55
23:P:354:SER:HB3	23:P:402:PHE:CD1	2.38	0.55
26:S:215:MET:SD	26:S:218:LEU:HD12	2.47	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:354:LEU:HD12	26:S:359:LYS:HE3	1.88	0.55
28:U:15:LEU:CD1	29:V:216:LEU:HD21	2.36	0.55
28:U:85:ALA:O	28:U:88:LYS:HE3	2.06	0.55
28:U:191:THR:HG21	29:V:232:GLU:OE1	2.07	0.55
33:Z:327:GLN:NE2	33:Z:346:LEU:CD1	2.69	0.55
33:Z:361:HIS:CG	33:Z:960:GLY:O	2.59	0.55
33:Z:433:LEU:HD13	33:Z:473:LEU:HD23	1.89	0.55
1:1:83:LYS:CD	1:1:119:VAL:HG23	2.36	0.55
9:B:159:TRP:CE2	10:C:57:LEU:HD23	2.40	0.55
13:F:30:LYS:NZ	13:F:163:ALA:C	2.64	0.55
14:G:203:HIS:CG	14:G:211:PHE:CD1	2.94	0.55
15:H:62:ARG:NH1	16:I:99:ILE:O	2.31	0.55
17:J:264:GLY:HA3	18:K:281:ARG:NH1	2.22	0.55
18:K:92:VAL:HG22	18:K:93:PRO:HA	1.87	0.55
20:M:149:ASN:HD21	29:V:76:THR:CG2	2.20	0.55
22:O:15:ARG:O	22:O:15:ARG:HG3	2.07	0.55
23:P:265:VAL:HG12	23:P:296:GLN:HE21	1.71	0.55
23:P:311:TRP:HZ2	23:P:341:LEU:HB3	1.71	0.55
23:P:392:LYS:HG3	24:Q:354:PHE:HB2	1.88	0.55
24:Q:227:CYS:C	24:Q:334:HIS:CE1	2.85	0.55
27:T:103:SER:O	27:T:106:ILE:HG22	2.06	0.55
29:V:230:TYR:HB2	29:V:231:GLU:OE1	2.07	0.55
33:Z:913:ILE:CG1	33:Z:965:LEU:H	2.20	0.55
1:1:20:THR:HB	1:1:28:ASN:HD22	1.71	0.55
2:2:4:VAL:HG22	2:2:159:ILE:HD11	1.89	0.55
4:4:31:ASP:OD2	4:4:33:LYS:CE	2.54	0.55
5:5:6:PHE:CE1	5:5:13:ILE:HB	2.42	0.55
8:A:24:ARG:HD2	8:A:32:PHE:CE2	2.41	0.55
9:B:118:MET:CE	9:B:151:ASP:O	2.54	0.55
15:H:315:GLY:HA2	16:I:300:ARG:NH2	2.21	0.55
15:H:319:PHE:HD2	20:M:254:MET:HG2	1.70	0.55
16:I:184:ILE:CD1	16:I:187:LEU:HD12	2.35	0.55
17:J:26:LYS:CG	21:N:107:GLU:OE1	2.55	0.55
17:J:162:GLU:OE1	17:J:166:LEU:HD22	2.07	0.55
18:K:273:GLU:HB2	19:L:306:MET:HE1	1.86	0.55
18:K:319:ASN:OD1	18:K:320:ARG:N	2.40	0.55
21:N:348:PHE:HZ	21:N:355:TRP:CE2	2.24	0.55
22:O:44:SER:HB3	22:O:72:LYS:HZ2	1.61	0.55
22:O:66:VAL:HG13	22:O:106:PHE:CZ	2.41	0.55
22:O:139:LEU:HD23	22:O:181:PHE:CZ	2.41	0.55
33:Z:562:TRP:CZ2	33:Z:566:LEU:HD11	2.41	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:69:ASP:CB	13:F:107:ARG:HG2	2.37	0.55
10:C:181:LYS:O	10:C:184:MET:HE3	2.06	0.55
12:E:14:THR:HG22	12:E:22:PHE:HE2	1.71	0.55
20:M:423:GLN:O	20:M:424:ALA:HB3	2.07	0.55
21:N:355:TRP:O	21:N:358:LYS:HB2	2.06	0.55
21:N:596:LEU:HD11	21:N:718:GLU:HB2	1.88	0.55
22:O:12:SER:HB3	22:O:19:ASP:OD2	2.06	0.55
23:P:308:LEU:HD23	23:P:369:LEU:HA	1.89	0.55
25:R:396:LYS:NZ	26:S:449:LEU:HB3	2.20	0.55
27:T:50:ILE:HG13	27:T:51:TYR:HD2	1.67	0.55
27:T:127:GLN:HA	27:T:132:HIS:HE1	1.64	0.55
28:U:165:GLU:N	29:V:42:ARG:NH1	2.55	0.55
29:V:37:MET:HE2	29:V:141:VAL:HG21	1.89	0.55
29:V:117:TRP:HA	29:V:196:TYR:CE1	2.42	0.55
31:X:20:ASP:O	31:X:21:SER:CB	2.53	0.55
3:3:87:TYR:HD1	3:3:90:ARG:HD3	1.71	0.55
13:F:65:LYS:HA	13:F:222:PHE:CE2	2.41	0.55
16:I:268:PHE:CE2	16:I:312:GLN:HB2	2.42	0.55
19:L:252:VAL:HG12	20:M:256:ILE:CG2	2.36	0.55
20:M:433:TYR:HD1	20:M:434:ALA:N	2.05	0.55
21:N:768:ILE:CG1	21:N:919:THR:HB	2.37	0.55
22:O:362:GLN:NE2	28:U:230:GLN:HB2	2.21	0.55
28:U:92:TRP:CH2	28:U:94:HIS:CD2	2.95	0.55
29:V:52:LEU:HG	29:V:107:TRP:CZ3	2.42	0.55
31:X:18:ASN:O	31:X:98:PHE:CE1	2.59	0.55
31:X:46:TRP:HZ2	31:X:132:SER:HA	1.72	0.55
1:1:124:TYR:CB	1:1:142:PHE:CE1	2.90	0.55
5:5:32:LYS:HB3	6:6:123:GLU:OE2	2.07	0.55
5:5:35:ILE:HD11	5:5:45:MET:HE3	1.89	0.55
8:A:75:ILE:HD11	8:A:81:MET:HE2	1.88	0.55
9:B:75:TYR:CE1	9:B:82:TYR:CD2	2.95	0.55
12:E:157:HIS:HB3	12:E:167:TYR:CZ	2.29	0.55
15:H:173:ARG:HH22	16:I:128:TYR:HB3	1.70	0.55
15:H:389:PHE:CZ	15:H:419:LEU:HD22	2.42	0.55
16:I:137:ASP:O	16:I:141:LEU:HG	2.05	0.55
16:I:281:ILE:HG22	16:I:284:ILE:CG1	2.37	0.55
16:I:290:LYS:NZ	16:I:333:THR:CA	2.70	0.55
19:L:290:ARG:NH2	19:L:299:ARG:HH22	2.05	0.55
19:L:364:HIS:ND1	19:L:391:ILE:HG21	2.22	0.55
22:O:106:PHE:N	22:O:110:ASP:OD1	2.40	0.55
24:Q:72:ASP:CG	24:Q:75:ARG:NH2	2.54	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:70:TYR:HA	25:R:73:ASN:HD22	1.72	0.55
25:R:397:ASN:CB	25:R:400:TYR:H	2.19	0.55
27:T:206:LYS:HD3	27:T:214:GLU:HA	1.89	0.55
28:U:16:LEU:O	29:V:209:GLU:OE2	2.25	0.55
31:X:46:TRP:O	31:X:68:LEU:HB2	2.07	0.55
31:X:102:GLN:OE1	31:X:103:GLU:HG2	2.06	0.55
33:Z:138:ARG:NH2	33:Z:141:SER:CB	2.69	0.55
5:5:83:LEU:O	5:5:87:VAL:HG23	2.07	0.54
7:7:66:ASN:ND2	7:7:79:LEU:HD23	2.09	0.54
9:B:43:VAL:HG11	9:B:137:ALA:HB1	1.90	0.54
9:B:218:ASN:ND2	9:B:236:ARG:NH2	2.51	0.54
15:H:306:ILE:HG22	15:H:308:PHE:CE1	2.42	0.54
16:I:249:GLY:HA3	16:I:284:ILE:HD13	1.89	0.54
19:L:92:GLU:HB2	20:M:65:ASN:ND2	2.21	0.54
21:N:190:LEU:HD23	21:N:190:LEU:O	2.07	0.54
22:O:121:ASP:O	22:O:122:HIS:HB3	2.06	0.54
22:O:185:PHE:CD2	22:O:223:LEU:HB3	2.42	0.54
22:O:207:LEU:O	22:O:211:GLN:HG3	2.07	0.54
23:P:181:LEU:HD23	23:P:181:LEU:O	2.07	0.54
23:P:203:ILE:CG2	23:P:220:TYR:CD1	2.89	0.54
25:R:62:TYR:CE2	25:R:180:PHE:HE1	2.20	0.54
27:T:161:TRP:HE3	27:T:162:ASP:OD1	1.90	0.54
29:V:251:TYR:CD1	29:V:254:ARG:NH2	2.75	0.54
33:Z:897:HIS:NE2	33:Z:899:GLN:CG	2.70	0.54
1:1:138:CYS:O	1:1:142:PHE:HB2	2.08	0.54
5:5:104:TYR:HD1	5:5:109:GLY:C	2.16	0.54
9:B:69:PRO:CD	9:B:104:TYR:HE1	2.19	0.54
9:B:139:HIS:CE1	9:B:145:PHE:CE1	2.94	0.54
10:C:208:TYR:CD1	10:C:232:PRO:C	2.85	0.54
14:G:90:ARG:HH21	14:G:93:GLU:CD	2.15	0.54
16:I:150:HIS:CG	16:I:151:HIS:N	2.68	0.54
18:K:273:GLU:CG	19:L:306:MET:HE2	2.37	0.54
19:L:140:LEU:HD21	19:L:158:ILE:CG1	2.36	0.54
21:N:362:TRP:HH2	21:N:742:TRP:HZ2	1.49	0.54
21:N:736:PHE:CG	21:N:749:LEU:HD21	2.43	0.54
22:O:116:ASN:HB3	22:O:127:LEU:HB3	1.87	0.54
22:O:266:PHE:O	22:O:270:ILE:HG12	2.06	0.54
24:Q:236:PHE:CE2	24:Q:269:LYS:HD3	2.41	0.54
25:R:334:ARG:CZ	25:R:338:TYR:CE2	2.90	0.54
27:T:27:LEU:HD22	27:T:81:TYR:OH	2.08	0.54
28:U:14:VAL:HG21	28:U:48:VAL:CG1	2.31	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:49:VAL:HG12	29:V:73:GLN:HG2	1.88	0.54
30:W:125:LEU:CD1	30:W:157:PHE:HB2	2.10	0.54
33:Z:126:TYR:O	33:Z:127:SER:HB3	2.06	0.54
33:Z:827:LEU:HD23	33:Z:831:LEU:CD2	2.31	0.54
6:6:58:ARG:CZ	6:6:91:LYS:NZ	2.70	0.54
10:C:156:ASN:OD1	11:D:79:ASN:HB3	2.07	0.54
17:J:378:THR:O	17:J:382:PHE:HD2	1.88	0.54
18:K:372:ILE:CG2	24:Q:240:PHE:CE2	2.81	0.54
19:L:327:THR:HG21	19:L:333:LEU:HD11	1.90	0.54
22:O:122:HIS:HB3	22:O:164:PRO:CG	2.37	0.54
23:P:311:TRP:CZ2	23:P:315:GLN:NE2	2.76	0.54
24:Q:41:ALA:O	24:Q:51:ARG:HD3	2.07	0.54
24:Q:400:TYR:OH	24:Q:404:ASN:ND2	2.40	0.54
25:R:80:GLU:HG2	25:R:81:HIS:CD2	2.43	0.54
26:S:234:ILE:HB	26:S:257:LEU:HD21	1.90	0.54
27:T:7:LEU:HB3	27:T:30:ILE:HG12	1.89	0.54
33:Z:389:PHE:CZ	33:Z:854:LEU:HD21	2.42	0.54
33:Z:390:LEU:CD1	33:Z:856:HIS:O	2.55	0.54
33:Z:427:GLN:HG2	33:Z:428:TRP:CD1	2.41	0.54
9:B:75:TYR:CD1	9:B:82:TYR:CE1	2.95	0.54
11:D:118:GLN:NE2	12:E:83:ALA:CB	2.71	0.54
14:G:182:HIS:NE2	14:G:186:LEU:CD1	2.70	0.54
17:J:35:ARG:NH1	17:J:39:GLU:OE2	2.40	0.54
17:J:181:GLN:CG	17:J:286:LYS:HD2	2.35	0.54
18:K:242:PHE:CD1	18:K:250:GLY:CA	2.91	0.54
21:N:383:LYS:N	21:N:412:TYR:OH	2.40	0.54
22:O:72:LYS:CD	22:O:73:ILE:HD12	2.36	0.54
22:O:122:HIS:HB3	22:O:164:PRO:HG2	1.88	0.54
22:O:280:LEU:HD23	22:O:280:LEU:C	2.32	0.54
27:T:143:SER:HA	27:T:146:ILE:HG22	1.89	0.54
28:U:92:TRP:CZ2	28:U:120:LEU:HG	2.42	0.54
29:V:261:LEU:HB3	29:V:280:LEU:CG	2.35	0.54
30:W:12:ASN:ND2	30:W:80:GLN:O	2.41	0.54
31:X:12:ALA:HB3	31:X:33:ILE:CB	2.37	0.54
33:Z:212:LEU:HD13	33:Z:236:PHE:O	2.06	0.54
33:Z:217:GLU:OE2	33:Z:248:TYR:HD2	1.91	0.54
5:5:111:THR:HG22	5:5:113:TYR:CE2	2.43	0.54
8:A:220:LYS:NZ	8:A:242:GLU:CB	2.71	0.54
10:C:50:ARG:HH22	10:C:57:LEU:HD13	1.72	0.54
16:I:132:ILE:HD12	16:I:138:LYS:CE	2.37	0.54
16:I:401:LEU:HD12	17:J:312:ARG:CD	2.27	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:283:LEU:HB3	20:M:327:THR:HG22	1.89	0.54
21:N:106:ILE:O	21:N:110:VAL:HG23	2.08	0.54
21:N:239:LEU:HD21	21:N:276:GLU:OE1	2.07	0.54
23:P:346:ILE:HD13	23:P:379:TYR:CD2	2.33	0.54
25:R:353:MET:HA	25:R:357:PHE:CD1	2.43	0.54
25:R:396:LYS:NZ	26:S:449:LEU:HD13	2.21	0.54
31:X:29:VAL:HG23	31:X:29:VAL:O	2.07	0.54
33:Z:330:ILE:HG23	33:Z:341:TYR:CE2	2.43	0.54
33:Z:617:ILE:CD1	33:Z:746:ILE:HG21	2.38	0.54
33:Z:743:ILE:HB	33:Z:761:PHE:HZ	1.72	0.54
1:I:9:LEU:O	2:2:93:HIS:HD2	1.90	0.54
1:I:58:ILE:HG12	8:A:106:TYR:OH	2.07	0.54
5:5:158:LYS:HG2	5:5:196:LEU:HD21	1.89	0.54
6:6:114:TYR:CE2	6:6:124:ARG:HB2	2.42	0.54
8:A:204:GLU:HB2	8:A:244:ARG:NH1	2.22	0.54
9:B:139:HIS:CG	9:B:145:PHE:CE1	2.96	0.54
16:I:170:VAL:O	16:I:247:ILE:HG22	2.07	0.54
19:L:109:MET:CE	19:L:120:LYS:HB2	2.38	0.54
19:L:252:VAL:CG1	20:M:256:ILE:HG23	2.37	0.54
20:M:189:GLN:HE21	20:M:350:PRO:HD2	1.71	0.54
21:N:12:LEU:HD23	21:N:15:GLU:CD	2.33	0.54
21:N:321:LEU:HD13	21:N:689:LYS:HD2	1.89	0.54
21:N:768:ILE:HG13	21:N:919:THR:CB	2.37	0.54
21:N:871:MET:O	21:N:872:THR:OG1	2.11	0.54
24:Q:124:PHE:CD1	24:Q:127:ARG:NH2	2.75	0.54
25:R:201:GLY:HA3	25:R:207:ARG:NH2	2.23	0.54
27:T:206:LYS:HZ2	27:T:214:GLU:HG3	1.73	0.54
29:V:159:ILE:O	29:V:160:ASP:HB2	2.06	0.54
33:Z:389:PHE:CE2	33:Z:854:LEU:HD21	2.42	0.54
33:Z:888:LEU:C	33:Z:889:VAL:HG13	2.32	0.54
12:E:12:VAL:HG11	12:E:123:PHE:CZ	2.30	0.54
12:E:20:ARG:HE	12:E:25:GLU:CG	2.20	0.54
12:E:52:LYS:HA	12:E:66:LYS:HG3	1.88	0.54
12:E:127:ALA:N	12:E:132:ARG:NH2	2.56	0.54
18:K:99:PHE:CE1	18:K:101:GLU:O	2.60	0.54
18:K:286:THR:HG23	18:K:287:GLY:N	2.23	0.54
18:K:395:VAL:HG22	19:L:210:VAL:HG21	1.89	0.54
18:K:423:LYS:H	18:K:428:LYS:HZ1	1.54	0.54
19:L:248:ALA:HA	19:L:251:ILE:HD12	1.89	0.54
21:N:50:TYR:CE1	21:N:62:ALA:HB2	2.43	0.54
23:P:350:LEU:HD13	23:P:383:LEU:HD12	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:241:ILE:HG22	25:R:242:GLU:CG	2.30	0.54
27:T:199:PHE:CD2	27:T:234:TYR:CD1	2.96	0.54
27:T:249:MET:O	27:T:250:MET:HB2	2.08	0.54
29:V:116:CYS:C	29:V:117:TRP:CD1	2.85	0.54
1:1:1:THR:CG2	1:1:129:SER:H	2.18	0.54
5:5:55:TRP:CH2	5:5:90:TYR:CE1	2.95	0.54
7:7:132:PRO:CB	7:7:151:VAL:HG22	2.38	0.54
19:L:217:GLY:HA3	19:L:343:LEU:HD23	1.89	0.54
21:N:509:GLN:O	21:N:510:HIS:CE1	2.61	0.54
22:O:95:SER:HA	22:O:98:TYR:CD2	2.42	0.54
22:O:116:ASN:CA	22:O:127:LEU:HB3	2.38	0.54
22:O:289:GLN:NE2	22:O:328:VAL:HG22	2.23	0.54
23:P:188:ILE:HD13	23:P:226:LYS:HB3	1.89	0.54
24:Q:11:ALA:HA	24:Q:26:VAL:HG11	1.90	0.54
26:S:184:TRP:HB3	26:S:188:TYR:HE2	1.73	0.54
33:Z:991:GLU:CD	33:Z:993:GLU:HB3	2.32	0.54
7:7:144:ASN:HD21	7:7:148:ARG:HD2	1.72	0.54
9:B:218:ASN:N	9:B:236:ARG:HD2	2.22	0.54
13:F:203:ASP:OD1	13:F:204:GLU:HG3	2.07	0.54
16:I:281:ILE:CG2	16:I:284:ILE:CD1	2.85	0.54
17:J:163:VAL:CG1	17:J:164:ILE:HG13	2.23	0.54
21:N:43:LEU:O	21:N:47:GLU:HG2	2.06	0.54
25:R:80:GLU:O	25:R:80:GLU:HG2	2.08	0.54
25:R:175:ALA:CB	25:R:213:TYR:HE2	2.21	0.54
30:W:104:LYS:O	30:W:105:VAL:CB	2.56	0.54
33:Z:99:LEU:CD1	33:Z:115:LEU:HD11	2.22	0.54
4:4:147:TYR:HE1	4:4:151:MET:HB2	1.73	0.54
4:4:152:THR:CG2	4:4:153:THR:N	2.71	0.54
8:A:128:TYR:HD1	8:A:131:ARG:HD3	1.73	0.54
12:E:35:SER:HA	12:E:53:ARG:CZ	2.38	0.54
14:G:98:PHE:HE1	14:G:104:THR:O	1.90	0.54
18:K:332:GLY:O	18:K:333:ARG:CG	2.55	0.54
19:L:248:ALA:H	20:M:303:ARG:NH2	2.06	0.54
20:M:283:LEU:HD12	20:M:286:ILE:CG1	2.38	0.54
20:M:319:ASP:CB	20:M:322:LYS:HZ3	2.07	0.54
21:N:318:LYS:NZ	21:N:348:PHE:HA	2.23	0.54
22:O:81:TYR:O	22:O:82:LEU:CB	2.47	0.54
22:O:223:LEU:HD21	22:O:277:ILE:HG21	1.85	0.54
22:O:372:GLU:O	22:O:376:GLN:HG3	2.08	0.54
25:R:263:ARG:HD2	25:R:336:LYS:HE3	1.90	0.54
25:R:350:LEU:HD21	25:R:365:ASP:OD1	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:234:ILE:CG1	26:S:257:LEU:HD13	2.36	0.54
27:T:112:ASN:OD1	27:T:177:PHE:HE1	1.90	0.54
28:U:92:TRP:CE2	28:U:120:LEU:HG	2.43	0.54
31:X:15:CYS:CB	31:X:100:TRP:HB2	2.33	0.54
33:Z:520:ILE:HG22	33:Z:521:GLU:N	2.23	0.54
3:3:29:ASN:OD1	3:3:30:LYS:HG3	2.09	0.53
4:4:43:MET:O	4:4:45:PHE:HE1	1.91	0.53
12:E:157:HIS:HB2	12:E:167:TYR:CD2	2.42	0.53
13:F:194:VAL:O	13:F:197:ILE:HG22	2.08	0.53
15:H:210:ASP:OD2	15:H:258:LEU:CD1	2.56	0.53
15:H:312:ASP:HB3	16:I:300:ARG:NH2	2.22	0.53
18:K:52:LYS:NZ	21:N:159:GLU:CD	2.65	0.53
19:L:255:TYR:HD2	19:L:258:GLU:HG2	1.73	0.53
21:N:239:LEU:O	21:N:243:LYS:HG3	2.09	0.53
23:P:133:GLU:OE2	23:P:167:THR:HA	2.08	0.53
24:Q:409:TYR:CA	25:R:399:GLN:CG	2.84	0.53
28:U:16:LEU:HA	28:U:19:LEU:HD12	1.90	0.53
29:V:157:ARG:HD3	29:V:160:ASP:HB2	1.90	0.53
30:W:2:VAL:HG11	30:W:4:GLU:CD	2.33	0.53
33:Z:408:TYR:C	33:Z:415:MET:HE1	2.32	0.53
33:Z:981:VAL:CG1	33:Z:983:LEU:CD2	2.87	0.53
33:Z:981:VAL:HG12	33:Z:983:LEU:CD2	2.38	0.53
3:3:117:LEU:C	3:3:117:LEU:HD12	2.34	0.53
6:6:19:ARG:HB2	6:6:191:ASP:OD2	2.08	0.53
6:6:29:ARG:HH21	7:7:148:ARG:NH2	2.06	0.53
6:6:164:LYS:HZ3	6:6:170:GLU:CB	2.22	0.53
8:A:69:VAL:CA	14:G:157:TRP:CZ3	2.79	0.53
10:C:87:LEU:CD1	10:C:119:LYS:HE2	2.38	0.53
13:F:179:PHE:CZ	13:F:192:ALA:HB3	2.36	0.53
14:G:59:VAL:CG1	14:G:62:LYS:HB2	2.38	0.53
15:H:157:VAL:O	15:H:157:VAL:HG12	2.07	0.53
17:J:43:ARG:HD3	26:S:477:VAL:O	2.08	0.53
17:J:188:TYR:HE1	17:J:295:ASN:C	2.16	0.53
18:K:350:ARG:NH2	24:Q:236:PHE:HE2	2.03	0.53
19:L:254:LYS:HG3	20:M:256:ILE:HG13	1.90	0.53
19:L:387:ASN:HD21	20:M:335:PRO:HB3	1.72	0.53
21:N:297:ASP:OD2	21:N:921:ARG:HG3	2.08	0.53
22:O:40:GLN:NE2	22:O:58:ARG:NH2	2.56	0.53
23:P:349:ASN:O	23:P:352:VAL:HG22	2.08	0.53
24:Q:359:ILE:HG21	24:Q:374:GLU:HG2	1.89	0.53
26:S:416:GLU:OE1	26:S:417:GLN:NE2	2.41	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:89:TYR:C	27:T:90:PHE:CD1	2.86	0.53
29:V:109:HIS:CB	29:V:111:HIS:CD2	2.91	0.53
29:V:168:LEU:HD21	29:V:184:ASN:CB	2.14	0.53
33:Z:135:LEU:HA	33:Z:157:LEU:HD22	1.89	0.53
33:Z:394:TYR:CD1	33:Z:859:LYS:HG2	2.42	0.53
1:1:123:PRO:HG2	1:1:124:TYR:CD1	2.43	0.53
2:2:99:ILE:HG13	2:2:127:LEU:HD12	1.90	0.53
3:3:48:ALA:HB3	4:4:123:THR:HG23	1.90	0.53
7:7:129:TYR:HE1	7:7:134:LEU:HD22	0.80	0.53
11:D:37:LYS:HD2	11:D:147:LEU:CB	2.35	0.53
12:E:157:HIS:CE1	12:E:170:LYS:NZ	2.66	0.53
18:K:291:GLU:HA	18:K:294:ARG:CZ	2.39	0.53
21:N:23:TYR:CG	27:T:35:ILE:HG21	2.44	0.53
21:N:717:LEU:HD22	21:N:733:LEU:CD1	2.38	0.53
23:P:204:LEU:HD13	23:P:220:TYR:CD2	2.44	0.53
24:Q:23:ALA:HB1	24:Q:27:TYR:HE2	1.74	0.53
24:Q:109:ASP:OD2	24:Q:114:GLN:NE2	2.37	0.53
30:W:125:LEU:HD12	30:W:157:PHE:CD1	2.42	0.53
31:X:48:PHE:HZ	31:X:68:LEU:HD13	1.71	0.53
33:Z:562:TRP:CE2	33:Z:566:LEU:HD11	2.43	0.53
1:1:58:ILE:HG22	1:1:85:LEU:HD11	1.90	0.53
3:3:76:GLU:HB2	3:3:106:LYS:NZ	2.24	0.53
4:4:26:VAL:HG12	4:4:29:ASP:HB2	1.89	0.53
13:F:51:ARG:NH1	20:M:430:VAL:CG1	2.66	0.53
15:H:428:MET:O	15:H:432:ARG:HG3	2.09	0.53
18:K:240:SER:C	18:K:243:VAL:N	2.67	0.53
19:L:337:LEU:HG	19:L:343:LEU:HD12	1.91	0.53
20:M:276:THR:CG2	20:M:321:VAL:HG12	2.38	0.53
20:M:407:GLN:NE2	20:M:411:LYS:NZ	2.57	0.53
21:N:258:ALA:HB2	21:N:286:LEU:CD2	2.39	0.53
22:O:138:LEU:HD23	22:O:138:LEU:C	2.34	0.53
22:O:292:CYS:O	22:O:296:LEU:HG	2.09	0.53
24:Q:41:ALA:HB3	24:Q:47:ASP:OD1	2.09	0.53
25:R:167:LYS:O	25:R:171:MET:HG3	2.08	0.53
30:W:102:GLN:O	30:W:103:ASN:HB2	2.09	0.53
31:X:28:PRO:CG	31:X:57:VAL:HG21	2.36	0.53
1:1:58:ILE:HA	8:A:106:TYR:CE1	2.44	0.53
5:5:55:TRP:HH2	5:5:90:TYR:CE1	2.26	0.53
8:A:87:ILE:HG13	14:G:157:TRP:CZ2	2.36	0.53
10:C:161:LYS:HD2	10:C:180:TYR:OH	2.08	0.53
15:H:66:LYS:HE2	15:H:70:LYS:HZ1	1.70	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:641:LEU:HD12	21:N:660:LEU:HD23	1.89	0.53
21:N:717:LEU:O	21:N:718:GLU:CB	2.53	0.53
21:N:768:ILE:HD11	21:N:919:THR:HG21	1.90	0.53
22:O:321:LYS:HE2	22:O:325:GLU:OE2	2.07	0.53
25:R:209:ARG:NH1	25:R:243:LEU:CD1	2.71	0.53
25:R:240:SER:OG	25:R:243:LEU:HB2	2.08	0.53
27:T:206:LYS:NZ	27:T:214:GLU:HG3	2.22	0.53
3:3:42:LEU:HD21	3:3:44:ILE:HD11	1.91	0.53
3:3:183:LYS:O	3:3:183:LYS:HG2	2.08	0.53
7:7:-3:VAL:HG12	7:7:49:ILE:HB	1.89	0.53
9:B:2:THR:O	9:B:3:ASP:HB2	2.08	0.53
12:E:157:HIS:CB	12:E:167:TYR:CD2	2.88	0.53
17:J:297:LEU:HD13	17:J:305:LEU:CD1	2.37	0.53
18:K:84:GLU:HB3	18:K:88:ARG:NH1	2.24	0.53
18:K:191:PRO:HG3	18:K:198:TYR:CZ	2.43	0.53
21:N:767:ALA:O	21:N:768:ILE:HB	2.09	0.53
22:O:17:GLU:O	22:O:18:ALA:HB2	2.07	0.53
22:O:26:PHE:CD1	22:O:58:ARG:CZ	2.91	0.53
22:O:42:SER:O	22:O:43:GLU:CB	2.57	0.53
22:O:183:ASN:O	22:O:184:ASP:HB2	2.08	0.53
23:P:184:MET:CE	23:P:227:ILE:HD11	2.39	0.53
26:S:234:ILE:CG2	26:S:257:LEU:CD2	2.86	0.53
26:S:461:PHE:CE1	28:U:278:ILE:CG1	2.90	0.53
27:T:139:ASP:HB3	27:T:142:LEU:HD12	1.91	0.53
29:V:33:ALA:HA	29:V:68:VAL:CG1	2.38	0.53
30:W:110:ILE:HD12	30:W:139:VAL:CG2	2.37	0.53
1:1:9:LYS:HG3	1:1:145:ASN:OD1	2.09	0.53
3:3:-2:ASN:HD21	3:3:48:ALA:N	2.05	0.53
3:3:65:TYR:CE2	3:3:69:GLU:OE2	2.62	0.53
12:E:119:LEU:CD1	12:E:122:ARG:NH2	2.72	0.53
12:E:127:ALA:C	12:E:132:ARG:HH22	2.16	0.53
14:G:51:LYS:NZ	14:G:63:ASN:O	2.42	0.53
15:H:357:ARG:HH21	16:I:290:LYS:CA	2.21	0.53
20:M:379:LEU:CD1	20:M:415:PHE:CB	2.86	0.53
21:N:216:ASN:O	21:N:217:MET:HB2	2.09	0.53
21:N:768:ILE:CG2	21:N:770:LYS:HE3	2.39	0.53
22:O:15:ARG:O	22:O:16:MET:HB2	2.05	0.53
22:O:66:VAL:HG13	22:O:106:PHE:CE1	2.43	0.53
22:O:69:PHE:HZ	22:O:77:SER:HB3	1.72	0.53
24:Q:82:THR:HG23	24:Q:93:THR:CG2	2.37	0.53
28:U:165:GLU:CA	29:V:42:ARG:HH12	2.22	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:65:PHE:HZ	30:W:98:LEU:CD2	2.22	0.53
31:X:11:ARG:O	31:X:12:ALA:HB2	2.08	0.53
32:Y:80:GLU:OE2	32:Y:83:ARG:NH2	2.41	0.53
33:Z:276:ASN:O	33:Z:277:GLU:HB3	2.09	0.53
33:Z:617:ILE:HD11	33:Z:746:ILE:HG22	1.89	0.53
2:2:114:HIS:ND1	2:2:120:ASP:OD2	2.42	0.53
15:H:217:GLN:HE22	15:H:377:PHE:HA	1.72	0.53
15:H:312:ASP:HB3	16:I:300:ARG:HH12	1.74	0.53
22:O:119:SER:HB2	22:O:166:ARG:NE	2.24	0.53
23:P:135:GLU:O	23:P:139:VAL:HG23	2.08	0.53
24:Q:131:VAL:HG12	24:Q:134:LYS:HZ1	1.73	0.53
24:Q:264:TYR:OH	24:Q:330:LEU:HB3	2.03	0.53
25:R:188:LYS:HB2	25:R:217:HIS:CE1	2.44	0.53
28:U:210:TYR:O	28:U:214:VAL:HG23	2.08	0.53
33:Z:68:LEU:CD1	33:Z:115:LEU:HD12	2.34	0.53
33:Z:224:LEU:HD23	33:Z:224:LEU:C	2.34	0.53
33:Z:374:LEU:HD11	33:Z:849:ARG:NH2	2.23	0.53
6:6:43:MET:HG3	6:6:102:ILE:HG22	1.90	0.53
11:D:6:ARG:HH21	12:E:12:VAL:N	2.07	0.53
12:E:201:LEU:HD11	12:E:219:LEU:HD11	1.89	0.53
15:H:162:ARG:HH21	20:M:75:LEU:HD11	1.74	0.53
17:J:141:LYS:CD	17:J:209:LYS:HE3	2.39	0.53
17:J:259:GLU:HB2	18:K:280:LYS:NZ	2.18	0.53
18:K:183:GLU:HG3	18:K:338:ILE:HG12	1.90	0.53
18:K:341:PRO:HG2	18:K:344:ARG:NH1	2.24	0.53
19:L:252:VAL:CG1	20:M:256:ILE:CG2	2.87	0.53
20:M:183:VAL:CG1	20:M:186:LEU:HD12	2.38	0.53
22:O:38:TRP:HZ3	22:O:54:SER:N	2.04	0.53
22:O:222:LEU:HD23	22:O:230:PHE:CZ	2.43	0.53
23:P:124:VAL:HG23	23:P:125:VAL:HG13	1.91	0.53
24:Q:35:SER:HB2	24:Q:46:VAL:O	2.07	0.53
28:U:94:HIS:CD2	28:U:120:LEU:CD2	2.80	0.53
31:X:17:TYR:O	31:X:98:PHE:CD2	2.57	0.53
33:Z:357:ILE:CG2	33:Z:960:GLY:HA3	2.39	0.53
33:Z:392:LEU:HD23	33:Z:857:LEU:CD2	2.38	0.53
33:Z:413:ASP:OD2	33:Z:897:HIS:CB	2.57	0.53
33:Z:955:VAL:HG23	33:Z:956:LEU:O	2.09	0.53
5:5:104:TYR:CE1	5:5:109:GLY:CA	2.90	0.53
9:B:50:LYS:CE	9:B:203:GLU:CD	2.82	0.53
9:B:178:ARG:HH11	9:B:194:LEU:HD23	1.74	0.53
16:I:230:THR:CG2	16:I:234:LYS:HE3	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:119:SER:O	17:J:121:MET:HG3	2.09	0.53
17:J:350:MET:HG2	17:J:386:VAL:HG13	1.91	0.53
19:L:167:VAL:O	19:L:168:TYR:CG	2.62	0.53
19:L:283:VAL:HG21	19:L:325:MET:SD	2.49	0.53
22:O:80:LYS:CE	22:O:121:ASP:OD1	2.57	0.53
23:P:127:GLU:CA	23:P:136:ARG:NH2	2.72	0.53
23:P:128:ASN:N	23:P:136:ARG:HH12	2.07	0.53
26:S:157:GLU:O	26:S:161:LYS:HG3	2.09	0.53
26:S:377:TYR:CZ	27:T:133:ILE:HG12	2.44	0.53
26:S:379:LEU:HB3	26:S:383:LEU:CD1	2.39	0.53
27:T:164:LEU:HD22	27:T:174:PHE:CE2	2.44	0.53
29:V:70:ALA:HA	29:V:108:TYR:HH	1.74	0.53
33:Z:833:GLN:O	33:Z:837:TYR:HD1	1.92	0.53
7:7:146:LEU:CD1	7:7:175:VAL:HG21	2.38	0.52
8:A:24:ARG:HE	8:A:29:GLU:HG2	1.73	0.52
8:A:55:SER:HB3	8:A:72:ILE:HD11	1.91	0.52
13:F:30:LYS:HZ1	13:F:164:ARG:H	0.57	0.52
16:I:372:SER:CB	16:I:410:GLN:HE21	2.21	0.52
22:O:44:SER:O	22:O:47:LYS:CG	2.45	0.52
28:U:210:TYR:CZ	28:U:225:ILE:HB	2.44	0.52
31:X:46:TRP:CG	31:X:68:LEU:HD23	2.44	0.52
31:X:85:ARG:CG	31:X:87:PHE:CE1	2.93	0.52
31:X:89:LEU:HB2	31:X:99:PHE:HE1	1.75	0.52
33:Z:743:ILE:HB	33:Z:761:PHE:CZ	2.44	0.52
2:2:84:LYS:HD2	2:2:119:THR:HG23	1.91	0.52
5:5:15:ALA:HB1	5:5:161:ILE:CD1	2.33	0.52
8:A:56:GLN:HE21	8:A:214:LEU:CD1	2.19	0.52
9:B:50:LYS:CE	9:B:203:GLU:OE2	2.56	0.52
9:B:139:HIS:HE1	9:B:145:PHE:CE2	2.24	0.52
11:D:68:ASP:OD2	11:D:97:ARG:NH2	2.35	0.52
12:E:141:ALA:C	12:E:142:LEU:HD12	2.34	0.52
15:H:142:ASP:HA	20:M:74:GLN:HG3	1.91	0.52
17:J:109:ALA:O	17:J:110:SER:OG	2.24	0.52
17:J:156:GLN:HE21	17:J:160:ILE:CG1	2.18	0.52
18:K:220:THR:HG22	18:K:224:LYS:HE2	1.89	0.52
18:K:238:ASN:CB	18:K:241:GLU:HG2	2.39	0.52
19:L:260:ALA:HA	19:L:307:GLU:OE1	2.09	0.52
20:M:292:ASP:OD1	20:M:294:GLU:N	2.34	0.52
21:N:142:GLU:O	21:N:146:LYS:HG3	2.10	0.52
22:O:11:LEU:HD13	22:O:15:ARG:NH2	2.24	0.52
23:P:344:ARG:NH1	23:P:348:HIS:HB2	2.23	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:11:ALA:HB2	24:Q:26:VAL:HG12	1.92	0.52
25:R:206:ARG:HE	25:R:209:ARG:HD2	1.74	0.52
26:S:211:ARG:HH21	26:S:240:ASP:HB3	1.73	0.52
29:V:196:TYR:O	29:V:197:TYR:CB	2.58	0.52
29:V:247:ILE:HD12	29:V:251:TYR:OH	2.08	0.52
31:X:97:TYR:C	31:X:98:PHE:HD1	2.17	0.52
33:Z:617:ILE:HD11	33:Z:746:ILE:CG2	2.39	0.52
33:Z:764:LEU:HD23	33:Z:767:TYR:CE2	2.45	0.52
5:5:32:LYS:HD2	6:6:123:GLU:OE2	2.09	0.52
10:C:4:ARG:NE	10:C:5:ARG:NH1	2.56	0.52
10:C:208:TYR:HE1	10:C:232:PRO:HB3	1.67	0.52
11:D:146:LYS:HB3	11:D:148:TYR:CE2	2.44	0.52
16:I:223:GLY:O	16:I:229:LYS:HE2	2.08	0.52
17:J:251:ASP:OD1	17:J:293:ALA:O	2.27	0.52
21:N:114:SER:CA	21:N:161:TYR:CE2	2.64	0.52
21:N:361:ASN:ND2	21:N:399:PHE:CZ	2.78	0.52
22:O:82:LEU:N	22:O:85:SER:HB2	2.15	0.52
22:O:167:ILE:HG23	22:O:168:THR:N	2.25	0.52
23:P:434:THR:HG21	28:U:137:TYR:OH	2.09	0.52
25:R:380:VAL:HA	26:S:398:THR:HG22	1.89	0.52
33:Z:319:THR:O	33:Z:323:TYR:CD1	2.63	0.52
33:Z:381:LEU:CD1	33:Z:385:PHE:CE2	2.91	0.52
2:2:36:ARG:HB2	2:2:42:TRP:CH2	2.44	0.52
2:2:124:TYR:OH	2:2:139:GLU:CB	2.57	0.52
10:C:108:VAL:O	10:C:112:VAL:HG23	2.10	0.52
16:I:216:PRO:HG3	16:I:345:ASP:HB2	1.91	0.52
17:J:135:SER:O	17:J:136:LEU:CB	2.56	0.52
17:J:265:ASP:O	17:J:269:GLN:HG2	2.10	0.52
18:K:395:VAL:HG13	19:L:206:ILE:HG22	1.92	0.52
19:L:254:LYS:HE3	20:M:256:ILE:CG1	2.32	0.52
20:M:149:ASN:HD21	29:V:76:THR:HG22	1.74	0.52
21:N:114:SER:N	21:N:161:TYR:CE2	2.78	0.52
21:N:134:THR:O	21:N:138:GLU:HG3	2.10	0.52
21:N:740:TRP:H	21:N:740:TRP:CD1	2.27	0.52
22:O:199:LEU:HA	22:O:203:THR:HB	1.91	0.52
22:O:271:LYS:O	22:O:274:ILE:HG22	2.10	0.52
22:O:362:GLN:NE2	28:U:230:GLN:CB	2.73	0.52
26:S:192:GLU:OE1	26:S:239:ARG:CZ	2.58	0.52
27:T:50:ILE:O	27:T:55:LEU:CD1	2.57	0.52
28:U:49:THR:HB	29:V:39:LYS:HE3	1.92	0.52
33:Z:278:LEU:HD13	33:Z:300:ALA:HB3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:297:VAL:HG11	33:Z:310:LEU:HD22	1.85	0.52
33:Z:782:ILE:HG23	33:Z:864:MET:CG	2.33	0.52
33:Z:897:HIS:NE2	33:Z:899:GLN:HG2	2.23	0.52
1:1:120:HIS:CB	7:7:28:PHE:CE1	2.93	0.52
8:A:92:ASN:OD1	8:A:137:LEU:HD11	2.08	0.52
15:H:149:LEU:HD21	15:H:179:SER:HB3	1.91	0.52
18:K:141:ARG:HH11	19:L:153:LEU:HD12	1.74	0.52
19:L:358:LEU:CD1	19:L:362:LYS:HE3	2.39	0.52
21:N:760:GLY:O	21:N:761:ILE:HB	2.08	0.52
24:Q:62:GLY:HA2	24:Q:65:TYR:CD2	2.45	0.52
24:Q:90:LYS:HZ2	24:Q:129:LYS:HG3	1.73	0.52
27:T:15:PHE:CG	27:T:64:VAL:HG13	2.45	0.52
28:U:274:MET:HA	28:U:277:TYR:HD2	1.73	0.52
33:Z:65:GLU:OE2	33:Z:111:LEU:HA	2.10	0.52
33:Z:439:TYR:O	33:Z:447:VAL:HG12	2.10	0.52
33:Z:463:HIS:CD2	33:Z:464:ASP:HB3	2.44	0.52
3:3:158:ILE:HG23	3:3:159:SER:N	2.24	0.52
7:7:65:GLU:HA	7:7:68:TYR:HD2	1.73	0.52
7:7:187:PHE:CE2	7:7:204:LEU:CB	2.93	0.52
12:E:220:SER:HA	12:E:231:TYR:H	1.74	0.52
15:H:335:GLU:HG3	15:H:339:GLN:NE2	2.24	0.52
17:J:224:GLY:O	17:J:227:SER:CA	2.58	0.52
20:M:166:ARG:NH1	20:M:172:VAL:HG21	2.24	0.52
21:N:525:ASN:CB	21:N:528:ARG:HD3	2.39	0.52
24:Q:232:TYR:OH	24:Q:271:MET:SD	2.62	0.52
24:Q:300:LYS:O	24:Q:304:GLU:HG3	2.09	0.52
24:Q:370:THR:O	24:Q:374:GLU:HG3	2.09	0.52
25:R:161:ALA:C	25:R:162:ILE:HG23	2.35	0.52
25:R:237:THR:O	25:R:237:THR:HG22	2.10	0.52
29:V:49:VAL:CG1	29:V:73:GLN:HE21	2.23	0.52
31:X:75:TRP:CE3	31:X:129:LEU:HD11	2.43	0.52
31:X:85:ARG:NH1	31:X:87:PHE:CD2	2.64	0.52
33:Z:80:SER:O	33:Z:81:SER:HB2	2.09	0.52
33:Z:426:TYR:CD2	33:Z:432:GLY:O	2.62	0.52
33:Z:440:LEU:HD21	33:Z:477:TYR:CE1	2.45	0.52
33:Z:917:ASN:ND2	33:Z:918:ASP:H	2.07	0.52
2:2:109:HIS:HB3	2:2:111:PHE:HE2	1.75	0.52
3:3:179:TYR:HE2	3:3:188:LYS:HD2	1.68	0.52
4:4:3:ILE:HB	4:4:132:HIS:HD2	1.75	0.52
5:5:162:LEU:HD23	5:5:200:VAL:HG11	1.92	0.52
7:7:12:VAL:HG22	7:7:111:VAL:HG23	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:132:ALA:O	9:B:5:TYR:CE2	2.62	0.52
10:C:181:LYS:HE3	10:C:184:MET:CB	2.39	0.52
12:E:81:LEU:HD12	12:E:84:ASP:OD2	2.10	0.52
12:E:154:GLN:NE2	12:E:166:ARG:HH21	2.08	0.52
18:K:92:VAL:HG23	18:K:93:PRO:HA	1.90	0.52
18:K:140:HIS:CD2	18:K:147:VAL:HG22	2.17	0.52
18:K:141:ARG:HB2	29:V:148:LYS:HZ3	1.75	0.52
18:K:308:GLN:HE21	18:K:333:ARG:HH12	1.55	0.52
19:L:109:MET:HE3	19:L:120:LYS:HB2	1.92	0.52
20:M:364:HIS:CE1	20:M:392:LYS:HB2	2.45	0.52
21:N:75:TYR:O	21:N:79:VAL:HG23	2.10	0.52
21:N:112:GLU:O	21:N:116:GLN:HG2	2.10	0.52
21:N:776:TYR:HE2	21:N:860:LYS:HB2	1.75	0.52
22:O:175:ASN:ND2	22:O:179:PHE:HE2	2.07	0.52
26:S:455:GLU:HG2	27:T:256:LYS:HZ1	1.73	0.52
33:Z:412:GLY:HA2	33:Z:446:GLU:CD	2.34	0.52
33:Z:445:PRO:HB2	33:Z:484:LYS:HB2	1.91	0.52
33:Z:884:THR:HG22	33:Z:903:MET:CB	2.39	0.52
9:B:135:LEU:HD23	9:B:149:GLN:HA	1.92	0.52
10:C:122:TYR:HE2	10:C:131:PHE:CE1	2.17	0.52
15:H:50:LYS:CE	33:Z:770:GLU:OE1	2.58	0.52
15:H:174:VAL:HB	15:H:187:LEU:HD12	1.90	0.52
17:J:327:ILE:HG22	17:J:358:VAL:CG1	2.35	0.52
18:K:243:VAL:O	18:K:243:VAL:HG12	2.09	0.52
22:O:40:GLN:HE21	22:O:58:ARG:HH21	1.58	0.52
23:P:42:LEU:HD23	23:P:42:LEU:C	2.35	0.52
23:P:200:SER:O	23:P:220:TYR:HE1	1.93	0.52
24:Q:131:VAL:HA	24:Q:134:LYS:HE2	1.91	0.52
26:S:293:ILE:CD1	26:S:316:LEU:HG	2.39	0.52
27:T:229:VAL:HG13	27:T:234:TYR:CE2	2.45	0.52
28:U:16:LEU:O	29:V:32:ILE:HD11	2.10	0.52
33:Z:89:LEU:CD1	33:Z:125:THR:CG2	2.88	0.52
33:Z:440:LEU:HD21	33:Z:477:TYR:CE2	2.45	0.52
33:Z:601:VAL:CB	33:Z:616:LEU:HD22	2.35	0.52
5:5:8:PHE:HE1	5:5:12:ILE:C	2.18	0.52
8:A:57:LYS:HD3	8:A:224:GLU:HB2	1.92	0.52
17:J:146:THR:CG2	17:J:149:MET:HG3	2.40	0.52
17:J:188:TYR:HE1	17:J:295:ASN:O	1.92	0.52
21:N:362:TRP:CH2	21:N:742:TRP:CH2	2.96	0.52
22:O:29:PHE:C	22:O:40:GLN:NE2	2.68	0.52
23:P:137:ALA:HB1	23:P:179:PHE:CE1	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:311:TRP:CE2	23:P:315:GLN:CG	2.93	0.52
25:R:399:GLN:HE22	25:R:403:LEU:CD2	2.23	0.52
27:T:98:GLU:HA	27:T:102:LYS:NZ	2.25	0.52
31:X:101:LEU:HD11	31:X:103:GLU:O	2.09	0.52
33:Z:298:PHE:CZ	33:Z:341:TYR:CZ	2.86	0.52
4:4:66:TYR:HB2	4:4:74:LEU:HD11	1.91	0.52
4:4:152:THR:HG22	4:4:153:THR:H	1.74	0.52
7:7:41:THR:HG21	7:7:84:ILE:HD12	1.91	0.52
13:F:168:ALA:O	13:F:172:LEU:HG	2.09	0.52
15:H:195:VAL:CG1	15:H:289:ARG:HG2	2.40	0.52
15:H:447:VAL:CG1	15:H:451:ILE:HD12	2.40	0.52
15:H:454:TYR:CZ	15:H:456:LYS:HG3	2.44	0.52
16:I:284:ILE:HG22	16:I:288:GLY:HA3	1.92	0.52
17:J:26:LYS:CD	21:N:107:GLU:OE1	2.58	0.52
17:J:71:TYR:CD2	17:J:117:SER:HB3	2.44	0.52
19:L:67:HIS:HD2	19:L:68:ARG:HG3	1.75	0.52
19:L:107:GLU:OE2	19:L:163:THR:HG22	2.10	0.52
21:N:87:ASP:OD1	21:N:88:ARG:HG2	2.10	0.52
21:N:258:ALA:CB	21:N:289:ILE:HG21	2.40	0.52
23:P:327:LEU:O	23:P:328:ALA:HB3	2.08	0.52
27:T:127:GLN:HA	27:T:132:HIS:NE2	2.23	0.52
27:T:246:GLU:O	27:T:246:GLU:CD	2.53	0.52
31:X:14:VAL:CG2	31:X:50:TRP:CG	2.93	0.52
1:1:109:GLU:HB3	1:1:111:TYR:HE1	1.74	0.51
7:7:157:ILE:HB	7:7:158:PRO:HD3	1.92	0.51
8:A:220:LYS:HZ2	8:A:242:GLU:HG3	1.75	0.51
9:B:49:LYS:HD3	9:B:210:GLU:HB2	1.91	0.51
10:C:109:GLU:O	10:C:113:ARG:HG3	2.10	0.51
16:I:362:LEU:CD2	16:I:384:LYS:HZ2	2.14	0.51
16:I:418:GLN:CB	16:I:422:ARG:NH1	2.54	0.51
18:K:369:ASP:O	18:K:372:ILE:HG22	2.10	0.51
21:N:89:PHE:CE1	21:N:136:ILE:HG23	2.45	0.51
21:N:222:TYR:HE1	21:N:253:LEU:HG	1.72	0.51
25:R:63:TYR:HE2	25:R:94:PHE:CG	2.27	0.51
26:S:473:ASP:O	26:S:477:VAL:HG23	2.11	0.51
29:V:109:HIS:HB2	29:V:111:HIS:CD2	2.44	0.51
33:Z:77:ASN:OD1	33:Z:151:HIS:HB2	2.10	0.51
33:Z:89:LEU:HD11	33:Z:125:THR:OG1	2.10	0.51
33:Z:405:ASN:O	33:Z:409:LYS:HG3	2.09	0.51
33:Z:474:LEU:CD1	33:Z:493:LEU:CD1	2.88	0.51
33:Z:512:ILE:HG22	33:Z:523:ALA:CB	2.40	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:928:ARG:HA	33:Z:956:LEU:HG	1.91	0.51
5:5:80:SER:HB2	5:5:121:ARG:HD2	1.91	0.51
15:H:318:ARG:HH21	15:H:326:ASP:HB3	1.75	0.51
15:H:340:LEU:HD23	15:H:370:ARG:CZ	2.40	0.51
16:I:194:ILE:HG12	16:I:236:VAL:HG21	1.91	0.51
19:L:98:LEU:CD2	20:M:156:LEU:HD23	2.32	0.51
19:L:218:VAL:HG22	19:L:324:ILE:HG12	1.92	0.51
20:M:221:TYR:CE2	20:M:346:LYS:HE2	2.46	0.51
21:N:430:ASN:HB2	21:N:443:LEU:HD13	1.92	0.51
22:O:82:LEU:N	22:O:85:SER:CB	2.72	0.51
22:O:139:LEU:HD23	22:O:181:PHE:HZ	1.74	0.51
24:Q:20:TYR:HD2	24:Q:68:MET:SD	2.26	0.51
25:R:137:LEU:HB3	25:R:153:THR:HG21	1.91	0.51
26:S:383:LEU:O	26:S:387:VAL:HG23	2.10	0.51
33:Z:307:HIS:CE1	33:Z:341:TYR:CZ	2.79	0.51
33:Z:761:PHE:CD1	33:Z:764:LEU:HD12	2.37	0.51
1:1:66:TYR:CE2	1:1:73:PRO:HA	2.37	0.51
2:2:72:ARG:NH2	8:A:150:LEU:HD11	2.26	0.51
11:D:120:TYR:CG	11:D:126:VAL:HG11	2.46	0.51
11:D:232:TYR:O	11:D:236:ILE:HG13	2.10	0.51
12:E:12:VAL:HB	12:E:123:PHE:CE2	2.45	0.51
13:F:39:ARG:HD3	13:F:144:LEU:CB	2.40	0.51
13:F:98:VAL:HG12	13:F:99:PHE:CE1	2.43	0.51
20:M:331:ASP:OD1	20:M:332:VAL:HG13	2.10	0.51
21:N:141:ILE:HG13	21:N:165:ILE:HD13	1.92	0.51
22:O:26:PHE:HE1	22:O:58:ARG:HH11	1.47	0.51
2:2:36:ARG:HH12	9:B:224:TYR:HE2	1.58	0.51
3:3:107:SER:O	3:3:109:LYS:HG3	2.09	0.51
9:B:35:LEU:C	9:B:35:LEU:HD12	2.36	0.51
9:B:37:ILE:CD1	9:B:175:LEU:HD11	2.41	0.51
12:E:240:ILE:O	12:E:243:LEU:HB3	2.11	0.51
14:G:203:HIS:CE1	14:G:211:PHE:HD1	2.28	0.51
18:K:293:GLN:O	18:K:297:ILE:HG12	2.11	0.51
18:K:344:ARG:HD2	18:K:348:GLU:HB3	1.92	0.51
21:N:253:LEU:CD2	21:N:257:ILE:HD12	2.40	0.51
21:N:641:LEU:CD1	21:N:660:LEU:HD23	2.40	0.51
22:O:72:LYS:C	22:O:73:ILE:HG13	2.35	0.51
22:O:172:TYR:CZ	22:O:194:LEU:HB3	2.46	0.51
23:P:136:ARG:HG2	23:P:163:LEU:HD21	1.93	0.51
24:Q:302:VAL:HG13	24:Q:314:PHE:HE1	1.76	0.51
29:V:52:LEU:HB2	29:V:69:PHE:CZ	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:374:LEU:HD11	33:Z:849:ARG:HH22	1.75	0.51
33:Z:550:PHE:HB2	33:Z:566:LEU:HD13	1.92	0.51
5:5:53:GLN:HG3	6:6:85:GLN:HE22	1.75	0.51
8:A:140:ILE:HG12	8:A:159:PRO:HD3	1.91	0.51
9:B:75:TYR:CE1	9:B:82:TYR:CE2	2.99	0.51
11:D:6:ARG:NH2	12:E:11:GLY:CA	2.65	0.51
18:K:389:GLU:CG	18:K:393:ARG:HE	2.24	0.51
21:N:875:LEU:CD2	21:N:877:GLN:HB2	2.41	0.51
25:R:62:TYR:CD2	25:R:180:PHE:HE1	2.17	0.51
25:R:279:LEU:CD2	25:R:286:LEU:HD11	2.39	0.51
26:S:218:LEU:HD11	26:S:237:ILE:HD11	1.91	0.51
28:U:135:ASP:CB	28:U:137:TYR:HE1	2.24	0.51
29:V:52:LEU:CG	29:V:107:TRP:CZ3	2.93	0.51
33:Z:233:LEU:HB3	33:Z:234:PRO:CD	2.40	0.51
33:Z:245:VAL:CG1	33:Z:249:MET:HE3	2.40	0.51
33:Z:369:PHE:HA	33:Z:390:LEU:HD21	1.91	0.51
2:2:72:ARG:HH22	8:A:115:ASP:CB	2.23	0.51
5:5:150:VAL:HG12	5:5:179:HIS:HE1	1.71	0.51
6:6:120:GLY:O	6:6:121:SER:OG	2.23	0.51
10:C:119:LYS:HG2	10:C:131:PHE:CD2	2.45	0.51
13:F:50:LYS:HB2	13:F:210:ASN:O	2.10	0.51
15:H:69:VAL:HG21	16:I:131:SER:HB2	1.91	0.51
16:I:132:ILE:HB	16:I:138:LYS:NZ	2.17	0.51
17:J:188:TYR:CE1	17:J:295:ASN:O	2.64	0.51
21:N:761:ILE:HD12	21:N:904:VAL:N	2.25	0.51
21:N:884:PHE:HB3	21:N:905:LEU:HD22	1.92	0.51
22:O:59:LEU:HA	22:O:62:TYR:CD1	2.45	0.51
22:O:92:PHE:HE1	22:O:136:THR:HA	1.73	0.51
22:O:106:PHE:CD2	22:O:109:LEU:HB2	2.45	0.51
22:O:317:THR:O	22:O:318:HIS:CB	2.59	0.51
23:P:127:GLU:HA	23:P:136:ARG:HH22	1.75	0.51
24:Q:146:TYR:CE1	24:Q:184:VAL:HA	2.43	0.51
25:R:116:LYS:HZ3	25:R:136:ASN:ND2	2.08	0.51
25:R:246:TYR:CZ	25:R:279:LEU:HD13	2.46	0.51
27:T:55:LEU:HD23	27:T:55:LEU:O	2.10	0.51
29:V:47:MET:CE	29:V:74:SER:N	2.73	0.51
3:3:87:TYR:HA	3:3:90:ARG:NE	2.24	0.51
9:B:30:GLN:HB3	18:K:426:PHE:HE2	1.72	0.51
11:D:83:ARG:NH1	11:D:87:GLU:HB2	2.25	0.51
14:G:151:GLU:HB3	14:G:152:PRO:HD2	1.93	0.51
15:H:393:SER:OG	15:H:404:TRP:CZ2	2.51	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:143:PRO:O	17:J:204:HIS:ND1	2.44	0.51
17:J:150:VAL:HB	17:J:153:LEU:CD1	2.40	0.51
18:K:240:SER:O	18:K:243:VAL:CB	2.57	0.51
21:N:259:PHE:HE1	21:N:289:ILE:HG12	1.75	0.51
24:Q:102:GLU:O	24:Q:106:GLN:HG3	2.11	0.51
24:Q:409:TYR:HA	25:R:399:GLN:HG3	1.91	0.51
30:W:23:ARG:NH2	30:W:27:GLU:OE2	2.43	0.51
31:X:17:TYR:O	31:X:18:ASN:HB2	2.11	0.51
1:1:36:ARG:HD3	1:1:42:TRP:CZ2	2.46	0.51
3:3:6:MET:HE1	3:3:158:ILE:HA	1.93	0.51
7:7:103:TRP:CE3	7:7:124:LEU:HD23	2.46	0.51
11:D:218:ASP:O	11:D:219:SER:CB	2.59	0.51
17:J:255:SER:O	17:J:256:THR:HG23	2.11	0.51
21:N:190:LEU:C	21:N:190:LEU:CD2	2.84	0.51
21:N:381:GLU:HA	21:N:384:LYS:HD2	1.93	0.51
22:O:250:TRP:O	22:O:254:LEU:CG	2.48	0.51
22:O:303:LYS:HB3	28:U:260:ASN:ND2	2.26	0.51
23:P:181:LEU:HG	23:P:223:LEU:CD1	2.41	0.51
23:P:416:SER:HA	29:V:241:THR:HG21	1.91	0.51
24:Q:61:LEU:CD1	24:Q:65:TYR:HE1	2.03	0.51
24:Q:122:ILE:HG22	24:Q:126:LYS:HE3	1.92	0.51
26:S:318:CYS:SG	26:S:330:LEU:HD22	2.50	0.51
31:X:78:ILE:HD11	31:X:85:ARG:HA	1.92	0.51
33:Z:298:PHE:CE1	33:Z:310:LEU:CD2	2.93	0.51
33:Z:371:SER:HB3	33:Z:399:LEU:HD11	1.93	0.51
1:1:8:PHE:CE1	1:1:11:GLY:C	2.89	0.51
6:6:55:LEU:CD2	6:6:96:TYR:OH	2.50	0.51
9:B:69:PRO:CD	9:B:104:TYR:CE1	2.90	0.51
12:E:159:GLU:HB2	12:E:163:THR:OG1	2.10	0.51
13:F:171:TYR:HA	13:F:174:ARG:HE	1.76	0.51
18:K:184:ILE:CG2	18:K:226:VAL:HG21	2.41	0.51
19:L:212:ILE:HG13	19:L:213:LYS:H	1.75	0.51
21:N:338:PHE:HZ	21:N:749:LEU:HD12	1.76	0.51
21:N:761:ILE:CG2	21:N:904:VAL:N	2.70	0.51
23:P:133:GLU:CD	23:P:167:THR:HA	2.36	0.51
23:P:265:VAL:CG1	23:P:296:GLN:HG3	2.41	0.51
23:P:411:LEU:CD1	28:U:265:LEU:O	2.59	0.51
24:Q:61:LEU:HG	24:Q:65:TYR:CE2	1.79	0.51
25:R:72:VAL:O	25:R:72:VAL:HG12	2.11	0.51
26:S:163:VAL:HG13	26:S:184:TRP:CZ2	2.46	0.51
28:U:106:ILE:HG22	28:U:110:PHE:CE2	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:106:ILE:HG23	28:U:110:PHE:CE2	2.46	0.51
29:V:23:THR:OG1	29:V:164:LEU:HD23	2.11	0.51
30:W:140:ASP:HB3	30:W:190:ILE:HG12	1.92	0.51
31:X:38:ASN:CG	31:X:39:GLU:H	2.18	0.51
33:Z:370:SER:N	33:Z:390:LEU:CD2	2.74	0.51
1:1:120:HIS:HB2	7:7:28:PHE:CE1	2.46	0.51
3:3:136:GLN:NE2	3:3:168:ARG:HD3	2.26	0.51
5:5:124:GLY:CA	5:5:127:PHE:CE2	2.94	0.51
17:J:87:LYS:HG3	17:J:93:LYS:HG2	1.93	0.51
19:L:114:GLU:C	19:L:137:ARG:NH2	2.51	0.51
19:L:204:PRO:HG3	19:L:320:GLN:NE2	2.26	0.51
19:L:303:ARG:O	19:L:307:GLU:HG3	2.10	0.51
20:M:357:ARG:CD	20:M:383:THR:OG1	2.59	0.51
21:N:15:GLU:HG2	27:T:80:ASN:ND2	2.26	0.51
24:Q:94:VAL:CG2	24:Q:130:ARG:HD2	2.40	0.51
24:Q:111:LEU:HD23	24:Q:144:LEU:HD22	1.93	0.51
24:Q:146:TYR:CD1	24:Q:184:VAL:HG22	2.46	0.51
26:S:416:GLU:CD	26:S:417:GLN:NE2	2.59	0.51
28:U:165:GLU:HB3	29:V:42:ARG:CZ	2.41	0.51
33:Z:440:LEU:CD2	33:Z:477:TYR:CZ	2.89	0.51
4:4:125:VAL:HG22	4:4:127:LEU:HG	1.93	0.50
4:4:152:THR:CG2	4:4:153:THR:H	2.24	0.50
5:5:111:THR:HG21	5:5:113:TYR:CE2	2.45	0.50
5:5:158:LYS:HE3	5:5:196:LEU:HD11	1.94	0.50
6:6:-8:PHE:H	7:7:-8:THR:HG21	1.76	0.50
15:H:261:ARG:HH22	15:H:273:ARG:NH1	2.08	0.50
16:I:105:SER:HA	17:J:94:TYR:CD2	2.46	0.50
16:I:257:LEU:H	16:I:257:LEU:HD22	1.74	0.50
18:K:329:LEU:HA	18:K:334:LEU:HD23	1.91	0.50
21:N:585:ARG:HH12	21:N:740:TRP:HZ2	1.59	0.50
22:O:266:PHE:CZ	22:O:270:ILE:HG21	2.44	0.50
23:P:280:LEU:O	23:P:283:LYS:HG2	2.12	0.50
23:P:429:ILE:HD13	28:U:203:LYS:HE3	1.87	0.50
24:Q:202:ARG:HH21	24:Q:222:SER:HG	1.43	0.50
24:Q:347:LEU:O	24:Q:351:ILE:HG23	2.11	0.50
25:R:31:PHE:CE2	25:R:319:CYS:O	2.64	0.50
25:R:218:CYS:SG	25:R:226:GLU:CG	2.99	0.50
25:R:334:ARG:HG2	25:R:338:TYR:CE2	2.46	0.50
28:U:129:GLY:C	28:U:130:VAL:HG22	2.36	0.50
33:Z:230:ILE:HD12	33:Z:263:ALA:HB1	1.92	0.50
33:Z:929:VAL:CG1	33:Z:956:LEU:CD1	2.85	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:981:VAL:HG12	33:Z:983:LEU:HD23	1.92	0.50
6:6:82:ARG:HH21	12:E:101:LEU:HD11	1.75	0.50
11:D:96:HIS:ND1	11:D:100:LEU:HD12	2.22	0.50
12:E:157:HIS:CG	12:E:170:LYS:HD3	2.46	0.50
13:F:30:LYS:HZ2	13:F:164:ARG:N	2.00	0.50
15:H:97:LEU:HD21	16:I:129:TYR:CB	2.27	0.50
17:J:186:ILE:CD1	17:J:305:LEU:CD2	2.90	0.50
17:J:197:LEU:HD13	17:J:359:LYS:HZ1	1.76	0.50
18:K:242:PHE:O	18:K:244:HIS:ND1	2.45	0.50
19:L:198:GLU:HA	19:L:239:ILE:HD11	1.92	0.50
19:L:360:ILE:HG22	19:L:364:HIS:CE1	2.45	0.50
20:M:70:LYS:HG2	20:M:73:ARG:HH21	1.76	0.50
20:M:292:ASP:OD2	20:M:294:GLU:HB2	2.11	0.50
20:M:379:LEU:HD13	20:M:415:PHE:CB	2.40	0.50
21:N:356:LEU:O	21:N:364:LYS:HE2	2.12	0.50
21:N:641:LEU:O	21:N:645:THR:HG23	2.11	0.50
21:N:916:LEU:C	21:N:917:ILE:HG13	2.36	0.50
22:O:122:HIS:HE1	22:O:163:ILE:H	1.49	0.50
23:P:59:LEU:O	23:P:63:VAL:HG23	2.10	0.50
23:P:127:GLU:N	23:P:136:ARG:NH2	2.58	0.50
23:P:431:HIS:HD1	28:U:156:HIS:CB	2.07	0.50
25:R:348:LEU:HD21	25:R:353:MET:HE1	1.93	0.50
26:S:215:MET:O	26:S:218:LEU:HB2	2.11	0.50
26:S:428:ARG:HH22	27:T:191:LYS:HD2	1.74	0.50
29:V:71:MET:HB3	29:V:72:PRO:HD2	1.92	0.50
5:5:8:PHE:CZ	5:5:13:ILE:HG12	2.43	0.50
5:5:69:ARG:HA	12:E:93:ARG:NH1	2.26	0.50
7:7:112:GLN:HG2	7:7:115:GLY:N	2.25	0.50
13:F:13:PHE:CD1	14:G:22:GLN:HB3	2.42	0.50
14:G:59:VAL:HG11	14:G:62:LYS:HB2	1.92	0.50
16:I:247:ILE:CD1	16:I:267:ILE:HD13	2.41	0.50
19:L:402:ALA:CB	19:L:414:ASP:OD2	2.59	0.50
19:L:410:ILE:CD1	20:M:212:ILE:HD11	2.42	0.50
19:L:410:ILE:CG1	20:M:212:ILE:HD11	2.41	0.50
19:L:411:ASN:HB2	19:L:412:PRO:HD2	1.94	0.50
20:M:129:LEU:C	20:M:129:LEU:HD12	2.36	0.50
21:N:459:ASN:CG	21:N:462:VAL:HG23	2.35	0.50
22:O:125:GLY:O	22:O:129:ILE:HG12	2.11	0.50
22:O:289:GLN:HG2	22:O:293:LEU:HD22	1.94	0.50
24:Q:75:ARG:O	24:Q:117:VAL:HG22	2.11	0.50
24:Q:128:GLU:HG3	24:Q:129:LYS:HG2	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:134:TRP:CZ3	25:R:137:LEU:HD22	2.46	0.50
25:R:353:MET:HA	25:R:357:PHE:CD2	2.47	0.50
27:T:126:LEU:O	27:T:132:HIS:NE2	2.44	0.50
30:W:123:ASP:O	30:W:127:ARG:HG3	2.11	0.50
33:Z:250:VAL:HG21	33:Z:280:ASP:OD1	2.12	0.50
5:5:32:LYS:C	5:5:33:ARG:HG2	2.37	0.50
12:E:154:GLN:HB3	12:E:156:PHE:CE1	2.46	0.50
16:I:418:GLN:C	16:I:422:ARG:NH1	2.70	0.50
17:J:296:ARG:O	17:J:300:LEU:HD12	2.11	0.50
17:J:377:VAL:HG12	17:J:382:PHE:CE2	2.46	0.50
18:K:379:SER:OG	18:K:382:VAL:HG23	2.12	0.50
19:L:219:LEU:HD13	19:L:325:MET:HB2	1.94	0.50
20:M:433:TYR:HD1	20:M:433:TYR:C	2.20	0.50
21:N:22:THR:HG23	21:N:57:ASP:OD2	2.11	0.50
21:N:359:ALA:O	21:N:364:LYS:HE3	2.11	0.50
23:P:272:PRO:HB2	23:P:347:GLU:OE1	2.11	0.50
23:P:431:HIS:CE1	28:U:156:HIS:CA	2.94	0.50
25:R:257:GLY:O	25:R:261:LEU:HD12	2.11	0.50
27:T:89:TYR:HA	27:T:102:LYS:HE3	1.92	0.50
30:W:118:ILE:CG2	30:W:154:LEU:HG	2.33	0.50
6:6:3:ILE:CG1	6:6:101:ILE:HD12	2.41	0.50
6:6:59:PHE:O	6:6:63:VAL:HG23	2.12	0.50
15:H:50:LYS:HE3	33:Z:770:GLU:OE1	2.11	0.50
17:J:321:VAL:HG11	17:J:348:GLU:HG2	1.92	0.50
17:J:347:ALA:O	17:J:350:MET:HB2	2.12	0.50
19:L:281:ASP:OD1	19:L:282:GLU:HG2	2.12	0.50
20:M:384:ASP:N	20:M:386:PHE:HE1	2.04	0.50
20:M:402:ALA:HB2	20:M:414:ASP:OD2	2.11	0.50
21:N:362:TRP:CZ2	21:N:742:TRP:CH2	3.00	0.50
22:O:36:LYS:O	22:O:37:LEU:HB2	2.10	0.50
22:O:188:PHE:HE2	22:O:216:ASP:O	1.94	0.50
33:Z:838:TYR:HA	33:Z:848:THR:HG21	1.94	0.50
33:Z:981:VAL:CG1	33:Z:983:LEU:HD21	2.41	0.50
2:2:19:ARG:NH2	2:2:26:VAL:CG2	2.74	0.50
5:5:124:GLY:N	5:5:127:PHE:CZ	2.79	0.50
8:A:204:GLU:HB2	8:A:244:ARG:HH11	1.76	0.50
19:L:74:LEU:HD12	20:M:51:LEU:HD12	1.92	0.50
19:L:95:ILE:HG21	20:M:68:LYS:HD3	1.92	0.50
19:L:113:SER:OG	19:L:116:LYS:N	2.43	0.50
19:L:275:PRO:O	19:L:276:CYS:SG	2.69	0.50
19:L:277:ILE:HG23	19:L:324:ILE:CD1	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:M:79:VAL:HG11	20:M:145:LEU:HD22	1.93	0.50
20:M:248:ALA:HB3	20:M:249:PRO:HD3	1.92	0.50
20:M:379:LEU:CD1	20:M:415:PHE:HB3	2.38	0.50
21:N:365:PHE:CZ	21:N:406:TYR:CB	2.94	0.50
21:N:634:LEU:O	21:N:637:ALA:HB3	2.12	0.50
24:Q:189:ARG:HH21	25:R:277:LEU:HD22	1.76	0.50
29:V:249:GLU:O	29:V:253:LYS:HG3	2.11	0.50
31:X:16:GLU:HG3	31:X:17:TYR:N	2.25	0.50
3:3:61:LYS:HD2	3:3:81:LEU:HD11	1.94	0.50
4:4:69:ARG:NH2	4:4:70:GLU:OE2	2.45	0.50
12:E:69:GLU:OE2	12:E:72:ARG:HD2	2.11	0.50
12:E:154:GLN:CB	12:E:156:PHE:HE1	2.25	0.50
14:G:217:TRP:CH2	14:G:234:LEU:CD1	2.95	0.50
15:H:240:ILE:HG23	20:M:368:MET:SD	2.52	0.50
16:I:372:SER:HB3	16:I:410:GLN:HE21	1.77	0.50
19:L:81:ILE:HG23	20:M:58:MET:CE	2.42	0.50
20:M:73:ARG:CA	20:M:77:TYR:OH	2.60	0.50
20:M:135:VAL:CG1	20:M:155:ILE:HG22	2.41	0.50
21:N:158:LEU:HD12	21:N:202:PHE:CE2	2.47	0.50
21:N:352:ASN:HB3	21:N:355:TRP:HB3	1.91	0.50
22:O:44:SER:H	22:O:47:LYS:HE2	1.77	0.50
22:O:227:ILE:O	22:O:227:ILE:HG22	2.11	0.50
23:P:181:LEU:HB2	23:P:223:LEU:HD11	1.94	0.50
24:Q:146:TYR:HD1	24:Q:184:VAL:HG22	1.76	0.50
24:Q:271:MET:HG2	24:Q:338:LEU:HD13	1.93	0.50
25:R:395:ASN:O	26:S:452:TYR:CD1	2.52	0.50
27:T:27:LEU:HD13	27:T:81:TYR:CZ	2.44	0.50
27:T:229:VAL:HG21	27:T:234:TYR:OH	2.12	0.50
31:X:39:GLU:HG2	31:X:47:ASP:OD2	2.12	0.50
33:Z:224:LEU:HD11	33:Z:232:LYS:HB2	1.93	0.50
33:Z:755:GLU:HG2	33:Z:759:ARG:HH12	1.75	0.50
1:1:48:SER:O	1:1:52:THR:HG23	2.11	0.50
5:5:179:HIS:HB2	5:5:188:HIS:NE2	2.26	0.50
8:A:24:ARG:CZ	18:K:424:PHE:CD1	2.95	0.50
8:A:220:LYS:HA	8:A:241:ILE:HG21	1.93	0.50
10:C:87:LEU:HD11	10:C:131:PHE:CE2	2.47	0.50
11:D:118:GLN:HE22	12:E:86:ARG:CD	1.99	0.50
13:F:164:ARG:NH2	13:F:201:LEU:HD23	2.20	0.50
14:G:217:TRP:O	14:G:217:TRP:HD1	1.93	0.50
16:I:278:ILE:CG2	16:I:325:ILE:HD12	2.41	0.50
21:N:302:PHE:CE2	21:N:712:ASN:CB	2.85	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:662:MET:HB3	21:N:715:ILE:HG21	1.94	0.50
22:O:59:LEU:CA	22:O:62:TYR:HD1	2.25	0.50
23:P:214:GLU:HG2	23:P:251:LYS:HG2	1.93	0.50
24:Q:1:MET:O	24:Q:2:SER:CB	2.58	0.50
24:Q:232:TYR:CZ	24:Q:271:MET:CE	2.95	0.50
25:R:62:TYR:CB	25:R:180:PHE:CE2	2.95	0.50
25:R:353:MET:CG	25:R:357:PHE:CD2	2.82	0.50
27:T:27:LEU:HD13	27:T:81:TYR:HH	1.74	0.50
28:U:36:VAL:HG23	28:U:54:LEU:CD1	2.39	0.50
28:U:283:ARG:HE	29:V:287:THR:CB	2.23	0.50
29:V:104:VAL:HG12	29:V:133:ASN:HD21	1.77	0.50
31:X:75:TRP:CD1	31:X:126:ILE:HD11	2.47	0.50
33:Z:913:ILE:CG1	33:Z:965:LEU:N	2.74	0.50
3:3:2:ILE:HD11	3:3:162:LEU:HD11	1.94	0.50
7:7:171:ASN:HA	7:7:174:ARG:HH12	1.75	0.50
11:D:199:LEU:O	11:D:203:VAL:HG13	2.11	0.50
15:H:331:ARG:HH12	15:H:335:GLU:HB2	1.77	0.50
16:I:138:LYS:HD3	16:I:141:LEU:HD12	1.94	0.50
17:J:164:ILE:O	17:J:167:PRO:HD2	2.12	0.50
17:J:276:LEU:HD13	17:J:309:ARG:HG2	1.92	0.50
18:K:308:GLN:NE2	18:K:333:ARG:NH1	2.57	0.50
19:L:248:ALA:CB	20:M:303:ARG:NH2	2.73	0.50
20:M:221:TYR:HE2	20:M:346:LYS:CG	2.23	0.50
21:N:540:LEU:HD22	21:N:574:VAL:HG22	1.93	0.50
21:N:568:VAL:HG13	21:N:591:LEU:HD22	1.94	0.50
22:O:44:SER:HA	22:O:47:LYS:HE2	1.93	0.50
22:O:59:LEU:C	22:O:62:TYR:CE1	2.72	0.50
23:P:42:LEU:HD12	23:P:58:VAL:HG12	1.93	0.50
23:P:311:TRP:CE2	23:P:345:VAL:HG21	2.47	0.50
24:Q:111:LEU:CD2	24:Q:144:LEU:HD22	2.42	0.50
27:T:59:LYS:NZ	27:T:63:GLU:OE2	2.45	0.50
30:W:167:GLU:OE1	30:W:197:SER:OG	2.20	0.50
33:Z:284:LEU:CD1	33:Z:293:MET:CE	2.88	0.50
33:Z:387:ASN:O	33:Z:391:ASN:HB2	2.12	0.50
3:3:86:LEU:HD22	3:3:94:TYR:CE2	2.47	0.49
4:4:59:ILE:O	4:4:63:ILE:HG12	2.12	0.49
16:I:164:ALA:HB2	17:J:77:LYS:NZ	2.26	0.49
17:J:249:GLU:CG	18:K:297:ILE:HG21	2.42	0.49
18:K:281:ARG:HH11	18:K:290:ARG:HG2	1.77	0.49
20:M:221:TYR:CE1	20:M:348:GLU:HA	2.47	0.49
21:N:666:GLN:NE2	21:N:873:ARG:HG2	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:411:LEU:HD12	28:U:268:LYS:HB2	1.94	0.49
24:Q:116:PHE:CZ	24:Q:120:LYS:HE3	2.47	0.49
26:S:390:THR:HG23	26:S:393:ARG:HH22	1.77	0.49
28:U:19:LEU:HG	29:V:212:MET:SD	2.48	0.49
29:V:180:LEU:O	29:V:181:ASN:CB	2.60	0.49
30:W:118:ILE:CG1	30:W:154:LEU:CD1	2.51	0.49
33:Z:486:SER:O	33:Z:490:ILE:CG1	2.60	0.49
3:3:65:TYR:O	3:3:69:GLU:CG	2.56	0.49
7:7:64:THR:CG2	7:7:68:TYR:OH	2.60	0.49
8:A:128:TYR:CE1	8:A:131:ARG:NH1	2.77	0.49
8:A:220:LYS:HZ2	8:A:242:GLU:CG	2.25	0.49
12:E:55:THR:H	12:E:59:LEU:HD23	1.76	0.49
17:J:186:ILE:HD13	17:J:305:LEU:CD2	2.43	0.49
18:K:392:LEU:O	18:K:396:ARG:HG3	2.12	0.49
21:N:361:ASN:CG	21:N:399:PHE:CE1	2.90	0.49
23:P:101:MET:HE1	23:P:115:ARG:HB3	1.94	0.49
23:P:119:ILE:O	23:P:126:THR:HG21	2.12	0.49
24:Q:122:ILE:O	24:Q:126:LYS:HG3	2.12	0.49
24:Q:189:ARG:NH2	25:R:277:LEU:HD22	2.28	0.49
26:S:185:PHE:CE2	26:S:271:ARG:NH2	2.81	0.49
26:S:217:PHE:CD2	26:S:233:LEU:HD22	2.47	0.49
27:T:95:LYS:HG3	27:T:95:LYS:O	2.13	0.49
27:T:229:VAL:HG21	27:T:234:TYR:CZ	2.47	0.49
31:X:22:ARG:NH1	31:X:88:ALA:CB	2.64	0.49
33:Z:52:LEU:CD1	33:Z:70:ALA:HB3	2.42	0.49
3:3:16:CYS:SG	3:3:34:ILE:CD1	3.00	0.49
6:6:175:VAL:HG12	6:6:179:PHE:CE2	2.44	0.49
8:A:91:ARG:CB	14:G:120:GLN:HE22	2.18	0.49
9:B:119:GLN:CG	10:C:82:ALA:HB1	2.41	0.49
9:B:157:PHE:HB2	9:B:159:TRP:HE1	1.78	0.49
10:C:4:ARG:CZ	10:C:5:ARG:NH1	2.71	0.49
10:C:106:ILE:HD13	10:C:111:LEU:HD13	1.94	0.49
10:C:118:ILE:O	10:C:122:TYR:CD1	2.65	0.49
12:E:147:HIS:ND1	12:E:153:TYR:CD1	2.80	0.49
19:L:202:LYS:HZ1	19:L:239:ILE:HA	1.76	0.49
23:P:384:VAL:HG23	23:P:389:ILE:HD11	1.95	0.49
25:R:117:ILE:HD11	25:R:134:TRP:CE3	2.47	0.49
28:U:35:GLY:HA2	28:U:54:LEU:HG	1.94	0.49
33:Z:89:LEU:HD22	33:Z:122:LEU:HA	1.93	0.49
33:Z:358:TYR:CE1	33:Z:914:LEU:HD13	2.47	0.49
3:3:147:PRO:O	3:3:148:ASN:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:111:THR:CG2	5:5:113:TYR:CZ	2.96	0.49
5:5:124:GLY:N	5:5:127:PHE:CE2	2.80	0.49
6:6:147:PHE:CE2	6:6:164:LYS:CB	2.95	0.49
7:7:68:TYR:CD1	14:G:92:ARG:NE	2.80	0.49
8:A:163:TYR:C	8:A:164:VAL:HG23	2.36	0.49
8:A:220:LYS:HG3	8:A:245:LEU:HD12	1.93	0.49
10:C:131:PHE:HB3	10:C:133:VAL:HG12	1.94	0.49
13:F:180:ILE:HG13	13:F:181:LYS:HG3	1.94	0.49
15:H:335:GLU:HG3	15:H:339:GLN:HE21	1.77	0.49
16:I:194:ILE:CG1	16:I:236:VAL:HG21	2.42	0.49
18:K:74:HIS:HE1	18:K:77:ARG:HH21	1.55	0.49
18:K:286:THR:C	18:K:290:ARG:HE	2.20	0.49
19:L:345:ARG:CZ	19:L:347:VAL:HG22	2.42	0.49
21:N:113:ALA:O	21:N:161:TYR:CE2	2.65	0.49
21:N:125:THR:OG1	21:N:126:LYS:HG3	2.12	0.49
21:N:299:TYR:CE1	21:N:713:VAL:HG11	2.47	0.49
21:N:409:GLY:C	21:N:452:LEU:HD23	2.38	0.49
21:N:642:ASP:HB2	21:N:643:PRO:CD	2.39	0.49
25:R:208:ASN:ND2	25:R:235:LEU:CD1	2.64	0.49
30:W:118:ILE:HD12	30:W:154:LEU:HD21	1.94	0.49
33:Z:475:GLN:HE21	33:Z:505:VAL:HB	1.78	0.49
33:Z:888:LEU:HD22	33:Z:904:LEU:CD1	2.39	0.49
1:1:8:PHE:HD2	1:1:9:LYS:H	1.55	0.49
4:4:12:VAL:HG23	4:4:113:PRO:HB2	1.94	0.49
6:6:146:ASN:HA	6:6:163:LEU:CD1	2.43	0.49
8:A:128:TYR:HE1	8:A:131:ARG:NH1	2.10	0.49
10:C:228:LYS:HE2	10:C:230:PHE:CE2	2.47	0.49
13:F:135:ILE:HG22	13:F:144:LEU:HD13	1.95	0.49
18:K:227:ALA:CB	18:K:268:ILE:HD12	2.43	0.49
19:L:267:PHE:HE1	19:L:318:LEU:HD23	1.76	0.49
23:P:114:THR:O	23:P:114:THR:HG22	2.12	0.49
24:Q:227:CYS:CA	24:Q:232:TYR:HE1	2.25	0.49
24:Q:378:SER:CB	25:R:345:TYR:HH	2.17	0.49
25:R:164:THR:HG22	25:R:198:ILE:HD13	1.94	0.49
25:R:238:PHE:HB3	25:R:249:ILE:HD13	1.94	0.49
26:S:200:GLU:O	27:T:96:LEU:HD11	2.12	0.49
26:S:428:ARG:HG3	27:T:195:LEU:HD12	1.94	0.49
26:S:457:PRO:CG	28:U:274:MET:SD	3.00	0.49
26:S:464:ARG:CZ	28:U:281:LEU:CD1	2.89	0.49
28:U:127:GLN:NE2	29:V:212:MET:CA	2.75	0.49
30:W:9:VAL:HG22	30:W:52:ILE:CG1	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:77:PRO:O	31:X:78:ILE:CD1	2.56	0.49
33:Z:122:LEU:HD23	33:Z:122:LEU:O	2.13	0.49
33:Z:224:LEU:HG	33:Z:232:LYS:HD2	1.95	0.49
33:Z:419:VAL:HG22	33:Z:439:TYR:CD1	2.48	0.49
33:Z:493:LEU:HA	33:Z:497:PHE:CE1	2.48	0.49
33:Z:528:LEU:HD11	33:Z:565:PHE:HE1	1.77	0.49
33:Z:575:MET:CE	33:Z:878:LEU:HD22	2.42	0.49
33:Z:891:PRO:HD3	33:Z:901:PHE:HZ	1.77	0.49
33:Z:987:PRO:HA	33:Z:990:ARG:HB3	1.95	0.49
2:2:124:TYR:O	2:2:125:LEU:HD23	2.12	0.49
5:5:146:TRP:CZ3	5:5:147:ASP:HB2	2.47	0.49
7:7:17:ASP:C	7:7:17:ASP:OD1	2.54	0.49
9:B:98:LYS:HE2	9:B:104:TYR:HD1	1.73	0.49
16:I:362:LEU:HB3	16:I:377:LEU:CD2	2.43	0.49
18:K:48:TYR:CZ	21:N:152:LEU:HD12	2.46	0.49
18:K:52:LYS:HZ1	21:N:159:GLU:HG2	1.78	0.49
21:N:222:TYR:CZ	21:N:253:LEU:HG	2.47	0.49
22:O:215:TYR:O	22:O:219:ILE:HG12	2.11	0.49
23:P:272:PRO:O	23:P:344:ARG:HD2	2.13	0.49
25:R:60:ALA:HB2	25:R:102:LEU:HD12	1.95	0.49
25:R:396:LYS:HD3	26:S:450:ASN:O	2.11	0.49
28:U:135:ASP:HB3	28:U:137:TYR:HE1	1.78	0.49
29:V:53:MET:CE	29:V:65:VAL:HG11	2.43	0.49
31:X:64:ILE:O	31:X:65:SER:CB	2.60	0.49
33:Z:318:LYS:HD2	33:Z:874:ASN:CG	2.38	0.49
1:1:79:ALA:HB1	1:1:113:ILE:HD11	1.93	0.49
3:3:11:CYS:HA	3:3:103:ILE:HD11	1.93	0.49
3:3:61:LYS:NZ	3:3:85:SER:HB3	2.27	0.49
7:7:7:LYS:HG3	7:7:119:LEU:HD22	1.94	0.49
8:A:11:GLY:C	8:A:12:TYR:CD1	2.90	0.49
12:E:157:HIS:ND1	12:E:170:LYS:NZ	2.55	0.49
16:I:190:GLN:NE2	16:I:350:PHE:HA	2.27	0.49
21:N:215:MET:O	21:N:217:MET:HG3	2.12	0.49
21:N:665:ILE:HD12	21:N:715:ILE:HG12	1.95	0.49
22:O:77:SER:CA	22:O:80:LYS:HG2	2.41	0.49
22:O:177:GLN:O	22:O:181:PHE:HD2	1.96	0.49
23:P:265:VAL:O	23:P:269:VAL:HG23	2.13	0.49
23:P:308:LEU:O	23:P:308:LEU:HG	2.12	0.49
23:P:411:LEU:HD12	28:U:265:LEU:O	2.13	0.49
25:R:58:GLU:HB2	25:R:102:LEU:HG	1.94	0.49
25:R:374:ASN:O	25:R:375:LYS:HB2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:236:LEU:HD12	26:S:239:ARG:HH21	1.76	0.49
28:U:5:HIS:HE1	28:U:157:LEU:HG	1.76	0.49
33:Z:82:MET:SD	33:Z:85:VAL:HG22	2.52	0.49
33:Z:357:ILE:HG22	33:Z:960:GLY:HA3	1.94	0.49
33:Z:887:GLY:HA2	33:Z:900:LEU:HD13	1.95	0.49
3:3:93:PRO:O	3:3:94:TYR:HB2	2.13	0.49
3:3:136:GLN:HE22	3:3:168:ARG:HD3	1.77	0.49
6:6:65:TRP:HZ2	13:F:90:GLN:HA	1.74	0.49
9:B:159:TRP:CZ2	10:C:57:LEU:HD21	2.48	0.49
9:B:242:GLU:HB3	9:B:246:ARG:NH1	2.21	0.49
10:C:50:ARG:NH1	10:C:53:THR:CA	2.73	0.49
21:N:190:LEU:CD1	21:N:224:THR:CG2	2.88	0.49
22:O:119:SER:HB2	22:O:166:ARG:CZ	2.42	0.49
22:O:362:GLN:HE21	28:U:230:GLN:CG	2.24	0.49
25:R:174:ILE:O	25:R:187:VAL:HG22	2.12	0.49
5:5:76:VAL:CG1	5:5:113:TYR:CE2	2.87	0.49
13:F:222:PHE:HE1	13:F:224:ILE:CG1	2.23	0.49
17:J:392:LYS:HE2	18:K:337:LYS:HE3	1.95	0.49
19:L:361:PHE:CE2	19:L:376:PHE:CD1	2.96	0.49
20:M:76:PRO:HG2	20:M:150:LYS:NZ	2.27	0.49
21:N:352:ASN:CB	21:N:355:TRP:HB2	2.27	0.49
24:Q:246:TYR:CE2	24:Q:261:VAL:HG21	2.36	0.49
31:X:24:CYS:SG	31:X:86:ILE:CG1	2.81	0.49
33:Z:89:LEU:HD11	33:Z:125:THR:CB	2.42	0.49
33:Z:358:TYR:HE1	33:Z:960:GLY:HA2	1.78	0.49
1:1:19:ARG:HD2	1:1:170:GLY:HA3	1.94	0.49
7:7:187:PHE:CZ	7:7:204:LEU:HB2	2.48	0.49
8:A:69:VAL:CA	14:G:157:TRP:HZ3	2.18	0.49
8:A:69:VAL:HG13	14:G:157:TRP:CZ3	2.47	0.49
10:C:209:ASP:OD1	10:C:210:ARG:HG3	2.13	0.49
12:E:34:GLY:O	12:E:53:ARG:NH2	2.46	0.49
17:J:99:ALA:N	17:J:102:ILE:HD11	2.19	0.49
17:J:258:VAL:C	18:K:280:LYS:CD	2.86	0.49
18:K:99:PHE:CE1	18:K:101:GLU:C	2.90	0.49
23:P:157:ALA:HB1	23:P:186:LEU:HB3	1.88	0.49
24:Q:419:LEU:HD21	28:U:286:ILE:HD11	1.94	0.49
26:S:299:LYS:O	26:S:300:ALA:HB3	2.13	0.49
27:T:126:LEU:O	27:T:132:HIS:CD2	2.66	0.49
28:U:195:LYS:HZ2	29:V:230:TYR:N	2.11	0.49
30:W:167:GLU:OE1	30:W:197:SER:CB	2.61	0.49
5:5:64:ARG:O	5:5:68:LEU:HG	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:207:PHE:O	5:5:208:ASN:OD1	2.31	0.48
8:A:126:GLN:O	8:A:129:THR:OG1	2.28	0.48
12:E:119:LEU:CD1	12:E:122:ARG:HH21	2.24	0.48
13:F:13:PHE:CZ	14:G:130:PRO:HB2	2.48	0.48
15:H:295:PHE:CD1	15:H:339:GLN:OE1	2.67	0.48
16:I:428:VAL:O	16:I:428:VAL:CG1	2.52	0.48
21:N:9:LEU:HD21	21:N:27:SER:HB3	1.88	0.48
21:N:510:HIS:ND1	21:N:513:ILE:HD12	2.29	0.48
21:N:588:VAL:HG11	21:N:621:THR:CG2	2.24	0.48
21:N:656:ALA:O	21:N:660:LEU:HG	2.13	0.48
21:N:663:ILE:HG22	21:N:664:LEU:HD23	1.95	0.48
21:N:894:ARG:O	21:N:895:LYS:HB2	2.13	0.48
21:N:914:VAL:HG13	21:N:914:VAL:O	2.13	0.48
22:O:245:ASP:HB2	22:O:249:ASP:CG	2.36	0.48
23:P:115:ARG:HH12	23:P:146:ILE:HG12	1.70	0.48
24:Q:4:PRO:HB2	24:Q:53:GLU:OE1	2.12	0.48
25:R:176:ARG:HG2	25:R:243:LEU:CD2	2.42	0.48
25:R:312:TYR:CA	25:R:316:LEU:HD12	2.38	0.48
26:S:184:TRP:HB3	26:S:188:TYR:CE2	2.47	0.48
26:S:458:GLN:NE2	28:U:270:ASN:HB3	2.28	0.48
27:T:15:PHE:CD1	27:T:64:VAL:HG13	2.48	0.48
27:T:85:LEU:CD2	27:T:105:LEU:CD1	2.91	0.48
27:T:261:GLU:HA	27:T:264:MET:HE3	1.94	0.48
29:V:50:MET:HG2	29:V:78:VAL:HG11	1.95	0.48
33:Z:154:ILE:O	33:Z:158:ALA:CB	2.60	0.48
33:Z:168:GLN:HE21	33:Z:172:ASP:CG	2.19	0.48
33:Z:233:LEU:HB3	33:Z:234:PRO:HD3	1.93	0.48
2:2:109:HIS:HB3	2:2:111:PHE:CE2	2.48	0.48
5:5:66:HIS:HE1	5:5:70:GLU:OE1	1.93	0.48
8:A:36:ASN:C	8:A:37:GLN:HG3	2.36	0.48
8:A:164:VAL:HG12	8:A:165:GLY:H	1.77	0.48
9:B:107:THR:O	9:B:111:VAL:HG23	2.13	0.48
15:H:157:VAL:HG11	15:H:183:ILE:HD11	1.93	0.48
15:H:418:GLU:O	15:H:421:SER:OG	2.26	0.48
15:H:425:GLU:O	15:H:429:PHE:HD2	1.94	0.48
16:I:230:THR:HG23	16:I:234:LYS:HE3	1.95	0.48
17:J:197:LEU:HD13	17:J:359:LYS:NZ	2.27	0.48
18:K:60:LEU:HD11	21:N:598:ASP:CG	2.38	0.48
19:L:270:ALA:HB3	19:L:321:THR:OG1	2.13	0.48
21:N:229:VAL:HG22	21:N:237:LEU:HB3	1.95	0.48
22:O:33:TYR:CD1	22:O:40:GLN:NE2	2.82	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:403:LEU:CD2	28:U:278:ILE:HD13	2.44	0.48
27:T:250:MET:O	27:T:251:HIS:CB	2.61	0.48
28:U:92:TRP:CH2	28:U:94:HIS:HD2	2.31	0.48
28:U:274:MET:HA	28:U:277:TYR:CD2	2.48	0.48
33:Z:307:HIS:NE2	33:Z:345:GLU:OE1	2.46	0.48
1:1:-9:LEU:O	2:2:93:HIS:CD2	2.66	0.48
2:2:66:HIS:CE1	8:A:108:TYR:CE1	3.01	0.48
3:3:1:GLY:HA3	3:3:33:LYS:HZ3	1.78	0.48
6:6:136:LEU:HD22	6:6:186:HIS:NE2	2.28	0.48
9:B:218:ASN:OD1	9:B:220:ASP:HB2	2.13	0.48
14:G:91:GLY:CA	14:G:115:LEU:HD21	2.42	0.48
14:G:94:GLU:HB3	14:G:114:ARG:HD3	1.94	0.48
20:M:364:HIS:CE1	20:M:392:LYS:CA	2.96	0.48
21:N:98:VAL:O	21:N:102:VAL:HG23	2.13	0.48
21:N:259:PHE:CE1	21:N:289:ILE:HG12	2.47	0.48
22:O:16:MET:CE	22:O:19:ASP:OD1	2.55	0.48
22:O:38:TRP:CE3	22:O:54:SER:HB2	2.47	0.48
22:O:92:PHE:HE1	22:O:136:THR:HB	1.71	0.48
22:O:116:ASN:HB3	22:O:127:LEU:HD23	1.84	0.48
7:7:170:VAL:CG1	7:7:174:ARG:HH22	2.22	0.48
8:A:164:VAL:CG1	8:A:165:GLY:N	2.76	0.48
10:C:71:ASP:C	10:C:227:GLN:NE2	2.71	0.48
16:I:197:SER:OG	16:I:198:VAL:HG23	2.13	0.48
17:J:210:PHE:CE2	17:J:212:ARG:CD	2.93	0.48
19:L:201:LEU:HD12	19:L:239:ILE:CD1	2.35	0.48
20:M:283:LEU:HD12	20:M:286:ILE:CD1	2.44	0.48
21:N:657:MET:HG2	21:N:682:PHE:CE1	2.45	0.48
22:O:11:LEU:HB3	22:O:15:ARG:NH2	2.28	0.48
22:O:55:THR:HG23	22:O:55:THR:O	2.13	0.48
22:O:99:LEU:HD21	22:O:133:ILE:HG12	1.94	0.48
22:O:103:LYS:O	22:O:104:ALA:HB3	2.13	0.48
22:O:189:TYR:CZ	22:O:227:ILE:CG2	2.72	0.48
23:P:371:LEU:HB3	23:P:375:GLN:NE2	2.28	0.48
23:P:373:GLU:O	23:P:377:GLU:HG3	2.13	0.48
29:V:92:MET:O	29:V:95:LEU:HB2	2.13	0.48
30:W:2:VAL:CG1	30:W:4:GLU:CD	2.86	0.48
31:X:14:VAL:CG1	31:X:15:CYS:N	2.76	0.48
32:Y:72:ASP:OD1	32:Y:73:PHE:N	2.46	0.48
33:Z:463:HIS:HB2	33:Z:500:SER:OG	2.12	0.48
33:Z:857:LEU:HD23	33:Z:858:GLY:N	2.28	0.48
7:7:74:ASP:HA	7:7:78:ALA:HB3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:174:LYS:CD	8:A:214:LEU:CD2	2.91	0.48
14:G:137:PHE:CZ	14:G:148:TYR:HB2	2.49	0.48
15:H:107:LYS:CB	15:H:143:ALA:HB1	2.36	0.48
15:H:404:TRP:HA	15:H:404:TRP:CE3	2.49	0.48
19:L:150:ILE:HG23	19:L:151:THR:N	2.28	0.48
20:M:279:PHE:HD1	20:M:324:LEU:HD23	1.79	0.48
20:M:433:TYR:C	20:M:433:TYR:CD1	2.90	0.48
21:N:16:ASN:O	21:N:17:GLN:HB2	2.14	0.48
21:N:761:ILE:HG22	21:N:762:ARG:N	2.28	0.48
22:O:92:PHE:CE1	22:O:136:THR:CA	2.94	0.48
22:O:92:PHE:HE1	22:O:136:THR:CB	2.22	0.48
22:O:147:ARG:HB2	22:O:178:TYR:CE1	2.49	0.48
22:O:266:PHE:CE2	22:O:270:ILE:HD13	2.48	0.48
23:P:200:SER:O	23:P:220:TYR:CE1	2.67	0.48
23:P:392:LYS:CE	24:Q:399:VAL:HG11	2.42	0.48
24:Q:315:ASN:ND2	24:Q:368:LEU:HD13	2.28	0.48
27:T:151:TRP:CH2	27:T:159:LYS:HD3	2.48	0.48
28:U:38:LEU:CD2	28:U:89:LEU:HA	2.43	0.48
31:X:75:TRP:HZ3	31:X:125:MET:CE	2.19	0.48
33:Z:208:VAL:HB	33:Z:209:PRO:HD3	1.95	0.48
33:Z:407:VAL:CG1	33:Z:439:TYR:CE1	2.97	0.48
1:1:124:TYR:CG	1:1:142:PHE:CE1	3.02	0.48
4:4:136:GLY:O	4:4:140:PHE:HB2	2.13	0.48
5:5:178:TYR:CD2	5:5:187:TYR:HA	2.48	0.48
6:6:3:ILE:HG23	6:6:46:ASN:ND2	2.29	0.48
8:A:19:PHE:HA	8:A:25:LEU:HD21	1.94	0.48
8:A:135:ARG:CG	14:G:124:LEU:CD2	2.91	0.48
10:C:60:ASP:HA	10:C:232:PRO:HG2	1.95	0.48
10:C:195:LYS:O	10:C:199:LYS:HG2	2.12	0.48
11:D:71:VAL:HG22	11:D:106:VAL:HG22	1.96	0.48
13:F:13:PHE:CZ	14:G:129:ARG:HG3	2.48	0.48
14:G:129:ARG:HG2	14:G:130:PRO:O	2.13	0.48
16:I:258:GLY:O	16:I:261:PRO:HD2	2.13	0.48
17:J:259:GLU:HB3	18:K:280:LYS:CE	2.21	0.48
19:L:361:PHE:O	19:L:365:THR:HG23	2.13	0.48
19:L:375:ASP:OD1	19:L:377:GLU:HB3	2.13	0.48
21:N:627:ILE:HG23	21:N:717:LEU:HD23	1.94	0.48
21:N:776:TYR:HB3	21:N:862:SER:H	1.78	0.48
22:O:44:SER:CA	22:O:47:LYS:HE2	2.44	0.48
22:O:293:LEU:HD11	22:O:313:ILE:HG23	1.94	0.48
23:P:153:ILE:CG2	23:P:189:LEU:CB	2.83	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:62:TYR:HB2	25:R:180:PHE:CE2	2.49	0.48
26:S:360:PHE:CE2	26:S:364:ILE:HD11	2.49	0.48
26:S:401:LYS:HE2	26:S:444:GLU:OE2	2.12	0.48
27:T:15:PHE:CE1	27:T:20:TYR:CE1	3.01	0.48
33:Z:286:VAL:O	33:Z:287:ARG:CB	2.61	0.48
33:Z:592:GLU:O	33:Z:593:HIS:CG	2.67	0.48
8:A:234:PHE:HE2	8:A:236:LEU:CD2	2.23	0.48
11:D:184:PRO:CB	11:D:185:PRO:HD2	2.44	0.48
14:G:31:GLU:OE2	14:G:168:ARG:NH1	2.35	0.48
15:H:291:VAL:O	15:H:295:PHE:HD1	1.96	0.48
19:L:315:PHE:CE1	19:L:316:ASP:OD1	2.66	0.48
20:M:57:VAL:HG12	20:M:61:LYS:HE3	1.95	0.48
21:N:434:SER:HB3	21:N:439:VAL:HG12	1.89	0.48
23:P:127:GLU:HA	23:P:136:ARG:NH2	2.29	0.48
23:P:263:HIS:HB3	23:P:267:PHE:CE2	2.45	0.48
23:P:280:LEU:O	23:P:283:LYS:CE	2.60	0.48
25:R:80:GLU:OE1	25:R:99:TYR:CE2	2.66	0.48
25:R:117:ILE:HD13	25:R:134:TRP:CE2	2.45	0.48
25:R:396:LYS:NZ	26:S:449:LEU:CB	2.77	0.48
26:S:234:ILE:HB	26:S:257:LEU:CD2	2.44	0.48
26:S:321:GLN:O	26:S:327:ILE:CG2	2.61	0.48
26:S:399:TYR:CG	26:S:400:LYS:N	2.81	0.48
27:T:261:GLU:O	27:T:264:MET:HB2	2.13	0.48
30:W:114:VAL:HG12	30:W:116:SER:H	1.78	0.48
30:W:141:ILE:HD13	30:W:154:LEU:HD22	1.95	0.48
33:Z:72:LYS:CE	33:Z:117:ASP:HB3	2.43	0.48
4:4:27:LEU:HD13	5:5:133:GLN:HE22	1.78	0.48
8:A:196:GLU:HG3	8:A:197:GLU:N	2.29	0.48
9:B:21:ILE:O	9:B:25:LEU:HG	2.14	0.48
10:C:46:LEU:HD11	10:C:138:ALA:HB2	1.95	0.48
12:E:20:ARG:CZ	12:E:25:GLU:OE2	2.62	0.48
13:F:105:VAL:CG2	13:F:145:LEU:HB2	2.34	0.48
15:H:430:ALA:HA	15:H:442:ASP:OD2	2.13	0.48
16:I:290:LYS:HZ2	16:I:333:THR:CA	2.26	0.48
18:K:350:ARG:HA	18:K:372:ILE:HD13	1.96	0.48
19:L:132:ARG:HG2	19:L:133:ASN:N	2.29	0.48
19:L:329:ARG:CG	19:L:330:PRO:HD2	2.44	0.48
21:N:627:ILE:CG2	21:N:717:LEU:HD23	2.43	0.48
22:O:23:HIS:CE1	22:O:24:PRO:HD2	2.48	0.48
22:O:289:GLN:HE21	22:O:293:LEU:CD2	2.27	0.48
24:Q:75:ARG:CA	24:Q:117:VAL:CG2	2.89	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:461:PHE:HE1	28:U:278:ILE:CG1	2.26	0.48
29:V:47:MET:CE	29:V:75:GLY:HA2	2.43	0.48
33:Z:298:PHE:CD1	33:Z:310:LEU:HD23	2.49	0.48
33:Z:382:ALA:HB2	33:Z:846:PHE:CD1	2.49	0.48
33:Z:527:SER:OG	33:Z:565:PHE:HB3	2.14	0.48
33:Z:608:TYR:O	33:Z:609:THR:HG23	2.14	0.48
4:4:66:TYR:CB	4:4:74:LEU:HD11	2.44	0.48
6:6:106:ASP:C	6:6:106:ASP:OD1	2.57	0.48
8:A:79:ILE:HD13	8:A:145:SER:HB3	1.96	0.48
9:B:31:GLY:HA3	9:B:76:SER:OG	2.14	0.48
10:C:106:ILE:HD13	10:C:111:LEU:HB2	1.96	0.48
11:D:67:ILE:CD1	11:D:73:LEU:HB2	2.44	0.48
12:E:222:ILE:HG12	12:E:228:PHE:HD1	1.78	0.48
13:F:187:ASP:OD1	13:F:233:TYR:OH	2.08	0.48
14:G:11:ASN:OD1	14:G:20:ASN:ND2	2.47	0.48
22:O:14:LEU:O	22:O:15:ARG:HB3	2.13	0.48
22:O:86:LEU:HD13	22:O:98:TYR:CE2	2.49	0.48
22:O:106:PHE:CG	22:O:107:GLN:N	2.81	0.48
22:O:175:ASN:ND2	22:O:179:PHE:CE2	2.82	0.48
24:Q:35:SER:OG	24:Q:47:ASP:CB	2.61	0.48
25:R:113:LEU:HD22	25:R:137:LEU:CD1	2.44	0.48
25:R:290:SER:OG	25:R:291:SER:N	2.42	0.48
25:R:321:TYR:CD1	25:R:324:ARG:NH1	2.80	0.48
26:S:404:LEU:HD13	26:S:443:ILE:HG13	1.96	0.48
27:T:52:LEU:C	27:T:52:LEU:HD12	2.39	0.48
29:V:49:VAL:HG11	29:V:73:GLN:HE21	1.77	0.48
33:Z:745:LEU:HD22	33:Z:878:LEU:CG	2.43	0.48
2:2:72:ARG:HH21	8:A:150:LEU:HD11	1.79	0.48
5:5:12:ILE:HG23	5:5:112:ILE:HD11	1.95	0.48
5:5:32:LYS:O	5:5:33:ARG:CG	2.59	0.48
5:5:185:TRP:HZ3	5:5:187:TYR:HB2	1.79	0.48
18:K:389:GLU:O	18:K:393:ARG:HG3	2.13	0.48
19:L:74:LEU:CD1	20:M:51:LEU:HD12	2.44	0.48
19:L:136:ASP:HB2	19:L:158:ILE:HD12	1.95	0.48
20:M:433:TYR:CD1	20:M:434:ALA:N	2.82	0.48
21:N:593:PHE:CD1	21:N:730:VAL:HG13	2.49	0.48
21:N:596:LEU:CD1	21:N:718:GLU:HB2	2.44	0.48
21:N:596:LEU:HD21	21:N:718:GLU:HB2	1.95	0.48
21:N:602:VAL:CG1	21:N:625:LEU:CD1	2.92	0.48
22:O:21:SER:N	22:O:43:GLU:OE1	2.46	0.48
25:R:60:ALA:CB	25:R:102:LEU:CD1	2.92	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:111:LEU:HD22	27:T:174:PHE:HE1	1.79	0.48
28:U:24:ARG:NE	29:V:100:ARG:NH1	2.62	0.48
33:Z:809:MET:HG2	33:Z:847:ILE:CD1	2.41	0.48
11:D:118:GLN:CG	12:E:83:ALA:HB1	2.43	0.47
13:F:109:GLY:O	13:F:112:LEU:HB2	2.14	0.47
16:I:130:VAL:HG12	16:I:153:THR:HG23	1.96	0.47
18:K:174:VAL:HG23	18:K:221:MET:SD	2.53	0.47
18:K:420:THR:CG2	18:K:423:LYS:HD3	2.44	0.47
19:L:185:GLY:HA3	19:L:360:ILE:CG1	2.30	0.47
20:M:362:GLN:NE2	20:M:376:TRP:CH2	2.82	0.47
22:O:62:TYR:O	22:O:66:VAL:HG23	2.14	0.47
22:O:233:LEU:CD2	22:O:251:LEU:HD21	2.43	0.47
24:Q:165:PHE:CZ	24:Q:173:SER:HB2	2.49	0.47
25:R:102:LEU:HD23	25:R:102:LEU:C	2.39	0.47
25:R:116:LYS:HZ2	25:R:136:ASN:ND2	2.10	0.47
33:Z:166:ASN:CG	33:Z:227:ILE:HA	2.39	0.47
33:Z:517:ASP:HB2	33:Z:556:ILE:HG21	1.96	0.47
33:Z:522:THR:O	33:Z:525:MET:HG2	2.14	0.47
5:5:6:PHE:CZ	5:5:13:ILE:HG13	2.48	0.47
5:5:13:ILE:HD13	5:5:179:HIS:CD2	2.49	0.47
8:A:63:LEU:HD11	14:G:172:LYS:HG3	1.96	0.47
12:E:119:LEU:HD13	12:E:122:ARG:HH22	1.79	0.47
14:G:120:GLN:O	14:G:123:THR:OG1	2.30	0.47
15:H:178:ARG:HH22	15:H:192:ASP:HB2	1.79	0.47
15:H:261:ARG:NH2	15:H:273:ARG:NH1	2.60	0.47
16:I:310:LEU:HD11	16:I:338:LEU:CA	2.44	0.47
16:I:375:VAL:HG22	16:I:413:ALA:N	2.30	0.47
18:K:281:ARG:HD3	18:K:293:GLN:HE22	1.79	0.47
18:K:372:ILE:HG23	24:Q:240:PHE:CZ	2.48	0.47
19:L:114:GLU:O	19:L:137:ARG:NE	2.47	0.47
20:M:267:PHE:O	20:M:270:ALA:HB3	2.15	0.47
21:N:152:LEU:HD23	21:N:152:LEU:C	2.38	0.47
21:N:711:ARG:NH1	21:N:784:TYR:CE2	2.82	0.47
21:N:897:LYS:HE2	21:N:899:ASN:HD22	1.78	0.47
22:O:106:PHE:CG	22:O:109:LEU:HB3	2.49	0.47
23:P:204:LEU:HB2	23:P:220:TYR:CE1	2.48	0.47
24:Q:162:LEU:HD11	24:Q:181:GLU:OE1	2.14	0.47
26:S:350:LYS:HG2	26:S:359:LYS:HE3	1.96	0.47
31:X:28:PRO:CA	31:X:57:VAL:CG2	2.82	0.47
33:Z:308:LYS:HG2	33:Z:345:GLU:HG2	1.96	0.47
33:Z:531:ALA:C	33:Z:573:LEU:HD21	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:571:GLY:HA2	33:Z:574:TYR:OH	2.13	0.47
4:4:55:PHE:CZ	4:4:59:ILE:HG13	2.48	0.47
7:7:64:THR:HG21	7:7:68:TYR:OH	2.13	0.47
8:A:19:PHE:CZ	9:B:128:ARG:CD	2.89	0.47
10:C:50:ARG:NH2	10:C:57:LEU:HD13	2.29	0.47
10:C:119:LYS:HG2	10:C:131:PHE:HD2	1.79	0.47
10:C:156:ASN:HD21	11:D:78:LEU:CD1	2.26	0.47
11:D:138:PHE:HE1	11:D:215:VAL:CG1	2.15	0.47
12:E:41:ALA:HA	12:E:46:VAL:HG22	1.96	0.47
15:H:447:VAL:HG13	15:H:451:ILE:CD1	2.41	0.47
18:K:183:GLU:HG2	18:K:338:ILE:HG12	1.96	0.47
18:K:277:ILE:CD1	18:K:295:ILE:HG21	2.44	0.47
19:L:74:LEU:HD12	20:M:51:LEU:CD1	2.44	0.47
19:L:192:GLU:HB3	19:L:345:ARG:HH22	1.78	0.47
21:N:381:GLU:HA	21:N:384:LYS:HB2	1.95	0.47
21:N:510:HIS:CG	21:N:513:ILE:HD12	2.49	0.47
22:O:33:TYR:OH	22:O:40:GLN:HB2	2.10	0.47
25:R:116:LYS:O	25:R:120:LEU:HG	2.14	0.47
25:R:316:LEU:HD23	25:R:322:LEU:HD13	1.96	0.47
26:S:217:PHE:HD2	26:S:233:LEU:HD22	1.79	0.47
28:U:36:VAL:HG23	28:U:54:LEU:HD21	1.96	0.47
30:W:36:ILE:HD11	30:W:113:PHE:CZ	2.46	0.47
33:Z:750:GLU:HG3	33:Z:753:GLY:H	1.78	0.47
6:6:-9:GLN:HB3	7:7:-8:THR:HG23	1.95	0.47
6:6:-8:PHE:HZ	6:6:-6:PRO:HA	1.60	0.47
9:B:139:HIS:ND1	9:B:145:PHE:CE1	2.82	0.47
13:F:46:LEU:HD21	13:F:135:ILE:HG23	1.95	0.47
15:H:351:VAL:HG12	15:H:353:PHE:CE1	2.49	0.47
17:J:154:THR:HA	17:J:157:ILE:HD12	1.95	0.47
19:L:309:LEU:HD11	19:L:339:ARG:HH22	1.79	0.47
21:N:672:ASN:O	21:N:675:VAL:HG22	2.14	0.47
23:P:204:LEU:HD13	23:P:220:TYR:CE2	2.50	0.47
23:P:267:PHE:CZ	23:P:328:ALA:O	2.68	0.47
23:P:311:TRP:CE2	23:P:315:GLN:HG3	2.49	0.47
25:R:335:ARG:HH22	25:R:371:PHE:HA	0.53	0.47
26:S:143:GLN:HG2	26:S:147:TRP:O	2.14	0.47
26:S:188:TYR:CZ	26:S:210:LEU:HD13	2.49	0.47
26:S:415:SER:HB2	27:T:159:LYS:HZ1	1.79	0.47
27:T:99:SER:N	27:T:102:LYS:HD3	2.16	0.47
27:T:181:LEU:HD23	27:T:181:LEU:O	2.14	0.47
31:X:28:PRO:CB	31:X:56:PRO:C	2.86	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:120:SER:OG	33:Z:153:TYR:CE2	2.65	0.47
2:2:36:ARG:NH1	9:B:224:TYR:CZ	2.82	0.47
2:2:43:CYS:SG	2:2:100:VAL:HG22	2.54	0.47
4:4:40:HIS:HE1	4:4:185:LYS:C	2.22	0.47
5:5:35:ILE:HD11	5:5:45:MET:CE	2.44	0.47
11:D:193:LYS:HB3	11:D:197:ARG:NH1	2.30	0.47
12:E:226:ASP:O	12:E:226:ASP:OD1	2.33	0.47
13:F:110:HIS:CG	14:G:85:ARG:NH1	2.78	0.47
13:F:110:HIS:ND1	14:G:85:ARG:HG2	2.30	0.47
14:G:31:GLU:HG3	14:G:168:ARG:HH22	1.78	0.47
16:I:222:TYR:CE1	16:I:329:ASN:CA	2.75	0.47
16:I:289:THR:CG2	16:I:290:LYS:N	2.77	0.47
18:K:390:ALA:HB1	18:K:407:LEU:HD23	1.96	0.47
19:L:336:ALA:HB1	19:L:342:ARG:HH11	1.79	0.47
19:L:370:LYS:CG	19:L:410:ILE:HB	2.32	0.47
20:M:153:TYR:HE2	29:V:46:PRO:HG3	1.80	0.47
20:M:259:GLY:O	20:M:263:VAL:HG23	2.14	0.47
21:N:294:PRO:HA	21:N:921:ARG:NE	2.30	0.47
21:N:330:THR:O	21:N:334:VAL:HG23	2.14	0.47
22:O:7:ILE:HG21	22:O:46:THR:HG23	1.95	0.47
22:O:303:LYS:O	22:O:304:ASN:CB	2.61	0.47
23:P:157:ALA:O	23:P:161:CYS:SG	2.67	0.47
24:Q:250:THR:OG1	24:Q:251:THR:N	2.46	0.47
25:R:354:ALA:CA	25:R:364:LEU:HD23	2.45	0.47
31:X:28:PRO:CD	31:X:57:VAL:HG21	2.44	0.47
33:Z:138:ARG:HB2	33:Z:157:LEU:HD12	1.86	0.47
7:7:1:THR:N	7:7:33:ARG:HH22	2.13	0.47
15:H:211:VAL:HG12	15:H:211:VAL:O	2.13	0.47
15:H:244:LYS:CE	15:H:346:ARG:HH21	2.27	0.47
16:I:355:LEU:HD22	16:I:381:VAL:CG1	2.44	0.47
18:K:362:LEU:HD12	18:K:362:LEU:C	2.39	0.47
20:M:279:PHE:CD1	20:M:324:LEU:HD23	2.50	0.47
21:N:771:PHE:CD2	21:N:772:GLN:O	2.67	0.47
22:O:7:ILE:CG2	22:O:11:LEU:HD12	2.41	0.47
22:O:21:SER:HB3	22:O:43:GLU:HB3	1.96	0.47
26:S:428:ARG:NH2	27:T:191:LYS:CD	2.78	0.47
27:T:189:ILE:HG21	27:T:209:LEU:HD23	1.96	0.47
27:T:209:LEU:O	27:T:210:PHE:CB	2.62	0.47
28:U:271:ASP:HA	28:U:274:MET:HE3	1.96	0.47
29:V:116:CYS:HG	29:V:117:TRP:NE1	2.12	0.47
30:W:101:ARG:NH1	30:W:108:GLN:NE2	2.59	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:118:ILE:HG13	30:W:154:LEU:HG	1.88	0.47
1:1:37:VAL:HG11	1:1:82:PHE:CZ	2.40	0.47
1:1:61:TYR:CZ	8:A:103:GLU:CG	2.95	0.47
1:1:156:LYS:HE2	1:1:175:MET:HE1	1.97	0.47
4:4:36:GLN:CG	4:4:188:ILE:HD12	2.45	0.47
6:6:84:ILE:O	6:6:88:LEU:HG	2.14	0.47
7:7:70:ASN:HD22	13:F:107:ARG:HE	1.62	0.47
7:7:81:PRO:HB2	7:7:118:PHE:CG	2.49	0.47
8:A:46:ARG:HD3	8:A:154:ILE:HG13	1.95	0.47
8:A:83:VAL:HG22	8:A:141:LEU:HD23	1.95	0.47
9:B:177:LYS:HD3	24:Q:209:TYR:HB3	1.96	0.47
10:C:14:SER:OG	10:C:18:ARG:O	2.26	0.47
10:C:201:THR:CG2	10:C:206:LEU:HD21	2.43	0.47
11:D:106:VAL:HG23	11:D:139:ASP:OD1	2.15	0.47
11:D:116:VAL:HG13	11:D:119:ARG:NH2	2.29	0.47
11:D:188:VAL:HG11	11:D:216:LYS:CE	2.45	0.47
12:E:69:GLU:HG3	12:E:71:ASP:O	2.15	0.47
14:G:182:HIS:NE2	14:G:186:LEU:HD12	2.29	0.47
15:H:66:LYS:HG3	16:I:152:LYS:NZ	2.30	0.47
15:H:155:PHE:HE1	20:M:78:LEU:CD2	2.27	0.47
15:H:381:ASP:C	15:H:381:ASP:OD1	2.58	0.47
16:I:247:ILE:CD1	16:I:281:ILE:HG12	2.24	0.47
18:K:158:ILE:HG23	19:L:256:ILE:CG2	2.43	0.47
18:K:223:VAL:HG11	18:K:270:PHE:CD1	2.49	0.47
18:K:242:PHE:CA	18:K:244:HIS:H	2.24	0.47
19:L:125:PRO:CD	19:L:127:TYR:CZ	2.94	0.47
19:L:410:ILE:HD11	20:M:212:ILE:CD1	2.44	0.47
20:M:407:GLN:HE22	20:M:411:LYS:HZ2	1.60	0.47
21:N:123:PHE:CD1	21:N:124:TYR:N	2.82	0.47
21:N:494:LYS:HE2	21:N:497:ALA:HB2	1.97	0.47
21:N:596:LEU:HG	21:N:718:GLU:HB2	1.97	0.47
21:N:602:VAL:HG11	21:N:625:LEU:HD12	1.97	0.47
21:N:669:GLU:CB	21:N:784:TYR:N	2.78	0.47
21:N:884:PHE:HB3	21:N:905:LEU:CD1	2.41	0.47
21:N:909:GLU:HB3	21:N:912:GLU:OE1	2.14	0.47
21:N:909:GLU:HB3	21:N:912:GLU:OE2	2.15	0.47
22:O:38:TRP:HE3	22:O:54:SER:CB	2.22	0.47
23:P:306:ASN:HD21	23:P:349:ASN:HB2	1.79	0.47
24:Q:262:LEU:HD21	24:Q:288:LYS:HG3	1.96	0.47
24:Q:344:GLU:HG3	24:Q:376:LYS:HE2	1.97	0.47
25:R:117:ILE:HD11	25:R:134:TRP:CZ3	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:221:VAL:O	25:R:222:ARG:CB	2.63	0.47
26:S:237:ILE:HG21	26:S:253:PHE:CE2	2.49	0.47
27:T:20:TYR:CD1	27:T:68:ALA:HA	2.49	0.47
27:T:111:LEU:HD13	27:T:174:PHE:CE1	2.47	0.47
27:T:255:GLN:OE1	27:T:255:GLN:N	2.48	0.47
30:W:107:HIS:CE1	30:W:108:GLN:O	2.66	0.47
31:X:36:LYS:HD3	31:X:49:GLU:OE1	2.15	0.47
33:Z:230:ILE:CD1	33:Z:263:ALA:HB1	2.45	0.47
33:Z:237:VAL:CG1	33:Z:272:TYR:HE1	2.17	0.47
33:Z:617:ILE:CD1	33:Z:746:ILE:CG2	2.93	0.47
33:Z:617:ILE:HD13	33:Z:746:ILE:HG21	1.96	0.47
33:Z:827:LEU:HD21	33:Z:831:LEU:CD2	2.40	0.47
1:1:75:THR:HB	1:1:111:TYR:HE1	1.75	0.47
2:2:220:ILE:CG2	3:3:186:VAL:HG23	2.40	0.47
8:A:24:ARG:HH11	18:K:424:PHE:HA	1.74	0.47
8:A:30:TYR:CE1	14:G:16:PRO:HB3	2.49	0.47
8:A:53:VAL:HG11	8:A:82:VAL:HG21	1.97	0.47
13:F:48:ALA:O	13:F:211:LEU:HD12	2.15	0.47
13:F:164:ARG:HH11	20:M:428:LYS:CD	2.28	0.47
13:F:164:ARG:HH11	20:M:428:LYS:CG	2.28	0.47
16:I:252:LEU:C	16:I:254:GLN:H	2.23	0.47
16:I:281:ILE:HG22	16:I:284:ILE:CD1	2.45	0.47
16:I:418:GLN:HB3	16:I:422:ARG:CZ	2.39	0.47
19:L:98:LEU:HD22	20:M:154:LEU:HD22	1.96	0.47
19:L:102:GLY:O	19:L:103:GLN:HG2	2.14	0.47
21:N:685:VAL:HG12	21:N:696:LYS:HG2	1.95	0.47
21:N:870:ASN:ND2	21:N:871:MET:HE2	2.29	0.47
21:N:872:THR:OG1	21:N:874:ILE:HG12	2.14	0.47
21:N:890:PHE:CE2	21:N:914:VAL:CG2	2.97	0.47
22:O:79:VAL:CG1	22:O:123:GLY:O	2.39	0.47
22:O:210:ARG:HH21	22:O:238:ILE:HA	1.80	0.47
22:O:250:TRP:CD1	22:O:270:ILE:HG22	2.50	0.47
25:R:116:LYS:NZ	25:R:136:ASN:HD22	2.12	0.47
25:R:117:ILE:O	25:R:121:GLU:HG3	2.14	0.47
25:R:194:VAL:HA	25:R:197:MET:CG	2.45	0.47
26:S:415:SER:CB	27:T:159:LYS:HZ1	2.28	0.47
28:U:8:VAL:HG12	28:U:10:ILE:HG13	1.96	0.47
28:U:108:GLU:HB2	30:W:58:ASN:HD21	1.80	0.47
31:X:71:GLY:C	31:X:72:GLU:HG2	2.40	0.47
31:X:75:TRP:HZ3	31:X:125:MET:HE3	1.70	0.47
33:Z:491:LEU:HD11	33:Z:900:LEU:HD23	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:494:GLY:O	33:Z:532:HIS:HD2	1.98	0.47
33:Z:542:ILE:HG23	33:Z:543:THR:N	2.30	0.47
1:1:-6:GLY:CA	2:2:116:HIS:CE1	2.98	0.47
8:A:135:ARG:CD	14:G:124:LEU:CD2	2.89	0.47
14:G:89:ASN:HD22	14:G:90:ARG:NH2	2.12	0.47
15:H:280:VAL:O	15:H:280:VAL:HG12	2.14	0.47
16:I:124:THR:O	16:I:125:MET:CG	2.57	0.47
19:L:374:PHE:CE1	19:L:376:PHE:CD1	3.02	0.47
22:O:44:SER:N	22:O:47:LYS:HE2	2.30	0.47
22:O:250:TRP:CH2	22:O:274:ILE:HB	2.50	0.47
23:P:426:ILE:HD11	29:V:233:LYS:HE2	1.97	0.47
24:Q:297:ASP:HB3	24:Q:321:TYR:CZ	2.50	0.47
24:Q:363:SER:O	24:Q:366:ILE:HG22	2.15	0.47
25:R:48:GLU:HB2	25:R:91:TRP:CZ3	2.50	0.47
26:S:211:ARG:NH2	26:S:240:ASP:HB3	2.30	0.47
27:T:111:LEU:HD22	27:T:174:PHE:CE1	2.50	0.47
28:U:47:ARG:HG2	28:U:49:THR:CG2	2.44	0.47
33:Z:68:LEU:CD1	33:Z:115:LEU:CG	2.91	0.47
1:1:146:MET:HG3	1:1:150:GLU:OE1	2.15	0.47
5:5:69:ARG:HG3	12:E:93:ARG:NH1	2.30	0.47
7:7:6:MET:HE1	7:7:150:VAL:CB	2.45	0.47
10:C:190:ILE:O	10:C:194:LEU:HG	2.15	0.47
12:E:154:GLN:HB2	12:E:156:PHE:HE1	1.80	0.47
13:F:33:SER:CB	20:M:433:TYR:CE2	2.91	0.47
14:G:111:PHE:CE2	14:G:115:LEU:CD1	2.96	0.47
14:G:218:CYS:HB2	14:G:227:HIS:ND1	2.30	0.47
16:I:306:MET:SD	16:I:335:ASP:OD2	2.73	0.47
17:J:305:LEU:HD23	17:J:310:ILE:HD12	1.97	0.47
18:K:242:PHE:CD1	18:K:250:GLY:HA2	2.50	0.47
19:L:354:GLU:OE2	19:L:380:VAL:CG1	2.63	0.47
22:O:59:LEU:CA	22:O:62:TYR:CD1	2.98	0.47
22:O:110:ASP:HA	22:O:126:ILE:HD13	1.96	0.47
22:O:299:THR:OG1	22:O:365:LYS:NZ	2.44	0.47
25:R:26:VAL:HG11	25:R:180:PHE:HE1	1.80	0.47
25:R:366:ASN:O	25:R:370:LYS:HG3	2.14	0.47
28:U:283:ARG:CD	29:V:287:THR:OG1	2.63	0.47
30:W:107:HIS:HE1	30:W:138:ALA:HB2	1.80	0.47
30:W:118:ILE:HG21	30:W:154:LEU:CG	2.35	0.47
30:W:141:ILE:CG1	30:W:158:ILE:HD11	2.45	0.47
30:W:141:ILE:HG13	30:W:158:ILE:HD11	1.97	0.47
33:Z:340:LEU:O	33:Z:341:TYR:HB2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:431:ASP:OD1	33:Z:433:LEU:N	2.47	0.47
33:Z:897:HIS:CE1	33:Z:899:GLN:CD	2.93	0.47
6:6:4:LEU:HD11	6:6:141:LEU:HD22	1.97	0.46
8:A:127:ILE:O	8:A:131:ARG:HG3	2.15	0.46
10:C:18:ARG:HH21	10:C:23:GLU:HG2	1.80	0.46
12:E:165:TYR:O	12:E:167:TYR:CE2	2.68	0.46
13:F:74:LEU:C	13:F:74:LEU:HD12	2.40	0.46
14:G:215:ILE:CG2	14:G:230:VAL:CG1	2.93	0.46
16:I:167:MET:CE	16:I:270:VAL:HG22	2.27	0.46
17:J:150:VAL:CB	17:J:153:LEU:HD12	2.44	0.46
17:J:321:VAL:HG13	17:J:348:GLU:HA	1.97	0.46
18:K:332:GLY:C	18:K:333:ARG:HG2	2.40	0.46
19:L:74:LEU:CD2	20:M:44:PHE:HD1	2.28	0.46
19:L:403:ILE:CG2	20:M:203:ARG:HH11	2.28	0.46
21:N:862:SER:O	21:N:863:SER:CB	2.63	0.46
23:P:277:GLN:HG2	23:P:281:ILE:HD11	1.97	0.46
23:P:311:TRP:CZ3	23:P:315:GLN:NE2	2.83	0.46
25:R:93:LYS:HG2	25:R:94:PHE:O	2.15	0.46
27:T:126:LEU:O	27:T:132:HIS:CE1	2.68	0.46
31:X:113:GLU:HB2	31:X:115:SER:OG	2.15	0.46
33:Z:493:LEU:O	33:Z:497:PHE:CD1	2.68	0.46
8:A:11:GLY:O	8:A:12:TYR:CG	2.68	0.46
8:A:220:LYS:HZ2	8:A:242:GLU:CB	2.27	0.46
10:C:47:ALA:HB1	10:C:197:LEU:HD11	1.97	0.46
11:D:67:ILE:HD11	11:D:73:LEU:HD12	1.97	0.46
13:F:50:LYS:HZ1	13:F:61:LYS:HA	1.78	0.46
15:H:331:ARG:NH1	15:H:335:GLU:HB2	2.29	0.46
16:I:310:LEU:HD13	16:I:338:LEU:CA	2.40	0.46
21:N:329:HIS:CG	21:N:355:TRP:NE1	2.71	0.46
21:N:585:ARG:NH1	21:N:740:TRP:HZ2	2.13	0.46
22:O:80:LYS:HB3	22:O:81:TYR:CE1	2.50	0.46
22:O:226:LYS:C	22:O:227:ILE:HG12	2.40	0.46
22:O:284:GLU:HG2	22:O:288:ARG:NH2	2.30	0.46
23:P:126:THR:C	23:P:136:ARG:NH2	2.73	0.46
23:P:204:LEU:HB2	23:P:220:TYR:CZ	2.50	0.46
24:Q:232:TYR:CE2	24:Q:271:MET:HB3	2.50	0.46
24:Q:389:VAL:O	24:Q:397:LEU:HD12	2.15	0.46
28:U:127:GLN:HE22	29:V:212:MET:N	2.13	0.46
29:V:157:ARG:HB3	29:V:197:TYR:CD1	2.46	0.46
33:Z:122:LEU:HD23	33:Z:122:LEU:C	2.41	0.46
33:Z:278:LEU:HD13	33:Z:297:VAL:O	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:430:LEU:HD21	33:Z:468:GLU:HB2	1.97	0.46
33:Z:600:GLU:O	33:Z:603:VAL:HG22	2.15	0.46
3:3:44:ILE:HG12	3:3:98:PRO:HB3	1.97	0.46
6:6:-8:PHE:CD2	6:6:-6:PRO:CD	2.99	0.46
7:7:72:LEU:HD11	14:G:64:VAL:HG13	1.97	0.46
7:7:156:ASP:O	7:7:160:THR:HG23	2.15	0.46
13:F:50:LYS:HA	20:M:433:TYR:CZ	2.50	0.46
15:H:155:PHE:HB3	20:M:76:PRO:HG3	1.96	0.46
15:H:249:TYR:HE1	15:H:374:LYS:HG2	1.80	0.46
16:I:362:LEU:CB	16:I:377:LEU:HD22	2.46	0.46
18:K:291:GLU:HG3	18:K:294:ARG:HH22	0.66	0.46
19:L:337:LEU:HA	19:L:342:ARG:CZ	2.45	0.46
20:M:220:MET:CB	20:M:349:PHE:HE2	2.23	0.46
22:O:26:PHE:O	22:O:58:ARG:NH2	2.48	0.46
22:O:33:TYR:CD1	22:O:40:GLN:OE1	2.67	0.46
22:O:175:ASN:HD21	22:O:179:PHE:HE2	1.64	0.46
22:O:374:ASN:O	22:O:378:GLU:HG3	2.15	0.46
24:Q:232:TYR:CE1	24:Q:271:MET:CE	2.98	0.46
27:T:46:ILE:O	27:T:47:GLN:NE2	2.48	0.46
31:X:78:ILE:CG2	31:X:78:ILE:O	2.58	0.46
31:X:85:ARG:NE	31:X:101:LEU:HD13	2.30	0.46
33:Z:532:HIS:HA	33:Z:535:VAL:CG2	2.45	0.46
33:Z:585:LEU:HD21	33:Z:603:VAL:HG21	1.97	0.46
1:1:124:TYR:CD1	1:1:142:PHE:CE2	3.04	0.46
6:6:197:ILE:HG22	6:6:199:THR:HG23	1.96	0.46
8:A:89:ASP:OD1	8:A:137:LEU:HD22	2.15	0.46
9:B:7:PHE:CE2	10:C:7:ASP:CB	2.91	0.46
10:C:50:ARG:NH1	10:C:52:VAL:O	2.48	0.46
12:E:147:HIS:CE1	12:E:153:TYR:CD2	3.04	0.46
14:G:15:SER:OG	14:G:19:ARG:N	2.47	0.46
14:G:217:TRP:O	14:G:217:TRP:CD1	2.69	0.46
15:H:224:VAL:HG13	15:H:243:PRO:HD2	1.97	0.46
15:H:255:GLY:O	15:H:259:CYS:SG	2.68	0.46
17:J:99:ALA:CA	17:J:102:ILE:HG12	2.45	0.46
17:J:273:LEU:HD13	17:J:309:ARG:HH12	0.96	0.46
19:L:97:ALA:O	20:M:154:LEU:HD11	2.16	0.46
21:N:781:ALA:HB2	21:N:874:ILE:H	1.80	0.46
21:N:891:VAL:C	21:N:905:LEU:HD11	2.40	0.46
22:O:362:GLN:HE22	28:U:227:GLY:HA2	1.81	0.46
26:S:350:LYS:HG2	26:S:359:LYS:NZ	2.31	0.46
27:T:148:LEU:HD11	27:T:164:LEU:HD23	1.94	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:U:293:GLU:CG	29:V:277:LYS:HZ2	2.27	0.46
33:Z:212:LEU:HD21	33:Z:239:GLU:CG	2.44	0.46
33:Z:236:PHE:CD1	33:Z:249:MET:HE1	2.51	0.46
5:5:51:ASP:CG	5:5:95:LEU:HD12	2.40	0.46
9:B:49:LYS:HA	9:B:63:LYS:NZ	2.31	0.46
10:C:230:PHE:HA	10:C:234:GLU:OE1	2.15	0.46
14:G:182:HIS:CB	14:G:186:LEU:HG	2.45	0.46
16:I:142:GLU:O	16:I:145:CYS:SG	2.73	0.46
16:I:142:GLU:HB2	16:I:145:CYS:SG	2.55	0.46
16:I:172:LYS:HE3	17:J:278:GLN:HA	1.98	0.46
16:I:227:THR:HG21	17:J:306:ARG:NH1	2.30	0.46
16:I:258:GLY:C	16:I:261:PRO:HD2	2.40	0.46
17:J:342:ASN:HB3	17:J:345:LYS:HD3	1.98	0.46
18:K:423:LYS:HG3	18:K:424:PHE:CD2	2.50	0.46
19:L:273:HIS:CG	19:L:273:HIS:O	2.66	0.46
21:N:387:ALA:HB3	21:N:388:PRO:HD3	1.97	0.46
21:N:517:LEU:O	21:N:521:LEU:HG	2.15	0.46
21:N:539:MET:CE	21:N:551:GLY:HA2	2.45	0.46
24:Q:41:ALA:HA	24:Q:84:TYR:CG	2.50	0.46
25:R:325:HIS:CE1	25:R:329:PHE:CB	2.98	0.46
29:V:57:PHE:CZ	29:V:135:ARG:CG	2.98	0.46
30:W:125:LEU:HD22	30:W:153:LEU:HD22	1.98	0.46
33:Z:307:HIS:HE2	33:Z:341:TYR:CA	2.29	0.46
33:Z:358:TYR:CE1	33:Z:960:GLY:HA2	2.50	0.46
5:5:197:PHE:CZ	5:5:201:LYS:HD2	2.50	0.46
9:B:37:ILE:HG12	9:B:175:LEU:HD21	1.98	0.46
13:F:13:PHE:H	14:G:22:GLN:CD	2.24	0.46
13:F:87:TYR:CB	13:F:115:LYS:HZ2	2.29	0.46
16:I:217:LYS:NZ	16:I:343:ARG:HD2	2.25	0.46
18:K:99:PHE:CE2	18:K:133:PRO:HA	2.51	0.46
18:K:159:SER:CB	19:L:256:ILE:HG12	2.46	0.46
18:K:212:TYR:C	18:K:219:LYS:HZ2	2.24	0.46
18:K:426:PHE:CE1	18:K:427:TYR:CE2	3.04	0.46
20:M:364:HIS:CE1	20:M:392:LYS:HA	2.51	0.46
21:N:95:SER:OG	21:N:98:VAL:CG2	2.63	0.46
23:P:143:LEU:CG	23:P:147:LYS:HE3	2.42	0.46
23:P:425:HIS:CE1	23:P:429:ILE:CG1	2.99	0.46
24:Q:409:TYR:HA	25:R:399:GLN:CG	2.45	0.46
29:V:158:LEU:O	29:V:159:ILE:HB	2.15	0.46
3:3:87:TYR:OH	3:3:119:GLY:O	2.22	0.46
5:5:6:PHE:CZ	5:5:13:ILE:HB	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:158:THR:HG1	10:C:160:TRP:HE1	1.50	0.46
12:E:44:GLU:OE1	12:E:191:LEU:C	2.58	0.46
15:H:231:SER:OG	15:H:234:ARG:HG3	2.16	0.46
16:I:105:SER:HB3	17:J:94:TYR:CE2	2.51	0.46
22:O:59:LEU:HA	22:O:62:TYR:HD1	1.80	0.46
24:Q:75:ARG:C	24:Q:117:VAL:HG22	2.40	0.46
24:Q:270:ILE:HG13	24:Q:278:VAL:HG21	1.97	0.46
25:R:80:GLU:HG2	25:R:81:HIS:NE2	2.29	0.46
31:X:37:PRO:O	31:X:38:ASN:CB	2.63	0.46
31:X:125:MET:O	31:X:129:LEU:HG	2.16	0.46
1:1:30:VAL:HG21	2:2:123:TYR:CE2	2.51	0.46
1:1:70:TYR:CD1	14:G:110:ALA:HB1	2.51	0.46
1:1:78:ALA:O	1:1:82:PHE:CD2	2.69	0.46
6:6:147:PHE:HZ	6:6:164:LYS:HB2	1.78	0.46
8:A:220:LYS:CG	8:A:245:LEU:HD12	2.46	0.46
12:E:127:ALA:CA	12:E:132:ARG:NH2	2.79	0.46
16:I:136:VAL:HG11	16:I:159:VAL:HG11	1.98	0.46
19:L:180:PHE:CD2	19:L:238:THR:CB	2.96	0.46
20:M:379:LEU:HD11	20:M:415:PHE:CB	2.46	0.46
21:N:23:TYR:CD2	27:T:35:ILE:HD13	2.50	0.46
21:N:137:PHE:CE1	21:N:162:ARG:HD3	2.51	0.46
21:N:250:ASP:CG	21:N:906:ARG:HH21	2.23	0.46
21:N:602:VAL:CG1	21:N:625:LEU:HD12	2.46	0.46
21:N:870:ASN:OD1	21:N:871:MET:HG3	2.16	0.46
21:N:874:ILE:CG2	21:N:875:LEU:N	2.31	0.46
23:P:281:ILE:HG21	23:P:300:VAL:HG11	1.98	0.46
23:P:360:ILE:HD11	23:P:364:ARG:HG3	1.98	0.46
26:S:234:ILE:CG1	26:S:257:LEU:CD1	2.93	0.46
27:T:202:LEU:O	27:T:205:ILE:HG22	2.15	0.46
29:V:109:HIS:HB3	29:V:111:HIS:CD2	2.47	0.46
33:Z:412:GLY:O	33:Z:446:GLU:CD	2.59	0.46
1:1:75:THR:CB	1:1:111:TYR:CE1	2.97	0.46
8:A:141:LEU:HB3	8:A:143:PHE:CE1	2.51	0.46
10:C:18:ARG:NH2	10:C:26:LEU:HD12	2.30	0.46
13:F:215:ILE:CG2	13:F:220:THR:HG21	2.45	0.46
15:H:337:ILE:HA	15:H:370:ARG:NH2	2.30	0.46
17:J:186:ILE:HD13	17:J:305:LEU:HD21	1.98	0.46
18:K:349:ARG:NH2	18:K:378:LEU:O	2.49	0.46
18:K:423:LYS:C	18:K:428:LYS:HZ1	2.19	0.46
19:L:149:ASP:CB	19:L:152:THR:HB	2.46	0.46
21:N:597:ARG:HH21	21:N:725:LEU:HD11	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:250:TRP:CZ3	22:O:274:ILE:HB	2.51	0.46
22:O:297:ILE:CG2	22:O:356:ARG:NH2	2.79	0.46
23:P:216:LEU:HD23	23:P:219:GLU:OE1	2.16	0.46
24:Q:275:ILE:CD1	24:Q:306:TYR:CD2	2.92	0.46
25:R:137:LEU:CD1	25:R:141:TYR:CZ	2.95	0.46
26:S:286:TYR:CE1	26:S:323:LEU:CD1	2.80	0.46
27:T:85:LEU:HD23	27:T:105:LEU:HD13	1.98	0.46
33:Z:227:ILE:HG21	33:Z:232:LYS:NZ	2.31	0.46
33:Z:870:ALA:O	33:Z:872:VAL:HG13	2.16	0.46
1:1:14:LEU:HD11	1:1:44:CYS:SG	2.57	0.46
8:A:164:VAL:CG1	8:A:165:GLY:H	2.29	0.46
8:A:220:LYS:NZ	8:A:242:GLU:HG3	2.30	0.46
9:B:75:TYR:CD1	9:B:82:TYR:CE2	3.04	0.46
11:D:118:GLN:CD	12:E:83:ALA:HB1	2.41	0.46
13:F:13:PHE:HZ	14:G:130:PRO:CD	2.21	0.46
17:J:150:VAL:CG2	17:J:153:LEU:HD12	2.45	0.46
18:K:242:PHE:HD1	18:K:250:GLY:HA3	1.81	0.46
19:L:245:PHE:CE1	19:L:281:ASP:HB2	2.51	0.46
21:N:124:TYR:CE1	21:N:125:THR:HG23	2.50	0.46
21:N:158:LEU:CD1	21:N:202:PHE:CE2	2.99	0.46
21:N:222:TYR:OH	21:N:253:LEU:HG	2.16	0.46
22:O:242:ILE:C	22:O:242:ILE:HD12	2.41	0.46
23:P:211:PRO:O	23:P:213:TYR:CD1	2.69	0.46
24:Q:311:LEU:HD13	24:Q:343:LEU:HD13	1.97	0.46
25:R:50:VAL:O	25:R:54:ILE:HG12	2.16	0.46
29:V:50:MET:HB3	29:V:78:VAL:HG21	1.98	0.46
31:X:7:VAL:HB	31:X:35:ILE:O	2.16	0.46
31:X:37:PRO:O	31:X:38:ASN:HB3	2.15	0.46
4:4:45:PHE:HD2	4:4:99:VAL:HG11	1.80	0.45
16:I:172:LYS:CE	17:J:278:GLN:HA	2.45	0.45
16:I:418:GLN:O	16:I:422:ARG:HG3	2.15	0.45
17:J:33:LYS:NZ	26:S:224:LYS:NZ	2.64	0.45
18:K:123:LEU:HG	18:K:146:LEU:HG	1.98	0.45
19:L:361:PHE:HE2	19:L:376:PHE:CD1	2.33	0.45
19:L:392:ARG:NE	20:M:339:ARG:NH2	2.64	0.45
20:M:283:LEU:O	20:M:283:LEU:HG	2.16	0.45
20:M:362:GLN:CD	20:M:376:TRP:CZ3	2.94	0.45
21:N:331:ALA:HB2	21:N:697:PHE:CD1	2.52	0.45
21:N:721:ASP:HB2	21:N:754:THR:HG21	1.97	0.45
22:O:38:TRP:CZ3	22:O:54:SER:N	2.79	0.45
23:P:303:PHE:CE1	23:P:311:TRP:CZ3	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:V:154:ASP:OD2	29:V:156:PHE:CZ	2.69	0.45
31:X:38:ASN:HA	31:X:47:ASP:OD2	2.16	0.45
31:X:78:ILE:CG2	31:X:114:LEU:CB	2.93	0.45
33:Z:233:LEU:CD2	33:Z:233:LEU:C	2.89	0.45
33:Z:888:LEU:HD21	33:Z:904:LEU:HD11	1.95	0.45
5:5:76:VAL:CG1	5:5:113:TYR:HD2	2.25	0.45
8:A:135:ARG:HG3	14:G:124:LEU:HD22	1.98	0.45
8:A:156:LYS:HB3	8:A:166:TYR:CE2	2.52	0.45
9:B:75:TYR:CG	9:B:82:TYR:CD1	3.05	0.45
11:D:193:LYS:O	11:D:197:ARG:HG3	2.16	0.45
14:G:187:SER:OG	14:G:190:GLU:HG3	2.17	0.45
14:G:219:SER:OG	14:G:222:GLU:HB2	2.15	0.45
17:J:106:ASP:C	17:J:106:ASP:OD1	2.59	0.45
17:J:193:THR:HG22	17:J:354:SER:HB2	1.98	0.45
18:K:198:TYR:CD1	18:K:203:ILE:CD1	2.99	0.45
18:K:372:ILE:HG21	24:Q:240:PHE:HE2	1.68	0.45
19:L:167:VAL:HG23	19:L:168:TYR:CD2	2.51	0.45
19:L:411:ASN:OD1	19:L:413:ASP:HB2	2.15	0.45
20:M:192:GLU:OE1	20:M:347:ILE:HG23	2.17	0.45
21:N:893:VAL:HG23	21:N:894:ARG:HG3	1.98	0.45
22:O:63:ASP:CA	22:O:66:VAL:HG23	2.43	0.45
23:P:283:LYS:CG	23:P:286:ASN:CB	2.77	0.45
24:Q:35:SER:HB3	24:Q:47:ASP:HA	1.97	0.45
24:Q:228:GLU:N	24:Q:334:HIS:NE2	2.65	0.45
26:S:207:ASN:O	26:S:211:ARG:HG3	2.16	0.45
26:S:274:PHE:CZ	26:S:278:LYS:HE3	2.50	0.45
31:X:98:PHE:CD1	31:X:98:PHE:N	2.83	0.45
1:1:60:GLN:O	1:1:64:GLU:HG2	2.16	0.45
2:2:3:ILE:HD11	2:2:127:LEU:HB2	1.98	0.45
4:4:66:TYR:CD2	10:C:102:TYR:HE1	2.35	0.45
6:6:149:ASN:HA	6:6:151:TYR:HE1	1.81	0.45
7:7:171:ASN:OD1	7:7:174:ARG:NH1	2.40	0.45
9:B:159:TRP:CZ2	10:C:57:LEU:CD2	3.00	0.45
10:C:106:ILE:HG23	10:C:106:ILE:O	2.16	0.45
10:C:179:ASP:OD2	10:C:192:LEU:HD22	2.17	0.45
11:D:174:PHE:CD2	11:D:198:SER:HB2	2.51	0.45
12:E:123:PHE:HD1	12:E:136:ARG:N	2.11	0.45
13:F:30:LYS:HZ1	13:F:164:ARG:CA	2.16	0.45
13:F:105:VAL:HG13	13:F:106:GLU:N	2.30	0.45
14:G:182:HIS:CG	14:G:186:LEU:CG	2.94	0.45
15:H:152:ILE:O	15:H:153:ALA:HB3	2.14	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:192:LEU:HD22	18:K:266:PRO:HB3	1.98	0.45
19:L:149:ASP:HB3	19:L:152:THR:HB	1.98	0.45
21:N:123:PHE:CG	21:N:124:TYR:N	2.85	0.45
24:Q:65:TYR:HD2	24:Q:74:LEU:CD2	2.22	0.45
24:Q:263:LYS:HE2	24:Q:295:GLY:HA3	1.99	0.45
30:W:129:ALA:HB1	30:W:160:ALA:HB1	1.98	0.45
31:X:29:VAL:HG12	31:X:61:LEU:HB2	1.93	0.45
33:Z:82:MET:O	33:Z:83:THR:HG23	2.15	0.45
33:Z:322:GLU:CG	33:Z:323:TYR:HB3	2.31	0.45
1:1:33:LYS:HD3	1:1:45:ARG:NH2	2.29	0.45
1:1:90:LYS:HD3	7:7:-7:GLN:OE1	2.17	0.45
7:7:81:PRO:HB2	7:7:118:PHE:CD1	2.52	0.45
16:I:290:LYS:CB	16:I:306:MET:HE2	2.46	0.45
17:J:141:LYS:HE2	17:J:209:LYS:HE3	1.95	0.45
17:J:210:PHE:CE2	17:J:212:ARG:HG2	2.52	0.45
17:J:327:ILE:CG2	17:J:358:VAL:HG11	2.40	0.45
18:K:99:PHE:HB2	18:K:137:VAL:HG11	1.98	0.45
19:L:105:ILE:HB	20:M:126:THR:OG1	2.17	0.45
19:L:410:ILE:CD1	20:M:210:MET:SD	3.04	0.45
20:M:153:TYR:CE2	29:V:46:PRO:HG3	2.52	0.45
20:M:379:LEU:HD21	20:M:416:VAL:CG2	2.47	0.45
21:N:329:HIS:CG	21:N:355:TRP:HE1	2.34	0.45
21:N:525:ASN:HB3	21:N:528:ARG:HD3	1.98	0.45
21:N:597:ARG:NH2	21:N:725:LEU:HD11	2.31	0.45
22:O:116:ASN:CA	22:O:127:LEU:CB	2.94	0.45
22:O:274:ILE:HG23	22:O:275:SER:N	2.31	0.45
23:P:136:ARG:HE	23:P:163:LEU:CD2	2.29	0.45
23:P:173:MET:O	23:P:177:ILE:HG23	2.15	0.45
25:R:24:TYR:CZ	25:R:248:SER:CB	2.96	0.45
25:R:151:GLU:HG2	25:R:190:LYS:HZ1	1.79	0.45
28:U:51:SER:O	28:U:52:PHE:CD1	2.70	0.45
30:W:101:ARG:HH12	30:W:108:GLN:HE21	1.63	0.45
30:W:149:GLN:O	30:W:173:THR:HG21	2.16	0.45
31:X:87:PHE:CA	31:X:99:PHE:HB2	2.46	0.45
33:Z:613:ASP:O	33:Z:613:ASP:OD1	2.35	0.45
1:1:8:PHE:HE1	1:1:12:VAL:C	2.25	0.45
1:1:87:TYR:HH	7:7:51:ASP:CG	2.24	0.45
2:2:223:ILE:HD11	3:3:36:HIS:CD2	2.52	0.45
9:B:50:LYS:CE	9:B:203:GLU:OE1	2.59	0.45
16:I:117:HIS:CD2	16:I:129:TYR:OH	2.70	0.45
18:K:242:PHE:HD1	18:K:250:GLY:CA	2.29	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:372:ILE:HG23	24:Q:240:PHE:HZ	1.80	0.45
19:L:290:ARG:NH2	19:L:293:GLU:O	2.50	0.45
21:N:459:ASN:OD1	21:N:461:GLU:HB2	2.17	0.45
23:P:321:VAL:HG23	23:P:325:ASP:CG	2.41	0.45
24:Q:90:LYS:NZ	24:Q:129:LYS:HG3	2.31	0.45
25:R:241:ILE:HG22	25:R:242:GLU:N	2.31	0.45
26:S:465:ILE:CG1	28:U:281:LEU:HD21	2.44	0.45
27:T:144:TYR:O	27:T:148:LEU:HG	2.16	0.45
29:V:45:VAL:HG21	29:V:143:PRO:HG3	1.99	0.45
33:Z:89:LEU:HD22	33:Z:122:LEU:CB	2.47	0.45
5:5:8:PHE:CZ	5:5:13:ILE:CG1	2.98	0.45
7:7:-3:VAL:CG1	7:7:49:ILE:HB	2.46	0.45
9:B:247:LEU:HD12	9:B:250:LEU:HD22	1.98	0.45
10:C:120:GLN:HE22	11:D:127:ARG:NH2	2.14	0.45
11:D:237:GLU:O	11:D:241:GLN:HG3	2.17	0.45
13:F:201:LEU:CD2	13:F:204:GLU:HB2	2.41	0.45
15:H:107:LYS:CG	15:H:143:ALA:HB1	2.46	0.45
15:H:274:VAL:HB	15:H:308:PHE:CD1	2.52	0.45
15:H:337:ILE:HD13	15:H:364:ALA:CB	2.47	0.45
16:I:110:GLU:C	16:I:111:GLU:HG2	2.42	0.45
16:I:124:THR:C	16:I:125:MET:HG3	2.41	0.45
16:I:268:PHE:CD1	16:I:316:PHE:CE2	3.05	0.45
17:J:128:ASN:O	17:J:129:LYS:HB3	2.16	0.45
18:K:190:LEU:HB3	18:K:191:PRO:HD3	1.99	0.45
21:N:778:LYS:O	21:N:866:TYR:OH	2.20	0.45
22:O:15:ARG:HB2	30:W:19:GLY:O	2.16	0.45
22:O:79:VAL:HG21	22:O:123:GLY:C	2.41	0.45
22:O:222:LEU:HA	22:O:230:PHE:CE1	2.51	0.45
25:R:186:TYR:O	25:R:190:LYS:HG3	2.17	0.45
25:R:231:LEU:O	25:R:234:SER:HB2	2.17	0.45
25:R:335:ARG:HD3	25:R:376:GLN:HB2	1.98	0.45
26:S:388:ILE:HG23	26:S:414:ASP:OD2	2.17	0.45
29:V:33:ALA:O	29:V:37:MET:HG3	2.17	0.45
31:X:23:LEU:O	31:X:24:CYS:CB	2.63	0.45
31:X:24:CYS:CB	31:X:86:ILE:HG12	2.47	0.45
33:Z:173:ALA:HB3	33:Z:228:GLU:OE2	2.17	0.45
3:3:87:TYR:HD1	3:3:90:ARG:CD	2.29	0.45
5:5:121:ARG:NH1	11:D:101:GLU:OE1	2.49	0.45
7:7:116:ASP:C	7:7:116:ASP:OD1	2.60	0.45
8:A:46:ARG:HG3	8:A:154:ILE:HD12	1.95	0.45
9:B:211:LEU:HD22	9:B:238:LEU:CD1	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C:50:ARG:NH1	10:C:53:THR:OG1	2.41	0.45
12:E:20:ARG:HH21	12:E:25:GLU:CD	2.24	0.45
12:E:157:HIS:CA	12:E:167:TYR:HE2	2.30	0.45
16:I:362:LEU:O	16:I:366:THR:HG23	2.17	0.45
17:J:170:HIS:HE2	17:J:172:GLU:HB3	1.81	0.45
18:K:244:HIS:HB3	19:L:256:ILE:HD12	1.92	0.45
20:M:362:GLN:CD	20:M:376:TRP:CH2	2.95	0.45
21:N:50:TYR:HD1	21:N:62:ALA:HB2	1.76	0.45
22:O:48:PHE:CE1	22:O:81:TYR:HD1	2.33	0.45
23:P:273:TYR:HB3	23:P:347:GLU:OE1	2.16	0.45
24:Q:71:LYS:HB3	24:Q:71:LYS:NZ	2.32	0.45
24:Q:75:ARG:CB	24:Q:117:VAL:CG2	2.95	0.45
30:W:95:GLN:OE1	30:W:131:THR:HG22	2.17	0.45
33:Z:239:GLU:HG3	33:Z:240:ASN:CG	2.42	0.45
33:Z:774:ARG:HD2	33:Z:892:SER:HB2	1.98	0.45
6:6:147:PHE:HE2	6:6:164:LYS:CB	2.30	0.45
8:A:91:ARG:HB3	14:G:120:GLN:NE2	2.19	0.45
11:D:151:GLU:CD	11:D:155:ILE:HD11	2.42	0.45
15:H:62:ARG:HH22	16:I:100:ARG:HA	1.75	0.45
16:I:124:THR:HG21	17:J:94:TYR:OH	2.16	0.45
16:I:206:GLU:HG3	33:Z:824:ASN:ND2	2.32	0.45
16:I:266:GLN:O	16:I:270:VAL:HG23	2.17	0.45
16:I:398:GLU:CG	17:J:312:ARG:HH12	2.29	0.45
18:K:285:GLN:O	18:K:286:THR:CG2	2.62	0.45
18:K:350:ARG:CA	18:K:372:ILE:HD13	2.47	0.45
21:N:309:ILE:HG23	21:N:339:MET:HB3	1.98	0.45
21:N:740:TRP:CD1	21:N:740:TRP:N	2.84	0.45
21:N:889:ARG:HB2	21:N:914:VAL:HG11	1.97	0.45
22:O:16:MET:SD	22:O:72:LYS:CG	3.05	0.45
23:P:322:LEU:O	23:P:341:LEU:CD1	2.65	0.45
25:R:396:LYS:CB	26:S:452:TYR:CE1	2.73	0.45
26:S:253:PHE:O	26:S:257:LEU:CB	2.58	0.45
29:V:191:GLY:O	29:V:192:LEU:HB2	2.17	0.45
31:X:64:ILE:O	31:X:64:ILE:HG22	2.16	0.45
33:Z:408:TYR:HA	33:Z:415:MET:HE1	1.99	0.45
33:Z:474:LEU:CD1	33:Z:493:LEU:HD12	2.47	0.45
1:1:156:LYS:HE3	1:1:175:MET:HE1	1.99	0.45
2:2:122:GLY:HA3	2:2:125:LEU:HD21	1.99	0.45
2:2:124:TYR:CZ	2:2:139:GLU:CA	2.99	0.45
3:3:54:LEU:HB3	3:3:58:PHE:HE2	1.81	0.45
6:6:3:ILE:HG13	6:6:101:ILE:HD12	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:89:TYR:CE1	6:6:92:ARG:HD3	2.51	0.45
6:6:128:ARG:HA	6:6:138:MET:HE1	1.99	0.45
8:A:43:LEU:C	8:A:43:LEU:HD12	2.42	0.45
13:F:173:GLU:HG2	14:G:57:LEU:HG	1.99	0.45
14:G:240:ASP:HA	14:G:243:GLN:NE2	2.17	0.45
15:H:62:ARG:HG3	16:I:133:LEU:HB3	1.99	0.45
15:H:176:VAL:O	15:H:176:VAL:HG22	2.17	0.45
17:J:276:LEU:HD13	17:J:309:ARG:CB	2.47	0.45
19:L:336:ALA:HB1	19:L:342:ARG:NH1	2.32	0.45
19:L:396:THR:HA	20:M:212:ILE:HG21	1.99	0.45
20:M:221:TYR:CE2	20:M:346:LYS:HG2	2.39	0.45
22:O:59:LEU:CD1	22:O:62:TYR:CE1	2.98	0.45
23:P:427:GLU:C	29:V:230:TYR:CE1	2.91	0.45
24:Q:419:LEU:HD21	28:U:286:ILE:CD1	2.47	0.45
4:4:66:TYR:CD2	10:C:102:TYR:CE1	3.05	0.45
5:5:161:ILE:HG21	5:5:175:VAL:HG22	1.99	0.45
10:C:70:ASN:HD22	10:C:73:ILE:HB	1.82	0.45
14:G:49:VAL:HB	14:G:76:VAL:HG21	1.99	0.45
15:H:62:ARG:NH1	16:I:99:ILE:CG2	2.76	0.45
15:H:274:VAL:HB	15:H:308:PHE:HD1	1.81	0.45
16:I:214:LYS:HG2	16:I:319:ARG:HH22	1.81	0.45
16:I:304:ARG:HH12	16:I:308:GLU:HB2	1.83	0.45
18:K:258:PHE:CE2	18:K:262:ARG:HD2	2.52	0.45
21:N:525:ASN:HA	21:N:528:ARG:HD2	1.99	0.45
21:N:530:GLU:HA	21:N:533:ASP:CG	2.41	0.45
22:O:44:SER:H	22:O:47:LYS:CE	2.29	0.45
22:O:226:LYS:O	22:O:227:ILE:HG12	2.17	0.45
23:P:72:TRP:CG	23:P:104:LEU:HD21	2.50	0.45
23:P:346:ILE:HG21	23:P:379:TYR:CG	2.52	0.45
27:T:88:TYR:HA	27:T:94:HIS:CE1	2.52	0.45
30:W:118:ILE:CD1	30:W:154:LEU:HD21	2.47	0.45
31:X:10:PHE:C	31:X:33:ILE:HG22	2.38	0.45
6:6:29:ARG:HE	7:7:148:ARG:HH22	1.65	0.44
8:A:87:ILE:CG1	14:G:157:TRP:HZ2	2.24	0.44
8:A:141:LEU:HB2	8:A:157:THR:OG1	2.16	0.44
14:G:216:SER:C	14:G:230:VAL:HG23	2.41	0.44
15:H:66:LYS:HG2	15:H:70:LYS:HE3	1.99	0.44
15:H:224:VAL:HG13	15:H:243:PRO:HG2	1.98	0.44
15:H:250:GLY:O	15:H:256:LYS:NZ	2.41	0.44
15:H:357:ARG:NH2	16:I:290:LYS:CA	2.81	0.44
16:I:172:LYS:HZ1	17:J:278:GLN:HA	1.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:J:41:VAL:HG11	18:K:65:GLU:HG2	1.99	0.44
17:J:188:TYR:CE1	17:J:295:ASN:C	2.94	0.44
17:J:225:GLU:O	17:J:228:ARG:HB3	2.16	0.44
17:J:297:LEU:CD1	17:J:305:LEU:HD11	2.43	0.44
18:K:426:PHE:CZ	18:K:427:TYR:CD2	3.06	0.44
19:L:98:LEU:HA	20:M:154:LEU:CD1	2.47	0.44
20:M:221:TYR:CZ	20:M:348:GLU:HA	2.52	0.44
20:M:407:GLN:NE2	20:M:411:LYS:HZ2	2.14	0.44
21:N:889:ARG:HG3	21:N:909:GLU:HB2	1.98	0.44
22:O:293:LEU:O	22:O:297:ILE:CG1	2.64	0.44
23:P:429:ILE:CD1	28:U:203:LYS:CE	2.74	0.44
25:R:266:LEU:HD22	25:R:270:VAL:CG2	2.45	0.44
26:S:323:LEU:HD21	26:S:382:ARG:HE	1.82	0.44
26:S:464:ARG:NE	28:U:281:LEU:HD13	2.31	0.44
27:T:59:LYS:HZ1	27:T:102:LYS:HD2	1.81	0.44
31:X:109:LEU:HD12	31:X:118:ASP:OD2	2.17	0.44
33:Z:82:MET:HE1	33:Z:125:THR:HG23	1.99	0.44
2:2:8:PHE:CD1	2:2:10:ASN:CA	2.99	0.44
2:2:200:GLN:O	2:2:201:LYS:HB2	2.16	0.44
5:5:4:LEU:C	5:5:4:LEU:HD12	2.42	0.44
5:5:8:PHE:CD1	5:5:13:ILE:HG12	2.45	0.44
6:6:58:ARG:HD3	6:6:91:LYS:HZ2	1.82	0.44
6:6:65:TRP:CH2	13:F:90:GLN:N	2.79	0.44
14:G:31:GLU:CG	14:G:168:ARG:HH12	2.29	0.44
16:I:291:ARG:CG	16:I:292:TYR:N	2.55	0.44
16:I:349:LEU:C	16:I:349:LEU:HD12	2.41	0.44
18:K:99:PHE:HE2	18:K:102:PRO:HD3	1.79	0.44
18:K:191:PRO:HG3	18:K:198:TYR:CE2	2.52	0.44
19:L:114:GLU:CB	19:L:137:ARG:HH21	2.18	0.44
19:L:365:THR:CB	19:L:376:PHE:HE1	2.24	0.44
21:N:92:ASP:OD2	21:N:139:ARG:NH2	2.51	0.44
22:O:16:MET:CG	22:O:72:LYS:HG2	2.47	0.44
22:O:21:SER:HA	22:O:43:GLU:CG	2.47	0.44
23:P:308:LEU:HD13	23:P:345:VAL:HG11	1.95	0.44
23:P:428:THR:HG21	28:U:232:VAL:HG21	1.97	0.44
23:P:435:LYS:HG2	23:P:439:MET:HE2	1.99	0.44
25:R:84:LYS:HE2	25:R:86:ASP:CB	2.42	0.44
25:R:312:TYR:HA	25:R:316:LEU:CD1	2.40	0.44
26:S:321:GLN:O	26:S:327:ILE:HG23	2.16	0.44
31:X:35:ILE:HD12	31:X:48:PHE:HE1	1.79	0.44
31:X:38:ASN:HA	31:X:47:ASP:CG	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:106:TRP:HA	33:Z:112:LYS:HD3	1.99	0.44
1:1:17:ASP:OD1	1:1:17:ASP:O	2.35	0.44
5:5:38:ASN:HB2	5:5:39:PRO:HD2	1.99	0.44
8:A:158:ASP:C	8:A:158:ASP:OD1	2.60	0.44
9:B:6:SER:OG	11:D:4:TYR:CD2	2.44	0.44
11:D:51:THR:O	11:D:53:LYS:HG3	2.18	0.44
15:H:246:ILE:HD11	15:H:375:VAL:CG2	2.45	0.44
15:H:277:SER:OG	16:I:311:ASN:ND2	2.51	0.44
15:H:394:LYS:HA	15:H:400:ARG:HH22	1.82	0.44
18:K:67:TYR:CD1	21:N:572:LEU:HD22	2.49	0.44
18:K:360:MET:SD	18:K:402:ILE:CD1	3.06	0.44
19:L:221:TYR:CE1	19:L:348:GLU:CB	2.98	0.44
19:L:270:ALA:CB	19:L:321:THR:OG1	2.65	0.44
21:N:117:TYR:CZ	21:N:121:GLU:OE2	2.70	0.44
21:N:299:TYR:CE2	21:N:303:LEU:CD1	2.98	0.44
21:N:711:ARG:HH22	21:N:786:ARG:C	2.25	0.44
22:O:21:SER:CB	22:O:43:GLU:HB3	2.47	0.44
22:O:370:LEU:HD13	28:U:204:LEU:HA	1.98	0.44
26:S:428:ARG:HH12	27:T:188:GLU:C	2.25	0.44
27:T:229:VAL:HG23	27:T:232:LYS:HB2	1.97	0.44
33:Z:970:TYR:CD1	33:Z:985:LYS:HD2	2.50	0.44
5:5:8:PHE:HZ	5:5:179:HIS:CD2	2.35	0.44
7:7:68:TYR:CZ	14:G:92:ARG:HG2	2.52	0.44
7:7:205:GLN:O	7:7:207:GLU:HG2	2.16	0.44
8:A:84:ASN:ND2	8:A:171:THR:HG21	2.32	0.44
13:F:51:ARG:HH11	20:M:430:VAL:HG21	1.82	0.44
14:G:22:GLN:OE1	14:G:22:GLN:HA	2.17	0.44
14:G:182:HIS:HB3	14:G:186:LEU:HG	2.00	0.44
15:H:246:ILE:HG12	15:H:248:LEU:CD1	2.47	0.44
15:H:302:LYS:O	15:H:303:ALA:HB3	2.16	0.44
16:I:398:GLU:CA	17:J:312:ARG:HH12	2.06	0.44
17:J:276:LEU:CD1	17:J:309:ARG:HG2	2.48	0.44
18:K:183:GLU:HG2	18:K:338:ILE:HG23	1.99	0.44
18:K:205:PRO:HG2	18:K:310:THR:HG23	1.99	0.44
19:L:91:THR:O	19:L:94:ASP:HB2	2.18	0.44
21:N:717:LEU:HD13	21:N:729:SER:HB3	1.98	0.44
21:N:890:PHE:HB3	21:N:905:LEU:HD21	1.90	0.44
23:P:288:ASN:H	23:P:293:LEU:CD2	2.30	0.44
24:Q:24:GLU:HA	24:Q:27:TYR:HD2	1.80	0.44
25:R:206:ARG:HH21	25:R:209:ARG:HD2	1.79	0.44
25:R:357:PHE:CD1	25:R:357:PHE:N	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:265:SER:OG	26:S:268:LEU:HG	2.18	0.44
33:Z:89:LEU:HD22	33:Z:122:LEU:CA	2.47	0.44
33:Z:417:SER:O	33:Z:902:TYR:OH	2.27	0.44
33:Z:542:ILE:HD11	33:Z:546:ILE:HD11	2.00	0.44
1:1:112:THR:CG2	7:7:27:ARG:NH2	2.65	0.44
5:5:146:TRP:CH2	5:5:147:ASP:HB2	2.53	0.44
8:A:46:ARG:CG	8:A:154:ILE:HG13	2.48	0.44
11:D:188:VAL:HG11	11:D:216:LYS:HE2	1.99	0.44
13:F:65:LYS:HE3	13:F:222:PHE:CB	2.41	0.44
14:G:119:VAL:HG21	14:G:150:LEU:HD21	2.00	0.44
15:H:280:VAL:CB	16:I:304:ARG:HH21	2.30	0.44
15:H:289:ARG:NH2	15:H:293:GLU:HG2	2.33	0.44
18:K:347:ARG:HD3	24:Q:241:GLU:OE1	2.17	0.44
19:L:114:GLU:CA	19:L:137:ARG:HH21	2.27	0.44
22:O:116:ASN:C	22:O:127:LEU:HB3	2.43	0.44
22:O:122:HIS:ND1	22:O:122:HIS:O	2.51	0.44
22:O:262:ASP:OD1	22:O:264:ASP:N	2.47	0.44
23:P:215:SER:O	23:P:219:GLU:HG3	2.18	0.44
24:Q:11:ALA:HB2	24:Q:26:VAL:CG1	2.47	0.44
24:Q:131:VAL:HA	24:Q:134:LYS:CE	2.47	0.44
25:R:396:LYS:HZ2	26:S:449:LEU:CB	2.27	0.44
26:S:438:HIS:CD2	27:T:197:TYR:CE1	3.06	0.44
27:T:55:LEU:C	27:T:55:LEU:CD2	2.85	0.44
31:X:118:ASP:CG	31:X:119:LYS:N	2.75	0.44
33:Z:165:TYR:HE1	33:Z:201:LEU:HD23	1.83	0.44
1:1:34:LEU:HD23	1:1:176:VAL:HG23	2.00	0.44
3:3:20:LEU:CD1	4:4:125:VAL:HB	2.47	0.44
10:C:230:PHE:CD2	10:C:234:GLU:HB3	2.52	0.44
17:J:33:LYS:NZ	26:S:224:LYS:HZ2	2.15	0.44
17:J:145:SER:OG	17:J:201:ALA:N	2.51	0.44
17:J:321:VAL:CG2	17:J:324:ARG:NH2	2.72	0.44
18:K:281:ARG:NH1	18:K:290:ARG:HG2	2.33	0.44
20:M:334:ASP:OD1	20:M:335:PRO:CD	2.65	0.44
21:N:158:LEU:HD12	21:N:202:PHE:CZ	2.53	0.44
23:P:280:LEU:O	23:P:283:LYS:CD	2.66	0.44
25:R:29:LYS:HD3	25:R:49:PHE:CB	2.48	0.44
25:R:47:ALA:CB	25:R:89:ASN:ND2	2.75	0.44
25:R:173:THR:OG1	25:R:176:ARG:NH2	2.50	0.44
28:U:20:ASP:CG	28:U:24:ARG:HE	2.26	0.44
28:U:29:GLU:O	28:U:100:ARG:NH2	2.49	0.44
31:X:69:ILE:HA	31:X:70:PRO:HD3	1.44	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:188:ALA:HB3	33:Z:190:THR:HG22	2.00	0.44
33:Z:478:VAL:CG2	33:Z:493:LEU:HD22	2.46	0.44
33:Z:774:ARG:CD	33:Z:892:SER:HB2	2.47	0.44
1:1:29:ARG:CZ	1:1:30:VAL:HG13	2.48	0.44
6:6:34:VAL:CG1	6:6:196:LEU:HD12	2.48	0.44
7:7:126:GLY:O	7:7:128:THR:HG23	2.17	0.44
8:A:41:ASN:HB2	8:A:56:GLN:CD	2.42	0.44
9:B:178:ARG:CZ	9:B:191:ILE:HG23	2.47	0.44
13:F:51:ARG:HH11	20:M:430:VAL:CG2	2.31	0.44
13:F:164:ARG:HH11	20:M:428:LYS:HG2	1.83	0.44
18:K:135:MET:HE3	18:K:150:LEU:O	2.17	0.44
23:P:265:VAL:CG1	23:P:296:GLN:CG	2.96	0.44
25:R:70:TYR:CD2	25:R:70:TYR:O	2.71	0.44
25:R:117:ILE:CD1	25:R:134:TRP:CE3	3.01	0.44
27:T:89:TYR:HA	27:T:102:LYS:CE	2.48	0.44
27:T:268:ILE:HD11	29:V:292:ILE:HG21	2.00	0.44
28:U:19:LEU:HB3	29:V:209:GLU:OE2	2.11	0.44
28:U:21:HIS:CG	28:U:53:ALA:HB2	2.52	0.44
30:W:101:ARG:HH12	30:W:108:GLN:NE2	2.15	0.44
31:X:100:TRP:CG	31:X:101:LEU:N	2.86	0.44
33:Z:466:GLU:O	33:Z:467:VAL:CG2	2.66	0.44
1:1:30:VAL:HG21	2:2:123:TYR:HE2	1.83	0.44
1:1:173:ILE:HD12	1:1:193:TYR:CB	2.48	0.44
3:3:2:ILE:CD1	3:3:162:LEU:HD11	2.47	0.44
8:A:58:LYS:NZ	8:A:60:PRO:HB3	2.33	0.44
13:F:65:LYS:HG3	13:F:222:PHE:CE2	2.52	0.44
13:F:72:LEU:C	13:F:72:LEU:HD12	2.42	0.44
13:F:171:TYR:CZ	13:F:175:THR:HG21	2.53	0.44
15:H:238:LEU:HD21	20:M:408:SER:HA	2.00	0.44
15:H:244:LYS:NZ	15:H:346:ARG:HH21	2.15	0.44
16:I:310:LEU:HD13	16:I:338:LEU:HD13	2.00	0.44
18:K:242:PHE:CD1	18:K:250:GLY:HA3	2.52	0.44
18:K:277:ILE:CD1	18:K:295:ILE:CG2	2.94	0.44
20:M:354:GLU:HG2	20:M:357:ARG:HH21	1.78	0.44
21:N:313:LEU:O	21:N:316:LYS:HB3	2.18	0.44
21:N:601:THR:O	21:N:601:THR:HG22	2.17	0.44
22:O:16:MET:HG2	22:O:72:LYS:HG2	1.99	0.44
22:O:92:PHE:CE1	22:O:136:THR:HA	2.52	0.44
22:O:106:PHE:CD2	22:O:107:GLN:N	2.86	0.44
23:P:91:LEU:HG	23:P:130:ILE:HD13	2.00	0.44
24:Q:71:LYS:HG2	24:Q:75:ARG:HG3	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:Q:174:LEU:CG	24:Q:178:HIS:CE1	3.00	0.44
25:R:95:ASP:C	25:R:95:ASP:OD1	2.61	0.44
25:R:194:VAL:HA	25:R:197:MET:HG2	2.00	0.44
25:R:259:PHE:O	25:R:259:PHE:HD1	1.97	0.44
27:T:148:LEU:CD1	27:T:164:LEU:CD2	2.86	0.44
29:V:45:VAL:CG1	29:V:46:PRO:CA	2.85	0.44
30:W:181:LEU:O	30:W:185:ILE:HG23	2.18	0.44
31:X:84:GLY:O	31:X:86:ILE:HD12	2.17	0.44
33:Z:203:LEU:HD23	33:Z:203:LEU:O	2.18	0.44
33:Z:250:VAL:CG2	33:Z:280:ASP:OD1	2.66	0.44
33:Z:471:LEU:HD23	33:Z:471:LEU:O	2.18	0.44
33:Z:613:ASP:OD1	33:Z:613:ASP:C	2.61	0.44
33:Z:624:LEU:CD2	33:Z:740:VAL:CG2	2.93	0.44
33:Z:884:THR:HG22	33:Z:903:MET:HB2	2.00	0.44
3:3:16:CYS:SG	3:3:34:ILE:HD11	2.58	0.44
3:3:79:THR:HG23	3:3:115:PHE:CZ	2.49	0.44
4:4:38:SER:OG	4:4:41:THR:CB	2.65	0.44
7:7:142:MET:C	7:7:145:PRO:HD2	2.43	0.44
10:C:34:THR:HG22	10:C:167:ALA:O	2.18	0.44
11:D:213:THR:HA	11:D:223:ALA:HA	2.00	0.44
12:E:119:LEU:CD2	12:E:122:ARG:NH2	2.41	0.44
14:G:53:ILE:HD11	14:G:212:GLU:HB2	1.99	0.44
14:G:53:ILE:HB	14:G:210:ASP:HB2	1.99	0.44
15:H:149:LEU:CB	15:H:177:ASP:OD2	2.66	0.44
15:H:210:ASP:CB	15:H:258:LEU:CD1	2.91	0.44
15:H:222:ARG:O	15:H:226:GLU:HB3	2.18	0.44
15:H:289:ARG:NH1	15:H:293:GLU:CG	2.80	0.44
15:H:289:ARG:HH12	15:H:293:GLU:CG	2.30	0.44
15:H:294:LEU:HD21	15:H:308:PHE:CE1	2.53	0.44
16:I:377:LEU:O	16:I:381:VAL:HG23	2.18	0.44
17:J:140:GLU:CD	17:J:200:ARG:HH12	2.26	0.44
17:J:166:LEU:HG	17:J:174:PHE:HE1	1.82	0.44
17:J:304:LEU:HG	17:J:310:ILE:CD1	2.48	0.44
25:R:246:TYR:C	25:R:246:TYR:CD1	2.95	0.44
27:T:70:ILE:HG23	27:T:71:GLN:N	2.33	0.44
28:U:276:ILE:HG21	29:V:295:VAL:HG23	1.98	0.44
30:W:110:ILE:HB	30:W:139:VAL:HG22	2.00	0.44
33:Z:75:ILE:HG12	33:Z:89:LEU:HG	2.00	0.44
33:Z:857:LEU:HD23	33:Z:857:LEU:C	2.43	0.44
1:1:30:VAL:HB	1:1:174:ARG:NH2	2.33	0.43
1:1:112:THR:HG22	7:7:27:ARG:HH21	1.79	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:5:178:TYR:CZ	5:5:187:TYR:CE1	3.06	0.43
6:6:19:ARG:CB	6:6:191:ASP:OD2	2.66	0.43
9:B:75:TYR:HB3	9:B:82:TYR:CE1	2.53	0.43
10:C:18:ARG:NH2	10:C:26:LEU:CD1	2.81	0.43
13:F:6:TYR:HD1	13:F:12:THR:OG1	2.01	0.43
13:F:6:TYR:HB3	13:F:19:LEU:HD22	1.98	0.43
13:F:137:TYR:CD2	13:F:217:GLY:HA2	2.52	0.43
13:F:148:GLN:OE1	13:F:152:ASN:HB3	2.18	0.43
15:H:62:ARG:HH11	16:I:99:ILE:CG2	2.31	0.43
16:I:203:THR:HB	16:I:204:HIS:CE1	2.53	0.43
16:I:406:GLU:HB3	16:I:408:ARG:CZ	2.48	0.43
17:J:257:ARG:HH12	17:J:296:ARG:HH12	1.65	0.43
17:J:258:VAL:HA	18:K:280:LYS:CD	2.45	0.43
18:K:92:VAL:HG22	18:K:93:PRO:CA	2.47	0.43
18:K:423:LYS:H	18:K:428:LYS:NZ	2.12	0.43
19:L:410:ILE:HD11	20:M:212:ILE:HD11	1.99	0.43
20:M:49:GLN:HG3	20:M:53:HIS:CD2	2.53	0.43
21:N:258:ALA:HB3	21:N:289:ILE:CD1	2.45	0.43
21:N:406:TYR:HE2	21:N:747:HIS:CG	2.36	0.43
21:N:536:ILE:CD1	21:N:555:ILE:HG12	2.42	0.43
21:N:644:LEU:HA	21:N:647:ASP:HB2	2.00	0.43
23:P:176:LYS:HD3	23:P:206:LYS:HZ2	1.76	0.43
26:S:311:GLN:O	26:S:315:LYS:HG3	2.18	0.43
33:Z:151:HIS:CG	33:Z:152:GLU:N	2.53	0.43
1:1:9:LYS:HA	1:1:145:ASN:HA	1.99	0.43
8:A:79:ILE:HD12	8:A:114:CYS:SG	2.58	0.43
16:I:356:SER:O	16:I:359:LYS:HB3	2.18	0.43
19:L:180:PHE:CE2	19:L:238:THR:CB	3.00	0.43
19:L:201:LEU:HD22	19:L:275:PRO:HB3	1.99	0.43
19:L:204:PRO:HG3	19:L:320:GLN:HE22	1.81	0.43
20:M:282:GLU:OE1	20:M:328:ASN:ND2	2.50	0.43
21:N:383:LYS:CA	21:N:412:TYR:OH	2.65	0.43
21:N:774:ASN:HA	21:N:869:ASP:OD2	2.17	0.43
22:O:310:PHE:CE2	22:O:341:ILE:CG2	2.77	0.43
23:P:184:MET:HE2	23:P:227:ILE:HD11	2.00	0.43
23:P:268:LEU:HD13	23:P:280:LEU:HD12	1.95	0.43
23:P:346:ILE:CG2	23:P:379:TYR:CD2	3.00	0.43
25:R:209:ARG:NH1	25:R:243:LEU:HD12	2.32	0.43
28:U:164:GLU:CD	29:V:39:LYS:HA	2.38	0.43
29:V:53:MET:HE2	29:V:65:VAL:HG21	1.99	0.43
33:Z:795:THR:HG21	33:Z:799:PHE:CE2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:Z:867:PHE:CD1	33:Z:873:LEU:HD21	2.46	0.43
1:1:58:ILE:CG2	1:1:85:LEU:HD11	2.48	0.43
3:3:158:ILE:CG2	3:3:159:SER:N	2.81	0.43
4:4:27:LEU:HD13	5:5:133:GLN:NE2	2.33	0.43
11:D:167:ASN:HD22	11:D:202:VAL:HB	1.84	0.43
14:G:146:HIS:CB	14:G:148:TYR:CE2	2.95	0.43
15:H:56:LEU:O	15:H:60:GLU:HG3	2.17	0.43
15:H:149:LEU:CD2	15:H:179:SER:HB3	2.48	0.43
15:H:253:GLY:H	15:H:256:LYS:HB3	1.83	0.43
15:H:398:VAL:HG12	15:H:438:ALA:HB3	2.00	0.43
17:J:324:ARG:HD2	17:J:350:MET:SD	2.56	0.43
20:M:382:SER:O	20:M:425:ARG:NH1	2.51	0.43
21:N:238:ALA:HB2	21:N:273:LEU:CD2	2.47	0.43
22:O:122:HIS:ND1	22:O:164:PRO:CD	2.81	0.43
22:O:185:PHE:CD2	22:O:223:LEU:CB	3.01	0.43
22:O:299:THR:CB	22:O:365:LYS:NZ	2.80	0.43
23:P:173:MET:HG2	23:P:206:LYS:HE3	1.99	0.43
25:R:191:LEU:O	25:R:194:VAL:HG12	2.17	0.43
26:S:295:ALA:CA	26:S:298:ARG:HH21	2.30	0.43
30:W:36:ILE:CD1	30:W:113:PHE:HZ	2.30	0.43
31:X:87:PHE:CE2	31:X:121:ILE:HG21	2.53	0.43
33:Z:497:PHE:HB2	33:Z:533:VAL:HG22	2.01	0.43
33:Z:913:ILE:HG13	33:Z:966:GLU:H	1.84	0.43
5:5:116:ASP:C	5:5:116:ASP:OD1	2.62	0.43
6:6:8:GLY:HA2	6:6:166:LEU:CD1	2.49	0.43
6:6:63:VAL:O	6:6:67:HIS:CD2	2.72	0.43
6:6:190:GLY:O	6:6:191:ASP:HB2	2.18	0.43
7:7:187:PHE:CE1	7:7:205:GLN:C	2.93	0.43
8:A:153:SER:CB	8:A:155:TYR:HE1	2.27	0.43
12:E:72:ARG:O	12:E:73:HIS:CG	2.71	0.43
15:H:69:VAL:CG2	16:I:131:SER:HB2	2.49	0.43
16:I:197:SER:HB3	16:I:346:ARG:HG3	2.01	0.43
17:J:224:GLY:C	17:J:227:SER:H	2.19	0.43
18:K:211:LEU:CD2	18:K:338:ILE:HB	2.45	0.43
18:K:241:GLU:N	18:K:243:VAL:N	2.66	0.43
18:K:286:THR:O	18:K:290:ARG:HG3	2.17	0.43
18:K:351:LEU:CD2	24:Q:233:LYS:NZ	2.81	0.43
20:M:57:VAL:O	20:M:61:LYS:HG3	2.18	0.43
20:M:276:THR:HG22	20:M:321:VAL:HG12	2.01	0.43
21:N:368:THR:O	21:N:371:LEU:HB2	2.19	0.43
23:P:136:ARG:NE	23:P:163:LEU:HD21	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:P:306:ASN:OD1	23:P:308:LEU:N	2.52	0.43
23:P:307:GLU:O	23:P:308:LEU:HB3	2.19	0.43
25:R:301:TYR:HE2	25:R:359:VAL:CG2	2.19	0.43
26:S:404:LEU:HG	26:S:408:CYS:SG	2.58	0.43
27:T:89:TYR:CD2	27:T:90:PHE:CD1	3.06	0.43
27:T:146:ILE:HG23	27:T:147:LYS:N	2.32	0.43
27:T:254:ASP:OD1	27:T:255:GLN:OE1	2.36	0.43
27:T:261:GLU:HA	27:T:264:MET:CE	2.49	0.43
30:W:4:GLU:OE1	30:W:109:ARG:NE	2.51	0.43
31:X:8:ILE:HD12	31:X:128:VAL:HG23	2.00	0.43
33:Z:59:ASP:OD1	33:Z:64:TYR:OH	2.22	0.43
33:Z:75:ILE:O	33:Z:75:ILE:HG23	2.19	0.43
33:Z:464:ASP:OD1	33:Z:465:GLY:O	2.36	0.43
33:Z:512:ILE:HG22	33:Z:523:ALA:HB2	2.00	0.43
33:Z:532:HIS:C	33:Z:535:VAL:HG23	2.43	0.43
2:2:222:ASP:CG	3:3:36:HIS:NE2	2.72	0.43
3:3:6:MET:CE	3:3:158:ILE:HA	2.49	0.43
6:6:95:PRO:HB2	6:6:97:TYR:HE1	1.83	0.43
8:A:30:TYR:CZ	14:G:16:PRO:HB3	2.53	0.43
8:A:34:ALA:C	8:A:35:THR:HG23	2.44	0.43
10:C:87:LEU:HD11	10:C:131:PHE:CD2	2.53	0.43
11:D:159:TRP:CG	11:D:162:GLN:HB3	2.53	0.43
13:F:30:LYS:HZ2	13:F:163:ALA:C	2.25	0.43
15:H:107:LYS:CD	15:H:143:ALA:CB	2.94	0.43
15:H:176:VAL:CG2	15:H:183:ILE:HB	2.48	0.43
15:H:449:LYS:HZ1	16:I:346:ARG:NH1	2.15	0.43
17:J:28:GLN:O	17:J:32:LEU:HG	2.19	0.43
17:J:392:LYS:CB	18:K:337:LYS:NZ	2.82	0.43
18:K:103:ILE:HD12	18:K:107:THR:HG22	2.00	0.43
18:K:372:ILE:HG12	24:Q:240:PHE:CZ	2.54	0.43
20:M:129:LEU:HD11	20:M:155:ILE:HD12	2.00	0.43
21:N:29:ASN:O	21:N:32:VAL:HG23	2.18	0.43
21:N:329:HIS:HD2	21:N:355:TRP:CG	2.30	0.43
22:O:329:MET:HE1	23:P:307:GLU:OE2	2.18	0.43
23:P:47:ARG:HB2	23:P:49:ALA:O	2.18	0.43
23:P:138:ARG:HG2	23:P:141:LYS:HZ1	1.81	0.43
25:R:117:ILE:HG21	25:R:134:TRP:CZ2	2.53	0.43
25:R:131:ALA:O	25:R:135:ILE:HG12	2.19	0.43
25:R:224:PHE:HB3	25:R:260:THR:HG21	2.00	0.43
25:R:396:LYS:HZ2	26:S:449:LEU:HD13	1.82	0.43
27:T:95:LYS:HD2	27:T:98:GLU:OE2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:W:132:LEU:HD13	30:W:161:VAL:HG21	2.00	0.43
31:X:29:VAL:CG1	31:X:61:LEU:HD13	2.48	0.43
31:X:78:ILE:HG22	31:X:114:LEU:CB	2.48	0.43
33:Z:917:ASN:CG	33:Z:918:ASP:H	2.25	0.43
1:1:87:TYR:CE1	7:7:51:ASP:OD1	2.72	0.43
6:6:187:ILE:HG13	6:6:188:GLN:NE2	2.32	0.43
9:B:50:LYS:NZ	9:B:203:GLU:CD	2.75	0.43
12:E:187:TRP:O	12:E:188:HIS:CG	2.71	0.43
17:J:255:SER:O	17:J:256:THR:CG2	2.67	0.43
18:K:240:SER:O	18:K:243:VAL:HB	2.18	0.43
20:M:253:GLN:HG3	20:M:258:GLU:HG2	2.01	0.43
20:M:331:ASP:OD1	20:M:332:VAL:N	2.52	0.43
21:N:15:GLU:HG2	27:T:80:ASN:HD22	1.83	0.43
22:O:59:LEU:HD11	22:O:86:LEU:HD11	2.00	0.43
22:O:185:PHE:CE1	22:O:223:LEU:HD12	2.54	0.43
22:O:289:GLN:HG3	22:O:293:LEU:HD13	2.00	0.43
23:P:306:ASN:OD1	23:P:307:GLU:N	2.52	0.43
24:Q:20:TYR:HE2	24:Q:68:MET:SD	2.26	0.43
25:R:379:CYS:SG	25:R:388:VAL:HG13	2.58	0.43
25:R:396:LYS:NZ	26:S:449:LEU:CD1	2.81	0.43
29:V:164:LEU:O	29:V:185:ILE:HD13	2.18	0.43
33:Z:304:PRO:O	33:Z:308:LYS:HG3	2.17	0.43
1:1:143:ARG:HB3	1:1:146:MET:HE3	2.01	0.43
2:2:8:PHE:HA	2:2:146:LEU:HD23	2.00	0.43
3:3:53:THR:O	3:3:57:MET:HG2	2.18	0.43
8:A:84:ASN:HD21	8:A:171:THR:HG21	1.83	0.43
9:B:69:PRO:HG2	9:B:104:TYR:CZ	2.54	0.43
10:C:214:ALA:HB1	10:C:229:ILE:HD13	2.00	0.43
12:E:87:SER:CB	12:E:138:PHE:CZ	3.02	0.43
13:F:170:THR:O	13:F:174:ARG:HG3	2.19	0.43
14:G:203:HIS:NE2	14:G:211:PHE:HD1	2.17	0.43
15:H:170:GLU:HB3	15:H:171:GLY:H	1.67	0.43
16:I:82:LEU:CB	33:Z:622:HIS:CE1	2.97	0.43
17:J:392:LYS:CG	18:K:337:LYS:HZ1	2.26	0.43
19:L:157:ARG:NH2	20:M:113:VAL:HG23	2.29	0.43
20:M:135:VAL:HG11	20:M:155:ILE:HG21	2.00	0.43
20:M:220:MET:CG	20:M:324:LEU:HD11	2.48	0.43
20:M:292:ASP:OD1	20:M:292:ASP:C	2.61	0.43
22:O:195:TYR:CE1	22:O:213:LEU:HD13	2.54	0.43
24:Q:76:GLU:HG2	24:Q:80:HIS:HD2	1.76	0.43
24:Q:355:GLU:HB2	24:Q:399:VAL:HG12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:S:455:GLU:O	26:S:458:GLN:HB2	2.18	0.43
27:T:86:LYS:CE	27:T:128:TYR:CD1	3.02	0.43
31:X:29:VAL:CG1	31:X:61:LEU:CD2	2.83	0.43
33:Z:106:TRP:HH2	33:Z:198:GLU:CB	2.32	0.43
33:Z:233:LEU:HD22	33:Z:268:ALA:HB2	0.50	0.43
33:Z:394:TYR:CE1	33:Z:859:LYS:CB	3.00	0.43
4:4:45:PHE:HD2	4:4:99:VAL:CG1	2.32	0.43
6:6:41:ILE:HD13	6:6:80:ALA:HB2	2.00	0.43
12:E:157:HIS:NE2	12:E:172:ILE:HG21	2.33	0.43
13:F:60:GLN:CG	13:F:62:LYS:HE2	2.47	0.43
13:F:87:TYR:HB2	13:F:115:LYS:NZ	2.33	0.43
14:G:4:GLY:C	14:G:5:THR:HG23	2.43	0.43
14:G:182:HIS:NE2	14:G:186:LEU:HD11	2.31	0.43
14:G:203:HIS:CG	14:G:211:PHE:HD1	2.36	0.43
15:H:173:ARG:CZ	16:I:128:TYR:HA	2.49	0.43
15:H:214:CYS:HB2	15:H:218:ILE:HD11	2.00	0.43
16:I:281:ILE:CG2	16:I:284:ILE:CG1	2.97	0.43
19:L:384:ASP:N	19:L:386:PHE:CE1	2.79	0.43
21:N:130:ASP:OD1	21:N:130:ASP:C	2.62	0.43
21:N:259:PHE:CD1	21:N:289:ILE:HG23	2.53	0.43
22:O:122:HIS:CE1	22:O:162:SER:HA	2.54	0.43
22:O:199:LEU:C	22:O:199:LEU:CD2	2.92	0.43
23:P:299:LEU:HD11	23:P:311:TRP:CH2	2.50	0.43
24:Q:148:LYS:O	24:Q:149:LYS:HB2	2.18	0.43
24:Q:236:PHE:CE1	24:Q:269:LYS:HD3	2.54	0.43
25:R:302:ALA:O	25:R:306:PRO:HG2	2.19	0.43
27:T:15:PHE:CD2	27:T:64:VAL:HG13	2.53	0.43
28:U:60:GLU:HG3	28:U:100:ARG:NH1	2.34	0.43
29:V:186:GLN:O	29:V:190:HIS:HD2	2.01	0.43
31:X:12:ALA:CB	31:X:33:ILE:HG21	2.49	0.43
31:X:14:VAL:O	31:X:15:CYS:HB2	2.19	0.43
31:X:98:PHE:HD1	31:X:98:PHE:N	2.15	0.43
31:X:116:ALA:O	31:X:117:LYS:HB2	2.18	0.43
33:Z:473:LEU:HD11	33:Z:477:TYR:CE1	2.52	0.43
1:1:89:ASN:C	1:1:91:ASP:H	2.26	0.43
3:3:17:ASP:C	3:3:17:ASP:OD1	2.60	0.43
6:6:96:TYR:C	6:6:97:TYR:CG	2.97	0.43
7:7:49:ILE:HD12	7:7:52:MET:HE1	2.01	0.43
8:A:100:GLU:CD	8:A:120:ARG:HG2	2.44	0.43
9:B:48:GLU:O	9:B:63:LYS:HD2	2.18	0.43
12:E:20:ARG:CZ	12:E:25:GLU:HG2	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:31:GLU:CG	14:G:168:ARG:NH1	2.82	0.43
15:H:219:GLU:OE2	15:H:222:ARG:CZ	2.57	0.43
15:H:319:PHE:CZ	16:I:295:ASN:HB3	2.54	0.43
17:J:35:ARG:HH12	17:J:39:GLU:CD	2.26	0.43
18:K:66:ASP:HA	18:K:69:LYS:NZ	2.34	0.43
18:K:395:VAL:HG13	19:L:206:ILE:CG2	2.48	0.43
21:N:514:THR:HG22	21:N:546:LEU:HD13	1.82	0.43
21:N:768:ILE:CB	21:N:917:ILE:O	2.67	0.43
22:O:122:HIS:HE1	22:O:162:SER:HA	1.84	0.43
24:Q:23:ALA:O	24:Q:27:TYR:CD2	2.72	0.43
30:W:163:ASN:HB3	30:W:164:PRO:CD	2.49	0.43
1:1:83:LYS:HE2	1:1:117:GLY:O	2.18	0.43
6:6:152:GLU:HA	6:6:161:LYS:HE3	2.01	0.43
7:7:13:ILE:HG21	7:7:169:ILE:HG13	1.99	0.43
7:7:17:ASP:HB2	7:7:184:SER:OG	2.19	0.43
7:7:132:PRO:HB2	7:7:151:VAL:HG22	2.00	0.43
10:C:181:LYS:HE3	10:C:184:MET:HB3	2.01	0.43
10:C:208:TYR:CD1	10:C:232:PRO:HB3	2.54	0.43
11:D:153:SER:OG	11:D:155:ILE:HG12	2.19	0.43
12:E:23:GLN:OE1	12:E:123:PHE:CZ	2.72	0.43
12:E:121:LEU:HD21	13:F:126:ARG:HH22	1.84	0.43
13:F:65:LYS:HD2	13:F:222:PHE:CD1	2.53	0.43
14:G:122:HIS:CD2	14:G:131:PHE:CE2	3.07	0.43
17:J:324:ARG:NE	17:J:350:MET:HB2	2.33	0.43
19:L:140:LEU:CD1	19:L:155:ILE:CD1	2.94	0.43
20:M:368:MET:HE2	20:M:410:VAL:HG21	2.01	0.43
23:P:263:HIS:ND1	23:P:328:ALA:HB1	2.32	0.43
24:Q:12:ARG:HA	24:Q:27:TYR:OH	2.18	0.43
24:Q:26:VAL:O	24:Q:29:SER:HB2	2.18	0.43
24:Q:409:TYR:CB	25:R:399:GLN:CG	2.80	0.43
25:R:62:TYR:CZ	25:R:180:PHE:CE1	3.05	0.43
26:S:246:GLU:HG3	27:T:124:SER:HB3	1.99	0.43
29:V:32:ILE:CD1	29:V:205:LYS:HE2	2.49	0.43
29:V:157:ARG:CA	29:V:197:TYR:CD1	3.02	0.43
29:V:244:MET:O	29:V:247:ILE:HG12	2.19	0.43
31:X:76:VAL:HG23	31:X:90:VAL:CG2	2.48	0.43
32:Y:78:LYS:O	32:Y:81:LEU:HB3	2.19	0.43
33:Z:106:TRP:CH2	33:Z:198:GLU:HB3	2.54	0.43
33:Z:888:LEU:O	33:Z:889:VAL:HG13	2.19	0.43
3:3:60:TYR:CD1	10:C:96:GLN:HB3	2.54	0.42
5:5:128:CYS:HB2	5:5:133:GLN:HE21	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:7:-8:THR:HA	7:7:100:ASN:OD1	2.19	0.42
8:A:63:LEU:HD11	14:G:172:LYS:CG	2.49	0.42
8:A:220:LYS:HZ1	8:A:242:GLU:CG	2.32	0.42
19:L:198:GLU:CD	19:L:202:LYS:HZ3	2.20	0.42
19:L:387:ASN:ND2	20:M:335:PRO:HB3	2.33	0.42
21:N:50:TYR:HH	21:N:84:ALA:CB	2.32	0.42
21:N:239:LEU:HD21	21:N:276:GLU:HB3	2.00	0.42
21:N:767:ALA:O	21:N:768:ILE:CB	2.66	0.42
24:Q:390:LEU:HD12	25:R:345:TYR:HE1	1.78	0.42
27:T:15:PHE:CE1	27:T:20:TYR:HE1	2.35	0.42
33:Z:206:ASP:O	33:Z:209:PRO:HD2	2.19	0.42
33:Z:893:PHE:O	33:Z:894:MET:HB2	2.18	0.42
1:1:58:ILE:CG1	8:A:106:TYR:OH	2.66	0.42
4:4:36:GLN:HG3	4:4:188:ILE:HD12	1.97	0.42
4:4:191:VAL:HG12	4:4:193:ASP:O	2.19	0.42
10:C:81:THR:O	10:C:85:GLU:HG3	2.18	0.42
10:C:208:TYR:HD1	10:C:232:PRO:O	2.00	0.42
11:D:118:GLN:HE21	12:E:83:ALA:CB	2.31	0.42
13:F:135:ILE:HD12	13:F:216:VAL:HG12	2.01	0.42
19:L:132:ARG:HG2	19:L:133:ASN:H	1.84	0.42
19:L:132:ARG:CZ	19:L:156:MET:HA	2.49	0.42
21:N:258:ALA:HB2	21:N:286:LEU:HD22	2.00	0.42
21:N:353:LEU:N	21:N:354:PRO:CD	2.75	0.42
21:N:669:GLU:O	21:N:670:LYS:HB2	2.19	0.42
23:P:136:ARG:HE	23:P:163:LEU:HD21	1.83	0.42
23:P:176:LYS:CD	23:P:206:LYS:NZ	2.75	0.42
25:R:96:GLN:HA	25:R:99:TYR:HD2	1.85	0.42
27:T:220:PHE:O	27:T:224:ARG:HG2	2.19	0.42
27:T:242:LYS:O	27:T:243:ALA:HB3	2.19	0.42
31:X:14:VAL:HG11	31:X:61:LEU:HB3	2.00	0.42
31:X:101:LEU:CD1	31:X:103:GLU:O	2.67	0.42
2:2:14:ILE:HD12	2:2:34:LEU:HD22	2.02	0.42
3:3:-2:ASN:HD21	3:3:48:ALA:H	1.67	0.42
4:4:36:GLN:HE21	4:4:39:PRO:HA	1.83	0.42
5:5:30:THR:O	5:5:31:VAL:HB	2.19	0.42
6:6:39:ASP:OD2	6:6:67:HIS:NE2	2.53	0.42
9:B:47:THR:HG21	9:B:63:LYS:HB2	2.00	0.42
11:D:120:TYR:CE2	11:D:126:VAL:HG11	2.54	0.42
13:F:83:VAL:O	13:F:86:ASN:HB3	2.19	0.42
15:H:434:ARG:O	15:H:435:ARG:NH1	2.45	0.42
18:K:104:ASP:C	18:K:104:ASP:OD1	2.62	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:275:ASP:OD2	18:K:320:ARG:HB2	2.19	0.42
19:L:219:LEU:CD1	19:L:325:MET:HB2	2.49	0.42
21:N:12:LEU:CD2	21:N:15:GLU:OE1	2.66	0.42
21:N:23:TYR:CD2	27:T:35:ILE:HG21	2.55	0.42
21:N:137:PHE:CE2	21:N:156:ILE:HG22	2.54	0.42
21:N:514:THR:HB	21:N:546:LEU:HD11	1.73	0.42
21:N:768:ILE:HG13	21:N:919:THR:H	1.82	0.42
23:P:267:PHE:HZ	23:P:328:ALA:O	2.01	0.42
24:Q:54:GLN:HA	24:Q:57:SER:OG	2.19	0.42
24:Q:71:LYS:HE2	24:Q:113:ASP:HB3	2.01	0.42
24:Q:378:SER:HB2	25:R:345:TYR:OH	2.13	0.42
28:U:83:ILE:HG12	29:V:72:PRO:HA	2.02	0.42
29:V:158:LEU:HD23	29:V:159:ILE:HG12	2.00	0.42
29:V:261:LEU:HD11	29:V:283:THR:CG2	2.48	0.42
33:Z:138:ARG:HG2	33:Z:157:LEU:HB2	2.01	0.42
33:Z:491:LEU:HD12	33:Z:899:GLN:OE1	2.19	0.42
4:4:14:LEU:HD21	4:4:115:LEU:HD13	2.01	0.42
6:6:34:VAL:HG12	6:6:196:LEU:HD11	2.02	0.42
8:A:50:CYS:SG	8:A:202:VAL:HG21	2.59	0.42
10:C:19:LEU:HD21	11:D:127:ARG:NE	2.33	0.42
15:H:357:ARG:NH2	16:I:290:LYS:HA	2.34	0.42
16:I:172:LYS:HZ2	17:J:278:GLN:N	2.17	0.42
17:J:188:TYR:CE1	17:J:295:ASN:CA	3.01	0.42
18:K:52:LYS:NZ	21:N:159:GLU:HG2	2.32	0.42
19:L:121:ALA:HB2	19:L:127:TYR:CE2	2.54	0.42
19:L:164:ASP:CA	19:L:261:ARG:HH12	2.28	0.42
19:L:400:PHE:HE2	20:M:345:ARG:HD3	1.84	0.42
20:M:221:TYR:OH	20:M:348:GLU:CG	2.63	0.42
22:O:189:TYR:HD2	22:O:227:ILE:CG1	2.15	0.42
22:O:270:ILE:HD12	22:O:274:ILE:HG23	2.00	0.42
23:P:128:ASN:N	23:P:136:ARG:NH1	2.68	0.42
23:P:414:GLU:HB2	28:U:265:LEU:HD11	2.01	0.42
24:Q:90:LYS:HZ2	24:Q:129:LYS:HE3	1.85	0.42
24:Q:202:ARG:NH2	24:Q:222:SER:CB	2.79	0.42
24:Q:272:LEU:O	24:Q:273:ASN:HB2	2.19	0.42
24:Q:406:ASP:C	24:Q:406:ASP:OD1	2.63	0.42
26:S:455:GLU:OE2	26:S:459:GLN:NE2	2.47	0.42
27:T:181:LEU:C	27:T:181:LEU:CD2	2.91	0.42
29:V:238:LEU:CD1	29:V:242:LYS:HE3	2.47	0.42
33:Z:887:GLY:C	33:Z:889:VAL:HG13	2.42	0.42
2:2:19:ARG:CZ	2:2:26:VAL:HG22	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:3:42:LEU:CD2	3:3:44:ILE:HD11	2.49	0.42
6:6:171:VAL:O	6:6:175:VAL:HG23	2.19	0.42
8:A:36:ASN:HD21	8:A:40:ILE:H	1.66	0.42
8:A:119:LYS:HZ1	9:B:83:ARG:HB3	1.76	0.42
8:A:220:LYS:HE3	8:A:242:GLU:HB2	1.92	0.42
10:C:191:GLU:HG2	10:C:242:THR:HG22	2.00	0.42
10:C:202:ASP:O	17:J:351:ASN:ND2	2.52	0.42
12:E:209:GLU:HG3	15:H:406:LEU:CD2	2.50	0.42
13:F:30:LYS:NZ	13:F:165:SER:H	2.16	0.42
15:H:155:PHE:HE1	20:M:78:LEU:HD23	1.85	0.42
15:H:195:VAL:HG11	15:H:289:ARG:HG2	2.00	0.42
15:H:315:GLY:O	15:H:333:MET:HE3	2.19	0.42
16:I:253:ILE:HD12	16:I:286:ALA:HB1	2.01	0.42
17:J:85:LEU:HD23	17:J:85:LEU:C	2.43	0.42
18:K:424:PHE:HB3	18:K:427:TYR:HE2	1.84	0.42
20:M:189:GLN:NE2	20:M:350:PRO:HD2	2.33	0.42
20:M:221:TYR:CE1	20:M:348:GLU:CA	2.99	0.42
21:N:294:PRO:CD	21:N:921:ARG:HH21	2.33	0.42
21:N:318:LYS:CD	21:N:348:PHE:CD1	3.02	0.42
22:O:3:ASN:O	22:O:7:ILE:HG12	2.18	0.42
23:P:311:TRP:CZ2	23:P:341:LEU:HB3	2.54	0.42
25:R:80:GLU:OE1	25:R:99:TYR:CZ	2.73	0.42
25:R:80:GLU:CD	25:R:99:TYR:OH	2.59	0.42
30:W:135:ASN:CB	30:W:137:VAL:HG23	2.50	0.42
33:Z:542:ILE:HG13	33:Z:546:ILE:CD1	2.48	0.42
33:Z:884:THR:HG21	33:Z:904:LEU:HA	2.02	0.42
8:A:47:GLY:HA3	8:A:50:CYS:SG	2.60	0.42
8:A:54:ILE:HD13	8:A:207:ILE:HG13	2.02	0.42
8:A:159:PRO:O	8:A:160:ALA:HB2	2.20	0.42
11:D:216:LYS:HB3	11:D:217:PRO:CD	2.50	0.42
12:E:209:GLU:HA	15:H:406:LEU:HD22	2.01	0.42
14:G:137:PHE:CE2	14:G:148:TYR:HB2	2.54	0.42
16:I:172:LYS:NZ	17:J:278:GLN:CA	2.83	0.42
16:I:232:LEU:O	16:I:236:VAL:HG23	2.20	0.42
17:J:141:LYS:HG2	17:J:209:LYS:CE	2.43	0.42
19:L:152:THR:HG22	19:L:154:THR:CG2	2.45	0.42
19:L:374:PHE:CZ	19:L:415:LEU:HD22	2.55	0.42
21:N:28:ILE:HG22	21:N:32:VAL:HG22	2.02	0.42
21:N:217:MET:HE1	21:N:248:GLU:HG3	2.02	0.42
21:N:311:ILE:HG22	21:N:340:HIS:HE1	1.85	0.42
21:N:349:ILE:HD12	21:N:371:LEU:HD21	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:N:665:ILE:HD11	21:N:715:ILE:HG12	1.98	0.42
22:O:289:GLN:O	22:O:293:LEU:HD13	2.20	0.42
24:Q:19:GLN:NE2	24:Q:21:ASN:HB3	2.35	0.42
24:Q:240:PHE:CD1	24:Q:240:PHE:C	2.97	0.42
25:R:299:SER:CB	25:R:341:LEU:HD21	2.35	0.42
27:T:151:TRP:CE3	27:T:159:LYS:HD2	2.53	0.42
27:T:242:LYS:O	27:T:243:ALA:CB	2.67	0.42
30:W:38:GLN:HE21	30:W:42:ASN:CG	2.27	0.42
30:W:125:LEU:CD1	30:W:157:PHE:CD1	3.02	0.42
31:X:14:VAL:O	31:X:29:VAL:HG21	2.17	0.42
31:X:38:ASN:OD1	31:X:39:GLU:N	2.49	0.42
33:Z:888:LEU:HD13	33:Z:901:PHE:HA	2.00	0.42
1:1:34:LEU:HD22	1:1:174:ARG:HB3	2.01	0.42
2:2:223:ILE:HG13	3:3:38:GLY:H	1.83	0.42
3:3:48:ALA:CB	4:4:123:THR:HG23	2.49	0.42
3:3:176:ALA:CB	3:3:193:MET:SD	3.08	0.42
5:5:90:TYR:N	5:5:90:TYR:CD1	2.87	0.42
6:6:176:ARG:NH1	6:6:208:TYR:HB2	2.32	0.42
9:B:6:SER:HB2	11:D:4:TYR:CD2	2.55	0.42
10:C:75:VAL:HG12	10:C:137:TYR:CD2	2.54	0.42
11:D:122:GLN:HG2	12:E:136:ARG:NH2	2.35	0.42
12:E:114:GLN:NE2	13:F:82:ARG:HE	2.17	0.42
12:E:127:ALA:C	12:E:132:ARG:NH2	2.78	0.42
14:G:80:LEU:HD13	14:G:129:ARG:NH2	2.34	0.42
14:G:182:HIS:HE1	14:G:194:GLN:NE2	2.17	0.42
15:H:50:LYS:NZ	33:Z:770:GLU:OE1	2.53	0.42
18:K:345:ASP:N	18:K:348:GLU:OE1	2.43	0.42
18:K:393:ARG:NH2	18:K:413:THR:HG21	2.34	0.42
21:N:359:ALA:O	29:V:182:LYS:HE3	2.19	0.42
21:N:596:LEU:CD2	21:N:718:GLU:HB2	2.50	0.42
22:O:254:LEU:HD23	22:O:266:PHE:CZ	2.34	0.42
25:R:321:TYR:HA	25:R:324:ARG:HD2	2.00	0.42
26:S:323:LEU:CD2	26:S:382:ARG:HE	2.32	0.42
28:U:293:GLU:CD	29:V:277:LYS:HE3	2.45	0.42
33:Z:108:ASP:HB2	33:Z:112:LYS:HB2	2.01	0.42
33:Z:381:LEU:HG	33:Z:385:PHE:CE2	2.55	0.42
1:1:109:GLU:OE1	1:1:121:LYS:NZ	2.53	0.42
1:1:189:TYR:O	1:1:193:TYR:HD1	2.02	0.42
3:3:59:ARG:HH22	10:C:100:LYS:HA	1.85	0.42
4:4:27:LEU:CD1	5:5:133:GLN:NE2	2.83	0.42
5:5:104:TYR:CE1	5:5:109:GLY:C	2.98	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:6:7:ALA:HB2	6:6:113:VAL:HG23	2.01	0.42
7:7:187:PHE:CE1	7:7:205:GLN:N	2.88	0.42
11:D:188:VAL:CG2	11:D:216:LYS:HE2	2.49	0.42
12:E:162:GLY:O	13:F:79:PRO:HG3	2.19	0.42
16:I:105:SER:HA	17:J:94:TYR:HD2	1.82	0.42
19:L:256:ILE:O	19:L:256:ILE:CG2	2.66	0.42
20:M:232:ALA:CB	20:M:279:PHE:CE1	3.02	0.42
22:O:62:TYR:CG	22:O:63:ASP:N	2.88	0.42
22:O:301:PHE:HD2	22:O:305:ILE:O	2.01	0.42
23:P:203:ILE:HG23	23:P:204:LEU:N	2.35	0.42
24:Q:102:GLU:HG3	24:Q:140:LYS:HZ3	1.85	0.42
24:Q:160:ASP:HA	24:Q:163:ARG:NH2	2.34	0.42
24:Q:250:THR:CG2	24:Q:251:THR:N	2.55	0.42
26:S:137:PHE:CE1	26:S:162:VAL:HG13	2.54	0.42
26:S:146:LEU:HA	26:S:149:SER:OG	2.19	0.42
31:X:87:PHE:HB2	31:X:99:PHE:CG	2.51	0.42
33:Z:214:HIS:CD2	33:Z:216:GLY:HA3	2.55	0.42
33:Z:327:GLN:O	33:Z:328:ASP:HB2	2.20	0.42
33:Z:327:GLN:HE21	33:Z:346:LEU:CD1	2.32	0.42
33:Z:358:TYR:HE1	33:Z:914:LEU:HD13	1.83	0.42
33:Z:750:GLU:HG3	33:Z:753:GLY:N	2.34	0.42
1:1:72:THR:HG23	1:1:73:PRO:HD2	2.01	0.42
1:1:119:VAL:CG2	14:G:103:LYS:HE2	2.49	0.42
3:3:-2:ASN:ND2	3:3:48:ALA:H	2.18	0.42
3:3:36:HIS:CB	3:3:41:PHE:CD2	3.01	0.42
4:4:56:ALA:O	4:4:60:GLN:HG3	2.20	0.42
7:7:69:ASP:HB3	13:F:107:ARG:HG2	2.01	0.42
9:B:49:LYS:HA	9:B:63:LYS:HZ2	1.83	0.42
10:C:46:LEU:HD11	10:C:138:ALA:CB	2.50	0.42
11:D:120:TYR:CG	11:D:126:VAL:CG1	3.03	0.42
12:E:143:LEU:HD12	12:E:156:PHE:O	2.20	0.42
13:F:113:CYS:SG	14:G:85:ARG:NE	2.93	0.42
13:F:197:ILE:O	13:F:200:SER:HB2	2.20	0.42
15:H:142:ASP:O	15:H:143:ALA:CB	2.66	0.42
15:H:295:PHE:CE1	15:H:336:LEU:HD12	2.54	0.42
15:H:319:PHE:N	15:H:319:PHE:CD1	2.88	0.42
16:I:83:LYS:HG2	16:I:87:LYS:HE3	2.02	0.42
16:I:268:PHE:HB3	16:I:316:PHE:CE2	2.55	0.42
18:K:164:ASN:ND2	19:L:315:PHE:CE1	2.86	0.42
20:M:200:PRO:CB	20:M:207:PHE:CE2	3.02	0.42
21:N:549:TYR:CE2	21:N:586:ALA:HB2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:21:SER:HA	22:O:43:GLU:HG3	2.02	0.42
22:O:41:LEU:HD12	22:O:56:PRO:HB3	2.01	0.42
22:O:320:PRO:HG2	22:O:323:ASN:ND2	2.35	0.42
29:V:230:TYR:CA	29:V:231:GLU:OE1	2.68	0.42
30:W:146:GLU:O	30:W:147:ILE:CB	2.66	0.42
31:X:89:LEU:HB2	31:X:99:PHE:CE1	2.54	0.42
33:Z:144:SER:N	33:Z:206:ASP:OD1	2.53	0.42
33:Z:394:TYR:CZ	33:Z:859:LYS:HB2	2.55	0.42
33:Z:585:LEU:CD2	33:Z:603:VAL:HG21	2.50	0.42
33:Z:774:ARG:C	33:Z:777:PRO:HD2	2.45	0.42
6:6:39:ASP:OD2	6:6:67:HIS:CE1	2.73	0.42
7:7:9:ASP:OD1	7:7:158:PRO:HA	2.20	0.42
8:A:11:GLY:C	8:A:12:TYR:CG	2.98	0.42
8:A:15:HIS:O	8:A:16:ILE:HG23	2.20	0.42
10:C:70:ASN:HB2	10:C:73:ILE:HB	2.02	0.42
11:D:96:HIS:HE1	11:D:100:LEU:CD1	2.24	0.42
12:E:67:ILE:HD13	12:E:220:SER:HB3	2.02	0.42
13:F:65:LYS:CE	13:F:222:PHE:HB3	2.41	0.42
14:G:70:ASP:CG	14:G:99:LYS:HE3	2.43	0.42
14:G:182:HIS:CE1	14:G:186:LEU:CD1	3.00	0.42
16:I:75:PHE:N	33:Z:619:ASP:OD1	2.53	0.42
16:I:252:LEU:HD12	16:I:287:ILE:HD13	2.01	0.42
18:K:177:LEU:HD22	18:K:180:GLN:OE1	2.19	0.42
20:M:73:ARG:O	20:M:74:GLN:HB2	2.20	0.42
20:M:354:GLU:CG	20:M:357:ARG:NH2	2.76	0.42
21:N:600:THR:O	21:N:603:PRO:HD2	2.20	0.42
22:O:38:TRP:CE3	22:O:54:SER:HB3	2.42	0.42
22:O:122:HIS:ND1	22:O:164:PRO:HD2	2.34	0.42
25:R:63:TYR:OH	25:R:93:LYS:N	2.53	0.42
25:R:70:TYR:CD2	25:R:75:GLY:CA	3.00	0.42
25:R:146:ASP:N	25:R:181:TYR:OH	2.53	0.42
29:V:51:GLY:N	29:V:108:TYR:CE2	2.87	0.42
29:V:162:GLY:O	29:V:163:ALA:HB2	2.20	0.42
33:Z:574:TYR:CE2	33:Z:584:VAL:CG2	2.97	0.42
2:2:114:HIS:HE1	2:2:120:ASP:OD2	1.98	0.41
2:2:185:GLU:HG2	9:B:225:THR:HB	2.01	0.41
7:7:8:TYR:CZ	7:7:11:GLY:CA	3.03	0.41
7:7:12:VAL:HG22	7:7:111:VAL:CG2	2.49	0.41
9:B:218:ASN:HB2	9:B:236:ARG:NE	2.23	0.41
11:D:47:GLU:O	11:D:63:LYS:HE2	2.20	0.41
11:D:240:LYS:O	11:D:244:GLN:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:F:110:HIS:HA	14:G:85:ARG:HH11	1.78	0.41
16:I:401:LEU:CD1	17:J:312:ARG:CD	2.83	0.41
18:K:60:LEU:HD13	21:N:598:ASP:HB3	1.97	0.41
19:L:329:ARG:HG3	19:L:330:PRO:HD2	2.02	0.41
19:L:400:PHE:CE2	20:M:345:ARG:HD3	2.55	0.41
20:M:289:LYS:HB2	20:M:302:GLN:HG3	2.01	0.41
21:N:215:MET:HG3	21:N:244:LYS:HD3	2.01	0.41
21:N:539:MET:HE1	21:N:554:THR:CB	2.50	0.41
21:N:669:GLU:OE1	21:N:785:PRO:C	2.63	0.41
22:O:69:PHE:HE2	22:O:77:SER:HB2	1.79	0.41
22:O:147:ARG:N	22:O:178:TYR:CE1	2.88	0.41
22:O:299:THR:HA	22:O:365:LYS:HE2	2.01	0.41
24:Q:315:ASN:HD22	24:Q:368:LEU:HD13	1.85	0.41
25:R:407:GLY:O	25:R:411:LEU:HG	2.20	0.41
27:T:151:TRP:HE3	27:T:156:SER:CB	2.32	0.41
28:U:60:GLU:OE2	28:U:100:ARG:HD3	2.20	0.41
30:W:107:HIS:HE1	30:W:138:ALA:CB	2.33	0.41
33:Z:124:MET:HE2	33:Z:153:TYR:HD1	1.84	0.41
33:Z:245:VAL:HG12	33:Z:249:MET:HE3	2.02	0.41
33:Z:550:PHE:CD1	33:Z:550:PHE:C	2.97	0.41
3:3:61:LYS:HZ2	3:3:85:SER:HB3	1.86	0.41
4:4:129:TYR:CD2	4:4:143:LEU:HD13	2.55	0.41
5:5:12:ILE:CG1	5:5:110:PRO:HB3	2.50	0.41
5:5:124:GLY:HA3	5:5:127:PHE:CE2	2.55	0.41
7:7:111:VAL:HG13	7:7:117:GLN:HG3	2.02	0.41
8:A:54:ILE:HD12	8:A:206:ALA:CB	2.51	0.41
9:B:75:TYR:CD1	9:B:82:TYR:CD1	3.08	0.41
13:F:108:ALA:O	13:F:111:LEU:HB3	2.20	0.41
13:F:151:GLY:O	14:G:81:ILE:HG21	2.19	0.41
13:F:179:PHE:HB3	13:F:189:LEU:HD21	2.02	0.41
16:I:358:LYS:HD3	16:I:384:LYS:HD3	1.99	0.41
17:J:166:LEU:HD23	17:J:174:PHE:CZ	2.55	0.41
17:J:276:LEU:HD13	17:J:309:ARG:CG	2.51	0.41
20:M:49:GLN:HE21	20:M:53:HIS:CE1	2.38	0.41
20:M:243:PHE:CE2	20:M:245:LYS:HB2	2.55	0.41
21:N:348:PHE:CD1	21:N:348:PHE:C	2.96	0.41
22:O:59:LEU:CD1	22:O:86:LEU:HD11	2.51	0.41
22:O:308:LEU:HB2	22:O:350:ILE:HD11	2.02	0.41
25:R:263:ARG:HH11	25:R:340:GLN:CD	2.27	0.41
25:R:316:LEU:HD22	25:R:322:LEU:HB3	2.02	0.41
26:S:288:THR:HG22	26:S:292:TYR:CE2	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:T:85:LEU:O	27:T:88:TYR:HB2	2.20	0.41
28:U:19:LEU:HD13	29:V:209:GLU:CD	2.39	0.41
30:W:132:LEU:HB2	30:W:161:VAL:HG22	2.02	0.41
33:Z:322:GLU:HG3	33:Z:323:TYR:N	2.34	0.41
33:Z:570:LEU:HB3	33:Z:584:VAL:HG13	2.02	0.41
33:Z:926:ASN:CB	33:Z:993:GLU:HG3	2.41	0.41
1:1:61:TYR:CE1	8:A:103:GLU:N	2.83	0.41
3:3:63:ASN:HD22	10:C:96:GLN:HE22	1.68	0.41
8:A:24:ARG:NH2	18:K:424:PHE:CD1	2.88	0.41
10:C:181:LYS:CE	10:C:184:MET:HB3	2.50	0.41
10:C:230:PHE:HD2	10:C:234:GLU:HB3	1.85	0.41
11:D:179:TYR:CZ	11:D:184:PRO:HB3	2.55	0.41
13:F:179:PHE:HZ	13:F:192:ALA:HB1	1.48	0.41
15:H:61:ALA:O	15:H:65:GLU:HG3	2.20	0.41
15:H:224:VAL:HG13	15:H:243:PRO:CG	2.50	0.41
15:H:246:ILE:HG12	15:H:248:LEU:HD11	2.01	0.41
15:H:288:ALA:HB2	15:H:331:ARG:CZ	2.50	0.41
15:H:312:ASP:O	16:I:300:ARG:CZ	2.59	0.41
16:I:203:THR:CB	16:I:204:HIS:ND1	2.83	0.41
17:J:81:ASP:O	17:J:82:LYS:HB2	2.21	0.41
17:J:119:SER:HB3	17:J:121:MET:HE2	2.01	0.41
17:J:195:LYS:CB	17:J:253:ILE:HD12	2.50	0.41
17:J:327:ILE:O	17:J:331:HIS:CD2	2.73	0.41
22:O:40:GLN:CG	22:O:58:ARG:NE	2.83	0.41
22:O:362:GLN:OE1	28:U:226:LEU:CB	2.68	0.41
23:P:411:LEU:CD1	28:U:269:THR:N	2.83	0.41
23:P:426:ILE:CD1	29:V:233:LYS:HD3	2.51	0.41
24:Q:378:SER:HA	24:Q:390:LEU:HD11	2.02	0.41
26:S:133:GLU:HG2	26:S:137:PHE:CE2	2.55	0.41
26:S:318:CYS:SG	26:S:330:LEU:CD2	3.08	0.41
26:S:420:GLU:O	26:S:423:VAL:HG12	2.20	0.41
26:S:423:VAL:HG13	26:S:424:SER:N	2.36	0.41
29:V:50:MET:SD	29:V:78:VAL:HB	2.60	0.41
30:W:132:LEU:HD22	30:W:139:VAL:HG21	2.02	0.41
30:W:191:ILE:O	30:W:192:LEU:HB2	2.21	0.41
1:1:8:PHE:HZ	1:1:179:THR:HG22	1.85	0.41
2:2:19:ARG:HH21	2:2:26:VAL:CG2	2.29	0.41
4:4:7:ARG:NH2	4:4:113:PRO:O	2.50	0.41
6:6:20:ASN:ND2	6:6:31:GLU:O	2.53	0.41
10:C:107:PRO:HB3	10:C:141:ASP:OD2	2.21	0.41
14:G:64:VAL:CG2	14:G:67:GLN:HE22	2.31	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:G:111:PHE:CZ	14:G:115:LEU:HD11	2.56	0.41
15:H:182:ASN:CG	15:H:183:ILE:N	2.79	0.41
15:H:187:LEU:O	15:H:188:PRO:CB	2.68	0.41
16:I:362:LEU:HB2	16:I:377:LEU:HD22	2.03	0.41
17:J:98:VAL:HG12	17:J:122:LEU:CD1	2.48	0.41
18:K:275:ASP:HB2	18:K:323:THR:OG1	2.20	0.41
19:L:290:ARG:NH2	19:L:293:GLU:C	2.78	0.41
20:M:177:THR:C	20:M:178:GLU:HG2	2.46	0.41
21:N:258:ALA:HB1	21:N:289:ILE:HG21	2.02	0.41
21:N:408:LEU:CD1	21:N:412:TYR:CD1	3.03	0.41
21:N:668:THR:OG1	21:N:785:PRO:HD3	2.21	0.41
22:O:188:PHE:CE2	22:O:216:ASP:HB3	2.54	0.41
23:P:411:LEU:HD23	23:P:411:LEU:O	2.20	0.41
25:R:80:GLU:C	25:R:81:HIS:CG	2.97	0.41
1:1:4:MET:O	1:1:14:LEU:HD12	2.21	0.41
2:2:8:PHE:CD1	2:2:8:PHE:C	2.98	0.41
7:7:1:THR:C	7:7:33:ARG:HH22	2.28	0.41
7:7:132:PRO:HB2	7:7:151:VAL:CG2	2.50	0.41
13:F:179:PHE:CG	13:F:189:LEU:HD23	2.55	0.41
15:H:280:VAL:HG21	16:I:304:ARG:NE	2.29	0.41
16:I:310:LEU:HD13	16:I:338:LEU:CD1	2.50	0.41
17:J:26:LYS:HD2	21:N:107:GLU:OE1	2.19	0.41
17:J:344:ARG:O	17:J:348:GLU:HG3	2.20	0.41
19:L:301:ILE:CD1	20:M:299:ARG:NH2	2.76	0.41
20:M:74:GLN:O	20:M:77:TYR:CE1	2.74	0.41
21:N:36:TRP:CG	21:N:71:ASN:HD22	2.39	0.41
21:N:317:SER:HA	21:N:686:ILE:HG21	2.02	0.41
22:O:72:LYS:O	22:O:73:ILE:HG13	2.20	0.41
22:O:188:PHE:CD2	22:O:220:SER:CB	2.72	0.41
23:P:181:LEU:CD2	23:P:223:LEU:HD21	2.49	0.41
23:P:429:ILE:HA	28:U:203:LYS:NZ	2.36	0.41
24:Q:186:HIS:HE1	24:Q:228:GLU:CD	2.20	0.41
26:S:415:SER:CB	27:T:159:LYS:HZ2	2.33	0.41
27:T:229:VAL:CG2	27:T:234:TYR:CZ	3.04	0.41
30:W:102:GLN:O	30:W:103:ASN:CB	2.68	0.41
30:W:141:ILE:HD11	30:W:157:PHE:HD2	1.85	0.41
31:X:74:MET:HB2	31:X:90:VAL:HB	2.03	0.41
33:Z:71:LEU:CD1	33:Z:92:LEU:HD13	2.51	0.41
1:1:30:VAL:HB	1:1:174:ARG:HH21	1.84	0.41
2:2:144:GLN:O	2:2:145:ASP:HB2	2.20	0.41
2:2:179:GLU:HB2	2:2:182:LYS:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:19:PHE:HZ	9:B:129:PRO:O	2.03	0.41
8:A:77:ARG:NH2	8:A:105:ARG:HE	2.19	0.41
9:B:10:THR:HG21	9:B:122:THR:HG23	2.03	0.41
11:D:97:ARG:HH12	11:D:103:PRO:HB3	1.86	0.41
13:F:49:LEU:C	20:M:433:TYR:HH	2.11	0.41
14:G:19:ARG:CZ	14:G:24:GLU:HG3	2.50	0.41
14:G:141:ASP:OD1	14:G:141:ASP:C	2.62	0.41
15:H:149:LEU:HB3	15:H:177:ASP:OD2	2.20	0.41
15:H:221:LEU:HB3	15:H:263:VAL:HG21	2.02	0.41
16:I:104:LEU:CD2	16:I:150:HIS:HA	2.51	0.41
16:I:247:ILE:HD13	16:I:267:ILE:HD13	2.01	0.41
19:L:185:GLY:C	19:L:360:ILE:HD11	2.45	0.41
20:M:212:ILE:HG22	20:M:213:ARG:N	2.36	0.41
21:N:47:GLU:HA	21:N:47:GLU:OE1	2.20	0.41
21:N:246:LYS:NZ	21:N:281:GLY:O	2.41	0.41
21:N:293:LEU:HB3	21:N:294:PRO:HD3	2.02	0.41
21:N:509:GLN:C	21:N:510:HIS:ND1	2.75	0.41
21:N:666:GLN:CD	21:N:873:ARG:HG3	2.42	0.41
23:P:44:LYS:O	23:P:47:ARG:HG3	2.21	0.41
23:P:365:LEU:HD12	23:P:400:VAL:HG21	2.03	0.41
23:P:412:LEU:CD2	29:V:245:VAL:N	2.83	0.41
24:Q:355:GLU:O	24:Q:356:CYS:HB2	2.21	0.41
25:R:31:PHE:CZ	25:R:320:LYS:HA	2.56	0.41
25:R:399:GLN:OE1	25:R:400:TYR:CD1	2.74	0.41
29:V:164:LEU:HD11	29:V:197:TYR:HE2	1.86	0.41
31:X:35:ILE:CD1	31:X:48:PHE:CE1	3.03	0.41
33:Z:161:ILE:CB	33:Z:203:LEU:HD13	2.50	0.41
33:Z:307:HIS:HE2	33:Z:341:TYR:HA	1.85	0.41
33:Z:570:LEU:HB3	33:Z:584:VAL:HG22	2.02	0.41
33:Z:913:ILE:HG12	33:Z:965:LEU:H	1.84	0.41
1:1:17:ASP:OD1	1:1:17:ASP:C	2.62	0.41
4:4:43:MET:C	4:4:45:PHE:CE1	2.99	0.41
5:5:41:LEU:C	5:5:42:LEU:HD12	2.45	0.41
6:6:29:ARG:HE	7:7:148:ARG:NH2	2.18	0.41
7:7:103:TRP:O	7:7:103:TRP:CD1	2.74	0.41
10:C:136:ILE:CD1	10:C:165:VAL:CG2	2.89	0.41
12:E:73:HIS:C	12:E:74:ILE:HG13	2.46	0.41
13:F:13:PHE:CZ	14:G:130:PRO:CB	3.04	0.41
16:I:203:THR:OG1	16:I:204:HIS:ND1	2.41	0.41
17:J:210:PHE:CE2	17:J:212:ARG:HG3	2.56	0.41
17:J:234:PHE:CE1	17:J:279:LEU:HD21	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:K:240:SER:HA	18:K:243:VAL:CG2	2.45	0.41
20:M:362:GLN:NE2	20:M:376:TRP:CZ3	2.89	0.41
20:M:407:GLN:OE1	20:M:411:LYS:NZ	2.53	0.41
21:N:408:LEU:HD12	21:N:412:TYR:HE1	1.80	0.41
21:N:525:ASN:HA	21:N:528:ARG:CD	2.51	0.41
22:O:33:TYR:O	22:O:34:GLU:HB2	2.18	0.41
22:O:342:ASP:HB2	23:P:358:SER:HB3	2.02	0.41
23:P:133:GLU:HG3	23:P:167:THR:CG2	2.25	0.41
23:P:184:MET:HE3	23:P:227:ILE:HD11	2.01	0.41
24:Q:23:ALA:O	24:Q:26:VAL:HB	2.21	0.41
24:Q:71:LYS:HE3	24:Q:109:ASP:OD2	2.21	0.41
25:R:33:LEU:C	25:R:33:LEU:CD2	2.91	0.41
25:R:33:LEU:HG	25:R:43:ARG:HG3	2.02	0.41
25:R:301:TYR:CE2	25:R:359:VAL:CG2	2.98	0.41
26:S:261:HIS:C	26:S:262:THR:HG23	2.45	0.41
27:T:260:ILE:HG23	28:U:277:TYR:OH	2.18	0.41
28:U:60:GLU:OE1	28:U:60:GLU:HA	2.19	0.41
28:U:66:TRP:HE3	28:U:67:PHE:N	2.19	0.41
31:X:46:TRP:H	31:X:68:LEU:HB3	1.84	0.41
33:Z:114:SER:O	33:Z:118:VAL:HG23	2.20	0.41
33:Z:373:GLY:HA3	33:Z:406:TRP:CZ3	2.56	0.41
4:4:117:GLN:HB3	4:4:125:VAL:CG1	2.51	0.41
7:7:6:MET:HE1	7:7:150:VAL:CG1	2.50	0.41
10:C:188:ASP:O	10:C:192:LEU:HG	2.21	0.41
19:L:74:LEU:HD22	20:M:44:PHE:HD1	1.85	0.41
23:P:125:VAL:HA	23:P:136:ARG:HG3	2.03	0.41
24:Q:264:TYR:HE1	24:Q:331:THR:N	2.19	0.41
25:R:209:ARG:NH1	25:R:243:LEU:HD13	2.36	0.41
26:S:164:ILE:HG12	26:S:168:LEU:HD23	2.02	0.41
27:T:50:ILE:HD11	27:T:51:TYR:CE2	2.56	0.41
30:W:155:ASP:HA	30:W:171:LEU:HD22	2.02	0.41
33:Z:392:LEU:C	33:Z:394:TYR:CD2	2.98	0.41
33:Z:571:GLY:CA	33:Z:574:TYR:HE2	2.21	0.41
2:2:66:HIS:ND1	8:A:108:TYR:CE1	2.89	0.41
2:2:222:ASP:CG	3:3:36:HIS:HE1	1.93	0.41
3:3:38:GLY:O	3:3:39:HIS:CG	2.74	0.41
6:6:3:ILE:HG23	6:6:46:ASN:HD22	1.85	0.41
6:6:34:VAL:HG12	6:6:196:LEU:CD1	2.51	0.41
6:6:63:VAL:HG12	6:6:67:HIS:CD2	2.56	0.41
7:7:144:ASN:HB3	7:7:145:PRO:HD3	2.03	0.41
7:7:175:VAL:HG13	7:7:179:ARG:NH1	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:A:42:SER:HB2	8:A:171:THR:HG22	1.98	0.41
9:B:43:VAL:HB	9:B:214:ILE:HD12	2.02	0.41
10:C:87:LEU:HD13	10:C:119:LYS:HE2	2.02	0.41
13:F:113:CYS:CB	14:G:85:ARG:CD	2.91	0.41
13:F:157:TYR:CZ	14:G:59:VAL:HG23	2.55	0.41
15:H:147:ILE:HG22	15:H:177:ASP:OD2	2.21	0.41
16:I:169:SER:OG	16:I:170:VAL:N	2.52	0.41
16:I:358:LYS:NZ	16:I:384:LYS:HB3	2.34	0.41
16:I:404:LEU:HD13	17:J:174:PHE:CZ	2.56	0.41
16:I:426:ASN:HD22	17:J:313:LYS:HD3	1.86	0.41
17:J:170:HIS:CE1	17:J:173:LEU:CD2	3.03	0.41
17:J:244:ILE:CG2	17:J:291:ILE:HD12	2.50	0.41
18:K:66:ASP:O	18:K:69:LYS:HB2	2.21	0.41
18:K:90:GLN:HB3	18:K:147:VAL:HG13	2.03	0.41
18:K:244:HIS:NE2	18:K:251:PRO:HD3	2.22	0.41
19:L:74:LEU:CD1	20:M:51:LEU:CD1	2.99	0.41
19:L:392:ARG:HE	20:M:339:ARG:HH22	1.68	0.41
20:M:49:GLN:NE2	20:M:53:HIS:NE2	2.63	0.41
20:M:176:PRO:O	20:M:237:ALA:HB2	2.20	0.41
20:M:309:LEU:HD22	20:M:342:ARG:HD3	2.02	0.41
20:M:319:ASP:CB	20:M:322:LYS:HZ1	2.21	0.41
21:N:313:LEU:HD11	21:N:703:GLN:NE2	2.36	0.41
21:N:514:THR:HG21	21:N:546:LEU:CB	2.33	0.41
22:O:1:MET:HG3	22:O:37:LEU:HD11	2.02	0.41
22:O:23:HIS:CG	22:O:24:PRO:HD2	2.56	0.41
22:O:48:PHE:CE2	22:O:77:SER:HB3	2.55	0.41
22:O:76:LEU:HD21	22:O:115:ARG:NH1	2.36	0.41
22:O:80:LYS:C	22:O:81:TYR:CD1	2.98	0.41
22:O:127:LEU:HD21	22:O:167:ILE:CG1	2.33	0.41
22:O:296:LEU:HD11	22:O:316:ALA:CB	2.51	0.41
23:P:35:ALA:HB3	23:P:69:ARG:NH1	2.36	0.41
23:P:230:HIS:O	23:P:232:ARG:NH1	2.53	0.41
23:P:429:ILE:CG2	23:P:433:ILE:HD11	2.50	0.41
24:Q:11:ALA:CA	24:Q:26:VAL:HG11	2.50	0.41
24:Q:165:PHE:CG	24:Q:173:SER:OG	2.69	0.41
25:R:72:VAL:HA	25:R:76:GLN:CD	2.45	0.41
25:R:80:GLU:O	25:R:80:GLU:CG	2.69	0.41
25:R:137:LEU:CG	25:R:141:TYR:CE2	3.03	0.41
27:T:85:LEU:CD2	27:T:105:LEU:HD13	2.51	0.41
28:U:36:VAL:CG2	28:U:54:LEU:HD21	2.50	0.41
28:U:107:ASN:OD1	28:U:120:LEU:HD12	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:X:89:LEU:HD13	31:X:97:TYR:CD2	2.55	0.41
33:Z:82:MET:C	33:Z:83:THR:HG23	2.46	0.41
33:Z:96:TYR:CZ	33:Z:100:CYS:SG	3.14	0.41
33:Z:150:GLY:C	33:Z:154:ILE:HD12	2.45	0.41
33:Z:370:SER:HB2	33:Z:390:LEU:HD22	2.03	0.41
33:Z:392:LEU:C	33:Z:394:TYR:HD2	2.29	0.41
33:Z:400:ILE:O	33:Z:404:ASP:OD1	2.39	0.41
33:Z:497:PHE:CD1	33:Z:497:PHE:N	2.88	0.41
1:1:58:ILE:HA	8:A:106:TYR:HE1	1.84	0.41
1:1:123:PRO:HG2	1:1:124:TYR:HD1	1.84	0.41
2:2:48:THR:O	2:2:52:THR:HG23	2.21	0.41
8:A:21:PRO:HD3	9:B:23:TYR:CE1	2.56	0.41
8:A:47:GLY:HA2	8:A:194:ILE:HB	2.03	0.41
8:A:91:ARG:NH1	8:A:95:LEU:CB	2.66	0.41
12:E:166:ARG:H	13:F:60:GLN:NE2	2.18	0.41
13:F:121:GLN:HG2	14:G:129:ARG:HB3	2.03	0.41
17:J:186:ILE:CG2	17:J:313:LYS:HG3	2.50	0.41
19:L:88:TYR:CD1	20:M:62:ILE:HD13	2.56	0.41
19:L:98:LEU:HD22	20:M:156:LEU:CD2	2.32	0.41
21:N:318:LYS:HZ3	21:N:348:PHE:HA	1.83	0.41
21:N:336:ASN:OD1	21:N:340:HIS:CD2	2.74	0.41
22:O:27:GLU:O	22:O:31:LYS:HG3	2.21	0.41
22:O:41:LEU:HD21	22:O:82:LEU:HD21	2.01	0.41
22:O:83:LEU:O	22:O:86:LEU:HB2	2.19	0.41
22:O:272:VAL:HG13	22:O:273:GLN:N	2.35	0.41
23:P:306:ASN:ND2	23:P:349:ASN:CB	2.84	0.41
23:P:311:TRP:CD2	23:P:345:VAL:HG21	2.56	0.41
23:P:352:VAL:HG23	23:P:353:ILE:N	2.35	0.41
24:Q:151:TYR:CZ	24:Q:187:LYS:HG3	2.56	0.41
24:Q:387:TYR:CG	24:Q:402:THR:OG1	2.65	0.41
25:R:67:CYS:SG	25:R:92:ILE:HG12	2.61	0.41
26:S:171:TYR:OH	26:S:176:LEU:CD1	2.69	0.41
27:T:86:LYS:HE2	27:T:128:TYR:CZ	2.56	0.41
27:T:88:TYR:HA	27:T:94:HIS:NE2	2.35	0.41
28:U:36:VAL:HG23	28:U:54:LEU:CG	2.51	0.41
33:Z:532:HIS:HA	33:Z:535:VAL:HG23	2.02	0.41
33:Z:534:PHE:CA	33:Z:573:LEU:HD22	2.47	0.41
33:Z:811:SER:O	33:Z:815:MET:HG3	2.21	0.41
33:Z:874:ASN:ND2	33:Z:877:THR:H	2.19	0.41
1:1:4:MET:CE	1:1:159:LEU:CD2	2.85	0.40
1:1:59:VAL:CG1	1:1:82:PHE:CZ	2.81	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:65:LEU:HD13	8:A:99:ALA:HA	2.03	0.40
6:6:192:GLY:O	6:6:210:LEU:HD12	2.22	0.40
9:B:148:TYR:CD1	9:B:158:PRO:HB3	2.56	0.40
18:K:285:GLN:C	18:K:286:THR:HG22	2.46	0.40
18:K:423:LYS:O	18:K:424:PHE:HB2	2.21	0.40
22:O:340:SER:OG	23:P:358:SER:HB2	2.21	0.40
23:P:119:ILE:O	23:P:126:THR:HG23	2.20	0.40
25:R:31:PHE:CG	25:R:320:LYS:HG2	2.56	0.40
27:T:147:LYS:O	27:T:151:TRP:HD1	2.05	0.40
27:T:151:TRP:CZ3	27:T:159:LYS:HD3	2.55	0.40
28:U:119:LEU:HD11	28:U:136:ALA:HB1	2.03	0.40
29:V:216:LEU:O	29:V:217:HIS:HB2	2.21	0.40
30:W:10:ILE:HD12	30:W:51:LEU:HD11	2.02	0.40
30:W:141:ILE:HD12	30:W:158:ILE:HG12	2.02	0.40
31:X:10:PHE:HB2	31:X:33:ILE:HG23	2.02	0.40
31:X:89:LEU:HD13	31:X:97:TYR:HD2	1.87	0.40
33:Z:490:ILE:HG21	33:Z:526:ALA:HA	2.02	0.40
4:4:106:TYR:CE2	4:4:108:LYS:HA	2.56	0.40
7:7:8:TYR:CE1	7:7:11:GLY:C	2.98	0.40
7:7:45:ILE:HG21	7:7:52:MET:HG3	2.03	0.40
7:7:49:ILE:HD12	7:7:52:MET:CE	2.51	0.40
9:B:92:VAL:HG11	9:B:113:GLU:CG	2.50	0.40
10:C:115:LEU:O	10:C:119:LYS:HG3	2.20	0.40
12:E:147:HIS:ND1	12:E:153:TYR:CD2	2.89	0.40
13:F:27:GLU:HG2	13:F:31:GLN:HE21	1.87	0.40
19:L:235:VAL:O	19:L:238:THR:HG22	2.22	0.40
19:L:335:PRO:HA	19:L:338:LEU:HB2	2.02	0.40
20:M:257:GLY:O	20:M:260:ALA:HB3	2.22	0.40
21:N:358:LYS:HB3	29:V:181:ASN:CB	2.52	0.40
23:P:136:ARG:NE	23:P:163:LEU:CD2	2.84	0.40
24:Q:302:VAL:HG13	24:Q:314:PHE:CE1	2.55	0.40
25:R:350:LEU:HB2	25:R:388:VAL:HG23	2.03	0.40
30:W:104:LYS:C	30:W:105:VAL:HG23	2.47	0.40
31:X:29:VAL:HG13	31:X:61:LEU:HD13	2.04	0.40
33:Z:298:PHE:CE2	33:Z:341:TYR:CZ	3.08	0.40
33:Z:887:GLY:CA	33:Z:900:LEU:HD13	2.51	0.40
2:2:75:ARG:HB3	2:2:77:VAL:HG22	2.04	0.40
3:3:5:ALA:HA	3:3:13:ALA:O	2.22	0.40
4:4:44:SER:OG	4:4:102:LEU:HB2	2.21	0.40
7:7:62:LEU:HD11	7:7:66:ASN:HD21	1.86	0.40
9:B:43:VAL:HB	9:B:214:ILE:HB	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:B:211:LEU:C	9:B:211:LEU:HD23	2.45	0.40
10:C:118:ILE:HG21	10:C:122:TYR:OH	2.21	0.40
11:D:151:GLU:OE1	11:D:155:ILE:HD11	2.22	0.40
11:D:174:PHE:CE2	11:D:198:SER:HB2	2.56	0.40
13:F:156:LEU:HD21	14:G:58:LEU:HD23	1.97	0.40
14:G:51:LYS:HA	14:G:65:LYS:NZ	2.37	0.40
15:H:210:ASP:CB	15:H:258:LEU:HD13	2.49	0.40
17:J:164:ILE:O	17:J:289:LYS:HE3	2.22	0.40
18:K:141:ARG:HE	29:V:148:LYS:NZ	2.20	0.40
19:L:176:GLY:HA3	19:L:237:ALA:HB2	2.04	0.40
21:N:245:LEU:HD21	21:N:254:SER:CB	2.51	0.40
21:N:338:PHE:CZ	21:N:749:LEU:HD12	2.55	0.40
21:N:514:THR:HG21	21:N:546:LEU:CG	2.40	0.40
21:N:627:ILE:CG2	21:N:717:LEU:CD2	2.96	0.40
26:S:388:ILE:HG21	26:S:422:MET:CE	2.51	0.40
28:U:131:GLY:C	29:V:231:GLU:HG2	2.47	0.40
28:U:280:ASN:OD1	29:V:291:ASN:HB3	2.22	0.40
29:V:47:MET:CE	29:V:73:GLN:HB3	2.44	0.40
31:X:30:GLN:HB3	31:X:54:GLU:HB2	2.01	0.40
33:Z:373:GLY:HA3	33:Z:406:TRP:CH2	2.56	0.40
33:Z:381:LEU:CG	33:Z:385:PHE:CE2	3.04	0.40
33:Z:473:LEU:CD2	33:Z:477:TYR:CE2	3.04	0.40
33:Z:737:ALA:HB1	33:Z:775:MET:CG	2.50	0.40
1:1:87:TYR:HE1	7:7:51:ASP:OD1	2.05	0.40
1:1:124:TYR:CD1	1:1:142:PHE:CE1	3.09	0.40
3:3:41:PHE:CD1	3:3:181:ILE:HD13	2.56	0.40
5:5:32:LYS:HE2	5:5:35:ILE:CG1	2.43	0.40
6:6:2:THR:HG21	6:6:133:ALA:HB3	2.04	0.40
11:D:43:VAL:HG23	11:D:191:CYS:SG	2.61	0.40
12:E:44:GLU:OE1	12:E:192:THR:HA	2.21	0.40
12:E:147:HIS:ND1	12:E:153:TYR:N	2.70	0.40
13:F:135:ILE:HG22	13:F:144:LEU:CD1	2.52	0.40
16:I:221:LEU:HD12	16:I:325:ILE:CG2	2.52	0.40
19:L:95:ILE:HD13	20:M:68:LYS:HD2	2.04	0.40
20:M:299:ARG:HG3	20:M:300:GLU:N	2.37	0.40
20:M:401:ILE:HG21	20:M:417:GLU:OE1	2.22	0.40
21:N:239:LEU:CD2	21:N:276:GLU:HB3	2.51	0.40
22:O:167:ILE:CG2	22:O:168:THR:N	2.84	0.40
22:O:297:ILE:HG13	22:O:308:LEU:HD11	2.04	0.40
23:P:229:LEU:CD2	23:P:330:GLY:CA	2.93	0.40
23:P:328:ALA:O	23:P:329:PHE:HB2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:R:109:LYS:O	25:R:113:LEU:HD23	2.21	0.40
25:R:312:TYR:O	25:R:316:LEU:HB2	2.21	0.40
26:S:244:ASN:ND2	27:T:92:ASN:CB	2.83	0.40
26:S:415:SER:HB3	27:T:159:LYS:NZ	2.36	0.40
33:Z:71:LEU:HD13	33:Z:92:LEU:HD22	2.03	0.40
33:Z:466:GLU:O	33:Z:467:VAL:HG23	2.21	0.40
33:Z:466:GLU:C	33:Z:467:VAL:HG23	2.47	0.40
1:1:35:THR:OG1	1:1:45:ARG:NE	2.42	0.40
4:4:155:GLU:O	4:4:159:LEU:HG	2.22	0.40
7:7:6:MET:HE1	7:7:150:VAL:HG11	2.04	0.40
7:7:93:TYR:O	7:7:96:ARG:HG2	2.21	0.40
8:A:91:ARG:HH12	8:A:95:LEU:CA	2.33	0.40
9:B:12:PHE:CD2	9:B:16:GLY:O	2.75	0.40
11:D:73:LEU:C	11:D:73:LEU:HD23	2.47	0.40
11:D:146:LYS:HB3	11:D:148:TYR:HE2	1.86	0.40
12:E:165:TYR:CB	12:E:167:TYR:OH	2.44	0.40
13:F:110:HIS:HA	14:G:85:ARG:HD3	2.03	0.40
13:F:173:GLU:CG	14:G:57:LEU:HD11	2.50	0.40
15:H:66:LYS:O	15:H:70:LYS:HG3	2.21	0.40
15:H:294:LEU:HD21	15:H:308:PHE:HE1	1.86	0.40
15:H:312:ASP:HB3	16:I:300:ARG:NH1	2.36	0.40
15:H:389:PHE:CZ	15:H:419:LEU:CD2	3.04	0.40
15:H:425:GLU:OE1	15:H:428:MET:HE3	2.21	0.40
16:I:105:SER:CB	17:J:94:TYR:CD2	3.04	0.40
16:I:424:MET:O	16:I:428:VAL:HG23	2.21	0.40
18:K:99:PHE:HE2	18:K:133:PRO:HA	1.84	0.40
19:L:157:ARG:HG2	19:L:158:ILE:N	2.36	0.40
19:L:254:LYS:CG	20:M:256:ILE:HG12	2.52	0.40
20:M:227:GLY:O	20:M:231:LEU:HG	2.20	0.40
20:M:407:GLN:CD	20:M:411:LYS:HZ2	2.29	0.40
21:N:622:ALA:HA	21:N:641:LEU:CD2	2.51	0.40
21:N:759:ILE:HG23	21:N:903:VAL:CG1	2.22	0.40
23:P:163:LEU:C	23:P:163:LEU:CD1	2.95	0.40
24:Q:10:GLU:C	24:Q:14:LEU:HD23	2.31	0.40
28:U:49:THR:HB	29:V:39:LYS:CE	2.51	0.40
33:Z:394:TYR:OH	33:Z:859:LYS:HB2	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	1	203/215 (94%)	189 (93%)	12 (6%)	2 (1%)	12	49
2	2	221/261 (85%)	209 (95%)	9 (4%)	3 (1%)	9	40
3	3	202/205 (98%)	179 (89%)	14 (7%)	9 (4%)	2	17
4	4	196/198 (99%)	178 (91%)	15 (8%)	3 (2%)	8	40
5	5	210/287 (73%)	199 (95%)	8 (4%)	3 (1%)	9	40
6	6	220/241 (91%)	207 (94%)	9 (4%)	4 (2%)	6	34
7	7	231/266 (87%)	208 (90%)	18 (8%)	5 (2%)	5	29
8	A	241/252 (96%)	222 (92%)	16 (7%)	3 (1%)	10	44
9	B	248/250 (99%)	235 (95%)	11 (4%)	2 (1%)	16	54
10	C	243/258 (94%)	229 (94%)	13 (5%)	1 (0%)	30	67
11	D	240/254 (94%)	222 (92%)	15 (6%)	3 (1%)	9	42
12	E	241/260 (93%)	224 (93%)	11 (5%)	6 (2%)	4	26
13	F	231/234 (99%)	216 (94%)	13 (6%)	2 (1%)	14	51
14	G	243/288 (84%)	224 (92%)	17 (7%)	2 (1%)	16	54
15	H	351/467 (75%)	297 (85%)	37 (10%)	17 (5%)	2	16
16	I	358/437 (82%)	322 (90%)	28 (8%)	8 (2%)	5	29
17	J	371/405 (92%)	336 (91%)	24 (6%)	11 (3%)	3	23
18	K	377/428 (88%)	343 (91%)	23 (6%)	11 (3%)	3	23
19	L	357/437 (82%)	320 (90%)	28 (8%)	9 (2%)	4	26
20	M	363/434 (84%)	331 (91%)	22 (6%)	10 (3%)	4	24
21	N	843/945 (89%)	772 (92%)	45 (5%)	26 (3%)	3	22
22	O	385/393 (98%)	332 (86%)	26 (7%)	27 (7%)	1	11
23	P	413/445 (93%)	377 (91%)	19 (5%)	17 (4%)	2	18
24	Q	429/434 (99%)	398 (93%)	20 (5%)	11 (3%)	4	25
25	R	398/429 (93%)	351 (88%)	36 (9%)	11 (3%)	4	24

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	S	351/523 (67%)	318 (91%)	19 (5%)	14 (4%)	2	18
27	T	270/274 (98%)	233 (86%)	25 (9%)	12 (4%)	2	17
28	U	245/338 (72%)	237 (97%)	5 (2%)	3 (1%)	10	44
29	V	239/306 (78%)	214 (90%)	15 (6%)	10 (4%)	2	17
30	W	195/268 (73%)	171 (88%)	12 (6%)	12 (6%)	1	13
31	X	125/156 (80%)	83 (66%)	18 (14%)	24 (19%)	0	2
32	Y	17/89 (19%)	17 (100%)	0	0	100	100
33	Z	807/993 (81%)	714 (88%)	59 (7%)	34 (4%)	2	17
All	All	10064/11670 (86%)	9107 (90%)	642 (6%)	315 (3%)	5	22

All (315) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	2	196	ARG
3	3	194	ARG
5	5	31	VAL
7	7	209	MET
10	C	224	GLU
11	D	54	LEU
11	D	219	SER
15	H	76	LEU
15	H	188	PRO
15	H	286	GLU
16	I	125	MET
16	I	154	MET
18	K	426	PHE
19	L	297	ALA
20	M	74	GLN
20	M	169	ALA
20	M	319	ASP
21	N	217	MET
21	N	308	ASN
21	N	434	SER
21	N	634	LEU
21	N	669	GLU
21	N	761	ILE
21	N	872	THR
21	N	874	ILE
21	N	904	VAL

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Mol	Chain	Res	Type
21	N	914	VAL
22	O	16	MET
22	O	18	ALA
22	O	34	GLU
22	O	41	LEU
22	O	122	HIS
22	O	184	ASP
22	O	203	THR
22	O	227	ILE
22	O	247	ASN
22	O	304	ASN
22	O	353	VAL
23	P	287	ASP
23	P	328	ALA
24	Q	2	SER
24	Q	35	SER
24	Q	167	LYS
25	R	244	THR
26	S	225	HIS
26	S	259	TYR
26	S	450	ASN
27	T	242	LYS
27	T	243	ALA
27	T	246	GLU
28	U	130	VAL
28	U	133	PRO
29	V	159	ILE
29	V	163	ALA
29	V	181	ASN
29	V	197	TYR
29	V	204	HIS
30	W	46	GLU
30	W	105	VAL
30	W	147	ILE
31	X	24	CYS
31	X	28	PRO
31	X	54	GLU
31	X	57	VAL
31	X	78	ILE
31	X	80	SER
31	X	116	ALA
31	X	117	LYS

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Mol	Chain	Res	Type
33	Z	60	ASP
33	Z	127	SER
33	Z	366	LYS
33	Z	889	VAL
33	Z	963	ALA
1	1	92	ASN
3	3	94	TYR
3	3	107	SER
4	4	152	THR
5	5	208	ASN
6	6	40	ASN
7	7	69	ASP
8	A	37	GLN
8	A	160	ALA
9	B	3	ASP
15	H	143	ALA
15	H	170	GLU
15	H	177	ASP
15	H	197	MET
15	H	343	PHE
17	J	129	LYS
17	J	226	GLY
17	J	258	VAL
18	K	144	ASN
18	K	171	TYR
20	M	240	ASN
20	M	282	GLU
20	M	316	SER
21	N	670	LYS
21	N	718	GLU
21	N	903	VAL
22	O	15	ARG
22	O	73	ILE
22	O	108	GLU
22	O	117	ASN
22	O	246	SER
23	P	86	HIS
23	P	89	LEU
23	P	108	LYS
23	P	231	LYS
23	P	283	LYS
23	P	284	ILE

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Mol	Chain	Res	Type
23	P	323	ASN
23	P	325	ASP
24	Q	41	ALA
24	Q	231	ASP
25	R	162	ILE
25	R	394	ASP
25	R	421	VAL
26	S	144	LEU
26	S	167	LEU
26	S	244	ASN
26	S	300	ALA
29	V	165	ILE
30	W	83	GLY
30	W	103	ASN
30	W	193	GLU
31	X	12	ALA
31	X	15	CYS
31	X	38	ASN
31	X	65	SER
31	X	114	LEU
33	Z	373	GLY
33	Z	523	ALA
33	Z	539	ASN
33	Z	553	ARG
33	Z	558	LEU
33	Z	803	ALA
33	Z	888	LEU
33	Z	928	ARG
1	1	19	ARG
2	2	182	LYS
3	3	31	PHE
4	4	122	GLY
6	6	121	SER
7	7	221	GLY
11	D	39	LYS
12	E	53	ARG
13	F	203	ASP
14	G	71	ARG
14	G	185	GLY
15	H	145	TYR
15	H	303	ALA
16	I	150	HIS

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Mol	Chain	Res	Type
16	I	285	ASP
16	I	291	ARG
16	I	328	THR
17	J	142	VAL
17	J	249	GLU
17	J	250	ILE
17	J	263	GLY
18	K	289	ASP
18	K	417	THR
19	L	115	GLU
19	L	125	PRO
19	L	319	GLY
19	L	409	HIS
20	M	290	ARG
21	N	17	GLN
21	N	307	LYS
21	N	310	ASP
21	N	739	PHE
21	N	774	ASN
21	N	863	SER
22	O	42	SER
22	O	82	LEU
22	O	119	SER
22	O	318	HIS
23	P	289	ASN
23	P	306	ASN
23	P	329	PHE
24	Q	38	SER
24	Q	129	LYS
25	R	37	LYS
25	R	222	ARG
25	R	326	ALA
25	R	397	ASN
26	S	327	ILE
27	T	73	PHE
27	T	93	ASN
27	T	210	PHE
27	T	240	LYS
29	V	115	GLY
29	V	162	GLY
29	V	167	ASN
30	W	12	ASN

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Mol	Chain	Res	Type
30	W	151	THR
30	W	163	ASN
31	X	37	PRO
31	X	94	ASN
33	Z	262	VAL
33	Z	277	GLU
33	Z	333	GLY
33	Z	340	LEU
33	Z	516	THR
33	Z	612	GLY
33	Z	917	ASN
3	3	106	LYS
3	3	184	ASP
5	5	19	ARG
6	6	157	GLY
7	7	2	SER
8	A	34	ALA
12	E	123	PHE
15	H	252	PRO
15	H	255	GLY
15	H	325	GLY
16	I	320	GLY
17	J	90	PRO
17	J	110	SER
18	K	397	LYS
19	L	282	GLU
21	N	744	PRO
21	N	896	PHE
22	O	20	PRO
23	P	53	ALA
23	P	232	ARG
24	Q	42	ALA
24	Q	273	ASN
25	R	182	ASN
25	R	241	ILE
26	S	146	LEU
26	S	150	LYS
26	S	284	LEU
26	S	307	LEU
27	T	172	SER
27	T	251	HIS
27	T	254	ASP

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Mol	Chain	Res	Type
30	W	120	ASP
31	X	18	ASN
31	X	21	SER
31	X	115	SER
33	Z	110	ASN
33	Z	190	THR
33	Z	786	SER
2	2	145	ASP
3	3	-5	SER
3	3	148	ASN
7	7	-4	ILE
12	E	34	GLY
12	E	226	ASP
12	E	249	ALA
13	F	4	ASN
16	I	228	GLY
18	K	167	PRO
18	K	333	ARG
18	K	424	PHE
19	L	100	SER
20	M	425	ARG
21	N	87	ASP
22	O	43	GLU
22	O	74	ASN
22	O	307	MET
24	Q	34	ASP
24	Q	354	PHE
26	S	227	ASN
27	T	241	GLU
27	T	250	MET
30	W	22	PRO
31	X	85	ARG
33	Z	81	SER
33	Z	276	ASN
33	Z	341	TYR
33	Z	442	VAL
33	Z	578	GLY
33	Z	609	THR
4	4	150	ASP
12	E	121	LEU
15	H	99	VAL
15	H	176	VAL

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Mol	Chain	Res	Type
15	H	311	ILE
17	J	299	ILE
18	K	288	SER
19	L	286	ILE
21	N	325	PHE
21	N	768	ILE
22	O	357	ILE
23	P	321	VAL
23	P	410	GLN
25	R	81	HIS
26	S	228	GLU
28	U	132	LEU
33	Z	238	ASP
33	Z	467	VAL
33	Z	481	PRO
6	6	153	PRO
22	O	344	VAL
31	X	27	ILE
31	X	84	GLY
3	3	-6	PRO
15	H	183	ILE
19	L	352	PRO
21	N	130	ASP
21	N	353	LEU
29	V	72	PRO
9	B	233	PRO
17	J	223	ILE
30	W	195	GLY
31	X	63	PRO
18	K	152	PRO
20	M	167	VAL
22	O	238	ILE
31	X	56	PRO
33	Z	520	ILE
33	Z	610	GLY
20	M	252	VAL
31	X	77	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%)	169 (100%)	0	100	100
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%)	191 (100%)	1 (0%)	81	83
14	G	201/239 (84%)	201 (100%)	0	100	100
15	H	303/399 (76%)	300 (99%)	3 (1%)	68	78
16	I	319/385 (83%)	317 (99%)	2 (1%)	78	83
17	J	325/352 (92%)	325 (100%)	0	100	100
18	K	334/374 (89%)	334 (100%)	0	100	100
19	L	308/377 (82%)	307 (100%)	1 (0%)	86	86
20	M	315/375 (84%)	314 (100%)	1 (0%)	86	86
21	N	713/797 (90%)	713 (100%)	0	100	100
22	O	363/368 (99%)	363 (100%)	0	100	100
23	P	388/415 (94%)	384 (99%)	4 (1%)	68	78
24	Q	388/391 (99%)	388 (100%)	0	100	100
25	R	351/379 (93%)	350 (100%)	1 (0%)	86	86
26	S	330/489 (68%)	329 (100%)	1 (0%)	86	86
27	T	254/256 (99%)	254 (100%)	0	100	100
28	U	234/308 (76%)	234 (100%)	0	100	100
29	V	217/268 (81%)	217 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	W	171/230 (74%)	169 (99%)	2 (1%)	63	75
31	X	116/144 (81%)	116 (100%)	0	100	100
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%)	8800 (100%)	16 (0%)	85	87

All (16) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
13	F	222	PHE
15	H	166	THR
15	H	326	ASP
15	H	436	LYS
16	I	256	TYR
16	I	257	LEU
19	L	192	GLU
20	M	433	TYR
23	P	244	ILE
23	P	253	ASP
23	P	254	GLU
23	P	288	ASN
25	R	397	ASN
26	S	416	GLU
30	W	21	PHE
30	W	22	PRO

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (207) such sidechains are listed below:

Mol	Chain	Res	Type
2	2	9	ASN
2	2	86	HIS
2	2	172	ASN
2	2	189	ASN
3	3	36	HIS
3	3	136	GLN
4	4	36	GLN
4	4	40	HIS
4	4	85	GLN
4	4	145	HIS
4	4	146	HIS

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Mol	Chain	Res	Type
4	4	165	GLN
5	5	66	HIS
5	5	133	GLN
5	5	179	HIS
5	5	190	ASN
6	6	40	ASN
6	6	46	ASN
6	6	71	ASN
6	6	85	GLN
6	6	146	ASN
6	6	156	ASN
6	6	188	GLN
7	7	66	ASN
7	7	70	ASN
7	7	141	HIS
7	7	144	ASN
8	A	27	GLN
8	A	36	ASN
8	A	41	ASN
8	A	56	GLN
8	A	84	ASN
8	A	209	HIS
9	B	139	HIS
9	B	244	ASN
10	C	31	HIS
10	C	96	GLN
10	C	120	GLN
10	C	125	HIS
10	C	177	GLN
10	C	227	GLN
10	C	233	GLN
11	D	19	GLN
11	D	70	HIS
11	D	94	GLN
11	D	96	HIS
11	D	118	GLN
11	D	167	ASN
11	D	209	ASN
11	D	241	GLN
12	E	23	GLN
12	E	114	GLN
13	F	31	GLN

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Mol	Chain	Res	Type
13	F	60	GLN
13	F	86	ASN
13	F	119	ASN
14	G	20	ASN
14	G	42	ASN
14	G	61	GLN
14	G	67	GLN
14	G	86	HIS
14	G	89	ASN
14	G	120	GLN
14	G	181	HIS
14	G	182	HIS
14	G	203	HIS
14	G	206	ASN
14	G	243	GLN
15	H	265	ASN
15	H	339	GLN
16	I	117	HIS
16	I	410	GLN
16	I	426	ASN
17	J	128	ASN
17	J	156	GLN
17	J	277	ASN
17	J	331	HIS
17	J	379	GLN
18	K	74	HIS
18	K	144	ASN
18	K	285	GLN
18	K	308	GLN
19	L	67	HIS
19	L	73	GLN
19	L	302	GLN
19	L	320	GLN
20	M	65	ASN
20	M	125	GLN
20	M	253	GLN
20	M	302	GLN
20	M	311	GLN
20	M	328	ASN
20	M	362	GLN
20	M	364	HIS
20	M	377	GLN

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Mol	Chain	Res	Type
20	M	412	HIS
20	M	423	GLN
21	N	116	GLN
21	N	226	ASN
21	N	308	ASN
21	N	329	HIS
21	N	340	HIS
21	N	529	GLN
21	N	580	ASN
21	N	666	GLN
21	N	703	GLN
21	N	707	ASN
21	N	738	GLN
21	N	899	ASN
21	N	900	ASN
22	O	40	GLN
22	O	75	GLN
22	O	169	ASN
22	O	244	ASN
22	O	282	GLN
22	O	289	GLN
22	O	323	ASN
22	O	362	GLN
22	O	374	ASN
23	P	239	GLN
23	P	263	HIS
23	P	296	GLN
23	P	315	GLN
23	P	336	HIS
23	P	337	HIS
23	P	342	GLN
23	P	375	GLN
23	P	385	ASN
23	P	410	GLN
23	P	425	HIS
24	Q	54	GLN
24	Q	63	GLN
24	Q	114	GLN
24	Q	150	GLN
24	Q	186	HIS
24	Q	190	ASN
24	Q	213	GLN

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Mol	Chain	Res	Type
24	Q	379	GLN
24	Q	404	ASN
25	R	100	ASN
25	R	136	ASN
25	R	184	GLN
25	R	208	ASN
25	R	323	ASN
25	R	325	HIS
25	R	376	GLN
25	R	385	ASN
25	R	397	ASN
25	R	399	GLN
26	S	143	GLN
26	S	191	HIS
26	S	302	HIS
26	S	311	GLN
26	S	417	GLN
26	S	437	ASN
26	S	438	HIS
26	S	469	ASN
27	T	47	GLN
27	T	80	ASN
27	T	132	HIS
27	T	169	GLN
27	T	170	ASN
27	T	238	GLN
27	T	258	ASN
28	U	70	HIS
28	U	71	ASN
28	U	116	ASN
28	U	193	GLN
28	U	302	GLN
29	V	73	GLN
29	V	133	ASN
29	V	145	GLN
29	V	167	ASN
29	V	181	ASN
29	V	190	HIS
29	V	195	HIS
29	V	204	HIS
30	W	29	GLN
30	W	38	GLN

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Mol	Chain	Res	Type
30	W	44	ASN
30	W	47	ASN
30	W	58	ASN
30	W	92	GLN
30	W	106	GLN
30	W	108	GLN
30	W	162	ASN
33	Z	214	HIS
33	Z	240	ASN
33	Z	307	HIS
33	Z	317	GLN
33	Z	327	GLN
33	Z	380	ASN
33	Z	391	ASN
33	Z	396	ASN
33	Z	429	ASN
33	Z	435	GLN
33	Z	463	HIS
33	Z	475	GLN
33	Z	532	HIS
33	Z	766	HIS
33	Z	823	ASN
33	Z	856	HIS
33	Z	874	ASN
33	Z	897	HIS
33	Z	898	HIS
33	Z	899	GLN
33	Z	917	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry [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
15	H	2
29	V	2
20	M	2
16	I	1
18	K	1
19	L	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	I	252:LEU	C	253:ILE	N	3.25
1	H	279:LEU	C	280:VAL	N	2.88
1	K	242:PHE	C	243:VAL	N	2.46
1	L	251:ILE	C	252:VAL	N	2.09
1	H	285:GLY	C	286:GLU	N	1.97
1	V	290:ASN	C	291:ASN	N	1.83
1	M	257:GLY	C	258:GLU	N	1.69
1	M	251:LEU	C	252:VAL	N	1.20
1	V	282:GLU	C	283:THR	N	1.03

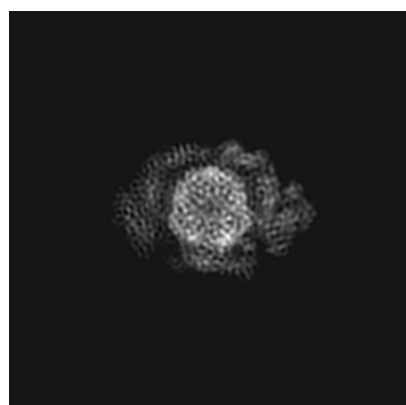
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2596. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



X



Y



Z

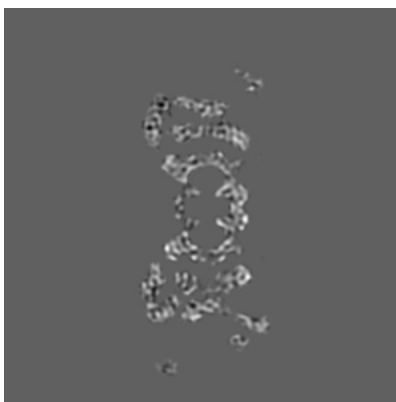
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

6.2.1 Primary map



X Index: 140



Y Index: 140

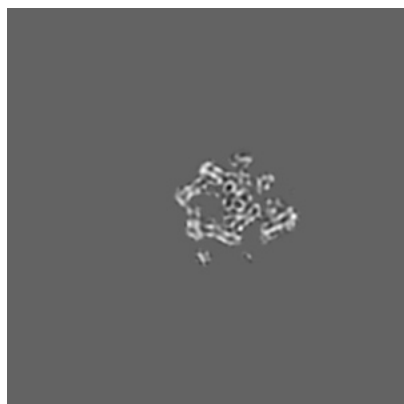


Z Index: 140

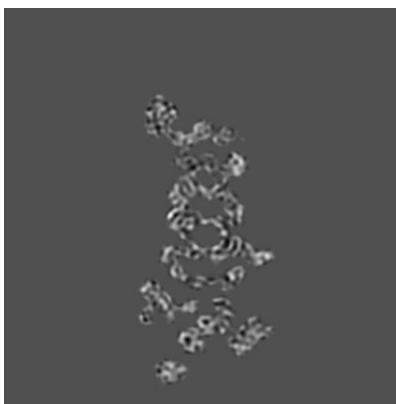
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

6.3.1 Primary map



X Index: 93



Y Index: 149

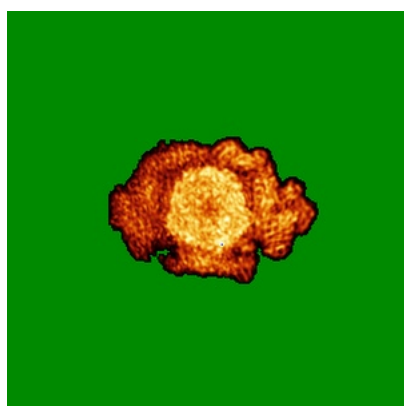


Z Index: 134

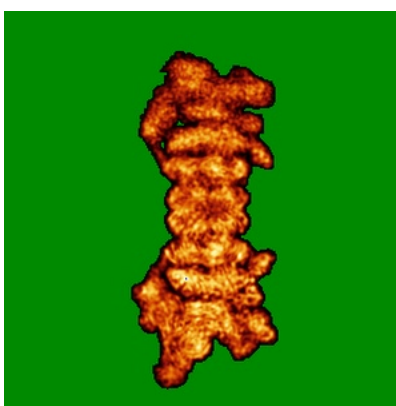
The images above show the largest variance slices of the map in three orthogonal directions.

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

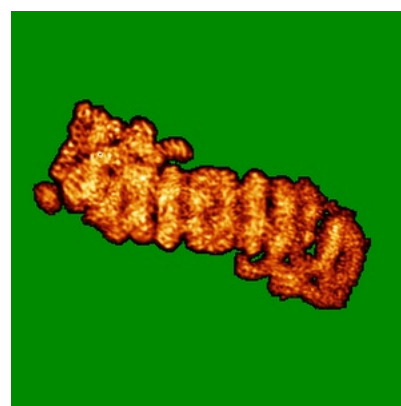
6.4.1 Primary map



X



Y

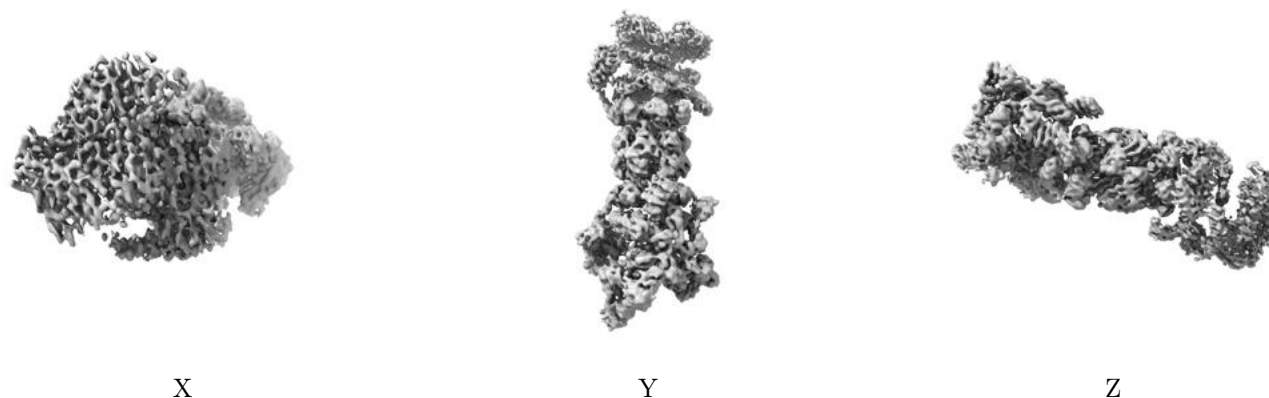


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.81. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

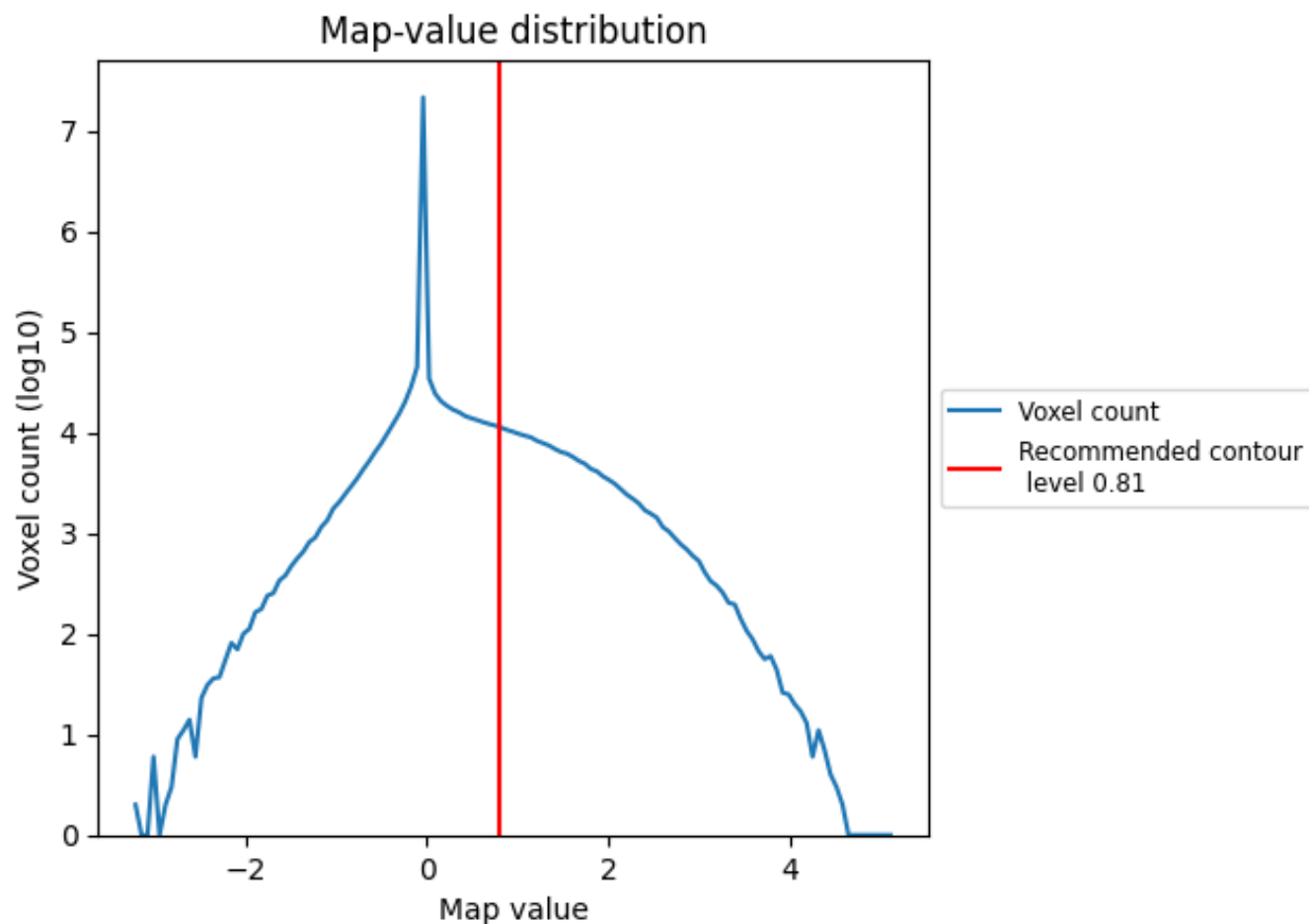
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

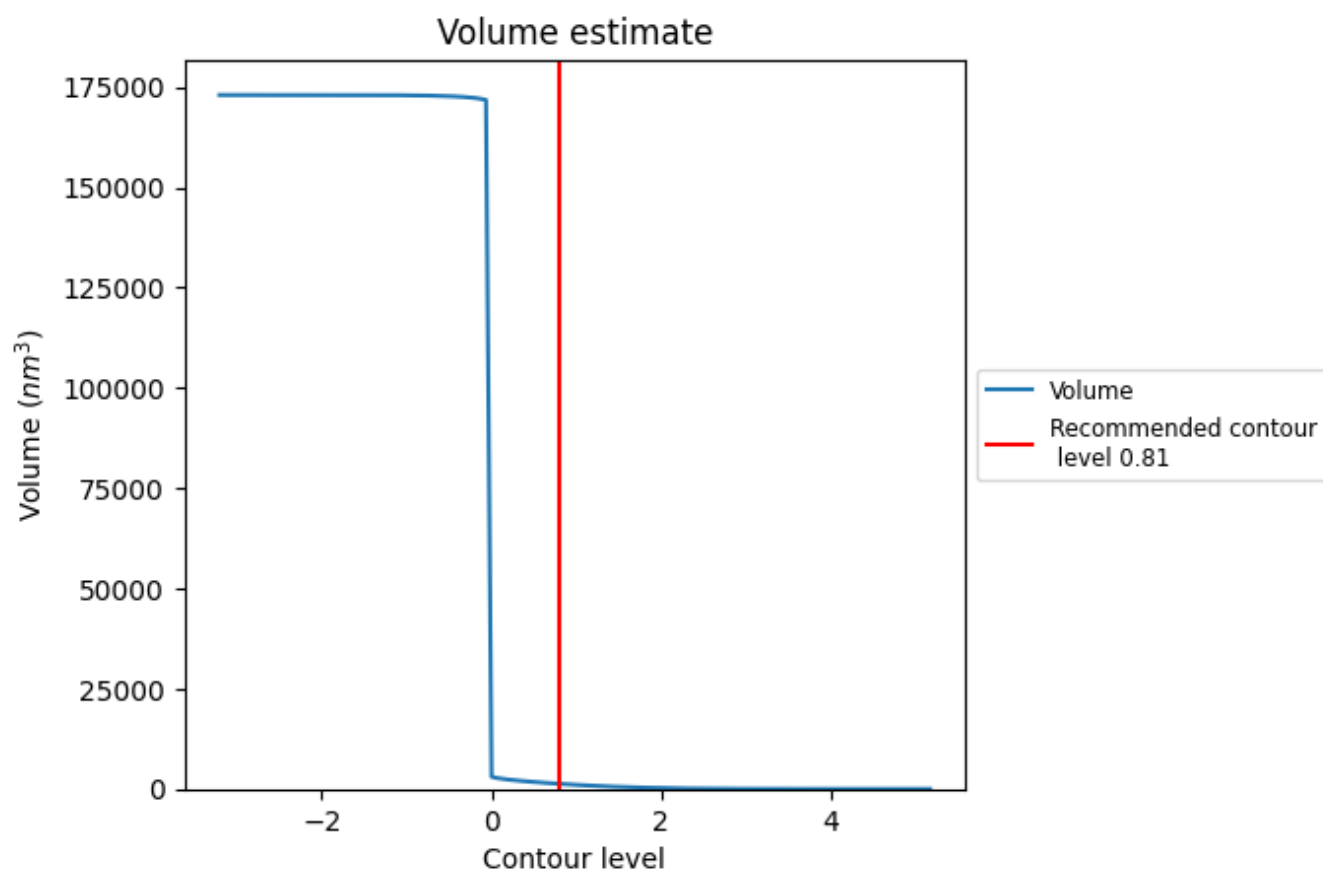
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

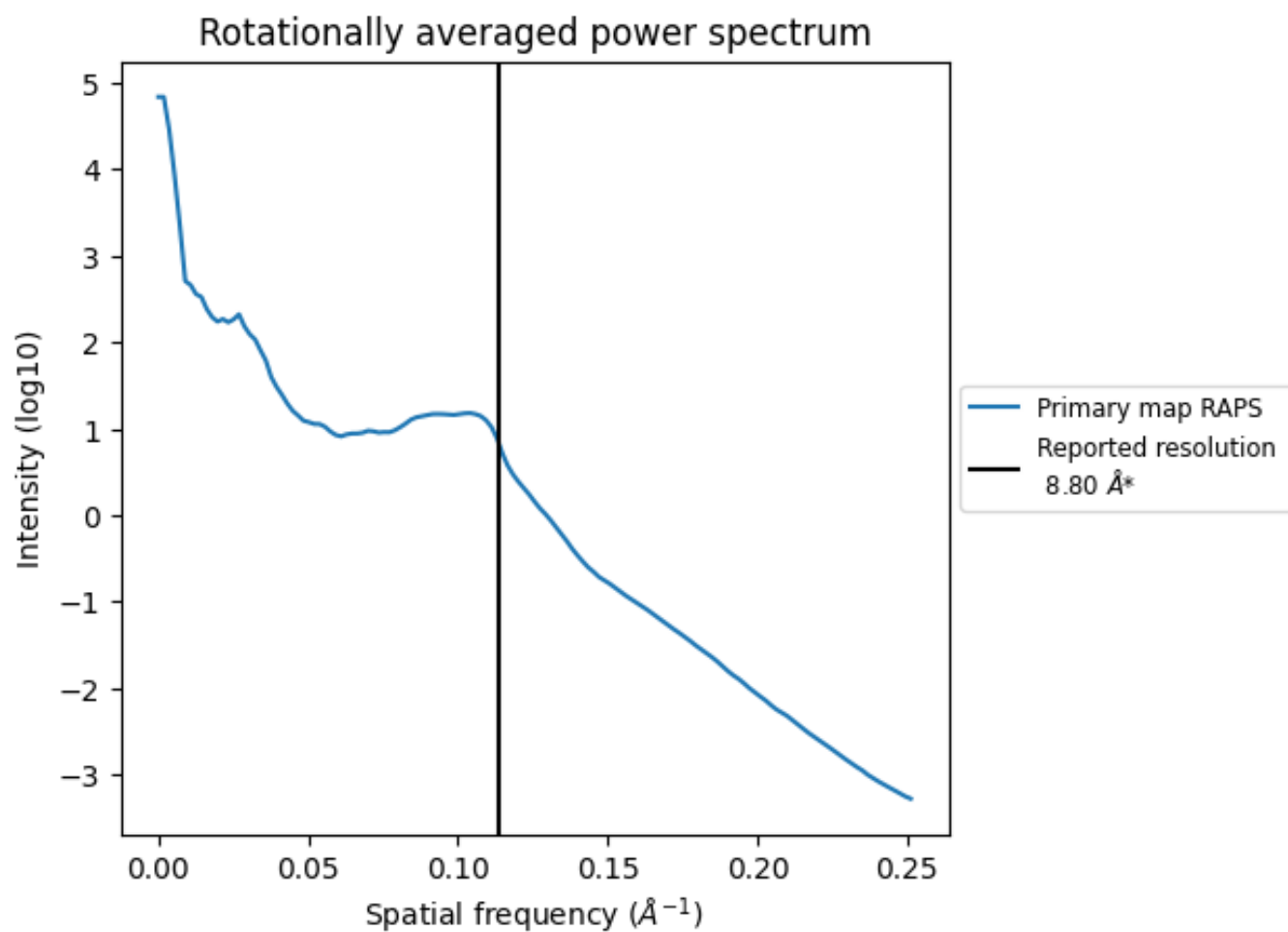
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1269 nm³; this corresponds to an approximate mass of 1146 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 ⓘ



*Reported resolution corresponds to spatial frequency of 0.114 Å⁻¹

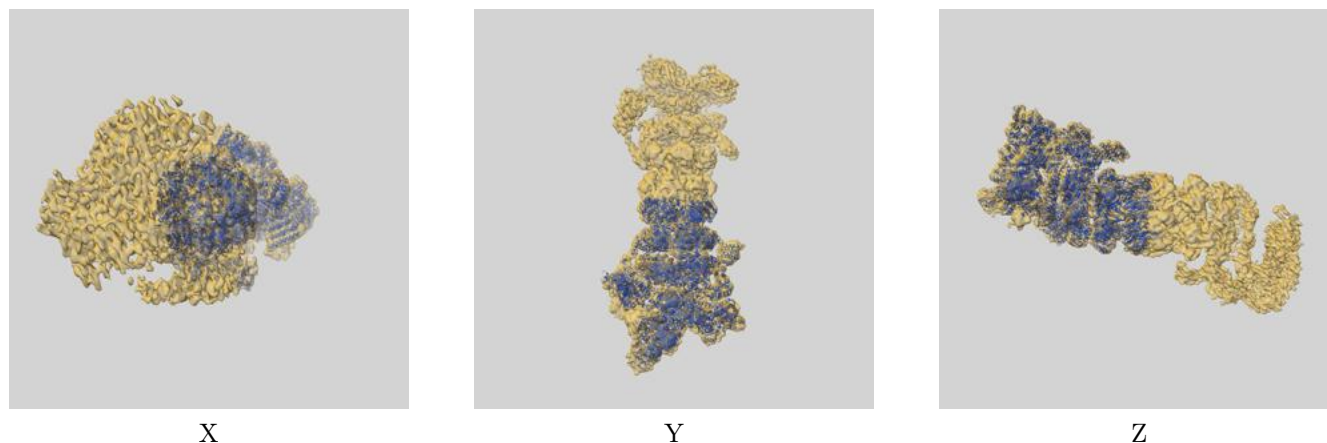
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

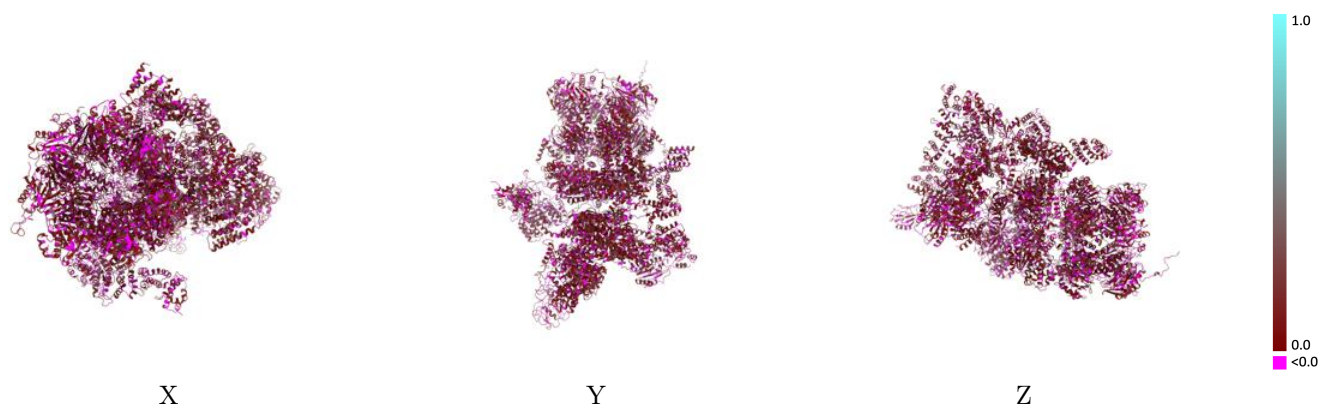
This section contains information regarding the fit between EMDB map EMD-2596 and PDB model 4CR4. Per-residue inclusion information can be found in section [3](#) on page [10](#).

9.1 Map-model overlay [i](#)



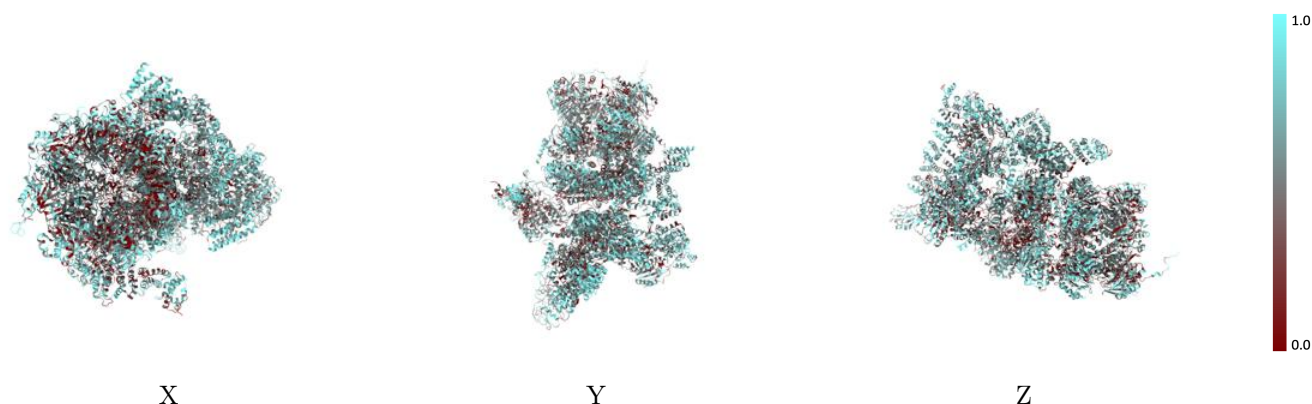
The images above show the 3D surface view of the map at the recommended contour level 0.81 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



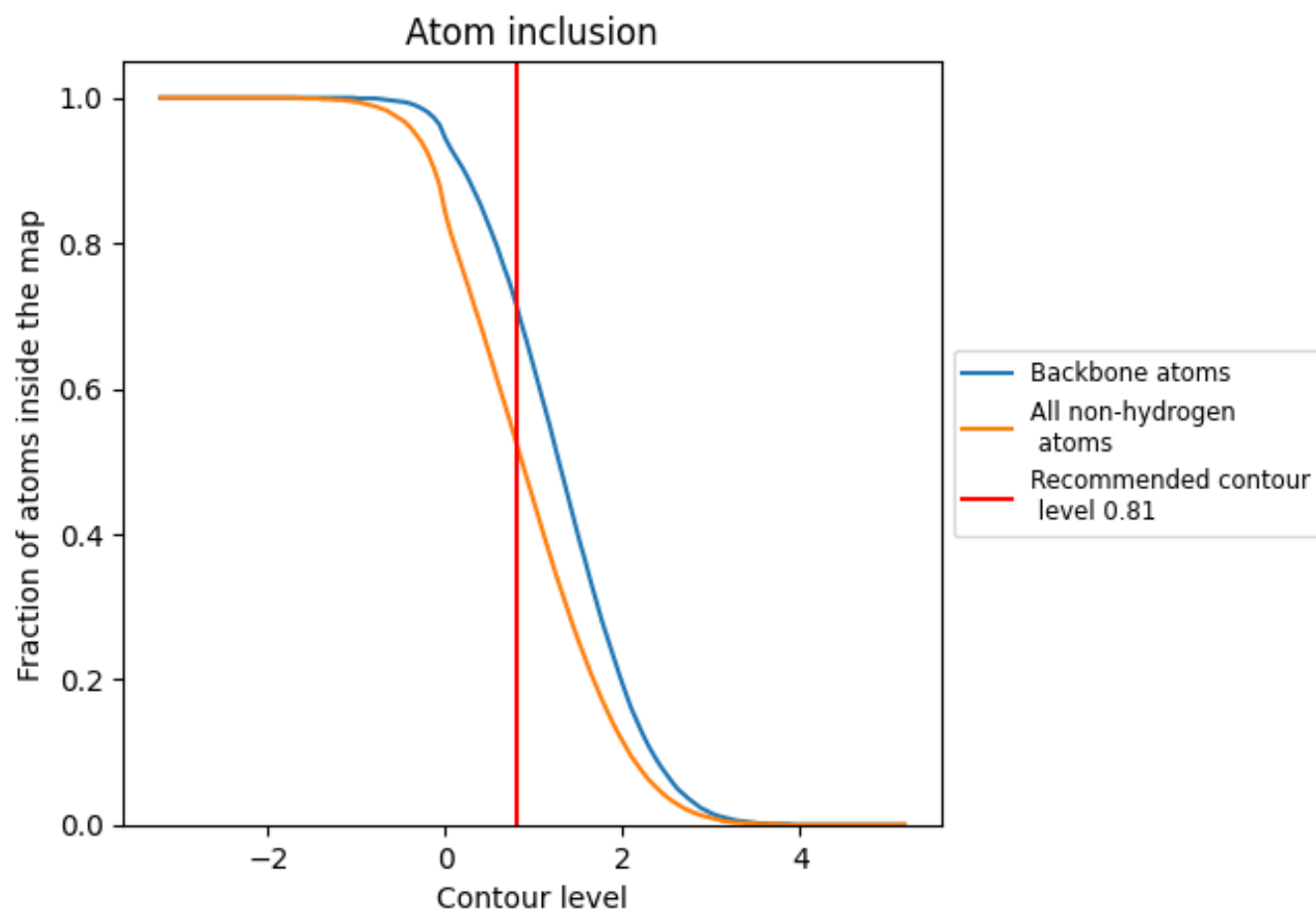
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.81).

9.4 Atom inclusion [i](#)



At the recommended contour level, 71% of all backbone atoms, 52% 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 (0.81) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.5220	 0.0950
1	 0.4600	 0.0620
2	 0.4860	 0.0940
3	 0.4220	 0.0820
4	 0.5320	 0.0980
5	 0.5260	 0.0990
6	 0.5070	 0.0980
7	 0.4880	 0.0750
A	 0.4790	 0.1150
B	 0.4390	 0.0940
C	 0.4990	 0.0930
D	 0.4990	 0.1020
E	 0.4870	 0.0970
F	 0.5000	 0.0860
G	 0.5300	 0.0960
H	 0.5230	 0.0860
I	 0.4190	 0.0790
J	 0.4720	 0.0910
K	 0.4440	 0.1040
L	 0.5170	 0.0990
M	 0.4580	 0.0890
N	 0.5620	 0.1060
O	 0.6040	 0.0960
P	 0.6550	 0.1040
Q	 0.6180	 0.1110
R	 0.6140	 0.1040
S	 0.4910	 0.0920
T	 0.6140	 0.1080
U	 0.5270	 0.1130
V	 0.4650	 0.0920
W	 0.4620	 0.0690
X	 0.5660	 0.0510
Y	 0.6990	 0.1450
Z	 0.5370	 0.0900

