Full wwPDB EM Validation Report

Mar 8, 2026 – 06:44 AM UTC

PDB ID	:	5LN3 / pdb_00005ln3
EMDB ID	:	EMD-4089
Title	:	The human 26S Proteasome at 6.8 Ang.
Authors	:	Schweitzer, A.; Beck, F.; Sakata, E.; Unverdorben, P.
Deposited on	:	2016-08-03
Resolution	:	6.80 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:

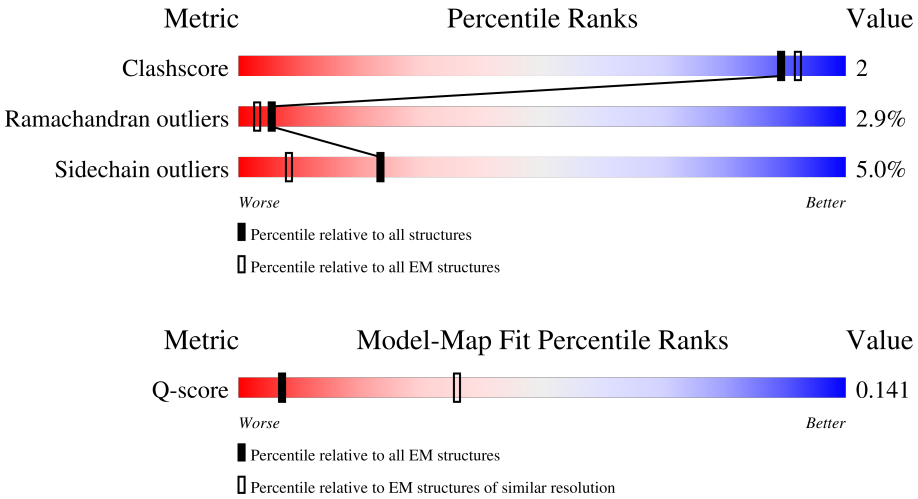
EMDB validation analysis	:	0.0.1.dev132
MolProbity	:	4-5-2 with Phenix2.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & 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 6.80 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	503 (6.30 - 7.30)

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 <=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	Z	908	79% 33% 48% 6% 13%
2	1	239	27% 45% 39% 5% 10%
3	2	277	15% 37% 37% 5% • 20%
4	3	205	32% 43% 46% 10% •

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Mol	Chain	Length	Quality of chain
5	4	201	20% 30% 57% 9%
6	5	263	19% 30% 40% 26%
7	6	241	25% 34% 46% 8% 12%
8	7	264	27% 34% 43% 5% 17%
9	A	246	17% 40% 48% 8%
10	B	234	22% 38% 56% 6%
11	C	261	24% 40% 51% 7%
12	D	248	26% 44% 50% 5%
13	E	241	23% 39% 50% 6%
14	F	263	20% 34% 45% 9% 11%
15	G	255	27% 41% 46% 7% 5%
16	H	433	33% 32% 47% 8% 13%
17	I	440	32% 31% 46% 5% 18%
18	J	406	28% 36% 49% 7% 8%
19	K	418	28% 36% 46% 9% 9%
20	L	389	32% 37% 48% 8% 7%
21	M	439	35% 35% 43% 10% 11%
22	N	953	37% 34% 47% 6% 12%
23	O	376	30% 38% 54% 7%
24	P	456	27% 34% 51% 7% 7%
25	Q	422	64% 42% 51% 6%
26	R	389	27% 35% 52% 9%
27	S	534	21% 23% 35% 5% 37%
28	T	350	26% 33% 35% 5% 28%
29	U	324	21% 28% 47% 8% 16%

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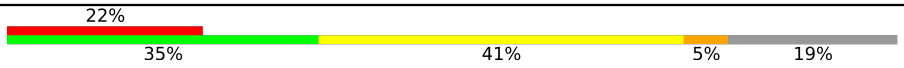
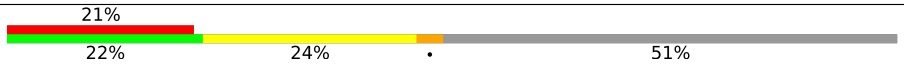
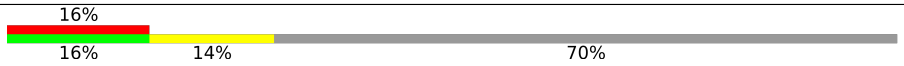
Mol	Chain	Length	Quality of chain
30	V	310	
31	W	377	
32	Y	70	

2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 78323 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 26S proteasome non-ATPase regulatory subunit 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	Z	794	6146	3893	1043	1166	44	0	0

- Molecule 2 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	1	214	1607	1006	274	315	12	0	0

- Molecule 3 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	2	222	1676	1055	285	324	12	0	0

- Molecule 4 is a protein called Proteasome subunit beta type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	3	205	1599	1018	266	295	20	0	0

- Molecule 5 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	4	194	1554	994	265	286	9	0	0

- Molecule 6 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	5	195	1509	951	265	284	9	0	0

- Molecule 7 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	6	213	Total	C	N	O	S	0	0
			1654	1047	284	313	10		

- Molecule 8 is a protein called Proteasome subunit beta type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	7	218	Total	C	N	O	S	0	0
			1705	1076	293	324	12		

- Molecule 9 is a protein called Proteasome subunit alpha type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	A	239	Total	C	N	O	S	0	0
			1874	1190	312	359	13		

- Molecule 10 is a protein called Proteasome subunit alpha type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	B	234	Total	C	N	O	S	0	0
			1826	1166	309	344	7		

- Molecule 11 is a protein called Proteasome subunit alpha type-4.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	C	261	Total	C	N	O	S	0	0
			2069	1304	356	398	11		

- Molecule 12 is a protein called Proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	D	248	Total	C	N	O	S	0	0
			1961	1229	349	377	6		

- Molecule 13 is a protein called Proteasome subunit alpha type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	E	232	Total	C	N	O	S	0	0
			1770	1112	293	354	11		

- Molecule 14 is a protein called Proteasome subunit alpha type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	F	233	Total	C	N	O	S	0	0
			1837	1153	331	341	12		

- Molecule 15 is a protein called Proteasome subunit alpha type-3.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	G	242	Total	C	N	O	S	0	0
			1894	1200	323	360	11		

- Molecule 16 is a protein called 26S protease regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	H	378	Total	C	N	O	S	0	0
			2962	1865	522	558	17		

- Molecule 17 is a protein called 26S protease regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	I	362	Total	C	N	O	S	0	0
			2840	1782	483	562	13		

- Molecule 18 is a protein called 26S protease regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	J	373	Total	C	N	O	S	0	0
			2929	1839	525	548	17		

- Molecule 19 is a protein called 26S protease regulatory subunit 6B.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	K	379	Total	C	N	O	S	0	0
			3032	1919	523	577	13		

- Molecule 20 is a protein called 26S protease regulatory subunit 10B.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	L	361	Total	C	N	O	S	0	0
			2862	1797	512	537	16		

- Molecule 21 is a protein called 26S protease regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	M	389	Total	C	N	O	S	0	0
			3046	1914	526	589	17		

- Molecule 22 is a protein called 26S proteasome non-ATPase regulatory subunit 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	N	836	Total	C	N	O	S	0	0
			6508	4130	1106	1229	43		

- Molecule 23 is a protein called 26S proteasome non-ATPase regulatory subunit 13.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	O	376	Total	C	N	O	S	0	0
			3020	1926	514	564	16		

- Molecule 24 is a protein called 26S proteasome non-ATPase regulatory subunit 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	P	422	Total	C	N	O	S	0	0
			3447	2185	589	651	22		

- Molecule 25 is a protein called 26S proteasome non-ATPase regulatory subunit 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	Q	422	Total	C	N	O	S	0	0
			3335	2116	567	639	13		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
26	R	374	Total	C	N	O	S	0	0
			3084	1967	527	573	17		

- Molecule 27 is a protein called 26S proteasome non-ATPase regulatory subunit 3.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	S	338	Total	C	N	O	S	0	0
			2757	1761	489	497	10		

- Molecule 28 is a protein called 26S proteasome non-ATPase regulatory subunit 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	T	253	Total	C	N	O	S	0	0
			2056	1332	337	378	9		

- Molecule 29 is a protein called 26S proteasome non-ATPase regulatory subunit 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	U	272	Total	C	N	O	S	0	0
			2183	1401	373	403	6		

- Molecule 30 is a protein called 26S proteasome non-ATPase regulatory subunit 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	V	252	Total	C	N	O	S	0	0
			1986	1261	342	366	17		

- Molecule 31 is a protein called 26S proteasome non-ATPase regulatory subunit 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	W	185	Total	C	N	O	S	0	0
			1420	885	255	272	8		

- Molecule 32 is a protein called 26S proteasome complex subunit DSS1.

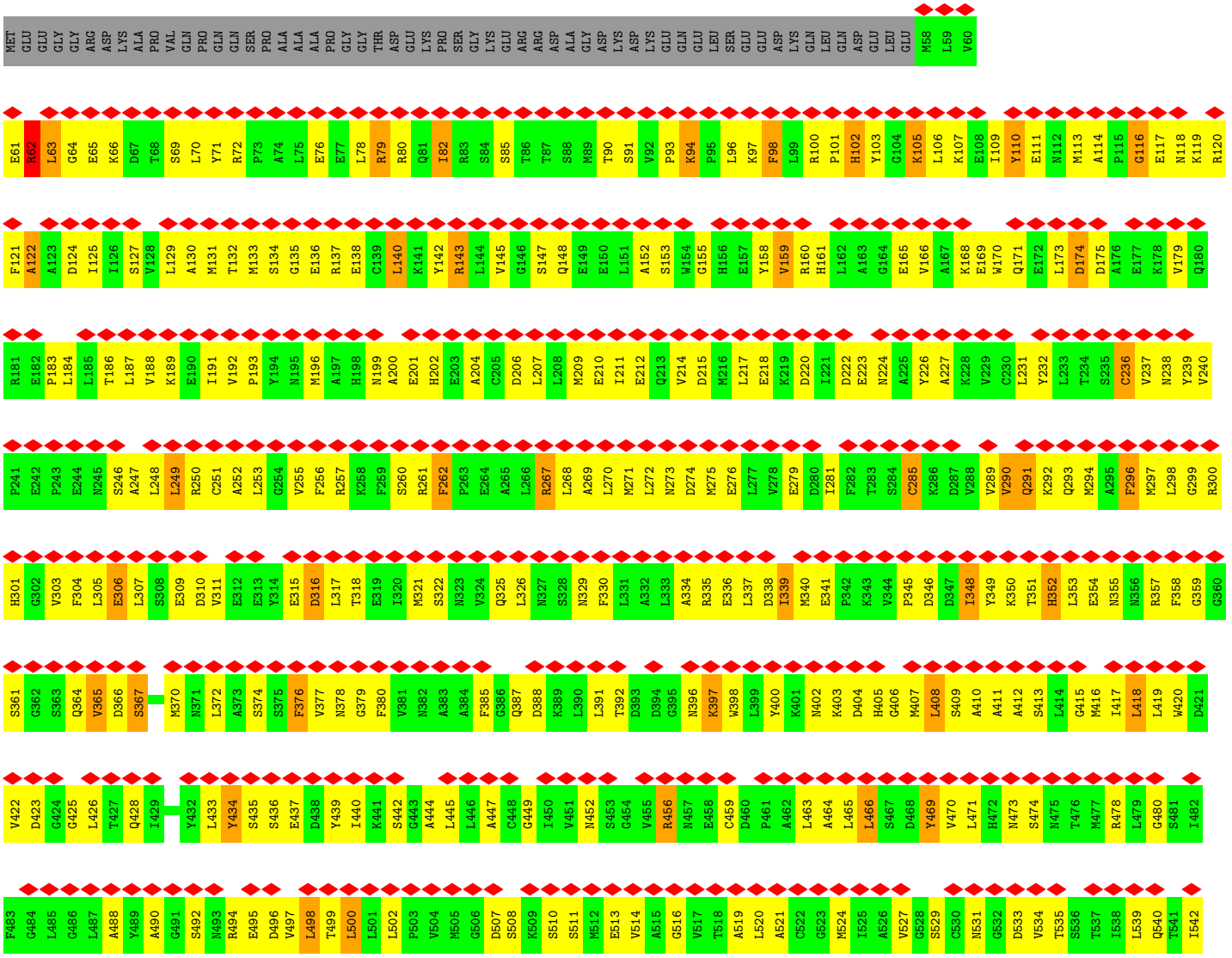
Mol	Chain	Residues	Atoms					AltConf	Trace
32	Y	21	Total	C	N	O	S	0	0
			175	106	30	38	1		

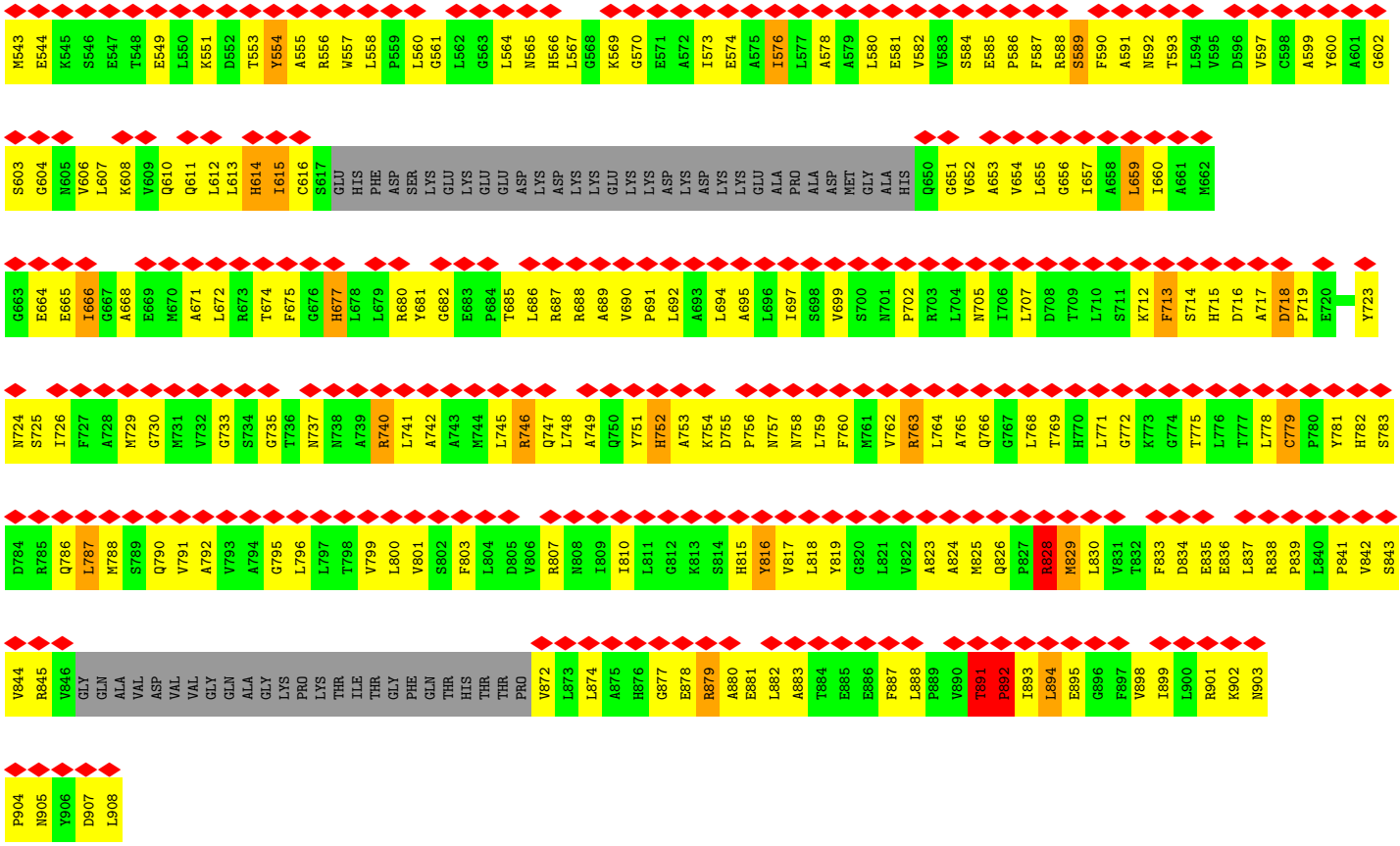
3 Residue-property plots (i)

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

- Molecule 1: 26S proteasome non-ATPase regulatory subunit 2

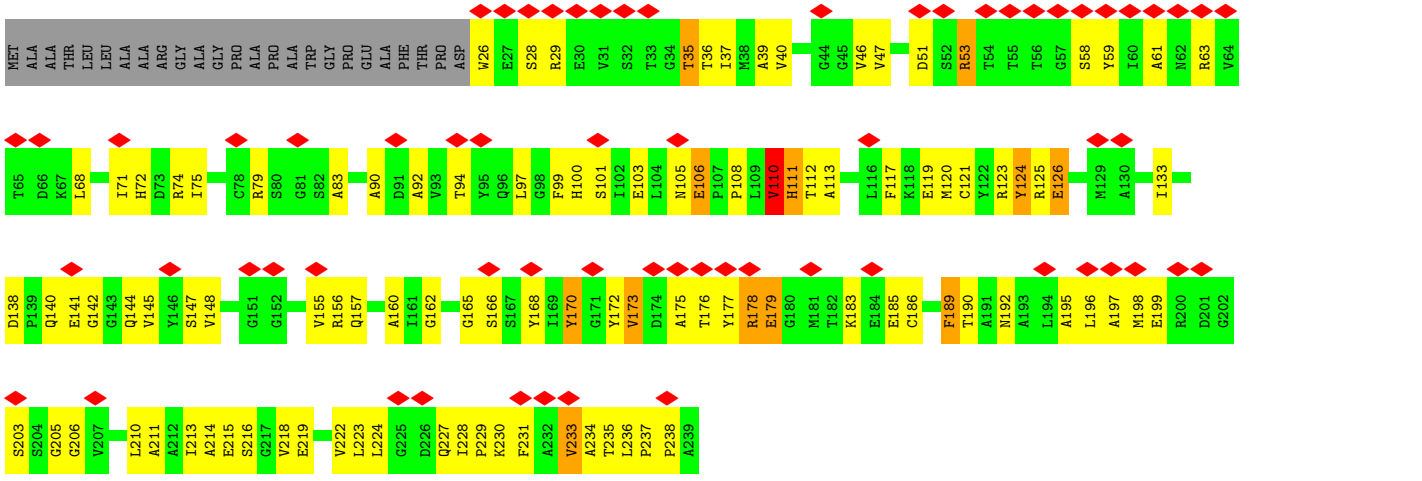
Chain Z:





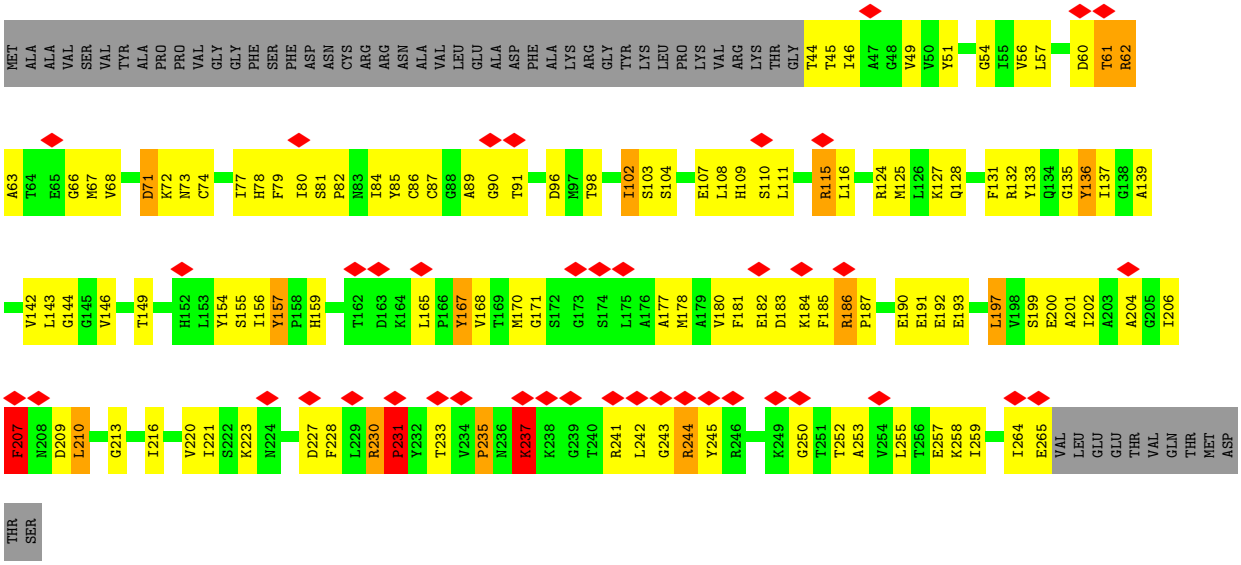
• Molecule 2: Proteasome subunit beta type-6

Chain 1:



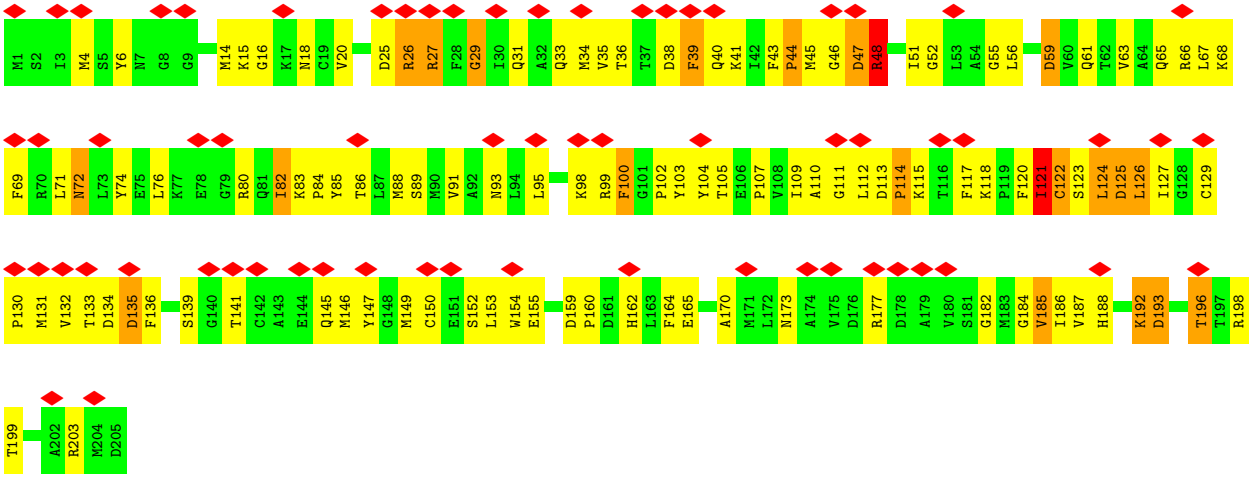
• Molecule 3: Proteasome subunit beta type-7

Chain 2:



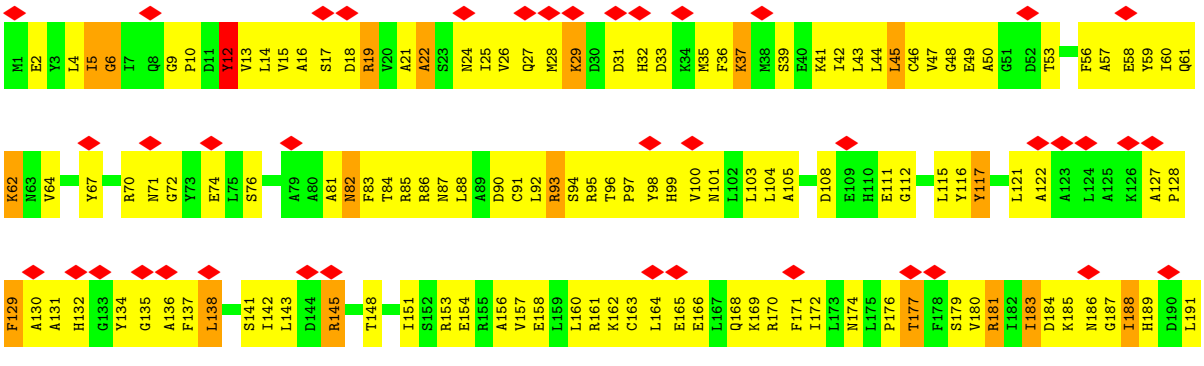
• Molecule 4: Proteasome subunit beta type-3

Chain 3:



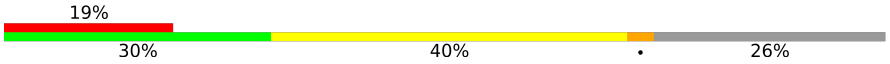
• Molecule 5: Proteasome subunit beta type-2

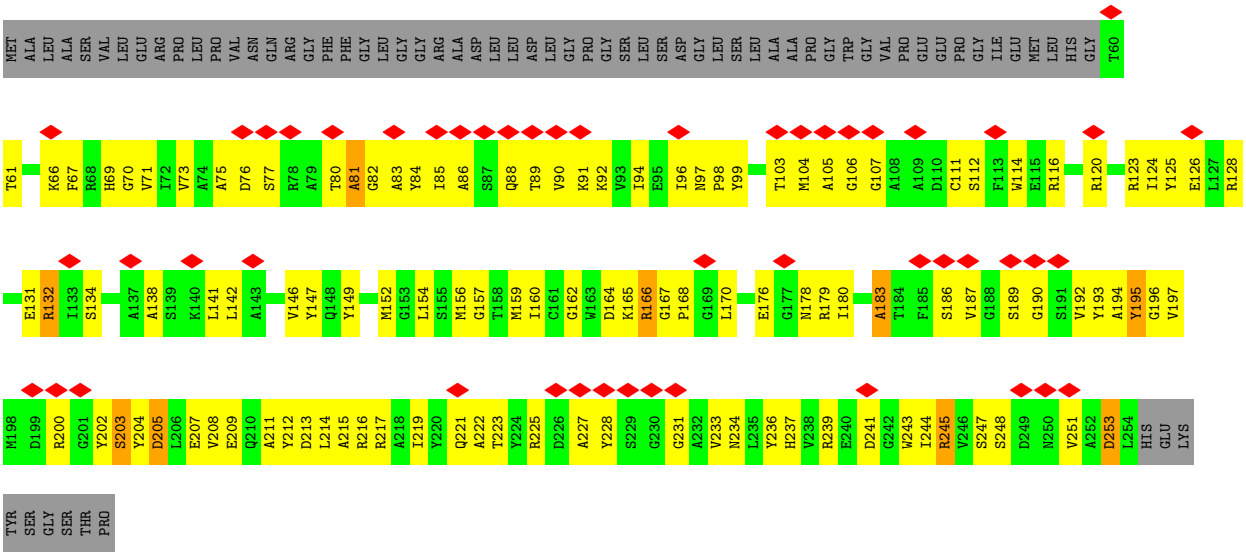
Chain 4:



• Molecule 6: Proteasome subunit beta type-5

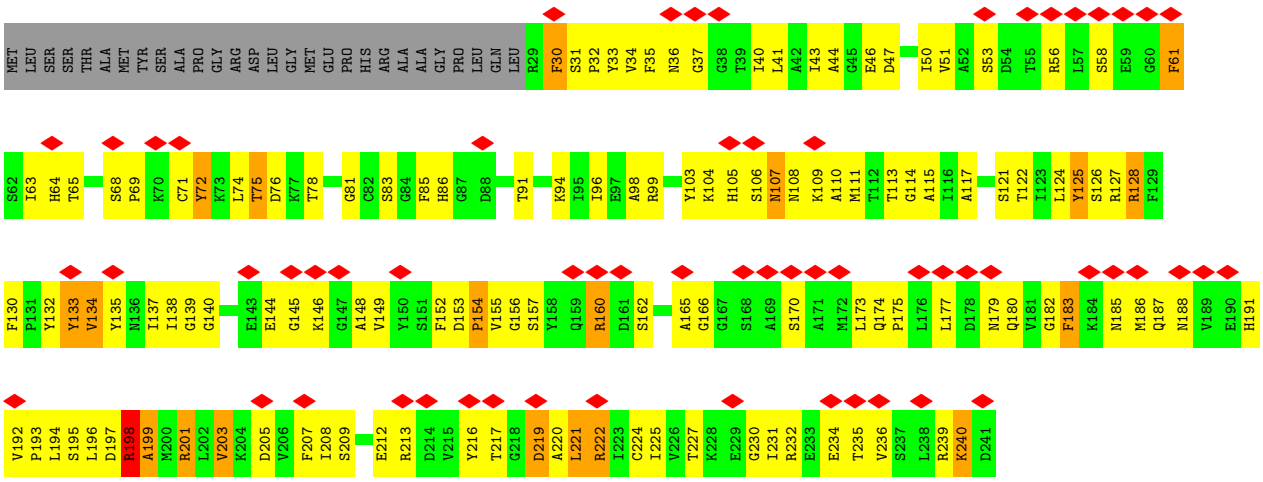
Chain 5:





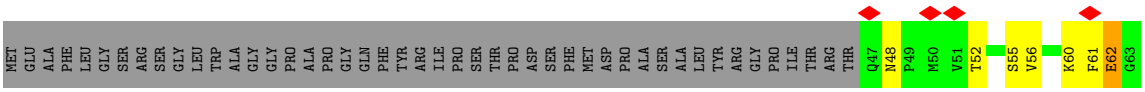
• Molecule 7: Proteasome subunit beta type-1

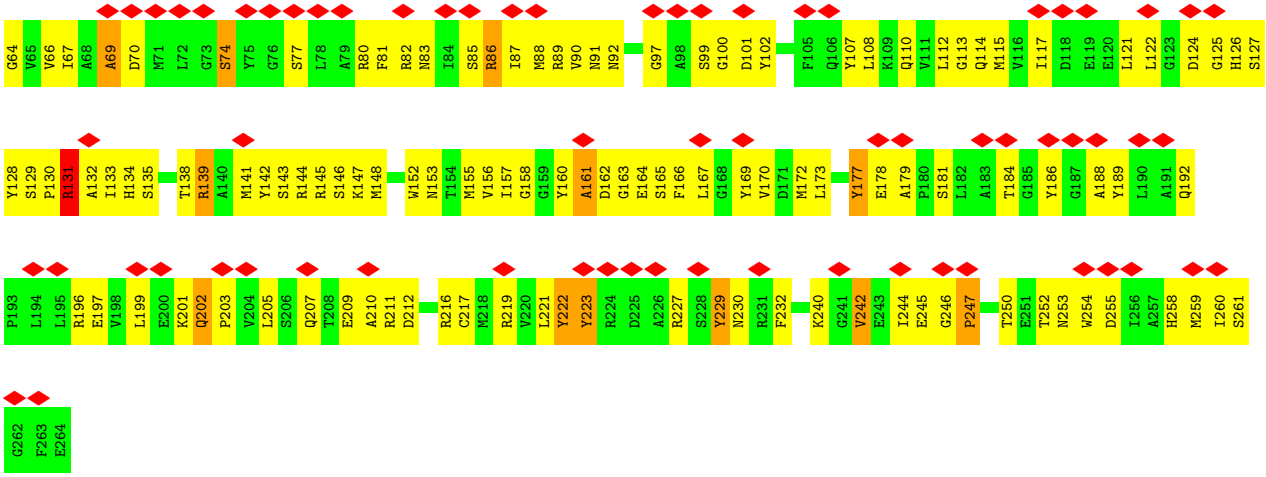
Chain 6:



• Molecule 8: Proteasome subunit beta type-4

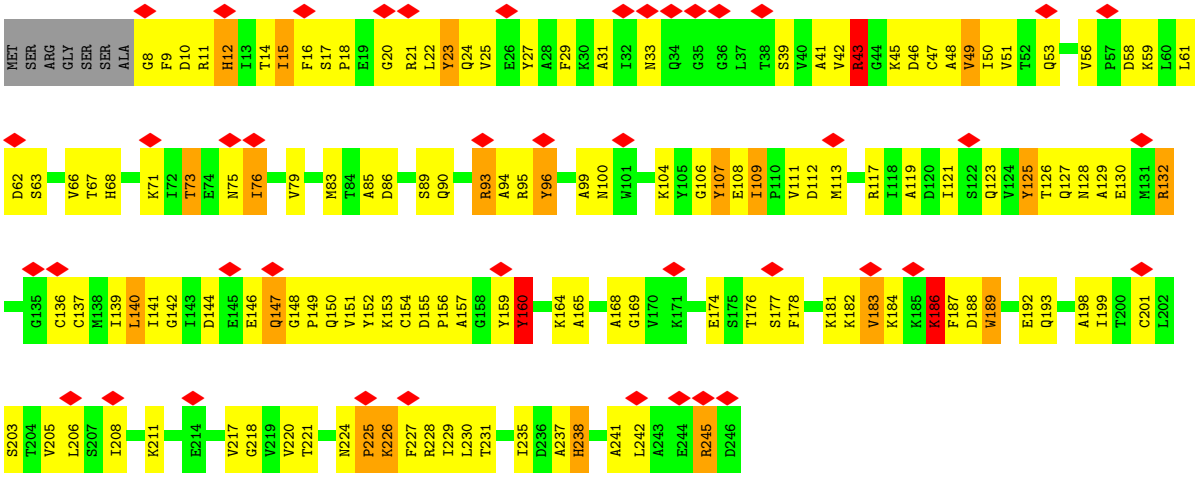
Chain 7:





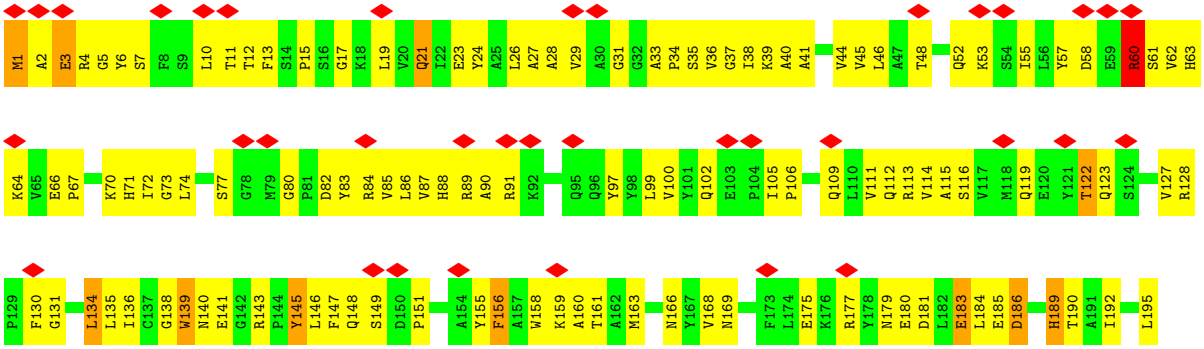
• Molecule 9: Proteasome subunit alpha type-6

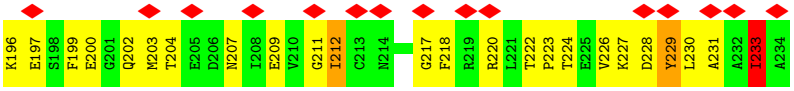
Chain A:



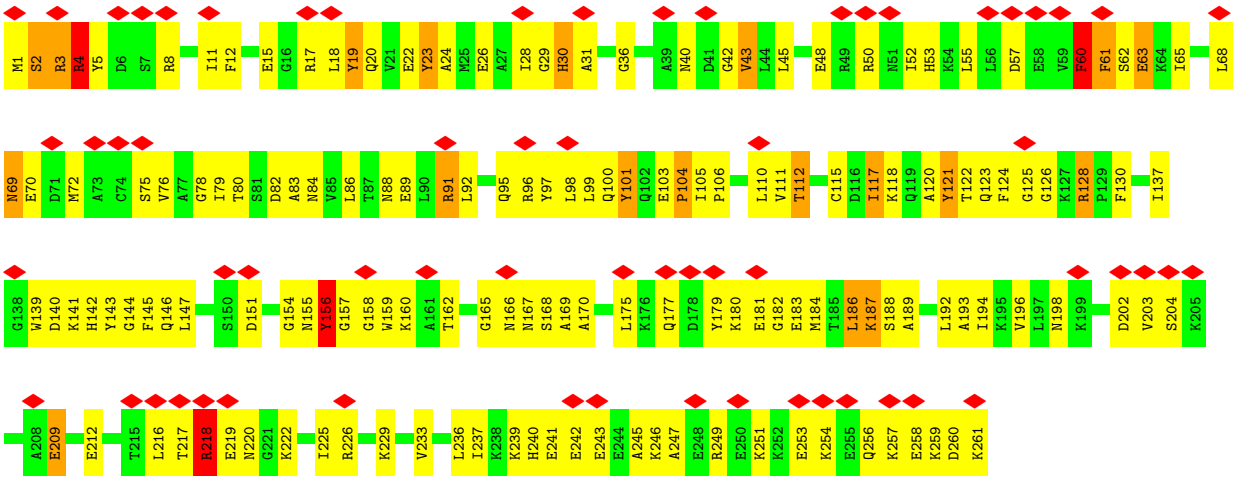
• Molecule 10: Proteasome subunit alpha type-2

Chain B:

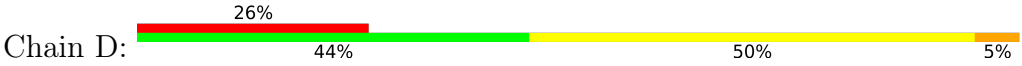


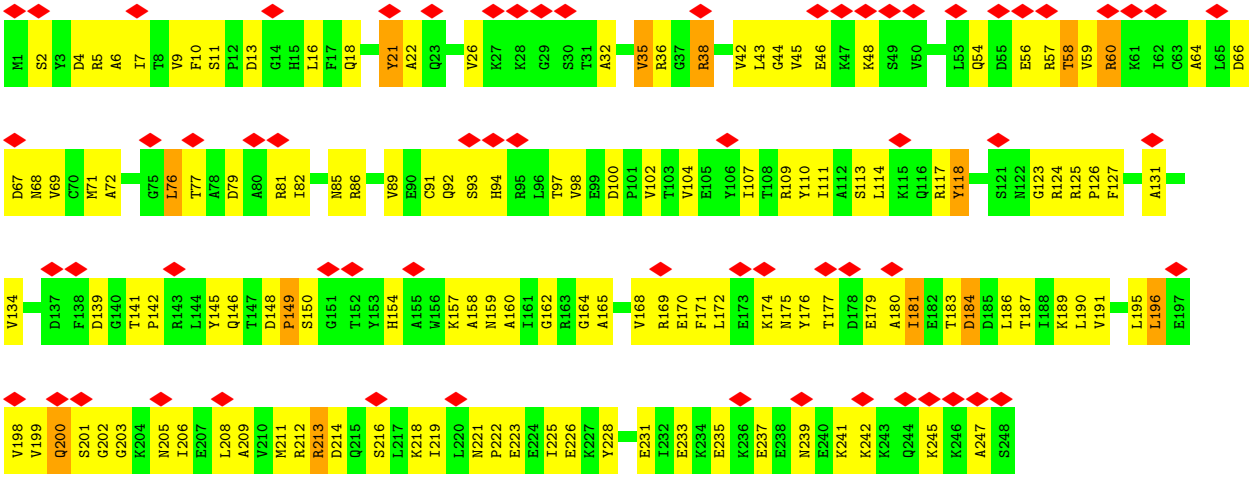


• Molecule 11: Proteasome subunit alpha type-4

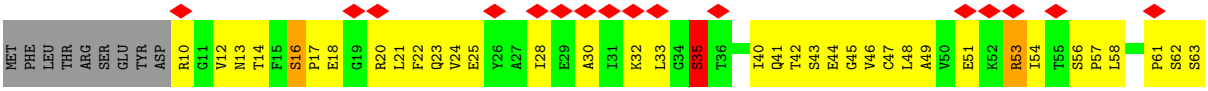


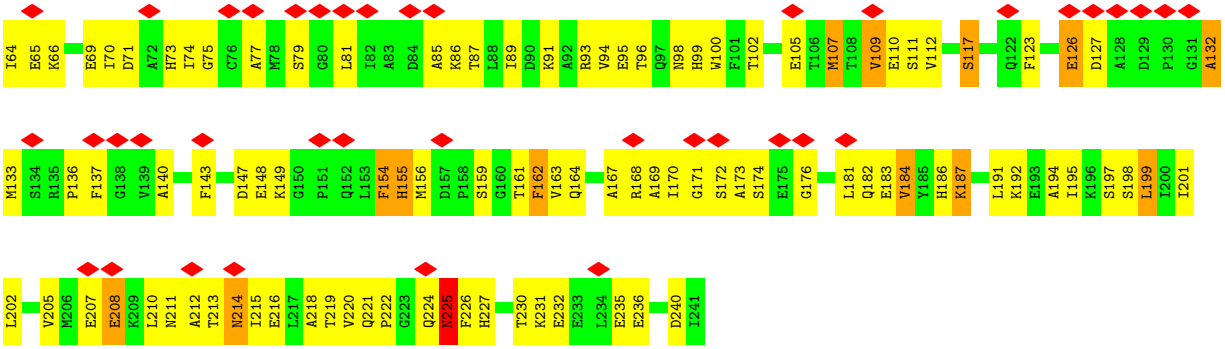
• Molecule 12: Proteasome subunit alpha type-7





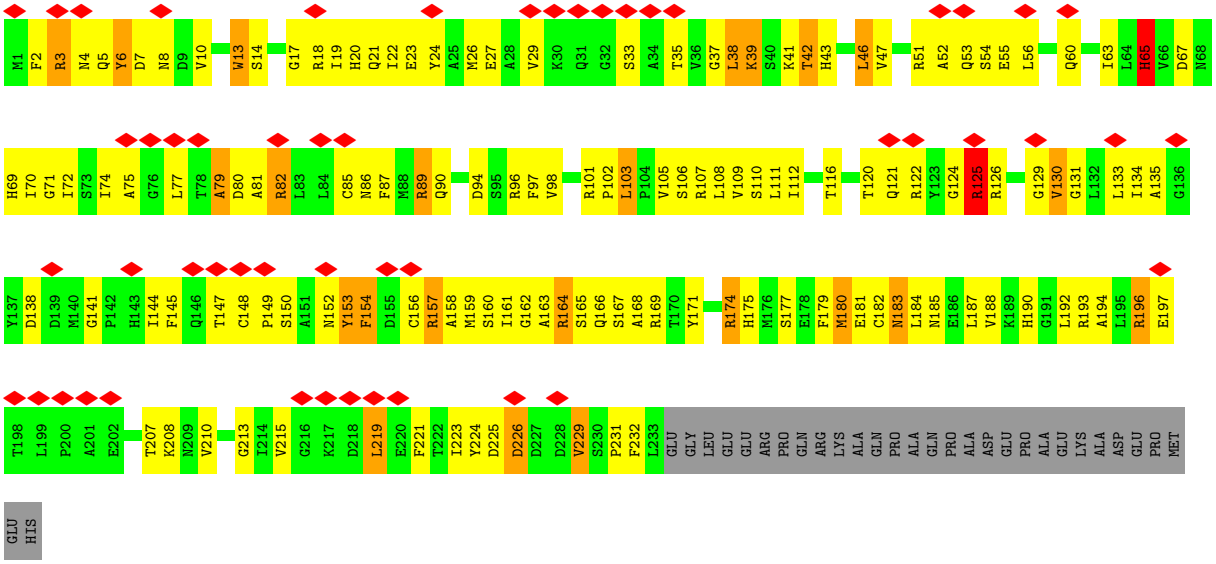
• Molecule 13: Proteasome subunit alpha type-5





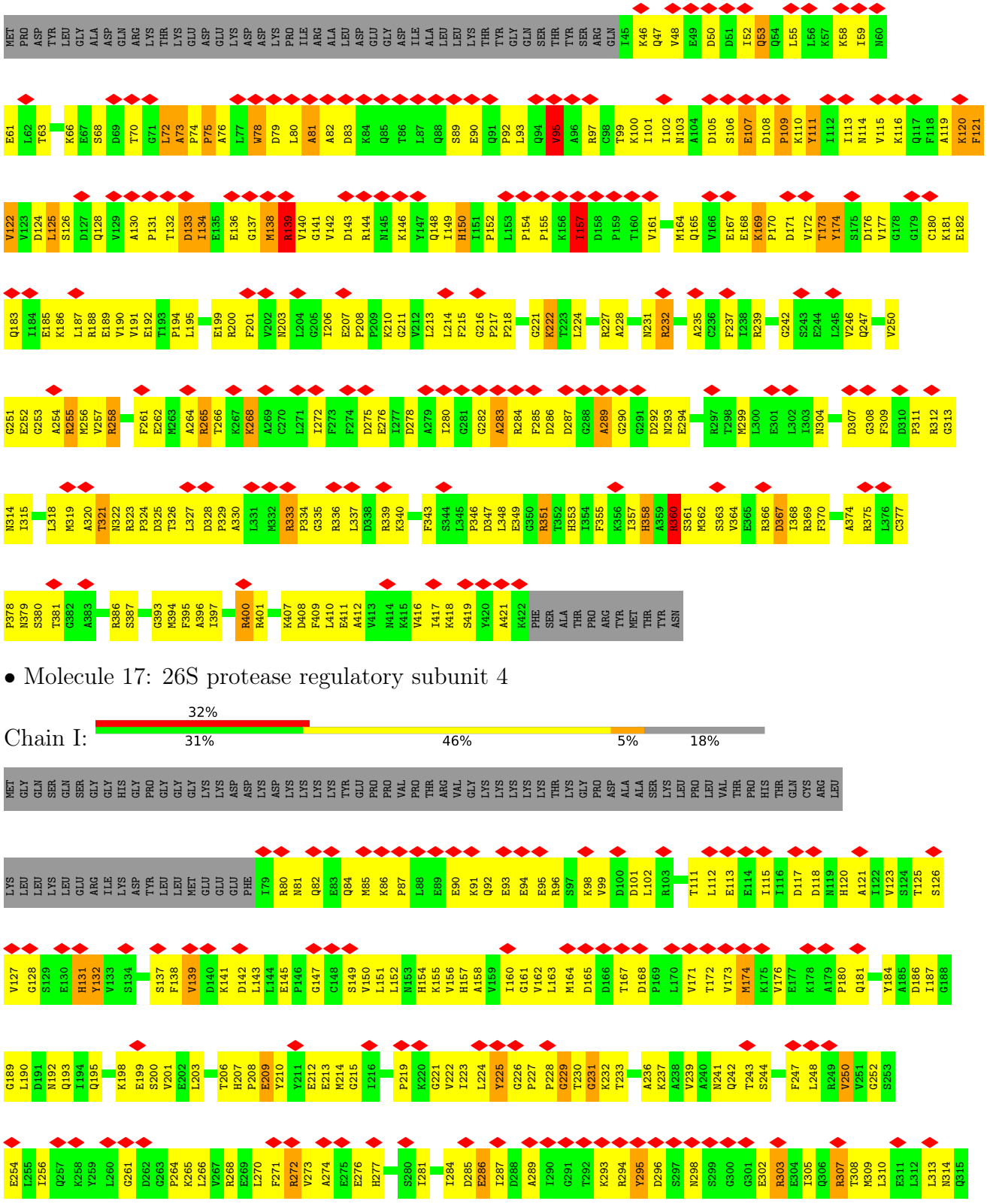
• Molecule 14: Proteasome subunit alpha type-1

Chain F:



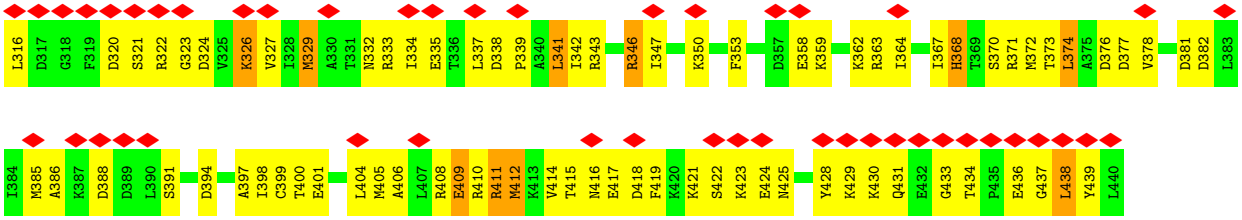
• Molecule 16: 26S protease regulatory subunit 7

Chain H:



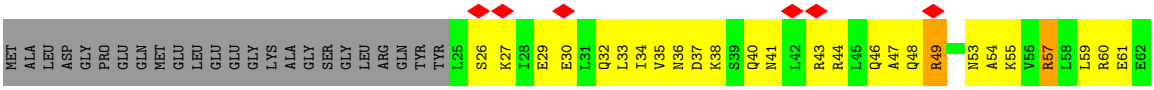
• Molecule 17: 26S protease regulatory subunit 4

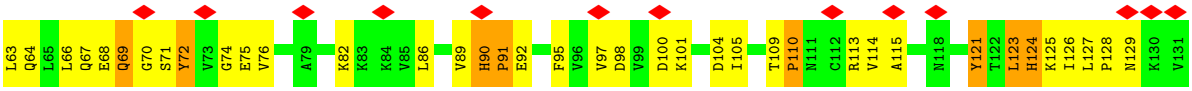
Chain I:

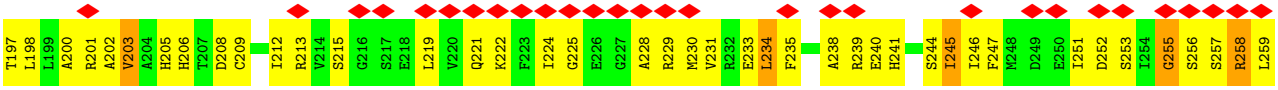


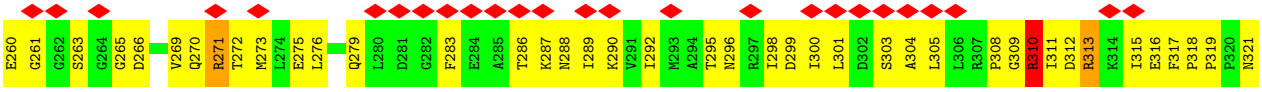
• Molecule 18: 26S protease regulatory subunit 8

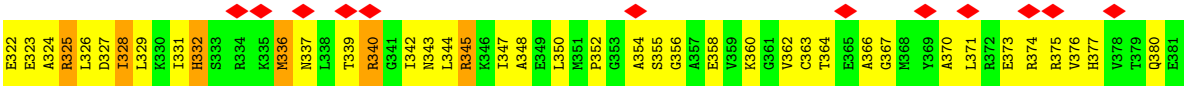
Chain J:

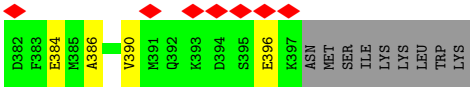






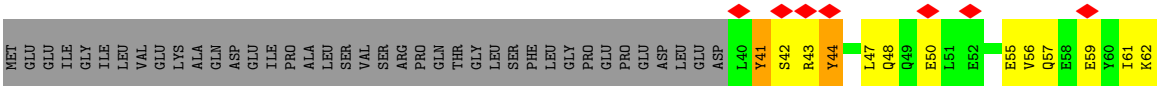


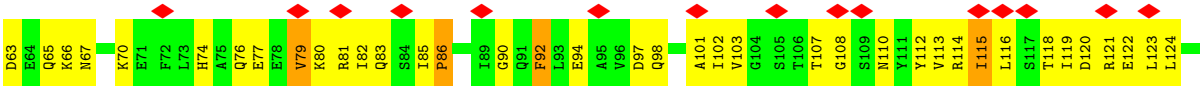


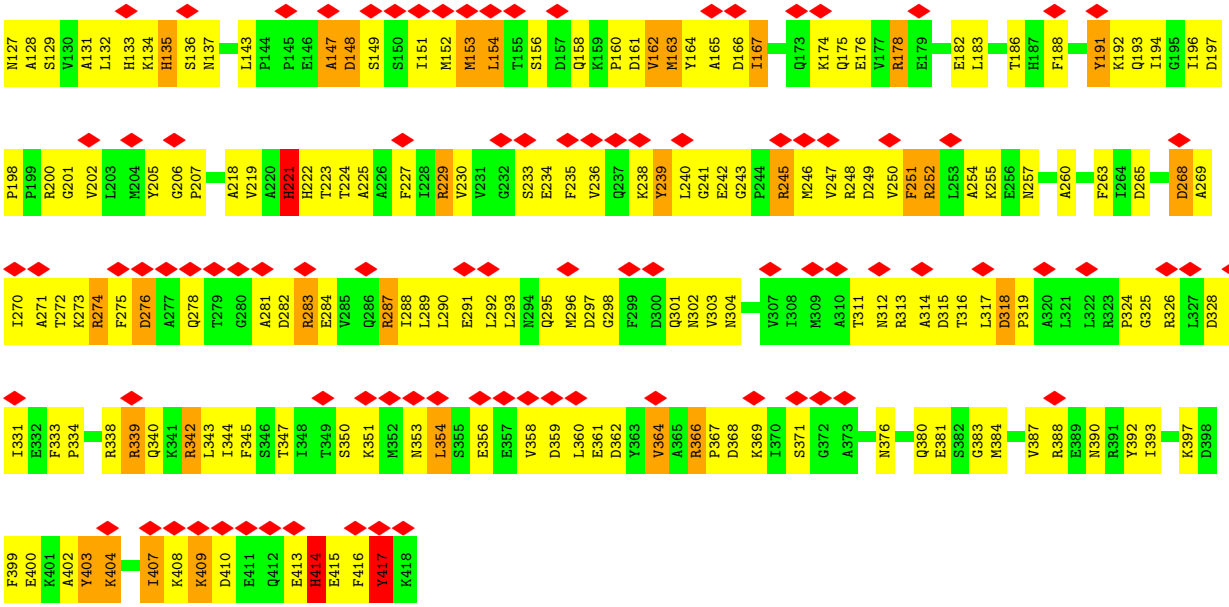


• Molecule 19: 26S protease regulatory subunit 6B

Chain K:

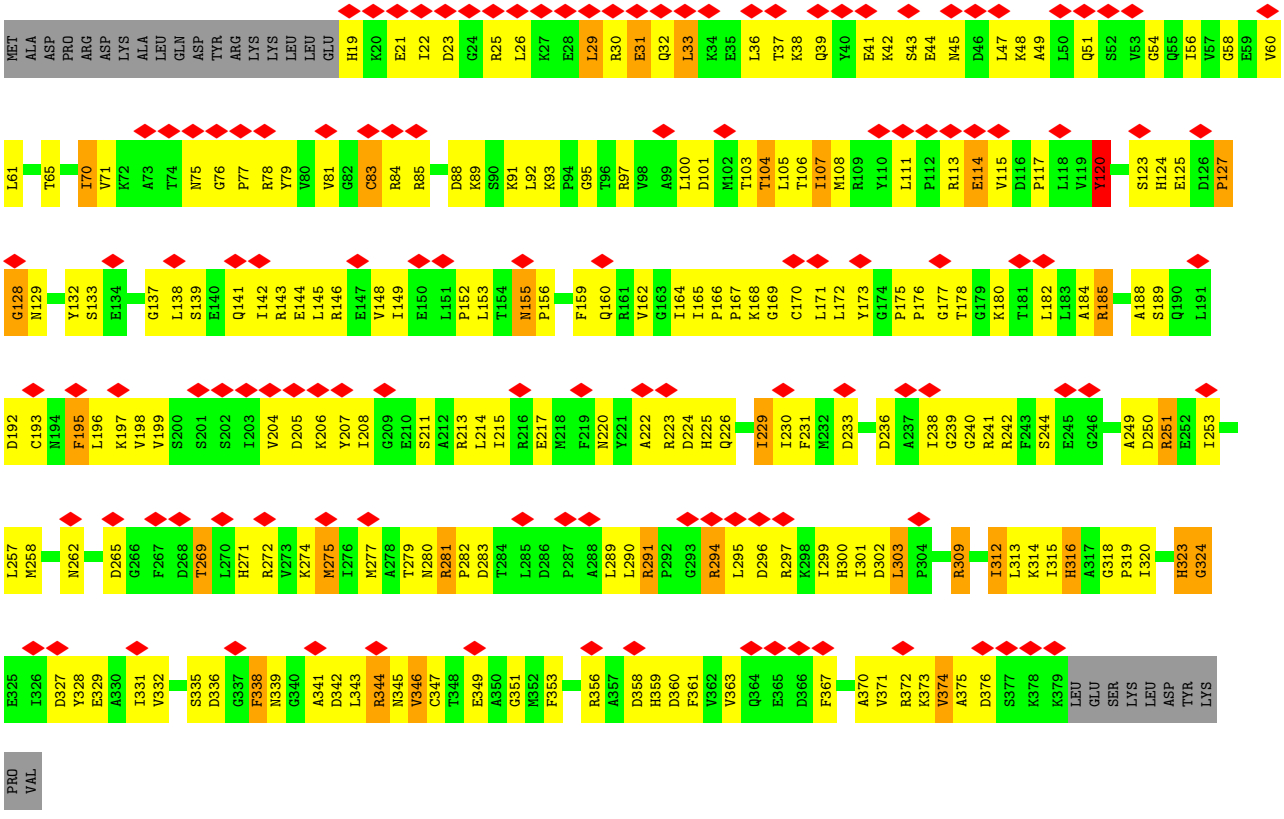






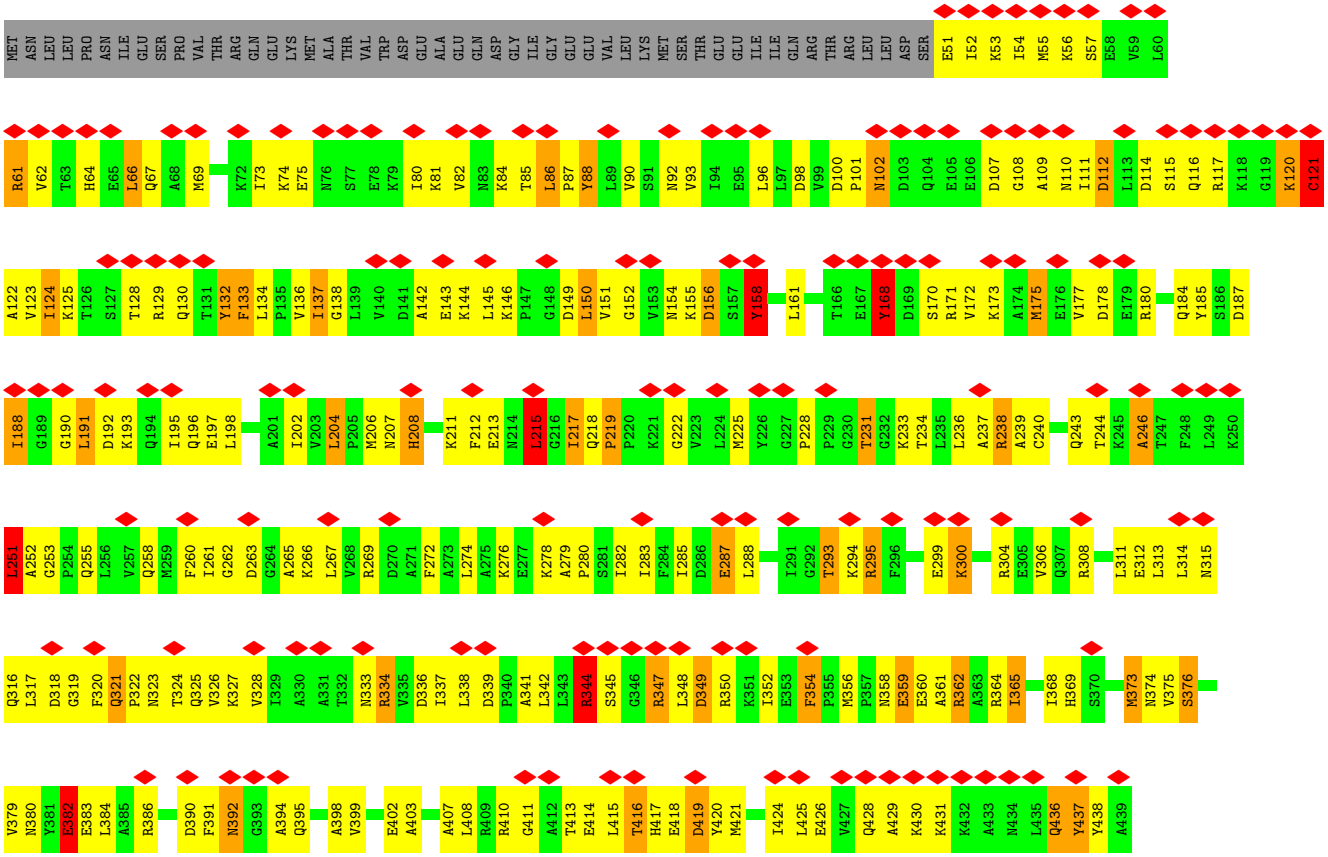
• Molecule 20: 26S protease regulatory subunit 10B

Chain L:



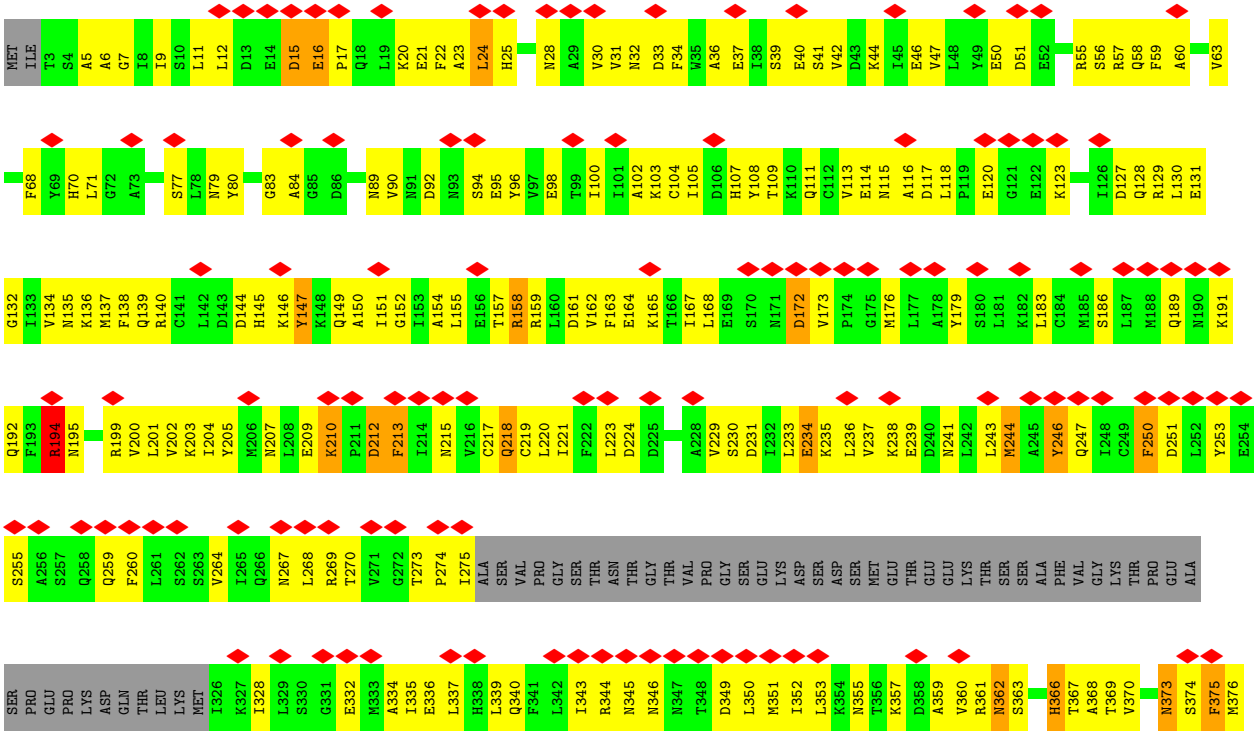
• Molecule 21: 26S protease regulatory subunit 6A

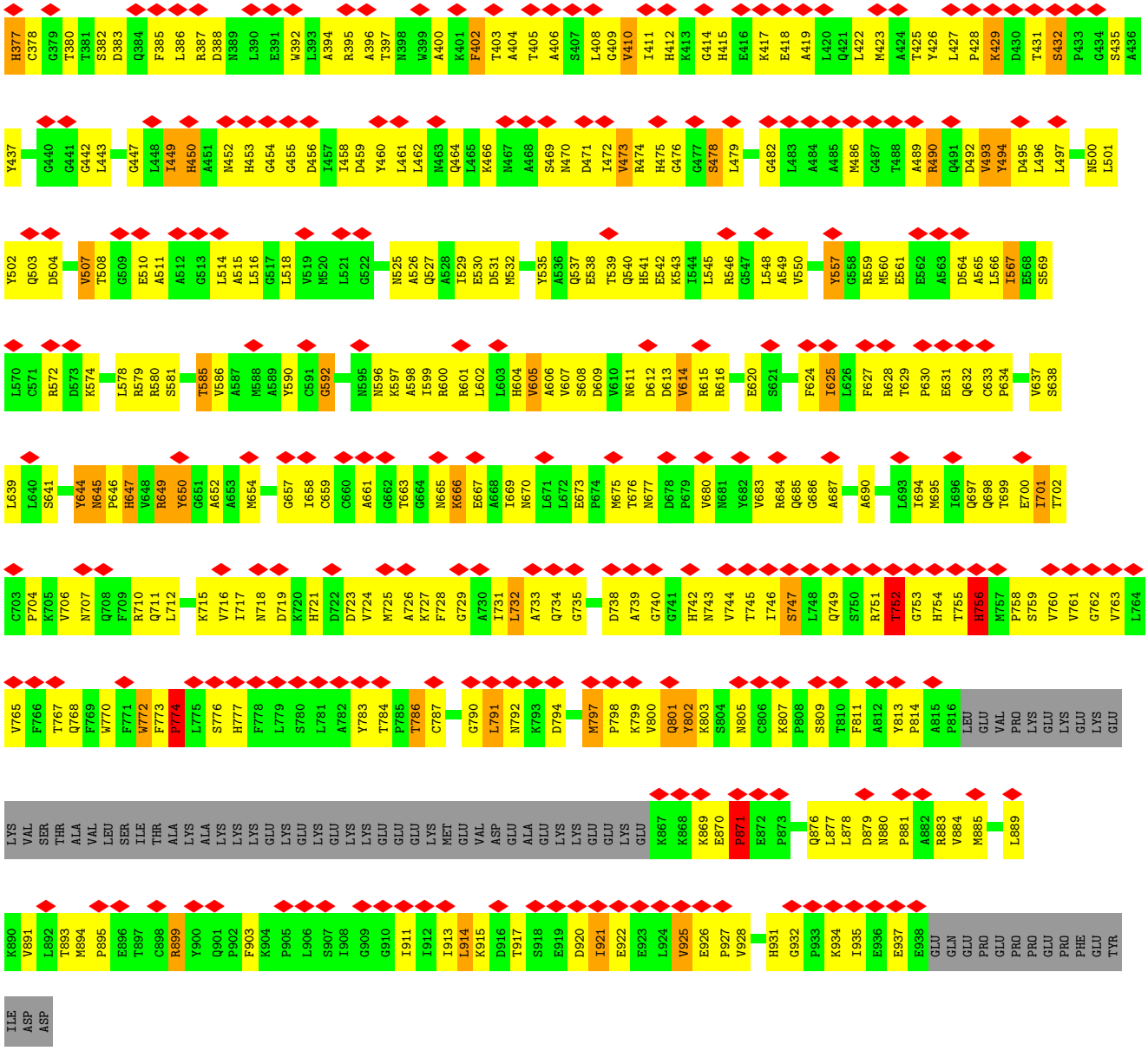
Chain M:



• Molecule 22: 26S proteasome non-ATPase regulatory subunit 1

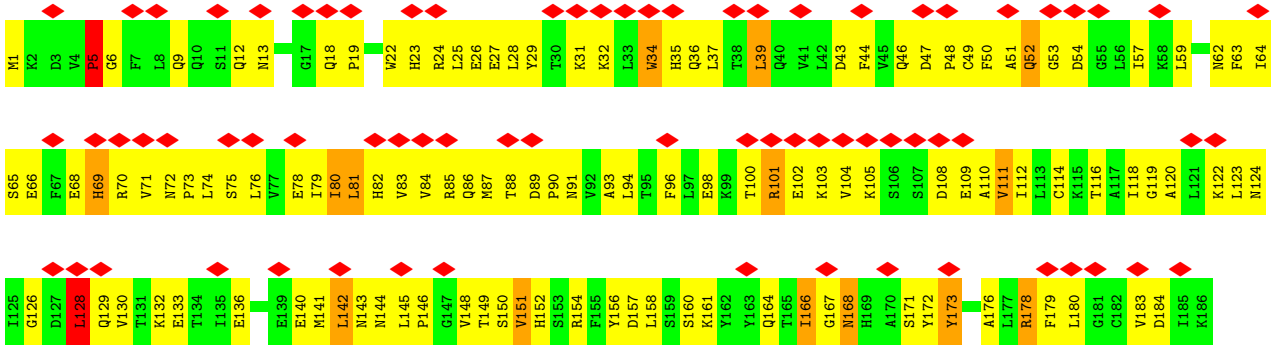
Chain N:

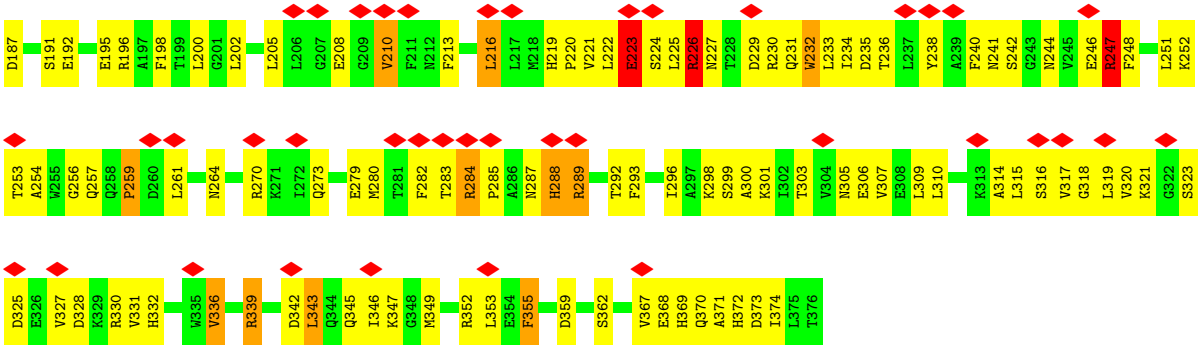




• Molecule 23: 26S proteasome non-ATPase regulatory subunit 13

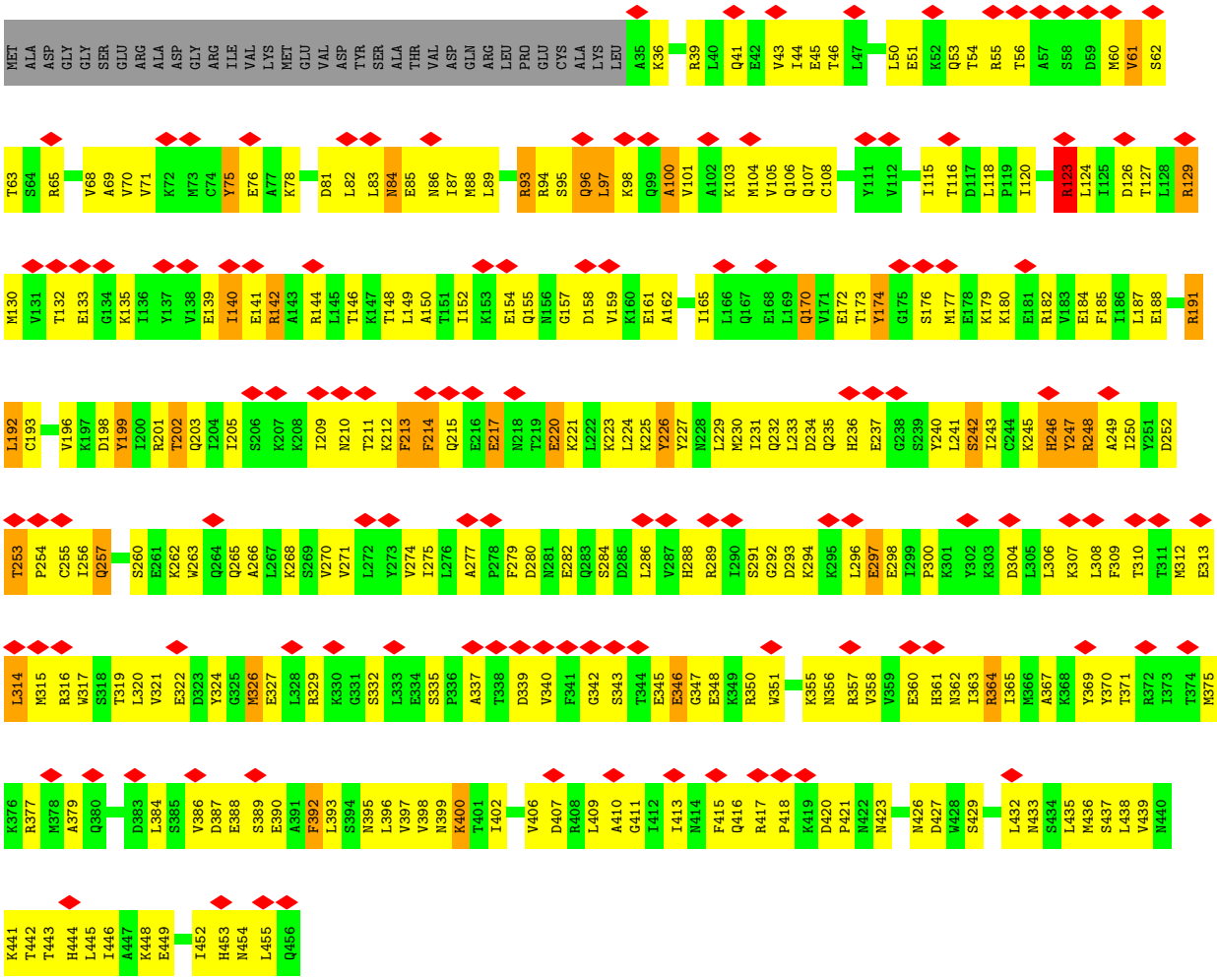
Chain O:





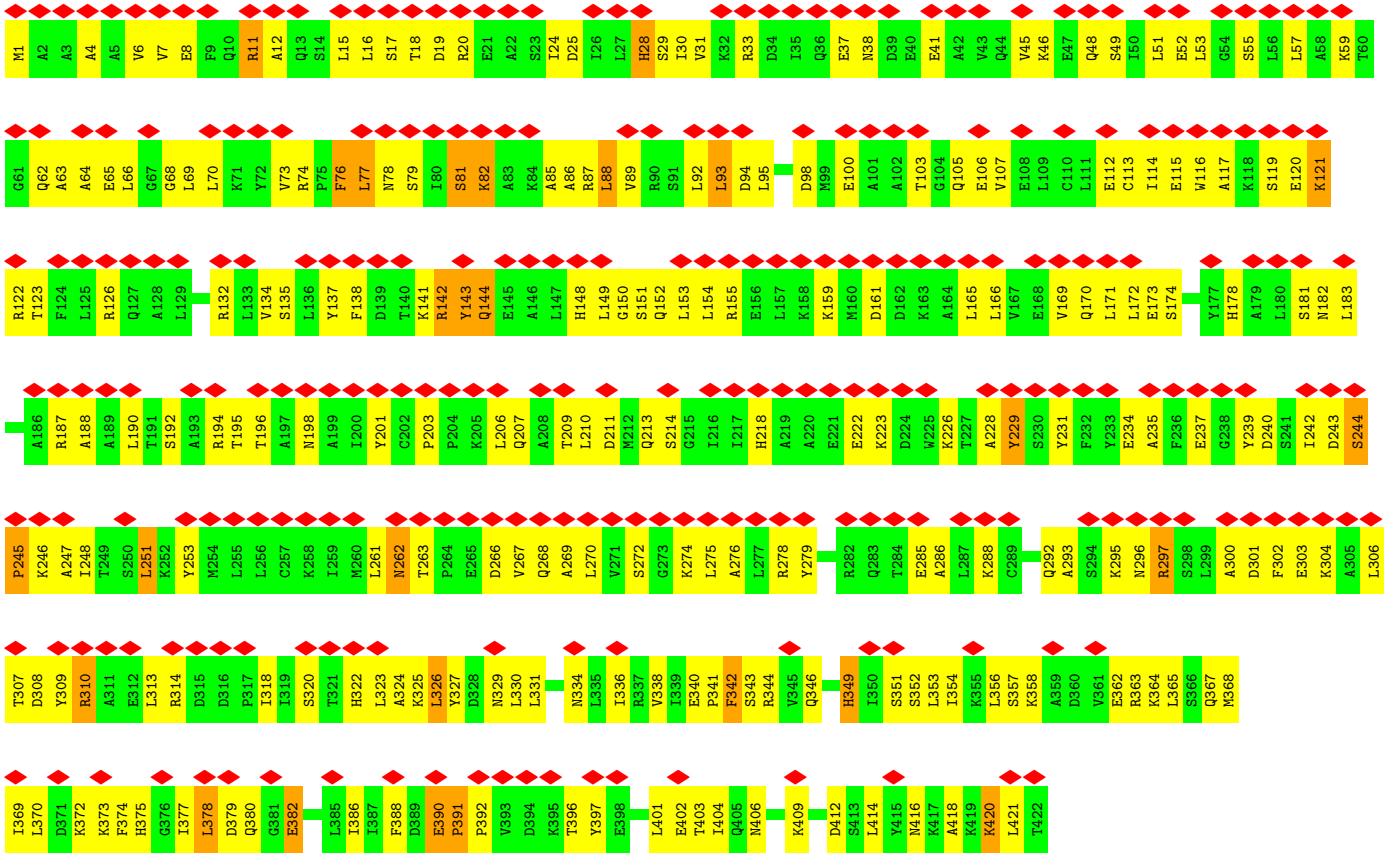
• Molecule 24: 26S proteasome non-ATPase regulatory subunit 12

Chain P:



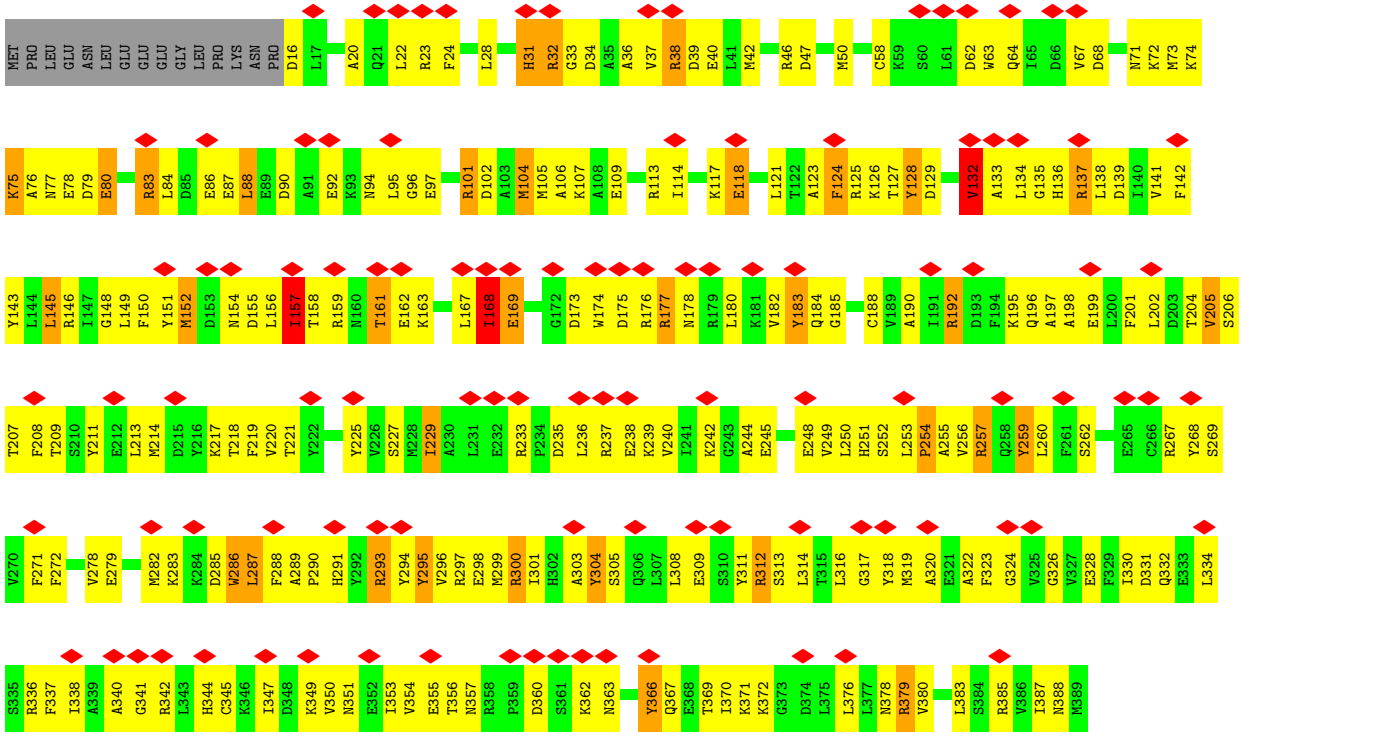
• Molecule 25: 26S proteasome non-ATPase regulatory subunit 11

Chain Q:



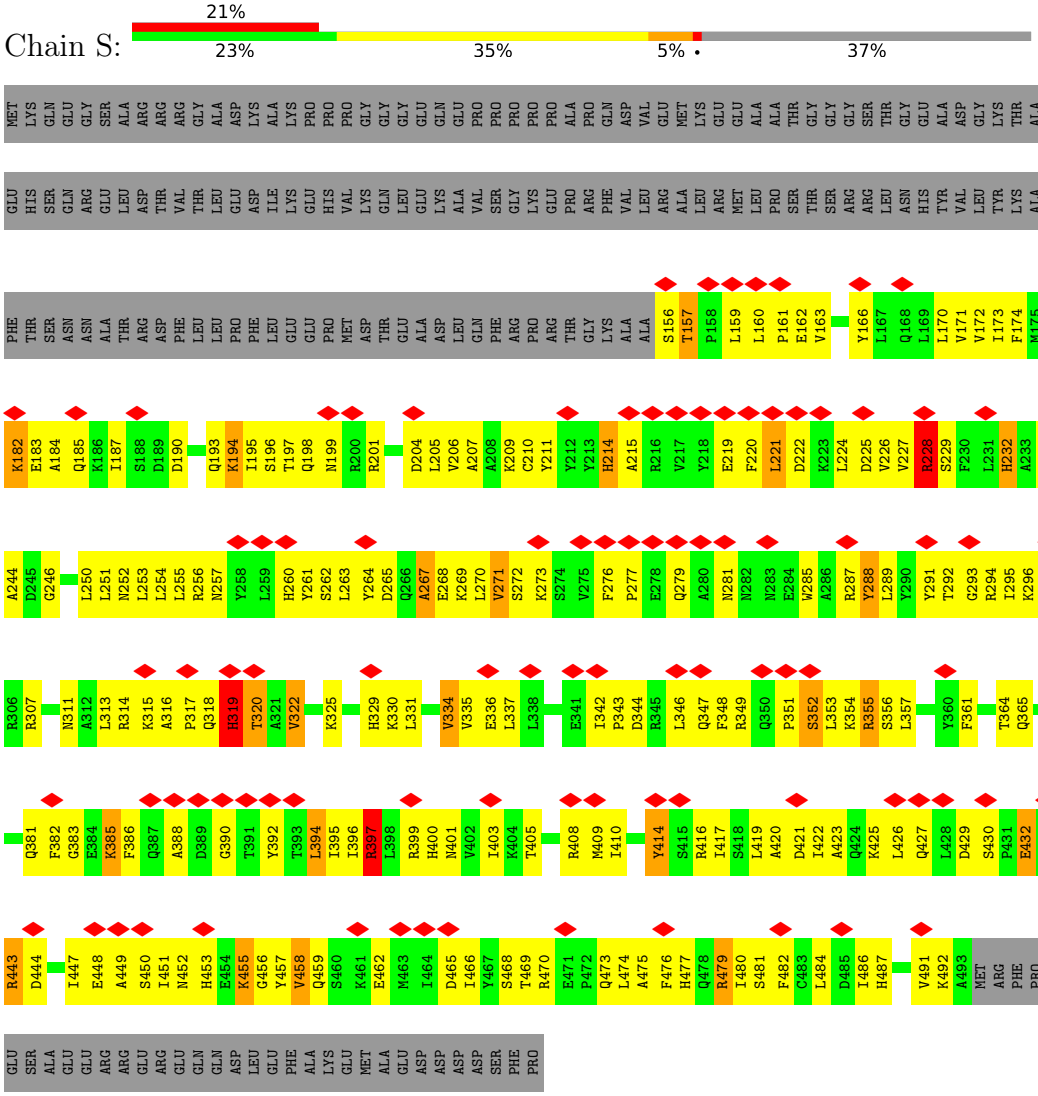
• Molecule 26: 26S proteasome non-ATPase regulatory subunit 6

Chain R:



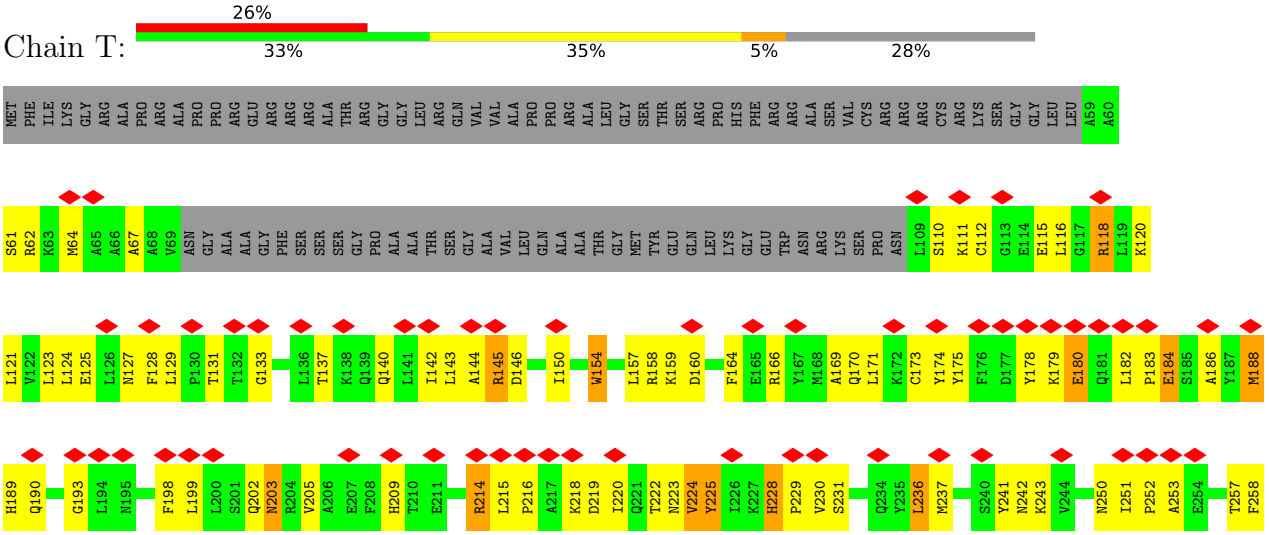
• Molecule 27: 26S proteasome non-ATPase regulatory subunit 3

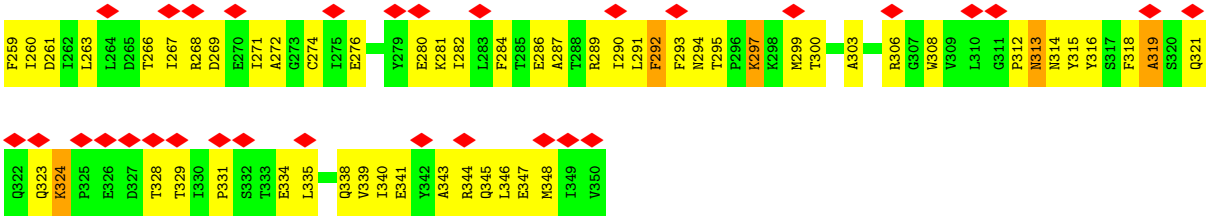
Chain S:



• Molecule 28: 26S proteasome non-ATPase regulatory subunit 8

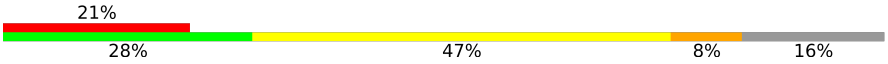
Chain T:

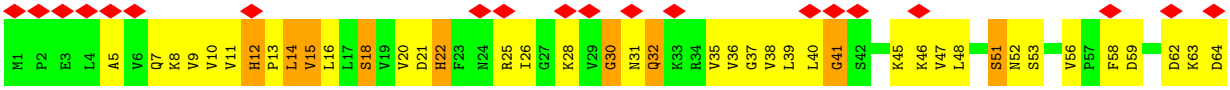


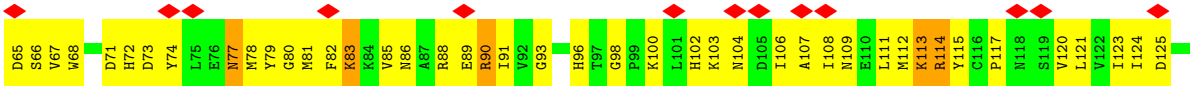


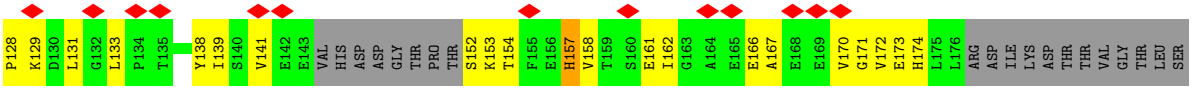
• Molecule 29: 26S proteasome non-ATPase regulatory subunit 7

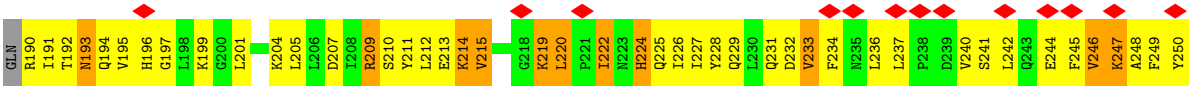
Chain U:





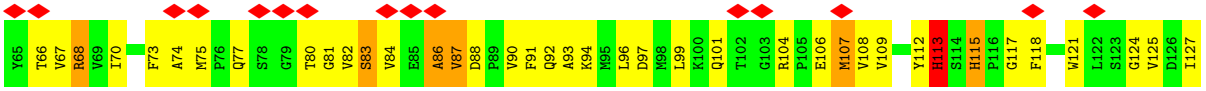


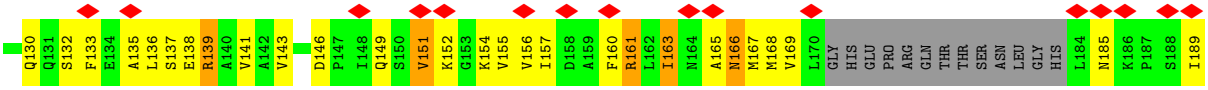


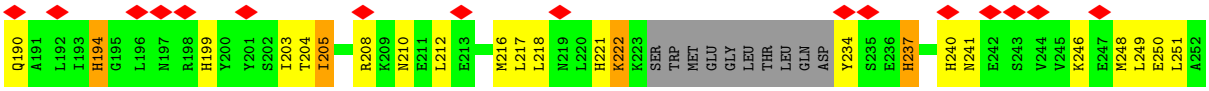


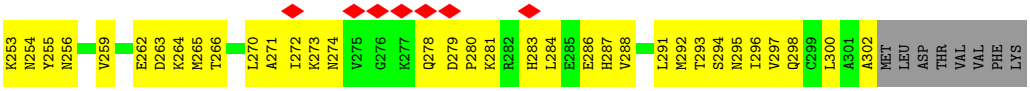
• Molecule 30: 26S proteasome non-ATPase regulatory subunit 14

Chain V:

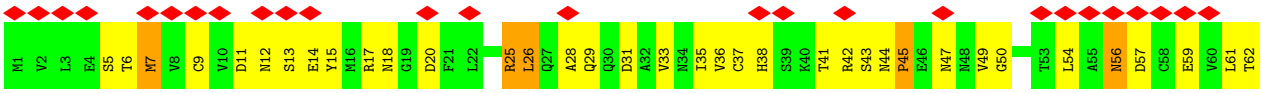


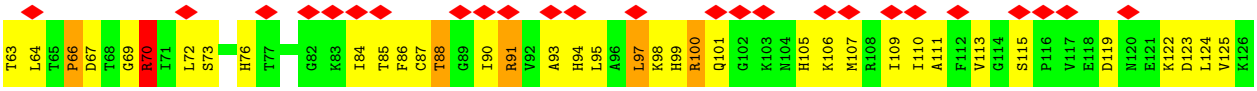


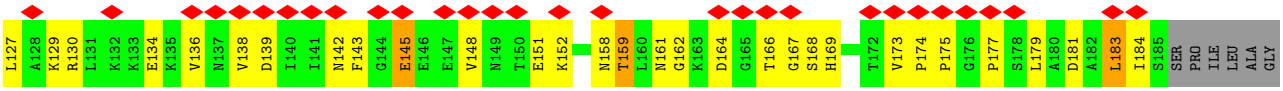


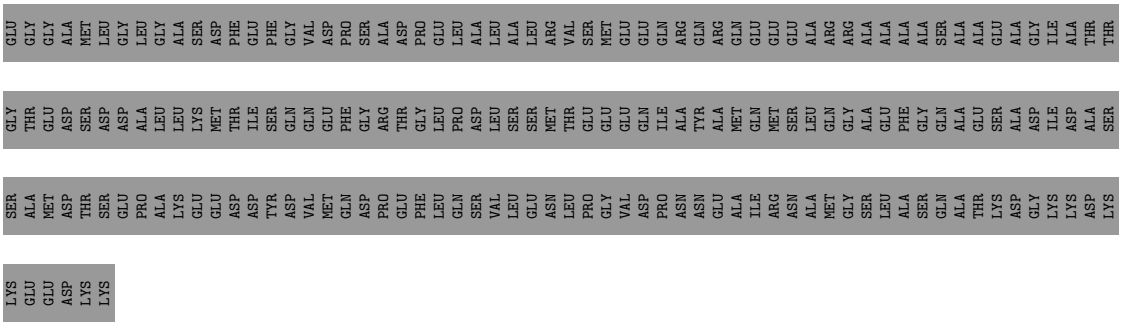


• Molecule 31: 26S proteasome non-ATPase regulatory subunit 4

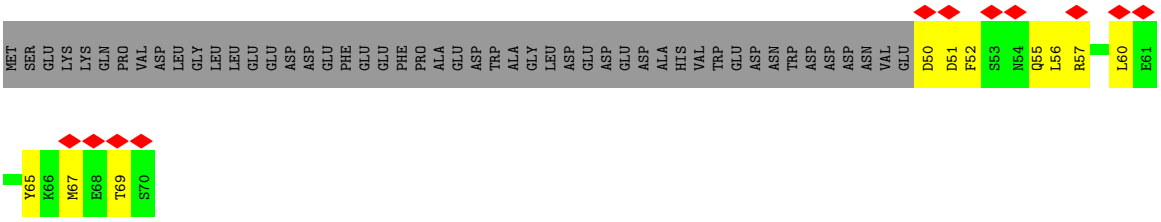








• Molecule 32: 26S proteasome complex subunit DSS1



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	252000	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	45	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.549	Depositor
Minimum map value	-0.463	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.012	Depositor
Recommended contour level	0.088	Depositor
Map size (Å)	604.80005, 604.80005, 604.80005	wwPDB
Map dimensions	280, 280, 280	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.16, 2.16, 2.16	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	Z	2.35	257/6249 (4.1%)	2.64	550/8457 (6.5%)
2	1	2.32	61/1637 (3.7%)	2.50	112/2218 (5.0%)
3	2	2.42	79/1703 (4.6%)	2.47	113/2305 (4.9%)
4	3	2.36	82/1628 (5.0%)	2.39	96/2194 (4.4%)
5	4	2.44	83/1585 (5.2%)	2.46	112/2144 (5.2%)
6	5	2.33	71/1538 (4.6%)	2.45	97/2078 (4.7%)
7	6	2.41	79/1684 (4.7%)	2.48	104/2268 (4.6%)
8	7	2.28	60/1739 (3.5%)	2.42	107/2351 (4.6%)
9	A	2.35	84/1908 (4.4%)	2.45	125/2578 (4.8%)
10	B	2.35	82/1865 (4.4%)	2.53	146/2524 (5.8%)
11	C	2.34	92/2099 (4.4%)	2.44	138/2818 (4.9%)
12	D	2.36	88/1987 (4.4%)	2.44	136/2673 (5.1%)
13	E	2.31	78/1797 (4.3%)	2.52	136/2426 (5.6%)
14	F	2.45	90/1872 (4.8%)	2.51	137/2529 (5.4%)
15	G	2.34	77/1929 (4.0%)	2.42	112/2597 (4.3%)
16	H	2.30	127/3009 (4.2%)	2.45	214/4061 (5.3%)
17	I	2.29	115/2881 (4.0%)	2.51	220/3887 (5.7%)
18	J	2.36	138/2966 (4.7%)	2.54	222/3989 (5.6%)
19	K	2.35	135/3082 (4.4%)	2.50	221/4157 (5.3%)
20	L	2.35	121/2906 (4.2%)	2.50	210/3913 (5.4%)
21	M	2.31	124/3087 (4.0%)	2.51	226/4160 (5.4%)
22	N	2.34	270/6626 (4.1%)	2.57	541/8970 (6.0%)
23	O	2.27	110/3078 (3.6%)	2.58	259/4165 (6.2%)
24	P	2.33	160/3493 (4.6%)	2.60	280/4696 (6.0%)
25	Q	2.31	137/3381 (4.1%)	2.55	250/4558 (5.5%)
26	R	2.31	122/3140 (3.9%)	2.53	229/4228 (5.4%)
27	S	2.40	122/2808 (4.3%)	2.60	237/3791 (6.3%)
28	T	2.23	73/2097 (3.5%)	2.47	139/2830 (4.9%)
29	U	2.37	101/2223 (4.5%)	2.55	189/3006 (6.3%)
30	V	2.28	73/2020 (3.6%)	2.50	134/2724 (4.9%)
31	W	2.38	64/1439 (4.4%)	2.52	94/1947 (4.8%)
32	Y	2.39	6/177 (3.4%)	2.53	11/233 (4.7%)
All	All	2.34	3361/79633 (4.2%)	2.52	5897/107475 (5.5%)

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	Z	0	19
2	1	0	3
3	2	0	5
4	3	0	3
5	4	0	7
6	5	0	6
7	6	0	9
8	7	0	9
9	A	0	10
10	B	0	3
11	C	0	9
12	D	0	5
14	F	0	8
15	G	0	4
16	H	1	12
17	I	0	5
18	J	0	10
19	K	0	19
20	L	0	11
21	M	0	12
22	N	1	16
23	O	0	8
24	P	0	13
25	Q	0	12
26	R	0	18
27	S	0	11
28	T	0	8
29	U	0	7
30	V	0	3
31	W	0	3
32	Y	0	1
All	All	2	269

All (3361) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	7	GLY	CA-C	-13.08	1.37	1.52
7	6	148	ALA	CA-C	-11.96	1.38	1.52
3	2	167	TYR	CA-C	-11.86	1.37	1.52

Continued on next page...

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	E	47	CYS	CA-C	-11.63	1.38	1.52
7	6	187	GLN	C-N	11.60	1.47	1.33
1	Z	403	LYS	C-N	11.31	1.45	1.33
4	3	196	THR	CA-C	-11.14	1.39	1.52
8	7	158	GLY	CA-C	-11.06	1.42	1.51
29	U	36	VAL	CA-C	-11.01	1.39	1.52
3	2	81	SER	N-CA	-10.91	1.35	1.46
7	6	222	ARG	NE-CZ	10.76	1.44	1.33
3	2	85	TYR	CA-C	-10.74	1.39	1.52
25	Q	322	HIS	ND1-CE1	10.74	1.43	1.32
19	K	114	ARG	NE-CZ	10.60	1.44	1.33
22	N	192	GLN	CA-C	-10.53	1.39	1.52
15	G	130	ARG	NE-CZ	10.47	1.44	1.33
10	B	200	GLU	CA-C	-10.36	1.40	1.52
3	2	259	ILE	CA-C	-10.20	1.41	1.53
26	R	293	ARG	CA-C	-10.19	1.38	1.52
17	I	242	GLN	N-CA	-10.18	1.34	1.46
25	Q	377	ILE	CA-C	-10.10	1.41	1.52
17	I	145	GLU	CA-C	-10.04	1.42	1.52
16	H	74	PRO	CA-C	10.00	1.61	1.52
27	S	347	GLN	CA-C	-9.99	1.39	1.52
21	M	219	PRO	CA-C	9.91	1.61	1.52
19	K	94	GLU	CA-C	-9.90	1.40	1.52
22	N	396	ALA	CA-C	-9.84	1.40	1.52
29	U	96	HIS	ND1-CE1	9.84	1.42	1.32
16	H	142	VAL	N-CA	-9.81	1.35	1.46
20	L	123	SER	CA-C	-9.79	1.40	1.52
29	U	8	LYS	CA-C	-9.77	1.40	1.52
26	R	326	GLY	CA-C	-9.76	1.41	1.52
9	A	41	ALA	CA-C	-9.72	1.40	1.52
5	4	14	LEU	CA-C	-9.71	1.41	1.52
30	V	112	TYR	CA-C	-9.71	1.41	1.52
18	J	74	GLY	CA-C	-9.63	1.40	1.51
29	U	259	VAL	C-N	9.60	1.46	1.33
6	5	159	MET	CA-C	-9.59	1.41	1.52
10	B	181	ASP	CA-C	-9.55	1.40	1.52
11	C	105	ILE	CA-C	9.54	1.61	1.52
14	F	71	GLY	CA-C	-9.53	1.41	1.51
1	Z	842	VAL	CA-C	-9.49	1.41	1.52
17	I	303	ARG	NE-CZ	9.46	1.43	1.33
23	O	282	PHE	CA-CB	9.42	1.66	1.53
9	A	140	LEU	CA-C	-9.37	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	G	26	TYR	CA-C	-9.37	1.40	1.52
12	D	170	GLU	N-CA	-9.36	1.34	1.46
2	1	203	SER	N-CA	-9.35	1.36	1.46
5	4	127	ALA	CA-C	-9.32	1.41	1.52
26	R	192	ARG	NE-CZ	9.29	1.43	1.33
25	Q	148	HIS	ND1-CE1	9.28	1.41	1.32
5	4	129	PHE	CA-C	-9.27	1.40	1.52
14	F	3	ARG	NE-CZ	9.27	1.43	1.33
29	U	123	ILE	CA-C	-9.27	1.41	1.52
27	S	228	ARG	CA-C	-9.23	1.40	1.52
23	O	235	ASP	C-N	9.21	1.46	1.33
29	U	171	GLY	CA-C	-9.19	1.41	1.52
13	E	94	VAL	N-CA	-9.18	1.35	1.46
28	T	218	LYS	CA-C	-9.16	1.40	1.52
22	N	107	HIS	ND1-CE1	9.13	1.41	1.32
9	A	21	ARG	NE-CZ	9.09	1.43	1.33
9	A	109	ILE	N-CA	-9.08	1.39	1.46
27	S	205	LEU	N-CA	-9.07	1.35	1.46
2	1	111	HIS	ND1-CE1	9.04	1.41	1.32
27	S	298	ILE	CA-CB	-9.03	1.43	1.54
14	F	43	HIS	CA-C	-9.02	1.41	1.52
1	Z	835	GLU	CA-C	-9.01	1.46	1.52
15	G	111	HIS	ND1-CE1	9.00	1.41	1.32
3	2	155	SER	CA-C	-8.98	1.41	1.52
20	L	125	GLU	CA-C	-8.98	1.42	1.52
22	N	510	GLU	CA-C	-8.98	1.41	1.52
25	Q	33	ARG	NE-CZ	8.98	1.43	1.33
11	C	142	HIS	CA-C	-8.94	1.43	1.52
10	B	71	HIS	N-CA	-8.93	1.36	1.46
1	Z	346	ASP	N-CA	-8.93	1.35	1.46
16	H	136	GLU	CA-C	-8.92	1.41	1.53
25	Q	95	LEU	CA-C	-8.91	1.41	1.52
26	R	135	GLY	C-N	8.90	1.45	1.33
24	P	120	ILE	CA-CB	-8.88	1.42	1.54
26	R	23	ARG	CD-NE	8.86	1.58	1.46
27	S	408	ARG	NE-CZ	8.86	1.42	1.33
14	F	148	CYS	CA-C	-8.85	1.43	1.52
16	H	387	SER	CA-C	-8.84	1.41	1.52
12	D	142	PRO	N-CA	-8.82	1.36	1.47
23	O	339	ARG	CD-NE	8.81	1.58	1.46
27	S	307	ARG	CA-C	-8.81	1.41	1.52
9	A	49	VAL	CA-C	-8.76	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	W	57	ASP	CA-C	-8.76	1.42	1.52
19	K	326	ARG	NE-CZ	8.75	1.42	1.33
15	G	134	CYS	CA-C	-8.74	1.42	1.52
27	S	322	VAL	N-CA	-8.74	1.35	1.46
1	Z	335	ARG	NE-CZ	8.74	1.42	1.33
19	K	70	LYS	CA-C	-8.73	1.41	1.52
20	L	70	ILE	CA-CB	-8.72	1.44	1.54
28	T	146	ASP	C-N	8.72	1.44	1.33
20	L	71	VAL	CA-C	-8.71	1.42	1.52
31	W	94	HIS	ND1-CE1	8.69	1.41	1.32
24	P	348	GLU	N-CA	-8.69	1.35	1.46
19	K	103	VAL	N-CA	-8.68	1.36	1.46
1	Z	366	ASP	CA-C	-8.67	1.42	1.52
8	7	184	THR	CA-C	-8.67	1.42	1.52
31	W	130	ARG	NE-CZ	8.67	1.42	1.33
1	Z	134	SER	CA-C	-8.66	1.42	1.52
29	U	225	GLN	CA-C	-8.65	1.41	1.52
16	H	154	PRO	C-N	8.64	1.40	1.33
27	S	468	SER	CA-C	-8.60	1.45	1.52
26	R	204	THR	N-CA	-8.59	1.38	1.46
1	Z	763	ARG	CD-NE	8.56	1.58	1.46
25	Q	278	ARG	NE-CZ	8.55	1.42	1.33
22	N	382	SER	CA-C	-8.55	1.42	1.53
21	M	108	GLY	C-N	8.54	1.44	1.33
1	Z	788	MET	C-N	8.53	1.44	1.33
7	6	91	THR	C-N	8.53	1.45	1.33
27	S	334	VAL	CA-CB	-8.53	1.43	1.54
22	N	137	MET	CA-CB	8.52	1.66	1.53
13	E	174	SER	CA-CB	8.49	1.66	1.53
12	D	198	VAL	C-N	8.48	1.44	1.34
18	J	336	MET	CA-C	-8.48	1.42	1.52
22	N	355	ASN	CA-C	-8.48	1.42	1.52
23	O	140	GLU	CA-CB	8.48	1.66	1.53
28	T	292	PHE	CA-C	-8.47	1.42	1.53
1	Z	829	MET	CA-C	-8.46	1.42	1.52
21	M	109	ALA	CA-C	-8.46	1.42	1.52
22	N	136	LYS	C-N	8.45	1.45	1.33
22	N	894	MET	N-CA	-8.43	1.38	1.46
26	R	159	ARG	CA-C	-8.43	1.42	1.52
15	G	83	ALA	N-CA	-8.41	1.36	1.46
7	6	72	TYR	N-CA	-8.41	1.35	1.45
14	F	65	HIS	ND1-CE1	8.41	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	H	217	PRO	CA-C	8.41	1.59	1.52
1	Z	232	TYR	CA-C	8.41	1.63	1.52
30	V	221	HIS	CA-C	-8.40	1.41	1.52
21	M	364	ARG	CD-NE	8.40	1.58	1.46
31	W	138	VAL	C-O	-8.39	1.15	1.24
31	W	42	ARG	NE-CZ	8.38	1.42	1.33
16	H	250	VAL	CA-C	-8.38	1.40	1.53
7	6	170	SER	C-N	8.37	1.45	1.33
14	F	122	ARG	C-N	8.34	1.44	1.33
13	E	48	LEU	CA-C	-8.33	1.42	1.52
11	C	159	TRP	CA-C	-8.33	1.42	1.52
16	H	312	ARG	CA-C	-8.33	1.42	1.52
20	L	195	PHE	CA-C	-8.32	1.42	1.52
27	S	361	PHE	N-CA	-8.32	1.36	1.46
1	Z	127	SER	CA-C	-8.32	1.42	1.52
20	L	351	GLY	C-O	-8.31	1.14	1.23
15	G	70	VAL	CA-C	-8.31	1.42	1.52
25	Q	392	PRO	N-CD	-8.31	1.36	1.47
3	2	197	LEU	N-CA	-8.30	1.36	1.46
29	U	90	ARG	CD-NE	8.30	1.57	1.46
21	M	398	ALA	N-CA	-8.28	1.36	1.46
27	S	383	GLY	CA-C	-8.28	1.42	1.52
26	R	101	ARG	CD-NE	8.28	1.57	1.46
22	N	34	PHE	C-N	8.27	1.44	1.34
22	N	83	GLY	CA-C	-8.26	1.41	1.52
7	6	235	THR	CA-C	-8.26	1.42	1.52
14	F	160	SER	C-N	8.26	1.44	1.33
3	2	73	ASN	CA-C	-8.25	1.42	1.52
5	4	188	ILE	CA-C	-8.25	1.42	1.52
17	I	254	GLU	N-CA	-8.25	1.35	1.46
10	B	10	LEU	CA-C	-8.25	1.42	1.52
13	E	81	LEU	CA-C	-8.25	1.42	1.52
20	L	297	ARG	CD-NE	8.25	1.57	1.46
2	1	224	LEU	CA-C	-8.24	1.42	1.53
24	P	420	ASP	CA-C	-8.24	1.44	1.52
25	Q	77	LEU	N-CA	-8.24	1.35	1.46
9	A	227	PHE	CA-C	-8.23	1.42	1.52
12	D	216	SER	N-CA	-8.23	1.35	1.46
21	M	129	ARG	NE-CZ	8.23	1.42	1.33
2	1	147	SER	CA-C	-8.22	1.42	1.52
18	J	326	LEU	N-CA	-8.22	1.36	1.46
26	R	31	HIS	ND1-CE1	8.22	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	5	213	ASP	C-N	8.21	1.44	1.33
3	2	245	TYR	CA-C	-8.21	1.41	1.52
4	3	65	GLN	CA-C	-8.20	1.41	1.52
1	Z	680	ARG	CD-NE	8.20	1.57	1.46
25	Q	266	ASP	N-CA	-8.20	1.36	1.46
27	S	479	ARG	C-N	8.19	1.44	1.33
21	M	61	ARG	CD-NE	8.16	1.57	1.46
14	F	111	LEU	CA-C	-8.15	1.42	1.52
17	I	430	LYS	CA-CB	8.15	1.66	1.53
21	M	283	ILE	CA-CB	-8.15	1.44	1.53
16	H	97	ARG	NE-CZ	8.14	1.42	1.33
17	I	98	LYS	CA-CB	8.14	1.66	1.53
17	I	176	VAL	CA-C	-8.14	1.43	1.52
24	P	340	VAL	N-CA	-8.14	1.37	1.46
4	3	186	ILE	CA-C	-8.13	1.43	1.52
22	N	641	SER	CA-C	-8.12	1.41	1.52
22	N	98	GLU	CA-C	-8.12	1.42	1.52
13	E	155	HIS	CA-C	-8.11	1.42	1.52
2	1	125	ARG	N-CA	-8.10	1.35	1.46
18	J	356	GLY	CA-C	-8.10	1.43	1.52
26	R	88	LEU	CA-CB	8.09	1.66	1.53
20	L	171	LEU	CA-C	-8.08	1.42	1.52
9	A	144	ASP	CA-CB	8.07	1.66	1.53
29	U	12	HIS	CG-CD2	-8.05	1.26	1.35
22	N	179	TYR	N-CA	-8.05	1.36	1.46
4	3	26	ARG	NE-CZ	8.04	1.41	1.33
22	N	740	GLY	CA-C	8.02	1.60	1.51
29	U	210	SER	N-CA	-8.02	1.36	1.46
23	O	48	PRO	CA-C	-8.01	1.43	1.52
12	D	43	LEU	CA-C	-8.01	1.43	1.52
18	J	295	THR	N-CA	-8.00	1.35	1.45
19	K	175	GLN	C-N	8.00	1.44	1.33
15	G	121	HIS	CE1-NE2	-8.00	1.24	1.32
7	6	222	ARG	CD-NE	7.99	1.57	1.46
13	E	66	LYS	CA-C	-7.99	1.43	1.52
11	C	11	ILE	CA-C	-7.98	1.42	1.52
5	4	101	ASN	CA-C	-7.97	1.43	1.52
27	S	484	LEU	N-CA	-7.96	1.36	1.46
16	H	211	GLY	CA-C	-7.95	1.43	1.51
23	O	54	ASP	C-N	7.95	1.41	1.33
9	A	53	GLN	CA-C	-7.95	1.43	1.52
26	R	185	GLY	CA-C	-7.93	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	W	95	LEU	CA-C	-7.93	1.42	1.52
2	1	148	VAL	CA-CB	7.93	1.61	1.53
19	K	353	ASN	CA-C	-7.93	1.42	1.52
18	J	239	ARG	CD-NE	7.93	1.57	1.46
5	4	104	LEU	CA-C	-7.92	1.43	1.52
31	W	113	VAL	CA-CB	-7.91	1.43	1.53
11	C	226	ARG	CD-NE	7.91	1.57	1.46
9	A	12	HIS	ND1-CE1	7.90	1.40	1.32
31	W	35	ILE	CA-CB	-7.90	1.44	1.54
5	4	42	ILE	CA-C	-7.89	1.43	1.52
22	N	799	LYS	CA-CB	7.89	1.61	1.53
28	T	189	HIS	ND1-CE1	7.89	1.40	1.32
22	N	429	LYS	CA-CB	7.88	1.66	1.53
20	L	65	THR	CA-C	-7.87	1.43	1.52
11	C	120	ALA	CA-C	-7.86	1.42	1.52
18	J	212	ILE	CA-C	-7.86	1.42	1.52
19	K	124	LEU	N-CA	-7.86	1.36	1.46
3	2	185	PHE	N-CA	-7.85	1.36	1.46
7	6	165	ALA	N-CA	-7.85	1.36	1.46
28	T	214	ARG	CD-NE	7.84	1.57	1.46
19	K	314	ALA	CA-CB	7.84	1.64	1.53
14	F	145	PHE	CA-C	-7.84	1.43	1.52
1	Z	903	ASN	C-O	7.84	1.27	1.23
12	D	109	ARG	NE-CZ	7.84	1.41	1.33
9	A	181	LYS	N-CA	-7.83	1.37	1.46
1	Z	132	THR	C-N	7.83	1.43	1.33
18	J	40	GLN	C-N	7.83	1.43	1.33
24	P	180	LYS	CA-C	-7.83	1.42	1.52
21	M	312	GLU	CA-C	-7.82	1.42	1.52
19	K	134	LYS	CA-C	-7.82	1.42	1.53
22	N	486	MET	C-N	7.82	1.42	1.33
31	W	6	THR	CA-C	-7.81	1.42	1.52
3	2	193	GLU	CA-C	-7.81	1.42	1.52
12	D	94	HIS	ND1-CE1	7.81	1.40	1.32
4	3	188	HIS	ND1-CE1	7.81	1.40	1.32
29	U	207	ASP	CA-CB	7.81	1.65	1.53
1	Z	192	VAL	CA-C	7.80	1.59	1.52
20	L	26	LEU	N-CA	-7.80	1.36	1.46
3	2	132	ARG	CZ-NH2	7.79	1.43	1.33
11	C	55	LEU	CA-C	-7.79	1.42	1.52
28	T	341	GLU	CA-C	-7.79	1.43	1.52
29	U	162	ILE	CA-C	-7.78	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	2	181	PHE	CA-C	-7.78	1.42	1.52
1	Z	456	ARG	CD-NE	7.77	1.57	1.46
31	W	142	ASN	C-N	7.77	1.43	1.33
1	Z	659	LEU	CA-C	-7.77	1.42	1.52
14	F	101	ARG	CA-C	-7.76	1.44	1.52
30	V	160	PHE	CA-C	-7.75	1.43	1.52
18	J	345	ARG	CD-NE	7.75	1.57	1.46
10	B	116	SER	CA-C	-7.73	1.42	1.52
16	H	282	GLY	CA-C	-7.73	1.43	1.52
24	P	364	ARG	CD-NE	7.73	1.57	1.46
29	U	64	ASP	CA-C	-7.72	1.42	1.52
20	L	373	LYS	CA-C	-7.72	1.43	1.52
11	C	158	GLY	N-CA	-7.72	1.37	1.46
16	H	246	VAL	N-CA	-7.71	1.36	1.46
11	C	239	LYS	N-CA	-7.70	1.37	1.46
25	Q	341	PRO	CA-C	-7.70	1.42	1.52
12	D	69	VAL	CA-C	-7.70	1.43	1.52
26	R	380	VAL	N-CA	-7.70	1.37	1.46
29	U	128	PRO	C-N	7.70	1.44	1.33
18	J	332	HIS	CA-C	-7.70	1.42	1.52
18	J	32	GLN	CA-C	-7.69	1.42	1.52
32	Y	55	GLN	C-N	7.69	1.43	1.33
20	L	30	ARG	CD-NE	7.68	1.57	1.46
1	Z	502	LEU	CA-CB	7.68	1.63	1.53
3	2	79	PHE	CA-CB	7.68	1.63	1.53
23	O	195	GLU	CA-C	-7.68	1.42	1.52
26	R	342	ARG	NE-CZ	7.68	1.41	1.33
22	N	363	SER	CA-C	-7.68	1.41	1.52
19	K	94	GLU	C-N	7.67	1.44	1.33
9	A	228	ARG	N-CA	-7.67	1.36	1.45
19	K	298	GLY	C-N	7.67	1.39	1.33
1	Z	116	GLY	CA-C	-7.67	1.41	1.51
17	I	391	SER	CA-C	-7.66	1.43	1.53
21	M	56	LYS	C-N	7.66	1.44	1.33
1	Z	653	ALA	C-N	7.65	1.43	1.33
1	Z	152	ALA	CA-C	-7.65	1.43	1.52
22	N	490	ARG	NE-CZ	7.65	1.41	1.33
22	N	475	HIS	ND1-CE1	7.65	1.40	1.32
24	P	124	LEU	CA-C	-7.64	1.43	1.52
6	5	77	SER	C-N	7.64	1.43	1.33
8	7	207	GLN	C-N	7.64	1.43	1.33
15	G	163	GLY	CA-C	-7.64	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	J	53	ASN	N-CA	-7.64	1.37	1.46
4	3	47	ASP	CA-CB	7.63	1.65	1.53
20	L	211	SER	CA-C	-7.63	1.43	1.52
6	5	69	HIS	ND1-CE1	7.63	1.40	1.32
5	4	187	GLY	CA-C	-7.63	1.41	1.51
22	N	139	GLN	C-N	7.63	1.43	1.33
26	R	240	VAL	CA-CB	-7.62	1.45	1.54
10	B	155	TYR	CA-C	-7.62	1.43	1.52
27	S	479	ARG	CZ-NH2	7.62	1.43	1.33
3	2	213	GLY	CA-C	-7.61	1.42	1.51
31	W	183	LEU	C-N	7.61	1.43	1.33
11	C	202	ASP	CA-C	-7.61	1.42	1.52
16	H	139	ARG	NE-CZ	7.61	1.41	1.33
18	J	49	ARG	CD-NE	7.60	1.56	1.46
16	H	258	ARG	N-CA	-7.60	1.37	1.46
26	R	78	GLU	N-CA	-7.60	1.37	1.46
18	J	75	GLU	C-N	7.59	1.42	1.33
26	R	319	MET	CA-C	-7.59	1.43	1.52
25	Q	16	LEU	CA-C	-7.58	1.43	1.52
23	O	23	HIS	ND1-CE1	7.58	1.40	1.32
1	Z	492	SER	CA-C	-7.57	1.43	1.52
22	N	369	THR	CA-C	-7.57	1.43	1.52
20	L	271	HIS	CD2-NE2	7.56	1.46	1.37
17	I	289	ALA	N-CA	-7.56	1.36	1.46
1	Z	79	ARG	NE-CZ	7.56	1.41	1.33
3	2	216	ILE	CA-C	-7.56	1.43	1.52
27	S	481	SER	N-CA	-7.56	1.37	1.46
12	D	69	VAL	N-CA	-7.55	1.37	1.46
20	L	251	ARG	CD-NE	7.55	1.56	1.46
22	N	717	ILE	N-CA	-7.55	1.37	1.46
18	J	205	HIS	CB-CG	-7.54	1.39	1.50
9	A	229	ILE	N-CA	-7.53	1.36	1.46
18	J	298	ILE	CA-CB	7.53	1.63	1.54
13	E	14	THR	N-CA	-7.53	1.36	1.45
28	T	263	LEU	CA-C	-7.53	1.43	1.52
19	K	242	GLU	N-CA	-7.53	1.36	1.46
1	Z	170	TRP	NE1-CE2	7.53	1.45	1.37
28	T	145	ARG	CD-NE	7.53	1.56	1.46
16	H	362	MET	CA-CB	7.53	1.63	1.53
10	B	175	GLU	CA-C	-7.52	1.43	1.52
24	P	172	GLU	N-CA	-7.52	1.37	1.46
19	K	351	LYS	C-N	7.51	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	604	HIS	ND1-CE1	7.51	1.40	1.32
14	F	182	CYS	CA-C	-7.51	1.43	1.52
21	M	67	GLN	C-N	7.50	1.43	1.33
7	6	225	ILE	CA-C	-7.50	1.43	1.52
23	O	49	CYS	C-N	7.50	1.42	1.33
27	S	452	ASN	N-CA	-7.49	1.36	1.46
13	E	62	SER	CA-C	-7.49	1.43	1.52
21	M	344	ARG	NE-CZ	7.49	1.41	1.33
23	O	172	TYR	CA-C	-7.49	1.43	1.52
29	U	66	SER	C-N	7.49	1.41	1.33
11	C	128	ARG	NE-CZ	7.48	1.41	1.33
12	D	154	HIS	ND1-CE1	7.48	1.40	1.32
12	D	36	ARG	CA-C	7.48	1.61	1.52
8	7	89	ARG	CD-NE	7.47	1.56	1.46
1	Z	143	ARG	NE-CZ	7.47	1.41	1.33
16	H	362	MET	C-N	7.47	1.43	1.33
22	N	574	LYS	CA-C	-7.47	1.42	1.52
29	U	226	ILE	N-CA	-7.47	1.37	1.46
2	1	119	GLU	C-N	7.46	1.43	1.33
18	J	197	THR	CA-C	-7.45	1.43	1.52
19	K	403	TYR	CA-CB	7.45	1.65	1.53
24	P	357	ARG	CD-NE	7.45	1.56	1.46
11	C	122	THR	CA-C	-7.45	1.42	1.52
22	N	608	SER	CA-C	-7.45	1.43	1.52
1	Z	301	HIS	ND1-CE1	7.45	1.40	1.32
19	K	162	VAL	N-CA	-7.44	1.37	1.46
7	6	31	SER	CA-CB	7.44	1.64	1.53
15	G	90	ASP	C-N	7.43	1.43	1.33
24	P	179	LYS	CA-C	-7.43	1.43	1.52
9	A	230	LEU	C-N	7.43	1.43	1.33
18	J	244	SER	CA-C	-7.43	1.43	1.52
26	R	252	SER	CA-C	-7.43	1.42	1.52
8	7	69	ALA	CA-C	-7.42	1.43	1.52
19	K	416	PHE	CA-C	-7.42	1.43	1.52
16	H	340	LYS	N-CA	-7.41	1.37	1.46
19	K	265	ASP	C-N	7.41	1.44	1.33
22	N	146	LYS	CA-CB	7.41	1.64	1.53
12	D	107	ILE	C-N	7.40	1.43	1.33
24	P	78	LYS	CA-C	-7.40	1.43	1.52
5	4	48	GLY	C-N	7.40	1.43	1.33
26	R	73	MET	CA-C	-7.40	1.43	1.52
30	V	46	ARG	NE-CZ	7.40	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	603	SER	CA-C	-7.40	1.45	1.53
22	N	437	TYR	CA-C	-7.40	1.43	1.52
19	K	44	TYR	CA-CB	7.39	1.64	1.53
25	Q	276	ALA	CA-CB	7.39	1.63	1.53
7	6	137	ILE	C-N	7.39	1.44	1.33
6	5	237	HIS	CA-C	-7.39	1.43	1.52
26	R	267	ARG	NE-CZ	7.39	1.41	1.33
10	B	203	MET	CA-C	-7.39	1.43	1.52
11	C	203	VAL	CA-C	-7.39	1.44	1.53
12	D	160	ALA	CA-C	-7.39	1.43	1.52
14	F	102	PRO	N-CA	-7.39	1.37	1.47
1	Z	459	CYS	C-N	7.38	1.40	1.33
29	U	88	ARG	CZ-NH2	7.38	1.43	1.33
13	E	198	SER	CA-C	-7.38	1.43	1.52
30	V	107	MET	CA-CB	7.38	1.65	1.53
10	B	91	ARG	CZ-NH2	7.37	1.43	1.33
18	J	323	GLU	N-CA	-7.37	1.37	1.46
26	R	136	HIS	N-CA	-7.37	1.37	1.46
5	4	74	GLU	CA-C	-7.37	1.43	1.52
31	W	7	MET	CA-C	-7.37	1.43	1.52
22	N	756	HIS	CA-C	-7.36	1.43	1.52
7	6	132	TYR	CA-CB	7.36	1.65	1.53
24	P	108	CYS	CA-C	-7.36	1.43	1.52
24	P	270	VAL	N-CA	-7.36	1.38	1.46
6	5	67	PHE	C-O	-7.35	1.18	1.24
22	N	57	ARG	NE-CZ	7.35	1.41	1.33
11	C	237	ILE	CA-C	-7.35	1.43	1.52
1	Z	311	VAL	N-CA	7.35	1.54	1.46
26	R	137	ARG	NE-CZ	7.35	1.41	1.33
3	2	181	PHE	N-CA	-7.34	1.37	1.46
30	V	88	ASP	CA-C	-7.34	1.46	1.52
9	A	51	VAL	CA-CB	-7.34	1.45	1.54
18	J	38	LYS	CA-C	-7.34	1.43	1.52
24	P	329	ARG	CD-NE	7.33	1.56	1.46
7	6	74	LEU	CA-C	-7.33	1.43	1.52
12	D	235	GLU	CA-CB	7.33	1.65	1.53
24	P	50	LEU	CA-C	-7.33	1.43	1.52
14	F	219	LEU	CA-C	-7.32	1.43	1.52
21	M	222	GLY	N-CA	-7.32	1.37	1.45
1	Z	433	LEU	C-N	7.32	1.43	1.33
31	W	69	GLY	CA-C	-7.32	1.43	1.52
3	2	110	SER	CA-CB	7.32	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	L	215	ILE	CA-C	-7.32	1.44	1.52
24	P	39	ARG	N-CA	-7.32	1.39	1.46
22	N	803	LYS	CA-C	-7.31	1.43	1.52
16	H	258	ARG	NE-CZ	7.31	1.41	1.33
17	I	272	ARG	NE-CZ	7.31	1.41	1.33
5	4	16	ALA	CA-C	-7.31	1.43	1.52
19	K	417	TYR	CA-C	-7.31	1.46	1.52
1	Z	80	ARG	CD-NE	7.30	1.56	1.46
24	P	432	LEU	N-CA	-7.30	1.37	1.46
14	F	144	ILE	CA-C	-7.29	1.43	1.52
22	N	442	GLY	CA-C	-7.29	1.44	1.52
7	6	179	ASN	N-CA	-7.29	1.37	1.46
21	M	251	LEU	CA-C	-7.29	1.44	1.52
20	L	208	ILE	CA-C	-7.29	1.44	1.52
3	2	57	LEU	N-CA	-7.28	1.36	1.45
25	Q	152	GLN	CA-C	-7.28	1.43	1.52
14	F	194	ALA	CA-C	-7.28	1.43	1.52
30	V	87	VAL	CA-CB	-7.28	1.46	1.54
1	Z	588	ARG	CD-NE	7.28	1.56	1.46
21	M	171	ARG	NE-CZ	7.28	1.41	1.33
7	6	96	ILE	CA-C	-7.28	1.43	1.52
15	G	131	PRO	N-CA	-7.28	1.38	1.47
13	E	210	LEU	CA-C	-7.28	1.43	1.52
16	H	68	SER	CA-CB	7.28	1.65	1.53
27	S	382	PHE	CA-C	-7.27	1.45	1.53
13	E	73	HIS	ND1-CE1	7.27	1.39	1.32
13	E	70	ILE	CA-CB	-7.27	1.45	1.54
15	G	97	SER	N-CA	-7.26	1.37	1.46
22	N	361	ARG	NE-CZ	7.26	1.41	1.33
20	L	299	ILE	CA-C	-7.26	1.43	1.52
11	C	91	ARG	NE-CZ	7.26	1.41	1.33
26	R	351	ASN	N-CA	-7.26	1.37	1.45
27	S	342	ILE	CA-C	7.25	1.57	1.52
2	1	178	ARG	CD-NE	7.25	1.56	1.46
18	J	215	SER	N-CA	-7.25	1.37	1.46
15	G	142	SER	CA-C	-7.25	1.43	1.52
15	G	128	ALA	C-N	7.24	1.42	1.33
19	K	143	LEU	CA-C	-7.24	1.45	1.52
22	N	16	GLU	CA-CB	7.24	1.64	1.53
30	V	106	GLU	N-CA	-7.24	1.37	1.46
25	Q	330	LEU	N-CA	-7.24	1.37	1.46
10	B	77	SER	CA-C	-7.23	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	1	36	THR	N-CA	7.23	1.55	1.46
5	4	162	LYS	C-N	7.22	1.43	1.33
26	R	139	ASP	CA-C	-7.22	1.43	1.52
29	U	245	PHE	CA-C	-7.22	1.42	1.52
14	F	97	PHE	CA-C	-7.22	1.43	1.52
20	L	274	LYS	N-CA	-7.22	1.37	1.45
5	4	90	ASP	CA-C	-7.22	1.43	1.52
3	2	228	PHE	CA-CB	7.21	1.62	1.53
20	L	215	ILE	N-CA	-7.21	1.38	1.46
22	N	633	CYS	N-CA	-7.21	1.40	1.46
18	J	124	HIS	N-CA	-7.21	1.37	1.46
23	O	24	ARG	CD-NE	7.21	1.56	1.46
30	V	161	ARG	CA-C	-7.21	1.44	1.52
16	H	284	ARG	CA-C	-7.21	1.43	1.52
6	5	134	SER	N-CA	-7.20	1.36	1.46
20	L	25	ARG	CD-NE	7.20	1.56	1.46
6	5	216	ARG	NE-CZ	7.20	1.41	1.33
22	N	744	VAL	CA-CB	-7.19	1.44	1.54
8	7	122	LEU	CA-C	-7.19	1.43	1.52
15	G	186	THR	CA-C	-7.19	1.43	1.52
12	D	100	ASP	CA-C	-7.18	1.45	1.52
11	C	82	ASP	C-N	7.18	1.43	1.33
15	G	93	ARG	CD-NE	7.17	1.56	1.46
17	I	425	ASN	CA-C	-7.17	1.43	1.52
21	M	265	ALA	CA-CB	7.17	1.64	1.53
24	P	319	THR	CA-CB	-7.17	1.42	1.53
5	4	156	ALA	CA-C	-7.16	1.43	1.52
28	T	171	LEU	C-N	7.16	1.43	1.33
20	L	107	ILE	CA-C	-7.16	1.44	1.52
17	I	294	ARG	CZ-NH1	7.16	1.42	1.32
1	Z	507	ASP	N-CA	-7.16	1.37	1.45
17	I	113	GLU	N-CA	-7.16	1.37	1.46
22	N	137	MET	CA-C	-7.15	1.43	1.52
1	Z	478	ARG	NE-CZ	7.15	1.41	1.33
3	2	115	ARG	CA-C	-7.15	1.43	1.52
21	M	269	ARG	C-N	7.15	1.43	1.33
22	N	673	GLU	C-O	-7.15	1.17	1.24
20	L	236	ASP	CA-C	-7.15	1.43	1.52
28	T	215	LEU	N-CA	-7.15	1.38	1.46
22	N	158	ARG	NE-CZ	7.15	1.41	1.33
22	N	770	TRP	CA-C	-7.15	1.42	1.52
30	V	251	LEU	CA-C	-7.14	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	E	173	ALA	N-CA	-7.14	1.36	1.46
21	M	115	SER	C-N	7.14	1.42	1.33
4	3	16	GLY	CA-C	-7.13	1.45	1.52
18	J	57	ARG	CD-NE	7.13	1.56	1.46
22	N	203	LYS	CA-C	-7.13	1.43	1.52
24	P	309	PHE	CA-C	-7.13	1.43	1.52
24	P	233	LEU	C-N	7.12	1.43	1.33
4	3	177	ARG	CZ-NH2	7.12	1.42	1.33
7	6	230	GLY	N-CA	-7.12	1.38	1.45
9	A	199	ILE	CA-C	-7.12	1.43	1.52
30	V	62	VAL	N-CA	7.12	1.54	1.46
12	D	125	ARG	NE-CZ	7.11	1.40	1.33
3	2	144	GLY	CA-C	-7.11	1.46	1.52
15	G	121	HIS	CD2-NE2	-7.11	1.30	1.37
18	J	101	LYS	CA-C	-7.10	1.43	1.52
24	P	448	LYS	C-N	7.10	1.43	1.33
20	L	149	ILE	CB-CG1	7.09	1.67	1.53
27	S	254	LEU	C-N	7.09	1.43	1.33
21	M	282	ILE	CA-C	-7.09	1.43	1.52
23	O	34	TRP	NE1-CE2	7.09	1.45	1.37
24	P	310	THR	N-CA	7.08	1.54	1.46
17	I	363	ARG	N-CA	-7.08	1.37	1.46
25	Q	194	ARG	CD-NE	7.08	1.56	1.46
19	K	329	ARG	CZ-NH2	7.07	1.42	1.33
22	N	599	ILE	N-CA	-7.07	1.38	1.46
29	U	121	LEU	N-CA	-7.07	1.37	1.46
1	Z	778	LEU	CA-C	-7.06	1.44	1.52
15	G	58	LEU	CA-C	-7.06	1.43	1.52
19	K	131	ALA	CA-C	-7.06	1.44	1.52
28	T	116	LEU	N-CA	-7.06	1.37	1.46
9	A	245	ARG	NE-CZ	7.05	1.40	1.33
10	B	138	GLY	CA-C	-7.05	1.44	1.51
14	F	215	VAL	CA-CB	-7.05	1.48	1.55
10	B	99	LEU	CA-C	-7.05	1.42	1.52
24	P	132	THR	CA-C	-7.05	1.43	1.52
21	M	236	LEU	CA-CB	7.04	1.64	1.53
27	S	410	ILE	CA-C	-7.04	1.46	1.52
22	N	32	ASN	CA-C	-7.04	1.43	1.52
17	I	411	ARG	CD-NE	7.03	1.56	1.46
27	S	355	ARG	NE-CZ	7.03	1.40	1.33
17	I	236	ALA	CA-C	-7.03	1.43	1.52
21	M	61	ARG	CZ-NH2	7.03	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	687	ARG	CZ-NH2	7.03	1.42	1.33
5	4	59	TYR	CA-C	-7.03	1.43	1.52
18	J	316	GLU	CA-CB	7.03	1.64	1.53
19	K	350	SER	C-N	7.03	1.43	1.33
6	5	123	ARG	NE-CZ	7.02	1.40	1.33
30	V	33	ILE	CA-CB	-7.02	1.46	1.54
18	J	146	SER	CA-C	-7.02	1.44	1.52
16	H	411	GLU	C-O	-7.02	1.16	1.24
9	A	43	ARG	NE-CZ	7.02	1.40	1.33
17	I	150	VAL	N-CA	-7.02	1.37	1.46
1	Z	588	ARG	NE-CZ	7.01	1.40	1.33
3	2	104	SER	N-CA	-7.01	1.38	1.46
4	3	26	ARG	CD-NE	7.01	1.56	1.46
1	Z	589	SER	CA-CB	7.01	1.64	1.53
22	N	159	ARG	NE-CZ	7.01	1.40	1.33
4	3	27	ARG	C-N	7.01	1.43	1.33
22	N	107	HIS	CA-C	-7.01	1.43	1.52
23	O	238	TYR	CA-C	-7.01	1.43	1.52
15	G	166	ILE	CA-C	-7.01	1.43	1.52
8	7	211	ARG	CA-C	-7.01	1.43	1.52
1	Z	892	PRO	N-CA	-7.01	1.38	1.47
4	3	15	LYS	CA-C	-7.01	1.44	1.52
31	W	50	GLY	CA-C	-7.00	1.46	1.52
11	C	111	VAL	CA-CB	-7.00	1.45	1.54
4	3	48	ARG	N-CA	-7.00	1.36	1.46
14	F	70	ILE	C-N	7.00	1.42	1.33
27	S	197	THR	N-CA	-7.00	1.37	1.46
22	N	727	LYS	CA-C	-7.00	1.43	1.52
14	F	82	ARG	NE-CZ	6.99	1.40	1.33
21	M	52	ILE	CA-C	-6.99	1.44	1.52
22	N	55	ARG	C-N	6.99	1.42	1.33
8	7	179	ALA	N-CA	-6.98	1.39	1.45
25	Q	313	LEU	N-CA	-6.97	1.38	1.46
1	Z	796	LEU	N-CA	-6.97	1.37	1.46
7	6	103	TYR	N-CA	-6.97	1.38	1.46
17	I	367	ILE	CA-CB	-6.97	1.45	1.54
26	R	83	ARG	CD-NE	6.97	1.56	1.46
10	B	5	GLY	CA-C	-6.97	1.42	1.51
18	J	92	GLU	N-CA	-6.97	1.36	1.45
29	U	192	THR	C-N	6.97	1.42	1.33
19	K	229	ARG	CA-CB	6.97	1.62	1.53
22	N	113	VAL	CA-C	-6.97	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	S	187	ILE	C-N	6.97	1.43	1.33
22	N	410	VAL	CA-CB	-6.96	1.45	1.54
19	K	388	ARG	CD-NE	6.95	1.55	1.46
27	S	444	ASP	CA-CB	6.95	1.64	1.53
17	I	152	LEU	CA-C	-6.95	1.44	1.52
19	K	366	ARG	CD-NE	6.95	1.55	1.46
20	L	19	HIS	ND1-CE1	6.95	1.39	1.32
18	J	287	LYS	CA-CB	6.95	1.63	1.53
22	N	46	GLU	N-CA	-6.95	1.37	1.46
27	S	457	TYR	CA-C	-6.95	1.44	1.52
25	Q	363	ARG	CD-NE	6.94	1.55	1.46
18	J	60	ARG	NE-CZ	6.94	1.40	1.33
10	B	89	ARG	CD-NE	6.94	1.55	1.46
11	C	63	GLU	CA-C	-6.94	1.43	1.52
13	E	17	PRO	CA-C	-6.94	1.41	1.52
22	N	893	THR	C-N	6.94	1.40	1.33
18	J	173	GLU	CA-C	-6.93	1.43	1.52
27	S	288	TYR	CA-CB	6.93	1.64	1.53
23	O	98	GLU	CA-C	-6.93	1.43	1.52
2	1	75	ILE	N-CA	-6.93	1.37	1.46
10	B	135	LEU	CA-C	-6.93	1.44	1.52
13	E	143	PHE	CA-CB	6.93	1.63	1.53
20	L	56	ILE	CA-C	-6.92	1.43	1.52
6	5	245	ARG	NE-CZ	6.92	1.40	1.33
22	N	374	SER	C-N	6.92	1.43	1.33
5	4	103	LEU	N-CA	-6.92	1.38	1.46
6	5	71	VAL	N-CA	-6.92	1.38	1.46
13	E	57	PRO	N-CA	-6.92	1.38	1.47
19	K	268	ASP	CA-CB	6.92	1.65	1.53
1	Z	440	ILE	N-CA	-6.92	1.38	1.46
1	Z	879	ARG	NE-CZ	6.92	1.40	1.33
1	Z	423	ASP	CA-C	-6.91	1.43	1.52
22	N	219	CYS	N-CA	-6.91	1.37	1.46
20	L	168	LYS	C-N	6.91	1.42	1.33
10	B	207	ASN	CA-C	-6.91	1.43	1.52
14	F	18	ARG	CZ-NH2	6.91	1.42	1.33
1	Z	307	LEU	N-CA	-6.91	1.38	1.46
1	Z	355	ASN	CA-C	-6.91	1.44	1.52
12	D	213	ARG	CZ-NH1	6.90	1.42	1.32
16	H	320	ALA	N-CA	-6.90	1.38	1.46
22	N	735	GLY	CA-C	-6.90	1.44	1.52
7	6	104	LYS	CA-CB	6.90	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	168	ALA	N-CA	-6.90	1.37	1.45
14	F	174	ARG	CD-NE	6.89	1.55	1.46
25	Q	329	ASN	N-CA	-6.89	1.37	1.46
6	5	241	ASP	CA-C	-6.89	1.43	1.52
5	4	19	ARG	NE-CZ	6.89	1.40	1.33
22	N	361	ARG	CD-NE	6.88	1.55	1.46
12	D	218	LYS	CA-C	-6.88	1.44	1.52
13	E	93	ARG	N-CA	-6.88	1.38	1.46
3	2	227	ASP	CA-C	-6.87	1.44	1.52
22	N	616	ARG	CZ-NH2	6.87	1.42	1.33
24	P	148	THR	N-CA	-6.87	1.38	1.46
12	D	114	LEU	N-CA	-6.87	1.38	1.46
24	P	357	ARG	NE-CZ	6.87	1.40	1.33
20	L	153	LEU	N-CA	-6.86	1.38	1.46
26	R	38	ARG	CZ-NH1	6.86	1.42	1.32
12	D	46	GLU	CA-C	-6.86	1.44	1.52
18	J	180	ILE	CA-C	-6.86	1.44	1.52
22	N	667	GLU	C-N	6.86	1.43	1.33
16	H	348	LEU	N-CA	-6.85	1.38	1.46
3	2	157	TYR	CA-C	-6.85	1.45	1.52
3	2	186	ARG	CZ-NH2	6.85	1.42	1.33
10	B	136	ILE	CA-CB	-6.85	1.46	1.54
12	D	5	ARG	CA-C	-6.85	1.43	1.52
24	P	144	ARG	CZ-NH2	6.85	1.42	1.33
6	5	243	TRP	CA-C	-6.85	1.43	1.52
20	L	376	ASP	CA-CB	6.85	1.64	1.53
24	P	191	ARG	NE-CZ	6.84	1.40	1.33
18	J	162	LYS	CA-C	-6.84	1.44	1.52
24	P	248	ARG	CD-NE	6.84	1.55	1.46
14	F	108	LEU	N-CA	-6.83	1.38	1.46
26	R	102	ASP	N-CA	-6.83	1.38	1.46
8	7	82	ARG	CD-NE	6.83	1.55	1.46
26	R	279	GLU	N-CA	-6.82	1.38	1.46
24	P	449	GLU	N-CA	-6.82	1.38	1.46
31	W	91	ARG	NE-CZ	6.82	1.40	1.33
11	C	105	ILE	N-CA	-6.82	1.40	1.47
14	F	105	VAL	CA-CB	-6.82	1.45	1.54
26	R	16	ASP	C-N	6.82	1.42	1.33
10	B	131	GLY	N-CA	-6.82	1.35	1.45
19	K	292	LEU	CA-C	-6.81	1.44	1.52
1	Z	584	SER	C-N	6.81	1.41	1.33
20	L	309	ARG	N-CA	-6.81	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	I	271	PHE	C-N	6.80	1.42	1.33
29	U	106	ILE	N-CA	-6.80	1.38	1.46
19	K	219	VAL	CA-CB	-6.80	1.46	1.54
20	L	124	HIS	ND1-CE1	6.79	1.39	1.32
27	S	462	GLU	CA-C	-6.79	1.44	1.52
10	B	189	HIS	CE1-NE2	-6.79	1.25	1.32
10	B	217	GLY	N-CA	-6.79	1.35	1.45
1	Z	220	ASP	C-N	6.78	1.42	1.33
22	N	734	GLN	C-N	6.78	1.42	1.33
14	F	141	GLY	CA-C	-6.78	1.42	1.51
19	K	112	TYR	CA-C	-6.78	1.44	1.52
3	2	51	TYR	N-CA	-6.77	1.36	1.45
12	D	190	LEU	C-N	6.77	1.42	1.33
7	6	71	CYS	C-N	6.77	1.42	1.33
27	S	225	ASP	N-CA	-6.77	1.37	1.46
11	C	236	LEU	C-N	6.77	1.42	1.33
21	M	93	VAL	C-N	6.77	1.42	1.33
22	N	469	SER	CA-C	-6.77	1.44	1.52
23	O	270	ARG	NE-CZ	6.77	1.40	1.33
1	Z	217	LEU	N-CA	-6.77	1.38	1.46
2	1	162	GLY	N-CA	-6.76	1.38	1.45
23	O	46	GLN	CA-C	-6.76	1.44	1.52
4	3	51	ILE	C-N	6.76	1.39	1.33
27	S	315	LYS	CA-C	-6.76	1.45	1.53
22	N	625	ILE	CA-CB	-6.75	1.46	1.54
25	Q	325	LYS	CA-CB	6.75	1.64	1.53
20	L	242	ARG	NE-CZ	6.75	1.40	1.33
4	3	46	GLY	CA-C	6.75	1.59	1.52
1	Z	337	LEU	CA-CB	6.75	1.64	1.53
28	T	158	ARG	C-N	6.75	1.43	1.33
19	K	235	PHE	CA-C	-6.74	1.43	1.52
30	V	60	GLU	N-CA	-6.74	1.37	1.45
12	D	60	ARG	C-N	6.74	1.43	1.34
22	N	51	ASP	CA-CB	6.73	1.64	1.53
15	G	41	ARG	CA-C	-6.73	1.44	1.52
6	5	211	ALA	N-CA	-6.73	1.38	1.46
14	F	210	VAL	CA-CB	-6.73	1.47	1.54
7	6	114	GLY	N-CA	-6.73	1.37	1.45
13	E	91	LYS	C-N	6.73	1.43	1.33
28	T	166	ARG	CA-C	-6.73	1.44	1.52
29	U	255	ASP	N-CA	-6.73	1.38	1.46
14	F	46	LEU	CA-CB	6.72	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	P	212	LYS	CA-C	-6.72	1.44	1.52
15	G	233	ARG	CD-NE	6.72	1.55	1.46
24	P	103	LYS	C-N	6.72	1.43	1.33
21	M	419	ASP	CA-C	-6.72	1.44	1.52
2	1	231	PHE	C-N	6.72	1.39	1.33
10	B	99	LEU	C-N	6.72	1.42	1.33
17	I	154	HIS	CE1-NE2	-6.71	1.25	1.32
12	D	36	ARG	NE-CZ	6.71	1.40	1.33
9	A	68	HIS	N-CA	-6.71	1.39	1.46
12	D	213	ARG	CD-NE	6.71	1.55	1.46
7	6	207	PHE	CA-C	-6.71	1.44	1.52
8	7	60	LYS	CA-C	-6.71	1.44	1.52
25	Q	62	GLN	CA-CB	6.71	1.62	1.53
20	L	184	ALA	C-N	6.70	1.43	1.33
1	Z	464	ALA	CA-C	-6.70	1.44	1.52
2	1	216	SER	CA-C	-6.70	1.44	1.52
28	T	116	LEU	C-N	6.70	1.42	1.33
29	U	45	LYS	CA-CB	6.70	1.63	1.53
9	A	137	CYS	CA-C	-6.70	1.44	1.52
20	L	91	LYS	N-CA	6.70	1.55	1.46
2	1	138	ASP	C-N	-6.69	1.27	1.33
1	Z	143	ARG	CD-NE	6.69	1.55	1.46
5	4	137	PHE	CA-CB	6.69	1.63	1.53
23	O	196	ARG	CA-C	-6.69	1.44	1.52
13	E	195	ILE	C-N	6.69	1.43	1.33
20	L	239	GLY	CA-C	-6.68	1.42	1.51
24	P	444	HIS	CA-C	-6.68	1.44	1.52
31	W	169	HIS	CA-C	-6.68	1.44	1.52
12	D	38	ARG	CD-NE	6.68	1.55	1.46
13	E	20	ARG	NE-CZ	6.68	1.40	1.33
1	Z	561	GLY	CA-C	6.68	1.59	1.52
1	Z	903	ASN	C-N	-6.68	1.25	1.33
3	2	96	ASP	N-CA	-6.68	1.38	1.46
9	A	94	ALA	N-CA	-6.68	1.38	1.46
13	E	75	GLY	C-N	6.68	1.42	1.33
25	Q	112	GLU	CA-C	-6.68	1.44	1.52
32	Y	57	ARG	CD-NE	6.68	1.55	1.46
10	B	73	GLY	CA-C	-6.68	1.46	1.52
1	Z	724	ASN	CA-CB	6.67	1.64	1.53
27	S	325	LYS	CA-CB	6.67	1.63	1.53
11	C	12	PHE	CA-C	-6.67	1.44	1.53
18	J	272	THR	N-CA	-6.67	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	P	69	ALA	N-CA	-6.67	1.38	1.46
19	K	81	ARG	CD-NE	6.66	1.55	1.46
7	6	194	LEU	CA-C	-6.66	1.44	1.52
23	O	65	SER	C-N	6.66	1.43	1.34
1	Z	893	ILE	CA-C	-6.66	1.45	1.52
29	U	91	ILE	CA-CB	6.66	1.61	1.54
27	S	272	SER	CA-CB	6.66	1.63	1.53
29	U	13	PRO	N-CA	-6.66	1.38	1.47
5	4	93	ARG	CA-C	-6.65	1.43	1.52
14	F	26	MET	C-N	6.65	1.43	1.33
10	B	220	ARG	CA-C	-6.65	1.44	1.52
7	6	56	ARG	NE-CZ	6.64	1.40	1.33
15	G	189	ASP	C-O	-6.64	1.16	1.24
7	6	94	LYS	N-CA	-6.64	1.38	1.46
16	H	265	ARG	CD-NE	6.64	1.55	1.46
25	Q	246	LYS	N-CA	-6.64	1.38	1.46
5	4	33	ASP	N-CA	-6.63	1.37	1.46
17	I	120	HIS	ND1-CE1	6.63	1.39	1.32
24	P	248	ARG	C-O	-6.63	1.16	1.24
7	6	72	TYR	CA-C	-6.63	1.44	1.52
15	G	49	GLY	C-N	6.63	1.41	1.33
5	4	64	VAL	C-N	6.62	1.42	1.34
11	C	167	ASN	CA-C	-6.62	1.45	1.53
19	K	193	GLN	CA-C	-6.62	1.44	1.52
24	P	142	ARG	CZ-NH1	6.62	1.42	1.32
25	Q	235	ALA	CA-CB	6.62	1.63	1.53
5	4	104	LEU	N-CA	-6.62	1.38	1.46
7	6	224	CYS	CA-C	-6.61	1.44	1.52
23	O	252	LYS	CA-C	-6.61	1.44	1.52
8	7	80	ARG	NE-CZ	6.61	1.40	1.33
18	J	256	SER	N-CA	-6.61	1.37	1.46
25	Q	143	TYR	CA-C	-6.61	1.44	1.52
1	Z	106	LEU	C-N	6.61	1.42	1.33
1	Z	372	LEU	C-N	6.61	1.42	1.33
26	R	175	ASP	C-N	6.61	1.42	1.33
22	N	596	ASN	CA-C	-6.61	1.44	1.52
3	2	137	ILE	N-CA	-6.60	1.38	1.46
10	B	40	ALA	N-CA	-6.60	1.37	1.46
20	L	363	VAL	CA-C	-6.60	1.44	1.52
4	3	147	TYR	N-CA	-6.60	1.38	1.46
8	7	86	ARG	NE-CZ	6.60	1.40	1.33
9	A	17	SER	CA-C	-6.60	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	A	160	TYR	N-CA	-6.60	1.37	1.45
14	F	96	ARG	CD-NE	6.60	1.55	1.46
22	N	518	LEU	N-CA	-6.60	1.38	1.46
22	N	753	GLY	CA-C	6.60	1.57	1.51
16	H	312	ARG	N-CA	-6.59	1.38	1.46
18	J	178	LEU	C-N	6.59	1.41	1.33
17	I	215	GLY	C-N	6.59	1.42	1.33
1	Z	273	ASN	CA-CB	6.59	1.62	1.53
1	Z	903	ASN	CA-CB	6.59	1.58	1.52
5	4	177	THR	C-N	6.59	1.42	1.33
9	A	22	LEU	CA-C	-6.59	1.44	1.52
22	N	716	VAL	C-N	6.59	1.42	1.33
29	U	124	ILE	CA-C	-6.59	1.44	1.52
23	O	176	ALA	C-O	-6.58	1.16	1.24
18	J	133	PRO	C-N	6.58	1.43	1.33
27	S	180	ARG	N-CA	-6.58	1.37	1.45
30	V	84	VAL	C-N	6.58	1.42	1.33
18	J	137	LEU	C-O	-6.58	1.16	1.23
13	E	186	HIS	CE1-NE2	-6.58	1.25	1.32
12	D	191	VAL	CA-CB	-6.58	1.46	1.54
21	M	145	LEU	C-N	6.58	1.41	1.32
9	A	142	GLY	CA-C	-6.57	1.43	1.51
23	O	284	ARG	CA-C	6.57	1.61	1.52
5	4	176	PRO	CA-CB	6.57	1.63	1.53
25	Q	41	GLU	N-CA	6.57	1.54	1.46
13	E	111	SER	CA-C	-6.57	1.44	1.52
14	F	46	LEU	N-CA	-6.57	1.38	1.46
1	Z	830	LEU	CA-C	-6.57	1.44	1.52
12	D	21	TYR	N-CA	-6.57	1.38	1.46
11	C	53	HIS	ND1-CE1	6.57	1.39	1.32
12	D	158	ALA	C-N	6.56	1.41	1.33
24	P	387	ASP	CA-CB	6.56	1.63	1.53
1	Z	411	ALA	CA-C	-6.56	1.44	1.52
21	M	100	ASP	CA-CB	6.56	1.63	1.53
4	3	55	GLY	CA-C	-6.56	1.42	1.51
27	S	388	ALA	CA-C	-6.56	1.44	1.52
7	6	232	ARG	CA-C	-6.56	1.44	1.52
27	S	426	LEU	C-N	6.56	1.42	1.33
23	O	124	ASN	C-N	6.55	1.42	1.33
3	2	168	VAL	C-N	6.55	1.41	1.33
6	5	94	ILE	N-CA	-6.55	1.38	1.46
21	M	369	HIS	CB-CG	6.55	1.59	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	V	205	ILE	CA-C	-6.55	1.45	1.52
5	4	61	GLN	CA-C	-6.54	1.44	1.52
19	K	114	ARG	CA-C	-6.54	1.43	1.53
24	P	400	LYS	CA-C	-6.54	1.44	1.52
24	P	455	LEU	N-CA	-6.54	1.38	1.46
25	Q	20	ARG	CZ-NH1	6.54	1.42	1.32
3	2	44	THR	N-CA	6.54	1.58	1.46
4	3	120	PHE	CA-C	-6.54	1.44	1.52
10	B	106	PRO	N-CA	-6.54	1.39	1.46
18	J	37	ASP	C-N	6.54	1.42	1.33
21	M	111	ILE	C-N	6.54	1.42	1.33
16	H	48	VAL	N-CA	-6.53	1.39	1.46
23	O	173	TYR	C-O	-6.53	1.16	1.24
1	Z	880	ALA	N-CA	6.53	1.54	1.46
20	L	361	PHE	CA-CB	6.53	1.64	1.53
23	O	28	LEU	CA-CB	6.53	1.63	1.53
28	T	178	TYR	C-N	6.52	1.41	1.33
1	Z	762	VAL	CA-CB	-6.52	1.46	1.54
19	K	162	VAL	C-N	6.52	1.41	1.33
24	P	348	GLU	C-N	6.52	1.42	1.33
9	A	59	LYS	N-CA	-6.52	1.38	1.46
9	A	198	ALA	C-O	-6.52	1.16	1.24
12	D	81	ARG	NE-CZ	6.52	1.40	1.33
1	Z	133	MET	C-N	6.52	1.42	1.33
11	C	117	ILE	C-N	6.52	1.42	1.33
28	T	143	LEU	CA-CB	6.51	1.63	1.53
22	N	195	ASN	CA-C	-6.51	1.43	1.52
1	Z	293	GLN	N-CA	-6.51	1.38	1.46
25	Q	244	SER	N-CA	-6.51	1.39	1.45
28	T	297	LYS	N-CA	-6.51	1.38	1.46
26	R	305	SER	C-N	6.51	1.42	1.33
3	2	156	ILE	CA-C	-6.51	1.44	1.52
22	N	615	ARG	CD-NE	6.51	1.55	1.46
2	1	168	TYR	C-N	6.51	1.41	1.33
5	4	181	ARG	NE-CZ	6.51	1.40	1.33
21	M	278	LYS	CA-C	-6.50	1.43	1.52
25	Q	89	VAL	N-CA	-6.50	1.39	1.46
25	Q	365	LEU	CA-C	-6.50	1.44	1.52
20	L	137	GLY	CA-C	-6.50	1.42	1.51
23	O	129	GLN	CA-CB	6.50	1.63	1.53
26	R	209	THR	C-N	6.50	1.42	1.33
28	T	203	ASN	CA-C	-6.50	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	G	188	ARG	CA-CB	6.50	1.63	1.53
4	3	188	HIS	C-N	6.50	1.41	1.33
20	L	143	ARG	NE-CZ	6.50	1.40	1.33
15	G	47	VAL	C-N	6.50	1.43	1.33
1	Z	379	GLY	C-N	6.49	1.42	1.33
22	N	127	ASP	CA-C	-6.49	1.44	1.52
10	B	233	ILE	N-CA	-6.49	1.38	1.46
30	V	165	ALA	C-N	6.49	1.42	1.33
14	F	21	GLN	N-CA	-6.49	1.38	1.46
17	I	281	ILE	N-CA	-6.49	1.38	1.46
22	N	649	ARG	CD-NE	6.49	1.55	1.46
4	3	69	PHE	CA-C	-6.48	1.44	1.52
22	N	765	VAL	C-N	6.48	1.42	1.33
18	J	396	GLU	N-CA	-6.48	1.37	1.45
13	E	13	ASN	C-N	6.48	1.42	1.33
14	F	122	ARG	NE-CZ	6.47	1.40	1.33
25	Q	65	GLU	CA-C	-6.47	1.44	1.52
1	Z	218	GLU	CA-C	-6.47	1.44	1.52
18	J	345	ARG	NE-CZ	6.47	1.40	1.33
25	Q	178	HIS	ND1-CE1	6.47	1.39	1.32
1	Z	495	GLU	CA-C	6.46	1.61	1.52
2	1	186	CYS	CA-C	-6.46	1.44	1.52
5	4	59	TYR	C-N	6.46	1.42	1.33
24	P	452	ILE	N-CA	-6.46	1.38	1.46
31	W	37	CYS	C-N	6.46	1.42	1.33
5	4	18	ASP	C-N	6.46	1.42	1.33
7	6	41	LEU	N-CA	-6.46	1.38	1.46
31	W	63	THR	N-CA	-6.46	1.38	1.45
3	2	144	GLY	N-CA	6.46	1.51	1.44
17	I	243	THR	CA-CB	-6.46	1.42	1.53
17	I	295	TYR	CA-C	-6.46	1.45	1.52
19	K	229	ARG	CD-NE	6.46	1.55	1.46
24	P	421	PRO	CA-C	-6.46	1.42	1.52
19	K	103	VAL	CA-C	-6.46	1.44	1.52
22	N	6	ALA	C-N	6.46	1.42	1.33
8	7	177	TYR	C-N	6.45	1.43	1.33
8	7	258	HIS	CG-CD2	6.45	1.43	1.35
24	P	265	GLN	N-CA	-6.45	1.38	1.46
21	M	354	PHE	C-N	-6.45	1.26	1.33
9	A	79	VAL	CA-C	-6.45	1.45	1.52
6	5	241	ASP	CA-CB	6.45	1.64	1.53
16	H	235	ALA	N-CA	-6.45	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	I	321	SER	CA-C	6.45	1.60	1.52
19	K	289	LEU	CA-CB	6.45	1.63	1.53
12	D	214	ASP	CA-CB	6.44	1.63	1.53
23	O	287	ASN	CA-C	-6.44	1.44	1.52
2	1	28	SER	CA-C	-6.44	1.45	1.53
24	P	129	ARG	CD-NE	6.44	1.55	1.46
18	J	229	ARG	CZ-NH2	6.44	1.41	1.33
19	K	283	ARG	CD-NE	6.44	1.55	1.46
23	O	331	VAL	CA-C	-6.44	1.45	1.52
29	U	242	LEU	CA-C	6.44	1.61	1.52
9	A	86	ASP	N-CA	-6.44	1.38	1.46
22	N	246	TYR	C-N	6.44	1.42	1.33
1	Z	97	LYS	C-N	6.43	1.42	1.33
17	I	137	SER	CA-C	6.43	1.61	1.52
18	J	44	ARG	CA-C	-6.43	1.44	1.52
23	O	196	ARG	NE-CZ	6.43	1.40	1.33
16	H	154	PRO	CA-C	-6.43	1.46	1.52
19	K	127	ASN	CA-C	-6.43	1.44	1.52
26	R	354	VAL	N-CA	-6.43	1.38	1.46
8	7	170	VAL	CA-C	-6.43	1.45	1.52
1	Z	905	ASN	C-N	6.42	1.42	1.33
19	K	186	THR	CA-C	-6.42	1.44	1.52
20	L	56	ILE	CA-CB	-6.42	1.46	1.54
22	N	601	ARG	N-CA	-6.42	1.38	1.46
3	2	104	SER	CA-C	-6.42	1.44	1.52
16	H	180	CYS	N-CA	-6.42	1.37	1.46
26	R	117	LYS	CA-CB	6.42	1.63	1.53
27	S	291	TYR	CA-C	-6.42	1.44	1.52
9	A	58	ASP	CA-C	-6.42	1.44	1.52
27	S	256	ARG	CA-C	-6.42	1.44	1.52
22	N	411	ILE	N-CA	-6.42	1.38	1.46
16	H	319	MET	N-CA	-6.42	1.38	1.45
1	Z	107	LYS	CA-CB	6.41	1.63	1.53
4	3	132	VAL	CA-CB	6.41	1.61	1.53
21	M	170	SER	C-N	6.41	1.40	1.33
7	6	232	ARG	NE-CZ	6.41	1.40	1.33
10	B	28	ALA	C-N	6.41	1.42	1.33
22	N	204	ILE	CA-C	-6.41	1.44	1.52
16	H	154	PRO	CA-CB	-6.40	1.45	1.54
2	1	155	VAL	N-CA	-6.40	1.38	1.46
26	R	76	ALA	N-CA	-6.40	1.38	1.46
28	T	229	PRO	CA-CB	6.40	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	U	39	LEU	N-CA	-6.40	1.38	1.45
14	F	164	ARG	NE-CZ	6.40	1.40	1.33
19	K	287	ARG	CZ-NH1	6.40	1.41	1.32
1	Z	436	SER	CA-C	-6.40	1.44	1.52
20	L	43	SER	CA-CB	6.40	1.63	1.53
21	M	416	THR	C-N	6.40	1.42	1.33
14	F	157	ARG	NE-CZ	6.40	1.40	1.33
21	M	356	MET	CA-C	-6.40	1.45	1.53
1	Z	535	THR	CA-C	-6.39	1.44	1.52
21	M	321	GLN	CA-C	-6.39	1.45	1.52
15	G	129	VAL	CA-CB	-6.39	1.46	1.54
19	K	276	ASP	CA-CB	6.39	1.64	1.54
6	5	203	SER	N-CA	-6.39	1.38	1.46
16	H	364	VAL	CA-C	-6.39	1.46	1.52
19	K	274	ARG	CA-CB	6.39	1.61	1.52
5	4	26	VAL	CA-C	-6.39	1.46	1.52
28	T	145	ARG	CZ-NH1	6.39	1.41	1.32
2	1	229	PRO	N-CA	6.39	1.52	1.46
5	4	44	LEU	N-CA	-6.39	1.38	1.46
9	A	109	ILE	CA-C	6.39	1.58	1.53
9	A	117	ARG	CZ-NH2	6.39	1.41	1.33
22	N	694	ILE	CA-C	6.39	1.61	1.52
27	S	238	ALA	CA-C	-6.39	1.44	1.52
6	5	239	ARG	CZ-NH2	6.38	1.41	1.33
16	H	155	PRO	N-CD	-6.38	1.38	1.47
7	6	53	SER	C-N	6.38	1.42	1.33
22	N	230	SER	N-CA	-6.38	1.38	1.46
4	3	199	THR	C-N	6.38	1.42	1.33
26	R	312	ARG	C-N	6.38	1.44	1.33
10	B	45	VAL	CA-C	-6.38	1.44	1.52
21	M	144	LYS	CA-C	-6.38	1.44	1.52
12	D	35	VAL	C-O	-6.38	1.17	1.24
23	O	43	ASP	CA-CB	6.38	1.63	1.53
30	V	43	LYS	CA-CB	6.38	1.63	1.53
5	4	145	ARG	NE-CZ	6.37	1.40	1.33
18	J	371	LEU	CA-C	-6.37	1.44	1.52
31	W	136	VAL	CA-C	-6.37	1.45	1.52
23	O	49	CYS	CA-C	-6.37	1.44	1.52
24	P	300	PRO	C-N	6.37	1.42	1.33
3	2	154	TYR	CA-C	-6.37	1.44	1.52
10	B	161	THR	N-CA	-6.37	1.38	1.46
7	6	145	GLY	CA-C	-6.37	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	V	90	VAL	N-CA	-6.36	1.38	1.46
18	J	221	GLN	CA-C	-6.36	1.45	1.52
28	T	306	ARG	NE-CZ	6.36	1.40	1.33
9	A	107	TYR	CA-C	-6.35	1.45	1.52
10	B	38	ILE	N-CA	-6.35	1.38	1.46
17	I	206	THR	N-CA	-6.35	1.38	1.46
26	R	101	ARG	CA-C	-6.35	1.44	1.52
29	U	48	LEU	CA-C	-6.35	1.44	1.52
13	E	194	ALA	CA-C	-6.35	1.44	1.52
27	S	400	HIS	CB-CG	6.35	1.59	1.50
7	6	137	ILE	CA-C	-6.35	1.44	1.52
23	O	192	GLU	CA-C	-6.35	1.44	1.52
25	Q	46	LYS	CA-CB	6.35	1.63	1.53
24	P	132	THR	C-N	6.35	1.41	1.33
28	T	154	TRP	CG-CD2	6.34	1.55	1.43
11	C	157	GLY	CA-C	-6.34	1.46	1.52
13	E	159	SER	C-N	6.34	1.42	1.33
26	R	142	PHE	CA-CB	6.34	1.63	1.53
30	V	92	GLN	CA-C	-6.34	1.44	1.52
27	S	456	GLY	C-N	6.34	1.42	1.33
3	2	135	GLY	CA-C	-6.34	1.43	1.51
17	I	252	GLY	N-CA	-6.34	1.37	1.45
11	C	72	MET	CA-C	-6.33	1.44	1.52
16	H	377	CYS	CA-C	-6.33	1.45	1.53
19	K	245	ARG	C-N	6.33	1.42	1.33
11	C	18	LEU	CA-C	-6.33	1.44	1.52
11	C	76	VAL	CA-CB	-6.33	1.46	1.54
16	H	161	VAL	N-CA	-6.33	1.38	1.46
28	T	343	ALA	CA-CB	6.33	1.63	1.53
20	L	327	ASP	CA-CB	6.33	1.60	1.52
4	3	44	PRO	C-N	6.33	1.42	1.33
9	A	15	ILE	CA-C	-6.33	1.47	1.52
31	W	184	ILE	CA-CB	-6.33	1.47	1.54
22	N	807	LYS	C-N	6.33	1.42	1.34
15	G	229	PRO	N-CA	-6.33	1.39	1.47
3	2	182	GLU	CA-CB	6.32	1.63	1.53
13	E	220	VAL	CA-C	-6.32	1.44	1.52
12	D	235	GLU	N-CA	-6.32	1.38	1.46
30	V	271	ALA	N-CA	-6.32	1.38	1.46
15	G	180	LEU	C-N	6.32	1.41	1.33
16	H	393	GLY	CA-C	6.32	1.59	1.52
6	5	227	ALA	CA-C	-6.32	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	G	108	PRO	CA-C	-6.31	1.44	1.52
25	Q	144	GLN	CA-C	-6.31	1.44	1.52
1	Z	602	GLY	N-CA	6.31	1.52	1.45
8	7	130	PRO	C-N	6.31	1.42	1.34
14	F	8	ASN	CA-C	-6.31	1.44	1.52
24	P	396	LEU	N-CA	-6.31	1.38	1.46
2	1	47	VAL	N-CA	-6.31	1.39	1.46
18	J	325	ARG	CD-NE	6.31	1.55	1.46
25	Q	357	SER	C-N	6.31	1.42	1.33
20	L	45	ASN	N-CA	-6.30	1.38	1.46
9	A	141	ILE	N-CA	-6.30	1.39	1.46
22	N	31	VAL	CA-C	-6.30	1.45	1.52
27	S	294	ARG	NE-CZ	6.30	1.40	1.33
12	D	184	ASP	CA-CB	6.30	1.63	1.53
2	1	74	ARG	CZ-NH2	6.30	1.41	1.33
19	K	47	LEU	N-CA	-6.29	1.38	1.46
26	R	31	HIS	CA-C	-6.29	1.46	1.53
5	4	143	LEU	N-CA	-6.29	1.38	1.46
16	H	200	ARG	NE-CZ	6.29	1.40	1.33
17	I	350	LYS	C-N	6.29	1.41	1.33
2	1	119	GLU	CA-C	-6.29	1.44	1.52
30	V	296	ILE	CA-CB	-6.29	1.46	1.54
20	L	342	ASP	C-N	6.29	1.42	1.34
12	D	85	ASN	CA-CB	6.29	1.63	1.53
1	Z	400	TYR	CA-CB	6.28	1.63	1.53
1	Z	746	ARG	CD-NE	6.28	1.55	1.46
3	2	206	ILE	C-N	6.28	1.41	1.33
21	M	219	PRO	C-O	-6.28	1.17	1.24
13	E	155	HIS	ND1-CE1	6.28	1.38	1.32
26	R	146	ARG	N-CA	-6.28	1.39	1.46
30	V	47	ALA	C-N	6.28	1.41	1.33
14	F	35	THR	CA-C	-6.28	1.44	1.52
6	5	116	ARG	CZ-NH2	6.28	1.41	1.33
16	H	394	MET	CA-CB	6.28	1.63	1.53
17	I	308	THR	C-N	6.28	1.42	1.33
18	J	209	CYS	CA-CB	6.28	1.63	1.53
19	K	163	MET	C-N	6.28	1.42	1.33
28	T	345	GLN	N-CA	-6.28	1.38	1.46
16	H	400	ARG	CA-C	-6.27	1.44	1.52
19	K	182	GLU	C-N	6.27	1.42	1.33
22	N	107	HIS	CG-ND1	6.27	1.45	1.38
18	J	125	LYS	CA-C	-6.26	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	K	245	ARG	CZ-NH2	6.26	1.41	1.33
20	L	291	ARG	CZ-NH1	6.26	1.41	1.32
24	P	393	LEU	CA-C	-6.26	1.44	1.52
2	1	53	ARG	CD-NE	6.26	1.55	1.46
7	6	239	ARG	NE-CZ	6.26	1.40	1.33
1	Z	418	LEU	C-N	6.26	1.42	1.33
4	3	136	PHE	CA-C	-6.26	1.44	1.52
18	J	340	ARG	CA-C	-6.26	1.45	1.52
1	Z	756	PRO	C-O	-6.26	1.16	1.24
20	L	172	LEU	N-CA	-6.26	1.38	1.46
24	P	339	ASP	CA-C	-6.26	1.44	1.52
25	Q	46	LYS	C-N	6.26	1.42	1.33
22	N	607	VAL	CA-CB	-6.25	1.46	1.54
6	5	180	ILE	CA-C	-6.25	1.45	1.52
10	B	90	ALA	CA-C	-6.25	1.44	1.52
7	6	191	HIS	CA-C	-6.25	1.45	1.52
26	R	132	VAL	CA-C	6.25	1.60	1.52
26	R	209	THR	N-CA	-6.25	1.38	1.46
11	C	198	ASN	CA-C	-6.24	1.44	1.52
5	4	103	LEU	CA-C	-6.24	1.45	1.52
22	N	355	ASN	C-N	6.24	1.42	1.34
11	C	217	THR	CA-CB	6.24	1.62	1.53
13	E	117	SER	C-N	6.24	1.42	1.33
16	H	255	ARG	CA-C	-6.23	1.44	1.52
11	C	156	TYR	CA-C	-6.23	1.45	1.52
21	M	238	ARG	CD-NE	6.23	1.54	1.46
8	7	178	GLU	CA-C	-6.23	1.44	1.52
15	G	14	THR	C-N	6.23	1.42	1.33
16	H	190	VAL	CA-CB	-6.23	1.47	1.54
18	J	126	ILE	N-CA	-6.23	1.39	1.46
18	J	198	LEU	N-CA	-6.23	1.38	1.46
22	N	616	ARG	NE-CZ	6.23	1.40	1.33
23	O	184	ASP	N-CA	-6.23	1.38	1.46
28	T	236	LEU	CA-CB	6.23	1.63	1.53
3	2	192	GLU	CA-C	-6.22	1.44	1.52
10	B	97	TYR	CA-C	-6.22	1.44	1.52
16	H	177	VAL	CA-CB	6.22	1.60	1.54
1	Z	98	PHE	N-CA	-6.22	1.38	1.46
6	5	216	ARG	CZ-NH2	6.22	1.41	1.33
11	C	139	TRP	CA-C	6.22	1.60	1.52
12	D	4	ASP	C-N	6.22	1.42	1.33
18	J	113	ARG	CD-NE	6.22	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	J	376	VAL	N-CA	6.22	1.53	1.46
26	R	220	VAL	CA-CB	-6.22	1.46	1.54
9	A	68	HIS	ND1-CE1	6.22	1.38	1.32
20	L	214	LEU	CA-C	-6.22	1.45	1.52
21	M	365	ILE	CA-CB	-6.22	1.46	1.54
21	M	399	VAL	C-N	6.22	1.42	1.33
29	U	113	LYS	CA-C	-6.22	1.44	1.52
19	K	121	ARG	CD-NE	6.22	1.54	1.46
26	R	207	THR	C-N	6.22	1.40	1.33
14	F	23	GLU	CA-C	-6.22	1.44	1.52
12	D	86	ARG	CA-C	-6.21	1.44	1.52
19	K	152	MET	CA-C	-6.21	1.44	1.52
21	M	311	LEU	C-N	6.21	1.42	1.33
28	T	123	LEU	N-CA	6.21	1.53	1.46
7	6	78	THR	C-N	6.21	1.42	1.33
12	D	239	ASN	C-N	6.21	1.42	1.33
20	L	75	ASN	CA-C	-6.21	1.44	1.52
22	N	566	LEU	N-CA	-6.21	1.38	1.46
19	K	63	ASP	CA-C	-6.21	1.44	1.52
19	K	376	ASN	CA-CB	6.21	1.62	1.53
24	P	317	TRP	N-CA	-6.21	1.39	1.46
25	Q	159	LYS	CA-C	-6.21	1.44	1.52
25	Q	303	GLU	CA-C	-6.21	1.44	1.52
4	3	89	SER	CA-CB	6.20	1.63	1.53
9	A	208	ILE	CA-CB	-6.20	1.45	1.54
19	K	200	ARG	CD-NE	6.20	1.54	1.46
16	H	78	TRP	N-CA	-6.20	1.38	1.46
17	I	209	GLU	N-CA	-6.20	1.38	1.46
29	U	114	ARG	CA-C	-6.20	1.44	1.52
20	L	103	THR	CA-C	-6.20	1.44	1.52
14	F	130	VAL	CA-C	-6.20	1.45	1.52
6	5	208	VAL	CA-CB	6.20	1.62	1.54
7	6	58	SER	CA-C	-6.19	1.45	1.52
11	C	86	LEU	N-CA	-6.19	1.38	1.46
17	I	294	ARG	CA-C	6.19	1.58	1.53
17	I	381	ASP	CA-C	-6.19	1.44	1.52
20	L	375	ALA	CA-C	-6.19	1.44	1.52
8	7	113	GLY	CA-C	-6.19	1.45	1.52
20	L	184	ALA	CA-C	-6.19	1.44	1.52
22	N	652	ALA	CA-C	-6.19	1.44	1.52
23	O	68	GLU	CA-C	-6.19	1.44	1.52
5	4	170	ARG	NE-CZ	6.19	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	C	20	GLN	CA-CB	6.19	1.63	1.53
12	D	48	LYS	CA-CB	6.19	1.62	1.53
19	K	63	ASP	N-CA	-6.19	1.38	1.46
19	K	414	HIS	ND1-CE1	6.19	1.38	1.32
20	L	125	GLU	N-CA	-6.19	1.39	1.46
27	S	198	GLN	N-CA	-6.19	1.38	1.46
1	Z	281	ILE	N-CA	-6.19	1.39	1.46
28	T	266	THR	C-N	6.19	1.41	1.33
1	Z	586	PRO	CA-C	-6.18	1.42	1.52
14	F	53	GLN	CA-CB	6.18	1.62	1.53
15	G	67	LEU	CA-CB	6.18	1.62	1.53
32	Y	67	MET	C-N	6.18	1.42	1.33
28	T	170	GLN	CA-C	-6.18	1.44	1.52
12	D	186	LEU	N-CA	-6.18	1.38	1.46
7	6	98	ALA	CA-CB	6.18	1.62	1.53
21	M	231	THR	C-N	6.18	1.41	1.33
16	H	272	ILE	CA-CB	-6.17	1.47	1.54
19	K	250	VAL	C-N	6.17	1.42	1.33
31	W	99	HIS	ND1-CE1	6.17	1.38	1.32
29	U	103	LYS	CA-C	-6.17	1.44	1.52
4	3	44	PRO	N-CD	-6.17	1.39	1.47
19	K	383	GLY	C-N	6.17	1.42	1.33
26	R	269	SER	CA-C	-6.17	1.45	1.52
4	3	107	PRO	CA-C	-6.16	1.43	1.52
16	H	265	ARG	C-N	6.16	1.41	1.33
22	N	559	ARG	C-N	6.16	1.42	1.33
30	V	136	LEU	CA-C	-6.16	1.45	1.52
24	P	262	LYS	CA-C	-6.16	1.44	1.52
26	R	293	ARG	C-N	6.16	1.42	1.33
27	S	409	MET	C-N	6.16	1.38	1.33
21	M	196	GLN	N-CA	-6.16	1.39	1.46
22	N	624	PHE	CA-C	-6.16	1.45	1.52
23	O	176	ALA	N-CA	-6.16	1.38	1.46
25	Q	368	MET	N-CA	-6.16	1.39	1.46
28	T	145	ARG	N-CA	-6.16	1.39	1.46
16	H	401	ARG	CZ-NH2	6.15	1.41	1.33
20	L	149	ILE	CA-CB	6.15	1.62	1.54
12	D	60	ARG	N-CA	-6.15	1.38	1.45
17	I	430	LYS	N-CA	6.15	1.53	1.46
14	F	219	LEU	CA-CB	6.15	1.63	1.53
24	P	61	VAL	C-N	6.15	1.42	1.33
25	Q	268	GLN	N-CA	-6.15	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	F	185	ASN	CA-C	-6.15	1.44	1.52
4	3	203	ARG	NE-CZ	6.14	1.39	1.33
4	3	40	GLN	N-CA	-6.14	1.37	1.46
19	K	404	LYS	CA-C	-6.14	1.44	1.52
17	I	201	VAL	CA-C	-6.14	1.45	1.52
2	1	123	ARG	CZ-NH2	6.14	1.41	1.33
6	5	92	LYS	C-N	6.14	1.42	1.33
15	G	212	LEU	CA-CB	6.14	1.62	1.53
10	B	113	ARG	C-N	6.14	1.41	1.33
16	H	59	ILE	CA-CB	-6.14	1.46	1.54
24	P	377	ARG	CA-CB	6.14	1.63	1.53
24	P	286	LEU	CA-C	-6.13	1.44	1.52
16	H	108	ASP	CA-CB	6.13	1.63	1.54
14	F	101	ARG	NE-CZ	6.13	1.39	1.33
4	3	153	LEU	N-CA	-6.13	1.39	1.46
24	P	289	ARG	CA-CB	6.13	1.63	1.53
16	H	255	ARG	CZ-NH1	6.13	1.41	1.32
28	T	318	PHE	N-CA	-6.13	1.38	1.46
27	S	261	TYR	N-CA	-6.12	1.39	1.46
13	E	99	HIS	ND1-CE1	6.12	1.38	1.32
18	J	374	ARG	C-N	6.12	1.42	1.33
1	Z	353	LEU	N-CA	-6.12	1.38	1.46
16	H	97	ARG	CD-NE	6.12	1.54	1.46
17	I	408	ARG	CA-C	6.12	1.60	1.52
31	W	84	ILE	N-CA	-6.12	1.38	1.46
22	N	455	GLY	N-CA	6.12	1.53	1.45
21	M	314	LEU	CA-C	-6.11	1.45	1.52
14	F	89	ARG	NE-CZ	6.11	1.39	1.33
19	K	278	GLN	N-CA	6.11	1.52	1.46
22	N	612	ASP	CA-C	6.11	1.60	1.52
24	P	75	TYR	N-CA	-6.11	1.39	1.46
26	R	312	ARG	CZ-NH2	6.11	1.41	1.33
29	U	89	GLU	N-CA	-6.11	1.39	1.46
13	E	162	PHE	CA-C	-6.11	1.45	1.52
1	Z	612	LEU	N-CA	-6.11	1.39	1.46
17	I	174	MET	CA-C	-6.11	1.44	1.52
25	Q	8	GLU	C-N	6.11	1.42	1.33
16	H	187	LEU	C-N	6.11	1.42	1.33
26	R	67	VAL	N-CA	-6.11	1.38	1.46
16	H	353	HIS	ND1-CE1	6.10	1.38	1.32
22	N	370	VAL	N-CA	-6.10	1.39	1.46
16	H	216	GLY	C-N	6.10	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	T	202	GLN	C-N	6.10	1.42	1.33
11	C	97	TYR	N-CA	-6.10	1.39	1.46
28	T	328	THR	C-N	6.10	1.41	1.33
30	V	81	GLY	C-N	6.10	1.40	1.33
30	V	292	MET	N-CA	-6.10	1.39	1.46
9	A	10	ASP	CA-C	-6.09	1.44	1.52
23	O	331	VAL	CA-CB	-6.09	1.47	1.54
5	4	161	ARG	CD-NE	6.09	1.54	1.46
8	7	177	TYR	CA-C	-6.09	1.45	1.52
17	I	327	VAL	CA-CB	-6.09	1.47	1.54
22	N	366	HIS	CA-CB	6.09	1.62	1.53
30	V	222	LYS	CA-C	-6.09	1.44	1.52
24	P	144	ARG	NE-CZ	6.09	1.39	1.33
26	R	324	GLY	CA-C	-6.09	1.43	1.51
1	Z	746	ARG	NE-CZ	6.09	1.39	1.33
26	R	345	CYS	CA-C	6.09	1.60	1.52
18	J	235	PHE	CA-C	-6.08	1.44	1.52
19	K	202	VAL	N-CA	-6.08	1.39	1.46
2	1	108	PRO	CA-CB	-6.08	1.47	1.54
11	C	193	ALA	C-N	6.08	1.41	1.33
23	O	176	ALA	CA-C	-6.08	1.45	1.52
24	P	220	GLU	C-N	6.08	1.42	1.33
28	T	142	ILE	N-CA	-6.08	1.39	1.46
15	G	63	SER	CA-C	-6.08	1.44	1.52
11	C	260	ASP	C-N	6.08	1.41	1.33
18	J	331	ILE	N-CA	6.08	1.53	1.46
29	U	213	GLU	CA-CB	6.08	1.62	1.53
3	2	89	ALA	CA-C	-6.08	1.45	1.52
6	5	114	TRP	CA-C	-6.08	1.44	1.52
27	S	423	ALA	C-O	-6.08	1.17	1.24
4	3	14	MET	CA-C	-6.07	1.45	1.52
20	L	155	ASN	CA-C	-6.07	1.46	1.53
25	Q	142	ARG	CD-NE	6.07	1.54	1.46
28	T	116	LEU	CA-CB	6.07	1.62	1.53
28	T	184	GLU	CA-CB	6.07	1.63	1.53
1	Z	772	GLY	CA-C	-6.07	1.43	1.51
4	3	40	GLN	CA-CB	6.07	1.62	1.53
8	7	227	ARG	NE-CZ	6.07	1.39	1.33
10	B	233	ILE	CA-C	6.07	1.60	1.52
23	O	192	GLU	CA-CB	6.07	1.62	1.53
1	Z	569	LYS	N-CA	-6.07	1.38	1.46
17	I	80	ARG	CA-CB	6.07	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	J	44	ARG	CD-NE	6.07	1.54	1.46
9	A	132	ARG	NE-CZ	6.07	1.39	1.33
16	H	188	ARG	CD-NE	6.07	1.54	1.46
21	M	84	LYS	C-N	6.07	1.42	1.33
30	V	249	LEU	CA-C	6.07	1.60	1.52
12	D	189	LYS	N-CA	-6.06	1.39	1.46
1	Z	298	LEU	C-N	6.06	1.41	1.33
6	5	233	VAL	N-CA	-6.06	1.39	1.46
10	B	183	GLU	CA-C	-6.06	1.45	1.52
22	N	879	ASP	N-CA	-6.06	1.37	1.46
23	O	183	VAL	C-N	6.06	1.42	1.33
1	Z	747	GLN	N-CA	-6.06	1.39	1.46
14	F	107	ARG	NE-CZ	6.06	1.39	1.33
19	K	283	ARG	NE-CZ	6.06	1.39	1.33
21	M	358	ASN	C-N	6.06	1.41	1.33
29	U	249	PHE	CA-C	-6.06	1.45	1.52
14	F	207	THR	CB-OG1	-6.05	1.34	1.43
21	M	410	ARG	CA-C	-6.05	1.45	1.52
24	P	304	ASP	CA-C	-6.05	1.44	1.52
22	N	443	LEU	CB-CG	6.05	1.65	1.53
23	O	94	LEU	CA-C	-6.05	1.45	1.52
19	K	403	TYR	C-O	-6.05	1.17	1.24
24	P	98	LYS	N-CA	-6.05	1.39	1.46
1	Z	543	MET	N-CA	-6.05	1.39	1.46
12	D	56	GLU	CA-CB	6.05	1.62	1.53
23	O	157	ASP	CA-CB	6.05	1.62	1.53
3	2	66	GLY	CA-C	-6.04	1.43	1.51
22	N	772	TRP	CA-C	-6.04	1.44	1.52
26	R	251	HIS	CA-CB	6.04	1.63	1.53
16	H	228	ALA	C-N	6.04	1.41	1.33
22	N	405	THR	CA-C	-6.04	1.45	1.52
22	N	247	GLN	C-N	6.04	1.41	1.33
28	T	205	VAL	CA-CB	-6.04	1.46	1.54
9	A	242	LEU	CA-C	6.04	1.60	1.52
15	G	187	CYS	N-CA	-6.04	1.39	1.46
18	J	352	PRO	C-N	6.04	1.40	1.33
30	V	295	ASN	C-N	6.04	1.41	1.33
14	F	2	PHE	N-CA	-6.04	1.37	1.46
15	G	86	ARG	NE-CZ	6.04	1.39	1.33
15	G	227	ILE	C-N	6.04	1.40	1.33
22	N	475	HIS	CE1-NE2	-6.04	1.26	1.32
27	S	181	TYR	CA-C	-6.04	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	G	87	SER	CA-C	-6.03	1.45	1.52
17	I	244	SER	CA-C	-6.03	1.45	1.53
9	A	8	GLY	CA-C	-6.03	1.41	1.52
18	J	257	SER	C-N	6.03	1.41	1.33
19	K	114	ARG	CZ-NH1	6.03	1.41	1.32
19	K	312	ASN	CA-C	-6.03	1.46	1.52
5	4	108	ASP	CA-C	-6.03	1.45	1.52
17	I	436	GLU	C-N	6.03	1.40	1.33
31	W	72	LEU	N-CA	-6.03	1.39	1.46
1	Z	100	ARG	N-CA	-6.03	1.40	1.46
5	4	32	HIS	ND1-CE1	6.03	1.38	1.32
15	G	197	ILE	N-CA	-6.03	1.39	1.46
17	I	370	SER	CA-C	-6.03	1.45	1.52
23	O	69	HIS	CA-C	-6.03	1.45	1.52
23	O	224	SER	N-CA	-6.03	1.39	1.46
8	7	99	SER	N-CA	-6.03	1.38	1.45
9	A	90	GLN	C-N	6.03	1.41	1.33
18	J	173	GLU	C-N	6.03	1.41	1.33
23	O	254	ALA	N-CA	-6.03	1.38	1.46
27	S	314	ARG	CD-NE	6.03	1.54	1.46
18	J	38	LYS	C-O	-6.02	1.17	1.24
13	E	143	PHE	N-CA	-6.02	1.38	1.46
24	P	453	HIS	CB-CG	6.02	1.58	1.50
26	R	217	LYS	N-CA	-6.02	1.39	1.46
27	S	336	GLU	CA-C	6.02	1.60	1.52
9	A	11	ARG	CA-C	-6.02	1.45	1.52
26	R	47	ASP	CA-C	-6.02	1.45	1.52
17	I	322	ARG	NE-CZ	6.02	1.39	1.33
23	O	289	ARG	CZ-NH1	6.02	1.41	1.32
16	H	396	ALA	CA-C	-6.01	1.45	1.52
24	P	246	HIS	ND1-CE1	6.01	1.38	1.32
28	T	179	LYS	N-CA	-6.01	1.39	1.46
5	4	16	ALA	N-CA	-6.01	1.38	1.46
11	C	168	SER	CA-C	-6.01	1.45	1.52
22	N	205	TYR	CA-C	-6.01	1.45	1.52
28	T	111	LYS	N-CA	-6.01	1.38	1.46
13	E	169	ALA	CA-C	-6.01	1.45	1.52
21	M	124	ILE	CA-C	-6.01	1.45	1.52
22	N	883	ARG	NE-CZ	6.01	1.39	1.33
31	W	136	VAL	C-O	-6.01	1.17	1.24
1	Z	566	HIS	ND1-CE1	6.01	1.38	1.32
1	Z	664	GLU	CA-CB	6.01	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	223	LEU	C-N	6.01	1.41	1.33
26	R	237	ARG	CD-NE	6.01	1.54	1.46
2	1	227	GLN	CA-CB	6.00	1.63	1.54
1	Z	470	VAL	CA-C	-6.00	1.45	1.52
22	N	581	SER	CA-C	-6.00	1.44	1.52
29	U	248	ALA	C-N	6.00	1.42	1.33
6	5	234	ASN	CA-CB	6.00	1.62	1.53
16	H	50	ASP	CA-C	-6.00	1.45	1.52
18	J	169	VAL	N-CA	6.00	1.53	1.46
20	L	105	LEU	N-CA	-6.00	1.38	1.46
22	N	115	ASN	C-N	6.00	1.41	1.33
29	U	37	GLY	N-CA	-6.00	1.39	1.45
2	1	72	HIS	ND1-CE1	6.00	1.38	1.32
6	5	157	GLY	N-CA	-6.00	1.39	1.45
20	L	143	ARG	CD-NE	6.00	1.54	1.46
23	O	349	MET	C-N	6.00	1.41	1.33
27	S	349	ARG	NE-CZ	6.00	1.39	1.33
28	T	329	THR	C-N	6.00	1.38	1.33
6	5	217	ARG	CA-C	-6.00	1.45	1.52
8	7	172	MET	C-N	6.00	1.41	1.33
21	M	107	ASP	C-N	6.00	1.40	1.33
26	R	282	MET	CA-C	-6.00	1.45	1.52
27	S	170	LEU	CA-CB	6.00	1.62	1.53
28	T	268	ARG	C-N	6.00	1.41	1.33
31	W	181	ASP	N-CA	-6.00	1.38	1.46
8	7	161	ALA	C-O	-5.99	1.16	1.24
3	2	237	LYS	C-N	5.99	1.41	1.33
19	K	136	SER	CA-C	-5.99	1.44	1.52
22	N	395	ARG	C-O	-5.99	1.17	1.24
29	U	154	THR	N-CA	-5.99	1.39	1.45
19	K	66	LYS	CA-C	-5.99	1.45	1.52
23	O	288	HIS	CA-CB	5.99	1.63	1.53
6	5	66	LYS	CA-C	-5.99	1.45	1.52
24	P	420	ASP	C-O	-5.99	1.16	1.24
25	Q	28	HIS	CB-CG	5.99	1.58	1.50
29	U	215	VAL	CA-C	-5.99	1.45	1.52
11	C	53	HIS	CG-CD2	5.98	1.42	1.35
25	Q	106	GLU	N-CA	-5.98	1.39	1.46
28	T	297	LYS	CA-C	-5.98	1.45	1.52
16	H	144	ARG	CD-NE	5.98	1.54	1.46
16	H	357	ILE	C-O	-5.98	1.17	1.24
14	F	26	MET	N-CA	-5.98	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	L	281	ARG	CZ-NH2	5.98	1.41	1.33
1	Z	155	GLY	CA-C	-5.98	1.43	1.51
16	H	52	ILE	CA-CB	-5.98	1.47	1.54
21	M	180	ARG	CA-CB	5.98	1.58	1.53
26	R	312	ARG	CA-C	-5.98	1.45	1.52
27	S	487	HIS	C-O	-5.98	1.17	1.24
3	2	231	PRO	CA-C	-5.98	1.44	1.52
2	1	100	HIS	ND1-CE1	5.97	1.38	1.32
9	A	61	LEU	N-CA	-5.97	1.38	1.45
22	N	349	ASP	N-CA	-5.97	1.39	1.46
24	P	162	ALA	CA-C	5.97	1.60	1.52
10	B	212	ILE	C-N	5.97	1.42	1.33
15	G	188	ARG	N-CA	-5.97	1.39	1.46
17	I	408	ARG	NE-CZ	5.97	1.39	1.33
22	N	931	HIS	ND1-CE1	5.97	1.38	1.32
23	O	84	VAL	C-N	5.97	1.41	1.33
31	W	110	ILE	CA-C	-5.97	1.45	1.52
6	5	89	THR	CA-C	-5.97	1.45	1.52
18	J	289	ILE	CA-C	-5.97	1.44	1.52
24	P	193	CYS	CA-C	-5.97	1.44	1.52
1	Z	534	VAL	CA-C	-5.97	1.45	1.52
11	C	256	GLN	CA-C	-5.97	1.45	1.52
22	N	870	GLU	C-O	-5.97	1.17	1.25
24	P	236	HIS	C-N	5.97	1.41	1.33
11	C	189	ALA	C-N	5.96	1.41	1.33
18	J	123	LEU	C-O	-5.96	1.16	1.24
20	L	41	GLU	N-CA	-5.96	1.39	1.46
1	Z	511	SER	CA-C	-5.96	1.44	1.52
22	N	194	ARG	NE-CZ	5.96	1.39	1.33
8	7	216	ARG	NE-CZ	5.96	1.39	1.33
16	H	157	ILE	N-CA	5.96	1.53	1.46
30	V	194	HIS	CE1-NE2	-5.96	1.26	1.32
1	Z	801	VAL	CA-CB	-5.96	1.47	1.54
14	F	101	ARG	CZ-NH2	5.96	1.41	1.33
8	7	88	MET	C-N	5.96	1.41	1.33
17	I	341	LEU	CA-CB	5.96	1.62	1.53
18	J	68	GLU	C-N	5.96	1.42	1.33
16	H	379	ASN	CA-CB	5.96	1.61	1.53
29	U	26	ILE	C-N	5.96	1.41	1.33
2	1	92	ALA	CA-C	-5.96	1.45	1.52
9	A	90	GLN	N-CA	-5.96	1.39	1.46
10	B	195	LEU	CA-C	-5.95	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	H	139	ARG	CA-C	-5.95	1.44	1.52
22	N	800	VAL	CA-CB	-5.95	1.46	1.55
24	P	304	ASP	CA-CB	5.95	1.63	1.53
25	Q	59	LYS	N-CA	-5.95	1.39	1.46
8	7	199	LEU	CA-C	-5.95	1.44	1.52
19	K	201	GLY	CA-C	5.95	1.56	1.51
1	Z	737	ASN	C-N	5.95	1.41	1.33
14	F	17	GLY	C-N	5.95	1.41	1.33
18	J	229	ARG	NE-CZ	5.95	1.39	1.33
22	N	885	MET	C-O	-5.95	1.19	1.24
31	W	84	ILE	CA-C	5.95	1.59	1.52
31	W	107	MET	CA-CB	5.95	1.62	1.53
8	7	145	ARG	CD-NE	5.95	1.54	1.46
12	D	110	TYR	CA-C	-5.95	1.45	1.52
19	K	48	GLN	CA-C	-5.95	1.45	1.52
27	S	330	LYS	C-N	5.95	1.41	1.33
27	S	420	ALA	N-CA	-5.95	1.39	1.46
4	3	99	ARG	CD-NE	5.94	1.54	1.46
24	P	441	LYS	CA-C	-5.94	1.45	1.52
25	Q	151	SER	C-N	5.94	1.42	1.33
1	Z	816	TYR	C-N	5.94	1.40	1.34
16	H	320	ALA	CA-C	-5.94	1.45	1.52
29	U	172	VAL	CA-C	-5.94	1.45	1.52
13	E	44	GLU	CA-C	-5.94	1.45	1.52
20	L	345	ASN	C-N	5.94	1.41	1.33
24	P	415	PHE	N-CA	-5.94	1.38	1.46
25	Q	369	ILE	CA-CB	-5.94	1.46	1.54
29	U	273	HIS	CG-CD2	-5.94	1.29	1.35
10	B	106	PRO	CA-CB	5.94	1.60	1.54
24	P	314	LEU	C-N	5.94	1.41	1.33
26	R	238	GLU	C-N	5.94	1.42	1.33
22	N	350	LEU	CA-C	-5.94	1.45	1.52
25	Q	69	LEU	N-CA	-5.94	1.39	1.46
1	Z	290	VAL	C-N	5.93	1.41	1.33
14	F	13	TRP	CA-C	-5.93	1.45	1.52
17	I	164	MET	CA-CB	5.93	1.62	1.53
22	N	809	SER	N-CA	-5.93	1.38	1.46
8	7	80	ARG	CD-NE	5.93	1.54	1.46
1	Z	553	THR	C-N	5.93	1.41	1.33
1	Z	740	ARG	NE-CZ	5.93	1.39	1.33
7	6	37	GLY	C-N	5.93	1.42	1.33
12	D	44	GLY	CA-C	-5.93	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	P	65	ARG	CA-CB	5.93	1.62	1.53
12	D	68	ASN	CA-C	-5.93	1.47	1.52
14	F	94	ASP	C-N	5.93	1.41	1.33
22	N	98	GLU	C-O	-5.93	1.17	1.24
22	N	516	LEU	C-N	5.92	1.41	1.33
12	D	126	PRO	CA-CB	-5.92	1.46	1.54
19	K	41	TYR	CA-C	5.92	1.60	1.52
24	P	241	LEU	CA-C	-5.92	1.45	1.52
1	Z	902	LYS	C-N	5.92	1.41	1.33
13	E	214	ASN	CA-C	-5.92	1.44	1.52
26	R	262	SER	N-CA	-5.92	1.39	1.46
27	S	352	SER	C-N	5.92	1.41	1.33
8	7	209	GLU	C-O	5.92	1.31	1.24
3	2	264	ILE	N-CA	-5.91	1.38	1.46
19	K	273	LYS	N-CA	-5.91	1.37	1.46
23	O	316	SER	CA-C	-5.91	1.45	1.52
24	P	39	ARG	CZ-NH1	5.91	1.41	1.32
26	R	257	ARG	CZ-NH1	5.91	1.41	1.32
18	J	201	ARG	NE-CZ	5.91	1.39	1.33
14	F	215	VAL	C-N	5.91	1.39	1.33
23	O	353	LEU	CA-CB	5.91	1.62	1.53
25	Q	229	TYR	CA-CB	5.91	1.62	1.53
28	T	346	LEU	CA-C	-5.91	1.44	1.52
6	5	176	GLU	CA-C	-5.91	1.44	1.52
20	L	108	MET	N-CA	-5.91	1.38	1.46
1	Z	757	ASN	CA-CB	5.90	1.62	1.53
22	N	759	SER	C-N	5.90	1.41	1.33
11	C	2	SER	N-CA	-5.90	1.38	1.46
12	D	86	ARG	NE-CZ	5.90	1.39	1.33
15	G	26	TYR	N-CA	-5.90	1.39	1.46
24	P	211	THR	C-N	5.90	1.41	1.33
26	R	370	ILE	CA-C	-5.90	1.45	1.52
22	N	412	HIS	ND1-CE1	5.90	1.38	1.32
27	S	171	VAL	CA-C	-5.90	1.45	1.52
20	L	197	LYS	CA-CB	5.89	1.63	1.53
22	N	220	LEU	CA-C	-5.89	1.45	1.52
29	U	205	LEU	CA-CB	5.89	1.62	1.53
17	I	409	GLU	CA-CB	5.89	1.63	1.53
31	W	66	PRO	C-N	5.89	1.41	1.33
20	L	113	ARG	CA-C	-5.89	1.45	1.52
22	N	914	LEU	CA-C	-5.89	1.45	1.52
15	G	86	ARG	N-CA	-5.89	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	K	113	VAL	CA-C	-5.89	1.45	1.52
24	P	274	VAL	CA-CB	-5.89	1.46	1.54
25	Q	353	LEU	CA-C	-5.89	1.45	1.52
1	Z	555	ALA	N-CA	-5.89	1.39	1.46
1	Z	715	HIS	ND1-CE1	5.89	1.38	1.32
29	U	51	SER	CA-C	-5.89	1.44	1.52
2	1	74	ARG	NE-CZ	5.89	1.39	1.33
21	M	238	ARG	NE-CZ	5.89	1.39	1.33
30	V	255	TYR	N-CA	-5.89	1.39	1.46
24	P	97	LEU	CA-C	-5.88	1.44	1.52
27	S	291	TYR	CA-CB	5.88	1.62	1.53
17	I	272	ARG	C-N	5.88	1.41	1.33
22	N	800	VAL	C-N	5.88	1.42	1.33
23	O	63	PHE	N-CA	-5.88	1.39	1.46
26	R	23	ARG	N-CA	-5.88	1.39	1.46
13	E	99	HIS	CE1-NE2	-5.88	1.26	1.32
19	K	80	LYS	N-CA	5.88	1.53	1.46
22	N	546	ARG	NE-CZ	5.88	1.39	1.33
3	2	90	GLY	C-O	-5.88	1.21	1.24
5	4	96	THR	CA-C	5.88	1.59	1.53
25	Q	66	LEU	C-N	5.88	1.41	1.33
27	S	351	PRO	CA-C	5.88	1.59	1.52
27	S	426	LEU	CA-C	-5.88	1.44	1.52
16	H	289	ALA	CA-C	-5.88	1.44	1.52
22	N	194	ARG	CZ-NH2	5.88	1.41	1.33
22	N	456	ASP	CA-C	-5.88	1.45	1.52
22	N	474	ARG	CZ-NH1	5.88	1.41	1.32
1	Z	361	SER	CA-C	5.87	1.59	1.52
4	3	29	GLY	CA-C	-5.87	1.43	1.51
16	H	252	GLU	CA-CB	5.87	1.62	1.53
1	Z	98	PHE	CA-C	5.87	1.60	1.52
29	U	271	ALA	N-CA	-5.87	1.39	1.46
2	1	112	THR	C-N	5.87	1.42	1.33
4	3	69	PHE	CA-CB	5.87	1.62	1.53
11	C	237	ILE	CA-CB	5.87	1.61	1.54
16	H	210	LYS	N-CA	-5.87	1.38	1.46
29	U	267	ARG	NE-CZ	5.87	1.39	1.33
23	O	345	GLN	CA-CB	5.87	1.62	1.53
24	P	246	HIS	C-N	5.87	1.41	1.33
9	A	245	ARG	CA-C	-5.86	1.45	1.52
10	B	3	GLU	N-CA	-5.86	1.38	1.46
14	F	159	MET	N-CA	-5.86	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	R	340	ALA	N-CA	-5.86	1.39	1.46
1	Z	882	LEU	CA-CB	5.86	1.62	1.53
17	I	412	MET	N-CA	-5.86	1.39	1.46
22	N	20	LYS	C-N	5.86	1.41	1.33
24	P	54	THR	CA-C	-5.86	1.45	1.52
24	P	68	VAL	N-CA	-5.86	1.39	1.46
4	3	162	HIS	ND1-CE1	5.86	1.38	1.32
22	N	597	LYS	N-CA	-5.86	1.39	1.46
16	H	148	GLN	CA-C	-5.86	1.48	1.53
21	M	425	LEU	N-CA	5.86	1.53	1.46
22	N	105	ILE	CA-CB	5.86	1.61	1.54
27	S	241	ARG	CZ-NH2	5.86	1.41	1.33
1	Z	365	VAL	C-N	5.86	1.41	1.33
16	H	103	ASN	C-N	5.86	1.43	1.33
16	H	312	ARG	CD-NE	5.86	1.54	1.46
19	K	397	LYS	CA-C	-5.86	1.45	1.52
30	V	254	ASN	CA-C	-5.85	1.45	1.52
14	F	3	ARG	CD-NE	5.85	1.54	1.46
10	B	143	ARG	CZ-NH1	5.85	1.41	1.32
22	N	167	ILE	CA-CB	5.85	1.60	1.53
9	A	211	LYS	CA-C	-5.85	1.46	1.52
23	O	372	HIS	CB-CG	-5.85	1.42	1.50
19	K	77	GLU	CA-CB	5.85	1.62	1.53
14	F	86	ASN	CA-C	-5.84	1.45	1.52
22	N	408	LEU	C-N	5.84	1.42	1.33
24	P	413	ILE	CA-CB	5.84	1.61	1.54
1	Z	823	ALA	CA-C	-5.84	1.44	1.52
18	J	390	VAL	N-CA	-5.84	1.38	1.46
20	L	176	PRO	N-CA	-5.84	1.39	1.47
7	6	63	ILE	CB-CG1	5.84	1.65	1.53
17	I	248	LEU	CA-CB	5.84	1.62	1.53
1	Z	810	ILE	C-N	5.84	1.41	1.33
10	B	66	GLU	CA-C	-5.84	1.46	1.52
23	O	75	SER	N-CA	-5.84	1.38	1.46
23	O	233	LEU	CA-C	-5.84	1.45	1.52
29	U	240	VAL	C-N	5.84	1.41	1.33
17	I	371	ARG	CD-NE	5.84	1.54	1.46
24	P	224	LEU	CA-C	-5.84	1.45	1.52
28	T	308	TRP	NE1-CE2	5.84	1.43	1.37
3	2	107	GLU	N-CA	-5.84	1.39	1.46
4	3	66	ARG	CD-NE	5.84	1.54	1.46
6	5	128	ARG	CZ-NH1	5.84	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	H	72	LEU	CA-CB	5.84	1.63	1.53
24	P	203	GLN	N-CA	-5.84	1.39	1.46
22	N	412	HIS	N-CA	-5.83	1.38	1.46
26	R	369	THR	CA-C	-5.83	1.45	1.52
1	Z	291	GLN	CA-C	-5.83	1.45	1.52
1	Z	716	ASP	C-O	-5.83	1.17	1.23
24	P	358	VAL	CA-CB	-5.83	1.46	1.54
26	R	72	LYS	N-CA	-5.83	1.39	1.46
31	W	145	GLU	CA-C	-5.83	1.45	1.52
14	F	107	ARG	CA-CB	5.83	1.62	1.53
20	L	31	GLU	C-N	5.83	1.41	1.33
9	A	155	ASP	CA-CB	5.83	1.61	1.54
16	H	339	ARG	NE-CZ	5.83	1.39	1.33
17	I	294	ARG	NE-CZ	5.83	1.39	1.33
31	W	43	SER	CA-C	-5.83	1.45	1.52
18	J	325	ARG	CZ-NH1	5.83	1.41	1.32
21	M	376	SER	CA-CB	5.83	1.61	1.53
1	Z	748	LEU	C-N	5.83	1.41	1.34
13	E	154	PHE	CA-C	-5.82	1.45	1.52
17	I	115	ILE	CA-C	-5.82	1.45	1.52
10	B	102	GLN	CA-C	-5.82	1.45	1.52
13	E	63	SER	N-CA	-5.82	1.39	1.46
1	Z	902	LYS	CA-CB	5.82	1.63	1.53
12	D	54	GLN	C-N	5.82	1.41	1.33
16	H	374	ALA	C-N	5.82	1.41	1.33
30	V	272	ILE	N-CA	-5.82	1.39	1.46
4	3	15	LYS	N-CA	-5.82	1.39	1.45
12	D	16	LEU	CA-C	-5.82	1.45	1.52
21	M	168	TYR	CA-C	-5.82	1.45	1.52
21	M	299	GLU	N-CA	-5.82	1.39	1.46
23	O	101	ARG	NE-CZ	5.82	1.39	1.33
28	T	160	ASP	C-N	5.82	1.40	1.33
15	G	213	GLU	N-CA	-5.81	1.39	1.46
20	L	146	ARG	NE-CZ	5.81	1.39	1.33
25	Q	318	ILE	C-N	5.81	1.41	1.33
1	Z	492	SER	CA-CB	5.81	1.61	1.53
17	I	276	GLU	CA-CB	5.81	1.62	1.53
19	K	66	LYS	C-O	-5.81	1.17	1.24
1	Z	114	ALA	C-N	5.81	1.40	1.33
1	Z	687	ARG	NE-CZ	5.81	1.39	1.33
19	K	345	PHE	CA-C	-5.81	1.45	1.52
22	N	698	GLN	CA-C	-5.81	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	H	227	ARG	CA-C	-5.81	1.45	1.52
17	I	394	ASP	N-CA	-5.81	1.38	1.46
7	6	76	ASP	CA-C	-5.81	1.44	1.53
25	Q	378	LEU	CA-CB	5.81	1.62	1.53
26	R	313	SER	CA-C	-5.81	1.45	1.53
15	G	77	ALA	N-CA	-5.81	1.38	1.45
1	Z	520	LEU	C-N	5.80	1.41	1.33
1	Z	845	ARG	NE-CZ	5.80	1.39	1.33
16	H	174	TYR	N-CA	-5.80	1.38	1.46
18	J	205	HIS	CG-CD2	-5.80	1.29	1.35
19	K	164	TYR	C-N	5.80	1.37	1.33
24	P	411	GLY	C-N	5.80	1.41	1.33
1	Z	580	LEU	N-CA	-5.80	1.39	1.46
1	Z	894	LEU	C-N	5.80	1.41	1.33
3	2	124	ARG	CA-CB	5.80	1.62	1.53
4	3	192	LYS	C-N	5.80	1.41	1.33
14	F	85	CYS	CA-CB	5.80	1.62	1.53
3	2	82	PRO	N-CD	-5.80	1.39	1.47
22	N	527	GLN	CA-CB	5.80	1.62	1.53
23	O	32	LYS	CA-C	-5.80	1.45	1.52
30	V	124	GLY	C-N	5.80	1.41	1.33
1	Z	309	GLU	CA-C	-5.80	1.47	1.52
15	G	222	ASN	CA-C	-5.80	1.45	1.53
24	P	55	ARG	CD-NE	5.80	1.54	1.46
24	P	65	ARG	CD-NE	5.80	1.54	1.46
24	P	234	ASP	N-CA	-5.80	1.39	1.46
29	U	93	GLY	CA-C	-5.80	1.43	1.51
9	A	208	ILE	N-CA	-5.80	1.38	1.46
4	3	68	LYS	C-N	5.80	1.41	1.33
17	I	346	ARG	CZ-NH1	5.79	1.40	1.32
19	K	399	PHE	C-N	5.79	1.41	1.33
22	N	395	ARG	CD-NE	5.79	1.54	1.46
24	P	300	PRO	C-O	-5.79	1.17	1.24
2	1	156	ARG	CZ-NH2	5.79	1.41	1.33
18	J	292	ILE	N-CA	-5.79	1.39	1.46
25	Q	152	GLN	C-N	5.79	1.41	1.33
29	U	53	SER	N-CA	-5.79	1.39	1.46
20	L	335	SER	C-N	5.79	1.40	1.33
30	V	264	LYS	C-O	-5.79	1.17	1.24
2	1	227	GLN	C-N	5.79	1.40	1.33
26	R	380	VAL	CA-C	-5.79	1.45	1.52
29	U	153	LYS	N-CA	-5.79	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	V	291	LEU	CA-C	-5.79	1.45	1.52
1	Z	824	ALA	C-O	-5.79	1.16	1.24
3	2	178	MET	N-CA	-5.79	1.39	1.46
24	P	51	GLU	CA-C	-5.79	1.45	1.52
29	U	107	ALA	C-N	5.79	1.41	1.33
1	Z	507	ASP	C-N	5.78	1.41	1.33
7	6	36	ASN	N-CA	-5.78	1.38	1.46
28	T	243	LYS	CA-C	-5.78	1.45	1.52
19	K	137	ASN	CA-CB	5.78	1.62	1.53
9	A	99	ALA	N-CA	-5.78	1.39	1.46
22	N	482	GLY	CA-C	-5.78	1.45	1.52
22	N	639	LEU	CA-C	5.78	1.60	1.52
22	N	869	LYS	N-CA	5.78	1.53	1.46
22	N	684	ARG	NE-CZ	5.78	1.39	1.33
8	7	110	GLN	C-N	5.78	1.41	1.33
25	Q	81	SER	CA-C	-5.78	1.45	1.52
29	U	272	LEU	N-CA	-5.78	1.39	1.46
30	V	127	ILE	CA-CB	5.78	1.61	1.54
5	4	153	ARG	CA-C	-5.77	1.45	1.52
6	5	176	GLU	C-N	5.77	1.41	1.33
21	M	75	GLU	N-CA	-5.77	1.39	1.46
29	U	46	LYS	N-CA	-5.77	1.42	1.47
24	P	89	LEU	CA-C	-5.77	1.45	1.52
15	G	48	PHE	CA-C	-5.76	1.45	1.52
20	L	162	VAL	CA-C	-5.76	1.45	1.52
21	M	322	PRO	N-CD	-5.76	1.39	1.47
24	P	327	GLU	CA-C	-5.76	1.45	1.52
7	6	160	ARG	NE-CZ	5.76	1.39	1.33
9	A	100	ASN	C-N	5.76	1.41	1.33
25	Q	269	ALA	CA-C	-5.76	1.45	1.52
19	K	402	ALA	CA-CB	5.76	1.62	1.53
21	M	53	LYS	C-N	5.76	1.41	1.33
22	N	647	HIS	ND1-CE1	5.76	1.38	1.32
27	S	252	ASN	CG-ND2	5.76	1.45	1.33
6	5	128	ARG	CD-NE	5.76	1.54	1.46
18	J	175	PHE	CA-CB	5.76	1.62	1.53
31	W	43	SER	N-CA	-5.75	1.39	1.46
2	1	185	GLU	CA-CB	5.75	1.62	1.53
23	O	52	GLN	CA-CB	5.75	1.63	1.53
25	Q	412	ASP	C-N	5.75	1.41	1.33
5	4	189	HIS	ND1-CE1	5.75	1.38	1.32
10	B	149	SER	CA-C	-5.75	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	C	147	LEU	CA-C	-5.75	1.45	1.52
30	V	151	VAL	CA-CB	5.75	1.62	1.54
17	I	423	LYS	CA-C	-5.75	1.45	1.52
22	N	415	HIS	CE1-NE2	5.75	1.38	1.32
13	E	208	GLU	CA-C	-5.75	1.44	1.53
24	P	45	GLU	C-N	5.75	1.41	1.34
27	S	400	HIS	CA-C	-5.75	1.45	1.52
1	Z	790	GLN	CA-CB	5.75	1.62	1.53
19	K	43	ARG	CA-C	-5.75	1.45	1.52
22	N	774	PRO	C-N	5.75	1.41	1.33
7	6	134	VAL	CA-CB	-5.75	1.49	1.55
22	N	877	LEU	CA-C	-5.75	1.45	1.52
27	S	394	LEU	C-N	5.75	1.41	1.33
3	2	181	PHE	C-N	5.74	1.41	1.33
6	5	231	GLY	C-N	5.74	1.40	1.33
10	B	26	LEU	CA-CB	5.74	1.62	1.53
14	F	82	ARG	CD-NE	5.74	1.54	1.46
25	Q	1	MET	C-N	5.74	1.41	1.33
25	Q	364	LYS	C-N	5.74	1.41	1.33
30	V	274	ASN	N-CA	-5.74	1.39	1.46
16	H	312	ARG	NE-CZ	5.74	1.39	1.33
17	I	368	HIS	ND1-CE1	5.74	1.38	1.32
6	5	98	PRO	N-CA	-5.74	1.40	1.47
26	R	316	LEU	CA-C	-5.74	1.45	1.52
29	U	72	HIS	CE1-NE2	-5.74	1.26	1.32
30	V	118	PHE	N-CA	-5.74	1.39	1.46
1	Z	452	ASN	N-CA	-5.74	1.39	1.46
11	C	104	PRO	CA-CB	5.74	1.61	1.53
27	S	390	GLY	C-N	5.74	1.41	1.33
29	U	205	LEU	CA-C	-5.74	1.45	1.52
26	R	332	GLN	CA-C	-5.74	1.45	1.52
11	C	60	PHE	CA-CB	5.74	1.64	1.53
18	J	136	SER	CA-C	-5.74	1.43	1.52
20	L	309	ARG	NE-CZ	5.74	1.39	1.33
11	C	8	ARG	NE-CZ	5.73	1.39	1.33
12	D	202	GLY	C-N	5.73	1.40	1.33
7	6	35	PHE	C-N	5.73	1.41	1.33
14	F	129	GLY	CA-C	-5.73	1.44	1.51
19	K	229	ARG	CA-C	-5.73	1.45	1.52
20	L	146	ARG	CA-C	-5.73	1.45	1.52
22	N	538	GLU	CA-C	-5.73	1.45	1.52
29	U	255	ASP	CA-CB	5.73	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	4	88	LEU	N-CA	-5.73	1.39	1.46
21	M	101	PRO	CA-C	-5.73	1.45	1.52
3	2	103	SER	CA-C	-5.73	1.45	1.52
30	V	212	LEU	C-N	5.73	1.41	1.34
4	3	122	CYS	C-N	5.72	1.41	1.33
1	Z	179	VAL	C-N	5.72	1.40	1.33
1	Z	66	LYS	N-CA	-5.72	1.38	1.46
4	3	124	LEU	N-CA	-5.72	1.38	1.45
18	J	348	ALA	CA-C	-5.72	1.45	1.52
9	A	182	LYS	C-N	5.72	1.40	1.34
22	N	422	LEU	CA-CB	5.72	1.62	1.53
26	R	376	LEU	N-CA	-5.72	1.39	1.46
12	D	231	GLU	C-N	5.72	1.41	1.33
13	E	231	LYS	CA-CB	5.72	1.62	1.53
1	Z	603	SER	N-CA	-5.72	1.39	1.46
25	Q	73	VAL	N-CA	5.72	1.54	1.46
26	R	101	ARG	N-CA	-5.72	1.39	1.46
26	R	148	GLY	C-O	-5.72	1.17	1.23
28	T	300	THR	N-CA	5.72	1.53	1.46
3	2	264	ILE	CA-C	-5.71	1.46	1.52
4	3	198	ARG	N-CA	-5.71	1.39	1.46
12	D	57	ARG	CA-C	-5.71	1.45	1.52
14	F	63	ILE	C-O	-5.71	1.17	1.24
31	W	136	VAL	CA-CB	-5.71	1.47	1.54
1	Z	148	GLN	N-CA	-5.71	1.38	1.46
5	4	99	HIS	CA-CB	5.71	1.59	1.53
13	E	28	ILE	C-N	5.71	1.41	1.33
25	Q	4	ALA	C-N	5.71	1.41	1.33
30	V	73	PHE	CA-CB	5.71	1.64	1.53
31	W	184	ILE	N-CA	-5.71	1.40	1.46
15	G	214	LEU	CA-C	-5.71	1.45	1.52
17	I	213	GLU	CA-CB	5.71	1.62	1.53
27	S	226	VAL	N-CA	-5.71	1.39	1.46
31	W	66	PRO	CA-CB	5.71	1.61	1.53
8	7	216	ARG	N-CA	-5.71	1.39	1.46
12	D	66	ASP	CA-C	-5.71	1.46	1.52
18	J	246	ILE	C-N	5.71	1.41	1.33
20	L	269	THR	CA-C	-5.71	1.45	1.52
22	N	255	SER	CA-C	-5.71	1.45	1.52
1	Z	689	ALA	CA-CB	5.70	1.62	1.53
10	B	228	ASP	N-CA	-5.70	1.39	1.46
18	J	304	ALA	CA-C	-5.70	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	K	101	ALA	N-CA	-5.70	1.38	1.45
25	Q	301	ASP	CA-CB	5.70	1.62	1.53
27	S	336	GLU	CA-CB	5.70	1.62	1.53
30	V	86	ALA	CA-C	5.70	1.60	1.52
29	U	139	ILE	N-CA	-5.70	1.39	1.46
31	W	124	LEU	C-N	5.70	1.41	1.33
14	F	166	GLN	N-CA	-5.70	1.39	1.46
24	P	241	LEU	CA-CB	5.70	1.62	1.53
9	A	132	ARG	CZ-NH1	5.70	1.40	1.32
14	F	106	SER	N-CA	-5.70	1.39	1.46
17	I	270	LEU	CA-C	-5.70	1.45	1.52
22	N	462	LEU	N-CA	-5.70	1.39	1.46
10	B	19	LEU	N-CA	-5.70	1.39	1.46
11	C	241	GLU	CA-CB	5.70	1.62	1.53
17	I	294	ARG	CD-NE	5.70	1.54	1.46
24	P	53	GLN	CA-C	5.70	1.60	1.52
24	P	120	ILE	C-N	5.70	1.41	1.33
26	R	371	LYS	C-N	5.70	1.41	1.33
29	U	269	VAL	CA-C	-5.70	1.45	1.52
2	1	106	GLU	N-CA	-5.69	1.38	1.46
4	3	41	LYS	N-CA	-5.69	1.37	1.45
18	J	327	ASP	C-N	5.69	1.41	1.33
20	L	180	LYS	CA-C	-5.69	1.45	1.52
31	W	107	MET	C-N	5.69	1.41	1.33
2	1	61	ALA	CA-C	-5.69	1.45	1.52
25	Q	279	TYR	C-N	5.69	1.41	1.33
2	1	101	SER	N-CA	-5.69	1.39	1.46
17	I	272	ARG	CD-NE	5.69	1.54	1.46
21	M	175	MET	CA-CB	5.69	1.60	1.53
7	6	197	ASP	CA-C	-5.69	1.45	1.52
13	E	227	HIS	ND1-CE1	5.69	1.38	1.32
22	N	733	ALA	C-N	5.69	1.41	1.33
2	1	222	VAL	N-CA	-5.68	1.39	1.46
19	K	359	ASP	C-N	5.68	1.41	1.34
27	S	234	ARG	CZ-NH2	5.68	1.40	1.33
1	Z	142	TYR	C-N	5.68	1.41	1.33
20	L	294	ARG	CD-NE	5.68	1.54	1.46
10	B	112	GLN	N-CA	-5.68	1.39	1.46
1	Z	687	ARG	CZ-NH1	5.68	1.40	1.32
5	4	163	CYS	N-CA	-5.68	1.39	1.46
7	6	205	ASP	N-CA	-5.68	1.39	1.46
20	L	124	HIS	CB-CG	5.68	1.58	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	338	ASP	CA-C	-5.67	1.45	1.52
10	B	90	ALA	CA-CB	5.67	1.62	1.53
19	K	50	GLU	N-CA	-5.67	1.39	1.46
23	O	145	LEU	C-O	-5.67	1.19	1.25
1	Z	692	LEU	CA-C	-5.67	1.45	1.52
17	I	264	PRO	N-CA	-5.67	1.40	1.47
19	K	65	GLN	N-CA	-5.67	1.39	1.46
23	O	289	ARG	CZ-NH2	5.67	1.40	1.33
25	Q	211	ASP	C-O	-5.67	1.17	1.24
22	N	220	LEU	C-O	-5.67	1.17	1.24
1	Z	783	SER	CA-CB	5.67	1.61	1.53
19	K	218	ALA	C-N	5.67	1.41	1.33
21	M	320	PHE	CA-C	-5.67	1.45	1.53
23	O	178	ARG	NE-CZ	5.67	1.39	1.33
31	W	25	ARG	NE-CZ	5.67	1.39	1.33
1	Z	279	GLU	C-N	5.67	1.41	1.33
11	C	123	GLN	CA-C	-5.67	1.45	1.52
5	4	105	ALA	CA-C	-5.67	1.45	1.52
9	A	25	VAL	CA-CB	-5.66	1.47	1.54
29	U	41	GLY	CA-C	-5.66	1.45	1.52
31	W	18	ASN	CA-C	-5.66	1.45	1.52
18	J	123	LEU	CA-C	-5.66	1.45	1.52
22	N	335	ILE	CA-CB	-5.66	1.47	1.54
22	N	473	VAL	CA-CB	5.66	1.61	1.54
2	1	196	LEU	CA-C	-5.66	1.45	1.52
2	1	211	ALA	C-N	5.66	1.41	1.33
17	I	433	GLY	C-N	5.66	1.41	1.33
18	J	323	GLU	C-N	5.66	1.41	1.33
19	K	55	GLU	C-N	5.66	1.41	1.33
23	O	226	ARG	N-CA	-5.66	1.38	1.46
27	S	161	PRO	C-N	5.66	1.41	1.33
13	E	46	VAL	CA-CB	-5.66	1.47	1.54
16	H	139	ARG	CZ-NH2	5.66	1.40	1.33
17	I	265	LYS	CA-C	-5.66	1.45	1.52
18	J	139	MET	C-N	5.66	1.41	1.33
27	S	438	VAL	CA-C	-5.66	1.45	1.52
27	S	455	LYS	C-N	5.66	1.40	1.33
31	W	175	PRO	N-CD	5.66	1.55	1.47
16	H	113	ILE	CA-C	-5.66	1.46	1.52
17	I	411	ARG	CZ-NH1	5.66	1.40	1.32
20	L	48	LYS	C-O	-5.66	1.17	1.24
25	Q	286	ALA	C-N	5.66	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	R	257	ARG	CZ-NH2	5.66	1.40	1.33
5	4	142	ILE	CA-C	-5.65	1.45	1.52
7	6	198	ARG	CZ-NH1	5.65	1.40	1.32
25	Q	114	ILE	C-N	5.65	1.41	1.33
27	S	227	VAL	C-N	5.65	1.41	1.33
3	2	68	VAL	C-N	5.65	1.39	1.33
7	6	107	ASN	C-N	5.65	1.41	1.33
8	7	129	SER	CA-CB	5.65	1.60	1.53
16	H	47	GLN	CA-CB	5.65	1.62	1.53
22	N	191	LYS	N-CA	-5.65	1.39	1.46
27	S	304	GLU	C-N	5.65	1.41	1.33
7	6	44	ALA	CA-C	-5.65	1.45	1.52
1	Z	250	ARG	NE-CZ	5.65	1.39	1.33
1	Z	735	GLY	C-N	5.65	1.41	1.33
26	R	83	ARG	NE-CZ	5.65	1.39	1.33
28	T	157	LEU	C-N	5.65	1.41	1.33
29	U	16	LEU	N-CA	-5.65	1.39	1.46
7	6	107	ASN	CA-C	-5.64	1.45	1.52
26	R	297	ARG	CZ-NH1	5.64	1.40	1.32
1	Z	335	ARG	CD-NE	5.64	1.54	1.46
10	B	72	ILE	CA-CB	-5.64	1.46	1.55
16	H	254	ALA	CA-CB	5.64	1.62	1.53
4	3	103	TYR	CA-C	-5.64	1.45	1.52
17	I	233	THR	CA-C	-5.64	1.45	1.52
20	L	269	THR	C-N	5.64	1.41	1.33
17	I	378	VAL	C-N	5.64	1.41	1.33
22	N	80	TYR	CA-CB	5.64	1.62	1.53
23	O	91	ASN	C-N	5.64	1.41	1.33
18	J	137	LEU	CA-C	-5.64	1.46	1.52
27	S	449	ALA	CA-CB	5.64	1.62	1.53
6	5	76	ASP	CA-CB	5.63	1.62	1.53
22	N	344	ARG	CZ-NH1	5.63	1.40	1.32
9	A	47	CYS	N-CA	-5.63	1.39	1.46
29	U	129	LYS	N-CA	-5.63	1.39	1.46
20	L	185	ARG	CA-C	-5.63	1.45	1.52
18	J	71	SER	N-CA	-5.63	1.38	1.45
20	L	182	LEU	CA-C	-5.63	1.45	1.52
30	V	212	LEU	CA-CB	5.63	1.62	1.53
2	1	172	TYR	C-N	5.62	1.41	1.33
1	Z	417	ILE	CA-CB	5.62	1.61	1.54
18	J	91	PRO	N-CA	5.62	1.53	1.47
18	J	299	ASP	CA-C	-5.62	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	I	284	ILE	CA-C	-5.62	1.45	1.52
22	N	928	VAL	C-N	5.62	1.41	1.33
1	Z	300	ARG	CZ-NH2	5.62	1.40	1.33
22	N	605	VAL	CA-CB	-5.62	1.47	1.54
31	W	84	ILE	C-N	5.62	1.41	1.33
1	Z	122	ALA	N-CA	-5.62	1.39	1.46
1	Z	250	ARG	CZ-NH1	5.62	1.40	1.32
13	E	61	PRO	CA-CB	-5.62	1.46	1.53
13	E	79	SER	N-CA	5.62	1.52	1.46
15	G	130	ARG	CZ-NH2	5.62	1.40	1.33
16	H	370	PHE	C-N	5.62	1.41	1.33
20	L	279	THR	CA-C	-5.62	1.45	1.52
25	Q	272	SER	C-N	5.62	1.39	1.33
26	R	225	TYR	N-CA	-5.62	1.39	1.46
12	D	169	ARG	NE-CZ	5.62	1.39	1.33
21	M	373	MET	N-CA	-5.62	1.39	1.46
25	Q	251	LEU	C-N	5.62	1.41	1.33
16	H	323	ARG	CD-NE	5.61	1.54	1.46
31	W	115	SER	CA-CB	5.61	1.61	1.54
3	2	45	THR	CA-C	-5.61	1.45	1.52
18	J	49	ARG	NE-CZ	5.61	1.39	1.33
18	J	213	ARG	C-O	-5.61	1.17	1.24
19	K	313	ARG	NE-CZ	5.61	1.39	1.33
21	M	415	LEU	N-CA	-5.61	1.38	1.46
21	M	426	GLU	CA-CB	5.61	1.62	1.53
22	N	264	VAL	C-N	5.61	1.41	1.33
22	N	620	GLU	CA-C	-5.61	1.45	1.52
23	O	273	GLN	N-CA	-5.61	1.39	1.46
23	O	146	PRO	N-CA	-5.61	1.40	1.47
26	R	257	ARG	NE-CZ	5.61	1.39	1.33
30	V	83	SER	CA-C	-5.61	1.45	1.52
28	T	263	LEU	C-N	5.61	1.41	1.33
22	N	377	HIS	C-N	5.60	1.41	1.33
25	Q	74	ARG	CA-C	-5.60	1.45	1.52
15	G	146	GLY	C-N	5.60	1.41	1.33
20	L	117	PRO	CA-C	-5.60	1.47	1.52
20	L	320	ILE	N-CA	-5.60	1.39	1.46
24	P	133	GLU	CA-CB	5.60	1.63	1.53
8	7	144	ARG	CZ-NH2	5.60	1.40	1.33
17	I	199	GLU	C-O	-5.60	1.17	1.24
23	O	66	GLU	CA-C	-5.60	1.45	1.52
23	O	167	GLY	CA-C	-5.60	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	U	232	ASP	CA-C	-5.60	1.45	1.52
19	K	343	LEU	CA-C	-5.59	1.45	1.52
28	T	284	PHE	N-CA	-5.59	1.39	1.46
29	U	11	VAL	C-N	5.59	1.41	1.33
21	M	195	ILE	N-CA	-5.59	1.39	1.46
26	R	126	LYS	CA-CB	5.59	1.62	1.53
31	W	100	ARG	NE-CZ	5.59	1.39	1.33
7	6	217	THR	CB-OG1	-5.59	1.34	1.43
11	C	184	MET	CA-C	-5.59	1.45	1.52
2	1	113	ALA	CA-CB	5.59	1.62	1.53
15	G	106	ASN	C-N	5.59	1.39	1.33
21	M	124	ILE	N-CA	-5.59	1.39	1.46
22	N	710	ARG	CZ-NH1	5.59	1.40	1.32
25	Q	126	ARG	NE-CZ	5.59	1.39	1.33
6	5	120	ARG	CD-NE	5.59	1.54	1.46
24	P	174	TYR	C-N	5.59	1.41	1.33
16	H	214	LEU	N-CA	-5.59	1.39	1.46
18	J	208	ASP	CA-C	-5.59	1.46	1.53
27	S	397	ARG	CA-C	5.59	1.60	1.52
30	V	287	HIS	CA-CB	5.59	1.62	1.53
18	J	367	GLY	N-CA	-5.58	1.38	1.45
1	Z	574	GLU	C-N	5.58	1.41	1.33
5	4	46	CYS	C-N	5.58	1.40	1.33
9	A	24	GLN	CA-C	5.58	1.60	1.52
12	D	242	LYS	N-CA	-5.58	1.39	1.46
21	M	304	ARG	NE-CZ	5.58	1.39	1.33
1	Z	556	ARG	CA-C	-5.58	1.45	1.52
5	4	88	LEU	C-N	5.58	1.41	1.34
6	5	91	LYS	CA-C	-5.58	1.46	1.52
16	H	255	ARG	CD-NE	5.58	1.54	1.46
17	I	231	GLY	C-N	5.58	1.41	1.33
21	M	324	THR	CA-CB	5.58	1.61	1.53
24	P	255	CYS	CA-CB	5.58	1.61	1.53
22	N	665	ASN	CA-CB	5.58	1.63	1.53
1	Z	702	PRO	CA-C	-5.58	1.46	1.52
24	P	127	THR	CA-C	-5.58	1.45	1.52
31	W	122	LYS	C-N	5.58	1.41	1.33
2	1	203	SER	CA-C	-5.58	1.45	1.53
4	3	114	PRO	N-CA	-5.58	1.40	1.47
19	K	194	ILE	N-CA	-5.58	1.39	1.46
1	Z	316	ASP	CA-C	-5.57	1.45	1.52
20	L	160	GLN	CA-CB	5.57	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	O	320	VAL	CA-CB	-5.57	1.47	1.54
8	7	83	ASN	C-N	5.57	1.41	1.33
22	N	336	GLU	C-N	5.57	1.41	1.33
27	S	399	ARG	NE-CZ	5.57	1.39	1.33
29	U	53	SER	CA-C	-5.57	1.46	1.52
3	2	98	THR	CA-C	-5.57	1.45	1.52
21	M	215	LEU	CA-CB	5.57	1.61	1.53
22	N	684	ARG	C-N	5.57	1.41	1.33
31	W	94	HIS	CE1-NE2	5.57	1.38	1.32
7	6	203	VAL	CA-C	-5.57	1.45	1.52
12	D	6	ALA	C-N	-5.57	1.26	1.33
28	T	287	ALA	CA-C	-5.57	1.45	1.52
1	Z	78	LEU	C-N	5.57	1.41	1.33
24	P	45	GLU	CA-CB	5.57	1.61	1.53
25	Q	292	GLN	C-N	5.57	1.41	1.33
31	W	97	LEU	C-N	5.57	1.41	1.34
10	B	55	ILE	C-O	-5.56	1.17	1.24
26	R	138	LEU	N-CA	-5.56	1.39	1.46
9	A	39	SER	N-CA	-5.56	1.38	1.45
11	C	151	ASP	C-N	-5.56	1.27	1.34
13	E	22	PHE	N-CA	-5.56	1.39	1.46
23	O	100	THR	CA-C	-5.56	1.46	1.52
26	R	385	ARG	CZ-NH1	5.56	1.40	1.32
3	2	62	ARG	CD-NE	5.56	1.54	1.46
13	E	99	HIS	CA-CB	5.56	1.62	1.53
22	N	84	ALA	CA-C	-5.56	1.45	1.52
22	N	738	ASP	C-N	5.56	1.41	1.33
22	N	163	PHE	C-N	5.56	1.41	1.33
4	3	52	GLY	CA-C	-5.55	1.48	1.52
12	D	162	GLY	C-N	5.55	1.41	1.33
20	L	182	LEU	CA-CB	5.55	1.61	1.53
30	V	296	ILE	N-CA	-5.55	1.39	1.46
22	N	686	GLY	C-N	5.55	1.41	1.33
13	E	218	ALA	C-N	5.55	1.40	1.33
6	5	156	MET	CA-CB	5.55	1.62	1.53
10	B	226	VAL	CA-C	-5.55	1.45	1.52
19	K	268	ASP	N-CA	-5.55	1.39	1.46
22	N	914	LEU	C-N	5.55	1.41	1.33
17	I	372	MET	CA-C	-5.55	1.45	1.52
22	N	234	GLU	CA-C	-5.55	1.45	1.52
25	Q	86	ALA	N-CA	-5.55	1.39	1.46
26	R	46	ARG	NE-CZ	5.55	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	T	286	GLU	C-N	5.55	1.41	1.33
10	B	84	ARG	NE-CZ	5.54	1.39	1.33
17	I	154	HIS	CD2-NE2	-5.54	1.31	1.37
22	N	236	LEU	C-N	5.54	1.40	1.33
5	4	164	LEU	CB-CG	5.54	1.64	1.53
10	B	139	TRP	NE1-CE2	5.54	1.43	1.37
16	H	253	GLY	CA-C	-5.54	1.45	1.52
19	K	56	VAL	CA-C	-5.54	1.45	1.52
28	T	189	HIS	CD2-NE2	5.54	1.44	1.37
29	U	111	LEU	C-O	-5.54	1.17	1.24
1	Z	600	TYR	CA-C	-5.54	1.45	1.52
12	D	42	VAL	CA-C	-5.54	1.46	1.52
13	E	133	MET	C-N	5.54	1.41	1.33
15	G	169	ALA	CA-CB	5.54	1.62	1.53
20	L	95	GLY	CA-C	-5.54	1.44	1.51
30	V	253	LYS	N-CA	-5.54	1.39	1.46
1	Z	823	ALA	C-O	-5.54	1.17	1.24
1	Z	881	GLU	CA-C	-5.54	1.46	1.52
4	3	115	LYS	CA-C	-5.54	1.44	1.52
10	B	27	ALA	N-CA	-5.54	1.39	1.46
11	C	194	ILE	N-CA	-5.54	1.39	1.46
22	N	154	ALA	CA-C	-5.54	1.45	1.52
1	Z	465	LEU	N-CA	-5.54	1.39	1.46
5	4	28	MET	C-N	5.54	1.40	1.33
15	G	230	LYS	CA-CB	5.54	1.62	1.53
20	L	291	ARG	NE-CZ	5.54	1.39	1.33
22	N	550	VAL	CA-CB	5.54	1.62	1.54
24	P	242	SER	CA-C	-5.54	1.45	1.52
16	H	138	MET	CA-C	-5.54	1.46	1.52
28	T	319	ALA	C-O	-5.54	1.17	1.24
12	D	247	ALA	CA-C	5.53	1.60	1.52
18	J	201	ARG	CZ-NH2	5.53	1.40	1.33
15	G	50	VAL	C-N	5.53	1.41	1.33
15	G	57	LYS	CA-C	-5.53	1.45	1.52
19	K	319	PRO	N-CA	-5.53	1.40	1.47
21	M	62	VAL	C-N	5.53	1.41	1.33
29	U	234	PHE	C-O	5.53	1.30	1.24
1	Z	763	ARG	NE-CZ	5.53	1.39	1.33
17	I	316	LEU	CA-CB	5.53	1.62	1.53
18	J	156	LYS	CA-CB	5.53	1.61	1.53
19	K	408	LYS	C-N	5.53	1.41	1.33
22	N	711	GLN	C-N	5.53	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	585	THR	CA-C	-5.53	1.45	1.52
27	S	156	SER	C-N	5.52	1.41	1.33
31	W	158	ASN	C-N	5.52	1.41	1.33
1	Z	322	SER	CA-CB	5.52	1.61	1.53
2	1	155	VAL	CA-CB	-5.52	1.47	1.54
6	5	69	HIS	CA-C	-5.52	1.46	1.52
13	E	85	ALA	CA-C	-5.52	1.45	1.52
15	G	44	ASP	CA-CB	5.52	1.62	1.54
22	N	453	HIS	C-N	5.52	1.41	1.33
24	P	361	HIS	CG-ND1	5.52	1.44	1.38
27	S	190	ASP	N-CA	-5.52	1.39	1.46
26	R	225	TYR	CA-CB	5.52	1.62	1.53
1	Z	735	GLY	CA-C	5.52	1.59	1.51
5	4	29	LYS	C-N	5.52	1.40	1.33
25	Q	288	LYS	C-N	5.52	1.41	1.33
4	3	177	ARG	C-N	5.52	1.41	1.33
22	N	609	ASP	CA-CB	5.52	1.62	1.53
25	Q	150	GLY	N-CA	5.52	1.52	1.45
27	S	453	HIS	ND1-CE1	5.52	1.38	1.32
26	R	322	ALA	C-N	5.52	1.41	1.33
30	V	80	THR	N-CA	5.52	1.53	1.46
30	V	82	VAL	N-CA	-5.52	1.38	1.46
2	1	40	VAL	CA-CB	-5.51	1.47	1.54
14	F	126	ARG	NE-CZ	5.51	1.39	1.33
21	M	206	MET	CA-CB	5.51	1.61	1.53
25	Q	105	GLN	N-CA	-5.51	1.39	1.46
4	3	146	MET	N-CA	-5.51	1.39	1.46
19	K	297	ASP	N-CA	-5.51	1.39	1.46
20	L	329	GLU	N-CA	-5.51	1.39	1.46
22	N	450	HIS	CD2-NE2	5.51	1.44	1.37
28	T	123	LEU	C-N	5.51	1.41	1.33
28	T	186	ALA	CA-CB	5.51	1.62	1.53
4	3	20	VAL	CA-C	-5.51	1.45	1.52
9	A	238	HIS	CA-C	-5.51	1.45	1.52
25	Q	93	LEU	C-N	5.51	1.41	1.33
1	Z	321	MET	CA-C	5.51	1.59	1.52
6	5	166	ARG	NE-CZ	5.51	1.39	1.33
13	E	186	HIS	ND1-CE1	5.51	1.38	1.32
20	L	346	VAL	N-CA	-5.51	1.39	1.46
24	P	150	ALA	N-CA	-5.51	1.39	1.46
27	S	268	GLU	CA-C	-5.51	1.45	1.52
21	M	206	MET	CA-C	-5.50	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	365	VAL	CA-CB	5.50	1.61	1.54
11	C	154	GLY	CA-C	-5.50	1.44	1.51
11	C	175	LEU	CA-C	-5.50	1.45	1.52
12	D	111	ILE	CA-CB	-5.50	1.47	1.54
17	I	268	ARG	CD-NE	5.50	1.53	1.46
17	I	329	MET	N-CA	-5.50	1.39	1.45
1	Z	729	MET	CA-C	-5.50	1.45	1.52
11	C	212	GLU	CA-C	-5.50	1.46	1.52
15	G	198	ILE	N-CA	-5.50	1.39	1.46
16	H	122	VAL	CA-CB	-5.50	1.47	1.54
19	K	183	LEU	N-CA	5.50	1.52	1.46
22	N	268	LEU	C-N	5.50	1.41	1.33
26	R	272	PHE	C-N	5.50	1.41	1.33
1	Z	137	ARG	CD-NE	5.50	1.53	1.46
4	3	111	GLY	CA-C	-5.50	1.45	1.51
13	E	187	LYS	C-N	5.50	1.40	1.33
19	K	260	ALA	CA-C	-5.50	1.45	1.52
27	S	265	ASP	CA-C	-5.50	1.45	1.52
30	V	234	TYR	C-N	5.50	1.42	1.33
1	Z	101	PRO	C-N	5.50	1.41	1.33
21	M	361	ALA	C-N	5.50	1.41	1.33
19	K	354	LEU	CA-CB	5.50	1.62	1.53
22	N	443	LEU	N-CA	-5.50	1.39	1.46
24	P	149	LEU	CA-C	-5.50	1.45	1.52
17	I	208	PRO	CA-C	-5.50	1.44	1.52
24	P	263	TRP	CZ2-CH2	5.50	1.47	1.37
31	W	167	GLY	C-N	5.50	1.41	1.33
14	F	133	LEU	N-CA	-5.49	1.39	1.46
20	L	196	LEU	CA-CB	5.49	1.60	1.53
1	Z	248	LEU	N-CA	-5.49	1.39	1.46
8	7	217	CYS	CA-CB	5.49	1.61	1.53
13	E	107	MET	C-N	5.49	1.41	1.33
23	O	219	HIS	ND1-CE1	5.49	1.38	1.32
25	Q	149	LEU	CA-C	-5.49	1.45	1.52
25	Q	340	GLU	CA-CB	5.49	1.62	1.53
25	Q	343	SER	C-N	5.49	1.41	1.33
26	R	355	GLU	CA-C	-5.49	1.45	1.52
10	B	160	ALA	C-N	5.49	1.40	1.33
18	J	331	ILE	CA-C	-5.49	1.46	1.52
22	N	911	ILE	C-N	5.49	1.41	1.33
24	P	293	ASP	C-N	5.49	1.40	1.33
26	R	46	ARG	CZ-NH2	5.49	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	U	40	LEU	CA-C	-5.49	1.46	1.52
19	K	362	ASP	CB-CG	5.49	1.65	1.52
25	Q	132	ARG	CD-NE	5.49	1.53	1.46
1	Z	792	ALA	CA-CB	-5.49	1.44	1.53
6	5	125	TYR	CA-C	-5.49	1.45	1.52
8	7	126	HIS	CA-C	-5.49	1.45	1.52
11	C	142	HIS	ND1-CE1	5.49	1.38	1.32
19	K	98	GLN	C-N	5.49	1.41	1.33
20	L	315	ILE	C-N	5.49	1.41	1.33
22	N	455	GLY	CA-C	-5.49	1.45	1.52
22	N	670	ASN	CA-CB	5.49	1.61	1.53
24	P	123	ARG	N-CA	-5.49	1.39	1.46
24	P	230	MET	CA-C	-5.49	1.45	1.52
26	R	146	ARG	CA-C	-5.49	1.45	1.52
28	T	293	PHE	CA-C	-5.49	1.46	1.52
1	Z	510	SER	CA-C	-5.48	1.45	1.52
15	G	234	GLU	CA-C	5.48	1.59	1.52
1	Z	169	GLU	CA-CB	5.48	1.61	1.53
1	Z	816	TYR	C-O	-5.48	1.17	1.24
15	G	149	LEU	CA-CB	5.48	1.63	1.53
31	W	99	HIS	CB-CG	-5.48	1.42	1.50
3	2	265	GLU	CA-C	5.48	1.64	1.52
10	B	190	THR	CA-C	-5.48	1.45	1.52
11	C	140	ASP	N-CA	-5.48	1.39	1.46
20	L	164	ILE	N-CA	-5.48	1.39	1.46
21	M	347	ARG	CZ-NH1	5.48	1.40	1.32
24	P	350	ARG	CZ-NH2	5.48	1.40	1.33
29	U	209	ARG	N-CA	-5.48	1.39	1.46
15	G	149	LEU	CA-C	-5.48	1.46	1.52
3	2	80	ILE	C-N	5.48	1.39	1.33
17	I	200	SER	C-N	5.48	1.40	1.33
9	A	226	LYS	CA-C	-5.48	1.46	1.52
23	O	198	PHE	N-CA	-5.48	1.39	1.46
10	B	189	HIS	CA-C	-5.47	1.45	1.52
21	M	178	ASP	CA-C	-5.47	1.46	1.53
22	N	601	ARG	NE-CZ	5.47	1.39	1.33
29	U	209	ARG	CZ-NH1	5.47	1.40	1.32
15	G	114	ASP	CA-C	-5.47	1.45	1.52
17	I	226	GLY	C-N	5.47	1.39	1.33
18	J	205	HIS	N-CA	-5.47	1.39	1.46
19	K	291	GLU	N-CA	-5.47	1.39	1.46
23	O	310	LEU	N-CA	-5.47	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	W	31	ASP	CA-CB	5.47	1.61	1.53
15	G	101	SER	N-CA	-5.47	1.39	1.46
17	I	139	VAL	CA-C	-5.47	1.46	1.52
22	N	669	ILE	CA-CB	-5.47	1.47	1.54
23	O	374	ILE	N-CA	-5.47	1.39	1.46
24	P	324	TYR	CA-CB	5.47	1.60	1.52
31	W	9	CYS	CA-C	-5.47	1.46	1.52
20	L	153	LEU	CA-CB	5.47	1.61	1.53
1	Z	494	ARG	NE-CZ	5.47	1.39	1.33
1	Z	898	VAL	CA-C	-5.47	1.46	1.52
7	6	221	LEU	C-N	5.47	1.40	1.33
11	C	170	ALA	N-CA	-5.47	1.39	1.46
18	J	263	SER	CA-C	-5.47	1.46	1.52
19	K	387	VAL	N-CA	-5.47	1.40	1.46
21	M	98	ASP	C-N	5.47	1.41	1.33
25	Q	194	ARG	NE-CZ	5.47	1.39	1.33
27	S	403	ILE	N-CA	-5.46	1.39	1.46
8	7	167	LEU	C-N	5.46	1.39	1.33
10	B	119	GLN	CA-CB	5.46	1.61	1.53
30	V	263	ASP	CA-CB	5.46	1.61	1.53
1	Z	334	ALA	CA-C	5.46	1.59	1.52
8	7	62	GLU	CA-CB	5.46	1.62	1.53
10	B	7	SER	CA-C	-5.46	1.45	1.52
24	P	101	VAL	CA-CB	-5.46	1.47	1.54
24	P	291	SER	N-CA	-5.46	1.39	1.46
16	H	309	PHE	CA-C	-5.46	1.45	1.52
1	Z	742	ALA	C-N	5.46	1.41	1.33
11	C	245	ALA	N-CA	-5.46	1.39	1.46
15	G	154	PRO	C-N	5.46	1.41	1.33
17	I	99	VAL	CA-CB	5.46	1.61	1.54
19	K	289	LEU	N-CA	-5.46	1.39	1.46
25	Q	94	ASP	CA-C	-5.46	1.45	1.52
5	4	168	GLN	CA-C	-5.46	1.45	1.52
12	D	85	ASN	CA-C	-5.46	1.45	1.52
8	7	131	ARG	NE-CZ	5.45	1.39	1.33
10	B	197	GLU	C-N	5.45	1.41	1.33
20	L	128	GLY	C-N	5.45	1.41	1.33
22	N	47	VAL	CA-C	-5.45	1.45	1.52
22	N	579	ARG	CA-CB	-5.45	1.44	1.53
24	P	98	LYS	CA-CB	5.45	1.61	1.53
25	Q	261	LEU	C-O	-5.45	1.17	1.24
1	Z	763	ARG	CZ-NH1	5.45	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	5	106	GLY	CA-C	-5.45	1.44	1.51
1	Z	335	ARG	CZ-NH1	5.45	1.40	1.32
5	4	87	ASN	CA-C	-5.45	1.45	1.52
25	Q	369	ILE	C-N	5.45	1.41	1.33
22	N	637	VAL	N-CA	-5.45	1.39	1.46
24	P	265	GLN	CA-CB	5.45	1.61	1.53
26	R	28	LEU	CA-CB	5.45	1.62	1.53
22	N	435	SER	CA-C	-5.45	1.45	1.52
29	U	7	GLN	N-CA	-5.45	1.39	1.45
1	Z	267	ARG	NE-CZ	5.45	1.39	1.33
4	3	136	PHE	N-CA	-5.45	1.39	1.45
16	H	122	VAL	CA-C	5.45	1.57	1.52
25	Q	126	ARG	N-CA	5.45	1.53	1.46
26	R	293	ARG	CA-CB	5.45	1.62	1.53
11	C	151	ASP	CA-CB	5.44	1.60	1.53
31	W	167	GLY	CA-C	-5.44	1.44	1.51
1	Z	469	TYR	C-N	5.44	1.40	1.33
20	L	51	GLN	N-CA	-5.44	1.39	1.46
22	N	213	PHE	N-CA	-5.44	1.39	1.46
24	P	83	LEU	CA-CB	5.44	1.61	1.53
1	Z	578	ALA	N-CA	-5.44	1.39	1.46
17	I	424	GLU	C-N	5.44	1.40	1.33
30	V	262	GLU	CA-C	5.44	1.59	1.52
30	V	272	ILE	CA-CB	-5.44	1.46	1.54
1	Z	902	LYS	N-CA	-5.44	1.38	1.46
4	3	72	ASN	N-CA	5.44	1.52	1.46
17	I	404	LEU	N-CA	-5.44	1.39	1.46
24	P	375	MET	C-N	5.44	1.41	1.33
1	Z	474	SER	C-N	5.44	1.41	1.33
22	N	360	VAL	CA-C	-5.44	1.45	1.52
9	A	21	ARG	CD-NE	5.43	1.53	1.46
17	I	273	VAL	CA-CB	-5.43	1.47	1.54
18	J	219	LEU	C-N	5.43	1.41	1.33
31	W	91	ARG	N-CA	-5.43	1.40	1.46
14	F	98	VAL	C-O	-5.43	1.18	1.24
11	C	65	ILE	N-CA	-5.43	1.39	1.46
15	G	24	VAL	C-N	5.43	1.41	1.33
23	O	280	MET	C-O	-5.43	1.17	1.24
32	Y	57	ARG	CZ-NH1	5.43	1.40	1.32
12	D	164	GLY	CA-C	-5.43	1.45	1.51
20	L	347	CYS	N-CA	-5.43	1.40	1.46
22	N	339	LEU	CA-CB	5.43	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	Q	231	TYR	N-CA	-5.43	1.39	1.46
16	H	99	THR	N-CA	-5.42	1.40	1.46
24	P	93	ARG	NE-CZ	5.42	1.39	1.33
1	Z	223	GLU	CA-CB	5.42	1.62	1.53
1	Z	315	GLU	CA-CB	5.42	1.60	1.53
4	3	16	GLY	C-N	5.42	1.41	1.33
6	5	152	MET	CA-CB	5.42	1.60	1.53
18	J	215	SER	C-N	5.42	1.40	1.33
25	Q	25	ASP	C-N	5.42	1.40	1.33
3	2	241	ARG	NE-CZ	5.42	1.39	1.33
6	5	217	ARG	NE-CZ	5.42	1.39	1.33
23	O	24	ARG	C-N	5.42	1.40	1.33
30	V	61	PHE	N-CA	-5.42	1.39	1.46
5	4	94	SER	CA-C	-5.42	1.45	1.53
23	O	5	PRO	N-CA	-5.42	1.40	1.47
28	T	268	ARG	NE-CZ	5.42	1.39	1.33
1	Z	160	ARG	C-N	5.42	1.40	1.33
18	J	115	ALA	CA-CB	5.42	1.61	1.53
23	O	196	ARG	CD-NE	5.42	1.53	1.46
25	Q	132	ARG	CZ-NH2	5.42	1.40	1.33
15	G	87	SER	CA-CB	5.42	1.61	1.53
16	H	369	ARG	CZ-NH1	5.42	1.40	1.32
17	I	437	GLY	N-CA	5.42	1.52	1.44
22	N	55	ARG	CZ-NH2	5.42	1.40	1.33
3	2	244	ARG	CZ-NH2	5.42	1.40	1.33
18	J	176	GLU	CA-CB	5.42	1.61	1.53
2	1	211	ALA	C-O	-5.41	1.17	1.24
20	L	224	ASP	N-CA	5.41	1.52	1.46
29	U	228	TYR	C-N	5.41	1.41	1.33
30	V	278	GLN	CA-C	-5.41	1.46	1.52
5	4	100	VAL	N-CA	-5.41	1.39	1.46
5	4	136	ALA	CA-CB	-5.41	1.44	1.53
15	G	72	ARG	CD-NE	5.41	1.53	1.46
18	J	27	LYS	N-CA	-5.41	1.39	1.46
20	L	296	ASP	C-N	5.41	1.40	1.33
23	O	119	GLY	N-CA	-5.41	1.39	1.45
27	S	392	TYR	CA-C	-5.41	1.45	1.52
30	V	241	ASN	CA-C	-5.41	1.45	1.52
30	V	280	PRO	C-N	5.41	1.41	1.33
14	F	134	ILE	N-CA	-5.41	1.39	1.46
19	K	339	ARG	CZ-NH2	5.41	1.40	1.33
22	N	253	TYR	CA-C	-5.41	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	725	MET	CA-C	-5.41	1.45	1.52
30	V	124	GLY	CA-C	-5.41	1.45	1.52
1	Z	173	LEU	CA-CB	5.41	1.61	1.53
1	Z	600	TYR	CA-CB	5.41	1.62	1.53
2	1	83	ALA	CA-C	-5.41	1.45	1.52
14	F	51	ARG	NE-CZ	5.41	1.39	1.33
28	T	242	ASN	C-N	5.41	1.41	1.33
6	5	86	ALA	C-O	-5.41	1.18	1.24
14	F	71	GLY	C-N	5.41	1.40	1.33
1	Z	72	ARG	CZ-NH1	5.40	1.40	1.32
4	3	124	LEU	CA-C	-5.40	1.45	1.52
16	H	239	ARG	CZ-NH2	5.40	1.40	1.33
25	Q	218	HIS	CB-CG	5.40	1.57	1.50
26	R	151	TYR	CA-CB	5.40	1.62	1.53
18	J	305	LEU	CA-CB	5.40	1.61	1.53
27	S	244	ALA	CA-C	-5.40	1.45	1.52
4	3	186	ILE	C-O	5.40	1.29	1.24
15	G	244	LEU	N-CA	-5.40	1.38	1.46
22	N	344	ARG	N-CA	-5.40	1.39	1.46
14	F	175	HIS	CB-CG	5.40	1.57	1.50
16	H	239	ARG	NE-CZ	5.40	1.39	1.33
21	M	379	VAL	CA-C	-5.40	1.45	1.52
22	N	400	ALA	N-CA	-5.40	1.39	1.46
24	P	95	SER	N-CA	-5.40	1.38	1.46
1	Z	533	ASP	CA-CB	5.40	1.61	1.53
1	Z	91	SER	C-N	5.39	1.39	1.33
1	Z	565	ASN	CA-CB	5.39	1.61	1.53
12	D	46	GLU	C-N	5.39	1.41	1.33
12	D	200	GLN	C-N	5.39	1.41	1.33
14	F	224	TYR	CA-CB	5.39	1.61	1.53
24	P	407	ASP	CA-C	-5.39	1.46	1.52
25	Q	153	LEU	CA-C	-5.39	1.45	1.52
17	I	394	ASP	CA-C	-5.39	1.45	1.52
22	N	474	ARG	CA-C	-5.39	1.45	1.52
24	P	339	ASP	N-CA	5.39	1.52	1.45
6	5	61	THR	CA-C	-5.39	1.46	1.52
8	7	134	HIS	ND1-CE1	5.39	1.38	1.32
1	Z	65	GLU	C-N	5.39	1.41	1.33
14	F	197	GLU	CA-CB	5.39	1.61	1.53
16	H	191	VAL	C-N	-5.39	1.26	1.33
17	I	309	MET	CA-CB	5.39	1.61	1.53
21	M	120	LYS	C-O	-5.39	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	600	ARG	CD-NE	5.39	1.53	1.46
24	P	124	LEU	CA-CB	5.39	1.61	1.53
26	R	32	ARG	N-CA	-5.39	1.39	1.46
19	K	196	ILE	N-CA	-5.39	1.39	1.46
2	1	196	LEU	C-N	-5.39	1.27	1.33
4	3	67	LEU	C-N	5.39	1.41	1.33
4	3	110	ALA	N-CA	-5.39	1.39	1.45
13	E	102	THR	CA-CB	5.39	1.61	1.53
16	H	360	ARG	NE-CZ	5.39	1.39	1.33
18	J	195	GLY	C-N	5.39	1.41	1.33
21	M	142	ALA	CA-C	-5.39	1.45	1.52
22	N	675	MET	CA-C	-5.39	1.45	1.52
7	6	71	CYS	CA-CB	5.38	1.62	1.53
8	7	90	VAL	CA-C	-5.38	1.45	1.52
16	H	369	ARG	CD-NE	5.38	1.53	1.46
22	N	893	THR	CA-C	-5.38	1.46	1.52
30	V	96	LEU	C-N	5.38	1.41	1.33
18	J	261	GLY	C-N	5.38	1.41	1.33
20	L	344	ARG	CA-CB	5.38	1.61	1.53
22	N	500	ASN	CA-C	-5.38	1.45	1.52
24	P	87	ILE	CA-CB	-5.38	1.47	1.54
5	4	136	ALA	C-N	5.38	1.40	1.33
19	K	284	GLU	CA-CB	5.38	1.61	1.53
20	L	358	ASP	CA-C	-5.38	1.48	1.53
22	N	633	CYS	CA-CB	5.38	1.60	1.53
5	4	99	HIS	ND1-CE1	5.38	1.38	1.32
10	B	115	ALA	CA-C	-5.38	1.45	1.52
22	N	275	ILE	C-O	5.38	1.34	1.23
14	F	105	VAL	C-N	5.38	1.40	1.33
27	S	416	ARG	CA-C	-5.38	1.45	1.52
1	Z	763	ARG	CA-C	5.37	1.59	1.52
11	C	229	LYS	N-CA	-5.37	1.38	1.45
30	V	68	ARG	CD-NE	5.37	1.53	1.46
6	5	166	ARG	CA-C	-5.37	1.45	1.52
10	B	128	ARG	NE-CZ	5.37	1.39	1.33
20	L	84	ARG	NE-CZ	5.37	1.39	1.33
22	N	36	ALA	N-CA	-5.37	1.39	1.46
22	N	922	GLU	CA-C	-5.37	1.46	1.52
21	M	437	TYR	C-N	5.37	1.41	1.33
22	N	157	THR	C-N	5.37	1.41	1.33
27	S	201	ARG	CZ-NH1	5.37	1.40	1.32
6	5	88	GLN	N-CA	-5.37	1.39	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	L	336	ASP	CA-CB	5.37	1.62	1.53
26	R	319	MET	N-CA	-5.37	1.39	1.46
4	3	188	HIS	N-CA	-5.37	1.39	1.46
21	M	233	LYS	N-CA	-5.37	1.39	1.46
22	N	486	MET	CA-C	-5.37	1.46	1.52
8	7	222	TYR	CZ-OH	5.36	1.49	1.38
27	S	296	LYS	CA-CB	5.36	1.62	1.53
1	Z	437	GLU	C-N	5.36	1.41	1.33
20	L	70	ILE	C-O	-5.36	1.18	1.24
29	U	56	VAL	N-CA	-5.36	1.40	1.46
1	Z	445	LEU	N-CA	-5.36	1.39	1.46
9	A	189	TRP	N-CA	-5.36	1.39	1.46
17	I	221	GLY	CA-C	-5.36	1.46	1.51
20	L	156	PRO	C-O	-5.36	1.17	1.24
25	Q	142	ARG	CA-C	-5.36	1.45	1.52
26	R	64	GLN	N-CA	5.36	1.53	1.45
26	R	183	TYR	CB-CG	-5.36	1.39	1.51
29	U	267	ARG	CD-NE	5.36	1.53	1.46
30	V	288	VAL	C-N	5.36	1.41	1.33
1	Z	158	TYR	N-CA	-5.36	1.40	1.46
18	J	167	LEU	N-CA	-5.36	1.40	1.46
22	N	881	PRO	CA-C	5.36	1.59	1.52
1	Z	71	TYR	C-N	5.36	1.41	1.33
1	Z	680	ARG	NE-CZ	5.36	1.39	1.33
5	4	117	TYR	N-CA	-5.36	1.39	1.46
13	E	111	SER	C-N	5.36	1.40	1.33
24	P	196	VAL	C-N	5.36	1.40	1.33
1	Z	361	SER	N-CA	-5.35	1.39	1.46
1	Z	807	ARG	CZ-NH2	5.35	1.40	1.33
22	N	751	ARG	N-CA	-5.35	1.39	1.46
25	Q	76	PHE	C-N	5.35	1.41	1.34
30	V	167	MET	N-CA	-5.35	1.40	1.46
1	Z	223	GLU	C-N	5.35	1.41	1.33
1	Z	690	VAL	CA-CB	5.35	1.57	1.53
1	Z	800	LEU	N-CA	-5.35	1.39	1.46
5	4	145	ARG	N-CA	-5.35	1.40	1.46
8	7	122	LEU	N-CA	-5.35	1.39	1.46
20	L	328	TYR	CA-C	-5.35	1.45	1.52
23	O	200	LEU	CA-CB	5.35	1.61	1.53
24	P	355	LYS	CA-CB	5.35	1.61	1.53
25	Q	134	VAL	N-CA	-5.35	1.40	1.46
25	Q	310	ARG	CA-C	-5.35	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	S	348	PHE	CA-C	-5.35	1.45	1.52
4	3	150	CYS	N-CA	-5.35	1.39	1.46
19	K	225	ALA	N-CA	-5.35	1.39	1.46
21	M	228	PRO	CA-C	5.35	1.57	1.52
5	4	131	ALA	N-CA	-5.35	1.39	1.46
7	6	81	GLY	CA-C	-5.35	1.44	1.51
22	N	541	HIS	ND1-CE1	5.35	1.37	1.32
24	P	294	LYS	CA-C	-5.35	1.45	1.52
29	U	100	LYS	CA-C	-5.35	1.46	1.52
4	3	66	ARG	CA-C	-5.35	1.46	1.52
12	D	174	LYS	CA-CB	5.35	1.61	1.53
17	I	157	HIS	ND1-CE1	5.35	1.37	1.32
18	J	234	LEU	C-N	5.35	1.41	1.33
19	K	116	LEU	N-CA	5.35	1.52	1.45
20	L	19	HIS	C-N	5.35	1.40	1.33
27	S	260	HIS	CG-ND1	-5.35	1.32	1.38
5	4	186	ASN	N-CA	-5.35	1.39	1.46
11	C	240	HIS	N-CA	-5.35	1.39	1.46
21	M	413	THR	CA-C	5.35	1.60	1.52
23	O	230	ARG	CZ-NH1	5.35	1.40	1.32
29	U	170	VAL	CA-C	-5.35	1.45	1.52
4	3	34	MET	C-N	5.34	1.40	1.33
19	K	192	LYS	CA-C	5.34	1.59	1.52
22	N	37	GLU	N-CA	-5.34	1.39	1.46
24	P	217	GLU	CA-CB	5.34	1.62	1.53
25	Q	121	LYS	CA-CB	5.34	1.62	1.53
26	R	298	GLU	CA-CB	5.34	1.62	1.53
30	V	66	THR	CA-C	-5.34	1.46	1.52
1	Z	585	GLU	C-O	-5.34	1.18	1.24
17	I	143	LEU	N-CA	-5.34	1.38	1.46
23	O	299	SER	CA-CB	5.34	1.61	1.53
1	Z	841	PRO	CA-C	-5.34	1.46	1.52
12	D	89	VAL	CA-C	-5.34	1.45	1.52
1	Z	747	GLN	C-N	5.34	1.41	1.33
4	3	93	ASN	N-CA	-5.34	1.39	1.46
18	J	375	ARG	NE-CZ	5.34	1.39	1.33
25	Q	206	LEU	CA-C	-5.34	1.46	1.52
26	R	293	ARG	C-O	-5.34	1.17	1.24
22	N	915	LYS	N-CA	-5.34	1.39	1.45
6	5	168	PRO	CA-C	5.34	1.58	1.52
20	L	290	LEU	C-N	5.34	1.41	1.33
29	U	266	ILE	N-CA	-5.34	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	6	105	HIS	ND1-CE1	5.33	1.37	1.32
7	6	219	ASP	C-N	5.33	1.40	1.33
24	P	140	ILE	C-N	5.33	1.41	1.33
31	W	111	ALA	CA-C	-5.33	1.46	1.52
5	4	86	ARG	CZ-NH2	5.33	1.40	1.33
12	D	118	TYR	CA-CB	5.33	1.62	1.53
22	N	790	GLY	C-N	5.33	1.41	1.33
1	Z	825	MET	N-CA	-5.33	1.39	1.46
4	3	139	SER	C-O	-5.33	1.17	1.23
8	7	117	ILE	C-N	5.33	1.40	1.33
10	B	36	VAL	CA-CB	-5.33	1.47	1.55
22	N	375	PHE	CA-CB	5.33	1.61	1.53
29	U	133	LEU	C-N	-5.33	1.29	1.33
3	2	191	GLU	CA-CB	5.33	1.61	1.53
6	5	104	MET	CA-C	-5.33	1.46	1.52
21	M	187	ASP	CA-C	-5.33	1.45	1.52
21	M	266	LYS	CA-C	-5.33	1.45	1.52
27	S	293	GLY	CA-C	-5.33	1.46	1.52
4	3	109	ILE	C-N	5.33	1.40	1.33
22	N	137	MET	C-N	5.33	1.40	1.33
24	P	332	SER	CA-C	-5.33	1.46	1.53
25	Q	48	GLN	CA-CB	5.33	1.61	1.53
27	S	255	LEU	C-N	5.33	1.41	1.33
5	4	62	LYS	CA-C	-5.33	1.46	1.52
13	E	216	GLU	N-CA	-5.33	1.39	1.46
30	V	298	GLN	CA-C	-5.33	1.45	1.52
1	Z	276	GLU	N-CA	-5.32	1.39	1.46
20	L	312	ILE	N-CA	-5.32	1.40	1.46
29	U	232	ASP	N-CA	-5.32	1.39	1.46
16	H	47	GLN	C-N	5.32	1.40	1.33
8	7	67	ILE	CA-C	-5.32	1.46	1.52
24	P	350	ARG	CZ-NH1	5.32	1.40	1.32
24	P	357	ARG	N-CA	-5.32	1.39	1.46
27	S	487	HIS	CA-C	5.32	1.59	1.52
31	W	45	PRO	CA-C	-5.32	1.44	1.52
13	E	100	TRP	CA-CB	5.32	1.61	1.53
4	3	126	LEU	C-N	5.32	1.39	1.33
6	5	73	VAL	CA-C	-5.32	1.46	1.52
27	S	477	HIS	C-N	5.32	1.41	1.33
3	2	60	ASP	C-N	5.31	1.40	1.33
26	R	347	ILE	CA-C	-5.31	1.46	1.52
15	G	34	SER	N-CA	5.31	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	K	247	VAL	C-N	5.31	1.40	1.33
17	I	172	THR	CA-C	-5.31	1.46	1.52
1	Z	161	HIS	C-N	5.31	1.40	1.33
5	4	193	ASN	CA-C	-5.31	1.46	1.52
7	6	177	LEU	CA-C	-5.31	1.45	1.52
11	C	110	LEU	CA-CB	5.31	1.61	1.53
12	D	118	TYR	C-N	5.31	1.41	1.33
12	D	158	ALA	N-CA	-5.31	1.39	1.45
27	S	199	ASN	CA-C	-5.31	1.46	1.52
22	N	529	ILE	CA-CB	-5.31	1.48	1.54
22	N	578	LEU	C-N	5.31	1.40	1.33
24	P	435	LEU	CB-CG	5.31	1.64	1.53
23	O	330	ARG	NE-CZ	5.31	1.38	1.33
2	1	68	LEU	CA-C	-5.30	1.46	1.52
9	A	16	PHE	N-CA	5.30	1.52	1.45
15	G	78	VAL	N-CA	-5.30	1.40	1.46
19	K	227	PHE	CA-C	-5.30	1.46	1.52
20	L	262	ASN	N-CA	5.30	1.52	1.46
23	O	44	PHE	CA-C	-5.30	1.46	1.52
29	U	73	ASP	CA-C	-5.30	1.45	1.52
11	C	226	ARG	CZ-NH1	5.30	1.40	1.32
11	C	216	LEU	C-O	-5.30	1.18	1.24
15	G	48	PHE	CG-CD1	5.30	1.50	1.38
16	H	81	ALA	CA-CB	5.30	1.62	1.53
16	H	208	PRO	CA-CB	5.30	1.61	1.54
18	J	61	GLU	N-CA	-5.30	1.40	1.46
25	Q	362	GLU	CA-CB	5.30	1.61	1.53
2	1	46	VAL	CA-C	-5.30	1.46	1.52
11	C	182	GLY	CA-C	-5.30	1.44	1.52
23	O	126	GLY	CA-C	-5.30	1.43	1.52
23	O	253	THR	C-N	5.30	1.41	1.33
27	S	244	ALA	C-O	-5.30	1.17	1.24
1	Z	671	ALA	CA-CB	5.30	1.61	1.53
5	4	81	ALA	C-N	5.30	1.41	1.34
24	P	288	HIS	C-N	5.30	1.41	1.33
12	D	89	VAL	N-CA	-5.30	1.40	1.46
16	H	346	PRO	N-CA	-5.30	1.40	1.47
22	N	565	ALA	CA-CB	5.30	1.61	1.53
24	P	367	ALA	C-N	5.30	1.41	1.33
25	Q	392	PRO	CA-C	5.30	1.59	1.52
2	1	79	ARG	CZ-NH2	5.29	1.40	1.33
13	E	53	ARG	CD-NE	5.29	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	E	62	SER	C-N	5.29	1.40	1.33
18	J	313	ARG	NE-CZ	5.29	1.38	1.33
3	2	235	PRO	CA-C	5.29	1.59	1.52
4	3	66	ARG	CZ-NH1	5.29	1.40	1.32
6	5	192	VAL	CA-C	5.29	1.59	1.52
7	6	108	ASN	CA-C	-5.29	1.45	1.52
8	7	221	LEU	CA-CB	5.29	1.61	1.53
9	A	241	ALA	CA-C	-5.29	1.45	1.52
13	E	87	THR	CA-CB	5.29	1.61	1.53
19	K	59	GLU	CA-C	-5.29	1.46	1.52
22	N	452	ASN	CA-CB	5.29	1.61	1.53
10	B	220	ARG	N-CA	5.29	1.52	1.46
12	D	86	ARG	CZ-NH2	5.29	1.40	1.33
19	K	200	ARG	NE-CZ	5.29	1.38	1.33
22	N	59	PHE	CA-CB	5.29	1.61	1.53
22	N	564	ASP	CA-C	-5.29	1.45	1.52
23	O	85	ARG	CD-NE	5.29	1.53	1.46
25	Q	87	ARG	CD-NE	5.29	1.53	1.46
17	I	214	MET	N-CA	-5.29	1.39	1.46
25	Q	414	LEU	CA-C	-5.29	1.45	1.52
28	T	158	ARG	CA-C	-5.29	1.45	1.52
1	Z	488	ALA	CA-CB	5.29	1.61	1.53
23	O	285	PRO	CA-C	-5.29	1.47	1.52
23	O	317	VAL	CA-CB	5.29	1.61	1.54
24	P	53	GLN	CG-CD	5.29	1.65	1.52
25	Q	235	ALA	CA-C	-5.29	1.46	1.52
10	B	112	GLN	CA-C	-5.29	1.46	1.52
1	Z	415	GLY	CA-C	-5.29	1.45	1.51
7	6	232	ARG	CZ-NH1	5.29	1.40	1.32
20	L	376	ASP	N-CA	-5.29	1.40	1.46
23	O	27	GLU	CA-CB	5.29	1.61	1.53
28	T	118	ARG	N-CA	5.29	1.52	1.46
22	N	412	HIS	CD2-NE2	-5.28	1.32	1.37
24	P	202	THR	C-N	5.28	1.40	1.33
29	U	283	ARG	C-N	5.28	1.40	1.33
22	N	474	ARG	NE-CZ	5.28	1.38	1.33
28	T	175	TYR	CA-C	5.28	1.59	1.52
7	6	133	TYR	CA-C	5.28	1.59	1.52
25	Q	100	GLU	CA-C	-5.28	1.45	1.52
26	R	297	ARG	C-N	5.28	1.41	1.34
27	S	364	THR	C-N	5.28	1.40	1.33
29	U	275	LEU	C-N	5.28	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	K	128	ALA	CA-C	-5.28	1.45	1.52
20	L	197	LYS	N-CA	5.28	1.52	1.46
28	T	129	LEU	CA-C	-5.28	1.46	1.52
1	Z	697	ILE	CA-CB	5.28	1.60	1.54
4	3	85	TYR	CA-C	-5.28	1.46	1.52
4	3	162	HIS	CG-CD2	5.28	1.41	1.35
11	C	3	ARG	CZ-NH2	5.28	1.40	1.33
11	C	139	TRP	C-N	5.28	1.40	1.33
18	J	136	SER	C-N	5.28	1.40	1.33
21	M	358	ASN	N-CA	-5.28	1.39	1.46
25	Q	223	LYS	CA-C	-5.28	1.46	1.53
4	3	52	GLY	C-N	5.28	1.41	1.33
9	A	201	CYS	CA-CB	5.28	1.62	1.53
23	O	352	ARG	NE-CZ	5.28	1.38	1.33
27	S	211	TYR	N-CA	-5.28	1.39	1.46
12	D	76	LEU	C-N	5.27	1.41	1.33
15	G	234	GLU	CA-CB	5.27	1.61	1.53
25	Q	76	PHE	CA-CB	5.27	1.61	1.53
4	3	71	LEU	CA-C	-5.27	1.46	1.52
14	F	125	ARG	CA-C	-5.27	1.45	1.52
26	R	233	ARG	NE-CZ	5.27	1.38	1.33
28	T	289	ARG	CZ-NH1	5.27	1.40	1.32
14	F	29	VAL	C-N	5.27	1.41	1.33
22	N	233	LEU	N-CA	-5.27	1.40	1.46
24	P	446	ILE	N-CA	5.27	1.52	1.46
27	S	375	PHE	CA-C	-5.27	1.46	1.52
27	S	351	PRO	C-N	5.27	1.41	1.33
8	7	125	GLY	C-N	5.26	1.40	1.33
8	7	258	HIS	CA-C	-5.26	1.46	1.52
13	E	53	ARG	NE-CZ	5.26	1.38	1.33
16	H	167	GLU	C-N	5.26	1.40	1.33
20	L	49	ALA	C-N	5.26	1.41	1.34
22	N	387	ARG	NE-CZ	5.26	1.38	1.33
26	R	77	ASN	CA-C	-5.26	1.46	1.52
4	3	164	PHE	C-N	5.26	1.40	1.33
10	B	89	ARG	CA-C	-5.26	1.46	1.52
15	G	127	SER	C-O	-5.26	1.16	1.24
4	3	184	GLY	C-N	5.26	1.38	1.33
6	5	219	ILE	C-O	-5.26	1.17	1.24
11	C	115	CYS	CA-CB	5.26	1.61	1.53
22	N	787	CYS	CA-C	-5.26	1.46	1.52
22	N	805	ASN	C-N	5.26	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	542	ILE	CA-C	-5.26	1.46	1.52
12	D	131	ALA	N-CA	5.26	1.52	1.45
2	1	214	ALA	CA-C	-5.26	1.46	1.52
8	7	250	THR	CA-C	-5.26	1.46	1.52
3	2	91	THR	CA-CB	-5.26	1.45	1.53
9	A	12	HIS	CA-C	-5.26	1.47	1.52
20	L	372	ARG	CZ-NH1	5.26	1.40	1.32
10	B	209	GLU	N-CA	-5.25	1.40	1.46
18	J	64	GLN	C-O	-5.25	1.18	1.24
27	S	176	MET	N-CA	-5.25	1.39	1.46
20	L	244	SER	N-CA	-5.25	1.39	1.46
26	R	38	ARG	CA-C	-5.25	1.45	1.52
22	N	747	SER	CA-CB	5.25	1.61	1.53
24	P	396	LEU	C-N	5.25	1.40	1.33
25	Q	64	ALA	CA-CB	5.25	1.61	1.53
27	S	193	GLN	C-O	-5.25	1.18	1.24
16	H	253	GLY	C-N	5.25	1.40	1.33
25	Q	391	PRO	CA-C	5.25	1.57	1.52
17	I	156	VAL	C-N	5.25	1.41	1.33
19	K	61	ILE	CA-C	-5.25	1.46	1.52
21	M	116	GLN	N-CA	5.25	1.52	1.46
21	M	430	LYS	CA-C	-5.25	1.45	1.52
4	3	83	LYS	N-CA	-5.25	1.38	1.45
5	4	151	ILE	C-N	5.25	1.40	1.33
23	O	368	GLU	N-CA	-5.25	1.40	1.46
27	S	281	ASN	C-N	5.25	1.40	1.33
1	Z	329	ASN	CG-ND2	5.24	1.44	1.33
8	7	173	LEU	N-CA	-5.24	1.40	1.46
17	I	298	ASN	CA-CB	5.24	1.62	1.53
18	J	308	PRO	C-N	5.24	1.41	1.33
22	N	186	SER	CA-C	-5.24	1.46	1.52
22	N	494	TYR	CZ-OH	5.24	1.49	1.38
22	N	614	VAL	CA-C	-5.24	1.46	1.52
1	Z	540	GLN	CA-CB	5.24	1.61	1.53
16	H	337	LEU	CA-C	-5.24	1.46	1.52
25	Q	343	SER	N-CA	-5.24	1.39	1.46
1	Z	597	VAL	CA-CB	-5.24	1.47	1.54
3	2	136	TYR	C-N	5.24	1.40	1.33
6	5	126	GLU	N-CA	-5.24	1.40	1.46
14	F	156	CYS	CA-C	-5.24	1.46	1.52
16	H	349	GLU	N-CA	-5.24	1.39	1.46
18	J	347	ILE	CA-C	-5.24	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	M	155	LYS	C-N	5.24	1.41	1.33
22	N	274	PRO	C-N	5.24	1.40	1.33
25	Q	396	THR	CA-C	-5.24	1.45	1.52
26	R	218	THR	CB-OG1	-5.24	1.35	1.43
5	4	74	GLU	C-N	5.24	1.40	1.33
18	J	323	GLU	CA-CB	5.24	1.61	1.53
27	S	442	ILE	C-N	5.24	1.41	1.34
1	Z	98	PHE	CA-CB	5.24	1.61	1.53
2	1	199	GLU	C-N	5.24	1.41	1.33
1	Z	269	ALA	C-N	5.24	1.40	1.33
9	A	182	LYS	N-CA	-5.24	1.40	1.46
17	I	326	LYS	CA-C	-5.24	1.46	1.52
31	W	28	ALA	C-N	5.24	1.40	1.33
22	N	718	ASN	CG-ND2	5.23	1.44	1.33
24	P	215	GLN	CA-C	-5.23	1.46	1.52
21	M	345	SER	CA-C	-5.23	1.45	1.52
23	O	324	ILE	CA-C	-5.23	1.46	1.52
1	Z	118	ASN	C-N	-5.23	1.27	1.33
3	2	252	THR	C-N	5.23	1.41	1.33
21	M	107	ASP	CA-C	-5.23	1.46	1.52
21	M	374	ASN	C-N	5.23	1.40	1.33
23	O	303	THR	CA-C	-5.23	1.46	1.53
25	Q	188	ALA	C-O	-5.23	1.18	1.24
26	R	370	ILE	C-N	5.23	1.40	1.33
16	H	97	ARG	CA-CB	5.23	1.60	1.53
24	P	313	GLU	C-N	5.23	1.41	1.33
12	D	195	LEU	N-CA	-5.23	1.39	1.46
14	F	18	ARG	NE-CZ	5.23	1.38	1.33
21	M	57	SER	CA-CB	5.23	1.61	1.53
22	N	151	ILE	N-CA	-5.23	1.40	1.46
16	H	100	LYS	CA-C	-5.23	1.45	1.52
25	Q	228	ALA	CA-CB	5.23	1.61	1.53
11	C	217	THR	CA-C	-5.22	1.45	1.52
14	F	80	ASP	CA-CB	5.22	1.61	1.53
22	N	659	CYS	C-N	5.22	1.41	1.33
11	C	249	ARG	CD-NE	5.22	1.53	1.46
12	D	225	ILE	CA-C	-5.22	1.46	1.52
19	K	238	LYS	CA-CB	5.22	1.61	1.53
24	P	205	ILE	N-CA	-5.22	1.39	1.46
26	R	92	GLU	N-CA	-5.22	1.39	1.46
26	R	367	GLN	CA-CB	5.22	1.61	1.53
5	4	157	VAL	CA-C	-5.22	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	6	83	SER	C-N	5.22	1.41	1.33
8	7	158	GLY	N-CA	-5.22	1.39	1.45
27	S	354	LYS	C-N	5.22	1.40	1.33
9	A	150	GLN	N-CA	-5.22	1.39	1.46
10	B	230	LEU	CA-C	-5.22	1.46	1.52
11	C	96	ARG	CA-C	-5.22	1.46	1.52
24	P	289	ARG	NE-CZ	5.22	1.38	1.33
28	T	272	ALA	CA-C	-5.22	1.46	1.52
19	K	247	VAL	CA-CB	-5.22	1.48	1.54
24	P	243	ILE	N-CA	-5.22	1.40	1.46
27	S	434	ALA	CA-CB	5.22	1.61	1.53
7	6	134	VAL	N-CA	-5.22	1.40	1.46
9	A	75	ASN	CA-CB	5.22	1.61	1.53
17	I	147	GLY	C-N	5.22	1.40	1.33
3	2	71	ASP	CA-C	-5.21	1.46	1.52
14	F	208	LYS	N-CA	-5.21	1.39	1.46
16	H	215	PHE	C-O	-5.21	1.17	1.23
20	L	54	GLY	C-N	5.21	1.40	1.33
30	V	156	VAL	C-N	5.21	1.40	1.33
27	S	220	PHE	CA-CB	5.21	1.61	1.53
1	Z	495	GLU	CA-CB	5.21	1.61	1.53
4	3	154	TRP	N-CA	5.21	1.52	1.46
1	Z	422	VAL	C-O	-5.21	1.18	1.24
16	H	321	THR	CA-C	5.21	1.59	1.52
27	S	297	ALA	C-N	5.21	1.40	1.33
6	5	244	ILE	CA-CB	-5.21	1.48	1.54
15	G	8	TYR	N-CA	-5.21	1.41	1.46
31	W	11	ASP	C-N	5.21	1.41	1.33
17	I	98	LYS	C-N	5.21	1.40	1.33
22	N	199	ARG	CZ-NH1	5.21	1.40	1.32
13	E	167	ALA	N-CA	-5.21	1.39	1.46
19	K	340	GLN	CA-CB	5.21	1.61	1.53
23	O	196	ARG	CA-CB	5.21	1.61	1.53
16	H	150	HIS	CG-CD2	5.20	1.41	1.35
21	M	117	ARG	CZ-NH2	5.20	1.40	1.33
22	N	355	ASN	N-CA	-5.20	1.40	1.46
22	N	710	ARG	CZ-NH2	5.20	1.40	1.33
26	R	385	ARG	NE-CZ	5.20	1.38	1.33
5	4	93	ARG	CA-CB	5.20	1.61	1.53
7	6	220	ALA	CA-C	-5.20	1.46	1.52
29	U	286	GLU	CA-CB	5.20	1.61	1.53
1	Z	765	ALA	C-N	5.20	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	4	24	ASN	CA-C	-5.20	1.45	1.52
7	6	173	LEU	C-N	5.20	1.41	1.33
22	N	404	ALA	C-N	5.20	1.41	1.33
22	N	899	ARG	CZ-NH2	5.20	1.40	1.33
26	R	114	ILE	CA-CB	5.20	1.61	1.54
6	5	134	SER	CA-CB	5.20	1.61	1.53
7	6	166	GLY	CA-C	5.20	1.56	1.52
11	C	257	LYS	C-N	5.20	1.40	1.33
1	Z	838	ARG	CD-NE	5.20	1.53	1.46
25	Q	356	LEU	N-CA	5.20	1.52	1.45
1	Z	307	LEU	C-N	5.20	1.40	1.33
8	7	82	ARG	N-CA	-5.20	1.39	1.45
28	T	128	PHE	CA-CB	5.20	1.60	1.53
31	W	29	GLN	CA-C	-5.20	1.46	1.52
26	R	151	TYR	C-N	5.19	1.41	1.33
9	A	130	GLU	C-N	5.19	1.39	1.33
14	F	162	GLY	CA-C	-5.19	1.45	1.52
16	H	418	LYS	C-N	5.19	1.41	1.34
21	M	282	ILE	CA-CB	-5.19	1.47	1.54
22	N	385	PHE	C-O	-5.19	1.18	1.24
22	N	471	ASP	N-CA	-5.19	1.39	1.46
28	T	225	TYR	CA-CB	5.19	1.61	1.53
29	U	247	LYS	CA-CB	5.19	1.61	1.53
1	Z	224	ASN	CA-C	-5.19	1.45	1.52
8	7	64	GLY	N-CA	5.19	1.52	1.45
21	M	88	TYR	C-N	5.19	1.41	1.33
22	N	343	ILE	N-CA	-5.19	1.40	1.46
24	P	199	TYR	C-N	5.19	1.40	1.33
24	P	365	ILE	CA-CB	5.19	1.61	1.54
29	U	190	ARG	CZ-NH2	5.19	1.40	1.33
9	A	48	ALA	CA-C	-5.19	1.46	1.52
27	S	329	HIS	N-CA	-5.19	1.40	1.46
2	1	175	ALA	N-CA	-5.19	1.40	1.46
12	D	21	TYR	C-N	5.19	1.40	1.33
25	Q	307	THR	C-N	5.19	1.40	1.33
6	5	157	GLY	CA-C	-5.18	1.45	1.51
19	K	302	ASN	C-N	5.18	1.40	1.33
26	R	149	LEU	CA-C	5.18	1.59	1.52
9	A	220	VAL	CA-CB	-5.18	1.48	1.54
24	P	277	ALA	CA-C	-5.18	1.46	1.52
28	T	158	ARG	NE-CZ	5.18	1.38	1.33
18	J	271	ARG	NE-CZ	5.18	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	F	89	ARG	CA-CB	5.18	1.61	1.53
14	F	196	ARG	CZ-NH1	5.18	1.40	1.32
15	G	51	GLU	N-CA	-5.18	1.39	1.46
18	J	26	SER	C-N	5.18	1.40	1.33
27	S	450	SER	CA-C	-5.18	1.46	1.52
28	T	193	GLY	C-N	5.18	1.40	1.33
29	U	9	VAL	N-CA	-5.18	1.40	1.46
10	B	128	ARG	CD-NE	5.18	1.53	1.46
13	E	232	GLU	CA-C	-5.18	1.46	1.52
22	N	109	THR	CA-C	-5.18	1.46	1.52
3	2	96	ASP	C-N	5.18	1.41	1.33
5	4	60	ILE	C-O	-5.18	1.18	1.24
7	6	33	TYR	CZ-OH	5.18	1.49	1.38
21	M	304	ARG	CZ-NH2	5.18	1.40	1.33
22	N	579	ARG	CD-NE	5.18	1.53	1.46
1	Z	220	ASP	CA-CB	5.17	1.61	1.53
7	6	154	PRO	N-CD	-5.17	1.40	1.47
11	C	181	GLU	N-CA	-5.17	1.39	1.46
13	E	16	SER	CA-C	-5.17	1.46	1.52
17	I	145	GLU	C-N	5.17	1.40	1.33
25	Q	308	ASP	CA-C	-5.17	1.46	1.52
32	Y	69	THR	CB-OG1	-5.17	1.35	1.43
17	I	431	GLN	CA-C	-5.17	1.46	1.52
18	J	290	LYS	C-N	5.17	1.40	1.33
28	T	348	MET	C-N	5.17	1.40	1.33
18	J	70	GLY	C-N	5.17	1.40	1.33
25	Q	41	GLU	C-N	5.17	1.40	1.33
26	R	145	LEU	N-CA	-5.17	1.40	1.46
27	S	194	LYS	N-CA	-5.17	1.40	1.46
29	U	58	PHE	CA-C	-5.17	1.45	1.52
16	H	327	LEU	CA-CB	5.17	1.62	1.53
17	I	286	GLU	N-CA	5.17	1.52	1.46
9	A	17	SER	N-CA	-5.17	1.41	1.45
24	P	362	ASN	N-CA	-5.17	1.40	1.46
5	4	15	VAL	CA-C	-5.17	1.46	1.52
9	A	93	ARG	NE-CZ	5.17	1.38	1.33
18	J	292	ILE	CA-CB	-5.17	1.48	1.54
21	M	213	GLU	N-CA	-5.17	1.40	1.46
29	U	10	VAL	CA-C	-5.17	1.46	1.52
2	1	195	ALA	N-CA	-5.17	1.40	1.46
23	O	143	ASN	C-N	5.17	1.40	1.33
25	Q	310	ARG	NE-CZ	5.17	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	V	141	VAL	C-N	5.17	1.40	1.33
1	Z	719	PRO	C-N	5.16	1.40	1.33
3	2	193	GLU	CA-CB	5.16	1.61	1.53
17	I	224	LEU	N-CA	-5.16	1.39	1.46
21	M	246	ALA	CA-C	-5.16	1.46	1.52
21	M	333	ASN	C-N	5.16	1.41	1.33
22	N	213	PHE	CA-C	-5.16	1.46	1.52
21	M	272	PHE	CA-C	-5.16	1.46	1.52
23	O	22	TRP	C-N	5.16	1.40	1.33
1	Z	752	HIS	ND1-CE1	5.16	1.37	1.32
2	1	58	SER	C-N	5.16	1.40	1.33
17	I	347	ILE	CA-C	-5.16	1.46	1.52
17	I	362	LYS	CA-C	5.16	1.59	1.52
21	M	152	GLY	CA-C	5.16	1.56	1.51
22	N	543	LYS	N-CA	-5.16	1.40	1.46
22	N	615	ARG	C-N	5.16	1.41	1.33
1	Z	556	ARG	NE-CZ	5.16	1.38	1.33
7	6	110	ALA	C-N	5.16	1.40	1.33
9	A	112	ASP	CA-C	-5.16	1.46	1.52
9	A	186	LYS	CA-CB	-5.16	1.44	1.53
1	Z	426	LEU	C-N	5.16	1.40	1.33
8	7	114	GLN	CD-NE2	5.16	1.44	1.33
8	7	260	ILE	N-CA	-5.16	1.40	1.46
16	H	377	CYS	CA-CB	5.16	1.61	1.53
20	L	361	PHE	CA-C	-5.16	1.46	1.52
29	U	37	GLY	CA-C	-5.16	1.45	1.51
6	5	200	ARG	NE-CZ	5.16	1.38	1.33
10	B	109	GLN	C-N	5.16	1.41	1.33
10	B	116	SER	C-N	5.16	1.40	1.33
13	E	226	PHE	C-N	5.16	1.40	1.33
20	L	272	ARG	CD-NE	5.16	1.53	1.46
22	N	77	SER	CA-C	-5.16	1.46	1.52
9	A	63	SER	N-CA	5.15	1.50	1.46
9	A	126	THR	CA-CB	5.15	1.61	1.53
13	E	25	GLU	CA-CB	5.15	1.61	1.53
22	N	250	PHE	CA-C	-5.15	1.45	1.52
27	S	289	LEU	CA-C	-5.15	1.45	1.52
3	2	79	PHE	CA-C	5.15	1.59	1.52
3	2	115	ARG	NE-CZ	5.15	1.38	1.33
10	B	114	VAL	CA-C	-5.15	1.46	1.52
11	C	222	LYS	N-CA	-5.15	1.39	1.46
14	F	187	LEU	CA-CB	5.15	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	J	272	THR	CA-C	-5.15	1.46	1.52
24	P	263	TRP	C-N	5.15	1.40	1.33
2	1	190	THR	CA-C	-5.15	1.46	1.52
16	H	262	GLU	CA-C	-5.15	1.46	1.52
18	J	212	ILE	CA-CB	-5.15	1.47	1.54
21	M	173	LYS	CA-C	-5.15	1.45	1.52
13	E	191	LEU	C-N	5.15	1.41	1.33
16	H	177	VAL	CA-C	-5.15	1.44	1.52
16	H	313	GLY	N-CA	-5.15	1.38	1.45
22	N	24	LEU	C-N	5.15	1.40	1.33
22	N	884	VAL	C-N	5.15	1.40	1.32
3	2	253	ALA	CA-C	5.15	1.60	1.52
21	M	402	GLU	N-CA	-5.15	1.40	1.46
1	Z	165	GLU	C-N	5.14	1.40	1.33
13	E	183	GLU	CA-CB	5.14	1.61	1.53
14	F	90	GLN	N-CA	-5.14	1.40	1.46
18	J	315	ILE	CA-C	-5.14	1.46	1.52
20	L	294	ARG	CZ-NH1	5.14	1.40	1.32
1	Z	769	THR	CB-OG1	-5.14	1.35	1.43
26	R	28	LEU	CA-C	5.14	1.59	1.52
26	R	220	VAL	C-N	5.14	1.41	1.33
29	U	66	SER	CA-C	-5.14	1.45	1.52
8	7	196	ARG	NE-CZ	5.14	1.38	1.33
31	W	99	HIS	C-N	-5.14	1.26	1.33
9	A	20	GLY	C-N	-5.14	1.27	1.33
25	Q	388	PHE	C-O	-5.14	1.20	1.23
30	V	109	VAL	CA-C	-5.14	1.46	1.52
19	K	241	GLY	N-CA	-5.14	1.38	1.45
25	Q	148	HIS	CE1-NE2	-5.14	1.27	1.32
4	3	193	ASP	C-N	5.13	1.39	1.33
13	E	24	VAL	N-CA	-5.13	1.40	1.46
18	J	377	HIS	CG-CD2	5.13	1.41	1.35
23	O	39	LEU	CA-C	-5.13	1.46	1.52
25	Q	152	GLN	N-CA	5.13	1.52	1.46
3	2	72	LYS	CA-CB	5.13	1.61	1.53
17	I	207	HIS	N-CA	-5.13	1.41	1.46
5	4	135	GLY	CA-C	-5.13	1.46	1.52
7	6	99	ARG	NE-CZ	5.13	1.38	1.33
11	C	29	GLY	N-CA	-5.13	1.38	1.45
16	H	126	SER	CA-C	-5.13	1.46	1.52
18	J	245	ILE	C-O	5.13	1.29	1.24
23	O	148	VAL	CA-CB	5.13	1.61	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	Q	92	LEU	CA-C	-5.13	1.46	1.52
30	V	185	ASN	CA-C	5.13	1.58	1.52
1	Z	725	SER	CA-C	-5.13	1.46	1.52
19	K	161	ASP	C-N	5.13	1.40	1.33
1	Z	712	LYS	N-CA	-5.13	1.40	1.46
1	Z	887	PHE	CA-C	-5.13	1.46	1.52
18	J	41	ASN	C-N	5.13	1.41	1.33
25	Q	354	ILE	C-N	5.13	1.40	1.33
30	V	56	LEU	CA-C	-5.13	1.46	1.52
11	C	139	TRP	NE1-CE2	5.13	1.43	1.37
12	D	32	ALA	N-CA	-5.13	1.39	1.45
15	G	110	LYS	CA-C	-5.13	1.46	1.52
21	M	82	VAL	CA-CB	-5.13	1.48	1.54
27	S	251	LEU	N-CA	-5.13	1.40	1.46
6	5	239	ARG	CD-NE	5.12	1.53	1.46
15	G	105	TYR	CA-C	-5.12	1.46	1.52
19	K	342	ARG	CZ-NH1	5.12	1.40	1.32
24	P	254	PRO	N-CD	-5.12	1.40	1.47
25	Q	190	LEU	N-CA	-5.12	1.40	1.46
25	Q	297	ARG	CD-NE	5.12	1.53	1.46
27	S	381	GLN	N-CA	-5.12	1.40	1.46
4	3	86	THR	CA-C	-5.12	1.46	1.52
20	L	222	ALA	N-CA	5.12	1.52	1.46
22	N	200	VAL	CA-C	-5.12	1.46	1.52
30	V	281	LYS	C-O	-5.12	1.18	1.24
15	G	164	CYS	CA-C	-5.12	1.46	1.52
4	3	118	LYS	CA-C	5.12	1.57	1.52
6	5	86	ALA	N-CA	-5.12	1.40	1.46
21	M	429	ALA	N-CA	-5.12	1.41	1.46
23	O	65	SER	CA-C	-5.12	1.46	1.52
31	W	72	LEU	C-N	5.12	1.40	1.33
22	N	202	VAL	C-N	5.12	1.40	1.33
6	5	69	HIS	CG-CD2	5.12	1.41	1.35
19	K	63	ASP	C-N	5.12	1.40	1.33
29	U	285	ALA	C-O	-5.12	1.18	1.24
1	Z	350	LYS	CA-C	-5.11	1.46	1.52
5	4	22	ALA	CA-CB	5.11	1.62	1.53
6	5	66	LYS	C-N	5.11	1.38	1.33
7	6	137	ILE	N-CA	-5.11	1.40	1.46
12	D	165	ALA	C-N	-5.11	1.27	1.33
16	H	293	ASN	CA-CB	5.11	1.61	1.53
16	H	369	ARG	NE-CZ	5.11	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	Q	11	ARG	CD-NE	5.11	1.53	1.46
5	4	161	ARG	N-CA	-5.11	1.40	1.46
13	E	45	GLY	C-N	5.11	1.40	1.33
22	N	628	ARG	CZ-NH2	5.11	1.40	1.33
26	R	237	ARG	CZ-NH1	5.11	1.40	1.32
1	Z	300	ARG	NE-CZ	5.11	1.38	1.33
6	5	124	ILE	CB-CG1	5.11	1.63	1.53
17	I	118	ASP	CA-C	5.11	1.59	1.53
19	K	254	ALA	CA-C	5.11	1.59	1.52
21	M	258	GLN	CA-C	-5.11	1.46	1.52
1	Z	370	MET	CA-C	-5.11	1.46	1.52
2	1	145	VAL	N-CA	-5.11	1.40	1.46
13	E	221	GLN	CA-CB	5.11	1.61	1.54
1	Z	305	LEU	CA-C	-5.11	1.46	1.52
1	Z	791	VAL	C-N	5.11	1.40	1.33
18	J	30	GLU	N-CA	-5.11	1.40	1.46
24	P	357	ARG	C-N	5.11	1.40	1.33
24	P	371	THR	CB-OG1	-5.11	1.35	1.43
25	Q	51	LEU	CA-C	-5.11	1.46	1.52
1	Z	677	HIS	CA-CB	5.10	1.61	1.53
5	4	191	LEU	CA-CB	5.10	1.60	1.53
10	B	86	LEU	CA-CB	5.10	1.61	1.53
22	N	615	ARG	CA-C	-5.10	1.46	1.52
23	O	102	GLU	C-N	5.10	1.41	1.33
26	R	117	LYS	CA-C	-5.10	1.46	1.52
25	Q	247	ALA	CA-CB	5.10	1.61	1.53
7	6	128	ARG	CD-NE	5.10	1.53	1.46
10	B	88	HIS	ND1-CE1	5.10	1.37	1.32
14	F	80	ASP	CA-C	-5.10	1.45	1.52
18	J	316	GLU	CA-C	-5.10	1.46	1.52
26	R	71	ASN	CA-CB	5.10	1.61	1.53
30	V	56	LEU	N-CA	-5.10	1.39	1.45
8	7	259	MET	C-O	5.10	1.30	1.24
19	K	219	VAL	C-N	5.10	1.40	1.33
19	K	236	VAL	CA-CB	-5.10	1.48	1.54
20	L	290	LEU	CA-C	-5.10	1.46	1.52
23	O	70	ARG	CZ-NH1	5.10	1.39	1.32
27	S	372	LEU	CA-C	-5.10	1.46	1.52
28	T	123	LEU	CA-CB	-5.10	1.45	1.53
1	Z	556	ARG	C-N	5.10	1.40	1.33
1	Z	654	VAL	C-N	5.10	1.40	1.34
6	5	205	ASP	CA-C	-5.10	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	N	89	ASN	CA-C	5.10	1.58	1.52
25	Q	247	ALA	C-N	5.10	1.40	1.33
4	3	48	ARG	NE-CZ	5.09	1.38	1.33
10	B	189	HIS	ND1-CE1	5.09	1.37	1.32
11	C	17	ARG	CZ-NH1	5.09	1.39	1.32
12	D	60	ARG	NE-CZ	5.09	1.38	1.33
12	D	89	VAL	C-N	5.09	1.40	1.33
12	D	211	MET	CA-C	-5.09	1.46	1.52
18	J	123	LEU	CA-CB	-5.09	1.46	1.53
26	R	379	ARG	CD-NE	5.09	1.53	1.46
31	W	152	LYS	C-N	5.09	1.40	1.34
13	E	95	GLU	CA-C	-5.09	1.46	1.52
13	E	155	HIS	CA-CB	5.09	1.60	1.53
15	G	170	ARG	NE-CZ	5.09	1.38	1.33
16	H	95	VAL	CA-C	-5.09	1.46	1.52
29	U	265	LEU	CA-C	-5.09	1.46	1.52
6	5	214	LEU	CA-C	-5.09	1.46	1.52
22	N	654	MET	CA-C	-5.09	1.46	1.52
26	R	245	GLU	N-CA	-5.09	1.40	1.46
3	2	209	ASP	CA-C	-5.09	1.46	1.52
10	B	168	VAL	C-N	5.09	1.40	1.33
18	J	61	GLU	CA-C	-5.09	1.46	1.52
18	J	145	ASP	C-N	5.09	1.39	1.33
22	N	403	THR	CA-C	-5.09	1.46	1.52
22	N	733	ALA	CA-C	-5.09	1.46	1.52
25	Q	267	VAL	N-CA	-5.09	1.40	1.46
27	S	397	ARG	N-CA	-5.09	1.40	1.46
29	U	236	LEU	CA-CB	5.09	1.61	1.53
2	1	68	LEU	N-CA	-5.09	1.40	1.46
25	Q	297	ARG	NE-CZ	5.09	1.38	1.33
6	5	75	ALA	C-O	-5.09	1.17	1.23
6	5	215	ALA	CA-C	-5.09	1.46	1.52
21	M	125	LYS	CA-C	-5.09	1.46	1.52
25	Q	17	SER	N-CA	-5.09	1.40	1.46
27	S	395	ILE	N-CA	-5.09	1.40	1.46
29	U	21	ASP	N-CA	-5.09	1.40	1.46
18	J	97	VAL	C-N	5.08	1.40	1.33
21	M	295	ARG	CZ-NH2	5.08	1.40	1.33
24	P	123	ARG	C-N	5.08	1.40	1.33
26	R	317	GLY	CA-C	-5.08	1.46	1.52
11	C	106	PRO	C-N	5.08	1.40	1.33
16	H	132	THR	CA-C	-5.08	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	I	266	LEU	CA-C	-5.08	1.46	1.52
21	M	197	GLU	N-CA	-5.08	1.40	1.46
26	R	90	ASP	N-CA	-5.08	1.40	1.46
30	V	216	MET	CA-C	-5.08	1.46	1.52
11	C	104	PRO	CA-C	5.08	1.58	1.52
13	E	174	SER	CA-C	-5.08	1.45	1.52
21	M	215	LEU	N-CA	-5.08	1.40	1.46
21	M	308	ARG	CA-CB	5.08	1.61	1.53
21	M	112	ASP	N-CA	5.08	1.52	1.46
24	P	342	GLY	N-CA	5.08	1.52	1.45
32	Y	50	ASP	CA-C	-5.08	1.42	1.52
21	M	66	LEU	CB-CG	5.08	1.63	1.53
25	Q	92	LEU	CA-CB	5.08	1.61	1.53
11	C	187	LYS	N-CA	-5.08	1.40	1.46
15	G	208	LYS	CA-C	-5.08	1.46	1.52
22	N	903	PHE	CA-C	-5.08	1.46	1.52
3	2	46	ILE	CA-C	-5.08	1.46	1.52
11	C	1	MET	C-N	5.08	1.40	1.33
10	B	12	THR	C-N	5.07	1.40	1.33
18	J	82	LYS	C-N	5.07	1.40	1.33
21	M	123	VAL	CA-C	-5.07	1.46	1.52
23	O	332	HIS	ND1-CE1	5.07	1.37	1.32
24	P	95	SER	CA-C	5.07	1.59	1.53
16	H	258	ARG	CZ-NH1	5.07	1.39	1.32
22	N	145	HIS	ND1-CE1	5.07	1.37	1.32
29	U	108	ILE	CA-C	5.07	1.59	1.52
1	Z	570	GLY	CA-C	-5.07	1.44	1.51
6	5	162	GLY	C-N	5.07	1.40	1.33
31	W	85	THR	C-N	5.07	1.40	1.33
1	Z	349	TYR	C-O	-5.07	1.18	1.24
17	I	123	VAL	C-N	5.07	1.40	1.33
21	M	359	GLU	C-O	-5.07	1.18	1.24
23	O	154	ARG	NE-CZ	5.07	1.38	1.33
24	P	254	PRO	CA-CB	5.07	1.60	1.53
25	Q	18	THR	C-N	5.07	1.41	1.33
26	R	353	ILE	N-CA	-5.07	1.40	1.46
2	1	230	LYS	C-N	5.07	1.40	1.33
10	B	159	LYS	N-CA	-5.07	1.39	1.46
11	C	43	VAL	CA-C	-5.07	1.46	1.52
14	F	147	THR	CA-C	-5.07	1.46	1.52
19	K	230	VAL	C-O	-5.07	1.18	1.24
21	M	74	LYS	CA-C	-5.07	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	O	69	HIS	ND1-CE1	5.07	1.37	1.32
11	C	183	GLU	CA-C	-5.06	1.46	1.52
23	O	29	TYR	CA-C	-5.06	1.46	1.52
1	Z	845	ARG	N-CA	-5.06	1.39	1.45
7	6	193	PRO	C-N	5.06	1.40	1.33
18	J	305	LEU	N-CA	-5.06	1.40	1.46
8	7	152	TRP	CZ2-CH2	5.06	1.46	1.37
16	H	257	VAL	N-CA	-5.06	1.40	1.46
29	U	257	MET	CA-C	-5.06	1.46	1.52
1	Z	500	LEU	C-N	5.06	1.40	1.33
19	K	147	ALA	CA-C	-5.06	1.46	1.52
20	L	189	SER	CA-C	-5.06	1.46	1.52
22	N	51	ASP	CA-C	-5.06	1.46	1.52
23	O	310	LEU	C-N	5.06	1.40	1.33
26	R	388	ASN	CA-C	-5.06	1.46	1.52
1	Z	109	ILE	C-N	5.06	1.40	1.33
1	Z	160	ARG	CZ-NH1	5.06	1.39	1.32
1	Z	488	ALA	C-N	5.06	1.40	1.33
3	2	191	GLU	CG-CD	5.06	1.64	1.52
5	4	19	ARG	CZ-NH1	5.06	1.39	1.32
12	D	71	MET	N-CA	5.06	1.52	1.46
12	D	233	GLU	C-N	5.06	1.40	1.33
21	M	138	GLY	C-N	5.06	1.41	1.34
21	M	240	CYS	CA-C	-5.06	1.46	1.52
24	P	237	GLU	CA-C	-5.06	1.46	1.52
18	J	303	SER	CA-C	-5.06	1.46	1.52
23	O	71	VAL	CA-C	-5.06	1.46	1.52
3	2	257	GLU	CA-C	-5.05	1.46	1.52
16	H	366	ARG	CZ-NH2	5.05	1.40	1.33
22	N	614	VAL	CA-CB	-5.05	1.48	1.54
27	S	405	THR	CA-C	-5.05	1.46	1.52
7	6	34	VAL	C-N	5.05	1.40	1.33
29	U	35	VAL	CA-C	-5.05	1.46	1.52
29	U	199	LYS	CA-C	-5.05	1.46	1.52
7	6	71	CYS	CA-C	-5.05	1.46	1.52
22	N	163	PHE	N-CA	-5.05	1.40	1.46
26	R	248	GLU	CA-CB	5.05	1.61	1.53
8	7	229	TYR	C-N	5.05	1.40	1.34
9	A	66	VAL	C-N	-5.05	1.27	1.33
16	H	200	ARG	C-N	5.05	1.40	1.33
17	I	419	PHE	CA-C	-5.05	1.46	1.52
20	L	223	ARG	NE-CZ	5.05	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	M	424	ILE	N-CA	-5.05	1.40	1.46
28	T	214	ARG	C-N	5.05	1.39	1.33
21	M	359	GLU	CA-CB	5.05	1.61	1.53
1	Z	480	GLY	C-N	5.05	1.40	1.33
17	I	302	GLU	N-CA	-5.05	1.40	1.46
17	I	394	ASP	C-O	-5.05	1.17	1.24
18	J	91	PRO	CA-C	-5.05	1.46	1.52
23	O	105	LYS	C-N	5.05	1.40	1.33
1	Z	660	ILE	CA-C	-5.04	1.46	1.52
19	K	400	GLU	CA-CB	5.04	1.61	1.53
29	U	284	ASP	CA-C	-5.04	1.46	1.52
12	D	169	ARG	CZ-NH1	5.04	1.39	1.32
12	D	219	ILE	N-CA	-5.04	1.40	1.46
16	H	89	SER	N-CA	-5.04	1.41	1.46
24	P	201	ARG	CA-C	-5.04	1.46	1.52
28	T	271	ILE	C-N	5.04	1.40	1.33
1	Z	782	HIS	C-N	5.04	1.40	1.33
3	2	200	GLU	N-CA	5.04	1.52	1.46
12	D	159	ASN	N-CA	-5.04	1.39	1.46
23	O	35	HIS	CG-CD2	-5.04	1.30	1.35
25	Q	7	VAL	CA-C	-5.04	1.46	1.52
24	P	409	LEU	CA-C	-5.04	1.45	1.52
27	S	262	SER	CA-C	5.04	1.59	1.52
7	6	183	PHE	CA-C	-5.04	1.46	1.52
25	Q	379	ASP	C-N	5.04	1.41	1.33
10	B	71	HIS	ND1-CE1	5.04	1.37	1.32
13	E	54	ILE	N-CA	-5.04	1.40	1.46
14	F	67	ASP	CA-C	-5.04	1.46	1.52
18	J	90	HIS	C-N	-5.04	1.29	1.34
21	M	282	ILE	CB-CG1	5.04	1.63	1.53
25	Q	148	HIS	CG-CD2	5.04	1.41	1.35
28	T	348	MET	N-CA	-5.04	1.39	1.46
7	6	34	VAL	CA-CB	-5.03	1.48	1.54
13	E	168	ARG	CA-C	-5.03	1.46	1.52
14	F	79	ALA	C-N	5.03	1.41	1.34
16	H	48	VAL	C-O	-5.03	1.18	1.24
1	Z	224	ASN	CA-CB	5.03	1.61	1.53
14	F	2	PHE	CA-C	-5.03	1.46	1.53
18	J	301	LEU	C-N	5.03	1.40	1.33
4	3	27	ARG	CA-CB	5.03	1.61	1.53
5	4	128	PRO	CA-CB	-5.03	1.46	1.53
11	C	91	ARG	CZ-NH2	5.03	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	I	333	ARG	CA-C	-5.03	1.46	1.52
19	K	107	THR	CA-C	-5.03	1.46	1.52
21	M	136	VAL	CA-CB	-5.03	1.48	1.54
22	N	717	ILE	CA-CB	-5.03	1.48	1.54
23	O	183	VAL	CA-CB	-5.03	1.47	1.54
31	W	177	PRO	N-CA	-5.03	1.41	1.47
14	F	20	HIS	CG-ND1	5.03	1.43	1.38
25	Q	70	LEU	CA-C	-5.03	1.46	1.52
1	Z	210	GLU	CA-CB	5.03	1.61	1.53
21	M	215	LEU	CA-C	5.03	1.59	1.52
27	S	353	LEU	CA-C	-5.03	1.46	1.52
3	2	255	LEU	CA-C	5.03	1.59	1.52
27	S	277	PRO	N-CD	5.03	1.54	1.47
5	4	188	ILE	CA-CB	5.02	1.60	1.54
11	C	15	GLU	CA-C	-5.02	1.46	1.52
20	L	335	SER	N-CA	-5.02	1.39	1.46
21	M	334	ARG	CA-C	-5.02	1.46	1.52
29	U	80	GLY	N-CA	-5.02	1.39	1.45
9	A	56	VAL	N-CA	-5.02	1.42	1.46
11	C	96	ARG	NE-CZ	5.02	1.38	1.33
11	C	143	TYR	CA-C	-5.02	1.46	1.52
18	J	240	GLU	C-N	5.02	1.40	1.33
19	K	223	THR	CB-OG1	-5.02	1.35	1.43
22	N	686	GLY	CA-C	-5.02	1.46	1.52
24	P	81	ASP	N-CA	-5.02	1.40	1.46
24	P	123	ARG	CA-CB	5.02	1.61	1.53
25	Q	302	PHE	C-N	5.02	1.40	1.33
27	S	386	PHE	N-CA	-5.02	1.40	1.46
29	U	63	LYS	C-N	5.02	1.39	1.33
16	H	76	ALA	N-CA	-5.02	1.39	1.46
18	J	269	VAL	N-CA	-5.02	1.40	1.46
1	Z	93	PRO	N-CA	-5.02	1.41	1.47
3	2	184	LYS	C-N	5.02	1.40	1.33
26	R	188	CYS	CA-CB	5.02	1.61	1.53
27	S	352	SER	CA-C	-5.02	1.46	1.52
9	A	154	CYS	N-CA	-5.02	1.39	1.45
11	C	187	LYS	C-O	-5.02	1.18	1.24
15	G	93	ARG	CA-C	-5.02	1.46	1.52
17	I	410	ARG	NE-CZ	5.02	1.38	1.33
18	J	322	GLU	CA-C	-5.02	1.46	1.52
22	N	620	GLU	C-O	-5.02	1.18	1.24
27	S	448	GLU	CA-C	-5.02	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	3	105	THR	N-CA	-5.02	1.39	1.45
17	I	397	ALA	N-CA	-5.02	1.40	1.46
2	1	178	ARG	NE-CZ	5.01	1.38	1.33
5	4	83	PHE	N-CA	-5.01	1.40	1.46
9	A	149	PRO	N-CA	-5.01	1.41	1.47
11	C	243	GLU	C-N	5.01	1.40	1.33
12	D	104	VAL	C-N	5.01	1.40	1.33
22	N	934	LYS	CA-CB	5.01	1.61	1.53
29	U	157	HIS	CA-C	-5.01	1.46	1.52
5	4	31	ASP	N-CA	-5.01	1.39	1.46
7	6	50	ILE	C-N	5.01	1.39	1.33
20	L	170	CYS	N-CA	-5.01	1.39	1.45
1	Z	566	HIS	CG-CD2	-5.01	1.30	1.35
1	Z	786	GLN	CA-CB	5.01	1.60	1.53
9	A	51	VAL	CA-C	-5.01	1.46	1.52
9	A	199	ILE	CA-CB	-5.01	1.48	1.54
10	B	26	LEU	C-N	5.01	1.40	1.33
14	F	213	GLY	C-N	5.01	1.40	1.33
13	E	169	ALA	C-N	5.01	1.40	1.33
14	F	221	PHE	C-N	5.01	1.40	1.33
27	S	261	TYR	C-N	5.01	1.40	1.33
22	N	6	ALA	N-CA	-5.01	1.40	1.46
4	3	154	TRP	C-N	5.01	1.40	1.33
10	B	130	PHE	CA-C	-5.01	1.46	1.52
11	C	84	ASN	C-N	5.01	1.40	1.33
19	K	67	ASN	CA-C	-5.01	1.46	1.52
22	N	712	LEU	C-N	5.01	1.40	1.33
24	P	141	GLU	N-CA	5.01	1.52	1.46
27	S	260	HIS	CA-C	-5.01	1.46	1.52
8	7	255	ASP	C-N	5.00	1.40	1.33
30	V	217	LEU	CA-C	-5.00	1.46	1.52
10	B	13	PHE	CA-CB	5.00	1.61	1.53
18	J	185	GLY	C-N	5.00	1.41	1.33
18	J	386	ALA	CA-C	-5.00	1.46	1.52
5	4	37	LYS	N-CA	-5.00	1.40	1.46
22	N	443	LEU	CA-C	-5.00	1.46	1.52
23	O	128	LEU	CA-C	-5.00	1.46	1.52
24	P	94	ARG	NE-CZ	5.00	1.38	1.33
25	Q	173	GLU	CA-CB	5.00	1.61	1.53
31	W	11	ASP	C-O	5.00	1.29	1.24

All (5897) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	7	52	THR	CA-C-N	16.54	132.90	121.65
8	7	52	THR	C-N-CA	16.54	132.90	121.65
25	Q	380	GLN	CA-C-N	14.39	135.95	119.98
25	Q	380	GLN	C-N-CA	14.39	135.95	119.98
24	P	315	MET	N-CA-C	-13.85	96.10	113.55
27	S	434	ALA	N-CA-C	13.61	125.63	111.07
29	U	31	ASN	N-CA-C	-13.12	98.22	114.75
24	P	420	ASP	O-C-N	-13.01	110.62	121.80
24	P	347	GLY	CA-C-N	11.95	137.26	120.29
24	P	347	GLY	C-N-CA	11.95	137.26	120.29
20	L	358	ASP	CA-CB-CG	-11.93	100.67	112.60
4	3	127	ILE	N-CA-C	-11.82	101.55	112.90
1	Z	614	HIS	CA-CB-CG	11.79	125.59	113.80
7	6	64	HIS	CA-CB-CG	-11.75	102.05	113.80
7	6	130	PHE	CA-CB-CG	11.58	125.38	113.80
21	M	380	ASN	CA-C-N	11.55	136.70	120.29
21	M	380	ASN	C-N-CA	11.55	136.70	120.29
26	R	213	LEU	N-CA-C	-11.55	98.69	113.12
27	S	487	HIS	CA-CB-CG	11.54	125.34	113.80
9	A	9	PHE	CA-CB-CG	-11.51	102.30	113.80
15	G	159	TYR	CA-C-N	11.48	132.70	121.57
15	G	159	TYR	C-N-CA	11.48	132.70	121.57
23	O	328	ASP	CA-CB-CG	11.34	123.94	112.60
1	Z	192	VAL	CA-C-O	-11.25	111.15	118.69
18	J	298	ILE	N-CA-C	-11.15	102.19	112.90
10	B	72	ILE	CA-C-N	11.12	131.14	121.58
10	B	72	ILE	C-N-CA	11.12	131.14	121.58
1	Z	224	ASN	CA-CB-CG	11.06	123.67	112.60
14	F	154	PHE	CA-CB-CG	-11.05	102.75	113.80
12	D	222	PRO	CA-C-N	11.04	135.96	120.29
12	D	222	PRO	C-N-CA	11.04	135.96	120.29
27	S	329	HIS	CA-CB-CG	-10.93	102.87	113.80
1	Z	377	VAL	CA-C-N	10.88	134.59	120.44
1	Z	377	VAL	C-N-CA	10.88	134.59	120.44
25	Q	275	LEU	N-CA-C	-10.81	99.66	113.72
21	M	315	ASN	CA-CB-CG	10.76	123.36	112.60
28	T	214	ARG	N-CA-C	10.56	122.87	111.36
21	M	149	ASP	CA-CB-CG	-10.51	102.09	112.60
8	7	246	GLY	CA-C-N	10.50	132.97	119.84
8	7	246	GLY	C-N-CA	10.50	132.97	119.84
1	Z	364	GLN	N-CA-C	10.50	122.72	111.28
7	6	216	TYR	N-CA-C	-10.47	101.26	114.56
22	N	111	GLN	N-CA-C	10.41	122.63	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	K	74	HIS	CA-CB-CG	-10.40	103.39	113.80
2	1	133	ILE	N-CA-C	-10.36	92.62	107.75
4	3	38	ASP	CA-CB-CG	-10.32	102.28	112.60
1	Z	129	LEU	CA-C-N	10.28	134.06	120.28
1	Z	129	LEU	C-N-CA	10.28	134.06	120.28
10	B	151	PRO	CA-C-N	10.27	134.05	120.28
10	B	151	PRO	C-N-CA	10.27	134.05	120.28
26	R	37	VAL	N-CA-C	-10.27	93.64	108.53
19	K	416	PHE	CA-CB-CG	-10.26	103.54	113.80
19	K	48	GLN	CA-C-N	10.14	133.87	120.28
19	K	48	GLN	C-N-CA	10.14	133.87	120.28
27	S	242	HIS	CE1-NE2-CD2	-10.14	98.86	109.00
22	N	131	GLU	CA-C-N	10.12	131.17	119.94
22	N	131	GLU	C-N-CA	10.12	131.17	119.94
20	L	120	TYR	N-CA-C	-10.07	101.12	113.50
22	N	366	HIS	CA-CB-CG	10.05	123.85	113.80
21	M	64	HIS	CA-CB-CG	10.03	123.83	113.80
26	R	297	ARG	NE-CZ-NH2	10.01	128.21	119.20
13	E	109	VAL	N-CA-C	-9.97	100.44	110.62
8	7	166	PHE	CA-CB-CG	-9.91	103.89	113.80
18	J	92	GLU	CA-C-N	9.89	133.50	121.83
18	J	92	GLU	C-N-CA	9.89	133.50	121.83
16	H	121	PHE	CA-CB-CG	-9.87	103.93	113.80
17	I	167	THR	CA-C-N	9.86	134.10	120.39
17	I	167	THR	C-N-CA	9.86	134.10	120.39
27	S	371	ASN	OD1-CG-ND2	9.85	132.44	122.60
31	W	166	THR	N-CA-C	-9.81	99.64	114.16
20	L	195	PHE	CA-CB-CG	-9.77	104.03	113.80
28	T	209	HIS	N-CA-C	9.73	121.96	111.36
15	G	9	ASP	CA-CB-CG	-9.70	102.90	112.60
5	4	36	PHE	CA-CB-CG	-9.69	104.11	113.80
26	R	134	LEU	CA-C-N	9.69	132.34	120.13
26	R	134	LEU	C-N-CA	9.69	132.34	120.13
21	M	178	ASP	CA-CB-CG	-9.65	102.95	112.60
1	Z	826	GLN	CA-C-O	-9.60	110.64	119.86
26	R	372	LYS	CA-C-N	9.58	130.61	119.98
26	R	372	LYS	C-N-CA	9.58	130.61	119.98
2	1	175	ALA	N-CA-C	9.54	121.44	111.14
1	Z	666	ILE	CA-C-N	9.54	130.57	119.98
1	Z	666	ILE	C-N-CA	9.54	130.57	119.98
11	C	177	GLN	N-CA-C	9.54	121.44	111.14
22	N	931	HIS	CA-CB-CG	9.53	123.33	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	724	ASN	CA-C-N	9.52	132.82	120.44
1	Z	724	ASN	C-N-CA	9.52	132.82	120.44
21	M	132	TYR	CA-C-N	9.52	135.22	122.84
21	M	132	TYR	C-N-CA	9.52	135.22	122.84
19	K	56	VAL	CB-CA-C	-9.51	99.30	112.14
17	I	156	VAL	N-CA-C	-9.40	104.17	113.20
15	G	190	ILE	O-C-N	9.38	131.34	121.87
26	R	101	ARG	CA-C-N	9.38	133.61	120.29
26	R	101	ARG	C-N-CA	9.38	133.61	120.29
28	T	260	ILE	CB-CA-C	-9.38	99.75	112.04
28	T	127	ASN	CA-CB-CG	-9.33	103.27	112.60
18	J	270	GLN	CA-C-N	9.31	132.75	120.28
18	J	270	GLN	C-N-CA	9.31	132.75	120.28
6	5	221	GLN	CA-C-N	9.30	133.68	120.28
6	5	221	GLN	C-N-CA	9.30	133.68	120.28
1	Z	76	GLU	CA-C-N	9.30	132.75	120.28
1	Z	76	GLU	C-N-CA	9.30	132.75	120.28
1	Z	464	ALA	CA-C-N	9.29	133.07	120.44
1	Z	464	ALA	C-N-CA	9.29	133.07	120.44
3	2	57	LEU	N-CA-C	-9.29	94.83	109.50
22	N	510	GLU	CA-C-N	9.26	133.44	120.29
22	N	510	GLU	C-N-CA	9.26	133.44	120.29
27	S	465	ASP	CA-CB-CG	-9.26	103.34	112.60
26	R	155	ASP	N-CA-C	9.24	121.12	111.14
15	G	68	PHE	CA-CB-CG	-9.23	104.57	113.80
27	S	295	ILE	CB-CA-C	-9.22	100.17	111.97
28	T	219	ASP	CA-CB-CG	9.21	121.81	112.60
30	V	199	HIS	CE1-NE2-CD2	-9.21	99.79	109.00
17	I	145	GLU	O-C-N	-9.18	114.39	121.55
30	V	216	MET	CA-C-N	9.18	132.58	120.28
30	V	216	MET	C-N-CA	9.18	132.58	120.28
27	S	453	HIS	CA-CB-CG	9.16	122.97	113.80
24	P	231	ILE	CB-CA-C	-9.16	99.77	112.14
22	N	172	ASP	CA-C-N	9.16	126.01	120.24
22	N	172	ASP	C-N-CA	9.16	126.01	120.24
22	N	541	HIS	CE1-NE2-CD2	-9.15	99.85	109.00
7	6	162	SER	N-CA-C	-9.13	101.03	113.18
5	4	184	ASP	CA-CB-CG	9.13	121.73	112.60
22	N	417	LYS	N-CA-C	-9.13	103.25	114.75
9	A	129	ALA	N-CA-C	-9.12	101.11	112.88
29	U	7	GLN	N-CA-C	-9.12	96.00	110.14
22	N	162	VAL	CA-C-N	9.10	132.47	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	162	VAL	C-N-CA	9.10	132.47	120.28
27	S	242	HIS	ND1-CE1-NE2	9.10	117.50	108.40
7	6	146	LYS	CA-C-N	9.09	128.97	120.34
7	6	146	LYS	C-N-CA	9.09	128.97	120.34
18	J	344	LEU	CA-C-N	9.08	132.45	120.28
18	J	344	LEU	C-N-CA	9.08	132.45	120.28
1	Z	819	TYR	CA-C-N	9.07	131.48	120.14
1	Z	819	TYR	C-N-CA	9.07	131.48	120.14
4	3	134	ASP	CA-CB-CG	-9.07	103.53	112.60
24	P	179	LYS	CA-C-N	9.07	132.23	120.44
24	P	179	LYS	C-N-CA	9.07	132.23	120.44
17	I	434	THR	O-C-N	-9.07	113.64	121.35
23	O	347	LYS	CA-C-N	9.04	130.02	119.98
23	O	347	LYS	C-N-CA	9.04	130.02	119.98
24	P	348	GLU	CA-C-N	9.04	132.40	120.28
24	P	348	GLU	C-N-CA	9.04	132.40	120.28
31	W	181	ASP	CA-CB-CG	9.04	121.64	112.60
1	Z	405	HIS	CA-C-N	9.02	130.00	119.98
1	Z	405	HIS	C-N-CA	9.02	130.00	119.98
17	I	93	GLU	CA-C-N	9.02	132.37	120.28
17	I	93	GLU	C-N-CA	9.02	132.37	120.28
21	M	191	LEU	CA-C-N	9.02	132.71	120.54
21	M	191	LEU	C-N-CA	9.02	132.71	120.54
21	M	419	ASP	CA-CB-CG	-9.00	103.60	112.60
20	L	213	ARG	CA-C-N	9.00	132.14	120.44
20	L	213	ARG	C-N-CA	9.00	132.14	120.44
24	P	157	GLY	N-CA-C	-8.99	102.15	115.72
22	N	756	HIS	CB-CG-CD2	-8.99	119.52	131.20
1	Z	553	THR	CA-C-N	8.97	132.30	120.28
1	Z	553	THR	C-N-CA	8.97	132.30	120.28
9	A	147	GLN	N-CA-C	-8.97	100.89	114.16
20	L	19	HIS	CA-CB-CG	8.94	122.74	113.80
25	Q	19	ASP	CA-CB-CG	-8.94	103.66	112.60
20	L	88	ASP	CA-CB-CG	-8.93	103.67	112.60
24	P	371	THR	N-CA-C	-8.93	102.90	113.88
17	I	406	ALA	CA-C-N	8.91	132.23	120.28
17	I	406	ALA	C-N-CA	8.91	132.23	120.28
27	S	239	THR	O-C-N	8.91	131.72	122.09
22	N	50	GLU	CA-C-N	8.91	133.38	120.82
22	N	50	GLU	C-N-CA	8.91	133.38	120.82
24	P	81	ASP	CA-C-N	8.90	132.93	120.29
24	P	81	ASP	C-N-CA	8.90	132.93	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	P	262	LYS	CA-C-N	8.89	132.20	120.28
24	P	262	LYS	C-N-CA	8.89	132.20	120.28
2	1	176	THR	N-CA-C	8.89	121.05	111.36
9	A	151	VAL	O-C-N	-8.87	113.96	123.18
29	U	240	VAL	N-CA-C	-8.86	102.61	112.80
15	G	22	PHE	CA-CB-CG	-8.86	104.94	113.80
21	M	151	VAL	CA-C-N	8.84	130.16	122.29
21	M	151	VAL	C-N-CA	8.84	130.16	122.29
1	Z	690	VAL	N-CA-CB	8.84	116.07	110.50
28	T	236	LEU	CA-C-N	8.84	131.93	120.44
28	T	236	LEU	C-N-CA	8.84	131.93	120.44
4	3	132	VAL	N-CA-CB	8.84	120.63	110.82
5	4	142	ILE	CB-CA-C	-8.83	100.03	112.22
19	K	276	ASP	N-CA-C	-8.83	103.09	114.04
17	I	399	CYS	CA-C-N	8.82	132.82	120.29
17	I	399	CYS	C-N-CA	8.82	132.82	120.29
13	E	192	LYS	CA-C-N	8.82	132.10	120.28
13	E	192	LYS	C-N-CA	8.82	132.10	120.28
25	Q	15	LEU	O-C-N	-8.81	112.78	122.12
5	4	17	SER	CA-C-N	8.81	134.05	120.75
5	4	17	SER	C-N-CA	8.81	134.05	120.75
24	P	266	ALA	N-CA-CB	-8.79	97.21	110.12
22	N	728	PHE	CA-CB-CG	8.77	122.57	113.80
26	R	184	GLN	CA-C-N	8.77	129.72	119.98
26	R	184	GLN	C-N-CA	8.77	129.72	119.98
1	Z	502	LEU	CA-C-O	-8.77	110.14	118.73
27	S	361	PHE	CA-CB-CG	-8.77	105.03	113.80
22	N	476	GLY	CA-C-N	8.76	131.34	120.22
22	N	476	GLY	C-N-CA	8.76	131.34	120.22
31	W	11	ASP	N-CA-C	-8.75	94.15	108.41
3	2	61	THR	O-C-N	8.74	133.15	123.27
30	V	248	MET	CA-C-N	8.73	131.79	120.44
30	V	248	MET	C-N-CA	8.73	131.79	120.44
20	L	32	GLN	CA-C-N	8.72	131.96	120.28
20	L	32	GLN	C-N-CA	8.72	131.96	120.28
30	V	118	PHE	CA-CB-CG	8.71	122.51	113.80
1	Z	672	LEU	CA-C-N	8.71	131.76	120.44
1	Z	672	LEU	C-N-CA	8.71	131.76	120.44
24	P	210	ASN	CA-CB-CG	-8.71	103.89	112.60
5	4	71	ASN	CA-CB-CG	-8.70	103.90	112.60
14	F	190	HIS	CA-C-N	8.70	129.63	119.98
14	F	190	HIS	C-N-CA	8.70	129.63	119.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	3	27	ARG	NE-CZ-NH2	-8.69	111.38	119.20
17	I	142	ASP	N-CA-C	-8.68	102.70	113.38
19	K	331	ILE	N-CA-C	-8.65	96.00	108.11
22	N	34	PHE	CA-CB-CG	8.65	122.45	113.80
23	O	282	PHE	CA-CB-CG	-8.64	105.16	113.80
17	I	277	HIS	CG-CD2-NE2	8.63	115.83	107.20
28	T	312	PRO	N-CA-C	-8.63	102.55	114.80
17	I	419	PHE	CA-CB-CG	-8.62	105.18	113.80
6	5	241	ASP	CA-CB-CG	-8.61	103.99	112.60
7	6	30	PHE	CA-C-O	-8.61	112.42	121.55
22	N	246	TYR	CB-CA-C	-8.61	96.21	110.85
18	J	325	ARG	CA-C-N	8.61	131.63	120.44
18	J	325	ARG	C-N-CA	8.61	131.63	120.44
19	K	358	VAL	O-C-N	8.60	131.77	122.57
15	G	190	ILE	CA-C-O	-8.60	111.37	120.57
23	O	261	LEU	CA-C-N	8.59	131.79	120.28
23	O	261	LEU	C-N-CA	8.59	131.79	120.28
1	Z	262	PHE	CA-C-O	-8.59	108.40	120.16
20	L	138	LEU	CA-C-N	8.58	133.69	120.82
20	L	138	LEU	C-N-CA	8.58	133.69	120.82
22	N	396	ALA	N-CA-C	8.57	121.38	110.24
2	1	71	ILE	N-CA-C	-8.56	104.82	113.47
18	J	60	ARG	NE-CZ-NH2	8.56	126.91	119.20
1	Z	307	LEU	CA-C-N	8.56	133.40	120.82
1	Z	307	LEU	C-N-CA	8.56	133.40	120.82
18	J	165	ILE	N-CA-C	8.56	119.41	111.45
27	S	260	HIS	CE1-NE2-CD2	-8.56	100.44	109.00
22	N	631	GLU	CA-C-N	8.55	132.44	120.29
22	N	631	GLU	C-N-CA	8.55	132.44	120.29
17	I	192	ASN	CA-CB-CG	-8.55	104.05	112.60
21	M	260	PHE	CA-CB-CG	-8.55	105.25	113.80
28	T	67	ALA	CA-C-N	8.54	131.55	120.44
28	T	67	ALA	C-N-CA	8.54	131.55	120.44
7	6	179	ASN	CA-C-N	8.54	132.41	120.29
7	6	179	ASN	C-N-CA	8.54	132.41	120.29
1	Z	226	TYR	CA-C-N	8.53	131.53	120.44
1	Z	226	TYR	C-N-CA	8.53	131.53	120.44
10	B	87	VAL	CA-C-O	-8.53	112.08	120.95
10	B	222	THR	N-CA-C	-8.53	97.60	110.39
26	R	177	ARG	CA-C-N	8.52	131.70	120.28
26	R	177	ARG	C-N-CA	8.52	131.70	120.28
22	N	630	PRO	N-CA-C	-8.52	104.79	114.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	329	ASN	N-CA-C	-8.50	103.77	114.56
14	F	226	ASP	CA-C-N	8.49	132.51	120.28
14	F	226	ASP	C-N-CA	8.49	132.51	120.28
24	P	187	LEU	CB-CA-C	-8.49	96.69	110.79
21	M	349	ASP	CA-CB-CG	-8.49	104.11	112.60
23	O	136	GLU	N-CA-C	8.49	120.15	111.07
25	Q	37	GLU	N-CA-C	-8.49	103.36	114.31
29	U	241	SER	N-CA-C	-8.48	96.44	109.24
6	5	106	GLY	CA-C-N	8.47	128.05	119.92
6	5	106	GLY	C-N-CA	8.47	128.05	119.92
25	Q	142	ARG	CA-C-N	8.46	131.62	120.28
25	Q	142	ARG	C-N-CA	8.46	131.62	120.28
1	Z	519	ALA	CA-C-N	8.46	131.62	120.28
1	Z	519	ALA	C-N-CA	8.46	131.62	120.28
14	F	42	THR	N-CA-C	-8.46	104.09	114.75
19	K	148	ASP	CA-CB-CG	-8.46	104.14	112.60
24	P	444	HIS	CA-C-N	8.46	131.62	120.28
24	P	444	HIS	C-N-CA	8.46	131.62	120.28
8	7	227	ARG	N-CA-C	-8.46	103.08	112.72
25	Q	340	GLU	O-C-N	-8.46	111.59	121.32
4	3	154	TRP	N-CA-C	8.46	121.23	110.24
22	N	386	LEU	CA-C-N	8.45	131.43	120.44
22	N	386	LEU	C-N-CA	8.45	131.43	120.44
8	7	147	LYS	CA-C-N	8.45	134.69	122.35
8	7	147	LYS	C-N-CA	8.45	134.69	122.35
22	N	397	THR	CA-C-N	8.45	131.60	120.28
22	N	397	THR	C-N-CA	8.45	131.60	120.28
22	N	415	HIS	CE1-NE2-CD2	-8.45	100.55	109.00
10	B	116	SER	CB-CA-C	-8.44	96.50	110.85
20	L	309	ARG	NE-CZ-NH2	8.45	126.80	119.20
3	2	80	ILE	N-CA-C	-8.44	103.54	113.42
24	P	351	TRP	CB-CG-CD2	-8.43	115.00	126.80
23	O	43	ASP	CB-CA-C	-8.43	96.80	110.79
28	T	261	ASP	CA-CB-CG	-8.43	104.17	112.60
12	D	239	ASN	CA-CB-CG	8.42	121.02	112.60
27	S	401	ASN	CA-CB-CG	-8.41	104.19	112.60
19	K	414	HIS	CA-CB-CG	8.41	122.21	113.80
19	K	137	ASN	CA-CB-CG	-8.40	104.19	112.60
9	A	235	ILE	CA-C-N	8.40	131.54	120.28
9	A	235	ILE	C-N-CA	8.40	131.54	120.28
5	4	94	SER	CA-C-N	8.40	132.22	120.29
5	4	94	SER	C-N-CA	8.40	132.22	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	P	63	THR	CA-CB-OG1	8.40	122.20	109.60
11	C	142	HIS	CA-CB-CG	-8.40	105.40	113.80
20	L	23	ASP	CA-C-N	8.39	129.29	119.98
20	L	23	ASP	C-N-CA	8.39	129.29	119.98
27	S	214	HIS	CE1-NE2-CD2	-8.39	100.61	109.00
15	G	164	CYS	N-CA-C	-8.38	96.33	109.07
17	I	156	VAL	CA-C-O	-8.38	112.92	119.46
19	K	315	ASP	N-CA-C	-8.38	100.65	113.89
18	J	317	PHE	CA-C-O	-8.38	111.75	119.62
3	2	183	ASP	CA-CB-CG	-8.37	104.23	112.60
3	2	78	HIS	CE1-NE2-CD2	-8.37	100.63	109.00
23	O	122	LYS	CA-C-N	8.36	131.31	120.44
23	O	122	LYS	C-N-CA	8.36	131.31	120.44
13	E	73	HIS	CE1-NE2-CD2	-8.36	100.64	109.00
10	B	71	HIS	N-CA-C	-8.36	105.10	114.62
31	W	56	ASN	CA-CB-CG	8.35	120.95	112.60
11	C	100	GLN	N-CA-C	8.35	120.15	111.14
12	D	13	ASP	CA-CB-CG	-8.34	104.26	112.60
28	T	128	PHE	CA-CB-CG	-8.34	105.46	113.80
24	P	339	ASP	CA-C-N	8.33	131.44	122.11
24	P	339	ASP	C-N-CA	8.33	131.44	122.11
29	U	91	ILE	N-CA-CB	8.32	120.49	111.00
27	S	260	HIS	CG-CD2-NE2	8.32	115.52	107.20
12	D	22	ALA	CA-C-O	-8.31	111.74	120.55
20	L	296	ASP	N-CA-C	8.31	120.03	110.97
27	S	426	LEU	CA-C-N	8.31	131.41	120.28
27	S	426	LEU	C-N-CA	8.31	131.41	120.28
28	T	198	PHE	CA-C-N	8.30	131.40	120.28
28	T	198	PHE	C-N-CA	8.30	131.40	120.28
13	E	61	PRO	N-CA-C	-8.29	105.06	114.92
16	H	329	PRO	CA-C-N	8.29	131.38	120.28
16	H	329	PRO	C-N-CA	8.29	131.38	120.28
25	Q	89	VAL	O-C-N	-8.28	113.80	121.91
25	Q	211	ASP	CA-CB-CG	-8.28	104.32	112.60
30	V	161	ARG	N-CA-C	-8.27	97.21	108.38
20	L	114	GLU	N-CA-C	-8.27	96.76	109.24
27	S	211	TYR	CA-C-N	8.27	131.35	120.28
27	S	211	TYR	C-N-CA	8.27	131.35	120.28
25	Q	20	ARG	NE-CZ-NH2	8.26	126.64	119.20
16	H	191	VAL	N-CA-C	8.26	119.13	111.45
20	L	129	ASN	N-CA-C	-8.25	102.77	113.17
23	O	352	ARG	N-CA-C	8.25	120.35	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	756	PRO	CA-C-N	8.25	132.00	120.29
1	Z	756	PRO	C-N-CA	8.25	132.00	120.29
2	1	72	HIS	CE1-NE2-CD2	-8.25	100.75	109.00
7	6	61	PHE	CA-CB-CG	-8.24	105.56	113.80
21	M	114	ASP	N-CA-CB	8.24	124.39	110.71
22	N	492	ASP	CA-CB-CG	-8.24	104.36	112.60
22	N	377	HIS	ND1-CE1-NE2	8.23	116.63	108.40
16	H	419	SER	N-CA-C	8.23	121.37	111.82
27	S	399	ARG	NE-CZ-NH2	-8.23	111.80	119.20
3	2	77	ILE	N-CA-CB	8.22	120.37	111.00
20	L	290	LEU	CA-C-O	-8.21	112.24	120.70
9	A	193	GLN	OE1-CD-NE2	8.21	130.81	122.60
18	J	35	VAL	N-CA-CB	8.21	121.71	110.54
19	K	338	ARG	NE-CZ-NH1	8.21	129.71	121.50
25	Q	137	TYR	N-CA-C	8.21	120.23	111.28
19	K	249	ASP	CA-CB-CG	-8.21	104.39	112.60
27	S	484	LEU	CA-C-O	-8.20	111.86	120.55
22	N	189	GLN	N-CA-C	-8.19	101.77	112.41
17	I	353	PHE	CA-C-O	-8.18	113.27	119.32
22	N	721	HIS	CE1-NE2-CD2	-8.18	100.82	109.00
13	E	73	HIS	CG-CD2-NE2	8.18	115.38	107.20
22	N	531	ASP	CA-C-N	8.18	131.24	120.28
22	N	531	ASP	C-N-CA	8.18	131.24	120.28
22	N	931	HIS	CE1-NE2-CD2	-8.18	100.82	109.00
22	N	164	GLU	CA-C-N	8.18	131.24	120.28
22	N	164	GLU	C-N-CA	8.18	131.24	120.28
3	2	73	ASN	CA-CB-CG	-8.17	104.43	112.60
22	N	932	GLY	CA-C-N	8.17	128.61	120.52
22	N	932	GLY	C-N-CA	8.17	128.61	120.52
9	A	229	ILE	N-CA-C	-8.17	96.67	108.36
18	J	192	PRO	O-C-N	8.17	132.41	123.01
19	K	124	LEU	N-CA-C	-8.17	95.92	109.07
27	S	394	LEU	CA-C-N	8.17	130.85	120.56
27	S	394	LEU	C-N-CA	8.17	130.85	120.56
16	H	280	ILE	N-CA-C	-8.16	104.92	112.43
2	1	72	HIS	CG-CD2-NE2	8.16	115.36	107.20
19	K	156	SER	N-CA-C	-8.16	95.11	108.41
1	Z	130	ALA	CA-C-N	8.15	131.21	120.28
1	Z	130	ALA	C-N-CA	8.15	131.21	120.28
1	Z	173	LEU	O-C-N	8.15	130.47	122.07
19	K	207	PRO	N-CA-CB	8.15	107.46	103.22
11	C	101	TYR	CA-C-N	8.14	134.35	122.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	C	101	TYR	C-N-CA	8.14	134.35	122.63
26	R	291	HIS	CE1-NE2-CD2	-8.14	100.86	109.00
1	Z	775	THR	N-CA-C	-8.14	100.49	111.96
22	N	269	ARG	N-CA-CB	8.14	122.08	110.12
24	P	314	LEU	N-CA-C	8.12	122.49	112.58
23	O	156	TYR	CA-C-O	-8.11	111.95	120.55
26	R	174	TRP	O-C-N	8.11	130.47	122.03
26	R	154	ASN	CA-CB-CG	-8.10	104.50	112.60
27	S	174	PHE	CA-C-N	8.10	133.60	122.34
27	S	174	PHE	C-N-CA	8.10	133.60	122.34
14	F	87	PHE	N-CA-CB	8.10	121.75	110.01
13	E	155	HIS	CE1-NE2-CD2	-8.10	100.90	109.00
24	P	379	ALA	O-C-N	-8.10	113.54	122.12
28	T	150	ILE	CA-C-N	8.09	128.97	119.98
28	T	150	ILE	C-N-CA	8.09	128.97	119.98
28	T	131	THR	CA-C-N	8.09	134.98	122.11
28	T	131	THR	C-N-CA	8.09	134.98	122.11
22	N	100	ILE	N-CA-C	8.09	118.89	110.72
1	Z	903	ASN	CA-C-N	8.09	128.09	119.76
1	Z	903	ASN	C-N-CA	8.09	128.09	119.76
4	3	155	GLU	CA-C-N	8.09	127.76	119.19
4	3	155	GLU	C-N-CA	8.09	127.76	119.19
25	Q	242	ILE	N-CA-C	-8.09	105.61	113.53
27	S	355	ARG	CA-C-N	8.09	132.60	120.31
27	S	355	ARG	C-N-CA	8.09	132.60	120.31
26	R	304	TYR	CA-C-N	8.07	131.09	120.28
26	R	304	TYR	C-N-CA	8.07	131.09	120.28
21	M	154	ASN	CA-CB-CG	-8.07	104.53	112.60
1	Z	184	LEU	CA-C-N	8.06	131.08	120.28
1	Z	184	LEU	C-N-CA	8.06	131.08	120.28
25	Q	81	SER	N-CA-CB	8.06	124.11	110.49
1	Z	615	ILE	CA-C-N	8.05	131.07	120.28
1	Z	615	ILE	C-N-CA	8.05	131.07	120.28
6	5	234	ASN	CA-CB-CG	-8.05	104.55	112.60
1	Z	681	TYR	CB-CA-C	-8.05	97.09	110.29
20	L	360	ASP	N-CA-C	-8.04	103.48	112.57
1	Z	748	LEU	CA-C-N	8.04	131.85	120.28
1	Z	748	LEU	C-N-CA	8.04	131.85	120.28
27	S	273	LYS	N-CA-CB	8.03	121.93	110.12
20	L	159	PHE	CA-CB-CG	-8.03	105.77	113.80
1	Z	325	GLN	CA-C-N	8.03	130.87	120.44
1	Z	325	GLN	C-N-CA	8.03	130.87	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B	143	ARG	CA-C-N	8.03	128.51	119.92
10	B	143	ARG	C-N-CA	8.03	128.51	119.92
12	D	94	HIS	CE1-NE2-CD2	-8.03	100.97	109.00
22	N	639	LEU	O-C-N	8.01	130.61	122.12
25	Q	234	GLU	CA-C-O	8.01	128.91	120.42
19	K	318	ASP	CA-C-O	-8.01	113.46	120.19
12	D	139	ASP	N-CA-CB	8.00	121.81	110.04
2	1	160	ALA	CA-C-N	8.00	134.10	123.06
2	1	160	ALA	C-N-CA	8.00	134.10	123.06
28	T	241	TYR	CA-C-N	8.00	131.00	120.28
28	T	241	TYR	C-N-CA	8.00	131.00	120.28
19	K	273	LYS	N-CA-C	-8.00	98.37	108.45
7	6	144	GLU	N-CA-C	-8.00	103.09	113.17
22	N	267	ASN	CA-CB-CG	-8.00	104.60	112.60
23	O	372	HIS	ND1-CE1-NE2	8.00	116.40	108.40
11	C	240	HIS	CE1-NE2-CD2	-8.00	101.00	109.00
27	S	336	GLU	CA-C-O	7.99	129.02	120.55
1	Z	404	ASP	CA-CB-CG	-7.99	104.61	112.60
1	Z	590	PHE	CA-CB-CG	-7.98	105.82	113.80
14	F	87	PHE	CB-CA-C	-7.98	98.35	110.88
15	G	226	GLU	CA-C-O	-7.98	112.39	121.40
20	L	331	ILE	CA-C-N	7.98	131.39	120.46
20	L	331	ILE	C-N-CA	7.98	131.39	120.46
23	O	296	ILE	N-CA-C	7.97	118.77	110.72
3	2	213	GLY	N-CA-C	-7.97	99.64	111.19
22	N	502	TYR	CA-C-O	-7.96	112.11	120.55
27	S	374	LYS	CA-C-N	7.95	130.77	120.44
27	S	374	LYS	C-N-CA	7.95	130.77	120.44
20	L	339	ASN	CA-CB-CG	-7.94	104.66	112.60
31	W	50	GLY	N-CA-C	-7.94	98.96	111.18
7	6	227	THR	CA-CB-OG1	7.94	121.50	109.60
22	N	94	SER	CA-C-N	7.94	131.56	120.29
22	N	94	SER	C-N-CA	7.94	131.56	120.29
20	L	37	THR	CA-C-N	7.93	131.56	120.29
20	L	37	THR	C-N-CA	7.93	131.56	120.29
10	B	58	ASP	CA-C-O	7.92	130.35	121.40
16	H	256	MET	CB-CA-C	-7.92	97.64	110.79
8	7	192	GLN	CA-C-O	-7.92	110.66	118.34
13	E	163	VAL	N-CA-C	-7.92	95.95	108.86
23	O	78	GLU	N-CA-C	7.92	119.54	111.07
21	M	285	ILE	CA-C-O	7.92	129.92	120.66
23	O	282	PHE	N-CA-C	-7.92	101.48	112.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	214	HIS	CA-C-N	7.91	131.67	120.28
27	S	214	HIS	C-N-CA	7.91	131.67	120.28
10	B	28	ALA	CA-C-N	7.91	131.65	120.42
10	B	28	ALA	C-N-CA	7.91	131.65	120.42
23	O	300	ALA	CA-C-N	7.90	133.32	122.34
23	O	300	ALA	C-N-CA	7.90	133.32	122.34
28	T	112	CYS	CA-C-N	7.90	128.75	119.98
28	T	112	CYS	C-N-CA	7.90	128.75	119.98
1	Z	903	ASN	CA-C-O	-7.89	115.03	120.47
21	M	207	ASN	CA-CB-CG	-7.89	104.71	112.60
31	W	20	ASP	CA-CB-CG	7.89	120.49	112.60
23	O	179	PHE	CA-C-N	7.88	130.85	120.28
23	O	179	PHE	C-N-CA	7.88	130.85	120.28
10	B	33	ALA	CA-C-N	7.88	129.69	119.84
10	B	33	ALA	C-N-CA	7.88	129.69	119.84
14	F	81	ALA	CA-C-N	7.88	130.84	120.28
14	F	81	ALA	C-N-CA	7.88	130.84	120.28
23	O	232	TRP	CB-CG-CD2	-7.88	115.77	126.80
22	N	687	ALA	CA-C-O	-7.88	112.20	120.55
22	N	548	LEU	O-C-N	7.88	131.96	122.27
3	2	165	LEU	N-CA-C	-7.87	99.12	108.25
17	I	422	SER	CB-CA-C	-7.87	97.47	110.85
2	1	148	VAL	CA-C-O	-7.87	114.72	119.12
11	C	126	GLY	N-CA-C	-7.86	104.24	114.85
30	V	43	LYS	O-C-N	7.85	130.16	122.07
7	6	46	GLU	N-CA-C	-7.85	102.22	113.21
3	2	204	ALA	N-CA-C	7.84	119.83	111.28
8	7	56	VAL	N-CA-C	-7.84	96.09	107.78
9	A	46	ASP	N-CA-C	-7.84	103.93	113.97
18	J	44	ARG	CA-C-N	7.84	131.42	120.29
18	J	44	ARG	C-N-CA	7.84	131.42	120.29
22	N	213	PHE	CA-CB-CG	-7.84	105.96	113.80
3	2	182	GLU	CB-CG-CD	-7.83	99.30	112.60
14	F	149	PRO	N-CA-CB	7.82	110.39	102.17
4	3	130	PRO	CB-CA-C	-7.82	101.96	111.11
6	5	212	TYR	N-CA-C	-7.82	102.76	111.28
13	E	56	SER	CA-C-O	-7.82	112.44	120.96
22	N	931	HIS	ND1-CE1-NE2	7.81	116.21	108.40
27	S	242	HIS	CG-CD2-NE2	7.81	115.01	107.20
14	F	111	LEU	CA-C-O	-7.81	112.62	120.82
14	F	157	ARG	N-CA-C	-7.81	103.76	113.28
3	2	170	MET	N-CA-C	-7.80	97.33	108.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	369	HIS	CA-CB-CG	-7.80	106.00	113.80
23	O	151	VAL	O-C-N	7.80	129.44	121.87
4	3	125	ASP	CA-CB-CG	-7.80	104.80	112.60
32	Y	52	PHE	CA-CB-CG	7.80	121.60	113.80
5	4	170	ARG	N-CA-C	-7.79	102.87	111.36
14	F	43	HIS	CA-CB-CG	-7.79	106.01	113.80
27	S	468	SER	N-CA-C	-7.79	102.30	113.21
9	A	121	ILE	N-CA-CB	7.78	122.24	110.58
25	Q	117	ALA	CA-C-N	7.78	130.70	120.28
25	Q	117	ALA	C-N-CA	7.78	130.70	120.28
22	N	334	ALA	N-CA-C	7.77	119.75	111.28
22	N	383	ASP	CA-C-N	7.77	131.03	120.38
22	N	383	ASP	C-N-CA	7.77	131.03	120.38
9	A	73	THR	N-CA-C	-7.77	97.26	108.60
20	L	318	GLY	CA-C-O	-7.77	110.41	121.52
5	4	148	THR	CA-C-O	-7.77	112.65	119.72
26	R	351	ASN	CA-CB-CG	-7.76	104.83	112.60
18	J	203	VAL	N-CA-C	7.76	118.53	110.62
15	G	217	VAL	N-CA-C	-7.75	96.23	107.78
9	A	217	VAL	CA-C-N	7.75	126.92	121.65
9	A	217	VAL	C-N-CA	7.75	126.92	121.65
29	U	270	VAL	O-C-N	-7.75	114.35	121.87
24	P	170	GLN	N-CA-C	7.75	119.72	111.28
31	W	86	PHE	CA-C-O	-7.75	112.72	120.70
22	N	598	ALA	CB-CA-C	-7.74	98.72	110.88
25	Q	358	LYS	N-CA-C	-7.74	102.78	111.14
26	R	24	PHE	CB-CA-C	-7.74	98.68	110.90
23	O	374	ILE	N-CA-C	-7.73	96.99	108.12
5	4	61	GLN	CB-CA-C	-7.73	97.96	110.79
20	L	125	GLU	CA-C-O	7.72	128.42	120.24
3	2	201	ALA	CB-CA-C	-7.72	98.70	110.90
12	D	68	ASN	CA-CB-CG	7.72	120.32	112.60
28	T	124	LEU	CB-CA-C	-7.72	97.98	110.79
2	1	165	GLY	CA-C-N	7.72	130.62	120.28
2	1	165	GLY	C-N-CA	7.72	130.62	120.28
19	K	80	LYS	CA-C-N	7.71	130.62	120.28
19	K	80	LYS	C-N-CA	7.71	130.62	120.28
27	S	385	LYS	CB-CA-C	-7.71	98.71	110.90
22	N	537	GLN	OE1-CD-NE2	-7.71	114.89	122.60
26	R	202	LEU	N-CA-CB	-7.71	98.78	110.12
12	D	109	ARG	O-C-N	-7.71	113.95	122.12
1	Z	267	ARG	O-C-N	7.71	130.01	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	3	74	TYR	CA-C-N	7.71	130.61	120.28
4	3	74	TYR	C-N-CA	7.71	130.61	120.28
23	O	64	ILE	N-CA-CB	7.70	121.01	110.54
1	Z	786	GLN	CA-C-O	-7.70	112.24	121.40
22	N	761	VAL	N-CA-CB	7.70	121.01	110.54
29	U	139	ILE	N-CA-C	-7.70	96.99	108.46
14	F	149	PRO	N-CA-C	-7.68	105.78	114.92
26	R	182	VAL	N-CA-C	7.68	118.48	110.72
10	B	211	GLY	N-CA-C	-7.68	99.14	110.90
21	M	293	THR	N-CA-C	-7.68	97.39	109.07
27	S	177	ASN	CA-CB-CG	-7.68	104.92	112.60
22	N	244	MET	CA-C-N	7.68	130.57	120.28
22	N	244	MET	C-N-CA	7.68	130.57	120.28
5	4	2	GLU	CB-CA-C	-7.68	97.86	110.14
16	H	315	ILE	N-CA-CB	7.68	118.90	110.53
19	K	166	ASP	CA-CB-CG	-7.67	104.92	112.60
30	V	189	ILE	CA-C-N	7.67	131.19	120.29
30	V	189	ILE	C-N-CA	7.67	131.19	120.29
14	F	229	VAL	CA-C-N	7.67	129.68	120.09
14	F	229	VAL	C-N-CA	7.67	129.68	120.09
14	F	55	GLU	CB-CA-C	-7.67	98.84	110.88
13	E	74	ILE	CA-C-N	7.67	128.26	121.82
13	E	74	ILE	C-N-CA	7.67	128.26	121.82
24	P	86	ASN	CA-CB-CG	-7.67	104.93	112.60
26	R	180	LEU	CA-C-N	7.67	130.56	120.28
26	R	180	LEU	C-N-CA	7.67	130.56	120.28
32	Y	67	MET	N-CA-C	-7.67	103.95	113.38
17	I	425	ASN	CA-CB-CG	-7.66	104.94	112.60
21	M	240	CYS	CA-C-O	-7.66	112.43	120.55
10	B	177	ARG	N-CA-C	7.66	121.88	112.23
18	J	296	ASN	CA-C-N	7.66	132.96	120.94
18	J	296	ASN	C-N-CA	7.66	132.96	120.94
9	A	218	GLY	N-CA-C	-7.66	98.06	111.46
12	D	123	GLY	O-C-N	-7.65	114.74	122.54
29	U	257	MET	CA-C-N	7.65	130.20	120.56
29	U	257	MET	C-N-CA	7.65	130.20	120.56
16	H	292	ASP	CA-C-N	7.65	131.15	120.29
16	H	292	ASP	C-N-CA	7.65	131.15	120.29
23	O	18	GLN	CB-CA-C	-7.65	98.28	108.76
22	N	718	ASN	O-C-N	7.65	130.22	122.12
26	R	341	GLY	N-CA-C	-7.64	104.65	115.43
26	R	285	ASP	CA-CB-CG	7.64	120.24	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	2	255	LEU	N-CA-C	7.63	119.39	111.14
17	I	359	LYS	CA-C-N	7.63	130.51	120.28
17	I	359	LYS	C-N-CA	7.63	130.51	120.28
1	Z	110	TYR	CA-C-N	7.62	130.50	120.28
1	Z	110	TYR	C-N-CA	7.62	130.50	120.28
1	Z	723	TYR	N-CA-CB	7.62	121.33	110.12
19	K	407	ILE	N-CA-C	7.62	120.57	111.05
29	U	30	GLY	N-CA-C	-7.61	103.52	116.01
24	P	213	PHE	N-CA-C	7.61	119.57	111.28
29	U	28	LYS	N-CA-C	-7.61	104.00	113.28
19	K	219	VAL	CA-C-N	7.61	130.47	120.28
19	K	219	VAL	C-N-CA	7.61	130.47	120.28
27	S	273	LYS	CA-C-N	7.60	131.23	120.28
27	S	273	LYS	C-N-CA	7.60	131.23	120.28
6	5	187	VAL	N-CA-C	-7.60	96.50	108.81
20	L	36	LEU	CA-C-N	7.60	130.46	120.28
20	L	36	LEU	C-N-CA	7.60	130.46	120.28
10	B	105	ILE	N-CA-C	7.59	117.24	108.96
18	J	60	ARG	NE-CZ-NH1	-7.59	113.91	121.50
22	N	460	TYR	O-C-N	7.59	129.89	122.07
1	Z	681	TYR	CA-C-O	7.59	129.29	120.49
23	O	98	GLU	CB-CA-C	-7.59	97.95	110.85
31	W	15	TYR	N-CA-C	-7.59	103.48	112.89
21	M	253	GLY	CA-C-O	-7.58	114.57	119.65
4	3	159	ASP	CA-C-N	7.58	127.46	119.05
4	3	159	ASP	C-N-CA	7.58	127.46	119.05
18	J	205	HIS	CE1-NE2-CD2	-7.58	101.42	109.00
22	N	685	GLN	O-C-N	7.57	129.87	122.07
14	F	147	THR	N-CA-C	-7.56	97.41	109.59
4	3	124	LEU	CA-C-O	7.56	129.46	120.99
18	J	296	ASN	N-CA-C	-7.56	103.04	112.72
11	C	137	ILE	N-CA-CB	7.56	121.42	111.90
1	Z	498	LEU	CA-C-O	-7.55	112.54	120.55
18	J	319	PRO	N-CA-C	-7.55	101.48	110.70
22	N	42	VAL	N-CA-CB	7.55	120.81	110.54
1	Z	117	GLU	N-CA-C	-7.55	104.20	113.41
25	Q	123	THR	N-CA-C	-7.55	104.22	113.50
11	C	240	HIS	ND1-CE1-NE2	7.54	115.94	108.40
20	L	224	ASP	CA-CB-CG	-7.54	105.06	112.60
24	P	84	ASN	CA-CB-CG	7.53	120.13	112.60
18	J	373	GLU	CA-C-N	7.53	132.81	122.34
18	J	373	GLU	C-N-CA	7.53	132.81	122.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	41	LYS	N-CA-C	-7.53	104.70	114.04
1	Z	685	THR	CA-C-N	7.53	130.98	120.29
1	Z	685	THR	C-N-CA	7.53	130.98	120.29
13	E	40	ILE	N-CA-C	-7.53	97.24	108.46
24	P	361	HIS	CA-C-N	7.53	130.37	120.28
24	P	361	HIS	C-N-CA	7.53	130.37	120.28
9	A	14	THR	N-CA-C	-7.53	96.27	109.06
1	Z	391	LEU	N-CA-C	7.52	119.48	111.28
20	L	301	ILE	O-C-N	-7.52	114.79	122.54
3	2	207	PHE	CA-CB-CG	-7.52	106.28	113.80
18	J	231	VAL	N-CA-C	7.52	118.29	110.62
1	Z	531	ASN	CA-CB-CG	7.52	120.12	112.60
6	5	176	GLU	N-CA-C	-7.52	103.91	113.23
11	C	158	GLY	O-C-N	-7.52	116.41	123.48
11	C	31	ALA	CA-C-O	-7.52	112.74	121.16
1	Z	111	GLU	O-C-N	7.51	130.08	122.12
17	I	91	LYS	CA-C-N	7.51	130.34	120.28
17	I	91	LYS	C-N-CA	7.51	130.34	120.28
10	B	141	GLU	CB-CA-C	-7.50	107.92	116.63
14	F	226	ASP	N-CA-CB	7.50	123.17	110.49
24	P	279	PHE	N-CA-C	7.50	119.99	110.24
7	6	140	GLY	N-CA-C	-7.49	100.47	110.74
21	M	90	VAL	N-CA-C	-7.49	97.35	108.97
29	U	78	MET	CA-C-N	7.49	130.32	120.28
29	U	78	MET	C-N-CA	7.49	130.32	120.28
23	O	320	VAL	N-CA-C	-7.49	97.55	108.71
2	1	100	HIS	CA-C-N	7.49	130.18	120.44
2	1	100	HIS	C-N-CA	7.49	130.18	120.44
22	N	885	MET	N-CA-C	-7.49	98.90	110.58
23	O	180	LEU	N-CA-C	-7.49	103.12	111.28
18	J	109	THR	CA-C-N	7.48	129.19	119.84
18	J	109	THR	C-N-CA	7.48	129.19	119.84
28	T	272	ALA	N-CA-C	7.48	119.44	111.28
9	A	238	HIS	ND1-CE1-NE2	7.48	115.88	108.40
18	J	74	GLY	CA-C-O	7.48	130.06	121.46
29	U	199	LYS	CA-C-N	7.48	128.23	120.00
29	U	199	LYS	C-N-CA	7.48	128.23	120.00
20	L	265	ASP	CA-C-N	7.48	136.07	121.41
20	L	265	ASP	C-N-CA	7.48	136.07	121.41
1	Z	407	MET	CG-SD-CE	-7.48	84.45	100.90
14	F	77	LEU	N-CA-C	7.48	121.07	110.23
30	V	274	ASN	N-CA-C	7.47	119.11	110.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	I	201	VAL	CA-C-N	7.47	130.60	120.44
17	I	201	VAL	C-N-CA	7.47	130.60	120.44
21	M	152	GLY	CA-C-O	-7.47	114.39	120.81
10	B	204	THR	N-CA-C	-7.47	98.33	108.86
28	T	292	PHE	CA-CB-CG	-7.47	106.33	113.80
27	S	399	ARG	CA-C-N	7.46	130.28	120.28
27	S	399	ARG	C-N-CA	7.46	130.28	120.28
2	1	183	LYS	CA-C-N	7.46	130.88	120.29
2	1	183	LYS	C-N-CA	7.46	130.88	120.29
24	P	82	LEU	CA-C-N	7.46	130.27	120.28
24	P	82	LEU	C-N-CA	7.46	130.27	120.28
26	R	173	ASP	CA-C-N	7.46	130.49	120.65
26	R	173	ASP	C-N-CA	7.46	130.49	120.65
1	Z	274	ASP	CA-CB-CG	-7.46	105.14	112.60
1	Z	449	GLY	CA-C-N	7.45	131.00	120.42
1	Z	449	GLY	C-N-CA	7.45	131.00	120.42
27	S	479	ARG	N-CA-C	7.45	119.40	111.28
10	B	145	TYR	CA-C-O	-7.45	113.47	121.14
12	D	2	SER	N-CA-C	-7.45	102.10	112.45
22	N	218	GLN	OE1-CD-NE2	-7.45	115.15	122.60
16	H	397	ILE	CB-CA-C	-7.45	101.95	112.22
19	K	326	ARG	NE-CZ-NH2	-7.45	112.50	119.20
20	L	250	ASP	CA-C-O	7.45	128.54	119.38
23	O	50	PHE	CA-CB-CG	-7.44	106.36	113.80
4	3	18	ASN	CA-CB-CG	-7.44	105.16	112.60
21	M	90	VAL	CB-CA-C	7.44	122.54	111.31
23	O	83	VAL	O-C-N	-7.44	113.40	121.80
10	B	13	PHE	CA-CB-CG	-7.43	106.37	113.80
1	Z	690	VAL	O-C-N	-7.43	114.79	120.07
27	S	383	GLY	CA-C-N	7.43	130.24	120.28
27	S	383	GLY	C-N-CA	7.43	130.24	120.28
19	K	197	ASP	CA-CB-CG	-7.43	105.17	112.60
2	1	141	GLU	CA-C-O	7.43	126.73	119.08
23	O	315	LEU	CA-C-N	7.43	130.23	120.28
23	O	315	LEU	C-N-CA	7.43	130.23	120.28
30	V	199	HIS	ND1-CE1-NE2	7.43	115.83	108.40
6	5	70	GLY	O-C-N	7.42	129.96	122.91
28	T	228	HIS	CA-CB-CG	-7.42	106.38	113.80
30	V	124	GLY	CA-C-N	7.42	129.91	120.56
30	V	124	GLY	C-N-CA	7.42	129.91	120.56
13	E	140	ALA	N-CA-C	-7.42	98.13	109.85
26	R	304	TYR	CB-CG-CD1	-7.42	109.67	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	K	183	LEU	CA-C-O	-7.42	111.15	118.34
1	Z	318	THR	CA-C-O	-7.41	111.04	119.79
17	I	193	GLN	OE1-CD-NE2	7.41	130.01	122.60
1	Z	473	ASN	CA-C-O	-7.40	110.51	119.32
2	1	111	HIS	N-CA-C	-7.39	102.59	111.69
15	G	9	ASP	N-CA-C	-7.39	102.91	112.23
22	N	105	ILE	CA-C-N	7.39	130.19	120.28
22	N	105	ILE	C-N-CA	7.39	130.19	120.28
19	K	149	SER	N-CA-CB	7.39	122.14	111.05
26	R	95	LEU	CA-C-N	7.39	135.90	121.41
26	R	95	LEU	C-N-CA	7.39	135.90	121.41
9	A	178	PHE	CA-CB-CG	-7.39	106.41	113.80
26	R	167	LEU	CA-C-O	-7.39	113.06	120.82
18	J	171	HIS	CB-CA-C	-7.39	100.81	111.01
13	E	49	ALA	N-CA-C	-7.39	97.83	109.50
24	P	209	ILE	N-CA-C	7.39	118.18	110.72
16	H	82	ALA	N-CA-C	-7.38	95.07	110.80
12	D	212	ARG	N-CA-C	-7.38	98.52	109.81
16	H	237	PHE	N-CA-C	-7.38	96.49	108.52
25	Q	55	SER	CA-C-N	7.38	130.77	120.29
25	Q	55	SER	C-N-CA	7.38	130.77	120.29
24	P	351	TRP	CB-CG-CD1	7.38	137.97	126.90
17	I	87	PRO	N-CA-CB	7.37	111.34	103.52
21	M	93	VAL	CB-CA-C	-7.37	102.04	110.96
11	C	118	LYS	CA-C-N	7.37	130.16	120.28
11	C	118	LYS	C-N-CA	7.37	130.16	120.28
24	P	84	ASN	CA-C-N	7.37	130.16	120.28
24	P	84	ASN	C-N-CA	7.37	130.16	120.28
19	K	122	GLU	N-CA-C	-7.37	101.13	112.99
30	V	75	MET	CA-C-O	-7.37	114.52	121.08
1	Z	657	ILE	CA-C-N	7.37	130.15	120.28
1	Z	657	ILE	C-N-CA	7.37	130.15	120.28
27	S	172	VAL	N-CA-C	7.37	118.13	110.62
1	Z	246	SER	CA-C-N	7.37	130.15	120.28
1	Z	246	SER	C-N-CA	7.37	130.15	120.28
24	P	44	ILE	N-CA-CB	7.36	120.00	110.57
15	G	163	GLY	CA-C-O	-7.36	114.49	121.19
23	O	128	LEU	CA-C-O	7.36	128.22	120.42
22	N	541	HIS	ND1-CE1-NE2	7.36	115.76	108.40
23	O	74	LEU	N-CA-C	-7.36	104.55	113.97
1	Z	497	VAL	CA-C-N	7.36	130.13	120.28
1	Z	497	VAL	C-N-CA	7.36	130.13	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	137	PHE	CA-CB-CG	-7.36	106.44	113.80
17	I	131	HIS	CA-C-N	7.36	133.13	121.66
17	I	131	HIS	C-N-CA	7.36	133.13	121.66
15	G	108	PRO	CB-CA-C	-7.35	101.32	110.95
27	S	319	HIS	CA-CB-CG	7.35	121.15	113.80
28	T	144	ALA	O-C-N	7.35	129.91	122.12
9	A	83	MET	CB-CA-C	-7.35	97.52	109.72
19	K	165	ALA	O-C-N	7.35	126.98	121.47
22	N	657	GLY	CA-C-N	7.35	129.97	120.56
22	N	657	GLY	C-N-CA	7.35	129.97	120.56
25	Q	30	ILE	CA-C-N	7.35	129.82	120.56
25	Q	30	ILE	C-N-CA	7.35	129.82	120.56
25	Q	248	ILE	CA-C-N	7.34	130.12	120.28
25	Q	248	ILE	C-N-CA	7.34	130.12	120.28
27	S	470	ARG	N-CA-C	7.34	121.89	112.34
1	Z	705	ASN	N-CA-C	7.34	119.28	111.28
16	H	408	ASP	CB-CA-C	-7.34	98.60	110.79
24	P	271	VAL	CA-C-N	7.34	130.11	120.28
24	P	271	VAL	C-N-CA	7.34	130.11	120.28
11	C	145	PHE	CA-C-O	7.34	129.38	121.16
29	U	11	VAL	N-CA-C	-7.34	97.56	108.12
9	A	111	VAL	O-C-N	7.33	129.10	121.91
3	2	159	HIS	CE1-NE2-CD2	-7.33	101.67	109.00
3	2	227	ASP	CA-CB-CG	-7.33	105.27	112.60
5	4	91	CYS	O-C-N	7.33	129.89	122.12
22	N	251	ASP	N-CA-C	7.33	118.92	111.07
12	D	214	ASP	CA-CB-CG	7.33	119.93	112.60
14	F	180	MET	CG-SD-CE	-7.33	84.78	100.90
10	B	57	TYR	N-CA-C	-7.33	98.49	108.38
22	N	879	ASP	CA-C-N	7.32	128.86	119.78
22	N	879	ASP	C-N-CA	7.32	128.86	119.78
24	P	248	ARG	CA-C-N	7.32	130.09	120.28
24	P	248	ARG	C-N-CA	7.32	130.09	120.28
22	N	102	ALA	CA-C-N	7.32	130.82	120.28
22	N	102	ALA	C-N-CA	7.32	130.82	120.28
17	I	111	THR	CA-C-N	7.32	132.33	121.72
17	I	111	THR	C-N-CA	7.32	132.33	121.72
25	Q	141	LYS	N-CA-CB	7.32	123.96	112.25
18	J	342	ILE	N-CA-C	-7.31	97.96	108.42
26	R	207	THR	N-CA-CB	7.31	120.87	110.12
22	N	202	VAL	N-CA-CB	7.31	121.55	110.58
26	R	239	LYS	CA-C-O	-7.31	111.08	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	I	256	ILE	N-CA-CB	7.31	118.50	110.53
6	5	160	ILE	N-CA-CB	7.30	119.76	111.21
31	W	73	SER	CB-CA-C	-7.30	98.68	110.79
25	Q	113	CYS	N-CA-CB	7.29	120.84	110.12
8	7	132	ALA	CA-C-N	7.29	130.45	120.46
8	7	132	ALA	C-N-CA	7.29	130.45	120.46
24	P	256	ILE	CA-C-N	7.29	130.64	120.29
24	P	256	ILE	C-N-CA	7.29	130.64	120.29
27	S	229	SER	CA-C-O	7.29	128.15	120.42
28	T	259	PHE	N-CA-C	7.29	120.28	111.82
16	H	351	ARG	CA-C-N	7.29	130.04	120.28
16	H	351	ARG	C-N-CA	7.29	130.04	120.28
31	W	87	CYS	CA-C-N	7.29	131.38	120.31
31	W	87	CYS	C-N-CA	7.29	131.38	120.31
7	6	208	ILE	O-C-N	7.28	128.93	121.87
15	G	91	ILE	CB-CA-C	-7.28	102.17	112.22
26	R	260	LEU	CA-C-O	-7.28	112.83	120.55
11	C	155	ASN	CA-CB-CG	7.28	119.88	112.60
26	R	142	PHE	CB-CG-CD1	7.28	133.07	120.70
7	6	113	THR	CA-C-N	7.27	128.00	120.00
7	6	113	THR	C-N-CA	7.27	128.00	120.00
11	C	155	ASN	OD1-CG-ND2	7.27	129.87	122.60
21	M	359	GLU	N-CA-C	-7.27	103.35	111.28
22	N	31	VAL	N-CA-C	7.27	118.00	110.36
29	U	246	VAL	N-CA-C	7.27	120.18	111.09
13	E	77	ALA	N-CA-C	-7.27	98.09	109.72
24	P	384	LEU	N-CA-C	-7.27	98.01	109.50
2	1	223	LEU	CA-C-N	7.27	133.15	120.87
2	1	223	LEU	C-N-CA	7.27	133.15	120.87
25	Q	187	ARG	CA-C-N	7.27	130.02	120.28
25	Q	187	ARG	C-N-CA	7.27	130.02	120.28
5	4	47	VAL	O-C-N	-7.27	114.90	122.82
20	L	374	VAL	N-CA-C	7.26	118.03	110.62
22	N	721	HIS	CG-CD2-NE2	7.26	114.47	107.20
31	W	47	ASN	N-CA-C	7.26	120.48	110.24
1	Z	745	LEU	O-C-N	-7.26	114.42	122.12
8	7	210	ALA	N-CA-C	7.26	121.40	112.54
19	K	362	ASP	N-CA-C	-7.26	103.44	111.36
3	2	187	PRO	CA-C-N	7.26	133.08	122.63
3	2	187	PRO	C-N-CA	7.26	133.08	122.63
17	I	296	ASP	N-CA-C	-7.26	100.07	110.59
20	L	258	MET	N-CA-C	-7.26	103.37	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	931	HIS	CG-CD2-NE2	7.26	114.46	107.20
18	J	355	SER	CA-C-N	7.25	128.03	119.98
18	J	355	SER	C-N-CA	7.25	128.03	119.98
23	O	39	LEU	CA-C-N	7.25	135.40	121.54
23	O	39	LEU	C-N-CA	7.25	135.40	121.54
10	B	97	TYR	CA-C-O	-7.25	111.63	119.97
24	P	439	VAL	N-CA-C	-7.25	103.22	110.62
2	1	156	ARG	NE-CZ-NH2	-7.25	112.68	119.20
13	E	30	ALA	CA-C-N	7.25	130.39	120.46
13	E	30	ALA	C-N-CA	7.25	130.39	120.46
20	L	343	LEU	CA-C-N	7.25	129.99	120.28
20	L	343	LEU	C-N-CA	7.25	129.99	120.28
8	7	70	ASP	N-CA-CB	7.25	120.80	110.44
26	R	24	PHE	CA-C-N	7.24	129.99	120.28
26	R	24	PHE	C-N-CA	7.24	129.99	120.28
26	R	33	GLY	CA-C-N	7.24	129.85	120.44
26	R	33	GLY	C-N-CA	7.24	129.85	120.44
3	2	109	HIS	O-C-N	7.24	129.79	122.12
18	J	328	ILE	N-CA-C	-7.24	103.24	110.62
29	U	14	LEU	CA-C-N	7.23	129.67	120.56
29	U	14	LEU	C-N-CA	7.23	129.67	120.56
1	Z	96	LEU	CA-C-N	7.23	130.56	120.29
1	Z	96	LEU	C-N-CA	7.23	130.56	120.29
22	N	794	ASP	CA-CB-CG	-7.23	105.37	112.60
9	A	206	LEU	CA-C-N	7.23	132.90	122.35
9	A	206	LEU	C-N-CA	7.23	132.90	122.35
18	J	147	THR	CA-C-N	7.23	129.84	120.44
18	J	147	THR	C-N-CA	7.23	129.84	120.44
21	M	272	PHE	CA-C-N	7.23	129.97	120.28
21	M	272	PHE	C-N-CA	7.23	129.97	120.28
6	5	228	TYR	N-CA-C	-7.22	102.76	112.94
8	7	242	VAL	N-CA-C	-7.22	98.09	108.42
24	P	387	ASP	CA-C-N	7.22	130.55	120.29
24	P	387	ASP	C-N-CA	7.22	130.55	120.29
20	L	165	ILE	O-C-N	-7.22	112.87	121.10
1	Z	566	HIS	CE1-NE2-CD2	-7.21	101.78	109.00
3	2	242	LEU	N-CA-C	-7.21	103.79	112.59
23	O	349	MET	N-CA-CB	7.21	120.72	110.12
26	R	86	GLU	CA-C-N	7.21	129.95	120.28
26	R	86	GLU	C-N-CA	7.21	129.95	120.28
1	Z	904	PRO	N-CA-CB	7.21	109.73	103.31
1	Z	558	LEU	CA-C-N	7.21	127.05	119.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	558	LEU	C-N-CA	7.21	127.05	119.05
22	N	920	ASP	CA-C-N	7.21	134.94	121.97
22	N	920	ASP	C-N-CA	7.21	134.94	121.97
27	S	162	GLU	CB-CA-C	-7.20	99.52	110.90
8	7	133	ILE	CA-C-N	7.20	129.80	120.44
8	7	133	ILE	C-N-CA	7.20	129.80	120.44
11	C	237	ILE	N-CA-C	7.20	117.96	110.62
6	5	105	ALA	N-CA-C	-7.20	102.60	112.03
1	Z	578	ALA	O-C-N	7.20	129.75	122.12
25	Q	303	GLU	CA-C-N	7.20	129.79	120.44
25	Q	303	GLU	C-N-CA	7.20	129.79	120.44
1	Z	666	ILE	N-CA-C	-7.19	103.45	110.72
3	2	127	LYS	CA-C-N	7.19	129.92	120.28
3	2	127	LYS	C-N-CA	7.19	129.92	120.28
22	N	541	HIS	CG-CD2-NE2	7.19	114.39	107.20
11	C	121	TYR	N-CA-CB	7.19	120.69	110.12
13	E	236	GLU	CB-CA-C	-7.19	98.86	110.79
20	L	272	ARG	N-CA-C	-7.19	102.08	111.71
5	4	36	PHE	N-CA-C	-7.19	96.84	109.06
11	C	151	ASP	N-CA-C	-7.18	97.34	108.55
5	4	22	ALA	N-CA-C	-7.18	95.50	110.80
1	Z	834	ASP	CA-CB-CG	-7.18	105.42	112.60
3	2	127	LYS	CB-CA-C	-7.18	98.87	110.79
1	Z	206	ASP	CA-CB-CG	7.18	119.78	112.60
24	P	406	VAL	N-CA-C	-7.18	98.06	108.11
22	N	92	ASP	CA-C-N	7.18	132.32	122.34
22	N	92	ASP	C-N-CA	7.18	132.32	122.34
1	Z	616	CYS	N-CA-CB	7.17	120.67	110.12
22	N	452	ASN	CA-CB-CG	-7.17	105.43	112.60
26	R	229	ILE	N-CA-C	7.17	117.27	110.53
22	N	466	LYS	N-CA-C	7.17	118.74	111.07
26	R	197	ALA	CA-C-N	7.17	130.60	120.28
26	R	197	ALA	C-N-CA	7.17	130.60	120.28
28	T	215	LEU	CA-C-O	-7.17	112.88	119.62
19	K	270	ILE	CA-CB-CG1	7.17	122.58	110.40
10	B	31	GLY	CA-C-N	7.16	126.90	120.10
10	B	31	GLY	C-N-CA	7.16	126.90	120.10
9	A	169	GLY	CA-C-O	-7.16	115.16	122.25
26	R	289	ALA	O-C-N	7.16	129.55	121.32
1	Z	904	PRO	CB-CA-C	-7.16	102.23	111.46
6	5	170	LEU	CB-CA-C	-7.16	96.75	109.70
15	G	122	ALA	CA-C-N	7.16	131.19	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	G	122	ALA	C-N-CA	7.16	131.19	120.31
17	I	250	VAL	O-C-N	7.16	130.44	123.14
25	Q	226	LYS	CA-C-N	7.16	130.45	120.29
25	Q	226	LYS	C-N-CA	7.16	130.45	120.29
12	D	125	ARG	CA-C-O	-7.15	113.47	120.26
25	Q	210	LEU	CA-C-N	7.15	131.18	120.31
25	Q	210	LEU	C-N-CA	7.15	131.18	120.31
31	W	105	HIS	CE1-NE2-CD2	-7.15	101.85	109.00
28	T	64	MET	N-CA-CB	7.15	120.63	110.12
3	2	87	CYS	N-CA-C	-7.15	98.59	109.95
8	7	223	TYR	CA-C-N	7.14	130.44	120.29
8	7	223	TYR	C-N-CA	7.14	130.44	120.29
9	A	62	ASP	CA-CB-CG	7.14	119.74	112.60
9	A	48	ALA	N-CA-C	-7.14	96.05	108.69
13	E	225	ASN	CA-CB-CG	7.14	119.74	112.60
18	J	336	MET	CA-C-O	7.14	128.99	120.99
19	K	249	ASP	CA-C-N	7.14	129.56	120.56
19	K	249	ASP	C-N-CA	7.14	129.56	120.56
18	J	82	LYS	N-CA-C	-7.14	104.57	113.28
22	N	105	ILE	CB-CA-C	-7.14	102.50	112.14
22	N	891	VAL	N-CA-CB	7.14	122.55	111.99
22	N	59	PHE	CA-C-N	7.13	129.84	120.28
22	N	59	PHE	C-N-CA	7.13	129.84	120.28
29	U	280	ILE	N-CA-C	-7.13	103.82	110.53
16	H	408	ASP	CA-C-N	7.13	129.84	120.28
16	H	408	ASP	C-N-CA	7.13	129.84	120.28
24	P	101	VAL	CA-C-N	7.13	129.84	120.28
24	P	101	VAL	C-N-CA	7.13	129.84	120.28
7	6	134	VAL	CA-C-O	7.13	126.94	121.09
19	K	234	GLU	N-CA-C	-7.13	102.92	113.61
3	2	183	ASP	CA-C-O	7.13	128.04	120.70
22	N	937	GLU	N-CA-C	-7.13	105.51	114.56
23	O	109	GLU	CA-C-N	7.12	129.83	120.28
23	O	109	GLU	C-N-CA	7.12	129.83	120.28
3	2	86	CYS	N-CA-C	-7.12	98.19	109.23
8	7	253	ASN	CA-CB-CG	-7.12	105.48	112.60
10	B	37	GLY	CA-C-N	7.12	132.84	122.94
10	B	37	GLY	C-N-CA	7.12	132.84	122.94
14	F	215	VAL	O-C-N	-7.12	116.77	122.97
26	R	161	THR	O-C-N	7.12	129.67	122.12
11	C	83	ALA	N-CA-C	7.12	119.04	111.28
26	R	39	ASP	CA-C-N	7.12	130.40	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	39	ASP	C-N-CA	7.12	130.40	120.29
28	T	115	GLU	CA-C-N	7.12	129.82	120.28
28	T	115	GLU	C-N-CA	7.12	129.82	120.28
31	W	158	ASN	OD1-CG-ND2	7.12	129.72	122.60
13	E	213	THR	N-CA-C	-7.12	102.70	112.03
14	F	124	GLY	CA-C-N	7.12	135.14	121.54
14	F	124	GLY	C-N-CA	7.12	135.14	121.54
1	Z	416	MET	CG-SD-CE	-7.12	85.24	100.90
10	B	169	ASN	CA-CB-CG	-7.12	105.48	112.60
22	N	784	THR	O-C-N	-7.11	114.97	121.66
13	E	58	LEU	N-CA-C	-7.11	103.77	113.30
21	M	323	ASN	CA-CB-CG	-7.11	105.49	112.60
5	4	50	ALA	N-CA-C	7.11	119.11	111.36
17	I	314	ASN	CA-C-N	7.11	129.80	120.28
17	I	314	ASN	C-N-CA	7.11	129.80	120.28
18	J	269	VAL	CA-C-O	-7.10	113.32	120.85
19	K	192	LYS	CA-C-O	7.10	128.08	120.55
3	2	71	ASP	CA-CB-CG	-7.10	105.50	112.60
14	F	121	GLN	OE1-CD-NE2	7.10	129.70	122.60
17	I	126	SER	N-CA-C	-7.10	102.92	112.94
3	2	137	ILE	CA-C-O	-7.10	113.63	121.23
5	4	172	ILE	CB-CA-C	7.10	123.26	110.48
16	H	408	ASP	CA-CB-CG	7.10	119.70	112.60
27	S	373	ALA	CB-CA-C	-7.10	99.00	110.79
30	V	70	ILE	CB-CA-C	-7.10	102.74	112.04
27	S	160	LEU	CA-C-O	-7.10	110.44	120.16
31	W	38	HIS	CA-C-O	-7.10	112.90	120.42
22	N	129	ARG	CA-C-N	7.09	129.78	120.28
22	N	129	ARG	C-N-CA	7.09	129.78	120.28
22	N	475	HIS	N-CA-C	-7.09	103.48	111.07
23	O	222	LEU	N-CA-C	7.09	119.01	111.28
5	4	87	ASN	CB-CA-C	-7.09	98.80	110.85
17	I	247	PHE	O-C-N	-7.09	115.26	123.27
1	Z	256	PHE	N-CA-C	7.09	119.01	111.28
19	K	325	GLY	N-CA-C	-7.09	104.83	115.32
23	O	233	LEU	N-CA-C	-7.09	103.64	111.36
16	H	394	MET	N-CA-C	7.08	119.00	111.28
27	S	408	ARG	CA-C-N	7.08	129.77	120.28
27	S	408	ARG	C-N-CA	7.08	129.77	120.28
27	S	425	LYS	CA-C-N	7.08	130.48	120.28
27	S	425	LYS	C-N-CA	7.08	130.48	120.28
3	2	78	HIS	ND1-CE1-NE2	7.08	115.48	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	F	232	PHE	CA-CB-CG	-7.08	106.72	113.80
15	G	169	ALA	N-CA-C	7.08	121.61	113.19
21	M	365	ILE	CB-CA-C	-7.08	102.58	112.14
24	P	83	LEU	CA-C-N	7.08	129.77	120.28
24	P	83	LEU	C-N-CA	7.08	129.77	120.28
17	I	438	LEU	N-CA-CB	7.08	122.45	110.49
4	3	46	GLY	N-CA-C	-7.08	103.45	112.65
19	K	284	GLU	CB-CA-C	-7.08	98.82	110.85
23	O	328	ASP	CA-C-N	7.08	133.08	122.68
23	O	328	ASP	C-N-CA	7.08	133.08	122.68
23	O	223	GLU	CA-C-N	7.07	129.63	120.44
23	O	223	GLU	C-N-CA	7.07	129.63	120.44
26	R	28	LEU	CA-C-O	-7.07	110.47	120.16
5	4	154	GLU	CA-C-O	7.07	127.91	120.42
23	O	18	GLN	O-C-N	-7.07	112.58	121.70
30	V	190	GLN	CA-C-N	7.07	130.33	120.29
30	V	190	GLN	C-N-CA	7.07	130.33	120.29
20	L	129	ASN	CA-CB-CG	-7.07	105.53	112.60
22	N	638	SER	CA-C-O	7.07	128.24	120.82
30	V	287	HIS	CE1-NE2-CD2	-7.06	101.94	109.00
1	Z	353	LEU	CA-C-N	7.06	129.74	120.28
1	Z	353	LEU	C-N-CA	7.06	129.74	120.28
2	1	112	THR	CA-C-O	-7.06	113.43	120.70
2	1	156	ARG	CA-C-O	-7.06	112.30	120.49
9	A	31	ALA	N-CA-C	-7.06	97.22	108.73
23	O	367	VAL	N-CA-CB	7.06	120.14	110.54
29	U	166	GLU	CA-C-N	7.06	130.31	120.29
29	U	166	GLU	C-N-CA	7.06	130.31	120.29
21	M	96	LEU	N-CA-C	7.06	118.97	111.28
6	5	111	CYS	CA-C-N	7.05	129.61	120.44
6	5	111	CYS	C-N-CA	7.05	129.61	120.44
26	R	309	GLU	CA-C-N	7.05	129.61	120.44
26	R	309	GLU	C-N-CA	7.05	129.61	120.44
22	N	332	GLU	N-CA-CB	7.05	120.49	110.12
31	W	101	GLN	N-CA-C	-7.05	105.21	114.31
1	Z	593	THR	CA-C-N	7.05	130.30	120.29
1	Z	593	THR	C-N-CA	7.05	130.30	120.29
22	N	150	ALA	CA-C-N	7.05	130.43	120.42
22	N	150	ALA	C-N-CA	7.05	130.43	120.42
22	N	792	ASN	OD1-CG-ND2	-7.05	115.55	122.60
25	Q	388	PHE	N-CA-C	-7.05	103.34	113.21
23	O	168	ASN	CA-CB-CG	7.04	119.64	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	191	ILE	CB-CA-C	-7.04	102.63	112.14
9	A	203	SER	CA-C-O	-7.04	113.08	120.55
16	H	349	GLU	O-C-N	7.04	130.46	122.22
27	S	291	TYR	CA-C-N	7.04	129.72	120.28
27	S	291	TYR	C-N-CA	7.04	129.72	120.28
8	7	155	MET	CG-SD-CE	-7.04	85.41	100.90
11	C	18	LEU	CA-C-N	7.04	129.59	120.44
11	C	18	LEU	C-N-CA	7.04	129.59	120.44
21	M	233	LYS	CA-C-N	7.04	130.28	120.29
21	M	233	LYS	C-N-CA	7.04	130.28	120.29
8	7	112	LEU	CA-C-N	7.04	127.79	119.98
8	7	112	LEU	C-N-CA	7.04	127.79	119.98
15	G	130	ARG	NE-CZ-NH2	-7.04	112.87	119.20
26	R	227	SER	N-CA-CB	7.04	120.21	110.01
12	D	150	SER	N-CA-C	-7.03	103.81	112.88
24	P	275	ILE	CA-C-N	7.03	129.71	120.28
24	P	275	ILE	C-N-CA	7.03	129.71	120.28
24	P	298	GLU	N-CA-C	7.03	118.95	111.28
1	Z	757	ASN	O-C-N	7.03	130.17	122.15
9	A	123	GLN	N-CA-C	7.03	118.94	111.28
21	M	218	GLN	CA-C-N	7.03	127.62	120.38
21	M	218	GLN	C-N-CA	7.03	127.62	120.38
29	U	292	GLU	N-CA-C	-7.03	97.17	108.55
1	Z	752	HIS	CA-CB-CG	7.02	120.82	113.80
22	N	758	PRO	CA-C-N	7.02	129.69	120.28
22	N	758	PRO	C-N-CA	7.02	129.69	120.28
26	R	20	ALA	CA-C-O	-7.02	112.98	120.42
8	7	223	TYR	CA-C-O	-7.02	113.47	120.70
19	K	353	ASN	CA-CB-CG	-7.02	105.58	112.60
20	L	188	ALA	CA-C-O	7.01	127.99	120.55
25	Q	94	ASP	CA-CB-CG	-7.01	105.59	112.60
27	S	209	LYS	N-CA-C	7.01	118.92	111.28
16	H	208	PRO	CA-C-N	7.01	128.60	119.84
16	H	208	PRO	C-N-CA	7.01	128.60	119.84
5	4	58	GLU	CB-CA-C	-7.01	98.94	110.85
18	J	164	VAL	CA-C-O	-7.01	113.05	121.18
1	Z	589	SER	CA-C-O	7.00	127.97	120.55
4	3	170	ALA	O-C-N	7.00	129.28	122.07
29	U	32	GLN	OE1-CD-NE2	-7.00	115.60	122.60
12	D	180	ALA	N-CA-C	-7.00	103.07	112.94
22	N	745	THR	CA-CB-OG1	7.00	120.10	109.60
1	Z	398	TRP	CA-C-N	7.00	130.23	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	398	TRP	C-N-CA	7.00	130.23	120.29
11	C	239	LYS	CA-C-N	7.00	129.66	120.28
11	C	239	LYS	C-N-CA	7.00	129.66	120.28
24	P	70	VAL	N-CA-CB	7.00	121.08	110.58
2	1	231	PHE	CA-CB-CG	-7.00	106.80	113.80
16	H	264	ALA	N-CA-CB	7.00	120.51	110.16
27	S	469	THR	CA-C-O	-7.00	113.96	121.38
3	2	197	LEU	N-CA-C	6.99	118.90	111.28
22	N	28	ASN	CA-C-N	6.99	129.53	120.44
22	N	28	ASN	C-N-CA	6.99	129.53	120.44
16	H	120	LYS	CA-C-N	6.99	131.09	120.82
16	H	120	LYS	C-N-CA	6.99	131.09	120.82
21	M	128	THR	N-CA-C	-6.99	104.50	113.16
27	S	438	VAL	O-C-N	6.99	128.65	121.87
23	O	89	ASP	CA-CB-CG	-6.98	105.62	112.60
13	E	136	PRO	CA-C-N	6.98	131.40	121.42
13	E	136	PRO	C-N-CA	6.98	131.40	121.42
13	E	211	ASN	N-CA-C	-6.98	99.02	108.86
17	I	324	ASP	N-CA-CB	6.98	120.49	110.16
17	I	208	PRO	CA-C-N	6.98	130.33	120.28
17	I	208	PRO	C-N-CA	6.98	130.33	120.28
18	J	362	VAL	CB-CA-C	-6.98	102.72	112.14
1	Z	227	ALA	N-CA-CB	6.98	120.13	110.01
5	4	82	ASN	CA-CB-CG	6.98	119.58	112.60
14	F	54	SER	CA-C-N	6.98	129.51	120.44
14	F	54	SER	C-N-CA	6.98	129.51	120.44
20	L	115	VAL	CB-CA-C	-6.98	103.91	111.59
16	H	304	ASN	CA-CB-CG	-6.98	105.62	112.60
2	1	138	ASP	CA-CB-CG	6.97	119.57	112.60
22	N	94	SER	CA-C-O	6.97	129.27	121.11
1	Z	159	VAL	CA-C-N	6.97	130.19	120.29
1	Z	159	VAL	C-N-CA	6.97	130.19	120.29
19	K	351	LYS	N-CA-C	6.97	118.88	111.28
23	O	353	LEU	O-C-N	6.97	129.51	122.12
22	N	497	LEU	N-CA-C	6.97	119.73	111.71
29	U	237	LEU	N-CA-CB	6.97	122.78	110.37
10	B	145	TYR	CA-C-N	6.97	134.85	121.54
10	B	145	TYR	C-N-CA	6.97	134.85	121.54
19	K	344	ILE	CA-C-N	6.97	129.62	120.28
19	K	344	ILE	C-N-CA	6.97	129.62	120.28
22	N	738	ASP	CA-CB-CG	6.97	119.57	112.60
10	B	179	ASN	CA-C-N	6.96	134.84	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B	179	ASN	C-N-CA	6.96	134.84	121.54
14	F	174	ARG	CD-NE-CZ	-6.96	114.65	124.40
15	G	18	ASP	CA-C-O	6.96	127.09	119.15
25	Q	340	GLU	CA-C-N	6.96	128.18	120.45
25	Q	340	GLU	C-N-CA	6.96	128.18	120.45
1	Z	117	GLU	CA-C-N	6.96	129.92	120.38
1	Z	117	GLU	C-N-CA	6.96	129.92	120.38
24	P	53	GLN	CA-C-N	6.96	129.91	120.44
24	P	53	GLN	C-N-CA	6.96	129.91	120.44
25	Q	274	LYS	N-CA-C	-6.96	103.90	112.88
22	N	712	LEU	N-CA-CB	6.96	120.35	110.12
25	Q	121	LYS	N-CA-CB	6.96	122.25	110.49
1	Z	566	HIS	CG-CD2-NE2	6.96	114.16	107.20
22	N	762	GLY	CA-C-N	6.96	129.99	120.46
22	N	762	GLY	C-N-CA	6.96	129.99	120.46
30	V	168	MET	N-CA-C	-6.96	104.82	113.38
11	C	61	PHE	CA-CB-CG	-6.95	106.85	113.80
12	D	64	ALA	CA-C-O	-6.95	112.64	120.43
29	U	277	ASN	CA-CB-CG	-6.95	105.65	112.60
31	W	49	VAL	CA-C-N	6.95	127.56	121.58
31	W	49	VAL	C-N-CA	6.95	127.56	121.58
12	D	94	HIS	CG-CD2-NE2	6.95	114.15	107.20
19	K	143	LEU	CA-C-O	-6.95	112.61	120.46
22	N	229	VAL	CB-CA-C	-6.95	102.76	112.14
1	Z	762	VAL	N-CA-C	6.95	117.74	110.72
27	S	474	LEU	N-CA-C	-6.95	103.71	111.28
28	T	140	GLN	N-CA-C	-6.94	96.01	110.80
23	O	246	GLU	N-CA-CB	6.94	120.32	110.12
25	Q	138	PHE	CA-C-O	6.94	127.91	120.55
13	E	18	GLU	N-CA-C	-6.94	103.80	111.36
15	G	88	LEU	CA-C-O	6.94	128.11	120.82
4	3	72	ASN	CB-CA-C	-6.94	99.99	110.88
15	G	145	ASP	CA-CB-CG	-6.94	105.66	112.60
27	S	197	THR	N-CA-C	6.94	118.84	111.28
16	H	417	ILE	N-CA-CB	6.93	119.97	110.54
30	V	302	ALA	CB-CA-C	-6.93	100.10	110.50
10	B	168	VAL	CB-CA-C	-6.93	103.10	111.97
22	N	768	GLN	N-CA-C	-6.93	98.40	109.76
8	7	138	THR	CA-C-O	6.92	127.92	120.10
17	I	172	THR	O-C-N	6.92	131.32	122.81
6	5	154	LEU	O-C-N	6.92	131.79	122.59
21	M	80	ILE	CA-CB-CG2	-6.92	98.73	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	82	HIS	ND1-CE1-NE2	6.92	115.32	108.40
17	I	276	GLU	CB-CA-C	-6.92	99.97	110.90
25	Q	6	VAL	N-CA-CB	6.92	119.43	110.57
17	I	181	GLN	CB-CA-C	-6.92	99.31	110.79
29	U	71	ASP	CA-C-N	6.92	130.11	120.29
29	U	71	ASP	C-N-CA	6.92	130.11	120.29
20	L	205	ASP	N-CA-C	-6.92	99.20	108.74
5	4	121	LEU	N-CA-C	-6.91	104.46	113.17
16	H	278	ASP	CA-CB-CG	6.91	119.51	112.60
16	H	411	GLU	CA-C-N	6.91	129.54	120.28
16	H	411	GLU	C-N-CA	6.91	129.54	120.28
27	S	228	ARG	NE-CZ-NH1	-6.91	114.59	121.50
4	3	98	LYS	N-CA-C	6.91	121.30	113.01
18	J	202	ALA	CA-C-O	-6.91	113.23	120.55
19	K	197	ASP	CB-CA-C	-6.91	98.13	109.46
24	P	161	GLU	O-C-N	6.91	130.02	122.15
9	A	75	ASN	CA-CB-CG	-6.91	105.69	112.60
29	U	173	GLU	CB-CA-C	-6.91	97.41	110.67
32	Y	56	LEU	N-CA-C	6.91	118.46	111.07
20	L	32	GLN	N-CA-C	6.90	118.46	111.07
4	3	198	ARG	CD-NE-CZ	6.90	134.06	124.40
16	H	355	PHE	CA-C-N	6.90	129.53	120.28
16	H	355	PHE	C-N-CA	6.90	129.53	120.28
11	C	242	GLU	N-CA-C	-6.90	103.84	111.36
27	S	374	LYS	CA-C-O	-6.90	113.24	120.55
1	Z	828	ARG	N-CA-C	-6.90	96.81	108.26
11	C	53	HIS	ND1-CE1-NE2	6.89	115.29	108.40
19	K	175	GLN	CB-CA-C	-6.89	99.35	110.79
1	Z	374	SER	O-C-N	6.89	130.01	122.15
19	K	137	ASN	CB-CA-C	-6.89	102.62	111.86
1	Z	527	VAL	CA-CB-CG2	-6.89	98.69	110.40
21	M	177	VAL	N-CA-C	-6.89	98.46	108.11
18	J	64	GLN	CA-C-N	6.89	130.07	120.29
18	J	64	GLN	C-N-CA	6.89	130.07	120.29
17	I	227	PRO	CA-C-N	6.89	128.45	119.84
17	I	227	PRO	C-N-CA	6.89	128.45	119.84
22	N	459	ASP	CA-CB-CG	-6.89	105.71	112.60
24	P	399	ASN	N-CA-C	6.89	119.63	111.71
22	N	647	HIS	CB-CA-C	-6.89	99.14	110.85
14	F	145	PHE	CA-CB-CG	-6.88	106.92	113.80
15	G	15	PHE	N-CA-CB	6.88	120.89	110.42
30	V	279	ASP	CA-C-O	-6.88	111.66	118.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	3	40	GLN	N-CA-C	-6.88	98.40	109.96
16	H	386	ARG	NE-CZ-NH2	6.88	125.39	119.20
29	U	12	HIS	CG-CD2-NE2	6.88	114.08	107.20
5	4	130	ALA	N-CA-CB	6.88	123.60	111.49
11	C	258	GLU	CA-C-N	6.88	134.68	121.54
11	C	258	GLU	C-N-CA	6.88	134.68	121.54
29	U	103	LYS	CA-C-O	6.88	127.71	120.42
16	H	185	GLU	CA-C-N	6.88	130.06	120.29
16	H	185	GLU	C-N-CA	6.88	130.06	120.29
16	H	203	ASN	CA-C-N	6.88	129.50	120.28
16	H	203	ASN	C-N-CA	6.88	129.50	120.28
18	J	158	ILE	N-CA-CB	6.88	118.59	110.55
20	L	230	ILE	CB-CA-C	6.88	121.00	110.96
2	1	100	HIS	CE1-NE2-CD2	-6.87	102.13	109.00
2	1	121	CYS	CA-C-N	6.87	129.79	120.44
2	1	121	CYS	C-N-CA	6.87	129.79	120.44
19	K	241	GLY	N-CA-C	-6.87	96.89	113.18
25	Q	214	SER	CA-C-N	6.87	127.56	120.00
25	Q	214	SER	C-N-CA	6.87	127.56	120.00
12	D	111	ILE	O-C-N	6.87	128.90	121.83
21	M	115	SER	N-CA-C	6.87	119.59	110.53
19	K	154	LEU	N-CA-C	-6.87	96.32	108.13
25	Q	31	VAL	N-CA-CB	6.87	118.58	110.55
24	P	139	GLU	CA-C-N	6.86	130.17	120.42
24	P	139	GLU	C-N-CA	6.86	130.17	120.42
25	Q	144	GLN	O-C-N	6.86	129.40	122.12
27	S	375	PHE	CA-C-O	-6.86	113.61	120.82
1	Z	757	ASN	OD1-CG-ND2	6.86	129.46	122.60
11	C	30	HIS	CA-CB-CG	-6.86	106.94	113.80
21	M	112	ASP	N-CA-CB	6.86	122.08	110.49
24	P	312	MET	CG-SD-CE	-6.86	85.81	100.90
26	R	291	HIS	ND1-CE1-NE2	6.86	115.26	108.40
22	N	40	GLU	O-C-N	6.86	129.97	122.15
13	E	10	ARG	CA-C-N	6.86	126.85	120.34
13	E	10	ARG	C-N-CA	6.86	126.85	120.34
22	N	357	LYS	CA-C-N	6.86	130.15	120.28
22	N	357	LYS	C-N-CA	6.86	130.15	120.28
1	Z	839	PRO	CA-C-O	-6.85	113.31	121.67
2	1	173	VAL	CA-C-N	6.85	129.46	120.28
2	1	173	VAL	C-N-CA	6.85	129.46	120.28
2	1	224	LEU	CA-C-O	-6.85	114.33	121.87
22	N	115	ASN	CA-CB-CG	6.85	119.45	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	V	281	LYS	CB-CA-C	-6.85	99.42	110.79
17	I	298	ASN	OD1-CG-ND2	6.85	129.45	122.60
3	2	192	GLU	CB-CG-CD	-6.85	100.96	112.60
25	Q	196	THR	CA-C-N	6.85	129.45	120.28
25	Q	196	THR	C-N-CA	6.85	129.45	120.28
11	C	157	GLY	CA-C-N	6.84	127.33	122.33
11	C	157	GLY	C-N-CA	6.84	127.33	122.33
21	M	170	SER	CA-C-O	-6.84	113.66	121.19
10	B	224	THR	CA-C-N	6.84	129.45	120.28
10	B	224	THR	C-N-CA	6.84	129.45	120.28
30	V	104	ARG	CA-C-N	6.84	127.39	120.14
30	V	104	ARG	C-N-CA	6.84	127.39	120.14
27	S	287	ARG	O-C-N	6.84	130.22	122.22
13	E	182	GLN	N-CA-C	6.84	118.39	111.07
18	J	49	ARG	N-CA-C	6.84	118.73	111.28
23	O	27	GLU	CA-C-N	6.84	129.44	120.28
23	O	27	GLU	C-N-CA	6.84	129.44	120.28
8	7	55	SER	N-CA-CB	6.83	122.04	110.49
1	Z	707	LEU	N-CA-C	6.83	119.56	111.71
18	J	171	HIS	CA-CB-CG	-6.83	106.97	113.80
24	P	82	LEU	CA-C-O	-6.83	113.18	120.42
1	Z	183	PRO	CA-C-N	6.83	130.69	120.31
1	Z	183	PRO	C-N-CA	6.83	130.69	120.31
24	P	107	GLN	OE1-CD-NE2	6.83	129.43	122.60
7	6	108	ASN	OD1-CG-ND2	6.83	129.43	122.60
8	7	162	ASP	N-CA-C	-6.83	104.06	114.16
9	A	17	SER	O-C-N	-6.82	117.34	121.71
8	7	166	PHE	CA-C-O	6.82	127.89	120.32
20	L	353	PHE	CA-C-N	6.82	129.97	120.29
20	L	353	PHE	C-N-CA	6.82	129.97	120.29
2	1	99	PHE	CA-C-N	6.82	129.30	120.44
2	1	99	PHE	C-N-CA	6.82	129.30	120.44
12	D	36	ARG	CB-CA-C	-6.82	96.35	109.37
29	U	232	ASP	O-C-N	6.82	129.92	122.15
22	N	644	TYR	CA-C-N	6.82	138.43	121.80
22	N	644	TYR	C-N-CA	6.82	138.43	121.80
24	P	192	LEU	CA-C-N	6.82	130.67	120.31
24	P	192	LEU	C-N-CA	6.82	130.67	120.31
1	Z	297	MET	CA-C-O	-6.82	113.19	120.42
26	R	317	GLY	N-CA-C	6.81	120.91	112.73
1	Z	651	GLY	CA-C-O	6.81	127.88	120.66
25	Q	326	LEU	CA-C-N	6.81	129.41	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Q	326	LEU	C-N-CA	6.81	129.41	120.28
31	W	41	THR	N-CA-CB	6.81	120.24	110.16
1	Z	124	ASP	O-C-N	6.81	129.91	122.15
1	Z	387	GLN	CA-C-N	6.81	133.66	120.99
1	Z	387	GLN	C-N-CA	6.81	133.66	120.99
1	Z	590	PHE	CA-C-N	6.81	130.08	120.28
1	Z	590	PHE	C-N-CA	6.81	130.08	120.28
10	B	147	PHE	CA-CB-CG	-6.80	107.00	113.80
11	C	254	LYS	CA-C-O	-6.80	113.34	120.55
12	D	141	THR	N-CA-C	-6.80	101.19	109.83
5	4	76	SER	CA-C-N	6.80	126.76	119.28
5	4	76	SER	C-N-CA	6.80	126.76	119.28
7	6	175	PRO	O-C-N	6.80	130.39	122.23
22	N	754	HIS	N-CA-C	-6.80	104.60	113.17
29	U	250	TYR	N-CA-CB	6.80	120.69	110.22
29	U	276	ILE	O-C-N	6.80	128.47	121.87
1	Z	611	GLN	N-CA-C	-6.80	103.87	111.28
1	Z	843	SER	N-CA-C	-6.80	98.54	109.96
25	Q	296	ASN	CA-C-O	6.80	127.74	119.38
8	7	148	MET	N-CA-C	-6.80	102.81	111.92
9	A	160	TYR	N-CA-C	-6.80	98.32	108.99
17	I	374	LEU	N-CA-C	-6.80	98.98	109.24
22	N	200	VAL	CA-C-N	6.80	130.07	120.28
22	N	200	VAL	C-N-CA	6.80	130.07	120.28
22	N	721	HIS	ND1-CE1-NE2	6.80	115.20	108.40
19	K	153	MET	N-CA-CB	6.79	121.97	110.49
17	I	339	PRO	CA-C-N	6.79	129.71	120.54
17	I	339	PRO	C-N-CA	6.79	129.71	120.54
18	J	260	GLU	N-CA-C	-6.79	97.29	108.76
27	S	317	PRO	O-C-N	6.79	131.80	122.64
25	Q	81	SER	CA-C-N	6.78	129.92	120.29
25	Q	81	SER	C-N-CA	6.78	129.92	120.29
11	C	169	ALA	N-CA-C	6.78	118.67	111.28
19	K	324	PRO	CA-C-O	-6.78	113.84	121.43
17	I	157	HIS	CE1-NE2-CD2	-6.78	102.22	109.00
22	N	412	HIS	CA-CB-CG	6.78	120.58	113.80
24	P	250	ILE	CA-C-N	6.78	129.66	120.38
24	P	250	ILE	C-N-CA	6.78	129.66	120.38
16	H	167	GLU	CB-CA-C	6.77	120.85	110.62
18	J	290	LYS	N-CA-C	-6.77	98.88	109.72
9	A	220	VAL	N-CA-C	-6.77	98.71	108.53
29	U	138	TYR	CA-CB-CG	-6.77	101.72	113.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	352	HIS	CA-CB-CG	-6.77	107.03	113.80
19	K	207	PRO	CA-C-O	-6.77	115.38	120.73
22	N	752	THR	CA-C-N	6.77	126.82	121.61
22	N	752	THR	C-N-CA	6.77	126.82	121.61
28	T	294	ASN	N-CA-C	6.77	118.74	111.36
22	N	368	ALA	N-CA-CB	6.77	120.07	110.12
24	P	65	ARG	CA-C-N	6.77	129.73	120.46
24	P	65	ARG	C-N-CA	6.77	129.73	120.46
29	U	174	HIS	O-C-N	6.76	129.29	122.12
19	K	129	SER	N-CA-C	-6.76	100.47	110.48
31	W	36	VAL	CA-C-N	6.76	129.34	120.28
31	W	36	VAL	C-N-CA	6.76	129.34	120.28
7	6	107	ASN	N-CA-C	-6.76	96.40	110.80
22	N	205	TYR	CB-CG-CD1	6.76	130.94	120.80
22	N	268	LEU	CA-C-N	6.76	129.34	120.28
22	N	268	LEU	C-N-CA	6.76	129.34	120.28
26	R	294	TYR	O-C-N	-6.76	114.96	122.12
16	H	333	ARG	O-C-N	6.75	127.31	121.30
17	I	244	SER	N-CA-C	6.75	120.86	111.74
32	Y	51	ASP	CA-C-N	6.75	129.22	120.44
32	Y	51	ASP	C-N-CA	6.75	129.22	120.44
22	N	474	ARG	CA-C-N	6.75	129.22	120.44
22	N	474	ARG	C-N-CA	6.75	129.22	120.44
4	3	149	MET	N-CA-CB	6.75	120.15	110.16
5	4	158	GLU	CB-CA-C	-6.75	99.38	110.85
19	K	338	ARG	CA-C-N	6.75	129.32	120.28
19	K	338	ARG	C-N-CA	6.75	129.32	120.28
1	Z	799	VAL	CA-C-N	6.75	129.32	120.28
1	Z	799	VAL	C-N-CA	6.75	129.32	120.28
21	M	180	ARG	NE-CZ-NH1	6.75	128.25	121.50
26	R	169	GLU	N-CA-CB	6.75	121.89	110.49
6	5	82	GLY	CA-C-O	-6.75	111.49	119.72
20	L	301	ILE	N-CA-C	-6.75	102.59	110.21
17	I	358	GLU	CA-C-N	6.74	129.31	120.28
17	I	358	GLU	C-N-CA	6.74	129.31	120.28
20	L	199	VAL	CA-CB-CG2	-6.74	98.94	110.40
26	R	320	ALA	O-C-N	6.74	129.27	122.12
8	7	121	LEU	N-CA-C	-6.74	100.48	110.46
22	N	239	GLU	N-CA-C	-6.74	104.00	111.82
30	V	149	GLN	O-C-N	-6.74	113.07	122.37
1	Z	326	LEU	CB-CA-C	-6.74	100.30	110.88
22	N	362	ASN	N-CA-CB	6.74	121.88	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	176	MET	N-CA-CB	6.74	121.88	110.49
10	B	190	THR	CB-CA-C	-6.74	99.61	110.79
18	J	255	GLY	CA-C-N	6.74	132.13	120.68
18	J	255	GLY	C-N-CA	6.74	132.13	120.68
19	K	161	ASP	CA-C-N	6.74	134.10	121.97
19	K	161	ASP	C-N-CA	6.74	134.10	121.97
6	5	112	SER	CB-CA-C	-6.73	100.31	110.88
16	H	73	ALA	N-CA-C	6.73	114.28	108.22
18	J	158	ILE	CB-CA-C	-6.73	103.36	111.97
21	M	142	ALA	CA-C-O	-6.73	112.49	120.10
24	P	105	VAL	N-CA-CB	6.73	120.68	110.58
18	J	340	ARG	CA-C-O	6.73	127.50	120.30
2	1	53	ARG	NE-CZ-NH2	-6.72	113.15	119.20
20	L	204	VAL	N-CA-CB	6.72	120.62	110.13
21	M	85	THR	CA-C-N	6.72	130.89	120.60
21	M	85	THR	C-N-CA	6.72	130.89	120.60
26	R	134	LEU	CB-CA-C	-6.72	97.76	110.67
1	Z	674	THR	CA-CB-OG1	6.72	119.68	109.60
21	M	234	THR	CA-C-N	6.72	129.18	120.44
21	M	234	THR	C-N-CA	6.72	129.18	120.44
21	M	262	GLY	CA-C-N	6.72	129.29	120.28
21	M	262	GLY	C-N-CA	6.72	129.29	120.28
1	Z	131	MET	CA-C-N	6.72	129.28	120.28
1	Z	131	MET	C-N-CA	6.72	129.28	120.28
19	K	417	TYR	N-CA-C	-6.72	103.80	113.21
25	Q	344	ARG	N-CA-CB	6.72	123.00	112.25
23	O	241	ASN	O-C-N	6.72	129.35	122.09
18	J	326	LEU	CB-CA-C	-6.72	100.33	110.88
22	N	611	ASN	CA-CB-CG	-6.72	105.88	112.60
3	2	80	ILE	N-CA-CB	6.71	121.62	112.35
20	L	300	HIS	CA-CB-CG	-6.71	107.08	113.80
10	B	58	ASP	O-C-N	-6.71	115.05	123.17
16	H	66	LYS	CA-C-O	6.71	127.87	120.82
6	5	225	ARG	CB-CA-C	-6.71	100.30	110.90
7	6	140	GLY	CA-C-O	6.71	127.75	120.97
18	J	134	LEU	N-CA-C	-6.71	105.25	113.50
23	O	108	ASP	N-CA-CB	6.71	120.97	110.71
27	S	361	PHE	CA-C-O	-6.71	113.44	120.55
7	6	209	SER	CA-C-N	6.71	129.26	120.28
7	6	209	SER	C-N-CA	6.71	129.26	120.28
28	T	61	SER	N-CA-C	6.71	118.59	111.28
28	T	303	ALA	N-CA-C	6.71	118.59	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	412	HIS	CG-CD2-NE2	6.70	113.90	107.20
24	P	187	LEU	N-CA-CB	6.70	119.97	110.12
12	D	183	THR	CA-CB-OG1	6.70	119.65	109.60
17	I	386	ALA	N-CA-CB	6.70	119.97	110.12
19	K	311	THR	CA-C-O	6.70	128.57	121.33
22	N	629	THR	N-CA-C	-6.70	95.00	109.81
27	S	222	ASP	N-CA-C	-6.70	99.49	108.74
2	1	168	TYR	CA-C-O	6.70	127.52	120.42
1	Z	844	VAL	N-CA-C	-6.70	98.84	108.48
4	3	63	VAL	N-CA-C	6.70	117.48	110.72
20	L	265	ASP	CA-CB-CG	6.70	119.30	112.60
24	P	288	HIS	CE1-NE2-CD2	-6.70	102.31	109.00
18	J	205	HIS	CG-CD2-NE2	6.69	113.89	107.20
19	K	353	ASN	N-CA-CB	6.69	121.80	110.49
4	3	162	HIS	CA-CB-CG	6.69	120.49	113.80
13	E	149	LYS	N-CA-C	-6.69	104.69	112.92
17	I	277	HIS	CE1-NE2-CD2	-6.69	102.31	109.00
19	K	242	GLU	N-CA-C	-6.69	97.99	108.90
22	N	359	ALA	CA-C-O	6.69	127.84	120.82
14	F	109	VAL	O-C-N	6.69	128.36	121.87
20	L	249	ALA	N-CA-C	-6.68	104.94	113.23
25	Q	240	ASP	CA-C-N	6.68	129.91	120.28
25	Q	240	ASP	C-N-CA	6.68	129.91	120.28
2	1	46	VAL	CA-C-O	6.68	128.36	121.28
12	D	58	THR	CA-C-N	6.68	130.51	120.75
12	D	58	THR	C-N-CA	6.68	130.51	120.75
17	I	334	ILE	N-CA-C	-6.68	105.00	113.22
10	B	220	ARG	NE-CZ-NH2	6.68	125.21	119.20
25	Q	418	ALA	CA-C-O	6.68	127.63	120.55
6	5	138	ALA	CA-C-O	-6.68	113.34	120.42
19	K	364	VAL	N-CA-C	6.68	117.43	110.62
5	4	170	ARG	N-CA-CB	6.68	120.04	110.16
28	T	348	MET	CA-C-N	6.68	133.72	121.70
28	T	348	MET	C-N-CA	6.68	133.72	121.70
18	J	328	ILE	N-CA-CB	6.67	119.62	110.54
27	S	276	PHE	CB-CG-CD2	-6.67	109.35	120.70
1	Z	826	GLN	CB-CA-C	-6.67	100.01	110.02
20	L	269	THR	N-CA-C	-6.67	96.88	108.69
22	N	695	MET	CG-SD-CE	-6.67	86.22	100.90
21	M	121	CYS	CA-C-N	-6.67	112.94	122.94
21	M	121	CYS	C-N-CA	-6.67	112.94	122.94
12	D	77	THR	CA-C-N	6.67	129.11	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	D	77	THR	C-N-CA	6.67	129.11	120.44
31	W	123	ASP	CA-C-N	6.67	129.22	120.28
31	W	123	ASP	C-N-CA	6.67	129.22	120.28
23	O	240	PHE	N-CA-CB	-6.67	100.29	110.16
1	Z	564	LEU	N-CA-C	-6.67	104.02	111.28
7	6	124	LEU	CA-C-O	6.66	127.48	120.42
10	B	111	VAL	CA-C-O	-6.66	114.02	120.95
28	T	321	GLN	CA-C-O	-6.66	113.33	121.06
1	Z	200	ALA	N-CA-C	-6.66	99.63	109.62
7	6	30	PHE	CA-CB-CG	-6.66	107.14	113.80
12	D	57	ARG	NE-CZ-NH1	-6.66	114.84	121.50
1	Z	145	VAL	CA-C-N	6.66	129.69	121.83
1	Z	145	VAL	C-N-CA	6.66	129.69	121.83
23	O	90	PRO	N-CA-CB	6.66	110.90	103.44
29	U	274	ASN	CA-C-O	-6.66	113.36	120.42
16	H	266	THR	CA-C-O	6.66	127.81	120.82
21	M	375	VAL	N-CA-C	6.66	118.07	108.48
10	B	17	GLY	N-CA-C	-6.66	105.47	115.32
15	G	194	VAL	N-CA-CB	6.66	120.56	110.58
17	I	90	GLU	CA-C-O	6.65	127.47	120.42
22	N	502	TYR	N-CA-CB	6.65	119.90	110.12
1	Z	385	PHE	CA-CB-CG	-6.65	107.15	113.80
7	6	213	ARG	NE-CZ-NH2	6.65	125.19	119.20
30	V	88	ASP	CA-C-N	6.65	126.10	118.85
30	V	88	ASP	C-N-CA	6.65	126.10	118.85
1	Z	400	TYR	CA-C-N	6.65	129.49	120.38
1	Z	400	TYR	C-N-CA	6.65	129.49	120.38
22	N	117	ASP	CA-CB-CG	-6.65	105.95	112.60
26	R	201	PHE	CA-CB-CG	-6.65	107.15	113.80
22	N	15	ASP	N-CA-CB	6.65	120.99	110.55
26	R	219	PHE	CA-C-N	6.65	129.86	120.42
26	R	219	PHE	C-N-CA	6.65	129.86	120.42
1	Z	189	LYS	CA-C-N	6.65	129.19	120.28
1	Z	189	LYS	C-N-CA	6.65	129.19	120.28
14	F	103	LEU	N-CA-CB	6.65	122.20	110.37
20	L	142	ILE	CA-C-N	6.64	129.08	120.44
20	L	142	ILE	C-N-CA	6.64	129.08	120.44
26	R	360	ASP	CA-CB-CG	-6.64	105.96	112.60
27	S	205	LEU	CA-C-N	6.64	132.28	122.71
27	S	205	LEU	C-N-CA	6.64	132.28	122.71
30	V	62	VAL	N-CA-C	-6.64	98.55	108.12
1	Z	694	LEU	CA-C-N	6.64	129.18	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	694	LEU	C-N-CA	6.64	129.18	120.28
1	Z	892	PRO	N-CA-CB	6.64	110.22	103.25
19	K	312	ASN	OD1-CG-ND2	-6.64	115.96	122.60
2	1	170	TYR	CA-C-N	6.64	127.35	119.98
2	1	170	TYR	C-N-CA	6.64	127.35	119.98
5	4	87	ASN	CA-C-N	6.64	129.18	120.28
5	4	87	ASN	C-N-CA	6.64	129.18	120.28
15	G	40	ILE	N-CA-C	6.64	117.68	108.12
26	R	291	HIS	CB-CA-C	-6.64	96.84	110.38
22	N	639	LEU	CA-C-O	-6.63	113.52	120.55
22	N	880	ASN	CA-C-O	-6.63	112.42	118.79
30	V	199	HIS	CG-CD2-NE2	6.63	113.83	107.20
7	6	196	LEU	CA-C-N	6.63	129.06	120.44
7	6	196	LEU	C-N-CA	6.63	129.06	120.44
22	N	115	ASN	OD1-CG-ND2	-6.63	115.97	122.60
22	N	805	ASN	CA-C-N	6.63	130.13	120.71
22	N	805	ASN	C-N-CA	6.63	130.13	120.71
24	P	453	HIS	CE1-NE2-CD2	-6.63	102.37	109.00
27	S	410	ILE	N-CA-C	6.63	113.31	106.21
10	B	6	TYR	CB-CG-CD2	-6.63	110.86	120.80
14	F	175	HIS	CE1-NE2-CD2	-6.63	102.37	109.00
22	N	437	TYR	CB-CA-C	-6.63	99.58	110.85
22	N	893	THR	CA-CB-OG1	6.63	119.54	109.60
23	O	247	ARG	CA-C-O	6.63	127.58	120.55
18	J	275	GLU	CA-C-O	-6.63	113.40	120.42
24	P	426	ASN	CB-CA-C	-6.63	99.79	110.79
31	W	12	ASN	CA-CB-CG	-6.63	105.97	112.60
17	I	81	ASN	CA-CB-CG	-6.62	105.97	112.60
19	K	347	THR	CA-C-O	-6.62	113.88	120.70
1	Z	539	LEU	CA-C-N	6.62	129.69	120.29
1	Z	539	LEU	C-N-CA	6.62	129.69	120.29
20	L	44	GLU	O-C-N	-6.62	115.10	122.12
5	4	171	PHE	CA-C-N	6.62	131.18	122.51
5	4	171	PHE	C-N-CA	6.62	131.18	122.51
26	R	219	PHE	CA-CB-CG	6.62	120.42	113.80
6	5	190	GLY	CA-C-N	6.62	129.45	120.38
6	5	190	GLY	C-N-CA	6.62	129.45	120.38
24	P	43	VAL	N-CA-CB	6.62	119.04	110.57
28	T	209	HIS	CE1-NE2-CD2	-6.62	102.38	109.00
19	K	316	THR	CA-CB-OG1	6.62	119.52	109.60
27	S	417	ILE	CB-CA-C	6.62	120.48	110.62
31	W	84	ILE	O-C-N	6.62	129.88	122.67

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	P	234	ASP	CA-C-O	6.61	127.43	120.42
18	J	46	GLN	O-C-N	6.61	129.13	122.12
25	Q	62	GLN	N-CA-C	-6.61	105.96	112.97
25	Q	310	ARG	CA-C-N	6.61	129.03	120.44
25	Q	310	ARG	C-N-CA	6.61	129.03	120.44
29	U	106	ILE	O-C-N	6.61	128.28	121.87
31	W	139	ASP	N-CA-C	-6.61	97.59	108.76
22	N	470	ASN	CA-CB-CG	-6.61	105.99	112.60
25	Q	77	LEU	CA-C-N	6.61	129.14	120.28
25	Q	77	LEU	C-N-CA	6.61	129.14	120.28
11	C	165	GLY	N-CA-C	-6.61	103.47	112.52
27	S	244	ALA	N-CA-C	6.61	118.56	111.36
3	2	132	ARG	N-CA-C	6.60	118.48	111.28
4	3	61	GLN	O-C-N	6.60	128.87	122.07
15	G	213	GLU	CB-CA-C	-6.60	97.75	109.70
27	S	269	LYS	CB-CG-CD	6.60	126.49	111.30
13	E	61	PRO	CA-C-N	6.60	129.12	120.28
13	E	61	PRO	C-N-CA	6.60	129.12	120.28
21	M	124	ILE	N-CA-C	-6.60	98.62	108.46
11	C	209	GLU	O-C-N	-6.60	114.15	122.27
13	E	235	GLU	CB-CG-CD	-6.60	101.38	112.60
30	V	80	THR	N-CA-C	-6.60	104.26	112.90
9	A	45	LYS	N-CA-C	-6.60	104.86	113.17
20	L	338	PHE	CA-CB-CG	-6.60	107.20	113.80
13	E	222	PRO	N-CA-CB	6.60	110.51	103.39
25	Q	242	ILE	CA-C-N	6.60	134.14	121.54
25	Q	242	ILE	C-N-CA	6.60	134.14	121.54
26	R	198	ALA	CA-C-N	6.60	129.01	120.44
26	R	198	ALA	C-N-CA	6.60	129.01	120.44
17	I	382	ASP	CB-CA-C	-6.59	99.84	110.79
18	J	37	ASP	CB-CA-C	-6.59	99.64	110.85
4	3	160	PRO	N-CA-C	-6.59	104.37	113.53
9	A	119	ALA	CA-C-N	6.59	129.11	120.28
9	A	119	ALA	C-N-CA	6.59	129.11	120.28
25	Q	263	THR	CA-C-N	6.59	126.18	119.19
25	Q	263	THR	C-N-CA	6.59	126.18	119.19
1	Z	655	LEU	CA-C-N	6.59	128.37	120.14
1	Z	655	LEU	C-N-CA	6.59	128.37	120.14
20	L	129	ASN	N-CA-CB	6.59	120.24	110.49
21	M	54	ILE	N-CA-C	-6.58	104.07	110.72
26	R	201	PHE	N-CA-CB	6.58	119.80	110.12
1	Z	253	LEU	N-CA-C	6.58	118.45	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	1	47	VAL	CB-CA-C	6.58	120.43	110.62
4	3	150	CYS	N-CA-CB	6.58	119.90	110.16
22	N	632	GLN	CA-C-N	6.58	129.08	120.26
22	N	632	GLN	C-N-CA	6.58	129.08	120.26
26	R	190	ALA	O-C-N	-6.58	115.14	122.12
15	G	33	ASN	CA-CB-CG	-6.58	106.02	112.60
27	S	220	PHE	CA-CB-CG	-6.58	107.22	113.80
27	S	344	ASP	CA-C-N	6.58	130.31	120.31
27	S	344	ASP	C-N-CA	6.58	130.31	120.31
22	N	645	ASN	CA-C-N	6.58	126.52	119.28
22	N	645	ASN	C-N-CA	6.58	126.52	119.28
22	N	927	PRO	N-CA-CB	6.58	109.19	103.27
12	D	214	ASP	CA-C-O	6.58	127.68	120.12
22	N	572	ARG	CD-NE-CZ	-6.58	115.19	124.40
29	U	85	VAL	N-CA-C	6.58	116.71	110.53
27	S	197	THR	CA-C-O	-6.58	113.58	120.55
22	N	427	LEU	CA-C-O	-6.57	113.53	120.70
17	I	368	HIS	CG-CD2-NE2	6.57	113.77	107.20
31	W	159	THR	CA-CB-CG2	6.57	121.67	110.50
26	R	148	GLY	N-CA-C	6.57	120.61	112.73
16	H	328	ASP	CA-C-N	6.57	126.51	119.28
16	H	328	ASP	C-N-CA	6.57	126.51	119.28
21	M	143	GLU	CA-C-N	6.57	130.29	120.31
21	M	143	GLU	C-N-CA	6.57	130.29	120.31
26	R	283	LYS	N-CA-CB	6.57	119.78	110.12
30	V	58	LEU	CA-C-O	-6.57	113.74	121.16
23	O	264	ASN	CA-C-N	6.57	129.08	120.28
23	O	264	ASN	C-N-CA	6.57	129.08	120.28
5	4	136	ALA	N-CA-C	6.57	119.26	111.71
9	A	23	TYR	CB-CA-C	-6.57	99.89	110.79
21	M	402	GLU	CA-C-O	6.57	127.51	120.55
22	N	508	THR	CA-C-N	6.57	128.35	120.14
22	N	508	THR	C-N-CA	6.57	128.35	120.14
22	N	41	SER	N-CA-C	6.56	121.14	113.20
22	N	353	LEU	N-CA-C	6.56	118.44	111.28
1	Z	560	LEU	CA-C-N	6.56	127.26	119.98
1	Z	560	LEU	C-N-CA	6.56	127.26	119.98
5	4	156	ALA	CA-C-O	6.56	127.38	120.42
22	N	173	VAL	CA-C-O	-6.56	113.27	118.85
22	N	783	TYR	N-CA-CB	6.56	120.57	109.87
22	N	493	VAL	N-CA-CB	6.56	120.42	110.58
18	J	155	ASP	CA-C-N	6.56	129.07	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	J	155	ASP	C-N-CA	6.56	129.07	120.28
12	D	66	ASP	CA-C-N	6.56	134.07	121.54
12	D	66	ASP	C-N-CA	6.56	134.07	121.54
21	M	208	HIS	CA-C-N	6.56	129.36	120.38
21	M	208	HIS	C-N-CA	6.56	129.36	120.38
24	P	256	ILE	N-CA-C	6.56	116.69	110.53
2	1	156	ARG	N-CA-CB	6.56	120.56	109.87
5	4	116	TYR	CA-CB-CG	-6.55	102.10	113.90
18	J	174	LEU	CB-CA-C	-6.55	99.91	110.79
24	P	76	GLU	CA-C-O	6.55	127.36	120.42
18	J	135	VAL	CB-CA-C	6.55	120.55	111.38
22	N	5	ALA	CA-C-O	6.55	127.43	119.31
1	Z	247	ALA	CA-C-N	6.55	129.05	120.28
1	Z	247	ALA	C-N-CA	6.55	129.05	120.28
14	F	75	ALA	CB-CA-C	-6.55	102.84	111.42
12	D	157	LYS	N-CA-C	-6.54	103.35	112.45
22	N	624	PHE	CA-CB-CG	-6.54	107.26	113.80
23	O	91	ASN	CA-CB-CG	-6.54	106.06	112.60
1	Z	252	ALA	CA-C-N	6.54	129.04	120.28
1	Z	252	ALA	C-N-CA	6.54	129.04	120.28
19	K	239	TYR	CA-C-O	-6.54	114.26	121.33
1	Z	64	GLY	CA-C-N	6.54	130.43	120.82
1	Z	64	GLY	C-N-CA	6.54	130.43	120.82
2	1	189	PHE	CA-CB-CG	6.54	120.34	113.80
19	K	79	VAL	N-CA-C	6.54	117.29	110.62
22	N	921	ILE	CA-CB-CG1	6.54	121.52	110.40
19	K	41	TYR	CB-CA-C	-6.54	97.41	110.42
21	M	287	GLU	N-CA-CB	6.54	121.54	110.49
1	Z	222	ASP	CA-C-O	6.53	125.81	119.08
1	Z	330	PHE	N-CA-C	-6.53	103.57	113.89
13	E	33	LEU	N-CA-C	6.53	120.51	112.54
22	N	394	ALA	CA-C-N	6.53	129.57	120.29
22	N	394	ALA	C-N-CA	6.53	129.57	120.29
10	B	131	GLY	O-C-N	6.53	131.19	122.70
30	V	240	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
21	M	348	LEU	O-C-N	-6.53	115.62	122.94
29	U	207	ASP	CA-CB-CG	-6.53	106.07	112.60
1	Z	544	GLU	O-C-N	6.53	128.79	122.07
1	Z	214	VAL	N-CA-C	-6.52	106.37	112.83
1	Z	299	GLY	CA-C-N	6.52	129.02	120.28
1	Z	299	GLY	C-N-CA	6.52	129.02	120.28
6	5	222	ALA	N-CA-CB	6.52	120.26	110.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	D	189	LYS	CA-C-N	6.52	129.55	120.29
12	D	189	LYS	C-N-CA	6.52	129.55	120.29
16	H	333	ARG	N-CA-C	6.52	118.87	109.48
11	C	204	SER	CA-C-O	-6.52	112.73	120.10
24	P	116	THR	O-C-N	-6.52	113.69	122.43
15	G	73	HIS	CE1-NE2-CD2	-6.52	102.48	109.00
3	2	96	ASP	O-C-N	-6.52	114.72	122.15
22	N	425	THR	O-C-N	6.52	129.03	122.12
1	Z	499	THR	CA-C-N	6.51	129.54	120.29
1	Z	499	THR	C-N-CA	6.51	129.54	120.29
8	7	61	PHE	CA-C-N	6.51	129.85	120.79
8	7	61	PHE	C-N-CA	6.51	129.85	120.79
24	P	63	THR	O-C-N	-6.51	116.42	123.26
5	4	56	PHE	CA-C-N	6.51	129.01	120.28
5	4	56	PHE	C-N-CA	6.51	129.01	120.28
25	Q	297	ARG	CD-NE-CZ	-6.51	115.28	124.40
30	V	64	ASP	N-CA-C	-6.51	103.32	113.02
17	I	294	ARG	CA-C-N	6.51	131.31	120.70
17	I	294	ARG	C-N-CA	6.51	131.31	120.70
29	U	72	HIS	ND1-CE1-NE2	6.51	114.91	108.40
24	P	242	SER	N-CA-C	6.51	118.37	111.28
1	Z	339	ILE	N-CA-C	-6.51	104.15	110.72
22	N	366	HIS	CB-CG-CD2	-6.51	122.74	131.20
3	2	191	GLU	N-CA-C	6.50	118.03	111.07
16	H	74	PRO	CA-C-N	6.50	127.97	119.84
16	H	74	PRO	C-N-CA	6.50	127.97	119.84
18	J	228	ALA	O-C-N	6.50	129.56	122.15
18	J	313	ARG	N-CA-C	-6.50	98.38	109.24
9	A	136	CYS	CA-C-N	6.50	131.97	123.00
9	A	136	CYS	C-N-CA	6.50	131.97	123.00
25	Q	336	ILE	CA-C-O	-6.50	114.19	120.95
1	Z	410	ALA	CA-C-N	6.50	128.99	120.28
1	Z	410	ALA	C-N-CA	6.50	128.99	120.28
18	J	200	ALA	CB-CA-C	-6.50	100.01	110.79
29	U	102	HIS	CA-C-N	6.50	129.52	120.29
29	U	102	HIS	C-N-CA	6.50	129.52	120.29
16	H	418	LYS	CB-CA-C	-6.49	100.01	110.79
22	N	503	GLN	CB-CA-C	-6.49	98.62	110.63
1	Z	346	ASP	CA-CB-CG	6.49	119.09	112.60
3	2	243	GLY	CA-C-O	-6.49	116.35	122.39
19	K	358	VAL	CA-C-O	-6.49	114.90	121.59
17	I	213	GLU	O-C-N	6.49	129.10	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	183	TYR	O-C-N	6.49	129.00	122.12
27	S	356	SER	CA-C-N	6.49	128.97	120.28
27	S	356	SER	C-N-CA	6.49	128.97	120.28
17	I	123	VAL	CA-C-N	6.49	131.95	123.00
17	I	123	VAL	C-N-CA	6.49	131.95	123.00
1	Z	668	ALA	N-CA-C	6.48	118.35	111.28
25	Q	262	ASN	N-CA-CB	6.48	121.45	110.49
27	S	331	LEU	CA-C-N	6.48	128.87	120.44
27	S	331	LEU	C-N-CA	6.48	128.87	120.44
27	S	492	LYS	N-CA-CB	6.48	119.60	109.94
4	3	159	ASP	N-CA-C	-6.48	100.19	110.10
16	H	377	CYS	CA-C-N	6.48	126.50	119.89
16	H	377	CYS	C-N-CA	6.48	126.50	119.89
24	P	288	HIS	N-CA-C	6.48	119.16	111.71
14	F	150	SER	N-CA-C	-6.48	104.95	112.92
15	G	48	PHE	N-CA-C	-6.48	99.27	109.50
21	M	198	LEU	CA-C-N	6.48	129.34	120.46
21	M	198	LEU	C-N-CA	6.48	129.34	120.46
24	P	182	ARG	CA-C-N	6.48	129.34	120.46
24	P	182	ARG	C-N-CA	6.48	129.34	120.46
30	V	265	MET	CA-C-O	-6.48	113.68	120.55
29	U	222	ILE	CA-C-N	6.48	129.95	120.82
29	U	222	ILE	C-N-CA	6.48	129.95	120.82
24	P	418	PRO	CA-C-O	-6.47	113.77	121.67
5	4	9	GLY	CA-C-O	-6.47	116.18	122.46
22	N	224	ASP	CA-CB-CG	-6.47	106.13	112.60
22	N	514	LEU	CA-C-N	6.47	128.95	120.28
22	N	514	LEU	C-N-CA	6.47	128.95	120.28
28	T	331	PRO	N-CA-C	6.47	122.25	113.84
30	V	204	THR	CA-C-N	6.47	131.45	123.10
30	V	204	THR	C-N-CA	6.47	131.45	123.10
17	I	256	ILE	N-CA-C	-6.47	100.35	108.89
11	C	30	HIS	CA-C-O	6.47	127.28	120.42
18	J	222	LYS	N-CA-C	-6.47	105.39	113.28
23	O	53	GLY	CA-C-N	6.47	132.11	122.99
23	O	53	GLY	C-N-CA	6.47	132.11	122.99
26	R	328	GLU	CB-CG-CD	-6.47	101.60	112.60
27	S	434	ALA	CA-C-O	-6.47	114.03	120.82
5	4	84	THR	CA-CB-OG1	6.47	119.30	109.60
28	T	112	CYS	N-CA-C	6.47	118.33	111.28
14	F	63	ILE	N-CA-CB	6.47	118.78	111.21
23	O	373	ASP	CA-C-N	-6.47	114.00	122.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	373	ASP	C-N-CA	-6.47	114.00	122.99
12	D	97	THR	CA-C-N	6.46	131.24	120.64
12	D	97	THR	C-N-CA	6.46	131.24	120.64
13	E	197	SER	CA-C-N	6.46	129.47	120.29
13	E	197	SER	C-N-CA	6.46	129.47	120.29
19	K	366	ARG	CA-C-N	6.46	127.92	119.84
19	K	366	ARG	C-N-CA	6.46	127.92	119.84
27	S	399	ARG	NE-CZ-NH1	6.46	127.96	121.50
29	U	193	ASN	N-CA-CB	6.46	119.38	110.01
8	7	261	SER	CB-CA-C	-6.46	99.14	111.48
11	C	97	TYR	CA-C-N	6.46	128.94	120.28
11	C	97	TYR	C-N-CA	6.46	128.94	120.28
24	P	321	VAL	N-CA-CB	6.46	120.27	110.58
4	3	83	LYS	CA-C-N	6.46	126.22	119.05
4	3	83	LYS	C-N-CA	6.46	126.22	119.05
5	4	12	TYR	CB-CG-CD2	-6.46	111.11	120.80
23	O	68	GLU	CA-C-N	6.46	128.94	120.28
23	O	68	GLU	C-N-CA	6.46	128.94	120.28
23	O	79	ILE	CB-CA-C	-6.46	103.05	110.73
2	1	195	ALA	N-CA-C	6.46	118.32	111.28
22	N	60	ALA	CA-C-O	-6.46	113.71	120.55
1	Z	524	MET	CA-C-N	6.45	128.82	120.56
1	Z	524	MET	C-N-CA	6.45	128.82	120.56
22	N	932	GLY	O-C-N	6.45	128.22	121.77
2	1	157	GLN	CA-C-N	6.45	128.93	120.28
2	1	157	GLN	C-N-CA	6.45	128.93	120.28
7	6	106	SER	CB-CA-C	-6.45	96.70	110.32
9	A	169	GLY	N-CA-C	-6.45	103.68	112.52
27	S	159	LEU	O-C-N	6.45	129.51	122.15
27	S	221	LEU	N-CA-CB	6.45	121.39	110.49
16	H	318	LEU	CA-C-O	-6.45	113.39	120.36
26	R	22	LEU	N-CA-C	6.45	118.39	111.36
28	T	205	VAL	N-CA-C	-6.45	104.20	110.72
22	N	415	HIS	CB-CG-CD2	-6.45	122.82	131.20
16	H	304	ASN	CA-C-O	6.45	127.38	120.55
31	W	139	ASP	CA-CB-CG	-6.45	106.16	112.60
9	A	33	ASN	CA-CB-CG	-6.44	106.16	112.60
24	P	442	THR	CA-C-O	-6.44	113.72	120.55
5	4	60	ILE	CB-CA-C	-6.44	103.33	112.22
19	K	354	LEU	N-CA-C	6.44	118.86	110.43
25	Q	172	LEU	N-CA-CB	6.44	119.59	110.12
10	B	89	ARG	NE-CZ-NH1	-6.44	115.06	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	787	LEU	N-CA-C	-6.44	99.69	108.38
5	4	10	PRO	N-CA-C	-6.44	107.26	114.92
9	A	50	ILE	N-CA-C	-6.44	99.21	108.48
9	A	108	GLU	CA-C-N	6.44	127.22	122.59
9	A	108	GLU	C-N-CA	6.44	127.22	122.59
22	N	259	GLN	CA-C-N	6.43	128.81	120.44
22	N	259	GLN	C-N-CA	6.43	128.81	120.44
24	P	116	THR	CA-C-O	6.43	127.29	119.38
24	P	185	PHE	CA-CB-CG	-6.43	107.37	113.80
27	S	174	PHE	CA-CB-CG	-6.43	107.36	113.80
27	S	184	ALA	CA-C-N	6.43	129.19	120.38
27	S	184	ALA	C-N-CA	6.43	129.19	120.38
12	D	195	LEU	CA-C-N	6.43	128.90	120.28
12	D	195	LEU	C-N-CA	6.43	128.90	120.28
18	J	44	ARG	NE-CZ-NH2	6.43	124.99	119.20
4	3	56	LEU	N-CA-C	-6.43	100.10	110.32
20	L	328	TYR	CA-C-N	6.43	129.42	120.29
20	L	328	TYR	C-N-CA	6.43	129.42	120.29
22	N	199	ARG	NE-CZ-NH1	-6.43	115.07	121.50
23	O	343	LEU	N-CA-C	6.43	124.50	110.80
25	Q	74	ARG	N-CA-C	6.43	121.50	112.75
27	S	267	ALA	N-CA-C	6.43	119.28	111.82
1	Z	695	ALA	N-CA-CB	6.43	119.57	110.12
13	E	53	ARG	N-CA-CB	6.43	121.35	110.49
21	M	130	GLN	OE1-CD-NE2	6.43	129.03	122.60
27	S	375	PHE	CA-CB-CG	-6.43	107.37	113.80
29	U	22	HIS	CE1-NE2-CD2	-6.43	102.57	109.00
6	5	83	ALA	CA-C-N	6.42	130.24	121.05
6	5	83	ALA	C-N-CA	6.42	130.24	121.05
29	U	245	PHE	CA-C-N	6.42	130.83	120.30
29	U	245	PHE	C-N-CA	6.42	130.83	120.30
1	Z	391	LEU	CA-C-O	6.42	127.36	120.55
15	G	142	SER	CA-C-N	6.42	133.53	121.97
15	G	142	SER	C-N-CA	6.42	133.53	121.97
24	P	343	SER	CA-C-O	-6.42	114.00	122.03
2	1	97	LEU	O-C-N	6.42	130.17	122.27
10	B	67	PRO	O-C-N	6.42	130.28	123.03
1	Z	166	VAL	N-CA-C	-6.42	104.50	110.53
26	R	363	ASN	CA-CB-CG	-6.42	106.18	112.60
29	U	65	ASP	CA-CB-CG	-6.42	106.18	112.60
5	4	33	ASP	CA-CB-CG	6.42	119.02	112.60
15	G	22	PHE	CA-C-N	6.42	128.88	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	G	22	PHE	C-N-CA	6.42	128.88	120.28
19	K	268	ASP	N-CA-C	6.42	120.21	112.38
30	V	210	ASN	CA-C-N	6.42	128.88	120.28
30	V	210	ASN	C-N-CA	6.42	128.88	120.28
11	C	180	LYS	CA-C-O	-6.42	112.90	120.60
16	H	326	THR	CA-CB-OG1	6.42	119.22	109.60
23	O	72	ASN	CA-CB-CG	6.42	119.02	112.60
29	U	98	GLY	O-C-N	-6.42	115.36	121.77
13	E	56	SER	CB-CA-C	-6.41	99.17	109.37
21	M	424	ILE	CA-C-N	6.41	128.87	120.28
21	M	424	ILE	C-N-CA	6.41	128.87	120.28
24	P	386	VAL	CA-C-N	6.41	129.40	120.29
24	P	386	VAL	C-N-CA	6.41	129.40	120.29
26	R	344	HIS	CE1-NE2-CD2	-6.41	102.59	109.00
27	S	346	LEU	CA-C-N	6.41	128.87	120.28
27	S	346	LEU	C-N-CA	6.41	128.87	120.28
23	O	280	MET	CB-CA-C	-6.41	100.15	110.79
9	A	85	ALA	CB-CA-C	-6.41	100.15	110.79
17	I	398	ILE	CB-CA-C	6.41	120.80	112.14
22	N	501	LEU	CA-C-N	6.41	128.87	120.28
22	N	501	LEU	C-N-CA	6.41	128.87	120.28
24	P	214	PHE	CA-C-N	6.41	128.87	120.28
24	P	214	PHE	C-N-CA	6.41	128.87	120.28
9	A	183	VAL	CA-C-N	6.41	128.86	120.28
9	A	183	VAL	C-N-CA	6.41	128.86	120.28
21	M	394	ALA	CB-CA-C	-6.41	99.96	110.85
22	N	542	GLU	CA-C-N	6.41	128.86	120.28
22	N	542	GLU	C-N-CA	6.41	128.86	120.28
26	R	268	TYR	N-CA-C	-6.41	104.08	112.41
17	I	121	ALA	CA-C-O	-6.40	114.06	121.10
26	R	338	ILE	CA-C-O	-6.40	114.29	120.95
9	A	9	PHE	N-CA-C	-6.40	96.82	108.02
11	C	196	VAL	CB-CA-C	-6.40	103.38	112.22
16	H	83	ASP	CA-CB-CG	6.40	119.00	112.60
29	U	107	ALA	N-CA-C	6.40	118.26	111.28
1	Z	350	LYS	N-CA-C	-6.40	104.39	111.36
16	H	258	ARG	NE-CZ-NH2	6.40	124.96	119.20
18	J	95	PHE	CA-CB-CG	-6.40	107.40	113.80
3	2	233	THR	N-CA-C	-6.40	99.39	109.50
16	H	79	ASP	N-CA-C	-6.39	97.95	108.76
22	N	723	ASP	CA-C-N	6.39	128.74	120.56
22	N	723	ASP	C-N-CA	6.39	128.74	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	174	ASP	N-CA-CB	6.39	121.30	110.49
2	1	142	GLY	O-C-N	-6.39	116.47	122.86
7	6	34	VAL	N-CA-C	-6.39	99.91	108.35
7	6	185	ASN	CA-C-N	6.39	132.69	123.17
7	6	185	ASN	C-N-CA	6.39	132.69	123.17
12	D	221	ASN	CA-CB-CG	6.39	118.99	112.60
27	S	215	ALA	N-CA-C	6.39	119.06	111.71
22	N	237	VAL	CA-C-N	6.39	129.13	120.44
22	N	237	VAL	C-N-CA	6.39	129.13	120.44
1	Z	132	THR	O-C-N	6.39	128.89	122.12
14	F	183	ASN	CA-CB-CG	-6.39	106.21	112.60
23	O	236	THR	CA-C-N	6.39	128.84	120.28
23	O	236	THR	C-N-CA	6.39	128.84	120.28
24	P	188	GLU	N-CA-CB	6.39	119.51	110.12
25	Q	117	ALA	O-C-N	-6.39	114.87	122.15
1	Z	891	THR	CA-C-O	-6.39	111.41	120.16
9	A	109	ILE	CB-CA-C	-6.39	103.88	110.71
16	H	325	ASP	CA-C-O	-6.39	114.05	121.07
22	N	373	ASN	CA-CB-CG	-6.39	106.21	112.60
19	K	356	GLU	N-CA-C	-6.38	105.49	113.28
28	T	198	PHE	CA-CB-CG	6.38	120.18	113.80
32	Y	67	MET	CA-C-O	6.38	126.43	119.15
11	C	76	VAL	CA-C-O	6.38	127.25	120.48
18	J	202	ALA	O-C-N	6.38	128.89	122.12
6	5	97	ASN	CA-CB-CG	-6.38	106.22	112.60
23	O	82	HIS	CE1-NE2-CD2	-6.38	102.62	109.00
28	T	140	GLN	CB-CG-CD	-6.38	101.75	112.60
1	Z	907	ASP	N-CA-CB	6.38	122.98	111.37
18	J	286	THR	N-CA-CB	6.38	121.84	110.80
22	N	458	ILE	O-C-N	6.38	128.40	121.83
6	5	160	ILE	CA-C-O	6.38	127.54	120.59
13	E	137	PHE	N-CA-C	-6.38	100.12	110.20
13	E	155	HIS	CG-CD2-NE2	6.38	113.58	107.20
29	U	278	ASN	OD1-CG-ND2	-6.38	116.22	122.60
17	I	168	ASP	CA-CB-CG	6.38	118.98	112.60
19	K	63	ASP	CA-C-N	6.38	128.82	120.28
19	K	63	ASP	C-N-CA	6.38	128.82	120.28
22	N	373	ASN	CA-C-N	6.38	129.15	120.54
22	N	373	ASN	C-N-CA	6.38	129.15	120.54
16	H	114	ASN	CA-CB-CG	-6.38	106.22	112.60
19	K	296	MET	CA-C-O	6.37	127.51	120.82
22	N	449	ILE	CA-C-O	-6.37	114.09	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	J	343	ASN	CA-C-N	6.37	129.46	120.28
18	J	343	ASN	C-N-CA	6.37	129.46	120.28
22	N	717	ILE	CA-C-N	6.37	128.82	120.28
22	N	717	ILE	C-N-CA	6.37	128.82	120.28
30	V	256	ASN	CA-CB-CG	6.37	118.97	112.60
19	K	274	ARG	CB-CA-C	-6.37	100.90	111.41
16	H	258	ARG	NE-CZ-NH1	-6.37	115.13	121.50
1	Z	608	LYS	N-CA-CB	6.36	119.48	110.12
17	I	84	GLN	CA-C-N	6.36	128.81	120.28
17	I	84	GLN	C-N-CA	6.36	128.81	120.28
1	Z	764	LEU	CA-C-N	6.36	128.81	120.28
1	Z	764	LEU	C-N-CA	6.36	128.81	120.28
1	Z	905	ASN	CA-CB-CG	-6.36	106.24	112.60
19	K	70	LYS	O-C-N	-6.36	114.90	122.15
14	F	52	ALA	CA-C-N	6.36	128.80	120.28
14	F	52	ALA	C-N-CA	6.36	128.80	120.28
18	J	276	LEU	O-C-N	6.36	128.62	122.07
20	L	60	VAL	CB-CA-C	-6.36	103.64	111.08
26	R	252	SER	CA-C-N	6.36	131.04	120.86
26	R	252	SER	C-N-CA	6.36	131.04	120.86
21	M	236	LEU	CB-CA-C	-6.36	100.23	110.79
8	7	124	ASP	CB-CA-C	-6.36	100.42	111.35
17	I	439	TYR	N-CA-C	-6.36	105.53	113.28
28	T	280	GLU	N-CA-C	-6.36	105.68	113.50
10	B	36	VAL	CA-CB-CG1	6.36	121.20	110.40
20	L	347	CYS	CA-C-O	6.36	127.49	120.82
22	N	634	PRO	N-CA-CB	6.36	110.25	103.39
27	S	422	ILE	CA-C-N	6.36	128.80	120.28
27	S	422	ILE	C-N-CA	6.36	128.80	120.28
16	H	213	LEU	CA-C-N	6.35	132.47	122.94
16	H	213	LEU	C-N-CA	6.35	132.47	122.94
22	N	426	TYR	CA-C-N	6.35	130.34	120.68
22	N	426	TYR	C-N-CA	6.35	130.34	120.68
1	Z	206	ASP	N-CA-CB	6.35	119.56	110.16
10	B	35	SER	CA-C-O	-6.35	113.69	121.06
18	J	36	ASN	O-C-N	6.35	128.85	122.12
22	N	355	ASN	CA-C-N	6.35	129.43	120.28
22	N	355	ASN	C-N-CA	6.35	129.43	120.28
29	U	77	ASN	CA-CB-CG	6.35	118.95	112.60
14	F	60	GLN	CG-CD-NE2	-6.35	106.87	116.40
22	N	786	THR	CA-C-O	-6.35	113.57	120.36
1	Z	85	SER	CA-C-O	6.35	127.88	120.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	K	235	PHE	N-CA-CB	6.35	120.00	110.22
25	Q	329	ASN	CA-C-N	6.35	129.42	120.28
25	Q	329	ASN	C-N-CA	6.35	129.42	120.28
29	U	82	PHE	CA-C-N	6.35	128.79	120.28
29	U	82	PHE	C-N-CA	6.35	128.79	120.28
12	D	57	ARG	N-CA-C	-6.35	104.28	111.07
16	H	418	LYS	N-CA-C	6.35	118.20	111.28
30	V	194	HIS	O-C-N	6.34	128.94	122.09
19	K	417	TYR	CA-C-N	6.34	133.12	121.70
19	K	417	TYR	C-N-CA	6.34	133.12	121.70
20	L	220	ASN	CA-C-N	6.34	129.30	120.29
20	L	220	ASN	C-N-CA	6.34	129.30	120.29
10	B	151	PRO	N-CA-C	-6.34	105.93	113.86
15	G	225	HIS	CE1-NE2-CD2	-6.34	102.66	109.00
18	J	384	GLU	CA-C-N	6.34	128.78	120.28
18	J	384	GLU	C-N-CA	6.34	128.78	120.28
20	L	104	THR	N-CA-C	-6.34	103.64	112.45
22	N	871	PRO	N-CA-CB	-6.34	96.59	103.25
1	Z	469	TYR	CB-CG-CD2	-6.34	111.29	120.80
7	6	174	GLN	CA-C-O	-6.34	112.52	118.73
28	T	169	ALA	CA-C-N	6.34	129.29	120.29
28	T	169	ALA	C-N-CA	6.34	129.29	120.29
1	Z	554	TYR	CA-C-N	6.34	129.41	120.28
1	Z	554	TYR	C-N-CA	6.34	129.41	120.28
10	B	74	LEU	N-CA-C	-6.34	99.49	109.50
11	C	28	ILE	CA-C-O	6.34	127.54	120.95
18	J	76	VAL	N-CA-CB	6.34	118.05	110.95
29	U	48	LEU	N-CA-C	-6.34	99.68	109.76
29	U	12	HIS	CA-CB-CG	6.33	120.14	113.80
4	3	76	LEU	N-CA-C	6.33	117.85	111.07
24	P	263	TRP	CA-C-O	-6.33	113.84	120.55
31	W	177	PRO	O-C-N	-6.33	116.08	122.98
2	1	113	ALA	N-CA-CB	6.33	119.53	110.16
27	S	183	GLU	N-CA-C	-6.33	107.40	114.62
9	A	9	PHE	N-CA-CB	6.33	120.65	110.65
16	H	80	LEU	O-C-N	-6.33	115.17	123.21
17	I	322	ARG	CA-C-O	6.33	126.10	119.14
24	P	120	ILE	CA-CB-CG2	-6.33	99.74	110.50
29	U	253	THR	N-CA-C	6.33	118.18	111.28
11	C	123	GLN	CA-C-O	-6.33	113.72	120.42
22	N	729	GLY	N-CA-C	6.33	120.87	112.77
1	Z	238	ASN	OD1-CG-ND2	6.32	128.92	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	K	268	ASP	CA-C-N	6.32	128.75	120.28
19	K	268	ASP	C-N-CA	6.32	128.75	120.28
24	P	199	TYR	N-CA-C	6.32	118.25	111.36
27	S	357	LEU	N-CA-C	-6.32	104.39	111.28
1	Z	726	ILE	O-C-N	6.32	128.94	121.80
11	C	75	SER	N-CA-C	-6.32	98.60	108.90
27	S	214	HIS	ND1-CE1-NE2	6.32	114.72	108.40
14	F	19	ILE	CB-CA-C	-6.32	102.77	110.99
19	K	413	GLU	O-C-N	-6.32	115.53	122.92
23	O	25	LEU	N-CA-C	6.32	117.83	111.07
25	Q	331	LEU	O-C-N	6.32	128.58	122.07
12	D	209	ALA	CB-CA-C	-6.32	98.26	109.70
1	Z	759	LEU	CA-C-N	6.32	128.74	120.28
1	Z	759	LEU	C-N-CA	6.32	128.74	120.28
7	6	222	ARG	CD-NE-CZ	-6.32	115.56	124.40
25	Q	295	LYS	CA-C-N	6.32	131.27	120.72
25	Q	295	LYS	C-N-CA	6.32	131.27	120.72
1	Z	733	GLY	N-CA-C	6.32	121.80	114.16
15	G	25	GLU	CA-C-N	6.32	129.26	120.29
15	G	25	GLU	C-N-CA	6.32	129.26	120.29
27	S	479	ARG	NE-CZ-NH1	6.32	127.82	121.50
9	A	132	ARG	CA-C-N	6.31	126.23	119.85
9	A	132	ARG	C-N-CA	6.31	126.23	119.85
11	C	106	PRO	N-CA-CB	6.31	108.84	103.35
19	K	368	ASP	N-CA-C	-6.31	104.04	112.94
29	U	228	TYR	CB-CG-CD2	6.31	130.27	120.80
31	W	63	THR	O-C-N	6.31	129.91	121.83
8	7	229	TYR	CA-C-N	6.31	129.36	120.28
8	7	229	TYR	C-N-CA	6.31	129.36	120.28
22	N	718	ASN	OD1-CG-ND2	6.31	128.91	122.60
23	O	318	GLY	N-CA-C	-6.31	105.98	115.32
22	N	560	MET	CB-CA-C	-6.30	109.29	116.54
26	R	196	GLN	N-CA-C	-6.30	104.41	111.28
26	R	357	ASN	N-CA-CB	6.30	121.18	111.22
3	2	223	LYS	N-CA-C	-6.30	106.29	112.97
26	R	50	MET	N-CA-CB	-6.30	102.51	110.45
10	B	130	PHE	N-CA-CB	6.30	119.87	110.29
24	P	351	TRP	CA-C-N	6.30	128.63	120.44
24	P	351	TRP	C-N-CA	6.30	128.63	120.44
5	4	138	LEU	CA-C-O	-6.30	113.74	120.42
30	V	190	GLN	N-CA-C	-6.30	104.49	111.36
30	V	74	ALA	O-C-N	6.30	130.11	123.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	103	THR	O-C-N	-6.29	115.86	123.10
6	5	165	LYS	CA-CB-CG	-6.29	101.51	114.10
6	5	167	GLY	O-C-N	6.29	128.06	121.77
18	J	133	PRO	N-CD-CG	6.29	112.64	103.20
8	7	81	PHE	CA-CB-CG	-6.29	107.51	113.80
4	3	43	PHE	CA-CB-CG	-6.29	107.51	113.80
21	M	325	GLN	CB-CA-C	-6.29	97.84	109.29
22	N	803	LYS	O-C-N	-6.29	115.95	123.31
9	A	153	LYS	N-CA-C	-6.29	99.66	109.72
18	J	303	SER	CA-C-N	6.29	128.70	120.28
18	J	303	SER	C-N-CA	6.29	128.70	120.28
9	A	71	LYS	N-CA-C	-6.29	97.45	108.20
22	N	690	ALA	CA-C-N	6.29	128.70	120.28
22	N	690	ALA	C-N-CA	6.29	128.70	120.28
29	U	219	LYS	CA-C-O	-6.29	114.06	121.16
26	R	146	ARG	N-CA-C	6.28	117.79	111.07
26	R	178	ASN	CA-CB-CG	6.28	118.88	112.60
26	R	218	THR	CA-C-N	6.28	128.70	120.28
26	R	218	THR	C-N-CA	6.28	128.70	120.28
2	1	172	TYR	CA-CB-CG	-6.28	102.59	113.90
5	4	141	SER	CB-CA-C	-6.28	100.36	110.79
14	F	148	CYS	O-C-N	-6.28	116.65	121.55
29	U	62	ASP	N-CA-C	-6.28	104.93	112.59
29	U	170	VAL	CB-CA-C	-6.28	103.55	112.22
21	M	327	LYS	N-CA-C	-6.28	98.76	109.24
29	U	13	PRO	CB-CA-C	-6.28	102.94	111.85
21	M	173	LYS	N-CA-CB	6.28	121.37	110.39
4	3	16	GLY	CA-C-O	-6.27	114.73	121.88
13	E	199	LEU	CA-C-N	6.27	128.47	120.56
13	E	199	LEU	C-N-CA	6.27	128.47	120.56
21	M	436	GLN	O-C-N	6.27	130.93	122.59
7	6	69	PRO	CA-C-O	-6.27	112.68	121.90
18	J	129	ASN	CA-CB-CG	6.27	118.87	112.60
22	N	23	ALA	CA-C-N	6.27	128.69	120.28
22	N	23	ALA	C-N-CA	6.27	128.69	120.28
24	P	433	ASN	CA-C-N	6.27	128.69	120.28
24	P	433	ASN	C-N-CA	6.27	128.69	120.28
30	V	287	HIS	ND1-CE1-NE2	6.27	114.67	108.40
1	Z	834	ASP	CA-C-O	6.27	126.64	119.18
11	C	156	TYR	CB-CG-CD2	-6.27	111.39	120.80
19	K	43	ARG	O-C-N	6.27	128.77	122.12
22	N	388	ASP	CA-CB-CG	-6.27	106.33	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	31	ASP	CA-C-N	6.27	131.37	122.09
5	4	31	ASP	C-N-CA	6.27	131.37	122.09
15	G	79	ALA	N-CA-C	-6.27	98.77	109.24
25	Q	309	TYR	CA-C-N	6.27	128.97	120.38
25	Q	309	TYR	C-N-CA	6.27	128.97	120.38
10	B	169	ASN	CB-CA-C	-6.27	100.39	110.79
19	K	388	ARG	O-C-N	-6.27	115.48	122.12
28	T	223	ASN	CA-C-N	6.27	129.05	120.46
28	T	223	ASN	C-N-CA	6.27	129.05	120.46
10	B	197	GLU	CA-C-O	6.27	127.18	119.97
16	H	292	ASP	N-CA-C	-6.26	105.64	113.28
27	S	246	GLY	CA-C-N	6.26	129.19	120.29
27	S	246	GLY	C-N-CA	6.26	129.19	120.29
17	I	172	THR	CA-C-O	-6.26	114.91	121.55
4	3	4	MET	CB-CA-C	6.26	119.59	109.07
18	J	336	MET	O-C-N	-6.26	116.26	123.33
28	T	175	TYR	N-CA-C	6.26	117.77	111.07
28	T	328	THR	N-CA-C	-6.26	105.60	113.18
1	Z	374	SER	CB-CA-C	-6.26	100.21	110.85
6	5	131	GLU	N-CA-C	6.26	117.74	108.60
10	B	71	HIS	CG-CD2-NE2	6.26	113.46	107.20
16	H	46	LYS	CA-C-N	6.26	128.67	120.28
16	H	46	LYS	C-N-CA	6.26	128.67	120.28
31	W	29	GLN	CA-C-O	6.26	127.19	120.55
14	F	152	ASN	CA-C-N	6.26	131.64	123.00
14	F	152	ASN	C-N-CA	6.26	131.64	123.00
21	M	122	ALA	CA-C-N	6.26	131.86	122.91
21	M	122	ALA	C-N-CA	6.26	131.86	122.91
23	O	157	ASP	CB-CA-C	-6.26	100.40	110.79
5	4	92	LEU	CA-C-N	6.26	129.82	120.31
5	4	92	LEU	C-N-CA	6.26	129.82	120.31
16	H	134	ILE	CA-C-N	6.26	129.75	120.87
16	H	134	ILE	C-N-CA	6.26	129.75	120.87
16	H	358	HIS	CB-CG-CD2	-6.26	123.07	131.20
18	J	324	ALA	CA-C-N	6.26	129.29	120.28
18	J	324	ALA	C-N-CA	6.26	129.29	120.28
25	Q	382	GLU	N-CA-C	-6.26	104.22	113.61
18	J	312	ASP	CA-CB-CG	-6.25	106.34	112.60
18	J	53	ASN	CA-C-N	6.25	128.57	120.44
18	J	53	ASN	C-N-CA	6.25	128.57	120.44
18	J	161	ILE	CA-C-N	6.25	128.57	120.44
18	J	161	ILE	C-N-CA	6.25	128.57	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	60	ALA	O-C-N	6.25	128.75	122.12
28	T	308	TRP	CB-CG-CD2	-6.25	118.05	126.80
14	F	21	GLN	N-CA-C	6.25	118.09	111.28
16	H	347	ASP	CA-C-N	6.25	128.66	120.28
16	H	347	ASP	C-N-CA	6.25	128.66	120.28
18	J	172	PRO	CA-C-N	6.25	129.17	120.29
18	J	172	PRO	C-N-CA	6.25	129.17	120.29
20	L	93	LYS	O-C-N	-6.25	117.48	121.85
22	N	352	ILE	CA-C-O	6.25	127.79	121.17
27	S	204	ASP	CA-CB-CG	-6.25	106.35	112.60
5	4	112	GLY	O-C-N	-6.25	115.52	121.77
6	5	69	HIS	CE1-NE2-CD2	-6.25	102.75	109.00
12	D	91	CYS	N-CA-CB	6.25	119.30	110.12
19	K	329	ARG	O-C-N	6.25	130.50	123.19
1	Z	66	LYS	N-CA-C	-6.24	105.30	113.17
16	H	411	GLU	CA-C-O	-6.24	113.93	120.55
28	T	344	ARG	NE-CZ-NH2	6.24	124.82	119.20
6	5	248	SER	CA-C-N	6.24	131.79	122.99
6	5	248	SER	C-N-CA	6.24	131.79	122.99
11	C	96	ARG	CA-C-O	6.24	127.37	120.82
13	E	64	ILE	CA-CB-CG1	6.24	121.01	110.40
30	V	152	LYS	CA-CB-CG	-6.24	101.62	114.10
10	B	207	ASN	N-CA-C	-6.24	105.71	113.38
16	H	59	ILE	O-C-N	6.24	128.26	121.83
17	I	400	THR	CA-C-O	6.24	127.03	120.42
22	N	774	PRO	N-CA-CB	6.24	109.80	103.25
8	7	132	ALA	N-CA-C	6.24	118.16	111.36
22	N	502	TYR	CA-C-N	6.24	129.26	120.28
22	N	502	TYR	C-N-CA	6.24	129.26	120.28
29	U	82	PHE	CA-C-O	-6.24	113.94	120.55
3	2	143	LEU	N-CA-C	-6.23	99.03	109.07
22	N	680	VAL	CA-C-N	6.23	128.54	120.44
22	N	680	VAL	C-N-CA	6.23	128.54	120.44
26	R	206	SER	CA-C-N	6.23	128.63	120.28
26	R	206	SER	C-N-CA	6.23	128.63	120.28
13	E	198	SER	CA-C-N	6.23	129.14	120.29
13	E	198	SER	C-N-CA	6.23	129.14	120.29
26	R	156	LEU	CB-CA-C	-6.23	100.25	110.85
5	4	108	ASP	N-CA-CB	6.23	120.58	110.43
22	N	497	LEU	CA-C-N	6.23	129.25	120.28
22	N	497	LEU	C-N-CA	6.23	129.25	120.28
19	K	390	ASN	CA-CB-CG	-6.23	106.37	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	L	206	LYS	N-CA-C	-6.23	104.31	112.41
22	N	685	GLN	CA-C-O	-6.23	114.28	120.82
29	U	157	HIS	ND1-CE1-NE2	6.23	114.63	108.40
4	3	83	LYS	N-CA-C	-6.22	100.87	110.58
6	5	245	ARG	CA-C-N	6.22	130.85	120.64
6	5	245	ARG	C-N-CA	6.22	130.85	120.64
16	H	222	LYS	N-CA-C	-6.22	104.42	111.14
16	H	395	PHE	CB-CA-C	-6.22	100.46	110.79
20	L	214	LEU	N-CA-C	6.22	117.73	111.07
10	B	100	VAL	CA-CB-CG1	6.22	120.98	110.40
15	G	56	SER	N-CA-C	-6.22	99.52	108.60
21	M	263	ASP	CA-CB-CG	6.22	118.82	112.60
22	N	504	ASP	O-C-N	-6.22	115.64	122.67
1	Z	315	GLU	N-CA-C	-6.22	104.05	112.26
1	Z	340	MET	N-CA-C	6.22	118.14	111.36
8	7	48	ASN	O-C-N	6.22	126.69	121.84
12	D	72	ALA	N-CA-C	-6.22	100.02	109.85
13	E	62	SER	CA-C-N	6.22	128.94	120.54
13	E	62	SER	C-N-CA	6.22	128.94	120.54
22	N	599	ILE	CA-C-O	6.22	127.42	120.95
24	P	322	GLU	CA-C-O	-6.22	113.83	120.42
9	A	228	ARG	N-CA-CB	6.22	123.08	111.52
12	D	123	GLY	CA-C-O	6.22	126.91	119.82
19	K	361	GLU	N-CA-C	6.22	118.06	111.28
20	L	19	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
24	P	377	ARG	CG-CD-NE	-6.22	98.33	112.00
16	H	394	MET	CA-C-O	6.21	127.14	120.55
19	K	223	THR	N-CA-C	6.21	120.12	112.54
27	S	172	VAL	CB-CA-C	-6.21	103.75	112.14
18	J	110	PRO	N-CA-CB	6.21	109.77	103.25
18	J	132	ASP	CA-C-N	6.21	127.61	119.84
18	J	132	ASP	C-N-CA	6.21	127.61	119.84
18	J	225	GLY	CA-C-O	6.21	125.73	119.27
18	J	366	ALA	CA-C-N	6.21	126.87	119.98
18	J	366	ALA	C-N-CA	6.21	126.87	119.98
26	R	370	ILE	CB-CA-C	-6.21	103.75	112.14
25	Q	370	LEU	N-CA-C	6.21	118.05	111.28
11	C	52	ILE	N-CA-C	-6.21	98.75	108.81
29	U	196	HIS	CE1-NE2-CD2	-6.21	102.79	109.00
18	J	363	CYS	CA-C-O	-6.21	113.97	120.55
30	V	90	VAL	CA-CB-CG2	6.21	120.95	110.40
26	R	244	ALA	O-C-N	6.21	128.70	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	196	SER	CB-CA-C	-6.21	100.49	110.79
11	C	260	ASP	CA-CB-CG	6.20	118.80	112.60
22	N	697	GLN	OE1-CD-NE2	6.20	128.80	122.60
26	R	72	LYS	CA-C-N	6.20	128.59	120.28
26	R	72	LYS	C-N-CA	6.20	128.59	120.28
31	W	85	THR	CA-C-N	6.20	128.88	120.44
31	W	85	THR	C-N-CA	6.20	128.88	120.44
6	5	168	PRO	CB-CA-C	6.20	119.45	111.64
14	F	47	VAL	N-CA-C	-6.20	99.44	108.87
26	R	366	TYR	CA-C-N	6.20	128.59	120.28
26	R	366	TYR	C-N-CA	6.20	128.59	120.28
8	7	156	VAL	N-CA-C	-6.20	99.43	108.11
9	A	157	ALA	N-CA-C	-6.20	105.57	113.01
18	J	266	ASP	N-CA-C	-6.20	105.74	113.55
23	O	156	TYR	CA-C-N	6.20	128.59	120.28
23	O	156	TYR	C-N-CA	6.20	128.59	120.28
27	S	474	LEU	N-CA-CB	6.20	119.23	110.12
7	6	213	ARG	O-C-N	6.20	128.50	121.93
14	F	181	GLU	N-CA-C	-6.20	103.13	111.87
16	H	144	ARG	N-CA-CB	6.20	119.23	110.12
22	N	22	PHE	O-C-N	6.20	128.46	122.07
22	N	269	ARG	CA-C-N	6.20	128.50	120.44
22	N	269	ARG	C-N-CA	6.20	128.50	120.44
22	N	478	SER	CB-CA-C	-6.20	100.31	110.85
24	P	152	ILE	O-C-N	6.20	127.88	121.87
25	Q	363	ARG	CA-C-O	-6.20	113.98	120.55
10	B	64	LYS	CA-C-O	6.20	125.34	118.52
15	G	171	GLN	O-C-N	6.20	128.78	122.09
13	E	21	LEU	N-CA-CB	6.20	119.19	109.83
14	F	215	VAL	N-CA-C	-6.20	99.33	107.88
21	M	360	GLU	CB-CA-C	-6.20	100.50	110.79
30	V	125	VAL	CB-CA-C	-6.20	104.04	111.97
7	6	177	LEU	CA-C-N	6.19	128.49	120.44
7	6	177	LEU	C-N-CA	6.19	128.49	120.44
20	L	312	ILE	O-C-N	6.19	128.21	121.83
14	F	162	GLY	O-C-N	-6.19	117.44	122.64
18	J	321	ASN	CA-C-N	6.19	128.58	120.28
18	J	321	ASN	C-N-CA	6.19	128.58	120.28
26	R	362	LYS	CA-C-O	6.19	127.11	120.55
1	Z	716	ASP	CA-C-N	6.19	133.36	121.54
1	Z	716	ASP	C-N-CA	6.19	133.36	121.54
1	Z	763	ARG	CA-C-N	6.19	128.58	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	763	ARG	C-N-CA	6.19	128.58	120.28
11	C	165	GLY	O-C-N	-6.19	116.97	122.85
15	G	44	ASP	N-CA-C	-6.19	105.67	113.72
16	H	335	GLY	N-CA-C	-6.19	106.70	115.43
26	R	46	ARG	NE-CZ-NH2	-6.19	113.63	119.20
27	S	239	THR	CA-C-O	-6.19	114.32	120.70
14	F	163	ALA	CA-C-N	6.19	133.36	121.54
14	F	163	ALA	C-N-CA	6.19	133.36	121.54
17	I	363	ARG	CB-CA-C	-6.19	100.52	110.79
17	I	320	ASP	CA-C-O	6.19	127.27	120.71
20	L	371	VAL	CB-CA-C	-6.18	103.79	112.14
26	R	126	LYS	CA-C-O	-6.18	114.00	120.55
27	S	219	GLU	CA-C-N	6.18	128.48	120.44
27	S	219	GLU	C-N-CA	6.18	128.48	120.44
6	5	141	LEU	CA-C-N	6.18	128.56	120.28
6	5	141	LEU	C-N-CA	6.18	128.56	120.28
19	K	302	ASN	N-CA-C	-6.18	100.25	109.83
25	Q	49	SER	CA-C-N	6.18	128.35	120.56
25	Q	49	SER	C-N-CA	6.18	128.35	120.56
30	V	237	HIS	ND1-CE1-NE2	6.18	114.58	108.40
27	S	400	HIS	CE1-NE2-CD2	-6.18	102.82	109.00
8	7	252	THR	N-CA-C	-6.18	98.66	108.73
11	C	249	ARG	NE-CZ-NH1	6.18	127.68	121.50
17	I	125	THR	N-CA-C	-6.18	99.74	109.50
21	M	421	MET	O-C-N	6.18	128.67	122.12
21	M	438	TYR	CA-C-O	-6.18	113.90	121.06
27	S	336	GLU	CB-CA-C	-6.18	100.54	110.79
14	F	10	VAL	CA-CB-CG1	6.17	120.89	110.40
16	H	181	LYS	N-CA-C	6.17	118.01	111.28
17	I	314	ASN	N-CA-CB	6.17	119.30	110.16
20	L	70	ILE	CA-C-O	-6.17	113.94	120.48
22	N	264	VAL	N-CA-CB	6.17	119.84	110.58
26	R	97	GLU	CA-CB-CG	6.17	126.44	114.10
26	R	236	LEU	CA-C-N	6.17	128.55	120.28
26	R	236	LEU	C-N-CA	6.17	128.55	120.28
28	T	272	ALA	N-CA-CB	-6.17	101.05	110.12
28	T	253	ALA	N-CA-C	6.17	117.80	111.14
29	U	191	ILE	N-CA-C	6.17	116.91	110.62
5	4	186	ASN	OD1-CG-ND2	-6.17	116.43	122.60
8	7	48	ASN	CA-C-O	-6.17	112.96	119.13
7	6	43	ILE	O-C-N	-6.17	116.54	123.20
1	Z	396	ASN	OD1-CG-ND2	6.16	128.76	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	H	286	ASP	CA-C-O	6.16	126.96	119.38
11	C	237	ILE	CA-C-N	6.16	129.04	120.29
11	C	237	ILE	C-N-CA	6.16	129.04	120.29
1	Z	345	PRO	CA-C-N	6.16	129.04	120.29
1	Z	345	PRO	C-N-CA	6.16	129.04	120.29
16	H	194	PRO	CA-C-N	6.16	129.04	120.29
16	H	194	PRO	C-N-CA	6.16	129.04	120.29
30	V	77	GLN	OE1-CD-NE2	-6.16	116.44	122.60
6	5	104	MET	O-C-N	-6.16	116.05	123.13
21	M	149	ASP	O-C-N	-6.16	116.13	123.27
6	5	114	TRP	N-CA-C	6.16	118.96	111.82
31	W	119	ASP	CA-CB-CG	-6.16	106.44	112.60
23	O	183	VAL	CA-CB-CG1	6.15	120.86	110.40
11	C	229	LYS	CA-C-O	-6.15	114.55	121.81
14	F	197	GLU	N-CA-C	6.15	118.07	111.36
17	I	195	GLN	CB-CA-C	-6.15	100.58	110.79
24	P	454	ASN	OD1-CG-ND2	6.15	128.75	122.60
25	Q	17	SER	CA-C-O	-6.15	114.36	120.70
26	R	117	LYS	CA-C-N	6.15	129.03	120.29
26	R	117	LYS	C-N-CA	6.15	129.03	120.29
13	E	226	PHE	CA-CB-CG	-6.15	107.65	113.80
21	M	416	THR	CA-CB-OG1	6.15	118.82	109.60
23	O	319	LEU	N-CA-CB	6.15	119.26	110.16
24	P	154	GLU	CB-CA-C	-6.15	100.58	110.79
1	Z	161	HIS	CE1-NE2-CD2	-6.15	102.85	109.00
11	C	30	HIS	CE1-NE2-CD2	-6.15	102.85	109.00
17	I	171	VAL	CA-C-N	6.15	130.03	120.75
17	I	171	VAL	C-N-CA	6.15	130.03	120.75
14	F	43	HIS	N-CA-C	-6.15	99.70	109.23
20	L	76	GLY	CA-C-N	6.15	127.52	119.84
20	L	76	GLY	C-N-CA	6.15	127.52	119.84
22	N	880	ASN	O-C-N	-6.15	115.52	120.38
1	Z	542	ILE	CA-C-N	6.15	128.51	120.28
1	Z	542	ILE	C-N-CA	6.15	128.51	120.28
17	I	320	ASP	N-CA-CB	6.15	120.58	110.69
22	N	28	ASN	CA-CB-CG	6.15	118.75	112.60
22	N	675	MET	N-CA-CB	6.15	119.81	110.28
1	Z	496	ASP	O-C-N	6.14	128.63	122.12
18	J	241	HIS	CG-CD2-NE2	6.14	113.34	107.20
1	Z	100	ARG	CA-C-N	6.14	125.76	119.56
1	Z	100	ARG	C-N-CA	6.14	125.76	119.56
15	G	181	GLN	OE1-CD-NE2	6.14	128.74	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	157	ILE	CA-CB-CG1	6.14	120.84	110.40
3	2	108	LEU	CB-CA-C	-6.14	100.60	110.79
3	2	221	ILE	CA-CB-CG1	6.14	120.84	110.40
14	F	4	ASN	CA-C-N	6.14	129.01	120.29
14	F	4	ASN	C-N-CA	6.14	129.01	120.29
28	T	334	GLU	N-CA-C	6.14	117.97	111.28
1	Z	524	MET	N-CA-CB	-6.14	101.08	110.16
16	H	108	ASP	CB-CA-C	-6.14	102.12	110.22
27	S	476	PHE	CA-C-N	6.14	128.42	120.44
27	S	476	PHE	C-N-CA	6.14	128.42	120.44
29	U	233	VAL	N-CA-CB	6.14	117.73	110.55
1	Z	336	GLU	CA-C-N	6.13	129.11	120.28
1	Z	336	GLU	C-N-CA	6.13	129.11	120.28
11	C	128	ARG	NE-CZ-NH2	-6.13	113.68	119.20
15	G	103	PHE	N-CA-C	-6.13	104.50	112.23
19	K	97	ASP	N-CA-CB	6.13	119.22	110.51
29	U	12	HIS	CE1-NE2-CD2	-6.13	102.86	109.00
30	V	194	HIS	ND1-CE1-NE2	6.13	114.53	108.40
9	A	132	ARG	N-CA-C	-6.13	101.18	110.50
21	M	215	LEU	O-C-N	6.13	128.62	122.12
22	N	244	MET	O-C-N	6.13	128.62	122.12
19	K	63	ASP	CA-CB-CG	-6.13	106.47	112.60
22	N	447	GLY	CA-C-N	6.13	128.41	120.44
22	N	447	GLY	C-N-CA	6.13	128.41	120.44
22	N	794	ASP	CA-C-N	6.13	130.86	122.34
22	N	794	ASP	C-N-CA	6.13	130.86	122.34
15	G	129	VAL	CA-CB-CG1	6.13	120.82	110.40
22	N	340	GLN	CB-CA-C	-6.13	100.62	110.79
24	P	233	LEU	N-CA-C	6.13	118.04	111.36
1	Z	558	LEU	CA-C-O	-6.13	112.40	118.34
22	N	526	ALA	N-CA-C	6.13	118.04	111.36
23	O	34	TRP	N-CA-CB	6.13	120.84	110.49
24	P	240	TYR	CA-C-N	6.13	128.49	120.28
24	P	240	TYR	C-N-CA	6.13	128.49	120.28
24	P	263	TRP	N-CA-C	-6.13	104.60	111.28
12	D	149	PRO	N-CA-C	-6.12	99.85	112.47
17	I	101	ASP	CB-CA-C	-6.12	100.62	110.79
27	S	352	SER	CA-C-N	6.12	130.18	121.42
27	S	352	SER	C-N-CA	6.12	130.18	121.42
5	4	95	ARG	O-C-N	-6.12	115.17	122.15
21	M	304	ARG	CA-C-N	6.12	128.49	120.28
21	M	304	ARG	C-N-CA	6.12	128.49	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	32	LYS	CA-C-N	6.12	129.41	120.71
23	O	32	LYS	C-N-CA	6.12	129.41	120.71
2	1	233	VAL	N-CA-CB	6.12	121.33	111.23
27	S	295	ILE	O-C-N	6.12	127.91	121.91
29	U	204	LYS	CA-C-N	6.12	128.48	120.28
29	U	204	LYS	C-N-CA	6.12	128.48	120.28
1	Z	471	LEU	N-CA-C	6.12	117.95	111.28
1	Z	713	PHE	CA-C-N	6.12	129.61	120.31
1	Z	713	PHE	C-N-CA	6.12	129.61	120.31
6	5	80	THR	O-C-N	-6.12	115.45	123.16
17	I	342	ILE	CB-CA-C	-6.12	104.16	111.81
19	K	76	GLN	N-CA-CB	6.12	119.64	110.22
7	6	191	HIS	ND1-CE1-NE2	6.12	114.52	108.40
16	H	407	LYS	CA-C-N	6.12	128.47	120.28
16	H	407	LYS	C-N-CA	6.12	128.47	120.28
24	P	268	LYS	CB-CG-CD	6.12	125.36	111.30
30	V	36	LEU	CB-CA-C	-6.12	100.64	110.79
1	Z	402	ASN	CA-CB-CG	-6.11	106.49	112.60
7	6	194	LEU	O-C-N	6.11	130.33	122.81
14	F	180	MET	CB-CA-C	-6.11	108.52	115.79
25	Q	346	GLN	OE1-CD-NE2	6.11	128.71	122.60
27	S	349	ARG	N-CA-C	6.11	117.61	111.07
21	M	316	GLN	OE1-CD-NE2	6.11	128.71	122.60
5	4	94	SER	CA-C-O	-6.11	114.92	121.94
8	7	141	MET	CA-C-N	6.11	128.47	120.28
8	7	141	MET	C-N-CA	6.11	128.47	120.28
13	E	42	THR	CA-C-N	6.11	128.79	120.54
13	E	42	THR	C-N-CA	6.11	128.79	120.54
14	F	110	SER	CA-C-N	6.11	128.38	120.44
14	F	110	SER	C-N-CA	6.11	128.38	120.44
22	N	539	THR	N-CA-CB	6.11	118.96	110.17
27	S	335	VAL	CA-CB-CG1	6.11	120.78	110.40
30	V	113	HIS	ND1-CE1-NE2	6.11	114.51	108.40
22	N	351	MET	CA-C-O	-6.10	114.08	120.55
3	2	128	GLN	CA-CB-CG	6.10	126.30	114.10
25	Q	98	ASP	CA-C-O	6.10	127.02	120.55
32	Y	60	LEU	CA-C-N	6.10	128.74	120.44
32	Y	60	LEU	C-N-CA	6.10	128.74	120.44
1	Z	236	CYS	CA-C-N	6.10	128.47	120.60
1	Z	236	CYS	C-N-CA	6.10	128.47	120.60
17	I	85	MET	CA-C-O	-6.10	114.08	120.55
21	M	417	HIS	ND1-CE1-NE2	6.10	114.50	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	217	CYS	CA-C-N	6.10	128.46	120.28
22	N	217	CYS	C-N-CA	6.10	128.46	120.28
23	O	171	SER	CA-C-N	6.10	128.46	120.28
23	O	171	SER	C-N-CA	6.10	128.46	120.28
25	Q	169	VAL	N-CA-CB	6.10	118.83	110.54
27	S	279	GLN	N-CA-C	-6.10	104.48	112.41
12	D	241	LYS	CA-C-O	-6.10	114.09	120.55
26	R	301	ILE	CB-CA-C	-6.10	103.81	112.22
23	O	307	VAL	CA-C-O	-6.10	114.39	120.85
4	3	141	THR	N-CA-C	-6.09	104.55	112.23
17	I	302	GLU	O-C-N	6.09	130.24	122.93
22	N	756	HIS	CB-CG-ND1	6.09	131.84	122.70
23	O	349	MET	CG-SD-CE	-6.09	87.49	100.90
26	R	260	LEU	O-C-N	6.09	128.58	122.12
31	W	161	ASN	CA-CB-CG	6.09	118.69	112.60
1	Z	285	CYS	CB-CA-C	-6.09	101.12	110.26
22	N	203	LYS	CB-CA-C	-6.09	100.68	110.79
21	M	395	GLN	OE1-CD-NE2	6.09	128.69	122.60
19	K	265	ASP	CA-CB-CG	-6.09	106.51	112.60
16	H	114	ASN	OD1-CG-ND2	-6.09	116.51	122.60
1	Z	782	HIS	N-CA-C	-6.09	101.19	110.14
17	I	233	THR	CA-C-N	6.08	128.35	120.44
17	I	233	THR	C-N-CA	6.08	128.35	120.44
20	L	39	GLN	CA-C-N	6.08	128.93	120.29
20	L	39	GLN	C-N-CA	6.08	128.93	120.29
21	M	258	GLN	CB-CG-CD	-6.08	102.25	112.60
23	O	298	LYS	CA-C-N	6.08	128.72	120.44
23	O	298	LYS	C-N-CA	6.08	128.72	120.44
29	U	157	HIS	CE1-NE2-CD2	-6.08	102.92	109.00
20	L	294	ARG	NE-CZ-NH2	6.08	124.67	119.20
22	N	475	HIS	CA-C-O	6.08	127.21	120.82
25	Q	181	SER	CB-CA-C	6.08	120.01	111.86
30	V	265	MET	CB-CA-C	-6.08	100.69	110.79
1	Z	215	ASP	CB-CA-C	-6.08	100.51	110.85
22	N	165	LYS	CA-C-N	6.08	128.43	120.28
22	N	165	LYS	C-N-CA	6.08	128.43	120.28
18	J	292	ILE	N-CA-C	-6.08	99.60	108.11
1	Z	378	ASN	CA-C-N	6.08	126.73	119.98
1	Z	378	ASN	C-N-CA	6.08	126.73	119.98
1	Z	407	MET	CA-C-N	6.08	128.43	120.28
1	Z	407	MET	C-N-CA	6.08	128.43	120.28
1	Z	603	SER	CA-C-N	-6.08	115.78	121.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	603	SER	C-N-CA	-6.08	115.78	121.62
7	6	51	VAL	O-C-N	-6.08	116.86	123.18
8	7	80	ARG	N-CA-CB	6.08	118.82	110.01
19	K	197	ASP	N-CA-C	6.08	118.29	109.84
22	N	443	LEU	CA-C-N	6.08	128.34	120.44
22	N	443	LEU	C-N-CA	6.08	128.34	120.44
15	G	18	ASP	O-C-N	-6.08	114.46	122.42
2	1	213	ILE	CB-CA-C	6.07	119.83	110.96
22	N	644	TYR	CA-C-O	6.07	127.99	121.55
30	V	284	LEU	N-CA-C	-6.07	104.74	111.36
6	5	131	GLU	CA-C-O	-6.07	114.94	121.38
13	E	148	GLU	N-CA-C	-6.07	105.87	113.28
20	L	217	GLU	CA-C-N	6.07	128.33	120.44
20	L	217	GLU	C-N-CA	6.07	128.33	120.44
29	U	22	HIS	ND1-CE1-NE2	6.07	114.47	108.40
2	1	148	VAL	CA-C-N	6.07	127.43	119.84
2	1	148	VAL	C-N-CA	6.07	127.43	119.84
9	A	112	ASP	O-C-N	6.07	128.55	122.12
21	M	341	ALA	N-CA-C	-6.07	97.87	110.80
22	N	130	LEU	CA-C-N	6.07	128.41	120.28
22	N	130	LEU	C-N-CA	6.07	128.41	120.28
26	R	349	LYS	N-CA-C	6.07	119.78	112.38
29	U	107	ALA	O-C-N	-6.07	115.69	122.12
24	P	363	ILE	CA-C-O	-6.07	114.42	120.85
9	A	63	SER	N-CA-C	-6.06	103.50	113.50
26	R	162	GLU	CA-C-N	6.06	128.32	120.44
26	R	162	GLU	C-N-CA	6.06	128.32	120.44
1	Z	351	THR	CA-C-N	6.06	128.40	120.28
1	Z	351	THR	C-N-CA	6.06	128.40	120.28
5	4	186	ASN	N-CA-C	-6.06	103.99	113.02
18	J	258	ARG	NE-CZ-NH2	6.06	124.66	119.20
23	O	87	MET	N-CA-C	6.06	118.68	111.71
26	R	106	ALA	CA-C-N	6.06	128.90	120.29
26	R	106	ALA	C-N-CA	6.06	128.90	120.29
27	S	337	LEU	CA-C-N	6.06	128.41	120.28
27	S	337	LEU	C-N-CA	6.06	128.41	120.28
4	3	76	LEU	O-C-N	-6.06	115.83	122.07
17	I	180	PRO	N-CA-C	6.06	120.74	111.11
19	K	135	HIS	CA-CB-CG	-6.06	107.74	113.80
9	A	89	SER	N-CA-C	6.06	117.88	111.28
13	E	230	THR	CA-CB-OG1	6.06	118.69	109.60
20	L	244	SER	CA-C-N	6.06	130.76	122.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	L	244	SER	C-N-CA	6.06	130.76	122.34
30	V	203	ILE	O-C-N	-6.06	116.23	122.95
15	G	129	VAL	CA-C-O	6.06	126.39	120.27
23	O	178	ARG	CA-C-N	6.06	128.40	120.28
23	O	178	ARG	C-N-CA	6.06	128.40	120.28
3	2	191	GLU	O-C-N	6.05	128.31	122.07
9	A	12	HIS	CA-C-O	6.05	125.13	118.65
19	K	61	ILE	CA-C-O	-6.05	114.65	120.95
20	L	313	LEU	CA-C-N	6.05	128.31	120.44
20	L	313	LEU	C-N-CA	6.05	128.31	120.44
22	N	270	THR	CA-CB-OG1	6.05	118.68	109.60
1	Z	98	PHE	CA-C-N	6.05	129.51	120.31
1	Z	98	PHE	C-N-CA	6.05	129.51	120.31
2	1	144	GLN	OE1-CD-NE2	-6.05	116.55	122.60
5	4	72	GLY	N-CA-C	-6.05	104.44	114.48
23	O	213	PHE	CA-C-N	6.05	126.70	119.98
23	O	213	PHE	C-N-CA	6.05	126.70	119.98
26	R	256	VAL	CA-C-O	6.05	127.36	119.85
30	V	121	TRP	CA-CB-CG	6.05	125.10	113.60
14	F	56	LEU	CA-C-O	6.05	126.75	119.43
29	U	100	LYS	N-CA-C	-6.05	100.14	109.52
9	A	106	GLY	N-CA-C	-6.05	107.32	115.36
12	D	165	ALA	CA-C-N	6.05	128.30	120.44
12	D	165	ALA	C-N-CA	6.05	128.30	120.44
25	Q	338	VAL	CA-CB-CG1	-6.05	100.12	110.40
12	D	107	ILE	CA-C-O	6.04	127.24	120.95
21	M	251	LEU	N-CA-CB	6.04	120.84	110.68
3	2	181	PHE	N-CA-C	6.04	117.87	111.28
24	P	316	ARG	CA-C-N	6.04	128.30	120.44
24	P	316	ARG	C-N-CA	6.04	128.30	120.44
1	Z	290	VAL	O-C-N	6.04	128.05	121.83
1	Z	355	ASN	CA-C-O	-6.04	114.68	120.90
25	Q	155	ARG	N-CA-C	6.04	117.86	111.28
17	I	406	ALA	O-C-N	6.04	129.03	122.15
21	M	354	PHE	CA-C-O	-6.04	114.38	119.76
1	Z	586	PRO	CA-C-N	6.04	128.87	120.29
1	Z	586	PRO	C-N-CA	6.04	128.87	120.29
22	N	159	ARG	N-CA-C	-6.04	98.00	108.69
12	D	10	PHE	CA-C-N	6.04	129.06	120.49
12	D	10	PHE	C-N-CA	6.04	129.06	120.49
20	L	211	SER	CB-CA-C	-6.04	100.59	110.85
22	N	6	ALA	N-CA-C	6.04	118.36	111.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	F	2	PHE	N-CA-C	6.04	119.97	112.24
14	F	153	TYR	N-CA-C	-6.03	99.36	109.07
23	O	314	ALA	O-C-N	6.03	129.03	122.15
29	U	86	ASN	OD1-CG-ND2	6.03	128.63	122.60
16	H	348	LEU	CB-CA-C	-6.03	100.78	110.79
22	N	673	GLU	CA-C-O	-6.03	112.82	118.73
1	Z	202	HIS	ND1-CE1-NE2	6.03	114.43	108.40
14	F	232	PHE	N-CA-C	-6.03	105.22	113.30
1	Z	665	GLU	N-CA-CB	6.03	118.81	110.07
5	4	153	ARG	CB-CA-C	-6.03	100.60	110.85
22	N	28	ASN	N-CA-CB	6.03	118.98	110.12
1	Z	782	HIS	CA-CB-CG	6.03	119.83	113.80
10	B	62	VAL	CA-C-O	6.03	129.27	121.98
19	K	174	LYS	O-C-N	6.03	128.28	122.07
19	K	123	LEU	N-CA-C	-6.03	104.58	112.41
16	H	53	GLN	CA-C-O	-6.02	114.16	120.55
11	C	104	PRO	O-C-N	6.02	130.64	122.99
22	N	361	ARG	NE-CZ-NH2	6.02	124.62	119.20
25	Q	320	SER	N-CA-C	6.02	117.84	111.28
11	C	166	ASN	CB-CA-C	-6.02	100.51	109.90
20	L	336	ASP	CA-CB-CG	-6.02	106.58	112.60
3	2	252	THR	CA-C-O	6.02	126.72	120.40
13	E	16	SER	CA-C-N	6.02	125.57	119.19
13	E	16	SER	C-N-CA	6.02	125.57	119.19
22	N	339	LEU	CA-C-O	-6.02	114.17	120.55
6	5	195	TYR	O-C-N	6.02	128.50	122.12
12	D	181	ILE	N-CA-C	-6.02	99.69	108.11
17	I	293	LYS	CA-C-O	6.02	126.12	118.54
20	L	332	VAL	O-C-N	-6.02	116.03	121.87
21	M	239	ALA	N-CA-CB	-6.02	101.25	110.16
24	P	245	LYS	CA-C-N	6.02	128.34	120.28
24	P	245	LYS	C-N-CA	6.02	128.34	120.28
1	Z	551	LYS	CA-C-N	6.02	129.45	120.31
1	Z	551	LYS	C-N-CA	6.02	129.45	120.31
19	K	90	GLY	N-CA-C	-6.02	102.16	111.12
1	Z	576	ILE	CA-CB-CG1	6.01	120.62	110.40
17	I	80	ARG	CA-C-N	6.01	128.34	120.28
17	I	80	ARG	C-N-CA	6.01	128.34	120.28
20	L	199	VAL	N-CA-C	-6.01	99.08	107.80
25	Q	379	ASP	CA-C-O	-6.01	113.84	120.70
8	7	135	SER	CB-CA-C	-6.01	100.81	110.79
24	P	356	ASN	OD1-CG-ND2	6.01	128.61	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	D	102	VAL	O-C-N	6.01	130.08	122.57
21	M	133	PHE	N-CA-CB	6.01	120.29	110.37
21	M	202	ILE	CB-CA-C	-6.01	104.05	111.92
22	N	58	GLN	CA-C-N	6.01	128.83	120.29
22	N	58	GLN	C-N-CA	6.01	128.83	120.29
24	P	395	ASN	CA-CB-CG	6.01	118.61	112.60
15	G	29	LYS	CB-CA-C	-6.01	100.81	110.79
15	G	127	SER	CB-CA-C	-6.01	100.30	110.64
31	W	106	LYS	CA-C-O	-6.01	114.86	121.89
31	W	179	LEU	N-CA-C	-6.01	99.21	109.24
22	N	132	GLY	CA-C-O	-6.01	114.51	121.00
30	V	67	VAL	O-C-N	-6.01	116.71	123.20
1	Z	374	SER	N-CA-C	6.01	117.91	111.36
4	3	173	ASN	OD1-CG-ND2	6.01	128.61	122.60
22	N	253	TYR	CA-CB-CG	-6.01	103.09	113.90
26	R	296	VAL	CB-CA-C	-6.01	104.15	112.02
30	V	264	LYS	CA-C-O	6.01	126.79	120.42
12	D	59	VAL	CA-CB-CG1	-6.00	100.19	110.40
21	M	379	VAL	O-C-N	-6.00	116.12	123.03
25	Q	403	THR	O-C-N	-6.00	115.75	122.12
26	R	233	ARG	CA-C-O	-6.00	111.93	120.16
29	U	273	HIS	N-CA-C	6.00	117.83	111.28
1	Z	542	ILE	N-CA-C	6.00	116.78	110.72
7	6	124	LEU	N-CA-C	6.00	117.91	111.36
12	D	235	GLU	N-CA-CB	6.00	119.05	110.16
27	S	177	ASN	N-CA-C	-6.00	103.70	113.19
17	I	333	ARG	CA-C-N	6.00	130.41	121.77
17	I	333	ARG	C-N-CA	6.00	130.41	121.77
10	B	156	PHE	CA-CB-CG	-6.00	107.80	113.80
16	H	409	PHE	CA-CB-CG	-6.00	107.80	113.80
26	R	133	ALA	CA-C-N	6.00	129.43	120.31
26	R	133	ALA	C-N-CA	6.00	129.43	120.31
12	D	196	LEU	CA-C-O	6.00	126.91	120.55
19	K	295	GLN	CA-C-N	6.00	128.23	120.44
19	K	295	GLN	C-N-CA	6.00	128.23	120.44
12	D	26	VAL	CA-C-O	-5.99	114.50	120.85
15	G	180	LEU	CA-C-N	5.99	131.00	120.87
15	G	180	LEU	C-N-CA	5.99	131.00	120.87
22	N	56	SER	CA-C-N	5.99	128.31	120.28
22	N	56	SER	C-N-CA	5.99	128.31	120.28
24	P	398	VAL	N-CA-C	-5.99	104.51	110.62
26	R	62	ASP	N-CA-CB	5.99	118.86	109.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	339	ASP	CA-CB-CG	-5.99	106.61	112.60
8	7	101	ASP	CA-C-N	5.99	129.41	120.31
8	7	101	ASP	C-N-CA	5.99	129.41	120.31
11	C	57	ASP	CA-CB-CG	-5.99	106.61	112.60
22	N	337	LEU	N-CA-C	-5.99	104.83	111.36
22	N	479	LEU	CA-C-N	5.99	126.59	120.00
22	N	479	LEU	C-N-CA	5.99	126.59	120.00
25	Q	245	PRO	CA-C-N	5.99	128.91	120.28
25	Q	245	PRO	C-N-CA	5.99	128.91	120.28
1	Z	768	LEU	CA-C-N	5.99	128.31	120.28
1	Z	768	LEU	C-N-CA	5.99	128.31	120.28
21	M	288	LEU	N-CA-C	-5.99	98.04	110.80
10	B	166	ASN	CA-C-N	5.99	128.30	120.28
10	B	166	ASN	C-N-CA	5.99	128.30	120.28
11	C	100	GLN	O-C-N	5.99	128.56	122.09
31	W	26	LEU	N-CA-CB	-5.99	101.32	110.12
14	F	27	GLU	N-CA-C	-5.99	104.84	111.36
17	I	401	GLU	CA-C-O	5.99	126.86	120.70
24	P	223	LYS	N-CA-CB	5.99	118.92	110.12
29	U	46	LYS	N-CA-C	-5.99	104.83	113.21
31	W	183	LEU	O-C-N	5.99	129.52	122.34
30	V	44	HIS	ND1-CE1-NE2	5.98	114.38	108.40
17	I	335	GLU	O-C-N	5.98	131.16	122.43
16	H	148	GLN	CA-C-O	5.98	130.33	122.44
13	E	12	VAL	CB-CA-C	-5.98	104.26	111.85
13	E	227	HIS	CB-CG-CD2	-5.98	123.43	131.20
15	G	54	VAL	N-CA-C	-5.98	99.78	108.87
20	L	54	GLY	N-CA-C	-5.98	103.51	113.02
20	L	316	HIS	ND1-CE1-NE2	5.98	114.38	108.40
22	N	489	ALA	N-CA-CB	5.98	120.17	110.42
2	1	100	HIS	CG-CD2-NE2	5.98	113.18	107.20
14	F	18	ARG	NE-CZ-NH1	5.98	127.48	121.50
7	6	135	TYR	CB-CA-C	-5.97	101.05	110.79
11	C	196	VAL	CA-C-O	-5.97	114.52	120.85
16	H	192	GLU	O-C-N	5.97	128.54	122.09
18	J	241	HIS	CE1-NE2-CD2	-5.97	103.03	109.00
22	N	567	ILE	N-CA-C	5.97	116.71	110.62
7	6	180	GLN	CA-C-O	-5.97	114.09	120.42
14	F	131	GLY	N-CA-C	-5.97	99.03	113.18
20	L	88	ASP	CA-C-N	5.97	129.38	120.31
20	L	88	ASP	C-N-CA	5.97	129.38	120.31
22	N	763	VAL	CB-CA-C	-5.97	104.08	112.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	63	TRP	N-CA-C	-5.97	98.08	110.80
29	U	104	ASN	CB-CA-C	-5.97	97.83	110.31
29	U	268	SER	O-C-N	-5.97	115.79	122.12
27	S	314	ARG	N-CA-CB	5.97	118.74	109.97
13	E	46	VAL	CB-CA-C	-5.97	101.73	110.62
26	R	104	MET	CG-SD-CE	-5.97	87.77	100.90
16	H	195	LEU	CA-C-N	5.96	128.19	120.44
16	H	195	LEU	C-N-CA	5.96	128.19	120.44
16	H	330	ALA	CB-CA-C	-5.96	100.89	110.79
18	J	60	ARG	CA-C-N	5.96	128.27	120.28
18	J	60	ARG	C-N-CA	5.96	128.27	120.28
9	A	12	HIS	ND1-CE1-NE2	5.96	114.36	108.40
22	N	437	TYR	N-CA-CB	5.96	118.98	110.16
30	V	283	HIS	CA-C-N	5.96	128.76	120.29
30	V	283	HIS	C-N-CA	5.96	128.76	120.29
1	Z	748	LEU	CB-CA-C	-5.96	100.89	110.79
21	M	192	ASP	CB-CA-C	-5.96	101.27	110.81
26	R	236	LEU	CA-C-O	-5.96	114.56	120.82
9	A	29	PHE	CA-CB-CG	5.96	119.76	113.80
9	A	211	LYS	CA-C-O	-5.96	114.74	120.64
10	B	23	GLU	CB-CA-C	-5.96	100.90	110.79
11	C	76	VAL	N-CA-CB	5.96	119.35	111.25
17	I	388	ASP	CA-C-N	5.96	130.86	122.46
17	I	388	ASP	C-N-CA	5.96	130.86	122.46
18	J	33	LEU	N-CA-C	5.96	117.85	111.36
24	P	191	ARG	NE-CZ-NH2	-5.96	113.84	119.20
21	M	246	ALA	N-CA-C	-5.96	101.39	110.14
1	Z	531	ASN	N-CA-C	-5.95	100.36	109.41
4	3	51	ILE	CA-C-N	5.95	128.27	122.73
4	3	51	ILE	C-N-CA	5.95	128.27	122.73
27	S	329	HIS	CE1-NE2-CD2	-5.95	103.05	109.00
31	W	184	ILE	N-CA-C	-5.95	106.95	112.43
17	I	327	VAL	O-C-N	-5.95	116.83	123.26
24	P	413	ILE	CA-C-O	5.95	126.58	120.39
10	B	71	HIS	ND1-CE1-NE2	5.95	114.35	108.40
13	E	23	GLN	N-CA-C	5.95	118.55	111.71
22	N	397	THR	N-CA-C	-5.95	101.39	109.95
19	K	79	VAL	CB-CA-C	-5.95	104.11	112.14
22	N	707	ASN	CA-C-N	5.95	128.25	120.28
22	N	707	ASN	C-N-CA	5.95	128.25	120.28
28	T	223	ASN	N-CA-CB	5.95	118.78	110.04
29	U	285	ALA	CA-C-N	5.95	128.17	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	285	ALA	C-N-CA	5.95	128.17	120.44
1	Z	749	ALA	N-CA-C	5.95	118.55	111.71
22	N	370	VAL	CA-C-N	5.95	128.86	120.42
22	N	370	VAL	C-N-CA	5.95	128.86	120.42
22	N	525	ASN	O-C-N	-5.95	115.28	123.01
32	Y	69	THR	N-CA-C	-5.95	106.07	113.38
1	Z	901	ARG	NE-CZ-NH2	-5.94	113.85	119.20
9	A	22	LEU	O-C-N	5.94	130.52	123.33
18	J	105	ILE	CA-CB-CG2	-5.94	100.39	110.50
19	K	48	GLN	CB-CA-C	-5.94	100.92	110.79
2	1	179	GLU	CA-C-O	-5.94	115.09	121.45
9	A	187	PHE	N-CA-C	-5.94	105.69	113.17
18	J	43	ARG	O-C-N	5.94	128.42	122.12
18	J	192	PRO	CB-CA-C	5.94	119.13	111.64
21	M	337	ILE	N-CA-C	-5.94	101.57	108.82
30	V	246	LYS	CA-C-O	5.94	126.81	120.10
1	Z	519	ALA	CB-CA-C	-5.94	100.94	110.79
12	D	66	ASP	N-CA-C	-5.94	100.94	110.14
17	I	378	VAL	N-CA-CB	5.94	118.39	110.26
18	J	329	LEU	N-CA-C	-5.94	104.89	111.36
19	K	176	GLU	CB-CG-CD	-5.94	102.51	112.60
11	C	24	ALA	CA-C-O	5.94	126.81	120.10
31	W	45	PRO	N-CA-CB	-5.94	97.56	103.20
24	P	247	TYR	CA-C-N	5.93	128.15	120.44
24	P	247	TYR	C-N-CA	5.93	128.15	120.44
5	4	31	ASP	CB-CA-C	-5.93	98.62	110.42
23	O	47	ASP	CA-C-N	5.93	125.94	119.89
23	O	47	ASP	C-N-CA	5.93	125.94	119.89
23	O	370	GLN	CA-C-N	5.93	132.87	121.54
23	O	370	GLN	C-N-CA	5.93	132.87	121.54
1	Z	423	ASP	CA-C-N	5.93	127.75	120.22
1	Z	423	ASP	C-N-CA	5.93	127.75	120.22
28	T	339	VAL	CA-CB-CG1	5.93	120.48	110.40
14	F	72	ILE	CA-C-O	5.93	127.38	121.45
22	N	606	ALA	CB-CA-C	-5.93	100.95	110.79
7	6	132	TYR	N-CA-C	-5.93	101.23	110.42
16	H	410	LEU	CA-C-N	5.93	128.22	120.28
16	H	410	LEU	C-N-CA	5.93	128.22	120.28
12	D	16	LEU	CA-C-N	5.93	128.22	120.28
12	D	16	LEU	C-N-CA	5.93	128.22	120.28
24	P	426	ASN	CA-C-N	5.92	128.70	120.29
24	P	426	ASN	C-N-CA	5.92	128.70	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	321	GLN	CA-C-N	5.92	127.24	119.84
21	M	321	GLN	C-N-CA	5.92	127.24	119.84
11	C	146	GLN	N-CA-CB	5.92	121.72	111.00
9	A	121	ILE	CA-CB-CG1	5.92	120.46	110.40
16	H	144	ARG	CA-C-N	5.92	128.53	120.54
16	H	144	ARG	C-N-CA	5.92	128.53	120.54
18	J	59	LEU	N-CA-CB	5.92	118.82	110.12
28	T	159	LYS	CA-C-O	-5.92	114.72	121.65
28	T	258	PHE	CA-CB-CG	-5.92	107.88	113.80
31	W	7	MET	CA-C-O	5.92	126.83	120.38
14	F	152	ASN	N-CA-CB	5.92	120.13	110.37
24	P	427	ASP	CA-C-N	5.92	128.21	120.28
24	P	427	ASP	C-N-CA	5.92	128.21	120.28
5	4	161	ARG	NH1-CZ-NH2	-5.91	111.61	119.30
9	A	245	ARG	NE-CZ-NH2	5.91	124.52	119.20
16	H	218	PRO	N-CA-C	-5.91	102.58	111.57
18	J	283	PHE	N-CA-C	-5.91	104.74	113.61
19	K	92	PHE	O-C-N	-5.91	115.51	122.96
24	P	360	GLU	N-CA-C	-5.91	104.83	111.28
27	S	355	ARG	CA-C-O	5.91	127.03	120.82
2	1	185	GLU	CA-C-N	5.91	128.68	120.29
2	1	185	GLU	C-N-CA	5.91	128.68	120.29
7	6	121	SER	CB-CA-C	-5.91	100.98	110.79
29	U	209	ARG	O-C-N	5.91	128.39	122.12
18	J	269	VAL	O-C-N	5.91	127.92	121.83
6	5	213	ASP	CA-CB-CG	-5.91	106.69	112.60
12	D	200	GLN	N-CA-CB	5.91	120.47	110.49
22	N	455	GLY	O-C-N	-5.91	116.44	122.17
24	P	397	VAL	CA-C-N	5.91	128.56	120.46
24	P	397	VAL	C-N-CA	5.91	128.56	120.46
26	R	68	ASP	N-CA-CB	5.91	119.32	110.22
10	B	112	GLN	OE1-CD-NE2	5.91	128.51	122.60
17	I	154	HIS	ND1-CE1-NE2	5.91	114.31	108.40
1	Z	582	VAL	CA-C-O	-5.91	114.81	120.95
13	E	89	ILE	N-CA-C	5.91	116.64	110.62
18	J	224	ILE	CB-CA-C	5.91	117.61	111.23
18	J	29	GLU	CA-C-N	5.90	128.19	120.28
18	J	29	GLU	C-N-CA	5.90	128.19	120.28
1	Z	844	VAL	N-CA-CB	5.90	121.66	111.39
7	6	240	LYS	N-CA-C	-5.90	99.76	108.79
22	N	114	GLU	CA-C-N	5.90	129.28	120.31
22	N	114	GLU	C-N-CA	5.90	129.28	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	158	LEU	O-C-N	5.90	128.38	122.12
23	O	279	GLU	CA-C-N	5.90	128.19	120.28
23	O	279	GLU	C-N-CA	5.90	128.19	120.28
1	Z	161	HIS	CB-CG-CD2	-5.90	123.53	131.20
24	P	133	GLU	CA-C-N	5.90	126.65	121.58
24	P	133	GLU	C-N-CA	5.90	126.65	121.58
25	Q	370	LEU	CA-C-N	5.90	129.28	120.31
25	Q	370	LEU	C-N-CA	5.90	129.28	120.31
17	I	132	TYR	CB-CG-CD1	5.90	129.65	120.80
1	Z	845	ARG	N-CA-C	-5.90	106.42	113.97
5	4	4	LEU	CB-CA-C	-5.90	99.25	109.86
9	A	10	ASP	CA-C-O	5.90	125.87	119.15
17	I	277	HIS	CA-CB-CG	-5.90	107.90	113.80
26	R	205	VAL	CA-C-N	5.90	131.01	122.16
26	R	205	VAL	C-N-CA	5.90	131.01	122.16
14	F	152	ASN	OD1-CG-ND2	5.90	128.50	122.60
21	M	255	GLN	CA-C-O	-5.90	114.17	120.42
26	R	161	THR	CA-C-O	-5.90	114.30	120.55
19	K	193	GLN	N-CA-C	5.89	117.71	111.28
25	Q	194	ARG	NE-CZ-NH1	-5.89	115.61	121.50
26	R	257	ARG	CA-C-N	5.89	128.10	120.44
26	R	257	ARG	C-N-CA	5.89	128.10	120.44
16	H	221	GLY	N-CA-C	-5.89	106.52	115.00
18	J	221	GLN	OE1-CD-NE2	5.89	128.49	122.60
21	M	407	ALA	CA-C-N	5.89	128.18	120.28
21	M	407	ALA	C-N-CA	5.89	128.18	120.28
19	K	56	VAL	N-CA-C	5.89	116.63	110.62
29	U	224	HIS	CG-CD2-NE2	5.89	113.09	107.20
1	Z	757	ASN	CA-CB-CG	-5.89	106.71	112.60
10	B	71	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
17	I	373	THR	CA-C-O	5.89	128.35	121.87
22	N	423	MET	CA-C-O	5.89	126.62	119.38
21	M	206	MET	CA-C-O	5.89	127.00	120.82
31	W	13	SER	O-C-N	-5.89	116.69	122.99
4	3	117	PHE	CA-C-O	-5.88	114.84	122.14
9	A	127	GLN	N-CA-C	5.88	118.65	111.82
21	M	318	ASP	CA-C-N	5.88	127.50	120.14
21	M	318	ASP	C-N-CA	5.88	127.50	120.14
22	N	530	GLU	CA-C-N	5.88	128.16	120.28
22	N	530	GLU	C-N-CA	5.88	128.16	120.28
22	N	797	MET	CA-C-N	5.88	127.19	119.84
22	N	797	MET	C-N-CA	5.88	127.19	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	237	VAL	CA-C-O	-5.88	115.15	121.27
13	E	98	ASN	CA-C-N	5.88	128.75	120.28
13	E	98	ASN	C-N-CA	5.88	128.75	120.28
26	R	380	VAL	CA-C-N	5.88	128.16	120.28
26	R	380	VAL	C-N-CA	5.88	128.16	120.28
27	S	171	VAL	CA-C-N	5.88	128.52	120.46
27	S	171	VAL	C-N-CA	5.88	128.52	120.46
3	2	177	ALA	N-CA-CB	5.88	118.86	110.16
11	C	166	ASN	CA-C-N	5.88	130.51	122.34
11	C	166	ASN	C-N-CA	5.88	130.51	122.34
14	F	5	GLN	CA-C-N	5.88	131.43	121.14
14	F	5	GLN	C-N-CA	5.88	131.43	121.14
17	I	138	PHE	N-CA-C	5.88	118.64	111.82
20	L	127	PRO	N-CA-C	-5.88	100.36	112.47
1	Z	169	GLU	CA-C-O	-5.88	114.19	120.42
3	2	111	LEU	CA-C-O	-5.88	114.19	120.42
22	N	15	ASP	CA-CB-CG	-5.88	106.72	112.60
25	Q	152	GLN	OE1-CD-NE2	-5.88	116.72	122.60
3	2	67	MET	N-CA-C	-5.88	106.15	113.38
22	N	135	ASN	O-C-N	5.88	128.35	122.12
22	N	602	LEU	N-CA-CB	5.88	118.86	110.16
24	P	210	ASN	CB-CA-C	-5.88	101.65	110.88
25	Q	137	TYR	CB-CA-C	-5.88	101.03	110.79
26	R	123	ALA	CA-C-N	5.88	128.15	120.28
26	R	123	ALA	C-N-CA	5.88	128.15	120.28
28	T	225	TYR	CB-CA-C	-5.88	101.65	110.88
29	U	215	VAL	CA-C-N	5.88	128.15	120.28
29	U	215	VAL	C-N-CA	5.88	128.15	120.28
17	I	271	PHE	CA-C-N	5.87	128.15	120.28
17	I	271	PHE	C-N-CA	5.87	128.15	120.28
18	J	97	VAL	CA-C-N	5.87	130.58	122.77
18	J	97	VAL	C-N-CA	5.87	130.58	122.77
26	R	40	GLU	N-CA-C	-5.87	104.96	111.36
30	V	125	VAL	CA-CB-CG2	-5.87	100.42	110.40
11	C	254	LYS	CA-C-N	5.87	128.15	120.28
11	C	254	LYS	C-N-CA	5.87	128.15	120.28
14	F	98	VAL	O-C-N	5.87	128.22	121.94
18	J	182	GLN	OE1-CD-NE2	5.87	128.47	122.60
30	V	59	GLY	N-CA-C	-5.87	102.56	111.42
20	L	359	HIS	CA-CB-CG	-5.87	107.93	113.80
21	M	211	LYS	CA-C-N	5.87	128.15	120.28
21	M	211	LYS	C-N-CA	5.87	128.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	222	GLY	CA-C-O	5.87	126.75	121.47
14	F	188	VAL	N-CA-C	5.87	116.61	110.62
16	H	312	ARG	CA-C-O	5.87	126.96	120.80
28	T	180	GLU	N-CA-CB	5.87	120.41	110.49
29	U	275	LEU	O-C-N	-5.87	115.90	122.12
18	J	229	ARG	CA-C-O	-5.87	114.20	120.42
20	L	47	LEU	O-C-N	5.87	128.34	122.12
21	M	156	ASP	CA-CB-CG	-5.87	106.73	112.60
7	6	65	THR	N-CA-C	-5.86	99.50	108.76
18	J	276	LEU	N-CA-C	-5.86	104.80	111.07
23	O	88	THR	CA-CB-OG1	5.86	118.40	109.60
23	O	293	PHE	CB-CA-C	-5.86	99.78	110.63
31	W	159	THR	CB-CA-C	5.86	120.52	110.79
10	B	119	GLN	N-CA-C	5.86	117.75	111.36
17	I	92	GLN	CB-CG-CD	-5.86	102.64	112.60
26	R	58	CYS	N-CA-C	5.86	117.67	111.28
2	1	192	ASN	CA-CB-CG	5.86	118.46	112.60
24	P	263	TRP	CA-CB-CG	5.86	124.73	113.60
2	1	213	ILE	CA-C-O	-5.86	114.26	120.53
5	4	35	MET	N-CA-C	-5.86	99.79	108.99
6	5	146	VAL	CA-CB-CG1	5.86	120.36	110.40
17	I	157	HIS	CG-CD2-NE2	5.86	113.06	107.20
22	N	273	THR	CA-C-N	5.86	125.62	119.76
22	N	273	THR	C-N-CA	5.86	125.62	119.76
1	Z	187	LEU	CA-C-N	5.86	128.48	120.46
1	Z	187	LEU	C-N-CA	5.86	128.48	120.46
24	P	157	GLY	CA-C-N	5.86	130.20	122.06
24	P	157	GLY	C-N-CA	5.86	130.20	122.06
26	R	259	TYR	CB-CA-C	-5.86	100.89	110.85
28	T	121	LEU	CA-C-N	5.86	128.48	120.46
28	T	121	LEU	C-N-CA	5.86	128.48	120.46
1	Z	592	ASN	CB-CG-ND2	5.85	125.18	116.40
1	Z	567	LEU	N-CA-C	5.85	118.19	109.59
6	5	94	ILE	CA-C-O	5.85	126.68	120.48
20	L	328	TYR	O-C-N	-5.85	115.48	122.15
21	M	204	LEU	CA-C-O	-5.85	112.66	118.34
26	R	388	ASN	N-CA-CB	5.85	120.38	110.49
3	2	87	CYS	N-CA-CB	5.85	120.21	110.85
21	M	368	ILE	N-CA-C	5.85	116.03	110.53
24	P	233	LEU	CA-C-N	5.85	128.60	120.29
24	P	233	LEU	C-N-CA	5.85	128.60	120.29
2	1	218	VAL	N-CA-CB	5.85	119.20	111.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	6	212	GLU	N-CA-C	-5.85	106.77	112.97
15	G	178	GLU	N-CA-CB	5.85	119.23	110.22
21	M	338	LEU	N-CA-C	-5.85	98.75	108.34
2	1	63	ARG	CA-C-O	-5.85	115.27	121.88
15	G	126	TYR	CB-CG-CD1	-5.85	112.03	120.80
24	P	165	ILE	CA-CB-CG1	5.85	120.34	110.40
25	Q	79	SER	N-CA-C	5.85	117.65	111.28
14	F	224	TYR	CA-C-O	-5.85	114.06	120.43
16	H	309	PHE	CA-C-N	5.85	128.09	120.26
16	H	309	PHE	C-N-CA	5.85	128.09	120.26
24	P	346	GLU	N-CA-C	-5.85	98.35	110.80
6	5	243	TRP	CE2-CD2-CE3	5.84	124.64	118.80
6	5	253	ASP	CA-CB-CG	-5.84	106.76	112.60
18	J	142	LYS	CA-C-O	5.84	125.81	119.15
19	K	43	ARG	CB-CG-CD	5.84	124.74	111.30
22	N	406	ALA	N-CA-C	5.84	118.43	111.71
1	Z	209	MET	CA-C-N	5.84	128.59	120.29
1	Z	209	MET	C-N-CA	5.84	128.59	120.29
1	Z	557	TRP	N-CA-C	5.84	117.73	111.36
10	B	231	ALA	CA-C-N	5.84	130.47	120.72
10	B	231	ALA	C-N-CA	5.84	130.47	120.72
21	M	267	LEU	N-CA-CB	5.84	118.71	110.12
24	P	71	VAL	CB-CA-C	-5.84	104.25	112.14
24	P	223	LYS	CB-CA-C	-5.84	101.09	110.79
28	T	335	LEU	N-CA-CB	5.84	118.71	110.12
1	Z	380	PHE	CA-C-N	5.84	128.46	120.46
1	Z	380	PHE	C-N-CA	5.84	128.46	120.46
8	7	74	SER	CA-C-O	-5.84	114.39	121.28
22	N	419	ALA	CA-C-N	5.84	128.58	120.29
22	N	419	ALA	C-N-CA	5.84	128.58	120.29
29	U	266	ILE	CB-CA-C	-5.84	104.50	111.97
22	N	155	LEU	CA-C-N	5.84	128.10	120.28
22	N	155	LEU	C-N-CA	5.84	128.10	120.28
25	Q	406	ASN	CB-CA-C	-5.84	101.10	110.79
1	Z	508	SER	N-CA-C	-5.84	99.77	109.46
1	Z	677	HIS	CB-CG-CD2	-5.84	123.61	131.20
8	7	83	ASN	OD1-CG-ND2	5.84	128.44	122.60
18	J	190	GLY	CA-C-N	5.84	126.39	120.38
18	J	190	GLY	C-N-CA	5.84	126.39	120.38
22	N	495	ASP	CA-C-O	-5.84	114.69	120.70
22	N	765	VAL	CA-CB-CG2	-5.84	100.48	110.40
25	Q	390	GLU	CA-C-O	-5.84	112.16	120.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	V	35	SER	CB-CA-C	-5.84	101.72	110.88
30	V	101	GLN	CB-CG-CD	-5.84	102.68	112.60
1	Z	392	THR	CA-CB-OG1	5.83	118.35	109.60
22	N	431	THR	N-CA-C	-5.83	106.13	113.72
22	N	500	ASN	CA-CB-CG	-5.83	106.77	112.60
23	O	264	ASN	CB-CA-C	-5.83	99.47	110.67
23	O	346	ILE	O-C-N	5.83	127.53	121.87
27	S	210	CYS	CA-C-N	5.83	128.58	120.29
27	S	210	CYS	C-N-CA	5.83	128.58	120.29
6	5	156	MET	CG-SD-CE	-5.83	88.07	100.90
10	B	44	VAL	CA-C-O	-5.83	114.34	120.76
22	N	418	GLU	CA-C-N	5.83	128.02	120.44
22	N	418	GLU	C-N-CA	5.83	128.02	120.44
1	Z	565	ASN	CA-CB-CG	-5.83	106.77	112.60
26	R	50	MET	CA-C-O	-5.83	113.69	122.38
26	R	163	LYS	CB-CA-C	-5.83	101.73	110.88
23	O	116	THR	CA-CB-CG2	-5.83	100.59	110.50
25	Q	397	TYR	N-CA-C	-5.83	105.01	111.36
12	D	93	SER	CA-C-N	5.83	128.09	120.28
12	D	93	SER	C-N-CA	5.83	128.09	120.28
19	K	198	PRO	CA-C-N	5.83	127.12	119.84
19	K	198	PRO	C-N-CA	5.83	127.12	119.84
25	Q	135	SER	CA-C-O	-5.83	114.37	120.55
23	O	309	LEU	CB-CA-C	-5.83	100.94	110.85
31	W	107	MET	CA-C-O	5.83	126.73	120.38
1	Z	364	GLN	CA-C-N	5.82	132.45	121.97
1	Z	364	GLN	C-N-CA	5.82	132.45	121.97
16	H	242	GLY	CA-C-N	5.82	128.67	120.28
16	H	242	GLY	C-N-CA	5.82	128.67	120.28
16	H	343	PHE	N-CA-C	-5.82	101.30	109.69
23	O	93	ALA	CA-C-N	5.82	128.56	120.29
23	O	93	ALA	C-N-CA	5.82	128.56	120.29
25	Q	37	GLU	CA-C-N	5.82	128.55	120.63
25	Q	37	GLU	C-N-CA	5.82	128.55	120.63
25	Q	218	HIS	CB-CG-CD2	-5.82	123.63	131.20
27	S	343	PRO	CA-C-N	5.82	128.98	120.71
27	S	343	PRO	C-N-CA	5.82	128.98	120.71
3	2	159	HIS	ND1-CE1-NE2	5.82	114.22	108.40
27	S	473	GLN	CA-C-N	5.82	128.08	120.28
27	S	473	GLN	C-N-CA	5.82	128.08	120.28
22	N	96	TYR	CA-C-N	5.82	128.69	120.42
22	N	96	TYR	C-N-CA	5.82	128.69	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	603	SER	CA-C-O	-5.82	114.21	120.09
1	Z	606	VAL	CA-C-N	5.82	128.08	120.28
1	Z	606	VAL	C-N-CA	5.82	128.08	120.28
22	N	120	GLU	N-CA-C	5.82	119.12	109.46
22	N	776	SER	CA-C-N	5.82	129.91	120.60
22	N	776	SER	C-N-CA	5.82	129.91	120.60
25	Q	218	HIS	ND1-CE1-NE2	5.82	114.22	108.40
26	R	297	ARG	NH1-CZ-NH2	-5.82	111.74	119.30
30	V	291	LEU	CA-C-O	5.82	126.72	120.55
1	Z	340	MET	CA-C-O	5.82	126.58	120.42
7	6	224	CYS	N-CA-CB	5.82	119.90	110.42
16	H	361	SER	N-CA-C	5.82	117.70	111.36
21	M	243	GLN	CA-C-O	5.82	126.58	120.42
21	M	411	GLY	N-CA-C	-5.82	107.07	115.27
8	7	139	ARG	CB-CG-CD	5.81	124.67	111.30
18	J	47	ALA	CA-C-N	5.81	128.07	120.28
18	J	47	ALA	C-N-CA	5.81	128.07	120.28
18	J	310	ARG	N-CA-C	-5.81	106.09	112.72
19	K	243	GLY	N-CA-C	-5.81	100.48	112.34
21	M	334	ARG	NE-CZ-NH1	5.81	127.31	121.50
22	N	339	LEU	N-CA-C	5.81	117.62	111.28
28	T	284	PHE	CA-C-N	5.81	128.07	120.28
28	T	284	PHE	C-N-CA	5.81	128.07	120.28
3	2	132	ARG	NE-CZ-NH2	5.81	124.43	119.20
1	Z	614	HIS	ND1-CE1-NE2	5.81	114.21	108.40
1	Z	815	HIS	CE1-NE2-CD2	-5.81	103.19	109.00
25	Q	247	ALA	CB-CA-C	-5.81	101.15	110.79
27	S	480	ILE	N-CA-CB	5.81	118.44	110.54
14	F	87	PHE	CA-C-O	-5.81	114.72	120.82
22	N	545	LEU	CA-C-N	5.81	128.54	120.29
22	N	545	LEU	C-N-CA	5.81	128.54	120.29
4	3	102	PRO	N-CA-C	-5.81	108.01	114.92
15	G	121	HIS	ND1-CG-CD2	-5.81	100.29	106.10
16	H	217	PRO	CA-C-N	5.81	126.00	120.31
16	H	217	PRO	C-N-CA	5.81	126.00	120.31
27	S	491	VAL	CA-C-N	5.81	128.38	120.54
27	S	491	VAL	C-N-CA	5.81	128.38	120.54
19	K	360	LEU	CA-C-N	5.80	128.06	120.28
19	K	360	LEU	C-N-CA	5.80	128.06	120.28
20	L	88	ASP	N-CA-CB	5.80	118.53	110.17
22	N	353	LEU	O-C-N	5.80	128.27	122.12
22	N	724	VAL	N-CA-C	-5.80	105.07	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	81	LEU	N-CA-C	-5.80	105.03	111.36
24	P	416	GLN	OE1-CD-NE2	5.80	128.40	122.60
30	V	259	VAL	O-C-N	-5.80	116.24	121.87
10	B	77	SER	N-CA-CB	5.80	121.52	111.13
15	G	132	PHE	N-CA-CB	5.80	119.27	110.45
22	N	377	HIS	CE1-NE2-CD2	-5.80	103.20	109.00
19	K	162	VAL	CA-C-O	5.80	128.03	120.78
19	K	206	GLY	O-C-N	5.80	127.57	121.77
26	R	118	GLU	CA-C-N	5.80	126.42	119.98
26	R	118	GLU	C-N-CA	5.80	126.42	119.98
1	Z	895	GLU	CA-C-O	-5.80	114.85	121.58
21	M	212	PHE	CA-C-N	5.80	127.98	120.44
21	M	212	PHE	C-N-CA	5.80	127.98	120.44
22	N	666	LYS	CA-C-O	5.80	126.57	120.42
25	Q	78	ASN	CB-CG-ND2	5.80	125.10	116.40
25	Q	334	ASN	CA-CB-CG	-5.80	106.80	112.60
29	U	73	ASP	CA-C-N	5.80	128.05	120.28
29	U	73	ASP	C-N-CA	5.80	128.05	120.28
29	U	86	ASN	CA-CB-CG	5.80	118.40	112.60
7	6	199	ALA	CA-C-N	5.80	128.05	120.28
7	6	199	ALA	C-N-CA	5.80	128.05	120.28
22	N	113	VAL	CA-C-N	5.80	128.05	120.28
22	N	113	VAL	C-N-CA	5.80	128.05	120.28
28	T	146	ASP	CA-C-N	5.80	127.86	120.56
28	T	146	ASP	C-N-CA	5.80	127.86	120.56
22	N	418	GLU	N-CA-C	-5.79	105.47	112.54
30	V	263	ASP	CB-CA-C	-5.79	101.17	110.79
16	H	336	ARG	N-CA-C	-5.79	98.46	110.80
17	I	112	LEU	N-CA-C	-5.79	100.39	109.25
22	N	683	VAL	CA-C-O	-5.79	114.92	120.95
22	N	727	LYS	CA-C-N	5.79	128.04	120.28
22	N	727	LYS	C-N-CA	5.79	128.04	120.28
25	Q	195	THR	N-CA-C	5.79	117.27	111.07
12	D	124	ARG	O-C-N	-5.79	117.50	123.29
24	P	307	LYS	CA-C-N	5.79	128.04	120.28
24	P	307	LYS	C-N-CA	5.79	128.04	120.28
1	Z	420	TRP	CD2-CE2-CZ2	-5.79	116.61	122.40
8	7	232	PHE	CA-CB-CG	5.79	119.59	113.80
17	I	414	VAL	O-C-N	5.79	129.29	122.69
23	O	321	LYS	N-CA-C	-5.79	98.97	108.41
24	P	85	GLU	CA-C-N	5.79	128.51	120.29
24	P	85	GLU	C-N-CA	5.79	128.51	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	129	PHE	CA-C-O	5.79	127.26	120.89
9	A	33	ASN	N-CA-CB	5.79	121.49	111.13
10	B	6	TYR	CA-C-O	5.79	126.56	120.54
12	D	208	LEU	N-CA-C	-5.79	99.97	109.40
18	J	360	LYS	CA-C-N	5.79	126.41	119.98
18	J	360	LYS	C-N-CA	5.79	126.41	119.98
20	L	124	HIS	CB-CA-C	-5.79	99.71	109.72
15	G	9	ASP	CA-C-N	5.79	128.03	120.28
15	G	9	ASP	C-N-CA	5.79	128.03	120.28
21	M	328	VAL	O-C-N	-5.79	117.01	123.26
1	Z	614	HIS	CE1-NE2-CD2	-5.79	103.22	109.00
4	3	93	ASN	CB-CG-ND2	5.79	125.08	116.40
23	O	66	GLU	CA-C-O	5.79	126.62	119.97
24	P	246	HIS	CE1-NE2-CD2	-5.79	103.21	109.00
25	Q	373	LYS	N-CA-C	-5.79	106.22	113.28
27	S	487	HIS	CG-CD2-NE2	5.79	112.99	107.20
3	2	72	LYS	N-CA-C	-5.78	104.41	112.45
17	I	156	VAL	O-C-N	5.78	127.74	121.78
23	O	257	GLN	O-C-N	-5.78	115.61	122.20
28	T	287	ALA	CA-C-N	5.78	128.03	120.28
28	T	287	ALA	C-N-CA	5.78	128.03	120.28
29	U	195	VAL	N-CA-CB	5.78	118.41	110.54
17	I	281	ILE	CA-C-N	5.78	130.50	122.93
17	I	281	ILE	C-N-CA	5.78	130.50	122.93
20	L	33	LEU	CA-C-O	-5.78	114.42	120.55
21	M	306	VAL	CA-C-N	5.78	128.50	120.29
21	M	306	VAL	C-N-CA	5.78	128.50	120.29
3	2	116	LEU	CA-C-O	-5.78	114.01	120.25
16	H	294	GLU	CA-C-N	5.78	129.78	120.30
16	H	294	GLU	C-N-CA	5.78	129.78	120.30
30	V	251	LEU	N-CA-C	5.78	119.15	111.75
13	E	172	SER	O-C-N	5.78	128.74	122.15
16	H	387	SER	CB-CA-C	-5.78	101.03	110.85
17	I	222	VAL	O-C-N	-5.78	116.64	123.00
19	K	83	GLN	N-CA-C	-5.78	99.48	108.90
22	N	151	ILE	N-CA-C	-5.78	104.88	110.72
22	N	168	LEU	O-C-N	5.78	130.16	123.17
22	N	176	MET	CB-CA-C	-5.78	101.03	110.85
23	O	142	LEU	N-CA-CB	5.78	118.61	110.12
27	S	427	GLN	CB-CG-CD	-5.78	102.78	112.60
28	T	340	ILE	N-CA-CB	5.78	118.40	110.54
29	U	211	TYR	CA-C-N	5.78	128.02	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	211	TYR	C-N-CA	5.78	128.02	120.28
10	B	15	PRO	N-CA-C	-5.78	106.92	114.03
17	I	86	LYS	N-CA-CB	5.78	118.91	110.30
17	I	293	LYS	N-CA-C	-5.78	108.04	114.62
20	L	89	LYS	CA-C-N	5.78	128.60	120.28
20	L	89	LYS	C-N-CA	5.78	128.60	120.28
22	N	565	ALA	CA-C-N	5.78	129.09	120.31
22	N	565	ALA	C-N-CA	5.78	129.09	120.31
3	2	136	TYR	CA-C-N	5.77	128.94	120.91
3	2	136	TYR	C-N-CA	5.77	128.94	120.91
29	U	196	HIS	ND1-CE1-NE2	5.77	114.17	108.40
1	Z	63	LEU	CA-C-N	5.77	126.35	120.00
1	Z	63	LEU	C-N-CA	5.77	126.35	120.00
10	B	127	VAL	CA-CB-CG2	5.77	120.22	110.40
13	E	13	ASN	N-CA-C	-5.77	106.00	113.16
20	L	117	PRO	N-CA-C	-5.77	102.13	111.77
4	3	48	ARG	CA-C-N	-5.77	115.04	123.00
4	3	48	ARG	C-N-CA	-5.77	115.04	123.00
10	B	60	ARG	CA-C-N	5.77	132.56	121.54
10	B	60	ARG	C-N-CA	5.77	132.56	121.54
14	F	134	ILE	CB-CA-C	-5.77	102.99	110.84
24	P	220	GLU	CB-CG-CD	-5.77	102.79	112.60
26	R	304	TYR	CB-CG-CD2	5.77	129.46	120.80
7	6	43	ILE	CA-C-O	5.77	126.47	120.36
10	B	127	VAL	CB-CA-C	-5.77	101.94	110.82
12	D	175	ASN	N-CA-C	5.77	117.57	111.28
14	F	182	CYS	O-C-N	5.77	130.45	122.78
15	G	73	HIS	ND1-CE1-NE2	5.77	114.17	108.40
1	Z	740	ARG	NE-CZ-NH2	5.77	124.39	119.20
1	Z	62	ARG	NE-CZ-NH2	5.76	124.39	119.20
1	Z	498	LEU	O-C-N	5.76	128.23	122.12
1	Z	514	VAL	N-CA-CB	5.76	120.74	111.23
7	6	197	ASP	CA-CB-CG	-5.76	106.84	112.60
29	U	194	GLN	CA-C-O	-5.76	114.44	120.55
1	Z	160	ARG	CA-C-N	5.76	127.93	120.44
1	Z	160	ARG	C-N-CA	5.76	127.93	120.44
1	Z	201	GLU	CB-CG-CD	-5.76	102.80	112.60
10	B	218	PHE	N-CA-C	5.76	118.69	110.10
4	3	104	TYR	CA-C-N	5.76	131.80	122.29
4	3	104	TYR	C-N-CA	5.76	131.80	122.29
13	E	99	HIS	CE1-NE2-CD2	-5.76	103.24	109.00
25	Q	322	HIS	CA-C-N	5.76	128.00	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Q	322	HIS	C-N-CA	5.76	128.00	120.28
6	5	107	GLY	CA-C-O	-5.76	116.34	121.41
11	C	79	ILE	N-CA-C	-5.76	102.14	109.80
15	G	160	GLY	CA-C-O	-5.76	116.11	121.18
30	V	163	ILE	N-CA-C	-5.76	100.02	108.54
11	C	111	VAL	CA-CB-CG1	5.76	120.19	110.40
27	S	453	HIS	CA-C-N	5.76	128.46	120.29
27	S	453	HIS	C-N-CA	5.76	128.46	120.29
27	S	475	ALA	CB-CA-C	-5.76	101.24	110.79
25	Q	74	ARG	NE-CZ-NH2	-5.75	114.02	119.20
25	Q	352	SER	CB-CA-C	-5.75	101.81	110.90
29	U	215	VAL	CB-CA-C	5.75	119.91	112.14
1	Z	279	GLU	CA-C-O	-5.75	114.45	120.55
1	Z	817	VAL	CA-CB-CG1	5.75	120.18	110.40
17	I	376	ASP	N-CA-C	-5.75	106.12	113.02
23	O	353	LEU	CA-C-N	5.75	127.99	120.28
23	O	353	LEU	C-N-CA	5.75	127.99	120.28
13	E	94	VAL	N-CA-C	5.75	116.49	110.62
15	G	201	VAL	O-C-N	5.75	127.45	121.87
1	Z	133	MET	CB-CA-C	-5.75	102.04	110.95
26	R	320	ALA	CA-C-O	-5.75	114.45	120.55
1	Z	335	ARG	N-CA-C	5.75	117.63	111.36
17	I	261	GLY	CA-C-N	5.75	128.26	120.44
17	I	261	GLY	C-N-CA	5.75	128.26	120.44
18	J	272	THR	N-CA-CB	5.75	118.57	110.12
21	M	56	LYS	CA-C-N	5.75	127.98	120.28
21	M	56	LYS	C-N-CA	5.75	127.98	120.28
23	O	289	ARG	N-CA-C	-5.75	104.11	113.19
24	P	249	ALA	N-CA-C	5.75	117.55	111.28
31	W	11	ASP	CA-CB-CG	-5.75	106.85	112.60
1	Z	652	VAL	CA-C-O	-5.75	114.97	120.95
13	E	89	ILE	CA-C-O	-5.75	114.97	120.95
26	R	31	HIS	CA-CB-CG	5.75	119.55	113.80
12	D	104	VAL	N-CA-C	5.75	116.48	110.62
25	Q	416	ASN	CA-C-N	5.75	128.45	120.29
25	Q	416	ASN	C-N-CA	5.75	128.45	120.29
8	7	227	ARG	NE-CZ-NH2	-5.74	114.03	119.20
19	K	133	HIS	ND1-CE1-NE2	5.74	114.14	108.40
21	M	368	ILE	CB-CA-C	-5.74	104.50	112.02
29	U	128	PRO	CA-C-N	5.74	128.44	120.29
29	U	128	PRO	C-N-CA	5.74	128.44	120.29
6	5	157	GLY	O-C-N	5.74	127.88	123.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	J	266	ASP	CA-CB-CG	-5.74	106.86	112.60
4	3	145	GLN	OE1-CD-NE2	5.74	128.34	122.60
7	6	186	MET	N-CA-C	-5.74	102.97	111.81
12	D	221	ASN	CA-C-N	5.74	125.42	119.05
12	D	221	ASN	C-N-CA	5.74	125.42	119.05
18	J	205	HIS	CA-C-N	5.74	128.44	120.29
18	J	205	HIS	C-N-CA	5.74	128.44	120.29
1	Z	279	GLU	O-C-N	5.74	128.20	122.12
28	T	251	ILE	CA-C-N	5.74	125.41	119.56
28	T	251	ILE	C-N-CA	5.74	125.41	119.56
23	O	13	ASN	CA-CB-CG	-5.74	106.86	112.60
28	T	118	ARG	CA-C-N	5.74	127.97	120.28
28	T	118	ARG	C-N-CA	5.74	127.97	120.28
2	1	94	THR	CA-C-N	5.74	127.90	120.44
2	1	94	THR	C-N-CA	5.74	127.90	120.44
14	F	116	THR	CA-CB-OG1	5.74	118.20	109.60
16	H	265	ARG	N-CA-CB	5.74	118.65	110.16
22	N	20	LYS	O-C-N	5.74	127.98	122.07
24	P	297	GLU	O-C-N	5.74	128.69	122.15
2	1	206	GLY	CA-C-N	5.73	129.12	120.75
2	1	206	GLY	C-N-CA	5.73	129.12	120.75
9	A	231	THR	CA-C-N	5.73	127.96	120.28
9	A	231	THR	C-N-CA	5.73	127.96	120.28
27	S	292	THR	N-CA-CB	5.73	118.55	110.12
1	Z	449	GLY	N-CA-C	5.73	119.61	112.73
15	G	71	ASP	CB-CA-C	-5.73	109.98	116.63
23	O	323	SER	CA-C-N	-5.73	115.63	123.14
23	O	323	SER	C-N-CA	-5.73	115.63	123.14
1	Z	597	VAL	O-C-N	-5.73	115.93	121.83
1	Z	675	PHE	CA-CB-CG	5.73	119.53	113.80
2	1	61	ALA	O-C-N	-5.73	116.05	122.12
2	1	108	PRO	CA-C-N	5.73	127.96	120.28
2	1	108	PRO	C-N-CA	5.73	127.96	120.28
8	7	184	THR	N-CA-CB	5.73	119.67	110.85
9	A	21	ARG	N-CA-C	-5.73	101.23	108.45
12	D	26	VAL	O-C-N	5.73	127.73	121.83
22	N	515	ALA	CA-C-O	-5.73	114.48	120.55
27	S	292	THR	N-CA-C	-5.73	105.03	111.28
1	Z	397	LYS	N-CA-CB	-5.73	101.70	110.01
14	F	182	CYS	CA-C-N	5.73	132.48	121.54
14	F	182	CYS	C-N-CA	5.73	132.48	121.54
17	I	95	GLU	CA-C-N	5.73	127.95	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	I	95	GLU	C-N-CA	5.73	127.95	120.28
20	L	376	ASP	CA-CB-CG	5.73	118.33	112.60
21	M	150	LEU	CA-C-N	5.73	131.79	122.69
21	M	150	LEU	C-N-CA	5.73	131.79	122.69
28	T	189	HIS	CB-CG-CD2	-5.73	123.75	131.20
5	4	88	LEU	CA-C-N	5.73	128.53	120.28
5	4	88	LEU	C-N-CA	5.73	128.53	120.28
9	A	221	THR	CA-C-O	5.73	126.54	120.36
11	C	78	GLY	CA-C-N	5.73	129.11	120.75
11	C	78	GLY	C-N-CA	5.73	129.11	120.75
22	N	721	HIS	N-CA-C	-5.73	106.46	113.50
1	Z	803	PHE	N-CA-C	-5.72	104.42	111.40
10	B	67	PRO	CA-C-O	-5.72	114.27	120.97
1	Z	688	ARG	CA-C-N	5.72	127.95	120.28
1	Z	688	ARG	C-N-CA	5.72	127.95	120.28
11	C	20	GLN	CA-C-N	5.72	128.55	120.42
11	C	20	GLN	C-N-CA	5.72	128.55	120.42
13	E	89	ILE	CA-C-N	5.72	127.95	120.28
13	E	89	ILE	C-N-CA	5.72	127.95	120.28
14	F	159	MET	CG-SD-CE	-5.72	88.31	100.90
7	6	126	SER	N-CA-CB	5.72	118.53	110.12
8	7	188	ALA	N-CA-C	5.72	117.52	111.28
14	F	184	LEU	CB-CA-C	-5.72	101.86	110.90
22	N	415	HIS	ND1-CE1-NE2	5.72	114.12	108.40
25	Q	6	VAL	CA-C-N	5.72	128.54	120.42
25	Q	6	VAL	C-N-CA	5.72	128.54	120.42
25	Q	38	ASN	O-C-N	5.72	128.21	122.03
26	R	151	TYR	CB-CA-C	-5.72	99.69	110.67
17	I	241	ASN	N-CA-CB	-5.72	101.70	110.16
22	N	453	HIS	N-CA-C	-5.72	103.78	112.99
30	V	154	LYS	N-CA-C	-5.71	100.61	109.24
8	7	258	HIS	CE1-NE2-CD2	-5.71	103.29	109.00
17	I	230	THR	CA-CB-OG1	5.71	118.17	109.60
17	I	421	LYS	CA-C-N	5.71	128.40	120.29
17	I	421	LYS	C-N-CA	5.71	128.40	120.29
19	K	293	LEU	CA-C-N	5.71	127.94	120.28
19	K	293	LEU	C-N-CA	5.71	127.94	120.28
12	D	203	GLY	CA-C-O	5.71	126.24	119.50
17	I	145	GLU	N-CA-C	-5.71	99.15	109.09
23	O	79	ILE	O-C-N	5.71	128.57	123.03
23	O	156	TYR	N-CA-CB	5.71	118.52	110.12
24	P	187	LEU	O-C-N	5.71	128.18	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	189	SER	N-CA-C	-5.71	105.98	113.12
7	6	122	THR	CA-C-O	5.71	126.60	120.55
17	I	338	ASP	O-C-N	-5.71	116.03	121.57
20	L	44	GLU	N-CA-CB	5.71	118.51	110.12
20	L	81	VAL	N-CA-C	5.71	117.89	108.99
22	N	269	ARG	NE-CZ-NH2	-5.71	114.06	119.20
24	P	396	LEU	O-C-N	-5.71	115.64	122.15
28	T	125	GLU	CA-C-N	5.71	128.94	120.95
28	T	125	GLU	C-N-CA	5.71	128.94	120.95
7	6	175	PRO	N-CA-C	-5.71	105.60	113.53
10	B	15	PRO	CA-C-N	5.71	127.93	120.28
10	B	15	PRO	C-N-CA	5.71	127.93	120.28
11	C	233	VAL	CA-C-N	5.71	128.39	120.29
11	C	233	VAL	C-N-CA	5.71	128.39	120.29
13	E	224	GLN	N-CA-C	5.71	122.92	113.50
14	F	38	LEU	N-CA-C	-5.71	100.03	108.99
21	M	394	ALA	N-CA-CB	5.71	118.61	110.16
24	P	282	GLU	N-CA-C	5.71	118.27	111.71
25	Q	207	GLN	OE1-CD-NE2	5.71	128.31	122.60
25	Q	382	GLU	CB-CG-CD	5.71	122.30	112.60
28	T	140	GLN	O-C-N	5.71	130.18	122.59
1	Z	758	ASN	CA-C-N	5.71	127.92	120.28
1	Z	758	ASN	C-N-CA	5.71	127.92	120.28
2	1	35	THR	N-CA-CB	5.70	120.83	111.08
11	C	166	ASN	OD1-CG-ND2	5.70	128.30	122.60
17	I	190	LEU	CA-C-N	5.70	128.19	120.38
17	I	190	LEU	C-N-CA	5.70	128.19	120.38
25	Q	235	ALA	CA-C-N	5.70	127.92	120.28
25	Q	235	ALA	C-N-CA	5.70	127.92	120.28
27	S	271	VAL	CA-C-N	5.70	127.92	120.28
27	S	271	VAL	C-N-CA	5.70	127.92	120.28
26	R	97	GLU	N-CA-C	-5.70	106.45	113.41
16	H	251	GLY	O-C-N	5.70	128.58	122.65
18	J	370	ALA	N-CA-C	-5.70	105.15	111.36
19	K	272	THR	CA-CB-OG1	5.70	118.15	109.60
7	6	40	ILE	CA-CB-CG1	5.70	120.09	110.40
9	A	225	PRO	N-CA-C	-5.70	100.73	112.47
11	C	166	ASN	CA-CB-CG	-5.70	106.90	112.60
13	E	231	LYS	O-C-N	5.70	128.16	122.12
23	O	284	ARG	CB-CA-C	5.70	121.39	110.17
28	T	276	GLU	N-CA-C	5.70	117.49	111.28
29	U	255	ASP	CA-C-O	-5.70	114.51	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	6	156	GLY	N-CA-C	-5.70	99.68	113.18
16	H	275	ASP	CA-C-N	5.70	132.42	121.54
16	H	275	ASP	C-N-CA	5.70	132.42	121.54
25	Q	82	LYS	O-C-N	-5.70	115.66	122.15
31	W	5	SER	N-CA-C	-5.70	99.90	109.07
3	2	210	LEU	CB-CA-C	-5.69	98.09	109.99
12	D	184	ASP	N-CA-CB	-5.69	101.73	110.16
19	K	275	PHE	N-CA-C	-5.69	105.26	114.09
20	L	141	GLN	N-CA-C	-5.69	105.22	111.82
4	3	121	ILE	CA-CB-CG2	-5.69	100.82	110.50
10	B	10	LEU	CA-C-O	5.69	126.45	120.42
20	L	303	LEU	CA-C-N	5.69	125.70	119.89
20	L	303	LEU	C-N-CA	5.69	125.70	119.89
24	P	444	HIS	N-CA-CB	5.69	118.58	110.16
2	1	219	GLU	N-CA-C	-5.69	99.63	108.90
5	4	95	ARG	NE-CZ-NH2	5.69	124.32	119.20
11	C	189	ALA	CA-C-O	-5.69	114.52	120.55
23	O	69	HIS	CB-CG-CD2	-5.69	123.80	131.20
27	S	441	ALA	N-CA-C	5.69	117.48	111.28
2	1	147	SER	N-CA-CB	5.69	119.70	110.77
13	E	207	GLU	N-CA-C	-5.69	106.99	114.04
20	L	319	PRO	N-CA-C	5.69	121.44	113.53
21	M	74	LYS	CA-C-N	5.69	128.37	120.29
21	M	74	LYS	C-N-CA	5.69	128.37	120.29
21	M	382	GLU	CB-CA-C	-5.69	101.35	110.79
13	E	112	VAL	CA-C-N	5.69	127.90	120.28
13	E	112	VAL	C-N-CA	5.69	127.90	120.28
23	O	293	PHE	CA-CB-CG	-5.69	108.11	113.80
27	S	386	PHE	O-C-N	5.69	128.15	122.12
27	S	492	LYS	CB-CA-C	-5.69	101.71	110.81
10	B	84	ARG	CG-CD-NE	-5.68	99.50	112.00
16	H	400	ARG	CA-C-N	5.68	131.51	122.59
16	H	400	ARG	C-N-CA	5.68	131.51	122.59
17	I	82	GLN	CA-C-O	5.68	126.58	120.55
20	L	274	LYS	CA-C-O	-5.68	114.74	121.16
23	O	130	VAL	CA-C-O	-5.68	114.82	120.85
23	O	161	LYS	N-CA-CB	-5.68	101.75	110.16
25	Q	391	PRO	CB-CA-C	-5.68	103.98	110.92
27	S	194	LYS	CA-C-N	5.68	128.49	120.42
27	S	194	LYS	C-N-CA	5.68	128.49	120.42
1	Z	519	ALA	N-CA-C	5.68	117.47	111.28
7	6	188	ASN	OD1-CG-ND2	-5.68	116.92	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	C	40	ASN	CA-CB-CG	-5.68	106.92	112.60
16	H	106	SER	N-CA-C	5.68	118.41	111.82
24	P	253	THR	CA-C-N	5.68	125.36	119.56
24	P	253	THR	C-N-CA	5.68	125.36	119.56
22	N	241	ASN	CA-CB-CG	5.68	118.28	112.60
22	N	392	TRP	N-CA-CB	5.68	118.47	110.12
27	S	419	LEU	CA-C-N	5.68	127.89	120.28
27	S	419	LEU	C-N-CA	5.68	127.89	120.28
29	U	102	HIS	CE1-NE2-CD2	-5.68	103.32	109.00
14	F	5	GLN	OE1-CD-NE2	-5.68	116.92	122.60
18	J	29	GLU	CB-CA-C	-5.68	101.20	110.85
19	K	284	GLU	CA-C-O	5.68	126.44	120.42
30	V	44	HIS	CE1-NE2-CD2	-5.68	103.32	109.00
18	J	128	PRO	CA-C-N	5.68	133.60	121.45
18	J	128	PRO	C-N-CA	5.68	133.60	121.45
27	S	206	VAL	N-CA-C	-5.67	100.05	108.45
7	6	113	THR	CA-C-O	5.67	126.56	120.55
1	Z	349	TYR	N-CA-CB	5.67	118.46	110.12
3	2	49	VAL	N-CA-C	-5.67	100.06	108.45
9	A	76	ILE	CB-CA-C	5.67	120.13	111.68
28	T	125	GLU	CB-CG-CD	5.67	122.24	112.60
16	H	133	ASP	CA-CB-CG	5.67	118.27	112.60
20	L	38	LYS	CA-C-N	5.67	127.88	120.28
20	L	38	LYS	C-N-CA	5.67	127.88	120.28
22	N	138	PHE	CA-C-N	5.67	127.88	120.28
22	N	138	PHE	C-N-CA	5.67	127.88	120.28
12	D	203	GLY	CA-C-N	5.67	131.53	120.99
12	D	203	GLY	C-N-CA	5.67	131.53	120.99
19	K	188	PHE	CA-CB-CG	5.67	119.47	113.80
19	K	311	THR	O-C-N	-5.67	116.79	123.25
22	N	63	VAL	N-CA-C	5.67	116.45	110.72
22	N	380	THR	CA-C-N	5.67	130.69	122.36
22	N	380	THR	C-N-CA	5.67	130.69	122.36
27	S	430	SER	O-C-N	-5.67	115.99	121.94
21	M	408	LEU	O-C-N	5.67	128.13	122.12
7	6	207	PHE	N-CA-C	5.67	117.53	111.36
1	Z	428	GLN	CA-C-N	5.66	128.22	120.46
1	Z	428	GLN	C-N-CA	5.66	128.22	120.46
26	R	337	PHE	CA-C-O	-5.66	114.42	120.42
9	A	61	LEU	N-CA-C	-5.66	100.66	109.72
22	N	423	MET	CG-SD-CE	-5.66	88.44	100.90
28	T	231	SER	O-C-N	5.66	127.90	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	496	ASP	CA-C-O	-5.66	114.55	120.55
1	Z	591	ALA	N-CA-CB	5.66	118.94	110.22
2	1	197	ALA	O-C-N	5.66	127.90	122.07
27	S	236	ARG	N-CA-C	5.66	117.45	111.28
7	6	139	GLY	N-CA-C	-5.66	102.53	110.96
22	N	199	ARG	NE-CZ-NH2	5.66	124.29	119.20
22	N	685	GLN	CA-C-N	5.66	126.22	120.00
22	N	685	GLN	C-N-CA	5.66	126.22	120.00
25	Q	85	ALA	O-C-N	5.66	128.12	122.12
28	T	344	ARG	CA-C-N	5.66	127.86	120.28
28	T	344	ARG	C-N-CA	5.66	127.86	120.28
10	B	40	ALA	CA-C-N	5.66	132.34	121.54
10	B	40	ALA	C-N-CA	5.66	132.34	121.54
21	M	115	SER	N-CA-CB	5.66	118.45	110.36
5	4	171	PHE	O-C-N	5.65	130.11	122.59
30	V	156	VAL	N-CA-C	-5.65	97.58	109.34
9	A	224	ASN	OD1-CG-ND2	5.65	128.25	122.60
22	N	516	LEU	O-C-N	-5.65	116.13	122.12
22	N	739	ALA	CA-C-N	5.65	131.34	120.66
22	N	739	ALA	C-N-CA	5.65	131.34	120.66
24	P	86	ASN	CA-C-O	-5.65	114.43	120.42
4	3	153	LEU	CA-C-O	-5.65	114.88	120.70
22	N	238	LYS	CA-C-N	5.65	128.90	120.31
22	N	238	LYS	C-N-CA	5.65	128.90	120.31
1	Z	301	HIS	N-CA-CB	5.65	121.29	111.74
6	5	178	ASN	OD1-CG-ND2	-5.65	116.95	122.60
15	G	222	ASN	CA-CB-CG	-5.65	106.95	112.60
16	H	284	ARG	N-CA-C	-5.65	99.46	109.06
20	L	78	ARG	NE-CZ-NH2	5.65	124.28	119.20
1	Z	211	ILE	N-CA-C	5.65	120.02	111.89
3	2	44	THR	CA-C-N	5.65	131.88	121.94
3	2	44	THR	C-N-CA	5.65	131.88	121.94
5	4	132	HIS	CA-C-N	5.65	130.17	121.42
5	4	132	HIS	C-N-CA	5.65	130.17	121.42
8	7	129	SER	CA-C-N	5.65	125.32	119.05
8	7	129	SER	C-N-CA	5.65	125.32	119.05
17	I	120	HIS	N-CA-C	-5.65	100.94	108.74
21	M	317	LEU	N-CA-C	5.65	117.52	111.36
28	T	166	ARG	N-CA-CB	5.65	118.52	110.16
28	T	299	MET	CA-C-N	5.65	127.85	120.28
28	T	299	MET	C-N-CA	5.65	127.85	120.28
29	U	51	SER	CA-C-N	-5.65	112.72	122.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	51	SER	C-N-CA	-5.65	112.72	122.10
31	W	44	ASN	CA-CB-CG	5.65	118.25	112.60
15	G	193	GLU	N-CA-C	5.65	117.51	111.36
20	L	198	VAL	CA-CB-CG2	-5.65	100.80	110.40
23	O	248	PHE	CB-CA-C	-5.65	101.25	110.85
1	Z	211	ILE	CA-C-N	5.64	130.15	122.19
1	Z	211	ILE	C-N-CA	5.64	130.15	122.19
6	5	81	ALA	N-CA-CB	5.64	120.03	110.49
16	H	412	ALA	O-C-N	5.64	128.10	122.12
18	J	322	GLU	CA-C-N	5.64	127.78	120.44
18	J	322	GLU	C-N-CA	5.64	127.78	120.44
20	L	19	HIS	ND1-CE1-NE2	5.64	114.05	108.40
24	P	144	ARG	N-CA-C	5.64	117.43	111.28
30	V	75	MET	CA-C-N	5.64	126.90	119.84
30	V	75	MET	C-N-CA	5.64	126.90	119.84
1	Z	186	THR	CA-C-O	-5.64	114.44	120.42
1	Z	779	CYS	CA-C-N	5.64	126.89	119.84
1	Z	779	CYS	C-N-CA	5.64	126.89	119.84
6	5	241	ASP	N-CA-C	-5.64	98.78	110.80
9	A	205	VAL	CA-C-O	5.64	127.31	121.05
17	I	314	ASN	CA-CB-CG	-5.64	106.96	112.60
20	L	22	ILE	CA-C-N	5.64	127.84	120.28
20	L	22	ILE	C-N-CA	5.64	127.84	120.28
23	O	216	LEU	CA-C-N	5.64	127.84	120.28
23	O	216	LEU	C-N-CA	5.64	127.84	120.28
23	O	369	HIS	CA-CB-CG	-5.64	108.16	113.80
27	S	320	THR	CA-C-N	5.64	130.14	120.72
27	S	320	THR	C-N-CA	5.64	130.14	120.72
19	K	301	GLN	N-CA-C	-5.64	105.35	114.09
21	M	244	THR	CA-CB-OG1	5.64	118.06	109.60
22	N	743	ASN	CA-CB-CG	-5.64	106.96	112.60
29	U	15	VAL	O-C-N	5.64	127.44	121.91
3	2	165	LEU	CA-C-N	5.64	125.25	119.56
3	2	165	LEU	C-N-CA	5.64	125.25	119.56
22	N	264	VAL	N-CA-C	5.64	116.42	110.72
27	S	276	PHE	CB-CG-CD1	5.64	130.29	120.70
30	V	136	LEU	N-CA-CB	5.64	118.25	110.07
1	Z	838	ARG	CA-C-O	-5.64	114.56	120.09
10	B	116	SER	CA-C-O	-5.64	114.44	120.42
18	J	129	ASN	CA-C-O	-5.64	115.46	121.94
1	Z	671	ALA	CB-CA-C	-5.64	101.43	110.79
11	C	249	ARG	NH1-CZ-NH2	-5.64	111.97	119.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	J	247	PHE	CA-CB-CG	-5.64	108.16	113.80
21	M	130	GLN	CG-CD-OE1	-5.64	109.53	120.80
21	M	255	GLN	N-CA-CB	5.64	118.50	110.16
25	Q	367	GLN	CB-CA-C	-5.64	101.43	110.79
30	V	118	PHE	N-CA-C	-5.64	105.71	112.59
30	V	194	HIS	CE1-NE2-CD2	-5.64	103.36	109.00
1	Z	539	LEU	N-CA-CB	5.63	118.18	110.01
25	Q	89	VAL	CA-C-N	5.63	128.29	120.29
25	Q	89	VAL	C-N-CA	5.63	128.29	120.29
25	Q	134	VAL	O-C-N	5.63	127.33	121.87
26	R	242	LYS	N-CA-C	-5.63	106.29	114.12
27	S	441	ALA	CA-C-O	5.63	126.52	120.55
30	V	249	LEU	CB-CA-C	-5.63	102.03	110.88
6	5	125	TYR	N-CA-CB	-5.63	101.82	110.16
9	A	146	GLU	CA-C-O	-5.63	112.85	119.05
25	Q	304	LYS	N-CA-C	-5.63	105.04	111.07
9	A	99	ALA	CA-C-N	5.63	127.83	120.28
9	A	99	ALA	C-N-CA	5.63	127.83	120.28
12	D	145	TYR	N-CA-C	-5.63	100.79	109.52
16	H	157	ILE	N-CA-CB	5.63	120.52	111.23
17	I	338	ASP	CA-CB-CG	-5.63	106.97	112.60
18	J	279	GLN	CA-C-N	5.63	127.83	120.28
18	J	279	GLN	C-N-CA	5.63	127.83	120.28
23	O	192	GLU	CB-CA-C	-5.63	101.44	110.79
29	U	8	LYS	N-CA-C	-5.63	100.15	108.99
4	3	131	MET	CA-C-N	5.63	129.62	121.18
4	3	131	MET	C-N-CA	5.63	129.62	121.18
18	J	246	ILE	N-CA-C	-5.63	99.04	107.37
29	U	20	VAL	CA-C-N	5.63	128.28	120.29
29	U	20	VAL	C-N-CA	5.63	128.28	120.29
3	2	190	GLU	N-CA-C	-5.63	100.97	108.34
16	H	262	GLU	N-CA-CB	-5.63	101.85	110.12
17	I	313	LEU	CA-C-N	5.63	128.28	120.29
17	I	313	LEU	C-N-CA	5.63	128.28	120.29
18	J	300	ILE	CA-C-N	5.63	129.90	122.30
18	J	300	ILE	C-N-CA	5.63	129.90	122.30
20	L	145	LEU	CA-C-O	5.63	126.39	120.42
24	P	158	ASP	CA-C-N	5.63	128.41	120.42
24	P	158	ASP	C-N-CA	5.63	128.41	120.42
8	7	217	CYS	N-CA-CB	5.63	118.39	110.12
21	M	69	MET	N-CA-C	-5.63	105.23	111.36
16	H	150	HIS	CA-CB-CG	5.62	119.42	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	175	ASP	CA-CB-CG	-5.62	106.98	112.60
14	F	85	CYS	CA-C-N	5.62	128.28	120.29
14	F	85	CYS	C-N-CA	5.62	128.28	120.29
15	G	98	ASN	N-CA-C	-5.62	105.23	111.36
22	N	876	GLN	OE1-CD-NE2	5.62	128.22	122.60
25	Q	325	LYS	CA-C-O	-5.62	114.46	120.42
19	K	415	GLU	N-CA-C	-5.62	105.77	113.30
22	N	613	ASP	CA-C-N	5.62	128.16	120.46
22	N	613	ASP	C-N-CA	5.62	128.16	120.46
22	N	802	TYR	N-CA-C	-5.62	100.17	108.99
23	O	287	ASN	N-CA-C	-5.62	105.01	113.89
27	S	264	TYR	CA-C-N	5.62	128.08	120.38
27	S	264	TYR	C-N-CA	5.62	128.08	120.38
1	Z	589	SER	N-CA-C	5.62	117.41	111.28
1	Z	892	PRO	N-CD-CG	5.62	111.63	103.20
18	J	289	ILE	N-CA-C	-5.62	99.55	107.75
29	U	167	ALA	CB-CA-C	-5.62	101.30	110.85
1	Z	410	ALA	N-CA-CB	5.62	118.16	110.01
3	2	265	GLU	CA-C-O	-5.62	111.25	120.80
6	5	165	LYS	CA-C-O	5.62	126.45	120.10
13	E	184	VAL	CA-CB-CG1	-5.62	100.85	110.40
14	F	77	LEU	CA-C-N	5.62	127.81	120.28
14	F	77	LEU	C-N-CA	5.62	127.81	120.28
22	N	756	HIS	ND1-CE1-NE2	5.62	114.02	108.40
30	V	287	HIS	CG-CD2-NE2	5.62	112.82	107.20
22	N	128	GLN	CA-C-N	5.62	127.81	120.28
22	N	128	GLN	C-N-CA	5.62	127.81	120.28
11	C	5	TYR	CB-CA-C	-5.62	99.57	110.46
14	F	6	TYR	N-CA-C	-5.62	105.93	112.89
1	Z	138	GLU	CA-C-N	5.61	128.84	120.31
1	Z	138	GLU	C-N-CA	5.61	128.84	120.31
13	E	123	PHE	CA-CB-CG	-5.61	108.19	113.80
20	L	175	PRO	CA-C-O	-5.61	112.42	120.56
26	R	84	LEU	CB-CA-C	-5.61	101.31	110.85
26	R	129	ASP	CA-CB-CG	-5.61	106.99	112.60
1	Z	173	LEU	N-CA-C	5.61	117.07	111.07
1	Z	666	ILE	CA-C-O	-5.61	114.90	120.85
23	O	303	THR	CA-C-N	5.61	128.15	120.46
23	O	303	THR	C-N-CA	5.61	128.15	120.46
20	L	225	HIS	CA-C-O	5.61	126.29	119.11
26	R	31	HIS	ND1-CE1-NE2	5.61	114.01	108.40
29	U	96	HIS	CA-CB-CG	5.61	119.41	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	1	90	ALA	CA-C-O	-5.61	114.61	120.55
10	B	86	LEU	N-CA-CB	5.61	118.46	110.16
13	E	56	SER	N-CA-C	5.61	117.87	110.36
14	F	55	GLU	N-CA-C	5.61	117.07	111.07
16	H	92	PRO	CA-C-O	-5.61	115.17	122.12
17	I	168	ASP	CA-C-O	-5.61	114.34	120.17
21	M	116	GLN	CB-CG-CD	-5.61	103.07	112.60
29	U	18	SER	CB-CA-C	-5.61	101.48	110.79
3	2	85	TYR	CA-CB-CG	-5.61	103.81	113.90
10	B	109	GLN	CA-C-O	-5.61	114.61	120.55
17	I	418	ASP	CA-C-N	5.61	128.25	120.29
17	I	418	ASP	C-N-CA	5.61	128.25	120.29
21	M	431	LYS	N-CA-C	-5.61	100.10	109.24
26	R	272	PHE	N-CA-C	-5.61	106.28	113.23
15	G	10	LEU	CA-C-O	5.60	126.49	120.55
1	Z	754	LYS	N-CA-C	-5.60	106.11	113.17
14	F	70	ILE	CA-C-O	-5.60	115.34	121.28
1	Z	140	LEU	O-C-N	5.60	127.84	122.07
17	I	410	ARG	N-CA-CB	5.60	120.59	112.13
23	O	120	ALA	N-CA-C	-5.60	105.26	111.36
29	U	25	ARG	NE-CZ-NH1	-5.60	115.90	121.50
31	W	130	ARG	CA-C-N	5.60	127.78	120.28
31	W	130	ARG	C-N-CA	5.60	127.78	120.28
1	Z	908	LEU	N-CA-CB	5.60	120.02	110.50
20	L	148	VAL	CA-CB-CG1	5.60	119.92	110.40
25	Q	370	LEU	CB-CA-C	-5.60	101.50	110.79
1	Z	688	ARG	N-CA-C	5.60	117.46	111.36
9	A	95	ARG	NE-CZ-NH2	5.60	124.24	119.20
19	K	282	ASP	CA-CB-CG	5.60	118.20	112.60
21	M	320	PHE	CA-CB-CG	-5.60	108.20	113.80
23	O	75	SER	N-CA-C	-5.60	105.80	113.30
3	2	235	PRO	CA-C-N	5.59	129.72	120.94
3	2	235	PRO	C-N-CA	5.59	129.72	120.94
8	7	102	TYR	N-CA-C	5.59	118.31	111.82
14	F	196	ARG	CA-C-O	5.59	126.42	120.10
23	O	62	ASN	CA-C-N	5.59	128.24	120.29
23	O	62	ASN	C-N-CA	5.59	128.24	120.29
24	P	146	THR	N-CA-C	5.59	117.38	111.28
24	P	226	TYR	CB-CA-C	-5.59	101.34	110.85
26	R	383	LEU	CA-C-N	5.59	128.81	120.31
26	R	383	LEU	C-N-CA	5.59	128.81	120.31
25	Q	196	THR	CA-C-O	5.59	126.35	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	413	SER	N-CA-C	5.59	118.14	111.71
19	K	178	ARG	NE-CZ-NH2	-5.59	114.17	119.20
20	L	36	LEU	N-CA-C	5.59	117.38	111.28
30	V	157	ILE	CA-C-O	-5.59	115.35	121.28
1	Z	62	ARG	NE-CZ-NH1	-5.59	115.91	121.50
12	D	21	TYR	N-CA-CB	5.59	118.94	110.28
18	J	292	ILE	CA-C-O	5.59	126.26	120.39
25	Q	420	LYS	N-CA-CB	5.59	119.94	110.49
8	7	101	ASP	CA-CB-CG	-5.59	107.01	112.60
17	I	210	TYR	CB-CG-CD2	-5.59	112.42	120.80
17	I	353	PHE	CA-CB-CG	-5.59	108.21	113.80
22	N	614	VAL	N-CA-C	5.59	116.32	110.62
25	Q	63	ALA	O-C-N	5.59	128.04	122.12
26	R	221	THR	CA-C-N	5.59	127.77	120.28
26	R	221	THR	C-N-CA	5.59	127.77	120.28
28	T	178	TYR	CG-CD1-CE1	-5.59	112.82	121.20
1	Z	519	ALA	N-CA-CB	5.58	118.33	110.12
2	1	63	ARG	NE-CZ-NH2	-5.58	114.17	119.20
11	C	186	LEU	N-CA-C	5.58	117.37	111.28
18	J	206	HIS	ND1-CE1-NE2	5.58	113.98	108.40
24	P	417	ARG	N-CA-C	-5.58	101.71	110.14
24	P	453	HIS	CB-CG-CD2	-5.58	123.94	131.20
3	2	199	SER	O-C-N	5.58	128.04	122.12
4	3	165	GLU	CB-CA-C	-5.58	101.53	110.79
6	5	128	ARG	NE-CZ-NH2	5.58	124.22	119.20
22	N	345	ASN	CA-CB-CG	-5.58	107.02	112.60
22	N	472	ILE	O-C-N	-5.58	116.46	121.87
23	O	220	PRO	N-CA-C	-5.58	101.06	110.21
23	O	301	LYS	CB-CA-C	-5.58	104.38	111.86
24	P	449	GLU	N-CA-CB	5.58	118.32	110.12
2	1	235	THR	N-CA-C	5.58	117.49	110.24
9	A	176	THR	OG1-CB-CG2	-5.58	98.14	109.30
19	K	80	LYS	O-C-N	-5.58	115.79	122.15
3	2	259	ILE	CA-CB-CG1	5.58	119.88	110.40
20	L	133	SER	N-CA-C	-5.58	104.72	112.03
27	S	408	ARG	NE-CZ-NH2	-5.58	114.18	119.20
6	5	149	TYR	N-CA-CB	5.58	118.92	110.28
20	L	316	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
23	O	152	HIS	CG-CD2-NE2	5.58	112.78	107.20
29	U	197	GLY	O-C-N	5.58	127.60	122.19
30	V	203	ILE	CA-C-N	5.58	128.79	120.87
30	V	203	ILE	C-N-CA	5.58	128.79	120.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	322	SER	CA-C-N	5.58	128.02	120.44
1	Z	322	SER	C-N-CA	5.58	128.02	120.44
1	Z	499	THR	N-CA-C	5.58	117.36	111.28
1	Z	581	GLU	CA-C-N	5.58	128.10	120.46
1	Z	581	GLU	C-N-CA	5.58	128.10	120.46
2	1	117	PHE	CA-CB-CG	-5.58	108.22	113.80
16	H	349	GLU	CA-C-N	5.58	126.17	119.98
16	H	349	GLU	C-N-CA	5.58	126.17	119.98
22	N	361	ARG	CA-C-N	5.58	132.19	121.54
22	N	361	ARG	C-N-CA	5.58	132.19	121.54
3	2	128	GLN	CA-C-N	5.57	127.69	120.44
3	2	128	GLN	C-N-CA	5.57	127.69	120.44
11	C	61	PHE	N-CA-C	-5.57	105.35	111.82
12	D	171	PHE	O-C-N	5.57	127.81	122.07
14	F	147	THR	N-CA-CB	5.57	119.67	110.69
22	N	726	ALA	CA-C-N	5.57	128.20	120.29
22	N	726	ALA	C-N-CA	5.57	128.20	120.29
26	R	31	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
26	R	105	MET	CA-C-N	5.57	127.75	120.28
26	R	105	MET	C-N-CA	5.57	127.75	120.28
27	S	178	SER	CA-C-O	5.57	127.42	121.45
1	Z	388	ASP	CA-C-N	5.57	127.74	120.28
1	Z	388	ASP	C-N-CA	5.57	127.74	120.28
6	5	83	ALA	N-CA-CB	5.57	120.04	111.46
25	Q	152	GLN	CA-C-O	5.57	126.32	120.42
7	6	173	LEU	CB-CA-C	-5.57	101.39	110.85
10	B	82	ASP	CB-CA-C	-5.57	101.39	110.85
13	E	227	HIS	ND1-CE1-NE2	5.57	113.97	108.40
19	K	314	ALA	N-CA-C	-5.57	103.64	110.65
21	M	73	ILE	CA-C-N	5.57	127.74	120.28
21	M	73	ILE	C-N-CA	5.57	127.74	120.28
24	P	315	MET	N-CA-CB	5.57	118.47	110.40
28	T	306	ARG	CA-CB-CG	-5.57	102.97	114.10
12	D	245	LYS	N-CA-C	5.56	117.34	111.28
16	H	264	ALA	CB-CA-C	-5.56	101.39	110.85
25	Q	194	ARG	N-CA-CB	5.56	118.30	110.12
29	U	52	ASN	OD1-CG-ND2	5.56	128.16	122.60
15	G	89	ALA	N-CA-C	5.56	117.42	111.36
29	U	109	ASN	N-CA-C	5.56	117.34	111.28
29	U	117	PRO	N-CA-CB	5.56	109.60	103.26
13	E	94	VAL	CA-C-N	5.56	128.19	120.29
13	E	94	VAL	C-N-CA	5.56	128.19	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	L	363	VAL	CA-C-N	5.56	128.29	120.28
20	L	363	VAL	C-N-CA	5.56	128.29	120.28
22	N	707	ASN	CA-CB-CG	-5.56	107.04	112.60
11	C	159	TRP	CE3-CZ3-CH2	5.56	128.33	121.10
15	G	136	PHE	CA-C-O	5.56	126.36	120.36
16	H	108	ASP	N-CA-CB	5.56	116.94	111.10
18	J	340	ARG	N-CA-C	-5.56	99.35	108.41
20	L	101	ASP	CA-CB-CG	-5.56	107.04	112.60
22	N	349	ASP	CA-C-N	5.56	127.73	120.28
22	N	349	ASP	C-N-CA	5.56	127.73	120.28
23	O	1	MET	CA-C-N	5.56	128.18	120.29
23	O	1	MET	C-N-CA	5.56	128.18	120.29
27	S	429	ASP	N-CA-CB	5.56	118.13	110.07
1	Z	888	LEU	O-C-N	-5.56	116.20	121.20
30	V	94	LYS	N-CA-CB	5.56	118.07	110.01
1	Z	560	LEU	O-C-N	-5.56	116.23	122.12
4	3	100	PHE	CA-CB-CG	-5.56	108.24	113.80
14	F	171	TYR	CA-C-O	-5.56	114.66	120.55
28	T	231	SER	CA-C-O	-5.56	114.99	120.82
1	Z	72	ARG	NE-CZ-NH1	5.55	127.05	121.50
4	3	40	GLN	OE1-CD-NE2	5.55	128.16	122.60
6	5	194	ALA	N-CA-C	-5.55	105.23	111.28
19	K	79	VAL	CA-C-N	5.55	128.18	120.29
19	K	79	VAL	C-N-CA	5.55	128.18	120.29
22	N	500	ASN	N-CA-CB	5.55	118.29	110.12
23	O	19	PRO	N-CA-CB	5.55	109.08	103.25
23	O	299	SER	CA-C-N	5.55	128.75	120.31
23	O	299	SER	C-N-CA	5.55	128.75	120.31
25	Q	409	LYS	CA-C-N	5.55	128.07	120.46
25	Q	409	LYS	C-N-CA	5.55	128.07	120.46
26	R	31	HIS	CG-CD2-NE2	5.55	112.75	107.20
30	V	208	ARG	CA-C-O	5.55	127.11	120.28
3	2	142	VAL	N-CA-CB	5.55	118.90	111.90
7	6	127	ARG	N-CA-C	-5.55	106.48	113.20
12	D	158	ALA	CA-C-O	5.55	127.21	120.99
19	K	287	ARG	CB-CA-C	-5.55	101.57	110.79
24	P	317	TRP	CB-CA-C	-5.55	102.17	110.88
26	R	345	CYS	CB-CA-C	-5.55	100.79	109.84
5	4	180	VAL	CA-C-N	5.55	131.52	122.81
5	4	180	VAL	C-N-CA	5.55	131.52	122.81
22	N	464	GLN	CA-C-N	5.55	128.17	120.29
22	N	464	GLN	C-N-CA	5.55	128.17	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	101	ARG	NH1-CZ-NH2	5.55	126.51	119.30
11	C	179	TYR	CA-C-O	-5.55	115.77	121.87
11	C	155	ASN	N-CA-C	-5.55	98.50	108.48
12	D	117	ARG	NE-CZ-NH1	-5.55	115.95	121.50
19	K	160	PRO	CA-C-O	-5.55	115.24	122.12
19	K	410	ASP	O-C-N	-5.55	116.69	122.96
22	N	68	PHE	CA-CB-CG	-5.55	108.25	113.80
22	N	229	VAL	O-C-N	5.55	127.25	121.87
22	N	400	ALA	N-CA-CB	5.55	118.37	110.16
25	Q	52	GLU	CA-C-N	5.55	127.71	120.28
25	Q	52	GLU	C-N-CA	5.55	127.71	120.28
27	S	311	ASN	OD1-CG-ND2	5.55	128.15	122.60
25	Q	20	ARG	NE-CZ-NH1	-5.54	115.95	121.50
12	D	18	GLN	CA-C-O	-5.54	114.67	120.55
19	K	176	GLU	CA-C-N	5.54	128.29	120.42
19	K	176	GLU	C-N-CA	5.54	128.29	120.42
21	M	146	LYS	CA-C-N	5.54	126.77	119.84
21	M	146	LYS	C-N-CA	5.54	126.77	119.84
21	M	347	ARG	N-CA-C	-5.54	101.44	109.31
22	N	167	ILE	CA-CB-CG1	-5.54	100.97	110.40
27	S	297	ALA	N-CA-CB	5.54	118.36	110.16
10	B	52	GLN	N-CA-CB	5.54	119.86	110.49
21	M	180	ARG	CA-C-N	5.54	125.85	119.92
21	M	180	ARG	C-N-CA	5.54	125.85	119.92
22	N	17	PRO	CB-CA-C	-5.54	104.02	112.11
25	Q	64	ALA	O-C-N	5.54	128.00	122.12
25	Q	323	LEU	CA-C-N	5.54	128.16	120.29
25	Q	323	LEU	C-N-CA	5.54	128.16	120.29
26	R	117	LYS	O-C-N	5.54	128.87	122.17
29	U	131	LEU	N-CA-C	-5.54	106.11	112.92
29	U	244	GLU	N-CA-C	5.54	118.03	111.33
2	1	26	TRP	CZ3-CH2-CZ2	-5.54	114.30	121.50
9	A	147	GLN	CB-CA-C	-5.54	101.84	110.37
16	H	99	THR	N-CA-C	-5.54	108.31	114.62
20	L	132	TYR	CA-C-O	5.54	128.04	121.17
20	L	231	PHE	CA-CB-CG	5.54	119.34	113.80
29	U	67	VAL	CB-CA-C	-5.54	104.74	111.88
17	I	368	HIS	CA-CB-CG	-5.54	108.26	113.80
18	J	239	ARG	CA-C-N	5.54	128.15	120.29
18	J	239	ARG	C-N-CA	5.54	128.15	120.29
20	L	29	LEU	CA-C-N	5.54	127.64	120.44
20	L	29	LEU	C-N-CA	5.54	127.64	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	P	342	GLY	CA-C-O	5.54	125.26	119.06
29	U	64	ASP	N-CA-CB	5.54	120.79	110.99
5	4	90	ASP	CA-C-O	5.53	126.28	120.42
10	B	64	LYS	CA-C-N	5.53	130.46	123.10
10	B	64	LYS	C-N-CA	5.53	130.46	123.10
14	F	105	VAL	N-CA-C	-5.53	104.17	111.09
14	F	169	ARG	N-CA-CB	5.53	118.25	110.12
22	N	25	HIS	ND1-CE1-NE2	5.53	113.93	108.40
22	N	70	HIS	CA-CB-CG	-5.53	108.27	113.80
22	N	742	HIS	CE1-NE2-CD2	-5.53	103.47	109.00
30	V	189	ILE	N-CA-C	5.53	115.73	110.53
10	B	186	ASP	CB-CA-C	-5.53	101.45	110.85
15	G	145	ASP	N-CA-C	-5.53	106.58	113.55
20	L	192	ASP	N-CA-CB	5.53	119.84	110.49
23	O	355	PHE	N-CA-CB	5.53	118.25	110.12
25	Q	239	TYR	N-CA-CB	5.53	118.35	110.16
5	4	111	GLU	CA-C-O	5.53	125.34	118.43
6	5	106	GLY	N-CA-C	-5.53	100.07	113.18
9	A	27	TYR	CB-CA-C	-5.53	101.45	110.85
20	L	280	ASN	CA-CB-CG	5.53	118.13	112.60
22	N	677	ASN	OD1-CG-ND2	-5.53	117.07	122.60
29	U	249	PHE	CA-CB-CG	5.53	119.33	113.80
15	G	106	ASN	CA-C-N	5.53	132.36	122.13
15	G	106	ASN	C-N-CA	5.53	132.36	122.13
1	Z	599	ALA	O-C-N	5.53	128.06	122.09
12	D	13	ASP	N-CA-C	-5.53	105.47	113.21
20	L	44	GLU	CA-C-O	5.53	126.41	120.55
25	Q	132	ARG	CA-C-N	5.53	127.69	120.28
25	Q	132	ARG	C-N-CA	5.53	127.69	120.28
26	R	192	ARG	NE-CZ-NH1	5.53	127.03	121.50
6	5	197	VAL	CA-C-N	5.53	127.62	120.44
6	5	197	VAL	C-N-CA	5.53	127.62	120.44
16	H	363	SER	N-CA-CB	5.53	118.08	109.85
27	S	465	ASP	CB-CA-C	-5.53	101.82	110.94
1	Z	136	GLU	CB-CG-CD	-5.52	103.21	112.60
19	K	131	ALA	N-CA-C	-5.52	100.24	109.24
27	S	335	VAL	CA-CB-CG2	-5.52	101.01	110.40
1	Z	664	GLU	CA-C-N	5.52	127.95	120.44
1	Z	664	GLU	C-N-CA	5.52	127.95	120.44
22	N	16	GLU	N-CA-C	-5.52	97.60	109.81
24	P	442	THR	CA-C-N	5.52	127.68	120.28
24	P	442	THR	C-N-CA	5.52	127.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	W	151	GLU	O-C-N	-5.52	116.79	122.64
1	Z	400	TYR	CB-CA-C	-5.52	101.47	110.85
17	I	94	GLU	N-CA-CB	5.52	118.23	110.12
25	Q	365	LEU	O-C-N	5.52	127.97	122.12
1	Z	380	PHE	CA-CB-CG	5.52	119.32	113.80
3	2	243	GLY	O-C-N	5.52	128.55	122.70
11	C	144	GLY	CA-C-O	-5.52	115.00	122.39
12	D	145	TYR	CA-CB-CG	-5.52	103.97	113.90
13	E	162	PHE	CB-CG-CD1	-5.52	111.32	120.70
22	N	715	LYS	CA-C-N	5.52	128.25	120.42
22	N	715	LYS	C-N-CA	5.52	128.25	120.42
13	E	219	THR	N-CA-C	-5.52	100.74	108.96
21	M	137	ILE	O-C-N	-5.52	117.18	122.97
30	V	292	MET	N-CA-C	5.52	117.29	111.28
16	H	169	LYS	CB-CG-CD	5.51	123.98	111.30
18	J	336	MET	CA-C-N	5.51	130.87	122.65
18	J	336	MET	C-N-CA	5.51	130.87	122.65
26	R	289	ALA	CA-C-O	-5.51	112.61	120.16
31	W	28	ALA	CA-C-O	-5.51	114.57	120.42
25	Q	116	TRP	CA-C-N	5.51	128.12	120.29
25	Q	116	TRP	C-N-CA	5.51	128.12	120.29
4	3	112	LEU	CA-C-N	5.51	128.06	120.67
4	3	112	LEU	C-N-CA	5.51	128.06	120.67
11	C	19	TYR	N-CA-C	-5.51	105.17	111.07
16	H	362	MET	CA-C-N	5.51	128.66	120.95
16	H	362	MET	C-N-CA	5.51	128.66	120.95
20	L	253	ILE	CA-C-O	5.51	126.68	120.95
25	Q	165	LEU	CA-C-N	5.51	127.67	120.28
25	Q	165	LEU	C-N-CA	5.51	127.67	120.28
30	V	133	PHE	CA-C-N	5.51	129.92	120.72
30	V	133	PHE	C-N-CA	5.51	129.92	120.72
13	E	23	GLN	CA-C-N	5.51	128.24	120.42
13	E	23	GLN	C-N-CA	5.51	128.24	120.42
25	Q	155	ARG	CA-C-O	5.51	126.39	120.55
1	Z	782	HIS	CE1-NE2-CD2	-5.51	103.49	109.00
17	I	377	ASP	N-CA-C	-5.51	105.35	113.61
31	W	123	ASP	N-CA-CB	5.51	118.31	110.16
4	3	82	ILE	CA-CB-CG1	5.51	119.76	110.40
9	A	188	ASP	CA-C-O	5.51	125.79	119.35
9	A	227	PHE	N-CA-C	-5.51	99.31	108.34
20	L	346	VAL	CA-C-N	5.51	127.60	120.44
20	L	346	VAL	C-N-CA	5.51	127.60	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	128	TYR	CA-CB-CG	5.51	123.81	113.90
11	C	253	GLU	CA-C-O	-5.50	114.72	120.55
13	E	98	ASN	N-CA-CB	5.50	118.21	110.12
24	P	106	GLN	N-CA-C	5.50	117.28	111.28
24	P	369	TYR	CB-CG-CD1	5.50	129.06	120.80
1	Z	418	LEU	CA-C-N	5.50	132.05	121.54
1	Z	418	LEU	C-N-CA	5.50	132.05	121.54
10	B	166	ASN	CA-CB-CG	-5.50	107.10	112.60
18	J	180	ILE	CB-CA-C	5.50	119.81	110.95
20	L	193	CYS	CA-C-O	-5.50	114.15	121.47
10	B	83	TYR	CG-CD1-CE1	-5.50	112.95	121.20
19	K	407	ILE	CA-CB-CG1	5.50	119.75	110.40
11	C	167	ASN	OD1-CG-ND2	-5.50	117.10	122.60
21	M	426	GLU	CA-C-O	-5.50	115.50	121.44
26	R	291	HIS	N-CA-C	5.50	119.16	112.23
1	Z	105	LYS	CA-C-O	5.50	126.25	120.42
7	6	41	LEU	CB-CA-C	5.50	119.14	109.80
9	A	94	ALA	N-CA-C	5.50	117.27	111.28
22	N	201	LEU	CA-C-N	5.50	128.22	120.42
22	N	201	LEU	C-N-CA	5.50	128.22	120.42
23	O	112	ILE	CB-CA-C	-5.50	104.72	112.14
28	T	267	ILE	CA-C-N	5.50	127.65	120.28
28	T	267	ILE	C-N-CA	5.50	127.65	120.28
29	U	152	SER	CB-CA-C	5.50	120.54	110.10
5	4	71	ASN	CB-CG-ND2	-5.50	108.16	116.40
19	K	380	GLN	OE1-CD-NE2	-5.49	117.11	122.60
22	N	68	PHE	CA-C-O	-5.49	114.73	120.55
25	Q	402	GLU	CB-CA-C	-5.49	102.22	110.90
7	6	128	ARG	N-CA-CB	-5.49	101.76	110.22
23	O	160	SER	CB-CA-C	-5.49	101.67	110.79
23	O	256	GLY	CA-C-N	5.49	128.40	120.38
23	O	256	GLY	C-N-CA	5.49	128.40	120.38
3	2	171	GLY	N-CA-C	-5.49	104.43	110.96
9	A	111	VAL	CA-C-O	-5.49	115.35	121.17
10	B	227	LYS	CB-CG-CD	5.49	123.93	111.30
11	C	147	LEU	N-CA-C	-5.49	100.07	109.24
21	M	414	GLU	N-CA-C	-5.49	100.72	109.23
22	N	597	LYS	N-CA-C	5.49	117.26	111.28
23	O	359	ASP	CA-CB-CG	-5.49	107.11	112.60
27	S	421	ASP	N-CA-C	5.49	117.27	111.28
8	7	245	GLU	N-CA-C	-5.49	100.29	109.24
13	E	25	GLU	CA-C-N	5.49	127.63	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	E	25	GLU	C-N-CA	5.49	127.63	120.28
22	N	212	ASP	CA-CB-CG	5.49	118.09	112.60
23	O	150	SER	CA-C-N	5.49	127.98	120.46
23	O	150	SER	C-N-CA	5.49	127.98	120.46
27	S	240	LEU	CA-C-N	5.49	132.28	121.58
27	S	240	LEU	C-N-CA	5.49	132.28	121.58
28	T	120	LYS	CA-C-N	5.49	127.63	120.28
28	T	120	LYS	C-N-CA	5.49	127.63	120.28
12	D	45	VAL	CA-C-O	5.49	126.84	121.19
16	H	250	VAL	CA-C-N	5.49	131.93	123.31
16	H	250	VAL	C-N-CA	5.49	131.93	123.31
25	Q	342	PHE	N-CA-CB	5.49	119.76	110.49
1	Z	358	PHE	N-CA-C	-5.49	99.12	110.80
8	7	216	ARG	NE-CZ-NH1	-5.49	116.02	121.50
9	A	187	PHE	CA-C-O	5.49	125.77	119.35
27	S	157	THR	N-CA-CB	5.49	118.93	110.43
29	U	229	GLN	OE1-CD-NE2	-5.49	117.11	122.60
4	3	98	LYS	CA-C-N	5.48	128.18	120.28
4	3	98	LYS	C-N-CA	5.48	128.18	120.28
17	I	425	ASN	CA-C-O	-5.48	115.06	120.82
23	O	241	ASN	CA-CB-CG	-5.48	107.12	112.60
10	B	122	THR	CA-CB-OG1	5.48	117.82	109.60
11	C	196	VAL	N-CA-C	5.48	116.26	110.72
19	K	296	MET	N-CA-C	-5.48	105.20	111.07
22	N	123	LYS	O-C-N	5.48	129.23	123.03
23	O	202	LEU	N-CA-CB	5.48	118.18	110.12
24	P	396	LEU	CA-C-O	5.48	126.23	120.42
28	T	157	LEU	CD1-CG-CD2	-5.48	98.74	110.80
4	3	113	ASP	CB-CA-C	5.48	118.71	109.67
13	E	221	GLN	CA-C-N	5.48	125.31	119.28
13	E	221	GLN	C-N-CA	5.48	125.31	119.28
16	H	336	ARG	N-CA-CB	5.48	119.75	110.49
24	P	410	ALA	N-CA-C	-5.48	108.37	114.62
25	Q	362	GLU	O-C-N	5.48	128.40	122.15
28	T	313	ASN	N-CA-C	-5.48	101.02	109.52
4	3	76	LEU	CB-CA-C	-5.48	102.28	110.88
16	H	108	ASP	CA-CB-CG	-5.48	107.12	112.60
18	J	29	GLU	N-CA-C	5.48	117.33	111.36
18	J	32	GLN	O-C-N	-5.48	116.31	122.12
2	1	37	ILE	CA-CB-CG2	-5.48	101.19	110.50
3	2	244	ARG	NE-CZ-NH1	5.48	126.98	121.50
4	3	164	PHE	CA-CB-CG	-5.48	108.32	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	B	80	GLY	CA-C-N	5.48	125.13	119.05
10	B	80	GLY	C-N-CA	5.48	125.13	119.05
18	J	305	LEU	N-CA-CB	5.48	118.17	110.12
22	N	925	VAL	N-CA-C	-5.48	97.95	109.34
24	P	437	SER	N-CA-C	-5.48	105.41	111.71
16	H	48	VAL	N-CA-CB	-5.48	104.14	110.55
11	C	188	SER	CB-CA-C	-5.47	101.55	110.85
12	D	241	LYS	O-C-N	5.47	127.92	122.12
15	G	121	HIS	CB-CG-ND1	5.47	130.91	122.70
19	K	90	GLY	O-C-N	-5.47	118.91	123.73
19	K	115	ILE	N-CA-C	-5.47	100.59	108.42
26	R	287	LEU	CB-CA-C	-5.47	101.59	110.79
26	R	309	GLU	CB-CG-CD	-5.47	103.29	112.60
26	R	331	ASP	N-CA-CB	5.47	118.26	110.16
1	Z	103	TYR	CA-C-N	5.47	126.06	119.98
1	Z	103	TYR	C-N-CA	5.47	126.06	119.98
1	Z	357	ARG	CD-NE-CZ	-5.47	116.74	124.40
3	2	96	ASP	CB-CA-C	5.47	120.15	110.85
13	E	13	ASN	OD1-CG-ND2	-5.47	117.13	122.60
16	H	80	LEU	CA-C-O	5.47	126.51	120.71
22	N	147	TYR	CB-CA-C	-5.47	100.69	110.70
22	N	734	GLN	OE1-CD-NE2	5.47	128.07	122.60
24	P	345	GLU	CA-C-N	5.47	131.99	121.54
24	P	345	GLU	C-N-CA	5.47	131.99	121.54
12	D	134	VAL	CB-CA-C	-5.47	101.34	111.18
17	I	397	ALA	N-CA-C	5.47	117.24	111.28
19	K	178	ARG	N-CA-C	-5.47	105.22	111.07
23	O	86	GLN	OE1-CD-NE2	5.47	128.07	122.60
24	P	439	VAL	O-C-N	5.47	127.17	121.87
10	B	35	SER	O-C-N	5.47	129.61	123.27
18	J	46	GLN	N-CA-CB	5.47	118.16	110.12
19	K	183	LEU	CA-C-N	5.47	124.98	119.19
19	K	183	LEU	C-N-CA	5.47	124.98	119.19
22	N	161	ASP	CA-C-N	5.47	127.95	120.46
22	N	161	ASP	C-N-CA	5.47	127.95	120.46
24	P	284	SER	CB-CA-C	-5.47	101.72	110.79
9	A	104	LYS	CB-CA-C	-5.46	102.27	110.90
18	J	72	TYR	CB-CG-CD2	-5.46	112.60	120.80
21	M	321	GLN	CA-C-O	-5.46	113.48	120.04
23	O	305	ASN	N-CA-C	5.46	117.24	111.28
29	U	291	GLN	N-CA-CB	5.46	119.72	110.49
30	V	117	GLY	N-CA-C	-5.46	107.23	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	6	36	ASN	CA-CB-CG	-5.46	107.14	112.60
9	A	148	GLY	CA-C-N	5.46	125.37	119.85
9	A	148	GLY	C-N-CA	5.46	125.37	119.85
23	O	6	GLY	CA-C-N	5.46	127.54	120.44
23	O	6	GLY	C-N-CA	5.46	127.54	120.44
1	Z	337	LEU	N-CA-C	5.46	117.99	111.71
1	Z	581	GLU	CA-C-O	-5.46	114.76	120.55
18	J	332	HIS	CE1-NE2-CD2	-5.46	103.54	109.00
22	N	135	ASN	OD1-CG-ND2	-5.46	117.14	122.60
22	N	767	THR	N-CA-C	5.46	119.04	112.38
23	O	227	ASN	CB-CA-C	-5.46	102.27	110.90
31	W	109	ILE	N-CA-C	-5.46	100.47	108.11
3	2	209	ASP	CA-C-N	5.46	130.69	121.14
3	2	209	ASP	C-N-CA	5.46	130.69	121.14
7	6	78	THR	CA-CB-OG1	-5.46	101.41	109.60
10	B	21	GLN	CA-C-N	5.46	127.94	120.46
10	B	21	GLN	C-N-CA	5.46	127.94	120.46
18	J	172	PRO	N-CA-CB	5.46	108.98	103.25
18	J	221	GLN	N-CA-C	-5.46	100.87	109.50
21	M	237	ALA	CA-C-O	-5.46	114.76	120.55
1	Z	543	MET	O-C-N	5.46	127.91	122.12
4	3	45	MET	CG-SD-CE	-5.46	88.89	100.90
12	D	93	SER	CA-C-O	5.46	126.33	120.55
23	O	19	PRO	CA-C-N	5.46	128.04	120.29
23	O	19	PRO	C-N-CA	5.46	128.04	120.29
24	P	402	ILE	CB-CA-C	-5.46	101.95	110.52
26	R	300	ARG	NE-CZ-NH1	-5.46	116.04	121.50
29	U	201	LEU	O-C-N	5.46	127.91	122.12
29	U	220	LEU	O-C-N	-5.46	115.04	121.32
29	U	228	TYR	CD1-CG-CD2	-5.46	109.91	118.10
1	Z	109	ILE	CA-C-N	5.46	127.59	120.28
1	Z	109	ILE	C-N-CA	5.46	127.59	120.28
1	Z	715	HIS	ND1-CE1-NE2	5.46	113.86	108.40
4	3	100	PHE	CA-C-N	5.46	129.28	121.42
4	3	100	PHE	C-N-CA	5.46	129.28	121.42
22	N	650	TYR	CB-CG-CD1	5.46	128.98	120.80
8	7	60	LYS	O-C-N	-5.46	116.10	123.19
15	G	132	PHE	N-CA-C	-5.46	103.19	110.55
17	I	332	ASN	CA-C-N	5.46	131.12	122.94
17	I	332	ASN	C-N-CA	5.46	131.12	122.94
23	O	152	HIS	CE1-NE2-CD2	-5.46	103.55	109.00
24	P	316	ARG	CD-NE-CZ	-5.46	116.76	124.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	405	HIS	CB-CG-CD2	5.45	138.29	131.20
2	1	112	THR	CB-CA-C	-5.45	102.28	110.90
8	7	219	ARG	NE-CZ-NH2	5.45	124.11	119.20
14	F	43	HIS	ND1-CE1-NE2	5.45	113.85	108.40
23	O	259	PRO	N-CA-C	-5.45	101.24	112.47
25	Q	192	SER	O-C-N	5.45	127.90	122.12
12	D	98	VAL	CA-C-O	5.45	126.18	119.58
20	L	21	GLU	CB-CG-CD	-5.45	103.33	112.60
23	O	64	ILE	CA-CB-CG1	5.45	119.67	110.40
3	2	132	ARG	NE-CZ-NH1	-5.45	116.05	121.50
7	6	85	PHE	CA-C-N	5.45	127.58	120.28
7	6	85	PHE	C-N-CA	5.45	127.58	120.28
10	B	29	VAL	CB-CA-C	5.45	119.74	112.22
16	H	125	LEU	CA-C-N	5.45	128.59	120.90
16	H	125	LEU	C-N-CA	5.45	128.59	120.90
23	O	35	HIS	CB-CA-C	-5.45	100.66	110.36
24	P	392	PHE	CA-C-N	5.45	127.58	120.28
24	P	392	PHE	C-N-CA	5.45	127.58	120.28
31	W	85	THR	CA-CB-OG1	5.45	117.78	109.60
12	D	85	ASN	CA-CB-CG	-5.45	107.15	112.60
15	G	68	PHE	O-C-N	-5.45	116.58	123.17
16	H	149	ILE	O-C-N	5.45	128.93	123.10
18	J	157	GLN	O-C-N	-5.45	115.57	122.27
19	K	206	GLY	CA-C-N	-5.45	115.74	119.66
19	K	206	GLY	C-N-CA	-5.45	115.74	119.66
22	N	134	VAL	CA-C-N	5.45	127.58	120.28
22	N	134	VAL	C-N-CA	5.45	127.58	120.28
26	R	73	MET	N-CA-C	-5.45	105.34	111.28
12	D	82	ILE	CB-CA-C	-5.45	104.79	112.14
13	E	171	GLY	CA-C-N	5.45	128.02	120.29
13	E	171	GLY	C-N-CA	5.45	128.02	120.29
15	G	121	HIS	CB-CA-C	-5.45	101.59	110.85
20	L	180	LYS	O-C-N	5.45	127.68	122.07
23	O	36	GLN	O-C-N	-5.45	115.03	122.33
25	Q	198	ASN	CA-C-N	5.45	127.58	120.28
25	Q	198	ASN	C-N-CA	5.45	127.58	120.28
27	S	470	ARG	NE-CZ-NH2	5.44	124.10	119.20
31	W	28	ALA	O-C-N	5.44	128.36	122.15
13	E	71	ASP	N-CA-C	-5.44	101.03	108.38
15	G	233	ARG	NE-CZ-NH1	5.44	126.94	121.50
16	H	207	GLU	N-CA-C	-5.44	101.92	110.14
20	L	332	VAL	CA-C-O	5.44	126.61	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	367	THR	CA-CB-OG1	-5.44	101.44	109.60
24	P	233	LEU	CB-CA-C	-5.44	101.60	110.85
22	N	469	SER	CA-C-N	5.44	131.93	121.54
22	N	469	SER	C-N-CA	5.44	131.93	121.54
23	O	191	SER	CA-C-O	-5.44	115.11	120.82
21	M	379	VAL	CA-CB-CG2	-5.44	101.15	110.40
1	Z	409	SER	CA-C-N	5.44	127.51	120.44
1	Z	409	SER	C-N-CA	5.44	127.51	120.44
1	Z	516	GLY	CA-C-N	5.44	129.84	121.19
1	Z	516	GLY	C-N-CA	5.44	129.84	121.19
15	G	150	TYR	CA-C-O	5.44	127.54	121.40
18	J	89	VAL	CA-CB-CG2	-5.44	101.16	110.40
19	K	333	PHE	O-C-N	-5.44	114.73	121.64
26	R	36	ALA	N-CA-C	5.44	118.03	111.40
28	T	242	ASN	CA-C-N	5.44	127.57	120.28
28	T	242	ASN	C-N-CA	5.44	127.57	120.28
19	K	248	ARG	CA-C-O	5.44	126.53	120.82
26	R	323	PHE	N-CA-CB	5.44	119.90	110.39
1	Z	152	ALA	CA-C-N	5.43	131.92	121.54
1	Z	152	ALA	C-N-CA	5.43	131.92	121.54
1	Z	256	PHE	CA-C-N	5.43	127.56	120.28
1	Z	256	PHE	C-N-CA	5.43	127.56	120.28
13	E	66	LYS	N-CA-C	-5.43	106.12	114.16
21	M	64	HIS	CA-C-N	5.43	127.56	120.28
21	M	64	HIS	C-N-CA	5.43	127.56	120.28
26	R	286	TRP	N-CA-C	-5.43	107.19	113.88
28	T	137	THR	N-CA-C	-5.43	106.42	113.16
29	U	232	ASP	N-CA-C	5.43	117.28	111.36
2	1	40	VAL	N-CA-C	-5.43	100.37	108.46
6	5	251	VAL	CA-C-O	5.43	126.60	120.95
12	D	94	HIS	ND1-CE1-NE2	5.43	113.83	108.40
19	K	263	PHE	N-CA-CB	5.43	119.08	110.55
20	L	294	ARG	NE-CZ-NH1	-5.43	116.07	121.50
27	S	250	LEU	CA-C-N	5.43	127.56	120.28
27	S	250	LEU	C-N-CA	5.43	127.56	120.28
28	T	293	PHE	N-CA-C	-5.43	100.55	109.40
4	3	82	ILE	N-CA-C	-5.43	100.79	109.20
6	5	69	HIS	N-CA-C	-5.43	98.79	108.13
20	L	339	ASN	OD1-CG-ND2	5.43	128.03	122.60
30	V	106	GLU	N-CA-C	-5.43	100.67	108.60
2	1	71	ILE	CB-CA-C	5.43	116.48	110.62
16	H	102	ILE	N-CA-CB	5.43	117.70	110.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	H	105	ASP	N-CA-C	-5.43	100.18	108.76
17	I	394	ASP	CB-CA-C	-5.43	100.25	110.67
19	K	288	ILE	CA-CB-CG2	-5.43	101.27	110.50
24	P	96	GLN	CA-C-N	5.43	131.90	121.54
24	P	96	GLN	C-N-CA	5.43	131.90	121.54
28	T	116	LEU	CB-CA-C	-5.43	101.78	110.79
30	V	53	VAL	O-C-N	5.43	128.91	123.10
10	B	185	GLU	CB-CA-C	-5.42	101.78	110.79
22	N	183	LEU	CB-CA-C	-5.42	102.36	110.88
22	N	335	ILE	N-CA-CB	5.42	117.92	110.54
23	O	12	GLN	CA-C-N	5.42	131.90	121.54
23	O	12	GLN	C-N-CA	5.42	131.90	121.54
26	R	101	ARG	NE-CZ-NH2	-5.42	114.32	119.20
26	R	313	SER	N-CA-C	-5.42	96.93	107.62
1	Z	158	TYR	CA-C-N	5.42	127.50	120.56
1	Z	158	TYR	C-N-CA	5.42	127.50	120.56
27	S	276	PHE	CA-C-N	5.42	126.62	119.84
27	S	276	PHE	C-N-CA	5.42	126.62	119.84
1	Z	202	HIS	CE1-NE2-CD2	-5.42	103.58	109.00
1	Z	681	TYR	N-CA-CB	5.42	118.71	109.87
9	A	100	ASN	CA-CB-CG	-5.42	107.18	112.60
14	F	14	SER	CA-C-N	5.42	124.94	119.19
14	F	14	SER	C-N-CA	5.42	124.94	119.19
21	M	426	GLU	CA-C-N	5.42	127.84	120.63
21	M	426	GLU	C-N-CA	5.42	127.84	120.63
27	S	201	ARG	CB-CA-C	-5.42	100.72	110.37
14	F	168	ALA	N-CA-C	-5.42	105.45	111.36
22	N	335	ILE	O-C-N	5.42	127.13	121.87
31	W	143	PHE	N-CA-C	-5.42	100.50	108.79
1	Z	161	HIS	ND1-CE1-NE2	5.42	113.82	108.40
1	Z	835	GLU	N-CA-C	-5.42	99.54	108.48
3	2	149	THR	N-CA-C	-5.42	106.84	113.50
10	B	136	ILE	CA-CB-CG2	-5.42	101.29	110.50
15	G	173	ALA	CA-C-N	5.42	128.08	120.28
15	G	173	ALA	C-N-CA	5.42	128.08	120.28
19	K	135	HIS	CB-CG-CD2	-5.42	124.16	131.20
20	L	233	ASP	CA-CB-CG	5.42	118.02	112.60
21	M	69	MET	CA-C-N	5.42	127.54	120.28
21	M	69	MET	C-N-CA	5.42	127.54	120.28
23	O	230	ARG	CB-CG-CD	5.42	123.76	111.30
26	R	80	GLU	CA-C-N	5.42	127.98	120.29
26	R	80	GLU	C-N-CA	5.42	127.98	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	U	5	ALA	CA-C-N	5.42	127.50	120.56
29	U	5	ALA	C-N-CA	5.42	127.50	120.56
5	4	70	ARG	O-C-N	-5.42	116.24	122.09
9	A	139	ILE	CA-C-N	5.42	130.19	122.72
9	A	139	ILE	C-N-CA	5.42	130.19	122.72
16	H	99	THR	CB-CA-C	5.42	116.48	109.28
18	J	200	ALA	N-CA-C	5.42	117.18	111.28
29	U	276	ILE	CA-C-O	-5.42	115.32	120.95
4	3	29	GLY	N-CA-C	-5.42	100.35	113.18
23	O	240	PHE	N-CA-C	5.42	117.26	111.36
1	Z	159	VAL	N-CA-C	-5.41	105.44	110.53
1	Z	500	LEU	CA-C-N	5.41	127.98	120.29
1	Z	500	LEU	C-N-CA	5.41	127.98	120.29
1	Z	705	ASN	OD1-CG-ND2	-5.41	117.19	122.60
31	W	174	PRO	N-CA-C	5.41	117.30	110.70
10	B	183	GLU	CA-C-N	5.41	127.97	120.29
10	B	183	GLU	C-N-CA	5.41	127.97	120.29
18	J	318	PRO	O-C-N	-5.41	115.07	121.46
22	N	813	TYR	CA-C-N	5.41	126.61	119.84
22	N	813	TYR	C-N-CA	5.41	126.61	119.84
30	V	293	THR	CA-C-O	5.41	126.29	120.55
1	Z	211	ILE	O-C-N	5.41	128.23	122.06
3	2	72	LYS	O-C-N	5.41	130.23	122.28
12	D	177	THR	CA-C-N	5.41	130.99	122.49
12	D	177	THR	C-N-CA	5.41	130.99	122.49
13	E	32	LYS	CA-C-O	5.41	126.22	120.10
20	L	290	LEU	O-C-N	5.41	127.93	122.09
14	F	225	ASP	CB-CA-C	-5.41	101.48	110.14
18	J	63	LEU	CB-CA-C	-5.41	101.81	110.79
21	M	218	GLN	N-CA-C	-5.41	102.14	110.58
22	N	532	MET	CA-C-N	5.41	127.87	120.46
22	N	532	MET	C-N-CA	5.41	127.87	120.46
24	P	340	VAL	CA-CB-CG2	5.41	119.59	110.40
13	E	208	GLU	CA-C-N	5.41	128.91	120.75
13	E	208	GLU	C-N-CA	5.41	128.91	120.75
22	N	22	PHE	CA-C-O	-5.41	115.14	120.82
8	7	85	SER	CA-C-O	-5.40	115.93	121.87
14	F	39	LYS	N-CA-C	-5.40	100.22	108.76
25	Q	135	SER	CA-C-N	5.40	127.52	120.28
25	Q	135	SER	C-N-CA	5.40	127.52	120.28
29	U	270	VAL	CA-C-N	5.40	127.96	120.29
29	U	270	VAL	C-N-CA	5.40	127.96	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	7	62	GLU	O-C-N	5.40	127.86	122.08
25	Q	207	GLN	CB-CA-C	-5.40	101.67	110.85
25	Q	270	LEU	CA-C-N	5.40	128.09	120.42
25	Q	270	LEU	C-N-CA	5.40	128.09	120.42
1	Z	437	GLU	CA-C-N	5.40	127.96	120.29
1	Z	437	GLU	C-N-CA	5.40	127.96	120.29
27	S	365	GLN	O-C-N	5.40	127.84	122.12
29	U	256	GLN	CA-C-N	5.40	127.52	120.28
29	U	256	GLN	C-N-CA	5.40	127.52	120.28
6	5	69	HIS	ND1-CE1-NE2	5.40	113.80	108.40
11	C	98	LEU	N-CA-C	-5.40	105.39	111.28
22	N	238	LYS	CA-C-O	5.40	126.26	120.70
24	P	235	GLN	N-CA-CB	5.40	118.53	110.22
1	Z	226	TYR	CB-CA-C	-5.40	101.67	110.85
10	B	130	PHE	CB-CG-CD2	-5.40	111.53	120.70
16	H	275	ASP	CB-CA-C	-5.40	100.95	109.80
21	M	185	TYR	N-CA-C	-5.40	106.74	113.38
17	I	86	LYS	CA-C-O	-5.40	113.44	118.73
17	I	198	LYS	CA-C-N	5.40	127.51	120.28
17	I	198	LYS	C-N-CA	5.40	127.51	120.28
17	I	430	LYS	N-CA-CB	5.40	118.15	110.16
30	V	97	ASP	CA-CB-CG	-5.40	107.20	112.60
1	Z	757	ASN	CB-CG-ND2	-5.39	108.31	116.40
5	4	67	TYR	O-C-N	5.39	128.30	122.15
12	D	72	ALA	CA-C-O	-5.39	115.15	121.46
20	L	269	THR	N-CA-CB	5.39	119.87	110.81
3	2	54	GLY	O-C-N	-5.39	118.76	123.88
22	N	586	VAL	CB-CA-C	-5.39	104.78	112.22
26	R	109	GLU	CA-C-N	5.39	127.45	120.44
26	R	109	GLU	C-N-CA	5.39	127.45	120.44
11	C	160	LYS	CA-C-O	-5.39	115.15	120.70
23	O	210	VAL	CA-C-O	5.39	126.19	120.48
23	O	240	PHE	CA-C-N	5.39	127.77	120.44
23	O	240	PHE	C-N-CA	5.39	127.77	120.44
1	Z	294	MET	CA-C-O	-5.39	114.84	120.55
15	G	15	PHE	CB-CA-C	-5.39	100.33	110.51
18	J	178	LEU	N-CA-C	-5.39	105.48	111.36
23	O	80	ILE	CA-C-N	5.39	127.94	120.29
23	O	80	ILE	C-N-CA	5.39	127.94	120.29
23	O	179	PHE	N-CA-CB	-5.39	102.20	110.12
28	T	324	LYS	N-CA-CB	5.39	119.96	110.37
7	6	105	HIS	CE1-NE2-CD2	-5.39	103.61	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	C	256	GLN	CA-C-N	5.39	127.50	120.28
11	C	256	GLN	C-N-CA	5.39	127.50	120.28
18	J	124	HIS	CA-CB-CG	-5.39	108.41	113.80
23	O	332	HIS	CG-CD2-NE2	5.39	112.59	107.20
27	S	436	PHE	CA-C-N	5.39	128.07	120.42
27	S	436	PHE	C-N-CA	5.39	128.07	120.42
11	C	159	TRP	CZ3-CH2-CZ2	-5.39	114.50	121.50
16	H	242	GLY	CA-C-O	5.39	126.30	120.75
23	O	191	SER	N-CA-C	5.39	116.83	111.07
24	P	86	ASN	N-CA-CB	5.39	118.13	110.16
27	S	214	HIS	CG-CD2-NE2	5.39	112.59	107.20
14	F	185	ASN	CB-CG-ND2	5.38	124.48	116.40
3	2	108	LEU	O-C-N	5.38	127.83	122.12
10	B	212	ILE	CA-CB-CG1	5.38	119.55	110.40
20	L	277	MET	CA-C-O	5.38	127.19	121.11
21	M	102	ASN	N-CA-CB	5.38	119.58	110.49
23	O	202	LEU	CA-C-O	-5.38	114.84	120.55
24	P	135	LYS	CA-C-N	5.38	130.53	123.11
24	P	135	LYS	C-N-CA	5.38	130.53	123.11
25	Q	302	PHE	CA-CB-CG	5.38	119.18	113.80
31	W	67	ASP	CA-C-N	5.38	128.49	120.31
31	W	67	ASP	C-N-CA	5.38	128.49	120.31
12	D	199	VAL	N-CA-C	5.38	117.78	111.05
15	G	148	GLN	CA-C-O	5.38	127.16	120.54
25	Q	222	GLU	N-CA-C	-5.38	106.73	113.72
31	W	134	GLU	N-CA-C	-5.38	106.67	113.18
11	C	198	ASN	CA-CB-CG	5.38	117.98	112.60
13	E	69	GLU	N-CA-C	-5.38	99.96	108.73
1	Z	262	PHE	CA-CB-CG	-5.38	108.42	113.80
1	Z	387	GLN	N-CA-C	-5.38	105.36	112.94
23	O	231	GLN	CA-C-N	5.38	128.02	120.28
23	O	231	GLN	C-N-CA	5.38	128.02	120.28
27	S	477	HIS	N-CA-CB	5.38	117.81	110.01
5	4	87	ASN	N-CA-C	5.38	117.22	111.36
11	C	8	ARG	N-CA-C	-5.38	104.02	111.28
15	G	165	ALA	CA-C-O	-5.38	115.48	121.23
22	N	773	PHE	CA-CB-CG	-5.38	108.42	113.80
1	Z	589	SER	O-C-N	-5.37	116.42	122.12
8	7	197	GLU	CA-C-N	5.37	127.44	120.56
8	7	197	GLU	C-N-CA	5.37	127.44	120.56
14	F	184	LEU	CA-C-N	5.37	127.48	120.28
14	F	184	LEU	C-N-CA	5.37	127.48	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	G	113	ALA	CA-C-N	5.37	127.48	120.28
15	G	113	ALA	C-N-CA	5.37	127.48	120.28
18	J	239	ARG	CA-C-O	-5.37	114.86	120.55
18	J	247	PHE	N-CA-C	-5.37	100.48	109.24
19	K	287	ARG	NE-CZ-NH2	5.37	124.03	119.20
22	N	9	ILE	CA-C-O	-5.37	115.36	120.95
24	P	254	PRO	N-CD-CG	5.37	111.26	103.20
24	P	256	ILE	N-CA-CB	-5.37	103.69	110.57
25	Q	38	ASN	OD1-CG-ND2	5.37	127.97	122.60
27	S	479	ARG	NH1-CZ-NH2	-5.37	112.31	119.30
30	V	93	ALA	O-C-N	5.37	127.89	122.09
1	Z	246	SER	N-CA-C	-5.37	106.50	113.16
1	Z	795	GLY	O-C-N	5.37	127.34	122.18
7	6	125	TYR	N-CA-C	-5.37	105.43	111.28
9	A	107	TYR	CA-C-N	5.37	128.34	120.71
9	A	107	TYR	C-N-CA	5.37	128.34	120.71
16	H	217	PRO	CA-C-O	-5.37	112.77	120.56
31	W	164	ASP	CB-CA-C	-5.37	100.87	110.70
1	Z	682	GLY	CA-C-N	5.37	127.95	120.65
1	Z	682	GLY	C-N-CA	5.37	127.95	120.65
23	O	141	MET	N-CA-C	-5.37	105.51	111.36
4	3	14	MET	O-C-N	-5.37	116.67	123.17
6	5	203	SER	CA-C-O	-5.37	115.49	121.23
7	6	115	ALA	O-C-N	5.37	127.60	122.07
9	A	144	ASP	CA-C-O	-5.37	115.30	121.47
12	D	141	THR	CA-CB-OG1	5.37	117.65	109.60
22	N	123	LYS	CA-C-O	-5.37	115.11	121.66
22	N	687	ALA	O-C-N	5.37	127.81	122.12
3	2	116	LEU	CA-C-N	5.37	126.55	119.84
3	2	116	LEU	C-N-CA	5.37	126.55	119.84
15	G	32	GLU	CB-CG-CD	-5.37	103.48	112.60
3	2	230	ARG	CA-C-N	5.37	126.55	119.84
3	2	230	ARG	C-N-CA	5.37	126.55	119.84
7	6	106	SER	N-CA-C	5.37	118.92	112.38
13	E	191	LEU	O-C-N	5.37	127.60	122.07
16	H	409	PHE	N-CA-CB	5.37	118.01	110.12
21	M	300	LYS	N-CA-CB	5.37	119.56	110.49
10	B	3	GLU	CA-CB-CG	5.36	124.83	114.10
17	I	118	ASP	N-CA-C	-5.36	104.09	111.81
19	K	381	GLU	O-C-N	-5.36	116.43	122.12
22	N	760	VAL	CA-C-N	5.36	127.81	120.46
22	N	760	VAL	C-N-CA	5.36	127.81	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	V	99	LEU	CA-C-N	5.36	127.47	120.28
30	V	99	LEU	C-N-CA	5.36	127.47	120.28
12	D	179	GLU	CB-CA-C	-5.36	101.26	110.16
16	H	314	ASN	OD1-CG-ND2	5.36	127.96	122.60
18	J	273	MET	N-CA-CB	5.36	118.00	110.12
20	L	159	PHE	CA-C-N	5.36	127.90	120.29
20	L	159	PHE	C-N-CA	5.36	127.90	120.29
1	Z	833	PHE	CA-C-N	5.36	132.03	122.06
1	Z	833	PHE	C-N-CA	5.36	132.03	122.06
13	E	240	ASP	CB-CA-C	-5.36	101.89	110.79
16	H	97	ARG	N-CA-C	-5.36	100.50	109.24
16	H	321	THR	CA-CB-OG1	5.36	117.64	109.60
16	H	381	THR	CA-CB-OG1	5.36	117.64	109.60
22	N	502	TYR	CA-CB-CG	-5.36	104.25	113.90
7	6	105	HIS	ND1-CE1-NE2	5.36	113.76	108.40
23	O	132	LYS	N-CA-C	5.36	117.20	111.36
26	R	323	PHE	CA-C-N	5.36	129.59	120.91
26	R	323	PHE	C-N-CA	5.36	129.59	120.91
1	Z	232	TYR	CA-C-N	5.36	127.46	120.28
1	Z	232	TYR	C-N-CA	5.36	127.46	120.28
15	G	207	ASP	CA-C-O	5.36	124.58	118.47
19	K	47	LEU	CA-C-N	5.36	127.46	120.28
19	K	47	LEU	C-N-CA	5.36	127.46	120.28
27	S	232	HIS	ND1-CE1-NE2	5.36	113.76	108.40
1	Z	760	PHE	CB-CA-C	-5.36	101.90	110.79
15	G	170	ARG	NE-CZ-NH1	5.36	126.86	121.50
18	J	126	ILE	CA-CB-CG2	-5.36	101.39	110.50
19	K	57	GLN	CA-C-N	5.36	127.40	120.44
19	K	57	GLN	C-N-CA	5.36	127.40	120.44
22	N	199	ARG	N-CA-CB	5.36	118.09	110.16
22	N	346	ASN	N-CA-C	5.36	118.33	110.30
24	P	265	GLN	CB-CA-C	-5.36	101.75	110.85
24	P	416	GLN	N-CA-C	5.36	117.45	110.43
31	W	90	ILE	CA-C-N	5.36	127.40	120.44
31	W	90	ILE	C-N-CA	5.36	127.40	120.44
24	P	173	THR	CA-C-O	-5.35	115.19	120.70
27	S	378	VAL	CA-CB-CG2	5.35	119.50	110.40
29	U	83	LYS	CB-CG-CD	5.35	123.61	111.30
1	Z	408	LEU	CA-C-N	5.35	127.89	120.29
1	Z	408	LEU	C-N-CA	5.35	127.89	120.29
16	H	224	LEU	O-C-N	5.35	128.85	122.27
23	O	37	LEU	N-CA-CB	5.35	119.00	110.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Q	324	ALA	CB-CA-C	-5.35	101.75	110.85
25	Q	331	LEU	CB-CA-C	-5.35	102.48	110.88
13	E	147	ASP	N-CA-C	-5.35	102.34	108.49
23	O	87	MET	O-C-N	5.35	128.48	122.22
11	C	117	ILE	CA-C-O	5.35	126.84	121.17
25	Q	228	ALA	CA-C-N	5.35	127.45	120.28
25	Q	228	ALA	C-N-CA	5.35	127.45	120.28
28	T	199	LEU	CA-C-N	5.35	127.40	120.44
28	T	199	LEU	C-N-CA	5.35	127.40	120.44
30	V	286	GLU	CB-CA-C	-5.35	101.91	110.79
1	Z	296	PHE	CA-CB-CG	-5.35	108.45	113.80
10	B	48	THR	O-C-N	5.35	128.87	123.26
18	J	337	ASN	OD1-CG-ND2	-5.35	117.25	122.60
27	S	330	LYS	N-CA-CB	-5.35	102.26	110.12
27	S	400	HIS	ND1-CE1-NE2	5.35	113.75	108.40
29	U	15	VAL	CA-C-O	-5.35	115.50	121.17
10	B	192	ILE	O-C-N	-5.35	116.68	121.87
19	K	297	ASP	N-CA-C	5.35	118.02	111.82
23	O	44	PHE	N-CA-CB	5.35	117.76	110.01
31	W	64	LEU	N-CA-CB	5.35	117.87	109.69
9	A	177	SER	N-CA-CB	5.34	117.98	110.12
29	U	275	LEU	CA-C-O	5.34	126.21	120.55
15	G	238	LYS	CA-C-N	5.34	127.44	120.28
15	G	238	LYS	C-N-CA	5.34	127.44	120.28
19	K	42	SER	CA-C-N	5.34	127.44	120.28
19	K	42	SER	C-N-CA	5.34	127.44	120.28
20	L	367	PHE	N-CA-C	5.34	117.10	111.28
22	N	41	SER	CA-C-N	5.34	127.78	120.46
22	N	41	SER	C-N-CA	5.34	127.78	120.46
12	D	176	TYR	N-CA-C	5.34	119.77	112.88
17	I	193	GLN	CA-C-N	5.34	127.78	120.46
17	I	193	GLN	C-N-CA	5.34	127.78	120.46
17	I	371	ARG	O-C-N	5.34	128.24	122.15
18	J	54	ALA	CB-CA-C	-5.34	102.50	110.88
19	K	274	ARG	CB-CG-CD	5.34	123.58	111.30
20	L	349	GLU	O-C-N	5.34	127.78	122.12
28	T	323	GLN	CB-CA-C	-5.34	103.11	111.39
8	7	115	MET	N-CA-CB	5.34	118.44	110.22
24	P	86	ASN	OD1-CG-ND2	-5.34	117.26	122.60
20	L	257	LEU	CA-C-N	5.34	127.43	120.28
20	L	257	LEU	C-N-CA	5.34	127.43	120.28
25	Q	78	ASN	CA-C-O	5.34	126.21	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	211	TYR	N-CA-C	-5.34	105.54	111.36
21	M	425	LEU	N-CA-C	-5.34	105.46	111.28
29	U	74	TYR	O-C-N	5.34	127.78	122.12
29	U	141	VAL	N-CA-C	-5.34	100.17	108.81
3	2	109	HIS	CA-C-O	-5.33	114.89	120.55
18	J	48	GLN	CA-C-O	-5.33	114.89	120.55
22	N	663	THR	CA-CB-CG2	5.33	119.57	110.50
24	P	211	THR	O-C-N	5.33	127.78	122.12
26	R	311	TYR	CA-C-O	-5.33	114.80	120.40
1	Z	140	LEU	CB-CA-C	-5.33	102.51	110.88
2	1	47	VAL	CA-C-O	5.33	126.91	120.67
3	2	133	TYR	CG-CD2-CE2	-5.33	113.20	121.20
13	E	107	MET	CA-C-O	-5.33	115.11	121.56
19	K	317	LEU	CA-C-O	-5.33	115.81	121.94
21	M	86	LEU	CB-CA-C	5.33	118.21	109.46
22	N	755	THR	N-CA-C	-5.33	99.99	109.06
27	S	482	PHE	CA-C-O	5.33	126.20	120.55
1	Z	165	GLU	CA-C-O	-5.33	114.90	120.55
8	7	201	LYS	CA-C-N	5.33	126.75	120.09
8	7	201	LYS	C-N-CA	5.33	126.75	120.09
17	I	398	ILE	O-C-N	5.33	127.04	121.87
19	K	79	VAL	N-CA-CB	5.33	117.79	110.54
26	R	300	ARG	CD-NE-CZ	-5.33	116.94	124.40
4	3	182	GLY	O-C-N	5.33	129.63	122.70
11	C	247	ALA	N-CA-C	5.33	117.09	111.28
17	I	347	ILE	O-C-N	-5.33	117.11	123.03
21	M	436	GLN	N-CA-CB	5.33	119.50	110.49
23	O	98	GLU	CA-C-O	-5.33	114.77	120.42
1	Z	818	LEU	N-CA-C	5.33	117.84	111.71
15	G	201	VAL	CA-C-O	-5.33	115.41	120.95
16	H	182	GLU	CA-C-N	5.33	127.42	120.28
16	H	182	GLU	C-N-CA	5.33	127.42	120.28
22	N	30	VAL	CA-C-O	-5.33	112.62	119.39
22	N	549	ALA	CA-C-N	5.33	129.04	120.30
22	N	549	ALA	C-N-CA	5.33	129.04	120.30
25	Q	300	ALA	CA-C-O	-5.33	115.23	120.82
31	W	94	HIS	CE1-NE2-CD2	-5.33	103.67	109.00
15	G	51	GLU	CA-C-N	5.33	130.51	123.00
15	G	51	GLU	C-N-CA	5.33	130.51	123.00
26	R	250	LEU	N-CA-C	-5.33	105.92	112.90
28	T	219	ASP	O-C-N	5.33	128.82	122.27
3	2	111	LEU	N-CA-CB	5.33	118.04	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	116	TYR	CG-CD1-CE1	-5.33	113.21	121.20
8	7	143	SER	CB-CA-C	-5.33	101.80	110.85
14	F	70	ILE	CA-CB-CG1	5.33	119.45	110.40
15	G	102	ASN	CB-CA-C	-5.33	102.49	110.90
20	L	207	TYR	N-CA-CB	5.33	119.83	111.20
21	M	54	ILE	CB-CA-C	-5.33	104.87	112.22
23	O	71	VAL	N-CA-C	-5.33	101.24	108.06
23	O	284	ARG	NE-CZ-NH1	-5.33	116.17	121.50
24	P	292	GLY	O-C-N	-5.33	117.02	122.19
24	P	335	SER	CA-C-O	-5.33	112.86	120.16
27	S	334	VAL	CA-C-N	5.33	127.76	120.46
27	S	334	VAL	C-N-CA	5.33	127.76	120.46
29	U	260	VAL	CA-C-N	5.33	127.42	120.28
29	U	260	VAL	C-N-CA	5.33	127.42	120.28
12	D	82	ILE	O-C-N	5.32	127.03	121.87
18	J	59	LEU	CA-C-O	-5.32	114.91	120.55
22	N	235	LYS	CA-CB-CG	-5.32	103.45	114.10
1	Z	257	ARG	CA-C-O	-5.32	114.91	120.55
5	4	87	ASN	OD1-CG-ND2	-5.32	117.28	122.60
1	Z	207	LEU	CA-C-N	5.32	127.41	120.28
1	Z	207	LEU	C-N-CA	5.32	127.41	120.28
1	Z	521	ALA	N-CA-C	5.32	117.08	111.28
1	Z	570	GLY	CA-C-N	5.32	129.60	120.72
1	Z	570	GLY	C-N-CA	5.32	129.60	120.72
8	7	128	TYR	CA-CB-CG	5.32	123.48	113.90
11	C	26	GLU	CA-C-N	5.32	127.41	120.28
11	C	26	GLU	C-N-CA	5.32	127.41	120.28
31	W	76	HIS	N-CA-CB	-5.32	102.29	110.16
1	Z	61	GLU	N-CA-CB	5.32	117.94	110.12
1	Z	204	ALA	CA-C-N	5.32	127.84	120.29
1	Z	204	ALA	C-N-CA	5.32	127.84	120.29
5	4	154	GLU	CA-C-N	5.32	128.40	120.31
5	4	154	GLU	C-N-CA	5.32	128.40	120.31
13	E	105	GLU	CA-C-N	5.32	128.42	120.87
13	E	105	GLU	C-N-CA	5.32	128.42	120.87
6	5	67	PHE	CA-C-N	5.32	127.67	120.38
6	5	67	PHE	C-N-CA	5.32	127.67	120.38
10	B	105	ILE	CB-CA-C	-5.32	104.56	110.68
12	D	100	ASP	CA-C-O	-5.32	116.08	120.71
17	I	326	LYS	N-CA-C	-5.32	100.73	109.40
18	J	350	LEU	N-CA-CB	5.32	118.41	110.22
11	C	29	GLY	CA-C-N	5.32	127.84	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	C	29	GLY	C-N-CA	5.32	127.84	120.29
12	D	127	PHE	N-CA-C	-5.32	105.49	111.28
17	I	359	LYS	O-C-N	5.32	127.75	122.12
19	K	248	ARG	NE-CZ-NH1	-5.32	116.19	121.50
25	Q	325	LYS	O-C-N	5.32	128.21	122.15
30	V	91	PHE	CA-C-O	5.32	126.40	120.82
10	B	140	ASN	N-CA-CB	5.31	119.47	110.49
10	B	195	LEU	CA-C-O	-5.31	114.79	120.42
1	Z	292	LYS	CA-C-O	-5.31	114.79	120.42
1	Z	653	ALA	CA-C-N	5.31	127.96	120.42
1	Z	653	ALA	C-N-CA	5.31	127.96	120.42
11	C	92	LEU	CA-C-O	-5.31	114.79	120.42
15	G	129	VAL	CB-CA-C	-5.31	103.25	110.42
16	H	201	PHE	CB-CA-C	-5.31	101.97	110.79
22	N	732	LEU	N-CA-C	5.31	117.15	111.36
10	B	36	VAL	CA-C-O	5.31	126.85	121.49
22	N	646	PRO	CB-CA-C	-5.31	103.92	112.21
1	Z	119	LYS	CA-C-O	-5.31	114.92	120.55
1	Z	566	HIS	ND1-CE1-NE2	5.31	113.71	108.40
1	Z	766	GLN	CA-C-N	5.31	125.84	120.00
1	Z	766	GLN	C-N-CA	5.31	125.84	120.00
5	4	45	LEU	N-CA-CB	5.31	120.16	111.08
12	D	168	VAL	N-CA-C	5.31	117.69	111.05
21	M	392	ASN	CA-CB-CG	-5.31	107.29	112.60
24	P	36	LYS	N-CA-CB	-5.31	102.31	110.01
27	S	405	THR	CA-C-N	5.31	125.87	119.98
27	S	405	THR	C-N-CA	5.31	125.87	119.98
1	Z	433	LEU	N-CA-C	5.31	116.75	111.07
7	6	61	PHE	CB-CG-CD2	-5.31	111.68	120.70
15	G	104	GLY	N-CA-C	-5.31	107.78	115.27
18	J	113	ARG	CG-CD-NE	-5.31	100.32	112.00
18	J	343	ASN	CA-C-O	5.31	125.97	120.40
22	N	726	ALA	O-C-N	-5.31	116.50	122.12
24	P	71	VAL	N-CA-C	5.31	116.03	110.62
26	R	219	PHE	CA-C-O	-5.31	114.92	120.55
26	R	378	ASN	CA-CB-CG	-5.31	107.29	112.60
28	T	223	ASN	OD1-CG-ND2	5.31	127.91	122.60
29	U	10	VAL	N-CA-C	-5.31	100.68	108.11
2	1	72	HIS	ND1-CE1-NE2	5.31	113.71	108.40
11	C	106	PRO	CB-CA-C	-5.31	104.44	111.23
21	M	408	LEU	N-CA-CB	5.31	117.92	110.12
1	Z	904	PRO	CA-N-CD	-5.30	104.58	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	2	241	ARG	NE-CZ-NH1	-5.30	116.20	121.50
10	B	85	VAL	CA-CB-CG2	-5.30	101.38	110.40
11	C	60	PHE	CA-CB-CG	5.30	119.10	113.80
11	C	137	ILE	CA-CB-CG1	5.30	119.42	110.40
16	H	255	ARG	CB-CA-C	-5.30	101.98	110.79
17	I	149	SER	N-CA-CB	5.30	118.82	110.23
22	N	267	ASN	OD1-CG-ND2	-5.30	117.30	122.60
24	P	337	ALA	N-CA-C	-5.30	99.50	110.80
24	P	363	ILE	N-CA-C	-5.30	105.36	110.72
8	7	133	ILE	N-CA-C	-5.30	105.21	110.62
14	F	26	MET	N-CA-CB	-5.30	102.31	110.16
23	O	164	GLN	CB-CA-C	-5.30	101.99	110.79
4	3	65	GLN	O-C-N	-5.30	115.75	122.27
5	4	6	GLY	O-C-N	5.30	127.52	123.23
13	E	109	VAL	CB-CA-C	5.30	119.30	112.14
19	K	167	ILE	N-CA-C	-5.30	106.70	113.22
22	N	454	GLY	N-CA-C	5.30	120.50	114.67
27	S	447	ILE	CA-CB-CG2	-5.30	101.49	110.50
4	3	59	ASP	O-C-N	5.30	127.74	122.12
6	5	91	LYS	CA-C-O	5.30	127.10	121.11
8	7	133	ILE	O-C-N	-5.30	116.73	121.87
18	J	175	PHE	CA-CB-CG	-5.30	108.50	113.80
18	J	241	HIS	CB-CA-C	-5.30	99.36	110.17
20	L	32	GLN	OE1-CD-NE2	-5.30	117.30	122.60
24	P	174	TYR	O-C-N	5.30	128.66	122.99
30	V	218	LEU	CA-C-N	5.30	129.08	120.60
30	V	218	LEU	C-N-CA	5.30	129.08	120.60
13	E	12	VAL	CA-C-O	5.30	125.16	119.91
25	Q	203	PRO	CA-C-N	5.30	124.93	119.05
25	Q	203	PRO	C-N-CA	5.30	124.93	119.05
10	B	35	SER	CA-C-N	-5.30	115.91	123.17
10	B	35	SER	C-N-CA	-5.30	115.91	123.17
16	H	186	LYS	N-CA-C	5.30	117.13	111.36
18	J	171	HIS	CA-C-N	5.30	126.46	119.84
18	J	171	HIS	C-N-CA	5.30	126.46	119.84
8	7	196	ARG	NE-CZ-NH2	5.29	123.97	119.20
1	Z	899	ILE	CA-C-N	5.29	130.46	122.99
1	Z	899	ILE	C-N-CA	5.29	130.46	122.99
13	E	126	GLU	CB-CG-CD	-5.29	103.60	112.60
14	F	193	ARG	NE-CZ-NH2	-5.29	114.44	119.20
20	L	344	ARG	CA-C-N	5.29	127.81	120.29
20	L	344	ARG	C-N-CA	5.29	127.81	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	59	LEU	N-CA-C	5.29	117.05	111.28
25	Q	416	ASN	CA-CB-CG	-5.29	107.31	112.60
29	U	228	TYR	CA-C-N	5.29	127.81	120.29
29	U	228	TYR	C-N-CA	5.29	127.81	120.29
10	B	112	GLN	CG-CD-OE1	-5.29	110.22	120.80
12	D	100	ASP	N-CA-C	-5.29	102.06	108.14
22	N	374	SER	N-CA-CB	5.29	117.82	109.94
30	V	91	PHE	CA-CB-CG	-5.29	108.51	113.80
4	3	84	PRO	CA-C-N	5.29	127.37	120.28
4	3	84	PRO	C-N-CA	5.29	127.37	120.28
6	5	251	VAL	O-C-N	-5.29	116.74	121.87
16	H	55	LEU	CA-C-N	5.29	127.37	120.28
16	H	55	LEU	C-N-CA	5.29	127.37	120.28
22	N	777	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
24	P	155	GLN	CA-C-O	5.29	126.16	120.55
24	P	423	ASN	CB-CA-C	-5.29	102.01	110.79
26	R	74	LYS	N-CA-CB	-5.29	102.33	110.16
3	2	102	ILE	N-CA-CB	5.29	118.51	110.58
17	I	310	LEU	CA-C-N	5.29	128.35	120.31
17	I	310	LEU	C-N-CA	5.29	128.35	120.31
4	3	71	LEU	O-C-N	5.29	128.18	122.15
18	J	151	ILE	CA-C-O	-5.29	115.75	121.19
19	K	384	MET	N-CA-C	-5.29	105.60	111.36
8	7	145	ARG	CA-C-N	5.28	127.36	120.28
8	7	145	ARG	C-N-CA	5.28	127.36	120.28
8	7	186	TYR	CA-C-N	5.28	126.74	120.14
8	7	186	TYR	C-N-CA	5.28	126.74	120.14
20	L	19	HIS	CB-CG-ND1	5.28	130.62	122.70
20	L	84	ARG	CB-CG-CD	5.28	123.45	111.30
20	L	178	THR	CA-C-O	5.28	125.88	119.49
21	M	293	THR	CA-CB-OG1	5.28	117.53	109.60
27	S	313	LEU	CB-CA-C	-5.28	100.53	110.67
29	U	59	ASP	N-CA-C	-5.28	99.34	108.69
12	D	181	ILE	CA-C-N	5.28	129.59	121.19
12	D	181	ILE	C-N-CA	5.28	129.59	121.19
20	L	125	GLU	N-CA-CB	5.28	119.06	110.77
22	N	586	VAL	CA-CB-CG1	5.28	119.38	110.40
22	N	932	GLY	CA-C-O	-5.28	113.97	121.52
31	W	56	ASN	CA-C-N	5.28	131.20	122.33
31	W	56	ASN	C-N-CA	5.28	131.20	122.33
1	Z	240	VAL	N-CA-CB	5.28	118.60	111.21
1	Z	899	ILE	N-CA-C	-5.28	100.78	108.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	164	ASP	CA-C-N	5.28	127.89	120.28
6	5	164	ASP	C-N-CA	5.28	127.89	120.28
17	I	303	ARG	NE-CZ-NH1	-5.28	116.22	121.50
22	N	569	SER	CB-CA-C	-5.28	102.03	110.79
22	N	790	GLY	N-CA-C	-5.28	100.67	113.18
24	P	362	ASN	CB-CA-C	-5.28	102.03	110.79
25	Q	174	SER	CA-C-N	5.28	127.79	120.29
25	Q	174	SER	C-N-CA	5.28	127.79	120.29
29	U	13	PRO	CA-C-O	-5.28	111.63	119.18
21	M	158	TYR	CB-CG-CD2	-5.28	112.88	120.80
22	N	686	GLY	CA-C-N	5.28	127.35	120.28
22	N	686	GLY	C-N-CA	5.28	127.35	120.28
23	O	232	TRP	CB-CG-CD1	5.28	134.82	126.90
24	P	75	TYR	CA-C-N	5.28	127.79	120.29
24	P	75	TYR	C-N-CA	5.28	127.79	120.29
29	U	109	ASN	CB-CA-C	-5.28	102.03	110.79
1	Z	529	SER	N-CA-C	-5.28	100.70	108.99
6	5	245	ARG	CA-C-O	5.28	127.07	121.05
8	7	258	HIS	ND1-CE1-NE2	5.28	113.68	108.40
20	L	297	ARG	NH1-CZ-NH2	5.28	126.16	119.30
20	L	344	ARG	NE-CZ-NH1	5.28	126.78	121.50
28	T	173	CYS	CA-C-N	5.28	127.30	120.44
28	T	173	CYS	C-N-CA	5.28	127.30	120.44
19	K	176	GLU	O-C-N	-5.28	116.53	122.12
23	O	79	ILE	CA-C-N	5.28	131.46	121.97
23	O	79	ILE	C-N-CA	5.28	131.46	121.97
26	R	272	PHE	CA-CB-CG	-5.28	108.52	113.80
25	Q	12	ALA	N-CA-C	5.27	117.03	111.28
1	Z	301	HIS	CG-CD2-NE2	5.27	112.47	107.20
1	Z	656	GLY	CA-C-N	5.27	127.68	120.46
1	Z	656	GLY	C-N-CA	5.27	127.68	120.46
1	Z	764	LEU	N-CA-C	-5.27	105.53	111.28
2	1	205	GLY	CA-C-N	5.27	130.51	120.07
2	1	205	GLY	C-N-CA	5.27	130.51	120.07
3	2	125	MET	CB-CA-C	-5.27	102.04	110.79
17	I	117	ASP	N-CA-C	5.27	119.20	112.87
17	I	187	ILE	O-C-N	-5.27	115.93	122.52
23	O	374	ILE	CA-C-N	5.27	128.32	120.31
23	O	374	ILE	C-N-CA	5.27	128.32	120.31
24	P	346	GLU	N-CA-CB	5.27	119.40	110.49
27	S	357	LEU	N-CA-CB	5.27	117.87	110.12
2	1	231	PHE	O-C-N	5.27	130.16	122.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	7	110	GLN	CB-CA-C	-5.27	102.04	110.79
13	E	137	PHE	O-C-N	-5.27	116.79	123.01
31	W	54	LEU	N-CA-CB	-5.27	102.38	110.44
9	A	245	ARG	NE-CZ-NH1	-5.27	116.23	121.50
12	D	146	GLN	N-CA-C	-5.27	100.81	109.40
22	N	144	ASP	CA-CB-CG	-5.27	107.33	112.60
25	Q	240	ASP	N-CA-C	5.27	117.02	111.28
28	T	110	SER	CA-C-N	5.27	128.32	120.31
28	T	110	SER	C-N-CA	5.27	128.32	120.31
28	T	290	ILE	CA-C-O	5.27	126.43	120.95
1	Z	226	TYR	CA-C-O	5.27	126.00	120.42
7	6	117	ALA	N-CA-CB	5.27	117.86	110.12
16	H	134	ILE	CA-CB-CG1	5.27	119.36	110.40
17	I	212	GLU	CA-C-N	5.27	127.61	120.44
17	I	212	GLU	C-N-CA	5.27	127.61	120.44
22	N	767	THR	CA-C-N	5.27	130.50	122.65
22	N	767	THR	C-N-CA	5.27	130.50	122.65
23	O	9	GLN	CA-CB-CG	5.27	124.64	114.10
26	R	178	ASN	OD1-CG-ND2	5.27	127.87	122.60
29	U	81	MET	O-C-N	5.27	128.15	122.15
3	2	84	ILE	N-CA-C	-5.27	100.17	107.80
5	4	115	LEU	CA-C-O	-5.27	114.47	120.32
12	D	7	ILE	N-CA-C	-5.27	105.26	111.00
23	O	306	GLU	N-CA-C	5.27	117.02	111.28
27	S	227	VAL	O-C-N	-5.27	116.06	122.06
1	Z	490	ALA	N-CA-C	5.26	118.59	111.17
5	4	24	ASN	CA-C-N	5.26	131.45	121.97
5	4	24	ASN	C-N-CA	5.26	131.45	121.97
5	4	179	SER	N-CA-C	-5.26	100.59	109.07
20	L	70	ILE	N-CA-CB	5.26	118.41	111.25
21	M	390	ASP	CA-CB-CG	-5.26	107.33	112.60
28	T	164	PHE	CA-CB-CG	-5.26	108.53	113.80
29	U	157	HIS	CA-C-N	5.26	131.44	121.97
29	U	157	HIS	C-N-CA	5.26	131.44	121.97
2	1	103	GLU	N-CA-CB	-5.26	102.42	110.26
13	E	61	PRO	CB-CA-C	-5.26	104.11	110.00
12	D	48	LYS	N-CA-CB	5.26	118.86	110.65
14	F	138	ASP	O-C-N	5.26	128.63	122.84
16	H	189	GLU	N-CA-C	-5.26	105.62	111.36
18	J	352	PRO	N-CA-CB	5.26	108.77	103.25
20	L	152	PRO	O-C-N	5.26	129.01	122.22
25	Q	374	PHE	N-CA-C	-5.26	99.75	108.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	451	ILE	O-C-N	5.26	128.73	123.10
28	T	209	HIS	CG-CD2-NE2	5.26	112.46	107.20
4	3	154	TRP	CA-CB-CG	5.26	123.59	113.60
17	I	322	ARG	N-CA-C	-5.26	107.03	113.50
20	L	19	HIS	CB-CG-CD2	-5.26	124.36	131.20
25	Q	183	LEU	CA-C-N	5.26	124.89	119.05
25	Q	183	LEU	C-N-CA	5.26	124.89	119.05
27	S	364	THR	CA-C-N	5.26	127.33	120.28
27	S	364	THR	C-N-CA	5.26	127.33	120.28
30	V	166	ASN	N-CA-CB	5.26	119.38	110.49
30	V	250	GLU	CA-CB-CG	-5.26	103.58	114.10
1	Z	199	ASN	CA-C-O	5.26	126.88	120.57
14	F	135	ALA	N-CA-CB	-5.26	102.68	111.20
26	R	357	ASN	CA-CB-CG	5.26	117.86	112.60
1	Z	192	VAL	O-C-N	-5.26	117.06	120.42
2	1	237	PRO	CA-C-O	-5.26	112.94	120.56
7	6	174	GLN	CA-C-N	5.26	124.89	119.05
7	6	174	GLN	C-N-CA	5.26	124.89	119.05
16	H	100	LYS	CA-C-N	5.26	131.43	121.97
16	H	100	LYS	C-N-CA	5.26	131.43	121.97
17	I	203	LEU	CA-C-O	-5.26	113.24	118.34
21	M	269	ARG	N-CA-C	-5.26	105.55	111.28
22	N	612	ASP	CA-CB-CG	-5.26	107.34	112.60
24	P	320	LEU	N-CA-CB	5.26	117.94	110.16
3	2	241	ARG	N-CA-C	-5.25	100.16	108.73
23	O	325	ASP	CA-CB-CG	-5.25	107.34	112.60
30	V	300	LEU	CA-C-N	5.25	127.27	120.44
30	V	300	LEU	C-N-CA	5.25	127.27	120.44
1	Z	724	ASN	CA-CB-CG	-5.25	107.35	112.60
3	2	133	TYR	CA-C-N	5.25	129.58	122.07
3	2	133	TYR	C-N-CA	5.25	129.58	122.07
10	B	48	THR	CA-C-N	5.25	130.25	123.00
10	B	48	THR	C-N-CA	5.25	130.25	123.00
13	E	205	VAL	N-CA-C	5.25	117.66	111.09
15	G	27	ALA	O-C-N	5.25	128.14	122.15
16	H	61	GLU	CA-C-N	5.25	127.32	120.28
16	H	61	GLU	C-N-CA	5.25	127.32	120.28
18	J	206	HIS	CG-CD2-NE2	5.25	112.45	107.20
21	M	252	ALA	O-C-N	-5.25	117.33	123.27
1	Z	113	MET	N-CA-C	-5.25	106.65	113.16
5	4	71	ASN	CB-CG-OD1	5.25	131.30	120.80
7	6	234	GLU	CA-C-O	-5.25	114.97	121.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	D	118	TYR	N-CA-C	5.25	117.91	111.82
17	I	256	ILE	O-C-N	5.25	128.64	122.81
21	M	144	LYS	CB-CG-CD	5.25	123.38	111.30
23	O	345	GLN	CA-C-N	5.25	127.65	120.46
23	O	345	GLN	C-N-CA	5.25	127.65	120.46
24	P	227	TYR	CA-C-N	5.25	127.32	120.28
24	P	227	TYR	C-N-CA	5.25	127.32	120.28
24	P	389	SER	O-C-N	5.25	127.69	122.12
25	Q	19	ASP	CB-CA-C	-5.25	102.60	112.00
26	R	286	TRP	CA-C-N	5.25	129.48	120.71
26	R	286	TRP	C-N-CA	5.25	129.48	120.71
1	Z	173	LEU	CA-C-O	-5.25	115.31	120.82
15	G	191	VAL	CB-CA-C	-5.25	105.05	112.14
16	H	90	GLU	N-CA-C	-5.25	99.89	108.76
6	5	196	GLY	CA-C-N	5.25	127.65	120.46
6	5	196	GLY	C-N-CA	5.25	127.65	120.46
23	O	84	VAL	CB-CA-C	-5.25	104.98	112.22
26	R	127	THR	CA-C-N	5.25	127.26	120.44
26	R	127	THR	C-N-CA	5.25	127.26	120.44
27	S	466	ILE	CA-CB-CG1	5.25	119.32	110.40
30	V	146	ASP	CA-C-N	5.25	124.57	118.85
30	V	146	ASP	C-N-CA	5.25	124.57	118.85
2	1	195	ALA	O-C-N	5.25	127.68	122.12
9	A	100	ASN	N-CA-C	-5.25	105.56	111.28
12	D	226	GLU	CB-CG-CD	-5.25	103.68	112.60
13	E	110	GLU	CB-CA-C	-5.25	102.08	110.79
13	E	201	ILE	O-C-N	5.25	126.96	121.87
20	L	258	MET	CA-C-O	-5.25	114.99	120.55
22	N	586	VAL	O-C-N	5.25	127.23	121.83
23	O	283	THR	N-CA-C	-5.25	106.47	112.92
24	P	96	GLN	CB-CA-C	5.25	120.86	110.42
24	P	118	LEU	O-C-N	-5.25	115.78	120.71
25	Q	396	THR	CA-C-N	5.25	127.74	120.29
25	Q	396	THR	C-N-CA	5.25	127.74	120.29
26	R	79	ASP	CB-CA-C	-5.25	102.08	110.79
1	Z	497	VAL	O-C-N	-5.25	116.43	121.83
3	2	139	ALA	N-CA-CB	5.25	119.49	110.68
27	S	173	ILE	N-CA-C	5.25	119.42	112.76
5	4	185	LYS	N-CA-C	-5.24	106.64	112.57
10	B	1	MET	CA-C-N	5.24	131.56	121.54
10	B	1	MET	C-N-CA	5.24	131.56	121.54
20	L	71	VAL	CA-CB-CG1	-5.24	101.48	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	269	ARG	NE-CZ-NH2	5.24	123.92	119.20
21	M	403	ALA	CA-C-N	5.24	125.80	119.98
21	M	403	ALA	C-N-CA	5.24	125.80	119.98
23	O	198	PHE	CB-CG-CD1	5.24	129.61	120.70
23	O	319	LEU	N-CA-C	-5.24	105.64	111.36
25	Q	115	GLU	CB-CG-CD	-5.24	103.69	112.60
27	S	381	GLN	CB-CA-C	-5.24	102.65	110.88
1	Z	828	ARG	N-CA-CB	5.24	119.31	110.77
9	A	90	GLN	N-CA-C	-5.24	105.65	111.36
27	S	285	TRP	N-CA-C	-5.24	99.74	108.34
3	2	44	THR	CA-CB-OG1	5.24	117.46	109.60
12	D	97	THR	O-C-N	-5.24	116.37	122.03
16	H	173	THR	N-CA-CB	5.24	118.02	110.37
6	5	164	ASP	N-CA-C	-5.24	102.41	109.95
6	5	245	ARG	O-C-N	-5.24	116.83	123.01
11	C	36	GLY	N-CA-C	-5.24	100.77	113.18
13	E	197	SER	CA-C-O	-5.24	115.00	120.55
17	I	334	ILE	O-C-N	-5.24	116.96	122.20
20	L	302	ASP	N-CA-C	-5.24	100.16	109.06
31	W	93	ALA	CA-C-N	5.24	127.30	120.28
31	W	93	ALA	C-N-CA	5.24	127.30	120.28
1	Z	415	GLY	O-C-N	5.24	127.99	122.28
1	Z	737	ASN	CA-C-N	5.24	130.38	122.68
1	Z	737	ASN	C-N-CA	5.24	130.38	122.68
8	7	157	ILE	CA-C-O	5.24	126.13	120.53
10	B	84	ARG	CA-C-N	5.24	127.64	120.46
10	B	84	ARG	C-N-CA	5.24	127.64	120.46
16	H	171	ASP	N-CA-C	-5.24	106.68	114.64
23	O	219	HIS	CE1-NE2-CD2	-5.24	103.76	109.00
25	Q	161	ASP	CA-CB-CG	-5.24	107.36	112.60
4	3	91	VAL	N-CA-C	-5.24	105.43	110.72
14	F	22	ILE	CA-C-N	5.24	127.30	120.28
14	F	22	ILE	C-N-CA	5.24	127.30	120.28
23	O	283	THR	CA-CB-CG2	-5.24	101.60	110.50
2	1	120	MET	CB-CA-C	-5.23	102.66	110.88
5	4	145	ARG	N-CA-C	5.23	116.79	111.14
9	A	121	ILE	O-C-N	-5.23	116.44	121.83
16	H	125	LEU	N-CA-C	-5.23	99.57	108.26
19	K	289	LEU	O-C-N	5.23	127.67	122.12
20	L	36	LEU	CB-CA-C	-5.23	102.10	110.79
21	M	123	VAL	N-CA-C	5.23	116.51	108.71
24	P	88	MET	O-C-N	-5.23	116.57	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	W	59	GLU	CA-CB-CG	5.23	124.57	114.10
31	W	127	LEU	CA-C-N	5.23	127.29	120.28
31	W	127	LEU	C-N-CA	5.23	127.29	120.28
16	H	59	ILE	CA-C-O	-5.23	115.30	120.85
17	I	91	LYS	N-CA-C	-5.23	105.66	111.36
20	L	139	SER	CA-C-N	5.23	127.72	120.29
20	L	139	SER	C-N-CA	5.23	127.72	120.29
21	M	178	ASP	CA-C-N	5.23	128.26	120.31
21	M	178	ASP	C-N-CA	5.23	128.26	120.31
26	R	199	GLU	CA-C-O	5.23	126.31	120.82
2	1	177	TYR	CB-CA-C	-5.23	103.25	111.51
14	F	19	ILE	CA-C-N	5.23	127.81	120.28
14	F	19	ILE	C-N-CA	5.23	127.81	120.28
19	K	41	TYR	CA-C-N	5.23	128.26	120.31
19	K	41	TYR	C-N-CA	5.23	128.26	120.31
21	M	319	GLY	N-CA-C	5.23	120.09	113.24
22	N	21	GLU	CA-C-N	5.23	127.24	120.44
22	N	21	GLU	C-N-CA	5.23	127.24	120.44
22	N	243	LEU	N-CA-CB	5.23	117.90	110.16
22	N	402	PHE	CA-CB-CG	-5.23	108.57	113.80
22	N	658	ILE	CA-C-N	5.23	127.55	120.44
22	N	658	ILE	C-N-CA	5.23	127.55	120.44
29	U	35	VAL	N-CA-C	-5.23	100.22	107.80
1	Z	82	ILE	CA-C-N	5.23	127.74	120.63
1	Z	82	ILE	C-N-CA	5.23	127.74	120.63
1	Z	608	LYS	CA-C-N	5.23	127.62	120.46
1	Z	608	LYS	C-N-CA	5.23	127.62	120.46
5	4	37	LYS	O-C-N	-5.23	116.02	122.82
19	K	304	ASN	N-CA-CB	5.23	119.33	110.49
3	2	159	HIS	CG-CD2-NE2	5.23	112.43	107.20
10	B	88	HIS	CE1-NE2-CD2	-5.23	103.77	109.00
18	J	167	LEU	CA-C-O	-5.23	113.27	118.34
18	J	355	SER	CB-CA-C	5.23	119.16	109.54
19	K	328	ASP	CA-C-N	-5.23	114.86	122.65
19	K	328	ASP	C-N-CA	-5.23	114.86	122.65
21	M	384	LEU	CA-C-N	5.23	127.28	120.28
21	M	384	LEU	C-N-CA	5.23	127.28	120.28
24	P	198	ASP	CA-C-N	5.23	127.71	120.29
24	P	198	ASP	C-N-CA	5.23	127.71	120.29
25	Q	138	PHE	O-C-N	-5.23	116.58	122.12
2	1	228	ILE	CA-C-O	-5.23	112.95	119.95
6	5	207	GLU	CA-C-N	5.23	127.62	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	207	GLU	C-N-CA	5.23	127.62	120.46
12	D	241	LYS	CA-C-N	5.23	127.71	120.29
12	D	241	LYS	C-N-CA	5.23	127.71	120.29
17	I	189	GLY	CA-C-N	5.23	131.55	122.56
17	I	189	GLY	C-N-CA	5.23	131.55	122.56
26	R	376	LEU	CA-C-O	5.23	125.98	119.97
27	S	458	VAL	CA-C-O	5.23	126.02	120.48
1	Z	406	GLY	N-CA-C	5.22	119.00	112.73
12	D	237	GLU	CA-C-O	5.22	125.96	120.42
16	H	251	GLY	N-CA-C	-5.22	107.46	114.25
16	H	381	THR	CA-C-N	5.22	126.67	120.14
16	H	381	THR	C-N-CA	5.22	126.67	120.14
21	M	80	ILE	CA-C-N	5.22	127.28	120.28
21	M	80	ILE	C-N-CA	5.22	127.28	120.28
21	M	420	TYR	CB-CA-C	-5.22	101.97	110.85
25	Q	114	ILE	N-CA-CB	5.22	117.64	110.54
28	T	269	ASP	CB-CA-C	-5.22	102.12	110.79
10	B	140	ASN	CA-CB-CG	-5.22	107.38	112.60
11	C	120	ALA	CA-C-N	5.22	127.28	120.28
11	C	120	ALA	C-N-CA	5.22	127.28	120.28
14	F	65	HIS	CE1-NE2-CD2	-5.22	103.78	109.00
14	F	112	ILE	O-C-N	5.22	126.94	121.87
22	N	79	ASN	O-C-N	5.22	127.45	122.07
23	O	292	THR	N-CA-CB	-5.22	102.48	110.42
31	W	70	ARG	CA-C-O	5.22	125.96	120.42
22	N	799	LYS	CA-C-N	5.22	129.75	122.23
22	N	799	LYS	C-N-CA	5.22	129.75	122.23
28	T	222	THR	N-CA-C	5.22	116.66	111.07
29	U	212	LEU	CA-C-N	5.22	127.54	120.44
29	U	212	LEU	C-N-CA	5.22	127.54	120.44
1	Z	223	GLU	N-CA-C	-5.22	100.51	108.76
21	M	51	GLU	CA-C-N	5.22	127.14	120.56
21	M	51	GLU	C-N-CA	5.22	127.14	120.56
22	N	811	PHE	CB-CG-CD2	5.22	129.57	120.70
23	O	69	HIS	CE1-NE2-CD2	-5.22	103.78	109.00
8	7	166	PHE	N-CA-C	-5.22	99.94	108.76
11	C	1	MET	CA-C-O	-5.22	111.93	120.80
13	E	73	HIS	CB-CG-ND1	5.22	130.53	122.70
22	N	108	TYR	CA-C-N	5.22	127.27	120.28
22	N	108	TYR	C-N-CA	5.22	127.27	120.28
29	U	154	THR	N-CA-CB	5.22	118.55	110.46
4	3	152	SER	N-CA-C	5.22	116.77	111.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	86	ALA	N-CA-C	-5.22	108.67	114.62
12	D	113	SER	CA-C-N	5.22	127.27	120.28
12	D	113	SER	C-N-CA	5.22	127.27	120.28
13	E	35	SER	CA-C-O	5.22	127.97	120.51
22	N	96	TYR	N-CA-C	-5.22	105.49	111.07
22	N	627	PHE	CB-CA-C	-5.22	101.06	109.72
24	P	246	HIS	ND1-CE1-NE2	5.22	113.62	108.40
7	6	160	ARG	NE-CZ-NH1	5.21	126.72	121.50
10	B	66	GLU	CA-C-N	5.21	126.02	120.13
10	B	66	GLU	C-N-CA	5.21	126.02	120.13
29	U	231	GLN	CB-CA-C	-5.21	102.14	110.79
5	4	136	ALA	CA-C-O	5.21	125.99	120.10
13	E	99	HIS	CG-CD2-NE2	5.21	112.41	107.20
22	N	376	MET	CG-SD-CE	-5.21	89.43	100.90
1	Z	367	SER	N-CA-CB	5.21	119.30	110.49
6	5	193	TYR	CA-CB-CG	-5.21	104.52	113.90
7	6	121	SER	N-CA-C	5.21	116.96	111.28
21	M	352	ILE	CA-C-N	5.21	131.26	122.87
21	M	352	ILE	C-N-CA	5.21	131.26	122.87
23	O	123	LEU	CA-C-N	5.21	127.26	120.28
23	O	123	LEU	C-N-CA	5.21	127.26	120.28
5	4	169	LYS	CA-C-N	5.21	127.69	120.29
5	4	169	LYS	C-N-CA	5.21	127.69	120.29
11	C	89	GLU	CB-CG-CD	-5.21	103.74	112.60
29	U	72	HIS	CE1-NE2-CD2	-5.21	103.79	109.00
12	D	22	ALA	O-C-N	5.21	127.64	122.12
17	I	385	MET	CA-C-N	5.21	127.26	120.28
17	I	385	MET	C-N-CA	5.21	127.26	120.28
22	N	507	VAL	N-CA-CB	5.21	116.64	110.55
22	N	889	LEU	CA-C-N	5.21	127.26	120.28
22	N	889	LEU	C-N-CA	5.21	127.26	120.28
10	B	196	LYS	O-C-N	5.21	127.64	122.12
14	F	165	SER	CB-CA-C	-5.21	102.15	110.79
20	L	143	ARG	CA-C-O	-5.21	115.35	120.82
24	P	159	VAL	CA-C-N	5.21	127.21	120.44
24	P	159	VAL	C-N-CA	5.21	127.21	120.44
25	Q	69	LEU	N-CA-CB	5.21	117.86	110.16
12	D	54	GLN	O-C-N	-5.20	116.54	122.89
22	N	39	SER	CB-CA-C	-5.20	101.00	110.63
26	R	355	GLU	N-CA-CB	5.20	119.70	111.43
28	T	160	ASP	N-CA-CB	5.20	119.25	110.46
29	U	108	ILE	N-CA-C	-5.20	105.31	110.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	94	LYS	CG-CD-CE	5.20	123.26	111.30
8	7	202	GLN	CB-CG-CD	-5.20	103.76	112.60
10	B	143	ARG	CA-C-O	-5.20	114.84	120.87
24	P	280	ASP	CA-C-N	5.20	127.68	120.29
24	P	280	ASP	C-N-CA	5.20	127.68	120.29
19	K	246	MET	CB-CA-C	-5.20	102.01	110.85
22	N	883	ARG	CD-NE-CZ	-5.20	117.12	124.40
23	O	70	ARG	N-CA-C	5.20	116.76	111.14
23	O	372	HIS	CE1-NE2-CD2	-5.20	103.80	109.00
25	Q	237	GLU	CA-C-O	5.20	125.93	120.42
30	V	70	ILE	CA-C-O	-5.20	114.77	120.96
1	Z	589	SER	CB-CA-C	-5.20	102.16	110.79
13	E	58	LEU	CB-CA-C	-5.20	101.39	110.17
14	F	158	ALA	O-C-N	-5.20	118.73	123.41
7	6	78	THR	CA-C-N	5.20	130.23	123.06
7	6	78	THR	C-N-CA	5.20	130.23	123.06
23	O	184	ASP	CA-C-O	-5.20	113.48	119.61
24	P	322	GLU	CB-CA-C	-5.20	102.01	110.85
2	1	126	GLU	CA-C-O	5.20	125.72	119.59
2	1	156	ARG	NE-CZ-NH1	5.20	126.70	121.50
12	D	111	ILE	CA-CB-CG1	5.20	119.23	110.40
17	I	219	PRO	CA-C-N	5.20	127.56	120.54
17	I	219	PRO	C-N-CA	5.20	127.56	120.54
19	K	116	LEU	N-CA-C	-5.20	101.81	110.17
20	L	250	ASP	N-CA-C	5.20	118.88	112.54
24	P	370	TYR	CB-CA-C	-5.20	100.36	109.71
25	Q	57	LEU	N-CA-C	5.19	116.94	111.28
1	Z	872	VAL	CA-CB-CG2	5.19	119.23	110.40
17	I	417	GLU	CB-CG-CD	5.19	121.43	112.60
23	O	198	PHE	CB-CG-CD2	-5.19	111.87	120.70
24	P	427	ASP	CA-CB-CG	-5.19	107.41	112.60
31	W	145	GLU	CB-CG-CD	-5.19	103.77	112.60
1	Z	531	ASN	OD1-CG-ND2	5.19	127.79	122.60
3	2	180	VAL	CB-CA-C	-5.19	105.06	112.22
6	5	197	VAL	N-CA-C	5.19	115.91	110.62
10	B	127	VAL	CA-CB-CG1	-5.19	101.58	110.40
11	C	24	ALA	N-CA-C	5.19	117.68	111.71
18	J	350	LEU	CB-CA-C	-5.19	101.03	110.63
19	K	290	LEU	CA-C-N	5.19	127.23	120.28
19	K	290	LEU	C-N-CA	5.19	127.23	120.28
19	K	371	SER	CA-C-N	5.19	126.63	120.14
19	K	371	SER	C-N-CA	5.19	126.63	120.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	L	329	GLU	CA-C-O	5.19	125.92	120.42
23	O	280	MET	CG-SD-CE	5.19	112.32	100.90
27	S	426	LEU	N-CA-CB	5.19	118.22	110.22
29	U	274	ASN	N-CA-C	-5.19	105.70	111.36
30	V	190	GLN	CA-C-O	-5.19	114.92	120.42
18	J	377	HIS	CA-CB-CG	-5.19	108.61	113.80
22	N	706	VAL	CA-CB-CG1	-5.19	101.58	110.40
22	N	801	GLN	OE1-CD-NE2	5.19	127.79	122.60
26	R	338	ILE	N-CA-CB	5.19	117.60	110.54
29	U	213	GLU	O-C-N	5.19	127.69	122.09
1	Z	188	VAL	O-C-N	5.19	126.90	121.87
1	Z	309	GLU	N-CA-C	-5.19	105.02	112.13
1	Z	610	GLN	CB-CG-CD	-5.19	103.78	112.60
7	6	81	GLY	O-C-N	5.19	129.44	122.70
16	H	287	ASP	N-CA-CB	5.19	119.26	110.49
17	I	186	ASP	CA-C-N	-5.19	113.53	120.95
17	I	186	ASP	C-N-CA	-5.19	113.53	120.95
22	N	344	ARG	CB-CA-C	-5.19	102.70	110.90
23	O	156	TYR	O-C-N	5.19	127.62	122.12
26	R	312	ARG	NE-CZ-NH2	-5.19	114.53	119.20
28	T	164	PHE	CA-C-N	5.19	127.66	120.29
28	T	164	PHE	C-N-CA	5.19	127.66	120.29
29	U	96	HIS	CA-C-O	-5.19	115.37	121.44
16	H	421	ALA	N-CA-C	-5.19	106.73	113.16
1	Z	193	PRO	N-CD-CG	5.18	110.98	103.20
18	J	135	VAL	CA-C-O	-5.18	116.12	121.93
20	L	141	GLN	CA-C-O	-5.18	114.01	119.97
23	O	118	ILE	CA-C-O	-5.18	115.35	120.85
3	2	131	PHE	CB-CA-C	-5.18	102.19	110.79
13	E	212	ALA	O-C-N	5.18	129.51	121.63
15	G	221	THR	N-CA-C	-5.18	106.46	112.89
18	J	358	GLU	CB-CG-CD	-5.18	103.79	112.60
19	K	364	VAL	CA-C-N	5.18	127.65	120.29
19	K	364	VAL	C-N-CA	5.18	127.65	120.29
20	L	303	LEU	N-CA-CB	5.18	117.99	110.32
30	V	272	ILE	N-CA-CB	5.18	119.51	110.65
3	2	202	ILE	CB-CA-C	-5.18	105.07	112.22
5	4	15	VAL	N-CA-C	5.18	117.31	108.86
8	7	61	PHE	O-C-N	-5.18	115.89	122.78
8	7	244	ILE	CA-C-O	5.18	125.85	120.36
17	I	305	ILE	CA-CB-CG2	-5.18	101.69	110.50
19	K	108	GLY	N-CA-C	-5.18	107.51	116.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	L	294	ARG	CA-CB-CG	5.18	124.46	114.10
22	N	80	TYR	CA-CB-CG	-5.18	104.58	113.90
4	3	103	TYR	CB-CG-CD2	5.18	128.57	120.80
16	H	411	GLU	CB-CA-C	-5.18	102.19	110.79
17	I	302	GLU	N-CA-CB	5.18	118.44	110.21
19	K	63	ASP	CA-C-O	5.18	126.04	120.55
26	R	196	GLN	CA-C-N	5.18	127.22	120.28
26	R	196	GLN	C-N-CA	5.18	127.22	120.28
1	Z	336	GLU	N-CA-CB	5.18	117.73	110.12
22	N	496	LEU	CA-C-N	5.18	127.74	120.28
22	N	496	LEU	C-N-CA	5.18	127.74	120.28
24	P	371	THR	CB-CA-C	5.18	117.42	109.03
9	A	20	GLY	CA-C-O	5.18	124.74	119.10
11	C	247	ALA	O-C-N	5.18	127.61	122.12
20	L	240	GLY	N-CA-C	-5.18	100.91	113.18
21	M	395	GLN	CB-CG-CD	-5.18	103.80	112.60
22	N	92	ASP	N-CA-C	-5.18	106.99	113.72
22	N	147	TYR	N-CA-CB	5.18	117.91	110.20
22	N	470	ASN	N-CA-C	-5.18	99.77	110.80
27	S	270	LEU	N-CA-CB	5.18	117.73	110.12
2	1	51	ASP	N-CA-CB	5.17	117.52	110.38
4	3	111	GLY	N-CA-C	-5.17	103.13	110.63
15	G	54	VAL	CA-CB-CG2	-5.17	101.60	110.40
15	G	188	ARG	CD-NE-CZ	5.17	131.64	124.40
19	K	151	ILE	CA-C-O	5.17	124.78	119.35
22	N	40	GLU	N-CA-C	5.17	117.00	111.36
22	N	334	ALA	CA-C-N	5.17	127.55	120.46
22	N	334	ALA	C-N-CA	5.17	127.55	120.46
25	Q	351	SER	CB-CA-C	-5.17	102.20	110.79
30	V	73	PHE	N-CA-C	-5.17	100.87	108.99
17	I	289	ALA	CA-C-O	5.17	125.32	119.27
1	Z	293	GLN	N-CA-CB	-5.17	102.51	110.16
3	2	139	ALA	CA-C-N	5.17	130.29	123.05
3	2	139	ALA	C-N-CA	5.17	130.29	123.05
19	K	289	LEU	CA-C-O	-5.17	115.07	120.55
31	W	124	LEU	CA-C-N	5.17	127.76	120.42
31	W	124	LEU	C-N-CA	5.17	127.76	120.42
6	5	123	ARG	N-CA-CB	5.17	117.81	110.16
11	C	86	LEU	CA-C-N	5.17	127.21	120.28
11	C	86	LEU	C-N-CA	5.17	127.21	120.28
19	K	151	ILE	N-CA-C	-5.17	107.94	112.90
27	S	492	LYS	CA-C-N	5.17	131.00	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	S	492	LYS	C-N-CA	5.17	131.00	121.70
28	T	237	MET	N-CA-CB	5.17	117.51	110.01
28	T	292	PHE	O-C-N	5.17	128.96	122.55
1	Z	310	ASP	CA-CB-CG	5.17	117.77	112.60
11	C	162	THR	N-CA-C	-5.17	101.21	109.07
16	H	380	SER	CB-CA-C	-5.17	101.01	110.62
20	L	359	HIS	CE1-NE2-CD2	-5.17	103.83	109.00
21	M	274	LEU	CA-C-N	5.17	127.21	120.28
21	M	274	LEU	C-N-CA	5.17	127.21	120.28
25	Q	88	LEU	CA-C-N	5.17	127.07	120.56
25	Q	88	LEU	C-N-CA	5.17	127.07	120.56
13	E	56	SER	CA-C-N	5.17	125.62	120.04
13	E	56	SER	C-N-CA	5.17	125.62	120.04
13	E	74	ILE	N-CA-C	-5.17	100.76	108.46
13	E	220	VAL	N-CA-C	-5.17	100.68	108.12
18	J	253	SER	N-CA-C	-5.17	101.26	108.96
18	J	339	THR	CA-CB-OG1	5.17	117.35	109.60
18	J	396	GLU	CB-CG-CD	-5.17	103.82	112.60
20	L	146	ARG	CA-C-N	5.17	127.20	120.28
20	L	146	ARG	C-N-CA	5.17	127.20	120.28
23	O	144	ASN	CB-CA-C	-5.17	102.77	110.88
24	P	236	HIS	ND1-CE1-NE2	5.17	113.57	108.40
28	T	230	VAL	CA-C-N	5.17	127.16	120.44
28	T	230	VAL	C-N-CA	5.17	127.16	120.44
29	U	161	GLU	CA-C-N	-5.17	115.87	123.10
29	U	161	GLU	C-N-CA	-5.17	115.87	123.10
30	V	189	ILE	CA-CB-CG1	5.17	119.18	110.40
2	1	117	PHE	CB-CA-C	-5.17	102.22	110.79
16	H	314	ASN	CA-C-N	5.17	128.79	121.66
16	H	314	ASN	C-N-CA	5.17	128.79	121.66
17	I	237	LYS	CA-C-N	5.17	127.20	120.28
17	I	237	LYS	C-N-CA	5.17	127.20	120.28
21	M	418	GLU	CA-C-N	5.17	127.20	120.28
21	M	418	GLU	C-N-CA	5.17	127.20	120.28
1	Z	354	GLU	CA-C-N	5.16	127.65	120.63
1	Z	354	GLU	C-N-CA	5.16	127.65	120.63
9	A	67	THR	CA-C-O	-5.16	115.75	121.28
19	K	324	PRO	N-CA-C	5.16	119.32	111.11
22	N	231	ASP	N-CA-C	5.16	116.99	111.36
22	N	719	ASP	O-C-N	5.16	129.19	122.89
24	P	220	GLU	CA-C-O	-5.16	114.95	120.42
26	R	23	ARG	CA-C-N	5.16	127.46	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	R	23	ARG	C-N-CA	5.16	127.46	120.44
27	S	250	LEU	CA-C-O	5.16	125.89	120.42
27	S	260	HIS	ND1-CG-CD2	-5.16	100.94	106.10
28	T	145	ARG	NE-CZ-NH1	-5.16	116.34	121.50
30	V	130	GLN	O-C-N	5.16	127.59	122.12
1	Z	100	ARG	CA-C-O	-5.16	113.58	118.33
1	Z	474	SER	CA-C-N	5.16	127.62	120.29
1	Z	474	SER	C-N-CA	5.16	127.62	120.29
2	1	83	ALA	CB-CA-C	-5.16	102.22	110.79
2	1	231	PHE	N-CA-C	-5.16	101.57	109.41
12	D	9	VAL	CA-C-O	-5.16	115.56	121.44
14	F	153	TYR	O-C-N	5.16	129.38	123.29
16	H	110	LYS	O-C-N	5.16	129.45	122.59
17	I	132	TYR	CB-CG-CD2	-5.16	113.06	120.80
22	N	605	VAL	CA-CB-CG2	5.16	119.17	110.40
30	V	161	ARG	NE-CZ-NH2	5.16	123.84	119.20
16	H	357	ILE	CA-CB-CG2	5.16	119.27	110.50
27	S	414	TYR	N-CA-CB	5.16	119.20	110.49
29	U	201	LEU	N-CA-CB	5.16	117.70	110.12
1	Z	376	PHE	CB-CA-C	-5.16	102.79	110.88
11	C	23	TYR	N-CA-CB	5.16	117.79	110.16
12	D	124	ARG	CB-CA-C	-5.16	101.67	110.95
19	K	288	ILE	CA-C-N	5.16	127.19	120.28
19	K	288	ILE	C-N-CA	5.16	127.19	120.28
20	L	166	PRO	CA-C-N	5.16	126.28	119.84
20	L	166	PRO	C-N-CA	5.16	126.28	119.84
24	P	284	SER	CA-C-N	5.16	127.14	120.44
24	P	284	SER	C-N-CA	5.16	127.14	120.44
25	Q	178	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
25	Q	210	LEU	CB-CA-C	-5.16	102.79	110.88
7	6	86	HIS	CE1-NE2-CD2	-5.15	103.85	109.00
20	L	238	ILE	N-CA-CB	5.15	118.39	112.15
3	2	170	MET	CG-SD-CE	5.15	112.23	100.90
7	6	148	ALA	N-CA-CB	5.15	120.35	111.13
17	I	158	ALA	N-CA-C	-5.15	101.53	109.52
28	T	188	MET	O-C-N	-5.15	116.66	122.12
30	V	81	GLY	CA-C-N	5.15	127.51	120.35
30	V	81	GLY	C-N-CA	5.15	127.51	120.35
31	W	151	GLU	CA-C-O	5.15	127.97	121.58
19	K	288	ILE	CA-C-O	-5.15	115.71	121.17
19	K	289	LEU	CB-CA-C	-5.15	102.24	110.79
23	O	59	LEU	CA-C-N	5.15	128.14	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	O	59	LEU	C-N-CA	5.15	128.14	120.31
24	P	453	HIS	ND1-CE1-NE2	5.15	113.55	108.40
25	Q	37	GLU	N-CA-CB	5.15	117.75	110.90
25	Q	322	HIS	CB-CG-CD2	-5.15	124.50	131.20
30	V	54	MET	N-CA-C	-5.15	101.46	109.24
21	M	109	ALA	CA-C-N	5.15	131.37	121.54
21	M	109	ALA	C-N-CA	5.15	131.37	121.54
2	1	75	ILE	N-CA-CB	5.15	117.95	111.46
4	3	112	LEU	N-CA-C	-5.15	100.02	108.41
7	6	127	ARG	N-CA-CB	5.15	118.76	110.42
17	I	96	ARG	CA-C-N	5.15	127.18	120.28
17	I	96	ARG	C-N-CA	5.15	127.18	120.28
20	L	56	ILE	CB-CA-C	5.15	119.35	111.68
23	O	285	PRO	CA-C-O	-5.15	115.36	122.15
24	P	236	HIS	CB-CA-C	-5.15	102.80	110.88
24	P	420	ASP	CA-C-N	5.15	124.65	119.19
24	P	420	ASP	C-N-CA	5.15	124.65	119.19
26	R	150	PHE	N-CA-CB	5.15	117.47	110.01
29	U	227	ILE	CA-C-N	5.15	127.18	120.28
29	U	227	ILE	C-N-CA	5.15	127.18	120.28
7	6	153	ASP	CA-CB-CG	-5.15	107.45	112.60
22	N	529	ILE	CB-CA-C	-5.15	105.38	111.97
1	Z	135	GLY	CA-C-N	5.14	130.55	122.11
1	Z	135	GLY	C-N-CA	5.14	130.55	122.11
1	Z	675	PHE	CA-C-N	5.14	125.69	119.98
1	Z	675	PHE	C-N-CA	5.14	125.69	119.98
12	D	213	ARG	NE-CZ-NH2	5.14	123.83	119.20
18	J	110	PRO	O-C-N	5.14	129.59	122.64
18	J	362	VAL	CA-C-N	5.14	127.17	120.28
18	J	362	VAL	C-N-CA	5.14	127.17	120.28
20	L	220	ASN	N-CA-CB	5.14	117.68	110.12
20	L	341	ALA	CA-C-N	5.14	127.59	120.29
20	L	341	ALA	C-N-CA	5.14	127.59	120.29
21	M	217	ILE	CA-CB-CG1	5.14	119.14	110.40
22	N	31	VAL	CB-CA-C	-5.14	105.30	111.88
23	O	120	ALA	O-C-N	-5.14	116.29	122.15
26	R	80	GLU	CB-CG-CD	-5.14	103.85	112.60
27	S	207	ALA	N-CA-CB	5.14	119.19	110.49
9	A	113	MET	CA-C-N	5.14	127.17	120.28
9	A	113	MET	C-N-CA	5.14	127.17	120.28
14	F	75	ALA	N-CA-CB	5.14	119.17	110.79
18	J	100	ASP	CA-C-N	5.14	129.30	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	J	100	ASP	C-N-CA	5.14	129.30	120.71
19	K	270	ILE	CA-CB-CG2	-5.14	101.76	110.50
22	N	450	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
26	R	303	ALA	CA-C-O	-5.14	115.40	120.70
19	K	83	GLN	CA-C-O	5.14	125.91	120.36
24	P	83	LEU	N-CA-CB	5.14	117.68	110.12
2	1	124	TYR	CA-C-N	5.14	131.36	121.54
2	1	124	TYR	C-N-CA	5.14	131.36	121.54
6	5	125	TYR	CA-C-N	5.14	127.59	120.29
6	5	125	TYR	C-N-CA	5.14	127.59	120.29
9	A	174	GLU	O-C-N	5.14	127.57	122.12
10	B	207	ASN	N-CA-CB	5.14	118.19	110.53
19	K	197	ASP	CA-C-O	-5.14	114.88	120.69
21	M	137	ILE	CB-CA-C	5.14	118.23	111.19
22	N	155	LEU	O-C-N	5.14	127.64	122.09
22	N	462	LEU	O-C-N	5.14	127.57	122.12
23	O	35	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
23	O	332	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
27	S	409	MET	CA-C-O	5.14	126.00	120.55
31	W	33	VAL	CA-C-N	5.14	127.17	120.28
31	W	33	VAL	C-N-CA	5.14	127.17	120.28
2	1	213	ILE	O-C-N	5.14	129.11	123.10
10	B	63	HIS	CA-C-N	5.14	129.07	120.70
10	B	63	HIS	C-N-CA	5.14	129.07	120.70
15	G	143	VAL	CG1-CB-CG2	5.14	122.10	110.80
24	P	260	SER	CA-C-N	5.14	127.17	120.28
24	P	260	SER	C-N-CA	5.14	127.17	120.28
24	P	367	ALA	N-CA-C	-5.14	105.68	111.28
1	Z	140	LEU	N-CA-C	-5.14	105.58	111.07
1	Z	680	ARG	CD-NE-CZ	-5.14	117.21	124.40
11	C	112	THR	CA-CB-OG1	5.14	117.30	109.60
16	H	143	ASP	N-CA-C	-5.14	101.32	109.59
17	I	368	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
22	N	195	ASN	CA-C-N	5.14	127.16	120.28
22	N	195	ASN	C-N-CA	5.14	127.16	120.28
1	Z	425	GLY	CA-C-N	5.13	127.16	120.28
1	Z	425	GLY	C-N-CA	5.13	127.16	120.28
4	3	188	HIS	CA-CB-CG	5.13	118.93	113.80
8	7	66	VAL	CA-CB-CG2	-5.13	101.67	110.40
18	J	34	ILE	N-CA-C	-5.13	105.53	110.72
23	O	129	GLN	CA-C-O	-5.13	115.41	120.70
26	R	294	TYR	CA-CB-CG	-5.13	104.66	113.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	186	SER	N-CA-C	-5.13	100.33	109.06
22	N	715	LYS	CB-CA-C	-5.13	102.27	110.79
24	P	390	GLU	CB-CG-CD	-5.13	103.87	112.60
27	S	219	GLU	CA-C-O	-5.13	114.07	119.97
31	W	94	HIS	CA-C-N	5.13	127.58	120.29
31	W	94	HIS	C-N-CA	5.13	127.58	120.29
1	Z	148	GLN	N-CA-C	-5.13	104.31	110.88
17	I	416	ASN	O-C-N	5.13	128.58	122.27
18	J	121	TYR	CA-CB-CG	-5.13	104.66	113.90
19	K	251	PHE	N-CA-C	5.13	116.87	111.28
20	L	138	LEU	N-CA-C	-5.13	106.70	113.17
23	O	85	ARG	CA-C-N	5.13	127.58	120.29
23	O	85	ARG	C-N-CA	5.13	127.58	120.29
24	P	184	GLU	CB-CA-C	-5.13	102.27	110.79
24	P	436	MET	CG-SD-CE	-5.13	89.61	100.90
25	Q	222	GLU	CA-C-N	5.13	130.10	122.82
25	Q	222	GLU	C-N-CA	5.13	130.10	122.82
31	W	98	LYS	CA-C-O	5.13	125.90	120.10
22	N	437	TYR	O-C-N	5.13	128.00	122.15
23	O	192	GLU	O-C-N	5.13	127.56	122.12
25	Q	404	ILE	N-CA-C	5.13	115.34	110.42
1	Z	179	VAL	CA-CB-CG2	5.13	119.12	110.40
2	1	68	LEU	N-CA-C	-5.13	100.15	108.41
13	E	16	SER	N-CA-CB	5.13	119.50	110.37
15	G	136	PHE	CA-CB-CG	-5.13	108.67	113.80
23	O	234	ILE	CB-CA-C	-5.13	105.22	112.14
24	P	369	TYR	N-CA-CB	5.13	117.51	110.07
24	P	397	VAL	CA-C-O	-5.13	115.62	120.95
9	A	159	TYR	CB-CG-CD2	5.13	128.49	120.80
23	O	166	ILE	CA-CB-CG1	5.13	119.11	110.40
29	U	103	LYS	CA-C-N	5.13	129.28	120.72
29	U	103	LYS	C-N-CA	5.13	129.28	120.72
1	Z	248	LEU	N-CA-C	-5.12	105.69	111.28
7	6	197	ASP	O-C-N	5.12	127.35	122.07
9	A	22	LEU	N-CA-C	-5.12	100.35	109.06
9	A	68	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
19	K	275	PHE	CA-C-O	5.12	124.58	118.79
1	Z	837	LEU	N-CA-C	-5.12	105.09	113.19
4	3	129	CYS	CA-C-O	-5.12	115.52	119.46
8	7	259	MET	CG-SD-CE	-5.12	89.63	100.90
21	M	313	LEU	CA-C-O	5.12	125.98	120.55
22	N	540	GLN	OE1-CD-NE2	-5.12	117.48	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	V	240	HIS	ND1-CE1-NE2	5.12	113.52	108.40
1	Z	247	ALA	N-CA-CB	5.12	117.65	110.12
1	Z	255	VAL	CA-C-N	5.12	127.14	120.28
1	Z	255	VAL	C-N-CA	5.12	127.14	120.28
9	A	156	PRO	N-CA-C	-5.12	108.13	114.68
13	E	232	GLU	N-CA-CB	-5.12	102.58	110.16
15	G	164	CYS	N-CA-CB	5.12	120.21	111.66
22	N	116	ALA	CB-CA-C	-5.12	102.29	110.79
23	O	369	HIS	CB-CA-C	-5.12	102.84	110.88
24	P	100	ALA	N-CA-C	5.12	116.86	111.28
24	P	184	GLU	O-C-N	5.12	127.55	122.12
25	Q	270	LEU	CA-C-O	5.12	125.98	120.55
27	S	254	LEU	CA-C-N	5.12	127.14	120.28
27	S	254	LEU	C-N-CA	5.12	127.14	120.28
29	U	207	ASP	O-C-N	-5.12	116.69	122.12
16	H	320	ALA	N-CA-CB	-5.12	102.73	110.77
24	P	345	GLU	N-CA-C	-5.12	105.88	111.82
25	Q	63	ALA	CA-C-N	5.12	127.14	120.28
25	Q	63	ALA	C-N-CA	5.12	127.14	120.28
25	Q	412	ASP	CA-CB-CG	5.12	117.72	112.60
29	U	256	GLN	O-C-N	-5.12	116.31	122.15
1	Z	268	LEU	CA-C-O	-5.12	114.99	120.42
5	4	45	LEU	N-CA-C	-5.12	101.53	109.72
10	B	175	GLU	CA-C-N	5.12	127.40	120.44
10	B	175	GLU	C-N-CA	5.12	127.40	120.44
21	M	142	ALA	N-CA-C	5.12	117.60	111.71
21	M	326	VAL	O-C-N	5.12	128.36	123.14
24	P	232	GLN	O-C-N	-5.12	116.23	122.22
30	V	31	VAL	O-C-N	5.12	128.56	123.18
17	I	84	GLN	N-CA-C	-5.12	105.78	111.36
24	P	417	ARG	CA-C-N	5.12	125.02	119.85
24	P	417	ARG	C-N-CA	5.12	125.02	119.85
1	Z	815	HIS	CA-CB-CG	-5.11	108.69	113.80
8	7	97	GLY	N-CA-C	-5.11	101.61	110.71
12	D	148	ASP	CA-C-O	-5.11	115.64	120.34
22	N	564	ASP	CA-C-N	5.11	127.09	120.44
22	N	564	ASP	C-N-CA	5.11	127.09	120.44
23	O	355	PHE	CB-CA-C	-5.11	102.30	110.79
25	Q	81	SER	N-CA-C	-5.11	99.91	110.80
29	U	232	ASP	CA-C-N	5.11	127.00	120.56
29	U	232	ASP	C-N-CA	5.11	127.00	120.56
1	Z	196	MET	CA-C-O	5.11	125.97	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	K	276	ASP	CA-C-N	5.11	129.87	122.36
19	K	276	ASP	C-N-CA	5.11	129.87	122.36
1	Z	350	LYS	CA-CB-CG	5.11	124.32	114.10
2	1	175	ALA	O-C-N	5.11	127.61	122.09
3	2	56	VAL	N-CA-C	-5.11	101.12	108.48
18	J	66	LEU	N-CA-C	5.11	118.61	112.38
20	L	83	CYS	O-C-N	-5.11	118.14	123.56
23	O	114	CYS	CA-C-O	-5.11	115.13	120.55
24	P	56	THR	CA-C-O	5.11	125.33	119.35
24	P	236	HIS	CA-C-O	-5.11	115.45	120.82
25	Q	302	PHE	CA-C-N	5.11	127.13	120.28
25	Q	302	PHE	C-N-CA	5.11	127.13	120.28
29	U	82	PHE	CA-CB-CG	5.11	118.91	113.80
21	M	92	ASN	CA-C-N	-5.11	115.98	122.37
21	M	92	ASN	C-N-CA	-5.11	115.98	122.37
21	M	383	GLU	N-CA-C	-5.11	105.71	111.28
26	R	176	ARG	CA-C-O	5.11	125.97	120.55
31	W	107	MET	CG-SD-CE	-5.11	89.66	100.90
1	Z	690	VAL	CA-C-N	5.11	124.90	119.28
1	Z	690	VAL	C-N-CA	5.11	124.90	119.28
4	3	123	SER	N-CA-C	-5.11	101.61	109.52
16	H	368	ILE	CA-C-O	-5.11	116.26	121.67
17	I	126	SER	O-C-N	5.11	128.37	122.19
22	N	56	SER	CA-C-O	5.11	126.74	120.15
22	N	229	VAL	CA-C-N	5.11	127.08	120.44
22	N	229	VAL	C-N-CA	5.11	127.08	120.44
22	N	259	GLN	CB-CA-C	-5.11	102.31	110.79
22	N	432	SER	CA-C-N	5.11	126.22	119.84
22	N	432	SER	C-N-CA	5.11	126.22	119.84
22	N	772	TRP	CB-CG-CD1	5.11	134.56	126.90
25	Q	49	SER	N-CA-C	5.11	117.58	111.71
29	U	112	MET	CA-C-N	5.11	127.12	120.28
29	U	112	MET	C-N-CA	5.11	127.12	120.28
1	Z	69	SER	CB-CA-C	-5.11	102.86	110.88
9	A	56	VAL	CA-C-N	5.11	126.22	119.84
9	A	56	VAL	C-N-CA	5.11	126.22	119.84
11	C	156	TYR	N-CA-C	-5.11	101.43	109.50
12	D	208	LEU	CA-C-O	5.11	126.21	120.70
23	O	261	LEU	CB-CA-C	-5.11	102.31	110.79
24	P	362	ASN	O-C-N	5.11	127.53	122.12
24	P	429	SER	CB-CA-C	-5.11	100.87	110.67
30	V	133	PHE	CB-CA-C	-5.11	102.32	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	5	183	ALA	CA-C-O	-5.10	113.21	120.51
1	Z	585	GLU	O-C-N	5.10	125.42	121.85
6	5	219	ILE	CA-C-N	5.10	127.12	120.28
6	5	219	ILE	C-N-CA	5.10	127.12	120.28
8	7	203	PRO	CB-CA-C	-5.10	104.66	112.11
16	H	207	GLU	CA-C-N	5.10	125.64	120.38
16	H	207	GLU	C-N-CA	5.10	125.64	120.38
19	K	132	LEU	N-CA-C	-5.10	101.61	109.52
23	O	242	SER	O-C-N	5.10	127.60	122.09
26	R	168	ILE	N-CA-C	5.10	120.01	113.07
27	S	257	ASN	CA-C-N	5.10	127.12	120.28
27	S	257	ASN	C-N-CA	5.10	127.12	120.28
30	V	266	THR	N-CA-C	5.10	119.69	112.75
10	B	55	ILE	O-C-N	5.10	127.56	121.80
16	H	146	LYS	CA-C-O	5.10	127.81	120.51
2	1	140	GLN	O-C-N	-5.10	116.34	122.15
11	C	31	ALA	N-CA-C	5.10	117.83	110.28
12	D	154	HIS	ND1-CE1-NE2	5.10	113.50	108.40
14	F	192	LEU	CA-C-N	5.10	127.53	120.29
14	F	192	LEU	C-N-CA	5.10	127.53	120.29
17	I	274	ALA	O-C-N	5.10	127.53	122.12
17	I	322	ARG	CA-CB-CG	5.10	124.30	114.10
19	K	399	PHE	CB-CA-C	-5.10	102.33	110.79
25	Q	194	ARG	NE-CZ-NH2	5.10	123.79	119.20
1	Z	304	PHE	CB-CA-C	-5.10	100.28	110.42
1	Z	730	GLY	O-C-N	5.10	127.08	122.19
7	6	115	ALA	N-CA-CB	5.10	117.40	110.01
16	H	348	LEU	CA-C-N	5.10	127.62	120.28
16	H	348	LEU	C-N-CA	5.10	127.62	120.28
18	J	328	ILE	CA-C-N	5.10	127.53	120.29
18	J	328	ILE	C-N-CA	5.10	127.53	120.29
21	M	132	TYR	CA-CB-CG	-5.10	104.72	113.90
24	P	306	LEU	CB-CA-C	-5.10	102.33	110.79
26	R	233	ARG	N-CA-C	5.10	121.08	109.81
2	1	105	ASN	CA-C-N	5.10	134.23	121.80
2	1	105	ASN	C-N-CA	5.10	134.23	121.80
16	H	326	THR	CA-C-N	5.10	128.45	120.75
16	H	326	THR	C-N-CA	5.10	128.45	120.75
17	I	160	ILE	CB-CA-C	5.10	119.25	112.22
17	I	405	MET	CB-CA-C	-5.10	102.33	110.79
30	V	41	MET	CA-C-O	-5.10	115.47	120.82
1	Z	301	HIS	CE1-NE2-CD2	-5.09	103.91	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	444	ALA	N-CA-C	5.09	116.83	111.28
4	3	29	GLY	CA-C-N	-5.09	115.60	121.71
4	3	29	GLY	C-N-CA	-5.09	115.60	121.71
8	7	261	SER	N-CA-C	-5.09	102.61	109.95
15	G	88	LEU	CB-CA-C	-5.09	102.88	110.88
18	J	233	GLU	CA-C-N	5.09	127.11	120.28
18	J	233	GLU	C-N-CA	5.09	127.11	120.28
27	S	185	GLN	CA-C-N	5.09	127.11	120.28
27	S	185	GLN	C-N-CA	5.09	127.11	120.28
28	T	291	LEU	CA-C-N	5.09	129.59	122.36
28	T	291	LEU	C-N-CA	5.09	129.59	122.36
31	W	14	GLU	N-CA-CB	-5.09	102.46	110.46
31	W	134	GLU	CA-C-N	5.09	131.27	121.54
31	W	134	GLU	C-N-CA	5.09	131.27	121.54
15	G	183	LYS	CA-C-N	5.09	130.17	122.68
15	G	183	LYS	C-N-CA	5.09	130.17	122.68
20	L	48	LYS	CA-C-N	5.09	127.10	120.28
20	L	48	LYS	C-N-CA	5.09	127.10	120.28
22	N	486	MET	CB-CA-C	-5.09	102.93	110.67
25	Q	45	VAL	N-CA-CB	5.09	119.99	110.77
1	Z	111	GLU	CA-CB-CG	5.09	124.28	114.10
1	Z	127	SER	CA-C-O	-5.09	115.47	120.82
1	Z	466	LEU	N-CA-CB	5.09	117.60	110.12
1	Z	604	GLY	O-C-N	5.09	127.12	123.35
1	Z	691	PRO	CA-C-N	5.09	127.10	120.28
1	Z	691	PRO	C-N-CA	5.09	127.10	120.28
4	3	69	PHE	CB-CA-C	-5.09	102.89	110.88
5	4	27	GLN	CG-CD-NE2	5.09	124.04	116.40
9	A	71	LYS	O-C-N	-5.09	116.99	123.05
16	H	307	ASP	CA-C-N	5.09	131.39	121.41
16	H	307	ASP	C-N-CA	5.09	131.39	121.41
5	4	134	TYR	CA-C-N	5.09	125.73	120.03
5	4	134	TYR	C-N-CA	5.09	125.73	120.03
9	A	10	ASP	CA-C-N	5.09	127.10	120.28
9	A	10	ASP	C-N-CA	5.09	127.10	120.28
12	D	148	ASP	N-CA-C	-5.09	102.35	108.25
14	F	171	TYR	CA-C-N	5.09	127.10	120.28
14	F	171	TYR	C-N-CA	5.09	127.10	120.28
22	N	676	THR	O-C-N	5.09	127.95	122.15
23	O	80	ILE	N-CA-C	-5.09	98.75	109.34
26	R	158	THR	CA-CB-OG1	5.09	117.23	109.60
1	Z	607	LEU	CA-C-O	-5.09	115.16	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	N	115	ASN	CA-C-N	5.09	127.10	120.28
22	N	115	ASN	C-N-CA	5.09	127.10	120.28
1	Z	402	ASN	O-C-N	-5.09	116.61	122.87
10	B	97	TYR	O-C-N	5.09	128.53	122.27
19	K	191	TYR	CA-C-N	5.09	127.10	120.28
19	K	191	TYR	C-N-CA	5.09	127.10	120.28
20	L	142	ILE	CB-CA-C	5.09	119.01	112.14
22	N	525	ASN	CA-C-O	5.09	126.50	120.70
23	O	343	LEU	CA-C-N	5.09	127.51	120.29
23	O	343	LEU	C-N-CA	5.09	127.51	120.29
24	P	420	ASP	N-CA-C	-5.09	101.29	109.58
29	U	90	ARG	CB-CA-C	-5.09	101.65	110.45
5	4	5	ILE	CA-CB-CG1	5.08	119.05	110.40
5	4	166	GLU	CA-C-N	5.08	127.51	120.29
5	4	166	GLU	C-N-CA	5.08	127.51	120.29
8	7	164	GLU	CA-C-N	5.08	129.83	121.39
8	7	164	GLU	C-N-CA	5.08	129.83	121.39
16	H	192	GLU	N-CA-CB	5.08	117.44	110.07
27	S	319	HIS	CE1-NE2-CD2	-5.08	103.92	109.00
1	Z	589	SER	CA-C-N	5.08	127.51	120.29
1	Z	589	SER	C-N-CA	5.08	127.51	120.29
5	4	48	GLY	CA-C-N	5.08	127.93	120.71
5	4	48	GLY	C-N-CA	5.08	127.93	120.71
5	4	165	GLU	N-CA-CB	5.08	117.68	110.16
7	6	222	ARG	O-C-N	5.08	129.29	123.29
14	F	24	TYR	N-CA-C	-5.08	105.82	111.36
15	G	235	GLU	O-C-N	5.08	127.51	122.12
17	I	212	GLU	O-C-N	-5.08	116.73	122.12
25	Q	65	GLU	CA-C-N	5.08	127.09	120.28
25	Q	65	GLU	C-N-CA	5.08	127.09	120.28
1	Z	102	HIS	ND1-CE1-NE2	5.08	113.48	108.40
12	D	11	SER	CB-CA-C	-5.08	101.44	109.42
17	I	225	TYR	N-CA-CB	5.08	119.59	110.80
17	I	397	ALA	O-C-N	-5.08	116.73	122.12
18	J	360	LYS	N-CA-C	-5.08	105.74	111.28
22	N	25	HIS	CE1-NE2-CD2	-5.08	103.92	109.00
23	O	26	GLU	CA-C-O	-5.08	115.03	120.42
23	O	216	LEU	N-CA-CB	5.08	117.59	110.12
24	P	158	ASP	N-CA-C	-5.08	102.55	109.71
28	T	118	ARG	NE-CZ-NH2	5.08	123.77	119.20
5	4	57	ALA	O-C-N	5.08	127.50	122.12
7	6	111	MET	O-C-N	-5.08	116.62	122.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	6	162	SER	CB-CA-C	-5.08	101.29	110.23
7	6	194	LEU	CB-CA-C	-5.08	100.53	109.62
20	L	313	LEU	CB-CA-C	-5.08	102.36	110.79
21	M	190	GLY	N-CA-C	-5.08	108.61	115.21
22	N	33	ASP	CA-C-N	5.08	131.50	122.06
22	N	33	ASP	C-N-CA	5.08	131.50	122.06
27	S	288	TYR	O-C-N	5.08	127.50	122.12
22	N	12	LEU	CB-CA-C	-5.08	100.92	110.67
30	V	240	HIS	CG-CD2-NE2	5.08	112.28	107.20
17	I	429	LYS	CA-C-O	-5.08	115.17	120.55
20	L	132	TYR	CA-C-N	5.08	129.41	121.08
20	L	132	TYR	C-N-CA	5.08	129.41	121.08
21	M	260	PHE	N-CA-C	5.08	117.66	110.50
22	N	473	VAL	N-CA-C	5.08	115.80	110.62
24	P	46	THR	N-CA-CB	5.08	118.04	110.22
27	S	177	ASN	OD1-CG-ND2	-5.08	117.52	122.60
28	T	190	GLN	CA-C-N	5.08	127.50	120.29
28	T	190	GLN	C-N-CA	5.08	127.50	120.29
1	Z	169	GLU	CA-C-N	5.07	127.03	120.44
1	Z	169	GLU	C-N-CA	5.07	127.03	120.44
4	3	33	GLN	O-C-N	-5.07	116.84	122.93
7	6	114	GLY	CA-C-N	5.07	127.03	120.44
7	6	114	GLY	C-N-CA	5.07	127.03	120.44
9	A	111	VAL	CA-C-N	5.07	127.08	120.28
9	A	111	VAL	C-N-CA	5.07	127.08	120.28
14	F	126	ARG	CA-C-N	5.07	126.18	119.84
14	F	126	ARG	C-N-CA	5.07	126.18	119.84
17	I	307	ARG	CD-NE-CZ	5.07	131.50	124.40
19	K	240	LEU	O-C-N	-5.07	116.81	122.75
22	N	756	HIS	CE1-NE2-CD2	-5.07	103.93	109.00
21	M	53	LYS	N-CA-C	5.07	116.81	111.28
24	P	221	LYS	CB-CA-C	-5.07	102.37	110.79
24	P	308	LEU	N-CA-CB	5.07	117.57	110.12
25	Q	15	LEU	CA-C-N	5.07	127.34	120.44
25	Q	15	LEU	C-N-CA	5.07	127.34	120.44
32	Y	50	ASP	CB-CA-C	5.07	119.73	110.10
21	M	171	ARG	CA-CB-CG	-5.07	103.96	114.10
5	4	122	ALA	N-CA-CB	5.07	119.06	110.49
15	G	193	GLU	CB-CA-C	-5.07	102.23	110.85
19	K	47	LEU	CB-CA-C	-5.07	100.94	110.67
23	O	158	LEU	N-CA-C	-5.07	105.76	111.28
25	Q	209	THR	CA-C-N	5.07	127.03	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Q	209	THR	C-N-CA	5.07	127.03	120.44
25	Q	293	ALA	CA-C-N	5.07	127.07	120.28
25	Q	293	ALA	C-N-CA	5.07	127.07	120.28
1	Z	755	ASP	O-C-N	-5.07	117.88	121.83
4	3	135	ASP	CA-C-N	5.07	130.82	121.85
4	3	135	ASP	C-N-CA	5.07	130.82	121.85
12	D	205	ASN	CA-CB-CG	5.07	117.67	112.60
12	D	206	ILE	N-CA-CB	-5.07	104.42	111.41
13	E	65	GLU	CA-C-O	-5.07	116.01	121.38
16	H	128	GLN	CG-CD-NE2	-5.07	108.80	116.40
25	Q	318	ILE	CB-CA-C	-5.07	105.23	112.22
15	G	61	GLU	N-CA-C	-5.06	102.02	110.17
21	M	55	MET	CG-SD-CE	-5.06	89.76	100.90
22	N	535	TYR	CA-C-N	5.06	127.07	120.28
22	N	535	TYR	C-N-CA	5.06	127.07	120.28
8	7	146	SER	O-C-N	-5.06	116.75	122.12
11	C	220	ASN	CB-CG-ND2	-5.06	108.81	116.40
13	E	132	ALA	N-CA-C	-5.06	100.02	110.80
18	J	55	LYS	N-CA-CB	5.06	117.56	110.12
19	K	70	LYS	CB-CA-C	-5.06	102.24	110.85
24	P	355	LYS	N-CA-CB	5.06	117.56	110.12
28	T	224	VAL	CA-C-N	5.06	127.02	120.44
28	T	224	VAL	C-N-CA	5.06	127.02	120.44
1	Z	434	TYR	CA-C-O	-5.06	115.29	121.36
2	1	68	LEU	N-CA-CB	5.06	118.26	110.21
3	2	143	LEU	O-C-N	-5.06	117.32	123.29
13	E	95	GLU	CA-C-N	5.06	127.32	120.44
13	E	95	GLU	C-N-CA	5.06	127.32	120.44
14	F	167	SER	O-C-N	5.06	127.28	122.07
30	V	194	HIS	N-CA-C	5.06	116.61	111.14
3	2	244	ARG	N-CA-C	-5.06	100.02	110.80
7	6	188	ASN	O-C-N	-5.06	118.86	123.41
11	C	177	GLN	N-CA-CB	-5.06	102.73	110.07
19	K	102	ILE	CA-CB-CG2	5.06	119.10	110.50
23	O	111	VAL	CB-CA-C	-5.06	105.50	111.97
23	O	161	LYS	CA-C-O	5.06	125.78	120.42
25	Q	12	ALA	CB-CA-C	-5.06	102.39	110.79
25	Q	364	LYS	N-CA-C	5.06	116.87	111.36
28	T	250	ASN	CB-CG-ND2	5.06	123.99	116.40
30	V	96	LEU	O-C-N	5.06	127.48	122.12
4	3	76	LEU	CA-C-O	5.06	126.13	120.82
11	C	83	ALA	CB-CA-C	-5.06	102.40	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	I	232	LYS	CA-C-N	5.06	127.47	120.29
17	I	232	LYS	C-N-CA	5.06	127.47	120.29
22	N	152	GLY	O-C-N	-5.06	117.33	122.18
6	5	236	TYR	CB-CG-CD2	5.05	128.38	120.80
11	C	31	ALA	O-C-N	5.05	129.06	122.89
12	D	126	PRO	CA-C-N	5.05	127.05	120.28
12	D	126	PRO	C-N-CA	5.05	127.05	120.28
16	H	165	GLN	N-CA-C	-5.05	100.17	108.41
20	L	149	ILE	CA-C-N	5.05	127.47	120.29
20	L	149	ILE	C-N-CA	5.05	127.47	120.29
21	M	333	ASN	OD1-CG-ND2	-5.05	117.55	122.60
24	P	202	THR	CA-CB-OG1	5.05	117.18	109.60
25	Q	29	SER	CA-C-N	5.05	128.46	120.47
25	Q	29	SER	C-N-CA	5.05	128.46	120.47
26	R	295	TYR	N-CA-CB	-5.05	102.69	110.12
2	1	166	SER	CB-CA-C	-5.05	102.40	110.79
11	C	225	ILE	CA-CB-CG1	5.05	118.99	110.40
15	G	231	ASP	CA-C-N	5.05	127.38	120.46
15	G	231	ASP	C-N-CA	5.05	127.38	120.46
23	O	198	PHE	N-CA-C	5.05	116.79	111.28
25	Q	349	HIS	CA-CB-CG	5.05	118.85	113.80
3	2	220	VAL	CB-CA-C	-5.05	103.97	110.84
8	7	126	HIS	CA-CB-CG	5.05	118.85	113.80
14	F	134	ILE	N-CA-CB	5.05	117.05	110.99
22	N	104	CYS	N-CA-CB	5.05	117.55	110.12
22	N	695	MET	N-CA-C	5.05	118.70	112.54
23	O	69	HIS	CG-CD2-NE2	5.05	112.25	107.20
25	Q	386	ILE	CA-C-N	5.05	128.13	120.75
25	Q	386	ILE	C-N-CA	5.05	128.13	120.75
26	R	22	LEU	CB-CA-C	-5.05	102.26	110.85
5	4	12	TYR	CB-CG-CD1	5.05	128.37	120.80
10	B	130	PHE	CB-CG-CD1	5.05	129.28	120.70
17	I	285	ASP	N-CA-C	-5.05	101.73	109.76
30	V	297	VAL	N-CA-C	-5.05	105.47	110.62
9	A	237	ALA	CA-C-N	5.05	127.31	120.44
9	A	237	ALA	C-N-CA	5.05	127.31	120.44
14	F	7	ASP	CB-CA-C	-5.05	101.46	110.70
20	L	280	ASN	OD1-CG-ND2	5.05	127.65	122.60
22	N	409	GLY	CA-C-O	5.05	125.85	120.40
30	V	199	HIS	CA-CB-CG	5.05	118.85	113.80
31	W	110	ILE	N-CA-C	-5.05	101.04	108.11
10	B	169	ASN	N-CA-C	5.05	116.78	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	H	183	GLN	CB-CG-CD	5.05	121.18	112.60
17	I	181	GLN	CA-C-N	5.05	128.86	120.94
17	I	181	GLN	C-N-CA	5.05	128.86	120.94
22	N	215	ASN	CA-C-O	5.05	125.77	120.42
22	N	217	CYS	CB-CA-C	-5.05	102.27	110.85
25	Q	106	GLU	CA-C-N	5.05	127.37	120.46
25	Q	106	GLU	C-N-CA	5.05	127.37	120.46
29	U	161	GLU	CB-CA-C	-5.05	98.97	110.07
2	1	106	GLU	CB-CG-CD	-5.04	104.02	112.60
16	H	199	GLU	CA-C-N	5.04	127.00	120.44
16	H	199	GLU	C-N-CA	5.04	127.00	120.44
16	H	418	LYS	CA-C-N	5.04	127.98	120.31
16	H	418	LYS	C-N-CA	5.04	127.98	120.31
21	M	276	LYS	CA-C-O	5.04	125.90	120.55
24	P	129	ARG	CA-C-O	5.04	125.86	120.46
29	U	96	HIS	CG-CD2-NE2	5.04	112.25	107.20
10	B	158	TRP	CG-CD2-CE3	-5.04	128.86	133.90
13	E	51	GLU	CA-C-O	-5.04	115.06	120.46
17	I	161	GLY	CA-C-O	-5.04	116.16	121.56
20	L	274	LYS	O-C-N	5.04	129.51	123.16
27	S	170	LEU	CA-C-O	-5.04	115.07	120.42
4	3	52	GLY	N-CA-C	-5.04	103.00	110.71
7	6	188	ASN	CA-CB-CG	5.04	117.64	112.60
7	6	194	LEU	N-CA-C	5.04	117.21	110.35
8	7	126	HIS	CA-C-O	-5.04	115.21	120.55
8	7	165	SER	N-CA-C	-5.04	103.02	110.48
8	7	217	CYS	CA-C-N	5.04	127.97	120.31
8	7	217	CYS	C-N-CA	5.04	127.97	120.31
21	M	362	ARG	CA-CB-CG	-5.04	104.02	114.10
21	M	364	ARG	CD-NE-CZ	-5.04	117.34	124.40
28	T	143	LEU	CA-C-N	5.04	127.04	120.28
28	T	143	LEU	C-N-CA	5.04	127.04	120.28
6	5	138	ALA	N-CA-C	-5.04	105.87	111.36
12	D	223	GLU	N-CA-CB	5.04	117.62	110.16
16	H	70	THR	N-CA-CB	5.04	117.38	109.97
1	Z	85	SER	N-CA-C	5.04	117.65	110.24
1	Z	334	ALA	CA-C-N	5.04	127.45	120.29
1	Z	334	ALA	C-N-CA	5.04	127.45	120.29
17	I	102	LEU	N-CA-CB	5.04	117.62	110.16
19	K	43	ARG	CA-C-N	5.04	127.03	120.28
19	K	43	ARG	C-N-CA	5.04	127.03	120.28
20	L	367	PHE	CB-CG-CD1	5.04	129.26	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	P	252	ASP	N-CA-C	5.04	116.77	111.28
24	P	453	HIS	CB-CG-ND1	5.04	130.26	122.70
25	Q	12	ALA	CA-C-O	5.04	125.89	120.55
26	R	249	VAL	CA-CB-CG1	5.04	118.97	110.40
9	A	189	TRP	N-CA-CB	5.04	118.47	110.16
18	J	172	PRO	N-CD-CG	5.04	110.76	103.20
1	Z	542	ILE	N-CA-CB	5.04	118.13	110.58
2	1	29	ARG	CA-C-N	5.04	131.16	121.54
2	1	29	ARG	C-N-CA	5.04	131.16	121.54
3	2	250	GLY	CA-C-O	-5.04	114.96	120.40
4	3	103	TYR	CB-CG-CD1	-5.04	113.25	120.80
6	5	223	THR	N-CA-C	5.04	116.77	111.28
8	7	127	SER	CA-C-N	5.04	131.16	121.54
8	7	127	SER	C-N-CA	5.04	131.16	121.54
26	R	75	LYS	CA-C-N	5.04	127.03	120.28
26	R	75	LYS	C-N-CA	5.04	127.03	120.28
17	I	358	GLU	N-CA-C	5.03	116.77	111.28
18	J	98	ASP	CA-CB-CG	5.03	117.63	112.60
18	J	238	ALA	N-CA-C	-5.03	105.88	111.36
20	L	65	THR	O-C-N	-5.03	115.97	122.97
25	Q	119	SER	CA-C-O	-5.03	115.22	120.55
26	R	121	LEU	CA-C-N	5.03	127.02	120.28
26	R	121	LEU	C-N-CA	5.03	127.02	120.28
10	B	111	VAL	O-C-N	5.03	126.75	121.87
12	D	169	ARG	CA-C-N	5.03	127.96	120.31
12	D	169	ARG	C-N-CA	5.03	127.96	120.31
22	N	650	TYR	N-CA-CB	-5.03	102.72	110.12
3	2	178	MET	CB-CA-C	-5.03	102.44	110.79
12	D	233	GLU	N-CA-CB	5.03	117.61	110.16
14	F	10	VAL	N-CA-C	-5.03	106.18	113.07
15	G	99	PHE	CA-C-N	5.03	126.98	120.44
15	G	99	PHE	C-N-CA	5.03	126.98	120.44
21	M	161	LEU	CD1-CG-CD2	-5.03	99.73	110.80
21	M	243	GLN	N-CA-C	5.03	116.84	111.36
21	M	304	ARG	CD-NE-CZ	-5.03	117.36	124.40
22	N	383	ASP	CA-CB-CG	5.03	117.63	112.60
22	N	917	THR	N-CA-C	-5.03	102.44	109.69
23	O	369	HIS	O-C-N	5.03	127.25	122.07
26	R	157	ILE	CB-CA-C	5.03	118.93	112.14
26	R	318	TYR	O-C-N	5.03	127.52	122.09
1	Z	270	LEU	CA-C-N	5.03	131.15	121.54
1	Z	270	LEU	C-N-CA	5.03	131.15	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	4	163	CYS	CB-CA-C	-5.03	102.98	110.88
19	K	257	ASN	CB-CA-C	-5.03	104.91	111.40
28	T	303	ALA	CB-CA-C	-5.03	102.44	110.79
1	Z	718	ASP	CA-CB-CG	-5.03	107.57	112.60
14	F	39	LYS	N-CA-CB	5.03	120.19	111.39
19	K	388	ARG	CA-C-O	5.03	125.88	120.55
20	L	229	ILE	CB-CA-C	-5.03	103.34	110.83
25	Q	182	ASN	CA-C-N	5.03	126.38	120.09
25	Q	182	ASN	C-N-CA	5.03	126.38	120.09
4	3	162	HIS	ND1-CE1-NE2	5.03	113.42	108.40
13	E	100	TRP	CB-CG-CD2	-5.03	119.76	126.80
13	E	181	LEU	O-C-N	-5.03	116.42	122.15
18	J	63	LEU	CA-C-O	5.03	125.88	120.55
18	J	229	ARG	N-CA-C	-5.03	105.88	111.36
24	P	319	THR	CA-C-N	5.03	127.43	120.29
24	P	319	THR	C-N-CA	5.03	127.43	120.29
26	R	262	SER	CA-C-O	-5.03	115.22	120.55
27	S	163	VAL	CB-CA-C	5.03	118.92	112.14
30	V	240	HIS	N-CA-C	5.03	116.45	111.07
32	Y	51	ASP	N-CA-C	5.03	116.76	111.28
2	1	39	ALA	N-CA-C	-5.02	100.85	109.24
13	E	216	GLU	N-CA-CB	5.02	120.12	111.13
16	H	264	ALA	CA-C-N	5.02	127.42	120.29
16	H	264	ALA	C-N-CA	5.02	127.42	120.29
22	N	259	GLN	N-CA-C	5.02	116.76	111.28
22	N	800	VAL	CA-C-N	5.02	131.14	121.54
22	N	800	VAL	C-N-CA	5.02	131.14	121.54
25	Q	401	LEU	O-C-N	-5.02	116.79	122.12
11	C	80	THR	CA-C-N	5.02	126.97	120.44
11	C	80	THR	C-N-CA	5.02	126.97	120.44
25	Q	234	GLU	CB-CG-CD	-5.02	104.06	112.60
25	Q	296	ASN	O-C-N	-5.02	115.70	122.43
27	S	178	SER	N-CA-CB	5.02	119.50	111.56
1	Z	877	GLY	N-CA-C	-5.02	103.54	112.58
11	C	245	ALA	CB-CA-C	-5.02	102.46	110.79
19	K	388	ARG	CA-C-N	5.02	131.12	121.18
19	K	388	ARG	C-N-CA	5.02	131.12	121.18
20	L	177	GLY	CA-C-N	5.02	128.63	120.60
20	L	177	GLY	C-N-CA	5.02	128.63	120.60
29	U	125	ASP	CA-C-N	5.02	127.34	120.46
29	U	125	ASP	C-N-CA	5.02	127.34	120.46
1	Z	249	LEU	O-C-N	-5.02	116.90	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	251	CYS	CA-C-N	5.02	127.01	120.28
1	Z	251	CYS	C-N-CA	5.02	127.01	120.28
3	2	159	HIS	CA-C-O	5.02	125.53	119.31
6	5	84	TYR	N-CA-C	5.02	117.62	110.24
8	7	66	VAL	N-CA-C	-5.02	100.68	108.86
16	H	231	ASN	OD1-CG-ND2	5.02	127.62	122.60
17	I	120	HIS	CA-CB-CG	5.02	118.82	113.80
23	O	156	TYR	CB-CG-CD1	5.02	128.33	120.80
25	Q	8	GLU	O-C-N	5.02	127.87	122.15
27	S	253	LEU	CA-C-N	5.02	127.01	120.28
27	S	253	LEU	C-N-CA	5.02	127.01	120.28
29	U	103	LYS	O-C-N	-5.02	116.43	122.15
31	W	100	ARG	CA-C-N	5.02	130.12	122.24
31	W	100	ARG	C-N-CA	5.02	130.12	122.24
1	Z	121	PHE	CA-C-N	5.02	127.00	120.28
1	Z	121	PHE	C-N-CA	5.02	127.00	120.28
1	Z	279	GLU	N-CA-C	5.02	116.75	111.28
1	Z	499	THR	CA-C-O	5.02	125.87	120.55
5	4	174	ASN	CB-CA-C	-5.02	100.43	110.42
18	J	171	HIS	ND1-CE1-NE2	5.02	113.42	108.40
19	K	414	HIS	ND1-CE1-NE2	5.02	113.42	108.40
22	N	11	LEU	CA-C-N	5.02	127.94	120.31
22	N	11	LEU	C-N-CA	5.02	127.94	120.31
23	O	362	SER	O-C-N	5.02	127.44	122.12
24	P	60	MET	CA-C-O	5.02	125.78	120.36
29	U	213	GLU	CB-CA-C	-5.02	102.97	110.90
31	W	167	GLY	N-CA-C	-5.02	108.44	114.66
8	7	177	TYR	CB-CA-C	-5.02	101.34	111.17
20	L	188	ALA	CA-C-N	5.02	126.96	120.44
20	L	188	ALA	C-N-CA	5.02	126.96	120.44
27	S	195	ILE	O-C-N	5.02	127.00	121.83
29	U	58	PHE	N-CA-C	-5.02	100.89	108.52
30	V	294	SER	CA-C-N	5.02	127.00	120.28
30	V	294	SER	C-N-CA	5.02	127.00	120.28
1	Z	127	SER	CB-CA-C	-5.01	103.01	110.88
9	A	53	GLN	N-CA-CB	-5.01	103.08	111.20
14	F	161	ILE	CB-CA-C	5.01	118.17	110.55
30	V	263	ASP	N-CA-C	5.01	116.75	111.28
13	E	86	LYS	CA-C-O	-5.01	115.24	120.55
21	M	325	GLN	CA-C-O	5.01	124.65	119.14
23	O	48	PRO	N-CA-C	5.01	119.08	111.11
26	R	330	ILE	CA-C-O	-5.01	115.74	120.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	Z	755	ASP	N-CA-CB	5.01	117.73	110.77
12	D	154	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
13	E	99	HIS	O-C-N	5.01	128.08	122.22
17	I	151	LEU	CA-C-O	5.01	125.89	120.43
21	M	316	GLN	N-CA-CB	5.01	117.58	110.16
28	T	271	ILE	N-CA-C	5.01	115.73	110.62
31	W	63	THR	CA-C-O	-5.01	115.23	121.50
5	4	67	TYR	CA-C-O	-5.01	115.11	120.42
12	D	54	GLN	CA-C-O	5.01	126.77	121.16
16	H	232	ARG	CB-CA-C	-5.01	102.33	110.85
22	N	149	GLN	CB-CG-CD	-5.01	104.08	112.60
22	N	684	ARG	CA-C-N	5.01	126.95	120.44
22	N	684	ARG	C-N-CA	5.01	126.95	120.44
29	U	214	LYS	CA-C-N	5.01	127.32	120.46
29	U	214	LYS	C-N-CA	5.01	127.32	120.46
23	O	120	ALA	CA-C-N	5.01	127.40	120.29
23	O	120	ALA	C-N-CA	5.01	127.40	120.29
24	P	413	ILE	O-C-N	-5.01	117.89	123.20
27	S	395	ILE	CA-C-N	5.01	127.53	120.42
27	S	395	ILE	C-N-CA	5.01	127.53	120.42
1	Z	349	TYR	CB-CG-CD2	-5.01	113.29	120.80
1	Z	411	ALA	CA-C-N	5.01	127.49	120.28
1	Z	411	ALA	C-N-CA	5.01	127.49	120.28
8	7	219	ARG	NH1-CZ-NH2	-5.01	112.79	119.30
10	B	134	LEU	CA-C-N	5.01	130.06	123.00
10	B	134	LEU	C-N-CA	5.01	130.06	123.00
11	C	22	GLU	CB-CA-C	-5.01	102.48	110.79
13	E	221	GLN	N-CA-C	-5.01	101.42	109.58
14	F	70	ILE	CB-CA-C	-5.01	101.75	110.71
29	U	233	VAL	CA-C-N	5.01	126.99	120.28
29	U	233	VAL	C-N-CA	5.01	126.99	120.28
30	V	135	ALA	O-C-N	5.01	127.43	122.12
1	Z	771	LEU	CA-C-O	5.00	125.72	120.36
10	B	86	LEU	CB-CA-C	-5.00	102.34	110.85
19	K	175	GLN	CA-C-N	5.00	126.99	120.28
19	K	175	GLN	C-N-CA	5.00	126.99	120.28
22	N	597	LYS	CA-C-N	5.00	126.95	120.44
22	N	597	LYS	C-N-CA	5.00	126.95	120.44
25	Q	68	GLY	CA-C-O	-5.00	115.35	120.66
11	C	147	LEU	CA-C-N	5.00	131.22	122.82
11	C	147	LEU	C-N-CA	5.00	131.22	122.82
13	E	73	HIS	CB-CG-CD2	-5.00	124.70	131.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	M	193	LYS	CB-CA-C	-5.00	102.48	110.79
22	N	118	LEU	CA-C-O	-5.00	113.31	120.16
22	N	207	ASN	CA-CB-CG	-5.00	107.60	112.60
24	P	449	GLU	CB-CA-C	-5.00	102.48	110.79
26	R	136	HIS	CE1-NE2-CD2	-5.00	104.00	109.00
26	R	291	HIS	CG-CD2-NE2	5.00	112.20	107.20
29	U	120	VAL	CA-CB-CG2	5.00	118.91	110.40
1	Z	747	GLN	N-CA-C	-5.00	105.91	111.36
8	7	181	SER	N-CA-CB	5.00	120.08	111.13
14	F	166	GLN	CA-C-N	5.00	126.94	120.44
14	F	166	GLN	C-N-CA	5.00	126.94	120.44
15	G	117	ALA	CA-C-N	5.00	126.98	120.28
15	G	117	ALA	C-N-CA	5.00	126.98	120.28
16	H	412	ALA	N-CA-CB	5.00	117.47	110.12
20	L	42	LYS	CB-CG-CD	5.00	122.80	111.30
26	R	235	ASP	CB-CA-C	-5.00	102.35	110.85

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
16	H	311	PRO	CA
22	N	752	THR	CA

All (269) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	1	124	TYR	Sidechain
2	1	178	ARG	Sidechain
2	1	59	TYR	Sidechain
3	2	115	ARG	Sidechain
3	2	157	TYR	Sidechain
3	2	167	TYR	Sidechain
3	2	186	ARG	Sidechain
3	2	207	PHE	Sidechain
4	3	100	PHE	Sidechain
4	3	6	TYR	Sidechain
4	3	80	ARG	Sidechain
5	4	117	TYR	Sidechain
5	4	12	TYR	Sidechain
5	4	129	PHE	Sidechain
5	4	145	ARG	Sidechain
5	4	85	ARG	Sidechain

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Mol	Chain	Res	Type	Group
5	4	93	ARG	Sidechain
5	4	98	TYR	Sidechain
6	5	147	TYR	Sidechain
6	5	179	ARG	Sidechain
6	5	204	TYR	Sidechain
6	5	209	GLU	Sidechain
6	5	245	ARG	Sidechain
6	5	99	TYR	Sidechain
7	6	125	TYR	Sidechain
7	6	133	TYR	Sidechain
7	6	152	PHE	Sidechain
7	6	198	ARG	Sidechain
7	6	201	ARG	Sidechain
7	6	222	ARG	Sidechain
7	6	30	PHE	Sidechain
7	6	61	PHE	Sidechain
7	6	72	TYR	Sidechain
8	7	139	ARG	Sidechain
8	7	142	TYR	Sidechain
8	7	160	TYR	Sidechain
8	7	169	TYR	Sidechain
8	7	177	TYR	Sidechain
8	7	189	TYR	Sidechain
8	7	222	TYR	Sidechain
8	7	223	TYR	Sidechain
8	7	229	TYR	Sidechain
9	A	107	TYR	Sidechain
9	A	125	TYR	Sidechain
9	A	132	ARG	Sidechain
9	A	152	TYR	Sidechain
9	A	160	TYR	Sidechain
9	A	23	TYR	Sidechain
9	A	245	ARG	Sidechain
9	A	43	ARG	Sidechain
9	A	93	ARG	Sidechain
9	A	96	TYR	Sidechain
10	B	156	PHE	Sidechain
10	B	229	TYR	Sidechain
10	B	60	ARG	Sidechain
11	C	101	TYR	Sidechain
11	C	121	TYR	Sidechain
11	C	130	PHE	Sidechain

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Mol	Chain	Res	Type	Group
11	C	156	TYR	Sidechain
11	C	218	ARG	Sidechain
11	C	23	TYR	Sidechain
11	C	4	ARG	Sidechain
11	C	60	PHE	Sidechain
11	C	61	PHE	Sidechain
12	D	118	TYR	Sidechain
12	D	21	TYR	Sidechain
12	D	213	ARG	Sidechain
12	D	228	TYR	Sidechain
12	D	60	ARG	Sidechain
14	F	125	ARG	Sidechain
14	F	154	PHE	Sidechain
14	F	157	ARG	Sidechain
14	F	174	ARG	Sidechain
14	F	196	ARG	Sidechain
14	F	3	ARG	Sidechain
14	F	6	TYR	Sidechain
14	F	89	ARG	Sidechain
15	G	141	TYR	Sidechain
15	G	170	ARG	Sidechain
15	G	20	ARG	Sidechain
15	G	26	TYR	Sidechain
16	H	107	GLU	Peptide
16	H	111	TYR	Sidechain
16	H	139	ARG	Sidechain
16	H	232	ARG	Sidechain
16	H	255	ARG	Sidechain
16	H	258	ARG	Sidechain
16	H	283	ALA	Peptide
16	H	333	ARG	Sidechain
16	H	351	ARG	Sidechain
16	H	358	HIS	Sidechain
16	H	360	ARG	Sidechain
16	H	75	PRO	Peptide
17	I	184	TYR	Sidechain
17	I	225	TYR	Sidechain
17	I	272	ARG	Sidechain
17	I	295	TYR	Sidechain
17	I	428	TYR	Sidechain
18	J	104	ASP	Mainchain
18	J	121	TYR	Sidechain

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Mol	Chain	Res	Type	Group
18	J	258	ARG	Sidechain
18	J	271	ARG	Sidechain
18	J	310	ARG	Sidechain
18	J	313	ARG	Sidechain
18	J	325	ARG	Sidechain
18	J	332	HIS	Sidechain
18	J	49	ARG	Sidechain
18	J	72	TYR	Sidechain
19	K	135	HIS	Sidechain
19	K	178	ARG	Sidechain
19	K	191	TYR	Sidechain
19	K	205	TYR	Sidechain
19	K	221	HIS	Sidechain
19	K	239	TYR	Sidechain
19	K	251	PHE	Sidechain
19	K	283	ARG	Sidechain
19	K	339	ARG	Sidechain
19	K	342	ARG	Sidechain
19	K	366	ARG	Sidechain
19	K	392	TYR	Sidechain
19	K	403	TYR	Sidechain
19	K	409	LYS	Peptide
19	K	41	TYR	Sidechain
19	K	414	HIS	Sidechain
19	K	417	TYR	Sidechain
19	K	44	TYR	Sidechain
19	K	92	PHE	Sidechain
20	L	120	TYR	Sidechain
20	L	173	TYR	Sidechain
20	L	185	ARG	Sidechain
20	L	241	ARG	Sidechain
20	L	251	ARG	Sidechain
20	L	291	ARG	Sidechain
20	L	309	ARG	Sidechain
20	L	338	PHE	Sidechain
20	L	344	ARG	Sidechain
20	L	356	ARG	Sidechain
20	L	79	TYR	Sidechain
21	M	121	CYS	Peptide
21	M	133	PHE	Sidechain
21	M	158	TYR	Sidechain
21	M	168	TYR	Sidechain

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Mol	Chain	Res	Type	Group
21	M	238	ARG	Sidechain
21	M	321	GLN	Peptide
21	M	344	ARG	Sidechain
21	M	350	ARG	Sidechain
21	M	376	SER	Peptide
21	M	386	ARG	Sidechain
21	M	391	PHE	Sidechain
21	M	88	TYR	Sidechain
22	N	140	ARG	Sidechain
22	N	147	TYR	Sidechain
22	N	158	ARG	Sidechain
22	N	210	LYS	Peptide
22	N	246	TYR	Sidechain
22	N	250	PHE	Sidechain
22	N	260	PHE	Sidechain
22	N	375	PHE	Sidechain
22	N	402	PHE	Sidechain
22	N	490	ARG	Sidechain
22	N	557	TYR	Sidechain
22	N	590	TYR	Sidechain
22	N	644	TYR	Sidechain
22	N	647	HIS	Sidechain
22	N	650	TYR	Sidechain
22	N	802	TYR	Sidechain
23	O	110	ALA	Mainchain
23	O	173	TYR	Sidechain
23	O	178	ARG	Sidechain
23	O	208	GLU	Peptide
23	O	289	ARG	Sidechain
23	O	339	ARG	Sidechain
23	O	342	ASP	Peptide
23	O	355	PHE	Sidechain
24	P	123	ARG	Sidechain
24	P	129	ARG	Sidechain
24	P	142	ARG	Sidechain
24	P	174	TYR	Sidechain
24	P	199	TYR	Sidechain
24	P	213	PHE	Sidechain
24	P	214	PHE	Sidechain
24	P	226	TYR	Sidechain
24	P	247	TYR	Sidechain
24	P	248	ARG	Sidechain

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Mol	Chain	Res	Type	Group
24	P	364	ARG	Sidechain
24	P	392	PHE	Sidechain
24	P	75	TYR	Sidechain
25	Q	11	ARG	Sidechain
25	Q	122	ARG	Sidechain
25	Q	142	ARG	Sidechain
25	Q	143	TYR	Sidechain
25	Q	201	TYR	Sidechain
25	Q	229	TYR	Sidechain
25	Q	253	TYR	Sidechain
25	Q	297	ARG	Sidechain
25	Q	314	ARG	Sidechain
25	Q	327	TYR	Sidechain
25	Q	349	HIS	Sidechain
25	Q	76	PHE	Sidechain
26	R	113	ARG	Sidechain
26	R	124	PHE	Sidechain
26	R	125	ARG	Sidechain
26	R	128	TYR	Sidechain
26	R	177	ARG	Sidechain
26	R	183	TYR	Sidechain
26	R	211	TYR	Sidechain
26	R	259	TYR	Sidechain
26	R	288	PHE	Sidechain
26	R	293	ARG	Sidechain
26	R	295	TYR	Sidechain
26	R	300	ARG	Sidechain
26	R	312	ARG	Sidechain
26	R	32	ARG	Sidechain
26	R	336	ARG	Sidechain
26	R	366	TYR	Sidechain
26	R	379	ARG	Sidechain
26	R	38	ARG	Sidechain
27	S	166	TYR	Sidechain
27	S	181	TYR	Sidechain
27	S	228	ARG	Sidechain
27	S	241	ARG	Sidechain
27	S	288	TYR	Sidechain
27	S	302	TYR	Sidechain
27	S	355	ARG	Sidechain
27	S	397	ARG	Sidechain
27	S	436	PHE	Sidechain

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Mol	Chain	Res	Type	Group
27	S	443	ARG	Sidechain
27	S	479	ARG	Sidechain
28	T	118	ARG	Sidechain
28	T	145	ARG	Sidechain
28	T	174	TYR	Sidechain
28	T	214	ARG	Sidechain
28	T	225	TYR	Sidechain
28	T	292	PHE	Sidechain
28	T	315	TYR	Sidechain
28	T	316	TYR	Sidechain
29	U	114	ARG	Sidechain
29	U	115	TYR	Sidechain
29	U	209	ARG	Sidechain
29	U	224	HIS	Sidechain
29	U	261	TYR	Sidechain
29	U	68	TRP	Mainchain
29	U	90	ARG	Sidechain
30	V	115	HIS	Sidechain
30	V	237	HIS	Mainchain
30	V	68	ARG	Sidechain
31	W	17	ARG	Sidechain
31	W	25	ARG	Sidechain
31	W	70	ARG	Sidechain
32	Y	65	TYR	Sidechain
1	Z	110	TYR	Sidechain
1	Z	120	ARG	Sidechain
1	Z	143	ARG	Sidechain
1	Z	239	TYR	Sidechain
1	Z	341	GLU	Peptide
1	Z	434	TYR	Sidechain
1	Z	439	TYR	Sidechain
1	Z	469	TYR	Sidechain
1	Z	587	PHE	Sidechain
1	Z	62	ARG	Sidechain
1	Z	713	PHE	Sidechain
1	Z	740	ARG	Sidechain
1	Z	746	ARG	Sidechain
1	Z	751	TYR	Sidechain
1	Z	763	ARG	Sidechain
1	Z	781	TYR	Sidechain
1	Z	79	ARG	Sidechain
1	Z	816	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	Z	828	ARG	Sidechain

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	Z	6146	0	6189	25	0
2	1	1607	0	1567	2	0
3	2	1676	0	1695	5	0
4	3	1599	0	1621	10	0
5	4	1554	0	1559	8	0
6	5	1509	0	1477	3	0
7	6	1654	0	1653	3	0
8	7	1705	0	1674	4	0
9	A	1874	0	1879	10	0
10	B	1826	0	1823	11	0
11	C	2069	0	2099	9	0
12	D	1961	0	2000	3	0
13	E	1770	0	1760	9	0
14	F	1837	0	1834	11	0
15	G	1894	0	1877	12	0
16	H	2962	0	3027	15	0
17	I	2840	0	2881	13	0
18	J	2929	0	3044	8	0
19	K	3032	0	3072	10	0
20	L	2862	0	2924	14	0
21	M	3046	0	3116	19	0
22	N	6508	0	6533	19	0
23	O	3020	0	3041	13	0
24	P	3447	0	3567	7	0
25	Q	3335	0	3435	8	0
26	R	3084	0	3086	17	0
27	S	2757	0	2819	7	0
28	T	2056	0	2096	6	0
29	U	2183	0	2223	9	0
30	V	1986	0	2014	9	0
31	W	1420	0	1463	4	0
32	Y	175	0	159	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	78323	0	79207	277	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 2.

All (277) 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:O:128:LEU:H	23:O:128:LEU:HD22	1.58	0.68
20:L:85:ARG:HE	30:V:47:ALA:HA	1.59	0.67
1:Z:261:ARG:HH21	1:Z:267:ARG:HH12	1.43	0.65
28:T:184:GLU:HG2	28:T:188:MET:HE1	1.79	0.65
17:I:303:ARG:HE	17:I:307:ARG:HH22	1.43	0.65
17:I:409:GLU:HG3	17:I:411:ARG:HH21	1.62	0.64
18:J:147:THR:H	18:J:150:MET:HB2	1.64	0.63
23:O:103:LYS:H	23:O:111:VAL:HG13	1.64	0.62
9:A:12:HIS:CD2	11:C:4:ARG:HH22	2.18	0.61
1:Z:463:LEU:H	1:Z:463:LEU:HD12	1.66	0.61
21:M:120:LYS:HG2	21:M:121:CYS:H	1.66	0.60
19:K:252:ARG:HH21	19:K:255:LYS:HB2	1.65	0.60
16:H:157:ILE:HG23	16:H:265:ARG:HB3	1.84	0.60
16:H:206:ILE:HG22	21:M:373:MET:HE1	1.85	0.58
23:O:223:GLU:H	23:O:223:GLU:CD	2.12	0.58
29:U:254:ASN:HA	29:U:257:MET:HE2	1.86	0.58
21:M:225:MET:HE1	21:M:354:PHE:HB2	1.86	0.58
22:N:791:LEU:H	22:N:798:PRO:HD2	1.70	0.57
1:Z:828:ARG:HH22	1:Z:883:ALA:H	1.52	0.57
30:V:137:SER:HB3	30:V:139:ARG:H	1.71	0.56
13:E:161:THR:HG22	13:E:162:PHE:H	1.71	0.56
16:H:111:TYR:HE2	16:H:124:ASP:H	1.53	0.55
30:V:169:VAL:HG11	30:V:194:HIS:CE1	2.41	0.55
22:N:218:GLN:HA	22:N:221:ILE:HD12	1.88	0.55
13:E:96:THR:HA	13:E:107:MET:SD	2.48	0.54
18:J:114:VAL:HG21	18:J:123:LEU:HD23	1.90	0.54
22:N:749:GLN:HE22	22:N:752:THR:HG23	1.72	0.54
15:G:10:LEU:H	15:G:10:LEU:HD22	1.73	0.54
5:4:138:LEU:H	5:4:138:LEU:HD12	1.73	0.53
6:5:132:ARG:HA	6:5:132:ARG:HH11	1.73	0.53
10:B:60:ARG:HH21	10:B:223:PRO:HG2	1.73	0.53
1:Z:891:THR:H	1:Z:892:PRO:CD	2.22	0.53
21:M:86:LEU:HA	21:M:87:PRO:C	2.34	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:O:229:ASP:HA	23:O:232:TRP:CD2	2.44	0.53
14:F:38:LEU:HD21	14:F:179:PHE:CZ	2.44	0.53
22:N:213:PHE:CZ	22:N:244:MET:HE2	2.44	0.53
13:E:161:THR:HG22	13:E:162:PHE:N	2.25	0.52
21:M:231:THR:HG22	21:M:392:ASN:HB3	1.91	0.52
23:O:5:PRO:HA	23:O:39:LEU:HD21	1.91	0.52
29:U:12:HIS:HB2	29:U:15:VAL:HG23	1.90	0.52
19:K:404:LYS:HA	19:K:407:ILE:HG22	1.91	0.52
27:S:443:ARG:HD2	28:T:274:CYS:SG	2.50	0.51
4:3:47:ASP:H	4:3:48:ARG:NH2	2.09	0.51
1:Z:90:THR:HA	1:Z:98:PHE:CE1	2.45	0.51
7:6:195:SER:HB2	7:6:198:ARG:HB3	1.91	0.51
19:K:221:HIS:CE1	19:K:222:HIS:CE1	2.98	0.51
16:H:138:MET:HE1	17:I:132:TYR:CE1	2.45	0.51
20:L:312:ILE:HG22	20:L:316:HIS:CE1	2.45	0.51
18:J:340:ARG:HD3	26:R:208:PHE:H	1.76	0.50
27:S:319:HIS:CG	27:S:320:THR:H	2.29	0.50
13:E:176:GLY:H	16:H:375:ARG:HH22	1.58	0.50
27:S:334:VAL:HG11	27:S:394:LEU:HD22	1.93	0.50
21:M:150:LEU:HD21	21:M:168:TYR:CD1	2.46	0.50
22:N:592:GLY:H	22:N:625:ILE:HA	1.76	0.50
16:H:150:HIS:CD2	16:H:152:PRO:HD3	2.47	0.50
11:C:60:PHE:HB3	11:C:62:SER:H	1.77	0.50
3:2:63:ALA:HB3	3:2:71:ASP:HB2	1.93	0.49
6:5:203:SER:HB3	6:5:205:ASP:H	1.78	0.49
21:M:382:GLU:CD	21:M:382:GLU:H	2.20	0.49
1:Z:267:ARG:HH21	1:Z:894:LEU:HD12	1.77	0.49
10:B:189:HIS:HE1	10:B:229:TYR:CD2	2.30	0.49
16:H:95:VAL:HG22	16:H:139:ARG:HH21	1.77	0.49
26:R:304:TYR:CE1	26:R:334:LEU:HD13	2.48	0.49
5:4:181:ARG:HH21	5:4:188:ILE:HG22	1.78	0.49
15:G:181:GLN:CD	15:G:181:GLN:H	2.21	0.49
7:6:199:ALA:O	7:6:203:VAL:HG23	2.13	0.48
13:E:155:HIS:CE1	13:E:170:ILE:HG21	2.47	0.48
14:F:79:ALA:HA	14:F:82:ARG:HE	1.77	0.48
5:4:29:LYS:NZ	6:5:183:ALA:H	2.12	0.48
14:F:74:ILE:HD11	14:F:130:VAL:HB	1.95	0.48
26:R:141:VAL:HG13	26:R:161:THR:HG23	1.96	0.48
1:Z:102:HIS:CE1	1:Z:105:LYS:HB3	2.49	0.48
21:M:362:ARG:HA	21:M:365:ILE:HD12	1.96	0.48
26:R:152:MET:HA	26:R:152:MET:HE3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:R:286:TRP:CE2	26:R:287:LEU:HG	2.49	0.48
20:L:281:ARG:HH12	21:M:294:LYS:HD2	1.80	0.47
1:Z:589:SER:HB3	1:Z:615:ILE:HD12	1.95	0.47
21:M:246:ALA:HA	21:M:280:PRO:HG2	1.96	0.47
15:G:70:VAL:HB	15:G:74:VAL:HB	1.97	0.47
26:R:80:GLU:HA	26:R:83:ARG:HE	1.79	0.47
1:Z:408:LEU:HD22	1:Z:442:SER:HB2	1.96	0.47
22:N:772:TRP:CD1	22:N:774:PRO:HD2	2.50	0.47
1:Z:466:LEU:HD23	1:Z:500:LEU:HG	1.97	0.47
19:K:163:MET:HE1	19:K:222:HIS:CE1	2.49	0.47
26:R:157:ILE:C	26:R:157:ILE:HD12	2.40	0.47
9:A:42:VAL:HG23	9:A:49:VAL:HG22	1.96	0.47
16:H:119:ALA:HA	16:H:121:PHE:CE1	2.49	0.47
17:I:364:ILE:CG2	17:I:368:HIS:CE1	2.98	0.47
24:P:443:THR:HG21	29:U:157:HIS:HE1	1.79	0.47
27:S:214:HIS:CE1	27:S:224:LEU:HD22	2.49	0.47
4:3:72:ASN:HD22	11:C:95:GLN:HE22	1.61	0.47
19:K:85:ILE:HA	19:K:86:PRO:C	2.39	0.47
21:M:344:ARG:HH21	21:M:347:ARG:HG3	1.80	0.47
16:H:299:MET:HE1	21:M:334:ARG:HH22	1.80	0.47
21:M:416:THR:HG22	21:M:419:ASP:OD2	2.15	0.47
8:7:69:ALA:HB1	8:7:86:ARG:HD2	1.97	0.46
21:M:175:MET:HE1	21:M:251:LEU:HD21	1.97	0.46
1:Z:122:ALA:O	1:Z:125:ILE:HG22	2.16	0.46
22:N:749:GLN:HA	22:N:756:HIS:CG	2.51	0.46
5:4:49:GLU:O	5:4:53:THR:HG23	2.15	0.46
20:L:323:HIS:CG	20:L:324:GLY:N	2.78	0.46
19:K:221:HIS:C	19:K:221:HIS:CD2	2.93	0.46
4:3:82:ILE:C	4:3:82:ILE:HD12	2.41	0.46
9:A:125:TYR:HA	9:A:128:ASN:HD22	1.81	0.46
10:B:183:GLU:H	10:B:186:ASP:HB2	1.81	0.46
14:F:65:HIS:CD2	14:F:65:HIS:O	2.69	0.46
30:V:57:MET:HE1	30:V:143:VAL:HG21	1.98	0.46
5:4:13:VAL:HB	5:4:183:ILE:HG23	1.97	0.46
21:M:204:LEU:HD22	21:M:208:HIS:CE1	2.51	0.45
3:2:61:THR:HG23	3:2:74:CYS:H	1.80	0.45
17:I:131:HIS:CE1	17:I:155:LYS:O	2.69	0.45
17:I:364:ILE:HG23	17:I:368:HIS:CE1	2.52	0.45
24:P:191:ARG:HH21	24:P:192:LEU:HA	1.81	0.45
26:R:137:ARG:HE	26:R:168:ILE:CG2	2.29	0.45
26:R:137:ARG:HE	26:R:168:ILE:HG21	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:F:37:GLY:HA2	14:F:46:LEU:HG	1.98	0.45
3:2:237:LYS:H	3:2:237:LYS:HD3	1.82	0.45
4:3:121:ILE:HD11	4:3:135:ASP:H	1.81	0.45
17:I:163:LEU:HG	17:I:165:ASP:H	1.82	0.45
20:L:33:LEU:HD22	21:M:66:LEU:HD22	1.98	0.45
28:T:224:VAL:O	28:T:228:HIS:CE1	2.70	0.45
15:G:108:PRO:HB2	15:G:111:HIS:H	1.81	0.45
16:H:78:TRP:CD1	17:I:132:TYR:CE1	3.04	0.45
1:Z:352:HIS:CD2	1:Z:829:MET:HE1	2.52	0.45
19:K:268:ASP:HA	19:K:271:ALA:HB3	1.99	0.45
23:O:128:LEU:H	23:O:128:LEU:CD2	2.27	0.45
9:A:186:LYS:HA	9:A:189:TRP:CE2	2.51	0.45
15:G:10:LEU:H	15:G:10:LEU:CD2	2.29	0.45
30:V:83:SER:HB2	30:V:86:ALA:HB2	1.99	0.45
13:E:202:LEU:HD13	13:E:215:ILE:HD11	1.98	0.45
19:K:274:ARG:HH12	19:K:281:ALA:C	2.24	0.45
20:L:29:LEU:O	20:L:33:LEU:HG	2.17	0.45
21:M:359:GLU:H	21:M:359:GLU:CD	2.25	0.45
23:O:81:LEU:HD13	23:O:96:PHE:CD2	2.52	0.45
29:U:214:LYS:HG2	29:U:219:LYS:HD3	1.99	0.45
4:3:122:CYS:HA	4:3:133:THR:H	1.81	0.44
10:B:39:LYS:HG2	10:B:41:ALA:H	1.82	0.44
10:B:148:GLN:HE21	10:B:163:MET:CE	2.30	0.44
18:J:309:GLY:H	18:J:311:ILE:HG12	1.83	0.44
20:L:169:GLY:HA2	20:L:275:MET:HB3	1.99	0.44
10:B:60:ARG:HH21	10:B:223:PRO:CG	2.31	0.44
15:G:194:VAL:HA	15:G:197:ILE:HD12	2.00	0.44
24:P:220:GLU:HB2	24:P:257:GLN:HG2	1.99	0.44
1:Z:296:PHE:CD2	1:Z:339:ILE:HG21	2.52	0.44
15:G:79:ALA:CB	15:G:166:ILE:HD12	2.48	0.44
15:G:79:ALA:HB2	15:G:166:ILE:HD12	1.99	0.44
20:L:104:THR:HG22	20:L:106:THR:HG23	1.99	0.44
20:L:195:PHE:CE2	20:L:229:ILE:HG13	2.53	0.44
22:N:449:ILE:HG13	22:N:450:HIS:CD2	2.53	0.44
25:Q:28:HIS:CE1	25:Q:53:LEU:HB2	2.53	0.44
4:3:29:GLY:HA2	4:3:35:VAL:H	1.83	0.44
22:N:478:SER:HB2	22:N:511:ALA:HB1	1.99	0.44
30:V:113:HIS:CE1	30:V:115:HIS:CE1	3.06	0.44
19:K:233:SER:HA	19:K:269:ALA:HB3	1.99	0.43
31:W:125:VAL:HG22	31:W:159:THR:HG21	1.99	0.43
1:Z:262:PHE:CG	1:Z:290:VAL:HG11	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:E:117:SER:HB3	13:E:156:MET:HE1	2.00	0.43
23:O:69:HIS:CD2	23:O:69:HIS:C	2.95	0.43
26:R:254:PRO:HG3	26:R:257:ARG:HH11	1.82	0.43
28:T:282:ILE:HG23	28:T:314:ASN:HD22	1.83	0.43
5:4:37:LYS:HA	5:4:43:LEU:HD12	2.01	0.43
23:O:244:ASN:HD22	23:O:247:ARG:HG3	1.84	0.43
25:Q:372:LYS:O	25:Q:375:HIS:CE1	2.71	0.43
26:R:308:LEU:HD23	26:R:314:LEU:HD23	2.00	0.43
31:W:7:MET:HG2	31:W:97:LEU:HD21	2.01	0.43
1:Z:159:VAL:HB	1:Z:191:ILE:HG23	2.01	0.43
17:I:229:GLY:CA	18:J:310:ARG:HH22	2.31	0.43
20:L:83:CYS:SG	20:L:107:ILE:HB	2.58	0.43
25:Q:154:LEU:HD11	25:Q:170:GLN:HE21	1.83	0.43
27:S:228:ARG:O	27:S:232:HIS:CD2	2.72	0.43
13:E:154:PHE:CZ	13:E:164:GLN:HG2	2.54	0.43
14:F:38:LEU:HD13	14:F:39:LYS:N	2.33	0.43
16:H:321:THR:HG21	16:H:324:PRO:HA	1.99	0.43
23:O:336:VAL:HG22	23:O:336:VAL:O	2.19	0.43
16:H:172:VAL:O	16:H:173:THR:HG23	2.16	0.43
22:N:373:ASN:O	22:N:377:HIS:CD2	2.72	0.43
22:N:926:GLU:CD	22:N:926:GLU:H	2.27	0.43
31:W:173:VAL:HG21	31:W:183:LEU:HD23	2.01	0.43
13:E:127:ASP:H	14:F:125:ARG:H	1.66	0.43
16:H:107:GLU:HG3	16:H:125:LEU:HD23	2.01	0.43
17:I:223:ILE:HG12	17:I:329:MET:HB2	2.00	0.43
29:U:18:SER:O	29:U:22:HIS:CG	2.72	0.43
3:2:230:ARG:HB3	3:2:231:PRO:HD2	2.00	0.43
25:Q:82:LYS:HE3	25:Q:120:GLU:HB3	2.01	0.43
9:A:15:ILE:HB	10:B:21:GLN:HE22	1.83	0.42
20:L:370:ALA:O	20:L:374:VAL:HG23	2.19	0.42
27:S:298:ILE:HA	27:S:397:ARG:HH12	1.84	0.42
29:U:41:GLY:HA2	29:U:51:SER:HB2	2.01	0.42
1:Z:613:LEU:HD21	1:Z:677:HIS:CD2	2.54	0.42
17:I:131:HIS:HE1	17:I:155:LYS:O	2.02	0.42
26:R:104:MET:HA	26:R:107:LYS:HB2	2.01	0.42
26:R:118:GLU:H	26:R:118:GLU:CD	2.27	0.42
14:F:13:TRP:HE1	15:G:131:PRO:HD2	1.84	0.42
24:P:97:LEU:HB2	24:P:100:ALA:H	1.83	0.42
9:A:18:PRO:HD3	10:B:24:TYR:CE1	2.55	0.42
16:H:73:ALA:HB3	17:I:131:HIS:HA	2.00	0.42
22:N:378:CYS:HA	22:N:410:VAL:HG12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:N:699:THR:HB	22:N:700:GLU:H	1.67	0.42
9:A:186:LYS:HB2	9:A:189:TRP:CZ3	2.55	0.42
2:1:110:VAL:HG13	2:1:111:HIS:H	1.84	0.42
4:3:26:ARG:HE	4:3:39:PHE:H	1.67	0.42
4:3:35:VAL:HG13	4:3:36:THR:HG22	2.02	0.42
21:M:215:LEU:HD12	21:M:217:ILE:HG23	2.02	0.42
24:P:242:SER:HB3	24:P:246:HIS:CE1	2.55	0.42
1:Z:348:ILE:O	1:Z:352:HIS:CD2	2.72	0.42
11:C:69:ASN:ND2	11:C:70:GLU:H	2.17	0.42
21:M:188:ILE:HG12	21:M:191:LEU:HD12	2.02	0.42
22:N:44:LYS:H	22:N:44:LYS:HD2	1.85	0.42
28:T:184:GLU:CG	28:T:188:MET:HE1	2.49	0.42
25:Q:171:LEU:HD12	25:Q:213:GLN:HE22	1.85	0.42
8:7:100:GLY:HA3	8:7:153:ASN:HA	2.02	0.41
22:N:194:ARG:C	22:N:194:ARG:HD3	2.44	0.41
14:F:219:LEU:HD13	14:F:219:LEU:HA	1.87	0.41
18:J:90:HIS:HB2	18:J:91:PRO:HD3	2.02	0.41
4:3:25:ASP:HA	4:3:185:VAL:HG12	2.01	0.41
18:J:57:ARG:HH22	22:N:649:ARG:CZ	2.33	0.41
17:I:229:GLY:HA3	18:J:310:ARG:HH22	1.86	0.41
24:P:297:GLU:CD	24:P:297:GLU:H	2.28	0.41
31:W:88:THR:HA	31:W:91:ARG:HE	1.86	0.41
1:Z:82:ILE:O	1:Z:82:ILE:HG22	2.20	0.41
1:Z:168:LYS:O	1:Z:171:GLN:HG2	2.20	0.41
2:1:170:TYR:O	2:1:173:VAL:HG22	2.21	0.41
5:4:5:ILE:HG22	5:4:6:GLY:N	2.35	0.41
16:H:131:PRO:HB3	16:H:140:VAL:HG22	2.03	0.41
20:L:289:LEU:HD13	20:L:295:LEU:HD12	2.02	0.41
22:N:731:ILE:HG23	22:N:732:LEU:N	2.35	0.41
25:Q:244:SER:HB3	25:Q:245:PRO:HD2	2.03	0.41
19:K:154:LEU:HD23	19:K:229:ARG:O	2.21	0.41
20:L:58:GLY:HA3	20:L:100:LEU:HD11	2.01	0.41
26:R:124:PHE:CE2	26:R:143:TYR:CD1	3.08	0.41
28:T:295:THR:HG22	28:T:297:LYS:H	1.85	0.41
29:U:14:LEU:HD13	30:V:39:LEU:HB3	2.02	0.41
5:4:62:LYS:HG3	12:D:92:GLN:HB3	2.03	0.41
9:A:192:GLU:OE2	9:A:238:HIS:CE1	2.74	0.41
10:B:1:MET:HB3	10:B:4:ARG:HB2	2.01	0.41
22:N:701:ILE:HG22	22:N:701:ILE:O	2.21	0.41
23:O:149:THR:C	23:O:151:VAL:H	2.28	0.41
26:R:229:ILE:HD12	26:R:299:MET:HG3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:G:38:ILE:HD13	15:G:38:ILE:HG21	1.86	0.41
20:L:97:ARG:HH11	20:L:114:GLU:H	1.68	0.41
25:Q:103:THR:O	25:Q:107:VAL:HG23	2.21	0.41
1:Z:62:ARG:HH21	1:Z:70:LEU:HD22	1.85	0.41
1:Z:285:CYS:HB2	1:Z:291:GLN:HE21	1.86	0.41
9:A:43:ARG:HH21	9:A:164:LYS:HG2	1.86	0.41
10:B:123:GLN:HA	11:C:128:ARG:HE	1.85	0.41
10:B:139:TRP:HA	10:B:145:TYR:CE1	2.55	0.41
11:C:42:GLY:H	11:C:218:ARG:HH12	1.69	0.41
11:C:88:ASN:HD22	11:C:91:ARG:HH21	1.67	0.41
15:G:10:LEU:HD22	15:G:10:LEU:N	2.36	0.41
23:O:166:ILE:HG13	23:O:168:ASN:H	1.84	0.41
24:P:225:LYS:O	24:P:229:LEU:HD23	2.20	0.41
25:Q:306:LEU:HD23	25:Q:310:ARG:HH22	1.86	0.41
29:U:30:GLY:HA2	29:U:32:GLN:HE22	1.85	0.41
30:V:155:VAL:H	30:V:155:VAL:HG12	1.66	0.41
1:Z:874:LEU:HD21	1:Z:879:ARG:O	2.20	0.41
8:7:131:ARG:H	8:7:131:ARG:HD2	1.86	0.41
26:R:287:LEU:HA	26:R:287:LEU:HD23	1.90	0.41
1:Z:249:LEU:HD12	1:Z:249:LEU:H	1.85	0.40
11:C:30:HIS:N	11:C:30:HIS:CD2	2.87	0.40
14:F:177:SER:O	14:F:180:MET:HE2	2.20	0.40
14:F:226:ASP:O	14:F:229:VAL:HG22	2.21	0.40
29:U:79:TYR:CE2	29:U:83:LYS:HD3	2.56	0.40
8:7:62:GLU:H	8:7:62:GLU:CD	2.29	0.40
12:D:35:VAL:HG11	12:D:187:THR:CG2	2.50	0.40
12:D:76:LEU:HD12	12:D:79:ASP:OD2	2.20	0.40
22:N:461:LEU:O	22:N:461:LEU:HD23	2.21	0.40
1:Z:63:LEU:HD22	1:Z:125:ILE:HD12	2.03	0.40
1:Z:412:ALA:HA	1:Z:447:ALA:HB2	2.03	0.40
26:R:101:ARG:HH21	26:R:132:VAL:H	1.69	0.40
30:V:161:ARG:HD2	30:V:161:ARG:HA	1.94	0.40
7:6:149:VAL:H	7:6:160:ARG:NH2	2.19	0.40
15:G:192:LYS:HA	15:G:236:ALA:HB1	2.03	0.40
3:2:258:LYS:O	4:3:196:THR:HG23	2.21	0.40
9:A:73:THR:HG23	9:A:76:ILE:H	1.86	0.40
11:C:42:GLY:HA3	11:C:186:LEU:HD21	2.03	0.40
23:O:149:THR:HG23	23:O:151:VAL:HG13	2.03	0.40
27:S:267:ALA:O	27:S:271:VAL:HG23	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Z	788/908 (87%)	698 (89%)	66 (8%)	24 (3%)	3	23
2	1	212/239 (89%)	187 (88%)	19 (9%)	6 (3%)	4	24
3	2	220/277 (79%)	206 (94%)	9 (4%)	5 (2%)	5	28
4	3	203/205 (99%)	184 (91%)	14 (7%)	5 (2%)	4	26
5	4	192/201 (96%)	173 (90%)	13 (7%)	6 (3%)	3	22
6	5	193/263 (73%)	177 (92%)	12 (6%)	4 (2%)	5	30
7	6	211/241 (88%)	185 (88%)	15 (7%)	11 (5%)	1	15
8	7	216/264 (82%)	193 (89%)	17 (8%)	6 (3%)	4	24
9	A	237/246 (96%)	219 (92%)	15 (6%)	3 (1%)	9	42
10	B	232/234 (99%)	210 (90%)	14 (6%)	8 (3%)	3	21
11	C	259/261 (99%)	239 (92%)	11 (4%)	9 (4%)	3	20
12	D	246/248 (99%)	221 (90%)	21 (8%)	4 (2%)	7	38
13	E	230/241 (95%)	210 (91%)	13 (6%)	7 (3%)	3	23
14	F	231/263 (88%)	213 (92%)	12 (5%)	6 (3%)	4	25
15	G	240/255 (94%)	217 (90%)	18 (8%)	5 (2%)	5	30
16	H	376/433 (87%)	320 (85%)	32 (8%)	24 (6%)	1	12
17	I	360/440 (82%)	331 (92%)	18 (5%)	11 (3%)	3	22
18	J	371/406 (91%)	342 (92%)	18 (5%)	11 (3%)	3	23
19	K	377/418 (90%)	328 (87%)	39 (10%)	10 (3%)	4	25
20	L	359/389 (92%)	319 (89%)	32 (9%)	8 (2%)	5	29
21	M	387/439 (88%)	336 (87%)	37 (10%)	14 (4%)	2	20
22	N	830/953 (87%)	758 (91%)	50 (6%)	22 (3%)	4	25
23	O	374/376 (100%)	331 (88%)	26 (7%)	17 (4%)	2	17
24	P	420/456 (92%)	390 (93%)	21 (5%)	9 (2%)	5	30
25	Q	420/422 (100%)	389 (93%)	23 (6%)	8 (2%)	6	32

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
26	R	372/389 (96%)	338 (91%)	26 (7%)	8 (2%)	5 29
27	S	336/534 (63%)	305 (91%)	20 (6%)	11 (3%)	3 21
28	T	249/350 (71%)	226 (91%)	14 (6%)	9 (4%)	2 20
29	U	266/324 (82%)	252 (95%)	12 (4%)	2 (1%)	16 54
30	V	246/310 (79%)	227 (92%)	15 (6%)	4 (2%)	7 38
31	W	183/377 (48%)	170 (93%)	7 (4%)	6 (3%)	3 21
32	Y	19/70 (27%)	18 (95%)	1 (5%)	0	100 100
All	All	9855/11432 (86%)	8912 (90%)	660 (7%)	283 (3%)	5 23

All (283) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	Z	303	VAL
1	Z	306	GLU
1	Z	365	VAL
1	Z	891	THR
2	1	110	VAL
3	2	136	TYR
3	2	231	PRO
3	2	244	ARG
4	3	39	PHE
5	4	25	ILE
6	5	247	SER
7	6	75	THR
10	B	2	ALA
10	B	61	SER
10	B	180	GLU
10	B	233	ILE
11	C	2	SER
11	C	259	LYS
12	D	58	THR
13	E	16	SER
15	G	229	PRO
16	H	311	PRO
17	I	286	GLU
19	K	162	VAL
19	K	409	LYS
21	M	110	ASN
21	M	112	ASP
22	N	212	ASP

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Mol	Chain	Res	Type
22	N	362	ASN
22	N	429	LYS
22	N	645	ASN
22	N	801	GLN
23	O	51	ALA
23	O	80	ILE
23	O	336	VAL
23	O	343	LEU
24	P	130	MET
25	Q	121	LYS
25	Q	342	PHE
25	Q	420	LYS
26	R	94	ASN
26	R	169	GLU
27	S	182	LYS
27	S	221	LEU
27	S	316	ALA
27	S	318	GLN
27	S	414	TYR
28	T	182	LEU
28	T	183	PRO
28	T	319	ALA
1	Z	260	SER
1	Z	836	GLU
2	1	233	VAL
3	2	62	ARG
3	2	235	PRO
5	4	21	ALA
5	4	22	ALA
5	4	177	THR
6	5	81	ALA
6	5	90	VAL
7	6	47	ASP
7	6	183	PHE
9	A	165	ALA
10	B	53	LYS
10	B	146	LEU
11	C	4	ARG
11	C	124	PHE
11	C	125	GLY
11	C	219	GLU
12	D	200	GLN

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Mol	Chain	Res	Type
13	E	132	ALA
13	E	214	ASN
14	F	33	SER
16	H	139	ARG
17	I	229	GLY
18	J	127	LEU
19	K	147	ALA
20	L	127	PRO
21	M	172	VAL
21	M	336	ASP
21	M	436	GLN
22	N	557	TYR
22	N	752	THR
22	N	791	LEU
23	O	104	VAL
23	O	221	VAL
24	P	115	ILE
24	P	176	SER
24	P	326	MET
24	P	346	GLU
25	Q	262	ASN
26	R	96	GLY
26	R	255	ALA
27	S	240	LEU
27	S	263	LEU
27	S	322	VAL
27	S	432	GLU
28	T	203	ASN
29	U	222	ILE
31	W	168	SER
1	Z	94	LYS
1	Z	116	GLY
1	Z	174	ASP
1	Z	513	GLU
1	Z	753	ALA
2	1	236	LEU
4	3	27	ARG
5	4	97	PRO
7	6	32	PRO
7	6	68	SER
8	7	91	ASN
8	7	163	GLY

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Mol	Chain	Res	Type
8	7	247	PRO
9	A	186	LYS
9	A	225	PRO
12	D	67	ASP
12	D	149	PRO
13	E	35	SER
13	E	53	ARG
13	E	126	GLU
14	F	164	ARG
14	F	183	ASN
15	G	34	SER
16	H	81	ALA
16	H	130	ALA
16	H	133	ASP
16	H	157	ILE
16	H	268	LYS
16	H	283	ALA
16	H	367	ASP
16	H	400	ARG
17	I	231	GLY
17	I	323	GLY
17	I	438	LEU
18	J	195	GLY
18	J	252	ASP
18	J	259	LEU
19	K	334	PRO
20	L	77	PRO
20	L	128	GLY
20	L	283	ASP
21	M	437	TYR
22	N	661	ALA
22	N	701	ILE
22	N	756	HIS
22	N	871	PRO
22	N	921	ILE
23	O	34	TRP
23	O	73	PRO
23	O	101	ARG
23	O	187	ASP
23	O	288	HIS
24	P	62	SER
25	Q	391	PRO

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Mol	Chain	Res	Type
26	R	271	PHE
28	T	216	PRO
28	T	324	LYS
28	T	347	GLU
29	U	158	VAL
30	V	139	ARG
30	V	151	VAL
30	V	222	LYS
31	W	56	ASN
31	W	66	PRO
31	W	162	GLY
1	Z	147	SER
1	Z	153	SER
1	Z	367	SER
1	Z	419	LEU
1	Z	718	ASP
1	Z	878	GLU
1	Z	892	PRO
2	1	106	GLU
2	1	234	ALA
5	4	39	SER
6	5	253	ASP
7	6	157	SER
8	7	92	ASN
11	C	3	ARG
11	C	50	ARG
14	F	103	LEU
15	G	62	GLY
16	H	116	LYS
16	H	174	TYR
16	H	276	GLU
16	H	289	ALA
16	H	290	GLY
17	I	173	VAL
17	I	228	PRO
18	J	265	GLY
18	J	288	ASN
18	J	354	ALA
19	K	153	MET
19	K	393	ILE
20	L	324	GLY
21	M	102	ASN

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Mol	Chain	Res	Type
21	M	156	ASP
21	M	158	TYR
21	M	279	ALA
21	M	287	GLU
21	M	295	ARG
21	M	300	LYS
21	M	428	GLN
22	N	16	GLU
22	N	414	GLY
22	N	704	PRO
22	N	774	PRO
22	N	878	LEU
22	N	899	ARG
23	O	57	ILE
23	O	226	ARG
23	O	284	ARG
23	O	327	VAL
23	O	371	ALA
24	P	41	GLN
24	P	296	LEU
25	Q	421	LEU
28	T	133	GLY
1	Z	271	MET
1	Z	549	GLU
1	Z	717	ALA
4	3	31	GLN
4	3	44	PRO
4	3	114	PRO
7	6	109	LYS
8	7	77	SER
10	B	3	GLU
10	B	199	PHE
13	E	225	ASN
14	F	41	LYS
15	G	12	ALA
15	G	63	SER
16	H	75	PRO
16	H	101	ILE
16	H	176	ASP
16	H	308	GLY
16	H	322	ASN
17	I	337	LEU

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Mol	Chain	Res	Type
17	I	343	ARG
18	J	69	GLN
19	K	224	THR
19	K	414	HIS
20	L	323	HIS
22	N	432	SER
23	O	259	PRO
24	P	96	GLN
26	R	132	VAL
26	R	192	ARG
27	S	300	LEU
27	S	352	SER
28	T	180	GLU
30	V	166	ASN
31	W	145	GLU
1	Z	316	ASP
7	6	107	ASN
7	6	219	ASP
8	7	161	ALA
14	F	125	ARG
16	H	141	GLY
17	I	128	GLY
18	J	251	ILE
19	K	118	THR
19	K	367	PRO
22	N	935	ILE
25	Q	243	ASP
7	6	155	VAL
16	H	109	PRO
20	L	167	PRO
11	C	103	GLU
16	H	115	VAL
1	Z	359	GLY
16	H	137	GLY
17	I	127	VAL
18	J	110	PRO
22	N	592	GLY
26	R	290	PRO
1	Z	779	CYS
2	1	238	PRO
20	L	282	PRO
25	Q	390	GLU

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Mol	Chain	Res	Type
31	W	148	VAL
7	6	182	GLY
18	J	255	GLY

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	Z	670/763 (88%)	642 (96%)	28 (4%)	26	48
2	1	167/181 (92%)	158 (95%)	9 (5%)	20	41
3	2	183/228 (80%)	176 (96%)	7 (4%)	29	50
4	3	174/174 (100%)	162 (93%)	12 (7%)	14	36
5	4	165/171 (96%)	159 (96%)	6 (4%)	31	52
6	5	151/202 (75%)	144 (95%)	7 (5%)	24	46
7	6	178/199 (89%)	167 (94%)	11 (6%)	16	38
8	7	180/215 (84%)	167 (93%)	13 (7%)	13	35
9	A	205/210 (98%)	197 (96%)	8 (4%)	28	49
10	B	191/191 (100%)	181 (95%)	10 (5%)	21	42
11	C	221/221 (100%)	200 (90%)	21 (10%)	8	25
12	D	211/211 (100%)	205 (97%)	6 (3%)	38	60
13	E	194/203 (96%)	185 (95%)	9 (5%)	24	46
14	F	200/224 (89%)	193 (96%)	7 (4%)	32	53
15	G	199/212 (94%)	186 (94%)	13 (6%)	15	37
16	H	324/372 (87%)	300 (93%)	24 (7%)	13	33
17	I	318/385 (83%)	304 (96%)	14 (4%)	25	47
18	J	325/352 (92%)	308 (95%)	17 (5%)	21	42
19	K	332/366 (91%)	309 (93%)	23 (7%)	14	36
20	L	315/341 (92%)	300 (95%)	15 (5%)	23	44
21	M	333/379 (88%)	316 (95%)	17 (5%)	21	42

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
22	N	710/816 (87%)	674 (95%)	36 (5%)	21	42
23	O	336/336 (100%)	321 (96%)	15 (4%)	24	46
24	P	389/416 (94%)	370 (95%)	19 (5%)	22	43
25	Q	362/362 (100%)	350 (97%)	12 (3%)	33	55
26	R	330/344 (96%)	310 (94%)	20 (6%)	17	38
27	S	299/460 (65%)	288 (96%)	11 (4%)	30	51
28	T	222/294 (76%)	213 (96%)	9 (4%)	27	49
29	U	245/295 (83%)	234 (96%)	11 (4%)	24	46
30	V	221/268 (82%)	211 (96%)	10 (4%)	24	46
31	W	163/312 (52%)	155 (95%)	8 (5%)	22	43
32	Y	19/63 (30%)	19 (100%)	0	100	100
All	All	8532/9766 (87%)	8104 (95%)	428 (5%)	23	43

All (428) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	Z	140	LEU
1	Z	212	GLU
1	Z	231	LEU
1	Z	236	CYS
1	Z	272	LEU
1	Z	275	MET
1	Z	289	VAL
1	Z	306	GLU
1	Z	317	LEU
1	Z	348	ILE
1	Z	376	PHE
1	Z	397	LYS
1	Z	418	LEU
1	Z	435	SER
1	Z	456	ARG
1	Z	498	LEU
1	Z	554	TYR
1	Z	573	ILE
1	Z	576	ILE
1	Z	614	HIS
1	Z	659	LEU
1	Z	666	ILE

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Mol	Chain	Res	Type
1	Z	686	LEU
1	Z	699	VAL
1	Z	714	SER
1	Z	741	LEU
1	Z	752	HIS
1	Z	787	LEU
2	1	35	THR
2	1	53	ARG
2	1	110	VAL
2	1	126	GLU
2	1	179	GLU
2	1	189	PHE
2	1	198	MET
2	1	210	LEU
2	1	215	GLU
3	2	102	ILE
3	2	146	VAL
3	2	197	LEU
3	2	207	PHE
3	2	210	LEU
3	2	231	PRO
3	2	237	LYS
4	3	48	ARG
4	3	59	ASP
4	3	88	MET
4	3	95	LEU
4	3	121	ILE
4	3	124	LEU
4	3	125	ASP
4	3	126	LEU
4	3	185	VAL
4	3	187	VAL
4	3	192	LYS
4	3	193	ASP
5	4	12	TYR
5	4	19	ARG
5	4	45	LEU
5	4	82	ASN
5	4	160	LEU
5	4	183	ILE
6	5	85	ILE
6	5	96	ILE

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Mol	Chain	Res	Type
6	5	132	ARG
6	5	142	LEU
6	5	166	ARG
6	5	195	TYR
6	5	202	TYR
7	6	75	THR
7	6	128	ARG
7	6	134	VAL
7	6	138	ILE
7	6	154	PRO
7	6	192	VAL
7	6	201	ARG
7	6	221	LEU
7	6	231	ILE
7	6	236	VAL
7	6	240	LYS
8	7	74	SER
8	7	87	ILE
8	7	107	TYR
8	7	108	LEU
8	7	131	ARG
8	7	202	GLN
8	7	205	LEU
8	7	212	ASP
8	7	230	ASN
8	7	240	LYS
8	7	242	VAL
8	7	247	PRO
8	7	254	TRP
9	A	96	TYR
9	A	109	ILE
9	A	140	LEU
9	A	147	GLN
9	A	160	TYR
9	A	183	VAL
9	A	184	LYS
9	A	226	LYS
10	B	11	THR
10	B	34	PRO
10	B	46	LEU
10	B	70	LYS
10	B	122	THR

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Mol	Chain	Res	Type
10	B	134	LEU
10	B	184	LEU
10	B	202	GLN
10	B	212	ILE
10	B	233	ILE
11	C	4	ARG
11	C	19	TYR
11	C	43	VAL
11	C	45	LEU
11	C	48	GLU
11	C	63	GLU
11	C	68	LEU
11	C	69	ASN
11	C	99	LEU
11	C	104	PRO
11	C	112	THR
11	C	117	ILE
11	C	141	LYS
11	C	156	TYR
11	C	187	LYS
11	C	192	LEU
11	C	209	GLU
11	C	218	ARG
11	C	246	LYS
11	C	251	LYS
11	C	261	LYS
12	D	38	ARG
12	D	172	LEU
12	D	181	ILE
12	D	184	ASP
12	D	196	LEU
12	D	201	SER
13	E	35	SER
13	E	41	GLN
13	E	43	SER
13	E	109	VAL
13	E	184	VAL
13	E	187	LYS
13	E	199	LEU
13	E	208	GLU
13	E	225	ASN
14	F	42	THR

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Mol	Chain	Res	Type
14	F	65	HIS
14	F	69	HIS
14	F	120	THR
14	F	153	TYR
14	F	223	ILE
14	F	231	PRO
15	G	10	LEU
15	G	20	ARG
15	G	35	SER
15	G	36	THR
15	G	69	ASN
15	G	76	MET
15	G	110	LYS
15	G	166	ILE
15	G	226	GLU
15	G	230	LYS
15	G	234	GLU
15	G	237	GLU
15	G	246	GLU
16	H	53	GLN
16	H	58	LYS
16	H	63	THR
16	H	72	LEU
16	H	93	LEU
16	H	95	VAL
16	H	109	PRO
16	H	120	LYS
16	H	122	VAL
16	H	134	ILE
16	H	164	MET
16	H	168	GLU
16	H	169	LYS
16	H	170	PRO
16	H	222	LYS
16	H	247	GLN
16	H	261	PHE
16	H	268	LYS
16	H	285	PHE
16	H	334	PRO
16	H	360	ARG
16	H	367	ASP
16	H	378	PRO

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Mol	Chain	Res	Type
16	H	416	VAL
17	I	139	VAL
17	I	141	LYS
17	I	162	VAL
17	I	174	MET
17	I	209	GLU
17	I	239	VAL
17	I	250	VAL
17	I	287	ILE
17	I	326	LYS
17	I	341	LEU
17	I	346	ARG
17	I	374	LEU
17	I	412	MET
17	I	415	THR
18	J	67	GLN
18	J	69	GLN
18	J	86	LEU
18	J	124	HIS
18	J	137	LEU
18	J	144	PRO
18	J	155	ASP
18	J	191	PRO
18	J	203	VAL
18	J	230	MET
18	J	234	LEU
18	J	245	ILE
18	J	328	ILE
18	J	336	MET
18	J	345	ARG
18	J	364	THR
18	J	380	GLN
19	K	62	LYS
19	K	79	VAL
19	K	82	ILE
19	K	86	PRO
19	K	110	ASN
19	K	115	ILE
19	K	119	ILE
19	K	120	ASP
19	K	148	ASP
19	K	158	GLN

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Mol	Chain	Res	Type
19	K	167	ILE
19	K	221	HIS
19	K	245	ARG
19	K	252	ARG
19	K	276	ASP
19	K	287	ARG
19	K	303	VAL
19	K	318	ASP
19	K	330	LYS
19	K	354	LEU
19	K	364	VAL
19	K	369	LYS
19	K	417	TYR
20	L	31	GLU
20	L	61	LEU
20	L	70	ILE
20	L	92	LEU
20	L	111	LEU
20	L	120	TYR
20	L	144	GLU
20	L	155	ASN
20	L	226	GLN
20	L	269	THR
20	L	275	MET
20	L	294	ARG
20	L	303	LEU
20	L	314	LYS
20	L	346	VAL
21	M	61	ARG
21	M	81	LYS
21	M	121	CYS
21	M	124	ILE
21	M	132	TYR
21	M	134	LEU
21	M	137	ILE
21	M	184	GLN
21	M	188	ILE
21	M	215	LEU
21	M	219	PRO
21	M	251	LEU
21	M	261	ILE
21	M	293	THR

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Mol	Chain	Res	Type
21	M	342	LEU
21	M	349	ASP
21	M	382	GLU
22	N	15	ASP
22	N	24	LEU
22	N	71	LEU
22	N	90	VAL
22	N	95	GLU
22	N	103	LYS
22	N	172	ASP
22	N	194	ARG
22	N	209	GLU
22	N	210	LYS
22	N	234	GLU
22	N	328	ILE
22	N	366	HIS
22	N	428	PRO
22	N	473	VAL
22	N	493	VAL
22	N	494	TYR
22	N	507	VAL
22	N	561	GLU
22	N	567	ILE
22	N	580	ARG
22	N	585	THR
22	N	605	VAL
22	N	614	VAL
22	N	666	LYS
22	N	702	THR
22	N	746	ILE
22	N	747	SER
22	N	786	THR
22	N	797	MET
22	N	814	PRO
22	N	871	PRO
22	N	895	PRO
22	N	913	ILE
22	N	914	LEU
22	N	925	VAL
23	O	5	PRO
23	O	31	LYS
23	O	52	GLN

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Mol	Chain	Res	Type
23	O	76	LEU
23	O	128	LEU
23	O	133	GLU
23	O	142	LEU
23	O	205	LEU
23	O	210	VAL
23	O	216	LEU
23	O	223	GLU
23	O	225	LEU
23	O	226	ARG
23	O	247	ARG
23	O	251	LEU
24	P	61	VAL
24	P	84	ASN
24	P	93	ARG
24	P	104	MET
24	P	123	ARG
24	P	126	ASP
24	P	140	ILE
24	P	170	GLN
24	P	177	MET
24	P	202	THR
24	P	217	GLU
24	P	253	THR
24	P	257	GLN
24	P	314	LEU
24	P	326	MET
24	P	388	GLU
24	P	400	LYS
24	P	438	LEU
24	P	445	LEU
25	Q	24	ILE
25	Q	77	LEU
25	Q	81	SER
25	Q	88	LEU
25	Q	93	LEU
25	Q	144	GLN
25	Q	166	LEU
25	Q	251	LEU
25	Q	285	GLU
25	Q	326	LEU
25	Q	378	LEU

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Mol	Chain	Res	Type
25	Q	382	GLU
26	R	31	HIS
26	R	34	ASP
26	R	42	MET
26	R	75	LYS
26	R	87	GLU
26	R	88	LEU
26	R	132	VAL
26	R	145	LEU
26	R	152	MET
26	R	157	ILE
26	R	168	ILE
26	R	195	LYS
26	R	205	VAL
26	R	214	MET
26	R	253	LEU
26	R	254	PRO
26	R	278	VAL
26	R	350	VAL
26	R	356	THR
26	R	387	ILE
27	S	157	THR
27	S	182	LYS
27	S	194	LYS
27	S	319	HIS
27	S	385	LYS
27	S	396	ILE
27	S	432	GLU
27	S	455	LYS
27	S	458	VAL
27	S	459	GLN
27	S	486	ILE
28	T	62	ARG
28	T	154	TRP
28	T	220	ILE
28	T	236	LEU
28	T	252	PRO
28	T	257	THR
28	T	281	LYS
28	T	313	ASN
28	T	338	GLN
29	U	38	VAL

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Mol	Chain	Res	Type
29	U	47	VAL
29	U	77	ASN
29	U	113	LYS
29	U	193	ASN
29	U	215	VAL
29	U	220	LEU
29	U	233	VAL
29	U	246	VAL
29	U	247	LYS
29	U	252	LYS
30	V	87	VAL
30	V	107	MET
30	V	108	VAL
30	V	113	HIS
30	V	132	SER
30	V	138	GLU
30	V	163	ILE
30	V	205	ILE
30	V	270	LEU
30	V	273	LYS
31	W	26	LEU
31	W	45	PRO
31	W	61	LEU
31	W	62	THR
31	W	70	ARG
31	W	88	THR
31	W	100	ARG
31	W	129	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (235) such sidechains are listed below:

Mol	Chain	Res	Type
1	Z	102	HIS
1	Z	148	GLN
1	Z	195	ASN
1	Z	291	GLN
1	Z	352	HIS
1	Z	355	ASN
1	Z	605	ASN
1	Z	610	GLN
1	Z	650	GLN
1	Z	724	ASN

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Mol	Chain	Res	Type
1	Z	752	HIS
1	Z	790	GLN
1	Z	815	HIS
2	1	72	HIS
2	1	96	GLN
2	1	105	ASN
3	2	73	ASN
4	3	61	GLN
4	3	173	ASN
4	3	188	HIS
5	4	61	GLN
5	4	65	GLN
5	4	87	ASN
5	4	189	HIS
6	5	69	HIS
6	5	148	GLN
6	5	250	ASN
7	6	64	HIS
7	6	108	ASN
8	7	91	ASN
8	7	106	GLN
8	7	149	ASN
8	7	202	GLN
8	7	230	ASN
8	7	253	ASN
9	A	12	HIS
9	A	68	HIS
9	A	75	ASN
9	A	100	ASN
9	A	128	ASN
9	A	147	GLN
9	A	150	GLN
9	A	172	GLN
10	B	21	GLN
10	B	71	HIS
10	B	109	GLN
10	B	148	GLN
10	B	189	HIS
10	B	214	ASN
11	C	20	GLN
11	C	53	HIS
11	C	69	ASN

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Mol	Chain	Res	Type
11	C	88	ASN
11	C	95	GLN
11	C	102	GLN
11	C	119	GLN
11	C	155	ASN
11	C	177	GLN
11	C	220	ASN
11	C	230	GLN
11	C	235	GLN
12	D	120	GLN
12	D	239	ASN
13	E	23	GLN
13	E	99	HIS
13	E	118	ASN
13	E	122	GLN
13	E	155	HIS
13	E	211	ASN
14	F	4	ASN
14	F	8	ASN
14	F	65	HIS
14	F	117	GLN
14	F	143	HIS
15	G	121	HIS
15	G	144	ASN
15	G	202	HIS
15	G	222	ASN
16	H	53	GLN
16	H	54	GLN
16	H	60	ASN
16	H	150	HIS
16	H	293	ASN
16	H	314	ASN
17	I	84	GLN
17	I	131	HIS
17	I	153	ASN
17	I	157	HIS
17	I	298	ASN
17	I	368	HIS
17	I	416	ASN
18	J	40	GLN
18	J	48	GLN
18	J	53	ASN

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Mol	Chain	Res	Type
18	J	106	ASN
18	J	171	HIS
18	J	241	HIS
18	J	270	GLN
18	J	332	HIS
18	J	377	HIS
18	J	392	GLN
19	K	99	ASN
19	K	127	ASN
19	K	133	HIS
19	K	158	GLN
19	K	173	GLN
19	K	221	HIS
19	K	222	HIS
19	K	286	GLN
19	K	312	ASN
20	L	75	ASN
20	L	155	ASN
20	L	190	GLN
20	L	225	HIS
20	L	254	GLN
20	L	305	ASN
20	L	316	HIS
21	M	130	GLN
21	M	218	GLN
21	M	255	GLN
21	M	417	HIS
21	M	436	GLN
22	N	18	GLN
22	N	70	HIS
22	N	91	ASN
22	N	107	HIS
22	N	115	ASN
22	N	207	ASN
22	N	258	GLN
22	N	362	ASN
22	N	377	HIS
22	N	412	HIS
22	N	421	GLN
22	N	450	HIS
22	N	475	HIS
22	N	537	GLN

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Mol	Chain	Res	Type
22	N	632	GLN
22	N	685	GLN
22	N	707	ASN
22	N	743	ASN
22	N	749	GLN
22	N	756	HIS
22	N	777	HIS
22	N	876	GLN
22	N	901	GLN
22	N	931	HIS
23	O	12	GLN
23	O	23	HIS
23	O	40	GLN
23	O	62	ASN
23	O	69	HIS
23	O	72	ASN
23	O	91	ASN
23	O	244	ASN
23	O	258	GLN
23	O	264	ASN
23	O	372	HIS
24	P	53	GLN
24	P	107	GLN
24	P	189	GLN
24	P	203	GLN
24	P	265	GLN
24	P	362	ASN
24	P	440	ASN
24	P	453	HIS
25	Q	10	GLN
25	Q	28	HIS
25	Q	36	GLN
25	Q	38	ASN
25	Q	127	GLN
25	Q	148	HIS
25	Q	152	GLN
25	Q	178	HIS
25	Q	198	ASN
25	Q	292	GLN
25	Q	322	HIS
25	Q	349	HIS
25	Q	375	HIS

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Mol	Chain	Res	Type
25	Q	405	GLN
26	R	136	HIS
26	R	291	HIS
26	R	302	HIS
26	R	306	GLN
26	R	357	ASN
26	R	363	ASN
26	R	388	ASN
27	S	177	ASN
27	S	214	HIS
27	S	232	HIS
27	S	252	ASN
27	S	260	HIS
27	S	299	GLN
27	S	326	GLN
27	S	459	GLN
27	S	478	GLN
27	S	487	HIS
27	S	488	ASN
28	T	139	GLN
28	T	153	GLN
28	T	221	GLN
28	T	314	ASN
28	T	322	GLN
29	U	7	GLN
29	U	31	ASN
29	U	32	GLN
29	U	52	ASN
29	U	72	HIS
29	U	77	ASN
29	U	109	ASN
29	U	157	HIS
29	U	202	ASN
29	U	224	HIS
29	U	229	GLN
29	U	243	GLN
29	U	256	GLN
29	U	282	ASN
30	V	44	HIS
30	V	113	HIS
30	V	115	HIS
30	V	130	GLN

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Mol	Chain	Res	Type
30	V	194	HIS
30	V	199	HIS
30	V	206	ASN
30	V	219	ASN
30	V	240	HIS
30	V	254	ASN
30	V	256	ASN
30	V	278	GLN
30	V	287	HIS
30	V	298	GLN
31	W	18	ASN
31	W	56	ASN
31	W	101	GLN
31	W	158	ASN
31	W	161	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

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)

There are no chain breaks in this entry.

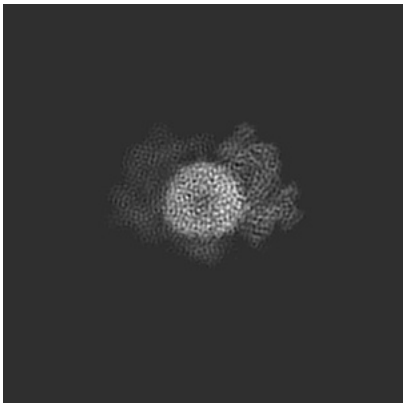
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-4089. These allow visual inspection of the internal detail of the map and identification of artifacts.

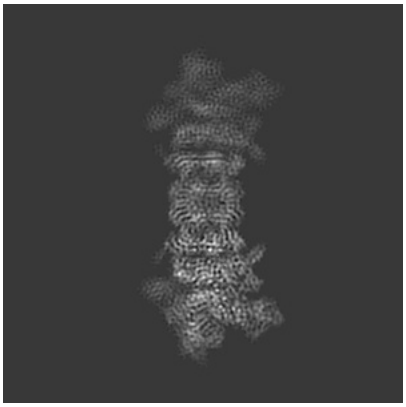
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

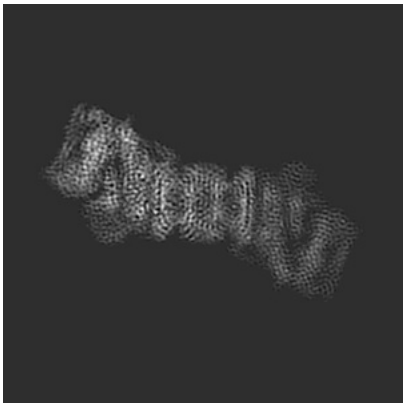
6.1.1 Primary map



X



Y

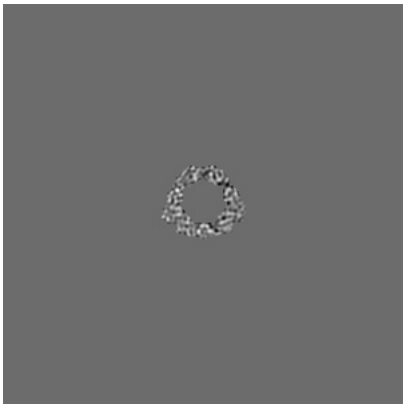


Z

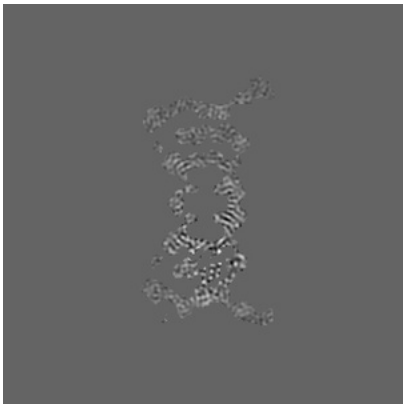
The images above show the map projected in three orthogonal directions.

6.2 Central slices

6.2.1 Primary map



X Index: 140



Y Index: 140

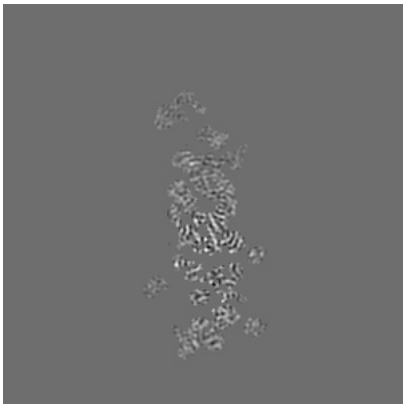
Z Index: 140

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

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 111



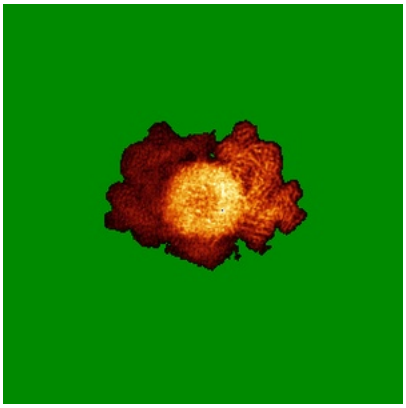
Y Index: 153

Z Index: 134

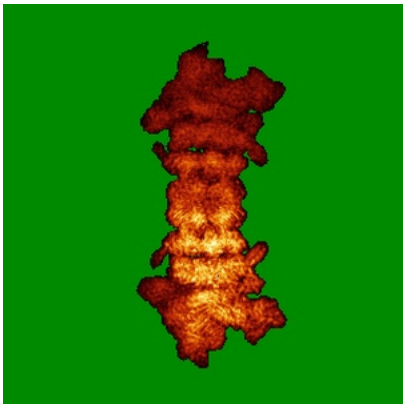
The images above show the largest variance slices of the map in three orthogonal directions.

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

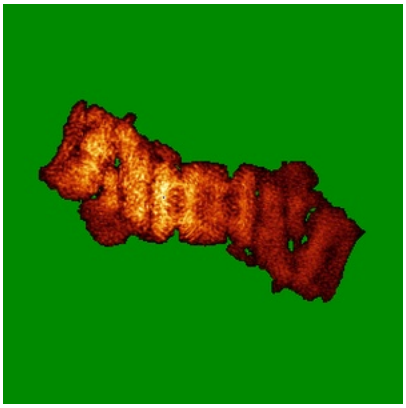
6.4.1 Primary map



X



Y

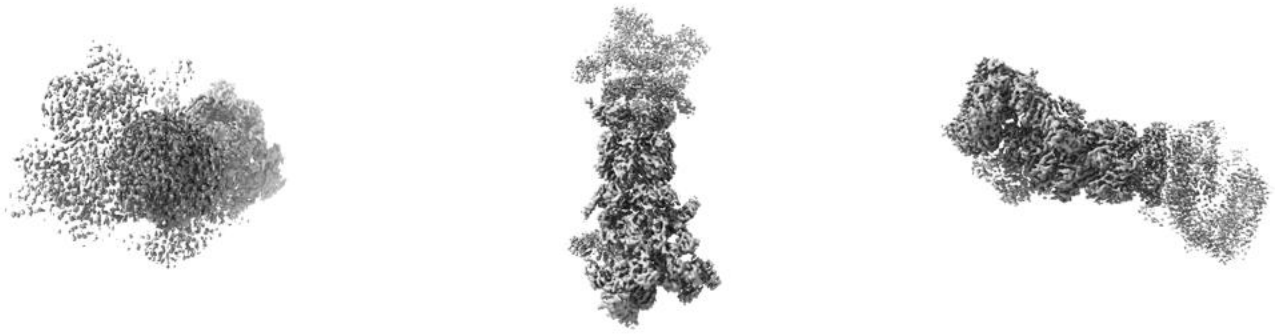


Z

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



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.088. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

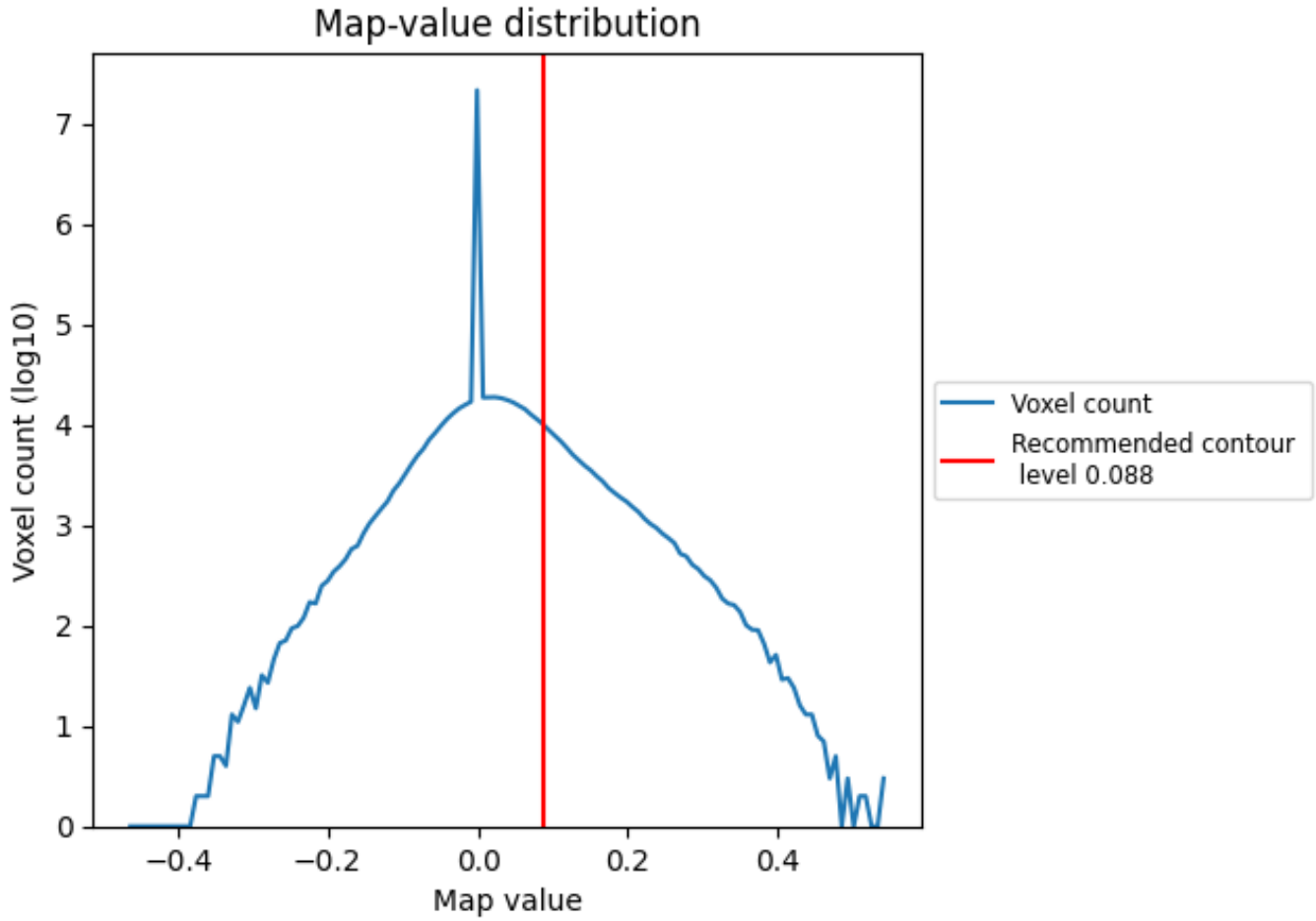
6.6 Mask visualisation (i)

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

7 Map analysis

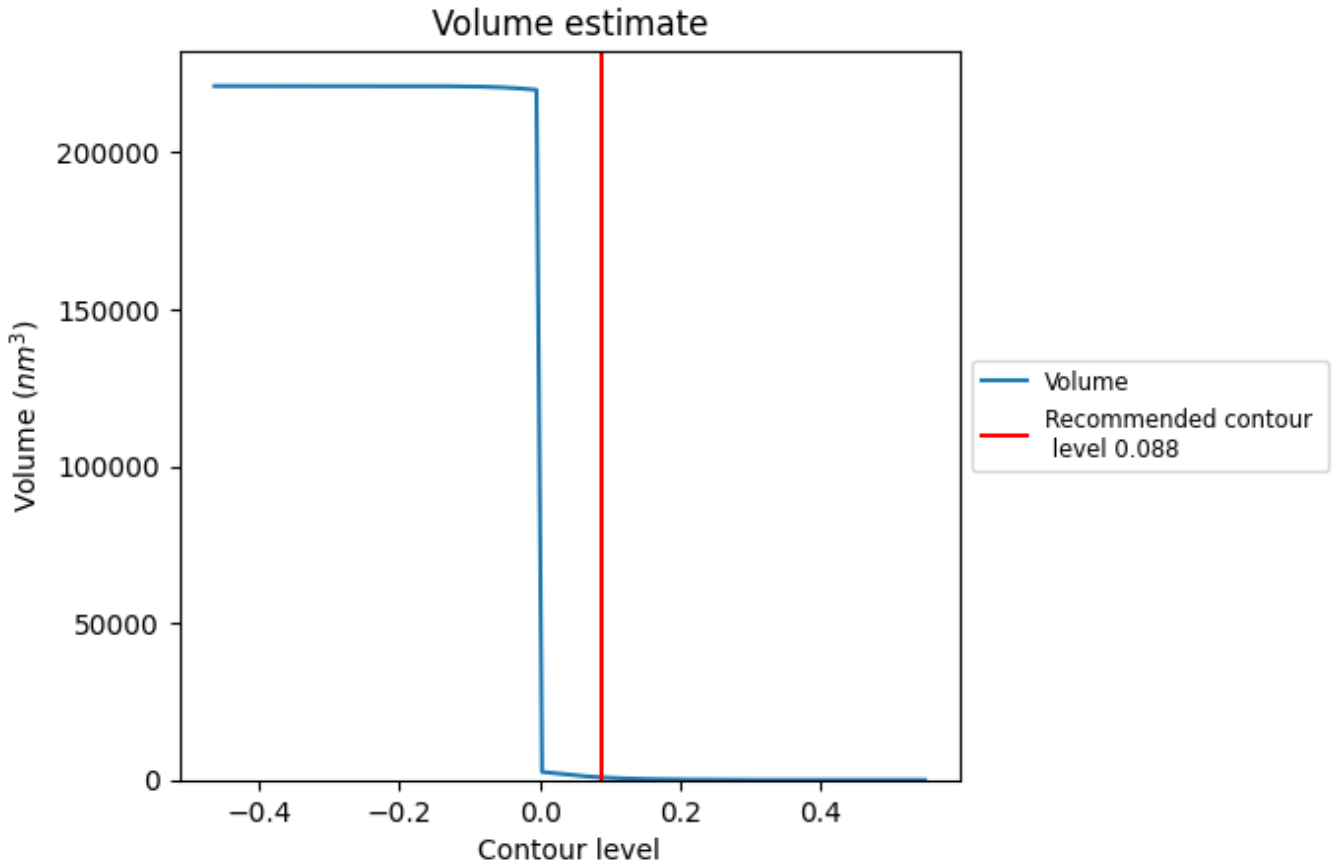
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

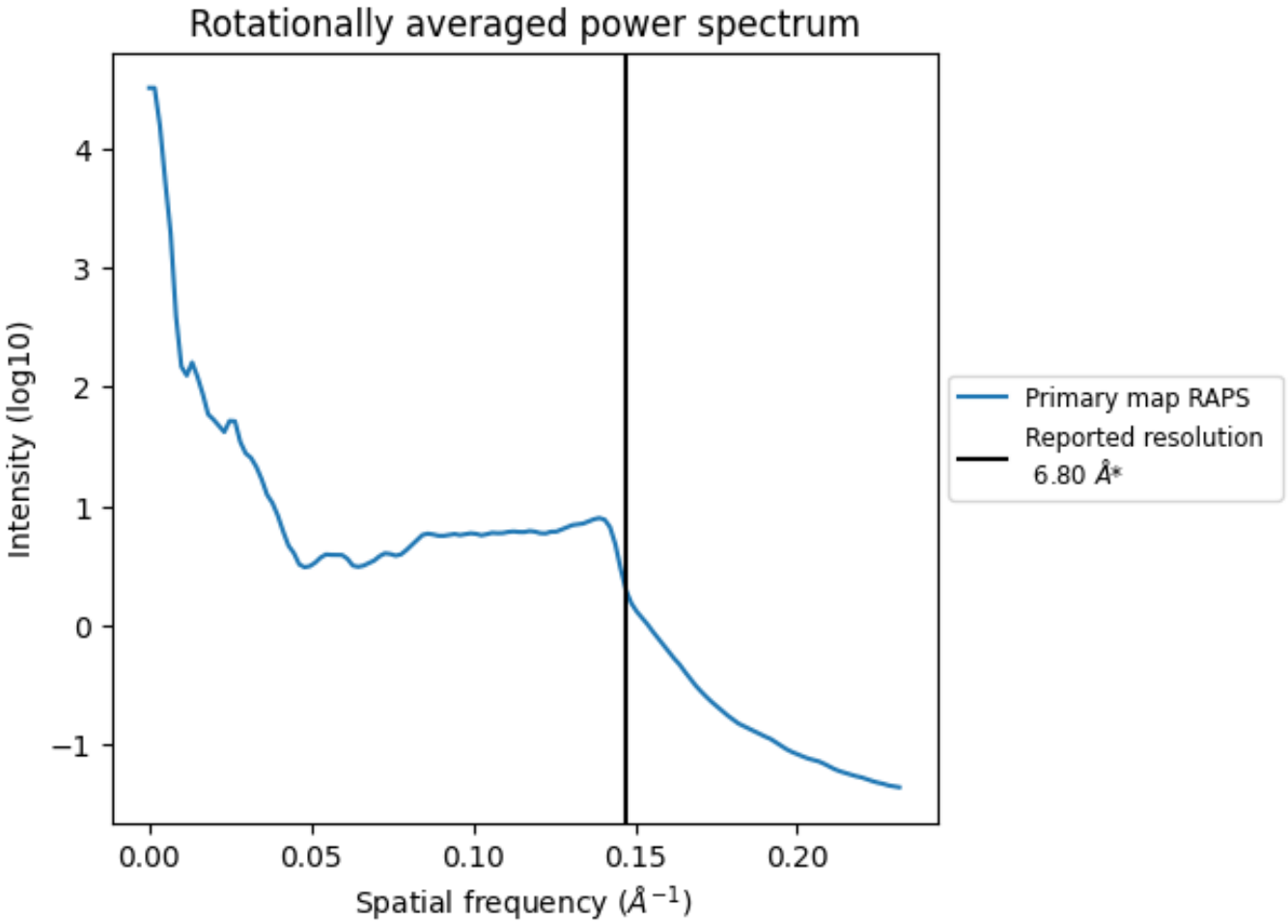
7.2 Volume estimate



The volume at the recommended contour level is 815 nm^3; this corresponds to an approximate mass of 737 kDa.

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

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.147 $Å^{-1}$

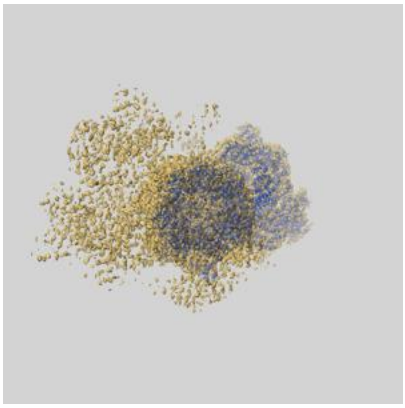
8 Fourier-Shell correlation (i)

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

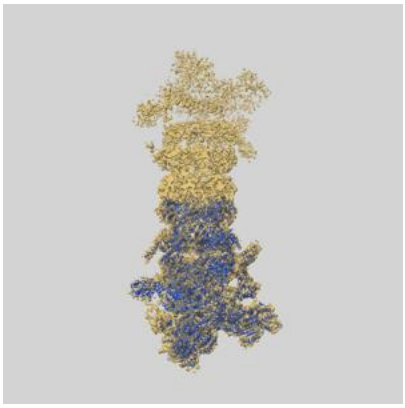
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-4089 and PDB model 5LN3. Per-residue inclusion information can be found in section 3 on page 10.

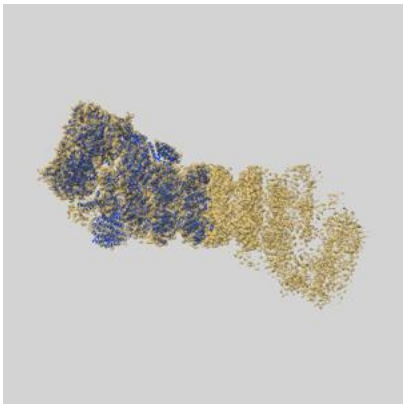
9.1 Map-model overlay



X



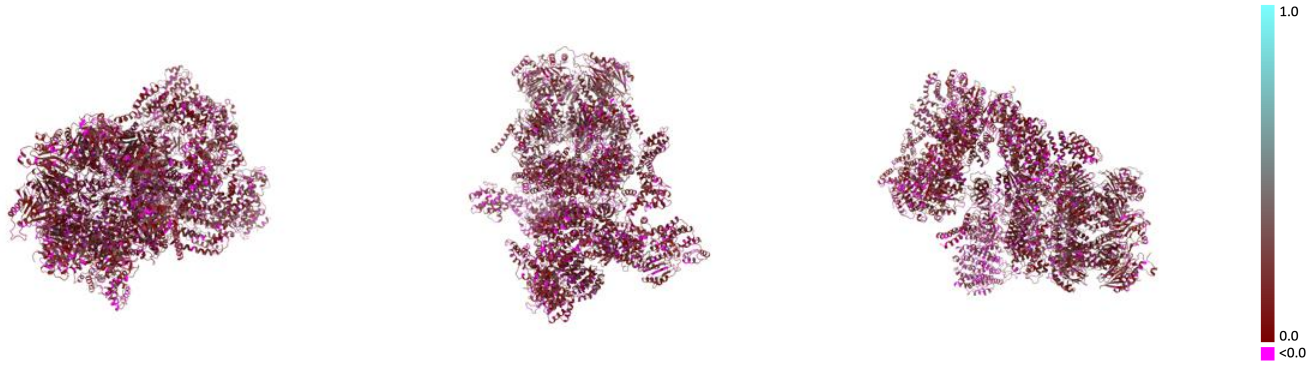
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.088 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

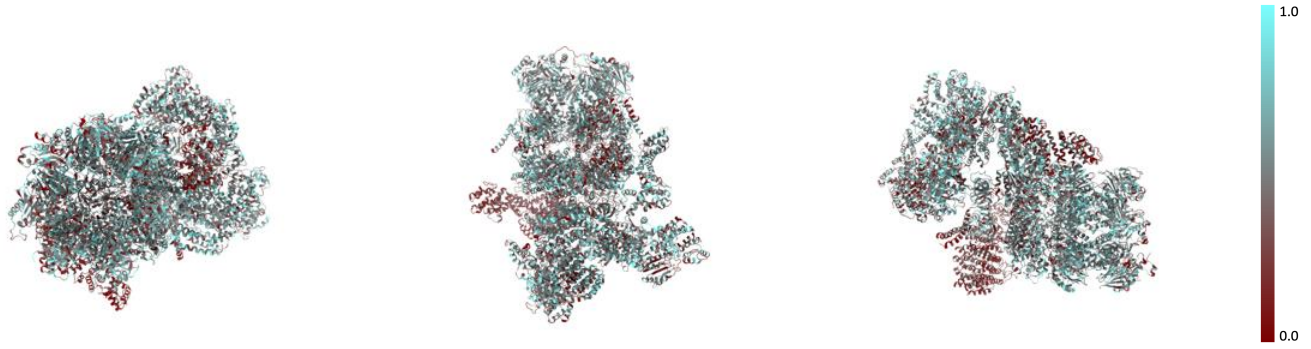
9.2 Q-score mapped to coordinate model



X Y Z

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

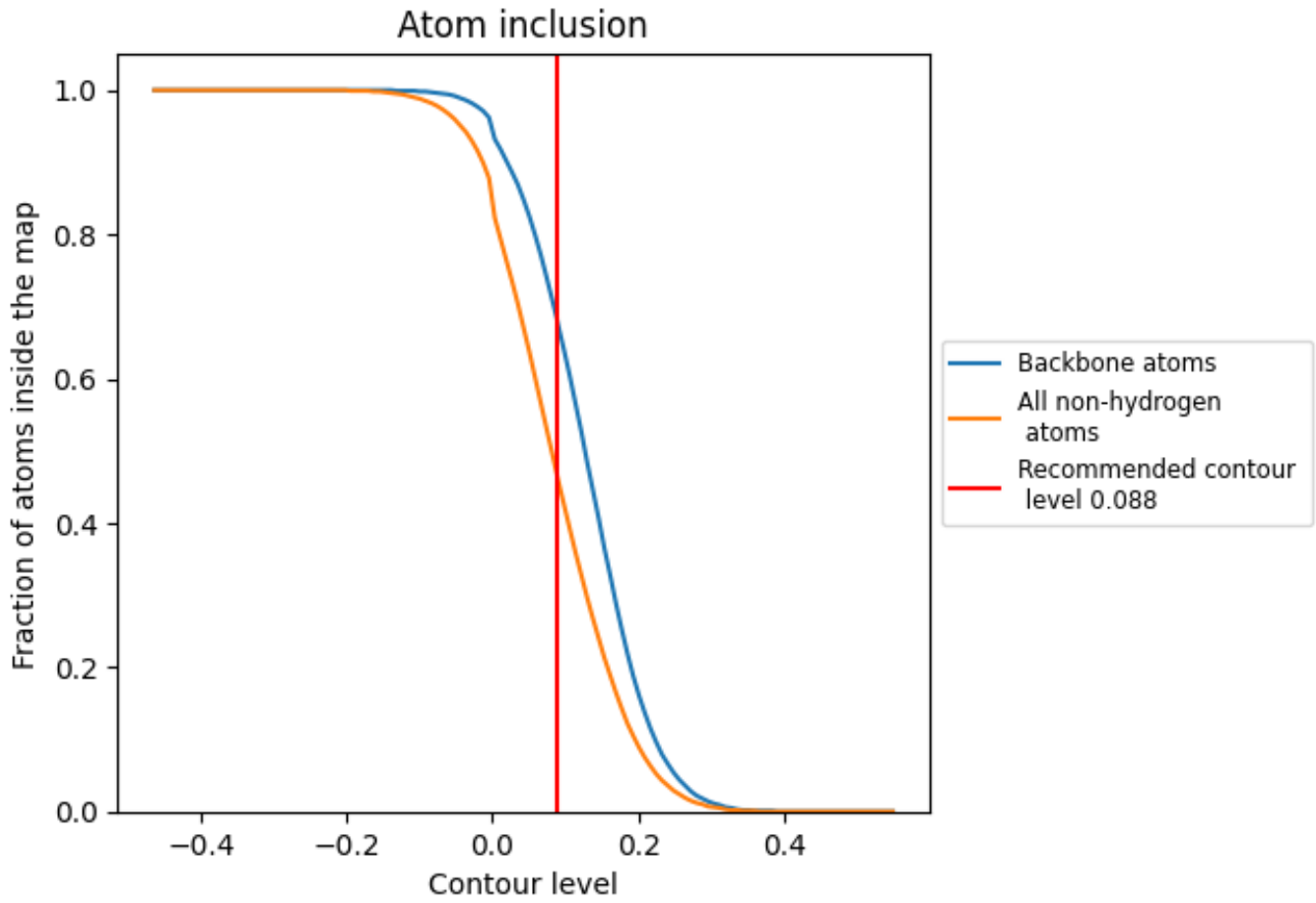
9.3 Atom inclusion mapped to coordinate model



X Y Z

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 (0.088).

9.4 Atom inclusion (i)



At the recommended contour level, 68% of all backbone atoms, 47% 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 (0.088) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.4690	0.1410
1	0.5060	0.1540
2	0.5600	0.1950
3	0.4990	0.1550
4	0.5600	0.1640
5	0.5640	0.1700
6	0.5020	0.1640
7	0.5170	0.1590
A	0.5950	0.1790
B	0.5610	0.1630
C	0.5370	0.1670
D	0.5360	0.1720
E	0.5460	0.1610
F	0.5460	0.1660
G	0.5310	0.1520
H	0.4650	0.1340
I	0.4550	0.1290
J	0.5020	0.1470
K	0.5100	0.1440
L	0.4880	0.1450
M	0.4550	0.1350
N	0.4460	0.1440
O	0.5270	0.1330
P	0.5200	0.1320
Q	0.3150	0.1120
R	0.5370	0.1380
S	0.5000	0.1440
T	0.5110	0.1360
U	0.5420	0.1560
V	0.5210	0.1530
W	0.4300	0.1420
Y	0.4420	0.1600
Z	0.1150	0.0640