Full wwPDB EM Validation Report ⓘ

Mar 6, 2026 – 07:57 AM UTC

PDB ID	:	6FVW / pdb_00006fvw
EMDB ID	:	EMD-4322
Title	:	26S proteasome, s4 state
Authors	:	Eisele, M.R.; Reed, R.G.; Rudack, T.; Schweitzer, A.; Beck, F.; Nagy, I.; Pfeifer, G.; Plitzko, J.M.; Baumeister, W.; Tomko, R.J.; Sakata, E.
Deposited on	:	2018-03-05
Resolution	:	4.50 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:

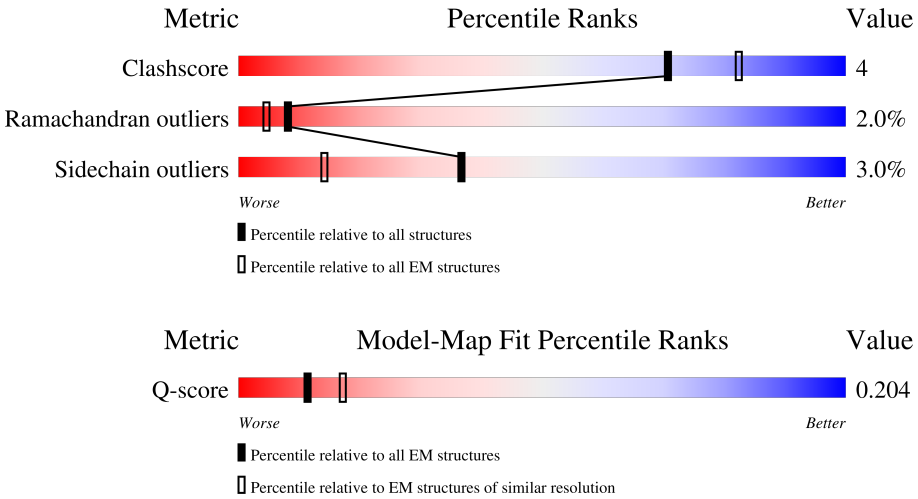
EMDB validation analysis	:	0.0.1.dev132
Mogul	:	2022.3.0, CSD as543be (2022)
MolProbity	:	4-5-2 with Phenix2.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data 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 4.50 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	2937 (4.00 - 5.00)

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	A	244	41% 54% 5%
1	a	244	25% 43% 52%
2	B	247	42% 54%
2	b	247	26% 49% 44% 6%

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Mol	Chain	Length	Quality of chain
3	C	241	44% 46% 9%
3	c	241	27% 48% 47% 5%
4	D	252	5% 40% 51% 8%
4	d	252	32% 42% 50% 8%
5	E	245	47% 45% 8%
5	e	245	29% 43% 50% 7%
6	F	232	47% 50%
6	f	232	25% 50% 45% 5%
7	G	245	43% 49% 8%
7	g	245	20% 45% 47% 8%
8	1	196	47% 47% 5%
8	h	196	42% 53% 5%
9	2	226	44% 45% 10%
9	i	226	5% 45% 48% 7%
10	3	204	42% 53%
10	j	204	5% 49% 46% 5%
11	4	195	43% 50% 7%
11	k	195	5% 47% 48% 5%
12	5	212	45% 49% 6%
12	l	212	7% 45% 50%
13	6	222	45% 50% 5%
13	m	222	7% 43% 53%
14	7	232	47% 49%
14	n	232	5% 47% 49%
15	W	197	51% 39% 54% 5%

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Mol	Chain	Length	Quality of chain
16	V	289	20% 51% 45%
17	T	266	49% 45% 50% 5%
18	X	127	98% 38% 53% 9%
19	Y	89	64% 40% 47% 12%
20	Z	970	54% 38% 47% 7% 7%
21	N	922	34% 45% 50% 5%
22	S	475	41% 37% 55% 8%
23	P	440	11% 43% 51% 6%
24	Q	434	20% 44% 50% 5%
25	R	405	14% 44% 49% 7%
26	U	304	22% 44% 53%
27	O	388	34% 43% 51% 6%
28	H	426	24% 42% 48% 9%
29	I	385	18% 37% 54% 8%
30	K	384	18% 41% 52% 5%
31	L	388	38% 41% 54% 5%
32	M	421	30% 45% 50% 5%
33	J	403	21% 42% 50% 7%

2 Entry composition (i)

There are 37 unique types of molecules in this entry. The entry contains 110594 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					AltConf	Trace
1	a	244	Total	C	N	O	S	0	0
			1924	1223	323	370	8		
1	A	244	Total	C	N	O	S	0	0
			1924	1223	323	370	8		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	b	247	Total	C	N	O	S	0	0
			1892	1206	312	371	3		
2	B	247	Total	C	N	O	S	0	0
			1892	1206	312	371	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	c	241	Total	C	N	O	S	0	0
			1884	1190	315	376	3		
3	C	241	Total	C	N	O	S	0	0
			1884	1190	315	376	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	d	252	Total	C	N	O	S	0	0
			1986	1237	351	394	4		
4	D	252	Total	C	N	O	S	0	0
			1986	1237	351	394	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	e	245	Total	C	N	O	S	0	0
			1889	1179	317	386	7		
5	E	245	Total	C	N	O	S	0	0
			1889	1179	317	386	7		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	f	232	Total	C	N	O	S	0	0
			1784	1120	311	349	4		
6	F	232	Total	C	N	O	S	0	0
			1784	1120	311	349	4		

- Molecule 7 is a protein called Probable proteasome subunit alpha type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	g	245	Total	C	N	O	S	0	0
			1905	1211	331	359	4		
7	G	245	Total	C	N	O	S	0	0
			1905	1211	331	359	4		

- Molecule 8 is a protein called Proteasome subunit beta type-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	h	196	Total	C	N	O	S	0	0
			1512	955	250	300	7		
8	1	196	Total	C	N	O	S	0	0
			1512	955	250	300	7		

- Molecule 9 is a protein called Proteasome subunit beta type-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	i	226	Total	C	N	O	S	0	0
			1720	1082	298	333	7		
9	2	226	Total	C	N	O	S	0	0
			1720	1082	298	333	7		

- Molecule 10 is a protein called Proteasome subunit beta type-3.

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

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	3	204	Total	C	N	O	S	0	0
			1581	1010	258	305	8		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
11	k	195	Total	C	N	O	S	0	0
			1562	992	264	300	6		
11	4	195	Total	C	N	O	S	0	0
			1562	992	264	300	6		

- Molecule 12 is a protein called Proteasome subunit beta type-5.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	l	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		
12	5	212	Total	C	N	O	S	0	0
			1644	1045	280	312	7		

- Molecule 13 is a protein called Proteasome subunit beta type-6.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	m	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		
13	6	222	Total	C	N	O	S	0	0
			1757	1115	303	335	4		

- Molecule 14 is a protein called Proteasome subunit beta type-7.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	n	232	Total	C	N	O	S	0	0
			1816	1148	311	350	7		
14	7	229	Total	C	N	O	S	0	0
			1790	1133	306	344	7		

- Molecule 15 is a protein called 26S proteasome regulatory subunit RPN10.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	W	197	Total	C	N	O	S	0	0
			1535	962	269	301	3		

- Molecule 16 is a protein called Ubiquitin carboxyl-terminal hydrolase RPN11.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	V	289	Total	C	N	O	S	0	0
			2274	1425	389	446	14		

- Molecule 17 is a protein called 26S proteasome regulatory subunit RPN12.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	T	266	Total	C	N	O	S	0	0
			2193	1405	349	433	6		

- Molecule 18 is a protein called 26S proteasome regulatory subunit RPN13.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	X	127	Total	C	N	O	S	0	0
			1033	664	169	196	4		

- Molecule 19 is a protein called 26S proteasome complex subunit SEM1.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Y	89	Total	C	N	O	S	0	0
			731	447	119	164	1		

- Molecule 20 is a protein called 26S proteasome regulatory subunit RPN1.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	Z	906	Total	C	N	O	S	0	0
			7005	4416	1150	1409	30		

- Molecule 21 is a protein called 26S proteasome regulatory subunit RPN2.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	N	922	Total	C	N	O	S	0	0
			7158	4536	1205	1389	28		

- Molecule 22 is a protein called 26S proteasome regulatory subunit RPN3.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	S	475	Total	C	N	O	S	0	0
			3895	2488	653	739	15		

- Molecule 23 is a protein called 26S proteasome regulatory subunit RPN5.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	P	440	Total	C	N	O	S	0	0
			3609	2297	604	698	10		

- Molecule 24 is a protein called 26S proteasome regulatory subunit RPN6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Q	434	Total	C	N	O	S	0	0
			3499	2225	577	681	16		

- Molecule 25 is a protein called 26S proteasome regulatory subunit RPN7.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	R	405	Total	C	N	O	S	0	0
			3259	2077	535	637	10		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
26	U	304	Total	C	N	O	S	0	0
			2427	1529	414	477	7		

- Molecule 27 is a protein called 26S proteasome regulatory subunit RPN9.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	O	388	Total	C	N	O	S	0	0
			3186	2051	519	608	8		

- Molecule 28 is a protein called 26S proteasome regulatory subunit 7 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	H	426	Total	C	N	O	S	0	0
			3313	2056	592	648	17		

- Molecule 29 is a protein called 26S proteasome regulatory subunit 4 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	I	385	Total	C	N	O	S	0	0
			3022	1899	508	598	17		

- Molecule 30 is a protein called 26S proteasome regulatory subunit 6B homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	K	384	Total	C	N	O	S	0	0
			3041	1911	533	587	10		

- Molecule 31 is a protein called 26S proteasome subunit RPT4.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	L	388	Total	C	N	O	S	0	0
			3083	1942	548	581	12		

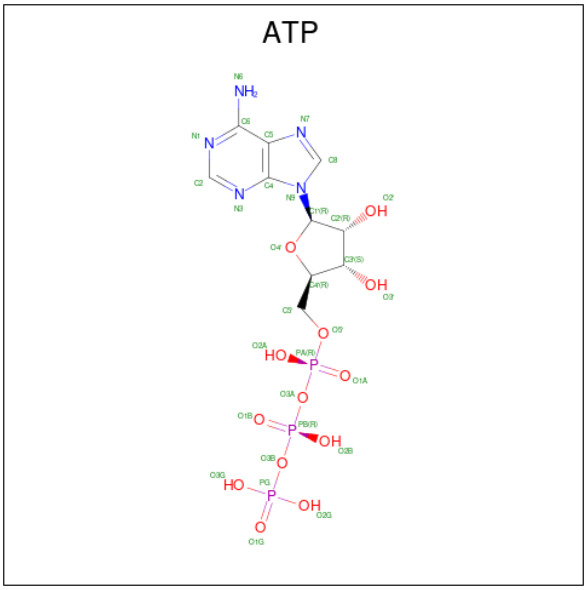
- Molecule 32 is a protein called 26S proteasome regulatory subunit 6A.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	M	421	Total	C	N	O	S	0	0
			3285	2043	573	656	13		

- Molecule 33 is a protein called 26S proteasome regulatory subunit 8 homolog.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	J	403	Total	C	N	O	S	0	0
			3156	1986	563	590	17		

- Molecule 34 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: $C_{10}H_{16}N_5O_{13}P_3$).



Mol	Chain	Residues	Atoms					AltConf
34	H	1	Total	C	N	O	P	0
			31	10	5	13	3	

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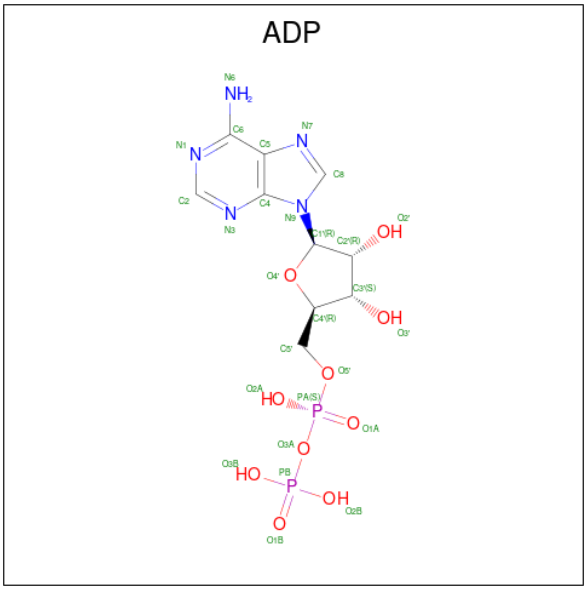
Mol	Chain	Residues	Atoms					AltConf
34	I	1	Total	C	N	O	P	0
			31	10	5	13	3	
34	M	1	Total	C	N	O	P	0
			31	10	5	13	3	
34	J	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 35 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		AltConf
35	H	1	Total	Mg	0
			1	1	
35	I	1	Total	Mg	0
			1	1	
35	K	1	Total	Mg	0
			1	1	
35	L	1	Total	Mg	0
			1	1	
35	M	1	Total	Mg	0
			1	1	
35	J	1	Total	Mg	0
			1	1	

- Molecule 36 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: $C_{10}H_{15}N_5O_{10}P_2$).



Mol	Chain	Residues	Atoms					AltConf
36	K	1	Total	C	N	O	P	0
			27	10	5	10	2	
36	L	1	Total	C	N	O	P	0
			27	10	5	10	2	

- Molecule 37 is water.

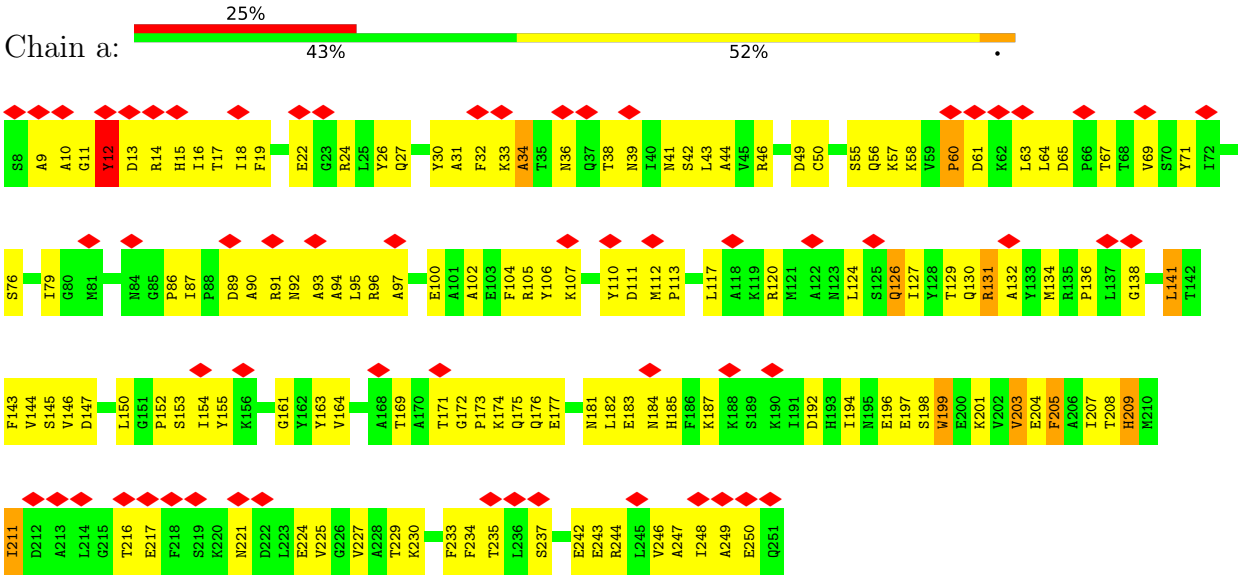
Mol	Chain	Residues	Atoms		AltConf
37	H	3	Total	O	0
			3	3	
37	I	3	Total	O	0
			3	3	
37	K	4	Total	O	0
			4	4	
37	L	4	Total	O	0
			4	4	
37	M	3	Total	O	0
			3	3	
37	J	3	Total	O	0
			3	3	

3 Residue-property plots (i)

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

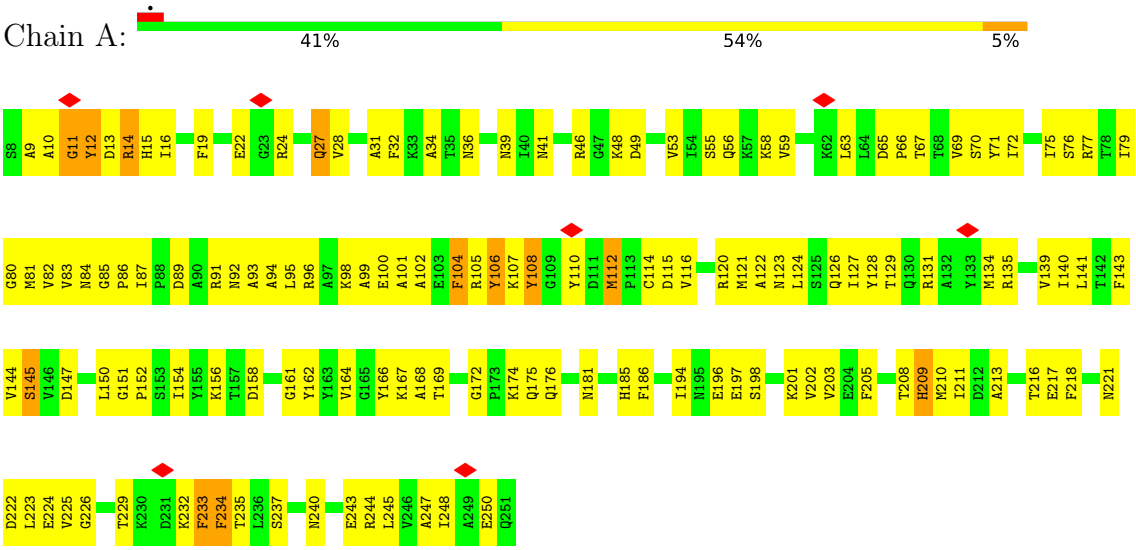
• Molecule 1: Proteasome subunit alpha type-1

Chain a:



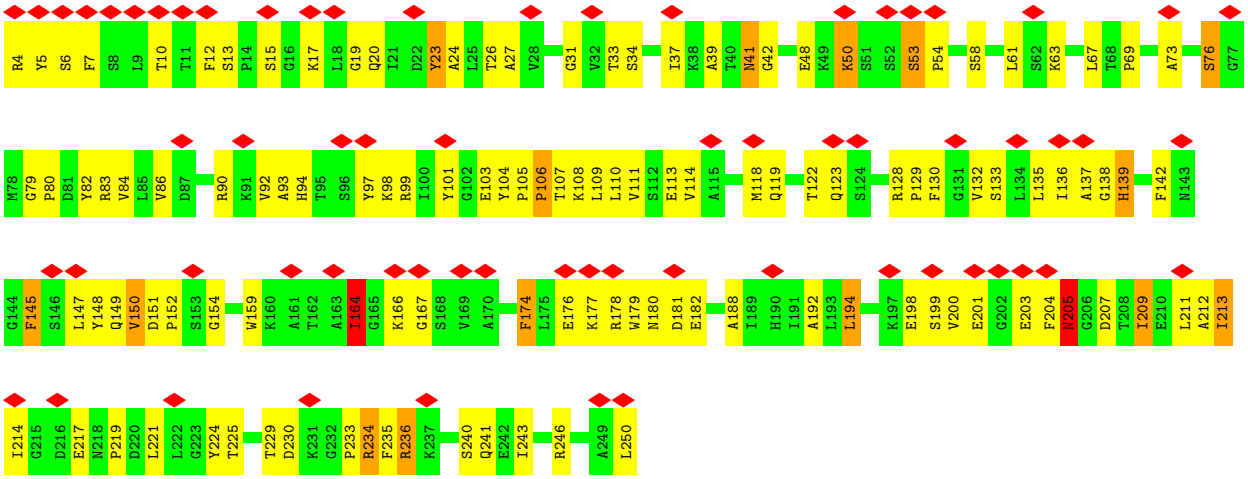
• Molecule 1: Proteasome subunit alpha type-1

Chain A:



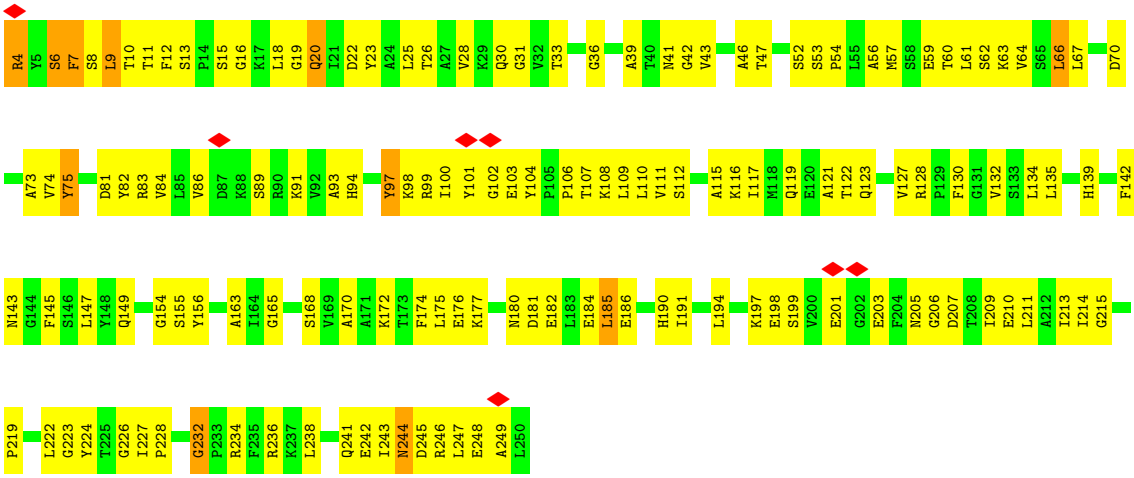
• Molecule 2: Proteasome subunit alpha type-2

Chain b:



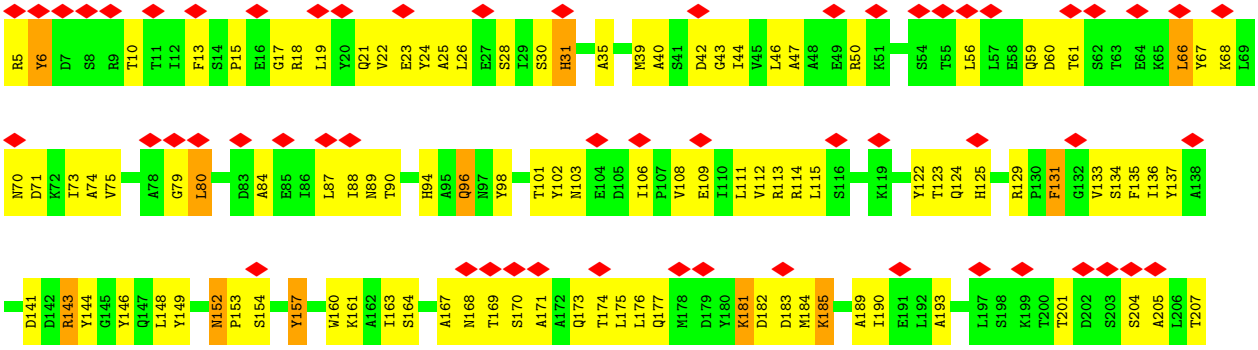
• Molecule 2: Proteasome subunit alpha type-2

Chain B:

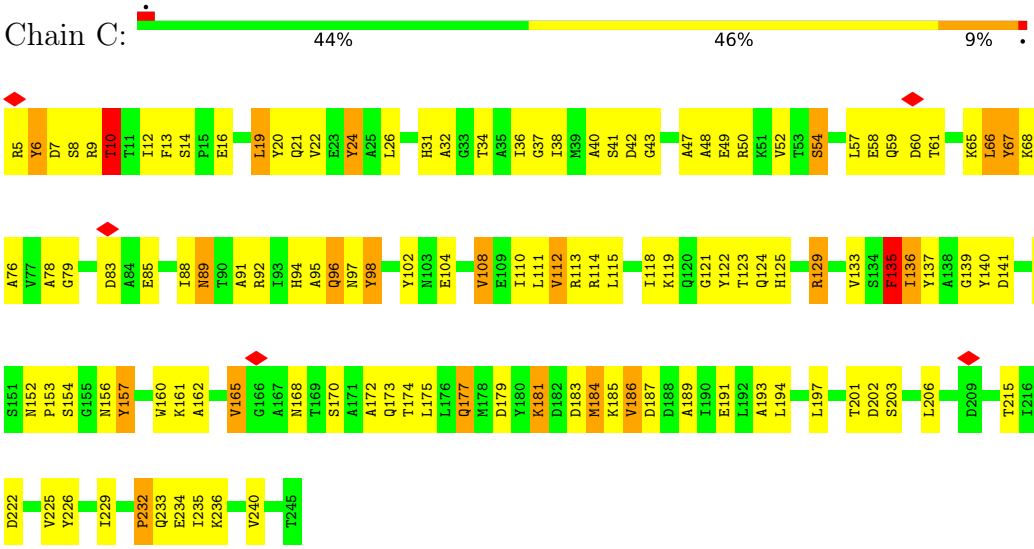


• Molecule 3: Proteasome subunit alpha type-3

Chain c:

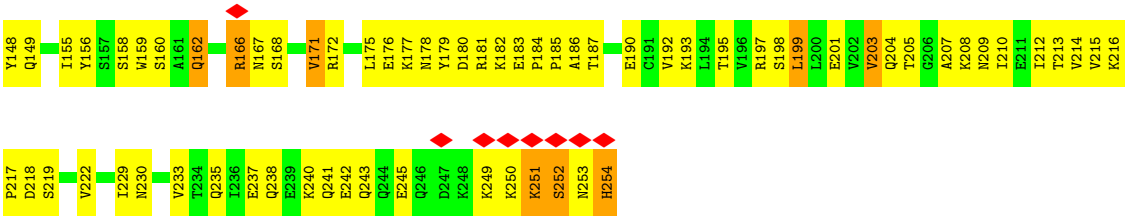


• Molecule 3: Proteasome subunit alpha type-3



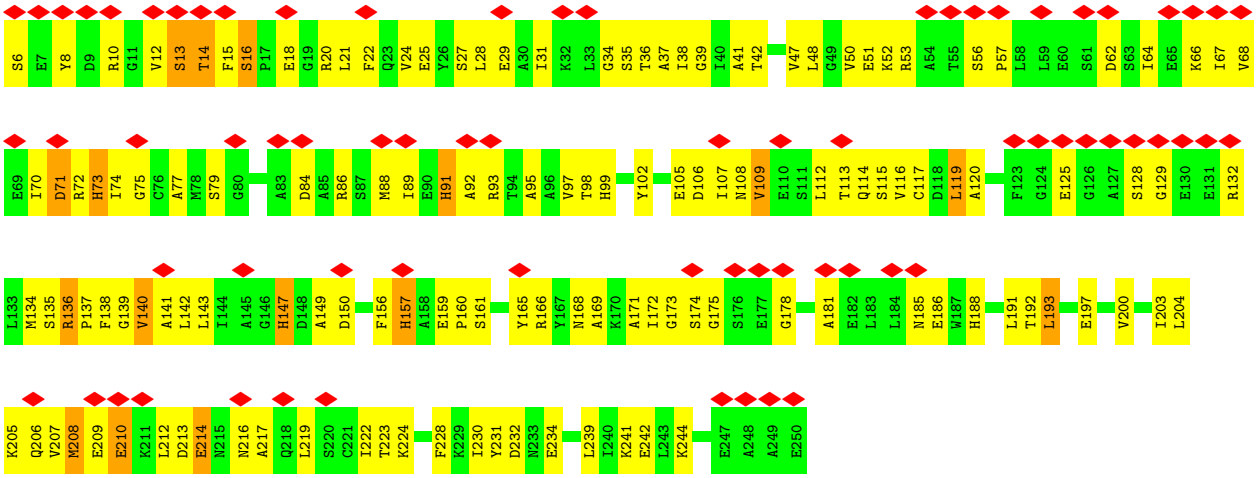
• Molecule 4: Proteasome subunit alpha type-4

• Molecule 4: Proteasome subunit alpha type-4



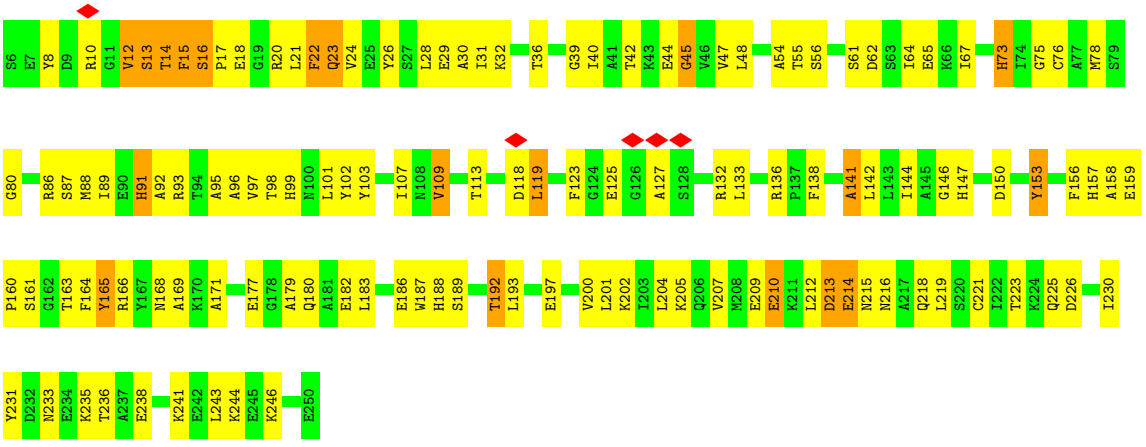
• Molecule 5: Proteasome subunit alpha type-5

Chain e:



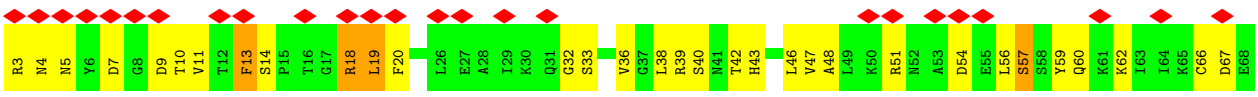
• Molecule 5: Proteasome subunit alpha type-5

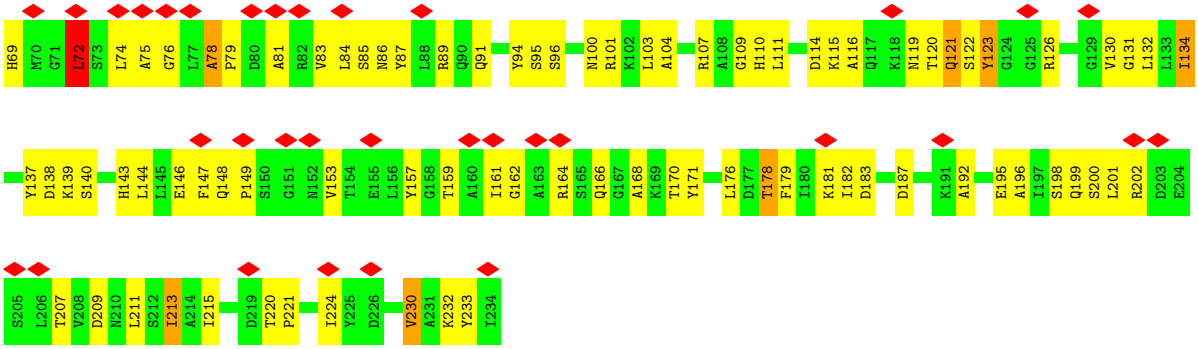
Chain E:



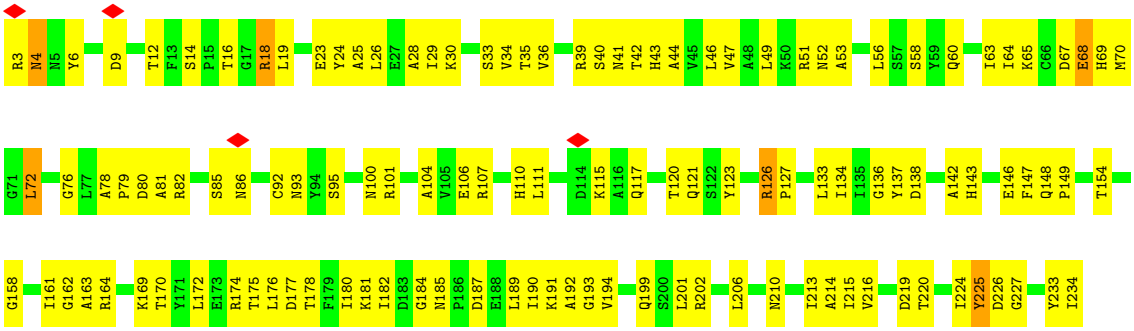
• Molecule 6: Proteasome subunit alpha type-6

Chain f:

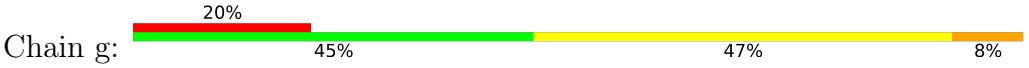


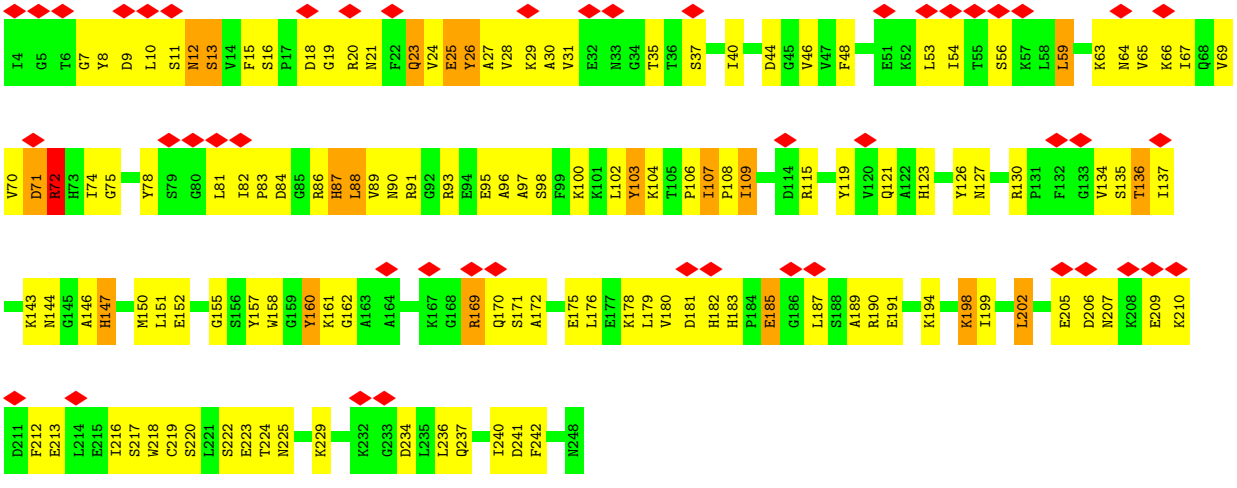


• Molecule 6: Proteasome subunit alpha type-6

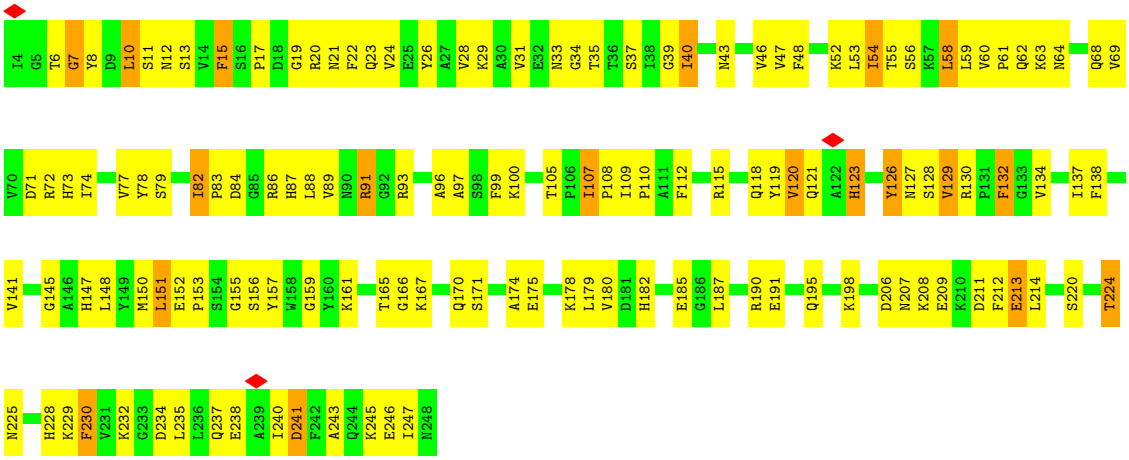


• Molecule 7: Probable proteasome subunit alpha type-7



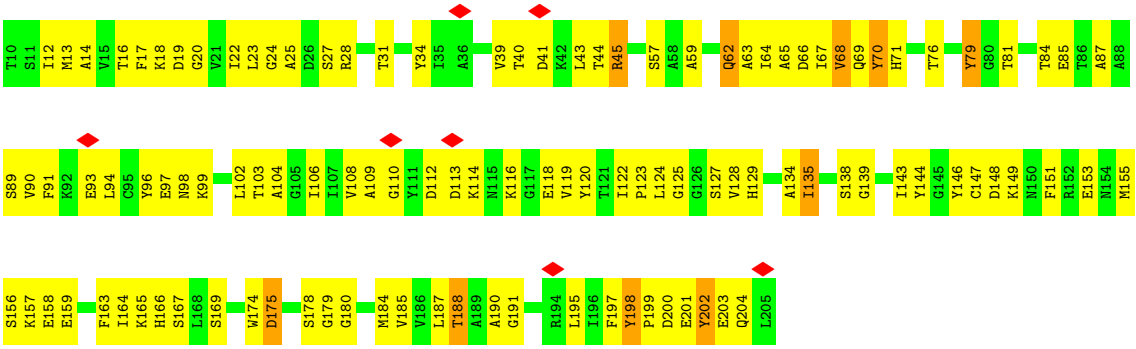


• Molecule 7: Probable proteasome subunit alpha type-7



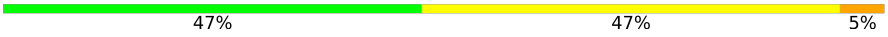
• Molecule 8: Proteasome subunit beta type-1

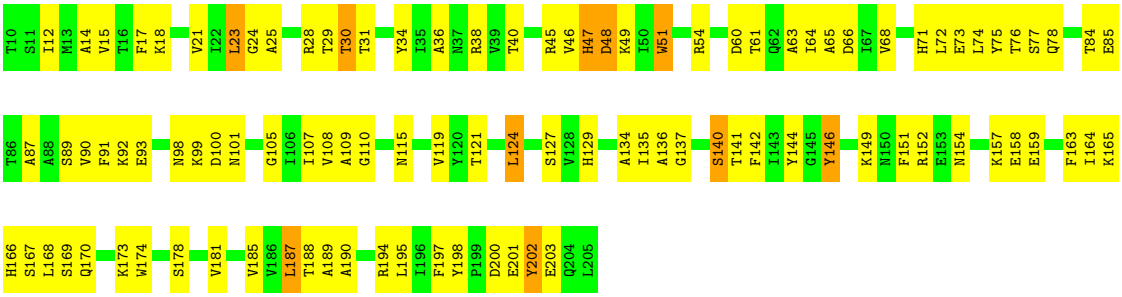
Chain h:



• Molecule 8: Proteasome subunit beta type-1

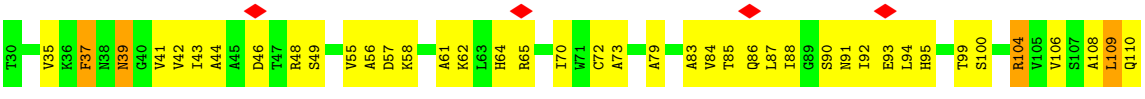
Chain 1:

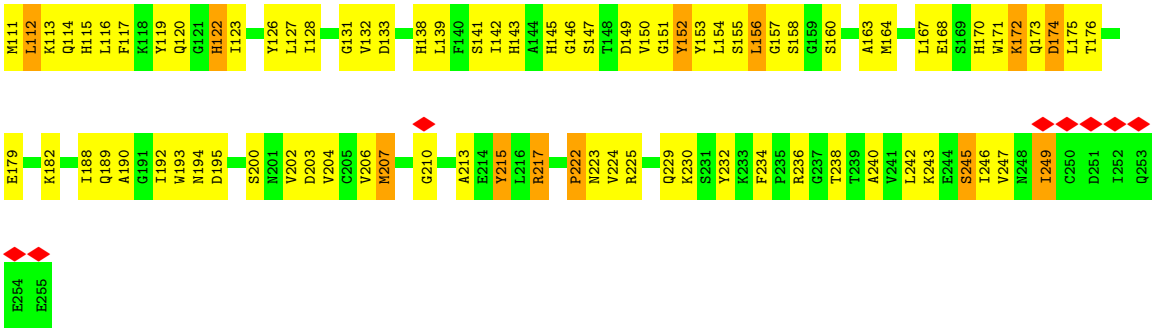




• Molecule 9: Proteasome subunit beta type-2

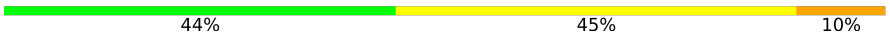
Chain i:

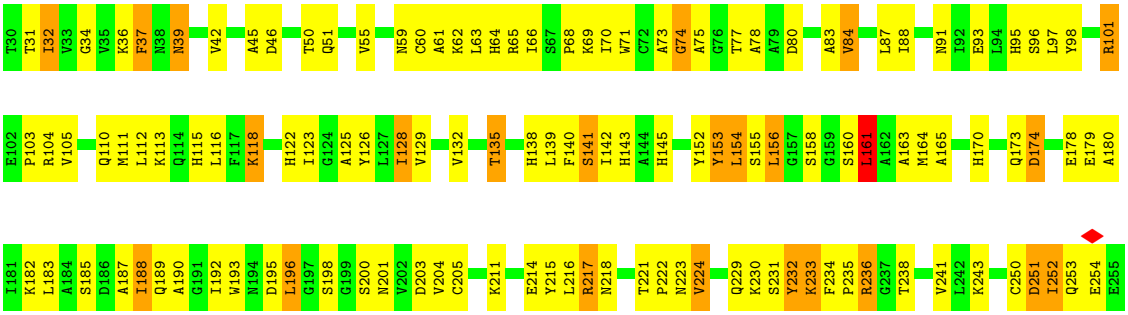




• Molecule 9: Proteasome subunit beta type-2

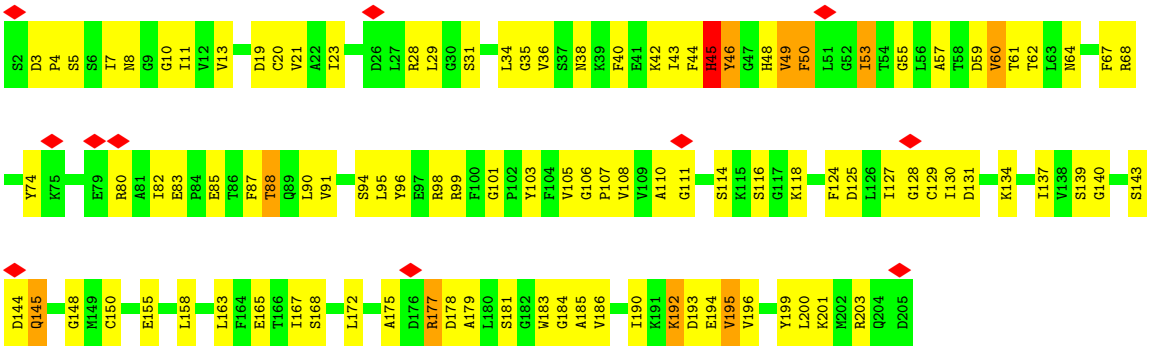
Chain 2:





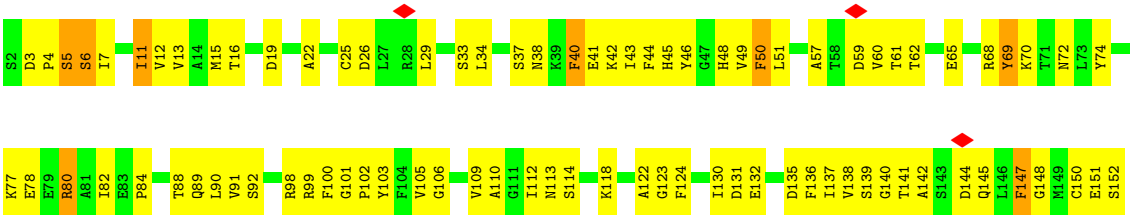
• Molecule 10: Proteasome subunit beta type-3

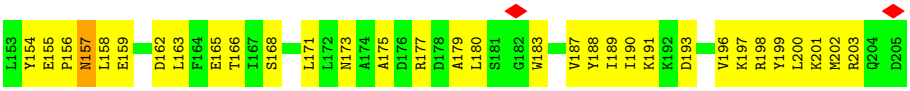
Chain j:



• Molecule 10: Proteasome subunit beta type-3

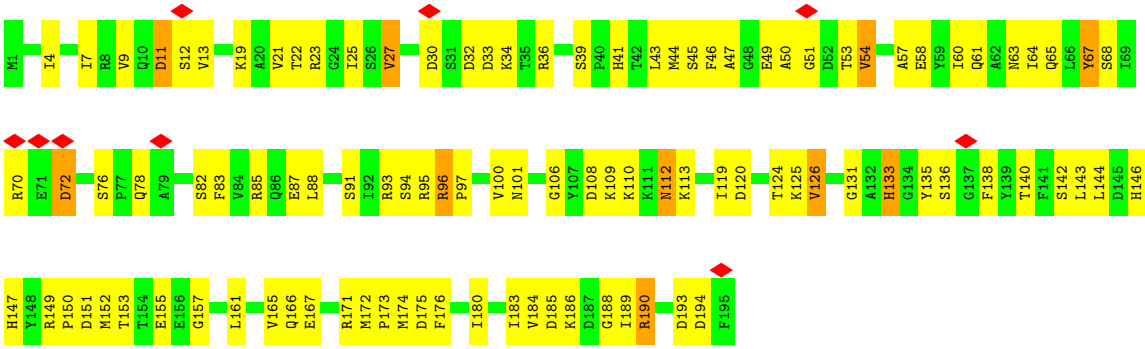
Chain 3:





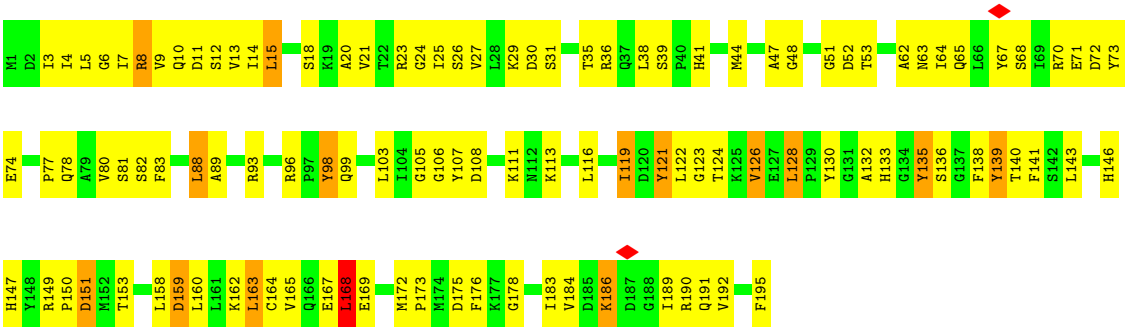
• Molecule 11: Proteasome subunit beta type-4

Chain k:



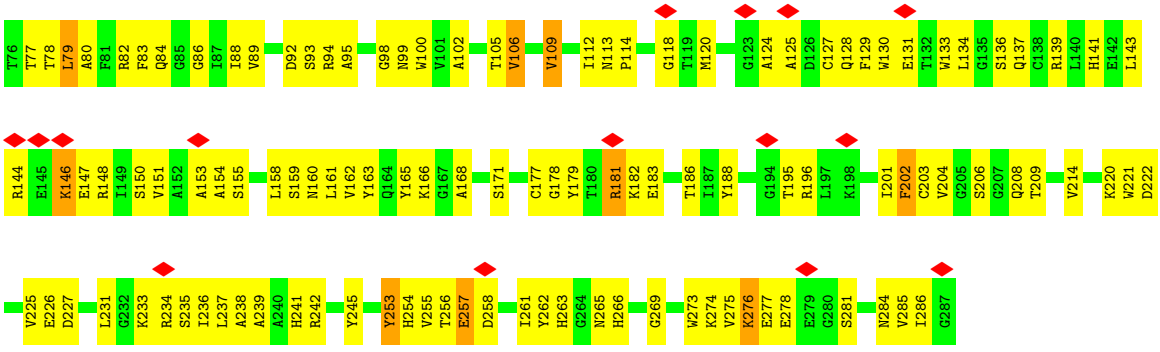
• Molecule 11: Proteasome subunit beta type-4

Chain 4:



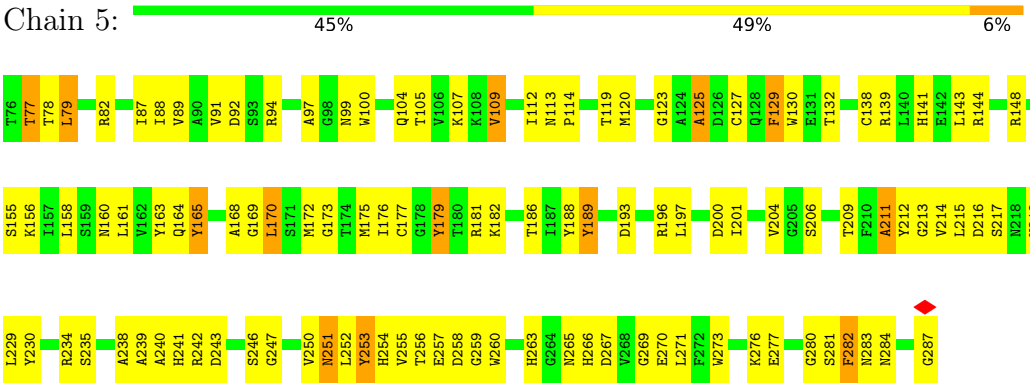
• Molecule 12: Proteasome subunit beta type-5

Chain l:



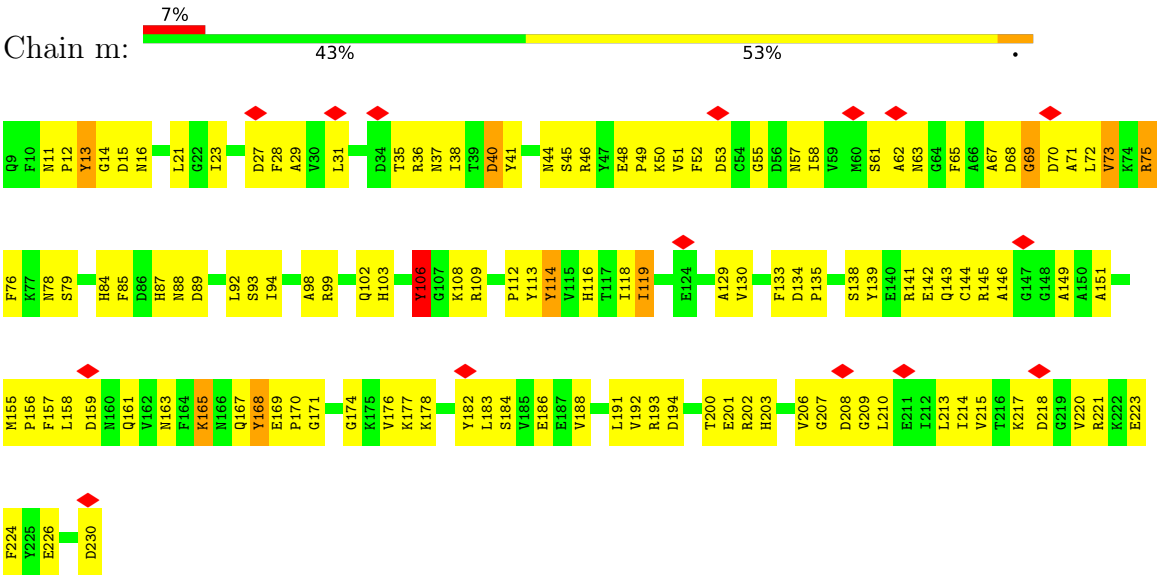
• Molecule 12: Proteasome subunit beta type-5

Chain 5:



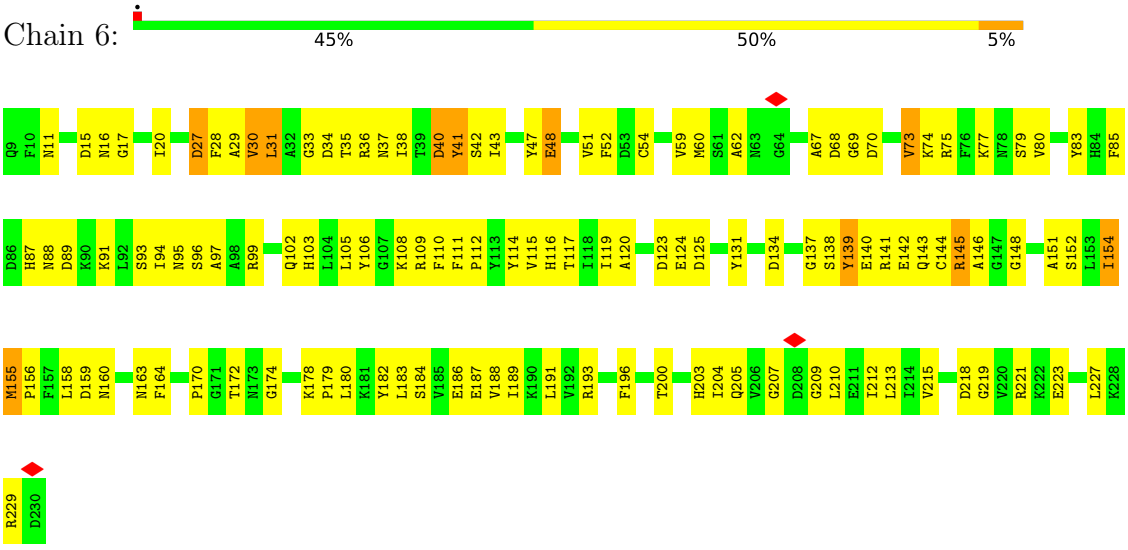
• Molecule 13: Proteasome subunit beta type-6

Chain m:



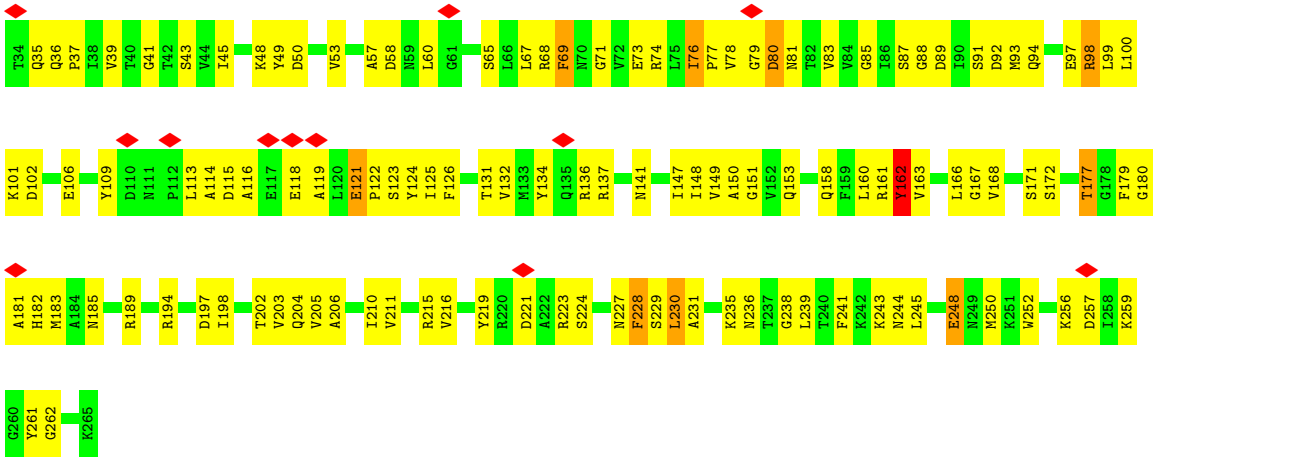
• Molecule 13: Proteasome subunit beta type-6

Chain 6:



• Molecule 14: Proteasome subunit beta type-7

Chain n:

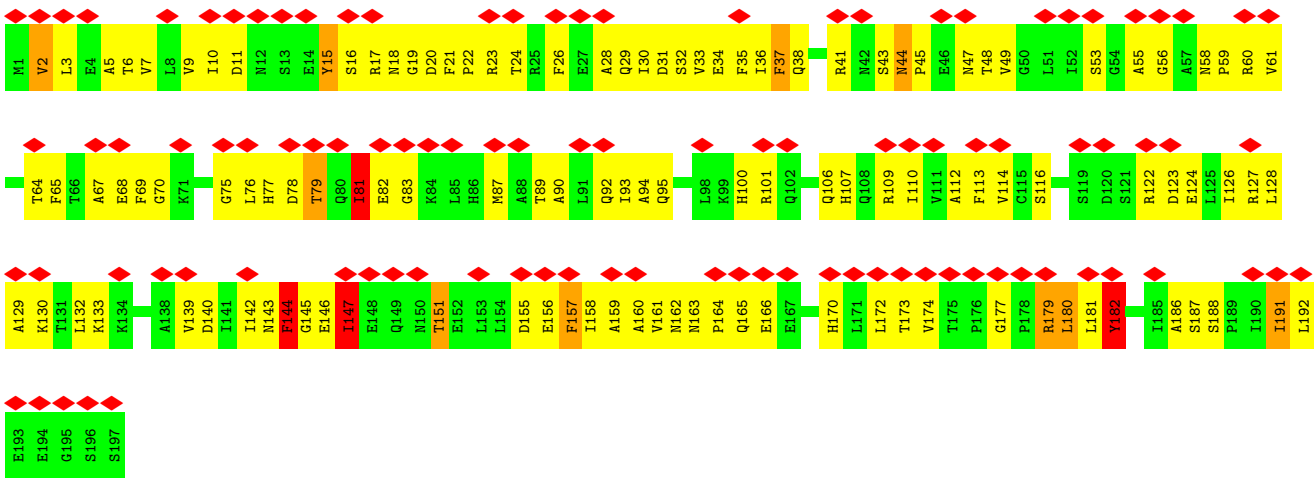


• Molecule 14: Proteasome subunit beta type-7

Chain 7:

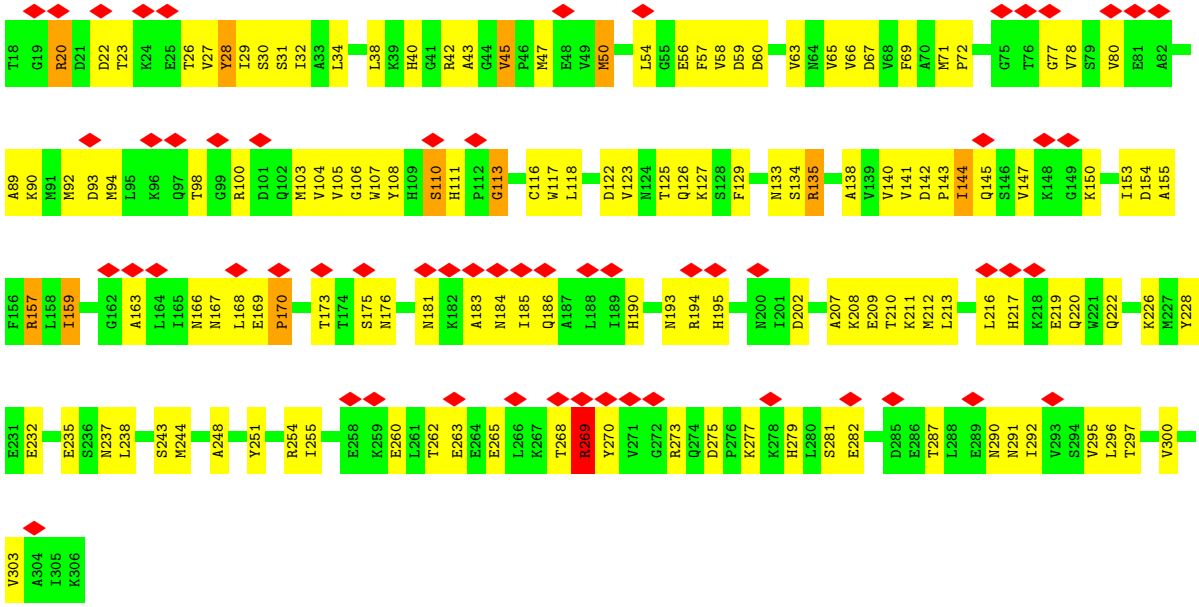
• Molecule 15: 26S proteasome regulatory subunit RPN10

Chain W:



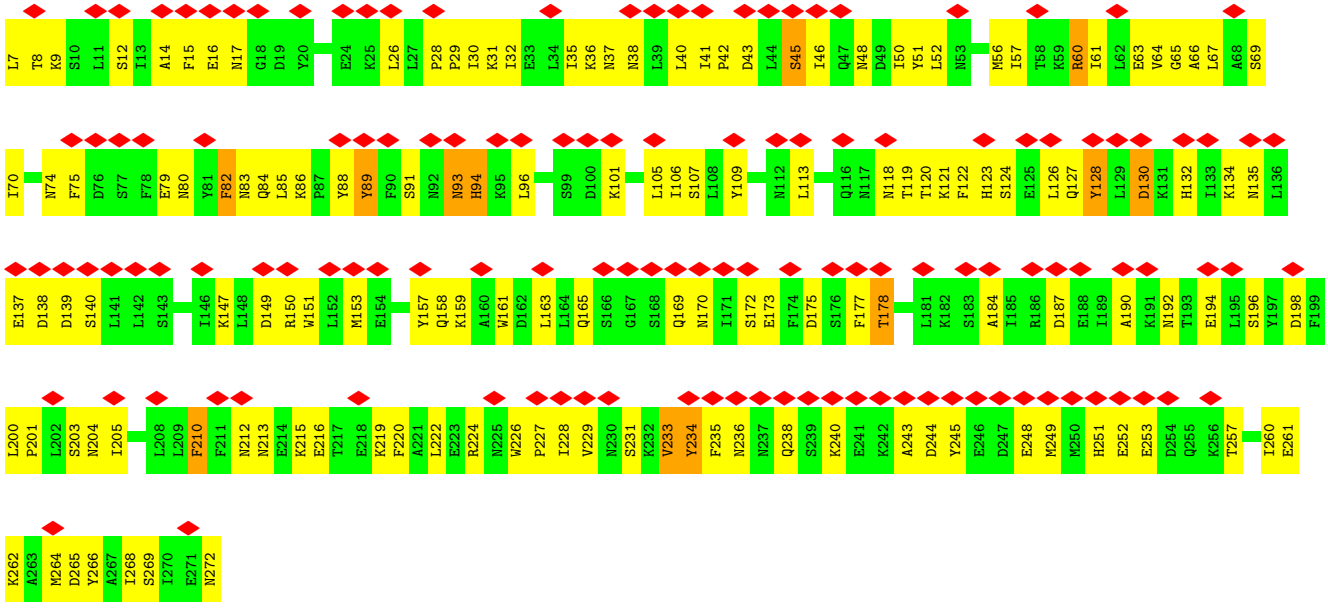
• Molecule 16: Ubiquitin carboxyl-terminal hydrolase RPN11

Chain V:



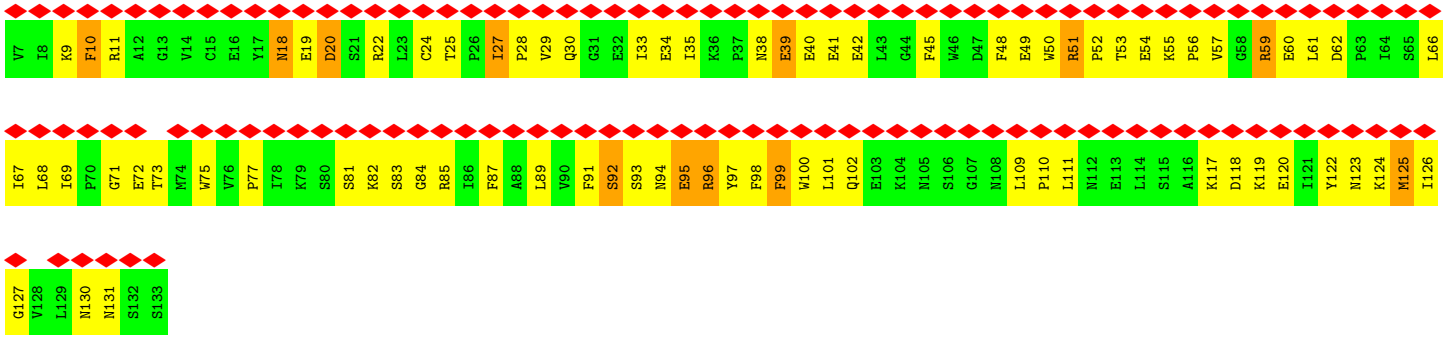
• Molecule 17: 26S proteasome regulatory subunit RPN12

Chain T:



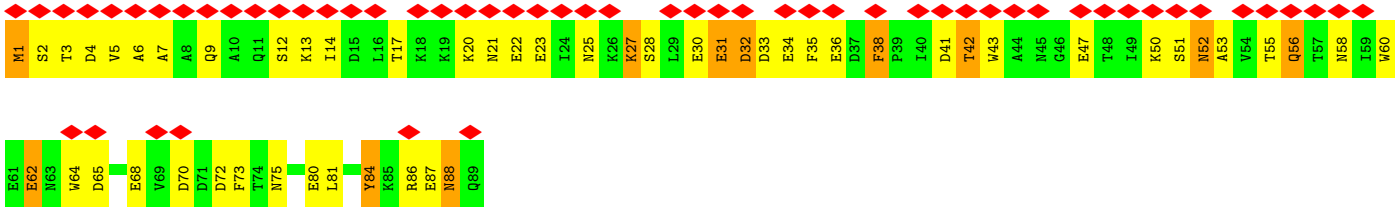
• Molecule 18: 26S proteasome regulatory subunit RPN13

Chain X:



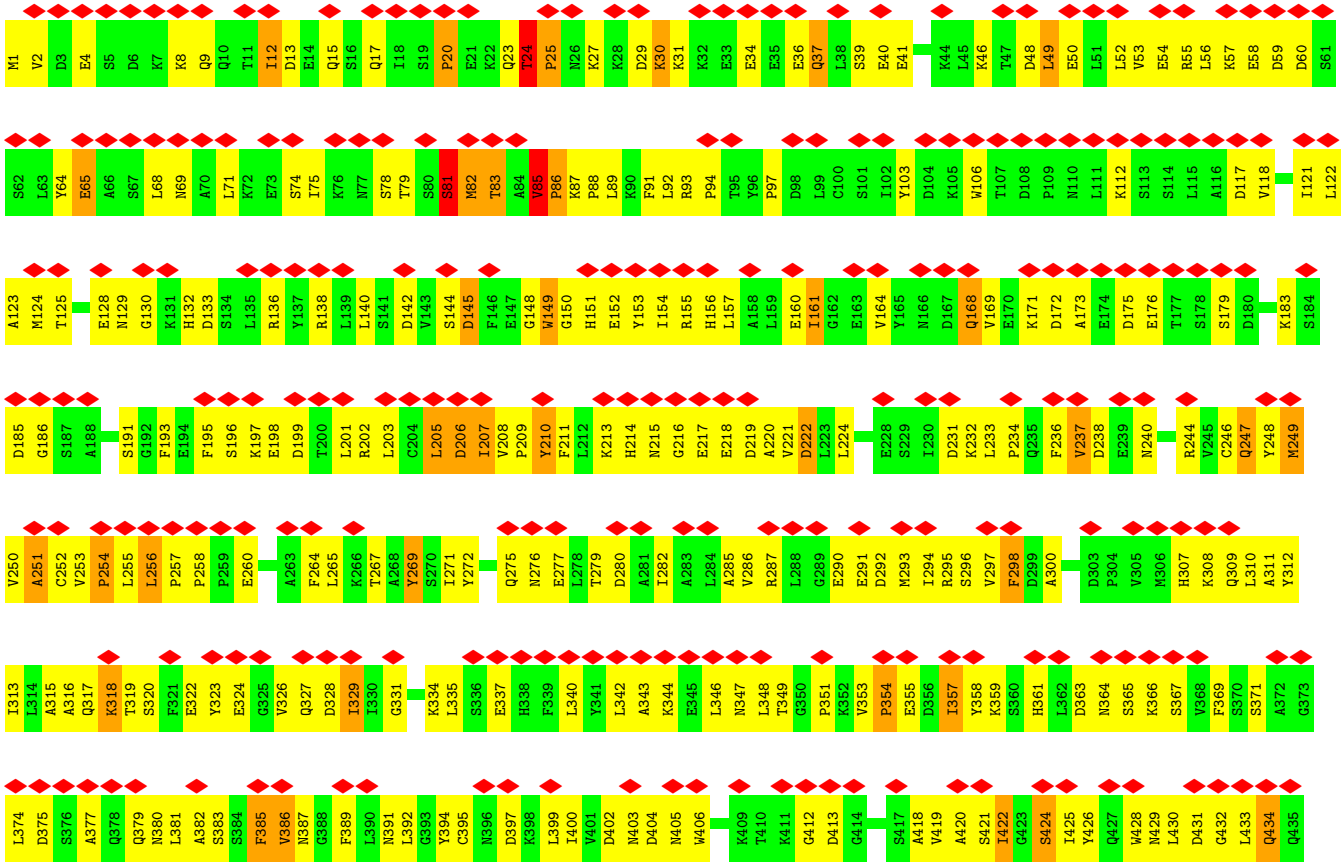
• Molecule 19: 26S proteasome complex subunit SEM1

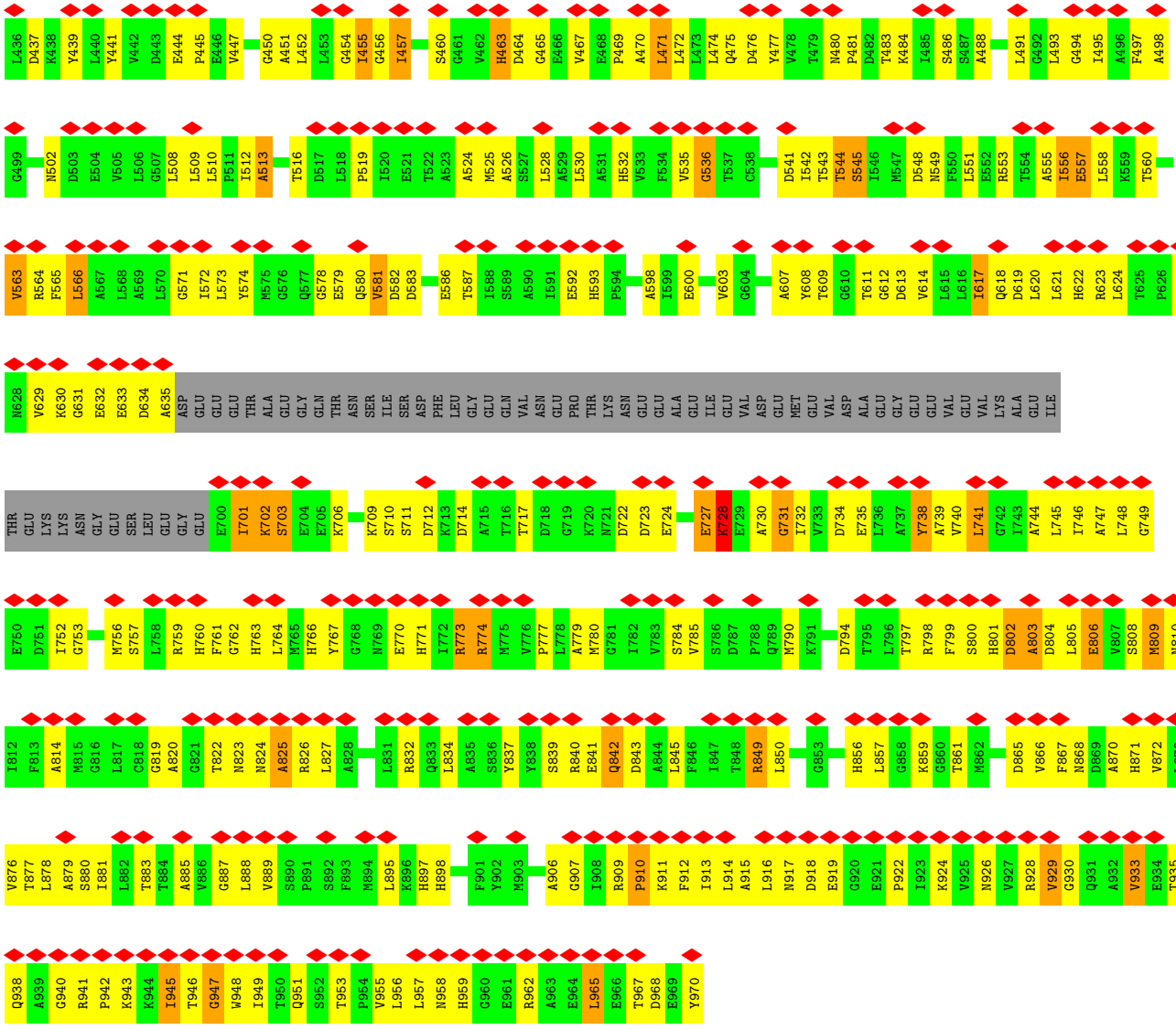
Chain Y:



• Molecule 20: 26S proteasome regulatory subunit RPN1

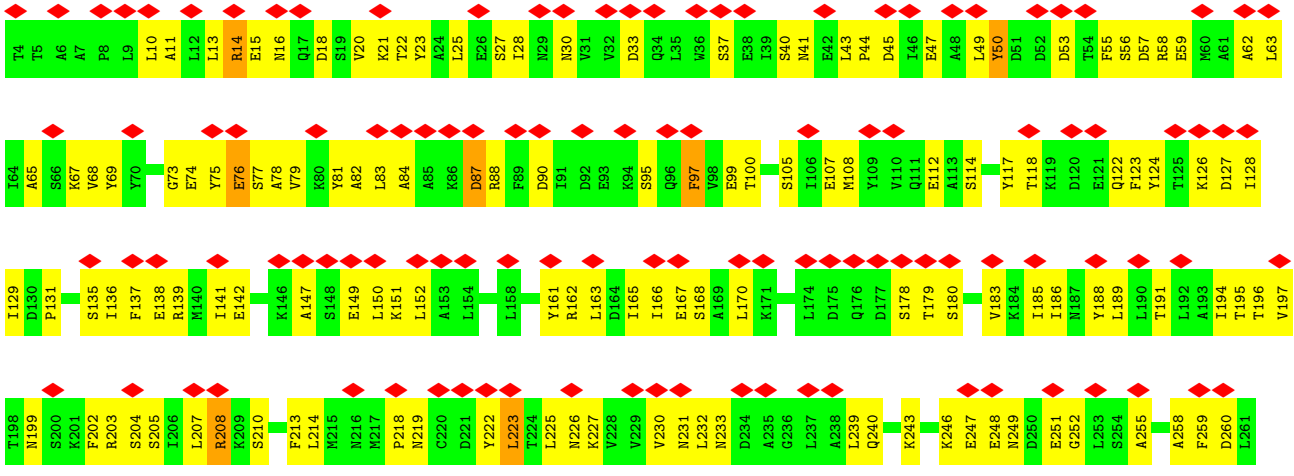
Chain Z:

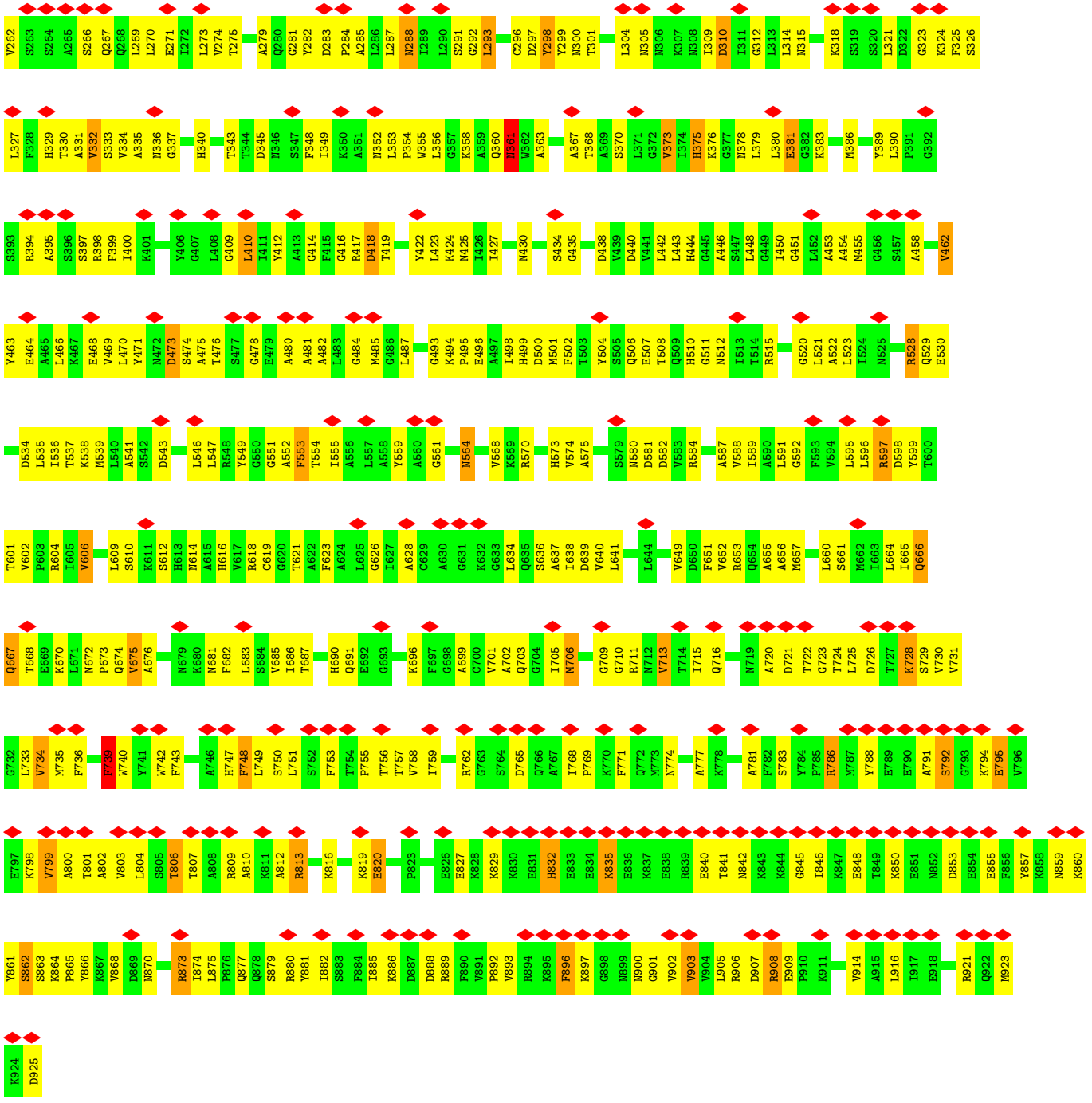




• Molecule 21: 26S proteasome regulatory subunit RPN2

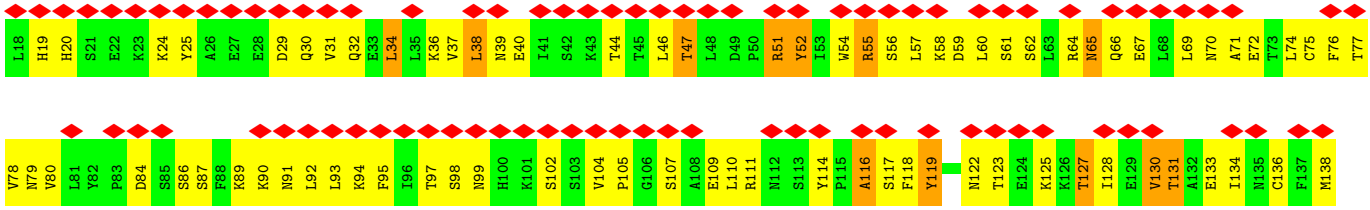
Chain N:

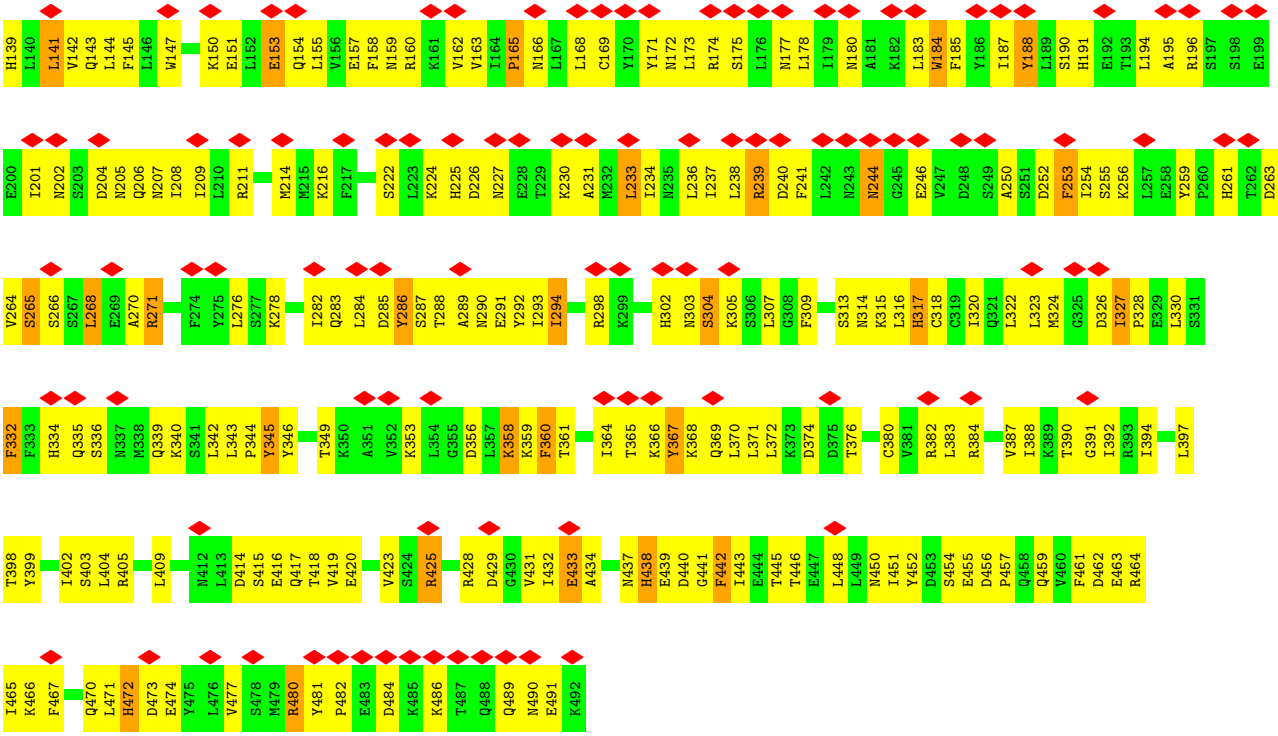




• Molecule 22: 26S proteasome regulatory subunit RPN3

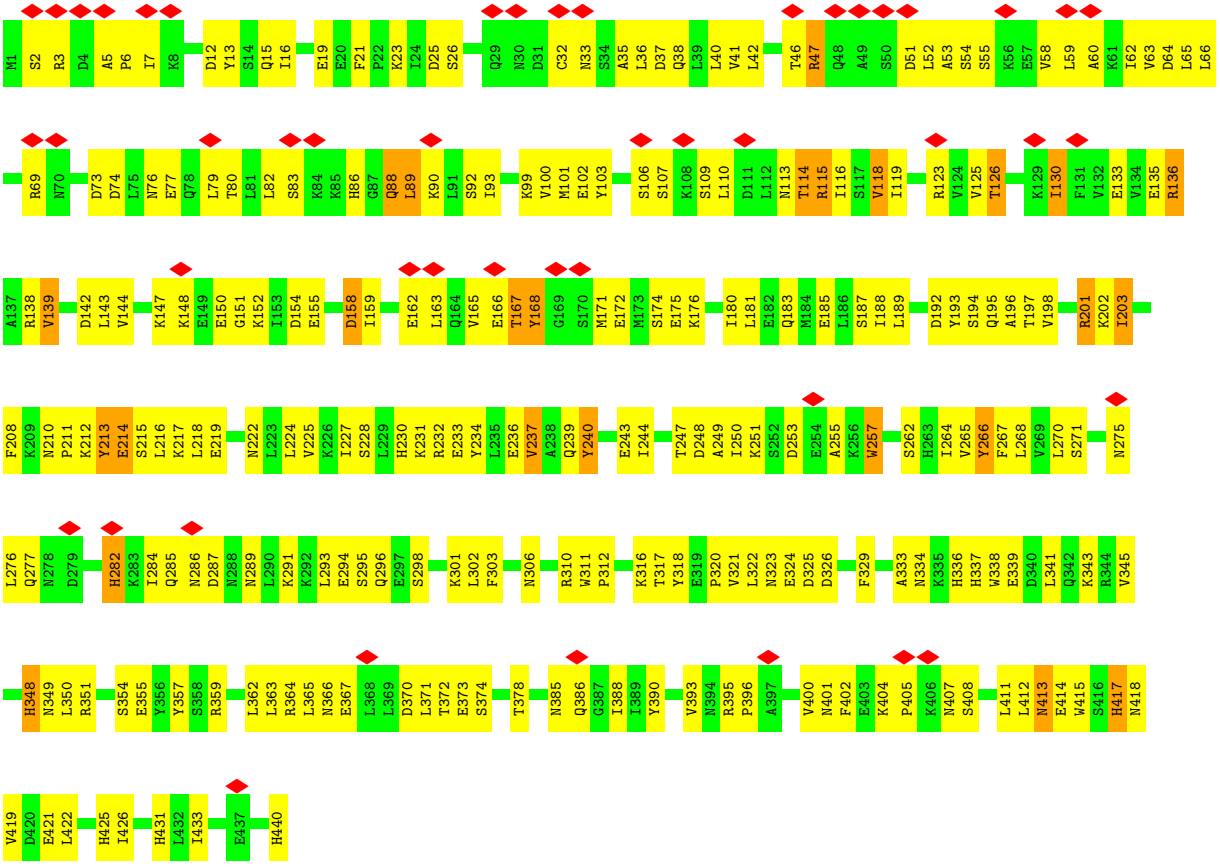
Chain S:





• Molecule 23: 26S proteasome regulatory subunit RPN5

Chain P:

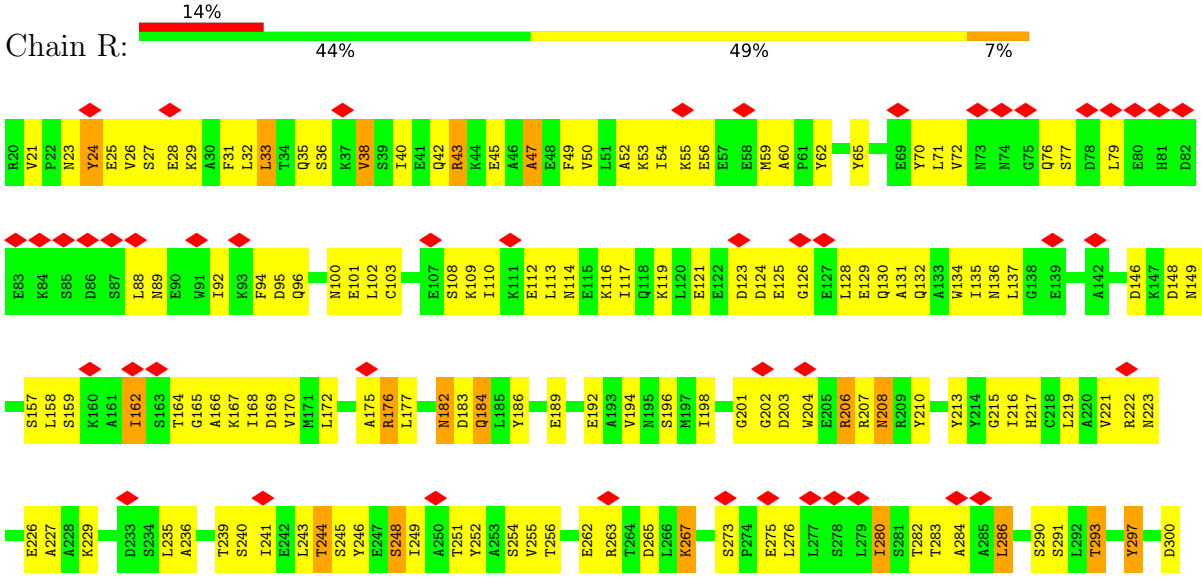


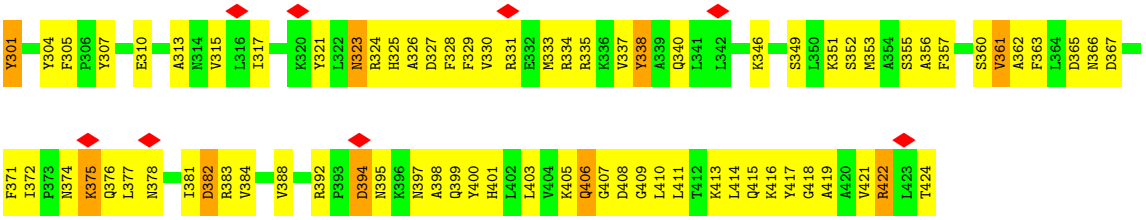
• Molecule 24: 26S proteasome regulatory subunit RPN6

Chain Q:

• Molecule 25: 26S proteasome regulatory subunit RPN7

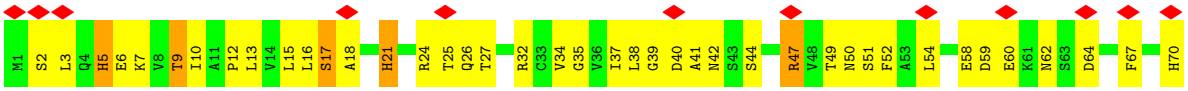
Chain R:

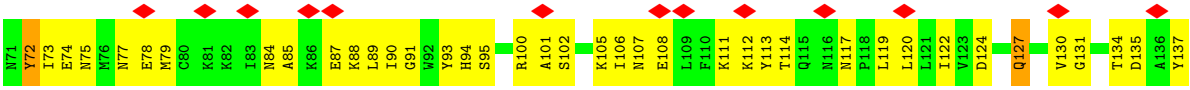


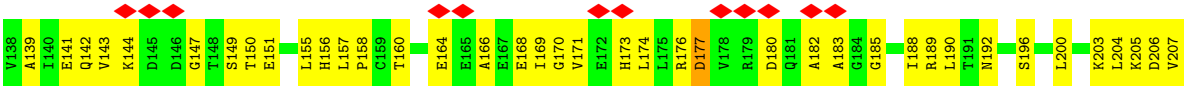


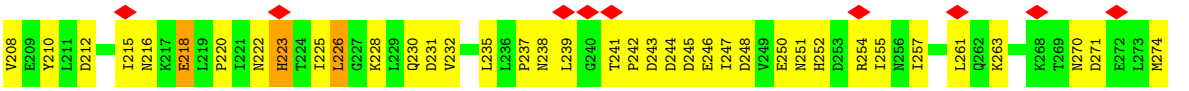
• Molecule 26: 26S proteasome regulatory subunit RPN8

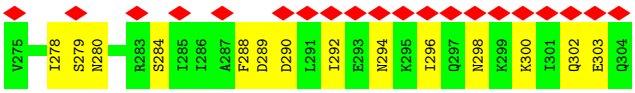
Chain U:





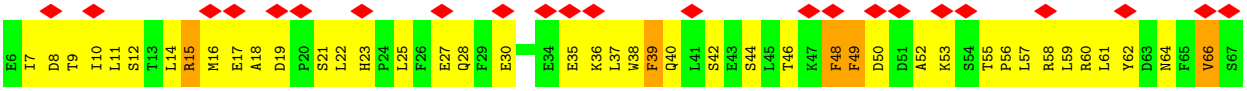


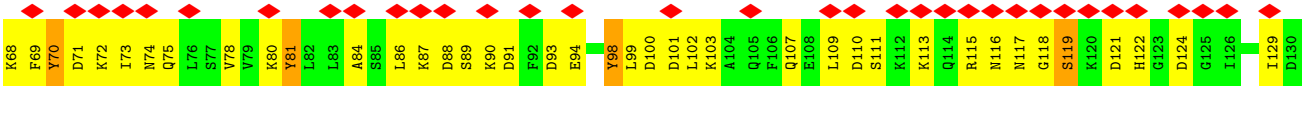


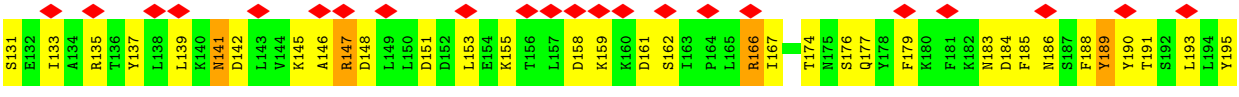


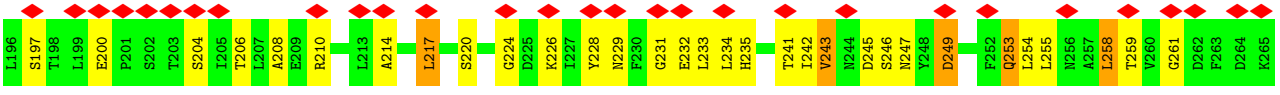
• Molecule 27: 26S proteasome regulatory subunit RPN9

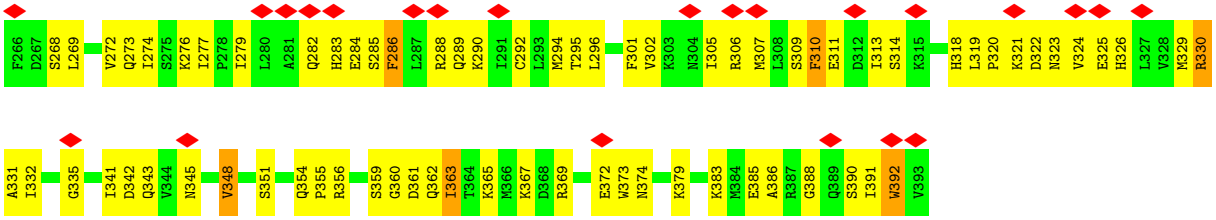
Chain O:





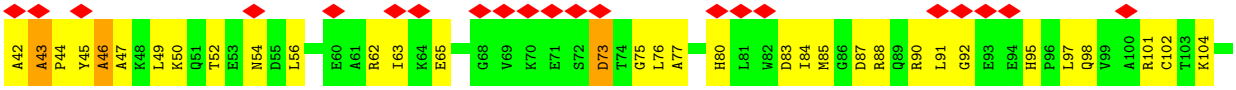


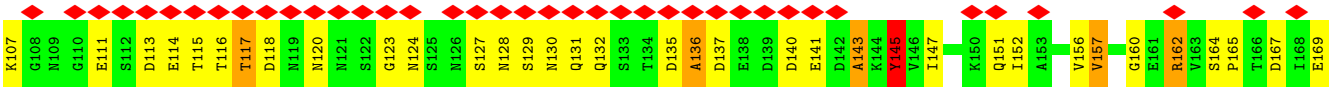


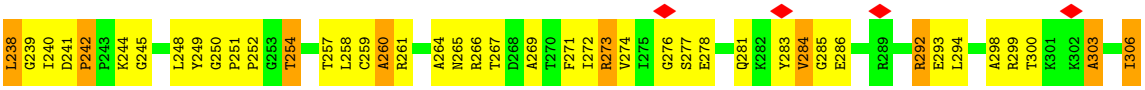


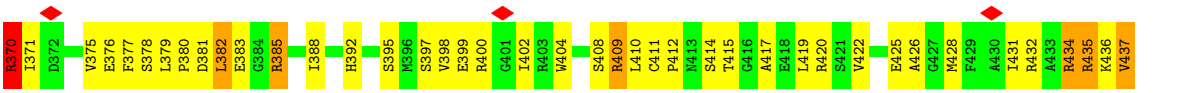
• Molecule 28: 26S proteasome regulatory subunit 7 homolog

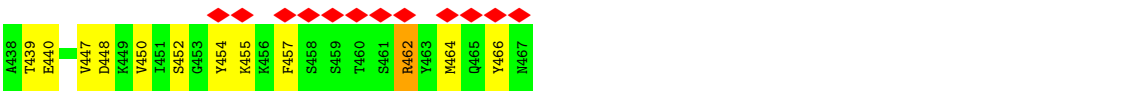
Chain H:

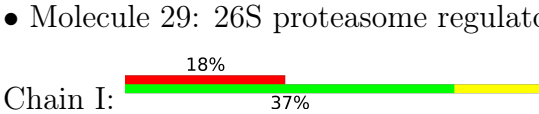






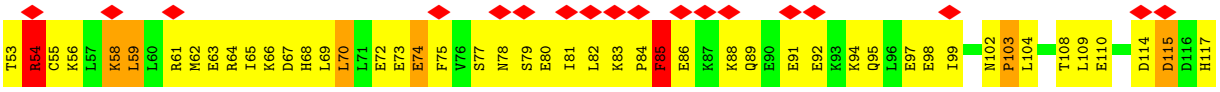


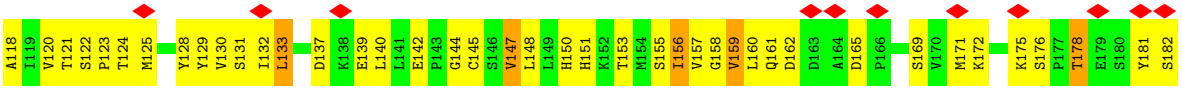


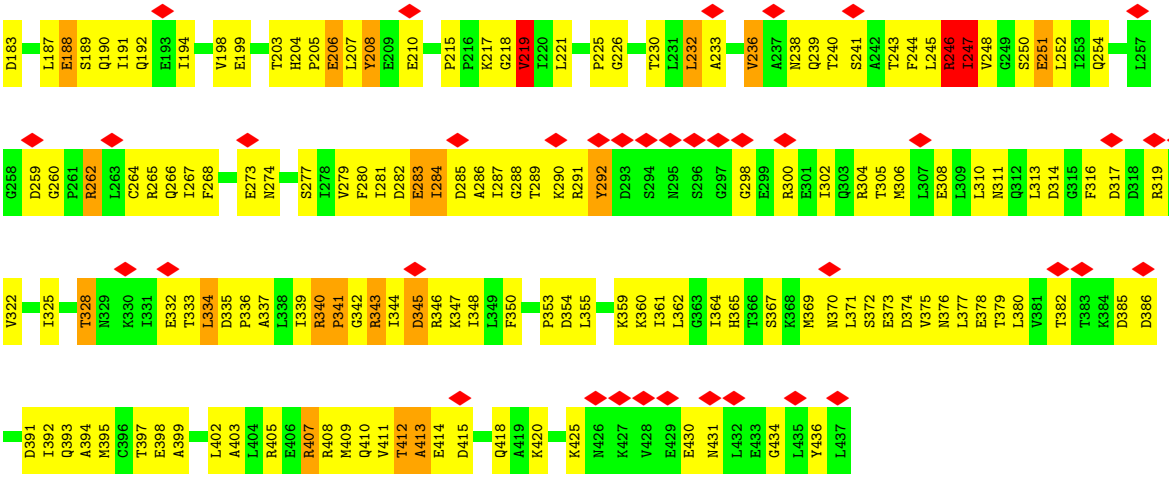


• Molecule 29: 26S proteasome regulatory subunit 4 homolog

Chain I:

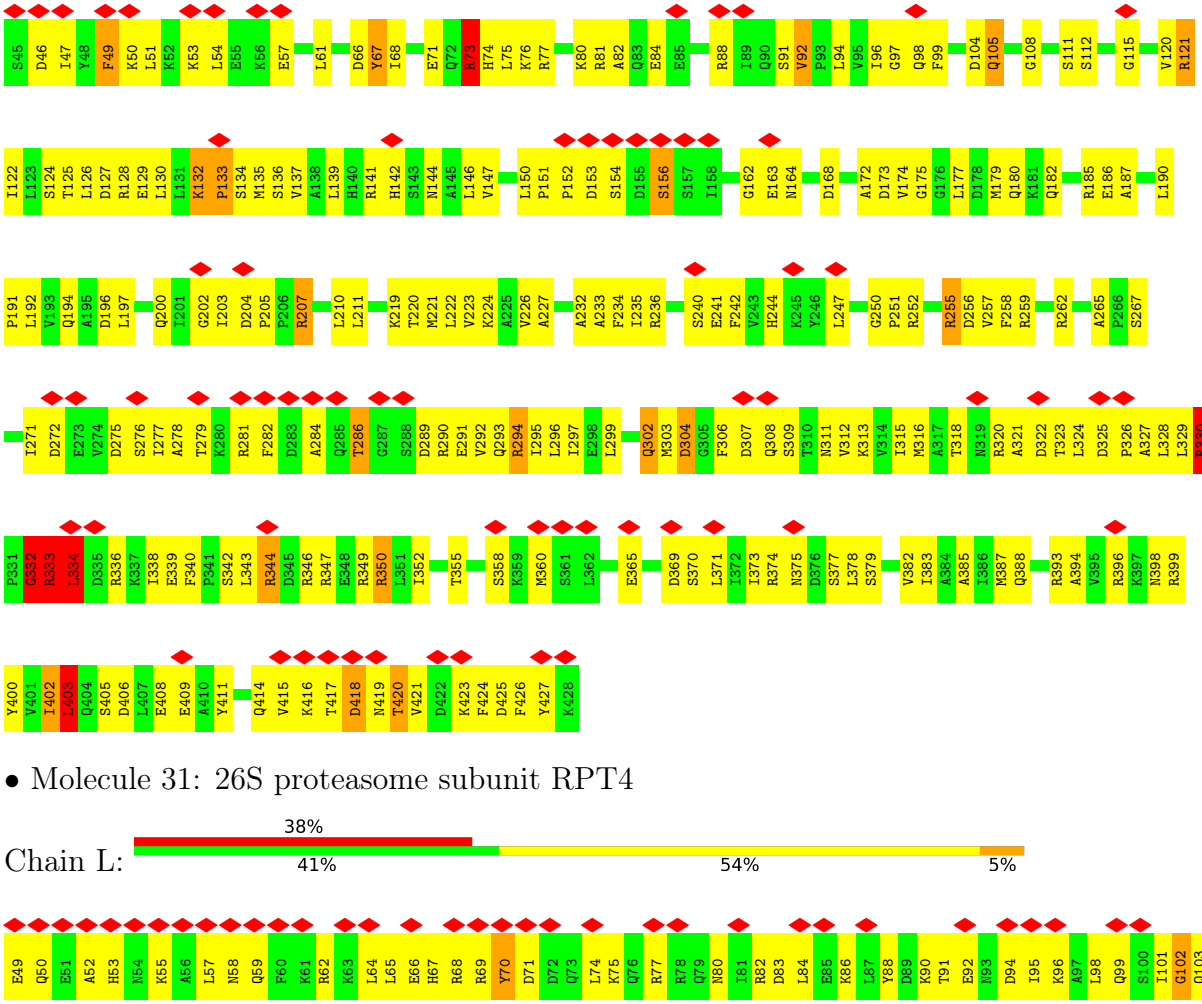






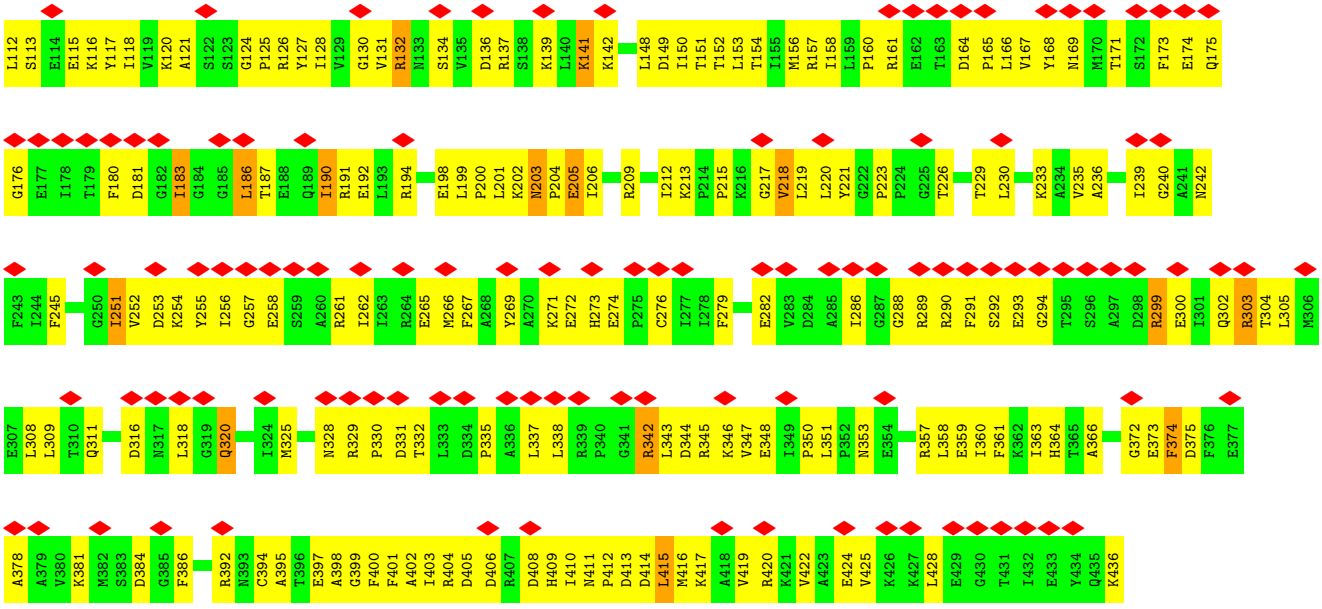
• Molecule 30: 26S proteasome regulatory subunit 6B homolog

Chain K:



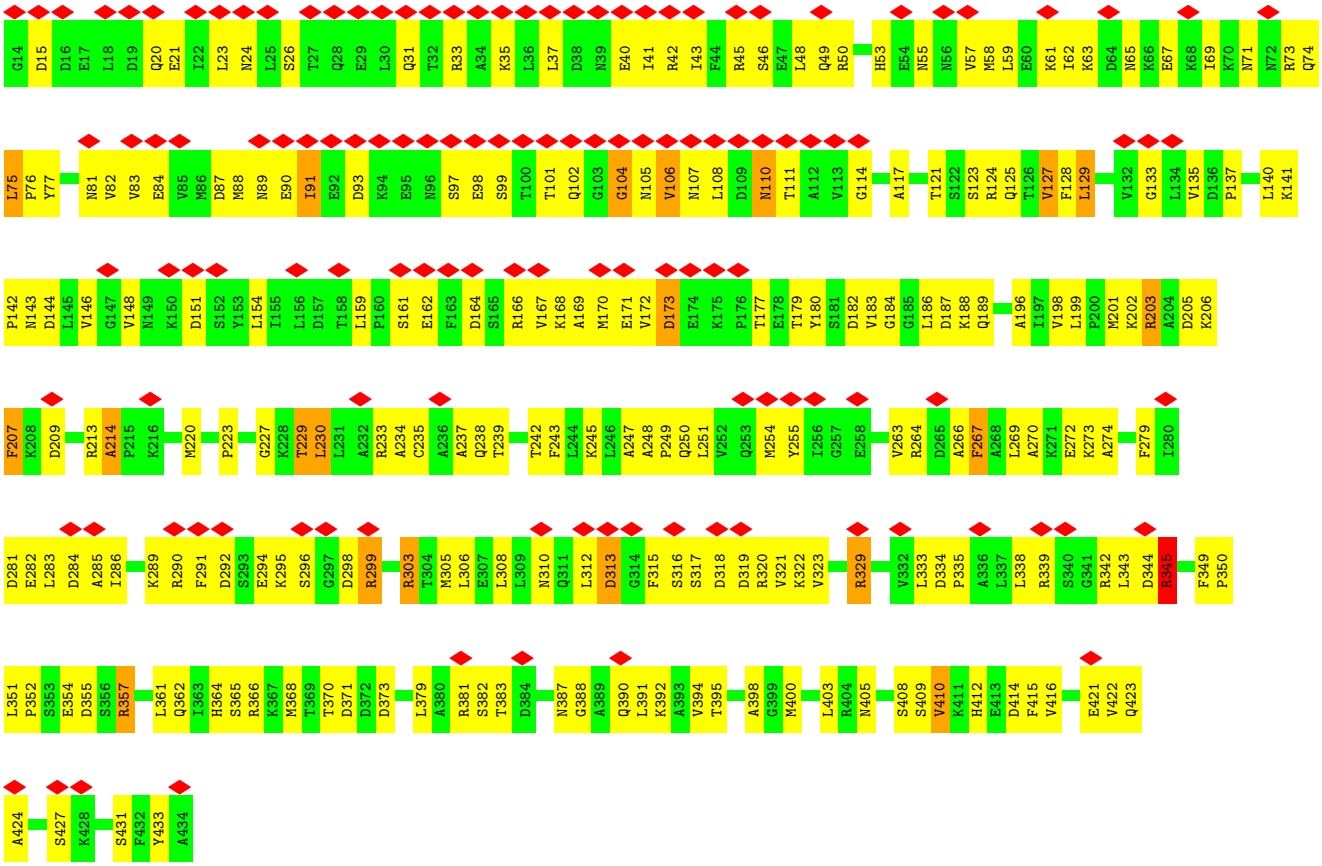
• Molecule 31: 26S proteasome subunit RPT4

Chain L:



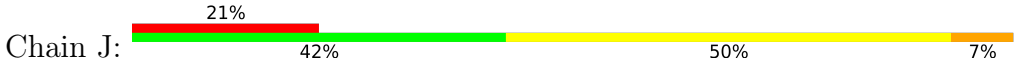
• Molecule 32: 26S proteasome regulatory subunit 6A

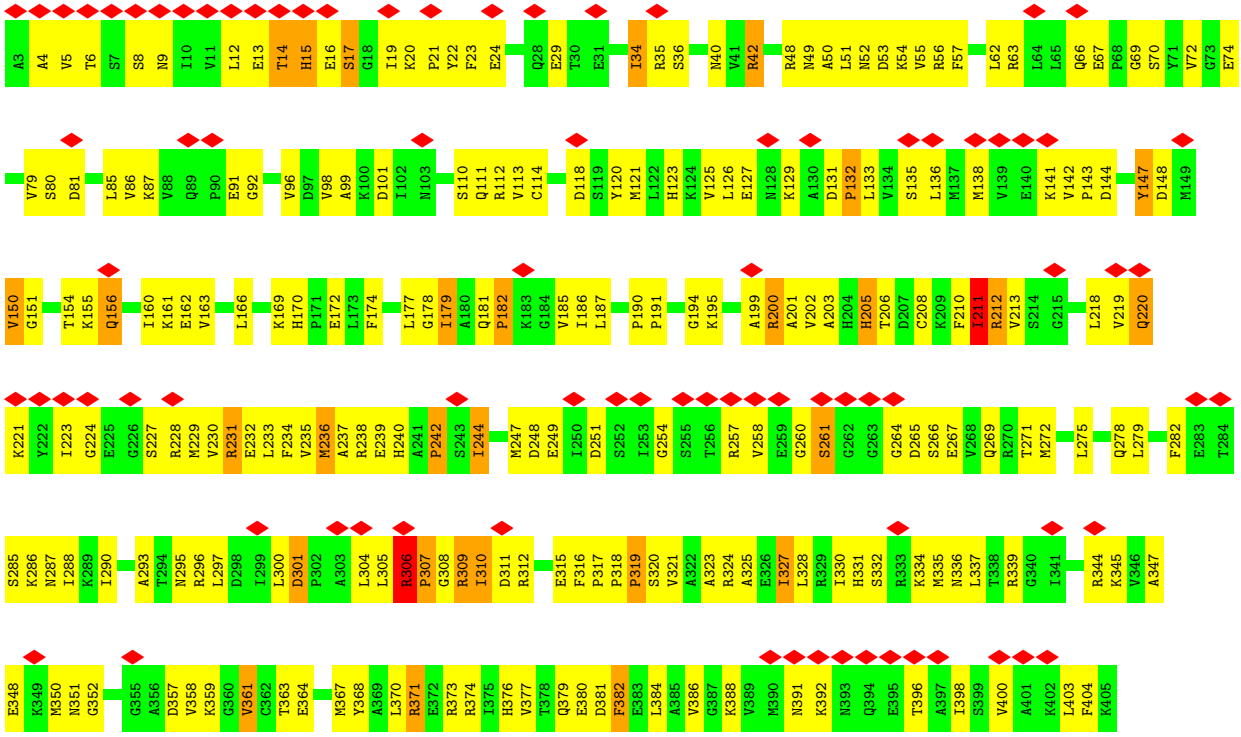
Chain M:



• Molecule 33: 26S proteasome regulatory subunit 8 homolog

Chain J:


21%
42%
50%
7%


A3 A4 V5 T6 S7 S8 N9 I10 V11 L12 E13 T14 H15 E16 S17 G18 I19 K20 P21 Y22 F23 E24 Q28 E29 T30 E31 I34 R35 S36 N40 V41 R42 R48 N49 A50 L51 N52 D53 K54 V55 R56 F57 L62 R63 L64 L65 Q66 E67 P68 G69 S70 Y71 V72 G73 E74
V79 S80 D81 L85 V86 K87 V88 Q89 P90 E91 G92 V96 D97 V98 A99 K100 D101 I102 N103 S110 Q111 R112 V113 C114 D118 S119 Y120 M121 L122 H123 K124 V125 L126 E127 N128 K129 A130 D131 P132 L133 V134 S135 L136 M137 M138 V139 E140 K141 V142 P143 D144 Y147 D148 M149
V150 G151 T154 K155 Q156 I160 K161 E162 V163 L166 K169 H170 P171 E172 L173 F174 L177 G178 I179 A180 Q181 P182 K183 G184 V185 I186 L187 P190 P191 G194 K195 A199 R200 A201 V202 A203 H204 H205 T206 D207 C208 K209 F210 I211 R212 V213 S214 G215 L218 V219 Q220
K221 Y222 I223 G224 E225 G226 S227 R228 M229 V230 R231 E232 L233 F234 V235 M236 A237 R238 E239 H240 A241 P242 S243 I244 M247 D248 E249 I250 D251 S252 I253 G254 S255 T256 R257 V258 E259 G260 S261 G262 G263 G264 D265 S266 E267 V268 Q269 R270 T271 M272 L275 Q278 L279 F282 E283 T284
S285 K286 N287 I288 K289 I290 A293 T294 N295 R296 L297 D298 I299 L300 D301 P302 A303 L304 L305 R306 P307 G308 R309 I310 D311 R312 E315 F316 P317 P318 P319 S320 V321 A322 A323 R324 A325 E326 I327 L328 R329 I330 H331 S332 R333 K334 M335 N336 L337 T338 R339 G340 I341 R344 K345 V346 A347
E348 K349 M350 N351 G352 G355 A356 D357 V358 K359 G360 V361 C362 T363 E364 M367 Y368 A369 L370 R371 E372 B373 R374 I375 H376 V377 T378 Q379 E380 D381 F382 E383 L384 A385 V386 G387 K388 V389 M390 N391 K392 N393 Q394 E396 T396 A397 I398 S399 V400 A401 K402 L403 F404 K405

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	351984	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 ($e^-/Å^2$)	35	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.223	Depositor
Minimum map value	-0.185	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.007	Depositor
Recommended contour level	0.02	Depositor
Map size (Å)	529.92, 529.92, 529.92	wwPDB
Map dimensions	384, 384, 384	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.38, 1.38, 1.38	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ATP, ADP

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	2.30	89/1962 (4.5%)	2.41	115/2656 (4.3%)
1	a	2.29	84/1962 (4.3%)	2.37	116/2656 (4.4%)
2	B	2.21	83/1929 (4.3%)	2.50	149/2611 (5.7%)
2	b	2.24	68/1929 (3.5%)	2.46	114/2611 (4.4%)
3	C	2.33	74/1914 (3.9%)	2.43	121/2591 (4.7%)
3	c	2.25	68/1914 (3.6%)	2.35	103/2591 (4.0%)
4	D	2.35	84/2016 (4.2%)	2.50	135/2723 (5.0%)
4	d	2.28	74/2016 (3.7%)	2.47	121/2723 (4.4%)
5	E	2.31	82/1915 (4.3%)	2.38	105/2579 (4.1%)
5	e	2.33	77/1915 (4.0%)	2.43	127/2579 (4.9%)
6	F	2.33	78/1811 (4.3%)	2.44	113/2447 (4.6%)
6	f	2.22	68/1811 (3.8%)	2.44	111/2447 (4.5%)
7	G	2.32	90/1945 (4.6%)	2.45	133/2625 (5.1%)
7	g	2.21	74/1945 (3.8%)	2.50	152/2625 (5.8%)
8	1	2.32	57/1541 (3.7%)	2.35	87/2087 (4.2%)
8	h	2.29	61/1541 (4.0%)	2.35	92/2087 (4.4%)
9	2	2.34	69/1751 (3.9%)	2.41	121/2373 (5.1%)
9	i	2.40	92/1751 (5.3%)	2.36	90/2373 (3.8%)
10	3	2.36	67/1611 (4.2%)	2.45	107/2174 (4.9%)
10	j	2.35	72/1611 (4.5%)	2.37	83/2174 (3.8%)
11	4	2.41	81/1590 (5.1%)	2.39	90/2142 (4.2%)
11	k	2.31	70/1590 (4.4%)	2.37	85/2142 (4.0%)
12	5	2.29	69/1681 (4.1%)	2.39	100/2274 (4.4%)
12	l	2.29	65/1681 (3.9%)	2.40	116/2274 (5.1%)
13	6	2.29	71/1795 (4.0%)	2.42	120/2420 (5.0%)
13	m	2.28	73/1795 (4.1%)	2.44	115/2420 (4.8%)
14	7	2.27	69/1821 (3.8%)	2.46	117/2470 (4.7%)
14	n	2.33	71/1847 (3.8%)	2.38	105/2503 (4.2%)
15	W	2.29	65/1558 (4.2%)	2.53	144/2111 (6.8%)
16	V	2.23	73/2309 (3.2%)	2.47	145/3115 (4.7%)
17	T	2.13	63/2236 (2.8%)	2.52	163/3017 (5.4%)
18	X	2.26	37/1059 (3.5%)	2.43	63/1432 (4.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
19	Y	2.17	24/741 (3.2%)	2.63	58/1000 (5.8%)
20	Z	2.22	251/7122 (3.5%)	2.43	497/9645 (5.2%)
21	N	2.24	232/7273 (3.2%)	2.54	556/9822 (5.7%)
22	S	2.23	134/3967 (3.4%)	2.57	339/5355 (6.3%)
23	P	2.21	131/3664 (3.6%)	2.50	279/4940 (5.6%)
24	Q	2.26	113/3556 (3.2%)	2.54	281/4787 (5.9%)
25	R	2.22	116/3314 (3.5%)	2.53	250/4469 (5.6%)
26	U	2.25	96/2461 (3.9%)	2.48	173/3327 (5.2%)
27	O	2.22	115/3247 (3.5%)	2.50	239/4380 (5.5%)
28	H	2.26	126/3363 (3.7%)	2.51	230/4532 (5.1%)
29	I	2.28	114/3061 (3.7%)	2.51	238/4121 (5.8%)
30	K	2.33	130/3084 (4.2%)	2.51	230/4162 (5.5%)
31	L	2.33	131/3129 (4.2%)	2.51	223/4204 (5.3%)
32	M	2.29	126/3323 (3.8%)	2.51	247/4478 (5.5%)
33	J	2.28	118/3197 (3.7%)	2.52	239/4296 (5.6%)
All	All	2.27	4275/112254 (3.8%)	2.47	7737/151570 (5.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	7
1	a	0	5
2	B	0	4
2	b	0	8
3	C	0	15
3	c	0	7
4	D	0	9
4	d	0	8
5	E	0	7
5	e	0	3
6	F	0	4
6	f	0	8
7	G	0	6
7	g	0	7
8	1	0	5
8	h	0	5
9	2	0	7
9	i	0	6
10	3	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
10	j	0	3
11	4	0	5
11	k	0	4
12	5	0	6
12	l	0	6
13	6	0	4
13	m	0	9
14	7	0	7
14	n	0	8
15	W	0	4
16	V	0	8
17	T	0	5
18	X	0	7
19	Y	0	2
20	Z	0	12
21	N	0	21
22	S	0	16
23	P	0	12
24	Q	0	8
25	R	0	7
26	U	0	3
27	O	0	11
28	H	0	20
29	I	0	18
30	K	0	15
31	L	0	9
32	M	0	10
33	J	0	12
All	All	0	376

All (4275) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	K	151	PRO	CA-C	-14.51	1.43	1.51
7	G	79	SER	CA-C	-13.79	1.36	1.52
3	c	125	HIS	ND1-CE1	12.87	1.45	1.32
7	G	72	ARG	CA-C	-12.40	1.42	1.52
33	J	142	VAL	N-CA	12.16	1.55	1.46
14	7	141	ASN	N-CA	-12.08	1.34	1.46
2	b	201	GLU	CA-C	-11.97	1.38	1.52
13	m	114	TYR	CA-C	-11.32	1.39	1.53
21	N	916	LEU	C-N	11.04	1.47	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	159	ILE	CA-CB	11.00	1.66	1.54
5	e	28	LEU	CA-C	-10.97	1.37	1.52
30	K	121	ARG	CD-NE	10.96	1.61	1.46
29	I	405	ARG	NE-CZ	10.93	1.45	1.33
10	j	34	LEU	C-N	10.90	1.40	1.33
14	7	198	ILE	CA-CB	10.84	1.60	1.54
20	Z	753	GLY	CA-C	-10.75	1.38	1.52
4	D	168	SER	CA-C	-10.74	1.38	1.52
7	g	123	HIS	ND1-CE1	10.73	1.43	1.32
17	T	66	ALA	N-CA	-10.72	1.33	1.46
8	1	187	LEU	N-CA	-10.52	1.33	1.46
33	J	205	HIS	ND1-CE1	10.51	1.43	1.32
14	n	85	GLY	CA-C	-10.42	1.45	1.52
20	Z	806	GLU	CA-C	10.40	1.61	1.52
3	c	50	ARG	NE-CZ	10.38	1.44	1.33
11	4	14	ILE	CA-CB	-10.34	1.41	1.54
12	5	266	HIS	ND1-CE1	10.19	1.42	1.32
4	d	216	LYS	N-CA	-10.16	1.38	1.46
10	3	33	SER	CA-C	-10.14	1.39	1.52
18	X	100	TRP	CA-C	-10.07	1.40	1.52
31	L	90	LYS	C-N	10.06	1.47	1.33
13	m	84	HIS	ND1-CE1	10.04	1.42	1.32
5	e	72	ARG	CD-NE	10.02	1.60	1.46
24	Q	161	LEU	N-CA	-9.97	1.34	1.46
16	V	184	ASN	CA-C	-9.86	1.41	1.52
15	W	100	HIS	ND1-CE1	9.83	1.42	1.32
6	F	162	GLY	CA-C	-9.83	1.41	1.52
2	B	84	VAL	CA-C	-9.83	1.40	1.52
25	R	355	SER	CA-CB	9.76	1.68	1.53
32	M	279	PHE	CA-C	-9.74	1.41	1.52
3	C	92	ARG	NE-CZ	9.69	1.43	1.33
11	k	144	LEU	CA-C	-9.65	1.40	1.52
14	7	241	PHE	CA-C	-9.60	1.41	1.52
8	1	93	GLU	N-CA	-9.57	1.34	1.46
27	O	324	VAL	CA-C	-9.56	1.40	1.52
4	d	181	ARG	CD-NE	9.56	1.59	1.46
31	L	409	HIS	CA-C	-9.53	1.40	1.52
30	K	128	ARG	CD-NE	9.52	1.59	1.46
3	c	114	ARG	CD-NE	9.51	1.59	1.46
4	D	96	HIS	ND1-CE1	9.50	1.42	1.32
29	I	345	ASP	CA-C	-9.46	1.42	1.52
11	4	133	HIS	ND1-CE1	9.45	1.42	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	l	161	LEU	CA-C	-9.41	1.40	1.52
13	6	96	SER	CA-C	-9.36	1.40	1.52
2	B	214	ILE	CA-CB	9.36	1.65	1.53
22	S	256	LYS	N-CA	-9.35	1.34	1.45
5	e	70	ILE	CA-C	-9.32	1.42	1.52
8	1	87	ALA	N-CA	-9.31	1.34	1.46
4	D	48	ARG	NE-CZ	9.30	1.43	1.33
21	N	208	ARG	CD-NE	9.26	1.59	1.46
11	4	93	ARG	CD-NE	9.24	1.59	1.46
26	U	302	GLN	N-CA	-9.22	1.35	1.46
9	i	112	LEU	N-CA	-9.22	1.35	1.46
18	X	56	PRO	C-N	9.21	1.46	1.33
15	W	110	ILE	CA-C	-9.20	1.41	1.52
6	F	34	VAL	CA-CB	-9.17	1.42	1.54
9	2	36	LYS	CA-C	-9.17	1.40	1.52
31	L	117	TYR	CA-C	-9.16	1.41	1.52
7	G	13	SER	CA-C	-9.15	1.41	1.52
22	S	445	THR	N-CA	-9.13	1.34	1.46
29	I	94	LYS	N-CA	-9.13	1.35	1.46
13	m	223	GLU	CA-C	-9.12	1.41	1.52
30	K	333	ARG	CD-NE	9.06	1.58	1.46
24	Q	398	TYR	CA-C	-9.04	1.41	1.52
19	Y	56	GLN	CA-C	-9.02	1.40	1.52
30	K	146	LEU	C-N	9.02	1.41	1.33
14	n	83	VAL	N-CA	-8.99	1.35	1.46
29	I	405	ARG	CD-NE	8.97	1.58	1.46
17	T	224	ARG	CD-NE	8.97	1.58	1.46
24	Q	206	ASN	CA-C	-8.97	1.39	1.53
16	V	58	VAL	CA-C	-8.97	1.41	1.52
28	H	182	ASN	CA-CB	8.96	1.69	1.53
14	7	39	VAL	CA-CB	-8.96	1.43	1.54
12	5	242	ARG	CA-C	-8.95	1.41	1.52
24	Q	366	ILE	N-CA	-8.93	1.35	1.46
32	M	73	ARG	NE-CZ	8.91	1.42	1.33
20	Z	856	HIS	ND1-CE1	8.91	1.41	1.32
28	H	273	ARG	CD-NE	8.89	1.58	1.46
26	U	120	LEU	CA-C	-8.89	1.41	1.53
1	A	185	HIS	CA-CB	8.87	1.67	1.53
3	C	68	LYS	CA-C	-8.87	1.42	1.52
25	R	219	LEU	C-N	8.87	1.45	1.33
13	6	203	HIS	ND1-CE1	8.86	1.41	1.32
7	g	202	LEU	CA-C	-8.84	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	102	PRO	CA-C	-8.83	1.42	1.52
28	H	417	ALA	CA-C	-8.83	1.41	1.52
22	S	52	TYR	CA-C	-8.82	1.40	1.52
8	h	44	THR	CA-C	-8.81	1.41	1.52
8	1	15	VAL	CA-C	-8.80	1.41	1.52
10	3	123	GLY	CA-C	-8.80	1.43	1.52
2	b	128	ARG	NE-CZ	8.79	1.42	1.33
14	n	78	VAL	N-CA	-8.79	1.35	1.46
28	H	292	ARG	NE-CZ	8.78	1.42	1.33
13	6	212	ILE	CA-C	-8.77	1.41	1.52
10	j	178	ASP	CA-C	-8.76	1.41	1.52
20	Z	924	LYS	CA-C	-8.76	1.41	1.52
28	H	235	PHE	CA-C	-8.76	1.41	1.52
30	K	141	ARG	NE-CZ	8.75	1.42	1.33
9	i	175	LEU	CA-C	-8.74	1.41	1.52
11	4	173	PRO	N-CA	-8.71	1.36	1.47
4	d	248	LYS	CA-CB	8.70	1.67	1.53
16	V	100	ARG	NE-CZ	8.69	1.42	1.33
31	L	361	PHE	CA-C	-8.69	1.41	1.52
2	b	203	GLU	N-CA	-8.69	1.39	1.47
24	Q	34	ASP	CA-C	-8.68	1.41	1.52
18	X	77	PRO	C-N	8.68	1.44	1.33
14	n	171	SER	CA-C	-8.68	1.42	1.52
4	d	111	ARG	NE-CZ	8.66	1.42	1.33
28	H	272	ILE	CA-C	-8.65	1.41	1.52
27	O	14	LEU	CA-CB	8.64	1.68	1.53
11	k	60	ILE	N-CA	-8.63	1.35	1.46
31	L	351	LEU	CA-C	-8.63	1.43	1.53
5	E	132	ARG	N-CA	-8.61	1.35	1.46
32	M	366	ARG	CD-NE	8.61	1.58	1.46
32	M	23	LEU	CA-C	-8.61	1.41	1.52
12	5	239	ALA	CA-C	-8.58	1.41	1.52
30	K	255	ARG	NE-CZ	8.58	1.42	1.33
33	J	282	PHE	CA-CB	8.58	1.59	1.53
12	5	156	LYS	C-N	8.58	1.44	1.33
33	J	344	ARG	CD-NE	8.57	1.58	1.46
5	E	210	GLU	CA-CB	8.54	1.68	1.53
31	L	156	MET	N-CA	-8.54	1.35	1.46
4	D	71	VAL	CA-C	-8.54	1.42	1.52
23	P	355	GLU	CA-C	-8.54	1.42	1.52
12	5	94	ARG	NE-CZ	8.53	1.42	1.33
9	2	195	ASP	CA-C	-8.51	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	182	LYS	C-N	8.49	1.41	1.33
32	M	73	ARG	CD-NE	8.48	1.58	1.46
1	A	14	ARG	CD-NE	8.48	1.58	1.46
18	X	39	GLU	N-CA	-8.47	1.39	1.47
31	L	290	ARG	CD-NE	8.47	1.58	1.46
24	Q	344	GLU	CA-C	-8.47	1.42	1.52
1	a	97	ALA	N-CA	-8.46	1.35	1.46
2	b	225	THR	CA-C	-8.46	1.42	1.52
30	K	53	LYS	N-CA	-8.46	1.35	1.46
26	U	292	ILE	N-CA	-8.45	1.36	1.46
10	j	186	VAL	N-CA	-8.45	1.35	1.46
17	T	83	ASN	N-CA	-8.44	1.36	1.46
29	I	121	THR	CA-C	-8.43	1.42	1.52
27	O	107	GLN	C-N	8.42	1.44	1.33
26	U	117	ASN	CA-C	8.41	1.62	1.52
1	A	65	ASP	CA-C	-8.40	1.41	1.52
6	F	44	ALA	CA-C	-8.40	1.42	1.52
14	n	67	LEU	CA-C	-8.39	1.42	1.52
7	g	190	ARG	N-CA	8.38	1.56	1.46
33	J	48	ARG	CD-NE	8.38	1.57	1.46
21	N	709	GLY	C-N	8.37	1.44	1.33
24	Q	361	HIS	CB-CG	8.37	1.61	1.50
10	j	111	GLY	CA-C	-8.35	1.41	1.51
24	Q	223	GLY	CA-C	-8.35	1.42	1.51
27	O	258	LEU	CA-C	-8.34	1.42	1.52
7	G	12	ASN	CA-C	-8.32	1.42	1.53
11	4	72	ASP	CA-CB	8.32	1.66	1.53
32	M	124	ARG	NE-CZ	8.31	1.42	1.33
10	j	127	ILE	CA-CB	-8.31	1.45	1.54
22	S	342	LEU	N-CA	-8.31	1.35	1.46
9	2	95	HIS	ND1-CE1	8.30	1.40	1.32
21	N	873	ARG	NE-CZ	8.31	1.42	1.33
7	G	166	GLY	CA-C	-8.30	1.42	1.52
13	6	221	ARG	NE-CZ	8.30	1.42	1.33
23	P	336	HIS	N-CA	-8.30	1.35	1.46
10	j	177	ARG	CD-NE	8.29	1.57	1.46
14	7	78	VAL	CA-C	-8.29	1.42	1.52
20	Z	558	LEU	N-CA	-8.29	1.36	1.46
1	a	14	ARG	NE-CZ	8.29	1.42	1.33
9	i	238	THR	N-CA	-8.28	1.35	1.46
22	S	104	VAL	N-CA	-8.28	1.39	1.46
8	h	167	SER	CA-C	-8.27	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	374	ARG	CD-NE	8.27	1.57	1.46
30	K	122	ILE	N-CA	-8.24	1.36	1.46
4	D	35	GLY	CA-C	-8.22	1.44	1.51
2	B	236	ARG	CD-NE	8.22	1.57	1.46
31	L	218	VAL	C-O	-8.22	1.15	1.24
20	Z	819	GLY	CA-C	-8.21	1.43	1.52
22	S	99	ASN	CA-CB	8.20	1.64	1.53
30	K	294	ARG	CD-NE	8.20	1.57	1.46
14	n	194	ARG	CD-NE	8.19	1.57	1.46
9	2	74	GLY	CA-C	-8.19	1.44	1.52
12	l	241	HIS	CA-C	-8.18	1.42	1.52
6	f	221	PRO	CA-C	-8.18	1.43	1.52
28	H	95	HIS	N-CA	-8.18	1.37	1.46
4	D	141	ARG	CD-NE	8.17	1.57	1.46
14	7	247	VAL	CA-C	-8.17	1.41	1.52
10	3	203	ARG	CD-NE	8.17	1.57	1.46
15	W	142	ILE	CA-C	-8.16	1.42	1.52
16	V	195	HIS	N-CA	-8.16	1.39	1.46
28	H	83	ASP	C-N	8.15	1.44	1.33
29	I	347	LYS	N-CA	-8.15	1.35	1.46
10	j	185	ALA	C-N	8.14	1.42	1.33
25	R	290	SER	CA-C	8.14	1.63	1.52
30	K	141	ARG	N-CA	-8.14	1.36	1.46
6	F	69	HIS	N-CA	-8.13	1.39	1.46
11	k	166	GLN	N-CA	-8.13	1.36	1.46
20	Z	876	VAL	C-N	8.13	1.44	1.33
21	N	881	TYR	CA-C	-8.12	1.43	1.52
24	Q	68	MET	C-N	8.12	1.40	1.32
1	a	203	VAL	C-O	-8.11	1.14	1.24
29	I	343	ARG	CD-NE	8.11	1.57	1.46
5	E	20	ARG	CD-NE	8.11	1.57	1.46
10	3	57	ALA	CA-C	8.11	1.63	1.52
14	7	161	ARG	CZ-NH2	8.11	1.44	1.33
33	J	72	VAL	N-CA	-8.11	1.36	1.46
4	d	197	ARG	CD-NE	8.10	1.57	1.46
11	k	147	HIS	ND1-CE1	8.10	1.40	1.32
1	a	91	ARG	CD-NE	8.10	1.57	1.46
18	X	89	LEU	CA-C	-8.09	1.43	1.52
23	P	371	LEU	N-CA	-8.09	1.36	1.45
22	S	440	ASP	C-N	8.09	1.42	1.33
3	C	31	HIS	ND1-CE1	8.08	1.40	1.32
13	6	145	ARG	NE-CZ	8.08	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	215	GLY	CA-C	8.06	1.61	1.52
26	U	50	ASN	C-N	8.06	1.43	1.33
6	f	176	LEU	N-CA	-8.06	1.36	1.46
13	6	114	TYR	CA-CB	8.06	1.59	1.53
33	J	49	ASN	C-N	8.05	1.44	1.33
21	N	865	PRO	C-N	8.05	1.43	1.33
33	J	377	VAL	N-CA	-8.04	1.37	1.46
1	A	205	PHE	CA-CB	8.04	1.65	1.53
4	D	119	ARG	CA-C	-8.04	1.42	1.52
7	g	172	ALA	CA-C	-8.03	1.42	1.52
9	i	145	HIS	ND1-CE1	8.03	1.40	1.32
13	6	97	ALA	CA-C	-8.03	1.42	1.52
5	E	236	THR	CA-C	-8.02	1.42	1.52
13	6	219	GLY	N-CA	-8.02	1.35	1.45
24	Q	7	LYS	CA-C	-8.02	1.42	1.52
11	4	106	GLY	N-CA	-8.01	1.37	1.45
14	n	150	ALA	CA-C	-8.01	1.42	1.52
8	1	24	GLY	CA-C	-8.01	1.45	1.51
29	I	125	MET	N-CA	-8.01	1.39	1.46
9	i	120	GLN	CA-CB	8.00	1.65	1.53
30	K	307	ASP	C-N	8.00	1.45	1.33
1	a	42	SER	N-CA	-8.00	1.36	1.45
20	Z	773	ARG	CA-C	-8.00	1.42	1.52
5	E	138	PHE	N-CA	-7.99	1.34	1.45
10	3	188	TYR	N-CA	-7.99	1.36	1.46
31	L	344	ASP	CA-C	-7.99	1.43	1.52
29	I	162	ASP	C-N	7.99	1.43	1.33
30	K	252	ARG	NE-CZ	7.99	1.41	1.33
21	N	390	LEU	CA-C	-7.98	1.44	1.53
4	d	221	ILE	N-CA	-7.98	1.36	1.46
2	b	104	TYR	CA-C	-7.98	1.44	1.53
1	a	61	ASP	CA-C	-7.96	1.42	1.52
11	4	147	HIS	CG-CD2	7.95	1.44	1.35
11	4	189	ILE	CA-C	-7.95	1.42	1.52
8	1	194	ARG	CD-NE	7.94	1.57	1.46
4	D	183	GLU	CA-CB	7.93	1.61	1.53
29	I	292	TYR	CA-C	-7.93	1.44	1.52
9	i	188	ILE	CA-CB	-7.92	1.44	1.54
20	Z	498	ALA	C-O	-7.92	1.17	1.24
6	F	185	ASN	N-CA	-7.92	1.38	1.46
20	Z	361	HIS	ND1-CE1	7.92	1.40	1.32
21	N	523	LEU	N-CA	-7.92	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	197	ARG	N-CA	-7.91	1.36	1.46
1	a	141	LEU	C-N	7.90	1.44	1.33
3	c	134	SER	N-CA	-7.90	1.36	1.46
20	Z	759	ARG	CZ-NH2	7.89	1.43	1.33
5	e	10	ARG	CD-NE	7.89	1.57	1.46
21	N	794	LYS	CA-C	-7.89	1.42	1.52
25	R	112	GLU	N-CA	7.89	1.55	1.46
12	l	100	TRP	C-N	7.89	1.43	1.33
21	N	614	ASN	C-N	7.89	1.44	1.33
1	A	76	SER	CA-C	-7.89	1.43	1.52
22	S	369	GLN	C-N	7.89	1.44	1.33
12	l	158	LEU	C-N	7.88	1.44	1.33
31	L	372	GLY	CA-C	-7.88	1.40	1.51
7	G	56	SER	N-CA	-7.88	1.36	1.46
16	V	157	ARG	CZ-NH1	7.88	1.43	1.32
17	T	74	ASN	CA-C	-7.88	1.42	1.52
20	Z	400	ILE	C-N	7.88	1.43	1.33
11	4	62	ALA	CA-C	-7.88	1.43	1.52
11	4	96	ARG	N-CA	-7.87	1.38	1.46
17	T	243	ALA	C-N	7.87	1.44	1.33
2	B	246	ARG	NE-CZ	7.87	1.41	1.33
10	3	15	MET	N-CA	-7.87	1.35	1.45
27	O	235	HIS	ND1-CE1	7.87	1.40	1.32
24	Q	3	LEU	N-CA	-7.86	1.40	1.46
28	H	251	PRO	CA-C	-7.86	1.44	1.52
6	F	216	VAL	N-CA	-7.86	1.36	1.46
23	P	282	HIS	CG-CD2	7.86	1.44	1.35
27	O	331	ALA	C-N	7.86	1.43	1.33
14	7	83	VAL	CA-C	-7.85	1.43	1.52
15	W	41	ARG	N-CA	-7.85	1.36	1.46
13	m	143	GLN	CA-C	-7.84	1.41	1.52
3	c	108	VAL	CA-CB	-7.84	1.45	1.54
1	a	104	PHE	N-CA	-7.83	1.36	1.46
12	l	285	VAL	CA-CB	-7.82	1.45	1.54
6	F	164	ARG	NE-CZ	7.82	1.41	1.33
18	X	91	PHE	CA-C	-7.81	1.43	1.52
33	J	315	GLU	C-N	7.81	1.41	1.33
20	Z	849	ARG	NE-CZ	7.79	1.41	1.33
5	E	186	GLU	CA-C	-7.79	1.44	1.53
21	N	574	VAL	C-N	7.79	1.44	1.34
7	G	134	VAL	CA-C	-7.78	1.43	1.52
31	L	194	ARG	NE-CZ	7.78	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	U	174	LEU	N-CA	7.78	1.55	1.46
23	P	123	ARG	NE-CZ	7.77	1.41	1.33
3	C	76	ALA	CA-C	-7.77	1.43	1.52
23	P	154	ASP	CA-C	-7.77	1.43	1.52
10	3	198	ARG	CZ-NH1	7.76	1.43	1.32
22	S	397	LEU	CA-C	-7.76	1.42	1.52
11	k	25	ILE	C-N	7.76	1.44	1.33
7	G	47	VAL	CA-C	-7.75	1.43	1.52
21	N	702	ALA	N-CA	-7.75	1.36	1.46
5	e	181	ALA	CA-C	-7.75	1.43	1.52
25	R	338	TYR	CA-CB	7.75	1.65	1.53
29	I	304	ARG	NE-CZ	7.74	1.41	1.33
4	d	128	PRO	N-CA	-7.74	1.39	1.46
5	E	235	LYS	CA-CB	7.74	1.65	1.53
31	L	82	ARG	NE-CZ	7.74	1.41	1.33
4	D	43	VAL	N-CA	-7.74	1.37	1.46
21	N	129	ILE	CA-CB	-7.73	1.44	1.54
10	3	162	ASP	N-CA	7.73	1.56	1.46
27	O	229	ASN	CA-CB	7.73	1.64	1.53
8	h	109	ALA	CA-C	-7.72	1.43	1.52
11	4	147	HIS	CB-CG	7.72	1.60	1.50
23	P	333	ALA	CA-C	-7.72	1.41	1.52
23	P	396	PRO	CA-C	-7.72	1.45	1.52
16	V	143	PRO	N-CA	-7.72	1.41	1.47
11	4	67	TYR	N-CA	-7.71	1.37	1.46
25	R	351	LYS	N-CA	-7.71	1.37	1.46
31	L	69	ARG	CD-NE	7.70	1.57	1.46
16	V	66	VAL	CA-C	-7.70	1.42	1.52
13	m	188	VAL	CA-C	7.70	1.62	1.52
8	1	47	HIS	ND1-CE1	7.70	1.40	1.32
26	U	27	THR	CA-C	-7.70	1.43	1.52
32	M	342	ARG	NE-CZ	7.69	1.41	1.33
29	I	191	ILE	CA-C	-7.69	1.43	1.52
13	m	165	LYS	N-CA	-7.69	1.36	1.46
6	f	40	SER	CA-C	-7.69	1.42	1.52
24	Q	391	ASP	C-N	7.68	1.44	1.33
12	l	195	THR	C-N	7.68	1.44	1.33
3	C	240	VAL	CA-C	-7.68	1.42	1.52
23	P	326	ASP	CA-C	-7.68	1.43	1.52
13	m	29	ALA	CA-C	-7.67	1.43	1.52
5	e	166	ARG	NE-CZ	7.67	1.41	1.33
8	1	45	ARG	C-N	7.66	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	439	TYR	N-CA	-7.66	1.37	1.46
26	U	93	TYR	N-CA	-7.65	1.37	1.45
1	A	174	LYS	C-N	7.65	1.43	1.33
13	m	63	ASN	N-CA	-7.65	1.36	1.46
14	n	91	SER	N-CA	-7.64	1.36	1.46
14	n	185	ASN	CA-CB	7.64	1.63	1.53
11	4	184	VAL	CA-CB	-7.64	1.44	1.54
21	N	251	GLU	N-CA	-7.64	1.36	1.46
31	L	88	TYR	N-CA	-7.64	1.37	1.46
1	A	232	LYS	CA-C	-7.63	1.43	1.52
21	N	539	MET	C-N	7.63	1.44	1.33
33	J	20	LYS	C-N	7.63	1.43	1.33
1	A	65	ASP	C-N	7.62	1.40	1.33
25	R	297	TYR	CA-CB	7.62	1.66	1.53
5	E	113	THR	CA-C	-7.62	1.42	1.52
21	N	855	GLU	CA-CB	-7.61	1.43	1.53
9	2	214	GLU	CA-C	-7.61	1.43	1.52
10	3	65	GLU	CA-CB	7.61	1.65	1.53
3	c	66	LEU	CA-C	-7.60	1.44	1.52
9	i	115	HIS	CE1-NE2	7.60	1.40	1.32
28	H	101	ARG	CD-NE	7.60	1.56	1.46
20	Z	420	ALA	C-N	7.59	1.44	1.34
22	S	93	LEU	CA-C	-7.59	1.43	1.52
2	b	236	ARG	CD-NE	7.59	1.56	1.46
10	3	25	CYS	N-CA	-7.59	1.36	1.45
12	l	80	ALA	CA-C	-7.59	1.43	1.52
6	F	227	GLY	CA-C	-7.58	1.41	1.51
14	n	194	ARG	CA-C	-7.58	1.43	1.52
5	E	153	TYR	CA-C	-7.58	1.42	1.52
23	P	232	ARG	NE-CZ	7.58	1.41	1.33
6	f	215	ILE	CA-CB	-7.57	1.43	1.54
2	b	105	PRO	CA-C	7.57	1.59	1.52
10	3	22	ALA	CA-C	-7.57	1.43	1.52
22	S	398	THR	N-CA	7.57	1.55	1.46
28	H	382	LEU	CA-CB	7.57	1.65	1.53
31	L	358	LEU	C-N	7.56	1.44	1.34
31	L	420	ARG	NE-CZ	7.55	1.41	1.33
2	B	249	ALA	C-N	7.55	1.44	1.33
17	T	70	ILE	CA-C	-7.55	1.43	1.52
22	S	147	TRP	NE1-CE2	7.55	1.45	1.37
11	4	71	GLU	N-CA	-7.54	1.35	1.46
9	2	115	HIS	ND1-CE1	7.54	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	765	ASP	C-N	7.54	1.44	1.33
7	G	82	ILE	CA-C	-7.54	1.45	1.52
2	B	243	ILE	CA-CB	-7.53	1.45	1.54
23	P	351	ARG	CD-NE	7.53	1.56	1.46
16	V	157	ARG	CA-CB	7.52	1.66	1.53
8	h	16	THR	C-N	7.52	1.44	1.33
4	D	24	LEU	N-CA	-7.52	1.37	1.46
32	M	329	ARG	CA-C	-7.52	1.43	1.52
8	h	187	LEU	N-CA	-7.51	1.36	1.46
11	4	169	GLU	CA-C	-7.51	1.43	1.52
13	6	62	ALA	N-CA	-7.51	1.37	1.46
25	R	418	GLY	C-N	7.51	1.43	1.33
28	H	353	PHE	CA-C	-7.51	1.43	1.52
32	M	81	ASN	N-CA	-7.51	1.36	1.45
2	b	48	GLU	CA-C	-7.50	1.43	1.52
21	N	802	ALA	CA-C	-7.50	1.43	1.52
2	B	19	GLY	CA-C	-7.50	1.42	1.52
5	e	114	GLN	CA-C	-7.50	1.43	1.52
30	K	77	ARG	NE-CZ	7.50	1.41	1.33
7	g	210	LYS	CA-CB	7.50	1.64	1.53
12	l	201	ILE	CA-C	-7.50	1.43	1.52
26	U	44	SER	CA-C	-7.50	1.43	1.52
28	H	244	LYS	CA-C	-7.49	1.43	1.52
25	R	383	ARG	NE-CZ	7.49	1.41	1.33
2	b	213	ILE	CA-C	-7.49	1.44	1.52
24	Q	411	SER	CA-C	-7.49	1.43	1.52
4	D	172	ARG	CD-NE	7.48	1.56	1.46
21	N	716	GLN	CA-C	-7.48	1.43	1.52
24	Q	425	GLN	CA-C	7.48	1.62	1.52
7	g	240	ILE	N-CA	7.47	1.55	1.46
14	n	73	GLU	CA-C	-7.47	1.43	1.52
2	B	99	ARG	NE-CZ	7.47	1.41	1.33
24	Q	244	GLU	N-CA	-7.47	1.37	1.46
11	4	146	HIS	N-CA	-7.47	1.37	1.46
12	l	263	HIS	ND1-CE1	7.47	1.40	1.32
32	M	405	ASN	C-N	7.47	1.42	1.32
25	R	206	ARG	NE-CZ	7.47	1.41	1.33
2	B	232	GLY	C-N	7.46	1.42	1.33
4	D	52	LEU	CA-C	-7.46	1.43	1.52
5	E	158	ALA	CA-C	-7.46	1.43	1.52
32	M	15	ASP	N-CA	-7.46	1.36	1.46
33	J	79	VAL	CA-C	-7.46	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	399	VAL	CA-C	-7.45	1.43	1.52
13	m	202	ARG	CD-NE	7.45	1.56	1.46
22	S	20	HIS	N-CA	-7.45	1.37	1.46
13	m	63	ASN	CA-C	-7.45	1.43	1.52
25	R	334	ARG	NE-CZ	7.45	1.41	1.33
4	d	97	ARG	NE-CZ	7.45	1.41	1.33
32	M	416	VAL	CA-C	7.44	1.62	1.52
5	e	22	PHE	N-CA	-7.44	1.37	1.46
3	C	43	GLY	CA-C	-7.44	1.42	1.51
13	6	30	VAL	CA-CB	-7.44	1.45	1.54
27	O	332	ILE	N-CA	-7.44	1.37	1.46
4	D	209	ASN	N-CA	-7.43	1.37	1.46
12	l	202	PHE	CA-C	-7.43	1.43	1.52
2	b	61	LEU	N-CA	-7.43	1.36	1.46
21	N	742	TRP	CA-C	-7.42	1.45	1.53
22	S	67	GLU	CA-C	-7.42	1.43	1.52
27	O	98	TYR	N-CA	7.42	1.55	1.46
24	Q	195	LYS	CA-CB	7.42	1.65	1.53
23	P	138	ARG	CD-NE	7.41	1.56	1.46
23	P	374	SER	N-CA	-7.41	1.37	1.46
2	B	6	SER	N-CA	-7.41	1.37	1.46
31	L	127	TYR	CA-C	-7.41	1.43	1.52
3	C	89	ASN	CA-CB	7.40	1.65	1.53
21	N	664	LEU	C-N	7.40	1.43	1.33
7	G	19	GLY	C-N	7.40	1.43	1.33
11	4	25	ILE	N-CA	-7.40	1.36	1.46
5	e	88	MET	C-O	-7.40	1.15	1.24
1	a	34	ALA	N-CA	-7.39	1.37	1.46
6	f	75	ALA	N-CA	-7.39	1.37	1.46
31	L	59	GLN	CA-C	-7.39	1.43	1.52
20	Z	286	VAL	N-CA	-7.39	1.37	1.46
22	S	201	ILE	C-N	7.39	1.43	1.33
1	a	127	ILE	CA-CB	-7.38	1.45	1.54
12	l	105	THR	CA-C	-7.38	1.44	1.52
32	M	281	ASP	CA-CB	7.38	1.65	1.53
6	f	60	GLN	C-O	7.38	1.32	1.23
18	X	84	GLY	C-N	7.38	1.44	1.33
22	S	59	ASP	N-CA	-7.38	1.37	1.46
31	L	286	ILE	CA-CB	7.38	1.62	1.54
4	d	214	VAL	CA-C	-7.38	1.43	1.52
1	A	194	ILE	CA-CB	-7.38	1.45	1.54
26	U	7	LYS	CA-C	-7.38	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	n	100	LEU	CA-C	-7.37	1.43	1.52
9	i	141	SER	CA-C	-7.37	1.43	1.52
1	a	50	CYS	CA-C	-7.36	1.43	1.52
32	M	141	LYS	N-CA	-7.36	1.38	1.46
23	P	196	ALA	C-N	7.36	1.43	1.33
1	A	71	TYR	CA-C	-7.35	1.42	1.52
21	N	504	TYR	C-N	7.35	1.44	1.33
25	R	55	LYS	CA-C	-7.35	1.43	1.52
8	1	137	GLY	CA-C	-7.35	1.41	1.51
2	b	240	SER	CA-CB	7.35	1.65	1.53
8	1	181	VAL	C-N	7.34	1.41	1.33
16	V	135	ARG	CD-NE	7.34	1.56	1.46
13	m	209	GLY	N-CA	-7.34	1.37	1.45
1	a	24	ARG	CD-NE	7.34	1.56	1.46
2	B	47	THR	CA-C	-7.34	1.43	1.52
11	k	97	PRO	C-N	7.33	1.43	1.33
32	M	127	VAL	CA-C	-7.33	1.43	1.52
10	j	98	ARG	C-N	7.33	1.43	1.33
22	S	317	HIS	ND1-CE1	7.32	1.39	1.32
29	I	129	TYR	CA-CB	7.32	1.62	1.53
31	L	157	ARG	N-CA	-7.32	1.37	1.46
1	A	28	VAL	CA-CB	-7.32	1.45	1.54
13	6	103	HIS	CG-CD2	7.32	1.44	1.35
20	Z	8	LYS	CA-CB	7.32	1.66	1.53
31	L	240	GLY	C-N	7.32	1.43	1.33
9	2	93	GLU	C-N	7.32	1.43	1.33
12	5	225	VAL	CA-C	-7.32	1.43	1.52
23	P	294	GLU	C-N	7.32	1.43	1.33
3	c	79	GLY	C-N	7.31	1.43	1.33
4	D	214	VAL	CA-C	-7.31	1.43	1.52
11	4	36	ARG	NE-CZ	7.31	1.41	1.33
16	V	144	ILE	C-N	7.30	1.43	1.33
20	Z	203	LEU	CA-C	-7.30	1.43	1.52
26	U	67	PHE	CA-C	-7.30	1.43	1.52
17	T	26	LEU	CA-CB	7.30	1.64	1.54
28	H	226	GLU	CA-CB	7.30	1.64	1.53
12	5	259	GLY	C-N	7.29	1.43	1.33
14	7	130	ALA	CA-CB	7.29	1.64	1.53
9	2	123	ILE	CA-C	-7.29	1.44	1.52
25	R	411	LEU	CA-CB	7.29	1.64	1.53
4	d	201	GLU	CA-C	-7.29	1.43	1.52
32	M	233	ARG	NE-CZ	7.29	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
17	T	121	LYS	N-CA	-7.28	1.36	1.46
21	N	485	MET	C-N	7.28	1.43	1.34
2	b	136	ILE	N-CA	-7.28	1.36	1.46
8	h	34	TYR	C-N	7.28	1.43	1.33
1	A	225	VAL	C-O	-7.28	1.16	1.24
6	F	49	LEU	CA-CB	7.28	1.63	1.53
21	N	14	ARG	C-N	7.28	1.43	1.33
8	h	112	ASP	C-N	7.28	1.44	1.33
9	2	140	PHE	CA-C	-7.28	1.44	1.52
29	I	410	GLN	CA-C	-7.28	1.43	1.52
28	H	62	ARG	NE-CZ	7.27	1.41	1.33
7	g	147	HIS	CA-C	-7.27	1.43	1.52
31	L	345	ARG	C-N	7.27	1.43	1.33
3	c	224	GLU	CA-C	-7.26	1.43	1.52
11	4	133	HIS	CD2-NE2	7.26	1.45	1.37
7	g	20	ARG	NE-CZ	7.26	1.41	1.33
22	S	328	PRO	CA-C	7.26	1.60	1.52
31	L	96	LYS	CA-CB	7.26	1.65	1.53
14	7	252	TRP	NE1-CE2	-7.25	1.29	1.37
15	W	158	ILE	CA-C	-7.25	1.44	1.52
3	c	185	LYS	N-CA	-7.25	1.36	1.45
33	J	261	SER	C-N	7.25	1.44	1.33
4	d	49	ARG	NE-CZ	7.25	1.41	1.33
17	T	16	GLU	C-N	7.25	1.43	1.33
25	R	217	HIS	CA-CB	7.24	1.64	1.53
4	D	162	GLN	CA-C	-7.24	1.43	1.52
23	P	282	HIS	ND1-CE1	7.24	1.39	1.32
20	Z	124	MET	CA-C	-7.23	1.43	1.52
6	F	107	ARG	N-CA	-7.23	1.37	1.46
15	W	174	VAL	CA-C	-7.23	1.43	1.52
7	g	182	HIS	CA-C	-7.23	1.43	1.52
14	7	138	SER	N-CA	-7.23	1.36	1.46
14	7	164	ASN	CA-C	-7.23	1.43	1.52
19	Y	65	ASP	CA-CB	7.23	1.63	1.53
30	K	168	ASP	CA-C	-7.22	1.42	1.52
3	C	161	LYS	CA-CB	7.22	1.64	1.54
13	m	176	VAL	C-N	7.22	1.43	1.33
12	l	196	ARG	CZ-NH2	7.22	1.42	1.33
6	F	192	ALA	N-CA	-7.22	1.37	1.46
19	Y	14	ILE	CA-C	-7.22	1.44	1.52
21	N	425	ASN	C-N	7.21	1.42	1.33
1	a	44	ALA	N-CA	-7.21	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	4	ARG	NE-CZ	7.21	1.41	1.33
8	1	167	SER	CA-C	-7.21	1.43	1.52
21	N	801	THR	N-CA	7.21	1.55	1.46
7	G	165	THR	CA-C	7.21	1.61	1.52
6	F	36	VAL	C-N	7.21	1.43	1.33
28	H	329	VAL	CA-CB	-7.20	1.45	1.54
16	V	111	HIS	CA-C	-7.20	1.43	1.52
21	N	798	LYS	C-N	7.20	1.42	1.33
31	L	276	CYS	CA-C	-7.20	1.44	1.52
6	f	87	TYR	N-CA	-7.20	1.37	1.46
14	n	69	PHE	CA-C	-7.19	1.43	1.52
24	Q	357	VAL	CA-CB	-7.19	1.45	1.54
25	R	300	ASP	CA-C	-7.19	1.43	1.52
3	c	144	TYR	CA-C	-7.19	1.46	1.52
32	M	124	ARG	CD-NE	7.19	1.56	1.46
33	J	279	LEU	C-N	7.19	1.43	1.33
23	P	348	HIS	C-N	7.19	1.43	1.33
1	a	194	ILE	CA-C	-7.18	1.43	1.52
3	C	95	ALA	CA-C	-7.18	1.43	1.52
20	Z	801	HIS	ND1-CE1	7.18	1.39	1.32
20	Z	949	ILE	N-CA	-7.18	1.37	1.46
1	a	120	ARG	NE-CZ	7.18	1.41	1.33
30	K	92	VAL	CA-C	-7.18	1.45	1.52
3	C	144	TYR	N-CA	-7.17	1.38	1.46
14	n	256	LYS	CA-C	-7.17	1.42	1.52
32	M	161	SER	C-N	7.17	1.43	1.33
31	L	115	GLU	C-N	7.17	1.42	1.33
28	H	447	VAL	CA-C	-7.17	1.43	1.52
15	W	114	VAL	CA-C	-7.17	1.43	1.52
18	X	18	ASN	CA-C	-7.17	1.44	1.52
24	Q	278	VAL	CA-C	-7.16	1.43	1.52
13	6	75	ARG	NE-CZ	7.15	1.41	1.33
23	P	408	SER	CA-C	-7.15	1.43	1.52
8	h	190	ALA	CA-C	-7.14	1.43	1.52
3	C	14	SER	C-O	-7.14	1.18	1.24
28	H	131	GLN	C-N	7.14	1.42	1.33
2	B	165	GLY	C-N	7.14	1.43	1.33
10	j	108	VAL	CA-C	-7.13	1.43	1.52
1	A	12	TYR	CA-C	-7.13	1.45	1.52
5	E	147	HIS	CA-C	-7.13	1.44	1.52
30	K	316	MET	CA-C	-7.13	1.43	1.52
1	a	105	ARG	NE-CZ	7.13	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	43	HIS	CE1-NE2	-7.13	1.25	1.32
18	X	10	PHE	CA-C	-7.13	1.44	1.52
21	N	255	ALA	C-N	7.12	1.43	1.33
22	S	448	LEU	C-N	7.12	1.41	1.33
12	l	234	ARG	NE-CZ	7.11	1.40	1.33
1	A	166	TYR	CA-C	-7.11	1.44	1.52
28	H	266	ARG	NE-CZ	7.11	1.40	1.33
33	J	16	GLU	C-N	7.11	1.43	1.33
1	A	96	ARG	NE-CZ	7.11	1.40	1.33
20	Z	434	GLN	CA-C	-7.11	1.43	1.52
14	n	39	VAL	CA-C	-7.10	1.44	1.52
12	l	186	THR	N-CA	-7.10	1.37	1.46
1	a	39	ASN	CA-C	-7.10	1.45	1.53
14	n	71	GLY	C-N	7.10	1.42	1.33
21	N	59	GLU	N-CA	-7.10	1.37	1.46
23	P	92	SER	CA-CB	7.10	1.65	1.53
23	P	101	MET	CA-C	-7.09	1.43	1.52
10	3	140	GLY	C-N	7.09	1.43	1.33
20	Z	71	LEU	N-CA	-7.09	1.37	1.46
13	6	75	ARG	CD-NE	7.09	1.56	1.46
20	Z	883	THR	CA-C	-7.09	1.43	1.52
22	S	382	ARG	CA-CB	7.09	1.65	1.53
9	2	231	SER	N-CA	7.09	1.54	1.45
21	N	595	LEU	CA-C	7.09	1.59	1.53
4	D	178	ASN	C-N	7.08	1.42	1.33
6	f	101	ARG	CD-NE	7.08	1.56	1.46
29	I	336	PRO	CA-C	-7.08	1.44	1.52
26	U	160	THR	CA-C	-7.07	1.44	1.52
31	L	395	ALA	CA-C	-7.07	1.43	1.52
23	P	6	PRO	N-CA	7.07	1.56	1.47
32	M	306	LEU	CA-CB	7.07	1.64	1.53
7	g	229	LYS	CA-C	-7.07	1.44	1.52
22	S	55	ARG	NE-CZ	7.07	1.40	1.33
12	l	255	VAL	CA-C	-7.07	1.44	1.52
28	H	437	VAL	N-CA	-7.07	1.37	1.46
27	O	86	LEU	CA-C	7.07	1.62	1.52
30	K	278	ALA	N-CA	-7.06	1.37	1.46
9	i	146	GLY	CA-C	-7.06	1.42	1.51
3	C	177	GLN	CA-C	-7.06	1.43	1.52
17	T	210	PHE	C-N	7.06	1.42	1.33
8	1	25	ALA	CA-C	-7.05	1.44	1.52
26	U	189	ARG	CD-NE	7.05	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	144	LEU	N-CA	-7.05	1.38	1.46
1	a	144	VAL	CA-C	-7.05	1.43	1.52
30	K	77	ARG	CD-NE	7.05	1.56	1.46
30	K	144	ASN	N-CA	-7.05	1.37	1.46
10	j	158	LEU	CA-C	-7.05	1.43	1.52
25	R	263	ARG	CD-NE	7.04	1.56	1.46
1	a	216	THR	CA-C	-7.04	1.44	1.52
33	J	260	GLY	CA-C	-7.04	1.45	1.52
8	h	139	GLY	CA-C	7.04	1.58	1.51
15	W	92	GLN	C-N	7.04	1.42	1.33
30	K	346	ARG	CZ-NH2	7.04	1.42	1.33
6	f	51	ARG	NE-CZ	7.03	1.40	1.33
14	7	215	ARG	CZ-NH2	7.03	1.42	1.33
4	D	253	ASN	CA-CB	7.03	1.64	1.53
7	G	130	ARG	NE-CZ	7.03	1.40	1.33
2	b	4	ARG	C-N	7.03	1.44	1.33
2	b	166	LYS	CA-C	-7.02	1.43	1.52
5	E	169	ALA	N-CA	-7.02	1.38	1.46
20	Z	824	ASN	CA-C	7.02	1.60	1.52
20	Z	752	ILE	C-N	7.02	1.43	1.33
20	Z	103	TYR	CA-C	-7.02	1.44	1.52
28	H	425	GLU	CA-C	-7.02	1.43	1.52
22	S	366	LYS	C-O	-7.02	1.16	1.24
29	I	131	SER	C-N	7.02	1.42	1.33
4	D	81	ASP	CA-C	-7.02	1.43	1.52
25	R	77	SER	CA-C	-7.01	1.44	1.52
14	n	68	ARG	NE-CZ	7.01	1.40	1.33
7	G	115	ARG	CD-NE	7.01	1.56	1.46
17	T	187	ASP	CA-CB	7.01	1.64	1.53
32	M	202	LYS	C-N	7.01	1.41	1.33
13	m	62	ALA	CA-C	-7.01	1.44	1.53
18	X	27	ILE	CA-C	-7.01	1.47	1.53
23	P	440	HIS	CD2-NE2	7.01	1.45	1.37
6	F	142	ALA	N-CA	-7.00	1.37	1.46
32	M	107	ASN	C-N	7.00	1.43	1.33
8	1	63	ALA	CA-C	-7.00	1.44	1.52
9	2	50	THR	CA-C	-7.00	1.44	1.52
31	L	410	ILE	N-CA	-7.00	1.38	1.46
33	J	288	ILE	CA-CB	7.00	1.62	1.54
8	h	97	GLU	CA-C	-7.00	1.43	1.52
28	H	54	ASN	C-N	7.00	1.43	1.33
23	P	310	ARG	CZ-NH1	7.00	1.42	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	252	HIS	ND1-CE1	7.00	1.39	1.32
13	6	99	ARG	CZ-NH1	7.00	1.42	1.32
29	I	291	ARG	NE-CZ	7.00	1.40	1.33
14	n	39	VAL	C-N	7.00	1.43	1.33
11	k	93	ARG	CZ-NH1	6.99	1.42	1.32
14	7	76	ILE	CA-CB	-6.99	1.49	1.54
29	I	188	GLU	CA-C	6.99	1.62	1.52
31	L	363	ILE	CA-C	6.99	1.61	1.52
7	g	175	GLU	CA-C	-6.99	1.43	1.52
2	B	60	THR	N-CA	-6.99	1.38	1.46
6	F	3	ARG	CZ-NH2	6.99	1.42	1.33
8	1	154	ASN	CA-C	-6.99	1.44	1.53
1	a	112	MET	CA-C	-6.99	1.44	1.52
17	T	106	ILE	CA-CB	-6.99	1.46	1.54
11	k	135	TYR	C-N	6.98	1.43	1.33
9	2	123	ILE	N-CA	-6.98	1.38	1.46
13	6	172	THR	CA-C	-6.98	1.43	1.52
3	C	14	SER	N-CA	-6.98	1.41	1.46
33	J	239	GLU	CA-CB	6.98	1.64	1.53
6	f	196	ALA	CA-C	-6.97	1.43	1.52
5	E	133	LEU	CA-C	-6.97	1.45	1.52
6	F	121	GLN	CA-C	-6.97	1.44	1.52
21	N	112	GLU	C-N	6.96	1.43	1.34
9	i	151	GLY	C-O	-6.96	1.18	1.24
7	g	134	VAL	CA-C	-6.96	1.43	1.52
8	h	165	LYS	CA-C	-6.96	1.44	1.52
12	l	203	CYS	N-CA	-6.96	1.37	1.46
9	2	254	GLU	C-N	6.96	1.43	1.33
21	N	686	ILE	CA-CB	-6.96	1.45	1.54
11	k	124	THR	CA-C	-6.95	1.44	1.52
22	S	282	ILE	C-N	6.95	1.42	1.33
8	1	71	HIS	ND1-CE1	6.95	1.39	1.32
23	P	23	LYS	CA-C	6.95	1.62	1.52
21	N	162	ARG	CZ-NH2	6.95	1.42	1.33
1	a	227	VAL	CA-C	-6.94	1.44	1.52
12	5	163	TYR	C-N	6.94	1.43	1.33
11	k	126	VAL	N-CA	-6.94	1.38	1.46
9	i	35	VAL	CA-C	-6.93	1.44	1.52
24	Q	64	LEU	CA-C	-6.93	1.44	1.52
13	m	186	GLU	C-N	6.93	1.42	1.33
24	Q	119	GLU	N-CA	-6.93	1.38	1.46
27	O	151	ASP	C-N	6.93	1.43	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	28	ARG	CA-C	-6.92	1.44	1.52
20	Z	343	ALA	C-N	6.92	1.43	1.33
33	J	403	LEU	C-N	6.92	1.42	1.33
20	Z	965	LEU	CA-C	-6.92	1.44	1.52
21	N	21	LYS	C-N	6.92	1.42	1.33
28	H	242	PRO	CA-C	6.92	1.58	1.52
15	W	144	PHE	C-N	6.92	1.43	1.33
31	L	169	ASN	N-CA	-6.92	1.38	1.46
7	g	91	ARG	CD-NE	6.92	1.55	1.46
13	m	112	PRO	CA-C	-6.91	1.43	1.52
33	J	344	ARG	NE-CZ	6.91	1.40	1.33
7	g	158	TRP	NE1-CE2	6.91	1.45	1.37
19	Y	31	GLU	CA-CB	6.91	1.65	1.53
21	N	363	ALA	CA-C	-6.91	1.43	1.52
24	Q	310	SER	N-CA	-6.91	1.37	1.46
27	O	342	ASP	CA-C	-6.91	1.44	1.52
2	b	103	GLU	CA-C	-6.91	1.44	1.52
27	O	119	SER	N-CA	6.91	1.55	1.46
11	k	11	ASP	C-N	6.91	1.42	1.33
32	M	400	MET	CA-C	-6.91	1.43	1.52
27	O	276	LYS	C-N	6.90	1.41	1.33
24	Q	284	ALA	N-CA	-6.90	1.37	1.46
6	f	182	ILE	CA-C	6.90	1.60	1.52
6	F	19	LEU	CA-C	-6.90	1.44	1.52
1	a	153	SER	CA-C	-6.90	1.43	1.52
9	i	179	GLU	CA-C	-6.90	1.44	1.52
4	D	245	GLU	CA-C	6.89	1.61	1.52
11	4	20	ALA	CA-C	-6.89	1.43	1.52
23	P	116	ILE	C-N	6.89	1.43	1.33
28	H	333	MET	CA-CB	6.89	1.64	1.53
29	I	408	ARG	NE-CZ	6.89	1.40	1.33
20	Z	210	TYR	CA-C	-6.89	1.44	1.52
5	e	25	GLU	CA-CB	6.89	1.64	1.53
21	N	151	LYS	C-N	6.89	1.43	1.33
21	N	619	CYS	CA-C	-6.89	1.44	1.52
22	S	160	ARG	CD-NE	6.88	1.55	1.46
5	E	101	LEU	CA-CB	6.88	1.64	1.53
9	i	189	GLN	CA-C	-6.88	1.44	1.52
6	F	180	ILE	CA-C	-6.88	1.44	1.52
26	U	206	ASP	C-N	6.88	1.42	1.33
26	U	207	VAL	CA-CB	-6.88	1.45	1.54
9	2	115	HIS	N-CA	-6.88	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	335	GLY	N-CA	-6.88	1.35	1.45
22	S	238	LEU	CA-CB	6.87	1.64	1.53
8	h	89	SER	CA-C	-6.87	1.43	1.52
12	5	82	ARG	CD-NE	6.87	1.55	1.46
20	Z	87	LYS	N-CA	-6.87	1.40	1.46
20	Z	572	ILE	N-CA	-6.87	1.37	1.46
13	m	161	GLN	CA-C	-6.87	1.44	1.52
13	m	209	GLY	C-N	-6.87	1.23	1.33
28	H	411	CYS	CA-C	-6.87	1.45	1.53
4	d	70	HIS	ND1-CE1	6.87	1.39	1.32
24	Q	65	TYR	N-CA	-6.87	1.38	1.46
28	H	101	ARG	CA-CB	6.86	1.65	1.53
28	H	190	ARG	N-CA	-6.86	1.37	1.46
16	V	269	ARG	CD-NE	6.86	1.55	1.46
12	l	89	VAL	N-CA	-6.86	1.37	1.46
12	l	209	THR	N-CA	-6.86	1.38	1.46
5	E	150	ASP	N-CA	6.86	1.53	1.46
33	J	357	ASP	CA-CB	6.86	1.64	1.53
23	P	339	GLU	N-CA	-6.86	1.37	1.46
26	U	151	GLU	CA-C	-6.86	1.44	1.52
6	f	100	ASN	C-N	6.86	1.42	1.33
20	Z	295	ARG	CD-NE	6.86	1.55	1.46
32	M	267	PHE	CA-CB	6.85	1.65	1.53
6	F	110	HIS	ND1-CE1	6.85	1.39	1.32
3	C	94	HIS	ND1-CE1	6.85	1.39	1.32
7	G	100	LYS	C-N	6.85	1.42	1.33
9	i	58	LYS	CA-CB	6.85	1.64	1.53
23	P	431	HIS	CA-C	-6.85	1.43	1.52
9	i	207	MET	CA-CB	6.85	1.63	1.53
10	j	82	ILE	N-CA	-6.85	1.37	1.46
7	g	224	THR	C-N	6.84	1.43	1.33
32	M	394	VAL	CA-C	6.84	1.61	1.52
7	G	141	VAL	N-CA	-6.84	1.38	1.46
13	6	144	CYS	CA-C	-6.84	1.44	1.52
15	W	106	GLN	C-N	6.83	1.42	1.33
25	R	114	ASN	CA-CB	6.83	1.64	1.53
27	O	242	ILE	C-O	-6.83	1.16	1.24
24	Q	411	SER	N-CA	-6.83	1.38	1.46
12	5	219	TYR	CA-CB	6.83	1.65	1.53
30	K	51	LEU	CA-C	-6.83	1.43	1.52
10	j	116	SER	CA-C	-6.83	1.44	1.52
15	W	123	ASP	CA-CB	6.83	1.64	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	351	VAL	CA-C	-6.83	1.44	1.52
32	M	251	LEU	CA-CB	6.82	1.64	1.53
8	h	70	TYR	N-CA	-6.82	1.38	1.46
13	m	142	GLU	CA-C	-6.82	1.44	1.52
25	R	166	ALA	C-N	6.82	1.43	1.34
33	J	319	PRO	CA-C	-6.82	1.44	1.52
21	N	541	ALA	N-CA	-6.82	1.37	1.46
31	L	348	GLU	C-N	6.82	1.40	1.33
1	A	223	LEU	N-CA	-6.82	1.37	1.46
12	5	125	ALA	N-CA	-6.82	1.38	1.46
23	P	285	GLN	N-CA	-6.81	1.38	1.46
9	i	156	LEU	CA-C	-6.81	1.44	1.52
2	B	83	ARG	CZ-NH1	6.81	1.42	1.32
14	7	252	TRP	N-CA	-6.81	1.38	1.46
30	K	210	LEU	CA-C	-6.81	1.43	1.52
5	e	142	LEU	C-N	6.81	1.43	1.33
3	C	14	SER	CA-C	-6.81	1.45	1.52
31	L	279	PHE	CA-CB	6.81	1.62	1.53
6	f	131	GLY	C-N	6.81	1.42	1.33
9	2	55	VAL	CA-C	-6.81	1.44	1.52
20	Z	12	ILE	C-O	-6.81	1.16	1.24
20	Z	706	LYS	C-N	6.81	1.42	1.33
29	I	403	ALA	C-N	6.81	1.42	1.33
4	D	167	ASN	CA-CB	6.81	1.63	1.53
13	6	215	VAL	CA-C	-6.80	1.44	1.52
10	j	74	TYR	CA-CB	6.80	1.63	1.53
23	P	138	ARG	NE-CZ	6.80	1.40	1.33
20	Z	136	ARG	N-CA	-6.80	1.38	1.46
30	K	244	HIS	ND1-CE1	6.79	1.39	1.32
9	2	65	ARG	NE-CZ	6.79	1.40	1.33
20	Z	371	SER	CA-CB	6.79	1.65	1.53
1	a	76	SER	CA-C	-6.79	1.44	1.52
6	f	168	ALA	CA-C	-6.79	1.43	1.52
13	m	57	ASN	CA-CB	6.79	1.63	1.53
5	E	88	MET	CA-C	-6.79	1.44	1.52
6	F	181	LYS	C-N	6.79	1.42	1.33
12	5	79	LEU	CA-C	-6.78	1.44	1.52
7	g	209	GLU	CA-C	-6.78	1.43	1.52
11	k	133	HIS	ND1-CE1	6.78	1.39	1.32
1	A	22	GLU	CA-C	-6.78	1.44	1.52
29	I	94	LYS	C-N	6.78	1.43	1.33
21	N	283	ASP	C-N	-6.78	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	167	ALA	CA-CB	6.78	1.64	1.53
22	S	19	HIS	ND1-CE1	6.78	1.39	1.32
33	J	85	LEU	N-CA	-6.78	1.37	1.46
20	Z	155	ARG	CZ-NH2	6.78	1.42	1.33
20	Z	329	ILE	CA-C	-6.78	1.44	1.52
28	H	222	ARG	C-N	6.78	1.42	1.33
31	L	191	ARG	NE-CZ	6.78	1.40	1.33
26	U	156	HIS	N-CA	-6.77	1.37	1.46
32	M	99	SER	CA-C	-6.77	1.44	1.52
1	A	11	GLY	CA-C	-6.77	1.42	1.51
12	5	255	VAL	N-CA	-6.77	1.38	1.46
28	H	162	ARG	CZ-NH2	6.77	1.42	1.33
14	n	58	ASP	CA-CB	6.77	1.64	1.53
3	C	76	ALA	N-CA	6.77	1.53	1.45
1	a	153	SER	N-CA	6.77	1.54	1.46
6	f	11	VAL	CA-CB	-6.77	1.47	1.54
11	4	26	SER	CA-C	-6.77	1.44	1.52
28	H	362	ASP	CA-CB	6.76	1.63	1.53
32	M	220	MET	CA-C	-6.76	1.44	1.52
21	N	361	ASN	CA-CB	6.76	1.64	1.53
30	K	73	ARG	NE-CZ	6.76	1.40	1.33
2	B	238	LEU	CA-C	-6.76	1.43	1.52
16	V	111	HIS	ND1-CE1	6.76	1.39	1.32
4	D	49	ARG	CD-NE	6.76	1.55	1.46
10	3	187	VAL	CA-C	-6.76	1.44	1.52
9	i	72	CYS	CA-C	-6.76	1.44	1.52
11	k	183	ILE	N-CA	-6.76	1.38	1.46
15	W	112	ALA	CA-C	6.76	1.60	1.52
16	V	20	ARG	CD-NE	6.76	1.55	1.46
9	2	183	LEU	CA-C	-6.75	1.43	1.52
11	4	81	SER	CA-C	-6.75	1.44	1.52
11	4	191	GLN	CA-C	-6.75	1.44	1.52
3	C	184	MET	C-N	6.75	1.41	1.33
12	5	170	LEU	CA-C	-6.75	1.44	1.52
29	I	407	ARG	CD-NE	6.75	1.55	1.46
23	P	312	PRO	N-CD	-6.75	1.38	1.47
33	J	240	HIS	ND1-CE1	6.75	1.39	1.32
3	c	181	LYS	CA-C	-6.74	1.44	1.52
14	7	135	GLN	CA-CB	6.74	1.64	1.53
20	Z	424	SER	C-N	6.74	1.42	1.33
9	2	74	GLY	N-CA	-6.74	1.37	1.45
27	O	259	THR	C-O	-6.74	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	7	ILE	CA-C	-6.74	1.44	1.52
32	M	339	ARG	CD-NE	6.74	1.55	1.46
3	c	18	ARG	CZ-NH1	6.74	1.42	1.32
20	Z	247	GLN	C-N	6.74	1.42	1.33
20	Z	555	ALA	N-CA	-6.74	1.38	1.46
7	g	59	LEU	C-N	6.73	1.39	1.33
9	2	232	TYR	CA-C	-6.73	1.44	1.52
16	V	166	ASN	C-N	6.73	1.42	1.33
4	D	18	PHE	CA-C	-6.73	1.43	1.52
24	Q	65	TYR	C-N	6.73	1.42	1.33
26	U	3	LEU	CA-CB	6.73	1.63	1.53
28	H	448	ASP	N-CA	-6.73	1.38	1.46
11	k	93	ARG	CD-NE	6.72	1.55	1.46
24	Q	221	MET	C-O	-6.72	1.16	1.24
10	j	186	VAL	CA-C	6.72	1.60	1.52
20	Z	962	ARG	CD-NE	6.72	1.55	1.46
25	R	201	GLY	C-N	6.72	1.43	1.33
5	e	128	SER	CA-CB	6.72	1.64	1.53
21	N	795	GLU	C-O	-6.72	1.16	1.24
28	H	187	LEU	C-N	6.72	1.41	1.33
29	I	398	GLU	CA-CB	6.72	1.64	1.53
20	Z	962	ARG	NE-CZ	6.72	1.40	1.33
25	R	31	PHE	CA-C	-6.72	1.43	1.52
5	E	45	GLY	CA-C	-6.71	1.45	1.51
18	X	53	THR	C-N	6.71	1.42	1.33
30	K	211	LEU	C-N	6.71	1.41	1.33
33	J	316	PHE	CA-CB	6.71	1.62	1.52
28	H	398	VAL	CA-C	-6.71	1.47	1.52
31	L	304	THR	CA-C	-6.71	1.44	1.52
12	l	226	GLU	C-N	6.71	1.43	1.34
26	U	111	LYS	CA-C	-6.71	1.43	1.52
21	N	568	VAL	CA-C	-6.70	1.44	1.52
18	X	96	ARG	CA-C	-6.70	1.44	1.52
3	c	131	PHE	CA-C	-6.70	1.44	1.52
6	f	5	ASN	N-CA	-6.70	1.38	1.46
20	Z	75	ILE	N-CA	-6.70	1.39	1.46
14	n	229	SER	CA-C	-6.70	1.44	1.52
20	Z	152	GLU	N-CA	-6.70	1.38	1.46
10	3	118	LYS	C-N	-6.70	1.24	1.33
13	m	194	ASP	CA-C	-6.69	1.43	1.52
10	3	51	LEU	CA-C	-6.69	1.44	1.52
16	V	159	ILE	CA-C	-6.69	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	4	116	LEU	CA-C	-6.69	1.44	1.52
28	H	284	VAL	N-CA	-6.69	1.38	1.46
4	d	49	ARG	C-N	6.68	1.42	1.33
8	h	110	GLY	N-CA	-6.68	1.39	1.45
9	2	64	HIS	N-CA	-6.68	1.37	1.45
1	A	55	SER	CA-C	-6.68	1.44	1.52
16	V	122	ASP	N-CA	-6.68	1.37	1.46
24	Q	347	LEU	C-N	6.68	1.42	1.33
2	b	42	GLY	CA-C	6.68	1.59	1.51
30	K	128	ARG	NE-CZ	6.68	1.40	1.33
7	g	67	ILE	N-CA	-6.67	1.38	1.46
12	5	104	GLN	CA-C	-6.67	1.44	1.52
2	b	67	LEU	CA-C	-6.67	1.44	1.52
8	1	141	THR	N-CA	-6.67	1.38	1.46
32	M	387	ASN	CA-CB	6.67	1.64	1.53
14	n	76	ILE	CA-C	-6.67	1.46	1.52
22	S	174	ARG	NE-CZ	6.67	1.40	1.33
24	Q	297	ASP	N-CA	-6.67	1.37	1.46
10	3	12	VAL	N-CA	-6.67	1.38	1.46
22	S	287	SER	CA-CB	6.67	1.63	1.53
4	d	145	PRO	CA-C	-6.66	1.44	1.52
1	A	79	ILE	C-N	6.66	1.41	1.33
9	2	125	ALA	CA-C	-6.66	1.44	1.52
24	Q	75	ARG	CD-NE	6.66	1.55	1.46
6	f	107	ARG	CD-NE	6.66	1.55	1.46
4	d	212	ILE	N-CA	-6.66	1.38	1.46
5	e	204	LEU	CA-CB	6.66	1.63	1.53
10	j	11	ILE	CA-C	-6.66	1.44	1.52
20	Z	37	GLN	CA-C	-6.66	1.43	1.52
2	B	89	SER	CA-C	-6.65	1.44	1.52
14	7	226	ARG	NE-CZ	6.65	1.40	1.33
23	P	175	GLU	CA-C	-6.65	1.44	1.52
11	k	36	ARG	N-CA	-6.65	1.37	1.46
32	M	412	HIS	CG-ND1	6.65	1.45	1.38
3	C	34	THR	CA-C	-6.65	1.44	1.52
26	U	39	GLY	N-CA	6.65	1.51	1.45
27	O	274	ILE	CA-CB	-6.65	1.46	1.54
25	R	331	ARG	CD-NE	6.65	1.55	1.46
1	a	217	GLU	C-N	6.65	1.43	1.33
13	6	73	VAL	CA-C	-6.64	1.44	1.52
22	S	185	PHE	C-O	-6.64	1.16	1.24
28	H	410	LEU	CA-C	6.64	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	320	ARG	CA-C	-6.64	1.44	1.52
2	B	228	PRO	N-CA	-6.64	1.40	1.47
8	h	164	ILE	C-N	6.63	1.42	1.33
20	Z	861	THR	CA-C	-6.63	1.43	1.52
27	O	58	ARG	NE-CZ	6.63	1.40	1.33
31	L	358	LEU	N-CA	-6.63	1.38	1.46
10	j	139	SER	CA-C	-6.63	1.44	1.52
10	j	23	ILE	CA-CB	-6.63	1.46	1.54
4	D	132	SER	CA-C	-6.63	1.44	1.52
28	H	209	SER	CA-C	6.63	1.61	1.52
1	a	244	ARG	CD-NE	6.62	1.55	1.46
7	G	121	GLN	CA-C	6.62	1.61	1.52
11	4	70	ARG	NE-CZ	6.62	1.40	1.33
25	R	176	ARG	CZ-NH1	6.62	1.42	1.32
21	N	713	VAL	CA-C	-6.62	1.44	1.52
4	d	150	THR	C-N	6.62	1.41	1.32
13	m	11	ASN	C-N	6.62	1.39	1.33
14	n	181	ALA	CA-C	-6.62	1.44	1.52
9	i	150	VAL	N-CA	-6.62	1.38	1.46
3	c	182	ASP	C-N	6.62	1.42	1.33
9	i	217	ARG	CA-CB	6.62	1.63	1.53
11	k	23	ARG	CD-NE	6.62	1.55	1.46
20	Z	471	LEU	C-N	6.61	1.41	1.33
8	h	23	LEU	N-CA	-6.61	1.38	1.46
4	d	251	LYS	CA-C	6.61	1.61	1.52
8	h	197	PHE	N-CA	-6.61	1.38	1.46
21	N	287	LEU	N-CA	-6.61	1.38	1.46
24	Q	226	HIS	CG-CD2	6.61	1.43	1.35
11	4	9	VAL	N-CA	-6.60	1.38	1.46
16	V	56	GLU	N-CA	-6.60	1.37	1.46
33	J	92	GLY	N-CA	-6.60	1.38	1.45
25	R	313	ALA	CA-CB	6.60	1.63	1.53
33	J	247	MET	CA-CB	6.60	1.65	1.53
7	G	28	VAL	CA-CB	-6.60	1.46	1.54
10	3	118	LYS	CA-C	-6.60	1.43	1.52
19	Y	47	GLU	N-CA	-6.60	1.37	1.46
20	Z	516	THR	CA-C	-6.60	1.44	1.52
27	O	220	SER	CA-C	-6.60	1.44	1.52
29	I	277	SER	N-CA	6.60	1.54	1.45
26	U	203	LYS	CA-C	-6.60	1.44	1.52
9	2	143	HIS	C-N	6.59	1.42	1.33
1	a	120	ARG	CD-NE	6.59	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	170	HIS	C-N	6.59	1.42	1.33
10	j	127	ILE	N-CA	-6.59	1.37	1.46
8	h	43	LEU	CA-C	-6.59	1.44	1.52
29	I	98	GLU	C-N	6.59	1.42	1.33
30	K	313	LYS	C-N	6.59	1.42	1.33
9	2	235	PRO	N-CD	-6.58	1.38	1.47
3	C	36	ILE	N-CA	-6.58	1.38	1.46
32	M	33	ARG	CZ-NH1	6.58	1.42	1.32
32	M	409	SER	CA-C	6.58	1.60	1.52
12	l	124	ALA	N-CA	-6.58	1.38	1.46
9	i	70	ILE	CA-CB	-6.58	1.45	1.54
9	i	85	THR	C-N	6.58	1.42	1.33
14	n	180	GLY	N-CA	-6.58	1.36	1.45
7	G	91	ARG	CZ-NH2	6.58	1.42	1.33
18	X	111	LEU	CA-C	-6.58	1.44	1.52
20	Z	430	LEU	N-CA	-6.58	1.38	1.46
7	g	75	GLY	CA-C	-6.58	1.44	1.52
24	Q	192	ALA	CA-C	-6.58	1.44	1.52
1	a	86	PRO	CA-CB	6.58	1.62	1.53
33	J	373	ARG	NE-CZ	6.58	1.40	1.33
1	A	71	TYR	N-CA	-6.57	1.36	1.46
7	g	182	HIS	C-N	6.57	1.40	1.33
9	i	58	LYS	CA-C	-6.57	1.44	1.52
18	X	25	THR	CA-C	6.57	1.60	1.52
8	1	49	LYS	C-N	6.57	1.42	1.33
7	G	20	ARG	NE-CZ	6.57	1.40	1.33
18	X	61	LEU	CA-C	-6.57	1.44	1.52
22	S	95	PHE	CA-CB	6.57	1.63	1.53
5	e	139	GLY	N-CA	-6.57	1.35	1.45
1	A	24	ARG	C-N	6.57	1.42	1.33
21	N	179	THR	CA-C	-6.57	1.44	1.52
1	a	185	HIS	CG-CD2	-6.56	1.28	1.35
25	R	243	LEU	C-N	6.56	1.42	1.33
6	f	138	ASP	CA-CB	6.56	1.64	1.53
11	4	190	ARG	NE-CZ	6.56	1.40	1.33
12	l	78	THR	CA-CB	-6.56	1.42	1.53
12	5	188	TYR	N-CA	-6.56	1.38	1.46
20	Z	826	ARG	CZ-NH2	6.56	1.42	1.33
16	V	168	LEU	N-CA	-6.56	1.38	1.46
33	J	203	ALA	C-N	6.56	1.42	1.33
4	d	81	ASP	CA-C	-6.55	1.44	1.52
4	D	100	LEU	CA-C	-6.55	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	S	473	ASP	CA-C	6.55	1.61	1.52
24	Q	403	PRO	CA-CB	-6.55	1.45	1.53
29	I	359	LYS	CA-C	-6.55	1.44	1.52
7	G	119	TYR	CA-C	-6.55	1.44	1.52
28	H	174	VAL	C-N	6.55	1.40	1.33
1	A	158	ASP	C-N	6.55	1.40	1.33
20	Z	221	VAL	CA-C	6.55	1.61	1.52
30	K	350	ARG	NE-CZ	6.55	1.40	1.33
9	i	56	ALA	N-CA	-6.55	1.38	1.46
5	e	219	LEU	CA-C	-6.54	1.44	1.52
6	F	127	PRO	CA-C	-6.54	1.44	1.52
7	G	97	ALA	C-N	6.54	1.42	1.33
2	B	108	LYS	CA-C	-6.54	1.44	1.52
6	F	107	ARG	NE-CZ	6.54	1.40	1.33
16	V	71	MET	C-N	6.54	1.42	1.33
17	T	159	LYS	CA-C	-6.54	1.44	1.52
12	5	271	LEU	C-N	6.54	1.42	1.33
29	I	408	ARG	CD-NE	6.54	1.55	1.46
30	K	259	ARG	NE-CZ	6.54	1.40	1.33
12	l	112	ILE	CA-C	6.54	1.61	1.52
13	6	54	CYS	N-CA	-6.54	1.36	1.45
13	6	111	PHE	CA-C	-6.54	1.44	1.52
3	c	23	GLU	CA-C	-6.53	1.44	1.52
4	D	137	GLY	N-CA	-6.53	1.38	1.45
4	d	203	VAL	CA-C	-6.53	1.43	1.52
20	Z	959	HIS	CD2-NE2	-6.53	1.30	1.37
7	G	55	THR	C-N	6.53	1.42	1.33
28	H	260	ALA	C-N	6.53	1.42	1.33
4	d	42	VAL	C-O	-6.53	1.17	1.24
24	Q	222	SER	N-CA	6.53	1.54	1.46
7	G	33	ASN	N-CA	6.53	1.54	1.46
17	T	140	SER	C-N	6.53	1.42	1.33
29	I	354	ASP	C-N	6.53	1.42	1.33
6	f	232	LYS	CA-C	-6.52	1.44	1.52
2	B	213	ILE	N-CA	-6.52	1.39	1.46
33	J	331	HIS	ND1-CE1	6.52	1.39	1.32
5	E	132	ARG	CZ-NH1	6.52	1.41	1.32
2	b	188	ALA	CA-C	-6.52	1.44	1.52
9	i	225	ARG	CA-C	-6.52	1.44	1.52
32	M	90	GLU	CA-C	-6.52	1.45	1.52
12	5	229	LEU	CA-CB	6.52	1.63	1.53
29	I	279	VAL	N-CA	-6.51	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	65	VAL	CA-C	-6.51	1.44	1.52
21	N	74	GLU	CA-CB	6.51	1.61	1.52
4	D	242	GLU	C-N	6.51	1.42	1.33
33	J	24	GLU	CA-C	-6.51	1.44	1.52
4	D	16	HIS	CD2-NE2	6.51	1.45	1.37
21	N	749	LEU	CA-C	-6.51	1.44	1.53
10	j	124	PHE	C-N	6.50	1.42	1.33
30	K	374	ARG	CZ-NH2	6.50	1.42	1.33
14	n	114	ALA	N-CA	-6.50	1.37	1.46
6	F	182	ILE	C-N	6.50	1.42	1.33
20	Z	276	ASN	CA-CB	6.50	1.63	1.53
26	U	6	GLU	C-N	6.50	1.42	1.33
4	d	217	PRO	CA-C	-6.50	1.44	1.52
23	P	350	LEU	CA-CB	6.50	1.64	1.53
6	F	201	LEU	CA-C	-6.50	1.44	1.52
6	f	211	LEU	CA-CB	6.49	1.62	1.53
21	N	142	GLU	N-CA	6.49	1.54	1.46
27	O	288	ARG	CD-NE	6.49	1.55	1.46
12	5	282	PHE	CA-C	-6.49	1.45	1.53
27	O	12	SER	CA-C	6.49	1.61	1.52
22	S	58	LYS	CA-C	-6.49	1.44	1.52
31	L	71	ASP	CA-C	-6.49	1.44	1.52
1	a	209	HIS	ND1-CE1	6.49	1.39	1.32
20	Z	623	ARG	NE-CZ	6.49	1.40	1.33
22	S	292	TYR	C-N	6.49	1.41	1.33
13	6	67	ALA	C-N	6.48	1.42	1.33
16	V	157	ARG	C-N	6.48	1.42	1.33
26	U	196	SER	C-N	6.48	1.42	1.33
14	n	57	ALA	N-CA	-6.48	1.37	1.46
24	Q	184	VAL	N-CA	-6.48	1.38	1.46
5	e	52	LYS	CA-C	-6.48	1.44	1.52
18	X	11	ARG	CD-NE	6.48	1.55	1.46
25	R	175	ALA	N-CA	-6.48	1.38	1.46
26	U	114	THR	CA-C	-6.48	1.44	1.52
29	I	230	THR	CA-C	6.48	1.61	1.52
3	c	18	ARG	NE-CZ	6.48	1.40	1.33
9	i	225	ARG	CD-NE	6.48	1.55	1.46
2	B	213	ILE	CA-C	-6.48	1.45	1.52
4	D	52	LEU	CA-CB	6.48	1.64	1.53
12	5	241	HIS	N-CA	-6.48	1.38	1.46
10	j	201	LYS	N-CA	-6.48	1.37	1.46
32	M	123	SER	C-N	6.48	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	214	VAL	N-CA	-6.47	1.38	1.46
15	W	179	ARG	CD-NE	6.47	1.55	1.46
16	V	65	VAL	C-N	6.47	1.42	1.33
20	Z	957	LEU	CA-C	-6.47	1.44	1.52
22	S	62	SER	C-N	6.47	1.42	1.33
17	T	229	VAL	CA-CB	-6.47	1.47	1.54
8	1	152	ARG	NE-CZ	6.47	1.40	1.33
17	T	236	ASN	CA-CB	6.47	1.64	1.53
21	N	521	LEU	CA-C	-6.47	1.44	1.52
30	K	373	ILE	N-CA	6.47	1.54	1.46
20	Z	331	GLY	N-CA	-6.47	1.37	1.45
11	4	6	GLY	CA-C	-6.47	1.42	1.51
33	J	17	SER	C-N	6.47	1.41	1.33
5	e	166	ARG	CZ-NH1	6.46	1.41	1.32
14	7	98	ARG	CA-C	-6.46	1.44	1.52
17	T	37	ASN	C-N	6.46	1.42	1.33
20	Z	945	ILE	N-CA	-6.46	1.38	1.46
21	N	37	SER	CA-C	-6.46	1.44	1.52
21	N	122	GLN	CA-C	6.46	1.59	1.52
24	Q	359	ILE	CA-CB	-6.46	1.46	1.54
21	N	668	THR	N-CA	-6.46	1.38	1.46
9	i	242	LEU	C-N	6.46	1.41	1.33
25	R	226	GLU	CA-C	-6.46	1.44	1.52
30	K	290	ARG	CZ-NH1	6.46	1.41	1.32
21	N	162	ARG	CD-NE	6.46	1.55	1.46
1	a	173	PRO	CA-C	-6.46	1.42	1.52
5	E	95	ALA	CA-CB	6.46	1.63	1.53
3	c	219	GLY	CA-C	-6.46	1.44	1.52
9	i	55	VAL	N-CA	-6.46	1.38	1.46
11	k	87	GLU	N-CA	-6.46	1.38	1.46
4	D	124	GLY	CA-C	-6.46	1.43	1.51
10	3	72	ASN	CA-C	-6.46	1.44	1.52
19	Y	86	ARG	CD-NE	6.46	1.55	1.46
20	Z	391	ASN	CA-CB	6.46	1.61	1.53
25	R	29	LYS	CA-C	-6.46	1.44	1.52
5	e	66	LYS	C-O	-6.46	1.15	1.24
12	5	188	TYR	CA-CB	6.45	1.63	1.53
16	V	157	ARG	NE-CZ	6.45	1.40	1.33
24	Q	265	MET	CA-C	-6.45	1.44	1.52
20	Z	914	LEU	CA-C	-6.45	1.44	1.52
30	K	197	LEU	N-CA	-6.45	1.38	1.46
7	G	96	ALA	CA-C	-6.45	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	H	361	LEU	CA-C	-6.45	1.44	1.52
9	i	95	HIS	CB-CG	6.45	1.59	1.50
21	N	751	LEU	CB-CG	6.45	1.66	1.53
26	U	51	SER	CA-CB	6.44	1.64	1.53
30	K	125	THR	CA-C	-6.44	1.45	1.53
10	j	199	TYR	CA-CB	6.44	1.62	1.53
11	k	85	ARG	C-N	6.44	1.42	1.33
7	G	73	HIS	ND1-CE1	6.44	1.39	1.32
33	J	42	ARG	NE-CZ	6.44	1.40	1.33
13	m	193	ARG	CD-NE	6.44	1.55	1.46
28	H	123	GLY	CA-C	-6.44	1.42	1.51
32	M	33	ARG	CD-NE	6.44	1.55	1.46
4	d	181	ARG	CA-C	-6.44	1.44	1.52
3	C	65	LYS	C-O	-6.43	1.17	1.24
7	g	46	VAL	N-CA	-6.43	1.38	1.46
1	A	141	LEU	N-CA	-6.43	1.38	1.46
14	7	50	ASP	C-O	-6.43	1.16	1.24
15	W	89	THR	N-CA	-6.43	1.38	1.46
21	N	748	PHE	CA-C	-6.43	1.44	1.52
2	b	69	PRO	CA-CB	-6.43	1.44	1.53
14	n	67	LEU	C-N	6.43	1.43	1.33
13	6	179	PRO	CA-C	6.43	1.60	1.52
20	Z	214	HIS	ND1-CE1	6.43	1.39	1.32
27	O	311	GLU	CA-CB	6.43	1.63	1.53
20	Z	867	PHE	CA-C	6.43	1.61	1.52
22	S	271	ARG	NE-CZ	6.43	1.40	1.33
9	i	57	ASP	CA-C	-6.43	1.44	1.52
12	5	87	ILE	N-CA	-6.43	1.38	1.46
1	A	9	ALA	CA-C	-6.42	1.45	1.52
2	B	210	GLU	CA-C	-6.42	1.45	1.52
5	E	15	PHE	N-CA	-6.42	1.37	1.45
6	F	3	ARG	CD-NE	6.42	1.55	1.46
2	B	236	ARG	C-N	6.42	1.42	1.33
28	H	338	THR	CA-C	-6.42	1.44	1.52
30	K	182	GLN	CA-CB	6.42	1.63	1.53
32	M	114	GLY	CA-C	-6.42	1.42	1.51
4	D	6	ARG	C-N	6.42	1.41	1.33
7	G	93	ARG	NE-CZ	6.42	1.40	1.33
10	3	43	ILE	CA-C	-6.42	1.44	1.52
9	i	95	HIS	ND1-CE1	6.42	1.39	1.32
23	P	333	ALA	C-N	6.42	1.43	1.33
30	K	236	ARG	CA-C	-6.42	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	329	ARG	C-N	6.42	1.39	1.33
3	C	59	GLN	N-CA	6.42	1.52	1.47
1	A	120	ARG	NE-CZ	6.42	1.40	1.33
5	E	47	VAL	CA-C	-6.42	1.45	1.52
21	N	547	LEU	CA-C	-6.42	1.44	1.52
4	D	243	GLN	CA-C	-6.41	1.44	1.52
20	Z	246	CYS	N-CA	-6.41	1.37	1.46
26	U	41	ALA	C-N	6.41	1.42	1.33
4	d	141	ARG	CD-NE	6.41	1.55	1.46
1	A	95	LEU	N-CA	-6.41	1.38	1.46
21	N	734	VAL	N-CA	-6.41	1.38	1.46
3	C	144	TYR	CA-C	-6.41	1.45	1.52
11	4	138	PHE	CA-C	-6.41	1.44	1.52
21	N	139	ARG	CD-NE	6.41	1.55	1.46
2	b	234	ARG	CA-C	-6.40	1.44	1.52
12	5	287	GLY	N-CA	-6.40	1.35	1.45
25	R	198	ILE	CA-C	-6.40	1.42	1.52
15	W	124	GLU	N-CA	-6.40	1.38	1.46
20	Z	897	HIS	CG-ND1	6.40	1.45	1.38
22	S	70	ASN	CA-CB	6.40	1.63	1.53
11	4	128	LEU	CA-C	-6.40	1.46	1.52
31	L	65	LEU	N-CA	-6.40	1.38	1.46
5	e	35	SER	N-CA	-6.40	1.37	1.46
11	4	47	ALA	CA-C	-6.40	1.44	1.52
32	M	141	LYS	CA-C	-6.40	1.44	1.52
6	F	18	ARG	NE-CZ	6.40	1.40	1.33
21	N	288	ASN	CA-C	-6.40	1.44	1.52
23	P	390	TYR	N-CA	-6.39	1.38	1.46
4	d	241	GLN	C-N	6.39	1.42	1.33
9	i	172	LYS	CA-C	-6.39	1.44	1.52
9	2	230	LYS	N-CA	-6.39	1.37	1.45
3	c	170	SER	CA-C	-6.39	1.44	1.52
13	6	20	ILE	CA-CB	-6.39	1.44	1.54
7	G	56	SER	CA-C	-6.38	1.44	1.52
10	3	34	LEU	C-N	6.38	1.40	1.33
29	I	377	LEU	C-N	6.38	1.42	1.33
1	A	233	PHE	CA-C	-6.38	1.44	1.52
5	e	143	LEU	CA-C	-6.38	1.44	1.52
13	6	51	VAL	N-CA	-6.38	1.38	1.46
21	N	771	PHE	CA-C	-6.38	1.44	1.52
4	d	33	ALA	C-N	6.38	1.42	1.33
8	1	163	PHE	CA-CB	6.38	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	322	ASP	N-CA	-6.38	1.38	1.46
8	h	149	LYS	CA-CB	6.38	1.63	1.53
3	C	112	VAL	CA-C	-6.38	1.44	1.52
7	G	15	PHE	N-CA	-6.38	1.38	1.46
1	a	69	VAL	C-N	6.38	1.41	1.33
21	N	312	GLY	CA-C	-6.38	1.42	1.51
21	N	862	SER	C-N	6.37	1.41	1.33
6	f	115	LYS	C-N	6.37	1.42	1.33
6	F	14	SER	C-N	-6.37	1.25	1.34
21	N	219	ASN	CA-C	-6.37	1.45	1.52
1	a	41	ASN	CA-C	-6.37	1.44	1.52
6	F	28	ALA	CA-CB	6.37	1.63	1.53
8	1	28	ARG	CZ-NH1	6.37	1.41	1.32
21	N	419	THR	N-CA	6.36	1.54	1.46
24	Q	204	ALA	C-N	6.36	1.43	1.33
28	H	322	GLY	C-O	6.36	1.31	1.23
20	Z	151	HIS	ND1-CE1	6.36	1.39	1.32
24	Q	224	ILE	C-N	6.36	1.42	1.33
22	S	398	THR	CA-C	-6.36	1.44	1.52
28	H	77	ALA	N-CA	-6.36	1.39	1.46
30	K	312	VAL	CA-CB	-6.36	1.46	1.53
5	e	120	ALA	N-CA	-6.36	1.38	1.46
6	F	136	GLY	CA-C	6.36	1.58	1.51
7	G	71	ASP	CA-C	-6.36	1.44	1.52
21	N	616	HIS	CA-C	-6.36	1.44	1.52
26	U	27	THR	CA-CB	6.36	1.62	1.53
30	K	204	ASP	C-N	-6.35	1.25	1.33
9	i	41	VAL	CA-C	6.35	1.60	1.52
1	A	84	ASN	CA-C	-6.35	1.44	1.52
16	V	125	THR	CA-C	6.35	1.61	1.52
21	N	522	ALA	CA-C	-6.35	1.44	1.52
26	U	47	ARG	NE-CZ	6.35	1.40	1.33
24	Q	130	ARG	NE-CZ	6.34	1.40	1.33
33	J	63	ARG	NE-CZ	6.34	1.40	1.33
27	O	261	GLY	CA-C	-6.34	1.42	1.51
21	N	786	ARG	CA-C	-6.34	1.45	1.52
29	I	117	HIS	ND1-CE1	6.34	1.38	1.32
9	i	236	ARG	CZ-NH2	6.34	1.41	1.33
4	D	98	LEU	N-CA	-6.34	1.38	1.46
22	S	169	CYS	C-N	6.34	1.42	1.33
13	m	21	LEU	C-N	6.33	1.40	1.33
15	W	19	GLY	CA-C	-6.33	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	186	ILE	CA-C	-6.33	1.44	1.52
24	Q	311	LEU	CA-CB	6.33	1.63	1.53
25	R	382	ASP	CA-CB	6.33	1.60	1.53
31	L	346	LYS	N-CA	-6.33	1.38	1.46
33	J	231	ARG	CD-NE	6.33	1.55	1.46
8	1	121	THR	CA-C	-6.33	1.44	1.52
14	7	144	TRP	N-CA	-6.33	1.38	1.46
18	X	66	LEU	CA-C	-6.33	1.45	1.52
9	i	112	LEU	CA-C	-6.33	1.44	1.52
24	Q	396	TRP	CA-C	-6.33	1.44	1.52
10	j	43	ILE	CA-C	-6.33	1.44	1.52
8	1	99	LYS	C-N	6.33	1.41	1.33
20	Z	928	ARG	CZ-NH2	6.33	1.41	1.33
25	R	293	THR	C-N	6.33	1.41	1.33
27	O	284	GLU	C-N	6.33	1.42	1.33
2	b	69	PRO	N-CA	-6.33	1.39	1.47
21	N	902	VAL	CA-C	-6.33	1.45	1.52
28	H	199	THR	C-N	6.32	1.41	1.33
8	1	200	ASP	CA-C	-6.32	1.44	1.52
14	7	194	ARG	CA-CB	-6.32	1.43	1.53
28	H	176	VAL	N-CA	-6.32	1.38	1.46
6	F	158	GLY	C-N	6.32	1.41	1.33
18	X	97	TYR	CA-C	-6.32	1.44	1.52
2	B	203	GLU	N-CA	-6.32	1.40	1.46
7	G	99	PHE	C-N	6.32	1.42	1.33
14	7	74	ARG	NE-CZ	6.32	1.40	1.33
21	N	521	LEU	C-N	6.31	1.42	1.33
27	O	10	ILE	CA-CB	-6.31	1.46	1.54
30	K	223	VAL	CA-C	-6.31	1.44	1.52
2	B	13	SER	CA-CB	6.31	1.61	1.53
16	V	281	SER	C-O	-6.31	1.16	1.24
9	i	157	GLY	CA-C	-6.31	1.45	1.52
4	D	58	ARG	NE-CZ	6.31	1.40	1.33
30	K	396	ARG	CA-CB	6.31	1.63	1.53
9	i	143	HIS	ND1-CE1	6.31	1.38	1.32
11	k	21	VAL	CA-C	-6.31	1.45	1.52
6	F	154	THR	C-O	-6.31	1.16	1.23
7	G	167	LYS	CA-C	-6.31	1.44	1.52
20	Z	138	ARG	CZ-NH1	6.31	1.41	1.32
1	a	100	GLU	N-CA	-6.30	1.38	1.46
20	Z	249	MET	C-N	6.30	1.41	1.33
21	N	279	ALA	CA-C	-6.30	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	102	ALA	N-CA	-6.30	1.38	1.46
15	W	82	GLU	CA-C	-6.30	1.44	1.52
6	f	120	THR	CA-C	-6.30	1.44	1.52
26	U	257	ILE	CA-C	-6.30	1.44	1.52
9	i	116	LEU	CA-C	-6.30	1.44	1.52
3	C	153	PRO	C-N	6.30	1.42	1.33
6	F	60	GLN	N-CA	-6.30	1.38	1.46
15	W	43	SER	CA-CB	6.30	1.63	1.53
21	N	326	SER	CA-CB	6.30	1.63	1.53
11	4	71	GLU	C-N	6.29	1.41	1.33
32	M	392	LYS	CA-C	-6.29	1.44	1.52
33	J	290	ILE	CA-C	-6.29	1.44	1.52
1	A	235	THR	CA-C	-6.29	1.45	1.52
14	n	221	ASP	N-CA	-6.29	1.38	1.46
2	B	155	SER	CA-C	-6.29	1.45	1.52
9	2	163	ALA	C-N	6.29	1.42	1.33
16	V	300	VAL	CA-C	-6.29	1.45	1.52
26	U	59	ASP	CA-CB	6.29	1.65	1.53
29	I	54	ARG	NE-CZ	6.29	1.40	1.33
22	S	361	THR	C-N	6.29	1.42	1.33
31	L	384	ASP	N-CA	6.29	1.54	1.46
9	i	195	ASP	CA-C	-6.29	1.45	1.52
17	T	175	ASP	N-CA	-6.29	1.38	1.46
9	i	64	HIS	CA-C	-6.28	1.45	1.52
13	m	177	LYS	CA-CB	6.28	1.63	1.53
5	E	91	HIS	N-CA	-6.28	1.39	1.46
20	Z	586	GLU	C-O	-6.28	1.16	1.24
7	g	135	SER	CA-C	-6.28	1.45	1.52
10	3	166	THR	CA-C	-6.28	1.45	1.52
24	Q	84	TYR	CA-C	-6.28	1.44	1.52
31	L	254	LYS	CA-C	-6.28	1.44	1.52
5	e	86	ARG	C-N	6.28	1.42	1.33
6	f	19	LEU	CA-C	-6.28	1.45	1.52
13	m	200	THR	CA-C	-6.28	1.44	1.52
11	4	133	HIS	CA-C	-6.28	1.45	1.52
21	N	398	ARG	CA-C	6.28	1.61	1.52
23	P	59	LEU	C-O	-6.28	1.16	1.24
25	R	101	GLU	C-N	6.28	1.41	1.33
8	h	120	TYR	CA-C	-6.28	1.44	1.52
9	i	156	LEU	CA-CB	6.28	1.64	1.53
9	i	249	ILE	CA-CB	-6.28	1.46	1.54
22	S	133	GLU	N-CA	-6.28	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	43	ARG	CD-NE	6.27	1.55	1.46
32	M	242	THR	N-CA	-6.27	1.38	1.46
12	l	118	GLY	C-N	6.27	1.42	1.33
5	E	197	GLU	N-CA	-6.27	1.39	1.46
21	N	197	VAL	CA-CB	-6.27	1.46	1.54
1	A	108	TYR	C-O	-6.27	1.15	1.24
21	N	813	ARG	CD-NE	6.27	1.55	1.46
22	S	324	MET	C-N	6.27	1.41	1.33
23	P	359	ARG	NE-CZ	6.27	1.40	1.33
25	R	407	GLY	C-N	6.26	1.42	1.33
30	K	236	ARG	CZ-NH2	6.26	1.41	1.33
31	L	99	GLN	N-CA	-6.26	1.37	1.46
31	L	175	GLN	C-N	6.26	1.42	1.33
20	Z	943	LYS	CA-C	-6.26	1.45	1.52
30	K	179	MET	C-O	6.26	1.31	1.24
10	j	155	GLU	CA-C	-6.26	1.45	1.52
18	X	51	ARG	CZ-NH1	6.26	1.41	1.32
20	Z	747	ALA	CA-C	-6.26	1.44	1.52
30	K	415	VAL	C-N	6.26	1.42	1.33
27	O	122	HIS	CA-CB	6.26	1.64	1.53
6	f	157	TYR	N-CA	6.26	1.54	1.46
5	e	137	PRO	CA-CB	6.26	1.61	1.53
14	7	261	TYR	C-N	6.26	1.42	1.33
24	Q	314	PHE	CA-CB	6.26	1.63	1.53
21	N	196	THR	C-N	6.25	1.40	1.33
24	Q	329	GLU	CA-C	-6.25	1.44	1.52
2	b	24	ALA	N-CA	-6.25	1.38	1.46
3	c	59	GLN	N-CA	-6.25	1.38	1.46
3	c	60	ASP	CA-C	-6.25	1.44	1.52
23	P	296	GLN	C-N	6.25	1.42	1.33
29	I	260	GLY	C-N	6.25	1.41	1.33
17	T	138	ASP	CA-C	6.25	1.60	1.53
20	Z	214	HIS	CE1-NE2	-6.25	1.26	1.32
25	R	417	TYR	CA-C	-6.25	1.44	1.52
30	K	402	ILE	CA-C	6.25	1.60	1.52
31	L	331	ASP	CA-C	-6.25	1.44	1.52
6	F	226	ASP	N-CA	-6.25	1.38	1.45
20	Z	475	GLN	N-CA	-6.25	1.38	1.46
27	O	91	ASP	CA-C	-6.25	1.45	1.52
3	c	175	LEU	N-CA	-6.25	1.38	1.46
8	h	71	HIS	ND1-CE1	6.25	1.38	1.32
8	1	65	ALA	CA-C	-6.25	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	334	ASP	CA-C	-6.25	1.46	1.53
27	O	330	ARG	CD-NE	6.25	1.54	1.46
29	I	355	LEU	CA-C	-6.24	1.44	1.52
5	E	182	GLU	CA-CB	6.24	1.63	1.53
15	W	140	ASP	CA-C	-6.24	1.45	1.52
1	a	36	ASN	CA-C	-6.24	1.44	1.52
16	V	219	GLU	CA-CB	6.24	1.64	1.53
23	P	367	GLU	C-N	6.24	1.42	1.33
5	E	39	GLY	CA-C	-6.24	1.46	1.51
7	G	157	TYR	CA-C	-6.24	1.44	1.52
10	3	114	SER	CA-C	-6.24	1.45	1.52
23	P	213	TYR	CA-C	-6.24	1.45	1.53
23	P	378	THR	CA-C	-6.24	1.44	1.52
25	R	372	ILE	C-N	6.24	1.41	1.34
27	O	60	ARG	CZ-NH2	6.24	1.41	1.33
30	K	398	ASN	CA-C	-6.24	1.45	1.53
2	B	7	PHE	CA-CB	6.23	1.61	1.53
29	I	97	GLU	CA-CB	6.23	1.63	1.53
4	d	15	GLY	C-N	6.23	1.41	1.33
7	g	82	ILE	C-N	6.23	1.41	1.34
10	3	62	THR	N-CA	-6.23	1.38	1.46
20	Z	573	LEU	CA-CB	6.23	1.63	1.53
24	Q	30	LEU	C-N	6.23	1.41	1.33
7	g	16	SER	CA-CB	6.23	1.62	1.53
12	l	82	ARG	NE-CZ	6.23	1.40	1.33
24	Q	98	LYS	C-N	6.23	1.42	1.33
21	N	149	GLU	CA-C	-6.23	1.45	1.52
16	V	126	GLN	CA-C	-6.23	1.44	1.52
27	O	383	LYS	N-CA	-6.23	1.38	1.46
8	h	87	ALA	CA-CB	6.22	1.63	1.53
6	F	154	THR	CA-C	-6.22	1.45	1.52
27	O	356	ARG	CD-NE	6.22	1.54	1.46
32	M	338	LEU	CA-C	-6.22	1.44	1.52
8	h	106	ILE	CA-CB	-6.22	1.46	1.54
12	l	226	GLU	CA-CB	6.22	1.63	1.53
15	W	145	GLY	CA-C	-6.22	1.43	1.51
21	N	463	TYR	CA-CB	6.22	1.62	1.53
32	M	283	LEU	CA-CB	6.22	1.61	1.53
32	M	294	GLU	N-CA	-6.22	1.38	1.46
6	f	131	GLY	CA-C	6.22	1.56	1.52
14	7	220	ARG	NE-CZ	6.22	1.39	1.33
20	Z	34	GLU	C-N	6.22	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	33	GLY	CA-C	-6.22	1.45	1.51
27	O	62	TYR	CA-C	-6.22	1.44	1.52
29	I	319	ARG	CD-NE	6.22	1.54	1.46
21	N	686	ILE	C-N	6.22	1.41	1.33
1	A	13	ASP	N-CA	-6.22	1.38	1.46
9	i	104	ARG	N-CA	-6.21	1.37	1.45
9	i	122	HIS	ND1-CE1	6.21	1.38	1.32
1	A	222	ASP	N-CA	-6.21	1.38	1.46
22	S	105	PRO	C-N	6.21	1.41	1.33
23	P	386	GLN	CA-C	-6.21	1.44	1.52
29	I	198	VAL	N-CA	6.21	1.54	1.46
13	6	155	MET	C-N	6.21	1.40	1.34
21	N	291	SER	C-N	6.21	1.42	1.33
4	d	119	ARG	N-CA	-6.21	1.38	1.46
4	D	172	ARG	CA-C	-6.21	1.45	1.52
23	P	401	ASN	CA-C	-6.21	1.45	1.52
20	Z	600	GLU	C-N	-6.21	1.26	1.33
29	I	236	VAL	CA-C	-6.21	1.44	1.52
1	a	67	THR	N-CA	-6.21	1.37	1.46
28	H	440	GLU	N-CA	-6.21	1.38	1.46
21	N	45	ASP	C-N	6.20	1.41	1.33
15	W	101	ARG	NE-CZ	6.20	1.39	1.33
28	H	408	SER	CA-CB	6.20	1.63	1.53
14	n	45	ILE	CA-C	-6.20	1.45	1.52
14	7	158	GLN	N-CA	-6.20	1.38	1.46
21	N	875	LEU	CA-C	-6.20	1.46	1.53
4	d	200	LEU	N-CA	-6.20	1.38	1.46
12	5	120	MET	CA-C	-6.20	1.45	1.52
31	L	165	PRO	N-CD	-6.20	1.39	1.47
32	M	290	ARG	CD-NE	6.20	1.54	1.46
33	J	182	PRO	N-CA	-6.20	1.39	1.47
11	k	108	ASP	N-CA	-6.20	1.38	1.46
1	A	87	ILE	C-N	-6.20	1.25	1.34
18	X	85	ARG	C-N	6.20	1.40	1.33
1	a	15	HIS	ND1-CE1	6.20	1.38	1.32
28	H	178	ARG	CA-C	-6.20	1.43	1.52
33	J	235	VAL	CA-CB	6.20	1.62	1.54
3	C	197	LEU	CA-C	-6.19	1.44	1.52
30	K	194	GLN	CA-C	-6.19	1.46	1.53
12	5	77	THR	CA-C	-6.19	1.45	1.52
20	Z	494	GLY	N-CA	-6.19	1.37	1.45
28	H	434	ARG	NE-CZ	6.19	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	354	PHE	CA-CB	6.19	1.64	1.53
4	d	175	LEU	CB-CG	6.19	1.65	1.53
20	Z	400	ILE	N-CA	-6.19	1.39	1.46
20	Z	832	ARG	CD-NE	6.19	1.54	1.46
13	m	75	ARG	CD-NE	6.18	1.54	1.46
13	6	204	ILE	CA-CB	-6.18	1.45	1.54
20	Z	13	ASP	N-CA	6.18	1.53	1.46
27	O	15	ARG	NE-CZ	6.18	1.39	1.33
3	c	44	ILE	N-CA	-6.18	1.39	1.46
14	n	83	VAL	C-N	6.18	1.41	1.33
4	D	76	SER	CA-C	-6.18	1.45	1.52
20	Z	344	LYS	CA-C	-6.18	1.44	1.52
30	K	302	GLN	C-N	6.18	1.42	1.33
21	N	305	ASN	N-CA	-6.18	1.39	1.46
11	k	94	SER	N-CA	-6.18	1.38	1.45
7	G	191	GLU	N-CA	-6.18	1.38	1.46
17	T	83	ASN	C-N	6.18	1.41	1.33
21	N	442	LEU	CA-C	-6.18	1.44	1.52
26	U	215	ILE	N-CA	6.18	1.54	1.46
26	U	237	PRO	N-CA	-6.18	1.40	1.47
7	g	20	ARG	CZ-NH1	6.18	1.41	1.32
14	7	53	VAL	CA-C	-6.18	1.45	1.52
11	k	4	ILE	N-CA	-6.18	1.39	1.46
11	k	30	ASP	CA-CB	6.17	1.63	1.53
7	G	46	VAL	N-CA	-6.17	1.39	1.46
13	6	143	GLN	CA-C	-6.17	1.44	1.52
21	N	58	ARG	CZ-NH2	6.17	1.41	1.33
21	N	394	ARG	NE-CZ	6.17	1.39	1.33
33	J	330	ILE	C-N	6.17	1.42	1.33
1	a	89	ASP	N-CA	-6.17	1.38	1.46
13	6	115	VAL	N-CA	-6.17	1.39	1.46
7	g	48	PHE	N-CA	-6.17	1.38	1.46
11	k	70	ARG	NE-CZ	6.17	1.39	1.33
10	3	177	ARG	NE-CZ	6.17	1.39	1.33
20	Z	779	ALA	CA-C	-6.17	1.44	1.52
26	U	90	ILE	CA-CB	-6.17	1.46	1.54
16	V	67	ASP	N-CA	6.17	1.53	1.45
14	n	57	ALA	CA-C	-6.16	1.44	1.52
8	1	170	GLN	CA-C	-6.16	1.44	1.52
11	4	111	LYS	CA-C	-6.16	1.44	1.52
12	l	86	GLY	C-N	6.16	1.42	1.33
7	G	59	LEU	C-N	6.16	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	I	145	CYS	CA-C	-6.16	1.45	1.52
2	b	10	THR	C-N	6.16	1.41	1.33
10	j	106	GLY	N-CA	-6.16	1.36	1.44
11	k	149	ARG	N-CA	6.16	1.50	1.45
12	l	214	VAL	C-O	-6.16	1.16	1.24
5	E	218	GLN	C-N	6.16	1.42	1.33
12	5	144	ARG	CA-C	-6.16	1.44	1.52
24	Q	345	SER	C-N	6.16	1.42	1.34
13	m	145	ARG	NE-CZ	6.16	1.39	1.33
2	B	206	GLY	CA-C	-6.16	1.42	1.51
7	G	108	PRO	N-CA	-6.16	1.39	1.47
11	4	27	VAL	CA-CB	-6.15	1.46	1.53
25	R	355	SER	N-CA	-6.15	1.38	1.46
32	M	143	ASN	CA-C	-6.15	1.44	1.52
32	M	270	ALA	C-N	6.15	1.42	1.33
3	c	31	HIS	CA-C	-6.15	1.44	1.52
4	d	218	ASP	CA-CB	6.15	1.63	1.53
7	G	214	LEU	C-N	6.15	1.41	1.33
9	2	122	HIS	C-N	6.15	1.40	1.33
11	4	183	ILE	CA-CB	-6.15	1.46	1.54
20	Z	875	LYS	CA-C	-6.15	1.45	1.52
21	N	783	SER	N-CA	-6.15	1.41	1.47
26	U	135	ASP	C-N	6.15	1.41	1.33
33	J	13	GLU	CA-CB	6.15	1.64	1.53
13	6	193	ARG	CA-C	-6.15	1.44	1.52
23	P	123	ARG	C-N	6.15	1.41	1.33
9	i	213	ALA	CA-C	-6.15	1.45	1.52
10	3	68	ARG	NE-CZ	6.15	1.39	1.33
14	7	204	GLN	CA-CB	6.15	1.63	1.53
26	U	252	HIS	CA-C	-6.15	1.44	1.52
32	M	177	THR	CA-C	-6.15	1.45	1.52
6	f	36	VAL	CA-C	-6.14	1.45	1.52
21	N	454	ALA	CA-C	-6.14	1.45	1.52
23	P	433	ILE	N-CA	6.14	1.53	1.46
6	f	224	ILE	C-N	6.14	1.42	1.33
28	H	432	ARG	CZ-NH1	6.14	1.41	1.32
30	K	343	LEU	CA-C	-6.14	1.45	1.52
33	J	206	THR	C-N	6.14	1.41	1.33
30	K	151	PRO	CA-CB	-6.14	1.48	1.53
31	L	271	LYS	CA-CB	6.14	1.63	1.53
14	n	94	GLN	C-O	-6.14	1.17	1.24
20	Z	40	GLU	N-CA	-6.14	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	398	ALA	N-CA	-6.14	1.38	1.46
33	J	49	ASN	CA-CB	6.14	1.62	1.53
12	l	168	ALA	CA-C	-6.13	1.47	1.52
2	B	103	GLU	CA-C	-6.13	1.45	1.52
22	S	153	GLU	CA-C	-6.13	1.44	1.52
24	Q	294	ARG	NE-CZ	6.13	1.39	1.33
22	S	191	HIS	CB-CG	6.13	1.58	1.50
22	S	291	GLU	N-CA	-6.13	1.39	1.46
28	H	212	GLY	CA-C	-6.13	1.43	1.51
31	L	116	LYS	N-CA	-6.13	1.38	1.46
33	J	240	HIS	CE1-NE2	-6.13	1.26	1.32
8	h	119	VAL	N-CA	-6.13	1.39	1.46
12	l	257	GLU	N-CA	-6.13	1.39	1.46
20	Z	868	ASN	N-CA	-6.13	1.39	1.46
22	S	158	PHE	CA-C	-6.13	1.44	1.52
9	2	187	ALA	N-CA	-6.13	1.38	1.46
15	W	114	VAL	C-O	-6.13	1.17	1.24
26	U	208	VAL	CA-C	-6.13	1.45	1.52
7	g	190	ARG	CZ-NH1	6.12	1.41	1.32
8	1	174	TRP	NE1-CE2	-6.12	1.30	1.37
16	V	31	SER	CA-C	-6.12	1.44	1.52
26	U	228	LYS	CA-C	-6.12	1.45	1.52
28	H	245	GLY	CA-C	-6.12	1.46	1.52
9	i	111	MET	CA-CB	6.12	1.63	1.53
11	4	23	ARG	NE-CZ	6.12	1.39	1.33
27	O	22	LEU	CA-C	-6.12	1.44	1.52
31	L	156	MET	CA-C	-6.12	1.45	1.53
20	Z	198	GLU	CA-CB	6.12	1.62	1.53
12	l	196	ARG	NE-CZ	6.12	1.39	1.33
29	I	247	ILE	CA-CB	-6.12	1.46	1.54
32	M	321	VAL	C-O	6.12	1.30	1.24
13	m	14	GLY	C-O	-6.12	1.19	1.23
12	5	143	LEU	N-CA	6.12	1.53	1.46
14	7	144	TRP	CA-C	-6.12	1.44	1.52
27	O	246	SER	C-N	6.12	1.42	1.33
32	M	239	THR	N-CA	-6.11	1.37	1.46
1	a	136	PRO	CA-C	6.11	1.60	1.52
20	Z	756	MET	N-CA	-6.11	1.38	1.46
31	L	262	ILE	N-CA	-6.11	1.39	1.46
2	B	109	LEU	CA-C	-6.11	1.45	1.52
4	D	160	SER	C-O	-6.11	1.16	1.24
16	V	238	LEU	N-CA	-6.11	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	213	TYR	C-N	6.11	1.42	1.33
29	I	74	GLU	CA-CB	6.11	1.62	1.53
31	L	386	PHE	CA-C	-6.11	1.45	1.52
10	3	201	LYS	CA-C	-6.11	1.45	1.52
20	Z	55	ARG	NE-CZ	6.11	1.39	1.33
20	Z	432	GLY	C-N	6.11	1.42	1.33
9	i	149	ASP	C-N	6.10	1.41	1.33
14	7	105	THR	CA-C	-6.10	1.45	1.52
18	X	54	GLU	N-CA	-6.10	1.38	1.45
23	P	118	VAL	N-CA	-6.10	1.38	1.46
25	R	208	ASN	C-O	-6.10	1.17	1.24
28	H	120	ASN	C-N	6.10	1.42	1.33
7	g	205	GLU	CA-CB	6.10	1.63	1.53
4	D	97	ARG	CD-NE	6.10	1.54	1.46
7	G	238	GLU	N-CA	-6.10	1.39	1.46
16	V	77	GLY	N-CA	-6.10	1.36	1.45
22	S	461	PHE	CA-C	-6.10	1.44	1.52
23	P	83	SER	C-N	6.10	1.42	1.33
11	4	73	TYR	CZ-OH	6.10	1.50	1.38
28	H	420	ARG	NE-CZ	6.10	1.39	1.33
10	j	199	TYR	CA-C	-6.09	1.45	1.52
21	N	189	LEU	CA-CB	6.09	1.62	1.53
1	a	208	THR	N-CA	6.09	1.53	1.46
7	G	15	PHE	CA-C	-6.09	1.45	1.52
14	7	231	ALA	N-CA	-6.09	1.38	1.46
22	S	304	SER	N-CA	-6.09	1.38	1.46
27	O	121	ASP	CA-C	-6.09	1.45	1.52
32	M	97	SER	CA-C	-6.09	1.45	1.52
10	j	195	VAL	CA-CB	-6.09	1.46	1.54
2	B	106	PRO	CA-C	-6.09	1.43	1.52
9	i	242	LEU	CA-C	-6.09	1.45	1.52
14	n	224	SER	CA-C	-6.09	1.45	1.52
6	F	40	SER	CA-C	-6.09	1.45	1.52
21	N	604	ARG	C-N	6.09	1.41	1.33
24	Q	202	ARG	NE-CZ	6.09	1.39	1.33
2	b	94	HIS	N-CA	-6.09	1.38	1.46
6	F	162	GLY	C-N	6.09	1.41	1.33
12	5	234	ARG	NE-CZ	6.09	1.39	1.33
7	g	27	ALA	C-N	6.09	1.41	1.33
14	n	37	PRO	CA-C	-6.09	1.45	1.52
1	A	202	VAL	C-N	6.09	1.41	1.33
4	D	111	ARG	NE-CZ	6.09	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	U	189	ARG	CZ-NH1	6.09	1.41	1.32
29	I	251	GLU	CA-C	-6.09	1.44	1.52
15	W	124	GLU	C-N	6.08	1.42	1.33
6	f	42	THR	C-N	6.08	1.41	1.33
1	A	124	LEU	C-N	6.08	1.42	1.33
20	Z	160	GLU	C-O	-6.08	1.16	1.24
20	Z	216	GLY	CA-C	-6.08	1.43	1.51
27	O	259	THR	CA-CB	6.08	1.62	1.53
21	N	434	SER	C-N	6.08	1.42	1.33
23	P	266	TYR	CA-CB	6.08	1.62	1.53
28	H	286	GLU	C-N	6.08	1.42	1.33
3	C	175	LEU	CA-C	-6.08	1.45	1.52
6	F	36	VAL	CA-CB	-6.08	1.46	1.54
32	M	237	ALA	N-CA	-6.08	1.39	1.46
32	M	290	ARG	NE-CZ	6.08	1.39	1.33
33	J	400	VAL	CA-CB	6.08	1.62	1.54
8	1	78	GLN	CA-C	-6.08	1.45	1.52
4	d	70	HIS	CB-CG	6.08	1.58	1.50
12	5	270	GLU	C-N	6.08	1.41	1.33
21	N	68	VAL	C-N	6.08	1.41	1.33
7	g	95	GLU	CA-C	-6.07	1.45	1.52
11	4	12	SER	N-CA	-6.07	1.38	1.45
21	N	715	ILE	CA-C	-6.07	1.45	1.52
9	2	126	TYR	CA-C	-6.07	1.45	1.52
6	f	164	ARG	CD-NE	6.07	1.54	1.46
3	C	79	GLY	N-CA	-6.07	1.37	1.44
20	Z	481	PRO	N-CA	-6.07	1.40	1.47
31	L	160	PRO	C-N	6.07	1.41	1.33
32	M	117	ALA	C-N	6.07	1.41	1.33
33	J	172	GLU	C-O	-6.07	1.17	1.24
6	f	86	ASN	N-CA	-6.07	1.38	1.46
6	f	176	LEU	CA-CB	6.07	1.62	1.53
13	m	58	ILE	N-CA	-6.07	1.38	1.46
8	h	104	ALA	C-N	6.07	1.38	1.33
12	l	141	HIS	ND1-CE1	6.07	1.38	1.32
2	B	194	LEU	CA-C	-6.07	1.45	1.52
31	L	113	SER	C-N	6.07	1.42	1.33
23	P	373	GLU	N-CA	-6.06	1.39	1.46
20	Z	801	HIS	CD2-NE2	6.06	1.44	1.37
22	S	231	ALA	C-N	6.06	1.41	1.33
22	S	450	ASN	CA-C	-6.06	1.45	1.52
25	R	416	LYS	N-CA	-6.06	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	111	SER	CA-CB	6.06	1.62	1.53
5	E	76	CYS	N-CA	-6.06	1.38	1.45
17	T	118	ASN	C-N	6.06	1.42	1.34
19	Y	86	ARG	C-N	6.06	1.42	1.33
24	Q	146	TYR	CA-CB	6.06	1.62	1.53
26	U	239	LEU	C-N	6.06	1.42	1.33
30	K	121	ARG	NE-CZ	6.06	1.39	1.33
32	M	110	ASN	C-N	6.06	1.42	1.33
3	c	236	LYS	C-N	6.06	1.41	1.33
4	D	46	CYS	CA-C	-6.06	1.45	1.52
4	D	158	SER	N-CA	-6.06	1.38	1.46
11	4	89	ALA	CA-C	-6.06	1.44	1.52
25	R	124	ASP	N-CA	-6.06	1.38	1.46
3	c	225	VAL	C-O	6.06	1.30	1.24
20	Z	608	TYR	CA-C	-6.06	1.44	1.52
2	b	73	ALA	CA-C	-6.05	1.45	1.52
15	W	172	LEU	CA-C	6.05	1.59	1.52
21	N	857	TYR	N-CA	-6.05	1.38	1.46
32	M	433	TYR	CA-C	-6.05	1.45	1.52
1	a	235	THR	CA-C	-6.05	1.45	1.52
29	I	133	LEU	CA-CB	6.05	1.63	1.53
1	A	166	TYR	N-CA	-6.05	1.38	1.46
7	G	87	HIS	ND1-CE1	6.05	1.38	1.32
7	G	229	LYS	C-N	6.05	1.41	1.33
11	4	48	GLY	CA-C	-6.05	1.44	1.52
14	7	68	ARG	CZ-NH2	6.05	1.41	1.33
20	Z	68	LEU	CA-CB	6.05	1.61	1.53
9	2	193	TRP	C-O	-6.05	1.16	1.24
4	D	31	THR	C-N	6.04	1.41	1.33
22	S	255	SER	CA-CB	6.04	1.62	1.53
30	K	262	ARG	NE-CZ	6.04	1.39	1.33
3	c	167	ALA	CA-C	-6.04	1.44	1.52
3	C	165	VAL	N-CA	6.04	1.53	1.46
25	R	92	ILE	CA-CB	6.04	1.62	1.54
32	M	339	ARG	NE-CZ	6.04	1.39	1.33
2	B	26	THR	N-CA	6.04	1.53	1.46
21	N	100	THR	CA-CB	6.04	1.63	1.53
16	V	72	PRO	N-CA	-6.04	1.39	1.47
18	X	95	GLU	C-N	6.04	1.41	1.33
20	Z	536	GLY	C-N	6.04	1.41	1.33
21	N	55	PHE	CA-C	-6.04	1.45	1.52
32	M	213	ARG	CD-NE	6.04	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	274	ALA	CA-CB	6.04	1.62	1.53
2	b	83	ARG	NE-CZ	6.03	1.39	1.33
7	g	106	PRO	C-N	6.03	1.40	1.33
12	l	227	ASP	CA-C	-6.03	1.44	1.52
20	Z	553	ARG	CD-NE	6.03	1.54	1.46
31	L	299	ARG	CD-NE	6.03	1.54	1.46
11	4	138	PHE	C-N	6.03	1.42	1.33
16	V	238	LEU	CA-CB	6.03	1.62	1.53
23	P	189	LEU	N-CA	-6.03	1.39	1.46
23	P	295	SER	CA-C	-6.03	1.45	1.52
6	F	115	LYS	N-CA	-6.03	1.39	1.46
13	m	44	ASN	N-CA	-6.03	1.39	1.46
11	4	38	LEU	C-N	6.03	1.40	1.33
6	F	161	ILE	CA-C	-6.03	1.45	1.52
20	Z	551	LEU	CA-C	-6.03	1.45	1.52
21	N	559	TYR	CA-CB	6.03	1.61	1.53
22	S	253	PHE	C-N	6.03	1.41	1.33
27	O	234	LEU	C-N	6.03	1.42	1.33
27	O	274	ILE	N-CA	-6.03	1.39	1.46
2	B	46	ALA	C-N	6.03	1.41	1.33
9	2	193	TRP	CA-CB	6.03	1.63	1.53
32	M	329	ARG	CD-NE	6.03	1.54	1.46
4	d	133	THR	CA-C	-6.02	1.45	1.52
25	R	50	VAL	N-CA	-6.02	1.39	1.46
30	K	414	GLN	CA-C	-6.02	1.44	1.52
14	n	166	LEU	C-N	6.02	1.42	1.33
7	G	115	ARG	C-N	6.02	1.41	1.33
11	4	18	SER	CA-C	-6.02	1.45	1.52
32	M	88	MET	CA-CB	6.02	1.63	1.53
3	C	98	TYR	CA-C	-6.02	1.45	1.52
20	Z	621	LEU	CA-C	-6.02	1.45	1.52
23	P	230	HIS	N-CA	-6.02	1.38	1.46
29	I	414	GLU	C-N	6.02	1.42	1.33
5	e	185	ASN	N-CA	6.02	1.53	1.46
6	F	148	GLN	N-CA	-6.02	1.40	1.45
33	J	96	VAL	C-N	6.02	1.41	1.33
20	Z	486	SER	N-CA	-6.01	1.39	1.46
24	Q	36	SER	C-N	6.01	1.41	1.33
22	S	480	ARG	N-CA	-6.01	1.39	1.46
12	l	98	GLY	C-N	6.01	1.41	1.33
8	h	147	CYS	C-N	6.01	1.41	1.33
22	S	399	TYR	C-N	6.01	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	57	PHE	N-CA	-6.01	1.39	1.46
11	4	123	GLY	C-N	6.01	1.41	1.33
20	Z	380	ASN	CA-C	-6.01	1.45	1.52
20	Z	566	LEU	N-CA	-6.01	1.39	1.46
28	H	143	ALA	CA-CB	6.01	1.63	1.53
2	B	64	VAL	CA-C	-6.00	1.44	1.52
3	c	88	ILE	CA-C	-6.00	1.45	1.52
25	R	235	LEU	C-N	6.00	1.42	1.33
30	K	84	GLU	N-CA	6.00	1.53	1.46
2	b	205	ASN	CA-CB	6.00	1.63	1.53
9	i	95	HIS	CA-C	-6.00	1.44	1.52
9	i	168	GLU	CA-CB	6.00	1.62	1.53
14	7	191	VAL	CA-C	6.00	1.59	1.52
27	O	186	ASN	CA-C	-6.00	1.45	1.52
31	L	261	ARG	CA-C	-6.00	1.45	1.52
9	i	163	ALA	CA-C	6.00	1.60	1.52
4	D	29	ARG	C-N	6.00	1.41	1.33
22	S	326	ASP	C-N	6.00	1.40	1.33
23	P	3	ARG	CD-NE	6.00	1.54	1.46
30	K	46	ASP	CA-CB	6.00	1.62	1.53
17	T	248	GLU	CA-C	6.00	1.60	1.52
32	M	117	ALA	N-CA	-6.00	1.38	1.45
22	S	154	GLN	C-O	-6.00	1.16	1.24
3	c	137	TYR	CA-CB	5.99	1.61	1.53
8	1	51	TRP	C-N	5.99	1.41	1.33
17	T	60	ARG	NE-CZ	5.99	1.39	1.33
24	Q	99	THR	CA-CB	5.99	1.62	1.53
27	O	44	SER	CA-CB	5.99	1.62	1.53
21	N	496	GLU	N-CA	-5.99	1.39	1.46
5	e	222	ILE	CB-CG1	5.99	1.65	1.53
31	L	364	HIS	CG-CD2	5.99	1.42	1.35
5	e	191	LEU	N-CA	-5.99	1.38	1.46
8	h	67	ILE	CA-CB	-5.99	1.46	1.54
9	2	252	ILE	CA-C	-5.99	1.45	1.52
13	6	27	ASP	C-O	-5.99	1.16	1.24
3	C	218	LYS	N-CA	-5.99	1.37	1.45
11	4	9	VAL	CA-CB	5.99	1.62	1.54
22	S	459	GLN	C-N	5.99	1.41	1.33
4	d	151	GLU	N-CA	5.99	1.50	1.45
5	e	165	TYR	CA-C	-5.99	1.45	1.52
1	A	115	ASP	CA-CB	5.99	1.62	1.53
3	C	66	LEU	CA-C	-5.99	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	7	194	ARG	CD-NE	5.99	1.54	1.46
2	b	240	SER	C-N	5.98	1.42	1.33
8	h	66	ASP	CA-CB	5.98	1.62	1.53
20	Z	197	LYS	CA-C	-5.98	1.45	1.52
20	Z	471	LEU	CA-C	-5.98	1.45	1.52
22	S	168	LEU	C-N	5.98	1.42	1.33
25	R	49	PHE	CA-CB	5.98	1.62	1.53
21	N	721	ASP	CA-CB	5.98	1.62	1.53
27	O	277	ILE	C-N	-5.98	1.28	1.34
5	e	73	HIS	ND1-CE1	5.98	1.38	1.32
10	j	183	TRP	N-CA	-5.98	1.38	1.46
9	2	139	LEU	CA-C	-5.98	1.46	1.52
14	7	161	ARG	CD-NE	5.98	1.54	1.46
19	Y	70	ASP	CA-CB	5.97	1.61	1.52
21	N	588	VAL	CA-C	-5.97	1.45	1.52
21	N	696	LYS	C-N	5.97	1.42	1.33
32	M	233	ARG	CZ-NH2	5.97	1.41	1.33
10	j	103	TYR	CA-C	-5.97	1.45	1.52
13	6	41	TYR	C-N	5.97	1.42	1.33
14	7	177	THR	N-CA	-5.97	1.38	1.45
15	W	24	THR	CA-C	-5.97	1.45	1.52
16	V	290	ASN	C-N	5.97	1.41	1.33
21	N	637	ALA	CA-CB	5.97	1.62	1.53
23	P	325	ASP	CA-CB	5.97	1.63	1.53
30	K	308	GLN	CA-C	-5.97	1.45	1.53
3	c	212	GLU	N-CA	-5.97	1.38	1.45
4	d	69	SER	CA-CB	5.97	1.63	1.53
1	A	91	ARG	CZ-NH1	5.97	1.41	1.32
3	C	156	ASN	CA-CB	5.97	1.63	1.53
21	N	683	LEU	CB-CG	5.97	1.65	1.53
11	4	116	LEU	C-N	5.96	1.41	1.33
11	4	126	VAL	N-CA	-5.96	1.39	1.46
26	U	226	LEU	CA-CB	5.96	1.63	1.53
33	J	5	VAL	CA-C	-5.96	1.45	1.52
9	i	106	VAL	N-CA	-5.96	1.39	1.46
4	D	29	ARG	NE-CZ	5.96	1.39	1.33
3	c	160	TRP	NE1-CE2	-5.96	1.30	1.37
2	B	97	TYR	N-CA	5.96	1.53	1.46
21	N	848	GLU	CA-C	-5.96	1.45	1.52
22	S	437	ASN	CA-C	-5.96	1.45	1.52
22	S	470	GLN	CA-CB	5.96	1.62	1.53
32	M	421	GLU	CA-CB	5.96	1.62	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	146	TYR	C-N	5.96	1.41	1.33
7	g	183	HIS	CG-CD2	-5.96	1.29	1.35
9	i	217	ARG	NE-CZ	5.96	1.39	1.33
1	A	82	VAL	N-CA	5.96	1.52	1.46
1	A	144	VAL	C-O	-5.96	1.18	1.24
25	R	422	ARG	CD-NE	5.96	1.54	1.46
7	G	151	LEU	CA-C	-5.96	1.45	1.52
22	S	77	THR	CA-C	5.96	1.60	1.52
23	P	302	LEU	N-CA	-5.96	1.39	1.46
15	W	191	ILE	CA-C	-5.95	1.45	1.52
25	R	146	ASP	N-CA	-5.95	1.39	1.46
30	K	234	PHE	CA-CB	5.95	1.66	1.53
7	g	213	GLU	N-CA	5.95	1.53	1.46
1	a	33	LYS	CA-C	-5.95	1.44	1.52
10	j	200	LEU	CA-CB	5.95	1.61	1.53
3	C	26	LEU	C-N	5.95	1.42	1.33
17	T	132	HIS	CG-ND1	-5.95	1.31	1.38
28	H	399	GLU	CA-C	-5.95	1.45	1.52
23	P	275	ASN	CA-C	-5.95	1.45	1.53
3	C	60	ASP	N-CA	-5.95	1.39	1.46
32	M	202	LYS	CA-C	5.95	1.60	1.52
20	Z	543	THR	C-N	5.95	1.42	1.33
23	P	59	LEU	N-CA	-5.95	1.39	1.46
27	O	290	LYS	C-N	5.95	1.41	1.33
20	Z	762	GLY	CA-C	-5.94	1.45	1.52
12	5	243	ASP	C-N	5.94	1.42	1.33
17	T	45	SER	CA-C	-5.94	1.44	1.52
24	Q	332	ARG	CZ-NH2	5.94	1.41	1.33
26	U	60	GLU	CA-CB	5.94	1.64	1.53
29	I	354	ASP	CA-CB	5.94	1.63	1.53
5	e	138	PHE	CA-C	-5.94	1.45	1.53
3	C	170	SER	N-CA	-5.94	1.39	1.46
19	Y	47	GLU	C-N	5.94	1.41	1.33
20	Z	244	ARG	CZ-NH2	5.94	1.41	1.33
24	Q	421	LYS	C-N	5.94	1.41	1.33
30	K	172	ALA	CA-CB	5.94	1.63	1.53
21	N	482	ALA	C-N	5.94	1.42	1.33
21	N	626	GLY	C-N	5.94	1.41	1.33
10	3	179	ALA	CA-C	-5.94	1.45	1.52
21	N	333	SER	CA-C	-5.94	1.44	1.52
30	K	342	SER	CA-C	-5.94	1.44	1.52
7	G	246	GLU	C-N	5.93	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	144	VAL	C-N	5.93	1.42	1.33
4	d	11	PHE	CA-C	-5.93	1.44	1.52
10	3	140	GLY	CA-C	-5.93	1.45	1.52
22	S	211	ARG	CZ-NH1	5.93	1.41	1.32
25	R	24	TYR	CA-C	-5.93	1.45	1.52
14	7	204	GLN	CA-C	-5.93	1.45	1.52
20	Z	351	PRO	N-CA	-5.93	1.41	1.47
5	e	107	ILE	C-N	5.93	1.41	1.33
22	S	159	ASN	C-N	5.93	1.42	1.33
25	R	184	GLN	CA-C	-5.93	1.44	1.52
10	3	98	ARG	CD-NE	5.93	1.54	1.46
5	E	20	ARG	NE-CZ	5.93	1.39	1.33
23	P	374	SER	CA-C	5.93	1.60	1.52
25	R	424	THR	CA-C	5.93	1.65	1.52
11	k	96	ARG	NE-CZ	5.92	1.39	1.33
16	V	103	MET	CA-C	-5.92	1.45	1.52
28	H	285	GLY	N-CA	5.92	1.54	1.45
11	k	82	SER	N-CA	-5.92	1.39	1.46
28	H	375	VAL	CA-CB	-5.92	1.47	1.54
14	n	102	ASP	C-N	5.92	1.42	1.34
14	7	223	ARG	CA-C	-5.92	1.45	1.52
26	U	141	GLU	CA-C	-5.92	1.45	1.52
12	l	275	VAL	C-N	5.92	1.41	1.33
30	K	256	ASP	N-CA	-5.92	1.39	1.46
10	3	98	ARG	CA-C	-5.92	1.47	1.53
22	S	159	ASN	CA-C	-5.92	1.45	1.52
8	1	36	ALA	CA-C	-5.92	1.45	1.52
5	e	108	ASN	CA-C	-5.91	1.45	1.52
27	O	23	HIS	ND1-CE1	5.91	1.38	1.32
31	L	411	ASN	CA-C	-5.91	1.45	1.52
20	Z	767	TYR	N-CA	5.91	1.53	1.46
31	L	203	ASN	CA-C	-5.91	1.45	1.52
19	Y	86	ARG	NE-CZ	5.91	1.39	1.33
20	Z	383	SER	CA-C	-5.91	1.45	1.52
20	Z	790	MET	C-N	5.91	1.42	1.33
29	I	292	TYR	N-CA	-5.91	1.41	1.46
28	H	346	ARG	CD-NE	5.91	1.54	1.46
27	O	282	GLN	CA-C	-5.91	1.46	1.52
10	j	131	ASP	N-CA	-5.90	1.39	1.46
4	D	208	LYS	CA-CB	5.90	1.62	1.53
7	G	24	VAL	C-N	5.90	1.41	1.33
11	4	108	ASP	CA-C	-5.90	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	X	60	GLU	CA-CB	5.90	1.60	1.53
32	M	299	ARG	CZ-NH1	5.90	1.41	1.32
8	h	65	ALA	N-CA	-5.90	1.39	1.46
20	Z	55	ARG	CZ-NH2	5.90	1.41	1.33
20	Z	145	ASP	N-CA	-5.90	1.39	1.46
26	U	189	ARG	CA-C	5.90	1.60	1.52
8	h	59	ALA	CA-C	-5.90	1.45	1.52
9	i	41	VAL	N-CA	-5.90	1.39	1.46
1	A	92	ASN	C-N	5.90	1.41	1.33
31	L	217	GLY	C-N	5.90	1.41	1.33
21	N	356	LEU	C-N	5.90	1.41	1.33
23	P	63	VAL	C-N	5.90	1.41	1.33
11	4	165	VAL	CA-C	-5.90	1.45	1.52
20	Z	128	GLU	N-CA	-5.90	1.39	1.46
25	R	25	GLU	CA-CB	5.90	1.62	1.53
2	b	234	ARG	N-CA	-5.89	1.38	1.46
5	e	244	LYS	CA-C	5.89	1.60	1.52
10	j	46	TYR	N-CA	-5.89	1.39	1.46
10	3	69	TYR	N-CA	-5.89	1.39	1.46
22	S	89	LYS	C-N	5.89	1.41	1.33
29	I	97	GLU	N-CA	-5.89	1.39	1.46
31	L	132	ARG	CZ-NH2	5.89	1.41	1.33
8	h	41	ASP	CA-C	-5.89	1.45	1.52
8	1	127	SER	CA-C	-5.89	1.45	1.52
23	P	247	THR	CA-C	-5.89	1.45	1.52
33	J	324	ARG	CZ-NH2	5.89	1.41	1.33
8	h	45	ARG	CA-CB	5.89	1.62	1.53
13	6	141	ARG	NE-CZ	5.89	1.39	1.33
20	Z	814	ALA	CA-C	5.89	1.60	1.52
25	R	376	GLN	N-CA	-5.89	1.39	1.46
2	B	241	GLN	CG-CD	5.89	1.66	1.52
12	5	206	SER	CA-CB	5.89	1.62	1.53
23	P	311	TRP	C-N	5.89	1.40	1.34
27	O	158	ASP	CA-C	-5.89	1.44	1.52
33	J	201	ALA	C-N	5.89	1.41	1.33
1	A	104	PHE	N-CA	5.88	1.53	1.46
5	E	99	HIS	CB-CG	-5.88	1.42	1.50
21	N	711	ARG	CZ-NH2	5.88	1.41	1.33
30	K	259	ARG	CA-C	-5.88	1.45	1.52
21	N	480	ALA	C-N	5.88	1.41	1.33
3	C	186	VAL	N-CA	-5.88	1.39	1.46
10	3	131	ASP	C-O	-5.88	1.17	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	45	ASP	CA-C	-5.88	1.45	1.52
4	D	79	ASN	C-O	-5.88	1.16	1.24
26	U	35	GLY	CA-C	-5.88	1.46	1.52
13	6	11	ASN	CA-C	-5.88	1.46	1.52
31	L	92	GLU	N-CA	-5.88	1.39	1.46
10	j	49	VAL	CA-CB	5.88	1.61	1.54
10	j	190	ILE	N-CA	-5.88	1.39	1.46
11	k	95	ARG	NE-CZ	5.88	1.39	1.33
1	A	36	ASN	CA-C	-5.88	1.45	1.52
20	Z	4	GLU	C-N	5.88	1.39	1.32
20	Z	872	VAL	CA-C	-5.88	1.45	1.52
21	N	30	ASN	N-CA	-5.88	1.39	1.46
11	k	143	LEU	N-CA	-5.88	1.39	1.46
18	X	49	GLU	CA-CB	5.88	1.60	1.53
27	O	116	ASN	C-N	5.88	1.41	1.33
27	O	288	ARG	NE-CZ	5.88	1.39	1.33
6	f	166	GLN	C-N	5.87	1.41	1.33
5	E	188	HIS	CG-ND1	5.87	1.44	1.38
33	J	86	VAL	CA-C	-5.87	1.45	1.52
6	f	178	THR	N-CA	-5.87	1.39	1.46
14	n	147	ILE	C-N	5.87	1.41	1.33
22	S	415	SER	CA-C	-5.87	1.45	1.52
27	O	341	ILE	CA-CB	-5.87	1.47	1.54
4	d	58	ARG	NE-CZ	5.87	1.39	1.33
7	g	18	ASP	CA-C	-5.87	1.44	1.52
19	Y	53	ALA	C-N	5.87	1.41	1.33
8	h	31	THR	CA-C	-5.87	1.45	1.52
16	V	157	ARG	CD-NE	5.87	1.54	1.46
10	3	110	ALA	CA-C	-5.86	1.45	1.52
21	N	587	ALA	CA-C	-5.86	1.45	1.52
20	Z	199	ASP	CA-CB	5.86	1.62	1.53
28	H	361	LEU	N-CA	-5.86	1.39	1.46
33	J	191	PRO	N-CA	-5.86	1.40	1.47
4	d	166	ARG	CZ-NH1	5.86	1.41	1.32
11	k	50	ALA	CA-C	-5.86	1.45	1.52
5	E	146	GLY	C-N	5.86	1.41	1.33
6	F	115	LYS	CA-C	-5.86	1.45	1.52
30	K	425	ASP	CA-CB	5.85	1.60	1.52
17	T	173	GLU	N-CA	-5.85	1.38	1.46
31	L	137	ARG	NE-CZ	5.85	1.39	1.33
12	l	130	TRP	C-N	5.85	1.42	1.33
9	2	204	VAL	N-CA	-5.85	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	236	PHE	N-CA	-5.85	1.38	1.46
6	f	123	TYR	C-N	5.85	1.42	1.33
14	n	79	GLY	C-N	5.85	1.41	1.33
14	n	92	ASP	C-N	5.85	1.41	1.33
1	A	102	ALA	C-O	-5.85	1.17	1.24
17	T	269	SER	CA-C	-5.85	1.45	1.52
20	Z	296	SER	CA-CB	5.85	1.62	1.53
27	O	11	LEU	CA-C	-5.85	1.45	1.52
13	m	93	SER	C-N	5.85	1.41	1.33
28	H	383	GLU	N-CA	-5.85	1.39	1.46
30	K	185	ARG	NE-CZ	5.85	1.39	1.33
13	m	92	LEU	C-N	5.84	1.41	1.33
21	N	152	LEU	CA-C	-5.84	1.45	1.52
31	L	130	GLY	N-CA	5.84	1.50	1.44
5	e	191	LEU	CA-C	-5.84	1.45	1.52
5	E	216	ASN	CA-CB	5.84	1.61	1.53
11	4	26	SER	C-O	-5.84	1.17	1.24
4	d	51	THR	CA-C	5.84	1.60	1.52
24	Q	246	TYR	CA-C	-5.84	1.45	1.52
1	a	201	LYS	CA-C	5.84	1.60	1.52
2	b	139	HIS	CE1-NE2	5.84	1.38	1.32
2	b	217	GLU	CA-C	-5.84	1.45	1.53
8	h	198	TYR	CA-CB	5.84	1.62	1.53
3	c	67	TYR	N-CA	-5.84	1.38	1.46
6	f	84	LEU	CA-C	-5.84	1.44	1.52
11	k	184	VAL	CA-C	-5.84	1.45	1.52
25	R	186	TYR	C-N	5.84	1.41	1.33
9	i	93	GLU	N-CA	-5.83	1.39	1.46
19	Y	64	TRP	CZ2-CH2	5.83	1.48	1.37
27	O	99	LEU	C-N	5.83	1.41	1.33
7	g	115	ARG	C-N	5.83	1.41	1.33
1	A	156	LYS	N-CA	-5.83	1.39	1.46
23	P	287	ASP	C-N	5.83	1.41	1.33
9	i	44	ALA	N-CA	-5.83	1.38	1.45
4	D	181	ARG	CD-NE	5.83	1.54	1.46
20	Z	856	HIS	CD2-NE2	5.83	1.44	1.37
27	O	274	ILE	C-N	5.83	1.41	1.33
32	M	87	ASP	C-N	5.83	1.41	1.33
4	D	49	ARG	N-CA	-5.83	1.38	1.46
10	3	103	TYR	CA-C	-5.83	1.45	1.52
27	O	73	ILE	C-N	5.83	1.41	1.33
23	P	90	LYS	N-CA	-5.83	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	Q	28	LEU	CA-C	-5.83	1.45	1.52
14	n	177	THR	N-CA	-5.83	1.38	1.45
6	F	56	LEU	CA-C	-5.83	1.45	1.52
20	Z	156	HIS	C-N	5.83	1.41	1.34
9	i	48	ARG	CA-C	5.83	1.60	1.52
27	O	38	TRP	N-CA	5.83	1.53	1.46
28	H	102	CYS	N-CA	-5.83	1.39	1.46
31	L	137	ARG	N-CA	-5.83	1.38	1.46
3	C	36	ILE	CA-C	-5.82	1.45	1.52
22	S	94	LYS	CA-CB	5.82	1.62	1.53
7	G	170	GLN	N-CA	-5.82	1.39	1.46
30	K	74	HIS	ND1-CE1	5.82	1.38	1.32
5	e	239	LEU	CA-C	-5.82	1.44	1.52
12	5	241	HIS	CE1-NE2	-5.82	1.26	1.32
22	S	128	ILE	N-CA	-5.82	1.41	1.46
19	Y	30	GLU	CA-C	-5.82	1.45	1.52
24	Q	300	LYS	C-N	5.82	1.41	1.33
2	b	129	PRO	N-CA	-5.82	1.40	1.46
20	Z	429	ASN	C-N	5.82	1.41	1.33
21	N	561	GLY	CA-C	-5.82	1.42	1.51
21	N	655	ALA	N-CA	-5.82	1.39	1.46
32	M	322	LYS	CA-C	-5.82	1.46	1.52
22	S	196	ARG	CZ-NH2	5.82	1.41	1.33
24	Q	12	ARG	CZ-NH1	5.82	1.40	1.32
22	S	62	SER	CA-C	-5.81	1.45	1.52
33	J	56	ARG	CD-NE	5.81	1.54	1.46
33	J	380	GLU	C-N	5.81	1.41	1.33
3	c	39	MET	CA-CB	5.81	1.62	1.53
5	e	206	GLN	N-CA	-5.81	1.39	1.46
1	A	77	ARG	CA-CB	5.81	1.62	1.53
12	5	141	HIS	CB-CG	5.81	1.58	1.50
12	5	255	VAL	C-O	-5.81	1.17	1.24
20	Z	877	THR	CA-C	-5.81	1.45	1.52
29	I	300	ARG	CZ-NH1	5.81	1.40	1.32
33	J	6	THR	CA-C	-5.81	1.45	1.52
28	H	52	THR	C-O	-5.81	1.17	1.24
29	I	250	SER	N-CA	-5.81	1.38	1.46
2	b	151	ASP	CA-C	5.81	1.60	1.52
9	i	43	ILE	N-CA	-5.81	1.39	1.46
5	E	166	ARG	CZ-NH1	5.81	1.40	1.32
22	S	250	ALA	N-CA	-5.81	1.39	1.46
24	Q	220	LEU	CA-CB	5.81	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	U	246	GLU	C-N	5.81	1.41	1.33
11	4	122	LEU	C-N	5.81	1.42	1.33
16	V	140	VAL	N-CA	-5.81	1.39	1.46
20	Z	58	GLU	CA-C	-5.81	1.45	1.52
19	Y	35	PHE	CA-CB	5.81	1.62	1.53
7	G	185	GLU	C-N	5.80	1.40	1.33
29	I	64	ARG	NE-CZ	5.80	1.39	1.33
33	J	9	ASN	C-N	5.80	1.41	1.33
14	n	206	ALA	CA-C	-5.80	1.45	1.52
5	E	157	HIS	ND1-CE1	5.80	1.38	1.32
31	L	202	LYS	CA-C	-5.80	1.45	1.52
9	i	142	ILE	C-O	-5.80	1.18	1.23
10	j	10	GLY	N-CA	-5.80	1.39	1.45
13	m	106	TYR	N-CA	-5.80	1.38	1.46
12	5	201	ILE	C-N	5.80	1.41	1.33
23	P	136	ARG	NE-CZ	5.80	1.39	1.33
25	R	304	TYR	CA-CB	5.80	1.62	1.53
29	I	232	LEU	C-O	-5.80	1.17	1.24
10	3	41	GLU	N-CA	-5.80	1.39	1.46
28	H	414	SER	C-N	5.80	1.41	1.33
30	K	220	THR	N-CA	-5.80	1.39	1.46
5	E	54	ALA	CA-C	-5.80	1.45	1.52
21	N	597	ARG	CD-NE	5.80	1.54	1.46
32	M	35	LYS	C-N	5.80	1.41	1.33
13	6	221	ARG	N-CA	-5.80	1.39	1.45
28	H	116	THR	C-N	5.79	1.41	1.33
31	L	420	ARG	CD-NE	5.79	1.54	1.46
13	m	170	PRO	N-CA	-5.79	1.40	1.47
21	N	596	LEU	CA-C	-5.79	1.45	1.52
28	H	49	LEU	CA-C	-5.79	1.45	1.52
28	H	309	ASP	CA-C	-5.79	1.45	1.52
1	A	131	ARG	CZ-NH2	5.79	1.41	1.33
31	L	67	HIS	CE1-NE2	-5.79	1.26	1.32
1	a	55	SER	CA-C	-5.79	1.45	1.52
11	k	61	GLN	CA-CB	5.79	1.62	1.53
11	4	5	LEU	CA-C	-5.79	1.45	1.52
1	A	145	SER	CA-C	-5.79	1.45	1.52
12	l	151	VAL	CA-C	-5.79	1.45	1.52
5	E	93	ARG	CA-C	-5.79	1.45	1.52
24	Q	134	LYS	CA-CB	5.79	1.62	1.53
8	h	116	LYS	C-O	5.79	1.29	1.24
1	A	9	ALA	N-CA	-5.79	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	194	LEU	C-N	5.79	1.41	1.33
25	R	43	ARG	NE-CZ	5.79	1.39	1.33
11	k	150	PRO	CA-C	-5.78	1.43	1.52
2	B	127	VAL	CA-C	-5.78	1.45	1.52
4	D	67	ILE	N-CA	-5.78	1.39	1.46
6	F	39	ARG	NE-CZ	5.78	1.39	1.33
20	Z	128	GLU	C-N	5.78	1.41	1.33
6	f	116	ALA	CA-C	-5.78	1.45	1.52
13	6	99	ARG	CD-NE	-5.78	1.38	1.46
22	S	376	THR	N-CA	5.78	1.53	1.45
4	D	219	SER	N-CA	-5.78	1.38	1.46
30	K	111	SER	N-CA	-5.78	1.38	1.45
31	L	347	VAL	C-O	-5.78	1.17	1.24
31	L	186	LEU	CA-CB	5.78	1.61	1.53
6	f	181	LYS	C-N	5.78	1.40	1.33
2	B	163	ALA	N-CA	-5.78	1.38	1.45
25	R	186	TYR	CA-C	-5.78	1.45	1.52
5	E	48	LEU	N-CA	-5.78	1.39	1.46
15	W	132	LEU	CA-C	-5.78	1.45	1.52
17	T	60	ARG	CA-CB	5.78	1.62	1.53
32	M	391	LEU	N-CA	-5.78	1.39	1.46
24	Q	189	ARG	CZ-NH2	5.77	1.41	1.33
6	f	39	ARG	CZ-NH2	5.77	1.41	1.33
5	E	231	TYR	CA-C	-5.77	1.46	1.53
18	X	9	LYS	CA-C	5.77	1.59	1.52
1	a	38	THR	CA-C	5.77	1.60	1.52
15	W	101	ARG	CZ-NH2	5.77	1.41	1.33
20	Z	620	LEU	CA-C	-5.77	1.45	1.52
22	S	305	LYS	C-N	5.77	1.43	1.34
21	N	232	LEU	CA-CB	5.77	1.62	1.53
3	C	139	GLY	CA-C	-5.76	1.46	1.52
12	5	265	ASN	N-CA	-5.76	1.39	1.46
21	N	906	ARG	CA-C	-5.76	1.45	1.52
20	Z	622	HIS	CA-C	-5.76	1.45	1.52
5	e	34	GLY	C-N	5.76	1.41	1.33
15	W	60	ARG	C-N	5.76	1.41	1.33
18	X	130	ASN	CA-C	5.76	1.60	1.52
28	H	194	SER	N-CA	-5.76	1.39	1.46
30	K	51	LEU	N-CA	-5.76	1.39	1.46
32	M	273	LYS	CA-C	-5.76	1.48	1.53
5	E	26	TYR	CG-CD2	5.76	1.51	1.39
14	7	69	PHE	CA-C	-5.76	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	176	GLU	C-N	5.76	1.41	1.33
26	U	84	ASN	CA-C	-5.76	1.45	1.52
9	2	32	ILE	C-O	-5.75	1.17	1.23
9	2	158	SER	CA-CB	5.75	1.62	1.53
31	L	103	GLN	N-CA	-5.75	1.38	1.46
16	V	155	ALA	N-CA	-5.75	1.39	1.45
21	N	882	ILE	CA-CB	-5.75	1.47	1.53
9	i	204	VAL	N-CA	-5.75	1.39	1.46
14	n	48	LYS	CA-CB	5.75	1.62	1.53
1	a	242	GLU	C-N	5.75	1.41	1.33
11	4	162	LYS	CA-CB	5.75	1.62	1.53
25	R	71	LEU	CA-C	-5.75	1.45	1.52
31	L	255	TYR	C-N	-5.75	1.26	1.33
1	a	204	GLU	C-N	5.74	1.41	1.33
21	N	348	PHE	CA-C	-5.74	1.45	1.52
30	K	340	PHE	C-N	5.74	1.40	1.33
9	i	122	HIS	CB-CG	5.74	1.58	1.50
1	a	26	TYR	CZ-OH	5.74	1.50	1.38
2	B	236	ARG	NE-CZ	5.74	1.39	1.33
15	W	32	SER	CA-CB	5.74	1.62	1.53
16	V	34	LEU	CA-C	-5.74	1.45	1.52
16	V	181	ASN	N-CA	-5.74	1.39	1.46
22	S	239	ARG	CZ-NH1	5.74	1.40	1.32
23	P	66	LEU	N-CA	-5.74	1.39	1.46
25	R	256	THR	CA-CB	5.74	1.62	1.53
28	H	345	PRO	C-N	5.74	1.41	1.33
2	B	139	HIS	CA-C	-5.74	1.45	1.52
16	V	60	ASP	CA-C	-5.74	1.46	1.52
29	I	191	ILE	C-N	5.74	1.41	1.33
28	H	118	ASP	N-CA	-5.74	1.38	1.45
29	I	109	LEU	C-N	5.74	1.42	1.33
29	I	120	VAL	CA-C	-5.74	1.46	1.52
2	b	33	THR	CA-C	-5.74	1.45	1.52
10	j	203	ARG	CA-C	-5.74	1.45	1.52
4	D	143	ASP	N-CA	-5.73	1.39	1.46
24	Q	383	ASP	C-N	5.73	1.41	1.33
28	H	335	GLU	CA-CB	5.73	1.62	1.53
30	K	234	PHE	C-N	5.73	1.40	1.33
31	L	288	GLY	C-N	5.73	1.41	1.33
3	c	73	ILE	C-N	5.73	1.41	1.33
10	j	95	LEU	C-N	5.73	1.42	1.33
10	3	99	ARG	CA-C	-5.73	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	248	ALA	CA-C	-5.73	1.44	1.52
18	X	59	ARG	CA-CB	5.73	1.63	1.53
26	U	70	HIS	ND1-CE1	5.73	1.38	1.32
10	j	28	ARG	CZ-NH2	5.73	1.40	1.33
20	Z	138	ARG	NE-CZ	5.73	1.39	1.33
29	I	194	ILE	CA-C	5.73	1.60	1.52
5	E	45	GLY	N-CA	-5.73	1.39	1.45
11	4	65	GLN	C-N	5.73	1.41	1.33
4	d	93	ALA	N-CA	-5.73	1.39	1.46
17	T	50	ILE	CA-C	-5.73	1.44	1.52
1	A	226	GLY	C-N	5.73	1.40	1.33
7	G	224	THR	CB-OG1	-5.73	1.34	1.43
5	e	35	SER	CA-C	-5.72	1.45	1.52
6	f	196	ALA	CA-CB	5.72	1.62	1.53
20	Z	397	ASP	N-CA	-5.72	1.39	1.46
29	I	343	ARG	CZ-NH1	5.72	1.40	1.32
32	M	41	ILE	C-N	5.72	1.41	1.33
29	I	434	GLY	CA-C	-5.72	1.43	1.51
33	J	56	ARG	CZ-NH1	5.72	1.40	1.32
13	6	103	HIS	ND1-CE1	5.72	1.38	1.32
27	O	151	ASP	CA-CB	5.72	1.62	1.53
28	H	46	ALA	N-CA	5.72	1.53	1.46
2	B	185	LEU	N-CA	5.72	1.53	1.46
2	B	210	GLU	CA-CB	5.72	1.62	1.53
7	G	68	GLN	N-CA	-5.72	1.38	1.45
17	T	163	LEU	CB-CG	5.72	1.64	1.53
29	I	262	ARG	CD-NE	5.72	1.54	1.46
20	Z	56	LEU	C-N	5.72	1.41	1.33
22	S	24	LYS	N-CA	-5.72	1.39	1.46
22	S	317	HIS	C-O	-5.72	1.17	1.24
2	B	36	GLY	C-N	5.72	1.41	1.33
6	F	199	GLN	C-O	-5.72	1.16	1.24
11	4	82	SER	N-CA	-5.72	1.39	1.46
21	N	414	GLY	CA-C	-5.72	1.43	1.51
21	N	827	GLU	CA-C	-5.72	1.45	1.52
22	S	134	ILE	N-CA	-5.72	1.40	1.46
2	B	121	ALA	C-N	5.71	1.43	1.33
20	Z	367	SER	N-CA	5.71	1.53	1.46
20	Z	519	PRO	CA-C	5.71	1.60	1.52
33	J	112	ARG	CZ-NH1	5.71	1.40	1.32
33	J	328	LEU	CA-C	-5.71	1.45	1.52
1	a	138	GLY	C-N	5.71	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	13	PRO	CA-CB	-5.71	1.50	1.53
6	F	214	ALA	C-N	5.71	1.41	1.33
20	Z	369	PHE	N-CA	-5.71	1.39	1.45
20	Z	619	ASP	CA-CB	5.71	1.61	1.53
23	P	185	GLU	N-CA	-5.71	1.39	1.46
28	H	312	ASP	CA-CB	5.71	1.63	1.53
31	L	209	ARG	CZ-NH1	5.71	1.40	1.32
1	a	155	TYR	CA-CB	5.71	1.62	1.53
3	C	52	VAL	CA-C	-5.71	1.45	1.52
9	2	189	GLN	CA-CB	5.71	1.62	1.53
17	T	122	PHE	CA-CB	5.71	1.62	1.53
24	Q	66	VAL	N-CA	-5.71	1.39	1.46
25	R	126	GLY	CA-C	-5.71	1.45	1.52
30	K	164	ASN	N-CA	-5.71	1.38	1.46
33	J	91	GLU	N-CA	-5.71	1.36	1.45
3	c	43	GLY	CA-C	-5.71	1.46	1.51
2	B	11	THR	N-CA	-5.71	1.38	1.46
11	k	41	HIS	CB-CG	5.71	1.58	1.50
20	Z	152	GLU	CA-C	-5.71	1.45	1.52
22	S	442	PHE	N-CA	-5.71	1.38	1.45
25	R	33	LEU	C-N	5.71	1.41	1.33
1	a	19	PHE	CA-CB	5.70	1.62	1.53
5	e	234	GLU	CA-CB	5.70	1.62	1.53
25	R	240	SER	CA-C	-5.70	1.45	1.52
31	L	203	ASN	N-CA	-5.70	1.40	1.46
9	2	217	ARG	NE-CZ	5.70	1.39	1.33
24	Q	130	ARG	CA-C	-5.70	1.45	1.52
10	j	137	ILE	C-N	5.70	1.41	1.33
9	2	138	HIS	ND1-CE1	5.70	1.38	1.32
21	N	652	VAL	CA-CB	-5.70	1.47	1.54
2	B	236	ARG	N-CA	-5.70	1.39	1.46
13	6	200	THR	CA-C	-5.70	1.45	1.52
23	P	175	GLU	N-CA	-5.70	1.39	1.46
33	J	170	HIS	CA-C	-5.70	1.46	1.52
13	6	188	VAL	C-N	5.70	1.41	1.33
23	P	251	LYS	N-CA	-5.70	1.39	1.46
32	M	91	ILE	N-CA	-5.70	1.39	1.46
33	J	169	LYS	CA-C	-5.70	1.45	1.52
4	d	55	GLN	N-CA	-5.70	1.39	1.46
15	W	48	THR	CA-C	-5.70	1.45	1.52
24	Q	334	HIS	CA-C	-5.70	1.45	1.52
27	O	279	ILE	C-N	5.70	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	I	120	VAL	C-N	5.69	1.41	1.33
8	1	92	LYS	C-N	5.69	1.41	1.33
12	5	257	GLU	C-N	5.69	1.42	1.33
24	Q	371	GLN	CA-CB	5.69	1.62	1.53
25	R	129	GLU	C-N	5.69	1.41	1.34
28	H	462	ARG	NE-CZ	5.69	1.39	1.33
29	I	360	LYS	N-CA	5.69	1.53	1.46
14	n	77	PRO	N-CA	-5.69	1.40	1.47
21	N	536	ILE	N-CA	-5.69	1.40	1.46
29	I	291	ARG	CA-C	-5.69	1.45	1.53
28	H	273	ARG	CZ-NH1	5.69	1.40	1.32
12	5	250	VAL	CA-C	-5.69	1.45	1.52
22	S	456	ASP	CA-CB	5.69	1.61	1.53
23	P	243	GLU	C-N	5.69	1.41	1.33
28	H	336	LEU	C-O	-5.69	1.17	1.24
13	m	206	VAL	C-N	5.69	1.37	1.33
21	N	348	PHE	N-CA	-5.69	1.39	1.46
27	O	386	ALA	N-CA	-5.69	1.39	1.46
5	E	238	GLU	C-N	5.68	1.41	1.33
16	V	254	ARG	CA-C	-5.68	1.45	1.52
31	L	347	VAL	CA-C	-5.68	1.45	1.52
5	e	74	ILE	N-CA	-5.68	1.39	1.46
6	F	174	ARG	NE-CZ	5.68	1.39	1.33
8	1	45	ARG	CZ-NH2	5.68	1.40	1.33
2	b	106	PRO	CA-C	-5.68	1.46	1.52
3	c	90	THR	N-CA	-5.68	1.39	1.46
3	C	136	ILE	CA-CB	-5.68	1.47	1.54
20	Z	528	LEU	N-CA	-5.68	1.39	1.46
22	S	123	THR	CA-C	-5.68	1.45	1.52
22	S	428	ARG	CD-NE	5.68	1.54	1.46
25	R	256	THR	N-CA	5.68	1.53	1.46
26	U	177	ASP	CA-C	-5.68	1.45	1.52
26	U	185	GLY	C-O	5.68	1.28	1.23
31	L	59	GLN	C-N	5.68	1.41	1.33
28	H	319	PHE	N-CA	-5.68	1.38	1.45
6	f	201	LEU	CA-C	-5.68	1.45	1.52
14	n	73	GLU	C-O	-5.68	1.17	1.24
7	G	64	ASN	N-CA	-5.68	1.38	1.46
21	N	759	ILE	CA-CB	5.68	1.61	1.54
24	Q	213	GLN	N-CA	-5.68	1.39	1.46
1	A	122	ALA	CA-C	-5.67	1.45	1.52
13	6	210	LEU	CA-C	-5.67	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	167	GLU	CA-CB	5.67	1.62	1.53
6	F	137	TYR	CA-C	-5.67	1.46	1.52
26	U	85	ALA	CA-C	-5.67	1.44	1.52
13	m	119	ILE	N-CA	-5.67	1.38	1.46
26	U	39	GLY	CA-C	-5.67	1.46	1.51
4	D	28	LYS	C-N	5.67	1.41	1.33
6	F	192	ALA	CA-C	-5.67	1.45	1.52
33	J	186	ILE	CA-C	-5.67	1.45	1.52
8	h	174	TRP	CA-C	-5.67	1.45	1.52
12	5	100	TRP	CA-C	-5.67	1.45	1.52
20	Z	2	VAL	C-N	5.67	1.41	1.33
24	Q	25	GLN	CA-CB	5.67	1.62	1.53
28	H	464	MET	CA-C	-5.67	1.46	1.53
32	M	154	LEU	C-N	5.67	1.39	1.33
9	i	92	ILE	C-N	5.67	1.41	1.33
24	Q	147	GLN	CA-C	-5.67	1.44	1.52
26	U	200	LEU	CA-CB	5.67	1.62	1.53
30	K	88	ARG	CD-NE	5.67	1.54	1.46
24	Q	378	SER	C-N	5.66	1.41	1.33
10	j	137	ILE	CA-C	-5.66	1.45	1.52
13	m	170	PRO	CA-CB	5.66	1.61	1.53
7	G	171	SER	C-N	5.66	1.41	1.33
24	Q	41	ALA	C-N	5.66	1.41	1.33
25	R	216	ILE	C-N	5.66	1.41	1.33
14	n	241	PHE	CA-C	-5.66	1.46	1.52
2	B	149	GLN	C-N	5.66	1.40	1.33
5	E	92	ALA	C-O	-5.66	1.17	1.24
6	F	64	ILE	CA-C	-5.66	1.45	1.52
6	F	189	LEU	CA-CB	5.66	1.62	1.53
5	e	51	GLU	C-O	-5.66	1.16	1.24
6	f	18	ARG	CD-NE	5.66	1.54	1.46
13	m	94	ILE	CA-CB	5.66	1.61	1.54
29	I	155	SER	C-N	5.66	1.40	1.33
31	L	384	ASP	CA-CB	5.66	1.62	1.53
10	3	202	MET	CA-C	-5.66	1.45	1.52
28	H	43	ALA	C-N	5.66	1.41	1.33
7	g	104	LYS	CA-CB	5.66	1.61	1.53
5	E	103	TYR	C-N	5.66	1.40	1.33
23	P	267	PHE	N-CA	-5.66	1.38	1.46
31	L	137	ARG	CD-NE	5.66	1.54	1.46
2	b	84	VAL	CA-C	-5.65	1.45	1.52
10	3	88	THR	CA-C	-5.65	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	40	ILE	CA-C	-5.65	1.46	1.52
25	R	255	VAL	CA-C	-5.65	1.45	1.52
31	L	180	PHE	CA-C	-5.65	1.45	1.52
16	V	273	ARG	CZ-NH1	5.65	1.40	1.32
20	Z	57	LYS	N-CA	-5.65	1.39	1.46
4	d	24	LEU	C-N	5.65	1.41	1.34
21	N	208	ARG	CZ-NH1	5.65	1.40	1.32
4	d	154	GLY	CA-C	-5.65	1.44	1.51
7	g	91	ARG	N-CA	-5.65	1.39	1.46
5	E	214	GLU	CG-CD	5.65	1.66	1.52
17	T	91	SER	CA-CB	5.65	1.62	1.53
21	N	541	ALA	CA-C	-5.65	1.45	1.52
1	A	99	ALA	CA-C	-5.65	1.45	1.52
10	j	55	GLY	C-O	-5.64	1.20	1.24
7	G	110	PRO	CA-CB	5.64	1.61	1.53
28	H	306	ILE	N-CA	5.64	1.53	1.46
8	h	179	GLY	CA-C	5.64	1.58	1.51
14	n	115	ASP	C-N	5.64	1.41	1.33
2	B	175	LEU	C-N	5.64	1.41	1.33
3	C	113	ARG	CZ-NH2	5.64	1.40	1.33
9	2	77	THR	CA-CB	-5.64	1.45	1.53
15	W	180	LEU	CB-CG	5.64	1.64	1.53
30	K	223	VAL	N-CA	-5.64	1.39	1.46
30	K	385	ALA	C-N	5.64	1.41	1.33
12	l	127	CYS	CA-CB	5.64	1.62	1.53
4	D	240	LYS	C-N	5.64	1.41	1.33
11	4	105	GLY	N-CA	-5.64	1.38	1.46
24	Q	135	HIS	CA-C	-5.64	1.45	1.52
8	h	112	ASP	N-CA	-5.64	1.38	1.45
23	P	366	ASN	C-N	5.64	1.41	1.33
13	m	149	ALA	N-CA	-5.64	1.39	1.46
6	F	187	ASP	CA-C	-5.64	1.45	1.52
20	Z	39	SER	CA-CB	5.64	1.62	1.53
22	S	71	ALA	CA-CB	5.64	1.62	1.53
29	I	328	THR	C-O	-5.64	1.17	1.23
10	j	85	GLU	CA-CB	5.63	1.62	1.53
4	D	104	VAL	N-CA	-5.63	1.39	1.46
6	F	81	ALA	N-CA	-5.63	1.39	1.46
11	4	11	ASP	CA-C	-5.63	1.45	1.52
22	S	374	ASP	C-N	5.63	1.41	1.33
24	Q	222	SER	C-N	5.63	1.41	1.33
27	O	145	LYS	C-O	-5.63	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	L	235	VAL	CA-C	-5.63	1.46	1.52
7	G	6	THR	C-N	5.63	1.41	1.33
12	5	270	GLU	N-CA	-5.63	1.39	1.46
27	O	330	ARG	C-O	-5.63	1.17	1.24
3	c	136	ILE	CA-CB	-5.63	1.47	1.54
33	J	200	ARG	CD-NE	5.63	1.54	1.46
33	J	364	GLU	CA-C	-5.63	1.45	1.52
1	a	131	ARG	NE-CZ	5.63	1.39	1.33
12	l	129	PHE	CA-C	-5.63	1.45	1.52
2	B	210	GLU	C-N	5.63	1.40	1.33
20	Z	623	ARG	CZ-NH2	5.63	1.40	1.33
21	N	762	ARG	NE-CZ	5.63	1.39	1.33
29	I	434	GLY	C-N	5.63	1.41	1.33
20	Z	234	PRO	CA-CB	5.63	1.61	1.53
30	K	267	SER	CA-C	5.63	1.59	1.52
8	1	18	LYS	C-O	-5.62	1.17	1.24
20	Z	89	LEU	N-CA	-5.62	1.39	1.46
20	Z	808	SER	C-N	-5.62	1.26	1.33
8	h	13	MET	CA-C	-5.62	1.45	1.52
4	D	70	HIS	CE1-NE2	-5.62	1.26	1.32
12	5	263	HIS	CG-ND1	-5.62	1.32	1.38
21	N	681	ASN	CA-C	-5.62	1.45	1.52
22	S	303	ASN	CA-CB	5.62	1.62	1.53
26	U	94	HIS	CG-CD2	-5.62	1.29	1.35
26	U	188	ILE	CA-CB	-5.62	1.47	1.54
3	c	124	GLN	C-O	5.62	1.30	1.24
5	e	193	LEU	CA-CB	5.62	1.62	1.53
13	m	99	ARG	CA-CB	5.62	1.62	1.53
7	g	115	ARG	CZ-NH1	5.62	1.40	1.32
7	g	179	LEU	N-CA	-5.62	1.39	1.46
27	O	88	ASP	C-N	5.62	1.41	1.33
33	J	404	PHE	C-N	5.62	1.41	1.33
12	l	148	ARG	NE-CZ	5.62	1.39	1.33
14	n	36	GLN	CA-CB	5.62	1.62	1.54
11	4	88	LEU	CA-CB	5.62	1.62	1.53
21	N	423	LEU	CA-C	-5.62	1.45	1.52
20	Z	773	ARG	NE-CZ	5.62	1.39	1.33
13	6	17	GLY	C-N	5.62	1.40	1.33
21	N	293	LEU	CB-CG	5.62	1.64	1.53
23	P	301	LYS	CA-CB	5.62	1.63	1.53
14	7	85	GLY	C-N	5.61	1.41	1.33
14	n	151	GLY	N-CA	-5.61	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	5	176	ILE	N-CA	-5.61	1.39	1.46
28	H	90	ARG	CD-NE	5.61	1.54	1.46
4	d	18	PHE	N-CA	-5.61	1.39	1.46
5	e	197	GLU	C-N	5.61	1.42	1.33
6	f	101	ARG	NE-CZ	5.61	1.39	1.33
12	l	136	SER	N-CA	-5.61	1.39	1.46
6	F	51	ARG	CD-NE	5.61	1.54	1.46
9	2	110	GLN	CA-CB	5.61	1.62	1.53
15	W	37	PHE	N-CA	-5.61	1.39	1.46
17	T	251	HIS	ND1-CE1	5.61	1.38	1.32
9	i	243	LYS	N-CA	-5.61	1.39	1.46
10	j	125	ASP	CA-C	-5.61	1.45	1.52
3	C	47	ALA	CA-C	-5.61	1.45	1.52
5	E	244	LYS	N-CA	-5.61	1.39	1.46
15	W	127	ARG	NE-CZ	5.61	1.39	1.33
32	M	206	LYS	C-O	-5.61	1.17	1.24
33	J	19	ILE	C-N	5.61	1.42	1.34
2	B	190	HIS	ND1-CE1	5.61	1.38	1.32
29	I	240	THR	CA-C	-5.61	1.45	1.52
7	g	190	ARG	C-N	5.60	1.42	1.33
2	B	243	ILE	C-N	5.60	1.41	1.33
21	N	337	GLY	N-CA	-5.60	1.38	1.45
15	W	89	THR	CB-OG1	-5.60	1.34	1.43
20	Z	205	LEU	CA-C	-5.60	1.44	1.52
20	Z	475	GLN	CA-CB	5.60	1.62	1.53
20	Z	493	LEU	CA-CB	5.60	1.62	1.53
23	P	58	VAL	N-CA	-5.60	1.39	1.46
23	P	321	VAL	C-N	5.60	1.42	1.33
28	H	349	ILE	CA-C	-5.60	1.45	1.52
30	K	271	ILE	CA-CB	-5.60	1.47	1.54
7	g	7	GLY	C-N	5.60	1.41	1.33
12	l	253	TYR	C-N	5.60	1.41	1.33
1	A	185	HIS	CE1-NE2	5.60	1.38	1.32
11	4	178	GLY	N-CA	-5.60	1.37	1.45
21	N	724	THR	CA-C	-5.60	1.45	1.52
27	O	204	SER	N-CA	-5.60	1.42	1.47
29	I	359	LYS	C-N	5.60	1.41	1.33
33	J	169	LYS	C-N	5.60	1.41	1.33
1	a	69	VAL	CA-C	-5.60	1.47	1.53
15	W	2	VAL	CA-CB	-5.60	1.48	1.54
17	T	79	GLU	C-N	5.60	1.41	1.33
20	Z	208	VAL	C-O	-5.60	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	140	LEU	C-N	5.60	1.39	1.33
7	G	62	GLN	CA-CB	5.60	1.61	1.53
13	6	223	GLU	CA-C	-5.59	1.45	1.52
16	V	275	ASP	CA-CB	5.59	1.62	1.53
18	X	72	GLU	CA-C	-5.59	1.44	1.52
25	R	100	ASN	CA-CB	5.59	1.62	1.53
21	N	58	ARG	CA-CB	-5.59	1.44	1.53
14	n	194	ARG	NE-CZ	5.59	1.39	1.33
1	A	91	ARG	N-CA	5.59	1.53	1.46
17	T	84	GLN	N-CA	-5.59	1.39	1.46
5	e	106	ASP	C-N	5.59	1.40	1.33
7	G	159	GLY	N-CA	-5.59	1.37	1.45
27	O	148	ASP	C-N	5.59	1.41	1.33
31	L	405	ASP	N-CA	5.59	1.53	1.46
33	J	132	PRO	C-N	5.59	1.41	1.33
10	3	157	ASN	C-N	5.59	1.41	1.33
17	T	165	GLN	CA-C	-5.59	1.45	1.52
5	e	53	ARG	CA-CB	5.59	1.63	1.53
10	j	110	ALA	CA-C	-5.59	1.45	1.52
24	Q	208	ILE	CB-CG1	5.59	1.64	1.53
31	L	299	ARG	CZ-NH2	5.59	1.40	1.33
23	P	88	GLN	C-N	5.58	1.41	1.33
33	J	261	SER	N-CA	-5.58	1.39	1.46
6	F	147	PHE	C-N	5.58	1.40	1.32
20	Z	469	PRO	CA-C	-5.58	1.45	1.52
27	O	242	ILE	CB-CG1	5.58	1.64	1.53
28	H	141	GLU	CA-C	-5.58	1.45	1.52
33	J	131	ASP	N-CA	-5.58	1.40	1.45
7	g	147	HIS	CA-CB	5.58	1.63	1.53
14	n	198	ILE	CA-CB	5.58	1.57	1.54
14	7	181	ALA	CA-C	-5.58	1.45	1.52
24	Q	130	ARG	C-N	5.58	1.40	1.34
33	J	148	ASP	CA-C	-5.58	1.44	1.52
16	V	235	GLU	N-CA	-5.58	1.39	1.46
33	J	191	PRO	CA-C	5.58	1.59	1.52
9	i	156	LEU	N-CA	-5.58	1.39	1.46
3	C	233	GLN	CA-C	5.58	1.60	1.52
7	G	48	PHE	N-CA	-5.58	1.39	1.46
8	1	110	GLY	CA-C	-5.58	1.45	1.51
16	V	279	HIS	CG-CD2	-5.58	1.29	1.35
21	N	786	ARG	N-CA	-5.58	1.39	1.45
24	Q	63	GLN	CA-CB	5.58	1.61	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	352	PRO	CA-CB	-5.58	1.45	1.53
33	J	162	GLU	CA-C	-5.58	1.45	1.52
6	f	196	ALA	N-CA	-5.58	1.39	1.46
6	f	126	ARG	N-CA	-5.58	1.40	1.45
7	G	138	PHE	CA-C	-5.58	1.46	1.52
7	G	207	ASN	CA-C	-5.58	1.44	1.52
12	5	172	MET	CA-C	-5.58	1.45	1.52
23	P	425	HIS	ND1-CE1	5.58	1.38	1.32
1	a	39	ASN	CA-CB	5.57	1.61	1.53
25	R	418	GLY	CA-C	-5.57	1.45	1.51
28	H	353	PHE	C-O	-5.57	1.17	1.23
29	I	251	GLU	CA-CB	5.57	1.61	1.54
31	L	363	ILE	CB-CG1	5.57	1.64	1.53
4	d	173	GLU	C-O	-5.57	1.17	1.24
11	k	45	SER	CA-C	-5.57	1.45	1.52
14	n	123	SER	CA-C	-5.57	1.45	1.52
13	6	196	PHE	N-CA	-5.57	1.39	1.46
21	N	723	GLY	N-CA	-5.57	1.37	1.45
25	R	165	GLY	CA-C	-5.57	1.45	1.52
25	R	394	ASP	CA-CB	5.57	1.62	1.53
21	N	656	ALA	CA-CB	5.57	1.61	1.53
4	d	166	ARG	CA-C	-5.57	1.45	1.52
12	l	154	ALA	CA-C	-5.57	1.45	1.52
6	F	193	GLY	C-N	5.57	1.40	1.33
7	G	77	VAL	CA-CB	-5.57	1.47	1.54
8	1	85	GLU	CA-C	-5.57	1.45	1.52
20	Z	508	LEU	CA-C	-5.57	1.45	1.52
10	j	194	GLU	CA-C	-5.57	1.46	1.52
1	A	218	PHE	C-N	5.57	1.41	1.33
13	6	108	LYS	CA-C	-5.57	1.46	1.52
22	S	402	ILE	CA-CB	-5.57	1.47	1.54
33	J	363	THR	C-N	5.57	1.41	1.33
6	f	170	THR	CA-CB	-5.56	1.44	1.53
9	i	192	ILE	CA-C	-5.56	1.45	1.52
21	N	464	GLU	N-CA	-5.56	1.39	1.46
27	O	174	THR	N-CA	-5.56	1.39	1.46
7	g	130	ARG	CA-C	-5.56	1.46	1.52
9	i	194	ASN	C-N	5.56	1.41	1.33
13	m	217	LYS	N-CA	-5.56	1.39	1.46
8	1	166	HIS	ND1-CE1	5.56	1.38	1.32
12	5	193	ASP	CA-C	-5.56	1.45	1.52
23	P	125	VAL	C-N	5.56	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	101	ASP	CA-C	-5.56	1.46	1.52
5	e	86	ARG	NE-CZ	5.56	1.39	1.33
17	T	165	GLN	CG-CD	5.56	1.66	1.52
24	Q	213	GLN	C-N	5.56	1.41	1.34
3	c	109	GLU	C-O	-5.56	1.17	1.24
17	T	261	GLU	CA-C	-5.56	1.45	1.52
22	S	360	PHE	CA-C	-5.56	1.45	1.52
27	O	55	THR	N-CA	-5.56	1.37	1.45
31	L	338	LEU	N-CA	-5.56	1.39	1.46
32	M	364	HIS	ND1-CE1	5.56	1.38	1.32
13	m	57	ASN	N-CA	5.56	1.54	1.46
10	3	200	LEU	CA-C	-5.56	1.45	1.52
20	Z	287	ARG	CZ-NH2	5.56	1.40	1.33
23	P	222	ASN	C-O	-5.56	1.17	1.24
30	K	427	TYR	N-CA	-5.56	1.38	1.46
9	i	138	HIS	ND1-CE1	5.55	1.38	1.32
20	Z	856	HIS	CG-CD2	5.55	1.42	1.35
27	O	122	HIS	CE1-NE2	5.55	1.38	1.32
30	K	194	GLN	C-N	5.55	1.41	1.33
3	C	217	ARG	NE-CZ	5.55	1.39	1.33
33	J	138	MET	CA-CB	5.55	1.61	1.53
6	F	16	THR	C-N	5.55	1.41	1.33
27	O	307	MET	CA-C	-5.55	1.45	1.52
29	I	393	GLN	CA-C	-5.55	1.45	1.52
30	K	47	ILE	CA-C	-5.55	1.45	1.52
2	b	58	SER	N-CA	-5.55	1.38	1.46
4	d	80	ALA	CA-C	-5.55	1.45	1.52
9	2	170	HIS	ND1-CE1	5.55	1.38	1.32
20	Z	491	LEU	CA-C	-5.55	1.45	1.52
21	N	394	ARG	CD-NE	5.55	1.54	1.46
27	O	323	ASN	CA-C	-5.55	1.45	1.52
10	3	40	PHE	CA-C	-5.55	1.45	1.52
20	Z	202	ARG	CA-C	-5.55	1.45	1.52
20	Z	941	ARG	C-O	-5.55	1.19	1.24
21	N	266	SER	CA-C	-5.55	1.45	1.53
7	g	71	ASP	C-N	5.55	1.41	1.33
11	k	167	GLU	C-N	5.55	1.41	1.33
3	C	91	ALA	CA-C	5.55	1.59	1.52
4	D	197	ARG	NE-CZ	5.55	1.39	1.33
20	Z	703	SER	CA-CB	5.55	1.62	1.53
33	J	120	TYR	CA-C	-5.55	1.46	1.53
12	5	91	VAL	N-CA	-5.54	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	5	179	TYR	CA-C	-5.54	1.46	1.53
14	7	206	ALA	CA-C	-5.54	1.45	1.52
22	S	318	CYS	C-O	-5.54	1.17	1.24
22	S	405	ARG	NE-CZ	5.54	1.39	1.33
30	K	61	LEU	CA-C	5.54	1.59	1.52
4	D	70	HIS	CB-CG	5.54	1.57	1.50
22	S	127	THR	C-N	5.54	1.39	1.33
25	R	394	ASP	CA-C	-5.54	1.45	1.52
32	M	249	PRO	C-N	5.54	1.41	1.33
9	2	236	ARG	NE-CZ	5.54	1.39	1.33
11	4	175	ASP	N-CA	-5.54	1.39	1.46
21	N	309	ILE	CA-C	-5.54	1.46	1.52
13	m	171	GLY	CA-C	-5.54	1.43	1.51
23	P	343	LYS	CA-CB	5.54	1.61	1.53
23	P	284	ILE	C-N	5.54	1.41	1.33
26	U	251	ASN	N-CA	-5.54	1.39	1.46
1	a	242	GLU	CA-CB	5.54	1.62	1.53
12	l	100	TRP	CA-CB	5.54	1.62	1.53
12	l	254	HIS	CG-CD2	5.54	1.42	1.35
1	A	27	GLN	C-N	5.54	1.40	1.33
17	T	261	GLU	C-N	5.53	1.41	1.33
27	O	30	GLU	C-N	5.53	1.41	1.33
29	I	153	THR	CA-C	-5.53	1.46	1.52
30	K	277	ILE	CA-CB	-5.53	1.47	1.54
31	L	110	LYS	C-N	5.53	1.41	1.33
8	h	12	ILE	N-CA	-5.53	1.39	1.46
10	j	35	GLY	C-N	5.53	1.39	1.33
12	l	177	CYS	N-CA	-5.53	1.39	1.46
31	L	107	GLU	C-N	5.53	1.40	1.33
32	M	69	ILE	C-O	-5.53	1.17	1.24
5	e	13	SER	N-CA	-5.53	1.39	1.46
9	2	66	ILE	CA-C	-5.53	1.46	1.52
17	T	190	ALA	CA-CB	5.53	1.61	1.53
28	H	431	ILE	CB-CG1	5.53	1.64	1.53
20	Z	840	ARG	CD-NE	5.53	1.53	1.46
32	M	382	SER	N-CA	-5.53	1.39	1.46
3	c	90	THR	CA-C	-5.53	1.45	1.52
5	e	37	ALA	C-N	5.53	1.41	1.33
6	f	130	VAL	C-N	5.53	1.38	1.33
8	h	20	GLY	CA-C	-5.53	1.43	1.51
5	E	75	GLY	CA-C	-5.53	1.47	1.52
20	Z	219	ASP	C-N	5.53	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	372	ILE	CA-CB	-5.53	1.50	1.53
31	L	290	ARG	CZ-NH1	5.53	1.40	1.32
1	a	225	VAL	C-N	5.53	1.40	1.33
8	h	93	GLU	CA-C	-5.53	1.45	1.52
10	j	99	ARG	CD-NE	5.53	1.53	1.46
12	l	266	HIS	C-N	5.53	1.40	1.33
14	n	189	ARG	CZ-NH2	5.53	1.40	1.33
13	6	88	ASN	CA-CB	5.53	1.62	1.53
18	X	24	CYS	CA-CB	5.53	1.61	1.53
20	Z	431	ASP	C-O	-5.53	1.17	1.23
33	J	293	ALA	CA-C	-5.53	1.45	1.52
4	d	180	ASP	C-N	5.52	1.41	1.33
8	h	195	LEU	C-O	-5.52	1.17	1.23
33	J	336	ASN	CA-C	-5.52	1.46	1.52
9	i	153	TYR	C-N	5.52	1.40	1.33
2	B	33	THR	CA-C	-5.52	1.46	1.52
3	C	10	THR	N-CA	-5.52	1.38	1.45
5	E	138	PHE	C-N	5.52	1.41	1.33
12	5	105	THR	C-N	5.52	1.40	1.33
21	N	194	ILE	N-CA	-5.52	1.39	1.46
26	U	75	ASN	C-N	5.52	1.41	1.33
29	I	262	ARG	NE-CZ	5.52	1.39	1.33
9	2	69	LYS	CA-C	-5.52	1.45	1.52
14	7	134	TYR	CZ-OH	5.52	1.49	1.38
21	N	202	PHE	C-N	5.52	1.41	1.33
21	N	835	LYS	C-N	5.52	1.41	1.33
21	N	475	ALA	C-N	5.52	1.42	1.33
25	R	196	SER	C-N	5.52	1.41	1.33
31	L	201	LEU	N-CA	5.52	1.52	1.46
31	L	276	CYS	N-CA	-5.52	1.39	1.45
32	M	73	ARG	C-N	5.52	1.40	1.33
32	M	205	ASP	CA-CB	5.52	1.61	1.53
3	c	47	ALA	CA-C	-5.52	1.45	1.52
3	c	157	TYR	N-CA	-5.52	1.39	1.45
6	f	91	GLN	CA-C	5.52	1.59	1.52
12	l	127	CYS	N-CA	-5.52	1.39	1.46
2	B	185	LEU	CB-CG	5.52	1.64	1.53
9	2	224	VAL	C-N	5.52	1.42	1.33
12	5	169	GLY	CA-C	-5.52	1.44	1.51
26	U	34	VAL	C-O	-5.52	1.18	1.24
26	U	254	ARG	CA-CB	5.52	1.62	1.53
11	k	19	LYS	CA-CB	5.51	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	164	VAL	CA-C	-5.51	1.46	1.52
21	N	845	GLY	C-N	5.51	1.40	1.33
1	a	211	ILE	CA-CB	-5.51	1.47	1.54
8	h	203	GLU	CA-C	-5.51	1.45	1.52
26	U	169	ILE	CA-C	-5.51	1.45	1.52
33	J	238	ARG	CA-C	-5.51	1.45	1.52
6	f	104	ALA	CA-C	-5.51	1.45	1.52
8	h	28	ARG	CA-CB	5.51	1.61	1.53
20	Z	898	HIS	CA-CB	5.51	1.61	1.53
24	Q	300	LYS	CA-CB	5.51	1.62	1.53
32	M	137	PRO	CA-CB	5.51	1.61	1.53
12	l	120	MET	CA-CB	5.51	1.61	1.53
7	G	179	LEU	N-CA	-5.51	1.39	1.46
12	5	196	ARG	CA-C	-5.51	1.46	1.52
17	T	264	MET	C-N	5.51	1.41	1.34
2	b	53	SER	CA-C	-5.50	1.45	1.52
11	k	185	ASP	CA-C	-5.50	1.46	1.53
5	E	10	ARG	CD-NE	5.50	1.53	1.46
5	E	157	HIS	CE1-NE2	-5.50	1.27	1.32
21	N	546	LEU	N-CA	-5.50	1.39	1.46
4	d	139	ASP	CA-C	5.50	1.59	1.53
5	E	163	THR	N-CA	-5.50	1.39	1.45
10	3	92	SER	CA-C	-5.50	1.45	1.52
21	N	353	LEU	N-CA	-5.50	1.40	1.46
29	I	239	GLN	CA-C	-5.50	1.45	1.52
30	K	241	GLU	C-N	5.50	1.41	1.33
25	R	273	SER	C-N	5.50	1.39	1.34
1	A	58	LYS	CA-C	-5.50	1.46	1.52
2	B	135	LEU	CA-C	-5.50	1.46	1.52
14	7	184	ALA	N-CA	-5.50	1.38	1.46
2	B	15	SER	N-CA	-5.50	1.38	1.46
3	C	38	ILE	CA-CB	-5.50	1.47	1.54
8	1	64	ILE	N-CA	-5.50	1.40	1.46
9	2	78	ALA	N-CA	-5.50	1.39	1.46
33	J	379	GLN	N-CA	-5.50	1.39	1.46
9	i	79	ALA	N-CA	-5.50	1.39	1.46
8	1	25	ALA	C-N	5.50	1.40	1.33
24	Q	168	LEU	N-CA	-5.50	1.39	1.46
1	a	95	LEU	C-N	5.49	1.41	1.33
4	d	190	GLU	C-N	5.49	1.40	1.33
9	i	230	LYS	CA-C	-5.49	1.46	1.52
12	l	225	VAL	CA-C	-5.49	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	n	100	LEU	C-N	5.49	1.41	1.33
21	N	218	PRO	C-N	5.49	1.41	1.33
27	O	118	GLY	CA-C	-5.49	1.44	1.51
29	I	398	GLU	C-O	-5.49	1.17	1.24
1	a	152	PRO	N-CA	5.49	1.53	1.47
7	G	39	GLY	C-N	5.49	1.40	1.33
7	G	198	LYS	CA-C	-5.49	1.45	1.52
15	W	109	ARG	CZ-NH1	5.49	1.40	1.32
21	N	604	ARG	NE-CZ	5.49	1.39	1.33
7	g	219	CYS	CA-C	-5.49	1.46	1.52
2	B	86	VAL	CA-CB	-5.49	1.47	1.54
11	4	150	PRO	C-N	5.49	1.40	1.33
15	W	41	ARG	CA-C	-5.49	1.45	1.52
26	U	113	TYR	CA-CB	5.49	1.62	1.53
28	H	344	ASP	CA-C	5.49	1.59	1.53
10	j	67	PHE	CA-C	-5.49	1.45	1.52
22	S	166	ASN	CA-C	-5.49	1.45	1.52
27	O	296	LEU	C-O	-5.49	1.17	1.24
30	K	257	VAL	C-N	5.49	1.42	1.33
5	E	30	ALA	C-O	-5.49	1.17	1.24
22	S	211	ARG	CA-CB	5.49	1.62	1.53
23	P	323	ASN	C-N	5.49	1.40	1.33
14	7	94	GLN	CA-C	-5.48	1.45	1.52
26	U	180	ASP	N-CA	-5.48	1.38	1.46
30	K	281	ARG	N-CA	5.48	1.52	1.46
31	L	302	GLN	C-N	5.48	1.41	1.34
17	T	45	SER	C-N	5.48	1.39	1.33
27	O	103	LYS	C-N	5.48	1.41	1.33
28	H	140	ASP	N-CA	-5.48	1.39	1.46
2	b	233	PRO	N-CD	-5.48	1.40	1.47
5	e	98	THR	C-N	5.48	1.41	1.33
5	E	209	GLU	CA-C	-5.48	1.45	1.52
14	7	155	ASN	CA-C	-5.48	1.45	1.52
21	N	726	ASP	CA-C	-5.48	1.46	1.52
22	S	419	VAL	C-N	5.48	1.41	1.33
28	H	190	ARG	CZ-NH2	5.48	1.40	1.33
31	L	271	LYS	CA-C	-5.48	1.45	1.52
32	M	286	ILE	CA-CB	5.48	1.61	1.54
1	A	32	PHE	C-N	5.48	1.42	1.33
9	2	183	LEU	N-CA	-5.48	1.39	1.46
18	X	35	ILE	CA-C	-5.48	1.46	1.52
21	N	248	GLU	CA-CB	5.48	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	46	ARG	CD-NE	5.48	1.53	1.46
21	N	417	ARG	CD-NE	5.48	1.53	1.46
22	S	441	GLY	C-N	5.48	1.40	1.33
3	c	75	VAL	CA-C	-5.47	1.46	1.52
4	D	166	ARG	CA-CB	5.47	1.60	1.53
20	Z	193	PHE	C-O	-5.47	1.17	1.24
14	n	109	TYR	CA-CB	5.47	1.61	1.53
17	T	231	SER	C-N	5.47	1.40	1.33
14	n	168	VAL	CA-CB	-5.47	1.47	1.54
7	G	174	ALA	CA-C	-5.47	1.45	1.52
22	S	111	ARG	C-N	5.47	1.41	1.33
28	H	233	GLU	CA-CB	5.47	1.61	1.53
7	g	170	GLN	CA-C	5.47	1.60	1.52
5	E	48	LEU	CA-CB	5.47	1.61	1.53
10	3	203	ARG	NE-CZ	5.47	1.39	1.33
11	4	119	ILE	C-N	5.47	1.41	1.33
15	W	100	HIS	CD2-NE2	5.47	1.43	1.37
21	N	327	LEU	CA-C	5.47	1.59	1.52
26	U	255	ILE	CA-CB	5.47	1.61	1.54
29	I	306	MET	CA-C	-5.47	1.45	1.52
25	R	366	ASN	C-N	5.47	1.41	1.33
3	C	220	ALA	CA-CB	5.47	1.60	1.53
14	7	49	TYR	C-N	5.47	1.40	1.33
21	N	230	VAL	C-N	5.47	1.41	1.33
26	U	94	HIS	CA-C	-5.47	1.46	1.52
1	a	196	GLU	C-N	5.46	1.41	1.33
13	m	69	GLY	N-CA	-5.46	1.39	1.45
9	2	250	CYS	CA-C	-5.46	1.46	1.52
11	4	53	THR	CA-C	-5.46	1.45	1.52
16	V	194	ARG	CZ-NH1	5.46	1.40	1.32
8	h	76	THR	C-N	5.46	1.41	1.33
10	3	91	VAL	CA-C	-5.46	1.46	1.52
9	i	116	LEU	CA-CB	5.46	1.62	1.53
1	A	77	ARG	NE-CZ	5.46	1.39	1.33
27	O	167	ILE	CA-C	-5.46	1.45	1.52
29	I	337	ALA	N-CA	-5.46	1.39	1.46
10	j	98	ARG	CZ-NH1	5.46	1.40	1.32
13	6	193	ARG	CA-CB	5.46	1.61	1.53
33	J	212	ARG	NE-CZ	5.46	1.39	1.33
5	e	157	HIS	CG-CD2	5.46	1.41	1.35
21	N	203	ARG	C-N	5.46	1.41	1.33
26	U	112	LYS	CA-CB	5.46	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	30	GLU	CA-CB	5.46	1.61	1.53
29	I	74	GLU	C-N	5.46	1.40	1.33
9	i	83	ALA	CA-CB	5.46	1.61	1.53
13	m	31	LEU	C-O	-5.46	1.17	1.23
23	P	69	ARG	N-CA	5.46	1.52	1.46
1	A	80	GLY	CA-C	-5.46	1.45	1.52
1	a	248	ILE	C-N	5.45	1.41	1.33
11	k	54	VAL	N-CA	-5.45	1.40	1.46
20	Z	906	ALA	C-N	5.45	1.38	1.33
6	f	19	LEU	C-N	5.45	1.41	1.33
7	G	220	SER	CA-C	-5.45	1.45	1.52
8	1	68	VAL	N-CA	-5.45	1.40	1.46
20	Z	759	ARG	CD-NE	5.45	1.53	1.46
24	Q	356	CYS	CA-CB	5.45	1.61	1.53
2	b	148	TYR	C-O	-5.45	1.17	1.23
11	4	133	HIS	CE1-NE2	5.45	1.38	1.32
22	S	139	HIS	N-CA	-5.45	1.39	1.46
25	R	388	VAL	CA-C	-5.45	1.45	1.52
29	I	155	SER	CA-CB	-5.45	1.44	1.53
10	j	91	VAL	C-O	-5.45	1.17	1.24
13	m	48	GLU	N-CA	-5.45	1.41	1.46
1	A	127	ILE	C-N	5.45	1.41	1.33
6	F	146	GLU	CA-CB	5.45	1.61	1.53
13	6	48	GLU	CA-C	-5.45	1.46	1.52
25	R	381	ILE	C-O	-5.45	1.18	1.24
29	I	156	ILE	CA-C	-5.45	1.46	1.52
9	i	246	ILE	CB-CG1	5.45	1.64	1.53
6	F	43	HIS	CB-CG	-5.45	1.42	1.50
32	M	53	HIS	CD2-NE2	5.45	1.43	1.37
7	g	18	ASP	N-CA	-5.45	1.38	1.46
23	P	119	ILE	CA-C	-5.45	1.45	1.52
3	c	129	ARG	CD-NE	5.44	1.53	1.46
22	S	370	LEU	CA-C	-5.44	1.45	1.52
17	T	192	ASN	N-CA	-5.44	1.39	1.46
1	A	105	ARG	NE-CZ	5.44	1.39	1.33
5	E	96	ALA	CA-C	-5.44	1.45	1.52
6	F	65	LYS	CA-C	-5.44	1.45	1.52
21	N	710	GLY	C-N	5.44	1.41	1.33
25	R	136	ASN	CA-CB	5.44	1.61	1.53
30	K	289	ASP	N-CA	-5.44	1.38	1.46
11	k	180	ILE	CA-C	-5.44	1.45	1.52
14	7	187	LEU	CA-C	-5.44	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	W	78	ASP	CA-CB	5.44	1.63	1.53
23	P	192	ASP	CA-CB	5.44	1.59	1.53
30	K	196	ASP	CA-CB	5.44	1.62	1.53
8	1	136	ALA	N-CA	-5.44	1.39	1.45
14	n	181	ALA	C-N	5.43	1.41	1.33
23	P	339	GLU	CA-C	-5.43	1.45	1.52
28	H	395	SER	N-CA	-5.43	1.39	1.46
31	L	251	ILE	CA-C	-5.43	1.45	1.52
6	F	133	LEU	C-N	5.43	1.41	1.33
11	4	139	TYR	N-CA	-5.43	1.39	1.46
1	a	9	ALA	CA-C	-5.43	1.45	1.52
3	c	144	TYR	C-N	5.43	1.40	1.33
20	Z	55	ARG	CD-NE	5.43	1.53	1.46
23	P	89	LEU	CA-CB	5.43	1.62	1.53
33	J	396	THR	N-CA	-5.43	1.39	1.46
7	g	109	ILE	C-N	-5.43	1.27	1.34
21	N	653	ARG	CZ-NH2	5.43	1.40	1.33
23	P	135	GLU	CA-C	-5.43	1.45	1.52
26	U	278	ILE	CA-C	5.43	1.59	1.52
30	K	399	ARG	NE-CZ	5.43	1.39	1.33
20	Z	8	LYS	N-CA	-5.43	1.39	1.46
22	S	209	ILE	C-N	5.43	1.41	1.33
1	a	144	VAL	CA-CB	-5.43	1.46	1.54
28	H	299	ARG	NE-CZ	5.43	1.39	1.33
7	g	72	ARG	CD-NE	5.42	1.53	1.46
1	A	172	GLY	C-N	5.42	1.39	1.34
9	2	103	PRO	CA-CB	5.42	1.60	1.54
17	T	249	MET	CA-CB	5.42	1.62	1.53
22	S	367	TYR	C-N	5.42	1.41	1.33
27	O	254	LEU	C-N	5.42	1.41	1.33
10	3	29	LEU	C-N	5.42	1.39	1.34
14	7	232	ILE	CA-CB	-5.42	1.47	1.54
32	M	159	LEU	CA-CB	5.42	1.62	1.54
5	e	12	VAL	N-CA	-5.42	1.38	1.46
14	n	161	ARG	NE-CZ	5.42	1.39	1.33
17	T	205	ILE	CA-CB	-5.42	1.47	1.54
21	N	597	ARG	CZ-NH2	5.42	1.40	1.33
23	P	201	ARG	NE-CZ	5.42	1.39	1.33
31	L	205	GLU	CA-C	5.42	1.59	1.52
13	6	38	ILE	CA-C	-5.42	1.46	1.52
16	V	194	ARG	NE-CZ	5.42	1.39	1.33
3	c	230	PHE	CA-C	-5.42	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	135	ARG	CZ-NH2	5.42	1.40	1.33
4	D	217	PRO	CA-CB	5.42	1.61	1.53
22	S	358	LYS	C-N	5.42	1.41	1.34
24	Q	16	ASN	CA-CB	5.42	1.63	1.53
26	U	244	ASP	N-CA	5.42	1.53	1.46
15	W	2	VAL	C-N	5.42	1.41	1.33
20	Z	237	VAL	N-CA	-5.42	1.39	1.46
20	Z	253	VAL	CA-CB	5.42	1.56	1.54
24	Q	319	LYS	C-N	5.42	1.42	1.33
31	L	166	LEU	CA-CB	5.42	1.61	1.53
9	i	170	HIS	N-CA	-5.42	1.41	1.46
13	m	158	LEU	CA-C	-5.42	1.45	1.52
24	Q	270	ILE	N-CA	-5.42	1.39	1.46
32	M	322	LYS	N-CA	-5.42	1.39	1.45
9	i	72	CYS	N-CA	-5.41	1.39	1.45
29	I	298	GLY	CA-C	5.41	1.60	1.51
30	K	112	SER	CA-C	-5.41	1.45	1.52
20	Z	256	LEU	C-N	5.41	1.39	1.33
20	Z	418	ALA	C-N	5.41	1.40	1.33
20	Z	553	ARG	NE-CZ	5.41	1.39	1.33
12	l	113	ASN	CA-CB	5.41	1.61	1.53
6	f	166	GLN	N-CA	-5.41	1.39	1.46
11	k	47	ALA	C-N	5.41	1.41	1.33
4	D	195	THR	N-CA	-5.41	1.39	1.46
8	1	121	THR	N-CA	-5.41	1.39	1.45
14	7	236	ASN	CA-C	-5.41	1.45	1.52
15	W	59	PRO	N-CA	-5.41	1.40	1.47
23	P	100	VAL	CA-C	-5.41	1.46	1.52
16	V	296	LEU	C-N	5.41	1.41	1.33
21	N	239	LEU	CA-C	5.41	1.59	1.52
31	L	373	GLU	N-CA	-5.41	1.39	1.45
9	i	65	ARG	CD-NE	5.41	1.53	1.46
7	G	178	LYS	CA-C	-5.41	1.45	1.52
21	N	450	ILE	C-N	5.41	1.40	1.33
30	K	408	GLU	C-N	5.41	1.41	1.33
8	h	28	ARG	CD-NE	5.40	1.53	1.46
11	k	100	VAL	CA-CB	-5.40	1.47	1.54
5	E	65	GLU	CA-C	-5.40	1.46	1.52
29	I	371	LEU	N-CA	-5.40	1.39	1.46
9	2	154	LEU	CA-C	-5.40	1.46	1.52
20	Z	452	LEU	CA-C	-5.40	1.45	1.52
21	N	666	GLN	C-N	5.40	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	8	SER	C-N	5.40	1.41	1.33
10	j	128	GLY	CA-C	-5.40	1.44	1.51
12	l	235	SER	C-N	5.40	1.40	1.33
12	5	200	ASP	C-O	-5.40	1.17	1.24
21	N	848	GLU	C-N	5.40	1.41	1.33
26	U	263	LYS	C-N	5.40	1.41	1.33
28	H	56	LEU	C-N	5.40	1.41	1.34
31	L	136	ASP	CA-CB	5.40	1.62	1.53
32	M	295	LYS	N-CA	-5.40	1.39	1.46
3	C	50	ARG	N-CA	-5.40	1.39	1.45
26	U	38	LEU	C-N	5.40	1.39	1.32
3	c	79	GLY	CA-C	-5.40	1.42	1.51
2	B	42	GLY	CA-C	-5.40	1.45	1.51
7	G	23	GLN	N-CA	-5.40	1.39	1.46
15	W	70	GLY	CA-C	-5.40	1.46	1.52
23	P	317	THR	N-CA	-5.40	1.39	1.46
28	H	339	GLN	CA-C	-5.40	1.45	1.52
32	M	102	GLN	C-N	5.40	1.40	1.33
7	g	218	TRP	N-CA	-5.40	1.38	1.46
21	N	389	TYR	CA-C	-5.40	1.45	1.52
5	e	39	GLY	C-O	-5.39	1.17	1.23
1	A	107	LYS	C-N	5.39	1.41	1.33
1	A	248	ILE	CA-CB	-5.39	1.48	1.54
3	C	185	LYS	N-CA	-5.39	1.39	1.46
15	W	143	ASN	CA-C	-5.39	1.46	1.52
26	U	208	VAL	CA-CB	5.39	1.61	1.54
33	J	126	LEU	CA-CB	-5.39	1.46	1.53
33	J	339	ARG	NE-CZ	5.39	1.39	1.33
7	g	23	GLN	C-N	5.39	1.40	1.33
5	E	20	ARG	CZ-NH1	5.39	1.40	1.32
31	L	94	ASP	C-N	5.39	1.40	1.33
11	k	22	THR	CA-C	-5.39	1.46	1.52
21	N	122	GLN	N-CA	-5.39	1.39	1.46
28	H	395	SER	C-N	5.39	1.41	1.33
29	I	140	LEU	CA-C	-5.39	1.45	1.52
32	M	15	ASP	CA-C	-5.39	1.46	1.52
2	b	103	GLU	N-CA	-5.39	1.39	1.45
6	f	183	ASP	CA-CB	5.39	1.63	1.53
2	B	13	SER	CA-C	-5.39	1.45	1.52
17	T	169	GLN	N-CA	5.39	1.52	1.46
1	a	46	ARG	NE-CZ	5.39	1.39	1.33
4	d	6	ARG	CZ-NH1	5.39	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	h	27	SER	C-N	5.39	1.40	1.33
20	Z	773	ARG	CZ-NH2	5.39	1.40	1.33
21	N	310	ASP	C-N	5.39	1.40	1.33
21	N	880	ARG	C-N	5.39	1.42	1.34
23	P	218	LEU	CA-CB	5.39	1.61	1.53
23	P	364	ARG	CD-NE	5.39	1.53	1.46
23	P	395	ARG	CA-CB	5.39	1.61	1.53
27	O	309	SER	CA-C	5.39	1.59	1.52
6	f	38	LEU	N-CA	-5.39	1.39	1.46
10	j	53	ILE	C-N	5.39	1.40	1.33
2	B	91	LYS	C-N	5.39	1.40	1.34
5	E	233	ASN	CG-ND2	5.39	1.44	1.33
22	S	214	MET	C-N	5.39	1.41	1.34
27	O	286	PHE	CA-C	-5.39	1.46	1.52
32	M	279	PHE	C-N	5.39	1.40	1.33
7	G	156	SER	CA-C	-5.38	1.46	1.52
11	4	105	GLY	CA-C	-5.38	1.48	1.52
16	V	279	HIS	CG-ND1	5.38	1.44	1.38
21	N	568	VAL	C-N	5.38	1.40	1.33
26	U	84	ASN	C-N	5.38	1.40	1.33
29	I	420	LYS	C-N	5.38	1.41	1.34
7	g	13	SER	CA-C	-5.38	1.45	1.52
12	5	235	SER	N-CA	-5.38	1.40	1.46
23	P	5	ALA	CA-CB	5.38	1.60	1.53
28	H	248	LEU	C-N	5.38	1.40	1.33
2	b	166	LYS	C-N	5.38	1.41	1.33
3	C	123	THR	C-N	5.38	1.41	1.33
9	2	241	VAL	CA-C	-5.38	1.46	1.52
24	Q	282	LEU	CA-CB	5.38	1.60	1.53
27	O	210	ARG	CA-C	-5.38	1.46	1.52
29	I	148	LEU	CA-C	-5.38	1.46	1.52
23	P	359	ARG	C-N	5.38	1.40	1.33
25	R	207	ARG	CD-NE	5.38	1.53	1.46
32	M	320	ARG	CZ-NH1	5.38	1.40	1.32
13	6	218	ASP	C-N	5.38	1.40	1.33
16	V	186	GLN	C-O	-5.38	1.17	1.24
16	V	292	ILE	C-N	5.38	1.40	1.33
20	Z	581	VAL	CA-CB	-5.38	1.48	1.54
20	Z	709	LYS	N-CA	-5.38	1.40	1.46
25	R	55	LYS	C-N	5.38	1.40	1.33
13	m	48	GLU	CA-CB	5.38	1.59	1.53
2	B	197	LYS	CA-C	-5.38	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	V	269	ARG	NE-CZ	5.38	1.39	1.33
22	S	61	SER	C-N	5.38	1.40	1.33
25	R	170	VAL	N-CA	-5.38	1.40	1.46
31	L	392	ARG	CD-NE	5.38	1.53	1.46
2	b	194	LEU	C-N	5.38	1.41	1.33
27	O	272	VAL	CA-C	-5.38	1.45	1.52
32	M	161	SER	CA-CB	5.38	1.62	1.53
2	b	233	PRO	N-CA	-5.37	1.40	1.47
4	d	26	ALA	N-CA	-5.37	1.39	1.46
21	N	409	GLY	C-N	5.37	1.41	1.33
32	M	414	ASP	CA-C	-5.37	1.45	1.52
1	A	143	PHE	CA-CB	5.37	1.61	1.53
8	1	189	ALA	C-N	5.37	1.41	1.33
11	4	93	ARG	NE-CZ	5.37	1.39	1.33
4	D	222	VAL	N-CA	-5.37	1.40	1.46
10	3	144	ASP	CA-C	-5.37	1.46	1.52
23	P	51	ASP	CA-C	5.37	1.59	1.52
30	K	233	ALA	CA-CB	5.37	1.61	1.53
9	i	167	LEU	N-CA	-5.37	1.40	1.46
3	C	111	LEU	C-N	5.37	1.40	1.33
7	G	29	LYS	C-N	5.37	1.41	1.34
7	G	211	ASP	CA-C	-5.37	1.45	1.53
8	1	157	LYS	CA-CB	5.37	1.61	1.53
21	N	269	LEU	N-CA	-5.37	1.39	1.46
25	R	346	LYS	N-CA	-5.37	1.39	1.46
30	K	247	LEU	C-N	5.37	1.40	1.33
32	M	343	LEU	CA-C	-5.37	1.45	1.52
3	C	42	ASP	C-N	5.37	1.39	1.32
6	F	51	ARG	CZ-NH2	5.37	1.40	1.33
6	F	126	ARG	NE-CZ	5.37	1.39	1.33
10	3	100	PHE	CA-C	-5.37	1.46	1.52
15	W	5	ALA	CA-C	-5.37	1.46	1.52
27	O	42	SER	C-N	5.37	1.41	1.33
27	O	68	LYS	C-N	5.37	1.41	1.33
31	L	303	ARG	CD-NE	5.37	1.53	1.46
33	J	29	GLU	CA-C	5.37	1.59	1.52
3	c	19	LEU	N-CA	-5.36	1.40	1.46
4	d	138	PHE	CA-C	-5.36	1.46	1.52
1	A	196	GLU	CA-C	5.36	1.59	1.52
21	N	725	LEU	CA-C	-5.36	1.46	1.52
12	l	231	LEU	C-N	5.36	1.40	1.33
10	j	31	SER	C-N	5.36	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	190	ARG	CD-NE	5.36	1.53	1.46
2	B	132	VAL	CA-C	5.36	1.59	1.52
7	G	31	VAL	CA-CB	-5.36	1.47	1.54
13	6	109	ARG	CZ-NH1	5.36	1.40	1.32
16	V	72	PRO	C-N	5.36	1.40	1.33
17	T	210	PHE	N-CA	5.36	1.53	1.46
32	M	320	ARG	CD-NE	5.36	1.53	1.46
12	5	173	GLY	CA-C	-5.36	1.44	1.51
4	D	112	TYR	CA-C	5.36	1.59	1.52
4	D	230	ASN	C-N	5.36	1.41	1.33
28	H	91	LEU	N-CA	-5.36	1.39	1.46
30	K	173	ASP	CA-C	-5.36	1.45	1.52
2	b	90	ARG	CZ-NH1	5.36	1.40	1.32
6	f	48	ALA	CA-C	-5.36	1.46	1.52
2	B	211	LEU	CA-C	-5.36	1.46	1.52
11	4	23	ARG	CZ-NH1	5.36	1.40	1.32
13	6	154	ILE	CA-CB	-5.36	1.47	1.54
21	N	205	SER	CA-CB	-5.36	1.44	1.53
21	N	623	PHE	CA-CB	5.36	1.61	1.53
22	S	276	LEU	CA-C	-5.36	1.45	1.52
25	R	192	GLU	N-CA	-5.36	1.40	1.46
14	7	44	VAL	C-N	5.35	1.41	1.33
21	N	623	PHE	CA-C	-5.35	1.46	1.52
22	S	188	TYR	CA-CB	5.35	1.61	1.53
28	H	261	ARG	NE-CZ	5.35	1.39	1.33
10	3	5	SER	N-CA	-5.35	1.39	1.46
20	Z	564	ARG	CZ-NH1	5.35	1.40	1.32
23	P	425	HIS	CD2-NE2	5.35	1.43	1.37
24	Q	113	ASP	C-O	-5.35	1.17	1.24
24	Q	365	ILE	N-CA	-5.35	1.40	1.46
1	a	209	HIS	N-CA	-5.35	1.39	1.46
21	N	699	ALA	N-CA	-5.35	1.39	1.46
27	O	189	TYR	CA-C	-5.35	1.46	1.52
30	K	346	ARG	N-CA	5.35	1.52	1.46
15	W	23	ARG	NE-CZ	5.35	1.39	1.33
25	R	401	HIS	ND1-CE1	5.35	1.37	1.32
26	U	87	GLU	N-CA	-5.35	1.39	1.46
2	B	75	TYR	N-CA	-5.35	1.38	1.46
20	Z	777	PRO	CA-C	-5.35	1.44	1.52
7	g	121	GLN	C-N	5.35	1.41	1.33
2	b	90	ARG	CA-C	-5.34	1.45	1.52
7	G	138	PHE	N-CA	-5.34	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	245	LYS	CA-C	-5.34	1.46	1.52
13	6	43	ILE	CA-C	-5.34	1.46	1.52
13	6	103	HIS	CD2-NE2	5.34	1.43	1.37
16	V	118	LEU	CA-C	-5.34	1.45	1.52
20	Z	293	MET	N-CA	-5.34	1.39	1.46
21	N	731	VAL	C-N	5.34	1.41	1.33
28	H	229	LEU	CA-CB	5.34	1.61	1.53
26	U	124	ASP	CA-CB	5.34	1.61	1.53
4	d	95	SER	CA-CB	5.34	1.62	1.53
2	B	112	SER	N-CA	-5.34	1.39	1.46
10	3	3	ASP	CA-C	-5.34	1.47	1.53
28	H	435	ARG	CZ-NH1	5.34	1.40	1.32
30	K	324	LEU	CB-CG	5.34	1.64	1.53
10	j	179	ALA	CA-C	-5.34	1.45	1.52
13	m	135	PRO	C-N	5.34	1.41	1.33
7	G	182	HIS	CB-CG	5.34	1.57	1.50
10	3	25	CYS	C-N	5.34	1.41	1.33
14	7	176	ALA	CA-C	-5.34	1.46	1.52
22	S	367	TYR	CZ-OH	5.34	1.49	1.38
27	O	326	HIS	CB-CG	5.34	1.57	1.50
30	K	406	ASP	C-N	5.34	1.40	1.33
8	h	90	VAL	CA-C	5.34	1.59	1.52
13	m	78	ASN	C-N	5.34	1.41	1.33
3	c	129	ARG	CZ-NH2	5.34	1.40	1.33
10	j	167	ILE	CA-C	-5.34	1.45	1.52
11	k	57	ALA	CA-CB	5.34	1.61	1.53
3	C	162	ALA	CA-C	-5.34	1.45	1.52
5	E	212	LEU	C-N	5.34	1.40	1.33
8	1	40	THR	CA-C	-5.34	1.46	1.52
29	I	259	ASP	CA-C	-5.34	1.45	1.52
29	I	362	LEU	N-CA	-5.34	1.40	1.46
33	J	374	ARG	NE-CZ	5.34	1.39	1.33
28	H	378	SER	CA-C	5.33	1.59	1.52
5	e	28	LEU	C-N	5.33	1.41	1.33
14	7	124	TYR	N-CA	-5.33	1.39	1.46
22	S	225	HIS	ND1-CE1	5.33	1.37	1.32
25	R	79	LEU	CA-CB	5.33	1.64	1.54
1	a	87	ILE	CA-C	-5.33	1.47	1.52
20	Z	349	THR	CA-C	-5.33	1.46	1.52
29	I	322	VAL	C-N	5.33	1.40	1.33
20	Z	430	LEU	C-O	-5.33	1.18	1.24
20	Z	463	HIS	CB-CG	-5.33	1.42	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	P	107	SER	N-CA	-5.33	1.40	1.46
7	G	228	HIS	ND1-CE1	5.33	1.37	1.32
25	R	157	SER	CA-C	5.33	1.59	1.52
5	E	109	VAL	CA-CB	-5.33	1.47	1.54
23	P	172	GLU	N-CA	-5.33	1.39	1.46
3	c	169	THR	N-CA	-5.32	1.40	1.46
10	j	105	VAL	N-CA	-5.32	1.39	1.46
16	V	54	LEU	C-N	5.32	1.41	1.33
20	Z	598	ALA	CA-C	-5.32	1.46	1.52
33	J	305	LEU	N-CA	-5.32	1.40	1.46
1	a	207	ILE	C-O	5.32	1.30	1.24
2	b	178	ARG	CZ-NH2	5.32	1.40	1.33
5	e	224	LYS	CA-CB	5.32	1.61	1.53
14	n	189	ARG	NE-CZ	5.32	1.39	1.33
16	V	170	PRO	N-CA	5.32	1.54	1.47
17	T	128	TYR	C-N	5.32	1.41	1.33
28	H	370	ARG	N-CA	5.32	1.53	1.45
1	a	27	GLN	CA-C	-5.32	1.45	1.52
24	Q	408	THR	C-N	5.32	1.41	1.33
13	m	55	GLY	CA-C	-5.32	1.45	1.52
13	m	62	ALA	C-N	5.32	1.40	1.33
16	V	28	TYR	CA-CB	5.32	1.60	1.53
19	Y	13	LYS	CA-C	-5.32	1.46	1.52
20	Z	214	HIS	C-N	5.32	1.41	1.33
7	g	236	LEU	N-CA	-5.32	1.40	1.46
14	7	137	ARG	NE-CZ	5.32	1.38	1.33
20	Z	247	GLN	CD-NE2	5.32	1.44	1.33
24	Q	113	ASP	CA-CB	5.32	1.61	1.53
25	R	92	ILE	CA-C	5.32	1.59	1.52
25	R	275	GLU	C-N	5.32	1.41	1.33
27	O	60	ARG	CD-NE	5.32	1.53	1.46
30	K	192	LEU	CA-CB	5.32	1.61	1.53
30	K	350	ARG	CZ-NH2	5.32	1.40	1.33
33	J	234	PHE	CA-CB	5.32	1.61	1.53
12	5	247	GLY	N-CA	-5.31	1.39	1.45
17	T	7	LEU	C-N	5.31	1.41	1.34
23	P	236	GLU	C-N	5.31	1.40	1.33
31	L	215	PRO	C-O	-5.31	1.17	1.24
5	e	188	HIS	ND1-CE1	5.31	1.37	1.32
12	l	178	GLY	C-N	5.31	1.40	1.33
5	e	42	THR	C-N	5.31	1.41	1.33
14	7	215	ARG	NE-CZ	5.31	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	N	806	THR	CA-C	-5.31	1.45	1.52
22	S	65	ASN	CA-CB	5.31	1.61	1.53
31	L	62	ARG	CD-NE	5.31	1.53	1.46
11	k	142	SER	N-CA	-5.31	1.39	1.46
20	Z	347	ASN	CG-ND2	5.31	1.44	1.33
28	H	191	ILE	CA-CB	-5.31	1.47	1.54
12	l	269	GLY	CA-C	-5.31	1.44	1.51
3	c	222	ASP	CA-C	-5.30	1.46	1.52
12	l	257	GLU	C-O	-5.30	1.18	1.24
14	n	248	GLU	CA-CB	-5.30	1.45	1.53
20	Z	583	ASP	C-O	-5.30	1.18	1.24
20	Z	876	VAL	N-CA	-5.30	1.40	1.46
1	a	150	LEU	C-N	5.30	1.41	1.33
6	f	72	LEU	CA-C	-5.30	1.46	1.52
1	A	19	PHE	CA-CB	5.30	1.61	1.53
21	N	79	VAL	CA-C	-5.30	1.44	1.52
22	S	345	TYR	CA-C	-5.30	1.45	1.52
25	R	123	ASP	C-N	5.30	1.41	1.33
25	R	282	THR	N-CA	5.30	1.51	1.46
13	m	186	GLU	CA-C	-5.30	1.46	1.52
3	C	185	LYS	C-N	5.30	1.40	1.33
16	V	40	HIS	ND1-CE1	5.30	1.37	1.32
20	Z	798	ARG	CZ-NH2	5.30	1.40	1.33
30	K	365	GLU	C-N	5.30	1.40	1.33
33	J	143	PRO	CA-C	-5.30	1.45	1.52
6	f	179	PHE	CA-CB	5.30	1.62	1.53
8	1	152	ARG	CA-C	-5.30	1.45	1.52
21	N	262	VAL	CA-C	-5.30	1.46	1.52
23	P	12	ASP	CA-C	-5.30	1.46	1.52
5	e	178	GLY	C-N	5.30	1.41	1.33
8	1	77	SER	N-CA	-5.30	1.40	1.46
9	2	62	LYS	CA-C	5.30	1.59	1.52
15	W	139	VAL	CA-CB	-5.30	1.48	1.54
23	P	174	SER	N-CA	5.30	1.52	1.46
24	Q	359	ILE	CA-C	-5.30	1.45	1.52
21	N	769	PRO	CA-CB	5.29	1.60	1.53
7	g	130	ARG	NE-CZ	5.29	1.38	1.33
10	j	145	GLN	CA-C	-5.29	1.46	1.52
7	G	245	LYS	CA-CB	5.29	1.61	1.53
10	3	136	PHE	CA-C	-5.29	1.45	1.52
20	Z	173	ALA	CA-CB	-5.29	1.44	1.53
21	N	281	GLY	N-CA	-5.29	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	199	ALA	CA-CB	5.29	1.61	1.53
3	c	244	ILE	N-CA	-5.29	1.40	1.46
3	C	152	ASN	CA-CB	5.29	1.61	1.53
5	E	213	ASP	N-CA	-5.29	1.39	1.45
6	F	58	SER	C-N	5.29	1.41	1.33
16	V	116	CYS	C-N	-5.29	1.25	1.33
26	U	158	PRO	C-N	5.29	1.41	1.33
29	I	215	PRO	CA-C	5.29	1.57	1.52
31	L	150	ILE	C-N	5.29	1.41	1.33
2	b	147	LEU	C-N	5.29	1.40	1.33
7	g	81	LEU	CA-C	-5.29	1.46	1.52
27	O	166	ARG	CZ-NH2	5.29	1.40	1.33
29	I	137	ASP	CA-CB	5.29	1.61	1.53
10	j	168	SER	CA-C	-5.29	1.46	1.52
12	5	155	SER	CA-CB	5.29	1.62	1.53
15	W	65	PHE	CA-C	-5.29	1.46	1.52
29	I	244	PHE	CA-C	-5.29	1.46	1.52
33	J	316	PHE	CA-C	-5.29	1.46	1.52
4	d	112	TYR	CA-CB	5.29	1.61	1.53
5	e	99	HIS	CG-ND1	-5.29	1.32	1.38
28	H	307	PHE	CA-C	-5.29	1.46	1.52
7	g	136	THR	N-CA	-5.29	1.40	1.46
2	B	62	SER	CA-C	-5.29	1.46	1.52
8	1	54	ARG	CZ-NH2	5.29	1.40	1.33
8	1	140	SER	N-CA	-5.29	1.39	1.46
10	3	61	THR	CA-C	-5.29	1.46	1.52
19	Y	1	MET	N-CA	5.29	1.56	1.46
20	Z	81	SER	CA-CB	5.29	1.61	1.53
22	S	65	ASN	C-O	5.29	1.30	1.24
25	R	222	ARG	CD-NE	5.29	1.53	1.46
3	c	143	ARG	CA-C	-5.28	1.45	1.52
6	f	159	THR	N-CA	-5.28	1.40	1.46
6	f	162	GLY	N-CA	-5.28	1.38	1.45
11	k	46	PHE	C-N	5.28	1.40	1.33
19	Y	23	GLU	C-N	5.28	1.40	1.33
26	U	32	ARG	CD-NE	5.28	1.53	1.46
32	M	388	GLY	C-N	5.28	1.41	1.33
13	m	220	VAL	C-O	-5.28	1.18	1.24
12	5	273	TRP	CD2-CE2	-5.28	1.32	1.41
12	5	283	ASN	CA-CB	5.28	1.62	1.53
23	P	155	GLU	CA-CB	5.28	1.61	1.53
30	K	115	GLY	C-N	5.28	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	172	LYS	N-CA	-5.28	1.40	1.46
6	F	215	ILE	N-CA	-5.28	1.40	1.46
22	S	136	CYS	CA-CB	5.28	1.61	1.53
4	d	135	ILE	C-O	-5.28	1.18	1.24
7	G	62	GLN	CA-C	-5.28	1.48	1.53
25	R	176	ARG	CD-NE	5.28	1.53	1.46
3	C	9	ARG	CD-NE	5.28	1.53	1.46
3	C	58	GLU	CA-C	-5.28	1.45	1.52
4	D	67	ILE	C-N	5.28	1.41	1.33
11	4	132	ALA	CA-C	-5.28	1.46	1.52
20	Z	418	ALA	CA-C	-5.28	1.46	1.52
20	Z	524	ALA	C-N	5.28	1.41	1.33
25	R	167	LYS	C-N	5.28	1.40	1.33
28	H	382	LEU	CA-C	-5.28	1.46	1.52
32	M	20	GLN	CA-CB	5.28	1.61	1.53
32	M	390	GLN	N-CA	-5.28	1.39	1.46
2	b	182	GLU	N-CA	-5.28	1.39	1.46
32	M	184	GLY	C-N	5.28	1.41	1.33
2	B	130	PHE	CG-CD1	5.27	1.50	1.38
20	Z	138	ARG	CZ-NH2	5.27	1.40	1.33
31	L	219	LEU	CA-C	-5.27	1.46	1.52
7	g	209	GLU	N-CA	-5.27	1.39	1.46
11	k	97	PRO	CA-C	-5.27	1.45	1.52
3	C	157	TYR	C-N	5.27	1.40	1.33
25	R	337	VAL	CA-C	-5.27	1.46	1.52
30	K	232	ALA	N-CA	-5.27	1.39	1.46
8	1	105	GLY	CA-C	-5.27	1.44	1.51
30	K	307	ASP	N-CA	5.27	1.53	1.46
32	M	345	ARG	CD-NE	5.27	1.53	1.46
5	e	31	ILE	CB-CG1	5.27	1.64	1.53
11	k	13	VAL	N-CA	-5.27	1.40	1.46
7	G	241	ASP	C-N	5.27	1.40	1.33
20	Z	773	ARG	CD-NE	5.27	1.53	1.46
26	U	212	ASP	CA-C	-5.27	1.46	1.52
31	L	266	MET	CA-CB	5.27	1.61	1.53
2	b	61	LEU	CA-C	-5.27	1.45	1.52
2	B	147	LEU	CA-CB	5.27	1.62	1.53
32	M	21	GLU	N-CA	5.27	1.53	1.46
3	C	229	ILE	CA-C	-5.27	1.47	1.52
16	V	80	VAL	CA-CB	5.27	1.61	1.54
20	Z	395	CYS	CA-C	-5.27	1.46	1.52
16	V	50	MET	CA-C	-5.26	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	432	GLY	CA-C	-5.26	1.44	1.51
23	P	329	PHE	C-N	5.26	1.41	1.33
29	I	282	ASP	CA-C	-5.26	1.46	1.52
32	M	366	ARG	C-N	5.26	1.41	1.33
6	F	3	ARG	CZ-NH1	5.26	1.40	1.32
23	P	425	HIS	CA-C	-5.26	1.46	1.52
1	A	131	ARG	CZ-NH1	5.26	1.40	1.32
7	G	46	VAL	CA-C	-5.26	1.46	1.52
23	P	55	SER	C-N	5.26	1.40	1.33
24	Q	127	ARG	CZ-NH1	5.26	1.40	1.32
28	H	201	GLU	C-N	5.26	1.41	1.33
10	j	95	LEU	CA-C	-5.26	1.45	1.52
2	B	234	ARG	N-CA	-5.26	1.39	1.46
22	S	208	ILE	CA-CB	-5.26	1.48	1.54
31	L	348	GLU	CA-C	-5.26	1.46	1.52
1	a	67	THR	CA-CB	-5.26	1.44	1.53
14	n	231	ALA	CA-CB	5.26	1.65	1.53
20	Z	326	VAL	CA-C	-5.26	1.46	1.52
27	O	255	LEU	CA-CB	5.26	1.61	1.53
13	m	144	CYS	N-CA	5.26	1.52	1.46
20	Z	803	ALA	CA-C	-5.26	1.45	1.52
29	I	361	ILE	CA-C	-5.26	1.46	1.52
30	K	284	ALA	C-N	5.26	1.41	1.33
5	e	125	GLU	C-N	5.25	1.41	1.33
9	i	158	SER	N-CA	-5.25	1.39	1.46
20	Z	571	GLY	C-N	5.25	1.40	1.33
22	S	371	LEU	CA-CB	5.25	1.62	1.53
2	b	174	PHE	CA-CB	5.25	1.61	1.53
13	6	125	ASP	CA-C	5.25	1.59	1.52
17	T	233	VAL	N-CA	-5.25	1.39	1.46
22	S	234	ILE	CA-C	-5.25	1.46	1.52
24	Q	293	SER	N-CA	-5.25	1.39	1.45
1	a	250	GLU	C-O	5.25	1.30	1.24
9	i	132	VAL	N-CA	-5.25	1.40	1.46
14	7	238	GLY	CA-C	-5.25	1.44	1.51
24	Q	73	LYS	CA-C	-5.25	1.46	1.52
5	E	215	ASN	C-N	5.25	1.40	1.33
17	T	215	LYS	C-N	5.25	1.41	1.33
2	b	12	PHE	C-N	5.25	1.39	1.32
1	A	128	TYR	N-CA	-5.25	1.39	1.46
7	G	82	ILE	C-O	-5.25	1.20	1.24
7	G	232	LYS	CA-C	5.25	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	5	176	ILE	C-N	5.25	1.41	1.33
22	S	80	VAL	N-CA	-5.25	1.40	1.46
33	J	187	LEU	CA-CB	5.25	1.61	1.53
2	b	241	GLN	CA-CB	5.25	1.61	1.53
10	j	28	ARG	CD-NE	5.25	1.53	1.46
6	F	34	VAL	N-CA	-5.25	1.40	1.46
10	3	142	ALA	C-N	5.25	1.40	1.33
21	N	665	ILE	C-N	5.25	1.41	1.33
27	O	363	ILE	CA-CB	-5.25	1.48	1.54
15	W	180	LEU	CA-C	5.25	1.59	1.52
22	S	298	ARG	CD-NE	5.25	1.53	1.46
2	B	117	ILE	CA-C	-5.24	1.46	1.52
5	E	10	ARG	CZ-NH2	5.24	1.40	1.33
10	3	165	GLU	CA-C	-5.24	1.46	1.52
16	V	212	MET	N-CA	-5.24	1.40	1.46
30	K	294	ARG	CZ-NH1	5.24	1.40	1.32
7	g	31	VAL	CA-CB	-5.24	1.47	1.54
29	I	132	ILE	CA-C	-5.24	1.46	1.52
33	J	266	SER	CA-CB	5.24	1.61	1.53
14	7	228	PHE	CA-C	-5.24	1.46	1.52
20	Z	834	LEU	C-N	5.24	1.40	1.33
3	c	217	ARG	N-CA	-5.24	1.39	1.45
4	d	129	PHE	CA-C	5.24	1.60	1.53
4	D	90	ARG	NE-CZ	5.24	1.38	1.33
10	3	82	ILE	CA-CB	-5.24	1.49	1.54
12	5	201	ILE	CA-C	-5.24	1.46	1.52
21	N	850	LYS	C-N	5.24	1.40	1.33
29	I	82	LEU	N-CA	-5.24	1.40	1.46
31	L	309	LEU	N-CA	-5.24	1.40	1.46
32	M	394	VAL	C-O	-5.24	1.18	1.24
10	3	138	VAL	CA-C	-5.24	1.46	1.52
25	R	240	SER	C-N	5.24	1.39	1.33
27	O	292	CYS	CA-CB	5.24	1.61	1.53
29	I	189	SER	CA-CB	5.24	1.61	1.53
5	e	200	VAL	N-CA	-5.24	1.40	1.46
6	f	107	ARG	CZ-NH1	5.24	1.40	1.32
11	k	151	ASP	N-CA	-5.24	1.39	1.46
13	m	40	ASP	CA-C	-5.24	1.45	1.52
3	C	202	ASP	CA-CB	5.24	1.62	1.53
12	5	168	ALA	C-N	5.24	1.40	1.33
13	6	114	TYR	C-N	5.24	1.40	1.33
13	6	221	ARG	C-N	5.24	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	K	186	GLU	CA-CB	5.24	1.61	1.53
12	l	242	ARG	CZ-NH1	5.23	1.40	1.32
14	n	148	ILE	CA-C	-5.23	1.46	1.52
7	G	150	MET	CA-C	-5.23	1.46	1.52
21	N	310	ASP	CA-CB	5.23	1.61	1.53
21	N	728	LYS	CA-C	5.23	1.59	1.52
4	d	68	ASP	CA-C	-5.23	1.45	1.52
4	d	243	GLN	CA-CB	5.23	1.61	1.53
13	m	221	ARG	N-CA	-5.23	1.39	1.45
14	n	223	ARG	CD-NE	5.23	1.53	1.46
11	4	77	PRO	N-CD	-5.23	1.40	1.47
23	P	395	ARG	NE-CZ	5.23	1.38	1.33
2	B	156	TYR	CA-C	-5.23	1.46	1.52
6	F	29	ILE	C-O	-5.23	1.18	1.24
10	3	80	ARG	N-CA	-5.23	1.39	1.46
12	5	189	TYR	N-CA	-5.23	1.39	1.46
13	6	137	GLY	N-CA	5.23	1.50	1.45
20	Z	183	LYS	C-N	5.23	1.40	1.33
20	Z	348	LEU	CA-C	5.23	1.59	1.52
21	N	468	GLU	CA-C	-5.23	1.46	1.52
23	P	21	PHE	CA-CB	5.23	1.60	1.53
24	Q	268	SER	CA-C	-5.23	1.46	1.52
7	g	91	ARG	C-O	-5.23	1.18	1.24
5	E	17	PRO	N-CA	5.23	1.53	1.47
20	Z	946	THR	CA-CB	-5.23	1.46	1.53
1	a	17	THR	C-N	5.23	1.40	1.33
5	E	188	HIS	CG-CD2	5.23	1.41	1.35
10	3	179	ALA	C-N	5.23	1.39	1.33
18	X	87	PHE	CA-C	5.23	1.59	1.52
19	Y	9	GLN	C-N	5.23	1.41	1.33
21	N	921	ARG	CZ-NH2	5.23	1.40	1.33
24	Q	176	ASP	C-N	5.23	1.40	1.33
6	F	202	ARG	CA-C	-5.23	1.45	1.52
9	2	118	LYS	CA-C	-5.23	1.46	1.52
15	W	17	ARG	C-N	5.23	1.40	1.33
5	e	8	TYR	CA-CB	5.22	1.60	1.53
23	P	214	GLU	C-N	5.22	1.40	1.33
26	U	218	GLU	CA-CB	5.22	1.62	1.53
7	g	237	GLN	CA-C	-5.22	1.46	1.52
8	h	180	GLY	C-N	5.22	1.40	1.33
12	l	265	ASN	N-CA	-5.22	1.39	1.46
5	E	132	ARG	CZ-NH2	5.22	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	Z	15	GLN	N-CA	-5.22	1.40	1.46
23	P	217	LYS	CA-C	-5.22	1.46	1.52
23	P	411	LEU	CA-C	-5.22	1.45	1.52
30	K	57	GLU	CA-C	5.22	1.59	1.52
30	K	134	SER	N-CA	5.22	1.52	1.46
33	J	142	VAL	CA-CB	-5.22	1.48	1.53
4	d	206	GLY	CA-C	-5.22	1.44	1.51
10	j	62	THR	N-CA	5.22	1.52	1.46
6	F	199	GLN	CA-CB	5.22	1.61	1.53
9	2	164	MET	CA-CB	5.22	1.61	1.53
9	2	217	ARG	C-O	-5.22	1.17	1.23
20	Z	909	ARG	NE-CZ	5.22	1.38	1.33
6	f	132	LEU	C-N	5.22	1.40	1.33
1	A	243	GLU	CA-C	-5.22	1.46	1.52
10	3	44	PHE	C-N	5.22	1.40	1.33
12	5	284	ASN	CA-C	-5.22	1.45	1.52
25	R	119	LYS	C-O	-5.22	1.18	1.24
26	U	15	LEU	CA-C	-5.22	1.46	1.52
31	L	361	PHE	C-O	-5.22	1.18	1.24
14	n	106	GLU	CA-CB	5.22	1.61	1.53
21	N	675	VAL	CA-CB	5.22	1.60	1.54
5	e	134	MET	CA-C	-5.22	1.46	1.52
6	f	78	ALA	CA-C	-5.22	1.46	1.52
13	m	15	ASP	CA-C	-5.22	1.46	1.52
3	C	41	SER	N-CA	-5.22	1.40	1.46
12	5	225	VAL	C-O	-5.22	1.18	1.24
20	Z	756	MET	CA-CB	5.22	1.61	1.53
31	L	131	VAL	C-O	-5.22	1.18	1.24
10	j	42	LYS	N-CA	-5.21	1.38	1.46
10	j	144	ASP	CA-CB	5.21	1.61	1.53
6	F	101	ARG	CD-NE	5.21	1.53	1.46
20	Z	41	GLU	N-CA	-5.21	1.40	1.46
20	Z	161	ILE	C-N	5.21	1.41	1.33
21	N	293	LEU	C-O	5.21	1.30	1.24
21	N	495	PRO	C-N	5.21	1.41	1.33
21	N	786	ARG	NE-CZ	5.21	1.38	1.33
26	U	134	THR	CA-C	-5.21	1.46	1.52
29	I	341	PRO	N-CA	-5.21	1.40	1.47
5	e	20	ARG	CZ-NH1	5.21	1.40	1.32
12	5	258	ASP	CA-CB	5.21	1.62	1.53
23	P	167	THR	C-N	5.21	1.40	1.33
23	P	364	ARG	CZ-NH1	5.21	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	h	79	TYR	CA-CB	-5.21	1.45	1.53
11	4	29	LYS	C-N	5.21	1.41	1.33
15	W	166	GLU	C-N	5.21	1.40	1.33
17	T	64	VAL	CA-CB	-5.21	1.47	1.54
18	X	57	VAL	CA-CB	-5.21	1.47	1.54
19	Y	13	LYS	CA-CB	5.21	1.61	1.53
20	Z	286	VAL	C-O	-5.21	1.18	1.24
27	O	115	ARG	N-CA	-5.21	1.39	1.46
27	O	220	SER	N-CA	-5.21	1.40	1.46
31	L	102	GLY	C-N	5.21	1.40	1.33
13	6	213	LEU	CA-C	-5.21	1.46	1.52
17	T	52	LEU	C-O	5.21	1.30	1.24
22	S	380	CYS	C-N	5.21	1.40	1.33
25	R	403	LEU	CA-CB	5.21	1.61	1.53
7	g	103	TYR	CA-C	-5.21	1.45	1.52
7	g	147	HIS	CG-ND1	5.21	1.44	1.38
22	S	285	ASP	N-CA	-5.21	1.40	1.46
29	I	369	MET	N-CA	-5.21	1.39	1.46
2	B	108	LYS	C-N	5.21	1.40	1.33
21	N	651	PHE	CB-CG	5.21	1.62	1.50
25	R	124	ASP	CA-CB	5.21	1.62	1.53
26	U	100	ARG	CD-NE	5.21	1.53	1.46
26	U	189	ARG	NE-CZ	5.21	1.38	1.33
28	H	194	SER	C-N	5.21	1.40	1.33
30	K	122	ILE	C-N	5.21	1.40	1.33
31	L	53	HIS	CE1-NE2	-5.21	1.27	1.32
20	Z	405	ASN	CA-C	-5.21	1.45	1.52
3	c	113	ARG	NE-CZ	5.20	1.38	1.33
6	f	3	ARG	CD-NE	5.20	1.53	1.46
9	2	143	HIS	C-O	-5.20	1.16	1.23
24	Q	247	HIS	CE1-NE2	5.20	1.37	1.32
20	Z	809	MET	CA-C	-5.20	1.46	1.52
20	Z	820	ALA	N-CA	-5.20	1.40	1.46
21	N	50	TYR	N-CA	5.20	1.52	1.46
21	N	458	ALA	CA-C	5.20	1.58	1.53
24	Q	78	ILE	CA-C	5.20	1.56	1.52
28	H	157	VAL	N-CA	-5.20	1.40	1.46
33	J	200	ARG	CA-C	-5.20	1.46	1.52
12	l	139	ARG	CD-NE	5.20	1.53	1.46
20	Z	857	LEU	CA-CB	5.20	1.61	1.53
25	R	327	ASP	N-CA	5.20	1.52	1.46
9	i	46	ASP	CA-CB	5.20	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	X	39	GLU	C-O	5.20	1.27	1.23
9	2	104	ARG	CD-NE	5.20	1.53	1.46
9	2	161	LEU	N-CA	-5.20	1.40	1.46
20	Z	279	THR	C-O	-5.20	1.17	1.24
20	Z	784	SER	CA-C	-5.20	1.45	1.52
21	N	453	ALA	N-CA	-5.20	1.39	1.46
24	Q	371	GLN	CA-C	-5.20	1.45	1.52
30	K	175	GLY	CA-C	-5.20	1.44	1.51
5	e	91	HIS	CA-CB	5.19	1.61	1.53
28	H	117	THR	N-CA	-5.19	1.39	1.46
31	L	131	VAL	C-N	5.19	1.40	1.33
1	A	234	PHE	CG-CD1	5.19	1.49	1.38
1	a	34	ALA	CA-C	-5.19	1.46	1.52
10	j	23	ILE	N-CA	-5.19	1.40	1.46
1	A	216	THR	C-N	5.19	1.40	1.33
6	F	93	ASN	CA-CB	5.19	1.61	1.53
9	2	61	ALA	C-N	5.19	1.41	1.33
33	J	287	ASN	C-N	5.19	1.41	1.33
10	j	128	GLY	C-N	5.19	1.39	1.33
20	Z	880	SER	N-CA	-5.19	1.40	1.46
21	N	62	ALA	C-N	5.19	1.40	1.33
21	N	889	ARG	CZ-NH1	5.19	1.40	1.32
30	K	81	ARG	CD-NE	5.19	1.53	1.46
7	g	102	LEU	CA-CB	5.19	1.61	1.53
11	k	176	PHE	CG-CD1	5.19	1.49	1.38
4	D	129	PHE	CA-C	5.19	1.60	1.52
13	6	124	GLU	CA-C	-5.19	1.45	1.52
19	Y	12	SER	CA-CB	5.19	1.61	1.53
21	N	438	ASP	CA-C	-5.19	1.46	1.52
28	H	156	VAL	N-CA	-5.19	1.39	1.46
11	k	44	MET	CA-C	-5.19	1.46	1.52
3	C	32	ALA	N-CA	-5.19	1.39	1.45
3	C	67	TYR	CA-C	-5.18	1.46	1.52
9	2	192	ILE	CA-C	-5.18	1.46	1.52
17	T	224	ARG	C-N	5.18	1.40	1.33
9	i	61	ALA	N-CA	-5.18	1.39	1.46
13	m	157	PHE	N-CA	-5.18	1.40	1.46
1	A	245	LEU	C-N	5.18	1.40	1.33
16	V	59	ASP	CA-CB	5.18	1.62	1.53
22	S	457	PRO	CA-CB	5.18	1.61	1.53
2	B	4	ARG	C-N	5.18	1.40	1.33
20	Z	447	VAL	N-CA	-5.18	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	O	326	HIS	ND1-CE1	5.18	1.37	1.32
33	J	125	VAL	CA-CB	5.18	1.60	1.54
8	h	108	VAL	C-N	5.18	1.41	1.33
13	6	117	THR	CA-C	-5.18	1.46	1.52
17	T	31	LYS	N-CA	-5.18	1.39	1.46
21	N	573	HIS	ND1-CE1	5.18	1.37	1.32
21	N	906	ARG	NE-CZ	5.18	1.38	1.33
30	K	349	ARG	CD-NE	5.18	1.53	1.46
32	M	321	VAL	CA-C	-5.18	1.46	1.52
2	b	13	SER	C-N	5.18	1.38	1.33
3	c	94	HIS	CG-ND1	-5.18	1.32	1.38
6	f	103	LEU	CA-C	-5.18	1.46	1.52
12	l	133	TRP	NE1-CE2	-5.18	1.31	1.37
20	Z	412	GLY	C-O	-5.18	1.17	1.24
27	O	35	GLU	C-N	5.18	1.41	1.33
27	O	348	VAL	CA-C	-5.18	1.46	1.52
30	K	388	GLN	CA-C	-5.18	1.46	1.52
32	M	179	THR	C-N	5.18	1.41	1.33
3	c	84	ALA	CA-CB	5.17	1.61	1.53
8	h	103	THR	CA-C	-5.17	1.46	1.52
10	j	155	GLU	N-CA	-5.17	1.41	1.45
20	Z	544	THR	CA-C	-5.17	1.46	1.52
27	O	307	MET	C-N	5.17	1.40	1.33
29	I	262	ARG	N-CA	-5.17	1.39	1.46
33	J	55	VAL	C-N	5.17	1.40	1.33
10	j	48	HIS	ND1-CE1	5.17	1.37	1.32
8	h	18	LYS	CA-CB	5.17	1.61	1.53
9	i	73	ALA	CA-C	-5.17	1.46	1.52
5	E	127	ALA	CA-C	-5.17	1.46	1.52
13	6	170	PRO	C-N	5.17	1.41	1.33
17	T	93	ASN	CA-CB	5.17	1.62	1.53
20	Z	948	TRP	C-N	5.17	1.40	1.33
22	S	147	TRP	CZ2-CH2	5.17	1.47	1.37
27	O	115	ARG	CD-NE	5.17	1.53	1.46
2	B	52	SER	CA-C	-5.17	1.46	1.53
3	C	40	ALA	N-CA	-5.17	1.39	1.45
11	4	7	ILE	C-N	5.17	1.40	1.33
11	4	164	CYS	CA-CB	5.17	1.61	1.53
7	G	53	LEU	CA-CB	5.17	1.61	1.53
21	N	326	SER	CA-C	-5.17	1.46	1.52
21	N	628	ALA	CA-C	-5.17	1.46	1.52
31	L	343	LEU	CA-C	-5.17	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	J	238	ARG	CZ-NH1	5.17	1.40	1.32
5	e	93	ARG	CA-C	-5.17	1.46	1.52
1	A	250	GLU	N-CA	-5.17	1.39	1.46
25	R	362	ALA	N-CA	-5.17	1.40	1.46
26	U	149	SER	N-CA	5.17	1.52	1.46
7	g	97	ALA	C-N	-5.17	1.27	1.33
8	1	38	ARG	NE-CZ	5.17	1.38	1.33
13	6	116	HIS	ND1-CE1	5.17	1.37	1.32
29	I	300	ARG	CA-C	-5.17	1.46	1.52
4	d	131	VAL	N-CA	5.16	1.52	1.46
2	B	101	TYR	CA-C	-5.16	1.45	1.52
14	7	66	LEU	C-O	-5.16	1.17	1.23
21	N	124	TYR	C-N	5.16	1.40	1.33
21	N	903	VAL	CA-CB	-5.16	1.47	1.54
32	M	296	SER	CA-C	-5.16	1.45	1.52
11	k	100	VAL	CA-C	-5.16	1.46	1.52
26	U	302	GLN	C-O	-5.16	1.18	1.24
31	L	293	GLU	C-N	5.16	1.41	1.33
15	W	81	ILE	CA-CB	5.16	1.61	1.54
20	Z	276	ASN	C-N	5.16	1.40	1.33
21	N	373	VAL	C-O	-5.16	1.18	1.24
21	N	484	GLY	CA-C	5.16	1.58	1.51
23	P	291	LYS	N-CA	-5.16	1.39	1.46
24	Q	63	GLN	C-N	5.16	1.40	1.33
21	N	863	SER	CA-C	-5.16	1.46	1.52
33	J	138	MET	C-N	5.16	1.40	1.33
33	J	202	VAL	CA-C	-5.16	1.46	1.52
1	a	12	TYR	CA-C	-5.16	1.47	1.52
1	a	38	THR	CB-OG1	-5.16	1.35	1.43
3	c	44	ILE	CA-C	-5.16	1.46	1.52
1	A	224	GLU	CA-C	-5.16	1.46	1.52
6	F	189	LEU	C-O	-5.16	1.17	1.24
18	X	72	GLU	N-CA	5.16	1.53	1.46
20	Z	405	ASN	C-N	5.16	1.41	1.34
20	Z	717	THR	C-N	5.16	1.40	1.33
30	K	375	ASN	CA-CB	5.16	1.61	1.53
11	k	41	HIS	CG-ND1	5.15	1.44	1.38
26	U	296	ILE	CB-CG1	5.15	1.63	1.53
32	M	290	ARG	C-N	5.15	1.40	1.33
4	D	101	GLU	C-N	5.15	1.39	1.33
7	G	147	HIS	CD2-NE2	5.15	1.43	1.37
12	5	152	ALA	CA-C	-5.15	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	6	193	ARG	NE-CZ	5.15	1.38	1.33
21	N	243	LYS	N-CA	-5.15	1.40	1.46
9	2	196	LEU	CA-CB	-5.15	1.45	1.53
23	P	228	SER	CA-CB	5.15	1.61	1.53
23	P	286	ASN	C-N	5.15	1.40	1.33
30	K	150	LEU	N-CA	-5.15	1.41	1.45
14	n	153	GLN	CA-C	-5.15	1.46	1.53
5	E	219	LEU	N-CA	-5.15	1.40	1.45
7	G	26	TYR	CA-CB	5.15	1.63	1.53
26	U	21	HIS	ND1-CE1	5.15	1.37	1.32
4	D	41	CYS	C-O	5.15	1.29	1.23
5	E	23	GLN	CA-C	-5.15	1.46	1.52
5	E	189	SER	CA-C	-5.15	1.45	1.52
9	2	234	PHE	C-N	5.15	1.40	1.33
12	5	130	TRP	N-CA	-5.15	1.39	1.46
22	S	40	GLU	CA-CB	5.15	1.61	1.53
30	K	281	ARG	CZ-NH1	5.15	1.40	1.32
31	L	364	HIS	ND1-CE1	5.15	1.37	1.32
8	1	60	ASP	CA-CB	5.15	1.61	1.53
21	N	610	SER	C-N	5.15	1.41	1.33
3	c	96	GLN	N-CA	-5.14	1.39	1.46
7	g	25	GLU	N-CA	-5.14	1.40	1.46
11	k	126	VAL	C-N	5.14	1.40	1.33
11	k	188	GLY	CA-C	-5.14	1.46	1.52
3	C	9	ARG	CZ-NH1	5.14	1.40	1.32
5	E	44	GLU	C-N	5.14	1.38	1.32
6	F	82	ARG	NE-CZ	5.14	1.38	1.33
7	G	212	PHE	CA-C	-5.14	1.46	1.52
13	6	112	PRO	C-O	-5.14	1.17	1.23
20	Z	20	PRO	CA-CB	5.14	1.60	1.53
25	R	42	GLN	C-O	5.14	1.30	1.24
28	H	380	PRO	CA-C	-5.14	1.45	1.52
29	I	411	VAL	CA-C	5.14	1.58	1.53
32	M	135	VAL	CA-CB	-5.14	1.47	1.54
32	M	171	GLU	C-N	5.14	1.40	1.33
5	e	149	ALA	N-CA	-5.14	1.40	1.46
11	k	61	GLN	C-N	5.14	1.40	1.33
20	Z	454	GLY	C-N	5.14	1.40	1.33
22	S	237	ILE	CA-C	-5.14	1.46	1.52
28	H	98	GLN	CA-CB	5.14	1.61	1.53
11	k	167	GLU	CA-C	-5.14	1.46	1.52
14	n	238	GLY	CA-C	-5.14	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	1	72	LEU	C-N	5.14	1.40	1.33
30	K	352	ILE	C-O	5.14	1.31	1.24
4	D	138	PHE	CA-C	-5.14	1.46	1.52
9	2	128	ILE	CA-C	-5.14	1.45	1.52
10	3	68	ARG	CD-NE	5.14	1.53	1.46
23	P	92	SER	C-N	5.14	1.39	1.33
24	Q	8	LEU	CA-CB	5.14	1.61	1.53
6	F	72	LEU	CA-CB	5.14	1.62	1.53
3	c	50	ARG	CD-NE	5.14	1.53	1.46
5	e	79	SER	C-N	5.14	1.39	1.33
8	h	110	GLY	CA-C	-5.14	1.46	1.52
12	l	102	ALA	C-N	5.14	1.39	1.33
12	l	274	LYS	CA-C	-5.14	1.46	1.52
4	D	210	ILE	CA-CB	-5.14	1.48	1.54
13	6	87	HIS	CA-C	-5.14	1.45	1.52
16	V	287	THR	C-N	5.14	1.41	1.33
29	I	142	GLU	CA-C	-5.14	1.47	1.52
2	b	109	LEU	C-N	5.13	1.41	1.34
2	b	199	SER	N-CA	-5.13	1.40	1.46
4	d	3	GLY	C-N	5.13	1.40	1.33
5	e	230	ILE	N-CA	-5.13	1.40	1.46
11	k	64	ILE	C-O	-5.13	1.18	1.24
4	D	159	TRP	NE1-CE2	5.13	1.43	1.37
15	W	56	GLY	CA-C	-5.13	1.44	1.51
20	Z	956	LEU	CA-C	-5.13	1.46	1.53
28	H	435	ARG	NE-CZ	5.13	1.38	1.33
30	K	82	ALA	C-N	5.13	1.41	1.34
4	D	72	VAL	CA-C	-5.13	1.46	1.52
22	S	205	ASN	C-N	5.13	1.41	1.33
29	I	187	LEU	CA-CB	5.13	1.61	1.53
4	d	121	THR	C-N	5.13	1.40	1.33
5	e	191	LEU	CA-CB	5.13	1.61	1.53
9	i	210	GLY	C-N	5.13	1.40	1.33
16	V	195	HIS	CG-CD2	5.13	1.41	1.35
17	T	231	SER	CA-C	-5.13	1.46	1.53
23	P	138	ARG	N-CA	-5.13	1.40	1.46
31	L	116	LYS	CA-C	-5.13	1.46	1.52
10	j	186	VAL	C-N	5.13	1.40	1.33
3	C	61	THR	N-CA	-5.13	1.41	1.46
10	3	156	PRO	N-CA	-5.13	1.41	1.47
19	Y	87	GLU	C-O	-5.13	1.17	1.24
32	M	370	THR	C-O	-5.13	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	53	VAL	N-CA	-5.13	1.40	1.46
7	G	180	VAL	CA-CB	-5.13	1.47	1.54
10	3	187	VAL	C-N	5.13	1.40	1.33
20	Z	495	ILE	N-CA	-5.13	1.40	1.46
30	K	399	ARG	C-O	-5.13	1.17	1.23
3	c	114	ARG	NE-CZ	5.13	1.38	1.33
3	c	154	SER	CA-C	-5.13	1.46	1.52
5	E	183	LEU	CA-C	-5.13	1.45	1.52
21	N	626	GLY	CA-C	-5.13	1.46	1.51
8	1	152	ARG	N-CA	-5.12	1.39	1.46
26	U	261	LEU	CA-C	5.12	1.59	1.52
28	H	343	PHE	C-N	5.12	1.40	1.33
15	W	67	ALA	N-CA	-5.12	1.39	1.46
15	W	181	LEU	N-CA	-5.12	1.40	1.46
20	Z	317	GLN	CA-CB	5.12	1.61	1.53
21	N	180	SER	CA-C	-5.12	1.46	1.52
23	P	42	LEU	N-CA	-5.12	1.39	1.46
25	R	244	THR	C-N	5.12	1.40	1.33
26	U	108	GLU	N-CA	-5.12	1.40	1.46
29	I	199	GLU	N-CA	5.12	1.52	1.46
32	M	167	VAL	CA-C	-5.12	1.46	1.52
5	e	141	ALA	C-O	-5.12	1.17	1.23
8	h	45	ARG	N-CA	-5.12	1.39	1.46
11	k	106	GLY	N-CA	5.12	1.50	1.45
14	n	162	TYR	C-N	5.12	1.40	1.33
3	C	5	ARG	CD-NE	5.12	1.53	1.46
3	C	191	GLU	C-N	5.12	1.40	1.33
20	Z	803	ALA	C-N	5.12	1.40	1.33
33	J	325	ALA	N-CA	-5.12	1.40	1.46
31	L	425	VAL	C-N	5.12	1.40	1.33
32	M	59	LEU	N-CA	5.12	1.52	1.46
12	l	94	ARG	NE-CZ	5.12	1.38	1.33
5	E	159	GLU	N-CA	-5.12	1.38	1.45
22	S	477	VAL	CA-C	5.12	1.59	1.52
25	R	321	TYR	C-N	5.12	1.40	1.33
26	U	34	VAL	CA-C	-5.12	1.46	1.52
31	L	75	LYS	N-CA	-5.12	1.40	1.46
4	d	197	ARG	CA-C	-5.12	1.46	1.52
6	F	33	SER	N-CA	-5.12	1.39	1.45
27	O	147	ARG	NE-CZ	5.12	1.38	1.33
3	c	71	ASP	C-N	5.12	1.43	1.33
9	i	202	VAL	CA-C	-5.12	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	k	39	SER	CA-CB	5.12	1.60	1.53
4	D	50	SER	N-CA	-5.12	1.40	1.46
14	7	148	ILE	N-CA	5.12	1.52	1.46
31	L	404	ARG	CD-NE	5.12	1.53	1.46
1	a	126	GLN	CA-CB	5.11	1.61	1.53
6	f	39	ARG	C-O	-5.11	1.17	1.23
9	2	111	MET	N-CA	-5.11	1.40	1.46
13	6	109	ARG	CD-NE	5.11	1.53	1.46
23	P	240	TYR	C-N	5.11	1.40	1.33
26	U	290	ASP	C-N	5.11	1.40	1.33
28	H	258	LEU	C-N	5.11	1.40	1.33
33	J	312	ARG	CZ-NH2	5.11	1.40	1.33
10	j	45	HIS	ND1-CE1	5.11	1.37	1.32
30	K	318	THR	C-N	5.11	1.40	1.33
2	b	234	ARG	CZ-NH1	5.11	1.40	1.32
22	S	177	ASN	C-N	5.11	1.40	1.33
28	H	145	TYR	N-CA	-5.11	1.39	1.46
18	X	59	ARG	CA-C	-5.11	1.45	1.52
1	a	187	LYS	N-CA	-5.11	1.40	1.46
8	h	200	ASP	C-N	5.11	1.41	1.33
11	k	186	LYS	N-CA	-5.11	1.39	1.46
22	S	240	ASP	CA-CB	5.11	1.61	1.53
23	P	110	LEU	N-CA	-5.11	1.39	1.45
25	R	422	ARG	NE-CZ	5.11	1.38	1.33
33	J	309	ARG	CZ-NH1	5.11	1.39	1.32
6	f	60	GLN	CA-C	-5.11	1.46	1.52
11	k	85	ARG	CZ-NH1	5.11	1.39	1.32
12	5	97	ALA	N-CA	-5.11	1.39	1.46
20	Z	822	THR	C-N	5.11	1.40	1.33
24	Q	144	LEU	C-N	5.11	1.41	1.34
30	K	54	LEU	CA-CB	5.11	1.61	1.53
32	M	251	LEU	CA-C	-5.11	1.46	1.52
20	Z	164	VAL	CA-C	-5.10	1.46	1.52
4	D	90	ARG	CA-C	-5.10	1.46	1.52
20	Z	300	ALA	CA-CB	5.10	1.61	1.53
31	L	256	ILE	N-CA	5.10	1.51	1.46
32	M	189	GLN	N-CA	-5.10	1.40	1.46
9	i	99	THR	C-N	5.10	1.40	1.33
9	i	222	PRO	C-N	5.10	1.43	1.34
15	W	11	ASP	CA-C	-5.10	1.46	1.52
2	b	23	TYR	C-N	5.10	1.40	1.33
20	Z	381	LEU	CA-C	-5.10	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	132	GLN	C-O	5.10	1.30	1.24
33	J	295	ASN	CA-C	-5.10	1.45	1.52
8	h	128	VAL	CA-C	-5.10	1.46	1.52
9	i	123	ILE	N-CA	-5.10	1.40	1.46
1	A	106	TYR	C-O	-5.10	1.17	1.24
7	G	190	ARG	CD-NE	5.10	1.53	1.46
25	R	334	ARG	CA-C	-5.10	1.46	1.52
27	O	220	SER	CA-CB	-5.10	1.45	1.53
27	O	296	LEU	C-N	5.10	1.40	1.33
7	g	115	ARG	N-CA	-5.10	1.40	1.46
3	C	129	ARG	CD-NE	5.10	1.53	1.46
25	R	252	TYR	N-CA	-5.10	1.40	1.46
28	H	160	GLY	C-N	5.10	1.42	1.33
9	i	108	ALA	CA-CB	5.09	1.61	1.53
9	2	64	HIS	CA-C	-5.09	1.46	1.52
22	S	163	VAL	C-N	5.09	1.39	1.33
22	S	417	GLN	C-O	-5.09	1.17	1.24
26	U	150	THR	CA-C	-5.09	1.46	1.52
27	O	62	TYR	C-N	5.09	1.40	1.33
32	M	381	ARG	CA-CB	5.09	1.61	1.53
2	b	164	ILE	CA-C	-5.09	1.47	1.52
13	m	89	ASP	CA-CB	5.09	1.61	1.53
6	f	202	ARG	CD-NE	5.09	1.53	1.46
2	B	122	THR	CA-C	-5.09	1.46	1.52
12	5	189	TYR	CA-C	-5.09	1.46	1.52
15	W	95	GLN	N-CA	5.09	1.52	1.46
20	Z	39	SER	N-CA	-5.09	1.39	1.46
21	N	381	GLU	N-CA	-5.09	1.39	1.46
22	S	445	THR	CB-OG1	-5.09	1.35	1.43
32	M	289	LYS	CA-CB	5.09	1.61	1.53
33	J	172	GLU	C-N	5.09	1.40	1.33
33	J	254	GLY	CA-C	-5.09	1.44	1.51
4	d	27	VAL	N-CA	-5.09	1.40	1.46
4	d	90	ARG	CZ-NH1	5.09	1.39	1.32
5	e	212	LEU	C-O	-5.09	1.17	1.24
10	j	175	ALA	CA-C	-5.09	1.46	1.52
12	l	258	ASP	CA-CB	5.09	1.60	1.53
2	B	109	LEU	C-N	5.09	1.41	1.33
29	I	153	THR	N-CA	-5.09	1.40	1.46
30	K	108	GLY	CA-C	-5.09	1.47	1.52
7	g	44	ASP	C-N	5.09	1.38	1.33
7	g	151	LEU	N-CA	-5.09	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	i	70	ILE	C-N	5.09	1.40	1.33
9	i	147	SER	C-N	5.09	1.40	1.33
5	E	55	THR	C-N	5.09	1.38	1.33
20	Z	849	ARG	CD-NE	5.09	1.53	1.46
27	O	137	TYR	CA-C	-5.09	1.45	1.52
30	K	132	LYS	N-CA	-5.09	1.42	1.46
3	C	73	ILE	CA-CB	5.08	1.62	1.54
14	7	239	LEU	CA-C	-5.08	1.46	1.52
32	M	243	PHE	N-CA	-5.08	1.40	1.46
5	e	84	ASP	N-CA	-5.08	1.39	1.46
5	e	217	ALA	C-O	5.08	1.30	1.23
14	n	97	GLU	CA-C	-5.08	1.46	1.52
4	D	11	PHE	CA-C	-5.08	1.45	1.52
11	4	23	ARG	CD-NE	5.08	1.53	1.46
15	W	75	GLY	C-N	5.08	1.41	1.33
16	V	27	VAL	CA-C	-5.08	1.46	1.52
25	R	70	TYR	C-N	5.08	1.40	1.33
25	R	183	ASP	C-N	5.08	1.41	1.33
28	H	143	ALA	N-CA	-5.08	1.39	1.46
3	c	148	LEU	N-CA	-5.08	1.40	1.46
11	4	183	ILE	CA-C	-5.08	1.46	1.52
12	5	269	GLY	C-N	5.08	1.40	1.33
14	7	40	THR	CA-C	-5.08	1.46	1.52
15	W	127	ARG	CZ-NH1	5.08	1.39	1.32
17	T	17	ASN	CA-C	-5.08	1.46	1.52
21	N	335	ALA	C-N	5.08	1.40	1.33
27	O	25	LEU	C-O	-5.08	1.18	1.24
29	I	230	THR	N-CA	-5.08	1.39	1.46
32	M	53	HIS	CB-CG	5.08	1.57	1.50
4	d	122	GLN	CA-CB	5.08	1.61	1.53
27	O	330	ARG	NE-CZ	5.08	1.38	1.33
2	b	4	ARG	CZ-NH2	5.08	1.40	1.33
2	b	133	SER	N-CA	-5.08	1.39	1.46
8	h	76	THR	N-CA	-5.08	1.40	1.46
9	i	193	TRP	C-O	-5.08	1.17	1.24
10	j	99	ARG	N-CA	-5.08	1.39	1.46
29	I	172	LYS	N-CA	-5.08	1.39	1.46
30	K	382	VAL	C-N	5.08	1.40	1.33
31	L	320	GLN	CA-CB	5.08	1.61	1.53
32	M	209	ASP	C-N	5.08	1.40	1.33
32	M	254	MET	CA-CB	5.08	1.62	1.53
6	f	201	LEU	N-CA	5.08	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	X	85	ARG	CZ-NH1	5.08	1.39	1.32
29	I	118	ALA	N-CA	-5.08	1.40	1.46
7	G	48	PHE	CA-C	-5.08	1.46	1.52
21	N	521	LEU	CA-CB	5.08	1.61	1.53
26	U	284	SER	CA-CB	5.08	1.61	1.53
33	J	331	HIS	CA-CB	5.08	1.61	1.53
2	b	236	ARG	CZ-NH2	5.07	1.40	1.33
8	h	116	LYS	C-N	-5.07	1.27	1.33
11	k	65	GLN	C-N	5.07	1.40	1.33
33	J	348	GLU	N-CA	-5.07	1.40	1.46
13	m	52	PHE	CA-C	-5.07	1.46	1.52
13	m	144	CYS	CA-C	-5.07	1.46	1.52
1	A	123	ASN	N-CA	5.07	1.52	1.46
23	P	162	GLU	CA-CB	5.07	1.61	1.53
25	R	351	LYS	C-O	-5.07	1.18	1.24
32	M	82	VAL	N-CA	-5.07	1.39	1.46
1	A	121	MET	C-O	5.07	1.30	1.24
16	V	183	ALA	CA-C	-5.07	1.45	1.52
20	Z	494	GLY	C-N	5.07	1.40	1.33
21	N	897	LYS	C-N	5.07	1.40	1.33
24	Q	59	LEU	CA-C	-5.07	1.46	1.52
30	K	251	PRO	C-N	5.07	1.40	1.33
30	K	347	ARG	NE-CZ	5.07	1.38	1.33
31	L	261	ARG	NE-CZ	5.07	1.38	1.33
3	c	209	ASP	N-CA	-5.07	1.39	1.46
20	Z	318	LYS	C-N	5.07	1.41	1.34
31	L	53	HIS	ND1-CE1	5.07	1.37	1.32
20	Z	941	ARG	N-CA	-5.07	1.41	1.46
29	I	219	VAL	N-CA	-5.07	1.40	1.46
29	I	246	ARG	CA-CB	5.07	1.62	1.53
29	I	413	ALA	C-N	5.07	1.41	1.33
13	6	36	ARG	CA-CB	5.07	1.61	1.53
21	N	82	ALA	CA-CB	-5.07	1.45	1.53
29	I	233	ALA	CA-C	-5.07	1.46	1.52
30	K	66	ASP	C-N	5.07	1.40	1.34
30	K	256	ASP	CA-CB	5.07	1.61	1.53
11	4	8	ARG	CZ-NH1	5.06	1.39	1.32
22	S	54	TRP	NE1-CE2	5.06	1.43	1.37
27	O	210	ARG	CZ-NH1	5.06	1.39	1.32
5	e	97	VAL	C-O	-5.06	1.18	1.24
5	e	165	TYR	CA-CB	5.06	1.62	1.53
10	j	40	PHE	CA-C	-5.06	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	150	CYS	CA-C	-5.06	1.46	1.52
21	N	258	ALA	N-CA	-5.06	1.40	1.46
21	N	410	LEU	CA-CB	5.06	1.61	1.53
24	Q	309	ARG	C-N	5.06	1.40	1.33
25	R	378	ASN	CG-ND2	5.06	1.43	1.33
26	U	108	GLU	CA-C	-5.06	1.46	1.52
27	O	37	LEU	C-N	5.06	1.40	1.33
33	J	376	HIS	ND1-CE1	5.06	1.37	1.32
8	h	12	ILE	C-O	-5.06	1.18	1.23
9	2	34	GLY	CA-C	-5.06	1.44	1.51
21	N	67	LYS	C-N	5.06	1.40	1.33
1	a	175	GLN	CD-NE2	5.06	1.43	1.33
5	e	169	ALA	CA-CB	-5.06	1.46	1.53
6	f	159	THR	C-N	5.06	1.40	1.33
20	Z	161	ILE	N-CA	-5.06	1.40	1.46
28	H	363	PRO	C-O	-5.06	1.17	1.24
30	K	190	LEU	CA-C	-5.06	1.46	1.52
30	K	336	ARG	NE-CZ	5.06	1.38	1.33
32	M	335	PRO	CA-CB	5.06	1.60	1.53
4	d	155	ILE	CA-C	-5.06	1.46	1.52
7	g	44	ASP	CA-C	-5.06	1.47	1.53
7	g	218	TRP	CA-C	-5.06	1.46	1.52
7	g	242	PHE	CA-C	-5.06	1.46	1.52
9	i	203	ASP	N-CA	-5.06	1.39	1.46
3	C	57	LEU	CA-CB	5.06	1.60	1.53
7	G	247	ILE	C-N	5.06	1.40	1.33
12	5	242	ARG	NE-CZ	5.06	1.38	1.33
19	Y	60	TRP	CZ2-CH2	5.06	1.46	1.37
21	N	126	LYS	CA-C	-5.06	1.46	1.53
29	I	206	GLU	C-N	-5.06	1.27	1.33
33	J	80	SER	CA-CB	5.06	1.62	1.53
28	H	264	ALA	C-N	5.06	1.40	1.33
4	d	45	GLY	CA-C	-5.05	1.47	1.51
1	A	67	THR	N-CA	-5.05	1.39	1.46
15	W	55	ALA	N-CA	-5.05	1.39	1.45
16	V	175	SER	C-O	-5.05	1.17	1.24
21	N	756	THR	CA-C	-5.05	1.46	1.52
27	O	87	LYS	CA-C	-5.05	1.46	1.52
31	L	345	ARG	NE-CZ	5.05	1.38	1.33
31	L	428	LEU	C-N	5.05	1.40	1.33
32	M	410	VAL	CA-CB	5.05	1.59	1.54
24	Q	125	ALA	C-N	5.05	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	142	PHE	CA-C	-5.05	1.46	1.52
12	l	153	ALA	C-O	-5.05	1.18	1.24
13	m	215	VAL	CA-C	-5.05	1.46	1.52
10	3	180	LEU	N-CA	-5.05	1.40	1.46
14	7	134	TYR	N-CA	-5.05	1.40	1.46
15	W	133	LYS	CA-C	5.05	1.59	1.52
20	Z	293	MET	C-N	5.05	1.40	1.33
27	O	231	GLY	N-CA	5.05	1.52	1.45
31	L	49	GLU	C-N	5.05	1.40	1.33
31	L	328	ASN	C-N	5.05	1.41	1.33
33	J	231	ARG	CZ-NH1	5.05	1.39	1.32
1	a	90	ALA	CA-CB	5.05	1.61	1.53
13	m	76	PHE	CA-CB	5.05	1.61	1.53
2	B	181	ASP	N-CA	-5.05	1.39	1.46
8	1	169	SER	CA-CB	5.05	1.61	1.53
20	Z	456	GLY	CA-C	5.05	1.57	1.51
23	P	239	GLN	C-N	5.05	1.40	1.33
24	Q	199	THR	C-N	5.05	1.40	1.34
4	D	103	PRO	N-CD	-5.05	1.40	1.47
5	E	44	GLU	CA-C	-5.05	1.46	1.52
10	3	59	ASP	N-CA	-5.05	1.39	1.46
11	4	151	ASP	CA-CB	5.05	1.62	1.53
18	X	48	PHE	CA-C	-5.05	1.46	1.52
20	Z	563	VAL	N-CA	-5.05	1.39	1.46
22	S	271	ARG	CZ-NH2	5.05	1.40	1.33
28	H	452	SER	C-N	5.05	1.40	1.33
3	c	26	LEU	CA-CB	5.05	1.61	1.53
13	m	108	LYS	CA-C	-5.05	1.47	1.53
13	6	120	ALA	C-N	5.05	1.38	1.33
24	Q	84	TYR	CG-CD2	5.05	1.50	1.39
28	H	107	LYS	N-CA	-5.05	1.40	1.46
4	d	149	GLN	N-CA	-5.04	1.39	1.46
6	F	206	LEU	C-N	5.04	1.40	1.33
7	G	69	VAL	CA-C	-5.04	1.46	1.52
9	2	97	LEU	C-N	5.04	1.40	1.33
26	U	274	MET	CA-C	-5.04	1.46	1.52
5	E	200	VAL	CA-CB	-5.04	1.48	1.54
19	Y	80	GLU	CA-C	-5.04	1.46	1.52
21	N	446	ALA	CA-C	5.04	1.59	1.52
27	O	135	ARG	CZ-NH1	5.04	1.39	1.32
27	O	195	TYR	N-CA	5.04	1.52	1.46
29	I	393	GLN	N-CA	-5.04	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	M	133	GLY	C-N	5.04	1.40	1.33
2	b	41	ASN	CA-C	-5.04	1.46	1.52
12	l	171	SER	CA-C	5.04	1.58	1.52
22	S	353	LYS	CA-CB	5.04	1.61	1.53
26	U	26	GLN	CA-CB	5.04	1.61	1.53
26	U	58	GLU	CA-C	-5.04	1.46	1.52
33	J	66	GLN	C-N	5.04	1.40	1.33
2	b	128	ARG	CA-CB	5.04	1.61	1.53
2	b	194	LEU	CA-C	-5.04	1.46	1.52
13	m	169	GLU	CA-C	-5.04	1.47	1.53
1	A	69	VAL	N-CA	-5.04	1.40	1.46
23	P	136	ARG	CD-NE	5.04	1.53	1.46
31	L	92	GLU	CA-CB	5.04	1.61	1.53
2	B	168	SER	C-O	-5.04	1.18	1.24
5	E	144	ILE	CB-CG1	5.04	1.63	1.53
9	2	229	GLN	C-N	5.04	1.40	1.33
14	7	59	ASN	N-CA	-5.04	1.40	1.46
14	7	146	ALA	N-CA	-5.04	1.39	1.46
21	N	535	LEU	C-N	5.04	1.40	1.33
22	S	261	HIS	CE1-NE2	-5.04	1.27	1.32
30	K	221	MET	CG-SD	5.04	1.93	1.80
2	b	137	ALA	N-CA	-5.04	1.39	1.46
5	e	213	ASP	CA-C	-5.04	1.46	1.52
13	m	116	HIS	CE1-NE2	5.04	1.37	1.32
14	n	88	GLY	C-N	5.04	1.40	1.33
14	n	114	ALA	C-O	-5.04	1.17	1.24
4	D	49	ARG	NE-CZ	5.04	1.38	1.33
23	P	426	ILE	C-N	5.04	1.40	1.33
27	O	306	ARG	NE-CZ	5.04	1.38	1.33
31	L	154	THR	N-CA	-5.04	1.39	1.46
3	c	31	HIS	ND1-CE1	5.03	1.37	1.32
11	k	149	ARG	CZ-NH2	5.03	1.40	1.33
13	m	129	ALA	CA-C	-5.03	1.46	1.52
14	n	57	ALA	C-N	5.03	1.40	1.33
14	n	211	VAL	N-CA	-5.03	1.40	1.46
2	B	10	THR	C-N	5.03	1.40	1.33
2	B	20	GLN	C-N	5.03	1.40	1.33
11	4	99	GLN	C-N	5.03	1.40	1.33
17	T	56	MET	C-N	5.03	1.40	1.33
20	Z	311	ALA	C-N	5.03	1.40	1.33
22	S	109	GLU	N-CA	-5.03	1.40	1.46
23	P	113	ASN	CA-C	-5.03	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	R	280	ILE	CA-C	-5.03	1.46	1.52
11	k	67	TYR	C-O	-5.03	1.18	1.24
13	m	141	ARG	CA-C	5.03	1.59	1.52
20	Z	832	ARG	CZ-NH2	5.03	1.40	1.33
27	O	226	LYS	CA-C	-5.03	1.46	1.52
4	d	123	SER	CA-CB	5.03	1.61	1.53
13	m	65	PHE	C-N	5.03	1.40	1.33
11	4	8	ARG	CA-CB	5.03	1.61	1.53
15	W	163	ASN	CA-CB	5.03	1.61	1.53
20	Z	871	HIS	CA-CB	-5.03	1.46	1.53
21	N	464	GLU	CA-C	-5.03	1.46	1.52
22	S	432	ILE	CA-CB	-5.03	1.48	1.54
23	P	101	MET	CA-CB	5.03	1.61	1.53
23	P	188	ILE	N-CA	-5.03	1.40	1.46
24	Q	223	GLY	C-N	5.03	1.40	1.33
25	R	384	VAL	C-N	5.03	1.41	1.33
2	B	93	ALA	C-O	-5.03	1.18	1.24
22	S	119	TYR	N-CA	-5.03	1.39	1.46
27	O	390	SER	CA-C	-5.03	1.46	1.53
29	I	248	VAL	N-CA	5.03	1.52	1.46
6	F	70	MET	CA-CB	5.03	1.62	1.53
14	7	150	ALA	CA-C	-5.03	1.46	1.52
21	N	37	SER	CA-CB	5.03	1.60	1.53
26	U	190	LEU	C-N	5.03	1.40	1.33
1	a	198	SER	CA-C	-5.03	1.46	1.52
4	d	10	ILE	N-CA	-5.03	1.40	1.46
13	m	67	ALA	CA-C	-5.03	1.46	1.52
1	A	59	VAL	N-CA	-5.03	1.40	1.46
9	2	138	HIS	CA-C	-5.03	1.46	1.52
14	7	226	ARG	CD-NE	5.03	1.53	1.46
30	K	328	LEU	CA-C	-5.03	1.45	1.52
8	1	165	LYS	C-O	-5.02	1.18	1.24
5	E	216	ASN	N-CA	5.02	1.51	1.46
21	N	324	LYS	N-CA	-5.02	1.39	1.46
25	R	50	VAL	CA-C	-5.02	1.46	1.52
25	R	422	ARG	C-N	5.02	1.40	1.33
30	K	293	GLN	CA-C	-5.02	1.46	1.52
31	L	353	ASN	CA-C	-5.02	1.46	1.53
4	d	90	ARG	NE-CZ	5.02	1.38	1.33
13	m	73	VAL	CA-C	-5.02	1.46	1.52
25	R	116	LYS	N-CA	-5.02	1.40	1.46
31	L	183	ILE	N-CA	-5.02	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	49	ASP	CA-C	-5.02	1.48	1.52
5	E	233	ASN	CA-C	-5.02	1.45	1.52
21	N	846	ILE	C-O	5.02	1.29	1.24
24	Q	162	LEU	C-N	5.02	1.40	1.34
1	a	18	ILE	CA-CB	5.02	1.60	1.53
1	A	244	ARG	CD-NE	5.02	1.53	1.46
4	D	166	ARG	C-O	-5.02	1.18	1.24
6	F	213	ILE	N-CA	-5.02	1.40	1.46
15	W	116	SER	CA-C	5.02	1.58	1.52
17	T	41	ILE	N-CA	-5.02	1.40	1.46
23	P	350	LEU	C-O	-5.02	1.17	1.24
31	L	157	ARG	CD-NE	5.02	1.53	1.46
13	m	168	TYR	C-N	5.02	1.40	1.33
1	A	197	GLU	CA-CB	5.02	1.61	1.53
3	C	146	TYR	N-CA	-5.02	1.39	1.46
19	Y	32	ASP	CA-C	-5.02	1.46	1.52
29	I	335	ASP	C-N	-5.02	1.29	1.33
14	n	136	ARG	CD-NE	5.01	1.53	1.46
5	E	98	THR	CA-C	-5.01	1.46	1.52
11	4	106	GLY	CA-C	-5.01	1.46	1.51
14	7	110	ASP	CA-C	-5.01	1.46	1.52
26	U	100	ARG	C-N	5.01	1.41	1.33
14	7	104	VAL	CA-CB	-5.01	1.48	1.54
16	V	90	LYS	C-N	5.01	1.40	1.33
24	Q	359	ILE	N-CA	-5.01	1.40	1.46
3	c	89	ASN	CA-C	5.01	1.59	1.52
13	6	106	TYR	C-N	5.01	1.40	1.33
13	6	140	GLU	CA-CB	5.01	1.62	1.53
17	T	60	ARG	CD-NE	5.01	1.53	1.46
20	Z	176	GLU	CA-C	-5.01	1.46	1.52
5	E	141	ALA	CA-C	-5.01	1.46	1.52
16	V	58	VAL	C-N	5.01	1.40	1.33
20	Z	357	ILE	N-CA	-5.01	1.39	1.46
21	N	87	ASP	CA-C	-5.01	1.46	1.52
25	R	371	PHE	N-CA	-5.01	1.39	1.46
27	O	60	ARG	CA-CB	5.01	1.61	1.53
33	J	269	GLN	C-N	5.01	1.40	1.34
4	D	205	THR	C-N	5.01	1.39	1.32
17	T	212	ASN	C-O	-5.01	1.17	1.24
31	L	282	GLU	CA-C	5.01	1.59	1.53
11	k	91	SER	C-N	5.01	1.39	1.33
4	D	111	ARG	CD-NE	5.01	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	3	132	GLU	CA-CB	5.01	1.61	1.54
14	7	103	LEU	N-CA	-5.01	1.40	1.46
15	W	10	ILE	N-CA	-5.01	1.40	1.46
20	Z	491	LEU	C-O	-5.01	1.18	1.24
28	H	124	ASN	C-N	5.01	1.40	1.33
28	H	294	LEU	N-CA	-5.01	1.40	1.46
33	J	178	GLY	C-N	5.01	1.39	1.33
6	F	134	ILE	N-CA	-5.00	1.40	1.46
13	6	69	GLY	CA-C	-5.00	1.46	1.52
20	Z	371	SER	C-N	5.00	1.40	1.33
24	Q	163	ARG	CD-NE	5.00	1.53	1.46
24	Q	177	VAL	N-CA	-5.00	1.40	1.46
1	a	14	ARG	CZ-NH2	5.00	1.40	1.33
9	i	223	ASN	CA-CB	5.00	1.58	1.53
10	j	124	PHE	CA-C	-5.00	1.46	1.53
4	D	216	LYS	CA-CB	5.00	1.60	1.54
4	D	238	GLN	N-CA	-5.00	1.40	1.46
5	E	157	HIS	CB-CG	5.00	1.57	1.50
28	H	87	ASP	C-O	-5.00	1.18	1.24
7	g	29	LYS	N-CA	-5.00	1.40	1.46
8	1	18	LYS	CA-CB	5.00	1.61	1.53
14	7	152	VAL	C-N	5.00	1.40	1.33
20	Z	148	GLY	C-N	5.00	1.40	1.33
21	N	653	ARG	CD-NE	5.00	1.53	1.46

All (7737) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	106	ILE	N-CA-CB	14.90	123.93	110.08
1	A	86	PRO	CA-C-N	13.77	131.35	120.33
1	A	86	PRO	C-N-CA	13.77	131.35	120.33
5	e	156	PHE	CA-CB-CG	-13.27	100.53	113.80
16	V	154	ASP	CA-CB-CG	-12.95	99.65	112.60
31	L	240	GLY	N-CA-C	-12.57	97.70	115.43
2	b	10	THR	N-CA-C	-12.37	98.71	114.04
32	M	248	ALA	CA-C-O	-12.29	106.42	118.34
21	N	840	GLU	N-CA-C	-12.18	100.73	114.62
33	J	304	LEU	N-CA-C	-12.16	98.92	113.88
24	Q	283	ASN	CA-CB-CG	-12.15	100.45	112.60
6	f	148	GLN	CA-C-N	11.97	134.80	119.84
6	f	148	GLN	C-N-CA	11.97	134.80	119.84
1	A	66	PRO	N-CA-C	-11.86	102.35	114.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	7	198	ILE	O-C-N	-11.65	112.96	120.42
25	R	315	VAL	N-CA-C	-11.50	102.46	112.12
28	H	320	ASP	CA-CB-CG	-11.46	101.14	112.60
4	D	6	ARG	NE-CZ-NH2	11.46	129.51	119.20
4	D	6	ARG	NE-CZ-NH1	-11.31	110.19	121.50
25	R	371	PHE	CA-C-N	11.28	127.35	120.24
25	R	371	PHE	C-N-CA	11.28	127.35	120.24
2	b	219	PRO	CA-C-N	11.26	135.37	120.28
2	b	219	PRO	C-N-CA	11.26	135.37	120.28
14	7	50	ASP	CA-CB-CG	11.22	123.83	112.60
2	B	128	ARG	N-CA-CB	11.14	122.66	109.74
32	M	235	CYS	CA-C-N	10.96	136.97	120.31
32	M	235	CYS	C-N-CA	10.96	136.97	120.31
16	V	173	THR	N-CA-C	-10.95	99.49	113.72
25	R	136	ASN	CA-CB-CG	-10.89	101.71	112.60
10	j	60	VAL	N-CA-C	10.81	121.64	110.72
32	M	274	ALA	CA-C-O	-10.78	109.21	120.96
29	I	246	ARG	CA-C-O	-10.77	105.11	120.51
20	Z	324	GLU	N-CA-C	-10.72	99.38	111.82
27	O	78	VAL	N-CA-C	-10.69	99.92	110.72
29	I	280	PHE	CA-CB-CG	10.69	124.49	113.80
29	I	165	ASP	O-C-N	-10.69	113.85	121.65
11	4	133	HIS	CE1-NE2-CD2	-10.66	98.34	109.00
31	L	258	GLU	CA-C-N	10.66	135.43	120.29
31	L	258	GLU	C-N-CA	10.66	135.43	120.29
25	R	330	VAL	CA-C-N	10.63	134.26	120.44
25	R	330	VAL	C-N-CA	10.63	134.26	120.44
28	H	217	GLN	CA-C-N	10.51	133.80	120.56
28	H	217	GLN	C-N-CA	10.51	133.80	120.56
20	Z	612	GLY	O-C-N	10.48	131.99	122.77
32	M	43	ILE	CA-C-N	10.47	134.31	120.28
32	M	43	ILE	C-N-CA	10.47	134.31	120.28
21	N	743	PHE	CA-CB-CG	-10.46	103.34	113.80
7	G	108	PRO	CA-C-N	10.45	126.83	120.24
7	G	108	PRO	C-N-CA	10.45	126.83	120.24
23	P	275	ASN	CA-CB-CG	-10.44	102.17	112.60
3	c	207	THR	CA-C-N	10.43	134.26	120.28
3	c	207	THR	C-N-CA	10.43	134.26	120.28
22	S	117	SER	N-CA-C	-10.43	97.74	111.71
25	R	415	GLN	N-CA-C	10.38	122.17	111.07
12	5	97	ALA	N-CA-C	-10.37	100.37	113.43
5	E	168	ASN	OD1-CG-ND2	10.30	132.90	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	627	LYS	N-CA-C	10.30	122.50	111.28
17	T	88	TYR	N-CA-CB	10.29	124.93	110.01
10	3	29	LEU	CA-C-N	10.27	131.61	122.47
10	3	29	LEU	C-N-CA	10.27	131.61	122.47
23	P	253	ASP	CA-CB-CG	-10.27	102.33	112.60
15	W	45	PRO	N-CA-C	-10.27	102.70	114.92
20	Z	186	GLY	CA-C-O	-10.24	115.16	122.23
14	7	204	GLN	OE1-CD-NE2	10.23	132.83	122.60
30	K	306	PHE	N-CA-C	-10.23	101.86	114.75
7	g	82	ILE	O-C-N	-10.22	113.88	120.42
10	j	36	VAL	N-CA-C	-10.17	102.01	111.67
24	Q	391	ASP	CA-CB-CG	10.17	122.77	112.60
22	S	60	LEU	CA-C-N	10.16	134.26	120.44
22	S	60	LEU	C-N-CA	10.16	134.26	120.44
10	j	29	LEU	CA-C-N	10.15	128.55	121.65
10	j	29	LEU	C-N-CA	10.15	128.55	121.65
32	M	141	LYS	N-CA-C	-10.12	99.11	108.22
20	Z	810	ASN	CA-CB-CG	-10.11	102.49	112.60
24	Q	209	TYR	N-CA-C	-10.11	100.94	113.28
14	7	76	ILE	CA-C-O	-10.07	114.70	119.94
21	N	191	THR	CA-C-N	10.04	134.55	120.29
21	N	191	THR	C-N-CA	10.04	134.55	120.29
12	5	206	SER	N-CA-C	-10.02	101.56	113.88
20	Z	150	GLY	N-CA-C	-10.00	103.67	114.67
24	Q	222	SER	O-C-N	9.97	132.69	122.12
4	d	26	ALA	N-CA-C	9.96	123.16	111.71
23	P	33	ASN	CA-CB-CG	-9.96	102.64	112.60
9	2	115	HIS	CA-C-O	-9.95	110.45	120.70
23	P	152	LYS	N-CA-C	-9.95	102.43	112.97
4	D	180	ASP	CA-CB-CG	-9.94	102.66	112.60
4	D	34	VAL	CA-C-N	9.91	128.39	121.65
4	D	34	VAL	C-N-CA	9.91	128.39	121.65
5	E	13	SER	CA-C-N	9.89	140.44	121.54
5	E	13	SER	C-N-CA	9.89	140.44	121.54
4	D	59	ILE	N-CA-C	-9.88	103.05	112.83
6	f	32	GLY	O-C-N	9.88	132.26	122.88
11	k	41	HIS	CA-CB-CG	-9.87	103.93	113.80
14	n	185	ASN	CA-C-O	-9.87	109.06	118.73
15	W	157	PHE	CA-CB-CG	-9.87	103.93	113.80
30	K	99	PHE	CA-CB-CG	-9.85	103.95	113.80
7	G	225	ASN	CA-CB-CG	-9.81	102.79	112.60
21	N	315	ASN	CA-CB-CG	-9.76	102.84	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	80	ASN	N-CA-CB	9.76	124.47	110.12
22	S	472	HIS	CA-CB-CG	9.71	123.51	113.80
12	l	265	ASN	CA-CB-CG	9.70	122.30	112.60
13	6	83	TYR	CA-C-O	-9.69	110.72	120.70
17	T	244	ASP	CA-CB-CG	-9.69	102.91	112.60
30	K	333	ARG	CA-C-N	9.67	140.01	121.54
30	K	333	ARG	C-N-CA	9.67	140.01	121.54
24	Q	194	SER	N-CA-C	-9.67	100.82	111.36
7	G	82	ILE	O-C-N	-9.66	114.24	120.42
21	N	670	LYS	N-CA-C	-9.66	102.06	114.04
33	J	151	GLY	O-C-N	-9.65	113.37	122.93
32	M	188	LYS	CA-C-N	9.64	133.20	120.28
32	M	188	LYS	C-N-CA	9.64	133.20	120.28
28	H	83	ASP	CA-CB-CG	-9.64	102.96	112.60
27	O	80	LYS	N-CA-C	9.63	121.37	111.07
24	Q	222	SER	CA-C-N	9.61	130.85	119.99
24	Q	222	SER	C-N-CA	9.61	130.85	119.99
2	B	6	SER	N-CA-C	-9.60	96.88	111.56
27	O	185	PHE	CA-CB-CG	-9.57	104.22	113.80
6	F	6	TYR	N-CA-C	-9.57	100.53	112.88
1	a	143	PHE	CA-CB-CG	-9.56	104.23	113.80
7	g	182	HIS	CA-CB-CG	-9.56	104.24	113.80
29	I	302	ILE	CA-C-N	9.55	133.43	120.44
29	I	302	ILE	C-N-CA	9.55	133.43	120.44
12	l	263	HIS	CA-CB-CG	-9.54	104.26	113.80
22	S	335	GLN	OE1-CD-NE2	9.54	132.14	122.60
7	g	84	ASP	CA-C-N	9.53	130.48	120.00
7	g	84	ASP	C-N-CA	9.53	130.48	120.00
8	h	63	ALA	N-CA-C	9.53	121.27	111.07
22	S	464	ARG	CA-C-N	9.52	132.75	120.56
22	S	464	ARG	C-N-CA	9.52	132.75	120.56
26	U	177	ASP	CA-C-N	9.52	132.75	120.56
26	U	177	ASP	C-N-CA	9.52	132.75	120.56
30	K	304	ASP	CA-CB-CG	9.50	122.10	112.60
28	H	370	ARG	N-CA-C	-9.49	100.93	114.12
20	Z	475	GLN	N-CA-C	9.48	121.61	111.28
8	h	138	SER	N-CA-C	-9.48	100.13	114.16
4	D	131	VAL	CA-C-O	9.47	130.75	120.43
21	N	107	GLU	CA-C-N	9.46	132.95	120.28
21	N	107	GLU	C-N-CA	9.46	132.95	120.28
21	N	721	ASP	CA-CB-CG	-9.41	103.19	112.60
2	b	179	TRP	CB-CG-CD2	-9.40	113.63	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	124	SER	CA-C-N	9.40	135.44	122.19
30	K	124	SER	C-N-CA	9.40	135.44	122.19
25	R	323	ASN	N-CA-C	-9.39	101.82	113.28
20	Z	723	ASP	CA-CB-CG	-9.39	103.21	112.60
32	M	128	PHE	CA-CB-CG	9.39	123.19	113.80
7	G	109	ILE	N-CA-CB	9.39	116.41	110.50
3	C	59	GLN	OE1-CD-NE2	9.37	131.97	122.60
2	B	43	VAL	CA-C-O	-9.36	110.62	120.64
2	B	203	GLU	CA-C-O	9.35	128.90	119.08
25	R	392	ARG	N-CA-C	9.35	120.35	109.60
30	K	153	ASP	N-CA-C	-9.35	102.97	114.75
21	N	551	GLY	CA-C-N	9.33	133.53	120.29
21	N	551	GLY	C-N-CA	9.33	133.53	120.29
8	1	101	ASN	N-CA-C	-9.32	103.99	114.62
15	W	20	ASP	N-CA-C	-9.32	102.05	113.97
1	a	16	ILE	N-CA-C	-9.31	104.07	113.10
24	Q	233	LYS	N-CA-C	-9.29	100.26	111.69
21	N	758	VAL	CA-C-O	9.29	131.21	120.71
21	N	430	ASN	CA-CB-CG	-9.28	103.32	112.60
29	I	240	THR	N-CA-C	9.27	121.39	111.28
2	B	227	ILE	N-CA-CB	9.26	120.90	111.36
23	P	271	SER	CA-C-N	9.25	129.98	119.99
23	P	271	SER	C-N-CA	9.25	129.98	119.99
22	S	184	TRP	CA-C-N	9.25	133.02	120.54
22	S	184	TRP	C-N-CA	9.25	133.02	120.54
5	E	42	THR	N-CA-CB	9.24	126.59	111.62
17	T	172	SER	N-CA-CB	9.24	126.10	110.49
18	X	59	ARG	NE-CZ-NH2	9.24	127.51	119.20
8	h	24	GLY	O-C-N	-9.23	115.14	123.36
5	e	95	ALA	CA-C-O	9.23	130.51	120.82
33	J	111	GLN	N-CA-C	-9.23	93.20	108.34
24	Q	315	ASN	CA-C-N	9.23	132.99	120.44
24	Q	315	ASN	C-N-CA	9.23	132.99	120.44
20	Z	23	GLN	CB-CG-CD	-9.22	96.93	112.60
4	D	184	PRO	CA-C-N	9.20	129.78	119.93
4	D	184	PRO	C-N-CA	9.20	129.78	119.93
2	B	84	VAL	O-C-N	-9.18	112.91	121.91
20	Z	340	LEU	N-CA-C	-9.17	97.08	111.02
22	S	91	ASN	CA-CB-CG	-9.17	103.43	112.60
9	i	194	ASN	CA-CB-CG	-9.14	103.46	112.60
13	6	74	LYS	CA-C-N	9.14	133.26	120.29
13	6	74	LYS	C-N-CA	9.14	133.26	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	X	50	TRP	N-CA-CB	9.13	124.89	110.55
4	D	30	GLY	CA-C-N	9.11	134.45	121.42
4	D	30	GLY	C-N-CA	9.11	134.45	121.42
27	O	343	GLN	N-CA-C	-9.10	101.11	113.30
10	3	7	ILE	CA-C-O	-9.08	111.55	121.17
21	N	400	ILE	CA-C-N	9.07	132.44	120.28
21	N	400	ILE	C-N-CA	9.07	132.44	120.28
4	D	155	ILE	N-CA-C	-9.07	95.42	108.48
10	3	42	LYS	N-CA-C	-9.07	102.34	113.50
12	l	88	ILE	N-CA-C	-9.07	95.48	108.17
28	H	84	ILE	N-CA-CB	9.06	121.16	110.55
4	D	254	HIS	CE1-NE2-CD2	-9.05	99.95	109.00
21	N	127	ASP	CA-C-N	9.04	132.13	120.56
21	N	127	ASP	C-N-CA	9.04	132.13	120.56
24	Q	48	ASP	CA-CB-CG	-9.04	103.56	112.60
30	K	50	LYS	CA-C-N	9.04	132.77	120.38
30	K	50	LYS	C-N-CA	9.04	132.77	120.38
21	N	331	ALA	CA-C-N	9.03	133.25	120.42
21	N	331	ALA	C-N-CA	9.03	133.25	120.42
21	N	76	GLU	CA-C-O	-9.03	110.21	120.24
6	f	7	ASP	CA-C-O	9.03	130.35	119.43
6	f	153	VAL	N-CA-CB	9.02	123.86	111.41
24	Q	273	ASN	CA-CB-CG	9.02	121.62	112.60
28	H	252	PRO	CA-C-O	-9.02	111.58	121.23
21	N	706	MET	N-CA-CB	9.02	123.37	110.12
28	H	63	ILE	N-CA-C	-9.01	101.62	110.72
28	H	466	TYR	N-CA-C	-9.01	104.35	114.62
21	N	634	LEU	CA-C-N	9.01	132.15	120.44
21	N	634	LEU	C-N-CA	9.01	132.15	120.44
12	5	238	ALA	CA-C-N	9.00	132.34	120.28
12	5	238	ALA	C-N-CA	9.00	132.34	120.28
31	L	416	MET	CA-C-N	9.00	132.34	120.28
31	L	416	MET	C-N-CA	9.00	132.34	120.28
23	P	208	PHE	CA-CB-CG	-9.00	104.80	113.80
7	g	98	SER	CA-C-N	8.98	132.32	120.28
7	g	98	SER	C-N-CA	8.98	132.32	120.28
10	j	38	ASN	OD1-CG-ND2	8.96	131.56	122.60
1	A	158	ASP	CA-C-O	-8.95	111.96	121.27
19	Y	41	ASP	O-C-N	8.95	131.75	122.09
21	N	207	LEU	CA-C-N	8.95	132.27	120.28
21	N	207	LEU	C-N-CA	8.95	132.27	120.28
7	G	15	PHE	CA-CB-CG	-8.94	104.86	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	229	THR	N-CA-C	-8.94	96.81	109.69
25	R	172	LEU	CA-C-N	8.94	132.26	120.28
25	R	172	LEU	C-N-CA	8.94	132.26	120.28
32	M	416	VAL	N-CA-C	-8.94	101.69	110.72
7	G	161	LYS	N-CA-C	-8.94	102.50	113.50
21	N	701	VAL	CA-C-N	8.94	132.26	120.28
21	N	701	VAL	C-N-CA	8.94	132.26	120.28
17	T	35	ILE	CA-C-N	8.93	132.25	120.28
17	T	35	ILE	C-N-CA	8.93	132.25	120.28
8	1	99	LYS	N-CA-C	-8.93	102.40	113.38
3	c	152	ASN	CA-C-N	8.93	128.58	119.56
3	c	152	ASN	C-N-CA	8.93	128.58	119.56
7	g	206	ASP	N-CA-C	-8.91	101.73	114.12
31	L	171	THR	CA-C-N	8.91	132.02	120.44
31	L	171	THR	C-N-CA	8.91	132.02	120.44
30	K	187	ALA	N-CA-C	8.91	121.07	111.36
32	M	187	ASP	CA-C-N	8.90	137.72	121.70
32	M	187	ASP	C-N-CA	8.90	137.72	121.70
2	b	118	MET	CA-C-N	8.90	132.20	120.28
2	b	118	MET	C-N-CA	8.90	132.20	120.28
12	5	78	THR	N-CA-C	-8.90	95.44	109.23
1	A	167	LYS	N-CA-C	-8.89	102.01	113.12
2	B	203	GLU	CB-CG-CD	-8.88	97.51	112.60
18	X	72	GLU	N-CA-C	-8.85	103.59	114.75
20	Z	121	ILE	N-CA-C	-8.85	101.92	110.42
24	Q	259	CYS	N-CA-C	8.85	120.92	111.28
24	Q	296	ILE	N-CA-C	-8.85	101.79	110.72
8	1	91	PHE	CA-CB-CG	-8.83	104.97	113.80
5	e	16	SER	N-CA-CB	8.83	125.51	110.50
28	H	241	ASP	N-CA-C	-8.83	96.82	109.62
25	R	377	LEU	N-CA-C	-8.81	102.33	113.43
23	P	52	LEU	N-CA-C	-8.81	103.05	113.88
21	N	722	THR	N-CA-C	-8.80	102.95	114.31
25	R	360	SER	CA-C-N	8.80	132.92	120.42
25	R	360	SER	C-N-CA	8.80	132.92	120.42
13	m	12	PRO	N-CA-C	-8.80	103.42	114.68
16	V	80	VAL	N-CA-C	-8.80	101.02	113.07
7	G	185	GLU	CA-C-O	8.78	130.18	119.38
29	I	373	GLU	N-CA-C	8.78	120.46	111.07
2	b	167	GLY	CA-C-N	8.77	131.84	120.44
2	b	167	GLY	C-N-CA	8.77	131.84	120.44
6	f	96	SER	O-C-N	-8.77	113.04	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	57	PHE	N-CA-C	8.77	120.84	111.28
9	i	170	HIS	CA-C-N	-8.76	109.12	122.09
9	i	170	HIS	C-N-CA	-8.76	109.12	122.09
10	j	101	GLY	CA-C-N	8.76	128.62	120.21
10	j	101	GLY	C-N-CA	8.76	128.62	120.21
24	Q	289	GLU	CA-C-O	-8.76	114.21	119.55
29	I	89	GLN	N-CA-C	-8.76	103.72	114.75
17	T	252	GLU	N-CA-C	-8.75	103.11	113.88
1	A	100	GLU	N-CA-C	8.74	120.81	111.28
13	m	134	ASP	CA-CB-CG	-8.74	103.86	112.60
22	S	417	GLN	CA-C-N	8.73	132.69	120.29
22	S	417	GLN	C-N-CA	8.73	132.69	120.29
2	B	22	ASP	CA-CB-CG	-8.72	103.88	112.60
33	J	249	GLU	N-CA-C	-8.72	92.93	107.32
7	G	60	VAL	CB-CA-C	-8.71	102.83	110.94
11	4	113	LYS	CA-C-N	8.71	129.40	119.99
11	4	113	LYS	C-N-CA	8.71	129.40	119.99
22	S	342	LEU	CA-C-N	8.71	130.98	120.09
22	S	342	LEU	C-N-CA	8.71	130.98	120.09
30	K	295	ILE	N-CA-C	-8.71	101.92	110.72
16	V	150	LYS	N-CA-C	-8.71	104.69	114.62
21	N	923	MET	CA-C-O	8.71	129.78	120.55
4	d	57	THR	N-CA-C	-8.70	101.41	114.64
12	l	118	GLY	N-CA-C	-8.70	97.62	112.06
29	I	150	HIS	CE1-NE2-CD2	-8.68	100.32	109.00
27	O	72	LYS	N-CA-C	-8.68	102.24	113.17
30	K	202	GLY	CA-C-N	8.67	132.16	120.63
30	K	202	GLY	C-N-CA	8.67	132.16	120.63
8	1	61	THR	CA-CB-OG1	8.67	122.60	109.60
2	b	132	VAL	CA-C-N	8.67	135.94	122.94
2	b	132	VAL	C-N-CA	8.67	135.94	122.94
31	L	187	THR	N-CA-C	-8.67	101.03	111.69
1	a	164	VAL	CA-C-N	8.66	130.85	122.27
1	a	164	VAL	C-N-CA	8.66	130.85	122.27
5	E	204	LEU	N-CA-C	8.66	120.72	111.28
5	E	91	HIS	ND1-CE1-NE2	8.66	117.06	108.40
11	4	83	PHE	CA-C-O	-8.66	111.78	120.70
22	S	288	THR	N-CA-C	-8.65	102.86	113.50
21	N	568	VAL	CA-C-O	-8.64	111.46	121.05
23	P	402	PHE	N-CA-C	-8.64	102.30	112.92
10	3	45	HIS	CA-CB-CG	8.63	122.43	113.80
31	L	351	LEU	CA-C-N	8.63	128.65	119.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	351	LEU	C-N-CA	8.63	128.65	119.76
26	U	250	GLU	N-CA-C	8.63	121.63	111.71
29	I	156	ILE	N-CA-CB	8.63	120.83	111.00
22	S	368	LYS	CA-C-O	-8.62	111.41	120.55
7	g	147	HIS	CA-CB-CG	-8.62	105.18	113.80
11	k	155	GLU	CA-C-N	8.62	131.83	120.28
11	k	155	GLU	C-N-CA	8.62	131.83	120.28
20	Z	326	VAL	N-CA-C	-8.61	102.44	110.53
13	m	163	ASN	CA-CB-CG	-8.60	104.00	112.60
27	O	10	ILE	CB-CA-C	-8.60	100.53	112.14
4	D	66	LYS	N-CA-CB	8.60	123.89	109.87
4	d	70	HIS	O-C-N	8.60	134.02	122.59
8	1	173	LYS	CA-C-O	-8.59	111.44	120.55
32	M	350	PRO	CA-C-N	8.59	132.33	120.39
32	M	350	PRO	C-N-CA	8.59	132.33	120.39
12	5	88	ILE	CB-CA-C	-8.59	99.16	110.84
15	W	147	ILE	CA-C-N	8.59	132.48	120.29
15	W	147	ILE	C-N-CA	8.59	132.48	120.29
15	W	21	PHE	N-CA-C	-8.58	96.97	110.10
15	W	142	ILE	N-CA-C	-8.58	95.47	107.99
1	A	161	GLY	CA-C-O	-8.57	110.71	118.77
3	c	161	LYS	N-CA-C	-8.57	103.25	114.31
30	K	242	PHE	CA-CB-CG	-8.57	105.23	113.80
3	C	185	LYS	CA-C-N	8.56	132.19	120.46
3	C	185	LYS	C-N-CA	8.56	132.19	120.46
33	J	79	VAL	N-CA-CB	8.56	121.83	112.07
15	W	32	SER	CA-C-O	-8.56	111.48	120.55
33	J	309	ARG	CA-C-N	8.55	137.37	121.97
33	J	309	ARG	C-N-CA	8.55	137.37	121.97
22	S	431	VAL	CA-C-O	-8.55	112.11	121.17
2	b	19	GLY	CA-C-N	8.55	133.30	120.31
2	b	19	GLY	C-N-CA	8.55	133.30	120.31
21	N	410	LEU	N-CA-C	-8.53	103.01	113.41
20	Z	806	GLU	CA-C-N	8.52	131.47	120.56
20	Z	806	GLU	C-N-CA	8.52	131.47	120.56
26	U	130	VAL	N-CA-C	-8.52	102.12	110.72
14	7	197	ASP	CA-C-N	8.52	127.14	120.33
14	7	197	ASP	C-N-CA	8.52	127.14	120.33
28	H	349	ILE	N-CA-C	-8.52	92.94	107.24
8	h	69	GLN	CA-C-N	8.51	132.37	120.29
8	h	69	GLN	C-N-CA	8.51	132.37	120.29
21	N	628	ALA	N-CA-CB	8.51	122.63	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	219	GLU	N-CA-C	8.50	120.54	111.28
28	H	415	THR	CA-C-N	8.50	130.76	120.14
28	H	415	THR	C-N-CA	8.50	130.76	120.14
17	T	198	ASP	N-CA-C	-8.49	103.43	113.88
7	G	83	PRO	N-CA-C	-8.49	102.38	114.18
20	Z	959	HIS	CG-CD2-NE2	8.49	115.69	107.20
1	a	111	ASP	CA-CB-CG	-8.48	104.12	112.60
3	c	235	ILE	N-CA-CB	8.48	122.08	110.54
11	k	173	PRO	CB-CA-C	-8.48	100.50	110.00
13	6	70	ASP	CA-CB-CG	-8.48	104.12	112.60
24	Q	94	VAL	N-CA-CB	-8.48	101.10	110.51
26	U	232	VAL	O-C-N	8.48	130.09	121.87
20	Z	15	GLN	OE1-CD-NE2	8.47	131.07	122.60
24	Q	320	GLN	OE1-CD-NE2	8.47	131.07	122.60
6	f	143	HIS	CE1-NE2-CD2	-8.47	100.53	109.00
30	K	71	GLU	CA-C-N	8.46	131.44	120.44
30	K	71	GLU	C-N-CA	8.46	131.44	120.44
32	M	263	VAL	CA-C-N	8.46	132.31	120.29
32	M	263	VAL	C-N-CA	8.46	132.31	120.29
27	O	19	ASP	CA-CB-CG	-8.46	104.14	112.60
13	m	50	LYS	N-CA-C	-8.45	103.15	113.97
27	O	362	GLN	CA-C-N	8.45	131.21	120.56
27	O	362	GLN	C-N-CA	8.45	131.21	120.56
33	J	142	VAL	CA-C-O	-8.45	114.17	119.15
3	C	194	LEU	CA-C-N	8.45	131.42	120.44
3	C	194	LEU	C-N-CA	8.45	131.42	120.44
11	4	25	ILE	N-CA-C	-8.45	104.79	112.90
24	Q	205	ALA	N-CA-C	-8.45	97.79	109.95
21	N	352	ASN	CA-C-N	8.44	130.65	120.09
21	N	352	ASN	C-N-CA	8.44	130.65	120.09
9	i	155	SER	CA-C-O	8.44	130.26	121.23
27	O	42	SER	N-CA-C	-8.44	102.16	111.36
14	7	195	GLU	N-CA-C	-8.44	102.98	113.28
24	Q	16	ASN	CA-CB-CG	8.44	121.04	112.60
13	m	149	ALA	N-CA-C	8.43	120.47	111.28
23	P	293	LEU	N-CA-C	-8.43	96.53	109.85
10	3	199	TYR	CA-CB-CG	-8.43	98.73	113.90
1	A	101	ALA	CA-C-O	8.42	129.66	120.82
18	X	99	PHE	CA-CB-CG	-8.41	105.39	113.80
8	1	203	GLU	CA-C-N	8.41	132.23	120.29
8	1	203	GLU	C-N-CA	8.41	132.23	120.29
30	K	252	ARG	CA-C-N	8.40	131.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	252	ARG	C-N-CA	8.40	131.54	120.28
4	d	112	TYR	N-CA-C	8.40	120.43	111.28
3	C	145	GLY	O-C-N	8.39	131.94	122.62
16	V	208	LYS	CA-C-N	8.39	131.53	120.28
16	V	208	LYS	C-N-CA	8.39	131.53	120.28
21	N	857	TYR	N-CA-C	-8.39	102.06	113.30
21	N	325	PHE	CA-CB-CG	-8.38	105.42	113.80
30	K	328	LEU	N-CA-C	-8.37	103.66	114.04
15	W	20	ASP	CA-CB-CG	-8.36	104.24	112.60
26	U	244	ASP	CA-C-N	8.35	132.15	120.29
26	U	244	ASP	C-N-CA	8.35	132.15	120.29
9	i	150	VAL	N-CA-C	-8.35	95.98	108.17
7	G	108	PRO	N-CA-CB	8.35	110.74	103.31
24	Q	337	ALA	N-CA-C	-8.34	101.73	112.23
24	Q	381	ILE	CA-C-N	8.34	131.45	120.28
24	Q	381	ILE	C-N-CA	8.34	131.45	120.28
33	J	359	LYS	CA-C-N	8.33	130.80	120.22
33	J	359	LYS	C-N-CA	8.33	130.80	120.22
18	X	94	ASN	N-CA-C	-8.31	103.73	114.04
32	M	279	PHE	CA-CB-CG	8.31	122.11	113.80
15	W	159	ALA	CA-C-N	8.31	131.41	120.28
15	W	159	ALA	C-N-CA	8.31	131.41	120.28
18	X	102	GLN	N-CA-C	-8.31	100.47	110.44
27	O	176	SER	CA-C-N	8.31	131.41	120.28
27	O	176	SER	C-N-CA	8.31	131.41	120.28
11	4	63	ASN	CA-CB-CG	-8.30	104.30	112.60
25	R	43	ARG	CA-C-O	-8.30	111.75	120.55
32	M	349	PHE	CA-CB-CG	8.30	122.11	113.80
14	7	257	ASP	CA-CB-CG	-8.30	104.30	112.60
13	6	180	LEU	N-CA-CB	8.30	122.59	110.06
13	m	57	ASN	CA-CB-CG	-8.29	104.31	112.60
20	Z	37	GLN	OE1-CD-NE2	-8.29	114.31	122.60
6	f	20	PHE	N-CA-C	8.29	120.39	111.36
22	S	253	PHE	N-CA-C	-8.28	102.21	111.82
20	Z	779	ALA	CA-C-N	8.28	132.05	120.29
20	Z	779	ALA	C-N-CA	8.28	132.05	120.29
7	g	66	LYS	N-CA-C	-8.28	100.81	113.89
11	k	157	GLY	CA-C-N	8.27	131.36	120.28
11	k	157	GLY	C-N-CA	8.27	131.36	120.28
4	D	129	PHE	CA-CB-CG	-8.27	105.53	113.80
1	a	221	ASN	N-CA-C	-8.27	102.50	112.59
21	N	147	ALA	N-CA-C	-8.26	102.64	112.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	5	160	ASN	N-CA-C	8.26	120.28	111.28
31	L	332	THR	N-CA-C	-8.26	97.62	110.42
6	f	32	GLY	CA-C-O	-8.26	114.02	122.28
8	h	65	ALA	CA-C-N	8.26	132.01	120.29
8	h	65	ALA	C-N-CA	8.26	132.01	120.29
1	A	106	TYR	CA-CB-CG	-8.26	99.04	113.90
17	T	253	GLU	N-CA-C	8.26	120.36	111.36
10	j	127	ILE	N-CA-C	-8.25	104.98	112.90
21	N	138	GLU	N-CA-C	8.25	120.36	111.36
29	I	199	GLU	CA-C-O	8.25	129.20	120.70
20	Z	359	LYS	CA-C-O	-8.25	111.81	120.55
17	T	85	LEU	N-CA-C	8.24	120.34	111.36
25	R	135	ILE	CA-C-N	8.24	131.32	120.28
25	R	135	ILE	C-N-CA	8.24	131.32	120.28
31	L	409	HIS	CE1-NE2-CD2	-8.23	100.77	109.00
22	S	70	ASN	N-CA-C	-8.23	103.71	112.93
22	S	246	GLU	CA-C-N	8.23	134.35	122.09
22	S	246	GLU	C-N-CA	8.23	134.35	122.09
4	d	239	GLU	CA-C-N	8.23	131.31	120.28
4	d	239	GLU	C-N-CA	8.23	131.31	120.28
26	U	242	PRO	CA-C-N	8.23	131.13	120.44
26	U	242	PRO	C-N-CA	8.23	131.13	120.44
31	L	191	ARG	NE-CZ-NH1	-8.23	113.27	121.50
28	H	367	ARG	CA-C-N	8.22	128.16	119.85
28	H	367	ARG	C-N-CA	8.22	128.16	119.85
30	K	151	PRO	CA-C-O	-8.22	114.98	120.90
13	6	178	LYS	N-CA-C	-8.21	99.45	109.72
17	T	107	SER	CA-C-O	-8.21	111.84	120.55
28	H	210	ASP	O-C-N	-8.21	115.94	123.50
32	M	412	HIS	CG-CD2-NE2	8.21	115.41	107.20
10	j	83	GLU	N-CA-CB	8.21	121.54	109.88
24	Q	304	GLU	N-CA-CB	8.21	122.19	110.12
19	Y	68	GLU	CA-C-N	8.20	136.73	121.97
19	Y	68	GLU	C-N-CA	8.20	136.73	121.97
6	f	220	THR	N-CA-CB	8.20	120.97	110.23
7	g	176	LEU	CA-C-N	8.20	131.93	120.29
7	g	176	LEU	C-N-CA	8.20	131.93	120.29
30	K	309	SER	N-CA-C	8.20	121.82	110.35
23	P	33	ASN	CA-C-N	8.19	131.26	120.28
23	P	33	ASN	C-N-CA	8.19	131.26	120.28
27	O	102	LEU	CA-C-N	8.18	131.24	120.28
27	O	102	LEU	C-N-CA	8.18	131.24	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	284	ILE	N-CA-C	-8.18	104.61	112.29
9	i	154	LEU	CA-C-O	8.17	130.63	121.40
22	S	111	ARG	N-CA-C	-8.16	103.46	113.50
16	V	134	SER	O-C-N	8.16	130.58	122.09
29	I	194	ILE	N-CA-C	-8.16	102.48	110.72
31	L	357	ARG	NE-CZ-NH2	-8.16	111.86	119.20
17	T	140	SER	N-CA-C	-8.16	101.81	112.41
21	N	877	GLN	OE1-CD-NE2	-8.16	114.44	122.60
30	K	418	ASP	N-CA-CB	8.15	124.27	110.49
17	T	26	LEU	N-CA-C	-8.15	103.54	113.97
13	m	55	GLY	CA-C-O	-8.15	116.92	122.22
32	M	168	LYS	CA-C-O	8.14	129.05	120.42
5	e	161	SER	N-CA-C	-8.14	103.14	113.72
17	T	86	LYS	CA-C-O	-8.14	110.44	118.34
29	I	183	ASP	CA-CB-CG	-8.14	104.46	112.60
4	D	254	HIS	ND1-CE1-NE2	8.14	116.54	108.40
10	3	203	ARG	NE-CZ-NH2	-8.13	111.88	119.20
33	J	151	GLY	CA-C-O	8.13	128.57	121.41
5	E	188	HIS	CA-CB-CG	-8.13	105.67	113.80
20	Z	947	GLY	CA-C-N	8.13	131.83	120.29
20	Z	947	GLY	C-N-CA	8.13	131.83	120.29
27	O	110	ASP	CA-C-N	8.12	131.00	120.44
27	O	110	ASP	C-N-CA	8.12	131.00	120.44
22	S	451	ILE	N-CA-C	-8.12	104.79	112.83
4	d	16	HIS	CE1-NE2-CD2	-8.12	100.88	109.00
24	Q	206	ASN	CA-CB-CG	-8.11	104.49	112.60
1	a	87	ILE	CA-C-O	-8.11	111.96	118.85
7	g	237	GLN	CA-C-N	8.11	131.15	120.28
7	g	237	GLN	C-N-CA	8.11	131.15	120.28
12	5	276	LYS	O-C-N	8.11	130.42	122.07
30	K	68	ILE	CB-CA-C	8.11	122.35	111.97
21	N	329	HIS	CA-CB-CG	-8.10	105.70	113.80
21	N	500	ASP	O-C-N	8.10	130.41	122.07
16	V	238	LEU	N-CA-CB	8.09	121.75	110.01
20	Z	207	ILE	CA-C-N	8.09	126.80	120.33
20	Z	207	ILE	C-N-CA	8.09	126.80	120.33
21	N	800	ALA	O-C-N	8.08	130.40	122.07
21	N	473	ASP	CA-CB-CG	-8.07	104.53	112.60
5	E	225	GLN	OE1-CD-NE2	8.07	130.67	122.60
9	2	39	ASN	OD1-CG-ND2	8.07	130.67	122.60
21	N	117	TYR	N-CA-C	-8.07	102.33	112.90
24	Q	383	ASP	CA-CB-CG	-8.07	104.53	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	189	SER	CA-C-N	8.06	131.08	120.28
29	I	189	SER	C-N-CA	8.06	131.08	120.28
2	B	18	LEU	CA-C-N	8.06	130.22	120.14
2	B	18	LEU	C-N-CA	8.06	130.22	120.14
5	e	141	ALA	N-CA-C	-8.06	98.30	110.14
31	L	204	PRO	N-CA-C	-8.06	104.12	114.03
3	C	59	GLN	N-CA-C	-8.05	101.94	113.21
3	C	13	PHE	N-CA-C	-8.05	97.51	108.86
6	F	176	LEU	N-CA-C	8.05	120.77	111.11
28	H	210	ASP	CA-C-N	8.05	136.19	121.70
28	H	210	ASP	C-N-CA	8.05	136.19	121.70
7	G	206	ASP	N-CA-C	-8.04	103.48	113.38
26	U	59	ASP	N-CA-C	-8.04	95.17	108.76
27	O	365	LYS	CA-C-O	-8.04	111.89	120.42
21	N	128	ILE	N-CA-C	-8.04	102.97	110.53
33	J	67	GLU	CA-C-N	8.04	127.71	119.19
33	J	67	GLU	C-N-CA	8.04	127.71	119.19
20	Z	58	GLU	N-CA-CB	8.03	121.96	109.83
6	F	78	ALA	CA-C-N	8.03	127.59	119.24
6	F	78	ALA	C-N-CA	8.03	127.59	119.24
10	3	155	GLU	CA-C-O	-8.03	112.15	119.86
27	O	295	THR	CA-C-N	8.03	130.87	120.44
27	O	295	THR	C-N-CA	8.03	130.87	120.44
3	C	125	HIS	CB-CG-CD2	-8.02	120.77	131.20
32	M	108	LEU	N-CA-C	-8.02	102.61	111.36
22	S	183	LEU	N-CA-CB	8.02	122.02	110.16
25	R	315	VAL	CA-C-O	8.02	127.63	120.34
28	H	398	VAL	CA-C-O	-8.02	113.02	121.44
25	R	158	LEU	CA-C-N	8.01	130.86	120.44
25	R	158	LEU	C-N-CA	8.01	130.86	120.44
6	f	221	PRO	CB-CA-C	8.01	122.60	110.75
28	H	169	GLU	N-CA-CB	8.01	123.89	111.24
4	D	235	GLN	CA-C-N	8.00	131.78	120.42
4	D	235	GLN	C-N-CA	8.00	131.78	120.42
24	Q	51	ARG	NE-CZ-NH2	-7.99	112.01	119.20
28	H	130	ASN	CA-CB-CG	-7.99	104.61	112.60
6	F	79	PRO	CA-C-N	7.99	131.64	120.29
6	F	79	PRO	C-N-CA	7.99	131.64	120.29
11	k	30	ASP	CA-CB-CG	-7.99	104.61	112.60
23	P	345	VAL	O-C-N	7.99	130.06	121.83
27	O	75	GLN	CA-C-N	7.99	130.98	120.28
27	O	75	GLN	C-N-CA	7.99	130.98	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	56	LEU	CA-C-N	7.98	130.97	120.28
20	Z	56	LEU	C-N-CA	7.98	130.97	120.28
1	a	131	ARG	NE-CZ-NH2	-7.98	112.02	119.20
2	B	227	ILE	N-CA-C	-7.98	100.25	108.15
19	Y	27	LYS	CA-C-N	7.97	131.61	120.29
19	Y	27	LYS	C-N-CA	7.97	131.61	120.29
33	J	218	LEU	CA-C-N	7.97	133.97	122.09
33	J	218	LEU	C-N-CA	7.97	133.97	122.09
11	k	138	PHE	CA-CB-CG	-7.95	105.85	113.80
7	g	12	ASN	N-CA-CB	7.94	119.49	110.35
22	S	253	PHE	CA-CB-CG	-7.94	105.86	113.80
14	7	234	ASP	CA-CB-CG	7.94	120.54	112.60
33	J	133	LEU	O-C-N	7.94	130.53	122.12
17	T	153	MET	CA-C-N	7.93	131.55	120.29
17	T	153	MET	C-N-CA	7.93	131.55	120.29
30	K	205	PRO	CA-C-N	7.93	128.41	119.92
30	K	205	PRO	C-N-CA	7.93	128.41	119.92
16	V	190	HIS	CE1-NE2-CD2	-7.92	101.08	109.00
21	N	458	ALA	N-CA-C	7.92	120.18	110.91
21	N	859	ASN	CA-CB-CG	7.92	120.52	112.60
28	H	76	LEU	CA-C-N	7.92	129.99	120.09
28	H	76	LEU	C-N-CA	7.92	129.99	120.09
6	F	127	PRO	CA-C-O	-7.92	112.41	121.36
13	6	28	PHE	N-CA-C	-7.92	97.03	109.07
33	J	205	HIS	CA-CB-CG	-7.92	105.88	113.80
26	U	102	SER	N-CA-C	-7.92	103.41	113.23
25	R	262	GLU	CA-C-N	7.92	130.89	120.28
25	R	262	GLU	C-N-CA	7.92	130.89	120.28
11	4	24	GLY	CA-C-O	7.92	127.65	120.53
6	F	52	ASN	CA-CB-CG	7.91	120.51	112.60
3	C	10	THR	N-CA-C	-7.91	104.11	114.31
23	P	168	TYR	CA-CB-CG	-7.91	99.66	113.90
7	g	170	GLN	OE1-CD-NE2	7.90	130.50	122.60
8	1	46	VAL	CB-CA-C	-7.89	102.09	110.62
24	Q	131	VAL	CA-C-N	7.89	131.50	120.29
24	Q	131	VAL	C-N-CA	7.89	131.50	120.29
21	N	783	SER	N-CA-C	-7.89	102.16	113.21
8	1	200	ASP	CA-CB-CG	-7.89	104.71	112.60
31	L	201	LEU	N-CA-CB	-7.89	98.57	110.01
21	N	841	THR	N-CA-C	-7.89	94.00	110.80
11	4	72	ASP	CA-CB-CG	-7.88	104.72	112.60
31	L	363	ILE	N-CA-C	-7.88	103.12	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	n	101	LYS	N-CA-C	7.88	119.95	111.36
1	a	87	ILE	CA-C-N	7.87	127.79	119.05
1	a	87	ILE	C-N-CA	7.87	127.79	119.05
11	4	128	LEU	O-C-N	-7.87	113.67	121.94
29	I	385	ASP	CA-CB-CG	-7.86	104.74	112.60
7	G	54	ILE	N-CA-C	-7.86	96.41	107.80
27	O	307	MET	N-CA-C	-7.86	94.78	108.69
32	M	357	ARG	NE-CZ-NH2	7.86	126.27	119.20
30	K	226	VAL	N-CA-C	-7.85	102.88	110.42
7	g	137	ILE	CB-CA-C	-7.85	100.94	111.15
29	I	83	LYS	CA-C-O	-7.85	111.04	118.73
29	I	128	TYR	CA-C-N	7.85	133.04	122.84
29	I	128	TYR	C-N-CA	7.85	133.04	122.84
6	f	149	PRO	N-CA-CB	7.84	111.49	103.25
26	U	64	ASP	N-CA-CB	7.84	121.39	110.56
5	e	150	ASP	N-CA-C	-7.84	101.34	113.02
10	j	45	HIS	CB-CG-CD2	-7.84	121.01	131.20
11	4	151	ASP	CA-C-O	7.84	129.51	120.89
20	Z	353	VAL	N-CA-CB	7.83	115.44	110.50
32	M	141	LYS	O-C-N	-7.83	114.58	121.71
3	C	193	ALA	N-CA-CB	7.82	121.74	110.16
4	d	254	HIS	CE1-NE2-CD2	-7.82	101.18	109.00
7	G	211	ASP	CA-CB-CG	-7.82	104.78	112.60
10	3	44	PHE	CA-CB-CG	-7.82	105.98	113.80
20	Z	470	ALA	CA-C-N	7.82	131.09	120.54
20	Z	470	ALA	C-N-CA	7.82	131.09	120.54
1	a	176	GLN	N-CA-C	7.82	120.79	111.33
10	j	8	ASN	CA-C-O	7.82	128.71	120.42
16	V	193	ASN	N-CA-C	-7.81	104.27	113.88
3	c	115	LEU	CA-C-O	-7.81	112.14	120.42
22	S	56	SER	CA-C-N	7.81	130.74	120.28
22	S	56	SER	C-N-CA	7.81	130.74	120.28
1	a	15	HIS	CE1-NE2-CD2	-7.81	101.19	109.00
21	N	22	THR	CA-C-N	7.81	130.74	120.28
21	N	22	THR	C-N-CA	7.81	130.74	120.28
5	e	70	ILE	N-CA-C	-7.80	105.10	111.81
11	4	52	ASP	CA-C-N	7.80	130.74	120.28
11	4	52	ASP	C-N-CA	7.80	130.74	120.28
16	V	30	SER	CA-C-N	7.80	130.74	120.28
16	V	30	SER	C-N-CA	7.80	130.74	120.28
21	N	267	GLN	CA-C-N	7.80	130.58	120.44
21	N	267	GLN	C-N-CA	7.80	130.58	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	288	PHE	CA-CB-CG	-7.80	106.00	113.80
12	l	226	GLU	N-CA-C	-7.79	102.86	111.36
20	Z	881	ILE	N-CA-C	-7.79	103.21	110.53
29	I	397	THR	N-CA-CB	7.79	121.56	110.12
28	H	111	GLU	N-CA-C	-7.78	102.64	114.16
28	H	360	THR	N-CA-C	-7.78	100.85	110.65
30	K	150	LEU	CA-C-N	7.78	125.34	119.66
30	K	150	LEU	C-N-CA	7.78	125.34	119.66
26	U	142	GLN	CA-C-N	7.78	130.92	120.50
26	U	142	GLN	C-N-CA	7.78	130.92	120.50
2	b	235	PHE	CA-CB-CG	-7.78	106.02	113.80
10	3	112	ILE	N-CA-C	-7.78	96.92	108.12
28	H	368	PRO	CA-C-N	7.78	133.33	121.51
28	H	368	PRO	C-N-CA	7.78	133.33	121.51
32	M	250	GLN	CA-C-N	7.78	131.33	120.29
32	M	250	GLN	C-N-CA	7.78	131.33	120.29
33	J	123	HIS	CA-CB-CG	7.78	121.58	113.80
12	5	138	CYS	CA-C-O	-7.77	112.69	120.70
24	Q	80	HIS	O-C-N	7.77	131.67	122.34
20	Z	804	ASP	CA-CB-CG	-7.77	104.83	112.60
22	S	39	ASN	CA-C-N	7.77	131.32	120.29
22	S	39	ASN	C-N-CA	7.77	131.32	120.29
21	N	45	ASP	N-CA-C	-7.76	102.90	111.36
21	N	205	SER	CA-C-N	7.76	130.34	120.56
21	N	205	SER	C-N-CA	7.76	130.34	120.56
1	a	172	GLY	CA-C-N	7.76	127.48	119.64
1	a	172	GLY	C-N-CA	7.76	127.48	119.64
5	E	118	ASP	CA-C-N	7.76	130.68	120.28
5	E	118	ASP	C-N-CA	7.76	130.68	120.28
30	K	369	ASP	CA-C-N	7.76	130.53	120.44
30	K	369	ASP	C-N-CA	7.76	130.53	120.44
21	N	336	ASN	CA-CB-CG	7.76	120.36	112.60
28	H	151	GLN	OE1-CD-NE2	7.76	130.36	122.60
5	E	180	GLN	OE1-CD-NE2	7.75	130.35	122.60
22	S	20	HIS	CA-CB-CG	7.75	121.55	113.80
31	L	316	ASP	CA-C-O	-7.75	112.22	121.05
2	b	111	VAL	CA-C-N	7.75	131.29	120.29
2	b	111	VAL	C-N-CA	7.75	131.29	120.29
9	2	77	THR	CA-C-N	7.75	130.66	120.28
9	2	77	THR	C-N-CA	7.75	130.66	120.28
23	P	198	VAL	CA-C-N	7.74	131.43	120.28
23	P	198	VAL	C-N-CA	7.74	131.43	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	1	163	PHE	N-CA-CB	-7.74	98.70	110.16
20	Z	491	LEU	N-CA-CB	7.74	121.61	110.16
3	c	123	THR	CA-C-N	7.74	130.50	120.44
3	c	123	THR	C-N-CA	7.74	130.50	120.44
2	b	151	ASP	CA-C-N	7.73	127.79	119.28
2	b	151	ASP	C-N-CA	7.73	127.79	119.28
14	n	131	THR	N-CA-CB	7.73	121.60	110.16
3	c	6	TYR	N-CA-C	-7.73	100.55	112.99
20	Z	732	ILE	CA-C-N	7.73	130.30	120.56
20	Z	732	ILE	C-N-CA	7.73	130.30	120.56
31	L	411	ASN	CA-C-O	-7.73	112.23	120.88
1	A	56	GLN	OE1-CD-NE2	7.72	130.32	122.60
20	Z	257	PRO	CA-C-N	7.72	128.34	120.38
20	Z	257	PRO	C-N-CA	7.72	128.34	120.38
3	C	32	ALA	CA-C-N	7.72	128.86	120.44
3	C	32	ALA	C-N-CA	7.72	128.86	120.44
33	J	8	SER	N-CA-C	-7.72	102.40	113.21
21	N	50	TYR	CA-C-N	7.72	130.62	120.28
21	N	50	TYR	C-N-CA	7.72	130.62	120.28
21	N	283	ASP	CA-C-N	7.72	127.90	119.87
21	N	283	ASP	C-N-CA	7.72	127.90	119.87
27	O	57	LEU	CA-C-N	7.72	130.95	120.38
27	O	57	LEU	C-N-CA	7.72	130.95	120.38
31	L	394	CYS	N-CA-CB	7.72	121.58	110.16
14	n	98	ARG	N-CA-CB	7.72	121.70	110.20
28	H	332	THR	CA-C-N	7.71	130.95	120.54
28	H	332	THR	C-N-CA	7.71	130.95	120.54
33	J	34	ILE	CA-C-N	7.71	130.62	120.28
33	J	34	ILE	C-N-CA	7.71	130.62	120.28
23	P	310	ARG	CA-C-N	7.71	129.73	120.09
23	P	310	ARG	C-N-CA	7.71	129.73	120.09
20	Z	334	LYS	CA-C-O	7.70	128.82	119.97
4	D	241	GLN	CA-C-N	7.70	130.60	120.28
4	D	241	GLN	C-N-CA	7.70	130.60	120.28
33	J	316	PHE	CA-CB-CG	7.70	121.50	113.80
2	b	179	TRP	CB-CG-CD1	7.70	138.44	126.90
23	P	284	ILE	CA-C-N	7.70	130.59	120.28
23	P	284	ILE	C-N-CA	7.70	130.59	120.28
5	e	216	ASN	N-CA-C	-7.69	101.56	113.02
2	b	26	THR	CA-C-N	7.69	130.92	120.38
2	b	26	THR	C-N-CA	7.69	130.92	120.38
14	7	133	MET	CA-C-N	7.69	130.92	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	7	133	MET	C-N-CA	7.69	130.92	120.38
9	i	46	ASP	CA-C-O	-7.68	113.23	121.99
1	a	63	LEU	CA-C-N	7.68	131.62	120.71
1	a	63	LEU	C-N-CA	7.68	131.62	120.71
1	a	237	SER	CA-C-N	7.68	130.57	120.28
1	a	237	SER	C-N-CA	7.68	130.57	120.28
2	b	159	TRP	CB-CG-CD2	-7.68	116.05	126.80
2	B	26	THR	CA-C-N	7.68	130.57	120.28
2	B	26	THR	C-N-CA	7.68	130.57	120.28
33	J	111	GLN	OE1-CD-NE2	7.68	130.28	122.60
5	e	56	SER	CA-C-N	7.68	127.86	119.87
5	e	56	SER	C-N-CA	7.68	127.86	119.87
30	K	240	SER	N-CA-C	-7.68	103.91	113.28
4	d	178	ASN	CA-CB-CG	-7.68	104.92	112.60
21	N	870	ASN	CA-CB-CG	7.67	120.28	112.60
22	S	31	VAL	CB-CA-C	-7.67	102.15	111.97
28	H	300	THR	CA-C-O	-7.67	112.80	120.70
3	C	97	ASN	CA-C-N	7.67	130.56	120.28
3	C	97	ASN	C-N-CA	7.67	130.56	120.28
8	h	135	ILE	N-CA-C	-7.67	98.22	108.35
28	H	278	GLU	N-CA-C	-7.67	103.75	113.72
22	S	263	ASP	CA-C-N	7.67	131.40	120.98
22	S	263	ASP	C-N-CA	7.67	131.40	120.98
20	Z	374	LEU	CA-C-O	7.66	129.66	120.92
12	5	228	ALA	N-CA-C	-7.66	103.01	111.36
22	S	261	HIS	CE1-NE2-CD2	-7.66	101.34	109.00
13	m	193	ARG	CA-C-O	-7.65	112.44	120.55
2	B	223	GLY	CA-C-O	7.65	127.52	119.02
5	e	15	PHE	CA-C-N	7.65	135.47	121.70
5	e	15	PHE	C-N-CA	7.65	135.47	121.70
24	Q	334	HIS	CA-CB-CG	-7.65	106.15	113.80
16	V	153	ILE	N-CA-C	-7.65	96.38	107.78
17	T	147	LYS	O-C-N	-7.65	113.43	122.15
26	U	79	MET	CG-SD-CE	-7.65	84.08	100.90
17	T	88	TYR	CB-CA-C	-7.64	98.89	110.88
27	O	17	GLU	O-C-N	7.64	130.86	122.15
23	P	324	GLU	CA-C-O	-7.64	112.98	121.00
8	1	90	VAL	N-CA-C	-7.64	102.68	111.00
24	Q	27	TYR	CB-CA-C	-7.63	98.12	110.79
27	O	146	ALA	CA-C-N	7.63	130.82	120.44
27	O	146	ALA	C-N-CA	7.63	130.82	120.44
7	g	127	ASN	CA-CB-CG	-7.63	104.97	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	170	HIS	CE1-NE2-CD2	-7.63	101.37	109.00
3	c	31	HIS	N-CA-C	-7.63	103.28	112.59
8	h	40	THR	N-CA-C	7.63	120.81	109.59
10	j	148	GLY	CA-C-N	7.63	131.12	120.29
10	j	148	GLY	C-N-CA	7.63	131.12	120.29
30	K	174	VAL	N-CA-CB	7.63	119.49	110.95
14	7	172	SER	N-CA-C	-7.63	101.28	108.07
28	H	286	GLU	CB-CG-CD	-7.63	99.63	112.60
30	K	241	GLU	N-CA-C	-7.63	104.21	113.97
30	K	323	THR	N-CA-C	-7.63	105.14	114.75
33	J	318	PRO	CA-C-O	-7.63	109.50	120.56
31	L	128	ILE	N-CA-C	-7.62	96.49	107.77
29	I	316	PHE	N-CA-C	-7.62	101.85	113.89
31	L	289	ARG	CA-C-N	7.62	131.38	120.79
31	L	289	ARG	C-N-CA	7.62	131.38	120.79
32	M	255	TYR	CA-C-N	7.62	133.13	120.64
32	M	255	TYR	C-N-CA	7.62	133.13	120.64
31	L	424	GLU	CA-C-N	7.62	131.23	120.42
31	L	424	GLU	C-N-CA	7.62	131.23	120.42
33	J	279	LEU	CA-C-N	7.61	130.81	120.38
33	J	279	LEU	C-N-CA	7.61	130.81	120.38
9	2	198	SER	CA-C-O	7.61	128.58	120.36
5	E	123	PHE	CA-CB-CG	7.61	121.41	113.80
21	N	170	LEU	CA-C-N	7.61	130.47	120.28
21	N	170	LEU	C-N-CA	7.61	130.47	120.28
28	H	362	ASP	CA-C-O	-7.61	112.26	120.17
12	l	95	ALA	N-CA-C	-7.61	97.34	109.59
24	Q	345	SER	CA-C-N	7.60	131.87	120.31
24	Q	345	SER	C-N-CA	7.60	131.87	120.31
25	R	251	THR	CA-C-O	-7.60	112.36	120.42
31	L	67	HIS	ND1-CE1-NE2	7.60	116.00	108.40
12	l	163	TYR	CA-C-N	7.60	130.32	120.44
12	l	163	TYR	C-N-CA	7.60	130.32	120.44
12	l	233	LYS	N-CA-CB	7.60	121.03	110.01
18	X	25	THR	O-C-N	-7.60	113.68	121.28
21	N	601	THR	N-CA-C	-7.59	104.15	113.41
2	B	127	VAL	N-CA-C	-7.59	97.19	108.12
25	R	333	MET	CG-SD-CE	-7.59	84.20	100.90
33	J	141	LYS	CA-C-N	7.59	128.05	122.59
33	J	141	LYS	C-N-CA	7.59	128.05	122.59
4	D	26	ALA	N-CA-C	7.59	120.43	111.71
20	Z	800	SER	CA-C-N	7.59	130.77	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	800	SER	C-N-CA	7.59	130.77	120.38
9	2	189	GLN	OE1-CD-NE2	7.58	130.18	122.60
26	U	17	SER	N-CA-CB	7.58	121.26	110.12
33	J	248	ASP	CA-CB-CG	-7.58	105.02	112.60
14	7	237	THR	N-CA-C	-7.58	105.98	114.62
24	Q	135	HIS	CB-CG-CD2	-7.58	121.35	131.20
30	K	334	LEU	N-CA-CB	7.58	123.29	110.49
7	g	190	ARG	O-C-N	7.58	129.87	122.07
24	Q	226	HIS	ND1-CE1-NE2	7.58	115.98	108.40
24	Q	80	HIS	CA-C-N	7.57	131.04	120.29
24	Q	80	HIS	C-N-CA	7.57	131.04	120.29
7	G	170	GLN	CA-C-N	7.57	130.42	120.28
7	G	170	GLN	C-N-CA	7.57	130.42	120.28
14	n	81	ASN	O-C-N	-7.57	113.03	122.19
12	5	280	GLY	N-CA-C	-7.57	104.78	115.30
20	Z	722	ASP	CA-CB-CG	7.57	120.17	112.60
26	U	171	VAL	N-CA-C	7.57	117.69	110.42
21	N	448	LEU	CA-C-N	7.56	128.33	119.94
21	N	448	LEU	C-N-CA	7.56	128.33	119.94
23	P	294	GLU	CA-C-N	7.56	130.27	120.44
23	P	294	GLU	C-N-CA	7.56	130.27	120.44
28	H	368	PRO	N-CA-CB	7.56	110.36	103.33
2	b	138	GLY	CA-C-O	-7.56	113.67	121.61
11	k	95	ARG	N-CA-CB	7.56	121.99	110.28
13	6	67	ALA	O-C-N	7.55	130.25	122.09
1	a	246	VAL	CA-C-N	7.55	130.40	120.28
1	a	246	VAL	C-N-CA	7.55	130.40	120.28
32	M	146	VAL	CA-C-N	7.55	129.60	120.92
32	M	146	VAL	C-N-CA	7.55	129.60	120.92
16	V	300	VAL	CA-C-O	-7.55	113.17	121.17
19	Y	42	THR	CA-C-N	7.55	133.50	122.63
19	Y	42	THR	C-N-CA	7.55	133.50	122.63
31	L	303	ARG	CA-C-N	7.54	130.25	120.44
31	L	303	ARG	C-N-CA	7.54	130.25	120.44
2	B	135	LEU	N-CA-C	-7.54	97.11	109.40
5	e	13	SER	CA-C-N	7.54	135.94	121.54
5	e	13	SER	C-N-CA	7.54	135.94	121.54
3	C	85	GLU	CA-C-O	-7.54	112.83	120.90
30	K	130	LEU	N-CA-C	-7.54	102.61	112.41
14	7	164	ASN	OD1-CG-ND2	-7.54	115.06	122.60
20	Z	455	ILE	CA-C-N	7.54	128.51	119.99
20	Z	455	ILE	C-N-CA	7.54	128.51	119.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	S	346	TYR	N-CA-C	-7.53	103.15	111.36
24	Q	199	THR	O-C-N	7.53	130.10	122.12
21	N	27	SER	CA-C-N	7.53	130.78	120.46
21	N	27	SER	C-N-CA	7.53	130.78	120.46
22	S	474	GLU	N-CA-C	7.53	119.49	111.28
32	M	21	GLU	CA-C-N	7.53	131.11	120.42
32	M	21	GLU	C-N-CA	7.53	131.11	120.42
2	B	112	SER	CA-C-N	7.53	130.98	120.29
2	B	112	SER	C-N-CA	7.53	130.98	120.29
32	M	55	ASN	CA-C-N	7.53	130.37	120.28
32	M	55	ASN	C-N-CA	7.53	130.37	120.28
13	6	163	ASN	CA-CB-CG	-7.53	105.07	112.60
24	Q	361	HIS	CE1-NE2-CD2	-7.53	101.47	109.00
1	A	72	ILE	N-CA-CB	7.52	118.92	110.72
27	O	36	LYS	N-CA-CB	7.52	123.20	110.49
2	b	154	GLY	N-CA-C	-7.52	104.43	115.63
1	A	164	VAL	O-C-N	-7.52	114.73	123.00
21	N	301	THR	CA-C-N	7.52	130.21	120.44
21	N	301	THR	C-N-CA	7.52	130.21	120.44
10	j	172	LEU	N-CA-C	7.52	119.47	111.28
29	I	123	PRO	N-CA-CB	7.52	110.34	103.20
13	m	37	ASN	N-CA-CB	7.51	124.59	111.00
26	U	303	GLU	CA-C-O	-7.51	112.93	120.82
31	L	364	HIS	ND1-CE1-NE2	7.51	115.91	108.40
25	R	103	CYS	O-C-N	7.50	130.07	122.12
7	g	46	VAL	N-CA-C	-7.50	97.69	108.42
21	N	348	PHE	CA-C-O	7.50	128.37	120.42
24	Q	267	LEU	CA-C-N	7.50	130.33	120.28
24	Q	267	LEU	C-N-CA	7.50	130.33	120.28
8	1	66	ASP	CA-CB-CG	-7.50	105.10	112.60
17	T	28	PRO	CA-C-O	-7.50	109.69	120.56
3	C	161	LYS	N-CA-C	-7.49	104.64	114.31
17	T	96	LEU	CA-C-N	7.49	135.19	121.70
17	T	96	LEU	C-N-CA	7.49	135.19	121.70
22	S	259	TYR	CB-CG-CD2	7.49	132.04	120.80
24	Q	186	HIS	CE1-NE2-CD2	-7.49	101.51	109.00
25	R	265	ASP	CB-CA-C	-7.49	97.58	110.09
2	b	152	PRO	CA-C-N	7.49	130.31	120.28
2	b	152	PRO	C-N-CA	7.49	130.31	120.28
2	B	99	ARG	N-CA-C	-7.49	103.26	114.64
6	F	138	ASP	CA-CB-CG	7.49	120.08	112.60
21	N	204	SER	N-CA-C	7.49	119.44	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	90	SER	N-CA-C	-7.48	103.06	111.07
10	3	189	ILE	N-CA-C	-7.48	96.95	107.80
22	S	102	SER	N-CA-C	-7.48	104.28	113.41
3	C	88	ILE	O-C-N	7.48	129.54	121.83
20	Z	59	ASP	N-CA-C	-7.48	104.66	114.31
21	N	246	LYS	N-CA-C	-7.48	104.30	113.50
31	L	359	GLU	CA-C-N	7.48	131.04	120.42
31	L	359	GLU	C-N-CA	7.48	131.04	120.42
23	P	187	SER	CA-C-N	7.48	131.04	120.42
23	P	187	SER	C-N-CA	7.48	131.04	120.42
29	I	316	PHE	CA-CB-CG	-7.48	106.32	113.80
11	4	133	HIS	ND1-CE1-NE2	7.47	115.87	108.40
33	J	155	LYS	CA-C-N	7.47	130.30	120.28
33	J	155	LYS	C-N-CA	7.47	130.30	120.28
32	M	379	LEU	CA-C-N	7.47	130.29	120.28
32	M	379	LEU	C-N-CA	7.47	130.29	120.28
20	Z	930	GLY	CA-C-N	7.47	132.03	120.75
20	Z	930	GLY	C-N-CA	7.47	132.03	120.75
10	j	118	LYS	CA-C-O	-7.47	112.56	120.70
23	P	51	ASP	N-CA-C	-7.47	103.25	112.88
28	H	194	SER	CA-C-O	-7.47	112.50	120.42
26	U	84	ASN	N-CA-C	-7.46	97.97	109.24
29	I	161	GLN	N-CA-C	-7.46	102.30	111.40
15	W	79	THR	CA-CB-OG1	7.46	120.79	109.60
33	J	53	ASP	O-C-N	7.46	129.75	122.07
7	G	145	GLY	N-CA-C	-7.46	99.41	112.53
22	S	442	PHE	CA-CB-CG	7.45	121.25	113.80
30	K	104	ASP	CA-CB-CG	-7.44	105.16	112.60
5	e	231	TYR	CB-CG-CD2	7.44	131.96	120.80
27	O	89	SER	N-CA-CB	7.44	120.94	109.85
33	J	376	HIS	CE1-NE2-CD2	-7.44	101.56	109.00
30	K	152	PRO	N-CA-CB	7.44	110.26	103.19
7	g	109	ILE	N-CA-CB	7.44	115.18	110.50
19	Y	25	ASN	N-CA-CB	7.43	121.04	110.12
29	I	92	GLU	CA-C-N	7.43	130.84	120.29
29	I	92	GLU	C-N-CA	7.43	130.84	120.29
2	b	130	PHE	CA-CB-CG	-7.43	106.37	113.80
6	f	56	LEU	N-CA-C	-7.43	103.17	112.90
17	T	157	TYR	CA-CB-CG	-7.43	100.53	113.90
21	N	538	LYS	N-CA-C	7.43	119.02	111.07
22	S	268	LEU	N-CA-C	7.43	119.45	111.36
13	6	77	LYS	CA-C-N	7.42	130.23	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	6	77	LYS	C-N-CA	7.42	130.23	120.28
16	V	229	ASP	CA-C-N	7.42	134.12	121.14
16	V	229	ASP	C-N-CA	7.42	134.12	121.14
3	C	152	ASN	CA-CB-CG	-7.42	105.18	112.60
5	E	147	HIS	CE1-NE2-CD2	-7.42	101.58	109.00
16	V	43	ALA	N-CA-C	-7.42	103.28	111.36
23	P	203	ILE	N-CA-C	-7.42	97.34	108.17
24	Q	130	ARG	NE-CZ-NH2	7.42	125.87	119.20
1	A	150	LEU	CA-C-N	7.42	133.51	121.87
1	A	150	LEU	C-N-CA	7.42	133.51	121.87
27	O	179	PHE	CA-CB-CG	-7.42	106.39	113.80
3	C	193	ALA	CA-C-N	7.41	130.22	120.28
3	C	193	ALA	C-N-CA	7.41	130.22	120.28
15	W	79	THR	N-CA-C	7.41	120.73	110.35
7	G	132	PHE	CA-CB-CG	-7.41	106.39	113.80
22	S	222	SER	CA-C-N	7.41	130.07	120.44
22	S	222	SER	C-N-CA	7.41	130.07	120.44
8	h	81	THR	CA-C-N	7.41	129.10	119.84
8	h	81	THR	C-N-CA	7.41	129.10	119.84
20	Z	958	ASN	OD1-CG-ND2	7.41	130.00	122.60
17	T	75	PHE	CA-CB-CG	-7.40	106.40	113.80
17	T	130	ASP	CA-CB-CG	7.40	120.00	112.60
25	R	182	ASN	CA-CB-CG	7.40	120.00	112.60
5	e	119	LEU	O-C-N	7.40	129.96	122.12
23	P	123	ARG	O-C-N	7.40	129.79	122.09
4	d	182	LYS	CA-C-O	-7.40	112.98	120.90
3	c	141	ASP	N-CA-C	-7.40	97.37	108.99
9	2	179	GLU	N-CA-CB	7.40	121.00	110.12
9	2	253	GLN	OE1-CD-NE2	7.40	130.00	122.60
21	N	587	ALA	CA-C-N	7.40	130.03	120.56
21	N	587	ALA	C-N-CA	7.40	130.03	120.56
31	L	409	HIS	ND1-CE1-NE2	7.40	115.80	108.40
20	Z	444	GLU	CA-C-N	7.40	127.10	119.56
20	Z	444	GLU	C-N-CA	7.40	127.10	119.56
29	I	314	ASP	CA-CB-CG	-7.40	105.20	112.60
2	b	122	THR	N-CA-C	-7.39	104.11	113.43
10	j	99	ARG	O-C-N	-7.39	113.47	122.19
4	D	201	GLU	N-CA-C	7.39	118.98	111.07
21	N	304	LEU	CA-C-N	7.39	130.49	120.44
21	N	304	LEU	C-N-CA	7.39	130.49	120.44
21	N	443	LEU	CA-C-N	7.39	130.04	120.44
21	N	443	LEU	C-N-CA	7.39	130.04	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	7	90	ILE	CA-C-O	7.39	128.23	120.25
25	R	109	LYS	CA-C-O	7.39	128.38	120.55
8	1	85	GLU	N-CA-C	-7.38	103.17	111.07
22	S	75	CYS	CA-C-N	7.38	130.77	120.29
22	S	75	CYS	C-N-CA	7.38	130.77	120.29
25	R	305	PHE	N-CA-CB	7.38	123.51	110.37
33	J	310	ILE	N-CA-CB	7.38	123.41	111.23
14	n	167	GLY	CA-C-N	7.38	130.45	120.63
14	n	167	GLY	C-N-CA	7.38	130.45	120.63
20	Z	161	ILE	O-C-N	7.38	129.03	121.87
25	R	36	SER	N-CA-C	-7.38	104.30	113.38
31	L	181	ASP	CA-CB-CG	-7.38	105.22	112.60
15	W	158	ILE	CA-C-N	7.38	130.77	120.29
15	W	158	ILE	C-N-CA	7.38	130.77	120.29
6	f	140	SER	N-CA-C	-7.38	104.23	112.57
23	P	414	GLU	N-CA-CB	-7.38	99.27	110.12
9	2	64	HIS	CE1-NE2-CD2	-7.38	101.62	109.00
21	N	329	HIS	CA-C-N	7.38	130.03	120.44
21	N	329	HIS	C-N-CA	7.38	130.03	120.44
26	U	143	VAL	CA-C-O	-7.38	113.25	121.36
12	l	168	ALA	O-C-N	-7.37	114.99	121.85
5	E	243	LEU	CA-C-N	7.37	130.75	120.29
5	E	243	LEU	C-N-CA	7.37	130.75	120.29
20	Z	433	LEU	CA-C-N	7.37	130.75	120.29
20	Z	433	LEU	C-N-CA	7.37	130.75	120.29
3	C	123	THR	CA-C-N	7.36	130.45	120.44
3	C	123	THR	C-N-CA	7.36	130.45	120.44
10	3	26	ASP	N-CA-C	-7.36	99.62	110.52
2	B	31	GLY	CA-C-N	7.36	131.76	120.13
2	B	31	GLY	C-N-CA	7.36	131.76	120.13
9	2	122	HIS	ND1-CE1-NE2	7.36	115.76	108.40
13	m	103	HIS	CA-CB-CG	-7.36	106.44	113.80
3	C	108	VAL	N-CA-CB	7.36	118.67	110.51
6	F	185	ASN	CA-C-N	7.35	127.37	119.28
6	F	185	ASN	C-N-CA	7.35	127.37	119.28
4	d	183	GLU	CA-C-N	7.35	127.95	120.38
4	d	183	GLU	C-N-CA	7.35	127.95	120.38
20	Z	128	GLU	CA-C-N	7.35	130.13	120.28
20	Z	128	GLU	C-N-CA	7.35	130.13	120.28
30	K	49	PHE	N-CA-CB	7.35	121.34	110.53
31	L	82	ARG	NE-CZ-NH2	-7.35	112.58	119.20
31	L	130	GLY	N-CA-C	-7.35	98.72	112.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	l	134	LEU	CA-C-O	7.35	128.34	120.55
13	m	49	PRO	N-CA-CB	7.35	109.85	103.31
5	E	205	LYS	CA-C-N	7.35	130.12	120.28
5	E	205	LYS	C-N-CA	7.35	130.12	120.28
8	1	71	HIS	ND1-CE1-NE2	7.35	115.75	108.40
21	N	122	GLN	CB-CG-CD	-7.35	100.11	112.60
21	N	476	THR	N-CA-C	-7.35	104.17	113.72
2	b	123	GLN	OE1-CD-NE2	-7.34	115.25	122.60
2	b	221	LEU	N-CA-C	-7.34	103.46	113.30
10	j	184	GLY	N-CA-C	-7.34	104.97	111.95
32	M	333	LEU	CA-C-N	7.34	130.60	120.39
32	M	333	LEU	C-N-CA	7.34	130.60	120.39
14	n	216	VAL	N-CA-C	-7.34	103.63	110.53
26	U	173	HIS	CE1-NE2-CD2	-7.34	101.66	109.00
11	4	172	MET	N-CA-C	-7.34	99.90	110.40
29	I	392	ILE	CA-C-N	7.34	130.12	120.28
29	I	392	ILE	C-N-CA	7.34	130.12	120.28
31	L	149	ASP	CA-C-O	7.34	129.37	121.44
7	g	24	VAL	CA-CB-CG2	-7.34	97.93	110.40
13	m	50	LYS	CA-C-N	7.34	131.68	122.43
13	m	50	LYS	C-N-CA	7.34	131.68	122.43
22	S	32	GLN	CA-C-O	-7.34	112.77	120.55
32	M	355	ASP	CA-C-O	7.34	128.52	120.82
6	F	82	ARG	N-CA-C	-7.33	103.29	111.28
15	W	49	VAL	CA-C-N	7.33	130.61	122.69
15	W	49	VAL	C-N-CA	7.33	130.61	122.69
22	S	211	ARG	CA-C-O	7.33	128.19	120.42
27	O	224	GLY	CA-C-O	-7.33	112.48	122.31
27	O	159	LYS	N-CA-C	-7.33	103.90	112.92
2	B	83	ARG	CB-CA-C	-7.33	98.40	110.85
4	d	110	THR	CA-C-N	7.32	130.09	120.28
4	d	110	THR	C-N-CA	7.32	130.09	120.28
25	R	236	ALA	CA-C-N	7.32	133.43	121.86
25	R	236	ALA	C-N-CA	7.32	133.43	121.86
27	O	142	ASP	N-CA-C	-7.32	96.09	109.56
19	Y	28	SER	CA-C-O	-7.32	112.66	120.42
28	H	85	MET	CA-C-N	7.32	128.05	120.00
28	H	85	MET	C-N-CA	7.32	128.05	120.00
30	K	272	ASP	N-CA-C	-7.32	102.47	111.40
3	C	60	ASP	N-CA-C	-7.32	102.35	112.30
7	g	20	ARG	NE-CZ-NH1	-7.31	114.19	121.50
16	V	211	LYS	CA-C-O	-7.31	112.80	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	405	LYS	N-CA-C	-7.31	102.70	111.69
6	f	18	ARG	O-C-N	-7.31	113.75	122.96
4	d	114	ALA	CA-C-N	7.31	128.04	120.00
4	d	114	ALA	C-N-CA	7.31	128.04	120.00
8	h	158	GLU	CA-C-N	7.31	130.07	120.28
8	h	158	GLU	C-N-CA	7.31	130.07	120.28
13	m	183	LEU	CA-C-O	7.31	128.18	120.36
19	Y	52	ASN	OD1-CG-ND2	-7.31	115.29	122.60
1	A	147	ASP	N-CA-CB	7.30	121.39	110.29
7	g	151	LEU	CA-C-O	7.30	128.34	120.38
11	4	80	VAL	CA-C-N	7.30	130.66	120.29
11	4	80	VAL	C-N-CA	7.30	130.66	120.29
20	Z	541	ASP	N-CA-C	-7.30	101.43	111.28
28	H	341	ASP	CA-C-N	7.29	128.04	119.94
28	H	341	ASP	C-N-CA	7.29	128.04	119.94
33	J	220	GLN	N-CA-CB	7.29	122.22	110.77
7	g	64	ASN	OD1-CG-ND2	7.29	129.89	122.60
13	6	75	ARG	NE-CZ-NH1	-7.29	114.21	121.50
9	i	49	SER	N-CA-C	-7.29	96.85	108.73
28	H	83	ASP	CA-C-N	7.29	129.75	120.56
28	H	83	ASP	C-N-CA	7.29	129.75	120.56
6	F	100	ASN	CA-CB-CG	7.29	119.89	112.60
9	2	96	SER	CA-C-O	-7.29	112.82	120.55
20	Z	629	VAL	O-C-N	7.29	129.05	121.91
21	N	493	GLY	CA-C-N	7.29	130.56	120.65
21	N	493	GLY	C-N-CA	7.29	130.56	120.65
22	S	265	SER	N-CA-CB	7.29	121.53	110.45
24	Q	182	SER	CA-C-N	7.29	130.05	120.28
24	Q	182	SER	C-N-CA	7.29	130.05	120.28
5	E	64	ILE	N-CA-CB	7.29	120.62	110.56
17	T	245	TYR	CA-C-N	7.29	130.64	120.29
17	T	245	TYR	C-N-CA	7.29	130.64	120.29
29	I	114	ASP	CA-CB-CG	-7.28	105.32	112.60
7	g	18	ASP	CA-CB-CG	-7.28	105.32	112.60
20	Z	387	ASN	CA-CB-CG	-7.28	105.32	112.60
3	C	154	SER	N-CA-C	-7.28	103.42	111.36
21	N	765	ASP	CA-CB-CG	-7.28	105.32	112.60
13	m	159	ASP	CA-CB-CG	-7.28	105.32	112.60
1	A	110	TYR	CA-C-N	7.28	135.44	121.54
1	A	110	TYR	C-N-CA	7.28	135.44	121.54
20	Z	790	MET	N-CA-CB	7.28	122.21	110.42
16	V	145	GLN	N-CA-C	-7.27	102.69	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	63	GLU	CA-C-N	7.27	130.75	120.42
17	T	63	GLU	C-N-CA	7.27	130.75	120.42
25	R	25	GLU	CA-C-N	7.27	129.79	120.70
25	R	25	GLU	C-N-CA	7.27	129.79	120.70
2	B	184	GLU	N-CA-C	-7.27	101.15	110.53
3	C	61	THR	N-CA-C	-7.27	101.50	113.50
12	5	165	TYR	CA-C-O	-7.27	110.53	119.18
21	N	800	ALA	CA-C-O	-7.27	113.19	120.82
2	b	94	HIS	ND1-CE1-NE2	7.27	115.67	108.40
30	K	227	ALA	N-CA-C	7.27	120.07	111.71
1	A	105	ARG	N-CA-C	7.26	119.20	111.28
4	d	121	THR	CA-C-O	7.26	128.25	120.55
14	n	204	GLN	CB-CG-CD	-7.26	100.25	112.60
20	Z	710	SER	CA-C-N	7.26	130.34	120.54
20	Z	710	SER	C-N-CA	7.26	130.34	120.54
27	O	361	ASP	CA-CB-CG	-7.26	105.34	112.60
20	Z	175	ASP	CA-CB-CG	7.26	119.86	112.60
26	U	238	ASN	CA-CB-CG	-7.26	105.34	112.60
2	b	149	GLN	CA-C-O	-7.25	112.86	120.70
5	e	136	ARG	NE-CZ-NH1	7.25	128.75	121.50
6	F	148	GLN	CA-C-N	7.25	127.26	119.28
6	F	148	GLN	C-N-CA	7.25	127.26	119.28
21	N	476	THR	CA-C-O	7.25	127.03	119.05
20	Z	53	VAL	N-CA-C	-7.25	103.22	110.62
30	K	426	PHE	N-CA-C	-7.25	104.03	113.17
2	B	227	ILE	CA-C-O	-7.25	115.95	120.88
24	Q	396	TRP	CE2-CD2-CE3	7.25	126.05	118.80
21	N	249	ASN	OD1-CG-ND2	-7.25	115.35	122.60
21	N	908	ARG	O-C-N	7.25	129.61	121.93
32	M	349	PHE	N-CA-CB	7.25	120.59	110.01
2	B	128	ARG	CB-CA-C	-7.25	97.85	109.37
32	M	207	PHE	CA-CB-CG	-7.25	106.56	113.80
7	g	213	GLU	N-CA-C	-7.24	96.52	108.76
26	U	72	TYR	CA-C-N	7.24	130.71	120.42
26	U	72	TYR	C-N-CA	7.24	130.71	120.42
6	f	11	VAL	N-CA-C	-7.24	105.77	112.43
11	k	106	GLY	CA-C-O	-7.24	114.88	121.47
20	Z	565	PHE	CB-CA-C	-7.24	98.77	110.79
11	4	126	VAL	N-CA-C	-7.24	98.80	108.35
9	2	201	ASN	CA-CB-CG	-7.23	105.37	112.60
21	N	213	PHE	CA-CB-CG	-7.23	106.57	113.80
23	P	303	PHE	CA-CB-CG	-7.23	106.57	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	O	18	ALA	CA-C-N	7.23	130.44	120.39
27	O	18	ALA	C-N-CA	7.23	130.44	120.39
32	M	408	SER	N-CA-C	-7.23	104.19	113.16
17	T	60	ARG	CA-C-N	7.23	129.67	120.56
17	T	60	ARG	C-N-CA	7.23	129.67	120.56
20	Z	231	ASP	CA-C-N	7.23	130.93	120.38
20	Z	231	ASP	C-N-CA	7.23	130.93	120.38
20	Z	403	ASN	CA-CB-CG	-7.22	105.38	112.60
20	Z	530	LEU	O-C-N	-7.22	113.92	122.15
31	L	125	PRO	N-CA-C	7.22	122.60	111.11
6	f	104	ALA	CA-C-N	7.22	130.36	120.46
6	f	104	ALA	C-N-CA	7.22	130.36	120.46
20	Z	214	HIS	CA-C-O	-7.22	111.67	119.97
5	e	75	GLY	N-CA-C	-7.22	100.60	111.14
22	S	38	LEU	CA-C-N	7.22	130.54	120.29
22	S	38	LEU	C-N-CA	7.22	130.54	120.29
10	j	114	SER	N-CA-C	-7.22	104.62	113.50
9	2	223	ASN	CA-CB-CG	-7.22	105.38	112.60
20	Z	320	SER	CA-C-N	7.22	130.27	120.38
20	Z	320	SER	C-N-CA	7.22	130.27	120.38
1	a	49	ASP	N-CA-C	-7.21	103.11	113.21
13	m	213	LEU	N-CA-CB	7.21	122.42	110.52
11	4	20	ALA	N-CA-C	7.21	120.67	110.50
17	T	260	ILE	N-CA-C	-7.21	103.44	110.72
23	P	165	VAL	N-CA-CB	7.21	121.40	110.58
29	I	264	CYS	CA-C-N	7.21	130.53	120.29
29	I	264	CYS	C-N-CA	7.21	130.53	120.29
13	6	172	THR	N-CA-C	-7.21	104.35	113.72
1	a	229	THR	N-CA-C	-7.21	99.31	109.69
8	h	156	SER	CA-C-N	7.21	129.94	120.28
8	h	156	SER	C-N-CA	7.21	129.94	120.28
18	X	20	ASP	N-CA-C	-7.21	102.83	111.69
29	I	208	TYR	O-C-N	7.21	131.99	122.33
9	i	138	HIS	ND1-CE1-NE2	7.20	115.60	108.40
2	B	22	ASP	N-CA-C	7.20	118.78	111.07
13	6	93	SER	N-CA-CB	7.20	121.37	110.42
22	S	339	GLN	CA-C-O	7.20	126.50	119.08
27	O	188	PHE	CA-CB-CG	-7.20	106.60	113.80
29	I	89	GLN	CA-C-N	7.20	129.93	120.28
29	I	89	GLN	C-N-CA	7.20	129.93	120.28
33	J	50	ALA	CA-C-N	7.20	129.93	120.28
33	J	50	ALA	C-N-CA	7.20	129.93	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	127	ASN	N-CA-C	-7.20	105.03	113.88
21	N	803	VAL	CA-C-N	7.20	129.93	120.28
21	N	803	VAL	C-N-CA	7.20	129.93	120.28
27	O	135	ARG	CA-C-N	7.20	129.93	120.28
27	O	135	ARG	C-N-CA	7.20	129.93	120.28
29	I	165	ASP	CA-C-O	-7.20	113.72	120.34
32	M	62	ILE	CB-CA-C	-7.20	102.75	111.97
14	7	139	LYS	CA-C-N	7.20	132.34	122.34
14	7	139	LYS	C-N-CA	7.20	132.34	122.34
14	7	157	ASP	CA-C-N	7.19	130.96	120.82
14	7	157	ASP	C-N-CA	7.19	130.96	120.82
21	N	462	VAL	CA-C-N	7.19	129.79	120.44
21	N	462	VAL	C-N-CA	7.19	129.79	120.44
31	L	201	LEU	CA-C-O	-7.19	113.27	120.82
31	L	236	ALA	CA-C-N	7.19	131.24	120.31
31	L	236	ALA	C-N-CA	7.19	131.24	120.31
13	6	67	ALA	CA-C-N	7.19	130.22	120.44
13	6	67	ALA	C-N-CA	7.19	130.22	120.44
20	Z	819	GLY	O-C-N	7.19	129.09	122.19
26	U	9	THR	N-CA-C	-7.19	98.89	110.32
14	7	223	ARG	NE-CZ-NH2	-7.18	112.73	119.20
6	F	191	LYS	N-CA-C	7.18	119.11	111.28
12	l	236	ILE	N-CA-C	-7.18	103.47	110.72
17	T	220	PHE	CA-CB-CG	-7.18	106.62	113.80
20	Z	129	ASN	CA-C-N	7.18	133.92	121.07
20	Z	129	ASN	C-N-CA	7.18	133.92	121.07
20	Z	429	ASN	OD1-CG-ND2	7.18	129.78	122.60
26	U	173	HIS	ND1-CE1-NE2	7.18	115.58	108.40
6	f	78	ALA	CA-C-O	-7.18	110.33	120.16
6	F	51	ARG	N-CA-C	-7.18	99.59	110.14
11	k	167	GLU	O-C-N	7.17	129.46	122.07
12	5	256	THR	CA-C-N	7.17	131.21	120.31
12	5	256	THR	C-N-CA	7.17	131.21	120.31
32	M	49	GLN	CA-C-N	7.17	130.76	120.79
32	M	49	GLN	C-N-CA	7.17	130.76	120.79
7	G	73	HIS	CB-CG-CD2	-7.17	121.88	131.20
20	Z	164	VAL	O-C-N	-7.17	114.44	121.83
24	Q	348	CYS	CA-C-N	7.17	129.89	120.28
24	Q	348	CYS	C-N-CA	7.17	129.89	120.28
29	I	246	ARG	CA-CB-CG	7.17	128.44	114.10
13	6	97	ALA	CA-C-N	7.17	130.47	120.29
13	6	97	ALA	C-N-CA	7.17	130.47	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	136	ARG	CA-C-N	7.17	127.20	119.89
5	e	136	ARG	C-N-CA	7.17	127.20	119.89
6	f	147	PHE	N-CA-C	-7.17	98.63	110.17
7	g	176	LEU	N-CA-C	7.17	119.09	111.28
16	V	219	GLU	CA-C-N	7.17	129.88	120.28
16	V	219	GLU	C-N-CA	7.17	129.88	120.28
14	n	163	VAL	N-CA-C	-7.17	97.33	108.44
20	Z	351	PRO	N-CA-C	-7.16	106.39	114.92
32	M	71	ASN	CA-CB-CG	-7.16	105.44	112.60
22	S	286	TYR	CA-C-N	7.16	130.46	120.29
22	S	286	TYR	C-N-CA	7.16	130.46	120.29
23	P	367	GLU	CB-CG-CD	-7.16	100.43	112.60
27	O	8	ASP	CA-C-N	7.16	130.46	120.29
27	O	8	ASP	C-N-CA	7.16	130.46	120.29
31	L	124	GLY	CA-C-N	7.16	127.19	119.89
31	L	124	GLY	C-N-CA	7.16	127.19	119.89
32	M	371	ASP	CA-CB-CG	-7.16	105.44	112.60
4	d	155	ILE	N-CA-C	-7.16	98.17	108.48
6	F	226	ASP	CA-CB-CG	7.16	119.75	112.60
21	N	163	LEU	CA-C-N	7.16	130.45	120.29
21	N	163	LEU	C-N-CA	7.16	130.45	120.29
26	U	274	MET	N-CA-C	7.16	119.08	111.28
32	M	196	ALA	CA-C-O	7.15	128.13	120.55
9	2	174	ASP	CA-CB-CG	-7.15	105.45	112.60
20	Z	432	GLY	CA-C-N	7.15	132.14	120.63
20	Z	432	GLY	C-N-CA	7.15	132.14	120.63
21	N	687	THR	CA-C-N	7.15	131.72	121.50
21	N	687	THR	C-N-CA	7.15	131.72	121.50
11	k	176	PHE	CA-C-N	7.15	132.27	122.34
11	k	176	PHE	C-N-CA	7.15	132.27	122.34
31	L	242	ASN	CA-CB-CG	-7.15	105.45	112.60
2	b	181	ASP	O-C-N	7.14	129.43	122.07
9	2	64	HIS	CG-CD2-NE2	7.14	114.34	107.20
32	M	310	ASN	CA-CB-CG	-7.14	105.46	112.60
7	G	46	VAL	N-CA-CB	7.14	125.19	111.62
15	W	22	PRO	CA-C-O	-7.14	112.74	121.31
21	N	703	GLN	CA-C-N	7.14	127.91	119.98
21	N	703	GLN	C-N-CA	7.14	127.91	119.98
5	E	188	HIS	ND1-CE1-NE2	7.14	115.54	108.40
7	G	73	HIS	CB-CG-ND1	7.14	133.41	122.70
21	N	137	PHE	CA-CB-CG	-7.14	106.66	113.80
32	M	110	ASN	CA-CB-CG	7.14	119.74	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	m	16	ASN	CA-CB-CG	-7.14	105.46	112.60
17	T	69	SER	N-CA-C	7.13	119.91	111.71
17	T	234	TYR	CA-C-N	7.13	130.55	120.28
17	T	234	TYR	C-N-CA	7.13	130.55	120.28
25	R	399	GLN	CA-C-N	7.13	130.14	120.44
25	R	399	GLN	C-N-CA	7.13	130.14	120.44
31	L	150	ILE	CA-C-O	7.13	127.66	119.89
21	N	223	LEU	N-CA-CB	7.13	120.35	110.01
21	N	330	THR	N-CA-C	-7.13	103.44	111.07
16	V	123	VAL	CA-C-N	7.13	129.83	120.28
16	V	123	VAL	C-N-CA	7.13	129.83	120.28
19	Y	33	ASP	CA-CB-CG	-7.13	105.47	112.60
27	O	247	ASN	CA-CB-CG	-7.13	105.47	112.60
4	D	199	LEU	O-C-N	-7.12	112.88	122.43
6	F	67	ASP	CA-CB-CG	-7.12	105.47	112.60
27	O	302	VAL	N-CA-CB	7.12	123.67	110.77
5	e	115	SER	N-CA-CB	7.12	120.59	110.12
2	B	215	GLY	CA-C-N	7.12	133.21	121.39
2	B	215	GLY	C-N-CA	7.12	133.21	121.39
12	5	87	ILE	N-CA-C	-7.12	97.86	108.12
20	Z	406	TRP	CE2-CD2-CE3	7.12	125.92	118.80
20	Z	629	VAL	N-CA-C	-7.12	103.59	110.42
20	Z	17	GLN	CA-C-O	-7.12	112.06	120.10
5	e	15	PHE	CA-CB-CG	-7.12	106.68	113.80
3	C	172	ALA	CA-C-O	7.12	128.09	120.55
21	N	512	ASN	OD1-CG-ND2	-7.12	115.48	122.60
10	j	94	SER	CA-C-N	7.11	130.52	120.28
10	j	94	SER	C-N-CA	7.11	130.52	120.28
14	n	92	ASP	CA-CB-CG	-7.11	105.49	112.60
1	A	89	ASP	CA-C-N	7.11	129.69	120.44
1	A	89	ASP	C-N-CA	7.11	129.69	120.44
21	N	888	ASP	N-CA-C	-7.11	98.34	109.72
2	b	225	THR	N-CA-C	7.11	119.73	109.14
1	A	36	ASN	N-CA-C	-7.11	103.92	112.59
27	O	69	PHE	CA-CB-CG	-7.11	106.69	113.80
17	T	89	TYR	N-CA-C	7.10	119.02	111.28
20	Z	307	HIS	ND1-CE1-NE2	7.10	115.50	108.40
12	l	144	ARG	CD-NE-CZ	-7.10	114.45	124.40
20	Z	298	PHE	CA-C-N	7.10	130.37	120.29
20	Z	298	PHE	C-N-CA	7.10	130.37	120.29
30	K	200	GLN	CA-C-O	7.10	128.28	120.82
5	E	91	HIS	CE1-NE2-CD2	-7.10	101.90	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	154	GLY	N-CA-C	-7.10	104.37	116.01
2	B	74	VAL	N-CA-CB	7.09	120.40	112.45
7	G	56	SER	N-CA-C	-7.09	95.71	108.48
31	L	86	LYS	CA-C-N	7.09	131.09	120.31
31	L	86	LYS	C-N-CA	7.09	131.09	120.31
13	6	160	ASN	N-CA-C	-7.09	104.49	113.43
28	H	192	ASP	CA-C-O	-7.09	110.44	120.16
6	f	83	VAL	N-CA-C	7.09	117.23	110.42
14	n	215	ARG	N-CA-C	-7.09	103.55	111.28
25	R	337	VAL	N-CA-CB	7.09	118.85	110.55
32	M	151	ASP	CA-CB-CG	-7.09	105.51	112.60
5	e	205	LYS	N-CA-CB	7.09	120.29	110.01
8	h	94	LEU	CA-C-N	7.09	130.35	120.29
8	h	94	LEU	C-N-CA	7.09	130.35	120.29
16	V	40	HIS	ND1-CE1-NE2	7.09	115.49	108.40
20	Z	790	MET	N-CA-C	-7.08	104.63	113.20
26	U	222	ASN	CA-CB-CG	-7.08	105.52	112.60
1	a	33	LYS	N-CA-C	-7.08	102.70	113.89
14	n	67	LEU	N-CA-CB	7.08	120.97	110.49
33	J	186	ILE	CA-C-O	7.08	128.15	120.43
1	A	208	THR	CA-C-N	7.08	130.34	120.29
1	A	208	THR	C-N-CA	7.08	130.34	120.29
5	e	210	GLU	N-CA-CB	7.08	121.84	109.18
13	m	88	ASN	CA-CB-CG	-7.08	105.53	112.60
14	7	151	GLY	CA-C-O	7.08	128.35	121.63
33	J	272	MET	CA-C-N	7.08	130.34	120.29
33	J	272	MET	C-N-CA	7.08	130.34	120.29
32	M	55	ASN	CA-CB-CG	-7.07	105.53	112.60
21	N	195	THR	CA-C-O	-7.07	112.98	120.55
27	O	354	GLN	CA-C-N	7.07	128.68	119.84
27	O	354	GLN	C-N-CA	7.07	128.68	119.84
30	K	98	GLN	N-CA-C	-7.07	96.18	108.69
32	M	69	ILE	CA-C-N	7.07	130.06	120.38
32	M	69	ILE	C-N-CA	7.07	130.06	120.38
20	Z	218	GLU	CA-C-N	7.07	130.06	120.38
20	Z	218	GLU	C-N-CA	7.07	130.06	120.38
22	S	70	ASN	O-C-N	-7.06	113.33	122.37
31	L	192	GLU	N-CA-C	-7.06	103.66	111.36
20	Z	437	ASP	CA-C-O	-7.06	113.06	120.55
3	C	38	ILE	N-CA-C	-7.06	97.96	108.12
21	N	424	LYS	N-CA-CB	7.06	120.49	110.12
28	H	332	THR	N-CA-C	7.06	119.05	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	42	THR	N-CA-C	-7.05	98.63	109.14
2	b	80	PRO	N-CA-CB	7.05	111.08	103.33
6	f	81	ALA	CA-C-N	7.05	129.73	120.28
6	f	81	ALA	C-N-CA	7.05	129.73	120.28
18	X	67	ILE	CA-C-N	7.05	133.12	123.11
18	X	67	ILE	C-N-CA	7.05	133.12	123.11
11	k	25	ILE	N-CA-C	-7.04	105.48	112.17
11	4	39	SER	CA-C-O	-7.04	114.58	120.71
24	Q	299	MET	O-C-N	-7.04	114.66	122.12
30	K	96	ILE	N-CA-CB	7.04	118.40	110.72
13	m	116	HIS	N-CA-C	-7.04	95.53	107.99
16	V	185	ILE	O-C-N	7.04	129.22	121.90
11	4	141	PHE	CA-CB-CG	-7.04	106.76	113.80
2	B	39	ALA	N-CA-C	-7.04	99.19	109.18
21	N	733	LEU	CA-C-O	-7.04	112.96	120.42
22	S	72	GLU	N-CA-C	-7.04	103.66	111.82
33	J	187	LEU	O-C-N	-7.04	115.00	123.16
9	i	109	LEU	N-CA-C	7.03	118.74	111.14
7	G	178	LYS	N-CA-C	7.03	119.80	111.71
13	m	119	ILE	CA-C-O	-7.03	113.69	121.92
2	B	122	THR	N-CA-C	-7.03	104.57	113.43
29	I	362	LEU	CA-C-N	7.03	127.78	119.98
29	I	362	LEU	C-N-CA	7.03	127.78	119.98
10	3	139	SER	N-CA-C	-7.03	98.34	108.60
6	f	67	ASP	N-CA-C	-7.03	98.89	108.38
9	2	160	SER	CA-C-N	7.03	130.27	120.29
9	2	160	SER	C-N-CA	7.03	130.27	120.29
15	W	26	PHE	CA-C-N	7.03	130.27	120.29
15	W	26	PHE	C-N-CA	7.03	130.27	120.29
21	N	510	HIS	ND1-CE1-NE2	7.03	115.43	108.40
29	I	94	LYS	N-CA-CB	7.03	120.56	110.16
21	N	511	GLY	CA-C-N	7.03	130.27	120.29
21	N	511	GLY	C-N-CA	7.03	130.27	120.29
27	O	200	GLU	N-CA-C	-7.03	99.53	110.14
6	f	138	ASP	CA-C-N	7.02	130.99	120.31
6	f	138	ASP	C-N-CA	7.02	130.99	120.31
13	m	223	GLU	N-CA-CB	7.02	123.70	111.13
15	W	163	ASN	CA-CB-CG	7.02	119.62	112.60
28	H	135	ASP	O-C-N	7.02	129.56	122.12
11	k	33	ASP	N-CA-C	-7.01	99.27	110.14
2	B	236	ARG	N-CA-C	-7.01	96.75	108.75
10	j	139	SER	N-CA-CB	7.01	122.26	111.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	203	GLU	N-CA-C	-7.01	103.39	113.21
16	V	103	MET	CA-C-N	7.01	130.52	120.98
16	V	103	MET	C-N-CA	7.01	130.52	120.98
25	R	421	VAL	N-CA-C	-7.01	103.64	110.72
27	O	282	GLN	N-CA-C	-7.01	101.93	113.50
20	Z	441	TYR	CA-CB-CG	-7.01	101.29	113.90
21	N	331	ALA	CA-C-O	-7.01	113.12	120.55
27	O	283	HIS	CA-CB-CG	-7.00	106.80	113.80
1	a	14	ARG	CA-C-O	7.00	127.44	119.18
2	B	47	THR	O-C-N	-7.00	115.91	123.26
20	Z	475	GLN	CA-C-N	7.00	129.66	120.28
20	Z	475	GLN	C-N-CA	7.00	129.66	120.28
24	Q	145	HIS	CE1-NE2-CD2	-7.00	102.00	109.00
1	A	174	LYS	N-CA-C	-7.00	103.31	112.41
22	S	481	TYR	CA-C-O	-7.00	111.87	118.73
29	I	157	VAL	CB-CA-C	7.00	121.21	112.04
32	M	84	GLU	N-CA-CB	7.00	123.64	111.39
21	N	53	ASP	N-CA-C	-7.00	104.36	113.17
4	d	151	GLU	CA-C-O	-6.99	113.72	120.64
29	I	367	SER	N-CA-C	-6.99	104.75	113.28
15	W	161	VAL	N-CA-C	6.99	117.78	110.72
19	Y	50	LYS	N-CA-C	-6.99	105.94	114.75
10	j	90	LEU	N-CA-C	-6.99	103.66	111.28
12	5	240	ALA	N-CA-C	6.99	118.69	111.14
22	S	56	SER	O-C-N	-6.99	114.54	122.09
2	b	27	ALA	CA-C-N	6.99	130.03	120.46
2	b	27	ALA	C-N-CA	6.99	130.03	120.46
24	Q	268	SER	CA-C-O	-6.99	113.14	120.55
21	N	370	SER	CB-CA-C	-6.99	97.71	110.63
22	S	368	LYS	O-C-N	6.99	129.53	122.12
20	Z	962	ARG	N-CA-C	-6.98	102.88	111.33
5	e	232	ASP	CA-C-O	-6.98	113.91	121.94
25	R	170	VAL	O-C-N	6.98	128.64	121.87
29	I	268	PHE	CA-CB-CG	-6.98	106.82	113.80
10	j	64	ASN	CA-C-N	6.97	129.62	120.28
10	j	64	ASN	C-N-CA	6.97	129.62	120.28
2	B	149	GLN	N-CA-C	-6.97	98.03	109.40
6	F	63	ILE	N-CA-C	-6.97	98.35	108.11
33	J	16	GLU	CA-C-O	-6.97	111.47	119.14
18	X	118	ASP	CA-CB-CG	-6.97	105.63	112.60
31	L	67	HIS	CE1-NE2-CD2	-6.97	102.03	109.00
9	i	100	SER	CA-C-O	6.97	129.62	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	398	ALA	CA-C-O	6.97	127.81	120.42
2	B	243	ILE	CA-C-N	6.97	129.62	120.28
2	B	243	ILE	C-N-CA	6.97	129.62	120.28
4	D	20	VAL	N-CA-C	6.97	117.76	110.72
5	E	15	PHE	O-C-N	-6.97	114.09	123.15
17	T	204	ASN	CA-CB-CG	-6.97	105.63	112.60
17	T	228	ILE	N-CA-C	-6.97	104.53	111.77
24	Q	71	LYS	N-CA-C	-6.97	98.58	108.96
2	b	198	GLU	CA-C-N	6.96	129.61	120.28
2	b	198	GLU	C-N-CA	6.96	129.61	120.28
1	A	161	GLY	N-CA-C	-6.96	104.59	116.01
3	C	153	PRO	N-CA-C	-6.96	104.87	114.27
31	L	149	ASP	CA-CB-CG	6.96	119.56	112.60
8	h	204	GLN	N-CA-C	-6.96	103.12	111.69
18	X	123	ASN	CA-CB-CG	-6.96	105.64	112.60
7	g	20	ARG	NE-CZ-NH2	6.96	125.46	119.20
11	k	49	GLU	CB-CG-CD	-6.96	100.77	112.60
3	c	80	LEU	N-CA-CB	6.96	120.34	109.83
11	k	133	HIS	CB-CA-C	-6.96	97.53	111.17
16	V	282	GLU	CA-C-N	6.96	129.60	120.28
16	V	282	GLU	C-N-CA	6.96	129.60	120.28
31	L	300	GLU	CA-C-O	6.96	127.80	120.42
25	R	54	ILE	N-CA-C	-6.96	103.99	110.53
6	f	7	ASP	CA-CB-CG	6.96	119.56	112.60
23	P	240	TYR	CA-C-N	6.96	130.17	120.29
23	P	240	TYR	C-N-CA	6.96	130.17	120.29
12	l	89	VAL	N-CA-C	-6.95	97.60	107.75
28	H	455	LYS	CA-C-N	6.95	129.60	120.28
28	H	455	LYS	C-N-CA	6.95	129.60	120.28
20	Z	930	GLY	N-CA-C	6.95	123.98	112.30
6	F	175	THR	N-CA-CB	-6.95	99.96	110.73
22	S	446	THR	CA-CB-CG2	6.95	122.32	110.50
6	f	9	ASP	CA-CB-CG	-6.95	105.65	112.60
17	T	165	GLN	OE1-CD-NE2	6.95	129.55	122.60
29	I	313	LEU	CA-C-N	6.95	130.16	120.29
29	I	313	LEU	C-N-CA	6.95	130.16	120.29
28	H	315	GLY	CA-C-O	6.95	125.30	118.77
9	2	236	ARG	NE-CZ-NH2	-6.95	112.95	119.20
22	S	119	TYR	CA-C-O	-6.95	113.00	120.92
20	Z	866	VAL	N-CA-C	-6.94	104.00	110.53
16	V	295	VAL	CA-CB-CG1	6.94	122.20	110.40
20	Z	60	ASP	N-CA-CB	6.94	120.31	109.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	O	313	ILE	CA-C-N	6.94	129.58	120.28
27	O	313	ILE	C-N-CA	6.94	129.58	120.28
14	n	198	ILE	CA-C-O	-6.94	114.04	118.69
4	D	229	ILE	CA-C-N	6.94	129.57	120.28
4	D	229	ILE	C-N-CA	6.94	129.57	120.28
24	Q	334	HIS	CE1-NE2-CD2	-6.94	102.06	109.00
29	I	285	ASP	N-CA-C	-6.94	104.39	112.92
9	2	135	THR	N-CA-C	-6.93	104.43	113.17
29	I	281	ILE	N-CA-CB	6.93	120.20	111.46
2	B	94	HIS	ND1-CE1-NE2	6.93	115.33	108.40
12	5	182	LYS	N-CA-C	-6.93	102.94	111.40
20	Z	841	GLU	N-CA-C	-6.93	98.10	109.40
30	K	61	LEU	CA-C-N	6.93	129.57	120.28
30	K	61	LEU	C-N-CA	6.93	129.57	120.28
30	K	204	ASP	CA-CB-CG	-6.93	105.67	112.60
27	O	332	ILE	CA-C-N	6.93	129.57	120.28
27	O	332	ILE	C-N-CA	6.93	129.57	120.28
10	j	155	GLU	N-CA-C	-6.93	100.21	108.25
5	E	201	LEU	CA-C-O	-6.93	112.00	119.97
20	Z	587	THR	CA-C-N	6.93	129.95	120.46
20	Z	587	THR	C-N-CA	6.93	129.95	120.46
22	S	240	ASP	CA-C-O	-6.93	113.08	120.42
25	R	330	VAL	CA-C-O	-6.93	113.83	121.17
33	J	52	ASN	CA-C-N	6.93	129.45	120.44
33	J	52	ASN	C-N-CA	6.93	129.45	120.44
27	O	162	SER	N-CA-C	-6.93	104.02	113.30
33	J	56	ARG	NE-CZ-NH1	-6.93	114.57	121.50
28	H	249	TYR	N-CA-CB	6.93	122.84	111.62
8	h	57	SER	N-CA-C	-6.92	98.66	109.25
26	U	93	TYR	CA-C-N	6.92	133.68	122.81
26	U	93	TYR	C-N-CA	6.92	133.68	122.81
5	e	8	TYR	N-CA-C	-6.92	104.14	112.59
1	A	201	LYS	N-CA-C	-6.92	104.65	113.23
14	7	179	PHE	CA-CB-CG	-6.92	106.88	113.80
31	L	69	ARG	CA-C-N	6.92	130.83	120.31
31	L	69	ARG	C-N-CA	6.92	130.83	120.31
16	V	207	ALA	CA-C-N	6.92	129.55	120.28
16	V	207	ALA	C-N-CA	6.92	129.55	120.28
17	T	222	LEU	N-CA-C	-6.92	104.84	113.28
6	f	5	ASN	CA-CB-CG	-6.92	105.68	112.60
6	f	179	PHE	N-CA-CB	6.92	121.68	110.40
9	i	179	GLU	O-C-N	-6.92	114.26	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	j	184	GLY	CA-C-O	-6.92	117.72	122.22
3	c	204	SER	O-C-N	6.92	129.56	122.09
2	b	138	GLY	O-C-N	6.91	131.46	123.44
1	A	185	HIS	CE1-NE2-CD2	-6.91	102.09	109.00
21	N	901	GLY	CA-C-N	6.91	130.38	120.98
21	N	901	GLY	C-N-CA	6.91	130.38	120.98
33	J	154	THR	N-CA-C	-6.91	105.12	113.97
10	j	193	ASP	CA-CB-CG	6.91	119.51	112.60
28	H	303	ALA	N-CA-CB	6.91	122.17	110.49
1	A	181	ASN	CA-C-N	6.91	130.10	120.29
1	A	181	ASN	C-N-CA	6.91	130.10	120.29
21	N	580	ASN	N-CA-C	-6.91	97.99	109.46
22	S	174	ARG	CA-C-N	6.91	129.54	120.28
22	S	174	ARG	C-N-CA	6.91	129.54	120.28
6	f	220	THR	CA-C-O	-6.91	114.21	119.32
29	I	151	HIS	CA-CB-CG	6.91	120.71	113.80
33	J	156	GLN	CA-C-N	6.91	130.23	120.42
33	J	156	GLN	C-N-CA	6.91	130.23	120.42
33	J	118	ASP	CA-C-N	6.90	130.09	120.29
33	J	118	ASP	C-N-CA	6.90	130.09	120.29
7	G	58	LEU	N-CA-C	-6.90	104.74	113.02
21	N	771	PHE	CA-C-O	-6.90	114.04	121.36
27	O	331	ALA	CA-C-N	6.90	129.92	120.46
27	O	331	ALA	C-N-CA	6.90	129.92	120.46
30	K	297	ILE	CA-C-N	6.90	130.09	120.29
30	K	297	ILE	C-N-CA	6.90	130.09	120.29
6	F	53	ALA	O-C-N	6.90	129.44	122.12
22	S	93	LEU	CA-C-N	6.90	129.53	120.28
22	S	93	LEU	C-N-CA	6.90	129.53	120.28
24	Q	100	LEU	CA-C-N	6.90	129.25	120.56
24	Q	100	LEU	C-N-CA	6.90	129.25	120.56
28	H	241	ASP	CA-C-N	6.90	127.49	120.38
28	H	241	ASP	C-N-CA	6.90	127.49	120.38
4	d	13	PRO	CA-C-O	-6.89	116.07	121.38
1	a	181	ASN	CA-CB-CG	6.89	119.49	112.60
20	Z	17	GLN	CB-CG-CD	-6.89	100.89	112.60
20	Z	218	GLU	N-CA-CB	6.89	120.96	110.28
23	P	262	SER	CA-C-N	6.89	129.51	120.28
23	P	262	SER	C-N-CA	6.89	129.51	120.28
29	I	115	ASP	N-CA-CB	6.89	122.13	110.49
33	J	170	HIS	ND1-CE1-NE2	6.89	115.29	108.40
1	a	244	ARG	CB-CG-CD	6.89	127.14	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	139	LEU	N-CA-C	-6.88	96.98	108.75
16	V	235	GLU	N-CA-C	6.88	118.78	111.28
21	N	810	ALA	N-CA-C	6.88	121.27	113.01
26	U	220	PRO	CA-C-N	6.88	129.72	120.50
26	U	220	PRO	C-N-CA	6.88	129.72	120.50
21	N	422	TYR	CB-CA-C	-6.88	100.07	110.88
30	K	186	GLU	CA-C-O	-6.88	113.12	120.42
17	T	65	GLY	CA-C-N	6.88	129.80	120.44
17	T	65	GLY	C-N-CA	6.88	129.80	120.44
17	T	80	ASN	CA-CB-CG	-6.88	105.72	112.60
1	a	117	LEU	CA-C-N	6.88	130.19	120.28
1	a	117	LEU	C-N-CA	6.88	130.19	120.28
21	N	520	GLY	N-CA-C	-6.88	106.13	114.66
27	O	139	LEU	CA-C-O	6.88	127.71	120.42
20	Z	389	PHE	CA-CB-CG	-6.88	106.92	113.80
21	N	473	ASP	N-CA-CB	6.88	122.11	110.49
3	c	28	SER	N-CA-CB	6.87	121.00	110.14
20	Z	711	SER	O-C-N	6.87	129.24	122.09
30	K	46	ASP	N-CA-C	6.87	118.77	111.28
30	K	265	ALA	O-C-N	-6.87	114.22	121.30
10	3	60	VAL	N-CA-C	-6.87	103.82	110.42
22	S	315	LYS	CB-CA-C	-6.87	99.17	110.85
13	6	148	GLY	CA-C-N	6.87	130.04	120.29
13	6	148	GLY	C-N-CA	6.87	130.04	120.29
16	V	138	ALA	CA-C-N	-6.87	114.67	123.19
16	V	138	ALA	C-N-CA	-6.87	114.67	123.19
17	T	251	HIS	CA-CB-CG	-6.87	106.93	113.80
20	Z	201	LEU	CA-C-N	6.87	129.37	120.44
20	Z	201	LEU	C-N-CA	6.87	129.37	120.44
13	m	215	VAL	O-C-N	6.87	131.13	123.10
33	J	336	ASN	CA-CB-CG	-6.87	105.73	112.60
21	N	318	LYS	N-CA-C	6.87	118.42	111.07
30	K	340	PHE	CA-CB-CG	-6.87	106.94	113.80
25	R	326	ALA	O-C-N	-6.86	114.33	122.15
7	g	88	LEU	O-C-N	6.86	130.71	122.27
22	S	356	ASP	CA-CB-CG	-6.86	105.74	112.60
24	Q	302	VAL	N-CA-C	6.86	117.65	110.72
20	Z	764	LEU	N-CA-C	-6.86	103.73	111.07
1	A	127	ILE	CB-CA-C	6.86	121.40	112.14
15	W	173	THR	CA-C-O	-6.86	112.79	120.54
29	I	386	ASP	CA-CB-CG	-6.86	105.75	112.60
31	L	261	ARG	CA-C-N	6.86	129.34	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	261	ARG	C-N-CA	6.86	129.34	120.56
33	J	87	LYS	CA-C-N	6.86	131.12	121.66
33	J	87	LYS	C-N-CA	6.86	131.12	121.66
26	U	70	HIS	CE1-NE2-CD2	-6.85	102.15	109.00
10	j	134	LYS	N-CA-C	-6.85	102.05	110.61
13	m	71	ALA	CA-C-N	6.85	129.46	120.28
13	m	71	ALA	C-N-CA	6.85	129.46	120.28
25	R	53	LYS	CA-C-N	6.85	129.33	120.56
25	R	53	LYS	C-N-CA	6.85	129.33	120.56
28	H	381	ASP	N-CA-CB	6.85	120.23	110.44
24	Q	340	ASP	N-CA-CB	6.85	120.29	110.16
27	O	362	GLN	CA-C-O	6.85	127.87	119.79
31	L	358	LEU	CA-C-N	6.85	130.72	120.31
31	L	358	LEU	C-N-CA	6.85	130.72	120.31
1	A	247	ALA	CA-C-N	6.85	129.32	120.56
1	A	247	ALA	C-N-CA	6.85	129.32	120.56
12	5	92	ASP	CA-CB-CG	6.85	119.45	112.60
27	O	245	ASP	N-CA-CB	6.85	121.79	110.63
6	F	216	VAL	N-CA-C	-6.84	98.32	108.45
27	O	326	HIS	CE1-NE2-CD2	-6.84	102.16	109.00
23	P	12	ASP	CA-C-N	6.84	129.45	120.28
23	P	12	ASP	C-N-CA	6.84	129.45	120.28
24	Q	83	GLU	CA-C-N	6.84	130.13	120.28
24	Q	83	GLU	C-N-CA	6.84	130.13	120.28
3	C	189	ALA	CA-C-N	6.84	129.83	120.46
3	C	189	ALA	C-N-CA	6.84	129.83	120.46
1	a	211	ILE	CA-C-N	6.84	129.74	120.44
1	a	211	ILE	C-N-CA	6.84	129.74	120.44
20	Z	112	LYS	N-CA-C	-6.84	103.91	111.36
2	B	81	ASP	CA-CB-CG	-6.84	105.76	112.60
9	2	42	VAL	N-CA-C	-6.83	98.64	108.48
10	3	193	ASP	CA-CB-CG	6.83	119.43	112.60
22	S	261	HIS	CG-CD2-NE2	6.83	114.03	107.20
11	4	149	ARG	O-C-N	-6.83	115.05	121.20
22	S	32	GLN	CA-C-N	6.83	129.99	120.29
22	S	32	GLN	C-N-CA	6.83	129.99	120.29
28	H	87	ASP	CB-CA-C	-6.83	99.45	110.79
29	I	139	GLU	N-CA-C	-6.83	104.62	114.12
31	L	265	GLU	N-CA-C	6.83	118.72	111.28
6	f	78	ALA	CA-C-N	6.83	127.10	119.32
6	f	78	ALA	C-N-CA	6.83	127.10	119.32
11	4	26	SER	O-C-N	6.83	131.42	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	n	197	ASP	CA-C-N	6.82	125.79	120.33
14	n	197	ASP	C-N-CA	6.82	125.79	120.33
3	C	54	SER	N-CA-CB	6.82	122.02	110.49
21	N	282	TYR	CA-C-N	6.82	129.87	120.39
21	N	282	TYR	C-N-CA	6.82	129.87	120.39
5	E	113	THR	CA-CB-OG1	6.82	119.83	109.60
21	N	640	VAL	O-C-N	6.82	129.51	121.80
31	L	80	ASN	OD1-CG-ND2	6.82	129.42	122.60
24	Q	93	THR	CA-C-N	6.82	129.40	120.60
24	Q	93	THR	C-N-CA	6.82	129.40	120.60
13	6	37	ASN	OD1-CG-ND2	6.82	129.42	122.60
17	T	118	ASN	CA-C-N	6.82	130.68	120.31
17	T	118	ASN	C-N-CA	6.82	130.68	120.31
29	I	79	SER	CA-C-N	6.82	132.11	120.72
29	I	79	SER	C-N-CA	6.82	132.11	120.72
25	R	108	SER	O-C-N	6.82	129.34	122.12
28	H	251	PRO	N-CA-C	6.82	119.01	110.70
31	L	245	PHE	CA-CB-CG	-6.82	106.98	113.80
29	I	251	GLU	N-CA-C	-6.81	105.25	113.97
12	l	255	VAL	N-CA-C	-6.81	98.63	108.17
20	Z	133	ASP	CA-CB-CG	-6.81	105.79	112.60
20	Z	834	LEU	CA-C-N	6.81	129.41	120.28
20	Z	834	LEU	C-N-CA	6.81	129.41	120.28
24	Q	132	PHE	N-CA-CB	6.81	120.24	110.16
8	1	23	LEU	CA-C-N	6.81	126.85	121.61
8	1	23	LEU	C-N-CA	6.81	126.85	121.61
20	Z	472	LEU	CA-C-O	-6.81	113.58	121.07
23	P	16	ILE	CA-C-O	6.81	127.82	120.47
28	H	242	PRO	CB-CA-C	-6.81	102.61	110.92
21	N	564	ASN	OD1-CG-ND2	6.81	129.41	122.60
25	R	351	LYS	CA-C-N	6.80	129.29	120.44
25	R	351	LYS	C-N-CA	6.80	129.29	120.44
9	2	73	ALA	CA-C-O	-6.80	113.50	121.46
26	U	241	THR	CA-C-N	6.80	127.36	119.47
26	U	241	THR	C-N-CA	6.80	127.36	119.47
7	G	28	VAL	CB-CA-C	-6.80	102.96	112.14
21	N	730	VAL	CA-C-N	6.80	129.27	120.56
21	N	730	VAL	C-N-CA	6.80	129.27	120.56
24	Q	314	PHE	CA-C-N	6.80	129.40	120.28
24	Q	314	PHE	C-N-CA	6.80	129.40	120.28
4	d	214	VAL	CA-C-O	6.80	128.29	120.67
9	i	232	TYR	CA-CB-CG	-6.80	101.66	113.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	242	GLU	CA-C-N	6.80	129.28	120.44
5	e	242	GLU	C-N-CA	6.80	129.28	120.44
29	I	402	LEU	CA-C-N	6.79	129.94	120.29
29	I	402	LEU	C-N-CA	6.79	129.94	120.29
33	J	240	HIS	ND1-CE1-NE2	6.79	115.19	108.40
14	n	259	LYS	CB-CA-C	-6.79	99.27	110.14
2	B	191	ILE	CA-C-N	6.79	129.27	120.44
2	B	191	ILE	C-N-CA	6.79	129.27	120.44
30	K	320	ARG	CA-C-N	6.79	132.59	121.99
30	K	320	ARG	C-N-CA	6.79	132.59	121.99
5	E	56	SER	N-CA-C	-6.79	97.96	108.55
31	L	165	PRO	CA-C-N	6.79	129.93	120.29
31	L	165	PRO	C-N-CA	6.79	129.93	120.29
9	i	128	ILE	N-CA-C	-6.79	98.65	108.36
14	7	145	ASN	CB-CA-C	-6.79	97.99	110.62
21	N	270	LEU	CA-C-N	6.79	129.38	120.28
21	N	270	LEU	C-N-CA	6.79	129.38	120.28
22	S	173	LEU	N-CA-C	-6.79	99.29	108.86
22	S	474	GLU	CA-C-N	6.79	129.38	120.28
22	S	474	GLU	C-N-CA	6.79	129.38	120.28
26	U	101	ALA	CA-C-N	6.79	133.60	121.66
26	U	101	ALA	C-N-CA	6.79	133.60	121.66
8	h	62	GLN	N-CA-CB	6.79	120.09	110.12
21	N	18	ASP	CA-CB-CG	-6.79	105.81	112.60
21	N	792	SER	N-CA-C	-6.79	105.56	114.31
25	R	415	GLN	OE1-CD-NE2	6.79	129.39	122.60
28	H	328	GLU	CA-C-N	6.79	129.76	120.46
28	H	328	GLU	C-N-CA	6.79	129.76	120.46
2	B	43	VAL	N-CA-C	-6.78	98.98	108.27
6	F	3	ARG	NE-CZ-NH1	6.78	128.28	121.50
20	Z	291	GLU	CA-C-N	6.78	129.26	120.44
20	Z	291	GLU	C-N-CA	6.78	129.26	120.44
33	J	223	ILE	N-CA-C	-6.78	104.69	111.88
24	Q	401	GLU	N-CA-C	-6.78	99.35	109.86
11	4	160	LEU	N-CA-C	-6.78	103.97	111.36
13	6	184	SER	CA-C-N	6.78	130.05	120.42
13	6	184	SER	C-N-CA	6.78	130.05	120.42
20	Z	313	ILE	N-CA-C	-6.78	103.87	110.72
20	Z	494	GLY	CA-C-N	6.78	129.24	120.56
20	Z	494	GLY	C-N-CA	6.78	129.24	120.56
4	D	243	GLN	CA-C-N	6.78	129.25	120.44
4	D	243	GLN	C-N-CA	6.78	129.25	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	909	GLU	CA-C-O	6.78	124.88	119.59
1	a	205	PHE	CA-CB-CG	6.78	120.58	113.80
28	H	128	ASN	CA-CB-CG	6.77	119.37	112.60
12	l	129	PHE	N-CA-CB	-6.77	100.25	110.07
33	J	179	ILE	N-CA-C	-6.77	98.99	108.27
3	C	145	GLY	CA-C-O	-6.77	113.28	121.67
23	P	77	GLU	CA-C-O	6.77	127.76	119.97
22	S	307	LEU	CA-C-N	6.77	127.45	119.94
22	S	307	LEU	C-N-CA	6.77	127.45	119.94
25	R	176	ARG	CA-C-O	6.77	127.75	120.10
17	T	265	ASP	CA-C-N	6.77	129.64	120.44
17	T	265	ASP	C-N-CA	6.77	129.64	120.44
7	G	86	ARG	NE-CZ-NH2	-6.76	113.11	119.20
20	Z	959	HIS	CE1-NE2-CD2	-6.76	102.24	109.00
22	S	332	PHE	N-CA-C	-6.76	103.91	111.28
24	Q	259	CYS	O-C-N	6.76	129.29	122.12
6	F	46	LEU	N-CA-C	-6.76	98.38	109.40
29	I	268	PHE	CA-C-N	6.76	129.34	120.28
29	I	268	PHE	C-N-CA	6.76	129.34	120.28
10	3	163	LEU	O-C-N	6.76	130.59	122.27
17	T	96	LEU	N-CA-CB	6.76	121.91	110.49
21	N	167	GLU	CA-C-O	-6.76	113.72	120.82
4	d	44	LEU	N-CA-C	-6.76	97.26	108.34
13	m	129	ALA	O-C-N	-6.76	115.78	123.48
2	B	176	GLU	N-CA-CB	6.76	119.81	110.01
6	F	178	THR	N-CA-CB	6.76	119.87	110.07
10	j	19	ASP	CA-CB-CG	-6.75	105.85	112.60
14	n	235	LYS	CA-C-O	6.75	127.45	119.28
23	P	257	TRP	N-CA-CB	6.75	120.14	110.16
13	6	110	PHE	CA-CB-CG	-6.74	107.06	113.80
17	T	151	TRP	CE2-CD2-CE3	6.74	125.54	118.80
10	3	147	PHE	CA-C-N	6.74	127.28	119.94
10	3	147	PHE	C-N-CA	6.74	127.28	119.94
20	Z	4	GLU	N-CA-CB	6.74	125.72	111.10
20	Z	349	THR	N-CA-C	-6.74	104.02	111.36
21	N	225	LEU	CA-C-N	6.74	129.98	120.28
21	N	225	LEU	C-N-CA	6.74	129.98	120.28
24	Q	112	ASP	CA-C-N	6.74	129.31	120.28
24	Q	112	ASP	C-N-CA	6.74	129.31	120.28
19	Y	3	THR	CA-C-N	6.73	134.40	121.54
19	Y	3	THR	C-N-CA	6.73	134.40	121.54
18	X	109	LEU	O-C-N	-6.73	113.89	121.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	115	HIS	CA-CB-CG	6.73	120.53	113.80
20	Z	824	ASN	N-CA-C	-6.73	104.20	114.16
25	R	60	ALA	CA-C-N	6.73	126.68	119.28
25	R	60	ALA	C-N-CA	6.73	126.68	119.28
10	j	140	GLY	CA-C-O	-6.73	115.48	122.01
1	A	85	GLY	CA-C-N	6.73	126.71	119.78
1	A	85	GLY	C-N-CA	6.73	126.71	119.78
5	e	24	VAL	CB-CA-C	6.73	120.83	112.02
32	M	291	PHE	CA-C-N	6.73	132.08	120.58
32	M	291	PHE	C-N-CA	6.73	132.08	120.58
13	m	48	GLU	CA-C-O	-6.73	112.56	119.49
9	2	195	ASP	CA-C-O	6.73	127.50	120.30
16	V	134	SER	CA-C-O	-6.73	113.70	120.90
31	L	212	ILE	CA-C-N	6.73	129.74	120.39
31	L	212	ILE	C-N-CA	6.73	129.74	120.39
33	J	269	GLN	N-CA-CB	6.73	120.11	110.16
1	a	92	ASN	CA-CB-CG	6.72	119.32	112.60
1	a	134	MET	N-CA-C	-6.72	99.12	109.14
10	j	107	PRO	N-CA-CB	6.72	109.20	103.35
25	R	374	ASN	CA-CB-CG	-6.72	105.88	112.60
26	U	39	GLY	N-CA-C	-6.72	101.42	110.56
10	3	48	HIS	CB-CG-CD2	-6.72	122.46	131.20
16	V	216	LEU	N-CA-C	-6.72	97.40	108.76
28	H	457	PHE	N-CA-C	6.72	118.40	111.14
25	R	110	ILE	CB-CA-C	-6.72	103.37	111.97
30	K	325	ASP	CA-CB-CG	-6.72	105.88	112.60
7	g	218	TRP	CB-CG-CD1	6.71	136.97	126.90
17	T	184	ALA	N-CA-C	6.71	118.60	111.28
21	N	494	LYS	O-C-N	-6.71	115.33	121.30
27	O	245	ASP	CA-C-N	6.71	129.27	120.28
27	O	245	ASP	C-N-CA	6.71	129.27	120.28
10	3	163	LEU	CA-C-O	-6.71	112.25	119.97
14	7	61	GLY	N-CA-C	-6.71	97.28	113.18
24	Q	361	HIS	CA-C-O	6.71	127.53	120.42
25	R	59	MET	N-CA-C	-6.71	104.99	112.57
31	L	344	ASP	N-CA-C	-6.71	106.97	114.62
12	5	163	TYR	CA-C-N	6.71	129.57	120.38
12	5	163	TYR	C-N-CA	6.71	129.57	120.38
16	V	202	ASP	N-CA-C	-6.71	99.11	109.24
29	I	343	ARG	CA-C-N	6.71	130.95	121.96
29	I	343	ARG	C-N-CA	6.71	130.95	121.96
30	K	370	SER	CA-C-N	6.71	130.50	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	370	SER	C-N-CA	6.71	130.50	120.31
28	H	145	TYR	N-CA-CB	6.71	121.82	110.49
22	S	433	GLU	N-CA-CB	6.70	121.82	110.49
8	h	146	TYR	CA-C-N	6.70	129.81	120.29
8	h	146	TYR	C-N-CA	6.70	129.81	120.29
18	X	34	GLU	CA-C-N	6.70	130.91	121.66
18	X	34	GLU	C-N-CA	6.70	130.91	121.66
28	H	277	SER	N-CA-C	-6.70	104.41	112.59
24	Q	371	GLN	CB-CA-C	-6.70	97.80	110.67
2	b	177	LYS	O-C-N	-6.70	114.86	122.09
4	d	138	PHE	CA-CB-CG	-6.70	107.10	113.80
17	T	105	LEU	CB-CA-C	-6.70	99.67	110.79
4	d	91	VAL	N-CA-CB	6.70	119.65	110.54
24	Q	75	ARG	NE-CZ-NH2	6.70	125.23	119.20
33	J	297	LEU	CA-C-N	6.70	129.80	120.29
33	J	297	LEU	C-N-CA	6.70	129.80	120.29
30	K	57	GLU	O-C-N	6.69	129.22	122.12
4	D	252	SER	CA-C-N	6.69	129.14	120.44
4	D	252	SER	C-N-CA	6.69	129.14	120.44
21	N	325	PHE	N-CA-C	-6.69	98.30	109.07
25	R	395	ASN	OD1-CG-ND2	6.69	129.29	122.60
32	M	229	THR	N-CA-CB	6.69	119.91	110.07
1	a	145	SER	N-CA-CB	6.69	121.93	111.56
20	Z	771	HIS	N-CA-C	-6.69	103.46	111.69
31	L	52	ALA	CA-C-N	6.69	130.48	120.31
31	L	52	ALA	C-N-CA	6.69	130.48	120.31
11	k	113	LYS	O-C-N	-6.69	117.17	121.85
12	l	109	VAL	N-CA-C	-6.69	97.87	107.77
8	1	169	SER	CB-CA-C	-6.69	99.69	110.79
15	W	10	ILE	CB-CA-C	6.69	120.53	110.63
21	N	247	GLU	N-CA-C	-6.69	105.16	113.38
6	f	110	HIS	CE1-NE2-CD2	-6.69	102.31	109.00
25	R	129	GLU	CA-C-O	-6.69	113.81	120.70
5	E	8	TYR	N-CA-C	-6.68	102.47	113.50
30	K	415	VAL	N-CA-C	-6.68	103.71	111.00
33	J	40	ASN	CA-CB-CG	-6.68	105.92	112.60
9	2	243	LYS	N-CA-C	-6.68	98.57	108.79
21	N	636	SER	CA-C-N	6.68	129.24	120.28
21	N	636	SER	C-N-CA	6.68	129.24	120.28
25	R	331	ARG	N-CA-CB	6.68	119.70	110.01
28	H	455	LYS	CA-C-O	-6.68	112.55	120.10
1	a	209	HIS	CA-CB-CG	-6.68	107.12	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	W	95	GLN	OE1-CD-NE2	-6.68	115.92	122.60
9	2	231	SER	N-CA-CB	6.68	121.53	110.85
17	T	178	THR	CA-C-N	6.68	129.23	120.28
17	T	178	THR	C-N-CA	6.68	129.23	120.28
22	S	139	HIS	CB-CG-CD2	-6.68	122.52	131.20
23	P	35	ALA	CA-C-N	6.68	129.12	120.44
23	P	35	ALA	C-N-CA	6.68	129.12	120.44
26	U	246	GLU	CA-C-N	6.67	129.60	120.46
26	U	246	GLU	C-N-CA	6.67	129.60	120.46
4	d	188	VAL	CA-C-N	6.67	129.77	120.29
4	d	188	VAL	C-N-CA	6.67	129.77	120.29
23	P	388	ILE	CB-CA-C	6.67	116.93	111.06
6	f	10	THR	N-CA-C	-6.67	104.45	112.59
5	e	156	PHE	N-CA-C	-6.67	99.19	109.52
20	Z	895	LEU	CA-C-N	6.67	133.27	122.53
20	Z	895	LEU	C-N-CA	6.67	133.27	122.53
22	S	226	ASP	CA-CB-CG	6.67	119.27	112.60
22	S	490	ASN	CA-CB-CG	-6.67	105.93	112.60
23	P	224	LEU	CB-CA-C	-6.67	98.30	110.63
29	I	265	ARG	O-C-N	-6.67	114.55	122.15
23	P	123	ARG	NE-CZ-NH1	-6.67	114.83	121.50
24	Q	210	CYS	CA-C-N	6.67	126.70	119.90
24	Q	210	CYS	C-N-CA	6.67	126.70	119.90
8	h	166	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
6	F	29	ILE	N-CA-C	-6.66	104.27	110.53
24	Q	70	ALA	CA-C-N	6.66	132.80	121.87
24	Q	70	ALA	C-N-CA	6.66	132.80	121.87
29	I	431	ASN	N-CA-C	-6.66	105.02	113.02
33	J	309	ARG	N-CA-C	-6.66	104.32	113.18
10	3	98	ARG	CA-C-N	6.66	129.10	120.44
10	3	98	ARG	C-N-CA	6.66	129.10	120.44
22	S	52	TYR	CA-C-N	6.66	129.59	120.46
22	S	52	TYR	C-N-CA	6.66	129.59	120.46
1	a	209	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
5	E	225	GLN	N-CA-C	6.66	118.54	111.28
5	E	109	VAL	N-CA-C	-6.66	104.00	110.72
20	Z	195	PHE	CA-CB-CG	-6.66	107.14	113.80
28	H	385	ARG	N-CA-CB	6.66	120.01	110.16
5	e	77	ALA	CA-C-O	-6.66	113.51	121.56
10	3	124	PHE	CA-CB-CG	-6.66	107.14	113.80
7	G	127	ASN	N-CA-C	-6.65	102.49	112.54
25	R	149	ASN	N-CA-CB	6.65	120.81	110.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	77	ASN	CA-C-N	6.65	129.19	120.28
26	U	77	ASN	C-N-CA	6.65	129.19	120.28
29	I	311	ASN	N-CA-C	6.65	118.53	111.28
33	J	74	GLU	CA-C-N	6.65	130.48	120.77
33	J	74	GLU	C-N-CA	6.65	130.48	120.77
21	N	628	ALA	CA-C-O	-6.65	113.50	120.55
31	L	220	LEU	N-CA-C	-6.65	98.89	109.59
32	M	292	ASP	O-C-N	-6.65	113.59	122.23
33	J	81	ASP	N-CA-C	-6.65	104.79	113.17
17	T	46	ILE	N-CA-C	-6.65	99.55	108.06
21	N	765	ASP	O-C-N	-6.65	112.97	122.41
32	M	107	ASN	N-CA-CB	6.65	121.69	111.46
22	S	190	SER	CA-C-N	6.64	129.73	120.29
22	S	190	SER	C-N-CA	6.64	129.73	120.29
30	K	330	ARG	N-CA-C	6.64	124.50	109.81
6	f	69	HIS	CE1-NE2-CD2	-6.64	102.36	109.00
14	7	221	ASP	CA-CB-CG	-6.64	105.96	112.60
20	Z	766	HIS	CE1-NE2-CD2	-6.64	102.36	109.00
22	S	147	TRP	N-CA-C	6.64	118.52	111.28
29	I	262	ARG	CB-CA-C	-6.64	98.55	110.70
29	I	334	LEU	CA-C-N	6.64	130.76	120.60
29	I	334	LEU	C-N-CA	6.64	130.76	120.60
9	i	176	THR	N-CA-C	-6.64	100.07	110.36
28	H	274	VAL	N-CA-C	-6.64	98.63	108.45
8	h	151	PHE	CB-CG-CD2	6.63	131.98	120.70
24	Q	199	THR	CA-C-O	-6.63	113.52	120.55
14	7	179	PHE	N-CA-C	-6.63	104.05	111.28
25	R	335	ARG	CA-C-N	6.63	129.46	120.44
25	R	335	ARG	C-N-CA	6.63	129.46	120.44
33	J	227	SER	N-CA-C	-6.63	105.75	114.31
20	Z	946	THR	N-CA-C	-6.63	97.71	108.52
21	N	398	ARG	CA-C-O	6.63	127.60	119.97
25	R	96	GLN	N-CA-C	-6.63	104.05	111.28
31	L	110	LYS	CA-C-N	6.63	130.79	121.24
31	L	110	LYS	C-N-CA	6.63	130.79	121.24
32	M	414	ASP	CA-C-N	6.63	129.17	120.28
32	M	414	ASP	C-N-CA	6.63	129.17	120.28
8	1	72	LEU	CA-C-O	-6.63	110.62	119.11
23	P	114	THR	CA-C-N	6.63	129.06	120.44
23	P	114	THR	C-N-CA	6.63	129.06	120.44
27	O	305	ILE	N-CA-C	-6.63	98.93	108.48
30	K	315	ILE	N-CA-C	-6.63	98.88	108.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	130	ARG	CA-C-N	6.63	126.39	119.76
7	G	130	ARG	C-N-CA	6.63	126.39	119.76
1	A	123	ASN	CA-CB-CG	-6.63	105.97	112.60
6	F	172	LEU	O-C-N	6.63	129.70	122.15
13	6	205	GLN	N-CA-C	-6.63	103.60	112.94
33	J	323	ALA	N-CA-C	6.62	118.58	111.36
3	C	40	ALA	N-CA-C	-6.62	99.25	109.52
29	I	103	PRO	CA-C-O	-6.62	113.88	121.36
29	I	344	ILE	N-CA-C	-6.62	98.74	107.88
4	d	16	HIS	CG-CD2-NE2	6.62	113.82	107.20
4	d	229	ILE	CA-C-N	6.62	129.15	120.28
4	d	229	ILE	C-N-CA	6.62	129.15	120.28
22	S	119	TYR	CA-C-N	6.62	129.69	120.29
22	S	119	TYR	C-N-CA	6.62	129.69	120.29
28	H	97	LEU	N-CA-C	-6.62	98.90	109.76
24	Q	193	LYS	N-CA-C	-6.62	105.20	113.28
20	Z	827	LEU	N-CA-C	-6.62	103.99	111.14
32	M	303	ARG	NE-CZ-NH1	-6.62	114.88	121.50
15	W	29	GLN	OE1-CD-NE2	6.62	129.22	122.60
16	V	89	ALA	CA-C-N	6.62	129.44	120.44
16	V	89	ALA	C-N-CA	6.62	129.44	120.44
23	P	275	ASN	N-CA-C	-6.62	102.51	112.04
4	d	135	ILE	CA-C-O	6.61	127.27	120.39
7	g	16	SER	CA-C-N	6.61	127.14	119.47
7	g	16	SER	C-N-CA	6.61	127.14	119.47
4	D	33	ALA	N-CA-C	-6.61	97.82	109.06
10	3	131	ASP	N-CA-C	-6.61	98.92	109.76
9	2	241	VAL	N-CA-C	-6.61	98.67	108.85
30	K	383	ILE	CA-C-N	6.61	129.14	120.28
30	K	383	ILE	C-N-CA	6.61	129.14	120.28
33	J	81	ASP	N-CA-CB	6.61	120.28	110.49
13	m	159	ASP	CA-C-N	6.61	130.36	120.31
13	m	159	ASP	C-N-CA	6.61	130.36	120.31
15	W	36	ILE	CA-C-N	6.61	129.43	120.44
15	W	36	ILE	C-N-CA	6.61	129.43	120.44
20	Z	237	VAL	N-CA-CB	6.61	122.14	111.23
22	S	204	ASP	O-C-N	6.61	129.69	122.15
8	1	202	TYR	CA-C-O	-6.61	111.54	119.27
21	N	330	THR	N-CA-CB	6.61	119.59	110.01
2	b	83	ARG	CA-CB-CG	-6.61	100.89	114.10
16	V	260	GLU	O-C-N	-6.61	115.66	123.06
20	Z	497	PHE	CA-CB-CG	-6.61	107.19	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	373	ILE	N-CA-C	6.61	116.76	110.42
32	M	342	ARG	NE-CZ-NH2	-6.61	113.25	119.20
33	J	351	ASN	OD1-CG-ND2	6.61	129.21	122.60
7	g	74	ILE	CA-C-N	6.61	128.45	121.45
7	g	74	ILE	C-N-CA	6.61	128.45	121.45
7	G	100	LYS	N-CA-CB	6.61	119.59	110.01
28	H	215	LYS	CA-C-N	6.61	129.79	120.28
28	H	215	LYS	C-N-CA	6.61	129.79	120.28
32	M	422	VAL	CB-CA-C	-6.61	103.39	112.04
7	g	191	GLU	N-CA-C	-6.60	104.70	112.89
11	k	146	HIS	CE1-NE2-CD2	-6.60	102.40	109.00
10	3	50	PHE	CA-CB-CG	-6.60	107.20	113.80
16	V	213	LEU	N-CA-C	-6.60	104.01	111.14
20	Z	582	ASP	N-CA-C	-6.60	104.16	111.36
24	Q	226	HIS	CE1-NE2-CD2	-6.60	102.40	109.00
30	K	339	GLU	O-C-N	-6.60	115.50	123.16
33	J	345	LYS	N-CA-CB	6.60	119.93	110.16
4	d	254	HIS	ND1-CE1-NE2	6.60	115.00	108.40
6	f	138	ASP	CA-CB-CG	6.60	119.20	112.60
11	k	21	VAL	CA-C-O	-6.60	113.72	120.25
17	T	36	LYS	N-CA-C	-6.60	104.09	111.28
32	M	141	LYS	CA-C-N	6.60	126.63	119.90
32	M	141	LYS	C-N-CA	6.60	126.63	119.90
7	g	26	TYR	N-CA-C	6.60	119.30	111.71
8	1	151	PHE	CA-C-O	6.60	129.28	121.36
24	Q	57	SER	CA-C-N	6.60	129.79	120.42
24	Q	57	SER	C-N-CA	6.60	129.79	120.42
32	M	205	ASP	CA-C-N	6.60	129.12	120.28
32	M	205	ASP	C-N-CA	6.60	129.12	120.28
32	M	229	THR	CA-C-N	6.60	134.14	121.54
32	M	229	THR	C-N-CA	6.60	134.14	121.54
5	e	62	ASP	CA-CB-CG	-6.60	106.00	112.60
20	Z	770	GLU	CA-C-O	-6.59	114.37	121.56
24	Q	180	LEU	CA-C-N	6.59	129.01	120.44
24	Q	180	LEU	C-N-CA	6.59	129.01	120.44
28	H	335	GLU	CA-C-O	-6.59	113.56	120.55
31	L	74	LEU	CA-C-N	6.59	129.12	120.28
31	L	74	LEU	C-N-CA	6.59	129.12	120.28
11	k	53	THR	O-C-N	6.59	128.86	122.07
1	A	237	SER	CA-C-N	6.59	129.11	120.28
1	A	237	SER	C-N-CA	6.59	129.11	120.28
4	D	89	ALA	N-CA-CB	6.59	119.81	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	491	LEU	O-C-N	-6.59	114.64	122.15
22	S	340	LYS	CA-C-N	6.59	134.13	121.54
22	S	340	LYS	C-N-CA	6.59	134.13	121.54
13	m	116	HIS	CA-C-O	6.59	127.51	120.46
12	5	99	ASN	N-CA-C	-6.59	104.38	112.88
21	N	510	HIS	CE1-NE2-CD2	-6.59	102.41	109.00
30	K	416	LYS	CB-CA-C	6.59	123.53	110.42
6	f	46	LEU	N-CA-C	-6.59	98.66	109.40
8	h	201	GLU	O-C-N	-6.59	114.20	122.17
14	n	118	GLU	N-CA-C	-6.59	94.94	108.18
12	5	100	TRP	N-CA-C	-6.59	100.46	110.14
26	U	166	ALA	CA-C-O	6.59	127.48	120.70
23	P	264	ILE	CA-C-N	6.58	129.48	120.46
23	P	264	ILE	C-N-CA	6.58	129.48	120.46
6	f	110	HIS	CG-CD2-NE2	6.58	113.78	107.20
23	P	2	SER	CB-CA-C	-6.58	99.22	110.22
32	M	73	ARG	N-CA-CB	6.58	119.61	110.07
7	g	89	VAL	CA-C-N	6.58	129.00	120.44
7	g	89	VAL	C-N-CA	6.58	129.00	120.44
27	O	369	ARG	CA-C-O	-6.58	112.66	120.10
28	H	293	GLU	N-CA-CB	6.58	119.90	110.16
29	I	85	PHE	CA-C-O	-6.58	113.46	121.36
6	F	69	HIS	CE1-NE2-CD2	-6.58	102.42	109.00
21	N	682	PHE	CA-C-N	6.58	129.63	120.29
21	N	682	PHE	C-N-CA	6.58	129.63	120.29
24	Q	202	ARG	N-CA-CB	6.58	119.90	110.16
21	N	438	ASP	CA-C-N	6.58	129.76	120.42
21	N	438	ASP	C-N-CA	6.58	129.76	120.42
32	M	247	ALA	N-CA-C	-6.58	97.88	109.06
22	S	240	ASP	CA-C-N	6.58	129.09	120.28
22	S	240	ASP	C-N-CA	6.58	129.09	120.28
13	m	224	PHE	CA-CB-CG	-6.58	107.22	113.80
20	Z	868	ASN	CB-CA-C	-6.57	99.88	110.79
14	7	184	ALA	N-CA-C	-6.57	104.49	113.30
33	J	382	PHE	CA-CB-CG	-6.57	107.23	113.80
4	D	213	THR	N-CA-C	-6.57	99.05	109.23
14	7	164	ASN	CA-C-N	6.57	130.30	120.31
14	7	164	ASN	C-N-CA	6.57	130.30	120.31
30	K	258	PHE	N-CA-CB	6.57	121.11	110.40
25	R	35	GLN	N-CA-C	6.57	120.00	110.28
25	R	284	ALA	N-CA-CB	6.57	119.88	110.16
2	b	192	ALA	O-C-N	6.57	128.84	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	j	125	ASP	CA-CB-CG	6.57	119.17	112.60
17	T	94	HIS	ND1-CE1-NE2	6.57	114.97	108.40
17	T	149	ASP	O-C-N	6.57	129.08	122.12
21	N	534	ASP	CA-C-N	6.57	129.37	120.44
21	N	534	ASP	C-N-CA	6.57	129.37	120.44
14	n	93	MET	CA-C-N	6.57	129.08	120.28
14	n	93	MET	C-N-CA	6.57	129.08	120.28
5	E	226	ASP	N-CA-C	-6.57	105.30	113.38
18	X	40	GLU	CA-C-N	6.57	134.08	121.54
18	X	40	GLU	C-N-CA	6.57	134.08	121.54
25	R	229	LYS	CB-CA-C	-6.57	100.53	110.90
26	U	226	LEU	CA-C-N	6.57	127.22	120.00
26	U	226	LEU	C-N-CA	6.57	127.22	120.00
26	U	231	ASP	CA-C-O	6.57	127.52	119.97
26	U	243	ASP	O-C-N	-6.57	115.31	122.07
24	Q	120	LYS	CA-C-O	-6.56	113.94	120.70
30	K	207	ARG	NE-CZ-NH2	-6.56	113.29	119.20
12	l	133	TRP	CA-C-N	6.56	129.07	120.28
12	l	133	TRP	C-N-CA	6.56	129.07	120.28
14	n	113	LEU	O-C-N	-6.56	116.37	123.26
16	V	123	VAL	CA-C-O	-6.56	113.89	120.85
16	V	190	HIS	CG-CD2-NE2	6.56	113.76	107.20
3	c	59	GLN	CB-CG-CD	-6.56	101.45	112.60
21	N	389	TYR	CA-C-N	6.56	130.64	120.60
21	N	389	TYR	C-N-CA	6.56	130.64	120.60
29	I	75	PHE	O-C-N	-6.56	115.06	122.08
29	I	217	LYS	CG-CD-CE	6.56	126.39	111.30
9	2	88	ILE	CA-C-N	6.56	127.40	119.99
9	2	88	ILE	C-N-CA	6.56	127.40	119.99
12	5	212	TYR	N-CA-C	-6.56	104.13	111.28
32	M	319	ASP	CA-C-N	6.56	129.07	120.28
32	M	319	ASP	C-N-CA	6.56	129.07	120.28
2	B	130	PHE	CA-CB-CG	-6.55	107.25	113.80
10	3	88	THR	CA-C-O	6.55	127.70	120.82
20	Z	513	ALA	CB-CA-C	6.55	123.46	110.42
22	S	418	THR	N-CA-C	-6.55	104.22	111.36
21	N	638	ILE	CA-C-N	6.55	129.59	120.29
21	N	638	ILE	C-N-CA	6.55	129.59	120.29
22	S	384	ARG	N-CA-CB	6.55	119.86	110.16
21	N	33	ASP	N-CA-C	-6.55	105.44	113.50
29	I	266	GLN	OE1-CD-NE2	6.55	129.15	122.60
27	O	284	GLU	CA-C-N	6.55	129.05	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	O	284	GLU	C-N-CA	6.55	129.05	120.28
21	N	168	SER	CB-CA-C	-6.54	99.72	110.85
21	N	226	ASN	CA-C-N	6.54	128.95	120.44
21	N	226	ASN	C-N-CA	6.54	128.95	120.44
2	b	176	GLU	CA-C-N	6.54	129.34	120.44
2	b	176	GLU	C-N-CA	6.54	129.34	120.44
12	l	208	GLN	CA-C-N	6.54	129.34	120.44
12	l	208	GLN	C-N-CA	6.54	129.34	120.44
20	Z	467	VAL	N-CA-CB	6.54	120.15	111.90
13	m	130	VAL	N-CA-C	-6.54	98.62	108.17
20	Z	292	ASP	CA-CB-CG	6.54	119.14	112.60
20	Z	335	LEU	CA-C-N	6.54	129.58	120.29
20	Z	335	LEU	C-N-CA	6.54	129.58	120.29
26	U	235	LEU	CA-C-O	6.54	127.42	119.31
31	L	351	LEU	N-CA-C	6.54	118.93	109.84
33	J	70	SER	N-CA-C	-6.54	99.36	109.24
18	X	19	GLU	N-CA-C	-6.54	103.28	113.02
19	Y	5	VAL	CA-C-N	6.54	130.25	120.31
19	Y	5	VAL	C-N-CA	6.54	130.25	120.31
20	Z	208	VAL	CA-C-O	-6.54	114.31	118.69
28	H	434	ARG	CD-NE-CZ	6.54	133.56	124.40
5	e	125	GLU	N-CA-C	-6.54	104.61	112.59
9	2	143	HIS	CA-C-N	6.54	129.28	120.65
9	2	143	HIS	C-N-CA	6.54	129.28	120.65
9	2	173	GLN	CA-C-N	6.54	134.03	121.54
9	2	173	GLN	C-N-CA	6.54	134.03	121.54
12	5	153	ALA	CA-C-N	6.54	129.33	120.44
12	5	153	ALA	C-N-CA	6.54	129.33	120.44
21	N	259	PHE	CA-CB-CG	-6.54	107.26	113.80
21	N	530	GLU	N-CA-C	6.54	119.23	111.71
8	h	110	GLY	N-CA-C	-6.54	101.38	111.12
15	W	162	ASN	N-CA-CB	6.54	119.77	109.71
30	K	358	SER	CA-C-N	6.54	129.33	120.44
30	K	358	SER	C-N-CA	6.54	129.33	120.44
32	M	427	SER	N-CA-C	-6.54	103.72	112.94
33	J	357	ASP	CA-CB-CG	-6.54	106.06	112.60
20	Z	617	ILE	CA-C-N	6.53	129.03	120.28
20	Z	617	ILE	C-N-CA	6.53	129.03	120.28
24	Q	56	THR	O-C-N	-6.53	115.19	122.12
1	a	177	GLU	CB-CG-CD	-6.53	101.50	112.60
22	S	266	SER	CA-C-N	6.53	129.57	120.29
22	S	266	SER	C-N-CA	6.53	129.57	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	m	79	SER	N-CA-C	6.53	118.40	111.28
25	R	407	GLY	CA-C-N	6.53	129.56	120.29
25	R	407	GLY	C-N-CA	6.53	129.56	120.29
1	a	32	PHE	CA-CB-CG	-6.53	107.27	113.80
5	e	41	ALA	N-CA-CB	6.53	121.05	110.41
32	M	431	SER	CB-CA-C	-6.53	106.24	114.40
1	a	132	ALA	N-CA-C	-6.53	104.95	113.17
7	G	93	ARG	N-CA-C	6.53	118.39	111.28
19	Y	65	ASP	N-CA-C	-6.53	102.45	110.61
22	S	19	HIS	CE1-NE2-CD2	-6.53	102.47	109.00
24	Q	114	GLN	N-CA-C	6.53	119.39	111.82
8	1	98	ASN	N-CA-C	-6.52	97.56	109.56
16	V	210	THR	CA-C-N	6.52	129.02	120.28
16	V	210	THR	C-N-CA	6.52	129.02	120.28
24	Q	30	LEU	CB-CA-C	-6.52	99.96	110.79
3	C	48	ALA	O-C-N	-6.52	115.81	123.25
1	a	243	GLU	CB-CG-CD	-6.52	101.52	112.60
33	J	384	LEU	N-CA-C	-6.52	104.25	111.36
7	G	87	HIS	CB-CG-CD2	-6.52	122.72	131.20
9	2	221	THR	N-CA-C	-6.52	98.97	109.40
14	7	35	GLN	N-CA-CB	6.52	120.33	110.42
14	7	94	GLN	N-CA-CB	6.52	119.70	110.12
20	Z	922	PRO	CB-CA-C	6.52	119.84	111.56
28	H	381	ASP	CA-C-N	6.52	129.01	120.28
28	H	381	ASP	C-N-CA	6.52	129.01	120.28
31	L	267	PHE	CA-CB-CG	-6.52	107.28	113.80
20	Z	361	HIS	CA-CB-CG	-6.52	107.28	113.80
20	Z	545	SER	CA-C-N	6.52	129.68	120.42
20	Z	545	SER	C-N-CA	6.52	129.68	120.42
30	K	75	LEU	N-CA-C	6.52	118.39	111.28
33	J	264	GLY	CA-C-N	6.52	129.66	120.28
33	J	264	GLY	C-N-CA	6.52	129.66	120.28
14	n	119	ALA	CA-C-N	6.52	131.17	121.72
14	n	119	ALA	C-N-CA	6.52	131.17	121.72
6	F	18	ARG	N-CA-C	-6.52	100.24	108.45
28	H	414	SER	CB-CA-C	-6.52	98.50	110.62
17	T	205	ILE	N-CA-C	-6.51	103.97	110.62
20	Z	898	HIS	CA-C-N	6.51	132.68	122.78
20	Z	898	HIS	C-N-CA	6.51	132.68	122.78
4	d	237	GLU	CB-CA-C	-6.51	98.17	110.67
3	C	152	ASN	CA-C-N	6.51	127.07	120.04
3	C	152	ASN	C-N-CA	6.51	127.07	120.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	49	GLU	N-CA-C	-6.51	99.60	109.95
20	Z	959	HIS	N-CA-C	-6.51	103.76	112.94
23	P	339	GLU	CA-C-N	6.51	132.53	121.14
23	P	339	GLU	C-N-CA	6.51	132.53	121.14
28	H	276	GLY	N-CA-C	-6.51	106.59	114.66
4	D	112	TYR	CA-CB-CG	-6.51	102.18	113.90
31	L	80	ASN	CB-CA-C	-6.51	99.98	110.79
33	J	186	ILE	N-CA-C	-6.51	98.67	108.17
25	R	249	ILE	O-C-N	6.51	128.53	121.83
11	k	63	ASN	OD1-CG-ND2	6.51	129.11	122.60
2	B	248	GLU	CA-C-N	6.51	131.59	120.72
2	B	248	GLU	C-N-CA	6.51	131.59	120.72
27	O	131	SER	N-CA-C	6.51	118.37	111.28
13	6	31	LEU	N-CA-CB	6.50	121.05	110.90
21	N	55	PHE	CA-CB-CG	-6.50	107.30	113.80
31	L	186	LEU	N-CA-C	-6.50	103.95	112.41
11	k	175	ASP	CA-C-N	6.50	133.96	121.54
11	k	175	ASP	C-N-CA	6.50	133.96	121.54
2	b	99	ARG	N-CA-C	-6.50	102.52	112.99
24	Q	98	LYS	CA-C-N	6.50	128.99	120.28
24	Q	98	LYS	C-N-CA	6.50	128.99	120.28
30	K	291	GLU	CA-C-N	6.50	129.65	120.42
30	K	291	GLU	C-N-CA	6.50	129.65	120.42
8	h	202	TYR	N-CA-CB	6.50	120.35	110.28
5	E	16	SER	N-CA-CB	6.50	121.55	110.50
24	Q	9	GLU	CA-C-N	6.50	128.99	120.28
24	Q	9	GLU	C-N-CA	6.50	128.99	120.28
1	a	86	PRO	CA-C-N	6.50	124.33	120.24
1	a	86	PRO	C-N-CA	6.50	124.33	120.24
17	T	67	LEU	CA-C-N	6.50	128.98	120.28
17	T	67	LEU	C-N-CA	6.50	128.98	120.28
22	S	30	GLN	CA-C-O	-6.50	113.67	120.55
22	S	367	TYR	CA-C-N	6.50	128.99	120.28
22	S	367	TYR	C-N-CA	6.50	128.99	120.28
26	U	78	GLU	CB-CA-C	-6.50	100.01	110.79
7	g	10	LEU	N-CA-CB	6.49	121.46	110.49
32	M	249	PRO	CA-C-N	6.49	128.98	120.28
32	M	249	PRO	C-N-CA	6.49	128.98	120.28
5	e	159	GLU	CA-C-O	-6.49	113.97	120.66
6	f	66	CYS	O-C-N	6.49	130.03	122.17
2	B	168	SER	N-CA-CB	6.49	119.42	110.01
23	P	248	ASP	CA-CB-CG	-6.49	106.11	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	k	57	ALA	CA-C-N	6.49	129.63	120.28
11	k	57	ALA	C-N-CA	6.49	129.63	120.28
4	D	14	ASP	CA-C-O	6.49	126.94	119.35
17	T	79	GLU	CA-C-N	6.49	128.88	120.44
17	T	79	GLU	C-N-CA	6.49	128.88	120.44
23	P	265	VAL	CA-C-N	6.49	128.98	120.28
23	P	265	VAL	C-N-CA	6.49	128.98	120.28
27	O	64	ASN	CA-CB-CG	6.49	119.09	112.60
28	H	314	VAL	N-CA-CB	6.49	121.94	111.23
29	I	165	ASP	N-CA-CB	-6.49	102.10	111.25
32	M	245	LYS	CA-C-O	6.49	127.45	120.38
1	a	173	PRO	N-CA-C	-6.49	105.16	114.18
27	O	217	LEU	CA-C-N	6.49	129.50	120.29
27	O	217	LEU	C-N-CA	6.49	129.50	120.29
10	j	103	TYR	O-C-N	-6.49	115.83	123.22
12	l	206	SER	N-CA-C	-6.49	104.41	112.90
11	4	39	SER	CA-C-N	6.49	126.18	119.82
11	4	39	SER	C-N-CA	6.49	126.18	119.82
29	I	265	ARG	CA-C-O	6.49	127.29	120.42
1	A	186	PHE	N-CA-C	-6.48	104.06	112.23
16	V	195	HIS	ND1-CE1-NE2	6.48	114.88	108.40
11	k	174	MET	N-CA-C	-6.48	99.73	110.17
21	N	751	LEU	N-CA-CB	-6.48	101.97	110.59
7	g	137	ILE	N-CA-CB	6.48	117.59	110.53
8	h	122	ILE	O-C-N	-6.48	113.71	121.10
21	N	672	ASN	CA-C-O	-6.48	114.53	119.59
28	H	250	GLY	N-CA-C	-6.48	99.12	112.34
12	5	213	GLY	CA-C-N	6.48	129.34	120.46
12	5	213	GLY	C-N-CA	6.48	129.34	120.46
29	I	221	LEU	N-CA-C	-6.48	98.64	109.07
7	g	185	GLU	N-CA-CB	6.48	120.63	110.46
7	G	171	SER	CA-C-N	6.48	129.49	120.29
7	G	171	SER	C-N-CA	6.48	129.49	120.29
15	W	164	PRO	CA-C-N	6.47	132.40	122.11
15	W	164	PRO	C-N-CA	6.47	132.40	122.11
24	Q	283	ASN	N-CA-C	-6.47	97.01	110.80
27	O	391	ILE	N-CA-C	-6.47	103.51	113.16
23	P	255	ALA	N-CA-C	6.47	118.42	111.36
12	l	128	GLN	CA-C-O	6.47	127.61	120.82
20	Z	206	ASP	N-CA-C	6.47	117.99	111.07
21	N	618	ARG	CA-C-N	6.47	128.85	120.44
21	N	618	ARG	C-N-CA	6.47	128.85	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	182	GLN	CB-CG-CD	6.47	123.60	112.60
5	e	205	LYS	CA-C-N	6.47	128.95	120.28
5	e	205	LYS	C-N-CA	6.47	128.95	120.28
23	P	151	GLY	N-CA-C	-6.47	106.84	115.32
33	J	293	ALA	N-CA-C	-6.47	97.24	108.69
33	J	328	LEU	N-CA-CB	6.47	120.31	110.28
13	m	35	THR	CA-CB-OG1	6.47	119.30	109.60
4	D	237	GLU	CA-C-O	6.46	127.40	119.97
10	3	175	ALA	O-C-N	6.46	128.97	122.12
21	N	230	VAL	CA-CB-CG2	-6.46	99.41	110.40
25	R	325	HIS	N-CA-C	-6.46	102.78	110.41
4	d	200	LEU	CA-C-N	6.46	128.94	120.28
4	d	200	LEU	C-N-CA	6.46	128.94	120.28
12	5	209	THR	N-CA-C	6.46	118.41	111.36
21	N	105	SER	CA-C-N	6.46	129.64	120.53
21	N	105	SER	C-N-CA	6.46	129.64	120.53
23	P	40	LEU	N-CA-CB	6.46	120.17	110.22
2	b	135	LEU	N-CA-CB	6.46	121.09	110.69
9	i	154	LEU	N-CA-C	-6.46	99.48	109.24
14	n	182	HIS	CG-CD2-NE2	6.46	113.66	107.20
2	B	57	MET	CA-C-O	-6.46	114.37	121.87
21	N	274	VAL	N-CA-C	6.46	117.21	110.62
21	N	720	ALA	CA-C-N	6.46	128.84	120.44
21	N	720	ALA	C-N-CA	6.46	128.84	120.44
21	N	386	MET	CA-C-O	-6.46	111.49	119.18
20	Z	130	GLY	N-CA-C	-6.46	105.13	115.08
21	N	742	TRP	O-C-N	6.46	130.70	123.40
23	P	362	LEU	CA-C-N	6.46	129.46	120.29
23	P	362	LEU	C-N-CA	6.46	129.46	120.29
25	R	40	ILE	CB-CA-C	-6.46	103.31	112.22
12	l	263	HIS	CE1-NE2-CD2	-6.46	102.54	109.00
28	H	50	LYS	N-CA-C	-6.46	104.32	111.36
7	g	7	GLY	N-CA-C	-6.46	104.52	112.33
20	Z	771	HIS	O-C-N	6.46	130.62	122.23
27	O	306	ARG	NE-CZ-NH1	-6.46	115.05	121.50
32	M	423	GLN	N-CA-CB	6.46	119.47	110.17
4	d	216	LYS	CA-C-O	-6.45	114.42	120.94
15	W	116	SER	CA-C-N	6.45	126.37	119.85
15	W	116	SER	C-N-CA	6.45	126.37	119.85
21	N	273	LEU	N-CA-C	6.45	118.31	111.28
23	P	150	GLU	O-C-N	-6.45	114.78	122.65
20	Z	777	PRO	N-CA-CB	6.45	110.43	103.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	O	314	SER	N-CA-CB	6.45	119.61	110.12
5	e	47	VAL	N-CA-C	-6.45	99.14	108.17
14	n	228	PHE	N-CA-CB	6.45	121.56	111.56
10	3	26	ASP	O-C-N	-6.45	115.72	122.94
21	N	478	GLY	CA-C-N	6.45	128.92	120.28
21	N	478	GLY	C-N-CA	6.45	128.92	120.28
1	A	39	ASN	CA-CB-CG	6.45	119.05	112.60
27	O	325	GLU	CB-CG-CD	-6.45	101.64	112.60
2	b	199	SER	N-CA-C	6.45	118.31	111.28
20	Z	244	ARG	CB-CA-C	-6.45	100.76	110.88
20	Z	924	LYS	O-C-N	-6.45	114.58	122.25
21	N	20	VAL	CA-C-N	6.45	129.44	120.29
21	N	20	VAL	C-N-CA	6.45	129.44	120.29
21	N	417	ARG	O-C-N	6.45	129.76	122.22
25	R	410	LEU	CA-C-O	-6.45	113.72	120.55
10	3	60	VAL	CA-C-N	6.44	129.44	120.29
10	3	60	VAL	C-N-CA	6.44	129.44	120.29
24	Q	163	ARG	O-C-N	-6.44	114.35	122.27
12	l	275	VAL	CA-C-N	6.44	128.81	120.44
12	l	275	VAL	C-N-CA	6.44	128.81	120.44
20	Z	524	ALA	N-CA-C	-6.44	104.26	111.28
23	P	362	LEU	N-CA-CB	6.44	120.26	110.28
32	M	405	ASN	CA-C-O	6.44	127.25	120.42
33	J	258	VAL	N-CA-C	-6.44	105.88	113.42
8	h	17	PHE	CA-C-N	6.44	130.10	120.31
8	h	17	PHE	C-N-CA	6.44	130.10	120.31
10	3	130	ILE	O-C-N	6.44	130.75	122.77
13	6	215	VAL	O-C-N	6.44	130.18	123.03
21	N	255	ALA	CA-C-O	6.44	127.24	120.42
23	P	16	ILE	O-C-N	-6.44	114.53	121.80
26	U	13	LEU	CA-C-N	6.44	129.56	120.42
26	U	13	LEU	C-N-CA	6.44	129.56	120.42
28	H	45	TYR	N-CA-CB	-6.44	102.34	110.90
28	H	362	ASP	CA-CB-CG	-6.44	106.16	112.60
20	Z	701	ILE	CA-C-O	-6.43	114.26	120.95
23	P	237	VAL	CA-C-N	6.43	128.90	120.28
23	P	237	VAL	C-N-CA	6.43	128.90	120.28
26	U	279	SER	CA-C-N	6.43	128.90	120.28
26	U	279	SER	C-N-CA	6.43	128.90	120.28
5	e	73	HIS	CB-CG-ND1	6.43	132.35	122.70
2	B	59	GLU	N-CA-C	-6.43	105.59	113.50
28	H	227	LEU	CA-C-N	6.43	126.01	119.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	H	227	LEU	C-N-CA	6.43	126.01	119.19
33	J	42	ARG	CA-C-N	6.43	128.80	120.44
33	J	42	ARG	C-N-CA	6.43	128.80	120.44
12	l	82	ARG	NE-CZ-NH2	-6.43	113.41	119.20
15	W	26	PHE	CA-C-O	6.43	127.37	120.55
32	M	93	ASP	CA-C-O	-6.43	114.03	121.49
25	R	363	PHE	CA-CB-CG	-6.43	107.37	113.80
22	S	394	ILE	CB-CA-C	-6.43	103.60	112.02
23	P	115	ARG	CA-C-O	-6.43	114.07	120.82
4	D	185	PRO	N-CA-CB	6.43	108.97	103.19
25	R	32	LEU	CA-C-N	6.43	128.89	120.28
25	R	32	LEU	C-N-CA	6.43	128.89	120.28
27	O	98	TYR	CA-CB-CG	-6.43	102.33	113.90
20	Z	136	ARG	N-CA-CB	6.42	119.56	110.12
30	K	144	ASN	CA-CB-CG	-6.42	106.18	112.60
1	A	143	PHE	CA-CB-CG	-6.42	107.38	113.80
17	T	106	ILE	CB-CA-C	-6.42	103.61	112.02
20	Z	175	ASP	CA-C-O	6.42	127.08	119.56
29	I	344	ILE	N-CA-CB	6.42	120.49	111.05
14	n	182	HIS	CE1-NE2-CD2	-6.42	102.58	109.00
12	5	113	ASN	CA-C-N	6.42	126.11	119.82
12	5	113	ASN	C-N-CA	6.42	126.11	119.82
21	N	84	ALA	CA-C-N	6.42	129.21	120.54
21	N	84	ALA	C-N-CA	6.42	129.21	120.54
5	e	79	SER	N-CA-C	-6.42	97.77	108.75
1	A	131	ARG	N-CA-C	-6.42	100.47	110.42
11	4	113	LYS	O-C-N	-6.42	115.20	121.94
12	5	127	CYS	CA-C-N	6.42	128.78	120.44
12	5	127	CYS	C-N-CA	6.42	128.78	120.44
31	L	267	PHE	CA-C-N	6.42	129.41	120.29
31	L	267	PHE	C-N-CA	6.42	129.41	120.29
14	n	53	VAL	CA-C-O	-6.42	115.28	121.63
1	A	168	ALA	N-CA-C	-6.42	99.32	109.07
11	4	68	SER	CA-C-N	6.42	129.53	120.42
11	4	68	SER	C-N-CA	6.42	129.53	120.42
17	T	42	PRO	CA-C-N	6.42	131.26	122.34
17	T	42	PRO	C-N-CA	6.42	131.26	122.34
22	S	292	TYR	CB-CG-CD2	-6.42	111.17	120.80
7	G	68	GLN	CA-C-O	-6.42	113.62	121.06
10	3	157	ASN	OD1-CG-ND2	6.42	129.01	122.60
28	H	315	GLY	N-CA-C	-6.42	105.49	116.01
26	U	292	ILE	O-C-N	6.41	128.44	121.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	350	MET	O-C-N	-6.41	115.81	123.31
4	d	81	ASP	CA-C-N	6.41	129.51	120.28
4	d	81	ASP	C-N-CA	6.41	129.51	120.28
4	D	71	VAL	O-C-N	-6.41	116.25	123.18
23	P	135	GLU	CA-C-O	6.41	127.32	119.11
9	i	174	ASP	N-CA-CB	6.41	121.33	110.49
20	Z	916	LEU	N-CA-C	-6.41	104.37	111.36
25	R	189	GLU	CA-C-N	6.41	129.39	120.29
25	R	189	GLU	C-N-CA	6.41	129.39	120.29
27	O	345	ASN	CA-CB-CG	-6.41	106.19	112.60
7	G	198	LYS	N-CA-C	6.41	118.34	111.36
23	P	324	GLU	CA-C-N	6.41	129.97	120.87
23	P	324	GLU	C-N-CA	6.41	129.97	120.87
7	g	234	ASP	CA-C-N	6.41	128.77	120.44
7	g	234	ASP	C-N-CA	6.41	128.77	120.44
30	K	150	LEU	O-C-N	-6.41	116.55	121.55
12	l	83	PHE	N-CA-C	-6.40	99.90	108.74
16	V	142	ASP	N-CA-C	-6.40	95.47	109.11
24	Q	250	THR	CA-C-O	6.40	127.20	120.54
8	h	155	MET	N-CA-CB	6.40	120.18	110.45
12	l	77	THR	N-CA-C	-6.40	96.63	108.02
12	5	168	ALA	N-CA-CB	6.40	121.76	111.20
17	T	127	GLN	N-CA-C	-6.40	104.22	111.07
20	Z	746	ILE	CA-C-O	-6.40	114.07	120.85
24	Q	111	LEU	CA-C-N	6.40	128.76	120.44
24	Q	111	LEU	C-N-CA	6.40	128.76	120.44
20	Z	888	LEU	O-C-N	6.40	130.08	122.79
3	C	31	HIS	N-CA-CB	6.40	120.06	110.53
13	6	191	LEU	CA-C-N	6.39	129.22	120.46
13	6	191	LEU	C-N-CA	6.39	129.22	120.46
21	N	296	CYS	CB-CA-C	-6.39	100.84	110.88
4	d	225	SER	CA-C-N	6.39	129.49	120.28
4	d	225	SER	C-N-CA	6.39	129.49	120.28
31	L	273	HIS	ND1-CE1-NE2	6.39	114.79	108.40
2	B	36	GLY	CA-C-N	6.39	132.02	122.75
2	B	36	GLY	C-N-CA	6.39	132.02	122.75
21	N	753	PHE	N-CA-CB	6.39	119.37	109.85
26	U	170	GLY	CA-C-O	-6.39	113.89	120.66
2	b	174	PHE	CA-CB-CG	-6.39	107.41	113.80
3	c	98	TYR	CA-C-N	6.39	128.75	120.44
3	c	98	TYR	C-N-CA	6.39	128.75	120.44
25	R	408	ASP	CA-C-O	-6.39	113.65	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	O	320	PRO	CA-C-N	6.39	129.48	120.28
27	O	320	PRO	C-N-CA	6.39	129.48	120.28
10	j	50	PHE	CA-CB-CG	-6.38	107.42	113.80
13	m	157	PHE	CA-CB-CG	6.38	120.18	113.80
7	G	7	GLY	N-CA-C	-6.38	102.39	112.61
21	N	166	ILE	N-CA-C	6.38	116.53	110.53
28	H	432	ARG	NE-CZ-NH2	6.38	124.95	119.20
23	P	298	SER	N-CA-C	-6.38	104.40	111.36
32	M	412	HIS	CA-C-N	6.38	128.83	120.28
32	M	412	HIS	C-N-CA	6.38	128.83	120.28
28	H	375	VAL	N-CA-CB	6.38	120.22	111.41
7	G	62	GLN	OE1-CD-NE2	-6.38	116.22	122.60
3	c	46	LEU	N-CA-C	-6.38	99.01	109.40
25	R	246	TYR	CA-C-N	6.38	129.34	120.29
25	R	246	TYR	C-N-CA	6.38	129.34	120.29
30	K	196	ASP	O-C-N	6.38	129.68	122.22
31	L	55	LYS	CA-C-N	6.38	129.35	120.29
31	L	55	LYS	C-N-CA	6.38	129.35	120.29
9	i	115	HIS	CE1-NE2-CD2	-6.37	102.63	109.00
1	A	65	ASP	N-CA-C	-6.37	99.70	109.64
27	O	220	SER	CA-C-O	-6.37	113.80	120.55
27	O	318	HIS	CE1-NE2-CD2	-6.37	102.63	109.00
20	Z	889	VAL	N-CA-C	-6.37	98.95	108.12
23	P	216	LEU	N-CA-C	-6.37	105.33	113.23
22	S	365	THR	CA-CB-OG1	6.37	119.16	109.60
28	H	132	GLN	N-CA-C	-6.37	99.30	108.60
30	K	129	GLU	N-CA-CB	6.37	120.02	110.53
28	H	398	VAL	O-C-N	6.37	129.50	122.75
24	Q	151	TYR	N-CA-C	-6.37	105.82	113.97
30	K	235	ILE	CA-C-N	6.37	131.97	122.99
30	K	235	ILE	C-N-CA	6.37	131.97	122.99
8	h	175	ASP	N-CA-CB	6.37	121.25	110.49
14	7	98	ARG	N-CA-CB	6.37	119.58	110.16
20	Z	763	HIS	CE1-NE2-CD2	-6.37	102.64	109.00
26	U	156	HIS	CE1-NE2-CD2	-6.37	102.63	109.00
28	H	432	ARG	NE-CZ-NH1	-6.37	115.13	121.50
32	M	357	ARG	NE-CZ-NH1	-6.37	115.13	121.50
33	J	219	VAL	CA-C-N	6.37	131.75	122.77
33	J	219	VAL	C-N-CA	6.37	131.75	122.77
4	d	54	LEU	N-CA-C	-6.36	105.55	113.38
17	T	85	LEU	CA-C-N	6.36	128.04	120.09
17	T	85	LEU	C-N-CA	6.36	128.04	120.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	257	GLY	CA-C-N	6.36	128.81	120.28
31	L	257	GLY	C-N-CA	6.36	128.81	120.28
20	Z	258	PRO	N-CA-C	6.36	118.46	110.70
29	I	70	LEU	CA-C-N	6.36	128.71	120.44
29	I	70	LEU	C-N-CA	6.36	128.71	120.44
2	b	105	PRO	N-CA-C	6.36	118.46	110.70
10	j	125	ASP	CA-C-N	6.36	128.71	120.44
10	j	125	ASP	C-N-CA	6.36	128.71	120.44
8	1	159	GLU	CA-C-N	6.36	129.32	120.29
8	1	159	GLU	C-N-CA	6.36	129.32	120.29
11	k	146	HIS	ND1-CE1-NE2	6.36	114.76	108.40
31	L	364	HIS	N-CA-C	6.36	118.21	111.28
10	j	168	SER	CA-C-N	6.36	128.80	120.28
10	j	168	SER	C-N-CA	6.36	128.80	120.28
14	n	216	VAL	O-C-N	-6.36	115.29	121.90
2	B	100	ILE	CA-C-O	6.36	124.49	118.90
21	N	498	ILE	CA-C-N	6.36	129.09	120.44
21	N	498	ILE	C-N-CA	6.36	129.09	120.44
7	g	24	VAL	CA-C-N	6.36	128.70	120.44
7	g	24	VAL	C-N-CA	6.36	128.70	120.44
10	j	90	LEU	CD1-CG-CD2	-6.35	96.82	110.80
10	3	122	ALA	CA-C-N	6.35	128.12	122.47
10	3	122	ALA	C-N-CA	6.35	128.12	122.47
18	X	18	ASN	OD1-CG-ND2	6.35	128.95	122.60
31	L	256	ILE	N-CA-C	-6.35	106.59	112.43
1	A	176	GLN	CA-C-N	6.35	129.31	120.29
1	A	176	GLN	C-N-CA	6.35	129.31	120.29
8	1	119	VAL	N-CA-C	-6.35	98.98	108.12
21	N	65	ALA	N-CA-C	6.35	118.20	111.28
24	Q	69	GLY	N-CA-C	-6.35	105.67	112.08
28	H	206	VAL	O-C-N	-6.35	115.99	123.04
4	d	102	ASP	CA-C-O	-6.35	114.50	120.34
11	4	128	LEU	CA-C-N	6.35	127.17	120.12
11	4	128	LEU	C-N-CA	6.35	127.17	120.12
24	Q	255	TYR	CA-C-N	6.35	129.30	120.29
24	Q	255	TYR	C-N-CA	6.35	129.30	120.29
27	O	74	ASN	N-CA-CB	6.35	119.42	109.83
32	M	364	HIS	CE1-NE2-CD2	-6.35	102.65	109.00
20	Z	897	HIS	ND1-CE1-NE2	6.35	114.75	108.40
25	R	130	GLN	CB-CG-CD	-6.35	101.81	112.60
32	M	62	ILE	CA-C-N	6.35	129.96	120.31
32	M	62	ILE	C-N-CA	6.35	129.96	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	n	76	ILE	N-CA-CB	6.34	120.87	111.86
3	C	150	THR	N-CA-C	-6.34	99.66	109.24
21	N	592	GLY	CA-C-N	6.34	128.69	120.44
21	N	592	GLY	C-N-CA	6.34	128.69	120.44
21	N	649	VAL	CA-C-O	6.34	128.27	121.04
1	a	197	GLU	N-CA-CB	6.34	120.14	110.44
10	j	67	PHE	CB-CA-C	-6.34	97.44	110.38
28	H	107	LYS	CA-C-N	6.34	134.55	121.17
28	H	107	LYS	C-N-CA	6.34	134.55	121.17
4	d	155	ILE	CB-CA-C	-6.34	101.17	110.62
7	G	112	PHE	CA-C-N	6.34	128.78	120.28
7	G	112	PHE	C-N-CA	6.34	128.78	120.28
27	O	345	ASN	CA-C-N	6.34	131.13	122.19
27	O	345	ASN	C-N-CA	6.34	131.13	122.19
28	H	367	ARG	CB-CA-C	-6.34	97.68	110.17
20	Z	15	GLN	O-C-N	-6.34	114.92	122.15
21	N	41	ASN	N-CA-C	-6.34	103.67	111.40
22	S	234	ILE	N-CA-C	6.34	116.51	110.42
25	R	340	GLN	O-C-N	-6.34	114.92	122.15
27	O	61	LEU	CA-C-N	6.34	129.94	120.31
27	O	61	LEU	C-N-CA	6.34	129.94	120.31
9	2	205	CYS	CA-C-N	6.34	131.73	123.11
9	2	205	CYS	C-N-CA	6.34	131.73	123.11
16	V	181	ASN	N-CA-C	-6.34	98.87	109.07
22	S	404	LEU	CA-C-N	6.34	129.29	120.29
22	S	404	LEU	C-N-CA	6.34	129.29	120.29
25	R	28	GLU	CA-C-O	-6.34	113.70	120.42
12	l	160	ASN	CA-C-O	6.33	127.22	120.70
13	m	183	LEU	O-C-N	-6.33	116.00	123.22
1	a	124	LEU	CA-C-O	-6.33	113.84	120.55
3	c	176	LEU	N-CA-CB	6.33	119.19	110.01
6	F	56	LEU	N-CA-C	-6.33	104.11	113.61
12	5	254	HIS	ND1-CE1-NE2	6.33	114.73	108.40
21	N	651	PHE	N-CA-C	-6.33	105.38	113.23
22	S	409	LEU	O-C-N	6.33	128.93	122.09
4	d	185	PRO	CA-C-N	6.33	128.67	120.44
4	d	185	PRO	C-N-CA	6.33	128.67	120.44
5	e	209	GLU	N-CA-C	-6.33	103.59	113.02
30	K	221	MET	CA-C-N	6.33	129.28	120.29
30	K	221	MET	C-N-CA	6.33	129.28	120.29
2	B	149	GLN	CB-CG-CD	-6.33	101.84	112.60
12	5	270	GLU	CA-C-N	6.33	128.76	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	5	270	GLU	C-N-CA	6.33	128.76	120.28
16	V	183	ALA	N-CA-C	-6.33	106.10	113.88
21	N	464	GLU	N-CA-C	6.33	118.26	111.36
9	i	175	LEU	O-C-N	-6.33	115.67	123.33
13	6	125	ASP	N-CA-C	-6.33	105.04	112.89
21	N	149	GLU	N-CA-C	-6.33	97.49	108.69
26	U	156	HIS	ND1-CE1-NE2	6.33	114.73	108.40
30	K	57	GLU	CA-C-O	-6.33	113.84	120.55
32	M	238	GLN	N-CA-C	6.32	118.17	111.28
20	Z	307	HIS	CE1-NE2-CD2	-6.32	102.68	109.00
21	N	729	SER	CA-C-N	6.32	129.12	120.46
21	N	729	SER	C-N-CA	6.32	129.12	120.46
6	f	19	LEU	CA-C-N	6.32	129.26	120.29
6	f	19	LEU	C-N-CA	6.32	129.26	120.29
20	Z	287	ARG	O-C-N	6.32	128.66	122.09
22	S	425	ARG	O-C-N	6.32	128.91	122.09
1	a	185	HIS	CE1-NE2-CD2	-6.32	102.68	109.00
10	j	107	PRO	N-CA-C	6.32	121.25	111.21
21	N	147	ALA	CA-C-O	-6.32	111.48	119.31
33	J	391	ASN	CA-C-N	6.32	129.26	120.29
33	J	391	ASN	C-N-CA	6.32	129.26	120.29
7	g	183	HIS	CA-CB-CG	-6.31	107.49	113.80
1	A	115	ASP	CA-CB-CG	-6.31	106.29	112.60
8	1	187	LEU	CA-C-O	6.31	127.03	120.40
27	O	217	LEU	N-CA-CB	6.31	119.23	110.07
11	k	95	ARG	N-CA-C	-6.31	104.50	111.82
3	C	135	PHE	CA-CB-CG	-6.31	107.49	113.80
21	N	768	ILE	CA-C-O	-6.31	115.42	119.15
23	P	249	ALA	CA-C-N	6.31	129.38	120.42
23	P	249	ALA	C-N-CA	6.31	129.38	120.42
11	k	51	GLY	CA-C-O	6.31	126.03	119.02
6	F	185	ASN	CB-CA-C	-6.31	101.36	111.02
20	Z	215	ASN	O-C-N	6.31	129.34	122.15
20	Z	211	PHE	CA-C-O	-6.31	113.86	120.55
23	P	310	ARG	NE-CZ-NH2	6.31	124.88	119.20
5	E	188	HIS	CE1-NE2-CD2	-6.31	102.69	109.00
6	F	25	ALA	CA-C-N	6.31	128.64	120.44
6	F	25	ALA	C-N-CA	6.31	128.64	120.44
22	S	244	ASN	N-CA-CB	6.31	120.09	110.44
27	O	325	GLU	CA-C-N	6.31	129.25	120.29
27	O	325	GLU	C-N-CA	6.31	129.25	120.29
3	c	98	TYR	N-CA-C	6.31	118.15	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	224	VAL	N-CA-C	-6.31	98.58	108.23
11	k	27	VAL	CA-C-O	-6.31	113.32	120.95
1	A	175	GLN	CA-C-N	6.31	129.02	120.38
1	A	175	GLN	C-N-CA	6.31	129.02	120.38
21	N	379	LEU	CA-C-O	-6.31	112.15	119.59
3	c	171	ALA	N-CA-C	6.30	118.15	111.28
20	Z	876	VAL	CA-C-N	6.30	128.73	120.28
20	Z	876	VAL	C-N-CA	6.30	128.73	120.28
32	M	270	ALA	O-C-N	6.30	128.56	122.07
5	e	108	ASN	CA-C-N	6.30	128.63	120.56
5	e	108	ASN	C-N-CA	6.30	128.63	120.56
7	g	222	SER	N-CA-C	-6.30	103.69	112.45
30	K	308	GLN	CA-C-N	6.30	130.70	121.31
30	K	308	GLN	C-N-CA	6.30	130.70	121.31
33	J	182	PRO	N-CA-CB	6.30	108.86	103.19
10	3	80	ARG	N-CA-CB	6.30	122.42	111.39
21	N	87	ASP	CA-C-N	6.30	133.58	121.54
21	N	87	ASP	C-N-CA	6.30	133.58	121.54
21	N	168	SER	CA-C-N	6.30	128.63	120.44
21	N	168	SER	C-N-CA	6.30	128.63	120.44
24	Q	406	ASP	CA-C-N	6.30	129.35	120.28
24	Q	406	ASP	C-N-CA	6.30	129.35	120.28
28	H	320	ASP	N-CA-C	-6.30	103.02	112.54
9	2	45	ALA	O-C-N	-6.30	116.30	123.48
21	N	43	LEU	CA-C-N	6.30	125.98	119.56
21	N	43	LEU	C-N-CA	6.30	125.98	119.56
23	P	413	ASN	CA-C-N	6.30	128.72	120.28
23	P	413	ASN	C-N-CA	6.30	128.72	120.28
31	L	139	LYS	N-CA-C	-6.29	105.56	113.18
33	J	177	LEU	N-CA-C	6.29	118.66	111.11
2	b	50	LYS	CA-C-N	6.29	129.22	120.29
2	b	50	LYS	C-N-CA	6.29	129.22	120.29
3	c	221	ASN	CA-CB-CG	-6.29	106.31	112.60
4	d	106	VAL	CA-C-N	6.29	129.22	120.29
4	d	106	VAL	C-N-CA	6.29	129.22	120.29
7	G	175	GLU	CB-CA-C	-6.29	100.16	110.85
31	L	168	TYR	CA-C-O	-6.29	113.75	120.42
8	1	108	VAL	N-CA-C	-6.29	99.36	108.17
4	d	40	ASN	N-CA-C	-6.29	103.79	112.03
3	C	47	ALA	N-CA-C	-6.29	98.37	109.06
20	Z	52	LEU	O-C-N	6.29	128.55	122.07
22	S	372	LEU	CA-C-N	6.29	128.71	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	S	372	LEU	C-N-CA	6.29	128.71	120.28
27	O	191	THR	CA-CB-OG1	6.29	119.03	109.60
32	M	351	LEU	CA-C-O	-6.29	113.63	120.17
4	d	232	TYR	CA-C-O	-6.29	113.76	120.42
24	Q	398	TYR	CB-CG-CD1	-6.29	111.37	120.80
27	O	208	ALA	CA-C-N	6.29	129.21	120.29
27	O	208	ALA	C-N-CA	6.29	129.21	120.29
19	Y	9	GLN	O-C-N	-6.28	114.54	122.27
17	T	40	LEU	N-CA-C	6.28	117.79	111.07
20	Z	701	ILE	CA-C-N	6.28	129.02	120.54
20	Z	701	ILE	C-N-CA	6.28	129.02	120.54
20	Z	856	HIS	CE1-NE2-CD2	-6.28	102.72	109.00
25	R	352	SER	CA-C-N	6.28	128.70	120.28
25	R	352	SER	C-N-CA	6.28	128.70	120.28
27	O	301	PHE	CA-CB-CG	-6.28	107.52	113.80
23	P	193	TYR	N-CA-C	-6.28	105.62	113.28
28	H	92	GLY	CA-C-O	-6.28	113.90	122.31
6	F	220	THR	O-C-N	-6.28	115.76	121.66
23	P	73	ASP	CA-CB-CG	-6.28	106.32	112.60
29	I	274	ASN	N-CA-C	-6.28	104.93	112.59
17	T	69	SER	CA-C-N	6.28	129.33	120.42
17	T	69	SER	C-N-CA	6.28	129.33	120.42
18	X	40	GLU	CB-CA-C	-6.28	98.78	109.51
21	N	376	LYS	N-CA-C	6.28	118.40	110.24
2	b	113	GLU	CA-C-N	6.27	129.06	120.46
2	b	113	GLU	C-N-CA	6.27	129.06	120.46
13	6	215	VAL	CA-C-O	-6.27	113.86	120.57
21	N	905	LEU	N-CA-C	-6.27	99.49	109.59
7	g	9	ASP	CA-C-O	-6.27	114.29	121.19
1	A	87	ILE	CA-C-O	-6.27	114.49	118.69
4	D	175	LEU	CA-C-N	6.27	129.01	120.54
4	D	175	LEU	C-N-CA	6.27	129.01	120.54
3	c	26	LEU	N-CA-C	-6.27	104.53	111.36
11	k	165	VAL	CA-CB-CG1	6.27	121.06	110.40
9	2	238	THR	N-CA-C	-6.27	105.67	113.38
20	Z	618	GLN	OE1-CD-NE2	-6.27	116.33	122.60
25	R	94	PHE	N-CA-CB	6.27	120.63	110.41
25	R	158	LEU	CA-C-O	-6.27	113.78	120.42
25	R	409	GLY	CA-C-N	6.27	128.68	120.28
25	R	409	GLY	C-N-CA	6.27	128.68	120.28
5	E	10	ARG	CA-C-N	6.27	129.91	121.01
5	E	10	ARG	C-N-CA	6.27	129.91	121.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	151	TRP	CA-CB-CG	6.27	125.51	113.60
21	N	736	PHE	CA-CB-CG	-6.27	107.53	113.80
20	Z	912	PHE	N-CA-CB	6.26	119.22	110.26
32	M	53	HIS	CE1-NE2-CD2	-6.26	102.74	109.00
32	M	310	ASN	N-CA-CB	6.26	119.87	110.22
25	R	60	ALA	CA-C-O	-6.26	111.91	117.98
30	K	126	LEU	CA-C-O	-6.26	114.11	121.44
20	Z	634	ASP	CA-CB-CG	6.26	118.86	112.60
23	P	38	GLN	OE1-CD-NE2	-6.26	116.34	122.60
14	7	80	ASP	CA-CB-CG	6.26	118.86	112.60
25	R	124	ASP	CA-CB-CG	-6.26	106.34	112.60
29	I	148	LEU	N-CA-C	-6.26	100.00	109.95
24	Q	49	LYS	CA-C-N	6.26	128.67	120.28
24	Q	49	LYS	C-N-CA	6.26	128.67	120.28
6	f	83	VAL	CA-CB-CG1	6.26	121.04	110.40
21	N	354	PRO	CA-C-O	-6.26	110.14	119.34
23	P	422	LEU	CA-C-N	6.26	128.66	120.28
23	P	422	LEU	C-N-CA	6.26	128.66	120.28
24	Q	153	ASP	CA-CB-CG	-6.25	106.34	112.60
26	U	127	GLN	N-CA-CB	6.25	121.06	110.49
8	1	146	TYR	N-CA-C	-6.25	104.00	111.69
18	X	127	GLY	N-CA-C	-6.25	104.77	112.77
20	Z	586	GLU	O-C-N	6.25	128.75	122.12
21	N	298	TYR	O-C-N	6.25	128.75	122.12
21	N	336	ASN	CB-CA-C	-6.25	100.22	110.85
21	N	740	TRP	CB-CG-CD2	-6.25	118.05	126.80
24	Q	340	ASP	CA-C-N	6.25	129.17	120.29
24	Q	340	ASP	C-N-CA	6.25	129.17	120.29
14	7	145	ASN	N-CA-CB	6.25	121.25	111.56
22	S	484	ASP	CA-CB-CG	-6.25	106.35	112.60
20	Z	58	GLU	CB-CA-C	-6.25	99.34	109.72
31	L	141	LYS	N-CA-C	-6.25	99.57	109.07
7	g	183	HIS	CE1-NE2-CD2	-6.25	102.75	109.00
11	4	135	TYR	N-CA-C	-6.25	105.41	113.16
20	Z	439	TYR	CB-CG-CD1	6.25	130.17	120.80
21	N	67	LYS	CA-C-N	6.25	129.02	120.46
21	N	67	LYS	C-N-CA	6.25	129.02	120.46
21	N	354	PRO	O-C-N	6.25	130.71	122.27
33	J	238	ARG	CA-C-N	6.25	128.65	120.28
33	J	238	ARG	C-N-CA	6.25	128.65	120.28
12	l	150	SER	O-C-N	-6.25	115.94	122.94
1	A	15	HIS	CE1-NE2-CD2	-6.25	102.75	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	X	119	LYS	N-CA-C	6.25	119.07	111.82
22	S	481	TYR	O-C-N	6.25	126.04	120.48
25	R	262	GLU	CA-C-O	-6.25	114.44	121.81
26	U	147	GLY	N-CA-C	-6.25	106.62	115.43
30	K	402	ILE	CA-C-N	6.25	133.47	121.54
30	K	402	ILE	C-N-CA	6.25	133.47	121.54
10	3	16	THR	N-CA-CB	6.25	120.47	110.85
11	4	44	MET	CG-SD-CE	-6.25	87.16	100.90
25	R	157	SER	CA-C-O	-6.25	113.93	120.55
13	m	214	ILE	N-CA-C	-6.24	98.64	107.75
21	N	56	SER	N-CA-C	-6.24	105.30	113.17
22	S	364	ILE	N-CA-CB	6.24	122.07	110.77
32	M	151	ASP	N-CA-CB	6.24	119.37	110.13
9	i	167	LEU	N-CA-C	6.24	117.75	111.07
12	l	284	ASN	N-CA-C	-6.24	105.42	113.16
6	f	200	SER	CA-C-N	6.24	130.17	120.75
6	f	200	SER	C-N-CA	6.24	130.17	120.75
6	F	233	TYR	N-CA-C	-6.24	103.12	112.54
14	7	137	ARG	NE-CZ-NH1	6.24	127.74	121.50
27	O	249	ASP	CA-C-N	6.24	129.15	120.29
27	O	249	ASP	C-N-CA	6.24	129.15	120.29
2	b	34	SER	N-CA-C	-6.24	99.56	109.23
3	c	101	THR	O-C-N	6.24	129.26	122.15
22	S	391	GLY	CA-C-N	6.24	129.28	120.42
22	S	391	GLY	C-N-CA	6.24	129.28	120.42
26	U	54	LEU	CA-C-N	6.24	126.57	119.83
26	U	54	LEU	C-N-CA	6.24	126.57	119.83
29	I	157	VAL	N-CA-C	-6.24	104.77	110.82
29	I	225	PRO	CA-C-O	-6.24	114.23	121.34
33	J	14	THR	N-CA-CB	6.24	121.03	110.49
1	a	161	GLY	CA-C-O	6.24	125.53	118.86
7	g	178	LYS	CA-C-N	6.24	129.14	120.29
7	g	178	LYS	C-N-CA	6.24	129.14	120.29
25	R	148	ASP	N-CA-C	-6.24	104.56	111.36
21	N	674	GLN	CA-C-N	6.23	128.41	120.56
21	N	674	GLN	C-N-CA	6.23	128.41	120.56
4	d	246	GLN	N-CA-C	-6.23	104.57	111.36
14	n	81	ASN	N-CA-C	-6.23	104.15	112.94
13	6	163	ASN	OD1-CG-ND2	6.23	128.83	122.60
21	N	395	ALA	CA-C-N	6.23	128.54	120.44
21	N	395	ALA	C-N-CA	6.23	128.54	120.44
29	I	117	HIS	N-CA-C	-6.23	100.33	109.18

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	223	THR	N-CA-C	-6.23	98.83	109.24
25	R	110	ILE	N-CA-CB	6.23	117.84	110.55
18	X	125	MET	CG-SD-CE	-6.23	87.20	100.90
33	J	12	LEU	N-CA-C	-6.23	104.27	113.61
6	f	121	GLN	CA-C-N	6.23	130.32	121.42
6	f	121	GLN	C-N-CA	6.23	130.32	121.42
2	B	94	HIS	CA-CB-CG	-6.23	107.57	113.80
3	C	24	TYR	CB-CG-CD2	-6.23	111.46	120.80
5	E	65	GLU	N-CA-C	-6.23	98.75	108.90
21	N	274	VAL	N-CA-CB	6.23	119.01	110.54
26	U	157	LEU	N-CA-C	-6.23	99.44	109.40
4	D	89	ALA	CA-C-N	6.23	129.13	120.29
4	D	89	ALA	C-N-CA	6.23	129.13	120.29
29	I	370	ASN	CA-C-N	6.23	132.33	122.93
29	I	370	ASN	C-N-CA	6.23	132.33	122.93
1	A	141	LEU	N-CA-C	-6.22	98.75	108.90
4	D	22	TYR	CB-CG-CD2	-6.22	111.46	120.80
27	O	124	ASP	CA-CB-CG	6.22	118.83	112.60
33	J	381	ASP	CA-C-N	6.22	128.62	120.28
33	J	381	ASP	C-N-CA	6.22	128.62	120.28
7	g	87	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
7	g	100	LYS	N-CA-CB	6.22	119.03	110.01
28	H	419	LEU	N-CA-CB	6.22	119.92	110.28
9	2	223	ASN	CB-CA-C	-6.22	101.54	110.62
14	7	93	MET	CA-C-N	6.22	128.62	120.28
14	7	93	MET	C-N-CA	6.22	128.62	120.28
2	b	94	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
9	i	247	VAL	N-CA-C	-6.22	99.44	108.89
22	S	183	LEU	CA-C-N	6.22	128.53	120.44
22	S	183	LEU	C-N-CA	6.22	128.53	120.44
32	M	199	LEU	CA-C-O	-6.22	112.64	118.73
1	a	247	ALA	O-C-N	6.22	128.71	122.12
14	7	69	PHE	N-CA-C	-6.22	98.77	108.90
12	l	168	ALA	CA-C-O	6.22	126.83	118.38
16	V	71	MET	CB-CA-C	6.22	118.20	108.88
20	Z	151	HIS	CB-CA-C	-6.22	99.21	109.65
21	N	506	GLN	CA-C-N	6.22	129.12	120.29
21	N	506	GLN	C-N-CA	6.22	129.12	120.29
23	P	65	LEU	CA-C-N	6.22	129.12	120.29
23	P	65	LEU	C-N-CA	6.22	129.12	120.29
30	K	139	LEU	N-CA-C	-6.22	99.77	109.72
32	M	322	LYS	N-CA-CB	6.22	120.80	110.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	12	TYR	CA-C-O	6.21	125.30	118.65
22	S	302	HIS	CG-CD2-NE2	6.21	113.41	107.20
24	Q	346	ASN	CA-CB-CG	-6.21	106.39	112.60
25	R	337	VAL	CA-C-N	6.21	129.12	120.29
25	R	337	VAL	C-N-CA	6.21	129.12	120.29
26	U	204	LEU	N-CA-CB	6.21	119.25	110.12
30	K	416	LYS	CA-C-N	6.21	133.41	121.54
30	K	416	LYS	C-N-CA	6.21	133.41	121.54
4	D	253	ASN	CA-C-O	-6.21	114.30	120.82
27	O	93	ASP	CA-CB-CG	-6.21	106.39	112.60
30	K	299	LEU	CA-C-N	6.21	128.89	120.44
30	K	299	LEU	C-N-CA	6.21	128.89	120.44
31	L	223	PRO	CB-CA-C	6.21	118.50	110.92
25	R	117	ILE	CA-C-N	6.21	128.51	120.44
25	R	117	ILE	C-N-CA	6.21	128.51	120.44
2	b	207	ASP	N-CA-CB	6.21	120.13	110.44
10	j	108	VAL	N-CA-C	-6.21	99.11	108.17
12	l	263	HIS	N-CA-CB	6.21	121.08	111.39
14	n	132	VAL	CB-CA-C	-6.21	102.04	112.16
5	E	136	ARG	N-CA-C	-6.21	102.63	108.22
20	Z	413	ASP	CA-CB-CG	-6.21	106.39	112.60
31	L	201	LEU	O-C-N	6.21	128.46	122.07
7	g	15	PHE	CA-C-O	-6.21	113.96	121.28
9	i	245	SER	CB-CA-C	-6.21	100.00	110.43
13	6	105	LEU	O-C-N	-6.21	114.16	122.23
15	W	126	ILE	CA-C-N	6.21	128.60	120.28
15	W	126	ILE	C-N-CA	6.21	128.60	120.28
21	N	380	LEU	N-CA-C	-6.21	103.77	113.02
28	H	402	ILE	O-C-N	6.21	129.83	123.00
30	K	326	PRO	N-CA-CB	6.21	106.76	102.35
21	N	673	PRO	O-C-N	6.21	130.22	122.22
25	R	406	GLN	N-CA-C	6.21	118.04	111.28
27	O	285	SER	CB-CA-C	-6.21	100.49	110.79
12	l	131	GLU	CA-C-N	6.20	129.74	120.31
12	l	131	GLU	C-N-CA	6.20	129.74	120.31
3	C	219	GLY	N-CA-C	-6.20	105.98	115.66
32	M	203	ARG	CA-C-N	6.20	129.21	120.28
32	M	203	ARG	C-N-CA	6.20	129.21	120.28
4	D	96	HIS	CG-CD2-NE2	6.20	113.40	107.20
29	I	169	SER	CB-CA-C	-6.20	100.31	110.85
12	l	183	GLU	N-CA-C	-6.20	104.98	114.16
33	J	237	ALA	CA-C-N	6.20	129.09	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	237	ALA	C-N-CA	6.20	129.09	120.29
1	a	102	ALA	CA-C-N	6.20	129.09	120.29
1	a	102	ALA	C-N-CA	6.20	129.09	120.29
12	l	263	HIS	CG-CD2-NE2	6.20	113.40	107.20
21	N	288	ASN	O-C-N	6.20	128.69	122.12
27	O	373	TRP	O-C-N	-6.20	114.30	122.42
32	M	345	ARG	N-CA-CB	6.20	120.97	110.49
21	N	297	ASP	CA-C-O	-6.20	113.85	120.42
21	N	440	ASP	CA-CB-CG	6.20	118.80	112.60
5	e	186	GLU	CB-CA-C	-6.19	100.83	110.37
8	h	19	ASP	CA-CB-CG	-6.19	106.41	112.60
31	L	199	LEU	CA-C-O	-6.19	112.66	118.73
11	k	32	ASP	N-CA-C	-6.19	100.02	108.38
23	P	143	LEU	CB-CA-C	-6.19	100.32	110.85
26	U	235	LEU	CA-C-N	6.19	129.69	120.83
26	U	235	LEU	C-N-CA	6.19	129.69	120.83
28	H	207	THR	CA-CB-OG1	6.19	118.89	109.60
14	7	172	SER	CA-C-N	6.19	125.89	119.64
14	7	172	SER	C-N-CA	6.19	125.89	119.64
18	X	122	TYR	N-CA-C	6.19	118.03	111.28
20	Z	731	GLY	CA-C-N	6.19	128.94	120.46
20	Z	731	GLY	C-N-CA	6.19	128.94	120.46
21	N	481	ALA	CA-C-O	6.19	127.11	120.55
22	S	138	MET	N-CA-C	6.19	117.69	111.07
29	I	298	GLY	CA-C-N	6.19	129.08	120.29
29	I	298	GLY	C-N-CA	6.19	129.08	120.29
31	L	412	PRO	CA-C-N	6.19	129.08	120.29
31	L	412	PRO	C-N-CA	6.19	129.08	120.29
15	W	116	SER	O-C-N	-6.19	115.44	121.94
15	W	179	ARG	CA-C-N	6.19	133.36	121.54
15	W	179	ARG	C-N-CA	6.19	133.36	121.54
18	X	94	ASN	CA-CB-CG	6.19	118.79	112.60
23	P	37	ASP	N-CA-CB	6.19	119.22	110.12
4	d	4	TYR	CA-C-O	6.19	127.20	119.59
8	1	127	SER	N-CA-C	-6.19	100.03	108.38
27	O	214	ALA	N-CA-C	6.19	118.82	111.71
32	M	279	PHE	CA-C-N	6.19	131.16	123.12
32	M	279	PHE	C-N-CA	6.19	131.16	123.12
1	a	43	LEU	N-CA-C	-6.18	97.74	108.69
2	b	204	PHE	CA-CB-CG	-6.18	107.61	113.80
13	6	28	PHE	O-C-N	-6.18	116.20	123.25
23	P	323	ASN	N-CA-C	-6.18	105.22	112.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	171	MET	CA-C-N	6.18	130.15	121.24
29	I	171	MET	C-N-CA	6.18	130.15	121.24
32	M	398	ALA	N-CA-C	-6.18	104.54	111.28
4	d	53	LYS	N-CA-C	-6.18	105.32	112.92
5	E	48	LEU	N-CA-C	-6.18	97.20	108.02
15	W	182	TYR	O-C-N	-6.18	115.70	122.07
16	V	28	TYR	CA-CB-CG	-6.18	102.77	113.90
23	P	298	SER	N-CA-CB	6.18	119.31	110.16
31	L	65	LEU	O-C-N	6.18	128.44	122.07
33	J	170	HIS	CG-CD2-NE2	6.18	113.38	107.20
3	C	168	ASN	OD1-CG-ND2	-6.18	116.42	122.60
7	g	190	ARG	NE-CZ-NH2	6.18	124.76	119.20
7	g	205	GLU	N-CA-C	-6.18	105.32	112.92
17	T	219	LYS	N-CA-C	-6.18	104.09	111.69
22	S	66	GLN	CA-C-O	-6.18	114.00	120.55
7	g	162	GLY	N-CA-C	-6.18	98.54	113.18
12	l	239	ALA	CB-CA-C	-6.18	101.18	110.88
13	m	72	LEU	N-CA-CB	6.18	119.20	110.12
7	G	234	ASP	CA-CB-CG	-6.18	106.42	112.60
9	2	60	CYS	N-CA-C	-6.18	99.68	109.07
30	K	355	THR	N-CA-CB	6.18	119.81	110.30
1	a	174	LYS	CB-CA-C	-6.17	101.08	111.02
24	Q	135	HIS	CE1-NE2-CD2	-6.17	102.83	109.00
30	K	204	ASP	N-CA-CB	6.17	121.23	109.44
22	S	77	THR	N-CA-CB	6.17	119.19	110.12
2	b	107	THR	O-C-N	6.17	128.43	122.07
2	B	184	GLU	CA-C-N	6.17	128.46	120.44
2	B	184	GLU	C-N-CA	6.17	128.46	120.44
22	S	343	LEU	CA-C-N	6.17	126.07	119.28
22	S	343	LEU	C-N-CA	6.17	126.07	119.28
24	Q	120	LYS	O-C-N	6.17	128.76	122.09
27	O	16	MET	O-C-N	6.17	128.66	122.12
29	I	95	GLN	CA-C-N	6.17	128.55	120.28
29	I	95	GLN	C-N-CA	6.17	128.55	120.28
11	k	133	HIS	CE1-NE2-CD2	-6.17	102.83	109.00
1	a	64	LEU	CA-C-O	-6.17	114.41	121.19
2	B	110	LEU	CA-C-N	6.17	128.91	120.46
2	B	110	LEU	C-N-CA	6.17	128.91	120.46
25	R	70	TYR	N-CA-CB	6.17	118.95	110.01
2	B	73	ALA	N-CA-C	6.17	118.44	109.07
14	7	89	ASP	CA-C-N	6.17	130.90	120.29
14	7	89	ASP	C-N-CA	6.17	130.90	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	272	ASN	OD1-CG-ND2	-6.17	116.43	122.60
20	Z	267	THR	N-CA-CB	6.17	119.19	110.12
22	S	127	THR	CA-C-N	6.17	128.98	122.14
22	S	127	THR	C-N-CA	6.17	128.98	122.14
23	P	163	LEU	CA-C-O	6.17	127.05	120.70
24	Q	352	GLU	CA-C-N	6.17	125.38	118.97
24	Q	352	GLU	C-N-CA	6.17	125.38	118.97
6	f	171	TYR	O-C-N	-6.17	115.72	122.07
21	N	417	ARG	N-CA-CB	6.17	119.71	110.22
27	O	91	ASP	N-CA-C	-6.17	97.23	108.02
27	O	119	SER	N-CA-CB	6.17	120.91	110.49
33	J	6	THR	O-C-N	-6.17	116.12	123.27
14	n	236	ASN	CA-CB-CG	-6.16	106.44	112.60
8	1	30	THR	CA-CB-OG1	6.16	118.84	109.60
9	2	32	ILE	N-CA-C	-6.16	100.21	108.35
13	6	30	VAL	CA-CB-CG2	6.16	120.88	110.40
20	Z	428	TRP	N-CA-C	-6.16	105.06	112.58
22	S	74	LEU	CA-C-N	6.16	128.54	120.28
22	S	74	LEU	C-N-CA	6.16	128.54	120.28
16	V	237	ASN	CA-C-N	6.16	128.45	120.44
16	V	237	ASN	C-N-CA	6.16	128.45	120.44
21	N	731	VAL	N-CA-C	-6.16	104.74	110.53
2	b	114	VAL	CA-C-N	6.16	129.67	120.31
2	b	114	VAL	C-N-CA	6.16	129.67	120.31
6	f	230	VAL	CA-C-O	6.16	126.01	119.91
7	g	220	SER	N-CA-C	-6.16	98.22	108.75
9	i	122	HIS	CE1-NE2-CD2	-6.16	102.84	109.00
30	K	242	PHE	CB-CA-C	-6.16	101.33	111.68
2	b	243	ILE	O-C-N	6.16	127.84	121.87
6	f	104	ALA	N-CA-CB	6.16	119.13	109.83
6	F	213	ILE	N-CA-C	-6.16	99.25	108.12
7	g	54	ILE	N-CA-C	-6.16	98.76	107.75
13	6	139	TYR	CA-C-O	-6.16	114.24	121.44
24	Q	27	TYR	N-CA-CB	6.16	119.17	110.12
26	U	298	ASN	CA-C-N	6.16	129.14	120.28
26	U	298	ASN	C-N-CA	6.16	129.14	120.28
24	Q	334	HIS	ND1-CE1-NE2	6.15	114.55	108.40
14	n	198	ILE	O-C-N	-6.15	116.48	120.42
15	W	140	ASP	N-CA-CB	6.15	120.74	110.59
21	N	63	LEU	CA-C-N	6.15	129.16	120.42
21	N	63	LEU	C-N-CA	6.15	129.16	120.42
24	Q	346	ASN	OD1-CG-ND2	6.15	128.75	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	408	ARG	NE-CZ-NH1	-6.15	115.35	121.50
30	K	67	TYR	N-CA-C	6.15	118.79	111.71
22	S	34	LEU	CA-C-O	-6.15	114.36	120.70
30	K	82	ALA	CA-C-N	6.15	129.66	120.31
30	K	82	ALA	C-N-CA	6.15	129.66	120.31
7	g	180	VAL	CA-CB-CG1	6.15	120.85	110.40
2	B	224	TYR	N-CA-C	-6.15	99.34	108.99
29	I	420	LYS	CB-CA-C	-6.15	100.58	110.79
11	k	165	VAL	CA-C-O	-6.15	114.56	120.95
17	T	150	ARG	CD-NE-CZ	-6.15	115.79	124.40
32	M	403	LEU	CA-C-N	6.15	128.80	120.44
32	M	403	LEU	C-N-CA	6.15	128.80	120.44
5	e	24	VAL	CA-C-N	6.15	129.13	120.28
5	e	24	VAL	C-N-CA	6.15	129.13	120.28
14	n	41	GLY	N-CA-C	-6.15	104.34	112.82
4	D	79	ASN	CA-C-N	6.15	129.02	120.29
4	D	79	ASN	C-N-CA	6.15	129.02	120.29
6	f	3	ARG	CA-C-N	6.14	132.76	121.70
6	f	3	ARG	C-N-CA	6.14	132.76	121.70
1	A	92	ASN	CA-CB-CG	6.14	118.75	112.60
6	F	182	ILE	N-CA-CB	6.14	117.56	110.49
28	H	377	PHE	CA-CB-CG	-6.14	107.66	113.80
30	K	255	ARG	CA-C-O	-6.14	113.91	120.42
2	B	56	ALA	O-C-N	6.14	130.49	122.93
22	S	51	ARG	CA-C-N	6.14	129.65	120.31
22	S	51	ARG	C-N-CA	6.14	129.65	120.31
22	S	131	THR	CA-C-O	6.14	126.93	119.31
23	P	268	LEU	CA-C-N	6.14	129.14	120.42
23	P	268	LEU	C-N-CA	6.14	129.14	120.42
26	U	114	THR	CA-C-N	6.14	132.48	122.65
26	U	114	THR	C-N-CA	6.14	132.48	122.65
1	a	147	ASP	CA-CB-CG	6.14	118.74	112.60
20	Z	36	GLU	N-CA-C	-6.14	105.83	113.38
22	S	349	THR	O-C-N	6.14	128.40	122.07
13	6	36	ARG	NE-CZ-NH2	6.14	124.73	119.20
20	Z	310	LEU	CA-C-N	6.14	128.51	120.28
20	Z	310	LEU	C-N-CA	6.14	128.51	120.28
3	c	235	ILE	O-C-N	-6.14	115.92	121.87
27	O	321	LYS	CA-C-N	6.14	128.42	120.44
27	O	321	LYS	C-N-CA	6.14	128.42	120.44
8	1	168	LEU	CB-CA-C	-6.14	100.42	110.85
15	W	124	GLU	CB-CA-C	-6.14	100.61	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	574	TYR	CB-CG-CD2	-6.14	111.60	120.80
21	N	418	ASP	CB-CA-C	-6.14	100.42	110.85
14	n	183	MET	CG-SD-CE	-6.13	87.41	100.90
23	P	80	THR	CA-C-N	6.13	128.50	120.28
23	P	80	THR	C-N-CA	6.13	128.50	120.28
30	K	73	ARG	NE-CZ-NH2	6.13	124.72	119.20
6	F	181	LYS	N-CA-C	6.13	118.76	111.71
14	7	121	GLU	N-CA-C	-6.13	99.58	109.58
20	Z	709	LYS	CA-C-N	6.13	128.78	120.44
20	Z	709	LYS	C-N-CA	6.13	128.78	120.44
21	N	435	GLY	N-CA-C	-6.13	105.10	115.34
21	N	892	PRO	N-CA-C	-6.13	100.84	111.32
33	J	282	PHE	CA-C-N	6.13	132.74	121.70
33	J	282	PHE	C-N-CA	6.13	132.74	121.70
31	L	406	ASP	CA-CB-CG	-6.13	106.47	112.60
32	M	57	VAL	O-C-N	6.13	128.14	121.83
8	h	163	PHE	CA-C-O	6.13	127.44	121.00
1	A	209	HIS	CA-C-O	-6.13	113.92	120.42
28	H	156	VAL	N-CA-C	-6.13	99.58	108.71
29	I	150	HIS	ND1-CE1-NE2	6.13	114.53	108.40
2	B	104	TYR	O-C-N	-6.13	114.57	121.43
5	E	233	ASN	CB-CA-C	-6.13	97.88	110.38
8	1	47	HIS	CA-CB-CG	6.13	119.93	113.80
20	Z	603	VAL	CA-CB-CG2	-6.13	99.98	110.40
28	H	203	LYS	CA-C-N	6.13	127.50	119.84
28	H	203	LYS	C-N-CA	6.13	127.50	119.84
29	I	68	HIS	CB-CG-ND1	6.12	131.89	122.70
29	I	85	PHE	O-C-N	6.12	129.92	123.06
12	l	147	GLU	CA-C-N	6.12	129.41	120.71
12	l	147	GLU	C-N-CA	6.12	129.41	120.71
23	P	64	ASP	CA-C-N	6.12	128.99	120.29
23	P	64	ASP	C-N-CA	6.12	128.99	120.29
29	I	110	GLU	CB-CA-C	-6.12	100.50	110.79
3	C	31	HIS	CE1-NE2-CD2	-6.12	102.88	109.00
19	Y	20	LYS	CA-C-N	6.12	128.98	120.29
19	Y	20	LYS	C-N-CA	6.12	128.98	120.29
20	Z	97	PRO	N-CA-CB	6.12	110.00	103.39
29	I	150	HIS	CG-CD2-NE2	6.12	113.32	107.20
32	M	62	ILE	N-CA-CB	6.12	117.71	110.55
8	1	84	THR	CA-C-N	6.12	128.39	120.44
8	1	84	THR	C-N-CA	6.12	128.39	120.44
20	Z	196	SER	N-CA-C	-6.12	104.61	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	239	LEU	CA-C-N	6.12	129.61	120.31
21	N	239	LEU	C-N-CA	6.12	129.61	120.31
30	K	88	ARG	CB-CA-C	-6.12	101.23	110.90
4	d	90	ARG	CA-C-N	6.12	128.84	120.46
4	d	90	ARG	C-N-CA	6.12	128.84	120.46
14	n	43	SER	CA-C-N	6.12	131.49	122.99
14	n	43	SER	C-N-CA	6.12	131.49	122.99
12	5	241	HIS	ND1-CE1-NE2	6.12	114.52	108.40
16	V	104	VAL	N-CA-C	-6.12	101.66	109.30
30	K	80	LYS	N-CA-CB	6.12	119.31	110.20
7	g	28	VAL	CB-CA-C	-6.11	103.89	112.14
4	D	115	GLY	N-CA-C	-6.11	104.95	112.77
9	2	216	LEU	CA-C-N	6.11	129.44	120.82
9	2	216	LEU	C-N-CA	6.11	129.44	120.82
18	X	62	ASP	CA-C-O	-6.11	113.02	119.50
20	Z	799	PHE	CA-CB-CG	-6.11	107.69	113.80
28	H	306	ILE	N-CA-C	-6.11	99.61	108.17
6	f	122	SER	N-CA-CB	6.11	119.29	110.06
3	C	110	ILE	CB-CA-C	-6.11	103.78	112.22
1	a	209	HIS	CG-CD2-NE2	6.11	113.31	107.20
5	e	113	THR	O-C-N	6.11	128.60	122.12
12	l	134	LEU	CA-C-N	6.11	127.78	120.14
12	l	134	LEU	C-N-CA	6.11	127.78	120.14
4	D	80	ALA	CA-C-N	6.11	128.97	120.29
4	D	80	ALA	C-N-CA	6.11	128.97	120.29
10	3	145	GLN	O-C-N	-6.11	115.73	122.09
22	S	233	LEU	CA-C-N	6.11	128.26	120.56
22	S	233	LEU	C-N-CA	6.11	128.26	120.56
6	F	106	GLU	O-C-N	-6.11	115.19	122.15
15	W	107	HIS	CA-C-O	-6.11	114.90	121.56
22	S	238	LEU	CA-C-N	6.11	128.97	120.29
22	S	238	LEU	C-N-CA	6.11	128.97	120.29
23	P	401	ASN	CA-CB-CG	6.11	118.71	112.60
13	m	178	LYS	N-CA-CB	6.11	119.57	109.98
7	G	152	GLU	CA-C-O	-6.11	115.10	120.60
10	3	171	LEU	N-CA-C	6.11	117.73	111.14
22	S	472	HIS	CE1-NE2-CD2	-6.11	102.89	109.00
26	U	24	ARG	CA-C-O	6.11	126.86	119.78
4	d	44	LEU	CA-C-N	6.11	126.31	121.61
4	d	44	LEU	C-N-CA	6.11	126.31	121.61
2	B	191	ILE	N-CA-C	-6.11	104.55	110.72
9	2	132	VAL	CA-CB-CG1	-6.11	100.02	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	V	277	LYS	CA-C-N	6.11	128.75	120.44
16	V	277	LYS	C-N-CA	6.11	128.75	120.44
20	Z	803	ALA	N-CA-C	-6.11	97.80	110.80
21	N	681	ASN	CA-C-N	6.11	128.96	120.29
21	N	681	ASN	C-N-CA	6.11	128.96	120.29
27	O	319	LEU	N-CA-C	-6.11	98.50	108.82
5	E	230	ILE	O-C-N	-6.10	115.75	122.83
29	I	190	GLN	CA-C-N	6.10	128.25	120.56
29	I	190	GLN	C-N-CA	6.10	128.25	120.56
30	K	200	GLN	OE1-CD-NE2	-6.10	116.50	122.60
18	X	93	SER	CB-CA-C	-6.10	102.80	111.95
22	S	59	ASP	N-CA-CB	6.10	119.19	110.16
3	c	111	LEU	CA-C-N	6.10	128.82	120.46
3	c	111	LEU	C-N-CA	6.10	128.82	120.46
1	A	201	LYS	N-CA-CB	6.10	119.96	110.44
20	Z	727	GLU	CA-C-N	6.10	133.19	121.54
20	Z	727	GLU	C-N-CA	6.10	133.19	121.54
27	O	40	GLN	OE1-CD-NE2	6.10	128.70	122.60
31	L	71	ASP	N-CA-CB	6.10	119.19	110.16
32	M	349	PHE	N-CA-C	-6.10	99.77	109.04
1	A	93	ALA	O-C-N	6.10	128.58	122.12
13	6	48	GLU	O-C-N	-6.09	114.31	121.32
30	K	387	MET	CG-SD-CE	-6.09	87.49	100.90
31	L	57	LEU	N-CA-C	6.09	117.92	111.28
21	N	370	SER	CA-C-N	6.09	128.44	120.28
21	N	370	SER	C-N-CA	6.09	128.44	120.28
1	a	164	VAL	N-CA-C	-6.09	99.71	108.42
5	E	32	LYS	CA-C-N	6.09	128.44	120.28
5	E	32	LYS	C-N-CA	6.09	128.44	120.28
15	W	181	LEU	CA-C-N	6.09	128.36	120.44
15	W	181	LEU	C-N-CA	6.09	128.36	120.44
21	N	499	HIS	ND1-CE1-NE2	6.09	114.49	108.40
24	Q	30	LEU	CA-C-N	6.09	128.36	120.44
24	Q	30	LEU	C-N-CA	6.09	128.36	120.44
24	Q	196	ALA	CB-CA-C	-6.09	100.68	110.79
20	Z	129	ASN	N-CA-C	-6.09	104.64	111.28
20	Z	480	ASN	CA-CB-CG	6.09	118.69	112.60
21	N	16	ASN	CA-C-N	6.09	129.47	120.95
21	N	16	ASN	C-N-CA	6.09	129.47	120.95
26	U	70	HIS	CG-CD2-NE2	6.09	113.29	107.20
14	n	134	TYR	N-CA-C	6.09	117.92	111.28
28	H	439	THR	CA-C-N	6.09	129.95	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	H	439	THR	C-N-CA	6.09	129.95	120.82
3	C	145	GLY	CA-C-N	6.09	129.35	120.71
3	C	145	GLY	C-N-CA	6.09	129.35	120.71
6	F	51	ARG	CA-C-N	6.09	132.62	121.85
6	F	51	ARG	C-N-CA	6.09	132.62	121.85
23	P	336	HIS	N-CA-C	-6.09	106.11	112.93
24	Q	166	LYS	N-CA-C	-6.09	105.50	113.17
25	R	381	ILE	CB-CA-C	-6.09	101.84	110.12
6	f	192	ALA	O-C-N	6.08	128.57	122.12
16	V	72	PRO	N-CA-C	6.08	120.78	111.11
7	g	119	TYR	CA-CB-CG	-6.08	102.95	113.90
2	B	143	ASN	O-C-N	6.08	129.38	122.20
23	P	194	SER	CA-C-N	6.08	128.72	120.44
23	P	194	SER	C-N-CA	6.08	128.72	120.44
26	U	122	ILE	CB-CA-C	-6.08	103.37	110.91
13	m	167	GLN	CA-C-O	-6.08	114.32	121.44
10	3	199	TYR	N-CA-C	-6.08	100.59	110.20
20	Z	258	PRO	CB-CA-C	6.08	118.34	110.92
24	Q	135	HIS	N-CA-CB	6.08	119.06	110.12
24	Q	353	PRO	N-CA-CB	6.08	109.74	103.23
7	g	127	ASN	OD1-CG-ND2	-6.08	116.52	122.60
21	N	296	CYS	N-CA-CB	6.08	118.83	110.01
28	H	359	ASN	N-CA-C	-6.08	105.82	113.72
16	V	40	HIS	CE1-NE2-CD2	-6.08	102.92	109.00
16	V	117	TRP	N-CA-C	-6.08	99.58	107.73
23	P	234	TYR	CA-C-N	6.08	128.43	120.28
23	P	234	TYR	C-N-CA	6.08	128.43	120.28
28	H	218	ILE	CA-C-N	6.08	128.34	120.44
28	H	218	ILE	C-N-CA	6.08	128.34	120.44
7	g	143	LYS	N-CA-C	-6.08	106.12	112.93
12	5	107	LYS	O-C-N	-6.08	116.29	123.22
23	P	74	ASP	CA-CB-CG	-6.08	106.52	112.60
2	b	148	TYR	CA-C-O	6.08	127.73	121.23
10	3	203	ARG	CA-C-O	-6.08	114.35	121.16
20	Z	145	ASP	N-CA-CB	6.08	120.13	110.65
20	Z	801	HIS	CE1-NE2-CD2	-6.08	102.92	109.00
12	l	277	GLU	N-CA-C	-6.07	104.57	111.07
3	C	88	ILE	CA-C-O	-6.07	114.41	120.85
5	E	165	TYR	CA-C-O	6.07	126.92	120.36
17	T	106	ILE	N-CA-C	-6.07	104.82	110.53
24	Q	72	ASP	CA-C-N	6.07	128.42	120.28
24	Q	72	ASP	C-N-CA	6.07	128.42	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	83	GLU	N-CA-C	6.07	117.98	111.36
29	I	425	LYS	CA-C-N	6.07	128.34	120.44
29	I	425	LYS	C-N-CA	6.07	128.34	120.44
30	K	224	LYS	N-CA-CB	6.07	119.15	110.16
3	c	42	ASP	CA-CB-CG	-6.07	106.53	112.60
9	i	126	TYR	N-CA-C	-6.07	98.39	108.34
11	k	72	ASP	N-CA-CB	6.07	120.75	110.49
4	D	167	ASN	CA-C-O	-6.07	114.55	121.65
6	F	30	LYS	CA-C-O	6.07	127.19	120.63
11	4	107	TYR	N-CA-CB	6.07	120.41	110.39
17	T	32	ILE	O-C-N	-6.07	115.58	121.83
7	g	161	LYS	N-CA-C	-6.07	105.70	113.23
2	B	142	PHE	CA-CB-CG	-6.07	107.73	113.80
16	V	71	MET	CA-C-N	6.07	126.08	119.89
16	V	71	MET	C-N-CA	6.07	126.08	119.89
27	O	200	GLU	CA-C-N	6.07	125.75	119.56
27	O	200	GLU	C-N-CA	6.07	125.75	119.56
23	P	431	HIS	ND1-CE1-NE2	6.07	114.47	108.40
28	H	90	ARG	CA-C-N	6.07	128.41	120.28
28	H	90	ARG	C-N-CA	6.07	128.41	120.28
20	Z	24	THR	CA-C-N	6.07	127.42	119.84
20	Z	24	THR	C-N-CA	6.07	127.42	119.84
20	Z	87	LYS	O-C-N	-6.07	115.59	120.38
20	Z	630	LYS	CA-C-N	6.07	126.82	120.03
20	Z	630	LYS	C-N-CA	6.07	126.82	120.03
7	g	242	PHE	CB-CA-C	6.06	120.86	110.79
14	7	139	LYS	N-CA-C	-6.06	105.53	113.17
33	J	398	ILE	O-C-N	-6.06	114.99	122.57
10	j	67	PHE	N-CA-CB	6.06	119.64	110.30
7	G	237	GLN	N-CA-C	6.06	117.89	111.28
15	W	11	ASP	CA-CB-CG	-6.06	106.54	112.60
18	X	120	GLU	CA-C-O	-6.06	114.12	120.55
25	R	110	ILE	CA-C-N	6.06	128.40	120.28
25	R	110	ILE	C-N-CA	6.06	128.40	120.28
27	O	81	TYR	N-CA-CB	6.06	119.68	110.28
9	i	234	PHE	CA-C-N	6.06	127.42	119.84
9	i	234	PHE	C-N-CA	6.06	127.42	119.84
6	F	214	ALA	N-CA-C	-6.06	98.52	108.76
23	P	227	ILE	O-C-N	-6.06	115.60	121.90
32	M	368	MET	CG-SD-CE	-6.06	87.57	100.90
2	b	174	PHE	CA-C-N	6.06	128.32	120.44
2	b	174	PHE	C-N-CA	6.06	128.32	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	m	157	PHE	CA-C-O	-6.06	114.00	120.42
3	C	234	GLU	N-CA-C	-6.06	104.24	111.69
12	5	104	GLN	CB-CA-C	-6.06	101.73	111.18
18	X	131	ASN	CA-CB-CG	-6.06	106.54	112.60
21	N	352	ASN	CA-CB-CG	-6.06	106.54	112.60
9	2	170	HIS	CA-C-N	6.06	129.31	120.71
9	2	170	HIS	C-N-CA	6.06	129.31	120.71
30	K	125	THR	CA-CB-OG1	6.06	118.68	109.60
3	c	35	ALA	N-CA-C	-6.05	98.40	108.75
2	B	104	TYR	CA-C-N	6.05	126.62	120.38
2	B	104	TYR	C-N-CA	6.05	126.62	120.38
29	I	391	ASP	O-C-N	-6.05	115.25	122.15
1	A	48	LYS	N-CA-C	-6.05	103.63	113.19
3	C	172	ALA	CB-CA-C	-6.05	100.74	110.79
27	O	233	LEU	N-CA-C	6.05	117.88	111.28
29	I	333	THR	CA-CB-OG1	6.05	118.68	109.60
32	M	173	ASP	N-CA-CB	6.05	120.72	110.49
22	S	86	SER	CA-C-O	-6.05	114.09	120.63
27	O	331	ALA	CB-CA-C	-6.05	100.75	110.79
2	B	213	ILE	CA-C-O	-6.05	115.64	121.63
2	B	223	GLY	O-C-N	-6.05	114.71	122.39
11	4	167	GLU	CA-C-N	6.05	128.39	120.28
11	4	167	GLU	C-N-CA	6.05	128.39	120.28
23	P	197	THR	CA-C-O	-6.05	114.14	120.55
4	d	199	LEU	N-CA-C	6.05	118.84	111.82
11	k	83	PHE	O-C-N	6.05	128.53	122.12
4	D	102	ASP	CA-C-O	-6.05	114.05	120.28
25	R	357	PHE	CA-CB-CG	6.05	119.85	113.80
12	5	263	HIS	ND1-CE1-NE2	6.05	114.45	108.40
16	V	122	ASP	CA-CB-CG	-6.05	106.55	112.60
20	Z	480	ASN	O-C-N	-6.04	115.92	121.30
4	d	118	GLN	OE1-CD-NE2	6.04	128.64	122.60
9	2	164	MET	CA-C-N	6.04	128.38	120.28
9	2	164	MET	C-N-CA	6.04	128.38	120.28
11	4	74	GLU	N-CA-C	-6.04	99.39	109.24
12	5	141	HIS	CE1-NE2-CD2	-6.04	102.96	109.00
5	e	174	SER	CB-CA-C	-6.04	100.76	110.79
7	g	181	ASP	CA-CB-CG	-6.04	106.56	112.60
10	j	192	LYS	O-C-N	-6.04	114.56	122.59
15	W	38	GLN	CB-CG-CD	-6.04	102.33	112.60
24	Q	8	LEU	CA-C-N	6.04	128.87	120.29
24	Q	8	LEU	C-N-CA	6.04	128.87	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	214	ALA	N-CA-C	-6.04	101.97	110.31
33	J	278	GLN	CA-C-N	6.04	133.08	121.54
33	J	278	GLN	C-N-CA	6.04	133.08	121.54
33	J	384	LEU	O-C-N	6.04	129.04	122.15
6	F	86	ASN	OD1-CG-ND2	6.04	128.64	122.60
1	a	13	ASP	CA-CB-CG	6.04	118.64	112.60
14	n	141	ASN	N-CA-CB	6.04	120.18	110.88
11	4	41	HIS	ND1-CE1-NE2	6.04	114.44	108.40
24	Q	63	GLN	N-CA-C	-6.04	106.24	113.97
24	Q	276	ASP	CA-C-O	6.04	126.95	120.55
25	R	267	LYS	CA-C-N	6.04	128.87	120.29
25	R	267	LYS	C-N-CA	6.04	128.87	120.29
33	J	111	GLN	CG-CD-NE2	-6.04	107.34	116.40
12	5	112	ILE	O-C-N	6.04	128.18	121.90
15	W	76	LEU	CA-C-O	6.04	126.81	119.38
3	c	30	SER	CB-CA-C	-6.04	100.36	110.56
11	k	44	MET	CA-C-O	6.04	126.85	120.33
6	F	36	VAL	CA-C-N	6.04	128.57	122.66
6	F	36	VAL	C-N-CA	6.04	128.57	122.66
11	4	78	GLN	CA-C-N	6.04	128.37	120.28
11	4	78	GLN	C-N-CA	6.04	128.37	120.28
18	X	73	THR	N-CA-C	-6.03	98.44	108.34
21	N	538	LYS	CA-C-N	6.03	128.28	120.44
21	N	538	LYS	C-N-CA	6.03	128.28	120.44
32	M	15	ASP	N-CA-CB	6.03	120.26	110.42
14	7	218	TYR	CA-C-N	6.03	128.28	120.44
14	7	218	TYR	C-N-CA	6.03	128.28	120.44
3	c	6	TYR	CA-C-O	6.03	125.41	119.08
1	A	71	TYR	N-CA-C	-6.03	105.47	114.64
21	N	653	ARG	NE-CZ-NH2	6.03	124.63	119.20
27	O	235	HIS	CE1-NE2-CD2	-6.03	102.97	109.00
8	1	89	SER	CA-C-N	6.03	130.20	120.55
8	1	89	SER	C-N-CA	6.03	130.20	120.55
23	P	264	ILE	O-C-N	-6.03	116.02	121.87
26	U	169	ILE	CA-C-N	6.03	126.63	120.00
26	U	169	ILE	C-N-CA	6.03	126.63	120.00
26	U	216	ASN	OD1-CG-ND2	6.03	128.63	122.60
29	I	94	LYS	CB-CA-C	-6.03	100.60	110.85
6	f	202	ARG	O-C-N	6.03	130.71	123.36
10	j	44	PHE	CA-CB-CG	-6.03	107.77	113.80
5	E	44	GLU	N-CA-C	-6.03	104.75	114.09
20	Z	13	ASP	CA-CB-CG	-6.03	106.57	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	699	ALA	CA-C-O	6.03	126.81	120.42
22	S	420	GLU	N-CA-C	-6.03	104.71	111.28
23	P	155	GLU	CA-C-N	6.03	129.47	120.31
23	P	155	GLU	C-N-CA	6.03	129.47	120.31
27	O	9	THR	N-CA-C	-6.03	104.79	111.36
27	O	78	VAL	CA-C-O	-6.03	114.46	120.85
10	j	150	CYS	CA-C-N	6.03	128.84	120.29
10	j	150	CYS	C-N-CA	6.03	128.84	120.29
21	N	507	GLU	N-CA-C	6.03	117.93	111.36
26	U	206	ASP	CA-CB-CG	-6.03	106.57	112.60
1	a	32	PHE	N-CA-CB	6.02	120.17	110.42
9	i	173	GLN	CB-CG-CD	-6.02	102.36	112.60
6	F	121	GLN	O-C-N	-6.02	115.87	122.07
20	Z	611	THR	N-CA-C	-6.02	105.25	114.16
32	M	40	GLU	CA-C-N	6.02	128.71	120.46
32	M	40	GLU	C-N-CA	6.02	128.71	120.46
5	e	99	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
21	N	57	ASP	CA-C-N	6.02	128.63	120.38
21	N	57	ASP	C-N-CA	6.02	128.63	120.38
6	f	111	LEU	CA-C-N	6.02	128.35	120.28
6	f	111	LEU	C-N-CA	6.02	128.35	120.28
13	m	102	GLN	CB-CG-CD	-6.02	102.37	112.60
20	Z	280	ASP	CA-C-N	6.02	128.27	120.44
20	Z	280	ASP	C-N-CA	6.02	128.27	120.44
6	f	209	ASP	CA-C-O	6.02	125.28	119.08
3	C	83	ASP	CA-C-O	6.02	126.93	120.55
19	Y	13	LYS	CA-C-O	6.02	126.72	120.40
20	Z	600	GLU	N-CA-C	6.02	117.84	111.28
31	L	374	PHE	CA-CB-CG	6.02	119.82	113.80
1	a	163	TYR	CB-CG-CD1	6.02	129.82	120.80
6	f	143	HIS	CG-CD2-NE2	6.02	113.22	107.20
11	4	41	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
20	Z	125	THR	N-CA-CB	6.02	118.96	110.12
21	N	902	VAL	N-CA-C	-6.02	101.78	109.30
2	b	129	PRO	CA-C-N	6.01	129.66	120.82
2	b	129	PRO	C-N-CA	6.01	129.66	120.82
12	l	263	HIS	N-CA-C	-6.01	103.39	111.87
20	Z	136	ARG	CB-CA-C	-6.01	100.81	110.79
20	Z	801	HIS	CA-C-N	6.01	133.03	121.54
20	Z	801	HIS	C-N-CA	6.01	133.03	121.54
25	R	208	ASN	CA-C-N	6.01	128.34	120.28
25	R	208	ASN	C-N-CA	6.01	128.34	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	H	85	MET	CG-SD-CE	-6.01	87.67	100.90
3	c	21	GLN	CB-CG-CD	-6.01	102.38	112.60
12	5	188	TYR	CA-CB-CG	-6.01	103.08	113.90
27	O	153	LEU	CA-C-N	6.01	128.61	120.38
27	O	153	LEU	C-N-CA	6.01	128.61	120.38
33	J	67	GLU	CA-C-O	-6.01	113.90	120.69
2	B	9	LEU	N-CA-C	-6.01	104.47	112.94
8	1	91	PHE	N-CA-CB	6.01	118.95	110.12
17	T	158	GLN	CA-C-N	6.01	128.25	120.44
17	T	158	GLN	C-N-CA	6.01	128.25	120.44
32	M	170	MET	CG-SD-CE	-6.01	87.68	100.90
8	h	169	SER	O-C-N	6.01	129.00	122.15
12	l	195	THR	N-CA-CB	6.01	119.26	109.95
6	F	12	THR	CA-C-N	6.01	134.14	122.07
6	F	12	THR	C-N-CA	6.01	134.14	122.07
20	Z	269	TYR	N-CA-CB	6.01	118.72	110.01
21	N	499	HIS	CE1-NE2-CD2	-6.01	102.99	109.00
31	L	400	PHE	CA-C-N	6.01	128.33	120.28
31	L	400	PHE	C-N-CA	6.01	128.33	120.28
33	J	121	MET	N-CA-C	-6.01	101.39	110.28
11	k	27	VAL	O-C-N	6.00	129.57	122.66
22	S	438	HIS	CA-CB-CG	-6.00	107.80	113.80
5	e	57	PRO	N-CA-CB	6.00	109.05	103.41
1	A	129	THR	CA-C-N	6.00	128.81	120.29
1	A	129	THR	C-N-CA	6.00	128.81	120.29
16	V	263	GLU	N-CA-C	6.00	117.82	111.28
21	N	260	ASP	CA-C-N	6.00	128.32	120.28
21	N	260	ASP	C-N-CA	6.00	128.32	120.28
30	K	286	THR	CA-CB-OG1	6.00	118.61	109.60
33	J	265	ASP	N-CA-CB	6.00	119.47	110.22
2	b	107	THR	N-CA-C	6.00	117.49	111.07
12	l	83	PHE	CA-C-N	6.00	128.92	120.28
12	l	83	PHE	C-N-CA	6.00	128.92	120.28
12	l	128	GLN	O-C-N	-6.00	115.89	122.07
11	4	83	PHE	O-C-N	6.00	128.57	122.09
17	T	120	THR	CA-C-O	6.00	127.12	120.82
22	S	283	GLN	CB-CA-C	-6.00	100.58	110.72
25	R	397	ASN	CA-CB-CG	6.00	118.60	112.60
31	L	330	PRO	CA-C-O	6.00	125.16	118.38
12	5	89	VAL	N-CA-C	-6.00	99.83	108.53
21	N	150	LEU	N-CA-C	-6.00	105.26	113.30
32	M	83	VAL	N-CA-C	-6.00	105.00	110.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	164	ASP	CA-C-N	6.00	128.32	120.28
32	M	164	ASP	C-N-CA	6.00	128.32	120.28
28	H	284	VAL	CA-C-O	6.00	128.28	120.78
31	L	302	GLN	OE1-CD-NE2	-6.00	116.60	122.60
29	I	175	LYS	N-CA-C	-6.00	99.93	109.76
5	e	71	ASP	CA-CB-CG	5.99	118.59	112.60
6	f	168	ALA	N-CA-CB	-5.99	101.27	110.20
17	T	262	LYS	CA-C-O	-5.99	114.53	120.70
20	Z	497	PHE	N-CA-C	-5.99	105.46	112.89
25	R	365	ASP	CA-C-N	5.99	128.80	120.29
25	R	365	ASP	C-N-CA	5.99	128.80	120.29
10	3	84	PRO	N-CA-CB	5.99	110.15	103.44
21	N	69	TYR	CA-C-N	5.99	128.80	120.29
21	N	69	TYR	C-N-CA	5.99	128.80	120.29
23	P	404	LYS	CA-C-N	5.99	125.93	119.76
23	P	404	LYS	C-N-CA	5.99	125.93	119.76
25	R	346	LYS	CA-C-N	5.99	131.89	122.78
25	R	346	LYS	C-N-CA	5.99	131.89	122.78
8	1	166	HIS	ND1-CE1-NE2	5.99	114.39	108.40
13	6	131	TYR	CA-CB-CG	-5.99	103.12	113.90
26	U	73	ILE	CA-C-N	5.99	128.59	120.44
26	U	73	ILE	C-N-CA	5.99	128.59	120.44
16	V	243	SER	O-C-N	-5.99	114.91	122.27
31	L	414	ASP	N-CA-CB	5.99	118.75	110.07
20	Z	48	ASP	CA-C-N	5.99	128.22	120.44
20	Z	48	ASP	C-N-CA	5.99	128.22	120.44
23	P	287	ASP	CA-CB-CG	5.99	118.59	112.60
28	H	207	THR	N-CA-C	-5.98	100.20	109.24
6	f	144	LEU	N-CA-C	-5.98	98.33	108.26
15	W	7	VAL	N-CA-CB	5.98	118.89	111.41
15	W	83	GLY	N-CA-C	-5.98	103.44	112.41
25	R	162	ILE	N-CA-CB	5.98	121.10	111.23
27	O	100	ASP	CA-CB-CG	-5.98	106.62	112.60
28	H	283	TYR	N-CA-C	-5.98	104.16	112.30
4	d	84	ILE	CA-C-N	5.98	128.22	120.44
4	d	84	ILE	C-N-CA	5.98	128.22	120.44
9	2	113	LYS	CA-C-N	5.98	128.29	120.28
9	2	113	LYS	C-N-CA	5.98	128.29	120.28
20	Z	593	HIS	CE1-NE2-CD2	-5.98	103.02	109.00
23	P	60	ALA	CA-C-N	5.98	128.78	120.29
23	P	60	ALA	C-N-CA	5.98	128.78	120.29
29	I	108	THR	N-CA-C	-5.98	99.65	109.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	43	ILE	N-CA-C	5.98	116.16	110.42
33	J	232	GLU	CA-C-N	5.98	128.57	120.38
33	J	232	GLU	C-N-CA	5.98	128.57	120.38
9	2	84	VAL	CA-C-O	-5.98	114.73	120.95
4	d	250	LYS	CA-C-O	5.98	126.85	120.10
7	G	10	LEU	N-CA-CB	5.98	120.59	110.49
16	V	133	ASN	CA-CB-CG	-5.98	106.62	112.60
31	L	252	VAL	N-CA-C	-5.98	99.60	108.45
32	M	198	VAL	CA-C-N	5.98	128.27	120.26
32	M	198	VAL	C-N-CA	5.98	128.27	120.26
4	D	111	ARG	NE-CZ-NH1	5.98	127.48	121.50
17	T	32	ILE	CA-CB-CG2	-5.98	100.34	110.50
25	R	401	HIS	CA-C-O	-5.98	114.22	120.55
27	O	141	ASN	O-C-N	5.98	130.54	122.59
6	F	219	ASP	N-CA-C	-5.97	103.75	113.19
11	4	195	PHE	CA-CB-CG	-5.97	107.83	113.80
16	V	202	ASP	CA-CB-CG	-5.97	106.62	112.60
20	Z	859	LYS	CA-C-N	5.97	132.12	121.48
20	Z	859	LYS	C-N-CA	5.97	132.12	121.48
21	N	508	THR	O-C-N	-5.97	116.41	123.22
24	Q	386	PHE	CA-C-N	5.97	130.65	122.34
24	Q	386	PHE	C-N-CA	5.97	130.65	122.34
17	T	43	ASP	CA-CB-CG	5.97	118.57	112.60
20	Z	363	ASP	CA-CB-CG	5.97	118.57	112.60
21	N	923	MET	O-C-N	-5.97	115.79	122.12
22	S	463	GLU	CA-C-N	5.97	128.77	120.29
22	S	463	GLU	C-N-CA	5.97	128.77	120.29
3	c	96	GLN	CB-CG-CD	-5.97	102.45	112.60
23	P	147	LYS	CA-C-N	5.97	128.77	120.29
23	P	147	LYS	C-N-CA	5.97	128.77	120.29
4	d	147	LEU	CA-C-O	-5.97	113.44	120.60
4	D	115	GLY	O-C-N	-5.97	116.40	122.19
15	W	21	PHE	O-C-N	-5.97	115.78	121.57
16	V	291	ASN	CA-C-N	5.97	128.64	120.46
16	V	291	ASN	C-N-CA	5.97	128.64	120.46
2	b	148	TYR	O-C-N	-5.97	117.03	123.42
7	g	84	ASP	N-CA-C	-5.97	104.86	111.36
8	h	151	PHE	CB-CG-CD1	-5.97	110.56	120.70
12	l	220	LYS	N-CA-C	-5.96	99.63	108.99
4	D	91	VAL	N-CA-CB	5.96	118.65	110.54
25	R	113	LEU	CA-C-N	5.96	128.19	120.44
25	R	113	LEU	C-N-CA	5.96	128.19	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	122	ILE	N-CA-CB	5.96	117.22	110.72
28	H	380	PRO	N-CA-C	-5.96	101.90	111.38
31	L	392	ARG	O-C-N	-5.96	115.80	122.12
25	R	331	ARG	N-CA-C	-5.96	104.69	111.07
19	Y	22	GLU	CA-C-N	5.96	128.76	120.29
19	Y	22	GLU	C-N-CA	5.96	128.76	120.29
12	5	82	ARG	CD-NE-CZ	-5.96	116.06	124.40
29	I	286	ALA	N-CA-C	-5.96	105.59	112.92
5	e	27	SER	N-CA-C	-5.96	105.50	112.89
9	2	218	ASN	CA-C-N	5.96	128.26	120.28
9	2	218	ASN	C-N-CA	5.96	128.26	120.28
12	5	175	MET	CG-SD-CE	-5.96	87.79	100.90
25	R	382	ASP	O-C-N	5.96	130.81	122.77
27	O	386	ALA	N-CA-C	5.96	117.44	111.07
28	H	454	TYR	CA-C-N	5.96	128.86	120.28
28	H	454	TYR	C-N-CA	5.96	128.86	120.28
7	G	73	HIS	CG-CD2-NE2	5.96	113.16	107.20
17	T	119	THR	CA-C-N	5.96	128.18	120.44
17	T	119	THR	C-N-CA	5.96	128.18	120.44
21	N	118	THR	CA-C-O	-5.96	114.11	120.42
3	c	10	THR	CA-CB-CG2	-5.96	100.38	110.50
7	g	207	ASN	CA-CB-CG	-5.95	106.65	112.60
17	T	235	PHE	CA-C-N	5.95	130.66	120.72
17	T	235	PHE	C-N-CA	5.95	130.66	120.72
20	Z	277	GLU	CA-C-N	5.95	131.56	121.14
20	Z	277	GLU	C-N-CA	5.95	131.56	121.14
22	S	451	ILE	CA-C-O	-5.95	112.39	119.54
8	1	167	SER	N-CA-C	5.95	117.44	111.07
12	5	160	ASN	N-CA-CB	5.95	118.87	110.12
33	J	361	VAL	CB-CA-C	-5.95	104.11	112.14
6	f	47	VAL	N-CA-C	-5.95	99.55	108.12
9	i	160	SER	O-C-N	5.95	128.43	122.12
2	B	12	PHE	N-CA-C	-5.95	101.20	110.42
11	4	65	GLN	OE1-CD-NE2	5.95	128.55	122.60
24	Q	80	HIS	CE1-NE2-CD2	-5.95	103.05	109.00
29	I	56	LYS	CA-C-O	5.95	126.73	120.42
32	M	198	VAL	CB-CA-C	-5.95	104.36	111.97
2	b	159	TRP	CB-CG-CD1	5.95	135.82	126.90
1	A	134	MET	N-CA-C	-5.95	98.58	108.75
2	B	227	ILE	CA-C-N	5.95	128.08	120.89
2	B	227	ILE	C-N-CA	5.95	128.08	120.89
8	1	163	PHE	CA-CB-CG	-5.95	107.86	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	6	114	TYR	CA-C-N	5.95	131.27	122.71
13	6	114	TYR	C-N-CA	5.95	131.27	122.71
13	6	142	GLU	N-CA-C	-5.95	100.74	109.18
23	P	320	PRO	N-CA-CB	5.95	108.99	103.46
14	n	81	ASN	CA-C-O	5.94	126.49	119.48
32	M	180	TYR	N-CA-CB	5.94	119.66	110.80
11	k	194	ASP	N-CA-C	-5.94	100.04	109.07
14	n	257	ASP	CA-CB-CG	5.94	118.54	112.60
7	g	241	ASP	CA-C-O	-5.94	114.12	120.42
13	6	209	GLY	CA-C-N	5.94	131.37	122.99
13	6	209	GLY	C-N-CA	5.94	131.37	122.99
18	X	61	LEU	N-CA-C	-5.94	100.04	109.07
20	Z	219	ASP	N-CA-C	5.94	118.52	111.33
23	P	90	LYS	N-CA-C	-5.94	106.00	113.72
24	Q	84	TYR	N-CA-CB	5.94	119.37	110.22
24	Q	410	ASP	N-CA-CB	5.94	118.95	110.16
25	R	421	VAL	N-CA-CB	5.94	119.49	110.58
4	D	91	VAL	CA-C-O	-5.94	114.77	120.95
32	M	203	ARG	CD-NE-CZ	-5.94	116.08	124.40
2	b	119	GLN	CA-C-N	5.94	129.33	120.31
2	b	119	GLN	C-N-CA	5.94	129.33	120.31
3	c	168	ASN	OD1-CG-ND2	-5.94	116.66	122.60
7	G	35	THR	CA-C-N	5.94	129.54	121.05
7	G	35	THR	C-N-CA	5.94	129.54	121.05
30	K	151	PRO	N-CA-CB	5.94	106.52	103.19
33	J	62	LEU	CA-C-O	5.94	126.80	119.97
7	g	220	SER	CA-C-N	5.94	128.51	120.44
7	g	220	SER	C-N-CA	5.94	128.51	120.44
13	m	51	VAL	O-C-N	-5.94	115.41	122.77
6	F	234	ILE	CA-CB-CG1	5.94	120.49	110.40
10	3	144	ASP	CA-C-N	5.93	128.55	120.54
10	3	144	ASP	C-N-CA	5.93	128.55	120.54
4	d	174	PHE	CB-CA-C	-5.93	100.94	110.79
9	i	39	ASN	OD1-CG-ND2	5.93	128.53	122.60
4	D	26	ALA	CA-C-N	5.93	128.59	120.46
4	D	26	ALA	C-N-CA	5.93	128.59	120.46
7	G	182	HIS	CE1-NE2-CD2	-5.93	103.07	109.00
9	2	156	LEU	O-C-N	-5.93	115.98	122.92
15	W	107	HIS	CE1-NE2-CD2	-5.93	103.07	109.00
22	S	429	ASP	CA-CB-CG	-5.93	106.67	112.60
26	U	225	ILE	CA-C-N	5.93	129.33	120.31
26	U	225	ILE	C-N-CA	5.93	129.33	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	69	ILE	CA-CB-CG1	-5.93	100.31	110.40
12	l	150	SER	CA-C-N	5.93	128.58	120.46
12	l	150	SER	C-N-CA	5.93	128.58	120.46
10	3	48	HIS	ND1-CE1-NE2	5.93	114.33	108.40
21	N	806	THR	CA-C-N	5.93	128.23	120.28
21	N	806	THR	C-N-CA	5.93	128.23	120.28
33	J	301	ASP	N-CA-C	-5.93	102.18	109.65
1	a	175	GLN	CB-CG-CD	-5.93	102.52	112.60
14	n	123	SER	CB-CA-C	-5.93	99.29	110.67
1	A	131	ARG	CA-C-N	5.93	132.51	122.26
1	A	131	ARG	C-N-CA	5.93	132.51	122.26
1	A	240	ASN	N-CA-C	-5.93	104.76	112.23
2	B	99	ARG	CA-C-N	5.93	128.90	121.85
2	B	99	ARG	C-N-CA	5.93	128.90	121.85
6	F	92	CYS	CB-CA-C	-5.93	100.78	110.85
12	5	241	HIS	CA-C-O	-5.93	114.60	120.70
20	Z	850	LEU	O-C-N	-5.93	115.97	122.07
9	i	152	TYR	N-CA-C	-5.92	105.88	114.12
5	E	15	PHE	CA-C-N	5.92	132.36	121.70
5	E	15	PHE	C-N-CA	5.92	132.36	121.70
11	4	39	SER	N-CA-C	-5.92	101.33	108.14
15	W	29	GLN	CA-C-N	5.92	128.83	120.42
15	W	29	GLN	C-N-CA	5.92	128.83	120.42
20	Z	702	LYS	N-CA-CB	5.92	118.77	109.94
21	N	231	ASN	OD1-CG-ND2	5.92	128.52	122.60
31	L	375	ASP	N-CA-C	-5.92	106.29	112.93
9	2	141	SER	N-CA-C	-5.92	99.75	109.40
17	T	82	PHE	CA-C-N	5.92	128.22	120.28
17	T	82	PHE	C-N-CA	5.92	128.22	120.28
31	L	153	LEU	N-CA-CB	5.92	121.01	111.65
31	L	272	GLU	CA-C-N	5.92	132.27	122.73
31	L	272	GLU	C-N-CA	5.92	132.27	122.73
4	d	143	ASP	N-CA-C	-5.92	99.25	108.90
8	h	125	GLY	CA-C-N	5.92	133.02	121.41
8	h	125	GLY	C-N-CA	5.92	133.02	121.41
21	N	656	ALA	CA-C-O	-5.92	114.60	120.82
21	N	537	THR	N-CA-C	5.92	117.73	111.28
1	A	100	GLU	CA-C-N	5.92	128.13	120.44
1	A	100	GLU	C-N-CA	5.92	128.13	120.44
6	F	9	ASP	N-CA-C	-5.92	99.96	108.60
7	G	240	ILE	N-CA-CB	5.92	118.14	110.57
16	V	93	ASP	CA-CB-CG	-5.92	106.68	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	121	GLU	CA-C-N	5.92	128.49	120.44
25	R	121	GLU	C-N-CA	5.92	128.49	120.44
29	I	218	GLY	CA-C-O	5.92	127.25	121.63
11	4	141	PHE	N-CA-C	-5.92	104.91	111.36
13	6	41	TYR	CA-CB-CG	-5.92	103.25	113.90
14	7	182	HIS	CE1-NE2-CD2	-5.92	103.08	109.00
14	7	235	LYS	N-CA-C	-5.92	106.10	113.38
23	P	257	TRP	CA-CB-CG	5.92	124.84	113.60
29	I	333	THR	N-CA-C	-5.92	104.92	114.09
4	d	250	LYS	O-C-N	-5.92	115.30	122.22
14	n	50	ASP	N-CA-C	5.91	117.72	111.28
20	Z	712	ASP	CA-C-O	5.91	126.82	120.55
21	N	332	VAL	N-CA-C	-5.91	104.75	110.72
21	N	512	ASN	CA-C-N	5.91	130.01	120.55
21	N	512	ASN	C-N-CA	5.91	130.01	120.55
31	L	361	PHE	CA-C-N	5.91	128.21	120.28
31	L	361	PHE	C-N-CA	5.91	128.21	120.28
6	f	139	LYS	O-C-N	5.91	129.54	122.27
17	T	205	ILE	N-CA-CB	5.91	118.58	110.54
22	S	56	SER	N-CA-C	-5.91	104.75	111.14
33	J	266	SER	N-CA-CB	5.91	119.32	110.22
13	m	85	PHE	O-C-N	-5.91	115.41	122.15
7	G	128	SER	N-CA-C	-5.91	105.41	114.16
17	T	135	ASN	OD1-CG-ND2	5.91	128.51	122.60
32	M	31	GLN	N-CA-CB	5.91	118.91	110.16
4	d	164	ILE	N-CA-C	-5.91	100.08	108.65
7	g	70	VAL	N-CA-C	-5.91	99.54	108.17
8	h	14	ALA	CA-C-O	-5.91	113.27	120.54
15	W	155	ASP	CA-C-N	5.91	128.12	120.44
15	W	155	ASP	C-N-CA	5.91	128.12	120.44
20	Z	879	ALA	CA-C-N	5.91	128.20	120.28
20	Z	879	ALA	C-N-CA	5.91	128.20	120.28
22	S	78	VAL	CA-CB-CG2	-5.91	100.35	110.40
31	L	136	ASP	CA-CB-CG	5.91	118.51	112.60
7	g	130	ARG	NE-CZ-NH2	-5.91	113.88	119.20
24	Q	369	ASP	CA-C-N	5.91	128.20	120.28
24	Q	369	ASP	C-N-CA	5.91	128.20	120.28
7	g	108	PRO	CA-C-N	5.91	123.96	120.24
7	g	108	PRO	C-N-CA	5.91	123.96	120.24
27	O	224	GLY	O-C-N	5.91	131.43	122.69
33	J	35	ARG	NE-CZ-NH1	-5.91	115.59	121.50
5	e	20	ARG	NE-CZ-NH1	-5.90	115.60	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	m	201	GLU	CB-CG-CD	-5.90	102.56	112.60
33	J	203	ALA	O-C-N	5.90	128.38	122.12
4	d	156	TYR	O-C-N	-5.90	115.98	123.24
17	T	170	ASN	O-C-N	-5.90	116.03	123.17
23	P	118	VAL	CA-C-N	5.90	128.80	120.42
23	P	118	VAL	C-N-CA	5.90	128.80	120.42
24	Q	139	ILE	CA-C-N	5.90	128.47	120.44
24	Q	139	ILE	C-N-CA	5.90	128.47	120.44
2	b	105	PRO	CA-C-N	5.90	125.91	119.89
2	b	105	PRO	C-N-CA	5.90	125.91	119.89
9	i	100	SER	CB-CA-C	5.90	120.41	111.80
6	F	85	SER	N-CA-CB	5.90	118.99	110.20
12	5	251	ASN	N-CA-CB	5.90	120.59	110.68
15	W	64	THR	CA-C-O	-5.90	114.68	121.82
16	V	193	ASN	N-CA-CB	5.90	118.44	110.59
24	Q	194	SER	CA-C-N	5.90	128.67	120.29
24	Q	194	SER	C-N-CA	5.90	128.67	120.29
24	Q	336	ASN	CA-CB-CG	5.90	118.50	112.60
28	H	201	GLU	CB-CG-CD	-5.90	102.57	112.60
10	j	165	GLU	N-CA-CB	5.90	118.79	110.12
6	F	120	THR	CA-C-N	5.90	128.11	120.44
6	F	120	THR	C-N-CA	5.90	128.11	120.44
7	G	11	SER	N-CA-CB	5.90	120.46	110.49
24	Q	218	LEU	CA-C-O	5.90	126.67	120.42
26	U	232	VAL	CA-C-O	-5.90	114.82	120.95
30	K	316	MET	CG-SD-CE	5.90	113.88	100.90
4	d	199	LEU	CA-C-N	5.90	128.18	120.28
4	d	199	LEU	C-N-CA	5.90	128.18	120.28
14	n	87	SER	N-CA-C	-5.90	101.20	109.69
20	Z	52	LEU	CA-C-O	-5.90	114.63	120.82
33	J	368	TYR	CA-C-N	5.90	129.27	120.31
33	J	368	TYR	C-N-CA	5.90	129.27	120.31
13	6	96	SER	CA-C-N	5.89	128.18	120.28
13	6	96	SER	C-N-CA	5.89	128.18	120.28
21	N	788	TYR	N-CA-C	-5.89	105.44	114.16
7	g	86	ARG	N-CA-CB	5.89	118.78	110.12
13	6	143	GLN	OE1-CD-NE2	5.89	128.49	122.60
21	N	755	PRO	N-CD-CG	5.89	112.04	103.20
22	S	482	PRO	CA-C-N	5.89	128.77	120.28
22	S	482	PRO	C-N-CA	5.89	128.77	120.28
23	P	337	HIS	N-CA-C	-5.89	105.75	113.17
28	H	242	PRO	CA-C-O	-5.89	112.02	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	R	325	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
32	M	298	ASP	CA-CB-CG	-5.89	106.71	112.60
6	f	146	GLU	N-CA-C	-5.89	98.81	108.41
8	h	19	ASP	N-CA-CB	5.89	119.50	110.61
9	2	178	GLU	CA-C-N	5.89	128.17	120.28
9	2	178	GLU	C-N-CA	5.89	128.17	120.28
12	5	151	VAL	N-CA-C	-5.89	104.58	111.00
2	B	13	SER	N-CA-C	-5.89	101.47	110.07
20	Z	164	VAL	CA-C-N	5.89	128.17	120.28
20	Z	164	VAL	C-N-CA	5.89	128.17	120.28
24	Q	52	ASN	N-CA-C	5.89	117.37	111.07
10	j	143	SER	O-C-N	5.89	129.11	122.22
3	C	191	GLU	CB-CG-CD	-5.89	102.59	112.60
15	W	30	ILE	CA-C-N	5.89	129.26	120.31
15	W	30	ILE	C-N-CA	5.89	129.26	120.31
24	Q	109	ASP	CA-C-O	5.89	127.36	120.89
27	O	27	GLU	CA-C-N	5.89	130.55	120.72
27	O	27	GLU	C-N-CA	5.89	130.55	120.72
29	I	394	ALA	CA-C-O	-5.89	114.18	120.42
3	c	87	LEU	N-CA-C	5.88	118.65	111.82
1	A	98	LYS	N-CA-C	-5.88	104.77	111.07
8	1	46	VAL	CA-C-O	5.88	124.28	118.98
17	T	226	TRP	CA-C-O	-5.88	113.43	119.49
10	j	172	LEU	CB-CA-C	-5.88	101.02	110.79
23	P	74	ASP	CA-C-N	5.88	128.09	120.44
23	P	74	ASP	C-N-CA	5.88	128.09	120.44
23	P	133	GLU	N-CA-C	-5.88	106.10	113.28
25	R	177	LEU	O-C-N	-5.88	115.03	122.27
14	n	109	TYR	CB-CA-C	-5.88	101.69	110.16
8	1	164	ILE	CA-C-N	5.88	128.09	120.44
8	1	164	ILE	C-N-CA	5.88	128.09	120.44
23	P	102	GLU	CA-C-N	5.88	128.64	120.29
23	P	102	GLU	C-N-CA	5.88	128.64	120.29
28	H	147	ILE	CA-CB-CG1	5.88	120.40	110.40
10	3	177	ARG	N-CA-C	-5.88	105.76	113.17
20	Z	911	LYS	CA-C-N	5.88	130.81	120.87
20	Z	911	LYS	C-N-CA	5.88	130.81	120.87
22	S	195	ALA	N-CA-C	-5.88	104.95	111.36
28	H	426	ALA	CA-C-N	5.88	127.69	120.22
28	H	426	ALA	C-N-CA	5.88	127.69	120.22
33	J	15	HIS	CE1-NE2-CD2	-5.88	103.12	109.00
11	k	133	HIS	CG-CD2-NE2	5.88	113.08	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	20	TYR	CA-C-N	5.88	128.16	120.28
3	C	20	TYR	C-N-CA	5.88	128.16	120.28
16	V	110	SER	N-CA-C	-5.88	99.82	109.40
16	V	111	HIS	CA-CB-CG	-5.88	107.92	113.80
20	Z	741	LEU	CA-C-O	-5.88	113.21	119.97
26	U	164	GLU	CA-C-O	5.88	128.75	121.81
27	O	390	SER	N-CA-C	-5.88	101.49	109.54
4	d	122	GLN	O-C-N	5.88	128.35	122.12
7	G	73	HIS	CE1-NE2-CD2	-5.88	103.12	109.00
20	Z	871	HIS	ND1-CE1-NE2	5.88	114.28	108.40
31	L	381	LYS	CA-C-N	5.88	128.15	120.28
31	L	381	LYS	C-N-CA	5.88	128.15	120.28
2	B	61	LEU	CA-C-O	5.88	127.78	121.55
6	F	120	THR	CA-C-O	-5.88	113.72	120.24
12	5	177	CYS	N-CA-C	-5.88	99.82	109.40
16	V	157	ARG	CA-C-N	5.88	129.18	120.90
16	V	157	ARG	C-N-CA	5.88	129.18	120.90
23	P	334	ASN	CA-CB-CG	5.88	118.47	112.60
13	m	49	PRO	CB-CA-C	-5.87	103.88	111.46
10	3	171	LEU	CA-C-N	5.87	128.15	120.28
10	3	171	LEU	C-N-CA	5.87	128.15	120.28
17	T	187	ASP	CA-C-N	5.87	128.15	120.28
17	T	187	ASP	C-N-CA	5.87	128.15	120.28
19	Y	81	LEU	N-CA-C	-5.87	104.80	111.14
24	Q	276	ASP	O-C-N	-5.87	115.89	122.12
24	Q	350	ILE	N-CA-C	-5.87	104.79	110.72
25	R	131	ALA	CA-C-N	5.87	128.15	120.28
25	R	131	ALA	C-N-CA	5.87	128.15	120.28
33	J	321	VAL	CA-C-N	5.87	128.63	120.29
33	J	321	VAL	C-N-CA	5.87	128.63	120.29
9	2	189	GLN	O-C-N	5.87	128.84	122.15
29	I	273	GLU	CA-C-N	5.87	132.00	122.67
29	I	273	GLU	C-N-CA	5.87	132.00	122.67
18	X	126	ILE	CA-C-N	5.87	126.46	120.00
18	X	126	ILE	C-N-CA	5.87	126.46	120.00
21	N	57	ASP	CB-CA-C	-5.87	101.25	110.94
26	U	18	ALA	CA-C-N	5.87	128.15	120.28
26	U	18	ALA	C-N-CA	5.87	128.15	120.28
26	U	200	LEU	CA-C-N	5.87	128.07	120.44
26	U	200	LEU	C-N-CA	5.87	128.07	120.44
28	H	428	MET	CA-C-N	5.87	128.15	120.28
28	H	428	MET	C-N-CA	5.87	128.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	l	278	GLU	CA-C-N	5.87	130.66	120.68
12	l	278	GLU	C-N-CA	5.87	130.66	120.68
8	1	29	THR	CA-C-O	-5.87	114.02	120.24
9	2	140	PHE	CA-CB-CG	-5.87	107.93	113.80
15	W	35	PHE	O-C-N	5.87	128.84	122.15
20	Z	346	LEU	N-CA-CB	5.87	118.52	110.01
21	N	573	HIS	CA-C-N	5.87	128.50	120.46
21	N	573	HIS	C-N-CA	5.87	128.50	120.46
21	N	591	LEU	CB-CA-C	-5.87	101.05	110.79
7	g	218	TRP	CB-CG-CD2	-5.87	118.59	126.80
32	M	137	PRO	CA-C-N	5.87	128.62	120.29
32	M	137	PRO	C-N-CA	5.87	128.62	120.29
9	i	133	ASP	N-CA-C	-5.87	102.85	108.07
4	D	113	VAL	CA-C-N	5.87	129.23	120.31
4	D	113	VAL	C-N-CA	5.87	129.23	120.31
11	4	190	ARG	NE-CZ-NH2	5.87	124.48	119.20
14	7	124	TYR	CB-CG-CD2	-5.87	112.00	120.80
21	N	570	ARG	CA-C-N	5.87	128.14	120.28
21	N	570	ARG	C-N-CA	5.87	128.14	120.28
23	P	7	ILE	N-CA-CB	5.87	118.52	110.54
32	M	310	ASN	O-C-N	5.87	129.08	122.22
32	M	321	VAL	N-CA-CB	5.87	119.29	111.90
3	c	190	ILE	CB-CA-C	-5.86	104.22	112.14
12	l	162	VAL	CA-C-N	5.86	128.72	120.28
12	l	162	VAL	C-N-CA	5.86	128.72	120.28
4	D	82	SER	CB-CA-C	-5.86	99.78	110.63
17	T	63	GLU	N-CA-C	5.86	117.47	111.14
20	Z	767	TYR	O-C-N	5.86	128.84	122.15
21	N	73	GLY	N-CA-C	-5.86	106.39	116.01
26	U	16	LEU	CA-C-N	5.86	128.14	120.28
26	U	16	LEU	C-N-CA	5.86	128.14	120.28
29	I	283	GLU	N-CA-CB	5.86	120.40	110.49
4	D	144	GLU	CA-C-N	5.86	126.32	119.99
4	D	144	GLU	C-N-CA	5.86	126.32	119.99
23	P	148	LYS	N-CA-CB	5.86	118.84	110.16
6	F	111	LEU	CA-C-N	5.86	128.13	120.28
6	F	111	LEU	C-N-CA	5.86	128.13	120.28
17	T	57	ILE	CB-CA-C	-5.86	104.13	112.22
21	N	114	SER	N-CA-C	5.86	117.67	111.28
24	Q	361	HIS	CG-CD2-NE2	5.86	113.06	107.20
30	K	91	SER	CA-C-N	5.86	132.97	122.13
30	K	91	SER	C-N-CA	5.86	132.97	122.13

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	401	PHE	CA-CB-CG	-5.86	107.94	113.80
32	M	230	LEU	N-CA-CB	5.86	120.39	110.49
20	Z	825	ALA	CA-C-N	5.86	131.39	121.14
20	Z	825	ALA	C-N-CA	5.86	131.39	121.14
9	i	192	ILE	N-CA-C	5.86	116.59	110.62
9	i	240	ALA	N-CA-C	-5.86	98.86	108.76
13	6	95	ASN	OD1-CG-ND2	5.86	128.46	122.60
14	7	125	ILE	N-CA-C	-5.86	104.80	110.72
24	Q	8	LEU	CA-C-O	5.86	126.76	120.55
27	O	276	LYS	N-CA-CB	5.86	118.56	110.07
29	I	124	THR	CA-C-N	5.86	128.11	120.26
29	I	124	THR	C-N-CA	5.86	128.11	120.26
29	I	407	ARG	N-CA-CB	5.86	121.62	112.25
3	c	24	TYR	CA-C-O	-5.86	114.21	120.42
1	A	67	THR	CA-C-O	5.86	125.83	119.15
23	P	142	ASP	CA-C-N	5.86	128.60	120.29
23	P	142	ASP	C-N-CA	5.86	128.60	120.29
24	Q	132	PHE	CA-C-N	5.86	128.60	120.29
24	Q	132	PHE	C-N-CA	5.86	128.60	120.29
27	O	326	HIS	CG-CD2-NE2	5.86	113.06	107.20
28	H	337	ILE	CA-CB-CG1	5.86	120.35	110.40
30	K	105	GLN	OE1-CD-NE2	-5.86	116.74	122.60
32	M	81	ASN	N-CA-C	-5.86	100.15	109.23
33	J	221	LYS	N-CA-C	-5.86	104.36	112.03
4	D	201	GLU	CA-C-N	5.85	129.86	121.02
4	D	201	GLU	C-N-CA	5.85	129.86	121.02
4	d	134	LEU	N-CA-C	-5.85	99.36	108.90
13	m	46	ARG	NE-CZ-NH2	5.85	124.47	119.20
17	T	15	PHE	O-C-N	-5.85	115.48	122.15
22	S	202	ASN	CA-C-N	5.85	128.60	120.29
22	S	202	ASN	C-N-CA	5.85	128.60	120.29
11	k	188	GLY	O-C-N	5.85	128.41	122.85
6	F	117	GLN	OE1-CD-NE2	5.85	128.45	122.60
20	Z	275	GLN	CB-CG-CD	-5.85	102.66	112.60
27	O	294	MET	CB-CA-C	-5.85	100.90	110.85
30	K	180	GLN	CA-C-O	5.85	126.58	119.38
32	M	412	HIS	CE1-NE2-CD2	-5.85	103.15	109.00
8	h	119	VAL	N-CA-C	-5.85	100.26	108.27
3	C	119	LYS	CA-C-N	5.85	128.12	120.28
3	C	119	LYS	C-N-CA	5.85	128.12	120.28
4	D	217	PRO	O-C-N	5.85	130.13	123.00
12	5	216	ASP	CA-C-O	-5.85	114.35	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	16	GLU	CA-C-O	5.85	126.69	119.97
23	P	418	ASN	CA-CB-CG	-5.85	106.75	112.60
31	L	408	ASP	N-CA-C	-5.85	105.46	113.30
9	i	138	HIS	CE1-NE2-CD2	-5.85	103.15	109.00
20	Z	763	HIS	ND1-CE1-NE2	5.85	114.25	108.40
1	a	71	TYR	N-CA-CB	5.84	120.37	110.49
5	e	51	GLU	N-CA-C	-5.84	99.87	109.40
21	N	378	ASN	O-C-N	-5.84	114.82	122.59
21	N	554	THR	N-CA-CB	5.84	118.81	110.16
28	H	56	LEU	CA-C-N	5.84	129.19	120.31
28	H	56	LEU	C-N-CA	5.84	129.19	120.31
5	e	241	LYS	N-CA-C	5.84	117.65	111.28
9	2	196	LEU	CB-CA-C	-5.84	100.75	110.68
13	6	85	PHE	N-CA-C	5.84	117.73	111.36
13	6	112	PRO	CA-C-O	-5.84	114.87	122.12
23	P	99	LYS	CA-C-N	5.84	128.47	120.46
23	P	99	LYS	C-N-CA	5.84	128.47	120.46
29	I	361	ILE	CA-C-N	5.84	128.11	120.28
29	I	361	ILE	C-N-CA	5.84	128.11	120.28
2	B	180	ASN	N-CA-C	-5.84	100.47	109.52
30	K	289	ASP	N-CA-C	-5.84	105.65	112.89
4	d	41	CYS	CA-C-N	5.84	131.11	122.99
4	d	41	CYS	C-N-CA	5.84	131.11	122.99
12	l	261	ILE	N-CA-C	-5.84	99.71	108.12
13	m	68	ASP	CA-C-N	5.84	126.42	120.00
13	m	68	ASP	C-N-CA	5.84	126.42	120.00
14	n	205	VAL	CA-C-O	-5.84	114.57	121.05
4	D	167	ASN	O-C-N	5.84	129.59	122.58
9	2	101	ARG	CA-C-N	5.84	129.53	120.60
9	2	101	ARG	C-N-CA	5.84	129.53	120.60
14	7	258	ILE	CB-CA-C	-5.84	101.72	111.29
21	N	84	ALA	CB-CA-C	-5.84	101.10	110.79
21	N	330	THR	O-C-N	-5.84	116.05	122.07
23	P	227	ILE	CA-C-N	5.84	128.58	120.29
23	P	227	ILE	C-N-CA	5.84	128.58	120.29
29	I	208	TYR	CA-C-O	-5.84	112.90	119.79
4	D	37	LYS	CB-CA-C	-5.84	99.63	109.50
17	T	126	LEU	CA-C-N	5.84	128.03	120.44
17	T	126	LEU	C-N-CA	5.84	128.03	120.44
24	Q	374	GLU	N-CA-CB	5.84	118.70	110.12
32	M	26	SER	CA-C-N	5.84	128.10	120.28
32	M	26	SER	C-N-CA	5.84	128.10	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	208	CYS	N-CA-C	-5.84	100.89	109.18
21	N	367	ALA	CB-CA-C	-5.84	101.10	110.79
21	N	640	VAL	CA-C-O	-5.84	114.17	120.47
22	S	76	PHE	CA-CB-CG	-5.84	107.96	113.80
20	Z	728	LYS	CG-CD-CE	5.83	124.72	111.30
23	P	171	MET	CA-C-O	-5.83	114.21	120.92
25	R	65	TYR	CA-C-N	5.83	128.10	120.28
25	R	65	TYR	C-N-CA	5.83	128.10	120.28
25	R	136	ASN	N-CA-CB	5.83	118.70	110.12
27	O	147	ARG	CA-C-O	-5.83	114.69	120.70
3	c	149	TYR	CB-CA-C	-5.83	97.66	110.67
12	l	139	ARG	CB-CG-CD	5.83	124.71	111.30
5	E	89	ILE	CA-C-N	5.83	128.09	120.28
5	E	89	ILE	C-N-CA	5.83	128.09	120.28
10	3	177	ARG	N-CA-CB	5.83	119.12	110.49
15	W	186	ALA	CA-C-N	5.83	128.57	120.29
15	W	186	ALA	C-N-CA	5.83	128.57	120.29
17	T	172	SER	CB-CA-C	-5.83	98.81	110.42
18	X	11	ARG	N-CA-CB	5.83	118.57	110.17
25	R	307	TYR	CB-CG-CD1	5.83	129.55	120.80
9	i	173	GLN	O-C-N	5.83	129.99	123.05
25	R	326	ALA	CA-C-O	5.83	126.60	120.42
25	R	382	ASP	CA-C-O	-5.83	113.68	120.62
5	e	13	SER	O-C-N	-5.83	114.84	122.59
8	h	99	LYS	N-CA-CB	5.83	119.28	110.30
17	T	66	ALA	N-CA-C	5.83	117.44	111.14
31	L	308	LEU	CA-C-N	5.83	128.02	120.44
31	L	308	LEU	C-N-CA	5.83	128.02	120.44
1	a	185	HIS	CG-CD2-NE2	5.83	113.03	107.20
4	D	187	THR	N-CA-C	-5.83	100.29	109.50
11	4	176	PHE	N-CA-C	-5.83	106.33	113.50
21	N	151	LYS	CA-C-N	5.83	128.56	120.29
21	N	151	LYS	C-N-CA	5.83	128.56	120.29
22	S	425	ARG	NE-CZ-NH1	5.83	127.33	121.50
27	O	220	SER	CA-C-N	5.83	128.56	120.29
27	O	220	SER	C-N-CA	5.83	128.56	120.29
5	e	29	GLU	N-CA-C	-5.83	106.17	113.28
9	i	157	GLY	CA-C-N	5.83	128.56	120.29
9	i	157	GLY	C-N-CA	5.83	128.56	120.29
13	m	15	ASP	N-CA-C	-5.83	100.22	109.07
4	D	203	VAL	CA-C-N	5.83	132.67	121.54
4	D	203	VAL	C-N-CA	5.83	132.67	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	47	VAL	N-CA-CB	5.83	120.03	111.52
25	R	383	ARG	CA-C-N	5.83	128.69	120.42
25	R	383	ARG	C-N-CA	5.83	128.69	120.42
31	L	221	TYR	O-C-N	5.83	129.65	123.42
2	b	50	LYS	CG-CD-CE	5.82	124.70	111.30
4	d	101	GLU	N-CA-CB	5.82	120.33	110.49
9	i	242	LEU	O-C-N	-5.82	115.80	122.09
4	D	176	GLU	N-CA-CB	5.82	118.62	109.94
15	W	56	GLY	CA-C-N	5.82	128.56	120.29
15	W	56	GLY	C-N-CA	5.82	128.56	120.29
15	W	192	LEU	CA-C-O	5.82	126.53	119.31
22	S	440	ASP	O-C-N	-5.82	115.88	122.23
28	H	208	TYR	N-CA-C	-5.82	106.41	112.93
6	f	213	ILE	N-CA-C	-5.82	99.74	108.12
25	R	361	VAL	CA-C-O	5.82	127.02	120.85
14	n	177	THR	CA-C-N	5.82	128.77	119.98
14	n	177	THR	C-N-CA	5.82	128.77	119.98
11	4	64	ILE	N-CA-C	5.82	116.60	110.72
20	Z	967	THR	CA-C-O	5.82	127.92	121.11
28	H	75	GLY	N-CA-C	-5.82	103.43	112.45
32	M	422	VAL	N-CA-C	-5.82	105.17	110.82
5	E	182	GLU	N-CA-C	5.82	117.62	111.28
20	Z	208	VAL	CA-C-N	5.82	125.36	119.19
20	Z	208	VAL	C-N-CA	5.82	125.36	119.19
3	c	68	LYS	CA-C-N	5.82	130.53	120.58
3	c	68	LYS	C-N-CA	5.82	130.53	120.58
12	l	262	TYR	O-C-N	-5.82	116.14	123.01
14	n	166	LEU	N-CA-C	-5.82	106.22	113.38
3	C	34	THR	O-C-N	-5.82	115.65	122.81
11	4	124	THR	CA-CB-OG1	-5.82	100.87	109.60
7	g	102	LEU	CB-CA-C	-5.82	101.71	110.90
6	F	36	VAL	O-C-N	-5.82	116.92	123.20
23	P	41	VAL	O-C-N	-5.82	116.21	121.91
26	U	243	ASP	CA-CB-CG	5.82	118.42	112.60
25	R	128	LEU	N-CA-C	-5.81	103.67	112.04
14	n	89	ASP	CB-CA-C	5.81	118.14	110.06
2	B	62	SER	N-CA-C	-5.81	98.13	108.13
4	D	215	VAL	O-C-N	-5.81	116.98	123.26
6	F	161	ILE	N-CA-C	5.81	118.54	108.95
21	N	589	ILE	N-CA-CB	5.81	117.35	110.55
22	S	236	LEU	N-CA-CB	5.81	118.76	110.16
23	P	126	THR	CA-C-N	5.81	128.00	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	126	THR	C-N-CA	5.81	128.00	120.44
27	O	73	ILE	N-CA-C	-5.81	99.39	108.81
28	H	95	HIS	N-CA-C	-5.81	102.99	108.22
29	I	247	ILE	N-CA-CB	5.81	120.82	111.23
6	f	199	GLN	CA-C-N	5.81	128.34	120.38
6	f	199	GLN	C-N-CA	5.81	128.34	120.38
8	1	100	ASP	CA-C-O	-5.81	112.73	119.59
19	Y	17	THR	CA-C-N	5.81	128.54	120.29
19	Y	17	THR	C-N-CA	5.81	128.54	120.29
25	R	301	TYR	N-CA-C	-5.81	105.51	113.30
2	b	17	LYS	CB-CG-CD	5.81	124.66	111.30
7	g	104	LYS	CB-CA-C	5.81	119.53	111.63
20	Z	839	SER	CB-CA-C	-5.81	101.15	110.79
21	N	210	SER	CA-C-N	5.81	129.14	120.31
21	N	210	SER	C-N-CA	5.81	129.14	120.31
21	N	210	SER	N-CA-CB	5.81	118.66	110.12
2	B	174	PHE	CA-C-N	5.81	128.06	120.28
2	B	174	PHE	C-N-CA	5.81	128.06	120.28
22	S	455	GLU	CA-C-N	5.81	127.35	120.09
22	S	455	GLU	C-N-CA	5.81	127.35	120.09
22	S	462	ASP	CA-C-O	-5.81	114.36	120.63
31	L	167	VAL	CA-C-N	5.81	128.54	120.29
31	L	167	VAL	C-N-CA	5.81	128.54	120.29
31	L	343	LEU	N-CA-C	-5.81	98.41	108.69
3	c	17	GLY	CA-C-N	5.81	134.24	123.32
3	c	17	GLY	C-N-CA	5.81	134.24	123.32
2	B	177	LYS	O-C-N	-5.81	116.09	122.07
6	F	76	GLY	CA-C-N	5.81	129.61	121.02
6	F	76	GLY	C-N-CA	5.81	129.61	121.02
14	7	41	GLY	CA-C-O	-5.81	115.60	121.64
20	Z	232	LYS	N-CA-C	5.81	119.18	111.75
22	S	254	ILE	N-CA-C	-5.81	107.09	112.43
7	G	23	GLN	OE1-CD-NE2	5.80	128.41	122.60
8	1	48	ASP	CA-CB-CG	-5.80	106.80	112.60
24	Q	426	LEU	N-CA-CB	5.80	118.75	110.16
29	I	308	GLU	CA-C-N	5.80	128.33	120.38
29	I	308	GLU	C-N-CA	5.80	128.33	120.38
30	K	326	PRO	CB-CA-C	-5.80	105.20	113.09
30	K	423	LYS	O-C-N	-5.80	115.46	122.48
32	M	323	VAL	N-CA-C	-5.80	99.40	108.86
6	F	68	GLU	N-CA-C	-5.80	106.82	112.97
8	1	76	THR	CA-C-O	5.80	126.70	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
16	V	217	HIS	O-C-N	5.80	129.77	123.10
6	F	194	VAL	CA-C-N	5.80	128.05	120.28
6	F	194	VAL	C-N-CA	5.80	128.05	120.28
8	1	17	PHE	CA-C-O	-5.80	115.21	121.36
15	W	23	ARG	CG-CD-NE	-5.80	99.24	112.00
21	N	108	MET	N-CA-C	-5.80	104.96	111.28
7	g	89	VAL	CA-C-O	5.80	126.51	120.25
11	k	68	SER	O-C-N	5.80	128.04	122.07
4	D	139	ASP	CA-C-N	5.80	127.09	119.84
4	D	139	ASP	C-N-CA	5.80	127.09	119.84
7	G	109	ILE	CB-CA-C	-5.80	108.20	114.35
17	T	269	SER	N-CA-C	-5.80	105.04	111.36
21	N	598	ASP	N-CA-C	-5.80	101.04	110.20
22	S	367	TYR	CB-CG-CD2	5.80	129.50	120.80
27	O	306	ARG	NH1-CZ-NH2	5.80	126.84	119.30
28	H	124	ASN	N-CA-C	-5.80	105.04	111.36
31	L	274	GLU	CA-C-O	-5.80	114.14	120.17
21	N	724	THR	N-CA-CB	5.80	122.31	111.53
7	g	155	GLY	N-CA-C	-5.80	106.50	116.01
17	T	107	SER	O-C-N	5.80	128.26	122.12
21	N	314	LEU	CA-C-O	-5.80	114.73	120.70
22	S	359	LYS	CA-C-N	5.80	128.52	120.29
22	S	359	LYS	C-N-CA	5.80	128.52	120.29
22	S	480	ARG	CA-C-N	5.80	128.03	120.26
22	S	480	ARG	C-N-CA	5.80	128.03	120.26
25	R	217	HIS	CG-CD2-NE2	5.80	113.00	107.20
26	U	78	GLU	N-CA-CB	5.80	118.64	110.12
14	n	202	THR	CA-C-N	5.79	128.40	120.46
14	n	202	THR	C-N-CA	5.79	128.40	120.46
28	H	210	ASP	CB-CA-C	-5.79	103.51	111.51
7	g	21	ASN	CA-C-N	5.79	128.04	120.28
7	g	21	ASN	C-N-CA	5.79	128.04	120.28
12	l	125	ALA	CA-C-N	5.79	127.97	120.44
12	l	125	ALA	C-N-CA	5.79	127.97	120.44
12	l	276	LYS	N-CA-CB	5.79	118.41	110.01
15	W	9	VAL	N-CA-C	-5.79	98.80	107.37
17	T	165	GLN	N-CA-CB	5.79	118.64	110.12
23	P	166	GLU	CB-CG-CD	5.79	122.45	112.60
29	I	199	GLU	O-C-N	-5.79	115.83	122.09
4	d	116	VAL	CA-C-N	5.79	128.04	120.28
4	d	116	VAL	C-N-CA	5.79	128.04	120.28
21	N	500	ASP	CA-C-O	-5.79	114.74	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	190	ASN	CA-CB-CG	-5.79	106.81	112.60
31	L	134	SER	N-CA-C	-5.79	104.89	111.14
32	M	264	ARG	O-C-N	5.79	128.75	122.15
13	6	164	PHE	CA-C-N	5.79	129.78	121.50
13	6	164	PHE	C-N-CA	5.79	129.78	121.50
24	Q	87	GLN	OE1-CD-NE2	5.79	128.39	122.60
25	R	175	ALA	O-C-N	5.79	129.39	122.27
30	K	324	LEU	CB-CA-C	-5.79	102.97	111.77
14	7	167	GLY	CA-C-N	5.79	128.26	120.50
14	7	167	GLY	C-N-CA	5.79	128.26	120.50
28	H	176	VAL	CB-CA-C	-5.79	102.25	110.82
30	K	318	THR	CA-C-N	5.79	128.51	120.29
30	K	318	THR	C-N-CA	5.79	128.51	120.29
32	M	364	HIS	ND1-CE1-NE2	5.79	114.19	108.40
5	e	140	VAL	N-CA-C	-5.79	100.71	108.35
11	k	124	THR	CA-C-N	5.79	130.71	122.72
11	k	124	THR	C-N-CA	5.79	130.71	122.72
1	A	41	ASN	CA-CB-CG	-5.79	106.81	112.60
5	E	125	GLU	N-CA-C	-5.79	104.78	112.94
10	3	159	GLU	CA-C-O	-5.79	114.15	120.17
21	N	877	GLN	N-CA-C	-5.79	105.42	112.88
5	e	38	ILE	CA-C-N	5.79	126.06	121.61
5	e	38	ILE	C-N-CA	5.79	126.06	121.61
9	2	96	SER	O-C-N	5.79	128.25	122.12
21	N	863	SER	O-C-N	5.79	129.61	123.42
33	J	231	ARG	CA-C-N	5.79	128.61	120.28
33	J	231	ARG	C-N-CA	5.79	128.61	120.28
6	f	159	THR	N-CA-CB	5.78	120.37	111.46
29	I	364	ILE	CA-C-N	5.78	128.61	120.28
29	I	364	ILE	C-N-CA	5.78	128.61	120.28
33	J	150	VAL	CA-C-N	5.78	125.47	119.92
33	J	150	VAL	C-N-CA	5.78	125.47	119.92
33	J	311	ASP	CA-CB-CG	5.78	118.38	112.60
13	m	52	PHE	N-CA-C	-5.78	100.47	109.72
13	m	210	LEU	O-C-N	-5.78	116.33	123.33
7	G	46	VAL	N-CA-C	-5.78	100.15	108.42
32	M	76	PRO	CA-C-N	5.78	131.69	121.80
32	M	76	PRO	C-N-CA	5.78	131.69	121.80
1	a	91	ARG	NE-CZ-NH2	5.78	124.40	119.20
5	E	202	LYS	CA-C-N	5.78	128.63	120.42
5	E	202	LYS	C-N-CA	5.78	128.63	120.42
17	T	8	THR	N-CA-C	-5.78	105.11	111.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	249	MET	N-CA-CB	5.78	118.63	110.36
27	O	268	SER	CA-C-N	5.78	128.50	120.29
27	O	268	SER	C-N-CA	5.78	128.50	120.29
29	I	343	ARG	CD-NE-CZ	-5.78	116.31	124.40
2	b	20	GLN	CB-CG-CD	-5.78	102.78	112.60
5	E	103	TYR	CA-C-O	5.78	125.65	118.43
32	M	24	ASN	O-C-N	5.78	128.33	122.09
32	M	50	ARG	NE-CZ-NH2	5.78	124.40	119.20
18	X	34	GLU	N-CA-CB	5.78	120.19	110.77
27	O	360	GLY	O-C-N	-5.78	116.56	122.17
28	H	447	VAL	CB-CA-C	-5.78	104.34	112.14
29	I	230	THR	CB-CA-C	-5.78	99.58	110.67
33	J	286	LYS	O-C-N	5.78	129.51	121.83
21	N	475	ALA	N-CA-C	5.78	117.25	111.07
22	S	207	ASN	OD1-CG-ND2	5.78	128.38	122.60
26	U	205	LYS	CA-C-O	5.78	126.67	120.55
17	T	236	ASN	CA-C-N	5.77	128.49	120.29
17	T	236	ASN	C-N-CA	5.77	128.49	120.29
31	L	325	MET	CG-SD-CE	-5.77	88.20	100.90
12	l	92	ASP	O-C-N	-5.77	116.49	122.84
12	l	227	ASP	CA-C-N	5.77	128.49	120.29
12	l	227	ASP	C-N-CA	5.77	128.49	120.29
13	m	53	ASP	N-CA-C	-5.77	100.29	109.76
2	B	93	ALA	CA-C-N	5.77	128.49	120.29
2	B	93	ALA	C-N-CA	5.77	128.49	120.29
20	Z	528	LEU	O-C-N	-5.77	116.00	122.12
30	K	293	GLN	OE1-CD-NE2	-5.77	116.83	122.60
2	b	94	HIS	N-CA-CB	5.77	118.80	110.20
8	h	166	HIS	ND1-CE1-NE2	5.77	114.17	108.40
4	D	209	ASN	N-CA-C	-5.77	104.80	112.94
20	Z	172	ASP	CA-CB-CG	-5.77	106.83	112.60
27	O	117	ASN	CA-C-N	5.77	132.72	121.41
27	O	117	ASN	C-N-CA	5.77	132.72	121.41
1	a	19	PHE	CB-CA-C	-5.77	99.78	109.53
7	g	152	GLU	N-CA-CB	5.77	116.43	109.74
10	j	21	VAL	N-CA-C	-5.77	99.46	108.81
13	m	116	HIS	CE1-NE2-CD2	-5.77	103.23	109.00
1	A	139	VAL	CA-CB-CG1	-5.77	100.59	110.40
25	R	202	GLY	O-C-N	-5.77	115.20	122.70
25	R	328	PHE	N-CA-CB	5.77	118.70	110.16
17	T	61	ILE	N-CA-C	-5.77	104.89	110.42
5	e	209	GLU	CA-C-O	5.76	125.62	119.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	219	CYS	N-CA-C	-5.76	98.11	108.48
10	j	184	GLY	CA-C-N	5.76	131.32	121.87
10	j	184	GLY	C-N-CA	5.76	131.32	121.87
13	m	191	LEU	N-CA-C	5.76	117.64	111.36
8	1	194	ARG	NE-CZ-NH2	5.76	124.39	119.20
9	2	185	SER	CA-C-N	5.76	128.48	120.29
9	2	185	SER	C-N-CA	5.76	128.48	120.29
19	Y	52	ASN	N-CA-CB	5.76	120.23	110.49
20	Z	399	LEU	N-CA-C	5.76	117.56	111.28
21	N	397	SER	CA-C-N	5.76	129.07	120.31
21	N	397	SER	C-N-CA	5.76	129.07	120.31
23	P	289	ASN	N-CA-C	-5.76	105.58	113.30
25	R	356	ALA	CA-C-N	5.76	128.48	120.29
25	R	356	ALA	C-N-CA	5.76	128.48	120.29
26	U	24	ARG	NE-CZ-NH2	5.76	124.39	119.20
16	V	78	VAL	CA-C-O	5.76	127.39	120.65
23	P	150	GLU	CB-CG-CD	-5.76	102.80	112.60
24	Q	224	ILE	N-CA-C	5.76	116.50	110.62
5	e	160	PRO	CB-CA-C	-5.76	102.05	111.56
4	D	96	HIS	CA-CB-CG	5.76	119.56	113.80
17	T	67	LEU	N-CA-C	5.76	117.56	111.28
21	N	249	ASN	CA-CB-CG	5.76	118.36	112.60
29	I	341	PRO	N-CA-C	-5.76	100.60	112.47
12	l	150	SER	N-CA-C	-5.76	102.00	110.52
3	C	96	GLN	OE1-CD-NE2	5.76	128.36	122.60
6	F	81	ALA	CA-C-N	5.76	128.00	120.28
6	F	81	ALA	C-N-CA	5.76	128.00	120.28
13	6	144	CYS	N-CA-C	-5.76	98.70	108.26
21	N	455	MET	CG-SD-CE	-5.76	88.23	100.90
21	N	521	LEU	CD1-CG-CD2	5.76	123.47	110.80
13	m	151	ALA	N-CA-CB	5.76	119.09	110.22
14	7	177	THR	CA-C-N	5.76	128.67	119.98
14	7	177	THR	C-N-CA	5.76	128.67	119.98
20	Z	308	LYS	CA-C-O	-5.76	114.77	120.82
32	M	166	ARG	CA-C-O	-5.76	114.32	120.42
32	M	269	LEU	O-C-N	5.76	128.71	122.15
13	m	158	LEU	N-CA-CB	5.76	118.68	110.16
2	B	98	LYS	N-CA-C	-5.76	105.57	112.59
4	D	61	PRO	CB-CA-C	-5.76	104.33	111.64
13	6	37	ASN	N-CA-C	-5.76	99.63	109.24
13	6	219	GLY	O-C-N	-5.76	117.88	123.35
21	N	914	VAL	CA-C-N	5.76	129.44	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	914	VAL	C-N-CA	5.76	129.44	120.75
25	R	227	ALA	CA-C-N	5.76	127.92	120.44
25	R	227	ALA	C-N-CA	5.76	127.92	120.44
27	O	329	MET	N-CA-CB	5.76	118.58	110.12
4	D	182	LYS	N-CA-C	-5.75	105.09	111.36
9	2	231	SER	N-CA-C	-5.75	100.80	109.95
17	T	251	HIS	CB-CG-CD2	-5.75	123.72	131.20
27	O	247	ASN	O-C-N	5.75	128.22	122.12
29	I	124	THR	N-CA-C	-5.75	102.25	110.59
32	M	101	THR	CA-C-O	5.75	126.52	120.36
6	f	199	GLN	CB-CA-C	-5.75	101.07	110.85
20	Z	172	ASP	N-CA-C	-5.75	105.09	111.36
23	P	15	GLN	N-CA-C	5.75	117.63	111.36
28	H	130	ASN	CA-C-O	-5.75	114.61	120.71
2	b	54	PRO	N-CA-C	-5.75	106.18	114.18
11	4	107	TYR	CB-CA-C	-5.75	101.65	111.31
33	J	74	GLU	CB-CG-CD	-5.75	102.82	112.60
4	D	61	PRO	N-CA-C	5.75	120.63	111.26
6	F	126	ARG	O-C-N	-5.75	114.71	121.32
11	4	168	LEU	CA-C-N	5.75	127.98	120.28
11	4	168	LEU	C-N-CA	5.75	127.98	120.28
27	O	28	GLN	CB-CG-CD	-5.75	102.82	112.60
14	7	257	ASP	O-C-N	-5.75	116.11	122.09
7	G	39	GLY	N-CA-C	-5.75	101.40	111.46
10	3	113	ASN	CA-C-N	5.75	128.25	120.44
10	3	113	ASN	C-N-CA	5.75	128.25	120.44
20	Z	574	TYR	CB-CG-CD1	5.75	129.42	120.80
21	N	269	LEU	N-CA-C	5.75	117.54	111.28
24	Q	360	SER	CA-C-N	5.75	128.45	120.29
24	Q	360	SER	C-N-CA	5.75	128.45	120.29
33	J	376	HIS	CG-CD2-NE2	5.75	112.95	107.20
6	f	96	SER	CA-C-O	5.75	126.85	120.82
15	W	49	VAL	N-CA-C	-5.75	99.85	108.12
9	i	39	ASN	CA-C-O	5.74	126.07	119.35
12	l	233	LYS	CB-CA-C	-5.74	101.86	110.88
13	m	87	HIS	ND1-CE1-NE2	5.74	114.14	108.40
22	S	452	TYR	O-C-N	5.74	129.34	122.27
30	K	205	PRO	O-C-N	-5.74	114.68	121.46
3	c	218	LYS	CA-C-N	5.74	127.32	120.14
3	c	218	LYS	C-N-CA	5.74	127.32	120.14
15	W	87	MET	CA-C-N	5.74	128.44	120.29
15	W	87	MET	C-N-CA	5.74	128.44	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	765	ASP	N-CA-C	-5.74	106.28	113.28
22	S	92	LEU	CA-C-N	5.74	127.97	120.28
22	S	92	LEU	C-N-CA	5.74	127.97	120.28
22	S	241	PHE	N-CA-CB	5.74	118.56	110.12
27	O	190	TYR	CA-CB-CG	-5.74	103.57	113.90
28	H	63	ILE	CA-C-N	5.74	128.44	120.29
28	H	63	ILE	C-N-CA	5.74	128.44	120.29
6	f	43	HIS	CA-C-N	5.74	132.24	122.37
6	f	43	HIS	C-N-CA	5.74	132.24	122.37
10	3	44	PHE	N-CA-C	-5.74	100.62	109.52
13	6	52	PHE	CA-CB-CG	-5.74	108.06	113.80
28	H	466	TYR	CA-C-N	5.74	132.03	121.70
28	H	466	TYR	C-N-CA	5.74	132.03	121.70
29	I	204	HIS	CE1-NE2-CD2	-5.74	103.26	109.00
21	N	288	ASN	CA-C-O	-5.74	114.47	120.55
22	S	174	ARG	N-CA-CB	5.74	118.65	110.16
31	L	253	ASP	CA-C-N	5.74	131.18	121.14
31	L	253	ASP	C-N-CA	5.74	131.18	121.14
33	J	307	PRO	N-CA-C	-5.74	100.65	112.47
15	W	187	SER	N-CA-C	-5.74	105.11	111.36
16	V	168	LEU	N-CA-C	-5.74	104.85	112.94
21	N	641	LEU	CA-C-N	5.74	128.15	120.58
21	N	641	LEU	C-N-CA	5.74	128.15	120.58
30	K	333	ARG	N-CA-CB	5.74	120.25	110.50
9	i	167	LEU	CB-CA-C	-5.73	101.88	110.88
11	4	10	GLN	N-CA-CB	5.73	118.55	110.12
11	4	189	ILE	N-CA-C	-5.73	99.86	108.12
25	R	49	PHE	CA-C-N	5.73	128.56	120.42
25	R	49	PHE	C-N-CA	5.73	128.56	120.42
27	O	241	THR	CA-C-N	-5.73	115.45	123.13
27	O	241	THR	C-N-CA	-5.73	115.45	123.13
28	H	136	ALA	N-CA-CB	5.73	120.18	110.49
7	g	83	PRO	CB-CA-C	-5.73	102.08	111.31
21	N	573	HIS	CE1-NE2-CD2	-5.73	103.27	109.00
25	R	284	ALA	CB-CA-C	-5.73	101.11	110.85
28	H	257	THR	CA-C-N	5.73	127.96	120.28
28	H	257	THR	C-N-CA	5.73	127.96	120.28
31	L	200	PRO	O-C-N	5.73	130.38	122.64
8	1	12	ILE	N-CA-C	-5.73	99.39	108.90
10	3	48	HIS	CE1-NE2-CD2	-5.73	103.27	109.00
20	Z	337	GLU	CA-C-N	5.73	127.96	120.28
20	Z	337	GLU	C-N-CA	5.73	127.96	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	74	GLN	OE1-CD-NE2	5.73	128.33	122.60
3	c	168	ASN	CA-C-N	5.73	127.89	120.44
3	c	168	ASN	C-N-CA	5.73	127.89	120.44
18	X	71	GLY	O-C-N	5.73	129.42	122.32
28	H	354	ALA	N-CA-C	-5.73	99.56	108.90
13	m	45	SER	N-CA-C	-5.73	98.95	108.75
5	E	12	VAL	N-CA-C	-5.73	107.69	113.47
11	4	173	PRO	O-C-N	5.73	130.37	122.64
25	R	367	ASP	CA-C-O	-5.73	114.48	120.55
10	j	88	THR	N-CA-C	-5.73	105.12	111.36
4	D	197	ARG	N-CA-CB	5.73	118.54	110.12
3	c	74	ALA	N-CA-C	-5.72	100.59	109.24
6	f	13	PHE	CA-CB-CG	-5.72	108.08	113.80
11	k	58	GLU	CA-C-N	5.72	128.22	120.44
11	k	58	GLU	C-N-CA	5.72	128.22	120.44
14	n	149	VAL	O-C-N	-5.72	115.42	122.97
7	G	15	PHE	N-CA-CB	5.72	119.97	110.52
7	G	34	GLY	CA-C-N	5.72	130.56	122.09
7	G	34	GLY	C-N-CA	5.72	130.56	122.09
11	4	139	TYR	N-CA-C	-5.72	106.84	113.88
28	H	383	GLU	CA-C-N	5.72	127.30	120.14
28	H	383	GLU	C-N-CA	5.72	127.30	120.14
33	J	400	VAL	CB-CA-C	-5.72	104.04	111.88
12	l	265	ASN	N-CA-C	-5.72	99.86	109.07
3	C	19	LEU	N-CA-C	-5.72	98.76	108.26
9	2	46	ASP	N-CA-CB	5.72	118.54	110.36
12	5	200	ASP	N-CA-C	-5.72	107.29	114.56
15	W	160	ALA	CA-C-O	-5.72	114.48	120.55
20	Z	324	GLU	CA-C-O	-5.72	113.39	119.97
29	I	365	HIS	CE1-NE2-CD2	-5.72	103.28	109.00
31	L	84	LEU	CA-C-N	5.72	127.95	120.28
31	L	84	LEU	C-N-CA	5.72	127.95	120.28
33	J	9	ASN	CA-C-N	5.72	132.27	121.97
33	J	9	ASN	C-N-CA	5.72	132.27	121.97
33	J	54	LYS	N-CA-C	5.72	117.60	111.36
22	S	172	ASN	N-CA-CB	5.72	119.50	110.23
20	Z	557	GLU	CA-C-N	5.72	127.88	120.44
20	Z	557	GLU	C-N-CA	5.72	127.88	120.44
21	N	28	ILE	CA-C-N	5.72	128.52	120.28
21	N	28	ILE	C-N-CA	5.72	128.52	120.28
22	S	344	PRO	N-CA-CB	5.72	109.57	103.39
23	P	47	ARG	NE-CZ-NH1	5.72	127.22	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	374	SER	O-C-N	5.72	127.96	122.07
7	g	144	ASN	N-CA-C	-5.72	104.16	113.19
8	h	124	LEU	N-CA-C	5.72	120.12	113.20
23	P	370	ASP	N-CA-CB	5.72	121.84	112.63
31	L	204	PRO	CA-C-N	5.72	128.41	120.29
31	L	204	PRO	C-N-CA	5.72	128.41	120.29
32	M	201	MET	N-CA-C	5.72	117.51	111.28
2	B	25	LEU	O-C-N	5.72	128.18	122.12
13	6	134	ASP	CA-C-O	5.72	125.75	120.60
19	Y	38	PHE	CA-CB-CG	-5.72	108.08	113.80
25	R	248	SER	CA-C-O	-5.72	114.82	120.82
32	M	110	ASN	N-CA-C	-5.72	98.63	110.80
33	J	380	GLU	CA-C-N	5.72	127.87	120.44
33	J	380	GLU	C-N-CA	5.72	127.87	120.44
1	a	65	ASP	N-CA-CB	5.71	119.05	110.02
9	i	224	VAL	CA-CB-CG2	-5.71	100.68	110.40
13	m	215	VAL	N-CA-CB	5.71	118.66	111.46
7	G	118	GLN	N-CA-C	-5.71	104.66	111.69
12	5	144	ARG	CA-C-O	-5.71	114.36	120.42
20	Z	54	GLU	CA-C-O	-5.71	114.36	120.42
24	Q	166	LYS	CA-C-O	5.71	126.04	119.35
29	I	288	GLY	O-C-N	5.71	127.17	122.71
2	B	190	HIS	CA-C-N	5.71	128.53	120.42
2	B	190	HIS	C-N-CA	5.71	128.53	120.42
20	Z	579	GLU	CB-CG-CD	-5.71	102.89	112.60
4	d	103	PRO	CB-CA-C	5.71	118.43	110.95
13	m	35	THR	N-CA-C	-5.71	105.65	113.30
21	N	195	THR	O-C-N	5.71	129.08	122.17
24	Q	325	LEU	CA-C-O	-5.71	114.37	120.42
25	R	76	GLN	CG-CD-NE2	-5.71	107.83	116.40
29	I	148	LEU	N-CA-CB	5.71	119.99	110.85
5	E	97	VAL	O-C-N	-5.71	115.95	121.83
21	N	874	ILE	CA-C-N	5.71	129.36	120.68
21	N	874	ILE	C-N-CA	5.71	129.36	120.68
27	O	39	PHE	CA-CB-CG	5.71	119.51	113.80
2	b	90	ARG	NE-CZ-NH2	5.71	124.34	119.20
8	h	118	GLU	CB-CG-CD	-5.71	102.90	112.60
15	W	24	THR	N-CA-C	-5.71	101.26	108.45
16	V	232	GLU	CB-CG-CD	-5.71	102.89	112.60
20	Z	439	TYR	CA-C-N	5.71	128.50	120.28
20	Z	439	TYR	C-N-CA	5.71	128.50	120.28
25	R	137	LEU	N-CA-CB	5.71	118.51	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	164	GLU	N-CA-C	-5.71	102.84	110.55
26	U	180	ASP	N-CA-C	-5.71	105.98	113.17
26	U	230	GLN	CA-C-O	5.71	126.47	120.42
27	O	25	LEU	CA-C-N	5.71	127.86	120.44
27	O	25	LEU	C-N-CA	5.71	127.86	120.44
3	c	161	LYS	O-C-N	5.71	128.62	122.34
4	D	138	PHE	CA-CB-CG	-5.71	108.09	113.80
22	S	394	ILE	N-CA-CB	5.71	117.87	110.57
27	O	141	ASN	N-CA-CB	5.71	120.13	110.49
31	L	112	LEU	N-CA-C	-5.71	106.36	113.55
32	M	315	PHE	N-CA-C	-5.71	106.30	113.72
16	V	217	HIS	CA-CB-CG	-5.71	108.09	113.80
22	S	74	LEU	O-C-N	-5.71	116.07	122.12
29	I	325	ILE	CA-C-O	5.71	126.32	120.39
3	C	108	VAL	CA-C-N	5.70	128.39	120.29
3	C	108	VAL	C-N-CA	5.70	128.39	120.29
19	Y	34	GLU	N-CA-C	-5.70	104.90	112.94
21	N	555	ILE	CB-CA-C	-5.70	104.35	112.22
22	S	302	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
24	Q	227	CYS	CA-C-N	5.70	130.38	120.68
24	Q	227	CYS	C-N-CA	5.70	130.38	120.68
31	L	77	ARG	NE-CZ-NH2	-5.70	114.07	119.20
32	M	209	ASP	N-CA-CB	5.70	118.34	110.07
2	b	142	PHE	CA-CB-CG	-5.70	108.10	113.80
4	d	226	SER	CA-C-O	-5.70	113.66	120.10
10	3	101	GLY	CA-C-O	-5.70	113.37	121.52
27	O	283	HIS	CB-CG-ND1	5.70	131.25	122.70
8	h	188	THR	N-CA-C	-5.70	100.87	108.74
1	A	250	GLU	N-CA-C	-5.70	99.13	108.76
21	N	25	LEU	CA-C-N	5.70	127.92	120.28
21	N	25	LEU	C-N-CA	5.70	127.92	120.28
22	S	191	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
25	R	135	ILE	N-CA-CB	5.70	119.13	110.58
29	I	238	ASN	CB-CA-C	-5.70	101.93	110.88
31	L	360	ILE	N-CA-CB	5.70	119.13	110.58
31	L	395	ALA	N-CA-C	-5.70	105.07	111.28
3	c	61	THR	CA-C-O	-5.70	113.17	119.78
4	d	229	ILE	CA-CB-CG2	-5.70	100.81	110.50
14	n	172	SER	N-CA-C	-5.70	103.09	108.22
11	4	192	VAL	N-CA-C	-5.70	99.92	108.12
13	6	183	LEU	O-C-N	5.70	129.47	123.03
20	Z	385	PHE	CA-C-N	5.70	129.47	120.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	385	PHE	C-N-CA	5.70	129.47	120.47
6	f	187	ASP	CA-CB-CG	-5.70	106.90	112.60
11	k	21	VAL	O-C-N	5.70	128.90	123.03
20	Z	433	LEU	CA-C-O	5.70	126.33	119.61
31	L	174	GLU	CA-C-N	5.70	132.69	121.58
31	L	174	GLU	C-N-CA	5.70	132.69	121.58
31	L	191	ARG	CA-C-N	5.70	128.38	120.29
31	L	191	ARG	C-N-CA	5.70	128.38	120.29
5	e	50	VAL	CA-CB-CG2	5.70	120.08	110.40
7	g	223	GLU	N-CA-C	5.70	119.81	112.41
10	3	88	THR	N-CA-C	5.70	117.16	111.07
13	6	117	THR	CA-C-O	-5.70	114.72	121.16
23	P	42	LEU	CA-C-O	-5.70	113.92	120.24
24	Q	183	LYS	CA-C-N	5.70	128.26	120.46
24	Q	183	LYS	C-N-CA	5.70	128.26	120.46
26	U	27	THR	O-C-N	5.70	129.99	123.27
32	M	373	ASP	CA-C-N	5.70	129.72	121.18
32	M	373	ASP	C-N-CA	5.70	129.72	121.18
3	c	94	HIS	CA-C-N	5.69	127.91	120.28
3	c	94	HIS	C-N-CA	5.69	127.91	120.28
21	N	606	VAL	CA-C-O	5.69	125.83	120.14
27	O	133	ILE	N-CA-C	-5.69	104.81	110.62
3	c	222	ASP	CA-CB-CG	-5.69	106.91	112.60
13	6	174	GLY	CA-C-N	5.69	127.91	120.28
13	6	174	GLY	C-N-CA	5.69	127.91	120.28
20	Z	351	PRO	CA-C-O	5.69	125.17	118.68
21	N	59	GLU	CA-C-N	5.69	128.37	120.29
21	N	59	GLU	C-N-CA	5.69	128.37	120.29
23	P	148	LYS	CG-CD-CE	5.69	124.39	111.30
25	R	365	ASP	CA-C-O	5.69	126.80	120.82
27	O	59	LEU	CA-C-N	5.69	128.37	120.29
27	O	59	LEU	C-N-CA	5.69	128.37	120.29
3	c	13	PHE	CB-CA-C	-5.69	98.62	109.66
7	g	40	ILE	CA-C-O	5.69	125.89	120.31
22	S	224	LYS	CA-C-O	-5.69	113.67	120.10
33	J	331	HIS	CA-C-N	5.69	127.90	120.28
33	J	331	HIS	C-N-CA	5.69	127.90	120.28
14	n	197	ASP	CB-CA-C	-5.69	100.56	110.17
1	A	15	HIS	ND1-CE1-NE2	5.69	114.09	108.40
4	d	144	GLU	O-C-N	-5.69	114.78	121.32
6	F	104	ALA	CA-C-N	5.69	128.25	120.46
6	F	104	ALA	C-N-CA	5.69	128.25	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	5	129	PHE	O-C-N	5.69	127.93	122.07
20	Z	375	ASP	CA-CB-CG	-5.69	106.91	112.60
3	c	227	GLN	CB-CG-CD	-5.68	102.94	112.60
3	C	225	VAL	O-C-N	5.68	129.34	123.20
13	6	89	ASP	N-CA-CB	5.68	120.10	110.49
15	W	77	HIS	CA-C-N	-5.68	113.16	122.54
15	W	77	HIS	C-N-CA	-5.68	113.16	122.54
23	P	3	ARG	NE-CZ-NH2	-5.68	114.08	119.20
23	P	180	ILE	CA-C-N	5.68	128.36	120.29
23	P	180	ILE	C-N-CA	5.68	128.36	120.29
31	L	66	GLU	CA-C-O	-5.68	114.52	120.55
32	M	361	LEU	N-CA-CB	5.68	118.48	110.12
20	Z	272	TYR	N-CA-C	5.68	118.21	111.33
24	Q	209	TYR	CA-C-N	5.68	129.95	120.86
24	Q	209	TYR	C-N-CA	5.68	129.95	120.86
5	e	208	MET	CB-CA-C	5.68	119.77	109.83
19	Y	17	THR	N-CA-C	-5.68	105.61	112.54
28	H	258	LEU	N-CA-CB	5.68	118.47	110.12
3	c	5	ARG	CA-C-N	5.68	129.71	120.23
3	c	5	ARG	C-N-CA	5.68	129.71	120.23
9	i	115	HIS	CA-C-N	5.68	128.46	120.28
9	i	115	HIS	C-N-CA	5.68	128.46	120.28
5	E	119	LEU	CA-C-O	5.68	126.57	120.55
6	F	215	ILE	CA-C-O	5.68	127.01	120.76
13	6	29	ALA	N-CA-C	-5.68	99.35	108.55
13	6	218	ASP	N-CA-C	-5.68	105.09	113.61
14	7	144	TRP	CE2-CD2-CE3	5.68	124.48	118.80
27	O	310	PHE	CB-CA-C	-5.68	98.44	110.31
3	c	226	TYR	N-CA-CB	5.68	119.68	110.77
6	f	114	ASP	CA-C-N	5.68	127.89	120.28
6	f	114	ASP	C-N-CA	5.68	127.89	120.28
10	j	181	SER	N-CA-C	-5.68	101.12	109.18
20	Z	551	LEU	N-CA-C	5.68	117.47	111.28
24	Q	186	HIS	CB-CG-CD2	-5.68	123.82	131.20
25	R	377	LEU	CA-C-N	5.68	130.23	122.34
25	R	377	LEU	C-N-CA	5.68	130.23	122.34
26	U	139	ALA	N-CA-CB	5.68	118.45	109.71
26	U	196	SER	N-CA-C	5.68	117.47	111.28
27	O	313	ILE	N-CA-C	-5.68	104.99	110.72
7	g	29	LYS	CA-C-N	5.67	128.45	120.28
7	g	29	LYS	C-N-CA	5.67	128.45	120.28
9	i	230	LYS	CA-CB-CG	-5.67	102.75	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	n	36	GLN	CA-C-N	5.67	125.96	119.83
14	n	36	GLN	C-N-CA	5.67	125.96	119.83
20	Z	897	HIS	CE1-NE2-CD2	-5.67	103.33	109.00
23	P	201	ARG	CB-CA-C	-5.67	100.61	110.09
25	R	282	THR	N-CA-C	-5.67	104.14	113.50
28	H	80	HIS	CE1-NE2-CD2	-5.67	103.33	109.00
29	I	74	GLU	CB-CG-CD	-5.67	102.95	112.60
29	I	204	HIS	CA-C-O	5.67	125.33	119.49
31	L	417	LYS	N-CA-CB	5.67	118.46	110.12
5	e	86	ARG	N-CA-CB	5.67	118.30	110.07
5	e	217	ALA	CA-C-O	-5.67	114.99	121.40
4	D	57	THR	N-CA-C	-5.67	104.14	113.50
7	G	230	PHE	CA-C-N	5.67	129.46	122.37
7	G	230	PHE	C-N-CA	5.67	129.46	122.37
28	H	187	LEU	CA-C-N	5.67	126.22	120.38
28	H	187	LEU	C-N-CA	5.67	126.22	120.38
7	G	84	ASP	CA-CB-CG	-5.67	106.93	112.60
9	2	45	ALA	CB-CA-C	-5.67	99.65	109.86
22	S	230	LYS	CB-CA-C	-5.67	101.38	110.79
25	R	229	LYS	N-CA-CB	5.67	118.30	110.07
29	I	321	ASP	CA-CB-CG	5.67	118.27	112.60
1	A	151	GLY	CA-C-N	5.67	126.00	119.93
1	A	151	GLY	C-N-CA	5.67	126.00	119.93
12	5	123	GLY	CA-C-N	5.67	127.88	120.28
12	5	123	GLY	C-N-CA	5.67	127.88	120.28
20	Z	197	LYS	CA-C-N	5.67	127.81	120.44
20	Z	197	LYS	C-N-CA	5.67	127.81	120.44
32	M	65	ASN	OD1-CG-ND2	-5.67	116.93	122.60
1	a	65	ASP	CA-C-O	-5.67	114.13	120.25
3	c	205	ALA	CB-CA-C	-5.67	101.38	110.79
7	g	107	ILE	CA-C-N	5.67	125.57	119.85
7	g	107	ILE	C-N-CA	5.67	125.57	119.85
13	m	118	ILE	N-CA-C	-5.67	99.96	108.12
17	T	118	ASN	N-CA-C	-5.67	102.80	110.68
18	X	87	PHE	CA-CB-CG	-5.67	108.13	113.80
21	N	474	SER	N-CA-CB	5.67	118.74	109.95
31	L	75	LYS	CA-C-N	5.67	128.34	120.29
31	L	75	LYS	C-N-CA	5.67	128.34	120.29
7	g	182	HIS	CB-CG-CD2	-5.67	123.83	131.20
14	n	74	ARG	NE-CZ-NH1	5.67	127.17	121.50
25	R	366	ASN	CA-C-N	5.67	127.87	120.28
25	R	366	ASN	C-N-CA	5.67	127.87	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	248	ASP	CA-CB-CG	-5.67	106.93	112.60
28	H	398	VAL	CB-CA-C	-5.67	102.64	110.91
7	G	68	GLN	CG-CD-NE2	5.67	124.90	116.40
15	W	90	ALA	CA-C-N	5.67	128.34	120.29
15	W	90	ALA	C-N-CA	5.67	128.34	120.29
24	Q	214	THR	CA-C-N	5.67	128.47	120.42
24	Q	214	THR	C-N-CA	5.67	128.47	120.42
10	j	59	ASP	CA-CB-CG	5.66	118.26	112.60
7	G	230	PHE	CA-C-O	-5.66	114.96	121.47
10	3	69	TYR	CA-C-N	5.66	128.33	120.29
10	3	69	TYR	C-N-CA	5.66	128.33	120.29
16	V	65	VAL	N-CA-CB	5.66	120.58	111.23
19	Y	13	LYS	CA-C-N	5.66	129.48	121.66
19	Y	13	LYS	C-N-CA	5.66	129.48	121.66
23	P	230	HIS	O-C-N	-5.66	115.31	122.27
24	Q	261	VAL	CA-CB-CG2	-5.66	100.77	110.40
28	H	359	ASN	CA-C-N	5.66	130.51	122.24
28	H	359	ASN	C-N-CA	5.66	130.51	122.24
30	K	408	GLU	CB-CA-C	5.66	119.85	110.90
31	L	58	ASN	N-CA-C	5.66	117.45	111.28
23	P	53	ALA	O-C-N	5.66	128.60	122.15
23	P	326	ASP	CA-C-N	5.66	132.35	121.54
23	P	326	ASP	C-N-CA	5.66	132.35	121.54
27	O	94	GLU	CA-C-N	5.66	127.87	120.28
27	O	94	GLU	C-N-CA	5.66	127.87	120.28
31	L	151	THR	CB-CA-C	5.66	118.20	109.03
12	l	209	THR	CA-C-N	5.66	128.91	120.31
12	l	209	THR	C-N-CA	5.66	128.91	120.31
21	N	271	GLU	O-C-N	5.66	128.12	122.12
23	P	386	GLN	OE1-CD-NE2	5.66	128.26	122.60
30	K	235	ILE	O-C-N	-5.66	117.29	123.18
30	K	255	ARG	CA-C-N	5.66	128.14	120.44
30	K	255	ARG	C-N-CA	5.66	128.14	120.44
6	f	195	GLU	O-C-N	5.66	128.12	122.12
17	T	9	LYS	CB-CG-CD	5.66	124.31	111.30
21	N	383	LYS	N-CA-C	-5.66	106.54	113.50
21	N	667	GLN	OE1-CD-NE2	5.66	128.26	122.60
13	m	134	ASP	N-CA-C	-5.66	103.03	110.39
9	2	211	LYS	O-C-N	-5.66	117.30	123.52
22	S	57	LEU	N-CA-C	5.66	117.45	111.28
29	I	252	LEU	CA-C-N	5.66	129.67	122.37
29	I	252	LEU	C-N-CA	5.66	129.67	122.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	234	PHE	N-CA-CB	5.66	121.11	111.66
4	d	227	GLU	O-C-N	5.66	128.12	122.12
24	Q	236	PHE	O-C-N	-5.66	115.70	122.15
31	L	229	THR	CA-C-N	5.66	130.29	120.68
31	L	229	THR	C-N-CA	5.66	130.29	120.68
2	B	121	ALA	N-CA-C	-5.65	106.23	113.02
20	Z	524	ALA	CA-C-N	5.65	129.73	120.63
20	Z	524	ALA	C-N-CA	5.65	129.73	120.63
29	I	104	LEU	N-CA-C	-5.65	100.11	108.99
30	K	423	LYS	N-CA-C	-5.65	106.73	113.97
14	n	153	GLN	CA-C-O	-5.65	115.44	121.94
6	F	70	MET	CA-C-O	-5.65	115.22	121.33
6	F	170	THR	CA-C-O	5.65	126.41	120.42
24	Q	400	TYR	CA-C-N	5.65	132.07	122.12
24	Q	400	TYR	C-N-CA	5.65	132.07	122.12
28	H	165	PRO	N-CA-C	-5.65	107.08	114.03
17	T	238	GLN	OE1-CD-NE2	-5.65	116.95	122.60
19	Y	23	GLU	N-CA-CB	5.65	118.52	110.16
20	Z	898	HIS	N-CA-C	-5.65	105.59	112.88
22	S	55	ARG	CA-C-O	-5.65	114.56	120.55
25	R	108	SER	CB-CA-C	-5.65	101.41	110.79
32	M	247	ALA	CA-C-N	5.65	127.15	120.09
32	M	247	ALA	C-N-CA	5.65	127.15	120.09
24	Q	23	ALA	N-CA-C	5.65	117.44	111.28
13	6	205	GLN	OE1-CD-NE2	5.65	128.25	122.60
21	N	713	VAL	CA-CB-CG2	-5.65	100.80	110.40
10	j	80	ARG	CB-CG-CD	5.64	124.28	111.30
1	A	221	ASN	O-C-N	-5.64	115.53	122.25
14	7	84	VAL	O-C-N	-5.64	117.25	123.18
14	7	124	TYR	CB-CG-CD1	5.64	129.27	120.80
16	V	45	VAL	CA-CB-CG1	5.64	120.00	110.40
21	N	47	GLU	CA-CB-CG	-5.64	102.81	114.10
29	I	430	GLU	CA-C-O	-5.64	113.64	119.51
4	d	59	ILE	N-CA-CB	-5.64	106.00	112.21
15	W	188	SER	CA-C-N	5.64	126.89	119.84
15	W	188	SER	C-N-CA	5.64	126.89	119.84
20	Z	257	PRO	N-CA-C	-5.64	103.82	110.70
21	N	81	TYR	N-CA-C	-5.64	105.21	111.36
21	N	285	ALA	CA-C-N	5.64	128.30	120.29
21	N	285	ALA	C-N-CA	5.64	128.30	120.29
28	H	265	ASN	OD1-CG-ND2	5.64	128.24	122.60
13	m	114	TYR	CB-CA-C	-5.64	103.23	112.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	17	PRO	N-CA-C	-5.64	107.09	114.03
14	7	220	ARG	CA-C-O	-5.64	113.87	120.53
17	T	203	SER	CA-C-N	5.64	130.22	120.58
17	T	203	SER	C-N-CA	5.64	130.22	120.58
20	Z	630	LYS	O-C-N	5.64	128.10	122.12
24	Q	188	LEU	CA-C-N	5.64	130.58	122.35
24	Q	188	LEU	C-N-CA	5.64	130.58	122.35
27	O	195	TYR	CB-CG-CD1	-5.64	112.34	120.80
28	H	114	GLU	CA-C-N	5.64	130.27	122.77
28	H	114	GLU	C-N-CA	5.64	130.27	122.77
28	H	294	LEU	CA-C-N	5.64	127.84	120.28
28	H	294	LEU	C-N-CA	5.64	127.84	120.28
33	J	4	ALA	N-CA-C	-5.64	104.19	113.50
12	5	271	LEU	CA-C-O	-5.64	114.57	120.55
17	T	165	GLN	CB-CA-C	-5.64	101.43	110.79
20	Z	761	PHE	CA-C-N	5.64	126.24	119.98
20	Z	761	PHE	C-N-CA	5.64	126.24	119.98
10	3	183	TRP	CB-CG-CD2	-5.64	118.91	126.80
11	4	172	MET	CB-CA-C	5.64	117.31	108.63
20	Z	168	GLN	OE1-CD-NE2	5.64	128.24	122.60
23	P	417	HIS	N-CA-C	5.64	117.50	111.36
23	P	422	LEU	CB-CA-C	5.64	119.73	110.88
24	Q	145	HIS	ND1-CE1-NE2	5.64	114.04	108.40
29	I	221	LEU	CA-C-O	-5.64	114.24	120.38
33	J	331	HIS	CA-CB-CG	-5.64	108.16	113.80
33	J	332	SER	O-C-N	-5.64	116.14	122.12
11	k	189	ILE	CA-C-O	-5.63	114.47	120.39
9	2	179	GLU	CB-CG-CD	-5.63	103.02	112.60
12	5	197	LEU	O-C-N	-5.63	116.68	123.27
14	7	73	GLU	N-CA-CB	5.63	118.25	109.97
21	N	375	HIS	ND1-CE1-NE2	5.63	114.03	108.40
22	S	19	HIS	ND1-CE1-NE2	5.63	114.03	108.40
26	U	155	LEU	CA-C-O	5.63	126.39	120.36
28	H	137	ASP	N-CA-C	-5.63	100.73	109.24
30	K	378	LEU	CB-CA-C	-5.63	100.95	110.19
33	J	361	VAL	N-CA-C	5.63	116.37	110.62
7	G	195	GLN	OE1-CD-NE2	5.63	128.23	122.60
29	I	380	LEU	O-C-N	-5.63	116.01	122.09
13	m	23	ILE	CA-C-O	-5.63	114.29	120.43
13	m	70	ASP	CA-CB-CG	5.63	118.23	112.60
1	A	31	ALA	N-CA-C	-5.63	105.29	111.82
7	G	12	ASN	CA-CB-CG	5.63	118.23	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	2	83	ALA	N-CA-CB	5.63	118.40	110.12
20	Z	85	VAL	CA-C-N	5.63	126.88	119.84
20	Z	85	VAL	C-N-CA	5.63	126.88	119.84
20	Z	300	ALA	N-CA-CB	5.63	118.40	110.12
21	N	529	GLN	CA-C-N	5.63	128.39	120.28
21	N	529	GLN	C-N-CA	5.63	128.39	120.28
22	S	139	HIS	CB-CG-ND1	5.63	131.15	122.70
30	K	194	GLN	CA-C-N	5.63	128.29	120.29
30	K	194	GLN	C-N-CA	5.63	128.29	120.29
20	Z	210	TYR	N-CA-C	-5.63	105.22	111.36
25	R	413	LYS	CB-CG-CD	5.63	124.25	111.30
28	H	440	GLU	CA-C-O	-5.63	114.61	120.92
30	K	81	ARG	CG-CD-NE	-5.63	99.61	112.00
11	k	23	ARG	N-CA-C	-5.63	99.25	108.76
13	6	35	THR	N-CA-C	-5.63	106.40	113.72
21	N	735	MET	CG-SD-CE	-5.63	88.52	100.90
24	Q	186	HIS	CB-CG-ND1	5.63	131.14	122.70
26	U	247	ILE	N-CA-C	-5.63	104.88	110.62
21	N	861	TYR	O-C-N	5.63	129.63	123.22
23	P	103	TYR	CA-C-N	5.63	127.75	120.44
23	P	103	TYR	C-N-CA	5.63	127.75	120.44
29	I	162	ASP	CA-CB-CG	-5.63	106.97	112.60
31	L	409	HIS	CG-CD2-NE2	5.63	112.83	107.20
32	M	121	THR	N-CA-CB	5.63	118.49	110.44
32	M	209	ASP	N-CA-C	-5.63	105.06	111.14
5	e	106	ASP	N-CA-C	-5.62	101.32	109.59
12	l	273	TRP	N-CA-C	5.62	117.49	111.36
13	m	89	ASP	O-C-N	-5.62	114.87	122.41
9	2	64	HIS	N-CA-C	-5.62	101.01	109.95
21	N	345	ASP	N-CA-C	-5.62	98.36	108.48
12	l	221	TRP	N-CA-C	-5.62	105.92	112.89
1	A	213	ALA	CA-C-O	5.62	126.38	120.42
9	2	233	LYS	N-CA-CB	5.62	120.00	110.49
21	N	95	SER	N-CA-C	-5.62	100.94	108.19
24	Q	184	VAL	CB-CA-C	-5.62	104.55	112.14
29	I	375	VAL	N-CA-C	-5.62	99.78	107.99
2	b	98	LYS	N-CA-C	-5.62	103.94	112.99
5	e	231	TYR	CB-CG-CD1	-5.62	112.37	120.80
10	j	83	GLU	N-CA-C	-5.62	103.03	110.40
12	l	162	VAL	O-C-N	-5.62	115.45	121.80
9	2	71	TRP	CG-CD2-CE3	-5.62	128.28	133.90
10	3	106	GLY	CA-C-N	5.62	125.59	120.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	3	106	GLY	C-N-CA	5.62	125.59	120.03
14	7	205	VAL	CA-C-N	5.62	127.81	120.28
14	7	205	VAL	C-N-CA	5.62	127.81	120.28
17	T	244	ASP	CB-CA-C	-5.62	101.46	110.79
32	M	202	LYS	CA-C-O	5.62	126.48	120.24
14	n	149	VAL	CA-C-O	5.62	126.72	120.59
3	c	22	VAL	CA-CB-CG1	5.62	119.95	110.40
11	k	41	HIS	CA-C-O	-5.62	114.59	120.32
11	k	125	LYS	N-CA-CB	5.62	119.59	110.43
8	1	18	LYS	O-C-N	-5.62	115.74	122.15
8	1	47	HIS	O-C-N	-5.62	116.98	122.99
10	3	158	LEU	CA-C-N	5.62	128.20	120.39
10	3	158	LEU	C-N-CA	5.62	128.20	120.39
20	Z	392	LEU	O-C-N	5.62	129.49	122.86
24	Q	25	GLN	O-C-N	-5.62	115.74	122.15
26	U	270	ASN	O-C-N	-5.62	115.36	122.27
29	I	431	ASN	OD1-CG-ND2	-5.62	116.98	122.60
30	K	393	ARG	N-CA-CB	5.62	118.99	110.28
32	M	319	ASP	N-CA-CB	5.62	118.16	110.01
11	4	62	ALA	N-CA-CB	5.62	118.21	110.07
23	P	202	LYS	CA-C-N	5.62	130.90	122.75
23	P	202	LYS	C-N-CA	5.62	130.90	122.75
24	Q	231	ASP	N-CA-C	-5.62	99.25	108.41
25	R	116	LYS	CA-C-N	5.62	127.75	120.56
25	R	116	LYS	C-N-CA	5.62	127.75	120.56
30	K	182	GLN	CB-CA-C	-5.62	101.47	110.79
31	L	64	LEU	N-CA-C	5.62	117.48	111.36
9	2	143	HIS	N-CA-CB	5.62	118.96	110.42
10	3	102	PRO	CA-C-O	-5.62	115.16	122.12
21	N	27	SER	N-CA-C	5.62	117.48	111.36
1	a	199	TRP	CA-C-N	5.61	128.26	120.29
1	a	199	TRP	C-N-CA	5.61	128.26	120.29
11	k	143	LEU	CB-CA-C	-5.61	102.06	110.88
20	Z	328	ASP	CB-CA-C	-5.61	102.07	110.88
20	Z	740	VAL	N-CA-C	-5.61	105.05	110.72
32	M	40	GLU	N-CA-CB	-5.61	101.66	110.30
33	J	251	ASP	CA-CB-CG	-5.61	106.99	112.60
4	d	53	LYS	N-CA-CB	5.61	118.75	110.56
21	N	252	GLY	CA-C-O	-5.61	114.94	121.00
23	P	244	ILE	CA-C-N	5.61	127.80	120.28
23	P	244	ILE	C-N-CA	5.61	127.80	120.28
29	I	393	GLN	N-CA-C	-5.61	105.16	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	48	ARG	N-CA-CB	-5.61	101.25	110.68
8	1	63	ALA	N-CA-CB	5.61	118.20	110.07
21	N	484	GLY	CA-C-O	-5.61	114.13	120.30
21	N	682	PHE	N-CA-CB	5.61	118.46	110.16
23	P	348	HIS	CB-CG-CD2	-5.61	123.91	131.20
27	O	28	GLN	CA-C-O	-5.61	112.48	119.38
28	H	340	LEU	O-C-N	-5.61	115.13	122.59
2	b	37	ILE	CA-C-N	5.61	130.39	122.09
2	b	37	ILE	C-N-CA	5.61	130.39	122.09
2	b	63	LYS	N-CA-C	-5.61	106.48	113.38
6	f	7	ASP	N-CA-C	5.61	119.75	113.02
7	G	55	THR	CA-CB-OG1	5.61	118.01	109.60
24	Q	171	LYS	CA-C-N	5.61	126.10	120.04
24	Q	171	LYS	C-N-CA	5.61	126.10	120.04
3	c	176	LEU	O-C-N	-5.61	116.29	122.07
11	k	143	LEU	N-CA-CB	5.61	118.14	110.01
10	3	37	SER	CA-C-N	5.61	131.79	122.54
10	3	37	SER	C-N-CA	5.61	131.79	122.54
17	T	46	ILE	CA-C-O	5.61	126.23	120.96
20	Z	386	VAL	CA-CB-CG2	-5.61	100.87	110.40
10	j	192	LYS	CA-C-O	5.61	128.53	120.51
13	m	119	ILE	CB-CA-C	-5.61	103.17	111.19
7	G	213	GLU	N-CA-C	-5.61	99.29	108.76
16	V	268	THR	CA-CB-CG2	-5.61	100.97	110.50
23	P	183	GLN	CA-C-N	5.61	128.83	120.31
23	P	183	GLN	C-N-CA	5.61	128.83	120.31
23	P	282	HIS	CA-C-N	5.61	130.16	120.58
23	P	282	HIS	C-N-CA	5.61	130.16	120.58
30	K	338	ILE	CA-C-N	5.61	130.38	122.09
30	K	338	ILE	C-N-CA	5.61	130.38	122.09
14	7	246	GLN	CA-C-O	5.60	126.49	120.38
23	P	36	LEU	CB-CA-C	-5.60	102.08	110.88
15	W	140	ASP	N-CA-C	-5.60	98.49	108.13
20	Z	488	ALA	N-CA-C	-5.60	105.25	111.36
29	I	251	GLU	N-CA-CB	5.60	118.46	110.67
33	J	296	ARG	N-CA-C	-5.60	100.42	108.60
2	b	135	LEU	N-CA-C	-5.60	100.57	109.59
2	b	230	ASP	O-C-N	5.60	129.21	122.94
5	e	72	ARG	N-CA-C	-5.60	104.26	113.50
10	j	105	VAL	CB-CA-C	-5.60	102.10	111.29
14	n	131	THR	CA-CB-CG2	5.60	120.02	110.50
5	E	80	GLY	N-CA-C	-5.60	105.90	111.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	551	LEU	CB-CA-C	-5.60	101.49	110.79
1	a	56	GLN	CB-CG-CD	-5.60	103.08	112.60
2	b	150	VAL	N-CA-C	-5.60	97.83	107.24
9	i	64	HIS	CE1-NE2-CD2	-5.60	103.40	109.00
15	W	180	LEU	N-CA-CB	5.60	119.95	110.49
20	Z	709	LYS	N-CA-C	5.60	117.06	111.07
21	N	829	LYS	O-C-N	-5.60	116.55	123.33
21	N	879	SER	CB-CA-C	-5.60	101.25	110.72
26	U	74	GLU	CA-CB-CG	-5.60	102.90	114.10
27	O	177	GLN	CA-C-N	5.60	128.10	120.54
27	O	177	GLN	C-N-CA	5.60	128.10	120.54
7	g	30	ALA	CA-C-N	5.60	129.48	120.30
7	g	30	ALA	C-N-CA	5.60	129.48	120.30
11	k	76	SER	O-C-N	5.60	128.62	121.34
12	l	238	ALA	N-CA-C	5.60	117.38	111.28
9	2	243	LYS	N-CA-CB	5.60	120.23	111.56
16	V	127	LYS	CB-CA-C	-5.60	101.50	110.79
21	N	820	GLU	CA-C-O	5.60	126.45	120.24
29	I	132	ILE	N-CA-CB	5.60	117.38	111.00
29	I	243	THR	CA-C-N	-5.60	115.16	123.11
29	I	243	THR	C-N-CA	-5.60	115.16	123.11
33	J	160	ILE	CA-C-N	5.60	128.05	120.44
33	J	160	ILE	C-N-CA	5.60	128.05	120.44
33	J	347	ALA	CA-C-N	5.60	127.78	120.28
33	J	347	ALA	C-N-CA	5.60	127.78	120.28
2	B	172	LYS	O-C-N	-5.60	116.19	122.12
21	N	747	HIS	CB-CA-C	-5.60	101.67	110.79
24	Q	243	PHE	CA-C-O	-5.60	114.94	120.82
28	H	107	LYS	CA-C-O	5.60	126.40	120.36
10	j	57	ALA	N-CA-C	5.59	118.10	111.33
13	m	84	HIS	CA-CB-CG	-5.59	108.21	113.80
3	C	174	THR	O-C-N	5.59	128.05	122.12
10	3	148	GLY	O-C-N	5.59	127.56	122.19
16	V	63	VAL	O-C-N	-5.59	116.60	123.03
20	Z	439	TYR	N-CA-C	5.59	117.38	111.28
30	K	164	ASN	CA-CB-CG	-5.59	107.00	112.60
2	b	76	SER	N-CA-C	-5.59	99.55	109.06
5	e	108	ASN	N-CA-CB	5.59	118.79	110.29
9	i	39	ASN	CA-CB-CG	-5.59	107.01	112.60
3	C	8	SER	N-CA-C	5.59	119.36	112.54
30	K	375	ASN	N-CA-C	5.59	118.39	110.50
31	L	118	ILE	N-CA-C	-5.59	100.42	108.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	101	THR	CA-CB-OG1	-5.59	101.21	109.60
10	3	173	ASN	CA-CB-CG	-5.59	107.01	112.60
24	Q	176	ASP	CA-C-N	5.59	127.61	120.56
24	Q	176	ASP	C-N-CA	5.59	127.61	120.56
25	R	134	TRP	CB-CG-CD2	-5.59	118.97	126.80
25	R	176	ARG	O-C-N	-5.59	115.68	122.22
25	R	330	VAL	O-C-N	5.59	127.39	121.91
26	U	192	ASN	CA-C-N	5.59	128.23	120.29
26	U	192	ASN	C-N-CA	5.59	128.23	120.29
26	U	280	ASN	CB-CA-C	-5.59	101.51	110.79
30	K	136	SER	O-C-N	5.59	129.75	122.87
30	K	313	LYS	CA-C-N	5.59	128.85	120.69
30	K	313	LYS	C-N-CA	5.59	128.85	120.69
1	a	64	LEU	O-C-N	5.59	129.74	122.87
7	g	53	LEU	N-CA-C	-5.59	102.62	110.50
20	Z	191	SER	CA-CB-OG	5.59	122.28	111.10
20	Z	421	SER	N-CA-CB	5.59	118.94	110.28
28	H	240	ILE	N-CA-C	5.59	117.63	108.97
29	I	59	LEU	CA-C-N	5.59	128.33	120.28
29	I	59	LEU	C-N-CA	5.59	128.33	120.28
31	L	399	GLY	N-CA-C	-5.59	105.88	113.37
21	N	469	VAL	CA-C-N	5.59	128.22	120.29
21	N	469	VAL	C-N-CA	5.59	128.22	120.29
23	P	267	PHE	N-CA-CB	5.59	118.91	110.30
24	Q	122	ILE	CA-C-N	5.59	128.22	120.29
24	Q	122	ILE	C-N-CA	5.59	128.22	120.29
27	O	18	ALA	N-CA-C	5.59	117.95	110.35
29	I	289	THR	N-CA-CB	5.59	119.53	110.42
32	M	50	ARG	CA-C-N	5.59	128.22	120.29
32	M	50	ARG	C-N-CA	5.59	128.22	120.29
23	P	289	ASN	CA-CB-CG	-5.59	107.01	112.60
24	Q	4	PRO	CA-C-N	5.59	126.03	119.94
24	Q	4	PRO	C-N-CA	5.59	126.03	119.94
24	Q	67	THR	CA-C-N	5.59	131.75	121.70
24	Q	67	THR	C-N-CA	5.59	131.75	121.70
2	b	200	VAL	CA-C-O	5.58	126.90	120.76
14	n	185	ASN	CA-C-N	5.58	126.82	119.84
14	n	185	ASN	C-N-CA	5.58	126.82	119.84
15	W	163	ASN	N-CA-C	-5.58	97.47	109.81
21	N	348	PHE	O-C-N	-5.58	115.78	122.15
22	S	116	ALA	N-CA-C	-5.58	98.90	110.80
23	P	26	SER	CA-C-N	5.58	129.54	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	26	SER	C-N-CA	5.58	129.54	120.60
31	L	152	THR	CB-CA-C	-5.58	100.86	109.29
21	N	141	ILE	O-C-N	5.58	127.51	121.87
21	N	602	VAL	CA-C-O	-5.58	112.47	119.95
22	S	322	LEU	CA-C-O	-5.58	114.63	120.55
25	R	254	SER	CA-C-N	5.58	128.35	120.42
25	R	254	SER	C-N-CA	5.58	128.35	120.42
28	H	408	SER	N-CA-C	5.58	118.13	111.71
30	K	191	PRO	O-C-N	5.58	128.93	122.17
1	a	248	ILE	N-CA-CB	5.58	117.71	110.57
7	g	169	ARG	O-C-N	-5.58	114.76	122.46
2	B	84	VAL	CA-C-O	5.58	127.08	121.17
20	Z	766	HIS	ND1-CE1-NE2	5.58	113.98	108.40
21	N	129	ILE	N-CA-CB	5.58	118.26	110.56
22	S	184	TRP	CG-CD2-CE3	-5.58	128.32	133.90
27	O	161	ASP	CA-CB-CG	5.58	118.18	112.60
27	O	283	HIS	CA-C-O	-5.58	113.20	119.95
28	H	328	GLU	N-CA-C	-5.58	105.20	112.23
32	M	108	LEU	N-CA-CB	5.58	118.42	110.16
33	J	174	PHE	CA-C-O	-5.58	112.53	119.28
10	3	78	GLU	CA-C-O	-5.58	112.54	119.18
16	V	23	THR	CA-C-N	5.58	130.96	122.65
16	V	23	THR	C-N-CA	5.58	130.96	122.65
17	T	251	HIS	ND1-CE1-NE2	5.58	113.98	108.40
2	B	70	ASP	CA-CB-CG	-5.58	107.02	112.60
17	T	251	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
23	P	82	LEU	CA-C-O	-5.58	114.95	120.70
33	J	161	LYS	CG-CD-CE	5.58	124.13	111.30
9	2	128	ILE	N-CA-C	-5.58	99.61	107.75
14	7	95	HIS	CG-CD2-NE2	5.58	112.78	107.20
15	W	2	VAL	CA-C-N	5.58	132.19	121.54
15	W	2	VAL	C-N-CA	5.58	132.19	121.54
25	R	310	GLU	CA-C-O	-5.58	114.51	120.42
31	L	311	GLN	OE1-CD-NE2	5.58	128.18	122.60
5	e	73	HIS	CB-CG-CD2	-5.58	123.95	131.20
2	B	207	ASP	O-C-N	5.58	128.51	122.15
23	P	147	LYS	O-C-N	-5.58	115.37	122.34
24	Q	421	LYS	CA-C-N	5.58	128.10	120.46
24	Q	421	LYS	C-N-CA	5.58	128.10	120.46
2	b	180	ASN	CA-C-N	5.57	127.69	120.44
2	b	180	ASN	C-N-CA	5.57	127.69	120.44
8	h	98	ASN	OD1-CG-ND2	5.57	128.17	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	j	183	TRP	N-CA-CB	5.57	119.91	110.49
10	3	45	HIS	ND1-CE1-NE2	5.57	113.97	108.40
10	3	151	GLU	CA-C-O	5.57	126.46	120.55
13	6	105	LEU	CA-C-O	5.57	126.43	120.24
15	W	28	ALA	N-CA-C	5.57	118.29	111.82
15	W	37	PHE	CA-C-N	5.57	127.75	120.28
15	W	37	PHE	C-N-CA	5.57	127.75	120.28
24	Q	219	ASP	CA-C-N	5.57	127.75	120.28
24	Q	219	ASP	C-N-CA	5.57	127.75	120.28
25	R	276	LEU	N-CA-C	-5.57	106.64	113.50
29	I	374	ASP	CA-CB-CG	5.57	118.17	112.60
31	L	422	VAL	CA-C-N	5.57	127.75	120.28
31	L	422	VAL	C-N-CA	5.57	127.75	120.28
12	l	202	PHE	CA-CB-CG	-5.57	108.23	113.80
4	D	115	GLY	CA-C-N	5.57	128.33	120.42
4	D	115	GLY	C-N-CA	5.57	128.33	120.42
13	6	112	PRO	O-C-N	5.57	129.94	123.14
13	6	158	LEU	N-CA-C	-5.57	106.48	113.28
30	K	420	THR	CA-C-N	5.57	130.19	122.28
30	K	420	THR	C-N-CA	5.57	130.19	122.28
33	J	242	PRO	CA-C-N	5.57	130.89	123.20
33	J	242	PRO	C-N-CA	5.57	130.89	123.20
4	d	193	LYS	CA-C-O	-5.57	113.57	119.97
5	E	14	THR	N-CA-CB	5.57	119.90	110.49
7	G	208	LYS	N-CA-C	-5.57	100.11	108.96
10	3	162	ASP	N-CA-CB	5.57	118.91	110.28
15	W	94	ALA	O-C-N	5.57	128.74	122.22
24	Q	78	ILE	N-CA-CB	5.57	114.01	110.50
24	Q	235	ALA	N-CA-CB	5.57	118.40	110.16
6	f	211	LEU	N-CA-CB	5.57	118.58	109.95
8	h	93	GLU	N-CA-CB	5.57	118.08	110.01
8	h	144	TYR	CA-C-O	-5.57	114.97	120.82
2	B	119	GLN	CA-C-N	5.57	128.77	120.31
2	B	119	GLN	C-N-CA	5.57	128.77	120.31
3	C	94	HIS	CA-C-N	5.57	127.68	120.44
3	C	94	HIS	C-N-CA	5.57	127.68	120.44
5	E	55	THR	O-C-N	5.57	128.50	122.15
8	1	166	HIS	CE1-NE2-CD2	-5.57	103.44	109.00
11	4	158	LEU	N-CA-C	-5.57	104.84	111.69
13	6	151	ALA	N-CA-C	5.57	118.11	111.71
21	N	866	TYR	CA-C-O	-5.57	114.77	120.89
32	M	97	SER	N-CA-C	-5.57	104.40	113.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	37	SER	CA-C-N	-5.56	114.79	122.69
7	g	37	SER	C-N-CA	-5.56	114.79	122.69
13	6	68	ASP	N-CA-C	-5.56	105.13	111.14
25	R	125	GLU	CA-C-N	5.56	126.12	120.00
25	R	125	GLU	C-N-CA	5.56	126.12	120.00
28	H	364	ALA	CA-C-N	5.56	128.19	120.29
28	H	364	ALA	C-N-CA	5.56	128.19	120.29
30	K	247	LEU	CA-C-O	-5.56	114.31	120.60
30	K	371	LEU	N-CA-CB	5.56	118.90	110.28
10	j	145	GLN	CA-C-N	5.56	128.19	120.29
10	j	145	GLN	C-N-CA	5.56	128.19	120.29
13	6	16	ASN	OD1-CG-ND2	-5.56	117.04	122.60
14	7	105	THR	CA-C-N	5.56	127.73	120.28
14	7	105	THR	C-N-CA	5.56	127.73	120.28
20	Z	382	ALA	CA-C-N	5.56	128.19	120.29
20	Z	382	ALA	C-N-CA	5.56	128.19	120.29
27	O	44	SER	N-CA-C	5.56	117.34	111.28
28	H	388	ILE	CA-CB-CG1	5.56	119.86	110.40
9	2	116	LEU	CA-C-N	5.56	128.29	120.28
9	2	116	LEU	C-N-CA	5.56	128.29	120.28
4	D	81	ASP	O-C-N	5.56	128.49	122.15
22	S	464	ARG	N-CA-C	5.56	117.42	111.36
1	A	186	PHE	CA-CB-CG	-5.56	108.24	113.80
9	2	51	GLN	N-CA-C	-5.56	96.52	107.69
14	7	215	ARG	CD-NE-CZ	-5.56	116.62	124.40
19	Y	47	GLU	N-CA-CB	5.56	118.21	110.04
20	Z	214	HIS	ND1-CE1-NE2	5.56	113.96	108.40
20	Z	258	PRO	CA-C-O	-5.56	112.50	120.56
25	R	56	GLU	N-CA-C	5.56	117.02	111.07
32	M	48	LEU	CB-CA-C	-5.56	100.35	110.63
33	J	327	ILE	N-CA-CB	5.56	118.92	110.58
9	i	113	LYS	CA-C-O	-5.56	114.66	120.55
21	N	298	TYR	CB-CG-CD1	5.56	129.13	120.80
24	Q	172	PRO	N-CA-CB	5.56	108.48	103.20
33	J	132	PRO	CA-C-N	5.56	127.99	120.38
33	J	132	PRO	C-N-CA	5.56	127.99	120.38
12	l	168	ALA	CA-C-N	5.55	129.91	120.91
12	l	168	ALA	C-N-CA	5.55	129.91	120.91
3	C	217	ARG	NH1-CZ-NH2	5.55	126.52	119.30
21	N	573	HIS	CG-CD2-NE2	5.55	112.75	107.20
22	S	318	CYS	CB-CA-C	-5.55	101.41	110.85
9	i	190	ALA	CA-C-N	5.55	130.67	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	190	ALA	C-N-CA	5.55	130.67	120.79
5	E	42	THR	N-CA-C	-5.55	100.87	109.14
10	3	70	LYS	CB-CA-C	-5.55	101.41	110.85
15	W	32	SER	O-C-N	5.55	128.01	122.12
20	Z	627	LYS	CA-C-N	5.55	127.66	120.44
20	Z	627	LYS	C-N-CA	5.55	127.66	120.44
28	H	254	THR	CA-CB-OG1	5.55	117.93	109.60
1	a	89	ASP	N-CA-CB	5.55	119.45	110.40
3	C	94	HIS	ND1-CE1-NE2	5.55	113.95	108.40
21	N	575	ALA	N-CA-CB	5.55	118.77	110.22
31	L	292	SER	CB-CA-C	-5.55	101.82	110.37
9	i	87	LEU	CB-CA-C	-5.55	102.13	110.90
14	n	227	ASN	CA-CB-CG	-5.55	107.05	112.60
22	S	473	ASP	CA-CB-CG	5.55	118.15	112.60
25	R	351	LYS	N-CA-C	5.55	117.01	111.07
26	U	35	GLY	O-C-N	-5.55	118.54	123.65
12	l	114	PRO	CB-CA-C	5.55	119.72	111.62
14	n	244	ASN	N-CA-CB	5.55	120.34	111.91
9	i	164	MET	CB-CA-C	-5.55	101.94	110.81
21	N	427	ILE	N-CA-CB	5.55	117.67	110.57
33	J	199	ALA	O-C-N	5.55	128.00	122.12
4	D	90	ARG	N-CA-C	5.54	117.41	111.36
28	H	205	ASP	CA-C-N	5.54	131.44	122.68
28	H	205	ASP	C-N-CA	5.54	131.44	122.68
3	c	141	ASP	CA-C-N	5.54	129.98	120.72
3	c	141	ASP	C-N-CA	5.54	129.98	120.72
8	h	62	GLN	OE1-CD-NE2	5.54	128.14	122.60
10	j	7	ILE	CA-C-N	5.54	128.16	120.29
10	j	7	ILE	C-N-CA	5.54	128.16	120.29
5	E	147	HIS	CG-CD2-NE2	5.54	112.74	107.20
5	E	215	ASN	OD1-CG-ND2	-5.54	117.06	122.60
12	5	164	GLN	N-CA-C	-5.54	104.62	111.33
15	W	177	GLY	CA-C-N	5.54	125.86	119.93
15	W	177	GLY	C-N-CA	5.54	125.86	119.93
22	S	467	PHE	CB-CG-CD1	5.54	130.12	120.70
26	U	243	ASP	CA-C-O	5.54	126.64	120.82
7	g	96	ALA	N-CA-C	5.54	117.00	111.07
6	F	24	TYR	N-CA-C	5.54	117.40	111.36
28	H	239	GLY	N-CA-C	-5.54	106.92	116.01
31	L	126	ARG	NE-CZ-NH2	-5.54	114.21	119.20
18	X	52	PRO	CA-C-N	5.54	127.70	120.28
18	X	52	PRO	C-N-CA	5.54	127.70	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	218	LEU	CA-C-N	5.54	127.70	120.28
23	P	218	LEU	C-N-CA	5.54	127.70	120.28
25	R	45	GLU	O-C-N	5.54	128.47	122.15
25	R	338	TYR	CB-CG-CD1	5.54	129.11	120.80
4	d	95	SER	O-C-N	5.54	128.70	122.22
5	e	213	ASP	N-CA-C	-5.54	101.10	108.74
13	m	133	PHE	O-C-N	5.54	130.39	123.19
3	C	187	ASP	CA-CB-CG	-5.54	107.06	112.60
4	D	190	GLU	CA-C-N	5.54	127.64	120.44
4	D	190	GLU	C-N-CA	5.54	127.64	120.44
17	T	161	TRP	CD2-CE2-CZ2	-5.54	116.86	122.40
25	R	43	ARG	CB-CA-C	-5.54	101.60	110.79
27	O	90	LYS	N-CA-C	-5.54	104.06	111.87
14	n	137	ARG	CA-C-O	5.54	126.29	120.42
7	G	235	LEU	CA-C-O	5.54	126.42	120.55
20	Z	153	TYR	CA-C-N	5.54	128.05	120.46
20	Z	153	TYR	C-N-CA	5.54	128.05	120.46
20	Z	962	ARG	CA-C-O	-5.54	114.65	120.63
31	L	164	ASP	CA-C-O	-5.54	115.22	119.32
15	W	22	PRO	CA-C-N	5.54	131.66	121.70
15	W	22	PRO	C-N-CA	5.54	131.66	121.70
21	N	896	PHE	CA-C-O	-5.54	115.68	121.55
6	f	198	SER	CA-C-O	-5.53	114.56	120.42
14	n	88	GLY	CA-C-N	5.53	130.06	121.26
14	n	88	GLY	C-N-CA	5.53	130.06	121.26
7	G	15	PHE	CB-CA-C	-5.53	100.18	109.48
7	G	23	GLN	CA-C-N	5.53	128.28	120.42
7	G	23	GLN	C-N-CA	5.53	128.28	120.42
21	N	804	LEU	CA-C-N	5.53	128.15	120.29
21	N	804	LEU	C-N-CA	5.53	128.15	120.29
22	S	294	ILE	N-CA-C	-5.53	105.13	110.72
24	Q	114	GLN	CA-C-N	5.53	127.74	120.60
24	Q	114	GLN	C-N-CA	5.53	127.74	120.60
26	U	74	GLU	CA-C-N	5.53	128.15	120.29
26	U	74	GLU	C-N-CA	5.53	128.15	120.29
29	I	158	GLY	O-C-N	-5.53	118.48	123.96
29	I	267	ILE	CA-C-O	5.53	127.03	121.17
33	J	166	LEU	CA-C-O	-5.53	112.97	118.34
5	E	24	VAL	CA-CB-CG1	5.53	119.80	110.40
22	S	394	ILE	CA-C-N	5.53	128.28	120.42
22	S	394	ILE	C-N-CA	5.53	128.28	120.42
1	A	194	ILE	N-CA-C	-5.53	100.47	108.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	X	35	ILE	N-CA-C	-5.53	101.59	108.89
24	Q	206	ASN	CA-C-N	5.53	132.10	121.54
24	Q	206	ASN	C-N-CA	5.53	132.10	121.54
30	K	74	HIS	N-CA-CB	5.53	118.09	110.07
32	M	37	LEU	CB-CA-C	-5.53	101.61	110.79
4	D	19	GLN	CA-C-O	-5.53	113.85	120.10
22	S	471	LEU	N-CA-C	5.53	117.31	111.28
32	M	281	ASP	CB-CA-C	-5.53	100.15	109.83
10	j	193	ASP	CA-C-O	5.53	125.34	118.43
11	4	10	GLN	CG-CD-NE2	5.53	124.69	116.40
12	5	214	VAL	CA-C-N	5.53	127.96	120.44
12	5	214	VAL	C-N-CA	5.53	127.96	120.44
13	6	159	ASP	CA-CB-CG	-5.53	107.07	112.60
14	7	234	ASP	CA-C-O	-5.53	114.97	121.44
6	F	220	THR	CA-CB-OG1	5.53	117.89	109.60
8	1	185	VAL	CA-C-N	5.53	129.28	122.37
8	1	185	VAL	C-N-CA	5.53	129.28	122.37
8	1	195	LEU	N-CA-C	-5.53	100.67	109.23
20	Z	825	ALA	N-CA-CB	5.53	119.83	110.49
24	Q	75	ARG	NH1-CZ-NH2	-5.53	112.12	119.30
25	R	102	LEU	CA-C-N	5.53	127.69	120.28
25	R	102	LEU	C-N-CA	5.53	127.69	120.28
31	L	337	LEU	CA-C-N	5.53	128.13	120.29
31	L	337	LEU	C-N-CA	5.53	128.13	120.29
10	3	197	LYS	N-CA-C	-5.52	100.18	109.07
21	N	246	LYS	CA-CB-CG	5.52	125.15	114.10
26	U	42	ASN	CA-CB-CG	-5.52	107.08	112.60
27	O	331	ALA	N-CA-CB	5.52	118.24	110.12
8	h	113	ASP	N-CA-C	-5.52	104.97	112.26
12	5	243	ASP	N-CA-CB	5.52	118.26	110.36
17	T	216	GLU	CB-CA-C	-5.52	101.46	110.85
21	N	573	HIS	CA-C-O	-5.52	114.69	120.55
26	U	51	SER	N-CA-CB	5.52	120.12	111.56
32	M	245	LYS	O-C-N	-5.52	116.77	123.29
13	m	200	THR	N-CA-C	5.52	117.30	111.28
7	G	155	GLY	CA-C-N	5.52	131.22	122.94
7	G	155	GLY	C-N-CA	5.52	131.22	122.94
11	4	4	ILE	CA-C-O	-5.52	114.99	120.90
16	V	297	THR	CA-C-N	5.52	128.13	120.29
16	V	297	THR	C-N-CA	5.52	128.13	120.29
21	N	356	LEU	CA-C-N	5.52	130.62	120.79
21	N	356	LEU	C-N-CA	5.52	130.62	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	218	LEU	N-CA-C	5.52	117.38	111.36
11	k	88	LEU	CA-C-O	5.52	126.40	120.55
14	n	123	SER	CA-C-N	5.52	130.02	120.58
14	n	123	SER	C-N-CA	5.52	130.02	120.58
14	n	243	LYS	CA-C-N	5.52	130.01	122.34
14	n	243	LYS	C-N-CA	5.52	130.01	122.34
8	1	190	ALA	N-CA-C	-5.52	106.05	112.89
14	7	89	ASP	N-CA-CB	5.52	118.14	109.69
18	X	28	PRO	CA-C-N	5.52	131.90	121.97
18	X	28	PRO	C-N-CA	5.52	131.90	121.97
20	Z	766	HIS	CA-CB-CG	5.52	119.32	113.80
22	S	160	ARG	CA-C-O	5.52	126.27	120.42
31	L	357	ARG	CA-C-N	5.52	127.68	120.28
31	L	357	ARG	C-N-CA	5.52	127.68	120.28
4	d	88	LYS	CA-C-N	5.52	127.67	120.28
4	d	88	LYS	C-N-CA	5.52	127.67	120.28
7	g	216	ILE	N-CA-C	-5.52	100.24	108.46
11	k	131	GLY	N-CA-C	5.52	119.64	112.25
13	m	99	ARG	CA-C-N	5.52	128.13	120.29
13	m	99	ARG	C-N-CA	5.52	128.13	120.29
1	A	154	ILE	N-CA-C	-5.52	100.17	108.12
17	T	200	LEU	O-C-N	-5.52	117.99	121.85
21	N	807	THR	N-CA-C	-5.52	105.27	111.28
32	M	366	ARG	CB-CA-C	-5.52	101.63	110.79
33	J	236	MET	CA-C-N	5.52	127.67	120.28
33	J	236	MET	C-N-CA	5.52	127.67	120.28
7	g	171	SER	N-CA-C	-5.52	105.27	111.28
28	H	392	HIS	CA-CB-CG	-5.52	108.28	113.80
9	i	175	LEU	CA-C-O	5.51	127.22	120.60
3	C	12	ILE	O-C-N	5.51	129.46	122.57
19	Y	72	ASP	N-CA-CB	5.51	118.83	110.28
20	Z	112	LYS	CA-CB-CG	5.51	125.13	114.10
21	N	521	LEU	CA-C-N	5.51	127.67	120.28
21	N	521	LEU	C-N-CA	5.51	127.67	120.28
22	S	271	ARG	O-C-N	5.51	127.97	122.12
24	Q	216	ALA	CA-C-N	5.51	127.67	120.28
24	Q	216	ALA	C-N-CA	5.51	127.67	120.28
11	k	110	LYS	O-C-N	5.51	129.88	122.49
1	A	46	ARG	N-CA-CB	5.51	119.62	110.52
1	a	144	VAL	N-CA-CB	5.51	120.49	111.45
7	G	207	ASN	CA-CB-CG	-5.51	107.09	112.60
14	7	207	GLU	CA-C-O	5.51	126.26	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	286	LYS	CA-C-N	5.51	130.00	122.34
33	J	286	LYS	C-N-CA	5.51	130.00	122.34
5	e	117	CYS	CA-C-N	5.51	128.11	120.29
5	e	117	CYS	C-N-CA	5.51	128.11	120.29
6	f	85	SER	N-CA-CB	5.51	118.41	110.20
7	G	241	ASP	CA-C-N	5.51	127.60	120.44
7	G	241	ASP	C-N-CA	5.51	127.60	120.44
14	7	89	ASP	CB-CA-C	-5.51	101.31	109.90
21	N	554	THR	CA-C-N	5.51	128.25	120.42
21	N	554	THR	C-N-CA	5.51	128.25	120.42
21	N	621	THR	CA-CB-CG2	5.51	119.87	110.50
21	N	832	HIS	N-CA-CB	5.51	119.80	110.49
22	S	414	ASP	O-C-N	5.51	127.97	122.08
6	f	195	GLU	N-CA-CB	5.51	118.22	110.12
14	n	245	LEU	N-CA-C	-5.51	103.11	110.55
2	B	86	VAL	CA-C-N	5.51	127.93	120.44
2	B	86	VAL	C-N-CA	5.51	127.93	120.44
21	N	728	LYS	O-C-N	5.51	127.96	122.12
24	Q	260	GLN	CA-C-N	5.51	128.24	120.42
24	Q	260	GLN	C-N-CA	5.51	128.24	120.42
27	O	183	ASN	OD1-CG-ND2	5.51	128.11	122.60
4	D	209	ASN	CA-CB-CG	-5.51	107.09	112.60
10	3	159	GLU	CA-C-N	5.51	125.60	119.32
10	3	159	GLU	C-N-CA	5.51	125.60	119.32
16	V	290	ASN	CB-CA-C	-5.51	102.20	110.90
27	O	184	ASP	CA-CB-CG	-5.51	107.09	112.60
31	L	251	ILE	CA-C-O	-5.51	113.90	120.78
10	3	19	ASP	CA-CB-CG	-5.50	107.09	112.60
14	7	203	VAL	CA-CB-CG1	5.50	119.76	110.40
23	P	139	VAL	N-CA-C	-5.50	105.30	113.39
7	g	223	GLU	CB-CG-CD	-5.50	103.24	112.60
4	D	197	ARG	CA-C-N	5.50	127.93	120.44
4	D	197	ARG	C-N-CA	5.50	127.93	120.44
7	G	167	LYS	CA-CB-CG	5.50	125.11	114.10
9	2	179	GLU	CA-C-O	-5.50	114.72	120.55
22	S	34	LEU	CA-C-N	5.50	128.21	120.28
22	S	34	LEU	C-N-CA	5.50	128.21	120.28
23	P	419	VAL	N-CA-CB	-5.50	104.11	110.55
29	I	178	THR	CA-C-N	5.50	131.57	122.33
29	I	178	THR	C-N-CA	5.50	131.57	122.33
17	T	14	ALA	CA-C-O	5.50	126.30	119.97
32	M	320	ARG	NE-CZ-NH2	-5.50	114.25	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	229	GLN	O-C-N	5.50	127.73	122.07
11	k	41	HIS	N-CA-C	-5.50	104.34	111.71
9	2	203	ASP	N-CA-CB	5.50	119.65	110.85
25	R	169	ASP	CA-C-O	-5.50	114.59	120.42
7	g	194	LYS	O-C-N	5.50	127.95	122.12
9	i	222	PRO	N-CA-C	-5.50	101.14	112.47
21	N	335	ALA	O-C-N	5.50	127.95	122.12
21	N	581	ASP	CA-C-N	5.50	128.10	120.29
21	N	581	ASP	C-N-CA	5.50	128.10	120.29
23	P	113	ASN	N-CA-C	-5.50	105.20	111.14
27	O	71	ASP	CA-CB-CG	5.50	118.10	112.60
28	H	376	GLU	CA-C-N	5.50	131.72	122.87
28	H	376	GLU	C-N-CA	5.50	131.72	122.87
8	h	184	MET	N-CA-CB	5.50	121.08	111.13
14	n	158	GLN	CA-C-O	-5.50	114.49	120.81
14	7	60	LEU	CA-C-O	5.50	126.94	120.89
22	S	87	SER	CA-C-N	5.50	128.09	120.29
22	S	87	SER	C-N-CA	5.50	128.09	120.29
22	S	330	LEU	O-C-N	-5.50	116.29	122.12
26	U	160	THR	N-CA-C	-5.50	100.81	109.50
27	O	48	PHE	N-CA-C	5.50	118.03	111.71
9	i	112	LEU	N-CA-C	5.50	116.95	111.07
1	A	104	PHE	N-CA-C	-5.50	105.19	111.07
30	K	371	LEU	O-C-N	-5.50	115.51	122.27
20	Z	607	ALA	CB-CA-C	-5.49	101.67	110.79
23	P	271	SER	N-CA-C	-5.49	102.50	110.08
23	P	338	TRP	CD2-CE2-CZ2	-5.49	116.91	122.40
26	U	6	GLU	CB-CG-CD	-5.49	103.26	112.60
27	O	59	LEU	N-CA-CB	5.49	118.29	110.16
8	h	87	ALA	N-CA-CB	5.49	118.29	110.16
22	S	178	LEU	N-CA-C	5.49	117.70	111.11
23	P	55	SER	N-CA-CB	5.49	118.19	110.12
32	M	414	ASP	N-CA-CB	5.49	118.29	110.16
33	J	374	ARG	NE-CZ-NH2	5.49	124.14	119.20
12	l	182	LYS	O-C-N	-5.49	116.20	121.85
8	1	47	HIS	CG-CD2-NE2	5.49	112.69	107.20
14	7	52	GLY	CA-C-N	5.49	130.71	122.58
14	7	52	GLY	C-N-CA	5.49	130.71	122.58
15	W	68	GLU	CA-C-N	5.49	130.75	121.14
15	W	68	GLU	C-N-CA	5.49	130.75	121.14
23	P	12	ASP	O-C-N	-5.49	116.41	122.07
31	L	292	SER	N-CA-C	-5.49	106.03	114.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	104	GLY	CA-C-O	5.49	130.12	120.57
13	m	226	GLU	O-C-N	-5.49	116.76	122.96
2	B	226	GLY	CA-C-O	-5.49	112.77	119.03
8	1	47	HIS	CE1-NE2-CD2	-5.49	103.51	109.00
13	6	156	PRO	N-CA-C	-5.49	106.86	114.27
15	W	81	ILE	CB-CA-C	-5.49	102.29	111.29
20	Z	929	VAL	CA-C-N	5.49	129.39	121.54
20	Z	929	VAL	C-N-CA	5.49	129.39	121.54
21	N	499	HIS	CA-C-N	5.49	127.57	120.44
21	N	499	HIS	C-N-CA	5.49	127.57	120.44
22	S	261	HIS	ND1-CE1-NE2	5.49	113.89	108.40
31	L	91	THR	CA-CB-OG1	5.49	117.83	109.60
22	S	294	ILE	CA-C-N	5.49	127.63	120.28
22	S	294	ILE	C-N-CA	5.49	127.63	120.28
24	Q	104	PHE	CA-C-N	5.49	127.63	120.28
24	Q	104	PHE	C-N-CA	5.49	127.63	120.28
7	g	27	ALA	CA-C-O	-5.49	114.61	120.42
3	C	60	ASP	CA-CB-CG	-5.49	107.11	112.60
4	D	178	ASN	OD1-CG-ND2	-5.49	117.11	122.60
15	W	191	ILE	CA-CB-CG1	5.49	119.73	110.40
22	S	330	LEU	CA-C-O	5.49	126.36	120.55
26	U	176	ARG	CA-C-O	5.49	125.13	119.97
4	d	164	ILE	N-CA-CB	5.48	120.52	112.35
4	D	207	ALA	N-CA-C	-5.48	104.85	113.02
16	V	268	THR	N-CA-CB	5.48	118.56	110.33
24	Q	30	LEU	N-CA-CB	5.48	118.18	110.12
32	M	46	SER	N-CA-CB	5.48	118.28	110.16
7	g	147	HIS	ND1-CE1-NE2	5.48	113.88	108.40
2	B	175	LEU	CA-C-N	5.48	127.57	120.44
2	B	175	LEU	C-N-CA	5.48	127.57	120.44
15	W	44	ASN	N-CA-CB	5.48	120.13	110.37
16	V	110	SER	CA-C-O	5.48	126.62	120.70
25	R	353	MET	CA-C-O	-5.48	114.74	120.55
33	J	127	GLU	N-CA-C	-5.48	105.81	112.88
2	b	27	ALA	N-CA-CB	5.48	118.28	110.06
4	d	139	ASP	CA-CB-CG	-5.48	107.12	112.60
5	e	50	VAL	O-C-N	5.48	128.56	122.75
8	h	68	VAL	N-CA-C	-5.48	104.20	111.05
7	G	241	ASP	O-C-N	5.48	127.93	122.12
16	V	222	GLN	CA-C-O	-5.48	114.61	120.42
20	Z	371	SER	CA-C-N	5.48	128.65	120.87
20	Z	371	SER	C-N-CA	5.48	128.65	120.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	620	LEU	N-CA-C	-5.48	99.13	110.80
20	Z	880	SER	CA-C-N	5.48	127.57	120.56
20	Z	880	SER	C-N-CA	5.48	127.57	120.56
20	Z	924	LYS	N-CA-C	-5.48	105.81	112.88
21	N	240	GLN	N-CA-C	-5.48	105.46	111.82
22	S	222	SER	O-C-N	5.48	128.40	122.15
22	S	419	VAL	CA-C-N	5.48	127.62	120.28
22	S	419	VAL	C-N-CA	5.48	127.62	120.28
25	R	108	SER	CA-C-O	-5.48	114.74	120.55
2	b	31	GLY	N-CA-C	5.48	119.59	112.25
9	2	143	HIS	CE1-NE2-CD2	-5.48	103.52	109.00
13	6	94	ILE	N-CA-C	-5.48	105.19	110.72
12	5	156	LYS	N-CA-C	-5.48	106.60	113.28
22	S	142	VAL	CA-C-N	5.48	127.62	120.28
22	S	142	VAL	C-N-CA	5.48	127.62	120.28
28	H	189	PRO	CA-C-N	5.48	132.00	121.54
28	H	189	PRO	C-N-CA	5.48	132.00	121.54
30	K	191	PRO	CA-C-N	5.48	127.89	120.44
30	K	191	PRO	C-N-CA	5.48	127.89	120.44
5	e	157	HIS	CE1-NE2-CD2	-5.48	103.52	109.00
7	g	56	SER	N-CA-CB	5.48	119.89	111.46
5	E	107	ILE	O-C-N	-5.48	116.89	122.75
9	2	187	ALA	CB-CA-C	-5.48	101.54	110.85
15	W	82	GLU	CA-C-N	5.48	127.69	122.27
15	W	82	GLU	C-N-CA	5.48	127.69	122.27
19	Y	6	ALA	CA-C-O	5.48	126.27	119.97
20	Z	457	ILE	CA-C-O	-5.48	115.25	120.95
31	L	413	ASP	CA-C-N	5.48	127.89	120.44
31	L	413	ASP	C-N-CA	5.48	127.89	120.44
3	c	40	ALA	N-CA-C	-5.47	101.03	109.52
8	h	20	GLY	N-CA-C	5.47	119.69	111.42
8	h	157	LYS	O-C-N	5.47	127.92	122.12
20	Z	355	GLU	CB-CA-C	-5.47	102.25	110.90
21	N	97	PHE	N-CA-C	-5.47	99.14	110.80
26	U	164	GLU	CA-C-N	5.47	129.86	120.72
26	U	164	GLU	C-N-CA	5.47	129.86	120.72
27	O	23	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
1	a	60	PRO	N-CA-C	-5.47	101.20	112.47
5	e	89	ILE	O-C-N	5.47	127.47	121.83
7	g	16	SER	N-CA-C	-5.47	103.84	110.13
5	E	93	ARG	NE-CZ-NH2	5.47	124.12	119.20
5	E	141	ALA	N-CA-C	-5.47	102.10	110.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	5	211	ALA	CA-C-N	5.47	127.61	120.28
12	5	211	ALA	C-N-CA	5.47	127.61	120.28
21	N	10	LEU	CA-C-N	5.47	127.61	120.28
21	N	10	LEU	C-N-CA	5.47	127.61	120.28
21	N	183	VAL	CA-C-O	-5.47	115.05	120.85
26	U	252	HIS	CA-CB-CG	-5.47	108.33	113.80
26	U	270	ASN	CA-C-N	5.47	127.56	120.44
26	U	270	ASN	C-N-CA	5.47	127.56	120.44
29	I	304	ARG	NE-CZ-NH2	-5.47	114.28	119.20
16	V	42	ARG	CA-C-O	-5.47	114.62	120.42
18	X	38	ASN	CA-C-N	5.47	128.54	119.35
18	X	38	ASN	C-N-CA	5.47	128.54	119.35
27	O	273	GLN	CB-CG-CD	-5.47	103.30	112.60
33	J	203	ALA	CA-C-O	-5.47	114.72	120.63
7	g	206	ASP	N-CA-CB	5.47	118.43	110.88
2	B	247	LEU	CA-C-N	5.47	128.06	120.29
2	B	247	LEU	C-N-CA	5.47	128.06	120.29
21	N	78	ALA	CA-C-O	-5.47	114.75	120.55
21	N	502	PHE	CA-CB-CG	5.47	119.27	113.80
21	N	589	ILE	CA-C-O	5.47	126.97	121.17
25	R	349	SER	CA-C-N	5.47	128.06	120.29
25	R	349	SER	C-N-CA	5.47	128.06	120.29
25	R	419	ALA	CA-C-N	5.47	128.06	120.29
25	R	419	ALA	C-N-CA	5.47	128.06	120.29
5	e	139	GLY	O-C-N	-5.47	115.59	122.70
9	i	62	LYS	CA-C-O	5.47	125.21	119.03
8	1	174	TRP	CE2-CD2-CE3	5.47	124.27	118.80
12	5	267	ASP	CA-C-N	5.47	129.11	120.47
12	5	267	ASP	C-N-CA	5.47	129.11	120.47
20	Z	140	LEU	CB-CA-C	-5.47	101.55	110.85
31	L	70	TYR	N-CA-C	-5.47	105.48	111.82
10	3	78	GLU	CA-C-N	5.47	130.12	122.36
10	3	78	GLU	C-N-CA	5.47	130.12	122.36
13	6	110	PHE	O-C-N	5.47	128.80	122.19
15	W	146	GLU	N-CA-C	-5.47	99.16	110.80
25	R	121	GLU	O-C-N	5.47	127.70	122.07
25	R	204	TRP	N-CA-CB	5.47	118.97	110.44
28	H	385	ARG	NE-CZ-NH1	-5.47	116.03	121.50
32	M	162	GLU	CA-C-O	-5.47	115.75	121.55
8	1	90	VAL	CB-CA-C	-5.46	104.92	112.24
20	Z	89	LEU	N-CA-CB	5.46	117.93	110.01
20	Z	220	ALA	CA-C-N	5.46	127.95	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	220	ALA	C-N-CA	5.46	127.95	120.46
22	S	255	SER	CA-C-N	5.46	129.52	120.94
22	S	255	SER	C-N-CA	5.46	129.52	120.94
27	O	58	ARG	NE-CZ-NH2	5.46	124.12	119.20
27	O	247	ASN	CA-C-O	-5.46	114.76	120.55
10	j	85	GLU	CA-C-O	5.46	126.33	120.70
4	D	20	VAL	CA-C-N	5.46	127.60	120.28
4	D	20	VAL	C-N-CA	5.46	127.60	120.28
4	D	171	VAL	O-C-N	-5.46	116.20	121.83
13	6	227	LEU	N-CA-C	-5.46	101.05	109.52
14	7	178	GLY	CA-C-N	5.46	127.60	120.28
14	7	178	GLY	C-N-CA	5.46	127.60	120.28
20	Z	525	MET	CA-C-N	5.46	127.86	120.65
20	Z	525	MET	C-N-CA	5.46	127.86	120.65
26	U	89	LEU	N-CA-CB	5.46	118.12	109.71
5	E	61	SER	CA-C-O	5.46	126.34	120.55
5	E	62	ASP	CA-CB-CG	-5.46	107.14	112.60
9	2	138	HIS	CE1-NE2-CD2	-5.46	103.54	109.00
21	N	287	LEU	N-CA-C	5.46	117.99	111.71
28	H	111	GLU	CB-CG-CD	-5.46	103.32	112.60
29	I	217	LYS	N-CA-C	-5.46	106.29	113.17
32	M	234	ALA	CA-C-N	5.46	127.60	120.28
32	M	234	ALA	C-N-CA	5.46	127.60	120.28
7	g	65	VAL	N-CA-C	-5.46	99.98	108.44
13	m	79	SER	N-CA-CB	5.46	118.15	110.12
21	N	906	ARG	O-C-N	5.46	129.44	123.22
28	H	127	SER	CA-C-O	5.46	127.57	121.40
30	K	76	LYS	N-CA-CB	5.46	118.24	110.16
31	L	233	LYS	N-CA-C	5.46	116.91	111.07
33	J	220	GLN	CB-CG-CD	-5.46	103.32	112.60
4	d	228	GLU	CA-C-N	5.46	128.17	120.42
4	d	228	GLU	C-N-CA	5.46	128.17	120.42
6	f	126	ARG	O-C-N	5.46	125.63	121.65
1	A	93	ALA	CA-C-O	-5.46	114.77	120.55
12	5	139	ARG	CB-CG-CD	5.46	123.85	111.30
19	Y	58	ASN	CA-C-N	5.46	129.97	121.35
19	Y	58	ASN	C-N-CA	5.46	129.97	121.35
28	H	124	ASN	CA-CB-CG	-5.46	107.14	112.60
30	K	276	SER	N-CA-C	-5.46	106.75	113.41
4	d	166	ARG	NE-CZ-NH1	-5.46	116.04	121.50
9	i	113	LYS	CA-C-N	5.46	129.83	120.72
9	i	113	LYS	C-N-CA	5.46	129.83	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	309	GLN	CA-C-N	5.46	128.60	120.31
20	Z	309	GLN	C-N-CA	5.46	128.60	120.31
21	N	178	SER	CA-C-N	5.46	127.53	120.44
21	N	178	SER	C-N-CA	5.46	127.53	120.44
21	N	691	GLN	N-CA-C	-5.46	100.88	109.50
23	P	113	ASN	OD1-CG-ND2	-5.46	117.14	122.60
25	R	375	LYS	N-CA-CB	5.46	119.71	110.49
4	d	66	LYS	N-CA-CB	5.46	118.11	109.71
8	1	178	SER	N-CA-C	-5.46	101.06	109.52
8	h	159	GLU	CB-CA-C	-5.45	101.74	110.79
19	Y	56	GLN	N-CA-CB	5.45	119.71	110.49
20	Z	205	LEU	CA-C-N	5.45	127.53	120.44
20	Z	205	LEU	C-N-CA	5.45	127.53	120.44
21	N	129	ILE	N-CA-C	-5.45	100.58	108.87
23	P	440	HIS	CA-CB-CG	-5.45	108.35	113.80
29	I	99	ILE	N-CA-C	-5.45	105.06	111.00
33	J	403	LEU	N-CA-CB	5.45	119.71	110.49
20	Z	433	LEU	N-CA-C	5.45	119.43	112.34
21	N	138	GLU	CB-CG-CD	-5.45	103.33	112.60
21	N	710	GLY	O-C-N	5.45	128.71	122.33
22	S	209	ILE	CA-CB-CG2	-5.45	101.23	110.50
23	P	390	TYR	CA-C-O	5.45	126.99	120.28
26	U	25	THR	N-CA-C	-5.45	106.54	114.12
1	a	182	LEU	N-CA-C	5.45	117.30	111.36
3	c	25	ALA	O-C-N	5.45	128.97	122.27
7	g	69	VAL	CA-C-N	5.45	130.65	122.75
7	g	69	VAL	C-N-CA	5.45	130.65	122.75
11	k	172	MET	N-CA-C	-5.45	102.79	110.31
4	D	13	PRO	CA-C-O	-5.45	112.03	118.90
8	1	158	GLU	N-CA-CB	5.45	117.97	110.07
11	4	121	TYR	CA-C-N	5.45	127.53	120.44
11	4	121	TYR	C-N-CA	5.45	127.53	120.44
20	Z	334	LYS	N-CA-CB	5.45	118.73	110.28
20	Z	766	HIS	CB-CG-CD2	5.45	138.29	131.20
21	N	636	SER	CA-C-O	-5.45	115.10	120.82
28	H	49	LEU	CA-C-N	5.45	128.03	120.29
28	H	49	LEU	C-N-CA	5.45	128.03	120.29
28	H	349	ILE	CB-CG1-CD1	5.45	125.25	113.80
28	H	402	ILE	CA-C-O	-5.45	116.11	121.67
33	J	367	MET	CA-C-N	5.45	127.58	120.28
33	J	367	MET	C-N-CA	5.45	127.58	120.28
1	a	183	GLU	CB-CA-C	-5.45	101.74	110.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	j	163	LEU	CA-C-O	5.45	126.26	120.10
13	m	73	VAL	CB-CA-C	-5.45	104.70	112.22
5	E	179	ALA	CA-C-N	5.45	127.58	120.28
5	E	179	ALA	C-N-CA	5.45	127.58	120.28
24	Q	10	GLU	CA-C-N	5.45	127.52	120.44
24	Q	10	GLU	C-N-CA	5.45	127.52	120.44
25	R	329	PHE	CA-C-O	-5.45	114.78	120.55
30	K	224	LYS	CA-CB-CG	-5.45	103.20	114.10
11	k	96	ARG	CA-CB-CG	5.45	125.00	114.10
24	Q	47	ASP	N-CA-CB	5.45	119.70	110.49
2	B	59	GLU	CA-C-N	5.45	127.52	120.44
2	B	59	GLU	C-N-CA	5.45	127.52	120.44
2	B	135	LEU	N-CA-CB	5.45	120.30	110.83
5	E	192	THR	CA-CB-OG1	5.45	117.77	109.60
9	2	230	LYS	CA-C-O	-5.45	115.23	121.82
22	S	79	ASN	CA-CB-CG	-5.45	107.15	112.60
22	S	160	ARG	CA-C-N	5.45	128.02	120.29
22	S	160	ARG	C-N-CA	5.45	128.02	120.29
26	U	62	ASN	N-CA-C	-5.45	99.22	108.26
11	k	193	ASP	N-CA-CB	5.44	119.14	110.16
3	C	121	GLY	N-CA-C	5.44	120.37	113.24
6	F	23	GLU	CB-CA-C	-5.44	101.59	110.85
10	3	196	VAL	CA-C-O	-5.44	114.75	120.57
12	5	281	SER	CA-C-O	-5.44	115.68	121.94
15	W	165	GLN	N-CA-CB	5.44	120.30	111.21
20	Z	74	SER	CA-C-O	-5.44	112.90	119.49
27	O	232	GLU	CA-C-N	5.44	127.58	120.28
27	O	232	GLU	C-N-CA	5.44	127.58	120.28
3	c	103	ASN	N-CA-C	5.44	118.90	111.39
7	g	170	GLN	CA-C-N	5.44	127.57	120.28
7	g	170	GLN	C-N-CA	5.44	127.57	120.28
13	m	145	ARG	CB-CG-CD	5.44	123.81	111.30
4	D	181	ARG	CA-C-N	5.44	128.02	120.29
4	D	181	ARG	C-N-CA	5.44	128.02	120.29
14	7	122	PRO	N-CA-CB	5.44	109.27	103.39
24	Q	103	LYS	CA-C-N	5.44	127.57	120.28
24	Q	103	LYS	C-N-CA	5.44	127.57	120.28
26	U	290	ASP	N-CA-CB	-5.44	102.12	110.12
8	h	64	ILE	CA-C-N	5.44	127.57	120.28
8	h	64	ILE	C-N-CA	5.44	127.57	120.28
16	V	163	ALA	CA-C-O	5.44	126.22	119.97
28	H	345	PRO	N-CD-CG	5.44	110.33	103.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	223	PRO	N-CA-C	5.44	117.34	110.70
6	f	56	LEU	N-CA-CB	5.44	118.49	110.33
25	R	291	SER	CA-C-N	5.44	127.84	120.44
25	R	291	SER	C-N-CA	5.44	127.84	120.44
11	k	112	ASN	OD1-CG-ND2	5.44	128.04	122.60
13	m	112	PRO	CB-CA-C	-5.44	104.44	111.46
14	n	121	GLU	CA-C-O	-5.44	114.83	120.87
2	B	67	LEU	N-CA-C	-5.44	104.77	111.40
2	B	198	GLU	CA-C-N	5.44	128.11	120.28
2	B	198	GLU	C-N-CA	5.44	128.11	120.28
20	Z	439	TYR	CA-C-O	-5.44	114.79	120.55
30	K	94	LEU	N-CA-C	-5.44	101.04	109.14
32	M	383	THR	CA-CB-OG1	5.44	117.76	109.60
4	D	136	ALA	N-CA-C	-5.44	101.26	109.85
10	3	11	ILE	CA-CB-CG2	-5.44	101.26	110.50
3	c	89	ASN	N-CA-C	-5.43	105.44	111.36
3	C	221	ASN	CA-CB-CG	-5.43	107.17	112.60
22	S	369	GLN	CA-C-N	5.43	128.01	120.29
22	S	369	GLN	C-N-CA	5.43	128.01	120.29
27	O	318	HIS	CG-CD2-NE2	5.43	112.63	107.20
30	K	304	ASP	O-C-N	-5.43	115.36	122.59
6	F	201	LEU	N-CA-CB	5.43	117.99	110.17
9	2	122	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
17	T	93	ASN	CA-CB-CG	-5.43	107.17	112.60
32	M	111	THR	N-CA-C	-5.43	99.23	110.80
32	M	281	ASP	CA-CB-CG	-5.43	107.17	112.60
12	l	141	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
12	l	281	SER	N-CA-C	5.43	117.70	110.53
5	E	236	THR	CA-C-N	5.43	127.56	120.28
5	E	236	THR	C-N-CA	5.43	127.56	120.28
23	P	276	LEU	N-CA-CB	5.43	119.25	110.40
2	b	229	THR	CA-CB-OG1	5.43	117.74	109.60
7	g	170	GLN	CG-CD-OE1	-5.43	109.94	120.80
19	Y	73	PHE	CB-CG-CD2	5.43	129.93	120.70
27	O	385	GLU	CA-C-N	5.43	127.50	120.44
27	O	385	GLU	C-N-CA	5.43	127.50	120.44
33	J	114	CYS	N-CA-C	-5.43	101.69	110.32
9	i	160	SER	CA-C-O	-5.43	114.80	120.55
13	m	149	ALA	CB-CA-C	-5.43	101.78	110.79
3	C	118	ILE	CA-C-N	5.43	127.87	120.54
3	C	118	ILE	C-N-CA	5.43	127.87	120.54
17	T	48	ASN	N-CA-C	-5.43	99.24	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	358	TYR	N-CA-CB	5.43	118.10	110.12
20	Z	889	VAL	CA-CB-CG1	5.43	119.63	110.40
24	Q	276	ASP	CA-CB-CG	5.43	118.03	112.60
30	K	379	SER	CA-C-N	5.43	126.92	120.14
30	K	379	SER	C-N-CA	5.43	126.92	120.14
31	L	397	GLU	CA-C-N	5.43	128.56	120.31
31	L	397	GLU	C-N-CA	5.43	128.56	120.31
12	l	148	ARG	NE-CZ-NH1	5.43	126.93	121.50
6	F	95	SER	CA-C-O	5.43	126.17	120.42
9	2	165	ALA	CA-C-O	-5.43	114.80	120.55
12	5	246	SER	N-CA-C	-5.43	100.85	109.59
24	Q	87	GLN	CB-CG-CD	-5.43	103.38	112.60
28	H	397	SER	CA-C-O	5.43	126.67	120.54
5	E	30	ALA	CB-CA-C	-5.42	100.25	110.67
12	5	113	ASN	CA-CB-CG	5.42	118.02	112.60
21	N	81	TYR	CB-CG-CD2	5.42	128.94	120.80
21	N	444	HIS	CE1-NE2-CD2	-5.42	103.58	109.00
22	S	157	GLU	CA-C-N	5.42	127.55	120.28
22	S	157	GLU	C-N-CA	5.42	127.55	120.28
10	3	152	SER	CA-C-N	5.42	127.99	120.29
10	3	152	SER	C-N-CA	5.42	127.99	120.29
21	N	370	SER	N-CA-CB	5.42	118.57	110.22
26	U	274	MET	CA-C-O	5.42	126.30	120.55
29	I	348	ILE	CA-CB-CG1	5.42	119.62	110.40
13	m	52	PHE	CA-CB-CG	-5.42	108.38	113.80
1	A	63	LEU	N-CA-CB	5.42	118.28	110.20
12	5	163	TYR	O-C-N	5.42	127.87	122.12
24	Q	432	VAL	N-CA-C	-5.42	107.02	112.17
30	K	108	GLY	O-C-N	-5.42	119.78	123.95
31	L	65	LEU	CA-C-N	5.42	127.55	120.28
31	L	65	LEU	C-N-CA	5.42	127.55	120.28
33	J	311	ASP	N-CA-C	-5.42	106.14	114.16
5	e	222	ILE	N-CA-CB	5.42	118.73	111.90
2	B	123	GLN	N-CA-C	5.42	117.19	111.28
20	Z	714	ASP	N-CA-CB	5.42	118.02	109.94
21	N	543	ASP	CA-CB-CG	5.42	118.02	112.60
6	f	86	ASN	CA-CB-CG	-5.42	107.18	112.60
4	D	126	VAL	N-CA-C	-5.42	100.06	107.75
12	5	148	ARG	CD-NE-CZ	-5.42	116.81	124.40
16	V	72	PRO	N-CA-CB	5.42	107.87	103.32
22	S	309	PHE	CA-C-N	5.42	127.54	120.28
22	S	309	PHE	C-N-CA	5.42	127.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	130	GLY	N-CA-C	-5.42	100.34	113.18
4	d	204	GLN	N-CA-CB	5.42	119.64	110.49
23	P	46	THR	CA-C-N	5.42	129.44	120.94
23	P	46	THR	C-N-CA	5.42	129.44	120.94
26	U	294	ASN	CA-CB-CG	5.42	118.02	112.60
33	J	396	THR	O-C-N	-5.42	115.62	122.17
6	f	109	GLY	N-CA-C	-5.42	105.84	112.77
13	m	75	ARG	NE-CZ-NH2	5.42	124.07	119.20
1	A	167	LYS	CB-CA-C	-5.42	100.62	109.56
11	4	163	LEU	O-C-N	5.42	127.86	122.12
18	X	69	ILE	O-C-N	-5.42	114.93	121.10
6	f	83	VAL	CA-CB-CG2	-5.41	101.20	110.40
7	g	81	LEU	CA-C-N	-5.41	116.00	120.33
7	g	81	LEU	C-N-CA	-5.41	116.00	120.33
12	l	79	LEU	N-CA-CB	5.41	121.59	111.52
8	1	174	TRP	CB-CG-CD1	5.41	135.02	126.90
14	7	74	ARG	CB-CA-C	-5.41	101.11	109.29
20	Z	404	ASP	CA-C-N	5.41	131.88	121.54
20	Z	404	ASP	C-N-CA	5.41	131.88	121.54
26	U	141	GLU	CB-CG-CD	-5.41	103.40	112.60
28	H	327	ASN	CA-C-O	-5.41	114.81	120.55
30	K	332	GLY	CA-C-N	5.41	131.44	121.70
30	K	332	GLY	C-N-CA	5.41	131.44	121.70
20	Z	935	THR	CB-CA-C	-5.41	102.44	110.67
22	S	165	PRO	N-CA-C	5.41	121.66	113.81
23	P	349	ASN	O-C-N	5.41	128.32	122.15
30	K	154	SER	CA-C-N	5.41	129.86	122.34
30	K	154	SER	C-N-CA	5.41	129.86	122.34
32	M	148	VAL	N-CA-C	-5.41	100.40	108.46
4	d	17	ILE	N-CA-C	-5.41	99.45	107.51
14	7	84	VAL	N-CA-C	-5.41	100.60	108.17
15	W	16	SER	N-CA-C	-5.41	104.96	113.02
22	S	122	ASN	O-C-N	5.41	128.93	122.27
22	S	162	VAL	N-CA-C	5.41	115.62	110.53
23	P	301	LYS	CA-C-N	5.41	127.53	120.28
23	P	301	LYS	C-N-CA	5.41	127.53	120.28
11	k	76	SER	CA-C-O	-5.41	115.07	120.96
2	B	47	THR	N-CA-C	-5.41	100.70	108.60
15	W	132	LEU	N-CA-C	5.41	117.26	111.36
22	S	253	PHE	O-C-N	-5.41	115.62	122.27
29	I	305	THR	N-CA-CB	5.41	118.07	110.12
32	M	285	ALA	O-C-N	-5.41	115.40	122.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	208	LYS	CA-C-O	5.41	125.31	119.15
12	l	166	LYS	N-CA-C	5.41	118.16	110.10
5	E	78	MET	CG-SD-CE	-5.41	89.00	100.90
20	Z	785	VAL	CB-CA-C	-5.41	104.94	112.02
21	N	451	GLY	N-CA-C	-5.41	105.85	112.77
23	P	202	LYS	N-CA-C	-5.41	106.27	112.92
10	3	51	LEU	CB-CA-C	-5.41	101.81	110.14
18	X	72	GLU	N-CA-CB	5.41	119.04	111.15
20	Z	8	LYS	CA-C-O	-5.41	115.65	121.38
22	S	40	GLU	O-C-N	5.41	128.31	122.15
22	S	224	LYS	O-C-N	5.41	128.54	122.22
22	S	286	TYR	N-CA-C	-5.41	106.73	113.38
5	E	221	CYS	CA-C-N	5.40	130.37	123.13
5	E	221	CYS	C-N-CA	5.40	130.37	123.13
26	U	300	LYS	O-C-N	5.40	128.31	122.15
30	K	250	GLY	CA-C-N	5.40	125.22	119.28
30	K	250	GLY	C-N-CA	5.40	125.22	119.28
13	m	23	ILE	N-CA-C	-5.40	100.28	108.17
16	V	176	ASN	N-CA-C	-5.40	101.64	108.45
23	P	295	SER	CA-C-N	5.40	127.96	120.29
23	P	295	SER	C-N-CA	5.40	127.96	120.29
23	P	338	TRP	CE2-CD2-CE3	5.40	124.20	118.80
23	P	385	ASN	CA-CB-CG	-5.40	107.20	112.60
24	Q	43	GLY	CA-C-O	5.40	125.12	119.07
24	Q	304	GLU	N-CA-C	-5.40	105.39	111.28
29	I	319	ARG	NE-CZ-NH2	-5.40	114.34	119.20
1	a	172	GLY	O-C-N	5.40	127.17	121.77
12	l	195	THR	N-CA-C	-5.40	101.17	109.76
24	Q	72	ASP	CA-CB-CG	-5.40	107.20	112.60
27	O	21	SER	N-CA-C	-5.40	106.64	113.18
16	V	273	ARG	CB-CG-CD	5.40	123.72	111.30
21	N	865	PRO	N-CD-CG	5.40	111.30	103.20
24	Q	295	GLY	CA-C-N	5.40	128.09	120.42
24	Q	295	GLY	C-N-CA	5.40	128.09	120.42
31	L	83	ASP	CA-CB-CG	-5.40	107.20	112.60
11	k	70	ARG	NE-CZ-NH1	5.40	126.90	121.50
2	B	168	SER	O-C-N	-5.40	116.51	122.07
5	E	192	THR	N-CA-C	-5.40	101.09	109.24
9	2	251	ASP	CA-C-O	5.40	128.23	120.51
10	3	198	ARG	N-CA-CB	5.40	119.25	110.77
12	5	152	ALA	CA-C-O	5.40	126.14	120.42
15	W	61	VAL	N-CA-CB	5.40	116.41	110.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	474	LEU	N-CA-C	5.40	119.86	113.28
20	Z	837	TYR	CA-CB-CG	-5.40	104.18	113.90
22	S	119	TYR	CB-CG-CD1	5.40	128.90	120.80
22	S	403	SER	CA-C-N	5.40	127.51	120.28
22	S	403	SER	C-N-CA	5.40	127.51	120.28
7	G	107	ILE	O-C-N	-5.40	114.70	120.69
13	6	119	ILE	N-CA-C	-5.40	100.06	108.86
24	Q	286	TYR	CB-CG-CD1	-5.40	112.71	120.80
26	U	37	ILE	N-CA-CB	5.40	118.59	111.25
1	a	57	LYS	N-CA-C	-5.39	100.11	108.90
2	b	250	LEU	N-CA-C	-5.39	95.89	111.00
9	2	190	ALA	CA-C-N	5.39	126.09	119.99
9	2	190	ALA	C-N-CA	5.39	126.09	119.99
14	7	68	ARG	NE-CZ-NH2	-5.39	114.34	119.20
15	W	17	ARG	CA-C-O	5.39	125.87	119.56
20	Z	633	GLU	CB-CA-C	-5.39	101.84	110.79
26	U	64	ASP	N-CA-C	-5.39	106.89	112.93
27	O	197	SER	N-CA-C	5.39	117.16	111.28
32	M	213	ARG	NE-CZ-NH2	-5.39	114.34	119.20
4	d	194	LEU	N-CA-C	5.39	117.24	111.36
7	G	211	ASP	N-CA-C	-5.39	102.54	110.52
17	T	118	ASN	CA-CB-CG	-5.39	107.21	112.60
22	S	180	ASN	CA-C-N	5.39	128.51	120.31
22	S	180	ASN	C-N-CA	5.39	128.51	120.31
3	c	106	ILE	CA-C-O	-5.39	114.70	119.71
12	l	266	HIS	CB-CG-CD2	-5.39	124.19	131.20
1	A	115	ASP	O-C-N	-5.39	116.41	122.12
5	E	15	PHE	CA-CB-CG	-5.39	108.41	113.80
21	N	227	LYS	N-CA-C	-5.39	105.30	111.07
22	S	303	ASN	CA-CB-CG	5.39	117.99	112.60
3	c	181	LYS	CA-C-N	5.39	128.04	120.28
3	c	181	LYS	C-N-CA	5.39	128.04	120.28
6	f	54	ASP	O-C-N	-5.39	117.22	122.99
7	g	72	ARG	CA-C-O	-5.39	112.80	120.51
8	h	153	GLU	CB-CA-C	-5.39	100.77	109.72
11	k	39	SER	O-C-N	-5.39	116.96	121.54
12	5	263	HIS	CE1-NE2-CD2	-5.39	103.61	109.00
23	P	407	ASN	N-CA-C	-5.39	101.17	109.52
30	K	46	ASP	O-C-N	5.39	127.83	122.12
5	e	114	GLN	CA-C-N	5.39	127.50	120.28
5	e	114	GLN	C-N-CA	5.39	127.50	120.28
13	m	23	ILE	O-C-N	5.39	128.89	123.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	3	46	TYR	N-CA-CB	5.39	119.03	110.84
14	7	88	GLY	N-CA-C	-5.39	100.41	113.18
31	L	65	LEU	CA-C-O	-5.39	115.16	120.82
9	i	62	LYS	N-CA-C	-5.39	105.38	113.89
3	C	104	GLU	O-C-N	-5.39	117.24	123.33
13	6	75	ARG	N-CA-C	-5.39	105.49	111.36
20	Z	215	ASN	N-CA-C	-5.39	105.49	111.36
20	Z	359	LYS	N-CA-C	-5.39	105.41	111.28
20	Z	780	MET	CA-C-N	5.39	125.96	119.98
20	Z	780	MET	C-N-CA	5.39	125.96	119.98
22	S	428	ARG	NH1-CZ-NH2	-5.39	112.30	119.30
26	U	207	VAL	N-CA-C	5.39	116.11	110.62
29	I	72	GLU	CB-CA-C	-5.39	101.69	110.85
2	b	203	GLU	CB-CG-CD	-5.38	103.45	112.60
13	6	97	ALA	O-C-N	-5.38	116.41	122.12
16	V	226	LYS	N-CA-C	-5.38	99.66	108.76
25	R	194	VAL	O-C-N	-5.38	116.65	121.87
25	R	422	ARG	N-CA-CB	5.38	118.13	110.16
29	I	359	LYS	N-CA-CB	5.38	118.04	110.12
32	M	354	GLU	CA-C-N	5.38	127.44	120.44
32	M	354	GLU	C-N-CA	5.38	127.44	120.44
22	S	90	LYS	N-CA-C	5.38	117.84	111.33
32	M	319	ASP	CB-CA-C	-5.38	102.43	110.88
1	a	15	HIS	CG-CD2-NE2	5.38	112.58	107.20
3	c	71	ASP	N-CA-C	-5.38	106.76	113.38
12	5	217	SER	CA-C-O	5.38	125.57	119.27
14	7	35	GLN	OE1-CD-NE2	5.38	127.98	122.60
18	X	127	GLY	CA-C-O	-5.38	114.95	120.66
20	Z	412	GLY	CA-C-N	5.38	128.49	120.31
20	Z	412	GLY	C-N-CA	5.38	128.49	120.31
22	S	127	THR	CA-CB-OG1	5.38	117.67	109.60
23	P	337	HIS	CE1-NE2-CD2	-5.38	103.62	109.00
24	Q	186	HIS	ND1-CE1-NE2	5.38	113.78	108.40
33	J	69	GLY	N-CA-C	-5.38	103.24	110.56
5	e	13	SER	CB-CA-C	5.38	121.13	110.42
3	C	183	ASP	CA-C-N	5.38	131.81	121.54
3	C	183	ASP	C-N-CA	5.38	131.81	121.54
6	F	42	THR	O-C-N	-5.38	116.42	122.34
6	F	224	ILE	CB-CA-C	-5.38	103.11	110.96
7	G	40	ILE	N-CA-CB	5.38	118.63	111.64
3	c	222	ASP	N-CA-CB	5.38	120.76	111.13
4	d	93	ALA	CA-C-N	5.38	127.93	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	93	ALA	C-N-CA	5.38	127.93	120.29
5	e	21	LEU	CA-C-N	5.38	127.93	120.29
5	e	21	LEU	C-N-CA	5.38	127.93	120.29
6	f	171	TYR	CA-C-O	5.38	126.47	120.82
8	h	25	ALA	CB-CA-C	-5.38	100.32	110.16
7	G	21	ASN	N-CA-C	-5.38	98.45	108.02
9	2	165	ALA	CA-C-N	5.38	127.83	120.46
9	2	165	ALA	C-N-CA	5.38	127.83	120.46
15	W	67	ALA	N-CA-C	-5.38	106.39	113.17
20	Z	346	LEU	CB-CA-C	-5.38	102.44	110.88
20	Z	456	GLY	CA-C-N	5.38	127.83	120.46
20	Z	456	GLY	C-N-CA	5.38	127.83	120.46
26	U	176	ARG	N-CA-C	-5.38	104.98	112.03
14	n	179	PHE	CA-C-N	5.38	130.36	120.79
14	n	179	PHE	C-N-CA	5.38	130.36	120.79
12	5	104	GLN	CA-C-N	5.38	130.00	121.18
12	5	104	GLN	C-N-CA	5.38	130.00	121.18
14	7	214	MET	CA-C-N	5.38	127.48	120.28
14	7	214	MET	C-N-CA	5.38	127.48	120.28
17	T	227	PRO	O-C-N	5.38	129.68	123.01
21	N	378	ASN	CA-C-O	5.38	128.20	120.51
29	I	372	SER	CA-C-N	5.38	127.43	120.44
29	I	372	SER	C-N-CA	5.38	127.43	120.44
33	J	244	ILE	CA-CB-CG2	-5.38	101.36	110.50
5	E	207	VAL	CB-CA-C	-5.38	104.52	111.88
10	3	137	ILE	N-CA-C	-5.38	100.49	108.45
21	N	612	SER	O-C-N	5.38	129.20	122.86
25	R	32	LEU	N-CA-C	5.38	117.22	111.36
25	R	159	SER	CB-CA-C	-5.38	102.44	110.88
7	G	89	VAL	N-CA-C	-5.37	104.24	111.44
20	Z	885	ALA	CA-C-O	5.37	124.43	118.52
21	N	653	ARG	NH1-CZ-NH2	-5.37	112.31	119.30
22	S	440	ASP	CA-CB-CG	-5.37	107.23	112.60
23	P	54	SER	CA-C-N	5.37	127.48	120.28
23	P	54	SER	C-N-CA	5.37	127.48	120.28
25	R	203	ASP	CA-CB-CG	-5.37	107.23	112.60
28	H	283	TYR	CA-CB-CG	-5.37	104.23	113.90
29	I	98	GLU	CB-CA-C	-5.37	101.87	110.79
7	g	150	MET	CA-C-N	5.37	130.41	123.00
7	g	150	MET	C-N-CA	5.37	130.41	123.00
10	j	129	CYS	N-CA-C	-5.37	100.57	108.79
2	B	16	GLY	N-CA-C	-5.37	104.65	112.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	139	ASP	CA-C-O	-5.37	114.84	120.70
20	Z	342	LEU	CB-CA-C	-5.37	101.77	110.79
25	R	400	TYR	N-CA-C	-5.37	105.34	111.14
26	U	49	THR	N-CA-C	-5.37	106.41	113.12
29	I	311	ASN	CA-CB-CG	-5.37	107.23	112.60
31	L	190	ILE	CA-C-N	5.37	127.48	120.28
31	L	190	ILE	C-N-CA	5.37	127.48	120.28
32	M	61	LYS	N-CA-C	5.37	117.14	111.28
32	M	144	ASP	CA-CB-CG	5.37	117.97	112.60
33	J	21	PRO	CB-CA-C	5.37	119.48	111.85
29	I	88	LYS	N-CA-CB	5.37	118.54	110.65
6	f	104	ALA	CB-CA-C	-5.37	100.81	109.72
12	l	109	VAL	CA-C-O	-5.37	114.85	120.27
4	D	40	ASN	OD1-CG-ND2	-5.37	117.23	122.60
20	Z	151	HIS	CA-C-N	5.37	127.91	120.29
20	Z	151	HIS	C-N-CA	5.37	127.91	120.29
20	Z	845	LEU	CB-CA-C	-5.37	101.77	110.79
22	S	216	LYS	CB-CG-CD	5.37	123.65	111.30
29	I	230	THR	CA-C-N	5.37	127.42	120.44
29	I	230	THR	C-N-CA	5.37	127.42	120.44
27	O	379	LYS	CA-C-N	5.37	128.01	120.28
27	O	379	LYS	C-N-CA	5.37	128.01	120.28
28	H	404	TRP	N-CA-C	-5.37	105.47	112.23
3	c	112	VAL	O-C-N	-5.37	116.67	121.87
13	m	230	ASP	CA-CB-CG	-5.37	107.23	112.60
22	S	19	HIS	N-CA-C	5.37	117.21	111.36
23	P	62	ILE	CA-C-O	-5.37	112.50	119.53
27	O	8	ASP	CA-C-O	-5.37	114.86	120.55
28	H	91	LEU	CA-C-N	5.37	126.59	120.53
28	H	91	LEU	C-N-CA	5.37	126.59	120.53
32	M	270	ALA	CB-CA-C	-5.37	102.46	110.88
5	E	223	THR	N-CA-C	-5.36	100.28	109.24
21	N	40	SER	CA-C-N	5.36	129.66	120.71
21	N	40	SER	C-N-CA	5.36	129.66	120.71
22	S	110	LEU	N-CA-C	-5.36	98.91	108.13
25	R	167	LYS	N-CA-C	-5.36	105.60	111.82
31	L	58	ASN	CB-CA-C	-5.36	101.89	110.79
13	m	116	HIS	ND1-CE1-NE2	5.36	113.76	108.40
20	Z	425	ILE	CA-C-N	5.36	131.09	122.83
20	Z	425	ILE	C-N-CA	5.36	131.09	122.83
26	U	196	SER	CA-C-N	5.36	127.90	120.29
26	U	196	SER	C-N-CA	5.36	127.90	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	104	VAL	CA-C-O	-5.36	116.22	121.58
14	n	99	LEU	N-CA-CB	5.36	118.48	110.22
8	1	149	LYS	O-C-N	-5.36	116.44	122.12
20	Z	151	HIS	CE1-NE2-CD2	-5.36	103.64	109.00
20	Z	319	THR	CA-C-N	5.36	127.72	120.38
20	Z	319	THR	C-N-CA	5.36	127.72	120.38
30	K	360	MET	CA-C-N	5.36	128.32	120.71
30	K	360	MET	C-N-CA	5.36	128.32	120.71
11	k	119	ILE	CB-CA-C	-5.36	103.16	110.77
20	Z	618	GLN	CB-CA-C	-5.36	101.89	110.79
21	N	271	GLU	CA-C-O	-5.36	114.87	120.55
24	Q	382	LEU	N-CA-C	5.36	117.12	111.28
28	H	308	PHE	N-CA-C	-5.36	100.44	109.07
4	D	148	TYR	N-CA-C	-5.36	101.15	109.24
20	Z	117	ASP	CA-C-N	5.36	127.80	120.46
20	Z	117	ASP	C-N-CA	5.36	127.80	120.46
23	P	277	GLN	CA-C-N	5.36	127.46	120.28
23	P	277	GLN	C-N-CA	5.36	127.46	120.28
29	I	279	VAL	N-CA-C	-5.36	100.40	108.12
29	I	317	ASP	N-CA-C	-5.36	99.39	110.80
33	J	144	ASP	CA-C-O	5.36	126.27	119.95
9	i	120	GLN	N-CA-CB	5.36	120.05	111.91
22	S	151	GLU	N-CA-C	-5.36	100.58	108.99
25	R	108	SER	CA-C-N	5.36	127.46	120.28
25	R	108	SER	C-N-CA	5.36	127.46	120.28
26	U	271	ASP	N-CA-C	5.36	116.80	111.07
2	b	214	ILE	N-CA-C	-5.35	98.21	106.72
12	l	225	VAL	CA-CB-CG1	5.35	119.50	110.40
7	G	118	GLN	N-CA-CB	5.35	118.18	110.20
7	G	206	ASP	CA-CB-CG	5.35	117.95	112.60
13	6	187	GLU	N-CA-CB	5.35	118.58	110.28
14	7	95	HIS	CE1-NE2-CD2	-5.35	103.65	109.00
13	m	156	PRO	CA-C-N	5.35	127.89	120.29
13	m	156	PRO	C-N-CA	5.35	127.89	120.29
15	W	55	ALA	CA-C-O	-5.35	116.39	122.01
20	Z	385	PHE	CB-CG-CD2	-5.35	111.60	120.70
20	Z	942	PRO	N-CA-CB	5.35	108.87	103.25
21	N	862	SER	N-CA-CB	5.35	119.53	110.49
29	I	332	GLU	N-CA-C	-5.35	105.45	112.41
15	W	130	LYS	N-CA-C	-5.35	105.53	111.36
27	O	342	ASP	O-C-N	5.35	129.89	123.36
9	i	86	GLN	CA-C-N	5.35	127.72	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	i	86	GLN	C-N-CA	5.35	127.72	120.44
10	j	4	PRO	CA-C-N	5.35	127.45	120.28
10	j	4	PRO	C-N-CA	5.35	127.45	120.28
11	k	149	ARG	CA-C-O	-5.35	115.34	120.64
6	F	210	ASN	CA-C-N	5.35	129.15	121.50
6	F	210	ASN	C-N-CA	5.35	129.15	121.50
20	Z	59	ASP	CA-CB-CG	5.35	117.95	112.60
20	Z	64	TYR	N-CA-C	-5.35	106.69	113.43
20	Z	374	LEU	O-C-N	-5.35	116.32	122.95
20	Z	744	ALA	CA-C-N	5.35	127.45	120.28
20	Z	744	ALA	C-N-CA	5.35	127.45	120.28
21	N	487	LEU	CA-C-N	5.35	127.45	120.28
21	N	487	LEU	C-N-CA	5.35	127.45	120.28
31	L	419	VAL	N-CA-CB	5.35	120.45	110.77
31	L	436	LYS	N-CA-CB	5.35	119.59	110.50
32	M	409	SER	CA-C-N	5.35	127.87	120.49
32	M	409	SER	C-N-CA	5.35	127.87	120.49
5	e	89	ILE	CA-C-O	-5.35	115.18	120.85
6	f	51	ARG	N-CA-C	-5.35	101.17	109.72
8	h	16	THR	N-CA-CB	5.35	117.83	109.97
13	m	108	LYS	CA-C-N	5.35	127.39	120.44
13	m	108	LYS	C-N-CA	5.35	127.39	120.44
13	6	218	ASP	CA-CB-CG	-5.35	107.25	112.60
17	T	109	TYR	CA-C-N	5.35	127.44	120.28
17	T	109	TYR	C-N-CA	5.35	127.44	120.28
18	X	45	PHE	CA-CB-CG	-5.35	108.45	113.80
20	Z	122	LEU	N-CA-CB	5.35	119.11	110.40
20	Z	365	SER	CA-C-N	5.35	131.75	121.54
20	Z	365	SER	C-N-CA	5.35	131.75	121.54
29	I	350	PHE	CA-C-O	5.35	126.38	120.71
30	K	321	ALA	N-CA-C	-5.35	105.44	113.89
32	M	209	ASP	CA-CB-CG	5.35	117.95	112.60
33	J	131	ASP	N-CA-C	-5.35	102.05	108.25
1	a	22	GLU	CA-C-N	-5.35	117.09	123.08
1	a	22	GLU	C-N-CA	-5.35	117.09	123.08
10	j	106	GLY	CA-C-O	-5.35	113.88	121.52
1	A	202	VAL	CA-C-O	-5.35	114.99	120.71
31	L	121	ALA	CA-C-O	-5.35	115.41	121.72
6	F	123	TYR	N-CA-CB	5.34	118.89	110.23
22	S	376	THR	N-CA-C	-5.34	106.77	113.72
24	Q	51	ARG	NH1-CZ-NH2	5.34	126.25	119.30
2	B	242	GLU	N-CA-CB	5.34	118.07	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	6	152	SER	CA-CB-OG	-5.34	100.41	111.10
23	P	201	ARG	CG-CD-NE	-5.34	100.24	112.00
4	d	192	VAL	N-CA-CB	5.34	117.81	110.54
2	B	28	VAL	O-C-N	5.34	127.05	121.87
6	F	210	ASN	N-CA-C	-5.34	106.89	113.41
7	G	141	VAL	N-CA-C	-5.34	100.50	108.46
12	5	158	LEU	N-CA-CB	5.34	118.06	110.16
20	Z	169	VAL	O-C-N	-5.34	116.34	121.90
28	H	115	THR	CA-C-O	5.34	126.08	120.36
29	I	58	LYS	CB-CG-CD	5.34	123.59	111.30
31	L	378	ALA	CA-C-O	-5.34	114.76	120.42
1	a	146	VAL	N-CA-C	-5.34	99.95	107.75
7	g	7	GLY	CA-C-O	-5.34	118.30	122.52
7	g	67	ILE	N-CA-C	-5.34	100.89	108.58
11	k	47	ALA	N-CA-C	-5.34	100.62	108.79
14	n	125	ILE	CA-C-N	5.34	127.43	120.28
14	n	125	ILE	C-N-CA	5.34	127.43	120.28
2	B	219	PRO	CB-CA-C	-5.34	102.98	111.04
20	Z	328	ASP	N-CA-CB	5.34	117.75	110.01
22	S	162	VAL	CA-C-N	5.34	128.00	120.42
22	S	162	VAL	C-N-CA	5.34	128.00	120.42
25	R	42	GLN	CA-C-N	5.34	127.43	120.28
25	R	42	GLN	C-N-CA	5.34	127.43	120.28
29	I	133	LEU	N-CA-CB	5.34	119.51	110.49
29	I	155	SER	N-CA-C	-5.34	100.61	108.99
9	i	224	VAL	N-CA-CB	5.34	117.09	111.00
22	S	278	LYS	CA-C-N	5.34	127.77	120.46
22	S	278	LYS	C-N-CA	5.34	127.77	120.46
25	R	334	ARG	CA-C-N	5.34	127.43	120.28
25	R	334	ARG	C-N-CA	5.34	127.43	120.28
33	J	367	MET	CA-C-O	-5.34	114.76	120.42
3	C	36	ILE	CB-CG1-CD1	5.34	125.00	113.80
12	5	277	GLU	N-CA-C	-5.34	105.38	111.14
18	X	33	ILE	N-CA-C	-5.34	102.03	109.45
26	U	78	GLU	CA-C-N	5.34	127.87	120.29
26	U	78	GLU	C-N-CA	5.34	127.87	120.29
28	H	450	VAL	O-C-N	5.34	127.33	121.83
7	G	165	THR	CA-CB-CG2	5.33	119.57	110.50
22	S	227	ASN	OD1-CG-ND2	-5.33	117.27	122.60
22	S	416	GLU	CB-CG-CD	-5.33	103.53	112.60
23	P	26	SER	CB-CA-C	-5.33	102.47	110.90
2	b	234	ARG	CA-C-N	5.33	128.28	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	234	ARG	C-N-CA	5.33	128.28	120.71
3	C	229	ILE	N-CA-C	-5.33	101.80	108.84
7	G	74	ILE	O-C-N	-5.33	117.50	123.26
7	G	153	PRO	N-CA-CB	5.33	108.59	103.52
15	W	124	GLU	N-CA-CB	5.33	117.96	110.12
20	Z	849	ARG	N-CA-CB	5.33	120.78	111.13
21	N	555	ILE	O-C-N	-5.33	116.34	121.83
23	P	408	SER	N-CA-C	-5.33	105.47	111.28
25	R	265	ASP	CA-CB-CG	-5.33	107.27	112.60
26	U	245	ASP	N-CA-CB	5.33	118.05	110.16
27	O	155	LYS	CA-C-N	5.33	127.43	120.28
27	O	155	LYS	C-N-CA	5.33	127.43	120.28
9	i	123	ILE	CB-CA-C	5.33	118.77	111.31
9	2	161	LEU	CB-CA-C	-5.33	101.79	110.85
11	4	122	LEU	N-CA-C	-5.33	105.36	111.07
16	V	138	ALA	N-CA-C	-5.33	99.60	108.34
19	Y	23	GLU	CA-C-N	5.33	127.28	120.56
19	Y	23	GLU	C-N-CA	5.33	127.28	120.56
21	N	799	VAL	CA-C-N	5.33	127.37	120.44
21	N	799	VAL	C-N-CA	5.33	127.37	120.44
25	R	223	ASN	CA-CB-CG	5.33	117.93	112.60
29	I	91	GLU	CA-C-O	-5.33	114.90	120.55
1	a	237	SER	O-C-N	-5.33	117.01	123.03
12	5	125	ALA	N-CA-C	5.33	117.09	111.28
20	Z	222	ASP	CA-CB-CG	-5.33	107.27	112.60
22	S	119	TYR	CB-CG-CD2	-5.33	112.80	120.80
25	R	27	SER	N-CA-C	5.33	117.09	111.28
12	l	155	SER	N-CA-C	5.33	117.09	111.28
13	m	75	ARG	NE-CZ-NH1	-5.33	116.17	121.50
9	2	78	ALA	N-CA-C	-5.33	105.47	111.28
14	7	137	ARG	CA-C-O	-5.33	114.90	120.55
20	Z	580	GLN	N-CA-CB	5.33	119.09	110.40
20	Z	592	GLU	CA-C-O	5.33	126.23	120.32
21	N	686	ILE	O-C-N	-5.33	116.34	121.83
21	N	868	VAL	CA-C-N	5.33	128.79	120.75
21	N	868	VAL	C-N-CA	5.33	128.79	120.75
22	S	65	ASN	CA-C-N	5.33	127.42	120.28
22	S	65	ASN	C-N-CA	5.33	127.42	120.28
26	U	24	ARG	NE-CZ-NH1	-5.33	116.17	121.50
28	H	331	ARG	CD-NE-CZ	-5.33	116.94	124.40
31	L	373	GLU	N-CA-C	-5.33	101.19	109.24
7	g	26	TYR	CA-C-N	5.33	127.86	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	26	TYR	C-N-CA	5.33	127.86	120.29
7	G	178	LYS	CA-C-N	5.33	127.85	120.29
7	G	178	LYS	C-N-CA	5.33	127.85	120.29
10	3	183	TRP	CB-CA-C	-5.33	101.32	110.16
20	Z	271	ILE	O-C-N	5.33	127.13	121.91
20	Z	413	ASP	CA-C-N	5.33	125.89	119.98
20	Z	413	ASP	C-N-CA	5.33	125.89	119.98
21	N	649	VAL	CA-C-N	5.33	127.85	120.29
21	N	649	VAL	C-N-CA	5.33	127.85	120.29
22	S	270	ALA	CA-C-N	5.33	127.42	120.28
22	S	270	ALA	C-N-CA	5.33	127.42	120.28
4	d	89	ALA	N-CA-C	-5.33	105.48	111.28
4	D	230	ASN	CB-CA-C	-5.33	101.95	110.79
10	3	69	TYR	CB-CG-CD1	5.33	128.79	120.80
11	4	62	ALA	CB-CA-C	-5.33	102.48	110.90
22	S	442	PHE	N-CA-CB	5.33	120.55	111.66
23	P	47	ARG	CD-NE-CZ	5.33	131.86	124.40
27	O	10	ILE	N-CA-CB	5.33	117.78	110.54
28	H	164	SER	CA-C-N	5.33	125.41	119.87
28	H	164	SER	C-N-CA	5.33	125.41	119.87
3	c	61	THR	N-CA-C	-5.32	105.06	112.30
5	e	166	ARG	CD-NE-CZ	-5.32	116.95	124.40
8	1	115	ASN	N-CA-C	-5.32	106.67	114.39
12	5	160	ASN	CA-C-N	5.32	127.68	120.65
12	5	160	ASN	C-N-CA	5.32	127.68	120.65
16	V	106	GLY	N-CA-C	-5.32	100.56	113.18
21	N	481	ALA	CB-CA-C	-5.32	101.95	110.79
22	S	316	LEU	CA-C-N	5.32	127.85	120.29
22	S	316	LEU	C-N-CA	5.32	127.85	120.29
23	P	54	SER	O-C-N	-5.32	115.95	122.34
26	U	228	LYS	CA-CB-CG	5.32	124.75	114.10
29	I	122	SER	CA-C-N	5.32	125.79	120.04
29	I	122	SER	C-N-CA	5.32	125.79	120.04
7	g	198	LYS	N-CA-CB	-5.32	102.28	110.16
12	l	143	LEU	CA-C-N	5.32	127.94	120.28
12	l	143	LEU	C-N-CA	5.32	127.94	120.28
1	A	105	ARG	NE-CZ-NH1	-5.32	116.18	121.50
11	4	21	VAL	N-CA-CB	5.32	118.91	112.10
21	N	65	ALA	CA-C-N	5.32	127.41	120.28
21	N	65	ALA	C-N-CA	5.32	127.41	120.28
21	N	331	ALA	CB-CA-C	-5.32	101.96	110.79
14	n	102	ASP	CA-CB-CG	5.32	117.92	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	n	203	VAL	CA-C-O	-5.32	115.42	120.95
2	B	66	LEU	N-CA-CB	5.32	117.78	109.85
5	E	29	GLU	CA-C-O	5.32	125.50	119.27
14	7	81	ASN	OD1-CG-ND2	-5.32	117.28	122.60
17	T	113	LEU	CA-C-N	5.32	127.41	120.28
17	T	113	LEU	C-N-CA	5.32	127.41	120.28
19	Y	36	GLU	N-CA-C	-5.32	106.80	113.72
24	Q	303	ALA	CA-C-N	5.32	127.41	120.28
24	Q	303	ALA	C-N-CA	5.32	127.41	120.28
25	R	243	LEU	N-CA-CB	5.32	119.60	110.77
30	K	137	VAL	CA-C-O	-5.32	116.36	121.63
31	L	294	GLY	CA-C-N	5.32	128.27	120.71
31	L	294	GLY	C-N-CA	5.32	128.27	120.71
7	g	69	VAL	O-C-N	-5.32	117.45	122.98
14	n	215	ARG	CB-CA-C	-5.32	101.96	110.79
10	3	49	VAL	CA-C-O	-5.32	114.66	120.72
15	W	146	GLU	N-CA-CB	5.32	119.48	110.49
20	Z	400	ILE	CA-C-O	5.32	126.81	121.17
23	P	3	ARG	CD-NE-CZ	-5.32	116.95	124.40
4	d	210	ILE	N-CA-C	-5.32	100.67	108.11
6	f	57	SER	N-CA-CB	5.32	117.79	109.97
12	l	134	LEU	N-CA-C	-5.32	105.48	111.28
14	n	228	PHE	CA-C-O	-5.32	115.54	121.23
3	C	59	GLN	CG-CD-NE2	-5.32	108.42	116.40
4	D	45	GLY	N-CA-C	-5.32	102.77	110.90
4	D	218	ASP	CA-CB-CG	-5.32	107.28	112.60
13	6	188	VAL	N-CA-C	5.32	116.09	110.72
15	W	33	VAL	CA-C-N	5.32	127.40	120.28
15	W	33	VAL	C-N-CA	5.32	127.40	120.28
22	S	404	LEU	CB-CA-C	-5.32	101.96	110.79
23	P	33	ASN	OD1-CG-ND2	5.32	127.92	122.60
1	a	225	VAL	N-CA-CB	5.32	119.28	111.52
5	E	28	LEU	CA-C-O	5.32	125.92	119.38
16	V	69	PHE	CA-CB-CG	5.32	119.11	113.80
20	Z	912	PHE	CA-CB-CG	-5.32	108.48	113.80
20	Z	938	GLN	N-CA-CB	5.32	117.85	110.04
32	M	424	ALA	N-CA-C	-5.32	106.75	113.18
33	J	36	SER	CA-C-N	5.32	127.93	120.28
33	J	36	SER	C-N-CA	5.32	127.93	120.28
6	f	143	HIS	ND1-CE1-NE2	5.31	113.71	108.40
12	5	132	THR	N-CA-CB	5.31	118.52	110.28
22	S	79	ASN	N-CA-C	-5.31	107.34	112.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	S	187	ILE	CA-C-N	5.31	127.84	120.29
22	S	187	ILE	C-N-CA	5.31	127.84	120.29
5	E	12	VAL	CB-CA-C	-5.31	104.88	110.62
6	F	80	ASP	N-CA-CB	5.31	118.02	110.16
9	2	70	ILE	CA-C-O	-5.31	114.86	120.39
17	T	51	TYR	CA-CB-CG	5.31	123.46	113.90
27	O	342	ASP	N-CA-CB	5.31	119.73	110.81
27	O	373	TRP	CA-C-N	5.31	127.40	120.28
27	O	373	TRP	C-N-CA	5.31	127.40	120.28
14	n	239	LEU	CB-CA-C	5.31	118.51	109.75
23	P	372	THR	CA-C-N	5.31	127.40	120.28
23	P	372	THR	C-N-CA	5.31	127.40	120.28
33	J	224	GLY	CA-C-N	5.31	129.01	121.42
33	J	224	GLY	C-N-CA	5.31	129.01	121.42
1	a	124	LEU	O-C-N	5.31	127.75	122.12
2	b	177	LYS	N-CA-C	-5.31	105.41	111.14
2	B	186	GLU	N-CA-CB	5.31	117.71	110.01
9	2	215	TYR	O-C-N	-5.31	116.56	122.93
21	N	925	ASP	CA-CB-CG	-5.31	107.29	112.60
26	U	107	ASN	CA-CB-CG	-5.31	107.29	112.60
2	b	148	TYR	CB-CA-C	-5.31	100.75	110.62
8	h	148	ASP	O-C-N	-5.31	116.49	122.12
9	i	240	ALA	N-CA-CB	5.31	119.98	110.80
1	A	46	ARG	NE-CZ-NH2	-5.31	114.42	119.20
1	A	225	VAL	CA-C-N	5.31	126.20	122.33
1	A	225	VAL	C-N-CA	5.31	126.20	122.33
2	B	242	GLU	CB-CA-C	-5.31	101.83	110.85
11	4	133	HIS	CG-CD2-NE2	5.31	112.51	107.20
21	N	168	SER	N-CA-C	5.31	117.15	111.36
22	S	371	LEU	CA-C-N	5.31	127.66	120.44
22	S	371	LEU	C-N-CA	5.31	127.66	120.44
29	I	147	VAL	N-CA-C	-5.31	100.09	108.90
30	K	388	GLN	N-CA-CB	5.31	117.77	110.07
20	Z	633	GLU	N-CA-CB	5.31	117.92	110.12
24	Q	23	ALA	CA-C-N	5.31	127.82	120.29
24	Q	23	ALA	C-N-CA	5.31	127.82	120.29
2	B	209	ILE	N-CA-C	-5.30	100.01	107.75
4	D	233	VAL	CB-CA-C	-5.30	104.90	112.22
12	5	204	VAL	CA-C-O	5.30	127.24	121.67
12	5	241	HIS	CE1-NE2-CD2	-5.30	103.69	109.00
20	Z	65	GLU	CA-C-N	5.30	127.92	120.28
20	Z	65	GLU	C-N-CA	5.30	127.92	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	176	SER	CA-C-N	5.30	125.30	120.21
29	I	176	SER	C-N-CA	5.30	125.30	120.21
29	I	350	PHE	N-CA-C	-5.30	101.05	109.59
32	M	105	ASN	CA-C-N	5.30	131.52	121.97
32	M	105	ASN	C-N-CA	5.30	131.52	121.97
14	n	141	ASN	CA-CB-CG	-5.30	107.30	112.60
14	7	60	LEU	CB-CA-C	-5.30	100.45	110.16
5	e	10	ARG	CA-C-O	-5.30	113.53	119.79
6	f	48	ALA	CA-C-N	5.30	129.66	122.19
6	f	48	ALA	C-N-CA	5.30	129.66	122.19
6	f	95	SER	CA-C-N	5.30	127.33	120.44
6	f	95	SER	C-N-CA	5.30	127.33	120.44
12	l	137	GLN	CA-C-N	5.30	127.38	120.28
12	l	137	GLN	C-N-CA	5.30	127.38	120.28
13	m	65	PHE	CB-CA-C	5.30	118.21	110.26
1	A	140	ILE	N-CA-C	-5.30	100.81	108.71
4	D	171	VAL	CB-CA-C	-5.30	104.91	112.22
11	4	35	THR	CB-CA-C	5.30	121.23	109.94
11	4	119	ILE	N-CA-CB	5.30	119.84	111.99
20	Z	422	ILE	N-CA-C	-5.30	105.21	110.62
22	S	472	HIS	CA-C-N	5.30	127.38	120.28
22	S	472	HIS	C-N-CA	5.30	127.38	120.28
25	R	45	GLU	CA-C-N	5.30	127.33	120.44
25	R	45	GLU	C-N-CA	5.30	127.33	120.44
27	O	273	GLN	CA-C-O	-5.30	112.16	119.05
29	I	207	LEU	O-C-N	5.30	128.19	122.15
30	K	127	ASP	CA-CB-CG	-5.30	107.30	112.60
32	M	67	GLU	CB-CA-C	-5.30	101.84	110.85
33	J	391	ASN	OD1-CG-ND2	-5.30	117.30	122.60
1	A	240	ASN	OD1-CG-ND2	5.30	127.90	122.60
4	D	123	SER	O-C-N	-5.30	117.00	122.94
7	G	52	LYS	N-CA-CB	5.30	119.27	110.47
17	T	150	ARG	CB-CA-C	-5.30	101.99	110.79
20	Z	483	THR	CA-C-O	-5.30	114.80	120.42
22	S	289	ALA	N-CA-C	-5.30	105.40	111.07
23	P	208	PHE	N-CA-C	-5.30	104.82	113.19
29	I	159	VAL	N-CA-C	-5.30	100.69	108.85
32	M	84	GLU	N-CA-C	-5.30	100.39	108.76
33	J	317	PRO	CA-C-N	5.30	125.84	120.38
33	J	317	PRO	C-N-CA	5.30	125.84	120.38
9	i	39	ASN	O-C-N	-5.30	115.72	122.34
1	a	107	LYS	CA-C-N	-5.30	114.28	122.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	107	LYS	C-N-CA	-5.30	114.28	122.49
6	F	3	ARG	NH1-CZ-NH2	-5.30	112.41	119.30
6	F	63	ILE	O-C-N	5.30	128.98	123.26
11	4	103	LEU	CA-C-O	-5.30	114.98	120.70
12	5	176	ILE	N-CA-C	-5.30	100.26	107.99
13	6	83	TYR	O-C-N	5.30	127.81	122.09
5	E	138	PHE	CA-CB-CG	-5.29	108.50	113.80
17	T	201	PRO	N-CA-CB	5.29	107.77	103.32
24	Q	138	SER	N-CA-C	-5.29	105.96	112.90
4	d	167	ASN	OD1-CG-ND2	5.29	127.89	122.60
5	e	129	GLY	O-C-N	5.29	128.38	123.19
3	C	222	ASP	N-CA-CB	5.29	120.60	111.13
13	6	11	ASN	OD1-CG-ND2	5.29	127.89	122.60
13	6	42	SER	CA-C-N	-5.29	115.75	122.37
13	6	42	SER	C-N-CA	-5.29	115.75	122.37
22	S	25	TYR	CB-CG-CD1	-5.29	112.86	120.80
24	Q	37	GLN	CB-CG-CD	-5.29	103.60	112.60
26	U	254	ARG	N-CA-CB	5.29	117.99	110.16
29	I	382	THR	CA-C-N	5.29	127.81	120.29
29	I	382	THR	C-N-CA	5.29	127.81	120.29
30	K	141	ARG	NE-CZ-NH2	-5.29	114.44	119.20
30	K	223	VAL	CA-C-N	5.29	127.81	120.29
30	K	223	VAL	C-N-CA	5.29	127.81	120.29
5	e	102	TYR	N-CA-CB	5.29	118.45	110.30
13	m	156	PRO	N-CA-CB	5.29	109.11	103.39
4	D	98	LEU	CA-C-O	-5.29	115.26	120.82
20	Z	823	ASN	CA-CB-CG	-5.29	107.31	112.60
25	R	362	ALA	N-CA-C	5.29	117.05	111.28
32	M	207	PHE	CB-CG-CD1	-5.29	111.70	120.70
7	g	35	THR	N-CA-CB	5.29	119.05	110.43
13	m	203	HIS	CE1-NE2-CD2	-5.29	103.71	109.00
16	V	220	GLN	OE1-CD-NE2	5.29	127.89	122.60
21	N	292	GLY	N-CA-C	-5.29	107.97	115.43
23	P	296	GLN	OE1-CD-NE2	5.29	127.89	122.60
27	O	365	LYS	O-C-N	5.29	128.18	122.15
29	I	412	THR	CA-CB-OG1	5.29	117.53	109.60
4	d	119	ARG	CA-C-O	5.29	126.16	120.55
11	k	150	PRO	CA-N-CD	5.29	119.40	112.00
16	V	287	THR	N-CA-C	-5.29	105.69	111.82
21	N	743	PHE	CA-C-N	5.29	124.92	119.05
21	N	743	PHE	C-N-CA	5.29	124.92	119.05
31	L	120	LYS	CA-C-N	5.29	132.70	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	120	LYS	C-N-CA	5.29	132.70	122.07
2	B	30	GLN	CA-C-N	5.29	127.93	121.06
2	B	30	GLN	C-N-CA	5.29	127.93	121.06
7	G	126	TYR	CA-CB-CG	-5.29	104.39	113.90
11	4	190	ARG	NE-CZ-NH1	-5.29	116.21	121.50
15	W	107	HIS	ND1-CE1-NE2	5.29	113.69	108.40
20	Z	933	VAL	N-CA-CB	5.29	120.99	111.21
21	N	813	ARG	CG-CD-NE	-5.29	100.37	112.00
31	L	127	TYR	N-CA-C	-5.29	101.38	109.41
32	M	89	ASN	N-CA-C	5.29	117.54	110.35
5	e	168	ASN	OD1-CG-ND2	-5.28	117.32	122.60
6	f	14	SER	CA-C-O	-5.28	115.42	120.97
4	D	216	LYS	CA-C-O	-5.28	115.60	120.94
10	3	100	PHE	N-CA-CB	5.28	118.88	110.16
20	Z	331	GLY	CA-C-N	5.28	128.35	120.90
20	Z	331	GLY	C-N-CA	5.28	128.35	120.90
30	K	292	VAL	O-C-N	-5.28	116.39	121.83
5	e	92	ALA	N-CA-C	-5.28	105.60	111.36
21	N	584	ARG	N-CA-C	-5.28	105.52	111.28
14	n	231	ALA	CA-C-N	5.28	130.12	123.10
14	n	231	ALA	C-N-CA	5.28	130.12	123.10
3	C	232	PRO	CB-CA-C	-5.28	103.97	112.21
7	G	91	ARG	N-CA-C	-5.28	105.53	111.28
9	2	91	ASN	N-CA-CB	5.28	117.73	110.07
11	4	13	VAL	O-C-N	-5.28	117.45	123.10
13	6	203	HIS	CG-CD2-NE2	5.28	112.48	107.20
22	S	462	ASP	O-C-N	5.28	127.72	122.12
25	R	47	ALA	CA-C-N	5.28	127.79	120.29
25	R	47	ALA	C-N-CA	5.28	127.79	120.29
25	R	136	ASN	CA-C-N	5.28	127.36	120.28
25	R	136	ASN	C-N-CA	5.28	127.36	120.28
28	H	131	GLN	O-C-N	5.28	128.63	122.24
33	J	392	LYS	CA-C-N	5.28	127.79	120.29
33	J	392	LYS	C-N-CA	5.28	127.79	120.29
7	g	191	GLU	CA-C-O	-5.28	112.76	119.31
5	E	62	ASP	N-CA-CB	-5.28	102.85	110.56
17	T	238	GLN	CA-C-O	5.28	126.04	119.97
23	P	123	ARG	N-CA-C	5.28	117.44	111.11
27	O	324	VAL	CA-CB-CG2	-5.28	101.43	110.40
29	I	144	GLY	N-CA-C	-5.28	107.93	115.64
32	M	355	ASP	O-C-N	-5.28	116.63	122.07
10	j	165	GLU	CB-CG-CD	-5.28	103.63	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	l	139	ARG	NH1-CZ-NH2	-5.28	112.44	119.30
4	D	11	PHE	CA-CB-CG	-5.28	108.52	113.80
4	D	118	GLN	N-CA-C	5.28	117.03	111.28
28	H	259	CYS	N-CA-C	5.28	116.72	111.07
31	L	52	ALA	CA-C-O	-5.28	112.90	119.18
7	g	212	PHE	N-CA-C	-5.28	101.39	109.41
13	m	98	ALA	N-CA-C	5.28	117.11	111.36
15	W	17	ARG	N-CA-C	-5.28	106.43	112.92
24	Q	84	TYR	CA-C-O	-5.28	114.14	120.10
2	b	151	ASP	CB-CA-C	-5.27	100.98	109.37
5	e	188	HIS	ND1-CE1-NE2	5.27	113.67	108.40
8	h	191	GLY	CA-C-N	-5.27	115.66	122.99
8	h	191	GLY	C-N-CA	-5.27	115.66	122.99
4	D	249	LYS	CA-C-N	5.27	127.78	120.29
4	D	249	LYS	C-N-CA	5.27	127.78	120.29
31	L	157	ARG	N-CA-CB	5.27	119.73	111.56
7	g	93	ARG	CA-C-N	5.27	127.34	120.28
7	g	93	ARG	C-N-CA	5.27	127.34	120.28
1	A	34	ALA	N-CA-C	-5.27	106.44	112.92
11	4	30	ASP	O-C-N	5.27	129.07	122.22
13	6	99	ARG	CA-C-O	-5.27	114.83	120.42
14	7	221	ASP	CA-C-O	5.27	126.77	120.28
24	Q	218	LEU	N-CA-CB	-5.27	102.36	110.16
29	I	268	PHE	CA-C-O	5.27	126.03	119.97
30	K	200	GLN	CB-CG-CD	-5.27	103.64	112.60
8	h	24	GLY	CA-C-O	5.27	126.21	121.47
9	2	201	ASN	N-CA-CB	5.27	117.98	110.44
13	6	146	ALA	N-CA-C	-5.27	101.57	109.95
15	W	31	ASP	N-CA-CB	5.27	118.45	110.28
32	M	227	GLY	CA-C-N	5.27	128.32	120.31
32	M	227	GLY	C-N-CA	5.27	128.32	120.31
16	V	117	TRP	CG-CD2-CE3	-5.27	128.63	133.90
17	T	124	SER	O-C-N	5.27	127.78	122.09
18	X	117	LYS	CA-C-N	5.27	129.59	120.58
18	X	117	LYS	C-N-CA	5.27	129.59	120.58
32	M	284	ASP	N-CA-CB	5.27	119.39	110.49
32	M	313	ASP	CA-CB-CG	5.27	117.87	112.60
2	B	170	ALA	N-CA-CB	5.27	117.71	110.07
21	N	334	VAL	CA-C-N	5.27	127.34	120.28
21	N	334	VAL	C-N-CA	5.27	127.34	120.28
29	I	267	ILE	O-C-N	-5.27	116.75	121.91
20	Z	57	LYS	N-CA-C	-5.27	105.54	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	290	GLU	N-CA-CB	5.27	117.71	109.97
3	C	156	ASN	N-CA-C	-5.26	100.92	108.60
12	5	196	ARG	NE-CZ-NH2	5.26	123.94	119.20
20	Z	238	ASP	CA-C-N	5.26	127.65	120.54
20	Z	238	ASP	C-N-CA	5.26	127.65	120.54
23	P	323	ASN	CA-C-N	5.26	127.60	120.65
23	P	323	ASN	C-N-CA	5.26	127.60	120.65
7	g	97	ALA	CB-CA-C	-5.26	102.05	110.79
1	A	112	MET	O-C-N	-5.26	116.84	121.31
20	Z	476	ASP	CA-C-N	5.26	127.76	120.29
20	Z	476	ASP	C-N-CA	5.26	127.76	120.29
8	h	85	GLU	CA-C-N	5.26	127.76	120.29
8	h	85	GLU	C-N-CA	5.26	127.76	120.29
4	D	168	SER	N-CA-C	5.26	117.02	111.28
6	F	79	PRO	O-C-N	5.26	127.86	122.18
19	Y	43	TRP	N-CA-C	-5.26	104.18	111.28
22	S	456	ASP	CA-C-O	-5.26	113.24	118.34
23	P	215	SER	CA-CB-OG	5.26	121.62	111.10
30	K	350	ARG	N-CA-C	5.26	117.76	111.71
7	g	90	ASN	CA-C-O	5.26	126.34	120.82
11	k	78	GLN	CA-C-O	-5.26	115.28	120.70
14	n	74	ARG	N-CA-C	5.26	118.86	112.23
8	1	74	LEU	N-CA-C	5.26	117.01	111.28
17	T	130	ASP	CA-C-N	5.26	128.31	120.31
17	T	130	ASP	C-N-CA	5.26	128.31	120.31
21	N	657	MET	CA-C-N	5.26	127.67	120.46
21	N	657	MET	C-N-CA	5.26	127.67	120.46
22	S	360	PHE	O-C-N	-5.26	116.15	122.15
28	H	219	GLU	CA-C-N	5.26	127.76	120.29
28	H	219	GLU	C-N-CA	5.26	127.76	120.29
30	K	47	ILE	CA-C-N	5.26	128.30	120.31
30	K	47	ILE	C-N-CA	5.26	128.30	120.31
32	M	26	SER	CA-CB-OG	5.26	121.62	111.10
4	d	21	GLU	N-CA-CB	5.26	117.94	110.16
6	f	66	CYS	CA-C-O	-5.26	114.92	120.55
13	m	218	ASP	CA-CB-CG	-5.26	107.34	112.60
14	n	216	VAL	CA-C-N	5.26	127.33	120.28
14	n	216	VAL	C-N-CA	5.26	127.33	120.28
11	4	98	TYR	CA-C-N	5.26	129.84	122.79
11	4	98	TYR	C-N-CA	5.26	129.84	122.79
9	i	182	LYS	N-CA-CB	5.26	117.94	110.16
4	D	86	ILE	CA-C-O	-5.26	115.28	120.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	228	HIS	CA-CB-CG	-5.26	108.54	113.80
8	1	101	ASN	CA-CB-CG	-5.26	107.34	112.60
21	N	813	ARG	N-CA-C	-5.26	105.63	111.36
22	S	36	LYS	N-CA-C	5.26	117.09	111.36
30	K	111	SER	N-CA-C	-5.26	101.37	109.52
12	l	143	LEU	CB-CA-C	-5.25	102.60	110.90
5	E	75	GLY	O-C-N	-5.25	119.03	123.60
23	P	354	SER	CA-CB-OG	5.25	121.61	111.10
26	U	17	SER	CB-CA-C	-5.25	102.07	110.79
29	I	75	PHE	N-CA-CB	5.25	117.81	109.82
31	L	366	ALA	CA-C-N	5.25	127.59	120.44
31	L	366	ALA	C-N-CA	5.25	127.59	120.44
1	a	209	HIS	CA-C-N	5.25	127.75	120.29
1	a	209	HIS	C-N-CA	5.25	127.75	120.29
2	B	116	LYS	CA-C-N	5.25	127.88	120.42
2	B	116	LYS	C-N-CA	5.25	127.88	120.42
2	B	201	GLU	CB-CG-CD	-5.25	103.67	112.60
2	B	245	ASP	CA-C-N	5.25	129.50	120.72
2	B	245	ASP	C-N-CA	5.25	129.50	120.72
7	G	185	GLU	N-CA-CB	5.25	119.11	110.39
9	2	113	LYS	CA-CB-CG	-5.25	103.59	114.10
14	7	141	ASN	CA-CB-CG	-5.25	107.35	112.60
21	N	886	LYS	N-CA-C	-5.25	106.89	113.72
30	K	185	ARG	CB-CA-C	-5.25	102.07	110.79
32	M	63	LYS	CA-C-N	5.25	127.75	120.29
32	M	63	LYS	C-N-CA	5.25	127.75	120.29
11	k	140	THR	O-C-N	-5.25	115.89	122.35
2	B	145	PHE	N-CA-CB	5.25	117.76	110.04
15	W	34	GLU	O-C-N	5.25	127.69	122.12
16	V	117	TRP	O-C-N	-5.25	116.66	122.75
20	Z	794	ASP	N-CA-CB	5.25	117.84	110.12
33	J	35	ARG	NE-CZ-NH2	5.25	123.93	119.20
13	6	123	ASP	CA-C-O	-5.25	115.90	121.94
21	N	907	ASP	N-CA-C	-5.25	101.15	109.76
23	P	363	LEU	CA-C-O	-5.25	114.86	120.42
1	A	59	VAL	N-CA-C	-5.25	97.55	108.88
19	Y	62	GLU	CA-C-N	5.25	132.58	122.03
19	Y	62	GLU	C-N-CA	5.25	132.58	122.03
25	R	148	ASP	CA-CB-CG	5.25	117.85	112.60
27	O	284	GLU	CB-CG-CD	-5.25	103.68	112.60
30	K	97	GLY	O-C-N	-5.25	117.65	122.79
31	L	183	ILE	N-CA-C	-5.25	100.92	108.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	75	VAL	O-C-N	5.25	128.61	123.00
20	Z	840	ARG	N-CA-CB	5.25	119.13	110.69
24	Q	134	LYS	CB-CA-C	-5.25	102.08	110.79
24	Q	228	GLU	CA-C-N	5.25	131.81	121.58
24	Q	228	GLU	C-N-CA	5.25	131.81	121.58
1	a	58	LYS	CA-C-O	5.24	125.91	120.30
4	d	98	LEU	N-CA-C	-5.24	105.48	111.14
11	k	189	ILE	N-CA-C	-5.24	100.77	108.11
13	6	79	SER	N-CA-CB	5.24	118.41	110.28
20	Z	600	GLU	CA-C-O	-5.24	114.99	120.55
31	L	58	ASN	CB-CG-ND2	5.24	124.27	116.40
33	J	286	LYS	N-CA-C	-5.24	104.15	110.44
20	Z	285	ALA	CA-C-O	5.24	126.00	119.97
6	F	78	ALA	CA-C-O	-5.24	112.98	120.16
21	N	67	LYS	CB-CA-C	-5.24	101.94	110.85
21	N	373	VAL	O-C-N	5.24	127.23	121.83
22	S	47	THR	N-CA-C	5.24	121.96	110.80
25	R	38	VAL	CA-C-N	5.24	128.15	120.71
25	R	38	VAL	C-N-CA	5.24	128.15	120.71
27	O	302	VAL	CA-CB-CG2	5.24	119.31	110.40
30	K	219	LYS	O-C-N	5.24	128.12	122.15
30	K	394	ALA	CA-C-N	5.24	127.64	120.46
30	K	394	ALA	C-N-CA	5.24	127.64	120.46
14	n	160	LEU	CA-C-O	-5.24	113.59	119.98
13	6	40	ASP	CA-CB-CG	5.24	117.84	112.60
22	S	464	ARG	CA-C-O	5.24	125.97	120.42
11	k	85	ARG	NE-CZ-NH2	-5.24	114.49	119.20
21	N	468	GLU	CA-C-N	5.24	127.63	120.46
21	N	468	GLU	C-N-CA	5.24	127.63	120.46
27	O	23	HIS	N-CA-C	5.24	120.60	113.16
2	b	92	VAL	CA-C-O	-5.24	114.82	120.47
6	f	62	LYS	CA-C-N	5.24	130.00	123.14
6	f	62	LYS	C-N-CA	5.24	130.00	123.14
4	D	144	GLU	O-C-N	-5.24	116.53	121.35
12	5	141	HIS	ND1-CE1-NE2	5.24	113.64	108.40
18	X	48	PHE	CA-C-N	5.24	129.65	122.84
18	X	48	PHE	C-N-CA	5.24	129.65	122.84
20	Z	307	HIS	CB-CG-CD2	-5.24	124.39	131.20
20	Z	856	HIS	ND1-CE1-NE2	5.24	113.64	108.40
21	N	223	LEU	CA-C-N	5.24	128.27	120.31
21	N	223	LEU	C-N-CA	5.24	128.27	120.31
31	L	254	LYS	N-CA-CB	5.24	118.93	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	281	ASP	CA-C-N	5.24	131.54	121.54
32	M	281	ASP	C-N-CA	5.24	131.54	121.54
9	2	145	HIS	N-CA-C	-5.23	105.69	111.71
10	3	105	VAL	CA-C-O	-5.23	116.22	121.45
24	Q	252	HIS	CB-CG-CD2	-5.23	124.39	131.20
5	e	64	ILE	CA-C-O	-5.23	116.07	121.93
8	h	103	THR	CA-CB-OG1	-5.23	101.75	109.60
8	1	73	GLU	CA-C-N	5.23	127.29	120.28
8	1	73	GLU	C-N-CA	5.23	127.29	120.28
20	Z	251	ALA	CA-C-O	-5.23	115.00	120.55
21	N	131	PRO	CA-C-O	-5.23	111.60	119.55
21	N	340	HIS	CE1-NE2-CD2	-5.23	103.77	109.00
23	P	12	ASP	CA-C-O	5.23	126.31	120.82
28	H	73	ASP	N-CA-CB	5.23	119.33	110.49
9	i	90	SER	CA-C-O	-5.23	115.33	120.82
13	m	192	VAL	CA-C-O	-5.23	115.51	120.95
5	E	24	VAL	CA-C-N	5.23	127.29	120.28
5	E	24	VAL	C-N-CA	5.23	127.29	120.28
20	Z	89	LEU	CA-C-O	-5.23	115.33	120.82
31	L	395	ALA	CA-C-N	5.23	127.29	120.28
31	L	395	ALA	C-N-CA	5.23	127.29	120.28
19	Y	21	ASN	O-C-N	5.23	128.11	122.15
3	c	13	PHE	N-CA-C	-5.23	101.59	109.85
3	c	208	TYR	CB-CA-C	5.23	119.47	110.79
14	n	223	ARG	NE-CZ-NH1	-5.23	116.27	121.50
5	E	87	SER	CA-C-N	5.23	127.28	120.28
5	E	87	SER	C-N-CA	5.23	127.28	120.28
5	E	246	LYS	O-C-N	5.23	127.66	122.12
14	7	240	THR	N-CA-C	-5.23	99.77	108.34
15	W	130	LYS	CA-C-N	5.23	127.24	120.44
15	W	130	LYS	C-N-CA	5.23	127.24	120.44
21	N	705	ILE	N-CA-C	5.23	115.44	110.42
24	Q	400	TYR	N-CA-C	-5.23	101.35	109.24
8	1	197	PHE	N-CA-C	-5.23	100.79	108.99
17	T	177	PHE	O-C-N	5.23	128.78	122.35
21	N	705	ILE	CA-C-N	5.23	127.28	120.28
21	N	705	ILE	C-N-CA	5.23	127.28	120.28
22	S	252	ASP	CA-C-N	5.23	128.25	120.31
22	S	252	ASP	C-N-CA	5.23	128.25	120.31
23	P	150	GLU	N-CA-C	5.23	116.84	110.41
28	H	117	THR	CA-CB-OG1	5.23	117.44	109.60
30	K	49	PHE	CA-C-O	5.23	124.89	119.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	164	ASN	CA-C-O	5.23	125.46	119.35
3	c	87	LEU	CA-C-N	5.22	127.84	120.42
3	c	87	LEU	C-N-CA	5.22	127.84	120.42
5	e	18	GLU	N-CA-C	-5.22	106.75	113.23
4	D	177	LYS	CA-CB-CG	-5.22	103.65	114.10
10	3	6	SER	CA-C-N	5.22	127.14	120.56
10	3	6	SER	C-N-CA	5.22	127.14	120.56
14	7	104	VAL	CA-C-N	5.22	127.23	120.44
14	7	104	VAL	C-N-CA	5.22	127.23	120.44
20	Z	757	SER	N-CA-CB	5.22	118.38	110.28
22	S	125	LYS	CA-C-O	-5.22	115.32	120.70
22	S	383	LEU	CA-C-O	-5.22	112.42	119.11
25	R	210	TYR	CA-C-O	-5.22	114.88	120.42
29	I	334	LEU	N-CA-C	-5.22	101.95	110.20
30	K	296	LEU	O-C-N	-5.22	116.19	122.15
11	k	13	VAL	CA-C-N	-5.22	116.33	123.12
11	k	13	VAL	C-N-CA	-5.22	116.33	123.12
14	n	221	ASP	CA-CB-CG	-5.22	107.38	112.60
2	B	203	GLU	N-CA-C	-5.22	104.58	112.99
17	T	139	ASP	CB-CA-C	5.22	118.15	109.53
20	Z	78	SER	CA-C-N	5.22	127.54	120.44
20	Z	78	SER	C-N-CA	5.22	127.54	120.44
20	Z	450	GLY	CA-C-N	5.22	127.28	120.28
20	Z	450	GLY	C-N-CA	5.22	127.28	120.28
21	N	202	PHE	CA-C-N	5.22	127.70	120.29
21	N	202	PHE	C-N-CA	5.22	127.70	120.29
22	S	19	HIS	CG-CD2-NE2	5.22	112.42	107.20
22	S	25	TYR	CB-CG-CD2	5.22	128.63	120.80
22	S	328	PRO	CA-C-O	-5.22	115.26	122.15
1	A	70	SER	N-CA-CB	5.22	119.50	111.46
3	C	31	HIS	CB-CG-CD2	-5.22	124.41	131.20
22	S	490	ASN	N-CA-CB	5.22	117.71	109.83
4	d	252	SER	CA-C-N	5.22	127.22	120.44
4	d	252	SER	C-N-CA	5.22	127.22	120.44
5	e	6	SER	CA-C-N	5.22	128.21	120.17
5	e	6	SER	C-N-CA	5.22	128.21	120.17
7	g	213	GLU	CA-C-O	5.22	126.11	120.32
7	G	39	GLY	CA-C-O	5.22	125.01	120.94
13	6	102	GLN	N-CA-C	-5.22	105.59	111.28
31	L	265	GLU	CB-CG-CD	-5.22	103.73	112.60
31	L	345	ARG	CA-C-O	5.22	127.01	121.11
21	N	167	GLU	O-C-N	5.22	127.44	122.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	83	PRO	CA-C-N	5.22	127.70	120.29
7	g	83	PRO	C-N-CA	5.22	127.70	120.29
9	i	229	GLN	OE1-CD-NE2	5.22	127.82	122.60
3	C	222	ASP	CA-CB-CG	-5.22	107.38	112.60
5	E	235	LYS	O-C-N	5.22	127.65	122.12
7	G	206	ASP	CA-C-N	5.22	132.99	123.13
7	G	206	ASP	C-N-CA	5.22	132.99	123.13
26	U	168	GLU	N-CA-C	5.22	117.64	111.33
26	U	183	ALA	CA-C-O	5.22	126.81	121.23
27	O	330	ARG	CD-NE-CZ	-5.22	117.10	124.40
4	d	204	GLN	N-CA-C	-5.21	99.69	110.80
9	i	86	GLN	N-CA-C	5.21	117.05	111.36
11	k	175	ASP	N-CA-C	-5.21	102.34	110.42
3	C	137	TYR	CB-CG-CD1	-5.21	112.98	120.80
14	7	182	HIS	ND1-CE1-NE2	5.21	113.61	108.40
16	V	77	GLY	CA-C-N	-5.21	115.85	122.37
16	V	77	GLY	C-N-CA	-5.21	115.85	122.37
18	X	52	PRO	N-CA-C	-5.21	101.73	112.47
21	N	399	PHE	CA-CB-CG	-5.21	108.58	113.80
22	S	236	LEU	CB-CA-C	-5.21	101.99	110.85
32	M	77	TYR	CA-C-N	5.21	129.13	120.94
32	M	77	TYR	C-N-CA	5.21	129.13	120.94
6	f	18	ARG	NE-CZ-NH1	-5.21	116.29	121.50
24	Q	249	LEU	N-CA-C	-5.21	103.51	110.55
2	b	201	GLU	CA-C-O	-5.21	115.27	121.16
8	h	143	ILE	O-C-N	-5.21	117.08	122.14
2	B	205	ASN	CA-CB-CG	-5.21	107.39	112.60
3	C	235	ILE	CA-CB-CG2	-5.21	101.64	110.50
15	W	139	VAL	CA-C-O	-5.21	114.96	120.48
21	N	349	ILE	CB-CA-C	-5.21	105.03	112.22
21	N	923	MET	CB-CA-C	-5.21	102.14	110.79
9	i	91	ASN	OD1-CG-ND2	-5.21	117.39	122.60
3	C	54	SER	CB-CA-C	-5.21	100.05	110.42
10	3	38	ASN	N-CA-C	-5.21	106.61	113.17
30	K	163	GLU	N-CA-C	-5.21	105.79	113.61
5	e	203	ILE	N-CA-C	-5.21	105.32	111.00
7	g	82	ILE	CB-CA-C	-5.21	107.18	114.00
20	Z	264	PHE	CB-CG-CD2	-5.21	111.85	120.70
21	N	222	TYR	CA-C-N	5.21	127.21	120.44
21	N	222	TYR	C-N-CA	5.21	127.21	120.44
5	e	68	VAL	CA-C-N	5.21	129.91	122.72
5	e	68	VAL	C-N-CA	5.21	129.91	122.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	l	99	ASN	CA-C-N	5.21	128.10	120.71
12	l	99	ASN	C-N-CA	5.21	128.10	120.71
1	A	198	SER	N-CA-C	-5.21	101.62	109.85
20	Z	824	ASN	CA-CB-CG	5.21	117.81	112.60
21	N	731	VAL	CA-C-N	5.21	125.86	120.03
21	N	731	VAL	C-N-CA	5.21	125.86	120.03
22	S	472	HIS	O-C-N	-5.21	116.71	122.07
28	H	167	ASP	CA-C-N	-5.21	116.35	123.12
28	H	167	ASP	C-N-CA	-5.21	116.35	123.12
28	H	457	PHE	CB-CA-C	-5.21	102.67	110.90
33	J	320	SER	CA-C-O	-5.21	115.80	121.89
5	E	171	ALA	CA-C-N	5.21	130.11	123.03
5	E	171	ALA	C-N-CA	5.21	130.11	123.03
15	W	18	ASN	CA-CB-CG	-5.21	107.39	112.60
15	W	151	THR	CA-CB-OG1	5.21	117.41	109.60
20	Z	634	ASP	N-CA-C	-5.21	105.69	111.36
28	H	284	VAL	N-CA-CB	5.21	119.82	111.23
29	I	241	SER	CA-C-N	5.21	130.76	122.59
29	I	241	SER	C-N-CA	5.21	130.76	122.59
3	c	171	ALA	CB-CA-C	-5.20	102.15	110.79
3	C	235	ILE	CA-C-N	5.20	127.68	120.29
3	C	235	ILE	C-N-CA	5.20	127.68	120.29
21	N	777	ALA	CA-C-N	5.20	131.07	121.70
21	N	777	ALA	C-N-CA	5.20	131.07	121.70
24	Q	262	LEU	N-CA-CB	-5.20	102.46	110.16
32	M	361	LEU	CB-CA-C	-5.20	102.15	110.79
3	C	179	ASP	CB-CA-C	-5.20	101.38	110.17
20	Z	465	GLY	N-CA-C	-5.20	107.81	115.30
14	n	60	LEU	CA-C-O	-5.20	114.43	120.31
3	C	240	VAL	N-CA-C	5.20	115.97	110.72
9	2	145	HIS	ND1-CE1-NE2	5.20	113.60	108.40
16	V	211	LYS	O-C-N	5.20	127.63	122.12
20	Z	118	VAL	CA-CB-CG1	5.20	119.24	110.40
22	S	390	THR	CA-C-N	5.20	126.64	120.14
22	S	390	THR	C-N-CA	5.20	126.64	120.14
22	S	434	ALA	CA-C-O	-5.20	115.87	121.38
22	S	462	ASP	CA-C-N	5.20	127.20	120.44
22	S	462	ASP	C-N-CA	5.20	127.20	120.44
7	G	137	ILE	N-CA-C	-5.20	102.03	108.89
10	3	40	PHE	N-CA-C	-5.20	99.73	110.80
19	Y	7	ALA	N-CA-CB	-5.20	102.47	110.16
20	Z	106	TRP	N-CA-C	-5.20	101.24	109.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	282	ASP	CA-C-N	5.20	131.47	121.54
29	I	282	ASP	C-N-CA	5.20	131.47	121.54
31	L	239	ILE	CA-C-N	5.20	131.00	121.85
31	L	239	ILE	C-N-CA	5.20	131.00	121.85
8	h	147	CYS	CA-C-N	5.20	127.24	120.28
8	h	147	CYS	C-N-CA	5.20	127.24	120.28
14	n	35	GLN	N-CA-C	-5.20	103.67	110.53
14	n	45	ILE	CA-C-O	-5.20	114.46	121.32
3	C	236	LYS	O-C-N	5.20	128.07	122.15
16	V	167	ASN	OD1-CG-ND2	5.20	127.80	122.60
21	N	77	SER	CA-C-N	5.20	127.24	120.28
21	N	77	SER	C-N-CA	5.20	127.24	120.28
21	N	510	HIS	CG-CD2-NE2	5.20	112.40	107.20
1	a	150	LEU	N-CA-C	-5.20	106.62	113.17
2	B	19	GLY	CA-C-O	-5.20	114.79	120.40
14	7	135	GLN	CB-CG-CD	-5.20	103.77	112.60
20	Z	397	ASP	N-CA-C	-5.20	105.22	112.03
23	P	181	LEU	N-CA-C	-5.20	105.70	111.36
26	U	12	PRO	N-CA-C	-5.20	107.26	114.27
27	O	206	THR	CA-C-N	5.20	127.67	120.29
27	O	206	THR	C-N-CA	5.20	127.67	120.29
29	I	395	MET	N-CA-C	5.20	116.94	111.28
33	J	24	GLU	CA-C-N	5.20	127.19	120.44
33	J	24	GLU	C-N-CA	5.20	127.19	120.44
33	J	233	LEU	CA-C-N	5.20	127.67	120.29
33	J	233	LEU	C-N-CA	5.20	127.67	120.29
5	e	230	ILE	N-CA-C	-5.19	101.10	108.58
21	N	83	LEU	CA-C-N	5.19	127.24	120.28
21	N	83	LEU	C-N-CA	5.19	127.24	120.28
2	b	79	GLY	CA-C-N	5.19	124.81	119.05
2	b	79	GLY	C-N-CA	5.19	124.81	119.05
2	b	108	LYS	CA-C-N	-5.19	113.69	120.44
2	b	108	LYS	C-N-CA	-5.19	113.69	120.44
11	k	136	SER	N-CA-C	-5.19	105.70	111.36
12	l	256	THR	CA-C-N	5.19	127.24	120.28
12	l	256	THR	C-N-CA	5.19	127.24	120.28
12	5	120	MET	CA-C-O	5.19	125.92	120.36
20	Z	2	VAL	O-C-N	-5.19	117.12	122.63
21	N	434	SER	N-CA-C	-5.19	99.74	110.80
22	S	252	ASP	CA-CB-CG	5.19	117.79	112.60
23	P	54	SER	CA-C-O	5.19	125.64	119.56
25	R	410	LEU	O-C-N	5.19	127.62	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	375	ASN	CB-CA-C	-5.19	99.99	109.54
32	M	381	ARG	CA-C-N	5.19	127.19	120.44
32	M	381	ARG	C-N-CA	5.19	127.19	120.44
33	J	56	ARG	N-CA-CB	5.19	117.75	110.12
1	a	249	ALA	N-CA-CB	5.19	117.84	110.16
7	g	78	TYR	N-CA-CB	5.19	119.61	111.20
1	A	248	ILE	N-CA-CB	5.19	117.21	110.57
2	B	101	TYR	CB-CG-CD2	5.19	128.59	120.80
3	C	31	HIS	CG-CD2-NE2	5.19	112.39	107.20
18	X	51	ARG	NH1-CZ-NH2	-5.19	112.55	119.30
20	Z	607	ALA	CA-C-O	-5.19	115.05	120.55
27	O	329	MET	N-CA-C	5.19	116.94	111.28
1	A	175	GLN	N-CA-C	5.19	117.34	111.11
29	I	369	MET	O-C-N	-5.19	117.24	123.31
33	J	135	SER	CA-C-N	5.19	127.23	120.28
33	J	135	SER	C-N-CA	5.19	127.23	120.28
4	d	220	ASP	CB-CA-C	5.19	118.59	110.19
12	l	78	THR	N-CA-C	-5.19	101.70	109.95
1	A	210	MET	CA-C-N	5.19	127.57	120.46
1	A	210	MET	C-N-CA	5.19	127.57	120.46
5	E	156	PHE	N-CA-C	-5.19	101.48	109.52
13	6	180	LEU	N-CA-C	-5.19	102.00	110.20
20	Z	556	ILE	CA-C-N	5.19	131.45	121.54
20	Z	556	ILE	C-N-CA	5.19	131.45	121.54
23	P	234	TYR	CB-CG-CD1	-5.19	113.02	120.80
28	H	409	ARG	N-CA-C	-5.19	105.54	111.14
33	J	51	LEU	CA-C-N	5.19	127.23	120.28
33	J	51	LEU	C-N-CA	5.19	127.23	120.28
33	J	53	ASP	CA-C-O	-5.19	115.37	120.82
15	W	89	THR	CA-C-N	5.19	127.23	120.28
15	W	89	THR	C-N-CA	5.19	127.23	120.28
24	Q	294	ARG	NE-CZ-NH1	-5.19	116.31	121.50
7	g	19	GLY	N-CA-C	-5.18	108.07	115.64
8	1	129	HIS	CB-CA-C	-5.18	104.63	111.42
11	4	153	THR	CA-C-N	5.18	128.19	120.31
11	4	153	THR	C-N-CA	5.18	128.19	120.31
17	T	137	GLU	CB-CA-C	-5.18	101.96	110.72
25	R	95	ASP	CA-C-N	5.18	127.23	120.28
25	R	95	ASP	C-N-CA	5.18	127.23	120.28
26	U	2	SER	N-CA-CB	5.18	120.17	110.99
27	O	274	ILE	CB-CA-C	-5.18	105.23	112.02
27	O	302	VAL	CA-CB-CG1	-5.18	101.59	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	J	181	GLN	CA-C-O	-5.18	114.88	119.75
5	e	185	ASN	OD1-CG-ND2	5.18	127.78	122.60
9	i	141	SER	N-CA-C	-5.18	101.31	109.50
14	n	49	TYR	N-CA-CB	5.18	120.02	111.62
1	A	134	MET	N-CA-CB	5.18	120.51	111.13
3	C	215	THR	N-CA-C	-5.18	100.59	109.24
23	P	425	HIS	CA-C-N	5.18	128.66	120.47
23	P	425	HIS	C-N-CA	5.18	128.66	120.47
24	Q	236	PHE	CA-C-O	5.18	125.91	120.42
33	J	6	THR	CA-CB-CG2	-5.18	101.69	110.50
8	h	85	GLU	CA-C-O	5.18	126.04	120.55
3	C	69	LEU	N-CA-CB	5.18	117.80	110.13
6	F	169	LYS	CB-CA-C	-5.18	100.72	110.67
31	L	124	GLY	CA-C-O	-5.18	114.11	121.52
1	a	129	THR	N-CA-C	-5.18	106.81	113.23
1	a	234	PHE	CE1-CZ-CE2	5.18	129.32	120.00
4	d	158	SER	N-CA-CB	5.18	119.03	110.69
8	1	151	PHE	O-C-N	-5.18	117.26	123.06
15	W	9	VAL	CA-C-O	-5.18	114.60	120.66
21	N	832	HIS	CB-CG-CD2	-5.18	124.47	131.20
26	U	278	ILE	CA-C-N	5.18	127.22	120.28
26	U	278	ILE	C-N-CA	5.18	127.22	120.28
32	M	412	HIS	ND1-CG-CD2	-5.18	100.92	106.10
1	a	230	LYS	CB-CA-C	-5.18	102.13	110.77
3	c	210	ARG	NE-CZ-NH2	5.18	123.86	119.20
5	e	73	HIS	CA-CB-CG	-5.18	108.62	113.80
14	n	243	LYS	CB-CA-C	-5.18	99.90	109.37
7	G	22	PHE	N-CA-CB	5.18	117.73	110.12
7	G	208	LYS	CA-C-O	-5.18	114.63	120.43
20	Z	211	PHE	O-C-N	5.18	127.61	122.12
29	I	374	ASP	CB-CA-C	-5.18	102.69	111.02
29	I	414	GLU	CA-C-N	5.18	127.64	120.29
29	I	414	GLU	C-N-CA	5.18	127.64	120.29
6	f	76	GLY	CA-C-N	5.17	128.19	120.95
6	f	76	GLY	C-N-CA	5.17	128.19	120.95
3	C	129	ARG	O-C-N	-5.17	115.63	121.43
13	6	16	ASN	CA-C-O	5.17	124.19	118.65
13	6	20	ILE	N-CA-C	-5.17	100.41	108.95
16	V	275	ASP	CA-C-N	5.17	124.97	119.28
16	V	275	ASP	C-N-CA	5.17	124.97	119.28
19	Y	88	ASN	N-CA-C	-5.17	106.74	113.16
24	Q	177	VAL	N-CA-C	5.17	115.39	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	404	ASN	OD1-CG-ND2	-5.17	117.43	122.60
25	R	239	THR	N-CA-C	-5.17	100.60	109.24
28	H	157	VAL	N-CA-C	-5.17	100.43	108.86
26	U	5	HIS	CE1-NE2-CD2	-5.17	103.83	109.00
13	m	103	HIS	CE1-NE2-CD2	-5.17	103.83	109.00
2	B	142	PHE	CB-CA-C	-5.17	101.06	109.13
16	V	169	GLU	N-CA-CB	5.17	118.01	110.30
21	N	318	LYS	CG-CD-CE	5.17	123.20	111.30
21	N	588	VAL	CA-C-N	5.17	127.08	120.56
21	N	588	VAL	C-N-CA	5.17	127.08	120.56
23	P	19	GLU	CA-C-O	5.17	126.03	120.55
23	P	341	LEU	N-CA-CB	5.17	117.81	110.16
29	I	68	HIS	CB-CG-CD2	-5.17	124.48	131.20
32	M	183	VAL	N-CA-C	-5.17	98.55	107.24
33	J	285	SER	N-CA-C	-5.17	101.43	109.24
9	2	64	HIS	CB-CG-ND1	5.17	130.46	122.70
9	2	152	TYR	CA-C-O	5.17	125.47	119.32
13	6	182	TYR	N-CA-CB	5.17	117.64	109.83
14	7	54	ILE	N-CA-CB	5.17	118.54	111.41
24	Q	240	PHE	CB-CG-CD1	5.17	129.49	120.70
10	j	96	TYR	N-CA-CB	5.17	119.09	110.41
12	l	285	VAL	CA-C-N	5.17	129.46	121.34
12	l	285	VAL	C-N-CA	5.17	129.46	121.34
14	n	210	ILE	N-CA-C	-5.17	105.67	110.53
21	N	275	THR	CA-C-O	5.17	126.03	120.55
21	N	649	VAL	O-C-N	-5.17	117.03	122.67
21	N	859	ASN	N-CA-C	-5.17	99.79	110.80
21	N	886	LYS	CA-C-O	-5.17	113.37	119.05
23	P	158	ASP	CA-CB-CG	-5.17	107.43	112.60
25	R	406	GLN	CB-CG-CD	-5.17	103.81	112.60
31	L	261	ARG	NH1-CZ-NH2	-5.17	112.58	119.30
33	J	240	HIS	CB-CG-ND1	5.17	130.45	122.70
10	j	158	LEU	CA-C-N	5.17	128.51	120.60
10	j	158	LEU	C-N-CA	5.17	128.51	120.60
12	5	250	VAL	CA-C-O	-5.17	115.04	120.57
22	S	175	SER	CA-C-N	5.17	127.63	120.29
22	S	175	SER	C-N-CA	5.17	127.63	120.29
13	m	182	TYR	CA-C-O	-5.17	114.76	120.70
1	A	94	ALA	CA-C-N	5.17	127.16	120.44
1	A	94	ALA	C-N-CA	5.17	127.16	120.44
13	6	36	ARG	NE-CZ-NH1	-5.17	116.33	121.50
25	R	208	ASN	N-CA-CB	5.17	117.71	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	M	306	LEU	N-CA-C	5.17	116.91	111.28
5	e	141	ALA	O-C-N	-5.16	115.79	122.97
12	l	237	LEU	CA-C-N	5.16	127.20	120.28
12	l	237	LEU	C-N-CA	5.16	127.20	120.28
7	G	195	GLN	CA-C-O	-5.16	115.08	120.55
7	G	243	ALA	CB-CA-C	-5.16	102.07	110.85
16	V	107	TRP	CA-C-O	-5.16	115.21	120.89
23	P	421	GLU	CB-CG-CD	-5.16	103.82	112.60
26	U	105	LYS	CA-C-N	5.16	127.75	120.42
26	U	105	LYS	C-N-CA	5.16	127.75	120.42
2	B	115	ALA	CA-C-N	5.16	128.16	120.31
2	B	115	ALA	C-N-CA	5.16	128.16	120.31
8	h	135	ILE	CA-CB-CG2	-5.16	101.73	110.50
11	k	153	THR	N-CA-CB	5.16	119.64	111.43
13	6	207	GLY	CA-C-N	5.16	131.40	121.54
13	6	207	GLY	C-N-CA	5.16	131.40	121.54
16	V	244	MET	CA-C-N	5.16	127.75	120.42
16	V	244	MET	C-N-CA	5.16	127.75	120.42
20	Z	387	ASN	CB-CG-ND2	-5.16	108.66	116.40
30	K	405	SER	N-CA-C	5.16	116.91	111.28
32	M	303	ARG	CA-C-O	-5.16	115.08	120.55
32	M	362	GLN	CA-C-N	5.16	127.53	120.46
32	M	362	GLN	C-N-CA	5.16	127.53	120.46
3	c	84	ALA	CA-C-O	5.16	125.89	120.42
4	d	121	THR	CA-C-N	5.16	127.19	120.28
4	d	121	THR	C-N-CA	5.16	127.19	120.28
4	d	167	ASN	CA-C-N	5.16	127.19	120.28
4	d	167	ASN	C-N-CA	5.16	127.19	120.28
5	e	173	GLY	CA-C-N	5.16	127.19	120.28
5	e	173	GLY	C-N-CA	5.16	127.19	120.28
6	f	161	ILE	CA-C-O	-5.16	116.25	121.67
12	l	94	ARG	NE-CZ-NH2	5.16	123.84	119.20
12	5	181	ARG	CA-C-N	5.16	129.33	120.71
12	5	181	ARG	C-N-CA	5.16	129.33	120.71
22	S	259	TYR	CA-C-N	5.16	126.42	120.85
22	S	259	TYR	C-N-CA	5.16	126.42	120.85
28	H	338	THR	N-CA-C	5.16	116.98	111.36
7	g	172	ALA	N-CA-C	5.16	116.71	111.14
8	1	14	ALA	N-CA-C	-5.16	99.20	108.48
9	2	75	ALA	N-CA-C	-5.16	101.46	109.14
9	2	129	VAL	N-CA-C	-5.16	101.05	108.48
31	L	68	ARG	CA-C-N	5.16	127.61	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	68	ARG	C-N-CA	5.16	127.61	120.29
32	M	394	VAL	CB-CA-C	-5.16	105.10	112.22
4	d	248	LYS	CA-C-N	5.16	127.45	120.44
4	d	248	LYS	C-N-CA	5.16	127.45	120.44
8	h	129	HIS	N-CA-CB	5.16	119.47	110.81
11	4	159	ASP	CB-CA-C	-5.16	102.08	110.85
17	T	48	ASN	CA-CB-CG	-5.16	107.44	112.60
20	Z	49	LEU	CB-CA-C	-5.16	102.79	110.88
20	Z	69	ASN	N-CA-CB	5.16	117.79	110.16
20	Z	217	GLU	CA-C-O	5.16	127.36	121.28
22	S	174	ARG	O-C-N	5.16	128.03	122.15
27	O	372	GLU	N-CA-C	5.16	116.90	111.28
33	J	179	ILE	CA-CB-CG2	5.16	119.27	110.50
11	k	101	ASN	CA-C-N	-5.15	116.02	123.03
11	k	101	ASN	C-N-CA	-5.15	116.02	123.03
20	Z	292	ASP	CB-CA-C	5.15	118.97	110.88
20	Z	357	ILE	CA-C-O	5.15	126.04	120.47
27	O	313	ILE	O-C-N	-5.15	116.52	121.83
33	J	136	LEU	N-CA-CB	5.15	117.70	110.12
3	C	37	GLY	CA-C-N	-5.15	115.83	122.99
3	C	37	GLY	C-N-CA	-5.15	115.83	122.99
5	E	161	SER	CA-C-N	5.15	130.09	120.87
5	E	161	SER	C-N-CA	5.15	130.09	120.87
8	1	105	GLY	N-CA-C	-5.15	100.97	113.18
15	W	58	ASN	CA-C-O	-5.15	115.57	119.59
20	Z	286	VAL	N-CA-CB	-5.15	103.53	110.54
21	N	892	PRO	CA-C-N	5.15	128.61	120.47
21	N	892	PRO	C-N-CA	5.15	128.61	120.47
22	S	264	VAL	O-C-N	-5.15	117.05	122.67
22	S	443	ILE	N-CA-CB	5.15	117.17	110.99
23	P	393	VAL	O-C-N	5.15	128.66	123.20
26	U	74	GLU	CB-CG-CD	5.15	121.36	112.60
29	I	378	GLU	CA-C-O	-5.15	115.09	120.55
30	K	115	GLY	CA-C-O	5.15	123.61	118.77
13	m	61	SER	N-CA-C	-5.15	99.57	108.69
20	Z	582	ASP	CA-CB-CG	5.15	117.75	112.60
26	U	182	ALA	N-CA-CB	5.15	119.70	111.56
33	J	337	LEU	O-C-N	-5.15	116.72	122.75
5	e	208	MET	N-CA-C	-5.15	102.90	110.52
15	W	113	PHE	CA-C-N	5.15	129.81	123.12
15	W	113	PHE	C-N-CA	5.15	129.81	123.12
22	S	37	VAL	CA-C-N	5.15	127.60	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	S	37	VAL	C-N-CA	5.15	127.60	120.29
30	K	282	PHE	CA-C-O	5.15	127.22	121.40
30	K	424	PHE	N-CA-C	-5.15	104.16	110.65
9	i	206	VAL	CA-C-O	-5.15	115.06	120.57
6	F	163	ALA	CA-C-N	5.15	129.72	122.46
6	F	163	ALA	C-N-CA	5.15	129.72	122.46
9	2	122	HIS	CA-C-O	5.15	125.92	120.10
20	Z	343	ALA	O-C-N	5.15	127.58	122.12
22	S	293	ILE	CA-C-N	5.15	127.73	120.42
22	S	293	ILE	C-N-CA	5.15	127.73	120.42
22	S	442	PHE	N-CA-C	-5.15	101.25	109.07
33	J	185	VAL	CB-CA-C	-5.15	103.49	110.90
5	e	141	ALA	CA-C-O	5.15	128.37	121.78
12	5	179	TYR	CB-CG-CD2	-5.15	113.08	120.80
21	N	214	LEU	CA-C-O	-5.15	115.09	120.55
22	S	225	HIS	CA-CB-CG	-5.15	108.65	113.80
13	6	210	LEU	CA-C-O	5.14	125.92	120.36
18	X	50	TRP	CB-CA-C	-5.14	101.75	110.19
27	O	360	GLY	CA-C-O	5.14	125.84	120.80
31	L	213	LYS	O-C-N	-5.14	116.00	121.30
33	J	211	ILE	N-CA-C	-5.14	98.64	109.34
5	e	38	ILE	CA-C-O	-5.14	114.91	120.67
3	C	16	GLU	N-CA-C	-5.14	107.03	113.72
21	N	49	LEU	CA-C-N	5.14	127.17	120.28
21	N	49	LEU	C-N-CA	5.14	127.17	120.28
22	S	19	HIS	CA-C-N	5.14	127.17	120.28
22	S	19	HIS	C-N-CA	5.14	127.17	120.28
26	U	223	HIS	CE1-NE2-CD2	-5.14	103.86	109.00
27	O	148	ASP	N-CA-CB	5.14	118.25	110.28
30	K	162	GLY	CA-C-N	5.14	130.31	122.29
30	K	162	GLY	C-N-CA	5.14	130.31	122.29
32	M	264	ARG	NE-CZ-NH1	5.14	126.64	121.50
6	F	4	ASN	CB-CA-C	5.14	119.87	110.10
21	N	398	ARG	O-C-N	-5.14	115.95	122.27
25	R	414	LEU	N-CA-CB	5.14	117.77	110.16
33	J	271	THR	CA-C-N	5.14	127.59	120.29
33	J	271	THR	C-N-CA	5.14	127.59	120.29
4	d	85	LEU	CA-C-N	5.14	127.72	120.42
4	d	85	LEU	C-N-CA	5.14	127.72	120.42
7	G	150	MET	N-CA-CB	5.14	119.44	110.81
9	2	188	ILE	CA-CB-CG2	5.14	119.24	110.50
11	4	96	ARG	CG-CD-NE	-5.14	100.69	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	149	TRP	N-CA-CB	5.14	119.06	110.32
20	Z	343	ALA	CA-C-O	-5.14	115.10	120.55
22	S	466	LYS	CA-C-N	5.14	127.59	120.29
22	S	466	LYS	C-N-CA	5.14	127.59	120.29
24	Q	213	GLN	N-CA-C	5.14	116.96	111.36
24	Q	351	ILE	O-C-N	-5.14	117.47	122.09
29	I	97	GLU	CA-C-N	5.14	127.17	120.28
29	I	97	GLU	C-N-CA	5.14	127.17	120.28
31	L	55	LYS	CB-CA-C	-5.14	100.80	110.67
31	L	199	LEU	N-CA-CB	5.14	117.96	110.30
9	i	122	HIS	CA-C-O	5.14	125.36	119.35
10	j	74	TYR	N-CA-C	-5.14	105.57	111.07
25	R	245	SER	N-CA-C	-5.14	103.75	110.53
26	U	107	ASN	CA-C-N	5.14	127.17	120.28
26	U	107	ASN	C-N-CA	5.14	127.17	120.28
29	I	418	GLN	OE1-CD-NE2	5.14	127.74	122.60
33	J	306	ARG	O-C-N	-5.14	115.41	121.32
13	m	168	TYR	CA-C-N	5.14	128.49	120.68
13	m	168	TYR	C-N-CA	5.14	128.49	120.68
9	2	180	ALA	CA-C-N	5.14	127.03	120.56
9	2	180	ALA	C-N-CA	5.14	127.03	120.56
20	Z	179	SER	CA-C-O	5.14	125.85	119.79
25	R	325	HIS	ND1-CE1-NE2	5.14	113.54	108.40
32	M	387	ASN	N-CA-CB	5.14	118.42	110.46
1	a	184	ASN	CA-C-N	5.13	127.42	120.44
1	a	184	ASN	C-N-CA	5.13	127.42	120.44
3	c	217	ARG	NE-CZ-NH1	-5.13	116.37	121.50
2	B	197	LYS	N-CA-C	-5.13	106.97	113.18
20	Z	50	GLU	CB-CA-C	-5.13	102.27	110.79
20	Z	484	LYS	CB-CA-C	-5.13	102.27	110.79
2	b	39	ALA	N-CA-C	-5.13	101.89	109.18
8	h	197	PHE	N-CA-CB	5.13	119.14	110.77
4	D	186	ALA	N-CA-CB	-5.13	102.43	110.44
18	X	83	SER	CB-CA-C	-5.13	102.75	110.24
3	C	141	ASP	N-CA-C	-5.13	100.93	108.99
11	4	165	VAL	CA-C-O	-5.13	115.61	120.95
14	7	259	LYS	CA-C-O	-5.13	115.08	120.32
16	V	54	LEU	N-CA-C	-5.13	101.33	109.59
21	N	504	TYR	CB-CG-CD1	5.13	128.50	120.80
22	S	450	ASN	N-CA-C	-5.13	100.88	109.24
23	P	176	LYS	CA-C-N	5.13	127.49	120.46
23	P	176	LYS	C-N-CA	5.13	127.49	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	350	LEU	N-CA-C	5.13	117.77	111.82
26	U	52	PHE	CA-C-N	5.13	128.00	120.71
26	U	52	PHE	C-N-CA	5.13	128.00	120.71
27	O	84	ALA	CA-C-N	5.13	127.58	120.29
27	O	84	ALA	C-N-CA	5.13	127.58	120.29
29	I	219	VAL	N-CA-C	-5.13	101.08	108.42
5	E	165	TYR	O-C-N	-5.13	117.19	123.30
7	G	105	THR	CA-C-N	5.13	125.12	119.89
7	G	105	THR	C-N-CA	5.13	125.12	119.89
21	N	165	ILE	CA-C-N	5.13	127.13	120.56
21	N	165	ILE	C-N-CA	5.13	127.13	120.56
21	N	300	ASN	CB-CA-C	-5.13	102.13	110.85
26	U	106	ILE	CA-C-N	5.13	127.67	120.28
26	U	106	ILE	C-N-CA	5.13	127.67	120.28
30	K	173	ASP	N-CA-C	-5.13	106.53	112.89
3	c	189	ALA	CA-C-O	5.13	125.86	120.42
12	l	181	ARG	N-CA-C	-5.13	106.78	112.57
16	V	105	VAL	CB-CA-C	-5.13	105.08	110.62
21	N	685	VAL	CA-CB-CG1	5.13	119.12	110.40
27	O	158	ASP	CA-C-O	5.13	125.67	119.31
2	b	240	SER	O-C-N	-5.13	116.31	122.15
3	C	24	TYR	CB-CG-CD1	5.13	128.49	120.80
13	6	102	GLN	CA-C-O	-5.13	115.11	120.55
20	Z	565	PHE	N-CA-CB	5.13	117.66	110.12
23	P	212	LYS	N-CA-C	-5.13	105.77	111.36
5	e	20	ARG	NH1-CZ-NH2	5.12	125.96	119.30
6	F	33	SER	CA-C-O	-5.12	116.05	121.94
16	V	255	ILE	CA-C-N	5.12	127.40	120.38
16	V	255	ILE	C-N-CA	5.12	127.40	120.38
20	Z	850	LEU	CD1-CG-CD2	5.12	122.07	110.80
21	N	690	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
27	O	204	SER	N-CA-C	-5.12	106.03	113.21
8	h	14	ALA	O-C-N	5.12	129.40	123.41
3	C	189	ALA	CB-CA-C	-5.12	102.14	110.85
6	F	121	GLN	OE1-CD-NE2	5.12	127.72	122.60
9	2	155	SER	CA-C-N	5.12	130.26	122.11
9	2	155	SER	C-N-CA	5.12	130.26	122.11
17	T	123	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
23	P	295	SER	CA-C-O	5.12	126.20	120.82
27	O	329	MET	CA-C-N	5.12	127.57	120.29
27	O	329	MET	C-N-CA	5.12	127.57	120.29
29	I	405	ARG	N-CA-CB	5.12	118.22	110.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	K	409	GLU	O-C-N	5.12	127.55	122.12
31	L	158	ILE	CA-C-O	5.12	126.70	121.58
10	j	5	SER	CB-CA-C	-5.12	102.29	110.79
1	A	96	ARG	CA-C-N	5.12	127.56	120.29
1	A	96	ARG	C-N-CA	5.12	127.56	120.29
2	B	54	PRO	CA-C-N	5.12	127.40	120.38
2	B	54	PRO	C-N-CA	5.12	127.40	120.38
15	W	58	ASN	CB-CG-ND2	5.12	124.08	116.40
16	V	135	ARG	CG-CD-NE	-5.12	100.73	112.00
20	Z	103	TYR	CB-CG-CD1	5.12	128.48	120.80
21	N	812	ALA	O-C-N	5.12	127.55	122.12
23	P	417	HIS	N-CA-CB	-5.12	102.58	110.16
30	K	403	LEU	N-CA-CB	5.12	119.15	110.49
31	L	206	ILE	CA-C-O	-5.12	115.23	120.71
33	J	210	PHE	CA-C-N	5.12	131.19	121.97
33	J	210	PHE	C-N-CA	5.12	131.19	121.97
7	G	37	SER	CA-C-O	-5.12	114.77	120.66
9	2	115	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
16	V	135	ARG	N-CA-C	-5.12	100.89	109.24
10	j	61	THR	CA-CB-OG1	5.12	117.28	109.60
3	C	91	ALA	CA-C-N	5.12	127.14	120.28
3	C	91	ALA	C-N-CA	5.12	127.14	120.28
3	C	125	HIS	O-C-N	5.12	129.70	123.10
5	E	160	PRO	N-CA-C	-5.12	108.83	114.92
13	6	140	GLU	N-CA-CB	5.12	121.04	111.52
14	7	211	VAL	O-C-N	5.12	127.10	121.83
25	R	23	ASN	CA-CB-CG	-5.12	107.48	112.60
27	O	66	VAL	O-C-N	5.12	127.10	121.83
6	f	202	ARG	CD-NE-CZ	-5.12	117.24	124.40
14	n	101	LYS	O-C-N	5.12	127.98	122.15
28	H	73	ASP	CA-CB-CG	5.12	117.72	112.60
33	J	267	GLU	CA-CB-CG	5.12	124.33	114.10
1	a	94	ALA	N-CA-C	5.12	116.86	111.28
3	c	112	VAL	CA-C-O	5.12	126.27	120.95
7	g	97	ALA	CA-C-N	5.12	127.14	120.28
7	g	97	ALA	C-N-CA	5.12	127.14	120.28
7	g	160	TYR	O-C-N	-5.12	117.55	123.33
13	m	92	LEU	CA-C-N	5.12	128.47	120.75
13	m	92	LEU	C-N-CA	5.12	128.47	120.75
3	C	124	GLN	O-C-N	5.12	127.61	122.09
5	E	22	PHE	CA-C-N	5.12	127.14	120.28
5	E	22	PHE	C-N-CA	5.12	127.14	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	1	151	PHE	CA-C-N	5.12	130.94	121.94
8	1	151	PHE	C-N-CA	5.12	130.94	121.94
16	V	163	ALA	N-CA-CB	5.12	118.21	110.28
20	Z	460	SER	N-CA-CB	5.12	118.10	110.22
20	Z	463	HIS	CE1-NE2-CD2	-5.12	103.89	109.00
21	N	291	SER	N-CA-C	-5.12	106.55	112.89
32	M	43	ILE	N-CA-CB	5.12	116.53	110.55
3	c	208	TYR	N-CA-C	-5.11	105.70	111.28
7	g	157	TYR	CB-CG-CD1	-5.11	113.13	120.80
13	m	13	TYR	CA-C-N	5.11	127.92	121.83
13	m	13	TYR	C-N-CA	5.11	127.92	121.83
14	n	65	SER	O-C-N	5.11	129.28	122.43
10	3	90	LEU	N-CA-CB	5.11	117.73	110.16
10	3	168	SER	O-C-N	-5.11	116.32	122.15
21	N	90	ASP	O-C-N	5.11	128.55	122.26
21	N	501	MET	CA-C-N	5.11	127.13	120.28
21	N	501	MET	C-N-CA	5.11	127.13	120.28
25	R	43	ARG	O-C-N	5.11	127.54	122.12
29	I	115	ASP	CA-CB-CG	5.11	117.71	112.60
5	e	42	THR	N-CA-CB	5.11	119.90	111.62
2	B	134	LEU	CA-C-N	5.11	130.61	122.94
2	B	134	LEU	C-N-CA	5.11	130.61	122.94
18	X	59	ARG	N-CA-CB	5.11	119.37	111.24
24	Q	135	HIS	ND1-CE1-NE2	5.11	113.51	108.40
28	H	397	SER	O-C-N	-5.11	117.39	123.22
1	a	208	THR	CA-C-N	5.11	127.55	120.29
1	a	208	THR	C-N-CA	5.11	127.55	120.29
10	3	131	ASP	CA-C-N	-5.11	114.02	121.99
10	3	131	ASP	C-N-CA	-5.11	114.02	121.99
12	5	119	THR	N-CA-CB	5.11	119.82	111.08
13	6	34	ASP	N-CA-CB	5.11	118.06	110.29
16	V	56	GLU	N-CA-C	-5.11	100.37	109.06
16	V	57	PHE	CA-CB-CG	-5.11	108.69	113.80
21	N	226	ASN	N-CA-C	-5.11	105.83	111.71
23	P	195	GLN	O-C-N	5.11	127.61	122.09
23	P	321	VAL	CA-C-O	5.11	126.18	120.71
27	O	113	LYS	CA-C-N	5.11	127.55	120.29
27	O	113	LYS	C-N-CA	5.11	127.55	120.29
1	a	113	PRO	CB-CA-C	-5.11	103.19	110.75
20	Z	760	HIS	CE1-NE2-CD2	-5.11	103.89	109.00
22	S	194	LEU	O-C-N	5.11	128.20	122.22
31	L	230	LEU	N-CA-C	-5.11	105.79	112.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	212	ALA	N-CA-C	-5.11	101.35	108.96
3	c	146	TYR	CA-C-O	-5.11	115.57	121.19
3	c	174	THR	CA-C-O	5.11	126.14	120.63
13	m	155	MET	N-CA-CB	5.11	118.35	110.43
1	A	24	ARG	N-CA-C	-5.11	101.43	109.50
13	6	109	ARG	CA-C-O	5.11	124.56	118.69
17	T	260	ILE	CA-C-N	5.11	127.54	120.29
17	T	260	ILE	C-N-CA	5.11	127.54	120.29
22	S	29	ASP	CA-C-N	5.11	127.12	120.28
22	S	29	ASP	C-N-CA	5.11	127.12	120.28
22	S	465	ILE	CA-C-N	5.11	127.12	120.28
22	S	465	ILE	C-N-CA	5.11	127.12	120.28
25	R	241	ILE	CB-CA-C	5.11	117.06	111.08
26	U	95	SER	O-C-N	-5.11	116.21	122.34
26	U	131	GLY	O-C-N	-5.11	118.42	122.81
31	L	402	ALA	CA-C-O	-5.11	115.14	120.55
1	a	30	TYR	CB-CG-CD1	5.11	128.46	120.80
8	h	57	SER	CA-C-N	5.11	127.54	120.29
8	h	57	SER	C-N-CA	5.11	127.54	120.29
6	F	190	ILE	O-C-N	5.11	127.09	121.83
13	6	212	ILE	N-CA-CB	5.11	118.28	111.64
15	W	107	HIS	CA-CB-CG	5.11	118.91	113.80
22	S	141	LEU	N-CA-C	-5.11	105.72	111.28
25	R	52	ALA	CA-C-N	5.11	127.63	120.28
25	R	52	ALA	C-N-CA	5.11	127.63	120.28
1	a	224	GLU	CA-C-O	5.10	126.53	120.66
11	k	30	ASP	CB-CA-C	-5.10	99.97	110.38
2	B	115	ALA	N-CA-C	-5.10	105.84	111.71
15	W	93	ILE	CA-C-N	5.10	127.63	120.28
15	W	93	ILE	C-N-CA	5.10	127.63	120.28
26	U	77	ASN	N-CA-CB	5.10	117.62	110.12
29	I	123	PRO	N-CA-C	-5.10	107.38	114.27
6	f	119	ASN	CB-CA-C	-5.10	99.92	109.72
8	h	22	ILE	CA-C-N	5.10	130.25	122.65
8	h	22	ILE	C-N-CA	5.10	130.25	122.65
12	l	137	GLN	CB-CA-C	-5.10	101.19	110.63
12	l	141	HIS	ND1-CE1-NE2	5.10	113.50	108.40
13	m	184	SER	N-CA-C	-5.10	102.97	110.52
2	B	63	LYS	CA-C-N	5.10	129.89	123.10
2	B	63	LYS	C-N-CA	5.10	129.89	123.10
19	Y	73	PHE	CB-CG-CD1	-5.10	112.02	120.70
21	N	619	CYS	N-CA-C	-5.10	105.61	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	S	371	LEU	CB-CA-C	-5.10	100.87	110.67
22	S	486	LYS	N-CA-CB	5.10	117.71	110.16
23	P	147	LYS	CA-C-O	5.10	125.32	119.35
30	K	421	VAL	CA-C-N	5.10	128.07	120.31
30	K	421	VAL	C-N-CA	5.10	128.07	120.31
32	M	196	ALA	O-C-N	-5.10	116.71	122.12
4	D	17	ILE	N-CA-C	-5.10	99.13	106.88
16	V	78	VAL	N-CA-C	5.10	116.03	108.23
21	N	135	SER	CA-C-N	5.10	126.99	120.56
21	N	135	SER	C-N-CA	5.10	126.99	120.56
25	R	189	GLU	N-CA-C	-5.10	105.63	111.14
10	j	23	ILE	CB-CA-C	5.10	118.34	110.28
11	4	103	LEU	N-CA-C	-5.10	101.09	109.40
17	T	165	GLN	N-CA-C	5.10	116.84	111.28
18	X	109	LEU	CA-C-N	5.10	126.21	119.84
18	X	109	LEU	C-N-CA	5.10	126.21	119.84
19	Y	73	PHE	CA-C-N	5.10	127.07	120.44
19	Y	73	PHE	C-N-CA	5.10	127.07	120.44
20	Z	842	GLN	N-CA-CB	5.10	117.45	109.85
21	N	284	PRO	N-CD-CG	5.10	110.85	103.20
21	N	553	PHE	N-CA-CB	5.10	118.24	110.44
21	N	853	ASP	O-C-N	5.10	127.91	121.64
21	N	873	ARG	CD-NE-CZ	-5.10	117.26	124.40
27	O	28	GLN	OE1-CD-NE2	5.10	127.70	122.60
32	M	272	GLU	N-CA-CB	5.10	117.47	109.97
7	g	75	GLY	N-CA-C	-5.10	103.42	112.54
14	n	119	ALA	O-C-N	-5.10	117.35	123.06
10	3	84	PRO	CB-CA-C	-5.10	104.91	112.55
13	6	87	HIS	N-CA-C	-5.10	104.88	111.71
14	7	111	ASN	CA-C-N	5.10	124.89	119.28
14	7	111	ASN	C-N-CA	5.10	124.89	119.28
20	Z	123	ALA	N-CA-C	-5.10	105.80	111.36
21	N	214	LEU	CA-C-N	5.10	127.53	120.29
21	N	214	LEU	C-N-CA	5.10	127.53	120.29
22	S	195	ALA	N-CA-CB	5.10	117.70	110.16
23	P	227	ILE	CA-C-O	5.10	126.71	121.05
24	Q	273	ASN	N-CA-CB	5.10	119.11	110.49
30	K	259	ARG	CA-C-N	5.10	127.11	120.28
30	K	259	ARG	C-N-CA	5.10	127.11	120.28
31	L	86	LYS	CB-CA-C	-5.10	102.88	110.88
1	a	90	ALA	N-CA-C	5.10	116.64	111.14
3	C	160	TRP	CD2-CE2-CZ2	-5.10	117.30	122.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	560	THR	CA-CB-OG1	5.10	117.24	109.60
22	S	387	VAL	N-CA-C	-5.10	105.74	110.53
24	Q	89	ALA	N-CA-CB	5.10	119.10	110.49
25	R	28	GLU	O-C-N	5.10	127.96	122.15
32	M	317	SER	CA-C-N	5.10	130.76	123.17
32	M	317	SER	C-N-CA	5.10	130.76	123.17
3	c	193	ALA	CB-CA-C	5.09	118.88	110.88
5	e	105	GLU	CA-C-N	5.09	128.58	121.24
5	e	105	GLU	C-N-CA	5.09	128.58	121.24
9	i	149	ASP	N-CA-C	-5.09	100.40	109.06
2	B	94	HIS	CE1-NE2-CD2	-5.09	103.91	109.00
3	C	6	TYR	CA-C-N	5.09	127.11	120.28
3	C	6	TYR	C-N-CA	5.09	127.11	120.28
9	2	179	GLU	CA-C-N	5.09	127.11	120.28
9	2	179	GLU	C-N-CA	5.09	127.11	120.28
16	V	300	VAL	CA-C-N	5.09	127.11	120.28
16	V	300	VAL	C-N-CA	5.09	127.11	120.28
21	N	639	ASP	CA-CB-CG	5.09	117.69	112.60
22	S	454	SER	N-CA-C	-5.09	102.61	109.95
23	P	284	ILE	CA-C-O	5.09	126.25	120.85
24	Q	116	PHE	O-C-N	5.09	127.32	122.07
24	Q	311	LEU	CA-C-N	5.09	127.06	120.44
24	Q	311	LEU	C-N-CA	5.09	127.06	120.44
28	H	409	ARG	CA-C-N	5.09	127.06	120.44
28	H	409	ARG	C-N-CA	5.09	127.06	120.44
5	e	73	HIS	CG-CD2-NE2	5.09	112.29	107.20
1	A	217	GLU	N-CA-C	5.09	117.69	110.10
20	Z	739	ALA	O-C-N	5.09	127.52	122.12
21	N	136	ILE	N-CA-CB	5.09	116.51	110.55
22	S	143	GLN	N-CA-C	-5.09	105.73	111.28
3	c	214	ALA	CA-C-O	5.09	126.80	120.54
9	i	171	TRP	O-C-N	5.09	129.07	123.16
8	1	23	LEU	N-CA-C	-5.09	101.41	109.76
11	4	8	ARG	CD-NE-CZ	-5.09	117.27	124.40
21	N	282	TYR	CB-CG-CD1	-5.09	113.16	120.80
25	R	89	ASN	CA-CB-CG	-5.09	107.51	112.60
27	O	38	TRP	CA-C-N	5.09	127.10	120.28
27	O	38	TRP	C-N-CA	5.09	127.10	120.28
27	O	359	SER	N-CA-C	-5.09	100.78	108.52
29	I	204	HIS	ND1-CE1-NE2	5.09	113.49	108.40
30	K	292	VAL	CA-C-N	5.09	127.52	120.29
30	K	292	VAL	C-N-CA	5.09	127.52	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	L	198	GLU	CA-C-N	5.09	127.08	120.26
31	L	198	GLU	C-N-CA	5.09	127.08	120.26
8	h	39	VAL	CA-C-O	-5.09	114.95	119.38
11	4	64	ILE	CA-CB-CG1	5.09	119.05	110.40
16	V	125	THR	CA-C-N	5.09	127.10	120.28
16	V	125	THR	C-N-CA	5.09	127.10	120.28
17	T	159	LYS	N-CA-CB	5.09	117.39	110.01
22	S	77	THR	CB-CA-C	-5.09	102.34	110.79
23	P	240	TYR	CA-C-O	5.09	125.81	120.42
23	P	412	LEU	N-CA-C	-5.09	107.07	113.28
28	H	437	VAL	O-C-N	5.09	128.93	122.57
9	i	195	ASP	O-C-N	5.09	128.98	123.13
13	m	207	GLY	N-CA-C	-5.09	106.46	111.85
2	B	102	GLY	N-CA-C	-5.09	108.23	115.30
20	Z	549	ASN	CA-C-O	5.09	125.81	120.42
24	Q	184	VAL	N-CA-CB	5.09	117.46	110.54
24	Q	284	ALA	N-CA-C	-5.09	99.96	110.80
25	R	304	TYR	N-CA-C	5.09	116.83	111.28
30	K	241	GLU	CA-C-O	5.09	124.41	118.97
3	c	124	GLN	OE1-CD-NE2	-5.09	117.51	122.60
10	j	3	ASP	CA-C-O	-5.09	114.88	120.17
6	F	41	ASN	CA-CB-CG	-5.09	107.51	112.60
6	F	184	GLY	N-CA-C	-5.09	108.26	115.43
14	7	215	ARG	NE-CZ-NH2	5.09	123.78	119.20
15	W	122	ARG	CB-CA-C	-5.09	102.20	110.85
20	Z	565	PHE	CA-CB-CG	-5.09	108.71	113.80
21	N	471	TYR	CB-CG-CD2	-5.09	113.17	120.80
23	P	46	THR	O-C-N	5.09	127.95	122.15
33	J	295	ASN	CA-C-O	5.09	125.55	119.60
20	Z	295	ARG	CD-NE-CZ	5.08	131.52	124.40
23	P	106	SER	CB-CA-C	-5.08	101.39	110.70
29	I	89	GLN	CA-C-O	5.08	124.27	118.47
5	e	228	PHE	CA-CB-CG	-5.08	108.72	113.80
6	f	121	GLN	N-CA-C	5.08	116.51	111.07
11	k	152	MET	CG-SD-CE	-5.08	89.72	100.90
12	l	146	LYS	N-CA-CB	5.08	119.81	112.13
12	5	186	THR	N-CA-C	-5.08	100.06	108.75
21	N	470	LEU	CA-C-O	-5.08	115.03	120.42
25	R	26	VAL	CA-C-O	-5.08	115.85	121.29
27	O	253	GLN	OE1-CD-NE2	-5.08	117.52	122.60
29	I	399	ALA	CB-CA-C	-5.08	102.21	110.85
30	K	142	HIS	ND1-CE1-NE2	5.08	113.48	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	532	HIS	CA-CB-CG	5.08	118.88	113.80
20	Z	593	HIS	ND1-CE1-NE2	5.08	113.48	108.40
28	H	65	GLU	CA-C-O	5.08	125.81	120.42
31	L	137	ARG	NE-CZ-NH2	-5.08	114.63	119.20
33	J	98	VAL	CB-CA-C	-5.08	103.61	111.08
5	e	147	HIS	CE1-NE2-CD2	-5.08	103.92	109.00
9	2	183	LEU	O-C-N	-5.08	116.02	122.27
10	3	109	VAL	CB-CA-C	-5.08	104.62	111.63
19	Y	86	ARG	CA-C-O	-5.08	115.03	120.42
20	Z	254	PRO	CA-C-O	-5.08	111.85	118.86
23	P	32	CYS	N-CA-CB	5.08	117.68	110.16
25	R	136	ASN	CB-CA-C	-5.08	102.36	110.79
6	f	46	LEU	N-CA-CB	5.08	119.67	110.83
8	h	134	ALA	N-CA-CB	5.08	120.39	111.55
7	G	240	ILE	CA-CB-CG2	5.08	119.13	110.50
9	2	63	LEU	CA-C-N	5.08	131.05	122.87
9	2	63	LEU	C-N-CA	5.08	131.05	122.87
10	3	135	ASP	N-CA-C	-5.08	104.69	111.24
21	N	368	THR	CA-C-N	5.08	127.50	120.29
21	N	368	THR	C-N-CA	5.08	127.50	120.29
23	P	203	ILE	N-CA-CB	5.08	119.81	111.58
24	Q	59	LEU	CA-C-O	-5.08	115.04	120.42
32	M	266	ALA	CA-C-O	5.08	125.80	120.42
8	h	122	ILE	CA-C-N	5.08	126.19	119.84
8	h	122	ILE	C-N-CA	5.08	126.19	119.84
11	k	119	ILE	N-CA-CB	5.08	118.24	111.64
8	1	31	THR	CA-C-N	5.08	131.36	121.41
8	1	31	THR	C-N-CA	5.08	131.36	121.41
16	V	209	GLU	N-CA-CB	5.08	117.58	110.12
21	N	444	HIS	O-C-N	5.08	127.30	122.07
24	Q	341	THR	CA-C-O	-5.08	115.04	120.42
30	K	207	ARG	NE-CZ-NH1	5.08	126.58	121.50
33	J	249	GLU	CB-CA-C	-5.08	105.05	111.70
5	e	169	ALA	N-CA-CB	5.08	119.20	110.77
4	D	96	HIS	N-CA-C	5.08	116.81	111.28
14	7	141	ASN	CA-C-N	5.08	125.54	120.52
14	7	141	ASN	C-N-CA	5.08	125.54	120.52
19	Y	51	SER	CA-C-N	5.08	131.23	121.54
19	Y	51	SER	C-N-CA	5.08	131.23	121.54
19	Y	84	TYR	CB-CG-CD2	-5.08	113.19	120.80
20	Z	203	LEU	CD1-CG-CD2	-5.08	99.63	110.80
23	P	298	SER	CA-C-N	5.08	127.04	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	298	SER	C-N-CA	5.08	127.04	120.44
23	P	306	ASN	N-CA-C	-5.08	100.89	108.96
30	K	294	ARG	CA-C-N	5.08	127.63	120.42
30	K	294	ARG	C-N-CA	5.08	127.63	120.42
30	K	312	VAL	N-CA-C	-5.08	99.86	107.37
13	m	85	PHE	CA-CB-CG	-5.07	108.73	113.80
5	E	91	HIS	CA-CB-CG	-5.07	108.73	113.80
6	F	35	THR	O-C-N	-5.07	117.60	123.33
10	3	141	THR	N-CA-CB	5.07	117.58	110.12
16	V	29	ILE	N-CA-C	-5.07	101.07	108.17
16	V	212	MET	CA-C-N	5.07	127.34	120.44
16	V	212	MET	C-N-CA	5.07	127.34	120.44
17	T	192	ASN	CA-C-O	5.07	125.80	120.42
17	T	213	ASN	CA-C-O	5.07	127.13	121.40
19	Y	75	ASN	O-C-N	-5.07	116.37	122.15
20	Z	151	HIS	CA-CB-CG	5.07	118.87	113.80
22	S	439	GLU	CA-C-O	5.07	124.94	119.15
28	H	238	LEU	N-CA-C	-5.07	105.83	111.36
8	h	120	TYR	CA-C-O	-5.07	114.83	120.66
5	E	13	SER	O-C-N	-5.07	115.84	122.59
5	E	241	LYS	N-CA-CB	5.07	117.58	110.12
14	7	233	ILE	CA-C-N	5.07	130.55	122.59
14	7	233	ILE	C-N-CA	5.07	130.55	122.59
21	N	582	ASP	CA-C-N	5.07	127.62	120.42
21	N	582	ASP	C-N-CA	5.07	127.62	120.42
23	P	210	ASN	N-CA-C	-5.07	103.76	110.40
29	I	94	LYS	CA-C-N	5.07	127.49	120.29
29	I	94	LYS	C-N-CA	5.07	127.49	120.29
32	M	405	ASN	CB-CA-C	-5.07	102.23	110.85
5	e	48	LEU	N-CA-C	-5.07	99.15	108.02
7	g	217	SER	CA-C-O	-5.07	115.70	121.58
7	G	195	GLN	N-CA-CB	5.07	117.57	110.12
15	W	6	THR	N-CA-CB	5.07	119.03	110.77
17	T	57	ILE	CA-C-N	5.07	127.34	120.65
17	T	57	ILE	C-N-CA	5.07	127.34	120.65
18	X	72	GLU	O-C-N	5.07	127.88	121.64
20	Z	865	ASP	CA-CB-CG	-5.07	107.53	112.60
27	O	228	TYR	N-CA-CB	5.07	119.06	110.49
32	M	207	PHE	CB-CG-CD2	5.07	129.32	120.70
33	J	352	GLY	O-C-N	-5.07	118.75	122.71
8	h	120	TYR	CA-CB-CG	-5.07	104.78	113.90
6	F	170	THR	CA-CB-OG1	5.07	117.20	109.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	P	270	LEU	O-C-N	-5.07	115.47	122.46
1	a	141	LEU	N-CA-CB	-5.07	102.01	110.83
1	A	84	ASN	CA-C-O	5.07	126.17	120.70
7	G	43	ASN	CA-C-N	5.07	127.86	119.35
7	G	43	ASN	C-N-CA	5.07	127.86	119.35
11	4	51	GLY	N-CA-C	-5.07	101.17	113.18
16	V	65	VAL	N-CA-C	-5.07	98.80	109.34
16	V	230	TYR	CA-C-N	5.07	127.07	120.28
16	V	230	TYR	C-N-CA	5.07	127.07	120.28
26	U	212	ASP	N-CA-CB	5.07	117.36	110.01
30	K	279	THR	CA-C-N	5.07	127.07	120.28
30	K	279	THR	C-N-CA	5.07	127.07	120.28
32	M	125	GLN	N-CA-C	-5.07	101.37	109.07
33	J	287	ASN	N-CA-C	-5.07	104.42	111.52
8	h	178	SER	N-CA-C	-5.07	100.64	108.90
12	l	113	ASN	N-CA-C	-5.07	98.61	109.81
12	l	254	HIS	CA-C-O	-5.07	114.88	120.30
5	E	67	ILE	CA-C-O	5.07	126.60	120.67
9	2	182	LYS	CB-CA-C	-5.07	102.93	110.88
23	P	103	TYR	CA-C-O	-5.07	115.05	120.42
24	Q	376	LYS	CA-C-N	5.07	127.07	120.28
24	Q	376	LYS	C-N-CA	5.07	127.07	120.28
24	Q	377	LEU	CA-C-O	-5.07	115.18	120.55
25	R	186	TYR	CA-C-N	5.07	127.61	120.42
25	R	186	TYR	C-N-CA	5.07	127.61	120.42
31	L	206	ILE	CB-CA-C	-5.07	105.45	112.24
1	a	39	ASN	CA-C-N	5.06	130.74	122.69
1	a	39	ASN	C-N-CA	5.06	130.74	122.69
28	H	281	GLN	CA-C-O	5.06	125.58	121.02
28	H	307	PHE	CA-C-N	5.06	129.99	123.00
28	H	307	PHE	C-N-CA	5.06	129.99	123.00
9	i	168	GLU	CB-CA-C	-5.06	102.24	110.85
2	B	56	ALA	N-CA-CB	5.06	117.39	109.85
23	P	86	HIS	ND1-CE1-NE2	5.06	113.46	108.40
24	Q	168	LEU	O-C-N	-5.06	116.78	123.21
24	Q	211	PRO	O-C-N	5.06	129.32	122.89
13	m	13	TYR	N-CA-C	-5.06	102.07	109.81
7	G	107	ILE	CA-CB-CG1	5.06	119.00	110.40
9	2	221	THR	O-C-N	-5.06	116.89	121.39
13	6	93	SER	N-CA-C	-5.06	103.25	110.59
13	6	189	ILE	CB-CA-C	5.06	118.97	112.14
14	7	233	ILE	O-C-N	-5.06	117.18	123.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	N	301	THR	O-C-N	-5.06	116.38	122.15
25	R	167	LYS	CA-C-O	5.06	125.79	119.97
32	M	58	MET	O-C-N	-5.06	116.75	122.12
2	B	110	LEU	O-C-N	-5.06	115.65	122.43
13	6	145	ARG	NE-CZ-NH1	-5.06	116.44	121.50
21	N	591	LEU	CA-C-N	5.06	125.59	119.98
21	N	591	LEU	C-N-CA	5.06	125.59	119.98
26	U	117	ASN	N-CA-C	-5.06	103.28	109.65
30	K	275	ASP	CA-C-O	5.06	125.19	119.27
3	c	136	ILE	N-CA-C	-5.06	100.61	107.99
7	G	147	HIS	N-CA-C	-5.06	101.39	109.23
8	1	75	TYR	CA-C-N	5.06	127.06	120.28
8	1	75	TYR	C-N-CA	5.06	127.06	120.28
8	1	92	LYS	CB-CA-C	-5.06	102.25	110.85
11	4	136	SER	N-CA-C	-5.06	106.70	112.92
14	7	243	LYS	CA-C-N	5.06	129.91	122.63
14	7	243	LYS	C-N-CA	5.06	129.91	122.63
19	Y	47	GLU	CB-CG-CD	-5.06	104.00	112.60
21	N	185	ILE	CA-C-N	5.06	127.60	120.42
21	N	185	ILE	C-N-CA	5.06	127.60	120.42
31	L	342	ARG	CA-C-N	5.06	130.83	122.33
31	L	342	ARG	C-N-CA	5.06	130.83	122.33
32	M	55	ASN	OD1-CG-ND2	5.06	127.66	122.60
13	m	84	HIS	CB-CA-C	-5.06	102.40	110.79
20	Z	510	LEU	CA-C-O	-5.06	113.23	120.16
22	S	97	THR	CA-C-N	5.06	131.20	121.54
22	S	97	THR	C-N-CA	5.06	131.20	121.54
22	S	415	SER	CA-C-N	5.06	127.06	120.28
22	S	415	SER	C-N-CA	5.06	127.06	120.28
1	a	233	PHE	N-CA-C	-5.05	100.11	108.75
5	e	14	THR	CA-C-O	5.05	127.74	120.51
12	l	136	SER	N-CA-C	-5.05	105.42	112.45
11	4	140	THR	N-CA-C	-5.05	107.16	113.38
20	Z	470	ALA	O-C-N	5.05	128.49	122.27
21	N	660	LEU	CB-CA-C	-5.05	102.40	110.79
22	S	489	GLN	N-CA-C	5.05	117.56	110.23
23	P	171	MET	O-C-N	5.05	129.02	123.16
27	O	386	ALA	CA-C-N	5.05	128.38	120.75
27	O	386	ALA	C-N-CA	5.05	128.38	120.75
30	K	112	SER	CA-C-O	5.05	127.35	121.49
33	J	181	GLN	CA-C-N	5.05	125.34	119.93
33	J	181	GLN	C-N-CA	5.05	125.34	119.93

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	228	LYS	CA-C-O	5.05	125.79	120.33
14	n	89	ASP	O-C-N	-5.05	116.15	123.07
7	G	240	ILE	CA-C-N	5.05	127.05	120.28
7	G	240	ILE	C-N-CA	5.05	127.05	120.28
16	V	140	VAL	CA-C-N	5.05	129.76	123.14
16	V	140	VAL	C-N-CA	5.05	129.76	123.14
27	O	243	VAL	CB-CA-C	-5.05	103.00	111.29
13	m	146	ALA	N-CA-C	-5.05	100.94	109.07
7	G	241	ASP	CA-C-O	-5.05	115.20	120.55
16	V	125	THR	CA-CB-OG1	5.05	117.18	109.60
28	H	309	ASP	CB-CA-C	-5.05	101.90	110.19
29	I	344	ILE	CA-C-O	-5.05	116.72	120.96
30	K	133	PRO	CB-CA-C	-5.05	103.73	110.85
31	L	173	PHE	CA-CB-CG	-5.05	108.75	113.80
3	C	165	VAL	N-CA-C	-5.05	98.84	109.34
6	F	69	HIS	ND1-CE1-NE2	5.05	113.45	108.40
10	3	191	LYS	N-CA-CB	5.05	118.50	110.87
20	Z	155	ARG	CD-NE-CZ	5.05	131.47	124.40
20	Z	738	TYR	CB-CG-CD1	5.05	128.38	120.80
21	N	584	ARG	O-C-N	5.05	127.47	122.12
28	H	271	PHE	CA-CB-CG	-5.05	108.75	113.80
33	J	265	ASP	CA-C-N	5.05	127.55	120.28
33	J	265	ASP	C-N-CA	5.05	127.55	120.28
3	c	50	ARG	N-CA-C	-5.05	100.29	108.52
5	e	48	LEU	CA-C-O	-5.05	115.10	120.40
13	m	84	HIS	O-C-N	-5.05	116.77	122.12
6	F	24	TYR	CA-C-O	5.05	125.77	120.42
15	W	44	ASN	CA-CB-CG	-5.05	107.55	112.60
9	i	88	ILE	CA-C-N	5.05	126.63	120.22
9	i	88	ILE	C-N-CA	5.05	126.63	120.22
8	1	38	ARG	N-CA-C	-5.05	105.48	111.69
13	6	219	GLY	N-CA-C	-5.05	105.79	111.85
15	W	157	PHE	CA-C-O	-5.05	114.17	119.97
17	T	194	GLU	CA-C-N	5.05	129.26	120.68
17	T	194	GLU	C-N-CA	5.05	129.26	120.68
24	Q	120	LYS	CB-CA-C	-5.05	102.93	110.90
5	e	150	ASP	CA-CB-CG	-5.04	107.56	112.60
5	E	187	TRP	N-CA-C	-5.04	101.41	109.23
6	F	154	THR	CB-CA-C	5.04	117.91	110.14
7	G	97	ALA	N-CA-CB	5.04	117.54	110.12
14	7	212	ASN	OD1-CG-ND2	-5.04	117.56	122.60
20	Z	46	LYS	O-C-N	5.04	127.47	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	Z	907	GLY	N-CA-C	-5.04	102.22	111.25
21	N	485	MET	N-CA-CB	5.04	117.39	110.07
21	N	621	THR	CA-C-N	5.04	127.04	120.28
21	N	621	THR	C-N-CA	5.04	127.04	120.28
24	Q	265	MET	CA-C-N	5.04	127.45	120.29
24	Q	265	MET	C-N-CA	5.04	127.45	120.29
29	I	415	ASP	N-CA-CB	5.04	117.63	110.16
8	h	45	ARG	NE-CZ-NH1	-5.04	116.46	121.50
1	A	135	ARG	CA-C-O	-5.04	116.03	121.27
1	A	209	HIS	CE1-NE2-CD2	-5.04	103.96	109.00
17	T	196	SER	CB-CA-C	-5.04	102.27	110.85
20	Z	265	LEU	CB-CA-C	-5.04	99.77	110.31
20	Z	839	SER	CA-C-O	-5.04	115.20	120.55
21	N	914	VAL	O-C-N	-5.04	116.31	122.36
23	P	322	LEU	O-C-N	-5.04	116.15	122.35
24	Q	397	LEU	N-CA-C	-5.04	100.07	108.34
27	O	392	TRP	CE2-CD2-CE3	5.04	123.84	118.80
31	L	351	LEU	O-C-N	-5.04	115.78	121.43
32	M	306	LEU	CA-C-O	-5.04	115.20	120.55
1	a	185	HIS	N-CA-CB	5.04	117.38	110.07
6	F	9	ASP	N-CA-CB	5.04	119.22	111.46
7	G	31	VAL	O-C-N	-5.04	116.10	121.80
13	6	186	GLU	CB-CG-CD	-5.04	104.03	112.60
14	7	210	ILE	N-CA-CB	-5.04	101.65	110.77
20	Z	317	GLN	N-CA-C	-5.04	105.68	111.07
25	R	337	VAL	O-C-N	-5.04	116.97	121.91
27	O	7	ILE	CA-CB-CG1	5.04	118.97	110.40
33	J	195	LYS	CA-C-O	5.04	125.50	119.60
4	d	83	ARG	NE-CZ-NH1	5.04	126.54	121.50
4	D	122	GLN	CA-C-O	-5.04	115.21	120.55
4	D	168	SER	CA-C-O	5.04	125.89	120.55
4	D	198	SER	CA-C-N	5.04	129.14	120.72
4	D	198	SER	C-N-CA	5.04	129.14	120.72
6	F	143	HIS	CE1-NE2-CD2	-5.04	103.96	109.00
21	N	909	GLU	CA-C-N	5.04	126.14	119.84
21	N	909	GLU	C-N-CA	5.04	126.14	119.84
26	U	42	ASN	N-CA-CB	5.04	119.01	110.49
7	g	189	ALA	CA-C-O	-5.04	115.08	120.42
7	G	228	HIS	ND1-CE1-NE2	5.04	113.44	108.40
14	7	84	VAL	CA-CB-CG1	5.04	118.97	110.40
16	V	32	ILE	CB-CA-C	-5.04	105.27	112.22
16	V	78	VAL	N-CA-CB	5.04	116.74	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	T	238	GLN	CA-CB-CG	-5.04	104.02	114.10
20	Z	224	LEU	CA-C-N	5.04	127.34	120.54
20	Z	224	LEU	C-N-CA	5.04	127.34	120.54
21	N	343	THR	CA-C-O	-5.04	115.86	121.81
22	S	64	ARG	NE-CZ-NH2	5.04	123.73	119.20
23	P	197	THR	N-CA-C	-5.04	105.79	111.28
23	P	415	TRP	CA-C-O	-5.04	115.08	120.42
20	Z	156	HIS	O-C-N	5.04	127.26	122.07
20	Z	295	ARG	O-C-N	-5.04	116.33	122.22
24	Q	25	GLN	CA-C-O	5.04	125.76	120.42
5	e	109	VAL	N-CA-CB	5.04	117.02	110.57
5	e	171	ALA	N-CA-C	5.04	117.46	109.50
24	Q	250	THR	CA-C-N	5.04	128.35	120.75
24	Q	250	THR	C-N-CA	5.04	128.35	120.75
28	H	187	LEU	CB-CA-C	5.04	116.78	109.08
28	H	234	ARG	NE-CZ-NH2	-5.04	114.67	119.20
9	i	133	ASP	CA-CB-CG	5.03	117.63	112.60
7	G	182	HIS	ND1-CE1-NE2	5.03	113.43	108.40
10	3	89	GLN	N-CA-CB	5.03	118.08	110.28
14	7	49	TYR	N-CA-C	-5.03	102.03	109.18
15	W	49	VAL	CA-C-O	5.03	125.69	120.36
17	T	101	LYS	CA-C-N	5.03	127.03	120.28
17	T	101	LYS	C-N-CA	5.03	127.03	120.28
21	N	321	LEU	N-CA-CB	5.03	118.07	110.42
24	Q	215	VAL	O-C-N	-5.03	116.65	121.83
1	a	184	ASN	CA-CB-CG	-5.03	107.57	112.60
5	e	67	ILE	CA-CB-CG1	-5.03	101.85	110.40
13	m	194	ASP	CA-CB-CG	-5.03	107.57	112.60
24	Q	121	SER	CA-C-N	5.03	127.35	120.46
24	Q	121	SER	C-N-CA	5.03	127.35	120.46
25	R	89	ASN	OD1-CG-ND2	5.03	127.63	122.60
26	U	210	TYR	N-CA-CB	5.03	117.52	110.12
28	H	422	VAL	CB-CA-C	5.03	119.16	112.22
13	m	169	GLU	CB-CG-CD	-5.03	104.05	112.60
2	B	63	LYS	N-CA-C	-5.03	107.13	114.12
7	G	91	ARG	N-CA-CB	5.03	117.52	110.12
21	N	552	ALA	CA-C-O	5.03	125.75	120.42
22	S	145	PHE	CB-CA-C	-5.03	102.30	110.85
23	P	289	ASN	CA-C-O	5.03	125.31	119.32
27	O	50	ASP	N-CA-CB	5.03	117.52	110.12
28	H	383	GLU	N-CA-CB	5.03	117.30	110.01
29	I	215	PRO	O-C-N	-5.03	115.53	121.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	434	GLY	CA-C-N	5.03	127.28	120.44
29	I	434	GLY	C-N-CA	5.03	127.28	120.44
30	K	222	LEU	N-CA-CB	5.03	117.61	110.16
33	J	386	VAL	N-CA-CB	5.03	117.38	110.54
33	J	388	LYS	CA-C-N	5.03	128.42	120.47
33	J	388	LYS	C-N-CA	5.03	128.42	120.47
1	A	203	VAL	CA-C-O	-5.03	115.52	120.85
2	B	244	ASN	N-CA-CB	5.03	117.51	110.12
3	C	78	ALA	O-C-N	-5.03	117.22	123.36
5	E	73	HIS	ND1-CE1-NE2	5.03	113.43	108.40
9	2	193	TRP	CD2-CE2-CZ2	-5.03	117.37	122.40
20	Z	60	ASP	CA-CB-CG	-5.03	107.57	112.60
28	H	227	LEU	N-CA-CB	5.03	119.09	110.34
29	I	306	MET	CA-C-N	5.03	127.28	120.44
29	I	306	MET	C-N-CA	5.03	127.28	120.44
30	K	111	SER	CA-C-O	5.03	127.32	121.44
33	J	229	MET	N-CA-C	-5.03	106.56	113.30
33	J	334	LYS	CG-CD-CE	5.03	122.87	111.30
1	a	15	HIS	ND1-CE1-NE2	5.03	113.43	108.40
3	c	173	GLN	OE1-CD-NE2	5.03	127.63	122.60
9	i	138	HIS	CB-CG-CD2	-5.03	124.66	131.20
3	C	92	ARG	O-C-N	-5.03	116.79	122.12
8	1	75	TYR	CA-C-O	-5.03	115.22	120.55
10	3	48	HIS	CA-CB-CG	5.03	118.83	113.80
12	5	266	HIS	CG-CD2-NE2	5.03	112.23	107.20
17	T	12	SER	CB-CA-C	-5.03	101.50	110.70
21	N	807	THR	CA-C-N	5.03	127.02	120.28
21	N	807	THR	C-N-CA	5.03	127.02	120.28
23	P	66	LEU	N-CA-C	-5.03	105.88	111.36
23	P	168	TYR	N-CA-CB	5.03	120.05	111.66
29	I	345	ASP	CA-CB-CG	-5.03	107.57	112.60
13	m	102	GLN	N-CA-C	5.03	117.41	111.33
8	1	92	LYS	N-CA-C	-5.03	105.88	111.36
14	7	168	VAL	O-C-N	-5.03	117.30	122.63
20	Z	379	GLN	N-CA-CB	5.03	118.73	110.39
20	Z	928	ARG	NE-CZ-NH2	-5.03	114.68	119.20
21	N	885	ILE	CA-CB-CG1	5.03	118.94	110.40
23	P	264	ILE	CB-CA-C	-5.03	105.36	112.14
25	R	376	GLN	O-C-N	5.03	128.23	122.25
30	K	75	LEU	CA-C-N	5.03	127.43	120.29
30	K	75	LEU	C-N-CA	5.03	127.43	120.29
32	M	189	GLN	CA-C-O	-5.03	115.22	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	84	ALA	CA-C-N	5.02	127.32	120.54
3	c	84	ALA	C-N-CA	5.02	127.32	120.54
4	D	176	GLU	CB-CG-CD	-5.02	104.06	112.60
20	Z	316	ALA	N-CA-CB	5.02	117.50	110.12
27	O	129	ILE	CA-C-O	-5.02	115.83	121.05
32	M	308	LEU	CA-C-O	5.02	125.75	120.42
5	e	135	SER	N-CA-C	-5.02	106.57	113.30
10	j	203	ARG	O-C-N	-5.02	116.69	122.87
1	A	83	VAL	CA-C-O	-5.02	115.16	120.48
3	C	181	LYS	N-CA-CB	-5.02	103.27	111.66
4	D	14	ASP	CA-CB-CG	-5.02	107.58	112.60
6	F	170	THR	N-CA-C	-5.02	105.89	111.36
7	G	82	ILE	N-CA-CB	5.02	114.37	110.45
20	Z	240	ASN	CA-CB-CG	-5.02	107.58	112.60
22	S	206	GLN	N-CA-C	-5.02	106.66	112.89
27	O	69	PHE	N-CA-C	-5.02	101.12	109.46
3	c	115	LEU	O-C-N	5.02	127.87	122.15
21	N	15	GLU	CA-C-N	5.02	129.93	121.14
21	N	15	GLU	C-N-CA	5.02	129.93	121.14
21	N	58	ARG	CA-C-N	5.02	127.27	120.44
21	N	58	ARG	C-N-CA	5.02	127.27	120.44
32	M	182	ASP	CA-CB-CG	-5.02	107.58	112.60
1	a	79	ILE	CA-CB-CG2	-5.02	101.97	110.50
2	b	6	SER	N-CA-C	-5.02	105.96	113.89
2	b	209	ILE	CB-CA-C	5.02	118.06	110.63
9	i	119	TYR	CA-C-N	5.02	129.32	122.34
9	i	119	TYR	C-N-CA	5.02	129.32	122.34
12	l	204	VAL	CB-CA-C	-5.02	102.03	110.71
7	G	74	ILE	CA-C-N	5.02	126.44	121.57
7	G	74	ILE	C-N-CA	5.02	126.44	121.57
10	3	98	ARG	N-CA-C	-5.02	101.98	109.11
16	V	303	VAL	CB-CA-C	5.02	119.15	112.22
20	Z	1	MET	CG-SD-CE	-5.02	89.86	100.90
20	Z	502	ASN	CB-CG-ND2	5.02	123.93	116.40
20	Z	526	ALA	CA-C-O	-5.02	115.73	121.00
21	N	11	ALA	CA-C-N	5.02	127.42	120.29
21	N	11	ALA	C-N-CA	5.02	127.42	120.29
22	S	225	HIS	CE1-NE2-CD2	-5.02	103.98	109.00
24	Q	306	TYR	CA-C-N	5.02	127.00	120.28
24	Q	306	TYR	C-N-CA	5.02	127.00	120.28
25	R	221	VAL	CG1-CB-CG2	5.02	121.84	110.80
25	R	280	ILE	CA-C-O	-5.02	114.51	120.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	U	289	ASP	CA-C-N	5.02	127.00	120.28
26	U	289	ASP	C-N-CA	5.02	127.00	120.28
32	M	98	GLU	CA-C-N	5.02	127.01	120.28
32	M	98	GLU	C-N-CA	5.02	127.01	120.28
1	a	171	THR	CA-C-N	5.02	129.75	121.87
1	a	171	THR	C-N-CA	5.02	129.75	121.87
3	c	56	LEU	N-CA-CB	5.02	118.12	110.44
3	c	201	THR	N-CA-CB	5.02	117.92	110.29
5	e	86	ARG	CD-NE-CZ	-5.02	117.38	124.40
6	f	51	ARG	NE-CZ-NH1	-5.02	116.48	121.50
7	g	199	ILE	CB-CA-C	5.02	118.91	112.14
3	C	7	ASP	N-CA-C	5.02	116.75	111.28
9	2	190	ALA	N-CA-CB	5.02	118.06	110.28
15	W	15	TYR	CA-C-O	-5.02	113.67	119.59
21	N	13	LEU	CA-C-O	-5.02	115.23	120.55
21	N	199	ASN	OD1-CG-ND2	5.02	127.62	122.60
24	Q	130	ARG	NE-CZ-NH1	-5.02	116.48	121.50
30	K	322	ASP	CA-C-O	-5.02	114.61	120.53
31	L	86	LYS	N-CA-C	5.02	116.44	111.07
8	h	23	LEU	N-CA-CB	5.02	118.80	110.52
6	F	53	ALA	CB-CA-C	-5.02	102.46	110.79
6	F	225	TYR	CB-CA-C	-5.02	101.05	109.48
13	6	80	VAL	CA-C-N	5.02	126.96	120.44
13	6	80	VAL	C-N-CA	5.02	126.96	120.44
13	6	146	ALA	CA-C-O	5.02	126.83	121.16
15	W	47	ASN	CB-CG-ND2	-5.02	108.88	116.40
22	S	76	PHE	O-C-N	5.02	127.87	122.15
28	H	229	LEU	CA-C-N	5.02	129.16	120.58
28	H	229	LEU	C-N-CA	5.02	129.16	120.58
30	K	234	PHE	CA-CB-CG	-5.02	108.78	113.80
30	K	271	ILE	N-CA-C	-5.02	101.09	108.11
33	J	371	ARG	NE-CZ-NH2	-5.02	114.69	119.20
12	l	159	SER	CA-C-N	5.01	127.26	120.44
12	l	159	SER	C-N-CA	5.01	127.26	120.44
4	D	36	VAL	CA-C-O	-5.01	115.28	120.25
9	2	59	ASN	OD1-CG-ND2	5.01	127.61	122.60
13	6	141	ARG	N-CA-CB	5.01	117.72	109.95
17	T	38	ASN	N-CA-CB	5.01	117.49	110.12
20	Z	322	GLU	CA-C-N	5.01	130.67	122.65
20	Z	322	GLU	C-N-CA	5.01	130.67	122.65
23	P	316	LYS	CA-C-N	5.01	127.41	120.29
23	P	316	LYS	C-N-CA	5.01	127.41	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	Q	257	LYS	CA-C-N	5.01	127.00	120.28
24	Q	257	LYS	C-N-CA	5.01	127.00	120.28
30	K	120	VAL	O-C-N	5.01	128.61	123.04
33	J	249	GLU	N-CA-CB	5.01	120.49	111.36
20	Z	269	TYR	CB-CG-CD2	-5.01	113.28	120.80
20	Z	898	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
22	S	290	ASN	CA-C-N	5.01	127.00	120.28
22	S	290	ASN	C-N-CA	5.01	127.00	120.28
8	1	201	GLU	O-C-N	-5.01	116.68	122.09
14	7	133	MET	CG-SD-CE	-5.01	89.87	100.90
15	W	129	ALA	N-CA-C	5.01	116.82	111.36
16	V	118	LEU	N-CA-C	-5.01	100.18	108.75
27	O	49	PHE	CA-C-N	5.01	127.00	120.28
27	O	49	PHE	C-N-CA	5.01	127.00	120.28
27	O	391	ILE	O-C-N	-5.01	116.27	122.18
8	h	129	HIS	CE1-NE2-CD2	-5.01	103.99	109.00
11	k	12	SER	CA-CB-OG	5.01	121.12	111.10
6	F	225	TYR	N-CA-CB	5.01	118.79	110.52
7	G	120	VAL	N-CA-CB	5.01	119.22	110.65
15	W	114	VAL	CA-C-N	5.01	131.11	121.54
15	W	114	VAL	C-N-CA	5.01	131.11	121.54
18	X	124	LYS	CA-C-N	5.01	126.99	120.28
18	X	124	LYS	C-N-CA	5.01	126.99	120.28
21	N	781	ALA	N-CA-C	-5.01	106.59	113.30
23	P	405	PRO	CA-C-O	-5.01	115.63	121.34
27	O	64	ASN	OD1-CG-ND2	5.01	127.61	122.60
27	O	91	ASP	CA-CB-CG	-5.01	107.59	112.60
29	I	194	ILE	CA-C-O	-5.01	115.54	120.85
29	I	204	HIS	CG-CD2-NE2	5.01	112.21	107.20
32	M	169	ALA	CA-C-N	5.01	126.99	120.28
32	M	169	ALA	C-N-CA	5.01	126.99	120.28
6	f	131	GLY	N-CA-C	-5.01	102.29	111.25
1	A	211	ILE	CB-CA-C	5.01	118.90	112.14
11	4	30	ASP	N-CA-CB	-5.01	102.94	111.20
12	5	209	THR	CA-C-N	5.01	127.40	120.29
12	5	209	THR	C-N-CA	5.01	127.40	120.29
21	N	528	ARG	CA-C-N	5.01	131.10	121.54
21	N	528	ARG	C-N-CA	5.01	131.10	121.54
22	S	349	THR	CA-C-N	5.01	126.99	120.28
22	S	349	THR	C-N-CA	5.01	126.99	120.28
27	O	374	ASN	CA-C-N	5.01	126.99	120.28
27	O	374	ASN	C-N-CA	5.01	126.99	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	I	78	ASN	CA-C-N	5.01	126.95	120.44
29	I	78	ASN	C-N-CA	5.01	126.95	120.44
30	K	135	MET	N-CA-C	-5.01	101.46	109.07
3	c	22	VAL	O-C-N	5.01	126.99	121.83
8	h	102	LEU	N-CA-C	-5.01	101.59	109.50
3	C	173	GLN	CA-C-O	-5.01	115.11	120.42
7	G	61	PRO	CA-C-O	-5.01	115.47	121.48
15	W	123	ASP	CA-C-N	5.01	126.99	120.28
15	W	123	ASP	C-N-CA	5.01	126.99	120.28
16	V	38	LEU	CB-CA-C	-5.01	102.34	110.85
20	Z	714	ASP	CA-CB-CG	5.01	117.61	112.60
21	N	343	THR	CA-CB-OG1	5.01	117.11	109.60
27	O	208	ALA	CB-CA-C	-5.01	102.48	110.79
30	K	415	VAL	CA-C-O	-5.01	115.35	120.71
23	P	62	ILE	O-C-N	5.00	129.12	122.31
23	P	82	LEU	O-C-N	5.00	127.50	122.09
23	P	233	GLU	CA-C-O	-5.00	114.95	121.11
27	O	301	PHE	CA-C-N	5.00	128.51	120.30
27	O	301	PHE	C-N-CA	5.00	128.51	120.30
32	M	250	GLN	O-C-N	-5.00	116.81	122.12
20	Z	785	VAL	N-CA-C	-5.00	105.83	110.53
21	N	330	THR	CA-C-N	5.00	126.98	120.28
21	N	330	THR	C-N-CA	5.00	126.98	120.28
24	Q	74	LEU	CA-C-O	-5.00	115.12	120.42
32	M	128	PHE	N-CA-C	-5.00	100.74	108.90
4	D	193	LYS	CA-C-N	5.00	127.39	120.29
4	D	193	LYS	C-N-CA	5.00	127.39	120.29
7	G	129	VAL	O-C-N	-5.00	116.32	122.57
11	4	31	SER	CA-C-O	5.00	125.83	119.98
21	N	564	ASN	CA-C-N	5.00	127.39	120.29
21	N	564	ASN	C-N-CA	5.00	127.39	120.29
23	P	231	LYS	CA-C-N	5.00	129.22	122.07
23	P	231	LYS	C-N-CA	5.00	129.22	122.07
28	H	47	ALA	N-CA-C	5.00	116.73	111.28
33	J	182	PRO	CB-CA-C	-5.00	105.29	111.64
33	J	202	VAL	CA-C-N	5.00	127.23	120.38
33	J	202	VAL	C-N-CA	5.00	127.23	120.38

There are no chirality outliers.

All (376) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
8	1	144	TYR	Sidechain
8	1	146	TYR	Sidechain
8	1	198	TYR	Sidechain
8	1	202	TYR	Sidechain
8	1	34	TYR	Sidechain
9	2	101	ARG	Sidechain
9	2	153	TYR	Sidechain
9	2	217	ARG	Sidechain
9	2	232	TYR	Sidechain
9	2	236	ARG	Sidechain
9	2	37	PHE	Sidechain
9	2	98	TYR	Sidechain
10	3	154	TYR	Sidechain
10	3	69	TYR	Sidechain
10	3	74	TYR	Sidechain
11	4	121	TYR	Sidechain
11	4	135	TYR	Sidechain
11	4	139	TYR	Sidechain
11	4	8	ARG	Sidechain
11	4	98	TYR	Sidechain
12	5	129	PHE	Sidechain
12	5	165	TYR	Sidechain
12	5	189	TYR	Sidechain
12	5	230	TYR	Sidechain
12	5	253	TYR	Sidechain
12	5	282	PHE	Sidechain
13	6	139	TYR	Sidechain
13	6	229	ARG	Sidechain
13	6	41	TYR	Sidechain
13	6	47	TYR	Sidechain
14	7	128	TYR	Sidechain
14	7	161	ARG	Sidechain
14	7	162	TYR	Sidechain
14	7	170	TYR	Sidechain
14	7	215	ARG	Sidechain
14	7	254	PHE	Sidechain
14	7	49	TYR	Sidechain
1	A	106	TYR	Sidechain
1	A	108	TYR	Sidechain
1	A	11	GLY	Peptide
1	A	12	TYR	Peptide,Sidechain
1	A	162	TYR	Sidechain
1	A	233	PHE	Sidechain

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Mol	Chain	Res	Type	Group
2	B	23	TYR	Sidechain
2	B	7	PHE	Peptide
2	B	75	TYR	Sidechain
2	B	82	TYR	Sidechain
3	C	10	THR	Mainchain
3	C	102	TYR	Sidechain
3	C	114	ARG	Sidechain
3	C	122	TYR	Sidechain
3	C	129	ARG	Peptide,Sidechain
3	C	135	PHE	Sidechain
3	C	140	TYR	Sidechain
3	C	146	TYR	Sidechain
3	C	157	TYR	Sidechain
3	C	24	TYR	Sidechain
3	C	6	TYR	Peptide,Sidechain
3	C	67	TYR	Sidechain
3	C	98	TYR	Sidechain
4	D	111	ARG	Sidechain
4	D	120	TYR	Sidechain
4	D	156	TYR	Sidechain
4	D	166	ARG	Sidechain
4	D	179	TYR	Sidechain
4	D	29	ARG	Sidechain
4	D	3	GLY	Peptide
4	D	48	ARG	Sidechain
4	D	90	ARG	Sidechain
5	E	102	TYR	Sidechain
5	E	12	VAL	Mainchain
5	E	13	SER	Peptide
5	E	142	LEU	Peptide
5	E	165	TYR	Sidechain
5	E	22	PHE	Sidechain
5	E	86	ARG	Sidechain
6	F	126	ARG	Sidechain
6	F	18	ARG	Peptide
6	F	225	TYR	Sidechain
6	F	4	ASN	Peptide
7	G	123	HIS	Sidechain
7	G	15	PHE	Sidechain
7	G	230	PHE	Sidechain
7	G	78	TYR	Sidechain
7	G	8	TYR	Peptide

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Mol	Chain	Res	Type	Group
7	G	91	ARG	Sidechain
28	H	145	TYR	Sidechain
28	H	178	ARG	Sidechain
28	H	181	TYR	Sidechain
28	H	208	TYR	Sidechain
28	H	213	GLY	Peptide
28	H	234	ARG	Sidechain
28	H	344	ASP	Peptide
28	H	346	ARG	Peptide,Sidechain
28	H	357	ARG	Sidechain
28	H	366	LEU	Peptide
28	H	367	ARG	Sidechain
28	H	370	ARG	Peptide,Sidechain
28	H	385	ARG	Sidechain
28	H	400	ARG	Sidechain
28	H	409	ARG	Sidechain
28	H	435	ARG	Sidechain
28	H	462	ARG	Sidechain
28	H	88	ARG	Sidechain
29	I	178	THR	Peptide
29	I	208	TYR	Sidechain
29	I	245	LEU	Peptide,Mainchain
29	I	246	ARG	Peptide,Mainchain
29	I	247	ILE	Mainchain
29	I	262	ARG	Sidechain
29	I	292	TYR	Sidechain
29	I	339	ILE	Peptide
29	I	340	ARG	Peptide
29	I	342	GLY	Peptide
29	I	345	ASP	Peptide
29	I	407	ARG	Sidechain
29	I	412	THR	Peptide
29	I	436	TYR	Sidechain
29	I	54	ARG	Sidechain
29	I	85	PHE	Sidechain
33	J	147	TYR	Sidechain
33	J	200	ARG	Sidechain
33	J	211	ILE	Peptide
33	J	212	ARG	Peptide
33	J	23	PHE	Sidechain
33	J	231	ARG	Sidechain
33	J	261	SER	Peptide

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Mol	Chain	Res	Type	Group
33	J	306	ARG	Peptide
33	J	308	GLY	Peptide
33	J	309	ARG	Peptide
33	J	371	ARG	Sidechain
33	J	382	PHE	Sidechain
30	K	121	ARG	Sidechain
30	K	207	ARG	Sidechain
30	K	294	ARG	Sidechain
30	K	303	MET	Peptide
30	K	329	LEU	Peptide
30	K	332	GLY	Peptide
30	K	333	ARG	Peptide,Sidechain
30	K	350	ARG	Sidechain
30	K	400	TYR	Sidechain
30	K	402	ILE	Peptide
30	K	411	TYR	Sidechain
30	K	49	PHE	Sidechain
30	K	67	TYR	Sidechain
30	K	73	ARG	Sidechain
31	L	132	ARG	Sidechain
31	L	161	ARG	Sidechain
31	L	176	GLY	Peptide
31	L	186	LEU	Peptide
31	L	269	TYR	Sidechain
31	L	299	ARG	Sidechain
31	L	303	ARG	Sidechain
31	L	342	ARG	Sidechain
31	L	70	TYR	Sidechain
32	M	203	ARG	Sidechain
32	M	229	THR	Peptide
32	M	299	ARG	Sidechain
32	M	303	ARG	Sidechain
32	M	312	LEU	Peptide
32	M	329	ARG	Sidechain
32	M	345	ARG	Sidechain
32	M	357	ARG	Sidechain
32	M	42	ARG	Sidechain
32	M	45	ARG	Sidechain
21	N	14	ARG	Sidechain
21	N	161	TYR	Sidechain
21	N	188	TYR	Sidechain
21	N	208	ARG	Sidechain

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Mol	Chain	Res	Type	Group
21	N	23	TYR	Sidechain
21	N	298	TYR	Sidechain
21	N	299	TYR	Sidechain
21	N	412	TYR	Sidechain
21	N	50	TYR	Sidechain
21	N	515	ARG	Sidechain
21	N	528	ARG	Sidechain
21	N	549	TYR	Sidechain
21	N	553	PHE	Sidechain
21	N	597	ARG	Sidechain
21	N	599	TYR	Sidechain
21	N	739	PHE	Sidechain
21	N	75	TYR	Sidechain
21	N	809	ARG	Sidechain
21	N	873	ARG	Sidechain
21	N	896	PHE	Sidechain
21	N	908	ARG	Sidechain
27	O	147	ARG	Sidechain
27	O	15	ARG	Sidechain
27	O	166	ARG	Sidechain
27	O	189	TYR	Sidechain
27	O	286	PHE	Sidechain
27	O	310	PHE	Sidechain
27	O	330	ARG	Sidechain
27	O	39	PHE	Sidechain
27	O	48	PHE	Sidechain
27	O	81	TYR	Sidechain
27	O	98	TYR	Sidechain
23	P	109	SER	Peptide
23	P	115	ARG	Sidechain
23	P	13	TYR	Sidechain
23	P	168	TYR	Sidechain
23	P	201	ARG	Sidechain
23	P	213	TYR	Sidechain
23	P	240	TYR	Sidechain
23	P	266	TYR	Sidechain
23	P	282	HIS	Sidechain
23	P	318	TYR	Sidechain
23	P	348	HIS	Sidechain
23	P	357	TYR	Sidechain
24	Q	209	TYR	Sidechain
24	Q	27	TYR	Sidechain

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Mol	Chain	Res	Type	Group
24	Q	291	TYR	Sidechain
24	Q	306	TYR	Sidechain
24	Q	386	PHE	Sidechain
24	Q	387	TYR	Sidechain
24	Q	65	TYR	Sidechain
24	Q	84	TYR	Sidechain
25	R	206	ARG	Sidechain
25	R	213	TYR	Sidechain
25	R	297	TYR	Sidechain
25	R	301	TYR	Sidechain
25	R	338	TYR	Sidechain
25	R	422	ARG	Sidechain
25	R	62	TYR	Sidechain
22	S	114	TYR	Sidechain
22	S	119	TYR	Sidechain
22	S	171	TYR	Sidechain
22	S	188	TYR	Sidechain
22	S	239	ARG	Sidechain
22	S	253	PHE	Sidechain
22	S	286	TYR	Sidechain
22	S	332	PHE	Sidechain
22	S	345	TYR	Sidechain
22	S	360	PHE	Sidechain
22	S	367	TYR	Sidechain
22	S	425	ARG	Sidechain
22	S	438	HIS	Sidechain
22	S	442	PHE	Sidechain
22	S	472	HIS	Sidechain
22	S	52	TYR	Sidechain
17	T	128	TYR	Sidechain
17	T	266	TYR	Sidechain
17	T	60	ARG	Sidechain
17	T	82	PHE	Sidechain
17	T	89	TYR	Sidechain
26	U	137	TYR	Sidechain
26	U	47	ARG	Sidechain
26	U	72	TYR	Sidechain
16	V	108	TYR	Sidechain
16	V	129	PHE	Sidechain
16	V	157	ARG	Sidechain
16	V	20	ARG	Sidechain
16	V	228	TYR	Sidechain

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Mol	Chain	Res	Type	Group
16	V	269	ARG	Sidechain
16	V	270	TYR	Sidechain
16	V	28	TYR	Sidechain
15	W	144	PHE	Sidechain
15	W	15	TYR	Sidechain
15	W	157	PHE	Sidechain
15	W	182	TYR	Sidechain
18	X	10	PHE	Sidechain
18	X	22	ARG	Sidechain
18	X	27	ILE	Peptide
18	X	51	ARG	Sidechain
18	X	59	ARG	Sidechain
18	X	98	PHE	Sidechain
18	X	99	PHE	Sidechain
19	Y	38	PHE	Sidechain
19	Y	84	TYR	Sidechain
20	Z	132	HIS	Sidechain
20	Z	210	TYR	Sidechain
20	Z	269	TYR	Sidechain
20	Z	312	TYR	Sidechain
20	Z	323	TYR	Sidechain
20	Z	385	PHE	Sidechain
20	Z	394	TYR	Sidechain
20	Z	426	TYR	Sidechain
20	Z	477	TYR	Sidechain
20	Z	773	ARG	Sidechain
20	Z	774	ARG	Sidechain
20	Z	849	ARG	Sidechain
1	a	106	TYR	Sidechain
1	a	11	GLY	Peptide
1	a	12	TYR	Peptide
1	a	131	ARG	Sidechain
1	a	96	ARG	Sidechain
2	b	145	PHE	Sidechain
2	b	224	TYR	Sidechain
2	b	23	TYR	Sidechain
2	b	234	ARG	Sidechain
2	b	246	ARG	Sidechain
2	b	5	TYR	Peptide
2	b	7	PHE	Peptide
2	b	97	TYR	Sidechain
3	c	102	TYR	Sidechain

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Mol	Chain	Res	Type	Group
3	c	122	TYR	Sidechain
3	c	131	PHE	Sidechain
3	c	135	PHE	Sidechain
3	c	143	ARG	Sidechain
3	c	157	TYR	Sidechain
3	c	6	TYR	Sidechain
4	d	108	TYR	Sidechain
4	d	120	TYR	Sidechain
4	d	179	TYR	Sidechain
4	d	22	TYR	Sidechain
4	d	232	TYR	Sidechain
4	d	3	GLY	Peptide
4	d	90	ARG	Sidechain
4	d	97	ARG	Sidechain
5	e	13	SER	Peptide
5	e	132	ARG	Sidechain
5	e	147	HIS	Sidechain
6	f	123	TYR	Sidechain
6	f	137	TYR	Sidechain
6	f	18	ARG	Peptide
6	f	233	TYR	Sidechain
6	f	4	ASN	Peptide
6	f	59	TYR	Sidechain
6	f	89	ARG	Sidechain
6	f	94	TYR	Sidechain
7	g	103	TYR	Sidechain
7	g	126	TYR	Sidechain
7	g	160	TYR	Sidechain
7	g	169	ARG	Sidechain
7	g	26	TYR	Sidechain
7	g	72	ARG	Sidechain
7	g	8	TYR	Peptide
8	h	198	TYR	Sidechain
8	h	45	ARG	Sidechain
8	h	70	TYR	Sidechain
8	h	79	TYR	Sidechain
8	h	96	TYR	Sidechain
9	i	104	ARG	Sidechain
9	i	117	PHE	Sidechain
9	i	122	HIS	Peptide
9	i	152	TYR	Sidechain
9	i	215	TYR	Sidechain

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Mol	Chain	Res	Type	Group
9	i	37	PHE	Sidechain
10	j	45	HIS	Sidechain
10	j	46	TYR	Sidechain
10	j	68	ARG	Sidechain
11	k	171	ARG	Sidechain
11	k	190	ARG	Sidechain
11	k	67	TYR	Sidechain
11	k	96	ARG	Sidechain
12	l	165	TYR	Sidechain
12	l	179	TYR	Sidechain
12	l	188	TYR	Sidechain
12	l	202	PHE	Sidechain
12	l	245	TYR	Sidechain
12	l	253	TYR	Sidechain
13	m	106	TYR	Sidechain
13	m	113	TYR	Sidechain
13	m	114	TYR	Sidechain
13	m	13	TYR	Sidechain
13	m	139	TYR	Sidechain
13	m	28	PHE	Sidechain
13	m	36	ARG	Sidechain
13	m	41	TYR	Sidechain
13	m	75	ARG	Sidechain
14	n	124	TYR	Sidechain
14	n	126	PHE	Sidechain
14	n	162	TYR	Sidechain
14	n	219	TYR	Sidechain
14	n	228	PHE	Sidechain
14	n	261	TYR	Sidechain
14	n	69	PHE	Sidechain
14	n	98	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	A	1924	0	1916	6	0
1	a	1924	0	1916	5	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	B	1892	0	1906	5	0
2	b	1892	0	1906	8	0
3	C	1884	0	1880	7	0
3	c	1884	0	1880	6	0
4	D	1986	0	1996	30	0
4	d	1986	0	1996	7	0
5	E	1889	0	1856	8	0
5	e	1889	0	1856	8	0
6	F	1784	0	1788	0	0
6	f	1784	0	1788	6	0
7	G	1905	0	1897	6	0
7	g	1905	0	1897	5	0
8	1	1512	0	1478	6	0
8	h	1512	0	1478	4	0
9	2	1720	0	1716	11	0
9	i	1720	0	1716	7	0
10	3	1581	0	1571	1	0
10	j	1581	0	1571	7	0
11	4	1562	0	1569	7	0
11	k	1562	0	1569	3	0
12	5	1644	0	1592	4	0
12	l	1644	0	1592	3	0
13	6	1757	0	1708	3	0
13	m	1757	0	1708	3	0
14	7	1790	0	1790	1	0
14	n	1816	0	1818	4	0
15	W	1535	0	1542	4	0
16	V	2274	0	2273	7	0
17	T	2193	0	2161	4	0
18	X	1033	0	1017	4	0
19	Y	731	0	675	3	0
20	Z	7005	0	6924	520	0
21	N	7158	0	7219	56	0
22	S	3895	0	3938	14	0
23	P	3609	0	3694	8	0
24	Q	3499	0	3524	10	0
25	R	3259	0	3263	7	0
26	U	2427	0	2462	5	0
27	O	3186	0	3213	6	0
28	H	3313	0	3320	58	0
29	I	3022	0	3085	330	0
30	K	3041	0	3104	6	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	L	3083	0	3156	8	0
32	M	3285	0	3322	4	0
33	J	3156	0	3293	9	0
34	H	31	0	12	0	0
34	I	31	0	12	0	0
34	J	31	0	12	0	0
34	M	31	0	12	0	0
35	H	1	0	0	0	0
35	I	1	0	0	0	0
35	J	1	0	0	0	0
35	K	1	0	0	0	0
35	L	1	0	0	0	0
35	M	1	0	0	0	0
36	K	27	0	11	0	0
36	L	27	0	12	0	0
37	H	3	0	0	0	0
37	I	3	0	0	0	0
37	J	3	0	0	0	0
37	K	4	0	0	0	0
37	L	4	0	0	0	0
37	M	3	0	0	0	0
All	All	110594	0	110610	777	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 4.

All (777) 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)
20:Z:251:ALA:HA	29:I:58:LYS:CB	1.25	1.63
20:Z:30:LYS:CG	20:Z:37:GLN:HB3	1.22	1.61
20:Z:734:ASP:HB2	29:I:66:LYS:CB	1.28	1.61
20:Z:149:TRP:HE1	29:I:409:MET:CE	1.17	1.57
20:Z:913:ILE:CD1	29:I:182:SER:CB	1.83	1.56
20:Z:809:MET:SD	29:I:205:PRO:HG3	1.44	1.55
20:Z:154:ILE:CG1	28:H:43:ALA:HB3	1.39	1.52
20:Z:728:LYS:N	29:I:62:MET:CG	1.69	1.49
20:Z:254:PRO:HG2	29:I:61:ARG:CG	1.40	1.48
20:Z:735:GLU:N	29:I:66:LYS:CG	1.77	1.47
20:Z:913:ILE:HD12	29:I:182:SER:CB	1.39	1.45
20:Z:748:LEU:C	29:I:84:PRO:HG2	1.37	1.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:364:ASN:O	28:H:436:LYS:CE	1.63	1.43
20:Z:24:THR:HB	20:Z:25:PRO:CD	1.36	1.41
20:Z:738:TYR:CZ	29:I:69:LEU:CB	2.06	1.39
20:Z:748:LEU:O	29:I:84:PRO:CB	1.67	1.39
20:Z:730:ALA:CB	29:I:63:GLU:HB3	1.53	1.39
20:Z:749:GLY:HA2	29:I:84:PRO:CG	1.52	1.38
20:Z:149:TRP:NE1	29:I:409:MET:HE1	1.11	1.38
20:Z:251:ALA:CA	29:I:58:LYS:HB3	1.53	1.36
20:Z:30:LYS:CG	20:Z:37:GLN:CB	2.03	1.36
20:Z:913:ILE:CD1	29:I:182:SER:HB2	0.89	1.35
20:Z:632:GLU:O	21:N:792:SER:HB2	1.26	1.34
20:Z:364:ASN:HB3	28:H:436:LYS:NZ	1.44	1.32
20:Z:85:VAL:CG1	20:Z:86:PRO:HD3	1.60	1.31
20:Z:741:LEU:HD13	29:I:74:GLU:CA	1.60	1.31
20:Z:910:PRO:CD	29:I:181:TYR:OH	1.78	1.30
20:Z:806:GLU:HA	29:I:203:THR:O	1.27	1.30
20:Z:734:ASP:CB	29:I:66:LYS:HB3	1.60	1.29
20:Z:745:LEU:HD11	29:I:80:GLU:OE1	1.31	1.29
4:D:251:LYS:O	20:Z:953:THR:HG21	1.13	1.28
20:Z:734:ASP:HB3	29:I:66:LYS:C	1.59	1.28
20:Z:255:LEU:O	21:N:816:LYS:CG	1.82	1.27
20:Z:632:GLU:O	21:N:792:SER:CB	1.80	1.27
20:Z:809:MET:SD	29:I:205:PRO:CG	2.22	1.27
20:Z:30:LYS:HG3	20:Z:37:GLN:CB	1.63	1.26
20:Z:85:VAL:HG12	20:Z:86:PRO:CD	1.67	1.25
20:Z:738:TYR:O	29:I:73:GLU:OE1	1.53	1.25
20:Z:745:LEU:CD1	29:I:80:GLU:OE1	1.83	1.24
20:Z:30:LYS:CD	20:Z:37:GLN:HB3	1.64	1.24
20:Z:745:LEU:CD1	29:I:80:GLU:HB2	1.65	1.24
20:Z:741:LEU:HD13	29:I:74:GLU:N	1.50	1.23
20:Z:748:LEU:O	29:I:84:PRO:CG	1.87	1.23
20:Z:748:LEU:HD13	29:I:81:ILE:C	1.19	1.22
20:Z:85:VAL:CG1	20:Z:86:PRO:CD	2.18	1.22
20:Z:735:GLU:N	29:I:66:LYS:HG2	1.37	1.22
20:Z:254:PRO:CG	29:I:61:ARG:HG2	1.69	1.22
20:Z:741:LEU:CD1	29:I:74:GLU:HB2	1.68	1.22
20:Z:918:ASP:H	29:I:58:LYS:NZ	0.99	1.22
20:Z:85:VAL:CB	20:Z:86:PRO:HD2	1.69	1.20
20:Z:727:GLU:C	29:I:62:MET:HE2	1.65	1.20
20:Z:806:GLU:HG3	29:I:203:THR:CA	1.71	1.20
20:Z:144:SER:O	29:I:409:MET:SD	1.97	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:734:ASP:C	29:I:66:LYS:HG3	1.66	1.19
20:Z:730:ALA:HB1	29:I:63:GLU:CB	1.74	1.18
20:Z:738:TYR:CZ	29:I:69:LEU:HB2	1.73	1.18
20:Z:806:GLU:CA	29:I:203:THR:O	1.91	1.18
20:Z:247:GLN:NE2	29:I:55:CYS:HB2	1.60	1.17
20:Z:364:ASN:C	28:H:436:LYS:HE2	1.69	1.17
20:Z:251:ALA:CB	29:I:54:ARG:O	1.91	1.17
20:Z:154:ILE:CD1	28:H:43:ALA:CA	2.22	1.17
20:Z:249:MET:HA	29:I:54:ARG:NH2	1.55	1.17
20:Z:632:GLU:C	21:N:792:SER:HB2	1.68	1.17
20:Z:805:LEU:O	29:I:205:PRO:CD	1.94	1.16
20:Z:805:LEU:O	29:I:205:PRO:HD2	1.01	1.16
20:Z:929:VAL:HB	28:H:434:ARG:NH2	1.60	1.16
20:Z:255:LEU:CG	29:I:61:ARG:HH12	1.58	1.16
20:Z:749:GLY:CA	29:I:84:PRO:CG	2.24	1.16
20:Z:929:VAL:CB	28:H:434:ARG:HH21	1.59	1.15
20:Z:247:GLN:HE21	29:I:55:CYS:CB	1.58	1.15
20:Z:251:ALA:CA	29:I:58:LYS:CB	2.12	1.15
20:Z:749:GLY:N	29:I:84:PRO:HG2	1.60	1.15
20:Z:85:VAL:CB	20:Z:86:PRO:CD	2.22	1.15
20:Z:745:LEU:CD1	29:I:80:GLU:CB	2.24	1.15
20:Z:745:LEU:HD13	29:I:80:GLU:HB2	1.29	1.15
20:Z:251:ALA:CB	29:I:58:LYS:HB3	1.78	1.14
20:Z:748:LEU:C	29:I:84:PRO:CG	2.21	1.14
20:Z:248:TYR:CD1	29:I:54:ARG:HD3	1.63	1.13
20:Z:255:LEU:CG	29:I:61:ARG:NH1	2.09	1.13
20:Z:745:LEU:HD11	29:I:80:GLU:CD	1.72	1.13
20:Z:913:ILE:HD11	29:I:182:SER:HB2	1.18	1.13
20:Z:247:GLN:O	29:I:54:ARG:HG2	1.47	1.13
20:Z:206:ASP:HA	29:I:53:THR:HG21	1.14	1.13
20:Z:85:VAL:HG12	20:Z:86:PRO:HD3	1.14	1.13
20:Z:364:ASN:CB	28:H:436:LYS:HZ1	1.61	1.12
20:Z:734:ASP:CB	29:I:66:LYS:CB	2.23	1.12
20:Z:738:TYR:CE2	29:I:69:LEU:HB3	1.84	1.12
20:Z:255:LEU:HG	29:I:61:ARG:NH1	1.14	1.12
20:Z:85:VAL:HB	20:Z:86:PRO:CD	1.77	1.11
20:Z:24:THR:CB	20:Z:25:PRO:CD	2.22	1.11
20:Z:249:MET:CA	29:I:54:ARG:HH21	1.44	1.10
20:Z:30:LYS:HG2	20:Z:37:GLN:HB3	1.23	1.10
20:Z:738:TYR:CE2	29:I:69:LEU:CB	2.33	1.10
4:D:251:LYS:O	20:Z:953:THR:CG2	1.99	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:30:LYS:HG3	20:Z:37:GLN:CG	1.82	1.10
20:Z:24:THR:HB	20:Z:25:PRO:HD2	1.20	1.08
20:Z:24:THR:HB	20:Z:25:PRO:HD3	1.12	1.08
20:Z:364:ASN:CB	28:H:436:LYS:NZ	2.14	1.08
20:Z:748:LEU:CD1	29:I:81:ILE:C	2.13	1.08
20:Z:735:GLU:N	29:I:66:LYS:HG3	1.61	1.08
20:Z:255:LEU:HD21	21:N:813:ARG:HA	1.17	1.08
20:Z:255:LEU:HD23	21:N:813:ARG:HD2	1.35	1.08
20:Z:806:GLU:HG3	29:I:203:THR:HA	1.18	1.08
20:Z:918:ASP:N	29:I:58:LYS:NZ	1.78	1.07
20:Z:206:ASP:HA	29:I:53:THR:CG2	1.85	1.07
20:Z:749:GLY:CA	29:I:84:PRO:HG3	1.83	1.07
20:Z:30:LYS:HG3	20:Z:37:GLN:CD	1.78	1.07
20:Z:734:ASP:CB	29:I:66:LYS:C	2.27	1.07
20:Z:913:ILE:HD13	29:I:182:SER:HB2	1.13	1.07
20:Z:741:LEU:HD11	29:I:74:GLU:HB2	1.10	1.07
20:Z:85:VAL:O	20:Z:88:PRO:HD2	1.55	1.07
20:Z:251:ALA:HA	29:I:58:LYS:HB2	1.15	1.06
20:Z:734:ASP:HB2	29:I:66:LYS:CG	1.84	1.06
20:Z:247:GLN:HE21	29:I:55:CYS:HB2	0.98	1.06
20:Z:149:TRP:NE1	29:I:409:MET:CE	1.90	1.06
20:Z:206:ASP:CA	29:I:53:THR:HG21	1.86	1.04
20:Z:738:TYR:HH	29:I:69:LEU:HB2	1.16	1.04
4:D:254:HIS:HB2	20:Z:953:THR:OG1	1.58	1.04
20:Z:749:GLY:CA	29:I:84:PRO:HG2	1.86	1.03
20:Z:282:ILE:HG13	20:Z:318:LYS:HD2	1.38	1.03
20:Z:251:ALA:HB2	29:I:54:ARG:O	1.53	1.03
20:Z:282:ILE:HD11	20:Z:297:VAL:CG1	1.89	1.03
20:Z:809:MET:CG	29:I:205:PRO:HG3	1.88	1.03
20:Z:24:THR:CB	20:Z:25:PRO:HD3	1.84	1.03
20:Z:251:ALA:HA	29:I:58:LYS:HB3	1.06	1.03
20:Z:910:PRO:HD2	29:I:181:TYR:OH	0.85	1.02
20:Z:734:ASP:HB3	29:I:67:ASP:N	1.74	1.01
20:Z:738:TYR:CZ	29:I:69:LEU:HB3	1.92	1.01
20:Z:255:LEU:HD21	21:N:813:ARG:CA	1.90	1.01
20:Z:255:LEU:CD2	21:N:813:ARG:HA	1.89	1.01
20:Z:738:TYR:CZ	29:I:69:LEU:CA	2.36	1.01
20:Z:918:ASP:OD1	29:I:59:LEU:HG	1.62	1.00
20:Z:154:ILE:HD11	28:H:43:ALA:CA	1.85	1.00
20:Z:734:ASP:CB	29:I:67:ASP:N	2.26	0.99
20:Z:749:GLY:HA2	29:I:84:PRO:HG3	1.00	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:364:ASN:O	28:H:436:LYS:HE2	0.82	0.99
20:Z:249:MET:HA	29:I:54:ARG:HH21	1.09	0.98
20:Z:741:LEU:CD1	29:I:74:GLU:CB	2.41	0.98
20:Z:748:LEU:CG	29:I:81:ILE:O	2.10	0.98
20:Z:738:TYR:OH	29:I:69:LEU:HB2	1.64	0.98
20:Z:282:ILE:CD1	20:Z:297:VAL:HB	1.95	0.97
20:Z:154:ILE:HD13	28:H:43:ALA:CA	1.87	0.97
20:Z:364:ASN:HB3	28:H:436:LYS:HZ1	0.81	0.97
20:Z:727:GLU:O	29:I:62:MET:HE2	1.63	0.97
20:Z:748:LEU:HD22	29:I:81:ILE:O	1.65	0.97
20:Z:748:LEU:HD13	29:I:81:ILE:O	1.61	0.96
20:Z:255:LEU:HD22	21:N:813:ARG:O	1.64	0.96
20:Z:735:GLU:H	29:I:66:LYS:HG2	0.85	0.96
20:Z:806:GLU:CB	29:I:203:THR:O	2.14	0.96
20:Z:748:LEU:O	29:I:84:PRO:HB3	1.63	0.96
20:Z:364:ASN:HA	28:H:436:LYS:HZ3	1.31	0.96
20:Z:745:LEU:HB2	29:I:77:SER:CB	1.96	0.95
20:Z:727:GLU:C	29:I:62:MET:CE	2.39	0.95
20:Z:748:LEU:O	29:I:84:PRO:HB2	1.65	0.95
20:Z:154:ILE:CG1	28:H:43:ALA:CB	2.17	0.95
20:Z:728:LYS:N	29:I:62:MET:HG3	1.14	0.95
20:Z:254:PRO:CG	29:I:61:ARG:CG	2.35	0.95
20:Z:745:LEU:HB2	29:I:77:SER:HB3	1.44	0.94
20:Z:248:TYR:HD1	29:I:54:ARG:CD	1.78	0.94
20:Z:624:LEU:CD2	29:I:80:GLU:OE2	2.15	0.94
20:Z:364:ASN:CA	28:H:436:LYS:NZ	2.29	0.94
20:Z:85:VAL:HB	20:Z:86:PRO:HD2	0.95	0.94
20:Z:254:PRO:HB2	29:I:61:ARG:HH11	1.32	0.93
20:Z:929:VAL:HB	28:H:434:ARG:HH21	0.78	0.93
20:Z:929:VAL:CB	28:H:434:ARG:NH2	2.25	0.93
20:Z:910:PRO:HD2	29:I:181:TYR:HH	1.16	0.92
20:Z:49:LEU:HD21	20:Z:93:ARG:HG2	1.49	0.92
20:Z:918:ASP:N	29:I:58:LYS:HZ3	1.49	0.92
20:Z:738:TYR:CE2	29:I:69:LEU:HB2	2.00	0.92
20:Z:929:VAL:HG12	28:H:434:ARG:HH22	1.36	0.91
20:Z:254:PRO:HG2	29:I:61:ARG:HG3	1.51	0.91
20:Z:741:LEU:HD13	29:I:74:GLU:CB	2.01	0.91
20:Z:748:LEU:O	29:I:84:PRO:HG2	1.56	0.91
20:Z:613:ASP:OD2	21:N:813:ARG:HG2	1.71	0.91
20:Z:282:ILE:CD1	20:Z:297:VAL:CG1	2.49	0.90
20:Z:635:ALA:H	21:N:792:SER:HB3	1.35	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:741:LEU:CD1	29:I:74:GLU:N	2.33	0.90
20:Z:255:LEU:CD2	21:N:813:ARG:O	2.19	0.90
20:Z:85:VAL:HG12	20:Z:86:PRO:N	1.84	0.90
20:Z:364:ASN:CA	28:H:436:LYS:HZ3	1.85	0.90
20:Z:734:ASP:C	29:I:66:LYS:CG	2.32	0.90
20:Z:738:TYR:CE2	29:I:66:LYS:HA	2.07	0.90
20:Z:748:LEU:CD2	29:I:85:PHE:CE1	2.55	0.89
20:Z:741:LEU:HD12	29:I:70:LEU:O	1.71	0.89
20:Z:748:LEU:CD2	29:I:81:ILE:O	2.20	0.89
20:Z:929:VAL:CG1	28:H:434:ARG:NH2	2.35	0.89
20:Z:255:LEU:O	21:N:816:LYS:HG3	0.91	0.89
20:Z:249:MET:CA	29:I:54:ARG:NH2	2.17	0.88
20:Z:913:ILE:HD11	29:I:181:TYR:O	1.73	0.88
20:Z:728:LYS:HD2	29:I:63:GLU:N	1.41	0.88
20:Z:728:LYS:N	29:I:62:MET:HG2	1.75	0.87
20:Z:251:ALA:HA	29:I:58:LYS:CA	2.05	0.87
20:Z:248:TYR:HD1	29:I:54:ARG:HD3	1.12	0.87
20:Z:728:LYS:HD2	29:I:63:GLU:H	1.31	0.87
20:Z:282:ILE:CD1	20:Z:297:VAL:HG11	2.05	0.87
20:Z:728:LYS:HB3	29:I:58:LYS:O	1.75	0.87
4:D:254:HIS:CB	20:Z:953:THR:OG1	2.22	0.86
20:Z:282:ILE:CD1	20:Z:297:VAL:CB	2.54	0.86
20:Z:748:LEU:HD21	29:I:85:PHE:HE1	1.41	0.86
20:Z:913:ILE:HD12	29:I:182:SER:OG	1.75	0.86
20:Z:748:LEU:CD1	29:I:81:ILE:O	2.18	0.86
20:Z:806:GLU:CG	29:I:203:THR:HA	2.04	0.85
20:Z:918:ASP:OD1	29:I:59:LEU:CG	2.24	0.85
20:Z:918:ASP:N	29:I:58:LYS:HZ1	1.71	0.85
20:Z:154:ILE:CD1	28:H:43:ALA:CB	0.85	0.84
20:Z:260:GLU:CD	21:N:820:GLU:HG2	2.01	0.84
4:D:251:LYS:C	20:Z:970:TYR:OH	2.15	0.84
20:Z:748:LEU:HD21	29:I:85:PHE:CE1	2.11	0.84
20:Z:745:LEU:HD12	29:I:80:GLU:HB2	1.58	0.84
20:Z:728:LYS:O	29:I:62:MET:HE3	1.78	0.83
20:Z:913:ILE:HD12	29:I:182:SER:HB2	0.91	0.83
20:Z:738:TYR:OH	29:I:69:LEU:N	2.11	0.83
20:Z:741:LEU:CD1	29:I:74:GLU:CA	2.51	0.82
20:Z:145:ASP:CB	29:I:409:MET:N	2.36	0.82
20:Z:251:ALA:HB2	29:I:58:LYS:HB3	1.61	0.82
20:Z:843:ASP:HA	29:I:206:GLU:HG3	1.61	0.82
20:Z:843:ASP:OD2	29:I:210:GLU:HG3	1.79	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:255:LEU:CD2	21:N:813:ARG:CA	2.54	0.82
20:Z:741:LEU:CD1	29:I:70:LEU:O	2.28	0.81
20:Z:806:GLU:HG3	29:I:203:THR:C	2.05	0.81
4:D:254:HIS:HB3	20:Z:968:ASP:OD1	1.81	0.81
20:Z:154:ILE:CD1	28:H:43:ALA:HB3	0.61	0.81
20:Z:806:GLU:OE1	29:I:203:THR:HB	1.79	0.81
20:Z:734:ASP:HB3	29:I:66:LYS:O	1.80	0.81
20:Z:30:LYS:HD3	20:Z:37:GLN:HB3	1.62	0.80
20:Z:809:MET:SD	29:I:205:PRO:CD	2.69	0.80
20:Z:748:LEU:CD2	29:I:85:PHE:HE1	1.94	0.80
20:Z:727:GLU:C	29:I:62:MET:HG3	2.07	0.80
20:Z:843:ASP:HA	29:I:206:GLU:CG	2.11	0.80
20:Z:745:LEU:HD12	29:I:80:GLU:CB	2.10	0.80
20:Z:918:ASP:OD1	29:I:59:LEU:CD2	2.30	0.80
20:Z:748:LEU:CD2	29:I:85:PHE:CD1	2.65	0.79
20:Z:624:LEU:HD23	29:I:80:GLU:OE2	1.80	0.79
20:Z:730:ALA:CB	29:I:63:GLU:CB	2.47	0.79
20:Z:748:LEU:CB	29:I:81:ILE:O	2.30	0.79
20:Z:154:ILE:HD12	28:H:43:ALA:HB2	0.80	0.79
20:Z:282:ILE:HD13	20:Z:297:VAL:CB	2.12	0.79
20:Z:30:LYS:HG2	20:Z:37:GLN:CB	1.91	0.78
20:Z:730:ALA:HB1	29:I:63:GLU:HB3	0.79	0.78
20:Z:734:ASP:CB	29:I:66:LYS:CG	2.57	0.78
20:Z:30:LYS:CD	20:Z:37:GLN:CB	2.53	0.78
20:Z:145:ASP:HB2	29:I:409:MET:N	1.97	0.78
20:Z:248:TYR:CD1	29:I:54:ARG:CD	2.45	0.78
20:Z:254:PRO:HG2	29:I:61:ARG:HG2	0.80	0.78
20:Z:734:ASP:CG	29:I:67:ASP:N	2.32	0.78
20:Z:748:LEU:HB3	29:I:81:ILE:O	1.84	0.77
20:Z:632:GLU:CA	21:N:792:SER:HB2	2.13	0.77
20:Z:154:ILE:HD11	28:H:43:ALA:CB	1.28	0.77
20:Z:154:ILE:HG12	28:H:43:ALA:HB3	1.62	0.77
20:Z:154:ILE:HD11	28:H:43:ALA:N	1.99	0.76
20:Z:734:ASP:HB2	29:I:66:LYS:HB3	0.78	0.76
20:Z:741:LEU:HD13	29:I:74:GLU:HA	1.66	0.76
20:Z:728:LYS:O	29:I:62:MET:CE	2.33	0.76
20:Z:149:TRP:CD1	29:I:409:MET:HE1	2.17	0.76
20:Z:745:LEU:CD2	29:I:80:GLU:OE1	2.34	0.76
20:Z:24:THR:CG2	20:Z:25:PRO:HD3	2.16	0.75
20:Z:213:LYS:HG3	21:N:819:LYS:NZ	2.01	0.75
4:D:254:HIS:CB	20:Z:968:ASP:OD1	2.35	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:748:LEU:HD22	29:I:85:PHE:CD1	2.22	0.75
20:Z:724:GLU:HA	29:I:62:MET:HE1	1.68	0.74
20:Z:260:GLU:OE2	21:N:820:GLU:HG2	1.87	0.74
20:Z:251:ALA:HB1	29:I:54:ARG:O	1.87	0.74
20:Z:364:ASN:CB	28:H:436:LYS:HZ3	1.96	0.74
20:Z:929:VAL:CG1	28:H:434:ARG:HH22	2.00	0.74
20:Z:734:ASP:HB2	29:I:66:LYS:CA	2.16	0.74
20:Z:364:ASN:C	28:H:436:LYS:CE	2.44	0.74
20:Z:738:TYR:HE2	29:I:66:LYS:HA	1.52	0.73
20:Z:918:ASP:H	29:I:58:LYS:HZ3	0.74	0.73
20:Z:745:LEU:HD13	29:I:77:SER:HA	1.70	0.73
20:Z:843:ASP:HB3	29:I:206:GLU:OE2	1.88	0.73
20:Z:748:LEU:HD22	29:I:85:PHE:CE1	2.23	0.73
20:Z:745:LEU:HD13	29:I:80:GLU:OE1	1.85	0.73
20:Z:809:MET:SD	29:I:205:PRO:HD3	2.29	0.73
20:Z:728:LYS:N	29:I:62:MET:SD	2.60	0.73
20:Z:635:ALA:N	21:N:792:SER:HB3	2.03	0.73
20:Z:745:LEU:CD1	29:I:80:GLU:HB3	2.19	0.73
4:D:147:LEU:HG	4:D:149:GLN:HE22	1.54	0.72
20:Z:282:ILE:HD11	20:Z:297:VAL:CB	2.18	0.72
20:Z:735:GLU:CA	29:I:66:LYS:CG	2.59	0.72
20:Z:255:LEU:CD2	21:N:813:ARG:C	2.61	0.72
20:Z:741:LEU:HD11	29:I:74:GLU:CB	2.03	0.72
20:Z:168:GLN:CD	21:N:819:LYS:HB3	2.14	0.72
4:D:250:LYS:HD3	20:Z:951:GLN:OE1	1.89	0.72
20:Z:247:GLN:C	29:I:54:ARG:HG2	2.15	0.71
4:D:254:HIS:O	20:Z:953:THR:OG1	2.08	0.71
20:Z:745:LEU:HD11	29:I:80:GLU:CB	2.18	0.71
20:Z:282:ILE:HD13	20:Z:297:VAL:HB	1.69	0.71
20:Z:282:ILE:HD11	20:Z:297:VAL:HB	1.73	0.71
19:Y:1:MET:H2	22:S:336:SER:HA	1.56	0.71
20:Z:843:ASP:OD2	29:I:210:GLU:CG	2.39	0.71
24:Q:8:LEU:HD22	24:Q:60:GLU:HB2	1.73	0.71
20:Z:809:MET:HG2	29:I:205:PRO:HG3	1.71	0.70
20:Z:154:ILE:HD12	28:H:43:ALA:CB	1.45	0.70
20:Z:49:LEU:CD2	20:Z:93:ARG:HG2	2.22	0.69
21:N:606:VAL:HG12	21:N:609:LEU:HD12	1.74	0.69
20:Z:929:VAL:HG12	28:H:434:ARG:NH2	2.00	0.69
20:Z:168:GLN:HB2	21:N:819:LYS:HG2	1.73	0.69
20:Z:30:LYS:HD3	20:Z:37:GLN:CB	2.21	0.69
20:Z:154:ILE:HD13	28:H:43:ALA:CB	0.41	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:254:HIS:H	20:Z:970:TYR:HE1	1.41	0.68
20:Z:728:LYS:C	29:I:62:MET:HG3	1.68	0.68
20:Z:145:ASP:HB2	29:I:409:MET:H	1.59	0.68
20:Z:247:GLN:O	29:I:54:ARG:CG	2.36	0.68
20:Z:254:PRO:CB	29:I:61:ARG:HH11	2.06	0.68
20:Z:85:VAL:HG11	20:Z:86:PRO:HD3	1.69	0.68
20:Z:745:LEU:HD21	29:I:80:GLU:OE1	1.93	0.68
4:D:251:LYS:C	20:Z:953:THR:HG21	2.13	0.67
20:Z:93:ARG:HB3	20:Z:94:PRO:CD	2.24	0.67
20:Z:735:GLU:N	29:I:66:LYS:CD	2.50	0.67
20:Z:806:GLU:HG3	29:I:203:THR:CB	2.24	0.66
20:Z:734:ASP:CG	29:I:66:LYS:HB3	2.19	0.66
20:Z:748:LEU:HB2	29:I:81:ILE:HA	1.78	0.66
20:Z:910:PRO:CD	29:I:181:TYR:HH	1.83	0.66
20:Z:933:VAL:CG1	28:H:434:ARG:HD2	2.26	0.66
20:Z:364:ASN:O	28:H:436:LYS:HE3	1.87	0.66
20:Z:149:TRP:CD1	29:I:409:MET:CE	2.75	0.66
20:Z:913:ILE:HD13	29:I:182:SER:CB	1.88	0.65
20:Z:728:LYS:O	29:I:62:MET:HG3	1.95	0.65
20:Z:282:ILE:HD11	20:Z:297:VAL:HG12	1.77	0.65
20:Z:364:ASN:HA	28:H:436:LYS:NZ	1.99	0.65
20:Z:254:PRO:HB2	29:I:61:ARG:NH1	2.07	0.65
20:Z:734:ASP:HB3	29:I:67:ASP:CA	2.25	0.65
20:Z:741:LEU:CD1	29:I:74:GLU:H	2.08	0.65
20:Z:247:GLN:HG2	29:I:54:ARG:HB3	1.77	0.65
20:Z:727:GLU:C	29:I:62:MET:CG	2.64	0.64
20:Z:806:GLU:CD	29:I:203:THR:HB	2.21	0.64
20:Z:741:LEU:HD13	29:I:74:GLU:H	1.54	0.64
20:Z:206:ASP:C	29:I:53:THR:HG21	2.23	0.64
20:Z:805:LEU:HD12	29:I:206:GLU:HG3	1.80	0.64
9:2:141:SER:HB2	9:2:154:LEU:HD13	1.79	0.64
30:K:327:ALA:HA	30:K:330:ARG:HG2	1.79	0.64
20:Z:738:TYR:CZ	29:I:69:LEU:N	2.64	0.63
20:Z:738:TYR:OH	29:I:65:ILE:O	2.14	0.63
20:Z:730:ALA:HB3	29:I:63:GLU:HB3	1.71	0.63
20:Z:728:LYS:C	29:I:62:MET:CB	2.68	0.63
32:M:75:LEU:H	32:M:75:LEU:HD23	1.63	0.63
20:Z:251:ALA:CA	29:I:58:LYS:HB2	2.03	0.62
20:Z:154:ILE:HD13	28:H:43:ALA:HB1	0.63	0.62
20:Z:154:ILE:HG21	28:H:43:ALA:HB1	1.80	0.62
20:Z:617:ILE:HG22	21:N:806:THR:HG21	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:805:LEU:HD12	29:I:206:GLU:HB2	1.81	0.62
20:Z:154:ILE:HD11	28:H:43:ALA:HB3	0.93	0.62
20:Z:635:ALA:HB3	21:N:792:SER:OG	1.93	0.62
20:Z:255:LEU:HD23	21:N:813:ARG:CD	2.22	0.62
29:I:226:GLY:H	33:J:306:ARG:HH21	1.47	0.62
4:D:254:HIS:N	20:Z:970:TYR:CE1	2.67	0.62
20:Z:250:VAL:HG12	29:I:58:LYS:HD2	1.80	0.62
20:Z:728:LYS:CB	29:I:58:LYS:O	2.48	0.62
20:Z:728:LYS:C	29:I:62:MET:CG	2.47	0.61
20:Z:154:ILE:HD11	28:H:43:ALA:H	1.64	0.61
20:Z:24:THR:CB	20:Z:25:PRO:HD2	2.07	0.61
20:Z:805:LEU:HD12	29:I:206:GLU:CG	2.30	0.61
29:I:284:ILE:HG22	29:I:284:ILE:O	2.00	0.61
20:Z:254:PRO:CB	29:I:61:ARG:HD2	2.31	0.60
20:Z:735:GLU:H	29:I:66:LYS:CG	1.65	0.60
30:K:255:ARG:HH11	30:K:302:GLN:HE22	1.49	0.60
4:D:11:PHE:H	5:E:23:GLN:HE22	1.48	0.60
20:Z:93:ARG:HB3	20:Z:94:PRO:HD3	1.83	0.60
20:Z:806:GLU:CG	29:I:203:THR:O	2.50	0.60
20:Z:329:ILE:HD13	20:Z:464:ASP:OD1	2.02	0.60
3:C:136:ILE:HD11	3:C:165:VAL:HG22	1.83	0.59
20:Z:149:TRP:NE1	29:I:409:MET:HE3	2.07	0.59
20:Z:255:LEU:CD2	29:I:61:ARG:CZ	2.79	0.59
20:Z:509:LEU:HA	20:Z:512:ILE:HD11	1.83	0.59
20:Z:364:ASN:CA	28:H:436:LYS:CE	2.79	0.59
20:Z:254:PRO:HB2	29:I:61:ARG:HD2	1.83	0.59
20:Z:728:LYS:O	29:I:62:MET:CG	2.49	0.59
6:f:13:PHE:H	7:g:23:GLN:HE22	1.49	0.59
20:Z:917:ASN:HA	29:I:58:LYS:HZ3	1.68	0.59
20:Z:748:LEU:CB	29:I:81:ILE:HA	2.33	0.59
1:A:14:ARG:HH12	7:G:7:GLY:HA3	1.68	0.58
20:Z:30:LYS:HA	20:Z:37:GLN:OE1	2.03	0.58
20:Z:632:GLU:O	21:N:792:SER:OG	2.21	0.58
20:Z:918:ASP:HA	29:I:59:LEU:HD21	1.86	0.58
29:I:246:ARG:HG2	29:I:247:ILE:H	1.68	0.58
20:Z:624:LEU:HD13	21:N:799:VAL:CG1	2.34	0.58
20:Z:734:ASP:CB	29:I:66:LYS:CA	2.77	0.58
20:Z:31:LYS:HD2	20:Z:79:THR:HG23	1.86	0.58
20:Z:738:TYR:CE2	29:I:66:LYS:CA	2.84	0.58
20:Z:748:LEU:CD2	29:I:85:PHE:HD1	2.16	0.58
5:e:192:THR:HG22	5:e:193:LEU:H	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:731:GLY:O	29:I:66:LYS:HG2	2.04	0.57
20:Z:254:PRO:CB	21:N:813:ARG:HD3	2.34	0.57
20:Z:805:LEU:HB3	29:I:205:PRO:HG2	1.85	0.57
20:Z:85:VAL:CG1	20:Z:86:PRO:N	2.56	0.57
20:Z:154:ILE:CD1	28:H:43:ALA:HB2	1.07	0.57
20:Z:806:GLU:OE1	29:I:203:THR:CB	2.51	0.57
33:J:327:ILE:HB	33:J:358:VAL:HG11	1.86	0.57
8:h:62:GLN:OE1	14:7:262:GLY:HA3	2.04	0.57
20:Z:168:GLN:CB	21:N:819:LYS:HG2	2.34	0.57
20:Z:745:LEU:CG	29:I:80:GLU:OE1	2.52	0.57
20:Z:806:GLU:HB2	29:I:203:THR:O	2.04	0.57
3:C:19:LEU:HD23	3:C:22:VAL:HG23	1.87	0.57
20:Z:247:GLN:HG3	29:I:55:CYS:CA	2.34	0.57
20:Z:806:GLU:HG3	29:I:203:THR:O	2.04	0.57
28:H:260:ALA:HB1	28:H:273:ARG:HH12	1.69	0.57
33:J:147:TYR:H	33:J:205:HIS:HE1	1.53	0.57
20:Z:252:CYS:SG	29:I:54:ARG:NH1	2.78	0.56
20:Z:734:ASP:CB	29:I:66:LYS:HG3	2.32	0.56
20:Z:738:TYR:C	29:I:73:GLU:OE1	2.45	0.56
20:Z:806:GLU:OE1	29:I:203:THR:CG2	2.53	0.56
7:g:146:ALA:O	7:g:147:HIS:CD2	2.59	0.56
10:j:49:VAL:HG11	10:j:87:PHE:CD2	2.40	0.56
20:Z:731:GLY:H	29:I:62:MET:HB3	1.71	0.56
20:Z:728:LYS:O	29:I:62:MET:CB	2.54	0.56
20:Z:805:LEU:HD12	29:I:206:GLU:CB	2.35	0.56
20:Z:745:LEU:CD1	29:I:80:GLU:CD	2.52	0.56
9:i:249:ILE:HG21	10:j:195:VAL:HG21	1.87	0.56
20:Z:805:LEU:CD1	29:I:206:GLU:HB2	2.36	0.56
28:H:292:ARG:HG3	28:H:339:GLN:HE22	1.69	0.56
20:Z:624:LEU:HD13	21:N:799:VAL:HG12	1.88	0.55
20:Z:632:GLU:O	21:N:792:SER:HB3	1.96	0.55
20:Z:745:LEU:HB2	29:I:77:SER:OG	2.07	0.55
20:Z:915:ALA:O	29:I:55:CYS:SG	2.64	0.55
10:j:45:HIS:HB3	10:j:50:PHE:CD2	2.41	0.55
20:Z:209:PRO:HB3	29:I:54:ARG:HD2	1.88	0.55
20:Z:632:GLU:HA	21:N:792:SER:HB2	1.87	0.55
20:Z:213:LYS:HG3	21:N:819:LYS:HZ1	1.70	0.55
20:Z:632:GLU:C	21:N:792:SER:CB	2.51	0.55
20:Z:734:ASP:CA	29:I:66:LYS:CG	2.83	0.55
20:Z:255:LEU:O	21:N:816:LYS:CD	2.52	0.55
20:Z:282:ILE:HD13	20:Z:297:VAL:HG21	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:126:TYR:HB2	7:G:129:VAL:HG22	1.88	0.55
5:e:214:GLU:CD	5:e:214:GLU:H	2.15	0.54
2:B:107:THR:O	2:B:111:VAL:HG23	2.07	0.54
9:2:161:LEU:H	9:2:161:LEU:HD22	1.71	0.54
12:5:109:VAL:HG21	12:5:253:TYR:CE1	2.42	0.54
20:Z:631:GLY:HA3	21:N:795:GLU:HG2	1.89	0.54
2:b:139:HIS:CD2	2:b:145:PHE:CE1	2.96	0.54
3:C:226:TYR:HB2	9:2:252:ILE:HD11	1.89	0.54
20:Z:294:ILE:HD13	20:Z:327:GLN:HG2	1.89	0.54
22:S:294:ILE:HG12	22:S:317:HIS:CE1	2.42	0.54
7:G:54:ILE:HD11	7:G:213:GLU:HB2	1.89	0.54
20:Z:738:TYR:CD2	29:I:69:LEU:HB3	2.37	0.54
4:D:53:LYS:HD3	4:D:53:LYS:H	1.73	0.54
18:X:92:SER:HA	18:X:96:ARG:HH21	1.72	0.54
20:Z:282:ILE:HD13	20:Z:297:VAL:CG2	2.37	0.54
23:P:126:THR:HA	23:P:136:ARG:HH11	1.73	0.54
20:Z:731:GLY:HA3	29:I:62:MET:HB3	1.91	0.53
4:D:134:LEU:HG	4:D:149:GLN:HE21	1.73	0.53
20:Z:805:LEU:HD13	29:I:206:GLU:HA	1.90	0.53
31:L:318:LEU:HD22	31:L:318:LEU:H	1.72	0.53
20:Z:247:GLN:NE2	29:I:55:CYS:CB	2.38	0.53
20:Z:809:MET:CG	29:I:205:PRO:CG	2.76	0.53
30:K:177:LEU:HD21	30:K:344:ARG:HH12	1.73	0.53
4:d:122:GLN:HA	5:e:136:ARG:HE	1.74	0.53
4:D:96:HIS:CE1	4:D:100:LEU:HD12	2.43	0.53
20:Z:30:LYS:CG	20:Z:37:GLN:HB2	2.28	0.53
20:Z:250:VAL:CG1	29:I:58:LYS:HD2	2.38	0.53
20:Z:738:TYR:OH	29:I:66:LYS:CA	2.33	0.52
20:Z:745:LEU:CD1	29:I:80:GLU:CG	2.87	0.52
20:Z:918:ASP:OD1	29:I:59:LEU:HD21	2.08	0.52
25:R:283:THR:HG23	25:R:286:LEU:H	1.74	0.52
8:h:68:VAL:HG21	8:h:91:PHE:CD1	2.44	0.52
20:Z:364:ASN:CA	28:H:436:LYS:HE2	2.37	0.52
3:c:80:LEU:HD12	3:c:80:LEU:H	1.73	0.52
1:A:104:PHE:CE2	1:A:116:VAL:HG11	2.44	0.52
6:f:121:GLN:HE22	7:g:87:HIS:CG	2.28	0.52
20:Z:30:LYS:HG2	20:Z:37:GLN:HB2	1.87	0.52
25:R:24:TYR:HB2	25:R:176:ARG:HH22	1.75	0.52
20:Z:809:MET:SD	29:I:205:PRO:CB	2.97	0.52
20:Z:157:LEU:HB3	20:Z:207:ILE:HD12	1.91	0.52
20:Z:205:LEU:HD23	29:I:53:THR:N	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:738:TYR:HH	29:I:69:LEU:H	1.54	0.52
20:Z:805:LEU:CD1	29:I:206:GLU:CB	2.88	0.52
20:Z:745:LEU:HD12	29:I:80:GLU:HB3	1.84	0.52
20:Z:731:GLY:CA	29:I:62:MET:O	2.59	0.51
20:Z:738:TYR:HH	29:I:69:LEU:CB	2.04	0.51
20:Z:741:LEU:HB2	29:I:73:GLU:OE1	2.11	0.51
5:E:31:ILE:HD13	5:E:141:ALA:HB2	1.92	0.51
20:Z:85:VAL:O	20:Z:88:PRO:CD	2.43	0.51
20:Z:255:LEU:HD21	29:I:61:ARG:CZ	2.40	0.51
20:Z:945:ILE:CG1	20:Z:965:LEU:HD21	2.41	0.51
21:N:676:ALA:HB1	21:N:786:ARG:HH21	1.75	0.51
16:V:113:GLY:HA2	16:V:144:ILE:HD11	1.93	0.51
20:Z:919:GLU:H	29:I:58:LYS:HZ1	1.59	0.51
5:e:175:GLY:HA3	5:e:207:VAL:HB	1.92	0.51
20:Z:631:GLY:O	21:N:792:SER:HA	2.11	0.51
4:d:161:ALA:HB1	4:d:175:LEU:HD21	1.93	0.51
2:B:66:LEU:H	2:B:66:LEU:HD23	1.76	0.51
4:D:250:LYS:CD	20:Z:951:GLN:OE1	2.58	0.51
28:H:260:ALA:HB2	28:H:307:PHE:CZ	2.46	0.51
11:4:186:LYS:H	11:4:186:LYS:CD	2.24	0.50
13:6:60:MET:HE2	13:6:73:VAL:HG22	1.94	0.50
6:f:13:PHE:CE2	6:f:19:LEU:HD11	2.46	0.50
20:Z:542:ILE:HG12	20:Z:544:THR:H	1.76	0.50
4:D:199:LEU:O	4:D:203:VAL:HG22	2.11	0.50
20:Z:282:ILE:HD13	20:Z:297:VAL:CG1	2.37	0.50
24:Q:222:SER:O	24:Q:226:HIS:CD2	2.64	0.50
20:Z:9:GLN:HA	20:Z:12:ILE:HD12	1.94	0.50
21:N:323:GLY:H	21:N:358:LYS:HE3	1.76	0.50
29:I:219:VAL:HG12	29:I:346:ARG:HB2	1.94	0.50
15:W:2:VAL:HA	15:W:44:ASN:HB2	1.94	0.50
20:Z:734:ASP:HB3	29:I:67:ASP:HA	1.92	0.50
31:L:95:ILE:HA	31:L:98:LEU:HD12	1.94	0.50
20:Z:728:LYS:NZ	29:I:65:ILE:HB	2.27	0.50
12:l:93:SER:HB3	12:l:106:VAL:H	1.77	0.49
8:1:135:ILE:HB	8:1:140:SER:HB2	1.94	0.49
31:L:415:LEU:HD13	31:L:415:LEU:O	2.12	0.49
20:Z:424:SER:HA	20:Z:457:ILE:HG21	1.94	0.49
26:U:223:HIS:CE1	27:O:355:PRO:HB3	2.47	0.49
29:I:246:ARG:CG	29:I:247:ILE:H	2.24	0.49
11:4:186:LYS:H	11:4:186:LYS:HD2	1.78	0.49
20:Z:731:GLY:HA2	29:I:62:MET:O	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:79:THR:O	20:Z:83:THR:HG23	2.12	0.49
20:Z:254:PRO:HG2	29:I:61:ARG:CD	2.30	0.49
22:S:392:ILE:HD13	22:S:423:VAL:CG2	2.43	0.49
5:E:15:PHE:CE2	5:E:21:LEU:HD23	2.47	0.49
20:Z:161:ILE:HD11	20:Z:207:ILE:HG13	1.95	0.49
5:e:192:THR:HG22	5:e:193:LEU:N	2.27	0.49
3:c:163:ILE:HG13	3:c:164:SER:N	2.27	0.49
8:1:124:LEU:HD22	8:1:124:LEU:H	1.78	0.49
20:Z:88:PRO:HA	20:Z:91:PHE:HB2	1.95	0.49
20:Z:206:ASP:O	29:I:53:THR:HG21	2.13	0.49
20:Z:556:ILE:HD12	20:Z:556:ILE:C	2.38	0.49
20:Z:917:ASN:CA	29:I:58:LYS:HZ3	2.25	0.49
14:n:250:MET:CE	14:n:252:TRP:HE1	2.25	0.49
19:Y:1:MET:HE3	22:S:314:ASN:OD1	2.13	0.49
20:Z:255:LEU:HG	29:I:61:ARG:HH12	0.67	0.49
20:Z:843:ASP:HA	29:I:206:GLU:HG2	1.92	0.49
15:W:144:PHE:HA	15:W:147:ILE:HD11	1.94	0.48
33:J:132:PRO:HB2	33:J:220:GLN:OE1	2.13	0.48
2:B:222:LEU:HD13	2:B:232:GLY:HA2	1.95	0.48
20:Z:738:TYR:OH	29:I:66:LYS:HA	2.14	0.48
4:D:254:HIS:N	20:Z:970:TYR:HE1	2.08	0.48
18:X:101:LEU:HD12	18:X:125:MET:HE1	1.96	0.48
2:b:174:PHE:CZ	2:b:194:LEU:HD23	2.48	0.48
1:a:205:PHE:CE1	1:a:209:HIS:CE1	3.01	0.48
9:2:135:THR:HG22	9:2:135:THR:O	2.14	0.48
2:b:101:TYR:CE1	2:b:106:PRO:HD3	2.49	0.48
19:Y:55:THR:HA	22:S:334:HIS:CE1	2.49	0.48
4:D:251:LYS:HG3	20:Z:953:THR:HG22	1.96	0.47
4:d:208:LYS:HE3	4:d:230:ASN:HD21	1.78	0.47
10:j:88:THR:CG2	10:j:130:ILE:HG23	2.45	0.47
14:n:121:GLU:HB3	14:n:122:PRO:HD2	1.96	0.47
3:C:201:THR:HG22	3:C:203:SER:H	1.79	0.47
20:Z:251:ALA:HB3	29:I:54:ARG:HG3	1.96	0.47
20:Z:30:LYS:CG	20:Z:37:GLN:CD	2.69	0.47
20:Z:247:GLN:HG3	29:I:55:CYS:HA	1.96	0.47
29:I:376:ASN:HB3	29:I:379:THR:HG22	1.95	0.47
20:Z:724:GLU:CA	29:I:62:MET:HE1	2.42	0.47
12:l:181:ARG:HE	12:l:257:GLU:HB3	1.80	0.47
4:D:254:HIS:CD2	20:Z:970:TYR:N	2.81	0.47
4:D:254:HIS:C	20:Z:953:THR:OG1	2.58	0.47
21:N:661:SER:HA	21:N:706:MET:HE3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:K:132:LYS:HB2	30:K:133:PRO:HD3	1.96	0.47
17:T:233:VAL:HG12	17:T:234:TYR:H	1.80	0.47
14:n:230:LEU:C	14:n:230:LEU:HD23	2.40	0.47
20:Z:282:ILE:CG1	20:Z:297:VAL:HG11	2.45	0.47
20:Z:364:ASN:C	28:H:436:LYS:NZ	2.68	0.47
20:Z:738:TYR:OH	29:I:69:LEU:CA	2.52	0.47
33:J:147:TYR:H	33:J:205:HIS:CE1	2.33	0.47
12:5:77:THR:HG21	12:5:211:ALA:HB2	1.97	0.47
2:B:9:LEU:HG	2:B:20:GLN:HG3	1.97	0.46
20:Z:734:ASP:C	29:I:66:LYS:HG2	2.18	0.46
9:2:112:LEU:HD23	9:2:142:ILE:HG21	1.96	0.46
20:Z:20:PRO:HB2	20:Z:24:THR:OG1	2.15	0.46
20:Z:354:PRO:HA	20:Z:357:ILE:HG12	1.96	0.46
21:N:99:GLU:H	33:J:15:HIS:CD2	2.34	0.46
2:b:213:ILE:HD11	2:b:236:ARG:HE	1.81	0.46
14:n:162:TYR:CE2	14:n:177:THR:HG22	2.51	0.46
20:Z:806:GLU:HG3	29:I:203:THR:HB	1.97	0.46
10:j:53:ILE:HG22	10:j:60:VAL:HG22	1.98	0.46
13:m:69:GLY:O	13:m:73:VAL:HG23	2.16	0.46
24:Q:78:ILE:HG22	24:Q:117:VAL:HG21	1.96	0.46
17:T:130:ASP:HA	17:T:134:LYS:HB3	1.98	0.46
20:Z:81:SER:O	20:Z:82:MET:HB3	2.16	0.46
24:Q:67:THR:HB	24:Q:68:MET:HA	1.97	0.46
8:h:123:PRO:HD2	8:h:127:SER:H	1.81	0.46
4:D:254:HIS:CA	20:Z:968:ASP:OD1	2.64	0.46
16:V:110:SER:HA	16:V:141:VAL:O	2.15	0.46
20:Z:251:ALA:O	29:I:58:LYS:HA	2.16	0.46
20:Z:256:LEU:HD23	21:N:816:LYS:HE3	1.98	0.46
20:Z:471:LEU:HD13	20:Z:471:LEU:C	2.41	0.46
20:Z:745:LEU:HD11	29:I:80:GLU:CG	2.43	0.46
21:N:462:VAL:O	21:N:466:LEU:HG	2.15	0.46
5:E:45:GLY:HA2	5:E:153:TYR:CE1	2.51	0.46
20:Z:728:LYS:O	29:I:62:MET:HB3	2.16	0.46
5:E:214:GLU:CD	5:E:214:GLU:H	2.23	0.46
20:Z:254:PRO:HB2	21:N:813:ARG:HD3	1.97	0.46
25:R:184:GLN:HG2	25:R:324:ARG:HH12	1.81	0.46
7:G:120:VAL:O	7:G:120:VAL:HG12	2.17	0.45
2:b:82:TYR:CZ	2:b:86:VAL:HG21	2.52	0.45
5:e:157:HIS:CE1	5:e:172:ILE:HG21	2.51	0.45
10:j:145:GLN:HE22	10:j:177:ARG:HB2	1.80	0.45
9:2:37:PHE:HD1	9:2:39:ASN:H	1.64	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:542:ILE:HG23	20:Z:545:SER:H	1.80	0.45
20:Z:731:GLY:N	29:I:62:MET:HB3	2.31	0.45
27:O:70:TYR:CE2	27:O:109:LEU:HD22	2.52	0.45
3:C:10:THR:HG22	3:C:21:GLN:HG3	1.98	0.45
20:Z:745:LEU:HD13	29:I:80:GLU:CB	2.10	0.45
24:Q:178:HIS:CE1	24:Q:200:ALA:HB1	2.51	0.45
24:Q:220:LEU:HD12	24:Q:220:LEU:O	2.16	0.45
29:I:130:VAL:HG21	29:I:156:ILE:HD11	1.98	0.45
5:e:208:MET:HG2	5:e:210:GLU:H	1.81	0.45
16:V:251:TYR:CE2	24:Q:422:VAL:HG11	2.51	0.45
20:Z:843:ASP:CA	29:I:206:GLU:HG3	2.37	0.45
21:N:373:VAL:HG22	21:N:410:LEU:HD13	1.98	0.45
25:R:38:VAL:HG23	25:R:43:ARG:HE	1.81	0.45
32:M:214:ALA:HB3	32:M:318:ASP:H	1.81	0.45
2:b:76:SER:HB2	2:b:164:ILE:HD12	1.98	0.45
20:Z:535:VAL:HG12	20:Z:536:GLY:N	2.32	0.45
20:Z:734:ASP:CG	29:I:67:ASP:H	2.18	0.45
23:P:225:VAL:HG13	23:P:237:VAL:HG13	1.98	0.45
28:H:336:LEU:O	28:H:340:LEU:HD13	2.17	0.45
33:J:300:LEU:HG	33:J:301:ASP:H	1.82	0.45
11:4:128:LEU:HG	11:4:130:TYR:H	1.82	0.45
20:Z:613:ASP:CG	21:N:813:ARG:HG2	2.40	0.45
20:Z:249:MET:HA	29:I:54:ARG:HH22	1.68	0.45
8:1:23:LEU:HD11	8:1:109:ALA:HB3	1.99	0.44
4:d:34:VAL:HG22	4:d:163:THR:HG22	1.98	0.44
20:Z:614:VAL:O	20:Z:617:ILE:HG12	2.17	0.44
20:Z:933:VAL:HG12	28:H:434:ARG:HD2	1.98	0.44
3:c:152:ASN:HB3	3:c:153:PRO:HD2	1.99	0.44
1:A:16:ILE:HG23	1:A:27:GLN:HB3	1.99	0.44
26:U:226:LEU:HD11	27:O:363:ILE:HG12	1.99	0.44
28:H:298:ALA:CB	28:H:306:ILE:HD11	2.47	0.44
30:K:327:ALA:CA	30:K:330:ARG:HG2	2.45	0.44
16:V:94:MET:HE2	16:V:94:MET:HA	2.00	0.44
20:Z:364:ASN:HA	28:H:436:LYS:CE	2.46	0.44
20:Z:632:GLU:HA	21:N:792:SER:O	2.17	0.44
9:i:112:LEU:HD22	9:i:127:LEU:HD12	1.99	0.44
4:D:192:VAL:HG13	4:D:212:ILE:HG21	2.00	0.44
16:V:159:ILE:HG13	16:V:159:ILE:O	2.18	0.44
20:Z:298:PHE:CE1	20:Z:315:ALA:HB1	2.53	0.44
28:H:104:LYS:HA	28:H:170:GLU:HG2	1.99	0.44
6:f:213:ILE:HD12	6:f:230:VAL:HG12	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:k:120:ASP:HA	11:k:133:HIS:CE1	2.53	0.44
8:1:47:HIS:CD2	8:1:48:ASP:H	2.36	0.44
10:3:50:PHE:CD1	10:3:190:ILE:HD13	2.52	0.44
20:Z:93:ARG:CB	20:Z:94:PRO:CD	2.93	0.44
22:S:184:TRP:CE3	22:S:233:LEU:HD21	2.52	0.44
25:R:164:THR:O	25:R:168:ILE:HG13	2.18	0.44
20:Z:805:LEU:CD1	29:I:206:GLU:CG	2.96	0.44
21:N:375:HIS:O	21:N:375:HIS:CG	2.71	0.44
4:D:254:HIS:HA	20:Z:968:ASP:OD1	2.17	0.44
17:T:268:ILE:HG21	27:O:388:GLY:HA2	2.00	0.44
20:Z:581:VAL:HG12	20:Z:581:VAL:O	2.17	0.44
20:Z:728:LYS:C	29:I:62:MET:HB2	2.40	0.44
20:Z:738:TYR:OH	29:I:69:LEU:CB	2.36	0.44
20:Z:738:TYR:HA	29:I:70:LEU:HD12	1.49	0.44
9:i:215:TYR:CE2	9:i:217:ARG:HB2	2.53	0.43
4:D:250:LYS:CE	20:Z:951:GLN:OE1	2.66	0.43
4:D:252:SER:N	20:Z:970:TYR:OH	2.51	0.43
24:Q:220:LEU:HD13	24:Q:261:VAL:HG22	2.00	0.43
31:L:203:ASN:HD22	31:L:205:GLU:HB3	1.83	0.43
20:Z:30:LYS:HB2	20:Z:30:LYS:HE2	1.48	0.43
11:4:143:LEU:HD21	11:4:163:LEU:HD23	2.00	0.43
12:5:125:ALA:HA	13:6:138:SER:HB2	2.00	0.43
16:V:265:GLU:O	16:V:269:ARG:HG3	2.19	0.43
20:Z:282:ILE:HD13	20:Z:297:VAL:HG11	1.91	0.43
26:U:40:ASP:HA	26:U:88:LYS:HZ3	1.82	0.43
20:Z:802:ASP:CG	20:Z:803:ALA:H	2.25	0.43
22:S:38:LEU:HD21	22:S:130:VAL:O	2.19	0.43
23:P:114:THR:O	23:P:118:VAL:HG23	2.18	0.43
28:H:331:ARG:HH11	28:H:331:ARG:HD2	1.69	0.43
31:L:110:LYS:HA	31:L:142:LYS:HE3	1.99	0.43
8:h:199:PRO:HA	8:h:202:TYR:CE2	2.53	0.43
11:k:120:ASP:HA	11:k:133:HIS:HE1	1.84	0.43
22:S:320:ILE:HA	22:S:323:LEU:HD12	2.01	0.43
27:O:46:THR:O	27:O:49:PHE:CE2	2.72	0.43
4:d:237:GLU:O	4:d:241:GLN:HG3	2.19	0.43
5:E:91:HIS:CG	5:E:119:LEU:HD22	2.54	0.43
13:6:145:ARG:HG3	13:6:155:MET:HE1	1.99	0.43
9:i:37:PHE:HD2	9:i:39:ASN:H	1.67	0.43
5:E:177:GLU:HG3	28:H:382:LEU:HD13	2.00	0.43
20:Z:741:LEU:HD11	29:I:70:LEU:O	2.12	0.43
20:Z:945:ILE:HG12	20:Z:965:LEU:HD21	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:S:327:ILE:HD13	22:S:327:ILE:H	1.83	0.43
13:m:168:TYR:CD1	13:m:174:GLY:HA2	2.54	0.43
9:i:249:ILE:CG2	10:j:195:VAL:HG21	2.48	0.43
12:l:286:ILE:HG21	12:l:286:ILE:HD13	1.71	0.43
20:Z:247:GLN:HG2	29:I:54:ARG:CB	2.47	0.43
20:Z:701:ILE:HG13	20:Z:702:LYS:N	2.33	0.43
4:d:88:LYS:HA	4:d:91:VAL:HG22	2.01	0.42
16:V:22:ASP:HA	16:V:135:ARG:HH12	1.82	0.42
20:Z:624:LEU:HD22	29:I:80:GLU:OE2	2.15	0.42
20:Z:731:GLY:CA	29:I:62:MET:HB3	2.48	0.42
23:P:76:ASN:HA	23:P:79:LEU:HD12	2.00	0.42
3:C:108:VAL:O	3:C:112:VAL:HG23	2.19	0.42
20:Z:149:TRP:CD1	29:I:409:MET:HE3	2.52	0.42
20:Z:255:LEU:CD2	29:I:61:ARG:NH1	2.79	0.42
29:I:133:LEU:HD23	29:I:133:LEU:HA	1.93	0.42
33:J:163:VAL:HG13	33:J:182:PRO:HB2	2.00	0.42
18:X:18:ASN:HD22	18:X:20:ASP:H	1.67	0.42
20:Z:806:GLU:CG	29:I:203:THR:HB	2.48	0.42
28:H:42:ALA:HB3	28:H:46:ALA:HB2	2.01	0.42
1:A:114:CYS:HB2	1:A:145:SER:HB2	2.00	0.42
4:D:149:GLN:HG2	4:D:162:GLN:HG2	2.02	0.42
15:W:156:GLU:OE2	15:W:156:GLU:HA	2.19	0.42
27:O:253:GLN:HB3	27:O:269:LEU:HD11	2.01	0.42
28:H:267:THR:HG23	28:H:269:ALA:H	1.84	0.42
9:i:131:GLY:HA2	9:i:207:MET:SD	2.60	0.42
9:2:31:THR:HG22	9:2:188:ILE:HD13	2.01	0.42
9:2:80:ASP:O	9:2:84:VAL:HG23	2.19	0.42
17:T:233:VAL:HG12	17:T:234:TYR:N	2.35	0.42
20:Z:209:PRO:HG3	29:I:54:ARG:HB2	2.00	0.42
24:Q:243:PHE:CE1	24:Q:262:LEU:HD13	2.55	0.42
11:k:43:LEU:HD12	11:k:43:LEU:HA	1.88	0.42
20:Z:748:LEU:HD22	29:I:85:PHE:HD1	1.75	0.42
23:P:365:LEU:HD22	23:P:400:VAL:HG11	2.00	0.42
4:D:254:HIS:CG	20:Z:968:ASP:OD1	2.72	0.42
7:G:120:VAL:HG21	7:G:151:LEU:HD21	2.01	0.42
21:N:667:GLN:OE1	21:N:667:GLN:HA	2.20	0.42
8:1:107:ILE:HD13	8:1:134:ALA:HB3	2.01	0.42
20:Z:255:LEU:HD13	21:N:816:LYS:HB2	1.32	0.42
20:Z:451:ALA:O	20:Z:455:ILE:HG13	2.19	0.42
22:S:268:LEU:HD23	22:S:271:ARG:CZ	2.50	0.42
11:4:88:LEU:HD23	11:4:88:LEU:HA	1.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:5:114:PRO:HA	12:5:260:TRP:HE1	1.84	0.42
22:S:265:SER:H	22:S:268:LEU:HD12	1.85	0.42
23:P:413:ASN:O	23:P:417:HIS:CD2	2.73	0.42
1:a:31:ALA:HA	1:a:34:ALA:HB3	2.02	0.41
7:g:146:ALA:C	7:g:147:HIS:CD2	2.98	0.41
9:2:32:ILE:HD11	9:2:74:GLY:O	2.20	0.41
20:Z:254:PRO:HB3	21:N:813:ARG:HD3	2.02	0.41
22:S:51:ARG:HE	22:S:55:ARG:HH21	1.68	0.41
28:H:341:ASP:HB2	28:H:370:ARG:HE	1.85	0.41
2:b:15:SER:O	3:c:31:HIS:CE1	2.73	0.41
9:i:110:GLN:O	9:i:114:GLN:HG2	2.19	0.41
11:4:3:ILE:HD12	11:4:168:LEU:HD12	2.02	0.41
21:N:757:THR:H	21:N:900:ASN:HB3	1.85	0.41
3:C:133:VAL:HG11	3:C:135:PHE:CE1	2.54	0.41
20:Z:88:PRO:O	20:Z:92:LEU:HG	2.21	0.41
20:Z:805:LEU:HD13	29:I:206:GLU:CA	2.49	0.41
31:L:183:ILE:HG21	31:L:190:ILE:HD11	2.02	0.41
24:Q:1:MET:HE2	24:Q:52:ASN:HB3	2.02	0.41
2:B:244:ASN:HD22	2:B:244:ASN:HA	1.62	0.41
30:K:334:LEU:HD13	30:K:334:LEU:O	2.20	0.41
6:f:72:LEU:HB3	6:f:134:ILE:HG23	2.01	0.41
5:E:192:THR:HG22	5:E:193:LEU:H	1.84	0.41
7:G:123:HIS:CG	7:G:132:PHE:CE2	3.08	0.41
11:4:15:LEU:HD13	11:4:15:LEU:HA	1.89	0.41
20:Z:419:VAL:HA	20:Z:422:ILE:HD12	2.01	0.41
29:I:328:THR:HG21	29:I:334:LEU:HD11	2.02	0.41
1:a:154:ILE:HG21	1:a:169:THR:HG22	2.03	0.41
15:W:37:PHE:CD2	15:W:69:PHE:HB3	2.56	0.41
21:N:667:GLN:HB2	21:N:675:VAL:HG21	2.01	0.41
23:P:211:PRO:HA	23:P:214:GLU:HB2	2.03	0.41
23:P:250:ILE:HG22	23:P:257:TRP:HA	2.01	0.41
5:e:91:HIS:CD2	5:e:119:LEU:HB2	2.55	0.41
20:Z:731:GLY:CA	29:I:62:MET:C	2.94	0.41
22:S:480:ARG:HH21	33:J:42:ARG:HE	1.68	0.41
29:I:246:ARG:CG	29:I:247:ILE:N	2.84	0.41
31:L:403:ILE:HG21	32:M:207:PHE:CE1	2.56	0.41
1:a:93:ALA:HB1	1:a:141:LEU:HD21	2.03	0.41
3:c:15:PRO:HA	4:d:22:TYR:CD1	2.56	0.41
3:c:184:MET:HG3	3:c:185:LYS:H	1.86	0.41
1:A:75:ILE:HD11	1:A:81:MET:HE2	2.02	0.41
20:Z:354:PRO:O	20:Z:357:ILE:HG12	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:Z:774:ARG:NH2	29:I:203:THR:HG22	2.36	0.41
21:N:288:ASN:HD21	21:N:293:LEU:HD23	1.85	0.41
22:S:65:ASN:ND2	22:S:141:LEU:HD13	2.35	0.41
25:R:317:ILE:HA	25:R:323:ASN:HD22	1.86	0.41
26:U:17:SER:HB3	26:U:21:HIS:CE1	2.55	0.41
20:Z:205:LEU:O	29:I:53:THR:CG2	2.68	0.41
20:Z:734:ASP:CB	29:I:67:ASP:CA	2.87	0.41
20:Z:945:ILE:HG13	20:Z:965:LEU:HD21	2.03	0.41
20:Z:154:ILE:HG12	28:H:44:PRO:HD3	2.03	0.40
20:Z:249:MET:SD	29:I:54:ARG:NH2	2.94	0.40
20:Z:809:MET:HG2	29:I:205:PRO:CG	2.44	0.40
32:M:127:VAL:HG12	32:M:129:LEU:HD23	2.03	0.40
2:b:93:ALA:HB2	2:b:110:LEU:HD11	2.04	0.40
6:f:78:ALA:N	6:f:79:PRO:HD2	2.35	0.40
7:g:198:LYS:O	7:g:202:LEU:HD13	2.21	0.40
13:m:38:ILE:CG2	9:2:196:LEU:HD21	2.51	0.40
1:A:104:PHE:CD2	1:A:112:MET:HE3	2.56	0.40
20:Z:282:ILE:HG12	20:Z:297:VAL:HG11	2.02	0.40
21:N:332:VAL:HG21	21:N:355:TRP:CH2	2.56	0.40
26:U:91:GLY:CA	26:U:119:LEU:H	2.33	0.40
9:2:128:ILE:HD11	9:2:156:LEU:HG	2.03	0.40
18:X:75:TRP:CE2	18:X:125:MET:HG3	2.56	0.40
25:R:33:LEU:CD2	25:R:47:ALA:HB2	2.51	0.40
31:L:305:LEU:HD23	31:L:335:PRO:HD2	2.03	0.40
8:1:51:TRP:CD1	8:1:187:LEU:HD21	2.57	0.40
20:Z:806:GLU:OE1	29:I:203:THR:HG22	2.21	0.40
1:a:199:TRP:O	1:a:203: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	A	242/244 (99%)	231 (96%)	9 (4%)	2 (1%)	16	53
1	a	242/244 (99%)	227 (94%)	13 (5%)	2 (1%)	16	53
2	B	245/247 (99%)	232 (95%)	12 (5%)	1 (0%)	30	67
2	b	245/247 (99%)	231 (94%)	11 (4%)	3 (1%)	10	43
3	C	239/241 (99%)	222 (93%)	15 (6%)	2 (1%)	16	53
3	c	239/241 (99%)	227 (95%)	11 (5%)	1 (0%)	30	67
4	D	250/252 (99%)	238 (95%)	8 (3%)	4 (2%)	7	37
4	d	250/252 (99%)	235 (94%)	11 (4%)	4 (2%)	7	37
5	E	243/245 (99%)	226 (93%)	13 (5%)	4 (2%)	7	37
5	e	243/245 (99%)	225 (93%)	14 (6%)	4 (2%)	7	37
6	F	230/232 (99%)	219 (95%)	11 (5%)	0	100	100
6	f	230/232 (99%)	220 (96%)	10 (4%)	0	100	100
7	G	243/245 (99%)	225 (93%)	14 (6%)	4 (2%)	7	37
7	g	243/245 (99%)	226 (93%)	10 (4%)	7 (3%)	3	23
8	1	194/196 (99%)	185 (95%)	8 (4%)	1 (0%)	24	63
8	h	194/196 (99%)	182 (94%)	11 (6%)	1 (0%)	24	63
9	2	224/226 (99%)	211 (94%)	7 (3%)	6 (3%)	4	25
9	i	224/226 (99%)	209 (93%)	12 (5%)	3 (1%)	9	41
10	3	202/204 (99%)	188 (93%)	9 (4%)	5 (2%)	4	26
10	j	202/204 (99%)	187 (93%)	14 (7%)	1 (0%)	24	63
11	4	193/195 (99%)	183 (95%)	10 (5%)	0	100	100
11	k	193/195 (99%)	177 (92%)	12 (6%)	4 (2%)	5	30
12	5	210/212 (99%)	204 (97%)	6 (3%)	0	100	100
12	l	210/212 (99%)	196 (93%)	14 (7%)	0	100	100
13	6	220/222 (99%)	204 (93%)	13 (6%)	3 (1%)	9	39
13	m	220/222 (99%)	206 (94%)	10 (4%)	4 (2%)	6	33
14	7	227/232 (98%)	209 (92%)	15 (7%)	3 (1%)	9	41
14	n	230/232 (99%)	215 (94%)	12 (5%)	3 (1%)	9	41
15	W	195/197 (99%)	174 (89%)	14 (7%)	7 (4%)	2	20
16	V	287/289 (99%)	261 (91%)	22 (8%)	4 (1%)	9	39
17	T	264/266 (99%)	244 (92%)	15 (6%)	5 (2%)	6	32
18	X	125/127 (98%)	96 (77%)	20 (16%)	9 (7%)	1	11

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	Y	87/89 (98%)	74 (85%)	7 (8%)	6 (7%)	1	12
20	Z	902/970 (93%)	813 (90%)	66 (7%)	23 (2%)	4	26
21	N	920/922 (100%)	851 (92%)	51 (6%)	18 (2%)	6	31
22	S	473/475 (100%)	437 (92%)	21 (4%)	15 (3%)	3	21
23	P	438/440 (100%)	414 (94%)	20 (5%)	4 (1%)	14	49
24	Q	432/434 (100%)	395 (91%)	20 (5%)	17 (4%)	2	18
25	R	403/405 (100%)	375 (93%)	22 (6%)	6 (2%)	8	38
26	U	302/304 (99%)	290 (96%)	8 (3%)	4 (1%)	9	41
27	O	386/388 (100%)	364 (94%)	14 (4%)	8 (2%)	5	30
28	H	424/426 (100%)	369 (87%)	33 (8%)	22 (5%)	1	15
29	I	383/385 (100%)	341 (89%)	30 (8%)	12 (3%)	3	22
30	K	382/384 (100%)	339 (89%)	27 (7%)	16 (4%)	2	17
31	L	386/388 (100%)	361 (94%)	18 (5%)	7 (2%)	6	33
32	M	419/421 (100%)	379 (90%)	28 (7%)	12 (3%)	3	23
33	J	401/403 (100%)	351 (88%)	40 (10%)	10 (2%)	4	26
All	All	13936/14099 (99%)	12868 (92%)	791 (6%)	277 (2%)	8	31

All (277) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	a	10	ALA
2	b	53	SER
4	d	204	GLN
5	e	14	THR
5	e	16	SER
13	m	208	ASP
1	A	10	ALA
3	C	54	SER
5	E	16	SER
7	G	209	GLU
9	2	233	LYS
10	3	40	PHE
13	6	27	ASP
18	X	110	PRO
20	Z	24	THR
20	Z	82	MET
20	Z	85	VAL

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Mol	Chain	Res	Type
21	N	750	SER
21	N	791	ALA
21	N	832	HIS
21	N	862	SER
22	S	84	ASP
22	S	107	SER
24	Q	46	VAL
24	Q	284	ALA
25	R	244	THR
27	O	52	ALA
28	H	136	ALA
28	H	211	VAL
28	H	214	CYS
28	H	371	ILE
29	I	102	ASN
29	I	115	ASP
29	I	246	ARG
29	I	247	ILE
30	K	304	ASP
30	K	334	LEU
30	K	403	LEU
30	K	419	ASN
32	M	186	LEU
32	M	230	LEU
33	J	213	VAL
33	J	257	ARG
33	J	307	PRO
33	J	310	ILE
7	g	63	LYS
9	i	174	ASP
11	k	11	ASP
13	m	27	ASP
14	n	80	ASP
14	n	116	ALA
1	A	49	ASP
3	C	184	MET
4	D	68	ASP
9	2	222	PRO
13	6	40	ASP
14	7	224	SER
15	W	3	LEU
15	W	147	ILE

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Mol	Chain	Res	Type
15	W	191	ILE
16	V	47	MET
16	V	170	PRO
17	T	257	THR
18	X	29	VAL
18	X	81	SER
18	X	82	LYS
20	Z	142	ASP
20	Z	233	LEU
20	Z	802	ASP
20	Z	870	ALA
21	N	97	PHE
21	N	123	PHE
21	N	361	ASN
21	N	739	PHE
22	S	69	LEU
22	S	433	GLU
23	P	88	GLN
23	P	89	LEU
23	P	167	THR
24	Q	44	ALA
24	Q	89	ALA
24	Q	128	GLU
24	Q	354	PHE
25	R	182	ASN
25	R	280	ILE
25	R	394	ASP
26	U	218	GLU
28	H	73	ASP
28	H	117	THR
28	H	143	ALA
28	H	162	ARG
28	H	191	ILE
28	H	303	ALA
28	H	347	GLY
29	I	343	ARG
30	K	105	GLN
30	K	333	ARG
30	K	417	THR
31	L	101	ILE
31	L	251	ILE
31	L	291	PHE

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Mol	Chain	Res	Type
31	L	374	PHE
32	M	282	GLU
32	M	313	ASP
33	J	211	ILE
3	c	221	ASN
4	d	14	ASP
4	d	70	HIS
7	g	72	ARG
9	i	222	PRO
11	k	34	LYS
11	k	72	ASP
13	m	40	ASP
13	m	138	SER
4	D	204	GLN
8	1	142	PHE
10	3	4	PRO
10	3	6	SER
14	7	116	ALA
15	W	180	LEU
17	T	93	ASN
18	X	42	GLU
18	X	95	GLU
19	Y	2	SER
19	Y	4	ASP
19	Y	32	ASP
19	Y	56	GLN
20	Z	377	ALA
20	Z	513	ALA
20	Z	578	GLY
20	Z	887	GLY
20	Z	926	ASN
20	Z	940	GLY
20	Z	947	GLY
21	N	88	ARG
21	N	233	ASN
21	N	416	GLY
21	N	564	ASN
22	S	46	LEU
22	S	47	THR
24	Q	42	ALA
24	Q	68	MET
24	Q	207	SER

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Mol	Chain	Res	Type
24	Q	273	ASN
24	Q	394	ASN
25	R	88	LEU
26	U	5	HIS
26	U	144	LYS
27	O	70	TYR
27	O	119	SER
27	O	141	ASN
28	H	129	SER
28	H	284	VAL
28	H	348	ASN
29	I	341	PRO
29	I	413	ALA
30	K	156	SER
30	K	418	ASP
32	M	106	VAL
32	M	110	ASN
32	M	173	ASP
33	J	17	SER
33	J	194	GLY
2	b	41	ASN
5	e	71	ASP
7	g	13	SER
7	g	225	ASN
8	h	175	ASP
10	j	192	LYS
11	k	9	VAL
4	D	70	HIS
5	E	14	THR
9	2	200	SER
9	2	251	ASP
14	7	58	ASP
16	V	113	GLY
16	V	262	THR
17	T	45	SER
17	T	94	HIS
18	X	92	SER
20	Z	25	PRO
20	Z	237	VAL
20	Z	366	LYS
20	Z	557	GLU
20	Z	825	ALA

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Mol	Chain	Res	Type
21	N	473	ASP
21	N	842	ASN
22	S	44	THR
22	S	116	ALA
22	S	153	GLU
22	S	304	SER
22	S	491	GLU
24	Q	386	PHE
27	O	392	TRP
28	H	113	ASP
28	H	145	TYR
28	H	314	VAL
29	I	283	GLU
29	I	321	ASP
30	K	311	ASN
30	K	332	GLY
31	L	50	GLN
32	M	316	SER
33	J	335	MET
1	a	60	PRO
2	b	205	ASN
4	d	144	GLU
5	e	73	HIS
7	g	11	SER
7	g	71	ASP
9	i	200	SER
2	B	53	SER
5	E	73	HIS
5	E	210	GLU
7	G	10	LEU
7	G	187	LEU
9	2	174	ASP
9	2	224	VAL
10	3	5	SER
10	3	157	ASN
15	W	81	ILE
15	W	179	ARG
17	T	210	PHE
18	X	41	GLU
18	X	55	LYS
19	Y	31	GLU
19	Y	52	ASN

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Mol	Chain	Res	Type
20	Z	65	GLU
20	Z	463	HIS
21	N	381	GLU
21	N	748	PHE
22	S	98	SER
22	S	118	PHE
22	S	127	THR
22	S	150	LYS
23	P	130	ILE
24	Q	40	ALA
24	Q	49	LYS
24	Q	286	TYR
28	H	179	SER
28	H	312	ASP
28	H	340	LEU
29	I	160	LEU
30	K	344	ARG
30	K	420	THR
32	M	91	ILE
32	M	172	VAL
32	M	345	ARG
33	J	99	ALA
33	J	228	ARG
7	g	187	LEU
4	D	40	ASN
7	G	63	LYS
15	W	144	PHE
20	Z	728	LYS
21	N	666	GLN
21	N	864	LYS
24	Q	355	GLU
25	R	375	LYS
26	U	127	GLN
27	O	56	PRO
27	O	243	VAL
27	O	351	SER
29	I	188	GLU
30	K	377	SER
32	M	104	GLY
24	Q	208	ILE
14	n	262	GLY
29	I	287	ILE

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Mol	Chain	Res	Type
30	K	92	VAL
31	L	350	PRO
13	6	48	GLU
20	Z	86	PRO
28	H	152	ILE
28	H	412	PRO
31	L	102	GLY
30	K	330	ARG

5.3.2 Protein sidechains

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	207/207 (100%)	202 (98%)	5 (2%)	43	63
1	a	207/207 (100%)	201 (97%)	6 (3%)	37	58
2	B	206/206 (100%)	198 (96%)	8 (4%)	28	50
2	b	206/206 (100%)	200 (97%)	6 (3%)	37	58
3	C	201/201 (100%)	191 (95%)	10 (5%)	22	43
3	c	201/201 (100%)	194 (96%)	7 (4%)	32	53
4	D	224/224 (100%)	215 (96%)	9 (4%)	28	49
4	d	224/224 (100%)	212 (95%)	12 (5%)	20	42
5	E	201/201 (100%)	196 (98%)	5 (2%)	42	62
5	e	201/201 (100%)	195 (97%)	6 (3%)	36	57
6	F	191/191 (100%)	186 (97%)	5 (3%)	40	60
6	f	191/191 (100%)	184 (96%)	7 (4%)	30	51
7	G	202/202 (100%)	194 (96%)	8 (4%)	28	49
7	g	202/202 (100%)	194 (96%)	8 (4%)	28	49
8	1	162/162 (100%)	158 (98%)	4 (2%)	42	62
8	h	162/162 (100%)	157 (97%)	5 (3%)	35	56
9	2	185/185 (100%)	179 (97%)	6 (3%)	34	55

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	i	185/185 (100%)	178 (96%)	7 (4%)	29	51
10	3	172/172 (100%)	167 (97%)	5 (3%)	37	58
10	j	172/172 (100%)	169 (98%)	3 (2%)	53	67
11	4	173/173 (100%)	166 (96%)	7 (4%)	28	49
11	k	173/173 (100%)	167 (96%)	6 (4%)	32	53
12	5	169/169 (100%)	161 (95%)	8 (5%)	23	45
12	l	169/169 (100%)	162 (96%)	7 (4%)	27	49
13	6	185/185 (100%)	179 (97%)	6 (3%)	34	55
13	m	185/185 (100%)	181 (98%)	4 (2%)	45	64
14	7	195/198 (98%)	190 (97%)	5 (3%)	40	60
14	n	198/198 (100%)	194 (98%)	4 (2%)	48	65
15	W	171/171 (100%)	165 (96%)	6 (4%)	32	53
16	V	253/253 (100%)	247 (98%)	6 (2%)	43	63
17	T	249/249 (100%)	245 (98%)	4 (2%)	55	69
18	X	116/116 (100%)	113 (97%)	3 (3%)	40	60
19	Y	81/81 (100%)	77 (95%)	4 (5%)	22	44
20	Z	773/828 (93%)	749 (97%)	24 (3%)	35	56
21	N	776/776 (100%)	759 (98%)	17 (2%)	45	64
22	S	447/447 (100%)	435 (97%)	12 (3%)	39	59
23	P	412/412 (100%)	405 (98%)	7 (2%)	53	67
24	Q	391/391 (100%)	383 (98%)	8 (2%)	48	65
25	R	356/356 (100%)	345 (97%)	11 (3%)	35	56
26	U	277/277 (100%)	274 (99%)	3 (1%)	65	74
27	O	363/363 (100%)	353 (97%)	10 (3%)	38	59
28	H	361/361 (100%)	350 (97%)	11 (3%)	36	57
29	I	342/342 (100%)	327 (96%)	15 (4%)	25	47
30	K	337/337 (100%)	329 (98%)	8 (2%)	43	63
31	L	332/332 (100%)	326 (98%)	6 (2%)	51	67
32	M	364/364 (100%)	353 (97%)	11 (3%)	36	57
33	J	350/350 (100%)	332 (95%)	18 (5%)	21	43
All	All	12100/12158 (100%)	11737 (97%)	363 (3%)	37	57

All (363) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	a	12	TYR
1	a	110	TYR
1	a	126	GLN
1	a	130	GLN
1	a	192	ASP
1	a	211	ILE
2	b	50	LYS
2	b	150	VAL
2	b	164	ILE
2	b	205	ASN
2	b	209	ILE
2	b	211	LEU
3	c	66	LEU
3	c	70	ASN
3	c	96	GLN
3	c	133	VAL
3	c	177	GLN
3	c	181	LYS
3	c	183	ASP
4	d	14	ASP
4	d	24	LEU
4	d	53	LYS
4	d	64	VAL
4	d	71	VAL
4	d	104	VAL
4	d	126	VAL
4	d	134	LEU
4	d	140	PRO
4	d	171	VAL
4	d	205	THR
4	d	208	LYS
5	e	36	THR
5	e	109	VAL
5	e	112	LEU
5	e	116	VAL
5	e	140	VAL
5	e	214	GLU
6	f	33	SER
6	f	57	SER
6	f	72	LEU
6	f	74	LEU
6	f	134	ILE

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Mol	Chain	Res	Type
6	f	178	THR
6	f	207	THR
7	g	12	ASN
7	g	25	GLU
7	g	59	LEU
7	g	88	LEU
7	g	107	ILE
7	g	109	ILE
7	g	136	THR
7	g	185	GLU
8	h	84	THR
8	h	114	LYS
8	h	135	ILE
8	h	185	VAL
8	h	188	THR
9	i	42	VAL
9	i	84	VAL
9	i	94	LEU
9	i	109	LEU
9	i	156	LEU
9	i	172	LYS
9	i	245	SER
10	j	13	VAL
10	j	20	CYS
10	j	196	VAL
11	k	27	VAL
11	k	54	VAL
11	k	109	LYS
11	k	112	ASN
11	k	126	VAL
11	k	161	LEU
12	l	79	LEU
12	l	84	GLN
12	l	106	VAL
12	l	109	VAL
12	l	146	LYS
12	l	222	ASP
12	l	276	LYS
13	m	106	TYR
13	m	109	ARG
13	m	119	ILE
13	m	165	LYS

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Mol	Chain	Res	Type
14	n	76	ILE
14	n	80	ASP
14	n	230	LEU
14	n	248	GLU
1	A	126	GLN
1	A	152	PRO
1	A	169	THR
1	A	209	HIS
1	A	234	PHE
2	B	4	ARG
2	B	6	SER
2	B	8	SER
2	B	41	ASN
2	B	97	TYR
2	B	182	GLU
2	B	185	LEU
2	B	199	SER
3	C	66	LEU
3	C	73	ILE
3	C	89	ASN
3	C	96	GLN
3	C	115	LEU
3	C	177	GLN
3	C	181	LYS
3	C	186	VAL
3	C	206	LEU
3	C	232	PRO
4	D	19	GLN
4	D	24	LEU
4	D	40	ASN
4	D	53	LYS
4	D	64	VAL
4	D	71	VAL
4	D	104	VAL
4	D	171	VAL
4	D	251	LYS
5	E	18	GLU
5	E	36	THR
5	E	109	VAL
5	E	164	PHE
5	E	213	ASP
6	F	26	LEU

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Mol	Chain	Res	Type
6	F	68	GLU
6	F	72	LEU
6	F	149	PRO
6	F	177	ASP
7	G	40	ILE
7	G	58	LEU
7	G	82	ILE
7	G	88	LEU
7	G	107	ILE
7	G	148	LEU
7	G	224	THR
7	G	241	ASP
8	1	21	VAL
8	1	30	THR
8	1	124	LEU
8	1	188	THR
9	2	68	PRO
9	2	87	LEU
9	2	105	VAL
9	2	118	LYS
9	2	153	TYR
9	2	161	LEU
10	3	11	ILE
10	3	13	VAL
10	3	77	LYS
10	3	80	ARG
10	3	147	PHE
11	4	15	LEU
11	4	119	ILE
11	4	126	VAL
11	4	151	ASP
11	4	159	ASP
11	4	168	LEU
11	4	186	LYS
12	5	79	LEU
12	5	109	VAL
12	5	161	LEU
12	5	170	LEU
12	5	179	TYR
12	5	215	LEU
12	5	251	ASN
12	5	252	LEU

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Mol	Chain	Res	Type
13	6	15	ASP
13	6	30	VAL
13	6	31	LEU
13	6	59	VAL
13	6	91	LYS
13	6	154	ILE
14	7	53	VAL
14	7	80	ASP
14	7	165	LEU
14	7	197	ASP
14	7	221	ASP
15	W	53	SER
15	W	79	THR
15	W	81	ILE
15	W	128	LEU
15	W	151	THR
15	W	182	TYR
16	V	26	THR
16	V	45	VAL
16	V	50	MET
16	V	92	MET
16	V	98	THR
16	V	147	VAL
17	T	29	PRO
17	T	30	ILE
17	T	178	THR
17	T	240	LYS
18	X	30	GLN
18	X	39	GLU
18	X	68	LEU
19	Y	27	LYS
19	Y	42	THR
19	Y	62	GLU
19	Y	88	ASN
20	Z	27	LYS
20	Z	29	ASP
20	Z	30	LYS
20	Z	81	SER
20	Z	83	THR
20	Z	171	LYS
20	Z	185	ASP
20	Z	222	ASP

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Mol	Chain	Res	Type
20	Z	354	PRO
20	Z	386	VAL
20	Z	402	ASP
20	Z	434	GLN
20	Z	445	PRO
20	Z	548	ASP
20	Z	563	VAL
20	Z	566	LEU
20	Z	609	THR
20	Z	703	SER
20	Z	797	THR
20	Z	842	GLN
20	Z	874	ASN
20	Z	878	LEU
20	Z	910	PRO
20	Z	955	VAL
21	N	44	PRO
21	N	76	GLU
21	N	87	ASP
21	N	223	LEU
21	N	310	ASP
21	N	360	GLN
21	N	361	ASN
21	N	418	ASP
21	N	713	VAL
21	N	728	LYS
21	N	734	VAL
21	N	739	PHE
21	N	774	ASN
21	N	835	LYS
21	N	860	LYS
21	N	893	VAL
21	N	903	VAL
22	S	34	LEU
22	S	130	VAL
22	S	131	THR
22	S	144	LEU
22	S	155	LEU
22	S	165	PRO
22	S	244	ASN
22	S	284	LEU
22	S	313	SER

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Mol	Chain	Res	Type
22	S	327	ILE
22	S	358	LYS
22	S	388	ILE
23	P	25	ASP
23	P	47	ARG
23	P	93	ILE
23	P	130	ILE
23	P	139	VAL
23	P	158	ASP
23	P	203	ILE
24	Q	45	SER
24	Q	66	VAL
24	Q	174	LEU
24	Q	220	LEU
24	Q	335	PHE
24	Q	343	LEU
24	Q	370	THR
24	Q	402	THR
25	R	21	VAL
25	R	72	VAL
25	R	162	ILE
25	R	208	ASN
25	R	248	SER
25	R	267	LYS
25	R	286	LEU
25	R	293	THR
25	R	361	VAL
25	R	382	ASP
25	R	406	GLN
26	U	9	THR
26	U	10	ILE
26	U	177	ASP
27	O	53	LYS
27	O	66	VAL
27	O	101	ASP
27	O	193	LEU
27	O	217	LEU
27	O	249	ASP
27	O	258	LEU
27	O	289	GLN
27	O	348	VAL
27	O	367	LYS

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Mol	Chain	Res	Type
28	H	145	TYR
28	H	157	VAL
28	H	188	PRO
28	H	195	VAL
28	H	208	TYR
28	H	224	VAL
28	H	238	LEU
28	H	242	PRO
28	H	254	THR
28	H	379	LEU
28	H	437	VAL
29	I	86	GLU
29	I	103	PRO
29	I	147	VAL
29	I	159	VAL
29	I	192	GLN
29	I	219	VAL
29	I	232	LEU
29	I	236	VAL
29	I	247	ILE
29	I	251	GLU
29	I	254	GLN
29	I	290	LYS
29	I	310	LEU
29	I	340	ARG
29	I	353	PRO
30	K	73	ARG
30	K	147	VAL
30	K	156	SER
30	K	203	ILE
30	K	286	THR
30	K	330	ARG
30	K	334	LEU
30	K	403	LEU
31	L	141	LYS
31	L	148	LEU
31	L	218	VAL
31	L	226	THR
31	L	320	GLN
31	L	415	LEU
32	M	75	LEU
32	M	106	VAL

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Mol	Chain	Res	Type
32	M	129	LEU
32	M	142	PRO
32	M	267	PHE
32	M	305	MET
32	M	344	ASP
32	M	365	SER
32	M	395	THR
32	M	410	VAL
32	M	415	PHE
33	J	14	THR
33	J	22	TYR
33	J	34	ILE
33	J	110	SER
33	J	113	VAL
33	J	129	LYS
33	J	150	VAL
33	J	156	GLN
33	J	179	ILE
33	J	190	PRO
33	J	230	VAL
33	J	236	MET
33	J	242	PRO
33	J	244	ILE
33	J	275	LEU
33	J	319	PRO
33	J	361	VAL
33	J	370	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (311) such sidechains are listed below:

Mol	Chain	Res	Type
1	a	36	ASN
1	a	56	GLN
1	a	193	HIS
1	a	209	HIS
2	b	30	GLN
2	b	119	GLN
2	b	241	GLN
3	c	21	GLN
3	c	31	HIS
3	c	70	ASN
3	c	120	GLN

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Mol	Chain	Res	Type
4	d	241	GLN
5	e	91	HIS
5	e	99	HIS
5	e	147	HIS
5	e	180	GLN
6	f	43	HIS
6	f	121	GLN
6	f	143	HIS
6	f	148	GLN
6	f	210	ASN
7	g	21	ASN
7	g	23	GLN
7	g	64	ASN
7	g	87	HIS
7	g	123	HIS
7	g	147	HIS
7	g	183	HIS
8	h	47	HIS
8	h	129	HIS
9	i	59	ASN
9	i	110	GLN
9	i	115	HIS
9	i	138	HIS
9	i	145	HIS
10	j	89	GLN
10	j	145	GLN
10	j	173	ASN
11	k	10	GLN
11	k	55	GLN
11	k	61	GLN
11	k	99	GLN
11	k	118	GLN
11	k	133	HIS
11	k	146	HIS
11	k	191	GLN
12	l	84	GLN
12	l	137	GLN
12	l	141	HIS
12	l	251	ASN
12	l	254	HIS
12	l	263	HIS
12	l	265	ASN

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Mol	Chain	Res	Type
12	l	284	ASN
13	m	57	ASN
13	m	63	ASN
13	m	95	ASN
13	m	143	GLN
13	m	205	GLN
14	n	35	GLN
14	n	155	ASN
14	n	182	HIS
14	n	246	GLN
14	n	264	GLN
1	A	27	GLN
1	A	37	GLN
1	A	126	GLN
1	A	181	ASN
1	A	185	HIS
2	B	190	HIS
2	B	218	ASN
2	B	244	ASN
3	C	31	HIS
3	C	59	GLN
3	C	96	GLN
3	C	97	ASN
3	C	125	HIS
3	C	152	ASN
3	C	177	GLN
4	D	40	ASN
4	D	70	HIS
4	D	149	GLN
4	D	162	GLN
4	D	178	ASN
5	E	23	GLN
5	E	73	HIS
5	E	108	ASN
5	E	147	HIS
5	E	188	HIS
5	E	215	ASN
5	E	218	GLN
6	F	60	GLN
6	F	143	HIS
6	F	148	GLN
6	F	166	GLN

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Mol	Chain	Res	Type
7	G	12	ASN
7	G	43	ASN
7	G	87	HIS
7	G	127	ASN
7	G	147	HIS
7	G	182	HIS
7	G	204	HIS
8	1	47	HIS
8	1	166	HIS
9	2	91	ASN
9	2	170	HIS
10	3	38	ASN
10	3	169	GLN
10	3	173	ASN
10	3	204	GLN
11	4	112	ASN
11	4	147	HIS
12	5	128	GLN
12	5	141	HIS
12	5	218	ASN
12	5	251	ASN
12	5	263	HIS
13	6	37	ASN
13	6	87	HIS
13	6	95	ASN
13	6	205	GLN
14	7	36	GLN
14	7	70	ASN
14	7	94	GLN
14	7	111	ASN
14	7	244	ASN
14	7	246	GLN
14	7	249	ASN
15	W	38	GLN
15	W	58	ASN
15	W	86	HIS
15	W	95	GLN
15	W	100	HIS
15	W	150	ASN
15	W	165	GLN
16	V	111	HIS
16	V	124	ASN

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Mol	Chain	Res	Type
16	V	181	ASN
16	V	190	HIS
16	V	220	GLN
16	V	274	GLN
17	T	17	ASN
17	T	93	ASN
17	T	158	GLN
17	T	165	GLN
17	T	213	ASN
17	T	236	ASN
17	T	238	GLN
18	X	18	ASN
18	X	30	GLN
18	X	102	GLN
18	X	108	ASN
18	X	130	ASN
19	Y	9	GLN
19	Y	56	GLN
19	Y	88	ASN
20	Z	15	GLN
20	Z	23	GLN
20	Z	69	ASN
20	Z	156	HIS
20	Z	214	HIS
20	Z	215	ASN
20	Z	247	GLN
20	Z	275	GLN
20	Z	276	ASN
20	Z	307	HIS
20	Z	309	GLN
20	Z	317	GLN
20	Z	380	ASN
20	Z	396	ASN
20	Z	429	ASN
20	Z	480	ASN
20	Z	532	HIS
20	Z	539	ASN
20	Z	593	HIS
20	Z	769	ASN
20	Z	789	GLN
20	Z	823	ASN
20	Z	824	ASN

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Mol	Chain	Res	Type
20	Z	829	GLN
20	Z	842	GLN
20	Z	856	HIS
20	Z	874	ASN
20	Z	926	ASN
21	N	29	ASN
21	N	30	ASN
21	N	176	GLN
21	N	226	ASN
21	N	249	ASN
21	N	280	GLN
21	N	288	ASN
21	N	300	ASN
21	N	306	ASN
21	N	329	HIS
21	N	336	ASN
21	N	340	HIS
21	N	352	ASN
21	N	361	ASN
21	N	375	HIS
21	N	378	ASN
21	N	512	ASN
21	N	525	ASN
21	N	573	HIS
21	N	580	ASN
21	N	614	ASN
21	N	616	HIS
21	N	654	GLN
21	N	672	ASN
21	N	688	ASN
21	N	690	HIS
21	N	859	ASN
22	S	66	GLN
22	S	79	ASN
22	S	159	ASN
22	S	166	ASN
22	S	235	ASN
22	S	243	ASN
22	S	261	HIS
22	S	317	HIS
22	S	334	HIS
22	S	347	HIS

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Mol	Chain	Res	Type
22	S	437	ASN
22	S	470	GLN
23	P	98	GLN
23	P	128	ASN
23	P	282	HIS
23	P	334	ASN
23	P	375	GLN
23	P	417	HIS
23	P	440	HIS
24	Q	37	GLN
24	Q	54	GLN
24	Q	63	GLN
24	Q	145	HIS
24	Q	147	GLN
24	Q	150	GLN
24	Q	190	ASN
24	Q	213	GLN
24	Q	226	HIS
24	Q	252	HIS
24	Q	283	ASN
24	Q	320	GLN
24	Q	334	HIS
24	Q	361	HIS
24	Q	404	ASN
24	Q	405	GLN
25	R	81	HIS
25	R	208	ASN
25	R	223	ASN
25	R	314	ASN
25	R	323	ASN
25	R	376	GLN
25	R	395	ASN
25	R	415	GLN
26	U	5	HIS
26	U	21	HIS
26	U	77	ASN
26	U	127	GLN
26	U	260	ASN
26	U	270	ASN
26	U	280	ASN
27	O	64	ASN
27	O	74	ASN

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Mol	Chain	Res	Type
27	O	105	GLN
27	O	122	HIS
27	O	177	GLN
27	O	256	ASN
27	O	273	GLN
27	O	318	HIS
28	H	98	GLN
28	H	130	ASN
28	H	182	ASN
28	H	281	GLN
28	H	330	GLN
28	H	339	GLN
28	H	413	ASN
28	H	467	ASN
29	I	78	ASN
29	I	150	HIS
29	I	151	HIS
29	I	204	HIS
29	I	254	GLN
29	I	295	ASN
29	I	311	ASN
29	I	365	HIS
30	K	106	ASN
30	K	180	GLN
30	K	302	GLN
30	K	414	GLN
31	L	175	GLN
31	L	203	ASN
31	L	302	GLN
31	L	387	ASN
31	L	435	GLN
32	M	24	ASN
32	M	55	ASN
32	M	143	ASN
32	M	189	GLN
32	M	364	HIS
32	M	407	GLN
32	M	423	GLN
33	J	28	GLN
33	J	89	GLN
33	J	170	HIS
33	J	181	GLN

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Mol	Chain	Res	Type
33	J	205	HIS
33	J	240	HIS
33	J	277	ASN
33	J	287	ASN
33	J	351	ASN
33	J	394	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

Of 12 ligands modelled in this entry, 6 are monoatomic - leaving 6 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
34	ATP	I	501	35	32,33,33	3.72	5 (15%)	48,52,52	1.27	4 (8%)
34	ATP	H	501	35	32,33,33	4.65	7 (21%)	48,52,52	1.21	3 (6%)
34	ATP	J	501	35	32,33,33	4.66	7 (21%)	48,52,52	1.63	10 (20%)
36	ADP	L	501	35	28,29,29	2.40	6 (21%)	43,45,45	1.70	8 (18%)
34	ATP	M	501	35	32,33,33	3.96	5 (15%)	48,52,52	1.29	6 (12%)
36	ADP	K	501	35	28,29,29	2.09	5 (17%)	43,45,45	1.40	8 (18%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	ATP	I	501	35	-	7/22/38/38	0/3/3/3
34	ATP	H	501	35	-	4/22/38/38	0/3/3/3
34	ATP	J	501	35	-	3/22/38/38	0/3/3/3
36	ADP	L	501	35	-	3/16/32/32	0/3/3/3
34	ATP	M	501	35	-	5/22/38/38	0/3/3/3
36	ADP	K	501	35	-	4/16/32/32	0/3/3/3

All (35) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	J	501	ATP	PB-O3B	17.60	1.78	1.59
34	H	501	ATP	PB-O3B	17.36	1.78	1.59
34	M	501	ATP	PB-O3B	16.84	1.77	1.59
34	I	501	ATP	PB-O3B	16.09	1.76	1.59
34	H	501	ATP	PB-O3A	14.72	1.75	1.59
34	J	501	ATP	PA-O3A	12.93	1.73	1.59
34	J	501	ATP	PB-O3A	12.66	1.73	1.59
34	I	501	ATP	PB-O3A	11.13	1.71	1.59
34	H	501	ATP	PA-O3A	10.96	1.71	1.59
34	M	501	ATP	PB-O3A	10.27	1.70	1.59
36	L	501	ADP	PA-O3A	8.79	1.69	1.59
34	M	501	ATP	PA-O3A	8.41	1.68	1.59
36	K	501	ADP	PA-O3A	7.79	1.67	1.59
36	L	501	ADP	C5-N7	-5.01	1.29	1.39
34	I	501	ATP	PA-O3A	4.52	1.64	1.59
36	L	501	ADP	C2-N3	4.48	1.41	1.33
34	M	501	ATP	C8-N9	3.77	1.44	1.37
34	J	501	ATP	C6-N6	3.76	1.43	1.34
34	J	501	ATP	C4-N3	-3.24	1.28	1.34
36	K	501	ADP	C8-N9	-3.23	1.32	1.37
34	H	501	ATP	C8-N9	-3.17	1.32	1.37
36	L	501	ADP	O4'-C1'	2.98	1.48	1.42
36	K	501	ADP	O2'-C2'	-2.96	1.35	1.43
36	K	501	ADP	C6-N6	2.81	1.41	1.34
34	J	501	ATP	C5-N7	-2.51	1.34	1.39
36	L	501	ADP	PB-O2B	-2.48	1.45	1.54
34	I	501	ATP	O2'-C2'	-2.46	1.36	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	I	501	ATP	O3'-C3'	-2.40	1.37	1.43
34	H	501	ATP	C2'-C3'	-2.34	1.47	1.53
34	M	501	ATP	C3'-C4'	2.20	1.58	1.53
34	J	501	ATP	C4-N9	-2.18	1.33	1.37
34	H	501	ATP	C5-N7	-2.10	1.35	1.39
34	H	501	ATP	PA-O5'	-2.07	1.51	1.59
36	L	501	ADP	O4'-C4'	-2.04	1.40	1.45
36	K	501	ADP	C2'-C1'	-2.02	1.47	1.53

All (39) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	J	501	ATP	N6-C6-N1	5.35	130.29	118.38
36	L	501	ADP	O4'-C1'-N9	4.99	117.67	108.09
36	L	501	ADP	C6-C5-C4	4.16	122.86	117.18
34	J	501	ATP	C6-C5-C4	4.01	122.65	117.18
34	M	501	ATP	N6-C6-N1	3.93	127.13	118.38
36	L	501	ADP	N6-C6-N1	3.47	126.10	118.38
36	K	501	ADP	C2'-C3'-C4'	-3.44	95.96	102.61
34	J	501	ATP	O2B-PB-O3A	3.36	116.37	107.27
36	L	501	ADP	C6-C5-N7	-3.21	125.90	132.09
34	H	501	ATP	O5'-C5'-C4'	3.01	119.23	108.99
34	H	501	ATP	N6-C6-N1	2.99	125.04	118.38
36	L	501	ADP	C4-N9-C8	-2.98	102.61	105.74
34	I	501	ATP	N6-C6-N1	2.78	124.57	118.38
36	K	501	ADP	C4-C5-N7	-2.78	107.41	110.58
36	K	501	ADP	C4-N9-C8	2.70	108.58	105.74
36	L	501	ADP	O5'-C5'-C4'	2.60	117.83	108.99
36	K	501	ADP	N6-C6-N1	2.58	124.13	118.38
34	H	501	ATP	C6-C5-C4	2.58	120.70	117.18
34	J	501	ATP	O3G-PG-O2G	2.58	117.47	107.80
36	K	501	ADP	C3'-C2'-C1'	2.54	106.28	101.46
34	M	501	ATP	O3G-PG-O2G	2.54	117.33	107.80
34	M	501	ATP	C6-C5-C4	2.46	120.54	117.18
34	J	501	ATP	O3A-PA-O1A	-2.43	103.38	110.70
34	I	501	ATP	O2B-PB-O3A	2.43	113.84	107.27
36	K	501	ADP	O3B-PB-O2B	2.40	116.82	107.80
34	J	501	ATP	C5-C6-N1	-2.38	111.47	117.51
36	K	501	ADP	C5-N7-C8	2.37	107.17	103.45
34	J	501	ATP	O2A-PA-O3A	2.18	113.16	107.27
34	M	501	ATP	C5-C4-N3	-2.16	123.73	126.72
36	L	501	ADP	C5-N7-C8	2.15	106.83	103.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	L	501	ADP	O2A-PA-O1A	2.11	122.27	112.44
36	K	501	ADP	O4'-C1'-N9	2.11	112.14	108.09
34	J	501	ATP	C6-C5-N7	-2.06	128.12	132.09
34	I	501	ATP	C4-C5-N7	-2.05	108.24	110.58
34	J	501	ATP	C5-C6-N6	-2.04	118.24	123.29
34	M	501	ATP	O3'-C3'-C4'	-2.03	105.24	111.08
34	M	501	ATP	C6-C5-N7	-2.02	128.19	132.09
34	J	501	ATP	O3'-C3'-C4'	-2.02	105.28	111.08
34	I	501	ATP	O3B-PG-O1G	-2.00	100.51	111.04

There are no chirality outliers.

All (26) torsion outliers are listed below:

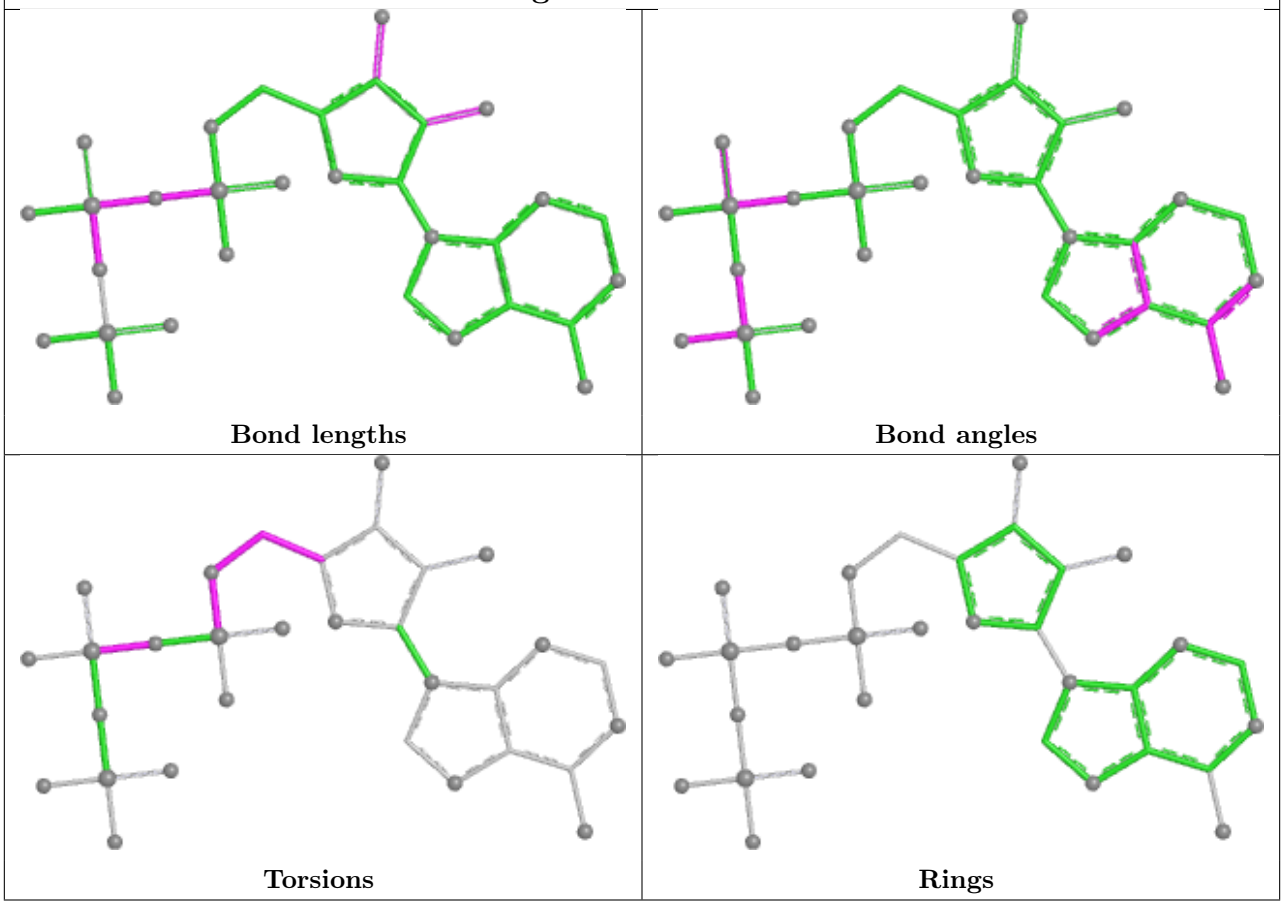
Mol	Chain	Res	Type	Atoms
34	H	501	ATP	C5'-O5'-PA-O2A
34	H	501	ATP	C5'-O5'-PA-O3A
34	I	501	ATP	C5'-O5'-PA-O1A
34	I	501	ATP	C5'-O5'-PA-O2A
34	I	501	ATP	C5'-O5'-PA-O3A
34	M	501	ATP	C5'-O5'-PA-O2A
34	M	501	ATP	C5'-O5'-PA-O3A
34	J	501	ATP	C5'-O5'-PA-O3A
36	K	501	ADP	C5'-O5'-PA-O1A
36	K	501	ADP	C5'-O5'-PA-O2A
36	K	501	ADP	C5'-O5'-PA-O3A
36	L	501	ADP	C5'-O5'-PA-O1A
36	L	501	ADP	C5'-O5'-PA-O3A
34	I	501	ATP	O4'-C4'-C5'-O5'
34	I	501	ATP	C3'-C4'-C5'-O5'
34	M	501	ATP	PA-O3A-PB-O2B
34	I	501	ATP	C4'-C5'-O5'-PA
34	J	501	ATP	C5'-O5'-PA-O1A
36	L	501	ADP	C5'-O5'-PA-O2A
34	H	501	ATP	C4'-C5'-O5'-PA
34	H	501	ATP	PA-O3A-PB-O2B
34	M	501	ATP	C4'-C5'-O5'-PA
36	K	501	ADP	PA-O3A-PB-O3B
34	I	501	ATP	PA-O3A-PB-O2B
34	M	501	ATP	PA-O3A-PB-O1B
34	J	501	ATP	PA-O3A-PB-O2B

There are no ring outliers.

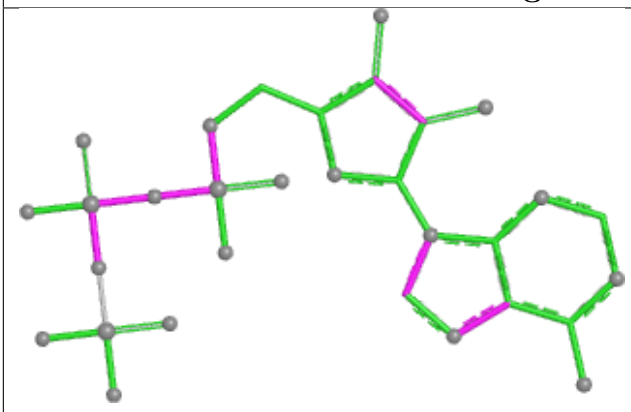
No monomer is involved in short contacts.

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

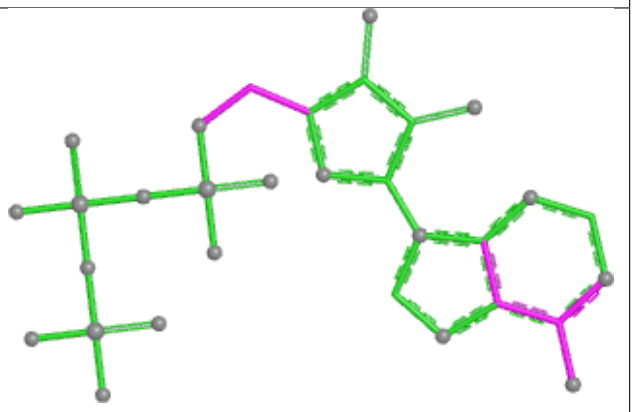
Ligand ATP I 501



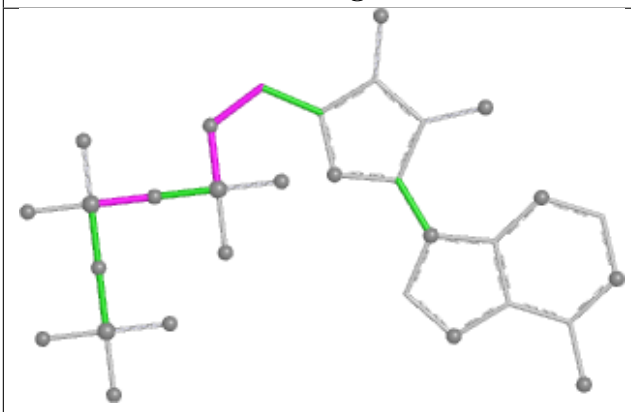
Ligand ATP H 501



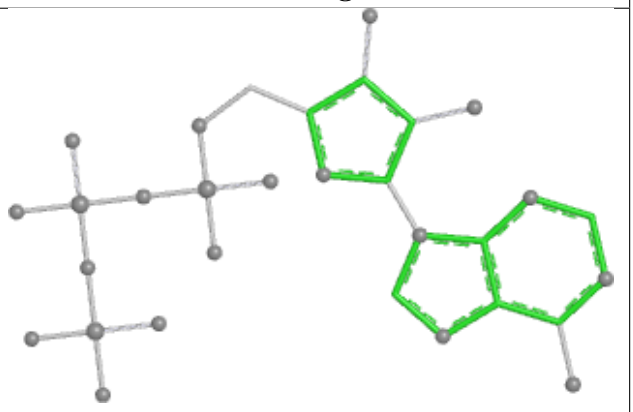
Bond lengths



Bond angles

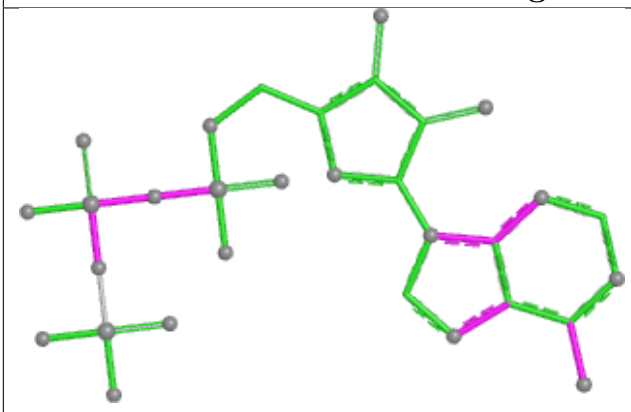


Torsions

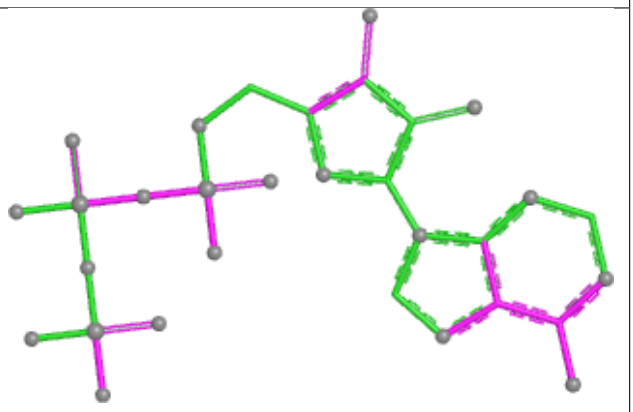


Rings

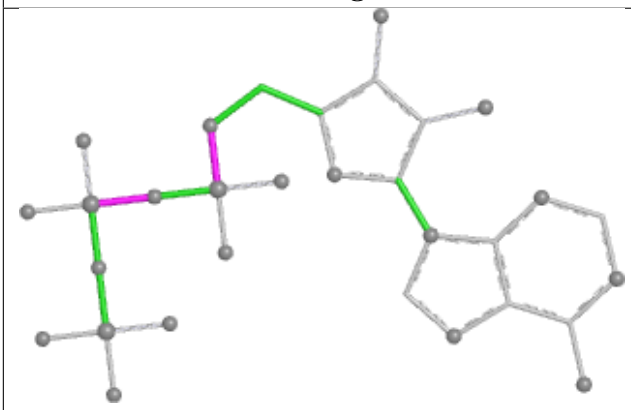
Ligand ATP J 501



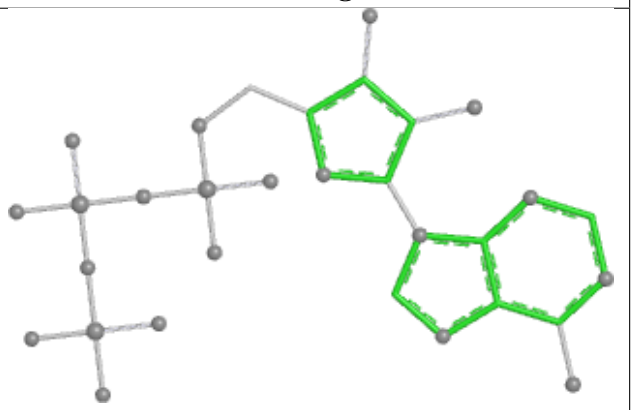
Bond lengths



Bond angles

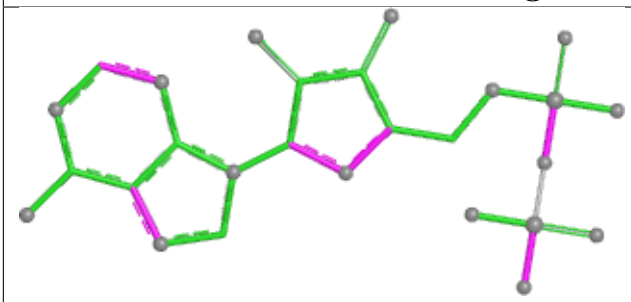


Torsions

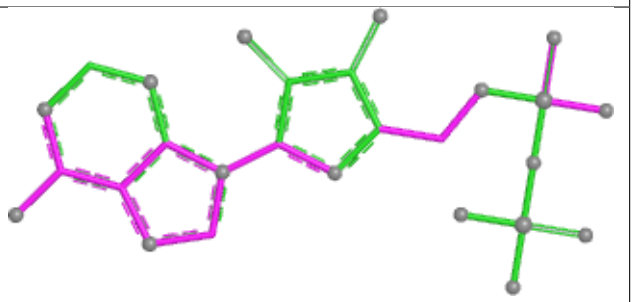


Rings

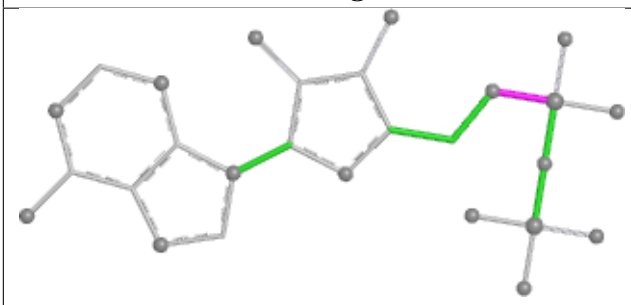
Ligand ADP L 501



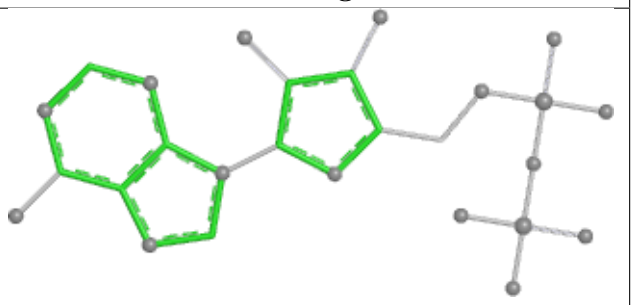
Bond lengths



Bond angles

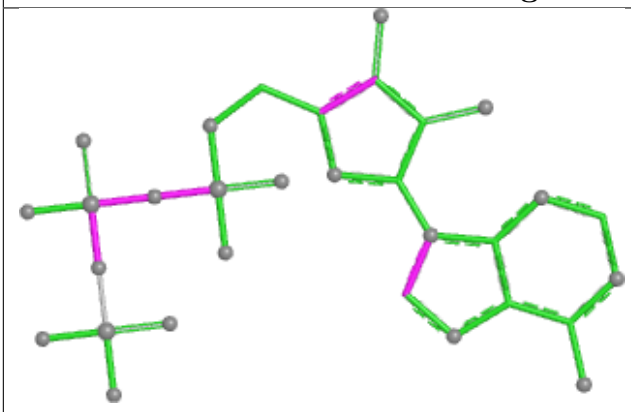


Torsions

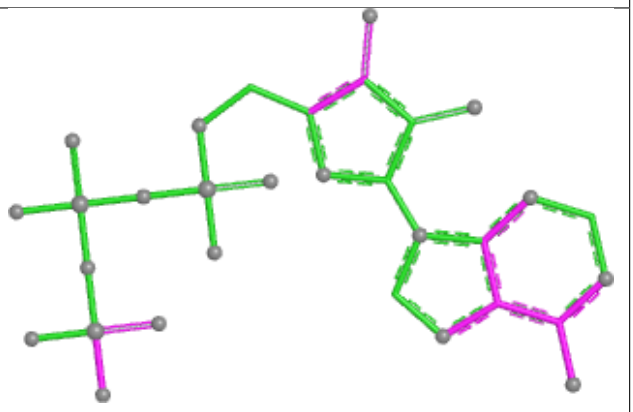


Rings

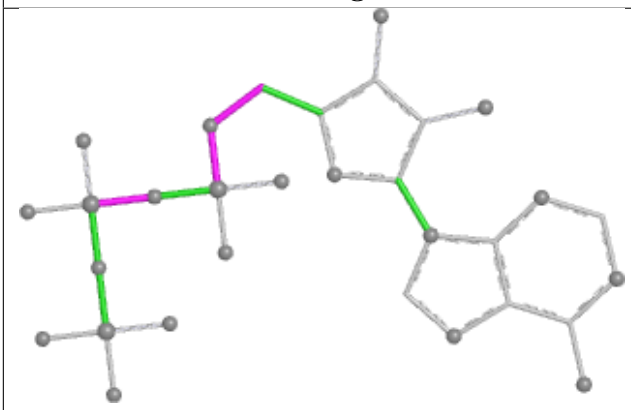
Ligand ATP M 501



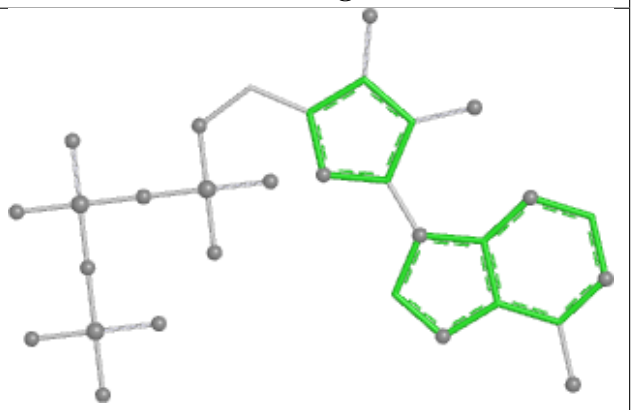
Bond lengths



Bond angles

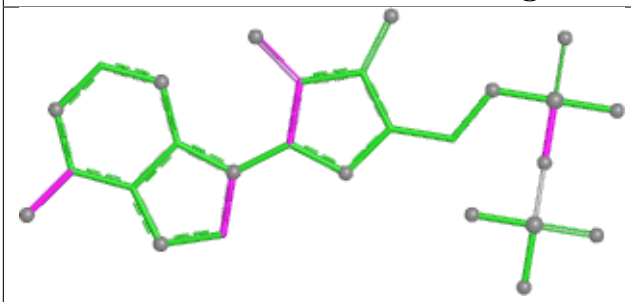


Torsions

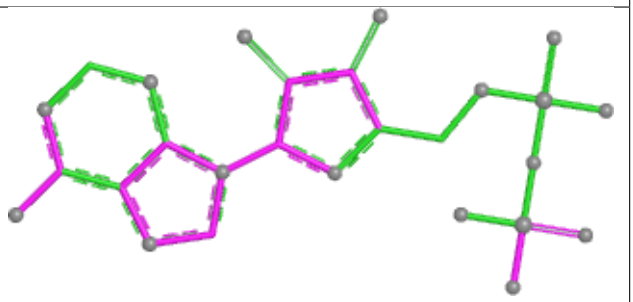


Rings

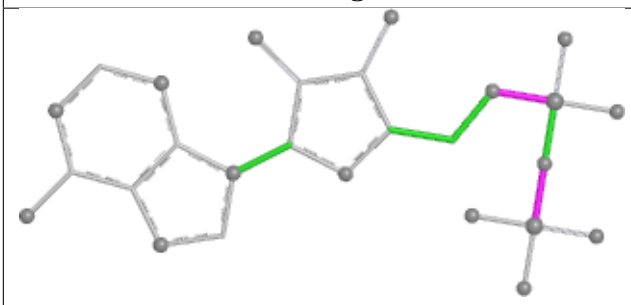
Ligand ADP K 501



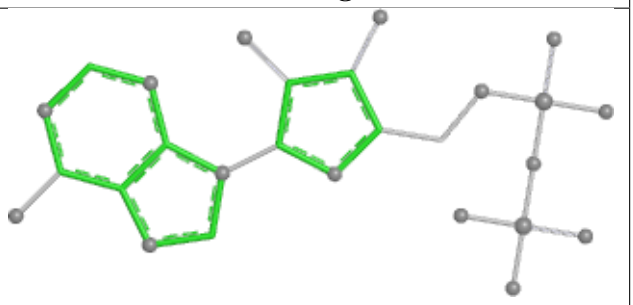
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

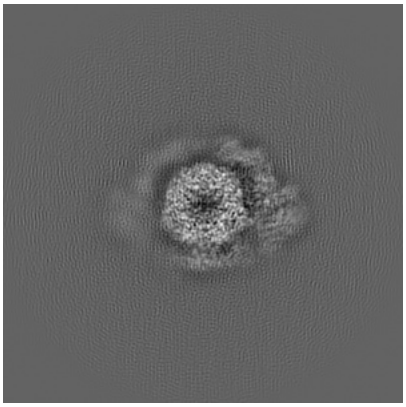
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-4322. These allow visual inspection of the internal detail of the map and identification of artifacts.

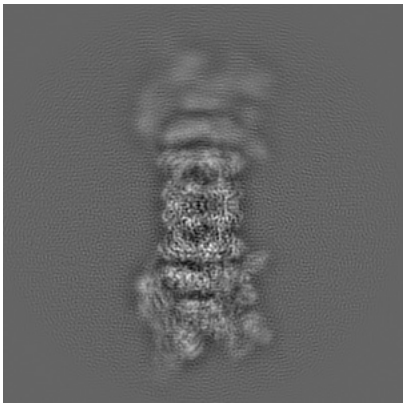
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

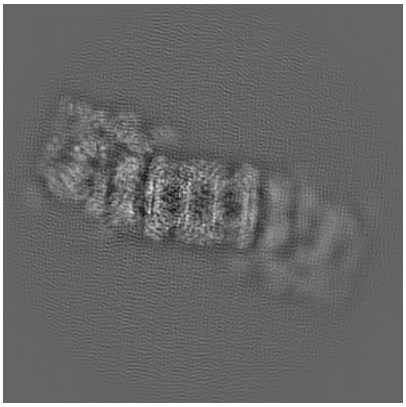
6.1.1 Primary map



X



Y

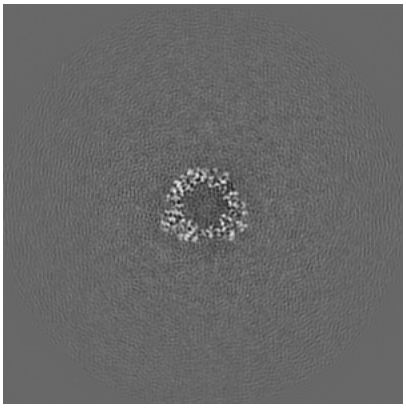


Z

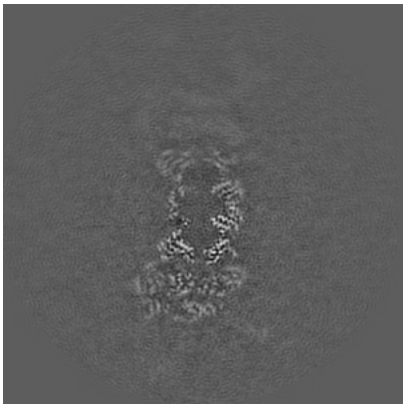
The images above show the map projected in three orthogonal directions.

6.2 Central slices

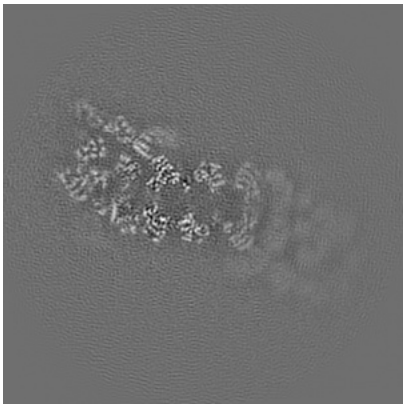
6.2.1 Primary map



X Index: 192



Y Index: 192

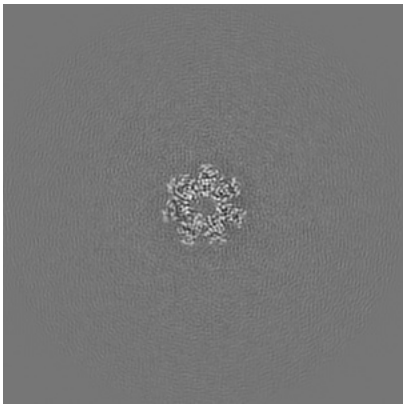


Z Index: 192

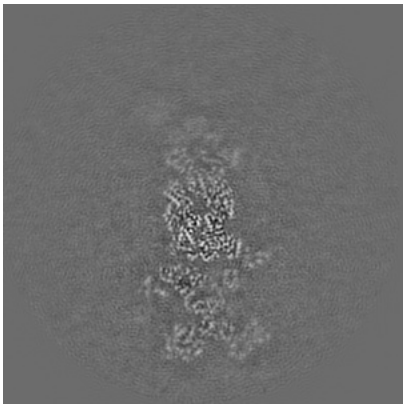
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

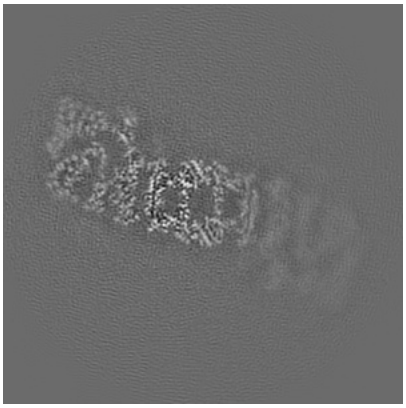
6.3.1 Primary map



X Index: 177



Y Index: 212

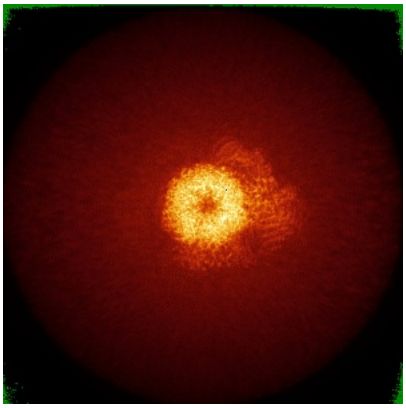


Z Index: 178

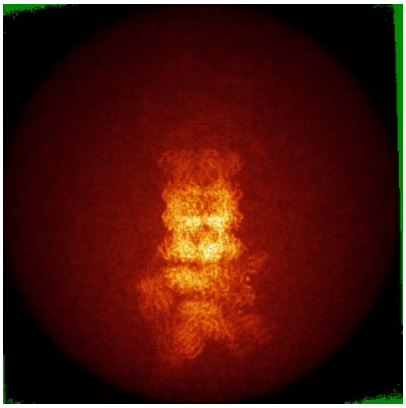
The images above show the largest variance slices of the map in three orthogonal directions.

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

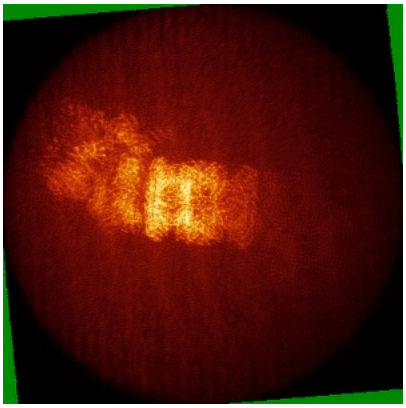
6.4.1 Primary map



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 0.02. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

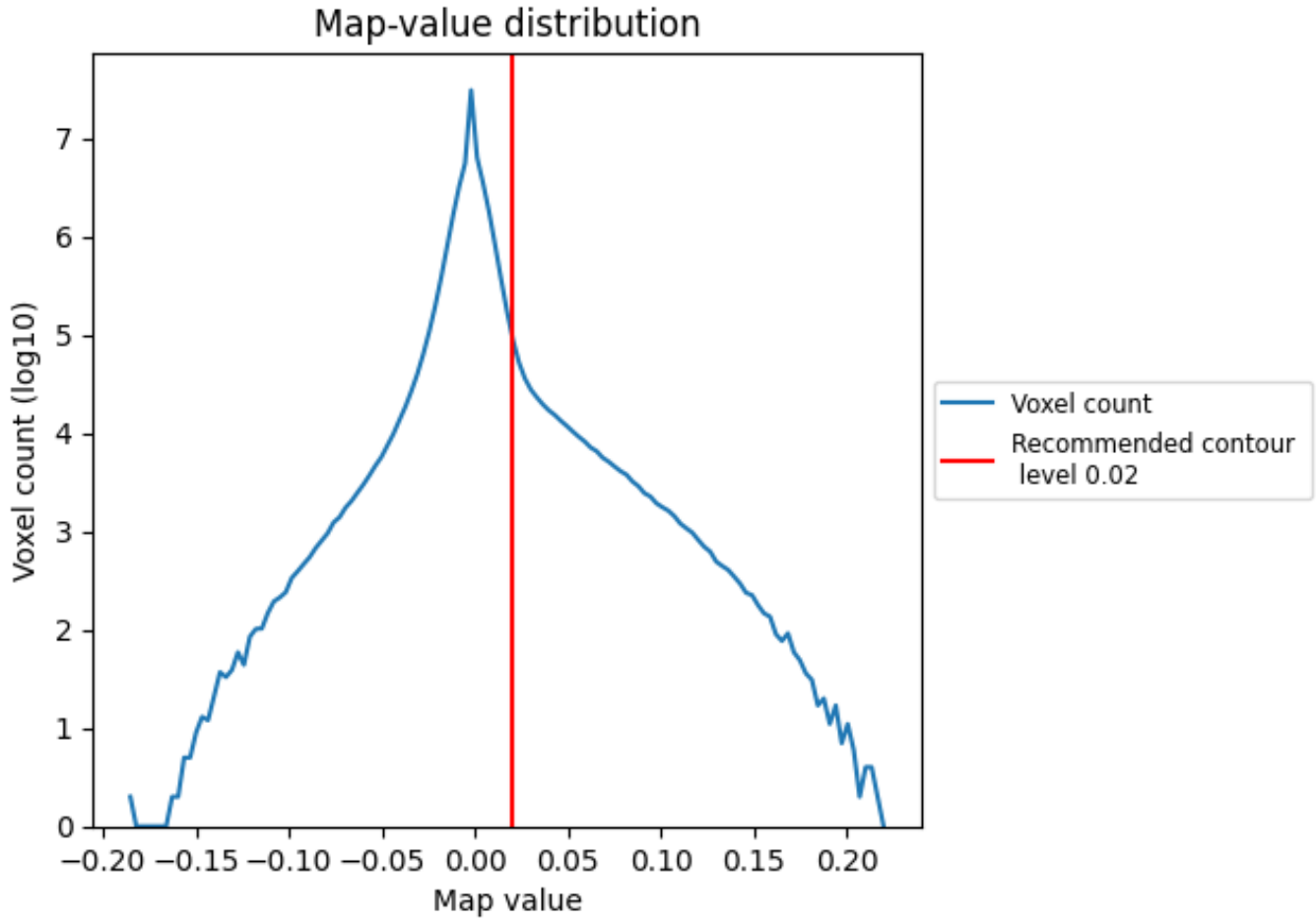
6.6 Mask visualisation (i)

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

7 Map analysis

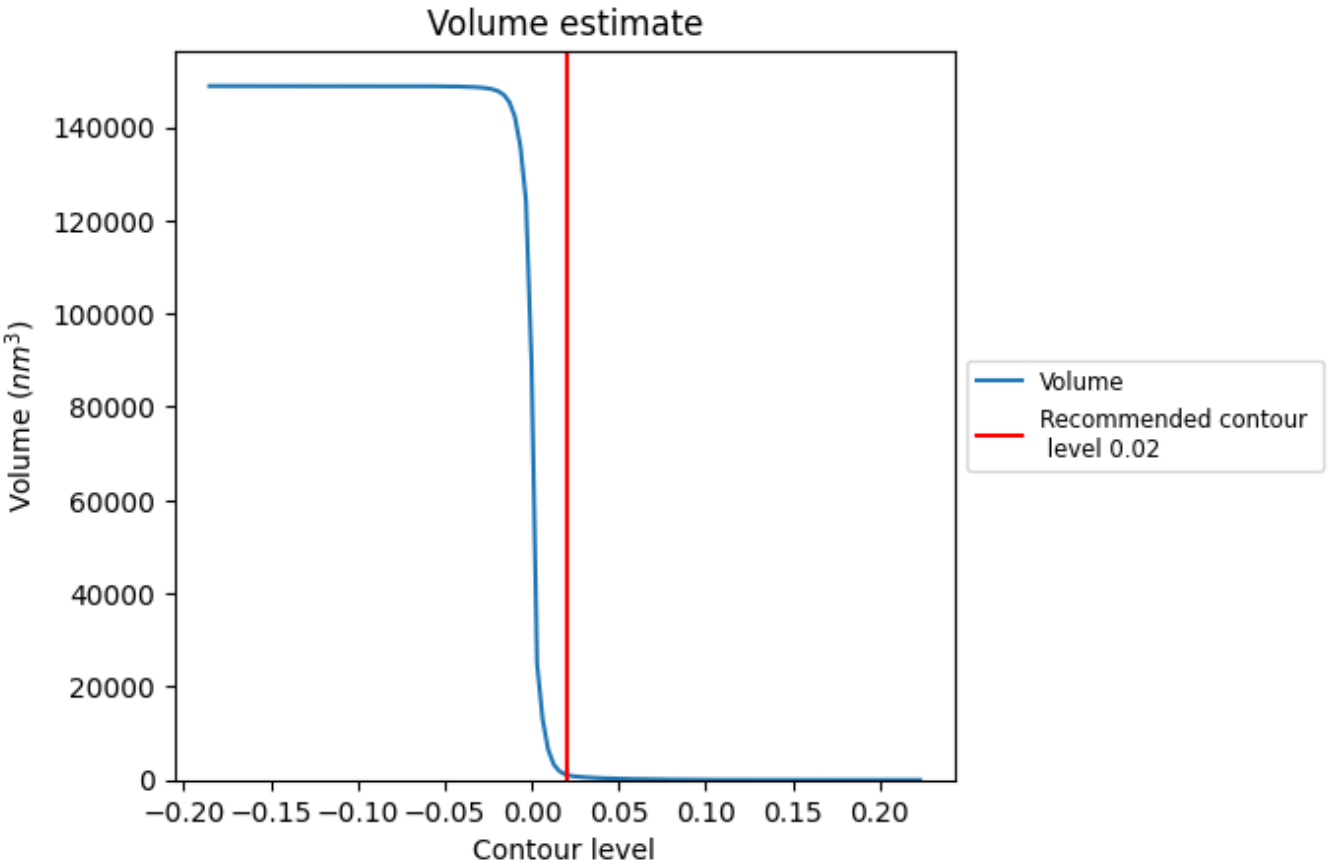
This section contains the results of statistical analysis of the map.

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.

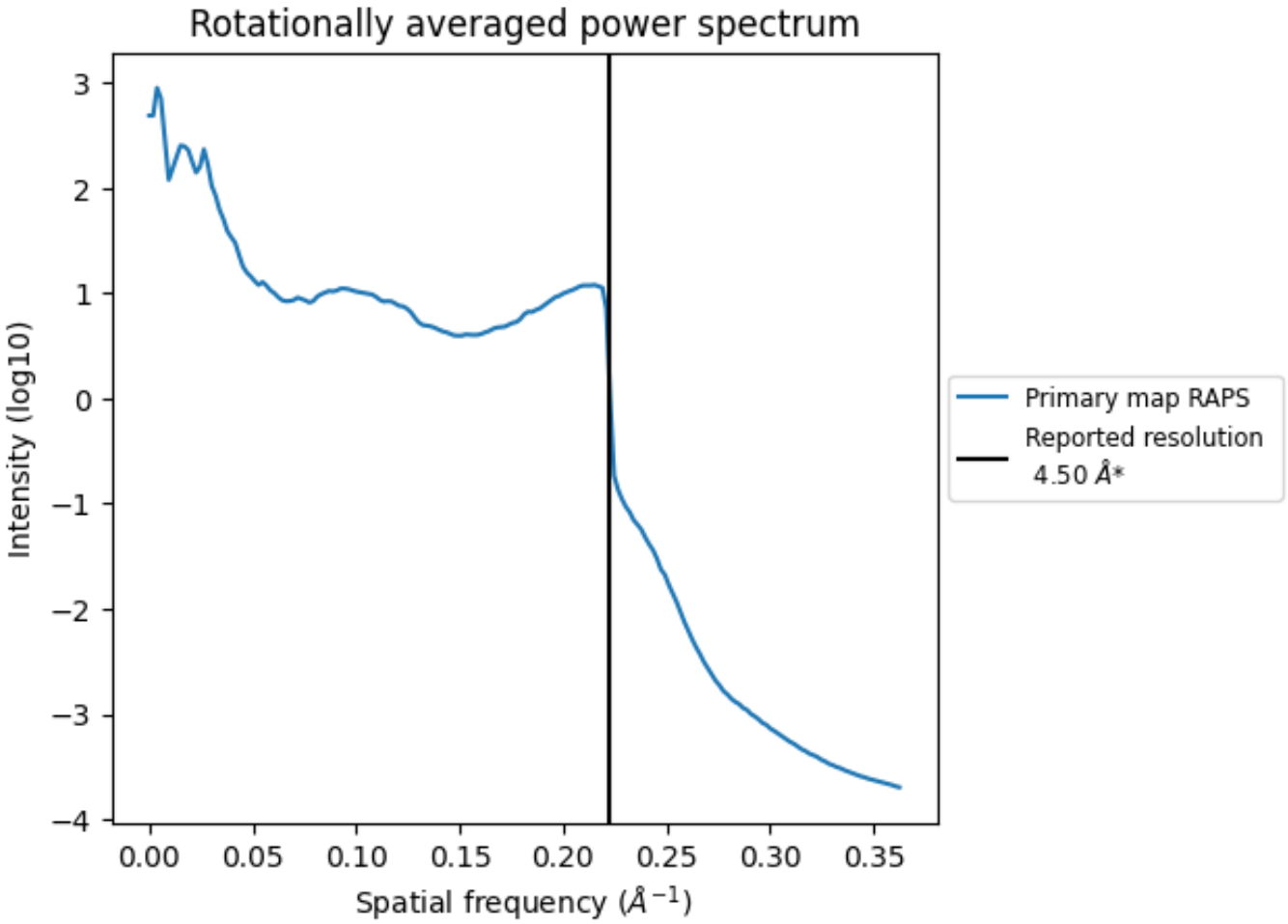
7.2 Volume estimate



The volume at the recommended contour level is 1128 nm^3; this corresponds to an approximate mass of 1019 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 0.222 Å^{-1}

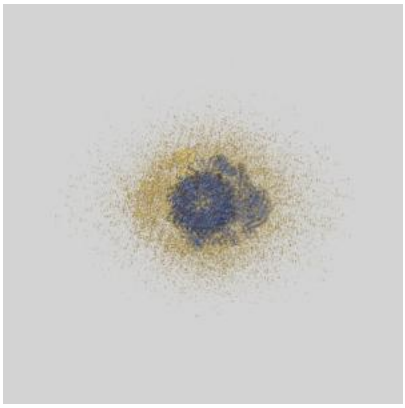
8 Fourier-Shell correlation

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

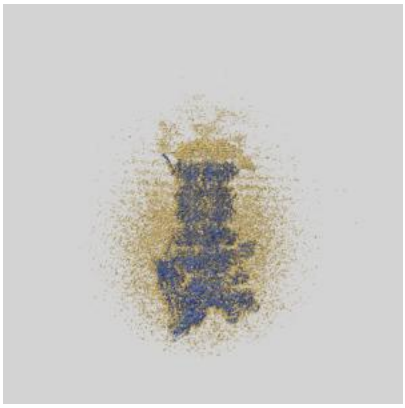
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-4322 and PDB model 6FVW. Per-residue inclusion information can be found in section 3 on page 13.

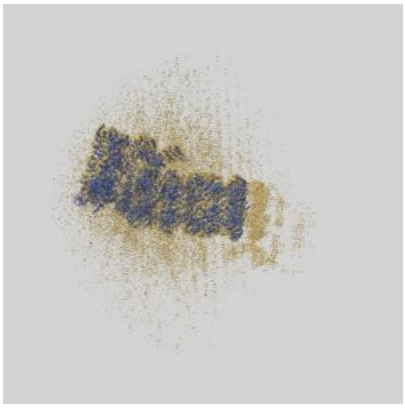
9.1 Map-model overlay



X



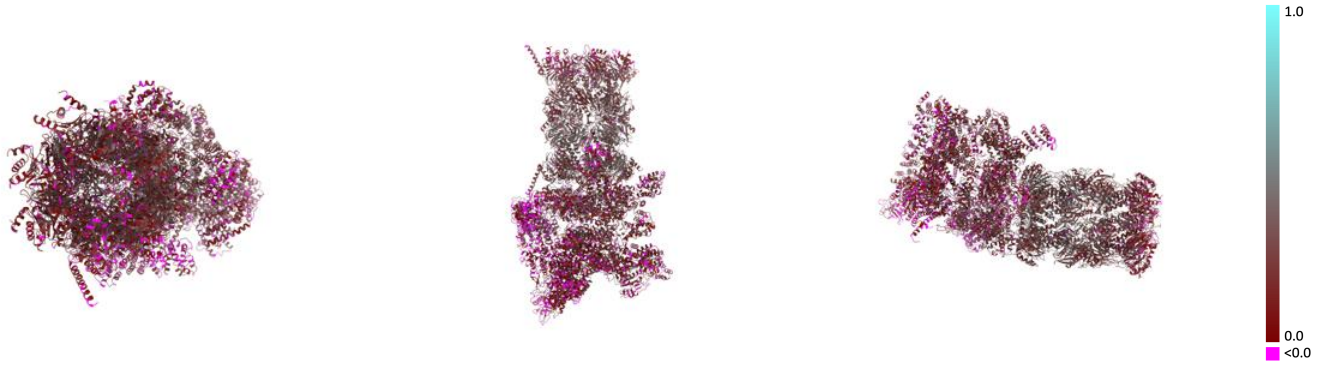
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.02 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.

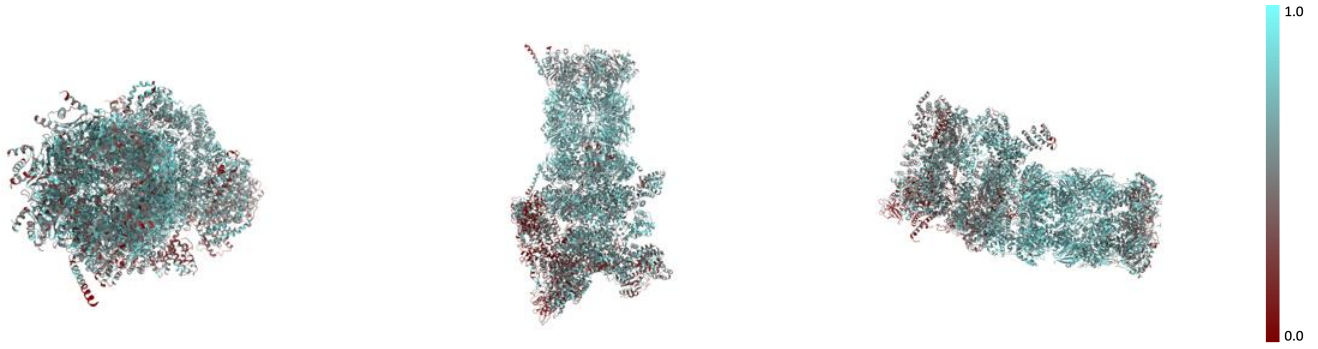
9.2 Q-score mapped to coordinate model



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.

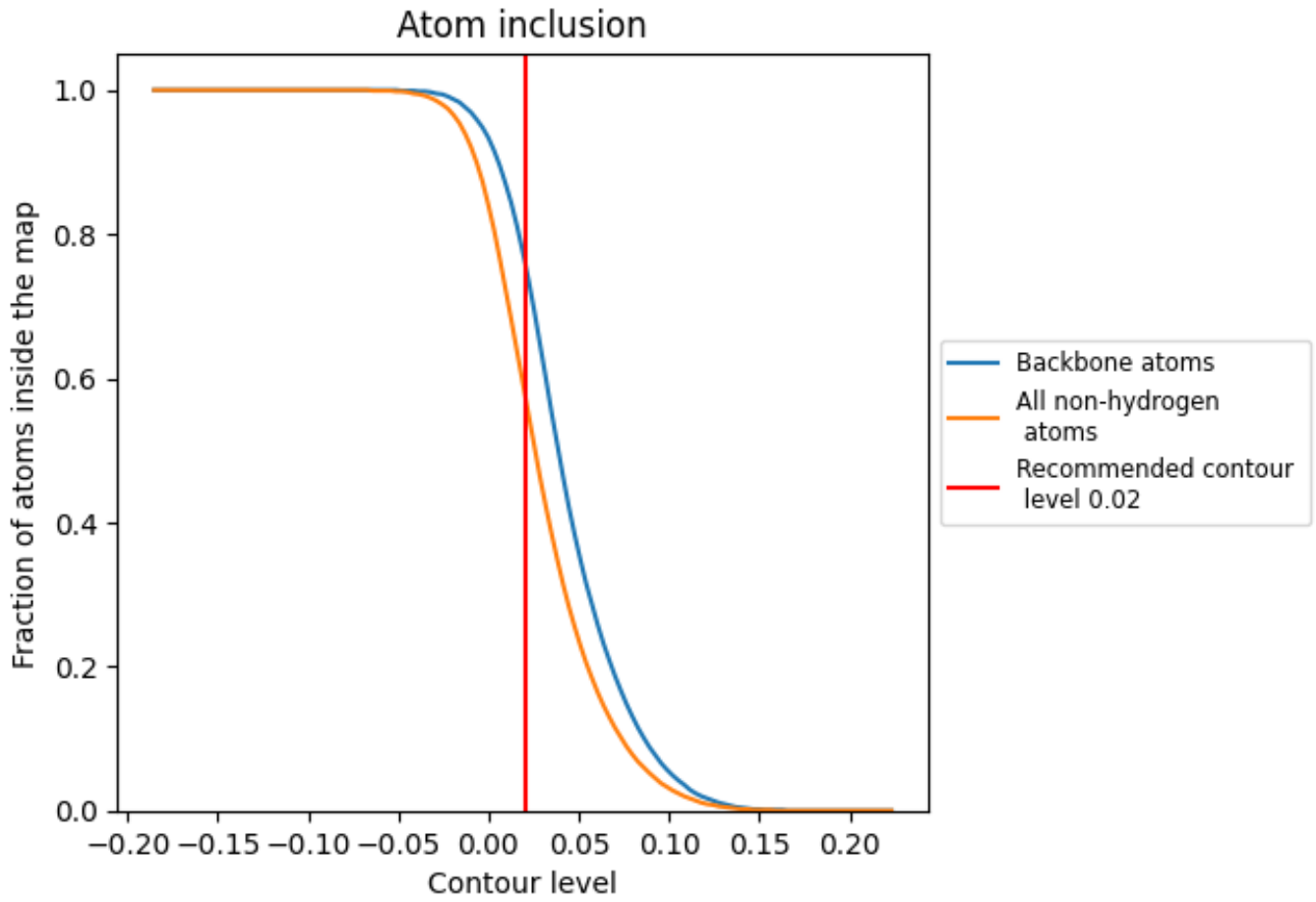
9.3 Atom inclusion mapped to coordinate model



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 (0.02).

9.4 Atom inclusion (i)



At the recommended contour level, 76% of all backbone atoms, 58% 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 (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5780	0.2040
1	0.7750	0.3320
2	0.7530	0.3300
3	0.7350	0.3300
4	0.7340	0.3070
5	0.7650	0.3140
6	0.7620	0.3240
7	0.7710	0.3240
A	0.7390	0.3050
B	0.7390	0.3200
C	0.7320	0.2950
D	0.7050	0.2880
E	0.7300	0.3120
F	0.7600	0.3260
G	0.7570	0.3100
H	0.5540	0.2050
I	0.6050	0.2220
J	0.5740	0.2010
K	0.6090	0.2080
L	0.4770	0.1500
M	0.5230	0.1880
N	0.4840	0.1380
O	0.4990	0.1400
P	0.6250	0.1740
Q	0.5860	0.1670
R	0.6090	0.1790
S	0.4390	0.1320
T	0.4000	0.0990
U	0.5500	0.1900
V	0.5840	0.2010
W	0.4050	0.1250
X	0.0380	0.0180
Y	0.3150	0.0850
Z	0.3420	0.0390
a	0.5300	0.1750

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Chain	Atom inclusion	Q-score
b	0.5130	0.1790
c	0.5410	0.1860
d	0.4880	0.1540
e	0.4960	0.1560
f	0.5530	0.1980
g	0.5540	0.1860
h	0.7060	0.2840
i	0.6970	0.2820
j	0.6790	0.2750
k	0.6890	0.2680
l	0.7040	0.2790
m	0.6930	0.2770
n	0.7200	0.3030