Full wwPDB EM Validation Report ⓘ

Mar 9, 2026 – 04:37 PM UTC

PDB ID	:	6NRA / pdb_00006nra
EMDB ID	:	EMD-0492
Title	:	hTRiC-hPFD Class1 (No PFD)
Authors	:	Gestaut, D.R.; Roh, S.H.; Ma, B.; Pintilie, G.; Joachimiak, L.A.; Leitner, A.; Walzthoeni, T.; Aebersold, R.; Chiu, W.; Frydman, J.
Deposited on	:	2019-01-23
Resolution	:	7.70 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

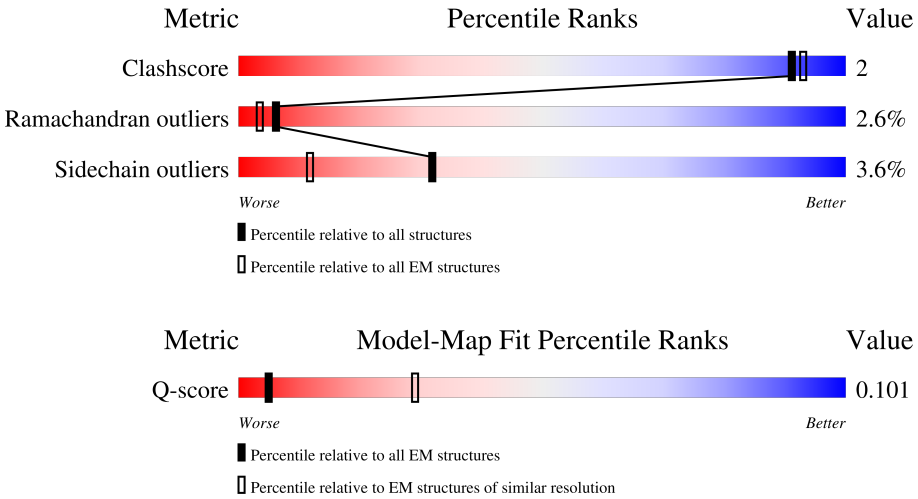
EMDB validation analysis	:	0.0.1.dev132
MolProbity	:	4-5-2 with Phenix2.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh &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

1 Overall quality at a glance

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

The reported resolution of this entry is 7.70 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	384 (7.20 - 8.20)

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	534	20% 45% 46% 6% .
1	I	534	25% 41% 52% 6% .
2	B	509	33% 40% 53% 6%
2	J	509	38% 47% 47% 5%

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Mol	Chain	Length	Quality of chain
3	C	513	17% 41% 51% 7%
3	K	513	21% 40% 53% 6%
4	D	514	14% 46% 47% 5%
4	L	514	21% 43% 52%
5	E	517	15% 42% 50% 7%
5	M	517	17% 43% 51% 6%
6	F	515	9% 48% 47% 5%
6	N	515	11% 48% 46% 6%
7	G	514	14% 42% 51% 6%
7	O	514	21% 43% 49% 7%
8	H	514	9% 46% 48% 5%
8	P	514	11% 45% 49% 5%

2 Entry composition

There are 8 unique types of molecules in this entry. The entry contains 62802 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 T-complex protein 1 subunit alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	521	Total	C	N	O	S	0	0
			3956	2479	691	763	23		
1	I	534	Total	C	N	O	S	0	0
			4056	2540	709	783	24		

- Molecule 2 is a protein called T-complex protein 1 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	509	Total	C	N	O	S	0	0
			3829	2392	673	745	19		
2	J	508	Total	C	N	O	S	0	0
			3823	2389	672	743	19		

- Molecule 3 is a protein called T-complex protein 1 subunit gamma.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	509	Total	C	N	O	S	0	0
			3956	2465	697	764	30		
3	K	513	Total	C	N	O	S	0	0
			3985	2481	703	771	30		

- Molecule 4 is a protein called T-complex protein 1 subunit delta.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	508	Total	C	N	O	S	0	0
			3832	2398	665	746	23		
4	L	513	Total	C	N	O	S	0	0
			3873	2422	674	754	23		

- Molecule 5 is a protein called T-complex protein 1 subunit epsilon.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	517	Total	C	N	O	S	0	0
			3974	2483	692	769	30		
5	M	517	Total	C	N	O	S	0	0
			3974	2483	692	769	30		

- Molecule 6 is a protein called T-complex protein 1 subunit zeta.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	514	Total	C	N	O	S	0	0
			3945	2478	690	757	20		
6	N	513	Total	C	N	O	S	0	0
			3940	2476	689	755	20		

- Molecule 7 is a protein called T-complex protein 1 subunit eta.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	512	Total	C	N	O	S	0	0
			3936	2485	682	746	23		
7	O	514	Total	C	N	O	S	0	0
			3947	2490	684	750	23		

- Molecule 8 is a protein called T-complex protein 1 subunit theta.

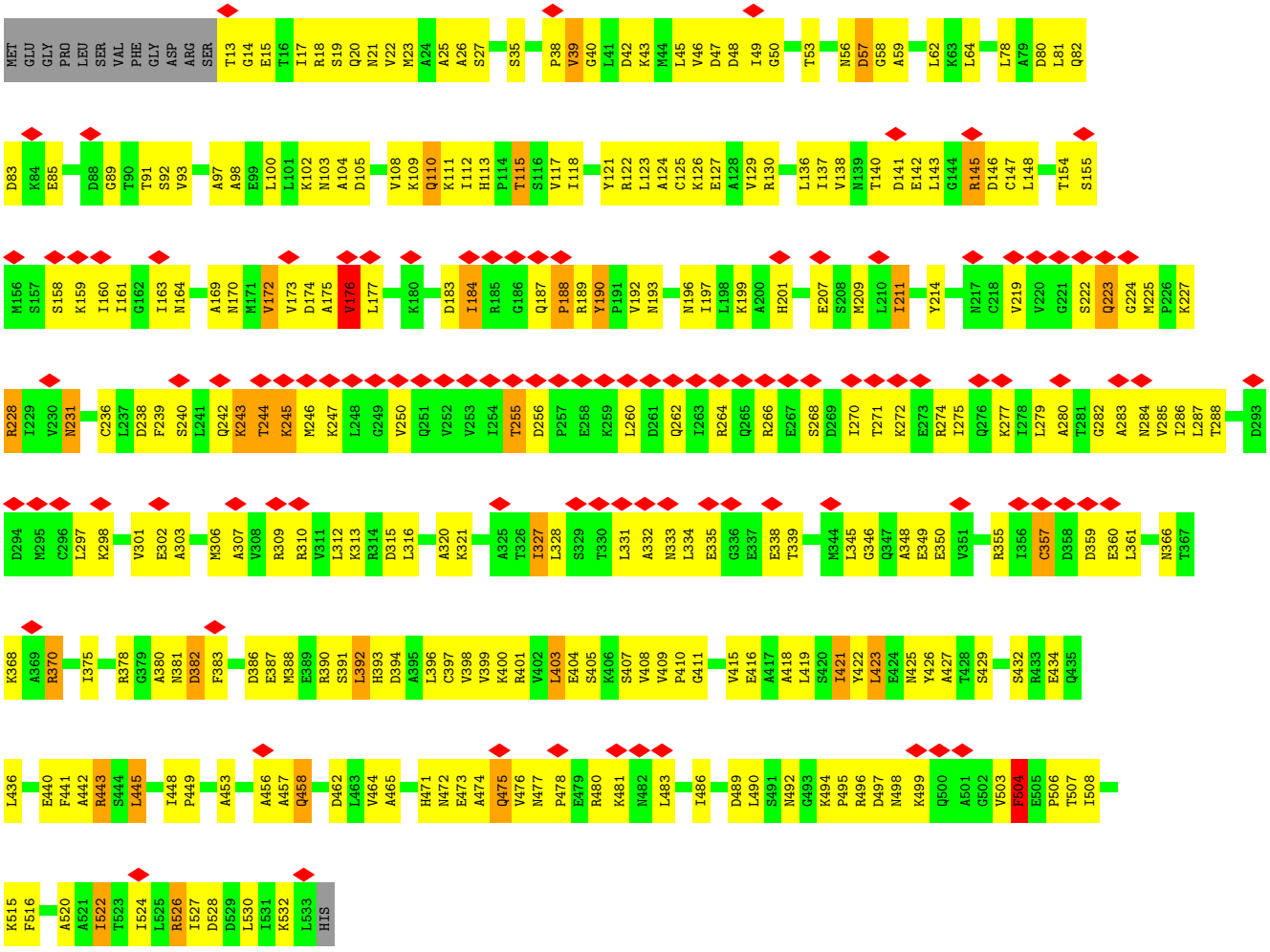
Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	510	Total	C	N	O	S	0	0
			3892	2451	661	754	26		
8	P	509	Total	C	N	O	S	0	0
			3884	2447	659	752	26		

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.

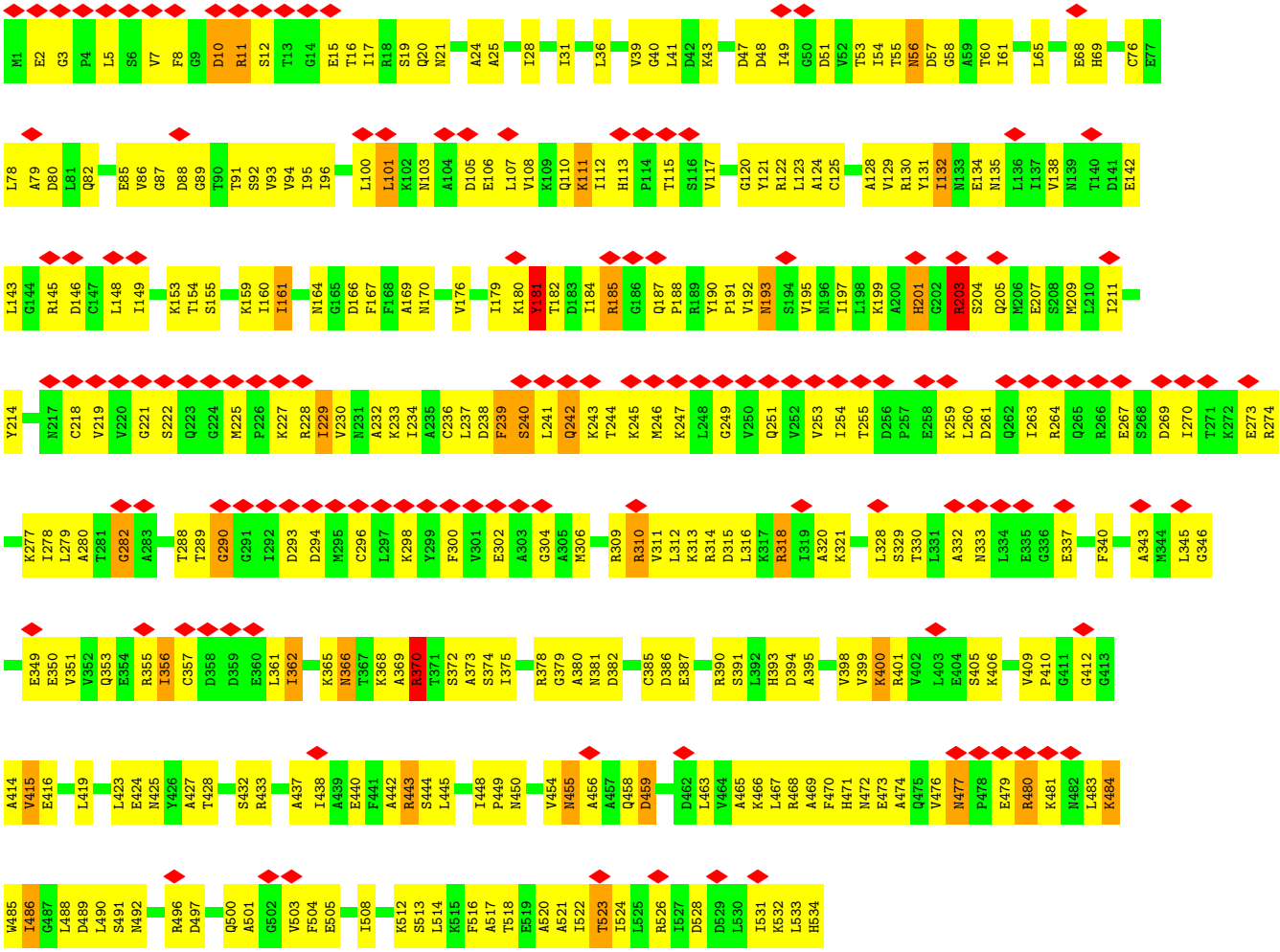
• Molecule 1: T-complex protein 1 subunit alpha

Chain A:



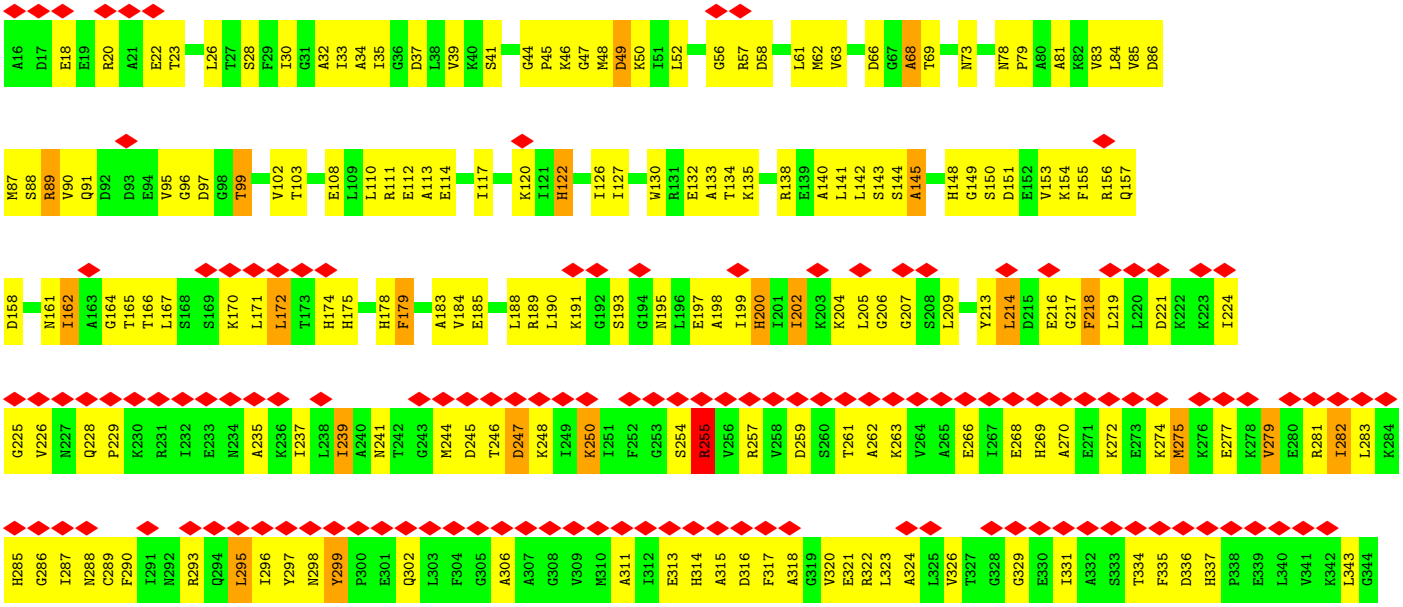
• Molecule 1: T-complex protein 1 subunit alpha

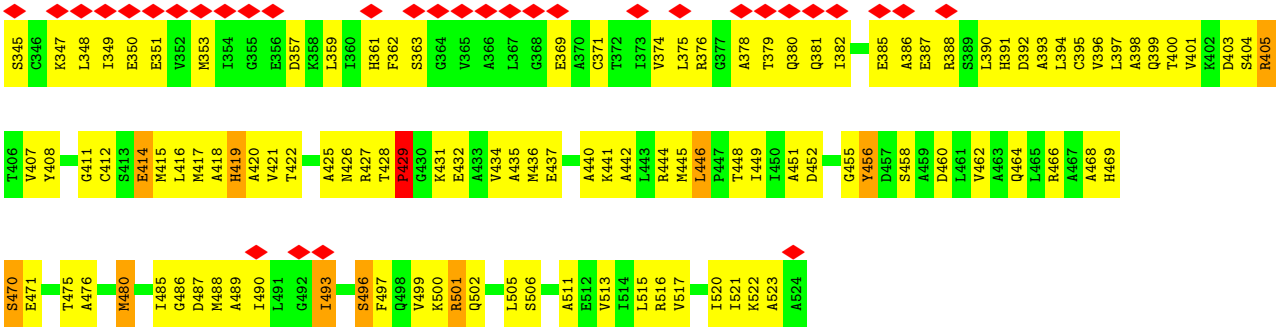
Chain I:



• Molecule 2: T-complex protein 1 subunit beta

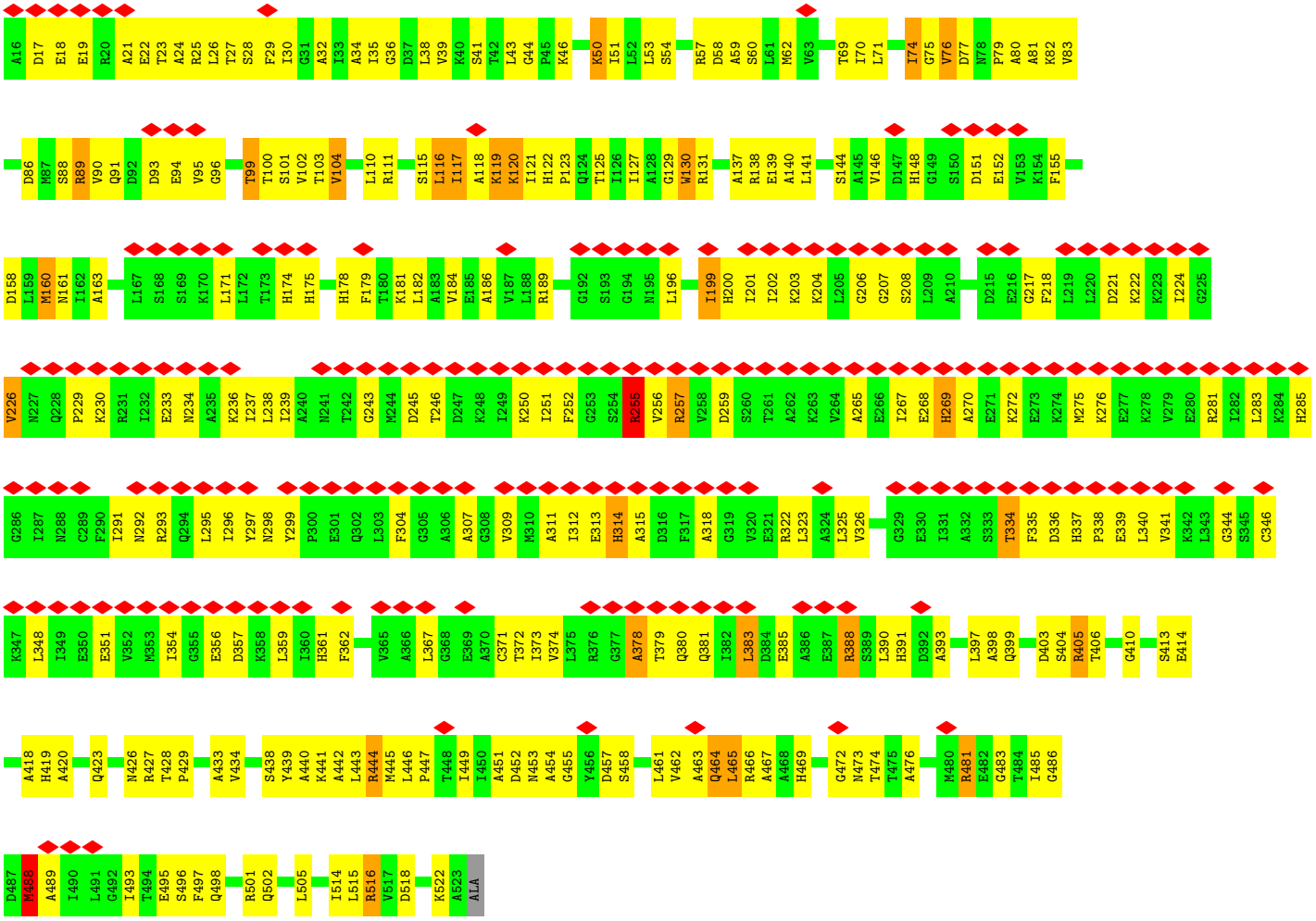
Chain B:





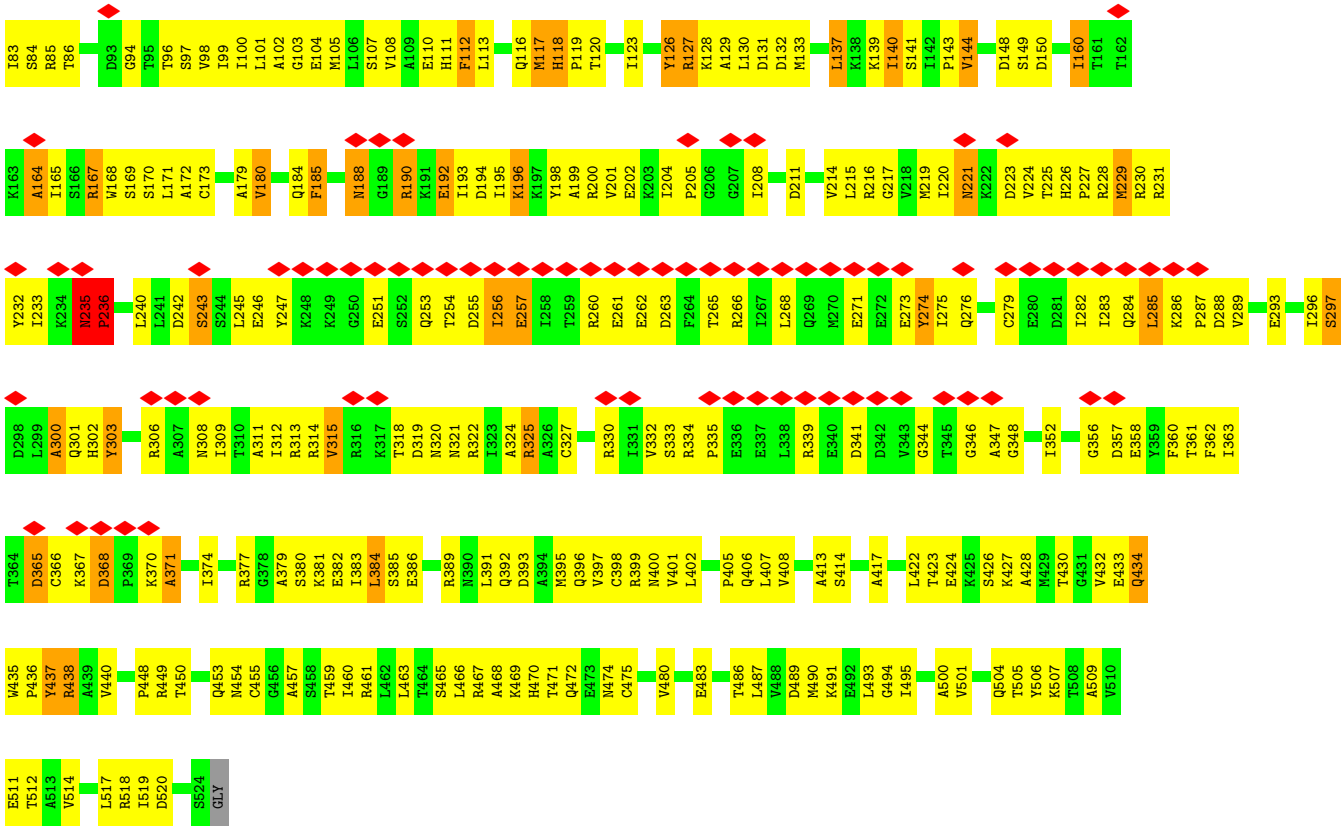
• Molecule 2: T-complex protein 1 subunit beta

Chain J:



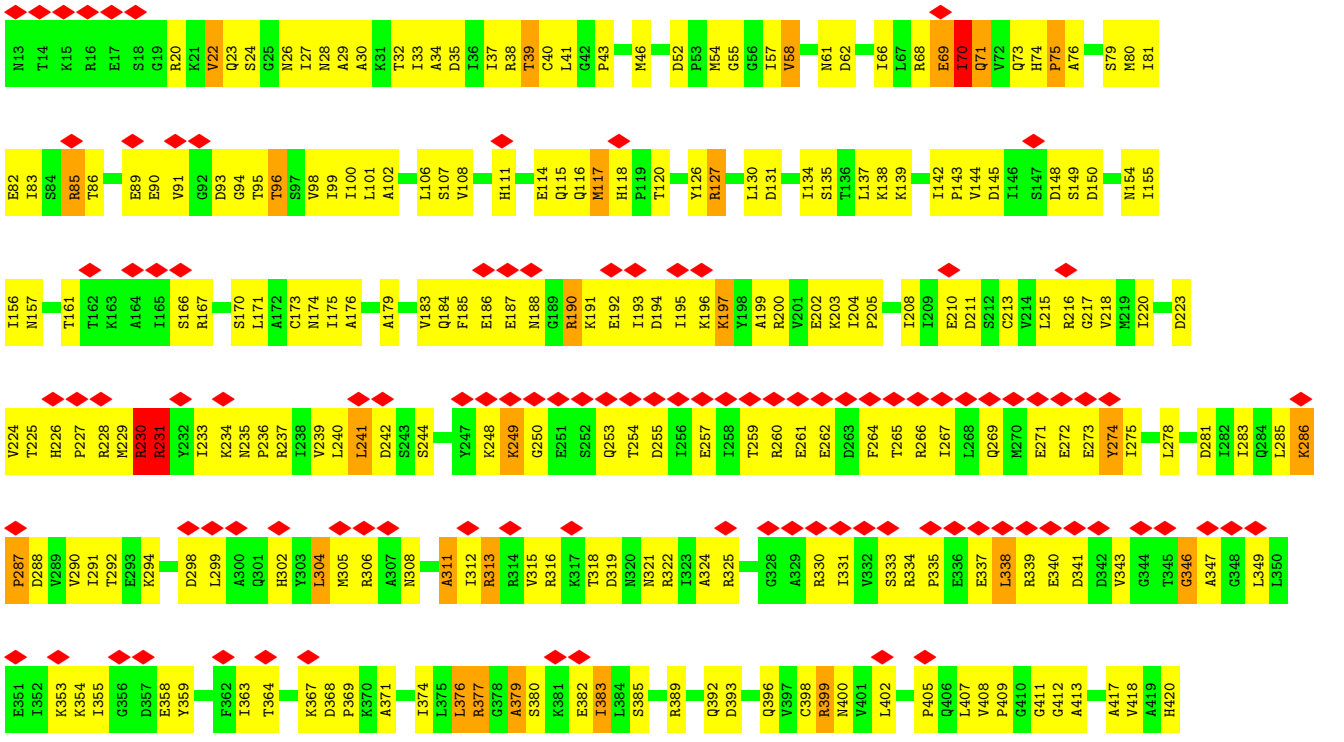
• Molecule 3: T-complex protein 1 subunit gamma

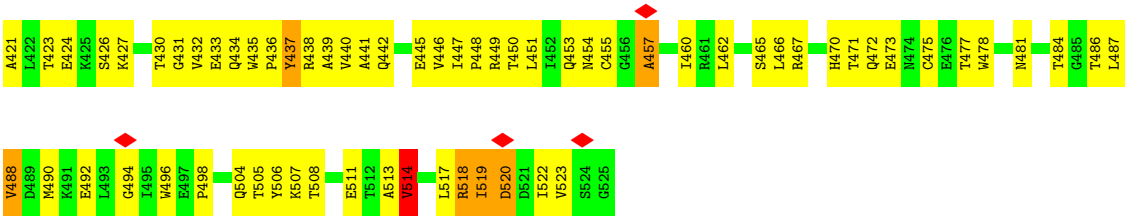
Chain C:



• Molecule 3: T-complex protein 1 subunit gamma

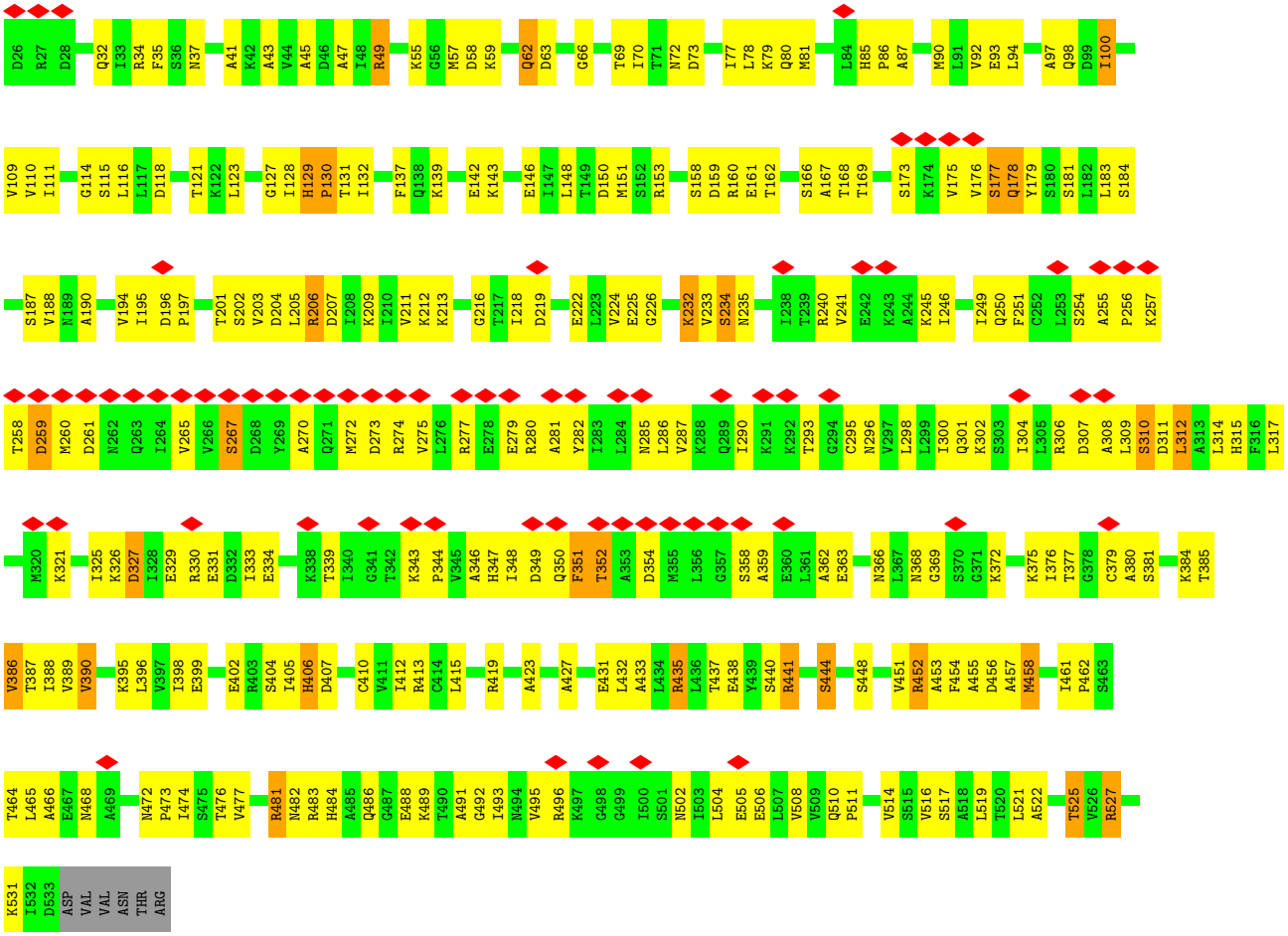
Chain K:





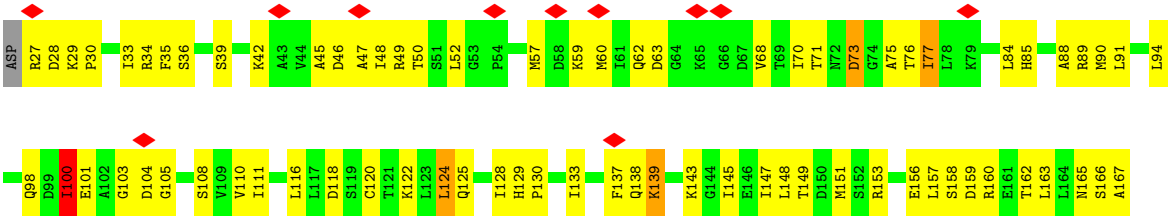
• Molecule 4: T-complex protein 1 subunit delta

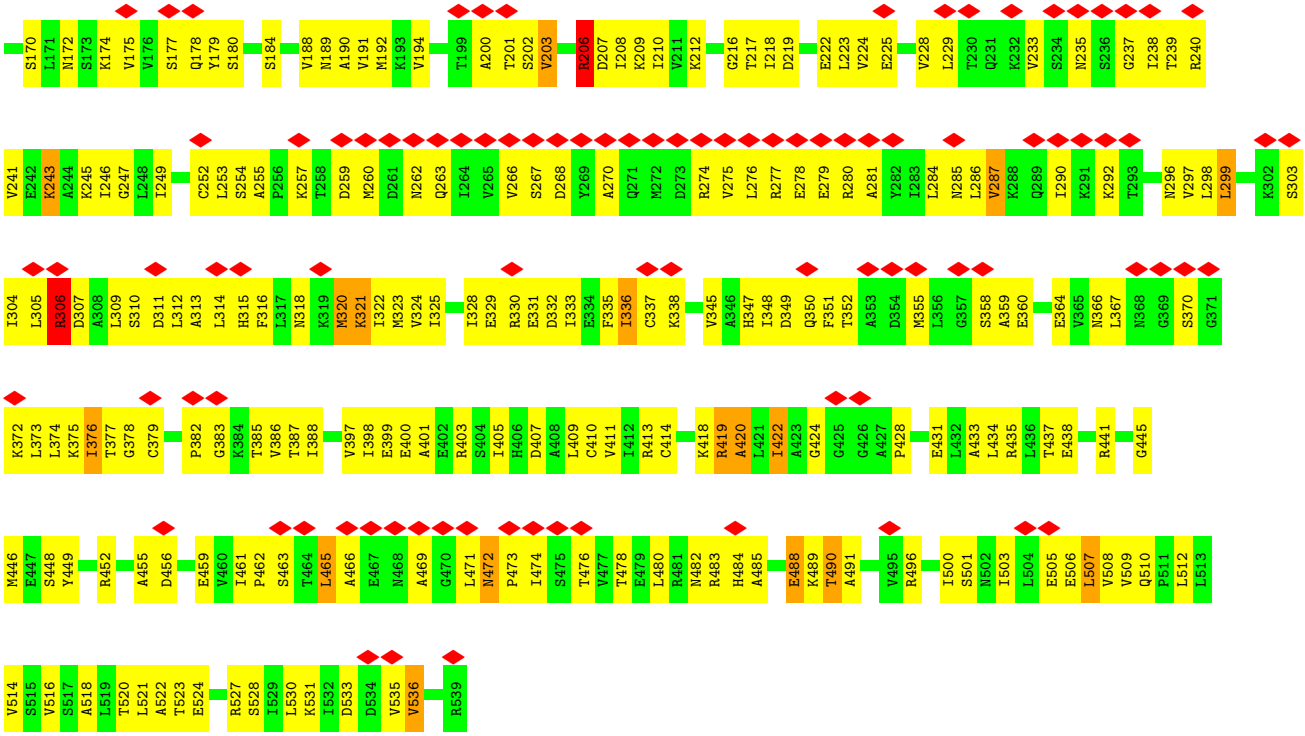
Chain D:



• Molecule 4: T-complex protein 1 subunit delta

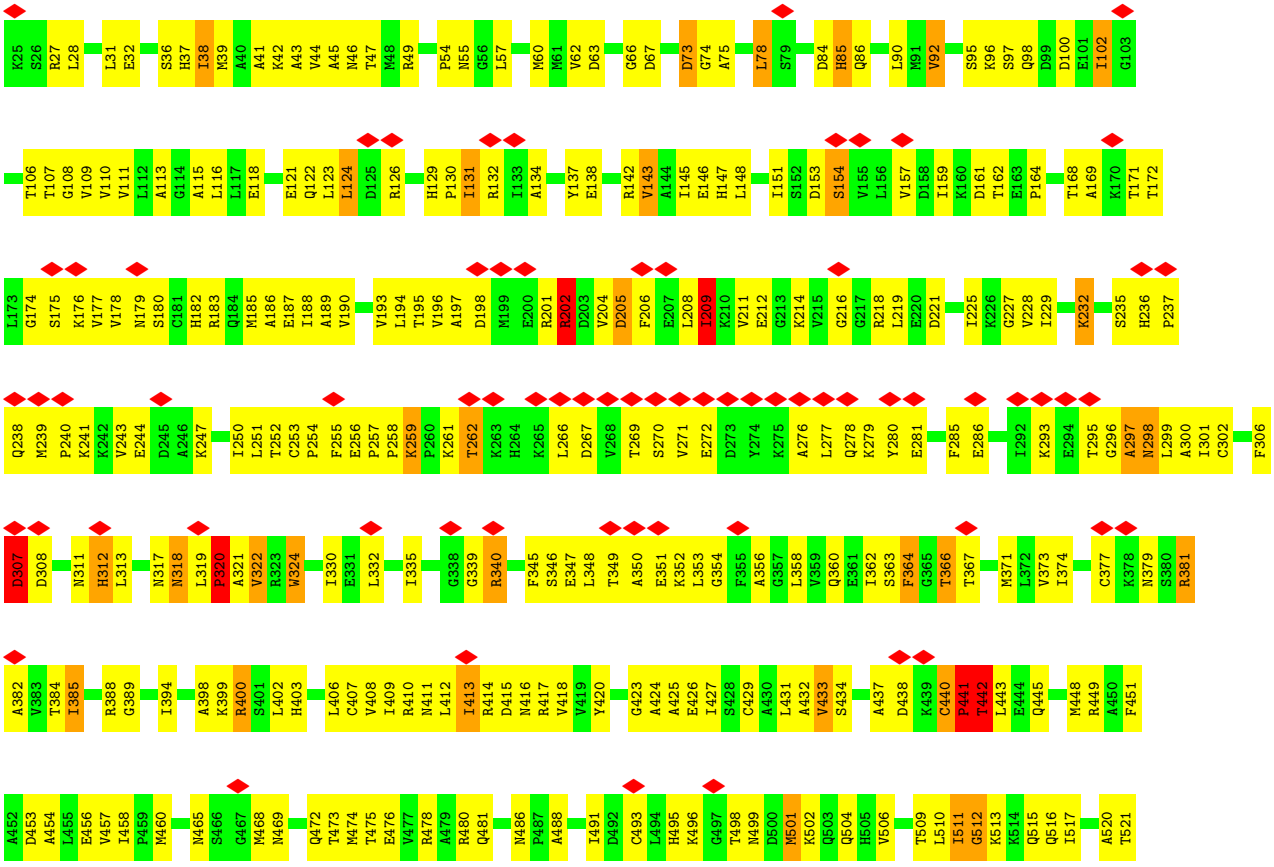
Chain L:

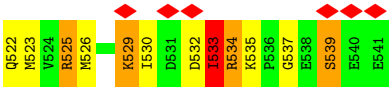




• Molecule 5: T-complex protein 1 subunit epsilon

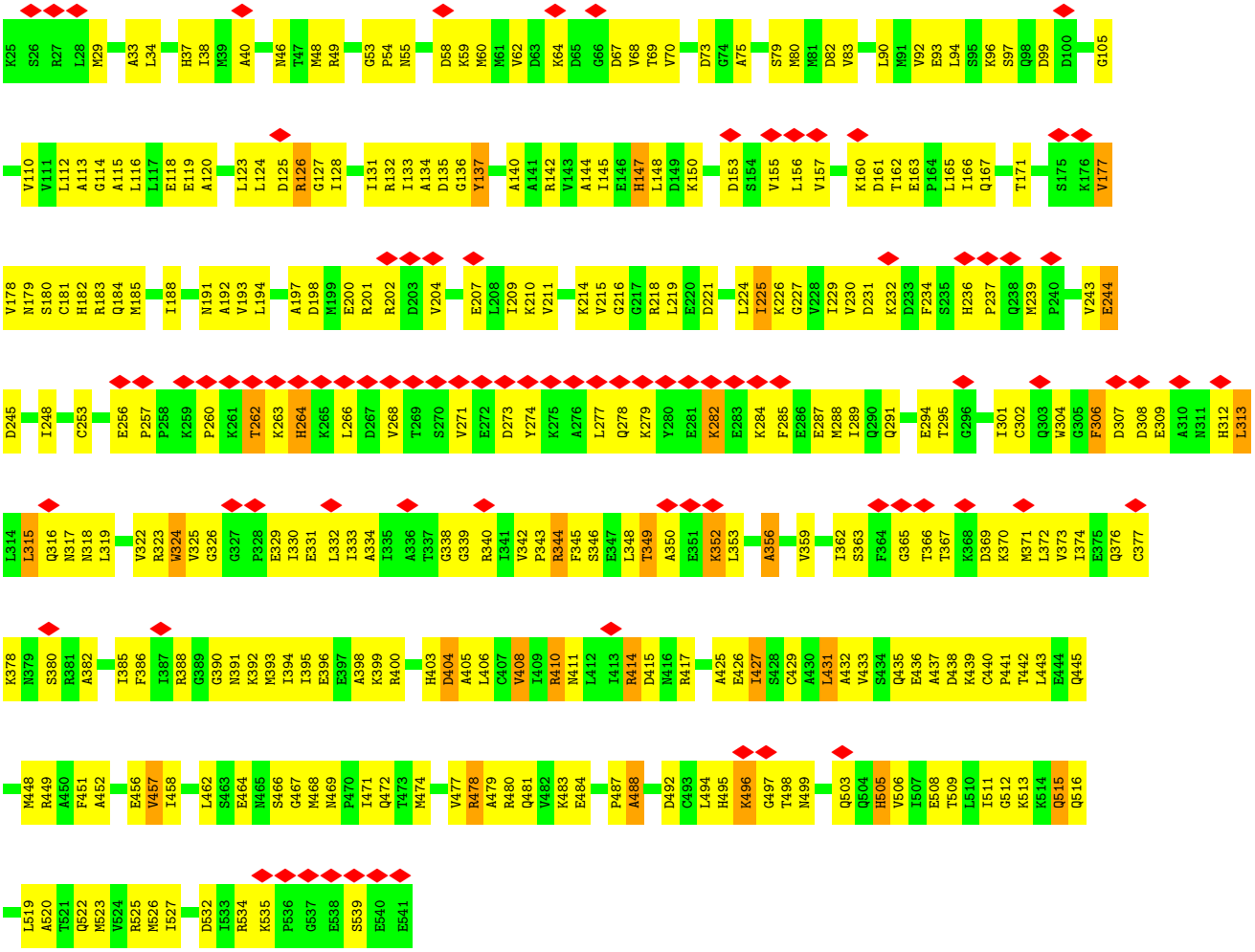
Chain E:





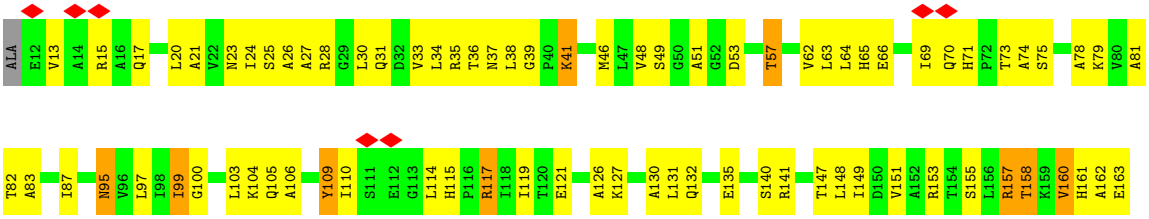
• Molecule 5: T-complex protein 1 subunit epsilon

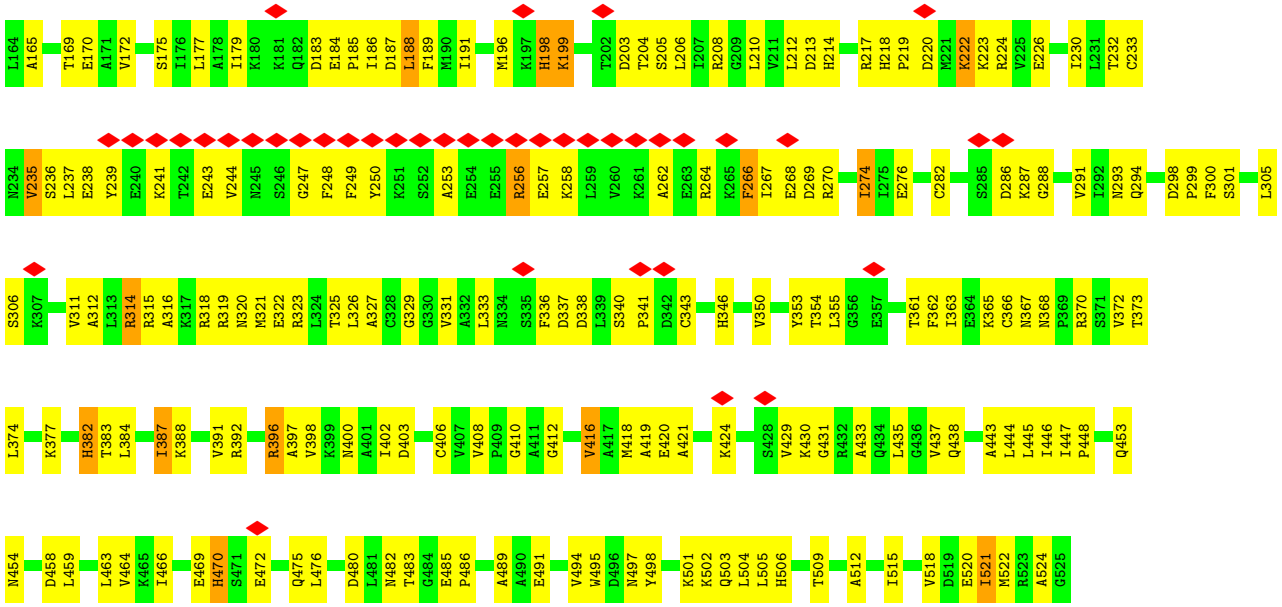
Chain M:



• Molecule 6: T-complex protein 1 subunit zeta

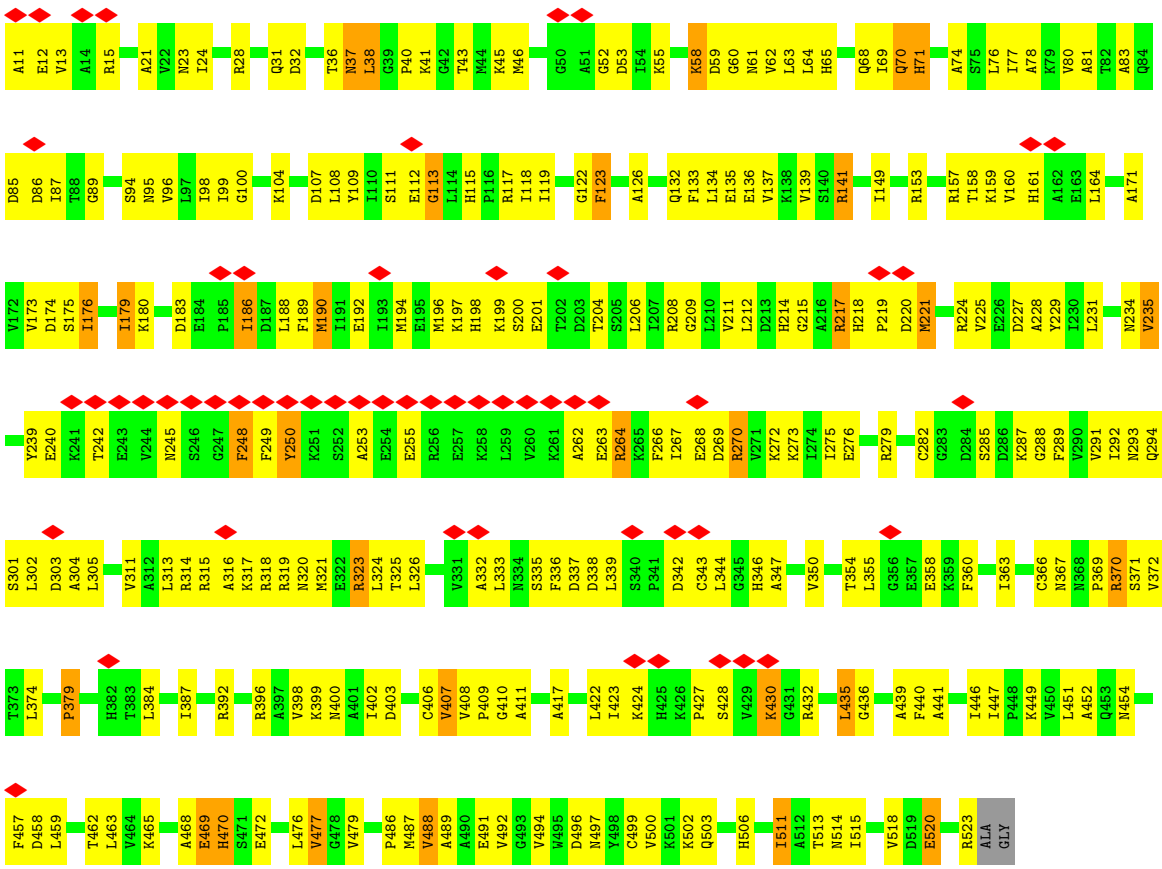
Chain F:





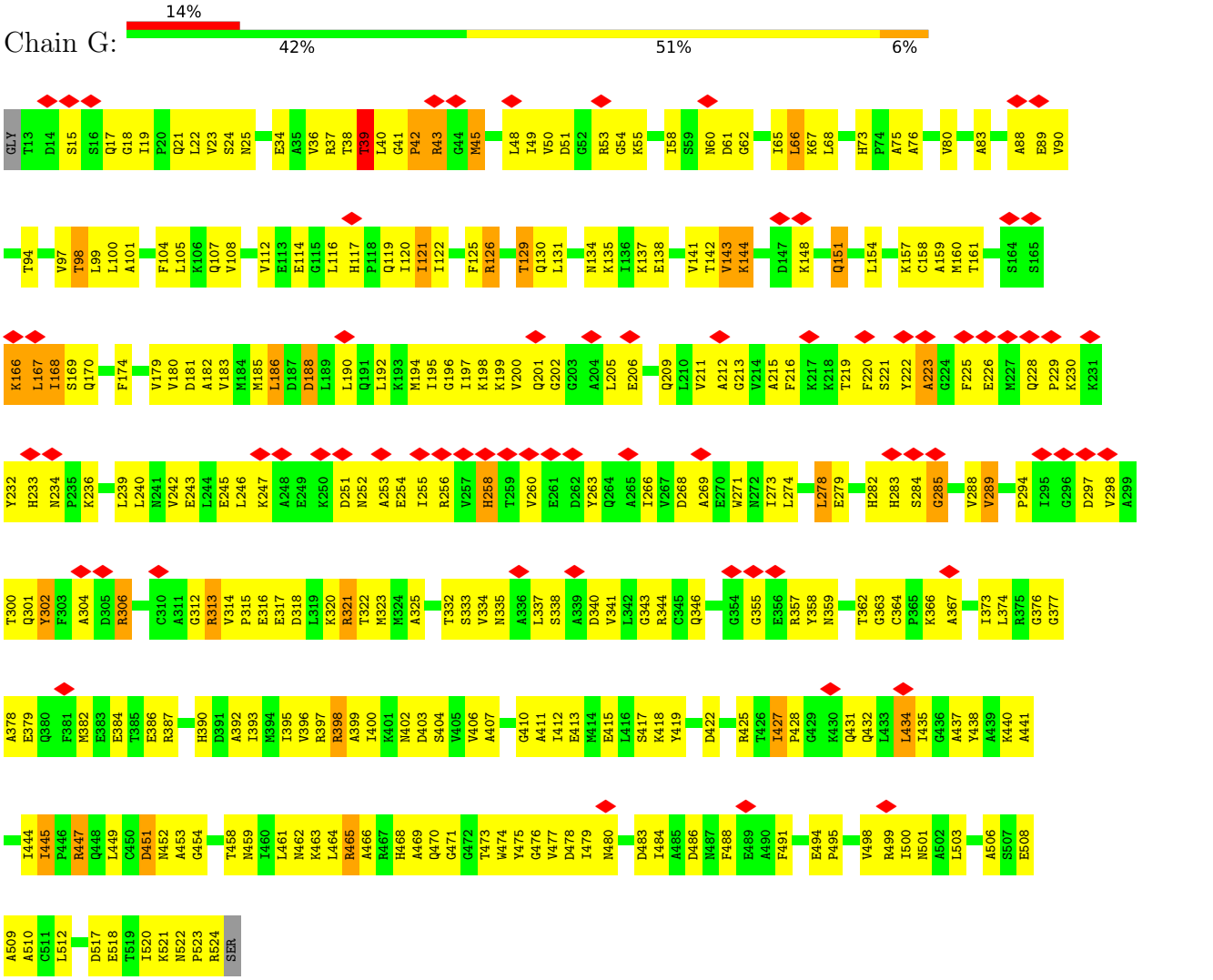
• Molecule 6: T-complex protein 1 subunit zeta

Chain N:



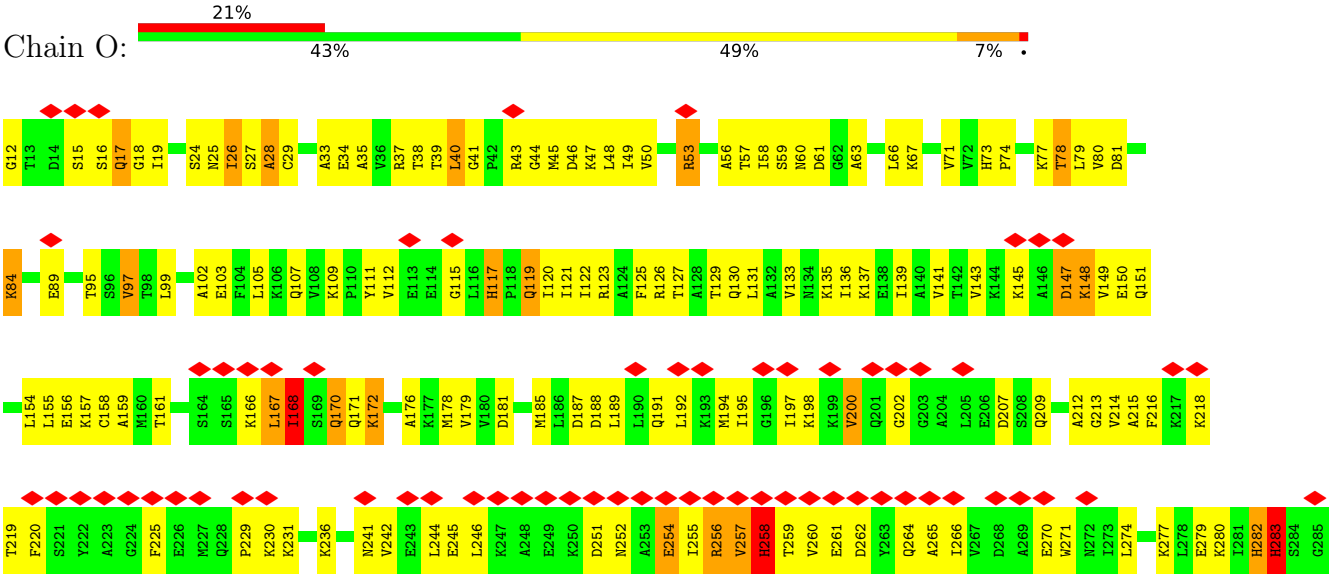
• Molecule 7: T-complex protein 1 subunit eta

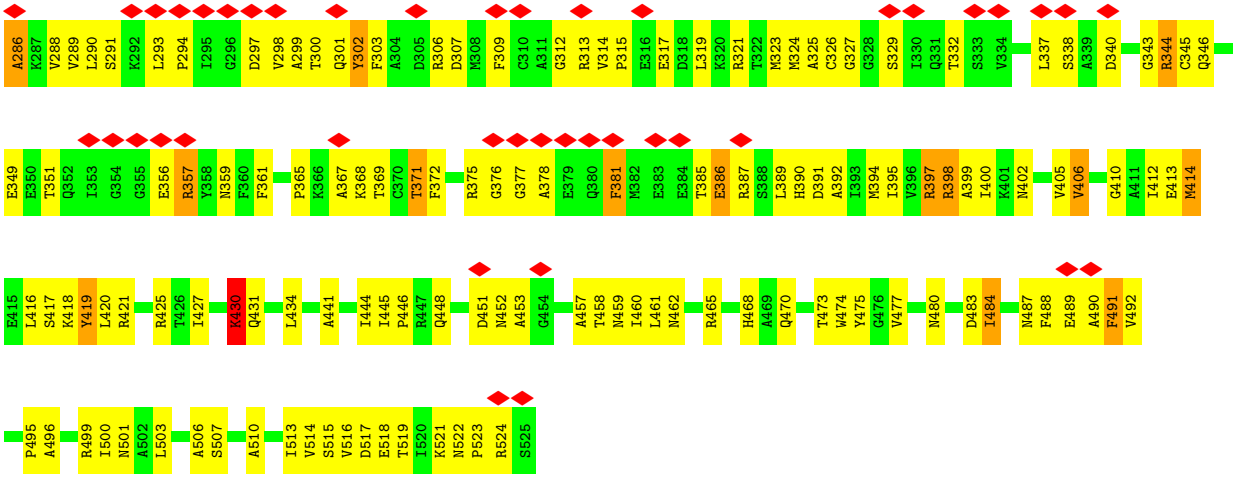
Chain G:



• Molecule 7: T-complex protein 1 subunit eta

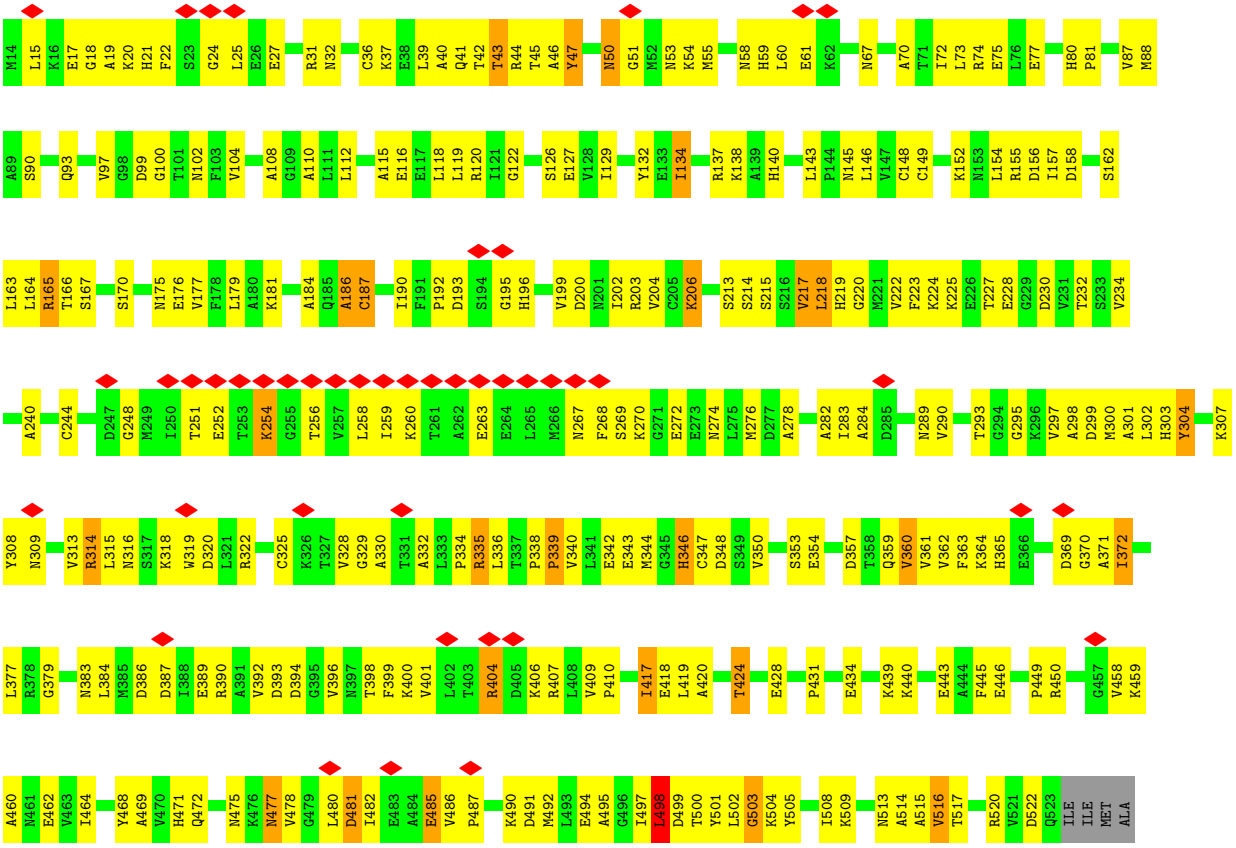
Chain O:





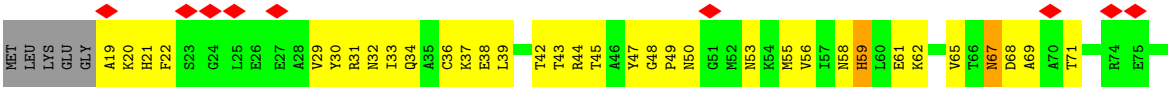
• Molecule 8: T-complex protein 1 subunit theta

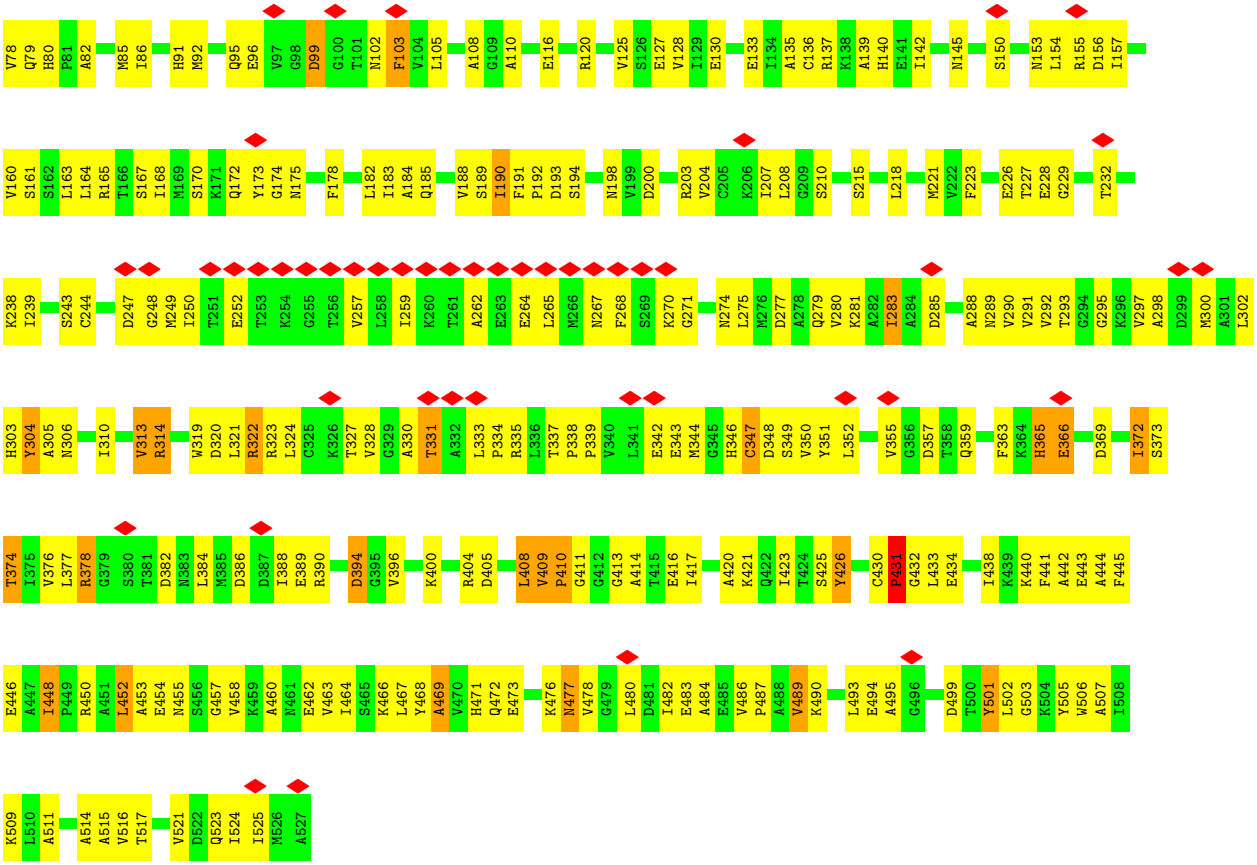
Chain H:



• Molecule 8: T-complex protein 1 subunit theta

Chain P:




V78 Q79 H80 P81 A82 M85 I86 H91 M92 Q95 E96 V97 G98 D99 G100 T101 N102 F103 V104 L105 A108 G109 A110 E116 R120 V125 S126 E127 V128 I129 E130 E133 I134 A135 C136 R137 K138 A139 H140 E141 I142 N145 S150 N153 L154 R155 D156 I157
V160 S161 S162 L163 L164 R165 T166 S167 I168 M169 S170 K171 Q172 Y173 G174 N175 F178 L182 I183 A184 Q185 V188 S189 I190 F191 P192 D193 S194 N198 V199 D200 R203 V204 C205 K206 I207 L208 C209 S210 S215 L218 M221 V222 F223 E226 T227 E228 G229 T232
K238 I239 S243 C244 D247 G248 M249 I250 T251 E252 T253 K254 G255 T256 V257 L258 I259 K260 T261 A262 E263 E264 L265 M266 N267 F268 S269 K270 G271 N274 L275 M276 D277 A278 Q279 V280 K281 A282 I283 A284 D285 A288 N289 V290 V291 V292 T293 G294 G295 K296 V297 A298 D299 M300 A301 L302
H303 Y304 A305 N306 I310 V313 R314 W319 D320 L321 R322 R323 L324 C325 K326 T327 V328 G329 A330 T331 A332 L333 P334 R335 L336 T337 P338 P339 V340 L341 E342 E343 M344 G345 H346 C347 D348 S349 V350 Y351 L352 V355 G356 D357 T358 Q359 F363 K364 H365 E366 D369 I372 S373
T374 I375 V376 L377 R378 G379 S380 T381 D382 N383 L384 M385 D386 D387 I388 E389 R390 D394 G395 V396 K400 R404 D405 L408 V409 P410 G411 G412 G413 A414 T415 E416 I417 A420 K421 Q422 I423 T424 S425 Y426 C430 P431 G432 L433 E434 I438 K439 K440 F441 A442 E443 A444 F445
E446 A447 I448 P449 R450 A451 L452 A453 E454 N455 S456 G457 V458 K459 A460 N461 E462 V463 I464 S465 K466 L467 Y468 A469 V470 H471 Q472 E473 K476 N477 V478 G479 L480 D481 I482 E483 A484 E485 V486 P487 A488 V489 K490 L493 E494 A495 G496 D499 T500 Y501 L502 G503 K504 Y505 W506 A507 I508
K509 L510 A511 A514 A515 V516 T517 V521 D522 Q523 I524 I525 M526 A527

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	38323	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	JEOL 3200FSC	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	48	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	0.247	Depositor
Minimum map value	-0.081	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.011	Depositor
Recommended contour level	0.05	Depositor
Map size (Å)	408.0, 408.0, 408.0	wwPDB
Map dimensions	240, 240, 240	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.7, 1.7, 1.7	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	2.26	149/3992 (3.7%)	2.48	268/5389 (5.0%)
1	I	2.28	158/4095 (3.9%)	2.52	324/5526 (5.9%)
2	B	2.68	179/3869 (4.6%)	2.58	315/5214 (6.0%)
2	J	3.07	156/3863 (4.0%)	2.57	286/5207 (5.5%)
3	C	2.35	179/4000 (4.5%)	2.55	293/5397 (5.4%)
3	K	2.32	175/4029 (4.3%)	2.52	310/5434 (5.7%)
4	D	2.31	158/3863 (4.1%)	2.52	263/5214 (5.0%)
4	L	2.31	137/3904 (3.5%)	2.56	301/5269 (5.7%)
5	E	2.33	174/4020 (4.3%)	2.59	326/5414 (6.0%)
5	M	2.29	154/4020 (3.8%)	2.52	286/5414 (5.3%)
6	F	2.30	146/3991 (3.7%)	2.45	258/5379 (4.8%)
6	N	2.26	141/3986 (3.5%)	2.47	259/5374 (4.8%)
7	G	2.28	151/3991 (3.8%)	2.48	295/5386 (5.5%)
7	O	2.25	143/4002 (3.6%)	2.51	283/5399 (5.2%)
8	H	2.25	149/3945 (3.8%)	2.46	272/5331 (5.1%)
8	P	2.31	162/3937 (4.1%)	2.49	274/5321 (5.1%)
All	All	2.37	2511/63507 (4.0%)	2.52	4613/85668 (5.4%)

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	4
1	I	0	9
2	B	0	9
2	J	0	9
3	C	0	10
3	K	0	14
4	D	0	7
4	L	0	2
5	E	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
5	M	0	8
6	F	0	12
6	N	0	10
7	G	0	11
7	O	0	12
8	H	0	9
8	P	0	10
All	All	0	141

All (2511) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	464	GLN	N-CA	122.90	3.04	1.46
2	B	429	PRO	CA-CB	49.19	2.23	1.53
2	B	429	PRO	N-CD	41.43	2.05	1.47
2	B	429	PRO	N-CA	41.04	1.99	1.47
2	B	429	PRO	CG-CD	20.12	2.19	1.50
2	B	429	PRO	CB-CG	15.41	2.26	1.49
6	N	447	ILE	CA-CB	14.49	1.63	1.53
8	P	191	PHE	C-N	13.07	1.44	1.33
1	A	307	ALA	CA-C	11.41	1.67	1.52
8	P	448	ILE	CA-CB	-11.14	1.48	1.54
3	K	447	ILE	CA-CB	-10.99	1.48	1.54
1	A	35	SER	CA-C	-10.85	1.43	1.53
7	O	361	PHE	CA-C	-10.83	1.40	1.52
2	J	148	HIS	ND1-CE1	10.73	1.43	1.32
6	F	402	ILE	C-N	10.45	1.46	1.33
4	D	363	GLU	CA-C	-10.24	1.39	1.52
1	A	310	ARG	NE-CZ	10.21	1.44	1.33
5	M	67	ASP	CA-C	-10.18	1.39	1.52
8	P	137	ARG	N-CA	-10.12	1.33	1.46
8	P	33	ILE	C-N	9.94	1.46	1.33
5	E	458	ILE	CA-CB	-9.81	1.49	1.54
4	L	345	VAL	CA-C	-9.80	1.41	1.52
3	K	236	PRO	CA-C	-9.76	1.43	1.53
5	E	481	GLN	C-N	9.71	1.46	1.33
6	N	141	ARG	NE-CZ	9.65	1.43	1.33
6	N	11	ALA	C-N	9.63	1.46	1.33
7	O	195	ILE	N-CA	-9.62	1.33	1.46
3	C	313	ARG	NE-CZ	9.59	1.43	1.33
3	C	71	GLN	CA-C	-9.58	1.41	1.52
4	L	298	LEU	CA-C	-9.48	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	510	GLN	CA-C	9.47	1.64	1.52
3	C	204	ILE	N-CA	-9.38	1.35	1.46
2	J	57	ARG	CD-NE	9.36	1.59	1.46
5	E	441	PRO	C-N	9.35	1.43	1.33
1	I	379	GLY	CA-C	-9.29	1.43	1.52
6	N	32	ASP	CA-C	-9.28	1.40	1.52
7	G	256	ARG	NE-CZ	9.16	1.43	1.33
3	C	205	PRO	N-CA	-9.10	1.36	1.47
1	I	309	ARG	NE-CZ	9.09	1.43	1.33
4	D	369	GLY	CA-C	-9.09	1.45	1.52
4	D	128	ILE	N-CA	-9.09	1.35	1.46
6	F	191	ILE	CA-C	-9.08	1.41	1.52
3	K	316	ARG	NE-CZ	9.05	1.43	1.33
7	O	522	ASN	CA-C	9.02	1.63	1.52
6	N	410	GLY	CA-C	-9.01	1.43	1.52
4	L	382	PRO	N-CA	-9.00	1.41	1.47
4	L	239	THR	N-CA	-8.97	1.34	1.46
7	O	500	ILE	N-CA	-8.95	1.35	1.46
5	E	279	LYS	C-N	8.92	1.46	1.34
1	I	310	ARG	NE-CZ	8.91	1.42	1.33
6	N	183	ASP	CA-C	-8.87	1.41	1.52
2	J	514	ILE	CA-CB	-8.86	1.43	1.54
7	G	15	SER	CA-C	-8.83	1.41	1.52
5	E	525	ARG	CD-NE	8.79	1.58	1.46
6	N	153	ARG	NE-CZ	8.77	1.42	1.33
8	H	45	THR	CA-C	8.77	1.63	1.52
7	G	312	GLY	CA-C	-8.76	1.44	1.52
4	L	364	GLU	CA-C	-8.75	1.41	1.52
5	E	313	LEU	CA-C	-8.72	1.41	1.52
7	G	437	ALA	N-CA	-8.71	1.34	1.46
2	B	293	ARG	NE-CZ	8.71	1.42	1.33
3	C	379	ALA	C-N	8.71	1.44	1.33
1	I	199	LYS	CA-C	-8.70	1.42	1.52
2	J	21	ALA	C-N	8.70	1.45	1.33
8	P	137	ARG	CD-NE	8.69	1.58	1.46
2	B	311	ALA	CA-C	-8.68	1.42	1.52
3	K	435	TRP	CA-C	8.67	1.62	1.52
3	C	16	ARG	CD-NE	8.65	1.58	1.46
3	K	475	CYS	CA-C	-8.61	1.42	1.52
2	J	111	ARG	CD-NE	8.59	1.58	1.46
8	P	374	THR	N-CA	-8.59	1.35	1.46
5	M	534	ARG	CA-C	-8.57	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	142	ILE	N-CA	-8.56	1.38	1.46
1	A	453	ALA	CA-C	-8.56	1.41	1.52
6	N	208	ARG	NE-CZ	8.56	1.42	1.33
5	E	228	VAL	CA-C	-8.54	1.43	1.52
5	M	29	MET	CA-C	-8.52	1.42	1.52
4	D	491	ALA	C-N	8.50	1.44	1.33
3	C	471	THR	N-CA	-8.48	1.36	1.46
6	F	288	GLY	CA-C	-8.48	1.41	1.52
2	J	121	ILE	N-CA	-8.46	1.36	1.46
7	O	321	ARG	NE-CZ	8.44	1.42	1.33
4	D	173	SER	C-N	8.42	1.45	1.33
4	L	252	CYS	C-N	8.42	1.44	1.33
1	I	222	SER	CA-C	-8.41	1.45	1.52
2	B	488	MET	CA-C	-8.41	1.42	1.52
4	L	347	HIS	ND1-CE1	8.38	1.41	1.32
1	I	143	LEU	C-N	8.37	1.45	1.33
4	L	518	ALA	N-CA	-8.36	1.36	1.46
3	K	216	ARG	NE-CZ	8.35	1.42	1.33
5	M	179	ASN	N-CA	-8.35	1.39	1.47
2	B	156	ARG	CD-NE	8.35	1.57	1.46
7	G	503	LEU	CA-C	-8.35	1.42	1.52
5	E	49	ARG	NE-CZ	8.34	1.42	1.33
4	D	493	ILE	CA-C	-8.31	1.43	1.52
5	E	214	LYS	CA-C	-8.30	1.42	1.52
2	J	200	HIS	ND1-CE1	8.29	1.40	1.32
8	P	502	LEU	N-CA	-8.26	1.35	1.46
7	O	325	ALA	N-CA	-8.26	1.36	1.46
2	B	516	ARG	NE-CZ	8.24	1.42	1.33
1	A	315	ASP	CA-CB	8.24	1.66	1.53
2	J	57	ARG	CA-C	-8.24	1.43	1.53
6	F	362	PHE	CA-C	-8.22	1.42	1.52
2	B	353	MET	CA-CB	8.21	1.64	1.53
6	F	26	ALA	CA-C	-8.20	1.42	1.52
2	J	458	SER	CA-C	-8.20	1.42	1.52
3	K	213	CYS	CA-C	-8.20	1.42	1.52
3	C	226	HIS	ND1-CE1	8.20	1.40	1.32
4	L	246	ILE	C-N	8.19	1.37	1.33
2	B	214	LEU	C-N	8.19	1.45	1.33
3	K	322	ARG	NE-CZ	8.19	1.42	1.33
7	G	474	TRP	NE1-CE2	8.18	1.46	1.37
1	I	416	GLU	N-CA	-8.17	1.36	1.46
8	P	319	TRP	CA-CB	8.16	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	237	LEU	C-N	8.15	1.44	1.33
5	E	449	ARG	CA-CB	8.14	1.66	1.53
8	H	498	LEU	CA-C	8.14	1.62	1.52
5	E	92	VAL	CA-CB	8.13	1.64	1.54
8	H	295	GLY	CA-C	-8.13	1.40	1.51
1	I	346	GLY	N-CA	-8.13	1.36	1.44
1	A	223	GLN	CA-C	8.12	1.63	1.52
1	A	355	ARG	CA-CB	8.12	1.63	1.53
3	C	380	SER	N-CA	-8.12	1.36	1.46
4	D	314	LEU	C-N	8.10	1.44	1.33
4	L	452	ARG	CD-NE	8.10	1.57	1.46
8	H	497	ILE	CA-C	-8.10	1.42	1.52
2	B	313	GLU	N-CA	-8.08	1.35	1.45
2	J	131	ARG	NE-CZ	8.08	1.42	1.33
6	N	117	ARG	CD-NE	8.08	1.57	1.46
6	N	319	ARG	CD-NE	8.07	1.57	1.46
5	E	131	ILE	CA-C	-8.07	1.43	1.52
5	M	508	GLU	C-N	8.05	1.44	1.33
2	B	63	VAL	N-CA	-8.05	1.36	1.46
1	I	378	ARG	NE-CZ	8.04	1.41	1.33
7	G	148	LYS	N-CA	-8.03	1.40	1.47
3	K	235	ASN	N-CA	-8.03	1.38	1.46
3	K	131	ASP	CA-C	-8.02	1.42	1.52
4	D	211	VAL	CA-C	-8.00	1.42	1.52
2	J	199	ILE	C-N	7.99	1.44	1.33
6	N	219	PRO	N-CA	-7.99	1.36	1.47
8	P	136	CYS	CA-C	-7.99	1.42	1.52
4	D	419	ARG	NE-CZ	7.99	1.41	1.33
8	P	503	GLY	CA-C	-7.97	1.43	1.52
2	J	208	SER	CA-C	-7.97	1.42	1.52
2	J	427	ARG	NE-CZ	7.96	1.41	1.33
2	J	34	ALA	C-N	7.96	1.44	1.33
8	H	283	ILE	CA-C	-7.96	1.42	1.52
2	B	89	ARG	C-N	7.95	1.44	1.33
2	B	444	ARG	NE-CZ	7.95	1.41	1.33
2	J	311	ALA	CA-CB	7.94	1.65	1.53
8	P	466	LYS	CA-CB	7.94	1.65	1.53
4	L	34	ARG	NE-CZ	7.94	1.41	1.33
2	B	396	VAL	C-O	-7.92	1.15	1.24
3	C	320	ASN	N-CA	-7.92	1.36	1.46
5	E	211	VAL	CA-C	-7.92	1.42	1.52
7	G	524	ARG	CD-NE	7.92	1.57	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	313	ARG	NE-CZ	7.91	1.41	1.33
3	C	216	ARG	CD-NE	7.90	1.57	1.46
1	I	115	THR	N-CA	-7.90	1.36	1.46
2	B	517	VAL	N-CA	-7.89	1.36	1.46
6	N	408	VAL	CA-CB	-7.88	1.44	1.54
3	C	438	ARG	NE-CZ	7.88	1.41	1.33
4	L	330	ARG	NE-CZ	7.88	1.41	1.33
5	M	326	GLY	CA-C	7.88	1.60	1.52
1	I	274	ARG	NE-CZ	7.86	1.41	1.33
3	C	333	SER	CA-C	-7.86	1.42	1.52
5	M	68	VAL	N-CA	-7.86	1.36	1.46
5	E	267	ASP	C-N	7.85	1.42	1.33
8	H	77	GLU	CA-C	-7.84	1.43	1.52
3	C	116	GLN	CA-C	-7.82	1.42	1.52
5	E	382	ALA	N-CA	-7.82	1.37	1.46
7	G	254	GLU	C-N	7.82	1.43	1.33
7	O	361	PHE	N-CA	-7.81	1.36	1.46
4	D	295	CYS	N-CA	-7.80	1.36	1.45
6	F	105	GLN	CA-C	-7.80	1.42	1.52
5	E	382	ALA	C-N	7.79	1.43	1.33
1	A	264	ARG	CD-NE	7.79	1.57	1.46
3	C	465	SER	N-CA	-7.79	1.36	1.46
2	J	130	TRP	N-CA	-7.78	1.36	1.46
5	M	163	GLU	CA-CB	7.77	1.63	1.53
4	L	241	VAL	CA-C	-7.77	1.46	1.52
2	B	326	VAL	CA-C	-7.77	1.42	1.52
2	B	206	GLY	CA-C	-7.77	1.42	1.52
7	G	174	PHE	N-CA	-7.76	1.37	1.46
6	N	479	VAL	CA-C	-7.76	1.43	1.52
1	I	251	GLN	CA-C	-7.75	1.43	1.52
6	N	436	GLY	CA-C	-7.75	1.43	1.52
3	K	298	ASP	CA-C	-7.74	1.42	1.52
4	L	424	GLY	CA-C	-7.74	1.44	1.52
8	P	203	ARG	CA-C	-7.74	1.43	1.52
8	P	409	VAL	CA-CB	-7.74	1.48	1.54
1	I	120	GLY	CA-C	-7.72	1.43	1.52
3	C	475	CYS	CA-C	-7.72	1.43	1.53
4	L	378	GLY	CA-C	-7.70	1.41	1.51
2	B	489	ALA	C-N	7.70	1.44	1.33
7	G	126	ARG	CD-NE	7.68	1.57	1.46
2	B	318	ALA	C-N	7.68	1.43	1.33
1	I	31	ILE	N-CA	-7.68	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	416	ASN	C-N	7.68	1.43	1.33
4	L	337	CYS	N-CA	-7.67	1.36	1.46
8	H	328	VAL	CA-C	7.67	1.62	1.52
5	E	84	ASP	CA-CB	7.66	1.65	1.54
1	A	388	MET	C-N	7.66	1.44	1.33
2	J	322	ARG	CA-C	7.66	1.62	1.52
5	M	452	ALA	N-CA	-7.66	1.36	1.46
2	B	266	GLU	N-CA	-7.65	1.37	1.46
2	J	117	ILE	C-N	7.65	1.44	1.33
8	P	450	ARG	CD-NE	7.65	1.56	1.46
2	J	313	GLU	CA-C	-7.63	1.43	1.52
2	J	495	GLU	CA-C	-7.62	1.43	1.52
7	G	445	ILE	CA-CB	-7.61	1.50	1.54
3	K	261	GLU	N-CA	-7.60	1.36	1.46
8	H	90	SER	CA-CB	7.59	1.65	1.53
6	F	186	ILE	N-CA	-7.59	1.37	1.46
8	P	339	PRO	CA-CB	7.59	1.63	1.53
2	B	517	VAL	CA-C	-7.58	1.43	1.52
5	E	179	ASN	CA-C	-7.57	1.43	1.53
3	C	20	ARG	NE-CZ	7.56	1.41	1.33
3	K	240	LEU	CA-C	-7.56	1.43	1.52
3	K	420	HIS	ND1-CE1	7.55	1.40	1.32
2	B	369	GLU	C-N	7.55	1.43	1.33
5	E	535	LYS	C-N	7.55	1.40	1.33
5	M	204	VAL	CA-C	-7.55	1.43	1.52
8	P	310	ILE	N-CA	-7.55	1.37	1.46
4	L	122	LYS	CA-CB	7.54	1.65	1.53
1	A	21	ASN	C-N	7.54	1.43	1.33
4	L	452	ARG	NE-CZ	7.54	1.41	1.33
7	O	109	LYS	CA-CB	7.53	1.64	1.53
3	C	62	ASP	C-N	7.53	1.43	1.33
6	N	141	ARG	CA-C	-7.53	1.43	1.52
1	I	378	ARG	CA-CB	7.52	1.65	1.53
7	G	15	SER	N-CA	-7.51	1.36	1.46
1	I	181	TYR	CA-C	-7.50	1.43	1.52
3	C	103	GLY	CA-C	-7.50	1.43	1.52
4	D	178	GLN	N-CA	-7.50	1.37	1.46
5	M	301	ILE	CA-C	-7.49	1.43	1.52
8	H	390	ARG	CD-NE	7.48	1.56	1.46
6	N	315	ARG	NE-CZ	7.48	1.41	1.33
7	O	492	VAL	CA-CB	7.47	1.62	1.53
5	M	271	VAL	C-N	7.46	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	188	ASP	CA-CB	7.46	1.66	1.53
8	H	329	GLY	C-N	7.45	1.44	1.33
7	G	459	ASN	CA-CB	7.45	1.65	1.53
1	I	370	ARG	NE-CZ	7.45	1.41	1.33
5	M	400	ARG	CD-NE	7.44	1.56	1.46
6	F	485	GLU	CA-CB	7.44	1.63	1.54
3	K	186	GLU	N-CA	-7.44	1.37	1.46
3	K	192	GLU	CA-C	-7.43	1.46	1.53
5	M	466	SER	CA-C	-7.43	1.43	1.52
6	N	295	LYS	C-N	7.43	1.44	1.33
3	C	407	LEU	C-N	7.42	1.41	1.33
8	H	313	VAL	C-N	7.41	1.42	1.33
4	D	274	ARG	N-CA	-7.41	1.37	1.46
5	M	289	ILE	CA-C	-7.40	1.43	1.52
8	P	99	ASP	N-CA	-7.40	1.36	1.46
6	F	270	ARG	CD-NE	7.40	1.56	1.46
2	J	356	GLU	N-CA	-7.40	1.39	1.46
2	B	26	LEU	N-CA	-7.39	1.37	1.46
5	M	236	HIS	ND1-CE1	7.39	1.40	1.32
5	M	525	ARG	CD-NE	7.39	1.56	1.46
1	A	422	TYR	CA-C	-7.38	1.43	1.52
1	I	378	ARG	C-N	7.38	1.42	1.33
1	A	522	ILE	N-CA	-7.38	1.37	1.46
6	F	406	CYS	N-CA	-7.37	1.36	1.46
5	M	496	LYS	CA-C	-7.37	1.42	1.52
7	O	102	ALA	N-CA	-7.37	1.37	1.46
3	K	208	ILE	CA-CB	-7.37	1.44	1.54
5	M	333	ILE	CA-C	7.37	1.62	1.52
3	C	195	ILE	CA-C	-7.37	1.44	1.52
3	K	127	ARG	CZ-NH1	7.37	1.43	1.32
3	K	148	ASP	CA-C	-7.36	1.43	1.52
1	I	405	SER	CA-C	-7.36	1.44	1.52
7	O	59	SER	N-CA	-7.36	1.37	1.46
5	E	403	HIS	CD2-NE2	7.36	1.46	1.37
5	M	478	ARG	CA-C	-7.35	1.43	1.52
3	C	480	VAL	CA-C	-7.35	1.44	1.52
5	E	312	HIS	CB-CG	7.35	1.60	1.50
3	K	449	ARG	CZ-NH2	7.35	1.43	1.33
1	I	481	LYS	CA-C	-7.35	1.43	1.52
4	L	45	ALA	C-N	7.34	1.43	1.33
8	H	346	HIS	ND1-CE1	7.34	1.39	1.32
1	A	409	VAL	CA-C	-7.34	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	142	ARG	CD-NE	7.34	1.56	1.46
1	A	355	ARG	CZ-NH1	7.33	1.43	1.32
3	C	246	GLU	CA-C	-7.33	1.43	1.52
2	B	388	ARG	CA-CB	7.33	1.65	1.53
3	K	193	ILE	CA-C	-7.31	1.44	1.52
3	K	311	ALA	N-CA	-7.31	1.36	1.46
7	G	183	VAL	C-N	7.30	1.43	1.33
8	H	47	TYR	N-CA	-7.30	1.36	1.46
4	D	481	ARG	CA-C	-7.30	1.43	1.52
3	C	465	SER	CA-C	-7.29	1.42	1.52
2	J	152	GLU	N-CA	-7.29	1.36	1.46
2	B	111	ARG	CZ-NH1	7.29	1.43	1.32
1	A	118	ILE	C-N	7.28	1.43	1.33
4	L	268	ASP	N-CA	-7.28	1.36	1.45
1	I	288	THR	CA-C	-7.27	1.44	1.52
2	B	493	ILE	C-N	7.27	1.43	1.33
6	F	483	THR	CA-C	-7.27	1.43	1.52
5	M	478	ARG	NE-CZ	7.27	1.41	1.33
6	F	343	CYS	CA-CB	7.26	1.64	1.53
5	M	167	GLN	CA-C	7.26	1.62	1.52
5	E	412	LEU	CB-CG	7.25	1.68	1.53
3	K	203	LYS	C-N	7.25	1.38	1.33
7	O	300	THR	CA-C	-7.25	1.43	1.52
8	P	347	CYS	N-CA	-7.24	1.36	1.45
1	I	129	VAL	N-CA	-7.23	1.38	1.46
7	O	357	ARG	CD-NE	7.23	1.56	1.46
1	I	380	ALA	C-N	7.23	1.42	1.33
2	J	41	SER	C-N	7.22	1.44	1.34
4	L	75	ALA	CA-C	-7.22	1.43	1.52
3	C	520	ASP	CA-CB	7.22	1.65	1.54
8	P	378	ARG	CA-C	-7.22	1.44	1.52
8	H	80	HIS	CA-C	-7.21	1.44	1.52
2	J	104	VAL	C-N	7.21	1.43	1.33
5	M	515	GLN	N-CA	-7.20	1.37	1.46
6	F	130	ALA	N-CA	-7.20	1.37	1.46
5	M	334	ALA	C-N	7.20	1.43	1.33
2	B	255	ARG	CZ-NH2	7.19	1.42	1.33
6	N	275	ILE	C-N	7.19	1.43	1.34
4	D	85	HIS	CG-ND1	7.19	1.46	1.38
8	H	164	LEU	CA-C	-7.18	1.43	1.52
5	M	236	HIS	C-N	-7.18	1.25	1.34
4	L	42	LYS	N-CA	-7.18	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	N	432	ARG	NE-CZ	7.18	1.41	1.33
3	C	314	ARG	NE-CZ	7.18	1.41	1.33
1	I	282	GLY	C-N	7.18	1.43	1.33
5	M	352	LYS	CA-C	-7.17	1.44	1.52
6	F	157	ARG	CD-NE	7.17	1.56	1.46
2	B	88	SER	C-N	7.16	1.43	1.33
8	H	322	ARG	CD-NE	7.16	1.56	1.46
5	E	398	ALA	C-N	7.16	1.43	1.34
1	A	196	ASN	CA-C	7.16	1.62	1.52
8	P	120	ARG	CA-C	-7.15	1.43	1.52
8	P	443	GLU	C-N	7.15	1.43	1.34
3	C	72	VAL	CA-CB	-7.15	1.45	1.54
5	M	443	LEU	N-CA	-7.14	1.36	1.46
1	A	145	ARG	NE-CZ	7.14	1.41	1.33
8	H	203	ARG	CD-NE	7.14	1.56	1.46
2	J	464	GLN	CA-CB	7.13	1.65	1.53
1	A	506	PRO	CA-C	-7.12	1.45	1.52
1	A	59	ALA	N-CA	-7.12	1.37	1.46
3	K	396	GLN	CA-C	-7.12	1.43	1.52
4	D	531	LYS	CA-C	-7.11	1.43	1.52
4	D	298	LEU	CA-C	-7.10	1.43	1.52
2	J	116	LEU	N-CA	-7.10	1.38	1.46
2	B	415	MET	N-CA	-7.09	1.37	1.46
8	H	458	VAL	CA-C	-7.09	1.44	1.52
1	A	378	ARG	CD-NE	7.09	1.56	1.46
1	I	393	HIS	CD2-NE2	-7.09	1.30	1.37
3	K	486	THR	N-CA	-7.09	1.36	1.45
1	A	403	LEU	CA-C	-7.08	1.43	1.52
1	A	524	ILE	C-N	7.08	1.43	1.34
5	M	70	VAL	CA-C	-7.08	1.43	1.52
7	O	67	LYS	CA-CB	7.08	1.64	1.53
7	G	197	ILE	CA-C	-7.08	1.44	1.52
3	K	338	LEU	N-CA	-7.08	1.37	1.46
2	B	427	ARG	NE-CZ	7.07	1.40	1.33
7	G	395	ILE	CA-CB	-7.07	1.46	1.54
2	J	463	ALA	C-N	7.07	1.43	1.33
6	N	95	ASN	C-N	7.07	1.42	1.33
5	M	201	ARG	N-CA	-7.07	1.38	1.46
1	I	16	THR	CA-C	-7.07	1.43	1.52
5	M	495	HIS	ND1-CE1	7.07	1.39	1.32
5	E	232	LYS	C-N	7.06	1.43	1.33
6	F	62	VAL	CA-C	-7.06	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	O	53	ARG	NE-CZ	7.06	1.40	1.33
5	E	403	HIS	ND1-CE1	7.06	1.39	1.32
6	F	306	SER	C-N	7.06	1.43	1.34
8	P	191	PHE	CA-CB	7.05	1.59	1.53
6	N	367	ASN	C-N	7.04	1.40	1.33
1	A	53	THR	C-N	7.04	1.42	1.33
3	K	225	THR	C-N	7.04	1.41	1.33
8	P	165	ARG	CZ-NH1	7.04	1.42	1.32
8	P	338	PRO	CA-C	-7.04	1.45	1.52
8	H	45	THR	N-CA	-7.04	1.37	1.46
4	L	527	ARG	CZ-NH1	7.04	1.42	1.32
1	I	69	HIS	ND1-CE1	7.04	1.39	1.32
8	H	314	ARG	CD-NE	7.04	1.56	1.46
5	E	424	ALA	N-CA	-7.03	1.38	1.46
3	K	488	VAL	CA-C	-7.03	1.43	1.52
4	D	363	GLU	C-N	7.03	1.43	1.33
3	K	228	ARG	CD-NE	7.02	1.56	1.46
7	O	17	GLN	CA-CB	7.02	1.63	1.53
7	O	289	VAL	C-N	7.02	1.43	1.33
5	E	145	ILE	CA-CB	-7.01	1.45	1.54
3	C	17	GLU	CA-C	-7.01	1.44	1.52
4	L	386	VAL	CA-C	-7.01	1.43	1.52
8	H	215	SER	C-N	7.00	1.43	1.33
2	J	179	PHE	C-N	7.00	1.42	1.33
5	M	148	LEU	CA-C	-7.00	1.42	1.52
4	L	375	LYS	CA-C	-6.99	1.44	1.52
7	G	144	LYS	N-CA	-6.99	1.37	1.46
3	K	68	ARG	NE-CZ	6.98	1.40	1.33
5	M	165	LEU	C-N	6.98	1.42	1.33
4	D	333	ILE	C-N	6.98	1.43	1.33
6	F	274	ILE	CA-CB	-6.98	1.45	1.54
6	F	224	ARG	NE-CZ	6.97	1.40	1.33
4	D	287	VAL	N-CA	-6.97	1.38	1.46
2	J	58	ASP	CA-C	-6.97	1.44	1.52
3	C	399	ARG	CD-NE	6.97	1.56	1.46
8	H	20	LYS	N-CA	-6.96	1.37	1.46
7	O	214	VAL	CA-CB	-6.96	1.45	1.54
8	P	440	LYS	CA-C	-6.96	1.43	1.52
1	I	122	ARG	CD-NE	6.96	1.55	1.46
7	G	464	LEU	C-N	6.96	1.43	1.34
1	A	27	SER	C-N	6.95	1.42	1.33
4	D	224	VAL	CA-CB	-6.95	1.45	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	496	ARG	NE-CZ	6.94	1.40	1.33
5	M	322	VAL	C-N	6.94	1.43	1.33
3	C	188	ASN	CA-C	6.94	1.58	1.52
4	L	238	ILE	CA-C	6.94	1.60	1.52
3	K	346	GLY	C-N	6.93	1.42	1.33
4	L	224	VAL	CA-C	-6.93	1.43	1.52
2	B	56	GLY	CA-C	-6.92	1.41	1.51
2	B	404	SER	C-N	6.92	1.42	1.33
3	K	442	GLN	CA-CB	6.92	1.64	1.53
5	E	46	ASN	C-N	6.91	1.43	1.33
5	E	354	GLY	C-N	6.91	1.43	1.33
7	O	519	THR	N-CA	-6.91	1.38	1.46
2	J	399	GLN	C-N	6.91	1.44	1.33
6	F	316	ALA	CA-C	-6.90	1.43	1.52
2	J	522	LYS	N-CA	-6.90	1.38	1.46
4	D	435	ARG	NE-CZ	6.89	1.40	1.33
5	M	192	ALA	C-N	6.89	1.42	1.33
7	G	206	GLU	CA-C	-6.89	1.43	1.52
1	I	328	LEU	C-N	6.89	1.43	1.33
1	I	214	TYR	C-N	6.89	1.44	1.33
3	K	230	ARG	NE-CZ	6.89	1.40	1.33
7	O	458	THR	CA-CB	6.88	1.64	1.53
3	K	438	ARG	NE-CZ	6.88	1.40	1.33
6	N	409	PRO	C-N	-6.87	1.27	1.34
4	D	129	HIS	CD2-NE2	6.87	1.45	1.37
5	E	366	THR	CA-C	6.87	1.61	1.52
7	G	117	HIS	ND1-CE1	6.87	1.39	1.32
4	D	49	ARG	NE-CZ	6.86	1.40	1.33
2	B	343	LEU	CA-C	-6.86	1.43	1.53
5	E	363	SER	CA-C	-6.86	1.44	1.52
3	K	197	LYS	C-N	6.86	1.44	1.33
3	C	192	GLU	CA-C	-6.84	1.43	1.52
3	K	305	MET	N-CA	-6.84	1.37	1.46
5	M	67	ASP	N-CA	-6.84	1.38	1.45
8	H	73	LEU	CA-C	-6.84	1.44	1.52
4	L	219	ASP	CA-CB	6.84	1.64	1.53
6	F	35	ARG	NE-CZ	6.84	1.40	1.33
8	H	325	CYS	C-N	6.83	1.43	1.33
1	I	222	SER	C-O	-6.83	1.18	1.23
8	H	361	VAL	CA-C	-6.83	1.44	1.52
5	M	192	ALA	N-CA	-6.83	1.38	1.46
4	D	195	ILE	CA-C	-6.83	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	20	ARG	NE-CZ	6.82	1.40	1.33
4	D	306	ARG	CD-NE	6.82	1.55	1.46
8	H	445	PHE	CA-CB	6.82	1.64	1.53
3	K	292	THR	CA-C	-6.82	1.44	1.52
5	M	400	ARG	CA-CB	6.82	1.64	1.53
7	G	126	ARG	NE-CZ	6.81	1.40	1.33
2	J	293	ARG	CA-C	-6.81	1.43	1.52
1	A	524	ILE	CA-C	-6.80	1.44	1.52
7	G	279	GLU	CA-C	-6.80	1.44	1.52
3	C	334	ARG	C-N	-6.80	1.27	1.33
6	N	279	ARG	NE-CZ	6.80	1.40	1.33
3	K	354	LYS	CA-C	-6.79	1.44	1.52
6	N	476	LEU	CA-C	-6.79	1.44	1.52
4	D	70	ILE	CA-CB	-6.79	1.45	1.53
7	G	233	HIS	ND1-CE1	6.79	1.39	1.32
8	H	428	GLU	C-N	6.79	1.42	1.33
5	M	315	LEU	CA-CB	6.79	1.64	1.53
8	P	223	PHE	CA-C	-6.79	1.44	1.52
1	I	41	LEU	CA-C	-6.79	1.44	1.52
5	M	319	LEU	N-CA	6.78	1.52	1.46
2	B	32	ALA	N-CA	-6.78	1.38	1.46
2	B	282	ILE	CA-CB	-6.78	1.46	1.54
8	H	138	LYS	C-N	6.77	1.43	1.33
4	D	168	THR	CA-C	6.77	1.61	1.52
3	C	132	ASP	N-CA	-6.77	1.38	1.46
7	O	522	ASN	C-O	-6.77	1.18	1.24
4	D	466	ALA	CA-C	-6.77	1.43	1.52
5	M	393	MET	C-N	6.77	1.42	1.33
4	D	146	GLU	C-N	6.77	1.42	1.33
6	F	110	ILE	N-CA	-6.76	1.38	1.46
4	L	304	ILE	CA-C	-6.76	1.44	1.52
3	K	517	LEU	CA-C	-6.76	1.44	1.52
2	B	229	PRO	CA-CB	-6.76	1.45	1.53
3	C	188	ASN	N-CA	-6.76	1.41	1.47
1	I	365	LYS	CA-C	-6.75	1.44	1.52
6	N	227	ASP	CA-CB	6.75	1.64	1.53
2	B	145	ALA	CA-C	-6.75	1.44	1.52
8	H	18	GLY	C-N	6.74	1.41	1.33
6	N	399	LYS	N-CA	-6.74	1.38	1.46
4	D	255	ALA	CA-C	6.74	1.60	1.53
6	F	66	GLU	CA-C	-6.74	1.44	1.52
8	H	149	CYS	C-N	6.74	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	48	ASP	CA-C	-6.73	1.43	1.52
6	F	312	ALA	C-N	6.73	1.42	1.33
7	G	418	LYS	CA-C	-6.73	1.44	1.52
6	F	206	LEU	CA-C	-6.73	1.44	1.52
4	L	275	VAL	N-CA	-6.72	1.38	1.46
5	E	460	MET	C-O	-6.72	1.16	1.24
1	A	483	LEU	N-CA	-6.72	1.38	1.46
2	J	299	TYR	CA-CB	6.71	1.62	1.53
3	K	313	ARG	C-N	6.71	1.42	1.33
5	E	126	ARG	CZ-NH2	6.71	1.42	1.33
1	I	241	LEU	CA-C	-6.71	1.44	1.52
1	I	345	LEU	CA-C	-6.71	1.43	1.52
6	N	436	GLY	N-CA	-6.71	1.37	1.45
7	O	56	ALA	CA-C	-6.71	1.44	1.52
3	C	74	HIS	ND1-CE1	6.70	1.39	1.32
4	D	347	HIS	N-CA	-6.70	1.37	1.46
6	F	121	GLU	C-N	6.70	1.42	1.34
8	H	359	GLN	CA-CB	6.70	1.62	1.53
4	L	129	HIS	CA-CB	6.70	1.63	1.53
3	C	518	ARG	NE-CZ	6.69	1.40	1.33
8	H	187	CYS	N-CA	-6.69	1.37	1.46
2	J	373	ILE	CA-CB	6.69	1.62	1.54
1	A	448	ILE	CA-C	-6.69	1.46	1.52
1	I	355	ARG	CA-C	-6.69	1.44	1.52
7	O	168	ILE	CA-CB	-6.69	1.47	1.54
2	B	155	PHE	CA-CB	6.69	1.64	1.53
6	F	169	THR	C-N	6.69	1.42	1.33
4	D	260	MET	CA-C	-6.69	1.44	1.52
7	G	229	PRO	CA-C	-6.68	1.44	1.52
5	M	326	GLY	C-N	6.68	1.43	1.33
3	K	457	ALA	CA-CB	6.68	1.64	1.53
6	F	189	PHE	N-CA	-6.68	1.37	1.45
1	A	255	THR	C-N	6.68	1.41	1.32
7	O	483	ASP	CA-C	-6.67	1.44	1.52
8	P	445	PHE	C-N	6.67	1.43	1.33
2	B	349	ILE	N-CA	-6.67	1.36	1.46
7	G	288	VAL	N-CA	-6.67	1.38	1.46
2	J	476	ALA	CA-CB	6.67	1.64	1.53
6	F	238	GLU	C-N	6.66	1.43	1.33
4	D	116	LEU	N-CA	6.66	1.54	1.46
8	H	293	THR	CA-CB	6.66	1.62	1.53
8	H	137	ARG	NE-CZ	6.66	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	441	LYS	CA-CB	-6.66	1.43	1.53
7	G	216	PHE	CA-C	-6.66	1.44	1.52
6	F	377	LYS	CA-C	-6.65	1.44	1.52
3	K	41	LEU	CA-CB	6.65	1.63	1.53
4	L	229	LEU	C-N	6.64	1.42	1.33
7	O	274	LEU	CA-C	-6.64	1.44	1.52
5	E	317	ASN	C-N	6.64	1.43	1.33
3	K	460	ILE	C-N	6.64	1.42	1.33
6	N	408	VAL	CA-C	-6.64	1.46	1.52
2	B	79	PRO	C-N	6.63	1.43	1.33
7	O	395	ILE	C-N	6.63	1.42	1.33
1	A	355	ARG	C-O	-6.63	1.15	1.24
7	O	156	GLU	N-CA	-6.63	1.38	1.46
8	H	196	HIS	ND1-CE1	6.63	1.39	1.32
1	A	122	ARG	CZ-NH2	6.63	1.42	1.33
5	E	449	ARG	C-O	-6.63	1.16	1.24
8	P	68	ASP	C-N	6.63	1.43	1.33
1	I	320	ALA	C-N	6.62	1.42	1.33
5	E	512	GLY	CA-C	-6.62	1.44	1.52
7	G	362	THR	N-CA	-6.62	1.37	1.45
5	M	340	ARG	NE-CZ	6.62	1.40	1.33
7	G	510	ALA	N-CA	-6.62	1.38	1.46
7	G	407	ALA	C-N	6.62	1.41	1.33
5	M	344	ARG	NE-CZ	6.62	1.40	1.33
1	A	137	ILE	N-CA	6.62	1.54	1.46
3	C	377	ARG	NE-CZ	6.62	1.40	1.33
5	M	236	HIS	CA-C	-6.61	1.46	1.52
8	P	489	VAL	CA-C	-6.61	1.44	1.52
3	C	129	ALA	N-CA	-6.61	1.38	1.46
2	J	340	LEU	N-CA	-6.61	1.38	1.46
4	D	379	CYS	N-CA	-6.60	1.37	1.45
8	P	189	SER	N-CA	-6.60	1.37	1.46
7	O	126	ARG	CD-NE	6.60	1.55	1.46
4	D	308	ALA	CA-C	-6.60	1.44	1.52
4	D	49	ARG	CD-NE	6.59	1.55	1.46
3	C	324	ALA	C-N	6.58	1.42	1.33
5	M	471	ILE	N-CA	-6.58	1.38	1.46
1	A	277	LYS	N-CA	-6.58	1.38	1.46
2	B	166	THR	N-CA	-6.57	1.38	1.46
6	N	104	LYS	N-CA	-6.57	1.38	1.46
1	I	230	VAL	CA-CB	6.57	1.62	1.54
2	B	237	ILE	N-CA	-6.57	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	152	GLU	CA-CB	6.57	1.64	1.53
5	M	244	GLU	C-N	6.57	1.42	1.33
8	P	292	VAL	CA-CB	-6.57	1.46	1.54
4	D	167	ALA	CA-C	6.56	1.61	1.52
3	K	421	ALA	C-N	6.56	1.43	1.33
6	F	288	GLY	N-CA	-6.56	1.38	1.44
5	M	185	MET	C-N	6.56	1.42	1.33
7	G	445	ILE	CA-C	-6.55	1.46	1.52
4	L	143	LYS	C-N	-6.55	1.25	1.33
4	L	437	THR	N-CA	6.55	1.54	1.46
7	O	315	PRO	CA-CB	6.55	1.62	1.53
1	I	526	ARG	NE-CZ	6.55	1.40	1.33
4	L	405	ILE	C-N	6.55	1.42	1.33
5	M	398	ALA	C-O	-6.55	1.16	1.24
5	E	526	MET	C-N	6.55	1.41	1.33
8	H	290	VAL	C-N	6.55	1.41	1.33
6	F	327	ALA	C-N	6.55	1.43	1.33
8	P	244	CYS	CA-C	-6.55	1.45	1.52
5	M	289	ILE	C-N	6.54	1.42	1.33
4	D	399	GLU	CA-C	-6.54	1.44	1.52
3	K	139	LYS	CA-C	-6.54	1.44	1.52
7	G	116	LEU	CA-C	6.54	1.58	1.52
2	B	90	VAL	N-CA	-6.54	1.38	1.46
2	B	387	GLU	C-N	6.54	1.42	1.33
4	L	27	ARG	NE-CZ	6.54	1.40	1.33
1	I	111	LYS	C-N	6.53	1.41	1.33
5	M	183	ARG	NE-CZ	6.53	1.40	1.33
2	B	205	LEU	N-CA	-6.53	1.38	1.46
6	F	476	LEU	CA-CB	6.53	1.61	1.52
1	A	457	ALA	CA-C	6.52	1.61	1.53
2	J	148	HIS	N-CA	-6.52	1.41	1.47
3	K	451	LEU	C-N	6.52	1.41	1.33
6	F	25	SER	CA-C	-6.52	1.44	1.52
1	I	337	GLU	N-CA	-6.52	1.38	1.46
1	A	503	VAL	CA-C	-6.52	1.44	1.52
2	B	451	ALA	C-N	6.52	1.43	1.34
2	B	257	ARG	NE-CZ	6.51	1.40	1.33
2	J	257	ARG	C-N	6.51	1.41	1.33
1	I	278	ILE	CA-CB	-6.51	1.46	1.54
5	E	90	LEU	CA-CB	6.51	1.63	1.53
2	B	432	GLU	CA-CB	6.50	1.64	1.53
1	I	382	ASP	C-N	6.50	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	C	504	GLN	N-CA	-6.50	1.38	1.46
8	H	224	LYS	CA-CB	6.50	1.63	1.53
5	M	403	HIS	CA-C	-6.50	1.44	1.52
8	P	259	ILE	C-O	-6.50	1.16	1.24
8	H	53	ASN	N-CA	-6.50	1.37	1.46
2	B	198	ALA	N-CA	-6.49	1.37	1.46
6	F	95	ASN	CA-C	-6.49	1.44	1.52
6	N	159	LYS	N-CA	-6.49	1.38	1.46
2	B	52	LEU	C-N	6.49	1.42	1.33
2	J	291	ILE	CA-CB	-6.49	1.46	1.54
2	J	429	PRO	CA-C	-6.49	1.43	1.52
3	C	362	PHE	CA-CB	6.49	1.63	1.53
5	E	102	ILE	CA-CB	-6.48	1.48	1.55
6	F	323	ARG	CZ-NH2	6.48	1.41	1.33
1	I	39	VAL	CA-C	-6.48	1.44	1.53
1	A	321	LYS	CA-CB	6.48	1.63	1.53
3	K	368	ASP	N-CA	-6.48	1.39	1.45
8	H	329	GLY	CA-C	-6.48	1.43	1.51
8	P	85	MET	CA-C	-6.48	1.44	1.52
1	A	13	THR	C-N	6.48	1.43	1.33
1	A	335	GLU	C-N	6.48	1.41	1.33
3	C	315	VAL	CA-C	-6.48	1.44	1.52
5	M	414	ARG	CD-NE	6.48	1.55	1.46
6	F	315	ARG	CD-NE	6.48	1.55	1.46
2	J	326	VAL	CA-CB	-6.48	1.46	1.54
4	L	201	THR	CA-C	-6.47	1.44	1.52
8	H	410	PRO	CA-CB	6.47	1.62	1.53
2	J	474	THR	C-N	6.47	1.41	1.33
1	A	404	GLU	CA-CB	6.47	1.63	1.53
2	B	395	CYS	C-N	6.47	1.42	1.33
5	M	262	THR	N-CA	-6.46	1.38	1.46
6	F	132	GLN	CA-C	6.46	1.61	1.52
7	G	402	ASN	CA-CB	6.46	1.65	1.53
7	G	393	ILE	C-N	6.46	1.42	1.33
8	P	32	ASN	C-N	6.46	1.41	1.33
6	F	148	LEU	CA-C	-6.46	1.43	1.52
3	K	82	GLU	N-CA	6.46	1.54	1.46
3	C	389	ARG	CA-CB	6.45	1.63	1.53
7	O	66	LEU	N-CA	-6.45	1.38	1.46
6	F	53	ASP	C-N	6.45	1.42	1.33
7	G	170	GLN	CA-C	-6.45	1.43	1.52
2	B	427	ARG	CZ-NH2	6.45	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	302	CYS	CA-C	6.45	1.60	1.52
7	O	45	MET	N-CA	-6.45	1.37	1.45
1	I	17	ILE	CA-CB	-6.45	1.45	1.54
8	H	390	ARG	CZ-NH1	6.44	1.41	1.32
3	K	398	CYS	N-CA	-6.44	1.38	1.46
5	E	460	MET	CA-C	-6.44	1.44	1.52
7	O	59	SER	CA-C	-6.44	1.44	1.52
6	F	338	ASP	C-N	6.44	1.42	1.33
1	A	400	LYS	CA-C	6.44	1.61	1.52
8	P	67	ASN	C-O	-6.44	1.17	1.24
4	L	527	ARG	CD-NE	6.43	1.55	1.46
3	K	155	ILE	N-CA	-6.43	1.38	1.46
5	E	132	ARG	NE-CZ	6.42	1.40	1.33
6	F	445	LEU	CA-CB	6.42	1.64	1.53
3	C	284	GLN	C-O	-6.42	1.16	1.24
8	P	56	VAL	N-CA	-6.42	1.38	1.46
3	C	40	CYS	CA-C	-6.42	1.43	1.52
6	F	196	MET	C-N	6.42	1.42	1.33
8	P	21	HIS	ND1-CE1	6.42	1.39	1.32
7	G	340	ASP	CA-CB	6.41	1.64	1.53
1	A	397	CYS	C-N	6.41	1.42	1.33
1	I	468	ARG	NE-CZ	6.41	1.40	1.33
2	J	74	ILE	CA-CB	6.41	1.61	1.54
2	J	446	LEU	C-N	6.41	1.41	1.33
3	C	127	ARG	CD-NE	6.41	1.55	1.46
4	D	310	SER	CA-C	-6.41	1.44	1.52
3	C	322	ARG	CD-NE	6.40	1.55	1.46
5	E	385	ILE	CA-CB	-6.40	1.46	1.54
6	N	113	GLY	CA-C	-6.40	1.42	1.51
5	E	506	VAL	N-CA	-6.40	1.38	1.46
2	J	483	GLY	CA-C	-6.40	1.42	1.51
2	B	274	LYS	CA-CB	6.39	1.63	1.53
7	G	206	GLU	C-N	6.39	1.41	1.33
7	G	469	ALA	N-CA	-6.39	1.40	1.46
6	N	122	GLY	CA-C	-6.39	1.44	1.51
8	P	388	ILE	CA-CB	-6.39	1.47	1.54
8	H	206	LYS	CA-CB	6.39	1.62	1.53
6	N	264	ARG	CZ-NH1	6.39	1.41	1.32
7	O	475	TYR	CA-CB	6.39	1.61	1.53
8	H	196	HIS	CD2-NE2	6.39	1.44	1.37
4	L	212	LYS	C-N	6.39	1.41	1.33
6	N	65	HIS	ND1-CE1	6.39	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	207	GLU	N-CA	-6.39	1.38	1.46
3	K	379	ALA	CA-C	-6.39	1.43	1.52
2	B	157	GLN	CA-C	-6.39	1.44	1.52
3	C	231	ARG	C-N	6.39	1.41	1.33
1	A	393	HIS	ND1-CE1	6.38	1.39	1.32
7	O	297	ASP	C-N	6.38	1.41	1.33
3	C	216	ARG	NE-CZ	6.38	1.40	1.33
1	A	404	GLU	CA-C	-6.38	1.44	1.52
8	H	155	ARG	NE-CZ	6.38	1.40	1.33
8	P	252	GLU	CA-C	-6.38	1.44	1.52
5	E	221	ASP	N-CA	-6.38	1.38	1.46
8	P	323	ARG	CD-NE	6.38	1.55	1.46
8	P	484	ALA	N-CA	-6.38	1.37	1.46
5	E	147	HIS	CB-CG	6.37	1.59	1.50
8	H	399	PHE	CA-C	-6.37	1.44	1.52
5	M	340	ARG	CZ-NH2	6.37	1.41	1.33
3	C	231	ARG	CZ-NH2	6.37	1.41	1.33
4	D	127	GLY	CA-C	-6.37	1.42	1.51
7	O	414	MET	CA-CB	6.37	1.63	1.53
1	A	98	ALA	C-O	-6.37	1.16	1.24
1	A	109	LYS	CA-CB	6.37	1.63	1.53
7	G	325	ALA	CA-C	6.37	1.61	1.52
6	N	31	GLN	N-CA	-6.37	1.38	1.46
3	C	127	ARG	CZ-NH1	6.36	1.41	1.32
8	H	346	HIS	CA-CB	6.36	1.63	1.53
1	I	277	LYS	CA-C	-6.36	1.44	1.52
2	J	96	GLY	CA-C	-6.36	1.43	1.51
7	O	135	LYS	C-N	6.36	1.41	1.33
6	F	372	VAL	N-CA	-6.36	1.38	1.46
1	I	12	SER	C-N	6.36	1.42	1.33
7	O	172	LYS	CA-C	-6.36	1.44	1.52
1	A	19	SER	N-CA	-6.36	1.38	1.46
1	A	164	ASN	N-CA	-6.36	1.38	1.46
1	A	266	ARG	CA-CB	6.36	1.63	1.53
3	C	111	HIS	ND1-CE1	6.36	1.39	1.32
7	G	468	HIS	ND1-CE1	6.36	1.39	1.32
6	F	299	PRO	N-CA	-6.36	1.39	1.47
2	J	181	LYS	CA-C	6.36	1.60	1.52
3	C	44	LYS	CA-C	-6.35	1.44	1.52
2	J	50	LYS	CA-C	-6.35	1.45	1.52
3	K	115	GLN	C-O	-6.35	1.16	1.24
3	C	314	ARG	CZ-NH2	6.35	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	19	GLU	N-CA	-6.35	1.38	1.46
2	J	391	HIS	CE1-NE2	-6.35	1.26	1.32
4	L	153	ARG	CA-CB	6.35	1.62	1.52
7	O	477	VAL	N-CA	-6.35	1.38	1.46
7	G	180	VAL	N-CA	-6.34	1.39	1.46
5	E	221	ASP	CA-CB	6.34	1.61	1.53
7	O	214	VAL	C-N	-6.34	1.25	1.33
1	I	203	ARG	NE-CZ	6.34	1.40	1.33
6	F	524	ALA	C-N	6.33	1.42	1.33
7	O	477	VAL	CA-CB	-6.33	1.46	1.54
5	E	438	ASP	C-N	6.33	1.42	1.33
6	F	387	ILE	C-N	6.33	1.42	1.33
3	K	312	ILE	C-O	-6.33	1.17	1.24
3	K	417	ALA	N-CA	6.33	1.53	1.46
1	A	255	THR	CA-C	-6.33	1.44	1.52
4	L	315	HIS	CB-CG	6.33	1.59	1.50
3	C	381	LYS	CA-C	-6.32	1.44	1.52
4	L	267	SER	C-N	6.32	1.41	1.33
8	H	363	PHE	C-N	6.32	1.41	1.33
1	A	45	LEU	C-N	6.32	1.40	1.33
3	C	128	LYS	N-CA	6.32	1.54	1.46
3	C	225	THR	CA-CB	6.32	1.63	1.53
1	I	355	ARG	CA-CB	6.32	1.62	1.53
1	I	471	HIS	N-CA	6.31	1.53	1.46
2	B	404	SER	CA-C	-6.31	1.44	1.53
3	C	315	VAL	N-CA	-6.31	1.38	1.46
4	D	489	LYS	N-CA	-6.31	1.38	1.46
5	M	135	ASP	CA-C	-6.31	1.44	1.52
5	E	209	ILE	CA-CB	-6.31	1.46	1.54
6	F	74	ALA	C-N	6.31	1.42	1.33
3	C	29	ALA	C-N	6.30	1.42	1.33
4	D	346	ALA	CA-C	-6.30	1.44	1.52
2	J	446	LEU	N-CA	-6.30	1.41	1.46
1	I	28	ILE	CA-C	-6.30	1.45	1.52
2	B	219	LEU	C-O	-6.30	1.16	1.23
3	C	108	VAL	CA-C	-6.30	1.44	1.52
1	I	497	ASP	C-N	6.30	1.42	1.33
6	F	247	GLY	N-CA	-6.30	1.36	1.45
6	N	80	VAL	CA-CB	-6.30	1.46	1.54
8	P	80	HIS	CD2-NE2	6.30	1.44	1.37
4	D	372	LYS	CA-C	-6.29	1.45	1.52
7	O	369	THR	C-N	6.29	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	O	524	ARG	CD-NE	6.29	1.55	1.46
5	E	253	CYS	CA-CB	6.29	1.62	1.53
8	H	313	VAL	CA-CB	-6.29	1.45	1.53
7	G	337	LEU	C-N	6.29	1.42	1.33
2	J	348	LEU	CA-C	-6.29	1.44	1.52
8	H	132	TYR	CA-C	-6.28	1.44	1.52
8	H	434	GLU	CA-C	-6.28	1.44	1.52
2	J	404	SER	C-N	6.28	1.41	1.33
7	O	213	GLY	CA-C	-6.28	1.43	1.51
2	B	167	LEU	N-CA	-6.28	1.38	1.46
8	H	394	ASP	CA-C	-6.28	1.44	1.52
6	N	407	VAL	CA-C	-6.28	1.45	1.52
7	O	37	ARG	CA-C	-6.28	1.44	1.52
5	E	332	LEU	N-CA	-6.28	1.39	1.46
6	N	40	PRO	C-N	6.28	1.42	1.33
8	P	293	THR	C-N	6.27	1.42	1.34
3	K	237	ARG	CD-NE	6.27	1.55	1.46
2	J	155	PHE	N-CA	-6.27	1.38	1.46
2	J	443	LEU	CA-C	6.27	1.60	1.52
2	B	306	ALA	N-CA	-6.27	1.38	1.46
5	M	406	LEU	CA-CB	6.26	1.63	1.53
6	N	291	VAL	C-O	-6.26	1.17	1.24
2	B	288	ASN	CA-CB	6.26	1.62	1.54
7	G	67	LYS	CA-C	6.26	1.60	1.52
4	L	379	CYS	CA-C	-6.26	1.44	1.52
2	B	87	MET	CA-C	-6.26	1.44	1.52
1	I	101	LEU	N-CA	-6.25	1.38	1.46
7	O	518	GLU	C-O	-6.25	1.17	1.23
2	J	403	ASP	C-N	6.25	1.42	1.33
4	L	209	LYS	N-CA	-6.25	1.38	1.46
3	C	273	GLU	CA-CB	6.25	1.63	1.53
8	H	203	ARG	CA-C	-6.25	1.45	1.52
1	I	187	GLN	N-CA	-6.25	1.40	1.45
5	M	429	CYS	N-CA	-6.25	1.38	1.46
6	N	520	GLU	CA-C	-6.25	1.45	1.52
7	G	510	ALA	CA-C	-6.24	1.44	1.52
8	H	206	LYS	N-CA	-6.24	1.38	1.46
2	B	434	VAL	C-N	6.24	1.42	1.34
2	B	440	ALA	CA-C	-6.24	1.44	1.52
3	C	66	ILE	CA-C	-6.24	1.45	1.52
5	E	27	ARG	N-CA	-6.24	1.38	1.46
5	E	100	ASP	CA-C	6.24	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	G	317	GLU	N-CA	-6.24	1.38	1.46
1	I	471	HIS	ND1-CE1	6.24	1.38	1.32
6	N	441	ALA	N-CA	6.24	1.53	1.46
8	P	155	ARG	NE-CZ	6.24	1.40	1.33
2	B	390	LEU	N-CA	6.23	1.54	1.46
8	H	322	ARG	NE-CZ	6.23	1.40	1.33
8	P	352	LEU	CA-C	-6.23	1.45	1.53
3	C	358	GLU	CA-C	-6.23	1.45	1.52
6	N	379	PRO	CA-C	6.23	1.60	1.52
3	C	18	SER	N-CA	-6.23	1.38	1.46
4	L	324	VAL	CA-C	-6.23	1.45	1.52
5	M	274	TYR	N-CA	-6.23	1.38	1.46
1	A	339	THR	CA-C	-6.22	1.44	1.53
4	D	159	ASP	CA-CB	6.22	1.62	1.53
4	D	496	ARG	CD-NE	6.22	1.54	1.46
7	G	130	GLN	CA-C	6.22	1.60	1.52
3	K	407	LEU	CA-C	-6.22	1.44	1.52
3	C	105	MET	CA-C	-6.22	1.44	1.52
6	F	161	HIS	CD2-NE2	6.22	1.44	1.37
1	I	260	LEU	CA-C	-6.22	1.44	1.52
3	K	496	TRP	N-CA	-6.22	1.38	1.46
7	G	410	GLY	CA-C	-6.21	1.43	1.51
6	F	34	LEU	CA-CB	6.21	1.62	1.53
8	H	268	PHE	C-N	6.21	1.42	1.33
7	G	453	ALA	CA-C	-6.21	1.44	1.52
7	O	391	ASP	N-CA	-6.21	1.38	1.46
1	A	306	MET	CA-C	-6.21	1.45	1.52
1	I	247	LYS	CA-C	6.21	1.61	1.52
2	J	90	VAL	N-CA	6.21	1.53	1.46
2	J	140	ALA	CA-C	6.21	1.61	1.52
1	I	444	SER	N-CA	-6.20	1.38	1.46
8	P	59	HIS	C-N	6.20	1.42	1.33
5	E	235	SER	C-N	6.20	1.40	1.33
2	J	315	ALA	CA-C	-6.20	1.44	1.53
7	O	346	GLN	CA-CB	6.20	1.63	1.53
1	A	409	VAL	CA-CB	6.20	1.59	1.54
2	J	467	ALA	N-CA	-6.20	1.38	1.46
4	L	306	ARG	NE-CZ	6.19	1.39	1.33
2	B	62	MET	C-N	6.19	1.41	1.33
7	O	490	ALA	C-N	6.19	1.42	1.33
1	I	269	ASP	N-CA	6.19	1.53	1.46
5	M	215	VAL	C-N	6.19	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	M	288	MET	CA-CB	6.19	1.62	1.53
3	C	72	VAL	CA-C	6.19	1.59	1.52
7	G	143	VAL	C-N	6.19	1.41	1.33
8	H	222	VAL	C-N	6.19	1.42	1.33
5	E	534	ARG	CA-C	-6.19	1.44	1.52
5	M	525	ARG	CZ-NH1	6.19	1.41	1.32
8	P	192	PRO	CA-C	6.19	1.59	1.52
7	G	503	LEU	N-CA	6.19	1.53	1.46
8	H	276	MET	C-O	-6.19	1.16	1.24
2	B	391	HIS	CA-CB	6.18	1.62	1.53
5	M	317	ASN	CA-CB	6.18	1.61	1.53
2	B	460	ASP	C-O	-6.18	1.17	1.24
8	H	319	TRP	C-N	6.18	1.42	1.33
5	E	172	THR	CA-C	-6.18	1.44	1.52
8	H	353	SER	CA-C	-6.18	1.44	1.52
8	P	480	LEU	CA-CB	6.18	1.61	1.53
6	F	470	HIS	CE1-NE2	6.17	1.38	1.32
6	N	370	ARG	CA-C	-6.17	1.46	1.52
1	A	266	ARG	CD-NE	6.17	1.54	1.46
4	L	461	ILE	CA-C	6.17	1.57	1.52
4	D	315	HIS	ND1-CE1	6.17	1.38	1.32
5	E	321	ALA	CA-CB	6.17	1.63	1.53
5	M	322	VAL	N-CA	-6.17	1.38	1.46
6	F	315	ARG	NE-CZ	6.17	1.39	1.33
4	L	202	SER	N-CA	6.16	1.53	1.45
3	C	149	SER	CA-C	-6.16	1.44	1.52
5	E	28	LEU	CA-CB	-6.16	1.44	1.53
2	B	382	ILE	CA-C	-6.16	1.45	1.52
1	I	504	PHE	CA-C	-6.16	1.44	1.52
5	M	372	LEU	CA-CB	6.16	1.62	1.53
3	K	154	ASN	CA-CB	6.15	1.63	1.53
5	E	516	GLN	C-O	-6.15	1.17	1.24
6	N	52	GLY	C-N	6.14	1.42	1.33
1	A	349	GLU	N-CA	6.14	1.54	1.46
8	H	122	GLY	C-N	6.14	1.41	1.33
1	A	250	VAL	CA-C	-6.14	1.45	1.52
2	B	357	ASP	CA-C	-6.14	1.45	1.52
5	M	438	ASP	CA-CB	6.14	1.61	1.53
4	D	79	LYS	CA-C	-6.14	1.44	1.52
3	C	463	LEU	CA-CB	6.14	1.62	1.53
6	F	475	GLN	CA-C	-6.13	1.45	1.52
5	M	349	THR	C-N	6.13	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	302	LEU	CA-C	-6.13	1.44	1.52
1	A	496	ARG	CZ-NH1	6.13	1.41	1.32
7	G	190	LEU	C-N	6.13	1.41	1.33
1	I	148	LEU	C-N	6.13	1.41	1.33
7	O	503	LEU	N-CA	-6.13	1.38	1.46
5	M	352	LYS	N-CA	-6.13	1.39	1.46
4	D	495	VAL	CA-CB	-6.13	1.47	1.54
1	A	411	GLY	C-N	6.12	1.42	1.33
3	C	101	LEU	N-CA	-6.12	1.38	1.46
4	D	209	LYS	CA-CB	6.12	1.62	1.53
2	B	263	LYS	C-N	6.12	1.41	1.34
7	O	167	LEU	CA-CB	6.12	1.63	1.53
2	B	462	VAL	N-CA	-6.12	1.39	1.46
4	D	390	VAL	N-CA	-6.12	1.38	1.46
7	G	477	VAL	N-CA	-6.12	1.39	1.46
6	N	336	PHE	CA-C	-6.12	1.45	1.53
4	L	172	ASN	CA-C	-6.12	1.44	1.52
4	D	240	ARG	CD-NE	6.11	1.54	1.46
2	J	457	ASP	C-N	6.11	1.42	1.33
1	A	174	ASP	CA-CB	6.11	1.62	1.53
3	C	219	MET	CA-C	-6.11	1.45	1.52
2	J	493	ILE	CA-CB	-6.11	1.46	1.54
1	I	138	VAL	C-N	6.11	1.42	1.33
6	N	344	LEU	CA-CB	6.11	1.62	1.53
3	C	223	ASP	N-CA	-6.11	1.38	1.46
8	H	93	GLN	C-N	6.11	1.42	1.33
8	H	370	GLY	C-N	6.11	1.41	1.33
3	K	339	ARG	NE-CZ	6.11	1.39	1.33
3	C	382	GLU	CA-C	-6.11	1.45	1.52
8	P	249	MET	CA-C	-6.10	1.45	1.52
3	C	438	ARG	CD-NE	6.10	1.54	1.46
4	D	184	SER	C-O	-6.10	1.18	1.24
7	G	403	ASP	N-CA	-6.10	1.38	1.46
2	J	293	ARG	CZ-NH1	6.10	1.41	1.32
4	L	257	LYS	CA-C	-6.10	1.45	1.53
5	M	539	SER	C-N	6.10	1.41	1.33
7	O	57	THR	C-N	6.10	1.42	1.33
2	J	25	ARG	CD-NE	6.10	1.54	1.46
5	M	132	ARG	CZ-NH2	6.10	1.41	1.33
3	K	465	SER	CA-CB	6.09	1.63	1.53
6	N	358	GLU	CA-C	-6.09	1.45	1.52
8	P	31	ARG	C-N	6.09	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	N	396	ARG	NE-CZ	6.09	1.39	1.33
5	E	134	ALA	N-CA	-6.09	1.39	1.46
8	H	365	HIS	CG-ND1	6.09	1.45	1.38
1	I	86	VAL	CA-C	-6.09	1.46	1.52
2	J	117	ILE	N-CA	-6.09	1.39	1.46
3	C	461	ARG	CZ-NH1	6.08	1.41	1.32
6	F	346	HIS	ND1-CE1	6.08	1.38	1.32
5	E	454	ALA	CA-C	-6.08	1.44	1.52
6	F	329	GLY	CA-C	6.08	1.59	1.51
4	L	240	ARG	CD-NE	6.08	1.54	1.46
8	P	221	MET	C-N	6.08	1.41	1.33
8	P	270	LYS	CA-C	-6.08	1.44	1.52
1	A	310	ARG	CA-C	-6.08	1.45	1.53
6	F	504	LEU	CA-C	-6.08	1.44	1.52
7	G	201	GLN	CA-C	-6.08	1.44	1.52
2	J	516	ARG	CA-CB	6.08	1.62	1.53
8	H	485	GLU	N-CA	-6.08	1.38	1.46
6	N	225	VAL	CA-CB	-6.07	1.46	1.54
2	B	317	PHE	N-CA	-6.07	1.38	1.46
3	C	140	ILE	C-N	6.07	1.41	1.33
3	C	201	VAL	CA-C	-6.07	1.45	1.52
3	C	193	ILE	CA-CB	-6.07	1.46	1.54
3	C	518	ARG	C-N	6.07	1.39	1.33
4	D	508	VAL	CA-CB	6.07	1.62	1.54
6	F	117	ARG	NE-CZ	6.07	1.39	1.33
1	I	455	ASN	N-CA	-6.07	1.39	1.46
3	K	30	ALA	CA-CB	6.06	1.62	1.53
1	A	422	TYR	C-N	6.06	1.42	1.33
1	I	513	SER	CA-CB	6.06	1.62	1.53
3	K	38	ARG	NE-CZ	6.06	1.39	1.33
1	I	205	GLN	C-N	6.06	1.41	1.33
3	K	156	ILE	CA-C	-6.06	1.43	1.52
6	F	233	CYS	CA-C	-6.05	1.44	1.53
3	C	74	HIS	C-N	6.05	1.41	1.33
3	C	301	GLN	CA-CB	6.05	1.63	1.53
1	A	196	ASN	CA-CB	6.05	1.60	1.52
3	C	160	ILE	CA-CB	-6.05	1.47	1.54
8	P	140	HIS	C-N	6.04	1.42	1.34
4	D	132	ILE	CA-C	-6.04	1.45	1.52
3	K	171	LEU	CA-C	-6.04	1.45	1.52
1	I	209	MET	CA-C	-6.04	1.45	1.52
5	M	134	ALA	CA-C	-6.04	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	N	189	PHE	N-CA	-6.04	1.38	1.46
1	A	416	GLU	N-CA	-6.04	1.39	1.46
5	M	362	ILE	N-CA	-6.04	1.39	1.46
2	B	209	LEU	N-CA	-6.03	1.38	1.46
8	P	421	LYS	CA-CB	6.03	1.62	1.53
1	A	130	ARG	NE-CZ	6.03	1.39	1.33
1	I	500	GLN	N-CA	-6.03	1.40	1.46
7	O	172	LYS	N-CA	-6.03	1.39	1.46
8	P	47	TYR	N-CA	-6.03	1.38	1.45
4	L	254	SER	CA-C	-6.03	1.45	1.52
4	D	511	PRO	CA-CB	6.03	1.62	1.53
3	K	93	ASP	C-N	6.03	1.40	1.33
6	N	336	PHE	CA-CB	-6.03	1.45	1.53
5	E	415	ASP	CA-C	-6.02	1.44	1.52
7	O	452	ASN	CA-C	-6.02	1.44	1.52
2	B	50	LYS	CA-C	-6.02	1.45	1.52
8	H	220	GLY	C-N	6.02	1.41	1.33
8	H	143	LEU	CA-CB	6.02	1.62	1.53
3	C	38	ARG	CD-NE	6.02	1.54	1.46
7	O	71	VAL	CA-C	-6.02	1.45	1.52
5	E	427	ILE	CA-C	-6.01	1.45	1.52
3	C	306	ARG	CZ-NH1	6.01	1.41	1.32
4	L	471	LEU	CA-C	-6.01	1.45	1.52
7	O	357	ARG	N-CA	-6.01	1.38	1.46
3	C	98	VAL	CA-C	6.01	1.60	1.52
1	I	79	ALA	N-CA	-6.01	1.39	1.46
5	E	75	ALA	N-CA	-6.01	1.39	1.46
4	L	489	LYS	N-CA	-6.01	1.38	1.46
3	C	289	VAL	CA-CB	-6.00	1.46	1.54
2	J	25	ARG	N-CA	-6.00	1.39	1.46
2	J	30	ILE	N-CA	6.00	1.53	1.46
2	B	469	HIS	CG-CD2	-6.00	1.29	1.35
3	K	424	GLU	CA-CB	6.00	1.62	1.53
4	L	286	LEU	CA-C	-6.00	1.45	1.52
5	M	348	LEU	C-N	6.00	1.41	1.33
6	F	131	LEU	C-N	6.00	1.42	1.34
6	F	218	HIS	N-CA	-6.00	1.37	1.46
7	G	151	GLN	CA-C	-6.00	1.44	1.52
5	M	282	LYS	C-N	6.00	1.42	1.33
3	K	22	VAL	C-N	6.00	1.42	1.34
1	A	108	VAL	C-N	6.00	1.42	1.34
3	C	69	GLU	CA-CB	6.00	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	378	ALA	CA-C	-6.00	1.44	1.52
2	J	444	ARG	CD-NE	6.00	1.54	1.46
6	N	217	ARG	CZ-NH2	5.99	1.41	1.33
3	K	271	GLU	CA-CB	5.99	1.62	1.53
3	C	330	ARG	CZ-NH2	5.99	1.41	1.33
6	F	256	ARG	CD-NE	5.99	1.54	1.46
2	B	357	ASP	N-CA	-5.99	1.38	1.45
5	E	353	LEU	CA-C	-5.99	1.45	1.52
7	O	148	LYS	CA-C	-5.99	1.44	1.52
6	N	249	PHE	CA-C	5.99	1.59	1.52
1	I	180	LYS	C-N	5.99	1.42	1.33
1	I	243	LYS	N-CA	-5.99	1.38	1.46
1	A	378	ARG	CZ-NH2	5.98	1.41	1.33
1	A	115	THR	CA-C	-5.98	1.45	1.52
3	C	475	CYS	C-N	5.98	1.41	1.33
8	P	203	ARG	N-CA	-5.98	1.38	1.46
3	K	418	VAL	N-CA	-5.98	1.39	1.46
6	N	15	ARG	NE-CZ	5.98	1.39	1.33
7	O	451	ASP	C-N	5.98	1.42	1.33
5	M	127	GLY	CA-C	-5.98	1.43	1.51
7	O	256	ARG	NE-CZ	5.98	1.39	1.33
2	J	498	GLN	CA-C	-5.97	1.45	1.52
2	B	269	HIS	CG-CD2	5.97	1.42	1.35
8	H	377	LEU	N-CA	-5.97	1.38	1.45
3	K	260	ARG	NE-CZ	5.97	1.39	1.33
8	P	31	ARG	NE-CZ	5.97	1.39	1.33
2	B	114	GLU	N-CA	-5.96	1.39	1.46
5	E	251	LEU	CA-C	-5.96	1.45	1.52
6	F	396	ARG	CZ-NH1	5.96	1.41	1.32
4	D	160	ARG	C-N	5.96	1.42	1.33
4	L	522	ALA	N-CA	-5.96	1.39	1.46
4	D	272	MET	CA-CB	5.96	1.62	1.53
2	J	413	SER	CA-C	5.96	1.60	1.52
3	C	400	ASN	CA-C	-5.95	1.45	1.52
3	C	449	ARG	CD-NE	5.95	1.54	1.46
4	D	330	ARG	CZ-NH2	5.95	1.41	1.33
2	B	466	ARG	CD-NE	5.95	1.54	1.46
8	P	82	ALA	C-N	5.95	1.42	1.34
8	P	417	ILE	CA-C	-5.95	1.45	1.52
4	D	359	ALA	C-O	-5.95	1.16	1.23
2	J	359	LEU	CA-C	-5.95	1.45	1.52
3	C	171	LEU	N-CA	-5.95	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	293	THR	CA-CB	5.95	1.63	1.53
5	M	435	GLN	CA-C	-5.95	1.45	1.52
2	B	185	GLU	N-CA	-5.94	1.39	1.46
4	D	389	VAL	CA-C	-5.94	1.46	1.52
5	E	267	ASP	CA-CB	5.94	1.61	1.53
4	D	197	PRO	C-N	5.94	1.42	1.33
3	K	95	THR	CA-C	-5.94	1.45	1.52
5	M	403	HIS	ND1-CE1	5.94	1.38	1.32
6	N	220	ASP	CA-CB	5.94	1.64	1.53
6	F	469	GLU	CA-C	-5.94	1.44	1.52
2	J	464	GLN	CA-C	5.94	1.60	1.52
3	K	134	ILE	N-CA	5.94	1.53	1.46
8	P	91	HIS	CA-C	-5.94	1.44	1.52
5	M	377	CYS	C-N	5.94	1.39	1.33
5	E	493	CYS	CA-CB	5.93	1.57	1.53
3	K	120	THR	C-N	5.93	1.41	1.33
3	C	339	ARG	CD-NE	5.93	1.54	1.46
2	J	291	ILE	C-N	5.93	1.42	1.33
3	K	377	ARG	CA-C	-5.93	1.45	1.52
5	M	483	LYS	CA-C	-5.93	1.44	1.52
4	D	347	HIS	C-N	5.93	1.41	1.33
5	E	122	GLN	CA-CB	5.93	1.62	1.53
1	I	513	SER	C-N	5.93	1.41	1.33
4	L	98	GLN	C-N	5.93	1.41	1.33
6	N	100	GLY	N-CA	-5.93	1.38	1.45
2	J	322	ARG	CZ-NH2	5.93	1.41	1.33
4	L	28	ASP	C-N	5.93	1.41	1.33
5	M	456	GLU	C-N	5.93	1.41	1.33
1	A	176	VAL	CA-CB	5.92	1.62	1.54
7	G	304	ALA	N-CA	-5.92	1.39	1.46
3	K	389	ARG	NE-CZ	5.92	1.39	1.33
8	P	110	ALA	N-CA	-5.92	1.39	1.46
2	J	445	MET	CA-CB	5.92	1.63	1.53
1	I	473	GLU	CA-CB	5.92	1.64	1.53
2	J	438	SER	N-CA	-5.92	1.39	1.46
3	K	374	ILE	N-CA	-5.92	1.38	1.46
4	L	419	ARG	CZ-NH1	5.92	1.41	1.32
6	N	173	VAL	CA-C	-5.92	1.45	1.52
2	B	245	ASP	N-CA	-5.92	1.39	1.46
7	G	431	GLN	CA-C	-5.92	1.44	1.52
8	P	306	ASN	CA-CB	5.92	1.62	1.53
6	N	520	GLU	C-N	5.92	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	197	ILE	CA-C	-5.91	1.45	1.52
5	M	282	LYS	CA-CB	5.91	1.62	1.53
1	A	141	ASP	CA-C	5.91	1.60	1.52
3	C	366	CYS	C-N	5.91	1.41	1.33
3	K	199	ALA	C-N	5.91	1.41	1.33
2	B	456	TYR	CA-C	-5.91	1.45	1.52
7	G	419	TYR	N-CA	-5.91	1.39	1.46
7	G	306	ARG	CZ-NH2	5.91	1.41	1.33
8	H	244	CYS	C-O	-5.91	1.19	1.24
1	I	442	ALA	C-N	5.91	1.42	1.33
2	J	38	LEU	C-N	5.91	1.41	1.34
3	K	99	ILE	N-CA	-5.91	1.39	1.46
6	N	71	HIS	CA-CB	5.90	1.62	1.53
4	L	441	ARG	CD-NE	5.90	1.54	1.46
5	E	324	TRP	CA-C	-5.90	1.44	1.52
6	F	424	LYS	N-CA	-5.90	1.39	1.46
7	O	261	GLU	C-N	5.90	1.42	1.33
8	H	393	ASP	CA-CB	5.90	1.62	1.53
8	H	354	GLU	N-CA	-5.90	1.39	1.46
8	P	480	LEU	CA-C	-5.90	1.45	1.52
4	D	188	VAL	N-CA	-5.90	1.39	1.46
7	G	266	ILE	C-N	5.90	1.41	1.33
8	H	365	HIS	ND1-CE1	5.90	1.38	1.32
5	M	350	ALA	CA-CB	5.89	1.62	1.53
1	I	60	THR	C-N	5.89	1.41	1.33
1	I	193	ASN	CA-CB	5.89	1.63	1.53
4	L	459	GLU	CA-C	-5.89	1.44	1.52
4	D	359	ALA	N-CA	-5.89	1.38	1.46
4	L	528	SER	N-CA	-5.89	1.39	1.46
2	B	57	ARG	CD-NE	5.89	1.54	1.46
1	I	31	ILE	CA-C	5.89	1.60	1.52
3	C	217	GLY	C-N	5.88	1.41	1.33
3	K	514	VAL	CA-C	5.88	1.60	1.52
8	P	164	LEU	C-N	5.88	1.42	1.33
3	K	316	ARG	CD-NE	5.88	1.54	1.46
8	P	477	ASN	CA-CB	5.88	1.64	1.53
4	L	266	VAL	CA-CB	-5.88	1.47	1.54
7	O	368	LYS	CA-C	-5.88	1.44	1.52
6	N	192	GLU	CA-C	5.88	1.59	1.52
8	H	219	HIS	ND1-CE1	5.88	1.38	1.32
4	L	29	LYS	CA-CB	5.88	1.61	1.53
6	N	224	ARG	C-N	5.88	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	264	PHE	C-N	5.87	1.42	1.33
6	N	69	ILE	C-N	5.87	1.41	1.33
7	G	230	LYS	CA-C	-5.87	1.45	1.52
2	J	60	SER	CA-C	-5.87	1.45	1.52
7	G	425	ARG	CZ-NH1	5.87	1.41	1.32
1	I	412	GLY	CA-C	-5.87	1.43	1.51
4	L	175	VAL	N-CA	-5.87	1.39	1.46
5	M	284	LYS	C-N	5.87	1.42	1.34
1	A	327	ILE	C-N	5.87	1.41	1.33
3	C	325	ARG	C-N	5.87	1.41	1.33
1	I	532	LYS	N-CA	-5.87	1.38	1.46
4	L	277	ARG	C-N	5.87	1.42	1.34
6	N	262	ALA	CA-C	-5.87	1.44	1.52
8	P	372	ILE	N-CA	-5.87	1.39	1.46
1	A	303	ALA	C-N	5.87	1.40	1.32
5	M	388	ARG	N-CA	-5.87	1.38	1.45
7	O	170	GLN	N-CA	5.87	1.53	1.46
8	P	423	ILE	CA-C	5.87	1.61	1.52
5	M	147	HIS	ND1-CE1	5.86	1.38	1.32
8	P	408	LEU	CA-C	-5.86	1.45	1.52
2	J	22	GLU	CA-CB	5.86	1.62	1.53
4	L	89	ARG	NE-CZ	5.86	1.39	1.33
5	M	194	LEU	CB-CG	5.86	1.65	1.53
6	N	149	ILE	C-N	5.86	1.42	1.34
4	L	407	ASP	C-N	5.86	1.42	1.34
6	N	215	GLY	N-CA	-5.86	1.39	1.45
1	A	40	GLY	CA-C	-5.85	1.43	1.52
2	B	140	ALA	N-CA	-5.85	1.38	1.46
3	K	37	ILE	CA-C	-5.85	1.44	1.52
8	H	407	ARG	CA-C	-5.85	1.46	1.53
2	B	18	GLU	C-O	-5.85	1.17	1.24
8	H	487	PRO	N-CA	-5.85	1.39	1.47
4	D	137	PHE	CA-C	5.85	1.60	1.52
1	A	170	ASN	C-N	5.85	1.41	1.33
3	C	107	SER	CA-C	-5.84	1.45	1.52
4	D	43	ALA	N-CA	-5.84	1.39	1.46
5	E	162	THR	CA-CB	5.84	1.62	1.53
8	P	314	ARG	CZ-NH1	5.84	1.41	1.32
7	O	103	GLU	C-N	5.84	1.41	1.33
5	M	273	ASP	CA-CB	5.84	1.63	1.53
2	B	262	ALA	CA-C	-5.84	1.45	1.52
1	I	443	ARG	CZ-NH1	5.84	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	436	MET	C-N	5.83	1.41	1.33
5	E	250	ILE	N-CA	-5.83	1.39	1.46
2	J	496	SER	CA-C	-5.83	1.45	1.53
3	K	358	GLU	CA-CB	5.83	1.62	1.53
7	O	387	ARG	NE-CZ	5.83	1.39	1.33
8	P	506	TRP	CA-CB	5.83	1.62	1.53
4	D	279	GLU	N-CA	-5.83	1.39	1.46
4	D	431	GLU	N-CA	-5.83	1.39	1.46
1	A	211	ILE	N-CA	5.83	1.52	1.46
1	A	508	ILE	CA-CB	-5.83	1.47	1.54
4	D	519	LEU	N-CA	-5.83	1.39	1.46
3	K	302	HIS	CB-CG	5.83	1.58	1.50
5	M	273	ASP	N-CA	-5.83	1.38	1.46
6	N	295	LYS	CA-CB	5.83	1.61	1.53
2	B	247	ASP	CA-CB	5.83	1.63	1.53
2	B	322	ARG	CD-NE	5.83	1.54	1.46
5	E	182	HIS	ND1-CE1	5.83	1.38	1.32
7	O	244	LEU	N-CA	-5.83	1.39	1.45
4	D	386	VAL	N-CA	-5.82	1.39	1.46
6	F	365	LYS	CA-CB	5.82	1.62	1.53
8	H	499	ASP	CA-CB	5.82	1.64	1.53
5	M	202	ARG	CA-CB	5.82	1.61	1.53
1	A	148	LEU	CA-C	-5.82	1.45	1.52
6	F	497	ASN	CA-CB	5.82	1.62	1.53
6	N	487	MET	CA-CB	5.82	1.63	1.53
4	D	527	ARG	CD-NE	5.82	1.54	1.46
6	N	209	GLY	CA-C	-5.82	1.43	1.51
2	B	156	ARG	NE-CZ	5.82	1.39	1.33
6	F	267	ILE	CA-CB	-5.82	1.47	1.54
7	G	58	ILE	CA-C	-5.82	1.45	1.52
8	P	501	TYR	CA-C	5.82	1.60	1.52
2	B	391	HIS	CB-CG	5.81	1.58	1.50
5	E	448	MET	CA-C	-5.81	1.45	1.52
6	N	300	PHE	CA-CB	5.81	1.62	1.53
1	A	192	VAL	N-CA	-5.81	1.38	1.46
2	B	226	VAL	C-N	5.81	1.41	1.33
5	E	481	GLN	CA-C	-5.81	1.45	1.52
4	D	347	HIS	CE1-NE2	-5.81	1.26	1.32
3	K	287	PRO	C-N	5.81	1.42	1.33
3	K	38	ARG	CD-NE	5.80	1.54	1.46
6	N	263	GLU	C-N	5.80	1.41	1.33
8	H	186	ALA	C-N	5.80	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	108	VAL	CA-CB	-5.80	1.47	1.54
7	G	500	ILE	CA-C	-5.80	1.45	1.52
8	P	204	VAL	CA-CB	-5.80	1.47	1.54
4	D	195	ILE	CA-CB	-5.80	1.47	1.54
5	M	123	LEU	CA-CB	5.80	1.62	1.53
7	O	293	LEU	CA-C	-5.80	1.44	1.53
3	C	282	ILE	N-CA	5.79	1.53	1.46
6	N	305	LEU	C-O	-5.79	1.17	1.24
6	F	73	THR	CA-C	-5.79	1.44	1.52
8	H	203	ARG	NE-CZ	5.79	1.39	1.33
1	I	60	THR	CA-C	-5.79	1.45	1.52
3	C	25	GLY	CA-C	-5.79	1.45	1.52
5	E	300	ALA	CA-C	-5.79	1.45	1.52
3	C	200	ARG	CD-NE	5.79	1.54	1.46
3	C	308	ASN	N-CA	-5.79	1.38	1.46
5	E	476	GLU	N-CA	-5.79	1.39	1.46
7	G	407	ALA	CA-C	-5.79	1.45	1.52
6	N	447	ILE	CA-C	5.79	1.57	1.52
4	D	452	ARG	CZ-NH2	5.78	1.41	1.33
6	F	205	SER	C-O	-5.78	1.16	1.23
4	L	184	SER	CA-C	-5.78	1.45	1.52
2	B	83	VAL	C-N	5.78	1.41	1.33
2	B	466	ARG	CZ-NH2	5.78	1.41	1.33
8	P	108	ALA	C-N	5.78	1.40	1.33
1	A	504	PHE	C-O	5.77	1.31	1.23
8	H	398	THR	C-N	5.77	1.41	1.33
3	K	85	ARG	C-N	5.77	1.41	1.33
3	K	176	ALA	C-N	5.77	1.41	1.33
7	O	441	ALA	N-CA	-5.77	1.39	1.46
4	L	419	ARG	CA-C	-5.77	1.45	1.53
7	G	116	LEU	N-CA	-5.77	1.42	1.47
7	O	524	ARG	NE-CZ	5.77	1.39	1.33
3	C	437	TYR	N-CA	-5.77	1.39	1.46
1	I	442	ALA	CA-C	5.77	1.60	1.52
2	J	335	PHE	N-CA	-5.77	1.39	1.46
7	O	161	THR	N-CA	-5.77	1.39	1.46
7	O	230	LYS	N-CA	-5.77	1.41	1.46
7	O	218	LYS	C-N	5.76	1.40	1.33
7	G	89	GLU	N-CA	-5.76	1.39	1.46
1	I	7	VAL	C-O	-5.76	1.16	1.23
3	C	450	THR	CA-C	-5.76	1.45	1.52
6	F	418	MET	C-O	-5.76	1.17	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	373	SER	C-N	5.76	1.41	1.33
8	P	414	ALA	CA-C	-5.76	1.44	1.52
2	B	52	LEU	CA-C	-5.76	1.45	1.52
2	B	268	GLU	C-N	5.76	1.41	1.33
3	C	427	LYS	C-N	5.76	1.41	1.33
5	E	227	GLY	C-N	5.76	1.41	1.33
7	G	105	LEU	N-CA	-5.76	1.38	1.46
8	H	148	CYS	C-N	5.76	1.40	1.33
1	I	93	VAL	CA-C	5.76	1.60	1.52
6	N	294	GLN	CA-C	5.76	1.61	1.52
6	N	158	THR	C-N	5.75	1.41	1.33
8	P	524	ILE	CA-C	-5.75	1.46	1.52
2	B	189	ARG	CZ-NH1	5.75	1.40	1.32
2	B	378	ALA	N-CA	-5.75	1.39	1.46
7	G	302	TYR	CA-CB	5.75	1.62	1.53
4	L	120	CYS	N-CA	-5.75	1.39	1.46
7	G	48	LEU	C-N	5.75	1.41	1.33
7	O	501	ASN	C-N	5.75	1.41	1.33
5	M	180	SER	CA-CB	5.74	1.60	1.53
8	H	156	ASP	CA-C	-5.74	1.45	1.52
4	L	138	GLN	CG-CD	5.74	1.66	1.52
1	I	53	THR	CA-C	-5.74	1.45	1.52
2	J	115	SER	C-N	5.74	1.41	1.33
5	M	225	ILE	CB-CG1	5.74	1.65	1.53
5	M	323	ARG	N-CA	-5.74	1.39	1.46
5	E	176	LYS	N-CA	-5.73	1.38	1.45
3	K	231	ARG	N-CA	-5.73	1.38	1.46
3	K	254	THR	C-N	5.73	1.40	1.33
5	M	46	ASN	CA-C	5.73	1.60	1.52
1	A	240	SER	CA-C	-5.73	1.45	1.52
7	O	405	VAL	CA-C	-5.73	1.45	1.52
8	H	167	SER	CA-C	-5.73	1.45	1.52
4	L	148	LEU	CA-CB	5.73	1.62	1.53
4	L	229	LEU	CA-C	-5.73	1.45	1.52
6	N	13	VAL	CA-C	-5.72	1.45	1.52
1	I	145	ARG	NE-CZ	5.72	1.39	1.33
5	M	480	ARG	CZ-NH1	5.72	1.40	1.32
8	P	404	ARG	CD-NE	5.72	1.54	1.46
2	J	243	GLY	CA-C	-5.72	1.46	1.52
5	M	198	ASP	CA-C	-5.72	1.45	1.53
1	A	173	VAL	N-CA	-5.72	1.39	1.46
5	E	175	SER	CA-C	-5.72	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	339	GLY	CA-C	-5.72	1.44	1.51
4	L	101	GLU	CA-C	-5.72	1.45	1.52
1	A	408	VAL	CA-C	-5.71	1.46	1.52
8	H	25	LEU	C-O	-5.71	1.19	1.24
1	I	21	ASN	CA-CB	5.71	1.62	1.53
7	O	425	ARG	CD-NE	5.71	1.54	1.46
3	C	233	ILE	CA-C	-5.71	1.45	1.52
7	G	50	VAL	CA-CB	5.71	1.61	1.54
6	N	40	PRO	CA-C	-5.71	1.46	1.52
7	O	303	PHE	N-CA	-5.71	1.39	1.46
8	H	214	SER	C-N	5.71	1.41	1.33
2	B	369	GLU	N-CA	-5.71	1.39	1.46
5	E	253	CYS	C-N	5.71	1.40	1.33
3	K	127	ARG	NE-CZ	5.71	1.39	1.33
3	K	278	LEU	C-N	5.71	1.41	1.34
1	I	263	ILE	N-CA	-5.71	1.39	1.46
5	M	257	PRO	CA-CB	-5.71	1.46	1.54
3	C	341	ASP	C-N	5.70	1.41	1.33
4	D	334	GLU	CA-CB	5.70	1.62	1.53
5	E	340	ARG	CD-NE	5.70	1.54	1.46
7	O	242	VAL	C-N	5.70	1.41	1.33
2	J	295	LEU	CA-C	-5.70	1.45	1.52
7	G	463	LYS	C-N	5.70	1.42	1.33
4	L	345	VAL	C-N	5.70	1.41	1.33
1	A	193	ASN	C-N	5.70	1.41	1.33
2	B	400	THR	C-N	5.70	1.41	1.33
8	H	199	VAL	C-N	5.70	1.41	1.33
4	L	89	ARG	CZ-NH1	5.70	1.40	1.32
2	J	298	ASN	N-CA	5.70	1.53	1.46
6	N	55	LYS	CA-C	-5.70	1.45	1.52
8	P	44	ARG	C-N	5.70	1.41	1.33
2	B	505	LEU	C-N	5.69	1.41	1.33
3	C	103	GLY	N-CA	-5.69	1.38	1.45
1	A	532	LYS	N-CA	-5.69	1.39	1.46
7	G	316	GLU	CA-CB	5.69	1.62	1.53
7	G	387	ARG	CD-NE	5.69	1.54	1.46
1	I	356	ILE	CA-CB	-5.69	1.47	1.54
4	L	84	LEU	CA-CB	5.69	1.63	1.53
5	M	304	TRP	CA-CB	-5.69	1.45	1.53
8	P	280	VAL	N-CA	-5.69	1.39	1.46
1	A	407	SER	CA-CB	5.69	1.62	1.53
7	O	176	ALA	C-N	5.69	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	O	109	LYS	CA-C	5.69	1.59	1.52
6	F	503	GLN	C-N	5.68	1.41	1.34
8	H	219	HIS	N-CA	-5.68	1.39	1.46
3	K	29	ALA	N-CA	-5.68	1.39	1.46
3	K	376	LEU	C-N	5.68	1.41	1.33
3	K	507	LYS	C-N	5.68	1.41	1.33
2	B	217	GLY	CA-C	-5.68	1.43	1.51
4	D	462	PRO	N-CA	-5.68	1.39	1.47
5	E	388	ARG	NE-CZ	5.68	1.39	1.33
1	A	176	VAL	C-N	5.68	1.41	1.33
7	G	313	ARG	CA-C	-5.68	1.46	1.53
1	I	521	ALA	C-O	-5.68	1.17	1.24
2	B	142	LEU	CA-CB	5.68	1.62	1.53
6	F	208	ARG	CD-NE	5.68	1.54	1.46
8	P	226	GLU	C-N	5.68	1.41	1.33
4	D	358	SER	CA-C	-5.67	1.46	1.52
5	E	193	VAL	CA-CB	-5.67	1.46	1.54
5	M	119	GLU	N-CA	-5.67	1.39	1.46
2	B	286	GLY	CA-C	-5.67	1.43	1.51
1	I	497	ASP	N-CA	-5.67	1.41	1.46
5	M	200	GLU	C-N	5.67	1.41	1.33
1	A	190	TYR	CA-C	-5.67	1.45	1.53
6	N	78	ALA	C-N	5.67	1.41	1.33
4	D	315	HIS	CB-CG	5.67	1.58	1.50
7	O	470	GLN	C-O	-5.67	1.17	1.24
2	B	302	GLN	N-CA	-5.67	1.39	1.46
7	O	457	ALA	CA-CB	-5.67	1.44	1.53
4	D	464	THR	CA-C	5.67	1.60	1.52
5	E	175	SER	CA-CB	5.67	1.63	1.53
8	H	74	ARG	C-N	5.67	1.41	1.33
3	K	333	SER	N-CA	-5.67	1.39	1.46
1	A	189	ARG	NE-CZ	5.66	1.39	1.33
4	D	85	HIS	ND1-CE1	5.66	1.38	1.32
7	G	445	ILE	C-N	5.66	1.41	1.33
3	C	104	GLU	CA-CB	5.66	1.62	1.53
5	E	176	LYS	CA-C	5.66	1.55	1.52
4	D	483	ARG	CA-C	-5.66	1.45	1.52
4	D	492	GLY	C-N	5.66	1.40	1.33
1	I	492	ASN	N-CA	-5.66	1.39	1.46
2	B	254	SER	CA-CB	5.66	1.65	1.54
8	H	134	ILE	C-N	5.66	1.41	1.33
8	P	506	TRP	NE1-CE2	5.66	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	N	40	PRO	N-CA	-5.66	1.43	1.47
1	A	426	TYR	CA-CB	5.65	1.62	1.53
3	C	296	ILE	N-CA	-5.65	1.39	1.46
6	N	366	CYS	CA-C	-5.65	1.45	1.52
8	H	234	VAL	CA-C	-5.65	1.47	1.53
5	E	123	LEU	C-N	5.65	1.41	1.33
6	F	408	VAL	N-CA	-5.65	1.39	1.46
1	I	80	ASP	CA-CB	5.65	1.62	1.53
5	M	487	PRO	N-CA	-5.65	1.40	1.47
1	A	378	ARG	C-N	5.65	1.41	1.33
3	C	401	VAL	CA-CB	-5.65	1.47	1.54
5	E	116	LEU	C-N	5.65	1.41	1.33
5	E	285	PHE	CA-C	-5.65	1.45	1.52
1	I	311	VAL	CA-C	5.65	1.59	1.52
6	F	131	LEU	N-CA	-5.65	1.39	1.46
8	H	297	VAL	CA-C	-5.65	1.46	1.52
4	D	435	ARG	CD-NE	5.64	1.54	1.46
3	K	413	ALA	N-CA	-5.64	1.39	1.46
5	M	194	LEU	C-N	5.64	1.41	1.33
6	N	298	ASP	C-N	-5.64	1.27	1.34
8	P	37	LYS	N-CA	-5.64	1.39	1.46
8	P	313	VAL	CA-C	-5.64	1.46	1.52
1	A	161	ILE	C-O	-5.64	1.17	1.24
6	N	487	MET	C-O	-5.64	1.17	1.23
5	E	320	PRO	N-CA	5.64	1.54	1.47
3	K	337	GLU	N-CA	-5.64	1.39	1.46
7	G	285	GLY	C-N	5.64	1.41	1.33
7	G	465	ARG	CZ-NH2	5.64	1.40	1.33
6	N	342	ASP	N-CA	-5.64	1.39	1.46
3	K	220	ILE	CA-C	-5.64	1.45	1.52
2	J	380	GLN	C-N	5.64	1.41	1.33
8	P	382	ASP	CA-C	-5.63	1.44	1.52
3	K	117	MET	CA-C	-5.63	1.45	1.52
5	E	423	GLY	N-CA	-5.63	1.37	1.45
6	F	464	VAL	CA-C	-5.63	1.45	1.52
3	C	167	ARG	NE-CZ	5.63	1.39	1.33
2	B	403	ASP	C-N	5.63	1.41	1.33
6	N	212	LEU	CA-C	-5.63	1.46	1.52
7	G	447	ARG	CA-CB	5.63	1.62	1.53
4	D	32	GLN	C-N	5.62	1.41	1.33
2	J	122	HIS	ND1-CE1	5.62	1.38	1.32
1	A	301	VAL	C-N	5.62	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	121	GLU	CA-C	-5.62	1.45	1.52
8	P	185	GLN	CA-C	-5.62	1.45	1.52
2	B	52	LEU	N-CA	-5.62	1.38	1.46
5	E	403	HIS	CE1-NE2	-5.62	1.26	1.32
5	M	204	VAL	CA-CB	5.62	1.62	1.54
7	O	43	ARG	CA-C	-5.62	1.45	1.52
2	B	324	ALA	N-CA	-5.61	1.39	1.46
6	F	322	GLU	CA-C	5.61	1.60	1.52
7	G	198	LYS	N-CA	-5.61	1.39	1.46
2	B	237	ILE	CA-C	-5.61	1.45	1.52
2	J	54	SER	C-N	5.61	1.41	1.33
6	N	28	ARG	CZ-NH1	5.61	1.40	1.32
1	I	218	CYS	CA-C	-5.61	1.45	1.52
5	M	285	PHE	CA-CB	5.61	1.62	1.53
2	B	499	VAL	N-CA	-5.61	1.40	1.46
8	P	274	ASN	CA-CB	5.61	1.62	1.53
3	C	196	LYS	N-CA	-5.61	1.39	1.46
4	D	81	MET	CA-C	-5.61	1.45	1.52
6	N	43	THR	CA-C	-5.61	1.45	1.52
2	J	102	VAL	N-CA	5.60	1.53	1.46
8	P	478	VAL	CA-CB	-5.60	1.47	1.53
1	A	338	GLU	CA-C	-5.60	1.45	1.53
3	C	19	GLY	N-CA	5.60	1.53	1.45
8	H	41	GLN	N-CA	-5.60	1.38	1.46
1	A	280	ALA	CA-C	-5.60	1.45	1.52
3	C	511	GLU	C-N	5.60	1.41	1.33
6	N	204	THR	C-N	5.60	1.41	1.33
7	O	27	SER	C-N	5.60	1.41	1.33
8	P	390	ARG	CZ-NH2	5.60	1.40	1.33
4	D	92	VAL	CA-C	5.60	1.59	1.52
5	E	347	GLU	N-CA	-5.60	1.39	1.46
4	L	209	LYS	CA-CB	5.60	1.61	1.53
3	C	313	ARG	CZ-NH2	5.59	1.40	1.33
6	F	264	ARG	CD-NE	5.59	1.54	1.46
7	G	491	PHE	C-O	-5.59	1.16	1.23
8	H	204	VAL	C-N	5.59	1.41	1.33
7	O	33	ALA	N-CA	-5.59	1.39	1.46
6	F	79	LYS	C-N	5.59	1.40	1.34
8	P	515	ALA	CA-C	-5.59	1.45	1.52
2	B	511	ALA	CA-C	5.59	1.60	1.52
5	M	127	GLY	C-N	-5.59	1.26	1.33
2	B	277	GLU	CA-C	5.59	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	415	VAL	CA-C	-5.59	1.45	1.52
4	L	116	LEU	C-N	5.59	1.41	1.33
6	N	477	VAL	C-O	-5.59	1.18	1.24
6	F	82	THR	C-N	5.58	1.41	1.33
6	N	463	LEU	C-N	5.58	1.40	1.34
7	G	212	ALA	C-N	5.58	1.40	1.33
5	M	110	VAL	CA-CB	5.58	1.61	1.54
5	M	506	VAL	CA-CB	5.58	1.59	1.53
1	A	441	PHE	C-O	-5.58	1.17	1.24
5	M	417	ARG	NE-CZ	5.58	1.39	1.33
7	O	344	ARG	CD-NE	5.58	1.54	1.46
2	B	322	ARG	NE-CZ	5.58	1.39	1.33
6	N	292	ILE	N-CA	-5.58	1.39	1.46
8	P	137	ARG	CZ-NH1	5.58	1.40	1.32
6	N	214	HIS	ND1-CE1	5.58	1.38	1.32
5	M	253	CYS	C-N	-5.57	1.27	1.33
5	E	427	ILE	N-CA	-5.57	1.39	1.46
2	J	374	VAL	CA-C	-5.57	1.45	1.52
7	O	444	ILE	C-N	5.57	1.41	1.34
3	C	455	CYS	CA-C	-5.57	1.45	1.52
2	J	518	ASP	CA-CB	5.57	1.62	1.54
3	K	505	THR	C-N	5.57	1.42	1.33
8	P	373	SER	N-CA	-5.57	1.38	1.45
8	P	285	ASP	C-N	5.56	1.42	1.33
8	P	86	ILE	N-CA	-5.56	1.39	1.46
2	B	408	TYR	N-CA	-5.56	1.39	1.46
2	B	515	LEU	CA-CB	5.56	1.61	1.53
5	M	306	PHE	CA-C	-5.56	1.46	1.52
3	C	83	ILE	CA-C	-5.56	1.45	1.52
5	E	116	LEU	CA-CB	5.56	1.61	1.53
5	M	481	GLN	CA-CB	5.56	1.62	1.53
5	M	532	ASP	CA-C	-5.56	1.46	1.52
7	O	306	ARG	CZ-NH1	5.56	1.40	1.32
8	H	443	GLU	C-O	-5.56	1.16	1.24
7	G	384	GLU	CA-CB	5.55	1.62	1.53
8	H	254	LYS	CA-C	-5.55	1.46	1.52
8	H	304	TYR	C-N	5.55	1.41	1.34
3	K	143	PRO	CA-CB	5.55	1.61	1.53
6	F	421	ALA	CA-C	5.55	1.59	1.52
1	A	407	SER	N-CA	5.55	1.53	1.46
6	F	83	ALA	N-CA	-5.55	1.39	1.46
4	L	29	LYS	C-N	5.55	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	338	LYS	N-CA	-5.55	1.39	1.46
2	B	297	TYR	C-N	5.55	1.41	1.33
5	E	78	LEU	CA-C	-5.55	1.45	1.52
5	E	247	LYS	C-N	5.55	1.40	1.33
1	I	10	ASP	CA-CB	5.55	1.62	1.53
4	D	483	ARG	CZ-NH1	5.55	1.40	1.32
7	G	258	HIS	CA-C	-5.55	1.45	1.52
7	G	41	GLY	CA-C	-5.54	1.44	1.51
2	B	403	ASP	CA-CB	5.54	1.62	1.53
2	J	36	GLY	CA-C	-5.54	1.45	1.51
8	P	175	ASN	N-CA	-5.54	1.39	1.46
2	B	134	THR	C-N	5.54	1.41	1.33
4	L	128	ILE	CA-C	-5.54	1.45	1.52
5	M	144	ALA	CA-C	5.54	1.59	1.52
4	D	93	GLU	C-N	-5.54	1.26	1.33
4	D	206	ARG	NE-CZ	5.54	1.39	1.33
7	G	269	ALA	C-N	5.54	1.41	1.33
3	K	215	LEU	N-CA	-5.54	1.39	1.46
6	N	346	HIS	ND1-CE1	5.54	1.38	1.32
8	H	120	ARG	N-CA	-5.54	1.39	1.46
3	K	174	ASN	CA-CB	5.54	1.62	1.53
4	L	377	THR	C-N	5.54	1.40	1.33
7	O	191	GLN	CA-C	-5.54	1.46	1.52
6	F	512	ALA	N-CA	-5.53	1.39	1.46
2	J	476	ALA	CA-C	-5.53	1.45	1.52
3	C	346	GLY	N-CA	-5.53	1.37	1.45
7	O	309	PHE	C-N	5.53	1.40	1.33
3	K	438	ARG	CZ-NH2	5.53	1.40	1.33
6	F	157	ARG	N-CA	-5.53	1.39	1.46
8	H	177	VAL	C-N	5.53	1.41	1.33
3	K	498	PRO	N-CA	-5.53	1.40	1.47
7	G	314	VAL	CA-C	5.53	1.58	1.52
6	N	371	SER	CA-C	-5.52	1.45	1.52
4	D	158	SER	N-CA	5.52	1.53	1.45
8	H	307	LYS	C-N	5.52	1.41	1.33
8	H	392	VAL	C-N	5.52	1.41	1.33
2	J	171	LEU	N-CA	-5.52	1.39	1.46
6	N	133	PHE	CA-C	-5.52	1.45	1.52
1	A	401	ARG	NE-CZ	5.52	1.39	1.33
2	B	487	ASP	CA-CB	5.52	1.62	1.53
5	E	299	LEU	CA-C	-5.51	1.46	1.52
5	E	364	PHE	N-CA	5.51	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	491	ALA	C-N	5.51	1.38	1.33
7	O	156	GLU	CA-CB	5.51	1.61	1.53
6	F	198	HIS	CB-CG	5.51	1.57	1.50
7	G	398	ARG	CA-C	5.51	1.60	1.52
5	M	294	GLU	C-N	5.51	1.42	1.33
8	H	491	ASP	C-N	5.51	1.41	1.33
2	J	256	VAL	C-N	5.51	1.41	1.33
4	L	284	LEU	N-CA	-5.51	1.39	1.46
6	N	288	GLY	N-CA	-5.51	1.37	1.45
1	A	415	VAL	CA-C	-5.51	1.45	1.52
7	G	213	GLY	N-CA	-5.51	1.39	1.45
5	E	367	THR	CA-C	5.51	1.59	1.52
5	E	413	ILE	CA-C	5.51	1.59	1.52
8	H	379	GLY	CA-C	-5.51	1.45	1.51
3	C	129	ALA	C-N	5.50	1.41	1.33
5	E	179	ASN	C-N	5.50	1.40	1.33
6	F	337	ASP	CA-CB	5.50	1.62	1.53
7	G	252	ASN	CA-C	-5.50	1.45	1.52
7	G	397	ARG	NE-CZ	5.50	1.39	1.33
2	J	372	THR	CA-CB	-5.50	1.43	1.53
7	O	495	PRO	N-CA	-5.50	1.40	1.47
8	P	58	ASN	CA-C	-5.50	1.45	1.53
3	C	379	ALA	CA-CB	5.50	1.62	1.54
4	D	184	SER	N-CA	5.50	1.52	1.46
5	E	107	THR	N-CA	-5.50	1.39	1.46
8	H	396	VAL	CA-C	5.50	1.59	1.52
1	I	373	ALA	N-CA	-5.50	1.39	1.46
3	K	55	GLY	CA-C	-5.50	1.43	1.52
6	N	511	ILE	CA-CB	-5.50	1.47	1.54
1	I	523	THR	N-CA	-5.50	1.39	1.46
5	E	41	ALA	N-CA	-5.49	1.39	1.46
5	E	202	ARG	NE-CZ	5.49	1.39	1.33
2	J	239	ILE	CA-C	-5.49	1.46	1.52
8	P	127	GLU	C-N	5.49	1.40	1.33
2	B	73	ASN	C-N	5.49	1.41	1.33
2	B	348	LEU	CA-C	-5.49	1.45	1.52
6	N	111	SER	C-N	5.49	1.41	1.33
1	A	211	ILE	C-O	-5.49	1.18	1.24
7	G	98	THR	N-CA	5.49	1.52	1.46
4	L	216	GLY	C-N	5.49	1.41	1.33
5	M	279	LYS	C-N	5.49	1.40	1.33
6	F	438	GLN	CA-C	-5.49	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	194	VAL	CA-CB	-5.49	1.46	1.54
4	D	506	GLU	CA-CB	5.48	1.62	1.53
4	D	476	THR	C-N	5.48	1.40	1.33
6	F	28	ARG	NE-CZ	5.48	1.39	1.33
6	F	223	LYS	C-N	5.48	1.41	1.33
8	H	369	ASP	N-CA	-5.48	1.39	1.46
8	H	419	LEU	CA-C	-5.48	1.45	1.52
1	I	229	ILE	C-N	5.48	1.41	1.33
4	L	162	THR	N-CA	-5.48	1.39	1.46
4	D	453	ALA	C-O	-5.48	1.17	1.24
6	N	215	GLY	CA-C	-5.48	1.45	1.51
4	L	35	PHE	C-N	5.48	1.41	1.33
3	K	435	TRP	CA-CB	5.48	1.60	1.53
7	O	212	ALA	CA-C	-5.48	1.45	1.52
8	P	116	GLU	C-N	5.48	1.41	1.33
2	B	153	VAL	C-N	5.47	1.41	1.33
4	L	240	ARG	CZ-NH2	5.47	1.40	1.33
5	M	417	ARG	N-CA	-5.47	1.39	1.46
4	D	139	LYS	CA-CB	5.47	1.61	1.53
4	L	190	ALA	C-N	5.47	1.40	1.33
2	B	20	ARG	CD-NE	5.47	1.53	1.46
8	P	355	VAL	N-CA	-5.47	1.38	1.46
1	A	421	ILE	C-N	5.47	1.41	1.33
7	G	465	ARG	CZ-NH1	5.47	1.40	1.32
4	L	247	GLY	CA-C	-5.47	1.47	1.51
7	O	171	GLN	CA-C	-5.47	1.45	1.52
2	B	257	ARG	C-N	5.46	1.40	1.33
3	C	494	GLY	CA-C	-5.46	1.44	1.51
3	C	480	VAL	N-CA	-5.46	1.39	1.46
8	H	400	LYS	CA-CB	5.46	1.62	1.53
2	J	337	HIS	ND1-CE1	5.46	1.38	1.32
1	A	302	GLU	N-CA	-5.46	1.39	1.46
4	D	517	SER	CA-C	-5.46	1.45	1.52
2	B	47	GLY	CA-C	-5.46	1.47	1.52
7	G	212	ALA	CA-C	-5.46	1.46	1.52
3	C	406	GLN	N-CA	-5.45	1.39	1.46
5	E	241	LYS	CA-CB	5.45	1.62	1.53
8	H	72	ILE	C-N	5.45	1.40	1.33
7	G	343	GLY	N-CA	-5.45	1.39	1.44
3	K	432	VAL	CA-CB	-5.45	1.47	1.54
8	H	228	GLU	N-CA	-5.45	1.39	1.45
8	H	263	GLU	C-N	-5.45	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	H	520	ARG	NE-CZ	5.45	1.39	1.33
4	L	47	ALA	CA-CB	-5.45	1.44	1.53
8	H	162	SER	N-CA	-5.45	1.39	1.46
6	N	268	GLU	N-CA	-5.45	1.39	1.46
6	F	100	GLY	CA-C	-5.44	1.46	1.52
7	O	375	ARG	N-CA	-5.44	1.39	1.46
7	G	524	ARG	CZ-NH2	5.44	1.40	1.33
5	M	366	THR	N-CA	-5.44	1.39	1.45
6	N	175	SER	C-N	5.44	1.40	1.33
5	E	475	THR	C-N	5.44	1.40	1.33
4	D	432	LEU	N-CA	5.43	1.52	1.46
5	E	356	ALA	CA-C	-5.43	1.46	1.52
7	G	483	ASP	CA-C	-5.43	1.46	1.52
8	P	280	VAL	CA-C	-5.43	1.45	1.52
5	E	431	LEU	N-CA	-5.43	1.39	1.46
8	H	469	ALA	C-N	5.43	1.39	1.34
7	O	301	GLN	C-N	5.43	1.41	1.33
1	A	496	ARG	CA-C	-5.43	1.45	1.52
3	C	283	ILE	C-N	5.43	1.41	1.34
6	F	453	GLN	CD-NE2	5.43	1.44	1.33
4	L	279	GLU	CA-C	-5.43	1.46	1.52
6	N	347	ALA	N-CA	-5.43	1.39	1.46
8	P	130	GLU	C-N	5.43	1.40	1.33
8	P	525	ILE	C-N	5.43	1.40	1.33
7	G	322	THR	CA-C	-5.43	1.45	1.52
8	P	330	ALA	N-CA	5.43	1.52	1.46
2	B	254	SER	C-N	5.43	1.40	1.33
5	E	255	PHE	CA-C	5.43	1.59	1.52
5	E	480	ARG	C-N	5.43	1.41	1.33
1	I	280	ALA	N-CA	-5.43	1.39	1.46
3	K	184	GLN	C-N	5.43	1.41	1.33
3	K	466	LEU	CA-C	-5.43	1.45	1.52
1	A	80	ASP	N-CA	-5.42	1.39	1.46
6	F	480	ASP	CA-CB	5.42	1.59	1.53
3	K	274	TYR	CA-CB	5.42	1.61	1.53
2	B	275	MET	CA-C	-5.42	1.45	1.52
2	J	62	MET	CA-CB	5.42	1.65	1.54
8	P	295	GLY	N-CA	-5.42	1.37	1.44
3	K	239	VAL	CA-CB	-5.42	1.47	1.54
4	L	223	LEU	N-CA	-5.42	1.39	1.46
5	M	90	LEU	CA-C	5.42	1.60	1.52
2	B	361	HIS	CA-C	-5.42	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	130	PRO	CA-CB	5.42	1.61	1.53
4	D	139	LYS	CA-C	5.42	1.59	1.52
7	G	378	ALA	CA-C	-5.42	1.46	1.52
6	F	431	GLY	N-CA	-5.42	1.38	1.45
1	A	93	VAL	N-CA	-5.41	1.39	1.46
1	A	465	ALA	CA-C	-5.41	1.45	1.52
1	A	475	GLN	CA-C	-5.41	1.45	1.52
5	E	521	THR	C-N	5.41	1.41	1.33
6	F	350	VAL	C-O	-5.41	1.18	1.24
5	M	126	ARG	CZ-NH2	5.41	1.40	1.33
6	F	21	ALA	CA-C	-5.41	1.45	1.52
3	C	283	ILE	CA-C	-5.41	1.44	1.52
6	F	397	ALA	CA-C	-5.41	1.46	1.52
2	J	399	GLN	CD-NE2	5.41	1.44	1.33
4	D	34	ARG	CZ-NH2	5.41	1.40	1.33
5	E	286	GLU	CA-C	-5.41	1.45	1.52
1	I	69	HIS	C-N	-5.41	1.27	1.34
5	E	468	MET	C-N	5.41	1.41	1.33
6	F	396	ARG	NE-CZ	5.41	1.39	1.33
2	B	496	SER	C-N	5.41	1.41	1.34
4	D	218	ILE	CA-C	-5.41	1.44	1.52
4	D	344	PRO	CA-C	-5.41	1.46	1.52
6	F	75	SER	CA-C	-5.41	1.45	1.52
2	B	385	GLU	CA-C	-5.40	1.45	1.52
7	O	74	PRO	C-N	5.40	1.40	1.33
1	A	398	VAL	C-N	5.40	1.40	1.33
3	C	132	ASP	CA-CB	5.40	1.61	1.53
4	L	469	ALA	CA-C	-5.40	1.45	1.52
5	M	390	GLY	C-N	5.40	1.40	1.33
4	D	270	ALA	N-CA	-5.40	1.39	1.46
8	P	483	GLU	C-N	5.40	1.41	1.33
3	K	20	ARG	CZ-NH2	5.40	1.40	1.33
8	P	44	ARG	NE-CZ	5.40	1.39	1.33
7	O	215	ALA	CA-C	-5.39	1.46	1.52
5	E	297	ALA	CA-C	-5.39	1.45	1.52
5	E	389	GLY	CA-C	-5.39	1.45	1.51
5	E	510	LEU	N-CA	5.39	1.52	1.46
8	H	389	GLU	CA-C	5.39	1.60	1.52
1	I	279	LEU	CA-CB	5.39	1.61	1.53
4	L	120	CYS	CA-CB	5.39	1.61	1.53
8	P	450	ARG	NE-CZ	5.39	1.39	1.33
2	B	261	THR	CA-C	5.38	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	298	ASP	CA-C	5.38	1.59	1.52
1	I	423	LEU	C-N	5.38	1.41	1.33
2	B	225	GLY	C-N	5.38	1.41	1.33
5	M	458	ILE	CA-C	-5.38	1.47	1.52
7	O	200	VAL	CA-CB	-5.38	1.49	1.55
2	J	516	ARG	CD-NE	5.38	1.53	1.46
5	M	426	GLU	N-CA	-5.38	1.39	1.46
6	F	103	LEU	N-CA	-5.38	1.39	1.46
2	J	95	VAL	N-CA	-5.38	1.39	1.46
3	C	296	ILE	CA-CB	-5.38	1.47	1.54
3	C	486	THR	C-O	5.38	1.30	1.23
7	G	412	ILE	N-CA	-5.38	1.40	1.46
1	I	385	CYS	N-CA	-5.38	1.39	1.46
8	P	525	ILE	C-O	-5.38	1.18	1.24
6	F	509	THR	C-N	5.38	1.40	1.33
1	I	255	THR	CA-C	-5.38	1.45	1.52
1	I	531	ILE	CA-C	5.38	1.59	1.52
6	N	60	GLY	C-N	5.38	1.41	1.33
7	G	167	LEU	CB-CG	5.38	1.64	1.53
5	E	456	GLU	N-CA	5.37	1.53	1.46
3	K	115	GLN	N-CA	-5.37	1.39	1.46
6	N	68	GLN	CA-C	-5.37	1.46	1.52
6	N	315	ARG	CA-CB	5.37	1.62	1.53
8	P	30	TYR	N-CA	-5.37	1.39	1.46
1	A	274	ARG	CZ-NH2	5.37	1.40	1.33
2	B	144	SER	C-N	5.37	1.41	1.33
4	D	213	LYS	C-N	5.37	1.40	1.33
6	F	506	HIS	C-N	5.37	1.41	1.33
8	P	350	VAL	N-CA	-5.37	1.40	1.46
8	P	19	ALA	C-N	5.37	1.40	1.33
3	C	254	THR	CA-C	-5.37	1.46	1.52
5	M	373	VAL	CA-CB	5.37	1.61	1.54
1	A	57	ASP	C-O	-5.37	1.17	1.24
3	C	318	THR	C-N	5.37	1.41	1.33
5	E	177	VAL	C-O	-5.37	1.17	1.24
8	H	404	ARG	CD-NE	5.37	1.53	1.46
4	L	328	ILE	N-CA	5.37	1.52	1.46
6	N	59	ASP	CA-CB	5.37	1.61	1.53
3	C	405	PRO	C-N	5.36	1.41	1.33
6	F	388	LYS	CA-CB	5.36	1.61	1.53
2	J	388	ARG	NE-CZ	5.36	1.39	1.33
7	O	501	ASN	CA-C	-5.36	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	P	71	THR	C-N	-5.36	1.27	1.33
8	P	342	GLU	C-N	5.36	1.41	1.33
1	I	246	MET	C-N	5.36	1.41	1.33
7	O	399	ALA	N-CA	5.36	1.52	1.46
4	D	245	LYS	CA-C	-5.36	1.46	1.52
4	D	522	ALA	C-N	5.36	1.41	1.33
3	K	130	LEU	C-N	5.36	1.40	1.33
1	I	96	ILE	N-CA	5.36	1.52	1.46
4	L	370	SER	C-N	5.36	1.41	1.33
6	N	206	LEU	N-CA	-5.36	1.39	1.46
8	P	61	GLU	CA-C	-5.36	1.45	1.52
1	A	136	LEU	C-N	5.36	1.40	1.33
3	K	46	MET	CA-CB	5.36	1.61	1.53
3	K	257	GLU	C-N	5.36	1.40	1.33
6	N	427	PRO	C-N	5.36	1.41	1.33
2	J	405	ARG	CZ-NH1	5.36	1.40	1.32
3	K	508	THR	CA-C	5.36	1.59	1.52
7	O	343	GLY	CA-C	-5.36	1.47	1.52
8	P	298	ALA	CA-C	-5.36	1.45	1.53
1	I	197	ILE	N-CA	-5.35	1.39	1.46
7	G	494	GLU	N-CA	-5.35	1.39	1.46
3	K	306	ARG	CD-NE	5.35	1.53	1.46
5	M	232	LYS	CA-C	-5.35	1.45	1.53
6	N	350	VAL	CA-CB	-5.35	1.47	1.54
1	A	188	PRO	N-CA	-5.35	1.40	1.47
3	C	144	VAL	C-N	5.35	1.41	1.33
7	G	228	GLN	CA-C	5.35	1.59	1.52
1	I	274	ARG	CD-NE	5.35	1.53	1.46
2	J	138	ARG	C-N	5.35	1.41	1.33
6	N	164	LEU	N-CA	-5.35	1.39	1.46
8	P	249	MET	SD-CE	5.35	1.93	1.79
7	G	50	VAL	N-CA	-5.35	1.40	1.46
7	G	390	HIS	CA-C	-5.35	1.45	1.52
2	J	341	VAL	CA-C	-5.35	1.45	1.52
6	N	436	GLY	C-N	5.35	1.40	1.33
8	P	394	ASP	C-O	-5.35	1.17	1.24
7	G	355	GLY	C-N	5.35	1.40	1.33
7	O	12	GLY	N-CA	5.35	1.54	1.45
8	P	303	HIS	CD2-NE2	5.35	1.43	1.37
1	I	274	ARG	CA-CB	5.34	1.61	1.53
1	I	375	ILE	C-N	5.34	1.40	1.33
4	L	77	ILE	CA-C	-5.34	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	J	420	ALA	N-CA	-5.34	1.39	1.46
2	J	137	ALA	N-CA	-5.34	1.39	1.46
3	K	363	ILE	C-O	-5.34	1.17	1.24
6	N	224	ARG	CD-NE	5.34	1.53	1.46
4	D	87	ALA	CA-CB	-5.34	1.44	1.53
1	I	25	ALA	CA-C	-5.34	1.45	1.52
2	J	204	LYS	CA-C	-5.34	1.46	1.52
3	K	287	PRO	CA-CB	5.34	1.61	1.53
5	M	232	LYS	N-CA	-5.34	1.38	1.45
5	M	263	LYS	C-N	5.34	1.40	1.33
3	C	141	SER	CA-C	-5.33	1.45	1.53
4	D	482	ASN	C-N	5.33	1.41	1.33
5	E	44	VAL	CA-C	5.33	1.59	1.52
4	L	312	LEU	CA-CB	5.33	1.61	1.53
5	M	411	ASN	C-N	5.33	1.41	1.33
8	P	174	GLY	CA-C	-5.33	1.44	1.51
1	A	175	ALA	C-N	5.33	1.40	1.33
4	D	273	ASP	C-N	5.33	1.41	1.33
2	J	293	ARG	CZ-NH2	5.33	1.40	1.33
3	K	265	THR	C-N	5.33	1.41	1.33
4	L	105	GLY	CA-C	5.33	1.59	1.51
8	P	160	VAL	CA-C	-5.33	1.45	1.52
2	B	298	ASN	CA-C	-5.33	1.45	1.52
5	E	129	HIS	ND1-CE1	5.33	1.37	1.32
5	E	168	THR	CA-CB	5.33	1.61	1.53
5	E	198	ASP	N-CA	-5.33	1.39	1.46
1	I	445	LEU	CA-C	-5.33	1.45	1.52
1	I	496	ARG	NE-CZ	5.33	1.39	1.33
8	P	303	HIS	N-CA	-5.33	1.40	1.46
3	K	318	THR	N-CA	5.33	1.52	1.46
1	A	26	ALA	C-N	5.33	1.41	1.33
2	B	464	GLN	C-N	5.33	1.40	1.33
5	E	523	MET	CA-C	-5.33	1.45	1.52
8	H	163	LEU	CA-CB	5.33	1.61	1.53
4	L	372	LYS	N-CA	-5.33	1.39	1.46
8	P	478	VAL	C-N	5.33	1.41	1.33
6	F	64	LEU	CB-CG	5.32	1.64	1.53
8	H	165	ARG	C-O	5.32	1.30	1.24
8	P	291	VAL	C-O	-5.32	1.18	1.24
2	J	148	HIS	CA-C	-5.32	1.48	1.52
4	L	516	VAL	C-O	-5.32	1.17	1.24
2	B	460	ASP	CA-C	-5.32	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	37	HIS	CE1-NE2	-5.32	1.27	1.32
8	P	425	SER	N-CA	-5.32	1.39	1.46
3	C	284	GLN	CA-C	-5.32	1.45	1.52
5	M	415	ASP	CA-CB	5.32	1.63	1.53
2	B	466	ARG	CA-C	-5.32	1.45	1.52
6	F	65	HIS	C-N	5.32	1.41	1.33
7	G	161	THR	C-N	5.32	1.41	1.33
1	I	195	VAL	N-CA	-5.32	1.38	1.46
4	D	66	GLY	C-N	5.31	1.41	1.33
1	I	227	LYS	CA-C	-5.31	1.45	1.52
4	L	85	HIS	N-CA	5.31	1.53	1.46
4	L	310	SER	C-N	5.31	1.41	1.33
4	D	59	LYS	N-CA	5.31	1.52	1.46
7	G	393	ILE	CA-CB	5.31	1.61	1.54
3	K	431	GLY	N-CA	5.31	1.50	1.45
2	B	197	GLU	N-CA	-5.31	1.40	1.46
7	G	21	GLN	C-N	5.31	1.40	1.33
1	A	183	ASP	CA-C	-5.31	1.45	1.52
4	D	484	HIS	CG-CD2	-5.31	1.30	1.35
6	F	169	THR	N-CA	5.31	1.52	1.46
8	H	399	PHE	CA-CB	5.30	1.61	1.53
6	N	287	LYS	CA-C	-5.30	1.46	1.52
3	C	229	MET	CA-CB	5.30	1.62	1.53
8	H	505	TYR	N-CA	5.30	1.52	1.46
5	M	342	VAL	N-CA	-5.30	1.40	1.46
3	C	322	ARG	NE-CZ	5.30	1.38	1.33
5	E	358	LEU	N-CA	-5.30	1.40	1.46
7	G	80	VAL	CA-CB	-5.30	1.48	1.54
6	N	186	ILE	CA-C	-5.30	1.46	1.52
6	N	326	LEU	CA-C	-5.30	1.46	1.52
3	C	139	LYS	CA-C	-5.30	1.46	1.52
5	E	182	HIS	CA-C	-5.30	1.46	1.52
7	G	335	ASN	CA-CB	5.30	1.60	1.53
1	I	357	CYS	CA-CB	5.30	1.61	1.53
2	J	81	ALA	CA-CB	5.30	1.61	1.53
5	E	414	ARG	C-O	-5.29	1.17	1.24
7	O	484	ILE	C-N	-5.29	1.26	1.33
1	A	256	ASP	CG-OD2	5.29	1.35	1.25
2	B	401	VAL	C-O	-5.29	1.17	1.24
5	E	74	GLY	N-CA	-5.29	1.39	1.45
2	J	82	LYS	CA-C	-5.29	1.45	1.52
5	M	69	THR	CA-C	-5.29	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	O	129	THR	CA-C	-5.29	1.45	1.52
7	O	413	GLU	N-CA	-5.29	1.40	1.46
7	O	241	ASN	CA-C	-5.29	1.46	1.52
4	D	45	ALA	C-N	5.29	1.40	1.33
2	J	276	LYS	CA-CB	5.29	1.61	1.53
7	O	198	LYS	C-N	5.29	1.40	1.33
3	C	300	ALA	CA-C	-5.29	1.46	1.52
4	D	312	LEU	CA-CB	5.29	1.61	1.53
7	G	470	GLN	N-CA	-5.29	1.39	1.46
3	K	325	ARG	CZ-NH1	5.29	1.40	1.32
3	K	423	THR	N-CA	-5.29	1.40	1.46
7	O	349	GLU	CA-C	-5.29	1.46	1.52
2	B	363	SER	C-N	5.28	1.40	1.33
4	D	280	ARG	CZ-NH2	5.28	1.40	1.33
4	D	282	TYR	N-CA	-5.28	1.40	1.46
4	L	280	ARG	CD-NE	5.28	1.53	1.46
6	N	494	VAL	CA-CB	5.28	1.59	1.53
4	D	246	ILE	CA-C	-5.28	1.46	1.52
6	F	448	PRO	N-CD	-5.28	1.40	1.47
3	K	74	HIS	CA-CB	-5.28	1.46	1.53
4	D	427	ALA	CA-C	-5.28	1.46	1.52
4	L	490	THR	CA-C	5.28	1.59	1.52
7	O	47	LYS	C-N	5.28	1.40	1.33
2	B	39	VAL	C-N	5.28	1.40	1.33
1	A	370	ARG	NE-CZ	5.28	1.38	1.33
3	C	302	HIS	ND1-CE1	5.28	1.37	1.32
7	G	357	ARG	CA-CB	-5.28	1.45	1.53
7	G	520	ILE	C-N	5.28	1.41	1.33
8	H	386	ASP	N-CA	5.28	1.52	1.46
8	H	54	LYS	N-CA	-5.28	1.40	1.46
8	P	67	ASN	N-CA	-5.28	1.41	1.46
3	C	228	ARG	CZ-NH2	5.27	1.40	1.33
3	K	89	GLU	C-N	5.27	1.41	1.33
8	P	430	CYS	CA-CB	5.27	1.61	1.53
3	C	392	GLN	C-N	-5.27	1.27	1.33
3	C	438	ARG	CA-CB	5.27	1.61	1.53
3	C	448	PRO	N-CA	-5.27	1.40	1.47
6	F	127	LYS	CA-CB	5.27	1.61	1.53
4	L	527	ARG	C-O	-5.27	1.17	1.24
8	P	194	SER	CA-C	-5.27	1.46	1.52
3	C	227	PRO	N-CA	-5.27	1.41	1.47
1	I	532	LYS	CA-C	-5.27	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	165	ASN	CA-C	-5.27	1.46	1.52
4	L	535	VAL	CA-CB	5.27	1.59	1.54
6	N	250	TYR	CA-C	-5.27	1.45	1.52
4	D	232	LYS	CA-CB	5.27	1.62	1.53
8	H	157	ILE	CB-CG1	5.27	1.64	1.53
3	K	62	ASP	C-N	5.27	1.40	1.33
6	N	86	ASP	C-N	5.27	1.40	1.33
2	B	127	ILE	CA-CB	5.27	1.59	1.54
3	C	414	SER	C-O	-5.26	1.17	1.24
5	E	27	ARG	CD-NE	5.26	1.53	1.46
7	G	323	MET	N-CA	-5.26	1.40	1.46
8	H	407	ARG	CD-NE	5.26	1.53	1.46
1	A	312	LEU	CA-C	-5.26	1.46	1.52
4	D	346	ALA	CA-CB	5.26	1.60	1.53
2	J	465	LEU	CA-CB	5.26	1.62	1.53
3	K	427	LYS	N-CA	-5.26	1.40	1.46
2	B	111	ARG	CZ-NH2	5.26	1.40	1.33
6	F	135	GLU	N-CA	-5.26	1.39	1.46
4	L	253	LEU	CA-C	-5.26	1.46	1.53
1	A	56	ASN	CA-C	-5.26	1.46	1.52
1	A	443	ARG	CZ-NH1	5.26	1.40	1.32
3	C	500	ALA	C-N	5.26	1.40	1.33
5	M	467	GLY	C-O	-5.26	1.16	1.23
6	F	430	LYS	C-N	5.26	1.40	1.34
2	B	523	ALA	C-N	5.25	1.40	1.33
8	H	462	GLU	N-CA	-5.25	1.40	1.46
7	O	159	ALA	N-CA	-5.25	1.40	1.46
7	O	41	GLY	CA-C	-5.25	1.44	1.51
1	A	130	ARG	CZ-NH2	5.25	1.40	1.33
1	A	339	THR	C-O	-5.25	1.16	1.23
3	C	397	VAL	CA-C	-5.25	1.46	1.52
4	L	49	ARG	NE-CZ	5.25	1.38	1.33
3	K	266	ARG	NE-CZ	5.25	1.38	1.33
1	I	211	ILE	CB-CG1	5.25	1.64	1.53
3	K	234	LYS	C-N	5.25	1.38	1.33
3	K	358	GLU	C-O	-5.25	1.17	1.24
6	F	244	VAL	CA-C	-5.25	1.47	1.52
7	G	435	ILE	CB-CG1	5.25	1.64	1.53
4	L	49	ARG	CZ-NH1	5.25	1.40	1.32
4	L	259	ASP	N-CA	-5.25	1.40	1.46
4	L	400	GLU	CD-OE2	5.25	1.35	1.25
2	B	376	ARG	NE-CZ	5.25	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	H	192	PRO	CA-CB	-5.25	1.46	1.53
2	B	329	GLY	CA-C	-5.24	1.45	1.51
3	C	131	ASP	CA-C	-5.24	1.45	1.52
6	F	343	CYS	C-N	5.24	1.40	1.33
1	A	418	ALA	CA-C	-5.24	1.46	1.52
7	G	223	ALA	N-CA	-5.24	1.39	1.46
1	I	134	GLU	CA-CB	5.24	1.61	1.53
1	I	314	ARG	N-CA	-5.24	1.40	1.46
2	J	362	PHE	CA-CB	5.24	1.60	1.53
7	O	489	GLU	CA-C	-5.24	1.45	1.52
8	P	262	ALA	CA-CB	-5.24	1.45	1.53
1	I	433	ARG	CA-CB	5.24	1.61	1.53
6	F	314	ARG	CD-NE	5.24	1.53	1.46
7	G	520	ILE	CA-C	-5.24	1.46	1.52
5	M	221	ASP	CA-CB	5.24	1.61	1.53
3	C	268	LEU	CA-C	-5.23	1.45	1.52
3	K	236	PRO	CA-CB	-5.23	1.45	1.54
2	B	185	GLU	C-N	5.23	1.40	1.33
3	C	457	ALA	CA-C	-5.23	1.46	1.52
7	G	232	TYR	CA-C	-5.23	1.46	1.52
1	I	57	ASP	C-N	5.23	1.40	1.33
2	J	452	ASP	C-O	-5.23	1.17	1.24
3	C	76	ALA	N-CA	-5.23	1.40	1.46
6	N	107	ASP	CA-C	-5.23	1.46	1.52
5	E	480	ARG	CD-NE	5.23	1.53	1.46
1	A	271	THR	CA-CB	5.23	1.61	1.53
6	F	502	LYS	CA-C	-5.23	1.46	1.52
4	D	151	MET	N-CA	-5.23	1.40	1.46
6	F	319	ARG	CA-CB	5.23	1.61	1.53
7	O	516	VAL	CA-C	-5.23	1.46	1.52
4	D	114	GLY	C-O	-5.22	1.17	1.24
5	E	382	ALA	CA-C	-5.22	1.47	1.52
3	K	275	ILE	CA-C	-5.22	1.46	1.52
4	L	505	GLU	CA-C	-5.22	1.46	1.52
8	P	243	SER	CA-CB	5.22	1.62	1.54
3	C	371	ALA	CA-C	-5.22	1.45	1.52
2	J	38	LEU	N-CA	5.22	1.52	1.46
3	K	116	GLN	N-CA	-5.22	1.40	1.46
3	K	267	ILE	N-CA	-5.22	1.40	1.46
3	C	334	ARG	CD-NE	5.22	1.53	1.46
8	H	274	ASN	CA-C	5.22	1.59	1.52
7	O	312	GLY	C-N	5.22	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	381	ARG	NE-CZ	5.22	1.38	1.33
8	H	517	THR	CA-C	-5.22	1.46	1.52
5	M	239	MET	CA-C	5.22	1.58	1.53
7	O	416	LEU	N-CA	5.22	1.52	1.46
2	B	314	HIS	C-N	5.22	1.40	1.33
5	E	73	ASP	CA-CB	5.22	1.62	1.53
5	E	174	GLY	CA-C	-5.22	1.44	1.51
5	M	49	ARG	CA-C	-5.22	1.45	1.52
5	E	408	VAL	C-N	5.21	1.39	1.33
7	G	323	MET	C-N	5.21	1.40	1.33
2	J	199	ILE	CB-CG1	5.21	1.63	1.53
3	K	69	GLU	N-CA	-5.21	1.39	1.46
4	L	191	VAL	C-N	5.21	1.41	1.34
7	G	357	ARG	CD-NE	5.21	1.53	1.46
4	D	423	ALA	N-CA	-5.21	1.39	1.45
6	F	419	ALA	CA-CB	-5.21	1.45	1.53
8	H	44	ARG	CD-NE	5.21	1.53	1.46
1	A	158	SER	CA-C	-5.21	1.45	1.52
4	D	98	GLN	CA-C	-5.21	1.46	1.52
1	I	134	GLU	CA-C	-5.21	1.45	1.52
2	J	144	SER	N-CA	-5.21	1.39	1.46
7	O	89	GLU	CA-CB	5.21	1.61	1.53
1	A	423	LEU	N-CA	5.21	1.52	1.46
4	D	516	VAL	C-N	5.21	1.40	1.33
5	E	201	ARG	CD-NE	5.21	1.53	1.46
8	H	22	PHE	CA-C	5.21	1.59	1.52
2	J	139	GLU	CA-CB	5.21	1.61	1.53
2	J	59	ALA	N-CA	-5.21	1.39	1.46
2	J	171	LEU	C-N	5.21	1.40	1.33
3	C	311	ALA	C-N	5.20	1.40	1.33
2	J	111	ARG	CZ-NH1	5.20	1.40	1.32
2	J	361	HIS	C-N	-5.20	1.26	1.33
2	J	473	ASN	CA-C	-5.20	1.47	1.53
6	N	174	ASP	C-N	5.20	1.40	1.33
7	O	420	LEU	C-N	5.20	1.41	1.34
3	K	107	SER	CA-C	-5.20	1.46	1.52
2	B	353	MET	C-N	5.20	1.39	1.33
4	D	259	ASP	CA-C	-5.20	1.45	1.52
7	G	168	ILE	N-CA	5.20	1.52	1.46
8	P	446	GLU	CA-C	-5.20	1.45	1.52
1	A	309	ARG	NE-CZ	5.20	1.38	1.33
2	B	486	GLY	N-CA	5.20	1.50	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	35	PHE	CA-C	5.20	1.59	1.52
5	E	407	CYS	C-N	5.20	1.40	1.33
3	K	522	ILE	C-N	5.20	1.39	1.33
7	O	458	THR	C-N	5.20	1.41	1.33
2	B	452	ASP	C-N	5.20	1.40	1.33
4	D	275	VAL	CA-CB	5.20	1.61	1.54
5	E	45	ALA	N-CA	-5.20	1.40	1.46
6	F	400	ASN	C-O	-5.20	1.18	1.24
8	H	37	LYS	N-CA	-5.20	1.40	1.46
5	E	318	ASN	CA-CB	5.19	1.62	1.53
6	N	514	ASN	C-O	-5.19	1.17	1.24
1	A	62	LEU	CB-CG	5.19	1.63	1.53
6	F	78	ALA	N-CA	-5.19	1.39	1.46
1	I	54	ILE	CA-C	-5.19	1.45	1.52
1	I	182	THR	CA-C	-5.19	1.46	1.52
1	I	362	ILE	CA-C	-5.19	1.46	1.52
2	B	226	VAL	N-CA	-5.19	1.39	1.46
4	D	354	ASP	CA-CB	5.19	1.61	1.53
7	O	326	CYS	CA-CB	5.19	1.61	1.53
5	E	195	THR	N-CA	-5.19	1.40	1.46
2	J	26	LEU	CB-CG	5.19	1.63	1.53
5	E	400	ARG	CZ-NH1	5.19	1.40	1.32
2	J	237	ILE	CA-CB	5.19	1.60	1.54
7	G	138	GLU	CA-C	-5.19	1.46	1.52
3	K	244	SER	CA-C	-5.19	1.46	1.52
1	A	102	LYS	CA-C	-5.18	1.46	1.52
1	A	177	LEU	C-N	5.18	1.40	1.33
6	F	158	THR	C-N	5.18	1.41	1.33
5	M	33	ALA	CA-CB	5.18	1.61	1.53
5	E	177	VAL	CA-CB	5.18	1.61	1.54
7	G	337	LEU	CA-C	-5.18	1.46	1.52
2	J	118	ALA	CA-CB	5.18	1.61	1.53
3	K	409	PRO	N-CA	-5.18	1.43	1.47
3	C	459	THR	CA-CB	-5.18	1.45	1.53
8	H	219	HIS	CD2-NE2	5.18	1.43	1.37
1	A	43	LYS	CA-C	-5.18	1.46	1.52
1	A	386	ASP	C-N	5.18	1.40	1.33
6	F	318	ARG	CZ-NH1	5.18	1.40	1.32
1	I	343	ALA	CA-CB	5.18	1.61	1.54
1	I	486	ILE	C-N	5.18	1.39	1.33
6	N	523	ARG	CA-C	5.18	1.63	1.52
7	O	523	PRO	C-N	5.18	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	455	CYS	N-CA	5.18	1.52	1.46
6	F	15	ARG	NE-CZ	5.18	1.38	1.33
7	G	367	ALA	CA-C	5.18	1.59	1.53
4	L	223	LEU	CA-C	-5.18	1.46	1.52
5	M	234	PHE	CA-C	5.18	1.59	1.52
6	N	470	HIS	ND1-CE1	5.18	1.37	1.32
4	D	131	THR	N-CA	5.17	1.52	1.46
7	G	215	ALA	CA-C	-5.17	1.46	1.52
8	P	314	ARG	CD-NE	5.17	1.53	1.46
3	C	137	LEU	C-O	-5.17	1.18	1.24
8	P	334	PRO	N-CA	-5.17	1.40	1.47
5	E	66	GLY	CA-C	5.17	1.58	1.51
6	F	293	ASN	CA-C	-5.17	1.46	1.52
3	K	511	GLU	N-CA	-5.17	1.40	1.46
2	B	250	LYS	C-O	-5.17	1.17	1.24
3	K	75	PRO	CA-C	-5.17	1.45	1.52
7	G	76	ALA	CA-C	-5.17	1.45	1.52
7	G	108	VAL	CA-CB	5.17	1.61	1.54
3	K	185	PHE	CG-CD2	5.17	1.49	1.38
4	L	496	ARG	CD-NE	5.17	1.53	1.46
1	A	100	LEU	CA-CB	-5.17	1.45	1.53
2	B	441	LYS	C-N	5.17	1.41	1.33
5	E	197	ALA	C-N	5.17	1.41	1.33
7	G	387	ARG	CZ-NH1	5.17	1.40	1.32
1	I	240	SER	CA-CB	5.17	1.61	1.53
5	M	436	GLU	C-N	5.17	1.40	1.33
1	A	214	TYR	CA-CB	5.17	1.61	1.53
7	G	42	PRO	N-CA	-5.17	1.40	1.47
3	C	38	ARG	NE-CZ	5.16	1.38	1.33
3	K	392	GLN	N-CA	-5.16	1.39	1.46
6	N	217	ARG	CA-C	-5.16	1.46	1.52
7	O	402	ASN	CA-C	-5.16	1.45	1.53
3	C	171	LEU	CA-C	-5.16	1.46	1.52
7	G	344	ARG	N-CA	-5.16	1.39	1.45
8	H	127	GLU	CA-C	-5.16	1.45	1.52
5	M	505	HIS	CA-C	-5.16	1.46	1.53
3	C	77	ALA	C-O	-5.16	1.18	1.24
3	C	119	PRO	N-CA	-5.16	1.40	1.47
5	E	151	ILE	C-N	5.16	1.41	1.33
5	E	388	ARG	CA-C	-5.16	1.46	1.52
7	G	395	ILE	C-N	5.16	1.40	1.33
8	H	487	PRO	CA-C	5.16	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	L	508	VAL	N-CA	-5.16	1.39	1.46
6	N	37	ASN	CA-CB	5.16	1.61	1.53
6	F	41	LYS	C-N	5.16	1.40	1.33
3	K	237	ARG	CZ-NH1	5.16	1.40	1.32
5	M	496	LYS	C-N	5.16	1.39	1.33
6	N	250	TYR	C-N	5.16	1.40	1.34
3	C	424	GLU	N-CA	-5.16	1.39	1.46
4	L	376	ILE	C-N	5.16	1.40	1.33
1	I	128	ALA	CA-C	-5.16	1.46	1.52
8	P	91	HIS	C-N	5.16	1.41	1.33
8	P	289	ASN	CA-CB	5.16	1.63	1.53
8	P	289	ASN	N-CA	5.16	1.52	1.46
2	B	485	ILE	CA-C	-5.15	1.46	1.52
4	D	352	THR	C-N	5.15	1.40	1.34
4	D	441	ARG	NE-CZ	5.15	1.38	1.33
6	N	149	ILE	CA-C	-5.15	1.46	1.52
1	A	408	VAL	C-N	5.15	1.38	1.33
1	A	449	PRO	CA-C	-5.15	1.43	1.52
2	B	345	SER	CA-C	-5.15	1.46	1.52
3	C	107	SER	C-O	-5.15	1.18	1.24
4	D	55	LYS	C-N	5.15	1.41	1.33
2	J	206	GLY	C-O	-5.15	1.17	1.23
6	F	433	ALA	CA-C	-5.15	1.46	1.52
6	F	505	LEU	N-CA	-5.15	1.40	1.46
7	G	25	ASN	CA-CB	5.15	1.61	1.53
3	C	127	ARG	C-N	5.15	1.40	1.33
3	K	353	LYS	CA-C	-5.15	1.46	1.52
4	L	279	GLU	C-N	5.15	1.41	1.33
1	A	103	ASN	N-CA	-5.15	1.40	1.46
2	B	35	ILE	C-N	5.15	1.41	1.33
5	E	324	TRP	C-N	5.15	1.40	1.33
8	P	183	ILE	CA-C	5.15	1.59	1.52
8	P	314	ARG	C-N	5.15	1.40	1.33
1	I	480	ARG	CZ-NH1	5.15	1.40	1.32
7	O	127	THR	CA-C	-5.15	1.46	1.52
7	O	458	THR	CA-C	-5.15	1.46	1.52
2	B	275	MET	CA-CB	5.14	1.61	1.53
5	E	196	VAL	C-N	5.14	1.40	1.33
1	I	232	ALA	CA-CB	5.14	1.62	1.53
2	J	28	SER	N-CA	-5.14	1.40	1.46
8	P	182	LEU	CA-CB	-5.14	1.45	1.53
8	H	116	GLU	C-O	-5.14	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	228	ARG	CZ-NH1	5.14	1.40	1.32
3	K	324	ALA	CA-C	-5.14	1.46	1.52
4	D	234	SER	CA-CB	5.14	1.62	1.53
6	F	187	ASP	CA-C	-5.14	1.46	1.52
1	I	378	ARG	CD-NE	5.14	1.53	1.46
2	J	24	ALA	CA-CB	-5.14	1.45	1.53
5	M	277	LEU	CA-CB	5.14	1.61	1.53
5	E	39	MET	C-N	5.14	1.40	1.33
5	E	41	ALA	CA-CB	5.14	1.61	1.53
6	F	71	HIS	ND1-CE1	5.14	1.37	1.32
6	F	410	GLY	CA-C	-5.14	1.46	1.51
5	M	131	ILE	C-N	5.14	1.40	1.33
3	K	107	SER	N-CA	-5.14	1.40	1.46
5	M	211	VAL	CA-CB	5.14	1.61	1.54
5	E	532	ASP	CA-CB	5.14	1.59	1.52
6	F	26	ALA	C-N	5.14	1.40	1.33
5	M	256	GLU	N-CA	-5.14	1.38	1.46
4	D	127	GLY	C-N	5.13	1.39	1.33
5	E	138	GLU	N-CA	-5.13	1.40	1.46
6	F	184	GLU	CA-C	-5.13	1.45	1.52
6	F	383	THR	CA-C	5.13	1.59	1.52
7	G	444	ILE	CA-CB	5.13	1.61	1.54
7	G	512	LEU	CB-CG	5.13	1.63	1.53
5	E	180	SER	C-N	5.13	1.40	1.33
5	E	453	ASP	C-N	5.13	1.40	1.33
6	F	232	THR	N-CA	-5.13	1.39	1.46
5	M	380	SER	CA-C	-5.13	1.46	1.52
8	P	302	LEU	CA-CB	5.13	1.61	1.53
2	J	230	LYS	N-CA	-5.13	1.39	1.46
7	O	202	GLY	C-N	5.13	1.41	1.33
8	P	59	HIS	CD2-NE2	5.13	1.43	1.37
6	F	31	GLN	CA-C	-5.13	1.45	1.52
3	K	434	GLN	CA-CB	5.13	1.61	1.53
2	B	436	MET	CA-C	-5.13	1.46	1.52
4	L	277	ARG	CZ-NH2	5.13	1.40	1.33
3	C	320	ASN	CA-C	-5.13	1.46	1.52
4	D	85	HIS	CG-CD2	5.13	1.41	1.35
6	F	520	GLU	N-CA	-5.13	1.39	1.46
7	O	452	ASN	CA-CB	5.13	1.61	1.53
6	N	132	GLN	N-CA	-5.12	1.39	1.46
4	D	521	LEU	C-O	5.12	1.30	1.24
7	O	25	ASN	N-CA	-5.12	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	58	ASP	CA-CB	5.12	1.62	1.53
8	H	217	VAL	C-N	5.12	1.40	1.33
1	I	123	LEU	CA-C	-5.12	1.46	1.52
3	K	334	ARG	CD-NE	5.12	1.53	1.46
3	K	420	HIS	CB-CG	5.12	1.57	1.50
6	N	211	VAL	C-O	-5.12	1.18	1.24
7	O	319	LEU	N-CA	-5.12	1.40	1.46
1	A	201	HIS	CA-C	-5.12	1.46	1.52
1	A	366	ASN	C-N	5.12	1.40	1.33
8	H	490	LYS	N-CA	-5.12	1.39	1.45
2	J	351	GLU	CA-CB	5.12	1.59	1.53
3	K	299	LEU	C-N	5.12	1.40	1.33
5	M	80	MET	CA-CB	5.12	1.61	1.53
2	B	458	SER	C-O	-5.12	1.18	1.24
4	D	234	SER	N-CA	-5.12	1.39	1.46
7	G	219	THR	C-N	5.12	1.40	1.33
2	J	91	GLN	C-N	5.12	1.40	1.33
7	O	321	ARG	C-N	5.12	1.40	1.33
7	O	321	ARG	CD-NE	5.12	1.53	1.46
8	P	142	ILE	CA-CB	-5.12	1.47	1.54
1	A	22	VAL	CA-C	-5.11	1.46	1.52
1	A	117	VAL	CA-CB	-5.11	1.47	1.54
3	K	173	CYS	C-N	5.11	1.40	1.33
7	O	488	PHE	CA-CB	5.11	1.61	1.53
8	P	92	MET	N-CA	-5.11	1.40	1.46
3	K	285	LEU	N-CA	-5.11	1.39	1.46
2	J	77	ASP	N-CA	-5.11	1.41	1.46
3	K	235	ASN	C-N	5.11	1.39	1.33
7	O	209	GLN	N-CA	-5.11	1.39	1.46
8	P	208	LEU	CA-C	-5.11	1.46	1.53
3	C	198	TYR	N-CA	-5.11	1.39	1.46
4	D	327	ASP	CA-CB	5.11	1.62	1.53
4	L	228	VAL	CA-C	-5.11	1.46	1.52
6	N	491	GLU	N-CA	-5.11	1.40	1.46
3	C	495	ILE	C-N	5.11	1.39	1.33
7	G	240	LEU	N-CA	-5.11	1.39	1.46
1	I	518	THR	N-CA	-5.11	1.40	1.46
2	B	381	GLN	CD-NE2	5.11	1.44	1.33
8	H	118	LEU	CA-C	-5.11	1.46	1.52
5	M	229	ILE	CA-CB	-5.11	1.48	1.54
8	P	194	SER	C-N	5.11	1.41	1.33
7	G	242	VAL	CA-C	5.10	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	F	443	ALA	CA-C	-5.10	1.46	1.52
8	H	284	ALA	N-CA	-5.10	1.40	1.46
2	J	174	HIS	CA-C	5.10	1.58	1.52
3	K	383	ILE	CA-C	5.10	1.59	1.52
6	N	355	LEU	C-O	5.10	1.30	1.23
1	A	480	ARG	CD-NE	5.10	1.53	1.46
4	D	326	LYS	C-N	5.10	1.40	1.33
6	F	319	ARG	CZ-NH1	5.10	1.39	1.32
6	F	463	LEU	CA-CB	5.10	1.61	1.53
7	O	35	ALA	C-N	5.10	1.39	1.33
3	C	509	ALA	CA-C	-5.10	1.46	1.52
6	F	28	ARG	N-CA	-5.10	1.40	1.46
4	L	367	LEU	C-N	5.10	1.40	1.33
3	K	200	ARG	CD-NE	5.10	1.53	1.46
4	L	240	ARG	CZ-NH1	5.10	1.39	1.32
6	N	339	LEU	C-N	5.10	1.40	1.33
6	N	470	HIS	CG-ND1	5.10	1.43	1.38
7	O	302	TYR	C-N	5.10	1.40	1.33
7	O	513	ILE	N-CA	-5.10	1.40	1.46
8	P	188	VAL	CA-C	-5.10	1.46	1.52
4	D	458	MET	N-CA	-5.09	1.40	1.46
7	G	185	MET	CA-CB	5.09	1.61	1.53
3	K	453	GLN	CA-C	-5.09	1.46	1.52
5	E	432	ALA	C-O	-5.09	1.18	1.24
6	F	256	ARG	C-O	-5.09	1.18	1.24
7	G	54	GLY	N-CA	-5.09	1.38	1.45
1	I	394	ASP	CA-C	-5.09	1.45	1.52
2	J	403	ASP	CA-CB	5.09	1.61	1.53
2	J	405	ARG	CZ-NH2	5.09	1.40	1.33
3	K	220	ILE	N-CA	-5.09	1.40	1.46
2	B	281	ARG	C-N	5.09	1.40	1.33
8	H	119	LEU	C-N	5.09	1.40	1.33
3	K	199	ALA	N-CA	-5.09	1.39	1.46
7	O	361	PHE	C-N	5.09	1.39	1.33
3	C	423	THR	CA-CB	-5.09	1.45	1.53
4	D	225	GLU	C-O	-5.09	1.18	1.24
4	D	440	SER	CA-C	-5.09	1.46	1.52
1	I	43	LYS	N-CA	5.09	1.52	1.45
3	K	377	ARG	NE-CZ	5.09	1.38	1.33
4	L	434	LEU	CA-C	-5.09	1.46	1.52
8	P	170	SER	CA-C	-5.09	1.45	1.52
8	P	344	MET	C-N	5.09	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	280	ARG	CZ-NH1	5.09	1.39	1.32
7	G	359	ASN	CA-CB	5.09	1.60	1.53
1	A	228	ARG	CA-C	5.09	1.58	1.52
7	G	40	LEU	CA-C	-5.09	1.46	1.52
1	I	318	ARG	C-N	5.09	1.40	1.33
7	O	416	LEU	CA-C	-5.09	1.46	1.52
4	L	160	ARG	CD-NE	5.08	1.53	1.46
5	M	359	VAL	CA-CB	-5.08	1.47	1.54
3	C	432	VAL	C-O	-5.08	1.18	1.24
5	E	486	ASN	C-O	-5.08	1.17	1.24
6	F	518	VAL	CA-C	-5.08	1.46	1.52
8	H	477	ASN	C-N	5.08	1.41	1.33
1	I	264	ARG	CA-CB	5.08	1.61	1.53
1	A	520	ALA	N-CA	-5.08	1.40	1.46
6	F	287	LYS	CA-C	-5.08	1.46	1.52
3	K	255	ASP	C-N	5.08	1.39	1.33
4	L	281	ALA	C-O	-5.08	1.18	1.24
7	O	425	ARG	C-N	5.08	1.41	1.33
5	E	172	THR	N-CA	5.08	1.52	1.46
2	J	452	ASP	C-N	5.08	1.40	1.33
3	K	253	GLN	C-N	5.08	1.40	1.33
3	K	290	VAL	C-N	5.08	1.40	1.33
3	C	242	ASP	CA-CB	5.08	1.61	1.53
3	C	490	MET	CA-C	-5.08	1.45	1.52
5	E	250	ILE	CA-CB	-5.08	1.48	1.54
5	E	425	ALA	CA-C	-5.08	1.46	1.52
1	I	314	ARG	CZ-NH1	5.08	1.39	1.32
1	I	406	LYS	CA-C	-5.08	1.46	1.52
5	M	512	GLY	CA-C	-5.08	1.46	1.52
6	N	248	PHE	CA-C	-5.08	1.46	1.52
3	C	225	THR	C-O	-5.08	1.18	1.24
2	J	439	TYR	C-N	5.08	1.40	1.33
3	K	218	VAL	N-CA	-5.08	1.40	1.46
1	A	118	ILE	CB-CG1	5.08	1.63	1.53
5	E	480	ARG	CZ-NH2	5.08	1.40	1.33
8	H	100	GLY	CA-C	-5.07	1.44	1.51
2	J	272	LYS	CA-C	-5.07	1.45	1.52
2	J	367	LEU	CA-CB	5.07	1.62	1.53
6	N	318	ARG	C-N	5.07	1.40	1.33
8	P	265	LEU	C-N	5.07	1.40	1.33
4	D	379	CYS	C-N	5.07	1.40	1.33
8	H	158	ASP	CA-C	5.07	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	55	LYS	CA-CB	5.07	1.62	1.53
8	H	140	HIS	ND1-CE1	5.07	1.37	1.32
2	J	442	ALA	C-N	5.07	1.40	1.33
5	E	218	ARG	NE-CZ	5.07	1.38	1.33
3	C	68	ARG	CD-NE	5.07	1.53	1.46
3	C	256	ILE	C-O	-5.07	1.18	1.23
7	G	99	LEU	C-O	-5.07	1.18	1.24
5	M	157	VAL	CA-C	-5.07	1.47	1.53
5	M	312	HIS	CA-C	5.07	1.59	1.52
8	P	20	LYS	C-N	5.07	1.40	1.33
2	B	324	ALA	CA-CB	5.07	1.61	1.53
3	K	40	CYS	CA-C	-5.07	1.45	1.52
7	O	392	ALA	C-N	5.07	1.40	1.33
8	P	324	LEU	C-N	5.07	1.40	1.33
8	H	196	HIS	CG-ND1	5.06	1.43	1.38
2	B	431	LYS	C-N	5.06	1.40	1.34
1	I	124	ALA	C-N	5.06	1.40	1.33
3	C	274	TYR	CA-C	5.06	1.59	1.52
8	H	335	ARG	C-N	5.06	1.40	1.33
5	M	165	LEU	CA-CB	5.06	1.61	1.53
4	D	187	SER	N-CA	5.06	1.52	1.46
8	H	24	GLY	C-N	5.06	1.40	1.33
2	J	326	VAL	CA-C	5.06	1.59	1.52
5	M	339	GLY	C-N	5.06	1.40	1.33
7	O	338	SER	C-N	5.06	1.40	1.33
1	A	397	CYS	CA-C	-5.06	1.46	1.52
4	D	59	LYS	CA-C	-5.06	1.46	1.52
6	F	363	ILE	C-N	5.06	1.40	1.33
4	L	249	ILE	CA-C	-5.06	1.46	1.52
1	A	142	GLU	CA-C	-5.06	1.46	1.52
5	E	280	TYR	N-CA	-5.05	1.40	1.46
5	M	440	CYS	CA-CB	5.05	1.60	1.53
3	C	79	SER	CA-CB	5.05	1.61	1.53
3	C	361	THR	CA-C	-5.05	1.46	1.52
4	D	438	GLU	N-CA	-5.05	1.40	1.46
2	J	224	ILE	CA-C	-5.05	1.46	1.52
4	L	438	GLU	CA-CB	5.05	1.61	1.53
3	C	179	ALA	C-N	5.05	1.40	1.33
4	D	327	ASP	N-CA	-5.05	1.39	1.46
8	H	504	LYS	C-N	5.05	1.41	1.33
2	B	386	ALA	C-N	5.05	1.40	1.33
4	D	169	THR	CA-CB	-5.05	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	E	381	ARG	CD-NE	5.05	1.53	1.46
8	P	102	ASN	CA-CB	5.05	1.61	1.53
2	B	200	HIS	CE1-NE2	-5.05	1.27	1.32
4	D	258	THR	N-CA	-5.05	1.40	1.46
5	E	412	LEU	CA-C	-5.05	1.46	1.52
1	I	85	GLU	C-N	5.05	1.41	1.33
3	K	306	ARG	NE-CZ	5.05	1.38	1.33
7	G	51	ASP	CA-C	-5.04	1.46	1.53
2	J	388	ARG	CD-NE	5.04	1.53	1.46
8	P	487	PRO	N-CD	-5.04	1.40	1.47
4	D	280	ARG	CD-NE	5.04	1.53	1.46
5	E	143	VAL	N-CA	5.04	1.52	1.46
7	G	495	PRO	N-CD	-5.04	1.40	1.47
2	J	307	ALA	CA-C	5.04	1.59	1.52
6	N	85	ASP	N-CA	-5.04	1.40	1.46
3	C	246	GLU	C-N	5.04	1.40	1.33
8	H	420	ALA	CA-C	5.04	1.59	1.52
6	N	451	LEU	C-N	5.04	1.40	1.34
8	P	103	PHE	C-N	5.04	1.40	1.33
1	I	528	ASP	C-N	5.04	1.40	1.33
6	N	21	ALA	CA-C	-5.04	1.46	1.52
2	B	520	ILE	C-N	5.04	1.39	1.33
5	E	410	ARG	CZ-NH2	5.04	1.40	1.33
6	F	33	VAL	N-CA	-5.04	1.40	1.46
6	F	39	GLY	C-N	-5.04	1.27	1.34
2	B	149	GLY	CA-C	-5.03	1.44	1.51
2	J	57	ARG	NE-CZ	5.03	1.38	1.33
3	K	250	GLY	CA-C	5.03	1.57	1.51
3	K	288	ASP	C-N	5.03	1.40	1.33
6	N	98	ILE	C-N	5.03	1.40	1.33
8	P	322	ARG	CZ-NH1	5.03	1.39	1.32
6	F	153	ARG	NE-CZ	5.03	1.38	1.33
5	E	322	VAL	CA-C	-5.03	1.46	1.52
1	I	485	TRP	NE1-CE2	5.03	1.43	1.37
7	O	123	ARG	CD-NE	5.03	1.53	1.46
8	H	515	ALA	C-N	5.03	1.40	1.33
5	M	180	SER	C-N	5.03	1.40	1.33
2	B	334	THR	CA-CB	-5.03	1.46	1.53
7	G	159	ALA	C-N	5.03	1.40	1.33
8	H	148	CYS	N-CA	-5.03	1.39	1.46
1	I	242	GLN	N-CA	-5.03	1.39	1.46
2	J	445	MET	CA-C	-5.03	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	272	GLU	CA-C	-5.03	1.46	1.52
6	N	318	ARG	CD-NE	5.03	1.53	1.46
7	O	517	ASP	CA-CB	5.03	1.61	1.53
4	D	201	THR	N-CA	-5.03	1.39	1.46
6	N	157	ARG	C-N	5.03	1.41	1.33
8	P	45	THR	N-CA	-5.03	1.39	1.46
1	A	274	ARG	CZ-NH1	5.02	1.39	1.32
2	B	178	HIS	ND1-CE1	5.02	1.37	1.32
2	B	521	ILE	N-CA	-5.02	1.40	1.46
7	G	114	GLU	N-CA	-5.02	1.39	1.46
4	L	313	ALA	C-N	5.02	1.40	1.33
7	O	302	TYR	CA-C	-5.02	1.46	1.52
4	L	358	SER	C-O	5.02	1.30	1.23
5	E	31	LEU	N-CA	-5.02	1.40	1.46
8	P	50	ASN	C-N	5.02	1.44	1.33
5	E	240	PRO	C-N	5.02	1.40	1.33
2	B	170	LYS	N-CA	-5.02	1.40	1.46
1	I	399	VAL	C-N	5.02	1.40	1.33
8	P	471	HIS	N-CA	-5.02	1.39	1.46
1	A	348	ALA	N-CA	5.01	1.52	1.45
3	C	48	LYS	C-N	5.01	1.40	1.33
1	I	469	ALA	N-CA	-5.01	1.40	1.46
6	N	449	LYS	C-N	5.01	1.39	1.33
7	O	46	ASP	CA-C	-5.01	1.46	1.52
8	H	227	THR	CA-C	-5.01	1.46	1.52
8	H	343	GLU	CA-C	-5.01	1.46	1.52
2	J	34	ALA	N-CA	-5.01	1.40	1.46
1	I	480	ARG	CA-CB	5.01	1.61	1.53
2	J	201	ILE	C-N	5.01	1.40	1.33
4	L	286	LEU	C-N	5.01	1.39	1.34
7	O	231	LYS	N-CA	-5.01	1.40	1.46
1	I	512	LYS	N-CA	-5.01	1.39	1.46
7	O	412	ILE	C-N	5.01	1.40	1.33
8	P	335	ARG	NE-CZ	5.01	1.38	1.33
8	P	350	VAL	CA-C	-5.01	1.46	1.52
1	A	345	LEU	CA-C	-5.01	1.47	1.53
1	I	197	ILE	CA-C	5.01	1.59	1.52
5	M	62	VAL	N-CA	5.01	1.51	1.46
2	B	113	ALA	N-CA	-5.00	1.40	1.46
4	D	331	GLU	N-CA	-5.00	1.40	1.46
7	G	141	VAL	CA-C	-5.00	1.46	1.52
8	P	394	ASP	C-N	5.00	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	189	ARG	NE-CZ	5.00	1.38	1.33
5	E	57	LEU	N-CA	-5.00	1.40	1.46
8	P	363	PHE	CA-C	-5.00	1.46	1.52

All (4613) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	463	ALA	CA-C-N	15.57	151.29	121.54
2	J	463	ALA	C-N-CA	15.57	151.29	121.54
4	L	207	ASP	N-CA-C	-13.42	99.32	114.62
5	M	155	VAL	N-CA-C	-13.38	89.94	108.27
1	A	39	VAL	N-CA-C	-12.80	100.66	112.43
8	P	337	THR	N-CA-C	-12.30	97.12	108.07
2	J	464	GLN	N-CA-CB	12.05	130.86	110.49
3	C	263	ASP	N-CA-CB	11.42	127.06	110.16
2	J	464	GLN	CB-CA-C	-11.24	88.06	110.42
5	E	458	ILE	O-C-N	-11.22	113.24	120.42
4	L	129	HIS	CA-C-N	11.22	131.62	119.28
4	L	129	HIS	C-N-CA	11.22	131.62	119.28
5	M	535	LYS	O-C-N	-11.12	114.59	121.71
3	K	446	VAL	CA-C-N	11.11	129.22	120.33
3	K	446	VAL	C-N-CA	11.11	129.22	120.33
1	I	57	ASP	CA-C-N	10.98	132.13	119.94
1	I	57	ASP	C-N-CA	10.98	132.13	119.94
3	K	204	ILE	CA-C-O	-10.94	112.72	119.51
1	A	478	PRO	N-CA-C	-10.84	102.02	114.92
4	D	407	ASP	CA-CB-CG	-10.83	101.77	112.60
1	A	462	ASP	CA-CB-CG	-10.83	101.77	112.60
1	I	131	TYR	CA-C-N	10.77	135.21	120.46
1	I	131	TYR	C-N-CA	10.77	135.21	120.46
7	O	522	ASN	CA-CB-CG	-10.65	101.95	112.60
6	F	485	GLU	O-C-N	-10.62	113.27	121.55
3	C	102	ALA	CA-C-N	10.53	131.58	120.00
3	C	102	ALA	C-N-CA	10.53	131.58	120.00
1	I	448	ILE	CB-CA-C	-10.50	103.22	114.35
4	L	431	GLU	CA-C-N	10.46	134.30	120.28
4	L	431	GLU	C-N-CA	10.46	134.30	120.28
3	K	118	HIS	CA-CB-CG	10.43	124.23	113.80
8	H	508	ILE	CA-C-O	-10.39	109.83	120.85
1	A	160	ILE	N-CA-C	-10.38	103.40	112.12
3	K	318	THR	CA-C-O	-10.31	109.99	120.82
5	E	319	LEU	CA-C-N	10.31	132.73	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	319	LEU	C-N-CA	10.31	132.73	119.84
3	K	519	ILE	N-CA-CB	10.31	122.99	110.31
1	A	155	SER	N-CA-C	-10.22	100.12	112.59
7	G	480	ASN	N-CA-C	-10.20	100.84	113.38
5	E	379	ASN	CA-CB-CG	10.18	122.78	112.60
8	H	387	ASP	CA-CB-CG	10.15	122.75	112.60
1	I	290	GLY	CA-C-N	10.11	133.76	121.83
1	I	290	GLY	C-N-CA	10.11	133.76	121.83
3	K	61	ASN	OD1-CG-ND2	-10.09	112.51	122.60
4	L	296	ASN	N-CA-C	-10.08	99.31	114.64
5	M	324	TRP	CA-C-N	10.04	137.30	122.75
5	M	324	TRP	C-N-CA	10.04	137.30	122.75
5	E	377	CYS	CA-C-O	10.00	130.24	119.34
5	E	533	ILE	N-CA-C	-9.92	103.01	112.83
6	F	466	ILE	O-C-N	9.91	131.48	121.87
1	A	477	ASN	CA-CB-CG	9.88	122.48	112.60
4	L	446	MET	N-CA-C	-9.86	100.61	111.36
5	E	63	ASP	CA-CB-CG	-9.86	102.74	112.60
7	O	283	HIS	CA-CB-CG	9.84	123.64	113.80
2	J	464	GLN	N-CA-C	9.78	131.63	110.80
1	A	97	ALA	N-CA-C	9.75	123.13	111.33
8	P	38	GLU	CA-C-N	9.73	133.32	120.28
8	P	38	GLU	C-N-CA	9.73	133.32	120.28
8	P	50	ASN	CA-CB-CG	-9.68	102.92	112.60
7	G	234	ASN	CA-CB-CG	9.67	122.27	112.60
2	B	295	LEU	N-CA-C	9.66	122.80	110.24
8	H	25	LEU	CA-C-N	9.62	133.18	120.28
8	H	25	LEU	C-N-CA	9.62	133.18	120.28
3	C	360	PHE	CA-CB-CG	-9.60	104.20	113.80
2	B	429	PRO	CB-CA-C	9.59	127.38	111.56
6	F	222	LYS	N-CA-C	-9.59	90.38	110.80
6	F	368	ASN	CA-CB-CG	9.58	122.18	112.60
8	H	495	ALA	N-CA-C	-9.55	101.63	113.38
6	F	149	ILE	N-CA-C	-9.55	101.08	110.72
8	P	499	ASP	CA-CB-CG	-9.53	103.07	112.60
2	J	337	HIS	CG-CD2-NE2	9.53	116.73	107.20
2	B	37	ASP	CA-CB-CG	-9.52	103.08	112.60
7	G	116	LEU	CA-C-N	9.52	131.99	120.09
7	G	116	LEU	C-N-CA	9.52	131.99	120.09
8	P	80	HIS	CA-C-N	9.49	129.25	119.19
8	P	80	HIS	C-N-CA	9.49	129.25	119.19
4	D	352	THR	N-CA-C	-9.49	94.82	108.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	238	GLN	N-CA-C	-9.47	100.14	114.16
5	E	350	ALA	CA-C-N	9.44	132.93	120.28
5	E	350	ALA	C-N-CA	9.44	132.93	120.28
5	M	319	LEU	O-C-N	-9.40	115.63	121.27
8	H	320	ASP	CA-CB-CG	-9.39	103.21	112.60
8	H	475	ASN	N-CA-C	-9.39	103.92	114.62
2	J	102	VAL	CA-C-N	9.38	133.61	120.29
2	J	102	VAL	C-N-CA	9.38	133.61	120.29
7	O	143	VAL	CA-C-N	9.36	133.57	120.29
7	O	143	VAL	C-N-CA	9.36	133.57	120.29
1	A	381	ASN	N-CA-C	-9.35	95.02	109.52
6	N	387	ILE	CA-C-N	9.32	133.52	120.29
6	N	387	ILE	C-N-CA	9.32	133.52	120.29
8	P	348	ASP	CA-C-O	-9.31	111.04	120.82
4	D	219	ASP	CA-CB-CG	-9.31	103.29	112.60
5	E	250	ILE	N-CA-CB	9.31	121.61	111.00
8	H	393	ASP	CA-CB-CG	-9.26	103.34	112.60
2	B	81	ALA	CA-C-N	9.24	132.66	120.28
2	B	81	ALA	C-N-CA	9.24	132.66	120.28
7	G	159	ALA	CA-C-N	9.23	132.65	120.28
7	G	159	ALA	C-N-CA	9.23	132.65	120.28
1	A	118	ILE	N-CA-C	9.23	120.03	110.62
3	C	312	ILE	N-CA-C	-9.22	94.84	108.12
8	P	460	ALA	CA-C-N	9.21	132.63	120.28
8	P	460	ALA	C-N-CA	9.21	132.63	120.28
2	B	464	GLN	CA-C-N	9.21	132.41	120.44
2	B	464	GLN	C-N-CA	9.21	132.41	120.44
8	P	285	ASP	CA-CB-CG	-9.18	103.42	112.60
5	E	516	GLN	N-CA-C	9.18	121.29	111.28
4	D	216	GLY	CA-C-O	-9.17	114.14	122.57
1	A	298	LYS	O-C-N	-9.13	112.44	122.12
7	G	252	ASN	CA-CB-CG	-9.13	103.47	112.60
5	E	252	THR	N-CA-C	-9.11	102.56	114.31
4	D	128	ILE	CA-C-O	9.10	130.26	120.53
5	M	53	GLY	CA-C-N	9.10	129.87	120.04
5	M	53	GLY	C-N-CA	9.10	129.87	120.04
4	D	510	GLN	O-C-N	-9.09	112.39	121.94
8	P	289	ASN	N-CA-C	-9.08	104.27	114.62
1	A	246	MET	N-CA-C	-9.07	94.75	108.99
6	F	486	PRO	O-C-N	9.06	134.17	123.21
5	E	522	GLN	CA-C-N	9.02	132.36	120.28
5	E	522	GLN	C-N-CA	9.02	132.36	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	469	HIS	CA-CB-CG	9.01	122.81	113.80
6	F	340	SER	CA-C-O	-9.01	110.79	120.88
3	C	243	SER	CA-C-O	-9.00	111.75	121.56
5	E	278	GLN	N-CA-C	9.00	121.09	111.28
3	K	523	VAL	N-CA-C	-8.98	96.53	109.29
4	D	280	ARG	CA-C-N	8.98	132.65	120.44
4	D	280	ARG	C-N-CA	8.98	132.65	120.44
4	D	398	ILE	N-CA-CB	8.96	124.02	110.58
8	H	316	ASN	CA-CB-CG	-8.96	103.64	112.60
5	M	308	ASP	CA-CB-CG	-8.95	103.65	112.60
3	C	32	THR	CA-C-N	8.94	132.71	120.46
3	C	32	THR	C-N-CA	8.94	132.71	120.46
8	P	145	ASN	N-CA-C	-8.92	102.41	113.38
5	M	515	GLN	CA-C-O	-8.91	111.11	120.55
3	C	245	LEU	N-CA-C	-8.90	102.57	113.97
4	L	461	ILE	O-C-N	-8.89	113.75	120.07
5	M	113	ALA	CA-C-N	8.89	129.85	119.98
5	M	113	ALA	C-N-CA	8.89	129.85	119.98
2	B	411	GLY	CA-C-N	8.87	132.51	120.44
2	B	411	GLY	C-N-CA	8.87	132.51	120.44
2	J	419	HIS	CA-C-N	8.86	132.16	120.28
2	J	419	HIS	C-N-CA	8.86	132.16	120.28
8	H	104	VAL	CB-CA-C	-8.85	100.64	111.97
4	D	309	LEU	N-CA-C	-8.84	94.79	108.76
8	H	72	ILE	CA-C-N	8.83	131.92	120.44
8	H	72	ILE	C-N-CA	8.83	131.92	120.44
4	L	329	GLU	CA-C-N	8.82	132.81	120.29
4	L	329	GLU	C-N-CA	8.82	132.81	120.29
1	A	219	VAL	CA-C-N	8.81	134.05	120.13
1	A	219	VAL	C-N-CA	8.81	134.05	120.13
7	O	171	GLN	CA-C-N	8.81	132.08	120.28
7	O	171	GLN	C-N-CA	8.81	132.08	120.28
2	B	122	HIS	CA-C-N	8.80	128.97	119.28
2	B	122	HIS	C-N-CA	8.80	128.97	119.28
8	P	384	LEU	CA-C-N	8.78	132.05	120.28
8	P	384	LEU	C-N-CA	8.78	132.05	120.28
6	N	304	ALA	N-CA-C	8.78	120.85	111.28
7	O	500	ILE	CA-C-N	8.77	132.75	120.29
7	O	500	ILE	C-N-CA	8.77	132.75	120.29
3	K	32	THR	CA-C-N	8.77	131.78	120.56
3	K	32	THR	C-N-CA	8.77	131.78	120.56
6	N	63	LEU	CA-C-N	8.76	131.83	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	63	LEU	C-N-CA	8.76	131.83	120.44
2	B	66	ASP	O-C-N	8.75	133.60	123.27
8	P	285	ASP	N-CA-CB	8.74	123.10	110.16
4	L	219	ASP	CA-CB-CG	-8.74	103.86	112.60
8	H	267	ASN	CA-CB-CG	-8.73	103.86	112.60
1	I	491	SER	CA-C-N	8.72	132.68	120.29
1	I	491	SER	C-N-CA	8.72	132.68	120.29
3	K	185	PHE	N-CA-C	-8.68	96.11	109.65
1	A	244	THR	CA-C-N	8.68	133.05	120.82
1	A	244	THR	C-N-CA	8.68	133.05	120.82
7	O	192	LEU	N-CA-C	-8.66	101.15	112.41
4	D	285	ASN	CA-CB-CG	8.66	121.26	112.60
2	B	435	ALA	CA-C-N	8.65	131.87	120.28
2	B	435	ALA	C-N-CA	8.65	131.87	120.28
5	E	311	ASN	CA-C-N	8.64	131.86	120.28
5	E	311	ASN	C-N-CA	8.64	131.86	120.28
2	J	337	HIS	CB-CG-ND1	8.64	135.66	122.70
6	F	110	ILE	CA-C-N	8.64	132.56	120.29
6	F	110	ILE	C-N-CA	8.64	132.56	120.29
8	P	421	LYS	N-CA-C	8.62	120.68	111.28
7	G	386	GLU	CB-CG-CD	-8.61	97.96	112.60
8	H	404	ARG	N-CA-C	-8.61	102.16	114.12
1	I	400	LYS	N-CA-C	8.61	120.74	111.36
1	I	471	HIS	CE1-NE2-CD2	-8.59	100.41	109.00
1	I	229	ILE	N-CA-C	-8.59	95.21	107.75
8	P	330	ALA	CA-C-O	-8.58	111.07	120.43
4	D	73	ASP	N-CA-C	-8.58	95.26	109.24
2	B	117	ILE	N-CA-CB	-8.57	98.89	110.54
4	D	519	LEU	CA-C-O	-8.55	111.40	120.55
4	L	461	ILE	CA-C-O	-8.55	111.58	118.85
6	N	298	ASP	CA-CB-CG	-8.53	104.07	112.60
4	D	129	HIS	CE1-NE2-CD2	-8.53	100.47	109.00
2	J	318	ALA	CA-C-N	8.53	129.41	119.94
2	J	318	ALA	C-N-CA	8.53	129.41	119.94
8	P	59	HIS	CE1-NE2-CD2	-8.53	100.47	109.00
2	B	195	ASN	CA-CB-CG	8.52	121.12	112.60
4	L	461	ILE	N-CA-CB	8.52	115.87	110.50
4	L	398	ILE	CA-C-N	8.51	131.69	120.28
4	L	398	ILE	C-N-CA	8.51	131.69	120.28
7	O	445	ILE	N-CA-CB	8.51	115.86	110.50
2	B	299	TYR	CA-C-O	-8.51	110.62	118.79
8	P	486	VAL	N-CA-C	-8.50	98.25	107.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	306	MET	CA-C-O	-8.49	112.09	120.92
3	C	34	ALA	N-CA-C	8.49	120.53	111.28
3	C	110	GLU	N-CA-C	8.47	120.20	110.97
2	J	121	ILE	N-CA-C	-8.47	95.84	108.46
7	O	61	ASP	N-CA-C	-8.46	95.10	108.90
3	C	454	ASN	CA-CB-CG	-8.46	104.14	112.60
5	M	166	ILE	N-CA-CB	8.46	122.04	110.54
5	E	159	ILE	N-CA-C	-8.46	102.92	111.88
3	K	473	GLU	CA-C-O	8.46	125.68	119.68
7	O	195	ILE	N-CA-C	-8.45	104.79	112.90
7	O	141	VAL	CA-C-O	8.45	128.80	120.27
3	K	442	GLN	CA-C-N	8.44	132.28	120.29
3	K	442	GLN	C-N-CA	8.44	132.28	120.29
1	A	164	ASN	N-CA-C	-8.44	101.04	112.94
7	G	474	TRP	CB-CG-CD2	-8.43	115.00	126.80
5	E	374	ILE	N-CA-C	-8.43	93.88	107.28
6	N	21	ALA	CA-C-N	8.42	132.38	120.42
6	N	21	ALA	C-N-CA	8.42	132.38	120.42
2	B	500	LYS	CA-C-N	8.41	131.56	120.28
2	B	500	LYS	C-N-CA	8.41	131.56	120.28
5	E	206	PHE	N-CA-C	-8.41	101.71	114.16
3	K	520	ASP	CA-CB-CG	8.41	121.01	112.60
5	M	113	ALA	N-CA-C	8.41	120.44	111.28
7	O	220	PHE	CA-CB-CG	-8.41	105.39	113.80
6	F	470	HIS	CB-CG-CD2	-8.40	120.28	131.20
7	O	194	MET	CA-C-O	8.39	127.62	118.65
7	G	117	HIS	N-CA-CB	8.37	123.40	110.43
7	G	364	CYS	CA-C-O	-8.37	111.88	119.75
8	P	207	ILE	CA-C-N	8.37	135.01	120.87
8	P	207	ILE	C-N-CA	8.37	135.01	120.87
1	I	386	ASP	CA-CB-CG	-8.36	104.24	112.60
3	C	453	GLN	CA-C-N	8.36	131.48	120.28
3	C	453	GLN	C-N-CA	8.36	131.48	120.28
6	N	360	PHE	CA-CB-CG	-8.36	105.44	113.80
3	K	462	LEU	CA-C-N	8.35	131.47	120.28
3	K	462	LEU	C-N-CA	8.35	131.47	120.28
1	I	125	CYS	O-C-N	-8.35	113.27	122.12
8	P	172	GLN	CB-CG-CD	-8.35	98.41	112.60
6	F	53	ASP	N-CA-CB	8.34	123.10	110.42
8	H	22	PHE	CA-CB-CG	-8.34	105.46	113.80
6	N	315	ARG	N-CA-CB	8.34	124.59	110.49
4	L	255	ALA	N-CA-C	-8.33	100.72	108.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	187	GLN	N-CA-C	-8.33	98.59	108.25
6	F	447	ILE	CA-C-O	-8.32	113.11	118.69
7	O	314	VAL	CB-CA-C	8.32	119.16	111.00
7	O	178	MET	CG-SD-CE	-8.31	82.61	100.90
3	C	169	SER	CA-C-N	8.30	131.40	120.28
3	C	169	SER	C-N-CA	8.30	131.40	120.28
6	N	511	ILE	O-C-N	8.30	130.53	121.90
4	D	188	VAL	N-CA-C	8.29	119.07	110.62
6	N	333	LEU	N-CA-C	-8.29	96.40	109.50
6	F	158	THR	N-CA-CB	8.28	122.02	110.01
2	J	252	PHE	CA-CB-CG	-8.28	105.52	113.80
2	J	186	ALA	N-CA-C	8.28	119.93	111.07
3	C	97	SER	N-CA-C	8.27	120.30	111.28
3	C	226	HIS	CA-CB-CG	8.27	122.07	113.80
7	O	26	ILE	N-CA-C	8.27	119.06	110.62
3	K	95	THR	CA-C-N	8.26	131.35	120.28
3	K	95	THR	C-N-CA	8.26	131.35	120.28
2	B	23	THR	CA-C-N	8.23	131.66	120.38
2	B	23	THR	C-N-CA	8.23	131.66	120.38
1	I	390	ARG	NE-CZ-NH1	-8.22	113.28	121.50
4	D	129	HIS	ND1-CE1-NE2	8.22	116.62	108.40
7	G	196	GLY	CA-C-O	-8.21	114.05	122.59
4	L	510	GLN	CA-C-N	8.21	128.70	119.92
4	L	510	GLN	C-N-CA	8.21	128.70	119.92
1	I	261	ASP	CA-C-N	8.21	131.94	120.29
1	I	261	ASP	C-N-CA	8.21	131.94	120.29
6	N	332	ALA	N-CA-C	8.21	121.51	110.35
2	J	337	HIS	CE1-NE2-CD2	-8.20	100.80	109.00
8	H	350	VAL	CA-C-O	-8.20	112.14	120.25
3	C	130	LEU	O-C-N	8.19	130.80	122.12
4	D	146	GLU	CA-C-O	8.19	129.23	120.55
5	E	277	LEU	CA-C-O	-8.18	111.88	120.55
5	E	107	THR	CA-C-N	8.18	130.61	120.22
5	E	107	THR	C-N-CA	8.18	130.61	120.22
8	P	463	VAL	CA-C-N	8.18	131.66	120.46
8	P	463	VAL	C-N-CA	8.18	131.66	120.46
3	K	343	VAL	N-CA-C	-8.17	96.25	108.17
1	A	122	ARG	CA-C-N	8.16	131.88	120.29
1	A	122	ARG	C-N-CA	8.16	131.88	120.29
4	D	159	ASP	CA-C-N	8.16	131.22	120.28
4	D	159	ASP	C-N-CA	8.16	131.22	120.28
1	A	126	LYS	N-CA-C	8.16	120.17	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	49	ARG	NE-CZ-NH2	8.16	126.54	119.20
8	H	256	THR	N-CA-C	-8.15	102.64	112.59
2	J	218	PHE	N-CA-C	-8.15	95.63	109.24
4	L	166	SER	CA-C-N	8.15	131.86	120.29
4	L	166	SER	C-N-CA	8.15	131.86	120.29
4	D	115	SER	CA-C-N	8.14	131.85	120.29
4	D	115	SER	C-N-CA	8.14	131.85	120.29
1	A	172	VAL	O-C-N	-8.14	113.44	121.83
7	O	356	GLU	CA-C-N	8.13	132.29	120.82
7	O	356	GLU	C-N-CA	8.13	132.29	120.82
8	H	47	TYR	N-CA-CB	8.13	124.23	110.49
2	B	228	GLN	O-C-N	-8.13	116.51	121.71
3	C	402	LEU	CA-C-N	8.13	131.01	120.44
3	C	402	LEU	C-N-CA	8.13	131.01	120.44
5	E	126	ARG	N-CA-C	8.12	120.13	111.28
1	A	138	VAL	N-CA-C	-8.12	105.41	113.20
2	B	322	ARG	CA-C-N	8.11	131.15	120.28
2	B	322	ARG	C-N-CA	8.11	131.15	120.28
5	M	391	ASN	OD1-CG-ND2	8.11	130.71	122.60
8	P	477	ASN	CA-C-N	8.11	132.65	122.43
8	P	477	ASN	C-N-CA	8.11	132.65	122.43
2	B	154	LYS	CA-C-N	8.10	131.79	120.29
2	B	154	LYS	C-N-CA	8.10	131.79	120.29
2	B	69	THR	CA-CB-OG1	8.10	121.74	109.60
1	I	448	ILE	O-C-N	-8.10	114.32	120.07
7	O	57	THR	CA-CB-OG1	8.10	121.75	109.60
5	M	245	ASP	CA-CB-CG	-8.09	104.51	112.60
6	F	189	PHE	CA-C-O	-8.09	112.45	121.51
6	N	435	LEU	CA-C-N	8.07	128.74	119.94
6	N	435	LEU	C-N-CA	8.07	128.74	119.94
6	F	214	HIS	CA-CB-CG	8.07	121.87	113.80
1	I	466	LYS	CA-C-N	8.07	131.09	120.28
1	I	466	LYS	C-N-CA	8.07	131.09	120.28
1	A	425	ASN	CA-C-N	8.06	131.08	120.28
1	A	425	ASN	C-N-CA	8.06	131.08	120.28
2	J	518	ASP	CA-CB-CG	-8.06	104.54	112.60
2	J	379	THR	N-CA-C	-8.05	96.77	109.50
8	P	409	VAL	N-CA-C	-8.05	98.03	107.61
4	L	245	LYS	N-CA-C	-8.05	95.29	108.41
6	N	81	ALA	CA-C-N	8.05	131.06	120.28
6	N	81	ALA	C-N-CA	8.05	131.06	120.28
2	J	393	ALA	CA-C-N	8.04	131.05	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	393	ALA	C-N-CA	8.04	131.05	120.28
3	K	359	TYR	N-CA-C	-8.04	97.17	109.95
1	A	92	SER	N-CA-C	8.04	120.12	111.36
4	L	160	ARG	N-CA-C	8.02	120.03	111.28
5	E	38	ILE	N-CA-CB	8.02	121.45	110.54
1	I	279	LEU	N-CA-C	8.02	120.02	111.28
4	D	148	LEU	N-CA-C	7.99	119.99	111.28
4	L	42	LYS	CA-C-N	7.98	130.97	120.28
4	L	42	LYS	C-N-CA	7.98	130.97	120.28
4	L	445	GLY	CA-C-N	7.98	131.62	120.29
4	L	445	GLY	C-N-CA	7.98	131.62	120.29
3	C	96	THR	CA-C-N	7.97	130.96	120.28
3	C	96	THR	C-N-CA	7.97	130.96	120.28
5	E	408	VAL	N-CA-CB	7.96	121.37	110.54
1	I	386	ASP	N-CA-CB	7.96	121.94	110.16
8	P	137	ARG	NE-CZ-NH2	7.95	126.36	119.20
4	L	359	ALA	CA-C-O	-7.95	112.96	121.38
4	L	478	THR	CA-C-N	7.95	130.93	120.28
4	L	478	THR	C-N-CA	7.95	130.93	120.28
5	E	55	ASN	N-CA-C	-7.94	103.16	113.17
4	L	60	MET	N-CA-C	-7.94	95.96	108.90
5	M	137	TYR	CA-C-N	7.94	130.92	120.28
5	M	137	TYR	C-N-CA	7.94	130.92	120.28
3	C	393	ASP	CA-C-N	7.93	131.22	120.44
3	C	393	ASP	C-N-CA	7.93	131.22	120.44
1	I	110	GLN	CA-C-N	7.92	132.71	120.75
1	I	110	GLN	C-N-CA	7.92	132.71	120.75
5	E	126	ARG	NE-CZ-NH2	-7.92	112.08	119.20
6	F	30	LEU	CA-C-N	7.91	131.22	120.38
6	F	30	LEU	C-N-CA	7.91	131.22	120.38
8	H	110	ALA	CA-C-N	7.91	130.88	120.28
8	H	110	ALA	C-N-CA	7.91	130.88	120.28
8	H	119	LEU	CA-C-N	7.91	130.88	120.28
8	H	119	LEU	C-N-CA	7.91	130.88	120.28
5	E	499	ASN	OD1-CG-ND2	-7.91	114.69	122.60
2	J	269	HIS	CE1-NE2-CD2	-7.91	101.09	109.00
5	M	374	ILE	N-CA-C	-7.91	94.15	106.72
1	I	155	SER	N-CA-C	7.90	120.80	111.71
5	M	432	ALA	CA-C-N	7.90	130.52	120.56
5	M	432	ALA	C-N-CA	7.90	130.52	120.56
4	D	37	ASN	CA-CB-CG	7.90	120.50	112.60
8	P	36	CYS	O-C-N	7.90	130.31	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	269	HIS	CG-CD2-NE2	7.90	115.10	107.20
1	I	387	GLU	O-C-N	7.90	130.62	122.09
7	O	386	GLU	CB-CG-CD	7.89	126.02	112.60
3	C	357	ASP	N-CA-C	-7.89	101.14	111.71
8	H	67	ASN	N-CA-C	-7.88	100.76	110.61
2	J	442	ALA	CA-C-O	-7.88	112.20	120.55
6	N	298	ASP	CA-C-O	-7.85	113.53	120.60
7	O	448	GLN	N-CA-CB	7.84	121.77	110.16
4	L	179	TYR	CA-C-N	7.84	131.57	120.28
4	L	179	TYR	C-N-CA	7.84	131.57	120.28
7	O	303	PHE	CA-C-N	7.84	130.79	120.28
7	O	303	PHE	C-N-CA	7.84	130.79	120.28
1	I	103	ASN	CA-CB-CG	-7.84	104.76	112.60
5	M	329	GLU	CB-CG-CD	-7.84	99.27	112.60
5	E	488	ALA	N-CA-C	-7.84	103.62	113.02
7	G	104	PHE	CB-CA-C	-7.83	98.58	110.88
6	N	317	LYS	O-C-N	-7.83	113.76	122.84
4	D	433	ALA	CA-C-N	7.82	130.76	120.28
4	D	433	ALA	C-N-CA	7.82	130.76	120.28
3	C	422	LEU	N-CA-CB	7.82	122.34	110.30
8	P	190	ILE	N-CA-C	7.82	118.59	110.62
1	A	375	ILE	N-CA-C	-7.82	97.17	108.11
1	I	508	ILE	CA-C-O	-7.81	112.38	121.05
4	L	507	LEU	N-CA-CB	7.81	123.69	110.49
1	I	112	ILE	N-CA-C	7.81	119.86	111.58
5	E	451	PHE	CA-C-O	7.81	128.70	120.42
2	B	455	GLY	N-CA-C	-7.80	104.00	115.63
7	O	155	LEU	CA-C-N	7.80	130.74	120.28
7	O	155	LEU	C-N-CA	7.80	130.74	120.28
5	E	501	MET	N-CA-C	-7.80	102.62	114.16
1	I	477	ASN	CA-CB-CG	7.80	120.40	112.60
2	J	419	HIS	CE1-NE2-CD2	-7.79	101.20	109.00
3	C	247	TYR	N-CA-C	7.79	120.64	110.43
6	F	175	SER	CA-C-O	-7.79	112.64	120.82
7	O	150	GLU	N-CA-C	-7.77	103.92	113.41
4	L	420	ALA	N-CA-CB	7.77	123.62	110.49
8	P	191	PHE	O-C-N	7.77	125.93	121.27
8	H	175	ASN	CA-C-N	7.76	130.53	120.44
8	H	175	ASN	C-N-CA	7.76	130.53	120.44
3	K	275	ILE	CB-CA-C	-7.76	101.66	112.14
4	L	482	ASN	OD1-CG-ND2	7.76	130.37	122.60
7	O	510	ALA	N-CA-CB	7.76	121.65	110.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	27	THR	CA-C-N	7.76	130.68	120.28
2	J	27	THR	C-N-CA	7.76	130.68	120.28
2	B	458	SER	N-CA-C	7.75	119.81	111.36
6	F	20	LEU	CA-C-N	7.75	130.67	120.28
6	F	20	LEU	C-N-CA	7.75	130.67	120.28
1	A	366	ASN	CA-CB-CG	-7.75	104.85	112.60
8	P	95	GLN	OE1-CD-NE2	7.75	130.35	122.60
3	K	102	ALA	CA-C-O	-7.75	112.34	120.55
1	I	96	ILE	CA-C-N	7.75	130.66	120.28
1	I	96	ILE	C-N-CA	7.75	130.66	120.28
5	M	48	MET	CA-C-O	-7.74	112.73	120.70
5	M	359	VAL	O-C-N	7.74	130.53	123.03
4	D	130	PRO	O-C-N	7.73	132.71	122.27
7	O	385	THR	CA-C-O	7.73	128.61	120.42
2	J	283	LEU	CA-C-N	7.73	130.63	120.28
2	J	283	LEU	C-N-CA	7.73	130.63	120.28
4	L	33	ILE	N-CA-CB	7.73	121.05	110.54
4	L	280	ARG	CA-C-N	7.73	130.49	120.44
4	L	280	ARG	C-N-CA	7.73	130.49	120.44
8	P	21	HIS	CE1-NE2-CD2	-7.73	101.27	109.00
6	N	294	GLN	OE1-CD-NE2	-7.72	114.88	122.60
3	K	86	THR	N-CA-C	-7.71	102.96	111.36
4	D	368	ASN	OD1-CG-ND2	7.70	130.30	122.60
8	H	81	PRO	CA-C-N	7.68	130.43	120.44
8	H	81	PRO	C-N-CA	7.68	130.43	120.44
6	N	58	LYS	CA-C-N	7.68	132.38	121.02
6	N	58	LYS	C-N-CA	7.68	132.38	121.02
3	C	293	GLU	O-C-N	7.68	130.01	122.03
8	H	508	ILE	O-C-N	7.68	129.74	121.83
2	J	161	ASN	CA-CB-CG	-7.67	104.93	112.60
3	K	374	ILE	CB-CA-C	7.67	122.90	111.31
8	P	483	GLU	N-CA-C	-7.67	103.03	113.30
4	D	349	ASP	CA-CB-CG	-7.66	104.94	112.60
1	I	69	HIS	CA-C-N	7.66	127.20	118.85
1	I	69	HIS	C-N-CA	7.66	127.20	118.85
5	M	395	ILE	CA-C-O	-7.66	112.73	120.85
5	M	226	LYS	N-CA-C	-7.66	104.36	112.93
6	N	220	ASP	CA-CB-CG	7.66	120.25	112.60
1	A	141	ASP	CA-CB-CG	-7.65	104.95	112.60
2	J	175	HIS	CE1-NE2-CD2	-7.64	101.36	109.00
1	I	25	ALA	CA-C-N	7.63	130.51	120.28
1	I	25	ALA	C-N-CA	7.63	130.51	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	433	LEU	CA-C-O	7.63	128.28	119.35
1	A	432	SER	CA-C-N	7.63	130.50	120.28
1	A	432	SER	C-N-CA	7.63	130.50	120.28
4	L	524	GLU	N-CA-C	7.63	119.38	111.14
4	D	375	LYS	N-CA-C	-7.62	97.32	109.59
6	N	335	SER	N-CA-C	-7.62	97.73	109.24
7	O	488	PHE	N-CA-C	-7.62	105.15	114.75
5	E	427	ILE	CA-C-N	7.61	130.47	120.28
5	E	427	ILE	C-N-CA	7.61	130.47	120.28
1	A	387	GLU	O-C-N	-7.60	114.06	122.12
2	J	304	PHE	CA-C-N	7.60	128.36	120.00
2	J	304	PHE	C-N-CA	7.60	128.36	120.00
1	I	393	HIS	CG-CD2-NE2	7.60	114.80	107.20
1	I	415	VAL	CA-C-N	7.60	130.46	120.28
1	I	415	VAL	C-N-CA	7.60	130.46	120.28
3	K	114	GLU	CA-C-O	-7.60	112.37	120.42
1	I	51	ASP	CA-CB-CG	-7.60	105.00	112.60
6	F	424	LYS	N-CA-C	7.59	119.34	111.14
7	O	299	ALA	N-CA-C	7.59	119.64	111.36
4	L	322	ILE	CA-C-N	7.59	132.86	120.94
4	L	322	ILE	C-N-CA	7.59	132.86	120.94
1	I	56	ASN	OD1-CG-ND2	7.59	130.19	122.60
1	I	517	ALA	CA-C-O	-7.58	112.38	120.42
6	N	231	LEU	N-CA-C	-7.58	96.54	108.90
1	A	284	ASN	N-CA-C	-7.58	105.20	114.75
6	N	496	ASP	CA-CB-CG	-7.58	105.02	112.60
6	N	392	ARG	CA-C-O	-7.57	112.87	120.82
4	L	483	ARG	NE-CZ-NH2	7.57	126.01	119.20
5	E	424	ALA	O-C-N	7.57	129.86	122.07
6	F	327	ALA	CB-CA-C	-7.57	98.95	110.90
8	P	39	LEU	CA-C-N	7.56	131.45	120.71
8	P	39	LEU	C-N-CA	7.56	131.45	120.71
3	C	363	ILE	N-CA-CB	7.56	122.10	111.82
4	L	129	HIS	CA-CB-CG	7.55	121.35	113.80
7	G	65	ILE	CA-C-N	7.54	131.00	120.29
7	G	65	ILE	C-N-CA	7.54	131.00	120.29
4	D	286	LEU	CA-C-N	7.54	130.79	120.46
4	D	286	LEU	C-N-CA	7.54	130.79	120.46
3	K	481	ASN	OD1-CG-ND2	7.54	130.14	122.60
8	P	297	VAL	O-C-N	7.54	130.34	123.03
1	I	526	ARG	N-CA-CB	7.54	123.13	110.32
1	I	410	PRO	O-C-N	7.54	128.08	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	33	VAL	O-C-N	7.53	129.73	121.90
7	G	476	GLY	N-CA-C	-7.53	98.69	111.27
2	B	374	VAL	N-CA-CB	7.53	120.95	111.46
7	O	303	PHE	O-C-N	-7.52	113.96	122.09
5	M	330	ILE	CA-C-N	7.52	130.22	120.44
5	M	330	ILE	C-N-CA	7.52	130.22	120.44
8	P	223	PHE	CA-CB-CG	-7.52	106.28	113.80
6	F	446	ILE	CA-C-N	7.51	126.34	120.33
6	F	446	ILE	C-N-CA	7.51	126.34	120.33
5	M	40	ALA	CA-C-O	-7.51	112.96	120.70
5	E	349	THR	N-CA-C	-7.51	97.30	108.79
8	H	445	PHE	CA-CB-CG	7.51	121.31	113.80
1	A	189	ARG	N-CA-CB	7.50	123.74	111.21
5	M	96	LYS	N-CA-C	7.50	119.54	111.36
4	L	217	THR	N-CA-C	-7.49	98.29	108.86
2	J	371	CYS	N-CA-C	-7.49	98.03	109.41
2	B	288	ASN	CA-CB-CG	-7.48	105.12	112.60
2	J	268	GLU	CA-C-N	7.47	130.63	120.54
2	J	268	GLU	C-N-CA	7.47	130.63	120.54
6	F	57	THR	O-C-N	-7.47	114.67	123.41
1	I	357	CYS	CA-C-O	-7.47	109.06	119.96
1	A	154	THR	N-CA-C	7.46	120.48	111.82
6	F	153	ARG	N-CA-CB	7.46	120.83	110.01
8	H	200	ASP	N-CA-C	-7.46	103.30	113.30
3	K	278	LEU	CB-CA-C	-7.46	99.11	110.90
7	G	279	GLU	CA-C-N	7.46	130.28	120.28
7	G	279	GLU	C-N-CA	7.46	130.28	120.28
1	I	516	PHE	CA-CB-CG	7.46	121.26	113.80
8	P	161	SER	N-CA-C	7.46	119.41	111.28
3	K	420	HIS	ND1-CE1-NE2	7.46	115.86	108.40
3	K	472	GLN	CA-C-O	-7.46	113.02	120.70
2	B	392	ASP	CA-C-N	7.46	130.27	120.28
2	B	392	ASP	C-N-CA	7.46	130.27	120.28
7	O	109	LYS	O-C-N	-7.46	113.70	120.71
7	O	332	THR	N-CA-C	-7.46	104.21	113.38
4	D	347	HIS	O-C-N	-7.45	115.44	123.42
7	G	73	HIS	CA-CB-CG	-7.45	106.35	113.80
2	J	269	HIS	CA-CB-CG	7.45	121.25	113.80
7	O	252	ASN	CA-C-N	7.45	135.77	121.54
7	O	252	ASN	C-N-CA	7.45	135.77	121.54
5	M	128	ILE	CA-C-N	7.45	131.99	120.60
5	M	128	ILE	C-N-CA	7.45	131.99	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	109	VAL	N-CA-CB	7.44	121.74	110.58
6	F	325	THR	O-C-N	-7.43	114.24	122.12
7	G	357	ARG	NE-CZ-NH2	-7.43	112.51	119.20
8	H	293	THR	N-CA-CB	7.43	122.22	110.55
1	A	272	LYS	CA-C-N	7.43	130.24	120.28
1	A	272	LYS	C-N-CA	7.43	130.24	120.28
8	H	334	PRO	CA-C-O	-7.43	112.40	121.31
4	L	296	ASN	CA-CB-CG	-7.43	105.17	112.60
4	L	503	ILE	N-CA-C	-7.42	106.26	113.53
1	A	309	ARG	CA-C-N	7.42	132.89	122.36
1	A	309	ARG	C-N-CA	7.42	132.89	122.36
1	A	279	LEU	CA-C-N	7.41	131.58	120.31
1	A	279	LEU	C-N-CA	7.41	131.58	120.31
8	H	104	VAL	CA-C-N	7.41	130.82	120.29
8	H	104	VAL	C-N-CA	7.41	130.82	120.29
1	A	339	THR	CA-C-O	-7.41	113.72	121.87
2	B	379	THR	CA-C-O	-7.40	112.40	120.24
4	D	258	THR	CA-CB-OG1	-7.40	98.50	109.60
4	D	304	ILE	N-CA-C	-7.39	105.93	113.10
3	K	98	VAL	O-C-N	7.39	129.15	121.91
8	P	506	TRP	O-C-N	7.39	129.68	122.07
6	N	218	HIS	CA-C-N	7.38	127.02	119.19
6	N	218	HIS	C-N-CA	7.38	127.02	119.19
8	P	193	ASP	CA-CB-CG	-7.38	105.22	112.60
3	K	438	ARG	N-CA-C	-7.38	103.26	111.82
8	P	155	ARG	N-CA-C	-7.38	104.52	113.97
2	J	101	SER	N-CA-C	7.38	118.97	111.07
1	A	495	PRO	CA-C-O	-7.38	112.86	121.86
3	K	393	ASP	CA-CB-CG	-7.38	105.22	112.60
5	M	477	VAL	O-C-N	-7.38	114.23	121.83
1	A	397	CYS	N-CA-C	7.37	119.32	111.28
5	M	494	LEU	N-CA-C	-7.37	104.81	113.88
1	I	238	ASP	N-CA-CB	7.37	121.16	109.51
8	P	271	GLY	CA-C-N	7.37	131.51	120.31
8	P	271	GLY	C-N-CA	7.37	131.51	120.31
2	B	245	ASP	CA-CB-CG	-7.37	105.23	112.60
5	E	293	LYS	CA-C-N	7.36	130.15	120.28
5	E	293	LYS	C-N-CA	7.36	130.15	120.28
6	N	449	LYS	O-C-N	7.36	130.54	122.15
8	H	477	ASN	N-CA-C	-7.36	98.44	108.38
5	E	212	GLU	CA-C-N	7.36	127.70	122.33
5	E	212	GLU	C-N-CA	7.36	127.70	122.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	M	302	CYS	CA-C-N	7.35	130.47	120.54
5	M	302	CYS	C-N-CA	7.35	130.47	120.54
2	B	446	LEU	CA-C-O	-7.35	111.73	118.79
1	A	209	MET	CG-SD-CE	-7.34	84.74	100.90
2	B	200	HIS	ND1-CE1-NE2	7.34	115.74	108.40
3	K	492	GLU	CA-C-N	7.34	130.12	120.28
3	K	492	GLU	C-N-CA	7.34	130.12	120.28
4	D	315	HIS	CE1-NE2-CD2	-7.34	101.66	109.00
8	P	328	VAL	CA-C-O	7.34	127.62	119.92
5	M	128	ILE	CA-CB-CG1	-7.34	97.93	110.40
2	J	346	CYS	O-C-N	-7.33	114.89	123.25
8	H	214	SER	CA-C-N	7.33	131.28	120.87
8	H	214	SER	C-N-CA	7.33	131.28	120.87
3	K	138	LYS	CA-C-O	-7.33	112.65	120.42
2	J	440	ALA	N-CA-C	7.33	119.27	111.28
3	K	223	ASP	CA-C-N	7.33	131.66	122.43
3	K	223	ASP	C-N-CA	7.33	131.66	122.43
2	B	73	ASN	CA-CB-CG	-7.32	105.28	112.60
2	B	122	HIS	CA-C-O	-7.32	112.68	120.88
8	H	418	GLU	CA-C-N	7.32	130.09	120.28
8	H	418	GLU	C-N-CA	7.32	130.09	120.28
8	P	373	SER	N-CA-C	-7.32	98.61	109.81
1	A	312	LEU	CA-C-N	7.31	130.08	120.28
1	A	312	LEU	C-N-CA	7.31	130.08	120.28
5	M	230	VAL	N-CA-C	-7.31	97.59	108.85
6	N	245	ASN	CA-CB-CG	7.31	119.91	112.60
7	O	29	CYS	CA-C-N	7.31	130.08	120.28
7	O	29	CYS	C-N-CA	7.31	130.08	120.28
5	E	225	ILE	O-C-N	7.31	130.60	123.14
5	E	54	PRO	N-CA-C	-7.31	105.21	114.35
7	G	316	GLU	N-CA-CB	7.30	120.97	110.16
1	A	15	GLU	N-CA-C	-7.30	103.40	111.36
7	G	415	GLU	N-CA-C	7.30	120.29	111.82
6	N	518	VAL	N-CA-CB	7.30	119.27	111.46
5	M	345	PHE	CA-CB-CG	7.29	121.09	113.80
6	N	324	LEU	N-CA-CB	7.29	120.59	110.01
4	D	468	ASN	CA-CB-CG	-7.29	105.31	112.60
3	K	484	THR	N-CA-C	-7.29	104.36	113.55
1	A	333	ASN	CA-CB-CG	-7.29	105.31	112.60
5	M	334	ALA	N-CA-C	7.29	118.87	111.07
7	G	216	PHE	CA-CB-CG	-7.29	106.52	113.80
2	J	298	ASN	OD1-CG-ND2	7.28	129.88	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	255	ALA	CA-C-N	7.28	128.94	119.84
4	D	255	ALA	C-N-CA	7.28	128.94	119.84
5	E	451	PHE	O-C-N	-7.27	113.86	122.15
5	M	331	GLU	CB-CG-CD	-7.27	100.24	112.60
3	C	472	GLN	N-CA-C	7.26	118.98	111.14
7	O	368	LYS	N-CA-C	-7.26	103.51	112.88
3	C	188	ASN	CA-CB-CG	7.26	119.86	112.60
1	I	351	VAL	N-CA-C	-7.26	95.46	106.42
5	M	474	MET	CB-CA-C	-7.26	98.74	110.79
6	N	463	LEU	O-C-N	-7.26	114.42	122.12
4	L	409	LEU	N-CA-C	-7.25	103.31	111.14
8	P	267	ASN	N-CA-C	-7.25	103.46	111.36
6	F	327	ALA	N-CA-C	7.25	118.97	111.14
7	G	316	GLU	CA-C-N	7.25	130.30	120.44
7	G	316	GLU	C-N-CA	7.25	130.30	120.44
4	L	428	PRO	CA-C-O	-7.25	109.22	118.86
4	D	510	GLN	CA-C-N	7.25	127.67	119.92
4	D	510	GLN	C-N-CA	7.25	127.67	119.92
2	J	265	ALA	CA-C-N	7.25	129.99	120.28
2	J	265	ALA	C-N-CA	7.25	129.99	120.28
3	K	167	ARG	CG-CD-NE	-7.25	96.06	112.00
4	D	347	HIS	CA-CB-CG	7.24	121.04	113.80
5	M	120	ALA	CA-C-N	7.24	130.57	120.29
5	M	120	ALA	C-N-CA	7.24	130.57	120.29
4	D	277	ARG	O-C-N	7.24	130.40	122.15
3	C	467	ARG	CA-C-N	7.24	129.98	120.28
3	C	467	ARG	C-N-CA	7.24	129.98	120.28
8	H	115	ALA	N-CA-C	7.24	119.17	111.28
5	M	503	GLN	N-CA-C	-7.23	103.61	113.30
1	I	390	ARG	NE-CZ-NH2	7.22	125.70	119.20
5	M	243	VAL	N-CA-C	-7.22	97.76	108.45
4	L	336	ILE	N-CA-C	7.22	118.01	110.72
1	A	405	SER	CA-C-N	7.22	130.54	120.29
1	A	405	SER	C-N-CA	7.22	130.54	120.29
8	H	480	LEU	N-CA-C	-7.22	104.73	113.97
2	J	426	ASN	OD1-CG-ND2	7.22	129.82	122.60
4	L	480	LEU	CA-C-N	7.22	130.68	120.28
4	L	480	LEU	C-N-CA	7.22	130.68	120.28
7	O	126	ARG	CA-C-N	7.22	129.83	120.44
7	O	126	ARG	C-N-CA	7.22	129.83	120.44
3	K	371	ALA	N-CA-C	-7.21	105.66	114.75
7	O	381	PHE	CA-C-N	7.21	130.66	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	381	PHE	C-N-CA	7.21	130.66	120.28
8	P	501	TYR	CA-C-N	7.21	131.26	120.31
8	P	501	TYR	C-N-CA	7.21	131.26	120.31
1	A	357	CYS	N-CA-CB	7.20	122.66	110.49
3	C	300	ALA	N-CA-C	7.20	119.13	111.28
8	H	126	SER	N-CA-C	7.20	120.17	111.82
1	I	88	ASP	N-CA-C	-7.20	97.21	109.24
6	F	155	SER	CA-C-N	7.20	131.25	120.31
6	F	155	SER	C-N-CA	7.20	131.25	120.31
8	P	208	LEU	O-C-N	-7.20	114.33	122.75
2	B	246	THR	N-CA-C	-7.19	103.37	111.14
3	K	438	ARG	NE-CZ-NH2	-7.19	112.73	119.20
6	N	417	ALA	O-C-N	7.19	129.75	122.12
8	P	200	ASP	N-CA-C	-7.19	101.73	111.87
7	O	19	ILE	CA-C-O	-7.19	112.74	118.85
7	G	300	THR	N-CA-C	-7.19	103.98	112.89
2	J	148	HIS	N-CA-C	-7.19	103.15	113.21
7	O	63	ALA	CA-C-O	7.19	128.04	120.42
2	B	378	ALA	N-CA-C	-7.18	103.53	114.16
6	F	203	ASP	N-CA-C	-7.18	98.15	109.50
6	N	458	ASP	CA-CB-CG	-7.18	105.42	112.60
3	C	379	ALA	N-CA-C	-7.18	102.55	113.89
6	N	161	HIS	ND1-CE1-NE2	7.17	115.57	108.40
3	K	518	ARG	CD-NE-CZ	-7.17	114.37	124.40
7	G	470	GLN	CB-CG-CD	-7.16	100.42	112.60
8	H	104	VAL	N-CA-CB	7.16	118.93	110.55
5	M	93	GLU	CA-C-N	7.16	129.75	120.44
5	M	93	GLU	C-N-CA	7.16	129.75	120.44
8	P	464	ILE	CA-C-N	7.16	129.87	120.28
8	P	464	ILE	C-N-CA	7.16	129.87	120.28
6	N	115	HIS	CA-C-O	-7.16	113.54	120.19
4	D	139	LYS	CA-C-N	7.15	130.58	120.28
4	D	139	LYS	C-N-CA	7.15	130.58	120.28
7	O	477	VAL	N-CA-CB	7.15	120.47	111.46
4	L	153	ARG	NE-CZ-NH2	7.15	125.63	119.20
1	A	118	ILE	CA-C-N	7.15	129.86	120.28
1	A	118	ILE	C-N-CA	7.15	129.86	120.28
5	E	299	LEU	N-CA-C	-7.15	97.56	109.07
6	F	270	ARG	CA-C-O	-7.15	111.75	119.97
7	G	53	ARG	N-CA-C	-7.14	104.60	113.38
6	N	58	LYS	N-CA-C	-7.14	104.72	113.50
7	G	273	ILE	O-C-N	7.13	129.18	121.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	H	36	CYS	CA-C-N	7.13	129.71	120.44
8	H	36	CYS	C-N-CA	7.13	129.71	120.44
1	I	378	ARG	NE-CZ-NH2	-7.13	112.78	119.20
8	P	198	ASN	CA-C-N	7.13	131.88	120.82
8	P	198	ASN	C-N-CA	7.13	131.88	120.82
6	N	196	MET	CG-SD-CE	-7.13	85.21	100.90
2	B	151	ASP	CA-CB-CG	7.13	119.73	112.60
7	O	78	THR	N-CA-C	-7.13	103.59	111.36
5	E	442	THR	CA-C-N	7.13	130.16	120.54
5	E	442	THR	C-N-CA	7.13	130.16	120.54
5	M	477	VAL	CA-C-O	7.12	128.40	120.85
3	C	455	CYS	N-CA-C	7.12	119.12	111.36
4	D	398	ILE	CB-CA-C	-7.12	102.40	112.22
8	H	272	GLU	O-C-N	7.12	129.66	122.12
6	N	224	ARG	NE-CZ-NH2	7.12	125.61	119.20
3	C	275	ILE	N-CA-CB	7.12	120.22	110.54
6	N	398	VAL	CA-C-N	7.11	129.81	120.28
6	N	398	VAL	C-N-CA	7.11	129.81	120.28
6	N	369	PRO	CA-C-N	7.11	131.12	120.17
6	N	369	PRO	C-N-CA	7.11	131.12	120.17
1	I	400	LYS	CA-C-N	7.11	130.38	120.29
1	I	400	LYS	C-N-CA	7.11	130.38	120.29
3	K	194	ASP	CA-CB-CG	7.11	119.71	112.60
2	B	506	SER	N-CA-C	7.11	119.11	111.36
4	D	441	ARG	N-CA-C	7.11	120.06	111.82
4	D	481	ARG	NE-CZ-NH1	-7.11	114.39	121.50
1	A	383	PHE	CA-CB-CG	-7.10	106.70	113.80
8	H	384	LEU	N-CA-C	-7.10	103.62	111.36
1	I	437	ALA	O-C-N	7.10	129.38	122.07
3	C	132	ASP	CA-CB-CG	-7.10	105.50	112.60
7	G	508	GLU	CA-C-N	7.09	129.79	120.28
7	G	508	GLU	C-N-CA	7.09	129.79	120.28
2	J	202	ILE	N-CA-CB	7.09	119.50	110.99
7	O	327	GLY	CA-C-N	7.09	135.31	121.41
7	O	327	GLY	C-N-CA	7.09	135.31	121.41
5	M	207	GLU	N-CA-C	-7.09	103.80	113.30
5	E	522	GLN	OE1-CD-NE2	7.09	129.69	122.60
4	D	464	THR	N-CA-CB	7.09	120.54	110.12
1	I	40	GLY	CA-C-O	-7.09	113.03	122.24
8	P	22	PHE	CA-C-O	-7.08	113.39	121.40
1	A	393	HIS	CE1-NE2-CD2	-7.08	101.92	109.00
4	L	456	ASP	CA-C-N	7.08	130.35	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	456	ASP	C-N-CA	7.08	130.35	120.29
5	M	343	PRO	N-CA-CB	7.08	111.37	103.44
2	J	314	HIS	CB-CG-CD2	-7.08	122.00	131.20
6	N	95	ASN	CA-C-N	7.08	130.16	120.46
6	N	95	ASN	C-N-CA	7.08	130.16	120.46
3	C	226	HIS	CG-CD2-NE2	7.08	114.28	107.20
3	K	61	ASN	N-CA-C	-7.08	104.22	112.92
6	F	206	LEU	O-C-N	-7.07	115.28	123.27
8	H	477	ASN	OD1-CG-ND2	7.07	129.67	122.60
2	B	32	ALA	CA-C-N	7.07	130.46	120.42
2	B	32	ALA	C-N-CA	7.07	130.46	120.42
1	I	366	ASN	CA-CB-CG	-7.07	105.53	112.60
3	K	385	SER	N-CA-C	7.07	119.07	111.36
2	B	425	ALA	CA-C-N	7.06	129.74	120.28
2	B	425	ALA	C-N-CA	7.06	129.74	120.28
7	G	459	ASN	CA-C-N	7.06	130.45	120.42
7	G	459	ASN	C-N-CA	7.06	130.45	120.42
5	M	105	GLY	CA-C-N	7.06	129.74	120.28
5	M	105	GLY	C-N-CA	7.06	129.74	120.28
2	J	269	HIS	N-CA-CB	7.06	120.46	109.94
3	K	347	ALA	CA-C-O	7.06	128.07	120.38
1	I	438	ILE	CA-C-O	-7.06	113.37	120.85
6	N	447	ILE	N-CA-CB	-7.06	106.06	110.50
7	O	77	LYS	CA-C-N	7.05	130.31	120.29
7	O	77	LYS	C-N-CA	7.05	130.31	120.29
2	B	314	HIS	CE1-NE2-CD2	-7.05	101.95	109.00
4	D	444	SER	N-CA-CB	7.05	122.41	110.49
2	B	95	VAL	N-CA-C	-7.05	104.97	111.67
5	E	115	ALA	CA-C-N	7.05	129.73	120.28
5	E	115	ALA	C-N-CA	7.05	129.73	120.28
7	G	205	LEU	N-CA-CB	7.05	120.92	110.49
2	J	178	HIS	CA-CB-CG	7.05	120.85	113.80
7	G	434	LEU	CA-C-N	7.05	130.12	120.46
7	G	434	LEU	C-N-CA	7.05	130.12	120.46
3	K	150	ASP	CA-CB-CG	-7.05	105.55	112.60
8	H	258	LEU	N-CA-C	-7.04	95.80	110.80
2	B	522	LYS	N-CA-C	-7.04	97.74	109.07
3	C	257	GLU	CA-C-N	7.04	131.17	122.37
3	C	257	GLU	C-N-CA	7.04	131.17	122.37
4	D	258	THR	N-CA-C	-7.04	103.71	112.72
8	P	168	ILE	CA-C-N	7.03	129.70	120.28
8	P	168	ILE	C-N-CA	7.03	129.70	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	94	GLY	CA-C-N	7.03	129.70	120.28
3	C	94	GLY	C-N-CA	7.03	129.70	120.28
5	E	270	SER	CA-C-N	7.03	130.40	120.42
5	E	270	SER	C-N-CA	7.03	130.40	120.42
5	E	486	ASN	OD1-CG-ND2	7.03	129.63	122.60
6	N	71	HIS	CA-C-N	7.03	126.64	119.19
6	N	71	HIS	C-N-CA	7.03	126.64	119.19
3	C	384	LEU	CA-C-N	7.02	129.69	120.28
3	C	384	LEU	C-N-CA	7.02	129.69	120.28
3	K	437	TYR	CA-C-N	7.02	130.98	120.31
3	K	437	TYR	C-N-CA	7.02	130.98	120.31
6	F	53	ASP	CA-C-O	-7.01	113.68	121.89
6	F	495	TRP	CB-CG-CD2	-7.01	116.98	126.80
5	M	312	HIS	CE1-NE2-CD2	-7.01	101.99	109.00
7	O	24	SER	CA-C-O	-7.00	112.99	120.42
1	A	38	PRO	N-CA-C	-7.00	106.59	114.92
3	K	486	THR	CA-C-N	7.00	130.81	120.87
3	K	486	THR	C-N-CA	7.00	130.81	120.87
8	H	459	LYS	CA-C-N	7.00	129.66	120.28
8	H	459	LYS	C-N-CA	7.00	129.66	120.28
2	J	91	GLN	CA-CB-CG	-7.00	100.10	114.10
6	N	293	ASN	N-CA-CB	7.00	121.84	110.43
4	D	204	ASP	CA-CB-CG	-7.00	105.60	112.60
2	B	263	LYS	CA-C-N	7.00	130.40	120.53
2	B	263	LYS	C-N-CA	7.00	130.40	120.53
7	G	321	ARG	CD-NE-CZ	-6.99	114.62	124.40
2	J	338	PRO	N-CA-C	-6.99	105.74	114.68
3	K	101	LEU	CA-C-O	-6.99	113.48	120.82
5	E	250	ILE	CA-C-O	-6.99	112.48	120.65
8	H	401	VAL	CA-C-N	6.99	134.88	121.54
8	H	401	VAL	C-N-CA	6.99	134.88	121.54
2	J	43	LEU	CA-C-O	-6.98	114.15	121.55
6	F	472	GLU	CA-C-O	6.98	127.89	120.70
2	J	30	ILE	CA-C-N	6.98	127.55	119.94
2	J	30	ILE	C-N-CA	6.98	127.55	119.94
1	I	61	ILE	O-C-N	6.98	128.92	121.94
3	K	175	ILE	N-CA-CB	6.97	118.71	110.55
3	C	255	ASP	N-CA-C	-6.97	105.71	114.56
3	C	35	ASP	O-C-N	6.97	129.25	122.07
5	E	330	ILE	CA-C-O	-6.97	113.25	120.71
7	G	358	TYR	CA-C-O	6.97	127.76	120.30
1	A	231	ASN	N-CA-CB	6.97	122.27	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	393	HIS	N-CA-CB	6.96	120.36	110.12
3	K	392	GLN	O-C-N	6.96	130.37	122.22
2	B	157	GLN	CA-C-N	6.96	129.49	120.44
2	B	157	GLN	C-N-CA	6.96	129.49	120.44
3	C	276	GLN	CA-C-O	-6.96	113.17	120.55
4	L	189	ASN	CA-C-N	6.96	129.49	120.44
4	L	189	ASN	C-N-CA	6.96	129.49	120.44
6	N	303	ASP	CA-C-O	-6.96	113.53	120.70
2	J	485	ILE	N-CA-C	-6.96	98.41	108.36
8	P	434	GLU	CA-C-N	6.96	129.91	120.38
8	P	434	GLU	C-N-CA	6.96	129.91	120.38
5	E	410	ARG	CA-C-N	6.96	130.17	120.29
5	E	410	ARG	C-N-CA	6.96	130.17	120.29
1	A	197	ILE	N-CA-C	-6.95	98.11	108.12
1	I	524	ILE	N-CA-C	-6.95	103.70	110.72
4	D	206	ARG	N-CA-C	-6.95	104.68	113.02
5	E	256	GLU	CA-C-O	-6.95	110.64	120.16
8	H	339	PRO	CA-C-N	6.95	129.89	122.11
8	H	339	PRO	C-N-CA	6.95	129.89	122.11
8	H	399	PHE	CA-CB-CG	-6.95	106.85	113.80
3	K	377	ARG	CA-C-N	6.95	128.62	122.43
3	K	377	ARG	C-N-CA	6.95	128.62	122.43
5	M	519	LEU	N-CA-CB	6.95	120.33	110.12
7	O	122	ILE	CA-CB-CG1	6.95	122.21	110.40
7	G	491	PHE	CA-CB-CG	-6.95	106.86	113.80
2	J	427	ARG	N-CA-C	6.95	118.74	111.03
7	O	157	LYS	CA-C-N	6.95	129.59	120.28
7	O	157	LYS	C-N-CA	6.95	129.59	120.28
1	A	380	ALA	N-CA-C	-6.94	106.71	114.62
4	D	256	PRO	O-C-N	6.94	132.01	122.64
5	E	513	LYS	CA-C-O	-6.94	113.06	120.42
8	H	36	CYS	N-CA-C	-6.94	103.80	111.36
7	G	458	THR	CA-C-N	6.93	129.57	120.28
7	G	458	THR	C-N-CA	6.93	129.57	120.28
8	H	44	ARG	N-CA-C	-6.93	102.09	111.87
5	M	82	ASP	N-CA-C	-6.93	100.14	110.06
4	D	207	ASP	N-CA-C	-6.93	106.02	114.75
1	A	46	VAL	N-CA-CB	6.92	118.70	110.95
6	F	46	MET	N-CA-C	-6.92	98.79	109.52
1	I	459	ASP	O-C-N	6.92	131.79	122.59
2	J	245	ASP	CA-CB-CG	-6.91	105.69	112.60
3	K	477	THR	N-CA-C	-6.91	102.97	111.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	458	ASP	CA-C-O	-6.91	113.06	121.36
1	I	382	ASP	CA-C-N	6.91	129.54	120.28
1	I	382	ASP	C-N-CA	6.91	129.54	120.28
4	D	92	VAL	N-CA-CB	6.91	119.94	110.54
5	M	488	ALA	N-CA-CB	6.91	122.17	110.49
3	K	467	ARG	CA-C-N	6.91	130.81	120.31
3	K	467	ARG	C-N-CA	6.91	130.81	120.31
3	C	383	ILE	CA-C-N	6.91	129.42	120.44
3	C	383	ILE	C-N-CA	6.91	129.42	120.44
7	O	33	ALA	N-CA-C	6.91	118.81	111.28
1	I	188	PRO	N-CA-C	6.90	122.51	111.26
6	F	489	ALA	CA-C-N	6.90	129.53	120.28
6	F	489	ALA	C-N-CA	6.90	129.53	120.28
4	L	352	THR	N-CA-CB	6.90	120.12	109.97
7	O	376	GLY	N-CA-C	-6.90	102.61	112.55
8	P	482	ILE	CA-C-N	6.90	133.19	122.49
8	P	482	ILE	C-N-CA	6.90	133.19	122.49
6	F	498	TYR	CA-C-N	6.90	130.09	120.29
6	F	498	TYR	C-N-CA	6.90	130.09	120.29
4	L	118	ASP	CA-CB-CG	6.90	119.50	112.60
5	E	123	LEU	N-CA-CB	6.90	120.37	110.16
7	O	462	ASN	CA-CB-CG	6.90	119.50	112.60
8	P	471	HIS	CA-CB-CG	6.90	120.70	113.80
6	F	346	HIS	CA-CB-CG	6.89	120.69	113.80
7	G	466	ALA	N-CA-CB	6.88	120.35	110.16
5	E	257	PRO	N-CA-C	6.88	119.10	110.70
8	P	279	GLN	N-CA-C	6.88	118.86	111.36
8	P	218	LEU	N-CA-C	-6.88	99.42	109.18
6	F	322	GLU	CA-C-N	6.87	129.49	120.28
6	F	322	GLU	C-N-CA	6.87	129.49	120.28
2	J	35	ILE	N-CA-CB	6.87	120.89	110.58
4	D	49	ARG	NE-CZ-NH2	6.87	125.39	119.20
5	E	130	PRO	N-CA-C	-6.87	104.63	114.18
5	E	433	VAL	CA-C-N	6.87	129.49	120.28
5	E	433	VAL	C-N-CA	6.87	129.49	120.28
4	D	329	GLU	CA-C-N	6.87	130.04	120.29
4	D	329	GLU	C-N-CA	6.87	130.04	120.29
8	H	330	ALA	O-C-N	6.87	130.63	122.94
1	I	176	VAL	O-C-N	6.87	128.90	121.83
4	L	501	SER	CA-C-N	6.87	130.58	120.90
4	L	501	SER	C-N-CA	6.87	130.58	120.90
2	B	202	ILE	CA-C-O	-6.86	112.93	120.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	146	ASP	N-CA-C	-6.86	102.51	111.71
7	O	48	LEU	CA-C-O	6.86	127.52	120.24
3	C	111	HIS	CE1-NE2-CD2	-6.86	102.14	109.00
4	D	93	GLU	CA-C-N	6.86	129.47	120.28
4	D	93	GLU	C-N-CA	6.86	129.47	120.28
5	M	445	GLN	OE1-CD-NE2	6.86	129.46	122.60
5	M	484	GLU	N-CA-C	6.86	119.77	111.40
6	N	12	GLU	N-CA-CB	6.86	120.17	110.36
7	O	24	SER	O-C-N	6.86	129.97	122.15
8	H	283	ILE	CA-C-N	6.86	130.02	120.29
8	H	283	ILE	C-N-CA	6.86	130.02	120.29
4	D	151	MET	CG-SD-CE	-6.85	85.83	100.90
6	N	108	LEU	CA-C-N	6.85	129.75	120.44
6	N	108	LEU	C-N-CA	6.85	129.75	120.44
5	E	97	SER	CB-CA-C	-6.84	99.43	110.79
3	C	129	ALA	CA-C-N	6.84	129.45	120.28
3	C	129	ALA	C-N-CA	6.84	129.45	120.28
2	J	179	PHE	CB-CG-CD1	-6.84	109.07	120.70
5	E	147	HIS	ND1-CE1-NE2	6.84	115.24	108.40
4	D	508	VAL	N-CA-CB	6.83	120.85	112.10
1	I	356	ILE	CB-CA-C	6.83	120.30	110.33
3	C	226	HIS	CE1-NE2-CD2	-6.83	102.17	109.00
5	E	271	VAL	N-CA-C	-6.83	103.82	110.72
8	H	263	GLU	CA-C-O	6.83	127.78	119.31
3	K	325	ARG	CA-C-N	6.83	129.72	120.44
3	K	325	ARG	C-N-CA	6.83	129.72	120.44
1	A	359	ASP	O-C-N	-6.82	115.62	123.33
3	C	139	LYS	O-C-N	6.82	129.93	122.15
6	F	97	LEU	N-CA-C	6.82	118.72	111.28
4	L	333	ILE	N-CA-C	-6.82	103.57	111.00
5	M	40	ALA	O-C-N	6.82	129.45	122.09
8	P	457	GLY	O-C-N	6.82	129.78	122.41
1	I	481	LYS	CA-C-N	6.82	130.49	120.95
1	I	481	LYS	C-N-CA	6.82	130.49	120.95
3	C	296	ILE	N-CA-C	-6.82	98.93	108.27
2	J	243	GLY	O-C-N	-6.82	117.21	123.96
5	M	55	ASN	N-CA-C	-6.82	104.71	113.16
1	A	85	GLU	CB-CG-CD	-6.81	101.02	112.60
4	D	143	LYS	CA-C-N	6.81	127.49	120.00
4	D	143	LYS	C-N-CA	6.81	127.49	120.00
8	P	108	ALA	CA-C-N	6.81	127.49	120.00
8	P	108	ALA	C-N-CA	6.81	127.49	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	319	ASP	CA-C-N	6.81	129.96	120.29
3	C	319	ASP	C-N-CA	6.81	129.96	120.29
1	I	514	LEU	CA-C-N	6.80	129.28	120.44
1	I	514	LEU	C-N-CA	6.80	129.28	120.44
3	K	412	GLY	CA-C-N	6.80	129.39	120.28
3	K	412	GLY	C-N-CA	6.80	129.39	120.28
2	B	431	LYS	CA-C-N	6.80	130.07	120.28
2	B	431	LYS	C-N-CA	6.80	130.07	120.28
3	C	86	THR	CA-C-N	6.80	129.94	120.29
3	C	86	THR	C-N-CA	6.80	129.94	120.29
3	C	165	ILE	CA-C-O	-6.79	112.39	121.02
3	C	198	TYR	N-CA-C	-6.79	105.12	113.41
3	K	191	LYS	CA-C-N	6.79	134.58	122.89
3	K	191	LYS	C-N-CA	6.79	134.58	122.89
6	N	87	ILE	O-C-N	6.79	129.21	121.94
6	N	267	ILE	CA-C-N	6.79	129.38	120.28
6	N	267	ILE	C-N-CA	6.79	129.38	120.28
8	P	448	ILE	O-C-N	-6.79	116.07	120.42
7	O	367	ALA	N-CA-CB	6.79	121.97	110.49
4	L	299	LEU	CB-CA-C	-6.79	99.28	110.14
5	E	501	MET	CA-C-N	6.79	134.01	121.52
5	E	501	MET	C-N-CA	6.79	134.01	121.52
1	I	222	SER	N-CA-C	-6.78	103.72	113.21
1	A	396	LEU	CB-CA-C	-6.78	100.19	110.90
2	B	460	ASP	CA-CB-CG	-6.78	105.82	112.60
5	E	335	ILE	N-CA-CB	6.78	120.74	110.58
7	G	449	LEU	N-CA-C	-6.78	103.97	111.36
4	L	455	ALA	O-C-N	-6.77	115.09	122.07
6	N	363	ILE	N-CA-CB	6.77	121.03	111.82
1	A	275	ILE	CA-C-N	6.76	129.90	120.29
1	A	275	ILE	C-N-CA	6.76	129.90	120.29
1	I	444	SER	CA-C-N	6.76	132.18	120.68
1	I	444	SER	C-N-CA	6.76	132.18	120.68
4	L	90	MET	N-CA-CB	6.76	120.06	110.12
5	M	469	ASN	OD1-CG-ND2	-6.76	115.83	122.60
7	G	363	GLY	CA-C-N	6.76	129.84	120.65
7	G	363	GLY	C-N-CA	6.76	129.84	120.65
5	E	182	HIS	CE1-NE2-CD2	-6.76	102.24	109.00
6	F	294	GLN	N-CA-C	-6.76	105.07	113.38
5	M	92	VAL	CB-CA-C	-6.76	103.32	111.97
6	N	408	VAL	CA-C-N	6.75	126.72	119.76
6	N	408	VAL	C-N-CA	6.75	126.72	119.76

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	156	GLU	CA-C-O	-6.75	113.39	120.55
3	C	123	ILE	CA-C-N	6.75	130.00	120.28
3	C	123	ILE	C-N-CA	6.75	130.00	120.28
8	H	108	ALA	N-CA-C	-6.75	103.85	111.14
1	I	8	PHE	O-C-N	-6.75	115.02	122.92
7	G	279	GLU	N-CA-C	6.75	118.29	111.07
7	G	366	LYS	O-C-N	6.75	129.08	121.93
1	I	153	LYS	N-CA-CB	-6.74	100.23	110.01
4	L	233	VAL	CA-C-N	6.74	130.28	120.71
4	L	233	VAL	C-N-CA	6.74	130.28	120.71
3	C	261	GLU	N-CA-C	-6.74	104.01	111.36
4	L	120	CYS	N-CA-C	6.74	119.49	111.33
8	P	283	ILE	CA-C-N	6.74	129.31	120.28
8	P	283	ILE	C-N-CA	6.74	129.31	120.28
2	J	501	ARG	CA-C-N	6.74	130.55	120.31
2	J	501	ARG	C-N-CA	6.74	130.55	120.31
1	A	58	GLY	N-CA-C	6.74	121.39	112.77
7	G	254	GLU	CA-C-N	6.74	131.33	122.51
7	G	254	GLU	C-N-CA	6.74	131.33	122.51
1	I	68	GLU	N-CA-C	-6.74	103.78	113.21
8	H	302	LEU	CA-C-N	6.73	129.85	120.29
8	H	302	LEU	C-N-CA	6.73	129.85	120.29
1	I	160	ILE	CB-CA-C	6.73	119.25	110.91
7	G	245	GLU	N-CA-C	-6.72	98.72	107.73
2	J	385	GLU	CA-C-O	6.72	127.55	120.42
3	K	210	GLU	N-CA-C	-6.72	104.70	113.17
5	E	254	PRO	N-CA-CB	6.72	109.67	103.15
3	C	381	LYS	CA-C-N	6.71	129.82	120.29
3	C	381	LYS	C-N-CA	6.71	129.82	120.29
7	G	121	ILE	CA-C-N	6.71	129.65	120.46
7	G	121	ILE	C-N-CA	6.71	129.65	120.46
6	N	180	LYS	O-C-N	6.71	130.51	122.26
7	G	495	PRO	CA-C-N	6.70	129.26	120.28
7	G	495	PRO	C-N-CA	6.70	129.26	120.28
1	I	391	SER	CA-C-N	6.70	129.81	120.29
1	I	391	SER	C-N-CA	6.70	129.81	120.29
4	D	376	ILE	N-CA-C	-6.70	97.97	107.75
1	I	474	ALA	N-CA-C	-6.70	103.30	113.89
3	K	248	LYS	N-CA-CB	6.70	119.82	110.17
5	M	534	ARG	N-CA-C	-6.70	96.30	108.02
2	B	161	ASN	N-CA-CB	6.70	119.96	110.12
7	O	125	PHE	N-CA-CB	6.70	119.72	110.01

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	17	ASP	CA-CB-CG	-6.69	105.91	112.60
6	N	240	GLU	CA-C-N	6.69	132.52	122.68
6	N	240	GLU	C-N-CA	6.69	132.52	122.68
5	M	97	SER	N-CA-CB	6.69	119.96	110.12
3	C	413	ALA	CA-C-N	6.69	129.79	120.29
3	C	413	ALA	C-N-CA	6.69	129.79	120.29
3	C	211	ASP	CA-CB-CG	-6.69	105.91	112.60
7	G	126	ARG	O-C-N	-6.69	115.03	122.12
6	F	147	THR	O-C-N	-6.68	114.05	122.27
7	G	432	GLN	CB-CG-CD	-6.68	101.24	112.60
8	H	202	ILE	CA-C-O	-6.68	113.27	120.36
8	P	56	VAL	CA-C-N	6.68	131.90	123.14
8	P	56	VAL	C-N-CA	6.68	131.90	123.14
3	C	215	LEU	N-CA-C	-6.68	99.15	109.24
4	D	309	LEU	N-CA-CB	6.68	123.08	111.39
6	N	164	LEU	CA-C-N	6.68	129.23	120.28
6	N	164	LEU	C-N-CA	6.68	129.23	120.28
3	C	385	SER	O-C-N	6.68	129.20	122.12
8	P	281	LYS	CB-CA-C	-6.68	99.49	110.85
1	A	247	LYS	CA-C-N	6.67	130.63	120.82
1	A	247	LYS	C-N-CA	6.67	130.63	120.82
6	F	416	VAL	O-C-N	6.67	128.34	121.87
6	N	470	HIS	CA-C-N	6.67	129.51	120.38
6	N	470	HIS	C-N-CA	6.67	129.51	120.38
4	L	243	LYS	N-CA-CB	6.67	121.76	110.49
6	N	402	ILE	CA-C-N	6.67	129.11	120.44
6	N	402	ILE	C-N-CA	6.67	129.11	120.44
2	B	287	ILE	CA-C-O	-6.67	114.76	121.49
2	B	466	ARG	O-C-N	6.66	129.18	122.12
3	C	273	GLU	N-CA-C	6.66	118.54	111.28
1	I	393	HIS	CE1-NE2-CD2	-6.66	102.34	109.00
2	B	257	ARG	O-C-N	-6.66	115.11	123.17
7	G	73	HIS	CB-CG-ND1	6.66	132.69	122.70
8	H	313	VAL	O-C-N	6.66	130.12	122.99
8	P	320	ASP	CA-CB-CG	-6.66	105.94	112.60
1	A	266	ARG	CD-NE-CZ	-6.66	115.08	124.40
4	D	287	VAL	CA-CB-CG2	-6.65	99.09	110.40
5	E	36	SER	CA-C-N	6.65	129.19	120.28
5	E	36	SER	C-N-CA	6.65	129.19	120.28
8	H	316	ASN	N-CA-C	-6.65	98.96	109.07
4	L	314	LEU	CB-CA-C	-6.65	99.75	110.79
8	P	339	PRO	O-C-N	6.65	131.08	123.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	467	LEU	N-CA-C	6.65	118.53	111.28
5	E	154	SER	CA-C-O	-6.65	111.01	120.51
6	N	428	SER	CA-C-N	6.64	129.86	120.42
6	N	428	SER	C-N-CA	6.64	129.86	120.42
6	F	163	GLU	CB-CG-CD	-6.64	101.31	112.60
3	C	160	ILE	CA-CB-CG2	-6.64	99.21	110.50
3	K	437	TYR	CA-C-O	6.64	127.60	119.97
2	B	86	ASP	CA-C-N	6.64	129.17	120.28
2	B	86	ASP	C-N-CA	6.64	129.17	120.28
2	J	151	ASP	N-CA-C	-6.64	99.10	109.72
6	N	64	LEU	CA-C-O	-6.64	113.85	120.82
1	A	201	HIS	ND1-CE1-NE2	6.63	115.03	108.40
1	I	425	ASN	N-CA-C	-6.63	104.13	111.36
3	K	34	ALA	CA-C-O	-6.63	113.52	120.55
8	P	333	LEU	O-C-N	-6.63	113.69	121.32
2	B	178	HIS	CA-C-N	6.63	129.17	120.28
2	B	178	HIS	C-N-CA	6.63	129.17	120.28
6	F	17	GLN	O-C-N	6.63	129.98	122.22
2	J	117	ILE	N-CA-CB	6.63	120.53	110.58
5	E	491	ILE	CA-C-N	6.63	130.53	121.05
5	E	491	ILE	C-N-CA	6.63	130.53	121.05
8	H	338	PRO	N-CA-C	6.63	118.79	110.70
5	M	425	ALA	CA-C-N	6.63	129.17	120.28
5	M	425	ALA	C-N-CA	6.63	129.17	120.28
7	O	446	PRO	CA-C-N	6.63	129.17	120.28
7	O	446	PRO	C-N-CA	6.63	129.17	120.28
7	G	36	VAL	N-CA-C	6.63	118.52	112.29
1	A	104	ALA	CA-C-N	6.63	129.16	120.28
1	A	104	ALA	C-N-CA	6.63	129.16	120.28
1	A	400	LYS	O-C-N	6.63	129.15	122.12
5	E	31	LEU	O-C-N	6.63	129.15	122.12
1	I	113	HIS	CA-CB-CG	-6.63	107.17	113.80
2	J	179	PHE	CB-CG-CD2	6.63	131.97	120.70
1	A	164	ASN	CA-C-N	6.63	128.69	120.34
1	A	164	ASN	C-N-CA	6.63	128.69	120.34
2	B	269	HIS	ND1-CE1-NE2	6.62	115.03	108.40
1	I	395	ALA	CA-C-N	6.62	129.16	120.28
1	I	395	ALA	C-N-CA	6.62	129.16	120.28
7	G	500	ILE	N-CA-CB	6.62	118.30	110.55
5	M	464	GLU	CA-C-N	6.62	129.69	120.29
5	M	464	GLU	C-N-CA	6.62	129.69	120.29
1	I	391	SER	N-CA-CB	6.62	119.85	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	163	ALA	CA-C-N	6.62	127.33	119.98
2	J	163	ALA	C-N-CA	6.62	127.33	119.98
2	B	497	PHE	CA-CB-CG	6.62	120.42	113.80
2	J	428	THR	CA-C-O	-6.62	111.09	120.16
5	M	224	LEU	N-CA-C	-6.62	98.41	109.07
7	O	521	LYS	CA-C-N	6.62	127.94	120.06
7	O	521	LYS	C-N-CA	6.62	127.94	120.06
1	A	201	HIS	CB-CG-ND1	-6.62	112.78	122.70
2	J	498	GLN	N-CA-C	6.62	118.49	111.28
8	P	305	ALA	CA-C-N	6.62	129.15	120.28
8	P	305	ALA	C-N-CA	6.62	129.15	120.28
8	H	80	HIS	O-C-N	-6.61	115.44	121.66
1	I	273	GLU	CA-C-N	6.61	129.68	120.29
1	I	273	GLU	C-N-CA	6.61	129.68	120.29
2	J	80	ALA	CA-C-N	6.61	129.14	120.28
2	J	80	ALA	C-N-CA	6.61	129.14	120.28
1	I	294	ASP	CA-C-N	6.61	129.03	120.44
1	I	294	ASP	C-N-CA	6.61	129.03	120.44
3	K	441	ALA	CA-C-N	6.61	130.35	120.31
3	K	441	ALA	C-N-CA	6.61	130.35	120.31
5	E	57	LEU	CA-C-N	6.61	132.03	120.87
5	E	57	LEU	C-N-CA	6.61	132.03	120.87
5	E	416	ASN	CA-C-O	6.61	127.53	120.46
2	B	84	LEU	N-CA-CB	6.60	119.83	110.12
2	B	244	MET	N-CA-C	-6.60	106.43	114.75
3	C	120	THR	CA-C-N	6.60	129.79	120.42
3	C	120	THR	C-N-CA	6.60	129.79	120.42
4	L	535	VAL	CA-C-O	-6.60	114.98	121.58
5	E	321	ALA	O-C-N	6.60	130.33	122.94
6	F	454	ASN	CA-CB-CG	-6.60	106.00	112.60
4	L	315	HIS	N-CA-CB	6.60	119.92	110.16
6	N	89	GLY	CA-C-N	6.60	133.69	121.62
6	N	89	GLY	C-N-CA	6.60	133.69	121.62
4	L	388	ILE	N-CA-C	-6.59	98.98	108.48
7	O	97	VAL	N-CA-CB	6.59	120.47	110.58
1	A	472	ASN	CA-CB-CG	-6.59	106.01	112.60
7	G	216	PHE	CA-C-N	6.59	129.01	120.44
7	G	216	PHE	C-N-CA	6.59	129.01	120.44
2	J	454	ALA	CB-CA-C	-6.59	98.02	110.67
1	A	62	LEU	N-CA-CB	6.59	120.02	110.20
5	M	264	HIS	CE1-NE2-CD2	-6.59	102.41	109.00
1	A	21	ASN	OD1-CG-ND2	-6.59	116.01	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	519	ILE	CB-CA-C	-6.59	104.17	111.35
7	G	346	GLN	N-CA-C	-6.58	104.97	114.12
3	C	143	PRO	CA-C-O	-6.58	113.93	121.56
3	C	164	ALA	N-CA-CB	6.58	121.61	110.49
7	G	228	GLN	OE1-CD-NE2	6.58	129.18	122.60
5	M	182	HIS	CA-C-N	6.58	131.70	120.72
5	M	182	HIS	C-N-CA	6.58	131.70	120.72
7	G	506	ALA	CA-C-O	-6.58	113.58	120.55
6	N	134	LEU	CA-C-N	6.58	130.30	120.31
6	N	134	LEU	C-N-CA	6.58	130.30	120.31
6	F	106	ALA	CA-C-N	6.57	129.09	120.28
6	F	106	ALA	C-N-CA	6.57	129.09	120.28
3	K	294	LYS	CB-CA-C	-6.57	99.68	110.85
1	A	27	SER	CA-C-N	6.57	129.46	120.46
1	A	27	SER	C-N-CA	6.57	129.46	120.46
2	B	437	GLU	CA-C-N	6.57	129.62	120.29
2	B	437	GLU	C-N-CA	6.57	129.62	120.29
8	H	515	ALA	O-C-N	-6.57	115.15	122.12
7	G	282	HIS	CE1-NE2-CD2	-6.57	102.43	109.00
4	L	285	ASN	OD1-CG-ND2	6.57	129.17	122.60
7	O	117	HIS	CA-C-N	6.57	128.05	119.84
7	O	117	HIS	C-N-CA	6.57	128.05	119.84
6	F	226	GLU	O-C-N	6.57	130.77	122.23
4	L	103	GLY	N-CA-C	-6.57	105.60	115.32
5	M	353	LEU	N-CA-C	-6.56	98.75	108.79
8	H	186	ALA	N-CA-C	-6.56	105.31	113.38
7	G	410	GLY	CA-C-N	6.56	128.97	120.44
7	G	410	GLY	C-N-CA	6.56	128.97	120.44
5	E	281	GLU	CB-CA-C	-6.56	99.70	110.85
5	M	59	LYS	CA-C-O	6.55	127.19	120.24
7	G	49	ILE	CA-C-N	6.55	131.31	123.19
7	G	49	ILE	C-N-CA	6.55	131.31	123.19
6	F	311	VAL	CA-C-O	6.55	127.54	120.53
6	N	123	PHE	CA-CB-CG	6.55	120.35	113.80
2	B	285	HIS	CE1-NE2-CD2	-6.55	102.45	109.00
7	O	266	ILE	CA-C-N	6.54	129.71	120.42
7	O	266	ILE	C-N-CA	6.54	129.71	120.42
2	B	245	ASP	CB-CA-C	-6.54	100.72	109.16
2	B	501	ARG	CA-C-O	-6.54	113.61	120.55
5	E	317	ASN	CA-CB-CG	-6.54	106.06	112.60
4	L	407	ASP	CA-CB-CG	-6.54	106.06	112.60
7	G	362	THR	N-CA-C	-6.54	99.21	108.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	M	163	GLU	N-CA-CB	6.54	118.14	110.42
4	D	413	ARG	CA-C-N	6.53	129.03	120.28
4	D	413	ARG	C-N-CA	6.53	129.03	120.28
7	G	341	VAL	N-CA-C	-6.53	106.63	112.90
3	K	278	LEU	N-CA-CB	6.53	119.54	110.07
3	K	434	GLN	N-CA-C	6.53	118.40	111.28
1	I	142	GLU	N-CA-C	-6.53	105.89	114.31
6	N	486	PRO	CA-C-O	-6.53	113.98	121.56
4	D	73	ASP	CA-C-N	6.53	127.18	120.00
4	D	73	ASP	C-N-CA	6.53	127.18	120.00
3	K	144	VAL	O-C-N	-6.53	115.79	123.04
3	K	439	ALA	CA-C-O	-6.53	113.50	120.42
7	O	406	VAL	N-CA-C	-6.53	99.69	108.96
7	O	345	CYS	N-CA-C	-6.53	99.73	108.74
3	C	357	ASP	CA-CB-CG	-6.52	106.08	112.60
3	K	150	ASP	CA-C-N	6.52	129.55	120.29
3	K	150	ASP	C-N-CA	6.52	129.55	120.29
6	F	482	ASN	OD1-CG-ND2	6.52	129.12	122.60
8	P	79	GLN	CA-C-O	6.52	126.31	119.14
4	D	161	GLU	CA-C-O	-6.52	113.51	120.42
2	J	44	GLY	CA-C-N	6.52	127.41	120.11
2	J	44	GLY	C-N-CA	6.52	127.41	120.11
3	K	341	ASP	CA-C-O	-6.52	113.13	120.43
2	B	132	GLU	CA-C-N	6.52	129.54	120.29
2	B	132	GLU	C-N-CA	6.52	129.54	120.29
5	E	131	ILE	CA-C-N	6.52	129.30	120.44
5	E	131	ILE	C-N-CA	6.52	129.30	120.44
1	I	113	HIS	CE1-NE2-CD2	-6.51	102.48	109.00
1	I	518	THR	O-C-N	6.51	129.58	122.15
3	K	308	ASN	CA-CB-CG	-6.51	106.09	112.60
2	B	428	THR	N-CA-C	6.51	124.20	109.81
8	H	501	TYR	CA-C-N	6.51	130.20	120.31
8	H	501	TYR	C-N-CA	6.51	130.20	120.31
5	M	239	MET	CA-C-N	6.51	126.53	119.89
5	M	239	MET	C-N-CA	6.51	126.53	119.89
5	E	121	GLU	CB-CG-CD	-6.51	101.54	112.60
2	B	420	ALA	CA-C-O	6.51	127.65	120.82
5	M	192	ALA	CA-C-O	-6.51	113.65	120.55
1	A	64	LEU	CA-C-O	6.50	127.31	120.42
1	A	370	ARG	CB-CA-C	-6.50	102.61	110.94
2	B	189	ARG	CA-C-O	-6.50	113.66	120.55
8	H	464	ILE	CA-C-N	6.50	129.00	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	H	464	ILE	C-N-CA	6.50	129.00	120.28
4	L	292	LYS	CA-C-N	6.50	128.99	120.28
4	L	292	LYS	C-N-CA	6.50	128.99	120.28
4	D	315	HIS	ND1-CE1-NE2	6.50	114.90	108.40
5	E	312	HIS	CA-CB-CG	6.50	120.30	113.80
7	G	121	ILE	O-C-N	-6.50	115.52	121.89
3	K	430	THR	N-CA-CB	6.50	121.47	110.49
5	M	144	ALA	CA-C-N	6.50	129.36	120.46
5	M	144	ALA	C-N-CA	6.50	129.36	120.46
5	M	256	GLU	CA-C-N	6.50	127.07	120.38
5	M	256	GLU	C-N-CA	6.50	127.07	120.38
3	K	82	GLU	CB-CA-C	-6.50	100.64	110.90
6	N	200	SER	CA-C-N	6.49	128.98	120.28
6	N	200	SER	C-N-CA	6.49	128.98	120.28
6	N	317	LYS	CA-C-N	6.49	130.18	120.31
6	N	317	LYS	C-N-CA	6.49	130.18	120.31
3	C	168	TRP	CA-C-N	6.49	128.88	120.44
3	C	168	TRP	C-N-CA	6.49	128.88	120.44
5	E	469	ASN	CA-C-O	-6.49	113.72	120.02
7	G	413	GLU	CA-C-N	6.49	128.98	120.28
7	G	413	GLU	C-N-CA	6.49	128.98	120.28
1	I	374	SER	N-CA-C	-6.49	96.80	108.48
3	K	111	HIS	CA-CB-CG	6.49	120.29	113.80
4	L	484	HIS	CA-C-N	6.49	128.97	120.28
4	L	484	HIS	C-N-CA	6.49	128.97	120.28
5	M	125	ASP	CA-C-N	6.49	130.17	120.31
5	M	125	ASP	C-N-CA	6.49	130.17	120.31
6	N	298	ASP	CA-C-N	6.49	126.06	119.19
6	N	298	ASP	C-N-CA	6.49	126.06	119.19
8	P	105	LEU	N-CA-CB	6.49	119.47	110.07
7	O	251	ASP	N-CA-CB	6.48	120.83	110.46
4	D	45	ALA	CA-C-N	6.48	128.97	120.28
4	D	45	ALA	C-N-CA	6.48	128.97	120.28
5	E	142	ARG	O-C-N	6.48	128.99	122.12
3	C	148	ASP	CA-CB-CG	-6.48	106.12	112.60
4	L	316	PHE	CA-C-N	6.48	128.96	120.28
4	L	316	PHE	C-N-CA	6.48	128.96	120.28
4	L	514	VAL	N-CA-CB	6.48	118.87	110.57
5	M	342	VAL	CA-C-N	6.48	125.92	118.85
5	M	342	VAL	C-N-CA	6.48	125.92	118.85
2	B	500	LYS	N-CA-C	6.48	118.42	111.36
3	C	257	GLU	N-CA-CB	6.48	122.16	111.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	207	GLY	CA-C-N	6.48	131.32	122.19
2	J	207	GLY	C-N-CA	6.48	131.32	122.19
3	K	488	VAL	N-CA-C	-6.48	99.80	108.35
6	F	504	LEU	CA-C-N	6.48	129.25	120.44
6	F	504	LEU	C-N-CA	6.48	129.25	120.44
6	N	370	ARG	N-CA-C	-6.47	102.82	113.50
1	A	386	ASP	CA-C-N	6.47	128.95	120.28
1	A	386	ASP	C-N-CA	6.47	128.95	120.28
1	A	392	LEU	CA-C-N	6.47	128.95	120.28
1	A	392	LEU	C-N-CA	6.47	128.95	120.28
6	F	115	HIS	CE1-NE2-CD2	-6.47	102.53	109.00
4	L	180	SER	CA-C-N	6.47	128.95	120.28
4	L	180	SER	C-N-CA	6.47	128.95	120.28
7	O	453	ALA	O-C-N	6.47	130.23	122.27
8	P	183	ILE	CA-C-N	6.47	129.48	120.29
8	P	183	ILE	C-N-CA	6.47	129.48	120.29
2	B	200	HIS	CA-CB-CG	6.47	120.27	113.80
8	P	21	HIS	CG-CD2-NE2	6.47	113.67	107.20
1	A	526	ARG	N-CA-C	6.47	117.99	111.07
7	G	219	THR	N-CA-C	-6.47	97.83	108.76
3	C	28	ASN	CA-C-N	6.46	129.47	120.29
3	C	28	ASN	C-N-CA	6.46	129.47	120.29
4	L	122	LYS	N-CA-C	-6.46	104.32	111.82
2	B	337	HIS	ND1-CE1-NE2	6.46	114.86	108.40
5	M	427	ILE	O-C-N	6.46	128.49	121.83
3	C	16	ARG	CD-NE-CZ	-6.46	115.36	124.40
1	A	504	PHE	N-CA-C	-6.46	99.59	109.41
2	B	148	HIS	CA-CB-CG	6.46	120.26	113.80
1	I	470	PHE	N-CA-C	-6.46	104.16	111.07
5	E	472	GLN	CA-C-N	6.46	129.46	120.29
5	E	472	GLN	C-N-CA	6.46	129.46	120.29
7	G	209	GLN	OE1-CD-NE2	6.46	129.06	122.60
8	H	486	VAL	CA-C-O	-6.46	111.30	119.95
2	J	265	ALA	O-C-N	-6.46	114.79	122.15
6	N	36	THR	CA-C-O	-6.46	113.71	120.55
8	P	376	VAL	N-CA-CB	6.46	117.76	110.72
8	P	430	CYS	N-CA-C	6.46	124.08	109.81
3	C	487	LEU	N-CA-CB	6.45	119.95	109.95
5	E	239	MET	N-CA-C	-6.45	101.39	110.29
2	B	440	ALA	CA-C-N	6.45	128.92	120.28
2	B	440	ALA	C-N-CA	6.45	128.92	120.28
3	C	440	VAL	N-CA-CB	6.45	120.26	110.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	359	ASP	N-CA-C	-6.45	98.86	108.99
7	G	76	ALA	CA-C-N	6.45	130.11	120.31
7	G	76	ALA	C-N-CA	6.45	130.11	120.31
7	G	100	LEU	CA-C-N	6.45	128.82	120.44
7	G	100	LEU	C-N-CA	6.45	128.82	120.44
1	I	263	ILE	CA-C-O	6.45	127.43	120.47
1	I	465	ALA	CB-CA-C	-6.45	100.76	110.88
6	N	77	ILE	CA-C-O	-6.45	113.50	120.47
6	N	468	ALA	N-CA-C	6.45	118.31	111.28
6	F	119	ILE	CA-CB-CG1	-6.45	99.44	110.40
7	O	16	SER	CA-C-O	-6.45	113.58	121.06
2	J	419	HIS	CB-CG-ND1	6.44	132.37	122.70
7	G	243	GLU	O-C-N	6.44	130.31	123.42
1	A	442	ALA	N-CA-C	6.44	118.30	111.28
7	G	318	ASP	CB-CA-C	-6.44	100.10	110.79
8	H	199	VAL	CB-CA-C	-6.44	103.79	111.65
4	L	496	ARG	N-CA-C	-6.44	104.63	114.16
1	I	381	ASN	N-CA-C	-6.44	98.50	108.42
5	M	414	ARG	NE-CZ-NH2	6.44	124.99	119.20
2	B	399	GLN	OE1-CD-NE2	-6.43	116.17	122.60
1	I	11	ARG	NE-CZ-NH2	-6.43	113.41	119.20
6	N	316	ALA	N-CA-C	-6.43	99.52	109.24
2	J	497	PHE	N-CA-C	6.43	117.95	111.07
4	L	533	ASP	CA-CB-CG	6.43	119.03	112.60
4	L	462	PRO	CA-C-N	6.43	129.19	120.44
4	L	462	PRO	C-N-CA	6.43	129.19	120.44
1	A	14	GLY	CA-C-N	6.43	129.42	120.29
1	A	14	GLY	C-N-CA	6.43	129.42	120.29
4	D	484	HIS	CE1-NE2-CD2	-6.43	102.57	109.00
4	L	418	LYS	N-CA-CB	6.43	121.35	110.49
3	K	75	PRO	CA-C-N	6.43	128.89	120.28
3	K	75	PRO	C-N-CA	6.43	128.89	120.28
7	O	46	ASP	CA-CB-CG	-6.43	106.17	112.60
3	K	215	LEU	N-CA-C	-6.42	97.59	108.26
5	M	264	HIS	N-CA-CB	6.42	119.52	109.69
7	G	445	ILE	N-CA-CB	6.42	115.46	110.45
2	B	391	HIS	CA-C-O	-6.42	113.74	120.55
3	C	437	TYR	CA-C-N	6.42	129.41	120.29
3	C	437	TYR	C-N-CA	6.42	129.41	120.29
6	N	95	ASN	CA-CB-CG	6.42	119.02	112.60
2	B	110	LEU	N-CA-C	6.42	119.09	111.71
4	D	279	GLU	CA-C-N	6.42	128.88	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	279	GLU	C-N-CA	6.42	128.88	120.28
2	B	347	LYS	N-CA-C	6.42	118.27	111.28
3	K	408	VAL	N-CA-C	6.42	116.02	108.96
5	E	509	THR	O-C-N	-6.41	115.29	122.86
1	I	92	SER	N-CA-C	6.41	118.35	111.36
2	B	130	TRP	CG-CD2-CE3	-6.41	127.49	133.90
2	J	255	ARG	CA-C-N	6.41	131.90	122.99
2	J	255	ARG	C-N-CA	6.41	131.90	122.99
6	F	115	HIS	ND1-CE1-NE2	6.41	114.81	108.40
8	P	91	HIS	CE1-NE2-CD2	-6.41	102.59	109.00
2	B	523	ALA	N-CA-C	-6.41	104.77	112.59
3	K	76	ALA	CB-CA-C	-6.41	100.16	110.79
5	M	312	HIS	ND1-CE1-NE2	6.41	114.81	108.40
6	N	137	VAL	CA-C-N	6.40	130.99	120.94
6	N	137	VAL	C-N-CA	6.40	130.99	120.94
1	A	97	ALA	O-C-N	6.40	128.91	122.12
3	C	85	ARG	CA-C-N	6.40	128.76	120.44
3	C	85	ARG	C-N-CA	6.40	128.76	120.44
6	F	412	GLY	CA-C-N	6.40	129.38	120.29
6	F	412	GLY	C-N-CA	6.40	129.38	120.29
2	J	89	ARG	N-CA-CB	6.40	119.63	110.16
7	O	283	HIS	CE1-NE2-CD2	-6.40	102.60	109.00
1	I	472	ASN	N-CA-CB	6.40	121.89	111.21
5	M	288	MET	CA-C-N	6.40	129.50	120.42
5	M	288	MET	C-N-CA	6.40	129.50	120.42
5	M	161	ASP	CA-C-N	6.39	129.14	120.38
5	M	161	ASP	C-N-CA	6.39	129.14	120.38
4	D	206	ARG	NE-CZ-NH1	6.39	127.89	121.50
8	H	446	GLU	CA-C-N	6.39	128.85	120.28
8	H	446	GLU	C-N-CA	6.39	128.85	120.28
1	I	310	ARG	N-CA-C	-6.39	103.36	111.92
2	J	419	HIS	ND1-CE1-NE2	6.39	114.79	108.40
5	E	225	ILE	N-CA-C	-6.39	99.26	108.53
4	L	322	ILE	CA-C-O	-6.39	113.58	120.36
7	O	431	GLN	CA-C-N	6.39	128.84	120.28
7	O	431	GLN	C-N-CA	6.39	128.84	120.28
6	F	341	PRO	CA-C-N	6.39	129.36	120.29
6	F	341	PRO	C-N-CA	6.39	129.36	120.29
5	M	99	ASP	CA-CB-CG	6.39	118.99	112.60
6	N	37	ASN	CA-CB-CG	-6.39	106.21	112.60
7	O	161	THR	CA-C-N	6.39	130.02	120.31
7	O	161	THR	C-N-CA	6.39	130.02	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	513	ALA	CA-C-N	6.38	129.49	120.42
3	K	513	ALA	C-N-CA	6.38	129.49	120.42
6	N	239	TYR	O-C-N	-6.38	115.60	123.33
8	P	469	ALA	CB-CA-C	-6.38	100.00	110.85
1	A	97	ALA	CA-C-N	6.38	129.35	120.29
1	A	97	ALA	C-N-CA	6.38	129.35	120.29
7	O	121	ILE	N-CA-C	6.38	117.13	110.62
2	B	46	LYS	N-CA-CB	6.38	119.87	110.56
1	I	207	GLU	CA-C-N	6.38	133.14	121.85
1	I	207	GLU	C-N-CA	6.38	133.14	121.85
2	B	314	HIS	ND1-CE1-NE2	6.38	114.78	108.40
1	I	512	LYS	N-CA-C	6.38	120.32	112.54
2	J	221	ASP	N-CA-CB	6.38	119.84	109.95
1	I	456	ALA	N-CA-C	-6.38	105.25	113.16
6	N	272	LYS	CA-C-N	6.38	128.82	120.28
6	N	272	LYS	C-N-CA	6.38	128.82	120.28
4	D	380	ALA	N-CA-CB	6.37	120.88	110.17
6	N	354	THR	N-CA-C	-6.37	96.87	108.02
4	D	224	VAL	N-CA-C	-6.37	99.22	108.71
1	I	361	LEU	N-CA-C	-6.37	99.35	109.23
3	K	166	SER	CA-C-N	6.37	129.34	120.29
3	K	166	SER	C-N-CA	6.37	129.34	120.29
3	K	281	ASP	CA-C-N	6.37	129.47	120.42
3	K	281	ASP	C-N-CA	6.37	129.47	120.42
4	L	466	ALA	CA-C-N	6.37	129.14	120.54
4	L	466	ALA	C-N-CA	6.37	129.14	120.54
6	N	488	VAL	O-C-N	-6.37	114.87	122.77
7	O	283	HIS	ND1-CE1-NE2	6.37	114.77	108.40
1	A	113	HIS	ND1-CE1-NE2	6.37	114.77	108.40
2	B	480	MET	N-CA-C	-6.37	105.09	112.92
5	E	537	GLY	CA-C-O	-6.37	112.05	118.86
6	F	314	ARG	NE-CZ-NH2	-6.37	113.47	119.20
8	H	443	GLU	O-C-N	-6.37	113.90	122.43
7	O	359	ASN	CA-C-O	-6.37	113.77	120.58
1	I	501	ALA	O-C-N	-6.37	114.12	122.59
6	F	38	LEU	N-CA-CB	6.36	119.51	109.71
3	K	142	ILE	CA-C-N	6.36	126.12	119.76
3	K	142	ILE	C-N-CA	6.36	126.12	119.76
3	K	426	SER	CA-C-N	6.36	129.09	120.44
3	K	426	SER	C-N-CA	6.36	129.09	120.44
2	B	470	SER	CA-C-O	6.36	127.16	120.42
1	A	122	ARG	NH1-CZ-NH2	-6.36	111.04	119.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	H	15	LEU	N-CA-C	-6.36	103.85	113.89
7	O	385	THR	O-C-N	-6.35	114.91	122.15
5	M	515	GLN	N-CA-C	6.35	118.20	111.28
6	N	23	ASN	CA-CB-CG	-6.35	106.25	112.60
8	P	268	PHE	N-CA-C	6.35	118.20	111.28
2	J	158	ASP	CA-C-N	6.35	128.78	120.28
2	J	158	ASP	C-N-CA	6.35	128.78	120.28
2	B	103	THR	N-CA-C	-6.35	104.44	111.36
5	M	331	GLU	CA-C-O	-6.35	114.16	120.82
4	D	281	ALA	N-CA-CB	-6.34	100.87	110.07
7	G	284	SER	N-CA-C	-6.34	104.29	111.14
7	O	314	VAL	O-C-N	-6.34	114.29	121.14
4	D	489	LYS	N-CA-CB	6.34	119.88	110.49
8	H	522	ASP	CA-C-O	6.34	129.58	120.51
2	B	235	ALA	O-C-N	6.34	130.34	122.86
8	H	267	ASN	CA-C-N	6.34	128.69	120.44
8	H	267	ASN	C-N-CA	6.34	128.69	120.44
1	I	166	ASP	CA-C-N	6.34	129.29	120.29
1	I	166	ASP	C-N-CA	6.34	129.29	120.29
8	P	275	LEU	O-C-N	6.34	128.60	122.07
1	I	233	LYS	CA-C-N	6.34	131.81	123.06
1	I	233	LYS	C-N-CA	6.34	131.81	123.06
3	K	259	THR	O-C-N	6.34	128.94	122.09
3	C	199	ALA	N-CA-C	6.34	119.66	110.28
7	G	120	ILE	CA-C-N	6.34	129.47	120.53
7	G	120	ILE	C-N-CA	6.34	129.47	120.53
3	C	112	PHE	CB-CA-C	-6.33	100.93	110.88
2	B	259	ASP	N-CA-C	-6.33	105.01	114.64
8	H	357	ASP	CA-C-O	6.33	127.89	119.59
4	L	318	ASN	CA-C-N	6.33	128.77	120.28
4	L	318	ASN	C-N-CA	6.33	128.77	120.28
1	A	239	PHE	CA-CB-CG	-6.33	107.47	113.80
2	B	172	LEU	N-CA-C	-6.33	97.31	110.80
2	B	245	ASP	CA-C-N	6.33	129.05	120.44
2	B	245	ASP	C-N-CA	6.33	129.05	120.44
3	C	325	ARG	NE-CZ-NH2	-6.33	113.50	119.20
1	I	459	ASP	CA-CB-CG	6.33	118.93	112.60
3	K	33	ILE	O-C-N	6.33	128.49	121.90
4	L	276	LEU	N-CA-C	-6.33	103.90	111.69
6	N	499	CYS	N-CA-C	6.33	118.18	111.28
5	M	185	MET	CG-SD-CE	-6.33	86.98	100.90
8	P	140	HIS	ND1-CE1-NE2	6.33	114.73	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	313	LYS	CA-C-N	6.33	128.66	120.44
1	A	313	LYS	C-N-CA	6.33	128.66	120.44
2	B	274	LYS	CA-C-N	6.33	128.76	120.28
2	B	274	LYS	C-N-CA	6.33	128.76	120.28
3	C	42	GLY	CA-C-N	6.33	126.53	119.32
3	C	42	GLY	C-N-CA	6.33	126.53	119.32
3	C	194	ASP	N-CA-C	-6.33	104.28	114.09
2	J	57	ARG	N-CA-C	-6.33	101.88	111.56
2	J	406	THR	N-CA-C	-6.33	99.06	108.99
1	I	263	ILE	O-C-N	-6.32	114.66	121.80
6	N	468	ALA	CB-CA-C	-6.32	100.29	110.79
5	E	513	LYS	CA-C-N	6.32	128.75	120.28
5	E	513	LYS	C-N-CA	6.32	128.75	120.28
5	E	537	GLY	N-CA-C	-6.32	106.04	114.95
6	F	196	MET	CA-C-N	6.32	130.83	122.30
6	F	196	MET	C-N-CA	6.32	130.83	122.30
6	F	343	CYS	N-CA-C	6.32	117.97	111.14
7	G	158	CYS	CB-CA-C	-6.32	100.11	110.85
2	J	229	PRO	CA-C-O	-6.32	114.15	121.86
3	K	334	ARG	O-C-N	-6.32	115.30	121.56
3	K	383	ILE	CA-C-O	-6.32	111.93	119.58
5	E	351	GLU	CB-CA-C	-6.32	100.30	110.79
2	B	193	SER	CA-C-O	-6.32	113.91	120.99
5	M	301	ILE	CA-CB-CG2	-6.32	99.76	110.50
5	E	176	LYS	O-C-N	6.32	126.39	120.71
8	H	332	ALA	N-CA-C	-6.31	96.97	108.02
4	L	330	ARG	CA-C-N	6.31	128.74	120.28
4	L	330	ARG	C-N-CA	6.31	128.74	120.28
7	G	474	TRP	N-CA-C	-6.31	103.76	112.03
3	K	379	ALA	N-CA-C	-6.31	105.41	113.23
6	F	445	LEU	CA-C-N	6.31	129.10	120.46
6	F	445	LEU	C-N-CA	6.31	129.10	120.46
2	J	434	VAL	N-CA-C	-6.31	104.35	110.72
4	D	49	ARG	NE-CZ-NH1	-6.31	115.19	121.50
7	G	486	ASP	CA-CB-CG	-6.31	106.29	112.60
3	K	34	ALA	CA-C-N	6.31	128.64	120.44
3	K	34	ALA	C-N-CA	6.31	128.64	120.44
1	I	93	VAL	CA-C-N	6.30	128.50	120.56
1	I	93	VAL	C-N-CA	6.30	128.50	120.56
1	I	505	GLU	O-C-N	-6.30	115.32	121.94
3	K	224	VAL	CA-C-N	6.30	132.08	122.37
3	K	224	VAL	C-N-CA	6.30	132.08	122.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	333	SER	CA-C-O	-6.30	113.74	120.42
8	H	240	ALA	N-CA-C	-6.30	98.72	109.24
6	F	203	ASP	CA-C-N	6.30	132.91	122.33
6	F	203	ASP	C-N-CA	6.30	132.91	122.33
1	I	190	TYR	CA-C-N	6.30	126.06	119.76
1	I	190	TYR	C-N-CA	6.30	126.06	119.76
2	J	141	LEU	N-CA-C	-6.30	104.50	111.36
4	L	455	ALA	N-CA-C	-6.30	104.33	111.07
5	M	386	PHE	N-CA-CB	6.30	120.22	110.21
5	E	302	CYS	CA-C-N	6.29	128.71	120.28
5	E	302	CYS	C-N-CA	6.29	128.71	120.28
1	I	242	GLN	OE1-CD-NE2	-6.29	116.31	122.60
1	I	368	LYS	CA-C-N	6.29	133.56	121.54
1	I	368	LYS	C-N-CA	6.29	133.56	121.54
6	N	321	MET	CG-SD-CE	-6.29	87.06	100.90
8	H	156	ASP	CA-CB-CG	-6.29	106.31	112.60
4	L	521	LEU	CA-C-N	6.29	128.62	120.44
4	L	521	LEU	C-N-CA	6.29	128.62	120.44
1	A	383	PHE	CA-C-N	6.29	128.71	120.28
1	A	383	PHE	C-N-CA	6.29	128.71	120.28
2	B	316	ASP	CA-CB-CG	-6.29	106.31	112.60
4	D	129	HIS	CA-C-O	-6.29	113.95	120.87
8	H	482	ILE	CA-C-N	6.29	129.33	120.28
8	H	482	ILE	C-N-CA	6.29	129.33	120.28
6	N	179	ILE	CA-CB-CG2	-6.29	99.81	110.50
7	O	99	LEU	CA-C-N	6.29	129.22	120.29
7	O	99	LEU	C-N-CA	6.29	129.22	120.29
8	H	140	HIS	ND1-CE1-NE2	6.29	114.69	108.40
1	A	349	GLU	CB-CG-CD	-6.28	101.92	112.60
8	H	215	SER	O-C-N	-6.28	115.22	122.89
2	B	126	ILE	CA-C-N	6.28	129.00	120.77
2	B	126	ILE	C-N-CA	6.28	129.00	120.77
1	I	532	LYS	CA-CB-CG	6.28	126.66	114.10
2	J	250	LYS	CA-C-N	6.28	129.39	120.53
2	J	250	LYS	C-N-CA	6.28	129.39	120.53
2	B	20	ARG	CA-C-O	-6.28	114.96	121.87
3	C	46	MET	N-CA-CB	6.28	120.64	110.41
4	D	222	GLU	CA-C-N	6.28	130.77	122.42
4	D	222	GLU	C-N-CA	6.28	130.77	122.42
2	B	33	ILE	CA-C-N	6.28	128.60	120.44
2	B	33	ILE	C-N-CA	6.28	128.60	120.44
8	P	62	LYS	N-CA-C	-6.28	98.60	108.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	390	HIS	CA-CB-CG	6.28	120.08	113.80
5	M	153	ASP	CB-CA-C	-6.28	97.93	110.42
8	P	441	PHE	CA-C-N	6.27	128.59	120.44
8	P	441	PHE	C-N-CA	6.27	128.59	120.44
4	D	327	ASP	N-CA-CB	6.27	121.08	110.49
5	E	320	PRO	CA-N-CD	-6.27	103.22	112.00
5	E	349	THR	CA-C-N	6.27	129.84	120.31
5	E	349	THR	C-N-CA	6.27	129.84	120.31
7	G	194	MET	CB-CA-C	-6.27	99.22	110.37
3	C	511	GLU	CB-CA-C	-6.26	100.39	110.79
4	L	399	GLU	CA-C-N	6.26	129.19	120.29
4	L	399	GLU	C-N-CA	6.26	129.19	120.29
6	N	293	ASN	N-CA-C	-6.26	99.03	109.24
8	H	230	ASP	CA-CB-CG	6.26	118.86	112.60
1	I	222	SER	O-C-N	6.26	127.67	121.85
4	L	36	SER	N-CA-CB	6.26	119.43	110.16
4	L	241	VAL	N-CA-CB	6.26	119.52	112.32
4	L	472	ASN	N-CA-CB	6.26	121.52	110.37
3	C	262	GLU	CA-C-N	6.26	129.18	120.29
3	C	262	GLU	C-N-CA	6.26	129.18	120.29
7	G	298	VAL	CA-C-N	6.26	128.67	120.28
7	G	298	VAL	C-N-CA	6.26	128.67	120.28
7	G	427	ILE	O-C-N	-6.26	113.97	121.10
4	D	315	HIS	N-CA-CB	6.26	119.08	110.01
4	L	527	ARG	NE-CZ-NH1	-6.26	115.24	121.50
7	O	187	ASP	CA-C-O	6.25	128.06	120.62
1	A	445	LEU	N-CA-C	-6.25	104.57	111.82
6	F	99	ILE	CA-C-N	6.25	126.75	119.94
6	F	99	ILE	C-N-CA	6.25	126.75	119.94
8	H	304	TYR	CB-CG-CD2	-6.25	111.42	120.80
5	M	37	HIS	ND1-CE1-NE2	6.25	114.65	108.40
4	D	527	ARG	NE-CZ-NH2	-6.25	113.58	119.20
3	K	157	ASN	CA-CB-CG	6.25	118.85	112.60
8	H	51	GLY	CA-C-N	6.25	130.19	120.75
8	H	51	GLY	C-N-CA	6.25	130.19	120.75
4	L	512	LEU	CA-C-N	6.25	128.94	120.38
4	L	512	LEU	C-N-CA	6.25	128.94	120.38
5	M	439	LYS	O-C-N	6.25	130.34	122.22
6	N	136	GLU	CA-C-N	6.25	130.89	120.64
6	N	136	GLU	C-N-CA	6.25	130.89	120.64
5	M	497	GLY	CA-C-O	6.25	127.19	119.88
1	A	321	LYS	N-CA-C	6.24	118.17	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	427	ILE	N-CA-C	6.24	117.03	110.72
2	J	26	LEU	N-CA-C	6.24	118.08	111.28
2	J	488	MET	CG-SD-CE	6.24	114.64	100.90
2	J	51	ILE	N-CA-C	-6.24	96.75	107.24
6	N	59	ASP	CA-CB-CG	6.24	118.84	112.60
7	O	398	ARG	NE-CZ-NH1	6.24	127.74	121.50
3	C	512	THR	CA-C-N	6.24	129.15	120.29
3	C	512	THR	C-N-CA	6.24	129.15	120.29
4	D	350	GLN	O-C-N	-6.24	114.34	122.39
5	E	47	THR	CA-C-N	6.24	129.79	120.31
5	E	47	THR	C-N-CA	6.24	129.79	120.31
7	O	270	GLU	CA-C-O	6.24	127.16	120.55
8	P	59	HIS	ND1-CE1-NE2	6.24	114.64	108.40
5	E	276	ALA	CA-C-N	6.24	128.64	120.28
5	E	276	ALA	C-N-CA	6.24	128.64	120.28
6	N	23	ASN	N-CA-C	6.23	117.87	111.14
6	N	300	PHE	CA-CB-CG	-6.23	107.57	113.80
3	C	424	GLU	CA-C-N	6.23	129.14	120.29
3	C	424	GLU	C-N-CA	6.23	129.14	120.29
7	G	523	PRO	N-CA-C	-6.23	107.51	114.92
4	D	317	LEU	CA-C-N	6.23	128.63	120.28
4	D	317	LEU	C-N-CA	6.23	128.63	120.28
5	E	399	LYS	CA-C-N	6.23	128.63	120.28
5	E	399	LYS	C-N-CA	6.23	128.63	120.28
8	H	75	GLU	N-CA-CB	6.23	119.28	110.12
2	B	165	THR	CA-C-N	6.22	129.13	120.29
2	B	165	THR	C-N-CA	6.22	129.13	120.29
7	G	105	LEU	CA-C-N	6.22	129.13	120.29
7	G	105	LEU	C-N-CA	6.22	129.13	120.29
6	N	95	ASN	OD1-CG-ND2	-6.22	116.38	122.60
6	F	486	PRO	CA-C-O	-6.22	114.48	122.13
8	P	279	GLN	CA-C-N	6.22	129.26	120.42
8	P	279	GLN	C-N-CA	6.22	129.26	120.42
7	O	79	LEU	CA-C-N	6.22	128.40	120.56
7	O	79	LEU	C-N-CA	6.22	128.40	120.56
8	P	516	VAL	CA-C-N	6.22	131.25	120.68
8	P	516	VAL	C-N-CA	6.22	131.25	120.68
6	F	140	SER	N-CA-C	-6.22	101.73	110.50
1	I	312	LEU	N-CA-C	-6.22	98.25	108.76
1	I	380	ALA	N-CA-C	-6.22	105.27	112.92
4	D	233	VAL	O-C-N	6.22	129.79	123.20
3	K	226	HIS	CE1-NE2-CD2	-6.22	102.78	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	291	VAL	CA-C-O	-6.22	113.40	120.67
3	K	319	ASP	CA-C-O	-6.22	114.29	120.82
3	C	382	GLU	CA-C-N	6.21	129.24	120.42
3	C	382	GLU	C-N-CA	6.21	129.24	120.42
2	B	41	SER	N-CA-CB	6.21	119.36	110.16
6	F	218	HIS	CE1-NE2-CD2	-6.21	102.79	109.00
8	H	224	LYS	N-CA-CB	6.21	119.35	110.16
6	F	175	SER	O-C-N	6.21	128.47	122.07
5	M	403	HIS	CB-CG-CD2	-6.21	123.13	131.20
5	M	456	GLU	N-CA-C	6.21	120.46	113.01
5	E	37	HIS	CE1-NE2-CD2	-6.21	102.80	109.00
1	A	520	ALA	N-CA-C	6.20	118.04	111.28
6	F	172	VAL	CA-C-N	6.20	129.22	120.42
6	F	172	VAL	C-N-CA	6.20	129.22	120.42
8	P	59	HIS	CG-CD2-NE2	6.20	113.40	107.20
3	C	265	THR	CB-CA-C	-6.20	101.11	110.90
1	I	190	TYR	CB-CA-C	6.20	118.18	108.88
2	B	412	CYS	O-C-N	-6.20	115.40	122.09
7	G	55	LYS	N-CA-C	-6.20	98.52	109.06
7	O	195	ILE	CA-C-N	6.20	125.99	120.10
7	O	195	ILE	C-N-CA	6.20	125.99	120.10
1	I	440	GLU	N-CA-C	-6.20	104.61	111.36
5	E	60	MET	N-CA-C	-6.19	98.80	108.90
4	L	160	ARG	CA-C-N	6.19	128.58	120.28
4	L	160	ARG	C-N-CA	6.19	128.58	120.28
6	F	257	GLU	N-CA-C	6.19	118.03	111.28
7	G	125	PHE	N-CA-CB	6.19	119.22	110.12
2	J	296	ILE	N-CA-C	-6.19	96.46	109.34
5	M	319	LEU	CA-C-N	6.19	126.21	119.90
5	M	319	LEU	C-N-CA	6.19	126.21	119.90
1	I	100	LEU	N-CA-C	6.19	118.03	111.28
7	G	518	GLU	CA-C-O	6.19	127.01	120.33
3	K	229	MET	N-CA-C	-6.19	99.72	109.50
8	P	55	MET	CA-C-N	6.19	131.25	123.14
8	P	55	MET	C-N-CA	6.19	131.25	123.14
4	D	129	HIS	CA-C-N	6.19	125.75	119.19
4	D	129	HIS	C-N-CA	6.19	125.75	119.19
6	F	71	HIS	CG-CD2-NE2	6.19	113.39	107.20
4	L	88	ALA	N-CA-C	6.19	119.00	111.82
1	I	471	HIS	CA-C-O	-6.18	114.39	121.19
2	J	122	HIS	CA-C-N	6.18	126.08	119.28
2	J	122	HIS	C-N-CA	6.18	126.08	119.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	18	GLY	N-CA-C	6.18	118.40	111.85
7	G	332	THR	N-CA-C	-6.18	104.51	114.09
3	K	292	THR	N-CA-C	-6.18	97.75	108.69
1	I	211	ILE	O-C-N	-6.18	116.51	123.18
7	O	277	LYS	CA-C-N	6.18	128.56	120.28
7	O	277	LYS	C-N-CA	6.18	128.56	120.28
7	G	323	MET	N-CA-C	6.18	117.68	111.07
2	J	94	GLU	CB-CA-C	-6.18	100.67	110.86
4	D	100	ILE	CA-CB-CG1	6.18	120.90	110.40
5	E	360	GLN	N-CA-C	-6.18	99.66	109.23
2	J	483	GLY	N-CA-C	-6.18	105.85	115.67
6	N	115	HIS	CE1-NE2-CD2	-6.18	102.82	109.00
6	N	245	ASN	N-CA-C	6.18	119.42	110.28
7	O	371	THR	N-CA-CB	6.18	121.19	110.81
6	F	66	GLU	CB-CG-CD	6.17	123.10	112.60
8	H	424	THR	N-CA-CB	6.17	119.20	110.12
4	L	133	ILE	CA-C-O	-6.17	113.96	120.57
2	B	78	ASN	O-C-N	6.17	126.56	121.31
3	K	505	THR	N-CA-C	-6.17	104.63	111.36
2	B	476	ALA	N-CA-C	-6.17	98.57	109.06
2	J	275	MET	CA-C-N	6.17	129.05	120.29
2	J	275	MET	C-N-CA	6.17	129.05	120.29
4	L	252	CYS	N-CA-C	-6.17	100.14	109.95
8	P	165	ARG	NE-CZ-NH2	6.17	124.75	119.20
6	F	147	THR	CA-C-N	6.17	131.03	120.72
6	F	147	THR	C-N-CA	6.17	131.03	120.72
4	L	222	GLU	O-C-N	6.17	130.89	123.36
5	M	266	LEU	N-CA-C	-6.17	99.67	109.23
5	M	394	ILE	CB-CA-C	-6.17	103.81	112.14
4	D	92	VAL	O-C-N	6.17	127.85	121.87
3	K	28	ASN	CA-C-N	6.17	129.05	120.29
3	K	28	ASN	C-N-CA	6.17	129.05	120.29
4	L	376	ILE	N-CA-CB	6.17	119.67	111.90
6	N	126	ALA	CA-C-N	6.17	129.05	120.29
6	N	126	ALA	C-N-CA	6.17	129.05	120.29
4	D	212	LYS	N-CA-CB	6.17	121.19	111.20
6	F	177	LEU	CA-C-N	6.17	129.68	120.31
6	F	177	LEU	C-N-CA	6.17	129.68	120.31
3	C	184	GLN	O-C-N	6.16	130.22	123.13
4	D	226	GLY	O-C-N	-6.16	114.69	122.70
6	F	162	ALA	CA-C-N	6.16	128.82	120.44
6	F	162	ALA	C-N-CA	6.16	128.82	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	263	GLN	OE1-CD-NE2	6.16	128.76	122.60
4	L	500	ILE	N-CA-CB	6.16	117.85	110.95
3	C	427	LYS	CA-C-N	6.16	128.82	120.44
3	C	427	LYS	C-N-CA	6.16	128.82	120.44
6	F	198	HIS	CE1-NE2-CD2	-6.16	102.84	109.00
1	A	277	LYS	CB-CA-C	-6.16	100.56	110.79
4	L	36	SER	CB-CA-C	-6.16	100.38	110.85
5	E	188	ILE	N-CA-C	-6.16	104.50	110.72
6	F	300	PHE	CA-C-N	6.16	129.67	120.31
6	F	300	PHE	C-N-CA	6.16	129.67	120.31
8	H	47	TYR	O-C-N	-6.16	114.40	122.59
7	G	399	ALA	CA-C-N	6.16	128.44	120.56
7	G	399	ALA	C-N-CA	6.16	128.44	120.56
4	L	137	PHE	O-C-N	6.16	128.65	122.12
4	L	71	THR	O-C-N	6.15	130.41	123.27
1	A	522	ILE	CA-C-O	-6.15	114.33	120.85
3	K	93	ASP	CA-CB-CG	6.15	118.75	112.60
4	L	296	ASN	CA-C-N	6.15	131.66	122.75
4	L	296	ASN	C-N-CA	6.15	131.66	122.75
2	J	71	LEU	N-CA-CB	6.15	118.92	110.01
7	O	468	HIS	CA-C-O	6.15	127.07	120.55
7	G	313	ARG	CD-NE-CZ	-6.15	115.80	124.40
3	K	183	VAL	N-CA-CB	6.15	118.37	110.13
1	A	137	ILE	N-CA-C	-6.14	99.51	108.11
3	C	362	PHE	CA-C-O	-6.14	113.98	120.80
5	E	510	LEU	N-CA-C	-6.14	104.66	111.36
7	O	95	THR	O-C-N	6.14	129.41	122.22
7	O	344	ARG	CA-C-O	6.14	127.96	121.33
3	C	296	ILE	CA-CB-CG2	6.14	120.94	110.50
5	E	478	ARG	CA-C-O	6.14	127.04	120.10
8	P	454	GLU	CB-CG-CD	-6.14	102.16	112.60
1	I	5	LEU	N-CA-C	-6.14	103.09	111.56
4	L	137	PHE	N-CA-C	6.14	117.97	111.28
7	G	101	ALA	CA-C-N	6.14	129.00	120.29
7	G	101	ALA	C-N-CA	6.14	129.00	120.29
7	G	182	ALA	CA-C-N	6.14	129.14	120.42
7	G	182	ALA	C-N-CA	6.14	129.14	120.42
7	G	23	VAL	N-CA-C	-6.14	103.42	111.09
3	K	233	ILE	N-CA-C	-6.14	98.69	107.77
4	L	531	LYS	N-CA-C	6.14	117.97	111.28
8	P	413	GLY	N-CA-C	-6.14	107.78	115.08
2	J	481	ARG	N-CA-C	-6.13	105.08	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	417	ALA	CA-C-O	6.13	127.25	120.63
3	K	196	LYS	CA-C-N	6.13	133.25	121.54
3	K	196	LYS	C-N-CA	6.13	133.25	121.54
7	O	389	LEU	N-CA-C	-6.13	104.67	111.36
8	H	42	THR	CA-CB-OG1	6.13	118.80	109.60
8	P	347	CYS	N-CA-C	-6.13	100.02	109.52
4	L	48	ILE	CA-C-O	-6.13	114.58	120.95
5	M	391	ASN	CA-C-N	6.13	128.99	120.29
5	M	391	ASN	C-N-CA	6.13	128.99	120.29
6	N	61	ASN	CA-C-N	6.13	129.12	120.42
6	N	61	ASN	C-N-CA	6.13	129.12	120.42
4	L	473	PRO	N-CA-C	6.13	122.04	113.53
6	N	159	LYS	N-CA-CB	6.13	119.08	110.07
7	O	317	GLU	CA-C-N	6.13	128.49	120.28
7	O	317	GLU	C-N-CA	6.13	128.49	120.28
2	B	337	HIS	CE1-NE2-CD2	-6.12	102.88	109.00
5	E	190	VAL	CA-CB-CG1	-6.12	99.99	110.40
8	H	219	HIS	CE1-NE2-CD2	-6.12	102.88	109.00
4	L	105	GLY	CA-C-N	6.12	129.62	120.31
4	L	105	GLY	C-N-CA	6.12	129.62	120.31
1	I	293	ASP	CA-C-N	6.12	128.98	120.29
1	I	293	ASP	C-N-CA	6.12	128.98	120.29
5	E	384	THR	N-CA-C	-6.12	99.73	109.59
3	K	318	THR	O-C-N	6.12	128.38	122.07
5	M	264	HIS	CB-CA-C	-6.12	100.35	109.90
4	D	454	PHE	CA-CB-CG	6.12	119.92	113.80
6	F	270	ARG	O-C-N	6.12	129.80	122.27
7	G	121	ILE	CA-C-O	6.12	127.42	121.05
3	C	333	SER	CA-C-N	6.12	131.08	121.17
3	C	333	SER	C-N-CA	6.12	131.08	121.17
4	D	406	HIS	O-C-N	6.12	128.61	122.12
2	J	29	PHE	CB-CG-CD2	-6.12	110.30	120.70
3	K	188	ASN	CA-CB-CG	-6.12	106.48	112.60
3	K	220	ILE	N-CA-C	-6.12	99.31	108.12
2	B	426	ASN	O-C-N	6.12	128.60	122.12
8	P	453	ALA	N-CA-CB	6.12	119.21	110.16
3	C	233	ILE	N-CA-C	-6.11	99.32	108.12
6	F	53	ASP	CA-CB-CG	-6.11	106.49	112.60
5	M	29	MET	CG-SD-CE	-6.11	87.45	100.90
4	D	72	ASN	CA-CB-CG	-6.11	106.49	112.60
8	H	439	LYS	CA-C-N	6.11	128.47	120.28
8	H	439	LYS	C-N-CA	6.11	128.47	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	70	ILE	O-C-N	6.11	128.47	121.94
5	E	517	ILE	CB-CA-C	-6.11	103.90	112.14
6	F	15	ARG	CA-C-N	6.11	133.20	121.54
6	F	15	ARG	C-N-CA	6.11	133.20	121.54
2	J	337	HIS	CB-CG-CD2	-6.11	123.26	131.20
6	F	298	ASP	CA-C-N	6.10	125.66	119.19
6	F	298	ASP	C-N-CA	6.10	125.66	119.19
5	M	484	GLU	O-C-N	6.10	129.56	122.17
1	I	458	GLN	N-CA-C	-6.10	105.79	113.72
4	L	240	ARG	N-CA-C	-6.10	104.03	112.03
5	M	404	ASP	CA-C-N	6.10	128.46	120.28
5	M	404	ASP	C-N-CA	6.10	128.46	120.28
7	O	49	ILE	N-CA-C	-6.10	99.33	108.12
4	D	474	ILE	CA-C-N	6.10	128.45	120.28
4	D	474	ILE	C-N-CA	6.10	128.45	120.28
7	G	134	ASN	CA-CB-CG	6.10	118.70	112.60
8	H	39	LEU	CB-CA-C	-6.10	100.67	110.79
5	M	248	ILE	CA-C-O	6.10	126.73	120.39
1	A	515	LYS	CA-C-N	6.10	128.95	120.29
1	A	515	LYS	C-N-CA	6.10	128.95	120.29
8	H	460	ALA	N-CA-C	6.10	117.92	111.28
3	C	363	ILE	N-CA-C	-6.10	98.75	107.77
6	N	164	LEU	N-CA-CB	6.10	119.08	110.12
4	L	307	ASP	CA-CB-CG	-6.09	106.51	112.60
2	B	279	VAL	N-CA-C	-6.09	104.57	110.72
4	L	508	VAL	N-CA-C	-6.09	96.67	109.34
8	H	213	SER	N-CA-CB	6.09	120.02	110.46
3	K	100	ILE	CA-CB-CG2	-6.09	100.15	110.50
4	L	89	ARG	NE-CZ-NH2	6.09	124.68	119.20
4	L	128	ILE	CA-C-N	6.09	129.92	120.60
4	L	128	ILE	C-N-CA	6.09	129.92	120.60
5	M	134	ALA	CA-C-O	-6.09	114.43	120.82
2	J	75	GLY	CA-C-N	6.09	131.12	123.14
2	J	75	GLY	C-N-CA	6.09	131.12	123.14
6	F	446	ILE	CA-CB-CG1	6.09	120.75	110.40
1	I	309	ARG	CA-C-N	6.09	131.24	122.35
1	I	309	ARG	C-N-CA	6.09	131.24	122.35
1	A	199	LYS	CA-C-O	6.08	126.81	120.30
1	A	394	ASP	CA-CB-CG	6.08	118.68	112.60
8	P	21	HIS	ND1-CE1-NE2	6.08	114.48	108.40
2	J	76	VAL	CA-C-N	6.08	129.54	120.17
2	J	76	VAL	C-N-CA	6.08	129.54	120.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	485	ALA	N-CA-C	6.08	117.91	111.28
6	N	451	LEU	CA-C-N	6.08	129.04	120.28
6	N	451	LEU	C-N-CA	6.08	129.04	120.28
3	C	173	CYS	O-C-N	6.08	128.33	122.07
3	C	406	GLN	OE1-CD-NE2	6.08	128.68	122.60
5	E	481	GLN	CG-CD-NE2	-6.08	107.28	116.40
1	A	303	ALA	CA-C-O	-6.08	112.98	119.97
2	J	53	LEU	N-CA-CB	6.07	120.12	110.65
5	M	512	GLY	N-CA-C	6.07	119.84	112.49
3	C	117	MET	N-CA-CB	6.07	120.75	110.49
5	E	504	GLN	CA-C-N	6.07	130.98	122.36
5	E	504	GLN	C-N-CA	6.07	130.98	122.36
1	A	492	ASN	N-CA-CB	6.07	120.96	111.56
3	K	230	ARG	NE-CZ-NH1	-6.07	115.43	121.50
7	O	397	ARG	CA-C-O	6.07	126.98	120.55
1	I	508	ILE	O-C-N	6.07	128.21	121.90
3	C	470	HIS	CE1-NE2-CD2	-6.06	102.94	109.00
2	B	269	HIS	CE1-NE2-CD2	-6.06	102.94	109.00
3	C	168	TRP	CA-C-O	6.06	126.83	119.31
5	M	316	GLN	CB-CA-C	-6.06	100.54	110.85
1	I	289	THR	CA-C-O	-6.06	114.64	121.00
6	F	70	GLN	N-CA-CB	6.06	119.56	110.65
1	I	69	HIS	CA-C-O	-6.06	114.93	120.50
1	I	381	ASN	CA-C-N	6.06	128.89	120.29
1	I	381	ASN	C-N-CA	6.06	128.89	120.29
5	E	95	SER	CA-C-N	6.06	128.89	120.29
5	E	95	SER	C-N-CA	6.06	128.89	120.29
6	F	28	ARG	CA-C-N	6.06	127.97	120.34
6	F	28	ARG	C-N-CA	6.06	127.97	120.34
5	M	285	PHE	CA-CB-CG	6.06	119.86	113.80
1	A	434	GLU	N-CA-C	6.06	119.77	112.38
4	D	465	LEU	CA-C-N	6.06	129.51	120.31
4	D	465	LEU	C-N-CA	6.06	129.51	120.31
2	J	71	LEU	CA-C-O	-6.06	114.46	120.82
1	A	56	ASN	CA-CB-CG	6.05	118.66	112.60
1	A	475	GLN	OE1-CD-NE2	6.05	128.65	122.60
1	A	490	LEU	N-CA-C	-6.05	105.54	113.17
5	E	194	LEU	CA-C-N	6.05	128.39	120.28
5	E	194	LEU	C-N-CA	6.05	128.39	120.28
6	F	26	ALA	N-CA-C	6.05	117.96	111.36
5	M	414	ARG	NH1-CZ-NH2	-6.05	111.43	119.30
6	N	407	VAL	CA-C-O	6.05	128.30	121.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	199	ILE	N-CA-C	-6.05	97.68	106.88
5	E	85	HIS	CE1-NE2-CD2	-6.05	102.95	109.00
2	B	206	GLY	CA-C-O	-6.05	117.16	121.88
3	C	391	LEU	CA-C-N	6.05	128.39	120.28
3	C	391	LEU	C-N-CA	6.05	128.39	120.28
6	F	403	ASP	CB-CA-C	-6.05	101.64	110.96
2	J	361	HIS	CA-C-N	6.05	129.96	121.24
2	J	361	HIS	C-N-CA	6.05	129.96	121.24
1	A	105	ASP	N-CA-C	6.05	117.87	111.28
2	B	97	ASP	O-C-N	6.05	130.00	122.86
3	C	474	ASN	OD1-CG-ND2	6.05	128.65	122.60
1	I	489	ASP	CA-CB-CG	-6.05	106.55	112.60
3	K	355	ILE	N-CA-C	-6.05	99.34	108.17
8	P	394	ASP	CA-CB-CG	-6.05	106.55	112.60
3	C	321	ASN	CA-C-N	6.05	128.88	120.29
3	C	321	ASN	C-N-CA	6.05	128.88	120.29
1	A	507	THR	N-CA-C	-6.05	104.61	111.14
5	E	269	THR	CB-CA-C	-6.05	100.24	110.64
6	N	270	ARG	N-CA-C	6.05	117.67	111.14
8	H	363	PHE	N-CA-C	-6.04	100.05	109.72
5	E	262	THR	CA-C-N	6.04	129.88	120.75
5	E	262	THR	C-N-CA	6.04	129.88	120.75
1	I	180	LYS	N-CA-C	-6.04	104.55	112.41
1	I	298	LYS	CA-C-O	-6.04	114.01	120.42
2	B	204	LYS	CA-C-N	6.04	129.45	120.87
2	B	204	LYS	C-N-CA	6.04	129.45	120.87
3	C	180	VAL	N-CA-CB	6.04	119.64	110.58
2	J	281	ARG	N-CA-CB	6.04	119.10	110.16
3	C	30	ALA	CA-C-O	6.04	126.95	120.55
5	E	324	TRP	N-CA-CB	6.04	120.69	110.49
8	H	219	HIS	ND1-CE1-NE2	6.04	114.44	108.40
4	L	125	GLN	OE1-CD-NE2	-6.04	116.56	122.60
1	I	321	LYS	N-CA-CB	6.04	118.99	110.12
8	P	80	HIS	CE1-NE2-CD2	-6.04	102.96	109.00
6	N	104	LYS	CB-CA-C	-6.03	101.41	110.88
7	O	38	THR	CA-C-O	-6.03	111.98	119.28
1	A	103	ASN	CA-CB-CG	-6.03	106.57	112.60
4	L	280	ARG	O-C-N	-6.03	115.27	122.15
2	B	315	ALA	O-C-N	-6.03	115.98	122.85
4	D	142	GLU	N-CA-C	-6.03	104.79	111.36
1	A	457	ALA	CA-C-N	6.03	133.71	122.74
1	A	457	ALA	C-N-CA	6.03	133.71	122.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	313	ARG	NE-CZ-NH2	-6.03	113.78	119.20
2	B	462	VAL	CB-CA-C	6.03	120.53	112.22
3	C	273	GLU	CB-CG-CD	-6.03	102.36	112.60
3	K	202	GLU	CB-CG-CD	-6.03	102.36	112.60
6	N	338	ASP	CA-CB-CG	-6.03	106.58	112.60
2	J	174	HIS	CA-CB-CG	6.02	119.82	113.80
8	H	222	VAL	N-CA-C	-6.02	99.74	108.17
2	J	88	SER	CA-C-O	6.02	126.90	119.97
1	I	534	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
4	D	351	PHE	CA-C-O	6.02	127.02	120.58
6	F	119	ILE	CA-C-N	6.02	128.62	120.44
6	F	119	ILE	C-N-CA	6.02	128.62	120.44
1	I	277	LYS	N-CA-C	6.02	117.92	111.36
4	D	162	THR	N-CA-CB	6.02	119.07	110.16
1	I	400	LYS	CA-C-O	6.02	126.80	120.42
5	M	492	ASP	CA-CB-CG	-6.02	106.58	112.60
3	C	435	TRP	CB-CG-CD2	-6.01	118.38	126.80
5	E	453	ASP	N-CA-CB	6.01	119.60	110.28
8	P	103	PHE	N-CA-C	6.01	117.84	111.28
6	F	169	THR	O-C-N	6.01	128.49	122.12
8	H	184	ALA	CA-C-N	6.01	128.94	120.28
8	H	184	ALA	C-N-CA	6.01	128.94	120.28
5	M	182	HIS	ND1-CE1-NE2	6.01	114.41	108.40
7	O	490	ALA	N-CA-C	-6.01	105.98	113.38
2	B	471	GLU	CB-CG-CD	-6.01	102.38	112.60
4	D	302	LYS	O-C-N	6.01	130.22	122.23
7	G	61	ASP	CA-CB-CG	-6.01	106.59	112.60
2	J	433	ALA	CA-C-N	6.01	128.95	120.42
2	J	433	ALA	C-N-CA	6.01	128.95	120.42
5	E	511	ILE	CA-C-N	6.01	126.61	119.94
5	E	511	ILE	C-N-CA	6.01	126.61	119.94
7	G	454	GLY	O-C-N	6.01	130.51	122.70
1	I	366	ASN	CA-C-N	6.01	129.24	120.71
1	I	366	ASN	C-N-CA	6.01	129.24	120.71
5	E	115	ALA	N-CA-C	6.00	117.49	111.07
6	N	234	ASN	OD1-CG-ND2	6.00	128.60	122.60
1	A	526	ARG	NE-CZ-NH1	-6.00	115.50	121.50
3	C	285	LEU	CA-C-N	6.00	136.44	121.80
3	C	285	LEU	C-N-CA	6.00	136.44	121.80
8	H	224	LYS	N-CA-C	6.00	117.90	111.36
4	L	335	PHE	N-CA-C	6.00	117.82	111.28
1	A	129	VAL	CA-C-N	6.00	128.32	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	129	VAL	C-N-CA	6.00	128.32	120.28
4	D	381	SER	CB-CA-C	-6.00	100.20	109.20
5	E	73	ASP	N-CA-CB	6.00	120.63	110.49
8	H	17	GLU	N-CA-C	-6.00	104.34	112.26
7	G	283	HIS	CE1-NE2-CD2	-6.00	103.00	109.00
2	J	451	ALA	N-CA-C	6.00	117.81	111.28
5	E	28	LEU	N-CA-C	-5.99	98.75	108.52
1	I	375	ILE	N-CA-C	-5.99	99.72	108.11
1	I	432	SER	CB-CA-C	-5.99	108.66	115.79
6	N	176	ILE	CA-C-N	5.99	130.73	120.72
6	N	176	ILE	C-N-CA	5.99	130.73	120.72
2	J	57	ARG	NH1-CZ-NH2	5.99	127.09	119.30
7	O	412	ILE	CA-C-N	5.99	128.31	120.28
7	O	412	ILE	C-N-CA	5.99	128.31	120.28
1	A	112	ILE	N-CA-C	-5.99	99.78	108.17
1	A	346	GLY	O-C-N	-5.99	117.36	123.35
3	C	489	ASP	CA-C-N	5.99	130.86	120.68
3	C	489	ASP	C-N-CA	5.99	130.86	120.68
1	I	149	ILE	CA-C-N	5.99	128.31	120.28
1	I	149	ILE	C-N-CA	5.99	128.31	120.28
7	O	312	GLY	CA-C-N	5.99	131.37	122.74
7	O	312	GLY	C-N-CA	5.99	131.37	122.74
7	O	491	PHE	CA-CB-CG	-5.99	107.81	113.80
4	D	118	ASP	CA-C-N	5.99	128.79	120.29
4	D	118	ASP	C-N-CA	5.99	128.79	120.29
3	K	26	ASN	O-C-N	5.99	128.98	122.15
6	N	41	LYS	N-CA-C	-5.99	105.62	113.17
7	O	111	TYR	O-C-N	-5.99	115.32	122.15
8	H	503	GLY	CA-C-N	5.99	129.41	120.31
8	H	503	GLY	C-N-CA	5.99	129.41	120.31
2	J	505	LEU	CA-C-N	5.99	128.22	120.44
2	J	505	LEU	C-N-CA	5.99	128.22	120.44
3	C	467	ARG	CD-NE-CZ	5.99	132.78	124.40
8	H	520	ARG	N-CA-C	5.99	117.80	111.28
2	J	357	ASP	CA-CB-CG	-5.99	106.61	112.60
7	O	127	THR	CA-C-O	-5.99	114.54	120.82
1	A	302	GLU	N-CA-C	-5.98	104.84	111.36
5	M	291	GLN	CB-CG-CD	-5.98	102.43	112.60
4	D	86	PRO	CA-C-O	-5.98	110.55	119.34
8	H	439	LYS	N-CA-CB	5.98	118.91	110.12
6	N	135	GLU	N-CA-CB	5.98	119.55	110.28
8	P	346	HIS	CE1-NE2-CD2	-5.98	103.02	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	98	GLN	CA-C-N	5.98	128.29	120.28
5	E	98	GLN	C-N-CA	5.98	128.29	120.28
8	H	137	ARG	CA-C-O	-5.98	114.08	120.42
5	M	408	VAL	CA-CB-CG1	5.98	120.56	110.40
6	F	115	HIS	CG-CD2-NE2	5.97	113.17	107.20
3	K	32	THR	CA-CB-OG1	5.97	118.56	109.60
6	N	250	TYR	CA-CB-CG	5.97	124.65	113.90
2	B	407	VAL	N-CA-C	-5.97	99.67	108.99
5	E	113	ALA	N-CA-C	5.97	117.87	111.36
4	L	28	ASP	CA-CB-CG	-5.97	106.63	112.60
5	M	526	MET	CA-C-N	5.97	128.64	120.46
5	M	526	MET	C-N-CA	5.97	128.64	120.46
6	F	420	GLU	CA-C-N	5.97	128.28	120.28
6	F	420	GLU	C-N-CA	5.97	128.28	120.28
8	H	193	ASP	CA-CB-CG	5.97	118.57	112.60
5	M	479	ALA	N-CA-C	-5.97	104.85	111.36
7	O	271	TRP	CB-CG-CD2	-5.97	118.44	126.80
3	C	377	ARG	N-CA-C	-5.97	98.56	108.34
3	C	437	TYR	N-CA-CB	5.97	118.99	110.16
4	L	39	SER	CB-CA-C	-5.97	101.51	110.88
2	B	158	ASP	CA-CB-CG	5.96	118.56	112.60
5	E	474	MET	CA-C-N	5.96	128.76	120.29
5	E	474	MET	C-N-CA	5.96	128.76	120.29
8	P	42	THR	N-CA-C	-5.96	103.77	113.19
6	F	321	MET	N-CA-C	5.96	118.26	111.11
2	J	120	LYS	N-CA-CB	5.96	120.56	110.49
8	P	432	GLY	CA-C-N	5.96	132.38	122.54
8	P	432	GLY	C-N-CA	5.96	132.38	122.54
1	A	91	THR	CA-C-N	5.96	128.75	120.29
1	A	91	THR	C-N-CA	5.96	128.75	120.29
3	C	386	GLU	CA-C-N	5.96	128.62	120.46
3	C	386	GLU	C-N-CA	5.96	128.62	120.46
4	L	98	GLN	OE1-CD-NE2	-5.96	116.64	122.60
4	D	419	ARG	N-CA-C	5.96	117.77	111.28
8	H	383	ASN	N-CA-C	5.96	117.85	111.36
3	C	348	GLY	N-CA-C	-5.96	101.88	112.54
4	L	275	VAL	CA-C-N	5.96	130.76	120.58
4	L	275	VAL	C-N-CA	5.96	130.76	120.58
5	M	451	PHE	CA-C-N	5.96	128.75	120.29
5	M	451	PHE	C-N-CA	5.96	128.75	120.29
3	C	205	PRO	CA-C-O	-5.95	114.56	121.34
5	E	171	THR	CA-CB-CG2	5.95	120.62	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	H	409	VAL	N-CA-C	-5.95	101.24	107.84
6	N	439	ALA	CA-C-N	5.95	129.35	120.31
6	N	439	ALA	C-N-CA	5.95	129.35	120.31
3	K	95	THR	CA-CB-OG1	5.95	118.52	109.60
3	C	275	ILE	CA-C-N	5.95	128.25	120.28
3	C	275	ILE	C-N-CA	5.95	128.25	120.28
5	E	85	HIS	ND1-CE1-NE2	5.95	114.34	108.40
8	H	170	SER	CA-C-O	-5.95	113.38	120.10
1	I	89	GLY	N-CA-C	-5.95	106.96	115.64
2	J	354	ILE	N-CA-CB	5.95	119.61	111.41
5	M	349	THR	N-CA-C	-5.95	100.10	108.96
2	B	357	ASP	CA-CB-CG	-5.94	106.66	112.60
7	G	517	ASP	N-CA-C	-5.94	105.36	114.16
4	L	42	LYS	N-CA-C	5.94	117.76	111.28
7	G	185	MET	O-C-N	5.94	128.42	122.12
6	N	454	ASN	CA-CB-CG	5.94	118.54	112.60
7	G	393	ILE	O-C-N	-5.94	115.09	121.80
6	F	438	GLN	CA-C-O	5.94	127.05	120.82
4	L	76	THR	N-CA-CB	5.94	119.36	110.22
8	H	156	ASP	CA-C-N	5.93	128.04	120.56
8	H	156	ASP	C-N-CA	5.93	128.04	120.56
7	O	506	ALA	N-CA-C	5.93	117.75	111.28
3	C	463	LEU	CB-CA-C	-5.93	100.94	110.79
8	H	99	ASP	CB-CA-C	-5.93	100.64	109.90
2	J	410	GLY	CA-C-O	5.93	125.79	119.03
5	M	307	ASP	CA-C-N	5.93	128.23	120.28
5	M	307	ASP	C-N-CA	5.93	128.23	120.28
2	B	375	LEU	N-CA-CB	5.93	120.31	110.52
3	C	399	ARG	CA-C-N	5.93	128.71	120.29
3	C	399	ARG	C-N-CA	5.93	128.71	120.29
5	E	259	LYS	N-CA-C	-5.93	96.70	109.81
4	D	315	HIS	CG-CD2-NE2	5.93	113.13	107.20
8	H	513	ASN	CB-CA-C	-5.93	100.95	110.79
5	M	405	ALA	CA-C-N	5.93	128.71	120.29
5	M	405	ALA	C-N-CA	5.93	128.71	120.29
6	N	269	ASP	O-C-N	-5.93	115.69	122.09
1	A	526	ARG	NH1-CZ-NH2	5.93	127.00	119.30
3	K	409	PRO	CA-C-O	-5.93	116.92	121.31
5	E	364	PHE	CA-CB-CG	5.92	119.72	113.80
1	I	201	HIS	CE1-NE2-CD2	-5.92	103.08	109.00
1	I	424	GLU	CA-C-O	-5.92	114.27	120.55
5	M	264	HIS	ND1-CE1-NE2	5.92	114.32	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	235	ASN	CA-CB-CG	5.92	118.52	112.60
8	H	53	ASN	O-C-N	-5.92	116.17	123.33
1	I	228	ARG	NE-CZ-NH2	5.92	124.53	119.20
8	H	282	ALA	CA-C-N	5.92	128.83	120.42
8	H	282	ALA	C-N-CA	5.92	128.83	120.42
8	P	455	ASN	CA-C-N	5.92	131.50	121.14
8	P	455	ASN	C-N-CA	5.92	131.50	121.14
1	A	453	ALA	CA-C-N	5.92	128.82	120.42
1	A	453	ALA	C-N-CA	5.92	128.82	120.42
6	N	161	HIS	CE1-NE2-CD2	-5.92	103.08	109.00
7	O	229	PRO	N-CA-CB	5.92	108.50	103.35
7	G	411	ALA	CA-C-N	5.92	128.82	120.42
7	G	411	ALA	C-N-CA	5.92	128.82	120.42
4	L	128	ILE	N-CA-C	-5.92	99.35	107.99
3	C	450	THR	CA-C-O	-5.92	114.28	120.55
5	E	183	ARG	CA-C-N	5.92	128.69	120.29
5	E	183	ARG	C-N-CA	5.92	128.69	120.29
5	M	181	CYS	N-CA-CB	5.92	120.49	110.49
5	E	262	THR	N-CA-C	-5.91	100.08	109.07
6	F	392	ARG	NE-CZ-NH2	5.91	124.52	119.20
5	M	219	LEU	CA-C-N	5.91	133.08	122.38
5	M	219	LEU	C-N-CA	5.91	133.08	122.38
1	A	245	LYS	CA-C-O	-5.91	114.18	120.92
3	C	276	GLN	O-C-N	5.91	128.38	122.12
2	B	361	HIS	CE1-NE2-CD2	-5.91	103.09	109.00
2	B	153	VAL	O-C-N	5.91	127.60	121.87
2	B	460	ASP	CA-C-N	5.91	128.47	120.44
2	B	460	ASP	C-N-CA	5.91	128.47	120.44
4	L	403	ARG	CD-NE-CZ	-5.91	116.13	124.40
4	D	486	GLN	OE1-CD-NE2	-5.90	116.70	122.60
8	H	213	SER	N-CA-C	-5.90	106.08	113.28
2	B	283	LEU	CA-C-N	5.90	130.04	120.60
2	B	283	LEU	C-N-CA	5.90	130.04	120.60
4	D	241	VAL	N-CA-C	-5.90	99.55	108.17
1	I	471	HIS	ND1-CE1-NE2	5.90	114.30	108.40
7	O	125	PHE	CA-C-O	-5.90	114.62	120.82
1	I	184	ILE	CB-CA-C	5.90	119.57	111.31
4	L	267	SER	N-CA-C	-5.90	103.76	113.50
6	N	358	GLU	CB-CG-CD	-5.90	102.57	112.60
3	C	194	ASP	CA-C-N	5.90	129.38	120.77
3	C	194	ASP	C-N-CA	5.90	129.38	120.77
1	A	386	ASP	N-CA-C	5.90	117.71	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	80	VAL	O-C-N	5.90	127.69	121.91
8	P	359	GLN	OE1-CD-NE2	5.90	128.50	122.60
8	P	442	ALA	CA-C-N	5.90	128.18	120.28
8	P	442	ALA	C-N-CA	5.90	128.18	120.28
7	G	80	VAL	CA-C-N	5.89	128.18	120.28
7	G	80	VAL	C-N-CA	5.89	128.18	120.28
7	G	464	LEU	CA-C-N	5.89	129.27	120.31
7	G	464	LEU	C-N-CA	5.89	129.27	120.31
4	L	435	ARG	N-CA-C	-5.89	104.94	111.36
2	B	175	HIS	CA-C-N	5.89	128.18	120.28
2	B	175	HIS	C-N-CA	5.89	128.18	120.28
6	F	311	VAL	N-CA-C	-5.89	99.26	107.80
7	O	431	GLN	OE1-CD-NE2	-5.89	116.71	122.60
2	B	143	SER	CB-CA-C	-5.89	100.83	110.85
6	F	213	ASP	CA-CB-CG	5.89	118.49	112.60
8	H	132	TYR	CA-C-N	5.89	128.66	120.29
8	H	132	TYR	C-N-CA	5.89	128.66	120.29
3	K	170	SER	CA-C-O	-5.89	114.31	120.55
7	G	417	SER	CA-C-N	5.89	128.10	120.44
7	G	417	SER	C-N-CA	5.89	128.10	120.44
4	L	490	THR	N-CA-C	-5.89	105.69	114.64
6	N	294	GLN	CG-CD-OE1	5.89	132.58	120.80
6	N	469	GLU	N-CA-C	-5.89	104.81	112.23
4	D	80	GLN	N-CA-C	-5.89	105.59	112.89
5	E	502	LYS	N-CA-C	-5.89	105.19	112.90
8	H	417	ILE	N-CA-CB	5.89	121.42	110.77
5	M	332	LEU	CA-C-N	5.89	128.52	120.46
5	M	332	LEU	C-N-CA	5.89	128.52	120.46
5	M	334	ALA	CB-CA-C	-5.89	101.64	110.88
8	P	59	HIS	N-CA-C	-5.89	104.78	111.14
1	A	464	VAL	CA-C-N	5.88	128.48	120.54
1	A	464	VAL	C-N-CA	5.88	128.48	120.54
3	K	190	ARG	N-CA-C	-5.88	98.81	108.76
3	K	367	LYS	N-CA-CB	5.88	120.85	111.91
2	B	189	ARG	NE-CZ-NH2	-5.88	113.91	119.20
5	E	214	LYS	O-C-N	-5.88	116.18	123.36
6	F	320	ASN	CA-CB-CG	5.88	118.48	112.60
7	O	453	ALA	CA-C-O	-5.88	113.21	119.97
3	C	465	SER	CA-C-N	5.88	128.64	120.29
3	C	465	SER	C-N-CA	5.88	128.64	120.29
2	J	462	VAL	CA-C-N	5.88	128.44	120.44
2	J	462	VAL	C-N-CA	5.88	128.44	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	162	ALA	N-CA-C	-5.88	106.65	113.88
7	G	24	SER	N-CA-CB	5.88	118.53	110.01
5	M	394	ILE	O-C-N	-5.88	116.17	121.87
6	N	94	SER	CA-C-N	5.88	128.08	120.44
6	N	94	SER	C-N-CA	5.88	128.08	120.44
1	A	48	ASP	N-CA-C	-5.88	98.28	110.80
1	A	516	PHE	CA-C-N	5.88	128.16	120.28
1	A	516	PHE	C-N-CA	5.88	128.16	120.28
6	F	282	CYS	N-CA-CB	5.88	120.42	110.49
7	G	225	PHE	CA-CB-CG	-5.88	107.92	113.80
1	I	313	LYS	CA-C-N	5.88	128.15	120.28
1	I	313	LYS	C-N-CA	5.88	128.15	120.28
4	L	147	ILE	CA-C-N	5.88	128.15	120.28
4	L	147	ILE	C-N-CA	5.88	128.15	120.28
7	G	520	ILE	N-CA-C	-5.87	99.89	108.11
2	B	381	GLN	N-CA-CB	-5.87	101.50	110.01
2	B	392	ASP	CA-CB-CG	-5.87	106.73	112.60
3	K	306	ARG	NE-CZ-NH1	-5.87	115.63	121.50
6	F	184	GLU	N-CA-C	-5.87	102.71	110.40
1	A	123	LEU	N-CA-CB	5.87	118.85	110.16
4	D	110	VAL	N-CA-C	-5.87	104.79	110.72
5	E	190	VAL	N-CA-C	5.87	116.61	110.62
8	P	440	LYS	CA-C-N	5.87	128.62	120.29
8	P	440	LYS	C-N-CA	5.87	128.62	120.29
2	B	30	ILE	CA-CB-CG2	-5.87	100.53	110.50
6	F	258	LYS	CB-CA-C	-5.87	99.78	110.63
1	I	239	PHE	N-CA-C	-5.87	98.31	110.80
4	L	422	ILE	CB-CA-C	-5.87	101.67	111.29
6	N	188	LEU	N-CA-C	-5.87	105.38	113.18
8	H	74	ARG	CA-C-N	5.86	128.14	120.28
8	H	74	ARG	C-N-CA	5.86	128.14	120.28
2	J	285	HIS	CE1-NE2-CD2	-5.86	103.14	109.00
5	M	378	LYS	CA-C-N	5.86	129.09	120.82
5	M	378	LYS	C-N-CA	5.86	129.09	120.82
7	G	225	PHE	O-C-N	-5.86	115.06	122.27
8	H	410	PRO	CA-C-O	-5.86	115.12	121.27
6	F	35	ARG	N-CA-CB	5.86	119.58	110.44
6	F	382	HIS	CA-CB-CG	-5.86	107.94	113.80
2	J	83	VAL	O-C-N	5.86	127.86	121.83
7	O	107	GLN	N-CA-C	-5.86	105.63	112.89
8	H	102	ASN	N-CA-CB	5.86	118.73	110.12
1	A	472	ASN	OD1-CG-ND2	5.85	128.45	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	276	GLU	N-CA-CB	5.85	118.82	110.16
5	M	29	MET	N-CA-C	-5.85	99.80	108.99
2	B	289	CYS	CA-C-O	5.85	126.44	120.24
7	G	154	LEU	CA-C-O	5.85	126.72	120.70
7	G	160	MET	CA-C-O	-5.85	114.35	120.55
3	K	76	ALA	N-CA-C	5.85	117.66	111.28
5	E	465	ASN	CA-CB-CG	5.85	118.45	112.60
2	J	419	HIS	CG-CD2-NE2	5.85	113.05	107.20
4	L	91	LEU	N-CA-C	5.85	118.44	111.71
4	L	349	ASP	CA-C-N	5.85	132.38	122.26
4	L	349	ASP	C-N-CA	5.85	132.38	122.26
8	P	463	VAL	N-CA-C	-5.85	105.03	110.53
5	E	307	ASP	CA-C-N	5.84	128.59	120.29
5	E	307	ASP	C-N-CA	5.84	128.59	120.29
3	K	174	ASN	CA-C-O	-5.84	114.22	120.42
7	G	160	MET	CA-C-N	5.84	128.04	120.44
7	G	160	MET	C-N-CA	5.84	128.04	120.44
8	H	43	THR	CA-CB-OG1	5.84	118.36	109.60
5	M	396	GLU	CA-C-N	5.84	128.39	120.44
5	M	396	GLU	C-N-CA	5.84	128.39	120.44
1	I	48	ASP	N-CA-C	-5.84	98.36	110.80
1	I	463	LEU	N-CA-C	5.84	117.34	110.97
1	I	503	VAL	O-C-N	-5.84	115.27	122.57
8	P	323	ARG	CA-C-N	5.84	128.11	120.28
8	P	323	ARG	C-N-CA	5.84	128.11	120.28
2	B	183	ALA	CA-C-O	5.84	126.61	120.42
3	C	139	LYS	N-CA-C	5.84	117.72	111.36
8	H	115	ALA	O-C-N	5.84	128.31	122.12
7	G	88	ALA	CA-C-O	-5.84	114.23	120.42
7	G	283	HIS	ND1-CE1-NE2	5.84	114.24	108.40
7	G	498	VAL	CA-C-N	5.84	128.58	120.29
7	G	498	VAL	C-N-CA	5.84	128.58	120.29
8	H	158	ASP	N-CA-C	5.84	117.64	111.28
4	L	100	ILE	CA-C-O	-5.84	114.88	120.95
8	P	137	ARG	CA-C-N	5.84	128.10	120.28
8	P	137	ARG	C-N-CA	5.84	128.10	120.28
6	F	521	ILE	N-CA-C	-5.83	99.13	107.77
3	C	435	TRP	CE2-CD2-CE3	5.83	124.63	118.80
5	M	162	THR	CA-CB-OG1	5.83	118.35	109.60
5	M	433	VAL	CA-C-N	5.83	128.10	120.28
5	M	433	VAL	C-N-CA	5.83	128.10	120.28
3	C	148	ASP	CA-C-N	5.83	128.57	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	148	ASP	C-N-CA	5.83	128.57	120.29
4	D	448	SER	N-CA-CB	5.83	118.69	110.12
7	G	274	LEU	CA-C-N	5.83	128.67	120.28
7	G	274	LEU	C-N-CA	5.83	128.67	120.28
8	P	249	MET	CA-C-O	-5.83	114.22	120.46
2	B	351	GLU	CA-C-N	5.83	131.89	122.68
2	B	351	GLU	C-N-CA	5.83	131.89	122.68
5	M	458	ILE	CA-C-N	5.83	125.44	119.56
5	M	458	ILE	C-N-CA	5.83	125.44	119.56
7	O	236	LYS	N-CA-C	-5.83	98.79	108.34
2	B	34	ALA	N-CA-C	-5.82	104.84	111.07
7	G	418	LYS	CA-C-N	5.82	128.08	120.28
7	G	418	LYS	C-N-CA	5.82	128.08	120.28
6	F	333	LEU	O-C-N	5.82	130.40	123.24
7	G	364	CYS	CA-C-N	5.82	125.52	119.64
7	G	364	CYS	C-N-CA	5.82	125.52	119.64
7	G	498	VAL	O-C-N	5.82	127.52	121.87
2	B	184	VAL	CA-CB-CG2	5.82	120.29	110.40
2	B	250	LYS	CA-C-N	5.82	128.30	120.50
2	B	250	LYS	C-N-CA	5.82	128.30	120.50
5	E	146	GLU	CA-C-N	5.82	128.08	120.28
5	E	146	GLU	C-N-CA	5.82	128.08	120.28
5	E	445	GLN	CA-C-N	5.82	129.16	120.31
5	E	445	GLN	C-N-CA	5.82	129.16	120.31
6	F	131	LEU	CA-C-N	5.82	128.66	120.28
6	F	131	LEU	C-N-CA	5.82	128.66	120.28
2	J	22	GLU	CA-C-N	5.82	128.56	120.29
2	J	22	GLU	C-N-CA	5.82	128.56	120.29
2	J	233	GLU	N-CA-CB	5.82	120.96	110.83
3	K	95	THR	CA-C-O	5.82	126.59	120.42
8	P	420	ALA	O-C-N	-5.82	115.95	122.12
4	D	484	HIS	CA-C-O	5.82	126.66	119.97
3	K	203	LYS	CA-C-O	-5.82	114.52	121.56
3	K	216	ARG	N-CA-C	-5.82	106.16	113.72
8	P	396	VAL	N-CA-C	-5.82	104.84	110.42
5	M	527	ILE	CA-C-O	-5.82	114.90	120.95
6	N	38	LEU	CA-C-N	5.81	131.00	121.87
6	N	38	LEU	C-N-CA	5.81	131.00	121.87
1	A	20	GLN	CA-C-N	5.81	128.07	120.28
1	A	20	GLN	C-N-CA	5.81	128.07	120.28
8	H	75	GLU	O-C-N	5.81	128.28	122.12
8	P	471	HIS	ND1-CE1-NE2	5.81	114.21	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	153	ARG	CA-C-N	5.81	125.72	119.85
4	D	153	ARG	C-N-CA	5.81	125.72	119.85
4	L	85	HIS	N-CA-CB	5.81	117.84	110.23
5	E	187	GLU	CA-C-O	-5.81	113.29	119.97
2	J	323	LEU	CA-C-N	5.81	128.06	120.28
2	J	323	LEU	C-N-CA	5.81	128.06	120.28
8	P	137	ARG	CA-C-O	5.81	126.58	120.42
4	D	205	LEU	N-CA-C	-5.80	105.78	112.92
4	D	413	ARG	CA-C-O	5.80	126.70	120.55
7	O	372	PHE	N-CA-C	-5.80	99.44	108.90
2	B	464	GLN	N-CA-C	5.80	117.60	111.28
8	H	70	ALA	CA-C-N	5.80	128.53	120.29
8	H	70	ALA	C-N-CA	5.80	128.53	120.29
2	J	245	ASP	N-CA-C	-5.80	104.87	111.14
5	M	48	MET	N-CA-C	-5.80	104.88	111.14
6	F	264	ARG	NE-CZ-NH2	5.80	124.42	119.20
7	O	34	GLU	CA-C-N	5.80	127.98	120.44
7	O	34	GLU	C-N-CA	5.80	127.98	120.44
6	N	409	PRO	CA-C-O	-5.80	114.73	121.34
4	D	287	VAL	CA-C-N	5.80	128.52	120.29
4	D	287	VAL	C-N-CA	5.80	128.52	120.29
5	E	153	ASP	CA-CB-CG	-5.80	106.80	112.60
5	E	235	SER	CA-C-N	-5.79	113.66	122.06
5	E	235	SER	C-N-CA	-5.79	113.66	122.06
7	O	340	ASP	CA-CB-CG	-5.79	106.81	112.60
3	C	227	PRO	N-CA-CB	5.79	109.25	102.76
3	C	356	GLY	N-CA-C	-5.79	99.45	113.18
4	D	462	PRO	CA-C-N	5.79	128.32	120.44
4	D	462	PRO	C-N-CA	5.79	128.32	120.44
3	K	94	GLY	CA-C-N	5.79	128.52	120.29
3	K	94	GLY	C-N-CA	5.79	128.52	120.29
4	D	139	LYS	CB-CA-C	-5.79	101.79	110.88
8	P	489	VAL	N-CA-CB	5.79	122.64	111.93
1	A	110	GLN	O-C-N	-5.79	114.89	122.59
4	L	162	THR	CA-C-N	5.79	128.51	120.29
4	L	162	THR	C-N-CA	5.79	128.51	120.29
4	L	170	SER	N-CA-C	5.79	117.67	111.36
5	M	411	ASN	CB-CA-C	-5.79	101.18	110.79
6	N	250	TYR	CA-C-N	5.79	128.62	120.28
6	N	250	TYR	C-N-CA	5.79	128.62	120.28
8	P	267	ASN	O-C-N	5.79	128.75	122.15
4	D	333	ILE	N-CA-CB	5.79	118.41	110.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	351	TYR	O-C-N	-5.79	117.23	123.42
8	P	405	ASP	O-C-N	5.79	129.85	123.25
2	B	161	ASN	N-CA-C	5.79	117.58	111.28
4	L	297	VAL	N-CA-C	-5.79	99.72	108.17
4	D	405	ILE	N-CA-C	-5.78	104.88	110.72
4	D	505	GLU	N-CA-C	-5.78	106.35	113.41
7	O	147	ASP	CA-C-N	5.78	132.59	121.54
7	O	147	ASP	C-N-CA	5.78	132.59	121.54
7	O	474	TRP	CE2-CD2-CE3	5.78	124.58	118.80
2	B	505	LEU	O-C-N	5.78	128.03	122.07
7	O	321	ARG	CB-CA-C	-5.78	101.80	110.88
2	B	426	ASN	OD1-CG-ND2	5.78	128.38	122.60
3	C	507	LYS	O-C-N	5.78	128.03	122.07
5	E	98	GLN	N-CA-C	-5.78	104.88	111.07
5	E	322	VAL	CA-C-N	5.78	132.10	122.73
5	E	322	VAL	C-N-CA	5.78	132.10	122.73
1	I	433	ARG	NE-CZ-NH2	-5.78	114.00	119.20
3	C	266	ARG	CA-C-N	5.78	128.38	120.46
3	C	266	ARG	C-N-CA	5.78	128.38	120.46
2	J	337	HIS	ND1-CG-CD2	-5.78	100.32	106.10
4	L	433	ALA	N-CA-C	5.78	118.32	111.33
2	B	130	TRP	CE2-CD2-CE3	5.78	124.58	118.80
2	B	448	THR	N-CA-CB	5.78	118.71	110.16
7	G	157	LYS	CA-C-N	5.78	128.50	120.29
7	G	157	LYS	C-N-CA	5.78	128.50	120.29
1	I	469	ALA	CA-C-N	5.78	127.95	120.44
1	I	469	ALA	C-N-CA	5.78	127.95	120.44
1	I	522	ILE	CA-C-O	5.78	126.97	120.85
3	K	244	SER	N-CA-C	-5.78	105.61	114.16
7	O	38	THR	O-C-N	5.78	130.34	122.37
8	H	406	LYS	CA-C-N	5.78	130.95	122.63
8	H	406	LYS	C-N-CA	5.78	130.95	122.63
1	I	492	ASN	N-CA-C	-5.78	105.06	111.36
2	J	453	ASN	CA-CB-CG	5.78	118.38	112.60
4	L	166	SER	CA-C-O	5.78	126.54	120.42
4	D	197	PRO	CA-C-N	5.77	130.36	120.72
4	D	197	PRO	C-N-CA	5.77	130.36	120.72
7	O	254	GLU	CA-C-N	5.77	132.36	121.97
7	O	254	GLU	C-N-CA	5.77	132.36	121.97
7	G	406	VAL	O-C-N	-5.77	116.65	123.00
1	A	231	ASN	CA-CB-CG	-5.77	106.83	112.60
6	N	422	LEU	CA-C-N	5.77	132.35	121.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	422	LEU	C-N-CA	5.77	132.35	121.97
1	A	148	LEU	CA-C-O	5.77	126.86	120.80
1	A	225	MET	CA-C-O	-5.77	113.86	119.51
7	O	265	ALA	O-C-N	5.77	128.01	122.07
8	P	85	MET	CG-SD-CE	-5.77	88.21	100.90
2	B	522	LYS	CA-C-O	-5.77	114.10	120.38
7	G	461	LEU	N-CA-C	-5.77	105.00	111.28
3	K	504	GLN	CA-C-N	5.76	128.48	120.29
3	K	504	GLN	C-N-CA	5.76	128.48	120.29
7	O	294	PRO	N-CD-CG	5.76	111.85	103.20
8	P	349	SER	O-C-N	5.76	129.73	123.10
8	P	460	ALA	CA-C-O	5.76	126.87	120.82
1	A	174	ASP	CA-CB-CG	-5.76	106.84	112.60
2	B	296	ILE	N-CA-C	-5.76	99.24	107.77
7	O	279	GLU	N-CA-CB	5.76	119.21	110.28
1	A	393	HIS	CG-CD2-NE2	5.76	112.96	107.20
2	J	129	GLY	O-C-N	5.76	127.78	122.19
3	K	26	ASN	CA-C-O	-5.76	114.32	120.42
3	K	176	ALA	CA-C-N	5.76	127.93	120.44
3	K	176	ALA	C-N-CA	5.76	127.93	120.44
4	L	509	VAL	O-C-N	-5.76	116.65	123.04
7	G	142	THR	N-CA-C	-5.76	99.86	109.24
5	M	191	ASN	CA-C-N	5.76	128.00	120.28
5	M	191	ASN	C-N-CA	5.76	128.00	120.28
3	C	276	GLN	CB-CG-CD	-5.76	102.81	112.60
6	F	501	LYS	CA-C-N	5.76	130.42	120.58
6	F	501	LYS	C-N-CA	5.76	130.42	120.58
7	G	221	SER	N-CA-CB	5.76	119.56	110.23
2	J	502	GLN	N-CA-C	5.76	118.50	111.82
1	A	222	SER	CA-C-O	5.75	127.25	120.58
7	G	373	ILE	CA-C-N	5.75	131.10	123.05
7	G	373	ILE	C-N-CA	5.75	131.10	123.05
3	K	434	GLN	CG-CD-OE1	5.75	132.31	120.80
5	M	431	LEU	N-CA-CB	5.75	118.35	110.01
7	O	309	PHE	O-C-N	-5.75	116.46	122.96
1	I	159	LYS	CA-C-N	5.75	129.79	122.37
1	I	159	LYS	C-N-CA	5.75	129.79	122.37
2	J	428	THR	CA-C-N	-5.75	112.65	119.84
2	J	428	THR	C-N-CA	-5.75	112.65	119.84
4	D	473	PRO	CA-C-N	5.75	128.59	120.42
4	D	473	PRO	C-N-CA	5.75	128.59	120.42
3	K	316	ARG	CA-C-N	5.75	127.98	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	316	ARG	C-N-CA	5.75	127.98	120.28
3	K	70	ILE	CA-C-N	5.75	132.52	121.54
3	K	70	ILE	C-N-CA	5.75	132.52	121.54
3	K	167	ARG	N-CA-C	5.75	117.62	111.36
6	N	74	ALA	O-C-N	5.75	128.21	122.12
6	N	171	ALA	N-CA-C	5.75	117.22	111.07
8	P	243	SER	N-CA-C	-5.75	106.25	113.72
7	G	233	HIS	CG-CD2-NE2	5.75	112.94	107.20
8	H	283	ILE	CB-CA-C	5.75	120.15	112.22
3	K	46	MET	N-CA-C	-5.75	101.02	109.18
4	L	35	PHE	CA-C-O	-5.75	114.78	120.70
2	J	518	ASP	CB-CA-C	-5.74	99.90	109.55
4	L	130	PRO	N-CD-CG	5.74	111.81	103.20
8	H	59	HIS	CB-CG-CD2	-5.74	123.73	131.20
7	O	84	LYS	N-CA-C	5.74	117.54	111.28
5	E	27	ARG	NE-CZ-NH2	-5.74	114.03	119.20
5	E	513	LYS	O-C-N	5.74	128.69	122.15
6	F	340	SER	CA-C-N	5.74	125.84	119.87
6	F	340	SER	C-N-CA	5.74	125.84	119.87
8	H	428	GLU	CA-C-N	5.74	127.97	120.28
8	H	428	GLU	C-N-CA	5.74	127.97	120.28
6	N	488	VAL	CA-C-N	5.74	127.97	120.28
6	N	488	VAL	C-N-CA	5.74	127.97	120.28
4	D	493	ILE	N-CA-CB	5.74	117.38	110.95
2	J	446	LEU	CA-C-N	5.74	125.41	119.56
2	J	446	LEU	C-N-CA	5.74	125.41	119.56
7	O	337	LEU	CB-CA-C	-5.74	100.77	110.64
5	E	440	CYS	N-CA-C	5.74	122.49	109.81
5	E	49	ARG	NE-CZ-NH1	-5.74	115.77	121.50
3	K	20	ARG	NE-CZ-NH2	-5.74	114.04	119.20
5	M	194	LEU	N-CA-C	5.74	117.33	111.14
3	K	39	THR	CA-C-N	5.73	128.54	120.28
3	K	39	THR	C-N-CA	5.73	128.54	120.28
5	E	148	LEU	O-C-N	5.73	128.20	122.12
1	I	117	VAL	N-CA-CB	5.73	117.26	110.55
4	L	328	ILE	CA-C-O	-5.73	114.57	121.28
7	O	430	LYS	O-C-N	-5.73	114.97	122.59
7	O	445	ILE	CB-CA-C	-5.73	108.27	114.35
2	B	61	LEU	CA-C-N	5.73	131.75	122.29
2	B	61	LEU	C-N-CA	5.73	131.75	122.29
7	G	122	ILE	CA-C-N	5.73	128.43	120.29
7	G	122	ILE	C-N-CA	5.73	128.43	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	300	PHE	CA-CB-CG	-5.73	108.07	113.80
1	I	315	ASP	CA-C-N	5.73	128.43	120.29
1	I	315	ASP	C-N-CA	5.73	128.43	120.29
2	B	239	ILE	N-CA-CB	5.73	118.68	111.46
6	F	183	ASP	CA-C-O	-5.73	114.58	121.40
4	L	188	VAL	N-CA-C	-5.73	104.94	110.72
7	O	50	VAL	CA-C-O	-5.73	114.43	120.39
1	A	21	ASN	CA-C-N	5.73	127.78	120.56
1	A	21	ASN	C-N-CA	5.73	127.78	120.56
2	B	248	LYS	N-CA-C	-5.73	102.56	110.35
4	D	514	VAL	N-CA-CB	5.73	123.07	111.05
6	N	272	LYS	N-CA-CB	5.73	118.54	110.12
1	I	415	VAL	O-C-N	5.72	127.73	121.83
2	J	99	THR	N-CA-CB	5.72	118.37	110.07
5	M	503	GLN	OE1-CD-NE2	5.72	128.32	122.60
6	N	70	GLN	O-C-N	5.72	129.74	123.04
8	P	290	VAL	N-CA-C	-5.72	99.88	108.12
2	B	155	PHE	CB-CG-CD2	-5.72	110.97	120.70
3	K	85	ARG	N-CA-CB	5.72	118.63	110.16
3	K	216	ARG	CD-NE-CZ	-5.72	116.39	124.40
5	E	98	GLN	OE1-CD-NE2	5.72	128.32	122.60
2	B	269	HIS	CA-C-O	-5.72	114.49	120.55
6	F	243	GLU	CA-C-N	5.72	131.01	123.17
6	F	243	GLU	C-N-CA	5.72	131.01	123.17
7	G	278	LEU	N-CA-CB	5.72	118.72	110.20
7	O	58	ILE	N-CA-C	-5.72	100.24	108.48
1	A	270	ILE	CA-C-N	5.72	128.41	120.29
1	A	270	ILE	C-N-CA	5.72	128.41	120.29
5	E	37	HIS	CG-CD2-NE2	5.72	112.92	107.20
5	E	186	ALA	N-CA-C	5.72	117.31	111.14
2	B	28	SER	N-CA-CB	5.72	118.52	110.12
3	C	309	ILE	N-CA-C	-5.72	99.83	108.17
5	E	286	GLU	CB-CA-C	-5.72	101.13	110.85
6	F	444	LEU	CA-C-O	5.72	126.48	120.42
8	H	347	CYS	N-CA-C	-5.72	99.92	109.24
3	C	422	LEU	N-CA-C	-5.71	105.03	112.23
5	E	371	MET	N-CA-CB	5.71	119.50	110.87
2	J	454	ALA	N-CA-C	5.71	118.45	111.82
3	K	402	LEU	CA-C-N	5.71	128.40	120.63
3	K	402	LEU	C-N-CA	5.71	128.40	120.63
6	N	384	LEU	CA-C-N	5.71	128.40	120.29
6	N	384	LEU	C-N-CA	5.71	128.40	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	34	GLN	CA-C-N	5.71	127.94	120.28
8	P	34	GLN	C-N-CA	5.71	127.94	120.28
3	C	228	ARG	NH1-CZ-NH2	-5.71	111.87	119.30
2	J	86	ASP	CA-CB-CG	-5.71	106.89	112.60
2	B	78	ASN	CA-C-O	-5.71	115.06	119.46
7	G	422	ASP	CA-C-N	5.71	128.99	120.31
7	G	422	ASP	C-N-CA	5.71	128.99	120.31
3	K	149	SER	N-CA-C	5.71	117.59	111.36
6	N	440	PHE	CA-CB-CG	5.71	119.51	113.80
2	B	394	LEU	CA-C-N	5.71	128.40	120.29
2	B	394	LEU	C-N-CA	5.71	128.40	120.29
3	C	365	ASP	CA-CB-CG	-5.71	106.89	112.60
4	D	111	ILE	N-CA-CB	5.71	117.23	110.55
4	D	301	GLN	OE1-CD-NE2	5.71	128.31	122.60
6	F	256	ARG	NE-CZ-NH1	-5.71	115.79	121.50
2	J	361	HIS	CA-CB-CG	5.71	119.51	113.80
3	K	58	VAL	N-CA-C	-5.71	100.45	108.27
8	P	365	HIS	CE1-NE2-CD2	-5.71	103.29	109.00
4	D	114	GLY	N-CA-C	-5.71	105.30	113.86
2	J	465	LEU	CA-C-N	5.71	128.20	120.38
2	J	465	LEU	C-N-CA	5.71	128.20	120.38
4	D	261	ASP	CA-C-N	5.71	129.36	120.75
4	D	261	ASP	C-N-CA	5.71	129.36	120.75
5	E	345	PHE	N-CA-C	-5.71	105.04	112.23
4	L	63	ASP	N-CA-CB	5.71	119.09	110.42
8	H	365	HIS	CA-C-O	-5.70	115.17	121.33
1	A	17	ILE	N-CA-CB	5.70	119.13	110.58
7	O	394	MET	N-CA-C	5.70	117.17	111.07
1	A	201	HIS	CB-CG-CD2	5.70	138.61	131.20
8	H	516	VAL	CA-CB-CG2	-5.70	100.71	110.40
2	J	174	HIS	ND1-CE1-NE2	5.70	114.10	108.40
3	K	380	SER	N-CA-CB	5.70	120.73	111.21
7	O	103	GLU	CA-C-O	-5.70	114.51	120.55
1	A	169	ALA	O-C-N	5.70	128.65	122.15
5	E	348	LEU	N-CA-C	-5.70	99.00	108.75
5	E	469	ASN	O-C-N	5.70	126.80	121.27
8	H	278	ALA	N-CA-C	5.70	117.49	111.28
5	M	309	GLU	O-C-N	5.70	127.94	122.07
3	C	77	ALA	CA-C-N	5.70	128.48	120.28
3	C	77	ALA	C-N-CA	5.70	128.48	120.28
5	E	385	ILE	CA-CB-CG2	-5.70	100.81	110.50
5	E	520	ALA	CA-C-N	5.70	127.91	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	520	ALA	C-N-CA	5.70	127.91	120.28
8	H	116	GLU	CA-C-N	5.70	127.91	120.28
8	H	116	GLU	C-N-CA	5.70	127.91	120.28
1	I	440	GLU	N-CA-CB	5.70	118.59	110.16
4	D	92	VAL	CA-CB-CG2	5.70	120.08	110.40
4	L	452	ARG	CA-C-N	5.70	128.38	120.29
4	L	452	ARG	C-N-CA	5.70	128.38	120.29
5	M	356	ALA	O-C-N	-5.70	117.28	123.26
6	N	472	GLU	CA-C-O	5.70	127.19	120.58
7	G	38	THR	CB-CA-C	5.69	119.61	109.65
3	K	312	ILE	N-CA-C	-5.69	100.14	108.11
6	N	294	GLN	N-CA-C	-5.69	105.92	112.92
8	H	308	TYR	CA-CB-CG	-5.69	103.66	113.90
7	O	451	ASP	N-CA-C	5.69	117.56	111.36
1	A	247	LYS	N-CA-CB	5.69	118.17	110.38
2	B	174	HIS	CA-CB-CG	-5.69	108.11	113.80
2	B	496	SER	O-C-N	5.69	129.33	122.68
4	D	148	LEU	CA-C-O	5.69	126.58	120.55
5	E	189	ALA	CA-C-N	5.69	128.25	120.46
5	E	189	ALA	C-N-CA	5.69	128.25	120.46
7	G	39	THR	CA-C-N	5.69	127.90	120.28
7	G	39	THR	C-N-CA	5.69	127.90	120.28
3	K	27	ILE	CA-C-N	5.69	127.83	120.44
3	K	27	ILE	C-N-CA	5.69	127.83	120.44
3	C	314	ARG	NE-CZ-NH1	-5.69	115.81	121.50
7	O	219	THR	N-CA-C	-5.69	100.06	108.99
6	F	82	THR	N-CA-CB	5.68	118.25	110.01
7	G	181	ASP	CA-CB-CG	-5.68	106.92	112.60
5	M	201	ARG	N-CA-CB	5.68	118.25	110.01
7	O	185	MET	CB-CA-C	-5.68	101.96	110.88
8	P	409	VAL	O-C-N	-5.68	115.37	121.11
7	G	362	THR	O-C-N	-5.68	116.56	123.10
3	K	261	GLU	CB-CA-C	-5.68	100.30	110.70
7	O	365	PRO	O-C-N	-5.68	115.41	122.23
2	B	216	GLU	CG-CD-OE1	-5.68	105.34	118.40
8	H	497	ILE	N-CA-C	-5.68	98.97	107.37
4	L	278	GLU	N-CA-CB	5.68	119.08	110.28
4	L	382	PRO	CA-C-O	-5.68	112.84	118.29
2	B	133	ALA	CA-C-N	5.68	127.89	120.28
2	B	133	ALA	C-N-CA	5.68	127.89	120.28
1	I	76	CYS	O-C-N	5.68	128.14	122.12
8	P	257	VAL	O-C-N	-5.68	117.41	122.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	311	ASP	O-C-N	5.67	129.25	122.27
6	F	163	GLU	N-CA-C	5.67	117.27	111.14
7	G	273	ILE	CA-C-O	-5.67	114.83	120.85
3	C	491	LYS	CB-CA-C	-5.67	101.37	110.79
3	K	96	THR	CA-CB-CG2	-5.67	100.86	110.50
2	B	382	ILE	O-C-N	5.67	127.80	121.90
3	C	408	VAL	CA-C-N	5.67	125.60	119.76
3	C	408	VAL	C-N-CA	5.67	125.60	119.76
7	G	19	ILE	CA-C-O	-5.67	112.35	119.95
2	J	311	ALA	N-CA-C	-5.67	99.94	109.07
3	K	490	MET	CB-CA-C	-5.67	99.78	110.67
3	C	352	ILE	CA-C-O	5.67	126.28	120.39
5	E	243	VAL	CA-C-O	-5.67	116.02	121.63
5	E	496	LYS	CA-C-O	-5.67	114.52	121.78
6	F	219	PRO	O-C-N	5.67	130.06	123.14
1	I	169	ALA	N-CA-C	-5.67	105.18	111.36
2	J	359	LEU	N-CA-CB	5.67	121.26	111.00
3	K	319	ASP	CA-CB-CG	5.67	118.27	112.60
5	M	38	ILE	CA-C-N	5.67	127.81	120.44
5	M	38	ILE	C-N-CA	5.67	127.81	120.44
6	N	343	CYS	N-CA-C	-5.67	106.36	113.28
1	A	393	HIS	ND1-CE1-NE2	5.67	114.07	108.40
2	B	281	ARG	NE-CZ-NH1	5.67	127.17	121.50
7	G	289	VAL	CA-C-O	-5.67	114.50	120.39
1	I	302	GLU	N-CA-C	5.67	117.46	111.28
5	M	468	MET	CG-SD-CE	5.67	113.36	100.90
2	B	468	ALA	N-CA-C	5.67	117.13	111.07
7	G	135	LYS	CA-C-N	5.67	127.70	120.56
7	G	135	LYS	C-N-CA	5.67	127.70	120.56
4	L	30	PRO	N-CA-C	5.67	120.99	113.57
1	A	214	TYR	N-CA-CB	5.66	119.86	110.63
5	E	271	VAL	CA-C-N	5.66	127.87	120.28
5	E	271	VAL	C-N-CA	5.66	127.87	120.28
5	M	325	VAL	N-CA-C	-5.66	99.90	108.17
6	N	287	LYS	CA-C-O	-5.66	115.39	121.45
8	P	96	GLU	N-CA-C	5.66	120.32	112.90
2	B	66	ASP	CA-C-O	-5.66	114.09	120.32
6	F	269	ASP	CA-CB-CG	-5.66	106.94	112.60
7	G	97	VAL	CA-C-O	-5.66	115.17	121.17
2	J	304	PHE	CA-CB-CG	-5.66	108.14	113.80
5	M	495	HIS	CG-CD2-NE2	5.66	112.86	107.20
6	F	188	LEU	N-CA-C	-5.66	98.75	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	49	PRO	N-CA-C	5.66	121.28	113.98
4	D	502	ASN	CA-C-O	5.66	127.55	121.55
1	A	172	VAL	CB-CA-C	-5.66	104.41	112.22
4	L	159	ASP	CA-C-N	5.66	127.86	120.28
4	L	159	ASP	C-N-CA	5.66	127.86	120.28
5	M	436	GLU	CA-C-N	5.66	127.86	120.28
5	M	436	GLU	C-N-CA	5.66	127.86	120.28
3	C	117	MET	O-C-N	5.65	130.11	122.59
5	E	62	VAL	CA-C-O	5.65	126.33	120.39
1	I	393	HIS	CA-CB-CG	5.65	119.45	113.80
2	J	341	VAL	N-CA-CB	5.65	119.34	112.10
1	A	497	ASP	N-CA-C	-5.65	102.39	110.59
3	C	82	GLU	CA-C-N	-5.65	112.48	121.02
3	C	82	GLU	C-N-CA	-5.65	112.48	121.02
7	G	359	ASN	OD1-CG-ND2	5.65	128.25	122.60
8	H	499	ASP	N-CA-C	-5.65	100.72	109.14
5	M	395	ILE	N-CA-CB	5.65	119.06	110.58
8	P	34	GLN	N-CA-CB	5.65	118.21	110.01
3	C	242	ASP	N-CA-C	-5.65	104.61	112.30
5	E	197	ALA	CA-C-O	5.65	126.54	120.55
1	I	398	VAL	CA-C-O	-5.65	115.07	120.95
2	J	189	ARG	CD-NE-CZ	-5.65	116.49	124.40
2	J	398	ALA	CA-C-N	5.65	130.15	120.72
2	J	398	ALA	C-N-CA	5.65	130.15	120.72
7	O	178	MET	CA-C-N	5.65	128.50	120.53
7	O	178	MET	C-N-CA	5.65	128.50	120.53
3	K	225	THR	N-CA-C	-5.65	104.98	112.94
8	P	227	THR	CA-C-O	5.65	126.54	120.38
2	B	397	LEU	O-C-N	5.65	128.10	122.12
8	P	514	ALA	CA-C-N	5.65	128.31	120.29
8	P	514	ALA	C-N-CA	5.65	128.31	120.29
1	I	121	TYR	O-C-N	5.64	128.10	122.12
2	J	505	LEU	CA-C-O	5.64	126.75	120.82
3	K	174	ASN	OD1-CG-ND2	5.64	128.24	122.60
2	B	138	ARG	CA-C-O	5.64	126.50	120.24
2	B	408	TYR	CA-CB-CG	-5.64	103.74	113.90
3	K	35	ASP	CA-C-O	-5.64	114.89	120.82
6	N	497	ASN	CA-C-N	5.64	128.30	120.29
6	N	497	ASN	C-N-CA	5.64	128.30	120.29
5	E	308	ASP	CA-C-O	-5.64	114.44	120.42
8	P	517	THR	CA-CB-CG2	5.64	120.09	110.50
1	I	337	GLU	CA-C-N	5.64	128.72	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	337	GLU	C-N-CA	5.64	128.72	120.71
4	L	104	ASP	N-CA-C	-5.64	100.14	108.99
4	L	172	ASN	N-CA-C	-5.64	105.90	112.89
6	N	83	ALA	CA-C-N	5.64	127.77	120.44
6	N	83	ALA	C-N-CA	5.64	127.77	120.44
6	N	220	ASP	N-CA-CB	-5.64	102.13	110.53
5	E	448	MET	CA-C-O	-5.64	114.58	120.55
2	B	380	GLN	CA-C-N	5.63	127.77	120.44
2	B	380	GLN	C-N-CA	5.63	127.77	120.44
5	E	236	HIS	ND1-CE1-NE2	5.63	114.03	108.40
5	E	306	PHE	CA-C-N	5.63	132.30	121.54
5	E	306	PHE	C-N-CA	5.63	132.30	121.54
7	G	315	PRO	O-C-N	5.63	130.00	123.01
2	J	405	ARG	N-CA-CB	5.63	118.42	110.36
5	M	278	GLN	OE1-CD-NE2	5.63	128.23	122.60
3	C	246	GLU	N-CA-CB	5.63	118.28	110.17
6	F	36	THR	CA-C-N	5.63	132.30	121.54
6	F	36	THR	C-N-CA	5.63	132.30	121.54
6	F	63	LEU	CA-C-N	5.63	127.83	120.28
6	F	63	LEU	C-N-CA	5.63	127.83	120.28
1	I	65	LEU	CA-C-N	5.63	131.10	122.77
1	I	65	LEU	C-N-CA	5.63	131.10	122.77
3	K	83	ILE	CB-CA-C	5.63	119.99	112.22
6	N	459	LEU	CB-CA-C	-5.63	101.44	110.79
2	B	246	THR	CA-C-N	5.63	132.29	121.54
2	B	246	THR	C-N-CA	5.63	132.29	121.54
7	O	417	SER	CA-C-O	5.63	126.73	120.82
4	D	388	ILE	CA-C-O	5.63	126.24	120.39
4	D	395	LYS	CA-C-N	5.63	128.38	120.28
4	D	395	LYS	C-N-CA	5.63	128.38	120.28
1	I	132	ILE	N-CA-C	-5.63	104.88	110.62
3	K	382	GLU	N-CA-CB	5.63	118.39	110.12
5	M	342	VAL	N-CA-C	-5.63	96.72	108.88
6	N	173	VAL	O-C-N	-5.63	116.41	121.87
6	N	470	HIS	N-CA-CB	5.63	119.00	110.28
2	B	385	GLU	CA-C-N	5.63	128.28	120.29
2	B	385	GLU	C-N-CA	5.63	128.28	120.29
4	D	260	MET	CA-C-O	-5.63	115.05	121.58
3	K	454	ASN	CB-CA-C	-5.63	101.45	110.79
2	B	382	ILE	CA-C-O	-5.62	114.81	121.05
4	D	254	SER	CA-C-N	5.62	129.21	120.60
4	D	254	SER	C-N-CA	5.62	129.21	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	398	ALA	CB-CA-C	-5.62	101.29	110.85
6	F	27	ALA	CA-C-N	5.62	128.28	120.29
6	F	27	ALA	C-N-CA	5.62	128.28	120.29
8	H	471	HIS	N-CA-CB	5.62	120.00	110.49
1	I	298	LYS	CG-CD-CE	5.62	124.23	111.30
3	K	217	GLY	CA-C-N	5.62	132.12	122.67
3	K	217	GLY	C-N-CA	5.62	132.12	122.67
7	O	158	CYS	CA-C-N	5.62	127.81	120.28
7	O	158	CYS	C-N-CA	5.62	127.81	120.28
7	O	446	PRO	N-CA-CB	5.62	109.15	103.25
8	P	29	VAL	N-CA-C	5.62	116.40	110.72
6	F	208	ARG	NE-CZ-NH2	5.62	124.26	119.20
8	H	102	ASN	CA-C-N	5.62	128.85	120.31
8	H	102	ASN	C-N-CA	5.62	128.85	120.31
8	H	206	LYS	CB-CG-CD	5.62	124.23	111.30
8	H	424	THR	CB-CA-C	-5.62	101.46	110.79
2	J	292	ASN	N-CA-CB	5.62	121.17	111.00
4	L	170	SER	CA-C-N	5.62	127.81	120.28
4	L	170	SER	C-N-CA	5.62	127.81	120.28
1	I	54	ILE	CB-CA-C	-5.62	102.79	110.77
2	J	413	SER	CA-C-N	5.62	128.27	120.29
2	J	413	SER	C-N-CA	5.62	128.27	120.29
4	L	257	LYS	CB-CA-C	5.62	119.71	111.73
3	K	24	SER	N-CA-C	5.62	117.40	111.28
6	N	24	ILE	CA-CB-CG2	-5.62	100.95	110.50
7	O	507	SER	CA-C-N	5.62	128.27	120.29
7	O	507	SER	C-N-CA	5.62	128.27	120.29
7	O	421	ARG	CA-C-N	5.62	128.08	120.44
7	O	421	ARG	C-N-CA	5.62	128.08	120.44
1	A	143	LEU	N-CA-CB	5.62	119.98	110.49
3	C	133	MET	CG-SD-CE	-5.62	88.55	100.90
4	D	412	ILE	CA-C-N	5.62	127.80	120.28
4	D	412	ILE	C-N-CA	5.62	127.80	120.28
6	F	368	ASN	O-C-N	-5.62	114.86	121.32
4	L	474	ILE	N-CA-C	5.62	115.81	110.42
6	N	285	SER	N-CA-C	-5.62	105.35	113.21
8	P	390	ARG	CB-CA-C	-5.62	101.47	110.79
2	B	516	ARG	NE-CZ-NH2	-5.61	114.15	119.20
6	F	398	VAL	CA-C-N	5.61	127.80	120.28
6	F	398	VAL	C-N-CA	5.61	127.80	120.28
1	I	350	GLU	N-CA-CB	5.61	120.26	111.56
6	N	71	HIS	CG-CD2-NE2	5.61	112.81	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	303	ASP	O-C-N	5.61	128.15	122.09
6	N	476	LEU	N-CA-C	-5.61	99.75	108.90
5	E	512	GLY	CA-C-N	5.61	128.26	120.29
5	E	512	GLY	C-N-CA	5.61	128.26	120.29
5	M	295	THR	CA-CB-OG1	5.61	118.01	109.60
8	H	372	ILE	CA-C-N	5.61	131.45	121.75
8	H	372	ILE	C-N-CA	5.61	131.45	121.75
4	L	46	ASP	CA-C-N	5.61	128.07	120.44
4	L	46	ASP	C-N-CA	5.61	128.07	120.44
4	L	203	VAL	N-CA-CB	5.61	120.48	111.23
7	O	137	LYS	CA-C-N	5.61	127.79	120.28
7	O	137	LYS	C-N-CA	5.61	127.79	120.28
7	O	244	LEU	CA-C-O	5.61	127.89	121.28
8	P	348	ASP	O-C-N	5.61	127.84	122.07
8	H	392	VAL	O-C-N	-5.60	116.06	121.83
4	L	206	ARG	N-CA-C	-5.60	106.03	112.92
8	P	346	HIS	CA-C-N	5.60	131.39	122.59
8	P	346	HIS	C-N-CA	5.60	131.39	122.59
1	A	440	GLU	CA-C-O	5.60	126.41	119.97
3	K	302	HIS	CA-CB-CG	-5.60	108.20	113.80
8	P	425	SER	O-C-N	5.60	128.77	122.22
6	N	346	HIS	CE1-NE2-CD2	-5.60	103.40	109.00
7	O	74	PRO	N-CA-CB	5.60	109.13	103.25
3	C	493	LEU	N-CA-C	5.60	118.15	111.71
8	H	371	ALA	N-CA-C	-5.60	102.99	110.55
7	O	242	VAL	O-C-N	-5.60	115.57	122.57
2	B	28	SER	CA-C-N	5.60	128.05	120.44
2	B	28	SER	C-N-CA	5.60	128.05	120.44
2	B	218	PHE	CB-CG-CD1	-5.60	111.19	120.70
6	F	287	LYS	CA-C-N	-5.60	116.53	122.30
6	F	287	LYS	C-N-CA	-5.60	116.53	122.30
6	F	475	GLN	CA-C-O	-5.60	114.59	120.80
2	J	447	PRO	CB-CA-C	-5.60	103.90	111.85
5	M	385	ILE	CA-CB-CG2	-5.60	100.98	110.50
4	D	168	THR	N-CA-C	-5.60	105.26	111.36
1	I	520	ALA	CA-C-N	5.60	127.78	120.28
1	I	520	ALA	C-N-CA	5.60	127.78	120.28
2	J	77	ASP	N-CA-C	-5.60	104.27	113.50
4	L	514	VAL	CB-CA-C	-5.60	104.69	112.02
2	J	93	ASP	N-CA-C	5.59	117.38	111.28
4	L	151	MET	CA-C-N	5.59	129.20	120.75
4	L	151	MET	C-N-CA	5.59	129.20	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	376	VAL	O-C-N	5.59	129.33	122.95
1	A	391	SER	O-C-N	5.59	128.05	122.12
2	B	206	GLY	O-C-N	5.59	127.67	122.47
2	J	81	ALA	CA-C-N	5.59	128.04	120.38
2	J	81	ALA	C-N-CA	5.59	128.04	120.38
2	B	179	PHE	CA-C-O	-5.59	114.62	120.55
4	D	109	VAL	CA-C-O	-5.59	114.59	120.57
1	I	455	ASN	CB-CA-C	-5.59	101.51	110.79
2	B	142	LEU	N-CA-CB	5.59	118.43	110.16
5	E	261	LYS	N-CA-C	5.59	122.71	110.80
2	J	381	GLN	CA-C-N	5.59	128.12	120.46
2	J	381	GLN	C-N-CA	5.59	128.12	120.46
4	L	145	ILE	CA-CB-CG2	-5.59	101.00	110.50
5	E	539	SER	O-C-N	-5.59	115.16	122.59
1	I	449	PRO	N-CA-CB	5.59	108.88	103.51
5	M	253	CYS	CB-CA-C	5.59	118.32	109.55
7	O	361	PHE	N-CA-CB	5.59	119.37	110.65
1	A	57	ASP	N-CA-CB	5.59	119.93	110.49
1	I	316	LEU	CA-C-N	5.59	128.22	120.29
1	I	316	LEU	C-N-CA	5.59	128.22	120.29
5	M	388	ARG	CB-CG-CD	5.59	124.15	111.30
7	O	39	THR	CA-C-N	5.59	132.21	121.54
7	O	39	THR	C-N-CA	5.59	132.21	121.54
6	F	17	GLN	OE1-CD-NE2	-5.58	117.02	122.60
2	J	455	GLY	CA-C-N	5.58	131.36	122.59
2	J	455	GLY	C-N-CA	5.58	131.36	122.59
1	A	173	VAL	N-CA-CB	5.58	118.95	110.58
3	C	79	SER	CA-C-N	5.58	128.03	120.44
3	C	79	SER	C-N-CA	5.58	128.03	120.44
3	C	374	ILE	O-C-N	5.58	129.04	123.18
1	I	368	LYS	CA-C-O	5.58	126.52	120.32
7	O	60	ASN	N-CA-C	-5.58	104.00	112.99
2	B	85	VAL	O-C-N	-5.58	116.46	121.87
2	B	470	SER	CB-CA-C	-5.58	101.36	110.85
8	H	176	GLU	N-CA-CB	5.58	118.10	110.01
1	I	534	HIS	ND1-CE1-NE2	5.58	113.98	108.40
3	K	106	LEU	CA-C-N	5.58	127.69	120.44
3	K	106	LEU	C-N-CA	5.58	127.69	120.44
4	L	138	GLN	O-C-N	5.58	128.51	122.15
4	L	335	PHE	CA-CB-CG	-5.58	108.22	113.80
6	N	506	HIS	CB-CG-CD2	-5.58	123.95	131.20
2	B	22	GLU	N-CA-C	5.58	117.44	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	24	SER	CA-C-N	5.58	126.17	119.98
3	C	24	SER	C-N-CA	5.58	126.17	119.98
4	D	290	ILE	CB-CA-C	-5.58	104.52	112.22
6	F	24	ILE	N-CA-CB	5.58	118.95	110.58
7	G	390	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
3	K	396	GLN	N-CA-C	5.58	117.36	111.28
3	K	449	ARG	NE-CZ-NH1	-5.58	115.92	121.50
5	M	118	GLU	CA-C-N	5.58	127.75	120.28
5	M	118	GLU	C-N-CA	5.58	127.75	120.28
7	O	286	ALA	N-CA-CB	5.58	119.97	110.71
1	A	207	GLU	CB-CA-C	5.58	119.69	109.99
4	D	399	GLU	CA-C-O	-5.58	113.56	119.97
1	A	471	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
3	C	85	ARG	NE-CZ-NH2	5.57	124.22	119.20
7	G	179	VAL	CA-C-N	5.57	128.10	120.46
7	G	179	VAL	C-N-CA	5.57	128.10	120.46
1	I	249	GLY	N-CA-C	-5.57	101.11	111.14
4	L	463	SER	N-CA-C	5.57	117.16	111.14
7	O	271	TRP	CB-CG-CD1	5.57	135.26	126.90
8	P	404	ARG	NE-CZ-NH2	5.57	124.22	119.20
1	I	456	ALA	CB-CA-C	-5.57	99.98	110.01
2	B	381	GLN	OE1-CD-NE2	5.57	128.17	122.60
2	B	505	LEU	CA-C-O	-5.57	114.97	120.82
6	F	433	ALA	CA-C-N	5.57	127.74	120.28
6	F	433	ALA	C-N-CA	5.57	127.74	120.28
3	K	412	GLY	N-CA-C	-5.57	107.97	115.21
7	O	397	ARG	N-CA-C	5.57	117.35	111.28
1	A	231	ASN	OD1-CG-ND2	5.57	128.17	122.60
1	I	108	VAL	CA-C-N	5.57	127.74	120.28
1	I	108	VAL	C-N-CA	5.57	127.74	120.28
8	P	32	ASN	O-C-N	-5.57	116.33	122.07
3	C	368	ASP	N-CA-CB	5.57	120.28	110.37
5	E	225	ILE	CB-CA-C	5.57	119.27	110.81
5	E	317	ASN	N-CA-CB	5.57	118.79	110.22
8	H	145	ASN	OD1-CG-ND2	5.57	128.17	122.60
8	H	179	LEU	CA-C-N	5.57	127.74	120.28
8	H	179	LEU	C-N-CA	5.57	127.74	120.28
4	L	110	VAL	N-CA-C	5.57	115.76	110.53
8	P	322	ARG	CA-C-O	-5.57	114.52	120.42
2	B	361	HIS	CA-CB-CG	5.57	119.37	113.80
5	M	79	SER	CB-CA-C	-5.57	101.39	110.85
5	M	177	VAL	CB-CA-C	5.57	120.42	111.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	M	532	ASP	N-CA-C	-5.57	98.11	108.02
3	K	400	ASN	OD1-CG-ND2	-5.56	117.04	122.60
5	M	516	GLN	CB-CG-CD	-5.56	103.14	112.60
7	O	24	SER	N-CA-CB	5.56	118.39	110.16
3	C	398	CYS	N-CA-C	-5.56	105.22	111.28
5	E	429	CYS	CA-C-N	5.56	127.73	120.28
5	E	429	CYS	C-N-CA	5.56	127.73	120.28
7	G	438	TYR	N-CA-C	-5.56	105.13	111.14
8	H	232	THR	CA-C-N	5.56	128.74	120.17
8	H	232	THR	C-N-CA	5.56	128.74	120.17
1	I	427	ALA	CA-C-N	5.56	127.67	120.44
1	I	427	ALA	C-N-CA	5.56	127.67	120.44
8	P	208	LEU	CA-C-N	5.56	131.66	122.43
8	P	208	LEU	C-N-CA	5.56	131.66	122.43
5	E	307	ASP	CA-C-O	5.56	128.46	120.51
8	H	301	ALA	O-C-N	5.56	128.49	122.15
8	P	47	TYR	CA-C-N	5.56	130.60	121.87
8	P	47	TYR	C-N-CA	5.56	130.60	121.87
1	A	121	TYR	CA-C-O	-5.56	114.53	120.42
6	F	355	LEU	CB-CA-C	-5.56	99.36	110.42
5	M	37	HIS	CG-CD2-NE2	5.56	112.76	107.20
5	M	515	GLN	O-C-N	5.56	128.01	122.12
3	C	111	HIS	CG-CD2-NE2	5.56	112.76	107.20
5	E	236	HIS	CE1-NE2-CD2	-5.56	103.44	109.00
2	J	62	MET	N-CA-C	-5.56	100.62	109.23
8	P	264	GLU	N-CA-CB	5.56	118.48	110.20
1	A	390	ARG	NE-CZ-NH2	-5.56	114.20	119.20
3	C	433	GLU	CB-CG-CD	-5.56	103.16	112.60
4	D	150	ASP	N-CA-C	-5.56	105.30	111.36
3	K	371	ALA	O-C-N	5.56	128.47	121.64
8	P	321	LEU	CB-CA-C	-5.56	101.40	110.85
8	H	227	THR	CA-C-N	5.55	131.53	122.81
8	H	227	THR	C-N-CA	5.55	131.53	122.81
5	M	216	GLY	N-CA-C	-5.55	107.35	114.85
5	M	301	ILE	CA-C-O	5.55	126.47	120.53
1	A	394	ASP	N-CA-CB	5.55	118.38	110.16
2	B	235	ALA	N-CA-CB	5.55	118.17	110.17
7	G	463	LYS	N-CA-C	5.55	118.26	111.82
2	J	131	ARG	CA-C-N	5.55	128.75	120.31
2	J	131	ARG	C-N-CA	5.55	128.75	120.31
2	J	444	ARG	CB-CG-CD	5.55	124.07	111.30
3	K	383	ILE	CA-CB-CG1	-5.55	100.96	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	189	ALA	CB-CA-C	-5.55	102.17	110.88
7	G	374	LEU	CA-C-O	5.55	126.42	120.32
2	J	444	ARG	CA-C-N	5.55	128.27	120.28
2	J	444	ARG	C-N-CA	5.55	128.27	120.28
2	J	464	GLN	O-C-N	-5.55	115.21	122.59
3	K	61	ASN	N-CA-CB	5.55	118.66	110.56
5	M	234	PHE	CA-C-O	-5.55	115.67	121.55
5	M	511	ILE	O-C-N	-5.55	116.27	121.87
6	N	235	VAL	O-C-N	-5.55	117.06	123.00
8	P	323	ARG	CA-C-O	5.55	126.84	120.90
1	I	161	ILE	CA-CB-CG2	-5.55	101.07	110.50
4	L	70	ILE	CA-C-O	-5.55	114.56	120.39
6	F	109	TYR	N-CA-C	5.55	117.41	111.36
7	G	22	LEU	CA-C-N	5.55	129.40	120.30
7	G	22	LEU	C-N-CA	5.55	129.40	120.30
2	B	122	HIS	CE1-NE2-CD2	-5.54	103.45	109.00
4	D	344	PRO	N-CA-C	5.54	119.91	111.15
8	P	409	VAL	CB-CA-C	5.54	115.51	110.13
2	J	200	HIS	ND1-CE1-NE2	5.54	113.94	108.40
3	C	450	THR	CA-C-N	5.54	128.73	120.31
3	C	450	THR	C-N-CA	5.54	128.73	120.31
4	D	85	HIS	ND1-CE1-NE2	5.54	113.94	108.40
5	E	145	ILE	O-C-N	5.54	127.54	121.83
7	G	73	HIS	CB-CG-CD2	-5.54	124.00	131.20
8	P	238	LYS	CA-C-N	-5.54	114.38	122.58
8	P	238	LYS	C-N-CA	-5.54	114.38	122.58
5	E	432	ALA	N-CA-C	5.54	117.12	111.14
2	J	28	SER	N-CA-CB	5.54	118.26	110.12
7	O	410	GLY	CA-C-N	5.54	127.70	120.28
7	O	410	GLY	C-N-CA	5.54	127.70	120.28
5	E	239	MET	CA-C-N	5.54	125.48	119.78
5	E	239	MET	C-N-CA	5.54	125.48	119.78
1	I	60	THR	CA-CB-OG1	5.54	117.91	109.60
3	K	306	ARG	NE-CZ-NH2	5.54	124.19	119.20
7	O	179	VAL	CA-C-N	5.54	127.54	120.56
7	O	179	VAL	C-N-CA	5.54	127.54	120.56
8	P	56	VAL	O-C-N	-5.54	117.28	123.26
8	P	161	SER	CA-C-N	5.54	128.15	120.29
8	P	161	SER	C-N-CA	5.54	128.15	120.29
1	A	225	MET	N-CA-C	5.54	119.27	109.58
1	A	47	ASP	N-CA-C	-5.54	106.69	113.50
1	A	280	ALA	CA-C-O	-5.54	113.61	119.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	288	VAL	N-CA-CB	5.54	119.60	111.52
8	P	167	SER	O-C-N	5.54	128.07	122.09
1	A	309	ARG	N-CA-C	-5.53	101.00	109.41
7	G	451	ASP	CA-CB-CG	-5.53	107.07	112.60
7	O	166	LYS	N-CA-CB	5.53	119.84	110.49
1	A	335	GLU	CB-CG-CD	-5.53	103.19	112.60
4	D	63	ASP	N-CA-C	-5.53	103.40	110.53
5	E	187	GLU	O-C-N	5.53	129.07	122.27
1	I	85	GLU	CA-C-N	5.53	129.02	123.16
1	I	85	GLU	C-N-CA	5.53	129.02	123.16
2	J	275	MET	N-CA-CB	5.53	118.25	110.12
1	I	58	GLY	CA-C-O	-5.53	115.03	121.00
2	B	376	ARG	CB-CG-CD	5.53	124.01	111.30
3	C	245	LEU	CA-C-N	5.53	129.62	120.94
3	C	245	LEU	C-N-CA	5.53	129.62	120.94
4	D	188	VAL	CB-CA-C	-5.53	104.68	112.14
4	D	427	ALA	CA-C-N	5.53	125.36	119.28
4	D	427	ALA	C-N-CA	5.53	125.36	119.28
6	F	286	ASP	N-CA-C	-5.53	106.49	113.18
3	K	321	ASN	CA-C-N	5.53	127.68	120.28
3	K	321	ASN	C-N-CA	5.53	127.68	120.28
5	M	362	ILE	N-CA-CB	5.53	121.00	111.39
6	N	249	PHE	CA-CB-CG	-5.53	108.27	113.80
8	P	525	ILE	CA-CB-CG2	-5.53	101.11	110.50
7	G	186	LEU	N-CA-CB	5.52	118.81	110.30
7	G	255	ILE	O-C-N	-5.52	116.80	122.82
7	O	329	SER	O-C-N	-5.52	117.46	123.26
8	P	227	THR	O-C-N	-5.52	116.77	123.29
2	B	321	GLU	N-CA-CB	5.52	118.08	110.07
2	B	488	MET	CG-SD-CE	-5.52	88.75	100.90
5	M	315	LEU	CA-C-N	5.52	128.13	120.29
5	M	315	LEU	C-N-CA	5.52	128.13	120.29
3	C	459	THR	O-C-N	5.52	127.97	122.12
4	D	277	ARG	NE-CZ-NH2	-5.52	114.23	119.20
5	E	420	TYR	N-CA-CB	5.52	118.87	109.87
5	M	264	HIS	CA-CB-CG	5.52	119.32	113.80
5	M	431	LEU	CB-CA-C	-5.52	102.21	110.88
4	D	77	ILE	CA-C-N	5.52	127.95	120.44
4	D	77	ILE	C-N-CA	5.52	127.95	120.44
7	G	271	TRP	CA-C-O	5.52	126.32	119.97
8	P	363	PHE	N-CA-C	-5.52	102.03	110.14
5	E	296	GLY	N-CA-C	-5.52	95.76	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	347	ALA	N-CA-C	-5.52	100.03	109.24
1	I	170	ASN	CA-C-N	5.52	127.67	120.28
1	I	170	ASN	C-N-CA	5.52	127.67	120.28
4	L	309	LEU	N-CA-C	-5.52	101.69	109.96
7	O	290	LEU	N-CA-C	-5.52	100.41	109.40
1	A	80	ASP	CA-C-N	5.51	127.67	120.28
1	A	80	ASP	C-N-CA	5.51	127.67	120.28
6	N	194	MET	N-CA-C	-5.51	100.41	109.40
6	F	198	HIS	ND1-CE1-NE2	5.51	113.91	108.40
7	O	245	GLU	CA-C-N	5.51	128.13	120.63
7	O	245	GLU	C-N-CA	5.51	128.13	120.63
1	A	23	MET	CB-CG-SD	5.51	129.24	112.70
2	B	452	ASP	CA-C-N	5.51	127.66	120.28
2	B	452	ASP	C-N-CA	5.51	127.66	120.28
2	B	476	ALA	N-CA-CB	5.51	120.99	111.13
5	E	411	ASN	CA-C-O	-5.51	114.58	120.42
2	B	270	ALA	N-CA-CB	5.51	118.31	110.16
5	E	465	ASN	CA-C-N	5.51	130.88	121.29
5	E	465	ASN	C-N-CA	5.51	130.88	121.29
6	F	210	LEU	N-CA-CB	5.51	119.00	110.46
7	G	432	GLN	OE1-CD-NE2	5.51	128.11	122.60
8	H	268	PHE	CA-CB-CG	5.51	119.31	113.80
1	I	357	CYS	CA-C-N	5.51	132.41	123.93
1	I	357	CYS	C-N-CA	5.51	132.41	123.93
2	J	339	GLU	N-CA-C	-5.51	106.60	113.38
4	L	108	SER	N-CA-C	5.51	117.28	111.28
7	O	340	ASP	N-CA-C	-5.51	105.77	112.88
8	P	193	ASP	CB-CA-C	-5.51	100.27	109.75
8	P	53	ASN	CB-CA-C	-5.51	100.23	109.65
2	J	217	GLY	N-CA-C	-5.51	104.31	111.52
3	K	299	LEU	CA-C-N	5.51	127.66	120.28
3	K	299	LEU	C-N-CA	5.51	127.66	120.28
4	L	321	LYS	N-CA-CB	5.51	119.80	110.49
7	O	487	ASN	N-CA-C	-5.51	103.96	111.56
4	L	47	ALA	CA-C-N	5.50	128.00	120.46
4	L	47	ALA	C-N-CA	5.50	128.00	120.46
5	M	472	GLN	N-CA-CB	-5.50	101.75	110.28
7	O	460	ILE	CA-C-O	-5.50	114.41	120.96
8	P	172	GLN	CB-CA-C	-5.50	100.38	110.62
3	C	308	ASN	N-CA-CB	5.50	119.79	110.49
7	G	94	THR	CA-C-O	-5.50	114.59	120.42
8	H	492	MET	CG-SD-CE	-5.50	88.80	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	259	LYS	CA-C-N	5.50	128.10	120.29
1	I	259	LYS	C-N-CA	5.50	128.10	120.29
4	L	350	GLN	CA-C-N	5.50	132.05	121.54
4	L	350	GLN	C-N-CA	5.50	132.05	121.54
5	M	523	MET	N-CA-C	5.50	117.08	111.14
3	K	187	GLU	CA-C-N	5.50	132.04	121.54
3	K	187	GLU	C-N-CA	5.50	132.04	121.54
6	N	81	ALA	N-CA-CB	5.50	118.30	110.16
3	C	428	ALA	N-CA-C	-5.50	105.20	111.14
7	G	137	LYS	CA-C-N	5.50	128.10	120.29
7	G	137	LYS	C-N-CA	5.50	128.10	120.29
2	J	465	LEU	CA-C-O	5.50	126.29	119.97
8	P	191	PHE	CA-C-O	-5.50	114.86	120.63
1	A	360	GLU	N-CA-C	-5.50	100.75	109.76
6	F	262	ALA	CA-C-N	5.50	127.92	120.44
6	F	262	ALA	C-N-CA	5.50	127.92	120.44
1	I	425	ASN	CA-C-N	5.50	128.09	120.29
1	I	425	ASN	C-N-CA	5.50	128.09	120.29
3	K	74	HIS	CE1-NE2-CD2	-5.50	103.50	109.00
4	L	331	GLU	CB-CG-CD	-5.50	103.26	112.60
2	B	444	ARG	CA-C-N	5.49	130.75	121.14
2	B	444	ARG	C-N-CA	5.49	130.75	121.14
6	F	23	ASN	CA-CB-CG	-5.49	107.11	112.60
8	P	192	PRO	CB-CA-C	5.49	115.96	109.92
8	P	285	ASP	CB-CA-C	-5.49	101.51	110.85
7	G	478	ASP	CA-C-N	5.49	130.35	122.72
7	G	478	ASP	C-N-CA	5.49	130.35	122.72
2	J	171	LEU	N-CA-CB	5.49	118.17	109.71
2	B	285	HIS	ND1-CE1-NE2	5.49	113.89	108.40
8	H	176	GLU	CB-CA-C	-5.49	102.26	110.88
3	K	118	HIS	N-CA-CB	5.49	120.14	110.37
5	M	53	GLY	O-C-N	-5.49	116.28	121.77
5	M	165	LEU	CA-C-N	5.49	127.98	120.46
5	M	165	LEU	C-N-CA	5.49	127.98	120.46
7	G	226	GLU	CB-CG-CD	-5.49	103.27	112.60
1	I	113	HIS	CG-CD2-NE2	5.49	112.69	107.20
7	O	150	GLU	CA-C-N	5.49	131.17	122.61
7	O	150	GLU	C-N-CA	5.49	131.17	122.61
2	B	150	SER	N-CA-CB	-5.49	102.03	110.20
3	C	202	GLU	N-CA-C	-5.49	100.30	109.24
7	G	220	PHE	CA-CB-CG	-5.49	108.31	113.80
5	E	27	ARG	O-C-N	5.48	129.88	122.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	458	ILE	CA-C-N	5.48	125.00	119.19
5	E	458	ILE	C-N-CA	5.48	125.00	119.19
7	G	263	TYR	N-CA-CB	5.48	118.28	110.16
4	L	366	ASN	N-CA-C	-5.48	101.23	109.95
6	F	326	LEU	N-CA-C	5.48	117.12	111.03
2	J	485	ILE	N-CA-CB	5.48	117.57	110.99
5	M	150	LYS	N-CA-C	5.48	117.34	111.36
8	P	277	ASP	CB-CA-C	-5.48	101.69	110.79
8	P	438	ILE	CA-C-N	5.48	127.63	120.28
8	P	438	ILE	C-N-CA	5.48	127.63	120.28
2	B	156	ARG	CA-CB-CG	5.48	125.06	114.10
3	C	463	LEU	N-CA-C	5.48	117.25	111.28
5	E	394	ILE	CA-C-N	5.48	128.20	120.42
5	E	394	ILE	C-N-CA	5.48	128.20	120.42
2	J	390	LEU	CA-C-N	5.48	127.94	120.54
2	J	390	LEU	C-N-CA	5.48	127.94	120.54
7	O	291	SER	CA-C-N	5.48	127.89	120.38
7	O	291	SER	C-N-CA	5.48	127.89	120.38
2	B	44	GLY	CA-C-N	5.48	125.00	119.19
2	B	44	GLY	C-N-CA	5.48	125.00	119.19
4	D	62	GLN	N-CA-CB	5.48	119.35	110.42
5	E	157	VAL	CA-C-O	-5.48	116.08	121.67
8	H	154	LEU	N-CA-C	-5.48	106.60	113.72
1	I	241	LEU	CA-C-O	-5.48	114.24	120.32
5	M	356	ALA	CA-C-O	5.48	127.19	121.38
2	B	237	ILE	O-C-N	-5.48	117.35	123.26
5	E	426	GLU	N-CA-C	5.48	117.25	111.28
7	G	410	GLY	CA-C-O	-5.48	112.94	119.02
4	L	200	ALA	CA-C-O	5.48	128.30	121.89
1	A	515	LYS	N-CA-C	5.47	117.25	111.28
5	E	67	ASP	CA-CB-CG	-5.47	107.13	112.60
7	O	115	GLY	O-C-N	5.47	128.96	122.50
1	A	436	LEU	N-CA-C	5.47	118.17	111.82
3	C	202	GLU	O-C-N	5.47	129.46	123.27
5	E	108	GLY	CA-C-N	5.47	128.19	120.42
5	E	108	GLY	C-N-CA	5.47	128.19	120.42
5	E	161	ASP	CA-C-N	5.47	128.16	120.28
5	E	161	ASP	C-N-CA	5.47	128.16	120.28
7	G	316	GLU	CB-CA-C	-5.47	101.55	110.85
7	G	392	ALA	CB-CA-C	-5.47	102.29	110.88
1	I	490	LEU	N-CA-C	-5.47	107.25	114.31
4	L	50	THR	CA-C-N	5.47	131.99	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	50	THR	C-N-CA	5.47	131.99	121.54
7	O	283	HIS	CG-CD2-NE2	5.47	112.67	107.20
7	G	498	VAL	CA-C-O	-5.47	115.26	120.95
2	J	309	VAL	N-CA-C	-5.47	99.28	107.37
5	M	214	LYS	CA-C-N	5.47	129.21	121.66
5	M	214	LYS	C-N-CA	5.47	129.21	121.66
8	P	215	SER	CA-C-N	5.47	130.81	122.11
8	P	215	SER	C-N-CA	5.47	130.81	122.11
7	O	406	VAL	CA-C-N	5.47	128.63	120.87
7	O	406	VAL	C-N-CA	5.47	128.63	120.87
4	L	465	LEU	O-C-N	5.47	127.70	122.07
8	P	426	TYR	CA-C-O	-5.46	113.69	119.97
2	B	156	ARG	N-CA-C	-5.46	105.24	111.14
4	D	94	LEU	O-C-N	5.46	127.91	122.12
4	D	160	ARG	CA-C-N	5.46	128.05	120.29
4	D	160	ARG	C-N-CA	5.46	128.05	120.29
5	E	424	ALA	N-CA-C	5.46	116.92	111.07
6	F	522	MET	CG-SD-CE	-5.46	88.88	100.90
3	K	66	ILE	CA-C-N	5.46	127.60	120.28
3	K	66	ILE	C-N-CA	5.46	127.60	120.28
2	B	178	HIS	N-CA-C	-5.46	105.24	111.14
3	K	20	ARG	CA-C-N	5.46	127.86	120.38
3	K	20	ARG	C-N-CA	5.46	127.86	120.38
8	P	410	PRO	CA-C-N	5.46	132.11	121.41
8	P	410	PRO	C-N-CA	5.46	132.11	121.41
5	M	180	SER	CA-C-O	-5.46	114.74	120.58
8	P	65	VAL	CA-C-N	5.46	131.38	122.81
8	P	65	VAL	C-N-CA	5.46	131.38	122.81
2	B	102	VAL	CA-C-N	5.46	128.04	120.29
2	B	102	VAL	C-N-CA	5.46	128.04	120.29
6	F	49	SER	N-CA-C	-5.46	106.67	113.38
6	F	416	VAL	CA-C-O	-5.46	115.27	120.95
8	H	289	ASN	CA-CB-CG	-5.46	107.14	112.60
6	N	45	LYS	CB-CA-C	5.46	119.21	109.38
8	P	157	ILE	N-CA-C	-5.46	105.21	110.72
1	A	489	ASP	N-CA-C	-5.46	100.83	108.96
4	D	496	ARG	CA-C-N	5.46	128.04	120.29
4	D	496	ARG	C-N-CA	5.46	128.04	120.29
5	E	389	GLY	O-C-N	-5.46	117.67	123.45
5	M	153	ASP	CA-CB-CG	-5.46	107.14	112.60
8	P	29	VAL	N-CA-CB	5.46	118.76	110.58
3	K	265	THR	N-CA-C	5.45	117.30	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	528	ASP	N-CA-C	-5.45	104.31	112.54
7	G	43	ARG	CA-C-O	5.45	128.16	121.56
7	O	119	GLN	OE1-CD-NE2	-5.45	117.15	122.60
1	A	286	ILE	CB-CA-C	-5.45	102.56	110.63
2	B	188	LEU	O-C-N	-5.45	116.34	122.12
2	B	336	ASP	CA-CB-CG	-5.45	107.15	112.60
8	H	27	GLU	CA-C-N	5.45	127.85	120.44
8	H	27	GLU	C-N-CA	5.45	127.85	120.44
4	L	28	ASP	CA-C-N	5.45	126.90	120.09
4	L	28	ASP	C-N-CA	5.45	126.90	120.09
5	M	37	HIS	CE1-NE2-CD2	-5.45	103.55	109.00
6	N	338	ASP	CB-CA-C	-5.45	99.51	109.54
1	A	361	LEU	N-CA-C	-5.45	100.44	108.99
4	D	225	GLU	O-C-N	5.45	127.90	122.12
4	D	251	PHE	CA-CB-CG	5.45	119.25	113.80
7	O	489	GLU	N-CA-C	-5.45	106.68	113.38
6	F	87	ILE	CA-C-O	5.45	127.48	120.83
6	F	165	ALA	N-CA-CB	5.45	118.22	110.16
2	J	148	HIS	CA-CB-CG	5.45	119.25	113.80
6	N	115	HIS	CA-C-N	5.45	125.10	119.05
6	N	115	HIS	C-N-CA	5.45	125.10	119.05
2	B	449	ILE	CB-CA-C	-5.45	104.71	112.22
8	H	40	ALA	CA-C-N	5.45	130.67	121.14
8	H	40	ALA	C-N-CA	5.45	130.67	121.14
3	K	193	ILE	CB-CA-C	5.45	119.54	111.26
2	B	135	LYS	CA-C-N	5.44	127.58	120.28
2	B	135	LYS	C-N-CA	5.44	127.58	120.28
3	C	396	GLN	O-C-N	-5.44	116.35	122.12
5	E	486	ASN	CA-CB-CG	-5.44	107.16	112.60
8	H	490	LYS	CA-C-N	5.44	129.66	122.42
8	H	490	LYS	C-N-CA	5.44	129.66	122.42
5	M	112	LEU	O-C-N	-5.44	115.94	122.15
8	P	445	PHE	CB-CA-C	-5.44	100.22	110.67
4	D	249	ILE	N-CA-C	-5.44	100.64	108.53
4	D	437	THR	O-C-N	5.44	128.35	122.15
1	I	111	LYS	N-CA-CB	5.44	118.04	110.04
3	K	68	ARG	CD-NE-CZ	-5.44	116.78	124.40
3	K	184	GLN	N-CA-C	-5.44	101.16	109.65
7	O	377	GLY	N-CA-C	-5.44	100.28	113.18
5	E	413	ILE	O-C-N	5.44	127.43	121.83
6	F	165	ALA	CB-CA-C	-5.44	101.60	110.85
2	J	267	ILE	CA-C-N	5.44	127.57	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	267	ILE	C-N-CA	5.44	127.57	120.28
6	F	210	LEU	O-C-N	5.44	129.15	122.84
3	K	260	ARG	N-CA-CB	5.44	117.95	109.85
4	D	181	SER	CB-CA-C	-5.44	102.34	110.88
2	J	44	GLY	O-C-N	-5.44	116.33	121.77
8	P	165	ARG	N-CA-CB	5.44	118.21	110.16
3	K	137	LEU	CA-C-N	5.44	128.01	120.29
3	K	137	LEU	C-N-CA	5.44	128.01	120.29
4	L	323	MET	CB-CA-C	5.43	119.54	109.54
1	A	262	GLN	O-C-N	5.43	127.96	122.09
2	B	156	ARG	CA-C-N	5.43	128.00	120.29
2	B	156	ARG	C-N-CA	5.43	128.00	120.29
5	E	521	THR	CA-C-O	5.43	126.31	120.55
1	I	244	THR	N-CA-CB	5.43	118.06	110.07
3	K	102	ALA	CA-C-N	5.43	127.12	120.22
3	K	102	ALA	C-N-CA	5.43	127.12	120.22
6	N	71	HIS	O-C-N	-5.43	115.07	121.32
8	P	300	MET	CA-C-N	5.43	127.56	120.28
8	P	300	MET	C-N-CA	5.43	127.56	120.28
1	I	106	GLU	N-CA-C	5.43	116.88	111.07
3	K	333	SER	CB-CA-C	-5.43	101.62	110.85
1	A	78	LEU	O-C-N	5.43	127.88	122.12
1	A	386	ASP	CA-CB-CG	5.43	118.03	112.60
5	E	147	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
2	J	32	ALA	CA-C-N	5.43	127.90	120.46
2	J	32	ALA	C-N-CA	5.43	127.90	120.46
3	K	448	PRO	N-CA-C	-5.43	106.46	113.57
4	L	116	LEU	CA-C-N	5.43	127.55	120.28
4	L	116	LEU	C-N-CA	5.43	127.55	120.28
5	M	156	LEU	N-CA-C	-5.43	101.04	109.24
5	E	346	SER	CA-C-O	5.43	126.49	120.90
3	K	81	ILE	CA-C-N	5.43	127.82	120.44
3	K	81	ILE	C-N-CA	5.43	127.82	120.44
5	E	151	ILE	N-CA-CB	5.43	116.45	110.53
5	E	400	ARG	CA-C-N	5.43	128.00	120.29
5	E	400	ARG	C-N-CA	5.43	128.00	120.29
5	E	474	MET	CG-SD-CE	5.43	112.84	100.90
8	H	407	ARG	O-C-N	5.43	129.37	122.91
1	A	287	LEU	N-CA-CB	5.42	119.11	110.65
2	B	419	HIS	CB-CG-CD2	-5.42	124.15	131.20
2	B	440	ALA	CB-CA-C	-5.42	101.63	110.85
5	E	295	THR	CA-C-O	5.42	126.17	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	99	LEU	CA-C-O	-5.42	115.13	120.82
4	D	265	VAL	N-CA-C	-5.42	98.07	109.34
3	K	364	THR	N-CA-C	-5.42	101.64	110.20
4	L	303	SER	O-C-N	5.42	129.75	123.30
2	B	369	GLU	CA-C-N	5.42	128.40	120.71
2	B	369	GLU	C-N-CA	5.42	128.40	120.71
7	G	236	LYS	CA-C-O	5.42	126.10	120.30
1	I	3	GLY	CA-C-N	5.42	126.61	119.84
1	I	3	GLY	C-N-CA	5.42	126.61	119.84
1	A	499	LYS	N-CA-C	-5.42	106.52	113.02
5	E	169	ALA	CA-C-N	5.42	127.80	120.65
5	E	169	ALA	C-N-CA	5.42	127.80	120.65
7	G	474	TRP	CB-CG-CD1	5.42	135.03	126.90
2	J	46	LYS	CA-C-N	5.42	132.03	121.41
2	J	46	LYS	C-N-CA	5.42	132.03	121.41
3	K	271	GLU	CA-C-O	5.42	126.29	120.55
3	K	288	ASP	CA-CB-CG	5.42	118.02	112.60
4	L	45	ALA	N-CA-CB	5.42	118.68	110.28
4	L	516	VAL	N-CA-CB	5.42	119.61	110.56
3	K	231	ARG	CG-CD-NE	-5.42	100.09	112.00
5	M	48	MET	CA-C-N	5.42	128.08	120.28
5	M	48	MET	C-N-CA	5.42	128.08	120.28
4	D	508	VAL	N-CA-C	-5.41	98.15	107.24
7	G	301	GLN	CA-C-O	5.41	126.50	120.82
8	H	303	HIS	CE1-NE2-CD2	-5.41	103.59	109.00
4	L	68	VAL	N-CA-C	-5.41	100.62	108.36
5	M	400	ARG	NE-CZ-NH2	5.41	124.07	119.20
7	O	145	LYS	N-CA-CB	5.41	118.14	110.13
8	H	60	LEU	CA-C-N	5.41	131.55	123.05
8	H	60	LEU	C-N-CA	5.41	131.55	123.05
1	A	320	ALA	N-CA-C	5.41	116.86	111.07
4	D	404	SER	N-CA-C	5.41	117.26	111.36
8	H	152	LYS	CB-CG-CD	5.41	123.74	111.30
2	J	71	LEU	CB-CA-C	-5.41	102.39	110.88
5	M	171	THR	O-C-N	5.41	128.32	122.15
1	A	383	PHE	O-C-N	-5.41	116.39	122.12
5	E	110	VAL	CA-C-N	5.41	127.37	120.56
5	E	110	VAL	C-N-CA	5.41	127.37	120.56
5	E	122	GLN	N-CA-CB	5.41	118.07	110.12
8	P	247	ASP	N-CA-CB	5.41	118.16	110.16
5	E	418	VAL	O-C-N	-5.41	116.91	123.02
5	E	434	SER	N-CA-CB	5.41	118.07	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	140	SER	N-CA-CB	5.41	117.96	110.17
6	F	483	THR	N-CA-C	-5.41	105.04	111.69
2	B	513	VAL	CA-CB-CG2	-5.41	101.21	110.40
3	C	228	ARG	NE-CZ-NH2	5.41	124.06	119.20
5	E	526	MET	CB-CA-C	-5.41	101.66	110.85
7	G	452	ASN	N-CA-C	5.41	117.25	111.36
3	K	267	ILE	N-CA-CB	5.41	117.89	110.54
8	P	102	ASN	CB-CA-C	-5.41	100.81	110.70
4	L	488	GLU	N-CA-CB	5.40	119.62	110.49
2	B	20	ARG	NE-CZ-NH2	5.40	124.06	119.20
2	B	432	GLU	O-C-N	-5.40	115.90	122.22
5	E	409	ILE	CA-C-O	-5.40	113.04	119.58
8	H	340	VAL	O-C-N	5.40	128.29	122.67
8	H	508	ILE	N-CA-C	-5.40	105.26	110.72
3	K	335	PRO	N-CA-C	-5.40	109.06	114.68
4	L	528	SER	CA-C-O	-5.40	114.82	120.55
5	M	371	MET	N-CA-C	-5.40	101.15	109.52
5	M	378	LYS	CB-CA-C	-5.40	107.65	114.40
1	A	282	GLY	N-CA-C	-5.40	100.38	113.18
6	F	236	SER	N-CA-CB	5.40	118.21	110.06
6	F	340	SER	O-C-N	5.40	127.58	121.53
8	H	22	PHE	N-CA-C	-5.40	106.61	114.12
5	M	274	TYR	CA-C-N	5.40	127.96	120.29
5	M	274	TYR	C-N-CA	5.40	127.96	120.29
6	N	491	GLU	CB-CG-CD	-5.40	103.42	112.60
4	D	296	ASN	N-CA-C	-5.40	105.72	114.09
5	E	332	LEU	N-CA-C	5.40	116.85	111.07
6	F	81	ALA	CA-C-N	5.40	127.46	120.44
6	F	81	ALA	C-N-CA	5.40	127.46	120.44
6	N	499	CYS	CA-C-O	-5.40	114.83	120.55
8	P	156	ASP	N-CA-CB	5.40	119.05	110.57
3	K	437	TYR	O-C-N	-5.40	115.63	122.27
8	P	20	LYS	N-CA-C	-5.40	101.10	109.14
1	A	201	HIS	CE1-NE2-CD2	-5.39	103.61	109.00
4	D	72	ASN	N-CA-C	-5.39	104.67	113.19
4	D	166	SER	O-C-N	-5.39	116.00	122.15
6	F	430	LYS	N-CA-CB	5.39	119.82	111.24
1	I	393	HIS	ND1-CE1-NE2	5.39	113.80	108.40
4	L	94	LEU	CA-C-N	5.39	127.95	120.29
4	L	94	LEU	C-N-CA	5.39	127.95	120.29
8	P	154	LEU	CA-C-N	5.39	130.96	122.11
8	P	154	LEU	C-N-CA	5.39	130.96	122.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	221	SER	CA-C-N	5.39	131.06	122.59
7	G	221	SER	C-N-CA	5.39	131.06	122.59
8	H	322	ARG	CA-C-N	5.39	128.51	120.31
8	H	322	ARG	C-N-CA	5.39	128.51	120.31
1	I	471	HIS	CG-CD2-NE2	5.39	112.59	107.20
3	K	291	ILE	CA-C-O	5.39	126.98	120.67
5	M	210	LYS	CA-C-O	-5.39	114.39	120.32
7	G	488	PHE	CA-CB-CG	-5.39	108.41	113.80
2	J	440	ALA	CA-C-N	5.39	127.94	120.29
2	J	440	ALA	C-N-CA	5.39	127.94	120.29
2	B	18	GLU	CB-CA-C	5.39	119.42	110.74
6	F	235	VAL	CA-CB-CG1	-5.39	101.24	110.40
1	I	253	VAL	CA-C-O	5.39	124.37	119.20
2	J	218	PHE	CA-CB-CG	-5.39	108.41	113.80
5	M	391	ASN	CB-CG-ND2	-5.39	108.32	116.40
1	A	91	THR	N-CA-C	-5.39	105.49	111.36
8	H	193	ASP	N-CA-C	-5.39	104.61	110.91
7	O	260	VAL	CA-C-N	5.39	127.50	120.28
7	O	260	VAL	C-N-CA	5.39	127.50	120.28
2	J	383	LEU	N-CA-C	5.39	118.07	111.82
5	M	231	ASP	CA-C-N	5.39	132.63	121.32
5	M	231	ASP	C-N-CA	5.39	132.63	121.32
2	B	361	HIS	ND1-CE1-NE2	5.38	113.78	108.40
5	E	295	THR	O-C-N	-5.38	116.01	122.15
6	F	443	ALA	CA-C-N	5.38	127.94	120.29
6	F	443	ALA	C-N-CA	5.38	127.94	120.29
1	I	349	GLU	N-CA-C	-5.38	105.49	111.36
4	L	449	TYR	CA-C-N	5.38	127.44	120.44
4	L	449	TYR	C-N-CA	5.38	127.44	120.44
5	M	513	LYS	O-C-N	5.38	127.83	122.12
7	O	120	ILE	CA-C-N	5.38	127.84	120.46
7	O	120	ILE	C-N-CA	5.38	127.84	120.46
4	L	520	THR	CA-CB-OG1	5.38	117.67	109.60
6	N	272	LYS	CB-CA-C	-5.38	101.85	110.79
2	B	91	GLN	N-CA-CB	5.38	118.03	110.12
3	C	459	THR	CA-C-O	-5.38	114.84	120.55
7	G	233	HIS	CE1-NE2-CD2	-5.38	103.62	109.00
1	I	230	VAL	N-CA-CB	-5.38	104.66	110.53
5	M	498	THR	CA-CB-OG1	5.38	117.67	109.60
4	D	504	LEU	N-CA-C	-5.38	106.88	113.50
6	F	256	ARG	NH1-CZ-NH2	5.38	126.29	119.30
1	I	15	GLU	N-CA-CB	-5.38	101.94	110.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	312	ILE	N-CA-C	-5.38	99.89	107.75
5	E	266	LEU	O-C-N	-5.38	116.94	123.29
6	F	373	THR	N-CA-C	-5.38	99.67	108.76
3	K	106	LEU	N-CA-C	-5.38	105.58	111.82
5	M	83	VAL	CA-CB-CG1	5.38	119.54	110.40
4	L	345	VAL	CA-C-O	5.38	126.98	121.28
5	M	370	LYS	N-CA-C	-5.38	99.33	108.26
7	O	315	PRO	CA-C-N	5.38	127.48	120.28
7	O	315	PRO	C-N-CA	5.38	127.48	120.28
7	G	199	LYS	CA-C-N	5.38	130.92	122.70
7	G	199	LYS	C-N-CA	5.38	130.92	122.70
8	H	477	ASN	CA-CB-CG	-5.38	107.22	112.60
5	M	370	LYS	N-CA-CB	5.38	119.53	110.77
7	O	344	ARG	N-CA-C	-5.38	100.90	109.07
1	A	266	ARG	NE-CZ-NH1	-5.37	116.13	121.50
4	D	201	THR	CB-CA-C	5.37	121.11	110.42
4	D	451	VAL	CB-CA-C	-5.37	104.81	112.22
1	I	2	GLU	CB-CG-CD	-5.37	103.46	112.60
5	M	317	ASN	CA-C-N	5.37	131.80	121.54
5	M	317	ASN	C-N-CA	5.37	131.80	121.54
1	A	110	GLN	CB-CG-CD	-5.37	103.47	112.60
7	O	181	ASP	N-CA-CB	5.37	118.11	110.16
4	D	307	ASP	CA-C-O	-5.37	112.65	119.31
4	L	287	VAL	O-C-N	-5.37	115.02	122.05
3	C	172	ALA	CA-C-O	-5.37	113.80	119.97
3	C	480	VAL	N-CA-C	-5.37	100.75	108.53
4	D	415	LEU	CA-C-O	-5.37	113.46	119.79
4	D	517	SER	N-CA-C	5.37	117.13	111.28
1	I	48	ASP	CA-C-N	5.37	131.63	121.97
1	I	48	ASP	C-N-CA	5.37	131.63	121.97
1	I	438	ILE	O-C-N	5.37	127.36	121.83
7	O	117	HIS	O-C-N	-5.37	116.93	121.12
6	F	361	THR	O-C-N	-5.37	116.96	123.13
7	G	521	LYS	N-CA-C	-5.37	101.02	109.50
8	P	128	VAL	CA-C-N	5.37	129.10	120.30
8	P	128	VAL	C-N-CA	5.37	129.10	120.30
2	B	99	THR	N-CA-C	-5.37	105.33	111.07
4	D	366	ASN	N-CA-C	-5.37	105.41	113.89
5	E	437	ALA	N-CA-C	-5.37	105.51	111.36
8	H	248	GLY	N-CA-C	-5.37	100.46	113.18
3	K	62	ASP	CA-C-N	5.37	125.90	120.00
3	K	62	ASP	C-N-CA	5.37	125.90	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	112	VAL	N-CA-C	5.37	117.80	111.09
2	B	218	PHE	CB-CG-CD2	5.36	129.82	120.70
3	C	225	THR	N-CA-CB	5.36	118.99	110.84
7	G	470	GLN	O-C-N	5.36	127.94	122.09
3	K	471	THR	CA-CB-OG1	5.36	117.64	109.60
6	N	28	ARG	NE-CZ-NH2	5.36	124.03	119.20
6	N	400	ASN	CB-CA-C	-5.36	101.73	110.85
1	A	160	ILE	CA-C-O	-5.36	115.46	120.34
3	C	470	HIS	N-CA-CB	5.36	118.00	110.12
1	I	419	LEU	CA-C-N	5.36	127.78	120.54
1	I	419	LEU	C-N-CA	5.36	127.78	120.54
2	J	309	VAL	CA-C-N	5.36	129.09	121.42
2	J	309	VAL	C-N-CA	5.36	129.09	121.42
7	O	262	ASP	CA-CB-CG	-5.36	107.24	112.60
1	A	492	ASN	CB-CA-C	-5.36	100.65	110.62
2	J	127	ILE	CA-CB-CG1	5.36	119.51	110.40
6	N	302	LEU	N-CA-C	-5.36	105.44	111.28
1	A	271	THR	CA-C-O	-5.36	114.74	120.42
2	B	126	ILE	CA-C-O	-5.36	115.10	121.05
8	H	31	ARG	N-CA-C	5.36	117.20	111.36
8	H	157	ILE	O-C-N	-5.36	116.66	121.91
2	B	421	VAL	O-C-N	-5.36	115.75	121.80
5	E	534	ARG	N-CA-C	-5.36	101.93	109.96
7	G	112	VAL	CA-CB-CG2	-5.36	101.30	110.40
8	H	361	VAL	N-CA-CB	5.36	117.42	110.99
7	O	143	VAL	CA-CB-CG2	5.36	119.50	110.40
7	O	321	ARG	CA-C-N	5.36	127.46	120.28
7	O	321	ARG	C-N-CA	5.36	127.46	120.28
2	B	485	ILE	N-CA-CB	5.35	116.37	110.53
7	G	321	ARG	NE-CZ-NH1	-5.35	116.15	121.50
7	G	441	ALA	N-CA-C	5.35	118.03	111.82
4	L	274	ARG	N-CA-C	5.35	117.20	111.36
4	D	306	ARG	N-CA-C	-5.35	99.96	109.06
2	J	110	LEU	O-C-N	5.35	128.85	122.27
7	O	324	MET	CA-C-N	5.35	127.89	120.29
7	O	324	MET	C-N-CA	5.35	127.89	120.29
8	P	184	ALA	CA-C-N	5.35	127.89	120.29
8	P	184	ALA	C-N-CA	5.35	127.89	120.29
3	C	490	MET	CA-C-O	-5.35	113.48	119.79
3	C	506	TYR	CB-CA-C	5.35	119.67	110.79
7	G	403	ASP	CA-C-N	5.35	130.62	122.65
7	G	403	ASP	C-N-CA	5.35	130.62	122.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	254	ILE	CA-C-O	5.35	126.91	120.65
2	B	254	SER	CA-C-N	5.35	129.34	120.94
2	B	254	SER	C-N-CA	5.35	129.34	120.94
4	D	377	THR	OG1-CB-CG2	5.35	120.00	109.30
7	O	264	GLN	N-CA-C	-5.35	106.92	113.50
7	G	239	LEU	O-C-N	-5.35	117.12	123.22
1	I	87	GLY	N-CA-C	-5.35	107.41	115.32
6	N	392	ARG	O-C-N	5.35	127.58	122.07
5	E	97	SER	N-CA-C	5.34	117.11	111.28
1	I	372	SER	CA-C-N	5.34	131.40	121.62
1	I	372	SER	C-N-CA	5.34	131.40	121.62
7	G	435	ILE	O-C-N	-5.34	116.69	121.87
8	P	476	LYS	N-CA-CB	5.34	118.23	109.95
3	K	399	ARG	CA-C-N	5.34	127.39	120.44
3	K	399	ARG	C-N-CA	5.34	127.39	120.44
6	N	452	ALA	CA-C-N	5.34	127.70	120.44
6	N	452	ALA	C-N-CA	5.34	127.70	120.44
2	B	189	ARG	CA-C-N	5.34	128.21	120.79
2	B	189	ARG	C-N-CA	5.34	128.21	120.79
3	C	483	GLU	CA-C-O	5.34	125.89	119.59
5	E	43	ALA	CA-C-N	5.34	127.78	120.46
5	E	43	ALA	C-N-CA	5.34	127.78	120.46
2	J	449	ILE	N-CA-C	-5.34	105.33	110.72
7	O	474	TRP	N-CA-C	-5.34	105.47	112.41
3	C	236	PRO	CA-N-CD	-5.34	104.53	112.00
6	N	32	ASP	N-CA-CB	5.34	117.97	110.12
7	O	25	ASN	O-C-N	5.34	127.57	122.07
3	C	193	ILE	N-CA-C	-5.34	99.96	107.75
3	C	435	TRP	CG-CD2-CE3	-5.34	128.56	133.90
4	D	78	LEU	CA-C-N	5.34	127.43	120.28
4	D	78	LEU	C-N-CA	5.34	127.43	120.28
4	D	235	ASN	N-CA-C	-5.34	106.65	114.39
5	E	37	HIS	ND1-CE1-NE2	5.34	113.74	108.40
6	F	301	SER	CA-C-N	5.34	128.42	120.31
6	F	301	SER	C-N-CA	5.34	128.42	120.31
1	I	86	VAL	N-CA-CB	5.34	116.02	111.64
2	J	116	LEU	O-C-N	5.34	127.57	122.07
6	N	470	HIS	ND1-CE1-NE2	5.33	113.73	108.40
6	F	306	SER	N-CA-C	5.33	117.09	111.28
6	F	170	GLU	CA-C-N	5.33	127.86	120.29
6	F	170	GLU	C-N-CA	5.33	127.86	120.29
6	F	266	PHE	CA-C-N	5.33	127.99	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	266	PHE	C-N-CA	5.33	127.99	120.42
3	K	85	ARG	CA-C-O	5.33	126.07	120.42
4	D	177	SER	CA-C-O	-5.33	112.89	120.51
4	L	210	ILE	N-CA-C	-5.33	99.97	107.75
2	B	103	THR	CA-CB-OG1	5.33	117.59	109.60
8	H	164	LEU	CA-C-N	5.33	127.73	120.54
8	H	164	LEU	C-N-CA	5.33	127.73	120.54
2	J	196	LEU	CA-C-O	5.33	125.80	119.56
6	N	325	THR	CA-CB-OG1	5.33	117.59	109.60
1	I	340	PHE	N-CA-C	-5.33	100.97	109.07
8	H	440	LYS	O-C-N	5.33	127.76	122.12
1	I	10	ASP	N-CA-CB	5.33	119.49	110.49
1	I	428	THR	CA-C-N	5.33	127.36	120.44
1	I	428	THR	C-N-CA	5.33	127.36	120.44
5	M	462	LEU	O-C-N	5.33	128.22	122.15
2	B	395	CYS	N-CA-CB	5.32	118.04	110.16
3	C	126	TYR	N-CA-CB	5.32	117.94	110.12
2	J	18	GLU	CA-C-N	5.32	129.85	122.77
2	J	18	GLU	C-N-CA	5.32	129.85	122.77
6	N	65	HIS	N-CA-C	5.32	116.89	111.14
1	A	508	ILE	N-CA-C	5.32	116.05	110.62
4	L	518	ALA	N-CA-C	5.32	117.16	111.36
3	C	334	ARG	O-C-N	5.32	126.13	121.18
8	P	48	GLY	CA-C-N	5.32	125.03	119.82
8	P	48	GLY	C-N-CA	5.32	125.03	119.82
8	H	39	LEU	O-C-N	-5.32	116.48	122.12
8	H	181	LYS	CA-C-O	5.32	126.06	120.42
8	H	450	ARG	N-CA-C	5.32	117.16	111.36
1	I	433	ARG	CA-C-N	5.32	127.94	120.28
1	I	433	ARG	C-N-CA	5.32	127.94	120.28
2	J	21	ALA	N-CA-C	5.32	117.08	111.28
2	B	407	VAL	CB-CA-C	-5.32	103.25	110.90
7	G	25	ASN	CA-C-N	5.32	127.97	120.42
7	G	25	ASN	C-N-CA	5.32	127.97	120.42
2	J	238	LEU	N-CA-CB	5.32	118.90	110.55
2	J	433	ALA	N-CA-CB	5.32	117.86	109.94
4	L	174	LYS	CA-C-N	5.32	127.97	120.42
4	L	174	LYS	C-N-CA	5.32	127.97	120.42
7	G	211	VAL	N-CA-C	-5.31	100.67	108.11
2	B	502	GLN	CA-C-N	5.31	127.96	120.42
2	B	502	GLN	C-N-CA	5.31	127.96	120.42
6	F	248	PHE	CA-C-N	5.31	128.77	120.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	248	PHE	C-N-CA	5.31	128.77	120.75
6	F	495	TRP	CB-CG-CD1	5.31	134.87	126.90
3	K	215	LEU	N-CA-CB	5.31	119.43	110.77
4	L	33	ILE	O-C-N	-5.31	116.72	121.87
4	L	382	PRO	N-CA-C	-5.31	107.88	114.68
5	M	142	ARG	CB-CA-C	-5.31	99.21	110.31
7	O	24	SER	CB-CA-C	-5.31	101.82	110.85
7	O	61	ASP	CA-C-O	5.31	126.10	120.36
5	E	182	HIS	ND1-CE1-NE2	5.31	113.71	108.40
8	P	250	ILE	N-CA-C	-5.31	101.34	108.35
2	B	362	PHE	CA-C-O	-5.31	114.33	120.49
5	E	537	GLY	O-C-N	5.31	130.13	121.53
6	F	126	ALA	CA-C-N	5.31	127.83	120.29
6	F	126	ALA	C-N-CA	5.31	127.83	120.29
6	F	518	VAL	N-CA-C	-5.31	100.99	109.17
1	I	19	SER	CA-C-N	5.31	127.83	120.29
1	I	19	SER	C-N-CA	5.31	127.83	120.29
3	K	127	ARG	O-C-N	5.31	127.75	122.12
3	K	273	GLU	CB-CG-CD	-5.31	103.57	112.60
6	F	515	ILE	N-CA-C	5.31	117.73	111.09
7	G	107	GLN	O-C-N	-5.31	115.14	122.46
4	L	488	GLU	CB-CA-C	5.31	120.98	110.42
6	N	62	VAL	CA-C-N	5.31	127.83	120.29
6	N	62	VAL	C-N-CA	5.31	127.83	120.29
7	O	25	ASN	CA-C-O	-5.31	115.25	120.82
3	K	145	ASP	CA-CB-CG	-5.31	107.29	112.60
4	L	167	ALA	CB-CA-C	-5.31	101.83	110.85
2	B	68	ALA	CA-C-N	5.30	128.37	120.31
2	B	68	ALA	C-N-CA	5.30	128.37	120.31
8	H	44	ARG	CA-C-N	5.30	129.88	121.44
8	H	44	ARG	C-N-CA	5.30	129.88	121.44
8	H	112	LEU	N-CA-C	5.30	117.97	111.82
2	J	348	LEU	N-CA-C	-5.30	100.38	109.24
8	P	511	ALA	CA-C-O	5.30	126.17	120.55
6	F	466	ILE	CA-C-O	-5.30	115.44	120.95
2	J	182	LEU	CA-C-N	5.30	127.82	120.29
2	J	182	LEU	C-N-CA	5.30	127.82	120.29
3	K	269	GLN	CA-CB-CG	5.30	124.70	114.10
6	N	135	GLU	CA-C-O	5.30	126.07	119.97
7	O	390	HIS	ND1-CE1-NE2	5.30	113.70	108.40
8	P	501	TYR	N-CA-C	5.30	116.74	111.07
2	J	334	THR	N-CA-CB	5.30	119.45	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	52	ASP	CB-CA-C	-5.30	99.86	109.45
3	K	367	LYS	CB-CA-C	-5.30	104.75	111.86
7	O	251	ASP	CA-CB-CG	5.30	117.90	112.60
4	L	279	GLU	CA-C-N	5.30	127.82	120.29
4	L	279	GLU	C-N-CA	5.30	127.82	120.29
7	O	258	HIS	ND1-CE1-NE2	5.30	113.70	108.40
7	O	522	ASN	CB-CA-C	-5.30	101.78	111.64
1	A	124	ALA	CA-C-N	5.30	127.38	120.28
1	A	124	ALA	C-N-CA	5.30	127.38	120.28
1	A	245	LYS	O-C-N	5.30	129.52	122.95
5	E	529	LYS	N-CA-C	5.30	122.08	110.80
1	A	146	ASP	O-C-N	5.30	128.66	122.67
4	D	330	ARG	CA-C-N	5.30	127.38	120.28
4	D	330	ARG	C-N-CA	5.30	127.38	120.28
7	G	479	ILE	N-CA-C	-5.30	107.96	113.10
2	J	58	ASP	CA-C-N	-5.30	115.95	122.84
2	J	58	ASP	C-N-CA	-5.30	115.95	122.84
8	P	135	ALA	O-C-N	-5.29	116.11	122.15
8	P	445	PHE	CA-C-O	5.29	126.06	119.97
1	A	312	LEU	N-CA-C	-5.29	103.04	110.50
5	E	515	GLN	OE1-CD-NE2	5.29	127.89	122.60
7	G	468	HIS	N-CA-C	-5.29	104.55	112.54
8	H	494	GLU	CA-CB-CG	-5.29	103.51	114.10
1	I	516	PHE	N-CA-CB	5.29	117.99	110.16
2	J	79	PRO	CA-C-N	5.29	127.81	120.29
2	J	79	PRO	C-N-CA	5.29	127.81	120.29
7	O	15	SER	N-CA-C	-5.29	99.32	108.69
1	A	25	ALA	CB-CA-C	-5.29	100.51	110.67
5	E	116	LEU	O-C-N	5.29	127.73	122.12
7	G	60	ASN	CA-C-O	5.29	124.87	119.05
2	B	207	GLY	N-CA-C	-5.29	104.25	112.45
6	F	419	ALA	O-C-N	5.29	127.73	122.12
4	L	111	ILE	CA-C-O	-5.29	115.24	120.85
2	B	418	ALA	CA-C-N	5.29	127.37	120.28
2	B	418	ALA	C-N-CA	5.29	127.37	120.28
2	B	442	ALA	CA-C-N	5.29	127.37	120.28
2	B	442	ALA	C-N-CA	5.29	127.37	120.28
4	D	92	VAL	CB-CA-C	-5.29	105.00	112.14
8	H	166	THR	N-CA-C	5.29	117.04	111.28
8	H	498	LEU	N-CA-C	-5.29	101.03	109.23
8	H	108	ALA	CA-C-O	-5.29	115.25	120.70
6	N	477	VAL	O-C-N	-5.29	117.44	123.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	191	GLN	CG-CD-NE2	-5.29	108.47	116.40
2	J	414	GLU	CB-CA-C	-5.29	101.86	110.85
7	O	130	GLN	N-CA-CB	5.29	117.67	110.01
5	M	520	ALA	CB-CA-C	-5.28	101.87	110.85
7	O	480	ASN	CA-CB-CG	5.28	117.88	112.60
1	A	427	ALA	CB-CA-C	-5.28	101.87	110.85
4	D	197	PRO	N-CA-C	-5.28	101.59	112.47
1	A	345	LEU	CB-CA-C	-5.28	103.79	112.03
4	D	300	ILE	N-CA-C	-5.28	100.88	108.48
2	J	423	GLN	O-C-N	5.28	127.51	122.07
4	L	387	THR	O-C-N	-5.28	116.94	123.33
5	M	338	GLY	N-CA-C	-5.28	108.34	115.36
8	P	365	HIS	CG-CD2-NE2	5.28	112.48	107.20
8	P	377	LEU	N-CA-C	-5.28	99.91	108.52
5	E	178	VAL	CA-CB-CG1	-5.28	101.43	110.40
4	L	274	ARG	N-CA-CB	-5.28	102.35	110.16
8	P	78	VAL	O-C-N	-5.28	116.59	122.66
3	C	112	PHE	CA-CB-CG	-5.28	108.52	113.80
7	G	501	ASN	O-C-N	5.28	127.71	122.12
1	I	448	ILE	CA-CB-CG1	-5.28	101.43	110.40
3	K	79	SER	O-C-N	5.28	128.16	122.15
3	K	431	GLY	N-CA-C	-5.28	105.00	112.81
4	L	208	ILE	CB-CA-C	5.28	116.93	111.23
8	H	394	ASP	CA-C-N	5.28	125.80	120.00
8	H	394	ASP	C-N-CA	5.28	125.80	120.00
2	J	469	HIS	CG-CD2-NE2	5.28	112.47	107.20
6	N	430	LYS	CG-CD-CE	5.28	123.43	111.30
7	G	445	ILE	CA-C-O	-5.27	115.16	118.69
3	K	318	THR	N-CA-CB	5.27	117.66	110.01
3	K	424	GLU	CA-C-O	5.27	126.36	120.82
6	N	190	MET	N-CA-C	-5.27	106.43	112.92
4	D	456	ASP	O-C-N	5.27	129.50	122.43
7	G	440	LYS	CB-CG-CD	5.27	123.43	111.30
3	K	175	ILE	N-CA-C	5.27	115.48	110.42
5	M	214	LYS	CB-CA-C	-5.27	98.68	109.38
7	O	282	HIS	CE1-NE2-CD2	-5.27	103.73	109.00
7	O	351	THR	CA-C-O	5.27	126.72	120.66
8	P	178	PHE	CA-C-N	5.27	127.35	120.28
8	P	178	PHE	C-N-CA	5.27	127.35	120.28
7	G	343	GLY	N-CA-C	-5.27	102.40	111.57
4	L	275	VAL	O-C-N	5.27	126.98	121.87
4	L	355	MET	CG-SD-CE	-5.27	89.31	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	130	GLU	N-CA-C	5.27	117.03	111.28
5	M	445	GLN	CA-C-N	5.27	127.34	120.28
5	M	445	GLN	C-N-CA	5.27	127.34	120.28
6	N	190	MET	CB-CA-C	-5.27	101.65	110.56
1	A	285	VAL	N-CA-C	-5.27	100.48	108.17
3	C	469	LYS	O-C-N	-5.27	115.79	122.27
6	F	222	LYS	N-CA-CB	5.27	119.39	110.49
5	M	73	ASP	CA-CB-CG	-5.27	107.33	112.60
3	C	468	ALA	N-CA-CB	5.27	117.86	110.12
7	G	404	SER	N-CA-C	-5.27	101.12	109.76
8	H	472	GLN	N-CA-CB	5.27	117.83	109.51
1	I	78	LEU	CA-C-N	5.27	127.34	120.28
1	I	78	LEU	C-N-CA	5.27	127.34	120.28
2	B	298	ASN	CA-C-N	5.26	126.31	119.78
2	B	298	ASN	C-N-CA	5.26	126.31	119.78
4	D	277	ARG	NE-CZ-NH1	5.26	126.76	121.50
5	E	137	TYR	N-CA-CB	5.26	118.44	110.28
5	E	185	MET	CA-C-O	5.26	126.08	120.24
7	G	55	LYS	CA-C-N	5.26	130.50	122.65
7	G	55	LYS	C-N-CA	5.26	130.50	122.65
5	M	287	GLU	CA-C-N	5.26	127.33	120.28
5	M	287	GLU	C-N-CA	5.26	127.33	120.28
6	N	372	VAL	N-CA-C	-5.26	101.02	108.65
5	E	124	LEU	CA-C-O	5.26	126.13	120.55
6	F	23	ASN	N-CA-C	5.26	117.10	111.36
4	L	238	ILE	CA-C-N	5.26	129.77	121.56
4	L	238	ILE	C-N-CA	5.26	129.77	121.56
6	N	180	LYS	CA-CB-CG	-5.26	103.57	114.10
1	I	415	VAL	CA-C-O	-5.26	115.27	120.85
1	I	454	VAL	CA-C-N	5.26	127.33	120.28
1	I	454	VAL	C-N-CA	5.26	127.33	120.28
4	L	401	ALA	CA-C-N	5.26	127.28	120.44
4	L	401	ALA	C-N-CA	5.26	127.28	120.44
5	M	135	ASP	CA-CB-CG	-5.26	107.34	112.60
5	M	316	GLN	OE1-CD-NE2	-5.26	117.34	122.60
7	G	158	CYS	CA-C-N	5.26	128.30	120.31
7	G	158	CYS	C-N-CA	5.26	128.30	120.31
8	H	146	LEU	CA-C-O	-5.26	113.41	119.56
1	I	534	HIS	CA-CB-CG	-5.26	108.54	113.80
2	J	336	ASP	CA-C-N	5.26	129.69	122.06
2	J	336	ASP	C-N-CA	5.26	129.69	122.06
4	L	463	SER	CA-C-N	5.26	128.30	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	463	SER	C-N-CA	5.26	128.30	120.31
6	N	457	PHE	CA-CB-CG	-5.26	108.54	113.80
7	O	503	LEU	O-C-N	5.26	128.15	122.15
6	F	78	ALA	N-CA-C	5.26	117.76	111.71
6	F	220	ASP	N-CA-CB	5.26	119.90	111.91
1	I	302	GLU	N-CA-CB	5.26	117.85	110.12
2	J	361	HIS	CE1-NE2-CD2	-5.26	103.74	109.00
3	K	445	GLU	N-CA-C	5.26	118.95	112.54
4	L	518	ALA	CA-C-O	5.26	125.99	120.42
1	A	473	GLU	N-CA-C	-5.26	102.41	110.14
3	C	96	THR	CA-CB-OG1	5.26	117.48	109.60
4	D	131	THR	CA-CB-OG1	5.26	117.49	109.60
5	E	295	THR	N-CA-CB	5.26	117.94	110.16
4	L	306	ARG	CA-C-N	5.26	131.58	121.54
4	L	306	ARG	C-N-CA	5.26	131.58	121.54
6	N	253	ALA	CA-C-N	5.26	128.30	120.31
6	N	253	ALA	C-N-CA	5.26	128.30	120.31
6	N	276	GLU	N-CA-CB	5.26	118.43	110.28
4	D	73	ASP	CA-CB-CG	-5.25	107.34	112.60
7	G	131	LEU	O-C-N	5.25	127.77	122.09
2	J	344	GLY	N-CA-C	-5.25	102.54	112.10
1	A	471	HIS	ND1-CE1-NE2	5.25	113.65	108.40
5	E	504	GLN	N-CA-CB	5.25	117.97	110.67
7	G	120	ILE	N-CA-C	5.25	120.27	109.34
7	G	404	SER	O-C-N	-5.25	117.04	123.19
7	G	484	ILE	CA-CB-CG1	5.25	119.33	110.40
8	H	272	GLU	CA-C-O	-5.25	114.98	120.55
2	J	88	SER	N-CA-C	5.25	117.91	111.82
5	M	128	ILE	N-CA-C	-5.25	100.76	108.11
2	J	361	HIS	ND1-CE1-NE2	5.25	113.65	108.40
1	A	481	LYS	CA-C-N	5.25	130.79	122.60
1	A	481	LYS	C-N-CA	5.25	130.79	122.60
8	H	269	SER	N-CA-C	5.25	117.08	111.36
7	O	459	ASN	CB-CA-C	-5.25	101.93	110.85
6	F	370	ARG	O-C-N	-5.25	115.61	122.59
8	H	61	GLU	CA-C-O	5.25	126.51	120.32
3	K	211	ASP	CA-C-N	5.25	128.92	121.42
3	K	211	ASP	C-N-CA	5.25	128.92	121.42
3	K	369	PRO	N-CA-CB	5.25	108.85	103.23
4	L	270	ALA	N-CA-CB	5.25	117.93	110.16
1	A	89	GLY	N-CA-C	-5.25	107.30	114.64
2	B	475	THR	N-CA-C	-5.25	105.59	112.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	184	GLN	CA-C-O	-5.25	114.55	120.43
5	E	111	VAL	N-CA-C	-5.25	105.38	110.42
7	G	129	THR	CB-CA-C	5.25	119.77	110.85
3	K	226	HIS	O-C-N	-5.25	117.82	121.65
4	L	298	LEU	N-CA-C	-5.25	100.14	109.06
5	M	188	ILE	CA-CB-CG1	5.25	119.32	110.40
7	O	139	ILE	CA-CB-CG2	5.25	119.42	110.50
5	E	85	HIS	CG-CD2-NE2	5.24	112.44	107.20
6	F	480	ASP	CA-C-N	5.24	127.31	120.28
6	F	480	ASP	C-N-CA	5.24	127.31	120.28
7	G	83	ALA	CA-C-N	5.24	127.31	120.28
7	G	83	ALA	C-N-CA	5.24	127.31	120.28
3	K	179	ALA	N-CA-C	5.24	116.80	111.14
7	O	117	HIS	N-CA-CB	5.24	117.89	111.23
8	P	482	ILE	N-CA-CB	5.24	119.88	111.23
7	G	75	ALA	N-CA-C	-5.24	105.65	111.36
7	G	462	ASN	CA-CB-CG	5.24	117.84	112.60
8	H	270	LYS	CA-C-N	5.24	125.77	120.00
8	H	270	LYS	C-N-CA	5.24	125.77	120.00
2	J	469	HIS	CE1-NE2-CD2	-5.24	103.76	109.00
3	C	255	ASP	CA-CB-CG	-5.24	107.36	112.60
3	K	305	MET	CA-C-O	-5.24	113.94	119.97
4	L	57	MET	N-CA-CB	5.24	120.49	111.00
8	P	172	GLN	N-CA-CB	5.24	119.68	111.56
2	B	255	ARG	CA-CB-CG	5.24	124.58	114.10
8	H	21	HIS	CE1-NE2-CD2	-5.24	103.76	109.00
2	J	418	ALA	CA-C-N	5.24	127.25	120.44
2	J	418	ALA	C-N-CA	5.24	127.25	120.44
3	K	286	LYS	CA-C-N	5.24	126.39	119.84
3	K	286	LYS	C-N-CA	5.24	126.39	119.84
8	P	453	ALA	CB-CA-C	-5.24	101.94	110.85
7	G	37	ARG	O-C-N	5.24	127.53	122.09
4	L	320	MET	CA-C-N	5.24	131.54	121.54
4	L	320	MET	C-N-CA	5.24	131.54	121.54
4	L	411	VAL	O-C-N	-5.24	116.79	121.87
8	H	232	THR	CA-CB-CG2	-5.23	101.60	110.50
1	A	80	ASP	N-CA-C	5.23	116.98	111.28
5	E	32	GLU	CA-C-N	5.23	127.29	120.28
5	E	32	GLU	C-N-CA	5.23	127.29	120.28
8	H	344	MET	N-CA-CB	5.23	121.72	111.15
1	I	182	THR	CA-CB-CG2	5.23	119.40	110.50
8	P	386	ASP	CA-CB-CG	-5.23	107.37	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	253	ALA	CA-C-N	5.23	127.29	120.28
6	F	253	ALA	C-N-CA	5.23	127.29	120.28
6	F	365	LYS	N-CA-CB	5.23	119.86	111.91
6	F	367	ASN	CA-CB-CG	-5.23	107.37	112.60
2	B	391	HIS	CA-CB-CG	5.23	119.03	113.80
6	F	35	ARG	NE-CZ-NH2	-5.23	114.50	119.20
7	G	468	HIS	CA-C-N	5.23	128.22	120.17
7	G	468	HIS	C-N-CA	5.23	128.22	120.17
7	O	194	MET	N-CA-C	-5.23	104.87	113.50
7	O	207	ASP	N-CA-C	-5.23	101.13	109.23
8	H	164	LEU	O-C-N	5.23	127.66	122.12
8	P	331	THR	CA-CB-CG2	-5.23	101.62	110.50
1	A	445	LEU	CA-C-N	5.22	129.44	120.72
1	A	445	LEU	C-N-CA	5.22	129.44	120.72
2	B	178	HIS	CG-CD2-NE2	5.22	112.42	107.20
3	C	400	ASN	CA-C-N	5.22	127.84	120.42
3	C	400	ASN	C-N-CA	5.22	127.84	120.42
7	G	392	ALA	O-C-N	5.22	127.45	122.07
2	J	236	LYS	N-CA-C	-5.22	99.93	108.76
2	J	489	ALA	N-CA-C	-5.22	105.65	112.23
5	M	218	ARG	NE-CZ-NH2	5.22	123.90	119.20
2	B	108	GLU	N-CA-C	5.22	116.97	111.28
4	L	275	VAL	CA-C-O	-5.22	115.52	120.95
7	G	138	GLU	N-CA-CB	5.22	117.89	110.16
1	I	304	GLY	CA-C-O	5.22	124.60	118.96
1	A	127	GLU	O-C-N	5.22	127.65	122.12
5	E	169	ALA	CB-CA-C	-5.22	102.12	110.79
7	G	253	ALA	CA-C-N	5.22	128.63	120.75
7	G	253	ALA	C-N-CA	5.22	128.63	120.75
8	H	32	ASN	CA-C-O	5.22	126.08	120.55
2	J	57	ARG	NE-CZ-NH2	-5.22	114.50	119.20
2	J	257	ARG	NH1-CZ-NH2	-5.22	112.51	119.30
2	J	337	HIS	ND1-CE1-NE2	5.22	113.62	108.40
7	O	148	LYS	CB-CA-C	5.22	120.81	110.42
2	J	234	ASN	CA-CB-CG	5.22	117.82	112.60
4	L	318	ASN	OD1-CG-ND2	5.22	127.82	122.60
6	N	370	ARG	CD-NE-CZ	5.22	131.71	124.40
5	E	457	VAL	CA-C-N	5.22	124.50	120.33
5	E	457	VAL	C-N-CA	5.22	124.50	120.33
8	H	298	ALA	CA-C-O	-5.22	115.51	121.82
8	H	318	LYS	CA-C-N	5.22	127.70	120.29
8	H	318	LYS	C-N-CA	5.22	127.70	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	296	CYS	CA-C-N	5.22	127.27	120.28
1	I	296	CYS	C-N-CA	5.22	127.27	120.28
8	P	304	TYR	CG-CD1-CE1	-5.22	113.38	121.20
3	C	46	MET	N-CA-C	-5.21	102.03	110.32
3	C	297	SER	CA-C-N	5.21	127.69	120.29
3	C	297	SER	C-N-CA	5.21	127.69	120.29
7	G	209	GLN	N-CA-C	-5.21	100.53	109.24
6	N	342	ASP	CB-CA-C	-5.21	102.13	110.79
8	P	416	GLU	N-CA-C	5.21	117.87	111.82
3	C	461	ARG	NH1-CZ-NH2	-5.21	112.52	119.30
4	D	281	ALA	O-C-N	5.21	127.72	122.09
5	E	516	GLN	CA-C-O	5.21	126.08	120.55
1	I	450	ASN	CA-C-N	5.21	127.69	120.29
1	I	450	ASN	C-N-CA	5.21	127.69	120.29
1	I	484	LYS	N-CA-C	-5.21	100.20	109.06
2	J	122	HIS	CE1-NE2-CD2	-5.21	103.79	109.00
3	C	84	SER	CA-C-N	5.21	127.69	120.29
3	C	84	SER	C-N-CA	5.21	127.69	120.29
5	E	504	GLN	N-CA-C	-5.21	107.30	113.97
5	M	474	MET	CA-C-O	-5.21	115.03	120.55
7	O	465	ARG	CA-C-O	5.21	125.99	120.10
1	A	262	GLN	CA-C-O	-5.21	115.33	120.70
4	D	121	THR	N-CA-C	-5.21	105.60	111.28
7	G	334	VAL	CA-C-O	5.21	123.52	119.46
1	I	476	VAL	CA-C-N	5.21	128.60	120.68
1	I	476	VAL	C-N-CA	5.21	128.60	120.68
2	J	285	HIS	CA-CB-CG	5.21	119.01	113.80
4	L	411	VAL	CA-C-N	5.21	128.84	120.30
4	L	411	VAL	C-N-CA	5.21	128.84	120.30
5	M	115	ALA	N-CA-CB	5.21	117.56	110.01
6	N	273	LYS	CA-C-N	5.21	128.19	120.74
6	N	273	LYS	C-N-CA	5.21	128.19	120.74
7	O	441	ALA	CA-C-N	5.21	127.26	120.28
7	O	441	ALA	C-N-CA	5.21	127.26	120.28
8	P	324	LEU	O-C-N	5.21	127.64	122.12
8	P	389	GLU	CA-C-O	5.21	125.94	120.42
1	A	382	ASP	O-C-N	5.21	128.67	122.27
1	I	191	PRO	CB-CA-C	-5.21	104.28	111.21
6	N	112	GLU	CA-C-O	-5.21	114.90	120.42
6	F	218	HIS	CG-CD2-NE2	5.21	112.41	107.20
3	K	108	VAL	CA-CB-CG2	-5.20	101.55	110.40
3	K	161	THR	N-CA-C	-5.20	106.52	112.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	331	ILE	CB-CA-C	5.20	117.17	111.08
5	M	82	ASP	CA-C-O	-5.20	115.95	121.78
1	I	370	ARG	CB-CA-C	-5.20	100.07	110.42
5	M	48	MET	CG-SD-CE	-5.20	89.46	100.90
5	M	374	ILE	O-C-N	-5.20	116.31	122.66
8	P	306	ASN	CA-CB-CG	5.20	117.80	112.60
1	A	441	PHE	CA-C-O	5.20	126.06	120.55
2	B	190	LEU	N-CA-C	5.20	117.36	111.02
2	B	419	HIS	CA-C-N	5.20	127.20	120.44
2	B	419	HIS	C-N-CA	5.20	127.20	120.44
3	C	232	TYR	CA-C-O	5.20	126.94	120.54
4	D	483	ARG	CB-CA-C	-5.20	102.01	110.85
5	E	154	SER	O-C-N	5.20	129.50	122.59
7	G	180	VAL	CA-C-N	5.20	127.67	120.29
7	G	180	VAL	C-N-CA	5.20	127.67	120.29
1	I	113	HIS	CA-C-N	5.20	124.70	119.19
1	I	113	HIS	C-N-CA	5.20	124.70	119.19
2	J	268	GLU	O-C-N	-5.20	116.61	122.12
3	K	100	ILE	CA-CB-CG1	5.20	119.24	110.40
3	K	405	PRO	CB-CA-C	-5.20	104.47	111.85
3	K	472	GLN	N-CA-C	5.20	116.75	111.14
8	P	293	THR	CA-C-O	5.20	126.80	120.25
5	M	54	PRO	N-CA-C	-5.20	107.25	114.27
3	C	118	HIS	O-C-N	-5.20	115.34	121.32
4	D	97	ALA	N-CA-C	5.20	116.94	111.28
5	E	407	CYS	N-CA-C	5.20	117.02	111.36
2	J	393	ALA	N-CA-C	5.20	116.63	111.07
7	O	44	GLY	N-CA-C	-5.20	105.07	112.55
7	O	293	LEU	CA-C-N	5.20	126.33	119.84
7	O	293	LEU	C-N-CA	5.20	126.33	119.84
8	P	153	ASN	CA-CB-CG	-5.20	107.40	112.60
6	N	313	LEU	N-CA-CB	5.19	119.41	110.68
8	P	458	VAL	N-CA-C	-5.19	101.58	108.96
1	A	243	LYS	N-CA-CB	5.19	119.69	111.43
1	A	476	VAL	O-C-N	-5.19	117.84	123.14
1	I	312	LEU	N-CA-CB	5.19	119.78	110.80
3	K	190	ARG	CA-C-N	5.19	131.05	121.70
3	K	190	ARG	C-N-CA	5.19	131.05	121.70
3	K	517	LEU	CA-C-N	5.19	127.66	120.29
3	K	517	LEU	C-N-CA	5.19	127.66	120.29
8	P	125	VAL	CA-CB-CG1	5.19	119.23	110.40
1	A	82	GLN	OE1-CD-NE2	-5.19	117.41	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	134	THR	CA-C-O	-5.19	115.05	120.55
1	I	24	ALA	CA-C-N	5.19	127.24	120.28
1	I	24	ALA	C-N-CA	5.19	127.24	120.28
3	K	472	GLN	CA-C-N	5.19	127.87	121.64
3	K	472	GLN	C-N-CA	5.19	127.87	121.64
6	N	98	ILE	O-C-N	5.19	127.18	121.83
6	N	289	PHE	CA-C-O	-5.19	114.69	120.66
6	F	186	ILE	CA-CB-CG1	5.19	119.22	110.40
5	M	437	ALA	CB-CA-C	-5.19	102.18	110.79
6	F	189	PHE	CA-CB-CG	-5.19	108.61	113.80
6	F	424	LYS	CB-CA-C	-5.19	102.70	110.90
7	G	480	ASN	CA-CB-CG	-5.19	107.41	112.60
3	K	272	GLU	CA-C-N	5.19	127.23	120.28
3	K	272	GLU	C-N-CA	5.19	127.23	120.28
8	P	289	ASN	CA-CB-CG	-5.19	107.41	112.60
3	C	253	GLN	N-CA-C	-5.18	100.43	108.42
2	J	27	THR	CA-C-O	5.18	126.05	120.55
3	K	440	VAL	CA-C-N	5.18	127.23	120.28
3	K	440	VAL	C-N-CA	5.18	127.23	120.28
4	L	167	ALA	N-CA-CB	5.18	117.83	110.16
2	B	86	ASP	N-CA-C	-5.18	105.71	111.36
3	C	440	VAL	CA-C-N	5.18	127.22	120.28
3	C	440	VAL	C-N-CA	5.18	127.22	120.28
7	G	510	ALA	N-CA-C	5.18	117.01	111.36
4	L	73	ASP	N-CA-CB	5.18	119.25	110.49
5	M	279	LYS	N-CA-C	-5.18	105.71	111.36
6	N	500	VAL	O-C-N	5.18	127.56	121.96
7	O	131	LEU	CA-C-N	5.18	127.22	120.28
7	O	131	LEU	C-N-CA	5.18	127.22	120.28
1	A	78	LEU	CB-CA-C	-5.18	102.19	110.79
7	G	333	SER	N-CA-CB	5.18	120.51	111.13
4	L	414	CYS	CB-CA-C	-5.18	100.72	110.67
6	N	492	VAL	CA-C-O	5.18	126.06	120.47
4	D	123	LEU	CA-C-N	5.18	127.17	120.44
4	D	123	LEU	C-N-CA	5.18	127.17	120.44
7	G	379	GLU	O-C-N	5.18	129.30	122.36
5	M	209	ILE	CA-C-O	5.18	126.11	120.57
2	B	393	ALA	N-CA-CB	5.18	117.73	110.12
7	O	105	LEU	CA-C-N	5.18	127.22	120.28
7	O	105	LEU	C-N-CA	5.18	127.22	120.28
7	O	158	CYS	N-CA-C	-5.18	105.64	111.28
8	P	139	ALA	CA-C-N	5.18	127.73	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	139	ALA	C-N-CA	5.18	127.73	120.28
1	A	260	LEU	CA-C-O	5.17	126.25	120.82
1	A	368	LYS	N-CA-CB	5.17	118.83	110.40
3	C	426	SER	N-CA-CB	5.17	118.30	110.28
4	D	273	ASP	N-CA-C	5.17	116.92	111.28
7	G	94	THR	CA-C-N	5.17	127.17	120.44
7	G	94	THR	C-N-CA	5.17	127.17	120.44
8	H	50	ASN	CA-CB-CG	5.17	117.77	112.60
4	L	474	ILE	O-C-N	5.17	126.98	121.91
3	C	223	ASP	CA-CB-CG	5.17	117.77	112.60
6	F	354	THR	N-CA-C	-5.17	100.75	109.07
7	G	437	ALA	CA-C-N	5.17	127.47	120.44
7	G	437	ALA	C-N-CA	5.17	127.47	120.44
5	M	140	ALA	N-CA-C	5.17	116.92	111.28
4	D	69	THR	N-CA-C	-5.17	100.02	108.76
5	E	417	ARG	N-CA-C	-5.17	101.21	109.07
8	H	347	CYS	N-CA-CB	5.17	118.86	110.43
4	L	484	HIS	N-CA-C	5.17	117.00	111.36
6	N	323	ARG	CB-CG-CD	5.17	123.19	111.30
1	A	415	VAL	CA-CB-CG2	-5.17	101.61	110.40
4	D	387	THR	N-CA-C	-5.17	100.61	109.24
3	C	100	ILE	O-C-N	5.17	127.27	121.90
4	D	362	ALA	N-CA-CB	5.17	119.74	110.80
1	I	333	ASN	O-C-N	5.17	129.46	122.59
3	C	35	ASP	CB-CA-C	-5.17	102.77	110.88
5	M	237	PRO	N-CA-C	-5.17	107.40	113.86
3	C	460	ILE	N-CA-C	5.16	115.38	110.42
3	K	127	ARG	CA-C-N	-5.16	112.46	120.31
3	K	127	ARG	C-N-CA	-5.16	112.46	120.31
3	K	393	ASP	N-CA-CB	5.16	118.25	110.30
3	K	494	GLY	CA-C-O	5.16	125.49	119.19
1	A	238	ASP	N-CA-C	-5.16	106.81	113.01
4	D	343	LYS	CA-C-O	-5.16	115.10	120.88
7	O	40	LEU	N-CA-CB	5.16	119.21	110.49
5	E	55	ASN	OD1-CG-ND2	-5.16	117.44	122.60
5	E	473	THR	CA-C-N	5.16	127.20	120.28
5	E	473	THR	C-N-CA	5.16	127.20	120.28
7	G	260	VAL	CA-CB-CG2	5.16	119.17	110.40
6	N	228	ALA	CA-C-O	5.16	126.21	120.43
1	A	429	SER	CA-C-N	5.16	127.19	120.28
1	A	429	SER	C-N-CA	5.16	127.19	120.28
2	B	432	GLU	CA-C-O	5.16	125.93	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	F	470	HIS	CA-C-O	5.16	126.02	120.55
7	G	45	MET	N-CA-CB	5.16	119.21	110.49
2	J	175	HIS	ND1-CE1-NE2	5.16	113.56	108.40
3	K	460	ILE	CB-CG1-CD1	5.16	124.63	113.80
4	L	167	ALA	CA-C-N	5.16	127.19	120.28
4	L	167	ALA	C-N-CA	5.16	127.19	120.28
6	N	502	LYS	N-CA-CB	-5.16	102.51	110.20
7	O	117	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
7	O	141	VAL	O-C-N	-5.16	117.81	123.18
8	P	267	ASN	N-CA-CB	5.16	117.80	110.16
2	B	272	LYS	N-CA-C	5.16	116.90	111.28
2	J	122	HIS	ND1-CE1-NE2	5.16	113.56	108.40
3	K	333	SER	O-C-N	5.16	128.03	122.15
6	N	201	GLU	CA-C-O	5.16	126.02	120.55
5	E	197	ALA	O-C-N	-5.16	116.66	122.12
7	G	334	VAL	CB-CA-C	5.16	115.81	110.70
2	J	88	SER	O-C-N	-5.16	115.93	122.27
7	O	28	ALA	CA-C-N	5.16	127.19	120.28
7	O	28	ALA	C-N-CA	5.16	127.19	120.28
5	E	301	ILE	N-CA-C	-5.15	100.33	107.80
8	H	516	VAL	N-CA-C	5.15	115.92	110.72
3	K	450	THR	O-C-N	5.15	128.61	122.27
2	B	164	GLY	O-C-N	-5.15	116.78	122.24
2	B	417	MET	N-CA-CB	5.15	117.79	110.16
4	D	183	LEU	N-CA-CB	5.15	118.27	110.28
5	E	98	GLN	N-CA-CB	5.15	117.48	110.01
5	E	460	MET	O-C-N	5.15	127.65	122.09
1	I	187	GLN	O-C-N	-5.15	117.89	121.65
3	K	418	VAL	O-C-N	-5.15	116.52	121.83
3	K	470	HIS	CG-CD2-NE2	5.15	112.35	107.20
6	F	33	VAL	CA-C-O	-5.15	115.33	121.05
6	F	318	ARG	N-CA-CB	5.15	118.26	110.28
8	H	514	ALA	CA-C-N	5.15	127.18	120.28
8	H	514	ALA	C-N-CA	5.15	127.18	120.28
2	B	275	MET	CG-SD-CE	-5.15	89.57	100.90
2	B	317	PHE	CA-C-N	5.15	127.45	120.65
2	B	317	PHE	C-N-CA	5.15	127.45	120.65
4	D	132	ILE	CA-C-O	-5.15	115.33	121.05
5	E	39	MET	CA-C-N	5.15	127.44	120.44
5	E	39	MET	C-N-CA	5.15	127.44	120.44
8	H	21	HIS	CG-CD2-NE2	5.15	112.35	107.20
2	J	483	GLY	O-C-N	-5.15	116.76	122.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	O	171	GLN	CA-C-O	5.15	125.29	119.27
8	P	355	VAL	CA-C-O	-5.15	115.10	120.51
4	D	41	ALA	N-CA-CB	5.15	117.78	110.16
7	G	125	PHE	CA-CB-CG	-5.15	108.65	113.80
3	K	83	ILE	CA-C-N	5.15	128.13	120.31
3	K	83	ILE	C-N-CA	5.15	128.13	120.31
2	B	371	CYS	N-CA-C	-5.14	101.25	109.07
3	C	119	PRO	CA-C-N	5.14	129.31	120.72
3	C	119	PRO	C-N-CA	5.14	129.31	120.72
6	F	437	VAL	N-CA-C	5.14	115.87	110.62
7	G	197	ILE	O-C-N	-5.14	117.51	123.07
8	H	163	LEU	CA-C-N	5.14	127.17	120.28
8	H	163	LEU	C-N-CA	5.14	127.17	120.28
8	H	481	ASP	N-CA-C	5.14	121.76	110.80
3	K	449	ARG	CA-C-N	5.14	128.13	120.31
3	K	449	ARG	C-N-CA	5.14	128.13	120.31
3	C	173	CYS	CA-C-N	5.14	127.59	120.29
3	C	173	CYS	C-N-CA	5.14	127.59	120.29
3	C	423	THR	N-CA-C	-5.14	105.75	111.36
3	C	466	LEU	CA-C-N	5.14	127.59	120.29
3	C	466	LEU	C-N-CA	5.14	127.59	120.29
5	E	188	ILE	CA-CB-CG1	-5.14	101.66	110.40
5	E	205	ASP	CA-CB-CG	-5.14	107.46	112.60
7	O	372	PHE	N-CA-CB	5.14	119.32	110.68
8	P	150	SER	CB-CA-C	-5.14	102.22	110.14
1	A	303	ALA	O-C-N	5.14	128.59	122.27
2	B	48	MET	CB-CA-C	-5.14	101.67	109.89
7	G	509	ALA	CA-C-N	5.14	127.59	120.29
7	G	509	ALA	C-N-CA	5.14	127.59	120.29
3	C	501	VAL	CA-C-N	5.14	127.12	120.44
3	C	501	VAL	C-N-CA	5.14	127.12	120.44
4	D	330	ARG	CB-CA-C	-5.14	102.11	110.85
5	E	118	GLU	N-CA-C	-5.14	105.68	111.28
1	I	12	SER	CA-C-N	5.14	131.36	121.54
1	I	12	SER	C-N-CA	5.14	131.36	121.54
1	I	361	LEU	N-CA-CB	5.14	121.09	111.53
3	K	304	LEU	N-CA-CB	5.14	118.25	110.28
6	N	240	GLU	N-CA-C	-5.14	103.61	110.55
8	H	53	ASN	N-CA-C	-5.14	100.33	109.06
4	D	510	GLN	CB-CG-CD	-5.14	103.87	112.60
7	G	94	THR	O-C-N	5.14	128.01	122.15
8	H	127	GLU	CA-C-N	5.14	127.71	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	H	127	GLU	C-N-CA	5.14	127.71	120.42
3	K	454	ASN	CA-C-N	5.14	127.58	120.29
3	K	454	ASN	C-N-CA	5.14	127.58	120.29
4	L	290	ILE	N-CA-CB	5.14	117.52	110.54
5	M	268	VAL	O-C-N	-5.14	117.19	122.63
3	C	208	ILE	CA-C-N	5.13	129.06	120.64
3	C	208	ILE	C-N-CA	5.13	129.06	120.64
6	F	366	CYS	N-CA-C	-5.13	103.26	110.50
7	G	468	HIS	CE1-NE2-CD2	-5.13	103.87	109.00
5	M	75	ALA	CB-CA-C	-5.13	102.12	110.85
7	O	241	ASN	OD1-CG-ND2	5.13	127.73	122.60
4	D	527	ARG	NE-CZ-NH1	5.13	126.63	121.50
1	I	47	ASP	CA-C-O	-5.13	113.49	119.14
3	K	262	GLU	CA-C-N	5.13	127.16	120.28
3	K	262	GLU	C-N-CA	5.13	127.16	120.28
5	M	114	GLY	CA-C-O	-5.13	115.46	120.75
6	F	151	VAL	CA-C-O	-5.13	115.22	120.71
8	H	165	ARG	CA-C-N	5.13	127.15	120.28
8	H	165	ARG	C-N-CA	5.13	127.15	120.28
3	C	62	ASP	CB-CA-C	-5.13	101.48	109.84
1	I	414	ALA	N-CA-C	5.13	118.69	112.23
4	L	311	ASP	CA-CB-CG	-5.13	107.47	112.60
5	M	288	MET	N-CA-CB	5.13	117.66	110.12
5	M	326	GLY	CA-C-N	5.13	129.92	121.87
5	M	326	GLY	C-N-CA	5.13	129.92	121.87
6	N	489	ALA	CA-C-N	5.13	127.15	120.28
6	N	489	ALA	C-N-CA	5.13	127.15	120.28
3	C	271	GLU	CA-C-O	-5.13	114.99	120.42
3	C	434	GLN	CA-CB-CG	5.13	124.35	114.10
5	E	374	ILE	CA-CB-CG1	5.13	119.12	110.40
8	H	88	MET	CG-SD-CE	-5.13	89.62	100.90
2	J	178	HIS	CE1-NE2-CD2	-5.13	103.87	109.00
6	F	361	THR	CA-C-O	5.12	126.17	120.43
2	B	112	GLU	N-CA-C	-5.12	105.78	112.23
8	H	220	GLY	CA-C-N	5.12	128.38	121.05
8	H	220	GLY	C-N-CA	5.12	128.38	121.05
3	K	437	TYR	CA-CB-CG	5.12	123.12	113.90
5	M	60	MET	CA-CB-CG	5.12	124.35	114.10
7	O	216	PHE	CB-CA-C	-5.12	102.25	110.14
3	K	283	ILE	O-C-N	5.12	127.11	121.83
6	N	406	CYS	CA-C-N	5.12	130.83	122.69
6	N	406	CYS	C-N-CA	5.12	130.83	122.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L	299	LEU	CA-C-N	5.12	129.81	121.62
4	L	299	LEU	C-N-CA	5.12	129.81	121.62
5	M	128	ILE	N-CA-CB	5.12	118.47	111.41
7	O	462	ASN	CA-C-N	5.12	127.56	120.29
7	O	462	ASN	C-N-CA	5.12	127.56	120.29
5	E	208	LEU	N-CA-C	-5.12	106.72	113.17
1	I	94	VAL	CA-C-O	5.12	126.59	121.17
2	J	119	LYS	CA-C-N	5.12	131.31	121.54
2	J	119	LYS	C-N-CA	5.12	131.31	121.54
4	L	157	LEU	N-CA-CB	-5.12	102.61	110.44
1	A	23	MET	N-CA-C	5.12	116.86	111.28
3	C	80	MET	N-CA-C	-5.12	105.62	111.14
4	D	85	HIS	CB-CA-C	-5.12	101.12	108.84
4	D	129	HIS	O-C-N	-5.12	116.18	121.60
2	J	449	ILE	CB-CA-C	5.12	119.28	112.22
4	L	397	VAL	CA-C-N	5.12	127.69	120.42
4	L	397	VAL	C-N-CA	5.12	127.69	120.42
7	O	122	ILE	CA-C-N	5.12	129.26	120.72
7	O	122	ILE	C-N-CA	5.12	129.26	120.72
2	B	422	THR	CA-C-N	5.11	128.08	120.31
2	B	422	THR	C-N-CA	5.11	128.08	120.31
4	D	437	THR	CA-CB-OG1	5.11	117.27	109.60
6	F	24	ILE	O-C-N	5.11	127.10	121.83
6	F	212	LEU	N-CA-CB	5.11	119.27	110.68
1	I	135	ASN	O-C-N	-5.11	116.65	122.89
4	L	124	LEU	N-CA-CB	5.11	117.64	110.12
8	P	327	THR	CB-CA-C	5.11	119.38	110.79
4	D	176	VAL	N-CA-CB	5.11	119.03	110.86
5	M	367	THR	CA-C-O	5.11	125.61	119.43
3	C	344	GLY	CA-C-N	5.11	128.60	121.24
3	C	344	GLY	C-N-CA	5.11	128.60	121.24
4	D	457	ALA	N-CA-CB	5.11	117.72	110.16
6	F	268	GLU	O-C-N	5.11	127.53	122.12
3	K	349	LEU	O-C-N	-5.11	117.43	123.25
8	P	37	LYS	CB-CA-C	-5.11	102.17	110.85
2	J	441	LYS	N-CA-CB	5.11	117.72	110.16
6	N	269	ASP	CA-C-N	5.11	127.39	120.44
6	N	269	ASP	C-N-CA	5.11	127.39	120.44
2	J	53	LEU	N-CA-C	-5.10	100.09	108.41
4	L	448	SER	CB-CA-C	-5.10	102.87	110.88
5	M	133	ILE	CA-C-N	5.10	127.08	120.44
5	M	133	ILE	C-N-CA	5.10	127.08	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	440	VAL	N-CA-C	-5.10	105.57	110.72
7	G	68	LEU	CB-CA-C	-5.10	102.32	110.79
6	N	221	MET	CA-C-O	-5.10	116.14	121.55
7	O	323	MET	CA-C-O	-5.10	114.33	120.10
3	C	221	ASN	CA-C-O	-5.10	113.22	120.51
1	I	532	LYS	N-CA-C	-5.10	101.38	109.59
3	K	148	ASP	CA-C-O	5.10	125.92	120.46
4	D	92	VAL	CA-CB-CG1	-5.10	101.73	110.40
5	E	420	TYR	CA-C-N	5.10	126.30	121.46
5	E	420	TYR	C-N-CA	5.10	126.30	121.46
8	H	300	MET	CA-C-N	5.10	127.53	120.29
8	H	300	MET	C-N-CA	5.10	127.53	120.29
8	H	304	TYR	CB-CG-CD1	5.10	128.45	120.80
2	J	160	MET	CA-C-N	5.10	127.38	120.44
2	J	160	MET	C-N-CA	5.10	127.38	120.44
5	E	41	ALA	CA-C-N	5.10	127.53	120.29
5	E	41	ALA	C-N-CA	5.10	127.53	120.29
7	G	119	GLN	N-CA-C	5.10	118.99	112.87
6	F	521	ILE	N-CA-CB	5.10	118.75	111.82
3	K	225	THR	N-CA-CB	5.10	119.39	110.98
2	B	84	LEU	N-CA-C	-5.09	105.73	111.28
2	B	171	LEU	CA-C-N	5.09	131.27	121.54
2	B	171	LEU	C-N-CA	5.09	131.27	121.54
6	F	196	MET	N-CA-C	-5.09	101.45	109.50
7	G	199	LYS	CA-C-O	5.09	127.11	121.56
1	I	362	ILE	N-CA-C	-5.09	101.08	108.36
2	J	256	VAL	O-C-N	-5.09	117.70	123.20
6	N	40	PRO	N-CA-C	-5.09	107.54	114.98
8	P	80	HIS	O-C-N	-5.09	116.02	121.42
5	M	145	ILE	N-CA-C	-5.09	105.43	110.62
1	A	129	VAL	CA-C-O	-5.09	114.97	120.47
1	A	443	ARG	NE-CZ-NH2	5.09	123.78	119.20
2	B	216	GLU	CB-CG-CD	-5.09	103.94	112.60
4	D	402	GLU	CA-C-N	5.09	127.52	120.29
4	D	402	GLU	C-N-CA	5.09	127.52	120.29
6	F	130	ALA	O-C-N	-5.09	116.35	122.15
7	G	486	ASP	N-CA-CB	5.09	117.52	109.83
6	N	324	LEU	N-CA-C	-5.09	105.62	111.07
1	A	225	MET	CB-CA-C	-5.09	101.34	109.69
4	D	179	TYR	N-CA-C	-5.09	106.76	113.17
4	D	273	ASP	N-CA-CB	5.09	117.60	110.12
1	I	54	ILE	N-CA-C	-5.09	100.32	107.75

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	P	507	ALA	N-CA-C	5.09	116.52	111.07
1	A	81	LEU	CA-C-N	5.09	128.04	120.31
1	A	81	LEU	C-N-CA	5.09	128.04	120.31
3	C	490	MET	O-C-N	5.09	129.15	122.33
3	K	167	ARG	O-C-N	5.09	127.95	122.15
4	L	85	HIS	CB-CG-CD2	-5.09	124.59	131.20
5	E	298	ASN	CB-CA-C	-5.09	100.30	110.42
7	G	17	GLN	CA-C-O	-5.09	115.84	121.33
1	I	201	HIS	ND1-CE1-NE2	5.09	113.49	108.40
1	I	240	SER	N-CA-C	-5.09	102.23	110.32
4	L	62	GLN	N-CA-C	-5.09	100.44	108.73
5	M	369	ASP	CA-CB-CG	-5.09	107.51	112.60
5	M	477	VAL	N-CA-C	-5.08	105.58	110.72
1	A	146	ASP	CB-CA-C	-5.08	105.31	111.82
1	A	288	THR	N-CA-C	-5.08	100.61	108.90
4	D	339	THR	CA-C-O	5.08	125.88	120.24
6	F	38	LEU	CB-CA-C	-5.08	102.63	110.26
6	F	374	LEU	CA-C-O	5.08	125.90	120.46
5	M	382	ALA	O-C-N	5.08	129.04	123.25
8	P	67	ASN	CA-CB-CG	5.08	117.68	112.60
1	A	297	LEU	CA-C-N	5.08	127.09	120.28
1	A	297	LEU	C-N-CA	5.08	127.09	120.28
5	E	442	THR	CA-C-O	-5.08	113.90	120.71
6	F	237	LEU	CA-C-O	5.08	125.48	119.48
1	I	401	ARG	CA-C-N	5.08	127.42	120.46
1	I	401	ARG	C-N-CA	5.08	127.42	120.46
2	J	257	ARG	NE-CZ-NH2	5.08	123.77	119.20
3	K	322	ARG	CA-C-N	5.08	128.63	120.30
3	K	322	ARG	C-N-CA	5.08	128.63	120.30
4	L	163	LEU	N-CA-C	-5.08	105.82	111.36
5	M	200	GLU	N-CA-C	-5.08	104.90	111.71
8	P	182	LEU	CA-C-O	-5.08	115.03	120.42
4	D	109	VAL	CA-C-N	5.08	127.63	120.42
4	D	109	VAL	C-N-CA	5.08	127.63	120.42
4	L	262	ASN	N-CA-C	-5.08	101.36	109.23
5	M	324	TRP	CE2-CD2-CE3	5.08	123.88	118.80
8	P	501	TYR	N-CA-CB	-5.08	102.64	110.01
3	C	185	PHE	CA-C-O	-5.08	113.25	120.51
6	F	249	PHE	CA-CB-CG	-5.08	108.72	113.80
3	K	89	GLU	O-C-N	-5.08	116.74	122.12
4	L	73	ASP	CA-C-N	5.08	125.59	120.00
4	L	73	ASP	C-N-CA	5.08	125.59	120.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	M	363	SER	N-CA-C	-5.08	100.13	108.41
6	F	336	PHE	N-CA-C	-5.08	99.98	110.80
4	L	239	THR	CA-C-O	5.08	126.03	120.95
3	C	170	SER	CA-C-O	-5.08	115.17	120.55
4	D	194	VAL	CA-C-N	5.08	128.91	121.80
4	D	194	VAL	C-N-CA	5.08	128.91	121.80
5	E	109	VAL	N-CA-C	-5.08	105.59	110.72
8	H	482	ILE	N-CA-C	5.08	117.44	111.09
5	M	236	HIS	CG-CD2-NE2	5.08	112.28	107.20
1	A	268	SER	CA-C-N	5.07	127.49	120.29
1	A	268	SER	C-N-CA	5.07	127.49	120.29
2	B	117	ILE	CB-CA-C	5.07	118.99	112.14
2	B	427	ARG	O-C-N	5.07	127.57	122.09
2	B	456	TYR	CA-C-N	5.07	127.92	120.71
2	B	456	TYR	C-N-CA	5.07	127.92	120.71
5	E	377	CYS	N-CA-C	-5.07	105.46	113.02
8	H	515	ALA	CA-C-O	5.07	125.93	120.55
1	I	415	VAL	N-CA-C	-5.07	105.59	110.72
2	J	23	THR	CA-C-N	5.07	127.08	120.28
2	J	23	THR	C-N-CA	5.07	127.08	120.28
1	A	187	GLN	CA-C-O	-5.07	114.92	119.59
4	D	385	THR	CB-CA-C	5.07	118.25	110.14
7	G	34	GLU	CA-C-N	5.07	127.08	120.28
7	G	34	GLU	C-N-CA	5.07	127.08	120.28
8	P	133	GLU	N-CA-C	5.07	116.89	111.36
8	P	444	ALA	N-CA-C	5.07	117.54	111.71
1	A	239	PHE	N-CA-C	-5.07	100.98	109.24
4	D	202	SER	N-CA-C	-5.07	107.04	113.43
4	D	274	ARG	NE-CZ-NH1	-5.07	116.43	121.50
5	E	218	ARG	N-CA-CB	5.07	118.66	110.85
8	H	50	ASN	OD1-CG-ND2	-5.07	117.53	122.60
1	I	378	ARG	CA-C-N	5.07	126.68	122.17
1	I	378	ARG	C-N-CA	5.07	126.68	122.17
3	K	478	TRP	N-CA-C	-5.07	99.53	108.20
4	L	85	HIS	CA-C-O	-5.07	115.57	119.32
6	N	320	ASN	CB-CA-C	-5.07	102.23	110.85
8	P	44	ARG	N-CA-C	-5.07	106.94	112.72
2	B	114	GLU	N-CA-C	5.07	116.81	111.28
6	N	229	TYR	O-C-N	5.07	129.08	123.05
6	F	210	LEU	CB-CG-CD2	5.07	125.91	110.70
6	F	372	VAL	N-CA-C	-5.07	101.05	108.85
7	G	89	GLU	N-CA-C	5.07	116.66	111.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	96	GLY	N-CA-C	-5.07	101.17	113.18
4	D	47	ALA	CB-CA-C	-5.07	102.38	110.79
4	D	384	LYS	N-CA-C	-5.07	100.01	110.80
8	H	196	HIS	CB-CG-CD2	-5.07	124.61	131.20
8	H	299	ASP	CA-C-N	5.07	127.03	120.44
8	H	299	ASP	C-N-CA	5.07	127.03	120.44
3	C	228	ARG	CD-NE-CZ	-5.06	117.31	124.40
3	C	505	THR	CB-CA-C	-5.06	102.24	110.85
4	D	250	GLN	N-CA-C	-5.06	104.84	112.99
2	B	393	ALA	CB-CA-C	-5.06	102.39	110.79
3	C	123	ILE	O-C-N	-5.06	116.88	121.94
3	C	520	ASP	N-CA-CB	5.06	118.09	110.65
5	E	42	LYS	CB-CA-C	5.06	119.46	110.85
5	E	272	GLU	CB-CG-CD	-5.06	103.99	112.60
1	I	115	THR	N-CA-C	-5.06	105.84	111.36
1	I	225	MET	O-C-N	-5.06	115.76	121.43
3	K	35	ASP	CB-CA-C	-5.06	102.93	110.88
3	K	249	LYS	N-CA-CB	5.06	119.05	110.49
7	O	468	HIS	N-CA-CB	5.06	117.56	110.12
8	P	431	PRO	CA-N-CD	-5.06	104.91	112.00
2	J	461	LEU	N-CA-C	5.06	116.80	111.28
7	O	151	GLN	CA-C-O	-5.06	114.07	120.55
8	P	29	VAL	CB-CA-C	-5.06	105.24	112.22
8	P	153	ASN	N-CA-CB	5.06	118.72	110.77
5	E	106	THR	CA-C-N	5.06	127.47	120.29
5	E	106	THR	C-N-CA	5.06	127.47	120.29
6	F	249	PHE	CA-C-O	-5.06	116.19	121.55
6	N	337	ASP	CA-CB-CG	5.06	117.66	112.60
2	B	44	GLY	O-C-N	-5.06	116.71	121.77
5	E	330	ILE	CA-C-N	5.06	128.00	120.31
5	E	330	ILE	C-N-CA	5.06	128.00	120.31
6	F	491	GLU	CA-C-O	5.06	125.85	120.24
2	J	46	LYS	CA-C-O	5.06	126.69	120.92
8	P	69	ALA	O-C-N	5.06	127.91	122.15
2	B	49	ASP	CA-C-O	5.05	127.74	120.51
2	B	391	HIS	N-CA-C	5.05	116.79	111.28
2	B	445	MET	CG-SD-CE	-5.05	89.78	100.90
2	B	468	ALA	CA-C-O	5.05	126.13	120.82
2	B	490	ILE	CB-CA-C	5.05	119.58	111.29
5	E	266	LEU	N-CA-CB	5.05	118.51	110.57
8	H	460	ALA	CA-C-N	5.05	127.01	120.44
8	H	460	ALA	C-N-CA	5.05	127.01	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	I	437	ALA	CA-C-O	-5.05	115.51	120.82
3	K	179	ALA	CA-C-N	5.05	128.46	120.47
3	K	179	ALA	C-N-CA	5.05	128.46	120.47
4	L	383	GLY	N-CA-C	-5.05	107.84	115.32
6	N	235	VAL	CA-C-N	5.05	130.45	122.36
6	N	235	VAL	C-N-CA	5.05	130.45	122.36
7	O	136	ILE	CA-CB-CG1	-5.05	101.81	110.40
1	I	129	VAL	CA-C-N	5.05	127.47	120.29
1	I	129	VAL	C-N-CA	5.05	127.47	120.29
4	L	305	LEU	O-C-N	5.05	128.30	122.19
2	B	50	LYS	N-CA-C	-5.05	101.87	109.85
3	C	246	GLU	CB-CG-CD	-5.05	104.01	112.60
8	H	43	THR	N-CA-C	-5.05	104.91	112.54
1	A	219	VAL	CA-CB-CG2	5.05	118.98	110.40
3	C	440	VAL	O-C-N	-5.05	116.63	121.83
2	J	125	THR	CA-CB-CG2	5.05	119.08	110.50
2	J	146	VAL	CA-C-O	-5.05	115.93	121.28
2	B	420	ALA	CB-CA-C	5.05	118.81	110.88
4	D	98	GLN	CA-C-O	-5.05	115.20	120.55
5	E	431	LEU	CA-C-N	5.05	127.30	120.44
5	E	431	LEU	C-N-CA	5.05	127.30	120.44
4	L	410	CYS	O-C-N	-5.05	116.40	122.15
6	N	160	VAL	CA-C-O	-5.05	116.69	121.64
1	A	227	LYS	CB-CA-C	-5.04	102.20	110.72
3	C	251	GLU	O-C-N	-5.04	116.52	122.32
4	D	296	ASN	O-C-N	-5.04	116.59	122.09
7	G	432	GLN	N-CA-CB	5.04	117.53	110.12
2	B	516	ARG	CD-NE-CZ	-5.04	117.34	124.40
3	C	150	ASP	CA-C-N	5.04	127.97	120.31
3	C	150	ASP	C-N-CA	5.04	127.97	120.31
2	J	497	PHE	CA-CB-CG	5.04	118.84	113.80
2	B	221	ASP	CA-C-N	5.04	129.76	121.39
2	B	221	ASP	C-N-CA	5.04	129.76	121.39
5	M	499	ASN	CA-CB-CG	-5.04	107.56	112.60
4	D	270	ALA	CB-CA-C	-5.04	102.28	110.85
6	F	355	LEU	N-CA-CB	5.04	119.00	110.49
6	F	515	ILE	CA-C-N	5.04	127.44	120.29
6	F	515	ILE	C-N-CA	5.04	127.44	120.29
8	H	59	HIS	CB-CG-ND1	5.04	130.26	122.70
5	M	64	LYS	CA-C-N	5.04	130.85	122.54
5	M	64	LYS	C-N-CA	5.04	130.85	122.54
6	N	175	SER	CA-C-N	5.04	128.56	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	N	175	SER	C-N-CA	5.04	128.56	120.30
7	O	154	LEU	CA-C-N	5.04	127.97	120.31
7	O	154	LEU	C-N-CA	5.04	127.97	120.31
4	D	258	THR	CA-C-O	5.04	125.70	119.81
4	L	530	LEU	CB-CA-C	-5.04	102.43	110.79
4	D	57	MET	CA-C-N	5.04	128.35	120.75
4	D	57	MET	C-N-CA	5.04	128.35	120.75
4	D	211	VAL	CA-CB-CG2	-5.04	101.84	110.40
5	E	164	PRO	N-CD-CG	5.04	110.75	103.20
5	E	427	ILE	CA-CB-CG1	5.04	118.96	110.40
6	F	204	THR	N-CA-CB	5.04	119.27	110.81
7	G	499	ARG	CA-C-N	5.04	126.91	120.56
7	G	499	ARG	C-N-CA	5.04	126.91	120.56
1	I	65	LEU	O-C-N	-5.04	115.89	122.59
1	I	236	CYS	CA-C-O	5.04	125.85	120.46
3	C	347	ALA	CA-C-N	5.03	126.79	121.45
3	C	347	ALA	C-N-CA	5.03	126.79	121.45
4	D	161	GLU	CA-C-N	5.03	127.44	120.29
4	D	161	GLU	C-N-CA	5.03	127.44	120.29
2	J	452	ASP	CA-CB-CG	-5.03	107.57	112.60
3	K	457	ALA	CA-C-N	5.03	129.51	121.66
3	K	457	ALA	C-N-CA	5.03	129.51	121.66
7	O	74	PRO	CA-C-N	5.03	126.98	120.44
7	O	74	PRO	C-N-CA	5.03	126.98	120.44
8	H	73	LEU	N-CA-C	5.03	116.45	111.07
2	B	408	TYR	N-CA-CB	5.03	117.99	109.94
7	G	258	HIS	CE1-NE2-CD2	-5.03	103.97	109.00
7	G	413	GLU	O-C-N	-5.03	116.79	122.12
8	H	509	LYS	N-CA-CB	5.03	117.36	110.07
3	K	80	MET	CG-SD-CE	-5.03	89.83	100.90
4	L	149	THR	CA-C-N	5.03	126.98	120.44
4	L	149	THR	C-N-CA	5.03	126.98	120.44
4	L	413	ARG	NE-CZ-NH2	5.03	123.73	119.20
6	N	514	ASN	CA-C-N	5.03	127.35	120.46
6	N	514	ASN	C-N-CA	5.03	127.35	120.46
8	P	468	TYR	CB-CG-CD1	-5.03	113.26	120.80
1	A	494	LYS	CA-C-N	5.03	125.47	120.14
1	A	494	LYS	C-N-CA	5.03	125.47	120.14
3	C	80	MET	N-CA-CB	5.03	117.36	110.07
5	E	517	ILE	CA-C-O	-5.03	115.72	120.95
7	G	522	ASN	CA-C-O	-5.03	115.03	119.86
1	I	533	LEU	CA-C-O	5.03	125.79	120.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	J	379	THR	CA-CB-OG1	5.03	117.14	109.60
2	J	385	GLU	CA-C-N	5.03	127.02	120.28
2	J	385	GLU	C-N-CA	5.03	127.02	120.28
5	M	133	ILE	CB-CA-C	-5.03	105.43	112.02
1	A	42	ASP	CA-C-O	-5.03	115.53	121.16
7	G	323	MET	CB-CA-C	-5.03	102.99	110.88
8	H	45	THR	O-C-N	5.03	127.57	122.09
1	I	185	ARG	N-CA-C	-5.03	107.10	114.39
2	J	69	THR	CA-C-N	5.03	126.85	120.72
2	J	69	THR	C-N-CA	5.03	126.85	120.72
4	L	260	MET	N-CA-C	-5.03	101.67	109.72
6	N	139	VAL	CB-CA-C	-5.03	102.00	111.30
1	I	101	LEU	N-CA-CB	5.03	117.60	110.16
1	I	477	ASN	CB-CG-ND2	5.03	123.94	116.40
4	L	316	PHE	CB-CG-CD1	-5.03	112.16	120.70
6	N	104	LYS	N-CA-CB	5.03	117.30	110.01
1	I	467	LEU	O-C-N	-5.02	116.79	122.12
7	O	133	VAL	N-CA-C	5.02	118.17	111.44
7	O	371	THR	CA-C-O	5.02	126.46	120.28
8	P	462	GLU	CA-C-O	-5.02	114.19	119.97
1	A	399	VAL	CA-C-N	5.02	127.26	120.38
1	A	399	VAL	C-N-CA	5.02	127.26	120.38
4	D	396	LEU	O-C-N	-5.02	116.34	122.22
6	F	20	LEU	O-C-N	5.02	127.88	122.15
6	F	172	VAL	N-CA-CB	5.02	117.00	110.57
8	H	100	GLY	N-CA-C	-5.02	101.27	113.18
1	I	531	ILE	CA-CB-CG1	5.02	118.94	110.40
6	N	403	ASP	CA-C-N	5.02	127.90	120.82
6	N	403	ASP	C-N-CA	5.02	127.90	120.82
7	O	111	TYR	CA-C-O	5.02	125.74	120.42
8	P	434	GLU	N-CA-C	-5.02	107.00	113.23
8	P	516	VAL	N-CA-CB	5.02	118.11	110.58
5	E	437	ALA	CA-C-O	5.02	125.74	120.42
6	F	37	ASN	CA-C-N	5.02	128.47	121.24
6	F	37	ASN	C-N-CA	5.02	128.47	121.24
5	M	184	GLN	OE1-CD-NE2	5.02	127.62	122.60
7	O	246	LEU	CA-C-N	5.02	130.45	122.62
7	O	246	LEU	C-N-CA	5.02	130.45	122.62
7	O	400	ILE	CA-CB-CG2	-5.02	101.96	110.50
8	P	452	LEU	CA-C-N	5.02	127.42	120.29
8	P	452	LEU	C-N-CA	5.02	127.42	120.29
3	C	260	ARG	CA-C-N	5.02	127.42	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	260	ARG	C-N-CA	5.02	127.42	120.29
3	C	314	ARG	CA-C-N	5.02	130.13	122.25
3	C	314	ARG	C-N-CA	5.02	130.13	122.25
7	O	430	LYS	N-CA-C	-5.02	100.11	110.80
1	A	42	ASP	O-C-N	5.02	129.01	122.89
1	A	458	GLN	CA-C-O	-5.02	115.54	121.66
6	F	218	HIS	CB-CA-C	-5.02	103.41	110.13
1	I	95	ILE	CA-C-N	5.02	127.54	120.42
1	I	95	ILE	C-N-CA	5.02	127.54	120.42
1	I	134	GLU	CB-CG-CD	-5.02	104.07	112.60
1	I	138	VAL	CA-C-N	5.02	131.66	123.93
1	I	138	VAL	C-N-CA	5.02	131.66	123.93
1	I	164	ASN	N-CA-CB	5.02	119.34	111.56
3	K	22	VAL	CA-C-N	5.02	127.94	120.31
3	K	22	VAL	C-N-CA	5.02	127.94	120.31
1	A	125	CYS	O-C-N	-5.02	116.80	122.12
4	L	139	LYS	CA-C-N	5.02	127.00	120.28
4	L	139	LYS	C-N-CA	5.02	127.00	120.28
1	A	122	ARG	NE-CZ-NH2	5.01	123.71	119.20
1	A	474	ALA	CA-C-N	5.01	131.12	121.54
1	A	474	ALA	C-N-CA	5.01	131.12	121.54
2	B	499	VAL	CB-CA-C	-5.01	105.55	111.97
3	C	52	ASP	CA-C-O	-5.01	115.26	120.88
3	C	190	ARG	NH1-CZ-NH2	-5.01	112.78	119.30
4	D	389	VAL	N-CA-C	-5.01	99.91	107.73
4	D	427	ALA	CA-C-O	-5.01	113.29	120.16
6	F	241	LYS	CA-C-N	5.01	127.83	120.71
6	F	241	LYS	C-N-CA	5.01	127.83	120.71
7	G	268	ASP	N-CA-CB	5.01	117.28	110.01
8	P	509	LYS	N-CA-C	5.01	116.44	111.07
3	C	279	CYS	CA-C-N	5.01	127.00	120.28
3	C	279	CYS	C-N-CA	5.01	127.00	120.28
5	M	183	ARG	CD-NE-CZ	-5.01	117.38	124.40
5	M	348	LEU	N-CA-CB	5.01	117.36	109.69
6	N	109	TYR	CB-CG-CD2	-5.01	113.28	120.80
3	C	48	LYS	N-CA-CB	5.01	117.72	109.95
3	C	224	VAL	CA-C-N	5.01	129.98	122.86
3	C	224	VAL	C-N-CA	5.01	129.98	122.86
4	D	204	ASP	CA-C-O	-5.01	114.80	121.46
7	G	148	LYS	N-CA-C	-5.01	106.19	113.21
8	H	54	LYS	N-CA-CB	5.01	118.64	110.77
2	J	175	HIS	CG-CD2-NE2	5.01	112.21	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	K	23	GLN	O-C-N	-5.01	116.11	122.27
6	N	430	LYS	CA-C-O	5.01	127.68	120.51
2	B	45	PRO	N-CD-CG	5.01	110.71	103.20
7	G	396	VAL	N-CA-C	5.01	115.78	110.72
8	H	360	VAL	CA-CB-CG1	5.01	118.92	110.40
4	L	373	LEU	O-C-N	-5.01	118.06	123.42
5	M	147	HIS	CA-C-N	5.01	129.09	120.72
5	M	147	HIS	C-N-CA	5.01	129.09	120.72
6	N	503	GLN	CA-C-N	5.01	126.95	120.44
6	N	503	GLN	C-N-CA	5.01	126.95	120.44
6	N	515	ILE	N-CA-CB	5.01	117.35	110.54
8	P	218	LEU	N-CA-CB	5.01	119.13	111.22
3	C	32	THR	O-C-N	-5.01	116.11	122.27
3	C	332	VAL	N-CA-C	-5.01	101.74	108.35
1	I	122	ARG	CA-C-N	5.01	127.40	120.29
1	I	122	ARG	C-N-CA	5.01	127.40	120.29
2	J	103	THR	CA-CB-OG1	-5.01	102.09	109.60
2	J	486	GLY	O-C-N	-5.01	118.91	123.57
4	L	145	ILE	CA-CB-CG1	5.01	118.91	110.40
6	N	255	GLU	CA-C-N	5.01	126.95	120.44
6	N	255	GLU	C-N-CA	5.01	126.95	120.44
8	P	191	PHE	CA-CB-CG	5.01	118.81	113.80
7	G	108	VAL	CA-CB-CG1	5.00	118.91	110.40
1	I	154	THR	CA-CB-OG1	5.00	117.11	109.60
8	P	494	GLU	CA-C-O	-5.00	114.99	120.70
4	D	34	ARG	NE-CZ-NH1	-5.00	116.50	121.50
7	G	75	ALA	CA-C-O	-5.00	115.12	120.42
7	G	251	ASP	N-CA-C	-5.00	105.28	113.19
8	H	348	ASP	CA-CB-CG	-5.00	107.60	112.60
5	M	179	ASN	N-CA-CB	5.00	119.20	110.65
1	A	520	ALA	CA-C-O	5.00	125.85	120.55
2	B	398	ALA	N-CA-C	5.00	117.62	111.82
3	C	198	TYR	CA-C-O	5.00	125.06	119.41
5	E	143	VAL	N-CA-CB	5.00	119.82	110.77
5	E	348	LEU	CA-C-N	5.00	130.77	121.62
5	E	348	LEU	C-N-CA	5.00	130.77	121.62
7	G	321	ARG	NE-CZ-NH2	5.00	123.70	119.20
1	I	190	TYR	CA-C-O	-5.00	114.04	120.04
5	M	457	VAL	N-CA-CB	5.00	117.34	110.54
7	O	283	HIS	CA-C-N	5.00	126.94	120.44
7	O	283	HIS	C-N-CA	5.00	126.94	120.44
8	P	346	HIS	CG-CD2-NE2	5.00	112.20	107.20

There are no chirality outliers.

All (141) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	18	ARG	Sidechain
1	A	242	GLN	Peptide
1	A	283	ALA	Peptide
1	A	443	ARG	Sidechain
2	B	122	HIS	Sidechain
2	B	179	PHE	Sidechain
2	B	213	TYR	Sidechain
2	B	299	TYR	Sidechain
2	B	335	PHE	Sidechain
2	B	405	ARG	Sidechain
2	B	456	TYR	Sidechain
2	B	501	ARG	Sidechain
2	B	89	ARG	Sidechain
3	C	112	PHE	Sidechain
3	C	126	TYR	Sidechain
3	C	243	SER	Peptide
3	C	274	TYR	Sidechain
3	C	303	TYR	Sidechain
3	C	325	ARG	Sidechain
3	C	367	LYS	Peptide
3	C	437	TYR	Sidechain
3	C	68	ARG	Sidechain
3	C	74	HIS	Sidechain
4	D	206	ARG	Sidechain
4	D	267	SER	Mainchain
4	D	435	ARG	Sidechain
4	D	452	ARG	Sidechain
4	D	481	ARG	Sidechain
4	D	49	ARG	Sidechain
4	D	527	ARG	Sidechain
5	E	202	ARG	Sidechain
5	E	400	ARG	Sidechain
5	E	440	CYS	Peptide
5	E	525	ARG	Sidechain
5	E	534	ARG	Sidechain
6	F	109	TYR	Sidechain
6	F	117	ARG	Sidechain
6	F	141	ARG	Sidechain
6	F	157	ARG	Sidechain
6	F	217	ARG	Sidechain

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Mol	Chain	Res	Type	Group
6	F	239	TYR	Peptide
6	F	250	TYR	Sidechain
6	F	256	ARG	Sidechain
6	F	266	PHE	Sidechain
6	F	353	TYR	Sidechain
6	F	396	ARG	Sidechain
6	F	57	THR	Mainchain
7	G	126	ARG	Sidechain
7	G	166	LYS	Peptide
7	G	167	LEU	Peptide
7	G	222	TYR	Sidechain
7	G	302	TYR	Sidechain
7	G	306	ARG	Sidechain
7	G	321	ARG	Sidechain
7	G	427	ILE	Peptide
7	G	43	ARG	Sidechain
7	G	447	ARG	Sidechain
7	G	465	ARG	Sidechain
8	H	165	ARG	Sidechain
8	H	223	PHE	Sidechain
8	H	252	GLU	Peptide
8	H	260	LYS	Peptide
8	H	304	TYR	Sidechain
8	H	314	ARG	Sidechain
8	H	335	ARG	Sidechain
8	H	404	ARG	Sidechain
8	H	468	TYR	Sidechain
1	I	11	ARG	Sidechain
1	I	111	LYS	Peptide
1	I	130	ARG	Sidechain
1	I	167	PHE	Sidechain
1	I	181	TYR	Sidechain
1	I	185	ARG	Sidechain
1	I	237	LEU	Peptide
1	I	318	ARG	Sidechain
1	I	370	ARG	Sidechain
2	J	255	ARG	Sidechain
2	J	257	ARG	Sidechain
2	J	297	TYR	Sidechain
2	J	405	ARG	Sidechain
2	J	444	ARG	Sidechain
2	J	466	ARG	Sidechain

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Mol	Chain	Res	Type	Group
2	J	481	ARG	Sidechain
2	J	516	ARG	Sidechain
2	J	89	ARG	Sidechain
3	K	126	TYR	Sidechain
3	K	190	ARG	Peptide
3	K	230	ARG	Sidechain
3	K	231	ARG	Sidechain
3	K	241	LEU	Peptide
3	K	274	TYR	Sidechain
3	K	286	LYS	Peptide
3	K	313	ARG	Sidechain
3	K	377	ARG	Sidechain
3	K	399	ARG	Sidechain
3	K	437	TYR	Sidechain
3	K	506	TYR	Sidechain
3	K	518	ARG	Sidechain
3	K	85	ARG	Sidechain
4	L	306	ARG	Sidechain
4	L	419	ARG	Sidechain
5	M	126	ARG	Sidechain
5	M	147	HIS	Sidechain
5	M	262	THR	Peptide
5	M	264	HIS	Sidechain
5	M	306	PHE	Sidechain
5	M	410	ARG	Sidechain
5	M	414	ARG	Sidechain
5	M	449	ARG	Sidechain
6	N	217	ARG	Sidechain
6	N	235	VAL	Peptide
6	N	248	PHE	Sidechain
6	N	264	ARG	Sidechain
6	N	266	PHE	Sidechain
6	N	270	ARG	Sidechain
6	N	282	CYS	Peptide
6	N	314	ARG	Sidechain
6	N	323	ARG	Sidechain
6	N	470	HIS	Sidechain
7	O	256	ARG	Sidechain
7	O	257	VAL	Peptide
7	O	258	HIS	Peptide
7	O	302	TYR	Sidechain
7	O	357	ARG	Sidechain

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Mol	Chain	Res	Type	Group
7	O	397	ARG	Sidechain
7	O	398	ARG	Sidechain
7	O	419	TYR	Sidechain
7	O	427	ILE	Peptide
7	O	491	PHE	Sidechain
7	O	499	ARG	Sidechain
7	O	53	ARG	Sidechain
8	P	103	PHE	Sidechain
8	P	173	TYR	Sidechain
8	P	228	GLU	Peptide
8	P	304	TYR	Sidechain
8	P	314	ARG	Sidechain
8	P	322	ARG	Sidechain
8	P	378	ARG	Sidechain
8	P	426	TYR	Sidechain
8	P	472	GLN	Peptide
8	P	505	TYR	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	3956	0	4124	19	0
1	I	4056	0	4218	11	0
2	B	3829	0	3932	38	0
2	J	3823	0	3927	29	0
3	C	3956	0	4079	15	0
3	K	3985	0	4108	8	0
4	D	3832	0	4042	9	0
4	L	3873	0	4086	8	0
5	E	3974	0	4084	16	0
5	M	3974	0	4084	14	0
6	F	3945	0	4071	8	0
6	N	3940	0	4068	16	0
7	G	3936	0	4029	10	0
7	O	3947	0	4037	16	0
8	H	3892	0	3949	10	0
8	P	3884	0	3943	11	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	62802	0	64781	203	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 2.

All (203) 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)
2:B:429:PRO:CD	2:J:464:GLN:HA	1.60	1.30
2:B:429:PRO:CA	2:B:429:PRO:N	1.99	1.25
2:B:429:PRO:CD	2:B:429:PRO:N	2.05	1.20
2:B:429:PRO:CD	2:B:429:PRO:CG	2.19	1.19
2:B:429:PRO:CA	2:B:429:PRO:CB	2.23	1.15
2:B:429:PRO:CG	2:B:429:PRO:CB	2.26	1.13
2:B:429:PRO:N	2:J:464:GLN:HA	1.68	1.09
2:B:429:PRO:CB	2:J:464:GLN:CA	2.39	0.99
2:B:429:PRO:CA	2:J:464:GLN:CA	2.41	0.98
2:B:429:PRO:CD	2:J:464:GLN:CA	2.43	0.97
2:B:429:PRO:CG	2:J:464:GLN:CA	2.43	0.96
2:B:429:PRO:CA	2:J:464:GLN:N	2.32	0.92
2:B:429:PRO:CG	2:J:464:GLN:N	2.35	0.89
2:B:429:PRO:N	2:J:464:GLN:CA	2.38	0.86
2:B:429:PRO:CB	2:J:464:GLN:N	2.38	0.86
2:B:429:PRO:CD	2:J:464:GLN:N	2.39	0.86
2:B:429:PRO:N	2:J:464:GLN:N	2.29	0.81
2:B:429:PRO:CA	2:J:464:GLN:H	1.95	0.78
2:B:200:HIS:CE1	2:B:202:ILE:HD11	2.28	0.69
6:N:37:ASN:HD22	6:N:58:LYS:HG3	1.59	0.67
2:B:429:PRO:HD2	2:J:464:GLN:HA	1.74	0.67
2:B:429:PRO:CA	2:J:464:GLN:CB	2.73	0.66
5:E:204:VAL:HG12	5:E:413:ILE:HD11	1.77	0.65
2:B:419:HIS:CE1	2:B:470:SER:HA	2.33	0.63
8:P:410:PRO:HB3	8:P:493:LEU:HD13	1.81	0.62
2:B:241:ASN:HD21	2:B:331:ILE:HD11	1.64	0.61
6:N:198:HIS:CD2	6:N:199:LYS:H	2.18	0.61
2:B:429:PRO:CA	2:J:464:GLN:HB2	2.31	0.60
2:B:429:PRO:CG	2:J:464:GLN:C	2.74	0.59
4:D:441:ARG:HE	5:M:431:LEU:HD23	1.66	0.59
8:H:129:ILE:HG23	8:H:516:VAL:HG13	1.83	0.59
5:M:225:ILE:HG22	5:M:227:GLY:H	1.68	0.59
6:F:198:HIS:CD2	6:F:199:LYS:H	2.20	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:297:SER:H	3:C:300:ALA:HB3	1.68	0.59
4:D:129:HIS:CD2	4:D:130:PRO:HD2	2.38	0.58
2:B:255:ARG:HE	2:B:255:ARG:H	1.50	0.58
2:B:429:PRO:HG2	2:J:464:GLN:C	2.29	0.58
7:G:202:GLY:H	7:G:377:GLY:HA2	1.69	0.57
3:K:330:ARG:HH22	3:K:338:LEU:HD13	1.70	0.57
3:C:47:MET:HG3	3:C:61:ASN:HD21	1.68	0.56
4:D:190:ALA:HB1	4:D:386:VAL:HG21	1.88	0.55
7:G:39:THR:HG21	7:G:62:GLY:H	1.71	0.55
2:J:74:ILE:CD1	4:L:536:VAL:HG12	2.37	0.55
5:E:533:ILE:H	5:E:533:ILE:HD13	1.72	0.54
7:O:28:ALA:HB1	7:O:73:HIS:CD2	2.43	0.54
8:P:347:CYS:SG	8:P:365:HIS:CE1	3.01	0.54
5:E:204:VAL:HG22	5:E:205:ASP:N	2.22	0.54
4:L:332:ASP:O	4:L:336:ILE:HG22	2.07	0.54
6:N:70:GLN:O	6:N:71:HIS:CD2	2.60	0.54
5:E:85:HIS:CD2	5:E:86:GLN:H	2.26	0.54
2:B:275:MET:O	2:B:279:VAL:HG23	2.09	0.53
1:A:228:ARG:HH12	1:A:350:GLU:HB2	1.73	0.53
5:E:340:ARG:HE	5:E:352:LYS:HA	1.75	0.52
2:B:429:PRO:C	2:J:464:GLN:HB2	2.33	0.52
5:E:204:VAL:HG22	5:E:205:ASP:H	1.74	0.51
7:G:90:VAL:HG13	7:G:398:ARG:HD2	1.93	0.51
7:O:282:HIS:HA	7:O:286:ALA:HB3	1.91	0.51
8:P:331:THR:H	8:P:343:GLU:HA	1.75	0.51
3:C:137:LEU:HA	3:C:140:ILE:HG22	1.93	0.50
1:I:179:ILE:HG22	1:I:181:TYR:H	1.77	0.50
1:A:522:ILE:O	1:A:526:ARG:HG2	2.11	0.50
6:N:221:MET:SD	6:N:311:VAL:HG13	2.51	0.50
6:F:416:VAL:HG23	6:F:470:HIS:CE1	2.46	0.50
2:B:429:PRO:HB2	2:J:465:LEU:H	1.76	0.49
7:G:294:PRO:HB3	7:G:313:ARG:HE	1.77	0.49
4:L:287:VAL:HG23	4:L:320:MET:HE3	1.94	0.49
2:B:429:PRO:CB	2:J:464:GLN:H	2.21	0.49
7:O:414:MET:HE2	7:O:461:LEU:HD22	1.94	0.49
6:N:141:ARG:HH11	6:N:407:VAL:HG23	1.77	0.49
1:A:245:LYS:H	3:C:335:PRO:HG2	1.77	0.49
4:D:461:ILE:H	4:D:461:ILE:HD12	1.78	0.49
3:K:57:ILE:HD13	6:N:76:LEU:HD23	1.95	0.49
4:L:374:LEU:HD11	4:L:376:ILE:HD11	1.95	0.49
8:H:43:THR:HA	8:H:46:ALA:HB3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:145:ALA:HB1	2:B:405:ARG:HE	1.78	0.48
2:J:130:TRP:CH2	2:J:515:LEU:HD22	2.47	0.48
3:K:330:ARG:HD3	3:K:330:ARG:H	1.78	0.48
5:E:85:HIS:CG	5:E:86:GLN:H	2.30	0.48
1:I:242:GLN:HG2	1:I:245:LYS:H	1.78	0.48
4:L:299:LEU:HD21	4:L:374:LEU:HD22	1.96	0.48
5:M:349:THR:HG21	5:M:352:LYS:HG3	1.96	0.48
1:A:243:LYS:HG2	1:A:244:THR:H	1.79	0.48
2:B:414:GLU:HG2	2:B:446:LEU:HD23	1.96	0.48
1:I:219:VAL:HG13	1:I:310:ARG:HH11	1.79	0.48
6:N:46:MET:HE3	8:P:521:VAL:HG11	1.96	0.48
7:O:168:ILE:H	7:O:168:ILE:HD13	1.79	0.48
3:C:127:ARG:HH21	3:C:514:VAL:HG11	1.79	0.47
1:A:382:ASP:H	3:C:190:ARG:NH1	2.11	0.47
1:A:382:ASP:H	3:C:190:ARG:HH11	1.61	0.47
5:E:131:ILE:HG21	7:G:451:ASP:O	2.15	0.47
5:M:522:GLN:OE1	7:O:378:ALA:HB2	2.15	0.47
8:P:448:ILE:HD12	8:P:448:ILE:H	1.79	0.47
1:A:328:LEU:HD12	1:A:331:LEU:HB2	1.96	0.47
1:I:132:ILE:HG12	1:I:415:VAL:HG21	1.96	0.47
5:M:356:ALA:HA	5:M:376:GLN:HE22	1.80	0.47
5:E:143:VAL:HG23	5:E:433:VAL:HG22	1.96	0.47
7:O:81:ASP:HA	7:O:84:LYS:HE3	1.97	0.47
2:B:162:ILE:HD13	2:B:496:SER:HB3	1.97	0.47
1:A:115:THR:HG22	1:A:526:ARG:HH12	1.80	0.47
5:E:232:LYS:HG3	5:E:322:VAL:HG22	1.96	0.47
1:I:267:GLU:HA	1:I:270:ILE:HG12	1.97	0.47
2:J:160:MET:HE2	2:J:184:VAL:HG11	1.96	0.47
6:F:384:LEU:HD12	6:F:387:ILE:HD11	1.96	0.47
2:J:488:MET:HE2	2:J:488:MET:HA	1.97	0.47
8:H:500:THR:HG23	8:H:503:GLY:H	1.80	0.46
6:N:198:HIS:CG	6:N:199:LYS:N	2.84	0.46
7:O:117:HIS:CE1	7:O:514:VAL:HG12	2.51	0.46
2:J:116:LEU:O	2:J:119:LYS:HB2	2.14	0.46
3:K:71:GLN:HE21	3:K:73:GLN:HE21	1.64	0.46
3:C:434:GLN:HE21	3:C:438:ARG:CZ	2.29	0.45
5:E:209:ILE:HB	5:E:406:LEU:HD23	1.98	0.45
7:O:378:ALA:H	7:O:381:PHE:HB3	1.82	0.45
5:E:402:LEU:O	5:E:406:LEU:HD13	2.15	0.45
8:H:225:LYS:HG3	8:H:315:LEU:O	2.16	0.45
4:L:156:GLU:HG2	4:L:158:SER:H	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:O:119:GLN:HE22	7:O:515:SER:HA	1.82	0.45
8:P:163:LEU:HD23	8:P:408:LEU:HD11	1.98	0.45
5:E:102:ILE:HD12	5:E:512:GLY:HA2	1.99	0.45
3:K:304:LEU:HD12	3:K:311:ALA:HB2	1.98	0.45
3:C:188:ASN:HD21	3:C:192:GLU:HB2	1.82	0.44
8:P:365:HIS:O	8:P:366:GLU:HG3	2.18	0.44
5:M:34:LEU:HD13	5:M:124:LEU:HD22	2.00	0.44
1:I:203:ARG:HH12	1:I:356:ILE:HD11	1.82	0.44
2:B:68:ALA:HB2	2:B:99:THR:HG21	1.99	0.44
1:A:530:LEU:HD11	4:D:62:GLN:HE21	1.82	0.44
8:P:409:VAL:HG21	8:P:501:TYR:HA	2.00	0.44
2:B:282:ILE:HD13	2:B:290:PHE:CZ	2.52	0.44
7:O:17:GLN:HG2	7:O:18:GLY:H	1.83	0.44
1:A:190:TYR:HB2	1:A:403:LEU:HD22	2.00	0.43
8:H:218:LEU:HD11	8:H:362:VAL:HG13	1.99	0.43
8:P:283:ILE:HG22	8:P:288:ALA:HB2	1.98	0.43
7:G:200:VAL:H	7:G:382:MET:HE1	1.83	0.43
2:J:100:THR:O	2:J:104:VAL:HG23	2.18	0.43
5:M:260:PRO:HG3	7:O:257:VAL:HG21	1.99	0.43
6:F:114:LEU:HD11	6:F:435:LEU:HD13	2.01	0.43
3:C:180:VAL:CG2	3:C:395:MET:HB2	2.48	0.43
8:H:218:LEU:HD22	8:H:218:LEU:HA	1.93	0.43
1:A:190:TYR:CB	1:A:403:LEU:HD22	2.49	0.43
3:C:235:ASN:HB3	3:C:236:PRO:HD3	2.01	0.43
5:M:427:ILE:HG21	5:M:478:ARG:HA	2.01	0.43
1:A:419:LEU:HB3	1:A:445:LEU:HD13	2.01	0.43
7:G:151:GLN:HE21	7:G:400:ILE:HD12	1.84	0.43
6:F:416:VAL:CG2	6:F:470:HIS:CE1	3.02	0.43
3:K:127:ARG:HH21	3:K:514:VAL:HG21	1.84	0.43
8:H:477:ASN:CG	8:H:478:VAL:H	2.27	0.42
1:I:179:ILE:HA	1:I:370:ARG:HH22	1.84	0.42
4:L:100:ILE:HG23	4:L:206:ARG:HH12	1.84	0.42
4:D:348:ILE:H	4:D:348:ILE:HG12	1.63	0.42
6:F:95:ASN:O	6:F:99:ILE:HG13	2.19	0.42
5:M:136:GLY:O	5:M:448:MET:HG2	2.19	0.42
1:A:145:ARG:HG2	1:A:504:PHE:HB2	2.01	0.42
5:E:442:THR:HG23	5:E:443:LEU:H	1.84	0.42
5:E:78:LEU:HB3	5:E:92:VAL:HG22	2.02	0.42
7:O:406:VAL:HG13	7:O:496:ALA:HB2	2.01	0.42
1:A:410:PRO:HB3	1:A:498:ASN:HD21	1.84	0.42
1:I:36:LEU:HB3	1:I:455:ASN:HD21	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:N:462:THR:HA	6:N:465:LYS:HE2	2.02	0.42
6:N:469:GLU:HB2	6:N:477:VAL:HG21	2.01	0.42
1:A:145:ARG:HG2	1:A:504:PHE:CB	2.49	0.42
8:H:186:ALA:HA	8:H:217:VAL:HG13	2.01	0.42
3:C:67:LEU:HB3	3:C:81:ILE:HG12	2.02	0.42
6:N:462:THR:HA	6:N:465:LYS:CE	2.50	0.42
5:M:116:LEU:HB3	5:M:137:TYR:CE2	2.55	0.41
5:M:344:ARG:CZ	7:O:298:VAL:HG11	2.51	0.41
3:C:113:LEU:HD22	3:C:118:HIS:CE1	2.55	0.41
6:F:69:ILE:HG22	8:H:19:ALA:H	1.85	0.41
5:M:193:VAL:O	5:M:197:ALA:HB3	2.20	0.41
3:C:430:THR:HG21	8:P:469:ALA:HA	2.03	0.41
2:J:203:LYS:HB3	2:J:383:LEU:HD13	2.02	0.41
6:N:197:LYS:HA	6:N:379:PRO:HA	2.02	0.41
6:N:96:VAL:O	6:N:99:ILE:HG12	2.20	0.41
1:A:172:VAL:O	1:A:176:VAL:HG23	2.20	0.41
1:A:236:CYS:H	1:A:327:ILE:HD11	1.86	0.41
4:D:90:MET:HB3	4:D:525:THR:HG23	2.03	0.41
8:P:452:LEU:CD1	8:P:477:ASN:HD21	2.32	0.41
6:F:382:HIS:CD2	6:F:382:HIS:H	2.38	0.41
5:M:408:VAL:HG13	5:M:509:THR:HG22	2.03	0.41
1:A:456:ALA:CB	1:A:458:GLN:HG2	2.51	0.41
2:B:218:PHE:CD2	2:B:323:LEU:HD13	2.56	0.41
4:D:455:ALA:O	4:D:458:MET:HB2	2.21	0.41
5:E:362:ILE:HG13	5:E:373:VAL:HG21	2.02	0.41
6:N:190:MET:HE3	6:N:370:ARG:HA	2.02	0.41
7:G:246:LEU:HG	7:G:247:LYS:HG2	2.03	0.41
1:I:483:LEU:HD23	1:I:483:LEU:HA	1.96	0.41
7:O:280:LYS:HD3	7:O:283:HIS:CE1	2.55	0.41
2:B:239:ILE:HG23	2:B:320:VAL:HG22	2.03	0.40
7:G:66:LEU:HD22	7:G:66:LEU:HA	1.99	0.40
1:I:192:VAL:HG22	1:I:400:LYS:HD3	2.03	0.40
4:L:348:ILE:HD12	4:L:348:ILE:HA	1.96	0.40
6:N:118:ILE:HD12	6:N:435:LEU:CD1	2.51	0.40
1:A:370:ARG:HH11	1:A:370:ARG:HD2	1.73	0.40
7:O:28:ALA:HB1	7:O:73:HIS:CG	2.56	0.40
3:C:229:MET:HE2	3:C:229:MET:HB3	1.86	0.40
8:H:498:LEU:HD13	8:H:498:LEU:HA	1.90	0.40
1:I:353:GLN:HG3	1:I:362:ILE:HG12	2.04	0.40
7:O:197:ILE:HB	7:O:386:GLU:HG3	2.02	0.40
4:D:406:HIS:CE1	4:D:410:CYS:SG	3.14	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:186:LEU:HD12	7:G:195:ILE:HD13	2.04	0.40
3:K:69:GLU:O	3:K:70:ILE:HB	2.20	0.40
5:M:282:LYS:HG3	5:M:313:LEU:HD21	2.04	0.40
2:J:255:ARG:HE	2:J:270:ALA:HB1	1.86	0.40
3:K:379:ALA:H	3:K:383:ILE:HB	1.86	0.40
6:N:119:ILE:HG22	6:N:123:PHE:CE1	2.57	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	519/534 (97%)	461 (89%)	39 (8%)	19 (4%)	2	20
1	I	532/534 (100%)	474 (89%)	40 (8%)	18 (3%)	3	21
2	B	507/509 (100%)	473 (93%)	25 (5%)	9 (2%)	6	34
2	J	506/509 (99%)	464 (92%)	32 (6%)	10 (2%)	6	31
3	C	507/513 (99%)	465 (92%)	28 (6%)	14 (3%)	4	24
3	K	511/513 (100%)	462 (90%)	29 (6%)	20 (4%)	2	19
4	D	506/514 (98%)	470 (93%)	24 (5%)	12 (2%)	4	27
4	L	511/514 (99%)	458 (90%)	35 (7%)	18 (4%)	3	20
5	E	515/517 (100%)	461 (90%)	36 (7%)	18 (4%)	3	20
5	M	515/517 (100%)	480 (93%)	25 (5%)	10 (2%)	6	32
6	F	512/515 (99%)	474 (93%)	32 (6%)	6 (1%)	10	44
6	N	511/515 (99%)	483 (94%)	20 (4%)	8 (2%)	7	38
7	G	510/514 (99%)	464 (91%)	33 (6%)	13 (2%)	4	26
7	O	512/514 (100%)	471 (92%)	28 (6%)	13 (2%)	4	26
8	H	508/514 (99%)	466 (92%)	31 (6%)	11 (2%)	5	29

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
8	P	507/514 (99%)	463 (91%)	29 (6%)	15 (3%)	3 22
All	All	8189/8260 (99%)	7489 (92%)	486 (6%)	214 (3%)	6 25

All (214) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	49	ILE
1	A	486	ILE
2	B	172	LEU
2	B	250	LYS
2	B	429	PRO
3	C	164	ALA
3	C	371	ALA
4	D	234	SER
4	D	488	GLU
5	E	441	PRO
5	E	529	LYS
6	F	222	LYS
7	G	188	ASP
7	G	338	SER
8	H	58	ASN
8	H	481	ASP
1	I	49	ILE
1	I	369	ALA
2	J	120	LYS
2	J	222	LYS
2	J	226	VAL
3	K	75	PRO
3	K	241	LEU
3	K	242	ASP
4	L	321	LYS
4	L	325	ILE
4	L	420	ALA
4	L	488	GLU
4	L	506	GLU
6	N	423	ILE
7	O	188	ASP
7	O	189	LEU
7	O	258	HIS
8	P	431	PRO
8	P	523	GLN
1	A	140	THR

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Mol	Chain	Res	Type
1	A	147	CYS
1	A	159	LYS
1	A	231	ASN
1	A	332	ALA
1	A	475	GLN
2	B	120	LYS
2	B	224	ILE
2	B	247	ASP
3	C	117	MET
3	C	185	PHE
3	C	368	ASP
4	D	257	LYS
4	D	321	LYS
5	E	318	ASN
5	E	320	PRO
7	G	39	THR
8	H	47	TYR
1	I	239	PHE
1	I	332	ALA
1	I	370	ARG
1	I	479	GLU
2	J	259	ASP
2	J	378	ALA
3	K	197	LYS
3	K	249	LYS
4	L	203	VAL
4	L	237	GLY
5	M	178	VAL
5	M	318	ASN
5	M	488	ALA
6	N	38	LEU
6	N	179	ILE
6	N	250	TYR
6	N	430	LYS
7	O	149	VAL
7	O	430	LYS
8	P	232	THR
8	P	357	ASP
8	P	473	GLU
1	A	50	GLY
1	A	57	ASP
1	A	110	GLN

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Mol	Chain	Res	Type
1	A	224	GLY
1	A	334	LEU
2	B	191	LYS
3	C	235	ASN
3	C	288	ASP
3	C	365	ASP
3	C	370	LYS
4	D	177	SER
4	D	232	LYS
4	D	267	SER
4	D	327	ASP
5	E	154	SER
5	E	237	PRO
5	E	297	ALA
5	E	298	ASN
5	E	307	ASP
5	E	495	HIS
6	F	51	ALA
7	G	42	PRO
7	G	45	MET
7	G	258	HIS
7	G	285	GLY
7	G	471	GLY
7	G	473	THR
8	H	309	ASN
8	H	339	PRO
8	H	342	GLU
8	H	431	PRO
1	I	282	GLY
1	I	459	ASP
1	I	488	LEU
2	J	314	HIS
2	J	334	THR
3	K	71	GLN
3	K	90	GLU
3	K	117	MET
3	K	230	ARG
3	K	231	ARG
3	K	287	PRO
3	K	340	GLU
3	K	346	GLY
3	K	411	GLY

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Mol	Chain	Res	Type
3	K	457	ALA
4	L	235	ASN
4	L	243	LYS
4	L	306	ARG
4	L	351	PHE
4	L	385	THR
4	L	472	ASN
5	M	244	GLU
5	M	324	TRP
5	M	365	GLY
5	M	496	LYS
7	O	167	LEU
7	O	255	ILE
7	O	307	ASP
8	P	43	THR
8	P	99	ASP
8	P	210	SER
8	P	248	GLY
8	P	369	ASP
8	P	411	GLY
8	P	495	ALA
1	A	111	LYS
1	A	357	CYS
3	C	230	ARG
3	C	287	PRO
4	D	259	ASP
4	D	444	SER
5	E	202	ARG
5	E	324	TRP
5	E	539	SER
6	F	188	LEU
7	G	376	GLY
7	G	428	PRO
1	I	203	ARG
1	I	221	GLY
1	I	329	SER
1	I	366	ASN
4	L	52	LEU
4	L	177	SER
5	M	177	VAL
5	M	441	PRO
7	O	40	LEU

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Mol	Chain	Res	Type
7	O	473	THR
8	P	366	GLU
1	A	184	ILE
2	B	49	ASP
3	C	196	LYS
5	E	73	ASP
5	E	381	ARG
7	G	223	ALA
8	H	187	CYS
8	H	485	GLU
1	I	204	SER
2	J	246	THR
3	K	195	ILE
4	L	360	GLU
4	L	507	LEU
5	M	442	THR
7	O	148	LYS
7	O	225	PHE
7	O	254	GLU
8	P	229	GLY
8	P	372	ILE
1	A	223	GLN
1	A	255	THR
4	D	196	ASP
4	D	203	VAL
5	E	259	LYS
8	H	336	LEU
1	I	10	ASP
1	I	330	THR
2	J	199	ILE
2	J	472	GLY
3	K	43	PRO
4	L	73	ASP
6	N	53	ASP
6	N	411	ALA
6	F	160	VAL
1	I	290	GLY
2	B	493	ILE
7	G	168	ILE
3	K	205	PRO
3	C	286	LYS
5	E	258	PRO

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Mol	Chain	Res	Type
8	H	195	GLY
1	I	486	ILE
3	K	70	ILE
6	N	113	GLY
1	A	188	PRO
3	C	236	PRO
5	E	216	GLY
6	F	185	PRO
3	K	227	PRO
6	F	429	VAL

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	434/445 (98%)	422 (97%)	12 (3%)	38	59
1	I	445/445 (100%)	423 (95%)	22 (5%)	22	43
2	B	405/405 (100%)	394 (97%)	11 (3%)	39	61
2	J	405/405 (100%)	392 (97%)	13 (3%)	34	55
3	C	441/444 (99%)	423 (96%)	18 (4%)	27	48
3	K	444/444 (100%)	428 (96%)	16 (4%)	31	52
4	D	433/439 (99%)	421 (97%)	12 (3%)	38	59
4	L	438/439 (100%)	422 (96%)	16 (4%)	30	51
5	E	436/436 (100%)	415 (95%)	21 (5%)	23	44
5	M	436/436 (100%)	423 (97%)	13 (3%)	36	57
6	F	429/429 (100%)	410 (96%)	19 (4%)	25	47
6	N	429/429 (100%)	418 (97%)	11 (3%)	40	62
7	G	420/421 (100%)	404 (96%)	16 (4%)	29	50
7	O	421/421 (100%)	404 (96%)	17 (4%)	28	49
8	H	423/426 (99%)	403 (95%)	20 (5%)	23	45
8	P	422/426 (99%)	410 (97%)	12 (3%)	38	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	6861/6890 (100%)	6612 (96%)	249 (4%)	32 52

All (249) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	39	VAL
1	A	83	ASP
1	A	163	ILE
1	A	176	VAL
1	A	184	ILE
1	A	211	ILE
1	A	316	LEU
1	A	392	LEU
1	A	421	ILE
1	A	423	LEU
1	A	504	PHE
1	A	527	ILE
2	B	58	ASP
2	B	141	LEU
2	B	162	ILE
2	B	214	LEU
2	B	255	ARG
2	B	295	LEU
2	B	350	GLU
2	B	359	LEU
2	B	414	GLU
2	B	416	LEU
2	B	480	MET
3	C	57	ILE
3	C	99	ILE
3	C	144	VAL
3	C	160	ILE
3	C	167	ARG
3	C	214	VAL
3	C	220	ILE
3	C	221	ASN
3	C	240	LEU
3	C	256	ILE
3	C	257	GLU
3	C	285	LEU
3	C	303	TYR
3	C	315	VAL

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Mol	Chain	Res	Type
3	C	327	CYS
3	C	384	LEU
3	C	436	PRO
3	C	517	LEU
4	D	100	ILE
4	D	175	VAL
4	D	178	GLN
4	D	310	SER
4	D	312	LEU
4	D	325	ILE
4	D	351	PHE
4	D	352	THR
4	D	390	VAL
4	D	472	ASN
4	D	477	VAL
4	D	525	THR
5	E	38	ILE
5	E	96	LYS
5	E	124	LEU
5	E	209	ILE
5	E	219	LEU
5	E	229	ILE
5	E	244	GLU
5	E	262	THR
5	E	307	ASP
5	E	312	HIS
5	E	320	PRO
5	E	364	PHE
5	E	366	THR
5	E	385	ILE
5	E	441	PRO
5	E	442	THR
5	E	498	THR
5	E	501	MET
5	E	511	ILE
5	E	530	ILE
5	E	533	ILE
6	F	13	VAL
6	F	41	LYS
6	F	48	VAL
6	F	104	LYS
6	F	158	THR

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Mol	Chain	Res	Type
6	F	160	VAL
6	F	179	ILE
6	F	199	LYS
6	F	230	ILE
6	F	235	VAL
6	F	274	ILE
6	F	305	LEU
6	F	314	ARG
6	F	331	VAL
6	F	391	VAL
6	F	458	ASP
6	F	459	LEU
6	F	494	VAL
6	F	521	ILE
7	G	66	LEU
7	G	98	THR
7	G	121	ILE
7	G	129	THR
7	G	143	VAL
7	G	144	LYS
7	G	166	LYS
7	G	169	SER
7	G	192	LEU
7	G	278	LEU
7	G	289	VAL
7	G	297	ASP
7	G	320	LYS
7	G	434	LEU
7	G	445	ILE
7	G	475	TYR
8	H	50	ASN
8	H	55	MET
8	H	87	VAL
8	H	97	VAL
8	H	134	ILE
8	H	190	ILE
8	H	206	LYS
8	H	218	LEU
8	H	251	THR
8	H	254	LYS
8	H	259	ILE
8	H	346	HIS

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Mol	Chain	Res	Type
8	H	360	VAL
8	H	364	LYS
8	H	372	ILE
8	H	417	ILE
8	H	424	THR
8	H	449	PRO
8	H	498	LEU
8	H	502	LEU
1	I	20	GLN
1	I	55	THR
1	I	56	ASN
1	I	82	GLN
1	I	91	THR
1	I	101	LEU
1	I	105	ASP
1	I	107	LEU
1	I	161	ILE
1	I	193	ASN
1	I	201	HIS
1	I	203	ARG
1	I	229	ILE
1	I	234	ILE
1	I	240	SER
1	I	306	MET
1	I	409	VAL
1	I	443	ARG
1	I	477	ASN
1	I	480	ARG
1	I	484	LYS
1	I	523	THR
2	J	39	VAL
2	J	50	LYS
2	J	76	VAL
2	J	99	THR
2	J	117	ILE
2	J	123	PRO
2	J	226	VAL
2	J	251	ILE
2	J	269	HIS
2	J	325	LEU
2	J	388	ARG
2	J	397	LEU

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Mol	Chain	Res	Type
2	J	488	MET
3	K	22	VAL
3	K	39	THR
3	K	54	MET
3	K	58	VAL
3	K	91	VAL
3	K	96	THR
3	K	135	SER
3	K	315	VAL
3	K	376	LEU
3	K	433	GLU
3	K	436	PRO
3	K	487	LEU
3	K	488	VAL
3	K	514	VAL
3	K	519	ILE
3	K	520	ASP
4	L	59	LYS
4	L	77	ILE
4	L	100	ILE
4	L	124	LEU
4	L	139	LYS
4	L	178	GLN
4	L	192	MET
4	L	206	ARG
4	L	218	ILE
4	L	225	GLU
4	L	422	ILE
4	L	465	LEU
4	L	476	THR
4	L	490	THR
4	L	523	THR
4	L	536	VAL
5	M	58	ASP
5	M	94	LEU
5	M	160	LYS
5	M	313	LEU
5	M	315	LEU
5	M	346	SER
5	M	392	LYS
5	M	399	LYS
5	M	404	ASP

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Mol	Chain	Res	Type
5	M	410	ARG
5	M	457	VAL
5	M	505	HIS
5	M	515	GLN
6	N	176	ILE
6	N	186	ILE
6	N	242	THR
6	N	301	SER
6	N	374	LEU
6	N	424	LYS
6	N	446	ILE
6	N	488	VAL
6	N	511	ILE
6	N	513	THR
6	N	520	GLU
7	O	26	ILE
7	O	78	THR
7	O	97	VAL
7	O	147	ASP
7	O	168	ILE
7	O	170	GLN
7	O	172	LYS
7	O	200	VAL
7	O	259	THR
7	O	283	HIS
7	O	344	ARG
7	O	371	THR
7	O	418	LYS
7	O	419	TYR
7	O	430	LYS
7	O	434	LEU
7	O	484	ILE
8	P	59	HIS
8	P	67	ASN
8	P	190	ILE
8	P	239	ILE
8	P	313	VAL
8	P	374	THR
8	P	394	ASP
8	P	400	LYS
8	P	431	PRO
8	P	467	LEU

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Mol	Chain	Res	Type
8	P	489	VAL
8	P	490	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (179) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	21	ASN
1	A	82	GLN
1	A	135	ASN
1	A	347	GLN
1	A	366	ASN
1	A	471	HIS
1	A	498	ASN
2	B	78	ASN
2	B	91	GLN
2	B	200	HIS
2	B	241	ASN
2	B	285	HIS
2	B	298	ASN
2	B	361	HIS
2	B	419	HIS
2	B	426	ASN
2	B	473	ASN
3	C	28	ASN
3	C	61	ASN
3	C	73	GLN
3	C	74	HIS
3	C	111	HIS
3	C	118	HIS
3	C	188	ASN
3	C	226	HIS
3	C	276	GLN
3	C	420	HIS
3	C	434	GLN
3	C	442	GLN
4	D	32	GLN
4	D	62	GLN
4	D	85	HIS
4	D	172	ASN
4	D	250	GLN
4	D	366	ASN
4	D	406	HIS

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Mol	Chain	Res	Type
4	D	468	ASN
4	D	482	ASN
4	D	494	ASN
5	E	55	ASN
5	E	85	HIS
5	E	236	HIS
5	E	264	HIS
5	E	391	ASN
5	E	403	HIS
5	E	411	ASN
5	E	472	GLN
5	E	481	GLN
5	E	503	GLN
5	E	515	GLN
6	F	17	GLN
6	F	71	HIS
6	F	198	HIS
6	F	214	HIS
6	F	218	HIS
6	F	320	ASN
6	F	346	HIS
6	F	367	ASN
6	F	382	HIS
6	F	438	GLN
6	F	467	GLN
7	G	117	HIS
7	G	119	GLN
7	G	134	ASN
7	G	151	GLN
7	G	171	GLN
7	G	201	GLN
7	G	209	GLN
7	G	258	HIS
7	G	264	GLN
7	G	272	ASN
7	G	282	HIS
7	G	352	GLN
7	G	390	HIS
7	G	431	GLN
7	G	432	GLN
7	G	468	HIS
7	G	480	ASN

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Mol	Chain	Res	Type
7	G	481	ASN
7	G	501	ASN
8	H	41	GLN
8	H	58	ASN
8	H	67	ASN
8	H	175	ASN
8	H	185	GLN
8	H	198	ASN
8	H	267	ASN
8	H	306	ASN
8	H	316	ASN
8	H	365	HIS
8	H	455	ASN
8	H	513	ASN
1	I	170	ASN
1	I	187	GLN
1	I	196	ASN
1	I	217	ASN
1	I	333	ASN
1	I	435	GLN
1	I	455	ASN
1	I	458	GLN
1	I	471	HIS
2	J	148	HIS
2	J	178	HIS
2	J	195	ASN
2	J	285	HIS
2	J	292	ASN
2	J	294	GLN
2	J	361	HIS
2	J	391	HIS
2	J	469	HIS
2	J	498	GLN
2	J	502	GLN
3	K	64	ASN
3	K	73	GLN
3	K	184	GLN
3	K	221	ASN
3	K	302	HIS
3	K	321	ASN
3	K	396	GLN
3	K	434	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	K	453	GLN
3	K	470	HIS
3	K	504	GLN
4	L	165	ASN
4	L	178	GLN
4	L	235	ASN
4	L	289	GLN
4	L	301	GLN
4	L	502	ASN
4	L	537	ASN
5	M	37	HIS
5	M	85	HIS
5	M	86	GLN
5	M	129	HIS
5	M	147	HIS
5	M	184	GLN
5	M	391	ASN
5	M	403	HIS
5	M	435	GLN
5	M	445	GLN
6	N	31	GLN
6	N	37	ASN
6	N	71	HIS
6	N	84	GLN
6	N	161	HIS
6	N	198	HIS
6	N	245	ASN
6	N	334	ASN
6	N	380	ASN
6	N	382	HIS
6	N	438	GLN
6	N	454	ASN
6	N	470	HIS
6	N	506	HIS
7	O	117	HIS
7	O	119	GLN
7	O	170	GLN
7	O	191	GLN
7	O	201	GLN
7	O	258	HIS
7	O	283	HIS
7	O	380	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	O	431	GLN
7	O	432	GLN
7	O	459	ASN
7	O	480	ASN
8	P	41	GLN
8	P	58	ASN
8	P	59	HIS
8	P	67	ASN
8	P	91	HIS
8	P	267	ASN
8	P	306	ASN
8	P	346	HIS
8	P	359	GLN
8	P	365	HIS
8	P	477	ASN
8	P	513	ASN
8	P	523	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

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

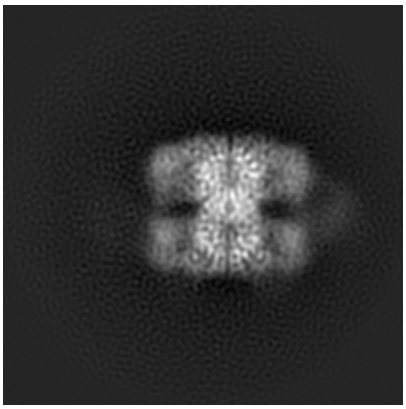
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-0492. These allow visual inspection of the internal detail of the map and identification of artifacts.

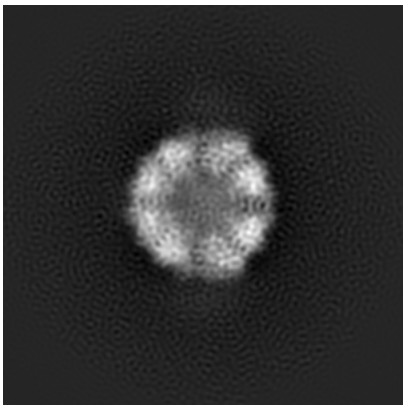
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

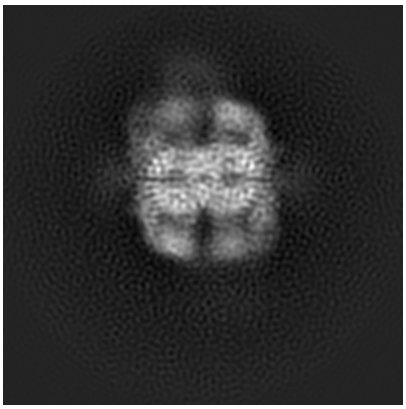
6.1.1 Primary map



X

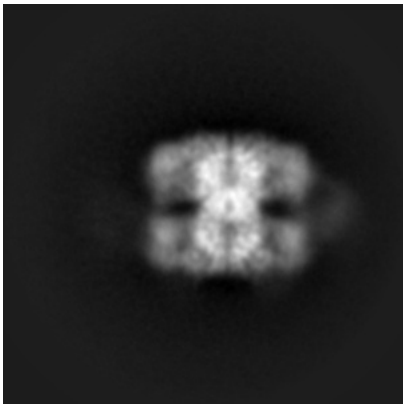


Y

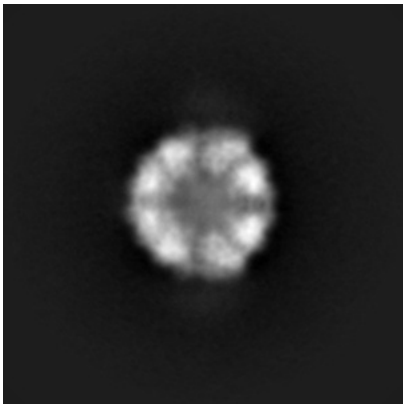


Z

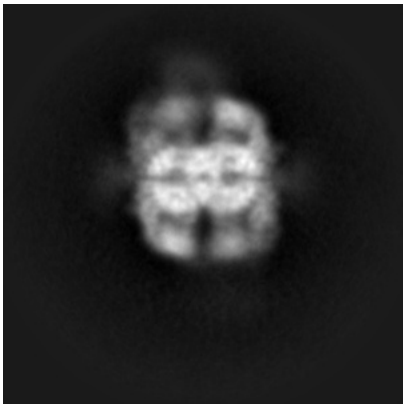
6.1.2 Raw map



X



Y

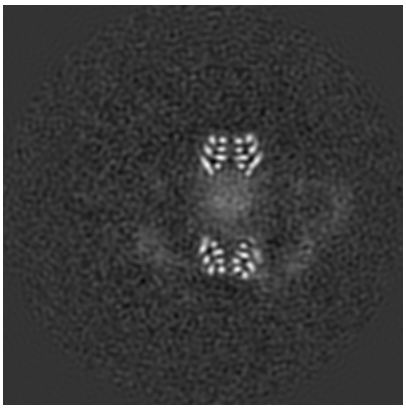


Z

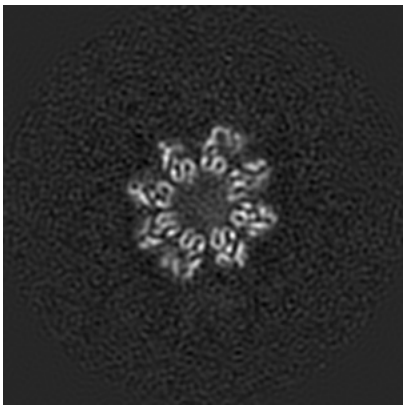
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

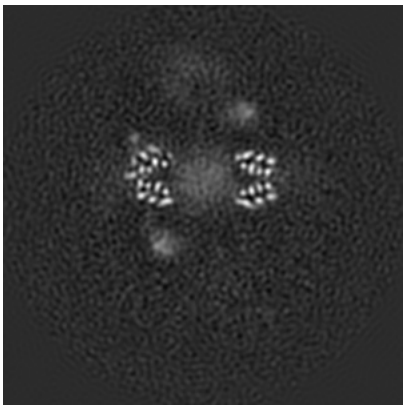
6.2.1 Primary map



X Index: 120

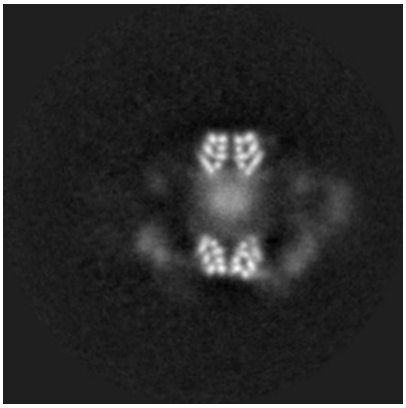


Y Index: 120

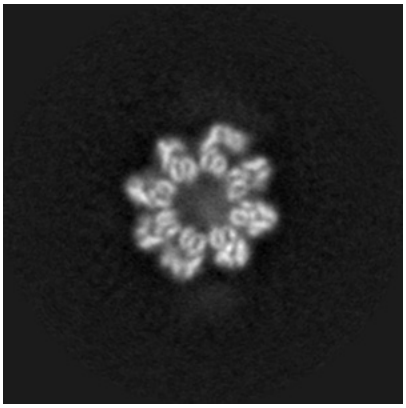


Z Index: 120

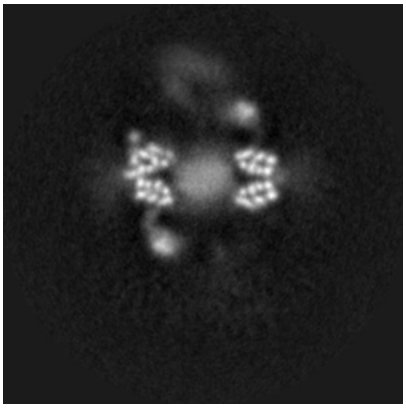
6.2.2 Raw map



X Index: 120



Y Index: 120

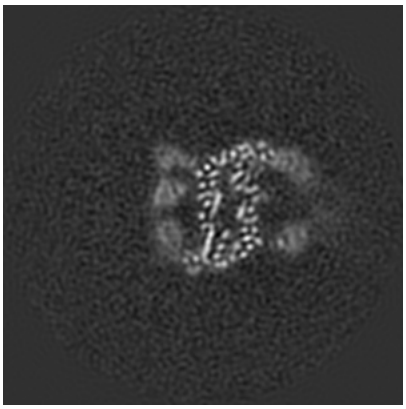


Z Index: 120

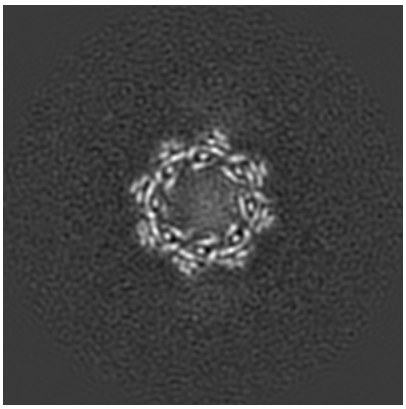
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

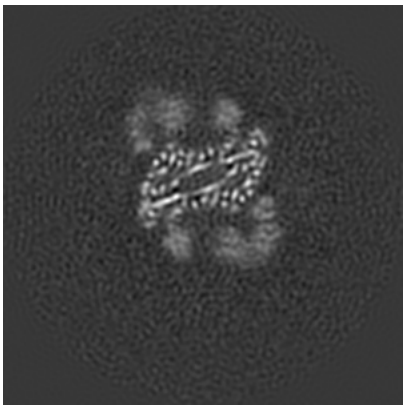
6.3.1 Primary map



X Index: 98

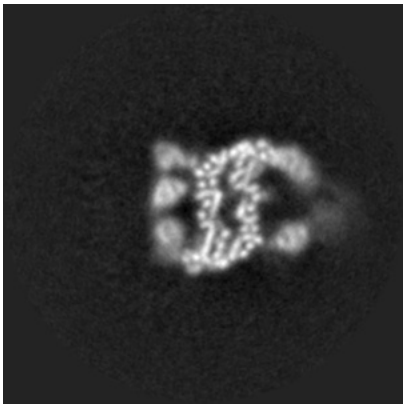


Y Index: 128

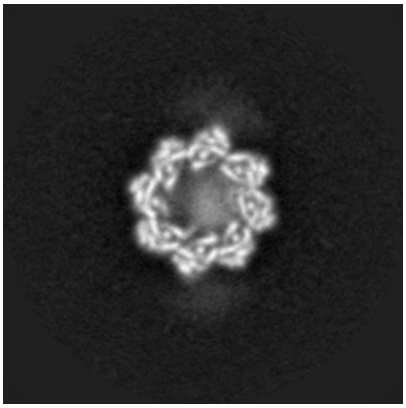


Z Index: 142

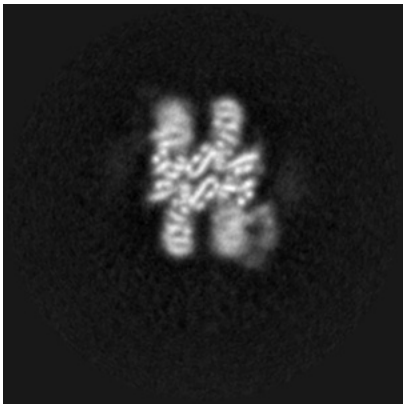
6.3.2 Raw map



X Index: 98



Y Index: 128

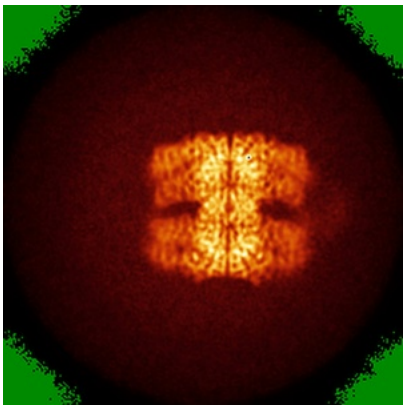


Z Index: 148

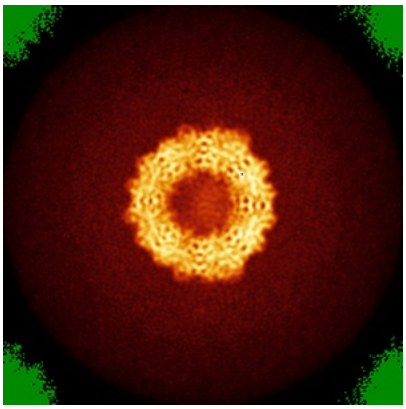
The images above show the largest variance slices of the map in three orthogonal directions.

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

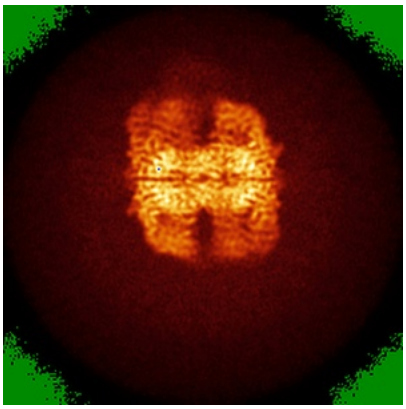
6.4.1 Primary map



X

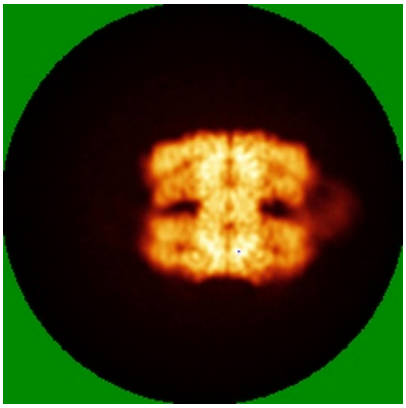


Y

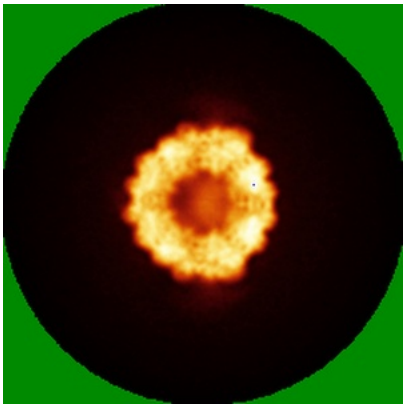


Z

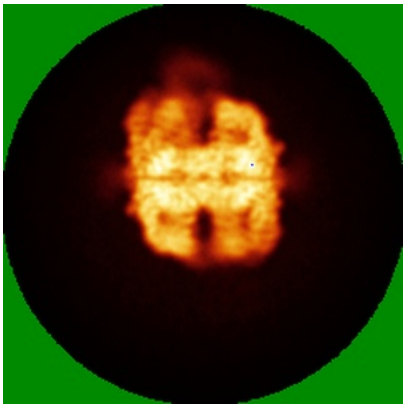
6.4.2 Raw map



X



Y

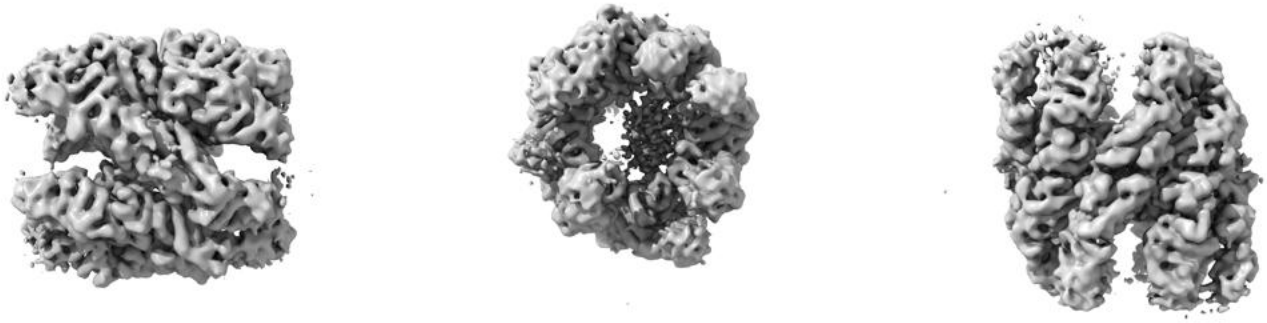


Z

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)

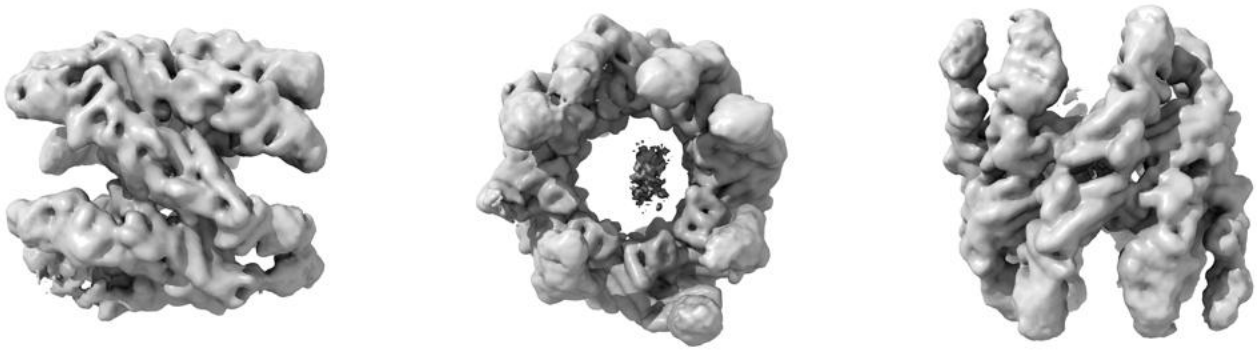
6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.05. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

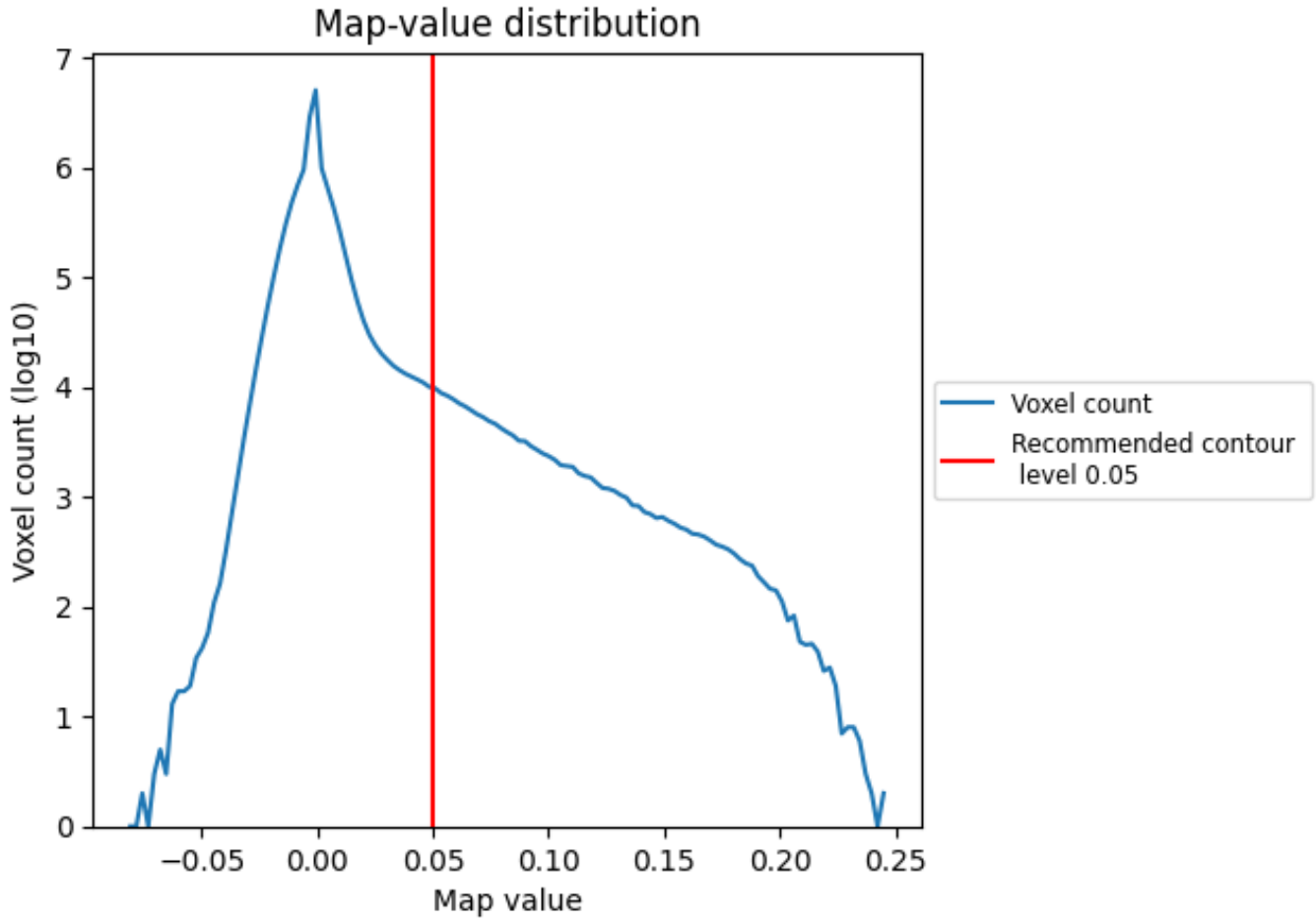
6.6 Mask visualisation (i)

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

7 Map analysis

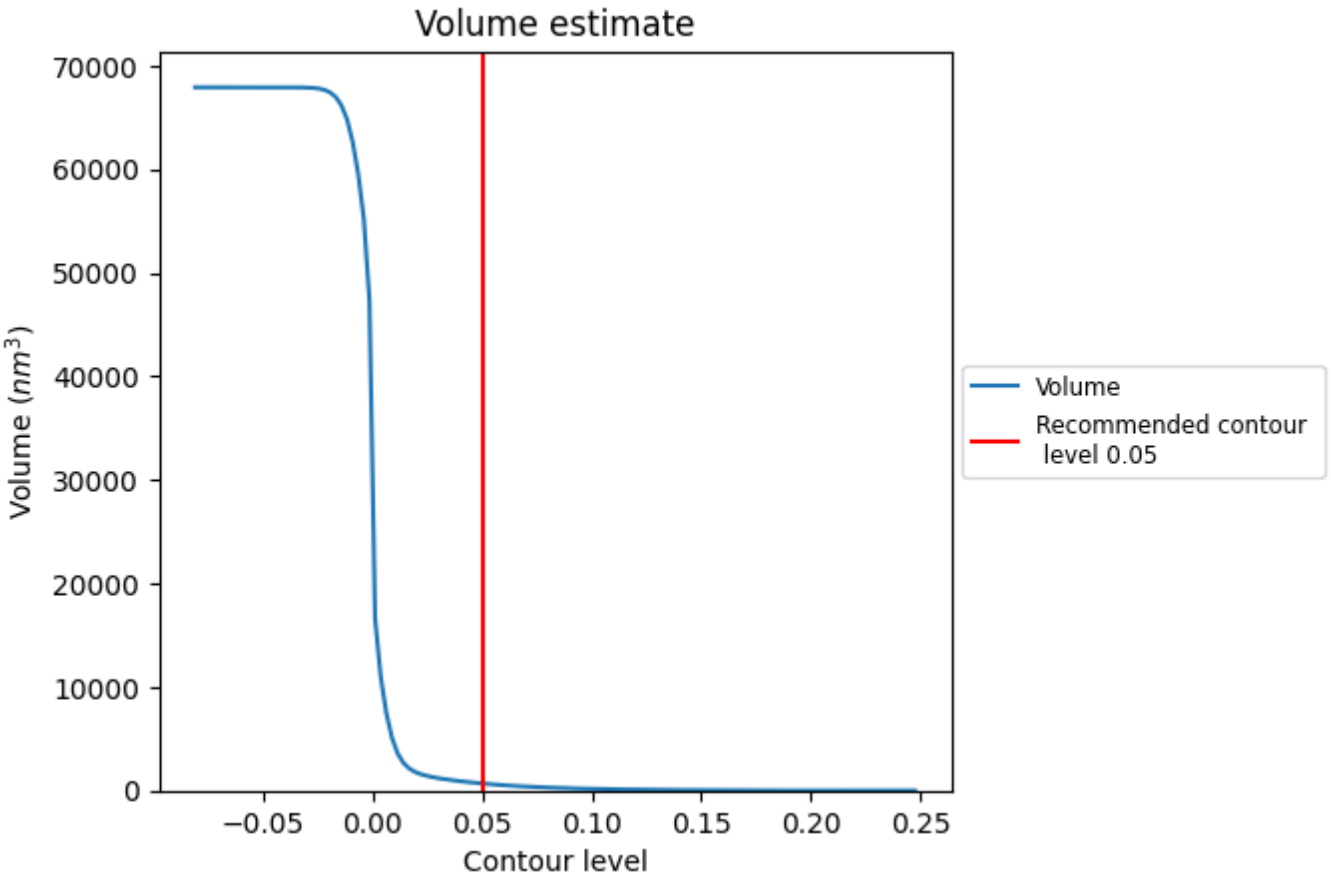
This section contains the results of statistical analysis of the map.

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.

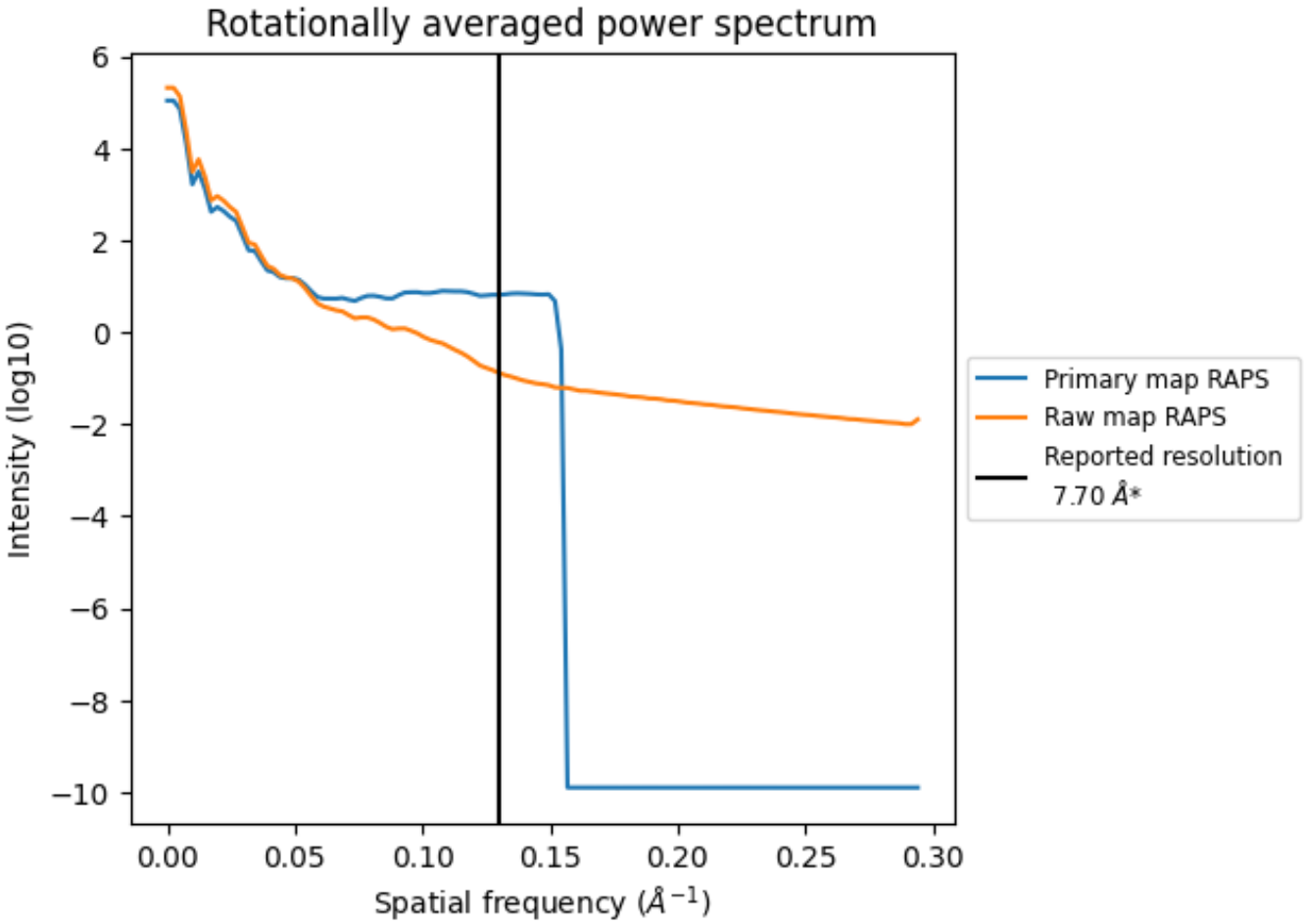
7.2 Volume estimate



The volume at the recommended contour level is 683 nm^3; this corresponds to an approximate mass of 617 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)

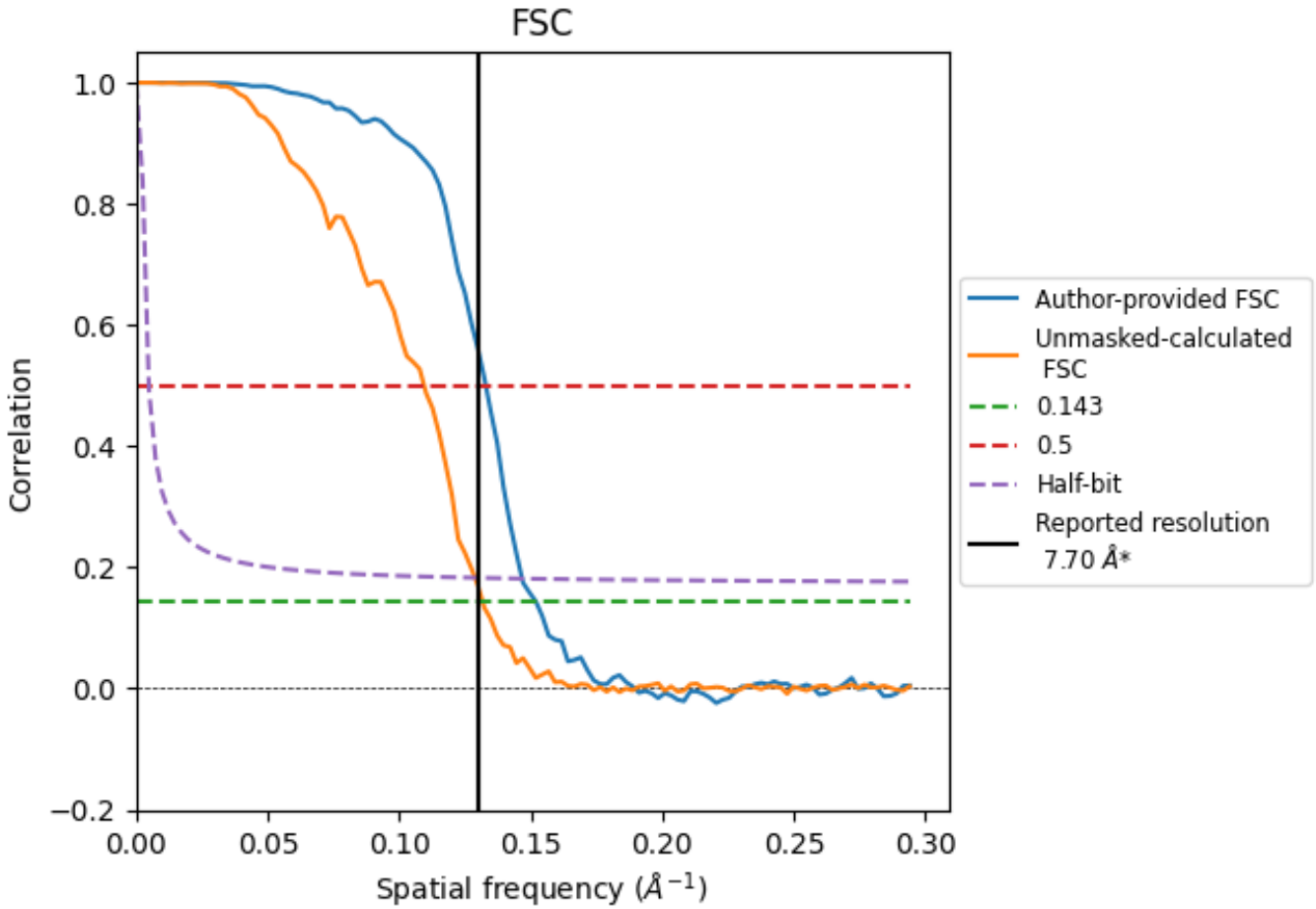


*Reported resolution corresponds to spatial frequency of 0.130 Å^{-1}

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.130 Å^{-1}

8.2 Resolution estimates (i)

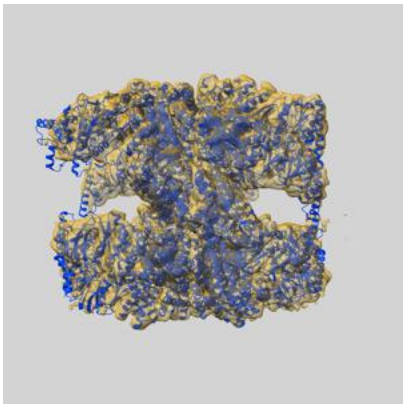
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	7.70	-	-
Author-provided FSC curve	6.58	7.52	6.82
Unmasked-calculated*	7.59	9.13	7.76

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from author-provided FSC intersecting FSC 0.143 CUT-OFF 6.58 differs from the reported value 7.7 by more than 10 %

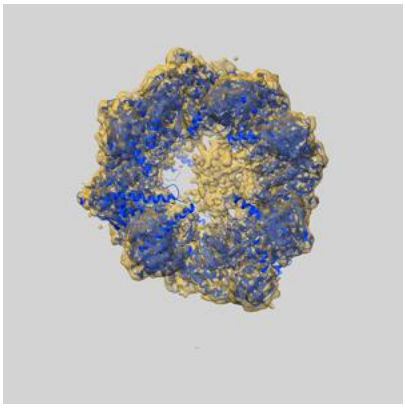
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-0492 and PDB model 6NRA. Per-residue inclusion information can be found in section 3 on page 6.

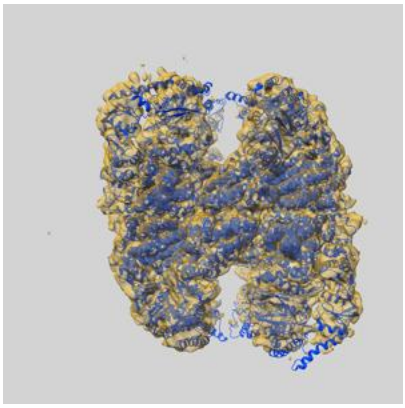
9.1 Map-model overlay



X



Y



Z

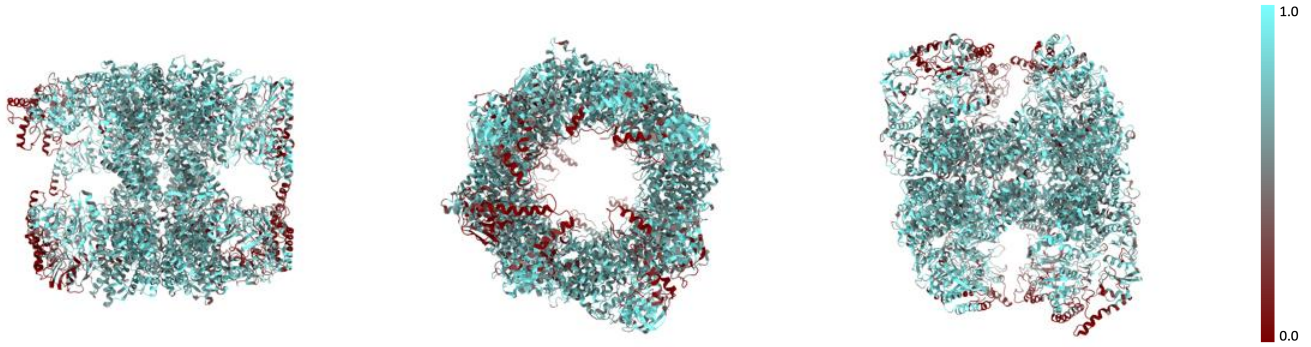
The images above show the 3D surface view of the map at the recommended contour level 0.05 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model (i)

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.

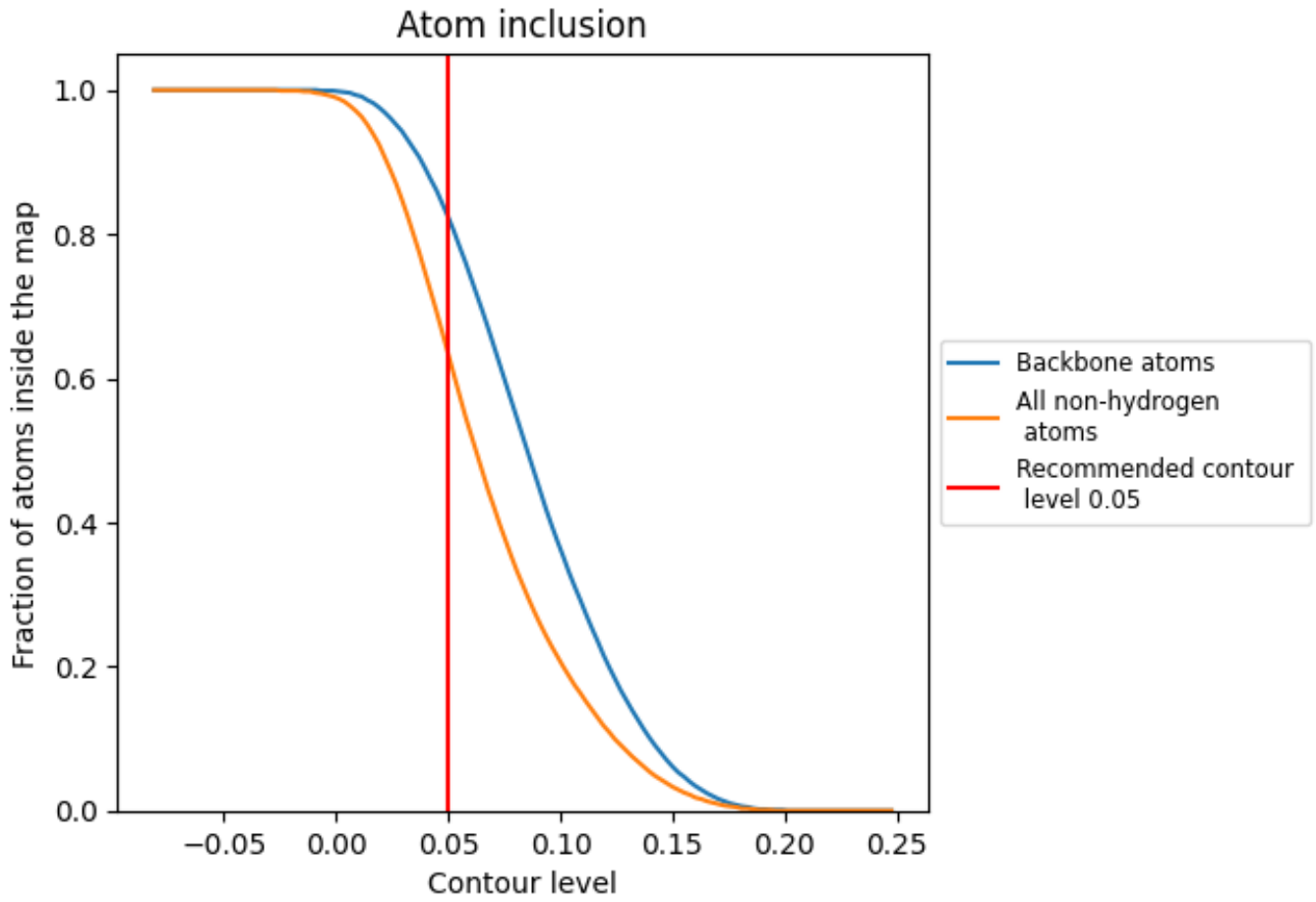
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.05).

9.4 Atom inclusion (i)



At the recommended contour level, 82% of all backbone atoms, 63% 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 (0.05) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6340	0.1010
A	0.6100	0.0910
B	0.5230	0.0950
C	0.6490	0.1070
D	0.6630	0.1150
E	0.6760	0.0980
F	0.7010	0.1150
G	0.6650	0.1010
H	0.7000	0.1140
I	0.6060	0.0860
J	0.4700	0.0880
K	0.6080	0.0880
L	0.6300	0.1050
M	0.6570	0.1040
N	0.6800	0.1090
O	0.6110	0.0950
P	0.6970	0.1110