Full wwPDB EM Validation Report

Mar 8, 2026 – 08:51 AM UTC

PDB ID	:	8TIE / pdb_00008tie
EMDB ID	:	EMD-41285
Title	:	Double nuclear outer ring of Nup84-complexes from the yeast NPC
Authors	:	Akey, C.W.; Echeverria, I.; Ouch, C.; Fernandez-Martinez, J.; Rout, M.P.
Deposited on	:	2023-07-19
Resolution	:	8.10 Å(reported)
Based on initial model	:	.

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:

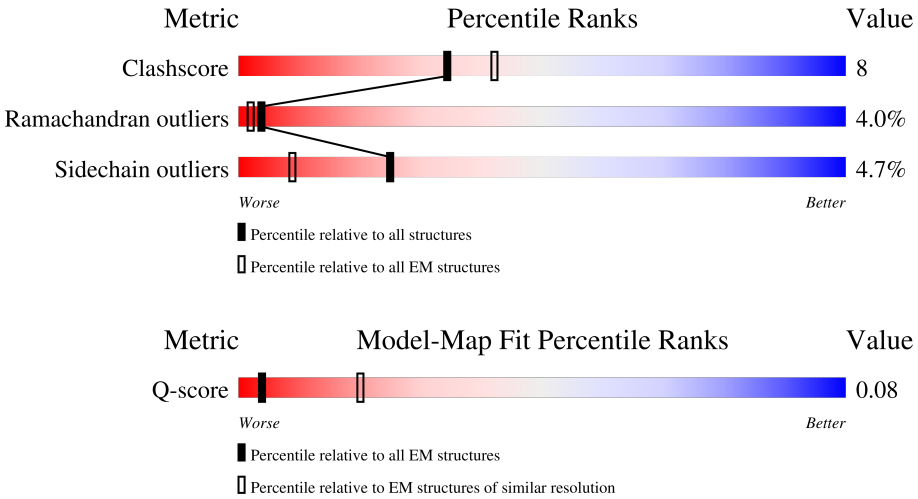
EMDB validation analysis	:	0.0.1.dev132
MolProbity	:	4-5-2 with Phenix2.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh &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

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 8.10 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	342 (7.60 - 8.60)

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	1037	9% 41% 51% 5% •
1	l	1037	7% 42% 48% 6% ••
2	b	744	5% 37% 44% 5% • 13%
2	m	744	29% 35% 45% 7% 13%

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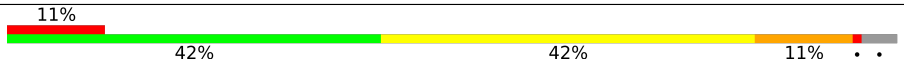
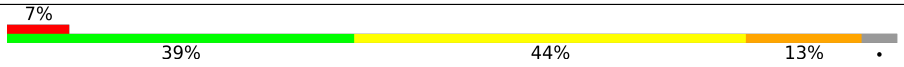
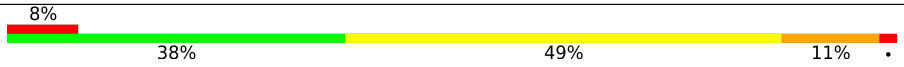
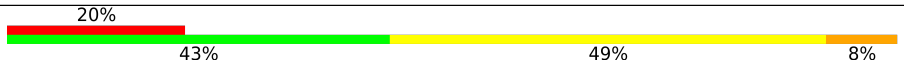
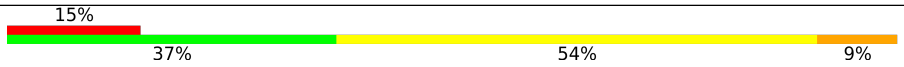
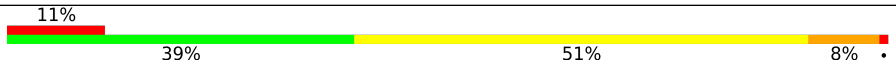
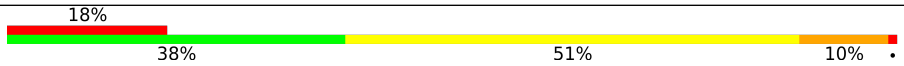
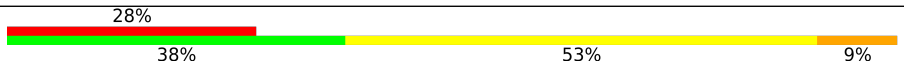
Mol	Chain	Length	Quality of chain
3	c	1317	
3	n	1317	
4	d	297	
4	o	297	
5	e	307	
5	p	307	
6	f	726	
6	q	726	
7	g	1157	
7	r	1157	

2 Entry composition (i)

There are 7 unique types of molecules in this entry. The entry contains 76621 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 Nucleoporin NUP120.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	a	1012	Total	C	N	O	S	0	0
			8321	5371	1340	1577	33		
1	l	1012	Total	C	N	O	S	0	0
			8321	5371	1340	1577	33		

- Molecule 2 is a protein called Nucleoporin NUP85.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	b	647	Total	C	N	O	S	0	0
			5186	3339	826	993	28		
2	m	647	Total	C	N	O	S	0	0
			5190	3343	826	993	28		

- Molecule 3 is a protein called NUP145 isoform 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	c	610	Total	C	N	O	S	0	0
			4877	3107	808	942	20		
3	n	599	Total	C	N	O	S	0	0
			4822	3074	797	931	20		

- Molecule 4 is a protein called Protein transport protein SEC13.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	d	286	Total	C	N	O	S	0	0
			2216	1412	381	420	3		
4	o	286	Total	C	N	O	S	0	0
			2216	1412	381	420	3		

- Molecule 5 is a protein called Nucleoporin Seh1.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	e	307	Total	C	N	O	S	0	0
			2439	1542	423	463	11		
5	p	307	Total	C	N	O	S	0	0
			2439	1542	423	463	11		

- Molecule 6 is a protein called Nucleoporin NUP84.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	f	726	Total	C	N	O	S	0	0
			5895	3766	962	1149	18		
6	q	726	Total	C	N	O	S	0	0
			5895	3766	962	1149	18		

- Molecule 7 is a protein called NUP133 isoform 1.

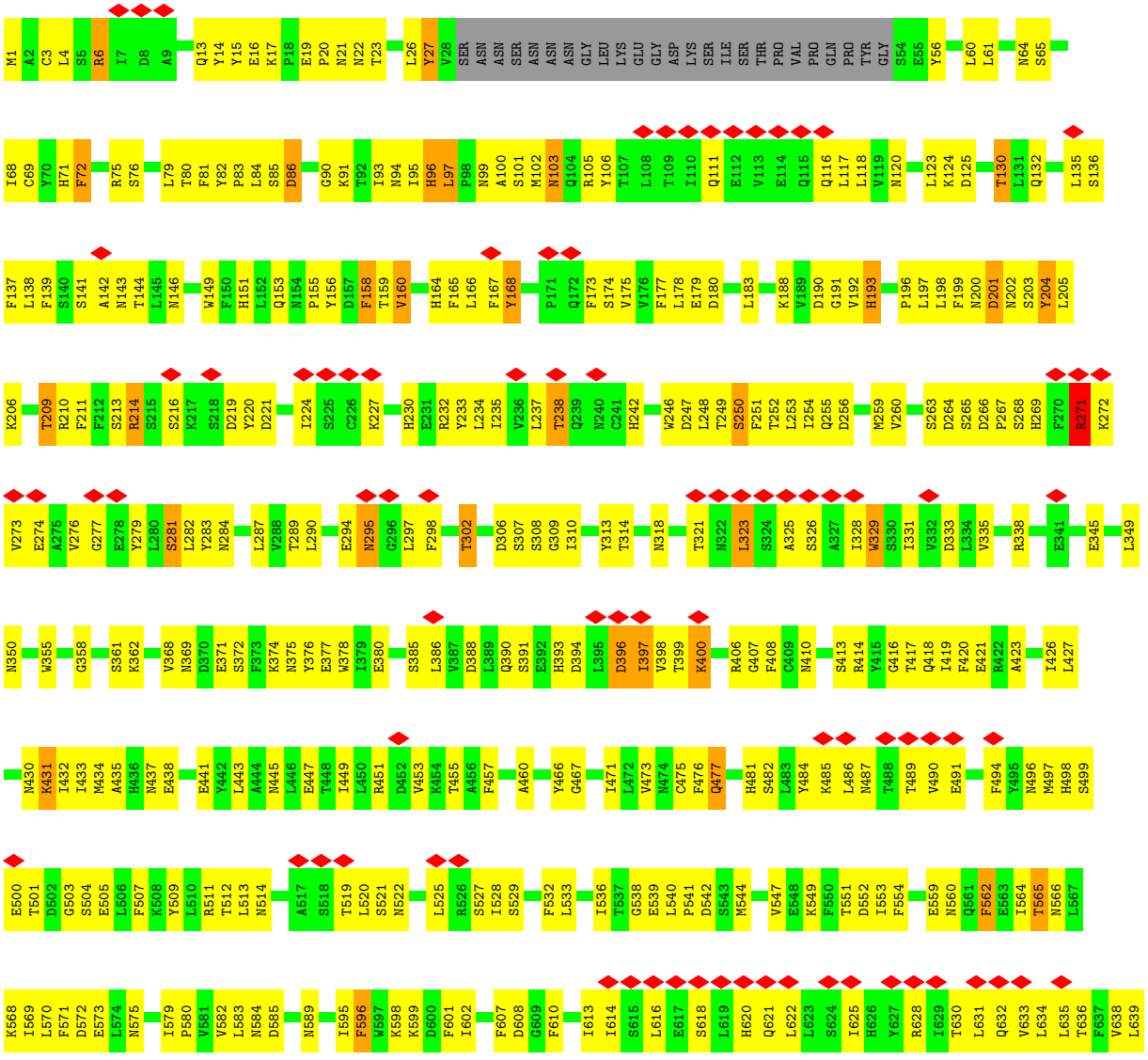
Mol	Chain	Residues	Atoms					AltConf	Trace
7	g	1157	Total	C	N	O	S	0	0
			9403	6023	1525	1823	32		
7	r	1157	Total	C	N	O	S	0	0
			9401	6023	1525	1821	32		

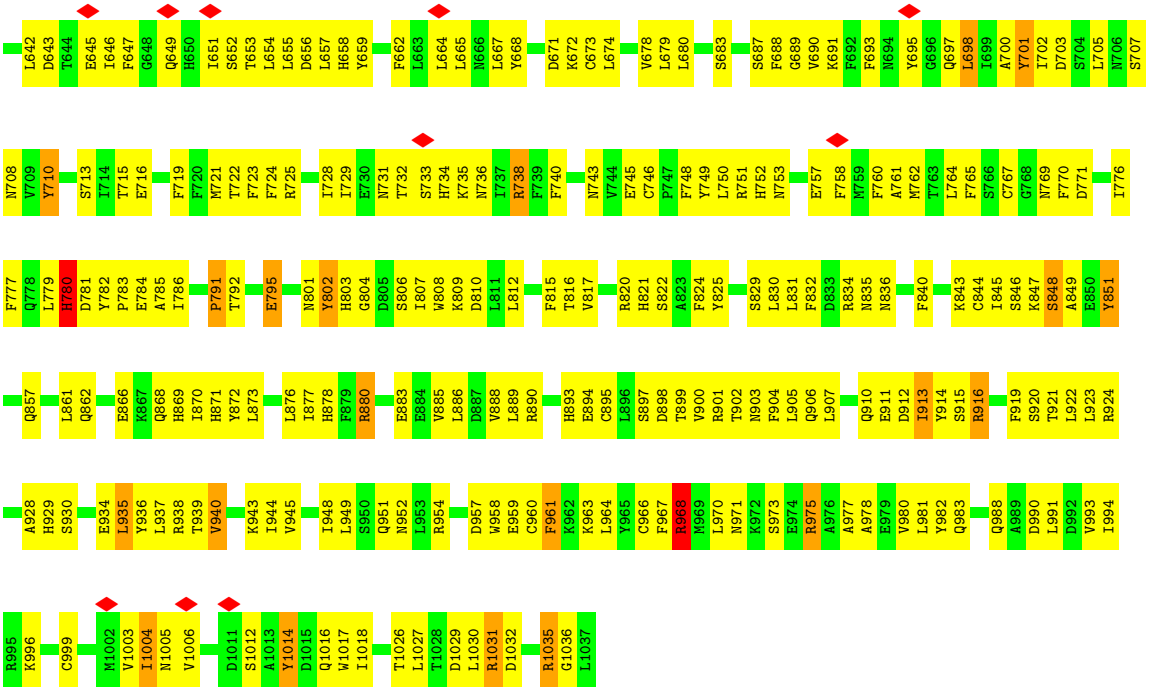
3 Residue-property plots (i)

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: Nucleoporin NUP120

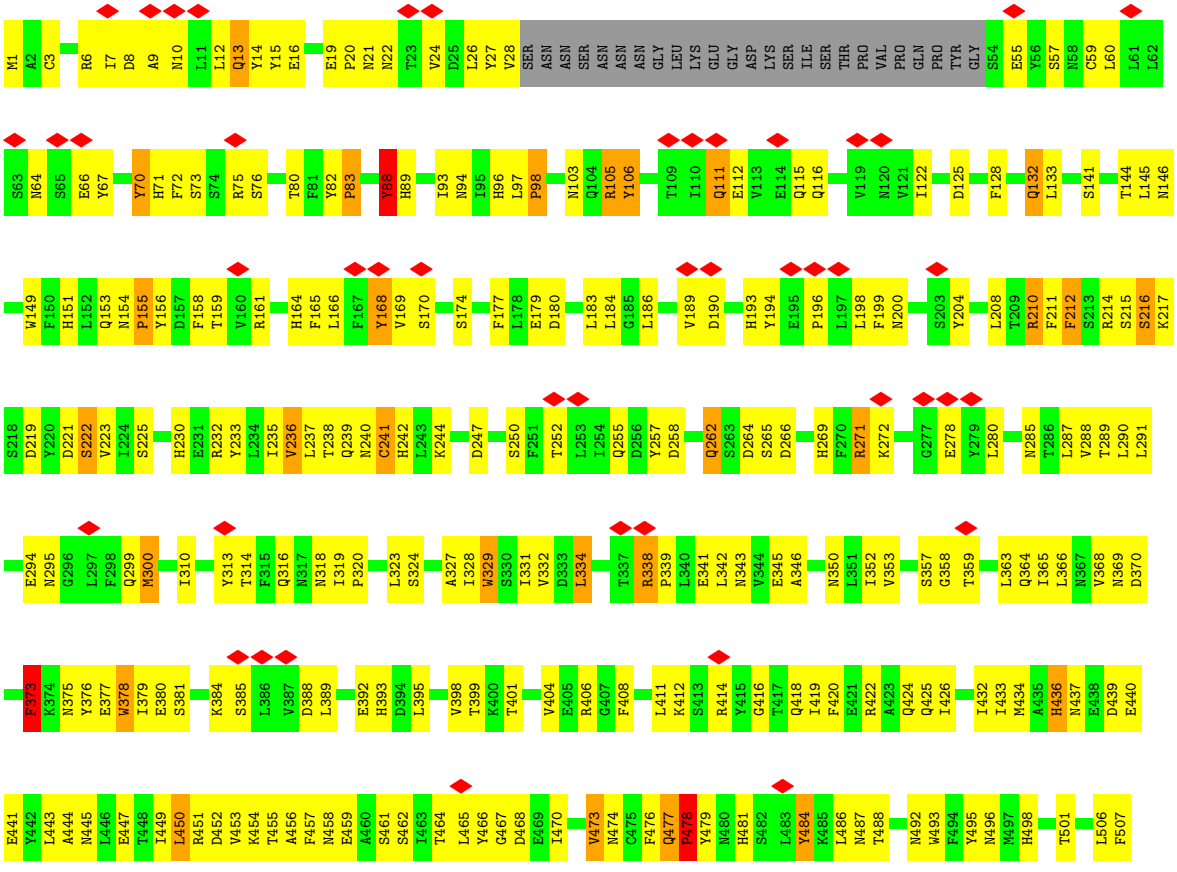
Chain a:

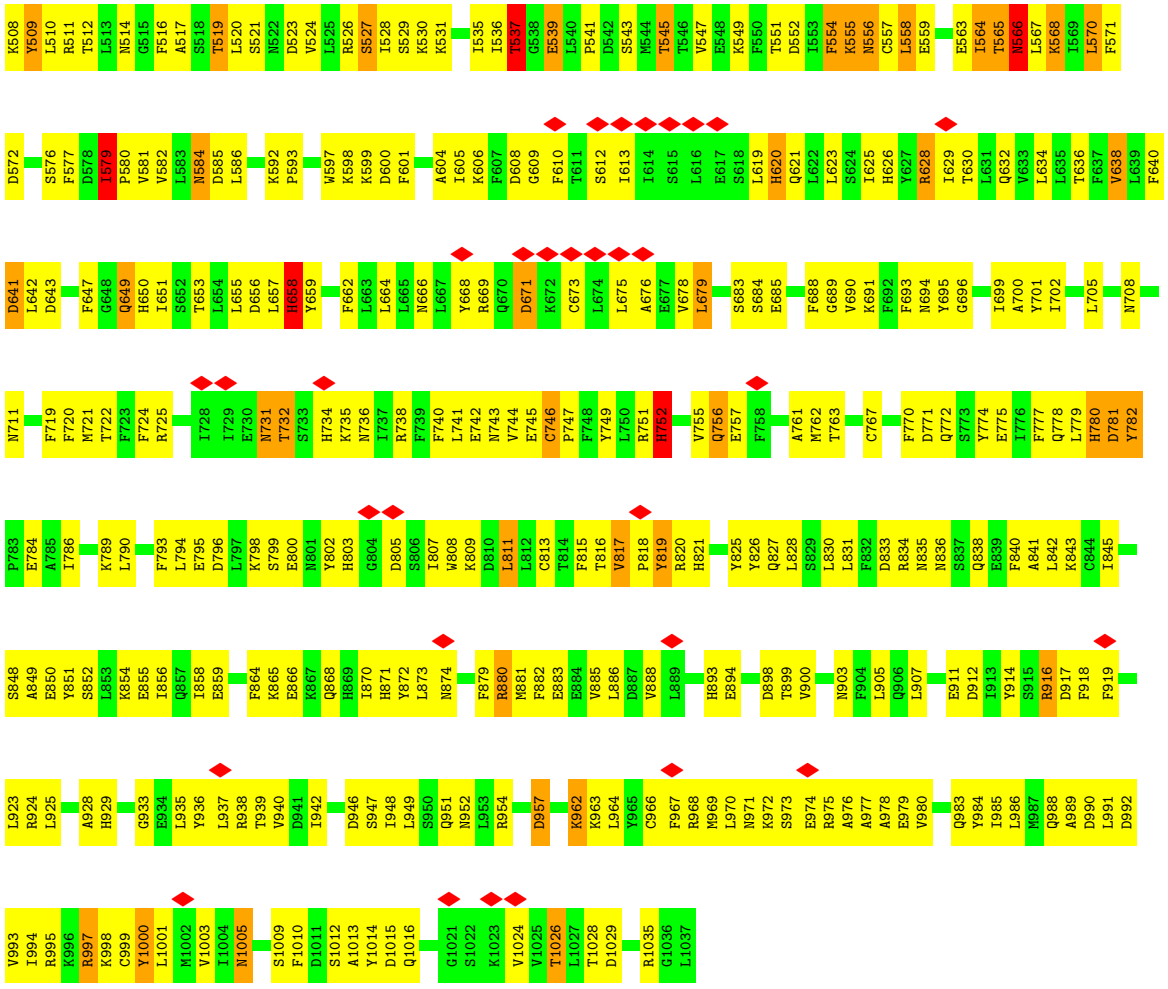




• Molecule 1: Nucleoporin NUP120

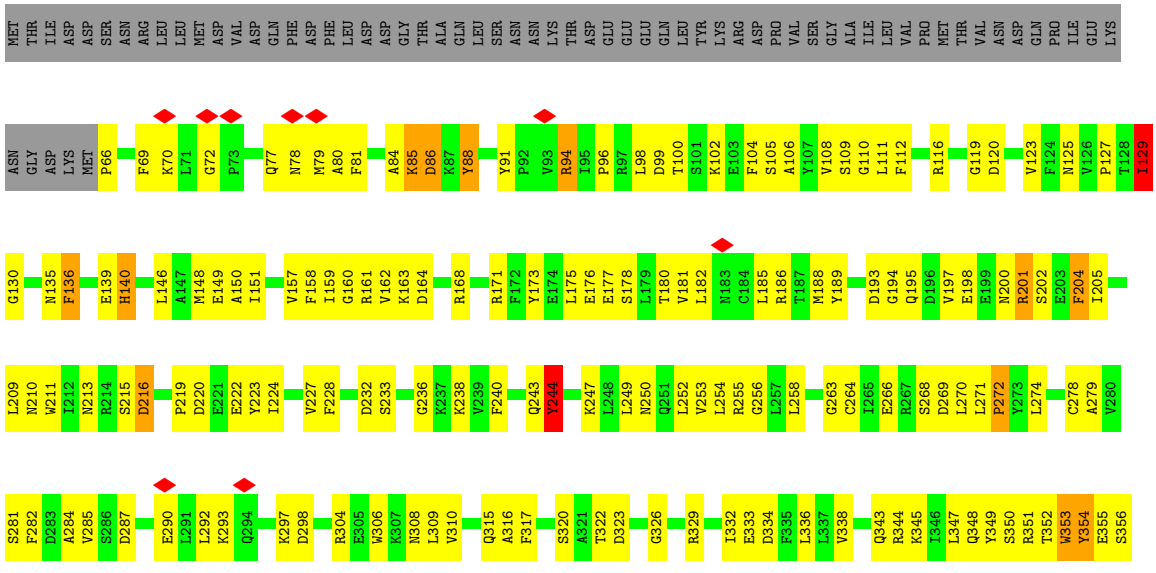
Chain l:

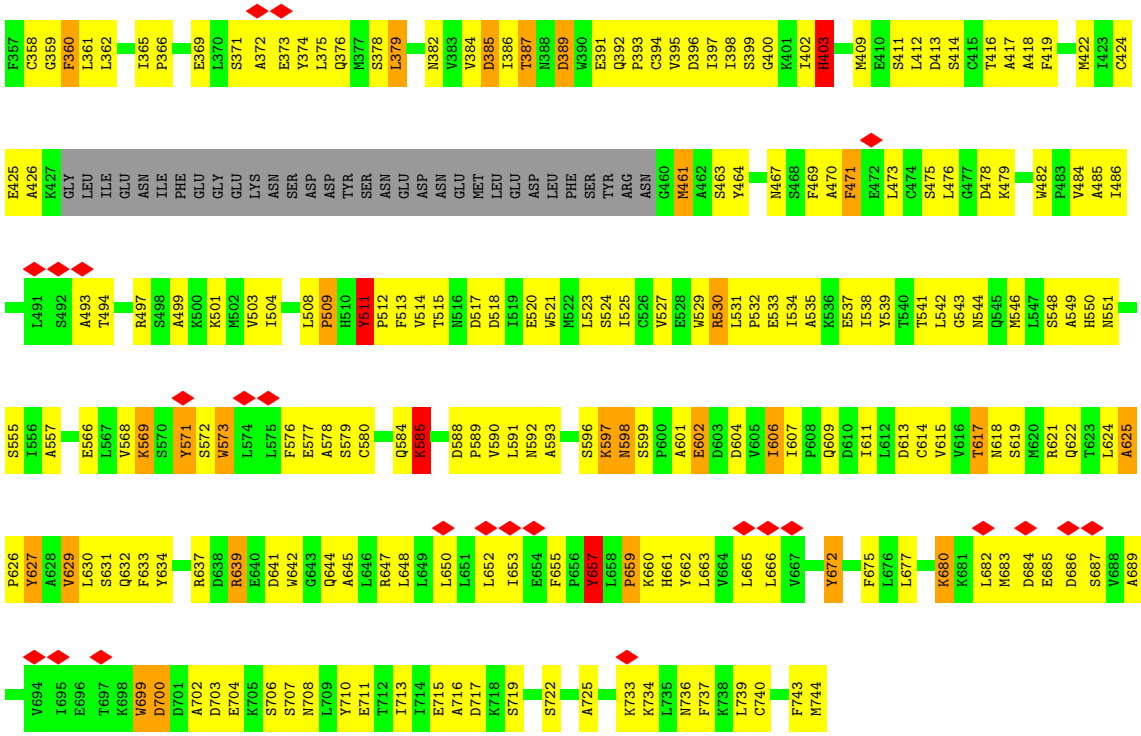




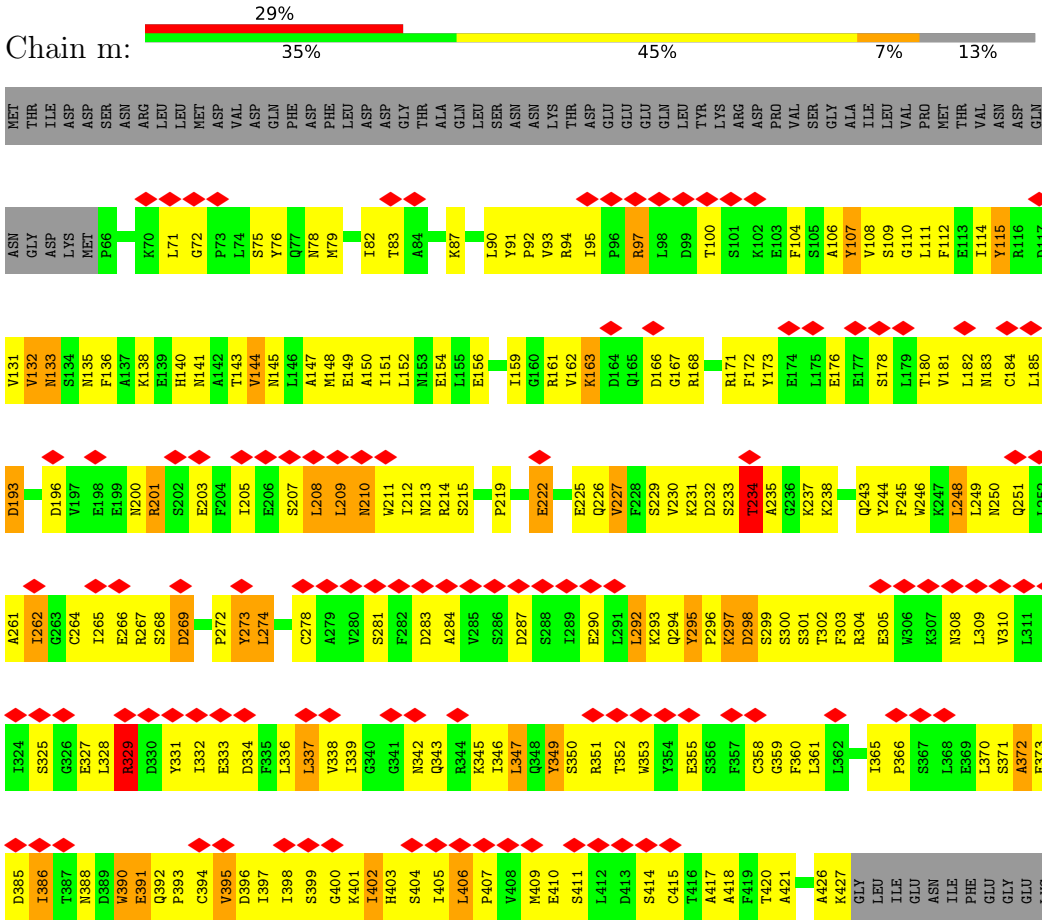
• Molecule 2: Nucleoporin NUP85

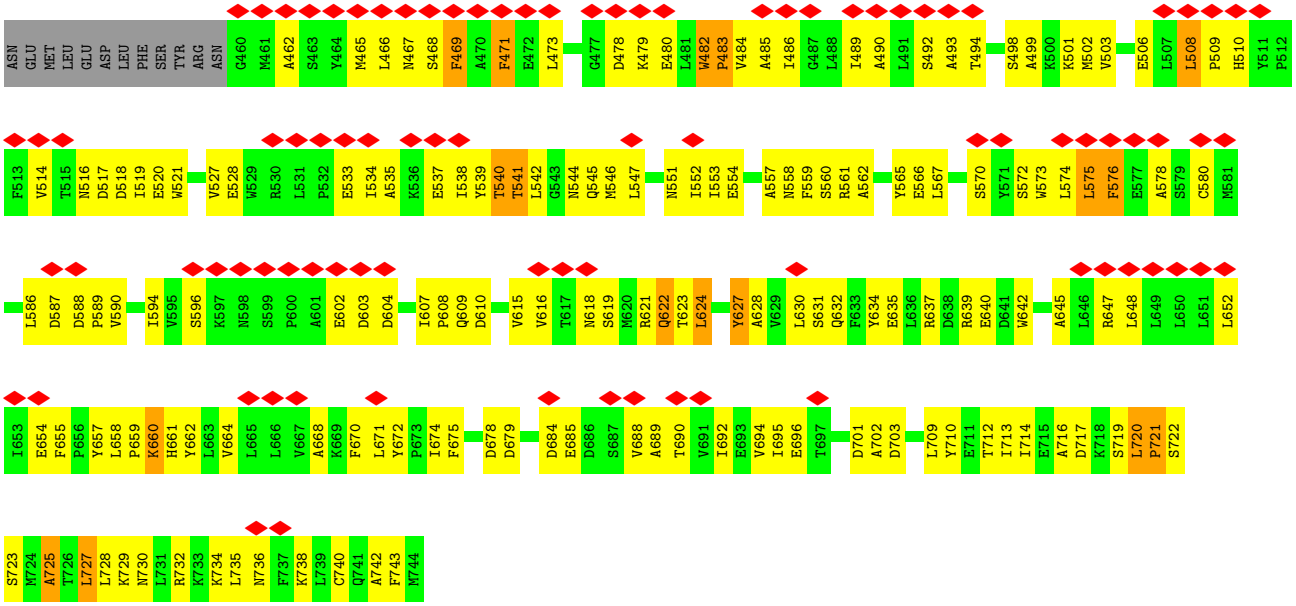
Chain b:





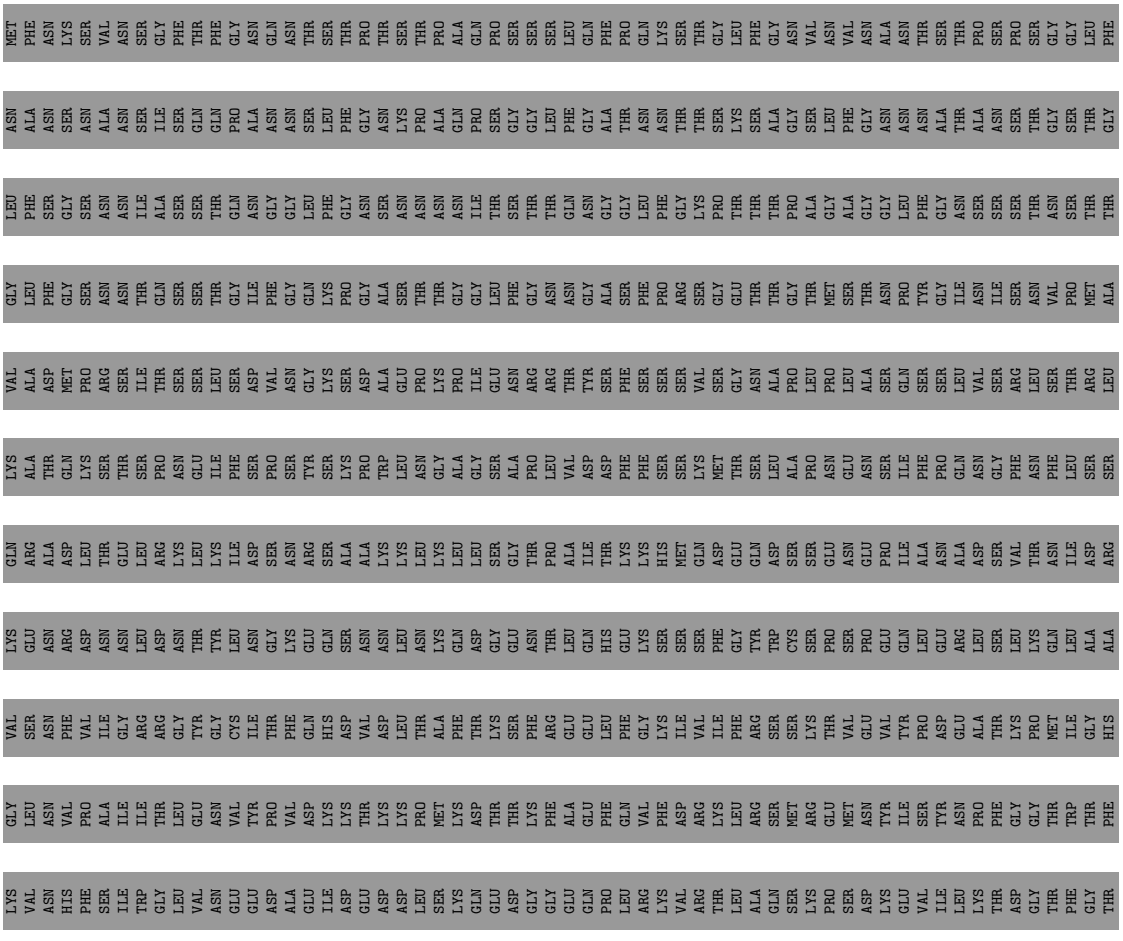
• Molecule 2: Nucleoporin NUP85

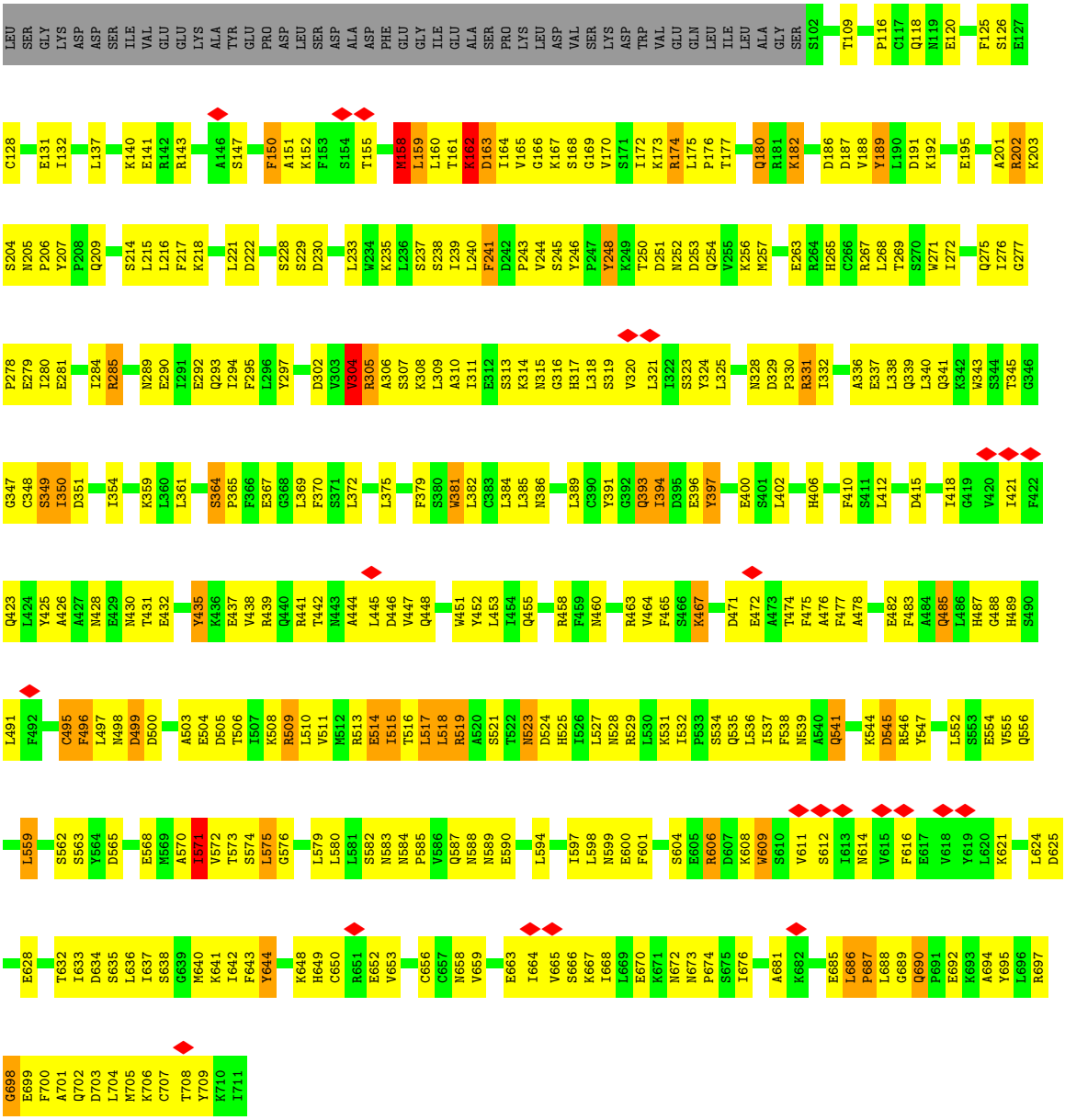




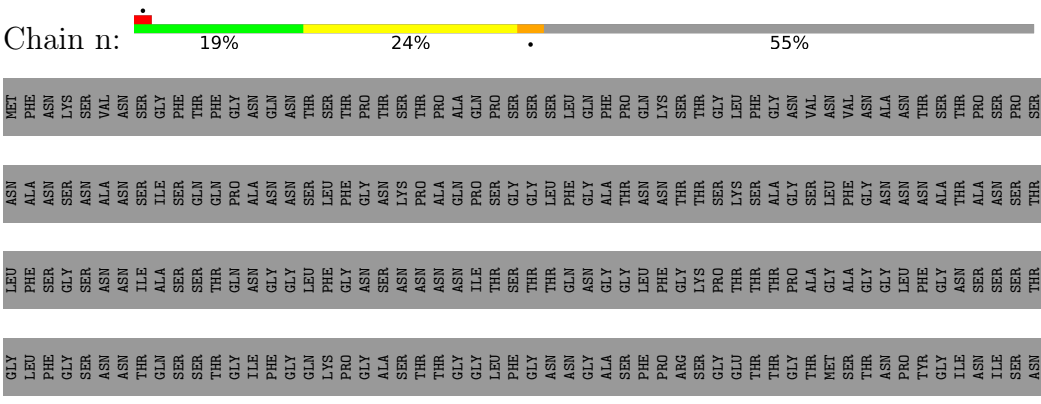
• Molecule 3: NUP145 isoform 1

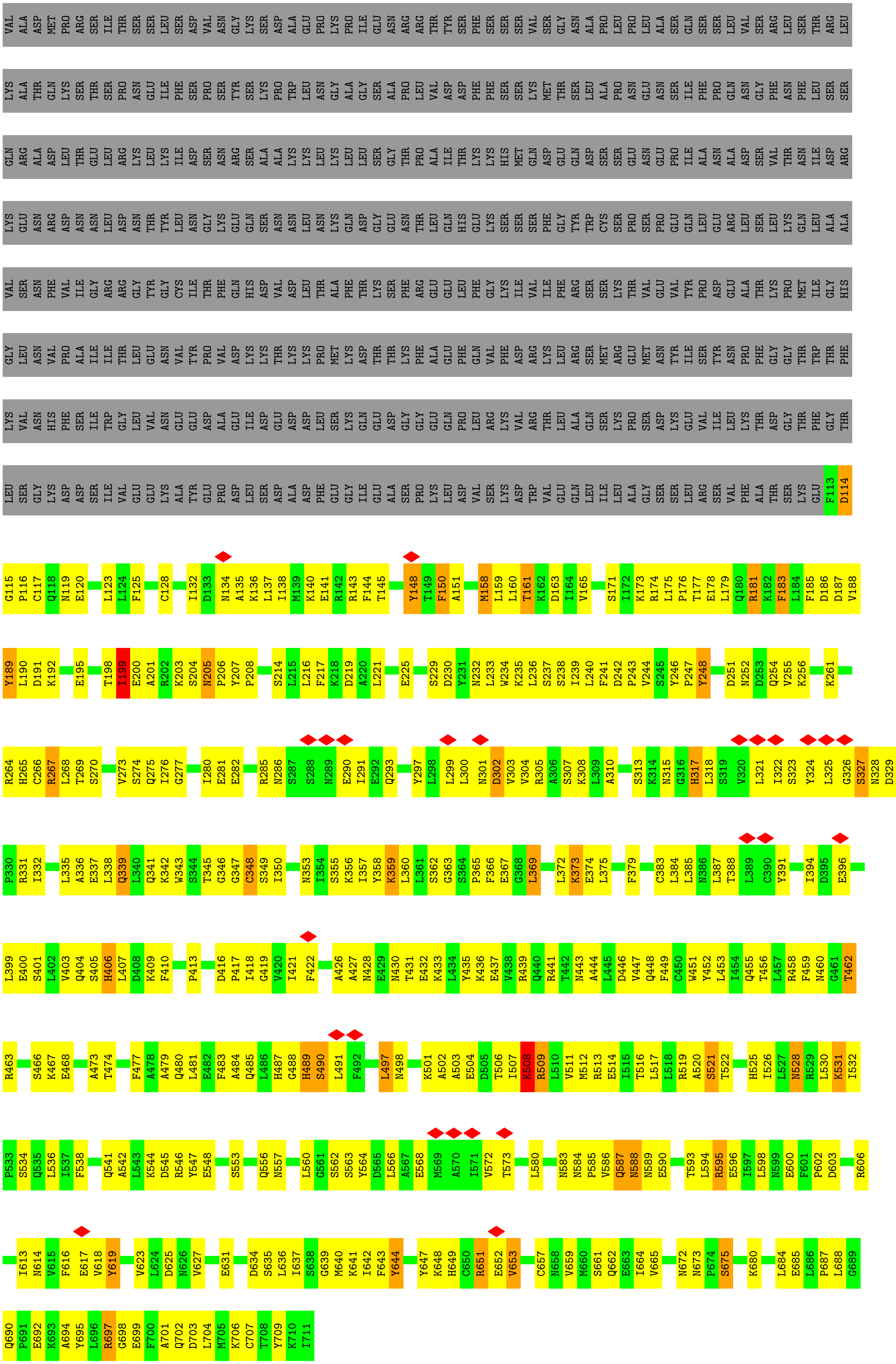
Chain c:





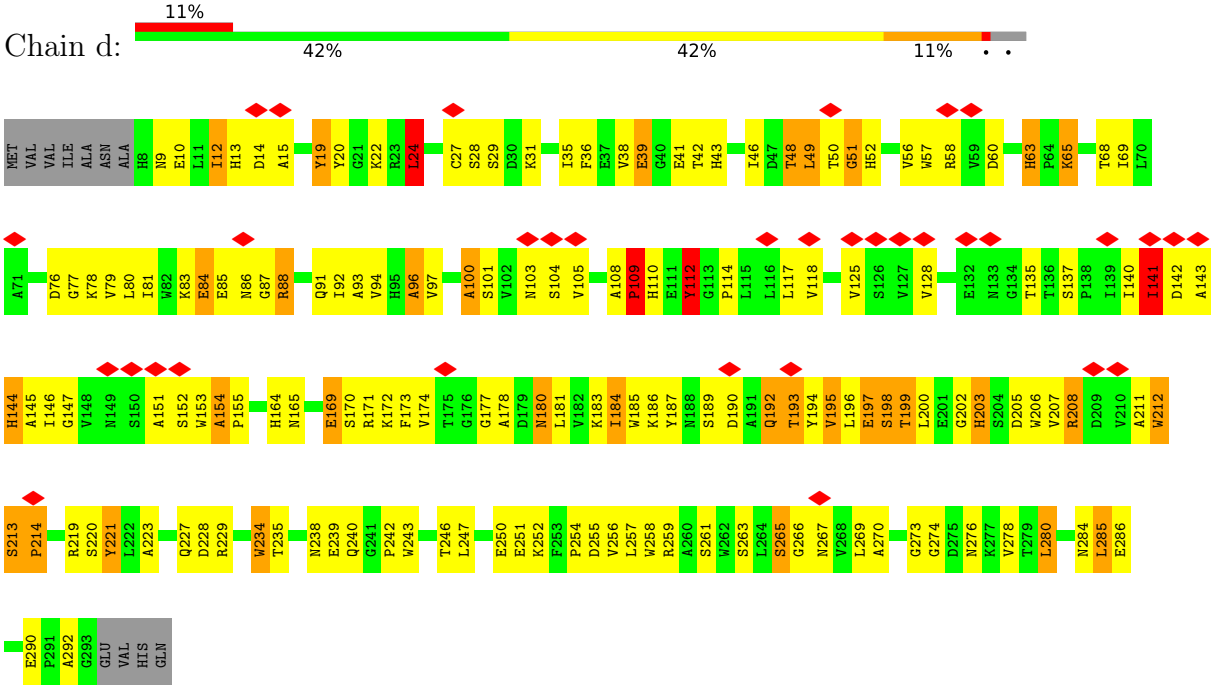
• Molecule 3: NUP145 isoform 1




VAL ALA ASP MET PRO ARG SER ILE THR SER SER LEU SER ASP VAL ASN GLY LYS SER ASP ALA GLU PRO LYS PRO ILE GLU ASN ARG ARG THR TYR SER PHE SER SER SER VAL SER GLY ASN ALA PRO LEU PRO LEU ALA SER GLN SER SER LEU VAL SER ARG LEU SER THR ARG LEU
LYS ALA THR GLN LYS SER THR SER PRO ASN GLU ILE PHE SER PRO SER TYR SER LYS PRO TRP LEU ASN GLY ALA GLY SER ALA PRO LEU VAL ASP ASP PHE PHE SER SER LYS MET THR SER LEU ALA PRO ASN GLU ASN SER ILE PHE PRO GLN ASN GLY PHE ASN PHE LEU SER SER
GLN ARG ALA ASP LEU THR GLU LEU ARG LYS LEU LYS ILE ASP SER ASN ARG SER ALA ALA LYS LYS LEU LYS LEU LEU SER GLY THR PRO ALA ILE THR LYS LYS HIS MET GLN ASP GLU GLN ASP SER SER GLU ASN GLU PRO ILE ALA ASN ALA ASP SER VAL THR ASN ILE ASP ARG
LYS GLU ASN ARG ASP ASN ASN LEU ASP ASN THR TYR LEU ASN GLY LYS GLU GLN SER ASN ASN LEU ASN LYS GLN ASP GLY GLU ASN THR LEU GLN HIS GLU LYS SER SER SER PHE GLY TYR TRP CYS SER PRO SER PRO GLU GLN LEU GLU ARG LEU SER LEU LYS GLN LEU ALA ALA
VAL SER ASN PHE VAL ILE GLY ARG ARG GLY TYR GLY CYS ILE THR PHE GLN HIS ASP VAL ASP LEU THR ALA PHE THR LYS SER PHE ARG GLU GLU LEU PHE GLY LYS ILE VAL ILE PHE ARG SER SER LYS THR VAL GLU VAL TYR PRO ASP GLU ALA THR LYS PRO MET ILE GLY HIS
GLY LEU ASN VAL PRO ALA ILE ILE THR LEU GLU ASN VAL TYR PRO VAL ASP LYS LYS THR LYS LYS PRO MET LYS ASP THR THR LYS PHE ALA GLU PHE GLN VAL PHE ASP ARG LYS LEU ARG SER MET ARG GLU MET ASN TYR ILE SER TYR ASN PRO PHE GLY GLY THR THR TRP THR PHE
LYS VAL ASN HIS PHE SER ILE TRP GLY LEU VAL ASN GLU GLU ASP ALA GLU ILE ASP GLU ASP ASP LEU SER LYS GLN GLU ASP GLY GLY GLU GLN PRO LEU ARG LYS VAL ARG THR LEU ALA GLN SER LYS PRO SER ASP LYS GLU VAL ILE LEU LYS THR ASP GLY THR PHE GLY THR
LEU SER GLY LYS ASP ASP SER ILE VAL GLU GLU LYS ALA TYR GLU PRO ASP LEU SER ASP ALA ASP PHE GLU GLY ILE GLU ALA SER PRO LYS LEU ASP VAL SER LYS ASP TRP VAL GLU GLN LEU ILE LEU ALA GLY SER SER LEU ARG SER VAL PHE ALA THR SER LYS GLU F113 D114
G115 P116 C117 Q118 N119 E120 L123 L124 F125 C128 I132 D133 N134 A135 K136 L137 I138 M139 K140 E141 R142 R143 F144 T145 Y148 T149 F150 A151 M158 L159 L160 T161 K162 D163 I164 V165 S171 I172 K173 R174 L175 P176 T177 E178 L179 Q180 R181 K182 F183 L184 F185 D186 D187 V188
Y189 L190 D191 K192 E195 T198 I199 E200 A201 R202 K203 S204 N205 P206 Y207 P208 S214 L215 L216 F217 K218 D219 A220 L221 E225 S229 D230 Y231 N232 L233 W234 K235 L236 S237 S238 I239 L240 F241 D242 P243 V244 S245 Y246 P247 Y248 D251 N252 D253 Q254 V255 K256 K261
R264 H265 C266 R267 L268 T269 S270 V273 S274 Q275 I276 G277 I280 E281 E282 R285 N286 S287 S288 N289 E290 I291 E292 Q293 Y297 L298 L299 L300 N301 D302 V303 V304 R305 A306 S307 K308 L309 A310 S313 K314 N315 G316 H317 L318 S319 V320 L321 I322 S323 Y324 L325 G326 S327 N328 D329
P330 R331 I332 L335 A336 E337 L338 Q339 L340 Q341 K342 W343 S344 T345 G346 G347 C348 S349 I350 N353 I354 S355 K356 I357 Y358 K359 L360 L361 S362 G363 S364 P365 F366 E367 G368 L369 L372 K373 E374 L375 F379 C383 L384 L385 N386 L387 T388 L389 C390 Y391 I394 D395 E396
L399 E400 S401 L402 V403 Q404 S405 H406 L407 D408 K409 F410 P413 D416 P417 I418 G419 V420 I421 F422 A426 A427 N428 E429 N430 T431 E432 K433 L434 Y435 K436 E437 V438 R439 Q440 R441 T442 N443 A444 L445 D446 V447 Q448 F449 C450 W451 Y452 L453 I454 Q455 T456 L457 R458 F459 N460 G461 T462
R463 S466 K467 E468 A473 T474 F477 A478 A479 Q480 L481 E482 F483 A484 Q485 L486 H487 G488 H489 S490 L491 F492 L497 N498 K501 A502 A503 E504 D505 T506 I507 K508 R509 L510 V511 M512 R513 E514 I515 T516 L517 L518 R519 A520 S521 T522 H525 I526 L527 N528 R529 L530 K531 I532
P533 S534 Q535 L536 I537 F538 Q541 A542 L543 K544 D545 R546 Y547 E548 S553 Q556 N557 L560 G561 S562 S563 Y564 D565 L566 A567 E568 M569 A570 I571 V572 T573 L580 N583 N584 P585 V586 Q587 N588 N589 E590 T593 L594 R595 E596 I597 L598 N599 E600 F601 P602 D603 R606
I613 N614 V615 F616 E617 V618 Y619 V623 L624 D625 N626 V627 E631 D634 S635 L636 I637 S638 G639 M640 K641 I642 F643 Y644 Y647 K648 H649 C650 R651 E652 V653 C657 N658 V659 M660 S661 Q662 E663 I664 V665 N672 N673 P674 S675 K680 L684 E685 L686 P687 L688 G689
Q690 P691 E692 K693 A694 Y695 L696 R697 G698 E699 F700 A701 Q702 D703 L704 M705 K706 C707 T708 Y709 K710 I711

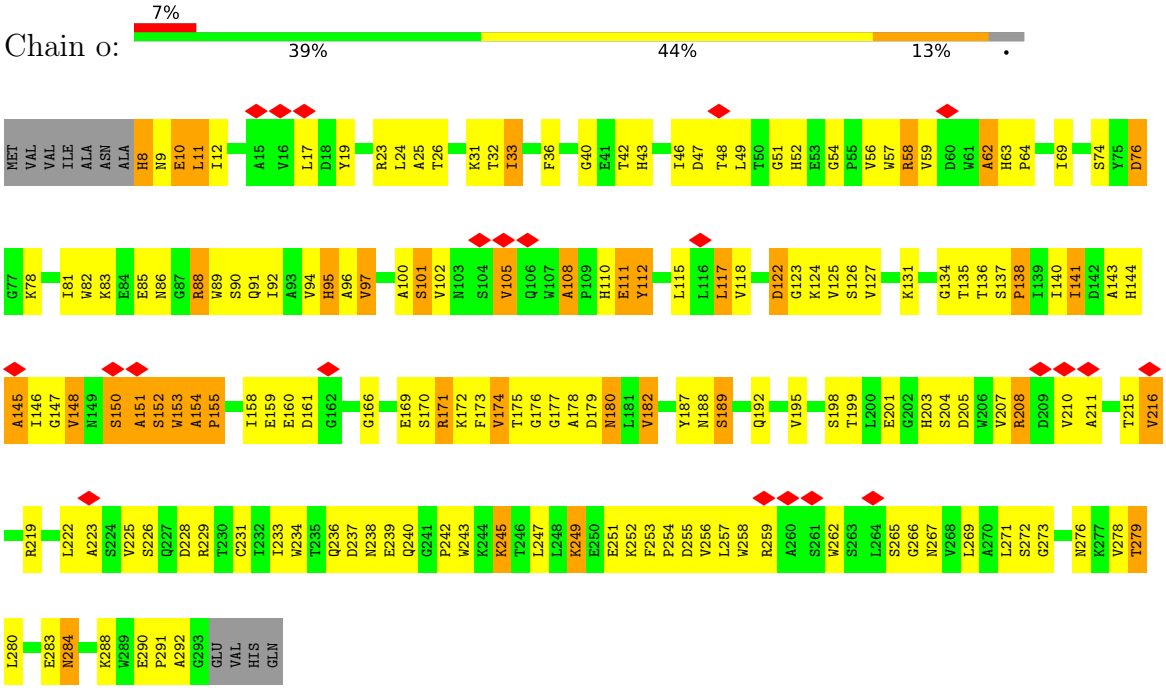
• Molecule 4: Protein transport protein SEC13

Chain d:



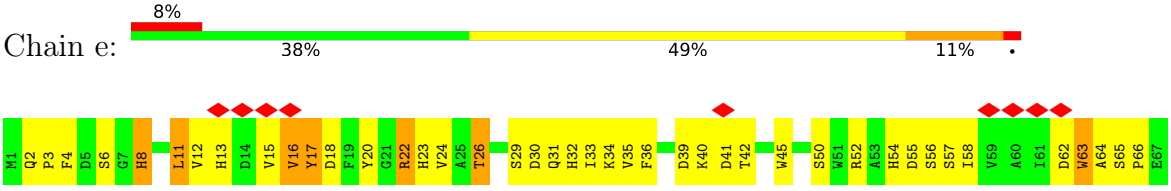
• Molecule 4: Protein transport protein SEC13

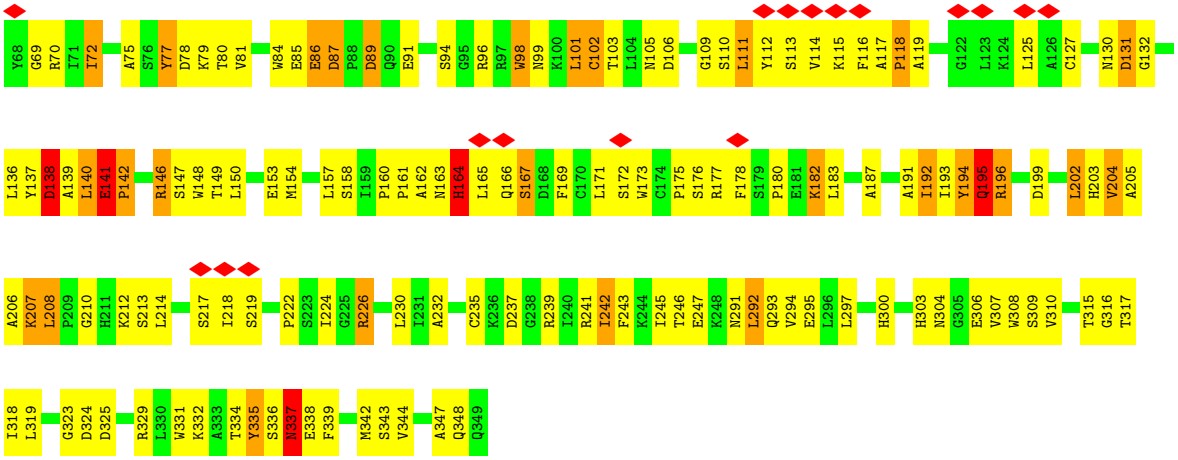
Chain o:



• Molecule 5: Nucleoporin Seh1

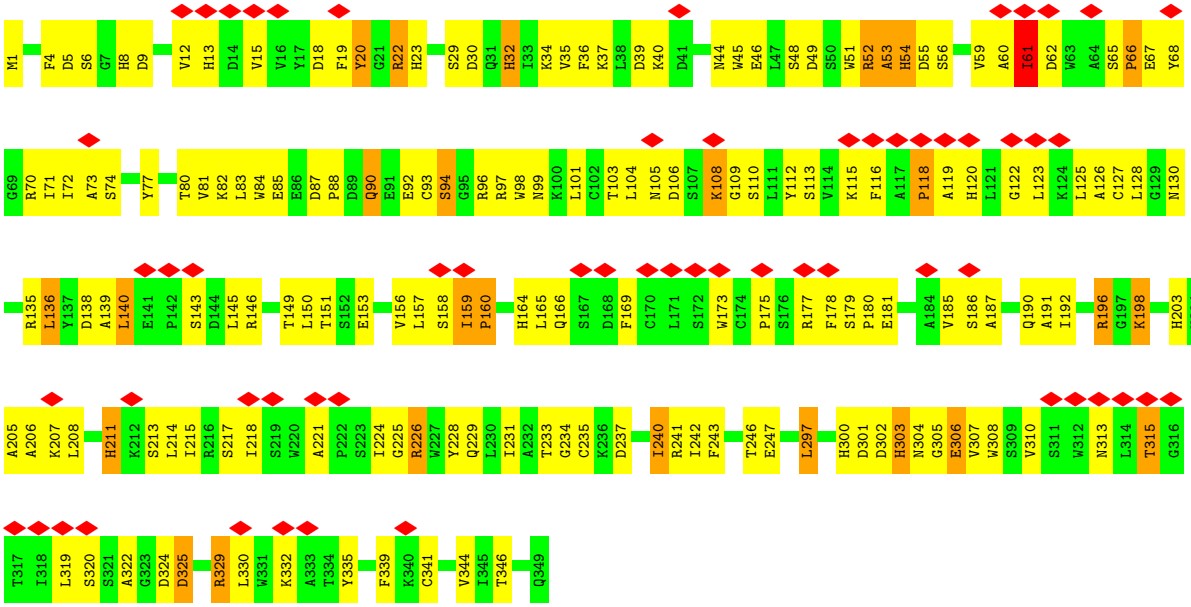
Chain e:





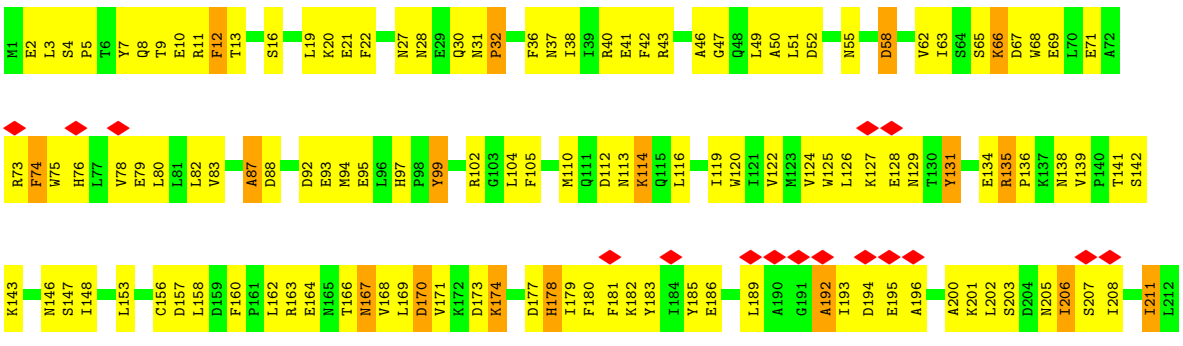
• Molecule 5: Nucleoporin Seh1

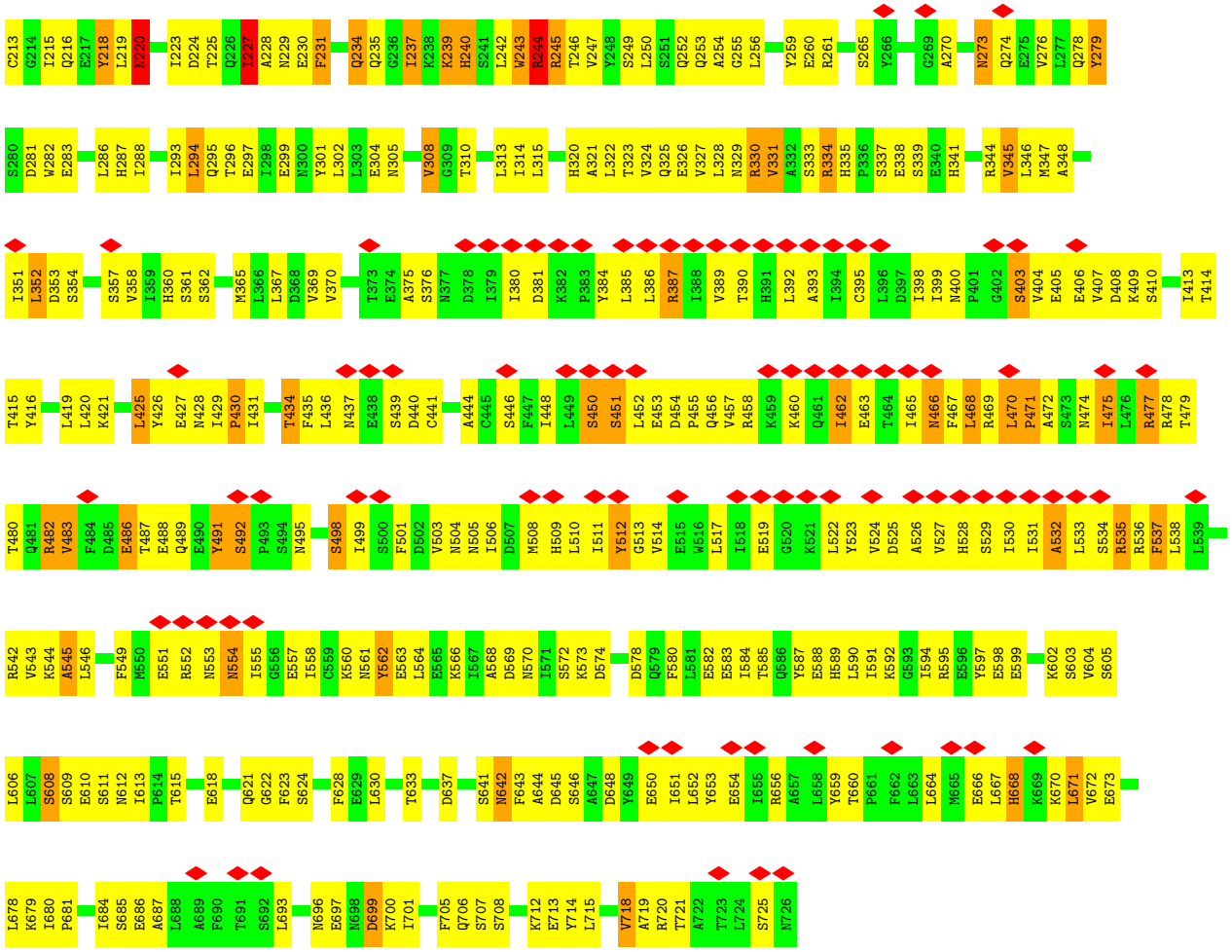
Chain p:



• Molecule 6: Nucleoporin NUP84

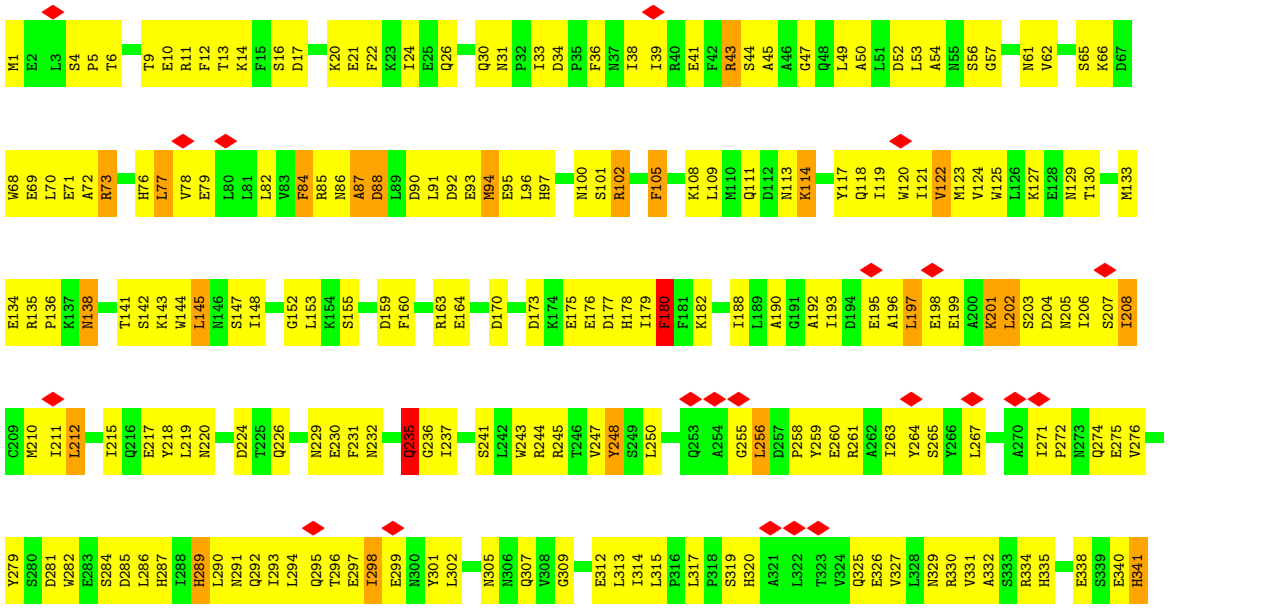
Chain f:

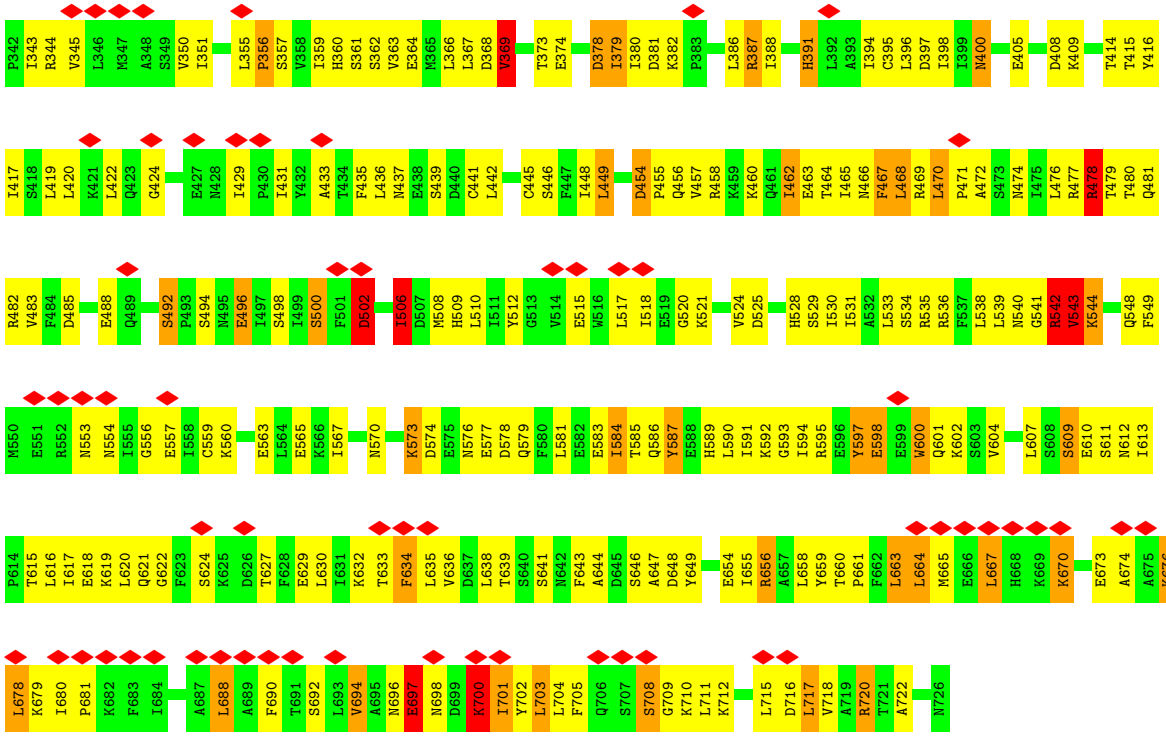




• Molecule 6: Nucleoporin NUP84

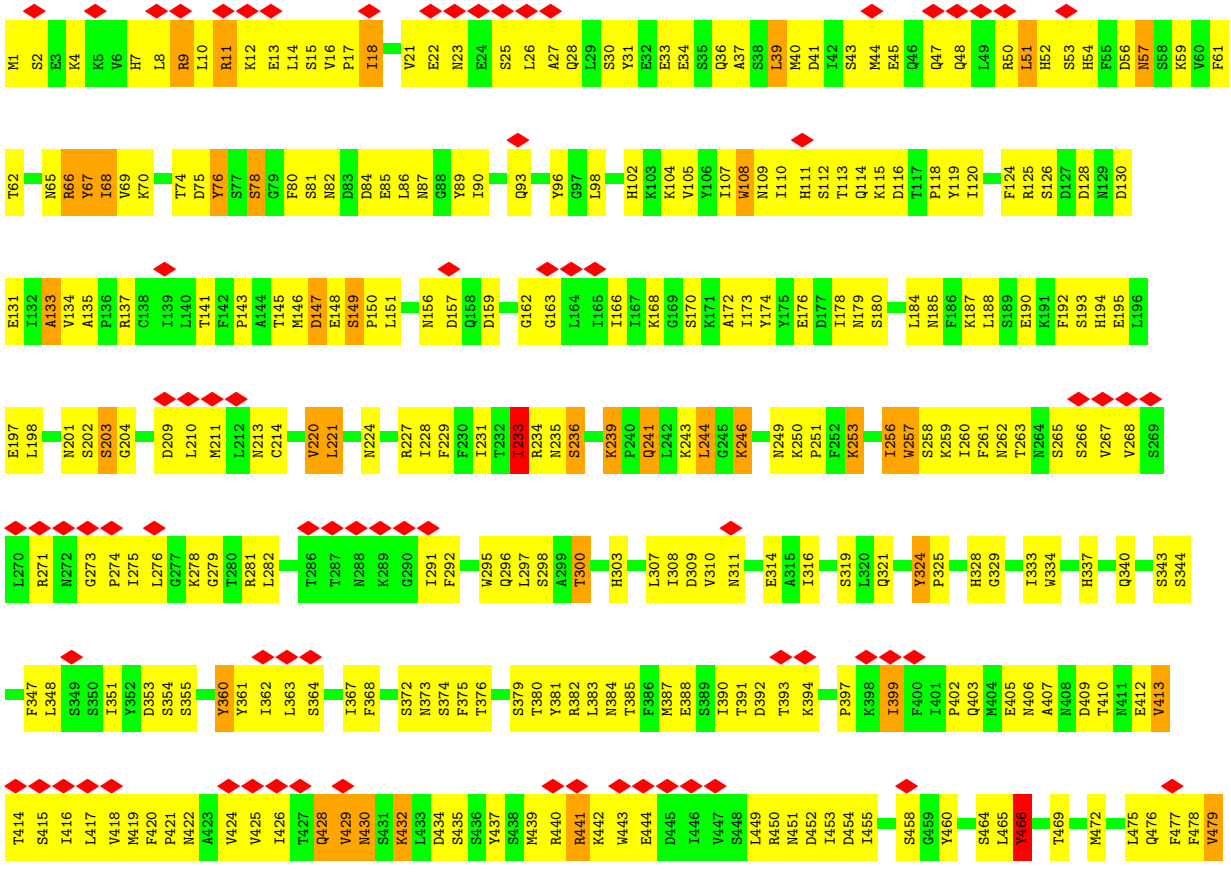
Chain q:

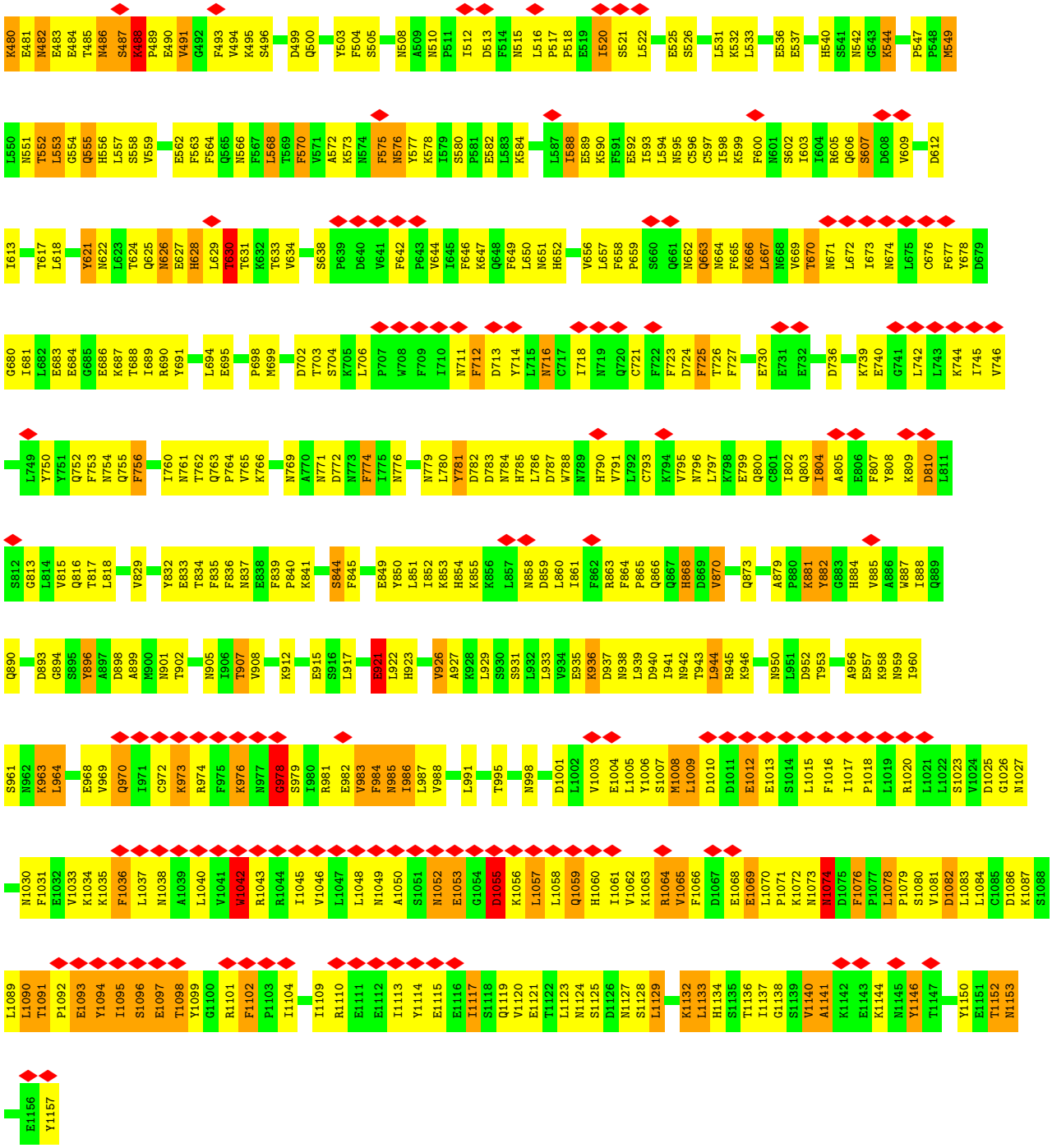




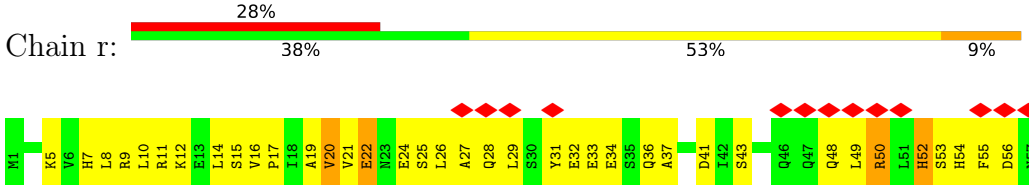
• Molecule 7: NUP133 isoform 1

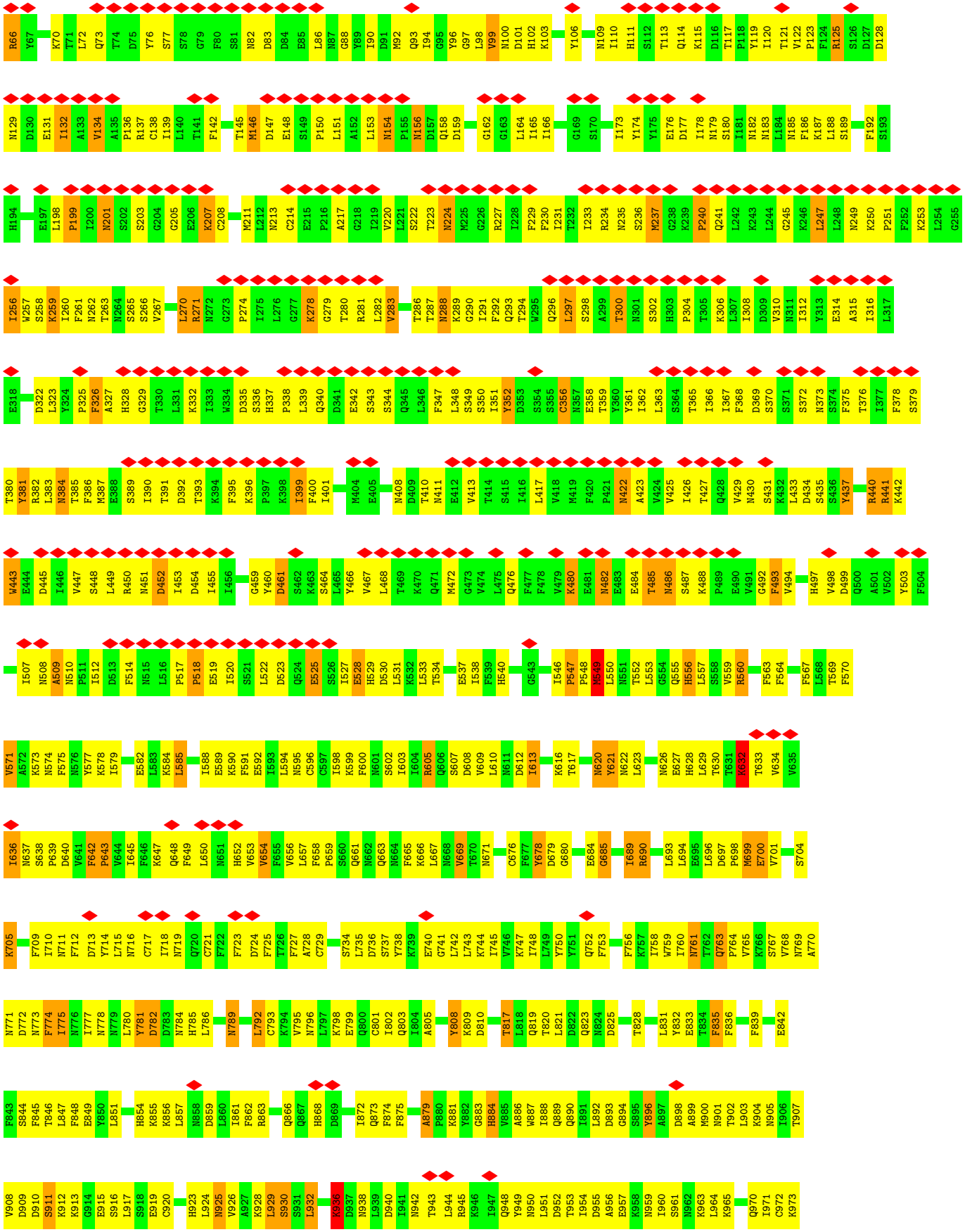
Chain g:





• Molecule 7: NUP133 isoform 1

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N129 D130 E131 I132 A133 V134 A135 P136 R137 C138 I139 L140 T141 F142 T145 M146 D147 E148 S149 P150 L151 A152 L153 N154 P155 N156 D157 Q158 D159 G162 G163 L164 I165 I166 G169 S170 I173 Y174 Y175 E176 D177 I178 N179 S180 I181 N182 N183 L184 N185 F186 K187 L188 S189 F192 S193
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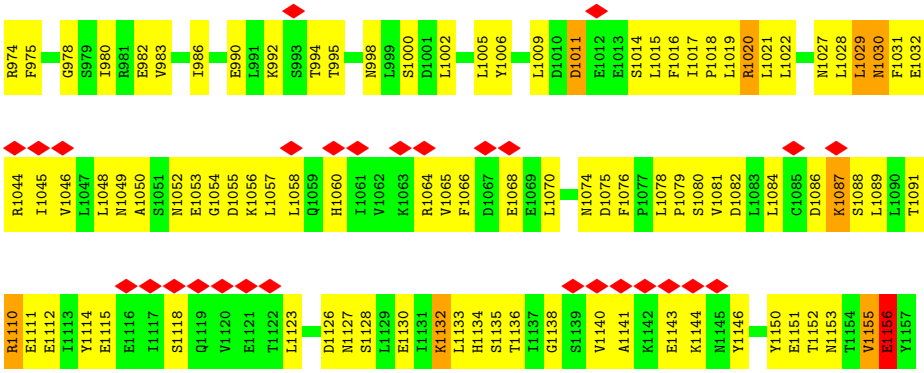
V908 D909 D910 S911 K912 K913 G914 E915 S916 L917 S918 E919 C920 H923 L924 N925 V926 A927 K928 L929 S930 S931 L932 K936 D937 N938 L939 D940 I941 N942 T943 L944 R945 K946 I947 Q948 Y949 N950 L951 D952 T953 I954 D955 A956 E957 K958 N959 I960 S961 N962 K963 L964 K965 Q970 I971 C972 K973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4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	29655	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION; CTF correction applied in RELION during the alignment and reconstruction	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	37651	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	6.038	Depositor
Minimum map value	-1.569	Depositor
Average map value	0.006	Depositor
Map value standard deviation	0.083	Depositor
Recommended contour level	0.4	Depositor
Map size (Å)	1276.8, 1276.8, 1276.8	wwPDB
Map dimensions	480, 480, 480	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.66, 2.66, 2.66	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	2.24	296/8509 (3.5%)	2.49	607/11534 (5.3%)
1	l	2.21	273/8509 (3.2%)	2.45	564/11534 (4.9%)
2	b	2.20	171/5293 (3.2%)	2.48	393/7172 (5.5%)
2	m	2.26	177/5297 (3.3%)	2.51	383/7178 (5.3%)
3	c	2.19	168/4963 (3.4%)	2.45	368/6704 (5.5%)
3	n	2.21	162/4908 (3.3%)	2.51	377/6627 (5.7%)
4	d	2.07	75/2277 (3.3%)	2.22	113/3108 (3.6%)
4	o	2.24	87/2277 (3.8%)	2.39	142/3108 (4.6%)
5	e	2.19	94/2500 (3.8%)	2.30	145/3388 (4.3%)
5	p	2.31	106/2500 (4.2%)	2.42	155/3388 (4.6%)
6	f	2.24	220/6007 (3.7%)	2.55	495/8143 (6.1%)
6	q	2.16	208/6007 (3.5%)	2.43	417/8143 (5.1%)
7	g	2.15	313/9599 (3.3%)	2.41	677/13008 (5.2%)
7	r	2.25	354/9597 (3.7%)	2.50	722/13007 (5.6%)
All	All	2.21	2704/78243 (3.5%)	2.46	5558/106042 (5.2%)

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	26
1	l	0	27
2	b	0	23
2	m	0	14
3	c	0	16
3	n	0	19
4	d	0	3
4	o	0	5
5	e	0	8
5	p	0	4
6	f	0	21

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Mol	Chain	#Chirality outliers	#Planarity outliers
6	q	0	20
7	g	0	20
7	r	0	31
All	All	0	237

All (2704) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	115	TYR	CG-CD1	23.09	1.87	1.39
2	m	115	TYR	CG-CD2	22.20	1.85	1.39
2	m	115	TYR	CE1-CZ	20.92	1.88	1.38
2	m	115	TYR	CE2-CZ	20.79	1.88	1.38
2	m	115	TYR	CD2-CE2	15.04	1.83	1.38
2	m	115	TYR	CD1-CE1	14.91	1.83	1.38
6	f	488	GLU	C-N	14.30	1.55	1.33
1	a	90	GLY	CA-C	-11.47	1.41	1.52
2	m	562	ALA	C-N	11.29	1.45	1.33
7	r	638	SER	CA-CB	10.94	1.62	1.52
5	e	158	SER	C-N	10.75	1.45	1.33
1	l	96	HIS	CB-CG	10.32	1.64	1.50
6	q	595	ARG	NE-CZ	10.14	1.44	1.33
6	f	680	ILE	CA-CB	-10.06	1.46	1.54
1	a	878	HIS	ND1-CE1	9.85	1.42	1.32
1	a	804	GLY	CA-C	-9.83	1.40	1.51
7	r	1014	SER	CA-C	-9.72	1.39	1.52
1	l	71	HIS	ND1-CE1	9.68	1.42	1.32
6	f	613	ILE	CA-CB	-9.53	1.49	1.54
3	c	209	GLN	C-N	9.50	1.45	1.33
6	f	31	ASN	N-CA	-9.46	1.35	1.45
1	l	971	ASN	C-N	9.45	1.45	1.33
4	d	240	GLN	CA-C	-9.35	1.41	1.52
7	r	945	ARG	NE-CZ	9.31	1.43	1.33
7	r	9	ARG	NE-CZ	9.27	1.43	1.33
3	n	706	LYS	N-CA	-9.23	1.35	1.46
1	a	314	THR	N-CA	-9.23	1.35	1.46
6	f	320	HIS	CA-C	-9.22	1.41	1.52
1	l	316	GLN	CA-C	9.19	1.61	1.52
1	l	373	PHE	C-N	9.17	1.46	1.33
7	r	24	GLU	CA-CB	9.17	1.66	1.53
6	f	598	GLU	CA-C	-9.12	1.41	1.52
7	g	420	PHE	N-CA	-9.05	1.38	1.45
7	g	963	LYS	CA-C	-9.01	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	p	82	LYS	N-CA	-9.01	1.35	1.46
7	r	7	HIS	ND1-CE1	8.99	1.41	1.32
2	b	389	ASP	CA-CB	8.96	1.68	1.53
1	a	136	SER	N-CA	-8.95	1.35	1.46
7	r	103	LYS	CA-C	-8.95	1.42	1.52
5	e	29	SER	CA-CB	8.92	1.64	1.52
6	f	480	THR	CA-C	8.92	1.64	1.52
7	g	516	LEU	CA-C	-8.90	1.42	1.52
7	r	183	ASN	CA-C	-8.90	1.41	1.52
7	r	547	PRO	CA-C	-8.90	1.46	1.52
2	b	501	LYS	N-CA	8.86	1.56	1.46
1	a	138	LEU	C-N	8.77	1.45	1.33
6	f	270	ALA	C-N	8.75	1.43	1.33
3	c	633	ILE	C-N	8.73	1.45	1.33
5	e	295	GLU	CA-C	-8.72	1.42	1.52
7	r	663	GLN	C-N	8.71	1.45	1.33
7	g	128	ASP	CA-C	-8.70	1.42	1.52
6	q	96	LEU	C-N	8.66	1.45	1.33
3	n	479	ALA	CA-C	-8.65	1.41	1.52
3	c	281	GLU	N-CA	-8.62	1.35	1.46
2	b	682	LEU	CA-CB	8.61	1.64	1.53
6	f	127	LYS	C-N	8.58	1.45	1.33
7	r	1009	LEU	CA-C	-8.54	1.42	1.52
7	r	907	THR	C-N	8.53	1.41	1.33
1	a	786	ILE	C-N	8.51	1.42	1.33
5	p	158	SER	C-N	8.50	1.42	1.33
3	c	244	VAL	CA-C	-8.49	1.43	1.52
6	f	323	THR	CA-C	-8.49	1.41	1.53
1	l	751	ARG	NE-CZ	8.49	1.42	1.33
5	e	218	ILE	CA-C	-8.47	1.42	1.52
5	p	56	SER	CA-C	-8.47	1.42	1.52
6	q	87	ALA	N-CA	-8.47	1.35	1.46
1	a	466	TYR	CA-CB	8.47	1.64	1.53
3	n	509	ARG	NE-CZ	8.43	1.42	1.33
7	r	1108	ALA	CA-C	-8.42	1.42	1.52
2	b	332	ILE	CA-C	-8.41	1.41	1.52
6	q	76	HIS	ND1-CE1	8.40	1.41	1.32
7	g	724	ASP	CA-C	8.38	1.63	1.52
6	q	39	ILE	CA-C	-8.38	1.42	1.52
7	r	1043	ARG	CZ-NH2	8.37	1.44	1.33
2	m	149	GLU	CA-C	-8.37	1.42	1.52
7	r	603	ILE	CA-CB	-8.36	1.45	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	e	230	LEU	N-CA	-8.34	1.35	1.46
7	g	676	CYS	CA-CB	8.33	1.66	1.53
5	e	158	SER	CA-C	-8.33	1.41	1.52
4	d	13	HIS	N-CA	-8.32	1.36	1.46
7	r	378	PHE	C-N	8.31	1.43	1.33
7	r	328	HIS	N-CA	-8.31	1.35	1.46
6	q	319	SER	C-N	8.29	1.44	1.33
7	r	137	ARG	N-CA	-8.29	1.35	1.46
2	b	111	LEU	CA-CB	8.28	1.66	1.53
3	c	267	ARG	NE-CZ	8.28	1.42	1.33
2	m	551	ASN	CA-C	-8.27	1.43	1.52
2	b	686	ASP	N-CA	-8.26	1.36	1.46
7	g	477	PHE	CA-C	-8.26	1.42	1.52
7	g	854	HIS	ND1-CE1	8.24	1.40	1.32
5	p	185	VAL	CA-CB	-8.24	1.43	1.54
7	g	988	VAL	CA-CB	8.24	1.64	1.54
7	r	1076	PHE	CA-C	-8.23	1.44	1.53
3	n	125	PHE	N-CA	-8.21	1.36	1.46
3	c	243	PRO	CA-C	-8.20	1.42	1.52
4	d	96	ALA	C-N	8.20	1.43	1.34
1	l	105	ARG	CD-NE	8.19	1.57	1.46
4	o	152	SER	CA-C	8.18	1.62	1.52
1	l	453	VAL	CA-CB	-8.18	1.44	1.54
5	p	53	ALA	CA-C	-8.16	1.42	1.52
2	m	359	GLY	CA-C	-8.16	1.42	1.52
7	r	1017	ILE	CA-C	8.16	1.61	1.52
1	a	203	SER	CA-C	-8.12	1.42	1.52
5	p	221	ALA	CA-C	-8.12	1.43	1.53
2	m	637	ARG	CD-NE	8.11	1.57	1.46
1	a	72	PHE	CA-C	-8.10	1.43	1.52
4	o	153	TRP	CA-C	8.10	1.62	1.52
1	a	321	THR	CA-C	-8.10	1.42	1.52
1	a	803	HIS	N-CA	-8.09	1.37	1.46
6	q	612	ASN	CA-CB	8.09	1.64	1.52
1	a	116	GLN	CA-C	-8.08	1.42	1.52
2	b	210	ASN	CA-C	-8.08	1.42	1.52
3	n	452	TYR	N-CA	-8.04	1.36	1.46
2	b	511	TYR	CA-CB	8.03	1.66	1.53
6	f	589	HIS	ND1-CE1	8.02	1.40	1.32
5	e	117	ALA	CA-C	-8.02	1.43	1.52
3	n	165	VAL	C-N	8.02	1.43	1.33
1	l	332	VAL	C-N	8.00	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	506	THR	CA-C	-8.00	1.42	1.52
2	b	737	PHE	CA-C	-7.98	1.42	1.52
2	m	186	ARG	CD-NE	7.97	1.57	1.46
6	f	136	PRO	CA-C	-7.97	1.43	1.52
5	e	96	ARG	NE-CZ	7.96	1.41	1.33
7	r	88	GLY	N-CA	-7.96	1.36	1.45
3	n	233	LEU	N-CA	-7.96	1.37	1.46
1	l	447	GLU	CA-CB	7.96	1.65	1.53
7	g	453	ILE	CA-C	-7.95	1.42	1.52
2	m	156	GLU	C-N	7.95	1.44	1.33
1	a	936	TYR	N-CA	-7.94	1.36	1.46
2	m	590	VAL	CA-C	-7.94	1.43	1.52
3	c	243	PRO	N-CA	-7.94	1.37	1.47
4	o	151	ALA	CA-C	7.94	1.62	1.52
6	q	388	ILE	C-N	7.94	1.43	1.33
1	a	123	LEU	CA-C	-7.93	1.43	1.52
4	o	222	LEU	CA-C	-7.92	1.43	1.52
1	a	437	ASN	CA-C	-7.92	1.42	1.52
1	l	15	TYR	CA-C	-7.92	1.43	1.52
2	m	503	VAL	C-N	7.91	1.43	1.34
6	q	613	ILE	CA-CB	7.91	1.58	1.54
1	l	352	ILE	C-N	7.88	1.43	1.33
7	r	77	SER	CA-C	-7.88	1.43	1.52
7	r	796	ASN	CA-C	-7.88	1.44	1.53
5	p	62	ASP	CA-C	-7.87	1.42	1.52
1	a	487	ASN	CA-C	-7.87	1.42	1.52
3	c	664	ILE	CA-CB	7.86	1.64	1.54
1	l	691	LYS	C-N	7.86	1.44	1.33
1	l	830	LEU	N-CA	-7.85	1.37	1.46
5	p	103	THR	CA-C	-7.83	1.43	1.52
6	f	167	ASN	CA-CB	7.81	1.66	1.53
3	c	313	SER	C-N	7.80	1.44	1.33
7	g	39	LEU	CA-C	-7.80	1.42	1.52
1	l	97	LEU	CA-C	7.78	1.63	1.53
1	a	168	TYR	C-N	7.76	1.41	1.33
7	g	249	ASN	CA-C	-7.76	1.42	1.52
6	f	390	THR	CA-C	-7.75	1.43	1.52
5	e	308	TRP	CA-C	-7.75	1.43	1.53
3	n	254	GLN	C-N	7.75	1.43	1.33
1	l	392	GLU	CA-C	7.74	1.63	1.52
7	g	450	ARG	CD-NE	7.74	1.57	1.46
6	q	163	ARG	CA-C	-7.73	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	888	VAL	CA-C	-7.72	1.42	1.52
7	g	82	ASN	CA-CB	7.72	1.65	1.53
6	q	366	LEU	C-N	7.72	1.43	1.33
3	n	225	GLU	CA-C	-7.71	1.42	1.53
7	r	1156	GLU	C-N	7.71	1.44	1.33
3	n	701	ALA	N-CA	-7.71	1.36	1.46
7	g	27	ALA	CA-C	-7.71	1.43	1.52
4	o	216	VAL	N-CA	-7.71	1.37	1.46
2	m	93	VAL	CA-C	-7.70	1.43	1.52
6	q	119	ILE	CA-CB	-7.70	1.44	1.54
1	a	781	ASP	N-CA	-7.69	1.36	1.46
7	r	949	TYR	CA-C	-7.69	1.43	1.52
7	r	951	LEU	CA-CB	7.68	1.65	1.53
6	q	449	LEU	N-CA	-7.68	1.37	1.46
3	c	539	ASN	CA-C	-7.67	1.42	1.52
4	d	265	SER	C-N	7.67	1.43	1.33
4	d	273	GLY	CA-C	-7.67	1.44	1.52
5	p	120	HIS	CG-CD2	7.67	1.44	1.35
7	r	113	THR	CA-C	7.66	1.63	1.52
1	a	393	HIS	ND1-CE1	7.65	1.40	1.32
1	l	989	ALA	N-CA	-7.64	1.37	1.46
7	g	310	VAL	C-N	7.63	1.44	1.33
7	r	460	TYR	CA-C	-7.63	1.43	1.52
7	g	1038	ASN	N-CA	-7.63	1.37	1.46
2	b	272	PRO	C-N	7.62	1.44	1.33
6	f	543	VAL	N-CA	-7.62	1.37	1.46
6	f	162	LEU	CA-C	-7.61	1.43	1.52
4	d	46	ILE	CA-C	-7.60	1.44	1.53
7	g	421	PRO	CA-C	-7.60	1.45	1.52
7	r	1027	ASN	CA-CB	7.60	1.67	1.53
3	c	633	ILE	CA-C	-7.59	1.43	1.52
6	q	636	VAL	CA-C	-7.59	1.42	1.52
3	n	653	VAL	CA-CB	-7.59	1.44	1.54
6	q	345	VAL	CA-CB	7.58	1.63	1.54
3	n	201	ALA	N-CA	-7.58	1.36	1.46
1	l	509	TYR	N-CA	-7.58	1.37	1.46
1	a	893	HIS	ND1-CE1	7.58	1.40	1.32
7	r	884	HIS	N-CA	-7.57	1.36	1.46
5	e	77	TYR	CA-CB	7.57	1.61	1.53
3	n	119	ASN	CA-C	7.56	1.62	1.52
4	o	96	ALA	CA-C	-7.56	1.42	1.52
5	e	332	LYS	CA-C	-7.56	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	o	271	LEU	CA-C	-7.56	1.43	1.52
6	q	622	GLY	CA-C	7.56	1.60	1.52
7	g	742	LEU	CA-C	7.56	1.62	1.52
7	g	1124	ASN	CA-CB	7.55	1.66	1.53
6	q	123	MET	C-N	7.54	1.43	1.33
3	c	545	ASP	N-CA	-7.54	1.37	1.46
7	r	591	PHE	CA-C	-7.54	1.43	1.52
7	g	594	LEU	CA-CB	7.53	1.65	1.53
3	n	405	SER	C-N	7.53	1.43	1.33
7	r	97	GLY	CA-C	-7.52	1.47	1.52
7	g	1073	ASN	C-N	7.52	1.44	1.33
5	p	32	HIS	CA-C	-7.52	1.43	1.52
1	l	459	GLU	C-N	7.52	1.43	1.33
3	n	204	SER	N-CA	-7.51	1.36	1.46
7	g	991	LEU	N-CA	-7.51	1.36	1.46
1	l	166	LEU	CA-C	-7.51	1.43	1.52
7	g	691	TYR	C-N	7.50	1.43	1.33
3	n	525	HIS	C-N	7.50	1.43	1.34
5	p	110	SER	CA-C	-7.50	1.43	1.52
7	g	260	ILE	N-CA	-7.50	1.38	1.46
3	c	250	THR	C-N	7.49	1.44	1.34
2	m	302	THR	CA-C	-7.49	1.42	1.52
6	f	458	ARG	NE-CZ	7.49	1.41	1.33
6	q	38	ILE	CA-C	-7.48	1.43	1.52
6	q	43	ARG	CZ-NH1	7.48	1.43	1.32
7	g	45	GLU	N-CA	7.48	1.55	1.46
5	e	161	PRO	CA-C	-7.47	1.43	1.52
5	p	322	ALA	CA-C	-7.46	1.43	1.52
3	n	661	SER	N-CA	7.46	1.55	1.46
7	g	499	ASP	C-N	7.46	1.43	1.33
1	a	831	LEU	C-N	7.45	1.44	1.33
7	g	90	ILE	N-CA	-7.45	1.37	1.46
6	q	559	CYS	C-N	7.45	1.44	1.33
3	c	498	ASN	CA-C	-7.45	1.43	1.52
7	g	102	HIS	C-N	7.45	1.44	1.33
1	a	79	LEU	CA-CB	7.44	1.63	1.53
5	p	73	ALA	CA-C	-7.44	1.43	1.52
7	g	8	LEU	CA-C	-7.43	1.43	1.52
7	r	282	LEU	CA-C	-7.43	1.43	1.52
1	a	380	GLU	C-N	7.43	1.44	1.33
7	g	926	VAL	C-N	7.42	1.43	1.33
4	d	234	TRP	NE1-CE2	-7.42	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	166	ILE	CA-CB	-7.42	1.45	1.54
5	e	36	PHE	N-CA	-7.41	1.37	1.45
2	b	104	PHE	C-N	7.40	1.44	1.33
2	b	104	PHE	N-CA	-7.40	1.37	1.46
3	c	597	ILE	C-N	7.39	1.44	1.33
2	b	369	GLU	CA-CB	7.39	1.64	1.53
7	r	281	ARG	C-N	7.39	1.43	1.33
7	g	686	GLU	CA-CB	7.38	1.65	1.53
5	e	325	ASP	C-N	7.38	1.42	1.33
1	a	723	PHE	N-CA	-7.37	1.37	1.46
6	f	313	LEU	CA-CB	7.37	1.63	1.53
3	c	323	SER	C-N	7.36	1.44	1.33
7	g	376	THR	C-N	7.36	1.40	1.33
7	r	261	PHE	CA-C	-7.35	1.45	1.53
7	r	679	ASP	N-CA	-7.35	1.37	1.46
6	q	624	SER	CA-C	-7.35	1.43	1.52
7	g	864	PHE	CA-CB	7.35	1.63	1.53
7	g	805	ALA	N-CA	-7.34	1.37	1.46
5	e	163	ASN	CA-CB	7.33	1.63	1.53
2	b	247	LYS	C-N	7.33	1.43	1.33
4	o	26	THR	N-CA	-7.33	1.36	1.45
6	f	62	VAL	C-O	-7.33	1.16	1.24
5	p	146	ARG	CD-NE	7.33	1.56	1.46
7	r	640	ASP	C-N	7.33	1.43	1.33
4	o	175	THR	CA-C	-7.32	1.43	1.52
6	q	462	ILE	CA-C	-7.32	1.43	1.52
5	p	179	SER	CA-C	-7.31	1.47	1.52
7	g	292	PHE	CA-C	-7.31	1.43	1.52
3	c	432	GLU	CA-C	-7.31	1.43	1.52
6	f	135	ARG	CA-CB	7.31	1.63	1.53
6	f	387	ARG	C-N	7.31	1.43	1.33
1	l	993	VAL	CA-CB	-7.31	1.45	1.54
6	q	229	ASN	N-CA	-7.30	1.35	1.45
7	r	764	PRO	CA-CB	-7.30	1.44	1.53
1	a	815	PHE	N-CA	-7.30	1.37	1.46
6	q	320	HIS	ND1-CE1	7.30	1.39	1.32
6	q	517	LEU	N-CA	-7.29	1.37	1.46
7	r	262	ASN	CA-C	-7.29	1.43	1.52
6	f	183	TYR	CA-CB	7.28	1.64	1.53
1	a	252	THR	C-N	7.27	1.43	1.33
7	g	1043	ARG	NE-CZ	7.27	1.41	1.33
7	g	194	HIS	CA-C	-7.27	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	174	SER	CA-C	-7.27	1.43	1.52
1	l	821	HIS	CG-ND1	7.26	1.46	1.38
5	e	6	SER	C-N	7.25	1.42	1.33
5	e	112	TYR	C-N	7.25	1.43	1.33
5	p	94	SER	C-N	7.25	1.43	1.33
4	d	114	PRO	C-N	7.25	1.43	1.33
4	o	118	VAL	CA-CB	-7.25	1.45	1.54
6	q	351	ILE	CA-CB	7.25	1.62	1.54
5	p	150	LEU	CA-CB	7.25	1.62	1.53
3	c	528	ASN	N-CA	7.24	1.55	1.46
3	c	702	GLN	CA-CB	7.24	1.64	1.53
3	n	375	LEU	C-N	7.24	1.44	1.33
3	c	690	GLN	N-CA	-7.24	1.40	1.46
6	f	462	ILE	CA-CB	7.24	1.62	1.54
1	a	158	PHE	C-N	7.23	1.41	1.33
7	g	1081	VAL	N-CA	-7.23	1.38	1.46
3	n	307	SER	CA-C	-7.23	1.43	1.52
4	o	249	LYS	CA-C	-7.23	1.43	1.52
1	a	457	PHE	N-CA	-7.23	1.37	1.46
3	n	235	LYS	C-N	7.23	1.43	1.33
7	r	50	ARG	CD-NE	7.22	1.56	1.46
3	c	137	LEU	C-N	7.22	1.43	1.33
5	e	39	ASP	CA-CB	7.22	1.64	1.53
1	a	911	GLU	CA-C	-7.22	1.44	1.52
6	q	468	LEU	C-N	7.22	1.43	1.33
1	a	664	LEU	CA-C	-7.22	1.43	1.52
7	g	1008	MET	CA-C	-7.22	1.43	1.52
6	q	260	GLU	CA-CB	7.21	1.64	1.53
7	r	480	LYS	N-CA	-7.21	1.37	1.46
7	g	475	LEU	CA-C	-7.21	1.43	1.52
7	r	645	ILE	CA-C	7.21	1.61	1.52
6	f	509	HIS	ND1-CE1	7.21	1.39	1.32
6	q	536	ARG	CA-C	-7.20	1.43	1.52
7	g	253	LYS	CA-C	-7.20	1.43	1.52
2	b	94	ARG	CD-NE	7.20	1.56	1.46
7	g	673	ILE	CA-CB	-7.19	1.46	1.54
5	p	55	ASP	C-N	7.19	1.42	1.33
2	m	154	GLU	CA-C	-7.19	1.43	1.52
6	q	380	ILE	C-O	-7.19	1.15	1.24
2	b	659	PRO	N-CA	-7.18	1.38	1.47
7	r	1143	GLU	CA-C	-7.18	1.43	1.52
5	e	307	VAL	CA-C	7.18	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	p	98	TRP	CA-C	-7.18	1.43	1.52
7	r	734	SER	CA-C	-7.18	1.45	1.53
6	f	549	PHE	CA-CB	7.18	1.64	1.53
1	l	597	TRP	CA-C	7.17	1.62	1.52
7	r	982	GLU	C-N	7.17	1.43	1.33
4	o	255	ASP	CA-C	-7.17	1.43	1.52
7	g	1134	HIS	CD2-NE2	7.17	1.45	1.37
7	g	1080	SER	CA-C	-7.16	1.44	1.52
7	r	534	THR	N-CA	-7.16	1.37	1.46
2	b	161	ARG	NE-CZ	7.15	1.41	1.33
3	c	519	ARG	CZ-NH1	7.15	1.42	1.32
1	l	600	ASP	C-N	7.14	1.42	1.33
7	g	159	ASP	C-N	7.14	1.44	1.33
2	m	201	ARG	CZ-NH2	7.14	1.42	1.33
7	g	960	ILE	N-CA	-7.14	1.37	1.46
3	c	337	GLU	C-N	7.13	1.43	1.33
5	e	32	HIS	CG-ND1	7.13	1.46	1.38
4	o	144	HIS	CB-CG	7.13	1.60	1.50
3	c	406	HIS	ND1-CE1	7.13	1.39	1.32
7	g	229	PHE	CA-C	-7.12	1.44	1.52
5	e	136	LEU	CA-C	-7.12	1.44	1.52
3	n	522	THR	CA-C	-7.12	1.43	1.52
3	c	562	SER	N-CA	-7.11	1.36	1.46
5	e	113	SER	C-N	7.11	1.42	1.33
7	g	575	PHE	N-CA	-7.11	1.38	1.46
1	l	377	GLU	CA-C	-7.11	1.43	1.52
2	m	672	TYR	CA-C	7.11	1.61	1.52
6	q	341	HIS	ND1-CE1	7.11	1.39	1.32
6	q	17	ASP	CA-CB	7.09	1.64	1.53
2	b	202	SER	N-CA	-7.09	1.38	1.46
1	l	414	ARG	CD-NE	7.09	1.56	1.46
2	m	248	LEU	CA-C	-7.09	1.43	1.52
1	a	201	ASP	CA-CB	7.08	1.65	1.53
3	c	643	PHE	N-CA	-7.08	1.37	1.46
1	a	349	LEU	CA-C	-7.08	1.43	1.52
3	n	385	LEU	C-N	7.08	1.42	1.33
1	l	966	CYS	CA-CB	7.08	1.64	1.53
2	m	499	ALA	CA-C	-7.08	1.43	1.52
6	q	177	ASP	N-CA	-7.08	1.37	1.46
6	f	429	ILE	CA-CB	-7.07	1.45	1.54
5	p	190	GLN	CA-C	-7.07	1.43	1.52
7	r	523	ASP	N-CA	7.07	1.54	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	627	GLU	C-N	7.06	1.42	1.33
7	g	1033	VAL	CA-CB	7.06	1.63	1.54
7	r	1009	LEU	N-CA	-7.06	1.37	1.45
7	g	956	ALA	C-N	7.05	1.42	1.33
5	p	81	VAL	CA-C	-7.05	1.44	1.52
1	l	411	LEU	N-CA	-7.05	1.37	1.46
7	r	740	GLU	C-N	7.05	1.43	1.33
7	r	109	ASN	CA-CB	7.05	1.62	1.53
3	c	239	ILE	N-CA	-7.04	1.38	1.46
6	f	245	ARG	CA-C	-7.04	1.43	1.52
7	r	122	VAL	C-N	7.04	1.42	1.33
2	m	621	ARG	C-N	7.04	1.43	1.33
2	m	703	ASP	N-CA	7.04	1.55	1.46
7	r	63	GLU	C-N	7.04	1.39	1.33
7	g	943	THR	C-N	7.04	1.43	1.33
1	l	658	HIS	ND1-CE1	7.03	1.39	1.32
1	a	355	TRP	N-CA	-7.03	1.37	1.45
3	c	163	ASP	C-N	7.03	1.42	1.33
7	r	66	ARG	NE-CZ	7.03	1.40	1.33
7	r	520	ILE	N-CA	-7.03	1.37	1.46
5	e	50	SER	CA-C	-7.03	1.44	1.52
5	p	203	HIS	CA-C	-7.03	1.44	1.52
1	a	234	LEU	CA-C	-7.02	1.44	1.52
7	g	266	SER	CA-CB	7.01	1.65	1.53
2	m	209	LEU	CA-C	-7.01	1.43	1.52
4	o	152	SER	N-CA	7.01	1.54	1.46
5	e	15	VAL	N-CA	-7.01	1.37	1.46
3	c	230	ASP	C-N	7.01	1.42	1.33
3	n	406	HIS	ND1-CE1	7.00	1.39	1.32
6	f	265	SER	C-N	7.00	1.42	1.33
6	q	282	TRP	NE1-CE2	-7.00	1.29	1.37
6	q	267	LEU	CB-CG	7.00	1.67	1.53
1	l	752	HIS	CE1-NE2	-7.00	1.25	1.32
7	r	579	ILE	CA-C	-7.00	1.44	1.52
1	l	314	THR	CA-C	-6.99	1.44	1.52
4	o	153	TRP	N-CA	6.99	1.54	1.46
6	q	563	GLU	N-CA	-6.99	1.38	1.46
1	l	289	THR	CA-C	-6.99	1.44	1.52
7	r	48	GLN	CA-C	-6.99	1.43	1.52
7	r	645	ILE	C-N	6.99	1.42	1.33
6	q	84	PHE	N-CA	-6.99	1.38	1.46
6	f	139	VAL	CA-C	6.99	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	293	LYS	C-N	6.99	1.42	1.33
7	g	658	PHE	CA-CB	6.98	1.64	1.53
2	m	528	GLU	CA-C	-6.98	1.43	1.52
5	p	329	ARG	NE-CZ	6.98	1.40	1.33
6	f	651	ILE	CA-CB	-6.98	1.45	1.54
1	a	568	LYS	C-N	6.98	1.42	1.33
6	f	387	ARG	CA-C	-6.97	1.43	1.52
1	l	803	HIS	CB-CG	6.97	1.59	1.50
7	g	403	GLN	C-N	6.97	1.43	1.33
7	g	959	ASN	CA-C	-6.97	1.44	1.52
5	p	12	VAL	N-CA	-6.97	1.38	1.46
3	n	372	LEU	CA-C	-6.96	1.44	1.52
3	n	665	VAL	CA-CB	-6.96	1.46	1.54
1	l	972	LYS	CA-C	-6.96	1.47	1.53
4	o	242	PRO	CA-CB	6.95	1.63	1.53
1	a	824	PHE	N-CA	6.95	1.54	1.46
3	c	221	LEU	N-CA	-6.95	1.37	1.46
6	f	435	PHE	N-CA	-6.95	1.36	1.46
6	f	240	HIS	ND1-CE1	6.95	1.39	1.32
1	l	232	ARG	CA-C	-6.95	1.43	1.52
7	g	868	HIS	CD2-NE2	6.95	1.45	1.37
6	f	553	ASN	CA-C	-6.94	1.43	1.52
1	a	393	HIS	CE1-NE2	6.93	1.39	1.32
3	c	336	ALA	N-CA	-6.93	1.38	1.46
4	o	40	GLY	CA-C	6.92	1.60	1.53
1	l	688	PHE	CA-C	-6.91	1.44	1.53
4	o	43	HIS	ND1-CE1	6.91	1.39	1.32
2	b	255	ARG	CD-NE	6.91	1.55	1.46
5	p	104	LEU	CA-CB	6.91	1.62	1.53
7	r	1110	ARG	CA-C	-6.91	1.43	1.52
1	a	809	LYS	CA-C	-6.91	1.44	1.52
2	m	403	HIS	ND1-CE1	6.91	1.39	1.32
4	d	63	HIS	CG-CD2	6.90	1.43	1.35
7	r	423	ALA	CA-C	-6.90	1.44	1.52
3	n	345	THR	CA-C	-6.90	1.43	1.52
4	o	228	ASP	C-N	6.89	1.43	1.33
6	q	635	LEU	C-N	6.89	1.42	1.33
7	r	855	LYS	CA-CB	6.89	1.64	1.53
4	o	208	ARG	CD-NE	6.89	1.55	1.46
7	g	800	GLN	C-N	6.89	1.43	1.33
2	m	299	SER	N-CA	-6.88	1.37	1.46
7	g	1153	ASN	CA-CB	6.88	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	672	TYR	N-CA	-6.88	1.40	1.46
3	c	667	LYS	C-N	6.88	1.42	1.33
7	g	493	PHE	CA-CB	6.88	1.64	1.53
7	r	983	VAL	C-N	6.88	1.42	1.33
2	b	521	TRP	N-CA	-6.87	1.38	1.46
6	f	478	ARG	CD-NE	6.87	1.55	1.46
1	a	513	LEU	C-N	6.87	1.43	1.33
3	c	297	TYR	CA-CB	6.87	1.64	1.53
5	e	2	GLN	CA-C	-6.87	1.45	1.52
3	c	653	VAL	CA-CB	6.86	1.63	1.54
3	c	634	ASP	CA-C	-6.86	1.44	1.52
7	r	367	ILE	CA-CB	-6.86	1.46	1.54
1	l	493	TRP	CA-C	-6.86	1.44	1.52
3	n	506	THR	C-N	6.86	1.42	1.33
7	g	28	GLN	CA-CB	6.85	1.64	1.53
3	c	256	LYS	CA-C	-6.85	1.43	1.52
1	a	166	LEU	CA-C	-6.85	1.44	1.52
4	o	105	VAL	CA-C	-6.85	1.44	1.52
5	p	218	ILE	C-O	6.85	1.30	1.24
7	r	214	CYS	CA-C	-6.85	1.43	1.52
1	a	500	GLU	CA-C	-6.84	1.44	1.53
1	a	802	TYR	CA-C	-6.84	1.44	1.52
4	o	192	GLN	CA-CB	6.84	1.63	1.53
5	e	8	HIS	ND1-CE1	6.84	1.39	1.32
1	l	174	SER	CA-C	-6.84	1.44	1.52
5	p	186	SER	C-N	6.83	1.42	1.33
2	b	648	LEU	CA-CB	6.83	1.64	1.53
4	d	207	VAL	CA-C	-6.83	1.45	1.52
1	l	437	ASN	CA-CB	6.83	1.62	1.53
1	a	569	ILE	CA-CB	-6.83	1.46	1.54
6	q	556	GLY	N-CA	-6.83	1.37	1.45
1	a	715	THR	C-N	6.83	1.42	1.33
2	b	680	LYS	C-N	6.83	1.43	1.33
4	d	202	GLY	CA-C	-6.82	1.42	1.51
2	b	397	ILE	N-CA	-6.82	1.38	1.46
6	f	522	LEU	CA-CB	6.82	1.61	1.53
6	q	134	GLU	CA-C	-6.82	1.44	1.53
1	a	220	TYR	CA-C	-6.82	1.44	1.52
7	r	909	ASP	C-N	6.82	1.43	1.33
6	f	554	ASN	C-N	6.81	1.41	1.33
7	g	937	ASP	CA-CB	6.81	1.64	1.53
1	l	184	LEU	C-O	-6.81	1.16	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	l	466	TYR	CA-CB	6.81	1.62	1.53
7	r	455	ILE	CA-C	-6.80	1.45	1.52
6	q	101	SER	CA-CB	6.80	1.63	1.53
5	e	58	ILE	C-N	6.79	1.40	1.33
1	a	487	ASN	N-CA	-6.79	1.36	1.46
3	n	374	GLU	CA-CB	6.79	1.64	1.53
3	n	541	GLN	C-N	6.79	1.42	1.33
3	c	125	PHE	N-CA	-6.78	1.37	1.46
1	a	358	GLY	CA-C	-6.77	1.45	1.52
6	q	366	LEU	CA-CB	6.77	1.63	1.53
1	a	575	ASN	N-CA	-6.77	1.37	1.46
7	r	654	VAL	CA-C	-6.77	1.44	1.52
7	g	36	GLN	C-N	6.77	1.42	1.33
7	r	448	SER	CA-CB	6.77	1.63	1.53
1	a	688	PHE	C-N	6.76	1.42	1.33
7	r	758	ILE	CA-C	-6.76	1.43	1.52
5	p	203	HIS	CE1-NE2	-6.75	1.25	1.32
7	g	125	ARG	CA-C	-6.75	1.43	1.52
4	o	154	ALA	CA-C	6.75	1.61	1.52
7	r	121	THR	C-N	6.75	1.41	1.33
6	f	125	TRP	N-CA	6.75	1.54	1.46
7	g	687	LYS	N-CA	-6.75	1.37	1.46
1	a	963	LYS	N-CA	-6.74	1.38	1.46
2	m	106	ALA	C-N	6.74	1.42	1.33
7	r	764	PRO	CA-C	6.74	1.59	1.52
2	m	333	GLU	C-N	6.74	1.42	1.33
4	o	269	LEU	CA-C	-6.73	1.44	1.52
2	m	108	VAL	N-CA	-6.73	1.38	1.46
7	r	884	HIS	ND1-CE1	6.73	1.39	1.32
2	b	591	LEU	N-CA	-6.73	1.38	1.46
1	a	539	GLU	N-CA	6.73	1.54	1.46
2	m	152	LEU	C-N	6.72	1.43	1.33
6	q	198	GLU	C-N	6.72	1.42	1.33
7	r	1150	TYR	C-N	6.72	1.43	1.33
1	a	614	ILE	CA-C	-6.72	1.43	1.52
3	c	546	ARG	CD-NE	6.72	1.55	1.46
1	a	91	LYS	C-N	6.71	1.42	1.33
6	q	463	GLU	CA-C	-6.71	1.44	1.52
1	l	549	LYS	CA-CB	6.71	1.63	1.53
3	n	651	ARG	CD-NE	6.71	1.55	1.46
5	e	4	PHE	N-CA	-6.71	1.38	1.46
6	f	46	ALA	CA-C	-6.71	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	1151	GLU	N-CA	-6.70	1.37	1.46
3	c	649	HIS	ND1-CE1	6.70	1.39	1.32
1	l	650	HIS	C-N	6.70	1.42	1.33
4	o	257	LEU	C-N	6.70	1.42	1.33
4	o	74	SER	CA-C	-6.69	1.44	1.53
7	r	1091	THR	CA-C	-6.69	1.45	1.52
2	b	578	ALA	N-CA	-6.68	1.38	1.46
1	l	604	ALA	C-N	6.68	1.41	1.34
1	l	708	ASN	CA-C	-6.68	1.44	1.52
3	n	407	LEU	C-O	-6.68	1.16	1.24
1	a	15	TYR	CA-C	-6.68	1.44	1.52
7	g	65	ASN	CA-CB	6.68	1.64	1.53
3	c	336	ALA	C-N	6.68	1.42	1.33
3	n	383	CYS	CA-C	6.68	1.61	1.52
6	q	78	VAL	N-CA	-6.68	1.38	1.46
2	b	661	HIS	ND1-CE1	6.67	1.39	1.32
3	n	280	ILE	CA-C	-6.67	1.44	1.52
1	a	520	LEU	CA-CB	6.67	1.64	1.53
2	b	533	GLU	C-N	6.67	1.42	1.33
1	l	628	ARG	NE-CZ	6.67	1.40	1.33
3	n	176	PRO	C-N	6.67	1.42	1.33
7	g	451	ASN	CA-CB	6.67	1.65	1.53
7	r	362	ILE	CA-C	-6.66	1.44	1.52
2	b	622	GLN	N-CA	-6.66	1.38	1.46
3	c	364	SER	CA-CB	6.66	1.64	1.53
2	b	599	SER	CA-C	-6.66	1.45	1.53
5	p	178	PHE	N-CA	-6.66	1.37	1.46
7	g	260	ILE	CA-C	-6.66	1.46	1.52
6	f	609	SER	CA-C	-6.66	1.44	1.53
7	g	383	LEU	CA-C	-6.65	1.44	1.52
1	a	752	HIS	ND1-CE1	6.65	1.39	1.32
3	c	688	LEU	N-CA	6.65	1.53	1.45
3	n	229	SER	CA-C	-6.65	1.44	1.52
6	f	308	VAL	C-N	6.64	1.40	1.33
1	l	552	ASP	C-N	6.64	1.42	1.33
3	n	281	GLU	CA-C	6.64	1.61	1.52
4	o	256	VAL	CA-CB	-6.64	1.46	1.53
5	p	123	LEU	C-N	6.64	1.42	1.33
1	a	420	PHE	CA-CB	6.63	1.63	1.53
1	a	821	HIS	ND1-CE1	6.63	1.39	1.32
1	l	973	SER	CA-CB	6.63	1.60	1.53
7	r	433	LEU	CA-C	6.62	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	293	LYS	C-N	6.62	1.43	1.33
7	r	770	ALA	CA-C	-6.62	1.43	1.52
1	a	267	PRO	N-CA	-6.62	1.39	1.47
7	g	168	LYS	N-CA	-6.62	1.38	1.46
7	g	12	LYS	C-N	6.62	1.42	1.33
5	p	302	ASP	CA-CB	6.61	1.64	1.53
7	r	289	LYS	CA-C	-6.61	1.43	1.52
6	f	279	TYR	C-N	6.61	1.42	1.33
6	q	520	GLY	CA-C	-6.61	1.42	1.51
1	l	1035	ARG	CA-C	-6.61	1.43	1.52
7	r	508	ASN	CA-CB	6.61	1.60	1.52
6	f	712	LYS	C-N	6.61	1.42	1.33
2	m	596	SER	C-N	6.60	1.43	1.33
6	f	511	ILE	CA-C	-6.60	1.44	1.52
6	f	237	ILE	CA-C	-6.59	1.44	1.52
5	e	241	ARG	CD-NE	6.59	1.55	1.46
7	g	662	ASN	CA-C	-6.59	1.44	1.52
1	a	427	LEU	N-CA	-6.59	1.38	1.46
4	o	23	ARG	NE-CZ	6.58	1.40	1.33
4	d	251	GLU	CA-C	-6.58	1.44	1.52
1	l	210	ARG	CA-C	-6.58	1.44	1.52
6	q	123	MET	CA-C	-6.58	1.44	1.52
1	a	329	TRP	CA-C	-6.58	1.44	1.52
4	d	140	ILE	N-CA	-6.58	1.38	1.46
1	l	112	GLU	CA-C	-6.58	1.44	1.52
5	e	339	PHE	CA-CB	6.58	1.63	1.53
7	g	849	GLU	CA-CB	6.58	1.63	1.53
1	a	75	ARG	CD-NE	6.58	1.55	1.46
1	a	708	ASN	C-N	6.58	1.42	1.33
3	c	640	MET	CA-CB	6.58	1.64	1.53
4	d	220	SER	CA-C	-6.58	1.44	1.52
3	n	341	GLN	CA-CB	6.58	1.63	1.53
1	a	705	LEU	C-N	6.57	1.42	1.33
6	f	93	GLU	C-N	6.57	1.42	1.33
6	f	230	GLU	C-N	6.57	1.42	1.33
7	r	408	ASN	CA-C	-6.57	1.44	1.52
2	b	637	ARG	CA-C	-6.57	1.44	1.52
2	m	471	PHE	C-N	6.57	1.42	1.33
2	m	304	ARG	CD-NE	6.56	1.55	1.46
7	r	332	LYS	N-CA	-6.56	1.37	1.46
3	n	299	LEU	CA-C	-6.56	1.43	1.52
1	l	465	LEU	CA-C	-6.55	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	344	ARG	CA-CB	6.55	1.64	1.53
4	d	104	SER	C-N	6.55	1.42	1.33
1	l	555	LYS	CA-C	-6.55	1.44	1.52
6	q	143	LYS	C-O	6.55	1.32	1.23
7	r	961	SER	C-N	6.55	1.42	1.33
3	n	692	GLU	CA-C	6.55	1.61	1.52
6	q	247	VAL	C-N	6.55	1.42	1.33
2	b	70	LYS	CA-C	-6.54	1.45	1.52
5	p	13	HIS	ND1-CE1	6.54	1.39	1.32
7	r	538	ILE	N-CA	-6.54	1.38	1.46
5	e	347	ALA	C-O	6.54	1.31	1.24
6	q	344	ARG	CD-NE	6.54	1.55	1.46
1	a	511	ARG	CD-NE	6.54	1.55	1.46
1	a	553	ILE	CA-C	-6.54	1.44	1.52
2	m	243	GLN	C-N	6.54	1.42	1.33
2	m	732	ARG	CD-NE	6.54	1.55	1.46
4	o	36	PHE	CA-C	-6.54	1.43	1.53
6	q	148	ILE	CA-CB	-6.54	1.46	1.54
6	q	445	CYS	C-N	6.53	1.42	1.33
1	l	584	ASN	CA-CB	6.53	1.64	1.53
1	a	298	PHE	CA-CB	6.53	1.61	1.53
7	g	124	PHE	C-N	6.53	1.42	1.33
7	r	323	LEU	C-N	6.53	1.41	1.33
1	l	20	PRO	N-CD	6.52	1.56	1.47
1	a	287	LEU	CB-CG	6.52	1.66	1.53
7	r	493	PHE	CA-CB	6.52	1.63	1.53
5	p	32	HIS	ND1-CE1	6.52	1.39	1.32
7	g	47	GLN	CA-CB	6.52	1.63	1.53
2	m	482	TRP	N-CA	-6.52	1.40	1.46
5	p	113	SER	N-CA	-6.52	1.38	1.46
4	o	154	ALA	N-CA	6.51	1.55	1.46
7	r	22	GLU	N-CA	-6.51	1.38	1.46
7	r	281	ARG	CD-NE	6.51	1.55	1.46
7	r	408	ASN	CA-CB	6.51	1.64	1.53
7	r	899	ALA	N-CA	-6.51	1.38	1.46
3	n	229	SER	C-N	6.51	1.42	1.33
7	g	908	VAL	CA-CB	-6.51	1.46	1.54
3	c	463	ARG	CD-NE	6.50	1.55	1.46
7	g	43	SER	N-CA	-6.50	1.38	1.46
2	m	148	MET	N-CA	-6.50	1.38	1.46
6	q	576	ASN	N-CA	-6.50	1.38	1.46
4	d	80	LEU	N-CA	-6.50	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	449	ILE	CA-CB	6.49	1.62	1.54
2	b	88	TYR	N-CA	6.49	1.54	1.46
1	l	318	ASN	CA-C	-6.49	1.44	1.52
6	q	460	LYS	C-N	6.49	1.42	1.33
7	g	69	VAL	CA-C	-6.49	1.44	1.52
1	l	732	THR	CA-C	-6.49	1.44	1.52
2	m	232	ASP	C-N	6.49	1.42	1.33
7	g	851	LEU	CA-C	-6.48	1.44	1.52
3	c	189	TYR	N-CA	6.48	1.54	1.46
7	g	870	VAL	CA-C	-6.48	1.44	1.52
1	a	869	HIS	ND1-CE1	6.47	1.39	1.32
7	g	368	PHE	CA-C	-6.47	1.44	1.52
7	r	729	CYS	CA-CB	6.47	1.64	1.53
1	l	266	ASP	C-N	6.47	1.40	1.33
1	a	406	ARG	CD-NE	6.46	1.55	1.46
1	a	191	GLY	CA-C	-6.46	1.42	1.51
1	a	750	LEU	C-N	6.46	1.42	1.33
7	g	311	ASN	CA-CB	6.45	1.63	1.53
2	m	527	VAL	CA-CB	-6.45	1.46	1.54
1	l	918	PHE	N-CA	-6.45	1.38	1.46
7	r	929	LEU	C-N	6.45	1.42	1.33
2	b	699	TRP	CA-C	-6.45	1.44	1.52
4	d	223	ALA	CA-C	-6.45	1.44	1.52
7	r	11	ARG	CA-C	-6.45	1.44	1.52
6	f	707	SER	CA-CB	6.44	1.63	1.53
3	c	295	PHE	CA-CB	6.44	1.63	1.53
1	l	468	ASP	N-CA	-6.44	1.37	1.46
4	o	25	ALA	C-N	6.44	1.42	1.33
3	n	511	VAL	CA-C	6.44	1.61	1.52
3	n	421	ILE	C-O	-6.43	1.16	1.24
2	m	180	THR	C-N	6.43	1.42	1.33
7	g	466	TYR	CA-C	-6.43	1.45	1.52
7	g	33	GLU	CA-C	6.43	1.61	1.52
7	g	551	ASN	CA-C	-6.43	1.44	1.52
6	q	329	ASN	CA-C	6.42	1.61	1.52
2	m	334	ASP	C-N	6.42	1.42	1.33
6	f	513	GLY	CA-C	6.42	1.59	1.52
7	g	104	LYS	CA-C	6.42	1.60	1.52
3	c	472	GLU	CA-C	-6.42	1.44	1.52
3	n	217	PHE	CA-CB	6.41	1.64	1.53
7	r	498	VAL	CA-C	-6.41	1.44	1.52
3	c	241	PHE	CA-C	-6.41	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	200	ASN	CA-C	-6.41	1.44	1.52
1	a	542	ASP	CA-CB	6.41	1.62	1.53
7	g	518	PRO	CA-C	6.41	1.60	1.52
4	o	92	ILE	C-N	6.41	1.41	1.33
1	a	871	HIS	CB-CG	6.41	1.59	1.50
1	a	920	SER	C-N	6.41	1.42	1.33
7	r	570	PHE	C-N	6.41	1.42	1.33
6	f	608	SER	CA-CB	6.41	1.64	1.53
1	l	919	PHE	CA-C	6.40	1.61	1.52
3	n	136	LYS	C-N	6.40	1.42	1.33
1	a	607	PHE	C-N	6.39	1.41	1.33
1	l	395	LEU	CA-C	-6.39	1.43	1.52
7	r	332	LYS	CA-C	-6.39	1.44	1.52
7	g	690	ARG	CZ-NH2	6.39	1.41	1.33
7	g	785	HIS	ND1-CE1	6.39	1.39	1.32
7	r	437	TYR	CA-CB	6.39	1.64	1.53
5	e	89	ASP	CA-C	-6.38	1.44	1.52
2	b	104	PHE	CA-CB	6.38	1.63	1.53
2	b	512	PRO	N-CA	-6.38	1.40	1.46
7	r	382	ARG	CD-NE	6.38	1.55	1.46
1	l	271	ARG	CD-NE	6.38	1.55	1.46
1	l	854	LYS	CA-CB	6.38	1.63	1.53
4	o	81	ILE	N-CA	-6.38	1.38	1.46
1	a	3	CYS	CA-C	-6.37	1.44	1.52
7	r	1035	LYS	C-N	6.37	1.42	1.33
7	r	1084	LEU	C-N	6.37	1.42	1.33
3	n	562	SER	CA-C	-6.37	1.44	1.53
5	p	175	PRO	N-CA	-6.37	1.39	1.47
7	r	514	PHE	C-N	6.37	1.41	1.33
7	r	574	ASN	CA-C	-6.37	1.43	1.52
3	c	164	ILE	C-N	6.37	1.41	1.33
4	o	124	LYS	CA-C	-6.37	1.44	1.52
5	e	30	ASP	CA-CB	6.37	1.64	1.54
1	l	180	ASP	CA-CB	6.37	1.62	1.53
6	q	175	GLU	CA-C	-6.37	1.44	1.52
2	b	336	LEU	CA-CB	6.36	1.63	1.53
3	c	546	ARG	CA-CB	6.36	1.63	1.53
6	f	211	ILE	C-N	6.36	1.42	1.34
3	n	137	LEU	N-CA	-6.36	1.38	1.46
6	f	583	GLU	C-N	6.36	1.42	1.33
2	b	518	ASP	N-CA	-6.36	1.38	1.46
5	e	13	HIS	ND1-CE1	6.36	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	125	ARG	NE-CZ	6.36	1.40	1.33
2	b	486	ILE	CA-C	-6.35	1.44	1.52
2	b	389	ASP	C-N	6.35	1.43	1.33
7	r	389	SER	C-N	6.35	1.41	1.33
1	a	810	ASP	N-CA	-6.34	1.38	1.46
7	r	114	GLN	N-CA	-6.34	1.38	1.45
3	n	433	LYS	N-CA	-6.34	1.38	1.46
7	r	300	THR	CA-C	-6.34	1.45	1.52
5	e	136	LEU	N-CA	-6.34	1.38	1.46
5	p	5	ASP	N-CA	-6.34	1.38	1.46
2	m	647	ARG	NE-CZ	6.34	1.40	1.33
1	a	880	ARG	CD-NE	6.33	1.55	1.46
2	b	597	LYS	N-CA	-6.33	1.38	1.46
7	g	868	HIS	CB-CG	6.33	1.59	1.50
1	a	197	LEU	N-CA	6.33	1.54	1.46
7	g	340	GLN	CA-CB	6.33	1.63	1.53
5	p	169	PHE	C-N	6.33	1.42	1.33
1	a	61	LEU	N-CA	-6.33	1.37	1.46
3	c	320	VAL	CA-CB	6.33	1.61	1.54
6	f	338	GLU	N-CA	-6.33	1.38	1.46
3	c	294	ILE	N-CA	-6.33	1.39	1.46
7	g	1036	PHE	N-CA	-6.33	1.38	1.46
6	q	215	ILE	N-CA	-6.33	1.38	1.46
1	a	1012	SER	CA-C	-6.32	1.44	1.52
2	b	80	ALA	C-N	6.32	1.41	1.33
7	g	329	GLY	C-N	6.32	1.42	1.33
6	q	573	LYS	CA-C	-6.32	1.44	1.52
5	e	130	ASN	CA-CB	6.32	1.61	1.52
7	r	972	CYS	CA-C	-6.32	1.44	1.52
3	n	444	ALA	C-N	6.31	1.41	1.33
4	d	269	LEU	C-N	6.31	1.41	1.33
6	f	243	TRP	CA-CB	6.31	1.63	1.53
7	g	881	LYS	CA-CB	6.31	1.64	1.53
6	q	465	ILE	C-N	6.31	1.41	1.33
1	l	845	ILE	C-N	6.31	1.42	1.33
7	r	666	LYS	N-CA	6.31	1.53	1.46
1	a	764	LEU	C-N	6.31	1.41	1.33
6	q	543	VAL	C-N	6.31	1.42	1.33
1	l	272	LYS	CA-C	-6.30	1.44	1.52
1	l	629	ILE	N-CA	-6.30	1.39	1.46
4	o	283	GLU	N-CA	6.30	1.53	1.46
3	c	375	LEU	N-CA	-6.30	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	639	ARG	CZ-NH1	6.30	1.41	1.32
7	r	1020	ARG	N-CA	-6.29	1.38	1.46
7	r	743	LEU	CA-CB	6.29	1.63	1.53
7	r	990	GLU	CA-CB	6.29	1.63	1.53
2	b	204	PHE	CA-CB	6.29	1.63	1.53
3	c	574	SER	CA-C	-6.29	1.44	1.52
7	g	374	SER	N-CA	-6.29	1.37	1.45
1	l	379	ILE	CA-C	6.29	1.60	1.52
1	a	224	ILE	C-N	6.29	1.41	1.33
6	f	387	ARG	CZ-NH2	6.29	1.41	1.33
1	l	60	LEU	C-N	6.29	1.42	1.33
7	r	795	VAL	C-N	6.29	1.41	1.33
1	a	964	LEU	CA-C	6.28	1.61	1.52
6	f	668	HIS	ND1-CE1	6.28	1.38	1.32
7	g	626	ASN	N-CA	-6.28	1.38	1.46
4	o	95	HIS	CA-C	6.28	1.59	1.52
6	f	706	GLN	N-CA	-6.28	1.38	1.46
1	l	125	ASP	CA-CB	6.28	1.64	1.53
2	m	558	ASN	CA-CB	6.28	1.63	1.53
2	b	396	ASP	CA-CB	6.28	1.63	1.53
1	a	928	ALA	CA-C	-6.27	1.44	1.52
1	a	191	GLY	C-N	6.27	1.42	1.33
6	q	394	ILE	CA-C	6.27	1.60	1.52
3	c	230	ASP	CA-C	-6.27	1.44	1.52
6	f	430	PRO	CA-C	6.27	1.62	1.52
4	o	46	ILE	N-CA	-6.27	1.38	1.46
7	r	741	GLY	CA-C	-6.27	1.45	1.52
7	g	952	ASP	CA-CB	6.26	1.63	1.53
5	p	53	ALA	N-CA	-6.26	1.38	1.46
2	m	538	ILE	CA-C	-6.26	1.45	1.52
6	q	541	GLY	CA-C	-6.26	1.42	1.51
7	g	873	GLN	CA-C	-6.25	1.44	1.52
7	r	131	GLU	CA-C	-6.25	1.44	1.52
3	c	594	LEU	CA-C	-6.25	1.44	1.52
5	e	80	THR	CA-C	-6.25	1.45	1.52
6	f	505	ASN	C-N	6.25	1.41	1.33
2	m	104	PHE	N-CA	-6.25	1.38	1.46
7	r	8	LEU	C-N	6.25	1.42	1.33
4	d	10	GLU	CA-C	-6.25	1.44	1.52
7	g	677	PHE	C-N	6.25	1.41	1.33
1	l	294	GLU	N-CA	-6.25	1.39	1.47
2	b	706	SER	N-CA	-6.25	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	562	GLU	C-N	6.25	1.42	1.33
6	q	524	VAL	N-CA	-6.25	1.39	1.46
7	r	174	TYR	CA-C	-6.25	1.45	1.52
6	f	623	PHE	CA-CB	6.25	1.63	1.53
7	g	224	ASN	CA-CB	6.25	1.63	1.53
1	l	720	PHE	CA-CB	6.25	1.63	1.53
6	q	10	GLU	N-CA	-6.25	1.38	1.46
6	f	279	TYR	N-CA	-6.24	1.37	1.45
1	l	141	SER	C-N	6.24	1.42	1.33
1	l	300	MET	C-O	6.24	1.31	1.24
5	p	67	GLU	CA-C	-6.24	1.44	1.52
7	r	7	HIS	CD2-NE2	6.24	1.44	1.37
3	c	215	LEU	CA-CB	6.24	1.63	1.53
1	a	565	THR	C-N	6.24	1.42	1.34
2	b	609	GLN	CA-CB	6.24	1.64	1.53
6	f	76	HIS	ND1-CE1	6.24	1.38	1.32
7	g	22	GLU	CA-C	-6.24	1.44	1.52
2	m	207	SER	CA-CB	6.24	1.63	1.53
2	m	332	ILE	CA-C	-6.23	1.44	1.52
6	q	315	LEU	C-N	6.23	1.42	1.33
5	p	40	LYS	CA-C	-6.23	1.44	1.52
4	o	101	SER	N-CA	-6.23	1.38	1.46
2	b	663	LEU	C-N	6.23	1.41	1.33
3	c	338	LEU	C-N	6.23	1.42	1.33
1	a	780	HIS	N-CA	-6.22	1.38	1.46
7	g	308	ILE	CA-C	-6.22	1.45	1.52
3	n	568	GLU	CA-CB	6.22	1.63	1.53
1	a	642	LEU	CA-C	-6.22	1.45	1.52
6	f	189	LEU	C-O	-6.22	1.16	1.24
3	n	204	SER	C-N	6.22	1.40	1.33
3	n	503	ALA	C-N	6.22	1.41	1.33
2	b	593	ALA	CA-C	6.22	1.60	1.52
6	f	67	ASP	CA-C	-6.22	1.44	1.52
5	p	301	ASP	CA-C	-6.22	1.45	1.52
1	a	708	ASN	N-CA	-6.21	1.38	1.46
4	d	15	ALA	C-N	6.21	1.42	1.33
7	g	517	PRO	CA-C	-6.21	1.48	1.52
4	o	219	ARG	CA-C	-6.21	1.45	1.52
3	c	541	GLN	N-CA	-6.21	1.38	1.46
3	c	532	ILE	CA-C	-6.21	1.48	1.53
7	r	1055	ASP	CA-C	6.21	1.60	1.52
1	a	369	ASN	CA-CB	6.20	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	e	329	ARG	NE-CZ	6.20	1.39	1.33
1	l	183	LEU	CA-CB	6.20	1.62	1.53
3	n	261	LYS	C-N	6.20	1.42	1.33
5	e	226	ARG	CD-NE	6.20	1.54	1.46
2	m	403	HIS	CA-CB	6.20	1.63	1.53
2	m	616	VAL	CA-CB	-6.20	1.48	1.54
7	r	10	LEU	C-O	-6.20	1.16	1.24
3	c	488	GLY	C-N	6.20	1.41	1.33
1	a	757	GLU	N-CA	-6.20	1.39	1.46
6	f	92	ASP	CA-C	-6.20	1.44	1.52
4	o	58	ARG	C-N	6.20	1.42	1.33
7	g	573	LYS	CA-C	-6.19	1.44	1.52
6	q	31	ASN	CA-C	-6.19	1.47	1.52
7	r	1040	LEU	C-N	6.19	1.41	1.33
6	f	613	ILE	N-CA	-6.19	1.39	1.46
7	g	453	ILE	C-N	6.19	1.41	1.33
6	q	456	GLN	N-CA	-6.19	1.38	1.46
2	m	498	SER	C-N	6.19	1.42	1.33
7	r	294	THR	CA-C	-6.19	1.45	1.52
6	f	325	GLN	C-N	6.18	1.42	1.33
3	n	600	GLU	CA-CB	6.18	1.63	1.53
6	q	360	HIS	C-N	6.18	1.42	1.33
7	r	106	TYR	C-N	6.17	1.41	1.33
2	m	161	ARG	N-CA	-6.17	1.38	1.46
4	d	142	ASP	CA-CB	6.17	1.61	1.53
6	q	248	TYR	N-CA	-6.17	1.39	1.46
7	g	85	GLU	C-N	6.17	1.42	1.33
7	g	634	VAL	CA-CB	-6.17	1.46	1.54
5	p	138	ASP	C-N	6.17	1.41	1.33
1	l	734	HIS	ND1-CE1	6.17	1.38	1.32
1	a	680	LEU	C-N	6.16	1.42	1.33
2	b	270	LEU	C-N	6.16	1.43	1.33
2	b	329	ARG	CA-CB	6.16	1.62	1.53
2	b	531	LEU	CA-C	-6.16	1.45	1.52
7	g	45	GLU	C-N	6.16	1.42	1.34
1	l	938	ARG	NE-CZ	6.16	1.39	1.33
7	r	650	LEU	CA-C	-6.16	1.45	1.52
5	p	71	ILE	C-N	6.16	1.41	1.33
6	q	494	SER	CA-CB	6.16	1.61	1.53
7	r	773	ASN	CA-CB	6.16	1.60	1.53
7	r	1086	ASP	N-CA	-6.16	1.38	1.46
7	g	600	PHE	N-CA	-6.16	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	366	ILE	CA-C	-6.16	1.45	1.52
6	q	79	GLU	C-N	6.15	1.41	1.33
7	r	464	SER	N-CA	-6.15	1.38	1.46
5	e	316	GLY	C-N	6.15	1.42	1.33
7	g	333	ILE	CA-CB	-6.15	1.46	1.54
1	l	82	TYR	CA-CB	6.15	1.63	1.54
7	g	986	ILE	CA-CB	6.14	1.61	1.54
1	l	826	TYR	CA-C	-6.14	1.45	1.52
1	a	528	ILE	CA-C	6.14	1.60	1.52
6	f	87	ALA	CA-C	-6.14	1.44	1.52
6	f	194	ASP	N-CA	-6.14	1.39	1.46
6	f	532	ALA	N-CA	-6.14	1.39	1.46
1	a	467	GLY	C-O	-6.14	1.15	1.23
7	g	109	ASN	CA-CB	6.14	1.62	1.53
4	d	41	GLU	CA-C	6.14	1.60	1.52
4	d	143	ALA	N-CA	6.14	1.53	1.46
4	o	233	ILE	CA-C	-6.14	1.45	1.52
3	c	412	LEU	CA-CB	6.13	1.63	1.53
7	r	259	LYS	N-CA	-6.13	1.38	1.46
1	l	225	SER	CA-C	-6.13	1.45	1.52
1	l	506	LEU	N-CA	-6.13	1.39	1.46
5	p	65	SER	CA-CB	6.13	1.62	1.53
3	c	402	LEU	N-CA	-6.13	1.39	1.46
7	r	119	TYR	C-N	6.13	1.39	1.33
6	f	334	ARG	CD-NE	6.12	1.54	1.46
1	a	905	LEU	N-CA	-6.12	1.38	1.46
1	a	1014	TYR	CA-C	6.12	1.59	1.52
7	g	194	HIS	CB-CG	6.12	1.58	1.50
5	p	231	ILE	CB-CG1	6.12	1.65	1.53
7	g	753	PHE	CG-CD2	6.12	1.51	1.38
7	g	12	LYS	CA-CB	6.12	1.62	1.53
1	l	997	ARG	CZ-NH1	6.12	1.41	1.32
4	o	238	ASN	CA-CB	6.12	1.63	1.53
7	r	115	LYS	N-CA	-6.12	1.39	1.46
7	r	26	LEU	CA-CB	6.12	1.63	1.53
1	a	785	ALA	CA-C	-6.11	1.45	1.52
3	c	320	VAL	CA-C	-6.11	1.45	1.52
3	c	331	ARG	NE-CZ	6.11	1.39	1.33
1	l	242	HIS	CA-C	-6.11	1.44	1.52
7	r	11	ARG	NE-CZ	6.11	1.39	1.33
3	c	251	ASP	N-CA	-6.11	1.38	1.46
7	r	1127	ASN	CA-CB	6.11	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	e	57	SER	N-CA	-6.10	1.38	1.46
3	n	451	TRP	CA-C	-6.10	1.44	1.52
7	r	245	GLY	CA-C	-6.10	1.43	1.51
7	r	960	ILE	CA-CB	6.10	1.62	1.54
1	l	319	ILE	CA-C	-6.10	1.47	1.52
3	c	204	SER	N-CA	-6.10	1.39	1.46
3	c	496	PHE	C-N	6.10	1.42	1.33
1	l	752	HIS	CG-ND1	6.10	1.45	1.38
7	r	50	ARG	NE-CZ	6.10	1.39	1.33
7	g	120	ILE	CA-CB	6.10	1.60	1.53
6	f	589	HIS	CA-CB	6.10	1.62	1.53
5	e	175	PRO	C-N	6.09	1.41	1.33
1	a	880	ARG	CZ-NH1	6.09	1.41	1.32
7	g	888	ILE	C-N	6.09	1.42	1.33
7	r	596	CYS	CA-CB	6.09	1.62	1.53
1	a	924	ARG	CD-NE	6.09	1.54	1.46
7	g	931	SER	CA-C	-6.09	1.44	1.52
7	r	379	SER	CA-CB	-6.09	1.43	1.53
2	m	586	LEU	N-CA	6.09	1.53	1.46
3	c	447	VAL	C-N	6.08	1.41	1.33
7	g	515	ASN	N-CA	-6.08	1.39	1.46
7	g	425	VAL	C-N	6.08	1.41	1.33
2	m	171	ARG	NE-CZ	6.08	1.39	1.33
6	f	345	VAL	CA-C	6.08	1.60	1.52
7	r	507	ILE	CA-C	-6.08	1.45	1.52
6	f	105	PHE	C-O	-6.08	1.16	1.24
5	e	303	HIS	CB-CG	-6.08	1.41	1.50
1	l	650	HIS	ND1-CE1	6.08	1.38	1.32
2	m	269	ASP	CA-C	-6.08	1.44	1.52
4	o	12	ILE	CA-C	-6.08	1.45	1.52
5	p	324	ASP	CA-C	-6.07	1.44	1.52
7	r	445	ASP	C-N	6.07	1.41	1.33
1	a	988	GLN	C-N	6.07	1.41	1.33
7	g	1150	TYR	N-CA	-6.07	1.37	1.45
4	d	92	ILE	CA-CB	-6.07	1.47	1.54
1	l	870	ILE	CA-C	-6.07	1.45	1.52
2	m	308	ASN	N-CA	6.07	1.53	1.46
7	r	778	ASN	CA-C	6.07	1.60	1.53
6	f	203	SER	CA-C	-6.07	1.43	1.52
6	f	590	LEU	CA-CB	6.07	1.62	1.53
7	g	146	MET	CA-CB	6.07	1.62	1.53
1	a	566	ASN	C-N	6.07	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	885	VAL	N-CA	6.07	1.53	1.46
3	c	571	ILE	CA-CB	6.06	1.61	1.54
3	n	435	TYR	CA-C	-6.06	1.44	1.52
4	o	258	TRP	N-CA	-6.06	1.40	1.46
1	l	585	ASP	CA-CB	6.06	1.62	1.53
2	b	94	ARG	CA-C	-6.05	1.44	1.52
7	r	971	ILE	N-CA	-6.05	1.39	1.46
7	r	49	LEU	C-N	6.05	1.41	1.33
1	l	850	GLU	CA-C	-6.05	1.45	1.52
1	a	95	ILE	CA-C	-6.05	1.45	1.52
6	f	112	ASP	CA-CB	6.05	1.63	1.53
6	f	542	ARG	CA-CB	6.05	1.63	1.53
1	l	831	LEU	C-N	6.05	1.42	1.34
7	g	603	ILE	C-N	6.05	1.41	1.33
1	l	855	GLU	CA-C	-6.04	1.44	1.52
6	f	491	TYR	CA-CB	6.04	1.64	1.53
7	g	45	GLU	CA-C	-6.04	1.45	1.52
6	f	326	GLU	CA-CB	6.04	1.62	1.53
7	g	596	CYS	N-CA	-6.04	1.39	1.46
7	g	939	LEU	CA-C	-6.04	1.45	1.53
1	l	10	ASN	C-N	6.04	1.42	1.33
2	m	331	TYR	CA-C	-6.04	1.44	1.52
6	q	294	LEU	N-CA	-6.04	1.39	1.46
7	r	738	TYR	CA-C	-6.04	1.44	1.52
1	a	982	TYR	N-CA	-6.04	1.39	1.46
6	q	478	ARG	C-N	6.04	1.41	1.33
6	q	335	HIS	ND1-CE1	6.03	1.38	1.32
2	b	345	LYS	N-CA	-6.03	1.38	1.46
3	c	131	GLU	CA-C	-6.03	1.44	1.52
7	r	286	THR	N-CA	-6.03	1.38	1.46
3	c	582	SER	CA-C	-6.03	1.44	1.52
7	r	293	GLN	CA-C	-6.03	1.45	1.52
3	c	132	ILE	CA-CB	-6.03	1.47	1.54
6	q	43	ARG	CA-CB	6.03	1.62	1.53
7	r	234	ARG	CZ-NH2	6.03	1.41	1.33
1	a	1027	LEU	C-N	6.03	1.41	1.33
7	g	62	THR	N-CA	-6.03	1.38	1.46
7	r	455	ILE	N-CA	-6.03	1.39	1.46
7	r	392	ASP	N-CA	-6.03	1.38	1.46
1	l	838	GLN	N-CA	-6.02	1.38	1.46
1	a	246	TRP	NE1-CE2	6.02	1.44	1.37
1	a	481	HIS	ND1-CE1	6.02	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	426	ALA	N-CA	-6.02	1.39	1.46
4	o	97	VAL	CA-CB	-6.02	1.47	1.54
7	r	447	VAL	C-N	6.02	1.41	1.33
7	r	727	PHE	CA-CB	6.02	1.62	1.53
6	f	79	GLU	N-CA	-6.02	1.39	1.46
7	g	364	SER	N-CA	-6.02	1.39	1.46
2	m	370	LEU	CA-CB	6.02	1.62	1.53
1	l	399	THR	CA-C	-6.02	1.44	1.52
3	n	264	ARG	NE-CZ	6.02	1.39	1.33
1	l	551	THR	N-CA	-6.01	1.39	1.46
5	e	309	SER	CA-C	-6.01	1.45	1.52
1	l	132	GLN	N-CA	-6.01	1.39	1.46
3	c	489	HIS	ND1-CE1	6.01	1.38	1.32
6	f	535	ARG	CA-CB	6.01	1.62	1.53
2	b	544	ASN	CA-C	-6.01	1.45	1.52
3	n	187	ASP	CA-CB	6.01	1.64	1.53
2	b	360	PHE	CA-C	-6.01	1.45	1.52
5	e	35	VAL	N-CA	-6.01	1.39	1.46
7	g	307	LEU	CA-C	-6.01	1.44	1.52
1	l	886	LEU	CA-C	-6.01	1.45	1.52
3	n	138	ILE	C-N	6.01	1.41	1.33
3	n	356	LYS	C-O	6.01	1.31	1.24
6	q	335	HIS	CA-C	-6.01	1.45	1.52
6	q	700	LYS	N-CA	6.00	1.53	1.46
7	g	12	LYS	N-CA	-6.00	1.39	1.46
4	o	24	LEU	CA-C	-6.00	1.45	1.52
6	q	102	ARG	CA-CB	6.00	1.63	1.53
2	b	345	LYS	CA-C	-6.00	1.45	1.52
3	c	495	CYS	CA-CB	6.00	1.62	1.53
7	g	40	MET	N-CA	-6.00	1.38	1.46
7	g	1141	ALA	C-N	6.00	1.41	1.33
3	n	329	ASP	CA-CB	6.00	1.61	1.54
6	q	93	GLU	CA-CB	6.00	1.62	1.53
6	f	421	LYS	CA-CB	6.00	1.62	1.53
7	g	1128	SER	CA-C	-6.00	1.44	1.52
1	a	276	VAL	CA-C	-6.00	1.46	1.52
6	f	73	ARG	NE-CZ	6.00	1.39	1.33
6	f	113	ASN	CA-CB	6.00	1.60	1.53
6	f	606	LEU	C-N	5.99	1.41	1.33
1	l	912	ASP	N-CA	-5.99	1.39	1.46
1	a	76	SER	CA-C	-5.99	1.44	1.52
7	g	410	THR	C-N	5.99	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	126	SER	C-N	5.99	1.41	1.33
1	l	770	PHE	C-N	5.99	1.41	1.33
1	a	179	GLU	CA-C	-5.99	1.44	1.52
1	a	538	GLY	C-N	5.99	1.42	1.33
1	a	435	ALA	N-CA	-5.98	1.37	1.46
3	n	659	VAL	CA-C	5.98	1.60	1.52
1	l	642	LEU	CA-C	-5.98	1.45	1.52
6	f	696	ASN	N-CA	5.98	1.53	1.45
2	m	95	ILE	N-CA	-5.98	1.41	1.46
2	m	149	GLU	CA-CB	5.98	1.62	1.53
1	a	635	LEU	CA-CB	5.97	1.63	1.53
6	f	19	LEU	CA-C	5.97	1.60	1.52
1	l	365	ILE	CA-C	-5.97	1.44	1.52
6	q	539	LEU	C-O	-5.97	1.16	1.24
2	b	224	ILE	CA-CB	5.97	1.61	1.54
2	b	482	TRP	C-O	-5.97	1.19	1.24
1	l	189	VAL	CA-CB	-5.97	1.47	1.54
1	a	490	VAL	CA-C	-5.97	1.45	1.52
1	l	734	HIS	CG-ND1	-5.97	1.31	1.38
6	f	223	ILE	C-O	-5.97	1.17	1.24
7	g	227	ARG	NE-CZ	5.97	1.39	1.33
7	r	1039	ALA	C-N	5.97	1.41	1.33
7	r	1128	SER	CA-C	-5.97	1.45	1.52
1	a	632	GLN	C-N	5.96	1.41	1.33
4	d	60	ASP	CA-C	-5.96	1.45	1.52
5	e	303	HIS	ND1-CE1	5.96	1.38	1.32
6	f	2	GLU	N-CA	-5.96	1.38	1.46
7	r	780	LEU	C-N	5.96	1.42	1.33
2	m	384	VAL	N-CA	-5.96	1.39	1.46
3	n	479	ALA	C-N	5.96	1.41	1.33
1	a	93	ILE	N-CA	-5.96	1.38	1.46
7	g	354	SER	C-N	5.96	1.42	1.33
1	l	755	VAL	N-CA	-5.96	1.39	1.46
7	r	1138	GLY	CA-C	-5.96	1.44	1.51
1	a	872	TYR	CZ-OH	5.96	1.50	1.38
4	d	76	ASP	C-N	5.96	1.40	1.33
5	p	196	ARG	NE-CZ	5.95	1.39	1.33
6	q	138	ASN	CA-C	-5.95	1.44	1.52
2	b	160	GLY	CA-C	-5.95	1.43	1.51
7	g	363	LEU	CA-C	-5.95	1.45	1.52
1	l	872	TYR	N-CA	-5.95	1.39	1.46
7	r	54	HIS	ND1-CE1	5.95	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	825	ASP	CA-CB	5.95	1.63	1.53
1	a	21	ASN	N-CA	-5.95	1.38	1.46
2	m	627	TYR	CA-C	5.95	1.60	1.52
3	n	388	THR	C-N	5.95	1.42	1.34
1	l	96	HIS	CG-ND1	-5.94	1.31	1.38
1	a	165	PHE	CA-CB	5.94	1.64	1.53
1	l	66	GLU	CA-C	-5.94	1.45	1.52
5	p	80	THR	CA-C	-5.94	1.45	1.52
5	e	172	SER	CA-C	-5.94	1.46	1.52
7	r	736	ASP	CA-C	-5.94	1.44	1.52
1	a	117	LEU	C-N	5.94	1.42	1.33
3	c	423	GLN	N-CA	-5.94	1.39	1.46
7	g	228	ILE	N-CA	-5.94	1.38	1.46
2	m	544	ASN	C-N	5.94	1.41	1.33
5	p	206	ALA	N-CA	-5.94	1.38	1.46
6	q	235	GLN	CA-C	-5.94	1.45	1.52
5	p	37	LYS	CA-CB	5.94	1.64	1.53
7	r	298	SER	C-N	5.94	1.41	1.33
4	d	49	LEU	C-N	5.93	1.41	1.33
7	g	402	PRO	CA-CB	5.93	1.59	1.53
7	g	950	ASN	CA-C	5.93	1.60	1.52
2	m	688	VAL	N-CA	-5.93	1.39	1.46
6	f	250	LEU	CA-C	-5.93	1.45	1.52
7	r	591	PHE	N-CA	-5.93	1.39	1.46
7	r	594	LEU	CA-CB	5.93	1.62	1.53
6	f	252	GLN	C-N	5.93	1.41	1.33
6	f	645	ASP	C-N	5.93	1.41	1.33
7	g	143	PRO	CA-C	-5.93	1.45	1.52
1	l	27	TYR	CA-C	-5.93	1.45	1.52
1	l	319	ILE	N-CA	-5.93	1.41	1.46
7	g	4	LYS	CA-C	-5.93	1.45	1.52
1	a	582	VAL	C-N	5.93	1.42	1.33
2	b	662	TYR	CA-C	-5.93	1.45	1.53
6	f	78	VAL	C-N	5.93	1.41	1.33
7	r	553	LEU	N-CA	-5.93	1.39	1.46
1	l	794	LEU	CA-CB	5.92	1.62	1.53
7	r	1087	LYS	C-N	5.92	1.41	1.33
1	a	68	ILE	CB-CG1	5.92	1.65	1.53
1	a	719	PHE	CA-C	-5.92	1.45	1.52
6	q	41	GLU	CA-C	5.92	1.60	1.52
1	a	898	ASP	C-N	5.92	1.41	1.33
5	e	119	ALA	C-N	5.92	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	393	ALA	C-N	5.92	1.41	1.33
7	r	559	VAL	C-N	5.92	1.41	1.33
1	a	391	SER	C-N	5.92	1.42	1.33
7	g	572	ALA	N-CA	-5.92	1.39	1.46
1	l	363	LEU	CA-CB	5.92	1.61	1.53
7	g	162	GLY	C-N	5.92	1.42	1.33
7	g	634	VAL	C-N	5.92	1.41	1.34
3	c	703	ASP	C-N	5.91	1.41	1.33
1	l	89	HIS	ND1-CE1	5.91	1.38	1.32
6	q	92	ASP	CA-CB	5.91	1.63	1.53
7	r	528	GLU	CA-C	-5.91	1.45	1.52
4	d	286	GLU	CA-C	-5.91	1.45	1.53
7	g	1026	GLY	C-N	5.91	1.42	1.33
7	r	591	PHE	CA-CB	5.91	1.63	1.53
2	b	150	ALA	C-N	5.91	1.41	1.33
4	d	151	ALA	CA-C	-5.91	1.45	1.52
7	r	1089	LEU	CA-C	-5.91	1.44	1.52
1	a	999	CYS	CA-CB	5.91	1.62	1.53
2	m	205	ILE	CA-CB	-5.91	1.47	1.54
1	a	273	VAL	CA-CB	-5.91	1.46	1.54
5	p	35	VAL	CA-C	-5.91	1.45	1.52
3	c	186	ASP	CA-C	-5.90	1.45	1.52
6	q	97	HIS	CG-ND1	5.90	1.44	1.38
6	q	509	HIS	ND1-CE1	5.90	1.38	1.32
1	a	271	ARG	CA-CB	5.90	1.64	1.53
3	c	289	ASN	C-N	5.90	1.41	1.33
3	c	499	ASP	CA-C	-5.90	1.44	1.52
1	l	199	PHE	CA-CB	5.90	1.62	1.53
7	r	260	ILE	N-CA	-5.90	1.39	1.46
7	r	584	LYS	CA-C	-5.90	1.45	1.52
7	r	671	ASN	CA-CB	5.90	1.62	1.53
1	a	496	ASN	C-N	5.90	1.41	1.33
4	d	118	VAL	CA-C	-5.90	1.45	1.52
4	d	203	HIS	CB-CG	-5.90	1.41	1.50
2	b	645	ALA	N-CA	-5.90	1.39	1.46
6	f	310	THR	C-N	5.90	1.42	1.33
1	a	230	HIS	CE1-NE2	-5.90	1.26	1.32
6	q	379	ILE	CA-C	-5.90	1.45	1.52
4	d	261	SER	N-CA	5.89	1.53	1.46
1	a	895	CYS	C-O	5.89	1.31	1.23
7	g	935	GLU	C-N	5.89	1.42	1.33
3	n	216	LEU	CA-C	5.89	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	222	SER	N-CA	-5.89	1.38	1.45
7	r	667	LEU	N-CA	-5.89	1.39	1.46
7	r	1094	TYR	N-CA	-5.89	1.39	1.46
7	g	220	VAL	N-CA	-5.88	1.39	1.46
1	l	536	ILE	CA-C	-5.88	1.45	1.52
6	q	66	LYS	CA-CB	5.88	1.62	1.53
1	l	375	ASN	C-N	5.88	1.41	1.33
1	a	500	GLU	C-N	5.88	1.41	1.33
3	c	500	ASP	C-N	5.88	1.41	1.33
5	e	303	HIS	N-CA	-5.88	1.39	1.46
6	f	618	GLU	C-O	-5.88	1.17	1.24
2	m	421	ALA	N-CA	-5.88	1.39	1.46
5	p	158	SER	CA-CB	5.88	1.62	1.53
2	b	347	LEU	CA-CB	-5.88	1.44	1.53
6	f	554	ASN	N-CA	-5.88	1.38	1.46
3	n	163	ASP	CA-C	-5.88	1.45	1.52
7	r	337	HIS	CE1-NE2	-5.88	1.26	1.32
7	r	750	TYR	C-N	5.88	1.41	1.33
6	f	49	LEU	CA-C	-5.87	1.44	1.52
1	l	288	VAL	C-N	5.87	1.41	1.33
1	l	458	ASN	CA-CB	5.87	1.62	1.53
2	m	132	VAL	C-N	5.87	1.41	1.33
2	b	240	PHE	C-N	5.87	1.42	1.33
3	c	348	CYS	CA-CB	5.87	1.63	1.53
7	g	845	PHE	CA-C	-5.87	1.45	1.52
7	r	288	ASN	C-N	5.87	1.41	1.34
3	c	658	ASN	CA-C	5.87	1.60	1.52
6	f	274	GLN	CA-CB	5.87	1.63	1.53
3	n	273	VAL	CA-C	-5.87	1.44	1.52
7	r	231	ILE	CA-CB	5.87	1.61	1.54
6	q	298	ILE	CA-C	-5.87	1.45	1.52
7	r	121	THR	N-CA	-5.87	1.38	1.46
2	b	256	GLY	C-N	5.86	1.40	1.33
5	e	54	HIS	CE1-NE2	5.86	1.38	1.32
7	g	584	LYS	CA-C	-5.86	1.45	1.52
1	a	507	PHE	CA-C	5.86	1.60	1.52
7	g	649	PHE	CA-CB	5.86	1.62	1.53
6	q	441	CYS	CA-C	-5.86	1.45	1.52
7	r	459	GLY	CA-C	-5.86	1.46	1.52
7	r	55	PHE	CA-C	-5.86	1.45	1.52
6	f	327	VAL	N-CA	-5.86	1.39	1.46
6	q	512	TYR	C-N	5.86	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	452	LEU	C-N	5.85	1.41	1.33
5	e	2	GLN	CD-NE2	5.85	1.45	1.33
6	f	536	ARG	N-CA	-5.85	1.39	1.46
1	l	194	TYR	CA-C	-5.85	1.45	1.52
5	p	300	HIS	C-N	5.85	1.41	1.33
5	e	242	ILE	CA-C	-5.85	1.45	1.52
2	m	303	PHE	N-CA	5.85	1.53	1.46
2	m	355	GLU	CA-C	-5.85	1.45	1.52
4	o	203	HIS	CD2-NE2	5.85	1.44	1.37
1	a	760	PHE	CA-C	-5.85	1.45	1.52
3	c	437	GLU	C-O	-5.85	1.17	1.24
3	c	633	ILE	N-CA	-5.85	1.39	1.46
4	d	88	ARG	NE-CZ	5.85	1.39	1.33
3	n	413	PRO	CA-C	-5.85	1.46	1.52
2	b	708	ASN	C-N	5.84	1.41	1.33
2	m	660	LYS	C-N	5.84	1.42	1.33
3	n	399	LEU	N-CA	5.84	1.53	1.46
7	r	560	ARG	NE-CZ	5.84	1.39	1.33
3	c	665	VAL	CA-CB	5.84	1.61	1.54
5	e	331	TRP	C-N	5.84	1.41	1.33
2	m	230	VAL	CA-CB	-5.84	1.46	1.53
3	c	616	PHE	N-CA	-5.84	1.39	1.46
3	c	445	LEU	C-N	5.84	1.41	1.33
7	g	923	HIS	ND1-CE1	5.84	1.38	1.32
1	l	290	LEU	CA-C	5.84	1.59	1.52
3	n	141	GLU	CA-C	5.84	1.60	1.52
6	q	243	TRP	C-N	5.84	1.41	1.33
2	b	655	PHE	N-CA	-5.84	1.37	1.46
2	m	391	GLU	C-N	5.84	1.43	1.34
3	n	290	GLU	C-N	5.84	1.41	1.34
6	q	639	THR	N-CA	-5.84	1.38	1.46
7	g	76	TYR	C-N	5.83	1.41	1.33
6	q	560	LYS	CA-CB	5.83	1.62	1.53
1	a	265	SER	N-CA	-5.83	1.38	1.45
7	r	965	LYS	N-CA	-5.83	1.39	1.46
4	d	229	ARG	CA-C	-5.83	1.46	1.53
7	r	159	ASP	CA-CB	5.83	1.63	1.53
1	a	869	HIS	C-O	-5.82	1.17	1.24
3	c	458	ARG	NE-CZ	5.82	1.39	1.33
1	l	291	LEU	C-N	5.82	1.38	1.33
2	m	406	LEU	CA-CB	5.82	1.62	1.53
2	b	613	ASP	N-CA	-5.82	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	343	TRP	NE1-CE2	-5.82	1.31	1.37
1	a	287	LEU	CA-C	-5.82	1.45	1.52
5	e	171	LEU	CA-C	-5.82	1.45	1.52
6	f	622	GLY	CA-C	-5.82	1.45	1.52
7	g	477	PHE	CA-CB	5.82	1.60	1.52
7	r	890	GLN	C-N	5.82	1.40	1.34
7	r	910	ASP	N-CA	-5.82	1.39	1.46
7	r	1112	GLU	N-CA	-5.81	1.39	1.46
3	c	317	HIS	ND1-CE1	5.81	1.38	1.32
7	g	26	LEU	N-CA	5.81	1.53	1.46
5	p	301	ASP	C-N	5.81	1.41	1.33
7	r	627	GLU	CA-C	5.81	1.60	1.52
1	l	608	ASP	CA-C	-5.81	1.45	1.52
2	m	647	ARG	CD-NE	5.81	1.54	1.46
3	n	590	GLU	N-CA	-5.80	1.39	1.46
4	o	11	LEU	N-CA	-5.80	1.38	1.46
4	d	51	GLY	CA-C	-5.80	1.43	1.51
2	b	164	ASP	CA-CB	5.80	1.62	1.53
7	g	268	VAL	CA-CB	-5.80	1.47	1.54
4	d	142	ASP	N-CA	-5.80	1.39	1.46
7	g	568	LEU	N-CA	-5.80	1.39	1.46
3	n	252	ASN	C-O	-5.80	1.16	1.24
6	q	1	MET	N-CA	5.80	1.57	1.46
2	b	665	LEU	C-N	5.80	1.41	1.33
3	c	389	LEU	CA-C	5.80	1.60	1.52
6	q	177	ASP	C-N	5.80	1.41	1.33
1	a	689	GLY	CA-C	5.80	1.58	1.52
1	l	358	GLY	N-CA	-5.80	1.36	1.45
1	l	669	ARG	CZ-NH2	5.80	1.41	1.33
3	n	325	LEU	N-CA	5.79	1.53	1.46
2	m	225	GLU	CA-CB	5.79	1.62	1.53
1	a	967	PHE	CA-CB	5.79	1.62	1.53
7	g	901	ASN	CA-CB	5.79	1.62	1.53
1	l	620	HIS	CD2-NE2	5.79	1.44	1.37
1	l	664	LEU	CB-CG	5.79	1.65	1.53
7	r	801	CYS	C-N	5.79	1.41	1.33
5	e	293	GLN	N-CA	-5.79	1.39	1.46
6	f	444	ALA	CA-C	-5.79	1.45	1.52
6	q	61	ASN	CA-C	-5.79	1.44	1.52
7	g	513	ASP	CA-CB	5.79	1.62	1.53
4	d	257	LEU	CA-C	-5.79	1.45	1.52
7	g	392	ASP	CA-C	-5.79	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	q	644	ALA	CA-CB	5.79	1.63	1.53
6	f	667	LEU	N-CA	-5.78	1.39	1.46
1	l	200	ASN	CA-C	-5.78	1.45	1.52
6	q	258	PRO	C-N	5.78	1.42	1.33
7	r	153	LEU	CA-C	-5.78	1.45	1.52
7	r	385	THR	N-CA	-5.78	1.38	1.46
2	m	709	LEU	CA-CB	5.78	1.62	1.53
6	q	589	HIS	ND1-CE1	5.78	1.38	1.32
5	p	203	HIS	C-N	5.77	1.40	1.33
6	q	621	GLN	C-N	5.77	1.41	1.33
7	r	737	SER	CA-CB	5.77	1.63	1.53
1	a	232	ARG	C-N	5.77	1.41	1.33
7	g	172	ALA	CA-CB	5.77	1.61	1.53
7	g	251	PRO	C-N	5.77	1.40	1.33
7	g	642	PHE	N-CA	5.76	1.54	1.46
1	a	776	ILE	CA-C	5.76	1.60	1.52
1	l	332	VAL	CA-CB	-5.76	1.46	1.54
6	f	8	GLN	C-N	5.76	1.41	1.33
7	r	56	ASP	C-N	5.76	1.41	1.33
5	e	109	GLY	CA-C	-5.76	1.43	1.52
1	l	369	ASN	C-N	5.76	1.40	1.33
3	n	365	PRO	N-CD	5.75	1.55	1.47
6	q	492	SER	CA-C	5.75	1.59	1.53
3	c	150	PHE	CA-C	-5.75	1.45	1.53
1	l	73	SER	C-N	5.75	1.42	1.33
1	a	732	THR	CA-C	-5.75	1.45	1.52
4	d	220	SER	N-CA	5.75	1.52	1.46
6	f	120	TRP	N-CA	5.75	1.53	1.46
2	m	634	TYR	N-CA	-5.75	1.39	1.46
3	n	703	ASP	CA-CB	5.75	1.62	1.53
6	q	127	LYS	N-CA	-5.75	1.39	1.46
7	r	310	VAL	C-O	5.75	1.29	1.23
7	g	170	SER	CA-CB	5.75	1.61	1.53
2	m	503	VAL	CA-C	-5.75	1.45	1.52
6	q	36	PHE	C-N	5.75	1.41	1.33
4	d	211	ALA	CA-C	-5.75	1.45	1.52
6	f	604	VAL	N-CA	5.75	1.53	1.46
1	l	1003	VAL	CA-C	-5.75	1.45	1.52
1	a	350	ASN	CA-C	-5.74	1.45	1.52
4	d	9	ASN	C-O	-5.74	1.17	1.24
1	l	517	ALA	C-O	-5.74	1.17	1.24
2	b	322	THR	C-N	5.74	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	698	GLY	CA-C	5.74	1.58	1.52
1	l	232	ARG	CA-CB	5.74	1.63	1.53
6	q	594	ILE	CA-C	-5.74	1.45	1.52
2	b	371	SER	N-CA	-5.74	1.39	1.46
6	q	286	LEU	C-N	5.74	1.41	1.33
2	m	351	ARG	NE-CZ	5.74	1.39	1.33
2	m	735	LEU	C-N	5.74	1.41	1.33
7	r	60	VAL	N-CA	-5.74	1.38	1.46
7	r	1130	GLU	C-N	5.74	1.41	1.33
1	a	141	SER	CA-C	-5.73	1.44	1.52
5	p	192	ILE	CA-C	-5.73	1.45	1.52
7	g	681	ILE	C-N	5.73	1.41	1.33
6	q	340	GLU	CA-C	-5.73	1.44	1.52
2	b	204	PHE	C-N	5.73	1.41	1.33
2	b	531	LEU	CA-CB	5.73	1.60	1.53
3	c	307	SER	C-N	5.73	1.41	1.33
7	g	577	TYR	CA-C	-5.73	1.45	1.52
7	r	529	HIS	ND1-CE1	5.73	1.38	1.32
7	g	278	LYS	CA-C	-5.73	1.46	1.53
3	n	140	LYS	CA-C	-5.73	1.45	1.52
4	o	151	ALA	N-CA	5.72	1.52	1.46
7	r	728	ALA	N-CA	-5.72	1.39	1.46
1	a	209	THR	CA-C	5.72	1.60	1.52
2	b	598	ASN	CA-CB	5.72	1.63	1.53
6	f	708	SER	N-CA	-5.72	1.38	1.46
1	l	807	ILE	CA-CB	-5.72	1.46	1.54
3	n	291	ILE	CA-C	-5.72	1.44	1.52
5	p	34	LYS	CA-C	-5.72	1.45	1.52
7	r	819	GLN	N-CA	-5.72	1.38	1.46
1	a	646	ILE	CA-CB	5.72	1.62	1.54
1	l	880	ARG	NE-CZ	5.72	1.39	1.33
5	p	120	HIS	ND1-CE1	5.72	1.38	1.32
3	n	327	SER	CA-CB	5.72	1.63	1.53
6	q	335	HIS	CA-CB	5.72	1.59	1.53
7	r	213	ASN	C-N	5.72	1.42	1.33
1	a	846	SER	C-N	5.72	1.41	1.33
2	m	79	MET	CA-C	-5.72	1.45	1.52
2	m	166	ASP	CA-C	-5.72	1.45	1.52
6	q	595	ARG	CD-NE	5.72	1.54	1.46
7	r	173	ILE	CA-C	-5.72	1.45	1.52
1	a	251	PHE	CA-C	-5.71	1.45	1.53
1	a	616	LEU	N-CA	-5.71	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	231	ILE	CA-C	-5.71	1.45	1.52
2	m	539	TYR	CA-CB	5.71	1.62	1.53
5	p	104	LEU	CA-C	-5.71	1.45	1.52
2	b	310	VAL	C-O	-5.71	1.17	1.24
1	l	593	PRO	C-N	5.71	1.40	1.32
7	g	414	THR	CA-CB	5.71	1.61	1.53
7	r	908	VAL	CA-CB	-5.71	1.48	1.54
7	r	942	ASN	CA-CB	5.71	1.62	1.53
1	l	419	ILE	CA-CB	-5.71	1.47	1.54
2	m	377	MET	CA-CB	5.71	1.62	1.53
3	n	572	VAL	CA-C	5.71	1.59	1.52
6	q	65	SER	CA-C	5.71	1.60	1.52
6	q	534	SER	C-N	5.71	1.41	1.33
3	c	673	ASN	CA-C	5.71	1.59	1.52
6	f	362	SER	C-N	5.71	1.41	1.33
7	g	362	ILE	C-N	5.71	1.41	1.33
1	l	638	VAL	CA-CB	-5.71	1.46	1.54
1	l	742	GLU	CA-C	-5.71	1.45	1.52
1	a	153	GLN	C-N	5.70	1.40	1.33
1	a	345	GLU	N-CA	-5.70	1.38	1.46
1	l	398	VAL	CA-C	-5.70	1.43	1.52
6	q	367	LEU	CA-C	-5.70	1.45	1.52
7	g	890	GLN	C-N	5.70	1.41	1.33
6	q	50	ALA	N-CA	-5.70	1.39	1.46
7	r	1074	ASN	CA-C	-5.70	1.43	1.53
1	a	118	LEU	CA-C	-5.70	1.45	1.52
3	c	441	ARG	CA-C	5.70	1.61	1.52
5	e	306	GLU	CA-CB	5.70	1.60	1.53
5	e	336	SER	C-N	5.70	1.41	1.33
6	f	99	TYR	CA-C	-5.70	1.45	1.52
6	q	52	ASP	CA-CB	5.70	1.62	1.53
2	b	418	ALA	CA-CB	5.69	1.62	1.53
2	b	629	VAL	C-N	5.69	1.41	1.33
3	n	248	TYR	N-CA	-5.69	1.38	1.46
5	e	22	ARG	N-CA	-5.69	1.39	1.46
3	n	384	LEU	CA-C	-5.69	1.45	1.52
6	f	31	ASN	CA-C	5.69	1.59	1.52
6	q	68	TRP	C-N	5.69	1.41	1.33
6	f	166	THR	C-N	5.69	1.41	1.33
1	l	106	TYR	C-N	5.69	1.41	1.33
1	l	511	ARG	CA-C	-5.69	1.45	1.52
6	q	130	THR	CA-CB	5.69	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	306	LYS	CA-C	-5.69	1.46	1.52
1	l	777	PHE	N-CA	5.68	1.53	1.46
3	n	145	THR	C-N	5.68	1.42	1.33
6	q	521	LYS	CA-CB	5.68	1.61	1.53
2	b	378	SER	CA-C	-5.68	1.45	1.52
7	r	1039	ALA	C-O	-5.68	1.17	1.24
6	f	143	LYS	CA-C	-5.68	1.45	1.52
7	r	923	HIS	CA-CB	5.68	1.62	1.53
1	a	599	LYS	N-CA	-5.68	1.38	1.46
6	f	605	SER	C-N	5.68	1.42	1.33
1	l	936	TYR	CA-CB	5.68	1.61	1.54
2	m	273	TYR	N-CA	-5.68	1.39	1.46
5	e	31	GLN	CA-CB	5.67	1.61	1.53
6	q	289	HIS	CE1-NE2	5.67	1.38	1.32
7	r	499	ASP	C-O	-5.67	1.17	1.24
2	b	614	CYS	CA-CB	5.67	1.62	1.53
2	m	168	ARG	NE-CZ	5.67	1.39	1.33
1	a	1035	ARG	NE-CZ	5.67	1.39	1.33
2	b	264	CYS	C-N	5.67	1.41	1.33
1	l	389	LEU	CA-CB	5.67	1.62	1.53
2	m	557	ALA	CA-C	-5.67	1.45	1.52
1	a	253	LEU	N-CA	-5.66	1.39	1.46
6	f	508	MET	CA-C	5.66	1.60	1.52
7	g	221	LEU	C-N	5.66	1.41	1.33
3	c	568	GLU	N-CA	5.66	1.53	1.46
2	m	350	SER	C-N	5.66	1.41	1.33
6	q	630	LEU	CA-C	-5.66	1.45	1.52
3	c	635	SER	CA-CB	5.66	1.62	1.53
7	r	1030	ASN	CA-C	-5.66	1.45	1.52
3	c	243	PRO	CA-CB	5.66	1.61	1.53
4	o	219	ARG	CZ-NH2	5.66	1.40	1.33
1	a	547	VAL	N-CA	-5.65	1.39	1.46
1	l	638	VAL	CA-C	-5.65	1.45	1.53
3	c	528	ASN	CA-CB	5.65	1.62	1.53
3	n	266	CYS	CA-C	-5.65	1.45	1.52
4	o	237	ASP	CA-C	5.65	1.60	1.52
1	a	101	SER	CA-CB	5.65	1.62	1.53
3	c	348	CYS	CA-C	5.65	1.60	1.52
1	l	530	LYS	CA-CB	5.65	1.62	1.53
4	o	32	THR	CA-C	5.65	1.60	1.52
5	p	341	CYS	CA-C	-5.65	1.45	1.52
6	q	700	LYS	CA-C	5.65	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	1110	ARG	CD-NE	5.65	1.54	1.46
1	a	471	ILE	N-CA	-5.65	1.40	1.46
2	b	739	LEU	C-N	5.65	1.41	1.33
3	c	643	PHE	CA-CB	5.65	1.62	1.53
6	f	282	TRP	CA-CB	5.65	1.62	1.53
5	p	112	TYR	C-N	5.65	1.40	1.33
2	b	100	THR	C-N	5.65	1.41	1.33
2	m	75	SER	N-CA	-5.65	1.39	1.46
7	g	274	PRO	N-CD	-5.64	1.39	1.47
1	l	905	LEU	C-N	5.64	1.41	1.33
3	n	345	THR	N-CA	-5.64	1.39	1.46
1	a	579	ILE	CA-C	5.64	1.58	1.52
2	b	550	HIS	CD2-NE2	5.64	1.44	1.37
7	r	271	ARG	NE-CZ	5.64	1.39	1.33
1	a	105	ARG	CD-NE	5.64	1.54	1.46
7	g	276	LEU	CA-C	5.64	1.60	1.52
1	a	331	ILE	CA-C	-5.64	1.45	1.52
2	m	268	SER	CA-CB	5.64	1.62	1.53
3	n	328	ASN	CA-C	-5.64	1.46	1.52
1	a	390	GLN	CA-CB	5.63	1.62	1.53
2	b	116	ARG	NE-CZ	5.63	1.39	1.33
2	b	707	SER	C-N	5.63	1.41	1.33
3	c	670	GLU	N-CA	-5.63	1.38	1.46
3	n	659	VAL	CA-CB	-5.63	1.47	1.54
4	o	226	SER	N-CA	-5.63	1.39	1.46
6	q	275	GLU	C-N	5.63	1.38	1.33
6	q	464	THR	CA-C	-5.63	1.45	1.52
6	f	381	ASP	CA-C	-5.63	1.44	1.52
1	l	777	PHE	CA-CB	5.63	1.63	1.53
3	n	460	ASN	CA-CB	5.63	1.63	1.54
7	r	452	ASP	N-CA	-5.63	1.39	1.46
7	r	970	GLN	C-N	5.63	1.38	1.33
6	f	448	ILE	C-N	5.63	1.40	1.33
6	q	16	SER	CA-CB	5.63	1.62	1.53
3	c	636	LEU	N-CA	-5.62	1.39	1.46
6	f	296	THR	CA-CB	5.62	1.62	1.53
2	m	640	GLU	CA-CB	5.62	1.62	1.53
1	a	180	ASP	CA-CB	5.62	1.61	1.53
7	g	193	SER	CA-C	-5.62	1.46	1.52
7	r	778	ASN	CA-CB	5.62	1.60	1.53
1	l	359	THR	N-CA	-5.62	1.40	1.46
6	q	387	ARG	NE-CZ	5.62	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	274	GLU	CA-CB	5.62	1.62	1.54
4	d	39	GLU	CA-C	-5.62	1.46	1.53
5	e	52	ARG	CA-CB	5.62	1.60	1.53
3	n	452	TYR	C-N	5.62	1.41	1.33
2	b	356	SER	CA-CB	5.62	1.62	1.53
1	l	238	THR	C-N	5.62	1.41	1.33
6	q	307	GLN	C-N	5.62	1.40	1.33
7	r	83	ASP	N-CA	-5.62	1.39	1.45
2	b	550	HIS	ND1-CE1	5.62	1.38	1.32
4	o	126	SER	N-CA	-5.62	1.39	1.45
4	d	250	GLU	C-N	5.62	1.41	1.33
7	g	134	VAL	CA-C	-5.62	1.46	1.52
7	r	338	PRO	CA-CB	5.62	1.61	1.53
3	c	233	LEU	C-N	5.61	1.41	1.33
6	f	249	SER	CA-C	-5.61	1.45	1.52
6	f	326	GLU	C-N	5.61	1.41	1.33
7	g	344	SER	N-CA	-5.61	1.39	1.46
2	m	184	CYS	CA-C	5.61	1.59	1.52
2	m	510	HIS	ND1-CE1	5.61	1.38	1.32
5	e	136	LEU	CB-CG	5.61	1.64	1.53
3	n	606	ARG	NE-CZ	5.61	1.39	1.33
1	a	321	THR	N-CA	-5.61	1.38	1.45
7	g	174	TYR	CA-C	-5.61	1.45	1.52
1	a	491	GLU	N-CA	5.61	1.53	1.46
6	q	287	HIS	ND1-CE1	5.61	1.38	1.32
7	g	837	ASN	CA-C	-5.61	1.45	1.52
3	n	648	LYS	CA-C	-5.61	1.45	1.53
4	o	137	SER	CA-CB	5.61	1.60	1.53
5	p	217	SER	CA-C	-5.61	1.45	1.52
1	a	306	ASP	CA-CB	5.60	1.62	1.53
6	f	301	TYR	CA-CB	5.60	1.62	1.53
2	m	267	ARG	NE-CZ	5.60	1.39	1.33
1	l	454	LYS	CA-C	-5.60	1.45	1.52
7	g	589	GLU	N-CA	-5.60	1.39	1.46
1	l	380	GLU	CA-C	-5.60	1.45	1.52
7	r	279	GLY	C-O	-5.60	1.15	1.23
7	r	367	ILE	C-N	5.60	1.41	1.33
7	r	413	VAL	CA-C	-5.60	1.45	1.52
1	a	652	SER	N-CA	-5.60	1.39	1.46
6	f	697	GLU	CA-C	-5.60	1.45	1.52
3	n	329	ASP	C-N	5.60	1.40	1.33
7	r	582	GLU	C-N	5.60	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	377	MET	C-N	5.59	1.40	1.33
7	r	909	ASP	CA-CB	5.59	1.61	1.53
3	c	539	ASN	CA-CB	5.59	1.62	1.53
7	g	375	PHE	C-N	5.59	1.41	1.33
1	l	462	SER	CA-CB	5.59	1.63	1.53
7	r	1053	GLU	C-N	5.59	1.41	1.33
1	l	408	PHE	CA-C	-5.59	1.45	1.52
3	n	631	GLU	N-CA	-5.59	1.39	1.46
4	o	208	ARG	CZ-NH1	5.59	1.40	1.32
1	a	473	VAL	CA-CB	-5.59	1.47	1.54
2	b	568	VAL	C-N	5.59	1.41	1.33
4	o	17	LEU	CB-CG	5.59	1.64	1.53
4	d	261	SER	C-O	-5.59	1.16	1.24
6	f	680	ILE	C-N	5.59	1.40	1.34
5	p	177	ARG	CA-C	-5.59	1.44	1.52
5	p	177	ARG	CD-NE	5.59	1.54	1.46
7	r	227	ARG	C-N	5.59	1.40	1.33
1	l	7	ILE	CA-CB	-5.58	1.47	1.54
2	m	370	LEU	CA-C	-5.58	1.45	1.52
6	q	433	ALA	CA-C	-5.58	1.45	1.52
1	a	803	HIS	CA-C	5.58	1.60	1.52
5	e	115	LYS	CA-CB	5.58	1.63	1.53
7	r	315	ALA	N-CA	-5.58	1.39	1.46
7	r	560	ARG	CZ-NH1	5.58	1.40	1.32
6	f	439	SER	CA-CB	5.58	1.62	1.53
7	g	137	ARG	NE-CZ	5.58	1.39	1.33
6	q	138	ASN	CG-ND2	5.58	1.45	1.33
7	r	351	ILE	CA-C	-5.58	1.46	1.52
1	a	499	SER	CA-C	-5.58	1.44	1.52
7	r	525	GLU	CA-C	-5.58	1.45	1.52
1	a	656	ASP	CA-CB	5.58	1.61	1.53
3	c	431	THR	N-CA	-5.58	1.39	1.46
7	g	291	ILE	CA-CB	-5.58	1.47	1.54
7	g	605	ARG	CZ-NH2	5.58	1.40	1.33
5	p	66	PRO	CA-CB	-5.58	1.47	1.53
6	q	618	GLU	CA-C	-5.58	1.45	1.52
1	a	75	ARG	CA-C	-5.58	1.46	1.53
3	c	238	SER	CA-CB	5.58	1.62	1.53
3	c	325	LEU	N-CA	5.58	1.52	1.46
3	c	505	ASP	CA-CB	5.58	1.62	1.53
7	g	259	LYS	CA-CB	5.58	1.62	1.53
1	l	237	LEU	CA-C	-5.58	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	276	ASN	C-N	5.57	1.40	1.33
7	g	394	LYS	CA-C	-5.57	1.45	1.52
1	l	461	SER	N-CA	-5.57	1.39	1.46
5	p	329	ARG	N-CA	-5.57	1.39	1.46
6	q	125	TRP	CA-CB	5.57	1.61	1.53
3	n	593	THR	C-N	5.57	1.41	1.33
1	l	928	ALA	C-N	5.57	1.42	1.33
6	q	236	GLY	CA-C	-5.57	1.44	1.51
7	r	349	SER	CA-CB	5.57	1.64	1.54
1	a	673	CYS	C-N	5.57	1.41	1.33
7	g	75	ASP	CA-CB	5.57	1.63	1.54
1	l	734	HIS	CB-CG	5.57	1.57	1.50
2	b	308	ASN	CA-CB	5.57	1.61	1.53
1	a	939	THR	CA-C	5.56	1.60	1.52
5	e	132	GLY	C-N	5.56	1.40	1.33
7	r	150	PRO	CA-C	-5.56	1.44	1.52
7	r	612	ASP	C-N	5.56	1.41	1.33
5	e	318	ILE	CA-C	-5.56	1.45	1.52
6	f	228	ALA	C-N	5.56	1.41	1.33
3	n	431	THR	C-N	5.56	1.41	1.33
7	r	828	THR	CA-C	-5.56	1.45	1.52
1	a	509	TYR	CA-C	5.56	1.59	1.52
4	o	177	GLY	CA-C	-5.56	1.46	1.52
1	a	547	VAL	C-N	5.56	1.41	1.33
7	g	677	PHE	CA-CB	5.56	1.61	1.53
6	q	285	ASP	N-CA	-5.56	1.39	1.46
7	r	808	TYR	C-N	5.56	1.41	1.33
7	g	893	ASP	CA-CB	5.56	1.63	1.53
5	e	210	GLY	C-N	5.55	1.41	1.33
5	e	343	SER	CA-C	-5.55	1.45	1.52
1	l	655	LEU	CA-C	-5.55	1.45	1.52
5	p	127	CYS	CA-C	5.55	1.59	1.52
6	q	26	GLN	CA-C	-5.55	1.45	1.52
6	q	540	ASN	N-CA	-5.55	1.39	1.46
7	g	276	LEU	C-N	5.55	1.37	1.33
4	o	134	GLY	CA-C	5.55	1.59	1.51
6	f	637	ASP	CA-CB	5.55	1.61	1.53
7	g	779	ASN	CA-C	-5.55	1.45	1.52
5	p	68	TYR	CA-C	5.55	1.59	1.52
1	a	657	LEU	C-N	5.55	1.41	1.33
6	q	329	ASN	N-CA	5.55	1.53	1.46
6	q	378	ASP	C-N	5.55	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	221	ASP	CA-CB	5.55	1.61	1.53
7	g	922	LEU	CA-C	-5.55	1.45	1.52
2	m	97	ARG	CA-CB	5.55	1.62	1.53
3	n	428	ASN	CA-C	-5.55	1.45	1.52
5	p	146	ARG	CZ-NH1	5.55	1.40	1.32
6	q	578	ASP	CA-C	-5.55	1.45	1.52
3	c	165	VAL	CA-C	-5.54	1.46	1.53
5	e	84	TRP	N-CA	-5.54	1.40	1.46
2	m	540	THR	CA-CB	5.54	1.61	1.53
2	b	254	LEU	CA-CB	5.54	1.62	1.53
1	l	851	TYR	CA-C	-5.54	1.45	1.52
1	a	598	LYS	N-CA	-5.54	1.39	1.46
6	f	385	LEU	CA-C	-5.54	1.45	1.52
7	g	110	ILE	CA-CB	-5.54	1.46	1.54
7	r	1066	PHE	CA-C	-5.54	1.45	1.52
6	q	641	SER	C-N	5.54	1.41	1.33
1	a	94	ASN	CA-C	-5.54	1.46	1.52
3	c	201	ALA	CA-C	-5.54	1.45	1.52
7	g	927	ALA	C-N	5.54	1.41	1.33
3	n	293	GLN	C-N	5.54	1.40	1.33
4	d	108	ALA	CA-C	-5.53	1.46	1.53
2	m	630	LEU	CA-C	5.53	1.59	1.52
4	o	243	TRP	CA-C	-5.53	1.45	1.52
2	b	566	GLU	C-N	5.53	1.41	1.33
4	d	112	TYR	C-N	5.53	1.41	1.33
6	q	351	ILE	CB-CG1	5.53	1.64	1.53
6	f	510	LEU	CA-CB	5.53	1.62	1.53
7	r	793	CYS	CA-C	-5.53	1.45	1.52
5	e	292	LEU	CA-CB	5.53	1.62	1.53
1	a	643	ASP	CA-C	-5.53	1.45	1.52
3	n	479	ALA	CA-CB	5.53	1.61	1.53
7	r	52	HIS	ND1-CE1	5.53	1.38	1.32
1	a	871	HIS	N-CA	-5.52	1.39	1.46
1	l	380	GLU	C-N	5.52	1.40	1.33
5	p	208	LEU	CA-CB	5.52	1.61	1.52
7	g	590	LYS	C-N	5.52	1.41	1.33
1	a	529	SER	C-N	5.52	1.40	1.33
2	b	473	LEU	CA-C	-5.52	1.45	1.52
3	c	143	ARG	NE-CZ	5.52	1.39	1.33
5	e	338	GLU	C-N	5.52	1.41	1.33
7	g	881	LYS	CA-C	-5.52	1.45	1.52
3	n	600	GLU	C-N	5.52	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	o	284	ASN	C-N	5.52	1.41	1.33
1	a	505	GLU	CA-C	-5.52	1.45	1.52
6	f	714	TYR	CA-C	5.52	1.59	1.52
3	n	143	ARG	NE-CZ	5.52	1.39	1.33
7	r	995	THR	C-N	5.52	1.39	1.33
2	m	395	VAL	C-N	5.52	1.40	1.33
7	g	176	GLU	C-N	5.51	1.41	1.33
2	b	627	TYR	N-CA	5.51	1.53	1.46
7	g	353	ASP	CA-C	-5.51	1.45	1.52
3	n	512	MET	N-CA	-5.51	1.39	1.46
7	r	820	THR	C-N	5.51	1.41	1.33
6	f	207	SER	CA-C	-5.51	1.45	1.52
3	n	531	LYS	C-O	-5.51	1.17	1.24
6	q	320	HIS	CA-C	-5.51	1.45	1.52
5	e	187	ALA	CA-CB	5.51	1.63	1.53
6	f	281	ASP	CA-CB	5.51	1.62	1.53
1	l	432	ILE	N-CA	-5.51	1.39	1.46
7	r	775	ILE	CA-C	-5.51	1.45	1.52
1	a	256	ASP	CA-C	-5.50	1.46	1.52
2	m	380	GLU	CA-CB	5.50	1.62	1.53
6	q	435	PHE	CA-CB	5.50	1.61	1.53
2	m	415	CYS	CA-CB	5.50	1.61	1.53
6	q	121	ILE	CA-CB	-5.50	1.47	1.54
1	a	544	MET	CA-C	-5.50	1.45	1.53
1	a	1030	LEU	CA-C	-5.50	1.45	1.52
2	b	99	ASP	CA-CB	5.50	1.62	1.53
2	b	119	GLY	C-N	5.50	1.40	1.33
2	b	514	VAL	N-CA	-5.50	1.39	1.46
4	d	84	GLU	CA-C	-5.50	1.45	1.52
4	o	154	ALA	C-N	5.50	1.40	1.33
1	l	980	VAL	N-CA	-5.50	1.40	1.46
2	m	664	VAL	CA-C	5.50	1.59	1.52
1	a	921	THR	C-N	5.50	1.41	1.33
3	c	310	ALA	C-N	5.50	1.40	1.33
5	p	335	TYR	N-CA	-5.50	1.39	1.46
7	r	716	ASN	CA-C	5.50	1.59	1.52
1	l	856	ILE	CA-CB	-5.50	1.48	1.54
7	r	808	TYR	CA-CB	5.50	1.62	1.53
1	a	602	ILE	CA-C	-5.50	1.45	1.52
6	f	283	GLU	CA-C	-5.50	1.45	1.52
7	g	753	PHE	CA-CB	5.50	1.61	1.53
3	c	188	VAL	N-CA	5.49	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	545	ASP	CA-C	-5.49	1.45	1.52
7	g	756	PHE	CA-C	5.49	1.59	1.52
1	l	287	LEU	CA-C	-5.49	1.46	1.52
1	l	474	ASN	N-CA	-5.49	1.39	1.46
2	m	562	ALA	N-CA	-5.49	1.38	1.46
3	n	491	LEU	CA-C	5.49	1.59	1.52
7	r	1152	THR	N-CA	-5.49	1.39	1.46
1	l	970	LEU	CA-CB	5.49	1.62	1.53
6	f	69	GLU	C-N	5.49	1.41	1.33
1	l	756	GLN	C-N	5.49	1.40	1.33
5	p	19	PHE	CA-C	5.49	1.60	1.52
1	a	139	PHE	CG-CD2	5.49	1.50	1.38
1	a	143	ASN	CA-C	-5.49	1.46	1.52
1	a	437	ASN	C-N	5.49	1.41	1.33
1	l	329	TRP	CD2-CE3	-5.49	1.31	1.40
2	m	345	LYS	CA-C	-5.49	1.45	1.52
7	r	1060	HIS	ND1-CE1	5.49	1.38	1.32
3	n	661	SER	C-N	5.49	1.41	1.33
1	a	671	ASP	CA-CB	5.49	1.62	1.53
5	e	8	HIS	CA-C	-5.49	1.45	1.52
6	f	514	VAL	N-CA	-5.49	1.39	1.46
7	g	771	ASN	N-CA	-5.49	1.39	1.46
7	r	676	CYS	CA-CB	5.49	1.62	1.53
7	g	652	HIS	CA-C	-5.48	1.45	1.52
5	p	235	CYS	CA-C	-5.48	1.46	1.52
6	q	422	LEU	CA-C	-5.48	1.45	1.52
2	b	579	SER	CA-CB	5.48	1.61	1.53
3	c	681	ALA	N-CA	-5.48	1.39	1.46
7	g	178	ILE	N-CA	-5.48	1.38	1.46
1	l	724	PHE	CA-C	-5.48	1.45	1.52
2	m	534	ILE	C-N	5.48	1.41	1.33
2	m	714	ILE	N-CA	-5.48	1.40	1.46
7	g	53	SER	CA-CB	5.48	1.61	1.53
4	o	262	TRP	CD2-CE2	5.48	1.50	1.41
3	c	314	LYS	CA-C	5.48	1.59	1.52
7	g	70	LYS	C-N	5.48	1.40	1.33
7	g	598	ILE	CA-C	-5.48	1.46	1.52
1	l	609	GLY	C-N	5.48	1.40	1.33
2	m	346	ILE	C-N	5.48	1.41	1.34
6	q	176	GLU	C-N	5.48	1.41	1.33
7	r	173	ILE	N-CA	-5.48	1.39	1.46
6	q	720	ARG	NE-CZ	5.48	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	61	PHE	CA-CB	5.47	1.62	1.53
2	m	621	ARG	CA-CB	5.47	1.63	1.53
5	p	45	TRP	CA-C	-5.47	1.46	1.52
7	r	32	GLU	CA-C	5.47	1.59	1.52
1	l	16	GLU	C-N	5.47	1.41	1.33
7	g	504	PHE	CA-CB	-5.47	1.45	1.53
3	n	128	CYS	CA-CB	5.47	1.61	1.53
7	r	166	ILE	CA-C	-5.47	1.45	1.52
5	p	247	GLU	CA-C	-5.47	1.46	1.52
6	f	605	SER	N-CA	-5.47	1.38	1.46
7	g	1027	ASN	CA-CB	5.47	1.62	1.53
1	l	827	GLN	CA-C	-5.47	1.45	1.52
1	a	476	PHE	CA-CB	5.46	1.62	1.53
1	a	690	VAL	CA-CB	5.46	1.61	1.54
6	f	679	LYS	C-N	5.46	1.39	1.33
3	n	367	GLU	N-CA	-5.46	1.39	1.46
7	r	721	CYS	CA-C	-5.46	1.45	1.52
6	q	480	THR	C-N	5.46	1.40	1.33
6	q	524	VAL	CA-CB	-5.46	1.48	1.54
7	r	847	LEU	C-N	5.46	1.41	1.33
2	b	378	SER	CA-CB	5.46	1.61	1.53
4	d	125	VAL	CA-C	-5.46	1.45	1.52
1	l	258	ASP	CA-C	-5.46	1.45	1.52
1	a	247	ASP	C-N	5.46	1.40	1.33
2	b	580	CYS	N-CA	5.46	1.52	1.46
7	g	296	GLN	C-O	-5.46	1.17	1.24
7	g	547	PRO	C-N	-5.46	1.28	1.33
3	n	285	ARG	CZ-NH1	5.46	1.40	1.32
6	f	528	HIS	CG-ND1	5.45	1.44	1.38
2	m	284	ALA	CA-C	-5.45	1.46	1.52
6	q	361	SER	C-N	5.45	1.41	1.33
6	q	387	ARG	CZ-NH2	5.45	1.40	1.33
7	r	427	THR	N-CA	-5.45	1.38	1.45
4	d	223	ALA	N-CA	-5.45	1.39	1.46
1	l	864	PHE	C-N	5.45	1.41	1.33
2	m	208	LEU	CA-C	-5.45	1.46	1.52
7	g	945	ARG	NE-CZ	5.45	1.39	1.33
2	m	82	ILE	CA-C	-5.45	1.46	1.52
4	o	90	SER	CA-CB	5.45	1.65	1.53
5	e	94	SER	C-N	5.45	1.40	1.33
6	q	649	TYR	CA-CB	5.45	1.62	1.53
1	a	745	GLU	CA-C	5.44	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	720	LEU	CA-C	-5.44	1.46	1.52
7	r	151	LEU	C-N	5.44	1.41	1.33
6	f	135	ARG	CD-NE	5.44	1.53	1.46
1	l	816	THR	CA-C	-5.44	1.46	1.52
2	m	171	ARG	CA-CB	5.44	1.61	1.53
2	m	668	ALA	N-CA	5.44	1.53	1.46
6	q	469	ARG	CD-NE	5.44	1.53	1.46
7	r	440	ARG	CA-C	-5.44	1.46	1.52
7	g	361	TYR	CA-CB	5.44	1.61	1.53
6	f	171	VAL	C-O	-5.44	1.17	1.24
1	l	763	THR	CA-C	5.44	1.59	1.52
2	m	516	ASN	N-CA	-5.44	1.38	1.46
7	r	883	GLY	CA-C	-5.44	1.44	1.51
1	a	100	ALA	CA-CB	-5.44	1.44	1.53
7	g	324	TYR	CA-C	5.44	1.59	1.52
1	a	735	LYS	N-CA	-5.43	1.39	1.46
3	c	128	CYS	CA-C	-5.43	1.45	1.52
6	q	483	VAL	CA-C	-5.43	1.45	1.52
2	b	479	LYS	N-CA	-5.43	1.40	1.46
1	a	83	PRO	N-CA	-5.43	1.40	1.47
1	a	219	ASP	N-CA	5.43	1.52	1.46
1	a	848	SER	N-CA	-5.43	1.39	1.46
2	m	710	TYR	CA-C	5.43	1.60	1.52
7	r	1027	ASN	CA-C	5.43	1.60	1.52
7	g	234	ARG	N-CA	-5.43	1.39	1.46
6	q	627	THR	N-CA	5.43	1.52	1.46
7	r	1099	TYR	CA-C	-5.43	1.45	1.52
1	a	656	ASP	CA-C	-5.43	1.46	1.52
2	b	625	ALA	N-CA	-5.43	1.40	1.46
2	m	576	PHE	N-CA	-5.43	1.39	1.46
1	a	69	CYS	C-N	5.42	1.41	1.33
2	b	105	SER	C-N	5.42	1.41	1.33
1	l	808	TRP	CZ2-CH2	5.42	1.47	1.37
4	o	251	GLU	N-CA	-5.42	1.38	1.46
7	r	37	ALA	C-N	5.42	1.41	1.33
7	r	653	VAL	CA-CB	-5.42	1.48	1.54
7	r	875	PHE	CA-C	5.42	1.59	1.52
1	a	725	ARG	NE-CZ	5.42	1.39	1.33
7	g	671	ASN	CA-C	5.42	1.59	1.52
7	r	665	PHE	N-CA	-5.42	1.40	1.46
6	f	71	GLU	CA-CB	5.42	1.61	1.53
6	f	552	ARG	C-N	5.42	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	157	VAL	C-N	5.42	1.40	1.33
6	f	148	ILE	C-O	-5.42	1.17	1.24
1	l	568	LYS	C-N	5.42	1.40	1.33
1	l	782	TYR	CA-C	-5.42	1.45	1.52
1	a	570	LEU	N-CA	-5.42	1.39	1.46
7	g	1127	ASN	C-N	5.42	1.41	1.33
5	p	96	ARG	CA-C	-5.42	1.45	1.52
2	b	615	VAL	CA-CB	5.42	1.61	1.54
5	e	26	THR	C-O	-5.42	1.17	1.23
6	q	245	ARG	CD-NE	5.42	1.53	1.46
7	g	659	PRO	CA-C	-5.42	1.44	1.52
4	o	115	LEU	N-CA	-5.42	1.38	1.45
1	a	437	ASN	N-CA	-5.41	1.39	1.46
6	f	215	ILE	N-CA	5.41	1.52	1.46
7	g	316	ILE	CA-CB	-5.41	1.46	1.54
2	m	161	ARG	CZ-NH1	5.41	1.40	1.32
4	o	10	GLU	C-N	5.41	1.41	1.33
5	p	6	SER	CA-CB	5.41	1.62	1.53
6	f	451	SER	CA-C	-5.41	1.45	1.52
6	f	454	ASP	C-O	5.41	1.30	1.23
1	l	925	LEU	N-CA	5.41	1.53	1.46
2	m	647	ARG	CZ-NH1	5.41	1.40	1.32
7	r	178	ILE	C-N	5.41	1.42	1.33
7	g	669	VAL	C-N	5.41	1.40	1.33
7	g	839	PHE	CA-CB	5.41	1.61	1.53
2	m	180	THR	N-CA	-5.41	1.39	1.46
2	m	317	PHE	CA-CB	5.41	1.61	1.53
3	n	265	HIS	N-CA	-5.41	1.39	1.46
3	n	332	ILE	CA-CB	-5.41	1.47	1.54
6	q	529	SER	N-CA	-5.41	1.39	1.46
1	a	929	HIS	ND1-CE1	5.41	1.38	1.32
3	n	338	LEU	N-CA	-5.41	1.40	1.46
3	c	174	ARG	N-CA	-5.41	1.39	1.46
4	d	36	PHE	N-CA	-5.41	1.38	1.45
6	f	215	ILE	CA-C	-5.41	1.45	1.52
7	g	7	HIS	CG-ND1	-5.41	1.32	1.38
7	g	450	ARG	NE-CZ	5.41	1.39	1.33
7	g	957	GLU	N-CA	-5.41	1.40	1.46
6	q	92	ASP	CA-C	-5.41	1.46	1.52
6	q	147	SER	CA-CB	5.41	1.62	1.53
6	f	235	GLN	CA-CB	5.40	1.62	1.53
6	f	299	GLU	C-N	5.40	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	166	ILE	N-CA	5.40	1.52	1.46
5	e	52	ARG	CD-NE	5.40	1.53	1.46
6	f	51	LEU	C-N	5.40	1.40	1.33
1	l	656	ASP	N-CA	5.39	1.52	1.46
2	m	619	SER	CA-C	-5.39	1.45	1.53
1	a	310	ILE	C-N	5.39	1.40	1.33
3	c	659	VAL	CA-CB	-5.39	1.47	1.54
1	l	593	PRO	CA-CB	5.39	1.63	1.54
7	g	444	GLU	CA-C	-5.39	1.46	1.52
1	a	71	HIS	CE1-NE2	-5.39	1.27	1.32
6	f	381	ASP	C-N	5.39	1.37	1.33
2	b	266	GLU	C-N	5.39	1.41	1.33
4	o	195	VAL	CA-CB	-5.39	1.47	1.54
1	a	817	VAL	C-N	5.39	1.39	1.33
2	b	94	ARG	CZ-NH1	5.39	1.40	1.32
7	r	1027	ASN	C-N	5.38	1.41	1.33
2	b	159	ILE	N-CA	-5.38	1.40	1.46
3	c	284	ILE	CA-C	-5.38	1.46	1.52
7	g	333	ILE	N-CA	-5.38	1.40	1.46
7	g	1157	TYR	CA-C	5.38	1.64	1.52
1	l	395	LEU	CA-CB	5.38	1.63	1.53
1	l	59	CYS	C-N	5.38	1.40	1.33
4	d	77	GLY	CA-C	-5.38	1.44	1.51
6	q	54	ALA	C-O	-5.38	1.17	1.24
7	r	862	PHE	CA-CB	5.38	1.61	1.53
2	b	353	TRP	CZ2-CH2	5.37	1.47	1.37
2	b	366	PRO	C-N	5.37	1.40	1.33
5	e	4	PHE	C-N	5.37	1.40	1.33
7	g	1010	ASP	CA-C	-5.37	1.46	1.52
1	l	626	HIS	CA-CB	5.37	1.61	1.53
6	q	284	SER	CA-CB	5.37	1.61	1.53
5	e	157	LEU	CB-CG	5.37	1.64	1.53
7	g	572	ALA	CA-C	-5.37	1.45	1.52
7	r	253	LYS	CB-CG	5.37	1.68	1.52
7	r	638	SER	CA-C	-5.37	1.48	1.53
6	q	654	GLU	CA-C	-5.37	1.45	1.52
7	r	974	ARG	CD-NE	5.37	1.53	1.46
1	a	362	LYS	C-N	5.37	1.41	1.33
6	f	670	LYS	CA-C	-5.37	1.45	1.53
1	l	9	ALA	CA-CB	5.37	1.61	1.53
1	l	610	PHE	C-O	-5.37	1.18	1.24
4	o	117	LEU	CA-CB	5.37	1.62	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	509	HIS	C-N	5.37	1.41	1.33
7	g	885	VAL	N-CA	-5.37	1.39	1.46
1	l	888	VAL	C-N	5.37	1.41	1.33
2	m	329	ARG	N-CA	5.37	1.53	1.46
2	m	621	ARG	CZ-NH2	5.37	1.40	1.33
5	p	205	ALA	CA-C	-5.37	1.45	1.52
2	b	355	GLU	C-N	5.36	1.41	1.33
6	q	416	TYR	CA-C	-5.36	1.45	1.52
4	d	219	ARG	N-CA	-5.36	1.39	1.45
3	n	349	SER	N-CA	-5.36	1.39	1.46
1	a	269	HIS	ND1-CE1	5.36	1.38	1.32
7	g	243	LYS	CA-C	-5.36	1.46	1.52
7	g	397	PRO	CA-CB	5.36	1.60	1.53
6	q	466	ASN	CA-C	-5.36	1.46	1.52
7	r	919	GLU	CA-CB	5.36	1.61	1.54
2	b	566	GLU	CA-C	-5.36	1.45	1.52
3	n	346	GLY	N-CA	5.36	1.52	1.45
7	r	435	SER	N-CA	-5.36	1.38	1.46
6	f	420	LEU	C-N	5.36	1.40	1.33
7	g	125	ARG	C-N	5.36	1.40	1.33
7	g	204	GLY	C-N	5.36	1.41	1.33
7	g	933	LEU	CA-CB	5.36	1.62	1.53
1	l	412	LYS	C-N	5.36	1.41	1.33
1	l	882	PHE	N-CA	-5.36	1.38	1.46
3	n	241	PHE	C-N	5.36	1.42	1.33
6	q	711	LEU	CA-CB	5.36	1.61	1.53
2	b	78	ASN	C-N	5.35	1.40	1.33
5	e	342	MET	C-N	5.35	1.40	1.33
1	a	734	HIS	ND1-CE1	5.35	1.38	1.32
2	b	469	PHE	CA-CB	5.35	1.61	1.53
3	c	192	LYS	C-N	5.35	1.41	1.33
1	l	484	TYR	N-CA	-5.35	1.39	1.46
7	r	363	LEU	C-N	5.35	1.40	1.33
1	a	873	LEU	N-CA	5.35	1.52	1.46
1	l	658	HIS	CB-CG	5.35	1.57	1.50
7	r	953	THR	C-N	5.35	1.40	1.33
1	l	577	PHE	CA-C	-5.35	1.45	1.52
2	b	204	PHE	CA-C	5.35	1.59	1.52
3	n	526	ILE	C-N	5.35	1.40	1.33
1	a	432	ILE	CA-C	-5.34	1.46	1.52
1	a	783	PRO	C-O	-5.34	1.17	1.24
1	a	1014	TYR	C-O	5.34	1.30	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	g	666	LYS	CA-C	-5.34	1.46	1.52
7	r	680	GLY	C-N	5.34	1.41	1.33
4	d	207	VAL	N-CA	5.34	1.52	1.46
1	l	24	VAL	CA-C	-5.34	1.46	1.52
1	l	632	GLN	CD-NE2	5.34	1.44	1.33
1	l	271	ARG	CZ-NH1	5.34	1.40	1.32
1	l	964	LEU	C-O	-5.34	1.17	1.24
2	b	317	PHE	CA-CB	5.34	1.61	1.53
6	f	225	THR	CA-C	5.34	1.59	1.52
6	f	347	MET	C-N	5.34	1.41	1.33
7	r	399	ILE	CA-C	-5.34	1.45	1.52
1	a	565	THR	CA-C	-5.34	1.46	1.52
1	a	943	LYS	C-N	5.34	1.40	1.33
3	n	267	ARG	CA-CB	5.34	1.61	1.53
1	a	283	TYR	CA-C	-5.34	1.46	1.52
5	e	319	LEU	CA-C	-5.34	1.46	1.52
3	n	317	HIS	CA-CB	5.34	1.62	1.53
4	o	201	GLU	C-N	5.34	1.41	1.33
2	b	186	ARG	NE-CZ	5.33	1.39	1.33
1	l	800	GLU	CA-CB	5.33	1.62	1.53
2	b	223	TYR	CA-CB	5.33	1.61	1.53
7	g	944	LEU	CA-C	-5.33	1.45	1.52
1	l	144	THR	CA-C	-5.33	1.46	1.52
2	m	71	LEU	CA-CB	5.33	1.60	1.53
3	n	409	LYS	C-N	5.33	1.40	1.33
4	o	170	SER	C-O	5.33	1.30	1.23
6	q	296	THR	N-CA	-5.33	1.40	1.46
7	r	482	ASN	N-CA	-5.33	1.39	1.46
4	o	33	ILE	CA-C	-5.33	1.46	1.52
7	r	280	THR	CA-C	-5.33	1.46	1.52
1	a	385	SER	CA-C	-5.33	1.46	1.53
4	d	83	LYS	C-N	5.33	1.41	1.33
6	f	43	ARG	C-N	5.33	1.41	1.33
2	b	102	LYS	CA-CB	5.33	1.61	1.54
7	g	102	HIS	CA-CB	-5.33	1.45	1.53
7	g	721	CYS	C-N	5.33	1.40	1.33
1	l	10	ASN	CA-C	-5.33	1.46	1.52
2	m	712	THR	C-N	5.33	1.40	1.33
3	n	173	LYS	CA-C	-5.33	1.45	1.52
1	a	388	ASP	CA-C	-5.32	1.46	1.52
3	c	292	GLU	C-N	5.32	1.41	1.34
7	r	786	LEU	N-CA	-5.32	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	n	136	LYS	N-CA	-5.32	1.40	1.46
1	a	242	HIS	ND1-CE1	5.32	1.37	1.32
2	b	504	ILE	CA-CB	5.32	1.62	1.54
7	g	764	PRO	CA-C	-5.32	1.46	1.52
1	a	533	LEU	C-N	5.32	1.41	1.33
3	n	360	LEU	N-CA	-5.32	1.40	1.46
7	g	319	SER	CA-C	-5.32	1.45	1.52
1	l	6	ARG	CZ-NH2	5.32	1.40	1.33
7	r	663	GLN	CA-CB	5.32	1.61	1.53
1	a	540	LEU	CA-C	-5.32	1.46	1.52
2	b	162	VAL	N-CA	-5.32	1.40	1.46
4	d	141	ILE	CA-C	-5.32	1.46	1.52
2	m	349	TYR	C-N	5.32	1.41	1.33
7	r	399	ILE	N-CA	-5.32	1.39	1.46
7	r	945	ARG	N-CA	5.31	1.52	1.46
1	a	302	THR	CA-C	-5.31	1.46	1.52
2	b	382	ASN	C-N	5.31	1.40	1.33
4	d	112	TYR	N-CA	-5.31	1.39	1.46
2	m	685	GLU	CA-C	5.31	1.59	1.52
1	l	673	CYS	C-N	5.31	1.41	1.33
5	p	130	ASN	CA-CB	5.31	1.62	1.53
2	b	387	THR	C-N	5.31	1.40	1.33
3	n	458	ARG	CD-NE	5.31	1.53	1.46
7	r	525	GLU	C-O	5.31	1.30	1.24
3	n	453	LEU	C-O	-5.31	1.18	1.24
7	r	724	ASP	N-CA	5.31	1.52	1.46
7	r	992	LYS	N-CA	-5.31	1.40	1.46
2	m	561	ARG	CD-NE	5.31	1.53	1.46
5	p	96	ARG	N-CA	-5.31	1.39	1.46
1	a	1005	ASN	N-CA	5.30	1.52	1.46
2	b	589	PRO	C-N	5.30	1.40	1.33
5	e	237	ASP	C-N	5.30	1.40	1.33
1	l	313	TYR	C-N	5.30	1.42	1.33
4	o	211	ALA	CA-C	-5.30	1.46	1.52
6	q	86	ASN	CA-C	-5.30	1.45	1.52
6	q	90	ASP	N-CA	-5.30	1.39	1.46
7	r	1152	THR	CA-CB	5.30	1.61	1.53
7	g	617	THR	CA-CB	-5.30	1.44	1.53
3	c	237	SER	CA-CB	5.30	1.62	1.53
7	g	1004	GLU	CA-CB	5.30	1.61	1.53
1	l	724	PHE	C-N	5.30	1.40	1.33
3	n	706	LYS	CA-C	5.30	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	165	ILE	CB-CG1	5.30	1.64	1.53
2	b	524	SER	C-N	5.30	1.40	1.33
6	f	419	LEU	CA-CB	5.30	1.61	1.53
1	l	1028	THR	N-CA	-5.30	1.40	1.46
3	n	532	ILE	CA-CB	5.30	1.62	1.53
7	r	33	GLU	CA-C	-5.30	1.46	1.52
2	m	266	GLU	CA-C	-5.29	1.45	1.52
4	o	203	HIS	CA-C	-5.29	1.46	1.52
1	a	1016	GLN	N-CA	-5.29	1.39	1.46
2	b	108	VAL	CA-CB	-5.29	1.47	1.54
1	l	543	SER	CA-CB	-5.29	1.46	1.54
1	l	939	THR	N-CA	5.29	1.52	1.46
3	n	237	SER	CA-C	5.29	1.59	1.52
5	p	15	VAL	C-N	5.29	1.40	1.33
5	p	44	ASN	N-CA	-5.29	1.39	1.45
1	l	426	ILE	C-N	5.29	1.40	1.33
2	m	358	CYS	C-N	5.29	1.41	1.33
3	n	448	GLN	C-N	5.29	1.41	1.33
6	q	302	LEU	C-N	5.29	1.40	1.33
7	r	339	LEU	CA-C	-5.29	1.46	1.53
1	a	897	SER	N-CA	-5.29	1.39	1.45
6	f	156	CYS	CA-C	-5.29	1.45	1.52
7	r	975	PHE	C-N	5.29	1.41	1.34
1	a	135	LEU	N-CA	-5.29	1.40	1.46
3	c	518	LEU	N-CA	-5.29	1.39	1.46
7	g	754	ASN	C-N	5.29	1.40	1.33
7	g	292	PHE	N-CA	5.29	1.52	1.46
1	l	539	GLU	CA-C	5.29	1.59	1.52
1	a	175	VAL	CA-C	-5.28	1.46	1.52
6	f	211	ILE	CA-CB	-5.28	1.47	1.54
1	l	183	LEU	CA-C	-5.28	1.46	1.52
2	m	248	LEU	CA-CB	5.28	1.61	1.53
2	m	553	ILE	CA-CB	5.28	1.60	1.55
3	c	173	LYS	CA-C	-5.28	1.46	1.53
6	q	66	LYS	C-N	5.28	1.40	1.33
7	g	30	SER	CA-CB	5.28	1.61	1.53
1	l	1001	LEU	N-CA	-5.28	1.39	1.46
7	r	1076	PHE	CA-CB	5.28	1.62	1.53
1	a	691	LYS	N-CA	-5.28	1.39	1.45
1	l	819	TYR	CA-C	-5.28	1.46	1.52
6	q	196	ALA	C-N	5.28	1.40	1.33
7	r	540	HIS	ND1-CE1	5.28	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	253	LEU	CA-C	-5.28	1.45	1.52
4	d	203	HIS	ND1-CE1	5.27	1.37	1.32
6	f	313	LEU	N-CA	-5.27	1.39	1.46
7	g	602	SER	N-CA	-5.27	1.39	1.46
7	g	1042	TRP	CA-C	-5.27	1.46	1.52
1	l	954	ARG	CZ-NH2	5.27	1.40	1.33
3	c	474	THR	C-N	5.27	1.40	1.33
6	f	671	LEU	N-CA	5.27	1.52	1.46
1	l	669	ARG	CA-CB	5.27	1.62	1.53
6	q	125	TRP	C-O	-5.27	1.18	1.24
1	a	572	ASP	CA-CB	5.27	1.61	1.53
6	f	32	PRO	C-N	5.27	1.40	1.33
7	g	552	THR	N-CA	5.27	1.51	1.45
1	l	369	ASN	N-CA	-5.27	1.40	1.46
2	b	511	TYR	CZ-OH	5.27	1.49	1.38
2	m	178	SER	C-N	5.27	1.41	1.33
3	n	557	ASN	CA-C	-5.27	1.46	1.52
7	r	70	LYS	CA-C	-5.27	1.45	1.52
7	r	761	ASN	C-N	-5.27	1.26	1.33
2	m	114	ILE	CA-CB	5.27	1.61	1.54
3	c	269	THR	CA-C	-5.26	1.46	1.52
6	f	488	GLU	CA-CB	-5.26	1.44	1.53
3	n	703	ASP	N-CA	5.26	1.52	1.46
5	e	3	PRO	CA-CB	-5.26	1.46	1.53
7	g	257	TRP	C-N	5.26	1.41	1.33
3	n	432	GLU	N-CA	-5.26	1.40	1.46
5	p	49	ASP	C-O	-5.26	1.17	1.23
7	r	842	GLU	C-N	5.26	1.41	1.33
5	e	52	ARG	NE-CZ	5.26	1.38	1.33
6	f	288	ILE	CA-CB	-5.26	1.47	1.54
4	o	135	THR	CA-C	-5.26	1.46	1.52
7	r	241	GLN	N-CA	-5.26	1.39	1.46
1	l	734	HIS	CA-CB	5.26	1.61	1.53
5	e	217	SER	CA-C	-5.25	1.45	1.52
5	p	46	GLU	CA-CB	5.25	1.62	1.53
7	r	1036	PHE	CA-CB	5.25	1.61	1.53
1	a	628	ARG	C-N	5.25	1.40	1.33
2	b	238	LYS	C-N	5.25	1.40	1.34
6	f	673	GLU	N-CA	-5.25	1.40	1.46
7	g	850	TYR	CA-CB	5.25	1.61	1.53
7	r	344	SER	CA-CB	5.25	1.61	1.53
3	c	337	GLU	CA-C	-5.25	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	388	ASN	N-CA	-5.25	1.40	1.46
5	p	39	ASP	N-CA	-5.25	1.40	1.46
7	r	1037	LEU	CA-C	-5.25	1.46	1.52
7	r	1038	ASN	C-N	5.25	1.40	1.33
2	b	424	CYS	CA-CB	5.25	1.62	1.53
3	c	253	ASP	N-CA	-5.25	1.39	1.46
7	r	434	ASP	N-CA	-5.25	1.39	1.46
7	g	868	HIS	ND1-CE1	5.25	1.37	1.32
4	o	49	LEU	C-N	5.25	1.40	1.33
4	o	81	ILE	CA-CB	-5.25	1.47	1.54
3	n	276	ILE	C-N	5.25	1.41	1.33
5	e	339	PHE	CA-C	-5.25	1.46	1.52
6	f	68	TRP	NE1-CE2	-5.25	1.31	1.37
2	b	106	ALA	CA-CB	5.24	1.61	1.53
5	p	211	HIS	ND1-CE1	5.24	1.37	1.32
1	a	834	ARG	NE-CZ	5.24	1.38	1.33
5	p	61	ILE	CA-C	-5.24	1.46	1.52
6	f	286	LEU	CA-CB	5.24	1.61	1.53
7	g	1140	VAL	C-N	5.24	1.41	1.33
2	m	473	LEU	C-N	5.24	1.40	1.33
7	r	748	ILE	C-N	5.24	1.40	1.33
1	a	56	TYR	CA-C	5.24	1.59	1.52
6	q	224	ASP	CA-C	-5.24	1.46	1.52
1	a	227	LYS	C-N	5.24	1.40	1.33
3	c	238	SER	C-N	5.24	1.40	1.34
3	c	478	ALA	CA-C	-5.24	1.45	1.52
7	g	1043	ARG	CA-C	-5.24	1.46	1.52
1	l	684	SER	CA-C	-5.24	1.46	1.52
6	q	159	ASP	CG-OD1	-5.24	1.15	1.25
3	c	350	ILE	CA-CB	-5.23	1.47	1.54
3	c	650	CYS	C-N	5.23	1.40	1.33
3	c	527	LEU	CA-CB	5.23	1.62	1.53
7	g	202	SER	CA-CB	5.23	1.60	1.53
6	q	22	PHE	CA-CB	5.23	1.61	1.53
1	a	377	GLU	CA-C	-5.23	1.46	1.52
2	b	372	ALA	C-N	5.23	1.40	1.33
2	m	182	LEU	N-CA	-5.23	1.39	1.46
2	b	743	PHE	CA-CB	5.23	1.63	1.53
3	c	525	HIS	CA-CB	5.23	1.61	1.53
6	f	389	VAL	C-N	5.23	1.40	1.33
2	m	184	CYS	CA-CB	5.23	1.61	1.53
1	a	200	ASN	C-N	5.23	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	637	ARG	CD-NE	5.23	1.53	1.46
3	c	485	GLN	CD-NE2	5.23	1.44	1.33
3	c	606	ARG	CD-NE	5.23	1.53	1.46
7	g	788	TRP	CA-C	-5.23	1.46	1.52
6	q	178	HIS	ND1-CE1	5.23	1.37	1.32
7	r	15	SER	CA-CB	5.23	1.62	1.53
7	r	249	ASN	N-CA	-5.23	1.40	1.46
6	f	223	ILE	CB-CG1	5.22	1.63	1.53
7	g	802	ILE	C-N	5.22	1.40	1.33
3	n	285	ARG	NE-CZ	5.22	1.38	1.33
1	a	944	ILE	N-CA	-5.22	1.40	1.46
4	d	252	LYS	CA-C	-5.22	1.45	1.52
7	r	422	ASN	CA-CB	5.22	1.62	1.53
7	r	1093	GLU	CA-C	-5.22	1.46	1.52
1	l	864	PHE	CA-CB	5.22	1.61	1.53
6	q	458	ARG	CZ-NH1	5.22	1.40	1.32
5	e	35	VAL	CA-C	-5.22	1.46	1.52
6	f	404	VAL	CA-C	-5.22	1.46	1.52
1	l	740	PHE	N-CA	-5.22	1.40	1.46
3	n	459	PHE	C-N	5.22	1.41	1.33
7	r	1080	SER	CA-C	-5.22	1.46	1.52
1	a	406	ARG	C-N	5.22	1.40	1.33
3	n	267	ARG	NE-CZ	5.22	1.38	1.33
5	p	135	ARG	CA-C	-5.22	1.46	1.52
6	q	464	THR	C-N	5.22	1.40	1.33
7	g	420	PHE	C-N	5.21	1.38	1.33
1	l	720	PHE	C-N	5.21	1.40	1.33
7	r	101	ASP	CA-C	-5.21	1.46	1.53
7	r	1098	THR	CA-C	-5.21	1.46	1.53
3	c	583	ASN	CA-CB	5.21	1.61	1.53
3	c	644	TYR	CA-C	-5.21	1.46	1.52
6	f	122	VAL	CA-C	-5.21	1.46	1.52
3	n	418	ILE	C-N	5.21	1.41	1.33
5	p	203	HIS	CD2-NE2	5.21	1.43	1.37
3	c	147	SER	N-CA	-5.21	1.39	1.46
6	f	288	ILE	CA-C	-5.21	1.46	1.52
6	f	330	ARG	C-N	5.21	1.40	1.33
7	g	67	TYR	CA-C	-5.21	1.46	1.52
1	l	57	SER	C-N	5.21	1.40	1.33
2	m	709	LEU	CB-CG	5.21	1.63	1.53
6	f	545	ALA	CA-CB	5.21	1.61	1.53
2	m	163	LYS	N-CA	5.21	1.52	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	73	GLN	N-CA	5.21	1.52	1.46
1	l	492	ASN	C-N	5.20	1.40	1.33
7	r	744	LYS	N-CA	-5.20	1.40	1.46
2	b	422	MET	CA-CB	5.20	1.61	1.53
5	p	140	LEU	C-N	5.20	1.39	1.33
7	r	258	SER	N-CA	-5.20	1.39	1.46
1	a	584	ASN	CA-C	-5.20	1.46	1.52
4	d	58	ARG	CD-NE	5.20	1.53	1.46
4	d	146	ILE	N-CA	-5.20	1.39	1.46
7	r	617	THR	C-N	5.20	1.41	1.33
1	a	912	ASP	C-N	5.20	1.40	1.34
2	m	161	ARG	CA-C	-5.20	1.46	1.52
5	p	22	ARG	CD-NE	5.20	1.53	1.46
7	r	1043	ARG	CA-C	-5.20	1.46	1.52
7	r	959	ASN	CA-C	-5.19	1.46	1.52
5	e	247	GLU	CA-CB	5.19	1.61	1.54
6	q	455	PRO	N-CD	-5.19	1.40	1.47
2	b	149	GLU	C-N	5.19	1.40	1.33
2	b	198	GLU	N-CA	-5.19	1.39	1.46
1	l	625	ILE	CA-C	-5.19	1.46	1.52
2	m	193	ASP	CA-CB	5.19	1.62	1.53
1	l	155	PRO	N-CA	5.19	1.53	1.47
1	l	422	ARG	CZ-NH2	5.19	1.40	1.33
2	m	297	LYS	N-CA	-5.19	1.39	1.46
4	o	279	THR	C-O	5.19	1.30	1.23
6	f	74	PHE	CG-CD2	5.19	1.49	1.38
6	f	713	GLU	N-CA	-5.19	1.40	1.46
1	a	252	THR	CA-C	-5.19	1.46	1.52
1	l	778	GLN	CA-CB	5.19	1.60	1.53
7	g	833	GLU	N-CA	-5.18	1.40	1.46
1	l	481	HIS	N-CA	-5.18	1.39	1.45
6	q	287	HIS	CG-CD2	-5.18	1.30	1.35
6	q	543	VAL	N-CA	5.18	1.52	1.46
7	r	443	TRP	CA-CB	5.18	1.61	1.53
7	r	747	LYS	CA-CB	5.18	1.61	1.53
7	g	78	SER	C-N	5.18	1.41	1.33
7	g	388	GLU	CA-C	5.18	1.58	1.52
1	a	683	SER	CA-C	-5.18	1.45	1.52
3	c	372	LEU	CA-CB	5.18	1.61	1.53
6	f	304	GLU	CA-C	5.18	1.59	1.52
1	l	799	SER	CA-C	-5.18	1.46	1.52
1	l	916	ARG	NE-CZ	5.18	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	a	645	GLU	C-N	5.18	1.40	1.33
7	g	328	HIS	CA-C	-5.18	1.46	1.53
3	n	247	PRO	CA-C	-5.18	1.46	1.52
5	p	74	SER	N-CA	-5.18	1.39	1.46
7	r	913	LYS	C-N	5.18	1.40	1.33
2	m	264	CYS	C-N	5.18	1.40	1.33
2	m	300	SER	C-N	5.18	1.41	1.33
2	b	79	MET	CA-C	-5.18	1.46	1.52
2	b	317	PHE	CA-C	5.18	1.59	1.52
3	c	579	LEU	C-N	5.18	1.41	1.33
6	f	650	GLU	C-O	5.18	1.30	1.24
6	q	391	HIS	C-N	5.18	1.40	1.33
4	d	19	TYR	C-N	5.17	1.41	1.33
2	m	159	ILE	CA-CB	5.17	1.60	1.54
4	o	198	SER	CA-CB	5.17	1.64	1.54
6	q	397	ASP	C-N	5.17	1.40	1.33
2	b	639	ARG	NE-CZ	5.17	1.38	1.33
1	a	679	LEU	C-O	-5.17	1.18	1.24
1	l	470	ILE	N-CA	-5.17	1.40	1.46
1	l	992	ASP	C-N	5.17	1.40	1.33
6	q	448	ILE	CA-CB	5.17	1.60	1.54
3	c	496	PHE	CA-C	-5.17	1.45	1.52
2	m	262	ILE	N-CA	-5.17	1.40	1.46
3	c	202	ARG	NE-CZ	5.17	1.38	1.33
4	d	202	GLY	C-N	5.17	1.40	1.33
2	m	551	ASN	CA-CB	5.17	1.61	1.53
3	c	609	TRP	CA-C	-5.17	1.47	1.52
4	d	97	VAL	C-N	5.17	1.40	1.33
3	n	181	ARG	CA-C	-5.17	1.45	1.52
7	g	516	LEU	N-CA	-5.17	1.41	1.46
2	m	190	PHE	CA-CB	5.17	1.60	1.53
2	m	469	PHE	CA-C	-5.17	1.46	1.52
2	b	110	GLY	CA-C	-5.16	1.45	1.52
5	e	173	TRP	CA-CB	5.16	1.61	1.53
7	g	410	THR	CB-OG1	-5.16	1.35	1.43
3	n	595	ARG	CA-CB	5.16	1.61	1.53
5	p	104	LEU	N-CA	-5.16	1.39	1.46
7	g	449	LEU	CA-C	-5.16	1.46	1.52
1	a	188	LYS	N-CA	5.16	1.52	1.46
3	c	329	ASP	N-CA	5.16	1.50	1.46
1	l	331	ILE	CB-CG1	5.16	1.63	1.53
5	e	70	ARG	CD-NE	5.16	1.53	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	407	VAL	C-O	-5.16	1.18	1.24
7	g	259	LYS	N-CA	-5.16	1.39	1.46
7	r	728	ALA	CA-C	-5.16	1.46	1.52
1	a	533	LEU	CA-C	-5.16	1.46	1.52
2	b	529	TRP	CA-C	-5.16	1.45	1.52
3	c	421	ILE	CA-CB	-5.16	1.48	1.54
6	f	229	ASN	N-CA	-5.16	1.39	1.46
7	g	128	ASP	CA-CB	5.16	1.61	1.53
1	a	654	LEU	C-N	5.16	1.40	1.33
7	g	425	VAL	CA-C	-5.16	1.46	1.52
6	q	591	ILE	C-N	5.16	1.40	1.33
3	c	278	PRO	CA-CB	-5.15	1.46	1.53
7	g	634	VAL	N-CA	5.15	1.52	1.46
1	l	467	GLY	CA-C	-5.15	1.44	1.51
2	m	329	ARG	CZ-NH2	5.15	1.40	1.33
6	q	327	VAL	CA-C	-5.15	1.46	1.52
7	r	447	VAL	N-CA	-5.15	1.39	1.46
7	r	610	LEU	CA-C	-5.15	1.46	1.52
1	a	193	HIS	C-N	5.15	1.40	1.33
1	a	939	THR	N-CA	-5.15	1.39	1.46
6	f	193	ILE	C-N	5.15	1.40	1.33
6	f	419	LEU	N-CA	-5.15	1.40	1.46
3	n	639	GLY	CA-C	-5.15	1.46	1.52
7	r	227	ARG	NE-CZ	5.15	1.38	1.33
1	l	711	ASN	N-CA	-5.15	1.39	1.46
1	a	248	LEU	C-N	5.15	1.40	1.33
1	a	938	ARG	CD-NE	5.15	1.53	1.46
2	b	691	VAL	N-CA	-5.15	1.40	1.46
3	c	284	ILE	CB-CG1	5.15	1.63	1.53
4	d	118	VAL	CA-CB	-5.15	1.48	1.54
6	f	413	ILE	CA-C	5.15	1.59	1.52
1	l	626	HIS	ND1-CE1	5.15	1.37	1.32
3	n	441	ARG	CZ-NH2	5.15	1.40	1.33
2	b	677	LEU	CA-C	5.14	1.59	1.52
4	d	234	TRP	CD2-CE2	5.14	1.50	1.41
5	e	79	LYS	C-N	5.14	1.40	1.33
2	m	180	THR	CA-CB	-5.14	1.45	1.53
2	m	237	LYS	CA-CB	5.14	1.61	1.53
6	q	395	CYS	N-CA	-5.14	1.40	1.46
1	a	601	PHE	CA-CB	5.14	1.64	1.54
2	b	70	LYS	C-N	5.14	1.40	1.33
6	f	524	VAL	N-CA	-5.14	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	587	TYR	C-O	5.14	1.30	1.24
7	r	518	PRO	CA-C	-5.14	1.45	1.52
1	a	701	TYR	C-N	5.14	1.40	1.33
6	f	259	TYR	N-CA	-5.14	1.40	1.46
1	l	623	LEU	N-CA	-5.14	1.39	1.46
3	n	305	ARG	C-N	5.14	1.41	1.33
3	n	327	SER	C-N	5.14	1.41	1.33
2	b	555	SER	CA-CB	5.14	1.61	1.53
1	l	236	VAL	CA-C	-5.14	1.46	1.52
4	d	219	ARG	CD-NE	5.13	1.53	1.46
6	f	354	SER	CA-CB	5.13	1.60	1.53
1	a	183	LEU	C-N	5.13	1.41	1.33
1	a	628	ARG	CD-NE	5.13	1.53	1.46
7	g	7	HIS	N-CA	-5.13	1.40	1.46
4	d	259	ARG	NE-CZ	5.13	1.38	1.33
6	f	219	LEU	N-CA	-5.13	1.40	1.46
7	g	51	LEU	N-CA	-5.13	1.40	1.46
2	m	537	GLU	CA-C	5.13	1.59	1.52
4	o	127	VAL	N-CA	-5.13	1.41	1.46
7	g	810	ASP	CA-CB	5.13	1.62	1.53
7	g	959	ASN	CA-CB	5.13	1.61	1.53
1	l	159	THR	N-CA	5.13	1.52	1.46
6	q	424	GLY	C-N	5.13	1.40	1.33
6	f	333	SER	C-N	5.13	1.41	1.33
2	m	732	ARG	NE-CZ	5.13	1.38	1.33
5	p	213	SER	C-N	5.13	1.40	1.33
7	r	756	PHE	N-CA	-5.13	1.40	1.46
2	b	538	ILE	CA-C	-5.12	1.46	1.52
7	g	135	ALA	C-N	5.12	1.40	1.33
2	b	268	SER	N-CA	5.12	1.52	1.46
7	g	686	GLU	C-N	5.12	1.41	1.34
1	l	451	ARG	NE-CZ	5.12	1.38	1.33
5	p	346	THR	CA-C	-5.12	1.46	1.52
5	p	332	LYS	C-N	5.12	1.40	1.33
7	g	413	VAL	CA-C	-5.12	1.46	1.52
5	p	344	VAL	C-N	5.12	1.40	1.33
2	b	195	GLN	N-CA	-5.12	1.41	1.46
2	b	550	HIS	C-N	5.12	1.41	1.33
6	f	538	LEU	N-CA	-5.12	1.39	1.46
7	g	147	ASP	CA-CB	5.12	1.62	1.53
1	l	848	SER	N-CA	-5.12	1.40	1.46
3	n	350	ILE	N-CA	-5.12	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	584	LYS	CA-CB	5.12	1.61	1.53
4	o	125	VAL	CA-C	-5.12	1.46	1.52
3	n	336	ALA	N-CA	-5.12	1.40	1.46
4	o	123	GLY	C-N	5.12	1.40	1.33
5	p	206	ALA	C-N	5.12	1.41	1.33
5	p	320	SER	CA-C	-5.12	1.46	1.52
6	q	531	ILE	N-CA	-5.12	1.40	1.46
7	r	422	ASN	CG-ND2	5.12	1.44	1.33
1	a	782	TYR	CA-C	5.11	1.59	1.52
3	c	248	TYR	CB-CG	-5.11	1.40	1.51
2	m	661	HIS	CB-CG	-5.11	1.43	1.50
5	p	187	ALA	CA-C	-5.11	1.46	1.52
5	p	169	PHE	N-CA	-5.11	1.39	1.46
2	b	402	ILE	CA-CB	5.11	1.60	1.54
6	f	97	HIS	CE1-NE2	5.11	1.37	1.32
1	l	230	HIS	C-N	5.11	1.41	1.33
3	n	698	GLY	CA-C	-5.11	1.46	1.52
6	q	82	LEU	CB-CG	5.11	1.63	1.53
7	r	775	ILE	N-CA	-5.11	1.40	1.46
1	a	844	CYS	CA-C	5.11	1.59	1.52
7	g	941	ILE	N-CA	-5.11	1.40	1.46
2	m	94	ARG	CZ-NH1	5.11	1.40	1.32
3	c	279	GLU	C-N	5.11	1.40	1.33
7	g	542	ASN	C-O	5.11	1.30	1.24
4	o	240	GLN	N-CA	5.11	1.52	1.46
7	r	342	GLU	CA-C	-5.11	1.45	1.52
7	r	879	ALA	CA-CB	5.11	1.61	1.53
1	a	780	HIS	CB-CG	5.11	1.57	1.50
6	f	420	LEU	CA-C	-5.11	1.45	1.52
7	g	885	VAL	CA-CB	5.11	1.61	1.54
6	q	579	GLN	CA-CB	5.11	1.61	1.53
7	r	266	SER	C-N	5.11	1.39	1.33
2	b	211	TRP	CD2-CE3	-5.10	1.32	1.40
7	g	244	LEU	CA-CB	5.10	1.59	1.53
1	a	674	LEU	C-O	-5.10	1.18	1.24
3	c	536	LEU	C-N	5.10	1.40	1.33
6	f	131	TYR	CZ-OH	5.10	1.48	1.38
6	f	584	ILE	C-N	5.10	1.40	1.33
7	g	496	SER	N-CA	-5.10	1.40	1.46
6	q	597	TYR	CA-C	-5.10	1.46	1.52
7	r	552	THR	C-N	5.10	1.40	1.33
1	a	751	ARG	CZ-NH2	5.10	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	b	176	GLU	C-O	5.10	1.30	1.24
2	b	255	ARG	C-N	5.10	1.39	1.33
3	c	517	LEU	C-N	5.10	1.40	1.33
6	f	193	ILE	CA-C	-5.10	1.45	1.52
1	a	902	THR	N-CA	5.10	1.52	1.46
4	d	78	LYS	C-N	5.10	1.39	1.33
3	n	560	LEU	CA-C	-5.10	1.45	1.52
2	m	664	VAL	CA-CB	-5.10	1.47	1.54
1	a	378	TRP	CA-CB	5.09	1.60	1.53
5	e	219	SER	N-CA	-5.09	1.40	1.46
2	m	211	TRP	C-O	-5.09	1.18	1.24
7	r	203	SER	CA-C	-5.09	1.45	1.52
7	r	257	TRP	CA-C	5.09	1.59	1.52
2	b	734	LYS	CA-CB	5.09	1.61	1.53
7	g	815	VAL	CA-C	-5.09	1.46	1.52
1	a	256	ASP	C-N	5.09	1.40	1.33
4	d	259	ARG	CA-C	-5.09	1.45	1.53
1	l	422	ARG	CD-NE	5.09	1.53	1.46
2	m	334	ASP	CA-CB	5.09	1.61	1.53
4	o	231	CYS	N-CA	-5.09	1.40	1.46
6	q	100	ASN	C-N	5.09	1.40	1.33
6	q	159	ASP	CA-C	-5.09	1.46	1.52
2	m	501	LYS	C-N	5.09	1.41	1.33
4	o	273	GLY	N-CA	-5.09	1.38	1.45
1	a	573	GLU	CA-CB	5.09	1.61	1.53
6	f	78	VAL	N-CA	-5.09	1.40	1.46
1	l	240	ASN	C-O	-5.09	1.18	1.24
5	p	164	HIS	CB-CG	-5.09	1.43	1.50
7	r	1016	PHE	N-CA	-5.09	1.39	1.46
6	f	234	GLN	CA-C	-5.08	1.46	1.53
2	m	420	THR	CA-CB	-5.08	1.45	1.53
1	a	903	ASN	C-O	-5.08	1.18	1.24
6	f	27	ASN	C-O	-5.08	1.16	1.24
1	l	874	ASN	CA-CB	5.08	1.61	1.53
2	m	674	ILE	N-CA	-5.08	1.40	1.46
3	n	619	TYR	CA-C	-5.08	1.46	1.52
4	d	110	HIS	C-O	-5.08	1.18	1.24
6	q	536	ARG	CD-NE	5.08	1.53	1.46
6	q	630	LEU	C-O	-5.08	1.18	1.24
1	a	221	ASP	C-N	5.08	1.40	1.33
3	c	509	ARG	CA-C	5.08	1.60	1.52
3	c	515	ILE	C-N	5.08	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	l	310	ILE	CA-C	5.08	1.58	1.52
7	r	889	GLN	C-O	-5.08	1.18	1.24
6	f	215	ILE	C-N	5.08	1.40	1.33
6	f	304	GLU	C-N	5.08	1.41	1.33
7	g	533	LEU	C-N	5.08	1.40	1.33
5	p	45	TRP	CA-CB	5.08	1.59	1.53
2	b	356	SER	N-CA	-5.08	1.40	1.46
7	g	577	TYR	N-CA	-5.08	1.39	1.46
7	r	924	LEU	CA-C	5.08	1.59	1.52
3	c	206	PRO	CA-CB	-5.07	1.47	1.54
7	g	712	PHE	C-N	-5.07	1.27	1.33
2	b	551	ASN	CA-C	-5.07	1.46	1.53
6	f	104	LEU	CA-CB	5.07	1.61	1.53
6	f	462	ILE	C-N	5.07	1.40	1.33
7	g	593	ILE	CA-C	5.07	1.59	1.52
7	r	711	ASN	CA-CB	5.07	1.61	1.53
5	e	235	CYS	N-CA	-5.07	1.39	1.45
7	g	364	SER	CA-CB	5.07	1.60	1.53
1	l	381	SER	CA-C	-5.07	1.46	1.52
1	l	986	LEU	N-CA	-5.07	1.40	1.46
3	c	491	LEU	CA-CB	5.07	1.61	1.53
6	q	648	ASP	CA-C	-5.07	1.46	1.52
3	n	132	ILE	CA-C	-5.07	1.46	1.52
5	p	54	HIS	C-O	-5.07	1.17	1.24
6	q	718	VAL	CA-C	-5.07	1.46	1.52
7	r	1009	LEU	C-N	5.07	1.40	1.33
7	r	1099	TYR	CA-CB	5.07	1.61	1.53
1	a	595	ILE	CB-CG1	5.07	1.63	1.53
6	f	425	LEU	CA-C	-5.07	1.46	1.52
7	g	203	SER	CA-C	-5.07	1.46	1.52
3	n	419	GLY	CA-C	-5.07	1.44	1.51
3	n	587	GLN	CA-C	-5.07	1.46	1.52
7	r	236	SER	CA-C	-5.07	1.46	1.52
1	a	376	TYR	CA-C	-5.06	1.46	1.52
1	a	501	THR	C-N	5.06	1.40	1.33
2	b	374	TYR	CA-C	-5.06	1.46	1.52
7	g	297	LEU	CA-CB	5.06	1.61	1.53
1	l	128	PHE	C-N	5.06	1.40	1.33
1	l	949	LEU	CA-C	-5.06	1.46	1.52
3	n	675	SER	CA-CB	5.06	1.62	1.53
1	a	3	CYS	N-CA	-5.06	1.39	1.45
6	f	196	ALA	N-CA	-5.06	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	m	635	GLU	CA-CB	5.06	1.61	1.53
6	q	215	ILE	CA-C	-5.06	1.46	1.52
7	r	1015	LEU	N-CA	-5.06	1.39	1.46
2	b	163	LYS	C-N	5.06	1.40	1.33
7	g	262	ASN	CA-C	-5.06	1.46	1.52
7	g	387	MET	C-N	5.06	1.40	1.33
7	g	472	MET	C-N	5.06	1.40	1.33
2	b	205	ILE	CA-C	-5.06	1.46	1.52
4	d	35	ILE	CA-CB	5.06	1.60	1.54
3	n	269	THR	CB-OG1	-5.06	1.35	1.43
3	n	286	ASN	N-CA	-5.06	1.39	1.46
7	r	154	ASN	CA-CB	5.06	1.61	1.53
7	r	240	PRO	CA-CB	5.06	1.60	1.53
3	n	343	TRP	NE1-CE2	-5.06	1.31	1.37
4	o	245	LYS	CA-CB	5.06	1.61	1.53
2	b	497	ARG	N-CA	-5.05	1.39	1.46
6	f	672	VAL	CA-C	-5.05	1.46	1.52
7	g	14	LEU	C-N	5.05	1.40	1.33
7	g	265	SER	CA-CB	5.05	1.65	1.53
7	g	836	PHE	C-N	5.05	1.41	1.33
1	l	280	LEU	CA-C	-5.05	1.46	1.52
2	m	358	CYS	N-CA	-5.05	1.40	1.46
1	l	572	ASP	CA-CB	5.05	1.61	1.53
1	l	708	ASN	C-N	5.05	1.40	1.33
6	q	621	GLN	CD-NE2	5.05	1.43	1.33
7	r	896	TYR	CA-C	-5.05	1.46	1.52
1	a	710	TYR	N-CA	-5.05	1.39	1.46
5	p	115	LYS	CA-CB	5.05	1.61	1.53
7	r	679	ASP	C-N	5.05	1.40	1.33
1	a	568	LYS	CB-CG	5.05	1.67	1.52
1	l	238	THR	CA-C	-5.05	1.46	1.53
1	l	834	ARG	NE-CZ	5.05	1.38	1.33
2	m	210	ASN	CA-CB	5.05	1.61	1.53
2	m	246	TRP	CA-CB	5.05	1.61	1.53
7	g	179	ASN	CA-CB	-5.05	1.46	1.54
1	a	610	PHE	CA-CB	5.05	1.61	1.53
3	c	438	VAL	CA-C	-5.05	1.46	1.52
6	f	213	CYS	C-N	5.05	1.40	1.33
6	f	501	PHE	CA-C	-5.05	1.46	1.53
7	g	791	VAL	C-N	5.05	1.40	1.33
1	l	96	HIS	CD2-NE2	5.05	1.43	1.37
1	l	683	SER	N-CA	-5.05	1.40	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	f	325	GLN	CA-C	-5.04	1.46	1.52
7	g	659	PRO	CA-CB	5.04	1.61	1.53
7	r	1021	LEU	N-CA	-5.04	1.40	1.46
1	a	897	SER	CA-CB	5.04	1.61	1.53
6	f	124	VAL	CA-C	5.04	1.59	1.52
7	g	1120	VAL	C-N	5.04	1.40	1.33
1	l	535	ILE	CA-CB	5.04	1.61	1.54
6	q	717	LEU	C-O	-5.04	1.18	1.24
7	r	817	THR	CA-C	-5.04	1.46	1.52
7	r	888	ILE	C-N	5.04	1.40	1.33
1	l	27	TYR	C-N	5.04	1.40	1.33
1	l	738	ARG	CD-NE	5.04	1.53	1.46
3	n	443	ASN	CA-CB	5.04	1.63	1.53
4	d	49	LEU	N-CA	-5.04	1.40	1.47
1	l	26	LEU	CA-C	-5.04	1.46	1.52
5	p	83	LEU	CB-CG	5.04	1.63	1.53
6	q	496	GLU	N-CA	-5.04	1.39	1.45
7	g	513	ASP	C-O	-5.04	1.18	1.23
1	l	334	LEU	N-CA	-5.04	1.39	1.46
3	c	441	ARG	CD-NE	5.03	1.53	1.46
6	f	687	ALA	C-N	5.03	1.41	1.34
2	m	639	ARG	N-CA	-5.03	1.40	1.46
6	q	201	LYS	C-O	-5.03	1.17	1.24
7	r	370	SER	CA-C	-5.03	1.45	1.52
7	g	998	ASN	CG-ND2	5.03	1.43	1.33
1	a	281	SER	C-N	5.03	1.40	1.33
7	g	554	GLY	N-CA	-5.03	1.39	1.45
1	l	552	ASP	N-CA	5.03	1.52	1.46
3	n	692	GLU	N-CA	-5.03	1.40	1.46
6	q	62	VAL	N-CA	5.03	1.52	1.46
6	q	722	ALA	N-CA	-5.03	1.39	1.46
1	a	309	GLY	C-N	5.03	1.39	1.33
2	b	541	THR	C-N	5.03	1.40	1.33
7	g	347	PHE	CA-C	-5.03	1.46	1.52
1	l	257	TYR	N-CA	-5.03	1.40	1.46
7	r	267	VAL	C-O	-5.03	1.18	1.24
7	r	986	ILE	CA-C	5.03	1.58	1.52
1	a	1031	ARG	CZ-NH1	5.03	1.39	1.32
2	b	161	ARG	CA-C	-5.03	1.46	1.52
6	f	398	ILE	CB-CG1	5.03	1.63	1.53
1	l	1001	LEU	C-N	5.03	1.40	1.33
7	r	289	LYS	CA-CB	5.03	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	d	13	HIS	CG-CD2	5.03	1.41	1.35
2	m	418	ALA	C-N	5.03	1.41	1.33
6	f	498	SER	C-N	5.02	1.39	1.33
3	n	702	GLN	C-N	5.02	1.40	1.33
2	b	253	VAL	CA-CB	5.02	1.60	1.54
2	b	359	GLY	CA-C	-5.02	1.46	1.52
7	g	961	SER	C-N	5.02	1.40	1.33
1	l	125	ASP	CA-C	-5.02	1.45	1.52
4	o	136	THR	CA-C	-5.02	1.46	1.52
2	b	569	LYS	CA-CB	5.02	1.61	1.53
6	q	120	TRP	C-N	5.02	1.40	1.33
6	q	331	VAL	C-N	5.02	1.41	1.33
7	r	657	LEU	CA-C	-5.02	1.46	1.52
2	b	650	LEU	C-N	5.02	1.40	1.33
5	e	331	TRP	N-CA	-5.02	1.40	1.46
1	l	803	HIS	C-N	5.02	1.40	1.33
3	n	598	LEU	C-O	-5.02	1.17	1.24
4	d	13	HIS	CE1-NE2	5.02	1.37	1.32
4	d	57	TRP	C-O	-5.02	1.18	1.24
7	g	180	SER	CA-C	-5.02	1.45	1.52
2	m	557	ALA	CA-CB	5.02	1.61	1.53
2	m	740	CYS	C-O	-5.02	1.18	1.24
6	q	332	ALA	C-N	5.02	1.40	1.33
6	f	398	ILE	CA-CB	-5.02	1.48	1.54
3	n	235	LYS	CA-C	-5.02	1.46	1.52
1	a	156	TYR	CG-CD2	5.01	1.49	1.39
3	c	306	ALA	N-CA	-5.01	1.40	1.46
3	c	391	TYR	CA-CB	5.01	1.62	1.54
3	c	451	TRP	CA-CB	5.01	1.61	1.53
1	l	991	LEU	CA-C	-5.01	1.46	1.52
1	a	265	SER	CA-C	-5.01	1.46	1.52
5	e	16	VAL	N-CA	-5.01	1.40	1.46
6	f	603	SER	C-N	5.01	1.40	1.33
1	a	740	PHE	C-N	-5.01	1.27	1.33
5	e	66	PRO	C-N	-5.01	1.27	1.34
6	f	47	GLY	N-CA	-5.01	1.39	1.45
3	n	357	ILE	C-N	5.01	1.40	1.34
7	r	809	LYS	C-N	5.01	1.40	1.33
2	b	216	ASP	N-CA	5.01	1.52	1.46
2	b	326	GLY	C-N	5.01	1.40	1.33
1	l	545	THR	C-N	5.01	1.40	1.34
3	n	160	LEU	CB-CG	5.01	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
7	r	375	PHE	CA-CB	5.01	1.62	1.53
7	r	1028	LEU	CA-CB	5.01	1.61	1.53
1	a	1035	ARG	CA-C	-5.01	1.45	1.52
6	f	38	ILE	C-N	5.01	1.40	1.33
3	n	585	PRO	CA-CB	-5.01	1.46	1.53
6	q	481	GLN	CA-C	5.01	1.59	1.52
1	a	419	ILE	CA-C	-5.01	1.46	1.52
2	b	736	ASN	N-CA	-5.01	1.40	1.46
7	g	607	SER	CA-CB	5.01	1.61	1.53
1	l	762	MET	C-N	5.01	1.40	1.33
3	n	120	GLU	C-N	-5.01	1.27	1.33
7	g	884	HIS	ND1-CE1	5.00	1.37	1.32
7	g	942	ASN	CG-ND2	5.00	1.43	1.33
7	r	1042	TRP	CA-CB	5.00	1.61	1.53
2	b	571	TYR	CA-CB	5.00	1.61	1.53
2	m	400	GLY	C-O	-5.00	1.19	1.23
6	q	482	ARG	CA-C	-5.00	1.46	1.52
7	r	224	ASN	C-O	-5.00	1.17	1.24
7	r	872	ILE	N-CA	-5.00	1.40	1.46
1	a	1017	TRP	C-N	5.00	1.40	1.33
1	l	865	LYS	C-N	5.00	1.40	1.33
3	n	208	PRO	CA-CB	-5.00	1.48	1.54
7	r	314	GLU	CA-C	-5.00	1.46	1.52
7	r	911	SER	C-O	5.00	1.30	1.24

All (5558) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	840	PHE	CA-CB-CG	-13.64	100.16	113.80
1	l	169	VAL	N-CA-C	-13.63	100.09	111.81
7	r	53	SER	N-CA-C	-13.09	97.05	113.55
3	n	116	PRO	N-CA-CB	12.47	116.58	103.23
1	a	137	PHE	CA-CB-CG	12.20	126.00	113.80
7	r	1031	PHE	CA-CB-CG	-12.16	101.64	113.80
2	b	220	ASP	CA-CB-CG	12.13	124.73	112.60
1	l	925	LEU	CA-C-N	12.11	136.51	120.28
1	l	925	LEU	C-N-CA	12.11	136.51	120.28
7	r	96	TYR	CA-C-N	11.79	133.80	122.36
7	r	96	TYR	C-N-CA	11.79	133.80	122.36
6	q	320	HIS	CA-CB-CG	11.77	125.57	113.80
1	l	882	PHE	N-CA-C	-11.66	97.67	113.18
4	d	213	SER	CA-C-O	-11.58	110.75	119.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	425	GLN	O-C-N	11.45	134.26	122.12
6	f	135	ARG	CA-C-N	11.24	131.36	119.89
6	f	135	ARG	C-N-CA	11.24	131.36	119.89
2	m	402	ILE	CA-C-N	11.21	135.67	120.54
2	m	402	ILE	C-N-CA	11.21	135.67	120.54
3	n	614	ASN	CA-CB-CG	11.18	123.78	112.60
1	a	883	GLU	CA-C-N	11.09	136.04	120.29
1	a	883	GLU	C-N-CA	11.09	136.04	120.29
5	p	160	PRO	N-CA-C	11.00	124.12	110.70
3	c	638	SER	CA-C-N	11.00	132.19	119.98
3	c	638	SER	C-N-CA	11.00	132.19	119.98
7	g	638	SER	CA-C-O	-10.99	110.65	119.66
3	c	614	ASN	CA-CB-CG	10.98	123.58	112.60
6	q	314	ILE	N-CA-C	-10.97	102.90	112.12
6	f	611	SER	N-CA-C	-10.95	92.43	109.07
7	r	347	PHE	CA-CB-CG	-10.91	102.89	113.80
7	g	451	ASN	CA-CB-CG	-10.88	101.72	112.60
2	m	401	LYS	CA-C-N	10.86	134.28	120.70
2	m	401	LYS	C-N-CA	10.86	134.28	120.70
1	l	879	PHE	CA-CB-CG	-10.84	102.96	113.80
7	g	978	GLY	O-C-N	-10.83	108.63	122.70
1	a	585	ASP	CA-C-N	10.79	134.47	120.44
1	a	585	ASP	C-N-CA	10.79	134.47	120.44
6	q	145	LEU	CA-C-N	10.79	134.74	120.28
6	q	145	LEU	C-N-CA	10.79	134.74	120.28
1	l	605	ILE	N-CA-C	-10.72	102.22	112.83
7	r	854	HIS	CA-CB-CG	-10.70	103.10	113.80
5	p	62	ASP	CA-CB-CG	10.64	123.24	112.60
7	g	57	ASN	N-CA-C	-10.63	98.97	114.39
3	n	432	GLU	CA-C-N	10.59	134.84	120.54
3	n	432	GLU	C-N-CA	10.59	134.84	120.54
4	o	145	ALA	CA-C-N	10.56	133.77	121.84
4	o	145	ALA	C-N-CA	10.56	133.77	121.84
2	b	725	ALA	N-CA-C	-10.46	100.51	113.38
7	r	1107	ASN	OD1-CG-ND2	10.42	133.02	122.60
2	b	392	GLN	CA-C-N	10.39	131.16	119.32
2	b	392	GLN	C-N-CA	10.39	131.16	119.32
7	g	118	PRO	N-CA-CB	10.37	110.18	103.23
1	l	742	GLU	N-CA-C	10.31	123.78	111.82
4	o	272	SER	CA-C-N	10.30	130.13	120.34
4	o	272	SER	C-N-CA	10.30	130.13	120.34
7	g	666	LYS	N-CA-C	-10.29	99.00	112.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	d	228	ASP	CA-CB-CG	10.28	122.88	112.60
6	q	285	ASP	CA-CB-CG	10.13	122.73	112.60
1	l	883	GLU	CA-C-N	10.05	134.15	120.38
1	l	883	GLU	C-N-CA	10.05	134.15	120.38
1	a	935	LEU	CA-C-N	10.04	133.73	120.28
1	a	935	LEU	C-N-CA	10.04	133.73	120.28
7	r	1155	VAL	N-CA-C	-10.00	101.28	111.88
5	e	62	ASP	CA-CB-CG	9.98	122.58	112.60
1	l	695	TYR	CA-C-N	9.97	131.05	119.98
1	l	695	TYR	C-N-CA	9.97	131.05	119.98
4	d	42	THR	O-C-N	-9.93	111.94	123.06
7	g	275	ILE	N-CA-CB	9.91	122.30	111.00
7	r	102	HIS	CA-CB-CG	9.90	123.70	113.80
1	a	973	SER	CA-C-N	9.89	133.54	120.28
1	a	973	SER	C-N-CA	9.89	133.54	120.28
5	p	13	HIS	CA-CB-CG	9.89	123.69	113.80
4	d	35	ILE	N-CA-CB	9.86	121.28	110.53
4	o	126	SER	CA-C-N	9.86	132.32	122.96
4	o	126	SER	C-N-CA	9.86	132.32	122.96
7	g	899	ALA	N-CA-C	9.85	122.02	111.28
2	m	200	ASN	CA-CB-CG	-9.84	102.76	112.60
7	r	628	HIS	CA-CB-CG	-9.80	104.00	113.80
1	l	295	ASN	OD1-CG-ND2	9.79	132.39	122.60
3	c	351	ASP	CA-C-N	9.77	133.37	120.28
3	c	351	ASP	C-N-CA	9.77	133.37	120.28
3	n	403	VAL	O-C-N	9.76	131.34	121.87
1	a	81	PHE	CA-CB-CG	-9.72	104.08	113.80
6	f	542	ARG	CA-C-N	9.71	132.79	120.56
6	f	542	ARG	C-N-CA	9.71	132.79	120.56
4	d	146	ILE	N-CA-C	-9.70	103.59	112.90
2	b	334	ASP	CA-C-N	9.68	133.02	120.44
2	b	334	ASP	C-N-CA	9.68	133.02	120.44
7	g	86	LEU	N-CA-C	-9.67	92.76	108.52
4	o	151	ALA	N-CA-C	9.67	125.28	108.75
7	r	292	PHE	CA-CB-CG	-9.66	104.14	113.80
1	l	693	PHE	CA-CB-CG	-9.64	104.16	113.80
1	l	795	GLU	N-CA-C	-9.64	101.03	113.17
3	c	394	ILE	N-CA-C	9.63	120.44	110.62
2	m	615	VAL	N-CA-C	-9.62	103.03	112.17
2	m	303	PHE	CA-CB-CG	9.61	123.41	113.80
3	n	406	HIS	CA-C-N	9.60	133.15	120.28
3	n	406	HIS	C-N-CA	9.60	133.15	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	335	HIS	O-C-N	-9.60	112.79	121.34
2	b	223	TYR	CA-C-N	9.60	132.98	120.60
2	b	223	TYR	C-N-CA	9.60	132.98	120.60
1	a	497	MET	N-CA-C	-9.59	100.46	113.30
7	r	920	CYS	CA-C-N	9.58	132.90	120.44
7	r	920	CYS	C-N-CA	9.58	132.90	120.44
6	f	308	VAL	CA-C-N	9.57	128.98	121.61
6	f	308	VAL	C-N-CA	9.57	128.98	121.61
7	g	835	PHE	CA-CB-CG	-9.56	104.24	113.80
5	e	22	ARG	NE-CZ-NH1	-9.55	111.95	121.50
2	b	348	GLN	N-CA-C	9.55	121.77	111.36
4	o	228	ASP	CA-CB-CG	9.53	122.13	112.60
7	g	111	HIS	CA-CB-CG	-9.52	104.28	113.80
1	a	656	ASP	CA-CB-CG	9.51	122.11	112.60
6	q	326	GLU	CA-C-N	9.51	132.54	120.56
6	q	326	GLU	C-N-CA	9.51	132.54	120.56
2	m	558	ASN	CA-C-O	9.50	130.49	120.42
1	l	406	ARG	CA-C-N	9.48	130.46	119.94
1	l	406	ARG	C-N-CA	9.48	130.46	119.94
6	q	439	SER	CA-C-N	9.48	132.98	120.28
6	q	439	SER	C-N-CA	9.48	132.98	120.28
7	g	488	LYS	CA-C-N	9.46	131.66	119.84
7	g	488	LYS	C-N-CA	9.46	131.66	119.84
6	f	186	GLU	CA-C-N	9.44	132.93	120.28
6	f	186	GLU	C-N-CA	9.44	132.93	120.28
5	p	225	GLY	N-CA-C	-9.43	102.75	113.79
7	g	739	LYS	CA-C-N	9.43	132.69	120.44
7	g	739	LYS	C-N-CA	9.43	132.69	120.44
7	r	1053	GLU	N-CA-C	-9.41	101.10	112.59
7	g	111	HIS	N-CA-C	-9.40	100.75	112.88
2	m	622	GLN	CA-C-N	9.39	132.87	120.28
2	m	622	GLN	C-N-CA	9.39	132.87	120.28
1	a	560	ASN	OD1-CG-ND2	-9.38	113.22	122.60
4	d	13	HIS	CA-CB-CG	9.38	123.18	113.80
4	o	153	TRP	N-CA-C	9.37	123.13	108.79
5	e	65	SER	CA-C-N	9.37	129.03	119.56
5	e	65	SER	C-N-CA	9.37	129.03	119.56
6	q	708	SER	CA-C-N	-9.36	108.50	121.13
6	q	708	SER	C-N-CA	-9.36	108.50	121.13
1	l	634	LEU	CA-C-N	9.34	132.80	120.28
1	l	634	LEU	C-N-CA	9.34	132.80	120.28
2	m	678	ASP	CA-C-N	9.34	132.80	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	678	ASP	C-N-CA	9.34	132.80	120.28
1	l	582	VAL	N-CA-C	-9.34	103.93	112.90
7	g	594	LEU	O-C-N	-9.31	112.25	122.12
6	f	725	SER	N-CA-C	-9.31	101.35	112.89
7	r	220	VAL	CB-CA-C	9.31	124.49	110.62
1	l	905	LEU	N-CA-CB	9.30	123.79	110.12
6	q	88	ASP	CA-CB-CG	9.27	121.87	112.60
3	c	563	SER	CA-C-N	9.26	132.47	120.44
3	c	563	SER	C-N-CA	9.26	132.47	120.44
7	g	1020	ARG	CA-C-N	9.24	132.45	120.44
7	g	1020	ARG	C-N-CA	9.24	132.45	120.44
7	g	1121	GLU	CA-C-N	9.23	133.40	120.29
7	g	1121	GLU	C-N-CA	9.23	133.40	120.29
1	l	488	THR	CA-C-N	9.22	132.64	120.28
1	l	488	THR	C-N-CA	9.22	132.64	120.28
1	l	14	TYR	N-CA-C	-9.22	101.58	112.92
4	o	152	SER	N-CA-C	9.21	122.88	108.79
6	f	602	LYS	N-CA-C	9.20	121.31	111.28
7	r	713	ASP	CA-C-N	9.19	132.39	120.44
7	r	713	ASP	C-N-CA	9.19	132.39	120.44
7	g	746	VAL	N-CA-C	9.19	120.00	110.72
7	g	517	PRO	CA-C-N	9.19	129.76	119.93
7	g	517	PRO	C-N-CA	9.19	129.76	119.93
2	b	740	CYS	CA-C-N	9.18	133.50	120.28
2	b	740	CYS	C-N-CA	9.18	133.50	120.28
1	l	967	PHE	CA-CB-CG	-9.17	104.63	113.80
7	g	917	LEU	N-CA-C	9.15	120.86	111.07
7	r	555	GLN	N-CA-C	9.13	120.84	111.07
6	f	527	VAL	N-CA-C	9.12	119.92	110.62
7	g	250	LYS	N-CA-C	-9.12	99.95	108.07
6	f	460	LYS	N-CA-C	9.12	121.22	111.28
7	r	400	PHE	CA-CB-CG	-9.10	104.70	113.80
2	m	642	TRP	N-CA-C	-9.10	101.97	113.43
2	m	542	LEU	CA-C-N	9.07	130.01	119.94
2	m	542	LEU	C-N-CA	9.07	130.01	119.94
7	r	392	ASP	CA-C-N	9.07	132.23	120.44
7	r	392	ASP	C-N-CA	9.07	132.23	120.44
7	g	10	LEU	CA-C-N	9.06	132.78	120.54
7	g	10	LEU	C-N-CA	9.06	132.78	120.54
6	q	380	ILE	N-CA-C	-9.05	104.33	113.47
1	l	159	THR	N-CA-C	-9.04	102.02	113.23
1	l	408	PHE	CA-C-N	9.04	132.74	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	408	PHE	C-N-CA	9.04	132.74	120.44
6	q	345	VAL	CA-C-N	9.04	132.40	120.28
6	q	345	VAL	C-N-CA	9.04	132.40	120.28
1	l	989	ALA	N-CA-C	-9.03	100.67	112.41
6	f	549	PHE	CA-CB-CG	-9.03	104.77	113.80
2	m	610	ASP	CA-CB-CG	9.03	121.63	112.60
3	c	230	ASP	CA-CB-CG	9.00	121.60	112.60
7	r	978	GLY	CA-C-N	9.00	132.34	120.28
7	r	978	GLY	C-N-CA	9.00	132.34	120.28
1	a	371	GLU	CA-C-N	8.98	132.31	120.28
1	a	371	GLU	C-N-CA	8.98	132.31	120.28
7	g	422	ASN	CA-CB-CG	8.96	121.56	112.60
2	b	632	GLN	CA-C-N	8.96	132.09	120.44
2	b	632	GLN	C-N-CA	8.96	132.09	120.44
3	n	410	PHE	CA-CB-CG	-8.95	104.85	113.80
2	b	269	ASP	CA-CB-CG	8.95	121.55	112.60
1	a	420	PHE	CA-CB-CG	-8.94	104.86	113.80
6	f	192	ALA	N-CA-CB	8.93	125.58	110.49
1	l	514	ASN	CA-C-N	8.93	129.85	119.94
1	l	514	ASN	C-N-CA	8.93	129.85	119.94
3	c	132	ILE	CA-C-N	8.92	132.24	120.28
3	c	132	ILE	C-N-CA	8.92	132.24	120.28
3	n	203	LYS	N-CA-C	-8.91	102.13	113.72
5	p	145	LEU	N-CA-C	-8.91	101.36	113.30
4	d	48	THR	CA-CB-OG1	8.89	122.93	109.60
3	c	589	ASN	CA-C-O	8.89	130.19	119.97
3	n	185	PHE	N-CA-C	-8.86	101.80	114.12
1	a	777	PHE	CA-CB-CG	-8.86	104.94	113.80
4	o	239	GLU	N-CA-C	-8.86	101.45	112.88
6	f	249	SER	CA-C-N	8.85	132.86	120.29
6	f	249	SER	C-N-CA	8.85	132.86	120.29
4	o	122	ASP	CA-CB-CG	8.83	121.43	112.60
7	r	760	ILE	CA-C-O	8.82	126.92	118.98
7	r	1022	LEU	N-CA-C	8.80	120.95	111.36
7	g	1082	ASP	CA-CB-CG	-8.80	103.80	112.60
3	c	690	GLN	CA-C-N	8.79	128.43	118.85
3	c	690	GLN	C-N-CA	8.79	128.43	118.85
7	r	1030	ASN	CA-C-N	8.79	131.86	120.44
7	r	1030	ASN	C-N-CA	8.79	131.86	120.44
1	a	498	HIS	CE1-NE2-CD2	-8.76	100.24	109.00
6	f	231	PHE	CA-CB-CG	8.76	122.56	113.80
2	b	168	ARG	N-CA-C	-8.76	101.02	112.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	316	ILE	O-C-N	8.76	130.49	121.91
3	n	404	GLN	CA-C-N	8.75	132.37	120.38
3	n	404	GLN	C-N-CA	8.75	132.37	120.38
3	c	191	ASP	CA-C-N	8.74	132.00	120.28
3	c	191	ASP	C-N-CA	8.74	132.00	120.28
1	a	738	ARG	N-CA-C	8.74	120.89	111.36
5	p	164	HIS	CA-CB-CG	-8.74	105.06	113.80
1	a	642	LEU	CA-C-N	8.74	133.91	121.42
1	a	642	LEU	C-N-CA	8.74	133.91	121.42
1	a	829	SER	CA-C-N	8.73	131.98	120.28
1	a	829	SER	C-N-CA	8.73	131.98	120.28
6	f	178	HIS	ND1-CE1-NE2	8.73	117.13	108.40
7	g	915	GLU	N-CA-C	-8.73	100.75	111.40
1	l	658	HIS	CA-CB-CG	8.73	122.53	113.80
4	o	146	ILE	N-CA-C	-8.73	104.23	112.96
2	b	385	ASP	N-CA-C	-8.73	92.20	110.80
7	g	7	HIS	CA-C-N	8.72	131.78	120.44
7	g	7	HIS	C-N-CA	8.72	131.78	120.44
7	g	15	SER	N-CA-C	8.71	120.77	111.28
7	r	661	GLN	N-CA-C	-8.68	101.44	114.64
1	a	16	GLU	N-CA-C	-8.67	102.25	112.92
1	a	498	HIS	ND1-CE1-NE2	8.67	117.07	108.40
1	l	911	GLU	CA-C-N	8.65	131.88	120.28
1	l	911	GLU	C-N-CA	8.65	131.88	120.28
4	d	208	ARG	NE-CZ-NH1	8.65	130.15	121.50
7	g	150	PRO	N-CA-CB	8.65	110.87	103.35
3	c	394	ILE	O-C-N	-8.62	113.51	121.87
1	a	414	ARG	NE-CZ-NH1	8.62	130.12	121.50
7	r	189	SER	CA-C-N	8.61	131.82	120.28
7	r	189	SER	C-N-CA	8.61	131.82	120.28
7	g	250	LYS	N-CA-CB	8.61	120.15	111.29
3	n	519	ARG	N-CA-C	-8.60	96.88	108.24
6	f	244	ARG	NE-CZ-NH2	8.60	126.94	119.20
7	r	774	PHE	CA-CB-CG	8.59	122.39	113.80
5	e	20	TYR	N-CA-C	-8.59	102.56	113.72
5	e	91	GLU	N-CA-C	-8.59	102.82	113.38
6	f	613	ILE	CA-C-O	-8.58	112.94	118.69
2	m	95	ILE	CA-C-O	-8.57	112.94	119.20
1	a	64	ASN	OD1-CG-ND2	8.57	131.17	122.60
3	c	534	SER	CA-C-N	8.56	132.09	120.54
3	c	534	SER	C-N-CA	8.56	132.09	120.54
7	g	978	GLY	CA-C-N	8.56	132.10	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	978	GLY	C-N-CA	8.56	132.10	120.38
1	l	780	HIS	CE1-NE2-CD2	-8.56	100.44	109.00
7	g	43	SER	CA-C-N	8.55	131.74	120.28
7	g	43	SER	C-N-CA	8.55	131.74	120.28
7	r	472	MET	N-CA-C	-8.54	103.71	114.56
1	a	870	ILE	CA-C-O	8.54	129.83	120.95
3	c	379	PHE	CA-C-N	8.54	133.65	120.75
3	c	379	PHE	C-N-CA	8.54	133.65	120.75
7	r	180	SER	N-CA-C	-8.54	101.86	112.88
2	m	492	SER	N-CA-C	-8.54	100.48	111.92
2	m	396	ASP	CA-C-N	8.53	131.31	120.56
2	m	396	ASP	C-N-CA	8.53	131.31	120.56
7	g	347	PHE	CA-CB-CG	-8.53	105.27	113.80
1	a	808	TRP	N-CA-C	-8.53	102.86	113.18
5	p	192	ILE	N-CA-C	-8.53	96.17	108.11
4	o	134	GLY	CA-C-N	8.52	132.91	120.90
4	o	134	GLY	C-N-CA	8.52	132.91	120.90
1	a	878	HIS	ND1-CE1-NE2	8.52	116.92	108.40
1	l	508	LYS	CA-C-N	8.52	131.69	120.28
1	l	508	LYS	C-N-CA	8.52	131.69	120.28
7	r	103	LYS	N-CA-C	-8.50	104.93	114.62
6	f	685	SER	N-CA-C	8.49	120.54	111.28
1	a	707	SER	CA-C-N	8.49	131.66	120.28
1	a	707	SER	C-N-CA	8.49	131.66	120.28
3	n	690	GLN	OE1-CD-NE2	8.49	131.09	122.60
2	m	694	VAL	O-C-N	-8.49	113.09	121.83
1	a	618	SER	CA-C-N	8.48	131.47	120.44
1	a	618	SER	C-N-CA	8.48	131.47	120.44
6	q	199	GLU	CA-C-N	8.47	132.32	120.29
6	q	199	GLU	C-N-CA	8.47	132.32	120.29
7	r	1020	ARG	O-C-N	8.47	130.80	122.07
2	b	181	VAL	CA-C-N	8.47	131.45	120.44
2	b	181	VAL	C-N-CA	8.47	131.45	120.44
4	d	22	LYS	N-CA-C	-8.47	103.39	114.31
6	f	30	GLN	N-CA-C	-8.46	102.72	113.72
4	d	103	ASN	N-CA-C	-8.46	100.04	111.96
2	m	587	ASP	CA-CB-CG	-8.46	104.14	112.60
7	r	1064	ARG	O-C-N	8.44	131.07	122.12
3	n	553	SER	CA-C-N	8.44	131.93	120.54
3	n	553	SER	C-N-CA	8.44	131.93	120.54
1	l	452	ASP	CA-CB-CG	-8.44	104.16	112.60
7	r	925	ASN	OD1-CG-ND2	-8.44	114.17	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	602	SER	CA-C-O	-8.43	111.49	120.42
6	q	439	SER	O-C-N	-8.42	113.40	122.07
7	r	250	LYS	CA-C-O	-8.42	113.12	120.19
3	c	487	HIS	CA-CB-CG	-8.41	105.39	113.80
7	r	66	ARG	N-CA-C	-8.41	102.20	114.39
7	r	486	ASN	CA-C-O	-8.40	111.91	121.15
1	a	26	LEU	N-CA-C	-8.40	96.50	109.52
6	q	439	SER	CA-C-O	8.40	129.64	120.82
3	c	601	PHE	CA-C-O	-8.39	111.99	120.63
4	d	154	ALA	CA-C-N	8.39	130.33	119.84
4	d	154	ALA	C-N-CA	8.39	130.33	119.84
2	m	738	LYS	CA-C-N	8.38	131.84	120.44
2	m	738	LYS	C-N-CA	8.38	131.84	120.44
2	b	180	THR	CA-C-N	8.38	131.11	120.56
2	b	180	THR	C-N-CA	8.38	131.11	120.56
7	g	227	ARG	N-CA-C	-8.37	94.61	108.76
1	l	752	HIS	ND1-CE1-NE2	8.37	116.77	108.40
3	c	483	PHE	CA-CB-CG	8.36	122.16	113.80
1	l	111	GLN	OE1-CD-NE2	8.36	130.96	122.60
1	l	401	THR	N-CA-C	-8.36	103.60	113.88
3	c	331	ARG	CA-C-N	8.36	131.91	120.46
3	c	331	ARG	C-N-CA	8.36	131.91	120.46
7	r	569	THR	N-CA-C	-8.36	102.17	111.28
6	f	648	ASP	CA-C-N	8.35	137.49	121.54
6	f	648	ASP	C-N-CA	8.35	137.49	121.54
6	q	68	TRP	CA-C-N	8.35	131.47	120.28
6	q	68	TRP	C-N-CA	8.35	131.47	120.28
6	q	417	ILE	O-C-N	-8.34	113.78	121.87
6	f	195	GLU	CA-C-N	8.34	131.28	120.44
6	f	195	GLU	C-N-CA	8.34	131.28	120.44
7	r	600	PHE	CA-C-N	8.34	131.28	120.44
7	r	600	PHE	C-N-CA	8.34	131.28	120.44
7	r	735	LEU	CA-C-O	8.34	129.39	120.55
7	g	508	ASN	OD1-CG-ND2	8.33	130.93	122.60
1	l	999	CYS	CA-C-N	8.32	131.43	120.28
1	l	999	CYS	C-N-CA	8.32	131.43	120.28
2	m	527	VAL	CA-C-N	8.32	131.43	120.28
2	m	527	VAL	C-N-CA	8.32	131.43	120.28
2	m	690	THR	CA-C-N	8.31	131.84	120.46
2	m	690	THR	C-N-CA	8.31	131.84	120.46
2	m	265	ILE	CA-C-N	8.31	131.41	120.28
2	m	265	ILE	C-N-CA	8.31	131.41	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	648	ASP	N-CA-C	-8.30	103.29	113.50
7	g	93	GLN	N-CA-C	-8.30	102.72	113.17
6	f	440	ASP	CA-CB-CG	-8.29	104.31	112.60
6	q	341	HIS	ND1-CE1-NE2	8.28	116.68	108.40
6	q	409	LYS	CA-C-N	8.28	131.38	120.28
6	q	409	LYS	C-N-CA	8.28	131.38	120.28
6	q	192	ALA	N-CA-C	-8.28	97.00	109.83
7	r	886	ALA	N-CA-C	8.28	120.31	111.28
2	b	338	VAL	CA-C-N	8.27	131.27	120.60
2	b	338	VAL	C-N-CA	8.27	131.27	120.60
7	r	517	PRO	CA-C-N	8.27	130.18	119.84
7	r	517	PRO	C-N-CA	8.27	130.18	119.84
1	a	889	LEU	CA-C-N	8.27	131.68	120.44
1	a	889	LEU	C-N-CA	8.27	131.68	120.44
7	g	517	PRO	CA-C-O	-8.26	114.21	120.73
1	l	189	VAL	N-CA-C	-8.25	96.60	108.48
3	n	159	LEU	CA-C-O	8.25	129.27	120.36
7	r	28	GLN	N-CA-C	8.25	120.36	111.36
1	a	547	VAL	CB-CA-C	8.25	123.28	112.14
6	q	378	ASP	N-CA-CB	8.24	124.42	110.49
2	m	482	TRP	CA-C-N	8.24	128.71	119.32
2	m	482	TRP	C-N-CA	8.24	128.71	119.32
4	d	63	HIS	CA-C-O	-8.23	112.43	119.76
1	l	105	ARG	N-CA-C	-8.23	100.76	113.02
6	f	380	ILE	N-CA-C	-8.23	105.12	113.10
6	q	180	PHE	CA-CB-CG	8.22	122.02	113.80
5	p	335	TYR	N-CA-C	-8.22	103.35	112.72
3	c	460	ASN	N-CA-C	-8.22	102.70	114.12
1	a	193	HIS	ND1-CE1-NE2	8.22	116.62	108.40
1	a	869	HIS	ND1-CE1-NE2	8.21	116.61	108.40
1	a	770	PHE	CA-CB-CG	-8.20	105.60	113.80
7	g	613	ILE	CA-C-O	-8.20	112.16	120.85
5	p	112	TYR	N-CA-C	-8.19	104.16	114.56
2	b	645	ALA	CA-C-N	8.16	131.05	120.44
2	b	645	ALA	C-N-CA	8.16	131.05	120.44
3	c	579	LEU	N-CA-C	-8.16	101.49	112.26
2	b	508	LEU	CA-C-N	8.16	128.22	119.90
2	b	508	LEU	C-N-CA	8.16	128.22	119.90
7	r	297	LEU	N-CA-C	-8.16	96.98	109.95
1	l	771	ASP	CA-CB-CG	8.15	120.75	112.60
2	m	235	ALA	N-CA-C	-8.15	96.32	108.79
2	m	151	ILE	CA-C-N	8.15	131.20	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	151	ILE	C-N-CA	8.15	131.20	120.28
3	n	342	LYS	N-CA-C	8.15	121.19	111.33
3	c	458	ARG	NE-CZ-NH2	-8.13	111.88	119.20
2	b	109	SER	CA-C-N	8.13	129.13	120.03
2	b	109	SER	C-N-CA	8.13	129.13	120.03
6	f	245	ARG	NE-CZ-NH1	8.13	129.63	121.50
7	r	678	TYR	CA-C-N	8.13	131.17	120.28
7	r	678	TYR	C-N-CA	8.13	131.17	120.28
1	a	934	GLU	CA-C-N	8.13	134.45	122.99
1	a	934	GLU	C-N-CA	8.13	134.45	122.99
7	g	1034	LYS	CA-C-N	8.13	131.17	120.28
7	g	1034	LYS	C-N-CA	8.13	131.17	120.28
6	f	488	GLU	O-C-N	8.13	131.42	123.29
7	r	476	GLN	CA-C-O	-8.12	112.09	120.54
6	q	105	PHE	N-CA-C	8.11	120.20	111.36
3	c	302	ASP	CA-C-N	8.11	131.40	120.77
3	c	302	ASP	C-N-CA	8.11	131.40	120.77
7	g	1026	GLY	N-CA-C	8.11	123.59	114.67
6	q	600	TRP	CA-C-N	8.11	131.14	120.28
6	q	600	TRP	C-N-CA	8.11	131.14	120.28
3	c	439	ARG	NE-CZ-NH1	8.10	129.60	121.50
4	o	102	VAL	N-CA-CB	8.10	119.36	110.53
7	r	1115	GLU	CA-C-N	8.10	130.96	120.44
7	r	1115	GLU	C-N-CA	8.10	130.96	120.44
7	r	1033	VAL	CA-C-N	8.09	130.96	120.44
7	r	1033	VAL	C-N-CA	8.09	130.96	120.44
1	a	71	HIS	ND1-CE1-NE2	8.09	116.49	108.40
7	r	488	LYS	N-CA-C	-8.09	95.93	108.55
7	g	1017	ILE	CA-C-O	-8.08	111.98	118.85
6	f	380	ILE	O-C-N	8.08	130.06	122.06
7	g	725	PHE	O-C-N	-8.08	113.36	122.09
3	n	324	TYR	N-CA-C	8.07	120.08	111.28
3	c	589	ASN	O-C-N	-8.07	112.34	122.27
7	r	898	ASP	CA-C-N	8.06	131.08	120.28
7	r	898	ASP	C-N-CA	8.06	131.08	120.28
6	f	610	GLU	N-CA-C	-8.05	102.51	113.30
7	r	768	VAL	N-CA-C	-8.05	103.32	113.22
6	q	335	HIS	CA-C-N	8.05	129.90	119.84
6	q	335	HIS	C-N-CA	8.05	129.90	119.84
7	r	560	ARG	CA-C-N	8.04	131.06	120.28
7	r	560	ARG	C-N-CA	8.04	131.06	120.28
6	f	71	GLU	CA-C-N	8.03	131.05	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	71	GLU	C-N-CA	8.03	131.05	120.28
6	q	717	LEU	CA-C-N	8.03	130.68	120.56
6	q	717	LEU	C-N-CA	8.03	130.68	120.56
1	l	418	GLN	N-CA-C	8.02	120.73	111.11
4	o	64	PRO	N-CA-CB	8.02	111.14	103.52
1	a	159	THR	N-CA-C	-8.01	101.35	112.25
1	l	850	GLU	N-CA-C	8.01	120.01	111.28
1	a	816	THR	N-CA-C	-8.00	103.47	113.55
2	b	304	ARG	N-CA-CB	8.00	121.88	110.12
3	c	614	ASN	CA-C-N	8.00	131.81	120.53
3	c	614	ASN	C-N-CA	8.00	131.81	120.53
6	q	361	SER	N-CA-CB	7.99	121.86	110.12
4	o	174	VAL	N-CA-C	-7.98	96.64	108.45
5	p	105	ASN	N-CA-C	-7.98	102.85	112.59
1	a	743	ASN	CB-CG-ND2	-7.98	104.43	116.40
1	l	613	ILE	N-CA-C	7.98	118.08	110.42
4	d	227	GLN	N-CA-C	-7.97	103.63	112.72
3	c	315	ASN	OD1-CG-ND2	7.97	130.57	122.60
6	f	526	ALA	N-CA-CB	7.96	121.62	110.07
5	p	105	ASN	CA-C-O	7.96	129.35	119.95
6	q	544	LYS	CA-C-O	-7.96	111.98	120.42
7	r	546	ILE	N-CA-CB	7.96	122.35	111.21
7	r	9	ARG	NE-CZ-NH2	-7.95	112.04	119.20
1	a	901	ARG	NE-CZ-NH2	-7.95	112.05	119.20
4	o	199	THR	N-CA-C	-7.94	95.34	108.76
1	a	279	TYR	N-CA-C	-7.93	102.89	114.39
6	q	263	ILE	N-CA-C	7.93	118.03	110.42
7	r	1081	VAL	N-CA-C	-7.93	103.47	113.22
6	f	273	ASN	CA-CB-CG	7.92	120.52	112.60
2	m	658	LEU	N-CA-C	-7.91	99.37	110.29
5	e	114	VAL	N-CA-C	-7.91	97.91	108.35
7	g	599	LYS	CA-C-N	7.91	130.72	120.44
7	g	599	LYS	C-N-CA	7.91	130.72	120.44
7	g	532	LYS	N-CA-C	7.91	119.90	111.28
1	l	458	ASN	N-CA-CB	7.91	121.47	110.56
7	g	1102	PHE	CA-C-N	7.90	127.82	119.05
7	g	1102	PHE	C-N-CA	7.90	127.82	119.05
3	n	594	LEU	CA-C-N	7.90	130.87	120.28
3	n	594	LEU	C-N-CA	7.90	130.87	120.28
2	b	387	THR	N-CA-C	-7.90	102.47	114.16
7	g	1003	VAL	N-CA-C	7.90	118.68	110.62
3	n	534	SER	CA-C-N	7.90	131.20	120.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	534	SER	C-N-CA	7.90	131.20	120.38
7	r	1082	ASP	CA-CB-CG	-7.89	104.71	112.60
6	f	602	LYS	CA-C-N	7.88	130.84	120.28
6	f	602	LYS	C-N-CA	7.88	130.84	120.28
1	a	180	ASP	CA-CB-CG	7.88	120.48	112.60
2	b	353	TRP	CA-C-N	7.88	131.62	120.28
2	b	353	TRP	C-N-CA	7.88	131.62	120.28
7	r	373	ASN	CA-C-N	7.87	134.95	122.59
7	r	373	ASN	C-N-CA	7.87	134.95	122.59
7	r	920	CYS	N-CA-C	7.87	120.56	111.11
7	r	93	GLN	N-CA-C	-7.87	103.14	112.89
5	e	239	ARG	N-CA-C	-7.86	95.44	108.34
1	l	971	ASN	CA-CB-CG	-7.86	104.74	112.60
1	a	878	HIS	CE1-NE2-CD2	-7.86	101.14	109.00
5	p	40	LYS	CA-C-N	7.85	130.65	120.44
5	p	40	LYS	C-N-CA	7.85	130.65	120.44
6	q	248	TYR	O-C-N	7.85	130.16	122.07
1	l	487	ASN	N-CA-CB	7.85	123.41	110.85
5	e	195	GLN	N-CA-C	7.85	118.60	108.24
2	m	222	GLU	CA-C-N	7.85	130.64	120.44
2	m	222	GLU	C-N-CA	7.85	130.64	120.44
7	r	782	ASP	CA-C-N	7.85	133.67	121.19
7	r	782	ASP	C-N-CA	7.85	133.67	121.19
2	b	686	ASP	N-CA-C	7.84	119.83	111.28
7	g	56	ASP	CA-CB-CG	7.84	120.44	112.60
1	l	393	HIS	ND1-CE1-NE2	7.84	116.24	108.40
7	r	955	ASP	CA-C-O	-7.84	112.24	120.55
6	q	274	GLN	O-C-N	7.84	131.39	122.22
2	m	575	LEU	CA-C-N	7.83	130.77	120.28
2	m	575	LEU	C-N-CA	7.83	130.77	120.28
1	a	135	LEU	CA-C-N	7.82	130.76	120.28
1	a	135	LEU	C-N-CA	7.82	130.76	120.28
3	c	687	PRO	CA-C-O	-7.82	112.52	121.36
5	e	243	PHE	CA-CB-CG	-7.82	105.98	113.80
6	f	529	SER	CA-C-O	-7.82	112.13	120.42
2	m	211	TRP	N-CA-C	7.81	119.43	111.07
7	g	549	MET	N-CA-CB	7.81	123.69	110.49
6	f	591	ILE	CA-C-O	-7.81	112.83	120.95
3	n	474	THR	N-CA-C	-7.81	102.71	111.14
2	b	548	SER	N-CA-C	7.80	120.68	111.71
3	n	303	VAL	CA-C-N	7.80	130.66	120.60
3	n	303	VAL	C-N-CA	7.80	130.66	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	363	GLY	N-CA-C	-7.80	102.30	115.08
2	m	483	PRO	O-C-N	7.79	131.20	122.24
1	a	915	SER	N-CA-C	7.79	119.77	111.28
3	c	370	PHE	N-CA-C	-7.79	96.19	108.90
7	r	422	ASN	CA-CB-CG	7.79	120.39	112.60
2	m	297	LYS	CA-C-N	7.79	136.42	121.54
2	m	297	LYS	C-N-CA	7.79	136.42	121.54
7	r	1091	THR	CA-C-N	7.79	127.43	119.56
7	r	1091	THR	C-N-CA	7.79	127.43	119.56
7	g	87	ASN	CA-CB-CG	7.79	120.39	112.60
7	r	595	ASN	O-C-N	-7.79	114.05	122.07
1	a	924	ARG	O-C-N	-7.79	113.99	122.09
3	n	419	GLY	CA-C-N	7.78	131.12	120.46
3	n	419	GLY	C-N-CA	7.78	131.12	120.46
3	n	322	ILE	N-CA-C	7.78	118.56	110.62
5	e	22	ARG	NE-CZ-NH2	7.77	126.20	119.20
2	b	464	TYR	CA-C-N	7.77	130.54	120.44
2	b	464	TYR	C-N-CA	7.77	130.54	120.44
6	f	555	ILE	N-CA-C	-7.77	105.44	112.90
7	r	128	ASP	CA-CB-CG	-7.77	104.83	112.60
6	f	182	LYS	CA-C-N	7.77	130.69	120.28
6	f	182	LYS	C-N-CA	7.77	130.69	120.28
1	l	164	HIS	CA-CB-CG	7.77	121.57	113.80
3	c	499	ASP	N-CA-C	-7.76	94.26	110.80
5	p	130	ASN	CA-C-N	7.76	134.52	122.49
5	p	130	ASN	C-N-CA	7.76	134.52	122.49
1	a	791	PRO	CA-C-N	7.76	130.68	120.28
1	a	791	PRO	C-N-CA	7.76	130.68	120.28
5	e	344	VAL	O-C-N	-7.76	114.98	123.20
7	r	887	TRP	N-CA-C	7.76	119.74	111.28
7	r	844	SER	N-CA-C	7.75	119.37	111.07
1	a	14	TYR	CB-CG-CD1	7.75	132.42	120.80
2	b	597	LYS	N-CA-CB	7.75	123.58	110.49
6	q	619	LYS	CA-C-N	7.75	130.66	120.28
6	q	619	LYS	C-N-CA	7.75	130.66	120.28
7	g	409	ASP	N-CA-C	-7.75	103.14	112.59
3	n	348	CYS	CA-C-O	7.74	127.56	119.05
2	m	390	TRP	CA-C-N	7.74	133.64	120.72
2	m	390	TRP	C-N-CA	7.74	133.64	120.72
4	d	79	VAL	N-CA-C	-7.73	96.59	107.80
3	n	254	GLN	CA-C-N	7.73	130.30	120.56
3	n	254	GLN	C-N-CA	7.73	130.30	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	624	LEU	O-C-N	7.73	130.44	122.09
7	g	746	VAL	CA-C-N	7.72	130.48	120.44
7	g	746	VAL	C-N-CA	7.72	130.48	120.44
7	r	220	VAL	N-CA-C	-7.72	97.36	108.48
6	q	341	HIS	CE1-NE2-CD2	-7.72	101.28	109.00
2	m	156	GLU	CB-CG-CD	-7.71	99.49	112.60
7	g	50	ARG	CA-C-N	7.71	130.93	120.44
7	g	50	ARG	C-N-CA	7.71	130.93	120.44
7	g	1124	ASN	CA-CB-CG	7.71	120.31	112.60
7	r	736	ASP	N-CA-C	7.71	121.62	111.75
3	c	588	ASN	CA-CB-CG	-7.71	104.89	112.60
5	e	23	HIS	CE1-NE2-CD2	-7.71	101.30	109.00
1	l	978	ALA	CA-C-N	7.70	130.60	120.28
1	l	978	ALA	C-N-CA	7.70	130.60	120.28
5	p	128	LEU	N-CA-C	-7.70	96.60	108.76
2	b	703	ASP	CA-CB-CG	7.69	120.29	112.60
7	g	945	ARG	NE-CZ-NH2	7.69	126.12	119.20
1	l	443	LEU	CA-C-O	7.68	128.57	120.42
1	l	488	THR	O-C-N	-7.68	114.28	122.96
2	m	342	ASN	CA-CB-CG	7.68	120.28	112.60
4	o	76	ASP	CA-CB-CG	7.68	120.28	112.60
7	g	281	ARG	N-CA-C	-7.68	96.94	108.99
2	m	248	LEU	N-CA-C	7.68	119.65	111.28
2	m	485	ALA	N-CA-C	7.68	119.28	111.07
4	d	108	ALA	CA-C-N	7.67	129.43	119.84
4	d	108	ALA	C-N-CA	7.67	129.43	119.84
5	e	310	VAL	N-CA-C	-7.67	97.03	108.46
1	l	693	PHE	N-CA-C	-7.67	103.46	114.12
7	g	382	ARG	NE-CZ-NH1	7.67	129.17	121.50
1	l	1029	ASP	CA-C-O	-7.67	112.42	120.55
6	q	601	GLN	N-CA-CB	7.67	121.39	110.12
6	f	684	ILE	CA-C-N	7.67	130.55	120.28
6	f	684	ILE	C-N-CA	7.67	130.55	120.28
7	g	337	HIS	CA-CB-CG	7.67	121.47	113.80
7	r	343	SER	N-CA-C	-7.66	103.96	113.38
3	c	163	ASP	CA-C-N	7.66	130.95	120.46
3	c	163	ASP	C-N-CA	7.66	130.95	120.46
1	l	529	SER	CB-CA-C	-7.66	98.08	110.79
7	r	223	THR	N-CA-CB	7.66	123.10	110.85
2	m	397	ILE	N-CA-C	7.65	117.77	110.42
4	d	50	THR	O-C-N	-7.65	114.62	123.27
5	e	131	ASP	CA-CB-CG	7.65	120.25	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	725	PHE	CA-CB-CG	-7.65	106.15	113.80
3	n	513	ARG	N-CA-C	7.64	121.71	112.38
1	a	396	ASP	CA-CB-CG	-7.64	104.96	112.60
6	f	114	LYS	CA-C-N	7.64	130.52	120.28
6	f	114	LYS	C-N-CA	7.64	130.52	120.28
1	l	359	THR	N-CA-C	-7.64	101.86	112.25
2	m	402	ILE	N-CA-C	7.64	117.71	110.30
7	g	131	GLU	CA-C-N	7.64	130.92	120.46
7	g	131	GLU	C-N-CA	7.64	130.92	120.46
7	r	669	VAL	N-CA-CB	7.63	119.47	110.55
7	r	156	ASN	CA-CB-CG	7.63	120.23	112.60
7	r	734	SER	CA-C-N	7.63	130.50	120.28
7	r	734	SER	C-N-CA	7.63	130.50	120.28
2	b	590	VAL	CA-C-N	7.62	130.50	120.28
2	b	590	VAL	C-N-CA	7.62	130.50	120.28
7	g	50	ARG	NE-CZ-NH1	-7.62	113.88	121.50
7	r	605	ARG	NE-CZ-NH2	-7.62	112.34	119.20
5	p	224	ILE	CA-C-N	7.61	132.50	123.44
5	p	224	ILE	C-N-CA	7.61	132.50	123.44
3	c	381	TRP	CA-C-N	7.61	131.09	120.29
3	c	381	TRP	C-N-CA	7.61	131.09	120.29
7	g	1074	ASN	N-CA-CB	7.61	123.35	110.49
7	g	424	VAL	N-CA-C	-7.60	95.19	107.28
5	e	81	VAL	CB-CA-C	-7.60	100.27	110.98
7	g	803	GLN	CA-C-N	7.59	130.87	120.46
7	g	803	GLN	C-N-CA	7.59	130.87	120.46
6	f	163	ARG	NE-CZ-NH2	-7.59	112.37	119.20
1	l	657	LEU	CA-C-N	7.59	130.31	120.44
1	l	657	LEU	C-N-CA	7.59	130.31	120.44
7	g	554	GLY	CA-C-N	7.58	130.44	120.28
7	g	554	GLY	C-N-CA	7.58	130.44	120.28
1	l	735	LYS	N-CA-CB	-7.58	98.97	110.12
2	m	736	ASN	CA-CB-CG	7.58	120.18	112.60
6	q	538	LEU	CA-C-N	7.58	131.84	120.31
6	q	538	LEU	C-N-CA	7.58	131.84	120.31
2	b	702	ALA	CA-C-O	7.58	127.98	119.41
1	l	719	PHE	CA-C-N	7.58	130.44	120.28
1	l	719	PHE	C-N-CA	7.58	130.44	120.28
3	c	643	PHE	CA-C-N	7.58	130.44	120.28
3	c	643	PHE	C-N-CA	7.58	130.44	120.28
5	e	103	THR	N-CA-C	-7.58	95.92	108.34
3	n	508	LYS	CA-C-N	7.58	132.18	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	508	LYS	C-N-CA	7.58	132.18	120.82
7	g	452	ASP	CA-CB-CG	7.57	120.17	112.60
1	a	898	ASP	CA-CB-CG	7.57	120.17	112.60
1	l	241	CYS	N-CA-CB	7.57	123.28	110.49
1	l	798	LYS	N-CA-C	-7.57	102.57	112.41
6	q	144	TRP	CA-C-N	7.57	130.42	120.28
6	q	144	TRP	C-N-CA	7.57	130.42	120.28
1	l	523	ASP	N-CA-C	-7.57	104.05	113.28
1	l	699	ILE	CB-CA-C	7.57	122.35	112.14
6	q	543	VAL	N-CA-CB	7.56	121.93	110.58
6	q	160	PHE	CA-C-N	7.56	127.20	119.56
6	q	160	PHE	C-N-CA	7.56	127.20	119.56
7	g	1081	VAL	CA-C-N	7.56	130.41	120.28
7	g	1081	VAL	C-N-CA	7.56	130.41	120.28
3	c	263	GLU	N-CA-CB	7.56	120.97	110.01
3	n	335	LEU	CA-C-N	7.55	131.02	120.29
3	n	335	LEU	C-N-CA	7.55	131.02	120.29
6	f	463	GLU	CA-C-O	-7.55	112.89	120.82
7	r	385	THR	N-CA-C	-7.55	104.21	113.50
7	g	860	LEU	N-CA-C	7.55	119.51	111.28
1	a	120	ASN	O-C-N	7.55	132.28	123.30
5	e	79	LYS	O-C-N	-7.54	113.53	122.58
5	p	177	ARG	O-C-N	7.54	131.76	122.34
2	m	590	VAL	CA-C-N	7.54	131.27	120.79
2	m	590	VAL	C-N-CA	7.54	131.27	120.79
6	q	528	HIS	CA-CB-CG	-7.54	106.26	113.80
4	d	88	ARG	N-CA-CB	7.54	124.33	110.99
5	e	235	CYS	N-CA-C	-7.53	97.87	109.24
1	a	193	HIS	CE1-NE2-CD2	-7.53	101.47	109.00
1	a	894	GLU	N-CA-C	-7.52	103.69	113.17
3	c	666	SER	CA-C-N	7.52	131.11	120.28
3	c	666	SER	C-N-CA	7.52	131.11	120.28
1	a	361	SER	CA-C-O	7.52	128.68	120.71
6	f	504	ASN	O-C-N	-7.52	113.38	123.15
6	q	94	MET	N-CA-C	-7.52	97.98	109.41
7	r	370	SER	N-CA-C	-7.52	103.70	113.17
2	b	91	TYR	CA-C-N	7.51	127.79	119.90
2	b	91	TYR	C-N-CA	7.51	127.79	119.90
2	b	467	ASN	CA-C-N	7.51	130.56	120.65
2	b	467	ASN	C-N-CA	7.51	130.56	120.65
7	r	237	MET	N-CA-C	-7.51	103.24	113.30
1	a	542	ASP	N-CA-C	-7.50	104.17	112.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	72	GLY	CA-C-N	7.50	129.22	119.84
2	m	72	GLY	C-N-CA	7.50	129.22	119.84
4	d	50	THR	CA-C-O	7.50	128.60	120.43
3	n	191	ASP	CA-C-N	7.50	130.33	120.28
3	n	191	ASP	C-N-CA	7.50	130.33	120.28
2	m	108	VAL	CA-C-N	7.50	130.64	120.44
2	m	108	VAL	C-N-CA	7.50	130.64	120.44
2	b	104	PHE	CA-C-N	7.49	130.93	120.29
2	b	104	PHE	C-N-CA	7.49	130.93	120.29
6	f	240	HIS	CE1-NE2-CD2	-7.49	101.51	109.00
1	a	498	HIS	N-CA-C	-7.49	103.71	112.92
1	l	834	ARG	O-C-N	7.49	130.06	122.12
2	m	674	ILE	CA-C-N	7.49	130.65	120.54
2	m	674	ILE	C-N-CA	7.49	130.65	120.54
2	b	112	PHE	CA-CB-CG	-7.48	106.32	113.80
7	g	337	HIS	CE1-NE2-CD2	-7.48	101.52	109.00
6	q	5	PRO	CA-C-N	7.48	130.16	120.44
6	q	5	PRO	C-N-CA	7.48	130.16	120.44
6	f	419	LEU	N-CA-C	7.47	119.43	111.28
5	e	118	PRO	CA-C-N	7.47	135.81	121.54
5	e	118	PRO	C-N-CA	7.47	135.81	121.54
3	n	509	ARG	CB-CA-C	-7.47	98.34	110.74
1	l	566	ASN	CA-C-N	7.47	130.29	120.28
1	l	566	ASN	C-N-CA	7.47	130.29	120.28
7	r	110	ILE	N-CA-C	-7.47	105.73	112.90
1	l	751	ARG	NE-CZ-NH2	7.47	125.92	119.20
1	l	893	HIS	ND1-CE1-NE2	7.47	115.87	108.40
2	m	417	ALA	N-CA-C	-7.47	106.11	114.62
2	m	742	ALA	N-CA-CB	7.47	121.21	110.16
1	a	144	THR	N-CA-C	-7.46	97.78	109.72
6	q	232	ASN	N-CA-C	-7.46	103.57	114.39
2	b	356	SER	CA-C-N	7.46	130.14	120.44
2	b	356	SER	C-N-CA	7.46	130.14	120.44
7	r	599	LYS	N-CA-CB	7.46	121.06	109.94
3	n	353	ASN	CA-CB-CG	-7.46	105.14	112.60
5	e	36	PHE	CA-CB-CG	-7.46	106.34	113.80
7	g	647	LYS	N-CA-C	7.45	119.04	111.07
1	a	651	ILE	CA-C-N	7.45	130.26	120.28
1	a	651	ILE	C-N-CA	7.45	130.26	120.28
7	r	592	GLU	CA-C-N	7.44	130.00	120.70
7	r	592	GLU	C-N-CA	7.44	130.00	120.70
3	c	504	GLU	CA-C-N	7.44	131.13	120.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	504	GLU	C-N-CA	7.44	131.13	120.79
7	g	907	THR	N-CA-C	-7.44	104.20	113.28
1	a	980	VAL	O-C-N	7.44	129.49	121.83
1	l	364	GLN	N-CA-C	-7.44	97.70	109.23
5	e	18	ASP	CA-CB-CG	7.43	120.03	112.60
6	f	65	SER	N-CA-CB	7.43	121.21	110.06
7	g	983	VAL	CA-C-O	7.43	127.29	120.30
7	r	296	GLN	N-CA-C	-7.43	96.62	108.73
1	l	653	THR	CA-C-O	7.43	128.35	120.70
1	a	130	THR	CA-CB-OG1	7.43	120.74	109.60
7	r	1039	ALA	CA-C-N	7.42	130.23	120.28
7	r	1039	ALA	C-N-CA	7.42	130.23	120.28
2	m	352	THR	CA-C-N	7.42	130.22	120.28
2	m	352	THR	C-N-CA	7.42	130.22	120.28
2	m	655	PHE	CA-CB-CG	7.42	121.22	113.80
7	r	769	ASN	N-CA-C	-7.42	103.31	112.88
3	n	205	ASN	CA-C-N	7.42	127.05	119.19
3	n	205	ASN	C-N-CA	7.42	127.05	119.19
2	b	158	PHE	CA-C-N	7.42	130.49	120.77
2	b	158	PHE	C-N-CA	7.42	130.49	120.77
4	d	60	ASP	CA-C-N	7.41	133.69	122.65
4	d	60	ASP	C-N-CA	7.41	133.69	122.65
6	q	287	HIS	CG-CD2-NE2	7.41	114.61	107.20
7	g	774	PHE	CA-C-N	7.41	130.61	120.46
7	g	774	PHE	C-N-CA	7.41	130.61	120.46
1	l	393	HIS	CE1-NE2-CD2	-7.40	101.60	109.00
2	b	685	GLU	CA-C-O	-7.40	113.08	120.70
7	r	396	LYS	CA-C-N	7.40	129.09	119.84
7	r	396	LYS	C-N-CA	7.40	129.09	119.84
1	a	657	LEU	CA-C-N	7.39	130.51	120.38
1	a	657	LEU	C-N-CA	7.39	130.51	120.38
3	c	438	VAL	CA-C-N	7.39	130.52	120.54
3	c	438	VAL	C-N-CA	7.39	130.52	120.54
7	g	832	TYR	N-CA-CB	7.39	120.73	110.01
4	o	228	ASP	N-CA-C	-7.39	103.86	113.17
7	r	942	ASN	CA-CB-CG	-7.39	105.21	112.60
1	l	676	ALA	N-CA-CB	7.39	120.73	110.01
6	q	478	ARG	CA-C-N	7.39	130.18	120.28
6	q	478	ARG	C-N-CA	7.39	130.18	120.28
3	n	302	ASP	CA-C-N	7.39	130.58	120.46
3	n	302	ASP	C-N-CA	7.39	130.58	120.46
7	g	116	ASP	N-CA-C	-7.39	102.51	112.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	1012	GLU	N-CA-C	-7.39	104.00	113.16
7	g	597	CYS	CA-C-O	-7.38	112.72	120.55
7	r	224	ASN	OD1-CG-ND2	7.38	129.98	122.60
1	a	765	PHE	CA-CB-CG	7.38	121.18	113.80
3	c	601	PHE	CA-CB-CG	7.38	121.18	113.80
2	b	621	ARG	NE-CZ-NH1	7.38	128.88	121.50
1	l	492	ASN	CA-CB-CG	-7.38	105.22	112.60
2	m	675	PHE	CA-CB-CG	7.38	121.18	113.80
1	a	735	LYS	N-CA-C	7.37	119.32	111.28
1	a	830	LEU	O-C-N	-7.37	114.31	122.12
3	c	265	HIS	CE1-NE2-CD2	-7.37	101.63	109.00
1	l	300	MET	N-CA-C	-7.37	97.73	109.59
6	q	697	GLU	O-C-N	-7.37	113.66	122.65
1	l	93	ILE	N-CA-C	-7.37	97.80	108.11
1	a	14	TYR	N-CA-CB	7.36	121.64	110.30
1	a	200	ASN	CA-CB-CG	-7.36	105.24	112.60
1	l	570	LEU	N-CA-C	7.36	119.30	111.28
1	l	586	LEU	CA-C-O	-7.36	113.03	120.90
2	m	572	SER	CA-C-N	7.36	133.01	120.72
2	m	572	SER	C-N-CA	7.36	133.01	120.72
6	q	711	LEU	CA-C-N	7.35	130.00	120.44
6	q	711	LEU	C-N-CA	7.35	130.00	120.44
6	f	475	ILE	N-CA-C	-7.35	105.55	112.83
6	f	320	HIS	CE1-NE2-CD2	-7.35	101.65	109.00
6	q	265	SER	CA-C-N	7.35	130.13	120.28
6	q	265	SER	C-N-CA	7.35	130.13	120.28
1	a	915	SER	CA-C-N	7.35	130.73	120.29
1	a	915	SER	C-N-CA	7.35	130.73	120.29
3	c	641	LYS	CA-C-O	-7.35	113.11	120.82
3	n	467	LYS	CB-CA-C	-7.34	95.40	110.38
7	g	176	GLU	CA-C-O	7.34	128.41	119.31
3	c	308	LYS	N-CA-CB	7.34	120.65	110.01
7	g	683	GLU	O-C-N	7.34	129.93	122.08
3	n	546	ARG	O-C-N	-7.34	114.34	122.12
3	n	675	SER	CA-C-N	7.34	132.54	122.34
3	n	675	SER	C-N-CA	7.34	132.54	122.34
1	a	990	ASP	CA-CB-CG	7.33	119.93	112.60
3	n	474	THR	CA-C-N	7.33	130.98	120.79
3	n	474	THR	C-N-CA	7.33	130.98	120.79
7	r	83	ASP	CA-C-O	7.33	130.47	121.89
1	a	857	GLN	N-CA-C	-7.33	104.59	113.97
4	d	292	ALA	N-CA-C	-7.33	104.34	113.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	247	GLU	CB-CG-CD	-7.33	100.14	112.60
2	b	290	GLU	CA-C-N	7.32	130.09	120.28
2	b	290	GLU	C-N-CA	7.32	130.09	120.28
3	c	554	GLU	CA-C-N	7.32	130.49	120.46
3	c	554	GLU	C-N-CA	7.32	130.49	120.46
6	f	119	ILE	N-CA-CB	7.32	120.50	110.54
2	m	100	THR	N-CA-C	-7.32	102.62	112.94
4	d	205	ASP	CA-CB-CG	7.32	119.92	112.60
1	a	820	ARG	N-CA-C	7.32	120.12	111.71
2	b	655	PHE	CA-C-O	-7.32	113.66	119.66
7	r	1151	GLU	CA-C-N	7.32	130.39	120.44
7	r	1151	GLU	C-N-CA	7.32	130.39	120.44
3	c	272	ILE	N-CA-CB	7.31	119.11	110.55
6	q	654	GLU	N-CA-C	7.31	119.33	111.36
1	a	96	HIS	CE1-NE2-CD2	-7.31	101.69	109.00
1	a	120	ASN	CA-C-O	-7.31	112.47	120.36
2	m	162	VAL	N-CA-C	7.31	120.22	111.09
2	b	343	GLN	N-CA-C	7.31	119.88	111.11
6	f	105	PHE	CA-C-N	7.31	129.94	120.44
6	f	105	PHE	C-N-CA	7.31	129.94	120.44
1	l	145	LEU	N-CA-C	-7.31	95.76	108.69
2	b	77	GLN	N-CA-CB	7.30	122.83	110.49
1	l	324	SER	CA-C-N	7.30	130.66	120.29
1	l	324	SER	C-N-CA	7.30	130.66	120.29
6	q	170	ASP	CA-CB-CG	-7.30	105.30	112.60
3	c	280	ILE	CA-C-N	7.30	130.06	120.28
3	c	280	ILE	C-N-CA	7.30	130.06	120.28
1	a	589	ASN	CA-CB-CG	7.30	119.90	112.60
3	n	115	GLY	CA-C-N	7.29	126.56	118.97
3	n	115	GLY	C-N-CA	7.29	126.56	118.97
7	r	1104	ILE	N-CA-C	-7.29	97.00	108.81
7	g	703	THR	CA-CB-OG1	7.29	120.54	109.60
5	p	30	ASP	CA-CB-CG	7.29	119.89	112.60
7	g	407	ALA	N-CA-C	-7.29	97.85	109.59
2	b	393	PRO	CA-C-N	7.29	130.64	120.29
2	b	393	PRO	C-N-CA	7.29	130.64	120.29
6	f	652	LEU	CA-C-N	7.29	130.38	120.54
6	f	652	LEU	C-N-CA	7.29	130.38	120.54
1	l	856	ILE	N-CA-C	-7.29	105.91	112.90
6	q	292	GLN	OE1-CD-NE2	-7.29	115.31	122.60
7	r	975	PHE	N-CA-C	-7.29	103.54	113.30
3	n	310	ALA	N-CA-C	7.28	118.86	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	167	PHE	CA-CB-CG	7.28	121.08	113.80
5	e	110	SER	N-CA-C	-7.28	97.38	109.24
6	f	562	TYR	N-CA-CB	7.28	120.53	109.91
1	l	64	ASN	OD1-CG-ND2	7.28	129.88	122.60
1	l	841	ALA	CA-C-N	7.28	130.03	120.28
1	l	841	ALA	C-N-CA	7.28	130.03	120.28
1	l	1029	ASP	O-C-N	7.28	129.83	122.12
1	a	210	ARG	CB-CG-CD	7.27	128.02	111.30
7	r	265	SER	N-CA-C	-7.27	97.67	108.79
1	a	22	ASN	CA-CB-CG	-7.27	105.33	112.60
3	n	171	SER	N-CA-CB	7.26	122.18	110.77
7	r	952	ASP	CA-CB-CG	7.26	119.86	112.60
3	n	439	ARG	NE-CZ-NH1	-7.26	114.24	121.50
5	p	146	ARG	O-C-N	-7.26	113.27	122.34
1	a	202	ASN	CA-CB-CG	-7.26	105.34	112.60
2	b	572	SER	N-CA-C	7.25	119.19	111.28
7	g	885	VAL	CA-C-N	7.25	130.33	120.54
7	g	885	VAL	C-N-CA	7.25	130.33	120.54
2	m	104	PHE	CA-CB-CG	7.25	121.05	113.80
3	n	233	LEU	CA-C-N	7.25	130.87	120.79
3	n	233	LEU	C-N-CA	7.25	130.87	120.79
2	m	244	TYR	N-CA-C	7.25	118.83	111.07
2	m	317	PHE	CA-CB-CG	-7.25	106.56	113.80
2	m	528	GLU	CA-C-O	-7.25	112.87	120.55
6	f	633	THR	CA-C-N	7.24	129.86	120.44
6	f	633	THR	C-N-CA	7.24	129.86	120.44
1	a	662	PHE	CA-C-N	7.24	129.85	120.44
1	a	662	PHE	C-N-CA	7.24	129.85	120.44
4	o	105	VAL	O-C-N	-7.24	113.52	122.57
1	l	671	ASP	CA-C-N	7.24	131.32	120.31
1	l	671	ASP	C-N-CA	7.24	131.32	120.31
7	r	186	PHE	CA-CB-CG	-7.24	106.56	113.80
7	r	547	PRO	CA-C-O	-7.24	115.01	120.73
5	e	23	HIS	ND1-CE1-NE2	7.24	115.64	108.40
7	r	652	HIS	CE1-NE2-CD2	-7.23	101.77	109.00
7	r	291	ILE	N-CA-CB	7.23	119.05	110.95
1	a	210	ARG	CA-C-O	-7.23	113.72	121.38
2	b	713	ILE	CA-C-N	7.23	130.37	120.46
2	b	713	ILE	C-N-CA	7.23	130.37	120.46
1	a	106	TYR	N-CA-C	-7.23	102.47	112.30
7	g	926	VAL	N-CA-C	7.23	117.99	110.62
2	m	559	PHE	CA-CB-CG	-7.23	106.57	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	554	ASN	CA-CB-CG	7.23	119.83	112.60
7	g	781	TYR	CA-C-N	7.23	129.96	120.28
7	g	781	TYR	C-N-CA	7.23	129.96	120.28
7	g	1007	SER	CA-C-O	-7.23	112.58	120.24
6	q	94	MET	N-CA-CB	7.23	122.92	111.43
5	p	23	HIS	CA-CB-CG	7.22	121.03	113.80
7	r	1141	ALA	N-CA-CB	7.22	120.74	110.12
7	r	632	LYS	N-CA-CB	7.22	122.70	110.49
3	c	158	MET	N-CA-C	-7.22	98.76	109.81
6	f	321	ALA	N-CA-C	-7.22	103.10	113.21
7	r	380	THR	N-CA-CB	7.22	123.29	110.80
6	f	568	ALA	N-CA-C	7.22	119.15	111.28
3	c	681	ALA	N-CA-CB	7.21	120.73	110.12
2	b	81	PHE	N-CA-CB	7.21	122.74	111.56
6	f	37	ASN	OD1-CG-ND2	-7.21	115.39	122.60
2	b	531	LEU	CA-C-N	7.21	126.71	118.85
2	b	531	LEU	C-N-CA	7.21	126.71	118.85
1	l	133	LEU	CA-C-O	-7.21	112.84	119.62
7	r	684	GLU	O-C-N	7.21	129.72	122.30
1	l	184	LEU	CA-C-N	7.21	128.85	120.71
1	l	184	LEU	C-N-CA	7.21	128.85	120.71
1	l	720	PHE	CA-C-N	7.21	129.94	120.28
1	l	720	PHE	C-N-CA	7.21	129.94	120.28
1	l	984	TYR	N-CA-C	7.21	118.78	111.07
4	d	9	ASN	CA-CB-CG	-7.20	105.40	112.60
6	f	544	LYS	CA-C-N	7.20	129.93	120.28
6	f	544	LYS	C-N-CA	7.20	129.93	120.28
1	l	350	ASN	CA-CB-CG	-7.20	105.40	112.60
5	p	99	ASN	CA-CB-CG	-7.20	105.40	112.60
1	l	800	GLU	N-CA-C	-7.20	104.06	112.92
6	q	417	ILE	CB-CA-C	7.20	121.86	112.14
7	r	235	ASN	CA-CB-CG	7.20	119.80	112.60
7	r	905	ASN	CA-CB-CG	7.20	119.80	112.60
6	f	286	LEU	CA-C-N	7.20	129.93	120.28
6	f	286	LEU	C-N-CA	7.20	129.93	120.28
2	m	670	PHE	CA-CB-CG	-7.20	106.60	113.80
1	a	746	CYS	CA-C-O	-7.20	110.30	120.16
7	g	387	MET	N-CA-C	-7.20	101.67	112.54
6	q	472	ALA	CA-C-N	7.19	131.61	120.82
6	q	472	ALA	C-N-CA	7.19	131.61	120.82
6	f	240	HIS	CA-CB-CG	7.19	120.99	113.80
6	f	205	ASN	CA-C-N	7.19	130.31	120.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	205	ASN	C-N-CA	7.19	130.31	120.46
7	g	235	ASN	CA-C-N	7.19	135.26	121.54
7	g	235	ASN	C-N-CA	7.19	135.26	121.54
3	n	651	ARG	N-CA-C	-7.18	105.70	114.75
7	r	304	PRO	CA-C-O	-7.18	113.39	121.43
7	g	1115	GLU	CA-C-N	7.17	129.89	120.28
7	g	1115	GLU	C-N-CA	7.17	129.89	120.28
5	e	317	THR	CA-C-N	-7.17	112.80	122.98
5	e	317	THR	C-N-CA	-7.17	112.80	122.98
7	g	59	LYS	N-CA-CB	7.17	121.90	110.86
1	l	64	ASN	N-CA-C	-7.17	103.69	113.30
6	q	586	GLN	OE1-CD-NE2	7.17	129.77	122.60
6	f	386	LEU	CA-C-N	7.17	129.88	120.28
6	f	386	LEU	C-N-CA	7.17	129.88	120.28
7	g	1	MET	CA-C-N	7.17	135.23	121.54
7	g	1	MET	C-N-CA	7.17	135.23	121.54
6	q	178	HIS	CB-CG-ND1	-7.17	111.95	122.70
7	g	881	LYS	CA-C-N	7.17	135.22	121.54
7	g	881	LYS	C-N-CA	7.17	135.22	121.54
7	g	558	SER	N-CA-C	7.16	119.09	111.28
1	a	19	GLU	CA-C-N	7.16	128.79	119.84
1	a	19	GLU	C-N-CA	7.16	128.79	119.84
1	a	430	ASN	CA-CB-CG	-7.16	105.44	112.60
4	d	137	SER	N-CA-C	-7.16	101.05	110.07
6	q	565	GLU	N-CA-CB	7.16	120.76	110.16
7	g	564	PHE	N-CA-CB	7.16	121.24	110.22
7	r	1005	LEU	N-CA-C	7.16	118.77	110.97
1	l	935	LEU	N-CA-CB	7.16	121.36	110.70
1	l	266	ASP	CA-CB-CG	7.16	119.76	112.60
7	r	287	THR	CA-C-N	7.15	129.86	120.28
7	r	287	THR	C-N-CA	7.15	129.86	120.28
6	f	65	SER	CA-C-N	7.15	129.86	120.28
6	f	65	SER	C-N-CA	7.15	129.86	120.28
2	m	547	LEU	CA-C-O	-7.15	112.97	120.55
7	r	11	ARG	CA-C-N	7.15	129.86	120.28
7	r	11	ARG	C-N-CA	7.15	129.86	120.28
7	g	940	ASP	CA-C-N	7.15	130.25	120.46
7	g	940	ASP	C-N-CA	7.15	130.25	120.46
2	m	519	ILE	CA-C-N	7.15	129.86	120.28
2	m	519	ILE	C-N-CA	7.15	129.86	120.28
6	q	287	HIS	CE1-NE2-CD2	-7.15	101.85	109.00
6	f	205	ASN	N-CA-C	-7.15	101.73	110.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	111	HIS	CE1-NE2-CD2	-7.14	101.86	109.00
1	l	966	CYS	CB-CA-C	-7.14	98.71	110.85
2	m	351	ARG	N-CA-C	-7.14	102.87	112.94
3	n	307	SER	CA-C-N	7.14	130.07	120.65
3	n	307	SER	C-N-CA	7.14	130.07	120.65
7	r	448	SER	N-CA-CB	7.14	120.84	110.06
2	b	551	ASN	CA-C-N	7.13	130.24	120.46
2	b	551	ASN	C-N-CA	7.13	130.24	120.46
3	n	205	ASN	N-CA-C	-7.13	101.80	108.22
1	a	639	LEU	O-C-N	7.13	129.79	122.09
4	d	100	ALA	N-CA-CB	7.13	122.54	110.49
7	r	1027	ASN	CA-CB-CG	7.13	119.73	112.60
2	b	323	ASP	N-CA-C	-7.13	102.89	112.94
3	c	445	LEU	N-CA-C	-7.12	97.80	108.99
5	e	222	PRO	N-CA-CB	7.12	109.65	103.31
5	p	22	ARG	N-CA-C	-7.12	104.74	113.50
3	c	177	THR	CA-C-N	7.12	133.60	121.14
3	c	177	THR	C-N-CA	7.12	133.60	121.14
7	r	187	LYS	N-CA-C	-7.12	104.20	113.17
5	e	325	ASP	N-CA-C	-7.12	103.76	113.30
5	p	242	ILE	N-CA-C	-7.12	97.35	107.75
7	r	956	ALA	O-C-N	7.12	129.67	122.12
2	m	734	LYS	CA-C-N	7.12	130.40	120.29
2	m	734	LYS	C-N-CA	7.12	130.40	120.29
6	q	720	ARG	NH1-CZ-NH2	-7.12	110.05	119.30
6	f	566	LYS	N-CA-C	7.12	119.04	111.28
2	b	213	ASN	CA-CB-CG	7.11	119.71	112.60
7	r	201	ASN	N-CA-CB	7.11	122.51	110.49
4	d	239	GLU	CB-CA-C	-7.11	102.79	109.83
3	n	406	HIS	CG-CD2-NE2	7.11	114.31	107.20
2	b	641	ASP	CA-C-N	7.11	131.12	120.31
2	b	641	ASP	C-N-CA	7.11	131.12	120.31
1	a	268	SER	CA-C-O	7.11	127.95	120.42
7	g	168	LYS	N-CA-CB	7.11	121.88	110.65
1	a	193	HIS	CA-CB-CG	-7.10	106.70	113.80
7	g	1129	LEU	CA-C-N	7.10	130.37	120.29
7	g	1129	LEU	C-N-CA	7.10	130.37	120.29
7	r	588	ILE	CA-C-N	7.10	130.75	120.38
7	r	588	ILE	C-N-CA	7.10	130.75	120.38
2	b	194	GLY	CA-C-N	7.10	131.54	120.89
2	b	194	GLY	C-N-CA	7.10	131.54	120.89
7	r	52	HIS	ND1-CE1-NE2	7.10	115.50	108.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	253	LYS	N-CA-C	-7.10	104.19	112.92
4	o	290	GLU	CA-C-N	7.10	128.06	120.11
4	o	290	GLU	C-N-CA	7.10	128.06	120.11
1	a	76	SER	N-CA-C	7.09	121.88	113.23
2	b	409	MET	CA-C-N	7.09	129.79	120.28
2	b	409	MET	C-N-CA	7.09	129.79	120.28
3	c	601	PHE	CA-C-N	7.09	128.70	119.84
3	c	601	PHE	C-N-CA	7.09	128.70	119.84
4	o	88	ARG	NE-CZ-NH1	7.09	128.59	121.50
7	r	923	HIS	CE1-NE2-CD2	-7.09	101.91	109.00
3	c	485	GLN	N-CA-CB	7.09	122.47	110.49
1	l	404	VAL	N-CA-C	-7.09	103.56	110.72
6	q	299	GLU	CA-C-O	-7.09	113.04	120.55
1	l	871	HIS	CA-CB-CG	7.09	120.89	113.80
6	q	567	ILE	N-CA-C	-7.09	102.97	113.39
7	g	1033	VAL	CA-C-N	7.08	129.77	120.28
7	g	1033	VAL	C-N-CA	7.08	129.77	120.28
6	q	380	ILE	CA-C-N	7.08	135.23	122.06
6	q	380	ILE	C-N-CA	7.08	135.23	122.06
7	r	700	GLU	CA-C-N	7.08	134.72	121.97
7	r	700	GLU	C-N-CA	7.08	134.72	121.97
7	g	1078	LEU	N-CA-C	-7.08	101.81	110.31
2	m	185	LEU	CA-C-N	7.08	129.64	120.44
2	m	185	LEU	C-N-CA	7.08	129.64	120.44
5	p	4	PHE	CA-C-O	-7.08	112.85	121.06
1	a	451	ARG	N-CA-C	7.07	118.64	111.07
7	g	180	SER	N-CA-C	-7.07	104.22	112.92
7	g	556	HIS	N-CA-C	7.07	119.89	111.33
3	n	580	LEU	N-CA-C	7.07	119.07	111.36
7	r	944	LEU	CA-C-N	7.07	129.75	120.28
7	r	944	LEU	C-N-CA	7.07	129.75	120.28
7	r	1104	ILE	CA-C-N	7.07	130.79	120.82
7	r	1104	ILE	C-N-CA	7.07	130.79	120.82
7	g	763	GLN	CA-C-N	7.07	127.10	119.89
7	g	763	GLN	C-N-CA	7.07	127.10	119.89
2	m	537	GLU	CA-C-N	7.07	129.71	120.60
2	m	537	GLU	C-N-CA	7.07	129.71	120.60
1	a	504	SER	CA-C-N	7.06	129.74	120.28
1	a	504	SER	C-N-CA	7.06	129.74	120.28
3	c	265	HIS	ND1-CE1-NE2	7.06	115.46	108.40
7	g	479	VAL	N-CA-C	-7.06	98.26	108.36
5	p	325	ASP	N-CA-CB	7.06	122.42	110.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	466	TYR	CA-C-O	7.06	128.68	120.49
1	a	596	PHE	CA-CB-CG	7.06	120.86	113.80
2	m	560	SER	CA-C-N	7.06	130.44	120.28
2	m	560	SER	C-N-CA	7.06	130.44	120.28
7	r	998	ASN	N-CA-C	7.06	119.42	110.24
2	m	168	ARG	N-CA-C	-7.06	102.70	112.30
1	a	242	HIS	CA-CB-CG	-7.05	106.75	113.80
1	a	633	VAL	CA-C-N	7.05	130.43	120.28
1	a	633	VAL	C-N-CA	7.05	130.43	120.28
4	d	46	ILE	N-CA-C	-7.05	105.91	112.96
7	r	283	VAL	N-CA-C	-7.05	97.88	108.17
7	r	986	ILE	CA-C-N	7.05	130.43	120.28
7	r	986	ILE	C-N-CA	7.05	130.43	120.28
4	d	212	TRP	O-C-N	-7.05	115.07	123.03
6	f	52	ASP	O-C-N	7.04	129.32	122.07
1	l	551	THR	CA-C-O	-7.04	113.08	120.55
1	l	477	GLN	N-CA-CB	7.04	122.91	110.37
1	l	752	HIS	CA-C-N	-7.04	111.64	122.62
1	l	752	HIS	C-N-CA	-7.04	111.64	122.62
1	l	827	GLN	CA-C-N	7.04	129.72	120.28
1	l	827	GLN	C-N-CA	7.04	129.72	120.28
5	e	55	ASP	N-CA-C	-7.04	103.02	112.94
1	l	620	HIS	CE1-NE2-CD2	-7.04	101.97	109.00
7	r	1048	LEU	CA-C-N	7.04	130.01	120.44
7	r	1048	LEU	C-N-CA	7.04	130.01	120.44
7	r	1135	SER	CA-C-N	7.04	130.01	120.44
7	r	1135	SER	C-N-CA	7.04	130.01	120.44
4	d	256	VAL	N-CA-C	-7.03	97.03	107.51
5	e	178	PHE	CA-CB-CG	-7.03	106.77	113.80
3	n	407	LEU	N-CA-CB	7.03	120.46	110.12
5	e	87	ASP	O-C-N	-7.03	113.23	121.32
7	g	201	ASN	OD1-CG-ND2	-7.03	115.57	122.60
1	a	693	PHE	CB-CA-C	-7.03	99.55	110.37
7	g	988	VAL	N-CA-CB	7.03	118.77	110.55
6	f	545	ALA	CA-C-N	7.02	129.57	120.44
6	f	545	ALA	C-N-CA	7.02	129.57	120.44
6	q	374	GLU	O-C-N	-7.02	114.83	122.07
6	q	178	HIS	CB-CG-CD2	7.02	140.33	131.20
3	n	585	PRO	CA-C-N	7.02	130.38	120.42
3	n	585	PRO	C-N-CA	7.02	130.38	120.42
3	n	680	LYS	O-C-N	7.02	129.56	122.12
1	l	543	SER	N-CA-C	-7.01	104.99	113.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	743	PHE	CB-CG-CD1	7.01	132.62	120.70
2	b	523	LEU	N-CA-C	7.01	119.95	111.82
6	f	88	ASP	N-CA-C	-7.01	99.17	110.32
3	c	321	LEU	CA-C-N	7.00	130.06	120.46
3	c	321	LEU	C-N-CA	7.00	130.06	120.46
5	e	337	ASN	CA-CB-CG	7.00	119.60	112.60
3	n	436	LYS	O-C-N	7.00	129.54	122.12
7	r	103	LYS	O-C-N	-7.00	112.57	121.67
7	r	584	LYS	CA-C-N	7.00	129.67	120.28
7	r	584	LYS	C-N-CA	7.00	129.67	120.28
7	g	1076	PHE	O-C-N	7.00	127.79	121.35
6	q	330	ARG	CA-C-N	7.00	130.05	120.46
6	q	330	ARG	C-N-CA	7.00	130.05	120.46
2	b	520	GLU	CA-C-N	7.00	129.99	120.54
2	b	520	GLU	C-N-CA	7.00	129.99	120.54
3	c	673	ASN	CA-C-O	-7.00	112.56	119.49
1	l	439	ASP	N-CA-CB	7.00	122.09	110.47
2	m	567	LEU	N-CA-C	7.00	118.99	111.36
1	a	625	ILE	CA-C-N	7.00	129.66	120.28
1	a	625	ILE	C-N-CA	7.00	129.66	120.28
6	f	211	ILE	CA-CB-CG1	7.00	122.30	110.40
7	g	531	LEU	CA-C-O	-7.00	113.13	120.55
1	a	71	HIS	CE1-NE2-CD2	-6.99	102.01	109.00
3	c	293	GLN	CA-C-N	6.99	130.04	120.46
3	c	293	GLN	C-N-CA	6.99	130.04	120.46
7	r	1156	GLU	N-CA-C	-6.99	95.91	110.80
7	r	52	HIS	CA-C-O	6.99	128.93	121.45
2	b	463	SER	CA-C-N	6.99	129.53	120.44
2	b	463	SER	C-N-CA	6.99	129.53	120.44
6	f	437	ASN	CA-C-N	6.99	129.95	120.38
6	f	437	ASN	C-N-CA	6.99	129.95	120.38
1	a	393	HIS	CG-CD2-NE2	6.99	114.19	107.20
1	a	945	VAL	N-CA-C	6.99	117.75	110.62
3	c	625	ASP	CA-CB-CG	-6.99	105.61	112.60
6	f	489	GLN	N-CA-C	-6.99	105.69	114.56
3	c	329	ASP	CA-C-O	-6.98	114.64	120.71
4	d	68	THR	N-CA-C	-6.98	101.31	111.30
2	m	203	GLU	CA-C-N	6.98	129.87	120.65
2	m	203	GLU	C-N-CA	6.98	129.87	120.65
5	e	153	GLU	N-CA-CB	6.98	122.88	110.80
7	r	892	LEU	CA-C-O	6.98	127.51	119.35
3	c	396	GLU	N-CA-C	-6.98	103.10	112.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	192	LEU	CA-C-N	6.98	134.86	121.54
2	m	192	LEU	C-N-CA	6.98	134.86	121.54
3	n	491	LEU	CA-C-N	6.98	129.96	120.54
3	n	491	LEU	C-N-CA	6.98	129.96	120.54
7	r	56	ASP	CA-C-O	-6.97	113.52	121.40
7	g	929	LEU	CA-C-N	6.97	129.62	120.28
7	g	929	LEU	C-N-CA	6.97	129.62	120.28
7	g	612	ASP	CA-C-N	6.97	130.31	120.42
7	g	612	ASP	C-N-CA	6.97	130.31	120.42
6	f	474	ASN	CA-CB-CG	6.96	119.56	112.60
5	p	87	ASP	CA-C-N	6.96	126.57	119.19
5	p	87	ASP	C-N-CA	6.96	126.57	119.19
3	c	309	LEU	CA-C-N	6.96	129.49	120.44
3	c	309	LEU	C-N-CA	6.96	129.49	120.44
6	q	711	LEU	N-CA-CB	6.96	120.50	110.06
1	a	306	ASP	CA-CB-CG	6.96	119.56	112.60
5	p	85	GLU	CA-C-N	6.96	131.81	121.72
5	p	85	GLU	C-N-CA	6.96	131.81	121.72
6	q	45	ALA	CA-C-N	6.96	129.60	120.28
6	q	45	ALA	C-N-CA	6.96	129.60	120.28
7	g	786	LEU	CA-C-N	6.96	130.17	120.29
7	g	786	LEU	C-N-CA	6.96	130.17	120.29
7	r	338	PRO	CB-CA-C	-6.96	102.49	111.46
6	f	178	HIS	CE1-NE2-CD2	-6.95	102.05	109.00
7	g	755	GLN	CA-C-O	-6.95	113.18	120.55
4	d	219	ARG	CD-NE-CZ	-6.95	114.67	124.40
2	b	699	TRP	CA-C-N	6.95	134.81	121.54
2	b	699	TRP	C-N-CA	6.95	134.81	121.54
2	b	493	ALA	N-CA-C	-6.94	105.08	113.97
2	m	396	ASP	N-CA-C	6.94	118.50	111.07
7	r	359	THR	CA-C-N	6.94	132.00	122.77
7	r	359	THR	C-N-CA	6.94	132.00	122.77
3	c	245	SER	N-CA-CB	6.94	120.36	110.44
3	c	367	GLU	CA-C-N	6.94	130.86	121.01
3	c	367	GLU	C-N-CA	6.94	130.86	121.01
1	l	15	TYR	CA-C-N	6.94	130.44	120.79
1	l	15	TYR	C-N-CA	6.94	130.44	120.79
5	p	165	LEU	CA-C-N	6.94	132.29	121.26
5	p	165	LEU	C-N-CA	6.94	132.29	121.26
1	a	872	TYR	CA-C-N	6.94	129.57	120.28
1	a	872	TYR	C-N-CA	6.94	129.57	120.28
3	n	606	ARG	NE-CZ-NH2	6.93	125.44	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	518	ILE	CA-C-N	6.93	129.57	120.28
6	q	518	ILE	C-N-CA	6.93	129.57	120.28
1	a	414	ARG	NE-CZ-NH2	-6.93	112.96	119.20
1	a	708	ASN	CA-C-N	6.93	129.29	120.56
1	a	708	ASN	C-N-CA	6.93	129.29	120.56
6	f	160	PHE	CA-CB-CG	-6.93	106.87	113.80
2	m	615	VAL	CA-C-N	6.93	132.35	122.72
2	m	615	VAL	C-N-CA	6.93	132.35	122.72
7	r	980	ILE	CA-CB-CG2	-6.93	98.72	110.50
1	a	585	ASP	CA-C-O	-6.92	113.08	120.42
5	p	240	ILE	N-CA-C	-6.92	98.48	108.17
7	r	560	ARG	CD-NE-CZ	-6.92	114.71	124.40
3	c	426	ALA	N-CA-C	6.92	118.90	111.36
5	e	70	ARG	NE-CZ-NH2	-6.92	112.97	119.20
1	l	28	VAL	N-CA-CB	6.91	123.25	111.50
1	l	456	ALA	N-CA-CB	6.91	120.09	110.07
3	n	119	ASN	CA-CB-CG	6.91	119.51	112.60
1	a	164	HIS	CE1-NE2-CD2	-6.91	102.09	109.00
2	b	621	ARG	NH1-CZ-NH2	-6.91	110.32	119.30
1	l	210	ARG	NE-CZ-NH2	6.91	125.42	119.20
7	r	1133	LEU	N-CA-C	6.91	118.50	110.97
2	m	662	TYR	CB-CG-CD2	-6.91	110.44	120.80
7	r	233	ILE	N-CA-C	-6.91	104.73	113.22
7	r	315	ALA	CA-C-N	6.91	129.26	120.56
7	r	315	ALA	C-N-CA	6.91	129.26	120.56
1	a	513	LEU	CA-C-N	6.90	129.53	120.28
1	a	513	LEU	C-N-CA	6.90	129.53	120.28
3	c	435	TYR	CA-C-O	-6.90	113.57	120.82
7	r	1021	LEU	N-CA-CB	6.90	120.02	110.01
7	r	887	TRP	O-C-N	6.90	129.44	122.12
5	e	324	ASP	N-CA-C	-6.90	104.86	112.72
1	l	269	HIS	ND1-CE1-NE2	6.90	115.30	108.40
6	q	391	HIS	CA-CB-CG	6.90	120.70	113.80
7	r	52	HIS	CE1-NE2-CD2	-6.89	102.11	109.00
2	b	422	MET	CG-SD-CE	-6.89	85.74	100.90
7	g	1025	ASP	CA-C-O	6.89	126.34	118.97
1	a	743	ASN	CB-CG-OD1	6.89	134.57	120.80
6	f	287	HIS	ND1-CE1-NE2	6.88	115.28	108.40
2	b	675	PHE	CA-CB-CG	-6.88	106.92	113.80
7	g	494	VAL	CA-C-N	6.88	129.38	120.44
7	g	494	VAL	C-N-CA	6.88	129.38	120.44
3	n	521	SER	N-CA-C	-6.88	96.15	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	960	ILE	CA-C-N	6.88	129.38	120.44
7	r	960	ILE	C-N-CA	6.88	129.38	120.44
3	c	523	ASN	N-CA-C	-6.88	104.70	113.23
1	a	830	LEU	CA-C-N	6.87	129.38	120.44
1	a	830	LEU	C-N-CA	6.87	129.38	120.44
6	q	241	SER	O-C-N	6.87	129.40	122.12
6	f	344	ARG	CD-NE-CZ	-6.87	114.79	124.40
1	a	808	TRP	CA-C-N	6.87	129.36	120.44
1	a	808	TRP	C-N-CA	6.87	129.36	120.44
1	a	901	ARG	N-CA-CB	6.87	120.21	110.12
2	m	167	GLY	N-CA-C	-6.86	105.75	115.43
6	q	34	ASP	CA-CB-CG	-6.86	105.74	112.60
3	c	665	VAL	N-CA-CB	6.86	118.58	110.55
3	c	328	ASN	CA-CB-CG	6.86	119.46	112.60
3	n	394	ILE	N-CA-C	-6.86	106.31	112.90
1	a	658	HIS	CB-CG-CD2	-6.86	122.28	131.20
5	e	72	ILE	N-CA-C	-6.86	98.51	108.11
1	a	445	ASN	CA-C-N	6.86	129.76	120.44
1	a	445	ASN	C-N-CA	6.86	129.76	120.44
1	a	1029	ASP	CA-C-N	6.86	129.47	120.28
1	a	1029	ASP	C-N-CA	6.86	129.47	120.28
7	g	568	LEU	O-C-N	6.86	129.39	122.12
3	n	355	SER	CA-C-N	6.86	129.47	120.28
3	n	355	SER	C-N-CA	6.86	129.47	120.28
7	g	552	THR	CA-C-N	6.85	129.46	120.28
7	g	552	THR	C-N-CA	6.85	129.46	120.28
6	f	4	SER	N-CA-C	-6.85	100.30	108.25
4	o	88	ARG	NE-CZ-NH2	-6.85	113.03	119.20
6	f	410	SER	O-C-N	6.85	129.38	122.12
1	l	551	THR	O-C-N	6.85	129.38	122.12
7	g	957	GLU	N-CA-C	6.85	118.40	111.07
3	n	516	THR	N-CA-C	-6.85	104.13	113.30
5	p	190	GLN	O-C-N	-6.85	115.22	123.16
3	c	587	GLN	OE1-CD-NE2	-6.84	115.76	122.60
3	n	270	SER	CA-C-N	6.84	129.75	120.44
3	n	270	SER	C-N-CA	6.84	129.75	120.44
1	l	170	SER	CA-C-O	-6.84	114.76	120.71
3	n	631	GLU	N-CA-C	6.84	118.82	111.36
7	r	948	GLN	N-CA-C	6.84	119.61	111.33
1	l	763	THR	O-C-N	-6.84	114.35	122.15
1	l	990	ASP	N-CA-C	-6.84	104.75	113.23
6	q	127	LYS	N-CA-C	6.84	118.73	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	643	PHE	CA-CB-CG	-6.84	106.96	113.80
7	r	146	MET	N-CA-C	-6.84	98.91	109.24
7	g	540	HIS	N-CA-C	-6.84	104.14	113.30
7	r	326	PHE	N-CA-CB	6.83	122.04	110.49
2	m	109	SER	CA-C-N	6.83	127.53	119.94
2	m	109	SER	C-N-CA	6.83	127.53	119.94
7	r	998	ASN	OD1-CG-ND2	6.83	129.43	122.60
1	a	504	SER	N-CA-C	-6.83	98.63	108.60
1	a	673	CYS	O-C-N	6.83	129.47	122.09
7	g	1117	ILE	O-C-N	6.83	128.50	121.87
7	r	923	HIS	CA-C-N	6.83	129.43	120.28
7	r	923	HIS	C-N-CA	6.83	129.43	120.28
7	g	995	THR	CA-CB-OG1	6.83	119.84	109.60
1	a	164	HIS	CG-CD2-NE2	6.83	114.03	107.20
1	l	1016	GLN	OE1-CD-NE2	6.83	129.43	122.60
2	m	178	SER	CA-C-N	6.83	129.98	120.29
2	m	178	SER	C-N-CA	6.83	129.98	120.29
7	g	596	CYS	CA-C-N	6.82	129.42	120.28
7	g	596	CYS	C-N-CA	6.82	129.42	120.28
5	p	159	ILE	O-C-N	-6.82	112.41	120.66
2	m	695	ILE	O-C-N	6.82	128.49	121.87
5	p	164	HIS	CE1-NE2-CD2	-6.82	102.18	109.00
6	f	474	ASN	OD1-CG-ND2	-6.82	115.78	122.60
7	r	556	HIS	N-CA-CB	6.82	120.25	110.16
7	r	792	LEU	N-CA-C	6.82	120.86	112.54
3	n	544	LYS	CA-C-N	6.82	129.41	120.28
3	n	544	LYS	C-N-CA	6.82	129.41	120.28
2	b	292	LEU	CA-C-N	6.81	130.09	120.28
2	b	292	LEU	C-N-CA	6.81	130.09	120.28
2	b	317	PHE	N-CA-C	6.81	118.36	111.07
4	o	188	ASN	CA-CB-CG	-6.81	105.79	112.60
7	r	1150	TYR	N-CA-C	-6.81	102.58	111.71
6	f	499	ILE	CA-C-N	6.81	133.76	122.73
6	f	499	ILE	C-N-CA	6.81	133.76	122.73
7	r	10	LEU	CA-C-N	6.81	129.29	120.44
7	r	10	LEU	C-N-CA	6.81	129.29	120.44
4	d	63	HIS	CE1-NE2-CD2	-6.81	102.19	109.00
1	l	165	PHE	O-C-N	-6.81	115.07	123.44
1	a	573	GLU	O-C-N	-6.80	114.91	122.12
5	e	339	PHE	CA-CB-CG	-6.80	107.00	113.80
6	f	474	ASN	CA-C-N	6.80	132.23	122.09
6	f	474	ASN	C-N-CA	6.80	132.23	122.09

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	595	ARG	N-CA-C	6.80	118.70	111.28
4	o	144	HIS	ND1-CE1-NE2	6.80	115.20	108.40
2	b	287	ASP	N-CA-CB	6.80	120.70	110.22
7	g	251	PRO	CA-C-N	6.80	132.48	122.82
7	g	251	PRO	C-N-CA	6.80	132.48	122.82
1	l	873	LEU	N-CA-CB	6.80	119.88	110.01
1	a	994	ILE	CA-C-N	6.80	129.28	120.44
1	a	994	ILE	C-N-CA	6.80	129.28	120.44
2	b	232	ASP	N-CA-C	-6.80	97.32	108.41
1	a	613	ILE	N-CA-C	6.80	116.95	110.42
3	c	341	GLN	CA-C-N	6.80	129.39	120.28
3	c	341	GLN	C-N-CA	6.80	129.39	120.28
6	q	498	SER	CA-C-N	6.80	129.67	120.63
6	q	498	SER	C-N-CA	6.80	129.67	120.63
7	r	653	VAL	N-CA-CB	6.80	118.50	110.55
3	c	143	ARG	NE-CZ-NH1	-6.79	114.71	121.50
2	b	532	PRO	N-CA-C	-6.79	104.31	113.40
7	g	394	LYS	N-CA-C	-6.79	104.90	113.72
3	c	116	PRO	N-CA-CB	6.79	110.49	103.23
1	a	869	HIS	CE1-NE2-CD2	-6.79	102.22	109.00
6	f	62	VAL	N-CA-C	6.79	116.91	110.53
7	g	832	TYR	CB-CA-C	-6.79	100.23	110.88
4	o	82	TRP	N-CA-C	-6.79	99.54	109.18
6	f	385	LEU	CA-C-N	6.78	129.26	120.44
6	f	385	LEU	C-N-CA	6.78	129.26	120.44
7	g	190	GLU	N-CA-C	6.78	119.51	111.71
1	l	492	ASN	OD1-CG-ND2	-6.78	115.82	122.60
6	f	153	LEU	N-CA-CB	6.78	121.61	110.69
6	q	122	VAL	CA-C-N	6.78	129.25	120.44
6	q	122	VAL	C-N-CA	6.78	129.25	120.44
1	l	903	ASN	CA-C-N	6.78	129.25	120.44
1	l	903	ASN	C-N-CA	6.78	129.25	120.44
6	q	13	THR	N-CA-CB	6.78	120.16	110.13
2	b	557	ALA	CA-C-O	6.78	127.73	120.55
6	f	146	ASN	CA-C-N	6.78	130.61	120.31
6	f	146	ASN	C-N-CA	6.78	130.61	120.31
6	f	157	ASP	CA-CB-CG	6.78	119.38	112.60
3	c	329	ASP	CA-C-N	6.78	126.37	119.19
3	c	329	ASP	C-N-CA	6.78	126.37	119.19
3	c	535	GLN	CA-C-N	6.77	129.36	120.28
3	c	535	GLN	C-N-CA	6.77	129.36	120.28
3	c	477	PHE	CA-C-N	6.77	130.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	477	PHE	C-N-CA	6.77	130.03	120.28
6	f	365	MET	CA-C-N	6.77	129.35	120.28
6	f	365	MET	C-N-CA	6.77	129.35	120.28
7	g	785	HIS	CE1-NE2-CD2	-6.77	102.23	109.00
2	m	305	GLU	CA-C-O	-6.77	113.65	120.90
3	n	685	GLU	N-CA-C	6.77	119.68	111.82
7	r	247	LEU	CA-C-O	-6.77	112.95	120.60
7	g	135	ALA	N-CA-CB	6.77	121.05	110.01
6	q	307	GLN	N-CA-C	-6.77	104.77	113.16
6	q	700	LYS	N-CA-C	6.77	125.22	110.80
5	p	81	VAL	N-CA-CB	6.77	119.11	110.99
6	q	577	GLU	N-CA-C	-6.77	96.71	108.69
2	b	478	ASP	CA-C-N	6.76	129.23	120.44
2	b	478	ASP	C-N-CA	6.76	129.23	120.44
3	c	275	GLN	CG-CD-NE2	6.76	126.55	116.40
3	c	624	LEU	N-CA-CB	6.76	119.88	110.07
1	a	930	SER	CB-CA-C	6.76	122.02	110.79
1	l	498	HIS	CE1-NE2-CD2	-6.76	102.24	109.00
6	q	44	SER	O-C-N	6.76	129.03	122.07
7	g	1090	LEU	N-CA-C	6.75	118.64	111.28
2	m	193	ASP	N-CA-CB	6.75	121.91	110.49
2	m	205	ILE	O-C-N	6.75	128.53	121.91
7	g	9	ARG	NE-CZ-NH2	-6.75	113.12	119.20
6	q	24	ILE	CA-C-O	-6.75	113.69	120.85
7	g	1104	ILE	N-CA-C	6.75	118.01	108.36
1	l	8	ASP	CA-CB-CG	6.75	119.35	112.60
1	l	700	ALA	CA-C-N	6.75	129.32	120.28
1	l	700	ALA	C-N-CA	6.75	129.32	120.28
2	b	630	LEU	CA-C-N	6.75	129.32	120.28
2	b	630	LEU	C-N-CA	6.75	129.32	120.28
5	p	319	LEU	N-CA-C	-6.75	98.73	109.59
6	q	708	SER	CA-C-O	-6.75	112.50	120.60
7	r	280	THR	CA-CB-OG1	6.75	119.72	109.60
6	q	360	HIS	CA-C-N	6.74	129.31	120.28
6	q	360	HIS	C-N-CA	6.74	129.31	120.28
2	b	201	ARG	CA-C-N	6.74	129.55	120.65
2	b	201	ARG	C-N-CA	6.74	129.55	120.65
6	q	525	ASP	CA-C-N	6.74	129.31	120.28
6	q	525	ASP	C-N-CA	6.74	129.31	120.28
1	a	235	ILE	CA-C-N	6.74	132.36	123.06
1	a	235	ILE	C-N-CA	6.74	132.36	123.06
2	b	520	GLU	CA-C-O	6.74	127.69	120.55

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	32	HIS	CA-CB-CG	-6.74	107.06	113.80
1	a	124	LYS	CA-C-N	6.74	134.41	121.54
1	a	124	LYS	C-N-CA	6.74	134.41	121.54
5	e	160	PRO	CA-C-O	-6.74	110.79	120.56
7	g	141	THR	CA-C-N	6.74	130.06	120.49
7	g	141	THR	C-N-CA	6.74	130.06	120.49
6	q	609	SER	CA-C-N	6.74	134.41	121.54
6	q	609	SER	C-N-CA	6.74	134.41	121.54
2	b	484	VAL	N-CA-C	6.74	116.86	110.53
7	r	564	PHE	CA-C-N	6.74	129.20	120.44
7	r	564	PHE	C-N-CA	6.74	129.20	120.44
1	a	457	PHE	CA-C-O	-6.73	113.28	120.42
6	q	335	HIS	CA-CB-CG	-6.73	107.07	113.80
4	d	221	TYR	CA-CB-CG	-6.73	101.79	113.90
7	g	111	HIS	CA-C-O	-6.73	111.65	119.59
4	o	54	GLY	CA-C-N	6.73	127.10	119.83
4	o	54	GLY	C-N-CA	6.73	127.10	119.83
6	f	522	LEU	CA-C-N	6.73	130.53	120.31
6	f	522	LEU	C-N-CA	6.73	130.53	120.31
7	r	595	ASN	CA-C-O	6.73	127.88	120.82
7	g	508	ASN	CB-CG-OD1	-6.72	107.35	120.80
2	m	396	ASP	CA-C-O	6.72	127.88	120.82
7	r	386	PHE	CA-CB-CG	-6.72	107.08	113.80
1	l	957	ASP	N-CA-CB	6.72	121.84	110.49
2	b	220	ASP	CA-C-N	6.72	130.19	120.38
2	b	220	ASP	C-N-CA	6.72	130.19	120.38
6	f	41	GLU	O-C-N	6.72	129.81	122.15
7	g	650	LEU	CA-C-N	6.71	129.28	120.28
7	g	650	LEU	C-N-CA	6.71	129.28	120.28
1	a	698	LEU	CA-C-N	6.71	129.02	120.56
1	a	698	LEU	C-N-CA	6.71	129.02	120.56
1	l	161	ARG	CA-C-O	6.71	127.58	120.33
1	l	345	GLU	N-CA-C	-6.71	104.84	113.16
2	b	417	ALA	CA-C-N	6.71	129.27	120.28
2	b	417	ALA	C-N-CA	6.71	129.27	120.28
3	c	637	ILE	CA-C-N	6.71	129.16	120.44
3	c	637	ILE	C-N-CA	6.71	129.16	120.44
1	l	947	SER	CA-C-N	6.71	129.15	120.56
1	l	947	SER	C-N-CA	6.71	129.15	120.56
3	n	136	LYS	CA-C-N	6.71	129.16	120.44
3	n	136	LYS	C-N-CA	6.71	129.16	120.44
5	e	239	ARG	NE-CZ-NH1	6.71	128.21	121.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	923	LEU	N-CA-C	6.71	118.59	111.28
1	a	539	GLU	N-CA-C	-6.71	103.78	112.23
3	c	252	ASN	N-CA-C	-6.71	98.83	109.23
5	p	54	HIS	N-CA-CB	6.71	121.82	110.49
2	b	385	ASP	N-CA-CB	6.70	121.82	110.49
7	r	82	ASN	OD1-CG-ND2	-6.70	115.90	122.60
2	m	602	GLU	N-CA-CB	6.70	121.81	110.49
3	n	634	ASP	CA-C-N	6.70	129.15	120.44
3	n	634	ASP	C-N-CA	6.70	129.15	120.44
3	c	361	LEU	N-CA-C	6.70	119.59	111.82
6	f	446	SER	N-CA-C	6.70	119.41	111.71
7	g	187	LYS	N-CA-C	-6.70	105.26	113.50
7	r	1092	PRO	CA-C-N	6.70	129.15	120.44
7	r	1092	PRO	C-N-CA	6.70	129.15	120.44
1	a	667	LEU	N-CA-C	6.70	118.58	111.28
2	b	271	LEU	CA-C-N	6.69	126.95	119.32
2	b	271	LEU	C-N-CA	6.69	126.95	119.32
1	l	334	LEU	N-CA-C	-6.69	97.68	109.06
6	f	671	LEU	N-CA-CB	6.69	121.80	110.49
7	g	544	LYS	N-CA-C	-6.69	103.57	113.61
6	q	231	PHE	N-CA-CB	6.69	121.93	111.56
7	r	795	VAL	CA-C-N	6.69	132.26	122.63
7	r	795	VAL	C-N-CA	6.69	132.26	122.63
3	n	460	ASN	CA-C-O	6.69	126.79	118.43
4	d	92	ILE	CA-C-O	6.69	126.29	119.20
1	l	1015	ASP	N-CA-C	-6.69	105.10	112.72
5	p	9	ASP	N-CA-C	-6.69	105.15	113.38
7	r	387	MET	N-CA-C	-6.69	102.44	112.54
1	a	249	THR	N-CA-C	-6.68	105.10	112.72
6	f	511	ILE	CA-C-O	-6.68	114.00	120.95
7	r	540	HIS	CE1-NE2-CD2	-6.68	102.32	109.00
3	n	251	ASP	O-C-N	6.68	130.42	122.94
1	l	917	ASP	CA-CB-CG	6.68	119.28	112.60
7	g	664	ASN	CA-CB-CG	6.68	119.28	112.60
2	m	144	VAL	CB-CA-C	6.68	121.16	112.14
6	q	198	GLU	CA-C-N	6.68	129.23	120.28
6	q	198	GLU	C-N-CA	6.68	129.23	120.28
7	r	716	ASN	CA-CB-CG	6.68	119.28	112.60
1	a	1	MET	CG-SD-CE	-6.68	86.21	100.90
7	g	790	HIS	CA-C-N	6.67	129.60	120.46
7	g	790	HIS	C-N-CA	6.67	129.60	120.46
4	o	108	ALA	CA-C-N	6.67	128.18	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	108	ALA	C-N-CA	6.67	128.18	119.84
7	r	724	ASP	N-CA-C	-6.67	104.00	111.28
1	a	418	GLN	CA-C-N	6.67	129.89	120.42
1	a	418	GLN	C-N-CA	6.67	129.89	120.42
1	a	639	LEU	N-CA-C	6.67	118.34	111.14
2	m	627	TYR	CA-C-N	6.67	129.22	120.28
2	m	627	TYR	C-N-CA	6.67	129.22	120.28
1	a	407	GLY	CA-C-N	6.67	129.52	120.38
1	a	407	GLY	C-N-CA	6.67	129.52	120.38
3	c	612	SER	N-CA-C	-6.67	96.60	110.80
7	g	718	ILE	N-CA-C	6.67	117.45	110.72
1	a	871	HIS	N-CA-C	6.67	119.38	111.71
2	b	359	GLY	CA-C-N	6.67	129.11	120.44
2	b	359	GLY	C-N-CA	6.67	129.11	120.44
1	l	734	HIS	CE1-NE2-CD2	-6.67	102.33	109.00
1	a	211	PHE	CA-C-O	-6.66	115.48	119.55
7	g	625	GLN	CA-C-N	6.66	134.27	121.54
7	g	625	GLN	C-N-CA	6.66	134.27	121.54
6	q	4	SER	N-CA-C	-6.66	97.56	108.82
1	a	981	LEU	N-CA-CB	6.66	119.67	110.01
6	q	615	THR	CA-C-N	6.66	130.43	120.31
6	q	615	THR	C-N-CA	6.66	130.43	120.31
6	f	201	LYS	CA-C-N	6.65	131.99	120.68
6	f	201	LYS	C-N-CA	6.65	131.99	120.68
7	g	670	THR	N-CA-CB	6.65	119.66	110.01
1	l	775	GLU	CB-CG-CD	-6.65	101.29	112.60
7	r	488	LYS	O-C-N	6.65	125.97	121.71
7	g	941	ILE	CA-C-N	6.65	129.73	120.29
7	g	941	ILE	C-N-CA	6.65	129.73	120.29
7	r	998	ASN	CA-CB-CG	-6.65	105.95	112.60
6	q	38	ILE	CA-C-N	6.65	129.57	120.46
6	q	38	ILE	C-N-CA	6.65	129.57	120.46
7	g	390	ILE	N-CA-C	-6.65	98.16	107.80
5	p	214	LEU	N-CA-CB	6.65	119.87	109.83
1	a	413	SER	CA-C-N	6.64	130.41	120.31
1	a	413	SER	C-N-CA	6.64	130.41	120.31
2	b	578	ALA	CA-C-N	6.64	129.73	120.29
2	b	578	ALA	C-N-CA	6.64	129.73	120.29
1	a	19	GLU	O-C-N	-6.64	117.20	121.85
2	m	245	PHE	CA-C-O	-6.64	113.85	120.82
7	g	730	GLU	N-CA-C	6.64	118.59	111.36
3	n	538	PHE	CA-CB-CG	-6.64	107.16	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	8	HIS	N-CA-CB	6.64	119.79	110.04
7	r	519	GLU	N-CA-CB	6.64	121.71	110.49
3	n	699	GLU	N-CA-C	-6.63	104.05	111.28
6	q	422	LEU	CA-C-O	6.63	127.58	120.55
2	b	358	CYS	CA-C-N	6.63	127.34	119.98
2	b	358	CYS	C-N-CA	6.63	127.34	119.98
3	c	316	GLY	CA-C-N	6.63	129.16	120.28
3	c	316	GLY	C-N-CA	6.63	129.16	120.28
1	l	214	ARG	N-CA-C	-6.63	97.41	108.75
3	c	321	LEU	CA-C-O	-6.63	113.53	120.55
1	l	55	GLU	N-CA-C	-6.63	105.10	113.72
2	m	109	SER	N-CA-C	-6.63	103.98	111.14
1	l	521	SER	CA-C-N	6.62	131.94	120.68
1	l	521	SER	C-N-CA	6.62	131.94	120.68
2	m	662	TYR	CB-CG-CD1	6.62	130.74	120.80
1	l	7	ILE	N-CA-CB	6.62	121.19	111.52
6	q	119	ILE	N-CA-CB	6.62	119.55	110.54
3	c	446	ASP	CA-C-N	6.62	130.93	120.47
3	c	446	ASP	C-N-CA	6.62	130.93	120.47
1	l	782	TYR	N-CA-C	6.62	122.56	113.16
4	o	203	HIS	CB-CG-CD2	-6.62	122.59	131.20
2	b	604	ASP	N-CA-C	-6.62	96.24	108.02
7	r	591	PHE	CA-C-N	6.62	129.47	120.54
7	r	591	PHE	C-N-CA	6.62	129.47	120.54
2	m	323	ASP	CA-CB-CG	-6.62	105.98	112.60
6	f	679	LYS	CA-C-N	6.61	128.60	122.85
6	f	679	LYS	C-N-CA	6.61	128.60	122.85
2	m	729	LYS	CA-C-N	6.61	129.68	120.29
2	m	729	LYS	C-N-CA	6.61	129.68	120.29
3	c	632	THR	CA-C-N	6.61	128.89	120.56
3	c	632	THR	C-N-CA	6.61	128.89	120.56
3	n	556	GLN	CA-C-N	6.61	129.14	120.28
3	n	556	GLN	C-N-CA	6.61	129.14	120.28
7	r	724	ASP	CB-CA-C	6.61	121.76	110.79
1	l	599	LYS	N-CA-C	-6.61	105.78	114.31
3	n	704	LEU	CB-CA-C	-6.61	99.82	110.79
7	g	984	PHE	CA-CB-CG	6.61	120.41	113.80
6	q	78	VAL	CA-C-N	6.61	129.46	120.54
6	q	78	VAL	C-N-CA	6.61	129.46	120.54
7	g	115	LYS	N-CA-C	-6.60	104.85	113.17
7	g	537	GLU	N-CA-CB	6.60	119.58	110.01
4	o	110	HIS	CE1-NE2-CD2	-6.60	102.40	109.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	188	LEU	N-CA-C	-6.60	105.26	113.38
6	f	234	GLN	CA-CB-CG	6.60	127.30	114.10
7	g	274	PRO	CB-CA-C	6.60	119.68	111.23
7	g	563	PHE	CA-CB-CG	-6.60	107.20	113.80
7	r	449	LEU	N-CA-CB	6.60	120.83	110.87
1	a	673	CYS	CA-C-O	-6.59	113.91	120.70
1	a	993	VAL	CA-CB-CG1	-6.59	99.19	110.40
2	b	200	ASN	CA-CB-CG	6.59	119.19	112.60
6	f	177	ASP	N-CA-C	6.59	119.02	111.11
6	f	643	PHE	N-CA-C	-6.59	104.81	112.92
7	r	802	ILE	N-CA-C	6.59	117.35	110.62
3	n	665	VAL	N-CA-CB	6.59	118.26	110.55
7	r	1005	LEU	CA-C-N	6.59	129.12	120.28
7	r	1005	LEU	C-N-CA	6.59	129.12	120.28
1	a	251	PHE	CA-CB-CG	-6.59	107.21	113.80
6	f	414	THR	CA-CB-CG2	6.59	121.71	110.50
6	q	644	ALA	N-CA-CB	6.59	121.63	110.49
6	f	686	GLU	N-CA-CB	6.59	119.81	110.12
7	g	761	ASN	OD1-CG-ND2	-6.59	116.01	122.60
1	l	436	HIS	N-CA-CB	6.59	121.62	110.49
5	e	56	SER	CA-C-N	6.58	130.17	120.95
5	e	56	SER	C-N-CA	6.58	130.17	120.95
4	o	131	LYS	CA-C-N	6.58	129.64	120.29
4	o	131	LYS	C-N-CA	6.58	129.64	120.29
1	a	282	LEU	O-C-N	-6.58	115.57	123.27
7	g	850	TYR	CA-C-N	6.58	129.10	120.28
7	g	850	TYR	C-N-CA	6.58	129.10	120.28
1	l	702	ILE	CB-CA-C	-6.58	103.14	112.22
6	q	454	ASP	N-CA-CB	6.58	122.09	110.37
7	r	527	ILE	N-CA-C	-6.58	104.34	110.53
7	g	246	LYS	CA-C-N	6.58	131.26	121.72
7	g	246	LYS	C-N-CA	6.58	131.26	121.72
3	n	556	GLN	N-CA-C	6.58	118.53	111.36
5	p	118	PRO	CA-C-N	6.58	134.11	121.54
5	p	118	PRO	C-N-CA	6.58	134.11	121.54
6	f	656	ARG	CA-C-N	6.58	131.65	121.19
6	f	656	ARG	C-N-CA	6.58	131.65	121.19
7	r	461	ASP	N-CA-C	-6.58	96.79	110.80
1	l	269	HIS	O-C-N	6.57	130.69	123.13
5	p	8	HIS	CE1-NE2-CD2	-6.57	102.43	109.00
1	a	564	ILE	CA-C-N	6.57	128.98	120.44
1	a	564	ILE	C-N-CA	6.57	128.98	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	780	HIS	ND1-CE1-NE2	6.57	114.97	108.40
3	n	276	ILE	O-C-N	6.57	128.51	121.87
5	e	96	ARG	NE-CZ-NH2	-6.57	113.29	119.20
7	g	25	SER	N-CA-C	-6.57	103.91	114.09
4	o	155	PRO	N-CA-C	6.57	120.42	111.22
6	q	314	ILE	CB-CA-C	6.57	117.35	110.91
7	r	1118	SER	CA-C-N	6.57	129.09	120.28
7	r	1118	SER	C-N-CA	6.57	129.09	120.28
1	a	329	TRP	N-CA-CB	6.57	119.74	109.69
2	b	644	GLN	CA-C-N	6.57	128.98	120.44
2	b	644	GLN	C-N-CA	6.57	128.98	120.44
5	e	224	ILE	CA-CB-CG1	6.57	121.56	110.40
7	r	893	ASP	N-CA-C	-6.57	105.27	113.28
2	m	334	ASP	CA-CB-CG	6.56	119.16	112.60
2	b	240	PHE	CA-CB-CG	-6.56	107.24	113.80
1	l	189	VAL	CA-C-N	6.56	134.07	121.54
1	l	189	VAL	C-N-CA	6.56	134.07	121.54
7	r	519	GLU	CA-C-N	6.56	133.78	121.97
7	r	519	GLU	C-N-CA	6.56	133.78	121.97
4	o	175	THR	N-CA-C	-6.56	97.67	108.76
7	r	111	HIS	ND1-CE1-NE2	6.56	114.96	108.40
7	r	854	HIS	CE1-NE2-CD2	-6.56	102.44	109.00
6	f	504	ASN	N-CA-C	-6.56	99.36	109.52
3	c	163	ASP	CA-CB-CG	-6.55	106.05	112.60
7	r	123	PRO	O-C-N	6.55	131.00	123.00
6	f	287	HIS	CE1-NE2-CD2	-6.55	102.45	109.00
7	g	776	ASN	OD1-CG-ND2	6.55	129.15	122.60
1	l	626	HIS	CA-C-N	6.55	128.96	120.44
1	l	626	HIS	C-N-CA	6.55	128.96	120.44
2	b	708	ASN	OD1-CG-ND2	6.55	129.15	122.60
1	a	386	LEU	CA-C-N	6.55	128.81	120.56
1	a	386	LEU	C-N-CA	6.55	128.81	120.56
1	a	807	ILE	CA-CB-CG1	6.55	121.53	110.40
5	e	117	ALA	CA-C-N	6.55	128.02	119.84
5	e	117	ALA	C-N-CA	6.55	128.02	119.84
3	n	436	LYS	CA-C-O	-6.55	113.61	120.55
2	b	386	ILE	N-CA-CB	6.54	117.85	110.72
3	n	268	LEU	O-C-N	6.54	128.81	122.07
2	b	685	GLU	CA-C-N	6.54	129.05	120.28
2	b	685	GLU	C-N-CA	6.54	129.05	120.28
1	l	936	TYR	N-CA-C	-6.54	105.87	114.31
4	d	144	HIS	CA-CB-CG	-6.54	107.26	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	880	ARG	NE-CZ-NH2	-6.54	113.31	119.20
2	m	410	GLU	O-C-N	6.54	131.31	123.33
1	a	803	HIS	ND1-CE1-NE2	6.54	114.94	108.40
3	c	285	ARG	NE-CZ-NH2	-6.54	113.31	119.20
6	q	325	GLN	N-CA-C	-6.54	104.07	111.07
4	o	175	THR	CA-C-N	6.54	127.91	121.57
4	o	175	THR	C-N-CA	6.54	127.91	121.57
1	l	320	PRO	N-CA-CB	6.54	109.42	103.34
7	g	950	ASN	CA-CB-CG	6.54	119.14	112.60
1	a	848	SER	CA-C-N	6.53	129.56	120.29
1	a	848	SER	C-N-CA	6.53	129.56	120.29
1	a	878	HIS	O-C-N	-6.53	115.20	122.12
6	q	350	VAL	CA-C-N	6.53	128.79	120.56
6	q	350	VAL	C-N-CA	6.53	128.79	120.56
3	c	278	PRO	CA-C-N	6.53	129.87	120.79
3	c	278	PRO	C-N-CA	6.53	129.87	120.79
6	f	119	ILE	CA-C-O	-6.53	114.16	120.95
2	m	292	LEU	O-C-N	6.53	131.28	122.59
1	l	647	PHE	CA-CB-CG	-6.53	107.27	113.80
2	b	198	GLU	N-CA-CB	6.53	121.52	110.49
2	b	326	GLY	CA-C-N	6.53	128.93	120.44
2	b	326	GLY	C-N-CA	6.53	128.93	120.44
6	f	11	ARG	CB-CA-C	-6.53	99.96	110.79
1	a	333	ASP	CA-CB-CG	-6.52	106.08	112.60
1	l	656	ASP	CA-C-N	6.52	128.92	120.44
1	l	656	ASP	C-N-CA	6.52	128.92	120.44
3	c	238	SER	O-C-N	-6.52	115.05	122.09
7	g	343	SER	N-CA-C	-6.52	105.32	113.28
2	m	248	LEU	CA-C-N	6.52	128.92	120.44
2	m	248	LEU	C-N-CA	6.52	128.92	120.44
3	n	613	ILE	CB-CA-C	6.52	120.94	112.14
7	r	784	ASN	N-CA-C	6.52	118.39	111.28
6	q	197	LEU	N-CA-C	6.52	118.39	111.28
1	l	455	THR	CA-C-N	6.52	129.31	120.44
1	l	455	THR	C-N-CA	6.52	129.31	120.44
1	l	628	ARG	CA-C-N	6.52	128.91	120.56
1	l	628	ARG	C-N-CA	6.52	128.91	120.56
1	l	701	TYR	CB-CG-CD1	-6.52	111.02	120.80
7	r	717	CYS	N-CA-C	-6.52	104.25	111.36
1	a	60	LEU	CA-C-N	6.52	130.74	121.42
1	a	60	LEU	C-N-CA	6.52	130.74	121.42
1	a	471	ILE	N-CA-CB	6.52	118.43	111.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	276	ILE	CA-C-N	6.52	132.10	121.87
3	c	276	ILE	C-N-CA	6.52	132.10	121.87
4	d	93	ALA	N-CA-C	6.52	118.11	108.60
7	g	625	GLN	N-CA-C	-6.52	105.48	113.50
1	l	979	GLU	CA-C-N	6.52	128.77	120.56
1	l	979	GLU	C-N-CA	6.52	128.77	120.56
1	a	571	PHE	CA-C-N	6.51	128.91	120.44
1	a	571	PHE	C-N-CA	6.51	128.91	120.44
7	g	532	LYS	CA-C-N	6.51	129.01	120.28
7	g	532	LYS	C-N-CA	6.51	129.01	120.28
1	a	620	HIS	N-CA-C	6.51	118.38	111.28
4	o	215	THR	CA-CB-OG1	6.51	119.36	109.60
1	l	914	TYR	N-CA-CB	6.51	119.25	110.59
1	l	888	VAL	CA-C-N	6.51	129.00	120.28
1	l	888	VAL	C-N-CA	6.51	129.00	120.28
6	q	429	ILE	CA-C-N	6.50	126.43	119.28
6	q	429	ILE	C-N-CA	6.50	126.43	119.28
3	n	530	LEU	CA-C-N	6.50	133.96	121.54
3	n	530	LEU	C-N-CA	6.50	133.96	121.54
7	g	59	LYS	CB-CA-C	-6.50	103.37	111.43
7	r	1144	LYS	CA-C-N	6.50	131.35	122.19
7	r	1144	LYS	C-N-CA	6.50	131.35	122.19
2	m	243	GLN	O-C-N	6.50	129.82	122.22
6	f	21	GLU	CA-C-N	6.49	128.98	120.28
6	f	21	GLU	C-N-CA	6.49	128.98	120.28
6	q	231	PHE	N-CA-C	-6.49	98.86	108.79
7	r	229	PHE	CB-CG-CD1	6.49	131.73	120.70
1	a	634	LEU	CA-C-N	6.49	129.62	120.28
1	a	634	LEU	C-N-CA	6.49	129.62	120.28
6	q	69	GLU	CA-C-N	6.49	128.97	120.28
6	q	69	GLU	C-N-CA	6.49	128.97	120.28
1	a	620	HIS	CE1-NE2-CD2	-6.49	102.51	109.00
3	c	621	LYS	N-CA-C	6.49	118.35	111.28
6	f	28	ASN	CB-CG-ND2	-6.49	106.67	116.40
6	f	599	GLU	CA-C-N	6.49	128.97	120.28
6	f	599	GLU	C-N-CA	6.49	128.97	120.28
2	m	398	ILE	N-CA-C	6.49	117.17	110.36
4	o	102	VAL	N-CA-C	-6.49	100.33	108.89
7	r	132	ILE	N-CA-C	6.49	122.83	109.34
6	f	457	VAL	CA-C-N	6.48	129.29	120.54
6	f	457	VAL	C-N-CA	6.48	129.29	120.54
6	f	628	PHE	CA-C-N	6.48	129.29	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	628	PHE	C-N-CA	6.48	129.29	120.54
1	a	630	THR	N-CA-CB	6.48	119.64	110.12
5	e	338	GLU	N-CA-C	-6.48	97.22	108.69
1	l	679	LEU	N-CA-C	6.48	118.00	111.07
7	r	213	ASN	N-CA-C	-6.48	100.07	109.59
2	b	360	PHE	O-C-N	-6.48	115.40	122.07
3	c	491	LEU	CA-C-N	6.48	129.79	120.79
3	c	491	LEU	C-N-CA	6.48	129.79	120.79
1	l	893	HIS	CB-CG-CD2	-6.48	122.78	131.20
1	a	385	SER	CA-C-N	6.48	128.96	120.28
1	a	385	SER	C-N-CA	6.48	128.96	120.28
1	a	815	PHE	N-CA-C	-6.47	104.53	112.88
7	r	856	LYS	N-CA-C	-6.47	102.49	110.65
6	f	668	HIS	CA-CB-CG	6.47	120.27	113.80
3	n	331	ARG	CA-C-N	6.47	129.33	120.46
3	n	331	ARG	C-N-CA	6.47	129.33	120.46
6	q	586	GLN	CA-C-N	6.47	131.68	120.68
6	q	586	GLN	C-N-CA	6.47	131.68	120.68
6	q	325	GLN	OE1-CD-NE2	-6.47	116.13	122.60
7	r	145	THR	CA-C-O	6.47	126.34	119.03
3	n	697	ARG	CA-C-N	6.47	127.16	119.98
3	n	697	ARG	C-N-CA	6.47	127.16	119.98
7	g	702	ASP	N-CA-C	-6.47	100.89	110.46
5	p	48	SER	N-CA-C	-6.47	104.08	112.68
1	a	96	HIS	CG-CD2-NE2	6.46	113.67	107.20
1	l	319	ILE	CA-C-N	6.46	126.22	119.76
1	l	319	ILE	C-N-CA	6.46	126.22	119.76
3	n	649	HIS	CE1-NE2-CD2	-6.46	102.54	109.00
3	n	665	VAL	CA-C-N	6.46	128.84	120.44
3	n	665	VAL	C-N-CA	6.46	128.84	120.44
3	c	379	PHE	CA-CB-CG	-6.46	107.34	113.80
7	g	163	GLY	CA-C-N	6.46	131.88	122.77
7	g	163	GLY	C-N-CA	6.46	131.88	122.77
4	o	267	ASN	CA-C-N	6.46	129.89	120.91
4	o	267	ASN	C-N-CA	6.46	129.89	120.91
7	g	816	GLN	OE1-CD-NE2	6.46	129.06	122.60
2	m	414	SER	N-CA-CB	6.46	121.41	110.49
1	a	420	PHE	CA-C-N	6.46	129.46	120.29
1	a	420	PHE	C-N-CA	6.46	129.46	120.29
5	e	334	THR	N-CA-CB	6.46	119.29	110.38
6	q	548	GLN	CA-C-N	6.46	128.93	120.28
6	q	548	GLN	C-N-CA	6.46	128.93	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	612	ASN	CA-C-N	6.46	125.50	120.33
6	q	612	ASN	C-N-CA	6.46	125.50	120.33
7	r	120	ILE	O-C-N	-6.46	115.64	122.68
7	r	467	VAL	N-CA-CB	6.46	120.32	111.41
2	b	178	SER	N-CA-CB	6.46	120.28	110.28
2	b	589	PRO	O-C-N	6.46	129.98	122.23
3	c	584	ASN	CA-CB-CG	6.46	119.06	112.60
1	l	772	GLN	N-CA-C	-6.45	104.17	111.07
2	b	247	LYS	CA-C-N	6.45	129.22	120.44
2	b	247	LYS	C-N-CA	6.45	129.22	120.44
7	g	536	GLU	CA-C-N	6.45	128.83	120.44
7	g	536	GLU	C-N-CA	6.45	128.83	120.44
2	m	244	TYR	CA-C-N	6.45	128.83	120.44
2	m	244	TYR	C-N-CA	6.45	128.83	120.44
1	a	188	LYS	N-CA-C	6.45	119.12	109.25
4	o	124	LYS	N-CA-C	6.45	119.52	109.52
7	r	241	GLN	CA-C-N	6.45	130.53	121.24
7	r	241	GLN	C-N-CA	6.45	130.53	121.24
4	d	228	ASP	CA-C-N	6.45	131.30	122.34
4	d	228	ASP	C-N-CA	6.45	131.30	122.34
7	g	772	ASP	CA-C-N	6.45	128.92	120.28
7	g	772	ASP	C-N-CA	6.45	128.92	120.28
1	l	963	LYS	N-CA-C	6.45	117.97	111.07
6	q	463	GLU	N-CA-C	6.45	118.39	111.36
1	a	247	ASP	N-CA-C	-6.45	98.71	108.96
2	b	662	TYR	CA-C-N	6.45	133.85	121.54
2	b	662	TYR	C-N-CA	6.45	133.85	121.54
6	f	483	VAL	CA-C-N	6.44	128.91	120.28
6	f	483	VAL	C-N-CA	6.44	128.91	120.28
6	f	237	ILE	N-CA-CB	6.44	120.30	111.41
1	l	338	ARG	CD-NE-CZ	-6.44	115.38	124.40
2	m	298	ASP	CA-CB-CG	6.44	119.04	112.60
6	f	483	VAL	CB-CA-C	6.44	120.12	111.88
7	g	367	ILE	CA-CB-CG1	-6.44	99.45	110.40
7	r	904	LYS	N-CA-C	6.44	118.38	111.36
2	b	163	LYS	CA-C-N	6.44	129.20	120.38
2	b	163	LYS	C-N-CA	6.44	129.20	120.38
3	n	573	THR	O-C-N	-6.44	114.81	122.15
3	n	308	LYS	N-CA-CB	6.44	119.31	109.91
7	r	929	LEU	N-CA-C	6.43	117.95	111.07
1	a	959	GLU	CA-C-O	6.43	127.24	120.42
2	b	320	SER	CA-C-N	6.43	129.97	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	320	SER	C-N-CA	6.43	129.97	120.90
7	r	630	THR	CA-C-O	-6.43	113.89	121.16
7	r	1128	SER	CA-C-N	6.43	129.42	120.29
7	r	1128	SER	C-N-CA	6.43	129.42	120.29
3	c	385	LEU	CA-C-N	6.43	128.80	120.44
3	c	385	LEU	C-N-CA	6.43	128.80	120.44
2	m	720	LEU	CA-C-N	6.43	127.88	119.84
2	m	720	LEU	C-N-CA	6.43	127.88	119.84
1	a	177	PHE	O-C-N	6.43	130.71	123.19
6	f	413	ILE	N-CA-CB	6.43	119.28	110.54
2	m	112	PHE	CA-CB-CG	6.43	120.23	113.80
7	r	711	ASN	OD1-CG-ND2	6.43	129.03	122.60
7	g	797	LEU	N-CA-C	-6.42	102.11	111.30
2	m	135	ASN	OD1-CG-ND2	-6.42	116.18	122.60
2	m	210	ASN	CA-C-N	6.42	128.79	120.44
2	m	210	ASN	C-N-CA	6.42	128.79	120.44
3	n	267	ARG	NE-CZ-NH1	6.42	127.92	121.50
3	c	482	GLU	CA-C-O	6.42	127.36	120.55
7	g	651	ASN	CA-C-N	6.42	129.41	120.29
7	g	651	ASN	C-N-CA	6.42	129.41	120.29
1	l	942	ILE	CA-C-N	6.42	130.07	120.31
1	l	942	ILE	C-N-CA	6.42	130.07	120.31
1	l	1000	TYR	CA-C-N	6.42	129.41	120.29
1	l	1000	TYR	C-N-CA	6.42	129.41	120.29
2	m	661	HIS	CE1-NE2-CD2	-6.42	102.58	109.00
2	m	552	ILE	N-CA-C	-6.42	106.07	112.17
6	f	128	GLU	CA-C-O	6.42	127.36	120.55
2	m	315	GLN	CA-C-N	6.42	129.40	120.29
2	m	315	GLN	C-N-CA	6.42	129.40	120.29
5	p	106	ASP	CA-C-O	6.42	127.05	119.28
1	a	99	ASN	OD1-CG-ND2	-6.42	116.19	122.60
2	b	228	PHE	N-CA-CB	6.41	121.19	110.41
6	f	554	ASN	CA-CB-CG	6.41	119.01	112.60
7	r	109	ASN	CA-CB-CG	6.41	119.01	112.60
7	r	622	ASN	CA-CB-CG	6.41	119.01	112.60
7	r	745	ILE	O-C-N	6.41	128.57	121.90
6	f	613	ILE	CA-C-N	6.41	126.33	119.28
6	f	613	ILE	C-N-CA	6.41	126.33	119.28
3	c	465	PHE	CA-CB-CG	-6.41	107.39	113.80
3	n	208	PRO	CA-C-O	-6.41	114.11	122.19
3	n	241	PHE	CA-C-N	6.41	131.55	121.17
3	n	241	PHE	C-N-CA	6.41	131.55	121.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	586	LEU	O-C-N	6.41	128.75	122.09
7	r	928	LYS	CA-C-N	6.41	128.77	120.44
7	r	928	LYS	C-N-CA	6.41	128.77	120.44
3	c	218	LYS	CG-CD-CE	6.41	126.03	111.30
1	l	963	LYS	CA-C-N	6.41	129.39	120.29
1	l	963	LYS	C-N-CA	6.41	129.39	120.29
6	q	305	ASN	CA-C-N	6.41	131.23	122.07
6	q	305	ASN	C-N-CA	6.41	131.23	122.07
7	r	772	ASP	CA-CB-CG	6.41	119.01	112.60
2	b	617	THR	CA-C-O	6.40	129.67	120.51
7	g	34	GLU	N-CA-C	6.40	118.26	111.28
1	a	149	TRP	N-CA-C	-6.40	104.91	114.64
3	c	463	ARG	NE-CZ-NH1	6.40	127.90	121.50
6	f	50	ALA	N-CA-C	6.40	118.83	111.02
6	f	295	GLN	N-CA-C	6.40	119.25	111.82
3	n	178	GLU	N-CA-C	-6.40	103.54	112.25
2	m	156	GLU	O-C-N	6.40	128.90	122.12
5	p	243	PHE	O-C-N	6.40	131.34	123.21
1	l	517	ALA	N-CA-CB	6.40	119.53	110.12
1	a	598	LYS	N-CA-C	6.40	119.07	111.33
2	b	627	TYR	N-CA-C	-6.40	104.31	111.28
2	m	557	ALA	N-CA-C	6.40	118.25	111.28
2	b	284	ALA	N-CA-C	6.40	118.25	111.28
2	b	666	LEU	N-CA-C	6.39	118.25	111.28
3	n	636	LEU	CA-C-N	6.39	129.22	120.46
3	n	636	LEU	C-N-CA	6.39	129.22	120.46
6	q	380	ILE	CB-CA-C	6.39	117.53	110.62
6	q	570	ASN	CA-CB-CG	-6.39	106.21	112.60
1	a	329	TRP	CB-CG-CD2	-6.39	117.85	126.80
3	n	282	GLU	CA-C-N	6.39	129.37	120.29
3	n	282	GLU	C-N-CA	6.39	129.37	120.29
6	q	464	THR	N-CA-C	6.39	119.79	112.57
1	a	929	HIS	CE1-NE2-CD2	-6.39	102.61	109.00
1	a	1005	ASN	CA-C-O	-6.39	114.11	120.82
7	g	1025	ASP	O-C-N	-6.39	114.75	122.48
3	c	294	ILE	CA-C-N	6.39	128.84	120.28
3	c	294	ILE	C-N-CA	6.39	128.84	120.28
3	n	175	LEU	CA-C-O	-6.39	111.49	119.54
1	l	641	ASP	CA-C-N	6.38	130.20	120.82
1	l	641	ASP	C-N-CA	6.38	130.20	120.82
1	l	840	PHE	CA-CB-CG	-6.38	107.42	113.80
1	l	852	SER	CA-C-N	6.38	131.53	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	852	SER	C-N-CA	6.38	131.53	120.68
3	n	642	ILE	CA-C-N	6.38	128.84	120.28
3	n	642	ILE	C-N-CA	6.38	128.84	120.28
5	p	229	GLN	CG-CD-NE2	6.38	125.97	116.40
7	r	575	PHE	CA-C-N	6.38	129.15	120.54
7	r	575	PHE	C-N-CA	6.38	129.15	120.54
2	b	379	LEU	CA-C-N	6.38	130.00	120.31
2	b	379	LEU	C-N-CA	6.38	130.00	120.31
3	n	436	LYS	N-CA-CB	6.38	119.50	110.12
4	d	12	ILE	CA-C-O	6.38	127.35	120.53
2	b	647	ARG	N-CA-C	6.38	118.23	111.28
2	b	416	THR	CA-C-N	6.37	128.82	120.28
2	b	416	THR	C-N-CA	6.37	128.82	120.28
6	f	327	VAL	O-C-N	-6.37	115.69	121.87
6	q	509	HIS	CA-CB-CG	-6.37	107.43	113.80
7	g	618	LEU	CA-C-N	6.37	128.82	120.28
7	g	618	LEU	C-N-CA	6.37	128.82	120.28
1	l	437	ASN	OD1-CG-ND2	-6.37	116.23	122.60
3	n	614	ASN	OD1-CG-ND2	6.37	128.97	122.60
6	q	230	GLU	N-CA-C	-6.37	106.09	114.31
3	c	570	ALA	N-CA-CB	-6.37	100.46	110.46
6	q	76	HIS	CG-CD2-NE2	6.37	113.57	107.20
6	q	414	THR	CA-C-N	6.37	129.33	120.29
6	q	414	THR	C-N-CA	6.37	129.33	120.29
3	c	585	PRO	CA-C-N	6.37	128.58	120.56
3	c	585	PRO	C-N-CA	6.37	128.58	120.56
1	a	607	PHE	CA-CB-CG	6.36	120.16	113.80
3	c	340	LEU	N-CA-C	6.36	118.22	111.28
7	g	258	SER	N-CA-C	-6.36	105.15	113.17
6	q	45	ALA	N-CA-CB	6.36	119.57	110.16
4	d	284	ASN	CA-CB-CG	6.36	118.96	112.60
4	o	180	ASN	N-CA-CB	6.36	121.24	110.49
6	f	276	VAL	CA-C-N	6.36	130.77	120.60
6	f	276	VAL	C-N-CA	6.36	130.77	120.60
6	f	701	ILE	CA-C-O	-6.36	114.34	120.95
2	m	226	GLN	O-C-N	6.36	128.62	122.07
5	p	19	PHE	CA-CB-CG	6.36	120.16	113.80
3	c	214	SER	N-CA-C	-6.36	103.70	112.03
7	r	894	GLY	N-CA-C	-6.36	98.12	113.18
7	r	1075	ASP	N-CA-CB	6.36	121.23	110.49
6	f	681	PRO	N-CA-CB	6.35	109.38	103.41
1	a	952	ASN	CA-C-N	6.35	129.73	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	952	ASN	C-N-CA	6.35	129.73	120.71
7	r	540	HIS	CA-C-N	6.35	131.38	122.36
7	r	540	HIS	C-N-CA	6.35	131.38	122.36
3	n	639	GLY	CA-C-N	6.35	129.96	120.31
3	n	639	GLY	C-N-CA	6.35	129.96	120.31
2	b	549	ALA	CA-C-N	6.35	131.15	122.07
2	b	549	ALA	C-N-CA	6.35	131.15	122.07
3	c	238	SER	N-CA-C	-6.35	104.28	111.14
7	g	96	TYR	CA-C-N	6.35	129.58	122.15
7	g	96	TYR	C-N-CA	6.35	129.58	122.15
3	c	216	LEU	N-CA-C	-6.35	99.76	109.41
7	r	620	ASN	N-CA-C	6.34	118.20	111.28
7	r	636	ILE	N-CA-CB	6.34	121.70	111.23
6	f	561	ASN	CA-C-N	6.34	129.02	120.65
6	f	561	ASN	C-N-CA	6.34	129.02	120.65
1	a	983	GLN	N-CA-C	6.34	119.00	111.71
2	m	661	HIS	CB-CG-CD2	-6.34	122.96	131.20
3	n	616	PHE	CA-C-N	6.34	129.06	120.44
3	n	616	PHE	C-N-CA	6.34	129.06	120.44
5	p	40	LYS	CA-C-O	6.33	127.26	119.79
2	m	735	LEU	CA-C-O	-6.33	113.71	120.42
7	r	774	PHE	N-CA-CB	6.33	121.19	110.49
6	f	163	ARG	CA-C-N	6.33	130.88	120.94
6	f	163	ARG	C-N-CA	6.33	130.88	120.94
2	m	95	ILE	CB-CA-C	6.33	118.06	110.78
6	f	589	HIS	CG-CD2-NE2	6.33	113.53	107.20
7	g	213	ASN	O-C-N	6.33	130.41	123.13
7	r	617	THR	O-C-N	6.33	128.59	122.07
2	b	476	LEU	N-CA-C	-6.33	98.21	108.52
7	g	887	TRP	O-C-N	6.33	129.36	122.15
1	l	89	HIS	CE1-NE2-CD2	-6.33	102.67	109.00
1	l	464	THR	N-CA-C	-6.33	99.60	109.72
5	p	126	ALA	N-CA-C	-6.33	99.60	109.72
6	f	551	GLU	CA-C-N	6.33	131.43	120.68
6	f	551	GLU	C-N-CA	6.33	131.43	120.68
6	q	629	GLU	O-C-N	6.32	128.82	122.12
1	a	190	ASP	CA-CB-CG	6.32	118.92	112.60
5	e	153	GLU	N-CA-C	-6.32	98.08	108.76
7	g	9	ARG	NE-CZ-NH1	6.32	127.82	121.50
7	g	512	ILE	CB-CG1-CD1	6.32	127.07	113.80
7	r	1118	SER	N-CA-C	6.32	117.83	111.07
1	a	399	THR	N-CA-C	-6.32	104.73	112.88

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	475	SER	N-CA-CB	-6.32	100.77	110.44
6	f	346	LEU	N-CA-C	-6.32	104.39	111.28
7	r	1140	VAL	N-CA-CB	6.32	120.06	110.58
7	g	665	PHE	CA-CB-CG	-6.32	107.48	113.80
3	n	195	GLU	N-CA-C	-6.31	105.61	113.38
3	n	362	SER	N-CA-C	6.31	120.24	112.54
6	q	373	THR	CA-C-N	6.31	128.65	120.44
6	q	373	THR	C-N-CA	6.31	128.65	120.44
6	f	578	ASP	CA-C-N	6.31	129.56	120.79
6	f	578	ASP	C-N-CA	6.31	129.56	120.79
7	g	723	PHE	CA-C-N	6.31	128.74	120.28
7	g	723	PHE	C-N-CA	6.31	128.74	120.28
6	q	479	THR	CA-C-N	6.31	128.65	120.44
6	q	479	THR	C-N-CA	6.31	128.65	120.44
2	b	209	LEU	CA-C-N	6.31	128.65	120.44
2	b	209	LEU	C-N-CA	6.31	128.65	120.44
3	c	235	LYS	CA-C-N	6.31	129.03	120.38
3	c	235	LYS	C-N-CA	6.31	129.03	120.38
3	c	676	ILE	CA-C-N	6.31	127.12	119.99
3	c	676	ILE	C-N-CA	6.31	127.12	119.99
2	b	550	HIS	CB-CG-CD2	-6.31	123.00	131.20
2	m	634	TYR	N-CA-C	6.31	118.16	111.28
1	a	820	ARG	NE-CZ-NH1	-6.31	115.19	121.50
4	d	258	TRP	CB-CG-CD1	-6.31	117.44	126.90
6	q	220	ASN	N-CA-CB	6.31	121.60	110.37
1	a	760	PHE	O-C-N	6.30	128.56	122.07
1	a	173	PHE	CA-CB-CG	6.30	120.10	113.80
2	b	78	ASN	N-CA-CB	6.30	120.00	110.42
5	e	154	MET	CA-C-N	6.30	131.67	122.41
5	e	154	MET	C-N-CA	6.30	131.67	122.41
7	r	288	ASN	CA-C-O	-6.30	113.87	120.55
7	r	1076	PHE	CA-C-O	-6.30	113.98	119.72
5	p	241	ARG	CA-C-O	-6.30	113.56	120.30
6	f	533	LEU	O-C-N	6.30	128.80	122.12
7	g	621	TYR	CB-CG-CD2	-6.30	111.36	120.80
2	m	631	SER	CB-CA-C	-6.30	100.34	110.79
5	p	8	HIS	ND1-CE1-NE2	6.30	114.70	108.40
6	f	335	HIS	CB-CG-CD2	-6.29	123.02	131.20
3	n	321	LEU	CA-C-N	6.29	129.08	120.46
3	n	321	LEU	C-N-CA	6.29	129.08	120.46
1	a	678	VAL	CB-CA-C	-6.29	103.78	112.02
1	l	235	ILE	N-CA-C	-6.29	98.80	107.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	530	LEU	N-CA-C	6.29	121.69	111.37
7	r	639	PRO	N-CA-CB	6.29	108.93	103.27
7	r	22	GLU	N-CA-C	-6.29	104.23	112.41
5	e	42	THR	N-CA-C	-6.29	105.27	114.39
1	a	94	ASN	CA-CB-CG	-6.29	106.31	112.60
1	a	628	ARG	O-C-N	-6.29	114.98	122.15
3	c	415	ASP	CA-C-O	-6.29	110.88	119.12
4	d	290	GLU	CA-C-N	6.29	126.05	119.76
4	d	290	GLU	C-N-CA	6.29	126.05	119.76
6	f	240	HIS	CG-CD2-NE2	6.29	113.49	107.20
1	l	210	ARG	N-CA-CB	6.29	121.37	110.81
3	n	297	TYR	CA-C-N	6.29	129.87	120.31
3	n	297	TYR	C-N-CA	6.29	129.87	120.31
3	c	598	LEU	N-CA-C	-6.29	105.65	113.38
3	n	661	SER	N-CA-C	6.29	118.13	111.28
7	r	613	ILE	O-C-N	6.29	127.97	121.87
1	a	901	ARG	NE-CZ-NH1	6.28	127.78	121.50
2	m	533	GLU	N-CA-CB	6.28	119.89	110.22
6	f	458	ARG	NE-CZ-NH2	-6.28	113.55	119.20
1	a	822	SER	N-CA-CB	6.28	119.45	110.16
4	d	88	ARG	CA-C-N	6.28	129.75	120.90
4	d	88	ARG	C-N-CA	6.28	129.75	120.90
7	g	1134	HIS	CA-CB-CG	6.28	120.08	113.80
5	e	40	LYS	N-CA-C	-6.28	105.26	113.17
1	l	262	GLN	CA-C-N	6.28	128.69	120.28
1	l	262	GLN	C-N-CA	6.28	128.69	120.28
3	c	554	GLU	N-CA-C	6.28	117.78	111.07
5	p	92	GLU	N-CA-CB	6.28	120.89	110.85
6	f	253	GLN	N-CA-CB	6.27	119.30	109.83
2	m	159	ILE	CA-C-N	6.27	126.94	119.98
2	m	159	ILE	C-N-CA	6.27	126.94	119.98
1	a	417	THR	CA-CB-CG2	-6.27	99.84	110.50
7	g	416	ILE	N-CA-C	-6.27	99.44	108.53
1	l	842	LEU	CA-C-O	6.27	127.20	120.55
6	q	381	ASP	CA-CB-CG	6.27	118.87	112.60
2	b	315	GLN	N-CA-CB	6.27	119.34	110.12
6	f	644	ALA	N-CA-C	-6.27	104.20	113.61
2	m	609	GLN	N-CA-C	-6.27	100.70	110.42
6	q	356	PRO	CA-C-N	6.27	129.19	120.29
6	q	356	PRO	C-N-CA	6.27	129.19	120.29
1	a	608	ASP	N-CA-C	-6.27	97.20	108.48
1	a	1031	ARG	CA-C-N	6.27	128.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	1031	ARG	C-N-CA	6.27	128.68	120.28
6	f	323	THR	CA-C-N	6.26	129.04	120.46
6	f	323	THR	C-N-CA	6.26	129.04	120.46
1	l	299	GLN	CA-C-O	-6.26	113.22	120.49
1	a	532	PHE	CA-C-N	6.26	128.67	120.28
1	a	532	PHE	C-N-CA	6.26	128.67	120.28
3	n	432	GLU	N-CA-CB	6.26	119.09	110.01
4	o	95	HIS	CA-CB-CG	6.26	120.06	113.80
6	f	126	LEU	CA-C-N	6.26	128.57	120.44
6	f	126	LEU	C-N-CA	6.26	128.57	120.44
7	g	612	ASP	CA-CB-CG	-6.26	106.34	112.60
2	b	86	ASP	N-CA-CB	6.25	121.06	110.49
4	o	236	GLN	OE1-CD-NE2	6.25	128.85	122.60
1	a	345	GLU	O-C-N	-6.25	114.27	122.59
6	f	129	ASN	CA-CB-CG	6.25	118.85	112.60
7	g	630	THR	N-CA-CB	6.25	121.06	110.49
1	a	722	THR	CA-C-N	6.25	128.66	120.28
1	a	722	THR	C-N-CA	6.25	128.66	120.28
7	g	41	ASP	N-CA-CB	6.25	119.08	110.01
7	r	980	ILE	CA-C-N	6.25	128.94	120.44
7	r	980	ILE	C-N-CA	6.25	128.94	120.44
2	b	544	ASN	N-CA-C	6.25	118.09	111.28
1	a	812	LEU	CA-C-O	-6.25	113.04	120.10
1	a	369	ASN	CA-C-O	6.25	126.01	119.14
7	g	816	GLN	CA-C-N	6.25	128.56	120.44
7	g	816	GLN	C-N-CA	6.25	128.56	120.44
7	r	1035	LYS	N-CA-C	6.25	118.17	111.36
6	f	369	VAL	CA-C-N	6.25	129.02	120.46
6	f	369	VAL	C-N-CA	6.25	129.02	120.46
7	g	694	LEU	N-CA-C	-6.25	102.80	110.61
1	l	19	GLU	CA-C-N	6.24	126.26	119.89
1	l	19	GLU	C-N-CA	6.24	126.26	119.89
4	o	112	TYR	N-CA-C	-6.24	104.03	113.89
7	r	451	ASN	CA-CB-CG	-6.24	106.36	112.60
1	l	740	PHE	CA-C-N	6.24	128.55	120.44
1	l	740	PHE	C-N-CA	6.24	128.55	120.44
7	r	362	ILE	CA-C-N	6.24	130.72	122.42
7	r	362	ILE	C-N-CA	6.24	130.72	122.42
7	r	557	LEU	N-CA-CB	6.24	119.29	110.12
3	c	182	LYS	CA-C-N	6.24	130.67	120.63
3	c	182	LYS	C-N-CA	6.24	130.67	120.63
2	b	478	ASP	N-CA-C	-6.24	99.96	108.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	517	ASP	CA-CB-CG	6.24	118.84	112.60
1	a	180	ASP	N-CA-C	-6.24	104.31	112.41
2	b	706	SER	N-CA-CB	6.24	119.28	110.12
1	l	874	ASN	CA-CB-CG	6.24	118.83	112.60
7	r	1022	LEU	CA-C-O	-6.24	113.81	120.42
1	l	329	TRP	CZ3-CH2-CZ2	-6.23	113.40	121.50
1	a	721	MET	N-CA-C	6.23	118.07	111.28
3	n	347	GLY	N-CA-C	-6.23	103.11	113.02
1	a	507	PHE	CA-CB-CG	6.23	120.03	113.80
6	f	509	HIS	CA-C-N	6.23	129.13	120.29
6	f	509	HIS	C-N-CA	6.23	129.13	120.29
7	r	786	LEU	CA-C-N	6.23	128.54	120.44
7	r	786	LEU	C-N-CA	6.23	128.54	120.44
1	a	375	ASN	N-CA-C	-6.23	98.75	108.90
6	f	142	SER	N-CA-C	-6.23	97.42	108.13
1	l	649	GLN	N-CA-CB	6.23	119.38	110.16
7	r	679	ASP	N-CA-CB	6.23	119.27	110.12
7	g	85	GLU	CA-C-O	6.22	127.17	120.32
3	n	635	SER	CA-C-N	6.22	129.13	120.29
3	n	635	SER	C-N-CA	6.22	129.13	120.29
7	r	308	ILE	CA-CB-CG2	6.22	121.08	110.50
1	l	406	ARG	NE-CZ-NH2	-6.22	113.60	119.20
2	m	393	PRO	CA-C-N	6.22	128.86	120.65
2	m	393	PRO	C-N-CA	6.22	128.86	120.65
7	r	643	PRO	CA-C-N	6.22	128.99	120.46
7	r	643	PRO	C-N-CA	6.22	128.99	120.46
4	o	223	ALA	CA-C-O	6.22	127.56	120.84
6	q	76	HIS	CE1-NE2-CD2	-6.22	102.78	109.00
3	c	686	LEU	CA-C-N	6.22	126.24	119.90
3	c	686	LEU	C-N-CA	6.22	126.24	119.90
6	f	320	HIS	ND1-CE1-NE2	6.22	114.62	108.40
2	m	386	ILE	CA-C-N	6.22	133.42	121.54
2	m	386	ILE	C-N-CA	6.22	133.42	121.54
7	r	632	LYS	CA-C-N	6.22	132.89	121.70
7	r	632	LYS	C-N-CA	6.22	132.89	121.70
6	f	437	ASN	CA-CB-CG	-6.22	106.38	112.60
7	g	53	SER	N-CA-C	-6.22	105.01	112.59
7	r	12	LYS	N-CA-CB	6.22	119.26	110.12
7	g	713	ASP	CA-C-N	6.21	128.52	120.44
7	g	713	ASP	C-N-CA	6.21	128.52	120.44
1	l	694	ASN	CA-CB-CG	-6.21	106.39	112.60
3	n	566	LEU	CA-C-N	6.21	128.61	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	566	LEU	C-N-CA	6.21	128.61	120.28
7	g	938	ASN	N-CA-C	-6.21	97.69	108.69
6	f	506	ILE	N-CA-CB	6.21	117.81	110.55
7	g	209	ASP	N-CA-C	-6.21	104.42	112.68
3	n	602	PRO	CA-C-O	-6.21	114.36	121.56
7	r	1136	THR	O-C-N	6.21	128.79	122.09
3	c	705	MET	N-CA-C	6.21	118.84	111.33
6	f	181	PHE	CA-CB-CG	6.21	120.01	113.80
7	g	214	CYS	CA-C-N	6.21	130.10	120.60
7	g	214	CYS	C-N-CA	6.21	130.10	120.60
2	m	725	ALA	N-CA-CB	6.21	119.57	110.57
6	q	369	VAL	N-CA-C	6.21	122.25	109.34
7	g	964	LEU	CA-C-N	6.21	128.59	120.28
7	g	964	LEU	C-N-CA	6.21	128.59	120.28
2	m	294	GLN	N-CA-C	6.21	118.59	111.02
1	a	466	TYR	O-C-N	-6.20	115.39	123.02
1	l	288	VAL	CA-C-O	-6.20	113.88	120.39
1	l	506	LEU	N-CA-C	-6.20	105.02	112.59
4	o	54	GLY	O-C-N	6.20	127.97	121.77
5	p	233	THR	CA-CB-OG1	6.20	118.91	109.60
6	q	24	ILE	O-C-N	6.20	128.22	121.83
2	b	158	PHE	CA-CB-CG	6.20	120.00	113.80
7	g	355	SER	O-C-N	-6.20	115.08	122.15
7	g	656	VAL	CA-C-N	6.20	128.50	120.44
7	g	656	VAL	C-N-CA	6.20	128.50	120.44
7	g	1138	GLY	CA-C-O	-6.20	113.48	120.30
3	n	643	PHE	CA-C-N	6.20	128.50	120.44
3	n	643	PHE	C-N-CA	6.20	128.50	120.44
7	r	846	THR	O-C-N	6.20	128.69	122.12
1	a	621	GLN	CA-C-O	6.20	127.53	120.90
1	l	974	GLU	N-CA-C	6.20	119.01	111.82
7	g	810	ASP	N-CA-CB	6.20	120.96	110.49
1	l	151	HIS	ND1-CE1-NE2	6.20	114.60	108.40
7	r	923	HIS	ND1-CE1-NE2	6.20	114.60	108.40
4	d	247	LEU	N-CA-CB	6.19	121.08	110.68
6	q	515	GLU	CA-C-N	6.19	128.58	120.28
6	q	515	GLU	C-N-CA	6.19	128.58	120.28
7	g	192	PHE	N-CA-CB	6.19	119.93	110.70
5	p	301	ASP	N-CA-CB	6.19	120.99	110.71
6	q	485	ASP	CA-CB-CG	6.19	118.79	112.60
7	r	426	ILE	N-CA-C	-6.19	99.44	108.11
3	c	590	GLU	CA-C-N	6.19	129.19	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	590	GLU	C-N-CA	6.19	129.19	120.28
7	g	594	LEU	CA-C-O	6.19	127.11	120.55
6	q	341	HIS	CG-CD2-NE2	6.19	113.39	107.20
7	r	338	PRO	N-CA-C	6.19	120.80	111.14
5	e	173	TRP	CA-C-O	-6.19	114.82	121.56
7	r	585	LEU	N-CA-C	-6.19	104.54	111.28
3	c	175	LEU	CA-C-N	6.18	126.20	119.89
3	c	175	LEU	C-N-CA	6.18	126.20	119.89
6	f	523	TYR	CA-C-N	6.18	128.35	120.56
6	f	523	TYR	C-N-CA	6.18	128.35	120.56
6	f	712	LYS	CA-C-N	6.18	128.48	120.44
6	f	712	LYS	C-N-CA	6.18	128.48	120.44
3	c	455	GLN	CA-C-O	-6.18	114.33	120.82
7	g	960	ILE	N-CA-CB	6.18	121.96	110.77
1	l	1026	THR	CA-C-O	-6.18	114.66	121.89
6	q	656	ARG	N-CA-C	6.18	118.02	111.28
2	b	249	LEU	CA-C-N	6.18	129.70	120.31
2	b	249	LEU	C-N-CA	6.18	129.70	120.31
3	c	597	ILE	CA-C-O	6.18	126.96	119.54
6	f	534	SER	CA-C-O	-6.18	114.00	120.55
1	a	541	PRO	N-CD-CG	6.18	112.47	103.20
3	n	462	THR	N-CA-C	-6.18	99.83	108.54
6	q	245	ARG	CA-C-N	6.18	128.56	120.28
6	q	245	ARG	C-N-CA	6.18	128.56	120.28
1	a	477	GLN	CA-C-N	6.17	126.14	119.78
1	a	477	GLN	C-N-CA	6.17	126.14	119.78
1	a	991	LEU	CA-C-N	6.17	130.63	120.94
1	a	991	LEU	C-N-CA	6.17	130.63	120.94
1	l	679	LEU	CA-C-N	6.17	129.06	120.29
1	l	679	LEU	C-N-CA	6.17	129.06	120.29
3	n	186	ASP	CA-C-O	6.17	127.76	120.66
1	l	851	TYR	CA-C-N	6.17	129.17	120.28
1	l	851	TYR	C-N-CA	6.17	129.17	120.28
2	m	727	LEU	N-CA-C	6.17	118.01	111.28
2	m	171	ARG	NE-CZ-NH2	-6.17	113.65	119.20
2	m	624	LEU	CA-C-N	6.17	127.80	120.09
2	m	624	LEU	C-N-CA	6.17	127.80	120.09
7	r	571	VAL	CA-C-O	-6.17	114.53	120.95
2	b	684	ASP	CA-CB-CG	6.17	118.77	112.60
7	g	135	ALA	CA-C-N	6.17	126.52	119.92
7	g	135	ALA	C-N-CA	6.17	126.52	119.92
3	n	649	HIS	CG-CD2-NE2	6.17	113.36	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	447	GLU	CA-C-N	6.16	128.45	120.44
1	a	447	GLU	C-N-CA	6.16	128.45	120.44
6	f	134	GLU	CA-C-N	6.16	129.45	120.51
6	f	134	GLU	C-N-CA	6.16	129.45	120.51
6	f	360	HIS	ND1-CE1-NE2	6.16	114.56	108.40
2	m	150	ALA	CA-C-O	-6.16	113.89	120.42
7	r	43	SER	CA-C-N	6.16	129.04	120.29
7	r	43	SER	C-N-CA	6.16	129.04	120.29
1	a	583	LEU	N-CA-C	6.16	118.08	111.36
6	f	670	LYS	N-CA-C	-6.16	101.40	110.52
7	g	41	ASP	CA-CB-CG	-6.16	106.44	112.60
7	g	90	ILE	CA-C-N	6.16	131.67	123.05
7	g	90	ILE	C-N-CA	6.16	131.67	123.05
1	l	21	ASN	N-CA-C	6.16	118.92	110.24
2	m	684	ASP	N-CA-CB	-6.16	101.07	110.49
3	n	188	VAL	O-C-N	6.16	127.95	121.91
1	a	883	GLU	N-CA-C	6.16	117.66	111.07
6	f	247	VAL	CB-CA-C	6.16	120.45	112.14
3	c	708	THR	CA-C-N	6.16	128.78	120.65
3	c	708	THR	C-N-CA	6.16	128.78	120.65
7	g	899	ALA	CB-CA-C	-6.16	100.57	110.79
1	l	647	PHE	N-CA-C	-6.16	105.41	113.17
6	q	470	LEU	O-C-N	-6.16	114.24	121.32
3	c	165	VAL	CA-C-O	6.15	127.03	120.26
2	b	243	GLN	N-CA-C	6.15	117.99	111.28
3	c	304	VAL	CA-C-N	6.15	133.29	121.54
3	c	304	VAL	C-N-CA	6.15	133.29	121.54
5	p	146	ARG	NE-CZ-NH2	6.15	124.74	119.20
6	q	56	SER	CA-C-N	6.15	131.51	122.10
6	q	56	SER	C-N-CA	6.15	131.51	122.10
2	m	639	ARG	N-CA-C	-6.15	105.62	112.57
3	c	642	ILE	CA-C-N	6.15	128.52	120.28
3	c	642	ILE	C-N-CA	6.15	128.52	120.28
7	r	727	PHE	N-CA-C	6.15	117.98	111.28
4	d	208	ARG	NE-CZ-NH2	-6.15	113.67	119.20
6	f	533	LEU	CA-C-O	-6.15	114.03	120.55
7	g	505	SER	N-CA-C	-6.15	105.54	113.16
1	l	186	LEU	N-CA-C	-6.15	98.26	108.34
2	m	373	GLU	CA-C-N	6.15	129.34	120.79
2	m	373	GLU	C-N-CA	6.15	129.34	120.79
2	m	494	THR	N-CA-C	-6.15	100.07	109.41
3	n	528	ASN	CA-CB-CG	6.15	118.75	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	528	GLU	CA-C-N	6.15	128.52	120.28
7	r	528	GLU	C-N-CA	6.15	128.52	120.28
6	f	574	ASP	CA-CB-CG	6.15	118.75	112.60
1	a	219	ASP	CA-CB-CG	6.14	118.74	112.60
3	n	238	SER	CA-C-N	6.14	133.03	121.97
3	n	238	SER	C-N-CA	6.14	133.03	121.97
7	r	182	ASN	O-C-N	-6.14	116.09	123.03
1	a	255	GLN	CA-C-N	6.14	131.48	122.39
1	a	255	GLN	C-N-CA	6.14	131.48	122.39
4	d	239	GLU	N-CA-CB	6.14	120.24	114.10
7	g	241	GLN	N-CA-C	-6.14	97.72	110.80
7	g	829	VAL	CA-C-N	6.14	129.13	120.28
7	g	829	VAL	C-N-CA	6.14	129.13	120.28
7	g	1132	LYS	N-CA-C	6.14	117.64	111.07
1	l	223	VAL	N-CA-C	6.14	117.35	109.30
1	l	388	ASP	CA-CB-CG	-6.14	106.46	112.60
1	l	751	ARG	N-CA-CB	6.14	119.01	110.17
2	m	661	HIS	ND1-CE1-NE2	6.14	114.54	108.40
3	n	502	ALA	N-CA-C	-6.14	104.86	112.72
7	r	461	ASP	N-CA-CB	6.14	120.87	110.49
2	b	271	LEU	N-CA-CB	6.14	119.45	110.30
3	c	128	CYS	N-CA-C	6.14	117.97	111.28
7	g	505	SER	CA-C-N	6.14	128.51	120.28
7	g	505	SER	C-N-CA	6.14	128.51	120.28
7	g	985	ASN	CA-CB-CG	-6.14	106.46	112.60
6	q	68	TRP	N-CA-C	6.14	118.94	111.82
7	r	729	CYS	CA-C-N	6.14	128.51	120.28
7	r	729	CYS	C-N-CA	6.14	128.51	120.28
1	l	445	ASN	CA-C-O	6.14	127.03	119.97
4	o	252	LYS	N-CA-CB	6.14	120.29	110.16
4	o	262	TRP	CZ3-CH2-CZ2	-6.14	113.52	121.50
1	a	540	LEU	CA-C-O	-6.13	112.45	119.32
6	f	367	LEU	CA-C-N	6.13	128.50	120.28
6	f	367	LEU	C-N-CA	6.13	128.50	120.28
1	l	977	ALA	CA-C-N	6.13	128.50	120.28
1	l	977	ALA	C-N-CA	6.13	128.50	120.28
1	a	249	THR	N-CA-CB	6.13	119.84	110.70
3	c	207	TYR	N-CA-CB	6.13	117.45	110.03
7	g	573	LYS	N-CA-C	6.13	117.96	111.28
3	c	692	GLU	N-CA-C	6.13	117.96	111.28
6	q	720	ARG	NE-CZ-NH1	6.13	127.63	121.50
6	f	22	PHE	CB-CG-CD1	6.13	131.11	120.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	1003	VAL	N-CA-CB	6.13	118.87	110.54
7	r	690	ARG	NE-CZ-NH2	6.13	124.71	119.20
7	r	740	GLU	CA-C-N	6.13	126.78	119.98
7	r	740	GLU	C-N-CA	6.13	126.78	119.98
1	a	230	HIS	CA-CB-CG	6.12	119.92	113.80
7	r	1019	LEU	CA-C-N	6.12	128.40	120.44
7	r	1019	LEU	C-N-CA	6.12	128.40	120.44
7	g	912	LYS	N-CA-C	-6.12	106.45	114.04
5	e	17	TYR	N-CA-C	-6.12	101.42	110.48
5	e	41	ASP	CA-CB-CG	-6.12	106.48	112.60
1	l	327	ALA	N-CA-C	-6.12	105.46	113.17
1	l	601	PHE	N-CA-C	-6.12	99.42	108.79
7	r	5	LYS	CB-CA-C	-6.12	99.50	110.70
6	f	208	ILE	CA-C-N	6.12	128.48	120.28
6	f	208	ILE	C-N-CA	6.12	128.48	120.28
7	g	113	THR	CA-C-N	6.12	133.23	121.54
7	g	113	THR	C-N-CA	6.12	133.23	121.54
7	g	787	ASP	CA-CB-CG	6.12	118.72	112.60
1	l	789	LYS	N-CA-C	-6.12	97.77	110.80
3	n	427	ALA	N-CA-C	-6.12	102.42	110.43
7	r	634	VAL	N-CA-C	-6.12	106.54	112.29
6	f	570	ASN	OD1-CG-ND2	-6.12	116.48	122.60
7	r	799	GLU	CA-C-N	6.12	128.47	120.28
7	r	799	GLU	C-N-CA	6.12	128.47	120.28
6	f	612	ASN	CA-C-N	6.11	125.22	120.33
6	f	612	ASN	C-N-CA	6.11	125.22	120.33
1	l	834	ARG	CA-C-O	-6.11	114.07	120.55
2	m	407	PRO	N-CA-CB	6.11	110.15	103.30
3	n	355	SER	N-CA-C	-6.11	104.69	111.36
1	a	958	TRP	N-CA-C	6.11	118.73	111.33
4	d	58	ARG	NE-CZ-NH1	6.11	127.61	121.50
7	g	678	TYR	CA-C-N	6.11	129.29	120.79
7	g	678	TYR	C-N-CA	6.11	129.29	120.79
3	n	183	PHE	N-CA-C	-6.11	105.11	113.30
7	r	336	SER	N-CA-C	-6.11	98.67	109.06
7	g	578	LYS	N-CA-C	-6.11	103.25	111.87
1	l	519	THR	CA-C-N	6.11	131.98	122.26
1	l	519	THR	C-N-CA	6.11	131.98	122.26
1	a	146	ASN	OD1-CG-ND2	-6.11	116.49	122.60
1	a	482	SER	N-CA-CB	6.11	120.43	110.90
7	g	662	ASN	CA-CB-CG	-6.11	106.49	112.60
1	l	341	GLU	N-CA-CB	6.11	120.18	110.65

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	251	GLN	N-CA-C	6.11	118.44	111.11
2	m	689	ALA	CA-C-N	6.11	128.75	120.44
2	m	689	ALA	C-N-CA	6.11	128.75	120.44
5	p	315	THR	N-CA-C	-6.11	105.11	113.30
6	q	95	GLU	CA-C-O	-6.11	114.45	121.47
6	q	419	LEU	CA-C-O	-6.11	113.94	120.42
6	f	331	VAL	O-C-N	6.11	127.79	121.87
4	o	86	ASN	OD1-CG-ND2	6.11	128.71	122.60
6	q	272	PRO	CA-C-N	6.11	129.80	120.82
6	q	272	PRO	C-N-CA	6.11	129.80	120.82
1	l	285	ASN	N-CA-C	-6.10	104.33	112.94
6	q	274	GLN	OE1-CD-NE2	-6.10	116.50	122.60
1	a	620	HIS	ND1-CE1-NE2	6.10	114.50	108.40
3	c	599	ASN	CA-CB-CG	-6.10	106.50	112.60
7	r	817	THR	N-CA-C	6.10	117.93	111.28
5	e	101	LEU	N-CA-C	-6.10	97.81	110.80
2	m	305	GLU	O-C-N	6.10	128.43	122.09
2	m	347	LEU	CA-C-N	6.10	129.06	120.28
2	m	347	LEU	C-N-CA	6.10	129.06	120.28
3	n	684	LEU	N-CA-C	-6.10	105.84	113.28
4	o	256	VAL	N-CA-C	-6.10	98.22	107.73
5	e	164	HIS	ND1-CE1-NE2	6.09	114.49	108.40
5	p	339	PHE	CA-CB-CG	-6.09	107.71	113.80
7	g	588	ILE	CA-CB-CG2	-6.09	100.14	110.50
6	f	207	SER	N-CA-C	6.09	117.92	111.28
6	q	255	GLY	N-CA-C	-6.09	106.36	114.95
2	b	461	MET	CA-C-N	6.09	128.44	120.28
2	b	461	MET	C-N-CA	6.09	128.44	120.28
4	d	63	HIS	CA-C-N	6.09	127.45	119.84
4	d	63	HIS	C-N-CA	6.09	127.45	119.84
6	f	52	ASP	CA-C-O	-6.09	114.43	120.82
2	b	534	ILE	CA-CB-CG2	6.09	120.85	110.50
7	g	684	GLU	CA-C-N	6.09	126.70	119.94
7	g	684	GLU	C-N-CA	6.09	126.70	119.94
1	a	703	ASP	N-CA-CB	6.09	119.17	110.16
2	m	260	GLN	N-CA-CB	6.09	119.17	110.16
7	r	547	PRO	N-CA-CB	-6.09	100.06	103.22
4	d	63	HIS	N-CA-C	-6.08	101.98	109.65
1	a	620	HIS	CG-CD2-NE2	6.08	113.28	107.20
1	a	757	GLU	CA-C-O	-6.08	114.43	120.70
2	b	194	GLY	N-CA-C	-6.08	106.54	115.72
7	g	363	LEU	N-CA-C	-6.08	98.82	108.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	589	ASN	CA-C-N	6.08	128.93	120.29
3	n	589	ASN	C-N-CA	6.08	128.93	120.29
7	r	123	PRO	CA-C-O	-6.08	114.30	122.08
5	e	54	HIS	CE1-NE2-CD2	-6.08	102.92	109.00
7	g	600	PHE	CB-CA-C	-6.08	101.33	110.88
1	l	567	LEU	N-CA-C	6.08	117.91	111.28
5	e	194	TYR	N-CA-C	6.08	116.30	108.34
7	g	690	ARG	N-CA-C	-6.08	104.73	111.36
1	l	449	ILE	CA-C-N	6.08	128.34	120.44
1	l	449	ILE	C-N-CA	6.08	128.34	120.44
4	o	229	ARG	CA-C-N	6.08	132.64	121.94
4	o	229	ARG	C-N-CA	6.08	132.64	121.94
4	d	280	LEU	N-CA-C	-6.08	98.49	108.76
3	n	236	LEU	CA-C-N	6.08	129.24	120.79
3	n	236	LEU	C-N-CA	6.08	129.24	120.79
7	r	94	ILE	N-CA-C	-6.08	107.94	113.71
1	l	554	PHE	O-C-N	-6.08	115.81	122.07
2	m	281	SER	N-CA-C	6.08	119.53	111.75
2	m	712	THR	CA-C-N	6.08	128.21	120.56
2	m	712	THR	C-N-CA	6.08	128.21	120.56
4	o	56	VAL	N-CA-CB	6.08	117.96	111.46
4	o	143	ALA	N-CA-C	-6.08	99.45	108.99
3	c	295	PHE	CA-C-N	6.07	128.42	120.28
3	c	295	PHE	C-N-CA	6.07	128.42	120.28
7	r	744	LYS	CB-CA-C	-6.07	100.53	110.85
5	e	336	SER	N-CA-C	-6.07	105.91	113.38
7	g	494	VAL	CA-C-O	6.07	127.61	121.17
6	f	185	TYR	CB-CA-C	6.07	120.86	110.79
6	f	335	HIS	ND1-CE1-NE2	6.07	114.47	108.40
6	q	21	GLU	CA-C-N	6.07	128.33	120.44
6	q	21	GLU	C-N-CA	6.07	128.33	120.44
7	r	719	ASN	CA-CB-CG	6.07	118.67	112.60
7	r	1078	LEU	CA-C-N	6.07	127.43	119.84
7	r	1078	LEU	C-N-CA	6.07	127.43	119.84
4	d	91	GLN	OE1-CD-NE2	-6.07	116.53	122.60
6	q	70	LEU	CA-C-N	6.07	128.91	120.29
6	q	70	LEU	C-N-CA	6.07	128.91	120.29
2	b	739	LEU	CA-C-N	6.07	128.41	120.28
2	b	739	LEU	C-N-CA	6.07	128.41	120.28
4	d	87	GLY	N-CA-C	-6.07	106.88	115.43
7	g	14	LEU	O-C-N	6.07	128.58	122.03
7	g	426	ILE	CA-C-O	-6.07	114.08	120.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	688	LEU	N-CA-C	-6.07	106.20	113.97
1	a	573	GLU	CA-C-O	6.07	126.98	120.55
3	c	386	ASN	CA-C-N	6.07	128.66	120.65
3	c	386	ASN	C-N-CA	6.07	128.66	120.65
7	g	61	PHE	CB-CG-CD2	6.07	131.01	120.70
5	p	37	LYS	CA-CB-CG	6.07	126.23	114.10
7	g	48	GLN	N-CA-CB	6.06	119.03	110.12
7	r	293	GLN	N-CA-C	-6.06	98.51	108.76
6	f	246	THR	N-CA-CB	6.06	119.13	110.16
6	f	339	SER	N-CA-C	-6.06	104.72	113.21
2	b	271	LEU	CA-C-O	-6.06	112.79	118.73
2	b	534	ILE	CB-CA-C	-6.06	103.86	112.22
5	p	313	ASN	CA-CB-CG	6.06	118.66	112.60
7	r	1050	ALA	CA-C-N	6.06	131.75	121.14
7	r	1050	ALA	C-N-CA	6.06	131.75	121.14
6	f	615	THR	N-CA-C	-6.06	104.75	111.36
3	n	199	ILE	N-CA-CB	6.06	117.33	110.72
5	p	180	PRO	CA-C-N	-6.06	112.28	120.82
5	p	180	PRO	C-N-CA	-6.06	112.28	120.82
5	e	23	HIS	N-CA-C	-6.06	99.93	109.50
6	f	37	ASN	CB-CA-C	-6.06	100.55	110.85
3	c	140	LYS	N-CA-C	6.06	117.55	111.07
6	q	259	TYR	CA-C-N	6.06	128.31	120.44
6	q	259	TYR	C-N-CA	6.06	128.31	120.44
7	r	567	PHE	CA-C-N	6.06	128.89	120.29
7	r	567	PHE	C-N-CA	6.06	128.89	120.29
7	r	957	GLU	CA-C-N	6.06	128.40	120.28
7	r	957	GLU	C-N-CA	6.06	128.40	120.28
7	r	1064	ARG	NE-CZ-NH2	-6.06	113.75	119.20
2	b	607	ILE	CA-C-O	-6.05	111.84	119.95
1	l	353	VAL	CB-CA-C	6.05	118.59	110.42
2	m	484	VAL	CA-C-O	-6.05	114.75	121.17
4	o	176	GLY	CA-C-N	6.05	127.86	122.47
4	o	176	GLY	C-N-CA	6.05	127.86	122.47
7	g	31	TYR	N-CA-CB	6.05	119.02	110.12
7	g	723	PHE	CA-CB-CG	-6.05	107.75	113.80
7	g	844	SER	CA-C-O	-6.05	114.14	120.55
7	g	736	ASP	CA-C-N	6.05	130.28	120.60
7	g	736	ASP	C-N-CA	6.05	130.28	120.60
7	r	715	LEU	CA-C-N	6.05	128.39	120.28
7	r	715	LEU	C-N-CA	6.05	128.39	120.28
4	o	78	LYS	CA-C-N	6.05	130.98	123.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	78	LYS	C-N-CA	6.05	130.98	123.12
3	c	600	GLU	CA-CB-CG	-6.05	102.01	114.10
6	f	93	GLU	N-CA-C	-6.05	103.03	110.65
1	l	693	PHE	N-CA-CB	6.05	119.22	110.88
3	n	542	ALA	N-CA-C	6.05	117.87	111.28
7	r	34	GLU	N-CA-CB	6.05	119.01	110.12
6	f	63	ILE	O-C-N	6.04	127.83	121.91
1	l	813	CYS	O-C-N	-6.04	115.15	122.22
3	c	311	ILE	N-CA-C	6.04	116.78	110.62
6	f	360	HIS	CE1-NE2-CD2	-6.04	102.96	109.00
2	m	261	ALA	O-C-N	-6.04	115.72	122.12
2	m	616	VAL	N-CA-C	-6.04	107.24	113.10
2	m	145	ASN	N-CA-C	6.04	117.87	111.28
1	a	408	PHE	CA-CB-CG	6.04	119.84	113.80
3	c	648	LYS	N-CA-C	-6.04	105.95	113.38
5	p	105	ASN	CA-CB-CG	-6.04	106.56	112.60
7	r	954	ILE	CA-C-N	6.04	128.37	120.28
7	r	954	ILE	C-N-CA	6.04	128.37	120.28
5	p	302	ASP	CA-C-N	6.04	128.65	120.44
5	p	302	ASP	C-N-CA	6.04	128.65	120.44
7	g	1152	THR	N-CA-CB	6.04	120.69	110.49
5	e	178	PHE	N-CA-C	-6.04	105.67	113.16
6	f	99	TYR	N-CA-CB	6.04	120.69	110.49
1	a	86	ASP	CA-CB-CG	-6.03	106.57	112.60
6	f	530	ILE	CA-C-O	-6.03	114.68	120.95
1	l	813	CYS	CA-C-O	6.03	126.92	120.10
6	f	278	GLN	CB-CG-CD	-6.03	102.34	112.60
1	l	954	ARG	NE-CZ-NH1	6.03	127.53	121.50
3	c	499	ASP	CA-C-N	6.03	128.68	120.54
3	c	499	ASP	C-N-CA	6.03	128.68	120.54
5	e	242	ILE	N-CA-C	-6.03	97.69	107.28
7	g	689	ILE	CA-CB-CG1	6.03	120.65	110.40
7	g	901	ASN	CA-C-N	6.03	128.28	120.44
7	g	901	ASN	C-N-CA	6.03	128.28	120.44
1	l	848	SER	O-C-N	6.03	128.51	122.12
7	g	454	ASP	CA-CB-CG	6.03	118.63	112.60
1	l	952	ASN	N-CA-C	-6.03	105.89	113.18
6	q	226	GLN	OE1-CD-NE2	6.03	128.63	122.60
1	l	811	LEU	N-CA-C	6.03	117.85	111.28
1	l	880	ARG	NH1-CZ-NH2	6.03	127.13	119.30
2	b	236	GLY	N-CA-C	-6.02	106.13	116.01
5	e	329	ARG	NE-CZ-NH2	6.02	124.62	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	719	SER	N-CA-C	-6.02	105.96	113.55
6	f	293	ILE	CB-CA-C	-6.02	104.26	111.97
1	a	219	ASP	N-CA-C	-6.02	104.05	113.02
1	a	410	ASN	OD1-CG-ND2	6.02	128.62	122.60
1	l	385	SER	CA-C-N	6.02	128.35	120.28
1	l	385	SER	C-N-CA	6.02	128.35	120.28
1	l	655	LEU	N-CA-C	6.02	117.84	111.28
6	f	569	ASP	CA-C-N	6.02	130.71	122.34
6	f	569	ASP	C-N-CA	6.02	130.71	122.34
2	m	272	PRO	CA-C-N	6.02	128.95	120.28
2	m	272	PRO	C-N-CA	6.02	128.95	120.28
7	r	1153	ASN	OD1-CG-ND2	-6.02	116.58	122.60
3	c	430	ASN	N-CA-CB	6.02	120.42	110.91
7	g	726	THR	N-CA-C	6.02	118.80	111.82
4	o	280	LEU	CA-C-O	-6.02	113.86	120.24
6	q	135	ARG	CA-C-N	6.02	126.37	119.93
6	q	135	ARG	C-N-CA	6.02	126.37	119.93
1	a	658	HIS	CA-C-N	6.02	128.59	120.65
1	a	658	HIS	C-N-CA	6.02	128.59	120.65
7	r	1134	HIS	CE1-NE2-CD2	-6.02	102.98	109.00
1	a	769	ASN	OD1-CG-ND2	6.01	128.61	122.60
7	g	10	LEU	O-C-N	-6.01	115.74	122.12
1	l	473	VAL	CA-C-O	6.01	126.97	120.53
2	m	380	GLU	CB-CG-CD	-6.01	102.37	112.60
7	r	129	ASN	OD1-CG-ND2	6.01	128.61	122.60
2	b	588	ASP	CA-C-N	6.01	125.72	119.05
2	b	588	ASP	C-N-CA	6.01	125.72	119.05
5	e	232	ALA	CA-C-O	-6.01	114.13	120.80
6	f	220	ASN	CA-C-O	-6.01	115.14	120.19
6	f	245	ARG	N-CA-C	6.01	117.91	111.36
2	m	227	VAL	O-C-N	-6.01	116.04	121.87
1	a	509	TYR	CA-C-N	6.01	128.82	120.29
1	a	509	TYR	C-N-CA	6.01	128.82	120.29
2	b	618	ASN	N-CA-C	6.01	119.92	112.47
5	e	20	TYR	CA-C-N	6.01	133.19	121.41
5	e	20	TYR	C-N-CA	6.01	133.19	121.41
7	r	111	HIS	N-CA-C	-6.01	105.13	112.88
1	a	804	GLY	CA-C-N	6.01	130.09	121.50
1	a	804	GLY	C-N-CA	6.01	130.09	121.50
3	c	428	ASN	OD1-CG-ND2	6.01	128.61	122.60
3	c	504	GLU	N-CA-C	6.01	118.35	111.02
3	n	618	VAL	CB-CA-C	6.01	121.99	112.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	24	LEU	CB-CA-C	6.01	119.44	109.53
5	p	226	ARG	CA-C-O	-6.01	115.02	121.45
3	c	290	GLU	CA-C-N	6.00	128.69	120.46
3	c	290	GLU	C-N-CA	6.00	128.69	120.46
7	g	495	LYS	CA-C-N	6.00	128.25	120.44
7	g	495	LYS	C-N-CA	6.00	128.25	120.44
6	q	124	VAL	N-CA-C	6.00	116.74	110.62
7	g	865	PRO	CA-C-N	-6.00	113.19	122.49
7	g	865	PRO	C-N-CA	-6.00	113.19	122.49
2	b	373	GLU	CA-C-N	6.00	128.32	120.28
2	b	373	GLU	C-N-CA	6.00	128.32	120.28
4	d	94	VAL	CA-C-O	-6.00	115.01	121.19
6	q	250	LEU	N-CA-C	6.00	117.90	111.36
7	r	401	ILE	CA-C-N	6.00	127.34	119.84
7	r	401	ILE	C-N-CA	6.00	127.34	119.84
7	g	804	ILE	CA-C-N	6.00	128.32	120.28
7	g	804	ILE	C-N-CA	6.00	128.32	120.28
6	q	502	ASP	N-CA-CB	6.00	120.62	110.49
7	r	859	ASP	CA-C-N	6.00	128.23	120.44
7	r	859	ASP	C-N-CA	6.00	128.23	120.44
2	b	493	ALA	CA-C-N	5.99	130.91	121.56
2	b	493	ALA	C-N-CA	5.99	130.91	121.56
1	a	178	LEU	CA-C-N	5.99	133.20	122.06
1	a	178	LEU	C-N-CA	5.99	133.20	122.06
6	f	147	SER	O-C-N	5.99	129.64	122.27
6	f	177	ASP	CA-C-O	-5.99	114.49	120.90
6	q	597	TYR	CA-C-N	5.99	128.31	120.28
6	q	597	TYR	C-N-CA	5.99	128.31	120.28
7	r	224	ASN	CA-C-N	5.99	128.31	120.28
7	r	224	ASN	C-N-CA	5.99	128.31	120.28
2	b	188	MET	N-CA-C	5.99	119.78	112.23
3	c	687	PRO	N-CA-C	5.99	120.61	111.15
1	l	375	ASN	N-CA-C	-5.99	98.65	108.41
6	q	265	SER	O-C-N	5.99	128.24	122.07
5	e	335	TYR	O-C-N	-5.99	114.47	122.43
6	q	173	ASP	CA-C-N	5.99	132.97	121.54
6	q	173	ASP	C-N-CA	5.99	132.97	121.54
1	a	1032	ASP	CA-C-N	5.99	128.30	120.28
1	a	1032	ASP	C-N-CA	5.99	128.30	120.28
7	g	159	ASP	N-CA-C	-5.99	98.66	108.41
1	l	694	ASN	OD1-CG-ND2	5.99	128.59	122.60
3	n	255	VAL	N-CA-C	-5.99	104.67	110.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	832	PHE	CA-C-N	5.98	128.30	120.28
1	a	832	PHE	C-N-CA	5.98	128.30	120.28
2	b	72	GLY	CA-C-N	5.98	125.60	119.56
2	b	72	GLY	C-N-CA	5.98	125.60	119.56
2	m	716	ALA	O-C-N	5.98	128.55	122.09
6	q	492	SER	CA-C-N	5.98	126.50	120.04
6	q	492	SER	C-N-CA	5.98	126.50	120.04
1	a	393	HIS	CE1-NE2-CD2	-5.98	103.02	109.00
1	a	877	ILE	CA-C-O	-5.98	114.51	120.85
1	a	890	ARG	NE-CZ-NH2	5.98	124.58	119.20
7	r	274	PRO	O-C-N	5.98	130.43	123.01
2	b	412	LEU	N-CA-C	5.98	117.60	111.14
7	r	253	LYS	CA-C-O	5.98	126.56	119.56
1	a	338	ARG	CA-C-N	5.98	126.33	119.93
1	a	338	ARG	C-N-CA	5.98	126.33	119.93
2	b	263	GLY	CA-C-N	5.98	128.78	120.29
2	b	263	GLY	C-N-CA	5.98	128.78	120.29
3	c	319	SER	CA-C-O	-5.98	114.17	120.63
7	r	323	LEU	N-CA-C	-5.98	107.81	114.62
7	g	658	PHE	CA-C-O	-5.98	111.97	120.16
6	q	76	HIS	CA-CB-CG	5.98	119.78	113.80
6	f	656	ARG	N-CA-CB	5.97	118.67	110.01
1	l	988	GLN	CA-C-N	5.97	131.87	122.49
1	l	988	GLN	C-N-CA	5.97	131.87	122.49
6	f	42	PHE	CA-CB-CG	-5.97	107.83	113.80
1	a	951	GLN	CA-C-N	5.97	128.53	120.65
1	a	951	GLN	C-N-CA	5.97	128.53	120.65
7	g	998	ASN	CA-C-N	5.97	128.20	120.44
7	g	998	ASN	C-N-CA	5.97	128.20	120.44
1	a	264	ASP	N-CA-C	-5.97	106.04	113.38
6	f	652	LEU	N-CA-C	5.97	117.78	111.28
1	l	826	TYR	N-CA-C	5.97	117.45	111.07
3	n	421	ILE	O-C-N	5.97	127.76	121.91
7	r	598	ILE	N-CA-C	5.97	116.71	110.62
2	b	104	PHE	CA-CB-CG	-5.96	107.83	113.80
1	l	264	ASP	CA-C-N	5.96	132.93	121.54
1	l	264	ASP	C-N-CA	5.96	132.93	121.54
7	r	340	GLN	CA-CB-CG	5.96	126.03	114.10
2	b	599	SER	CA-C-N	5.96	127.29	119.84
2	b	599	SER	C-N-CA	5.96	127.29	119.84
3	c	503	ALA	CB-CA-C	5.96	120.32	110.90
7	r	21	VAL	CA-C-O	5.96	128.23	120.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	512	THR	CA-C-N	5.96	128.75	120.29
1	a	512	THR	C-N-CA	5.96	128.75	120.29
2	b	394	CYS	CA-C-N	5.96	128.07	120.56
2	b	394	CYS	C-N-CA	5.96	128.07	120.56
3	c	237	SER	N-CA-C	5.96	118.56	111.71
7	g	958	LYS	CA-C-N	5.96	128.51	120.65
7	g	958	LYS	C-N-CA	5.96	128.51	120.65
7	g	1094	TYR	N-CA-C	5.96	117.78	111.28
3	n	637	ILE	CA-C-O	-5.96	114.75	120.95
7	g	472	MET	N-CA-C	-5.96	105.67	113.17
6	q	286	LEU	CA-C-N	5.96	128.26	120.28
6	q	286	LEU	C-N-CA	5.96	128.26	120.28
5	e	306	GLU	CB-CA-C	5.96	119.72	110.67
5	e	30	ASP	CA-CB-CG	5.95	118.55	112.60
1	l	929	HIS	ND1-CE1-NE2	5.95	114.35	108.40
6	q	71	GLU	CA-C-N	5.95	128.74	120.29
6	q	71	GLU	C-N-CA	5.95	128.74	120.29
1	a	647	PHE	CA-CB-CG	-5.95	107.85	113.80
2	b	278	CYS	CA-C-N	5.95	128.74	120.29
2	b	278	CYS	C-N-CA	5.95	128.74	120.29
1	l	612	SER	CB-CA-C	-5.95	101.50	110.90
2	m	589	PRO	N-CA-CB	5.95	110.11	103.44
6	q	73	ARG	CA-C-O	-5.95	114.11	120.42
1	a	748	PHE	CA-CB-CG	-5.95	107.85	113.80
1	l	486	LEU	O-C-N	5.95	129.57	122.79
3	n	356	LYS	N-CA-CB	5.95	118.87	110.12
7	r	425	VAL	N-CA-CB	5.95	117.02	110.53
3	c	265	HIS	CG-CD2-NE2	5.95	113.15	107.20
5	e	164	HIS	CA-CB-CG	5.95	119.75	113.80
7	g	785	HIS	CG-CD2-NE2	5.95	113.15	107.20
1	l	512	THR	O-C-N	5.95	128.43	122.12
6	q	398	ILE	N-CA-CB	5.95	118.18	110.57
2	b	614	CYS	N-CA-C	5.94	117.43	111.07
1	a	81	PHE	N-CA-C	-5.94	99.71	109.40
1	a	914	TYR	CA-C-N	5.94	128.24	120.28
1	a	914	TYR	C-N-CA	5.94	128.24	120.28
3	c	176	PRO	N-CA-CB	5.94	108.31	103.32
6	f	216	GLN	CB-CG-CD	-5.94	102.50	112.60
6	f	594	ILE	CB-CA-C	-5.94	104.02	112.22
1	l	342	LEU	CA-C-N	5.94	132.89	121.54
1	l	342	LEU	C-N-CA	5.94	132.89	121.54
2	b	515	THR	CA-C-N	5.94	129.34	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	515	THR	C-N-CA	5.94	129.34	120.31
4	o	144	HIS	CA-CB-CG	-5.94	107.86	113.80
5	e	63	TRP	CB-CA-C	-5.94	99.36	109.51
1	l	221	ASP	CA-CB-CG	-5.94	106.66	112.60
1	a	441	GLU	O-C-N	-5.94	115.38	122.15
1	a	958	TRP	CA-C-N	5.94	128.72	120.29
1	a	958	TRP	C-N-CA	5.94	128.72	120.29
2	b	419	PHE	CA-C-N	5.94	128.72	120.29
2	b	419	PHE	C-N-CA	5.94	128.72	120.29
4	d	14	ASP	CA-C-O	-5.94	114.88	121.23
6	f	429	ILE	CA-C-O	-5.94	111.99	119.95
7	g	631	THR	CA-CB-OG1	5.94	118.51	109.60
1	l	3	CYS	O-C-N	-5.94	114.69	122.59
6	f	458	ARG	O-C-N	5.93	128.26	122.09
6	f	523	TYR	N-CA-C	5.93	118.70	111.82
6	q	295	GLN	O-C-N	-5.93	114.97	122.27
7	r	781	TYR	CB-CA-C	5.93	122.23	110.42
1	a	254	ILE	CB-CA-C	-5.93	105.61	111.30
3	c	537	ILE	N-CA-CB	5.93	117.49	110.55
6	f	395	CYS	N-CA-C	5.93	117.75	111.28
7	g	17	PRO	O-C-N	5.93	130.37	123.01
3	n	185	PHE	N-CA-CB	5.93	119.07	110.88
5	p	18	ASP	CA-CB-CG	5.93	118.53	112.60
6	q	22	PHE	CA-C-O	-5.93	114.59	120.82
7	r	658	PHE	N-CA-CB	5.93	119.94	110.39
4	d	42	THR	CA-C-O	5.93	128.48	121.36
1	a	97	LEU	N-CA-CB	5.93	117.20	110.03
3	n	275	GLN	CA-C-N	5.93	129.84	120.47
3	n	275	GLN	C-N-CA	5.93	129.84	120.47
7	r	859	ASP	O-C-N	5.93	128.41	122.12
1	a	847	LYS	CA-C-N	5.93	128.22	120.28
1	a	847	LYS	C-N-CA	5.93	128.22	120.28
1	l	255	GLN	CA-C-O	5.93	127.71	120.60
3	n	160	LEU	N-CA-C	-5.93	101.35	109.71
1	a	242	HIS	O-C-N	-5.92	116.57	123.27
1	a	996	LYS	N-CA-C	5.92	117.41	111.07
7	g	233	ILE	CA-CB-CG1	5.92	120.47	110.40
7	g	940	ASP	N-CA-C	-5.92	105.36	112.59
1	l	89	HIS	CG-CD2-NE2	5.92	113.12	107.20
3	n	141	GLU	N-CA-C	5.92	120.12	113.01
2	m	714	ILE	N-CA-C	5.92	116.11	110.42
1	a	580	PRO	CA-C-N	5.92	128.02	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	580	PRO	C-N-CA	5.92	128.02	120.56
1	a	977	ALA	CA-C-N	5.92	128.70	120.29
1	a	977	ALA	C-N-CA	5.92	128.70	120.29
7	g	522	LEU	N-CA-C	-5.92	99.69	108.99
7	r	54	HIS	N-CA-CB	5.92	120.42	110.77
7	r	1002	LEU	CA-C-N	5.92	128.24	120.60
7	r	1002	LEU	C-N-CA	5.92	128.24	120.60
3	c	634	ASP	CA-C-N	5.92	128.69	120.29
3	c	634	ASP	C-N-CA	5.92	128.69	120.29
6	f	102	ARG	N-CA-C	-5.92	104.83	111.28
7	g	706	LEU	CA-C-N	5.92	127.23	119.84
7	g	706	LEU	C-N-CA	5.92	127.23	119.84
6	f	177	ASP	O-C-N	5.92	128.24	122.09
6	q	297	GLU	CA-C-O	-5.91	114.28	120.55
7	r	760	ILE	N-CA-C	-5.91	107.50	113.47
2	b	202	SER	CA-C-N	5.91	128.48	120.38
2	b	202	SER	C-N-CA	5.91	128.48	120.38
6	f	219	LEU	N-CA-C	-5.91	104.28	112.03
7	g	818	LEU	N-CA-C	5.91	118.68	111.82
6	q	9	THR	CA-C-N	5.91	129.30	120.31
6	q	9	THR	C-N-CA	5.91	129.30	120.31
3	n	403	VAL	CA-CB-CG1	5.91	120.45	110.40
1	a	498	HIS	CA-CB-CG	5.91	119.71	113.80
4	d	144	HIS	CE1-NE2-CD2	-5.91	103.09	109.00
1	l	520	LEU	N-CA-C	-5.91	106.04	113.72
3	c	203	LYS	CA-C-N	5.91	128.47	120.44
3	c	203	LYS	C-N-CA	5.91	128.47	120.44
3	c	589	ASN	N-CA-C	5.91	118.67	111.82
5	e	315	THR	N-CA-C	-5.91	106.20	113.41
7	g	229	PHE	CA-CB-CG	-5.91	107.89	113.80
7	g	963	LYS	CA-C-N	5.91	128.19	120.28
7	g	963	LYS	C-N-CA	5.91	128.19	120.28
2	m	188	MET	CA-C-O	-5.91	113.69	120.24
5	p	157	LEU	CA-C-N	5.91	128.68	120.29
5	p	157	LEU	C-N-CA	5.91	128.68	120.29
1	a	554	PHE	O-C-N	5.90	128.15	122.07
2	m	690	THR	O-C-N	-5.90	115.71	122.09
7	r	278	LYS	N-CA-CB	5.90	120.47	110.49
2	b	689	ALA	CA-C-O	5.90	126.81	120.55
7	r	679	ASP	N-CA-C	5.90	117.71	111.28
7	r	185	ASN	N-CA-C	-5.90	100.18	109.50
1	a	983	GLN	CA-C-N	5.90	128.18	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	983	GLN	C-N-CA	5.90	128.18	120.28
6	q	289	HIS	CE1-NE2-CD2	-5.90	103.10	109.00
1	l	757	GLU	CB-CG-CD	-5.90	102.58	112.60
7	r	1035	LYS	O-C-N	5.90	128.87	122.15
2	b	250	ASN	CA-CB-CG	-5.89	106.70	112.60
7	g	888	ILE	CA-C-N	5.89	128.18	120.28
7	g	888	ILE	C-N-CA	5.89	128.18	120.28
7	g	1031	PHE	CA-C-O	5.89	126.80	120.55
3	n	246	TYR	N-CA-C	-5.89	99.97	109.40
5	p	13	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
7	r	549	MET	N-CA-CB	5.89	120.45	110.49
6	f	392	LEU	CA-C-O	5.89	127.01	120.82
1	l	269	HIS	CE1-NE2-CD2	-5.89	103.11	109.00
1	l	422	ARG	CA-C-N	5.89	128.18	120.28
1	l	422	ARG	C-N-CA	5.89	128.18	120.28
3	n	448	GLN	CB-CG-CD	5.89	122.62	112.60
6	q	72	ALA	CA-C-O	5.89	126.67	120.42
1	a	846	SER	CA-C-N	5.89	128.17	120.28
1	a	846	SER	C-N-CA	5.89	128.17	120.28
2	m	172	PHE	CA-CB-CG	5.89	119.69	113.80
1	a	652	SER	N-CA-C	-5.89	104.86	111.28
2	b	391	GLU	O-C-N	5.89	128.36	122.12
7	g	275	ILE	N-CA-C	-5.89	99.22	108.23
7	g	905	ASN	CA-C-N	5.89	128.53	120.46
7	g	905	ASN	C-N-CA	5.89	128.53	120.46
1	l	767	CYS	CA-C-O	5.89	126.74	119.79
1	a	559	GLU	N-CA-CB	5.89	118.78	109.71
3	c	517	LEU	CA-C-O	5.89	126.55	119.43
7	g	487	SER	N-CA-C	-5.89	104.77	111.07
2	b	279	ALA	CA-C-N	5.89	128.53	120.46
2	b	279	ALA	C-N-CA	5.89	128.53	120.46
1	l	666	ASN	CA-C-N	5.89	128.76	120.28
1	l	666	ASN	C-N-CA	5.89	128.76	120.28
3	n	345	THR	N-CA-C	-5.89	98.26	110.80
6	q	565	GLU	CB-CA-C	-5.89	100.84	110.85
7	r	570	PHE	CB-CG-CD2	-5.89	110.69	120.70
3	c	584	ASN	OD1-CG-ND2	-5.88	116.72	122.60
7	g	713	ASP	N-CA-C	5.88	117.69	111.28
1	l	419	ILE	CA-C-O	-5.88	114.61	120.85
3	n	538	PHE	CA-C-O	5.88	126.79	120.55
7	r	52	HIS	CG-CD2-NE2	5.88	113.08	107.20
1	l	784	GLU	CA-CB-CG	5.88	125.87	114.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	204	SER	N-CA-C	-5.88	105.41	112.59
4	d	213	SER	N-CA-CB	5.88	117.93	110.23
7	g	578	LYS	CB-CG-CD	5.88	124.83	111.30
2	m	510	HIS	N-CA-CB	5.88	118.77	110.12
5	e	246	THR	N-CA-CB	5.88	120.14	110.97
7	g	706	LEU	N-CA-C	-5.88	99.94	109.82
1	l	24	VAL	N-CA-C	-5.88	100.01	108.48
7	r	848	PHE	N-CA-CB	5.88	118.76	110.12
2	b	195	GLN	OE1-CD-NE2	5.88	128.48	122.60
6	f	699	ASP	O-C-N	5.88	130.41	122.59
1	l	252	THR	CA-C-N	5.88	129.18	120.95
1	l	252	THR	C-N-CA	5.88	129.18	120.95
2	m	398	ILE	CA-C-N	5.88	128.74	120.28
2	m	398	ILE	C-N-CA	5.88	128.74	120.28
7	r	547	PRO	CA-C-N	5.88	127.19	119.84
7	r	547	PRO	C-N-CA	5.88	127.19	119.84
1	a	784	GLU	CA-C-N	5.88	128.64	120.29
1	a	784	GLU	C-N-CA	5.88	128.64	120.29
3	c	524	ASP	CB-CA-C	-5.88	98.44	109.72
3	n	125	PHE	CA-C-N	5.88	128.47	120.54
3	n	125	PHE	C-N-CA	5.88	128.47	120.54
6	q	542	ARG	CD-NE-CZ	-5.88	116.17	124.40
6	q	133	MET	CG-SD-CE	-5.88	87.97	100.90
3	n	511	VAL	CA-C-N	5.87	128.07	120.44
3	n	511	VAL	C-N-CA	5.87	128.07	120.44
7	r	256	ILE	N-CA-CB	5.87	120.92	111.23
1	a	598	LYS	CA-C-N	5.87	130.52	120.72
1	a	598	LYS	C-N-CA	5.87	130.52	120.72
1	l	821	HIS	CA-CB-CG	-5.87	107.93	113.80
2	m	325	SER	N-CA-C	5.87	117.47	110.19
2	b	599	SER	CA-C-O	-5.87	114.38	119.72
5	e	45	TRP	CD2-CE2-CZ2	-5.87	116.53	122.40
7	g	66	ARG	NE-CZ-NH2	5.87	124.48	119.20
5	p	310	VAL	O-C-N	-5.87	116.82	123.10
6	q	496	GLU	N-CA-C	-5.87	100.38	109.24
1	a	821	HIS	CA-CB-CG	-5.87	107.93	113.80
3	c	240	LEU	N-CA-C	5.87	118.56	111.40
6	f	315	LEU	CA-C-N	5.87	125.88	119.89
6	f	315	LEU	C-N-CA	5.87	125.88	119.89
7	g	406	ASN	O-C-N	5.87	130.40	122.59
3	n	234	TRP	CA-C-O	-5.87	114.61	121.07
1	a	211	PHE	O-C-N	5.87	125.99	120.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	675	PHE	N-CA-CB	5.87	118.39	110.59
5	e	239	ARG	NE-CZ-NH2	-5.87	113.92	119.20
1	l	208	LEU	N-CA-CB	5.87	118.57	110.07
3	n	520	ALA	CA-C-N	5.87	132.75	121.54
3	n	520	ALA	C-N-CA	5.87	132.75	121.54
6	q	31	ASN	CA-C-N	5.87	125.80	119.76
6	q	31	ASN	C-N-CA	5.87	125.80	119.76
7	r	873	GLN	CA-C-N	5.87	128.14	120.28
7	r	873	GLN	C-N-CA	5.87	128.14	120.28
6	f	12	PHE	CB-CG-CD2	-5.86	110.74	120.70
7	g	774	PHE	CA-CB-CG	5.86	119.66	113.80
1	l	796	ASP	CA-C-O	5.86	126.61	119.11
7	g	198	LEU	N-CA-C	-5.86	102.20	110.29
1	a	116	GLN	OE1-CD-NE2	5.86	128.46	122.60
1	a	494	PHE	CA-CB-CG	5.86	119.66	113.80
2	m	110	GLY	N-CA-C	-5.86	105.70	112.50
7	g	921	GLU	N-CA-CB	5.86	119.36	110.28
3	n	134	ASN	N-CA-CB	5.86	119.65	110.46
5	e	212	LYS	N-CA-C	-5.85	105.50	114.16
2	b	715	GLU	CA-C-N	5.85	129.20	120.31
2	b	715	GLU	C-N-CA	5.85	129.20	120.31
2	b	734	LYS	N-CA-CB	5.85	118.82	110.16
6	f	428	ASN	N-CA-C	-5.85	105.23	112.90
6	q	22	PHE	N-CA-CB	5.85	118.49	110.01
2	b	573	TRP	O-C-N	5.85	128.82	122.15
1	l	168	TYR	CA-C-N	5.85	129.25	122.35
1	l	168	TYR	C-N-CA	5.85	129.25	122.35
7	r	936	LYS	N-CA-C	5.85	116.66	108.00
1	a	966	CYS	N-CA-C	-5.85	104.99	111.36
3	n	416	ASP	CA-C-N	5.85	125.32	119.24
3	n	416	ASP	C-N-CA	5.85	125.32	119.24
4	d	65	LYS	N-CA-CB	5.84	120.37	110.49
7	g	566	ASN	CA-C-O	-5.84	114.68	120.82
3	n	323	SER	CA-C-N	5.84	128.11	120.28
3	n	323	SER	C-N-CA	5.84	128.11	120.28
7	r	199	PRO	N-CA-CB	-5.84	97.11	103.25
2	m	379	LEU	O-C-N	5.84	128.09	122.07
6	q	182	LYS	CA-C-O	-5.84	114.23	120.42
1	l	893	HIS	CA-C-N	5.84	132.69	121.54
1	l	893	HIS	C-N-CA	5.84	132.69	121.54
3	n	187	ASP	CA-C-N	5.84	127.92	120.56
3	n	187	ASP	C-N-CA	5.84	127.92	120.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	424	GLN	CA-C-N	5.84	128.10	120.28
1	l	424	GLN	C-N-CA	5.84	128.10	120.28
1	l	610	PHE	CA-C-N	5.84	129.18	120.31
1	l	610	PHE	C-N-CA	5.84	129.18	120.31
3	n	315	ASN	N-CA-C	-5.83	105.92	113.16
1	l	96	HIS	CE1-NE2-CD2	-5.83	103.17	109.00
2	m	713	ILE	N-CA-CB	5.83	117.38	110.55
6	f	315	LEU	N-CA-C	-5.83	99.41	109.15
6	f	361	SER	CA-C-O	5.83	126.73	120.55
7	g	458	SER	CB-CA-C	-5.83	100.63	110.43
5	p	303	HIS	CE1-NE2-CD2	-5.83	103.17	109.00
7	r	454	ASP	O-C-N	-5.83	115.67	123.14
7	g	297	LEU	N-CA-C	-5.83	100.78	110.17
7	g	500	GLN	CA-C-N	5.83	128.02	120.44
7	g	500	GLN	C-N-CA	5.83	128.02	120.44
7	r	117	THR	CA-C-N	5.83	125.80	120.03
7	r	117	THR	C-N-CA	5.83	125.80	120.03
1	a	433	ILE	N-CA-CB	5.83	117.07	110.72
2	b	116	ARG	NE-CZ-NH2	-5.83	113.95	119.20
6	f	329	ASN	O-C-N	-5.83	116.07	122.07
2	m	131	VAL	N-CA-C	-5.83	104.48	113.16
3	n	221	LEU	O-C-N	5.83	130.14	122.33
3	n	359	LYS	CA-C-N	5.83	128.09	120.28
3	n	359	LYS	C-N-CA	5.83	128.09	120.28
3	n	690	GLN	CA-C-O	-5.83	112.96	118.44
1	a	930	SER	N-CA-C	-5.83	104.93	111.28
1	a	993	VAL	CA-C-N	5.83	128.44	120.46
1	a	993	VAL	C-N-CA	5.83	128.44	120.46
1	l	720	PHE	CB-CG-CD1	5.83	130.60	120.70
3	n	261	LYS	CA-C-N	5.83	128.09	120.28
3	n	261	LYS	C-N-CA	5.83	128.09	120.28
4	o	141	ILE	CA-C-N	5.83	129.83	121.50
4	o	141	ILE	C-N-CA	5.83	129.83	121.50
7	r	182	ASN	CA-CB-CG	5.83	118.42	112.60
4	d	278	VAL	N-CA-C	-5.82	98.58	106.85
4	o	208	ARG	N-CA-CB	5.82	119.36	110.39
4	o	234	TRP	N-CA-CB	5.82	119.03	110.35
1	a	549	LYS	CB-CA-C	-5.82	101.13	110.79
6	f	380	ILE	CA-C-O	-5.82	114.32	119.38
7	g	66	ARG	NE-CZ-NH1	-5.82	115.68	121.50
2	b	266	GLU	CA-C-O	5.82	126.59	120.42
3	c	267	ARG	CA-C-N	5.82	128.00	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	267	ARG	C-N-CA	5.82	128.00	120.44
3	n	547	TYR	CB-CG-CD2	-5.82	112.07	120.80
7	g	334	TRP	CA-CB-CG	5.82	124.65	113.60
1	l	900	VAL	CA-CB-CG2	5.82	120.29	110.40
3	n	150	PHE	CA-CB-CG	5.82	119.62	113.80
3	n	456	THR	CA-CB-OG1	5.82	118.33	109.60
6	q	359	ILE	CA-CB-CG1	5.82	120.29	110.40
6	q	368	ASP	CA-CB-CG	-5.82	106.78	112.60
7	g	839	PHE	CA-CB-CG	-5.82	107.98	113.80
7	r	945	ARG	NE-CZ-NH2	-5.82	113.97	119.20
7	g	105	VAL	CA-C-N	5.81	131.19	122.99
7	g	105	VAL	C-N-CA	5.81	131.19	122.99
1	a	156	TYR	CA-C-N	5.81	129.61	121.24
1	a	156	TYR	C-N-CA	5.81	129.61	121.24
7	g	210	LEU	N-CA-C	-5.81	100.22	109.23
7	r	115	LYS	CA-C-N	5.81	130.07	120.94
7	r	115	LYS	C-N-CA	5.81	130.07	120.94
7	r	785	HIS	ND1-CE1-NE2	5.81	114.21	108.40
4	o	267	ASN	CA-CB-CG	-5.81	106.79	112.60
2	b	626	PRO	CA-C-N	5.81	128.07	120.28
2	b	626	PRO	C-N-CA	5.81	128.07	120.28
3	c	541	GLN	N-CA-C	5.81	117.61	111.28
2	m	490	ALA	CA-C-O	-5.81	114.72	120.82
4	o	178	ALA	N-CA-C	-5.81	105.39	112.88
4	o	179	ASP	CA-C-N	5.81	132.63	121.54
4	o	179	ASP	C-N-CA	5.81	132.63	121.54
6	q	148	ILE	N-CA-CB	5.81	118.44	110.54
7	r	639	PRO	CA-C-O	-5.81	115.01	121.23
7	r	940	ASP	CB-CA-C	5.81	118.53	110.16
2	b	537	GLU	CB-CG-CD	-5.81	102.73	112.60
1	l	255	GLN	N-CA-CB	5.81	121.53	111.13
6	q	70	LEU	N-CA-CB	5.81	118.66	110.12
6	q	416	TYR	CA-C-N	5.81	128.41	120.46
6	q	416	TYR	C-N-CA	5.81	128.41	120.46
7	r	497	HIS	CA-CB-CG	5.81	119.61	113.80
1	a	209	THR	CA-C-O	5.80	126.33	119.48
6	f	205	ASN	CA-C-O	-5.80	114.59	121.32
6	f	260	GLU	CB-CG-CD	-5.80	102.73	112.60
1	l	708	ASN	OD1-CG-ND2	5.80	128.40	122.60
6	q	276	VAL	CA-C-N	5.80	128.64	120.28
6	q	276	VAL	C-N-CA	5.80	128.64	120.28
1	a	554	PHE	N-CA-C	5.80	117.28	111.07

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	452	TYR	CA-C-N	5.80	128.31	120.65
3	c	452	TYR	C-N-CA	5.80	128.31	120.65
6	f	30	GLN	OE1-CD-NE2	5.80	128.40	122.60
6	f	146	ASN	CA-CB-CG	-5.80	106.80	112.60
2	b	653	ILE	CA-C-O	-5.80	115.02	121.17
6	f	256	LEU	N-CA-C	-5.80	100.53	109.52
2	m	184	CYS	CA-C-N	5.80	128.37	120.54
2	m	184	CYS	C-N-CA	5.80	128.37	120.54
6	q	594	ILE	N-CA-C	5.80	116.53	110.62
7	r	868	HIS	CE1-NE2-CD2	-5.80	103.20	109.00
6	f	348	ALA	N-CA-C	5.80	117.60	111.28
7	g	595	ASN	CB-CG-ND2	-5.80	107.70	116.40
1	a	980	VAL	N-CA-C	5.80	116.57	110.72
2	b	171	ARG	CA-C-N	5.80	128.36	120.54
2	b	171	ARG	C-N-CA	5.80	128.36	120.54
2	b	572	SER	CA-C-N	5.80	128.52	120.29
2	b	572	SER	C-N-CA	5.80	128.52	120.29
4	d	14	ASP	CA-CB-CG	5.80	118.40	112.60
6	f	178	HIS	CA-CB-CG	5.80	119.60	113.80
7	g	1006	TYR	CA-C-O	-5.80	114.37	120.63
5	e	78	ASP	CA-C-O	5.79	126.50	119.78
6	f	479	THR	O-C-N	5.79	128.35	122.09
7	g	16	VAL	CA-C-O	-5.79	112.19	119.95
2	m	152	LEU	CA-C-O	-5.79	114.41	120.55
2	m	721	PRO	N-CA-CB	5.79	109.33	103.25
1	a	736	ASN	N-CA-CB	5.79	118.73	110.16
6	q	76	HIS	N-CA-C	5.79	117.27	111.07
7	g	1125	SER	N-CA-C	-5.79	106.19	113.72
1	l	678	VAL	CA-C-N	5.79	127.97	120.44
1	l	678	VAL	C-N-CA	5.79	127.97	120.44
2	m	580	CYS	CA-C-O	5.79	126.12	119.35
6	f	224	ASP	N-CA-CB	5.79	120.63	111.43
7	r	718	ILE	N-CA-C	5.79	115.98	110.42
1	a	250	SER	O-C-N	-5.79	114.89	122.59
5	e	304	ASN	CA-CB-CG	-5.79	106.81	112.60
7	g	384	ASN	CA-C-N	5.79	131.27	121.14
7	g	384	ASN	C-N-CA	5.79	131.27	121.14
1	l	770	PHE	CA-C-O	5.79	126.37	119.60
6	q	33	ILE	N-CA-C	-5.79	99.38	108.23
7	r	728	ALA	O-C-N	-5.79	115.99	122.12
1	a	525	LEU	CA-C-N	5.79	128.03	120.28
1	a	525	LEU	C-N-CA	5.79	128.03	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	398	ILE	O-C-N	5.79	128.34	121.80
6	f	244	ARG	NE-CZ-NH1	-5.79	115.71	121.50
7	g	617	THR	CB-CA-C	5.79	121.78	110.67
7	g	1095	ILE	N-CA-C	5.79	116.52	110.62
6	q	446	SER	N-CA-C	-5.79	105.06	111.36
7	r	36	GLN	OE1-CD-NE2	-5.79	116.81	122.60
7	r	908	VAL	N-CA-C	-5.79	106.83	111.81
2	b	392	GLN	N-CA-C	5.78	121.37	113.16
6	f	557	GLU	CA-C-O	-5.78	114.75	120.82
2	m	668	ALA	O-C-N	5.78	128.74	122.15
4	o	182	VAL	N-CA-C	-5.78	97.31	109.34
6	q	612	ASN	O-C-N	-5.78	117.72	123.62
7	g	495	LYS	CA-C-O	5.78	126.89	120.82
5	p	186	SER	O-C-N	5.78	130.11	123.29
6	q	164	GLU	CA-C-O	-5.78	114.13	120.43
1	a	781	ASP	CB-CA-C	5.78	121.13	111.30
6	f	279	TYR	N-CA-C	-5.78	106.20	113.72
4	d	81	ILE	N-CA-C	-5.78	100.10	108.71
1	l	165	PHE	CA-C-N	5.78	131.14	123.05
1	l	165	PHE	C-N-CA	5.78	131.14	123.05
2	m	492	SER	CA-C-N	5.78	129.31	120.82
2	m	492	SER	C-N-CA	5.78	129.31	120.82
2	b	520	GLU	O-C-N	-5.78	116.00	122.12
6	f	504	ASN	CA-CB-CG	5.78	118.38	112.60
7	g	555	GLN	OE1-CD-NE2	5.78	128.38	122.60
4	o	249	LYS	N-CA-C	-5.78	100.25	109.96
5	p	15	VAL	N-CA-C	-5.78	99.17	107.78
6	q	196	ALA	O-C-N	5.78	128.24	122.12
7	r	1136	THR	CA-C-N	5.78	127.84	120.56
7	r	1136	THR	C-N-CA	5.78	127.84	120.56
2	b	607	ILE	CA-C-N	5.78	127.06	119.84
2	b	607	ILE	C-N-CA	5.78	127.06	119.84
3	c	505	ASP	CA-C-N	5.78	128.02	120.28
3	c	505	ASP	C-N-CA	5.78	128.02	120.28
1	l	886	LEU	CA-C-O	-5.78	114.43	120.55
4	o	188	ASN	N-CA-CB	5.78	119.62	110.84
1	a	279	TYR	CA-CB-CG	-5.77	103.51	113.90
1	a	501	THR	N-CA-C	-5.77	100.29	109.59
3	c	697	ARG	CD-NE-CZ	-5.77	116.32	124.40
7	g	790	HIS	CB-CG-CD2	-5.77	123.69	131.20
3	n	644	TYR	N-CA-C	5.77	117.24	111.07
6	q	182	LYS	O-C-N	5.77	128.73	122.15

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	342	MET	O-C-N	5.77	130.22	122.49
1	l	939	THR	CA-C-N	5.77	127.83	120.56
1	l	939	THR	C-N-CA	5.77	127.83	120.56
6	f	519	GLU	CA-C-O	5.77	126.66	120.55
1	a	61	LEU	N-CA-C	-5.76	101.09	110.20
4	d	24	LEU	N-CA-C	-5.76	98.89	108.75
7	g	795	VAL	CA-C-N	5.76	130.35	122.34
7	g	795	VAL	C-N-CA	5.76	130.35	122.34
3	n	301	ASN	CB-CG-ND2	5.76	125.05	116.40
3	n	349	SER	CA-C-O	5.76	127.20	120.80
4	d	41	GLU	CA-C-O	-5.76	114.44	120.55
7	g	57	ASN	CA-C-N	5.76	129.99	120.94
7	g	57	ASN	C-N-CA	5.76	129.99	120.94
1	l	440	GLU	CA-C-N	5.76	128.00	120.28
1	l	440	GLU	C-N-CA	5.76	128.00	120.28
2	m	546	MET	CA-C-N	5.76	128.00	120.28
2	m	546	MET	C-N-CA	5.76	128.00	120.28
6	q	248	TYR	CA-C-O	-5.76	114.77	120.82
1	l	199	PHE	N-CA-C	-5.76	97.84	107.80
5	p	67	GLU	CB-CG-CD	-5.76	102.81	112.60
1	a	948	ILE	CA-C-N	5.76	129.06	120.31
1	a	948	ILE	C-N-CA	5.76	129.06	120.31
3	c	384	LEU	CA-C-N	5.76	128.00	120.28
3	c	384	LEU	C-N-CA	5.76	128.00	120.28
1	l	659	TYR	N-CA-CB	5.76	118.42	110.07
2	b	354	TYR	CA-C-N	5.76	127.92	120.44
2	b	354	TYR	C-N-CA	5.76	127.92	120.44
7	g	816	GLN	N-CA-C	5.76	118.02	111.11
1	l	893	HIS	CE1-NE2-CD2	-5.76	103.24	109.00
3	n	318	LEU	CA-C-O	-5.76	114.78	120.82
1	a	460	ALA	CA-C-N	5.75	132.81	122.46
1	a	460	ALA	C-N-CA	5.75	132.81	122.46
1	a	973	SER	N-CA-C	-5.75	104.43	112.25
3	c	681	ALA	CA-C-N	5.75	127.99	120.28
3	c	681	ALA	C-N-CA	5.75	127.99	120.28
7	g	344	SER	N-CA-CB	5.75	119.95	110.69
3	n	304	VAL	N-CA-CB	5.75	116.90	110.51
5	p	217	SER	CA-C-O	-5.75	113.64	120.43
6	q	553	ASN	CA-CB-CG	-5.75	106.85	112.60
7	r	99	VAL	N-CA-C	-5.75	99.94	108.45
1	a	101	SER	CA-C-N	5.75	131.28	122.77
1	a	101	SER	C-N-CA	5.75	131.28	122.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	585	THR	CA-C-N	5.75	128.46	120.29
6	f	585	THR	C-N-CA	5.75	128.46	120.29
1	l	786	ILE	CA-CB-CG1	5.75	120.18	110.40
1	l	1005	ASN	OD1-CG-ND2	-5.75	116.85	122.60
7	r	873	GLN	O-C-N	5.75	128.22	122.12
1	a	866	GLU	O-C-N	5.75	127.99	122.07
3	c	343	TRP	N-CA-C	5.75	117.35	111.14
7	g	213	ASN	CA-CB-CG	5.75	118.35	112.60
7	g	664	ASN	CA-C-N	5.75	132.52	121.54
7	g	664	ASN	C-N-CA	5.75	132.52	121.54
1	l	968	ARG	CA-C-O	-5.75	114.46	120.55
2	m	557	ALA	O-C-N	5.75	128.21	122.12
3	n	219	ASP	N-CA-CB	5.75	120.21	110.49
3	n	430	ASN	CA-CB-CG	5.75	118.35	112.60
6	q	26	GLN	CA-C-O	-5.75	114.33	120.42
6	q	148	ILE	CA-C-N	5.75	127.98	120.28
6	q	148	ILE	C-N-CA	5.75	127.98	120.28
2	b	629	VAL	CA-CB-CG1	5.75	120.17	110.40
5	e	23	HIS	CG-CD2-NE2	5.75	112.95	107.20
2	m	269	ASP	N-CA-CB	5.75	120.20	110.49
7	r	230	PHE	CA-C-N	5.75	130.74	123.10
7	r	230	PHE	C-N-CA	5.75	130.74	123.10
1	a	307	SER	CA-C-N	5.75	132.51	121.54
1	a	307	SER	C-N-CA	5.75	132.51	121.54
6	f	563	GLU	CA-C-N	5.74	127.97	120.28
6	f	563	GLU	C-N-CA	5.74	127.97	120.28
4	o	249	LYS	N-CA-CB	5.74	119.53	110.23
5	p	308	TRP	CB-CG-CD2	-5.74	118.76	126.80
2	m	355	GLU	N-CA-C	5.74	117.54	111.28
5	p	68	TYR	CA-C-O	5.74	124.79	118.65
6	q	620	LEU	CA-C-N	5.74	127.90	120.44
6	q	620	LEU	C-N-CA	5.74	127.90	120.44
6	f	451	SER	N-CA-C	-5.74	98.58	110.80
7	g	998	ASN	OD1-CG-ND2	5.74	128.34	122.60
2	m	107	TYR	CA-C-N	5.74	128.32	120.46
2	m	107	TYR	C-N-CA	5.74	128.32	120.46
6	q	598	GLU	CA-C-N	5.74	127.97	120.28
6	q	598	GLU	C-N-CA	5.74	127.97	120.28
3	c	305	ARG	NE-CZ-NH2	-5.74	114.04	119.20
6	f	242	LEU	CA-C-O	5.74	126.61	120.70
7	g	298	SER	CA-C-N	5.74	128.99	119.35
7	g	298	SER	C-N-CA	5.74	128.99	119.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	586	LEU	CA-C-N	5.74	132.50	121.54
2	m	586	LEU	C-N-CA	5.74	132.50	121.54
3	n	595	ARG	NE-CZ-NH1	-5.74	115.76	121.50
3	c	421	ILE	N-CA-C	5.74	115.92	110.42
7	g	213	ASN	OD1-CG-ND2	-5.74	116.86	122.60
1	l	115	GLN	N-CA-CB	5.74	120.18	110.49
6	q	648	ASP	N-CA-CB	-5.74	102.69	110.95
7	r	964	LEU	CA-C-N	5.74	127.97	120.28
7	r	964	LEU	C-N-CA	5.74	127.97	120.28
5	p	315	THR	CA-C-N	5.73	132.65	121.41
5	p	315	THR	C-N-CA	5.73	132.65	121.41
5	p	329	ARG	CA-C-O	5.73	126.79	120.71
7	r	785	HIS	CE1-NE2-CD2	-5.73	103.27	109.00
1	a	242	HIS	N-CA-CB	5.73	119.78	110.43
2	b	652	LEU	O-C-N	-5.73	116.17	122.07
7	r	656	VAL	O-C-N	-5.73	115.41	122.57
7	r	907	THR	CA-C-O	-5.73	112.93	119.41
1	a	298	PHE	CA-CB-CG	-5.73	108.07	113.80
6	f	113	ASN	CA-CB-CG	-5.73	106.87	112.60
6	f	304	GLU	N-CA-C	-5.73	105.55	112.54
7	r	109	ASN	O-C-N	5.73	129.81	122.93
7	r	647	LYS	O-C-N	5.73	127.97	122.07
7	r	1114	TYR	CB-CG-CD1	5.73	129.40	120.80
2	m	406	LEU	CA-C-N	5.73	126.12	119.47
2	m	406	LEU	C-N-CA	5.73	126.12	119.47
7	r	1080	SER	N-CA-C	-5.73	100.60	109.14
1	a	475	CYS	N-CA-C	5.73	118.57	109.81
3	c	444	ALA	N-CA-C	-5.73	99.08	108.76
4	d	27	CYS	N-CA-C	-5.73	99.90	109.24
6	f	660	THR	CB-CA-C	5.73	121.45	110.17
3	n	264	ARG	N-CA-C	-5.73	105.79	112.89
4	o	33	ILE	N-CA-CB	5.73	119.17	112.35
7	g	1124	ASN	N-CA-C	-5.73	106.15	113.02
6	f	504	ASN	CB-CA-C	5.72	121.52	109.79
7	g	406	ASN	N-CA-CB	5.72	120.17	110.49
2	m	398	ILE	N-CA-CB	5.72	116.86	110.51
4	o	94	VAL	N-CA-CB	5.72	119.47	111.05
7	r	711	ASN	CA-C-N	5.72	128.22	120.38
7	r	711	ASN	C-N-CA	5.72	128.22	120.38
2	b	538	ILE	CA-C-N	5.72	127.95	120.28
2	b	538	ILE	C-N-CA	5.72	127.95	120.28
6	f	392	LEU	CA-C-N	5.72	127.95	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	392	LEU	C-N-CA	5.72	127.95	120.28
1	a	242	HIS	CA-C-O	5.72	126.67	120.43
2	b	333	GLU	CA-C-N	5.72	127.95	120.28
2	b	333	GLU	C-N-CA	5.72	127.95	120.28
6	f	80	LEU	CA-C-N	5.72	128.41	120.29
6	f	80	LEU	C-N-CA	5.72	128.41	120.29
7	g	157	ASP	CA-C-N	5.72	127.88	120.44
7	g	157	ASP	C-N-CA	5.72	127.88	120.44
7	g	985	ASN	CA-C-O	5.72	126.61	120.55
2	m	372	ALA	CA-C-N	5.72	128.26	120.54
2	m	372	ALA	C-N-CA	5.72	128.26	120.54
1	a	204	TYR	N-CA-C	-5.72	98.62	110.80
2	b	378	SER	N-CA-CB	-5.72	101.71	110.12
6	f	642	ASN	N-CA-CB	5.72	120.16	110.49
7	g	868	HIS	CA-C-N	5.72	127.94	120.28
7	g	868	HIS	C-N-CA	5.72	127.94	120.28
1	l	833	ASP	N-CA-C	5.72	117.19	111.07
2	m	489	ILE	CA-C-N	5.72	127.88	120.44
2	m	489	ILE	C-N-CA	5.72	127.88	120.44
5	p	146	ARG	NH1-CZ-NH2	-5.72	111.86	119.30
6	q	30	GLN	OE1-CD-NE2	5.72	128.32	122.60
6	q	123	MET	CA-C-O	-5.72	114.81	120.82
6	q	350	VAL	O-C-N	5.72	127.72	121.83
2	b	514	VAL	CA-C-O	-5.72	113.63	120.78
7	g	464	SER	CA-C-N	5.72	131.22	122.93
7	g	464	SER	C-N-CA	5.72	131.22	122.93
1	l	7	ILE	N-CA-C	-5.72	99.89	108.12
7	r	736	ASP	CA-CB-CG	5.72	118.32	112.60
7	r	1135	SER	CA-C-O	5.72	126.82	120.82
6	q	477	ARG	NE-CZ-NH1	5.71	127.22	121.50
1	a	873	LEU	CA-C-N	5.71	127.94	120.28
1	a	873	LEU	C-N-CA	5.71	127.94	120.28
1	l	198	LEU	N-CA-C	5.71	118.12	110.35
2	b	403	HIS	CB-CG-CD2	-5.71	123.78	131.20
6	f	705	PHE	CA-C-N	5.71	128.21	120.44
6	f	705	PHE	C-N-CA	5.71	128.21	120.44
1	l	782	TYR	CA-C-N	5.71	125.39	119.56
1	l	782	TYR	C-N-CA	5.71	125.39	119.56
7	r	302	SER	N-CA-C	-5.71	105.65	113.30
1	a	967	PHE	N-CA-C	5.71	117.18	111.07
6	f	434	THR	CA-CB-OG1	5.71	118.16	109.60
3	n	466	SER	N-CA-CB	5.71	118.45	109.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	467	LYS	CA-C-O	5.71	127.45	119.80
7	g	931	SER	N-CA-CB	5.71	118.51	110.12
7	r	857	LEU	CA-C-N	5.71	127.86	120.44
7	r	857	LEU	C-N-CA	5.71	127.86	120.44
1	a	870	ILE	O-C-N	-5.71	116.34	121.87
1	l	694	ASN	CA-C-N	5.71	127.86	120.44
1	l	694	ASN	C-N-CA	5.71	127.86	120.44
1	l	933	GLY	O-C-N	5.71	129.09	122.30
7	r	608	ASP	CA-C-N	5.71	128.52	120.42
7	r	608	ASP	C-N-CA	5.71	128.52	120.42
2	b	631	SER	CA-C-N	5.70	128.98	120.31
2	b	631	SER	C-N-CA	5.70	128.98	120.31
7	g	1016	PHE	CA-CB-CG	5.70	119.50	113.80
6	q	88	ASP	N-CA-CB	5.70	120.13	110.49
6	q	538	LEU	N-CA-CB	5.70	118.50	110.12
7	r	390	ILE	CA-CB-CG2	-5.70	100.80	110.50
1	a	102	MET	CA-C-N	5.70	132.43	121.54
1	a	102	MET	C-N-CA	5.70	132.43	121.54
7	g	194	HIS	CG-CD2-NE2	5.70	112.90	107.20
6	q	364	GLU	CA-C-N	5.70	127.92	120.28
6	q	364	GLU	C-N-CA	5.70	127.92	120.28
7	g	7	HIS	CE1-NE2-CD2	-5.70	103.30	109.00
1	l	558	LEU	N-CA-C	-5.70	105.07	111.28
1	a	589	ASN	O-C-N	-5.70	115.41	122.25
6	q	65	SER	N-CA-CB	5.70	118.50	110.12
1	a	498	HIS	CG-CD2-NE2	5.70	112.90	107.20
1	l	96	HIS	CA-CB-CG	-5.70	108.10	113.80
5	p	159	ILE	CA-C-N	5.70	126.25	120.38
5	p	159	ILE	C-N-CA	5.70	126.25	120.38
1	a	17	LYS	N-CA-C	-5.70	102.73	110.36
1	a	1036	GLY	N-CA-C	-5.70	107.60	114.66
7	g	600	PHE	N-CA-CB	5.70	118.27	110.01
1	l	907	LEU	N-CA-C	5.70	117.95	111.11
2	m	200	ASN	N-CA-CB	5.70	118.78	109.95
6	f	283	GLU	N-CA-CB	5.69	118.27	110.01
2	b	173	TYR	CA-C-N	5.69	128.18	120.38
2	b	173	TYR	C-N-CA	5.69	128.18	120.38
6	f	5	PRO	N-CA-CB	5.69	109.68	103.30
4	o	154	ALA	CA-C-N	-5.69	114.75	120.21
4	o	154	ALA	C-N-CA	-5.69	114.75	120.21
6	q	362	SER	CA-C-O	-5.69	114.52	120.55
6	q	697	GLU	CA-C-N	-5.69	111.40	120.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	697	GLU	C-N-CA	-5.69	111.40	120.17
3	c	685	GLU	CA-C-N	5.69	130.71	121.83
3	c	685	GLU	C-N-CA	5.69	130.71	121.83
5	e	213	SER	CA-C-N	5.69	129.79	121.31
5	e	213	SER	C-N-CA	5.69	129.79	121.31
7	g	239	LYS	CA-C-N	5.69	125.70	119.90
7	g	239	LYS	C-N-CA	5.69	125.70	119.90
6	q	340	GLU	CA-C-N	5.69	128.39	120.65
6	q	340	GLU	C-N-CA	5.69	128.39	120.65
6	f	30	GLN	N-CA-CB	5.69	119.01	110.65
2	m	287	ASP	CA-CB-CG	5.69	118.29	112.60
7	r	622	ASN	CA-C-N	5.69	128.47	120.28
7	r	622	ASN	C-N-CA	5.69	128.47	120.28
3	c	544	LYS	CA-C-N	5.68	128.36	120.29
3	c	544	LYS	C-N-CA	5.68	128.36	120.29
6	f	504	ASN	CA-C-O	5.68	128.09	121.44
1	l	98	PRO	N-CA-CB	5.68	109.22	103.25
3	n	627	VAL	N-CA-CB	5.68	119.03	112.15
7	r	411	ASN	CA-C-N	5.68	130.34	120.68
7	r	411	ASN	C-N-CA	5.68	130.34	120.68
4	d	266	GLY	CA-C-O	-5.68	118.03	122.52
2	m	728	LEU	O-C-N	5.68	128.14	122.12
3	n	603	ASP	CA-CB-CG	-5.68	106.92	112.60
7	r	676	CYS	N-CA-CB	5.68	118.42	110.07
1	a	728	ILE	N-CA-C	-5.68	106.92	111.81
3	c	529	ARG	NH1-CZ-NH2	-5.68	111.92	119.30
4	d	93	ALA	CB-CA-C	-5.68	100.04	111.17
7	r	620	ASN	OD1-CG-ND2	5.68	128.28	122.60
7	g	813	GLY	CA-C-N	5.68	127.89	120.28
7	g	813	GLY	C-N-CA	5.68	127.89	120.28
2	m	701	ASP	N-CA-C	-5.68	105.66	112.59
1	a	372	SER	N-CA-C	-5.68	105.09	111.28
1	a	441	GLU	CA-C-N	5.68	127.89	120.28
1	a	441	GLU	C-N-CA	5.68	127.89	120.28
6	f	194	ASP	CA-CB-CG	-5.68	106.92	112.60
3	c	345	THR	CA-C-N	5.67	126.24	120.00
3	c	345	THR	C-N-CA	5.67	126.24	120.00
1	l	761	ALA	CA-C-N	5.67	128.35	120.29
1	l	761	ALA	C-N-CA	5.67	128.35	120.29
3	n	662	GLN	CA-C-N	5.67	128.16	120.38
3	n	662	GLN	C-N-CA	5.67	128.16	120.38
5	p	116	PHE	N-CA-CB	5.67	118.40	109.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	222	LEU	CA-C-N	5.67	130.74	122.85
4	o	222	LEU	C-N-CA	5.67	130.74	122.85
7	r	719	ASN	CA-C-N	5.67	127.81	120.44
7	r	719	ASN	C-N-CA	5.67	127.81	120.44
2	b	606	ILE	CB-CA-C	5.67	120.59	111.29
6	f	664	LEU	N-CA-CB	5.67	118.23	110.01
7	g	711	ASN	O-C-N	-5.67	117.35	123.42
5	p	67	GLU	CA-C-N	5.67	128.90	120.17
5	p	67	GLU	C-N-CA	5.67	128.90	120.17
1	a	792	THR	CA-C-O	5.67	126.56	120.55
3	c	267	ARG	CB-CA-C	-5.67	101.38	110.79
1	l	779	LEU	CB-CA-C	-5.67	101.21	110.85
3	n	230	ASP	CA-C-N	5.67	128.19	120.54
3	n	230	ASP	C-N-CA	5.67	128.19	120.54
1	a	476	PHE	CA-CB-CG	5.67	119.47	113.80
2	b	744	MET	CG-SD-CE	5.67	113.37	100.90
6	f	720	ARG	NE-CZ-NH2	5.67	124.30	119.20
7	g	593	ILE	N-CA-C	-5.67	104.84	110.62
7	g	723	PHE	CA-C-O	-5.67	114.55	120.55
1	l	866	GLU	N-CA-CB	5.67	118.23	110.01
3	n	343	TRP	CA-CB-CG	5.67	124.37	113.60
3	n	664	ILE	O-C-N	5.67	127.37	121.87
4	o	148	VAL	N-CA-CB	5.67	119.23	111.41
2	b	281	SER	CA-C-N	5.67	128.15	120.44
2	b	281	SER	C-N-CA	5.67	128.15	120.44
6	f	179	ILE	CB-CA-C	-5.67	104.49	112.14
7	r	1068	GLU	CB-CG-CD	-5.67	102.97	112.60
1	l	493	TRP	CB-CG-CD2	-5.66	118.87	126.80
7	r	241	GLN	CB-CG-CD	-5.66	102.97	112.60
3	n	410	PHE	N-CA-C	-5.66	98.67	108.69
4	o	110	HIS	CG-CD2-NE2	5.66	112.86	107.20
7	r	20	VAL	CA-C-N	5.66	132.16	121.97
7	r	20	VAL	C-N-CA	5.66	132.16	121.97
6	f	644	ALA	N-CA-CB	5.66	119.23	110.80
4	d	144	HIS	CG-CD2-NE2	5.66	112.86	107.20
7	g	526	SER	O-C-N	5.66	128.12	122.12
3	n	506	THR	CA-CB-OG1	5.66	118.09	109.60
4	d	76	ASP	CA-CB-CG	5.66	118.26	112.60
1	a	284	ASN	N-CA-CB	5.66	120.05	110.49
1	a	761	ALA	CA-C-O	-5.66	114.56	120.55
2	b	254	LEU	N-CA-CB	5.66	119.05	110.28
6	f	351	ILE	CB-CA-C	-5.66	104.42	112.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	556	HIS	CA-CB-CG	-5.66	108.14	113.80
7	r	889	GLN	N-CA-C	-5.66	105.03	111.14
2	m	149	GLU	N-CA-CB	5.65	118.53	110.16
3	n	200	GLU	CB-CA-C	5.65	118.85	110.14
2	b	687	SER	CA-C-N	5.65	128.45	120.42
2	b	687	SER	C-N-CA	5.65	128.45	120.42
6	q	457	VAL	CA-CB-CG1	5.65	120.01	110.40
7	r	744	LYS	N-CA-CB	5.65	118.52	110.16
1	a	977	ALA	N-CA-CB	5.65	118.43	110.12
3	c	697	ARG	CA-C-N	5.65	126.21	119.94
3	c	697	ARG	C-N-CA	5.65	126.21	119.94
6	q	313	LEU	N-CA-CB	5.65	119.08	109.87
6	q	506	ILE	CA-C-N	5.65	128.17	120.54
6	q	506	ILE	C-N-CA	5.65	128.17	120.54
7	r	429	VAL	O-C-N	5.65	129.31	123.04
7	r	484	GLU	CB-CG-CD	-5.65	102.99	112.60
7	r	648	GLN	CB-CA-C	-5.65	102.01	110.88
6	f	182	LYS	CA-C-O	-5.65	114.56	120.55
7	g	953	THR	CA-C-N	5.65	128.44	120.42
7	g	953	THR	C-N-CA	5.65	128.44	120.42
6	q	293	ILE	N-CA-C	5.65	116.38	110.62
1	a	862	GLN	OE1-CD-NE2	5.65	128.25	122.60
7	r	959	ASN	CA-CB-CG	5.65	118.25	112.60
1	a	507	PHE	CA-C-N	5.64	127.84	120.28
1	a	507	PHE	C-N-CA	5.64	127.84	120.28
3	c	187	ASP	N-CA-C	-5.64	106.35	113.18
2	m	688	VAL	CA-C-N	5.64	128.31	120.29
2	m	688	VAL	C-N-CA	5.64	128.31	120.29
3	n	641	LYS	N-CA-CB	5.64	118.19	110.01
7	g	863	ARG	NE-CZ-NH2	-5.64	114.12	119.20
7	r	361	TYR	N-CA-CB	5.64	119.47	110.16
7	r	666	LYS	CA-C-N	5.64	127.78	120.44
7	r	666	LYS	C-N-CA	5.64	127.78	120.44
2	b	306	TRP	CA-C-N	5.64	127.84	120.28
2	b	306	TRP	C-N-CA	5.64	127.84	120.28
3	c	511	VAL	CA-C-N	5.64	127.77	120.44
3	c	511	VAL	C-N-CA	5.64	127.77	120.44
7	g	898	ASP	CA-CB-CG	5.64	118.24	112.60
3	n	525	HIS	N-CA-CB	5.64	118.36	110.07
3	c	694	ALA	CB-CA-C	-5.64	100.38	110.70
2	m	480	GLU	N-CA-C	5.64	119.67	112.34
3	n	188	VAL	CA-C-N	5.64	128.15	120.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	188	VAL	C-N-CA	5.64	128.15	120.54
3	n	355	SER	O-C-N	-5.64	115.72	122.15
6	q	396	LEU	N-CA-C	-5.64	105.22	111.36
2	b	662	TYR	N-CA-C	-5.63	104.82	112.26
2	m	229	SER	N-CA-C	-5.63	105.13	112.23
6	q	585	THR	N-CA-C	-5.63	104.16	111.71
2	b	513	PHE	CA-CB-CG	-5.63	108.17	113.80
2	b	683	MET	CG-SD-CE	-5.63	88.51	100.90
6	f	416	TYR	CA-C-N	5.63	128.18	120.46
6	f	416	TYR	C-N-CA	5.63	128.18	120.46
6	f	546	LEU	CA-C-N	5.63	127.76	120.44
6	f	546	LEU	C-N-CA	5.63	127.76	120.44
5	p	324	ASP	O-C-N	5.63	129.93	122.95
6	q	594	ILE	CA-C-N	5.63	127.82	120.28
6	q	594	ILE	C-N-CA	5.63	127.82	120.28
2	b	494	THR	CA-C-O	5.63	126.58	120.95
6	f	678	LEU	N-CA-C	5.63	119.87	112.89
7	r	613	ILE	CA-C-O	-5.63	115.10	120.95
3	c	367	GLU	N-CA-C	-5.63	105.76	113.30
3	c	495	CYS	N-CA-CB	5.63	118.39	110.12
6	f	203	SER	CA-C-N	5.63	130.56	122.40
6	f	203	SER	C-N-CA	5.63	130.56	122.40
7	g	16	VAL	O-C-N	-5.63	114.69	121.10
7	g	936	LYS	CB-CG-CD	5.63	124.24	111.30
5	p	1	MET	CG-SD-CE	-5.63	88.52	100.90
7	r	139	ILE	N-CA-C	-5.63	100.37	108.42
7	r	356	CYS	O-C-N	-5.63	115.11	122.59
7	r	738	TYR	CA-C-N	5.62	128.13	120.54
7	r	738	TYR	C-N-CA	5.62	128.13	120.54
1	a	375	ASN	N-CA-CB	5.62	120.13	110.68
1	a	688	PHE	CA-CB-CG	-5.62	108.18	113.80
4	d	263	SER	CA-C-N	5.62	128.27	120.29
4	d	263	SER	C-N-CA	5.62	128.27	120.29
7	g	321	GLN	N-CA-CB	5.62	121.45	110.88
6	q	13	THR	N-CA-C	-5.62	104.54	111.40
7	r	538	ILE	O-C-N	5.62	127.62	121.83
7	r	903	LEU	CA-C-N	5.62	128.28	120.29
7	r	903	LEU	C-N-CA	5.62	128.28	120.29
3	c	532	ILE	CA-C-O	-5.62	113.76	119.89
7	g	782	ASP	CA-C-O	-5.62	114.59	120.55
5	e	105	ASN	O-C-N	5.62	128.94	122.25
5	e	162	ALA	CA-C-N	5.62	130.92	123.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	162	ALA	C-N-CA	5.62	130.92	123.05
3	c	254	GLN	N-CA-C	-5.62	105.92	112.89
3	c	447	VAL	N-CA-C	-5.62	104.03	111.05
4	d	63	HIS	ND1-CE1-NE2	5.62	114.02	108.40
7	g	923	HIS	CE1-NE2-CD2	-5.62	103.38	109.00
1	l	809	LYS	O-C-N	5.62	127.86	122.07
3	c	348	CYS	N-CA-C	-5.62	106.09	113.17
3	c	570	ALA	CB-CA-C	5.62	120.50	109.72
7	g	405	GLU	N-CA-C	-5.62	106.25	114.39
1	a	476	PHE	CA-C-O	5.62	127.08	120.96
6	f	637	ASP	CA-C-N	5.62	128.06	120.65
6	f	637	ASP	C-N-CA	5.62	128.06	120.65
7	g	197	GLU	N-CA-CB	5.62	119.02	109.87
7	g	595	ASN	CB-CG-OD1	5.62	132.03	120.80
1	l	432	ILE	N-CA-C	-5.62	99.06	107.37
1	l	969	MET	CA-C-N	5.62	128.85	120.31
1	l	969	MET	C-N-CA	5.62	128.85	120.31
5	p	81	VAL	N-CA-C	-5.62	100.33	108.36
5	p	211	HIS	CG-CD2-NE2	5.62	112.81	107.20
6	q	716	ASP	CA-C-N	5.62	127.81	120.28
6	q	716	ASP	C-N-CA	5.62	127.81	120.28
6	f	12	PHE	CB-CG-CD1	5.61	130.24	120.70
7	g	580	SER	CA-C-O	-5.61	114.84	120.96
1	a	284	ASN	CA-C-O	-5.61	112.48	120.51
2	m	576	PHE	N-CA-C	-5.61	105.16	111.28
3	n	134	ASN	OD1-CG-ND2	5.61	128.21	122.60
6	q	274	GLN	N-CA-C	5.61	118.16	111.71
3	c	700	PHE	CA-CB-CG	-5.61	108.19	113.80
1	l	278	GLU	N-CA-CB	5.61	120.23	110.81
1	l	833	ASP	CA-CB-CG	5.61	118.21	112.60
7	r	367	ILE	O-C-N	5.61	129.07	123.18
7	r	621	TYR	CA-C-N	5.61	127.80	120.28
7	r	621	TYR	C-N-CA	5.61	127.80	120.28
6	f	408	ASP	CA-CB-CG	5.61	118.21	112.60
7	g	354	SER	N-CA-C	-5.61	106.28	113.23
2	m	133	ASN	CA-C-N	5.61	128.06	120.38
2	m	133	ASN	C-N-CA	5.61	128.06	120.38
5	p	138	ASP	N-CA-C	-5.61	99.28	108.76
6	q	175	GLU	N-CA-C	5.61	117.39	111.28
7	r	296	GLN	CA-C-O	5.61	126.36	120.36
7	r	1136	THR	CA-C-O	-5.61	114.92	120.70
7	g	762	THR	N-CA-CB	5.61	118.60	110.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	680	LYS	N-CA-CB	5.61	118.36	110.12
4	o	242	PRO	N-CA-CB	5.61	109.14	103.25
7	r	970	GLN	CA-C-O	-5.61	114.30	120.30
2	m	484	VAL	O-C-N	5.60	127.40	121.91
2	m	722	SER	N-CA-C	-5.60	99.53	109.06
1	l	444	ALA	CA-C-N	5.60	128.83	120.31
1	l	444	ALA	C-N-CA	5.60	128.83	120.31
2	m	331	TYR	CA-C-N	5.60	132.06	121.97
2	m	331	TYR	C-N-CA	5.60	132.06	121.97
7	r	198	LEU	CA-C-O	-5.60	115.56	120.60
2	b	285	VAL	N-CA-C	5.60	116.33	110.62
7	r	716	ASN	CA-C-N	5.60	128.24	120.29
7	r	716	ASN	C-N-CA	5.60	128.24	120.29
7	r	789	ASN	O-C-N	5.60	127.84	122.07
1	l	741	LEU	N-CA-C	-5.60	105.08	111.07
5	p	164	HIS	O-C-N	5.60	127.62	121.85
2	b	657	TYR	CA-C-O	5.60	125.90	119.35
3	c	565	ASP	CA-CB-CG	-5.60	107.00	112.60
3	n	573	THR	CB-CA-C	-5.60	101.34	110.85
4	o	110	HIS	ND1-CE1-NE2	5.60	114.00	108.40
7	r	1065	VAL	CB-CA-C	5.60	119.13	111.97
1	a	426	ILE	CA-C-O	-5.59	114.92	120.85
7	g	663	GLN	CB-CG-CD	-5.59	103.09	112.60
2	m	520	GLU	CA-C-N	5.59	127.71	120.44
2	m	520	GLU	C-N-CA	5.59	127.71	120.44
3	n	466	SER	N-CA-C	5.59	118.34	110.23
6	q	472	ALA	N-CA-C	-5.59	104.81	111.69
7	r	926	VAL	CA-C-N	5.59	128.05	120.44
7	r	926	VAL	C-N-CA	5.59	128.05	120.44
5	e	245	ILE	N-CA-C	-5.59	99.49	107.77
7	r	1041	VAL	N-CA-C	-5.59	105.05	110.42
2	b	527	VAL	CA-C-N	5.59	127.71	120.44
2	b	527	VAL	C-N-CA	5.59	127.71	120.44
7	g	986	ILE	CA-C-N	5.59	127.77	120.28
7	g	986	ILE	C-N-CA	5.59	127.77	120.28
7	r	449	LEU	N-CA-C	-5.59	101.64	109.69
7	g	520	ILE	N-CA-CB	5.59	120.45	111.23
1	l	917	ASP	CA-C-O	-5.59	114.50	120.42
7	g	235	ASN	N-CA-CB	5.59	118.43	110.16
1	l	881	MET	N-CA-CB	5.59	119.74	110.52
3	c	525	HIS	ND1-CG-CD2	-5.59	100.51	106.10
6	f	538	LEU	N-CA-CB	5.59	118.85	110.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	595	ARG	O-C-N	5.59	128.04	122.12
7	g	985	ASN	CA-C-N	5.59	127.60	120.56
7	g	985	ASN	C-N-CA	5.59	127.60	120.56
1	l	870	ILE	N-CA-CB	5.59	117.09	110.55
6	q	717	LEU	O-C-N	-5.59	116.20	122.12
7	r	745	ILE	CA-C-O	-5.59	114.85	121.05
2	b	298	ASP	CA-C-O	-5.58	112.39	119.31
2	b	499	ALA	CA-C-N	5.58	127.76	120.28
2	b	499	ALA	C-N-CA	5.58	127.76	120.28
3	c	704	LEU	N-CA-C	5.58	117.37	111.28
1	l	425	GLN	N-CA-CB	5.58	118.33	110.12
1	a	916	ARG	NH1-CZ-NH2	5.58	126.56	119.30
3	c	393	GLN	CA-C-N	5.58	128.11	120.46
3	c	393	GLN	C-N-CA	5.58	128.11	120.46
6	f	589	HIS	CE1-NE2-CD2	-5.58	103.42	109.00
1	l	346	ALA	N-CA-CB	-5.58	102.38	110.70
2	m	540	THR	CA-C-N	5.58	127.76	120.28
2	m	540	THR	C-N-CA	5.58	127.76	120.28
3	n	339	GLN	N-CA-C	5.58	118.13	111.71
6	q	299	GLU	O-C-N	5.58	128.04	122.12
6	q	420	LEU	N-CA-C	-5.58	105.20	111.28
7	r	114	GLN	CA-C-N	5.58	127.76	120.28
7	r	114	GLN	C-N-CA	5.58	127.76	120.28
7	r	590	LYS	N-CA-C	5.58	118.13	111.71
2	b	316	ALA	N-CA-C	5.58	117.04	111.07
6	f	714	TYR	N-CA-CB	-5.58	101.92	110.12
7	g	337	HIS	CG-CD2-NE2	5.58	112.78	107.20
1	l	250	SER	CA-C-N	5.58	130.06	122.19
1	l	250	SER	C-N-CA	5.58	130.06	122.19
3	n	422	PHE	CA-CB-CG	-5.58	108.22	113.80
7	r	709	PHE	CA-CB-CG	-5.58	108.22	113.80
3	c	668	ILE	CA-C-O	-5.58	114.94	120.85
6	f	450	SER	CA-C-N	5.58	132.20	121.54
6	f	450	SER	C-N-CA	5.58	132.20	121.54
6	q	84	PHE	CA-C-N	5.58	127.76	120.28
6	q	84	PHE	C-N-CA	5.58	127.76	120.28
7	r	260	ILE	CA-CB-CG1	5.58	119.88	110.40
7	r	810	ASP	N-CA-C	-5.58	99.21	108.75
1	a	702	ILE	CA-C-N	5.58	128.21	120.29
1	a	702	ILE	C-N-CA	5.58	128.21	120.29
6	f	623	PHE	CA-C-N	5.58	128.03	120.44
6	f	623	PHE	C-N-CA	5.58	128.03	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	281	GLU	CA-C-N	5.58	127.69	120.44
3	n	281	GLU	C-N-CA	5.58	127.69	120.44
1	a	781	ASP	CA-CB-CG	-5.58	107.02	112.60
7	g	1001	ASP	CA-CB-CG	5.58	118.18	112.60
4	o	199	THR	O-C-N	-5.58	116.79	123.31
7	r	52	HIS	N-CA-C	-5.58	100.65	108.96
7	r	595	ASN	CA-C-N	5.58	128.02	120.44
7	r	595	ASN	C-N-CA	5.58	128.02	120.44
1	a	400	LYS	CA-C-N	5.57	131.30	122.60
1	a	400	LYS	C-N-CA	5.57	131.30	122.60
6	f	113	ASN	CA-C-N	5.57	127.75	120.28
6	f	113	ASN	C-N-CA	5.57	127.75	120.28
6	f	239	LYS	CB-CA-C	-5.57	103.66	111.85
6	f	483	VAL	CA-C-O	-5.57	115.47	121.27
7	g	195	GLU	CA-C-O	-5.57	114.68	120.70
1	l	571	PHE	CA-CB-CG	5.57	119.37	113.80
1	l	662	PHE	CA-CB-CG	5.57	119.37	113.80
7	r	350	SER	N-CA-CB	5.57	121.09	111.00
1	l	478	PRO	N-CA-CB	-5.57	97.40	103.25
3	c	141	GLU	N-CA-C	5.57	119.69	113.01
2	m	684	ASP	CA-CB-CG	5.57	118.17	112.60
6	q	256	LEU	N-CA-CB	5.57	120.64	111.62
3	n	545	ASP	CB-CA-C	-5.57	101.55	110.79
5	p	88	PRO	N-CD-CG	5.57	111.55	103.20
4	d	52	HIS	CE1-NE2-CD2	-5.57	103.43	109.00
6	f	79	GLU	N-CA-C	5.57	117.79	111.11
7	r	298	SER	N-CA-C	-5.57	99.23	108.75
6	f	10	GLU	CA-C-N	5.57	127.74	120.28
6	f	10	GLU	C-N-CA	5.57	127.74	120.28
7	g	784	ASN	CA-CB-CG	-5.57	107.03	112.60
7	g	785	HIS	CA-CB-CG	5.57	119.37	113.80
2	m	296	PRO	N-CA-CB	5.57	108.49	103.20
3	n	396	GLU	CA-C-O	5.56	124.95	118.77
6	f	180	PHE	CA-CB-CG	-5.56	108.24	113.80
7	g	922	LEU	CA-C-N	5.56	127.73	120.28
7	g	922	LEU	C-N-CA	5.56	127.73	120.28
7	r	335	ASP	N-CA-C	-5.56	100.28	108.79
2	b	509	PRO	CA-C-O	-5.56	115.08	121.36
5	e	304	ASN	N-CA-CB	5.56	119.24	110.56
2	b	607	ILE	N-CA-C	-5.56	96.87	108.88
7	g	403	GLN	O-C-N	-5.56	116.51	122.85
6	q	524	VAL	CA-C-N	5.56	127.73	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	524	VAL	C-N-CA	5.56	127.73	120.28
1	a	631	LEU	CA-C-O	5.56	126.66	120.82
5	e	115	LYS	CB-CA-C	-5.56	100.35	109.80
4	o	100	ALA	N-CA-CB	5.56	119.88	110.49
6	q	334	ARG	NE-CZ-NH1	5.56	127.06	121.50
6	q	387	ARG	CA-C-N	5.56	127.56	120.56
6	q	387	ARG	C-N-CA	5.56	127.56	120.56
7	g	704	SER	N-CA-C	-5.56	106.63	113.41
1	l	242	HIS	CA-C-N	5.56	129.81	122.42
1	l	242	HIS	C-N-CA	5.56	129.81	122.42
4	d	128	VAL	CB-CA-C	5.55	120.40	111.29
6	f	215	ILE	O-C-N	5.55	127.33	121.89
3	n	321	LEU	CB-CA-C	-5.55	101.24	110.68
3	n	694	ALA	CA-C-N	5.55	127.72	120.28
3	n	694	ALA	C-N-CA	5.55	127.72	120.28
7	r	1135	SER	N-CA-C	5.55	117.01	111.07
1	a	613	ILE	O-C-N	-5.55	116.47	121.91
7	g	703	THR	CA-C-O	5.55	126.21	119.38
1	a	116	GLN	N-CA-CB	5.55	121.86	111.53
4	d	242	PRO	N-CA-CB	5.55	108.61	103.39
6	q	386	LEU	N-CA-C	-5.55	106.34	113.23
2	m	114	ILE	CA-C-N	5.55	127.72	120.28
2	m	114	ILE	C-N-CA	5.55	127.72	120.28
2	m	518	ASP	N-CA-C	-5.55	105.13	111.07
5	p	211	HIS	CE1-NE2-CD2	-5.55	103.45	109.00
6	q	448	ILE	N-CA-C	5.55	115.75	110.42
1	a	949	LEU	N-CA-CB	5.55	118.88	110.28
7	r	492	GLY	N-CA-C	-5.55	102.99	112.64
2	m	566	GLU	O-C-N	5.54	128.00	122.12
7	r	714	TYR	N-CA-CB	5.54	118.05	110.01
7	r	1091	THR	O-C-N	-5.54	116.45	121.66
3	c	268	LEU	CA-C-N	5.54	127.71	120.28
3	c	268	LEU	C-N-CA	5.54	127.71	120.28
4	d	267	ASN	N-CA-C	-5.54	104.94	112.26
6	f	352	LEU	O-C-N	5.54	129.43	122.23
7	g	314	GLU	CB-CA-C	-5.54	101.36	110.72
7	g	923	HIS	CA-CB-CG	5.54	119.34	113.80
1	l	80	THR	O-C-N	5.54	129.89	123.30
3	n	446	ASP	CA-CB-CG	5.54	118.14	112.60
5	p	304	ASN	OD1-CG-ND2	5.54	128.14	122.60
7	r	1076	PHE	CA-C-N	5.54	125.54	119.89
7	r	1076	PHE	C-N-CA	5.54	125.54	119.89

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	175	LEU	O-C-N	5.54	128.46	122.15
7	g	124	PHE	CA-C-O	5.54	127.60	121.56
2	m	181	VAL	N-CA-C	-5.54	105.13	110.72
6	q	14	LYS	CA-C-N	5.54	127.70	120.28
6	q	14	LYS	C-N-CA	5.54	127.70	120.28
1	a	760	PHE	N-CA-C	5.54	117.00	111.07
6	f	603	SER	CA-C-N	5.54	128.04	120.46
6	f	603	SER	C-N-CA	5.54	128.04	120.46
1	l	122	ILE	N-CA-C	-5.54	100.61	108.58
1	l	881	MET	CA-C-O	5.54	126.94	120.80
3	c	250	THR	CA-C-N	5.53	128.25	120.28
3	c	250	THR	C-N-CA	5.53	128.25	120.28
4	d	170	SER	CB-CA-C	-5.53	110.18	116.54
6	f	341	HIS	ND1-CE1-NE2	5.53	113.93	108.40
5	p	143	SER	CA-C-O	5.53	125.28	119.03
7	r	454	ASP	CA-C-N	5.53	129.48	121.18
7	r	454	ASP	C-N-CA	5.53	129.48	121.18
7	r	1111	GLU	N-CA-C	5.53	117.39	111.36
7	g	753	PHE	N-CA-C	5.53	117.31	111.28
2	m	575	LEU	N-CA-CB	5.53	119.83	110.49
3	n	447	VAL	CA-C-O	5.53	125.92	119.89
4	o	58	ARG	NE-CZ-NH2	5.53	124.18	119.20
6	f	557	GLU	CA-C-N	5.53	127.52	120.56
6	f	557	GLU	C-N-CA	5.53	127.52	120.56
1	l	539	GLU	CA-C-O	5.53	126.19	119.11
5	p	70	ARG	NE-CZ-NH1	-5.53	115.97	121.50
7	r	390	ILE	N-CA-C	-5.53	97.95	107.24
1	a	368	VAL	N-CA-CB	5.53	116.74	110.72
2	m	679	ASP	CA-C-N	5.53	128.00	120.54
2	m	679	ASP	C-N-CA	5.53	128.00	120.54
5	p	110	SER	N-CA-C	-5.53	100.68	109.96
5	p	153	GLU	CA-CB-CG	-5.53	103.05	114.10
1	a	290	LEU	CB-CA-C	-5.52	101.00	110.22
1	a	777	PHE	N-CA-C	-5.52	106.50	113.18
1	a	904	PHE	CA-CB-CG	-5.52	108.28	113.80
6	f	122	VAL	CB-CA-C	-5.52	104.90	111.97
1	l	655	LEU	CA-C-N	5.52	127.68	120.28
1	l	655	LEU	C-N-CA	5.52	127.68	120.28
6	q	467	PHE	O-C-N	5.52	129.93	122.59
7	r	555	GLN	CA-C-O	-5.52	115.02	120.82
2	b	611	ILE	O-C-N	5.52	128.04	121.80
6	f	324	VAL	CA-C-N	5.52	127.68	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	324	VAL	C-N-CA	5.52	127.68	120.28
6	f	413	ILE	CA-C-O	-5.52	115.21	120.95
1	l	498	HIS	CB-CA-C	-5.52	101.39	110.72
1	a	96	HIS	ND1-CE1-NE2	5.52	113.92	108.40
3	n	586	VAL	N-CA-CB	5.52	118.86	110.58
1	a	13	GLN	N-CA-C	-5.52	106.55	113.72
1	a	132	GLN	N-CA-C	-5.52	99.29	108.34
1	a	961	PHE	CA-C-N	5.52	128.13	120.29
1	a	961	PHE	C-N-CA	5.52	128.13	120.29
4	d	28	SER	CB-CA-C	-5.52	108.48	116.54
6	f	245	ARG	NE-CZ-NH2	-5.52	114.23	119.20
6	f	313	LEU	N-CA-CB	5.52	118.86	109.87
7	g	667	LEU	CA-C-N	5.52	127.61	120.44
7	g	667	LEU	C-N-CA	5.52	127.61	120.44
2	m	560	SER	N-CA-CB	5.52	118.72	110.22
3	n	584	ASN	N-CA-C	-5.52	102.69	110.31
3	n	623	VAL	CA-C-O	-5.52	114.90	120.69
6	f	3	LEU	N-CA-C	-5.52	99.05	110.80
7	g	360	TYR	CB-CA-C	-5.52	101.25	110.19
2	b	85	LYS	CB-CG-CD	5.51	123.98	111.30
3	c	332	ILE	CA-C-N	5.51	127.61	120.44
3	c	332	ILE	C-N-CA	5.51	127.61	120.44
5	e	169	PHE	CA-CB-CG	-5.51	108.28	113.80
3	n	117	CYS	CA-C-N	5.51	127.98	120.54
3	n	117	CYS	C-N-CA	5.51	127.98	120.54
6	q	264	TYR	CB-CG-CD1	5.51	129.07	120.80
2	m	87	LYS	N-CA-C	-5.51	99.39	108.49
6	q	94	MET	CG-SD-CE	-5.51	88.77	100.90
7	r	322	ASP	N-CA-C	5.51	119.85	113.18
2	b	344	ARG	CA-C-N	5.51	130.00	120.58
2	b	344	ARG	C-N-CA	5.51	130.00	120.58
2	b	365	ILE	CB-CA-C	5.51	116.64	110.52
7	g	714	TYR	O-C-N	5.51	127.75	122.07
1	l	1024	VAL	N-CA-CB	5.51	117.09	110.31
7	r	339	LEU	CA-C-N	5.51	128.22	120.28
7	r	339	LEU	C-N-CA	5.51	128.22	120.28
7	r	485	THR	CA-C-N	5.51	128.67	120.90
7	r	485	THR	C-N-CA	5.51	128.67	120.90
6	f	358	VAL	CA-C-N	5.51	128.01	120.46
6	f	358	VAL	C-N-CA	5.51	128.01	120.46
6	f	580	PHE	CA-C-N	5.51	129.92	120.72
6	f	580	PHE	C-N-CA	5.51	129.92	120.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	337	GLU	CA-C-O	5.51	126.26	120.42
3	n	544	LYS	N-CA-CB	5.51	118.22	110.12
5	e	247	GLU	N-CA-C	-5.51	107.56	114.56
2	m	225	GLU	O-C-N	5.51	129.39	122.23
7	r	956	ALA	CA-C-O	-5.51	114.71	120.55
6	f	482	ARG	NE-CZ-NH1	-5.51	115.99	121.50
2	m	506	GLU	CA-C-O	5.51	126.14	119.31
7	r	485	THR	CA-CB-CG2	5.51	119.86	110.50
7	r	494	VAL	CA-C-N	5.51	127.66	120.28
7	r	494	VAL	C-N-CA	5.51	127.66	120.28
7	r	522	LEU	N-CA-C	5.51	117.20	108.67
1	l	632	GLN	OE1-CD-NE2	-5.50	117.09	122.60
7	g	476	GLN	CB-CG-CD	-5.50	103.25	112.60
7	g	859	ASP	O-C-N	-5.50	116.29	122.12
7	g	559	VAL	CA-C-N	5.50	128.67	120.31
7	g	559	VAL	C-N-CA	5.50	128.67	120.31
7	g	995	THR	CA-C-N	5.50	131.87	121.97
7	g	995	THR	C-N-CA	5.50	131.87	121.97
1	l	368	VAL	N-CA-CB	5.50	117.59	110.99
5	p	304	ASN	N-CA-CB	5.50	120.27	111.91
1	a	964	LEU	CA-C-N	5.50	127.59	120.44
1	a	964	LEU	C-N-CA	5.50	127.59	120.44
2	m	371	SER	CA-C-N	5.50	132.04	121.54
2	m	371	SER	C-N-CA	5.50	132.04	121.54
3	n	207	TYR	CA-C-N	-5.50	113.58	120.51
3	n	207	TYR	C-N-CA	-5.50	113.58	120.51
6	q	31	ASN	OD1-CG-ND2	-5.50	117.10	122.60
6	q	627	THR	N-CA-CB	5.50	118.20	110.12
7	r	15	SER	N-CA-C	-5.50	106.41	113.23
7	r	453	ILE	N-CA-C	-5.50	100.50	108.36
7	r	971	ILE	N-CA-C	-5.50	99.94	107.75
1	a	830	LEU	CA-C-O	5.50	126.38	120.55
6	f	12	PHE	CB-CA-C	-5.50	101.50	110.85
6	f	594	ILE	N-CA-CB	5.50	118.82	110.58
2	m	469	PHE	CA-CB-CG	-5.50	108.30	113.80
3	n	187	ASP	CA-CB-CG	5.50	118.10	112.60
7	r	213	ASN	CB-CA-C	-5.50	102.02	110.26
1	a	443	LEU	CA-C-O	-5.50	114.59	120.42
7	g	112	SER	CA-C-N	5.50	129.05	120.75
7	g	112	SER	C-N-CA	5.50	129.05	120.75
3	n	406	HIS	CA-CB-CG	5.49	119.29	113.80
6	q	21	GLU	N-CA-CB	5.49	118.19	110.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	331	ARG	NE-CZ-NH2	5.49	124.14	119.20
6	f	63	ILE	CA-C-N	5.49	128.66	120.31
6	f	63	ILE	C-N-CA	5.49	128.66	120.31
1	l	849	ALA	CA-C-O	-5.49	114.60	120.42
7	r	383	LEU	CB-CA-C	-5.49	102.33	110.67
7	r	1011	ASP	N-CA-CB	5.49	119.77	110.49
6	f	406	GLU	N-CA-C	5.49	116.94	111.07
7	g	740	GLU	N-CA-CB	5.49	117.97	110.01
2	m	573	TRP	CA-CB-CG	5.49	124.03	113.60
7	r	638	SER	CB-CA-C	-5.49	107.30	111.20
6	f	527	VAL	CB-CA-C	-5.49	104.73	112.14
3	n	329	ASP	N-CA-C	-5.49	100.60	109.82
5	p	226	ARG	O-C-N	5.49	129.41	123.10
6	q	320	HIS	CA-C-N	5.49	128.66	120.87
6	q	320	HIS	C-N-CA	5.49	128.66	120.87
1	a	80	THR	N-CA-CB	5.49	119.18	110.57
6	f	255	GLY	N-CA-C	-5.49	104.53	114.46
6	f	641	SER	CA-C-N	5.49	132.02	121.54
6	f	641	SER	C-N-CA	5.49	132.02	121.54
6	q	290	LEU	CB-CA-C	-5.49	101.52	110.85
2	m	353	TRP	N-CA-C	-5.48	105.30	111.28
7	r	205	GLY	CA-C-N	5.48	131.55	121.85
7	r	205	GLY	C-N-CA	5.48	131.55	121.85
2	b	700	ASP	CA-CB-CG	5.48	118.08	112.60
1	l	510	LEU	N-CA-CB	5.48	118.18	110.12
4	d	13	HIS	N-CA-C	-5.48	103.18	111.56
7	g	406	ASN	CA-C-O	-5.48	112.67	120.51
6	q	656	ARG	CA-C-N	5.48	129.37	120.60
6	q	656	ARG	C-N-CA	5.48	129.37	120.60
1	a	890	ARG	NE-CZ-NH1	-5.48	116.02	121.50
4	d	41	GLU	O-C-N	5.48	127.92	122.12
1	l	64	ASN	CA-C-N	5.48	130.35	122.35
1	l	64	ASN	C-N-CA	5.48	130.35	122.35
1	l	240	ASN	N-CA-CB	5.48	118.01	110.07
7	r	567	PHE	CA-CB-CG	5.48	119.28	113.80
7	r	459	GLY	O-C-N	-5.48	118.61	123.65
7	r	531	LEU	CA-C-N	5.48	127.56	120.44
7	r	531	LEU	C-N-CA	5.48	127.56	120.44
1	a	758	PHE	CB-CA-C	-5.47	101.70	110.79
1	a	907	LEU	O-C-N	-5.47	116.43	122.07
7	g	745	ILE	CA-C-O	-5.47	115.37	121.17
2	b	256	GLY	CA-C-O	5.47	126.40	119.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	487	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
3	c	571	ILE	CA-C-O	5.47	123.72	118.90
7	g	520	ILE	CA-C-N	5.47	128.64	120.87
7	g	520	ILE	C-N-CA	5.47	128.64	120.87
4	o	40	GLY	N-CA-C	-5.47	106.63	111.67
7	r	1049	ASN	CA-C-O	5.47	126.34	120.70
5	e	33	ILE	N-CA-C	-5.47	100.60	108.53
3	n	148	TYR	N-CA-C	-5.47	101.94	110.42
1	a	260	VAL	O-C-N	5.47	128.42	122.57
7	g	11	ARG	CA-C-N	5.47	127.55	120.44
7	g	11	ARG	C-N-CA	5.47	127.55	120.44
1	l	640	PHE	N-CA-C	-5.47	106.97	113.97
2	m	654	GLU	N-CA-C	5.47	118.16	111.82
5	p	165	LEU	N-CA-C	-5.47	106.28	113.17
5	p	186	SER	N-CA-CB	5.47	119.16	110.57
1	a	914	TYR	CA-CB-CG	-5.47	104.06	113.90
5	e	69	GLY	N-CA-C	-5.47	105.54	112.65
5	p	84	TRP	CB-CG-CD2	-5.47	119.14	126.80
7	r	48	GLN	N-CA-C	5.47	117.32	111.36
7	r	328	HIS	CE1-NE2-CD2	-5.47	103.53	109.00
3	c	576	GLY	O-C-N	-5.47	116.30	121.77
1	l	526	ARG	N-CA-CB	5.47	118.64	110.22
7	r	393	THR	CA-C-O	-5.47	115.08	120.82
7	r	917	LEU	N-CA-CB	5.47	118.31	110.06
1	a	890	ARG	O-C-N	5.46	127.99	122.09
1	l	70	TYR	N-CA-CB	5.46	120.89	111.00
3	n	657	CYS	N-CA-C	-5.46	105.32	111.28
7	r	569	THR	CA-C-N	5.46	127.60	120.28
7	r	569	THR	C-N-CA	5.46	127.60	120.28
7	r	760	ILE	CA-C-N	5.46	131.97	121.54
7	r	760	ILE	C-N-CA	5.46	131.97	121.54
1	a	17	LYS	CA-C-N	5.46	124.81	118.85
1	a	17	LYS	C-N-CA	5.46	124.81	118.85
6	q	557	GLU	CA-C-N	5.46	127.44	120.56
6	q	557	GLU	C-N-CA	5.46	127.44	120.56
3	c	338	LEU	CB-CA-C	5.46	119.45	110.88
7	g	1133	LEU	N-CA-C	5.46	116.91	111.07
1	l	453	VAL	CA-C-N	5.46	127.60	120.28
1	l	453	VAL	C-N-CA	5.46	127.60	120.28
2	m	141	ASN	OD1-CG-ND2	5.46	128.06	122.60
3	n	280	ILE	N-CA-CB	5.46	118.77	110.58
6	q	512	TYR	O-C-N	-5.46	115.83	122.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	491	LEU	N-CA-C	-5.46	104.74	111.40
1	a	246	TRP	CD2-CE2-CZ2	-5.46	116.94	122.40
2	b	525	ILE	CA-C-O	-5.46	115.27	120.95
2	b	717	ASP	CA-C-O	5.46	127.84	120.47
6	f	460	LYS	CA-C-N	5.46	127.91	120.54
6	f	460	LYS	C-N-CA	5.46	127.91	120.54
1	l	211	PHE	CA-C-O	5.46	125.05	119.05
2	m	730	ASN	O-C-N	5.46	128.37	122.15
7	r	698	PRO	N-CA-C	-5.46	109.00	114.68
7	g	626	ASN	N-CA-CB	5.46	119.71	110.49
1	l	133	LEU	N-CA-CB	5.46	120.32	110.17
3	n	468	GLU	N-CA-C	-5.46	105.49	111.82
6	q	574	ASP	N-CA-C	-5.46	102.68	110.59
7	g	148	GLU	O-C-N	5.46	128.82	122.00
7	g	391	THR	CA-CB-CG2	-5.46	101.23	110.50
7	r	459	GLY	N-CA-C	-5.46	103.14	111.10
1	a	647	PHE	CA-C-N	5.45	126.03	119.98
1	a	647	PHE	C-N-CA	5.45	126.03	119.98
2	b	485	ALA	N-CA-C	5.45	117.22	111.28
7	g	861	ILE	CA-C-O	-5.45	114.18	120.83
1	l	179	GLU	CB-CG-CD	-5.45	103.33	112.60
7	r	369	ASP	CA-CB-CG	-5.45	107.15	112.60
1	a	963	LYS	CA-C-O	-5.45	115.09	120.82
6	q	431	ILE	N-CA-C	-5.45	105.21	110.72
7	r	5	LYS	CA-C-O	5.45	126.29	120.24
3	c	415	ASP	N-CA-C	-5.45	106.60	113.20
3	n	519	ARG	NE-CZ-NH2	-5.45	114.29	119.20
4	o	234	TRP	CD2-CE2-CZ2	-5.45	116.95	122.40
6	q	77	LEU	CB-CA-C	-5.45	102.32	110.88
6	f	170	ASP	N-CA-C	-5.45	101.47	109.81
7	g	36	GLN	CA-C-N	5.45	127.58	120.28
7	g	36	GLN	C-N-CA	5.45	127.58	120.28
1	l	805	ASP	N-CA-CB	5.45	119.83	110.68
3	n	120	GLU	CA-C-O	-5.45	114.64	120.42
7	r	158	GLN	N-CA-C	-5.45	105.26	112.94
7	r	179	ASN	CB-CG-ND2	-5.45	108.23	116.40
3	c	385	LEU	O-C-N	-5.45	116.35	122.12
3	c	475	PHE	N-CA-CB	5.45	117.91	110.01
7	g	646	PHE	CA-C-N	5.45	127.52	120.44
7	g	646	PHE	C-N-CA	5.45	127.52	120.44
6	q	84	PHE	CA-C-O	5.45	126.32	120.55
6	q	509	HIS	O-C-N	5.45	127.89	122.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	843	LYS	CB-CA-C	-5.45	102.33	110.88
2	m	222	GLU	CA-C-O	-5.45	114.75	120.63
2	m	521	TRP	CG-CD2-CE3	-5.45	128.45	133.90
3	n	417	PRO	CA-C-N	5.45	129.85	121.19
3	n	417	PRO	C-N-CA	5.45	129.85	121.19
5	p	20	TYR	CA-C-N	5.45	132.17	121.06
5	p	20	TYR	C-N-CA	5.45	132.17	121.06
7	r	1088	SER	N-CA-C	-5.45	105.86	112.88
2	b	274	LEU	CA-C-O	-5.44	114.78	120.55
5	e	85	GLU	CA-C-N	5.44	131.94	121.54
5	e	85	GLU	C-N-CA	5.44	131.94	121.54
7	g	84	ASP	CB-CA-C	-5.44	102.10	110.81
7	g	1093	GLU	N-CA-C	-5.44	104.85	112.25
1	l	233	TYR	N-CA-CB	5.44	119.35	110.37
6	q	105	PHE	CA-CB-CG	-5.44	108.36	113.80
1	a	613	ILE	CA-C-N	5.44	129.07	120.47
1	a	613	ILE	C-N-CA	5.44	129.07	120.47
2	b	577	GLU	CA-C-N	5.44	127.51	120.44
2	b	577	GLU	C-N-CA	5.44	127.51	120.44
7	g	348	LEU	N-CA-C	-5.44	99.65	108.52
2	m	342	ASN	CA-C-O	-5.44	114.47	120.24
3	n	391	TYR	N-CA-CB	5.44	119.09	110.55
5	p	122	GLY	N-CA-C	-5.44	105.83	112.68
6	q	579	GLN	CB-CG-CD	5.44	121.85	112.60
3	c	471	ASP	CA-C-N	5.44	127.57	120.28
3	c	471	ASP	C-N-CA	5.44	127.57	120.28
1	a	849	ALA	CA-C-N	5.44	127.57	120.28
1	a	849	ALA	C-N-CA	5.44	127.57	120.28
6	f	102	ARG	O-C-N	5.44	127.88	122.12
7	g	319	SER	CA-C-O	-5.44	112.73	120.51
1	l	198	LEU	CA-C-O	-5.44	115.79	121.55
5	p	214	LEU	CA-C-N	5.44	129.17	122.37
5	p	214	LEU	C-N-CA	5.44	129.17	122.37
7	r	164	LEU	CB-CA-C	5.44	120.11	109.35
6	q	715	LEU	O-C-N	-5.43	116.36	122.12
7	r	7	HIS	CE1-NE2-CD2	-5.43	103.57	109.00
7	r	337	HIS	CA-CB-CG	-5.43	108.36	113.80
7	r	369	ASP	CB-CA-C	-5.43	101.39	110.19
3	c	384	LEU	CA-C-O	5.43	126.18	120.42
1	l	338	ARG	CA-C-N	5.43	125.44	119.90
1	l	338	ARG	C-N-CA	5.43	125.44	119.90
7	r	616	LYS	CG-CD-CE	5.43	123.80	111.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	628	HIS	CA-CB-CG	5.43	119.23	113.80
1	l	225	SER	CA-C-O	5.43	127.07	120.99
1	l	999	CYS	N-CA-C	5.43	117.20	111.28
6	q	488	GLU	CA-C-N	5.43	128.56	120.31
6	q	488	GLU	C-N-CA	5.43	128.56	120.31
3	c	292	GLU	CA-C-O	-5.43	113.73	119.97
3	c	521	SER	CA-C-N	5.43	130.64	121.14
3	c	521	SER	C-N-CA	5.43	130.64	121.14
5	e	87	ASP	CA-CB-CG	-5.43	107.17	112.60
6	f	66	LYS	CA-C-N	5.43	128.00	120.29
6	f	66	LYS	C-N-CA	5.43	128.00	120.29
6	f	76	HIS	CA-CB-CG	5.43	119.23	113.80
6	f	604	VAL	CB-CA-C	5.43	119.47	112.14
2	m	112	PHE	N-CA-C	5.43	117.20	111.28
3	n	401	SER	CB-CA-C	-5.43	100.58	110.63
5	p	60	ALA	N-CA-C	-5.43	98.71	108.48
7	r	387	MET	CA-C-O	-5.43	113.86	119.51
2	b	425	GLU	CA-CB-CG	-5.43	103.24	114.10
6	f	510	LEU	CA-C-O	-5.43	114.67	120.42
7	g	156	ASN	CA-CB-CG	5.43	118.03	112.60
7	g	303	HIS	CA-CB-CG	5.43	119.23	113.80
7	g	902	THR	CA-C-N	5.43	128.09	120.28
7	g	902	THR	C-N-CA	5.43	128.09	120.28
1	l	918	PHE	O-C-N	5.43	127.66	122.07
4	o	33	ILE	CB-CA-C	5.43	117.11	111.09
5	p	68	TYR	N-CA-C	-5.43	104.55	113.50
1	a	56	TYR	N-CA-C	-5.42	100.47	108.99
1	a	527	SER	CA-C-N	5.42	127.89	120.46
1	a	527	SER	C-N-CA	5.42	127.89	120.46
1	a	868	GLN	N-CA-C	5.42	116.88	111.07
3	n	403	VAL	N-CA-CB	5.42	117.92	110.54
1	a	695	TYR	CA-C-N	5.42	125.96	119.94
1	a	695	TYR	C-N-CA	5.42	125.96	119.94
2	b	399	SER	CA-C-N	5.42	132.04	121.41
2	b	399	SER	C-N-CA	5.42	132.04	121.41
7	r	900	MET	N-CA-CB	5.42	118.09	110.12
4	o	266	GLY	CA-C-O	-5.42	116.75	122.01
5	p	330	LEU	N-CA-CB	5.42	119.11	110.65
7	r	831	LEU	CA-C-N	5.42	127.55	120.28
7	r	831	LEU	C-N-CA	5.42	127.55	120.28
7	g	465	LEU	N-CA-C	-5.42	100.86	109.59
7	r	1037	LEU	CA-C-N	5.42	127.54	120.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	1037	LEU	C-N-CA	5.42	127.54	120.28
3	c	370	PHE	CA-CB-CG	-5.42	108.38	113.80
7	g	393	THR	CA-C-O	5.42	125.87	119.48
2	m	83	THR	CA-C-O	5.42	127.46	121.39
4	o	147	GLY	O-C-N	5.42	129.74	122.70
4	o	254	PRO	O-C-N	5.42	129.67	122.30
2	b	215	SER	N-CA-CB	5.42	118.73	110.44
3	c	382	LEU	CA-C-O	-5.42	114.68	120.42
3	c	487	HIS	ND1-CE1-NE2	5.42	113.82	108.40
7	g	416	ILE	CA-C-N	5.42	130.63	122.99
7	g	416	ILE	C-N-CA	5.42	130.63	122.99
7	g	563	PHE	CA-C-N	5.42	128.08	120.28
7	g	563	PHE	C-N-CA	5.42	128.08	120.28
2	m	554	GLU	CB-CA-C	-5.42	100.27	110.67
1	a	836	ASN	CA-CB-CG	-5.42	107.19	112.60
7	g	1059	GLN	N-CA-C	5.42	117.18	111.28
1	l	818	PRO	N-CA-C	5.41	120.66	113.40
2	m	283	ASP	CA-C-O	5.41	126.69	120.90
3	n	538	PHE	O-C-N	-5.41	116.38	122.12
1	a	103	ASN	CA-C-N	5.41	131.87	121.54
1	a	103	ASN	C-N-CA	5.41	131.87	121.54
1	a	888	VAL	CA-C-O	-5.41	115.11	120.85
7	g	108	TRP	CA-CB-CG	5.41	123.88	113.60
7	g	384	ASN	CA-C-O	5.41	126.06	119.78
7	g	985	ASN	OD1-CG-ND2	5.41	128.01	122.60
2	m	114	ILE	N-CA-C	5.41	116.14	110.62
3	n	483	PHE	CA-C-O	5.41	126.04	119.38
6	q	589	HIS	CA-C-N	5.41	127.47	120.44
6	q	589	HIS	C-N-CA	5.41	127.47	120.44
6	q	629	GLU	N-CA-C	5.41	117.18	111.28
7	r	540	HIS	ND1-CE1-NE2	5.41	113.81	108.40
7	r	1060	HIS	CG-CD2-NE2	5.41	112.61	107.20
2	b	168	ARG	NE-CZ-NH2	-5.41	114.33	119.20
5	e	160	PRO	O-C-N	5.41	127.84	121.46
7	g	227	ARG	N-CA-CB	5.41	120.16	110.80
2	m	604	ASP	CA-C-N	5.41	127.75	120.50
2	m	604	ASP	C-N-CA	5.41	127.75	120.50
1	a	399	THR	O-C-N	5.41	128.69	122.25
2	b	219	PRO	N-CD-CG	5.41	110.29	103.80
5	e	157	LEU	CA-C-N	5.41	131.87	121.54
5	e	157	LEU	C-N-CA	5.41	131.87	121.54
1	l	478	PRO	N-CA-C	5.41	123.61	112.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	946	ASP	CA-CB-CG	5.41	118.01	112.60
6	f	376	SER	CA-C-O	5.41	125.13	119.51
7	g	56	ASP	N-CA-C	-5.41	99.29	110.80
1	l	434	MET	N-CA-CB	5.41	117.95	110.17
2	m	545	GLN	CA-C-N	5.41	128.06	120.28
2	m	545	GLN	C-N-CA	5.41	128.06	120.28
7	r	741	GLY	CA-C-N	5.41	127.52	120.28
7	r	741	GLY	C-N-CA	5.41	127.52	120.28
1	a	246	TRP	CE2-CD2-CE3	5.40	124.20	118.80
3	c	666	SER	CB-CA-C	5.40	119.36	110.88
1	a	198	LEU	N-CA-CB	5.40	117.91	109.97
2	b	642	TRP	CE2-CD2-CE3	5.40	124.20	118.80
5	e	165	LEU	N-CA-C	-5.40	101.09	109.14
7	g	797	LEU	CA-C-N	5.40	127.96	120.29
7	g	797	LEU	C-N-CA	5.40	127.96	120.29
2	b	585	LYS	CA-C-N	5.40	129.42	120.94
2	b	585	LYS	C-N-CA	5.40	129.42	120.94
2	m	126	VAL	CB-CA-C	-5.40	105.92	110.94
3	n	135	ALA	CA-C-O	5.40	126.47	120.80
3	n	652	GLU	N-CA-CB	5.40	119.43	110.63
7	r	612	ASP	CA-C-N	5.40	127.86	120.46
7	r	612	ASP	C-N-CA	5.40	127.86	120.46
2	m	91	TYR	CA-C-N	5.40	125.66	119.83
2	m	91	TYR	C-N-CA	5.40	125.66	119.83
1	a	821	HIS	CG-CD2-NE2	5.40	112.60	107.20
6	f	592	LYS	CA-C-N	5.40	127.07	120.22
6	f	592	LYS	C-N-CA	5.40	127.07	120.22
2	m	517	ASP	CA-CB-CG	-5.40	107.20	112.60
7	r	1066	PHE	CA-C-N	5.40	127.51	120.28
7	r	1066	PHE	C-N-CA	5.40	127.51	120.28
1	a	1027	LEU	CA-C-N	5.40	127.45	120.44
1	a	1027	LEU	C-N-CA	5.40	127.45	120.44
2	b	711	GLU	CA-C-O	-5.39	115.16	120.82
2	m	136	PHE	N-CA-CB	5.39	118.14	110.16
3	n	501	LYS	CA-CB-CG	5.39	124.89	114.10
3	n	564	TYR	CB-CA-C	-5.39	101.68	110.85
7	r	19	ALA	N-CA-C	5.39	118.11	110.50
7	r	862	PHE	O-C-N	5.39	129.35	123.04
2	b	345	LYS	CA-C-N	5.39	127.35	120.56
2	b	345	LYS	C-N-CA	5.39	127.35	120.56
3	c	628	GLU	O-C-N	-5.39	115.34	122.57
6	f	305	ASN	OD1-CG-ND2	5.39	127.99	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	926	VAL	CA-CB-CG1	5.39	119.57	110.40
1	l	93	ILE	N-CA-CB	5.39	118.85	111.41
5	p	303	HIS	CA-CB-CG	-5.39	108.41	113.80
6	f	189	LEU	CA-C-O	-5.39	114.83	120.55
7	g	960	ILE	CB-CA-C	-5.39	103.53	112.26
5	e	64	ALA	CA-C-O	-5.39	115.36	121.72
3	n	400	GLU	CB-CG-CD	-5.39	103.44	112.60
4	o	144	HIS	CE1-NE2-CD2	-5.39	103.61	109.00
5	p	45	TRP	CB-CA-C	5.39	119.40	110.78
7	r	710	ILE	N-CA-CB	5.39	116.99	110.95
1	a	734	HIS	CG-CD2-NE2	5.39	112.59	107.20
1	l	771	ASP	N-CA-C	5.39	116.83	111.07
6	f	328	LEU	CA-C-N	5.39	127.44	120.44
6	f	328	LEU	C-N-CA	5.39	127.44	120.44
7	g	1119	GLN	N-CA-CB	5.39	118.04	110.12
2	b	598	ASN	CA-CB-CG	5.38	117.98	112.60
7	g	13	GLU	CB-CA-C	-5.38	102.43	110.88
7	g	173	ILE	CB-CA-C	-5.38	103.12	110.77
7	g	188	LEU	CA-C-N	5.38	127.94	120.29
7	g	188	LEU	C-N-CA	5.38	127.94	120.29
1	l	845	ILE	CA-C-N	5.38	127.50	120.28
1	l	845	ILE	C-N-CA	5.38	127.50	120.28
3	n	280	ILE	CA-C-N	5.38	128.03	120.28
3	n	280	ILE	C-N-CA	5.38	128.03	120.28
1	l	441	GLU	CA-CB-CG	5.38	124.87	114.10
6	q	632	LYS	CG-CD-CE	5.38	123.68	111.30
1	a	271	ARG	NE-CZ-NH2	-5.38	114.36	119.20
1	a	725	ARG	NE-CZ-NH1	-5.38	116.12	121.50
2	b	105	SER	N-CA-C	-5.38	105.49	111.36
1	l	1009	SER	N-CA-C	-5.38	106.71	113.28
2	m	630	LEU	CA-C-N	5.38	127.49	120.28
2	m	630	LEU	C-N-CA	5.38	127.49	120.28
4	d	238	ASN	CB-CG-ND2	5.38	124.47	116.40
6	f	36	PHE	N-CA-C	-5.38	107.73	114.56
2	m	648	LEU	CA-C-N	5.38	127.93	120.29
2	m	648	LEU	C-N-CA	5.38	127.93	120.29
6	q	179	ILE	CA-C-N	5.38	127.80	120.54
6	q	179	ILE	C-N-CA	5.38	127.80	120.54
7	r	652	HIS	ND1-CE1-NE2	5.38	113.78	108.40
7	r	1016	PHE	CA-CB-CG	5.38	119.18	113.80
4	d	247	LEU	N-CA-C	-5.38	100.13	108.90
7	g	202	SER	N-CA-C	-5.38	103.53	111.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	496	ASN	N-CA-C	-5.38	106.57	113.02
7	r	329	GLY	O-C-N	5.38	129.69	122.70
7	r	1029	LEU	CA-C-N	5.38	128.87	120.75
7	r	1029	LEU	C-N-CA	5.38	128.87	120.75
1	a	552	ASP	CA-C-N	5.38	127.83	120.46
1	a	552	ASP	C-N-CA	5.38	127.83	120.46
1	a	665	LEU	O-C-N	-5.38	116.42	122.12
1	a	716	GLU	N-CA-CB	5.38	119.63	110.71
1	a	753	ASN	CB-CG-OD1	5.38	131.55	120.80
2	b	200	ASN	N-CA-CB	5.38	120.08	111.91
3	c	701	ALA	CA-C-O	-5.38	113.79	119.97
6	f	344	ARG	CA-C-N	5.38	127.33	120.56
6	f	344	ARG	C-N-CA	5.38	127.33	120.56
7	g	521	SER	CA-C-O	5.38	127.18	121.16
7	g	834	THR	N-CA-C	5.38	117.14	111.28
2	m	361	LEU	N-CA-C	5.38	117.22	111.36
1	l	212	PHE	CA-CB-CG	5.38	119.17	113.80
1	a	250	SER	CA-C-N	5.37	129.99	122.36
1	a	250	SER	C-N-CA	5.37	129.99	122.36
2	m	632	GLN	CA-C-O	-5.37	114.86	120.55
3	n	662	GLN	CB-CA-C	-5.37	101.87	110.79
5	p	146	ARG	N-CA-C	-5.37	106.40	113.17
7	r	1102	PHE	CA-C-O	-5.37	115.19	120.19
1	a	306	ASP	CA-C-O	-5.37	115.61	121.89
7	g	950	ASN	N-CA-C	5.37	117.14	111.28
1	l	180	ASP	N-CA-C	-5.37	106.04	112.59
5	p	13	HIS	ND1-CE1-NE2	5.37	113.77	108.40
6	q	530	ILE	N-CA-CB	5.37	117.85	110.54
5	e	65	SER	CB-CA-C	-5.37	100.62	109.27
6	f	719	ALA	CA-C-N	5.37	129.19	120.60
6	f	719	ALA	C-N-CA	5.37	129.19	120.60
3	n	498	ASN	N-CA-C	-5.37	105.37	112.94
5	e	218	ILE	CB-CA-C	5.37	118.76	110.28
7	g	595	ASN	N-CA-C	5.37	117.21	111.36
1	l	217	LYS	N-CA-CB	5.37	119.38	110.52
1	l	651	ILE	CA-C-O	-5.37	115.37	120.95
2	m	509	PRO	CA-C-N	5.37	127.47	120.28
2	m	509	PRO	C-N-CA	5.37	127.47	120.28
3	n	128	CYS	CA-C-O	-5.37	115.17	120.70
3	n	373	LYS	CB-CA-C	-5.37	101.12	110.09
4	o	208	ARG	NE-CZ-NH2	5.37	124.03	119.20
7	r	854	HIS	CG-CD2-NE2	5.37	112.57	107.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	910	ASP	CA-CB-CG	-5.37	107.23	112.60
7	g	80	PHE	N-CA-CB	5.37	118.78	110.46
2	m	652	LEU	CA-C-N	5.37	127.32	120.56
2	m	652	LEU	C-N-CA	5.37	127.32	120.56
1	a	622	LEU	N-CA-C	5.37	117.13	111.28
5	e	4	PHE	N-CA-C	-5.37	101.14	108.38
7	g	592	GLU	CB-CA-C	-5.37	101.73	110.85
1	l	146	ASN	CB-CG-ND2	-5.37	108.35	116.40
1	a	238	THR	CA-CB-OG1	5.36	117.64	109.60
2	m	333	GLU	CA-C-N	5.36	128.25	120.79
2	m	333	GLU	C-N-CA	5.36	128.25	120.79
3	n	606	ARG	N-CA-CB	5.36	118.10	110.16
7	r	64	ASN	N-CA-CB	5.36	120.46	110.86
2	m	385	ASP	CA-C-O	-5.36	115.29	121.19
3	n	541	GLN	OE1-CD-NE2	5.36	127.96	122.60
7	r	771	ASN	N-CA-CB	5.36	118.22	109.69
1	a	1004	ILE	N-CA-C	5.36	115.57	110.42
2	b	471	PHE	CA-C-N	5.36	127.41	120.44
2	b	471	PHE	C-N-CA	5.36	127.41	120.44
1	l	314	THR	CB-CA-C	5.36	119.53	110.79
2	m	274	LEU	CA-C-O	-5.36	115.88	119.68
5	p	346	THR	N-CA-C	-5.36	100.66	109.40
6	q	175	GLU	CA-C-O	-5.36	114.87	120.55
7	r	401	ILE	N-CA-C	-5.36	97.30	108.88
7	r	529	HIS	CA-C-O	5.36	126.23	120.55
7	r	533	LEU	O-C-N	-5.36	116.44	122.12
7	r	803	GLN	CA-C-O	-5.36	115.19	120.82
3	c	604	SER	N-CA-C	-5.36	106.52	113.16
3	c	652	GLU	CA-C-N	5.36	131.62	121.97
3	c	652	GLU	C-N-CA	5.36	131.62	121.97
1	l	731	ASN	N-CA-CB	5.36	119.55	110.49
7	r	336	SER	N-CA-CB	5.36	120.72	111.13
3	c	537	ILE	CB-CA-C	-5.36	105.11	111.97
6	f	696	ASN	CA-C-N	5.36	129.81	122.84
6	f	696	ASN	C-N-CA	5.36	129.81	122.84
7	g	469	THR	CA-C-N	5.36	131.77	121.54
7	g	469	THR	C-N-CA	5.36	131.77	121.54
7	g	766	LYS	CA-C-N	5.36	128.45	120.31
7	g	766	LYS	C-N-CA	5.36	128.45	120.31
7	g	1127	ASN	N-CA-CB	5.36	120.44	112.30
1	l	721	MET	N-CA-CB	5.36	118.00	110.12
2	m	493	ALA	CA-C-O	-5.36	115.65	121.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	121	ILE	CA-C-O	-5.36	115.38	120.95
1	a	1014	TYR	N-CA-C	-5.36	106.23	114.16
4	d	240	GLN	OE1-CD-NE2	-5.36	117.25	122.60
5	e	41	ASP	N-CA-C	-5.36	106.75	113.28
2	m	374	TYR	CA-C-N	5.36	127.77	120.54
2	m	374	TYR	C-N-CA	5.36	127.77	120.54
3	n	548	GLU	CA-C-O	5.36	125.95	119.31
7	r	712	PHE	CA-C-N	5.36	127.40	120.44
7	r	712	PHE	C-N-CA	5.36	127.40	120.44
7	r	1078	LEU	CA-C-O	-5.35	115.27	119.66
2	b	542	LEU	O-C-N	5.35	127.58	122.07
3	c	464	VAL	N-CA-C	5.35	116.92	109.80
4	d	109	PRO	CB-CA-C	-5.35	102.73	111.56
1	l	825	TYR	CA-C-N	5.35	127.40	120.44
1	l	825	TYR	C-N-CA	5.35	127.40	120.44
1	l	983	GLN	CA-C-N	5.35	127.40	120.44
1	l	983	GLN	C-N-CA	5.35	127.40	120.44
6	q	101	SER	CA-C-N	5.35	127.99	120.28
6	q	101	SER	C-N-CA	5.35	127.99	120.28
6	q	703	LEU	N-CA-C	-5.35	105.36	111.14
7	r	577	TYR	O-C-N	5.35	128.93	122.35
1	a	203	SER	CA-C-N	5.35	131.76	121.54
1	a	203	SER	C-N-CA	5.35	131.76	121.54
1	l	986	LEU	N-CA-C	5.35	117.93	111.40
1	l	1013	ALA	N-CA-C	-5.35	106.80	113.38
7	r	134	VAL	N-CA-C	-5.35	99.81	107.78
7	r	901	ASN	CA-CB-CG	-5.35	107.25	112.60
3	c	636	LEU	CA-C-O	-5.35	114.75	120.42
6	f	254	ALA	N-CA-CB	5.35	118.55	110.42
2	m	310	VAL	CA-C-N	5.35	129.64	120.71
2	m	310	VAL	C-N-CA	5.35	129.64	120.71
3	n	332	ILE	O-C-N	-5.35	116.68	121.87
7	r	828	THR	N-CA-C	5.35	117.11	111.28
1	a	277	GLY	N-CA-C	-5.34	100.52	113.18
1	a	655	LEU	N-CA-CB	5.34	117.98	110.12
6	f	477	ARG	NE-CZ-NH1	5.34	126.84	121.50
3	n	563	SER	CA-C-O	-5.34	115.79	121.78
7	r	820	THR	CA-C-N	5.34	131.75	121.54
7	r	820	THR	C-N-CA	5.34	131.75	121.54
3	n	596	GLU	CA-C-N	5.34	127.78	120.46
3	n	596	GLU	C-N-CA	5.34	127.78	120.46
6	f	189	LEU	N-CA-C	-5.34	105.46	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	696	GLU	N-CA-CB	5.34	118.06	110.16
3	n	214	SER	CA-C-N	5.34	128.29	120.71
3	n	214	SER	C-N-CA	5.34	128.29	120.71
5	p	90	GLN	OE1-CD-NE2	-5.34	117.26	122.60
6	q	20	LYS	N-CA-C	-5.34	105.54	111.36
1	a	84	LEU	CA-C-O	-5.34	116.23	122.37
1	a	433	ILE	CA-C-O	5.34	126.74	120.71
1	a	897	SER	N-CA-C	-5.34	101.58	110.17
3	c	513	ARG	N-CA-C	5.34	119.42	113.01
3	n	507	ILE	CA-C-N	5.34	131.74	121.54
3	n	507	ILE	C-N-CA	5.34	131.74	121.54
6	q	579	GLN	CA-C-N	5.34	128.29	120.71
6	q	579	GLN	C-N-CA	5.34	128.29	120.71
1	a	423	ALA	CA-C-O	-5.34	114.89	120.55
7	g	670	THR	CA-C-N	5.34	127.38	120.44
7	g	670	THR	C-N-CA	5.34	127.38	120.44
1	a	14	TYR	CB-CG-CD2	-5.34	112.80	120.80
3	c	222	ASP	CB-CA-C	-5.34	101.70	110.72
6	f	685	SER	CA-C-N	5.34	127.43	120.28
6	f	685	SER	C-N-CA	5.34	127.43	120.28
7	g	688	THR	CA-C-O	-5.34	114.07	120.10
7	g	1091	THR	N-CA-C	5.34	120.74	113.16
6	q	400	ASN	OD1-CG-ND2	5.34	127.94	122.60
7	r	552	THR	CB-CA-C	5.34	118.58	109.72
1	a	453	VAL	N-CA-C	5.33	116.06	110.62
7	g	31	TYR	CB-CG-CD1	5.33	128.80	120.80
7	g	553	LEU	CA-C-N	5.33	125.87	120.00
7	g	553	LEU	C-N-CA	5.33	125.87	120.00
2	m	143	THR	N-CA-C	5.33	117.17	111.36
7	r	556	HIS	N-CA-C	-5.33	105.55	111.36
1	a	795	GLU	CA-C-N	5.33	127.69	120.38
1	a	795	GLU	C-N-CA	5.33	127.69	120.38
1	l	828	LEU	CA-C-N	5.33	127.42	120.28
1	l	828	LEU	C-N-CA	5.33	127.42	120.28
2	m	78	ASN	CA-CB-CG	-5.33	107.27	112.60
2	m	603	ASP	N-CA-C	-5.33	106.82	113.38
5	p	101	LEU	N-CA-CB	5.33	118.14	110.20
6	q	230	GLU	O-C-N	5.33	128.20	122.34
6	q	581	LEU	N-CA-C	-5.33	101.61	109.18
7	r	712	PHE	N-CA-CB	5.33	118.06	110.06
1	a	638	VAL	O-C-N	-5.33	114.81	121.84
1	a	975	ARG	CA-C-N	5.33	128.41	120.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	975	ARG	C-N-CA	5.33	128.41	120.31
4	d	85	GLU	N-CA-C	-5.33	98.56	107.99
7	g	173	ILE	CA-C-O	-5.33	114.85	120.39
7	g	755	GLN	CA-CB-CG	5.33	124.76	114.10
7	g	1037	LEU	CA-C-N	5.33	127.42	120.28
7	g	1037	LEU	C-N-CA	5.33	127.42	120.28
7	r	650	LEU	CA-C-N	5.33	127.73	120.54
7	r	650	LEU	C-N-CA	5.33	127.73	120.54
1	a	99	ASN	O-C-N	5.33	129.45	123.27
1	a	481	HIS	CA-CB-CG	-5.33	108.47	113.80
7	g	659	PRO	N-CD-CG	5.33	111.19	103.20
1	l	656	ASP	CA-CB-CG	-5.33	107.27	112.60
1	l	994	ILE	N-CA-CB	5.33	117.79	110.54
3	c	339	GLN	CA-C-O	5.33	126.20	120.55
7	g	133	ALA	CA-C-N	5.33	130.46	122.58
7	g	133	ALA	C-N-CA	5.33	130.46	122.58
3	c	228	SER	CA-C-N	5.33	128.41	120.31
3	c	228	SER	C-N-CA	5.33	128.41	120.31
3	n	403	VAL	CB-CA-C	-5.33	104.95	112.14
6	q	282	TRP	N-CA-C	5.33	117.08	111.28
7	r	233	ILE	CA-CB-CG1	5.33	119.45	110.40
1	a	394	ASP	CA-C-N	5.32	127.41	120.28
1	a	394	ASP	C-N-CA	5.32	127.41	120.28
6	f	82	LEU	O-C-N	-5.32	115.19	122.33
6	f	409	LYS	CA-C-N	5.32	127.41	120.28
6	f	409	LYS	C-N-CA	5.32	127.41	120.28
2	m	589	PRO	CA-N-CD	-5.32	104.55	112.00
5	p	310	VAL	N-CA-C	-5.32	100.53	108.46
1	l	771	ASP	CA-C-N	5.32	127.36	120.44
1	l	771	ASP	C-N-CA	5.32	127.36	120.44
1	l	973	SER	N-CA-C	-5.32	101.58	109.83
1	a	206	LYS	N-CA-C	-5.32	107.33	112.97
2	b	139	GLU	CB-CA-C	-5.32	110.42	116.54
6	f	595	ARG	NE-CZ-NH1	5.32	126.82	121.50
6	f	621	GLN	CA-C-N	5.32	125.85	119.94
6	f	621	GLN	C-N-CA	5.32	125.85	119.94
2	m	338	VAL	CB-CA-C	5.32	118.69	111.88
5	p	139	ALA	N-CA-C	-5.32	102.61	110.48
7	g	184	LEU	CA-C-N	5.32	130.64	122.93
7	g	184	LEU	C-N-CA	5.32	130.64	122.93
7	r	1070	LEU	N-CA-CB	5.32	118.95	110.39
1	a	421	GLU	CA-C-O	-5.32	114.78	120.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	297	TYR	N-CA-CB	5.32	117.94	110.12
6	q	50	ALA	CA-C-O	-5.32	114.91	120.55
1	a	825	TYR	CA-CB-CG	-5.32	104.33	113.90
1	a	940	VAL	N-CA-CB	5.32	118.55	110.58
2	b	177	GLU	CA-C-N	5.32	128.39	120.31
2	b	177	GLU	C-N-CA	5.32	128.39	120.31
1	l	629	ILE	CB-CA-C	-5.32	105.06	112.02
2	m	670	PHE	O-C-N	-5.32	115.92	122.19
3	c	536	LEU	CA-C-N	5.31	127.25	120.56
3	c	536	LEU	C-N-CA	5.31	127.25	120.56
6	q	512	TYR	CA-C-N	5.31	125.98	120.03
6	q	512	TYR	C-N-CA	5.31	125.98	120.03
1	a	86	ASP	N-CA-CB	5.31	119.47	110.49
2	b	503	VAL	CA-C-N	5.31	128.86	120.47
2	b	503	VAL	C-N-CA	5.31	128.86	120.47
5	e	323	GLY	O-C-N	5.31	128.40	123.73
7	g	1038	ASN	CA-C-N	5.31	127.40	120.28
7	g	1038	ASN	C-N-CA	5.31	127.40	120.28
1	l	122	ILE	CA-C-O	-5.31	114.71	120.71
7	g	107	ILE	O-C-N	-5.31	117.66	123.18
2	b	414	SER	N-CA-CB	-5.31	102.30	110.16
6	q	136	PRO	N-CD-CG	5.31	111.16	103.20
6	f	237	ILE	N-CA-C	-5.31	100.68	108.11
6	f	296	THR	O-C-N	-5.31	116.50	122.12
2	m	249	LEU	N-CA-CB	5.31	117.71	110.01
3	c	318	LEU	CA-C-N	5.30	127.65	120.38
3	c	318	LEU	C-N-CA	5.30	127.65	120.38
5	e	303	HIS	CE1-NE2-CD2	-5.30	103.70	109.00
1	l	689	GLY	CA-C-N	5.30	130.43	122.58
1	l	689	GLY	C-N-CA	5.30	130.43	122.58
2	m	140	HIS	N-CA-CB	-5.30	102.32	110.01
2	m	671	LEU	CA-C-O	-5.30	114.80	120.42
7	g	1035	LYS	CA-C-N	5.30	127.33	120.44
7	g	1035	LYS	C-N-CA	5.30	127.33	120.44
1	l	411	LEU	O-C-N	5.30	127.74	122.12
6	f	40	ARG	N-CA-CB	5.30	117.91	110.12
6	f	341	HIS	CE1-NE2-CD2	-5.30	103.70	109.00
6	f	718	VAL	CB-CA-C	-5.30	105.19	111.97
3	n	563	SER	O-C-N	5.30	129.08	121.92
4	o	9	ASN	CA-C-N	5.30	131.45	122.65
4	o	9	ASN	C-N-CA	5.30	131.45	122.65
1	l	116	GLN	N-CA-C	-5.30	100.05	109.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	161	THR	N-CA-C	-5.30	103.54	110.53
7	r	211	MET	O-C-N	-5.30	116.92	123.33
7	r	899	ALA	CA-C-N	5.30	127.38	120.28
7	r	899	ALA	C-N-CA	5.30	127.38	120.28
2	b	683	MET	CA-C-O	-5.30	114.58	121.73
4	d	285	LEU	CA-C-N	5.30	135.45	123.16
4	d	285	LEU	C-N-CA	5.30	135.45	123.16
1	a	72	PHE	CA-CB-CG	-5.30	108.50	113.80
2	b	543	GLY	CA-C-O	-5.30	115.29	120.75
5	e	164	HIS	CE1-NE2-CD2	-5.30	103.70	109.00
7	g	185	ASN	N-CA-C	-5.30	101.06	109.59
7	r	352	TYR	CA-C-O	5.30	126.08	120.36
7	r	1140	VAL	N-CA-C	-5.30	105.37	110.72
1	a	913	ILE	CA-C-O	5.29	126.24	120.57
7	g	763	GLN	N-CA-C	-5.29	102.33	110.32
1	l	75	ARG	CB-CA-C	5.29	118.95	111.86
7	r	763	GLN	CA-C-O	-5.29	114.99	120.87
7	r	1006	TYR	N-CA-C	5.29	117.05	111.28
1	a	490	VAL	CA-C-N	5.29	127.37	120.28
1	a	490	VAL	C-N-CA	5.29	127.37	120.28
3	c	152	LYS	N-CA-CB	5.29	118.05	110.06
3	c	559	LEU	CA-C-O	5.29	126.03	120.42
3	c	636	LEU	CA-C-N	5.29	127.33	120.56
3	c	636	LEU	C-N-CA	5.29	127.33	120.56
5	e	102	CYS	CA-C-N	5.29	130.23	122.77
5	e	102	CYS	C-N-CA	5.29	130.23	122.77
7	g	151	LEU	CA-C-N	5.29	130.69	122.49
7	g	151	LEU	C-N-CA	5.29	130.69	122.49
7	g	367	ILE	N-CA-C	-5.29	100.26	107.99
7	g	716	ASN	CB-CG-OD1	-5.29	110.22	120.80
2	b	546	MET	O-C-N	-5.29	116.51	122.12
5	e	118	PRO	CA-N-CD	-5.29	104.59	112.00
7	g	96	TYR	N-CA-C	-5.29	101.07	109.59
1	a	196	PRO	O-C-N	-5.29	117.18	123.10
2	b	66	PRO	CA-N-CD	-5.29	104.60	112.00
6	f	141	THR	CA-CB-OG1	5.29	117.53	109.60
6	f	171	VAL	CA-C-N	5.29	127.37	120.28
6	f	171	VAL	C-N-CA	5.29	127.37	120.28
7	g	417	LEU	O-C-N	-5.29	117.01	123.30
2	m	694	VAL	CA-C-O	5.29	126.46	120.85
1	a	23	THR	CA-C-O	-5.29	115.43	121.40
7	g	282	LEU	N-CA-CB	5.29	118.04	110.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	e	78	ASP	CA-C-N	5.29	129.69	122.34
5	e	78	ASP	C-N-CA	5.29	129.69	122.34
6	f	141	THR	N-CA-C	-5.29	106.06	112.88
6	f	273	ASN	N-CA-CB	5.29	117.81	110.04
7	g	987	LEU	CA-C-N	5.29	127.22	120.56
7	g	987	LEU	C-N-CA	5.29	127.22	120.56
1	l	662	PHE	CA-C-O	5.29	126.05	119.97
4	o	276	ASN	N-CA-C	-5.29	105.63	113.40
6	q	85	ARG	N-CA-CB	5.29	117.89	110.12
6	q	560	LYS	CA-C-N	5.29	128.34	120.31
6	q	560	LYS	C-N-CA	5.29	128.34	120.31
7	r	659	PRO	O-C-N	5.29	129.78	122.64
1	a	507	PHE	N-CA-C	-5.28	105.52	111.28
1	a	636	THR	OG1-CB-CG2	-5.28	98.73	109.30
3	c	616	PHE	CA-C-N	5.28	127.31	120.44
3	c	616	PHE	C-N-CA	5.28	127.31	120.44
6	f	55	ASN	CA-C-N	5.28	127.36	120.28
6	f	55	ASN	C-N-CA	5.28	127.36	120.28
6	f	361	SER	CA-C-N	5.28	127.79	120.29
6	f	361	SER	C-N-CA	5.28	127.79	120.29
5	p	13	HIS	CG-CD2-NE2	5.28	112.48	107.20
6	q	528	HIS	ND1-CE1-NE2	5.28	113.68	108.40
6	q	574	ASP	CA-CB-CG	5.28	117.88	112.60
7	r	128	ASP	N-CA-CB	5.28	117.82	110.26
7	r	533	LEU	CB-CA-C	-5.28	102.02	110.79
2	b	588	ASP	CA-C-O	-5.28	115.41	120.64
1	l	339	PRO	N-CD-CG	5.28	111.12	103.20
2	m	196	ASP	CA-C-N	5.28	127.98	120.53
2	m	196	ASP	C-N-CA	5.28	127.98	120.53
2	b	713	ILE	O-C-N	5.28	127.27	121.83
3	c	598	LEU	O-C-N	5.28	129.34	122.42
6	f	2	GLU	N-CA-C	5.28	117.53	110.35
7	g	572	ALA	CA-C-N	5.28	127.36	120.28
7	g	572	ALA	C-N-CA	5.28	127.36	120.28
1	l	952	ASN	CA-CB-CG	-5.28	107.32	112.60
2	m	338	VAL	N-CA-CB	-5.28	104.65	110.51
7	r	761	ASN	N-CA-CB	5.28	119.41	110.49
1	a	376	TYR	CB-CG-CD2	-5.28	112.88	120.80
7	g	576	ASN	OD1-CG-ND2	5.28	127.88	122.60
7	g	793	CYS	O-C-N	-5.28	116.52	122.12
3	c	319	SER	O-C-N	5.28	127.71	122.12
7	g	373	ASN	N-CA-CB	5.28	120.08	111.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	743	ASN	CA-CB-CG	5.28	117.88	112.60
5	p	203	HIS	CA-CB-CG	5.28	119.08	113.80
7	r	848	PHE	CA-C-N	5.28	127.35	120.28
7	r	848	PHE	C-N-CA	5.28	127.35	120.28
7	r	854	HIS	ND1-CE1-NE2	5.28	113.68	108.40
6	f	537	PHE	CB-CG-CD1	5.28	129.67	120.70
7	g	752	GLN	CA-C-O	-5.28	114.96	120.55
3	n	274	SER	CA-C-O	-5.28	115.28	120.82
7	r	327	ALA	CA-C-N	5.27	129.89	121.66
7	r	327	ALA	C-N-CA	5.27	129.89	121.66
1	a	457	PHE	CB-CA-C	5.27	119.81	110.85
1	a	702	ILE	CA-CB-CG1	5.27	119.36	110.40
7	g	1073	ASN	CA-CB-CG	-5.27	107.33	112.60
1	l	843	LYS	CA-C-N	5.27	127.61	120.44
1	l	843	LYS	C-N-CA	5.27	127.61	120.44
1	l	83	PRO	CA-C-N	5.27	129.51	120.71
1	l	83	PRO	C-N-CA	5.27	129.51	120.71
4	d	246	THR	N-CA-C	-5.27	100.10	109.06
7	g	946	LYS	CA-C-O	-5.27	114.96	120.55
1	l	247	ASP	CA-CB-CG	-5.27	107.33	112.60
3	n	276	ILE	CA-C-N	5.27	130.14	121.87
3	n	276	ILE	C-N-CA	5.27	130.14	121.87
3	n	480	GLN	CA-C-N	5.27	127.34	120.28
3	n	480	GLN	C-N-CA	5.27	127.34	120.28
7	r	1138	GLY	N-CA-C	5.27	120.43	113.37
3	c	689	GLY	CA-C-N	5.27	127.32	120.26
3	c	689	GLY	C-N-CA	5.27	127.32	120.26
7	g	309	ASP	CA-CB-CG	5.27	117.87	112.60
1	l	516	PHE	N-CA-C	-5.27	105.54	111.28
1	l	724	PHE	N-CA-C	5.27	117.02	111.28
6	q	217	GLU	N-CA-CB	5.27	118.76	110.23
6	q	556	GLY	CA-C-N	5.27	127.34	120.28
6	q	556	GLY	C-N-CA	5.27	127.34	120.28
7	r	530	ASP	N-CA-CB	5.27	118.44	110.28
3	c	448	GLN	CA-CB-CG	5.27	124.63	114.10
2	m	670	PHE	CA-C-N	5.27	127.77	120.29
2	m	670	PHE	C-N-CA	5.27	127.77	120.29
7	r	36	GLN	N-CA-CB	5.27	117.95	110.16
2	b	482	TRP	CZ3-CH2-CZ2	-5.26	114.66	121.50
7	g	188	LEU	CA-C-O	5.26	126.00	120.42
1	l	445	ASN	N-CA-CB	5.26	118.44	110.28
1	l	778	GLN	OE1-CD-NE2	5.26	127.86	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	663	GLU	CA-C-N	5.26	127.67	120.46
3	c	663	GLU	C-N-CA	5.26	127.67	120.46
5	e	64	ALA	N-CA-CB	5.26	118.88	110.46
4	o	110	HIS	CB-CG-ND1	5.26	130.59	122.70
5	p	23	HIS	CB-CG-CD2	-5.26	124.36	131.20
6	q	474	ASN	CA-C-N	5.26	127.19	120.56
6	q	474	ASN	C-N-CA	5.26	127.19	120.56
3	c	217	PHE	CA-CB-CG	-5.26	108.54	113.80
1	l	984	TYR	O-C-N	5.26	127.49	122.07
7	r	125	ARG	CB-CA-C	-5.26	99.29	109.76
2	b	569	LYS	CB-CA-C	-5.26	102.62	110.88
2	b	580	CYS	N-CA-C	5.26	117.01	111.28
2	b	690	THR	N-CA-CB	5.26	117.85	110.12
7	g	525	GLU	CA-C-O	-5.26	114.97	120.55
7	g	858	ASN	OD1-CG-ND2	-5.26	117.34	122.60
4	d	9	ASN	CB-CA-C	-5.26	101.18	109.80
6	f	75	TRP	CE2-CD2-CE3	5.26	124.06	118.80
7	g	703	THR	N-CA-C	5.26	118.95	112.54
1	a	868	GLN	CA-C-N	5.26	127.75	120.29
1	a	868	GLN	C-N-CA	5.26	127.75	120.29
1	a	929	HIS	CA-CB-CG	-5.26	108.54	113.80
5	p	125	LEU	CA-C-O	-5.26	114.96	121.06
7	r	17	PRO	N-CA-C	-5.26	101.34	111.69
2	b	537	GLU	CA-C-N	5.25	127.66	120.46
2	b	537	GLU	C-N-CA	5.25	127.66	120.46
6	f	330	ARG	NE-CZ-NH1	-5.25	116.25	121.50
7	g	525	GLU	N-CA-C	5.25	117.01	111.28
7	g	779	ASN	CB-CG-ND2	-5.25	108.52	116.40
2	m	510	HIS	ND1-CE1-NE2	5.25	113.66	108.40
6	q	261	ARG	CA-C-O	-5.25	114.98	120.55
1	a	521	SER	O-C-N	5.25	128.90	122.75
3	c	585	PRO	N-CA-CB	5.25	108.35	103.46
7	g	1038	ASN	CA-CB-CG	-5.25	107.35	112.60
5	p	136	LEU	N-CA-C	-5.25	99.85	108.41
7	r	1079	PRO	O-C-N	5.25	129.73	122.64
1	a	749	TYR	CB-CG-CD1	-5.25	112.92	120.80
1	a	835	ASN	N-CA-C	-5.25	106.26	113.30
1	l	370	ASP	O-C-N	-5.25	117.80	123.42
2	m	135	ASN	CA-C-N	5.25	127.75	120.29
2	m	135	ASN	C-N-CA	5.25	127.75	120.29
7	r	525	GLU	CA-C-N	5.25	130.76	120.99
7	r	525	GLU	C-N-CA	5.25	130.76	120.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	c	289	ASN	O-C-N	5.25	129.33	123.19
7	g	807	PHE	O-C-N	-5.25	116.42	122.09
3	n	114	ASP	N-CA-C	5.25	121.98	110.80
3	n	388	THR	CA-C-N	5.25	128.29	120.31
3	n	388	THR	C-N-CA	5.25	128.29	120.31
1	a	237	LEU	CD1-CG-CD2	-5.25	99.25	110.80
1	a	1029	ASP	CB-CA-C	-5.25	102.08	110.79
5	e	2	GLN	O-C-N	-5.25	118.15	121.88
7	g	311	ASN	CA-CB-CG	5.25	117.85	112.60
3	n	704	LEU	N-CA-C	5.25	117.00	111.28
1	a	758	PHE	CA-CB-CG	-5.25	108.55	113.80
2	b	602	GLU	N-CA-CB	5.25	119.36	110.49
4	d	234	TRP	CA-C-N	5.25	129.40	122.42
4	d	234	TRP	C-N-CA	5.25	129.40	122.42
6	f	561	ASN	N-CA-CB	5.25	117.92	110.16
1	l	579	ILE	O-C-N	-5.25	115.12	121.10
7	g	295	TRP	CA-C-O	5.25	126.03	120.36
4	d	228	ASP	N-CA-CB	5.24	118.22	110.56
4	d	270	ALA	CA-C-O	-5.24	114.67	120.38
2	m	468	SER	O-C-N	5.24	128.38	122.19
3	n	367	GLU	CB-CG-CD	-5.24	103.69	112.60
3	n	489	HIS	CA-C-N	5.24	131.55	121.54
3	n	489	HIS	C-N-CA	5.24	131.55	121.54
4	o	288	LYS	CB-CG-CD	5.24	123.36	111.30
6	q	638	LEU	CD1-CG-CD2	5.24	122.33	110.80
1	a	886	LEU	N-CA-C	5.24	116.99	111.28
3	c	706	LYS	CA-C-N	5.24	127.57	120.44
3	c	706	LYS	C-N-CA	5.24	127.57	120.44
7	g	418	VAL	N-CA-CB	5.24	118.51	111.90
1	l	701	TYR	N-CA-C	5.24	116.99	111.28
1	a	649	GLN	CA-C-N	5.24	127.25	120.44
1	a	649	GLN	C-N-CA	5.24	127.25	120.44
1	a	810	ASP	CA-C-N	5.24	127.73	120.29
1	a	810	ASP	C-N-CA	5.24	127.73	120.29
3	c	349	SER	N-CA-CB	5.24	119.35	110.49
3	c	476	ALA	N-CA-C	5.24	117.40	111.11
7	g	74	THR	CA-CB-OG1	5.24	117.46	109.60
3	n	232	ASN	N-CA-CB	5.24	117.79	109.82
7	r	1057	LEU	O-C-N	5.24	127.47	122.07
2	b	77	GLN	OE1-CD-NE2	-5.24	117.36	122.60
6	f	65	SER	CA-C-O	-5.24	114.97	120.63
7	r	699	MET	CG-SD-CE	-5.24	89.37	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	499	ASP	CA-CB-CG	-5.24	107.36	112.60
6	q	160	PHE	CA-CB-CG	-5.24	108.56	113.80
2	b	485	ALA	O-C-N	5.24	127.67	122.12
3	c	541	GLN	OE1-CD-NE2	5.24	127.83	122.60
6	f	297	GLU	CB-CA-C	-5.24	102.10	110.79
7	g	713	ASP	CA-CB-CG	5.24	117.83	112.60
1	l	378	TRP	CA-C-N	5.24	129.60	122.90
1	l	378	TRP	C-N-CA	5.24	129.60	122.90
1	l	630	THR	CA-C-N	5.24	127.25	120.44
1	l	630	THR	C-N-CA	5.24	127.25	120.44
2	m	361	LEU	O-C-N	5.24	128.12	122.15
2	m	575	LEU	N-CA-C	-5.24	99.65	110.80
3	n	512	MET	O-C-N	5.24	127.46	122.07
5	p	61	ILE	N-CA-C	-5.24	100.33	108.81
7	r	348	LEU	CA-C-O	5.24	126.14	120.43
7	r	825	ASP	CB-CA-C	5.24	120.84	110.42
1	a	160	VAL	N-CA-C	-5.23	98.45	109.34
3	c	584	ASN	CA-C-O	-5.23	115.10	119.76
1	a	111	GLN	CA-C-N	5.23	128.98	121.50
1	a	111	GLN	C-N-CA	5.23	128.98	121.50
7	g	81	SER	CA-C-N	5.23	128.27	120.95
7	g	81	SER	C-N-CA	5.23	128.27	120.95
7	g	568	LEU	N-CA-C	5.23	116.98	111.28
1	l	592	LYS	CA-C-O	-5.23	114.89	120.23
1	l	838	GLN	OE1-CD-NE2	5.23	127.83	122.60
1	a	486	LEU	N-CA-C	-5.23	101.18	109.76
3	c	614	ASN	N-CA-C	5.23	117.06	111.36
7	g	372	SER	CA-C-N	5.23	130.16	122.63
7	g	372	SER	C-N-CA	5.23	130.16	122.63
2	m	580	CYS	O-C-N	-5.23	115.80	122.34
7	r	950	ASN	CA-CB-CG	-5.23	107.37	112.60
2	b	371	SER	N-CA-C	5.23	116.98	111.28
2	b	384	VAL	CA-C-O	-5.23	116.33	122.13
6	f	498	SER	CA-C-O	5.23	127.99	120.51
7	g	120	ILE	N-CA-CB	5.23	117.74	111.31
7	g	1128	SER	CA-C-N	5.23	127.72	120.29
7	g	1128	SER	C-N-CA	5.23	127.72	120.29
1	l	384	LYS	CA-C-O	5.23	127.20	121.40
6	q	587	TYR	CA-C-N	5.23	127.29	120.28
6	q	587	TYR	C-N-CA	5.23	127.29	120.28
7	r	174	TYR	CA-C-N	5.23	129.94	122.72
7	r	174	TYR	C-N-CA	5.23	129.94	122.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	512	ILE	CA-C-O	-5.23	114.89	121.11
3	c	674	PRO	CA-C-N	5.23	129.78	122.36
3	c	674	PRO	C-N-CA	5.23	129.78	122.36
6	f	325	GLN	CG-CD-NE2	5.23	124.24	116.40
7	g	870	VAL	CB-CA-C	-5.23	105.01	112.22
1	l	1014	TYR	CB-CA-C	-5.23	100.56	109.65
2	m	541	THR	CA-C-N	5.23	127.55	120.44
2	m	541	THR	C-N-CA	5.23	127.55	120.44
7	r	348	LEU	CD1-CG-CD2	-5.23	99.30	110.80
7	r	697	ASP	CA-CB-CG	-5.23	107.37	112.60
3	c	546	ARG	CA-C-N	5.22	128.25	120.31
3	c	546	ARG	C-N-CA	5.22	128.25	120.31
6	f	608	SER	N-CA-CB	5.22	119.32	110.49
7	g	68	ILE	O-C-N	-5.22	117.56	123.20
7	r	395	PHE	CA-CB-CG	-5.22	108.58	113.80
1	a	451	ARG	CA-C-O	-5.22	115.34	120.82
2	b	224	ILE	CA-C-N	5.22	127.28	120.28
2	b	224	ILE	C-N-CA	5.22	127.28	120.28
2	b	252	LEU	CA-C-O	-5.22	115.01	120.55
5	e	310	VAL	N-CA-CB	5.22	120.01	111.44
2	m	248	LEU	CA-C-O	5.22	126.09	120.55
6	f	612	ASN	CA-CB-CG	-5.22	107.38	112.60
1	l	222	SER	N-CA-CB	5.22	119.31	110.49
5	p	108	LYS	CB-CG-CD	5.22	123.31	111.30
6	q	170	ASP	CA-C-O	-5.22	115.26	121.89
6	f	512	TYR	CA-C-N	5.22	125.88	120.03
6	f	512	TYR	C-N-CA	5.22	125.88	120.03
1	l	584	ASN	CA-C-N	5.22	127.27	120.28
1	l	584	ASN	C-N-CA	5.22	127.27	120.28
1	l	995	ARG	O-C-N	-5.22	116.59	122.12
7	r	257	TRP	CA-C-N	5.22	130.60	121.52
7	r	257	TRP	C-N-CA	5.22	130.60	121.52
7	r	1126	ASP	N-CA-C	-5.22	100.80	109.46
1	a	872	TYR	CA-C-O	-5.22	115.33	120.70
3	c	195	GLU	N-CA-CB	-5.22	102.90	110.47
3	n	477	PHE	CA-C-N	5.22	127.27	120.28
3	n	477	PHE	C-N-CA	5.22	127.27	120.28
7	r	911	SER	N-CA-CB	5.22	119.31	110.49
1	a	769	ASN	N-CA-C	-5.22	98.05	107.75
3	c	437	GLU	CA-C-N	5.22	127.83	120.42
3	c	437	GLU	C-N-CA	5.22	127.83	120.42
6	f	454	ASP	CA-CB-CG	-5.22	107.38	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	m	713	ILE	N-CA-C	-5.22	105.41	110.42
3	n	198	THR	CA-C-N	5.22	129.10	122.37
3	n	198	THR	C-N-CA	5.22	129.10	122.37
3	n	595	ARG	CB-CG-CD	5.22	123.30	111.30
5	p	240	ILE	CA-CB-CG1	5.22	119.27	110.40
6	q	195	GLU	CB-CG-CD	-5.22	103.73	112.60
7	r	147	ASP	CA-CB-CG	5.22	117.82	112.60
3	c	695	TYR	CA-CB-CG	5.21	123.28	113.90
4	d	12	ILE	O-C-N	-5.21	117.00	123.10
6	f	585	THR	N-CA-C	5.21	116.96	111.28
2	m	251	GLN	OE1-CD-NE2	-5.21	117.39	122.60
7	r	742	LEU	CA-C-N	5.21	127.27	120.28
7	r	742	LEU	C-N-CA	5.21	127.27	120.28
7	g	297	LEU	CB-CA-C	5.21	118.31	109.50
6	q	285	ASP	CA-C-O	5.21	126.08	120.55
1	a	432	ILE	N-CA-C	-5.21	100.61	108.12
2	b	622	GLN	N-CA-C	5.21	117.04	111.36
2	b	713	ILE	CB-CA-C	5.21	119.41	112.22
3	c	705	MET	CA-C-N	5.21	127.78	120.28
3	c	705	MET	C-N-CA	5.21	127.78	120.28
6	f	624	SER	N-CA-C	-5.21	105.51	111.14
1	l	740	PHE	CA-CB-CG	5.21	119.01	113.80
2	m	394	CYS	CA-C-O	-5.21	115.53	121.00
5	p	315	THR	CA-CB-OG1	5.21	117.42	109.60
2	b	258	LEU	CB-CA-C	-5.21	101.99	110.85
1	l	600	ASP	CA-CB-CG	-5.21	107.39	112.60
4	o	47	ASP	CA-C-N	5.21	131.49	121.54
4	o	47	ASP	C-N-CA	5.21	131.49	121.54
4	o	97	VAL	N-CA-C	-5.21	106.81	113.22
6	q	291	ASN	CB-CG-ND2	-5.21	108.59	116.40
7	r	120	ILE	CB-CA-C	-5.21	105.61	111.23
1	a	455	THR	CA-C-O	-5.21	115.03	120.55
1	a	707	SER	O-C-N	5.21	127.64	122.12
3	c	707	CYS	N-CA-C	-5.21	105.52	111.14
3	n	484	ALA	N-CA-C	5.21	118.73	112.38
3	n	521	SER	CA-C-N	5.21	128.22	120.31
3	n	521	SER	C-N-CA	5.21	128.22	120.31
2	b	228	PHE	CB-CA-C	-5.21	99.59	109.95
7	g	279	GLY	CA-C-N	-5.21	115.13	122.94
7	g	279	GLY	C-N-CA	-5.21	115.13	122.94
1	a	99	ASN	CA-C-N	5.20	130.44	120.97
1	a	99	ASN	C-N-CA	5.20	130.44	120.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	544	ASN	CA-CB-CG	-5.20	107.40	112.60
3	c	294	ILE	N-CA-CB	5.20	117.62	110.54
6	f	564	LEU	N-CA-C	-5.20	105.61	111.28
2	m	578	ALA	O-C-N	-5.20	116.60	122.12
6	q	47	GLY	CA-C-N	5.20	127.25	120.28
6	q	47	GLY	C-N-CA	5.20	127.25	120.28
7	r	290	GLY	N-CA-C	-5.20	107.47	116.01
1	a	533	LEU	CB-CA-C	-5.20	102.16	110.79
3	c	525	HIS	CG-CD2-NE2	5.20	112.40	107.20
4	d	83	LYS	N-CA-CB	5.20	119.34	110.71
1	l	871	HIS	CE1-NE2-CD2	-5.20	103.80	109.00
2	m	159	ILE	CA-CB-CG1	-5.20	101.56	110.40
2	m	234	THR	N-CA-C	-5.20	99.72	110.80
2	m	317	PHE	CA-C-N	5.20	126.64	120.14
2	m	317	PHE	C-N-CA	5.20	126.64	120.14
1	a	544	MET	CB-CA-C	-5.20	100.68	110.51
1	a	936	TYR	N-CA-CB	5.20	117.77	110.12
3	n	473	ALA	N-CA-C	5.20	117.85	111.82
1	a	695	TYR	N-CA-C	5.20	117.69	111.71
1	a	929	HIS	ND1-CE1-NE2	5.20	113.60	108.40
2	b	533	GLU	N-CA-C	5.20	117.62	111.33
6	f	588	GLU	CA-C-N	5.20	127.25	120.28
6	f	588	GLU	C-N-CA	5.20	127.25	120.28
1	l	319	ILE	CA-C-O	-5.20	115.51	119.98
1	l	641	ASP	CB-CA-C	5.20	120.77	110.42
2	m	250	ASN	CA-C-O	-5.20	114.91	120.42
2	m	688	VAL	CA-C-O	-5.20	115.66	121.17
5	p	5	ASP	N-CA-C	-5.20	100.77	109.24
7	r	368	PHE	CA-C-O	-5.20	115.20	120.71
2	b	619	SER	CA-CB-OG	5.20	121.49	111.10
7	r	1052	ASN	CB-CA-C	-5.20	101.55	111.48
1	a	785	ALA	N-CA-C	-5.20	105.70	111.36
2	b	168	ARG	NH1-CZ-NH2	5.20	126.05	119.30
6	f	293	ILE	CA-C-N	5.20	127.19	120.44
6	f	293	ILE	C-N-CA	5.20	127.19	120.44
7	g	82	ASN	CA-C-N	5.20	130.74	121.75
7	g	82	ASN	C-N-CA	5.20	130.74	121.75
7	g	879	ALA	CA-C-N	5.20	124.51	118.85
7	g	879	ALA	C-N-CA	5.20	124.51	118.85
1	l	94	ASN	CA-C-O	5.20	126.04	120.32
1	l	154	ASN	CA-C-N	-5.20	113.35	119.84
1	l	154	ASN	C-N-CA	-5.20	113.35	119.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	n	625	ASP	CA-CB-CG	-5.20	107.40	112.60
7	g	712	PHE	CA-CB-CG	5.19	118.99	113.80
4	o	62	ALA	CA-C-N	5.19	128.26	120.83
4	o	62	ALA	C-N-CA	5.19	128.26	120.83
6	q	286	LEU	O-C-N	5.19	127.42	122.07
7	r	251	PRO	N-CA-CB	5.19	108.70	103.25
7	r	849	GLU	N-CA-CB	5.19	117.75	110.12
2	b	386	ILE	CB-CA-C	5.19	117.35	110.91
6	f	367	LEU	N-CA-CB	5.19	117.75	110.12
7	g	159	ASP	O-C-N	5.19	129.29	123.27
7	g	860	LEU	N-CA-CB	-5.19	102.49	110.12
7	g	944	LEU	O-C-N	5.19	127.62	122.12
2	m	183	ASN	OD1-CG-ND2	5.19	127.79	122.60
2	m	657	TYR	N-CA-C	-5.19	106.19	112.88
1	a	861	LEU	N-CA-CB	5.19	117.60	109.97
2	b	395	VAL	CB-CA-C	-5.19	105.33	111.97
7	g	853	LYS	N-CA-C	5.19	116.94	111.28
2	m	730	ASN	N-CA-CB	5.19	117.84	110.16
4	d	103	ASN	N-CA-CB	5.19	119.56	110.27
6	f	664	LEU	CA-C-N	5.19	127.18	120.44
6	f	664	LEU	C-N-CA	5.19	127.18	120.44
7	g	762	THR	CA-C-O	5.19	125.71	119.43
3	n	326	GLY	N-CA-C	-5.19	105.94	114.76
5	p	109	GLY	N-CA-C	-5.19	103.45	112.06
7	r	41	ASP	CA-CB-CG	-5.19	107.41	112.60
7	r	384	ASN	CA-CB-CG	-5.19	107.41	112.60
1	a	910	GLN	N-CA-CB	5.19	118.15	110.53
6	f	582	GLU	CB-CG-CD	-5.19	103.78	112.60
2	b	146	LEU	O-C-N	5.18	127.41	122.07
2	m	152	LEU	O-C-N	5.18	127.61	122.12
3	n	449	PHE	N-CA-C	5.18	119.08	112.34
3	n	481	LEU	N-CA-CB	5.18	117.74	110.12
7	r	1040	LEU	N-CA-CB	5.18	117.74	110.12
7	r	1049	ASN	CA-CB-CG	5.18	117.78	112.60
1	a	201	ASP	N-CA-CB	5.18	119.25	110.49
1	a	862	GLN	N-CA-C	5.18	116.93	111.28
2	b	470	ALA	N-CA-C	5.18	116.93	111.28
2	b	672	TYR	CB-CA-C	5.18	121.49	113.04
3	c	656	CYS	N-CA-C	5.18	117.83	111.82
2	m	182	LEU	N-CA-C	5.18	117.83	111.82
3	n	165	VAL	N-CA-C	-5.18	106.63	111.45
4	o	205	ASP	CA-CB-CG	5.18	117.78	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	651	ILE	O-C-N	-5.18	116.83	121.91
6	f	116	LEU	CA-C-N	5.18	127.65	120.29
6	f	116	LEU	C-N-CA	5.18	127.65	120.29
4	o	127	VAL	CA-CB-CG2	-5.18	101.59	110.40
4	o	236	GLN	O-C-N	-5.18	117.42	123.27
1	a	230	HIS	CA-C-N	5.18	130.20	122.74
1	a	230	HIS	C-N-CA	5.18	130.20	122.74
2	b	375	LEU	CA-C-N	5.18	127.22	120.28
2	b	375	LEU	C-N-CA	5.18	127.22	120.28
3	c	229	SER	CA-C-N	5.18	127.17	120.44
3	c	229	SER	C-N-CA	5.18	127.17	120.44
3	c	400	GLU	CA-C-N	5.18	127.74	120.28
3	c	400	GLU	C-N-CA	5.18	127.74	120.28
3	c	529	ARG	NE-CZ-NH1	5.18	126.68	121.50
5	e	8	HIS	CG-CD2-NE2	5.18	112.38	107.20
3	n	206	PRO	N-CA-C	-5.18	106.78	113.57
3	n	707	CYS	CA-C-O	-5.18	115.36	120.70
1	a	851	TYR	CA-C-O	-5.18	115.06	120.55
6	f	83	VAL	CA-C-N	5.18	127.48	120.44
6	f	83	VAL	C-N-CA	5.18	127.48	120.44
3	n	474	THR	N-CA-CB	5.18	117.58	110.07
4	d	56	VAL	CA-CB-CG1	-5.18	101.60	110.40
5	e	182	LYS	CA-C-N	5.18	130.05	122.39
5	e	182	LYS	C-N-CA	5.18	130.05	122.39
6	f	20	LYS	CA-C-N	5.18	127.64	120.29
6	f	20	LYS	C-N-CA	5.18	127.64	120.29
1	l	13	GLN	O-C-N	-5.18	115.71	122.59
3	n	583	ASN	N-CA-CB	5.18	117.61	109.69
6	f	244	ARG	N-CA-CB	5.17	117.51	110.01
6	f	345	VAL	CA-C-O	-5.17	115.69	121.17
1	l	975	ARG	O-C-N	-5.17	116.64	122.12
3	n	238	SER	N-CA-CB	5.17	119.24	110.49
4	o	189	SER	N-CA-C	-5.17	106.74	113.16
6	q	357	SER	CA-C-N	5.17	129.19	120.29
6	q	357	SER	C-N-CA	5.17	129.19	120.29
1	a	713	SER	CA-C-N	5.17	127.77	120.42
1	a	713	SER	C-N-CA	5.17	127.77	120.42
2	b	710	TYR	N-CA-C	-5.17	105.64	111.28
3	c	425	TYR	CA-C-N	5.17	127.63	120.29
3	c	425	TYR	C-N-CA	5.17	127.63	120.29
4	d	85	GLU	CA-C-N	5.17	131.42	121.54
4	d	85	GLU	C-N-CA	5.17	131.42	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	52	HIS	CG-CD2-NE2	5.17	112.37	107.20
1	l	244	LYS	N-CA-CB	5.17	119.02	110.69
1	l	821	HIS	CB-CG-CD2	-5.17	124.48	131.20
1	l	940	VAL	CA-CB-CG1	5.17	119.19	110.40
3	n	545	ASP	CA-CB-CG	-5.17	107.43	112.60
7	r	963	LYS	N-CA-C	5.17	116.92	111.28
6	f	16	SER	N-CA-CB	5.17	117.81	110.16
2	m	331	TYR	N-CA-CB	5.17	119.23	110.49
7	r	270	LEU	N-CA-C	-5.17	98.97	108.02
1	a	143	ASN	CA-C-O	5.17	125.72	120.24
2	b	160	GLY	CA-C-N	5.17	127.46	120.38
2	b	160	GLY	C-N-CA	5.17	127.46	120.38
2	b	511	TYR	N-CA-C	-5.17	98.39	109.81
3	c	467	LYS	N-CA-C	-5.17	107.49	112.97
4	d	235	THR	O-C-N	-5.17	116.73	122.93
6	q	517	LEU	N-CA-CB	5.17	117.81	110.16
7	r	205	GLY	O-C-N	-5.17	117.73	123.05
7	r	723	PHE	CA-C-N	5.17	127.21	120.28
7	r	723	PHE	C-N-CA	5.17	127.21	120.28
1	a	335	VAL	N-CA-CB	5.17	119.64	111.99
7	g	716	ASN	OD1-CG-ND2	5.17	127.77	122.60
1	l	200	ASN	CA-CB-CG	-5.17	107.43	112.60
4	o	182	VAL	N-CA-CB	5.17	119.75	111.23
6	q	231	PHE	CA-CB-CG	-5.17	108.63	113.80
7	r	267	VAL	N-CA-C	-5.17	102.84	109.30
7	r	851	LEU	N-CA-C	5.17	116.99	111.36
1	a	960	CYS	CA-C-N	5.17	127.62	120.29
1	a	960	CYS	C-N-CA	5.17	127.62	120.29
3	c	628	GLU	CA-C-O	5.17	126.56	120.98
6	f	240	HIS	ND1-CE1-NE2	5.17	113.56	108.40
6	f	357	SER	N-CA-C	5.17	116.91	111.28
5	p	119	ALA	CA-C-N	5.17	129.35	120.72
5	p	119	ALA	C-N-CA	5.17	129.35	120.72
1	a	674	LEU	CA-C-N	5.16	127.20	120.28
1	a	674	LEU	C-N-CA	5.16	127.20	120.28
1	a	809	LYS	O-C-N	5.16	127.39	122.07
2	b	618	ASN	CA-C-N	5.16	128.86	120.60
2	b	618	ASN	C-N-CA	5.16	128.86	120.60
4	d	254	PRO	N-CA-C	-5.16	101.83	112.47
7	g	4	LYS	CA-C-N	5.16	127.15	120.44
7	g	4	LYS	C-N-CA	5.16	127.15	120.44
4	o	207	VAL	N-CA-C	-5.16	100.90	108.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	p	234	GLY	N-CA-C	-5.16	101.97	110.95
7	r	930	SER	CA-C-O	-5.16	115.08	120.55
2	b	80	ALA	CB-CA-C	-5.16	100.81	109.48
6	f	427	GLU	N-CA-C	-5.16	107.01	113.72
7	g	260	ILE	CB-CG1-CD1	5.16	124.64	113.80
7	r	176	GLU	N-CA-CB	5.16	119.21	110.49
1	a	84	LEU	CA-C-N	5.16	131.40	121.54
1	a	84	LEU	C-N-CA	5.16	131.40	121.54
6	f	249	SER	CA-C-O	-5.16	115.08	120.55
7	g	628	HIS	CE1-NE2-CD2	-5.16	103.84	109.00
7	g	832	TYR	N-CA-C	5.16	116.59	111.07
1	l	874	ASN	CA-C-N	5.16	127.19	120.28
1	l	874	ASN	C-N-CA	5.16	127.19	120.28
1	l	937	LEU	CA-C-O	5.16	127.50	121.46
2	m	92	PRO	N-CA-CB	5.16	107.92	103.27
2	b	653	ILE	N-CA-CB	5.16	116.58	110.55
3	c	463	ARG	N-CA-CB	5.16	119.18	110.77
3	c	699	GLU	N-CA-CB	5.16	117.70	110.12
6	f	55	ASN	CA-CB-CG	-5.16	107.44	112.60
7	g	13	GLU	CA-C-N	5.16	127.65	120.63
7	g	13	GLU	C-N-CA	5.16	127.65	120.63
1	l	786	ILE	CA-C-N	5.16	131.39	121.54
1	l	786	ILE	C-N-CA	5.16	131.39	121.54
7	r	693	LEU	CA-C-N	5.16	131.39	121.54
7	r	693	LEU	C-N-CA	5.16	131.39	121.54
3	c	137	LEU	N-CA-CB	5.16	117.49	110.01
6	q	57	GLY	N-CA-C	-5.16	108.11	115.64
7	r	845	PHE	N-CA-CB	5.16	117.49	110.01
1	a	967	PHE	CA-C-N	5.16	127.19	120.28
1	a	967	PHE	C-N-CA	5.16	127.19	120.28
2	b	613	ASP	N-CA-CB	5.16	118.00	110.47
7	g	464	SER	N-CA-C	-5.16	101.24	109.23
1	l	626	HIS	N-CA-C	5.16	116.90	111.28
2	m	535	ALA	N-CA-CB	5.16	117.70	110.12
3	n	653	VAL	CA-C-N	5.16	128.15	120.31
3	n	653	VAL	C-N-CA	5.16	128.15	120.31
1	a	141	SER	N-CA-C	-5.15	106.58	112.92
2	b	713	ILE	CA-C-O	-5.15	115.39	120.85
4	d	81	ILE	CA-C-O	5.15	126.82	120.84
6	f	654	GLU	N-CA-CB	5.15	117.62	109.94
1	l	528	ILE	N-CA-C	-5.15	105.69	110.53
5	p	35	VAL	CA-CB-CG2	-5.15	101.64	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	693	PHE	N-CA-C	-5.15	106.53	114.16
6	f	158	LEU	N-CA-C	-5.15	106.23	112.88
7	r	1151	GLU	CB-CG-CD	-5.15	103.84	112.60
2	b	740	CYS	O-C-N	5.15	127.58	122.12
3	c	423	GLN	CA-C-N	5.15	127.18	120.28
3	c	423	GLN	C-N-CA	5.15	127.18	120.28
7	g	896	TYR	O-C-N	5.15	128.61	122.27
1	l	576	SER	N-CA-C	-5.15	105.88	113.61
1	l	745	GLU	CA-C-O	-5.15	114.05	119.97
1	l	873	LEU	CA-C-N	5.15	127.14	120.44
1	l	873	LEU	C-N-CA	5.15	127.14	120.44
1	l	998	LYS	CG-CD-CE	5.15	123.15	111.30
5	p	320	SER	N-CA-CB	5.15	119.33	110.68
7	r	365	THR	N-CA-CB	5.15	118.82	110.17
7	r	700	GLU	N-CA-C	-5.15	100.78	109.07
3	c	137	LEU	CB-CA-C	-5.15	102.80	110.88
6	f	99	TYR	CG-CD2-CE2	-5.15	113.48	121.20
5	p	37	LYS	CA-C-N	5.15	129.19	121.72
5	p	37	LYS	C-N-CA	5.15	129.19	121.72
6	q	9	THR	CA-CB-CG2	5.15	119.25	110.50
3	c	453	LEU	N-CA-C	5.15	116.58	110.97
3	c	517	LEU	O-C-N	-5.15	115.75	122.39
1	a	522	ASN	CA-CB-CG	-5.14	107.46	112.60
3	c	240	LEU	O-C-N	5.14	128.40	122.17
6	f	31	ASN	CA-C-O	-5.14	115.36	120.66
6	f	387	ARG	CA-C-O	5.14	126.00	120.55
7	g	957	GLU	O-C-N	5.14	127.37	122.07
1	l	977	ALA	O-C-N	-5.14	116.28	122.15
2	m	345	LYS	CA-CB-CG	-5.14	103.81	114.10
3	n	437	GLU	CB-CG-CD	-5.14	103.85	112.60
3	n	519	ARG	NH1-CZ-NH2	5.14	125.99	119.30
6	q	6	THR	CA-C-N	5.14	129.43	120.68
6	q	6	THR	C-N-CA	5.14	129.43	120.68
7	r	177	ASP	O-C-N	5.14	128.93	122.86
1	l	27	TYR	N-CA-C	-5.14	101.47	109.24
2	m	90	LEU	N-CA-C	-5.14	101.02	109.40
6	f	365	MET	N-CA-CB	5.14	117.68	110.12
7	g	744	LYS	CA-C-N	5.14	127.04	120.56
7	g	744	LYS	C-N-CA	5.14	127.04	120.56
2	m	376	GLN	CA-C-N	5.14	127.48	120.54
2	m	376	GLN	C-N-CA	5.14	127.48	120.54
6	q	398	ILE	CA-C-N	5.14	128.59	120.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	398	ILE	C-N-CA	5.14	128.59	120.47
1	a	834	ARG	NE-CZ-NH2	-5.14	114.58	119.20
2	b	539	TYR	N-CA-CB	5.14	117.67	110.12
7	g	796	ASN	OD1-CG-ND2	-5.14	117.46	122.60
7	r	537	GLU	CB-CA-C	-5.14	102.81	110.88
1	a	781	ASP	CA-C-N	5.14	126.51	120.09
1	a	781	ASP	C-N-CA	5.14	126.51	120.09
7	g	677	PHE	CB-CG-CD1	5.14	129.44	120.70
3	n	672	ASN	CA-CB-CG	5.14	117.74	112.60
7	r	338	PRO	CA-C-N	5.14	132.45	121.45
7	r	338	PRO	C-N-CA	5.14	132.45	121.45
7	r	1039	ALA	N-CA-C	-5.14	105.68	111.28
1	a	536	ILE	CA-CB-CG1	-5.14	101.67	110.40
7	g	680	GLY	CA-C-N	5.14	127.50	120.46
7	g	680	GLY	C-N-CA	5.14	127.50	120.46
3	n	345	THR	N-CA-CB	5.14	119.17	110.49
3	c	329	ASP	CA-CB-CG	5.13	117.73	112.60
3	c	653	VAL	CA-CB-CG2	5.13	119.13	110.40
6	f	224	ASP	N-CA-C	-5.13	101.61	109.41
6	f	354	SER	CB-CA-C	-5.13	102.75	111.02
7	g	211	MET	N-CA-C	-5.13	101.03	109.40
7	g	460	TYR	N-CA-CB	5.13	120.23	111.66
7	g	657	LEU	O-C-N	-5.13	116.78	122.07
7	g	790	HIS	CB-CG-ND1	5.13	130.40	122.70
1	l	519	THR	N-CA-C	-5.13	106.70	113.17
3	n	616	PHE	O-C-N	-5.13	116.30	122.15
6	q	281	ASP	CA-CB-CG	5.13	117.73	112.60
7	r	653	VAL	CA-CB-CG2	5.13	119.13	110.40
6	f	75	TRP	CD2-CE2-CZ2	-5.13	117.27	122.40
6	q	593	GLY	CA-C-O	5.13	126.54	121.00
7	r	943	THR	CA-CB-CG2	5.13	119.23	110.50
1	a	209	THR	N-CA-C	-5.13	105.70	112.94
3	c	510	LEU	CB-CA-C	-5.13	100.82	110.67
7	g	1018	PRO	CA-C-N	5.13	127.58	120.29
7	g	1018	PRO	C-N-CA	5.13	127.58	120.29
1	l	835	ASN	CA-CB-CG	-5.13	107.47	112.60
6	q	202	LEU	N-CA-C	-5.13	106.22	113.20
6	q	627	THR	CA-C-N	5.13	127.16	120.28
6	q	627	THR	C-N-CA	5.13	127.16	120.28
6	f	168	VAL	CA-CB-CG2	-5.13	101.68	110.40
5	p	66	PRO	CA-C-N	5.13	129.60	121.44
5	p	66	PRO	C-N-CA	5.13	129.60	121.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	a	232	ARG	CG-CD-NE	-5.13	100.72	112.00
1	a	900	VAL	O-C-N	-5.13	116.90	121.87
7	g	213	ASN	CA-C-O	-5.13	114.69	120.43
7	g	633	THR	N-CA-C	5.13	118.64	112.38
3	n	538	PHE	CB-CG-CD2	-5.13	111.98	120.70
4	o	266	GLY	N-CA-C	-5.13	104.80	111.52
1	a	156	TYR	O-C-N	-5.13	117.54	123.33
6	f	392	LEU	O-C-N	-5.13	116.79	122.07
7	g	107	ILE	N-CA-C	-5.13	100.18	107.77
1	l	1035	ARG	NE-CZ-NH1	5.13	126.63	121.50
3	c	347	GLY	CA-C-O	-5.12	116.14	122.03
7	g	17	PRO	CA-C-O	-5.12	115.62	121.56
1	l	1010	PHE	CA-CB-CG	-5.12	108.67	113.80
3	n	526	ILE	CA-C-N	5.12	127.42	120.65
3	n	526	ILE	C-N-CA	5.12	127.42	120.65
7	r	798	LYS	O-C-N	-5.12	116.31	122.15
7	r	1033	VAL	N-CA-C	-5.12	104.68	111.09
1	a	700	ALA	N-CA-C	5.12	116.86	111.28
6	f	21	GLU	N-CA-CB	5.12	117.74	110.16
7	g	634	VAL	N-CA-C	5.12	115.85	110.62
7	g	870	VAL	CA-C-N	5.12	127.66	120.28
7	g	870	VAL	C-N-CA	5.12	127.66	120.28
7	g	894	GLY	CA-C-O	5.12	125.66	119.82
1	l	628	ARG	N-CA-CB	5.12	117.65	110.12
7	r	584	LYS	N-CA-CB	5.12	117.65	110.12
1	a	295	ASN	OD1-CG-ND2	-5.12	117.48	122.60
6	f	533	LEU	CA-C-N	5.12	127.14	120.28
6	f	533	LEU	C-N-CA	5.12	127.14	120.28
6	f	622	GLY	CA-C-N	5.12	127.14	120.28
6	f	622	GLY	C-N-CA	5.12	127.14	120.28
7	g	810	ASP	N-CA-C	-5.12	99.89	110.80
4	o	85	GLU	N-CA-C	-5.12	100.95	108.99
6	q	47	GLY	N-CA-C	5.12	118.88	112.73
6	q	49	LEU	N-CA-C	5.12	116.86	111.28
7	r	109	ASN	N-CA-C	-5.12	100.16	108.41
7	r	556	HIS	CE1-NE2-CD2	-5.12	103.88	109.00
2	b	614	CYS	CA-C-N	5.12	128.70	120.30
2	b	614	CYS	C-N-CA	5.12	128.70	120.30
1	a	579	ILE	CA-C-N	5.12	124.62	119.19
1	a	579	ILE	C-N-CA	5.12	124.62	119.19
2	b	362	LEU	CA-C-N	-5.12	114.20	122.24
2	b	362	LEU	C-N-CA	-5.12	114.20	122.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	b	596	SER	CA-C-N	5.12	131.31	121.54
2	b	596	SER	C-N-CA	5.12	131.31	121.54
5	e	130	ASN	N-CA-CB	5.12	118.07	110.49
1	l	693	PHE	O-C-N	-5.12	116.33	122.27
3	n	405	SER	CA-C-O	-5.12	115.10	120.63
7	r	60	VAL	CA-C-O	5.12	125.33	120.31
1	a	283	TYR	N-CA-C	-5.12	99.27	108.48
4	d	247	LEU	CA-C-O	-5.12	114.83	120.36
2	m	508	LEU	N-CA-CB	5.12	118.36	110.43
6	q	476	LEU	CA-C-N	5.12	127.39	120.38
6	q	476	LEU	C-N-CA	5.12	127.39	120.38
7	r	1134	HIS	O-C-N	5.12	127.34	122.07
1	a	499	SER	CA-C-O	5.12	124.38	118.55
1	a	719	PHE	CA-C-N	5.12	127.09	120.44
1	a	719	PHE	C-N-CA	5.12	127.09	120.44
1	a	904	PHE	CB-CA-C	-5.12	102.30	110.79
2	b	78	ASN	N-CA-C	-5.12	103.17	110.59
2	b	573	TRP	CA-C-N	5.12	127.56	120.29
2	b	573	TRP	C-N-CA	5.12	127.56	120.29
3	c	704	LEU	CA-C-N	5.12	127.39	120.38
3	c	704	LEU	C-N-CA	5.12	127.39	120.38
1	l	486	LEU	CA-C-O	-5.12	115.94	121.87
1	a	1003	VAL	CA-C-N	5.11	127.00	120.56
1	a	1003	VAL	C-N-CA	5.11	127.00	120.56
6	f	178	HIS	CB-CG-CD2	-5.11	124.55	131.20
7	g	887	TRP	CA-C-N	5.11	127.00	120.56
7	g	887	TRP	C-N-CA	5.11	127.00	120.56
1	l	942	ILE	CB-CA-C	5.11	118.52	111.97
6	q	312	GLU	CA-C-O	5.11	125.25	119.27
7	r	86	LEU	CA-C-O	-5.11	114.81	120.33
7	r	978	GLY	N-CA-C	5.11	125.30	113.18
1	a	893	HIS	CG-CD2-NE2	5.11	112.31	107.20
2	b	722	SER	N-CA-C	5.11	116.66	111.14
5	e	99	ASN	OD1-CG-ND2	5.11	127.71	122.60
7	g	852	ILE	N-CA-CB	5.11	117.49	110.54
1	l	567	LEU	CA-C-N	5.11	127.13	120.28
1	l	567	LEU	C-N-CA	5.11	127.13	120.28
1	a	944	ILE	N-CA-CB	-5.11	104.57	110.55
3	c	652	GLU	CA-C-O	-5.11	113.20	120.51
5	e	42	THR	CA-C-N	5.11	129.59	122.08
5	e	42	THR	C-N-CA	5.11	129.59	122.08
1	l	103	ASN	CA-C-N	5.11	131.30	121.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	l	103	ASN	C-N-CA	5.11	131.30	121.54
2	m	141	ASN	CB-CG-ND2	-5.11	108.73	116.40
3	n	137	LEU	CA-C-O	-5.11	115.45	120.82
3	n	584	ASN	CA-CB-CG	5.11	117.71	112.60
7	g	556	HIS	CB-CG-CD2	-5.11	124.56	131.20
5	p	151	THR	CA-CB-OG1	5.11	117.26	109.60
6	q	534	SER	CA-C-N	5.11	127.13	120.28
6	q	534	SER	C-N-CA	5.11	127.13	120.28
6	f	666	GLU	CA-C-N	5.11	127.12	120.28
6	f	666	GLU	C-N-CA	5.11	127.12	120.28
4	o	57	TRP	CH2-CZ2-CE2	5.11	124.14	117.50
6	q	320	HIS	ND1-CE1-NE2	5.11	113.51	108.40
1	a	971	ASN	CB-CG-ND2	5.11	124.06	116.40
2	b	426	ALA	N-CA-CB	-5.11	102.36	110.22
5	e	127	CYS	CA-CB-SG	-5.11	102.66	114.40
1	l	650	HIS	O-C-N	5.11	127.33	122.07
1	l	962	LYS	N-CA-CB	5.11	117.41	110.01
1	a	188	LYS	CB-CA-C	-5.10	101.92	110.29
7	g	236	SER	N-CA-CB	5.10	119.12	110.49
1	l	882	PHE	CA-CB-CG	-5.10	108.70	113.80
7	r	1114	TYR	CB-CG-CD2	-5.10	113.14	120.80
1	l	524	VAL	CA-CB-CG1	5.10	119.08	110.40
4	o	64	PRO	CA-C-N	5.10	130.07	121.14
4	o	64	PRO	C-N-CA	5.10	130.07	121.14
6	q	12	PHE	O-C-N	5.10	128.54	122.27
6	q	129	ASN	CB-CA-C	-5.10	100.41	110.11
6	f	58	ASP	CA-CB-CG	5.10	117.70	112.60
7	r	911	SER	N-CA-C	-5.10	99.94	110.80
5	e	39	ASP	N-CA-C	-5.10	100.10	108.41
5	e	291	ASN	O-C-N	-5.10	114.84	123.00
6	f	157	ASP	N-CA-C	5.10	116.87	110.24
6	f	536	ARG	N-CA-C	5.10	116.84	111.28
7	g	149	SER	CA-C-N	5.10	125.03	119.78
7	g	149	SER	C-N-CA	5.10	125.03	119.78
7	g	609	VAL	O-C-N	-5.10	116.58	121.83
7	g	884	HIS	CE1-NE2-CD2	-5.10	103.90	109.00
2	m	360	PHE	N-CA-C	5.10	116.92	111.36
7	r	553	LEU	CB-CA-C	5.10	119.25	110.79
1	a	142	ALA	N-CA-CB	-5.10	103.12	110.56
2	b	579	SER	N-CA-CB	5.10	117.71	110.16
3	c	397	TYR	N-CA-CB	5.10	119.46	111.56
6	f	156	CYS	CA-C-N	5.10	128.31	120.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	156	CYS	C-N-CA	5.10	128.31	120.82
7	g	455	ILE	N-CA-C	5.10	114.95	108.12
1	l	177	PHE	CA-CB-CG	-5.10	108.70	113.80
3	n	123	LEU	CA-C-N	5.10	127.11	120.28
3	n	123	LEU	C-N-CA	5.10	127.11	120.28
6	q	718	VAL	CA-C-N	5.10	127.11	120.28
6	q	718	VAL	C-N-CA	5.10	127.11	120.28
7	r	119	TYR	CB-CG-CD2	-5.10	113.15	120.80
1	a	393	HIS	CB-CG-ND1	5.10	130.34	122.70
1	a	733	SER	CA-C-N	5.10	127.82	120.38
1	a	733	SER	C-N-CA	5.10	127.82	120.38
3	c	485	GLN	CG-CD-NE2	-5.10	108.76	116.40
2	m	133	ASN	CA-C-O	-5.10	112.14	120.80
2	m	336	LEU	CA-C-O	-5.10	115.21	120.92
3	n	588	ASN	N-CA-CB	5.10	119.10	110.49
4	o	138	PRO	CA-C-N	-5.10	116.98	122.59
4	o	138	PRO	C-N-CA	-5.10	116.98	122.59
7	r	447	VAL	N-CA-C	-5.10	99.18	107.28
5	e	98	TRP	CD2-CE3-CZ3	5.09	125.22	118.60
5	e	323	GLY	CA-C-N	5.09	130.93	122.73
5	e	323	GLY	C-N-CA	5.09	130.93	122.73
4	o	63	HIS	O-C-N	-5.09	117.20	121.38
7	g	556	HIS	CA-C-O	5.09	126.13	120.63
1	l	67	TYR	CA-C-N	5.09	129.74	123.12
1	l	67	TYR	C-N-CA	5.09	129.74	123.12
2	b	361	LEU	N-CA-C	5.09	116.83	111.28
4	d	58	ARG	O-C-N	-5.09	117.58	123.33
1	l	168	TYR	N-CA-CB	5.09	117.45	109.97
1	l	527	SER	CA-C-N	5.09	127.08	120.56
1	l	527	SER	C-N-CA	5.09	127.08	120.56
7	r	759	TRP	CD2-CE2-CZ2	-5.09	117.31	122.40
1	a	899	THR	N-CA-C	5.09	116.83	111.28
2	b	158	PHE	CA-C-O	-5.09	115.48	120.82
3	c	271	TRP	CA-C-N	5.09	126.97	120.56
3	c	271	TRP	C-N-CA	5.09	126.97	120.56
3	c	318	LEU	N-CA-CB	5.09	117.60	110.12
7	g	300	THR	N-CA-CB	5.09	119.09	110.49
1	l	1012	SER	CA-C-N	5.09	131.06	122.26
1	l	1012	SER	C-N-CA	5.09	131.06	122.26
2	m	688	VAL	CA-CB-CG2	-5.09	101.75	110.40
6	q	224	ASP	N-CA-CB	5.09	118.76	110.77
6	q	331	VAL	O-C-N	-5.09	116.93	121.87

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	685	GLY	O-C-N	-5.09	116.08	122.70
2	b	224	ILE	N-CA-CB	5.09	116.16	110.51
4	d	77	GLY	CA-C-O	5.09	125.83	119.88
1	l	898	ASP	CB-CA-C	-5.09	102.34	110.79
3	n	640	MET	N-CA-C	-5.09	105.92	111.82
7	r	136	PRO	CA-N-CD	-5.09	104.88	112.00
1	a	801	ASN	OD1-CG-ND2	5.09	127.69	122.60
5	e	11	LEU	O-C-N	-5.09	116.68	122.89
7	g	841	LYS	N-CA-C	-5.09	106.17	112.93
1	l	200	ASN	O-C-N	5.09	128.98	123.13
1	l	948	ILE	N-CA-C	-5.09	105.75	110.53
3	n	490	SER	N-CA-CB	5.09	119.09	110.49
4	o	258	TRP	O-C-N	5.09	126.77	121.79
6	f	605	SER	CA-C-O	-5.08	113.00	119.31
2	m	648	LEU	N-CA-CB	5.08	117.69	110.16
2	b	530	ARG	N-CA-C	5.08	118.14	111.28
5	e	176	SER	O-C-N	5.08	129.67	123.21
6	f	400	ASN	OD1-CG-ND2	-5.08	117.52	122.60
7	g	328	HIS	ND1-CE1-NE2	5.08	113.48	108.40
7	g	475	LEU	N-CA-C	-5.08	100.95	109.24
7	g	791	VAL	O-C-N	-5.08	116.94	121.87
1	l	809	LYS	N-CA-CB	5.08	117.38	110.01
2	m	259	SER	CA-C-O	5.08	125.81	120.42
3	n	373	LYS	N-CA-C	-5.08	106.77	113.17
1	a	1	MET	CA-C-N	5.08	130.99	122.15
1	a	1	MET	C-N-CA	5.08	130.99	122.15
1	a	514	ASN	CA-C-N	5.08	125.62	119.98
1	a	514	ASN	C-N-CA	5.08	125.62	119.98
6	f	566	LYS	CB-CA-C	-5.08	102.35	110.79
7	g	674	ASN	CA-C-N	5.08	127.85	120.79
7	g	674	ASN	C-N-CA	5.08	127.85	120.79
3	n	158	MET	N-CA-CB	5.08	118.91	110.63
2	b	535	ALA	N-CA-C	5.08	116.82	111.28
6	f	440	ASP	CA-C-N	5.08	127.09	120.28
6	f	440	ASP	C-N-CA	5.08	127.09	120.28
7	g	273	GLY	CA-C-N	5.08	125.01	119.78
7	g	273	GLY	C-N-CA	5.08	125.01	119.78
7	g	1057	LEU	N-CA-C	-5.08	105.66	111.14
3	n	687	PRO	N-CA-CB	5.08	107.36	103.30
4	o	216	VAL	CA-C-N	5.08	128.91	120.94
4	o	216	VAL	C-N-CA	5.08	128.91	120.94
6	q	326	GLU	N-CA-C	5.08	116.81	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	q	722	ALA	CB-CA-C	-5.08	100.92	110.67
2	b	222	GLU	N-CA-C	5.08	116.62	111.14
2	b	411	SER	CB-CA-C	-5.08	102.36	110.79
1	l	153	GLN	N-CA-CB	5.08	119.43	111.56
7	r	138	CYS	CA-C-N	-5.08	114.92	122.23
7	r	138	CYS	C-N-CA	-5.08	114.92	122.23
1	a	771	ASP	CA-C-O	-5.08	115.49	120.82
6	f	127	LYS	CA-C-N	5.08	127.08	120.28
6	f	127	LYS	C-N-CA	5.08	127.08	120.28
6	f	572	SER	CA-C-N	5.08	131.24	121.54
6	f	572	SER	C-N-CA	5.08	131.24	121.54
5	p	158	SER	N-CA-C	-5.08	105.83	111.36
6	q	508	MET	CA-C-N	5.08	127.08	120.28
6	q	508	MET	C-N-CA	5.08	127.08	120.28
3	c	330	PRO	N-CA-C	-5.07	106.92	113.57
7	g	258	SER	N-CA-CB	5.07	118.00	110.49
1	l	103	ASN	CB-CA-C	5.07	118.99	109.71
1	l	528	ILE	N-CA-CB	5.07	117.06	110.57
7	r	358	GLU	N-CA-CB	5.07	118.97	110.85
1	a	876	LEU	N-CA-C	-5.07	105.83	111.36
6	f	495	ASN	CA-CB-CG	-5.07	107.53	112.60
7	g	37	ALA	CA-C-O	-5.07	115.17	120.55
7	g	557	LEU	N-CA-C	5.07	117.54	111.71
2	b	148	MET	N-CA-CB	5.07	117.36	110.01
2	b	350	SER	N-CA-CB	5.07	118.13	110.42
3	c	406	HIS	CB-CG-CD2	-5.07	124.61	131.20
7	g	624	THR	N-CA-C	-5.07	106.84	112.57
1	l	938	ARG	O-C-N	5.07	128.63	122.85
4	o	141	ILE	CA-C-O	-5.07	115.47	120.90
7	r	1036	PHE	CB-CG-CD1	5.07	129.32	120.70
3	c	568	GLU	CB-CG-CD	-5.07	103.98	112.60
4	d	91	GLN	O-C-N	5.07	129.25	123.27
4	d	214	PRO	CA-C-N	5.07	129.92	122.77
4	d	214	PRO	C-N-CA	5.07	129.92	122.77
2	m	645	ALA	CA-C-N	5.07	127.03	120.44
2	m	645	ALA	C-N-CA	5.07	127.03	120.44
3	n	134	ASN	CA-C-N	5.07	129.09	120.88
3	n	134	ASN	C-N-CA	5.07	129.09	120.88
6	q	616	LEU	CA-C-N	5.07	127.62	120.42
6	q	616	LEU	C-N-CA	5.07	127.62	120.42
3	c	571	ILE	CB-CA-C	-5.07	105.36	110.88
7	g	666	LYS	CA-C-N	5.07	127.03	120.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	666	LYS	C-N-CA	5.07	127.03	120.44
1	l	675	LEU	CA-C-N	5.07	127.03	120.44
1	l	675	LEU	C-N-CA	5.07	127.03	120.44
1	l	858	ILE	CA-C-N	5.07	131.22	121.54
1	l	858	ILE	C-N-CA	5.07	131.22	121.54
1	l	885	VAL	CA-C-N	5.07	127.07	120.28
1	l	885	VAL	C-N-CA	5.07	127.07	120.28
1	l	951	GLN	CB-CG-CD	5.07	121.22	112.60
5	p	87	ASP	CA-C-O	-5.07	113.39	119.67
7	r	652	HIS	CA-C-N	5.07	126.94	120.56
7	r	652	HIS	C-N-CA	5.07	126.94	120.56
7	r	689	ILE	CA-CB-CG2	-5.07	101.88	110.50
7	r	1134	HIS	CA-C-O	-5.07	115.50	120.82
1	a	56	TYR	CA-C-N	5.07	130.51	121.75
1	a	56	TYR	C-N-CA	5.07	130.51	121.75
6	f	71	GLU	N-CA-C	5.07	116.49	111.07
1	l	567	LEU	CB-CA-C	-5.07	102.38	110.79
1	l	685	GLU	CA-C-O	5.07	125.28	119.35
2	m	309	LEU	N-CA-C	5.07	116.49	111.07
2	m	478	ASP	CA-C-N	5.07	129.29	120.68
2	m	478	ASP	C-N-CA	5.07	129.29	120.68
7	r	866	GLN	CB-CG-CD	-5.07	103.99	112.60
2	b	592	ASN	CA-C-O	-5.06	115.50	120.82
7	g	673	ILE	N-CA-CB	5.06	116.47	110.55
1	l	155	PRO	CA-C-N	5.06	131.21	121.54
1	l	155	PRO	C-N-CA	5.06	131.21	121.54
1	l	696	GLY	O-C-N	-5.06	117.33	122.19
2	m	337	LEU	CA-C-N	5.06	127.13	120.60
2	m	337	LEU	C-N-CA	5.06	127.13	120.60
3	n	300	LEU	CA-C-N	5.06	131.21	121.54
3	n	300	LEU	C-N-CA	5.06	131.21	121.54
2	b	365	ILE	CA-C-N	5.06	126.17	119.84
2	b	365	ILE	C-N-CA	5.06	126.17	119.84
3	c	552	LEU	N-CA-CB	5.06	117.30	109.91
1	l	647	PHE	CA-C-N	5.06	125.70	120.03
1	l	647	PHE	C-N-CA	5.06	125.70	120.03
1	a	770	PHE	N-CA-C	-5.06	107.24	113.41
2	b	403	HIS	N-CA-CB	5.06	119.04	110.49
7	g	783	ASP	N-CA-C	5.06	119.30	113.18
7	g	890	GLN	N-CA-C	5.06	116.79	111.28
1	l	158	PHE	N-CA-C	-5.06	106.35	112.88
4	o	24	LEU	CA-C-N	-5.06	115.66	122.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	o	24	LEU	C-N-CA	-5.06	115.66	122.95
7	r	62	THR	CA-CB-OG1	5.06	117.19	109.60
7	r	518	PRO	N-CD-CG	5.06	110.79	103.20
4	d	96	ALA	CB-CA-C	-5.06	100.36	110.42
5	e	336	SER	N-CA-CB	5.06	118.06	110.53
7	g	588	ILE	CG1-CB-CG2	-5.06	95.53	110.70
2	m	521	TRP	CE2-CD2-CE3	5.06	123.86	118.80
7	r	605	ARG	N-CA-C	5.06	119.21	113.19
7	g	622	ASN	N-CA-C	5.06	116.79	111.28
4	o	247	LEU	CA-C-O	5.06	126.41	120.80
2	m	740	CYS	N-CA-CB	5.05	117.55	110.12
3	n	229	SER	CA-C-N	5.05	127.05	120.28
3	n	229	SER	C-N-CA	5.05	127.05	120.28
7	r	347	PHE	CB-CA-C	-5.05	100.97	109.72
7	r	805	ALA	N-CA-C	5.05	116.87	111.36
1	a	572	ASP	CA-CB-CG	5.05	117.65	112.60
4	o	199	THR	CA-C-O	5.05	125.93	120.32
7	r	425	VAL	CB-CA-C	-5.05	104.58	111.15
7	r	1054	GLY	N-CA-C	-5.05	101.20	113.18
3	c	331	ARG	N-CA-CB	5.05	117.33	110.01
5	e	111	LEU	N-CA-C	5.05	117.95	110.48
5	e	213	SER	CA-C-O	-5.05	115.83	121.23
7	g	1038	ASN	N-CA-CB	5.05	117.54	110.12
3	n	297	TYR	N-CA-C	5.05	116.79	111.28
4	o	90	SER	N-CA-CB	5.05	120.17	111.13
5	p	297	LEU	N-CA-C	-5.05	105.96	112.68
7	r	300	THR	CB-CA-C	5.05	118.47	110.19
1	l	323	LEU	N-CA-C	-5.05	101.87	109.85
1	l	999	CYS	CB-CA-C	-5.05	102.41	110.79
2	m	407	PRO	N-CD-CG	5.05	110.78	103.20
3	n	246	TYR	O-C-N	-5.05	116.90	121.39
3	n	286	ASN	CB-CG-ND2	5.05	123.97	116.40
3	n	573	THR	CA-C-O	5.05	125.77	120.42
7	r	835	PHE	N-CA-CB	5.05	118.77	110.39
6	f	524	VAL	CA-CB-CG2	-5.05	101.82	110.40
7	g	337	HIS	ND1-CE1-NE2	5.05	113.45	108.40
7	g	852	ILE	N-CA-C	-5.05	105.47	110.62
7	g	1006	TYR	O-C-N	5.05	127.47	122.12
1	l	744	VAL	O-C-N	5.05	128.88	122.57
6	q	621	GLN	CA-C-N	5.05	125.54	119.94
6	q	621	GLN	C-N-CA	5.05	125.54	119.94
6	f	313	LEU	CB-CA-C	-5.05	102.02	110.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	570	PHE	N-CA-C	5.05	116.47	111.07
7	g	718	ILE	N-CA-CB	-5.05	103.01	110.58
7	g	765	VAL	N-CA-CB	5.05	117.40	110.54
4	o	138	PRO	N-CA-CB	5.05	108.55	103.25
7	r	1049	ASN	N-CA-CB	5.05	117.39	110.07
3	c	612	SER	CA-C-N	5.04	128.57	120.30
3	c	612	SER	C-N-CA	5.04	128.57	120.30
3	c	634	ASP	CA-C-O	-5.04	115.07	120.42
5	p	36	PHE	CB-CG-CD2	-5.04	112.12	120.70
5	e	30	ASP	N-CA-C	-5.04	105.92	113.89
1	l	918	PHE	N-CA-C	5.04	116.47	111.07
5	p	84	TRP	CB-CG-CD1	5.04	134.47	126.90
7	r	613	ILE	CB-CA-C	5.04	118.95	112.14
7	r	803	GLN	O-C-N	5.04	127.26	122.07
1	a	434	MET	N-CA-C	-5.04	101.74	109.76
5	e	307	VAL	CA-CB-CG2	-5.04	101.83	110.40
6	f	558	ILE	CA-C-O	-5.04	115.83	121.17
1	l	450	LEU	CB-CA-C	5.04	118.80	110.88
4	o	234	TRP	CE2-CD2-CE3	5.04	123.84	118.80
5	p	128	LEU	CA-C-O	5.04	126.44	120.89
6	q	338	GLU	N-CA-C	5.04	119.14	112.89
7	r	546	ILE	O-C-N	5.04	126.85	121.10
7	r	901	ASN	N-CA-C	5.04	116.78	111.28
1	a	817	VAL	CA-C-N	5.04	126.05	120.45
1	a	817	VAL	C-N-CA	5.04	126.05	120.45
5	e	348	GLN	CA-C-N	5.04	130.77	121.70
5	e	348	GLN	C-N-CA	5.04	130.77	121.70
7	g	399	ILE	N-CA-C	-5.04	101.21	108.87
7	r	1102	PHE	N-CA-C	-5.04	103.36	110.31
1	a	485	LYS	CA-C-N	5.04	130.16	122.65
1	a	485	LYS	C-N-CA	5.04	130.16	122.65
6	f	492	SER	N-CA-CB	5.04	119.34	110.37
7	g	80	PHE	N-CA-C	-5.04	103.00	110.46
2	m	608	PRO	O-C-N	5.04	129.44	122.64
5	p	173	TRP	CE2-CD2-CE3	5.04	123.84	118.80
7	r	886	ALA	CB-CA-C	-5.04	102.43	110.79
7	r	1108	ALA	CA-C-N	5.04	127.36	120.46
7	r	1108	ALA	C-N-CA	5.04	127.36	120.46
1	a	266	ASP	CA-C-N	5.04	125.86	120.47
1	a	266	ASP	C-N-CA	5.04	125.86	120.47
5	e	293	GLN	N-CA-CB	5.04	119.07	110.71
6	f	399	ILE	N-CA-C	-5.04	98.86	109.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	g	262	ASN	N-CA-C	-5.04	100.14	108.75
1	l	338	ARG	N-CA-C	5.04	120.94	109.81
7	r	563	PHE	N-CA-CB	5.04	117.31	110.01
1	a	764	LEU	CA-C-O	-5.04	115.53	120.82
2	b	151	ILE	O-C-N	-5.04	116.90	121.94
2	b	639	ARG	NE-CZ-NH1	5.04	126.54	121.50
6	f	498	SER	CA-C-N	5.04	127.25	120.50
6	f	498	SER	C-N-CA	5.04	127.25	120.50
7	g	582	GLU	N-CA-CB	5.04	117.61	110.16
1	l	736	ASN	OD1-CG-ND2	-5.04	117.56	122.60
1	l	976	ALA	CA-C-N	5.04	127.44	120.29
1	l	976	ALA	C-N-CA	5.04	127.44	120.29
2	m	570	SER	N-CA-C	5.04	116.77	111.28
3	n	189	TYR	CA-C-O	-5.04	115.51	120.90
6	q	391	HIS	CB-CG-CD2	-5.04	124.65	131.20
6	q	394	ILE	CA-C-N	5.04	126.99	120.44
6	q	394	ILE	C-N-CA	5.04	126.99	120.44
7	r	540	HIS	N-CA-C	-5.04	106.83	113.17
2	b	201	ARG	CD-NE-CZ	-5.03	117.35	124.40
7	g	1013	GLU	N-CA-C	-5.03	107.19	113.38
1	l	493	TRP	N-CA-C	5.03	116.46	111.07
2	m	736	ASN	N-CA-CB	5.03	117.31	110.01
2	m	742	ALA	N-CA-C	-5.03	105.87	111.36
6	q	95	GLU	CB-CG-CD	-5.03	104.04	112.60
7	r	605	ARG	NE-CZ-NH1	5.03	126.53	121.50
7	r	925	ASN	CA-C-N	5.03	127.36	120.46
7	r	925	ASN	C-N-CA	5.03	127.36	120.46
1	a	272	LYS	CB-CG-CD	5.03	122.87	111.30
7	r	110	ILE	CA-C-N	-5.03	114.75	122.60
7	r	110	ILE	C-N-CA	-5.03	114.75	122.60
2	b	647	ARG	CB-CA-C	-5.03	102.44	110.79
6	f	405	GLU	CA-C-N	5.03	126.98	120.44
6	f	405	GLU	C-N-CA	5.03	126.98	120.44
6	f	673	GLU	N-CA-C	5.03	116.76	111.28
2	m	409	MET	N-CA-CB	5.03	117.44	110.04
3	n	183	PHE	CA-CB-CG	5.03	118.83	113.80
5	p	211	HIS	CB-CG-CD2	-5.03	124.66	131.20
6	q	281	ASP	CA-C-N	5.03	127.02	120.28
6	q	281	ASP	C-N-CA	5.03	127.02	120.28
7	r	361	TYR	N-CA-C	-5.03	101.11	109.46
7	r	648	GLN	OE1-CD-NE2	-5.03	117.57	122.60
7	r	752	GLN	CA-C-N	5.03	127.43	120.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	752	GLN	C-N-CA	5.03	127.43	120.29
7	g	234	ARG	NE-CZ-NH2	5.03	123.73	119.20
1	l	27	TYR	CB-CG-CD2	-5.03	113.26	120.80
2	b	704	GLU	CA-C-N	5.03	127.43	120.29
2	b	704	GLU	C-N-CA	5.03	127.43	120.29
6	f	302	LEU	CA-C-O	5.03	125.75	119.97
6	f	531	ILE	CA-C-N	5.03	126.98	120.44
6	f	531	ILE	C-N-CA	5.03	126.98	120.44
7	g	1146	TYR	N-CA-C	-5.03	101.91	109.85
1	l	746	CYS	CA-C-N	5.03	124.64	119.56
1	l	746	CYS	C-N-CA	5.03	124.64	119.56
2	m	359	GLY	N-CA-C	5.03	118.96	112.83
3	n	177	THR	CA-C-N	5.03	131.29	122.95
3	n	177	THR	C-N-CA	5.03	131.29	122.95
3	n	179	LEU	O-C-N	-5.03	117.49	123.22
6	q	309	GLY	CA-C-N	5.03	128.65	120.60
6	q	309	GLY	C-N-CA	5.03	128.65	120.60
7	g	1009	LEU	N-CA-C	-5.03	100.85	109.24
2	m	406	LEU	O-C-N	-5.03	115.54	121.32
2	b	716	ALA	CA-C-O	5.02	125.75	119.97
6	f	338	GLU	CB-CG-CD	-5.02	104.06	112.60
2	m	345	LYS	CB-CG-CD	5.02	122.85	111.30
3	n	698	GLY	CA-C-N	5.02	127.01	120.28
3	n	698	GLY	C-N-CA	5.02	127.01	120.28
7	r	102	HIS	CB-CG-CD2	-5.02	124.67	131.20
3	c	293	GLN	O-C-N	5.02	128.45	122.27
5	e	24	VAL	O-C-N	-5.02	117.96	123.18
6	f	202	LEU	N-CA-C	-5.02	105.90	112.23
7	g	380	THR	CA-C-O	-5.02	114.75	120.32
7	g	927	ALA	CA-C-O	-5.02	115.23	120.55
1	l	571	PHE	CA-C-N	5.02	127.51	120.28
1	l	571	PHE	C-N-CA	5.02	127.51	120.28
3	n	426	ALA	CA-C-N	5.02	129.36	120.87
3	n	426	ALA	C-N-CA	5.02	129.36	120.87
4	o	111	GLU	CA-C-N	5.02	129.82	121.99
4	o	111	GLU	C-N-CA	5.02	129.82	121.99
7	r	485	THR	N-CA-C	-5.02	105.47	112.45
7	r	1134	HIS	ND1-CE1-NE2	5.02	113.42	108.40
2	b	244	TYR	CA-CB-CG	-5.02	104.86	113.90
7	g	162	GLY	CA-C-N	5.02	127.75	121.83
7	g	162	GLY	C-N-CA	5.02	127.75	121.83
1	l	572	ASP	CA-CB-CG	5.02	117.62	112.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	r	676	CYS	CA-C-N	5.02	127.27	120.44
7	r	676	CYS	C-N-CA	5.02	127.27	120.44
7	r	1152	THR	N-CA-CB	5.02	117.35	110.07
1	l	781	ASP	CA-CB-CG	5.02	117.62	112.60
7	r	192	PHE	N-CA-C	-5.02	106.94	113.16
7	r	626	ASN	CA-CB-CG	5.02	117.62	112.60
7	g	790	HIS	CA-C-O	-5.02	115.55	120.82
1	l	900	VAL	CA-C-N	5.02	127.41	120.29
1	l	900	VAL	C-N-CA	5.02	127.41	120.29
7	r	270	LEU	N-CA-CB	5.02	118.58	110.65
1	a	297	LEU	N-CA-C	-5.02	99.81	108.69
2	b	386	ILE	N-CA-C	-5.02	101.36	108.58
4	o	91	GLN	OE1-CD-NE2	5.02	127.62	122.60
7	r	759	TRP	CA-C-N	5.02	127.71	122.14
7	r	759	TRP	C-N-CA	5.02	127.71	122.14
6	f	142	SER	CB-CA-C	5.01	117.56	110.24
1	l	255	GLN	OE1-CD-NE2	-5.01	117.59	122.60
3	n	439	ARG	NH1-CZ-NH2	5.01	125.82	119.30
3	n	617	GLU	O-C-N	-5.01	116.67	122.09
4	o	150	SER	N-CA-C	5.01	116.61	109.14
5	p	330	LEU	N-CA-C	-5.01	100.23	108.41
7	r	839	PHE	CA-C-O	-5.01	115.33	121.00
7	r	1000	SER	CB-CA-C	-5.01	102.46	110.79
1	a	295	ASN	N-CA-C	-5.01	100.34	109.56
7	g	950	ASN	O-C-N	-5.01	116.81	122.12
5	p	181	GLU	N-CA-C	5.01	117.57	110.10
6	q	147	SER	N-CA-C	5.01	117.64	111.82
7	r	1018	PRO	N-CA-CB	5.01	108.51	103.25
1	a	374	LYS	N-CA-CB	-5.01	103.04	110.61
1	a	551	THR	N-CA-CB	5.01	117.49	110.12
1	a	713	SER	CB-CA-C	-5.01	101.06	109.83
2	b	157	VAL	CA-C-N	5.01	126.95	120.44
2	b	157	VAL	C-N-CA	5.01	126.95	120.44
6	f	227	ILE	CA-C-N	5.01	131.38	122.06
6	f	227	ILE	C-N-CA	5.01	131.38	122.06
7	g	454	ASP	CA-C-N	5.01	130.10	121.63
7	g	454	ASP	C-N-CA	5.01	130.10	121.63
7	g	1129	LEU	N-CA-CB	5.01	117.58	110.16
3	n	387	LEU	N-CA-C	5.01	117.12	111.11
4	o	57	TRP	CZ3-CH2-CZ2	-5.01	114.98	121.50
7	r	689	ILE	N-CA-CB	5.01	119.50	111.23
1	a	906	GLN	N-CA-C	5.01	116.74	111.28

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	f	482	ARG	CA-C-N	5.01	127.06	120.60
6	f	482	ARG	C-N-CA	5.01	127.06	120.60
7	g	102	HIS	CA-CB-CG	5.01	118.81	113.80
1	l	240	ASN	CA-C-N	5.01	131.11	121.54
1	l	240	ASN	C-N-CA	5.01	131.11	121.54
1	l	381	SER	O-C-N	5.01	129.69	123.28
1	l	619	LEU	O-C-N	5.01	127.43	122.12
6	q	646	SER	CA-C-N	5.01	131.11	121.54
6	q	646	SER	C-N-CA	5.01	131.11	121.54
7	r	22	GLU	O-C-N	5.01	128.73	122.22
1	a	697	GLN	N-CA-C	5.01	116.43	111.07
6	f	431	ILE	CA-C-O	-5.01	115.86	121.17
7	g	956	ALA	CA-C-N	5.01	126.95	120.44
7	g	956	ALA	C-N-CA	5.01	126.95	120.44
1	l	537	THR	N-CA-CB	5.01	118.95	110.49
6	q	343	ILE	CA-C-O	5.01	125.88	120.47
7	r	887	TRP	CD2-CE2-CZ2	-5.01	117.39	122.40
2	b	309	LEU	CA-C-O	5.01	125.86	120.55
6	f	174	LYS	N-CA-C	-5.01	105.90	111.36
7	g	126	SER	CA-C-O	5.01	125.50	119.59
7	r	380	THR	N-CA-C	-5.01	100.30	108.76
7	r	533	LEU	N-CA-CB	5.01	117.48	110.12
7	r	767	SER	N-CA-C	-5.01	107.22	113.38
1	a	93	ILE	CA-C-O	5.00	125.59	120.39
1	a	242	HIS	N-CA-C	-5.00	101.08	109.24
3	c	556	GLN	OE1-CD-NE2	5.00	127.61	122.60
3	n	536	LEU	N-CA-C	5.00	117.63	111.82
7	r	31	TYR	CA-C-N	5.00	126.99	120.28
7	r	31	TYR	C-N-CA	5.00	126.99	120.28
7	g	698	PRO	CA-C-N	5.00	131.10	121.54
7	g	698	PRO	C-N-CA	5.00	131.10	121.54
7	g	750	TYR	CB-CA-C	-5.00	102.97	110.92
2	m	201	ARG	N-CA-C	-5.00	106.28	112.93
2	m	674	ILE	CA-CB-CG2	5.00	119.00	110.50
7	r	1132	LYS	CB-CG-CD	5.00	122.81	111.30
5	e	125	LEU	CA-C-O	-5.00	114.91	120.66
6	f	387	ARG	N-CA-C	5.00	116.73	111.28
1	l	401	THR	CA-C-O	-5.00	113.59	119.24
1	l	991	LEU	CA-C-N	5.00	131.47	122.02
1	l	991	LEU	C-N-CA	5.00	131.47	122.02
3	n	277	GLY	O-C-N	-5.00	116.77	121.77
4	o	8	HIS	CA-CB-CG	5.00	118.80	113.80

There are no chirality outliers.

All (237) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	a	1014	TYR	Sidechain
1	a	1035	ARG	Sidechain
1	a	158	PHE	Sidechain
1	a	168	TYR	Sidechain
1	a	199	PHE	Sidechain
1	a	214	ARG	Sidechain
1	a	233	TYR	Sidechain
1	a	27	TYR	Sidechain
1	a	313	TYR	Sidechain
1	a	562	PHE	Sidechain
1	a	596	PHE	Sidechain
1	a	6	ARG	Sidechain
1	a	659	TYR	Sidechain
1	a	668	TYR	Sidechain
1	a	701	TYR	Sidechain
1	a	72	PHE	Sidechain
1	a	724	PHE	Sidechain
1	a	738	ARG	Sidechain
1	a	802	TYR	Sidechain
1	a	82	TYR	Sidechain
1	a	851	TYR	Sidechain
1	a	916	ARG	Sidechain
1	a	96	HIS	Sidechain
1	a	961	PHE	Sidechain
1	a	968	ARG	Sidechain
1	a	975	ARG	Sidechain
2	b	189	TYR	Sidechain
2	b	201	ARG	Sidechain
2	b	204	PHE	Sidechain
2	b	244	TYR	Sidechain
2	b	282	PHE	Sidechain
2	b	349	TYR	Sidechain
2	b	354	TYR	Sidechain
2	b	360	PHE	Sidechain
2	b	403	HIS	Sidechain
2	b	471	PHE	Sidechain
2	b	511	TYR	Sidechain
2	b	530	ARG	Sidechain
2	b	571	TYR	Sidechain
2	b	576	PHE	Sidechain

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Mol	Chain	Res	Type	Group
2	b	601	ALA	Peptide
2	b	627	TYR	Sidechain
2	b	633	PHE	Sidechain
2	b	634	TYR	Sidechain
2	b	639	ARG	Sidechain
2	b	657	TYR	Sidechain
2	b	672	TYR	Sidechain
2	b	69	PHE	Sidechain
2	b	94	ARG	Sidechain
3	c	150	PHE	Peptide
3	c	174	ARG	Sidechain
3	c	189	TYR	Sidechain
3	c	202	ARG	Sidechain
3	c	241	PHE	Sidechain
3	c	246	TYR	Sidechain
3	c	248	TYR	Sidechain
3	c	285	ARG	Sidechain
3	c	324	TYR	Sidechain
3	c	331	ARG	Sidechain
3	c	435	TYR	Sidechain
3	c	519	ARG	Sidechain
3	c	538	PHE	Sidechain
3	c	547	TYR	Sidechain
3	c	644	TYR	Sidechain
3	c	709	TYR	Sidechain
4	d	112	TYR	Sidechain
4	d	19	TYR	Sidechain
4	d	221	TYR	Sidechain
5	e	116	PHE	Sidechain
5	e	164	HIS	Sidechain
5	e	17	TYR	Sidechain
5	e	177	ARG	Sidechain
5	e	22	ARG	Sidechain
5	e	226	ARG	Sidechain
5	e	335	TYR	Sidechain
5	e	77	TYR	Sidechain
6	f	131	TYR	Sidechain
6	f	135	ARG	Sidechain
6	f	178	HIS	Sidechain
6	f	218	TYR	Sidechain
6	f	244	ARG	Sidechain
6	f	261	ARG	Sidechain

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Mol	Chain	Res	Type	Group
6	f	279	TYR	Sidechain
6	f	330	ARG	Sidechain
6	f	352	LEU	Peptide
6	f	384	TYR	Sidechain
6	f	426	TYR	Sidechain
6	f	477	ARG	Sidechain
6	f	491	TYR	Sidechain
6	f	512	TYR	Sidechain
6	f	537	PHE	Sidechain
6	f	562	TYR	Sidechain
6	f	597	TYR	Sidechain
6	f	653	TYR	Sidechain
6	f	659	TYR	Sidechain
6	f	7	TYR	Sidechain
6	f	74	PHE	Sidechain
7	g	119	TYR	Sidechain
7	g	261	PHE	Sidechain
7	g	271	ARG	Sidechain
7	g	324	TYR	Sidechain
7	g	360	TYR	Sidechain
7	g	381	TYR	Sidechain
7	g	466	TYR	Sidechain
7	g	503	TYR	Sidechain
7	g	570	PHE	Sidechain
7	g	575	PHE	Sidechain
7	g	621	TYR	Sidechain
7	g	725	PHE	Sidechain
7	g	727	PHE	Sidechain
7	g	76	TYR	Sidechain
7	g	781	TYR	Sidechain
7	g	808	TYR	Sidechain
7	g	882	TYR	Sidechain
7	g	89	TYR	Sidechain
7	g	896	TYR	Sidechain
7	g	978	GLY	Mainchain
1	l	1000	TYR	Sidechain
1	l	105	ARG	Sidechain
1	l	106	TYR	Sidechain
1	l	193	HIS	Sidechain
1	l	204	TYR	Sidechain
1	l	210	ARG	Peptide
1	l	271	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	l	373	PHE	Sidechain
1	l	376	TYR	Sidechain
1	l	457	PHE	Sidechain
1	l	476	PHE	Sidechain
1	l	484	TYR	Sidechain
1	l	495	TYR	Sidechain
1	l	507	PHE	Sidechain
1	l	509	TYR	Sidechain
1	l	620	HIS	Sidechain
1	l	628	ARG	Sidechain
1	l	668	TYR	Sidechain
1	l	725	ARG	Sidechain
1	l	774	TYR	Sidechain
1	l	782	TYR	Sidechain
1	l	802	TYR	Sidechain
1	l	815	PHE	Peptide
1	l	819	TYR	Sidechain
1	l	88	TYR	Sidechain
1	l	880	ARG	Sidechain
1	l	924	ARG	Sidechain
2	m	132	VAL	Peptide
2	m	173	TYR	Sidechain
2	m	273	TYR	Sidechain
2	m	295	TYR	Sidechain
2	m	329	ARG	Sidechain
2	m	349	TYR	Sidechain
2	m	365	ILE	Peptide
2	m	565	TYR	Sidechain
2	m	574	LEU	Mainchain,Peptide
2	m	576	PHE	Sidechain
2	m	627	TYR	Sidechain
2	m	725	ALA	Peptide
2	m	76	TYR	Sidechain
3	n	144	PHE	Sidechain
3	n	148	TYR	Sidechain
3	n	150	PHE	Sidechain
3	n	174	ARG	Sidechain
3	n	189	TYR	Sidechain
3	n	240	LEU	Peptide
3	n	242	ASP	Peptide
3	n	248	TYR	Sidechain
3	n	267	ARG	Sidechain

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Mol	Chain	Res	Type	Group
3	n	358	TYR	Sidechain
3	n	379	PHE	Sidechain
3	n	509	ARG	Sidechain
3	n	619	TYR	Sidechain
3	n	644	TYR	Sidechain
3	n	647	TYR	Sidechain
3	n	651	ARG	Sidechain
3	n	695	TYR	Sidechain
3	n	697	ARG	Sidechain
3	n	709	TYR	Sidechain
4	o	148	VAL	Mainchain
4	o	171	ARG	Sidechain
4	o	19	TYR	Sidechain
4	o	208	ARG	Sidechain
4	o	52	HIS	Sidechain
5	p	196	ARG	Sidechain
5	p	211	HIS	Sidechain
5	p	22	ARG	Sidechain
5	p	52	ARG	Sidechain
6	q	102	ARG	Sidechain
6	q	105	PHE	Sidechain
6	q	117	TYR	Sidechain
6	q	218	TYR	Sidechain
6	q	244	ARG	Sidechain
6	q	248	TYR	Sidechain
6	q	289	HIS	Sidechain
6	q	301	TYR	Sidechain
6	q	341	HIS	Sidechain
6	q	387	ARG	Sidechain
6	q	391	HIS	Sidechain
6	q	478	ARG	Sidechain
6	q	535	ARG	Sidechain
6	q	542	ARG	Sidechain
6	q	549	PHE	Sidechain
6	q	584	ILE	Peptide
6	q	587	TYR	Sidechain
6	q	597	TYR	Sidechain
6	q	697	GLU	Mainchain
6	q	73	ARG	Sidechain
7	r	1020	ARG	Sidechain
7	r	1043	ARG	Sidechain
7	r	1094	TYR	Sidechain

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Mol	Chain	Res	Type	Group
7	r	1110	ARG	Sidechain
7	r	125	ARG	Sidechain
7	r	142	PHE	Sidechain
7	r	271	ARG	Sidechain
7	r	352	TYR	Sidechain
7	r	381	TYR	Sidechain
7	r	441	ARG	Sidechain
7	r	450	ARG	Sidechain
7	r	493	PHE	Sidechain
7	r	50	ARG	Sidechain
7	r	503	TYR	Sidechain
7	r	509	ALA	Peptide
7	r	52	HIS	Sidechain
7	r	550	LEU	Peptide
7	r	560	ARG	Sidechain
7	r	621	TYR	Sidechain
7	r	632	LYS	Peptide
7	r	649	PHE	Sidechain
7	r	678	TYR	Sidechain
7	r	753	PHE	Sidechain
7	r	76	TYR	Sidechain
7	r	777	ILE	Peptide
7	r	808	TYR	Sidechain
7	r	832	TYR	Sidechain
7	r	835	PHE	Sidechain
7	r	874	PHE	Sidechain
7	r	884	HIS	Sidechain
7	r	896	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	8321	0	8169	27	0
1	l	8321	0	8169	46	0
2	b	5186	0	5159	41	0
2	m	5190	0	5173	73	0
3	c	4877	0	4854	67	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	n	4822	0	4829	31	0
4	d	2216	0	2118	132	0
4	o	2216	0	2118	62	0
5	e	2439	0	2375	78	0
5	p	2439	0	2375	14	0
6	f	5895	0	5875	53	0
6	q	5895	0	5875	147	0
7	g	9403	0	9304	459	0
7	r	9401	0	9304	64	0
All	All	76621	0	75697	1240	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 8.

All (1240) 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:657:TYR:CE2	3:c:109:THR:CB	1.75	1.66
2:m:115:TYR:CE1	2:m:115:TYR:CD1	1.83	1.66
2:m:115:TYR:CE2	2:m:115:TYR:CD2	1.83	1.66
7:g:1063:LYS:HD3	7:g:1140:VAL:CG1	1.21	1.64
2:m:115:TYR:CD2	2:m:115:TYR:CG	1.86	1.62
2:m:115:TYR:CE1	2:m:115:TYR:CZ	1.88	1.62
2:m:115:TYR:CE2	2:m:115:TYR:CZ	1.88	1.59
7:g:963:LYS:HB3	7:g:968:GLU:CG	1.30	1.57
7:g:1059:GLN:HG2	7:g:1140:VAL:CG2	1.15	1.57
6:q:600:TRP:CE2	6:q:604:VAL:HG22	1.38	1.57
2:m:115:TYR:CD1	2:m:115:TYR:CG	1.87	1.57
7:g:1059:GLN:CG	7:g:1140:VAL:HG21	1.26	1.56
7:g:1058:LEU:HD13	7:g:1133:LEU:CD2	1.14	1.55
6:q:617:ILE:HD11	6:q:678:LEU:CD2	1.30	1.55
7:g:963:LYS:CB	7:g:968:GLU:HG2	1.32	1.52
7:g:1058:LEU:CD1	7:g:1133:LEU:HD23	1.06	1.52
7:g:963:LYS:C	7:g:968:GLU:HB2	1.35	1.50
3:n:190:LEU:HB2	3:n:489:HIS:CE1	1.46	1.49
2:b:657:TYR:CZ	3:c:109:THR:CB	1.95	1.49
7:g:412:GLU:HB2	7:g:484:GLU:CB	1.42	1.48
6:q:617:ILE:CD1	6:q:678:LEU:HD23	1.44	1.47
4:o:153:TRP:CB	4:o:172:LYS:O	1.64	1.46
4:o:153:TRP:NE1	4:o:171:ARG:HD2	1.29	1.46
7:g:1087:LYS:HE3	7:g:1114:TYR:CD1	1.50	1.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:1023:SER:CB	7:g:1070:LEU:HD23	1.44	1.45
7:g:964:LEU:HD23	7:g:969:VAL:CG1	1.49	1.42
4:o:171:ARG:NH2	4:o:187:TYR:CE2	1.88	1.41
7:g:974:ARG:NH1	7:g:1109:ILE:HD11	1.28	1.40
7:g:412:GLU:N	7:g:484:GLU:HG2	1.33	1.37
7:g:963:LYS:C	7:g:968:GLU:CB	1.95	1.37
7:g:1058:LEU:CG	7:g:1133:LEU:HD23	1.52	1.37
5:e:206:ALA:HB2	5:e:292:LEU:CB	1.56	1.36
7:g:1087:LYS:CE	7:g:1114:TYR:CD1	2.09	1.35
7:g:1058:LEU:CD1	7:g:1133:LEU:CD2	1.78	1.35
7:g:1023:SER:CB	7:g:1070:LEU:CD2	2.05	1.34
4:d:141:ILE:HG13	4:d:185:TRP:CZ3	1.61	1.33
5:e:206:ALA:CB	5:e:292:LEU:HB2	1.58	1.33
6:f:470:LEU:CD1	6:f:471:PRO:HD2	1.55	1.33
7:g:1023:SER:HB2	7:g:1070:LEU:CD2	1.59	1.33
7:g:1063:LYS:CD	7:g:1140:VAL:CG1	2.03	1.33
5:e:106:ASP:HB2	5:e:148:TRP:CH2	1.64	1.32
7:g:1059:GLN:CG	7:g:1140:VAL:CG2	1.85	1.32
3:c:163:ASP:HB2	3:c:170:VAL:CG2	1.59	1.31
7:g:963:LYS:HB3	7:g:968:GLU:CD	1.55	1.31
6:q:600:TRP:CE2	6:q:604:VAL:CG2	2.14	1.31
3:c:163:ASP:CB	3:c:170:VAL:HG21	1.60	1.31
7:g:963:LYS:O	7:g:968:GLU:HB2	1.20	1.31
2:b:569:LYS:CE	2:b:657:TYR:HB3	1.59	1.30
7:g:1099:TYR:CZ	7:g:1109:ILE:HD13	1.65	1.30
7:g:984:PHE:CE1	7:g:1005:LEU:HD11	1.66	1.29
7:g:1063:LYS:CB	7:g:1140:VAL:HG11	1.61	1.29
7:g:1058:LEU:HD13	7:g:1133:LEU:CG	1.62	1.28
4:d:109:PRO:HG2	4:d:112:TYR:CE2	1.69	1.27
6:f:470:LEU:HD13	6:f:471:PRO:CD	1.64	1.27
6:q:600:TRP:O	6:q:604:VAL:HG23	1.26	1.27
7:g:412:GLU:H	7:g:484:GLU:CG	1.46	1.26
7:g:1042:TRP:CZ3	7:g:1061:ILE:HG21	1.70	1.26
7:g:413:VAL:CG2	7:g:484:GLU:HA	1.66	1.26
6:q:600:TRP:CD1	6:q:604:VAL:HG21	1.69	1.26
7:g:969:VAL:CA	7:g:1009:LEU:HD22	1.65	1.25
7:g:1058:LEU:CD2	7:g:1133:LEU:HD21	1.65	1.25
7:g:1087:LYS:CE	7:g:1114:TYR:HD1	1.46	1.25
4:d:141:ILE:HD12	4:d:194:TYR:CE2	1.70	1.25
4:d:185:TRP:CZ3	4:d:194:TYR:HB2	1.73	1.24
4:d:212:TRP:CZ3	4:d:214:PRO:HA	1.75	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:963:LYS:HE3	7:g:968:GLU:OE2	1.38	1.21
4:o:152:SER:O	4:o:173:PHE:HA	1.03	1.21
2:b:569:LYS:CG	2:b:573:TRP:CZ2	2.23	1.20
7:g:1058:LEU:CD2	7:g:1133:LEU:CD2	2.20	1.19
7:g:1086:ASP:O	7:g:1090:LEU:HD13	1.38	1.19
4:o:169:GLU:CB	4:o:189:SER:HB2	1.73	1.19
2:m:111:LEU:HD13	2:m:115:TYR:OH	1.05	1.18
7:g:974:ARG:CZ	7:g:1109:ILE:HD11	1.73	1.18
7:g:413:VAL:CG1	7:g:485:THR:H	1.56	1.18
7:g:1045:ILE:CD1	7:g:1061:ILE:HG13	1.74	1.17
7:g:1058:LEU:HD22	7:g:1133:LEU:CD2	1.74	1.17
7:g:969:VAL:HA	7:g:1009:LEU:CD2	1.74	1.17
7:g:1099:TYR:CZ	7:g:1109:ILE:CD1	2.27	1.17
7:g:963:LYS:O	7:g:968:GLU:CB	1.91	1.16
7:g:1087:LYS:HE2	7:g:1114:TYR:CE1	1.80	1.16
2:m:111:LEU:CD1	2:m:115:TYR:OH	1.92	1.15
4:o:153:TRP:CD1	4:o:171:ARG:HB3	1.80	1.15
2:b:569:LYS:CE	2:b:573:TRP:CZ2	2.30	1.15
7:g:974:ARG:CZ	7:g:1099:TYR:OH	1.93	1.15
4:o:153:TRP:HB3	4:o:172:LYS:O	1.43	1.15
2:b:569:LYS:CE	2:b:573:TRP:HZ2	1.60	1.14
2:b:569:LYS:HG3	2:b:573:TRP:CZ2	1.81	1.14
6:q:600:TRP:NE1	6:q:604:VAL:HG21	1.61	1.14
7:r:1146:TYR:CD1	7:r:1155:VAL:HG11	1.81	1.14
5:e:195:GLN:HB2	5:e:204:VAL:O	1.48	1.13
2:m:122:ARG:HB2	2:m:144:VAL:HG23	1.15	1.13
7:g:413:VAL:HG22	7:g:484:GLU:HA	1.23	1.12
7:g:1063:LYS:CG	7:g:1140:VAL:HG11	1.78	1.13
1:l:556:ASN:O	1:l:559:GLU:CD	1.90	1.12
5:e:141:GLU:HB3	5:e:142:PRO:HD3	1.27	1.12
7:g:969:VAL:HG22	7:g:984:PHE:CE2	1.82	1.12
5:e:195:GLN:O	5:e:202:LEU:HB3	1.46	1.12
7:g:1066:PHE:CG	7:g:1146:TYR:CE2	2.37	1.11
7:g:964:LEU:CD2	7:g:969:VAL:CG1	2.27	1.11
4:o:152:SER:O	4:o:173:PHE:CA	1.98	1.11
7:g:963:LYS:CB	7:g:968:GLU:CG	2.02	1.11
7:g:1059:GLN:OE1	7:g:1137:ILE:HA	1.50	1.11
5:e:191:ALA:HB3	5:e:208:LEU:HD12	1.27	1.10
7:g:1058:LEU:HD22	7:g:1133:LEU:HD21	1.25	1.10
3:n:190:LEU:CB	3:n:489:HIS:CE1	2.33	1.10
6:q:600:TRP:CD2	6:q:604:VAL:HG22	1.86	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:969:VAL:HG21	7:g:984:PHE:CD2	1.86	1.10
7:g:970:GLN:NE2	7:g:1009:LEU:HD21	1.66	1.10
5:e:106:ASP:HB2	5:e:148:TRP:CZ2	1.88	1.09
7:g:963:LYS:HB2	7:g:968:GLU:HG2	1.12	1.09
7:g:1063:LYS:HD3	7:g:1140:VAL:HG13	1.15	1.09
7:g:68:ILE:HG13	7:g:480:LYS:HD2	1.23	1.09
7:g:412:GLU:HB2	7:g:484:GLU:HB3	1.32	1.08
7:g:1063:LYS:HD3	7:g:1140:VAL:HG12	1.28	1.08
7:g:974:ARG:NH1	7:g:1109:ILE:CD1	2.15	1.08
7:g:1059:GLN:HG3	7:g:1140:VAL:HG21	1.09	1.08
7:g:1062:VAL:HG22	7:g:1078:LEU:HB2	1.34	1.08
6:q:207:SER:O	6:q:211:ILE:HD12	1.54	1.08
7:g:1023:SER:HB2	7:g:1070:LEU:HD22	1.36	1.07
4:o:153:TRP:CD1	4:o:171:ARG:HD2	1.89	1.07
2:b:569:LYS:HG2	2:b:573:TRP:CE2	1.88	1.07
7:g:412:GLU:CB	7:g:484:GLU:CB	2.32	1.07
7:g:1036:PHE:CE1	7:g:1090:LEU:HD12	1.89	1.07
2:m:465:MET:HE3	2:m:469:PHE:CE2	1.90	1.07
2:m:111:LEU:HD13	2:m:115:TYR:CZ	1.88	1.07
7:g:413:VAL:HG11	7:g:485:THR:H	1.17	1.07
7:g:969:VAL:HB	7:g:1009:LEU:HD13	1.27	1.07
2:m:467:ASN:O	2:m:471:PHE:CD2	2.06	1.07
4:o:153:TRP:NE1	4:o:171:ARG:CD	2.18	1.06
5:e:141:GLU:CB	5:e:142:PRO:CD	2.33	1.06
7:g:970:GLN:O	7:g:1009:LEU:HD11	1.51	1.06
7:g:1036:PHE:CE2	7:g:1093:GLU:OE2	2.08	1.06
7:g:979:SER:HB2	7:g:1102:PHE:CE2	1.90	1.06
7:g:1036:PHE:HE1	7:g:1090:LEU:CD1	1.68	1.06
6:f:434:THR:HG22	6:f:465:ILE:HG23	1.32	1.05
6:q:600:TRP:CZ2	6:q:604:VAL:HG22	1.89	1.05
7:g:964:LEU:CD2	7:g:969:VAL:HG13	1.86	1.05
4:d:109:PRO:HB2	4:d:112:TYR:HD2	1.21	1.05
7:g:1087:LYS:CE	7:g:1114:TYR:CE1	2.38	1.05
7:g:1094:TYR:HB2	7:g:1110:ARG:CD	1.86	1.05
6:q:600:TRP:CD2	6:q:604:VAL:CG2	2.38	1.05
2:b:569:LYS:HE3	2:b:573:TRP:CZ2	1.89	1.04
4:o:153:TRP:HB2	4:o:172:LYS:O	1.52	1.04
4:d:141:ILE:HG13	4:d:185:TRP:CH2	1.92	1.04
7:g:413:VAL:HG22	7:g:484:GLU:CA	1.85	1.04
3:c:163:ASP:HB2	3:c:170:VAL:CB	1.88	1.04
4:d:141:ILE:HG21	4:d:194:TYR:CD2	1.91	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:600:TRP:C	6:q:604:VAL:HG23	1.80	1.04
7:g:969:VAL:HG23	7:g:981:ARG:HH11	1.17	1.04
7:g:1099:TYR:CE2	7:g:1109:ILE:HG21	1.93	1.04
4:d:212:TRP:HZ3	4:d:214:PRO:HA	0.91	1.03
5:e:106:ASP:CB	5:e:148:TRP:CH2	2.41	1.03
7:g:1063:LYS:HB2	7:g:1140:VAL:HG11	1.09	1.03
6:q:660:THR:HB	6:q:661:PRO:HD3	1.40	1.03
4:d:141:ILE:CG1	4:d:185:TRP:CH2	2.40	1.03
6:q:600:TRP:NE1	6:q:604:VAL:CG2	2.18	1.03
3:c:160:LEU:HB3	3:c:169:GLY:CA	1.88	1.03
1:a:295:ASN:HD22	1:a:323:LEU:HB2	1.24	1.03
7:g:68:ILE:HG13	7:g:480:LYS:CD	1.89	1.03
5:e:191:ALA:CB	5:e:208:LEU:HD12	1.88	1.02
7:g:963:LYS:C	7:g:968:GLU:HB3	1.83	1.02
7:g:1078:LEU:HG	7:g:1153:ASN:O	1.59	1.02
6:q:600:TRP:CD1	6:q:604:VAL:CG2	2.42	1.02
4:d:185:TRP:CE3	4:d:194:TYR:CB	2.43	1.02
4:d:212:TRP:CZ3	4:d:214:PRO:CA	2.42	1.01
7:g:1023:SER:HB3	7:g:1070:LEU:HD23	1.39	1.01
7:g:1063:LYS:HB2	7:g:1140:VAL:CG1	1.89	1.01
7:g:984:PHE:CE1	7:g:1005:LEU:CD1	2.43	1.01
7:g:412:GLU:HB2	7:g:484:GLU:HB2	1.09	1.01
7:g:1045:ILE:HD13	7:g:1061:ILE:CG1	1.90	1.01
7:g:1087:LYS:HE2	7:g:1114:TYR:HE1	1.23	1.01
6:q:180:PHE:CE1	6:q:203:SER:OG	2.12	1.01
7:g:969:VAL:CG2	7:g:984:PHE:CD2	2.44	1.00
7:g:1086:ASP:OD1	7:g:1090:LEU:HD11	1.60	1.00
5:e:193:ILE:HG12	5:e:194:TYR:H	1.25	1.00
7:g:979:SER:HB2	7:g:1102:PHE:HE2	1.16	1.00
4:d:141:ILE:CG1	4:d:185:TRP:CZ3	2.45	1.00
7:g:1042:TRP:CZ3	7:g:1061:ILE:CG2	2.44	1.00
2:m:122:ARG:CB	2:m:144:VAL:HG23	1.91	1.00
3:c:160:LEU:HD23	3:c:169:GLY:HA3	1.42	1.00
3:c:163:ASP:HB2	3:c:170:VAL:HG21	1.19	1.00
7:g:969:VAL:CG2	7:g:984:PHE:CE2	2.43	1.00
7:g:972:CYS:HB3	7:g:978:GLY:HA2	1.40	1.00
1:l:554:PHE:HA	1:l:558:LEU:HD12	1.42	1.00
2:b:569:LYS:NZ	2:b:657:TYR:HB3	1.77	0.99
4:o:153:TRP:CA	4:o:172:LYS:O	2.10	0.99
4:d:192:GLN:HG2	6:q:141:THR:OG1	1.62	0.99
2:b:569:LYS:HG2	2:b:573:TRP:NE1	1.76	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:o:153:TRP:HE1	4:o:171:ARG:HD2	1.17	0.99
5:e:106:ASP:CG	5:e:148:TRP:CZ3	2.40	0.99
7:g:1023:SER:OG	7:g:1070:LEU:HD23	1.61	0.99
7:g:969:VAL:HG23	7:g:981:ARG:NH1	1.77	0.99
7:g:1099:TYR:CE2	7:g:1109:ILE:HD13	1.98	0.98
3:c:160:LEU:HB3	3:c:169:GLY:HA2	1.41	0.98
7:g:1058:LEU:CG	7:g:1133:LEU:CD2	2.26	0.98
7:g:1058:LEU:CD1	7:g:1133:LEU:CG	2.32	0.97
2:m:465:MET:CE	2:m:469:PHE:CE2	2.47	0.97
1:a:295:ASN:HD22	1:a:323:LEU:CB	1.77	0.97
3:n:339:GLN:NE2	6:q:206:ILE:HG21	1.79	0.97
7:g:970:GLN:H	7:g:1009:LEU:HD21	1.30	0.97
4:o:153:TRP:CD1	4:o:171:ARG:CB	2.47	0.97
6:q:617:ILE:HD11	6:q:678:LEU:HD22	1.47	0.97
2:b:569:LYS:HE3	2:b:657:TYR:HB3	1.42	0.97
6:q:84:PHE:HZ	6:q:114:LYS:HB3	1.27	0.97
7:g:1045:ILE:HD13	7:g:1061:ILE:HG13	0.98	0.96
6:f:470:LEU:HD22	6:f:471:PRO:HD3	1.44	0.96
7:g:1094:TYR:HB2	7:g:1110:ARG:HD3	1.48	0.96
6:q:202:LEU:HD13	6:q:212:LEU:HD23	1.47	0.96
3:c:160:LEU:CD2	3:c:169:GLY:HA3	1.95	0.96
7:r:1146:TYR:CE1	7:r:1155:VAL:HG11	2.02	0.95
2:m:118:LEU:HD13	2:m:122:ARG:HE	1.30	0.95
4:d:141:ILE:HD12	4:d:194:TYR:HE2	1.04	0.95
4:d:109:PRO:HG2	4:d:112:TYR:CD2	2.00	0.95
5:e:106:ASP:CB	5:e:148:TRP:CZ3	2.50	0.95
6:q:617:ILE:CD1	6:q:678:LEU:CD2	2.18	0.95
7:g:412:GLU:CB	7:g:484:GLU:HB3	1.94	0.95
4:o:154:ALA:HB1	4:o:155:PRO:HD2	1.49	0.95
4:d:109:PRO:HB2	4:d:112:TYR:CD2	2.01	0.94
4:d:212:TRP:HZ3	4:d:214:PRO:CA	1.78	0.94
7:g:963:LYS:CA	7:g:968:GLU:HB2	1.97	0.94
7:g:969:VAL:CG1	7:g:1009:LEU:HB3	1.96	0.94
3:c:161:THR:O	3:c:170:VAL:HG23	1.66	0.94
7:r:1046:VAL:HG13	7:r:1123:LEU:HD11	1.49	0.94
5:e:106:ASP:HB2	5:e:148:TRP:CZ3	2.02	0.94
6:q:180:PHE:HE1	6:q:203:SER:OG	1.44	0.94
6:q:600:TRP:O	6:q:604:VAL:CG2	2.16	0.94
4:d:185:TRP:HZ3	4:d:194:TYR:HB2	1.29	0.94
7:g:1036:PHE:CE1	7:g:1090:LEU:CD1	2.49	0.94
7:g:974:ARG:HH11	7:g:1109:ILE:HD11	1.27	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:676:LYS:HD3	7:r:925:ASN:CG	1.93	0.94
5:e:191:ALA:O	5:e:208:LEU:HB2	1.66	0.94
2:m:111:LEU:HB3	2:m:115:TYR:CZ	2.01	0.94
4:d:109:PRO:CB	4:d:112:TYR:HD2	1.81	0.93
7:g:1063:LYS:CD	7:g:1140:VAL:HG11	1.77	0.93
7:g:1071:PRO:HG2	7:g:1146:TYR:CZ	2.04	0.93
2:m:122:ARG:HH22	2:m:462:ALA:HB3	1.33	0.93
7:g:1055:ASP:O	7:g:1057:LEU:N	2.01	0.93
2:m:122:ARG:HB2	2:m:144:VAL:CG2	1.98	0.93
7:g:969:VAL:HB	7:g:1009:LEU:CD1	1.97	0.93
2:b:569:LYS:CG	2:b:573:TRP:HZ2	1.71	0.93
7:g:1059:GLN:HE21	7:g:1063:LYS:CB	1.80	0.93
7:g:1086:ASP:OD1	7:g:1090:LEU:CD1	2.17	0.93
2:m:122:ARG:HA	2:m:144:VAL:HG21	1.50	0.93
7:g:1066:PHE:CD1	7:g:1146:TYR:CE2	2.57	0.93
7:g:1066:PHE:HB3	7:g:1146:TYR:HE2	1.34	0.93
6:q:207:SER:O	6:q:211:ILE:CD1	2.17	0.93
7:g:68:ILE:CG1	7:g:480:LYS:HD2	1.98	0.92
7:g:1099:TYR:OH	7:g:1109:ILE:CD1	2.17	0.92
7:g:969:VAL:HG12	7:g:1009:LEU:HB3	1.50	0.92
7:g:970:GLN:CD	7:g:1009:LEU:HD21	1.93	0.91
4:d:185:TRP:CZ3	4:d:194:TYR:CB	2.53	0.91
7:g:1042:TRP:HZ3	7:g:1061:ILE:HG21	1.25	0.91
4:o:171:ARG:HH22	4:o:187:TYR:HE2	0.96	0.91
4:d:109:PRO:HG2	4:d:112:TYR:HE2	1.25	0.91
7:g:984:PHE:CD1	7:g:1005:LEU:CD1	2.54	0.91
7:g:1132:LYS:O	7:g:1136:THR:HG22	1.69	0.91
4:o:171:ARG:NH2	4:o:187:TYR:HE2	1.44	0.91
7:g:970:GLN:O	7:g:1009:LEU:CD1	2.17	0.91
7:g:1059:GLN:OE1	7:g:1137:ILE:O	1.88	0.91
7:g:1086:ASP:O	7:g:1090:LEU:CD1	2.18	0.90
2:b:657:TYR:HE2	3:c:109:THR:CB	1.65	0.90
6:q:600:TRP:CG	6:q:604:VAL:CG2	2.55	0.90
7:g:413:VAL:CG1	7:g:485:THR:N	2.34	0.90
7:g:969:VAL:HG21	7:g:984:PHE:CG	2.06	0.90
7:g:964:LEU:HD23	7:g:969:VAL:HG13	0.90	0.89
7:g:969:VAL:CB	7:g:1009:LEU:HD13	2.02	0.89
4:d:109:PRO:CG	4:d:112:TYR:CD2	2.55	0.89
1:l:556:ASN:O	1:l:559:GLU:CG	2.19	0.89
5:e:141:GLU:CB	5:e:142:PRO:HD3	1.95	0.89
7:g:1055:ASP:C	7:g:1057:LEU:H	1.80	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m:111:LEU:HB3	2:m:115:TYR:CE2	2.08	0.89
3:c:161:THR:O	3:c:170:VAL:CG2	2.21	0.89
7:g:1059:GLN:OE1	7:g:1137:ILE:CA	2.20	0.89
7:g:1078:LEU:CD1	7:g:1079:PRO:O	2.20	0.89
7:g:1066:PHE:CD2	7:g:1146:TYR:CD2	2.61	0.89
7:g:1091:THR:OG1	7:g:1114:TYR:OH	1.90	0.89
2:m:122:ARG:CB	2:m:144:VAL:CG2	2.51	0.89
2:m:111:LEU:HD13	2:m:115:TYR:HH	1.10	0.89
3:n:339:GLN:HE22	6:q:206:ILE:HG12	1.37	0.89
7:g:1059:GLN:HG2	7:g:1140:VAL:HG23	0.88	0.88
5:e:202:LEU:HD12	5:e:202:LEU:H	1.38	0.88
7:g:970:GLN:N	7:g:1009:LEU:HD11	1.88	0.88
3:c:163:ASP:CB	3:c:170:VAL:CG2	2.34	0.88
7:r:1146:TYR:HD1	7:r:1155:VAL:HG11	1.35	0.88
7:g:1099:TYR:OH	7:g:1109:ILE:HD13	1.71	0.88
4:o:153:TRP:CD1	4:o:171:ARG:CG	2.56	0.88
5:e:141:GLU:HB2	5:e:142:PRO:CD	2.02	0.87
2:b:569:LYS:CE	2:b:657:TYR:CB	2.52	0.87
2:b:569:LYS:NZ	2:b:657:TYR:CB	2.37	0.87
3:c:163:ASP:HB3	3:c:170:VAL:HG11	1.55	0.87
6:q:207:SER:HB3	6:q:211:ILE:HD11	1.56	0.87
5:e:193:ILE:CG1	5:e:194:TYR:H	1.86	0.87
2:b:569:LYS:HE3	2:b:573:TRP:HZ2	1.28	0.87
3:c:168:SER:HB2	4:d:24:LEU:HD11	1.56	0.87
5:e:196:ARG:HA	5:e:202:LEU:HA	1.56	0.87
7:g:972:CYS:HB3	7:g:978:GLY:CA	2.04	0.87
4:d:185:TRP:CE3	4:d:194:TYR:HB2	2.05	0.86
4:o:153:TRP:CD1	4:o:171:ARG:CD	2.58	0.86
6:q:617:ILE:HD11	6:q:678:LEU:HD23	0.90	0.86
2:b:569:LYS:CD	2:b:573:TRP:HZ2	1.87	0.86
7:g:1066:PHE:CB	7:g:1146:TYR:HE2	1.89	0.86
5:e:141:GLU:HB2	5:e:142:PRO:HD2	1.57	0.86
7:g:412:GLU:C	7:g:484:GLU:HB3	2.01	0.86
4:o:171:ARG:NH2	4:o:187:TYR:CD2	2.43	0.86
4:d:141:ILE:HG13	4:d:194:TYR:HD2	1.37	0.85
7:g:1090:LEU:CD2	7:g:1117:ILE:HD11	2.06	0.85
4:d:117:LEU:CD2	4:d:152:SER:O	2.24	0.85
4:o:153:TRP:HE1	4:o:171:ARG:CD	1.81	0.85
3:c:168:SER:HB3	4:d:24:LEU:CD2	2.05	0.85
5:e:195:GLN:O	5:e:202:LEU:CB	2.25	0.84
4:o:152:SER:HB2	4:o:174:VAL:HG12	1.60	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:84:PHE:CZ	6:q:114:LYS:HB3	2.11	0.84
7:g:1066:PHE:CG	7:g:1146:TYR:CD2	2.65	0.84
6:q:600:TRP:O	6:q:604:VAL:N	2.09	0.84
2:b:657:TYR:OH	3:c:109:THR:CB	2.24	0.84
6:q:676:LYS:HG3	7:r:925:ASN:OD1	1.76	0.84
4:d:184:ILE:HD11	4:d:243:TRP:CZ2	2.11	0.84
7:g:974:ARG:NH2	7:g:1099:TYR:OH	2.10	0.84
7:g:1087:LYS:HD2	7:g:1117:ILE:HD12	1.58	0.84
6:q:598:GLU:O	6:q:602:LYS:CD	2.25	0.84
7:g:1099:TYR:CD2	7:g:1109:ILE:HG21	2.12	0.84
3:c:158:MET:HE2	3:c:172:ILE:HD11	1.58	0.84
2:m:124:PHE:O	2:m:427:LYS:CD	2.26	0.84
6:f:483:VAL:CG2	6:f:525:ASP:OD1	2.25	0.84
7:g:1059:GLN:CD	7:g:1140:VAL:CG2	2.49	0.83
1:l:556:ASN:O	1:l:559:GLU:HG2	1.78	0.83
3:n:190:LEU:HB2	3:n:489:HIS:HE1	1.06	0.83
4:d:171:ARG:H	4:d:171:ARG:HD2	1.43	0.83
2:m:124:PHE:O	2:m:427:LYS:HD2	1.77	0.83
7:g:984:PHE:CD1	7:g:1005:LEU:HD11	2.14	0.83
7:g:1071:PRO:HG2	7:g:1146:TYR:CE1	2.14	0.83
2:m:111:LEU:CB	2:m:115:TYR:CE2	2.62	0.83
4:d:141:ILE:CD1	4:d:194:TYR:CE2	2.60	0.83
7:g:979:SER:CB	7:g:1102:PHE:CE2	2.62	0.82
4:o:153:TRP:HD1	4:o:171:ARG:CB	1.89	0.82
6:q:676:LYS:CG	7:r:925:ASN:OD1	2.27	0.82
4:d:180:ASN:HB3	4:d:203:HIS:HB2	1.62	0.82
7:g:1078:LEU:HD12	7:g:1079:PRO:O	1.79	0.82
4:d:185:TRP:CE3	4:d:194:TYR:HB3	2.13	0.82
7:g:1049:ASN:OD1	7:g:1055:ASP:HA	1.79	0.82
7:g:1110:ARG:NH1	7:g:1114:TYR:HE2	1.78	0.82
6:f:483:VAL:HG21	6:f:525:ASP:OD1	1.80	0.82
7:g:969:VAL:HA	7:g:1009:LEU:HD22	0.84	0.82
7:g:982:GLU:O	7:g:986:ILE:HD12	1.79	0.82
6:q:679:LYS:HA	7:r:929:LEU:HD21	1.61	0.82
7:g:1091:THR:O	7:g:1094:TYR:HD2	1.61	0.82
6:q:590:LEU:HD21	6:q:663:LEU:HD11	1.62	0.81
7:g:963:LYS:CE	7:g:968:GLU:OE2	2.24	0.81
3:c:163:ASP:HB2	3:c:170:VAL:HB	1.62	0.81
7:g:1078:LEU:CG	7:g:1153:ASN:O	2.29	0.81
3:c:163:ASP:CB	3:c:170:VAL:CB	2.58	0.81
7:g:964:LEU:N	7:g:968:GLU:HB3	1.95	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:e:106:ASP:CG	5:e:148:TRP:CH2	2.59	0.81
5:e:193:ILE:HG23	5:e:205:ALA:HB1	1.63	0.81
7:g:1078:LEU:HD21	7:g:1153:ASN:HB3	1.62	0.81
4:o:169:GLU:CB	4:o:189:SER:CB	2.58	0.81
7:g:1087:LYS:HD2	7:g:1117:ILE:CD1	2.10	0.80
3:c:159:LEU:O	3:c:172:ILE:HD13	1.81	0.80
4:d:185:TRP:CZ3	4:d:194:TYR:HD2	1.99	0.80
7:g:1087:LYS:HE3	7:g:1114:TYR:HD1	0.88	0.80
3:n:190:LEU:HB2	3:n:489:HIS:NE2	1.96	0.80
3:c:163:ASP:N	3:c:170:VAL:HG21	1.97	0.80
4:d:141:ILE:CG1	4:d:194:TYR:HD2	1.93	0.80
5:e:193:ILE:HG12	5:e:194:TYR:N	1.93	0.80
3:c:168:SER:HB3	4:d:24:LEU:HD21	1.64	0.80
6:f:517:LEU:CD2	6:f:525:ASP:OD2	2.30	0.80
7:g:413:VAL:CG1	7:g:484:GLU:HA	2.12	0.80
1:l:563:GLU:OE1	1:l:566:ASN:ND2	2.15	0.80
7:g:1063:LYS:HD2	7:g:1144:LYS:HG3	1.62	0.80
4:d:185:TRP:HE3	4:d:194:TYR:HB3	1.43	0.79
7:g:1060:HIS:O	7:g:1064:ARG:HB2	1.82	0.79
4:d:109:PRO:CB	4:d:112:TYR:CD2	2.63	0.79
4:o:108:ALA:HB2	4:o:153:TRP:HH2	1.46	0.79
1:a:271:ARG:NH1	1:a:295:ASN:OD1	2.16	0.79
7:g:1059:GLN:CD	7:g:1140:VAL:HB	2.07	0.79
7:g:1063:LYS:HE3	7:g:1144:LYS:CG	2.13	0.79
1:l:554:PHE:CD1	1:l:558:LEU:HD12	2.17	0.79
1:l:554:PHE:CD1	1:l:558:LEU:CD1	2.65	0.78
6:f:237:ILE:HG22	6:f:239:LYS:H	1.47	0.78
5:e:194:TYR:CA	5:e:205:ALA:HB2	2.12	0.78
7:g:970:GLN:N	7:g:1009:LEU:CD1	2.47	0.78
4:d:141:ILE:HD12	4:d:194:TYR:CD2	2.19	0.78
7:g:413:VAL:HG13	7:g:485:THR:H	1.47	0.78
4:d:185:TRP:HE3	4:d:194:TYR:CB	1.92	0.78
7:r:1155:VAL:HG12	7:r:1155:VAL:O	1.84	0.78
4:d:109:PRO:CG	4:d:112:TYR:CE2	2.60	0.78
6:q:660:THR:CB	6:q:661:PRO:HD3	2.14	0.78
4:d:185:TRP:CZ3	4:d:194:TYR:CD2	2.72	0.77
3:c:168:SER:CB	4:d:24:LEU:HD11	2.15	0.77
7:r:936:LYS:HZ2	7:r:936:LYS:HB2	1.47	0.77
7:g:974:ARG:CZ	7:g:1109:ILE:CD1	2.59	0.77
7:g:963:LYS:CB	7:g:968:GLU:CB	2.62	0.77
6:q:660:THR:HB	6:q:661:PRO:CD	2.14	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:970:GLN:H	7:g:1009:LEU:CD2	1.97	0.77
7:g:1065:VAL:HG23	7:g:1071:PRO:HD3	1.67	0.77
7:g:1066:PHE:CB	7:g:1146:TYR:CE2	2.67	0.77
7:g:1091:THR:O	7:g:1094:TYR:CD2	2.37	0.77
4:d:154:ALA:CB	4:d:172:LYS:HB2	2.15	0.77
1:l:554:PHE:HD1	1:l:558:LEU:CD1	1.97	0.77
6:q:617:ILE:CG1	6:q:678:LEU:HD23	2.14	0.77
4:o:108:ALA:HB2	4:o:153:TRP:CH2	2.20	0.76
5:e:207:LYS:O	5:e:294:VAL:HG21	1.85	0.76
7:g:413:VAL:HG13	7:g:485:THR:N	1.97	0.76
7:g:1055:ASP:OD1	7:g:1055:ASP:N	2.18	0.76
7:g:969:VAL:CG2	7:g:981:ARG:NH1	2.49	0.76
5:e:141:GLU:HB3	5:e:142:PRO:CD	1.98	0.76
4:d:178:ALA:HB1	4:d:206:TRP:CD2	2.21	0.76
2:m:122:ARG:HH22	2:m:462:ALA:CB	1.98	0.76
7:g:1058:LEU:HD11	7:g:1133:LEU:CD2	2.10	0.76
1:a:935:LEU:H	3:c:698:GLY:HA2	1.48	0.76
7:g:412:GLU:CA	7:g:484:GLU:HB3	2.16	0.76
7:g:1058:LEU:CD1	7:g:1133:LEU:HG	2.16	0.76
7:r:936:LYS:HB2	7:r:936:LYS:NZ	1.99	0.76
6:f:517:LEU:HD22	6:f:525:ASP:OD2	1.85	0.76
7:g:1059:GLN:OE1	7:g:1137:ILE:C	2.28	0.76
7:g:1059:GLN:HE21	7:g:1063:LYS:HB2	1.51	0.76
7:g:441:ARG:H	7:g:441:ARG:CZ	1.99	0.75
7:g:1090:LEU:HD22	7:g:1117:ILE:CD1	2.16	0.75
7:g:969:VAL:HG22	7:g:984:PHE:CZ	2.21	0.75
4:d:192:GLN:HB2	6:q:141:THR:HG21	1.67	0.75
7:g:964:LEU:O	7:g:984:PHE:CZ	2.39	0.75
6:q:656:ARG:O	6:q:660:THR:HB	1.84	0.75
4:d:147:GLY:O	4:d:177:GLY:HA2	1.85	0.75
1:l:558:LEU:HD11	1:l:638:VAL:HG12	1.67	0.75
2:b:569:LYS:HE2	2:b:573:TRP:CZ2	2.17	0.75
7:g:1058:LEU:CB	7:g:1133:LEU:HD23	2.16	0.75
7:g:478:PHE:CD2	7:g:480:LYS:HG2	2.21	0.75
4:d:212:TRP:CH2	4:d:214:PRO:HB3	2.22	0.74
7:g:1101:ARG:C	7:g:1101:ARG:HD3	2.12	0.74
2:b:569:LYS:NZ	2:b:657:TYR:CD1	2.53	0.74
7:g:973:LYS:HB3	7:g:973:LYS:NZ	2.02	0.74
7:g:1087:LYS:HD3	7:g:1117:ILE:HB	1.69	0.74
2:b:569:LYS:HE3	2:b:657:TYR:CB	2.17	0.74
7:g:412:GLU:CB	7:g:484:GLU:HB2	2.04	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:680:ILE:HG13	6:q:681:PRO:HD2	1.67	0.74
7:g:963:LYS:HB3	7:g:968:GLU:CB	2.18	0.74
4:d:171:ARG:HD2	4:d:171:ARG:N	2.02	0.74
7:g:1059:GLN:NE2	7:g:1063:LYS:HB2	2.02	0.74
3:n:485:GLN:HE21	3:n:485:GLN:HA	1.53	0.73
4:d:144:HIS:HE1	4:d:181:LEU:O	1.70	0.73
2:m:122:ARG:CA	2:m:144:VAL:HG21	2.17	0.73
7:g:976:LYS:NZ	7:g:976:LYS:HB3	2.04	0.73
4:d:141:ILE:HB	4:d:185:TRP:CH2	2.23	0.73
7:g:1058:LEU:HD13	7:g:1133:LEU:CB	2.18	0.73
3:n:339:GLN:HE22	6:q:206:ILE:HG21	1.54	0.73
7:g:964:LEU:O	7:g:984:PHE:HZ	1.71	0.73
2:m:465:MET:CE	2:m:469:PHE:HE2	1.99	0.73
6:q:590:LEU:CD2	6:q:663:LEU:HD11	2.18	0.72
7:g:413:VAL:HG21	7:g:484:GLU:HA	1.69	0.72
7:g:1058:LEU:CD1	7:g:1133:LEU:HA	2.20	0.72
6:f:470:LEU:HD22	6:f:471:PRO:CD	2.19	0.72
7:g:970:GLN:CB	7:r:237:MET:CE	2.66	0.72
7:g:1099:TYR:CZ	7:g:1109:ILE:HD12	2.23	0.72
4:d:117:LEU:HD22	4:d:152:SER:O	1.87	0.72
7:g:432:LYS:O	7:g:432:LYS:HG3	1.89	0.72
7:g:1059:GLN:CG	7:g:1140:VAL:HG23	1.79	0.72
6:q:602:LYS:HD2	6:q:602:LYS:N	2.04	0.72
4:d:141:ILE:CD1	4:d:194:TYR:HE2	1.95	0.72
2:b:569:LYS:NZ	2:b:657:TYR:CG	2.58	0.72
7:g:1090:LEU:HD21	7:g:1117:ILE:HD11	1.69	0.72
7:g:1094:TYR:CB	7:g:1110:ARG:CD	2.68	0.72
2:m:467:ASN:O	2:m:471:PHE:HD2	1.70	0.71
4:o:154:ALA:HB1	4:o:155:PRO:CD	2.19	0.71
6:q:500:SER:N	6:q:659:TYR:OH	2.23	0.71
7:g:1063:LYS:HE3	7:g:1144:LYS:HG3	1.71	0.71
6:q:590:LEU:CD2	6:q:663:LEU:CD1	2.67	0.71
4:d:141:ILE:CG2	4:d:194:TYR:CD2	2.73	0.71
3:n:190:LEU:CB	3:n:489:HIS:HE1	1.83	0.71
4:d:200:LEU:HD21	4:d:243:TRP:CB	2.21	0.71
3:c:160:LEU:HB3	3:c:169:GLY:HA3	1.70	0.71
7:g:413:VAL:HG13	7:g:484:GLU:HA	1.72	0.71
7:g:972:CYS:CB	7:g:978:GLY:CA	2.69	0.71
7:g:972:CYS:H	7:g:978:GLY:HA3	1.55	0.71
7:g:1058:LEU:HD21	7:g:1133:LEU:HD21	1.66	0.71
7:g:413:VAL:CG2	7:g:484:GLU:CA	2.52	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:984:PHE:CD1	7:g:1005:LEU:HD12	2.25	0.70
7:g:1023:SER:HB3	7:g:1070:LEU:CD2	2.06	0.70
7:g:1087:LYS:NZ	7:g:1114:TYR:HD1	1.88	0.70
4:o:117:LEU:HD21	4:o:151:ALA:HB1	1.73	0.70
3:c:163:ASP:HB3	3:c:170:VAL:HG21	1.68	0.70
7:g:970:GLN:C	7:g:1009:LEU:HD11	2.16	0.70
4:d:117:LEU:HB2	4:d:153:TRP:CZ2	2.27	0.70
6:f:434:THR:HG21	6:f:468:LEU:CD2	2.21	0.70
1:l:554:PHE:CA	1:l:558:LEU:HD12	2.20	0.70
2:b:569:LYS:HG2	2:b:573:TRP:HE1	1.57	0.70
7:g:413:VAL:HG11	7:g:485:THR:N	1.99	0.70
7:g:1063:LYS:CD	7:g:1144:LYS:HG3	2.21	0.70
7:g:1042:TRP:CH2	7:g:1061:ILE:CG2	2.74	0.70
7:g:1070:LEU:N	7:g:1071:PRO:CD	2.55	0.70
3:c:159:LEU:O	3:c:172:ILE:CD1	2.39	0.69
7:g:413:VAL:HG21	7:g:483:GLU:O	1.92	0.69
7:g:963:LYS:HE3	7:g:968:GLU:CD	2.16	0.69
1:l:556:ASN:O	1:l:559:GLU:OE2	2.09	0.69
6:q:590:LEU:HD21	6:q:663:LEU:CD1	2.22	0.69
2:m:111:LEU:CB	2:m:115:TYR:CZ	2.75	0.69
7:g:1090:LEU:HD22	7:g:1117:ILE:HD11	1.71	0.69
3:c:162:LYS:C	3:c:170:VAL:CG2	2.66	0.69
4:d:192:GLN:HA	4:d:192:GLN:OE1	1.90	0.69
7:g:1078:LEU:HD12	7:g:1079:PRO:C	2.17	0.69
2:m:208:LEU:O	2:m:212:ILE:HG12	1.91	0.69
6:q:206:ILE:O	6:q:210:MET:HB2	1.92	0.69
1:a:295:ASN:ND2	1:a:323:LEU:HB2	2.03	0.69
3:c:167:LYS:O	4:d:12:ILE:HG13	1.92	0.69
7:g:964:LEU:HB3	7:g:984:PHE:CE1	2.27	0.69
7:g:969:VAL:HB	7:g:1009:LEU:CB	2.22	0.69
7:g:984:PHE:HE1	7:g:1005:LEU:HD11	1.45	0.69
3:c:168:SER:CB	4:d:24:LEU:HD21	2.22	0.69
7:g:974:ARG:NE	7:g:1099:TYR:OH	2.25	0.69
2:m:467:ASN:O	2:m:471:PHE:CE2	2.46	0.69
4:o:153:TRP:HA	4:o:172:LYS:O	1.93	0.69
7:g:1036:PHE:CD2	7:g:1093:GLU:OE2	2.46	0.69
7:g:412:GLU:HB2	7:g:484:GLU:CG	2.23	0.68
7:g:1096:SER:C	7:g:1098:THR:H	2.01	0.68
7:g:413:VAL:HG13	7:g:484:GLU:CA	2.23	0.68
7:g:976:LYS:HB3	7:g:976:LYS:HZ3	1.57	0.68
7:g:1050:ALA:HB2	7:g:1129:LEU:HD13	1.73	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:1066:PHE:CD2	7:g:1146:TYR:HD2	2.11	0.68
2:m:124:PHE:O	2:m:427:LYS:HD3	1.93	0.68
4:d:144:HIS:CE1	4:d:181:LEU:O	2.46	0.68
4:d:153:TRP:O	4:d:212:TRP:CD1	2.47	0.68
5:e:101:LEU:O	5:e:146:ARG:HB3	1.93	0.68
7:g:972:CYS:CB	7:g:978:GLY:HA3	2.24	0.68
7:g:1096:SER:O	7:g:1098:THR:N	2.25	0.68
4:d:141:ILE:HG12	4:d:185:TRP:CH2	2.26	0.68
6:f:470:LEU:CG	6:f:471:PRO:HD2	2.22	0.68
3:c:163:ASP:CA	3:c:170:VAL:HG21	2.24	0.68
4:d:141:ILE:CG1	4:d:194:TYR:CD2	2.76	0.68
7:g:1066:PHE:HB3	7:g:1146:TYR:CE2	2.23	0.68
7:g:1091:THR:O	7:g:1094:TYR:HB3	1.94	0.67
7:g:969:VAL:CB	7:g:1009:LEU:HD22	2.23	0.67
7:g:1078:LEU:HD12	7:g:1078:LEU:C	2.18	0.67
6:f:472:ALA:O	6:f:475:ILE:HB	1.94	0.67
6:q:207:SER:O	6:q:211:ILE:CG1	2.42	0.67
4:d:109:PRO:CG	4:d:112:TYR:HD2	2.00	0.67
7:g:970:GLN:HB3	7:r:237:MET:CE	2.24	0.67
7:g:1036:PHE:HE1	7:g:1090:LEU:CG	2.07	0.67
2:m:122:ARG:NH2	2:m:462:ALA:HB3	2.07	0.67
7:r:1045:ILE:HG22	7:r:1058:LEU:HD23	1.76	0.67
7:g:969:VAL:HB	7:g:1009:LEU:CG	2.24	0.67
5:e:193:ILE:O	5:e:205:ALA:HB3	1.94	0.66
7:g:478:PHE:HD2	7:g:480:LYS:HG2	1.60	0.66
6:q:617:ILE:HD12	6:q:678:LEU:HD23	1.67	0.66
1:l:554:PHE:HA	1:l:558:LEU:CD1	2.24	0.66
7:r:1040:LEU:O	7:r:1044:ARG:HD3	1.95	0.66
4:o:150:SER:HB3	4:o:210:VAL:HG22	1.78	0.66
4:d:154:ALA:CB	4:d:172:LYS:O	2.43	0.66
6:f:468:LEU:HD22	6:f:468:LEU:H	1.60	0.66
6:f:483:VAL:HG22	6:f:525:ASP:OD1	1.94	0.66
7:g:969:VAL:CG2	7:g:981:ARG:HH11	2.02	0.66
4:o:117:LEU:HG	4:o:151:ALA:HB3	1.77	0.66
4:o:153:TRP:HD1	4:o:171:ARG:CG	2.02	0.66
7:g:1058:LEU:HB2	7:g:1136:THR:HG21	1.76	0.66
7:g:1094:TYR:CB	7:g:1110:ARG:HD3	2.25	0.66
3:n:485:GLN:HA	3:n:485:GLN:NE2	2.10	0.66
4:d:192:GLN:CG	6:q:141:THR:OG1	2.42	0.66
7:g:483:GLU:HG3	7:g:490:GLU:HB3	1.77	0.66
7:g:969:VAL:CA	7:g:1009:LEU:CD2	2.51	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:1058:LEU:HD11	7:g:1133:LEU:HG	1.76	0.65
7:g:1059:GLN:CD	7:g:1140:VAL:CB	2.68	0.65
1:a:295:ASN:ND2	1:a:323:LEU:CB	2.55	0.65
6:q:697:GLU:C	6:q:698:ASN:OD1	2.39	0.65
3:c:158:MET:HE2	3:c:172:ILE:CD1	2.25	0.65
7:g:1065:VAL:HB	7:g:1070:LEU:HB2	1.78	0.65
6:q:701:ILE:HD13	6:q:701:ILE:N	2.12	0.65
4:d:181:LEU:HD22	4:d:199:THR:OG1	1.97	0.65
5:e:101:LEU:O	5:e:146:ARG:HD2	1.96	0.65
7:g:1058:LEU:CD1	7:g:1133:LEU:CA	2.74	0.65
7:g:1058:LEU:HD12	7:g:1133:LEU:HA	1.77	0.65
6:q:602:LYS:HD2	6:q:602:LYS:H	1.62	0.65
2:m:111:LEU:HB2	2:m:115:TYR:CE2	2.30	0.65
6:q:180:PHE:HE1	6:q:203:SER:HG	0.72	0.65
6:q:598:GLU:O	6:q:602:LYS:HD3	1.94	0.65
5:p:32:HIS:CE1	5:p:52:ARG:HG3	2.31	0.65
6:f:430:PRO:O	6:f:465:ILE:HG12	1.97	0.64
3:n:339:GLN:HE22	6:q:206:ILE:CG1	2.07	0.64
4:o:111:GLU:HB3	4:o:160:GLU:CB	2.27	0.64
7:g:1087:LYS:NZ	7:g:1114:TYR:CD1	2.61	0.64
4:d:141:ILE:CD1	4:d:194:TYR:CD2	2.80	0.64
7:g:1063:LYS:CD	7:g:1140:VAL:HG12	1.99	0.64
7:g:1063:LYS:CE	7:g:1144:LYS:HG3	2.28	0.64
7:g:1078:LEU:HD11	7:g:1153:ASN:HB2	1.79	0.64
6:q:617:ILE:HD11	6:q:678:LEU:HD21	1.63	0.64
2:m:111:LEU:CD1	2:m:115:TYR:CZ	2.67	0.64
6:q:600:TRP:CH2	6:q:607:LEU:HD12	2.33	0.64
7:r:1045:ILE:HG22	7:r:1058:LEU:CD2	2.28	0.64
4:d:171:ARG:H	4:d:171:ARG:CD	2.10	0.64
7:g:1094:TYR:HB2	7:g:1110:ARG:NE	2.11	0.64
1:l:554:PHE:O	1:l:558:LEU:HB2	1.98	0.64
5:e:194:TYR:C	5:e:205:ALA:HB2	2.23	0.64
7:g:412:GLU:N	7:g:484:GLU:CG	2.25	0.64
3:n:488:GLY:HA2	3:n:517:LEU:CD1	2.28	0.64
3:c:166:GLY:O	4:d:12:ILE:HD11	1.97	0.63
3:c:167:LYS:HD3	4:d:43:HIS:HB2	1.79	0.63
5:e:202:LEU:HD12	5:e:202:LEU:N	2.11	0.63
6:f:434:THR:HG21	6:f:468:LEU:HD21	1.80	0.63
1:a:968:ARG:HE	1:a:968:ARG:HA	1.62	0.63
7:r:1155:VAL:O	7:r:1156:GLU:HB2	1.99	0.63
4:d:184:ILE:CD1	4:d:243:TRP:CZ2	2.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:1095:ILE:C	7:g:1097:GLU:H	2.04	0.63
7:g:1087:LYS:CD	7:g:1117:ILE:HD12	2.29	0.63
7:r:1146:TYR:HD1	7:r:1155:VAL:CG1	2.11	0.63
4:d:178:ALA:HB1	4:d:206:TRP:CE2	2.32	0.63
7:g:482:ASN:N	7:g:482:ASN:OD1	2.32	0.63
7:g:1078:LEU:HD21	7:g:1153:ASN:C	2.24	0.63
7:g:1058:LEU:HD13	7:g:1133:LEU:CA	2.29	0.63
1:l:554:PHE:CD1	1:l:558:LEU:HD13	2.33	0.62
3:n:488:GLY:HA2	3:n:517:LEU:HD11	1.81	0.62
6:q:701:ILE:HG22	6:q:705:PHE:CZ	2.34	0.62
7:g:1099:TYR:CE1	7:g:1109:ILE:HD12	2.34	0.62
5:e:193:ILE:CG1	5:e:194:TYR:N	2.53	0.62
6:f:434:THR:HG22	6:f:465:ILE:CG2	2.21	0.62
6:f:240:HIS:CE1	6:f:244:ARG:HE	2.17	0.62
7:g:970:GLN:HE22	7:g:1009:LEU:HD21	1.64	0.62
7:g:1063:LYS:CG	7:g:1140:VAL:CG1	2.57	0.62
6:q:667:LEU:HD12	6:q:667:LEU:O	1.99	0.62
7:g:1059:GLN:NE2	7:g:1063:LYS:CB	2.55	0.61
3:c:168:SER:HB3	4:d:24:LEU:HD22	1.80	0.61
5:e:194:TYR:HA	5:e:205:ALA:HB2	1.80	0.61
4:d:154:ALA:HB2	4:d:172:LYS:O	1.99	0.61
7:g:973:LYS:HB3	7:g:973:LYS:HZ3	1.65	0.61
5:e:182:LYS:HB3	5:e:193:ILE:CD1	2.31	0.61
7:g:1061:ILE:HB	7:g:1079:PRO:HG2	1.81	0.61
7:g:963:LYS:CA	7:g:968:GLU:CB	2.65	0.61
7:g:970:GLN:NE2	7:g:970:GLN:H	1.98	0.61
5:p:228:TYR:CD2	5:p:246:THR:HG22	2.36	0.61
5:e:207:LYS:O	5:e:294:VAL:CG2	2.48	0.61
6:q:590:LEU:HD22	6:q:663:LEU:HD13	1.82	0.61
3:c:161:THR:O	3:c:170:VAL:HG22	2.01	0.61
4:d:112:TYR:OH	4:d:154:ALA:O	2.15	0.61
6:f:169:LEU:HD13	6:f:174:LYS:HG2	1.81	0.61
2:b:569:LYS:CD	2:b:573:TRP:CZ2	2.73	0.60
3:c:163:ASP:CB	3:c:170:VAL:HG11	2.30	0.60
4:d:141:ILE:HB	4:d:185:TRP:CZ3	2.36	0.60
7:g:963:LYS:CB	7:g:968:GLU:CD	2.51	0.60
1:a:922:LEU:HD11	1:a:937:LEU:HD21	1.84	0.60
5:e:182:LYS:HB3	5:e:193:ILE:HD11	1.81	0.60
2:b:569:LYS:HE2	2:b:657:TYR:HB3	1.71	0.60
3:c:162:LYS:C	3:c:170:VAL:HG21	2.25	0.60
2:m:122:ARG:CG	2:m:144:VAL:CG2	2.78	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m:122:ARG:HG3	2:m:144:VAL:CG2	2.32	0.60
4:o:153:TRP:CG	4:o:171:ARG:HB3	2.32	0.60
6:q:206:ILE:O	6:q:210:MET:N	2.31	0.60
6:q:208:ILE:O	6:q:212:LEU:CD2	2.49	0.60
4:d:212:TRP:CZ3	4:d:214:PRO:CB	2.85	0.60
7:g:970:GLN:N	7:g:1009:LEU:HD21	2.11	0.60
1:l:564:ILE:HG22	1:l:564:ILE:O	2.01	0.60
5:p:198:LYS:H	5:p:198:LYS:HD2	1.67	0.60
7:g:970:GLN:N	7:g:1009:LEU:CD2	2.65	0.60
3:c:168:SER:CB	4:d:24:LEU:CD1	2.79	0.59
7:g:413:VAL:HG22	7:g:484:GLU:CB	2.31	0.59
5:p:61:ILE:HD11	5:p:72:ILE:HD12	1.82	0.59
7:g:974:ARG:NH2	7:g:1099:TYR:HH	1.98	0.59
2:m:176:GLU:HB3	2:m:215:SER:O	2.02	0.59
7:r:283:VAL:HG21	7:r:297:LEU:HD12	1.83	0.59
3:c:166:GLY:HA2	3:c:170:VAL:HG11	1.83	0.59
5:e:106:ASP:HB2	5:e:148:TRP:CE2	2.37	0.59
6:q:201:LYS:C	6:q:203:SER:H	2.09	0.59
3:n:199:ILE:HD13	3:n:199:ILE:H	1.68	0.59
6:q:208:ILE:O	6:q:212:LEU:HD23	2.01	0.59
6:q:598:GLU:O	6:q:602:LYS:HD2	2.01	0.59
5:e:140:LEU:HG	5:e:147:SER:HB2	1.83	0.59
7:g:1099:TYR:OH	7:g:1109:ILE:HD11	2.02	0.59
6:q:694:VAL:HG12	6:q:694:VAL:O	2.02	0.59
3:n:190:LEU:CG	3:n:489:HIS:CE1	2.86	0.59
3:n:487:HIS:HB3	3:n:514:GLU:OE2	2.02	0.59
7:g:437:TYR:HE1	7:g:486:ASN:HB2	1.68	0.59
3:c:163:ASP:HB3	3:c:170:VAL:CG1	2.30	0.58
7:g:1023:SER:OG	7:g:1070:LEU:CD2	2.38	0.58
4:o:155:PRO:HG3	4:o:159:GLU:HA	1.84	0.58
2:b:584:GLN:HE21	2:b:585:LYS:H	1.51	0.58
6:q:202:LEU:HD13	6:q:212:LEU:CD2	2.29	0.58
3:c:686:LEU:HD12	3:c:687:PRO:HD2	1.85	0.58
7:g:963:LYS:O	7:g:968:GLU:N	2.37	0.58
3:n:369:LEU:H	3:n:369:LEU:HD23	1.68	0.58
4:d:169:GLU:HA	4:d:186:LYS:HG3	1.84	0.58
6:f:483:VAL:HG21	6:f:525:ASP:CG	2.28	0.58
7:g:1065:VAL:HB	7:g:1070:LEU:CD1	2.33	0.58
7:g:1042:TRP:CH2	7:g:1061:ILE:HG22	2.38	0.58
4:d:200:LEU:HD21	4:d:243:TRP:HB2	1.86	0.58
7:g:479:VAL:HG13	7:g:482:ASN:HD21	1.68	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:n:487:HIS:CB	3:n:514:GLU:OE2	2.52	0.58
7:g:969:VAL:C	7:g:1009:LEU:HD13	2.29	0.58
1:l:527:SER:HB3	1:l:557:CYS:SG	2.44	0.58
5:e:193:ILE:C	5:e:205:ALA:HB3	2.29	0.58
6:q:600:TRP:CG	6:q:604:VAL:HG23	2.39	0.57
7:g:1062:VAL:HG22	7:g:1079:PRO:HD2	1.86	0.57
6:q:590:LEU:CD2	6:q:663:LEU:HD13	2.35	0.57
7:r:642:PHE:HB2	7:r:643:PRO:HD3	1.85	0.57
4:d:141:ILE:CB	4:d:185:TRP:CH2	2.87	0.57
6:f:434:THR:CG2	6:f:465:ILE:HG23	2.22	0.57
4:d:141:ILE:HB	4:d:185:TRP:HH2	1.67	0.57
7:g:964:LEU:CD2	7:g:969:VAL:HG12	2.29	0.57
7:g:970:GLN:HB2	7:r:237:MET:CE	2.33	0.57
1:l:527:SER:OG	1:l:557:CYS:SG	2.58	0.57
4:d:200:LEU:HD23	4:d:234:TRP:CD2	2.39	0.57
7:g:969:VAL:CB	7:g:1009:LEU:HB3	2.34	0.57
7:g:970:GLN:NE2	7:g:1009:LEU:CD2	2.56	0.57
7:r:1044:ARG:N	7:r:1044:ARG:HD2	2.20	0.57
3:c:515:ILE:HG22	3:c:518:LEU:HD12	1.86	0.56
4:o:153:TRP:HB2	4:o:172:LYS:N	2.20	0.56
6:f:470:LEU:HD13	6:f:471:PRO:HD2	0.69	0.56
5:e:192:ILE:HD12	5:e:192:ILE:H	1.70	0.56
6:f:462:ILE:O	6:f:466:ASN:HB2	2.05	0.56
7:g:440:ARG:HB3	7:g:441:ARG:HH21	1.69	0.56
7:g:1059:GLN:HE21	7:g:1063:LYS:N	2.02	0.56
7:g:1059:GLN:CD	7:g:1140:VAL:HG21	2.14	0.56
2:m:115:TYR:CD2	2:m:466:LEU:HD22	2.41	0.56
7:r:1155:VAL:O	7:r:1155:VAL:CG1	2.53	0.56
3:c:393:GLN:HB3	3:c:397:TYR:CD2	2.40	0.56
7:g:412:GLU:CA	7:g:484:GLU:HG2	2.30	0.56
4:d:141:ILE:HG13	4:d:194:TYR:CD2	2.30	0.56
4:d:212:TRP:CZ3	4:d:214:PRO:HB3	2.40	0.56
7:g:970:GLN:HB2	7:r:237:MET:HE3	1.85	0.56
7:g:1059:GLN:HE21	7:g:1063:LYS:H	1.54	0.56
7:g:1087:LYS:HD3	7:g:1117:ILE:CB	2.34	0.56
7:r:1040:LEU:HG	7:r:1044:ARG:CZ	2.36	0.56
3:c:514:GLU:HG2	3:c:516:THR:H	1.70	0.56
6:f:517:LEU:HD21	6:f:525:ASP:OD2	2.04	0.56
7:g:1059:GLN:HE21	7:g:1063:LYS:CA	2.18	0.56
2:m:122:ARG:CB	2:m:144:VAL:HG21	2.34	0.56
3:n:158:MET:HE2	3:n:485:GLN:OE1	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:205:ASN:HB2	6:q:208:ILE:HG12	1.88	0.56
7:g:964:LEU:HB3	7:g:984:PHE:HE1	1.69	0.56
5:p:140:LEU:HD11	5:p:149:THR:HG23	1.88	0.56
4:d:141:ILE:CB	4:d:185:TRP:CZ3	2.89	0.56
7:g:1109:ILE:O	7:g:1113:ILE:HG13	2.04	0.56
4:d:198:SER:O	4:d:200:LEU:HD12	2.06	0.55
5:e:106:ASP:OD1	5:e:148:TRP:CH2	2.59	0.55
5:e:193:ILE:HG23	5:e:205:ALA:CB	2.36	0.55
7:g:628:HIS:CE1	7:g:630:THR:HA	2.42	0.55
7:g:1065:VAL:HA	7:g:1070:LEU:HD12	1.88	0.55
5:e:192:ILE:HD12	5:e:192:ILE:N	2.21	0.55
7:g:1087:LYS:HD2	7:g:1117:ILE:HD13	1.88	0.55
7:r:90:ILE:HD11	7:r:468:LEU:HB2	1.88	0.55
6:f:465:ILE:HG22	6:f:465:ILE:O	2.07	0.55
6:q:600:TRP:CD2	6:q:604:VAL:HG23	2.36	0.55
4:d:165:ASN:CB	6:q:279:TYR:OH	2.55	0.55
7:g:984:PHE:HE1	7:g:1005:LEU:CD1	2.08	0.55
1:l:579:ILE:H	1:l:580:PRO:HD2	1.72	0.55
3:n:339:GLN:NE2	6:q:206:ILE:CG2	2.64	0.55
4:o:117:LEU:CD2	4:o:151:ALA:HB1	2.37	0.55
4:d:144:HIS:CE1	4:d:177:GLY:H	2.24	0.55
4:d:185:TRP:HZ3	4:d:194:TYR:CD2	2.23	0.55
7:g:963:LYS:O	7:g:968:GLU:CA	2.53	0.55
7:g:1045:ILE:O	7:g:1057:LEU:HD21	2.07	0.55
7:g:1110:ARG:NH1	7:g:1114:TYR:CE2	2.69	0.55
1:l:527:SER:CB	1:l:557:CYS:SG	2.95	0.55
7:r:1045:ILE:CG2	7:r:1058:LEU:HD23	2.36	0.55
2:b:569:LYS:CG	2:b:573:TRP:CE2	2.58	0.54
6:q:676:LYS:HD3	7:r:925:ASN:ND2	2.21	0.54
3:n:339:GLN:HE22	6:q:206:ILE:CG2	2.20	0.54
6:q:690:PHE:O	6:q:694:VAL:HG23	2.07	0.54
7:g:1059:GLN:NE2	7:g:1063:LYS:H	2.05	0.54
7:g:441:ARG:H	7:g:441:ARG:NE	2.04	0.54
4:d:185:TRP:CE3	4:d:194:TYR:CD2	2.96	0.54
7:g:970:GLN:CA	7:g:1009:LEU:HD11	2.37	0.54
6:q:676:LYS:HD3	7:r:925:ASN:OD1	2.08	0.54
1:a:978:ALA:HB2	1:a:1006:VAL:HG11	1.90	0.54
6:f:434:THR:HG21	6:f:468:LEU:HD23	1.90	0.54
7:g:1055:ASP:HB3	7:g:1132:LYS:HB3	1.89	0.54
7:g:1063:LYS:HE3	7:g:1144:LYS:HD3	1.89	0.54
7:g:1093:GLU:O	7:g:1093:GLU:HG2	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:o:117:LEU:HG	4:o:151:ALA:CB	2.38	0.54
7:g:1063:LYS:CD	7:g:1140:VAL:HG13	2.04	0.54
2:m:122:ARG:O	2:m:122:ARG:HG2	2.07	0.54
6:f:668:HIS:CE1	6:f:718:VAL:HG22	2.43	0.54
2:m:594:ILE:HG21	2:m:628:ALA:HA	1.90	0.54
5:p:32:HIS:HE1	5:p:52:ARG:HG3	1.73	0.54
7:r:1046:VAL:HG13	7:r:1123:LEU:CD1	2.32	0.54
4:d:192:GLN:HG2	6:q:141:THR:CB	2.38	0.53
7:g:413:VAL:CB	7:g:484:GLU:HA	2.36	0.53
7:g:1110:ARG:HH11	7:g:1114:TYR:HE2	1.54	0.53
2:m:123:VAL:HG22	2:m:426:ALA:HB1	1.89	0.53
5:e:206:ALA:HB1	5:e:294:VAL:HG23	1.88	0.53
7:g:437:TYR:CE1	7:g:486:ASN:HB2	2.43	0.53
6:q:700:LYS:HD2	6:q:702:TYR:CE2	2.43	0.53
4:d:185:TRP:HZ3	4:d:194:TYR:CB	2.10	0.53
7:g:1036:PHE:CE1	7:g:1090:LEU:HG	2.43	0.53
7:g:1096:SER:C	7:g:1098:THR:N	2.67	0.53
3:c:606:ARG:HA	3:c:609:TRP:HE1	1.72	0.53
6:q:355:LEU:HB2	6:q:356:PRO:HD3	1.90	0.53
6:q:670:LYS:HE2	6:q:670:LYS:HA	1.90	0.53
6:f:211:ILE:HG23	6:f:243:TRP:HE1	1.73	0.53
7:g:1086:ASP:OD1	7:g:1090:LEU:HD13	2.05	0.53
6:q:77:LEU:HD11	6:q:122:VAL:HG22	1.90	0.53
6:q:600:TRP:C	6:q:604:VAL:CG2	2.70	0.53
3:c:163:ASP:CB	3:c:170:VAL:CG1	2.86	0.53
6:f:245:ARG:HB3	6:f:314:ILE:H	1.74	0.53
4:o:117:LEU:HD11	4:o:151:ALA:HB1	1.91	0.53
6:q:696:ASN:O	6:q:698:ASN:OD1	2.26	0.53
5:e:106:ASP:OD2	5:e:150:LEU:HD22	2.09	0.53
3:c:163:ASP:CB	3:c:170:VAL:HB	2.31	0.53
7:g:964:LEU:CA	7:g:968:GLU:HB3	2.38	0.53
7:g:1101:ARG:HD3	7:g:1101:ARG:O	2.08	0.53
2:m:123:VAL:CG2	2:m:426:ALA:HB1	2.38	0.53
7:g:1066:PHE:CE2	7:g:1146:TYR:CD2	2.97	0.52
6:q:664:LEU:HD12	6:q:664:LEU:O	2.09	0.52
7:g:970:GLN:H	7:g:970:GLN:CD	2.17	0.52
2:m:465:MET:HE3	2:m:469:PHE:HE2	1.57	0.52
4:o:161:ASP:HA	4:o:166:GLY:O	2.08	0.52
5:e:191:ALA:HB3	5:e:208:LEU:CD1	2.19	0.52
7:g:1045:ILE:CD1	7:g:1061:ILE:CG1	2.67	0.52
1:l:752:HIS:H	1:l:780:HIS:CE1	2.27	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:590:LEU:HD22	6:q:663:LEU:CD1	2.39	0.52
7:g:969:VAL:C	7:g:1009:LEU:CD1	2.82	0.52
7:g:1036:PHE:CE1	7:g:1090:LEU:CG	2.88	0.52
7:g:1062:VAL:HG11	7:g:1137:ILE:HG23	1.91	0.52
2:m:122:ARG:CA	2:m:144:VAL:CG2	2.82	0.52
6:q:602:LYS:CD	6:q:602:LYS:H	2.21	0.52
7:g:1136:THR:HG23	7:g:1137:ILE:HG13	1.92	0.52
6:f:503:VAL:HG12	6:f:545:ALA:HA	1.92	0.52
7:g:1059:GLN:NE2	7:g:1063:LYS:N	2.57	0.52
7:g:1063:LYS:CE	7:g:1144:LYS:CG	2.84	0.52
7:g:1087:LYS:CD	7:g:1117:ILE:CD1	2.86	0.52
4:d:178:ALA:HB1	4:d:206:TRP:CG	2.45	0.52
4:d:187:TYR:CD1	4:d:187:TYR:C	2.88	0.52
7:g:984:PHE:HD1	7:g:1005:LEU:HD12	1.70	0.52
6:q:207:SER:O	6:q:211:ILE:HG13	2.10	0.52
7:g:973:LYS:NZ	7:g:973:LYS:CB	2.73	0.52
5:p:53:ALA:O	5:p:54:HIS:CD2	2.63	0.52
4:d:184:ILE:HG13	4:d:243:TRP:HZ2	1.75	0.51
4:d:200:LEU:HB3	4:d:234:TRP:CZ2	2.45	0.51
7:g:413:VAL:HG12	7:g:429:VAL:O	2.10	0.51
2:m:118:LEU:HD13	2:m:122:ARG:NE	2.13	0.51
4:o:153:TRP:CD1	4:o:171:ARG:HG2	2.44	0.51
4:d:185:TRP:CE3	4:d:194:TYR:CG	2.97	0.51
7:g:974:ARG:CZ	7:g:1099:TYR:HH	2.13	0.51
7:g:1046:VAL:HG12	7:g:1046:VAL:O	2.11	0.51
6:q:207:SER:C	6:q:211:ILE:CD1	2.84	0.51
7:g:974:ARG:NH1	7:g:1109:ILE:CG1	2.73	0.51
7:g:68:ILE:CG1	7:g:480:LYS:CD	2.72	0.51
7:g:1036:PHE:HE1	7:g:1090:LEU:HG	1.74	0.51
7:g:1058:LEU:HD13	7:g:1133:LEU:HD23	0.70	0.51
7:g:1095:ILE:HG13	7:g:1097:GLU:H	1.76	0.51
5:e:106:ASP:OD2	5:e:137:TYR:HE1	1.93	0.51
5:e:242:ILE:HD11	5:e:300:HIS:CD2	2.46	0.51
7:g:1063:LYS:HE3	7:g:1144:LYS:CD	2.40	0.51
6:q:676:LYS:CD	7:r:925:ASN:OD1	2.58	0.51
5:e:193:ILE:C	5:e:205:ALA:CB	2.84	0.51
7:r:92:MET:HE2	7:r:466:TYR:CE2	2.46	0.50
7:r:936:LYS:NZ	7:r:936:LYS:CB	2.73	0.50
3:c:168:SER:CB	4:d:24:LEU:CD2	2.81	0.50
4:d:141:ILE:HG21	4:d:194:TYR:CG	2.43	0.50
7:g:1086:ASP:C	7:g:1090:LEU:HD13	2.28	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:q:207:SER:HA	6:q:211:ILE:HG13	1.92	0.50
6:q:602:LYS:CD	6:q:602:LYS:N	2.73	0.50
7:g:969:VAL:CG2	7:g:984:PHE:CZ	2.87	0.50
7:g:1058:LEU:HD12	7:g:1133:LEU:CA	2.39	0.50
5:e:191:ALA:HB1	5:e:208:LEU:HD12	1.84	0.50
7:g:964:LEU:HB3	7:g:984:PHE:CZ	2.46	0.50
7:g:974:ARG:HD3	7:g:1109:ILE:CD1	2.41	0.50
6:q:108:LYS:HA	6:q:111:GLN:HE21	1.76	0.50
4:d:192:GLN:HG2	6:q:141:THR:HG1	1.72	0.50
1:l:563:GLU:C	1:l:565:THR:H	2.18	0.50
6:q:109:LEU:HD23	6:q:298:ILE:HD13	1.94	0.50
4:d:192:GLN:HB2	6:q:141:THR:CG2	2.40	0.50
4:d:255:ASP:HB3	4:d:274:GLY:H	1.76	0.50
5:p:20:TYR:CD2	5:p:66:PRO:HG2	2.47	0.50
1:a:845:ILE:HA	1:a:848:SER:HB3	1.93	0.50
5:e:182:LYS:CB	5:e:193:ILE:HD11	2.41	0.50
7:g:66:ARG:HG2	7:g:482:ASN:HB3	1.94	0.50
7:g:430:ASN:HB2	7:g:485:THR:HG22	1.92	0.50
1:l:570:LEU:HD21	1:l:636:THR:HG23	1.94	0.50
3:n:487:HIS:HB3	3:n:514:GLU:CD	2.36	0.50
2:m:219:PRO:HG2	2:m:222:GLU:OE2	2.12	0.50
6:f:470:LEU:CD2	6:f:471:PRO:CD	2.88	0.49
7:g:964:LEU:CD2	7:g:969:VAL:HG11	2.32	0.49
6:q:670:LYS:HA	6:q:670:LYS:CE	2.41	0.49
1:a:779:LEU:O	1:a:780:HIS:CG	2.65	0.49
1:a:1004:ILE:CG2	1:a:1031:ARG:HE	2.25	0.49
2:b:569:LYS:HZ1	2:b:657:TYR:HD1	1.48	0.49
5:e:106:ASP:OD2	5:e:137:TYR:CE1	2.65	0.49
7:g:1050:ALA:HB1	7:g:1123:LEU:HD13	1.93	0.49
7:g:1055:ASP:C	7:g:1057:LEU:N	2.50	0.49
4:o:154:ALA:H	4:o:172:LYS:H	1.59	0.49
3:c:359:LYS:HE2	3:c:369:LEU:H	1.76	0.49
7:g:964:LEU:HA	7:g:968:GLU:HB3	1.93	0.49
7:g:976:LYS:NZ	7:g:976:LYS:CB	2.73	0.49
7:g:1062:VAL:CG2	7:g:1079:PRO:HD2	2.43	0.49
3:n:595:ARG:HE	3:n:595:ARG:HA	1.77	0.49
1:a:325:ALA:HB2	1:a:329:TRP:CD1	2.47	0.49
7:g:974:ARG:NE	7:g:1109:ILE:HD11	2.22	0.49
7:g:982:GLU:O	7:g:986:ILE:CD1	2.58	0.49
7:g:1078:LEU:HD12	7:g:1079:PRO:N	2.27	0.49
7:g:1090:LEU:CD2	7:g:1117:ILE:CD1	2.79	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:o:117:LEU:CG	4:o:151:ALA:HB1	2.43	0.49
6:q:506:ILE:O	6:q:510:LEU:HD12	2.12	0.49
4:d:154:ALA:HB1	4:d:172:LYS:HB2	1.93	0.49
7:g:1036:PHE:CD1	7:g:1090:LEU:HD12	2.43	0.49
7:g:1060:HIS:O	7:g:1064:ARG:CB	2.57	0.49
6:f:468:LEU:HD22	6:f:468:LEU:N	2.25	0.49
4:o:108:ALA:CB	4:o:153:TRP:CH2	2.92	0.49
2:b:569:LYS:HE2	2:b:573:TRP:CE2	2.47	0.49
7:g:1058:LEU:HD13	7:g:1133:LEU:HA	1.87	0.49
4:d:154:ALA:HB3	4:d:172:LYS:O	2.13	0.49
7:g:441:ARG:NE	7:g:441:ARG:N	2.61	0.49
7:g:970:GLN:NE2	7:g:970:GLN:N	2.60	0.49
7:g:972:CYS:HB2	7:g:978:GLY:HA3	1.95	0.49
7:g:981:ARG:HG3	7:g:985:ASN:OD1	2.13	0.49
7:g:1066:PHE:CD1	7:g:1146:TYR:CZ	3.01	0.49
6:q:91:LEU:HB2	6:q:111:GLN:HG2	1.94	0.49
7:g:1048:LEU:HB2	7:g:1057:LEU:CD2	2.42	0.49
1:l:531:LYS:HE2	1:l:556:ASN:HD22	1.78	0.49
4:d:212:TRP:CE3	4:d:213:SER:C	2.91	0.49
7:g:969:VAL:CB	7:g:1009:LEU:CB	2.91	0.49
2:b:353:TRP:HE1	2:b:379:LEU:HA	1.78	0.48
7:g:1078:LEU:HD11	7:g:1153:ASN:CB	2.43	0.48
2:m:122:ARG:CG	2:m:144:VAL:HG23	2.42	0.48
7:g:1070:LEU:N	7:g:1071:PRO:HD3	2.28	0.48
4:d:147:GLY:O	4:d:177:GLY:CA	2.60	0.48
7:g:1059:GLN:NE2	7:g:1140:VAL:HB	2.27	0.48
7:g:1078:LEU:HD21	7:g:1153:ASN:CB	2.39	0.48
7:g:1099:TYR:HA	7:g:1102:PHE:CD1	2.48	0.48
1:l:88:TYR:CG	1:l:88:TYR:O	2.66	0.48
3:n:487:HIS:HB3	3:n:514:GLU:OE1	2.13	0.48
4:d:112:TYR:HD1	4:d:171:ARG:HG3	1.77	0.48
5:e:8:HIS:CE1	5:e:34:LYS:HG3	2.48	0.48
4:o:117:LEU:HD22	4:o:153:TRP:CZ3	2.49	0.48
6:q:660:THR:CB	6:q:661:PRO:CD	2.80	0.48
3:c:162:LYS:C	3:c:170:VAL:HG23	2.38	0.48
4:d:181:LEU:CD2	4:d:199:THR:OG1	2.62	0.48
7:g:57:ASN:HD22	7:g:114:GLN:H	1.62	0.48
7:g:440:ARG:HB3	7:g:441:ARG:NH2	2.29	0.48
4:o:117:LEU:HD21	4:o:151:ALA:C	2.38	0.48
3:n:190:LEU:HD13	3:n:489:HIS:ND1	2.29	0.48
4:d:48:THR:C	4:d:49:LEU:HD12	2.38	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:e:196:ARG:HG3	5:e:202:LEU:HG	1.95	0.48
7:g:981:ARG:C	7:g:983:VAL:N	2.71	0.48
7:g:1048:LEU:HB2	7:g:1057:LEU:HD21	1.96	0.48
4:o:249:LYS:HB2	4:o:253:PHE:CE2	2.49	0.48
6:f:470:LEU:CD1	6:f:471:PRO:CD	2.50	0.48
7:g:413:VAL:HG13	7:g:484:GLU:C	2.38	0.48
7:g:1099:TYR:HA	7:g:1102:PHE:HD1	1.79	0.48
3:n:190:LEU:HD22	3:n:489:HIS:CD2	2.48	0.48
4:d:144:HIS:CG	4:d:177:GLY:HA3	2.49	0.48
6:f:668:HIS:HE1	6:f:718:VAL:HG22	1.79	0.48
7:g:1045:ILE:O	7:g:1057:LEU:CD2	2.62	0.48
7:g:1071:PRO:HG2	7:g:1146:TYR:OH	2.14	0.48
4:o:117:LEU:CG	4:o:151:ALA:CB	2.92	0.48
4:d:185:TRP:CZ3	4:d:194:TYR:CG	3.01	0.47
3:c:160:LEU:CB	3:c:169:GLY:HA3	2.41	0.47
6:f:200:ALA:HB1	6:f:206:ILE:HA	1.96	0.47
4:o:112:TYR:HB3	4:o:171:ARG:HD3	1.96	0.47
4:o:117:LEU:HD21	4:o:152:SER:N	2.29	0.47
6:q:114:LYS:O	6:q:118:GLN:HG3	2.14	0.47
7:g:970:GLN:HB3	7:r:237:MET:HE1	1.94	0.47
7:g:1065:VAL:HG11	7:g:1076:PHE:HE2	1.80	0.47
2:m:107:TYR:CZ	2:m:111:LEU:HD11	2.49	0.47
2:m:227:VAL:HG11	2:m:248:LEU:HD22	1.95	0.47
4:d:165:ASN:N	6:q:279:TYR:OH	2.43	0.47
7:g:1091:THR:N	7:g:1092:PRO:HD2	2.29	0.47
4:o:88:ARG:HG3	4:o:89:TRP:H	1.79	0.47
5:e:194:TYR:N	5:e:205:ALA:CB	2.78	0.47
6:f:436:LEU:HD13	6:f:441:CYS:HA	1.95	0.47
7:g:1050:ALA:CB	7:g:1123:LEU:HD13	2.45	0.47
7:r:1146:TYR:HE1	7:r:1155:VAL:HG11	1.72	0.47
7:g:970:GLN:CB	7:r:237:MET:HE3	2.38	0.47
7:g:1098:THR:HG23	7:g:1099:TYR:CD2	2.49	0.47
6:q:442:LEU:HB3	6:q:478:ARG:HB2	1.97	0.47
7:r:929:LEU:O	7:r:932:LEU:HB2	2.15	0.47
1:a:6:ARG:HA	1:a:484:TYR:HA	1.96	0.47
7:g:1058:LEU:HD22	7:g:1133:LEU:HD22	1.85	0.47
2:m:219:PRO:HG2	2:m:222:GLU:HG3	1.96	0.47
7:g:1065:VAL:CB	7:g:1070:LEU:HB2	2.43	0.47
6:q:201:LYS:C	6:q:203:SER:N	2.73	0.47
1:a:935:LEU:H	3:c:698:GLY:CA	2.24	0.47
6:f:486:GLU:O	6:f:532:ALA:HB1	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:g:1049:ASN:OD1	7:g:1055:ASP:CA	2.59	0.47
6:q:219:LEU:HD12	6:q:235:GLN:HE22	1.80	0.47
6:q:436:LEU:HD23	6:q:437:ASN:H	1.79	0.47
7:r:134:VAL:HA	7:r:207:LYS:HA	1.96	0.47
5:e:207:LYS:HB3	5:e:207:LYS:HE2	1.37	0.46
5:p:303:HIS:CE1	5:p:329:ARG:HD2	2.50	0.46
7:g:233:ILE:HD13	7:g:233:ILE:H	1.81	0.46
7:r:1040:LEU:HD21	7:r:1044:ARG:NH2	2.30	0.46
7:g:964:LEU:C	7:g:984:PHE:HZ	2.22	0.46
7:g:1071:PRO:O	7:g:1074:ASN:N	2.48	0.46
1:l:1005:ASN:HD22	2:m:692:ILE:HG12	1.80	0.46
6:q:664:LEU:HD12	6:q:664:LEU:C	2.40	0.46
1:a:729:ILE:HD13	1:a:762:MET:SD	2.54	0.46
6:f:110:MET:HE1	6:f:294:LEU:HD11	1.98	0.46
5:p:59:VAL:HG11	5:p:77:TYR:CZ	2.51	0.46
2:b:625:ALA:O	2:b:629:VAL:HG23	2.15	0.46
3:c:393:GLN:CB	3:c:397:TYR:CD2	2.99	0.46
2:m:163:LYS:HZ1	2:m:214:ARG:NH2	2.13	0.46
4:d:63:HIS:CD2	4:d:109:PRO:HA	2.50	0.46
7:g:441:ARG:CZ	7:g:441:ARG:N	2.75	0.46
7:r:22:GLU:CG	7:r:607:SER:H	2.28	0.46
5:e:72:ILE:HD12	5:e:98:TRP:CZ3	2.51	0.46
5:e:102:CYS:HB3	5:e:146:ARG:CB	2.46	0.46
7:g:964:LEU:CA	7:g:984:PHE:HZ	2.29	0.46
7:g:970:GLN:CB	7:r:237:MET:HE1	2.45	0.46
4:o:153:TRP:HD1	4:o:171:ARG:HG2	1.78	0.46
7:r:1030:ASN:HD21	7:r:1032:GLU:HG3	1.81	0.46
6:f:482:ARG:HH22	6:f:517:LEU:HD21	1.81	0.46
1:a:295:ASN:HD22	1:a:323:LEU:HB3	1.69	0.46
3:c:304:VAL:HG23	3:c:305:ARG:H	1.81	0.46
5:e:183:LEU:O	5:e:193:ILE:HG13	2.16	0.46
5:e:194:TYR:N	5:e:205:ALA:HB2	2.31	0.46
7:g:1132:LYS:O	7:g:1136:THR:CG2	2.54	0.46
1:l:817:VAL:HG23	1:l:820:ARG:H	1.80	0.46
6:q:449:LEU:HD22	6:q:462:ILE:HG13	1.97	0.46
6:q:717:LEU:HA	6:q:720:ARG:HE	1.80	0.46
1:a:396:ASP:HA	1:a:400:LYS:HB2	1.97	0.45
5:e:202:LEU:H	5:e:202:LEU:CD1	2.16	0.45
2:m:122:ARG:NH2	2:m:462:ALA:CB	2.74	0.45
4:o:117:LEU:CD2	4:o:151:ALA:C	2.89	0.45
6:q:205:ASN:HB2	6:q:208:ILE:CG1	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:r:384:ASN:HD21	7:r:440:ARG:HG2	1.81	0.45
7:g:412:GLU:CA	7:g:484:GLU:CB	2.84	0.45
6:q:700:LYS:HA	6:q:700:LYS:HD3	1.61	0.45
7:g:480:LYS:HB2	7:g:481:GLU:H	1.59	0.45
7:g:979:SER:OG	7:g:1102:PHE:CE2	2.67	0.45
2:m:386:ILE:HD13	2:m:395:VAL:HG12	1.98	0.45
3:n:190:LEU:CA	3:n:489:HIS:HE1	2.29	0.45
1:a:151:HIS:CD2	1:a:193:HIS:HE1	2.33	0.45
3:n:190:LEU:HD22	3:n:489:HIS:NE2	2.32	0.45
4:d:192:GLN:HG2	6:q:141:THR:CG2	2.47	0.45
6:f:470:LEU:CG	6:f:471:PRO:CD	2.89	0.45
7:g:1070:LEU:H	7:g:1071:PRO:HD3	1.82	0.45
1:a:880:ARG:HH22	1:a:913:ILE:HG22	1.82	0.45
7:g:672:LEU:HD13	7:g:672:LEU:C	2.42	0.45
7:g:969:VAL:HB	7:g:1009:LEU:HB3	1.95	0.45
7:g:1052:ASN:HB2	7:g:1053:GLU:H	1.54	0.45
6:q:436:LEU:HD23	6:q:437:ASN:N	2.32	0.45
6:q:688:LEU:HD22	6:q:688:LEU:HA	1.81	0.45
7:r:482:ASN:HA	7:r:486:ASN:HD22	1.81	0.45
7:r:528:GLU:HG3	7:r:571:VAL:HG22	1.97	0.45
7:g:413:VAL:HG21	7:g:483:GLU:C	2.41	0.45
7:g:1069:GLU:HB3	7:g:1072:LYS:HG3	1.98	0.45
6:q:676:LYS:HB2	6:q:676:LYS:HE3	1.46	0.45
7:r:22:GLU:HG2	7:r:607:SER:H	1.81	0.45
7:r:381:TYR:CE2	7:r:440:ARG:HA	2.51	0.45
4:d:198:SER:O	4:d:200:LEU:CD1	2.65	0.45
7:g:412:GLU:CB	7:g:484:GLU:CG	2.88	0.45
7:g:1069:GLU:HB3	7:g:1072:LYS:CG	2.47	0.45
6:q:600:TRP:HH2	6:q:607:LEU:HD12	1.79	0.45
1:a:151:HIS:CG	1:a:193:HIS:HE1	2.35	0.45
2:b:129:ILE:O	2:b:136:PHE:CD1	2.70	0.45
3:c:381:TRP:H	3:c:381:TRP:CD1	2.34	0.45
4:o:153:TRP:CE2	4:o:171:ARG:HD2	2.32	0.45
6:q:206:ILE:O	6:q:210:MET:CB	2.65	0.45
4:d:187:TYR:CD1	4:d:187:TYR:O	2.70	0.44
7:g:981:ARG:C	7:g:983:VAL:H	2.24	0.44
1:l:300:MET:HB2	1:l:373:PHE:CD2	2.52	0.44
4:d:195:VAL:O	4:d:195:VAL:HG22	2.16	0.44
5:e:16:VAL:HG23	5:e:63:TRP:CD1	2.52	0.44
7:g:1059:GLN:HE21	7:g:1063:LYS:HB3	1.72	0.44
1:l:554:PHE:HD1	1:l:558:LEU:HD13	1.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m:210:ASN:O	2:m:213:ASN:HB2	2.18	0.44
7:r:270:LEU:HD23	7:r:270:LEU:HA	1.85	0.44
7:r:585:LEU:HD22	7:r:690:ARG:HH21	1.82	0.44
7:r:642:PHE:CB	7:r:643:PRO:HD3	2.47	0.44
4:d:192:GLN:HB3	4:d:193:THR:H	1.50	0.44
7:g:1071:PRO:O	7:g:1074:ASN:HA	2.17	0.44
7:g:1082:ASP:HB3	7:g:1086:ASP:HB2	1.98	0.44
1:a:397:ILE:HG23	1:a:398:VAL:HG23	1.99	0.44
7:g:760:ILE:HG23	7:g:774:PHE:CD2	2.52	0.44
7:g:974:ARG:CD	7:g:1109:ILE:HD11	2.48	0.44
2:m:390:TRP:CG	2:m:391:GLU:H	2.35	0.44
2:m:465:MET:HE3	2:m:469:PHE:CD2	2.46	0.44
7:r:833:GLU:HA	7:r:836:PHE:CD2	2.52	0.44
1:a:295:ASN:O	1:a:323:LEU:HD23	2.18	0.44
7:g:1058:LEU:HD12	7:g:1133:LEU:N	2.32	0.44
1:l:679:LEU:HB3	1:l:705:LEU:HD22	1.98	0.44
4:o:153:TRP:HB2	4:o:171:ARG:C	2.42	0.44
3:c:160:LEU:CD2	3:c:169:GLY:CA	2.82	0.44
4:d:173:PHE:O	4:d:185:TRP:CD1	2.70	0.44
6:f:170:ASP:H	6:f:173:ASP:HB2	1.83	0.44
7:g:67:TYR:C	7:g:480:LYS:HD3	2.42	0.44
7:g:1012:GLU:HA	7:g:1015:LEU:HD12	1.99	0.44
2:m:213:ASN:N	2:m:213:ASN:HD22	2.14	0.44
3:n:205:ASN:HD22	3:n:504:GLU:HG3	1.83	0.44
6:q:207:SER:C	6:q:211:ILE:HD12	2.34	0.44
7:r:930:SER:C	7:r:932:LEU:H	2.25	0.44
7:r:932:LEU:HD22	7:r:932:LEU:HA	1.85	0.44
6:q:91:LEU:CB	6:q:111:GLN:HG2	2.48	0.44
7:r:480:LYS:HE2	7:r:486:ASN:HD21	1.82	0.44
6:f:331:VAL:HG22	6:f:334:ARG:HH22	1.82	0.44
7:g:716:ASN:HA	7:g:780:LEU:HD21	2.00	0.44
4:d:117:LEU:HD23	4:d:152:SER:O	2.12	0.44
7:g:1036:PHE:HB2	7:g:1089:LEU:HD13	2.00	0.44
7:r:620:ASN:HA	7:r:623:LEU:HD12	1.99	0.44
4:d:200:LEU:HD21	4:d:243:TRP:CG	2.53	0.43
6:f:218:TYR:HB2	6:f:227:ILE:HD12	1.99	0.43
6:f:466:ASN:HD22	6:f:466:ASN:HA	1.57	0.43
7:g:379:SER:HB3	7:g:439:MET:HB3	1.99	0.43
7:g:415:SER:HB2	7:g:482:ASN:ND2	2.33	0.43
7:g:1095:ILE:C	7:g:1097:GLU:N	2.73	0.43
6:q:207:SER:CB	6:q:211:ILE:HD11	2.40	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:r:609:VAL:HG12	7:r:613:ILE:HD12	2.00	0.43
6:f:9:THR:HA	6:f:12:PHE:CE2	2.54	0.43
6:f:322:LEU:HD12	6:f:322:LEU:H	1.84	0.43
2:m:111:LEU:O	2:m:115:TYR:CG	2.71	0.43
2:m:118:LEU:HD21	2:m:147:ALA:CB	2.48	0.43
6:q:363:VAL:HG21	6:q:408:ASP:HA	2.01	0.43
7:r:66:ARG:HB3	7:r:443:TRP:CH2	2.54	0.43
7:r:549:MET:HA	7:r:556:HIS:CG	2.54	0.43
7:r:642:PHE:HB2	7:r:643:PRO:CD	2.48	0.43
2:b:461:MET:HA	5:e:337:ASN:HD21	1.83	0.43
3:c:166:GLY:HA2	3:c:170:VAL:CG1	2.46	0.43
7:g:760:ILE:HD13	7:g:774:PHE:HB3	2.01	0.43
2:m:163:LYS:NZ	2:m:214:ARG:NH2	2.66	0.43
6:q:188:ILE:HD12	6:q:197:LEU:HD12	2.00	0.43
2:b:129:ILE:HB	2:b:130:GLY:H	1.45	0.43
2:b:569:LYS:HG3	2:b:573:TRP:HZ2	1.42	0.43
2:b:657:TYR:CZ	3:c:109:THR:CA	2.92	0.43
4:d:178:ALA:O	4:d:206:TRP:CD1	2.71	0.43
7:g:413:VAL:N	7:g:484:GLU:HB3	2.32	0.43
7:g:1023:SER:CB	7:g:1070:LEU:HD22	2.12	0.43
1:l:420:PHE:HA	1:l:450:LEU:CD2	2.49	0.43
1:l:579:ILE:H	1:l:580:PRO:CD	2.31	0.43
7:g:1058:LEU:HB2	7:g:1136:THR:CG2	2.46	0.43
2:m:219:PRO:HG2	2:m:222:GLU:CG	2.49	0.43
2:m:479:LYS:HA	2:m:482:TRP:CD1	2.53	0.43
5:e:137:TYR:CE1	5:e:150:LEU:HD13	2.54	0.43
2:m:219:PRO:HD2	2:m:222:GLU:HB2	2.00	0.43
6:q:598:GLU:O	6:q:602:LYS:CE	2.67	0.43
1:a:259:MET:HE2	1:a:289:THR:HG21	2.00	0.43
1:l:559:GLU:OE1	1:l:559:GLU:HA	2.17	0.43
6:q:709:GLY:HA3	6:q:712:LYS:NZ	2.34	0.43
2:m:115:TYR:CD2	2:m:466:LEU:HD13	2.54	0.43
7:g:466:TYR:CD1	7:g:466:TYR:N	2.87	0.42
2:m:111:LEU:CD1	2:m:115:TYR:HH	2.01	0.42
3:n:199:ILE:H	3:n:199:ILE:CD1	2.31	0.42
6:q:205:ASN:N	6:q:205:ASN:HD22	2.16	0.42
4:d:38:VAL:O	4:d:39:GLU:HG3	2.20	0.42
5:e:106:ASP:CB	5:e:148:TRP:CE3	3.00	0.42
5:e:195:GLN:O	5:e:202:LEU:CA	2.66	0.42
2:m:274:LEU:HD23	2:m:322:THR:HG21	2.01	0.42
6:q:492:SER:HB2	6:q:542:ARG:HH22	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:r:134:VAL:HG13	7:r:208:CYS:H	1.84	0.42
4:d:187:TYR:O	4:d:187:TYR:HD1	2.02	0.42
6:f:525:ASP:OD1	6:f:525:ASP:O	2.38	0.42
4:o:140:ILE:O	4:o:141:ILE:HG23	2.19	0.42
6:q:667:LEU:HD12	6:q:667:LEU:C	2.43	0.42
5:e:75:ALA:HB1	5:e:111:LEU:HB2	2.00	0.42
6:f:434:THR:CG2	6:f:468:LEU:HD23	2.48	0.42
7:g:1058:LEU:HB3	7:g:1133:LEU:HD23	2.00	0.42
7:g:1061:ILE:O	7:g:1065:VAL:HG13	2.19	0.42
7:g:1078:LEU:CD2	7:g:1153:ASN:HB3	2.40	0.42
7:g:1087:LYS:HD3	7:g:1117:ILE:CG2	2.49	0.42
1:l:555:LYS:O	1:l:559:GLU:HA	2.19	0.42
2:m:115:TYR:HD2	2:m:466:LEU:HD22	1.82	0.42
4:o:97:VAL:HG11	4:o:138:PRO:HG3	2.01	0.42
7:r:938:ASN:N	7:r:938:ASN:HD22	2.16	0.42
1:l:545:THR:HG22	1:l:547:VAL:H	1.85	0.42
7:g:1058:LEU:CD1	7:g:1133:LEU:HD21	2.17	0.42
1:l:366:LEU:HD13	1:l:378:TRP:CE2	2.55	0.42
1:l:478:PRO:O	1:l:479:TYR:HB2	2.20	0.42
3:c:555:VAL:HG21	3:c:571:ILE:HG12	2.02	0.42
5:e:182:LYS:CA	5:e:193:ILE:HD11	2.50	0.42
7:g:974:ARG:HD3	7:g:1109:ILE:HD11	2.00	0.42
7:g:1087:LYS:HG2	7:g:1117:ILE:HG21	2.01	0.42
1:l:72:PHE:CZ	1:l:76:SER:HA	2.55	0.42
2:m:575:LEU:HD23	2:m:575:LEU:HA	1.99	0.42
4:d:200:LEU:HD12	4:d:200:LEU:N	2.35	0.42
7:g:1066:PHE:CE1	7:g:1071:PRO:HG3	2.55	0.42
7:g:1094:TYR:CB	7:g:1110:ARG:HD2	2.48	0.42
7:g:1096:SER:HB3	7:g:1098:THR:HG22	2.00	0.42
4:o:58:ARG:HG3	4:o:259:ARG:HH12	1.84	0.42
5:p:90:GLN:CB	5:p:97:ARG:HA	2.50	0.42
3:c:350:ILE:HG12	3:c:354:ILE:HG21	2.01	0.42
4:d:88:ARG:HD2	4:d:88:ARG:C	2.45	0.42
7:g:712:PHE:CE1	7:g:780:LEU:HD22	2.55	0.42
1:l:216:SER:HB2	1:l:239:GLN:HE22	1.85	0.42
1:l:537:THR:HG23	1:l:539:GLU:H	1.85	0.42
6:q:633:THR:HG22	6:q:634:PHE:H	1.85	0.42
6:f:487:THR:HB	6:f:535:ARG:HH22	1.85	0.41
7:g:1078:LEU:CD2	7:g:1153:ASN:O	2.68	0.41
6:q:11:ARG:NH2	6:q:53:LEU:HD11	2.35	0.41
6:q:442:LEU:HB3	6:q:478:ARG:CB	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:c:541:GLN:HE21	3:c:545:ASP:CG	2.27	0.41
5:e:140:LEU:HD13	5:e:141:GLU:HG3	2.01	0.41
6:q:656:ARG:O	6:q:661:PRO:CD	2.68	0.41
1:a:710:TYR:N	1:a:710:TYR:CD1	2.87	0.41
7:g:921:GLU:OE2	7:g:921:GLU:HA	2.19	0.41
1:l:111:GLN:HG3	1:l:168:TYR:CE2	2.55	0.41
1:l:749:TYR:CE2	1:l:756:GLN:HB3	2.54	0.41
6:q:678:LEU:HD12	6:q:678:LEU:HA	1.81	0.41
2:b:140:HIS:ND1	2:b:140:HIS:N	2.67	0.41
5:e:199:ASP:OD2	5:e:203:HIS:CE1	2.72	0.41
7:g:488:LYS:HA	7:g:489:PRO:HD3	1.71	0.41
7:g:1101:ARG:C	7:g:1101:ARG:CD	2.86	0.41
4:o:117:LEU:HD22	4:o:153:TRP:CE3	2.56	0.41
7:r:1155:VAL:O	7:r:1156:GLU:CB	2.66	0.41
3:c:159:LEU:HD21	4:d:280:LEU:HD21	2.02	0.41
7:g:1042:TRP:HZ3	7:g:1061:ILE:CG2	2.02	0.41
6:q:502:ASP:HA	6:q:544:LYS:HG2	2.02	0.41
5:e:207:LYS:O	5:e:294:VAL:HB	2.21	0.41
3:n:348:CYS:SG	6:q:145:LEU:HA	2.60	0.41
6:q:543:VAL:HG22	6:q:655:ILE:HG21	2.02	0.41
6:q:674:ALA:C	6:q:676:LYS:H	2.29	0.41
1:a:919:PHE:CE2	1:a:923:LEU:HD11	2.56	0.41
7:g:68:ILE:CD1	7:g:480:LYS:HD2	2.49	0.41
7:g:606:GLN:HG3	7:g:607:SER:H	1.84	0.41
7:g:1036:PHE:CZ	7:g:1090:LEU:HA	2.56	0.41
1:l:746:CYS:HB3	1:l:747:PRO:HD3	2.02	0.41
6:q:703:LEU:HD23	6:q:703:LEU:HA	1.93	0.41
2:b:569:LYS:NZ	2:b:657:TYR:HD1	2.11	0.41
3:c:495:CYS:C	3:c:497:LEU:H	2.28	0.41
4:o:155:PRO:HB3	4:o:159:GLU:HA	2.02	0.41
5:p:140:LEU:N	5:p:140:LEU:HD12	2.36	0.41
3:c:509:ARG:HH12	4:d:265:SER:HB2	1.85	0.41
4:d:174:VAL:O	4:d:174:VAL:HG13	2.21	0.41
5:e:138:ASP:HB3	5:e:139:ALA:H	1.47	0.41
6:f:370:VAL:HG22	6:f:415:THR:HA	2.02	0.41
7:g:437:TYR:CZ	7:g:485:THR:HB	2.56	0.41
7:g:1063:LYS:HB2	7:g:1140:VAL:CB	2.48	0.41
6:q:180:PHE:CE1	6:q:203:SER:CB	3.02	0.41
1:a:323:LEU:HD13	1:a:323:LEU:HA	1.79	0.41
5:e:194:TYR:CA	5:e:205:ALA:CB	2.93	0.41
1:l:563:GLU:C	1:l:565:THR:N	2.79	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m:622:GLN:HG3	2:m:623:THR:H	1.86	0.41
5:e:86:GLU:HA	5:e:98:TRP:CE3	2.56	0.40
7:g:1049:ASN:OD1	7:g:1132:LYS:HD2	2.21	0.40
1:l:420:PHE:HA	1:l:450:LEU:HD21	2.02	0.40
4:o:155:PRO:CG	4:o:159:GLU:HA	2.49	0.40
6:f:220:ASN:HD22	6:f:220:ASN:HA	1.71	0.40
6:f:483:VAL:CG2	6:f:525:ASP:CG	2.88	0.40
7:g:428:GLN:HB3	7:g:443:TRP:HE3	1.86	0.40
1:l:329:TRP:CE3	1:l:357:SER:HB2	2.56	0.40
5:p:191:ALA:HB2	5:p:215:ILE:HD13	2.04	0.40
6:q:237:ILE:HD13	6:q:237:ILE:HG21	1.92	0.40
6:q:317:LEU:HD23	6:q:317:LEU:HA	1.94	0.40
6:q:667:LEU:O	6:q:670:LYS:HB2	2.21	0.40
7:r:547:PRO:HA	7:r:548:PRO:HD3	1.85	0.40
7:g:1078:LEU:CD2	7:g:1153:ASN:C	2.92	0.40
6:q:679:LYS:N	7:r:929:LEU:HD11	2.37	0.40
7:g:486:ASN:HD22	7:g:486:ASN:HA	1.71	0.40
7:g:799:GLU:N	7:g:799:GLU:CD	2.79	0.40
4:o:62:ALA:HB3	4:o:69:ILE:H	1.86	0.40
2:b:136:PHE:O	2:b:136:PHE:HD1	2.04	0.40
2:b:227:VAL:HG13	2:b:244:TYR:HB3	2.03	0.40
4:d:164:HIS:HA	6:q:279:TYR:CE2	2.56	0.40
5:e:106:ASP:HB2	5:e:148:TRP:CE3	2.53	0.40
7:g:970:GLN:O	7:g:1009:LEU:HD12	2.16	0.40
7:g:1083:LEU:HB3	7:g:1084:LEU:H	1.64	0.40
1:l:658:HIS:CD2	1:l:658:HIS:C	2.99	0.40
5:p:303:HIS:CG	5:p:307:VAL:HG22	2.56	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	1008/1037 (97%)	910 (90%)	69 (7%)	29 (3%)	3 23
1	l	1008/1037 (97%)	899 (89%)	67 (7%)	42 (4%)	2 17
2	b	643/744 (86%)	574 (89%)	42 (6%)	27 (4%)	2 17
2	m	643/744 (86%)	535 (83%)	73 (11%)	35 (5%)	1 15
3	c	608/1317 (46%)	540 (89%)	47 (8%)	21 (4%)	3 20
3	n	597/1317 (45%)	527 (88%)	48 (8%)	22 (4%)	2 20
4	d	284/297 (96%)	227 (80%)	42 (15%)	15 (5%)	1 15
4	o	284/297 (96%)	230 (81%)	41 (14%)	13 (5%)	2 17
5	e	303/307 (99%)	255 (84%)	35 (12%)	13 (4%)	2 17
5	p	303/307 (99%)	276 (91%)	18 (6%)	9 (3%)	3 23
6	f	724/726 (100%)	661 (91%)	42 (6%)	21 (3%)	3 23
6	q	724/726 (100%)	647 (89%)	50 (7%)	27 (4%)	2 20
7	g	1155/1157 (100%)	1022 (88%)	91 (8%)	42 (4%)	2 20
7	r	1155/1157 (100%)	994 (86%)	102 (9%)	59 (5%)	1 15
All	All	9439/11170 (84%)	8297 (88%)	767 (8%)	375 (4%)	4 18

All (375) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	a	85	SER
1	a	125	ASP
1	a	201	ASP
1	a	204	TYR
1	a	780	HIS
2	b	84	ALA
2	b	193	ASP
2	b	385	ASP
2	b	389	ASP
2	b	403	HIS
2	b	511	TYR
2	b	597	LYS
2	b	617	THR
2	b	659	PRO
2	b	700	ASP
3	c	151	ALA
3	c	304	VAL
3	c	485	GLN
3	c	499	ASP

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Mol	Chain	Res	Type
3	c	514	GLU
4	d	65	LYS
4	d	96	ALA
4	d	100	ALA
4	d	155	PRO
5	e	131	ASP
5	e	141	GLU
5	e	180	PRO
6	f	192	ALA
6	f	353	ASP
6	f	456	GLN
6	f	498	SER
6	f	699	ASP
7	g	2	SER
7	g	133	ALA
7	g	236	SER
7	g	549	MET
7	g	626	ASN
7	g	644	VAL
7	g	699	MET
7	g	882	TYR
7	g	1008	MET
7	g	1030	ASN
7	g	1056	LYS
7	g	1097	GLU
1	l	88	TYR
1	l	156	TYR
1	l	190	ASP
1	l	216	SER
1	l	222	SER
1	l	241	CYS
1	l	579	ILE
1	l	894	GLU
2	m	238	LYS
2	m	406	LEU
3	n	114	ASP
3	n	239	ILE
3	n	490	SER
3	n	531	LYS
3	n	653	VAL
4	o	11	LEU
4	o	122	ASP

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Mol	Chain	Res	Type
4	o	180	ASN
5	p	237	ASP
5	p	325	ASP
6	q	88	ASP
6	q	378	ASP
6	q	379	ILE
6	q	454	ASP
6	q	500	SER
6	q	583	GLU
6	q	610	GLU
7	r	27	ALA
7	r	132	ILE
7	r	156	ASN
7	r	201	ASN
7	r	217	ALA
7	r	510	ASN
7	r	549	MET
7	r	632	LYS
7	r	637	ASN
7	r	642	PHE
7	r	701	VAL
7	r	774	PHE
7	r	781	TYR
7	r	823	GLN
7	r	861	ILE
7	r	879	ALA
7	r	881	LYS
7	r	912	LYS
7	r	1156	GLU
1	a	294	GLU
1	a	431	LYS
1	a	438	GLU
2	b	400	GLY
2	b	413	ASP
2	b	660	LYS
2	b	680	LYS
2	b	719	SER
3	c	277	GLY
3	c	349	SER
3	c	410	PHE
3	c	496	PHE
3	c	672	ASN

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Mol	Chain	Res	Type
4	d	20	TYR
4	d	169	GLU
5	e	86	GLU
5	e	164	HIS
5	e	166	GLN
5	e	297	LEU
6	f	87	ALA
6	f	375	ALA
6	f	451	SER
6	f	486	GLU
6	f	554	ASN
7	g	23	ASN
7	g	130	ASP
7	g	241	GLN
7	g	253	LYS
7	g	300	THR
7	g	810	ASP
7	g	1141	ALA
1	l	149	TRP
1	l	155	PRO
1	l	212	PHE
1	l	265	SER
1	l	343	ASN
1	l	416	GLY
1	l	436	HIS
1	l	537	THR
1	l	556	ASN
1	l	564	ILE
1	l	752	HIS
1	l	781	ASP
1	l	793	PHE
1	l	957	ASP
2	m	133	ASN
2	m	193	ASP
2	m	233	SER
2	m	297	LYS
2	m	298	ASP
2	m	301	SER
2	m	339	ILE
2	m	366	PRO
2	m	404	SER
2	m	514	VAL

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Mol	Chain	Res	Type
2	m	588	ASP
2	m	618	ASN
3	n	327	SER
3	n	463	ARG
3	n	497	LEU
3	n	521	SER
4	o	145	ALA
5	p	306	GLU
6	q	467	PHE
6	q	502	ASP
6	q	609	SER
6	q	710	LYS
7	r	25	SER
7	r	162	GLY
7	r	325	PRO
7	r	441	ARG
7	r	452	ASP
7	r	509	ALA
7	r	629	LEU
7	r	636	ILE
7	r	694	LEU
7	r	765	VAL
7	r	775	ILE
7	r	782	ASP
7	r	821	LEU
7	r	863	ARG
7	r	911	SER
7	r	1087	LYS
1	a	263	SER
1	a	308	SER
1	a	503	GLY
1	a	806	SER
1	a	954	ARG
2	b	86	ASP
2	b	88	TYR
2	b	129	ILE
2	b	216	ASP
2	b	233	SER
2	b	297	LYS
2	b	598	ASN
2	b	606	ILE
3	c	364	SER

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Mol	Chain	Res	Type
3	c	442	THR
3	c	611	VAL
4	d	51	GLY
4	d	105	VAL
5	e	89	ASP
5	e	142	PRO
6	f	95	GLU
6	f	337	SER
6	f	403	SER
6	f	573	LYS
7	g	149	SER
7	g	203	SER
7	g	629	LEU
7	g	809	LYS
7	g	881	LYS
1	l	12	LEU
1	l	196	PRO
1	l	215	SER
1	l	219	ASP
1	l	477	GLN
1	l	671	ASP
1	l	732	THR
2	m	234	THR
2	m	269	ASP
2	m	292	LEU
2	m	327	GLU
2	m	343	GLN
2	m	702	ALA
2	m	717	ASP
3	n	317	HIS
3	n	366	PHE
3	n	508	LYS
4	o	31	LYS
4	o	51	GLY
4	o	76	ASP
4	o	158	ILE
5	p	93	CYS
5	p	118	PRO
5	p	305	GLY
6	q	152	GLY
6	q	190	ALA
6	q	204	ASP

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Mol	Chain	Res	Type
6	q	369	VAL
6	q	471	PRO
6	q	647	ALA
7	r	154	ASN
7	r	207	LYS
7	r	259	LYS
7	r	326	PHE
7	r	356	CYS
7	r	372	SER
7	r	422	ASN
7	r	1011	ASP
1	a	86	ASP
1	a	103	ASN
1	a	216	SER
1	a	250	SER
1	a	397	ILE
2	b	602	GLU
3	c	180	GLN
3	c	182	LYS
3	c	531	LYS
4	d	86	ASN
4	d	101	SER
4	d	145	ALA
4	d	197	GLU
6	f	99	TYR
6	f	492	SER
6	f	608	SER
7	g	54	HIS
7	g	147	ASP
7	g	257	TRP
7	g	630	THR
7	g	663	GLN
7	g	840	PRO
7	g	1055	ASP
7	g	1074	ASN
7	g	1096	SER
1	l	328	ILE
1	l	584	ASN
1	l	859	GLU
2	m	97	ARG
2	m	231	LYS
2	m	278	CYS

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Mol	Chain	Res	Type
2	m	295	TYR
2	m	313	LEU
2	m	328	LEU
2	m	329	ARG
2	m	372	ALA
2	m	411	SER
2	m	607	ILE
2	m	721	PRO
3	n	244	VAL
3	n	302	ASP
3	n	313	SER
3	n	587	GLN
3	n	588	ASN
3	n	675	SER
4	o	83	LYS
4	o	101	SER
4	o	265	SER
4	o	292	ALA
6	q	87	ALA
6	q	142	SER
6	q	405	GLU
6	q	468	LEU
6	q	611	SER
6	q	694	VAL
7	r	20	VAL
7	r	256	ILE
7	r	430	ASN
7	r	431	SER
7	r	461	ASP
7	r	696	LEU
7	r	704	SER
7	r	705	LYS
7	r	916	SER
1	a	213	SER
1	a	328	ILE
1	a	687	SER
1	a	731	ASN
2	b	351	ARG
3	c	162	LYS
3	c	508	LYS
3	c	580	LEU
4	d	29	SER

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Mol	Chain	Res	Type
4	d	84	GLU
4	d	135	THR
5	e	167	SER
5	e	337	ASN
6	f	450	SER
6	f	453	GLU
6	f	471	PRO
6	f	642	ASN
7	g	78	SER
7	g	239	LYS
7	g	520	ILE
7	g	1152	THR
1	l	13	GLN
1	l	22	ASN
1	l	262	GLN
1	l	731	ASN
1	l	836	ASN
2	m	290	GLU
2	m	337	LEU
3	n	151	ALA
3	n	181	ARG
5	p	94	SER
6	q	470	LEU
7	r	410	THR
7	r	437	TYR
7	r	915	GLU
1	a	65	SER
1	a	477	GLN
1	a	957	ASP
3	c	575	LEU
5	e	138	ASP
7	g	18	ILE
7	g	256	ILE
7	g	695	GLU
1	l	478	PRO
1	l	790	LEU
2	m	723	SER
3	n	243	PRO
3	n	673	ASN
5	p	156	VAL
5	p	160	PRO
6	q	138	ASN

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Mol	Chain	Res	Type
6	q	634	PHE
7	r	487	SER
7	r	685	GLY
1	a	416	GLY
5	e	87	ASP
7	g	491	VAL
1	l	98	PRO
1	l	338	ARG
4	o	105	VAL
7	r	518	PRO
1	a	155	PRO
2	b	96	PRO
3	c	365	PRO
1	a	160	VAL
2	b	127	PRO
7	g	325	PRO
6	q	400	ASN
7	r	689	ILE
1	a	192	VAL
1	l	541	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	a	950/972 (98%)	919 (97%)	31 (3%)	33	55
1	l	950/972 (98%)	918 (97%)	32 (3%)	32	54
2	b	578/670 (86%)	557 (96%)	21 (4%)	31	52
2	m	580/670 (87%)	559 (96%)	21 (4%)	31	52
3	c	544/1161 (47%)	523 (96%)	21 (4%)	28	49
3	n	544/1161 (47%)	530 (97%)	14 (3%)	40	62
4	d	232/252 (92%)	213 (92%)	19 (8%)	10	31
4	o	232/252 (92%)	217 (94%)	15 (6%)	15	37

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	e	268/268 (100%)	249 (93%)	19 (7%)	13 35
5	p	268/268 (100%)	254 (95%)	14 (5%)	21 42
6	f	669/669 (100%)	634 (95%)	35 (5%)	21 42
6	q	669/669 (100%)	630 (94%)	39 (6%)	18 40
7	g	1088/1088 (100%)	1013 (93%)	75 (7%)	14 36
7	r	1088/1088 (100%)	1039 (96%)	49 (4%)	24 46
All	All	8660/10160 (85%)	8255 (95%)	405 (5%)	25 45

All (405) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	a	4	LEU
1	a	20	PRO
1	a	27	TYR
1	a	97	LEU
1	a	130	THR
1	a	205	LEU
1	a	209	THR
1	a	214	ARG
1	a	238	THR
1	a	271	ARG
1	a	281	SER
1	a	302	THR
1	a	318	ASN
1	a	323	LEU
1	a	326	SER
1	a	431	LYS
1	a	489	THR
1	a	519	THR
1	a	562	PHE
1	a	565	THR
1	a	653	THR
1	a	672	LYS
1	a	698	LEU
1	a	767	CYS
1	a	791	PRO
1	a	795	GLU
1	a	940	VAL
1	a	968	ARG
1	a	970	LEU

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Mol	Chain	Res	Type
1	a	1018	ILE
1	a	1026	THR
2	b	85	LYS
2	b	98	LEU
2	b	120	ASP
2	b	123	VAL
2	b	125	ASN
2	b	129	ILE
2	b	135	ASN
2	b	136	PHE
2	b	140	HIS
2	b	182	LEU
2	b	185	LEU
2	b	197	VAL
2	b	272	PRO
2	b	352	THR
2	b	376	GLN
2	b	387	THR
2	b	509	PRO
2	b	585	LYS
2	b	624	LEU
2	b	699	TRP
2	b	733	LYS
3	c	118	GLN
3	c	120	GLU
3	c	155	THR
3	c	158	MET
3	c	159	LEU
3	c	162	LYS
3	c	180	GLN
3	c	205	ASN
3	c	257	MET
3	c	394	ILE
3	c	418	ILE
3	c	467	LYS
3	c	517	LEU
3	c	523	ASN
3	c	559	LEU
3	c	571	ILE
3	c	572	VAL
3	c	573	THR
3	c	575	LEU

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Mol	Chain	Res	Type
3	c	608	LYS
3	c	690	GLN
4	d	24	LEU
4	d	31	LYS
4	d	69	ILE
4	d	109	PRO
4	d	141	ILE
4	d	180	ASN
4	d	183	LYS
4	d	184	ILE
4	d	189	SER
4	d	190	ASP
4	d	192	GLN
4	d	193	THR
4	d	195	VAL
4	d	196	LEU
4	d	197	GLU
4	d	198	SER
4	d	199	THR
4	d	208	ARG
4	d	285	LEU
5	e	11	LEU
5	e	12	VAL
5	e	26	THR
5	e	118	PRO
5	e	138	ASP
5	e	140	LEU
5	e	141	GLU
5	e	146	ARG
5	e	149	THR
5	e	164	HIS
5	e	167	SER
5	e	192	ILE
5	e	195	GLN
5	e	196	ARG
5	e	202	LEU
5	e	204	VAL
5	e	207	LYS
5	e	208	LEU
5	e	214	LEU
6	f	13	THR
6	f	32	PRO

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Mol	Chain	Res	Type
6	f	58	ASP
6	f	66	LYS
6	f	94	MET
6	f	114	LYS
6	f	138	ASN
6	f	164	GLU
6	f	167	ASN
6	f	206	ILE
6	f	220	ASN
6	f	227	ILE
6	f	231	PHE
6	f	234	GLN
6	f	273	ASN
6	f	294	LEU
6	f	308	VAL
6	f	345	VAL
6	f	387	ARG
6	f	403	SER
6	f	425	LEU
6	f	455	PRO
6	f	466	ASN
6	f	467	PHE
6	f	468	LEU
6	f	469	ARG
6	f	470	LEU
6	f	560	LYS
6	f	630	LEU
6	f	646	SER
6	f	671	LEU
6	f	693	LEU
6	f	700	LYS
6	f	715	LEU
6	f	721	THR
7	g	9	ARG
7	g	11	ARG
7	g	18	ILE
7	g	21	VAL
7	g	39	LEU
7	g	44	MET
7	g	51	LEU
7	g	98	LEU
7	g	108	TRP

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Mol	Chain	Res	Type
7	g	145	THR
7	g	220	VAL
7	g	221	LEU
7	g	233	ILE
7	g	244	LEU
7	g	246	LYS
7	g	256	ILE
7	g	263	THR
7	g	267	VAL
7	g	351	ILE
7	g	385	THR
7	g	399	ILE
7	g	419	MET
7	g	428	GLN
7	g	429	VAL
7	g	430	ASN
7	g	432	LYS
7	g	434	ASP
7	g	435	SER
7	g	441	ARG
7	g	442	LYS
7	g	480	LYS
7	g	482	ASN
7	g	486	ASN
7	g	487	SER
7	g	488	LYS
7	g	491	VAL
7	g	510	ASN
7	g	544	LYS
7	g	552	THR
7	g	553	LEU
7	g	555	GLN
7	g	568	LEU
7	g	576	ASN
7	g	588	ILE
7	g	630	THR
7	g	666	LYS
7	g	667	LEU
7	g	670	THR
7	g	756	PHE
7	g	769	ASN
7	g	804	ILE

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Mol	Chain	Res	Type
7	g	817	THR
7	g	844	SER
7	g	855	LYS
7	g	866	GLN
7	g	868	HIS
7	g	870	VAL
7	g	907	THR
7	g	921	GLU
7	g	926	VAL
7	g	936	LYS
7	g	944	LEU
7	g	970	GLN
7	g	973	LYS
7	g	976	LYS
7	g	1040	LEU
7	g	1042	TRP
7	g	1052	ASN
7	g	1053	GLU
7	g	1055	ASP
7	g	1064	ARG
7	g	1065	VAL
7	g	1068	GLU
7	g	1069	GLU
7	g	1098	THR
1	l	1	MET
1	l	70	TYR
1	l	83	PRO
1	l	132	GLN
1	l	236	VAL
1	l	334	LEU
1	l	433	ILE
1	l	473	VAL
1	l	501	THR
1	l	519	THR
1	l	565	THR
1	l	566	ASN
1	l	568	LYS
1	l	581	VAL
1	l	598	LYS
1	l	606	LYS
1	l	621	GLN
1	l	641	ASP

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Mol	Chain	Res	Type
1	l	643	ASP
1	l	649	GLN
1	l	658	HIS
1	l	690	VAL
1	l	722	THR
1	l	811	LEU
1	l	817	VAL
1	l	868	GLN
1	l	899	THR
1	l	916	ARG
1	l	962	LYS
1	l	985	ILE
1	l	997	ARG
1	l	1026	THR
2	m	138	LYS
2	m	201	ARG
2	m	209	LEU
2	m	234	THR
2	m	262	ILE
2	m	347	LEU
2	m	392	GLN
2	m	399	SER
2	m	402	ILE
2	m	405	ILE
2	m	483	PRO
2	m	486	ILE
2	m	502	MET
2	m	508	LEU
2	m	540	THR
2	m	541	THR
2	m	624	LEU
2	m	659	PRO
2	m	660	LYS
2	m	720	LEU
2	m	727	LEU
3	n	161	THR
3	n	183	PHE
3	n	192	LYS
3	n	199	ILE
3	n	256	LYS
3	n	359	LYS
3	n	369	LEU

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Mol	Chain	Res	Type
3	n	373	LYS
3	n	406	HIS
3	n	455	GLN
3	n	462	THR
3	n	497	LEU
3	n	508	LYS
3	n	528	ASN
4	o	8	HIS
4	o	10	GLU
4	o	33	ILE
4	o	42	THR
4	o	48	THR
4	o	59	VAL
4	o	95	HIS
4	o	182	VAL
4	o	216	VAL
4	o	225	VAL
4	o	245	LYS
4	o	278	VAL
4	o	279	THR
4	o	284	ASN
4	o	291	PRO
5	p	29	SER
5	p	51	TRP
5	p	61	ILE
5	p	108	LYS
5	p	136	LEU
5	p	159	ILE
5	p	166	GLN
5	p	198	LYS
5	p	207	LYS
5	p	226	ARG
5	p	240	ILE
5	p	297	LEU
5	p	306	GLU
5	p	315	THR
6	q	43	ARG
6	q	94	MET
6	q	113	ASN
6	q	114	LYS
6	q	153	LEU
6	q	155	SER

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Mol	Chain	Res	Type
6	q	180	PHE
6	q	193	ILE
6	q	208	ILE
6	q	212	LEU
6	q	235	GLN
6	q	256	LEU
6	q	271	ILE
6	q	369	VAL
6	q	382	LYS
6	q	415	THR
6	q	496	GLU
6	q	506	ILE
6	q	533	LEU
6	q	543	VAL
6	q	573	LYS
6	q	584	ILE
6	q	592	LYS
6	q	658	LEU
6	q	663	LEU
6	q	664	LEU
6	q	665	MET
6	q	667	LEU
6	q	670	LYS
6	q	673	GLU
6	q	676	LYS
6	q	677	LEU
6	q	678	LEU
6	q	688	LEU
6	q	692	SER
6	q	700	LYS
6	q	701	ILE
6	q	704	LEU
6	q	708	SER
7	r	14	LEU
7	r	16	VAL
7	r	29	LEU
7	r	72	LEU
7	r	98	LEU
7	r	99	VAL
7	r	100	ASN
7	r	146	MET
7	r	148	GLU

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Mol	Chain	Res	Type
7	r	199	PRO
7	r	224	ASN
7	r	240	PRO
7	r	247	LEU
7	r	263	THR
7	r	278	LYS
7	r	288	ASN
7	r	300	THR
7	r	312	ILE
7	r	376	THR
7	r	391	THR
7	r	399	ILE
7	r	417	LEU
7	r	442	LYS
7	r	485	THR
7	r	525	GLU
7	r	573	LYS
7	r	578	LYS
7	r	589	GLU
7	r	605	ARG
7	r	633	THR
7	r	654	VAL
7	r	669	VAL
7	r	699	MET
7	r	700	GLU
7	r	705	LYS
7	r	761	ASN
7	r	763	GLN
7	r	789	ASN
7	r	792	LEU
7	r	817	THR
7	r	902	THR
7	r	932	LEU
7	r	936	LYS
7	r	973	LYS
7	r	994	THR
7	r	1029	LEU
7	r	1036	PHE
7	r	1056	LYS
7	r	1132	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (293) such sidechains are listed below:

Mol	Chain	Res	Type
1	a	13	GLN
1	a	21	ASN
1	a	64	ASN
1	a	99	ASN
1	a	120	ASN
1	a	143	ASN
1	a	146	ASN
1	a	172	GLN
1	a	193	HIS
1	a	230	HIS
1	a	295	ASN
1	a	299	GLN
1	a	318	ASN
1	a	418	GLN
1	a	436	HIS
1	a	480	ASN
1	a	498	HIS
1	a	584	ASN
1	a	632	GLN
1	a	670	GLN
1	a	697	GLN
1	a	752	HIS
1	a	753	ASN
1	a	756	GLN
1	a	780	HIS
1	a	803	HIS
1	a	827	GLN
1	a	893	HIS
1	a	903	ASN
1	a	910	GLN
1	a	971	ASN
2	b	78	ASN
2	b	133	ASN
2	b	135	ASN
2	b	210	ASN
2	b	584	GLN
2	b	708	ASN
3	c	129	ASN
3	c	252	ASN
3	c	286	ASN
3	c	289	ASN
3	c	315	ASN
3	c	317	HIS

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Mol	Chain	Res	Type
3	c	328	ASN
3	c	393	GLN
3	c	404	GLN
3	c	455	GLN
3	c	480	GLN
3	c	498	ASN
3	c	550	ASN
3	c	626	ASN
3	c	649	HIS
3	c	702	GLN
4	d	63	HIS
4	d	86	ASN
4	d	106	GLN
4	d	133	ASN
4	d	144	HIS
4	d	227	GLN
5	e	8	HIS
5	e	23	HIS
5	e	203	HIS
5	e	300	HIS
5	e	337	ASN
6	f	26	GLN
6	f	27	ASN
6	f	30	GLN
6	f	76	HIS
6	f	129	ASN
6	f	138	ASN
6	f	178	HIS
6	f	205	ASN
6	f	220	ASN
6	f	226	GLN
6	f	235	GLN
6	f	240	HIS
6	f	252	GLN
6	f	305	ASN
6	f	341	HIS
6	f	377	ASN
6	f	391	HIS
6	f	456	GLN
6	f	466	ASN
6	f	474	ASN
6	f	509	HIS

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Mol	Chain	Res	Type
6	f	553	ASN
6	f	570	ASN
6	f	589	HIS
6	f	601	GLN
6	f	642	ASN
6	f	668	HIS
6	f	696	ASN
7	g	48	GLN
7	g	64	ASN
7	g	73	GLN
7	g	82	ASN
7	g	87	ASN
7	g	93	GLN
7	g	129	ASN
7	g	156	ASN
7	g	201	ASN
7	g	241	GLN
7	g	296	GLN
7	g	301	ASN
7	g	321	GLN
7	g	422	ASN
7	g	486	ASN
7	g	497	HIS
7	g	524	GLN
7	g	540	HIS
7	g	551	ASN
7	g	576	ASN
7	g	595	ASN
7	g	606	GLN
7	g	628	HIS
7	g	648	GLN
7	g	668	ASN
7	g	711	ASN
7	g	755	GLN
7	g	771	ASN
7	g	773	ASN
7	g	776	ASN
7	g	784	ASN
7	g	785	HIS
7	g	854	HIS
7	g	867	GLN
7	g	873	GLN

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Mol	Chain	Res	Type
7	g	938	ASN
7	g	970	GLN
7	g	998	ASN
7	g	1059	GLN
7	g	1134	HIS
7	g	1149	ASN
1	l	10	ASN
1	l	13	GLN
1	l	89	HIS
1	l	132	GLN
1	l	143	ASN
1	l	146	ASN
1	l	154	ASN
1	l	172	GLN
1	l	230	HIS
1	l	239	GLN
1	l	255	GLN
1	l	295	ASN
1	l	316	GLN
1	l	410	ASN
1	l	436	HIS
1	l	477	GLN
1	l	480	ASN
1	l	498	HIS
1	l	514	ASN
1	l	556	ASN
1	l	566	ASN
1	l	584	ASN
1	l	632	GLN
1	l	658	HIS
1	l	661	GLN
1	l	670	GLN
1	l	711	ASN
1	l	743	ASN
1	l	772	GLN
1	l	778	GLN
1	l	780	HIS
1	l	821	HIS
1	l	836	ASN
1	l	857	GLN
1	l	903	ASN
1	l	927	ASN

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Mol	Chain	Res	Type
1	l	932	ASN
1	l	1005	ASN
1	l	1016	GLN
2	m	77	GLN
2	m	133	ASN
2	m	140	HIS
2	m	145	ASN
2	m	165	GLN
2	m	195	GLN
2	m	213	ASN
2	m	243	GLN
2	m	315	GLN
2	m	392	GLN
2	m	510	HIS
2	m	545	GLN
2	m	551	ASN
2	m	584	GLN
2	m	598	ASN
2	m	618	ASN
2	m	661	HIS
2	m	736	ASN
3	n	118	GLN
3	n	119	ASN
3	n	328	ASN
3	n	339	GLN
3	n	386	ASN
3	n	485	GLN
3	n	489	HIS
3	n	498	ASN
3	n	523	ASN
3	n	525	HIS
3	n	535	GLN
3	n	541	GLN
3	n	550	ASN
3	n	583	ASN
3	n	584	ASN
3	n	587	GLN
3	n	589	ASN
3	n	630	GLN
3	n	658	ASN
3	n	702	GLN
4	o	8	HIS

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Mol	Chain	Res	Type
4	o	13	HIS
4	o	95	HIS
4	o	133	ASN
4	o	203	HIS
4	o	227	GLN
4	o	276	ASN
5	p	2	GLN
5	p	32	HIS
5	p	54	HIS
5	p	120	HIS
5	p	164	HIS
5	p	166	GLN
5	p	303	HIS
5	p	348	GLN
5	p	349	GLN
6	q	27	ASN
6	q	97	HIS
6	q	100	ASN
6	q	146	ASN
6	q	165	ASN
6	q	205	ASN
6	q	235	GLN
6	q	252	GLN
6	q	273	ASN
6	q	292	GLN
6	q	320	HIS
6	q	335	HIS
6	q	360	HIS
6	q	377	ASN
6	q	391	HIS
6	q	489	GLN
6	q	505	ASN
6	q	509	HIS
6	q	570	ASN
7	r	7	HIS
7	r	48	GLN
7	r	52	HIS
7	r	64	ASN
7	r	73	GLN
7	r	93	GLN
7	r	100	ASN
7	r	129	ASN

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Mol	Chain	Res	Type
7	r	154	ASN
7	r	235	ASN
7	r	241	GLN
7	r	272	ASN
7	r	293	GLN
7	r	296	GLN
7	r	340	GLN
7	r	373	ASN
7	r	384	ASN
7	r	411	ASN
7	r	422	ASN
7	r	486	ASN
7	r	497	HIS
7	r	540	HIS
7	r	542	ASN
7	r	556	HIS
7	r	574	ASN
7	r	601	ASN
7	r	648	GLN
7	r	661	GLN
7	r	663	GLN
7	r	716	ASN
7	r	752	GLN
7	r	755	GLN
7	r	761	ASN
7	r	784	ASN
7	r	785	HIS
7	r	789	ASN
7	r	800	GLN
7	r	824	ASN
7	r	837	ASN
7	r	923	HIS
7	r	938	ASN
7	r	1030	ASN
7	r	1049	ASN
7	r	1059	GLN
7	r	1060	HIS
7	r	1107	ASN
7	r	1127	ASN
7	r	1153	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
5	e	1
5	p	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	e	248:LYS	C	291:ASN	N	11.37
1	p	248:LYS	C	291:ASN	N	7.67

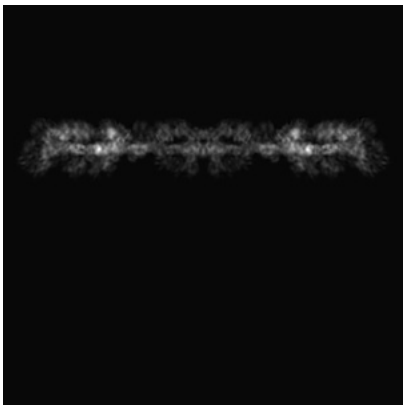
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-41285. These allow visual inspection of the internal detail of the map and identification of artifacts.

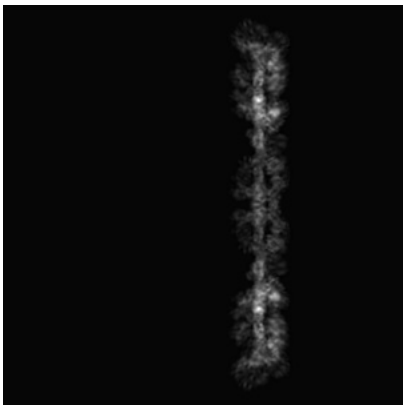
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

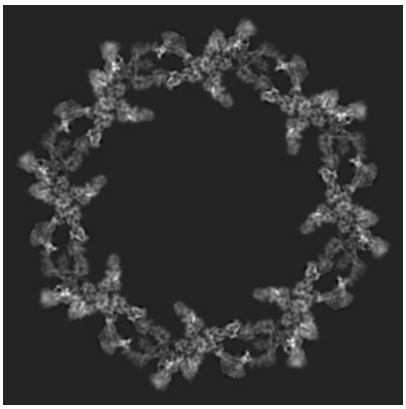
6.1.1 Primary map



X

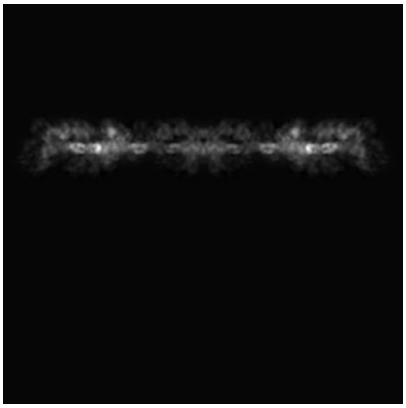


Y

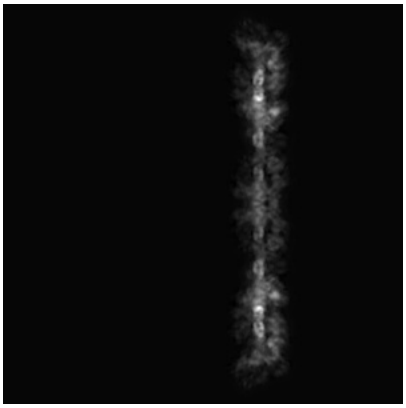


Z

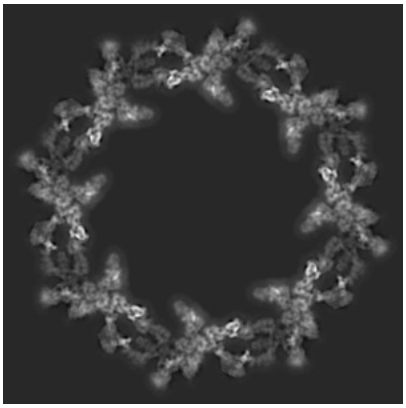
6.1.2 Raw map



X



Y



Z

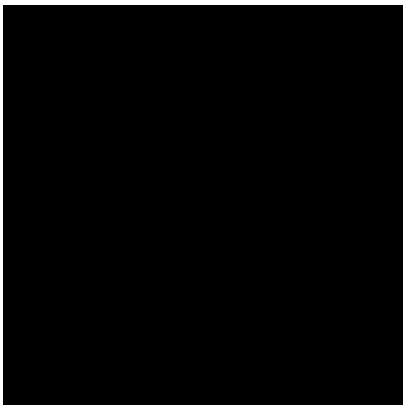
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map

X Index: 240

Y Index: 240

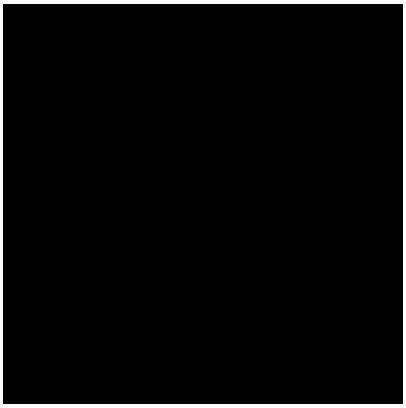


Z Index: 240

6.2.2 Raw map

X Index: 240

Y Index: 240



Z Index: 240

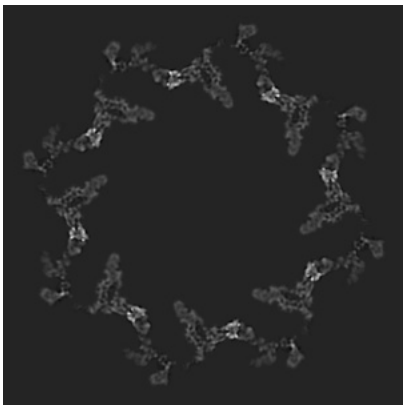
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map

X Index: 366

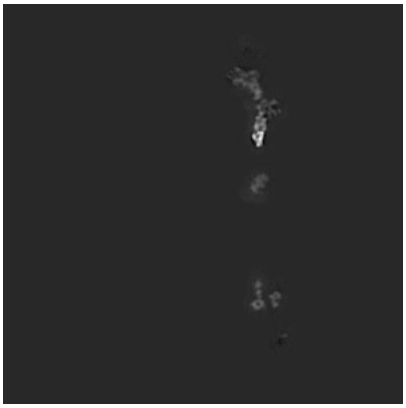
Y Index: 366



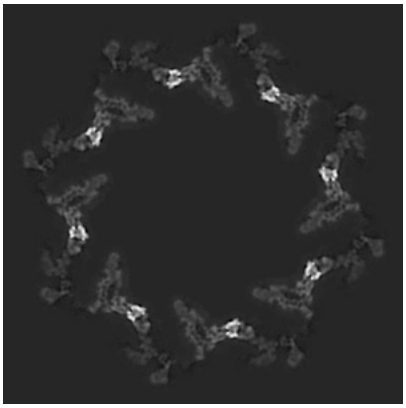
Z Index: 309

6.3.2 Raw map

X Index: 366



Y Index: 366

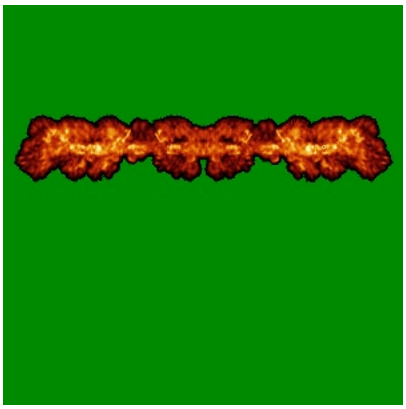


Z Index: 309

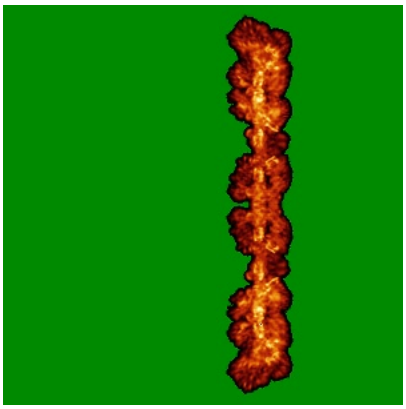
The images above show the largest variance slices of the map in three orthogonal directions.

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

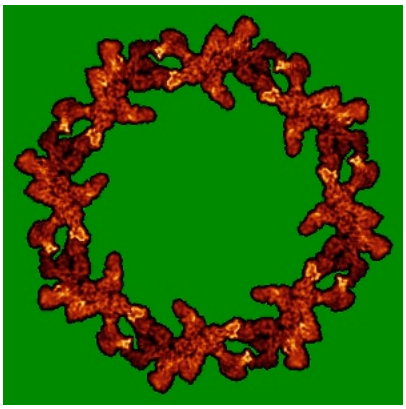
6.4.1 Primary map



X

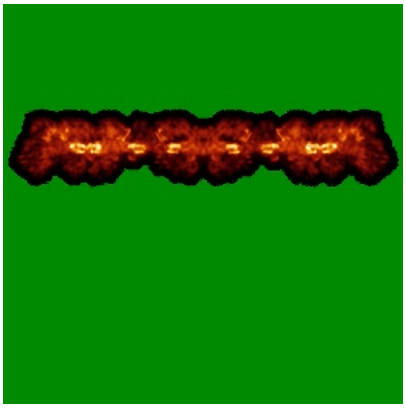


Y

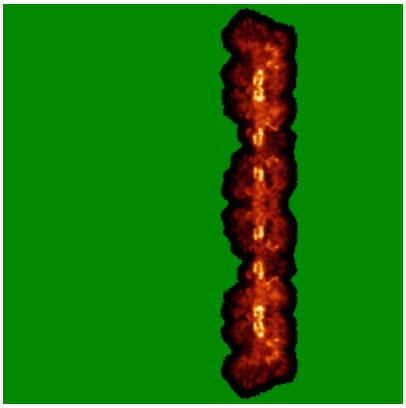


Z

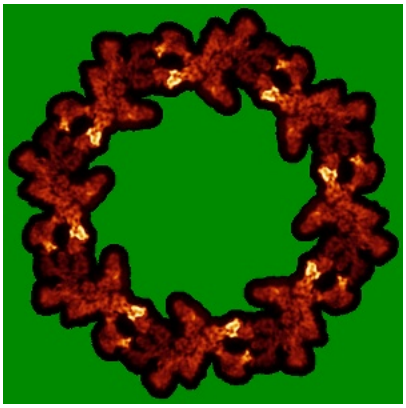
6.4.2 Raw map



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.

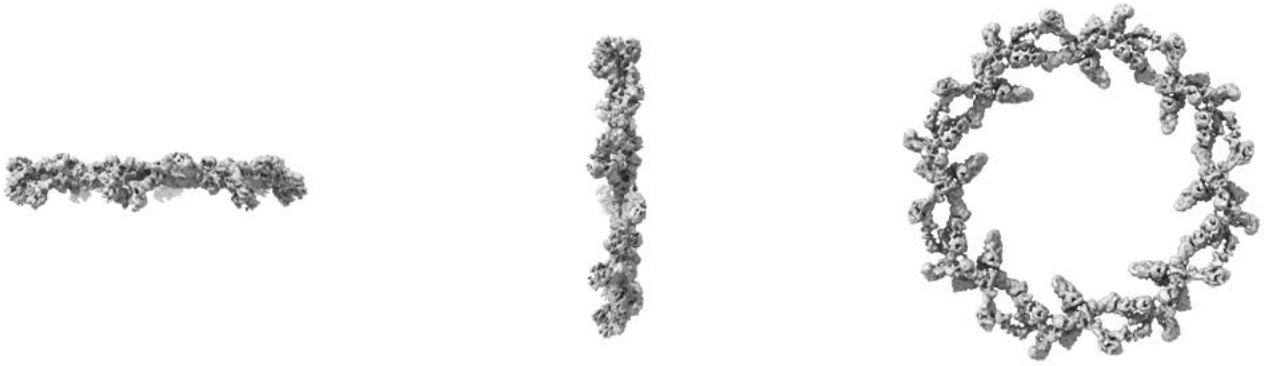
6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.4. 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.

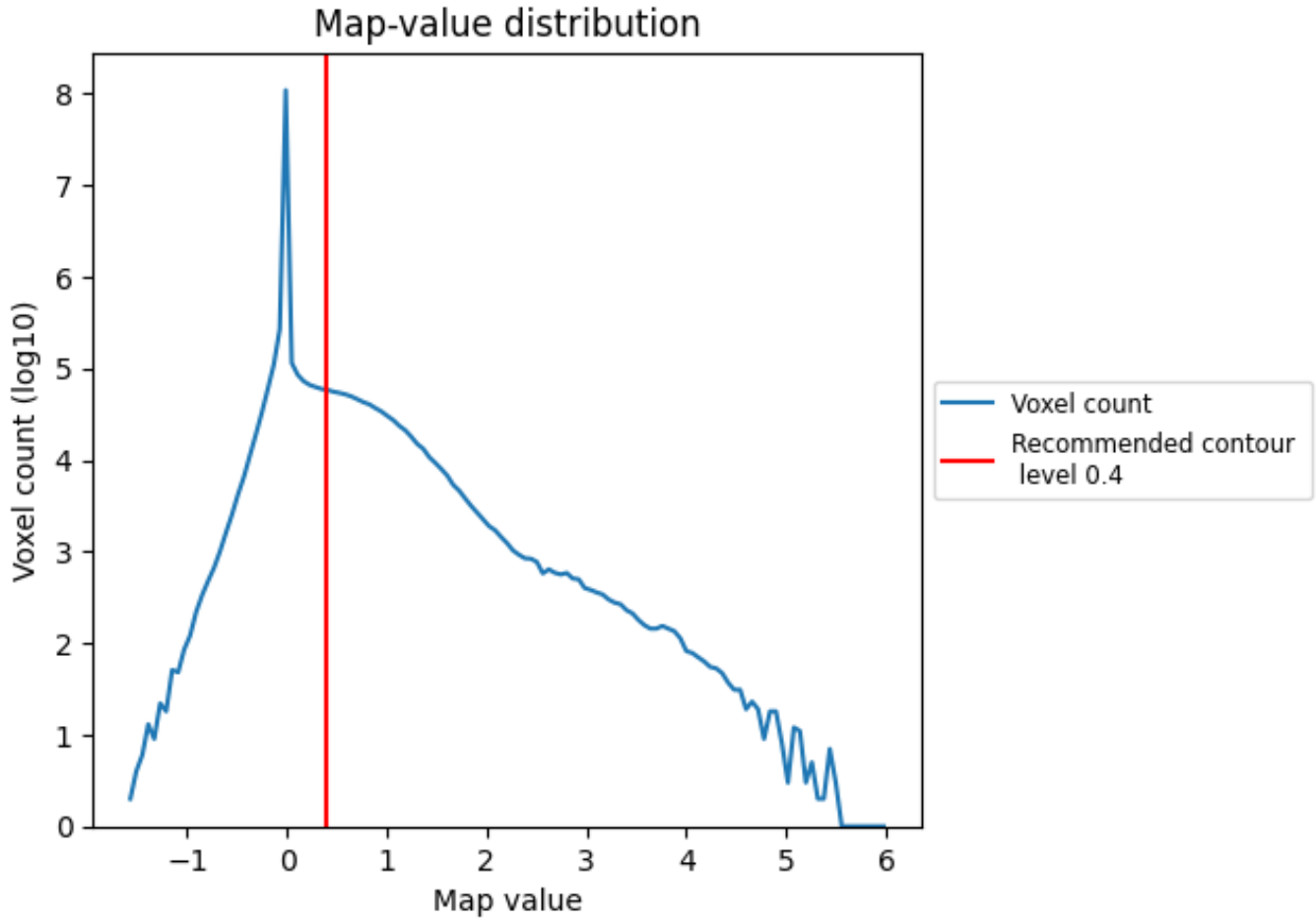
6.6 Mask visualisation (i)

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

7 Map analysis

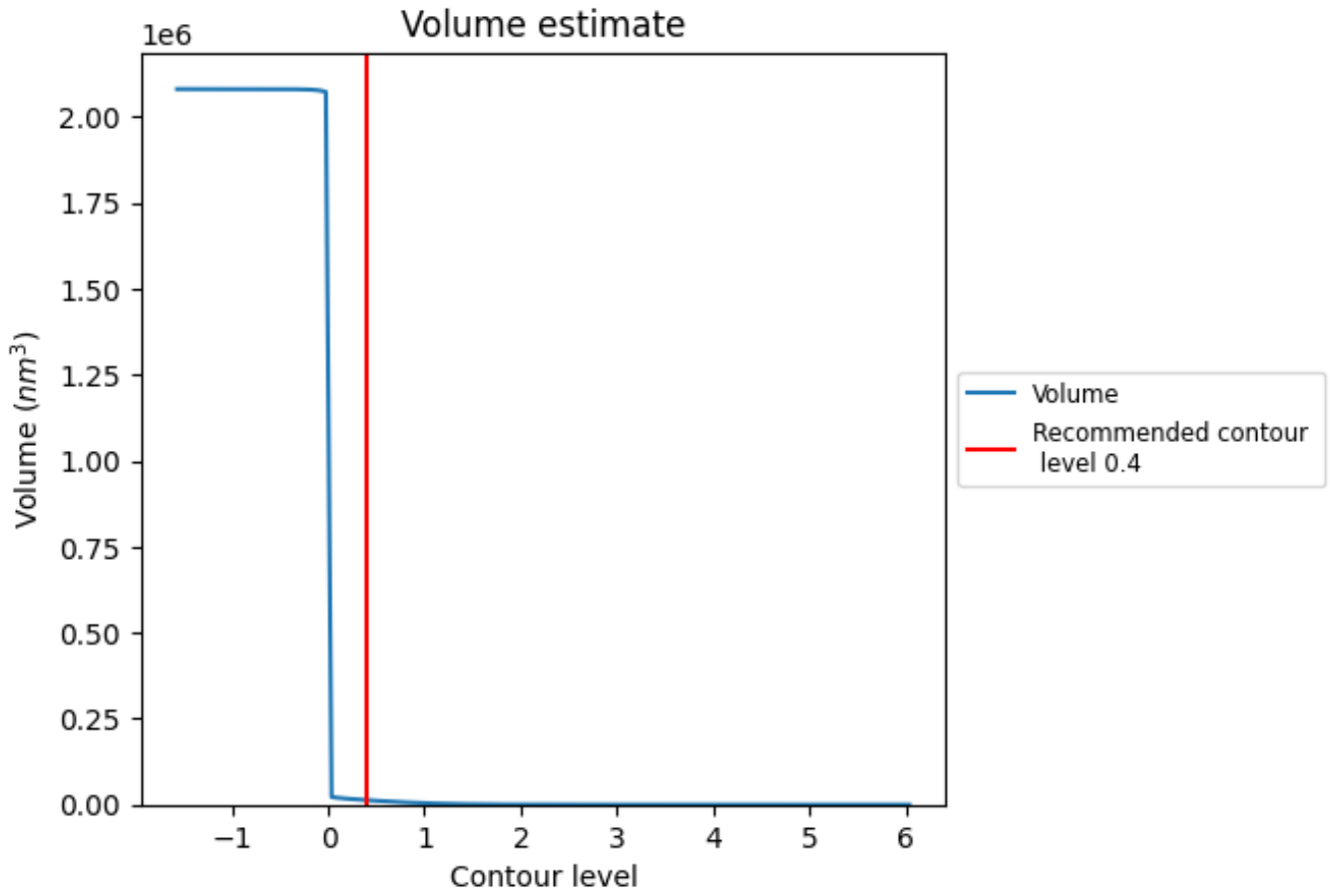
This section contains the results of statistical analysis of the map.

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.

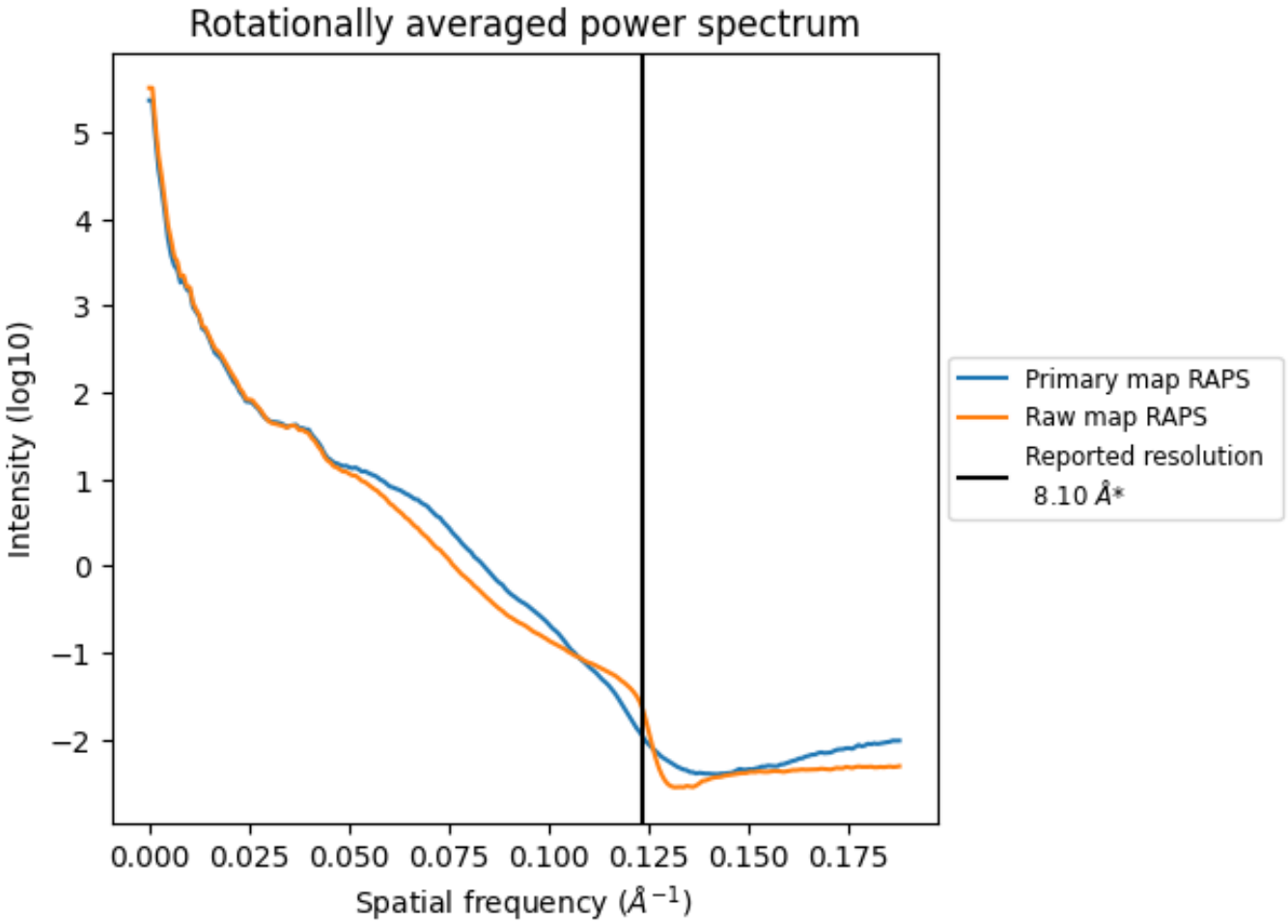
7.2 Volume estimate



The volume at the recommended contour level is 13169 nm^3; this corresponds to an approximate mass of 11895 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)

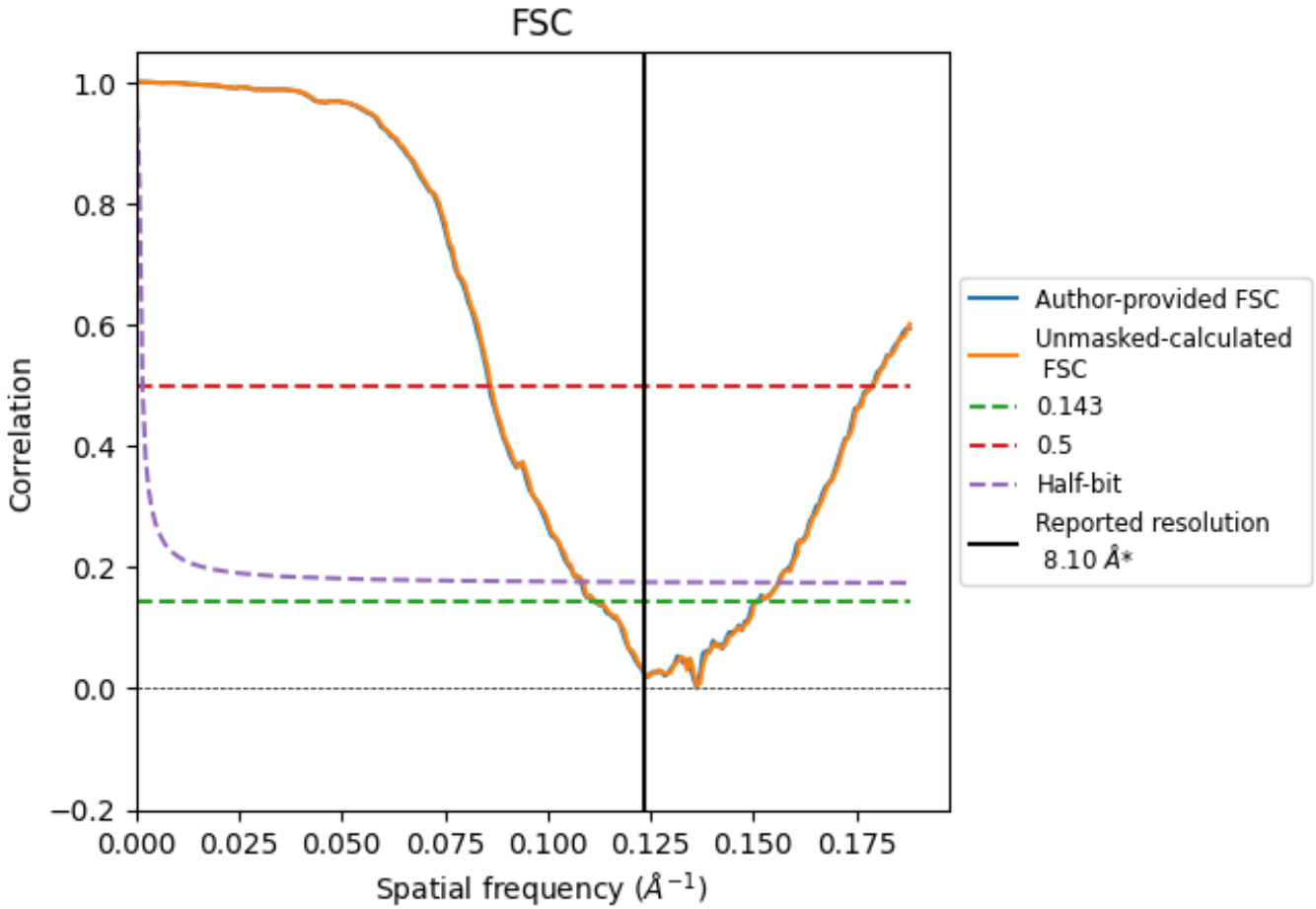


*Reported resolution corresponds to spatial frequency of 0.123 Å^{-1}

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 0.123 Å^{-1}

8.2 Resolution estimates (i)

Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	8.10	-	-
Author-provided FSC curve	8.98	11.66	9.25
Unmasked-calculated*	8.94	11.61	9.22

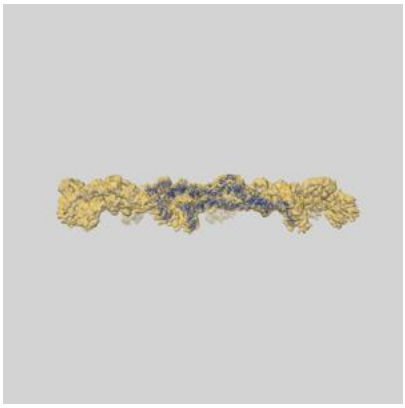
*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from author-provided FSC intersecting FSC 0.143 CUT-OFF 8.98 differs from the reported value 8.1 by more than 10 %

The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 8.94 differs from the reported value 8.1 by more than 10 %

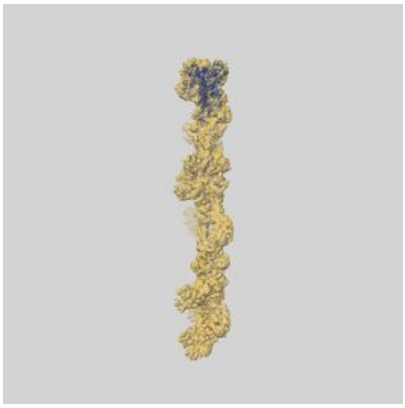
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-41285 and PDB model 8TIE. Per-residue inclusion information can be found in section 3 on page 6.

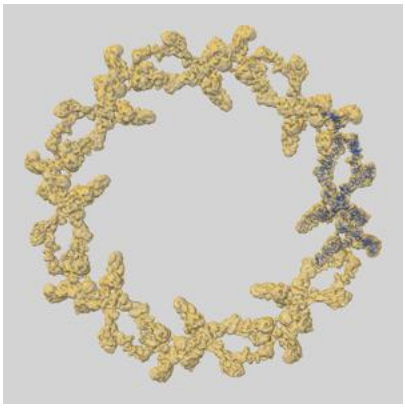
9.1 Map-model overlay



X



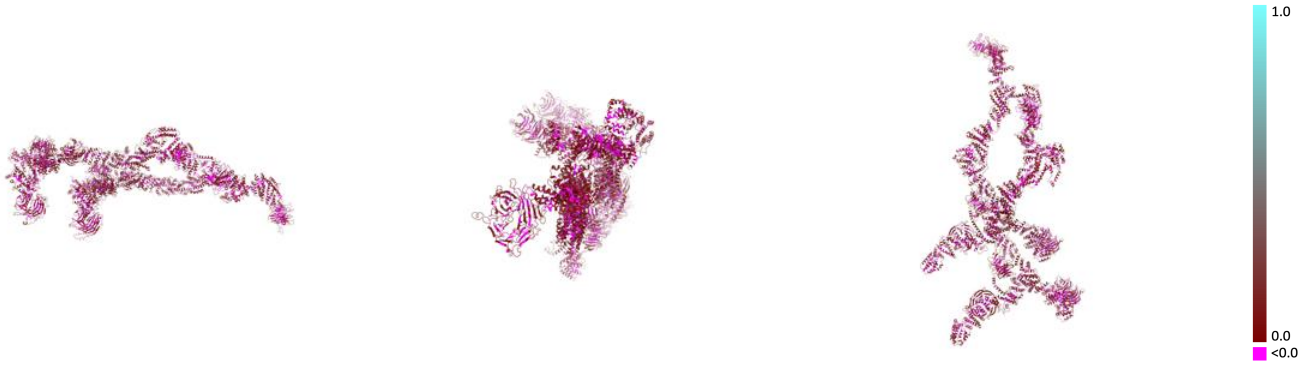
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.4 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.

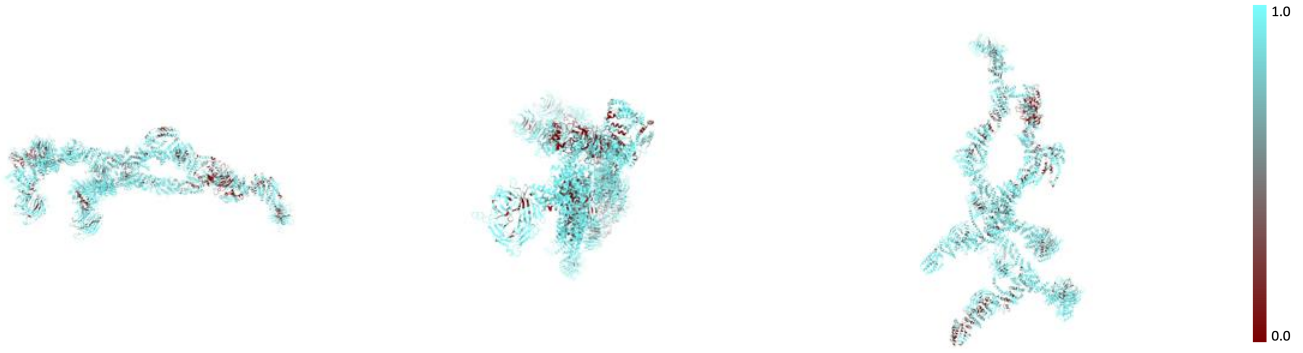
9.2 Q-score mapped to coordinate model (i)



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.

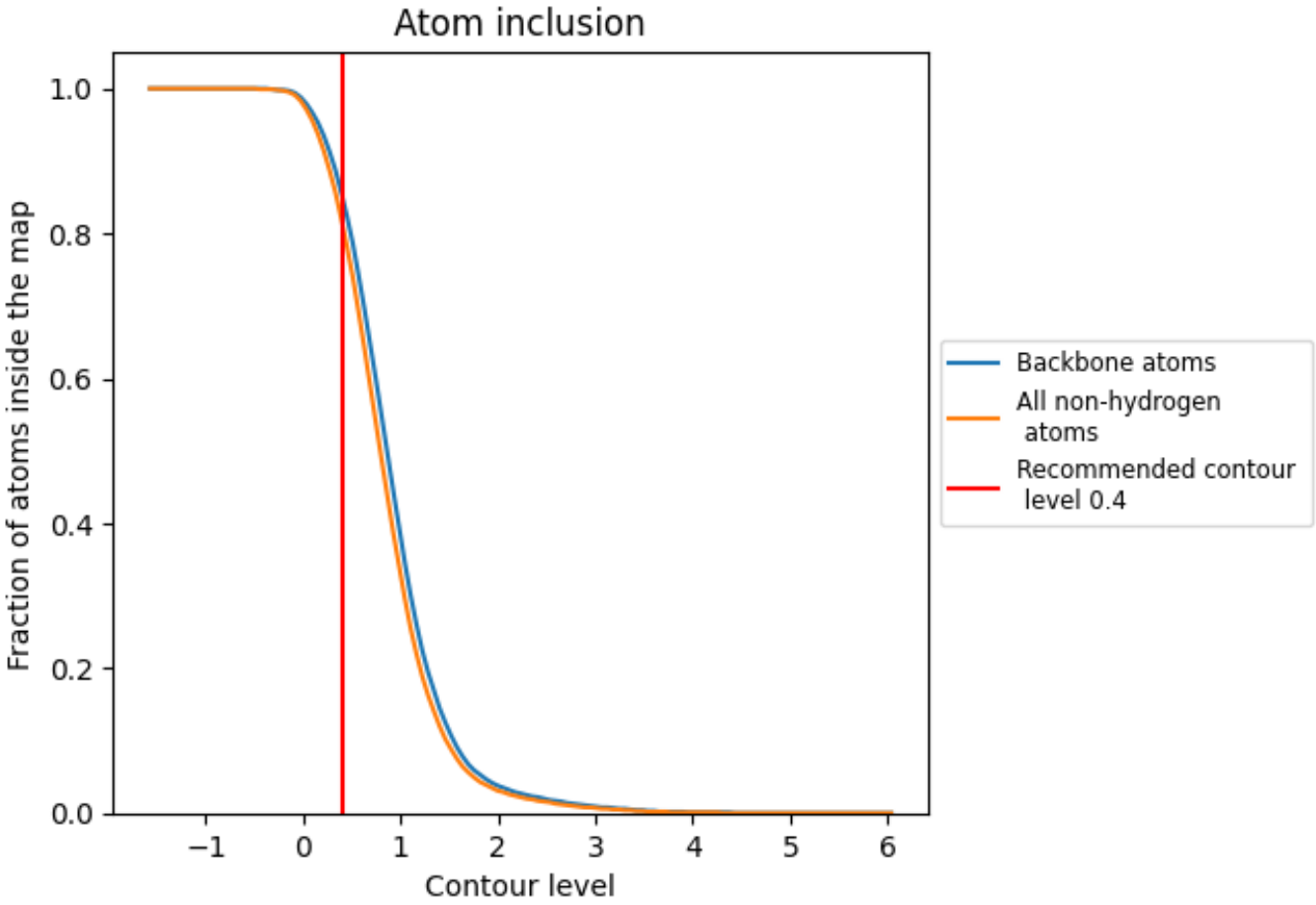
9.3 Atom inclusion mapped to coordinate model (i)



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 (0.4).

9.4 Atom inclusion (i)



At the recommended contour level, 85% of all backbone atoms, 82% 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 (0.4) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8160	0.0800
a	0.8790	0.0790
b	0.9200	0.0820
c	0.9250	0.1050
d	0.8380	0.0730
e	0.8750	0.0860
f	0.8020	0.0840
g	0.7680	0.0720
l	0.8810	0.0810
m	0.6230	0.0780
n	0.9040	0.1040
o	0.8880	0.0840
p	0.7600	0.0720
q	0.8300	0.1000
r	0.6810	0.0490