



Full wwPDB EM Validation Report ⓘ

Nov 20, 2022 – 04:15 am GMT

PDB ID : 5UOT
EMDB ID : EMD-8577
Title : CryoEM structure of the helical assembly of full length MxB
Authors : Perilla, J.R.; Alvarez, F.J.D.; Zhang, P.; Schulten, K.
Deposited on : 2017-02-01
Resolution : 4.60 Å (reported)
Based on initial model : 4WHJ

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:

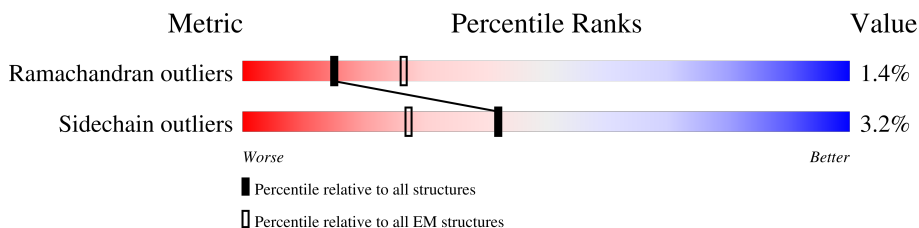
EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

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 4.60 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)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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

Mol	Chain	Length	Quality of chain
1	0	619	96% 75% 19% . . .
1	1	619	96% 75% 19% . .
1	2	619	96% 74% 18% . . .
1	3	619	96% 75% 17% . .
1	4	619	96% 74% 20% . .
1	5	619	96% 74% 19% . .
1	6	619	96% 75% 20% . .
1	7	619	96% 75% 18% . . .
1	8	619	96% 75% 19% . . .

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Mol	Chain	Length	Quality of chain	
1	9	619	96%	19%
1	A	619	96%	20%
1	B	619	96%	19%
1	C	619	96%	17%
1	D	619	96%	19%
1	E	619	96%	18%
1	F	619	96%	19%
1	G	619	96%	17%
1	H	619	96%	17%
1	I	619	96%	20%
1	J	619	96%	20%
1	K	619	96%	17%
1	L	619	96%	17%
1	M	619	96%	18%
1	N	619	96%	18%
1	O	619	96%	20%
1	P	619	96%	21%
1	Q	619	96%	18%
1	R	619	96%	18%
1	S	619	96%	20%
1	T	619	96%	18%
1	U	619	96%	21%
1	V	619	96%	19%
1	W	619	96%	19%
1	X	619	96%	16%

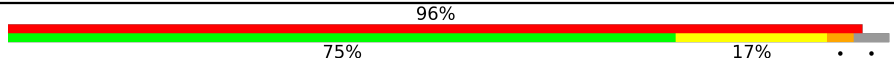
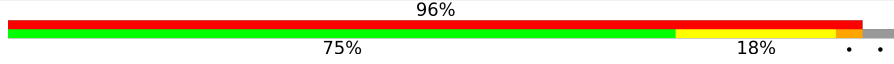
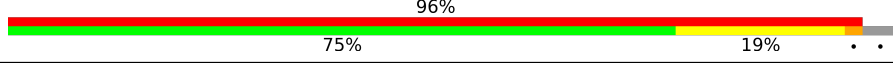
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Mol	Chain	Length	Quality of chain	
1	Y	619	96%	17%
1	Z	619	96%	18%
1	a	619	96%	17%
1	b	619	96%	18%
1	c	619	96%	18%
1	d	619	96%	17%
1	e	619	96%	18%
1	f	619	96%	19%
1	g	619	96%	20%
1	h	619	96%	20%
1	i	619	96%	20%
1	j	619	96%	16%
1	k	619	96%	20%
1	l	619	96%	20%
1	m	619	96%	17%
1	n	619	96%	21%
1	o	619	96%	20%
1	p	619	96%	19%
1	q	619	96%	19%
1	r	619	96%	19%
1	s	619	96%	17%
1	t	619	96%	21%
1	u	619	96%	20%
1	v	619	96%	19%
1	w	619	96%	18%

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Mol	Chain	Length	Quality of chain
1	x	619	
1	y	619	
1	z	619	

2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 298034 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 Interferon-induced GTP-binding protein Mx2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	0	596	4807	3046	841	896	24	0	0
1	1	596	4807	3046	841	896	24	0	0
1	2	596	4807	3046	841	896	24	0	0
1	3	596	4807	3046	841	896	24	0	0
1	4	596	4807	3046	841	896	24	0	0
1	5	596	4807	3046	841	896	24	0	0
1	6	596	4807	3046	841	896	24	0	0
1	7	596	4807	3046	841	896	24	0	0
1	8	596	4807	3046	841	896	24	0	0
1	9	596	4807	3046	841	896	24	0	0
1	a	596	4807	3046	841	896	24	0	0
1	b	596	4807	3046	841	896	24	0	0
1	c	596	4807	3046	841	896	24	0	0
1	d	596	4807	3046	841	896	24	0	0
1	e	596	4807	3046	841	896	24	0	0
1	f	596	4807	3046	841	896	24	0	0
1	g	596	4807	3046	841	896	24	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	h	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	i	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	j	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	k	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	l	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	m	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	n	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	o	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	p	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	q	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	r	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	s	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	t	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	u	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	v	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	w	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	x	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	y	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	z	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	A	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	B	596	Total 4807	C 3046	N 841	O 896	S 24	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	C	596	4807	3046	841	896	24	0	0
1	D	596	4807	3046	841	896	24	0	0
1	E	596	4807	3046	841	896	24	0	0
1	F	596	4807	3046	841	896	24	0	0
1	G	596	4807	3046	841	896	24	0	0
1	H	596	4807	3046	841	896	24	0	0
1	I	596	4807	3046	841	896	24	0	0
1	J	596	4807	3046	841	896	24	0	0
1	K	596	4807	3046	841	896	24	0	0
1	L	596	4807	3046	841	896	24	0	0
1	M	596	4807	3046	841	896	24	0	0
1	N	596	4807	3046	841	896	24	0	0
1	O	596	4807	3046	841	896	24	0	0
1	P	596	4807	3046	841	896	24	0	0
1	Q	596	4807	3046	841	896	24	0	0
1	R	596	4807	3046	841	896	24	0	0
1	S	596	4807	3046	841	896	24	0	0
1	T	596	4807	3046	841	896	24	0	0
1	U	596	4807	3046	841	896	24	0	0
1	V	596	4807	3046	841	896	24	0	0
1	W	596	4807	3046	841	896	24	0	0

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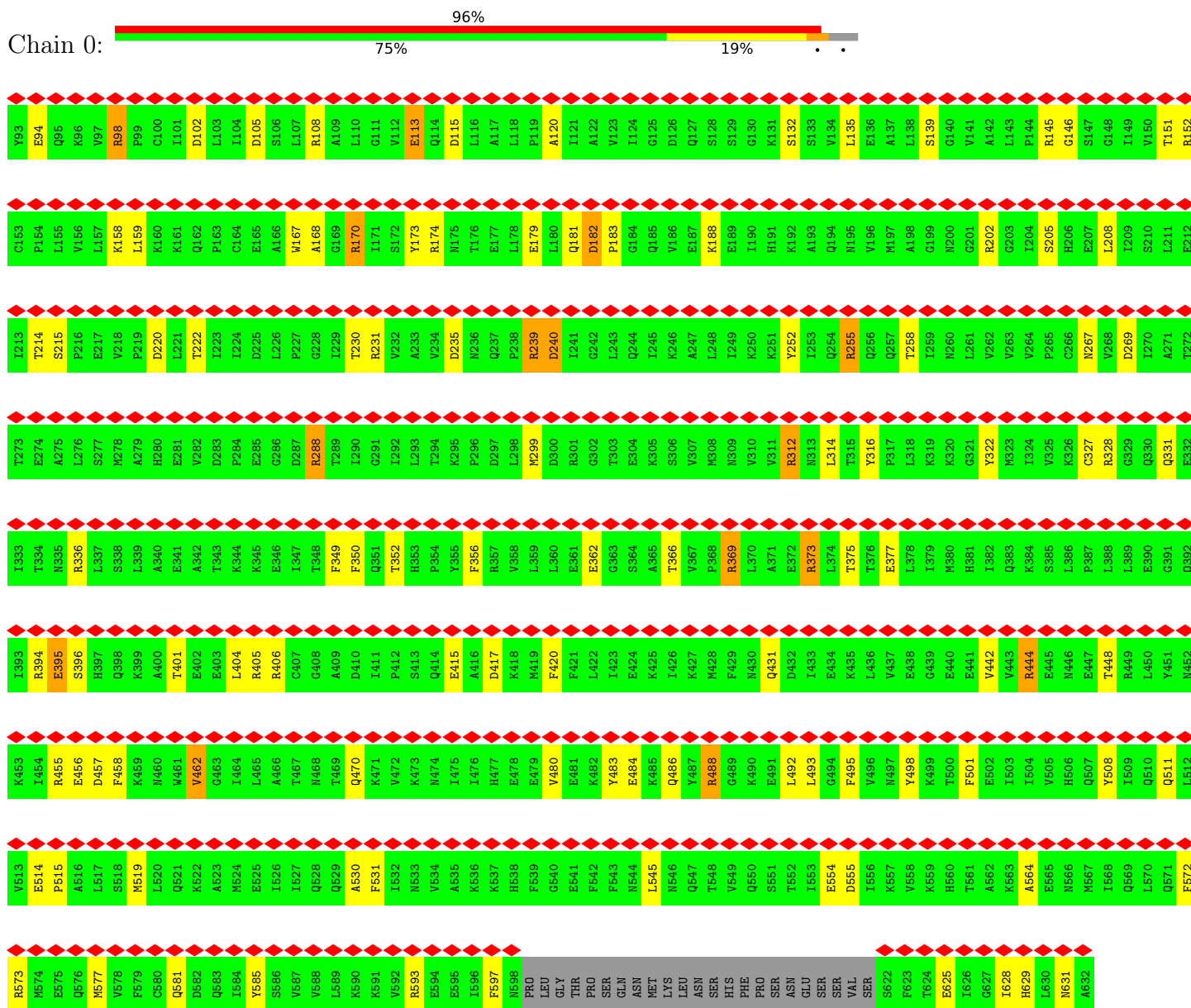
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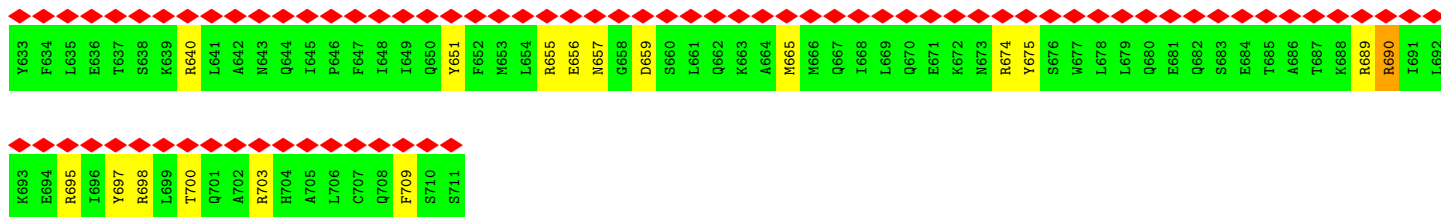
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	X	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	Y	596	Total 4807	C 3046	N 841	O 896	S 24	0	0
1	Z	596	Total 4807	C 3046	N 841	O 896	S 24	0	0

3 Residue-property plots [i](#)

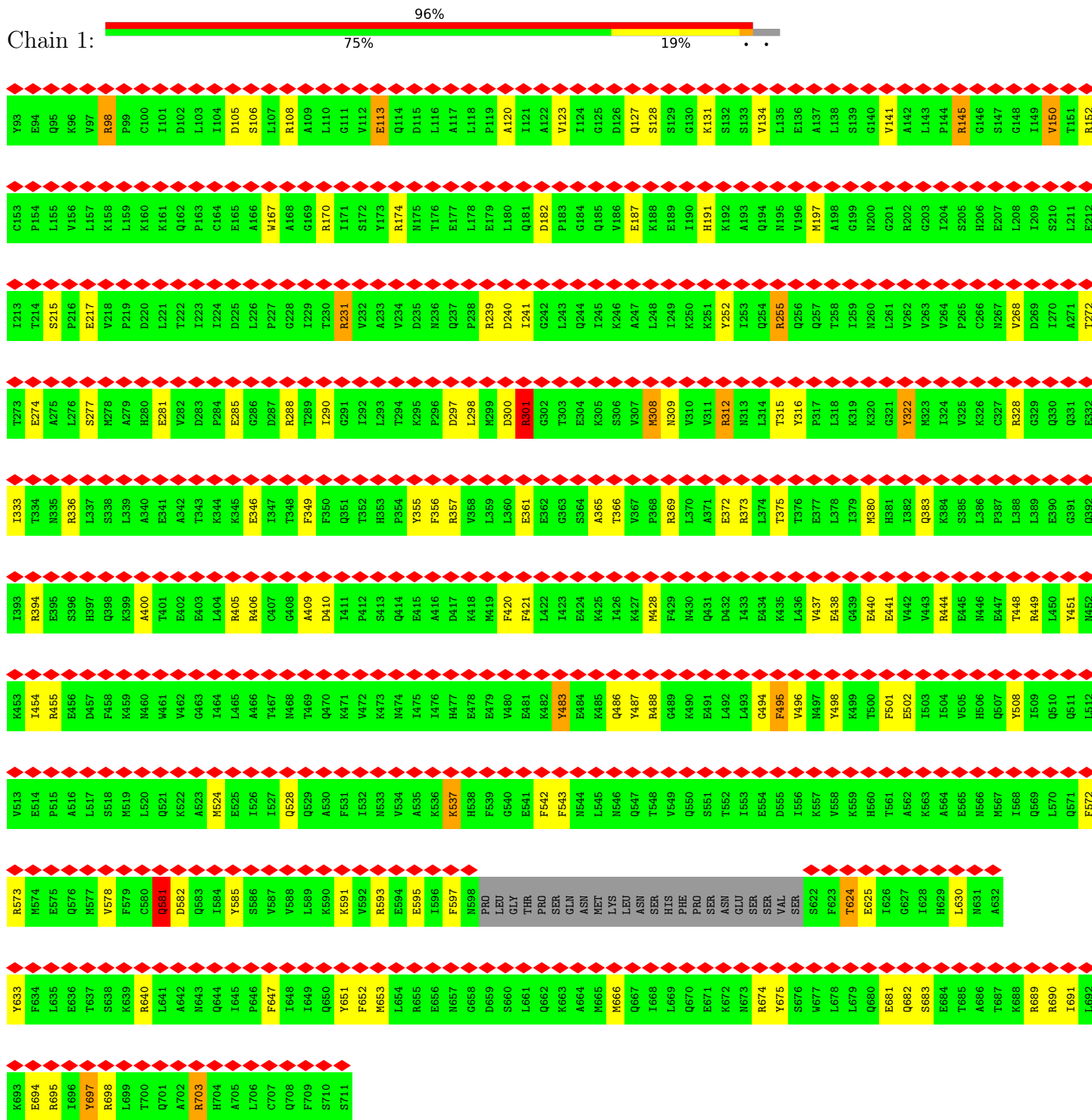
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Interferon-induced GTP-binding protein Mx2



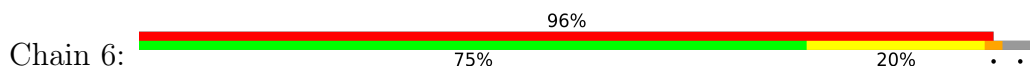


• Molecule 1: Interferon-induced GTP-binding protein Mx2



I333	T334	N335	R336	L337	S338	L339	A340	E341	T342	T343	K344	K345	E346	I347	T348	F349	F350	Q351	T352	H353	P354	Y355	F356	R357	L358	L360	E361	E362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	R373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	P387	L388	L389	E390	G391	Q392		
I393	R394	E395	S396	H397	Q398	K399	A400	T401	E402	E403	L404	R405	R406	C407	G408	A409	D410	I411	P412	S413	Q414	E415	A416	D417	K418	M419	F420	F421	L422	I423	E424	K425	L426	K427	M428	F429	M430	Q431	D432	I433	E434	K435	L436	V437	Y438	G439	E440	E441	V442	V443	R444	E445	N446	E447	T448	R449	L450	Q451	Y452	N452
K453	I454	R455	E456	D457	F458	K459	N460	V461	G462	L464	L465	L466	T467	N468	T469	Q470	K471	V472	K473	N474	I475	I476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	Q486	Y487	R488	G489	M490	E491	L492	L493	G494	F495	V496	N497	Y498	K499	T500	F501	E502	I503	I504	V505	V506	Q507	Y508	I509	L510	Q511	L512		
V513	E514	P515	A516	L517	S518	M519	L520	Q521	K522	A523	M524	E525	I526	I527	Q528	A529	A530	F531	I532	N533	V534	A535	K536	H537	H538	F539	G540	E541	F542	F543	N544	L545	N546	Q547	T548	V549	Q550	S551	T552	L553	E554	D555	I556	K557	V558	K559	H560	T561	K562	K563	A564	E565	N566	M567	I568	Q569	L570	Q571	F572	
R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	I584	Y585	S586	V587	V588	L589	K590	K591	V592	R593	E594	E595	I596	F597	N598	P600	L600	GLY	THR	PRO	SER	GLN	ASN	MET	LYS	LEU	ASN	SER	HIS	PHE	PRO	SER	ASN	GLU	SER	SER	VAL	S622	F623	T624	E625	I626	G627	I628	H629	L630	N631	M632	A632	
Y633	F634	L635	E636	T637	S638	K639	R640	L641	A642	N643	Q644	I645	P646	F647	I648	T649	Q650	Y651	F652	M653	L654	R655	E656	M657	G658	D659	S660	L661	Q662	K663	A664	M665	M666	Q667	I668	L669	Q670	E671	K672	N673	R674	Y675	S676	M677	L678	L679	Q680	E681	Q682	S683	E684	T685	A686	T687	K688	R689	L690	I691	L692	
K693	E694	R695	L696	Y697	R698	L699	T700	Q701	A702	R703	H704	A705	L706	C707	Q708	F709	S710	S711																																										

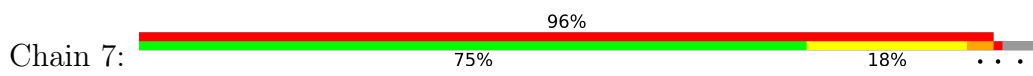
• Molecule 1: Interferon-induced GTP-binding protein Mx2



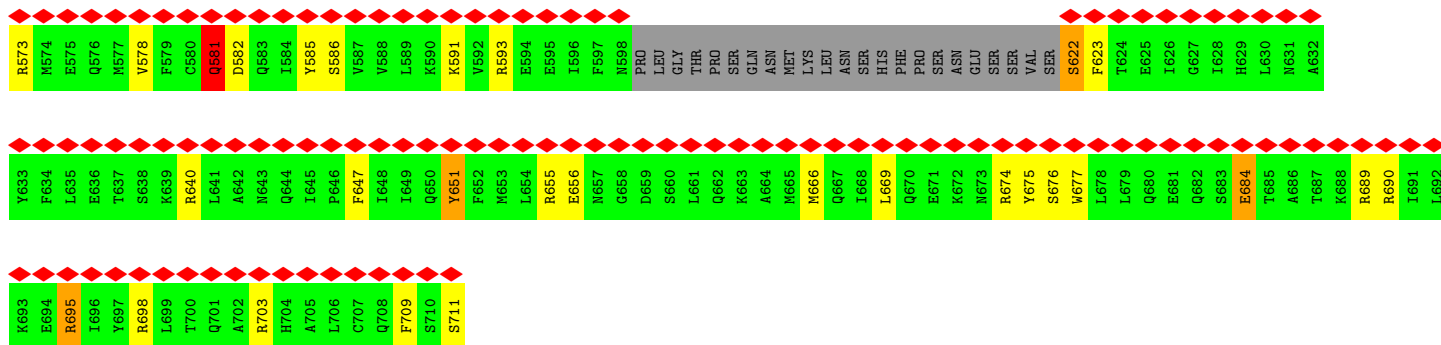
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C153	P154	L155	V156	L157	K158	L159	K160	Q161	Q162	P163	C164	E165	A166	V167	A168	G169	R170	I171	S172	Y173	R174	M175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	L186	E187	K188	I189	I190	H191	K192	A193	Q194	N195	V196	M197	A198	G199	N200	G201	R202	G203	I204	V205	S206	H206	E207	L208	I209	S210	L211	E212
I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	L224	D225	L226	P227	G228	I229	R230	R231	V232	L233	V234	D235	N236	Q237	P238	R239	D240	I241	L242	L243	Q244	I245	K246	A247	L248	I249	K250	K251	Y252	I253	Q254	R255	Q256	Q257	T258	I259	N260	L261	G262	V263	V264	P265	C266	N267	V268	D269	I270	A271	E272	
T273	E274	A275	L276	M277	S278	A279	H280	E281	V282	D283	P284	E285	G286	D287	R288	T289	L290	G291	L292	L293	T294	K295	P296	D297	L298	M299	D300	R301	G302	T303	E304	K305	S306	V307	M308	N309	V310	V311	R312	N313	L314	T315	Y316	P317	L318	K319	K320	G321	L322	M323	I324	S325	P326	K326	C327	R328	G329	Q330	Q331	E332
I333	T334	N335	R336	L337	S338	L339	A340	E341	T342	T343	K344	K345	E346	I347	T348	F349	F350	Q351	T352	H353	P354	Y355	F356	R357	L358	L360	E361	E362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	R373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	P387	L388	L389	E390	G391	Q392		
I393	R394	E395	S396	H397	Q398	K399	A400	T401	E402	E403	L404	R405	R406	C407	G408	A409	D410	I411	P412	S413	Q414	E415	A416	D417	K418	M419	F420	F421	L422	I423	E424	K425	L426	K427	M428	F429	M430	Q431	D432	I433	E434	K435	L436	V437	Y438	G439	E440	E441	V442	V443	R444	E445	N446	E447	T448	R449	L450	Q451	Y452	N452

K453	I454	R455	E456	D457	F458	K459	N460	V461	G462	G463	I464	L465	A466	T467	N468	T469	Q470	K471	V472	K473	N474	I475	I476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	K486	Y487	R488	G489	K490	E491	L492	L493	L494	F495	V496	I497	Y498	K499	T500	F501	E502	I503	I504	V505	V506	Q507	Y508	I509	Q510	Q511	L512		
V513	E514	P515	A516	L517	S518	M519	L520	Q521	K522	A523	M524	E525	I526	I527	Q528	Q529	A530	F531	I532	N533	V534	A535	K536	K537	H538	F539	G540	E541	F542	F543	F543	N544	L545	L546	Q547	T548	V549	Q550	S551	T552	I553	E554	E555	D556	I557	K558	V559	K559	H560	T561	E562	K563	A564	V565	E566	N567	I568	Q569	L570	Q571	F572
R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	I584	Y585	S586	V587	V588	L589	K590	K591	V592	E593	E594	E595	I596	F597	N598	P599	L600	L601	T602	S603	S604	A605	S606	L607	A608	H609	P610	S611	A612	S613	S614	S615	S616	S617	S618	S619	S620	S621	S622	S623	S624	S625	S626	S627	S628	S629	S630	S631	S632		
Y633	F634	L635	E636	T637	S638	K639	R640	L641	A642	M643	Q644	I645	P646	F647	I648	G649	Q650	Y651	F652	M653	L654	R655	E656	M657	G658	D659	S660	L661	Q662	K663	G664	M665	M666	Q667	I668	L669	Q670	E671	K672	M673	R674	Y675	S676	M677	L678	L679	Q680	E681	Q682	S683	E684	T685	T687	K688	R689	R690	I691	L692			
K693	E694	R695	I696	Y697	R698	L699	T700	Q701	A702	R703	H704	A705	L706	C707	Q708	F709	S710	S711																																											

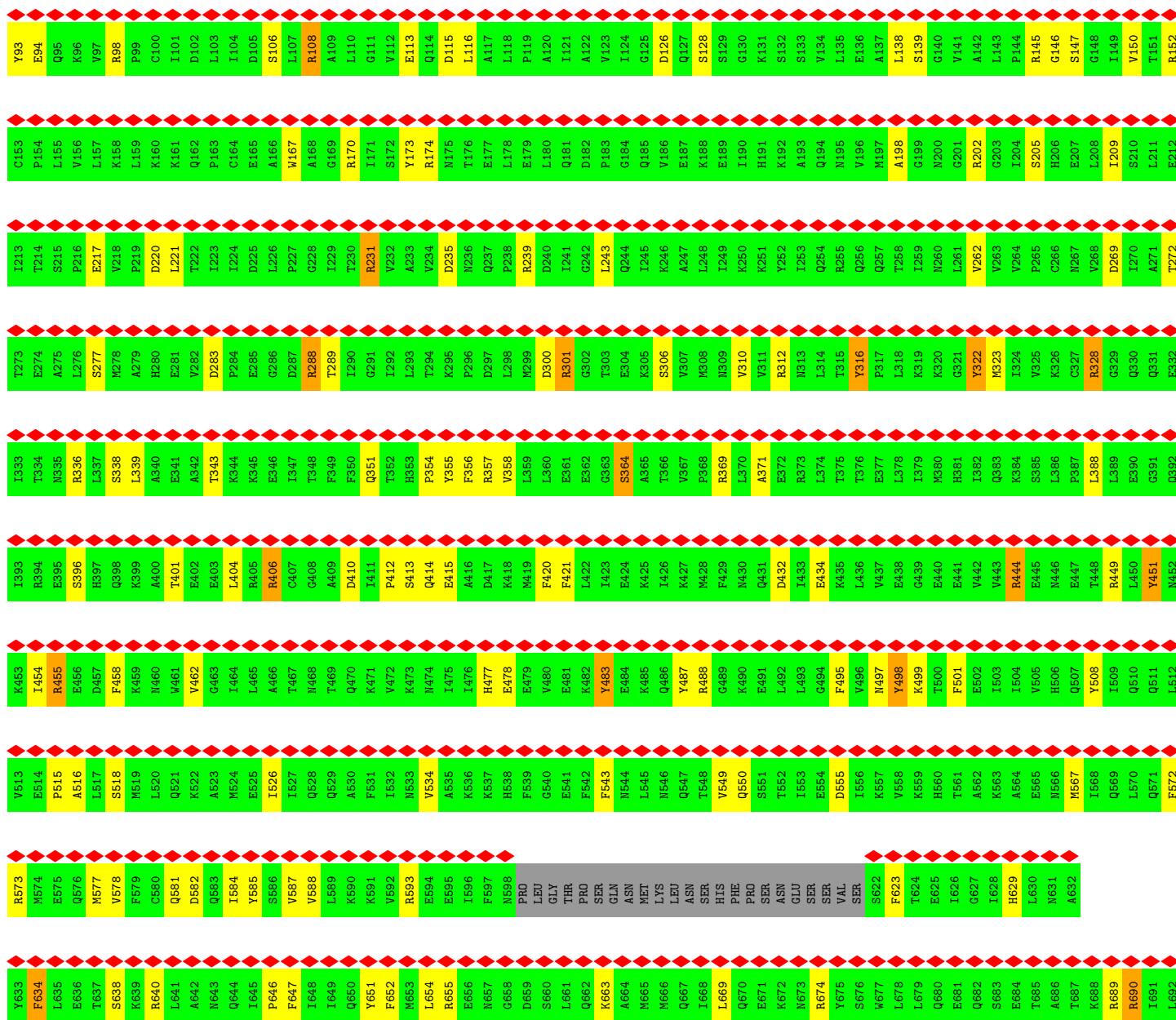
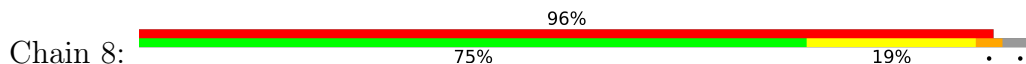
● Molecule 1: Interferon-induced GTP-binding protein Mx2

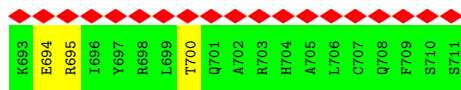


Y93	E94	Q95	K96	R97	R98	P99	C100	I101	D102	L103	I104	D105	S106	L107	R108	A109	L110	G111	V112	E113	Q114	D115	L116	A117	L118	P119	A120	I121	A122	V123	I124	G125	D126	Q127	S128	S129	G130	E131	S132	S133	V134	L135	E136	A137	L138	S139	G140	E141	V142	Q143	P144	R145	S147	G148	I149	V150	T151	R152		
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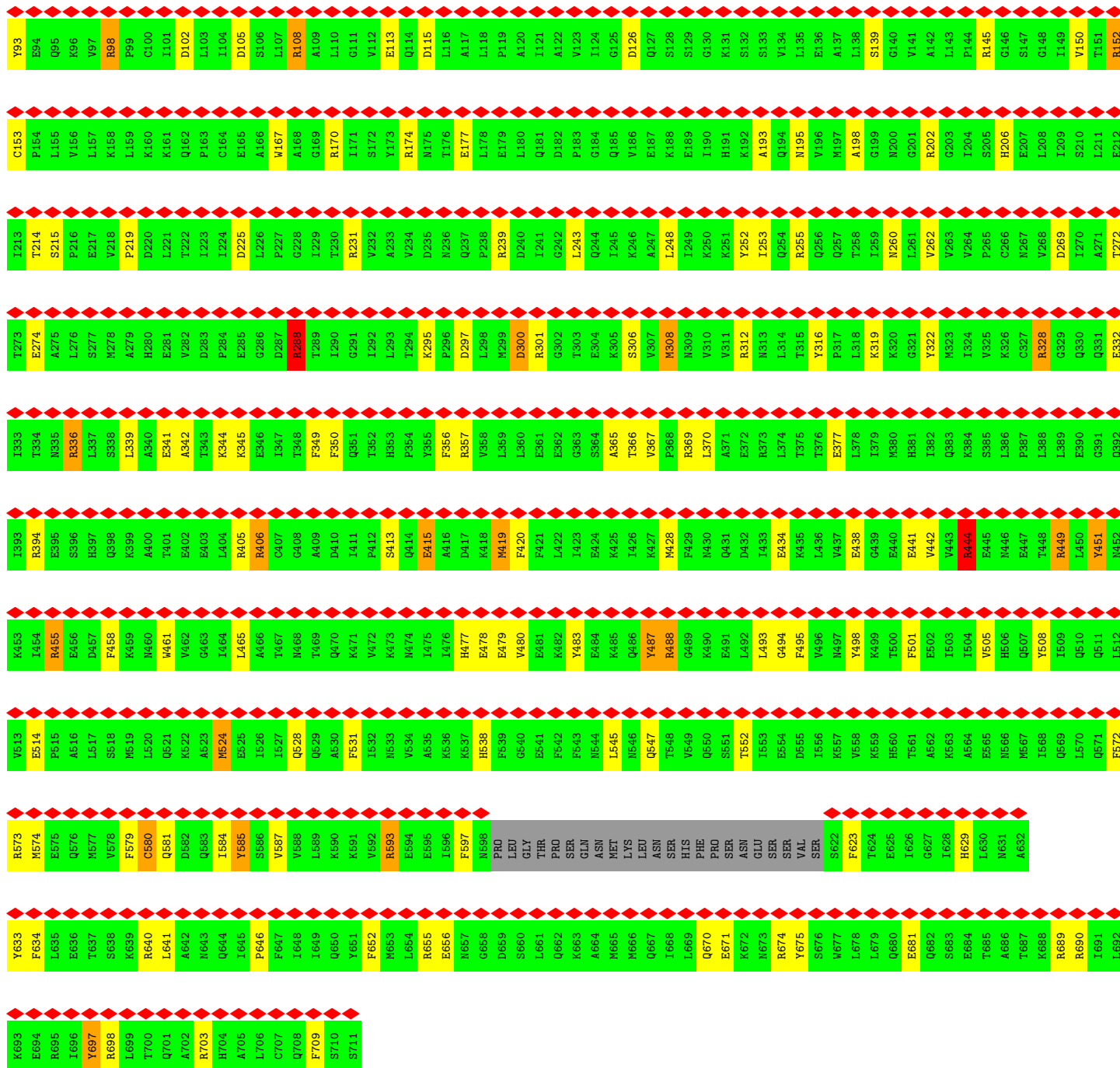


● Molecule 1: Interferon-induced GTP-binding protein Mx2





• Molecule 1: Interferon-induced GTP-binding protein Mx2



• Molecule 1: Interferon-induced GTP-binding protein Mx2



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C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	E165	A166	W167	A168	G169	R170	I171	S172	Y173	R174	M175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	V186	E187	K188	E189	I190	H191	K192	A193	Q194	N195	V196	A197	M198	A199	G199	N200	V201	R202	G203	I204	S205	H206	E207	L208	I209	S210	L211	E212
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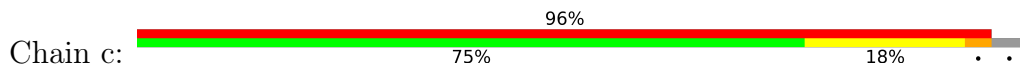
• Molecule 1: Interferon-induced GTP-binding protein Mx2



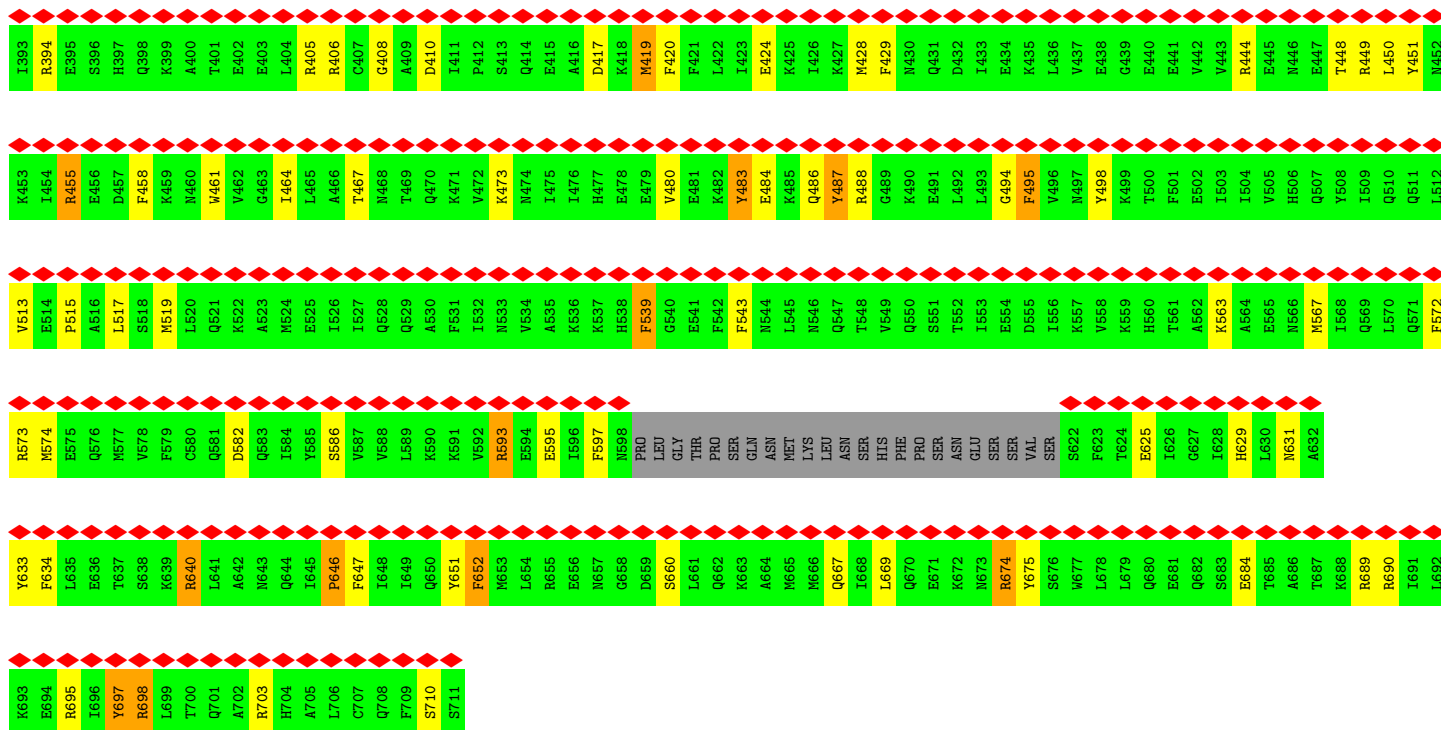
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V513	E514	F515	A516	L517	S518	M519	L520	Q521	K522	A523	M524	E525	I526	I527	Q528	Q529	A530	F531	I532	N533	V534	A535	K536	K537	H538	F539	G540	E541	F542	F543	N544	L545	N546	Q547	T548	V549	Q550	S551	T552	L553	E554	D555	I556	K557	V558	K559	H560	T561	G562	K563	A564	E565	N566	M567	I568	Q569	L570	Q571	F572		
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K693	E694	R695	L696	Y697	R698	L699	T700	Q701	A702	R703	H704	A705	L706	C707	Q708	F709	S710	S711																																											

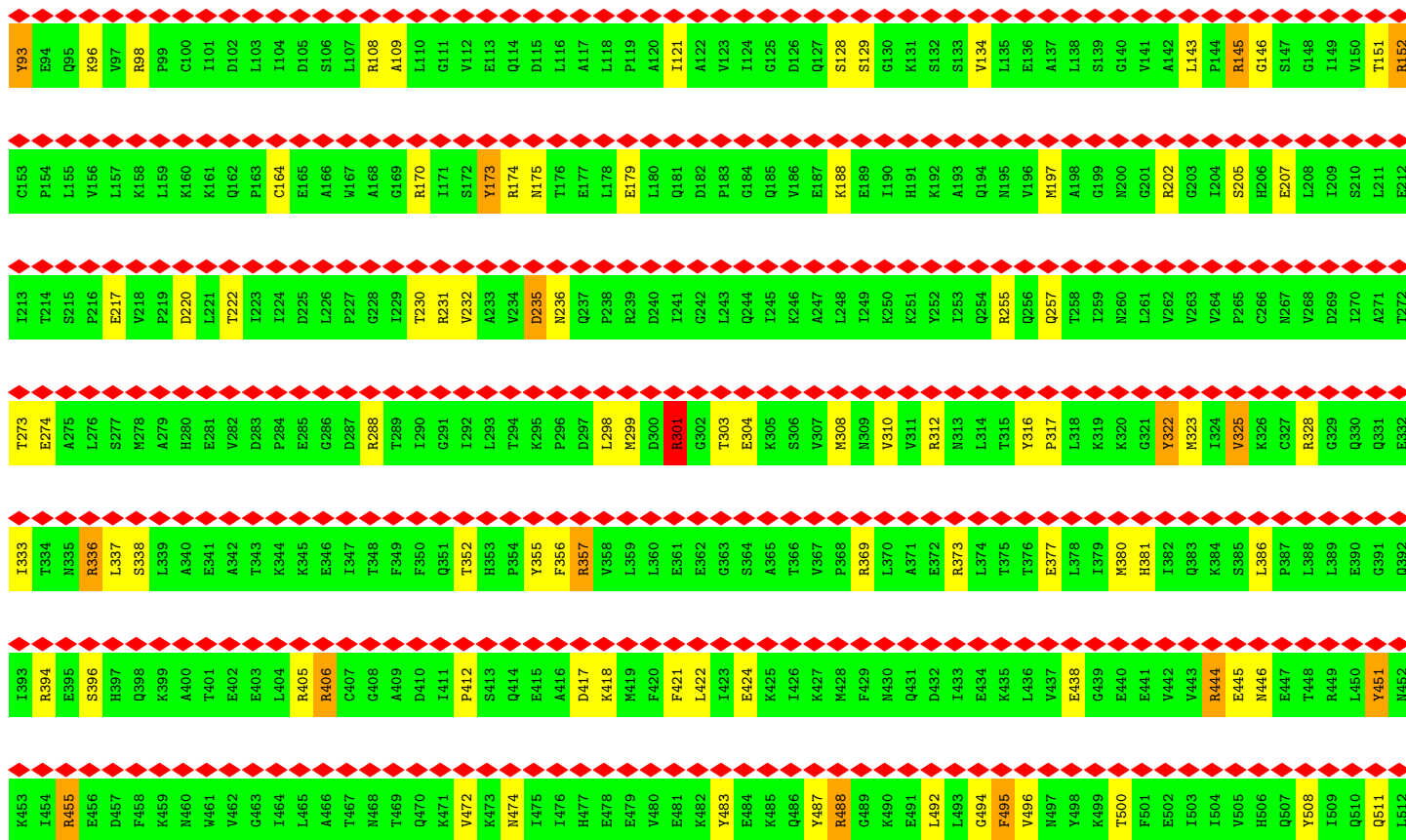
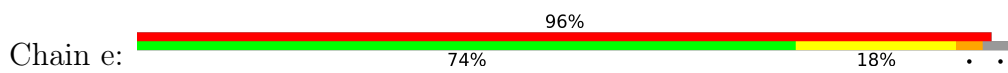
• Molecule 1: Interferon-induced GTP-binding protein Mx2



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C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	E165	A166	W167	A168	G169	R170	I171	S172	Y173	R174	N175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	V186	E187	K188	E189	I190	H191	K192	A193	Q194	N195	V196	M197	A198	G199	N200	G201	R202	G203	I204	S205	H206	E207	L208	I209	S210	L211	E212
I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	D225	E226	P227	G228	I229	T230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	I245	K246	A247	L248	I249	N250	K251	Y252	I253	Q254	R255	Q256	P257	T258	I259	N260	L261	V262	V263	V264	P265	C266	N267	V268	D269	I270	A271	T272



● Molecule 1: Interferon-induced GTP-binding protein Mx2



V513 E614 P515 A616 L517 S618 M519 L520 Q521 K522 A523 M524 E525 I526 I527 Q528 Q529 A530 F531 I532 N533 V534 A535 K536 K537 H538 F539 G540 E541 E542 F543 N544 L545 N546 Q547 T548 V549 Q550 S551 T552 I553 E554 D555 I556 K557 V558 K559 H560 T561 G562 K563 A564 E565 M566 I568 Q569 L570 Q571 F572

R573 M574 E575 Q576 M577 F578 F579 C580 Q581 Q582 Q583 I584 Y585 S586 V587 V588 L589 K590 Q590 K591 V592 N593 E594 E595 I596 F597 N598 PRO LEU GLY THR PRO SER GLN ASN MET LYS LEU ASN SER HIS PHE PRO SER ASN GLU SER VAL SER S622 F623 T624 E625 I626 G627 I628 H629 L630 N631 A632

Y633 F634 L635 E636 T637 K638 K639 R640 L641 A642 M643 Q644 P645 P646 F647 I648 L649 Q650 Y651 F652 M653 L654 R655 E656 M657 G658 D659 S660 L661 L662 K663 A664 M665 M666 Q667 I668 L669 Q670 Q671 K672 M673 N674 Y675 S676 M677 L678 L679 Q680 E681 Q682 S683 E684 T685 L686 T687 K688 R689 Q690 I691 L692

K693 E694 R695 I696 Y697 R698 L699 T700 Q701 A702 R703 H704 A705 L706 C707 Q708 F709 S710 S711

• Molecule 1: Interferon-induced GTP-binding protein Mx2



Y93 E94 Q95 K96 V97 R98 P99 C100 I101 D102 L103 I104 D105 S106 L107 R108 A109 L110 G111 V112 E113 Q114 D115 L116 A117 L118 P119 A120 I121 A122 V123 I124 G125 D126 Q127 S128 S129 I130 K131 S132 S133 V134 L135 E136 A137 L138 S139 G140 E881 V141 A142 L143 P144 R145 G146 S147 I148 I149 V150 T151 R152

C153 P154 L155 V156 K157 L158 L159 K160 C160 Q162 P163 C164 E165 A166 W167 A168 G169 R170 I171 S172 Y173 R174 N175 T176 E177 L178 E179 L180 Q181 D182 P183 I184 G185 Q186 K187 E188 I189 I190 H191 K192 A193 A194 Q194 N195 V196 M197 G199 N200 G201 R202 G203 I204 S205 H206 E207 L208 I209 S210 L211 E212

I213 T214 S215 P216 V217 E218 P219 D220 L221 T222 I223 I224 D225 G226 P227 R228 T229 I230 G231 V232 A233 V234 D235 N236 Q237 P238 R239 D240 I241 G242 L243 Q244 I245 S246 V247 M248 N249 R250 G251 S252 T253 E254 Q254 R255 Q256 P257 T258 I259 N260 L261 Y262 N263 I264 P265 C266 N267 V268 D269 I270 A271 T272

T273 E274 A275 L276 M278 A279 H280 E281 V282 D283 P284 E285 G286 D287 R288 I289 G291 I292 S293 T294 K295 P296 D297 L298 M299 R300 G301 G302 T303 E304 S305 K306 S307 M308 N309 V311 N312 N313 L314 T315 Y316 P317 L318 K319 K320 G321 Y322 M323 I324 S325 K326 C327 R328 G329 Q330 Q331 E332

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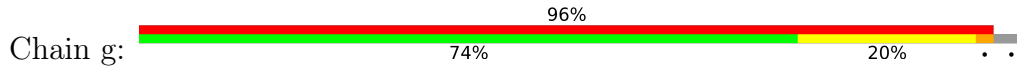
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• Molecule 1: Interferon-induced GTP-binding protein Mx2



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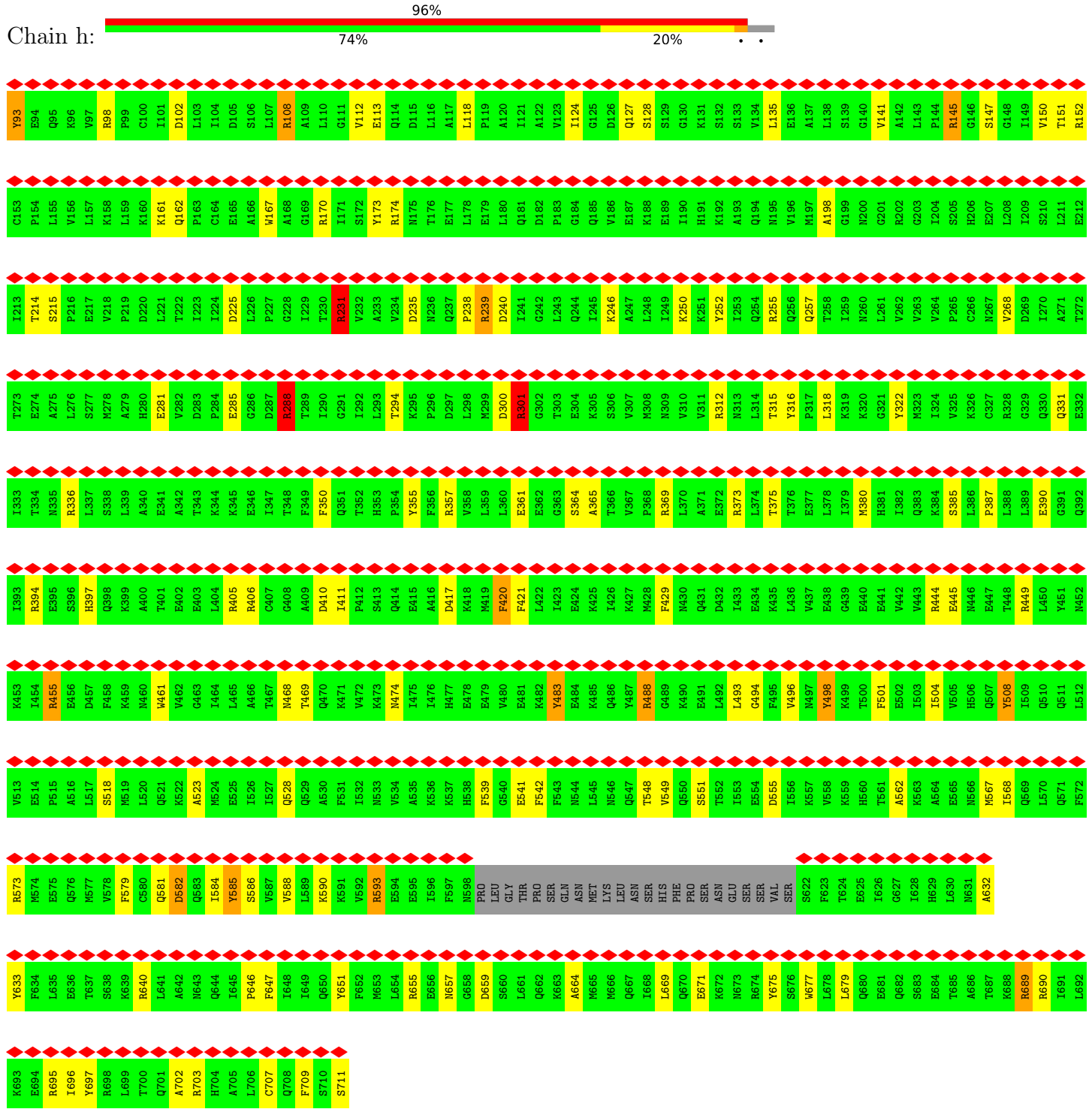
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K693	E694	R695	I696	Y697	R698	L699	T700	Q701	A702	R703	H704	A705	L706	C707	Q708	F709	S710	S711
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● Molecule 1: Interferon-induced GTP-binding protein Mx2

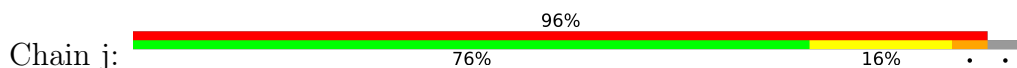


● Molecule 1: Interferon-induced GTP-binding protein Mx2



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I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	E225	L226	P227	G228	I229	T230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	I245	K246	A247	L248	I249	K250	K251	Y252	I253	Q254	R255	Q256	Q257	T258	I259	N260	L261	V262	V263	I264	P265	C266	N267	V268	D269	I270	A271	T272
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I333	T334	N335	R336	L337	S338	L339	A340	E341	A342	T343	K344	K345	E346	I347	T348	F349	Q350	T352	H353	L294	Y355	F356	R357	V358	L359	L360	E361	E362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	R373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	P387	L388	L389	E390	G391	Q392	
I393	R394	E395	S396	H397	Q398	K399	A400	T401	E402	E403	L404	R405	R406	C407	G408	A409	D410	I411	S413	Q414	E415	A416	D417	K418	M419	F420	F421	L422	I423	E424	K425	T426	K427	M428	F429	N430	Q431	D432	I433	E434	K435	L436	V437	E438	G439	E440	E441	V442	V443	R444	E445	N446	E447	T448	R449	L450	Y451	N452	
K453	L454	R455	E456	D457	F458	K459	N460	V461	G462	G463	L464	L465	A466	T467	N468	T469	K471	K472	K473	N474	L475	L476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	Q486	Y487	R488	G489	K490	E491	L492	L493	G494	F495	V496	M497	Y498	K499	T500	F501	E502	I503	I504	V505	E506	Q507	V508	I509	Q510	Q511	L512	
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R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	I584	Y585	S586	V587	V588	L589	K590	K591	V592	R593	E594	E595	E596	F597	PRO	LEU	GLY	THR	PRO	SER	GLN	ASN	MET	LYS	ASN	SER	HIS	PHE	PRO	SER	ASN	GLU	SER	VAL	S622	F623	T624	E625	I626	L628	H629	L630	N631	A632					
V633	F634	L635	E636	T637	S638	K639	R640	L641	A642	R643	O644	L645	P646	F647	L648	I649	Q650	Y651	F652	R653	L654	R655	E656	R657	D659	S660	L661	Q662	K663	A664	M665	M666	Q667	I668	L669	Q670	E671	K672	M673	R674	Y675	S676	M677	L679	O680	E681	D682	S683	E684	T685	R686	T687	K688	R689	R690	L691	L692		
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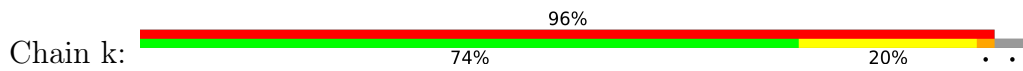
• Molecule 1: Interferon-induced GTP-binding protein Mx2



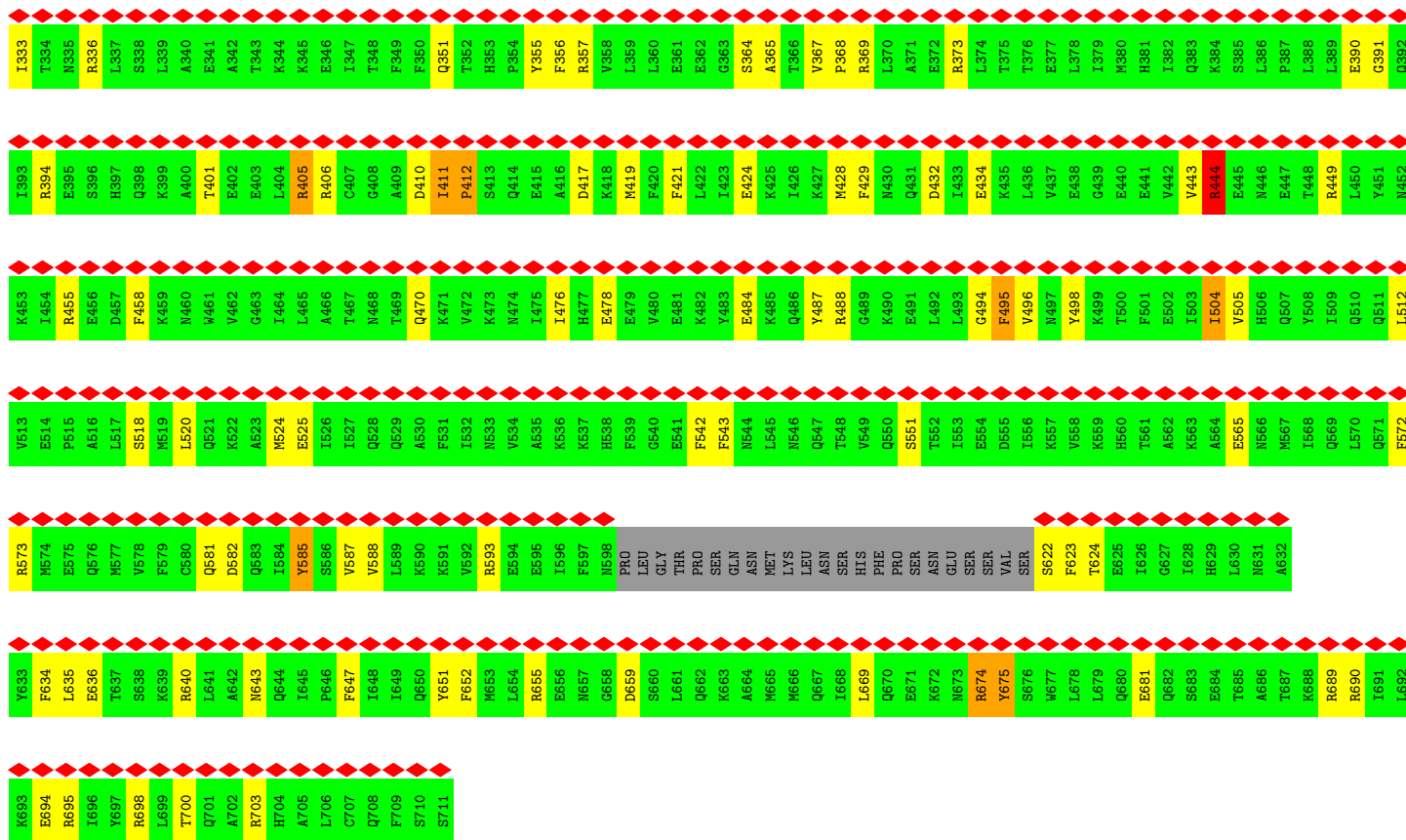
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C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	E165	A166	V167	A168	G169	R170	I171	S172	Y173	R174	M175	T176	E177	L178	E179	L180	Q181	D182	P183	I184	Q185	V186	E187	K188	E189	I190	H191	K192	A193	Q194	M195	V196	M197	A198	G199	N200	G201	R202	G203	I204	S205	G206	E207	L208	I209	S210	L211	E212

I213	T273	I333	I393	K453	V513	R573	Y633	K693
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S215	A275	N335	E395	R455	P515	E575	L635	R695
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V218	M278	S338	Q398	F458	S518	V578	S638	R698
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D220	H280	A340	A400	M460	L520	C580	R640	T700
L221	E281	E341	T401	M461	Q521	Q581	L641	Q701
T222	E282	A342	E402	G462	K522	D582	L642	A702
I223	D283	T343	E403	G463	A523	Q583	M643	R703
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D225	E285	K345	R405	L465	E525	Y585	I645	A705
L226	G286	E346	R406	A466	I526	S586	P646	L706
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G228	R288	T348	G408	M468	Q528	V588	I648	Q708
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T230	I290	D410	D410	Q470	A530	K590	Q650	S710
R231	G291	Q351	I411	K471	F531	K591	Y651	S711
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V234	L294	P354	Q414	M474	V534	E594	L654	Q114
D235	K295	Y355	E415	I475	A535	E595	R655	D115
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G242	G302	E362	L422	K482	F542	Q662	Q662	A122
L243	T303	G363	I423	Y483	F543	R663	R663	V123
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I249	N309	R369	F429	G489	V549	L669	L669	S129
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D269	G329	L389	R449	I509	Q569	R689	R689	I149
I270	Q330	E390	L450	Q510	L570	R690	R690	V150
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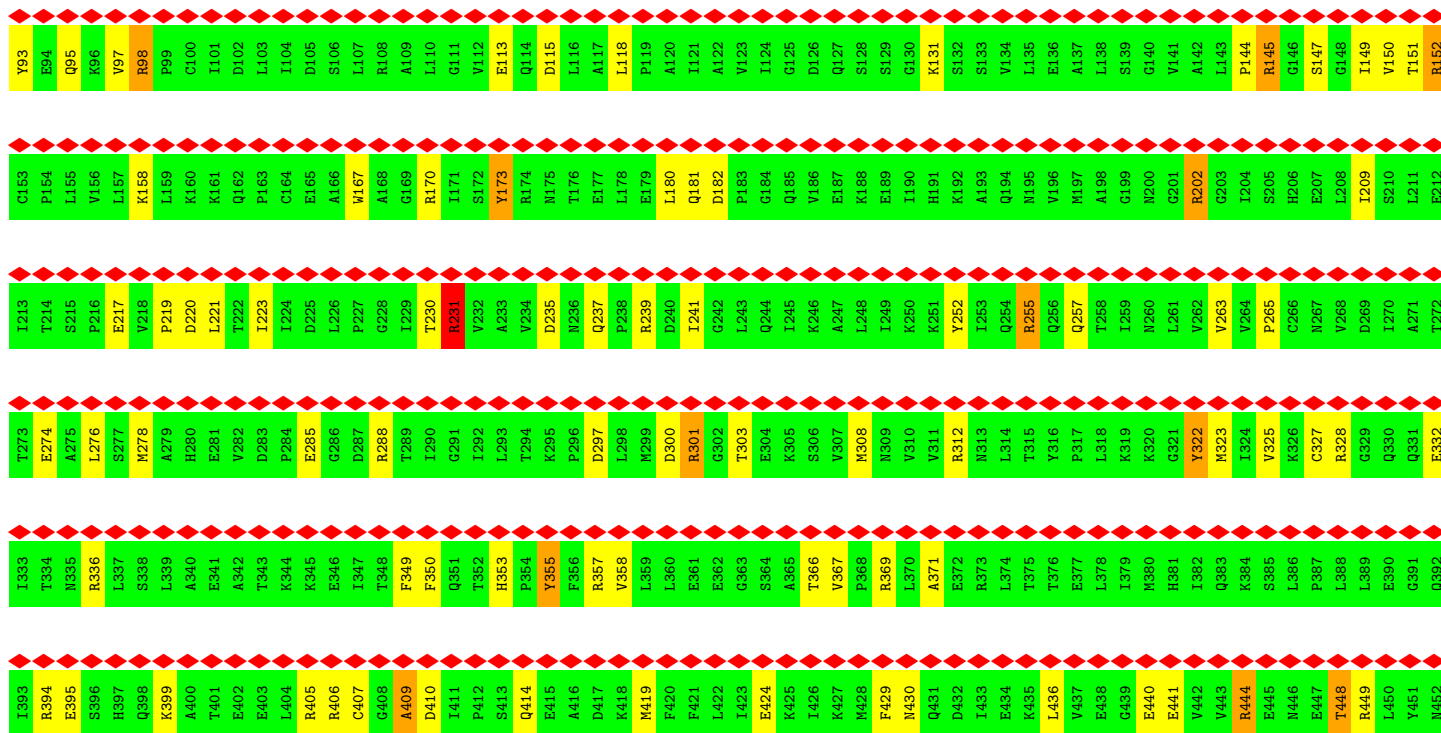
• Molecule 1: Interferon-induced GTP-binding protein Mx2

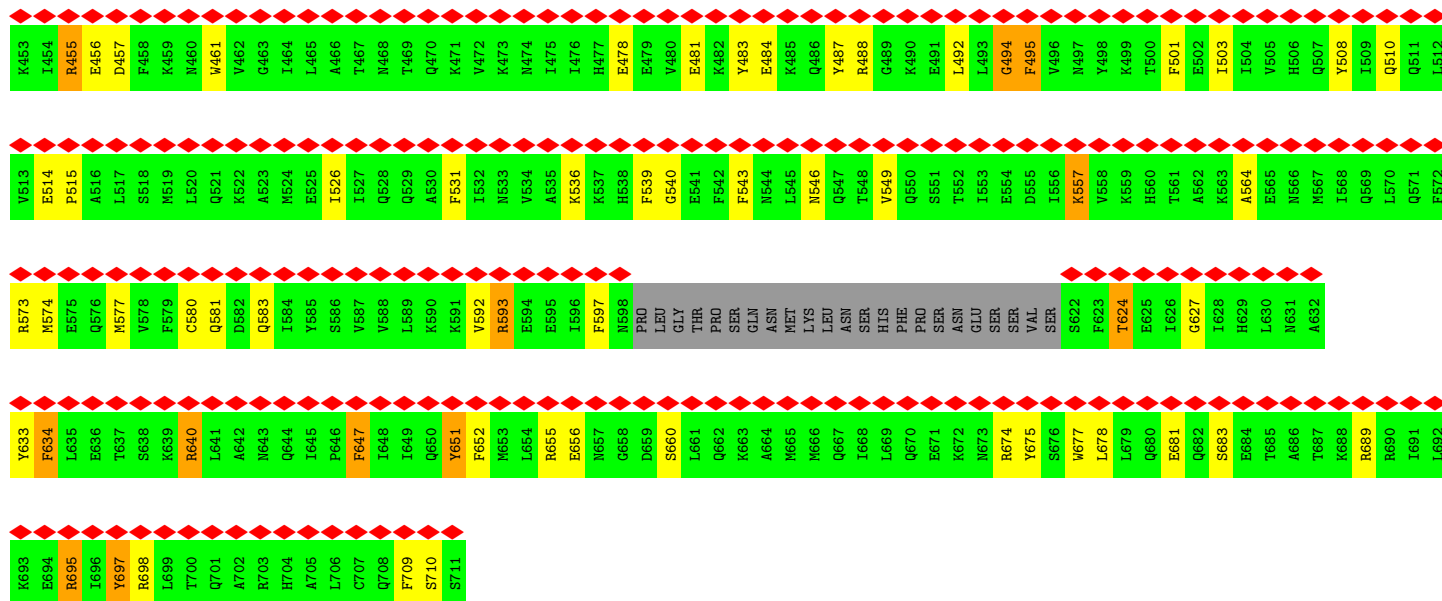


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P99	K160	P219	A279
C100	K161	D220	H280
I101	Q162	L221	E281
D102	P163	T222	V282
L103	C164	I223	D283
I104	E165	L224	P284
D105	M166	D225	E285
S106	L167	L226	G286
L107	A168	P227	D287
R108	G169	G228	R288
A109	R170	I229	T289
L110	I171	T230	I290
G111	S172	R231	G291
E113	Y173	V232	L292
Q114	R174	A233	L293
D115	N175	V234	T294
L116	T176	D235	K295
A117	E177	N236	P296
L118	L178	Q237	D297
P119	E179	P238	L298
L120	L180	R239	M299
I121	Q181	D240	D300
A122	D182	I241	R301
V123	P183	G242	G302
I124	G184	L243	T303
G125	Q185	Q244	E304
D126	L186	I245	K305
Q127	E187	K246	S306
S128	K188	A247	V307
S129	E189	L248	M308
G130	I190	I249	N309
K131	H191	K250	V310
S132	K192	K251	V311
S133	A193	Y252	R312
V134	Q194	I253	N313
L135	N195	Q254	L314
E136	V196	R255	T315
M137	M197	Q256	Y316
L138	A198	Q257	P317
G139	G199	T258	L318
G140	N200	I259	K319
V141	G201	N260	K320
A142	R202	L261	G321
L143	G203	V262	Y322
P144	I204	V263	M323
R145	S205	V264	I324
G146	H206	P265	V325
S147	E207	C266	K326
G148	L208	N267	L328
I149	I209	V268	R328
V150	S210	D269	G329
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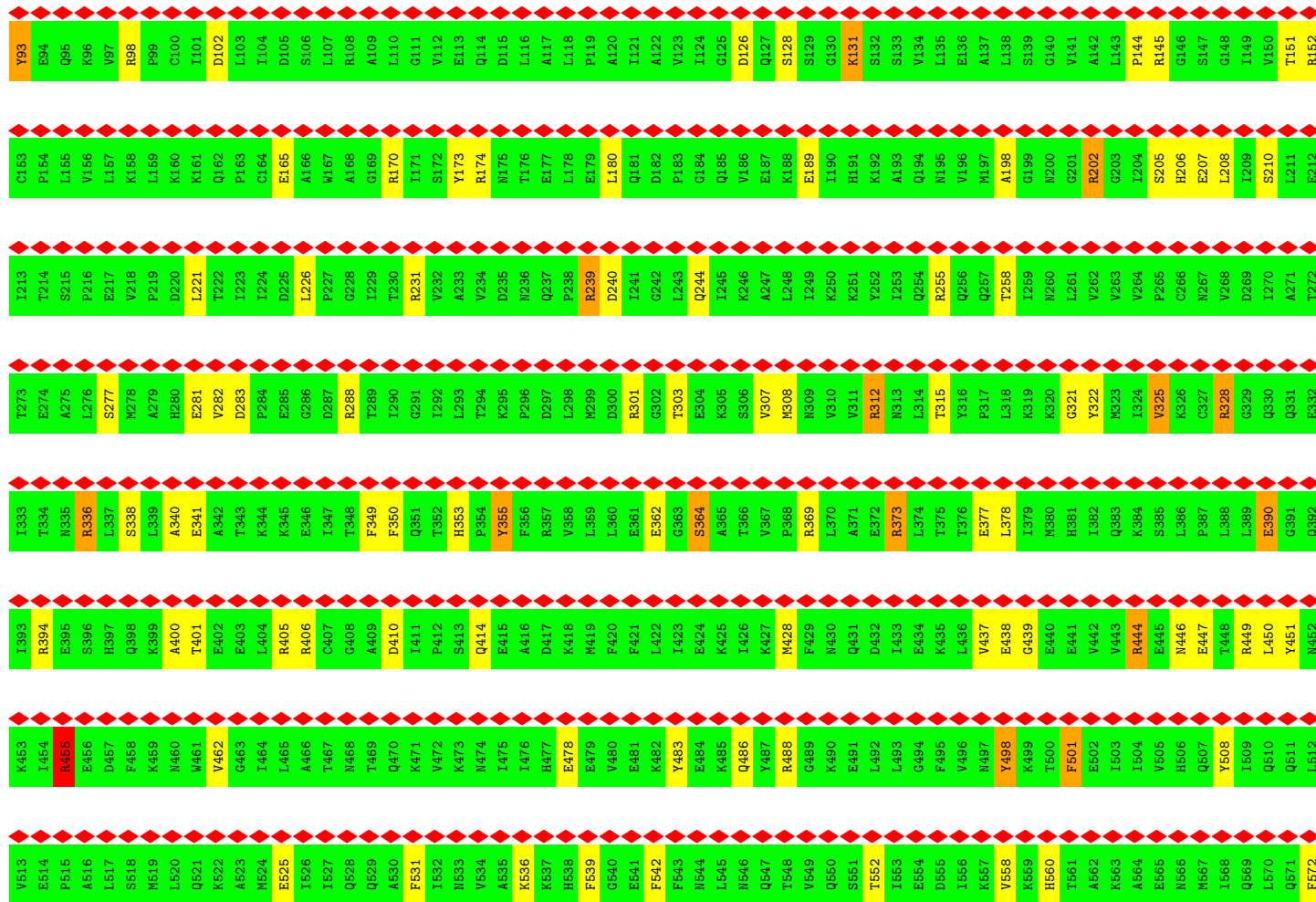
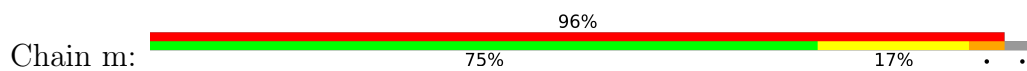


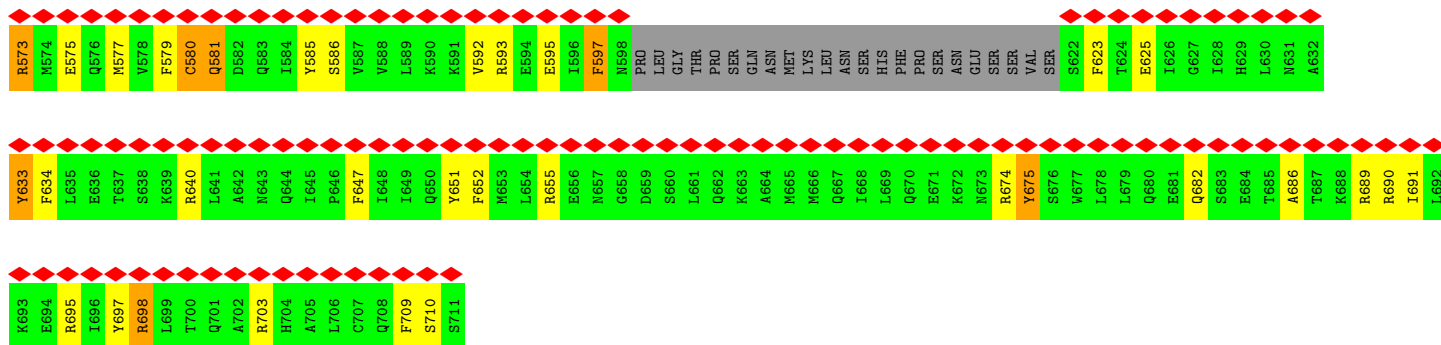
• Molecule 1: Interferon-induced GTP-binding protein Mx2



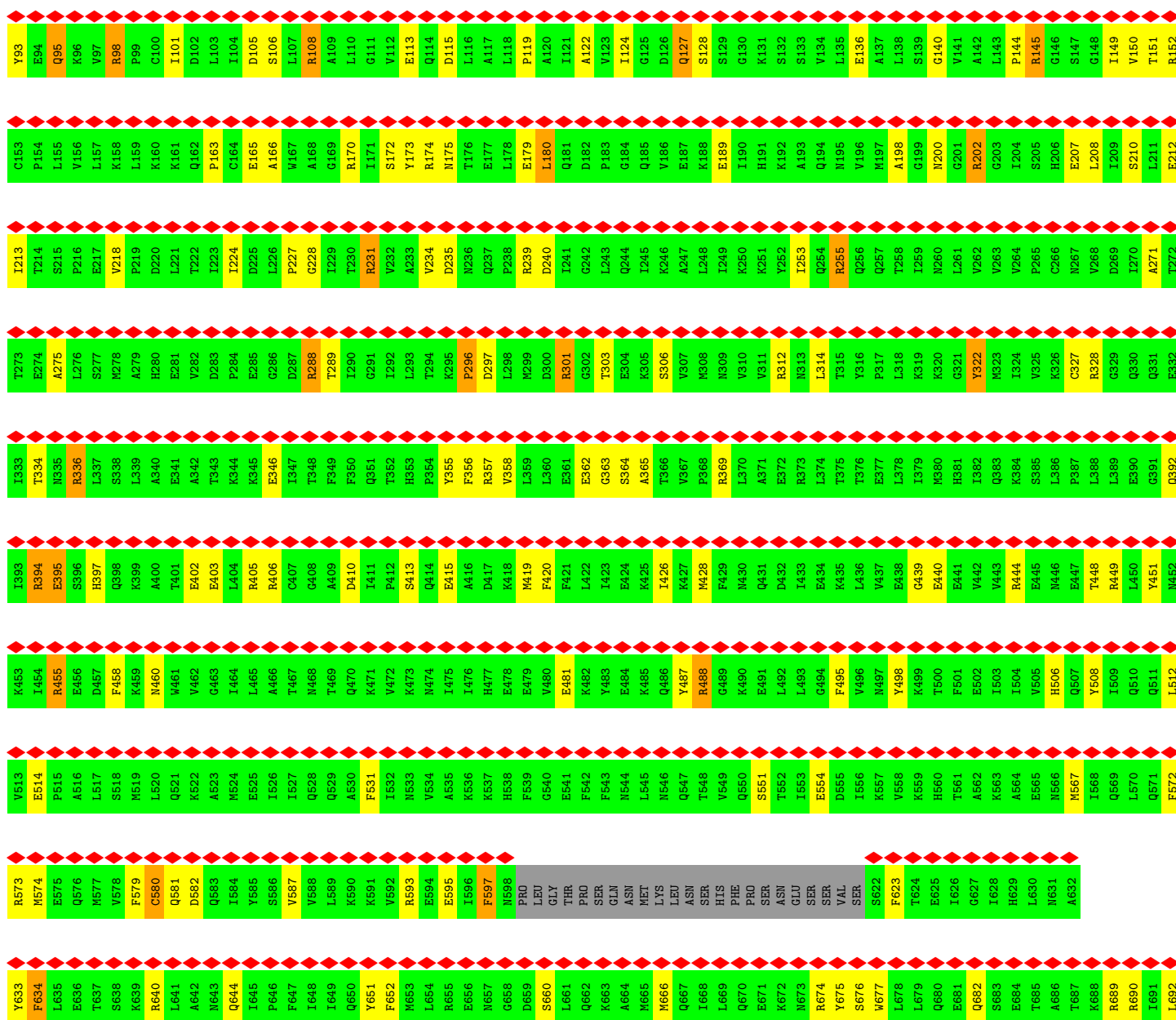
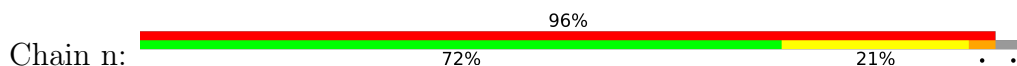


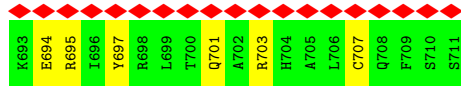
• Molecule 1: Interferon-induced GTP-binding protein Mx2



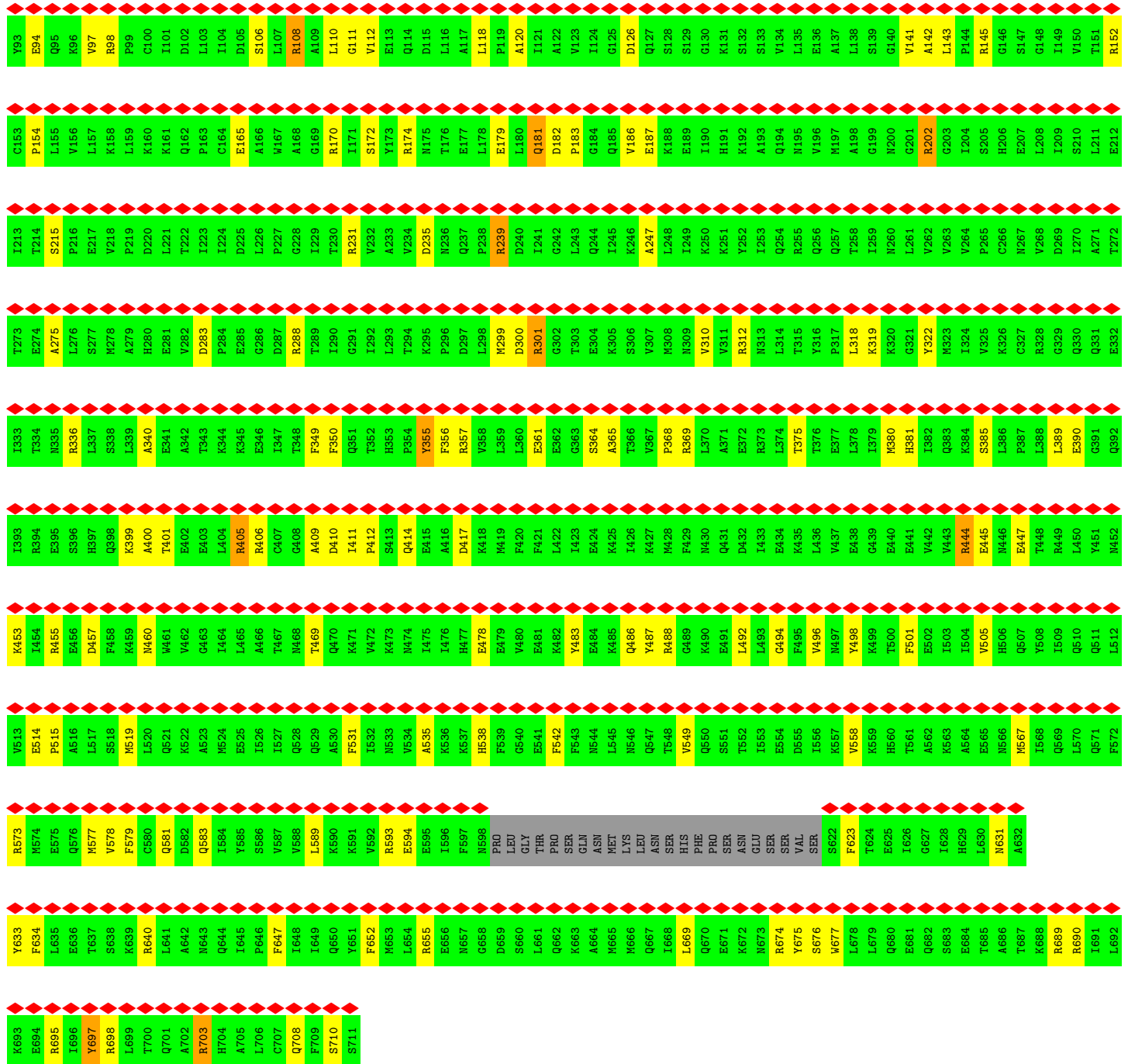
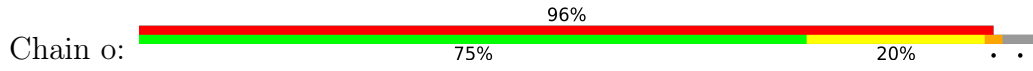


• Molecule 1: Interferon-induced GTP-binding protein Mx2

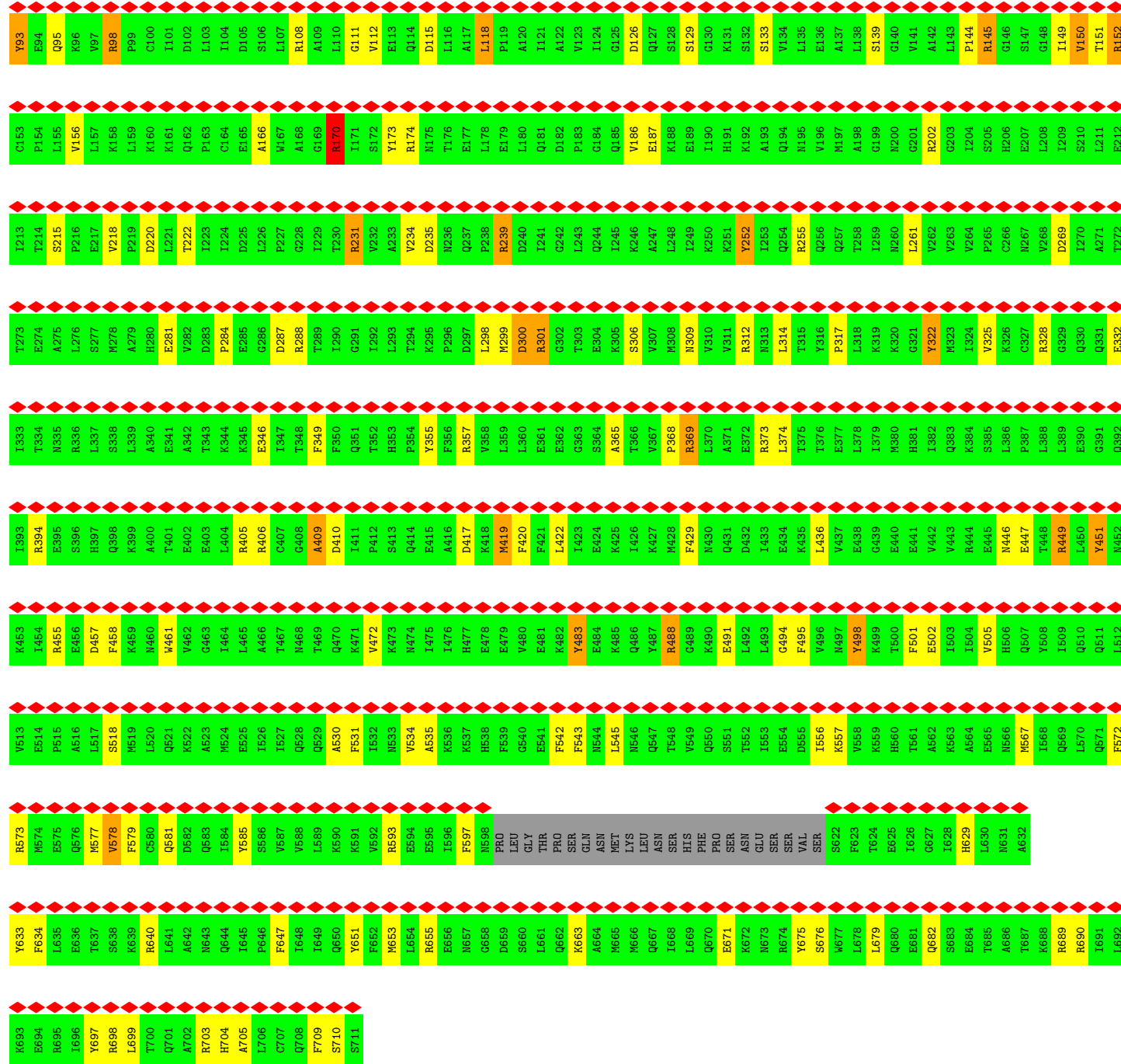




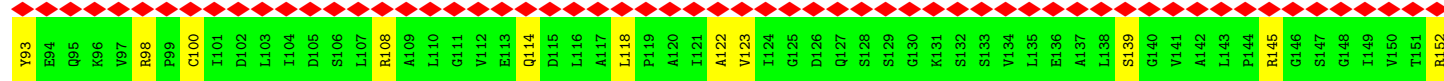
● Molecule 1: Interferon-induced GTP-binding protein Mx2



● Molecule 1: Interferon-induced GTP-binding protein Mx2

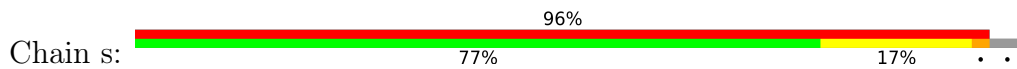


• Molecule 1: Interferon-induced GTP-binding protein Mx2

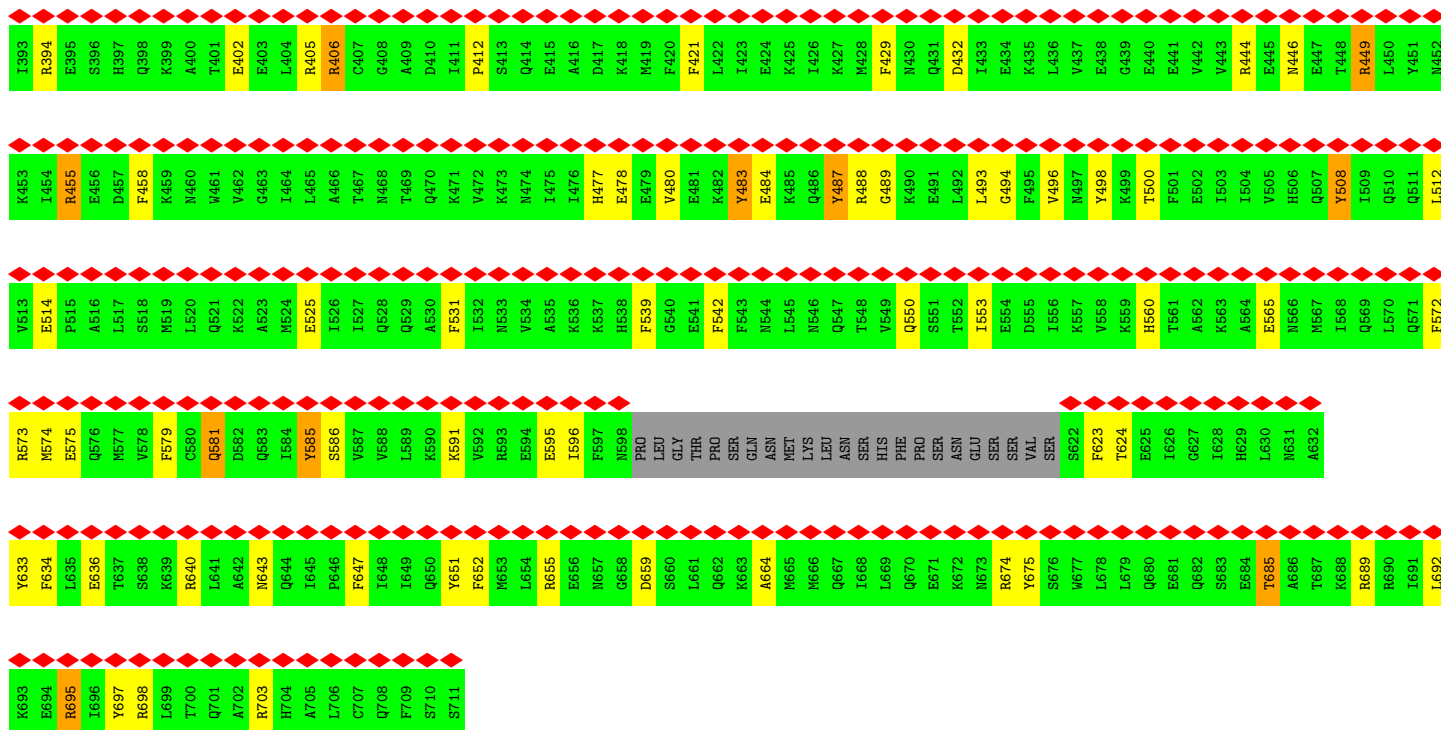


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I333	T334	M335	R336	L337	S338	L339	A340	H341	E342	T343	K344	K345	E346	I347	T348	F349	F350	Q351	T352	H353	P354	Y355	F356	R357	V358	L359	L360	E361	G362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	L373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	P387	L388	L389	Q390	G391	Q392
I393	R394	E395	S396	H397	Q398	K399	A400	T401	A402	E403	L404	R405	R406	C407	G408	A409	D410	I411	P412	S413	Q414	E415	A416	D417	K418	M419	F420	F421	I422	I423	A424	K425	A426	K427	M428	F429	N430	Q431	D432	I433	L434	K435	L436	V437	E438	G439	A440	E441	V442	V443	R444	E445	N446	E447	T448	R449	L450	Y451	N452
K453	I454	R455	E456	D457	F458	K459	M460	V461	G462	G463	I464	L465	A466	T467	M468	T469	Q470	K471	V472	K473	M474	I475	I476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	Q486	Y487	R488	G489	N490	E491	L492	L493	G494	F495	V496	M497	Y498	K499	T500	F501	E502	I503	I504	V505	V506	Q507	Y508	I509	Q510	Q511	L512
V513	E514	P515	A516	S517	S518	M519	L520	Q521	K522	A523	M524	E525	I526	I527	Q528	Q529	A530	F531	I532	N533	V534	A535	K536	K537	H538	F539	G540	E541	F542	F543	N544	L545	N546	Q547	T548	V549	Q550	S551	T552	I553	E554	D555	I556	K557	V558	K559	H560	T561	A562	K563	A564	E565	M566	M567	I568	Q569	L570	Q571	F572
R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	I584	Y585	S586	V587	V588	L589	K590	K591	V592	R593	E594	E595	I596	F597	N598	P600	L601	T602	S603	A604	A605	M606	L607	A608	S609	H610	P611	S612	G613	S614	G615	S616	S617	S618	S619	S620	S621	S622	F623	T624	E625	I626	I627	H628	H629	L630	M631	A632	
Y633	F634	L635	E636	T637	S638	K639	R640	L641	A642	M643	Q644	I645	P646	F647	L648	I649	Q650	Y651	F652	M653	L654	R655	E656	M657	G658	D659	S660	L661	Q662	R663	A664	M665	M666	Q667	L668	L669	Q670	E671	K672	M673	R674	Y675	S676	M677	L678	L679	Q680	E681	Q682	S683	E684	T685	A686	T687	R688	R689	Q690	L691	L692
K693	E694	R695	L696	Y697	R698	L699	T700	Q701	A702	R703	H704	A705	C706	Q707	Q708	F709	S710	S711																																									

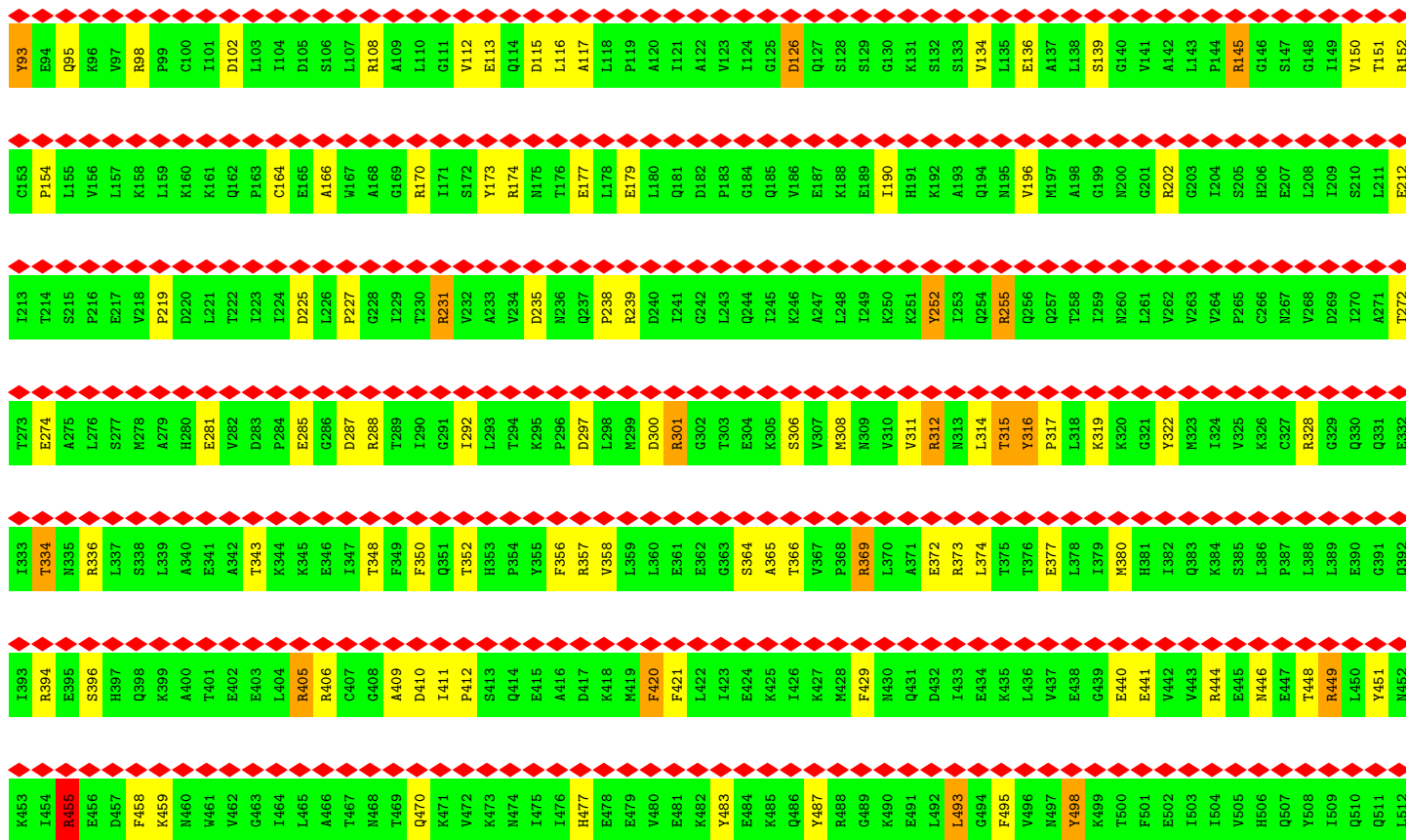
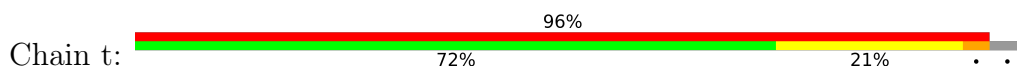
• Molecule 1: Interferon-induced GTP-binding protein Mx2



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C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	G165	A166	W167	A168	G169	R170	I171	S172	Y173	R174	D115	N175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	G186	E187	K188	E189	I190	H191	K192	A193	Q194	N195	V196	M197	A198	G199	N200	G201	R202	G203	I204	S205	C206	H206	E207	L208	I209	D210	L211	L212
I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	D225	L226	P227	G228	L229	R230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	I245	G246	K246	A247	L248	I249	K250	K251	Y252	I253	Q254	R255	Q256	Q257	L258	I259	N260	L261	V262	V263	V264	P265	C266	N267	V268	D269	Q330	A271	T272	
T273	E274	A275	L276	S277	M278	A279	H280	E281	V282	D283	P284	E285	G286	D287	R288	T289	I290	G291	L292	L293	T294	K295	P296	D297	L298	M299	D300	R301	G302	T303	E304	K305	S306	V307	M308	N309	V310	V311	R312	N313	L314	T315	Y316	P317	L318	K319	K320	G321	Y322	M323	I324	V325	K326	C327	R328	G329	Q330	A271	T272		
I333	T334	M335	R336	L337	S338	L339	A340	H341	E342	T343	K344	K345	E346	I347	T348	F349	F350	Q351	T352	H353	P354	Y355	F356	R357	V358	L359	L360	E361	G362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	L373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	P387	L388	L389	Q390	G391	Q392		



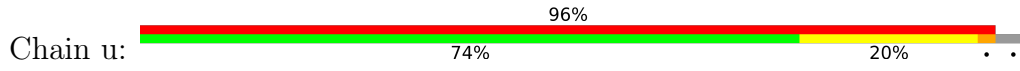
● Molecule 1: Interferon-induced GTP-binding protein Mx2



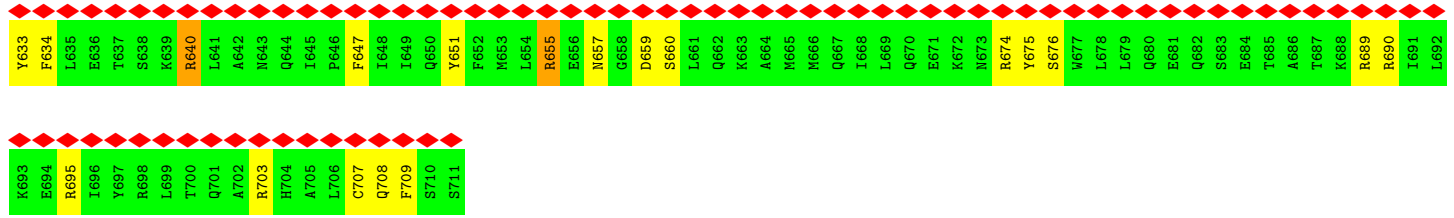
Chain u: 96% 74% 20%

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E614	M674	F634	E694	E94	P154	T214	E274	T334	R394	I454	E614	M674
P515	E575	L635	R695	Q95	L155	S215	A275	N335	E395	R455	P515	E575
A516	Q576	F636	I696	K96	V156	P216	L276	R336	S396	E456	A516	Q576
L517	M577	T637	R697	V97	L157	E217	M277	L337	H397	D457	L517	M577
S618	F578	S638	L698	R98	K158	V218	M278	L338	Q398	F458	S618	F578
M519	F579	K639	L699	P99	L159	P219	A279	L339	K399	K459	M519	F579
L520	C680	R640	T700	C100	K160	D220	H280	A340	A400	N460	L520	C680
Q521	D681	L641	I701	I101	K161	L221	E281	E341	T401	V461	Q521	D681
K522	Q682	A642	A702	D102	Q162	T222	V282	A342	E402	G462	K522	Q682
A523	Q683	N643	R703	L103	P163	I223	D283	T343	E403	G463	A523	Q683
M524	I684	Q644	H704	I104	C164	I224	P284	K344	L404	I464	M524	I684
E525	Y685	I645	A705	K105	E165	D225	R285	K345	R405	L465	E525	Y685
I526	S686	P646	L706	S106	A166	L226	G286	E346	R406	A466	I526	S686
I527	V687	F647	C707	L107	W167	P227	D287	I347	C407	T467	I527	V687
Q528	V688	I648	Q708	R108	A168	G228	R288	T348	G408	N468	Q528	V688
Q529	L689	I649	F709	A109	G169	I229	I289	F349	A409	T469	Q529	L689
A530	K690	Q650	S710	L110	R170	T230	I290	F350	D410	Q470	A530	K690
F531	K691	Y651	S711	G111	I171	R231	G291	Q351	I411	K471	F531	K691
I532	V592	F652	F652	V112	S172	V232	I292	T352	I412	V472	I532	V592
N533	R593	M653	E113	E113	Y173	A233	L293	H353	S413	K473	N533	R593
V534	E594	L654	Q114	Q114	R174	V234	T294	G354	Q414	N474	V534	E594
A535	E595	R655	D115	D115	N175	D235	K295	Y355	E415	I475	A535	E595
K536	I596	E656	L116	L116	T176	N236	P296	F356	A416	I476	K536	I596
K537	F597	M657	A117	A117	E177	Q237	D297	R357	D417	H477	K537	F597
H538	N598	L658	L118	L118	L178	P238	L298	V358	K418	E478	H538	N598
F539	P60	D659	P119	P119	E179	R239	M299	L359	M419	E479	F539	P60
G540	L60	S660	P119	P119	L180	D240	D300	L360	F420	V480	G540	L60
E541	GLY	L661	I121	I121	Q181	I241	R301	E361	F421	E481	E541	GLY
F542	PRO	Q662	A122	A122	D182	G242	G302	E362	L422	K482	F542	PRO
F543	SER	K663	L123	L123	P183	L243	T303	G363	I423	Y483	F543	SER
N544	ASN	A664	I124	I124	G184	Q244	E304	S364	E424	E484	N544	ASN
L545	MET	M665	G125	G125	Q185	I245	K305	A365	K425	K485	L545	MET
L546	LEU	M666	D126	D126	W186	K246	S306	T366	I426	Q486	L546	LEU
Q547	LEU	Q667	Q127	Q127	E187	A247	V307	V367	K427	Y487	Q547	LEU
T548	ASN	L668	S128	S128	K188	L248	M308	P368	M428	R488	T548	ASN
T548	SER	L668	S129	S129	E189	I249	N309	R369	F429	G489	T548	SER
V549	HIS	L669	G130	G130	I190	K250	N310	L370	M429	G489	V549	HIS
Q550	PHE	Q670	H131	H131	H191	K251	V311	A371	Q431	E491	Q550	PHE
S551	PRO	E671	K132	K132	Y192	Y252	R312	E372	D432	L492	S551	PRO
T552	SER	K672	S133	S133	K193	I253	N313	E373	I433	L493	T552	SER
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I556	VAL	S676	A137	A137	M197	Q257	P317	E377	V437	M497	I556	VAL
K557	SER	W677	L138	L138	A198	Q258	L318	L378	F438	N498	K557	SER
K558	SER	L678	S139	S139	G199	I259	K319	I379	G439	K499	K558	SER
K559	SER	L679	G140	G140	N200	N260	K320	M380	E440	T500	K559	SER
H560	LEU	E680	V141	V141	G201	L261	G321	H381	E441	F501	H560	LEU
T561	LEU	E681	A142	A142	R202	V262	Y322	I382	V442	E502	T561	LEU
I626	SER	S682	L143	L143	G203	V263	M323	Q383	V443	I503	I626	SER
I628	SER	L628	L144	L144	I204	V264	I324	K384	R444	I504	I628	SER
G629	ASN	E684	R145	R145	S205	P265	V325	S385	E445	E505	G629	ASN
L630	LEU	T885	G146	G146	S206	C266	K326	L386	N446	V506	L630	LEU
E565	GLU	T886	S147	S147	E207	N267	C327	F387	E447	Q507	E565	GLU
N566	SER	L630	G148	G148	E207	L208	L268	L388	T448	I508	N566	SER
M667	LEU	T887	I149	I149	S209	D269	G329	L389	R449	I509	M667	LEU
I568	LEU	K688	V150	V150	I270	I270	Q330	L390	R449	I509	I568	LEU
I568	SER	R889	V150	V150	I270	I270	Q330	L390	R449	I509	I568	SER
Q569	SER	R889	V150	V150	I270	I270	Q330	L390	R449	I509	Q569	SER
L570	SER	R889	V150	V150	I270	I270	Q330	L390	R449	I509	L570	SER
Q571	SER	T891	I151	I151	L211	T272	Q331	G391	Y451	Q511	Q571	SER
F572	LEU	L692	L152	L152	E212	L272	E332	Q392	N452	L512	F572	LEU

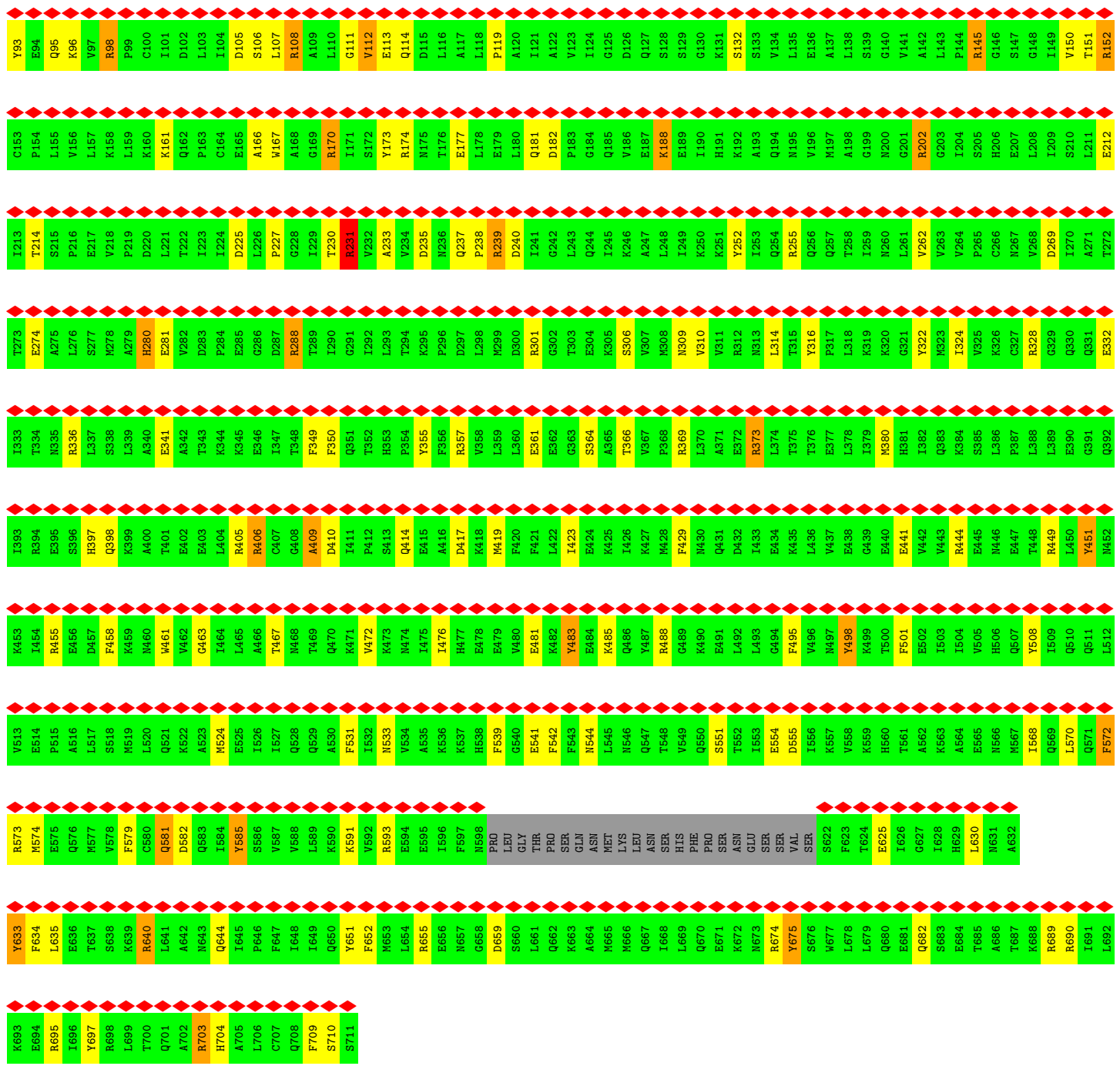
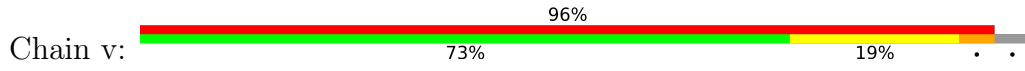
• Molecule 1: Interferon-induced GTP-binding protein Mx2



Chain u:



• Molecule 1: Interferon-induced GTP-binding protein Mx2



• Molecule 1: Interferon-induced GTP-binding protein Mx2



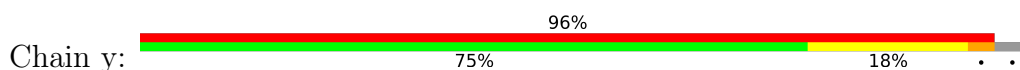
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• Molecule 1: Interferon-induced GTP-binding protein Mx2

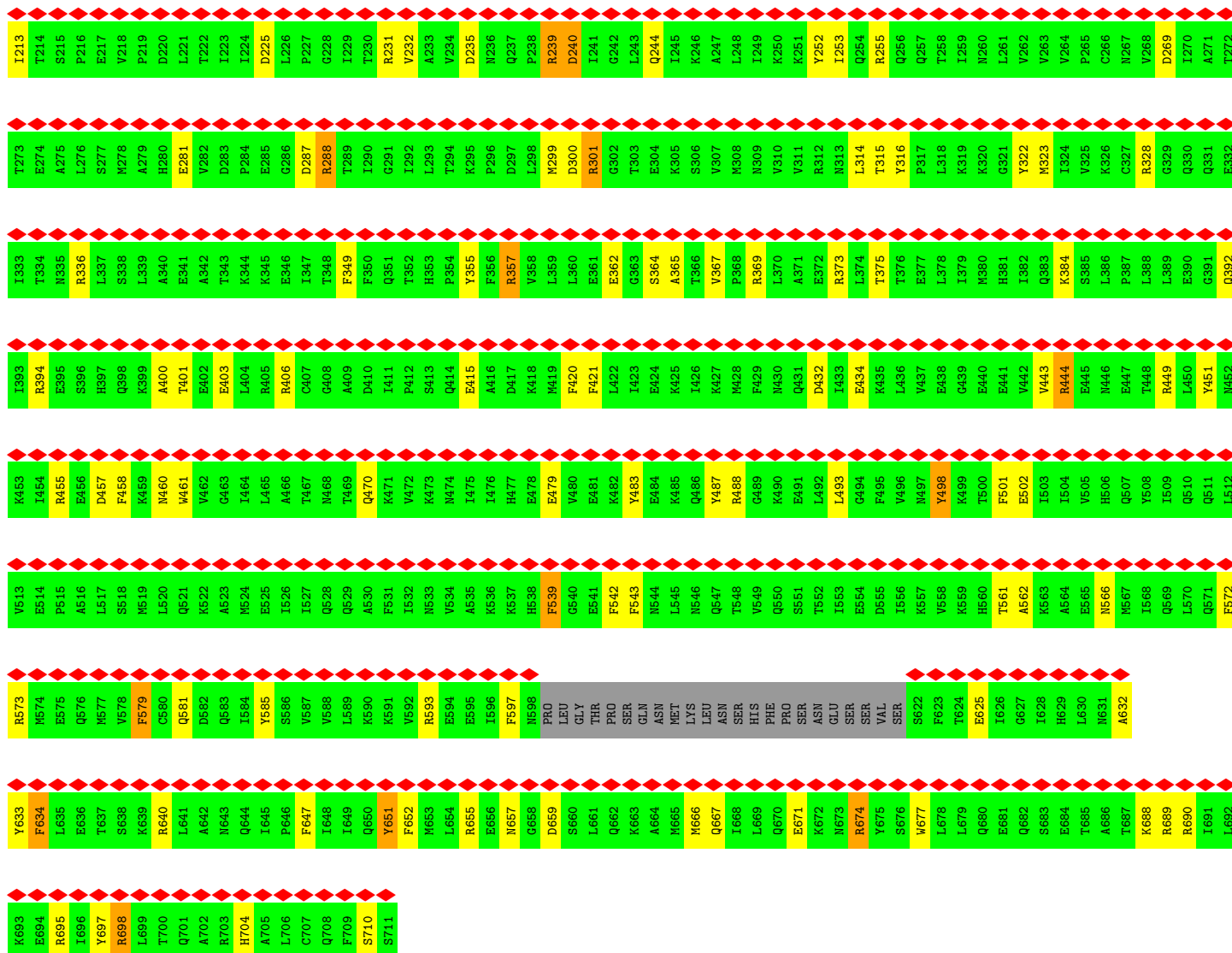


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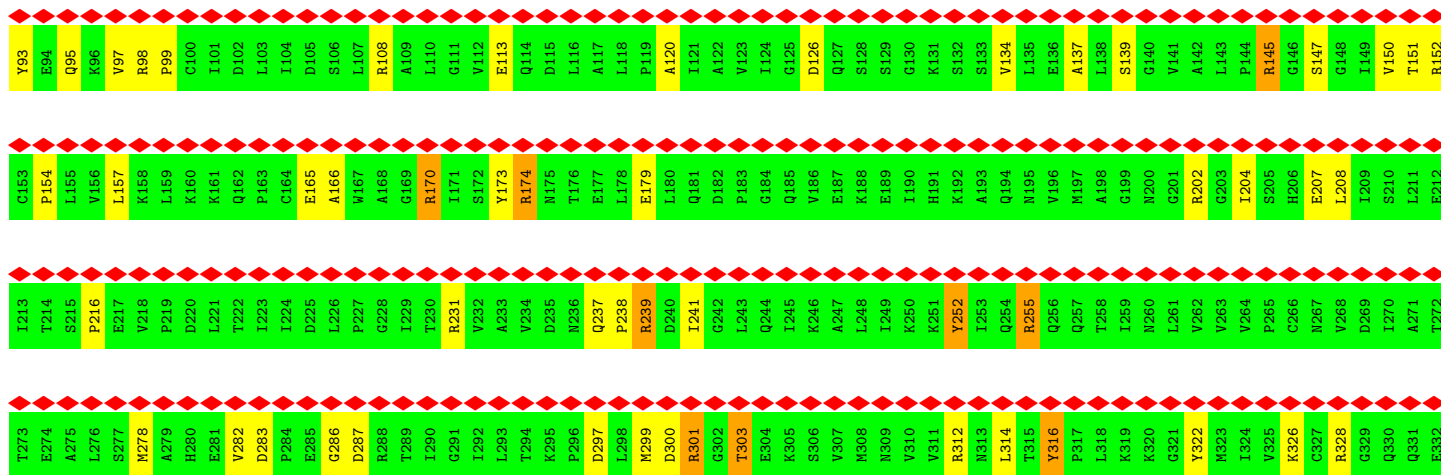
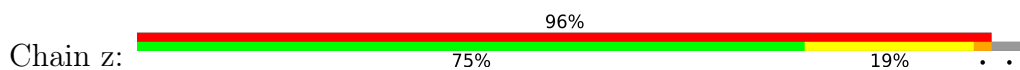
• Molecule 1: Interferon-induced GTP-binding protein Mx2

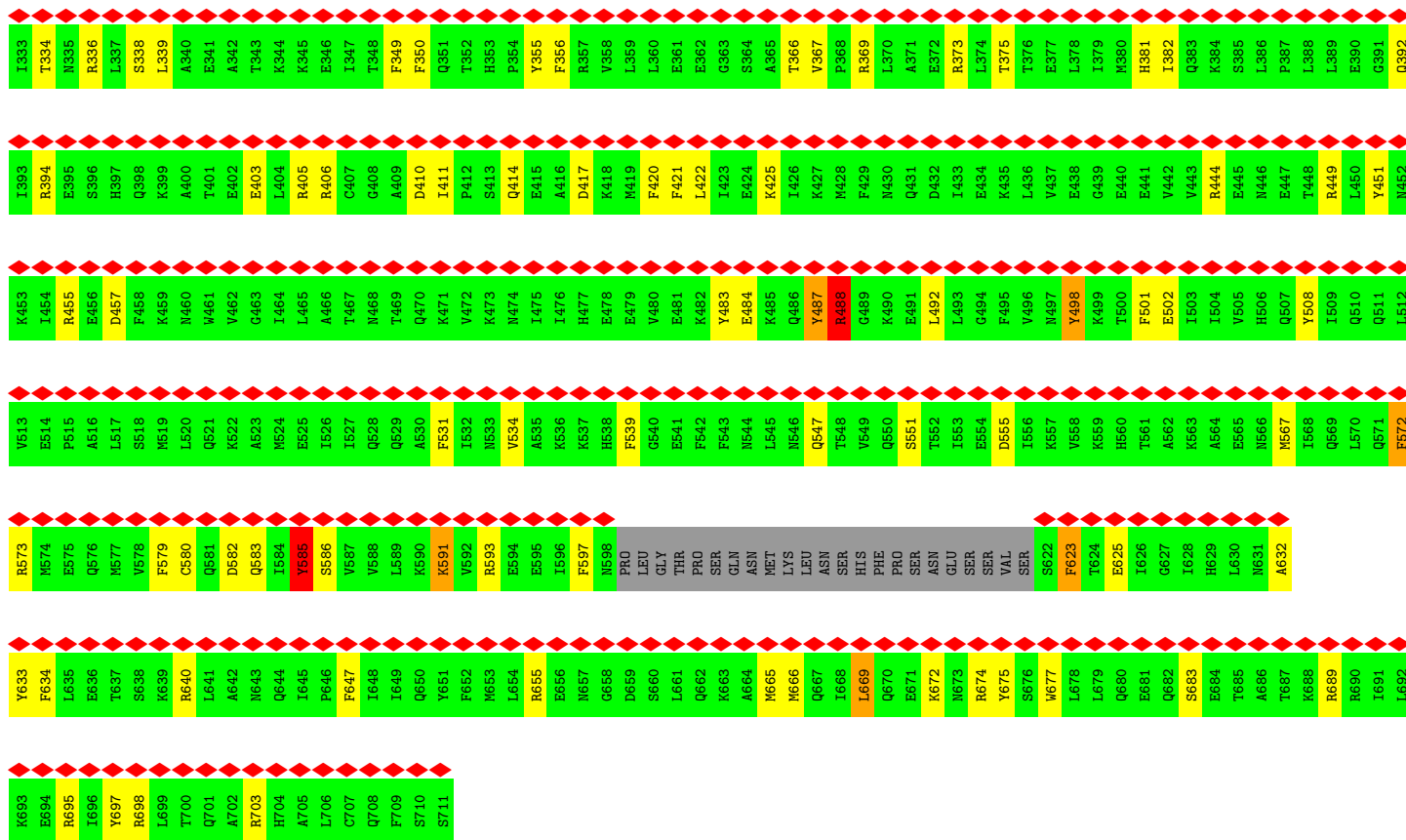


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C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	E165	A166	A168	G169	R170	I171	S172	Y173	R174	N175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	V186	E187	K188	E189	I190	H191	K192	A193	Q194	N195	V196	M197	A198	G199	N200	G201	R202	G203	I204	S205	H206	E207	L208	I209	S210	L211	E212

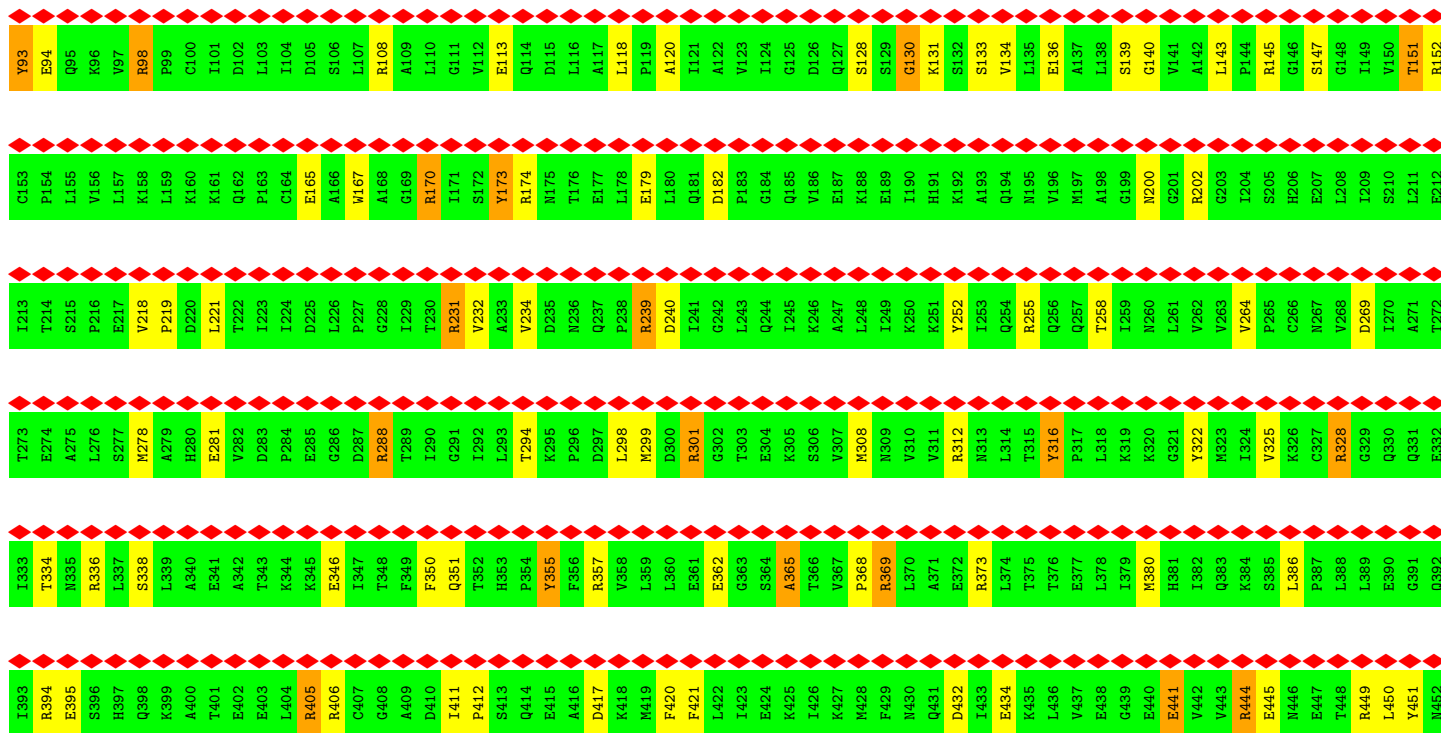
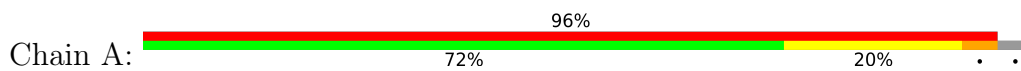


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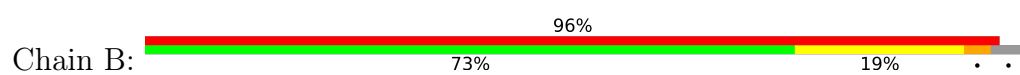


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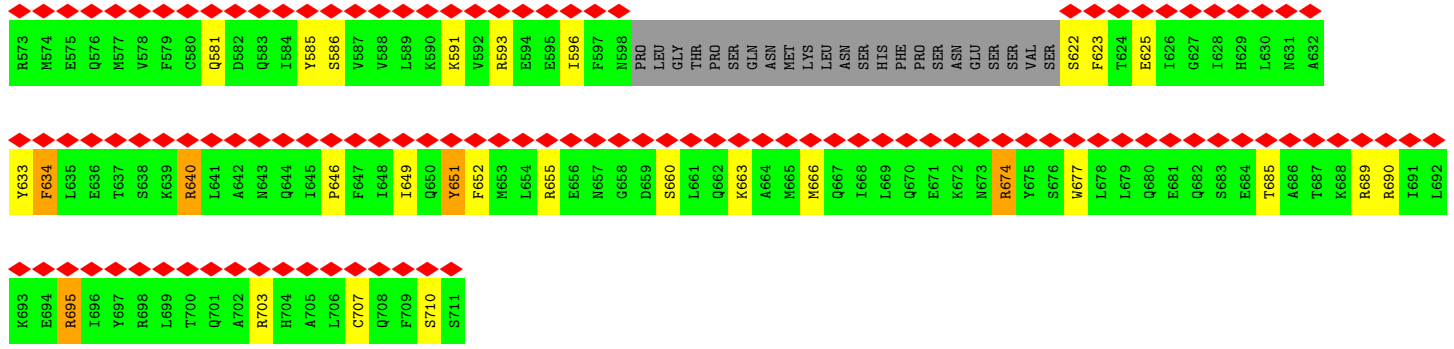


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V513	E514	P515	A516	L517	S518	M519	L520	Q521	K522	A523	M524	E525	I526	I527	Q528	Q529	A530	F531	I532	M533	V534	A535	K536	K537	H538	F539	G540	E541	F542	F543	M544	L545	M546	Q547	T548	V549	Q550	S551	T552	L553	E554	D555	E556	K557	V558	K559	H560	T561	A562	K563	A564	E565	M566	M567	I568	Q569	L570	Q571	F572
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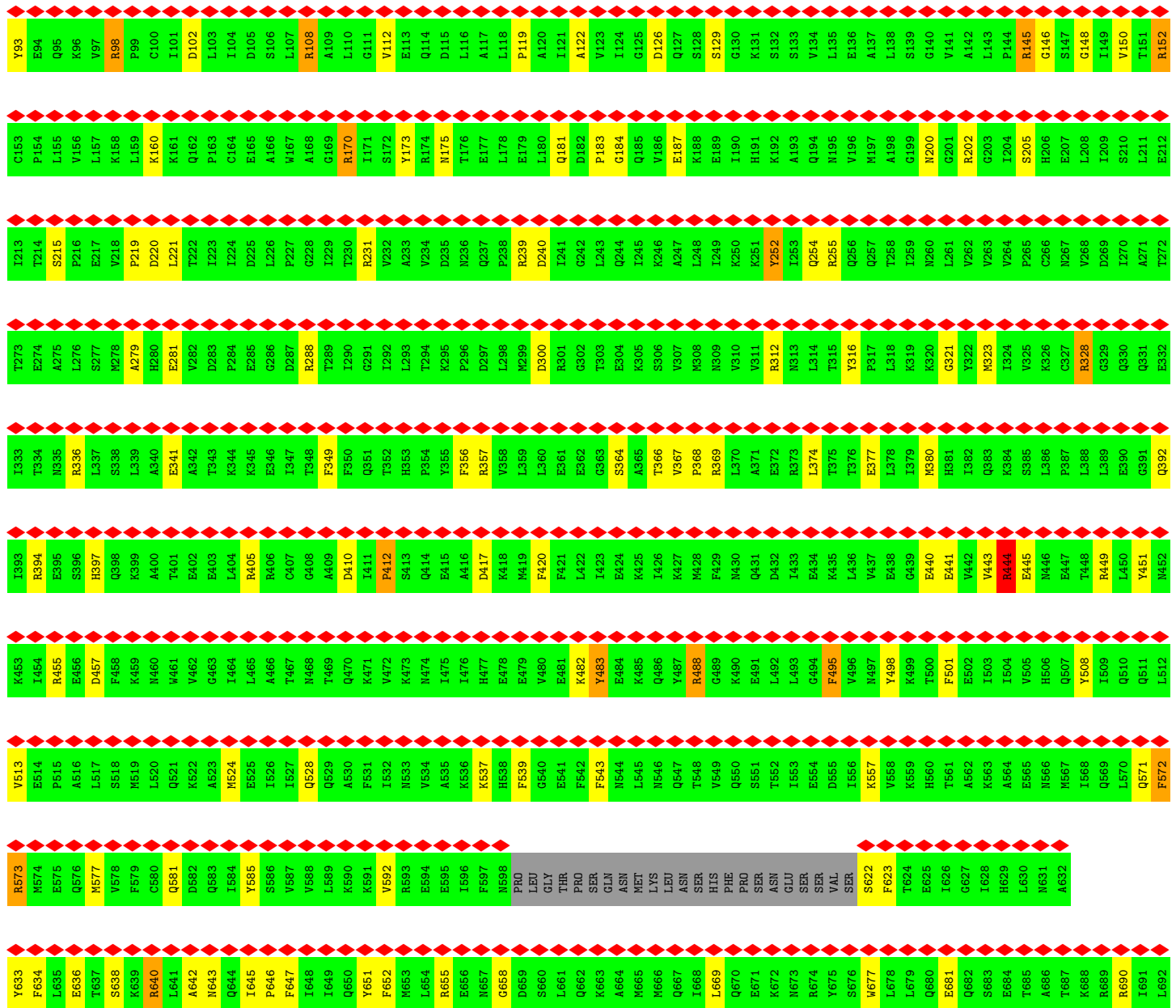
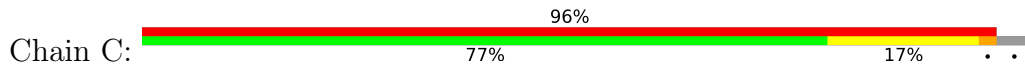
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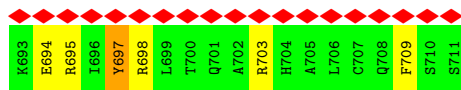


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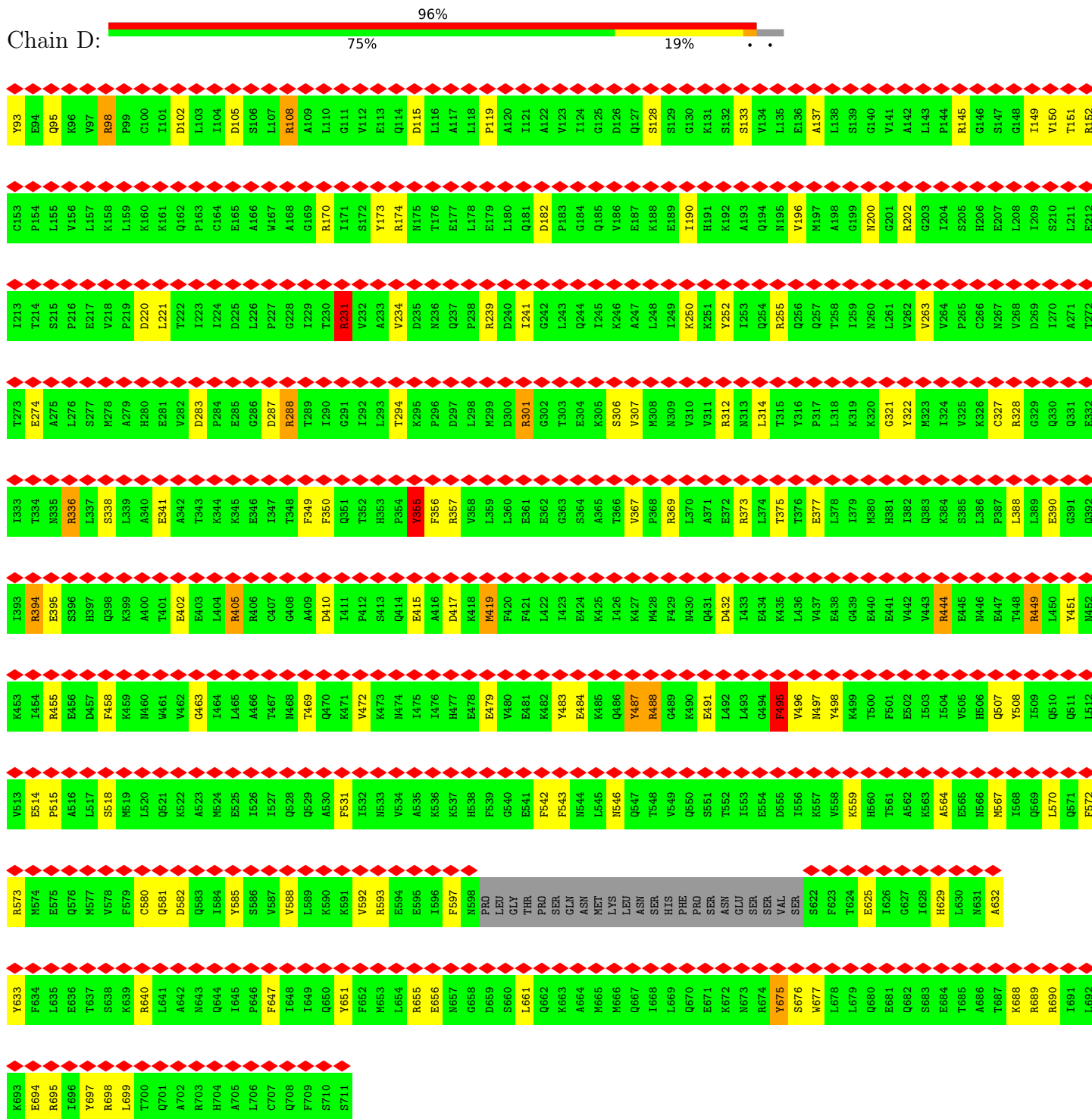


• Molecule 1: Interferon-induced GTP-binding protein Mx2

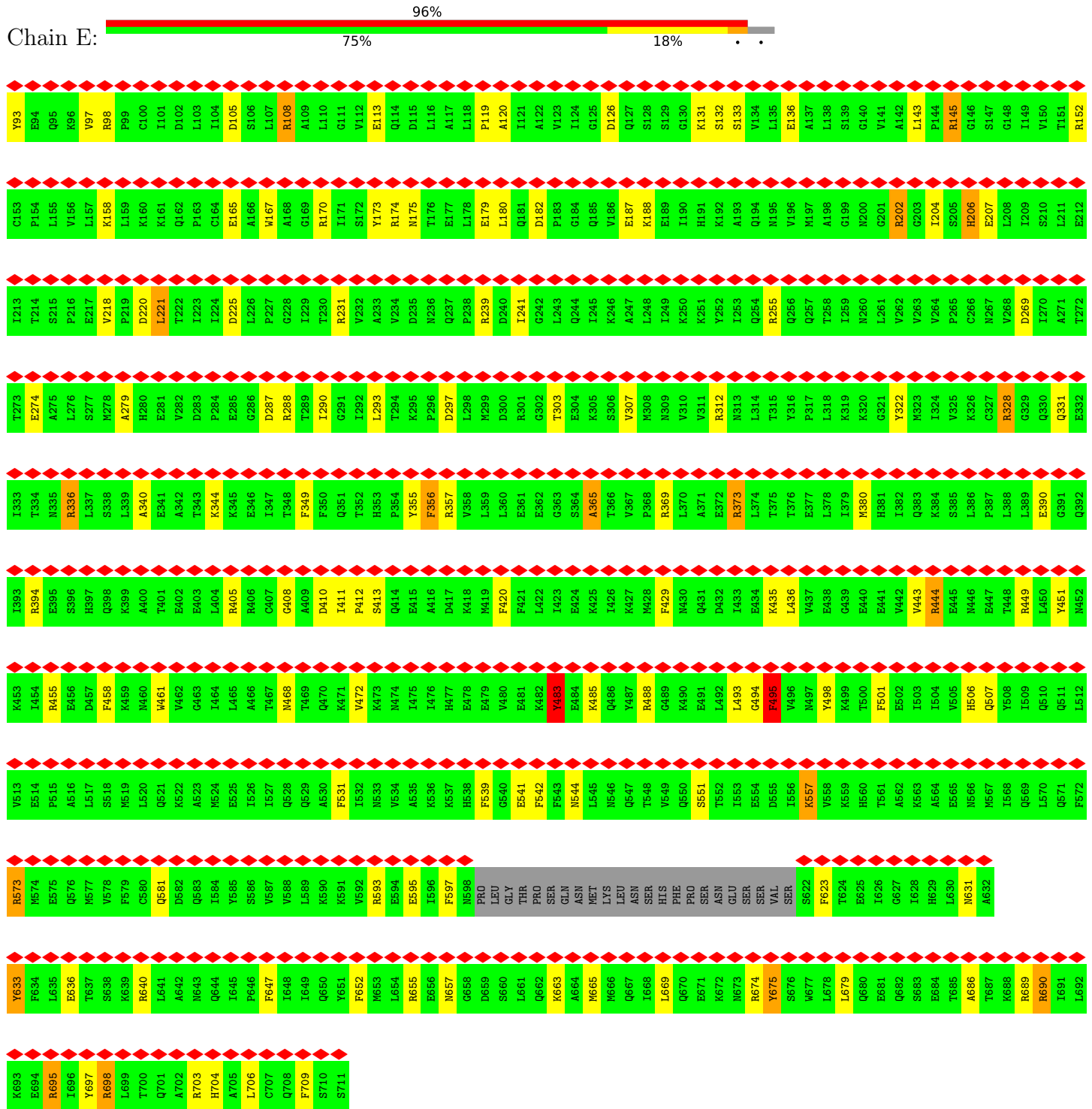




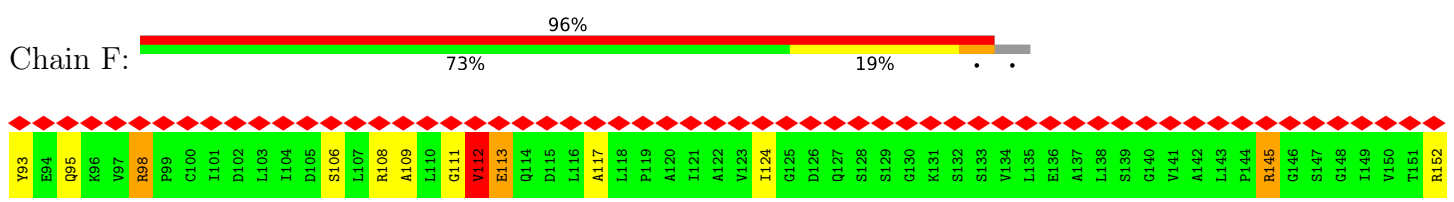
• Molecule 1: Interferon-induced GTP-binding protein Mx2



• Molecule 1: Interferon-induced GTP-binding protein Mx2



Molecule 1: Interferon-induced GTP-binding protein Mx2



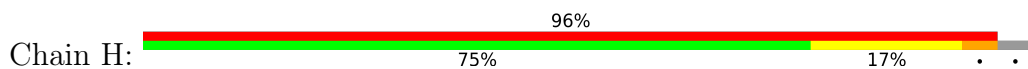
• Molecule 1: Interferon-induced GTP-binding protein Mx2

Chain G: 96% 75% 17%

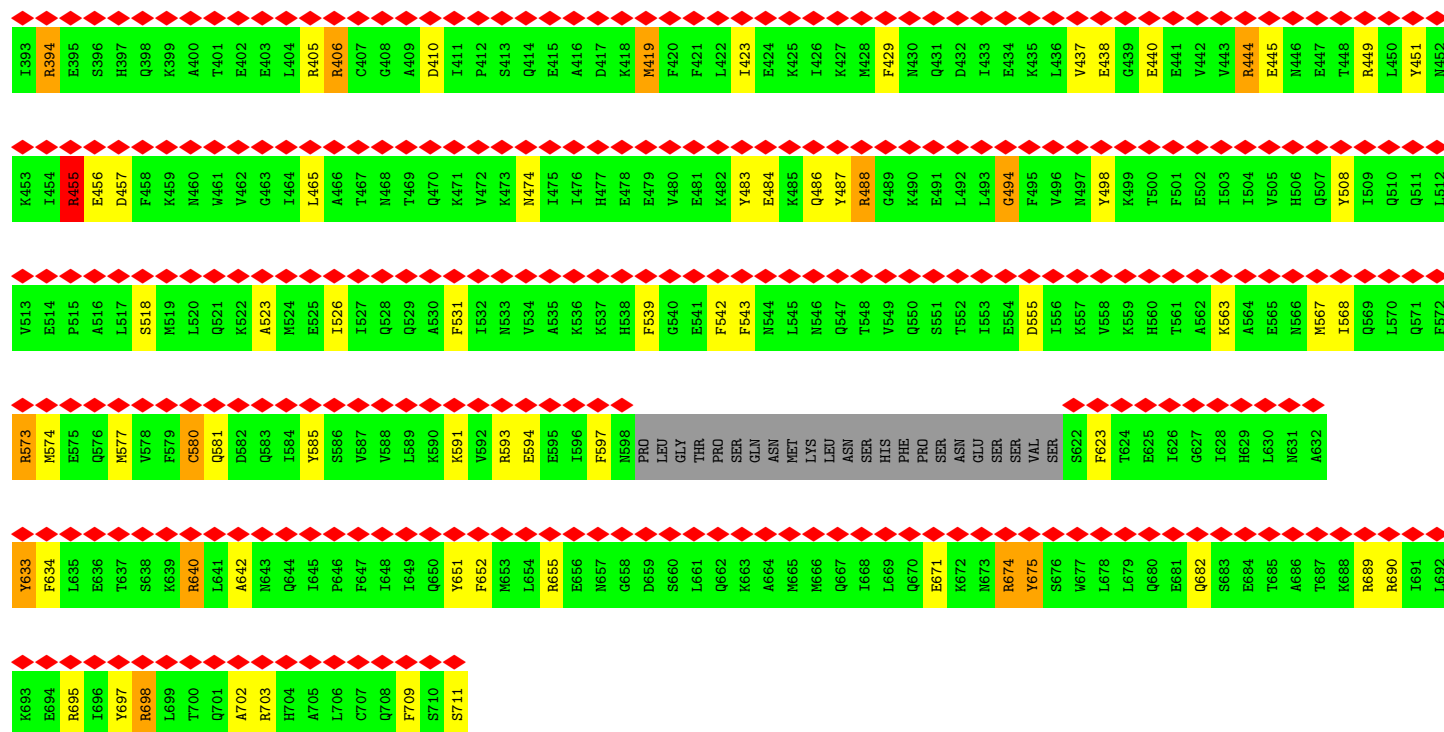
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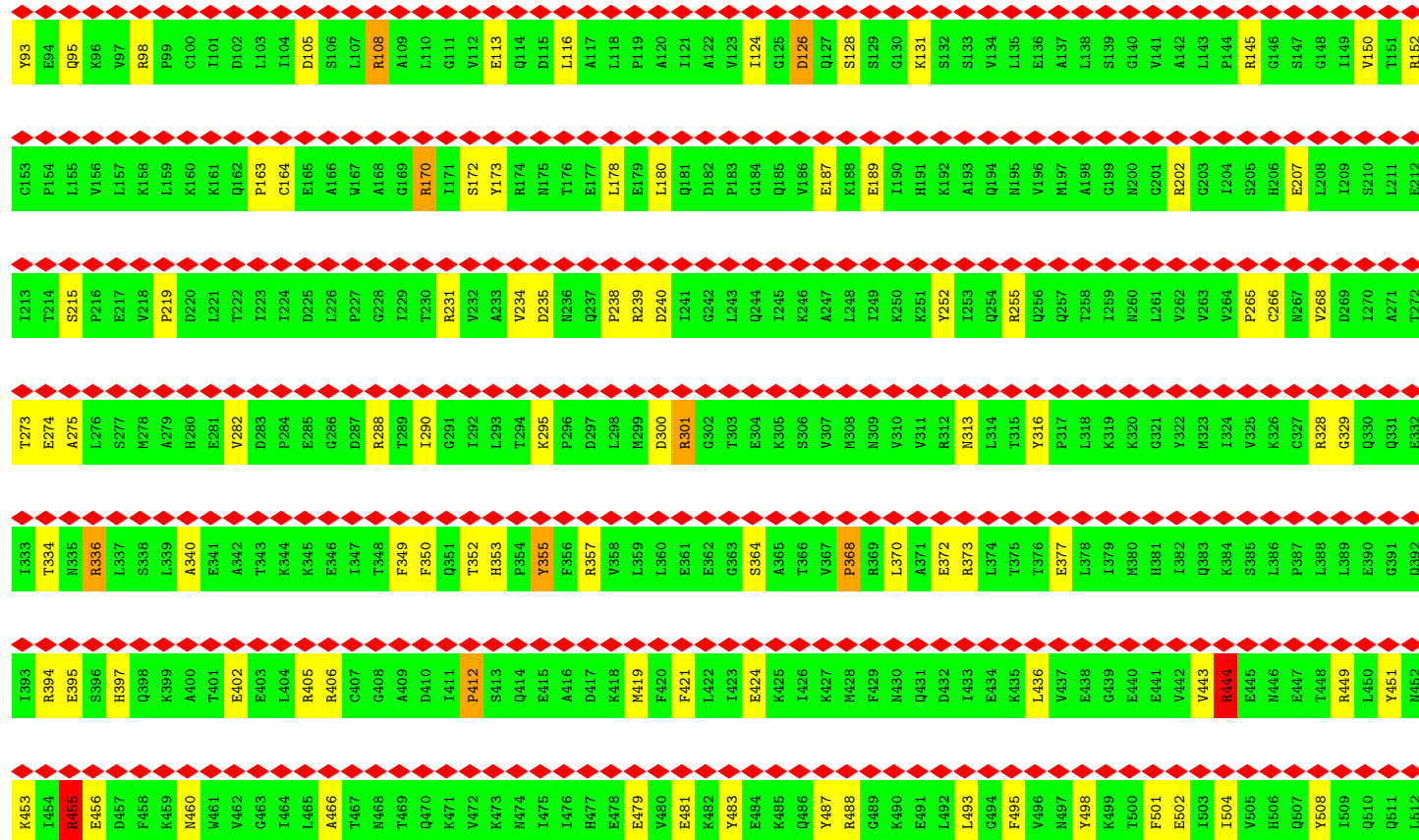
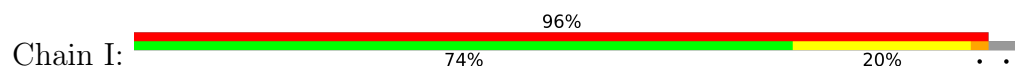
• Molecule 1: Interferon-induced GTP-binding protein Mx2

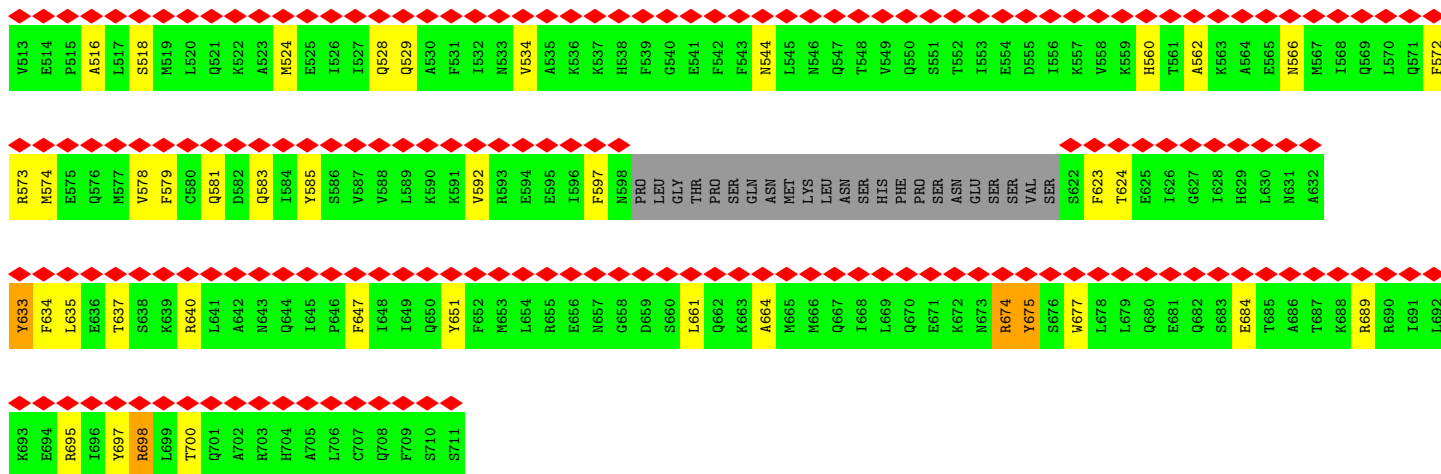


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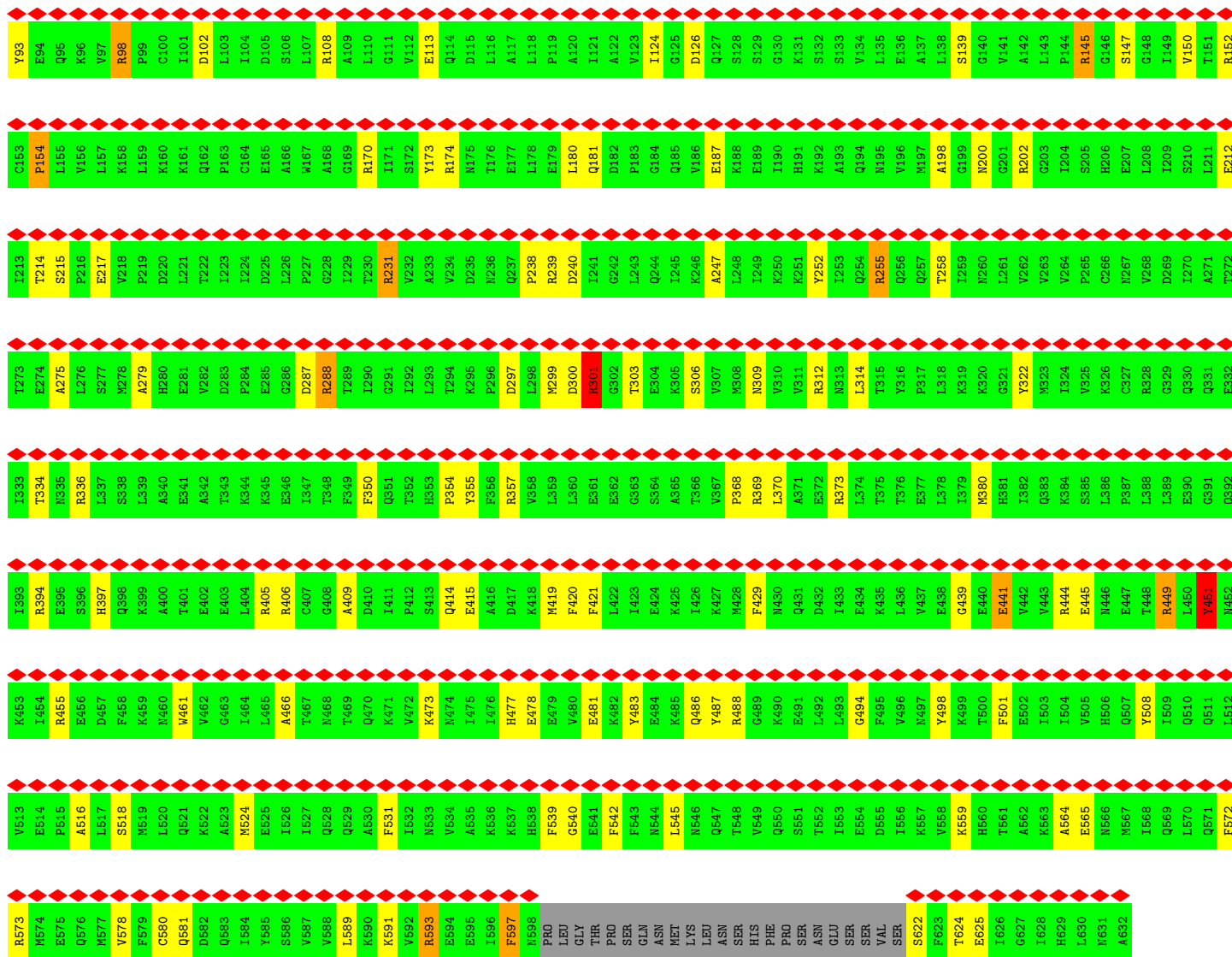
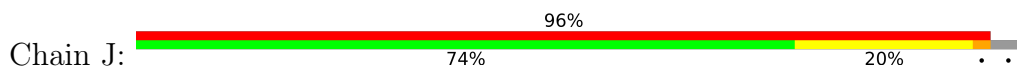


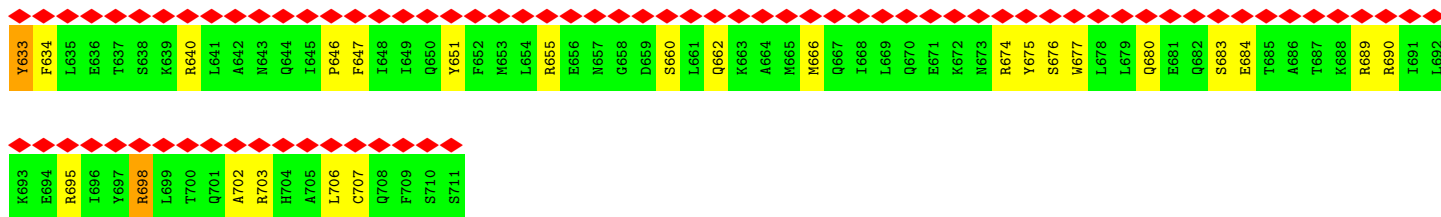
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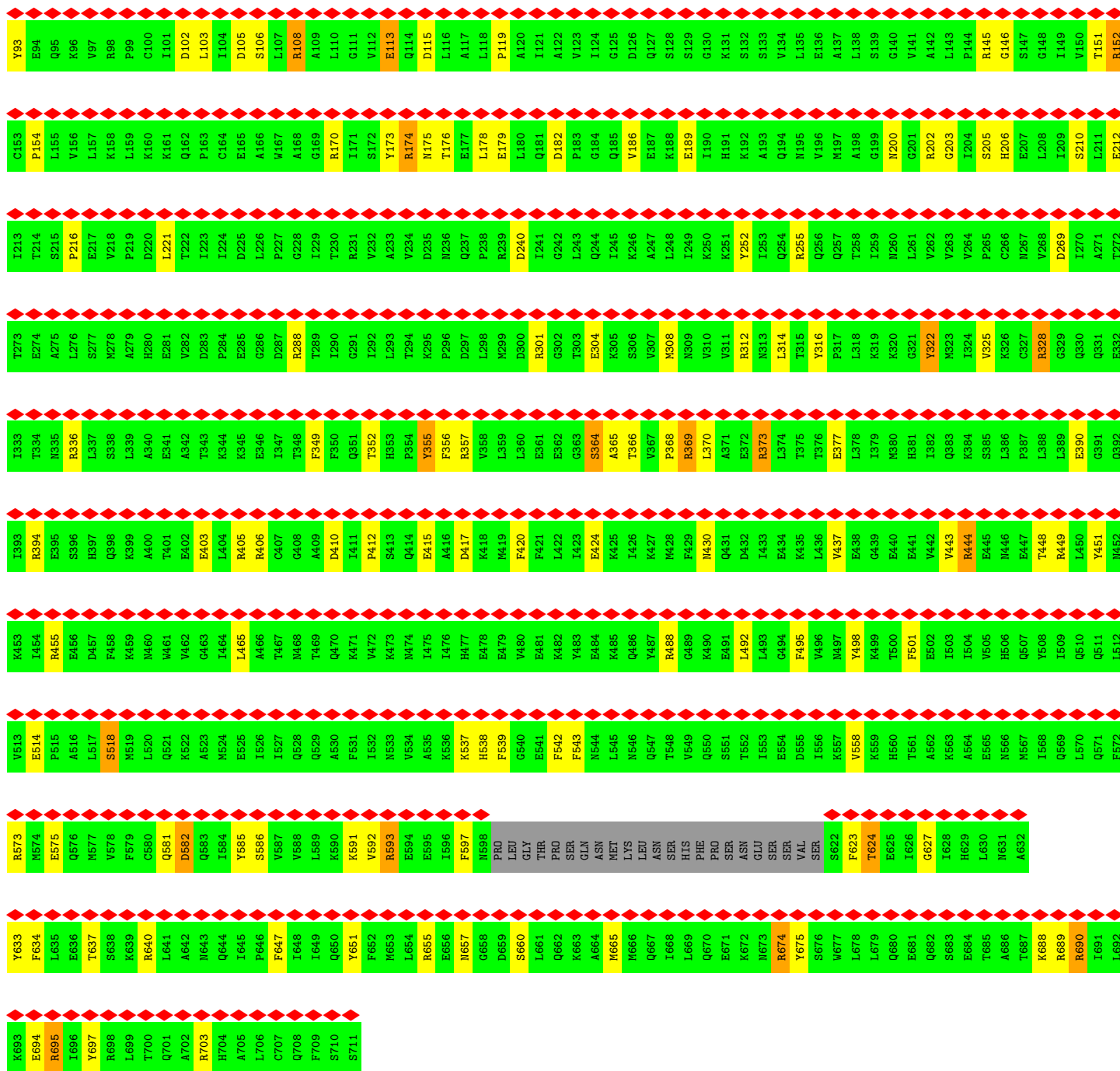


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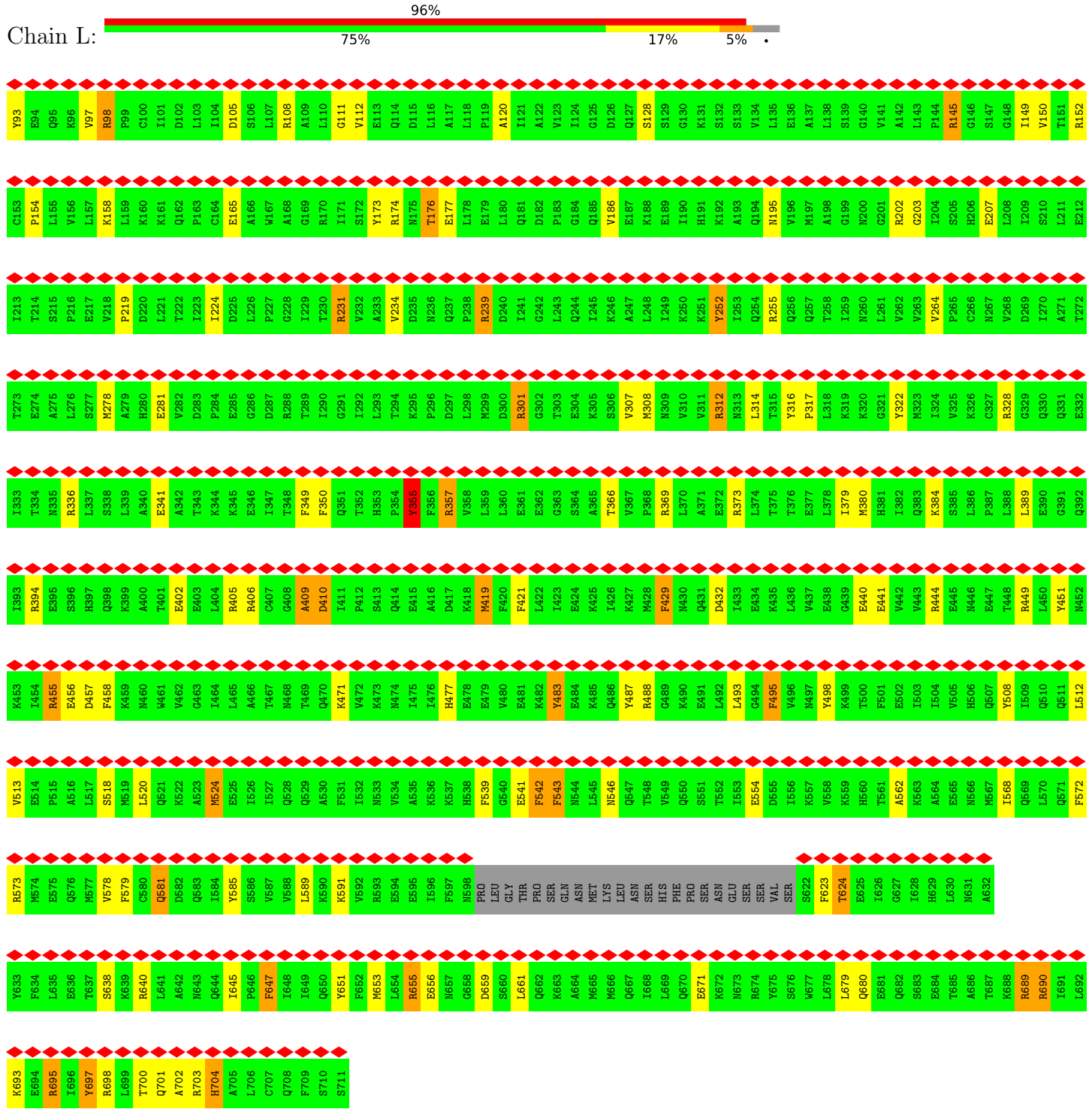




• Molecule 1: Interferon-induced GTP-binding protein Mx2



● Molecule 1: Interferon-induced GTP-binding protein Mx2

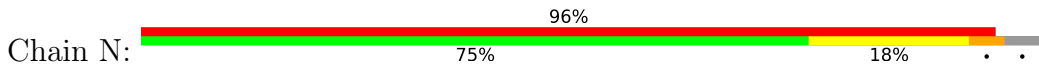


● Molecule 1: Interferon-induced GTP-binding protein Mx2



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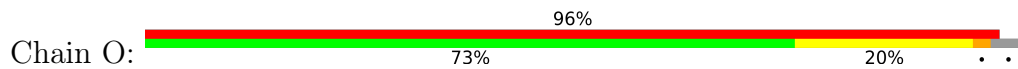
● Molecule 1: Interferon-induced GTP-binding protein Mx2



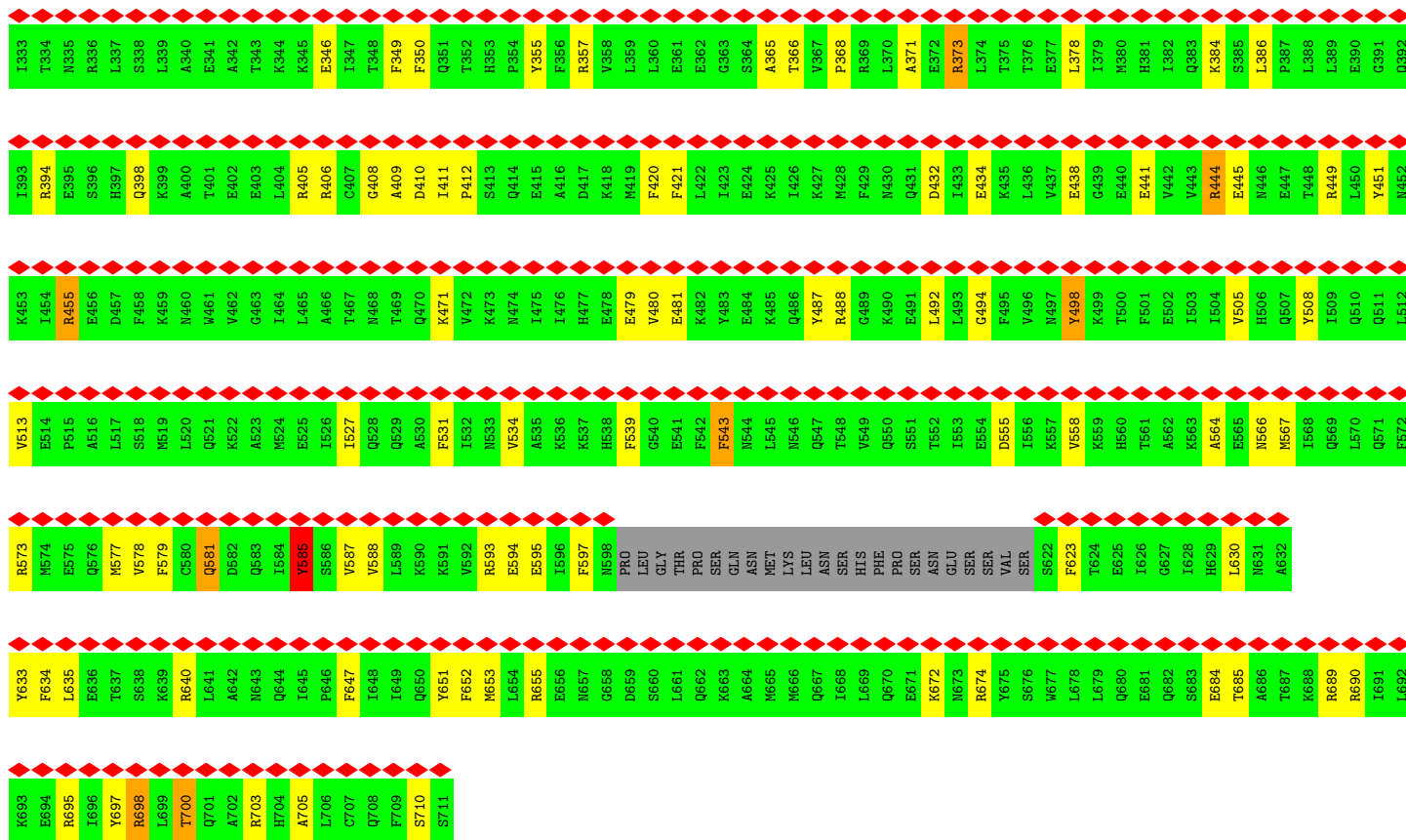
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K453	I454	R455	E456	D457	F458	K459	M460	I461	V462	G463	I464	L465	A466	T467	M468	T469	Q470	K471	V472	K473	M474	I475	I476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	Q486	Y487	R488	G489	Q490	E491	L492	L493	G494	F495	V496	M497	Y498	K499	T500	F501	E502	I503	I504	V505	H506	Q507	Y508	I509	Q510	Q511	L512
V513	E514	P515	A516	L517	S518	M519	L520	Q521	E522	A523	M524	E525	I526	I527	Q528	Q529	A530	F531	I532	M533	V534	A535	K536	K537	H538	F539	G540	E541	F542	F543	N544	L545	N546	Q547	T548	V549	Q550	S551	T552	I553	E554	D555	I556	K557	V558	K559	H560	T561	A562	K563	A564	E565	N566	M567	I568	Q569	L570	Q571	F572
R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	I584	Y585	S586	V587	V588	L589	K590	K591	V592	R593	E594	E595	I596	F597	N598	PRO	LEU	GLY	THR	PRO	SER	GLN	ASN	MET	LYS	ASN	SER	HIS	PHE	PRO	SER	GLU	SER	VAL	SER	S622	F623	T624	E625	L626	O627	L628	H629	L630	M631	A632			
Y633	F634	L635	E636	T637	S638	K639	R640	L641	Q701	M643	Q644	I645	P646	F647	L648	I649	Q650	Y651	F652	M653	L654	R655	E656	N657	G658	D659	S660	L661	Q662	K663	A664	M665	M666	Q667	L668	L669	Q670	E671	K672	M673	R674	Y675	S676	M677	L678	L679	Q680	E681	Q682	S683	E684	T685	A686	T687	K688	R689	R690	I691	L692
K693	E694	R695	L696	Y697	R698	L699	T700	A701	R703	H704	A705	L706	C707	O708	F709	S710	S711																																										

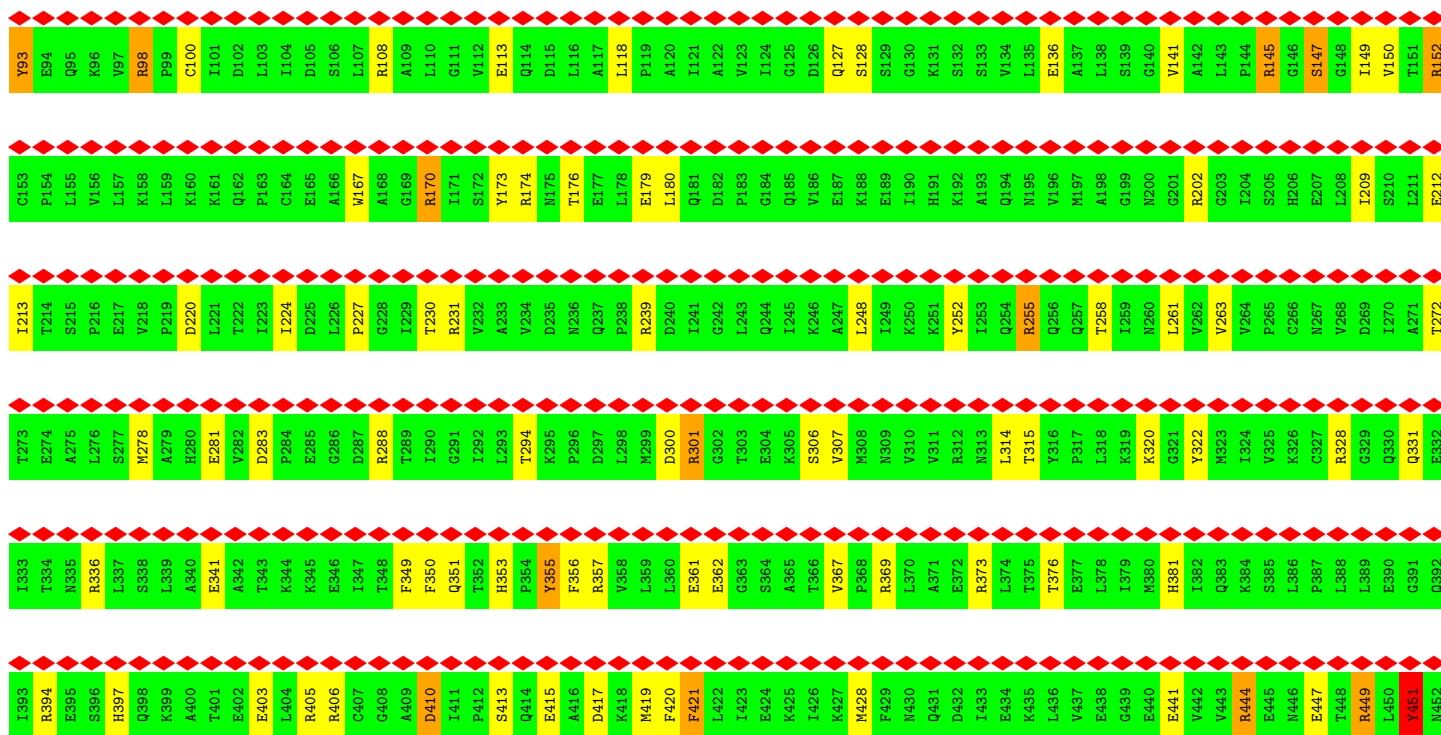
• Molecule 1: Interferon-induced GTP-binding protein Mx2

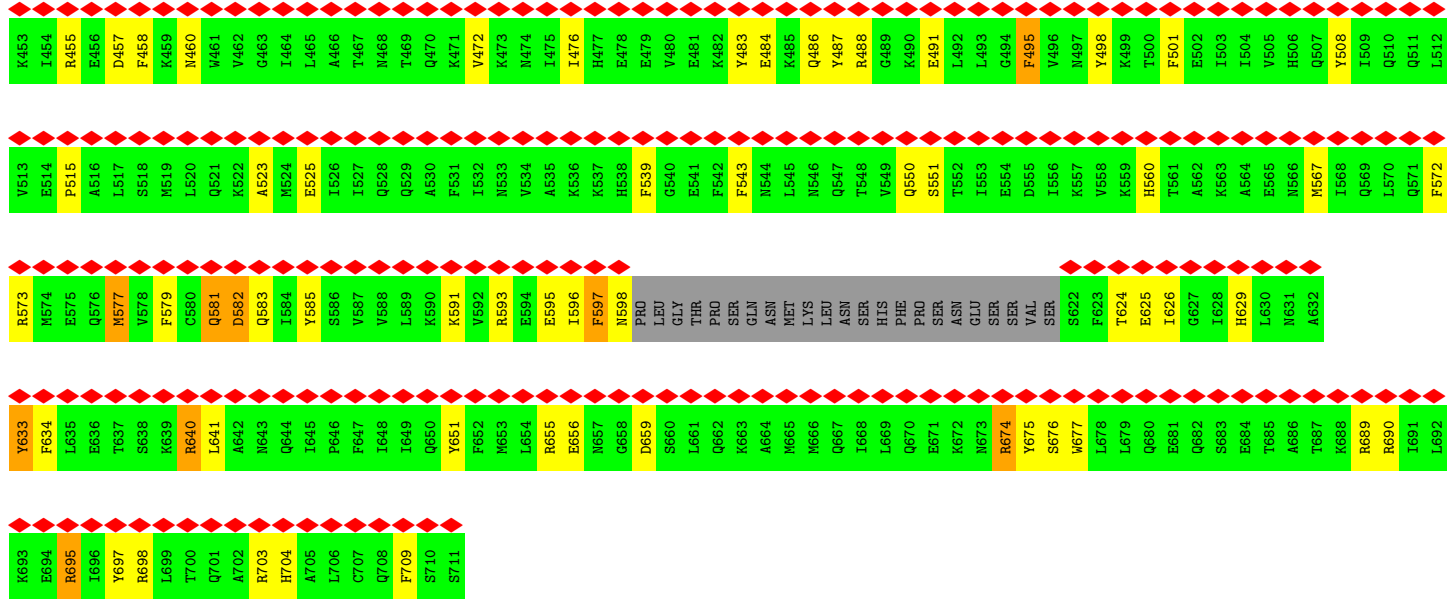


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C153	P154	L155	V156	K158	L159	K160	Q162	P163	C164	E165	A166	V167	A168	G169	R170	I171	S172	Y173	R174	M175	T176	E177	L178	E179	L180	Q181	D182	P183	G184	Q185	L186	V187	K188	E189	I190	H191	K192	A193	Q194	N195	V196	M197	A198	G199	N200	G201	R202	G203	I204	S205	H206	E207	L208	I209	S210	L211	A212		
I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	D225	D226	P227	G228	I229	T230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	I245	K246	A247	L248	I249	K250	V251	Y252	I253	Q254	R255	Q256	Q257	T258	I259	N260	L261	V262	V263	V264	P265	C266	N267	V268	D269	I270	A271	T272
T273	E274	A275	L276	S277	M278	A279	H280	E281	D282	D283	P284	E285	G286	D287	R288	T289	I290	G291	I292	L293	T294	K295	P296	D297	L298	M299	D300	R301	G302	T303	K304	E305	S306	V307	M308	N309	V310	V311	R312	L313	L314	T315	Y316	P317	L318	K319	N320	G321	Y322	M323	I324	V325	K326	C327	R328	G329	Q330	Q331	E332

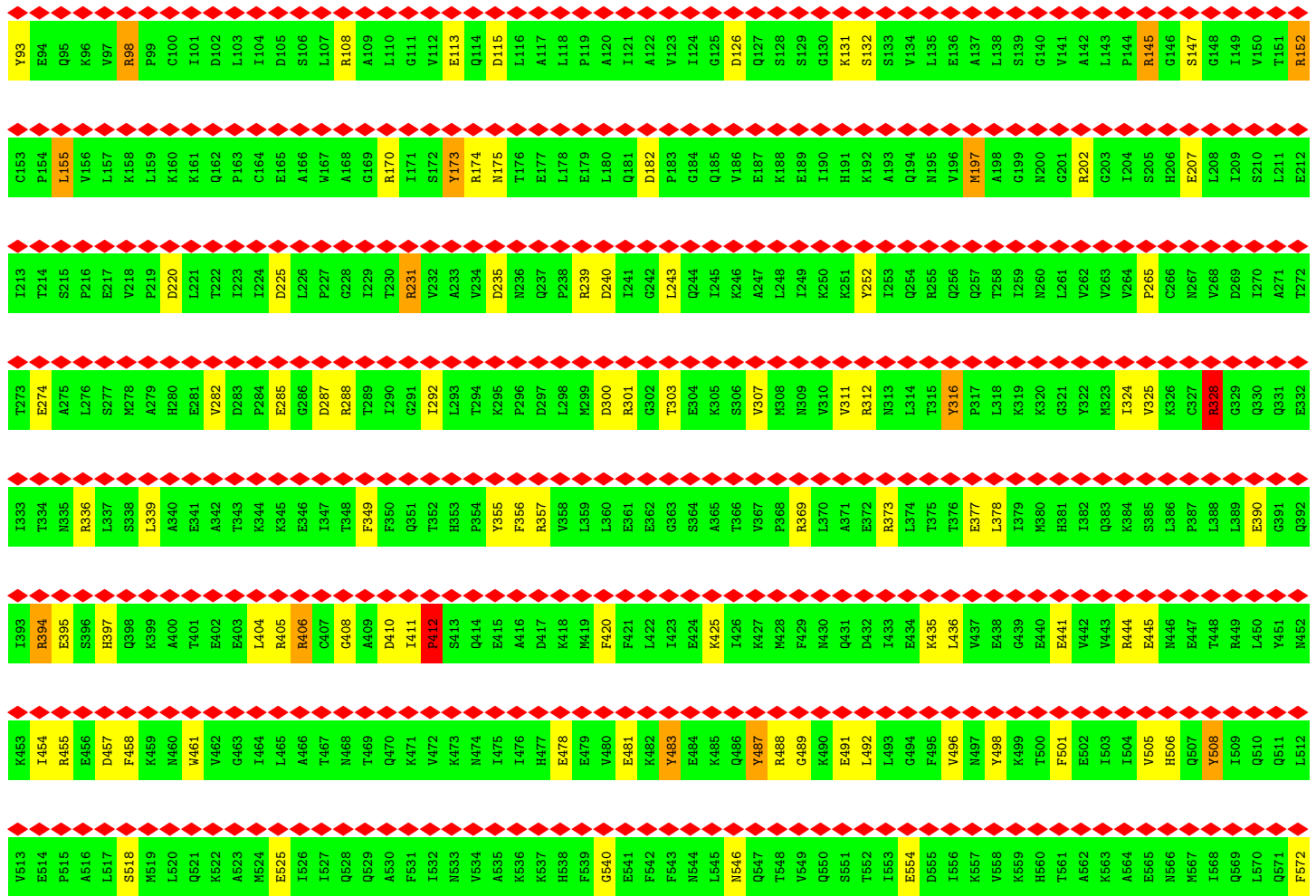
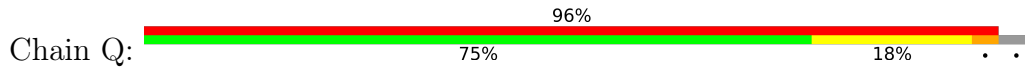


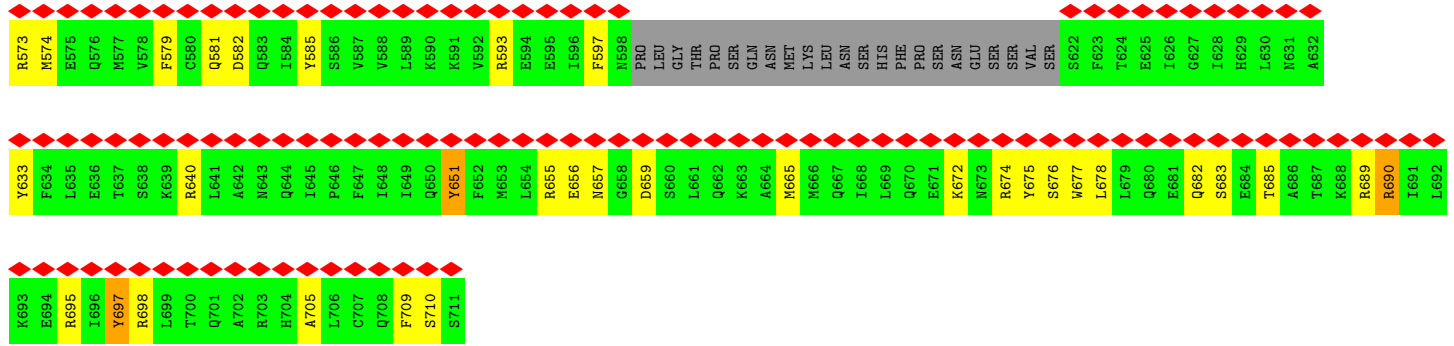
● Molecule 1: Interferon-induced GTP-binding protein Mx2



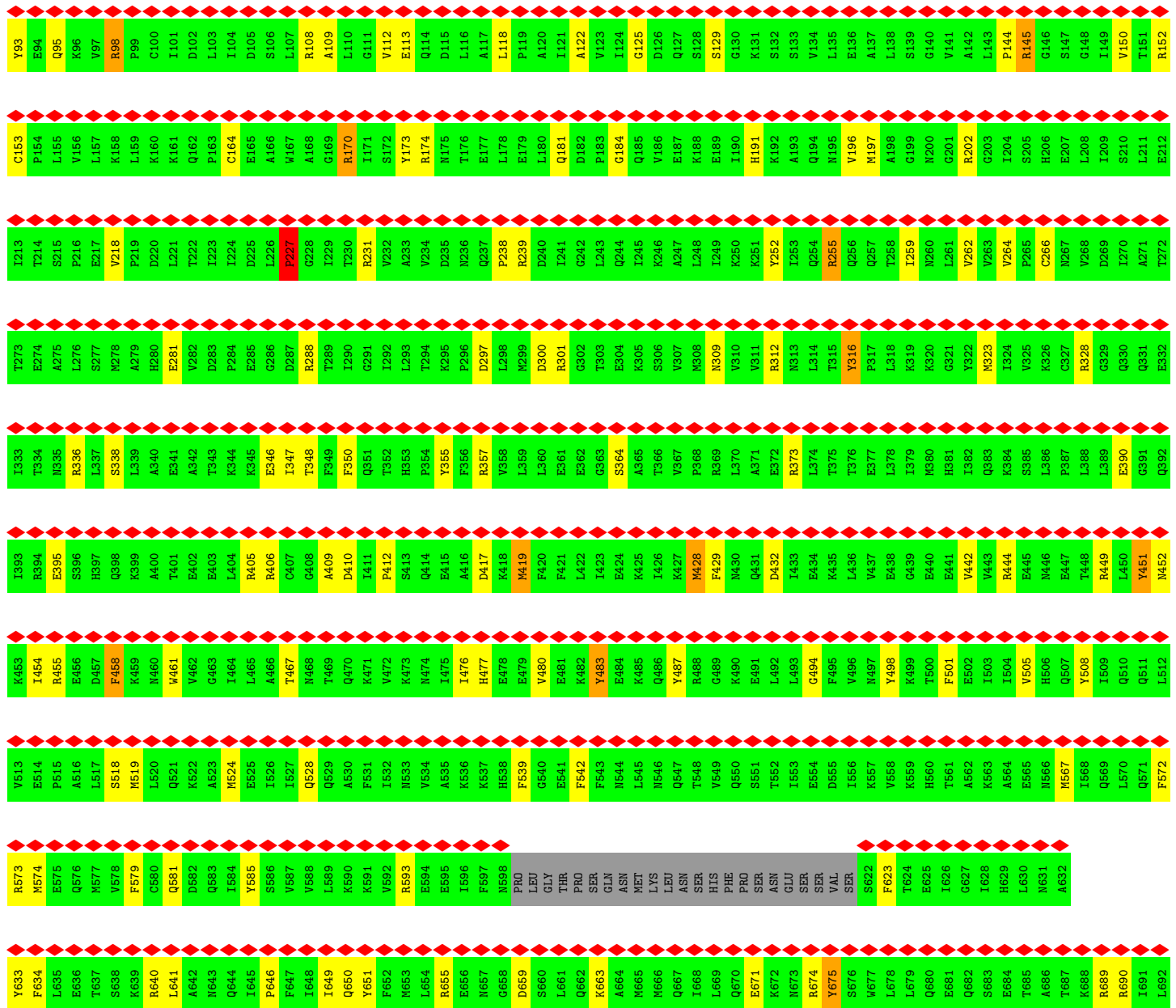
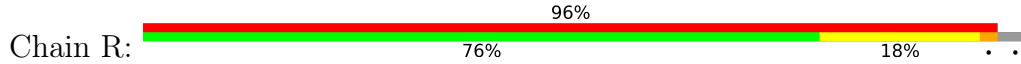


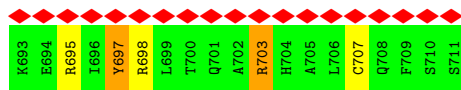
• Molecule 1: Interferon-induced GTP-binding protein Mx2



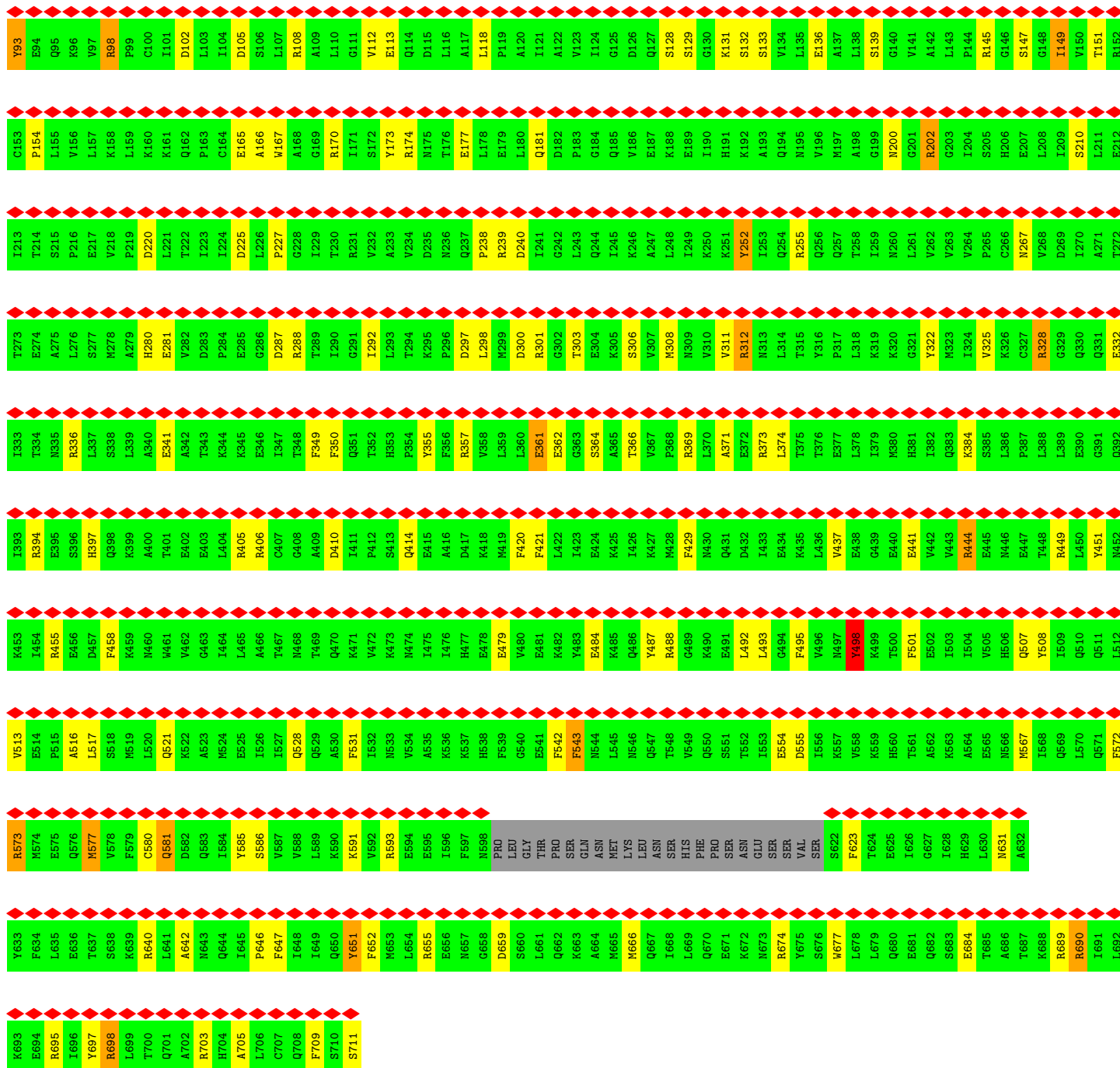
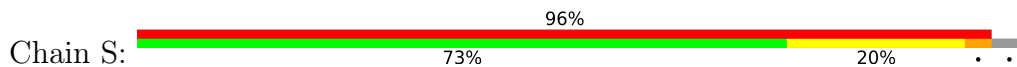


• Molecule 1: Interferon-induced GTP-binding protein Mx2

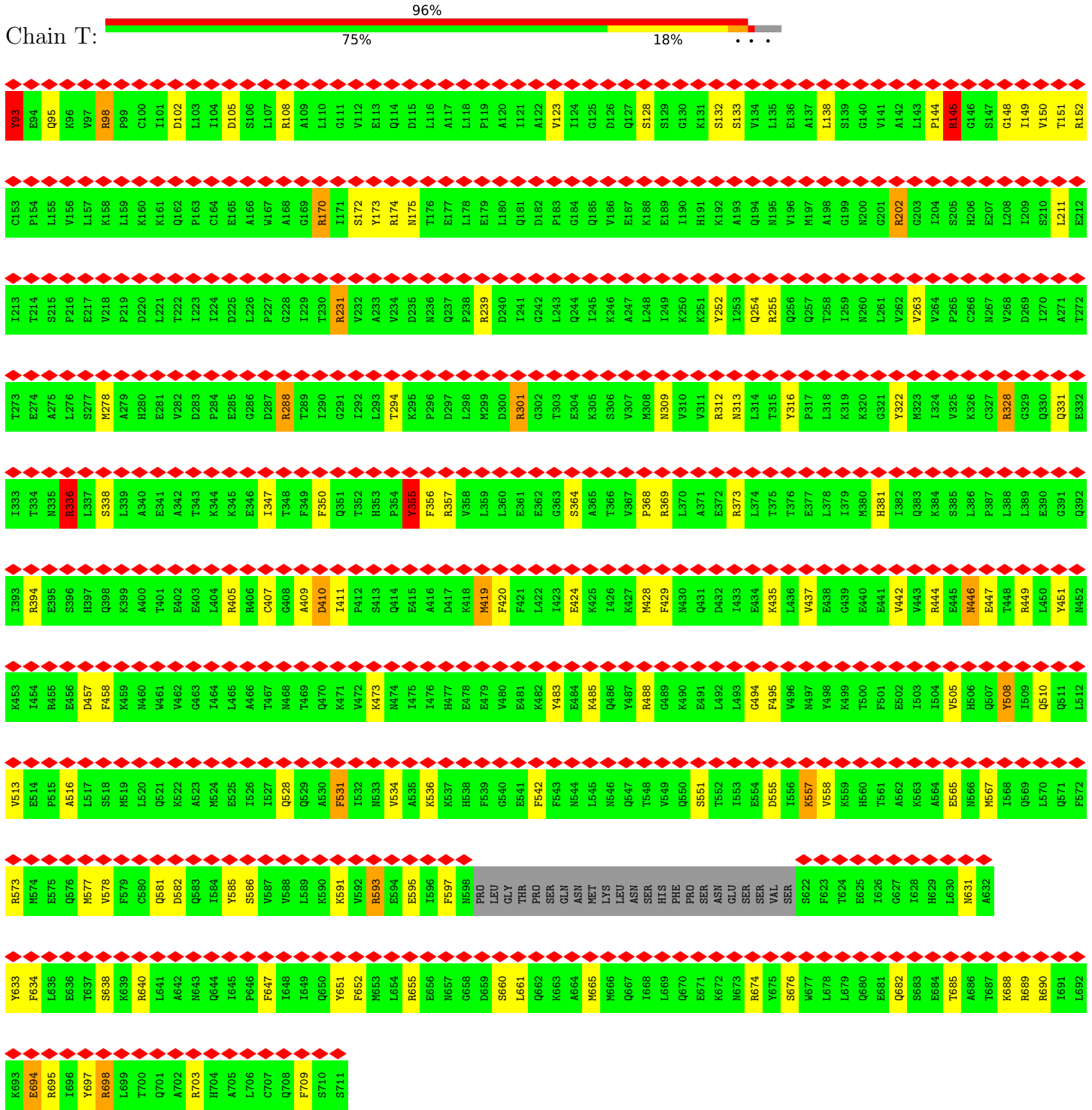




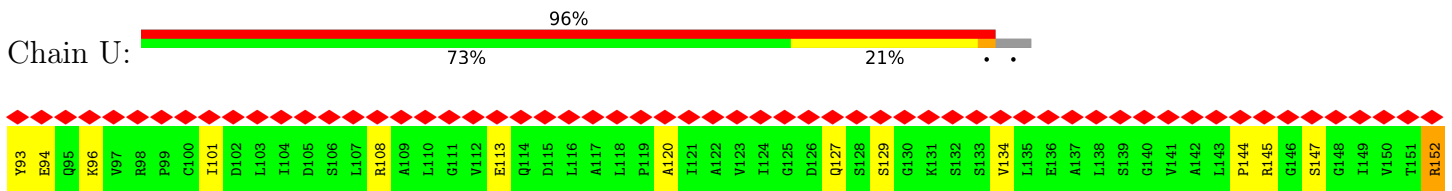
• Molecule 1: Interferon-induced GTP-binding protein Mx2



• Molecule 1: Interferon-induced GTP-binding protein Mx2

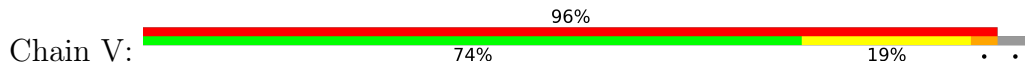


● Molecule 1: Interferon-induced GTP-binding protein Mx2

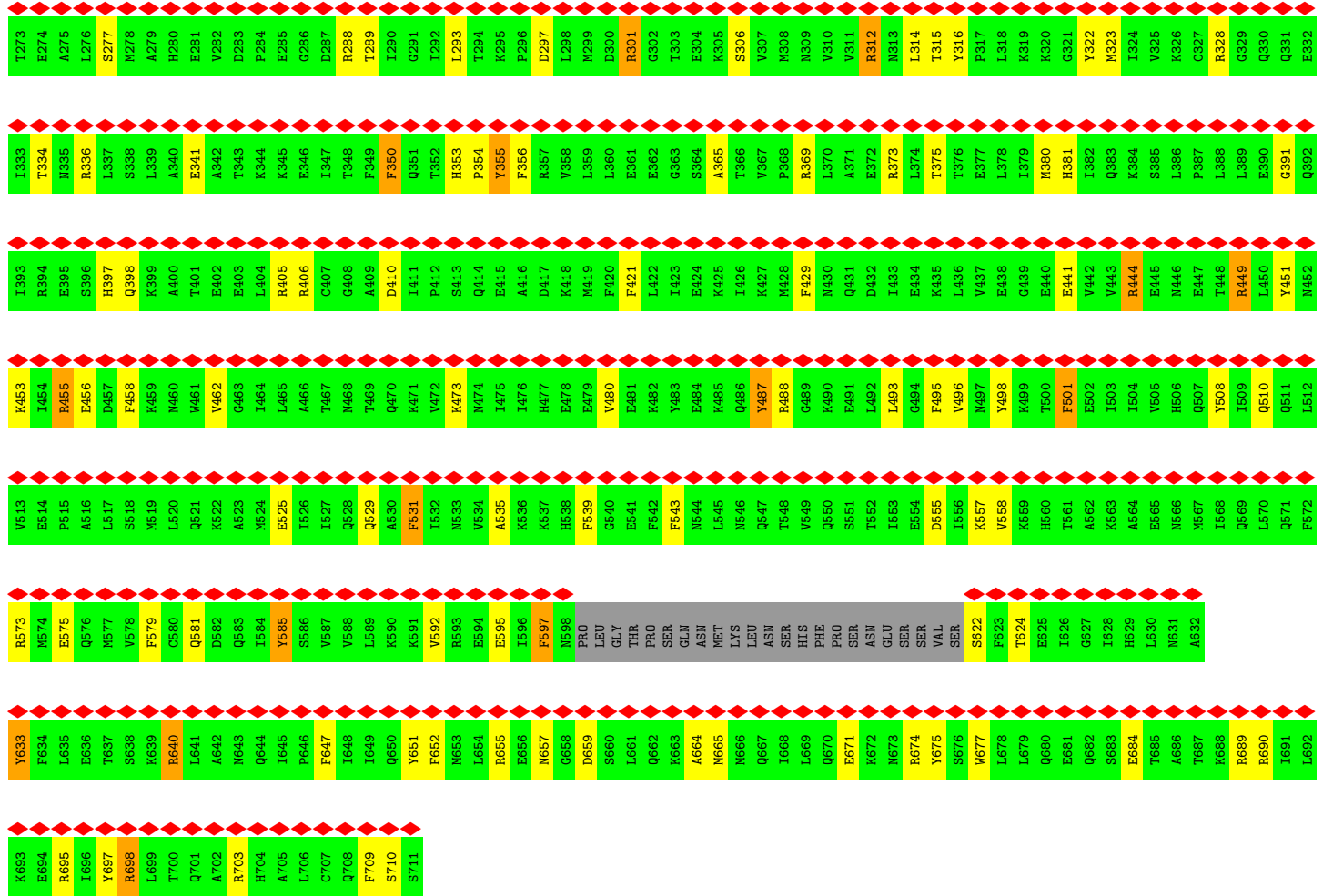


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I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	D225	E226	W227	G228	L229	T230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	L245	K246	A247	L248	I249	K250	K251	Y252	I253	Q254	R255	Q256	Q257	T258	I259	N260	L261	V262	V263	V264	P265	H206	E207	L208	I209	S210	L211	T272	
T273	E274	A275	L276	S277	M278	A279	H280	E281	V282	D283	P284	E285	G286	D287	R288	T289	I290	G291	L292	L293	T294	K295	P296	D297	L298	M299	D300	R301	G302	T303	E304	K305	S306	V307	M308	N309	V310	V311	R312	N313	L314	T315	Y316	P317	L318	K319	N320	L261	G321	M323	I324	V325	V326	P327	L328	G329	E330	Q331	E332	
I333	T334	N335	R336	L337	S338	L339	A340	E341	A342	T343	K344	K345	E346	I347	T348	F349	F350	Q351	T352	H353	P354	Y355	F356	R357	L358	L359	L360	E361	E362	G363	S364	A365	T366	V367	P368	R369	L370	A371	E372	R373	L374	T375	T376	E377	L378	I379	M380	H381	I382	Q383	K384	S385	L386	F387	L388	L389	E390	G391	Q392	
I393	R394	E395	S396	H397	Q398	K399	A400	T401	E402	E403	L404	L405	R406	C407	G408	A409	D410	I411	P412	S413	Q414	E415	A416	D417	K418	M419	F420	F421	L422	I423	E424	K425	I426	K427	M428	F429	M430	Q431	D432	I433	E434	K435	L436	V437	E438	G439	E440	E441	V442	V443	R444	E445	N446	E447	T448	R449	L450	Y451	N452	
K453	L454	R455	E456	D457	F458	K459	M460	V461	V462	G463	L464	L465	A466	T467	N468	T469	Q470	K471	V472	K473	N474	L475	L476	H477	E478	E479	V480	E481	K482	Y483	E484	K485	Q486	Y487	R488	G489	K490	E491	L492	L493	G494	F495	V496	M497	Y498	K499	T500	F501	I502	I503	I504	V505	H506	Q507	Y508	I509	Q510	Q511	L512	
V513	E514	F515	A516	L517	S518	M519	L520	Q521	K522	A523	M524	E525	L526	L527	Q528	E529	A530	F531	L532	N533	V534	A535	K536	K537	H538	F539	G540	E541	F542	N543	N544	L545	N546	Q547	T548	V549	Q550	S551	T552	L553	E554	E555	D556	L556	K557	V558	K559	H560	T561	A562	K563	A564	E565	E566	M567	L568	Q569	L570	Q571	F572
R573	M574	E575	Q576	M577	V578	F579	C580	Q581	D582	Q583	L584	Y585	S586	V587	V588	L589	K590	K591	V592	R593	E594	E595	L596	F597	N598	PRO	LEU	GLY	THR	PRO	SER	GLN	ASN	MET	LYS	LEU	ASN	HIS	PHE	PRO	SER	ASN	GLU	SER	SER	VAL	SER	S622	F623	T624	E625	L626	L628	H629	L630	N631	A632			
Y633	F634	L635	E636	T637	S638	K639	R640	L641	A642	N643	Q644	L645	P646	F647	L648	L649	Q650	Y651	F652	N653	L654	R655	E656	N657	G658	D659	S660	L661	Q662	K663	A664	M665	M666	Q667	L668	L669	Q670	E671	K672	N673	R674	Y675	S676	M677	L678	L679	O680	E681	O682	S683	E684	T685	A686	T687	K688	R689	O690	L691	L692	
K693	E694	R695	L696	Y697	R698	L699	T700	Q701	D702	N703	H704	A705	L706	C707	Q708	F709	S710	S711																																										

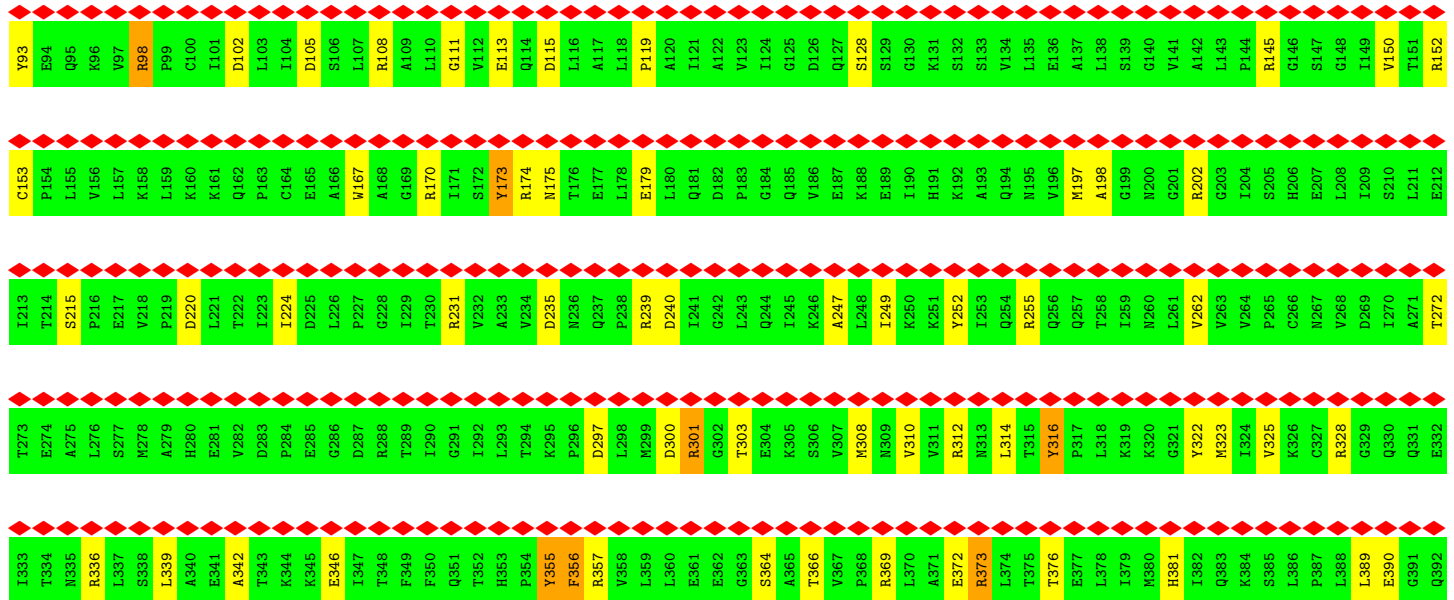
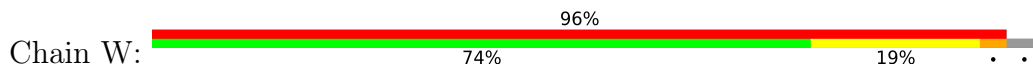
• Molecule 1: Interferon-induced GTP-binding protein Mx2

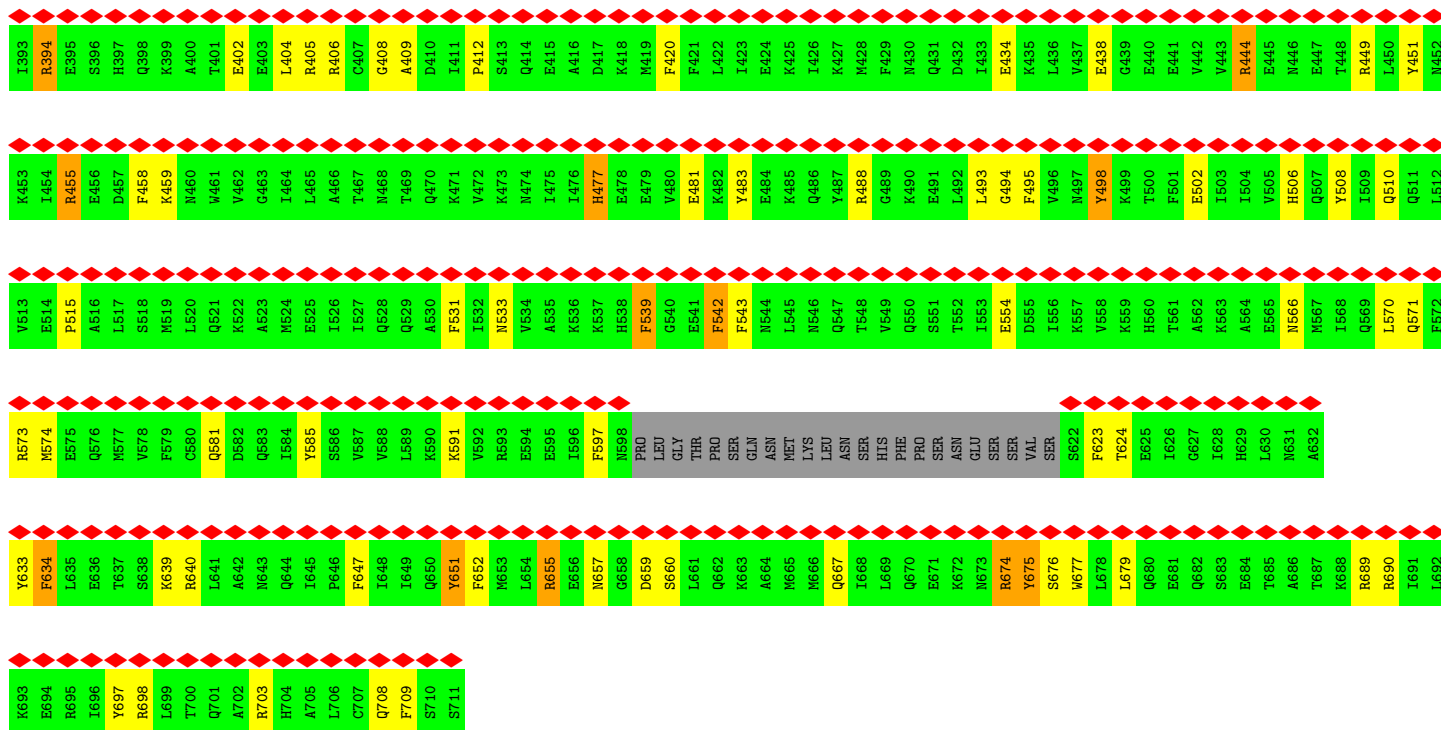


Y93	E94	Q95	K96	V97	R98	P99	C100	I101	D102	L103	I104	D105	S106	L107	R108	A109	L110	G111	V112	E113	Q114	D115	L116	A117	L118	P119	A120	I121	A122	V123	I124	G125	D126	Q127	S128	S129	I130	K131	S132	S133	V134	L135	E136	A137	L138	S139	G140	E681	V141	A142	L143	P144	R145	G146	S147	G148	I149	V150	T151	R152
C153	P154	L155	V156	L157	K158	L159	K160	K161	Q162	P163	C164	E165	A166	W167	A168	G169	R170	I171	S172	Y173	R174	M175	T176	E177	L178	E179	L180	Q181	P182	P183	G184	Q185	Q186	E187	K188	E189	I190	H191	K192	A193	Q194	M195	V196	M197	A198	G199	N200	G201	R202	G203	I204	H205	E206	L207	I208	S210	L211	E212		
I213	T214	S215	P216	E217	V218	P219	D220	L221	T222	I223	I224	D225	E226	W227	G228	L229	T230	R231	V232	A233	V234	D235	N236	Q237	P238	R239	D240	I241	G242	L243	Q244	L245	K246	A247	L248	I249	K250	K251	Y252	I253	Q254	R255	Q256	Q257	T258	I259	N260	L261	V262	V263	V264	P265	H206	E207	L208	I209	S210	L211	T272	

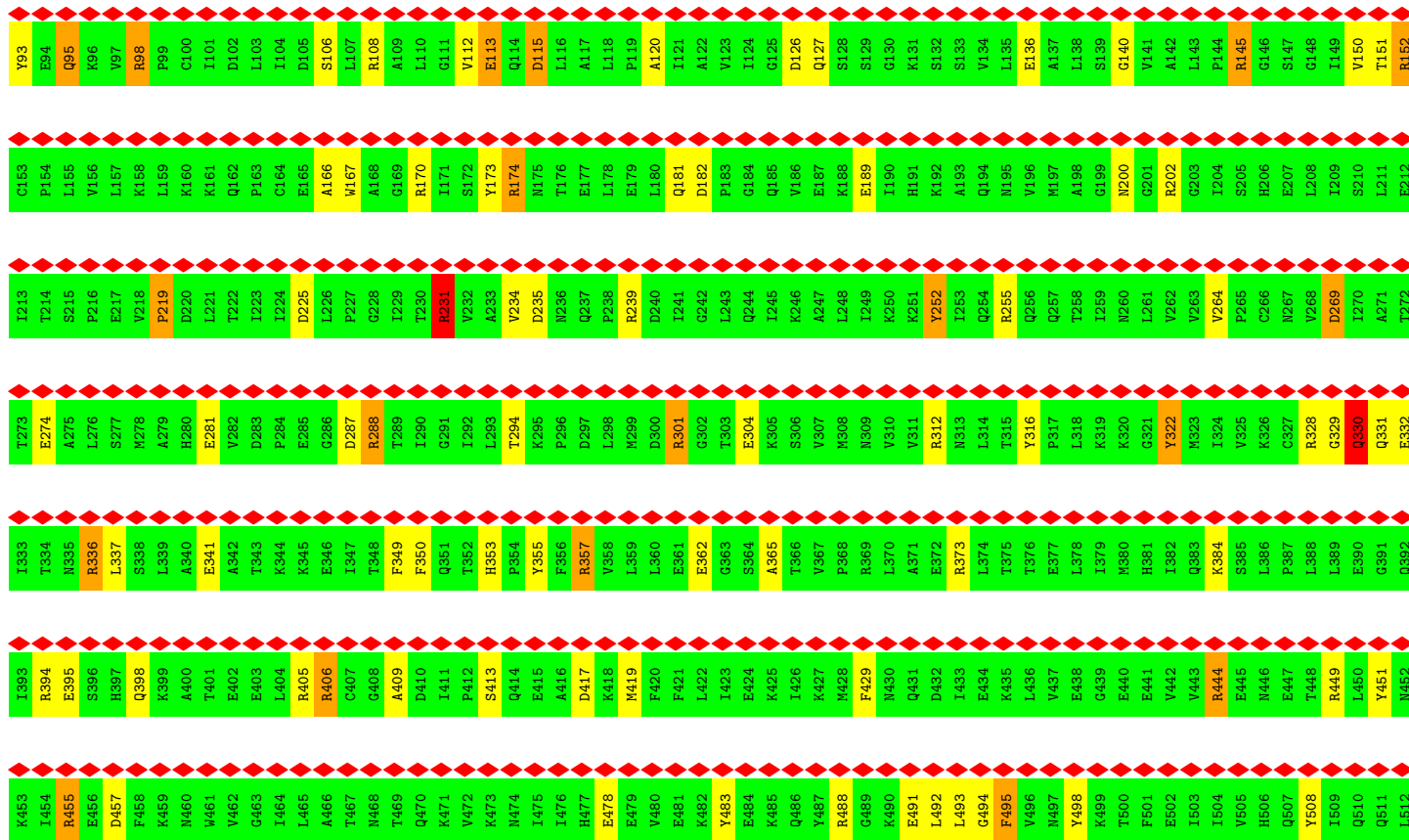
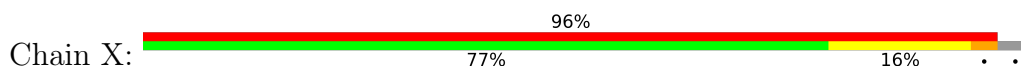


● Molecule 1: Interferon-induced GTP-binding protein Mx2



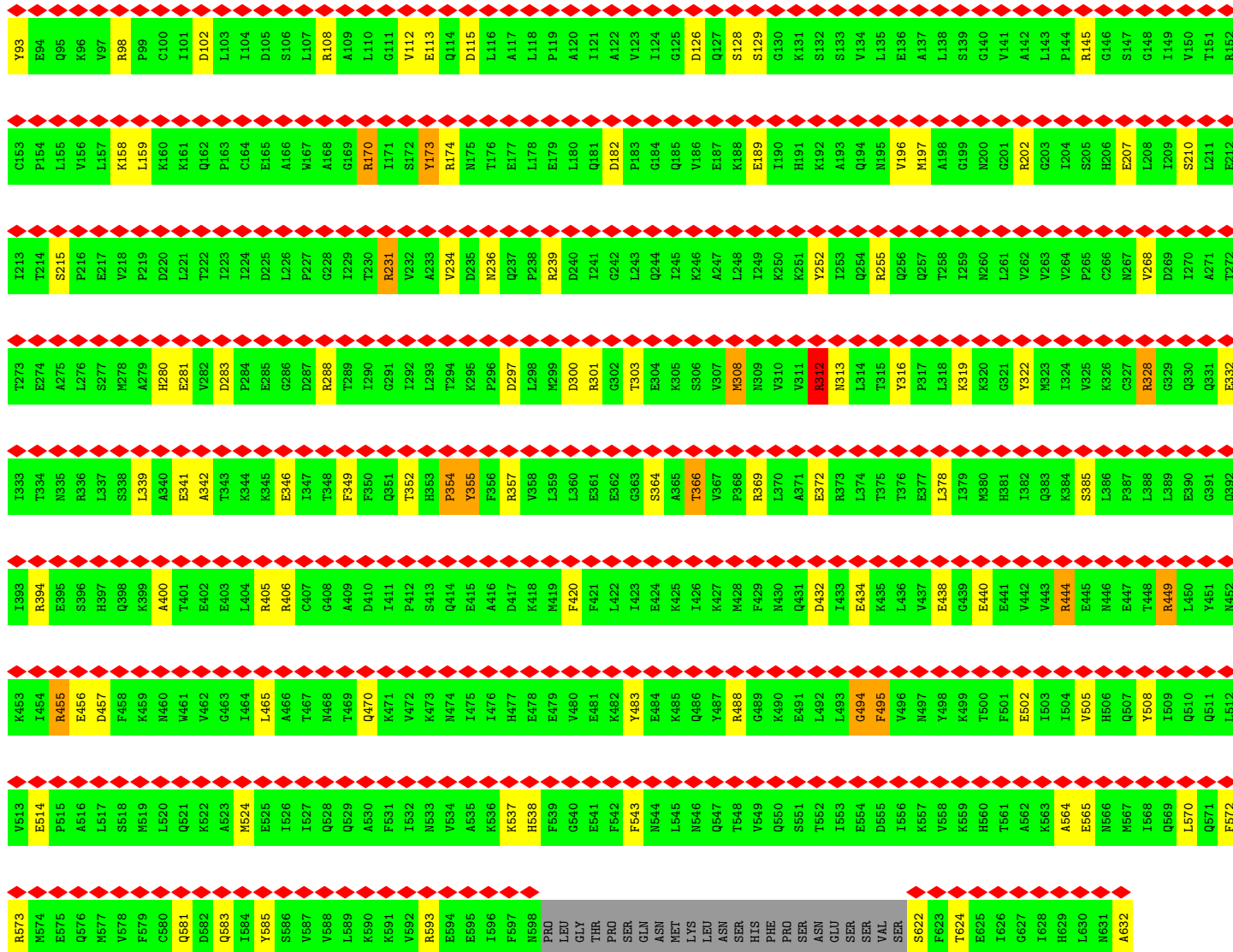
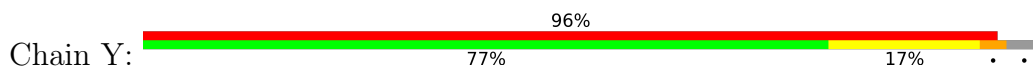


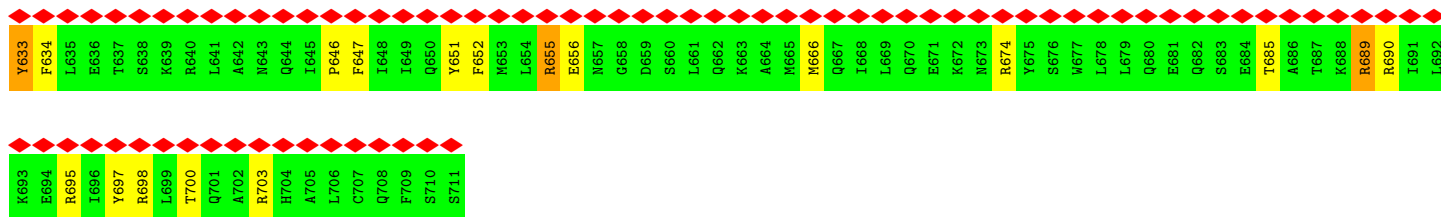
● Molecule 1: Interferon-induced GTP-binding protein Mx2



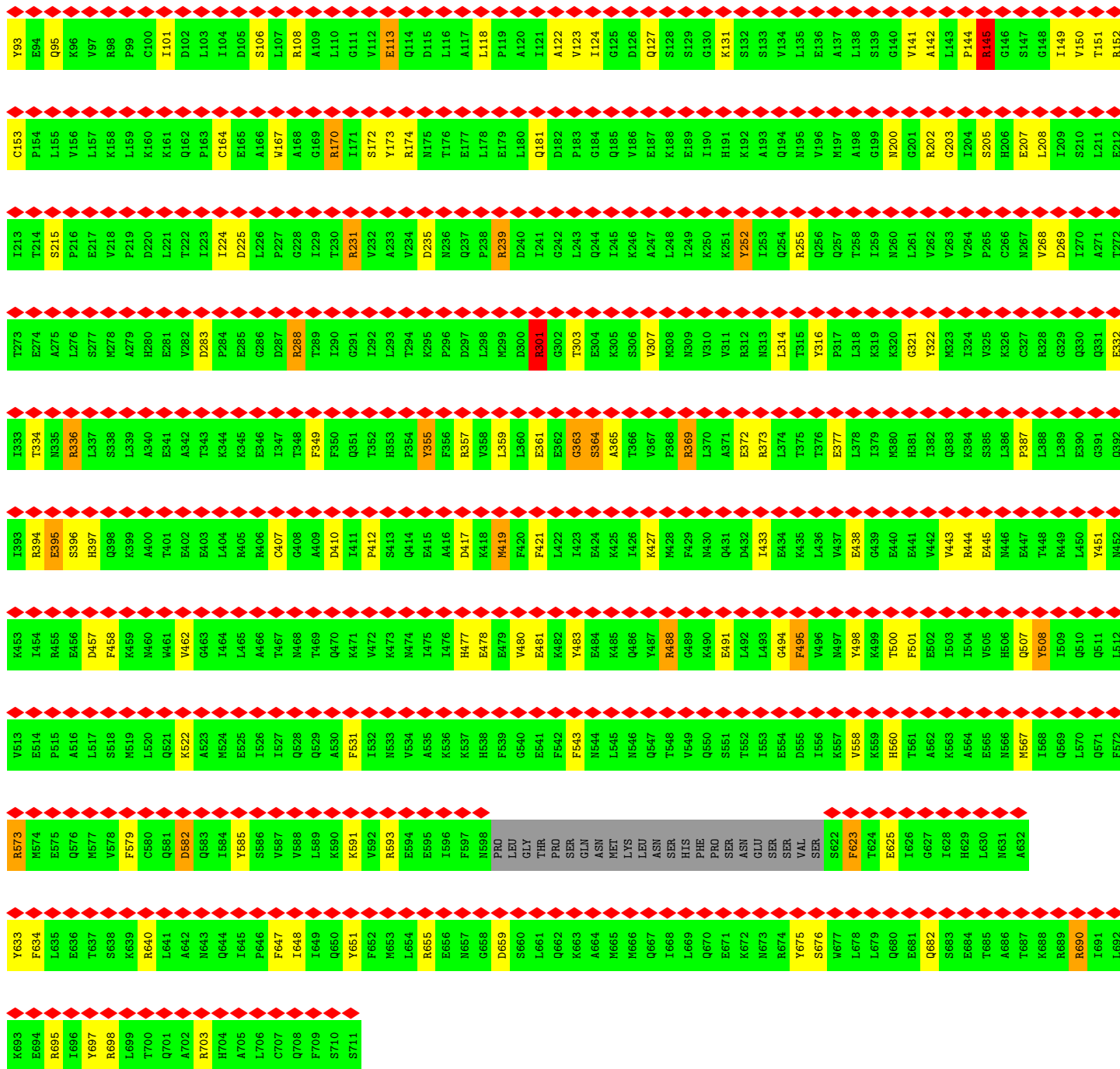
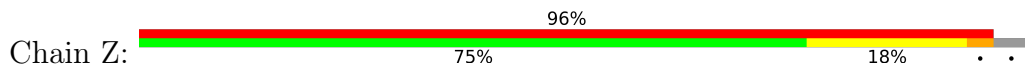


● Molecule 1: Interferon-induced GTP-binding protein Mx2





• Molecule 1: Interferon-induced GTP-binding protein Mx2



4 Experimental information

Property	Value	Source
EM reconstruction method	HELICAL	Depositor
Imposed symmetry	HELICAL, twist=58.4°, rise=8.25 Å, axial sym=C1	Depositor
Number of segments used	44955	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{Å}^2$)	40	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	93000	Depositor
Image detector	FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.199	Depositor
Minimum map value	-0.091	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.011	Depositor
Recommended contour level	4.5	Depositor
Map size (Å)	516.14996, 516.14996, 516.14996	wwPDB
Map dimensions	450, 450, 450	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.147, 1.147, 1.147	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	0	1.63	27/4880 (0.6%)	2.08	146/6573 (2.2%)
1	1	1.64	35/4880 (0.7%)	2.11	136/6573 (2.1%)
1	2	1.67	36/4880 (0.7%)	2.00	111/6573 (1.7%)
1	3	1.63	33/4880 (0.7%)	2.04	116/6573 (1.8%)
1	4	1.62	32/4880 (0.7%)	2.10	137/6573 (2.1%)
1	5	1.62	29/4880 (0.6%)	2.02	126/6573 (1.9%)
1	6	1.67	40/4880 (0.8%)	2.11	130/6573 (2.0%)
1	7	1.65	35/4880 (0.7%)	2.02	128/6573 (1.9%)
1	8	1.65	28/4880 (0.6%)	2.07	142/6573 (2.2%)
1	9	1.66	28/4880 (0.6%)	2.04	146/6573 (2.2%)
1	A	1.62	32/4880 (0.7%)	2.12	161/6573 (2.4%)
1	B	1.63	33/4880 (0.7%)	2.12	136/6573 (2.1%)
1	C	1.65	30/4880 (0.6%)	2.05	110/6573 (1.7%)
1	D	1.67	33/4880 (0.7%)	2.01	122/6573 (1.9%)
1	E	1.64	35/4880 (0.7%)	2.02	117/6573 (1.8%)
1	F	1.60	34/4880 (0.7%)	2.06	114/6573 (1.7%)
1	G	1.63	25/4880 (0.5%)	2.10	134/6573 (2.0%)
1	H	1.63	24/4880 (0.5%)	2.12	146/6573 (2.2%)
1	I	1.65	42/4880 (0.9%)	2.04	125/6573 (1.9%)
1	J	1.66	36/4880 (0.7%)	2.08	120/6573 (1.8%)
1	K	1.67	35/4880 (0.7%)	1.97	99/6573 (1.5%)
1	L	1.65	24/4880 (0.5%)	2.04	130/6573 (2.0%)
1	M	1.63	28/4880 (0.6%)	2.00	118/6573 (1.8%)
1	N	1.65	37/4880 (0.8%)	2.01	122/6573 (1.9%)
1	O	1.67	28/4880 (0.6%)	2.06	150/6573 (2.3%)
1	P	1.67	37/4880 (0.8%)	2.16	147/6573 (2.2%)
1	Q	1.66	30/4880 (0.6%)	2.08	138/6573 (2.1%)
1	R	1.63	21/4880 (0.4%)	2.08	135/6573 (2.1%)
1	S	1.66	36/4880 (0.7%)	2.03	135/6573 (2.1%)
1	T	1.64	27/4880 (0.6%)	2.06	134/6573 (2.0%)
1	U	1.66	40/4880 (0.8%)	2.01	134/6573 (2.0%)
1	V	1.64	33/4880 (0.7%)	2.08	142/6573 (2.2%)
1	W	1.65	34/4880 (0.7%)	2.01	129/6573 (2.0%)
1	X	1.62	25/4880 (0.5%)	1.97	108/6573 (1.6%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	Y	1.64	30/4880 (0.6%)	2.01	112/6573 (1.7%)
1	Z	1.64	33/4880 (0.7%)	2.03	122/6573 (1.9%)
1	a	1.65	22/4880 (0.5%)	2.09	127/6573 (1.9%)
1	b	1.60	30/4880 (0.6%)	2.01	113/6573 (1.7%)
1	c	1.60	21/4880 (0.4%)	2.08	143/6573 (2.2%)
1	d	1.64	29/4880 (0.6%)	2.07	133/6573 (2.0%)
1	e	1.65	31/4880 (0.6%)	2.01	136/6573 (2.1%)
1	f	1.62	31/4880 (0.6%)	2.08	143/6573 (2.2%)
1	g	1.65	30/4880 (0.6%)	2.12	142/6573 (2.2%)
1	h	1.62	35/4880 (0.7%)	2.05	129/6573 (2.0%)
1	i	1.64	34/4880 (0.7%)	2.07	131/6573 (2.0%)
1	j	1.65	32/4880 (0.7%)	2.04	120/6573 (1.8%)
1	k	1.63	27/4880 (0.6%)	1.99	109/6573 (1.7%)
1	l	1.65	36/4880 (0.7%)	2.07	141/6573 (2.1%)
1	m	1.67	41/4880 (0.8%)	2.07	133/6573 (2.0%)
1	n	1.65	43/4880 (0.9%)	2.03	129/6573 (2.0%)
1	o	1.64	33/4880 (0.7%)	2.05	125/6573 (1.9%)
1	p	1.66	27/4880 (0.6%)	2.07	140/6573 (2.1%)
1	q	1.64	29/4880 (0.6%)	2.11	129/6573 (2.0%)
1	r	1.62	33/4880 (0.7%)	2.07	139/6573 (2.1%)
1	s	1.65	26/4880 (0.5%)	2.04	122/6573 (1.9%)
1	t	1.64	27/4880 (0.6%)	2.14	160/6573 (2.4%)
1	u	1.63	33/4880 (0.7%)	2.11	123/6573 (1.9%)
1	v	1.63	27/4880 (0.6%)	2.09	152/6573 (2.3%)
1	w	1.63	29/4880 (0.6%)	2.07	131/6573 (2.0%)
1	x	1.66	37/4880 (0.8%)	2.05	116/6573 (1.8%)
1	y	1.61	26/4880 (0.5%)	2.09	127/6573 (1.9%)
1	z	1.63	25/4880 (0.5%)	2.05	132/6573 (2.0%)
All	All	1.64	1939/302560 (0.6%)	2.06	8083/407526 (2.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	0	0	9
1	1	0	10
1	2	0	22
1	3	0	22
1	4	0	14
1	5	0	17

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	6	0	11
1	7	0	15
1	8	0	17
1	9	0	19
1	A	0	23
1	B	0	17
1	C	0	17
1	D	0	17
1	E	0	18
1	F	0	27
1	G	0	19
1	H	0	20
1	I	0	18
1	J	0	15
1	K	0	18
1	L	0	23
1	M	0	13
1	N	0	21
1	O	0	16
1	P	0	19
1	Q	0	19
1	R	0	13
1	S	0	16
1	T	0	16
1	U	0	17
1	V	0	20
1	W	0	17
1	X	0	20
1	Y	0	12
1	Z	0	19
1	a	0	14
1	b	0	19
1	c	0	16
1	d	0	21
1	e	0	18
1	f	0	18
1	g	0	14
1	h	0	17
1	i	0	15
1	j	0	27
1	k	0	16
1	l	0	18

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	m	0	17
1	n	0	16
1	o	0	14
1	p	0	17
1	q	0	20
1	r	0	17
1	s	0	20
1	t	0	17
1	u	0	16
1	v	0	21
1	w	0	12
1	x	0	25
1	y	0	18
1	z	0	22
All	All	0	1091

All (1939) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	X	113	GLU	CD-OE1	11.22	1.38	1.25
1	m	93	TYR	CE2-CZ	10.00	1.51	1.38
1	j	316	TYR	CG-CD2	9.73	1.51	1.39
1	L	483	TYR	CB-CG	9.68	1.66	1.51
1	J	518	SER	CA-CB	9.53	1.67	1.52
1	z	551	SER	CA-CB	9.46	1.67	1.52
1	X	710	SER	CA-CB	9.28	1.66	1.52
1	Y	488	ARG	CZ-NH1	-9.23	1.21	1.33
1	v	483	TYR	CE1-CZ	9.10	1.50	1.38
1	V	451	TYR	CE1-CZ	9.08	1.50	1.38
1	A	531	PHE	CG-CD1	9.06	1.52	1.38
1	S	170	ARG	CD-NE	9.03	1.61	1.46
1	m	364	SER	CA-CB	8.99	1.66	1.52
1	v	710	SER	CA-CB	8.92	1.66	1.52
1	D	274	GLU	CG-CD	8.84	1.65	1.51
1	M	487	TYR	CE1-CZ	8.77	1.50	1.38
1	p	676	SER	CA-CB	8.76	1.66	1.52
1	E	394	ARG	CZ-NH2	-8.70	1.21	1.33
1	q	711	SER	CA-CB	8.52	1.65	1.52
1	C	622	SER	CA-CB	8.50	1.65	1.52
1	p	355	TYR	CB-CG	8.48	1.64	1.51
1	8	316	TYR	CG-CD2	8.45	1.50	1.39
1	h	147	SER	CA-CB	8.40	1.65	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	m	586	SER	CA-CB	8.38	1.65	1.52
1	S	332	GLU	CD-OE1	8.33	1.34	1.25
1	Y	508	TYR	CG-CD2	8.27	1.49	1.39
1	h	633	TYR	CG-CD2	8.21	1.49	1.39
1	5	586	SER	CA-CB	8.15	1.65	1.52
1	S	252	TYR	CB-CG	-8.14	1.39	1.51
1	L	173	TYR	CB-CG	8.09	1.63	1.51
1	I	215	SER	CA-CB	8.06	1.65	1.52
1	S	498	TYR	CB-CG	8.03	1.63	1.51
1	8	498	TYR	CE2-CZ	8.02	1.49	1.38
1	W	170	ARG	CD-NE	7.99	1.60	1.46
1	n	587	VAL	CA-CB	-7.98	1.38	1.54
1	d	355	TYR	CE2-CZ	7.96	1.48	1.38
1	t	660	SER	CA-CB	7.95	1.64	1.52
1	J	540	GLY	N-CA	7.95	1.57	1.46
1	t	306	SER	CA-CB	7.92	1.64	1.52
1	g	277	SER	CA-CB	7.91	1.64	1.52
1	7	676	SER	CA-CB	7.89	1.64	1.52
1	J	676	SER	CA-CB	7.86	1.64	1.52
1	A	338	SER	CA-CB	7.85	1.64	1.52
1	c	671	GLU	CD-OE1	7.84	1.34	1.25
1	F	113	GLU	CG-CD	7.82	1.63	1.51
1	o	514	GLU	CG-CD	7.80	1.63	1.51
1	R	395	GLU	CD-OE1	7.80	1.34	1.25
1	h	215	SER	CA-CB	7.78	1.64	1.52
1	O	508	TYR	CE2-CZ	7.78	1.48	1.38
1	Q	498	TYR	CB-CG	-7.76	1.40	1.51
1	p	129	SER	CA-CB	7.69	1.64	1.52
1	3	355	TYR	CZ-OH	7.67	1.50	1.37
1	y	479	GLU	CD-OE2	7.64	1.34	1.25
1	t	328	ARG	CZ-NH1	-7.61	1.23	1.33
1	Y	440	GLU	CD-OE1	7.61	1.34	1.25
1	u	487	TYR	CB-CG	-7.59	1.40	1.51
1	V	93	TYR	CE2-CZ	7.58	1.48	1.38
1	B	651	TYR	CG-CD1	7.58	1.49	1.39
1	W	554	GLU	CG-CD	7.58	1.63	1.51
1	T	551	SER	CA-CB	7.58	1.64	1.52
1	t	139	SER	CA-CB	7.56	1.64	1.52
1	s	147	SER	CA-CB	7.54	1.64	1.52
1	k	152	ARG	CD-NE	7.53	1.59	1.46
1	N	676	SER	CA-CB	7.53	1.64	1.52
1	Z	172	SER	CA-CB	7.53	1.64	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	p	710	SER	CB-OG	7.53	1.52	1.42
1	i	697	TYR	CD2-CE2	7.52	1.50	1.39
1	v	633	TYR	CG-CD2	7.51	1.49	1.39
1	R	364	SER	CA-CB	7.50	1.64	1.52
1	o	697	TYR	CZ-OH	7.49	1.50	1.37
1	W	652	PHE	CG-CD2	7.49	1.50	1.38
1	r	498	TYR	CG-CD1	-7.48	1.29	1.39
1	O	132	SER	CA-CB	7.47	1.64	1.52
1	a	710	SER	CA-CB	7.46	1.64	1.52
1	h	585	TYR	CG-CD1	7.45	1.48	1.39
1	Q	265	PRO	N-CD	-7.45	1.37	1.47
1	U	481	GLU	CG-CD	7.43	1.63	1.51
1	M	132	SER	CA-CB	7.41	1.64	1.52
1	P	322	TYR	CB-CG	7.39	1.62	1.51
1	f	515	PRO	N-CD	7.38	1.58	1.47
1	m	362	GLU	CD-OE1	7.38	1.33	1.25
1	K	93	TYR	CG-CD2	7.38	1.48	1.39
1	V	306	SER	CB-OG	7.37	1.51	1.42
1	W	660	SER	CA-CB	7.37	1.64	1.52
1	X	498	TYR	CE2-CZ	7.37	1.48	1.38
1	a	483	TYR	CG-CD2	7.36	1.48	1.39
1	x	106	SER	CA-CB	7.35	1.64	1.52
1	V	242	GLY	N-CA	7.33	1.57	1.46
1	9	690	ARG	CD-NE	7.32	1.58	1.46
1	4	444	ARG	CZ-NH2	-7.32	1.23	1.33
1	m	675	TYR	CG-CD2	7.31	1.48	1.39
1	Q	508	TYR	CE1-CZ	7.31	1.48	1.38
1	W	322	TYR	CG-CD2	7.28	1.48	1.39
1	T	676	SER	CA-CB	7.26	1.63	1.52
1	h	633	TYR	CE1-CZ	7.25	1.48	1.38
1	K	106	SER	CA-CB	7.25	1.63	1.52
1	o	215	SER	CA-CB	7.24	1.63	1.52
1	q	217	GLU	CD-OE1	7.24	1.33	1.25
1	Q	710	SER	CA-CB	7.23	1.63	1.52
1	Q	656	GLU	CD-OE2	7.23	1.33	1.25
1	Z	364	SER	CA-CB	7.22	1.63	1.52
1	g	94	GLU	CD-OE2	7.21	1.33	1.25
1	m	338	SER	CA-CB	7.20	1.63	1.52
1	Y	189	GLU	CD-OE1	7.20	1.33	1.25
1	U	173	TYR	CZ-OH	7.20	1.50	1.37
1	r	508	TYR	CG-CD2	7.19	1.48	1.39
1	8	449	ARG	CZ-NH1	-7.18	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	7	306	SER	CB-OG	7.17	1.51	1.42
1	I	585	TYR	CZ-OH	7.17	1.50	1.37
1	K	514	GLU	CD-OE1	7.16	1.33	1.25
1	3	514	GLU	CG-CD	7.15	1.62	1.51
1	j	440	GLU	CD-OE2	-7.15	1.17	1.25
1	A	139	SER	CA-CB	7.15	1.63	1.52
1	w	210	SER	CA-CB	7.14	1.63	1.52
1	N	179	GLU	CB-CG	7.13	1.65	1.52
1	T	638	SER	CA-CB	7.12	1.63	1.52
1	A	660	SER	CA-CB	7.11	1.63	1.52
1	n	695	ARG	CD-NE	7.10	1.58	1.46
1	r	322	TYR	CE2-CZ	7.10	1.47	1.38
1	9	306	SER	CA-CB	7.09	1.63	1.52
1	f	228	GLY	N-CA	7.09	1.56	1.46
1	u	660	SER	CB-OG	7.09	1.51	1.42
1	o	703	ARG	CZ-NH1	-7.08	1.23	1.33
1	t	274	GLU	CD-OE1	7.08	1.33	1.25
1	G	139	SER	CA-CB	7.08	1.63	1.52
1	M	586	SER	CA-CB	7.06	1.63	1.52
1	j	683	SER	CA-CB	7.06	1.63	1.52
1	C	148	GLY	N-CA	7.06	1.56	1.46
1	i	586	SER	CA-CB	7.05	1.63	1.52
1	f	202	ARG	CZ-NH1	-7.04	1.24	1.33
1	P	349	PHE	CB-CG	-7.03	1.39	1.51
1	3	575	GLU	CD-OE1	7.02	1.33	1.25
1	w	451	TYR	CG-CD2	7.02	1.48	1.39
1	e	405	ARG	CZ-NH2	-7.01	1.24	1.33
1	z	338	SER	CA-CB	7.01	1.63	1.52
1	r	671	GLU	CG-CD	7.00	1.62	1.51
1	n	623	PHE	CG-CD1	6.99	1.49	1.38
1	Q	445	GLU	CG-CD	6.98	1.62	1.51
1	Q	311	VAL	CB-CG2	6.98	1.67	1.52
1	t	477	HIS	CB-CG	6.98	1.62	1.50
1	Z	445	GLU	CB-CG	6.98	1.65	1.52
1	J	421	PHE	CG-CD2	6.97	1.49	1.38
1	b	346	GLU	CD-OE1	6.96	1.33	1.25
1	u	145	ARG	CD-NE	6.96	1.58	1.46
1	P	397	HIS	CB-CG	-6.95	1.37	1.50
1	U	647	PHE	CE1-CZ	6.94	1.50	1.37
1	l	674	ARG	CZ-NH2	-6.92	1.24	1.33
1	e	396	SER	CA-CB	6.92	1.63	1.52
1	c	173	TYR	CD2-CE2	6.91	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	203	GLY	CA-C	6.91	1.62	1.51
1	E	179	GLU	CG-CD	6.90	1.62	1.51
1	Q	508	TYR	CZ-OH	6.90	1.49	1.37
1	6	579	PHE	CG-CD2	6.90	1.49	1.38
1	g	543	PHE	CG-CD2	6.90	1.49	1.38
1	F	502	GLU	CD-OE2	6.90	1.33	1.25
1	U	355	TYR	CG-CD2	6.90	1.48	1.39
1	Z	167	TRP	NE1-CE2	-6.89	1.28	1.37
1	2	444	ARG	CD-NE	6.88	1.58	1.46
1	W	128	SER	CA-CB	6.88	1.63	1.52
1	K	443	VAL	CB-CG2	6.86	1.67	1.52
1	H	167	TRP	CE3-CZ3	6.84	1.50	1.38
1	N	456	GLU	CG-CD	6.84	1.62	1.51
1	U	508	TYR	CE2-CZ	6.84	1.47	1.38
1	1	572	PHE	CG-CD2	6.83	1.49	1.38
1	g	173	TYR	CE1-CZ	6.83	1.47	1.38
1	M	395	GLU	CD-OE2	6.83	1.33	1.25
1	j	647	PHE	CG-CD1	6.83	1.49	1.38
1	4	394	ARG	CD-NE	6.82	1.58	1.46
1	Y	444	ARG	CD-NE	6.82	1.58	1.46
1	d	495	PHE	CG-CD1	6.81	1.49	1.38
1	3	140	GLY	CA-C	-6.80	1.41	1.51
1	O	269	ASP	CA-CB	6.80	1.69	1.53
1	W	634	PHE	CG-CD1	6.79	1.49	1.38
1	I	684	GLU	CA-CB	6.79	1.68	1.53
1	W	408	GLY	CA-C	6.79	1.62	1.51
1	P	488	ARG	CZ-NH1	-6.78	1.24	1.33
1	i	447	GLU	CG-CD	-6.78	1.41	1.51
1	k	322	TYR	CB-CG	6.78	1.61	1.51
1	r	711	SER	CA-CB	6.78	1.63	1.52
1	w	93	TYR	CG-CD1	6.77	1.48	1.39
1	9	479	GLU	CD-OE1	6.76	1.33	1.25
1	s	636	GLU	CB-CG	6.75	1.65	1.52
1	S	487	TYR	CG-CD1	6.75	1.48	1.39
1	Y	215	SER	CA-CB	6.74	1.63	1.52
1	A	395	GLU	CG-CD	6.74	1.62	1.51
1	N	491	GLU	CG-CD	6.74	1.62	1.51
1	P	498	TYR	CG-CD1	6.74	1.48	1.39
1	v	93	TYR	CD1-CE1	6.73	1.49	1.39
1	I	98	ARG	CZ-NH1	-6.73	1.24	1.33
1	n	172	SER	CB-OG	6.72	1.50	1.42
1	w	572	PHE	CB-CG	-6.72	1.40	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	9	177	GLU	CG-CD	6.72	1.62	1.51
1	d	586	SER	CA-CB	6.72	1.63	1.52
1	K	203	GLY	N-CA	6.72	1.56	1.46
1	2	167	TRP	NE1-CE2	6.71	1.46	1.37
1	n	212	GLU	CD-OE2	6.70	1.33	1.25
1	E	307	VAL	CB-CG1	6.70	1.67	1.52
1	x	296	PRO	N-CD	6.69	1.57	1.47
1	V	381	HIS	CB-CG	6.69	1.62	1.50
1	l	173	TYR	CB-CG	6.69	1.61	1.51
1	L	638	SER	CA-CB	6.68	1.62	1.52
1	S	136	GLU	CG-CD	-6.67	1.42	1.51
1	K	212	GLU	CG-CD	-6.67	1.42	1.51
1	g	212	GLU	CG-CD	6.66	1.61	1.51
1	N	403	GLU	CB-CG	6.66	1.64	1.52
1	U	177	GLU	CG-CD	6.65	1.61	1.51
1	m	189	GLU	CD-OE1	6.65	1.32	1.25
1	k	551	SER	CA-CB	6.64	1.62	1.52
1	r	690	ARG	CZ-NH2	-6.64	1.24	1.33
1	A	202	ARG	CD-NE	6.64	1.57	1.46
1	q	623	PHE	CG-CD2	6.64	1.48	1.38
1	N	172	SER	CB-OG	6.64	1.50	1.42
1	K	660	SER	CA-CB	6.63	1.62	1.52
1	i	363	GLY	CA-C	-6.63	1.41	1.51
1	V	373	ARG	CD-NE	6.63	1.57	1.46
1	l	495	PHE	CG-CD1	6.62	1.48	1.38
1	y	502	GLU	CD-OE2	6.62	1.32	1.25
1	M	128	SER	CA-CB	6.62	1.62	1.52
1	Q	274	GLU	CD-OE1	6.62	1.32	1.25
1	K	518	SER	CB-OG	6.61	1.50	1.42
1	v	322	TYR	CG-CD1	6.61	1.47	1.39
1	x	312	ARG	CA-CB	6.60	1.68	1.53
1	n	403	GLU	CD-OE2	6.60	1.32	1.25
1	J	684	GLU	CG-CD	6.60	1.61	1.51
1	r	634	PHE	CG-CD2	6.59	1.48	1.38
1	F	285	GLU	CD-OE1	6.59	1.32	1.25
1	O	481	GLU	CD-OE1	6.58	1.32	1.25
1	E	206	HIS	CB-CG	6.58	1.61	1.50
1	i	405	ARG	CZ-NH2	-6.57	1.24	1.33
1	D	518	SER	CB-OG	6.57	1.50	1.42
1	l	710	SER	CA-CB	6.57	1.62	1.52
1	N	133	SER	CA-CB	6.57	1.62	1.52
1	p	531	PHE	CE2-CZ	6.56	1.49	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	k	622	SER	CA-CB	6.56	1.62	1.52
1	O	651	TYR	CE1-CZ	6.56	1.47	1.38
1	F	647	PHE	CG-CD1	6.55	1.48	1.38
1	T	316	TYR	CZ-OH	6.55	1.49	1.37
1	8	322	TYR	CG-CD2	6.55	1.47	1.39
1	A	451	TYR	CB-CG	-6.55	1.41	1.51
1	Y	210	SER	CA-CB	6.54	1.62	1.52
1	5	697	TYR	CE1-CZ	6.54	1.47	1.38
1	J	187	GLU	CD-OE2	6.54	1.32	1.25
1	I	207	GLU	CG-CD	6.54	1.61	1.51
1	U	495	PHE	CG-CD1	6.54	1.48	1.38
1	m	128	SER	CA-CB	6.53	1.62	1.52
1	y	710	SER	CA-CB	6.53	1.62	1.52
1	f	147	SER	CA-CB	6.52	1.62	1.52
1	3	252	TYR	CG-CD1	6.52	1.47	1.39
1	U	215	SER	CB-OG	6.52	1.50	1.42
1	l	481	GLU	CG-CD	6.52	1.61	1.51
1	s	316	TYR	CE1-CZ	6.52	1.47	1.38
1	0	405	ARG	CD-NE	6.51	1.57	1.46
1	W	173	TYR	CD2-CE2	6.51	1.49	1.39
1	N	355	TYR	CB-CG	6.51	1.61	1.51
1	5	281	GLU	CB-CG	6.51	1.64	1.52
1	f	355	TYR	CE2-CZ	6.51	1.47	1.38
1	Q	697	TYR	CG-CD2	6.51	1.47	1.39
1	g	93	TYR	N-CA	6.50	1.59	1.46
1	j	681	GLU	CB-CG	6.50	1.64	1.52
1	V	622	SER	CA-CB	6.50	1.62	1.52
1	e	445	GLU	CD-OE2	6.50	1.32	1.25
1	2	147	SER	CA-CB	6.49	1.62	1.52
1	k	525	GLU	CG-CD	6.49	1.61	1.51
1	C	658	GLY	CA-C	-6.48	1.41	1.51
1	M	173	TYR	CG-CD2	6.48	1.47	1.39
1	r	660	SER	CA-CB	6.47	1.62	1.52
1	U	406	ARG	CZ-NH2	6.47	1.41	1.33
1	j	338	SER	CA-CB	6.47	1.62	1.52
1	H	456	GLU	CG-CD	6.47	1.61	1.51
1	E	501	PHE	CG-CD1	6.46	1.48	1.38
1	a	350	PHE	CG-CD1	6.46	1.48	1.38
1	U	252	TYR	CG-CD1	6.46	1.47	1.39
1	H	597	PHE	CG-CD1	6.46	1.48	1.38
1	5	655	ARG	CD-NE	6.46	1.57	1.46
1	o	494	GLY	CA-C	6.45	1.62	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	w	390	GLU	CB-CG	6.45	1.64	1.52
1	j	440	GLU	CB-CG	6.44	1.64	1.52
1	x	316	TYR	CE2-CZ	6.44	1.47	1.38
1	h	390	GLU	CG-CD	6.44	1.61	1.51
1	j	157	LEU	N-CA	-6.44	1.33	1.46
1	z	238	PRO	N-CD	6.44	1.56	1.47
1	E	633	TYR	CG-CD1	6.44	1.47	1.39
1	I	372	GLU	CG-CD	6.44	1.61	1.51
1	s	478	GLU	CB-CG	6.43	1.64	1.52
1	J	288	ARG	CZ-NH2	-6.43	1.24	1.33
1	s	572	PHE	CE2-CZ	6.43	1.49	1.37
1	9	629	HIS	CG-CD2	6.43	1.46	1.35
1	0	675	TYR	CG-CD2	6.42	1.47	1.39
1	g	167	TRP	CA-CB	6.42	1.68	1.53
1	k	133	SER	CB-OG	6.41	1.50	1.42
1	c	487	TYR	CE2-CZ	6.41	1.46	1.38
1	2	498	TYR	N-CA	-6.40	1.33	1.46
1	a	640	ARG	CZ-NH2	-6.40	1.24	1.33
1	A	252	TYR	CG-CD1	6.40	1.47	1.39
1	8	515	PRO	CA-CB	6.39	1.66	1.53
1	Y	514	GLU	CB-CG	6.39	1.64	1.52
1	v	173	TYR	CG-CD1	6.39	1.47	1.39
1	Z	585	TYR	CE2-CZ	6.39	1.46	1.38
1	t	651	TYR	CD1-CE1	6.38	1.49	1.39
1	C	215	SER	CA-CB	6.38	1.62	1.52
1	4	623	PHE	CG-CD2	6.38	1.48	1.38
1	x	93	TYR	CG-CD2	6.38	1.47	1.39
1	j	302	GLY	N-CA	6.38	1.55	1.46
1	s	483	TYR	CG-CD1	6.38	1.47	1.39
1	S	147	SER	CA-CB	6.38	1.62	1.52
1	W	515	PRO	N-CD	-6.38	1.39	1.47
1	I	633	TYR	CG-CD2	6.37	1.47	1.39
1	N	301	ARG	CD-NE	6.37	1.57	1.46
1	m	531	PHE	CG-CD2	6.37	1.48	1.38
1	r	187	GLU	CB-CG	6.37	1.64	1.52
1	F	434	GLU	CB-CG	6.37	1.64	1.52
1	P	341	GLU	CB-CG	6.37	1.64	1.52
1	5	94	GLU	CB-CG	6.37	1.64	1.52
1	F	652	PHE	CG-CD2	6.37	1.48	1.38
1	H	445	GLU	CD-OE1	6.37	1.32	1.25
1	5	429	PHE	CG-CD2	6.36	1.48	1.38
1	q	187	GLU	CB-CG	6.36	1.64	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	441	GLU	CB-CG	6.36	1.64	1.52
1	0	488	ARG	CZ-NH2	-6.36	1.24	1.33
1	d	147	SER	CA-CB	6.36	1.62	1.52
1	d	539	PHE	CG-CD1	6.35	1.48	1.38
1	i	355	TYR	CG-CD1	6.35	1.47	1.39
1	P	689	ARG	CD-NE	6.35	1.57	1.46
1	R	518	SER	CB-OG	6.35	1.50	1.42
1	S	498	TYR	CG-CD2	6.35	1.47	1.39
1	D	128	SER	CA-CB	6.35	1.62	1.52
1	u	707	CYS	CB-SG	6.34	1.93	1.82
1	P	595	GLU	CD-OE2	6.34	1.32	1.25
1	S	227	PRO	N-CD	-6.34	1.39	1.47
1	G	711	SER	CA-CB	6.34	1.62	1.52
1	l	542	PHE	CG-CD2	6.33	1.48	1.38
1	4	94	GLU	CD-OE2	6.33	1.32	1.25
1	f	179	GLU	CG-CD	6.33	1.61	1.51
1	h	551	SER	CA-CB	6.33	1.62	1.52
1	a	252	TYR	CE1-CZ	6.32	1.46	1.38
1	U	636	GLU	CD-OE2	-6.32	1.18	1.25
1	X	697	TYR	CA-CB	6.32	1.67	1.53
1	0	456	GLU	CB-CG	6.32	1.64	1.52
1	x	508	TYR	CZ-OH	6.31	1.48	1.37
1	x	540	GLY	N-CA	6.30	1.55	1.46
1	B	622	SER	CB-OG	6.30	1.50	1.42
1	F	106	SER	CA-CB	6.30	1.62	1.52
1	4	498	TYR	CG-CD2	6.30	1.47	1.39
1	M	689	ARG	CZ-NH2	-6.30	1.24	1.33
1	l	440	GLU	CD-OE2	6.30	1.32	1.25
1	x	147	SER	CA-CB	6.30	1.62	1.52
1	z	683	SER	CB-OG	6.30	1.50	1.42
1	W	481	GLU	CD-OE2	6.30	1.32	1.25
1	6	133	SER	CA-CB	6.29	1.62	1.52
1	q	217	GLU	CD-OE2	6.29	1.32	1.25
1	f	284	PRO	CA-C	-6.29	1.40	1.52
1	i	312	ARG	CD-NE	6.29	1.57	1.46
1	R	174	ARG	CD-NE	6.29	1.57	1.46
1	x	456	GLU	CG-CD	6.29	1.61	1.51
1	p	139	SER	CB-OG	6.28	1.50	1.42
1	G	322	TYR	CG-CD1	6.28	1.47	1.39
1	K	647	PHE	CB-CG	6.28	1.62	1.51
1	B	710	SER	CA-CB	6.28	1.62	1.52
1	Z	625	GLU	CG-CD	6.28	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	b	586	SER	CB-OG	6.27	1.50	1.42
1	z	484	GLU	CB-CG	6.27	1.64	1.52
1	v	704	HIS	CB-CG	6.27	1.61	1.50
1	S	646	PRO	N-CD	6.27	1.56	1.47
1	W	502	GLU	CD-OE2	6.26	1.32	1.25
1	Y	633	TYR	CZ-OH	6.26	1.48	1.37
1	Z	372	GLU	CD-OE2	6.26	1.32	1.25
1	O	594	GLU	CB-CG	6.26	1.64	1.52
1	Q	633	TYR	CB-CG	6.26	1.61	1.51
1	c	458	PHE	CG-CD1	6.26	1.48	1.38
1	x	711	SER	CB-OG	6.25	1.50	1.42
1	O	434	GLU	CB-CG	6.25	1.64	1.52
1	m	321	GLY	N-CA	6.25	1.55	1.46
1	Q	147	SER	CA-CB	6.25	1.62	1.52
1	k	355	TYR	CG-CD2	6.25	1.47	1.39
1	I	128	SER	CB-OG	6.24	1.50	1.42
1	9	585	TYR	CE1-CZ	-6.24	1.30	1.38
1	Q	132	SER	CB-OG	6.24	1.50	1.42
1	8	415	GLU	CB-CG	6.24	1.64	1.52
1	c	152	ARG	CD-NE	6.24	1.57	1.46
1	m	633	TYR	CE2-CZ	6.24	1.46	1.38
1	5	144	PRO	CA-C	-6.23	1.40	1.52
1	s	489	GLY	CA-C	-6.23	1.41	1.51
1	j	373	ARG	CD-NE	6.23	1.57	1.46
1	N	514	GLU	CD-OE1	6.23	1.32	1.25
1	I	634	PHE	CG-CD2	6.23	1.48	1.38
1	d	595	GLU	CB-CG	6.22	1.64	1.52
1	F	264	VAL	C-N	6.22	1.46	1.34
1	I	562	ALA	CA-CB	6.22	1.65	1.52
1	H	623	PHE	CG-CD2	6.22	1.48	1.38
1	I	698	ARG	CZ-NH1	-6.22	1.25	1.33
1	S	113	GLU	CD-OE1	6.22	1.32	1.25
1	D	656	GLU	CB-CG	6.22	1.64	1.52
1	E	218	VAL	C-N	6.22	1.46	1.34
1	x	403	GLU	CD-OE1	6.22	1.32	1.25
1	F	710	SER	CA-CB	6.22	1.62	1.52
1	6	413	SER	CB-OG	6.21	1.50	1.42
1	c	585	TYR	CE1-CZ	6.21	1.46	1.38
1	x	231	ARG	CD-NE	6.21	1.57	1.46
1	Q	518	SER	CA-CB	6.21	1.62	1.52
1	9	215	SER	CA-CB	6.21	1.62	1.52
1	4	508	TYR	CE1-CZ	6.20	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	j	675	TYR	CB-CG	-6.20	1.42	1.51
1	y	252	TYR	CG-CD2	6.20	1.47	1.39
1	v	488	ARG	CZ-NH2	-6.20	1.25	1.33
1	T	565	GLU	CG-CD	6.20	1.61	1.51
1	5	221	LEU	CA-CB	6.20	1.68	1.53
1	6	683	SER	CB-OG	6.20	1.50	1.42
1	f	572	PHE	CG-CD1	6.19	1.48	1.38
1	9	344	LYS	CD-CE	6.19	1.66	1.51
1	t	459	LYS	CA-CB	6.19	1.67	1.53
1	h	518	SER	CA-CB	6.19	1.62	1.52
1	Q	540	GLY	N-CA	6.18	1.55	1.46
1	E	187	GLU	CG-CD	6.18	1.61	1.51
1	I	364	SER	CA-CB	6.18	1.62	1.52
1	S	355	TYR	CB-CG	6.18	1.60	1.51
1	8	396	SER	CB-OG	6.18	1.50	1.42
1	w	94	GLU	CB-CG	6.18	1.63	1.52
1	x	481	GLU	CG-CD	6.18	1.61	1.51
1	Z	531	PHE	CG-CD1	6.18	1.48	1.38
1	L	93	TYR	CZ-OH	6.18	1.48	1.37
1	C	498	TYR	CB-CG	-6.17	1.42	1.51
1	i	129	SER	CA-CB	6.17	1.62	1.52
1	s	484	GLU	CD-OE1	6.17	1.32	1.25
1	l	438	GLU	CG-CD	6.17	1.61	1.51
1	q	413	SER	CA-CB	6.17	1.62	1.52
1	Z	396	SER	CA-CB	6.16	1.62	1.52
1	0	215	SER	CA-CB	6.15	1.62	1.52
1	x	124	ILE	C-N	6.15	1.44	1.33
1	h	429	PHE	CG-CD2	6.15	1.48	1.38
1	m	373	ARG	CZ-NH1	-6.15	1.25	1.33
1	B	551	SER	CA-CB	6.15	1.62	1.52
1	0	132	SER	CB-OG	6.15	1.50	1.42
1	9	671	GLU	CD-OE2	6.15	1.32	1.25
1	x	483	TYR	CE2-CZ	6.15	1.46	1.38
1	x	451	TYR	CB-CG	-6.14	1.42	1.51
1	a	173	TYR	CE1-CZ	6.14	1.46	1.38
1	7	316	TYR	CG-CD2	6.14	1.47	1.39
1	K	312	ARG	CD-NE	6.14	1.56	1.46
1	T	355	TYR	CB-CG	-6.14	1.42	1.51
1	3	415	GLU	CG-CD	6.13	1.61	1.51
1	j	593	ARG	NE-CZ	-6.13	1.25	1.33
1	l	285	GLU	CD-OE1	6.13	1.32	1.25
1	A	128	SER	CA-CB	6.13	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	P	355	TYR	CE1-CZ	6.13	1.46	1.38
1	f	514	GLU	CB-CG	6.12	1.63	1.52
1	r	367	VAL	CA-CB	-6.12	1.41	1.54
1	I	518	SER	CA-CB	6.12	1.62	1.52
1	c	239	ARG	CD-NE	6.12	1.56	1.46
1	t	343	THR	N-CA	-6.12	1.34	1.46
1	K	205	SER	CA-CB	6.12	1.62	1.52
1	F	585	TYR	CG-CD2	6.11	1.47	1.39
1	4	586	SER	CB-OG	6.11	1.50	1.42
1	g	660	SER	CA-CB	6.11	1.62	1.52
1	s	361	GLU	CB-CG	6.11	1.63	1.52
1	E	539	PHE	CG-CD2	6.11	1.48	1.38
1	W	498	TYR	CB-CG	6.11	1.60	1.51
1	l	274	GLU	CD-OE1	-6.11	1.19	1.25
1	n	189	GLU	CG-CD	6.11	1.61	1.51
1	n	676	SER	CB-OG	6.10	1.50	1.42
1	o	697	TYR	CG-CD2	6.10	1.47	1.39
1	q	551	SER	CA-CB	6.10	1.62	1.52
1	R	461	TRP	CD2-CE2	6.10	1.48	1.41
1	l	451	TYR	CE2-CZ	6.10	1.46	1.38
1	g	484	GLU	CD-OE1	6.10	1.32	1.25
1	b	449	ARG	CD-NE	6.09	1.56	1.46
1	U	306	SER	CA-CB	6.09	1.62	1.52
1	k	133	SER	CA-CB	6.09	1.62	1.52
1	t	372	GLU	CB-CG	6.09	1.63	1.52
1	h	252	TYR	CG-CD2	6.09	1.47	1.39
1	h	586	SER	CB-OG	6.09	1.50	1.42
1	T	694	GLU	CD-OE1	6.09	1.32	1.25
1	D	593	ARG	CD-NE	6.08	1.56	1.46
1	V	456	GLU	CB-CG	6.08	1.63	1.52
1	g	207	GLU	CD-OE1	6.08	1.32	1.25
1	p	597	PHE	CG-CD1	6.08	1.47	1.38
1	b	660	SER	CA-CB	6.08	1.62	1.52
1	f	167	TRP	NE1-CE2	6.08	1.45	1.37
1	9	461	TRP	CE3-CZ3	6.08	1.48	1.38
1	e	373	ARG	CD-NE	6.08	1.56	1.46
1	e	487	TYR	CZ-OH	6.08	1.48	1.37
1	v	240	ASP	CA-CB	6.08	1.67	1.53
1	H	671	GLU	CD-OE1	6.08	1.32	1.25
1	V	429	PHE	CG-CD2	6.07	1.47	1.38
1	6	355	TYR	CG-CD1	6.07	1.47	1.39
1	X	518	SER	CB-OG	6.07	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	420	PHE	CA-CB	6.06	1.67	1.53
1	h	364	SER	CA-CB	6.06	1.62	1.52
1	P	656	GLU	CB-CG	6.06	1.63	1.52
1	u	572	PHE	CG-CD2	6.06	1.47	1.38
1	u	675	TYR	CD1-CE1	6.06	1.48	1.39
1	H	322	TYR	CG-CD1	6.06	1.47	1.39
1	I	402	GLU	CD-OE1	6.06	1.32	1.25
1	4	106	SER	CA-CB	6.06	1.62	1.52
1	s	338	SER	CA-CB	6.06	1.62	1.52
1	d	130	GLY	CA-C	-6.05	1.42	1.51
1	Y	158	LYS	N-CA	-6.05	1.34	1.46
1	J	481	GLU	CD-OE1	6.05	1.32	1.25
1	d	461	TRP	CD2-CE2	6.05	1.48	1.41
1	1	703	ARG	CD-NE	6.05	1.56	1.46
1	P	491	GLU	CD-OE1	6.04	1.32	1.25
1	0	377	GLU	CD-OE2	6.04	1.32	1.25
1	1	640	ARG	CZ-NH2	-6.04	1.25	1.33
1	m	478	GLU	CB-CG	6.04	1.63	1.52
1	e	487	TYR	CG-CD2	6.04	1.47	1.39
1	x	372	GLU	CD-OE2	6.04	1.32	1.25
1	n	363	GLY	CA-C	6.04	1.61	1.51
1	W	690	ARG	CD-NE	6.04	1.56	1.46
1	q	636	GLU	CB-CG	6.03	1.63	1.52
1	3	139	SER	CA-CB	6.03	1.61	1.52
1	r	136	GLU	CB-CG	6.03	1.63	1.52
1	6	586	SER	CA-CB	6.03	1.61	1.52
1	T	420	PHE	CE2-CZ	6.03	1.48	1.37
1	7	690	ARG	CD-NE	6.02	1.56	1.46
1	f	187	GLU	CG-CD	6.02	1.60	1.51
1	A	633	TYR	CE1-CZ	6.02	1.46	1.38
1	z	508	TYR	CZ-OH	6.02	1.48	1.37
1	O	172	SER	CA-CB	6.02	1.61	1.52
1	r	173	TYR	CE1-CZ	6.02	1.46	1.38
1	I	481	GLU	CG-CD	-6.02	1.43	1.51
1	V	165	GLU	CG-CD	6.01	1.60	1.51
1	6	684	GLU	CB-CG	6.01	1.63	1.52
1	O	144	PRO	CA-CB	6.01	1.65	1.53
1	o	697	TYR	CB-CG	6.01	1.60	1.51
1	z	179	GLU	CD-OE2	6.01	1.32	1.25
1	S	441	GLU	CB-CG	6.01	1.63	1.52
1	7	202	ARG	NE-CZ	-6.00	1.25	1.33
1	P	306	SER	CA-CB	6.00	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	g	420	PHE	CG-CD2	6.00	1.47	1.38
1	y	205	SER	CA-CB	6.00	1.61	1.52
1	T	555	ASP	CA-CB	6.00	1.67	1.53
1	E	241	ILE	C-N	6.00	1.43	1.33
1	V	595	GLU	CB-CG	6.00	1.63	1.52
1	a	369	ARG	CZ-NH2	-6.00	1.25	1.33
1	5	488	ARG	NE-CZ	5.99	1.40	1.33
1	K	154	PRO	N-CD	-5.99	1.39	1.47
1	R	93	TYR	CB-CG	5.99	1.60	1.51
1	S	128	SER	CB-OG	5.99	1.50	1.42
1	0	585	TYR	CG-CD1	5.98	1.47	1.39
1	e	316	TYR	CG-CD1	5.98	1.47	1.39
1	b	595	GLU	CD-OE2	5.98	1.32	1.25
1	c	638	SER	CA-CB	5.98	1.61	1.52
1	A	133	SER	CA-CB	5.98	1.61	1.52
1	X	711	SER	CA-CB	5.98	1.61	1.52
1	W	252	TYR	CG-CD2	5.97	1.47	1.39
1	g	173	TYR	CD2-CE2	5.97	1.48	1.39
1	h	312	ARG	CD-NE	5.97	1.56	1.46
1	o	445	GLU	CA-CB	5.97	1.67	1.53
1	p	572	PHE	CE2-CZ	5.97	1.48	1.37
1	3	656	GLU	CB-CG	5.97	1.63	1.52
1	A	239	ARG	CZ-NH2	-5.97	1.25	1.33
1	g	336	ARG	CZ-NH2	-5.97	1.25	1.33
1	L	441	GLU	CG-CD	5.97	1.60	1.51
1	F	456	GLU	CD-OE1	5.96	1.32	1.25
1	j	445	GLU	CD-OE2	5.96	1.32	1.25
1	I	164	CYS	CB-SG	5.96	1.92	1.82
1	h	493	LEU	C-N	5.96	1.43	1.33
1	B	487	TYR	CG-CD2	5.96	1.46	1.39
1	b	377	GLU	CD-OE2	5.95	1.32	1.25
1	H	373	ARG	CD-NE	5.95	1.56	1.46
1	x	418	LYS	CD-CE	5.95	1.66	1.51
1	B	483	TYR	CB-CG	5.95	1.60	1.51
1	5	543	PHE	CG-CD2	5.95	1.47	1.38
1	q	481	GLU	CD-OE2	5.95	1.32	1.25
1	M	170	ARG	CZ-NH2	-5.95	1.25	1.33
1	l	455	ARG	NE-CZ	-5.95	1.25	1.33
1	b	306	SER	CA-CB	5.95	1.61	1.52
1	s	113	GLU	CD-OE2	5.95	1.32	1.25
1	P	675	TYR	CA-CB	5.95	1.67	1.53
1	U	445	GLU	CD-OE1	5.95	1.32	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	8	487	TYR	CZ-OH	5.94	1.48	1.37
1	v	341	GLU	CG-CD	5.94	1.60	1.51
1	B	484	GLU	CD-OE1	5.94	1.32	1.25
1	m	508	TYR	CE1-CZ	5.94	1.46	1.38
1	C	495	PHE	CE2-CZ	5.94	1.48	1.37
1	2	690	ARG	NE-CZ	-5.93	1.25	1.33
1	1	98	ARG	CZ-NH1	-5.93	1.25	1.33
1	1	578	VAL	CB-CG1	5.93	1.65	1.52
1	j	478	GLU	CB-CG	5.93	1.63	1.52
1	L	456	GLU	CB-CG	5.93	1.63	1.52
1	b	385	SER	CA-CB	5.93	1.61	1.52
1	9	420	PHE	CG-CD1	5.93	1.47	1.38
1	M	172	SER	CA-CB	5.93	1.61	1.52
1	x	231	ARG	CZ-NH1	-5.93	1.25	1.33
1	K	424	GLU	CB-CG	5.93	1.63	1.52
1	P	128	SER	CA-CB	5.93	1.61	1.52
1	B	397	HIS	CB-CG	5.92	1.60	1.50
1	i	664	ALA	CA-CB	5.92	1.64	1.52
1	B	100	CYS	CB-SG	5.92	1.92	1.82
1	U	147	SER	CA-CB	5.92	1.61	1.52
1	l	332	GLU	CB-CG	5.92	1.63	1.52
1	r	498	TYR	CE2-CZ	5.92	1.46	1.38
1	o	549	VAL	CB-CG1	5.92	1.65	1.52
1	i	322	TYR	CE1-CZ	5.92	1.46	1.38
1	U	595	GLU	CD-OE1	-5.92	1.19	1.25
1	W	483	TYR	CG-CD2	5.92	1.46	1.39
1	6	498	TYR	CG-CD2	5.91	1.46	1.39
1	d	196	VAL	CB-CG2	5.91	1.65	1.52
1	n	413	SER	CA-CB	5.91	1.61	1.52
1	8	306	SER	CB-OG	5.91	1.50	1.42
1	k	498	TYR	CG-CD2	5.91	1.46	1.39
1	t	412	PRO	N-CD	-5.91	1.39	1.47
1	I	170	ARG	CZ-NH1	-5.91	1.25	1.33
1	V	215	SER	CA-CB	5.91	1.61	1.52
1	a	252	TYR	CZ-OH	5.90	1.47	1.37
1	Q	498	TYR	CG-CD1	5.90	1.46	1.39
1	h	483	TYR	CG-CD2	5.90	1.46	1.39
1	3	676	SER	CA-CB	5.89	1.61	1.52
1	a	625	GLU	CB-CG	5.89	1.63	1.52
1	n	212	GLU	CB-CG	5.89	1.63	1.52
1	x	338	SER	CA-CB	5.89	1.61	1.52
1	T	494	GLY	CA-C	5.89	1.61	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L	281	GLU	CD-OE1	-5.89	1.19	1.25
1	X	341	GLU	CD-OE1	5.89	1.32	1.25
1	2	419	MET	CA-CB	5.89	1.67	1.53
1	K	451	TYR	CE2-CZ	5.89	1.46	1.38
1	A	147	SER	CA-CB	5.88	1.61	1.52
1	m	355	TYR	CE2-CZ	5.88	1.46	1.38
1	g	677	TRP	CG-CD1	5.88	1.45	1.36
1	r	633	TYR	CE1-CZ	5.88	1.46	1.38
1	0	145	ARG	CD-NE	5.88	1.56	1.46
1	8	205	SER	CA-CB	5.88	1.61	1.52
1	a	424	GLU	CD-OE2	5.88	1.32	1.25
1	c	113	GLU	CD-OE2	5.88	1.32	1.25
1	z	147	SER	CA-CB	5.88	1.61	1.52
1	m	633	TYR	CZ-OH	5.87	1.47	1.37
1	s	353	HIS	CB-CG	5.87	1.60	1.50
1	d	697	TYR	CG-CD2	5.87	1.46	1.39
1	q	362	GLU	CD-OE2	5.87	1.32	1.25
1	J	634	PHE	CG-CD1	5.87	1.47	1.38
1	a	585	TYR	CB-CG	5.87	1.60	1.51
1	j	173	TYR	CG-CD1	5.87	1.46	1.39
1	c	207	GLU	CD-OE2	5.87	1.32	1.25
1	Y	354	PRO	CA-CB	5.87	1.65	1.53
1	l	358	VAL	N-CA	5.86	1.58	1.46
1	u	106	SER	CB-OG	5.86	1.49	1.42
1	C	652	PHE	CG-CD2	5.86	1.47	1.38
1	L	165	GLU	CG-CD	5.86	1.60	1.51
1	n	346	GLU	CD-OE2	5.86	1.32	1.25
1	S	479	GLU	CG-CD	5.86	1.60	1.51
1	h	128	SER	CA-CB	5.86	1.61	1.52
1	D	676	SER	CA-CB	5.86	1.61	1.52
1	q	255	ARG	CD-NE	5.86	1.56	1.46
1	I	231	ARG	CZ-NH2	-5.86	1.25	1.33
1	y	392	GLN	CG-CD	5.86	1.64	1.51
1	P	676	SER	CB-OG	5.86	1.49	1.42
1	U	518	SER	CA-CB	5.86	1.61	1.52
1	Z	377	GLU	CG-CD	5.86	1.60	1.51
1	y	129	SER	CB-OG	5.85	1.49	1.42
1	7	364	SER	CA-CB	5.85	1.61	1.52
1	i	129	SER	C-N	5.85	1.43	1.33
1	h	238	PRO	N-CD	-5.85	1.39	1.47
1	V	288	ARG	NE-CZ	-5.85	1.25	1.33
1	7	274	GLU	CG-CD	5.85	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	w	634	PHE	CB-CG	5.85	1.61	1.51
1	W	674	ARG	CD-NE	5.85	1.56	1.46
1	8	518	SER	CB-OG	5.84	1.49	1.42
1	M	638	SER	CA-CB	5.84	1.61	1.52
1	G	201	GLY	CA-C	-5.84	1.42	1.51
1	L	671	GLU	CA-CB	5.84	1.66	1.53
1	C	239	ARG	CD-NE	5.83	1.56	1.46
1	2	132	SER	CA-CB	5.83	1.61	1.52
1	k	355	TYR	CE1-CZ	5.83	1.46	1.38
1	r	710	SER	CB-OG	5.83	1.49	1.42
1	v	585	TYR	CD1-CE1	5.83	1.48	1.39
1	f	274	GLU	CD-OE1	5.83	1.32	1.25
1	p	144	PRO	N-CD	-5.83	1.39	1.47
1	v	625	GLU	CD-OE1	5.83	1.32	1.25
1	t	136	GLU	CD-OE1	5.83	1.32	1.25
1	G	205	SER	CA-CB	5.83	1.61	1.52
1	2	372	GLU	CD-OE2	5.83	1.32	1.25
1	V	677	TRP	NE1-CE2	5.83	1.45	1.37
1	W	312	ARG	CD-NE	5.83	1.56	1.46
1	t	531	PHE	CG-CD1	5.83	1.47	1.38
1	x	675	TYR	CZ-OH	5.83	1.47	1.37
1	C	356	PHE	CG-CD2	5.83	1.47	1.38
1	N	525	GLU	CD-OE2	-5.82	1.19	1.25
1	S	711	SER	CA-CB	5.82	1.61	1.52
1	y	633	TYR	CB-CG	5.82	1.60	1.51
1	3	98	ARG	CZ-NH1	-5.82	1.25	1.33
1	K	539	PHE	CG-CD1	5.82	1.47	1.38
1	U	349	PHE	CG-CD2	5.82	1.47	1.38
1	V	539	PHE	CB-CG	-5.82	1.41	1.51
1	Z	202	ARG	C-N	5.82	1.43	1.33
1	2	549	VAL	CA-CB	-5.82	1.42	1.54
1	o	179	GLU	CG-CD	5.82	1.60	1.51
1	D	487	TYR	CG-CD1	5.82	1.46	1.39
1	W	402	GLU	CD-OE2	5.82	1.32	1.25
1	1	694	GLU	CB-CG	5.82	1.63	1.52
1	P	573	ARG	CD-NE	5.82	1.56	1.46
1	Z	361	GLU	CD-OE2	5.82	1.32	1.25
1	F	478	GLU	CD-OE1	5.81	1.32	1.25
1	2	542	PHE	CG-CD2	5.81	1.47	1.38
1	8	106	SER	CA-CB	5.81	1.61	1.52
1	C	697	TYR	CG-CD2	5.81	1.46	1.39
1	O	640	ARG	CD-NE	5.81	1.56	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	F	597	PHE	CG-CD2	5.81	1.47	1.38
1	j	525	GLU	CB-CG	5.81	1.63	1.52
1	C	129	SER	CA-CB	5.81	1.61	1.52
1	H	172	SER	CA-CB	5.81	1.61	1.52
1	l	682	GLN	CG-CD	5.81	1.64	1.51
1	r	362	GLU	CG-CD	5.81	1.60	1.51
1	y	403	GLU	CG-CD	5.81	1.60	1.51
1	Z	438	GLU	CD-OE1	5.80	1.32	1.25
1	6	179	GLU	CD-OE1	5.80	1.32	1.25
1	k	266	CYS	CB-SG	5.80	1.92	1.82
1	x	703	ARG	CD-NE	5.80	1.56	1.46
1	M	338	SER	CA-CB	5.80	1.61	1.52
1	P	202	ARG	CZ-NH1	-5.80	1.25	1.33
1	V	462	VAL	C-N	5.80	1.43	1.33
1	I	585	TYR	CE1-CZ	5.79	1.46	1.38
1	N	217	GLU	CG-CD	-5.79	1.43	1.51
1	a	317	PRO	N-CD	-5.79	1.39	1.47
1	d	357	ARG	CD-NE	5.79	1.56	1.46
1	N	132	SER	CA-CB	5.79	1.61	1.52
1	4	684	GLU	CB-CG	5.79	1.63	1.52
1	R	173	TYR	CG-CD1	5.79	1.46	1.39
1	y	625	GLU	CD-OE2	5.78	1.32	1.25
1	I	172	SER	CB-OG	5.78	1.49	1.42
1	M	338	SER	CB-OG	5.78	1.49	1.42
1	m	451	TYR	CE1-CZ	5.78	1.46	1.38
1	y	113	GLU	CB-CG	5.77	1.63	1.52
1	6	487	TYR	CB-CG	5.77	1.60	1.51
1	x	572	PHE	CB-CG	5.77	1.61	1.51
1	P	212	GLU	CG-CD	5.77	1.60	1.51
1	J	215	SER	CA-CB	5.77	1.61	1.52
1	l	346	GLU	CB-CG	5.77	1.63	1.52
1	y	415	GLU	CD-OE1	5.77	1.31	1.25
1	8	585	TYR	CG-CD1	5.77	1.46	1.39
1	j	506	HIS	CB-CG	5.77	1.60	1.50
1	j	709	PHE	CB-CG	5.77	1.61	1.51
1	o	369	ARG	CD-NE	5.77	1.56	1.46
1	r	346	GLU	CD-OE1	5.77	1.31	1.25
1	F	364	SER	CA-CB	5.77	1.61	1.52
1	Z	412	PRO	CA-C	5.77	1.64	1.52
1	u	205	SER	CA-CB	5.77	1.61	1.52
1	Y	319	LYS	CA-C	5.77	1.68	1.52
1	t	498	TYR	CA-CB	5.76	1.66	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	X	332	GLU	CD-OE2	5.76	1.31	1.25
1	5	488	ARG	CA-CB	5.76	1.66	1.53
1	M	633	TYR	CG-CD1	5.76	1.46	1.39
1	6	413	SER	CA-CB	5.76	1.61	1.52
1	D	93	TYR	CG-CD1	5.76	1.46	1.39
1	8	694	GLU	CD-OE1	5.76	1.31	1.25
1	t	170	ARG	CZ-NH2	-5.75	1.25	1.33
1	8	339	LEU	CA-CB	5.75	1.67	1.53
1	j	215	SER	CA-CB	5.75	1.61	1.52
1	w	385	SER	CA-CB	5.74	1.61	1.52
1	I	684	GLU	CD-OE2	5.74	1.31	1.25
1	U	531	PHE	CG-CD1	5.74	1.47	1.38
1	5	108	ARG	CD-NE	5.74	1.56	1.46
1	8	498	TYR	CZ-OH	5.74	1.47	1.37
1	4	277	SER	CA-CB	5.74	1.61	1.52
1	w	406	ARG	NE-CZ	5.74	1.40	1.33
1	A	565	GLU	CD-OE2	-5.74	1.19	1.25
1	e	573	ARG	NE-CZ	-5.73	1.25	1.33
1	n	439	GLY	CA-C	-5.73	1.42	1.51
1	n	707	CYS	CB-SG	-5.73	1.72	1.81
1	6	103	LEU	CA-CB	5.73	1.67	1.53
1	d	633	TYR	CD1-CE1	5.73	1.48	1.39
1	U	655	ARG	CD-NE	5.73	1.56	1.46
1	4	651	TYR	CD2-CE2	5.73	1.48	1.39
1	6	349	PHE	CG-CD2	5.73	1.47	1.38
1	r	481	GLU	CD-OE2	5.72	1.31	1.25
1	R	125	GLY	CA-C	-5.72	1.42	1.51
1	s	514	GLU	CG-CD	5.72	1.60	1.51
1	v	306	SER	CA-CB	5.72	1.61	1.52
1	5	690	ARG	CZ-NH1	-5.72	1.25	1.33
1	M	396	SER	CB-OG	-5.72	1.34	1.42
1	i	573	ARG	CZ-NH1	-5.72	1.25	1.33
1	6	675	TYR	CG-CD1	5.72	1.46	1.39
1	M	215	SER	CA-CB	5.72	1.61	1.52
1	x	686	ALA	CA-CB	5.71	1.64	1.52
1	C	252	TYR	CE1-CZ	5.71	1.46	1.38
1	Q	505	VAL	CB-CG1	5.71	1.64	1.52
1	N	306	SER	CA-CB	5.71	1.61	1.52
1	A	681	GLU	CG-CD	5.71	1.60	1.51
1	p	346	GLU	CD-OE1	-5.71	1.19	1.25
1	H	484	GLU	CD-OE2	5.71	1.31	1.25
1	Y	207	GLU	CD-OE1	5.71	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	9	415	GLU	CD-OE2	5.71	1.31	1.25
1	J	212	GLU	CD-OE2	5.71	1.31	1.25
1	V	187	GLU	CD-OE1	-5.71	1.19	1.25
1	7	128	SER	CB-OG	5.70	1.49	1.42
1	f	542	PHE	CG-CD2	5.70	1.47	1.38
1	w	697	TYR	CE2-CZ	5.70	1.46	1.38
1	3	174	ARG	CD-NE	5.70	1.56	1.46
1	1	241	ILE	C-N	5.70	1.43	1.33
1	A	167	TRP	CD2-CE2	5.70	1.48	1.41
1	m	689	ARG	CZ-NH1	-5.70	1.25	1.33
1	Z	634	PHE	CA-CB	5.70	1.66	1.53
1	1	681	GLU	CD-OE1	5.70	1.31	1.25
1	l	328	ARG	CD-NE	5.70	1.56	1.46
1	A	130	GLY	N-CA	-5.70	1.37	1.46
1	D	483	TYR	CZ-OH	5.70	1.47	1.37
1	D	449	ARG	CD-NE	5.69	1.56	1.46
1	N	498	TYR	CZ-OH	5.69	1.47	1.37
1	O	346	GLU	CG-CD	5.69	1.60	1.51
1	W	542	PHE	CG-CD1	5.69	1.47	1.38
1	1	633	TYR	CB-CG	-5.69	1.43	1.51
1	D	479	GLU	CG-CD	-5.69	1.43	1.51
1	H	304	GLU	CD-OE1	5.69	1.31	1.25
1	t	356	PHE	CG-CD1	5.69	1.47	1.38
1	A	671	GLU	CB-CG	5.69	1.62	1.52
1	P	147	SER	CA-CB	5.68	1.61	1.52
1	Y	697	TYR	CB-CG	5.68	1.60	1.51
1	o	409	ALA	CA-CB	5.68	1.64	1.52
1	H	406	ARG	CD-NE	5.68	1.56	1.46
1	O	508	TYR	CB-CG	-5.68	1.43	1.51
1	C	681	GLU	CB-CG	5.68	1.62	1.52
1	l	697	TYR	CG-CD2	5.67	1.46	1.39
1	s	119	PRO	N-CD	-5.67	1.40	1.47
1	A	143	LEU	CA-CB	5.67	1.66	1.53
1	E	623	PHE	CB-CG	-5.67	1.41	1.51
1	u	406	ARG	CD-NE	5.67	1.56	1.46
1	y	93	TYR	CZ-OH	5.67	1.47	1.37
1	V	238	PRO	CA-CB	5.67	1.64	1.53
1	u	350	PHE	CE1-CZ	5.67	1.48	1.37
1	I	508	TYR	CE1-CZ	5.67	1.46	1.38
1	b	182	ASP	CA-CB	5.66	1.66	1.53
1	j	424	GLU	CD-OE1	5.66	1.31	1.25
1	1	690	ARG	NE-CZ	-5.66	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	7	284	PRO	CA-CB	5.66	1.64	1.53
1	G	675	TYR	CB-CG	5.66	1.60	1.51
1	U	634	PHE	CD1-CE1	5.66	1.50	1.39
1	k	694	GLU	CB-CG	5.66	1.62	1.52
1	K	575	GLU	CB-CG	5.66	1.62	1.52
1	Z	215	SER	CA-CB	5.66	1.61	1.52
1	1	651	TYR	CG-CD2	5.65	1.46	1.39
1	2	242	GLY	CA-C	5.65	1.60	1.51
1	h	689	ARG	CD-NE	5.65	1.56	1.46
1	m	633	TYR	CG-CD2	5.65	1.46	1.39
1	p	491	GLU	CD-OE2	5.65	1.31	1.25
1	7	518	SER	CA-CB	5.65	1.61	1.52
1	d	356	PHE	CG-CD2	5.65	1.47	1.38
1	D	341	GLU	CB-CG	5.65	1.62	1.52
1	c	93	TYR	CA-CB	5.65	1.66	1.53
1	x	597	PHE	CG-CD2	5.65	1.47	1.38
1	4	640	ARG	CD-NE	5.64	1.56	1.46
1	5	255	ARG	CZ-NH2	-5.64	1.25	1.33
1	o	573	ARG	CZ-NH1	-5.64	1.25	1.33
1	x	387	PRO	N-CD	-5.64	1.40	1.47
1	4	228	GLY	N-CA	5.64	1.54	1.46
1	y	281	GLU	CD-OE2	5.64	1.31	1.25
1	e	129	SER	CA-CB	5.64	1.61	1.52
1	n	358	VAL	CB-CG2	5.64	1.64	1.52
1	l	655	ARG	CD-NE	5.64	1.56	1.46
1	9	332	GLU	CB-CG	5.64	1.62	1.52
1	z	697	TYR	CE1-CZ	5.64	1.45	1.38
1	R	405	ARG	CZ-NH1	-5.64	1.25	1.33
1	x	93	TYR	CD1-CE1	5.63	1.47	1.39
1	0	205	SER	CA-CB	5.63	1.61	1.52
1	B	660	SER	CA-CB	5.63	1.61	1.52
1	E	698	ARG	CZ-NH2	-5.63	1.25	1.33
1	7	695	ARG	CD-NE	5.63	1.56	1.46
1	d	675	TYR	CG-CD2	5.63	1.46	1.39
1	L	518	SER	CA-CB	5.63	1.61	1.52
1	2	456	GLU	CD-OE2	5.63	1.31	1.25
1	b	167	TRP	NE1-CE2	-5.63	1.30	1.37
1	S	210	SER	CA-CB	5.63	1.61	1.52
1	3	316	TYR	CG-CD1	5.62	1.46	1.39
1	H	594	GLU	CG-CD	5.62	1.60	1.51
1	N	651	TYR	CE1-CZ	5.62	1.45	1.38
1	0	483	TYR	CG-CD1	5.62	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	461	TRP	CD1-NE1	5.62	1.47	1.38
1	b	415	GLU	CD-OE2	5.62	1.31	1.25
1	H	651	TYR	CZ-OH	5.62	1.47	1.37
1	U	338	SER	CA-CB	5.62	1.61	1.52
1	b	145	ARG	CZ-NH1	-5.62	1.25	1.33
1	o	355	TYR	CG-CD1	5.62	1.46	1.39
1	M	597	PHE	CG-CD2	5.62	1.47	1.38
1	P	579	PHE	CE2-CZ	5.62	1.48	1.37
1	u	217	GLU	CB-CG	5.62	1.62	1.52
1	w	98	ARG	NE-CZ	-5.62	1.25	1.33
1	k	274	GLU	CD-OE1	5.62	1.31	1.25
1	e	152	ARG	NE-CZ	-5.61	1.25	1.33
1	y	357	ARG	CZ-NH2	5.61	1.40	1.33
1	W	667	GLN	CG-CD	5.61	1.64	1.51
1	3	346	GLU	CD-OE2	5.61	1.31	1.25
1	e	188	LYS	CA-CB	5.61	1.66	1.53
1	l	514	GLU	CD-OE2	5.61	1.31	1.25
1	x	136	GLU	CD-OE2	-5.61	1.19	1.25
1	V	458	PHE	CB-CG	-5.61	1.41	1.51
1	2	681	GLU	CG-CD	5.61	1.60	1.51
1	e	638	SER	CB-OG	5.61	1.49	1.42
1	o	676	SER	CB-OG	5.61	1.49	1.42
1	J	707	CYS	CB-SG	5.61	1.91	1.82
1	C	440	GLU	CB-CG	5.61	1.62	1.52
1	X	572	PHE	CG-CD2	5.61	1.47	1.38
1	7	622	SER	CA-CB	5.61	1.61	1.52
1	q	427	LYS	CA-CB	5.61	1.66	1.53
1	Y	656	GLU	CB-CG	5.61	1.62	1.52
1	0	167	TRP	CD2-CE2	-5.61	1.34	1.41
1	i	260	ASN	CB-CG	5.61	1.64	1.51
1	B	163	PRO	N-CD	5.61	1.55	1.47
1	7	322	TYR	CA-CB	5.60	1.66	1.53
1	e	636	GLU	CB-CG	5.60	1.62	1.52
1	N	633	TYR	CD2-CE2	5.60	1.47	1.39
1	2	498	TYR	CZ-OH	5.60	1.47	1.37
1	9	253	ILE	CA-CB	-5.60	1.42	1.54
1	l	322	TYR	CG-CD1	5.60	1.46	1.39
1	B	93	TYR	CG-CD2	5.60	1.46	1.39
1	7	711	SER	CA-CB	5.60	1.61	1.52
1	m	488	ARG	CZ-NH1	-5.60	1.25	1.33
1	w	440	GLU	CB-CG	5.60	1.62	1.52
1	B	152	ARG	CD-NE	5.60	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	228	GLY	CA-C	5.60	1.60	1.51
1	3	695	ARG	CD-NE	5.59	1.55	1.46
1	F	593	ARG	CD-NE	5.59	1.55	1.46
1	P	136	GLU	CD-OE1	5.59	1.31	1.25
1	k	443	VAL	CB-CG2	5.59	1.64	1.52
1	f	406	ARG	CD-NE	5.59	1.55	1.46
1	2	215	SER	CA-CB	5.58	1.61	1.52
1	2	551	SER	CA-CB	5.58	1.61	1.52
1	8	217	GLU	CD-OE2	5.58	1.31	1.25
1	9	652	PHE	CE1-CZ	5.58	1.48	1.37
1	6	677	TRP	CD2-CE2	5.58	1.48	1.41
1	7	104	ILE	CA-CB	-5.58	1.42	1.54
1	i	675	TYR	CE1-CZ	5.58	1.45	1.38
1	I	93	TYR	CD2-CE2	5.58	1.47	1.39
1	d	420	PHE	CE1-CZ	5.58	1.48	1.37
1	p	325	VAL	CB-CG1	5.58	1.64	1.52
1	U	239	ARG	CZ-NH2	-5.58	1.25	1.33
1	D	355	TYR	CA-CB	5.58	1.66	1.53
1	e	175	ASN	N-CA	-5.57	1.35	1.46
1	n	136	GLU	CD-OE1	5.57	1.31	1.25
1	L	158	LYS	CD-CE	5.57	1.65	1.51
1	E	709	PHE	CG-CD1	5.57	1.47	1.38
1	N	113	GLU	CG-CD	5.57	1.60	1.51
1	N	264	VAL	C-N	5.57	1.44	1.34
1	g	429	PHE	CG-CD1	5.57	1.47	1.38
1	K	364	SER	CA-CB	5.57	1.61	1.52
1	l	564	ALA	N-CA	-5.57	1.35	1.46
1	v	274	GLU	CD-OE2	5.57	1.31	1.25
1	F	306	SER	CA-CB	5.57	1.61	1.52
1	u	625	GLU	CD-OE2	5.56	1.31	1.25
1	C	145	ARG	CD-NE	5.56	1.55	1.46
1	K	377	GLU	CB-CG	5.56	1.62	1.52
1	S	174	ARG	CZ-NH1	-5.56	1.25	1.33
1	U	356	PHE	CG-CD1	5.56	1.47	1.38
1	x	238	PRO	N-CA	-5.56	1.37	1.47
1	I	635	LEU	CA-CB	5.56	1.66	1.53
1	2	451	TYR	CG-CD1	5.56	1.46	1.39
1	K	675	TYR	CD2-CE2	5.56	1.47	1.39
1	4	341	GLU	CB-CG	5.56	1.62	1.52
1	i	322	TYR	CG-CD2	5.56	1.46	1.39
1	L	656	GLU	CG-CD	5.56	1.60	1.51
1	9	444	ARG	CD-NE	5.55	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	R	675	TYR	CE2-CZ	5.55	1.45	1.38
1	Z	106	SER	CA-CB	5.55	1.61	1.52
1	6	361	GLU	CD-OE1	5.55	1.31	1.25
1	A	674	ARG	CD-NE	5.55	1.55	1.46
1	J	461	TRP	NE1-CE2	-5.55	1.30	1.37
1	l	128	SER	CA-CB	5.55	1.61	1.52
1	c	170	ARG	CD-NE	5.55	1.55	1.46
1	p	281	GLU	CD-OE1	5.55	1.31	1.25
1	F	316	TYR	CB-CG	5.55	1.59	1.51
1	g	551	SER	CA-CB	5.55	1.61	1.52
1	r	451	TYR	CZ-OH	5.55	1.47	1.37
1	w	683	SER	CA-CB	5.55	1.61	1.52
1	D	694	GLU	CD-OE2	5.55	1.31	1.25
1	Q	174	ARG	CD-NE	5.55	1.55	1.46
1	N	408	GLY	CA-C	5.55	1.60	1.51
1	l	656	GLU	CD-OE1	5.54	1.31	1.25
1	F	651	TYR	CG-CD2	5.54	1.46	1.39
1	O	479	GLU	N-CA	-5.54	1.35	1.46
1	w	455	ARG	NE-CZ	-5.54	1.25	1.33
1	J	478	GLU	CA-CB	5.54	1.66	1.53
1	U	316	TYR	CE2-CZ	5.54	1.45	1.38
1	n	140	GLY	N-CA	5.54	1.54	1.46
1	J	429	PHE	CG-CD2	5.54	1.47	1.38
1	U	557	LYS	CA-CB	5.54	1.66	1.53
1	l	625	GLU	CG-CD	-5.54	1.43	1.51
1	6	439	GLY	CA-C	-5.54	1.43	1.51
1	w	671	GLU	CD-OE2	5.54	1.31	1.25
1	6	676	SER	CA-CB	5.53	1.61	1.52
1	x	210	SER	CB-OG	5.53	1.49	1.42
1	i	698	ARG	CZ-NH2	-5.53	1.25	1.33
1	q	445	GLU	CB-CG	5.53	1.62	1.52
1	R	355	TYR	CD1-CE1	5.53	1.47	1.39
1	7	349	PHE	CE1-CZ	5.53	1.47	1.37
1	A	316	TYR	CE1-CZ	5.53	1.45	1.38
1	S	651	TYR	CG-CD2	5.53	1.46	1.39
1	t	440	GLU	CD-OE1	5.52	1.31	1.25
1	B	403	GLU	CG-CD	5.52	1.60	1.51
1	k	494	GLY	CA-C	5.52	1.60	1.51
1	q	169	GLY	CA-C	5.52	1.60	1.51
1	z	134	VAL	CB-CG1	5.52	1.64	1.52
1	E	274	GLU	CG-CD	5.52	1.60	1.51
1	T	133	SER	CA-CB	5.52	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	f	487	TYR	CG-CD1	5.52	1.46	1.39
1	o	385	SER	CA-CB	5.51	1.61	1.52
1	F	629	HIS	N-CA	5.51	1.57	1.46
1	1	593	ARG	CA-CB	5.51	1.66	1.53
1	d	473	LYS	CB-CG	5.51	1.67	1.52
1	n	356	PHE	CG-CD2	5.51	1.47	1.38
1	q	488	ARG	CD-NE	5.51	1.55	1.46
1	t	572	PHE	CG-CD2	5.51	1.47	1.38
1	N	585	TYR	CD2-CE2	5.51	1.47	1.39
1	6	93	TYR	CE2-CZ	5.51	1.45	1.38
1	k	139	SER	CA-CB	5.51	1.61	1.52
1	A	651	TYR	CG-CD1	5.51	1.46	1.39
1	g	255	ARG	CZ-NH2	-5.51	1.25	1.33
1	y	362	GLU	CB-CG	5.51	1.62	1.52
1	h	551	SER	CB-OG	5.50	1.49	1.42
1	t	487	TYR	CA-CB	5.50	1.66	1.53
1	z	487	TYR	CE2-CZ	5.50	1.45	1.38
1	P	674	ARG	CD-NE	5.50	1.55	1.46
1	T	485	LYS	CA-CB	5.50	1.66	1.53
1	f	455	ARG	CD-NE	5.50	1.55	1.46
1	o	275	ALA	CA-CB	5.50	1.64	1.52
1	I	502	GLU	CD-OE2	5.50	1.31	1.25
1	K	403	GLU	CD-OE1	-5.50	1.19	1.25
1	7	479	GLU	CB-CG	5.50	1.62	1.52
1	C	638	SER	CA-CB	5.50	1.61	1.52
1	E	408	GLY	N-CA	5.50	1.54	1.46
1	8	434	GLU	CD-OE2	5.50	1.31	1.25
1	j	405	ARG	CD-NE	5.50	1.55	1.46
1	D	395	GLU	CD-OE2	5.50	1.31	1.25
1	B	543	PHE	CG-CD1	5.50	1.47	1.38
1	L	341	GLU	CD-OE1	-5.50	1.19	1.25
1	S	239	ARG	CD-NE	5.50	1.55	1.46
1	d	235	ASP	CA-CB	5.49	1.66	1.53
1	k	203	GLY	CA-C	5.49	1.60	1.51
1	I	674	ARG	CG-CD	5.49	1.65	1.51
1	Q	489	GLY	CA-C	-5.49	1.43	1.51
1	S	306	SER	CA-CB	5.49	1.61	1.52
1	S	332	GLU	CG-CD	-5.49	1.43	1.51
1	2	188	LYS	CD-CE	5.49	1.65	1.51
1	d	595	GLU	CG-CD	5.49	1.60	1.51
1	F	338	SER	CA-CB	5.49	1.61	1.52
1	1	285	GLU	CB-CG	5.49	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	9	202	ARG	CZ-NH1	-5.49	1.25	1.33
1	i	207	GLU	CB-CG	5.49	1.62	1.52
1	t	573	ARG	CD-NE	5.49	1.55	1.46
1	B	531	PHE	CB-CG	5.49	1.60	1.51
1	K	575	GLU	CD-OE2	-5.49	1.19	1.25
1	V	455	ARG	CD-NE	5.49	1.55	1.46
1	2	421	PHE	CG-CD2	5.48	1.47	1.38
1	H	128	SER	CA-CB	5.48	1.61	1.52
1	8	147	SER	CB-OG	5.48	1.49	1.42
1	q	139	SER	CA-CB	5.48	1.61	1.52
1	z	216	PRO	N-CD	-5.48	1.40	1.47
1	L	702	ALA	CA-CB	5.48	1.64	1.52
1	T	557	LYS	CA-CB	5.48	1.66	1.53
1	U	316	TYR	CG-CD1	5.48	1.46	1.39
1	Y	434	GLU	CG-CD	5.48	1.60	1.51
1	c	651	TYR	CE2-CZ	5.48	1.45	1.38
1	h	421	PHE	CG-CD2	5.48	1.47	1.38
1	v	281	GLU	CB-CG	5.48	1.62	1.52
1	Q	546	ASN	CB-CG	5.48	1.63	1.51
1	V	170	ARG	CD-NE	5.48	1.55	1.46
1	Y	332	GLU	CG-CD	5.48	1.60	1.51
1	0	208	LEU	CA-CB	5.48	1.66	1.53
1	3	636	GLU	CD-OE1	5.48	1.31	1.25
1	f	327	CYS	N-CA	5.48	1.57	1.46
1	3	207	GLU	CB-CG	5.48	1.62	1.52
1	e	231	ARG	CA-CB	5.47	1.66	1.53
1	l	328	ARG	C-N	5.47	1.43	1.33
1	l	483	TYR	CE1-CZ	5.47	1.45	1.38
1	q	304	GLU	CD-OE2	5.47	1.31	1.25
1	Z	675	TYR	CG-CD1	5.47	1.46	1.39
1	o	356	PHE	CG-CD2	5.47	1.47	1.38
1	4	173	TYR	CG-CD2	5.47	1.46	1.39
1	n	449	ARG	CD-NE	5.47	1.55	1.46
1	q	583	GLN	CA-CB	5.47	1.66	1.53
1	Q	324	ILE	N-CA	-5.47	1.35	1.46
1	9	153	CYS	CB-SG	5.46	1.91	1.82
1	s	595	GLU	CD-OE2	5.46	1.31	1.25
1	L	316	TYR	CE2-CZ	5.46	1.45	1.38
1	f	403	GLU	CG-CD	5.46	1.60	1.51
1	F	451	TYR	CZ-OH	5.46	1.47	1.37
1	k	449	ARG	CZ-NH2	-5.46	1.25	1.33
1	r	560	HIS	CB-CG	-5.46	1.40	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	n	327	CYS	CB-SG	5.46	1.91	1.82
1	q	483	TYR	CG-CD1	5.46	1.46	1.39
1	m	710	SER	CA-CB	5.46	1.61	1.52
1	r	473	LYS	N-CA	-5.46	1.35	1.46
1	R	651	TYR	CD2-CE2	5.46	1.47	1.39
1	Y	385	SER	CA-CB	5.46	1.61	1.52
1	2	172	SER	CA-CB	5.46	1.61	1.52
1	e	164	CYS	CB-SG	5.46	1.91	1.82
1	u	406	ARG	CZ-NH2	5.46	1.40	1.33
1	C	420	PHE	CG-CD2	5.46	1.47	1.38
1	S	177	GLU	CD-OE1	5.46	1.31	1.25
1	C	585	TYR	CE2-CZ	5.46	1.45	1.38
1	D	415	GLU	CB-CG	5.46	1.62	1.52
1	b	172	SER	C-N	5.45	1.46	1.34
1	V	535	ALA	N-CA	-5.45	1.35	1.46
1	q	402	GLU	CG-CD	5.45	1.60	1.51
1	E	498	TYR	CD1-CE1	5.45	1.47	1.39
1	0	369	ARG	CZ-NH1	-5.45	1.25	1.33
1	y	199	GLY	CA-C	5.45	1.60	1.51
1	0	554	GLU	CB-CG	5.45	1.62	1.52
1	p	187	GLU	CD-OE1	5.45	1.31	1.25
1	Z	676	SER	CA-CB	5.45	1.61	1.52
1	e	108	ARG	CD-NE	5.44	1.55	1.46
1	Y	93	TYR	CG-CD2	5.44	1.46	1.39
1	2	144	PRO	N-CA	5.44	1.56	1.47
1	j	633	TYR	CE1-CZ	5.44	1.45	1.38
1	C	377	GLU	CB-CG	5.44	1.62	1.52
1	P	413	SER	CA-CB	5.44	1.61	1.52
1	0	675	TYR	CB-CG	5.44	1.59	1.51
1	e	207	GLU	CD-OE1	5.44	1.31	1.25
1	r	148	GLY	N-CA	5.44	1.54	1.46
1	K	179	GLU	CD-OE1	5.44	1.31	1.25
1	p	534	VAL	CA-CB	-5.43	1.43	1.54
1	v	498	TYR	CE2-CZ	5.43	1.45	1.38
1	i	165	GLU	CD-OE2	5.43	1.31	1.25
1	J	651	TYR	CZ-OH	5.43	1.47	1.37
1	W	434	GLU	CG-CD	5.43	1.60	1.51
1	5	329	GLY	N-CA	-5.43	1.38	1.46
1	7	321	GLY	N-CA	-5.43	1.38	1.46
1	r	277	SER	CA-CB	5.43	1.61	1.52
1	r	403	GLU	CG-CD	-5.43	1.43	1.51
1	s	173	TYR	CE2-CZ	5.43	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	167	TRP	CG-CD1	5.43	1.44	1.36
1	H	498	TYR	CG-CD2	5.43	1.46	1.39
1	P	447	GLU	CD-OE2	5.43	1.31	1.25
1	Z	349	PHE	CG-CD2	5.43	1.46	1.38
1	3	694	GLU	CD-OE1	5.43	1.31	1.25
1	o	496	VAL	CB-CG1	5.43	1.64	1.52
1	B	501	PHE	CG-CD1	5.43	1.46	1.38
1	U	461	TRP	CE2-CZ2	5.43	1.49	1.39
1	Y	322	TYR	CE2-CZ	5.43	1.45	1.38
1	V	671	GLU	CG-CD	5.42	1.60	1.51
1	v	214	THR	CB-OG1	-5.42	1.32	1.43
1	B	182	ASP	C-N	-5.42	1.24	1.34
1	T	633	TYR	CE1-CZ	5.42	1.45	1.38
1	w	189	GLU	CB-CG	5.42	1.62	1.52
1	8	498	TYR	CB-CG	5.42	1.59	1.51
1	X	636	GLU	CA-CB	5.42	1.65	1.53
1	5	483	TYR	CG-CD1	5.42	1.46	1.39
1	6	167	TRP	NE1-CE2	-5.42	1.30	1.37
1	l	531	PHE	CG-CD2	5.42	1.46	1.38
1	G	368	PRO	N-CD	-5.42	1.40	1.47
1	G	421	PHE	CE2-CZ	5.42	1.47	1.37
1	8	198	ALA	C-N	5.41	1.42	1.33
1	i	362	GLU	CB-CG	5.41	1.62	1.52
1	i	420	PHE	CG-CD2	5.41	1.46	1.38
1	D	564	ALA	CA-CB	5.41	1.63	1.52
1	K	415	GLU	CD-OE1	5.41	1.31	1.25
1	c	622	SER	CA-CB	5.41	1.61	1.52
1	v	695	ARG	NE-CZ	-5.41	1.26	1.33
1	u	579	PHE	CG-CD1	5.41	1.46	1.38
1	S	133	SER	CA-CB	5.41	1.61	1.52
1	u	547	GLN	CA-CB	5.41	1.65	1.53
1	E	455	ARG	CD-NE	5.41	1.55	1.46
1	Z	113	GLU	CG-CD	5.41	1.60	1.51
1	v	441	GLU	CG-CD	5.40	1.60	1.51
1	J	336	ARG	CZ-NH1	-5.40	1.26	1.33
1	g	638	SER	CA-CB	5.40	1.61	1.52
1	l	327	CYS	CA-CB	5.40	1.65	1.53
1	S	139	SER	CA-CB	5.40	1.61	1.52
1	X	362	GLU	CG-CD	5.40	1.60	1.51
1	k	145	ARG	CD-NE	5.40	1.55	1.46
1	I	329	GLY	N-CA	5.40	1.54	1.46
1	J	674	ARG	CZ-NH2	-5.40	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	m	341	GLU	CD-OE1	5.40	1.31	1.25
1	r	684	GLU	CB-CG	5.40	1.62	1.52
1	I	479	GLU	CG-CD	5.40	1.60	1.51
1	Y	372	GLU	CD-OE2	5.40	1.31	1.25
1	Z	483	TYR	CB-CG	5.40	1.59	1.51
1	l	660	SER	CA-CB	5.40	1.61	1.52
1	u	396	SER	CA-CB	5.40	1.61	1.52
1	7	508	TYR	CG-CD1	5.39	1.46	1.39
1	b	322	TYR	CE2-CZ	5.39	1.45	1.38
1	G	396	SER	CB-OG	5.39	1.49	1.42
1	7	684	GLU	CD-OE2	5.39	1.31	1.25
1	i	172	SER	CA-CB	5.39	1.61	1.52
1	L	543	PHE	CG-CD1	5.39	1.46	1.38
1	e	217	GLU	CG-CD	5.39	1.60	1.51
1	9	316	TYR	CE1-CZ	5.39	1.45	1.38
1	f	445	GLU	CD-OE1	5.39	1.31	1.25
1	G	177	GLU	CG-CD	5.39	1.60	1.51
1	J	542	PHE	CG-CD2	5.39	1.46	1.38
1	O	365	ALA	CA-CB	5.39	1.63	1.52
1	5	508	TYR	CD2-CE2	5.39	1.47	1.39
1	e	317	PRO	N-CD	-5.39	1.40	1.47
1	E	595	GLU	CD-OE2	-5.38	1.19	1.25
1	S	421	PHE	CG-CD1	5.38	1.46	1.38
1	S	528	GLN	CG-CD	5.38	1.63	1.51
1	A	165	GLU	CB-CG	5.38	1.62	1.52
1	E	357	ARG	CD-NE	5.38	1.55	1.46
1	Y	456	GLU	CD-OE2	5.38	1.31	1.25
1	X	531	PHE	CA-CB	5.38	1.65	1.53
1	7	310	VAL	CB-CG2	5.38	1.64	1.52
1	i	675	TYR	CB-CG	5.38	1.59	1.51
1	D	328	ARG	CD-NE	5.38	1.55	1.46
1	F	252	TYR	CD2-CE2	5.38	1.47	1.39
1	N	152	ARG	CZ-NH1	-5.38	1.26	1.33
1	Y	93	TYR	N-CA	5.38	1.57	1.46
1	h	397	HIS	CB-CG	5.38	1.59	1.50
1	E	133	SER	CB-OG	5.37	1.49	1.42
1	L	477	HIS	CG-CD2	5.37	1.44	1.35
1	W	93	TYR	N-CA	5.37	1.57	1.46
1	X	508	TYR	CG-CD2	5.37	1.46	1.39
1	l	106	SER	CB-OG	5.37	1.49	1.42
1	7	335	ASN	CB-CG	5.37	1.63	1.51
1	r	304	GLU	CG-CD	5.37	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	U	483	TYR	CE1-CZ	5.37	1.45	1.38
1	v	288	ARG	CD-NE	5.37	1.55	1.46
1	z	286	GLY	CA-C	-5.37	1.43	1.51
1	j	636	GLU	CD-OE1	5.37	1.31	1.25
1	N	286	GLY	N-CA	5.37	1.54	1.46
1	T	355	TYR	CE1-CZ	5.37	1.45	1.38
1	e	257	GLN	CA-CB	5.37	1.65	1.53
1	P	403	GLU	CB-CG	5.37	1.62	1.52
1	9	339	LEU	N-CA	-5.36	1.35	1.46
1	g	136	GLU	CG-CD	5.36	1.59	1.51
1	g	594	GLU	CG-CD	5.36	1.59	1.51
1	n	163	PRO	N-CD	-5.36	1.40	1.47
1	F	174	ARG	CD-NE	5.36	1.55	1.46
1	G	288	ARG	NE-CZ	-5.36	1.26	1.33
1	H	539	PHE	CG-CD1	5.36	1.46	1.38
1	V	322	TYR	CG-CD2	5.36	1.46	1.39
1	7	177	GLU	CB-CG	5.36	1.62	1.52
1	9	152	ARG	CD-NE	5.36	1.55	1.46
1	s	232	VAL	N-CA	5.36	1.57	1.46
1	u	508	TYR	CE1-CZ	5.36	1.45	1.38
1	w	661	LEU	CA-CB	5.36	1.66	1.53
1	s	640	ARG	CD-NE	5.36	1.55	1.46
1	u	551	SER	CA-CB	5.36	1.60	1.52
1	W	346	GLU	CB-CG	5.36	1.62	1.52
1	4	542	PHE	CE1-CZ	5.36	1.47	1.37
1	b	405	ARG	CD-NE	5.36	1.55	1.46
1	s	242	GLY	CA-C	-5.35	1.43	1.51
1	G	655	ARG	CZ-NH2	-5.35	1.26	1.33
1	n	701	GLN	CA-CB	5.35	1.65	1.53
1	v	212	GLU	CG-CD	5.35	1.59	1.51
1	w	306	SER	CA-CB	5.35	1.60	1.52
1	Y	674	ARG	NE-CZ	5.35	1.40	1.33
1	t	525	GLU	CD-OE2	5.35	1.31	1.25
1	b	252	TYR	CZ-OH	5.35	1.47	1.37
1	q	170	ARG	CZ-NH1	-5.35	1.26	1.33
1	u	461	TRP	CZ2-CH2	5.35	1.47	1.37
1	x	93	TYR	N-CA	5.35	1.57	1.46
1	V	525	GLU	CG-CD	-5.35	1.44	1.51
1	V	651	TYR	CE2-CZ	5.35	1.45	1.38
1	5	651	TYR	CE2-CZ	5.35	1.45	1.38
1	M	136	GLU	CB-CG	5.35	1.62	1.52
1	k	390	GLU	CD-OE2	5.35	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	255	ARG	CZ-NH2	-5.35	1.26	1.33
1	V	633	TYR	CZ-OH	5.35	1.47	1.37
1	l	585	TYR	CG-CD2	5.34	1.46	1.39
1	m	575	GLU	CB-CG	5.34	1.62	1.52
1	q	498	TYR	CG-CD2	5.34	1.46	1.39
1	E	420	PHE	CB-CG	5.34	1.60	1.51
1	H	487	TYR	CG-CD2	5.34	1.46	1.39
1	d	488	ARG	CD-NE	5.34	1.55	1.46
1	f	525	GLU	CD-OE1	5.34	1.31	1.25
1	l	407	CYS	CB-SG	5.34	1.91	1.82
1	m	691	ILE	CB-CG1	5.34	1.69	1.54
1	I	674	ARG	CZ-NH1	-5.34	1.26	1.33
1	b	579	PHE	CA-CB	5.34	1.65	1.53
1	D	625	GLU	CB-CG	5.34	1.62	1.52
1	T	172	SER	CA-CB	5.34	1.60	1.52
1	n	579	PHE	CA-C	5.33	1.66	1.52
1	y	461	TRP	CD2-CE2	5.33	1.47	1.41
1	F	215	SER	CA-CB	5.33	1.60	1.52
1	U	551	SER	CA-CB	5.33	1.60	1.52
1	6	422	LEU	N-CA	-5.33	1.35	1.46
1	s	575	GLU	CB-CG	5.33	1.62	1.52
1	8	549	VAL	CB-CG2	5.33	1.64	1.52
1	N	478	GLU	CG-CD	5.33	1.59	1.51
1	r	483	TYR	CE1-CZ	5.33	1.45	1.38
1	P	281	GLU	CD-OE2	5.33	1.31	1.25
1	m	439	GLY	CA-C	-5.33	1.43	1.51
1	x	160	LYS	CD-CE	5.33	1.64	1.51
1	2	429	PHE	CG-CD1	5.33	1.46	1.38
1	3	231	ARG	CD-NE	5.33	1.55	1.46
1	6	655	ARG	CD-NE	5.33	1.55	1.46
1	p	543	PHE	CG-CD2	5.33	1.46	1.38
1	B	152	ARG	CZ-NH1	-5.33	1.26	1.33
1	G	170	ARG	CD-NE	5.33	1.55	1.46
1	V	177	GLU	CD-OE2	5.33	1.31	1.25
1	f	145	ARG	CG-CD	5.32	1.65	1.51
1	j	93	TYR	CG-CD1	5.32	1.46	1.39
1	S	677	TRP	CZ2-CH2	5.32	1.47	1.37
1	Y	502	GLU	CB-CG	5.32	1.62	1.52
1	E	541	GLU	CB-CG	5.32	1.62	1.52
1	K	304	GLU	CD-OE1	5.32	1.31	1.25
1	M	531	PHE	CA-C	5.32	1.66	1.52
1	U	94	GLU	CD-OE1	5.32	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	W	498	TYR	CD1-CE1	5.32	1.47	1.39
1	7	212	GLU	CD-OE2	-5.32	1.19	1.25
1	b	208	LEU	CA-CB	5.32	1.66	1.53
1	c	301	ARG	CD-NE	5.32	1.55	1.46
1	d	167	TRP	CA-CB	5.32	1.65	1.53
1	E	373	ARG	CD-NE	5.32	1.55	1.46
1	I	350	PHE	CB-CG	5.32	1.60	1.51
1	O	593	ARG	CD-NE	5.32	1.55	1.46
1	U	315	THR	N-CA	5.32	1.56	1.46
1	6	228	GLY	CA-C	-5.32	1.43	1.51
1	h	281	GLU	CD-OE1	-5.32	1.19	1.25
1	K	189	GLU	CB-CG	5.32	1.62	1.52
1	W	585	TYR	CD1-CE1	-5.32	1.31	1.39
1	1	502	GLU	CG-CD	5.31	1.59	1.51
1	g	684	GLU	CD-OE1	5.31	1.31	1.25
1	C	445	GLU	CB-CG	5.31	1.62	1.52
1	N	369	ARG	CD-NE	5.31	1.55	1.46
1	X	106	SER	CA-CB	5.31	1.60	1.52
1	2	397	HIS	CA-CB	5.31	1.65	1.53
1	b	594	GLU	C-N	5.31	1.46	1.34
1	z	586	SER	CA-CB	5.31	1.60	1.52
1	J	572	PHE	CB-CG	-5.31	1.42	1.51
1	U	488	ARG	CZ-NH2	-5.31	1.26	1.33
1	M	412	PRO	N-CA	5.31	1.56	1.47
1	A	362	GLU	CD-OE1	-5.31	1.19	1.25
1	i	681	GLU	CD-OE1	5.31	1.31	1.25
1	k	172	SER	CB-OG	5.31	1.49	1.42
1	C	254	GLN	CA-CB	5.31	1.65	1.53
1	J	147	SER	C-N	5.31	1.42	1.33
1	b	451	TYR	CG-CD2	5.31	1.46	1.39
1	I	592	VAL	CB-CG1	5.31	1.64	1.52
1	R	346	GLU	CD-OE1	5.31	1.31	1.25
1	8	652	PHE	CG-CD1	5.30	1.46	1.38
1	H	346	GLU	CG-CD	5.30	1.59	1.51
1	L	177	GLU	CB-CG	5.30	1.62	1.52
1	Q	508	TYR	CD2-CE2	5.30	1.47	1.39
1	3	341	GLU	CB-CG	5.30	1.62	1.52
1	5	93	TYR	CA-CB	5.30	1.65	1.53
1	8	139	SER	CB-OG	5.30	1.49	1.42
1	k	219	PRO	N-CD	-5.30	1.40	1.47
1	D	402	GLU	CB-CG	5.30	1.62	1.52
1	L	704	HIS	CB-CG	5.30	1.59	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	j	708	GLN	CA-CB	5.30	1.65	1.53
1	w	394	ARG	CD-NE	5.30	1.55	1.46
1	G	252	TYR	CE1-CZ	5.30	1.45	1.38
1	n	145	ARG	CZ-NH1	-5.30	1.26	1.33
1	k	593	ARG	CZ-NH2	-5.30	1.26	1.33
1	C	93	TYR	N-CA	5.30	1.56	1.46
1	O	597	PHE	CG-CD2	5.30	1.46	1.38
1	X	106	SER	CB-OG	5.30	1.49	1.42
1	s	579	PHE	CG-CD1	5.29	1.46	1.38
1	o	165	GLU	CD-OE2	5.29	1.31	1.25
1	J	501	PHE	CB-CG	5.29	1.60	1.51
1	4	306	SER	CB-OG	5.29	1.49	1.42
1	6	625	GLU	CG-CD	5.29	1.59	1.51
1	m	697	TYR	CD2-CE2	5.29	1.47	1.39
1	U	415	GLU	CB-CG	5.29	1.62	1.52
1	2	171	ILE	N-CA	5.29	1.56	1.46
1	6	551	SER	CA-CB	5.29	1.60	1.52
1	n	170	ARG	CZ-NH2	-5.29	1.26	1.33
1	n	395	GLU	CG-CD	5.29	1.59	1.51
1	v	651	TYR	CG-CD1	5.29	1.46	1.39
1	L	554	GLU	CB-CG	5.29	1.62	1.52
1	R	593	ARG	CD-NE	5.29	1.55	1.46
1	7	586	SER	CA-CB	5.29	1.60	1.52
1	h	539	PHE	CG-CD1	5.29	1.46	1.38
1	u	424	GLU	CD-OE1	5.29	1.31	1.25
1	T	483	TYR	CD2-CE2	5.29	1.47	1.39
1	E	136	GLU	CB-CG	5.29	1.62	1.52
1	l	414	GLN	CA-CB	5.28	1.65	1.53
1	u	108	ARG	CD-NE	5.28	1.55	1.46
1	B	674	ARG	CD-NE	5.28	1.55	1.46
1	G	651	TYR	CE2-CZ	5.28	1.45	1.38
1	J	93	TYR	N-CA	5.28	1.56	1.46
1	S	93	TYR	CZ-OH	5.28	1.46	1.37
1	u	518	SER	CA-CB	5.28	1.60	1.52
1	L	219	PRO	N-CD	-5.28	1.40	1.47
1	2	362	GLU	CA-CB	5.28	1.65	1.53
1	5	391	GLY	CA-C	-5.28	1.43	1.51
1	u	301	ARG	NE-CZ	-5.28	1.26	1.33
1	L	697	TYR	CG-CD2	5.28	1.46	1.39
1	k	698	ARG	CD-NE	5.28	1.55	1.46
1	O	441	GLU	CB-CG	5.28	1.62	1.52
1	Z	153	CYS	CA-CB	5.28	1.65	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	g	451	TYR	CE2-CZ	5.28	1.45	1.38
1	l	288	ARG	CZ-NH1	-5.28	1.26	1.33
1	l	526	ILE	N-CA	-5.28	1.35	1.46
1	z	421	PHE	CB-CG	5.28	1.60	1.51
1	U	187	GLU	CA-CB	5.28	1.65	1.53
1	g	461	TRP	CD2-CE2	5.27	1.47	1.41
1	v	634	PHE	CG-CD1	5.27	1.46	1.38
1	G	462	VAL	C-N	5.27	1.42	1.33
1	0	415	GLU	CB-CG	5.27	1.62	1.52
1	5	676	SER	CA-CB	5.27	1.60	1.52
1	j	659	ASP	CA-CB	5.27	1.65	1.53
1	D	283	ASP	C-N	-5.27	1.24	1.34
1	2	174	ARG	CD-NE	5.27	1.55	1.46
1	c	249	ILE	CA-CB	-5.27	1.42	1.54
1	e	451	TYR	CE2-CZ	5.27	1.45	1.38
1	W	111	GLY	N-CA	-5.27	1.38	1.46
1	J	622	SER	CA-CB	5.27	1.60	1.52
1	O	595	GLU	CD-OE1	5.27	1.31	1.25
1	P	550	GLN	CA-CB	5.27	1.65	1.53
1	W	409	ALA	CA-CB	5.27	1.63	1.52
1	O	384	LYS	CD-CE	5.27	1.64	1.51
1	0	395	GLU	CB-CG	5.26	1.62	1.52
1	t	541	GLU	CG-CD	5.26	1.59	1.51
1	0	170	ARG	CD-NE	5.26	1.55	1.46
1	D	449	ARG	CZ-NH1	-5.26	1.26	1.33
1	v	485	LYS	CA-CB	5.26	1.65	1.53
1	C	341	GLU	CD-OE1	-5.26	1.19	1.25
1	C	694	GLU	CG-CD	-5.26	1.44	1.51
1	7	209	ILE	CA-C	-5.26	1.39	1.52
1	a	681	GLU	CB-CG	5.26	1.62	1.52
1	l	483	TYR	CZ-OH	5.26	1.46	1.37
1	i	623	PHE	CE1-CZ	5.25	1.47	1.37
1	p	419	MET	CG-SD	5.25	1.94	1.81
1	A	281	GLU	CG-CD	5.25	1.59	1.51
1	a	711	SER	CA-CB	5.25	1.60	1.52
1	P	484	GLU	N-CA	-5.25	1.35	1.46
1	P	508	TYR	CE1-CZ	5.25	1.45	1.38
1	6	623	PHE	CE2-CZ	5.25	1.47	1.37
1	l	217	GLU	CG-CD	5.25	1.59	1.51
1	S	361	GLU	CD-OE1	5.25	1.31	1.25
1	b	451	TYR	CE1-CZ	5.25	1.45	1.38
1	U	675	TYR	CB-CG	5.25	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	c	277	SER	CB-OG	5.25	1.49	1.42
1	A	373	ARG	CD-NE	5.25	1.55	1.46
1	5	321	GLY	CA-C	5.24	1.60	1.51
1	o	340	ALA	N-CA	-5.24	1.35	1.46
1	y	434	GLU	CG-CD	5.24	1.59	1.51
1	E	449	ARG	CD-NE	5.24	1.55	1.46
1	N	647	PHE	CA-CB	5.24	1.65	1.53
1	l	424	GLU	CG-CD	5.24	1.59	1.51
1	x	420	PHE	CG-CD2	5.24	1.46	1.38
1	T	682	GLN	CA-CB	5.24	1.65	1.53
1	0	179	GLU	CD-OE2	-5.24	1.19	1.25
1	6	285	GLU	CB-CG	5.24	1.62	1.52
1	9	322	TYR	CG-CD2	5.24	1.46	1.39
1	b	709	PHE	CG-CD1	5.24	1.46	1.38
1	n	207	GLU	CB-CG	5.24	1.62	1.52
1	D	463	GLY	CA-C	-5.24	1.43	1.51
1	G	710	SER	CA-CB	5.24	1.60	1.52
1	l	316	TYR	CD1-CE1	5.24	1.47	1.39
1	D	580	CYS	CB-SG	5.24	1.91	1.82
1	F	429	PHE	CE2-CZ	5.24	1.47	1.37
1	K	627	GLY	N-CA	5.24	1.53	1.46
1	R	574	MET	N-CA	5.24	1.56	1.46
1	U	487	TYR	CD2-CE2	5.24	1.47	1.39
1	Z	203	GLY	N-CA	5.24	1.53	1.46
1	p	472	VAL	CA-CB	-5.24	1.43	1.54
1	B	167	TRP	CE2-CZ2	-5.24	1.30	1.39
1	6	585	TYR	CE1-CZ	5.24	1.45	1.38
1	g	695	ARG	CZ-NH1	-5.24	1.26	1.33
1	h	198	ALA	C-N	5.24	1.42	1.33
1	K	370	LEU	C-N	5.24	1.46	1.34
1	K	675	TYR	CG-CD1	5.24	1.46	1.39
1	Z	174	ARG	CA-CB	5.24	1.65	1.53
1	b	102	ASP	CA-CB	5.23	1.65	1.53
1	h	350	PHE	CG-CD2	5.23	1.46	1.38
1	X	304	GLU	CD-OE1	5.23	1.31	1.25
1	4	438	GLU	CA-CB	5.23	1.65	1.53
1	a	239	ARG	CZ-NH1	-5.23	1.26	1.33
1	e	495	PHE	CB-CG	5.23	1.60	1.51
1	A	322	TYR	CE1-CZ	5.23	1.45	1.38
1	D	640	ARG	CD-NE	5.23	1.55	1.46
1	E	573	ARG	CZ-NH1	-5.23	1.26	1.33
1	6	202	ARG	NE-CZ	-5.23	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	t	585	TYR	CG-CD1	5.23	1.46	1.39
1	u	307	VAL	CB-CG1	5.23	1.63	1.52
1	T	695	ARG	CA-CB	5.23	1.65	1.53
1	a	508	TYR	CZ-OH	5.22	1.46	1.37
1	p	457	ASP	CB-CG	5.22	1.62	1.51
1	w	106	SER	CA-CB	5.22	1.60	1.52
1	z	139	SER	CA-CB	5.22	1.60	1.52
1	O	710	SER	CA-CB	5.22	1.60	1.52
1	X	329	GLY	CA-C	-5.22	1.43	1.51
1	X	384	LYS	CA-CB	5.22	1.65	1.53
1	h	655	ARG	CZ-NH1	-5.22	1.26	1.33
1	i	645	ILE	C-N	5.22	1.44	1.34
1	z	502	GLU	CG-CD	5.22	1.59	1.51
1	D	688	LYS	CD-CE	5.22	1.64	1.51
1	P	525	GLU	CB-CG	5.22	1.62	1.52
1	R	312	ARG	CZ-NH2	-5.22	1.26	1.33
1	d	586	SER	CB-OG	5.22	1.49	1.42
1	i	495	PHE	CG-CD2	5.22	1.46	1.38
1	a	675	TYR	CG-CD1	5.22	1.46	1.39
1	p	557	LYS	CD-CE	5.22	1.64	1.51
1	u	411	ILE	CA-CB	-5.22	1.42	1.54
1	3	402	GLU	CB-CG	5.22	1.62	1.52
1	f	288	ARG	CZ-NH1	-5.22	1.26	1.33
1	h	528	GLN	CA-CB	5.22	1.65	1.53
1	Y	268	VAL	CB-CG1	5.22	1.63	1.52
1	w	346	GLU	CD-OE1	5.22	1.31	1.25
1	L	128	SER	CA-CB	5.22	1.60	1.52
1	g	633	TYR	CB-CG	5.21	1.59	1.51
1	m	572	PHE	CG-CD1	5.21	1.46	1.38
1	t	377	GLU	CB-CG	5.21	1.62	1.52
1	7	297	ASP	CA-CB	5.21	1.65	1.53
1	i	669	LEU	CB-CG	5.21	1.67	1.52
1	l	683	SER	CA-CB	5.21	1.60	1.52
1	K	640	ARG	CD-NE	5.21	1.55	1.46
1	d	647	PHE	CG-CD2	5.21	1.46	1.38
1	e	585	TYR	CG-CD1	5.21	1.46	1.39
1	g	683	SER	CA-CB	5.21	1.60	1.52
1	B	481	GLU	CG-CD	5.21	1.59	1.51
1	E	451	TYR	CB-CG	5.21	1.59	1.51
1	U	477	HIS	CA-CB	5.21	1.65	1.53
1	1	215	SER	CB-OG	5.21	1.49	1.42
1	4	262	VAL	CB-CG2	5.20	1.63	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	j	684	GLU	CB-CG	5.20	1.62	1.52
1	P	361	GLU	CB-CG	5.20	1.62	1.52
1	n	573	ARG	CD-NE	5.20	1.55	1.46
1	s	565	GLU	CG-CD	5.20	1.59	1.51
1	3	444	ARG	CD-NE	5.20	1.55	1.46
1	N	487	TYR	CZ-OH	5.20	1.46	1.37
1	Q	378	LEU	CA-CB	5.20	1.65	1.53
1	T	381	HIS	CA-CB	5.20	1.65	1.53
1	l	281	GLU	CB-CG	5.20	1.62	1.52
1	d	341	GLU	CD-OE2	5.20	1.31	1.25
1	n	675	TYR	CA-CB	5.20	1.65	1.53
1	E	669	LEU	C-N	5.20	1.46	1.34
1	I	677	TRP	CZ3-CH2	5.20	1.48	1.40
1	N	150	VAL	CB-CG2	5.20	1.63	1.52
1	Y	281	GLU	CD-OE1	5.20	1.31	1.25
1	Q	252	TYR	CG-CD2	5.20	1.46	1.39
1	X	189	GLU	CD-OE2	5.20	1.31	1.25
1	o	396	SER	CA-CB	5.20	1.60	1.52
1	4	675	TYR	CG-CD1	5.20	1.46	1.39
1	6	441	GLU	CB-CG	5.20	1.62	1.52
1	7	491	GLU	CG-CD	-5.20	1.44	1.51
1	h	697	TYR	CG-CD1	5.20	1.46	1.39
1	w	651	TYR	CE1-CZ	5.20	1.45	1.38
1	H	355	TYR	CE2-CZ	5.20	1.45	1.38
1	f	508	TYR	CE2-CZ	5.19	1.45	1.38
1	m	585	TYR	CD2-CE2	5.19	1.47	1.39
1	x	588	VAL	CA-CB	-5.19	1.43	1.54
1	F	458	PHE	CB-CG	5.19	1.60	1.51
1	M	429	PHE	CG-CD2	5.19	1.46	1.38
1	W	566	ASN	CB-CG	5.19	1.62	1.51
1	n	415	GLU	CD-OE2	5.19	1.31	1.25
1	Q	390	GLU	C-N	5.19	1.42	1.33
1	R	129	SER	CA-CB	5.19	1.60	1.52
1	Z	202	ARG	CD-NE	5.19	1.55	1.46
1	t	358	VAL	CB-CG2	5.19	1.63	1.52
1	N	622	SER	CA-CB	5.19	1.60	1.52
1	b	523	ALA	N-CA	-5.19	1.35	1.46
1	G	483	TYR	CE1-CZ	5.19	1.45	1.38
1	J	703	ARG	CD-NE	5.19	1.55	1.46
1	o	698	ARG	CZ-NH2	-5.19	1.26	1.33
1	e	179	GLU	CG-CD	5.19	1.59	1.51
1	n	660	SER	CA-CB	5.19	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	498	TYR	CG-CD1	5.19	1.45	1.39
1	h	285	GLU	CB-CG	5.18	1.62	1.52
1	q	390	GLU	CG-CD	5.18	1.59	1.51
1	I	152	ARG	CD-NE	5.18	1.55	1.46
1	J	139	SER	CA-CB	5.18	1.60	1.52
1	V	597	PHE	CG-CD1	5.18	1.46	1.38
1	5	319	LYS	N-CA	-5.18	1.35	1.46
1	q	487	TYR	CE1-CZ	5.18	1.45	1.38
1	j	487	TYR	CD1-CE1	5.18	1.47	1.39
1	7	266	CYS	CB-SG	-5.18	1.73	1.81
1	K	501	PHE	CB-CG	-5.18	1.42	1.51
1	N	448	THR	C-N	5.18	1.46	1.34
1	a	675	TYR	CZ-OH	5.18	1.46	1.37
1	f	95	GLN	CB-CG	5.18	1.66	1.52
1	x	441	GLU	CB-CG	5.18	1.61	1.52
1	F	165	GLU	CB-CG	5.18	1.61	1.52
1	2	357	ARG	CD-NE	5.17	1.55	1.46
1	9	656	GLU	CG-CD	5.17	1.59	1.51
1	z	157	LEU	CA-CB	5.17	1.65	1.53
1	F	667	GLN	CG-CD	5.17	1.62	1.51
1	M	473	LYS	CD-CE	5.17	1.64	1.51
1	4	493	LEU	C-N	5.17	1.42	1.33
1	g	170	ARG	NE-CZ	-5.17	1.26	1.33
1	l	355	TYR	CZ-OH	5.17	1.46	1.37
1	M	508	TYR	CG-CD2	5.17	1.45	1.39
1	8	173	TYR	CG-CD1	5.17	1.45	1.39
1	e	664	ALA	CA-CB	5.17	1.63	1.52
1	g	623	PHE	CG-CD2	5.17	1.46	1.38
1	J	288	ARG	CD-NE	5.17	1.55	1.46
1	Q	677	TRP	NE1-CE2	-5.17	1.30	1.37
1	o	231	ARG	NE-CZ	5.17	1.39	1.33
1	r	541	GLU	CG-CD	5.17	1.59	1.51
1	2	183	PRO	C-N	5.17	1.42	1.33
1	i	356	PHE	CG-CD1	5.17	1.46	1.38
1	u	154	PRO	CA-CB	5.17	1.63	1.53
1	w	483	TYR	CG-CD2	5.17	1.45	1.39
1	T	595	GLU	CG-CD	5.17	1.59	1.51
1	V	183	PRO	N-CD	-5.17	1.40	1.47
1	b	100	CYS	CB-SG	-5.17	1.73	1.81
1	B	212	GLU	CD-OE1	5.17	1.31	1.25
1	G	364	SER	CA-CB	5.17	1.60	1.52
1	3	192	LYS	CD-CE	5.16	1.64	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	174	ARG	CD-NE	5.16	1.55	1.46
1	m	651	TYR	CG-CD2	5.16	1.45	1.39
1	E	551	SER	CA-CB	5.16	1.60	1.52
1	K	420	PHE	CG-CD1	5.16	1.46	1.38
1	W	381	HIS	CB-CG	5.16	1.59	1.50
1	2	136	GLU	CB-CG	5.16	1.61	1.52
1	3	330	GLN	CA-C	5.16	1.66	1.52
1	3	482	LYS	C-N	5.16	1.46	1.34
1	z	675	TYR	CB-CG	-5.16	1.44	1.51
1	D	231	ARG	CZ-NH2	-5.16	1.26	1.33
1	S	298	LEU	CA-CB	5.16	1.65	1.53
1	2	415	GLU	CG-CD	5.16	1.59	1.51
1	h	355	TYR	CD2-CE2	5.16	1.47	1.39
1	o	186	VAL	CA-CB	-5.16	1.44	1.54
1	I	449	ARG	NE-CZ	-5.16	1.26	1.33
1	J	634	PHE	CA-CB	5.16	1.65	1.53
1	O	585	TYR	CB-CG	5.16	1.59	1.51
1	P	447	GLU	CD-OE1	5.16	1.31	1.25
1	6	438	GLU	CB-CG	5.16	1.61	1.52
1	n	297	ASP	CA-CB	5.16	1.65	1.53
1	n	322	TYR	CE2-CZ	5.16	1.45	1.38
1	M	629	HIS	CB-CG	5.16	1.59	1.50
1	9	202	ARG	CD-NE	5.16	1.55	1.46
1	9	306	SER	CB-OG	5.16	1.49	1.42
1	W	98	ARG	CZ-NH1	-5.16	1.26	1.33
1	K	448	THR	N-CA	5.15	1.56	1.46
1	q	362	GLU	CB-CG	5.15	1.61	1.52
1	s	539	PHE	CG-CD2	5.15	1.46	1.38
1	G	585	TYR	CE2-CZ	5.15	1.45	1.38
1	k	288	ARG	NE-CZ	-5.15	1.26	1.33
1	l	543	PHE	CE1-CZ	5.15	1.47	1.37
1	m	625	GLU	CG-CD	5.15	1.59	1.51
1	A	525	GLU	CD-OE2	5.15	1.31	1.25
1	G	432	ASP	CA-CB	5.15	1.65	1.53
1	u	480	VAL	CA-CB	-5.15	1.44	1.54
1	F	495	PHE	CG-CD1	5.15	1.46	1.38
1	3	455	ARG	CD-NE	5.15	1.55	1.46
1	p	312	ARG	CZ-NH2	-5.15	1.26	1.33
1	z	403	GLU	CB-CG	5.15	1.61	1.52
1	B	444	ARG	CD-NE	5.15	1.55	1.46
1	O	513	VAL	CB-CG2	5.15	1.63	1.52
1	R	390	GLU	CB-CG	5.15	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	8	277	SER	CA-CB	5.15	1.60	1.52
1	i	277	SER	CA-CB	5.15	1.60	1.52
1	p	215	SER	CA-CB	5.15	1.60	1.52
1	E	636	GLU	CD-OE2	5.15	1.31	1.25
1	m	205	SER	CA-CB	5.14	1.60	1.52
1	m	444	ARG	CD-NE	5.14	1.55	1.46
1	W	677	TRP	NE1-CE2	5.14	1.44	1.37
1	p	502	GLU	CB-CG	5.14	1.61	1.52
1	A	491	GLU	CB-CG	5.14	1.61	1.52
1	n	405	ARG	NE-CZ	5.14	1.39	1.33
1	C	445	GLU	CD-OE1	5.14	1.31	1.25
1	D	108	ARG	N-CA	-5.14	1.36	1.46
1	0	349	PHE	CG-CD1	5.14	1.46	1.38
1	3	155	LEU	CA-CB	5.14	1.65	1.53
1	w	99	PRO	N-CA	-5.14	1.38	1.47
1	O	585	TYR	CE2-CZ	5.14	1.45	1.38
1	1	355	TYR	CB-CG	5.14	1.59	1.51
1	4	125	GLY	CA-C	-5.14	1.43	1.51
1	l	367	VAL	CB-CG1	5.14	1.63	1.52
1	y	316	TYR	CG-CD2	5.14	1.45	1.39
1	K	202	ARG	CZ-NH1	-5.14	1.26	1.33
1	Z	655	ARG	CD-NE	5.14	1.55	1.46
1	i	554	GLU	CG-CD	5.13	1.59	1.51
1	n	128	SER	CA-CB	5.13	1.60	1.52
1	q	451	TYR	CE2-CZ	5.13	1.45	1.38
1	I	487	TYR	CZ-OH	5.13	1.46	1.37
1	T	429	PHE	CG-CD1	5.13	1.46	1.38
1	n	108	ARG	CD-NE	5.13	1.55	1.46
1	6	487	TYR	CG-CD1	5.13	1.45	1.39
1	l	681	GLU	CD-OE2	5.13	1.31	1.25
1	N	281	GLU	CG-CD	5.13	1.59	1.51
1	E	451	TYR	CZ-OH	5.13	1.46	1.37
1	j	165	GLU	CB-CG	5.13	1.61	1.52
1	j	213	ILE	N-CA	5.13	1.56	1.46
1	D	514	GLU	CD-OE2	5.13	1.31	1.25
1	V	684	GLU	CD-OE1	5.13	1.31	1.25
1	3	346	GLU	CG-CD	5.13	1.59	1.51
1	b	409	ALA	N-CA	5.13	1.56	1.46
1	l	546	ASN	CB-CG	5.13	1.62	1.51
1	H	543	PHE	CE1-CZ	5.13	1.47	1.37
1	Q	395	GLU	CB-CG	5.13	1.61	1.52
1	S	371	ALA	N-CA	-5.13	1.36	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	l	395	GLU	CG-CD	5.12	1.59	1.51
1	x	632	ALA	CA-CB	5.12	1.63	1.52
1	Z	207	GLU	CD-OE2	5.12	1.31	1.25
1	4	710	SER	CA-CB	5.12	1.60	1.52
1	b	487	TYR	CB-CG	-5.12	1.44	1.51
1	H	711	SER	CA-CB	5.12	1.60	1.52
1	5	403	GLU	CD-OE2	5.12	1.31	1.25
1	c	677	TRP	CB-CG	5.12	1.59	1.50
1	K	637	THR	N-CA	5.12	1.56	1.46
1	i	210	SER	CA-CB	5.12	1.60	1.52
1	m	488	ARG	CD-NE	5.12	1.55	1.46
1	I	677	TRP	CG-CD1	5.12	1.44	1.36
1	p	498	TYR	CG-CD1	5.12	1.45	1.39
1	P	331	GLN	CA-CB	5.12	1.65	1.53
1	d	660	SER	CA-CB	5.12	1.60	1.52
1	y	655	ARG	CD-NE	5.12	1.55	1.46
1	C	184	GLY	CA-C	5.12	1.60	1.51
1	d	165	GLU	CD-OE2	5.12	1.31	1.25
1	e	585	TYR	CE1-CZ	5.12	1.45	1.38
1	s	310	VAL	N-CA	5.12	1.56	1.46
1	N	481	GLU	CB-CG	5.12	1.61	1.52
1	l	217	GLU	CB-CG	5.11	1.61	1.52
1	4	316	TYR	CZ-OH	5.11	1.46	1.37
1	T	138	LEU	CA-CB	5.11	1.65	1.53
1	5	357	ARG	NE-CZ	-5.11	1.26	1.33
1	m	210	SER	CA-CB	5.11	1.60	1.52
1	z	173	TYR	CZ-OH	5.11	1.46	1.37
1	3	177	GLU	CG-CD	5.11	1.59	1.51
1	k	434	GLU	CD-OE2	5.11	1.31	1.25
1	u	128	SER	CB-OG	5.11	1.48	1.42
1	C	380	MET	CA-CB	5.11	1.65	1.53
1	J	275	ALA	C-N	5.11	1.45	1.34
1	a	165	GLU	CA-CB	5.11	1.65	1.53
1	u	212	GLU	CG-CD	5.11	1.59	1.51
1	I	377	GLU	CB-CG	5.11	1.61	1.52
1	B	250	LYS	CA-C	-5.11	1.39	1.52
1	O	322	TYR	CZ-OH	5.11	1.46	1.37
1	R	655	ARG	CZ-NH2	-5.11	1.26	1.33
1	X	478	GLU	CD-OE1	5.11	1.31	1.25
1	2	445	GLU	CD-OE1	5.10	1.31	1.25
1	o	487	TYR	CZ-OH	5.10	1.46	1.37
1	B	206	HIS	CB-CG	-5.10	1.40	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	7	586	SER	CB-OG	5.10	1.48	1.42
1	r	572	PHE	CD1-CE1	5.10	1.49	1.39
1	z	572	PHE	CG-CD2	5.10	1.46	1.38
1	B	677	TRP	CG-CD1	5.10	1.43	1.36
1	o	179	GLU	CB-CG	5.10	1.61	1.52
1	8	357	ARG	CD-NE	5.10	1.55	1.46
1	q	575	GLU	CA-C	5.10	1.66	1.52
1	I	528	GLN	CG-CD	5.10	1.62	1.51
1	Q	675	TYR	CE1-CZ	5.10	1.45	1.38
1	Z	647	PHE	CD2-CE2	5.10	1.49	1.39
1	m	173	TYR	CE1-CZ	5.10	1.45	1.38
1	N	573	ARG	NE-CZ	5.10	1.39	1.33
1	C	709	PHE	CA-CB	5.10	1.65	1.53
1	5	431	GLN	N-CA	-5.09	1.36	1.46
1	y	498	TYR	CZ-OH	5.09	1.46	1.37
1	z	420	PHE	CG-CD1	5.09	1.46	1.38
1	D	369	ARG	CZ-NH2	-5.09	1.26	1.33
1	U	206	HIS	C-N	5.09	1.45	1.34
1	3	215	SER	CA-CB	5.09	1.60	1.52
1	f	565	GLU	CD-OE2	5.09	1.31	1.25
1	B	355	TYR	CZ-OH	5.09	1.46	1.37
1	9	262	VAL	CB-CG2	5.09	1.63	1.52
1	u	93	TYR	N-CA	5.09	1.56	1.46
1	I	544	ASN	CB-CG	5.09	1.62	1.51
1	O	445	GLU	CB-CG	5.09	1.61	1.52
1	F	400	ALA	CA-CB	-5.09	1.41	1.52
1	5	179	GLU	CA-CB	5.09	1.65	1.53
1	8	364	SER	N-CA	5.09	1.56	1.46
1	n	364	SER	CB-OG	5.09	1.48	1.42
1	y	625	GLU	CD-OE1	5.09	1.31	1.25
1	P	397	HIS	CA-CB	5.08	1.65	1.53
1	6	173	TYR	CE1-CZ	5.08	1.45	1.38
1	r	174	ARG	CZ-NH1	-5.08	1.26	1.33
1	L	402	GLU	CD-OE1	5.08	1.31	1.25
1	M	355	TYR	CZ-OH	5.08	1.46	1.37
1	6	252	TYR	CB-CG	-5.08	1.44	1.51
1	c	212	GLU	CB-CG	5.08	1.61	1.52
1	m	98	ARG	CD-NE	5.08	1.55	1.46
1	J	441	GLU	CB-CG	5.08	1.61	1.52
1	K	390	GLU	C-N	5.08	1.42	1.33
1	O	133	SER	CA-CB	5.08	1.60	1.52
1	X	322	TYR	CB-CG	5.08	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	Z	144	PRO	N-CD	-5.08	1.40	1.47
1	X	551	SER	CA-CB	5.08	1.60	1.52
1	5	288	ARG	CD-NE	5.08	1.55	1.46
1	5	677	TRP	CG-CD1	5.08	1.43	1.36
1	a	124	ILE	C-N	5.08	1.42	1.33
1	h	420	PHE	CG-CD2	5.08	1.46	1.38
1	h	593	ARG	CD-NE	5.08	1.55	1.46
1	o	594	GLU	CD-OE1	5.08	1.31	1.25
1	C	316	TYR	CZ-OH	5.08	1.46	1.37
1	J	466	ALA	CA-CB	5.08	1.63	1.52
1	J	565	GLU	CB-CG	5.08	1.61	1.52
1	T	338	SER	CA-CB	5.08	1.60	1.52
1	3	363	GLY	N-CA	5.08	1.53	1.46
1	3	494	GLY	CA-C	5.08	1.59	1.51
1	e	128	SER	CA-CB	5.08	1.60	1.52
1	B	93	TYR	N-CA	5.08	1.56	1.46
1	q	152	ARG	CD-NE	5.07	1.55	1.46
1	B	145	ARG	CD-NE	5.07	1.55	1.46
1	B	483	TYR	CZ-OH	5.07	1.46	1.37
1	F	322	TYR	CE1-CZ	5.07	1.45	1.38
1	O	455	ARG	NE-CZ	5.07	1.39	1.33
1	P	362	GLU	CD-OE1	5.07	1.31	1.25
1	P	675	TYR	CZ-OH	5.07	1.46	1.37
1	c	489	GLY	N-CA	-5.07	1.38	1.46
1	g	355	TYR	CG-CD2	5.07	1.45	1.39
1	o	361	GLU	CD-OE2	5.07	1.31	1.25
1	v	463	GLY	N-CA	5.07	1.53	1.46
1	W	364	SER	CB-OG	5.07	1.48	1.42
1	D	585	TYR	CZ-OH	5.07	1.46	1.37
1	T	411	ILE	CB-CG1	5.07	1.68	1.54
1	7	390	GLU	C-N	5.07	1.42	1.33
1	A	652	PHE	CB-CG	-5.07	1.42	1.51
1	X	304	GLU	CD-OE2	5.07	1.31	1.25
1	Y	438	GLU	CD-OE2	5.07	1.31	1.25
1	0	94	GLU	CB-CG	5.07	1.61	1.52
1	e	274	GLU	CD-OE1	5.07	1.31	1.25
1	Q	554	GLU	N-CA	5.07	1.56	1.46
1	0	493	LEU	CB-CG	5.06	1.67	1.52
1	j	252	TYR	CG-CD1	5.06	1.45	1.39
1	m	131	LYS	CD-CE	5.06	1.64	1.51
1	m	542	PHE	CB-CG	5.06	1.59	1.51
1	u	390	GLU	CD-OE1	5.06	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	356	PHE	CG-CD2	5.06	1.46	1.38
1	2	139	SER	CA-CB	5.06	1.60	1.52
1	b	168	ALA	N-CA	-5.06	1.36	1.46
1	c	396	SER	CA-CB	5.06	1.60	1.52
1	d	108	ARG	CD-NE	5.06	1.55	1.46
1	e	304	GLU	CD-OE2	5.06	1.31	1.25
1	r	242	GLY	N-CA	5.06	1.53	1.46
1	r	636	GLU	CA-CB	5.06	1.65	1.53
1	u	420	PHE	CB-CG	5.06	1.59	1.51
1	I	661	LEU	CA-CB	5.06	1.65	1.53
1	U	697	TYR	CG-CD2	5.06	1.45	1.39
1	w	698	ARG	CA-CB	5.06	1.65	1.53
1	y	244	GLN	CA-CB	5.06	1.65	1.53
1	G	451	TYR	CZ-OH	5.06	1.46	1.37
1	7	593	ARG	CD-NE	5.06	1.55	1.46
1	n	580	CYS	CB-SG	-5.06	1.73	1.81
1	o	674	ARG	CD-NE	5.06	1.55	1.46
1	2	413	SER	CA-CB	5.06	1.60	1.52
1	4	543	PHE	CB-CG	5.06	1.59	1.51
1	e	202	ARG	C-N	5.06	1.42	1.33
1	n	514	GLU	CD-OE1	5.06	1.31	1.25
1	H	487	TYR	CA-CB	5.06	1.65	1.53
1	H	508	TYR	CG-CD2	5.06	1.45	1.39
1	Q	113	GLU	CG-CD	5.06	1.59	1.51
1	U	711	SER	CA-CB	5.06	1.60	1.52
1	V	405	ARG	CD-NE	5.06	1.55	1.46
1	1	543	PHE	CG-CD1	5.06	1.46	1.38
1	3	152	ARG	CD-NE	5.06	1.55	1.46
1	i	402	GLU	CB-CG	5.06	1.61	1.52
1	r	518	SER	CA-CB	5.06	1.60	1.52
1	6	711	SER	CA-CB	5.05	1.60	1.52
1	u	633	TYR	CB-CG	-5.05	1.44	1.51
1	E	675	TYR	CD1-CE1	5.05	1.47	1.39
1	J	451	TYR	CE2-CZ	5.05	1.45	1.38
1	Z	491	GLU	CD-OE2	5.05	1.31	1.25
1	f	302	GLY	N-CA	5.05	1.53	1.46
1	f	674	ARG	N-CA	-5.05	1.36	1.46
1	F	483	TYR	CG-CD2	5.05	1.45	1.39
1	2	103	LEU	CB-CG	5.05	1.67	1.52
1	l	429	PHE	CG-CD1	5.05	1.46	1.38
1	l	627	GLY	C-O	5.05	1.31	1.23
1	t	695	ARG	CD-NE	5.05	1.55	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	4	295	LYS	CA-C	5.05	1.66	1.52
1	7	483	TYR	CE2-CZ	5.05	1.45	1.38
1	h	355	TYR	CD1-CE1	5.05	1.47	1.39
1	n	498	TYR	CE2-CZ	5.05	1.45	1.38
1	o	94	GLU	C-N	5.05	1.45	1.34
1	N	675	TYR	CE2-CZ	5.05	1.45	1.38
1	Y	341	GLU	CD-OE2	5.05	1.31	1.25
1	q	660	SER	CA-CB	5.05	1.60	1.52
1	a	178	LEU	N-CA	-5.05	1.36	1.46
1	f	147	SER	C-N	5.05	1.42	1.33
1	n	106	SER	CB-OG	5.05	1.48	1.42
1	y	647	PHE	CG-CD1	5.05	1.46	1.38
1	D	241	ILE	C-N	5.05	1.42	1.33
1	O	635	LEU	CA-CB	5.05	1.65	1.53
1	R	633	TYR	CE2-CZ	5.05	1.45	1.38
1	t	706	LEU	CA-CB	5.04	1.65	1.53
1	y	163	PRO	N-CD	-5.04	1.40	1.47
1	E	657	ASN	C-N	5.04	1.42	1.33
1	G	385	SER	CA-CB	5.04	1.60	1.52
1	G	683	SER	CA-CB	5.04	1.60	1.52
1	j	541	GLU	CB-CG	5.04	1.61	1.52
1	k	525	GLU	CB-CG	5.04	1.61	1.52
1	o	106	SER	CA-CB	5.04	1.60	1.52
1	o	400	ALA	CA-C	-5.04	1.39	1.52
1	w	219	PRO	N-CD	5.04	1.54	1.47
1	W	438	GLU	CB-CG	5.04	1.61	1.52
1	9	341	GLU	CD-OE1	5.04	1.31	1.25
1	d	625	GLU	CB-CG	5.04	1.61	1.52
1	f	586	SER	CA-CB	5.04	1.60	1.52
1	C	119	PRO	N-CD	-5.04	1.40	1.47
1	J	660	SER	CA-CB	5.04	1.60	1.52
1	P	118	LEU	CA-CB	5.04	1.65	1.53
1	S	677	TRP	CD2-CE3	-5.04	1.32	1.40
1	a	542	PHE	CG-CD1	5.04	1.46	1.38
1	m	508	TYR	CG-CD1	5.04	1.45	1.39
1	w	539	PHE	CE2-CZ	5.04	1.47	1.37
1	4	413	SER	CB-OG	5.04	1.48	1.42
1	g	406	ARG	CD-NE	5.04	1.55	1.46
1	i	387	PRO	N-CD	5.04	1.54	1.47
1	l	440	GLU	CD-OE1	5.04	1.31	1.25
1	m	207	GLU	CB-CG	5.04	1.61	1.52
1	G	403	GLU	CG-CD	5.04	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	M	651	TYR	CD2-CE2	5.04	1.47	1.39
1	2	579	PHE	CB-CG	-5.04	1.42	1.51
1	s	265	PRO	N-CD	-5.04	1.40	1.47
1	Z	558	VAL	CB-CG1	5.04	1.63	1.52
1	4	481	GLU	N-CA	-5.04	1.36	1.46
1	b	437	VAL	CB-CG2	5.04	1.63	1.52
1	f	210	SER	CB-OG	5.04	1.48	1.42
1	6	633	TYR	CE2-CZ	-5.03	1.32	1.38
1	9	449	ARG	CD-NE	5.03	1.55	1.46
1	p	579	PHE	CB-CG	5.03	1.59	1.51
1	f	281	GLU	CG-CD	5.03	1.59	1.51
1	i	110	LEU	N-CA	5.03	1.56	1.46
1	X	269	ASP	CB-CG	-5.03	1.41	1.51
1	X	574	MET	CG-SD	5.03	1.94	1.81
1	Y	346	GLU	CB-CG	5.03	1.61	1.52
1	4	585	TYR	CG-CD2	5.03	1.45	1.39
1	h	387	PRO	N-CD	-5.03	1.40	1.47
1	p	222	THR	CB-OG1	-5.03	1.33	1.43
1	J	126	ASP	CA-CB	-5.03	1.42	1.53
1	0	629	HIS	CB-CG	5.03	1.59	1.50
1	7	218	VAL	C-N	-5.03	1.24	1.34
1	w	349	PHE	CG-CD2	5.03	1.46	1.38
1	A	697	TYR	CG-CD2	5.03	1.45	1.39
1	F	487	TYR	CE2-CZ	5.03	1.45	1.38
1	S	585	TYR	CZ-OH	5.03	1.46	1.37
1	n	288	ARG	CD-NE	5.03	1.54	1.46
1	v	501	PHE	CG-CD1	5.03	1.46	1.38
1	x	711	SER	CA-CB	5.03	1.60	1.52
1	0	316	TYR	CG-CD1	5.02	1.45	1.39
1	4	514	GLU	CB-CG	5.02	1.61	1.52
1	4	304	GLU	CG-CD	-5.02	1.44	1.51
1	o	349	PHE	CE2-CZ	5.02	1.46	1.37
1	z	350	PHE	CB-CG	5.02	1.59	1.51
1	B	207	GLU	CG-CD	5.02	1.59	1.51
1	V	205	SER	CB-OG	5.02	1.48	1.42
1	7	144	PRO	N-CD	-5.02	1.40	1.47
1	m	93	TYR	CZ-OH	5.02	1.46	1.37
1	I	238	PRO	N-CD	5.02	1.54	1.47
1	S	362	GLU	CG-CD	5.02	1.59	1.51
1	l	219	PRO	N-CA	-5.02	1.38	1.47
1	s	487	TYR	CE2-CZ	5.02	1.45	1.38
1	B	502	GLU	CD-OE1	5.02	1.31	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	N	174	ARG	CD-NE	5.02	1.54	1.46
1	S	252	TYR	CD1-CE1	5.02	1.46	1.39
1	6	580	CYS	CA-CB	5.02	1.65	1.53
1	b	578	VAL	CB-CG1	5.02	1.63	1.52
1	d	174	ARG	CZ-NH1	-5.02	1.26	1.33
1	2	437	VAL	CA-CB	-5.01	1.44	1.54
1	o	111	GLY	CA-C	-5.01	1.43	1.51
1	I	290	ILE	C-N	5.01	1.42	1.33
1	T	170	ARG	CD-NE	5.01	1.54	1.46
1	T	424	GLU	CD-OE1	5.01	1.31	1.25
1	w	222	THR	N-CA	5.01	1.56	1.46
1	F	395	GLU	CB-CG	5.01	1.61	1.52
1	J	306	SER	CB-OG	5.01	1.48	1.42
1	n	651	TYR	CB-CG	-5.01	1.44	1.51
1	p	436	LEU	CA-CB	5.01	1.65	1.53
1	3	622	SER	CB-OG	5.00	1.48	1.42
1	4	449	ARG	CA-CB	5.00	1.65	1.53
1	d	182	ASP	CA-CB	5.00	1.65	1.53
1	M	694	GLU	CG-CD	5.00	1.59	1.51
1	h	316	TYR	CE1-CZ	5.00	1.45	1.38
1	v	132	SER	CA-CB	5.00	1.60	1.52
1	M	488	ARG	CD-NE	5.00	1.54	1.46
1	R	281	GLU	CD-OE1	-5.00	1.20	1.25
1	1	675	TYR	CG-CD1	5.00	1.45	1.39
1	6	684	GLU	CG-CD	5.00	1.59	1.51
1	z	455	ARG	CZ-NH2	-5.00	1.26	1.33

All (8083) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	593	ARG	NE-CZ-NH1	29.87	135.23	120.30
1	B	145	ARG	NE-CZ-NH1	29.79	135.19	120.30
1	o	488	ARG	NE-CZ-NH2	-28.44	106.08	120.30
1	h	449	ARG	NE-CZ-NH1	27.17	133.89	120.30
1	P	357	ARG	NE-CZ-NH2	-26.62	106.99	120.30
1	5	674	ARG	NE-CZ-NH2	-26.16	107.22	120.30
1	P	394	ARG	NE-CZ-NH2	-25.89	107.36	120.30
1	L	312	ARG	NE-CZ-NH1	25.39	132.99	120.30
1	d	174	ARG	NE-CZ-NH1	25.31	132.96	120.30
1	8	674	ARG	NE-CZ-NH1	25.04	132.82	120.30
1	L	640	ARG	NE-CZ-NH1	24.59	132.60	120.30
1	0	455	ARG	NE-CZ-NH1	24.18	132.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	145	ARG	NE-CZ-NH1	24.17	132.39	120.30
1	r	336	ARG	NE-CZ-NH1	24.08	132.34	120.30
1	r	357	ARG	NE-CZ-NH2	-23.75	108.43	120.30
1	B	689	ARG	NE-CZ-NH1	23.74	132.17	120.30
1	c	406	ARG	NE-CZ-NH1	23.44	132.02	120.30
1	J	312	ARG	NE-CZ-NH2	-23.41	108.59	120.30
1	q	689	ARG	NE-CZ-NH1	23.38	131.99	120.30
1	q	406	ARG	NE-CZ-NH1	23.21	131.91	120.30
1	h	98	ARG	NE-CZ-NH1	23.18	131.89	120.30
1	i	444	ARG	NE-CZ-NH1	22.84	131.72	120.30
1	O	698	ARG	NE-CZ-NH1	22.82	131.71	120.30
1	t	689	ARG	NE-CZ-NH1	22.78	131.69	120.30
1	0	444	ARG	NE-CZ-NH1	22.74	131.67	120.30
1	C	336	ARG	NE-CZ-NH1	22.74	131.67	120.30
1	j	288	ARG	NE-CZ-NH1	22.72	131.66	120.30
1	o	488	ARG	NE-CZ-NH1	22.67	131.64	120.30
1	p	145	ARG	NE-CZ-NH1	22.66	131.63	120.30
1	f	312	ARG	NE-CZ-NH2	22.61	131.61	120.30
1	w	689	ARG	NE-CZ-NH1	22.51	131.56	120.30
1	T	202	ARG	NE-CZ-NH1	22.51	131.56	120.30
1	l	328	ARG	NE-CZ-NH1	22.42	131.51	120.30
1	H	640	ARG	NE-CZ-NH1	22.36	131.48	120.30
1	r	698	ARG	NE-CZ-NH2	-22.33	109.14	120.30
1	l	695	ARG	NE-CZ-NH1	22.29	131.45	120.30
1	l	483	TYR	CB-CG-CD2	-22.24	107.66	121.00
1	e	312	ARG	NE-CZ-NH1	22.23	131.41	120.30
1	i	98	ARG	NE-CZ-NH1	22.23	131.41	120.30
1	y	689	ARG	NE-CZ-NH1	22.20	131.40	120.30
1	R	444	ARG	NE-CZ-NH2	-22.10	109.25	120.30
1	G	174	ARG	NE-CZ-NH2	22.04	131.32	120.30
1	P	655	ARG	NE-CZ-NH1	21.80	131.20	120.30
1	c	336	ARG	NE-CZ-NH1	21.80	131.20	120.30
1	8	674	ARG	NE-CZ-NH2	-21.78	109.41	120.30
1	Q	288	ARG	NE-CZ-NH1	21.73	131.16	120.30
1	t	328	ARG	NE-CZ-NH1	21.62	131.11	120.30
1	l	573	ARG	NE-CZ-NH1	21.57	131.08	120.30
1	y	288	ARG	NE-CZ-NH1	21.54	131.07	120.30
1	3	405	ARG	NE-CZ-NH1	21.51	131.05	120.30
1	j	640	ARG	NE-CZ-NH2	-21.47	109.57	120.30
1	v	690	ARG	NE-CZ-NH1	21.34	130.97	120.30
1	4	145	ARG	NE-CZ-NH2	-21.26	109.67	120.30
1	U	640	ARG	NE-CZ-NH1	21.24	130.92	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	202	ARG	NE-CZ-NH1	21.21	130.90	120.30
1	Y	355	TYR	CB-CG-CD1	-21.21	108.28	121.00
1	O	640	ARG	NE-CZ-NH1	21.21	130.90	120.30
1	i	312	ARG	NE-CZ-NH2	-21.13	109.74	120.30
1	t	695	ARG	NE-CZ-NH2	21.11	130.86	120.30
1	G	301	ARG	NE-CZ-NH2	-21.08	109.76	120.30
1	C	357	ARG	NE-CZ-NH2	-21.07	109.77	120.30
1	A	202	ARG	NE-CZ-NH1	21.03	130.81	120.30
1	l	703	ARG	NE-CZ-NH1	20.86	130.73	120.30
1	b	573	ARG	NE-CZ-NH1	20.80	130.70	120.30
1	9	698	ARG	NE-CZ-NH2	-20.73	109.93	120.30
1	C	655	ARG	NE-CZ-NH1	20.67	130.64	120.30
1	v	328	ARG	NE-CZ-NH1	20.67	130.63	120.30
1	a	394	ARG	NE-CZ-NH2	-20.60	110.00	120.30
1	z	695	ARG	NE-CZ-NH1	20.60	130.60	120.30
1	f	336	ARG	NE-CZ-NH1	20.56	130.58	120.30
1	2	336	ARG	NE-CZ-NH1	20.52	130.56	120.30
1	u	98	ARG	NE-CZ-NH1	20.51	130.56	120.30
1	w	328	ARG	NE-CZ-NH1	20.44	130.52	120.30
1	G	698	ARG	NE-CZ-NH1	20.36	130.48	120.30
1	6	312	ARG	NE-CZ-NH2	-20.30	110.15	120.30
1	a	312	ARG	NE-CZ-NH2	-20.28	110.16	120.30
1	I	689	ARG	NE-CZ-NH1	20.23	130.41	120.30
1	x	689	ARG	NE-CZ-NH1	20.20	130.40	120.30
1	5	108	ARG	NE-CZ-NH1	20.13	130.37	120.30
1	D	455	ARG	NE-CZ-NH1	20.11	130.35	120.30
1	P	231	ARG	NE-CZ-NH1	20.03	130.32	120.30
1	F	655	ARG	NE-CZ-NH1	19.99	130.29	120.30
1	6	255	ARG	NE-CZ-NH2	-19.93	110.33	120.30
1	s	174	ARG	NE-CZ-NH1	19.89	130.24	120.30
1	I	640	ARG	NE-CZ-NH2	19.82	130.21	120.30
1	v	239	ARG	NE-CZ-NH1	19.78	130.19	120.30
1	l	328	ARG	NE-CZ-NH1	19.76	130.18	120.30
1	P	444	ARG	NE-CZ-NH1	19.69	130.15	120.30
1	l	444	ARG	NE-CZ-NH1	19.62	130.11	120.30
1	S	202	ARG	NE-CZ-NH1	19.59	130.09	120.30
1	u	444	ARG	NE-CZ-NH1	19.42	130.01	120.30
1	y	145	ARG	NE-CZ-NH1	19.42	130.01	120.30
1	0	405	ARG	NE-CZ-NH1	19.40	130.00	120.30
1	y	98	ARG	NE-CZ-NH1	19.33	129.97	120.30
1	o	288	ARG	NE-CZ-NH1	19.33	129.97	120.30
1	c	406	ARG	NE-CZ-NH2	-19.28	110.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	288	ARG	NE-CZ-NH1	19.26	129.93	120.30
1	j	202	ARG	NE-CZ-NH1	19.23	129.92	120.30
1	7	573	ARG	NE-CZ-NH1	19.22	129.91	120.30
1	Y	328	ARG	NE-CZ-NH2	-19.18	110.71	120.30
1	U	328	ARG	NE-CZ-NH2	-19.13	110.74	120.30
1	F	288	ARG	NE-CZ-NH1	19.09	129.84	120.30
1	k	231	ARG	NE-CZ-NH1	19.04	129.82	120.30
1	d	394	ARG	NE-CZ-NH1	19.02	129.81	120.30
1	l	690	ARG	NE-CZ-NH1	19.02	129.81	120.30
1	6	98	ARG	NE-CZ-NH1	18.93	129.77	120.30
1	s	239	ARG	NE-CZ-NH1	18.92	129.76	120.30
1	W	689	ARG	NE-CZ-NH1	18.89	129.75	120.30
1	a	328	ARG	NE-CZ-NH1	18.88	129.74	120.30
1	o	174	ARG	NE-CZ-NH2	-18.87	110.87	120.30
1	A	312	ARG	NE-CZ-NH2	-18.81	110.89	120.30
1	E	202	ARG	NE-CZ-NH2	-18.75	110.93	120.30
1	b	394	ARG	NE-CZ-NH1	18.74	129.67	120.30
1	q	301	ARG	NE-CZ-NH2	-18.72	110.94	120.30
1	I	357	ARG	NE-CZ-NH1	18.69	129.65	120.30
1	S	689	ARG	NE-CZ-NH1	18.68	129.64	120.30
1	H	695	ARG	NE-CZ-NH1	18.68	129.64	120.30
1	R	444	ARG	NE-CZ-NH1	18.64	129.62	120.30
1	e	108	ARG	NE-CZ-NH1	18.54	129.57	120.30
1	P	231	ARG	NE-CZ-NH2	-18.54	111.03	120.30
1	B	689	ARG	NE-CZ-NH2	-18.46	111.07	120.30
1	E	689	ARG	NE-CZ-NH1	18.43	129.52	120.30
1	4	312	ARG	NE-CZ-NH2	-18.41	111.10	120.30
1	6	255	ARG	NE-CZ-NH1	18.40	129.50	120.30
1	V	674	ARG	NE-CZ-NH1	18.33	129.47	120.30
1	q	640	ARG	NE-CZ-NH1	18.33	129.47	120.30
1	a	336	ARG	NE-CZ-NH1	18.30	129.45	120.30
1	p	98	ARG	NE-CZ-NH1	18.30	129.45	120.30
1	4	674	ARG	NE-CZ-NH1	18.28	129.44	120.30
1	8	488	ARG	NE-CZ-NH2	-18.25	111.17	120.30
1	L	312	ARG	NE-CZ-NH2	-18.23	111.18	120.30
1	B	145	ARG	NE-CZ-NH2	-18.23	111.18	120.30
1	T	301	ARG	NE-CZ-NH2	-18.23	111.19	120.30
1	m	174	ARG	NE-CZ-NH1	18.22	129.41	120.30
1	w	328	ARG	NE-CZ-NH2	-18.15	111.22	120.30
1	7	405	ARG	NE-CZ-NH1	18.15	129.37	120.30
1	h	357	ARG	NE-CZ-NH2	-18.13	111.23	120.30
1	q	98	ARG	NE-CZ-NH2	-18.13	111.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	369	ARG	NE-CZ-NH2	-18.12	111.24	120.30
1	B	655	ARG	NE-CZ-NH1	18.11	129.36	120.30
1	i	108	ARG	NE-CZ-NH1	18.09	129.35	120.30
1	c	405	ARG	NE-CZ-NH1	18.08	129.34	120.30
1	y	98	ARG	NE-CZ-NH2	-18.08	111.26	120.30
1	a	301	ARG	NE-CZ-NH1	18.07	129.33	120.30
1	6	312	ARG	NE-CZ-NH1	18.04	129.32	120.30
1	a	488	ARG	NE-CZ-NH1	18.02	129.31	120.30
1	p	288	ARG	NE-CZ-NH1	18.01	129.31	120.30
1	w	689	ARG	NE-CZ-NH2	-18.00	111.30	120.30
1	v	444	ARG	NE-CZ-NH1	17.98	129.29	120.30
1	N	394	ARG	NE-CZ-NH2	-17.98	111.31	120.30
1	h	640	ARG	NE-CZ-NH1	17.97	129.28	120.30
1	O	703	ARG	NE-CZ-NH1	17.93	129.27	120.30
1	7	369	ARG	NE-CZ-NH2	-17.89	111.35	120.30
1	s	288	ARG	NE-CZ-NH1	17.89	129.25	120.30
1	w	145	ARG	NE-CZ-NH1	17.84	129.22	120.30
1	u	152	ARG	NE-CZ-NH1	17.83	129.22	120.30
1	8	312	ARG	NE-CZ-NH2	-17.79	111.40	120.30
1	G	152	ARG	NE-CZ-NH2	-17.74	111.43	120.30
1	a	301	ARG	NE-CZ-NH2	-17.72	111.44	120.30
1	w	336	ARG	NE-CZ-NH1	17.69	129.14	120.30
1	F	640	ARG	NE-CZ-NH2	-17.66	111.47	120.30
1	0	98	ARG	NE-CZ-NH1	17.65	129.12	120.30
1	v	455	ARG	NE-CZ-NH1	17.64	129.12	120.30
1	p	455	ARG	NE-CZ-NH1	17.63	129.12	120.30
1	m	488	ARG	NE-CZ-NH2	-17.55	111.52	120.30
1	u	690	ARG	NE-CZ-NH1	17.55	129.07	120.30
1	H	690	ARG	NE-CZ-NH2	-17.55	111.53	120.30
1	j	573	ARG	NE-CZ-NH2	-17.54	111.53	120.30
1	r	573	ARG	NE-CZ-NH1	17.54	129.07	120.30
1	I	98	ARG	NE-CZ-NH1	17.49	129.05	120.30
1	t	357	ARG	NE-CZ-NH2	-17.49	111.55	120.30
1	B	640	ARG	NE-CZ-NH2	-17.48	111.56	120.30
1	i	328	ARG	NE-CZ-NH1	17.47	129.03	120.30
1	Q	488	ARG	NE-CZ-NH1	17.46	129.03	120.30
1	D	145	ARG	NE-CZ-NH1	17.43	129.02	120.30
1	i	455	ARG	NE-CZ-NH1	17.41	129.01	120.30
1	L	573	ARG	NE-CZ-NH1	17.41	129.00	120.30
1	a	328	ARG	NE-CZ-NH2	-17.36	111.62	120.30
1	B	640	ARG	NE-CZ-NH1	17.36	128.98	120.30
1	d	336	ARG	NE-CZ-NH1	17.36	128.98	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	689	ARG	NE-CZ-NH2	-17.36	111.62	120.30
1	f	655	ARG	NE-CZ-NH1	17.35	128.97	120.30
1	T	369	ARG	NE-CZ-NH2	-17.31	111.65	120.30
1	y	357	ARG	NE-CZ-NH2	-17.27	111.67	120.30
1	a	170	ARG	NE-CZ-NH1	17.25	128.93	120.30
1	D	690	ARG	NE-CZ-NH1	17.25	128.92	120.30
1	E	231	ARG	NE-CZ-NH2	-17.24	111.68	120.30
1	f	695	ARG	NE-CZ-NH1	17.23	128.91	120.30
1	u	231	ARG	NE-CZ-NH2	-17.23	111.69	120.30
1	P	444	ARG	NE-CZ-NH2	-17.23	111.69	120.30
1	c	301	ARG	NE-CZ-NH1	17.22	128.91	120.30
1	J	455	ARG	NE-CZ-NH1	17.21	128.91	120.30
1	z	255	ARG	NE-CZ-NH2	-17.21	111.70	120.30
1	y	573	ARG	NE-CZ-NH2	-17.18	111.71	120.30
1	Q	698	ARG	NE-CZ-NH1	17.18	128.89	120.30
1	k	373	ARG	NE-CZ-NH1	17.18	128.89	120.30
1	s	255	ARG	NE-CZ-NH1	17.16	128.88	120.30
1	c	655	ARG	NE-CZ-NH1	17.15	128.87	120.30
1	O	231	ARG	NE-CZ-NH1	17.13	128.87	120.30
1	W	145	ARG	NE-CZ-NH1	17.11	128.85	120.30
1	L	108	ARG	NE-CZ-NH1	17.10	128.85	120.30
1	V	301	ARG	NE-CZ-NH1	17.09	128.84	120.30
1	x	633	TYR	CB-CG-CD1	-17.04	110.78	121.00
1	Q	573	ARG	NE-CZ-NH2	-17.01	111.80	120.30
1	6	336	ARG	NE-CZ-NH1	17.00	128.80	120.30
1	G	328	ARG	NE-CZ-NH2	-17.00	111.80	120.30
1	M	444	ARG	NE-CZ-NH2	-16.99	111.80	120.30
1	6	202	ARG	NE-CZ-NH1	16.99	128.79	120.30
1	M	108	ARG	NE-CZ-NH1	16.98	128.79	120.30
1	W	698	ARG	NE-CZ-NH1	16.97	128.79	120.30
1	X	449	ARG	NE-CZ-NH1	16.94	128.77	120.30
1	1	406	ARG	NE-CZ-NH1	16.92	128.76	120.30
1	b	98	ARG	NE-CZ-NH1	16.88	128.74	120.30
1	g	369	ARG	NE-CZ-NH1	16.88	128.74	120.30
1	G	301	ARG	NE-CZ-NH1	16.86	128.73	120.30
1	S	202	ARG	NE-CZ-NH2	-16.82	111.89	120.30
1	H	640	ARG	NE-CZ-NH2	-16.82	111.89	120.30
1	q	202	ARG	NE-CZ-NH2	-16.78	111.91	120.30
1	g	449	ARG	NE-CZ-NH1	16.77	128.69	120.30
1	B	405	ARG	NE-CZ-NH2	-16.77	111.92	120.30
1	g	698	ARG	NE-CZ-NH1	16.76	128.68	120.30
1	G	357	ARG	NE-CZ-NH1	16.76	128.68	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	q	170	ARG	NE-CZ-NH2	-16.75	111.93	120.30
1	2	202	ARG	NE-CZ-NH2	-16.74	111.93	120.30
1	C	640	ARG	NE-CZ-NH1	16.74	128.67	120.30
1	2	328	ARG	NE-CZ-NH2	-16.73	111.94	120.30
1	I	406	ARG	NE-CZ-NH1	16.72	128.66	120.30
1	Q	488	ARG	NE-CZ-NH2	-16.67	111.96	120.30
1	g	455	ARG	NE-CZ-NH1	16.66	128.63	120.30
1	T	98	ARG	NE-CZ-NH2	-16.64	111.98	120.30
1	R	690	ARG	NE-CZ-NH1	16.62	128.61	120.30
1	3	444	ARG	NE-CZ-NH1	16.61	128.60	120.30
1	Y	690	ARG	NE-CZ-NH2	-16.59	112.00	120.30
1	V	355	TYR	CB-CG-CD1	-16.59	111.05	121.00
1	P	255	ARG	NE-CZ-NH2	-16.58	112.01	120.30
1	J	301	ARG	NE-CZ-NH2	-16.58	112.01	120.30
1	6	689	ARG	NE-CZ-NH1	16.54	128.57	120.30
1	H	170	ARG	NE-CZ-NH1	16.52	128.56	120.30
1	O	689	ARG	NE-CZ-NH1	16.50	128.55	120.30
1	L	369	ARG	NE-CZ-NH1	16.49	128.54	120.30
1	r	573	ARG	NE-CZ-NH2	-16.49	112.06	120.30
1	B	98	ARG	NE-CZ-NH2	-16.45	112.07	120.30
1	A	357	ARG	NE-CZ-NH2	-16.45	112.07	120.30
1	u	488	ARG	NE-CZ-NH2	-16.41	112.09	120.30
1	n	498	TYR	CB-CG-CD1	16.37	130.82	121.00
1	m	689	ARG	NE-CZ-NH1	16.36	128.48	120.30
1	s	508	TYR	CB-CG-CD1	-16.36	111.19	121.00
1	O	202	ARG	NE-CZ-NH2	-16.33	112.13	120.30
1	8	231	ARG	NE-CZ-NH1	16.32	128.46	120.30
1	C	405	ARG	NE-CZ-NH2	-16.32	112.14	120.30
1	8	98	ARG	NE-CZ-NH2	-16.32	112.14	120.30
1	G	328	ARG	NE-CZ-NH1	16.32	128.46	120.30
1	Z	301	ARG	NE-CZ-NH1	16.30	128.45	120.30
1	b	369	ARG	NE-CZ-NH1	16.30	128.45	120.30
1	C	336	ARG	NE-CZ-NH2	-16.29	112.15	120.30
1	Z	369	ARG	NE-CZ-NH1	16.29	128.44	120.30
1	x	231	ARG	NE-CZ-NH1	16.28	128.44	120.30
1	m	695	ARG	NE-CZ-NH1	16.27	128.44	120.30
1	G	255	ARG	NE-CZ-NH1	16.24	128.42	120.30
1	j	98	ARG	NE-CZ-NH1	16.24	128.42	120.30
1	b	369	ARG	NE-CZ-NH2	-16.22	112.19	120.30
1	b	405	ARG	NE-CZ-NH1	16.22	128.41	120.30
1	9	328	ARG	NE-CZ-NH1	16.20	128.40	120.30
1	d	675	TYR	CB-CG-CD1	-16.18	111.29	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	698	ARG	NE-CZ-NH2	-16.17	112.22	120.30
1	M	405	ARG	NE-CZ-NH1	16.14	128.37	120.30
1	M	655	ARG	NE-CZ-NH1	16.14	128.37	120.30
1	B	394	ARG	NE-CZ-NH2	-16.14	112.23	120.30
1	O	145	ARG	NE-CZ-NH2	-16.07	112.27	120.30
1	H	202	ARG	NE-CZ-NH1	16.07	128.33	120.30
1	3	623	PHE	CB-CG-CD2	-16.04	109.57	120.80
1	a	170	ARG	NE-CZ-NH2	-16.04	112.28	120.30
1	m	170	ARG	NE-CZ-NH1	16.04	128.32	120.30
1	4	655	ARG	NE-CZ-NH1	16.02	128.31	120.30
1	2	640	ARG	NE-CZ-NH1	16.01	128.31	120.30
1	n	336	ARG	NE-CZ-NH1	15.97	128.29	120.30
1	I	231	ARG	NE-CZ-NH2	-15.95	112.32	120.30
1	L	695	ARG	NE-CZ-NH1	15.94	128.27	120.30
1	x	449	ARG	NE-CZ-NH2	15.92	128.26	120.30
1	u	357	ARG	NE-CZ-NH2	-15.91	112.35	120.30
1	H	655	ARG	NE-CZ-NH1	15.89	128.25	120.30
1	Z	170	ARG	NE-CZ-NH1	15.85	128.23	120.30
1	K	593	ARG	NE-CZ-NH1	15.85	128.22	120.30
1	d	202	ARG	NE-CZ-NH1	15.85	128.22	120.30
1	q	703	ARG	NE-CZ-NH2	-15.84	112.38	120.30
1	f	703	ARG	NE-CZ-NH2	15.83	128.22	120.30
1	B	405	ARG	NE-CZ-NH1	15.83	128.22	120.30
1	d	640	ARG	NE-CZ-NH2	-15.83	112.38	120.30
1	E	98	ARG	NE-CZ-NH2	-15.83	112.38	120.30
1	u	689	ARG	NE-CZ-NH1	15.82	128.21	120.30
1	l	444	ARG	NE-CZ-NH1	15.79	128.20	120.30
1	u	689	ARG	NE-CZ-NH2	-15.79	112.40	120.30
1	H	312	ARG	NE-CZ-NH1	15.79	128.20	120.30
1	S	703	ARG	NE-CZ-NH2	-15.79	112.41	120.30
1	T	488	ARG	NE-CZ-NH1	15.79	128.19	120.30
1	V	288	ARG	NE-CZ-NH1	15.78	128.19	120.30
1	w	98	ARG	NE-CZ-NH1	15.77	128.19	120.30
1	l	483	TYR	CB-CG-CD1	15.76	130.46	121.00
1	r	301	ARG	NE-CZ-NH1	15.74	128.17	120.30
1	A	93	TYR	CB-CG-CD1	-15.74	111.55	121.00
1	l	170	ARG	NE-CZ-NH1	15.74	128.17	120.30
1	g	255	ARG	NE-CZ-NH1	15.73	128.16	120.30
1	J	301	ARG	NE-CZ-NH1	15.72	128.16	120.30
1	N	703	ARG	NE-CZ-NH1	15.72	128.16	120.30
1	g	108	ARG	NE-CZ-NH1	15.72	128.16	120.30
1	4	369	ARG	NE-CZ-NH1	15.71	128.15	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	i	674	ARG	NE-CZ-NH1	15.70	128.15	120.30
1	F	640	ARG	NE-CZ-NH1	15.69	128.14	120.30
1	n	690	ARG	NE-CZ-NH1	15.68	128.14	120.30
1	5	231	ARG	NE-CZ-NH2	-15.66	112.47	120.30
1	c	444	ARG	NE-CZ-NH2	-15.65	112.48	120.30
1	x	640	ARG	NE-CZ-NH2	-15.64	112.48	120.30
1	c	444	ARG	NE-CZ-NH1	15.62	128.11	120.30
1	v	145	ARG	NE-CZ-NH2	15.62	128.11	120.30
1	b	336	ARG	NE-CZ-NH1	15.62	128.11	120.30
1	G	690	ARG	NE-CZ-NH1	15.62	128.11	120.30
1	l	449	ARG	NE-CZ-NH1	15.61	128.10	120.30
1	l	698	ARG	NE-CZ-NH1	15.61	128.11	120.30
1	l	255	ARG	NE-CZ-NH1	15.61	128.10	120.30
1	9	108	ARG	NE-CZ-NH1	15.60	128.10	120.30
1	F	406	ARG	NE-CZ-NH1	15.60	128.10	120.30
1	l	170	ARG	NE-CZ-NH2	-15.60	112.50	120.30
1	y	444	ARG	NE-CZ-NH1	15.59	128.09	120.30
1	6	288	ARG	NE-CZ-NH1	15.58	128.09	120.30
1	r	703	ARG	NE-CZ-NH1	15.57	128.09	120.30
1	Y	573	ARG	NE-CZ-NH1	15.56	128.08	120.30
1	4	255	ARG	NE-CZ-NH1	15.54	128.07	120.30
1	x	202	ARG	NE-CZ-NH1	15.53	128.06	120.30
1	A	444	ARG	NE-CZ-NH1	15.53	128.06	120.30
1	H	573	ARG	NE-CZ-NH2	15.52	128.06	120.30
1	P	288	ARG	NE-CZ-NH1	15.50	128.05	120.30
1	A	593	ARG	NE-CZ-NH1	15.50	128.05	120.30
1	K	202	ARG	NE-CZ-NH2	-15.50	112.55	120.30
1	t	573	ARG	NE-CZ-NH1	15.48	128.04	120.30
1	0	231	ARG	NE-CZ-NH2	-15.48	112.56	120.30
1	K	145	ARG	NE-CZ-NH1	15.48	128.04	120.30
1	m	98	ARG	NE-CZ-NH1	15.47	128.04	120.30
1	f	239	ARG	NE-CZ-NH1	15.47	128.04	120.30
1	J	174	ARG	NE-CZ-NH1	15.47	128.04	120.30
1	Y	108	ARG	NE-CZ-NH1	15.45	128.03	120.30
1	6	573	ARG	NE-CZ-NH2	-15.44	112.58	120.30
1	R	703	ARG	NE-CZ-NH2	15.43	128.01	120.30
1	d	458	PHE	CB-CG-CD2	-15.41	110.02	120.80
1	j	640	ARG	NE-CZ-NH1	15.40	128.00	120.30
1	J	355	TYR	CB-CG-CD2	-15.40	111.76	121.00
1	G	695	ARG	NE-CZ-NH2	-15.38	112.61	120.30
1	h	174	ARG	NE-CZ-NH1	15.37	127.98	120.30
1	e	312	ARG	NE-CZ-NH2	-15.34	112.63	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	152	ARG	NE-CZ-NH2	-15.33	112.64	120.30
1	j	405	ARG	NE-CZ-NH1	15.32	127.96	120.30
1	6	301	ARG	NE-CZ-NH2	-15.31	112.64	120.30
1	u	640	ARG	NE-CZ-NH1	15.31	127.96	120.30
1	G	695	ARG	NE-CZ-NH1	15.31	127.95	120.30
1	R	357	ARG	NE-CZ-NH1	15.31	127.95	120.30
1	Z	174	ARG	NE-CZ-NH1	15.30	127.95	120.30
1	g	301	ARG	NE-CZ-NH2	-15.29	112.65	120.30
1	B	373	ARG	NE-CZ-NH1	15.28	127.94	120.30
1	w	690	ARG	NE-CZ-NH2	-15.27	112.67	120.30
1	d	689	ARG	NE-CZ-NH1	15.22	127.91	120.30
1	F	690	ARG	NE-CZ-NH1	15.22	127.91	120.30
1	8	455	ARG	NE-CZ-NH1	15.21	127.91	120.30
1	d	145	ARG	NE-CZ-NH1	15.20	127.90	120.30
1	v	593	ARG	NE-CZ-NH2	-15.20	112.70	120.30
1	6	690	ARG	NE-CZ-NH1	15.19	127.89	120.30
1	J	695	ARG	NE-CZ-NH1	15.17	127.89	120.30
1	s	455	ARG	NE-CZ-NH1	15.17	127.88	120.30
1	c	231	ARG	NE-CZ-NH2	15.13	127.86	120.30
1	c	174	ARG	NE-CZ-NH1	15.13	127.86	120.30
1	c	689	ARG	NE-CZ-NH2	15.12	127.86	120.30
1	D	640	ARG	NE-CZ-NH1	15.12	127.86	120.30
1	f	488	ARG	NE-CZ-NH2	-15.07	112.77	120.30
1	J	152	ARG	NE-CZ-NH1	15.06	127.83	120.30
1	N	145	ARG	NE-CZ-NH1	15.05	127.82	120.30
1	z	312	ARG	NE-CZ-NH1	15.05	127.82	120.30
1	q	483	TYR	CB-CG-CD1	-15.03	111.98	121.00
1	C	108	ARG	NE-CZ-NH1	15.02	127.81	120.30
1	2	202	ARG	NE-CZ-NH1	15.01	127.80	120.30
1	q	152	ARG	NE-CZ-NH1	15.00	127.80	120.30
1	J	357	ARG	NE-CZ-NH1	14.98	127.79	120.30
1	U	703	ARG	NE-CZ-NH2	14.96	127.78	120.30
1	U	145	ARG	NE-CZ-NH1	14.95	127.78	120.30
1	q	202	ARG	NE-CZ-NH1	14.92	127.76	120.30
1	I	373	ARG	NE-CZ-NH2	-14.92	112.84	120.30
1	8	357	ARG	NE-CZ-NH2	-14.89	112.85	120.30
1	P	449	ARG	NE-CZ-NH1	14.88	127.74	120.30
1	R	357	ARG	NE-CZ-NH2	-14.88	112.86	120.30
1	4	405	ARG	NE-CZ-NH1	14.86	127.73	120.30
1	P	255	ARG	NE-CZ-NH1	14.84	127.72	120.30
1	3	394	ARG	NE-CZ-NH1	14.83	127.72	120.30
1	0	394	ARG	NE-CZ-NH1	14.83	127.72	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	d	152	ARG	NE-CZ-NH1	14.83	127.72	120.30
1	J	488	ARG	NE-CZ-NH1	-14.82	112.89	120.30
1	0	98	ARG	NE-CZ-NH2	-14.82	112.89	120.30
1	4	698	ARG	NE-CZ-NH1	14.82	127.71	120.30
1	M	674	ARG	NE-CZ-NH2	-14.80	112.90	120.30
1	Y	355	TYR	CB-CG-CD2	14.78	129.87	121.00
1	S	449	ARG	NE-CZ-NH1	14.76	127.68	120.30
1	h	633	TYR	CB-CG-CD1	-14.75	112.15	121.00
1	J	498	TYR	CB-CG-CD2	-14.74	112.16	121.00
1	E	640	ARG	NE-CZ-NH1	14.73	127.67	120.30
1	W	373	ARG	NE-CZ-NH1	14.73	127.67	120.30
1	n	301	ARG	NE-CZ-NH1	14.73	127.67	120.30
1	f	690	ARG	NE-CZ-NH1	14.72	127.66	120.30
1	t	239	ARG	NE-CZ-NH1	14.72	127.66	120.30
1	J	689	ARG	NE-CZ-NH1	14.72	127.66	120.30
1	f	593	ARG	NE-CZ-NH1	14.71	127.65	120.30
1	1	145	ARG	NE-CZ-NH1	14.70	127.65	120.30
1	E	231	ARG	NE-CZ-NH1	14.70	127.65	120.30
1	Q	301	ARG	NE-CZ-NH1	14.68	127.64	120.30
1	U	152	ARG	NE-CZ-NH1	14.68	127.64	120.30
1	Q	336	ARG	NE-CZ-NH1	14.67	127.64	120.30
1	V	231	ARG	NE-CZ-NH1	14.67	127.63	120.30
1	3	640	ARG	NE-CZ-NH2	-14.66	112.97	120.30
1	x	301	ARG	NE-CZ-NH1	14.65	127.63	120.30
1	7	703	ARG	NE-CZ-NH1	14.65	127.62	120.30
1	g	674	ARG	NE-CZ-NH1	14.63	127.62	120.30
1	c	108	ARG	NE-CZ-NH1	14.61	127.61	120.30
1	u	633	TYR	CB-CG-CD1	-14.61	112.24	121.00
1	b	145	ARG	NE-CZ-NH1	14.60	127.60	120.30
1	q	98	ARG	NE-CZ-NH1	14.60	127.60	120.30
1	I	301	ARG	NE-CZ-NH2	-14.60	113.00	120.30
1	s	255	ARG	NE-CZ-NH2	-14.59	113.01	120.30
1	V	301	ARG	NE-CZ-NH2	-14.59	113.01	120.30
1	Y	145	ARG	NE-CZ-NH2	-14.57	113.01	120.30
1	9	152	ARG	NE-CZ-NH1	14.57	127.58	120.30
1	u	690	ARG	NE-CZ-NH2	-14.56	113.02	120.30
1	f	640	ARG	NE-CZ-NH1	14.55	127.58	120.30
1	s	316	TYR	CB-CG-CD1	-14.55	112.27	121.00
1	H	690	ARG	NE-CZ-NH1	14.53	127.56	120.30
1	K	690	ARG	NE-CZ-NH1	14.52	127.56	120.30
1	Z	174	ARG	NE-CZ-NH2	-14.51	113.05	120.30
1	m	593	ARG	NE-CZ-NH1	14.50	127.55	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	J	312	ARG	NE-CZ-NH1	14.49	127.54	120.30
1	w	640	ARG	NE-CZ-NH1	14.48	127.54	120.30
1	k	689	ARG	NE-CZ-NH2	-14.48	113.06	120.30
1	N	152	ARG	NE-CZ-NH1	14.48	127.54	120.30
1	m	405	ARG	NE-CZ-NH2	-14.48	113.06	120.30
1	g	288	ARG	NE-CZ-NH1	14.46	127.53	120.30
1	i	98	ARG	NE-CZ-NH2	-14.46	113.07	120.30
1	0	336	ARG	NE-CZ-NH1	14.44	127.52	120.30
1	W	312	ARG	NE-CZ-NH1	14.43	127.52	120.30
1	4	451	TYR	CB-CG-CD2	-14.42	112.35	121.00
1	B	455	ARG	NE-CZ-NH1	14.41	127.51	120.30
1	I	98	ARG	NE-CZ-NH2	-14.41	113.09	120.30
1	e	301	ARG	NE-CZ-NH1	14.40	127.50	120.30
1	l	455	ARG	NE-CZ-NH1	14.39	127.50	120.30
1	a	255	ARG	NE-CZ-NH1	14.39	127.50	120.30
1	8	301	ARG	NE-CZ-NH2	-14.38	113.11	120.30
1	6	640	ARG	NE-CZ-NH1	14.37	127.48	120.30
1	j	498	TYR	CB-CG-CD1	-14.37	112.38	121.00
1	N	301	ARG	NE-CZ-NH2	-14.36	113.12	120.30
1	O	145	ARG	NE-CZ-NH1	14.36	127.48	120.30
1	t	328	ARG	NE-CZ-NH2	-14.35	113.12	120.30
1	W	336	ARG	NE-CZ-NH1	14.35	127.48	120.30
1	Z	394	ARG	NE-CZ-NH1	14.34	127.47	120.30
1	z	623	PHE	CB-CG-CD1	14.34	130.84	120.80
1	r	698	ARG	NE-CZ-NH1	14.33	127.46	120.30
1	0	373	ARG	NE-CZ-NH1	14.31	127.46	120.30
1	b	593	ARG	NE-CZ-NH1	14.29	127.45	120.30
1	t	174	ARG	NE-CZ-NH1	14.30	127.45	120.30
1	h	170	ARG	NE-CZ-NH1	14.29	127.45	120.30
1	K	573	ARG	NE-CZ-NH1	14.29	127.45	120.30
1	z	336	ARG	NE-CZ-NH1	14.29	127.44	120.30
1	D	444	ARG	NE-CZ-NH1	14.28	127.44	120.30
1	H	357	ARG	NE-CZ-NH1	14.26	127.43	120.30
1	A	173	TYR	CB-CG-CD1	-14.26	112.44	121.00
1	4	689	ARG	NE-CZ-NH1	14.25	127.43	120.30
1	N	301	ARG	NE-CZ-NH1	14.24	127.42	120.30
1	O	373	ARG	NE-CZ-NH1	14.24	127.42	120.30
1	3	652	PHE	CB-CG-CD1	-14.24	110.83	120.80
1	7	170	ARG	NE-CZ-NH2	-14.24	113.18	120.30
1	p	698	ARG	NE-CZ-NH1	14.23	127.41	120.30
1	P	173	TYR	CB-CG-CD2	14.22	129.53	121.00
1	9	449	ARG	NE-CZ-NH2	14.21	127.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	98	ARG	NE-CZ-NH2	-14.21	113.19	120.30
1	3	108	ARG	NE-CZ-NH1	14.18	127.39	120.30
1	z	328	ARG	NE-CZ-NH1	14.18	127.39	120.30
1	g	93	TYR	CB-CG-CD2	14.17	129.50	121.00
1	7	674	ARG	NE-CZ-NH2	-14.16	113.22	120.30
1	E	239	ARG	NE-CZ-NH1	14.16	127.38	120.30
1	V	288	ARG	NE-CZ-NH2	-14.16	113.22	120.30
1	j	674	ARG	NE-CZ-NH1	14.16	127.38	120.30
1	Z	593	ARG	NE-CZ-NH1	14.15	127.38	120.30
1	F	488	ARG	NE-CZ-NH2	-14.15	113.23	120.30
1	R	501	PHE	CB-CG-CD1	-14.14	110.90	120.80
1	s	108	ARG	NE-CZ-NH1	14.13	127.36	120.30
1	Q	406	ARG	NE-CZ-NH2	-14.13	113.24	120.30
1	e	655	ARG	NE-CZ-NH1	14.12	127.36	120.30
1	h	357	ARG	NE-CZ-NH1	14.11	127.36	120.30
1	u	593	ARG	NE-CZ-NH2	-14.11	113.25	120.30
1	P	357	ARG	NE-CZ-NH1	14.10	127.35	120.30
1	Y	202	ARG	NE-CZ-NH1	14.10	127.35	120.30
1	k	231	ARG	NE-CZ-NH2	-14.09	113.25	120.30
1	c	698	ARG	NE-CZ-NH1	14.08	127.34	120.30
1	Z	695	ARG	NE-CZ-NH1	14.04	127.32	120.30
1	e	255	ARG	NE-CZ-NH2	-14.04	113.28	120.30
1	t	202	ARG	NE-CZ-NH1	14.02	127.31	120.30
1	f	301	ARG	NE-CZ-NH1	14.01	127.31	120.30
1	g	585	TYR	CB-CG-CD1	14.01	129.41	121.00
1	e	394	ARG	NE-CZ-NH1	14.01	127.30	120.30
1	j	451	TYR	CB-CG-CD2	14.01	129.40	121.00
1	P	640	ARG	NE-CZ-NH2	-14.01	113.30	120.30
1	8	288	ARG	NE-CZ-NH2	14.00	127.30	120.30
1	E	145	ARG	NE-CZ-NH2	-13.99	113.31	120.30
1	X	231	ARG	NE-CZ-NH1	13.96	127.28	120.30
1	J	336	ARG	NE-CZ-NH1	13.96	127.28	120.30
1	A	288	ARG	NE-CZ-NH1	13.96	127.28	120.30
1	Y	455	ARG	NE-CZ-NH1	13.94	127.27	120.30
1	o	231	ARG	NE-CZ-NH1	13.94	127.27	120.30
1	8	152	ARG	NE-CZ-NH1	13.92	127.26	120.30
1	K	689	ARG	NE-CZ-NH1	13.92	127.26	120.30
1	a	695	ARG	NE-CZ-NH1	13.92	127.26	120.30
1	L	357	ARG	NE-CZ-NH1	13.92	127.26	120.30
1	r	675	TYR	CB-CG-CD1	13.91	129.34	121.00
1	N	98	ARG	NE-CZ-NH1	13.91	127.25	120.30
1	P	394	ARG	NE-CZ-NH1	13.90	127.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	255	ARG	NE-CZ-NH1	13.89	127.25	120.30
1	b	93	TYR	CB-CG-CD2	-13.88	112.67	121.00
1	4	231	ARG	NE-CZ-NH1	13.88	127.24	120.30
1	L	406	ARG	NE-CZ-NH1	13.86	127.23	120.30
1	d	674	ARG	NE-CZ-NH2	-13.84	113.38	120.30
1	m	449	ARG	NE-CZ-NH1	13.84	127.22	120.30
1	0	231	ARG	NE-CZ-NH1	13.84	127.22	120.30
1	D	373	ARG	NE-CZ-NH1	13.83	127.21	120.30
1	C	98	ARG	NE-CZ-NH2	-13.82	113.39	120.30
1	5	655	ARG	NE-CZ-NH2	13.81	127.21	120.30
1	s	98	ARG	NE-CZ-NH2	-13.81	113.39	120.30
1	7	405	ARG	NE-CZ-NH2	-13.79	113.40	120.30
1	g	369	ARG	NE-CZ-NH2	-13.79	113.40	120.30
1	3	108	ARG	NE-CZ-NH2	-13.78	113.41	120.30
1	D	455	ARG	NE-CZ-NH2	-13.77	113.41	120.30
1	F	373	ARG	NE-CZ-NH2	-13.77	113.41	120.30
1	r	444	ARG	NE-CZ-NH1	13.77	127.18	120.30
1	w	369	ARG	NE-CZ-NH2	-13.76	113.42	120.30
1	f	98	ARG	NE-CZ-NH1	13.76	127.18	120.30
1	B	483	TYR	CB-CG-CD2	-13.75	112.75	121.00
1	x	690	ARG	NE-CZ-NH1	13.75	127.17	120.30
1	I	336	ARG	NE-CZ-NH1	13.74	127.17	120.30
1	Q	675	TYR	CB-CG-CD2	-13.72	112.77	121.00
1	O	301	ARG	NE-CZ-NH1	13.70	127.15	120.30
1	S	336	ARG	NE-CZ-NH2	13.70	127.15	120.30
1	x	170	ARG	NE-CZ-NH1	13.68	127.14	120.30
1	w	655	ARG	NE-CZ-NH1	13.67	127.14	120.30
1	P	640	ARG	NE-CZ-NH1	13.67	127.14	120.30
1	Q	593	ARG	NE-CZ-NH1	13.67	127.14	120.30
1	n	449	ARG	NE-CZ-NH1	13.66	127.13	120.30
1	Q	690	ARG	NE-CZ-NH2	-13.66	113.47	120.30
1	R	98	ARG	NE-CZ-NH1	13.66	127.13	120.30
1	x	689	ARG	NE-CZ-NH2	-13.65	113.47	120.30
1	O	108	ARG	NE-CZ-NH2	-13.65	113.48	120.30
1	0	593	ARG	NE-CZ-NH1	13.64	127.12	120.30
1	x	231	ARG	NE-CZ-NH2	-13.64	113.48	120.30
1	0	108	ARG	NE-CZ-NH1	13.63	127.11	120.30
1	i	689	ARG	NE-CZ-NH1	13.62	127.11	120.30
1	g	373	ARG	NE-CZ-NH1	13.62	127.11	120.30
1	k	593	ARG	NE-CZ-NH1	13.61	127.11	120.30
1	W	174	ARG	NE-CZ-NH2	-13.60	113.50	120.30
1	2	444	ARG	NE-CZ-NH1	13.58	127.09	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	170	ARG	NE-CZ-NH1	13.58	127.09	120.30
1	R	108	ARG	NE-CZ-NH2	-13.58	113.51	120.30
1	9	145	ARG	NE-CZ-NH1	13.57	127.09	120.30
1	0	405	ARG	NE-CZ-NH2	-13.56	113.52	120.30
1	h	593	ARG	NE-CZ-NH1	13.56	127.08	120.30
1	d	640	ARG	NE-CZ-NH1	13.55	127.08	120.30
1	u	444	ARG	NE-CZ-NH2	-13.55	113.53	120.30
1	v	573	ARG	NE-CZ-NH1	13.55	127.07	120.30
1	x	674	ARG	NE-CZ-NH1	13.55	127.07	120.30
1	0	703	ARG	NE-CZ-NH2	-13.53	113.53	120.30
1	J	690	ARG	NE-CZ-NH2	-13.52	113.54	120.30
1	U	174	ARG	NE-CZ-NH1	13.51	127.05	120.30
1	R	501	PHE	CB-CG-CD2	13.50	130.25	120.80
1	c	455	ARG	NE-CZ-NH1	13.50	127.05	120.30
1	2	406	ARG	NE-CZ-NH2	13.49	127.05	120.30
1	h	488	ARG	NE-CZ-NH2	-13.49	113.55	120.30
1	m	455	ARG	NE-CZ-NH1	13.49	127.05	120.30
1	M	98	ARG	NE-CZ-NH1	13.49	127.05	120.30
1	f	239	ARG	NE-CZ-NH2	-13.48	113.56	120.30
1	4	174	ARG	NE-CZ-NH2	-13.48	113.56	120.30
1	F	170	ARG	NE-CZ-NH1	13.46	127.03	120.30
1	J	593	ARG	NE-CZ-NH1	13.45	127.02	120.30
1	0	420	PHE	CB-CG-CD2	-13.45	111.39	120.80
1	Y	444	ARG	NE-CZ-NH2	-13.45	113.58	120.30
1	w	231	ARG	NE-CZ-NH2	13.44	127.02	120.30
1	V	573	ARG	NE-CZ-NH1	13.44	127.02	120.30
1	q	173	TYR	CB-CG-CD1	-13.43	112.94	121.00
1	Q	301	ARG	NE-CZ-NH2	-13.43	113.59	120.30
1	p	239	ARG	NE-CZ-NH1	13.42	127.01	120.30
1	J	98	ARG	NE-CZ-NH1	13.41	127.01	120.30
1	m	288	ARG	NE-CZ-NH1	13.41	127.00	120.30
1	7	98	ARG	NE-CZ-NH1	13.40	127.00	120.30
1	N	455	ARG	NE-CZ-NH2	-13.39	113.61	120.30
1	O	373	ARG	NE-CZ-NH2	-13.38	113.61	120.30
1	x	145	ARG	NE-CZ-NH1	13.37	126.98	120.30
1	H	145	ARG	NE-CZ-NH2	-13.37	113.62	120.30
1	D	357	ARG	NE-CZ-NH2	-13.36	113.62	120.30
1	a	231	ARG	NE-CZ-NH1	13.35	126.98	120.30
1	g	145	ARG	NE-CZ-NH1	13.35	126.97	120.30
1	C	152	ARG	NE-CZ-NH2	-13.35	113.63	120.30
1	P	301	ARG	NE-CZ-NH1	13.34	126.97	120.30
1	l	312	ARG	NE-CZ-NH2	-13.33	113.63	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	689	ARG	NE-CZ-NH2	-13.33	113.63	120.30
1	v	108	ARG	NE-CZ-NH1	13.33	126.96	120.30
1	P	695	ARG	NE-CZ-NH2	-13.33	113.64	120.30
1	m	444	ARG	NE-CZ-NH2	-13.32	113.64	120.30
1	I	328	ARG	NE-CZ-NH2	-13.32	113.64	120.30
1	v	240	ASP	CB-CG-OD2	13.31	130.28	118.30
1	q	689	ARG	NE-CZ-NH2	-13.30	113.65	120.30
1	N	152	ARG	NE-CZ-NH2	-13.30	113.65	120.30
1	s	698	ARG	NE-CZ-NH2	-13.30	113.65	120.30
1	t	255	ARG	NE-CZ-NH1	13.29	126.95	120.30
1	A	202	ARG	NE-CZ-NH2	-13.29	113.65	120.30
1	j	458	PHE	CB-CG-CD2	-13.28	111.50	120.80
1	r	170	ARG	NE-CZ-NH1	13.28	126.94	120.30
1	n	328	ARG	NE-CZ-NH2	-13.27	113.66	120.30
1	g	655	ARG	NE-CZ-NH1	-13.27	113.67	120.30
1	q	373	ARG	NE-CZ-NH2	-13.27	113.67	120.30
1	t	252	TYR	CB-CG-CD1	-13.26	113.04	121.00
1	i	328	ARG	NE-CZ-NH2	-13.23	113.69	120.30
1	Z	659	ASP	CB-CG-OD1	13.23	130.20	118.30
1	n	498	TYR	CB-CG-CD2	-13.22	113.07	121.00
1	q	406	ARG	NE-CZ-NH2	-13.21	113.69	120.30
1	7	202	ARG	NE-CZ-NH2	13.20	126.90	120.30
1	s	373	ARG	NE-CZ-NH1	13.20	126.90	120.30
1	k	301	ARG	NE-CZ-NH1	13.19	126.90	120.30
1	O	202	ARG	NE-CZ-NH1	13.19	126.89	120.30
1	i	312	ARG	NE-CZ-NH1	13.18	126.89	120.30
1	e	98	ARG	NE-CZ-NH2	-13.18	113.71	120.30
1	2	394	ARG	NE-CZ-NH1	13.17	126.89	120.30
1	l	328	ARG	NE-CZ-NH2	-13.17	113.72	120.30
1	e	322	TYR	CB-CG-CD2	-13.16	113.10	121.00
1	6	488	ARG	NE-CZ-NH1	13.15	126.87	120.30
1	T	202	ARG	NE-CZ-NH2	-13.14	113.73	120.30
1	Q	689	ARG	NE-CZ-NH1	13.14	126.87	120.30
1	p	108	ARG	NE-CZ-NH1	13.14	126.87	120.30
1	X	674	ARG	NE-CZ-NH1	13.13	126.86	120.30
1	C	698	ARG	NE-CZ-NH2	-13.12	113.74	120.30
1	T	444	ARG	NE-CZ-NH2	13.12	126.86	120.30
1	2	420	PHE	CB-CG-CD2	-13.11	111.62	120.80
1	t	394	ARG	NE-CZ-NH1	13.11	126.85	120.30
1	N	444	ARG	NE-CZ-NH2	-13.10	113.75	120.30
1	4	170	ARG	NE-CZ-NH1	13.10	126.85	120.30
1	R	695	ARG	NE-CZ-NH1	13.10	126.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	x	633	TYR	CB-CG-CD2	13.10	128.86	121.00
1	F	108	ARG	NE-CZ-NH1	13.09	126.85	120.30
1	y	655	ARG	NE-CZ-NH1	13.09	126.84	120.30
1	0	593	ARG	NE-CZ-NH2	-13.08	113.76	120.30
1	R	697	TYR	CB-CG-CD1	-13.08	113.15	121.00
1	w	695	ARG	NE-CZ-NH1	13.07	126.84	120.30
1	N	640	ARG	NE-CZ-NH2	-13.07	113.76	120.30
1	V	98	ARG	NE-CZ-NH2	-13.07	113.76	120.30
1	H	328	ARG	NE-CZ-NH1	13.07	126.83	120.30
1	W	170	ARG	NE-CZ-NH2	-13.07	113.77	120.30
1	W	455	ARG	NE-CZ-NH1	13.06	126.83	120.30
1	g	240	ASP	CB-CG-OD2	-13.05	106.55	118.30
1	8	174	ARG	NE-CZ-NH1	13.05	126.82	120.30
1	Y	444	ARG	NE-CZ-NH1	13.04	126.82	120.30
1	g	406	ARG	NE-CZ-NH1	13.03	126.82	120.30
1	1	449	ARG	NE-CZ-NH1	13.03	126.82	120.30
1	a	695	ARG	NE-CZ-NH2	-13.03	113.78	120.30
1	7	170	ARG	NE-CZ-NH1	13.03	126.81	120.30
1	4	640	ARG	NE-CZ-NH1	13.02	126.81	120.30
1	9	674	ARG	NE-CZ-NH1	13.02	126.81	120.30
1	s	288	ARG	NE-CZ-NH2	-13.02	113.79	120.30
1	e	572	PHE	CB-CG-CD1	-12.99	111.71	120.80
1	o	202	ARG	NE-CZ-NH2	-12.99	113.81	120.30
1	0	531	PHE	CB-CG-CD1	-12.97	111.72	120.80
1	A	444	ARG	NE-CZ-NH2	-12.97	113.82	120.30
1	E	174	ARG	NE-CZ-NH1	12.97	126.78	120.30
1	y	288	ARG	NE-CZ-NH2	-12.96	113.82	120.30
1	0	488	ARG	NE-CZ-NH2	-12.96	113.82	120.30
1	5	202	ARG	NE-CZ-NH2	-12.94	113.83	120.30
1	Q	312	ARG	NE-CZ-NH2	-12.95	113.83	120.30
1	A	170	ARG	NE-CZ-NH2	-12.94	113.83	120.30
1	Y	255	ARG	NE-CZ-NH2	-12.94	113.83	120.30
1	i	301	ARG	NE-CZ-NH1	12.94	126.77	120.30
1	J	698	ARG	NE-CZ-NH2	12.94	126.77	120.30
1	a	675	TYR	CB-CG-CD2	-12.92	113.25	121.00
1	e	98	ARG	NE-CZ-NH1	12.92	126.76	120.30
1	r	640	ARG	NE-CZ-NH1	12.92	126.76	120.30
1	B	449	ARG	NE-CZ-NH2	12.92	126.76	120.30
1	q	373	ARG	NE-CZ-NH1	12.91	126.76	120.30
1	v	373	ARG	NE-CZ-NH1	12.91	126.76	120.30
1	u	640	ARG	NE-CZ-NH2	-12.91	113.85	120.30
1	r	301	ARG	NE-CZ-NH2	-12.90	113.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	u	231	ARG	NE-CZ-NH1	12.90	126.75	120.30
1	3	690	ARG	NE-CZ-NH1	12.89	126.75	120.30
1	5	488	ARG	NE-CZ-NH1	12.89	126.75	120.30
1	G	640	ARG	NE-CZ-NH1	12.87	126.73	120.30
1	V	695	ARG	NE-CZ-NH2	-12.86	113.87	120.30
1	Y	690	ARG	NE-CZ-NH1	12.85	126.73	120.30
1	t	145	ARG	NE-CZ-NH1	12.85	126.72	120.30
1	E	488	ARG	NE-CZ-NH1	12.85	126.72	120.30
1	o	640	ARG	NE-CZ-NH1	12.84	126.72	120.30
1	f	531	PHE	CB-CG-CD1	12.83	129.78	120.80
1	D	488	ARG	NE-CZ-NH1	12.82	126.71	120.30
1	0	145	ARG	NE-CZ-NH2	-12.82	113.89	120.30
1	K	288	ARG	NE-CZ-NH1	12.82	126.71	120.30
1	T	98	ARG	NE-CZ-NH1	12.82	126.71	120.30
1	i	357	ARG	NE-CZ-NH2	-12.81	113.89	120.30
1	p	152	ARG	NE-CZ-NH1	12.80	126.70	120.30
1	u	488	ARG	NE-CZ-NH1	12.80	126.70	120.30
1	C	98	ARG	NE-CZ-NH1	12.80	126.70	120.30
1	3	394	ARG	NE-CZ-NH2	-12.79	113.90	120.30
1	4	170	ARG	NE-CZ-NH2	-12.78	113.91	120.30
1	P	698	ARG	NE-CZ-NH2	-12.77	113.92	120.30
1	v	655	ARG	NE-CZ-NH1	12.75	126.67	120.30
1	a	449	ARG	NE-CZ-NH1	12.75	126.67	120.30
1	7	531	PHE	CB-CG-CD1	-12.74	111.88	120.80
1	u	406	ARG	NE-CZ-NH1	12.74	126.67	120.30
1	6	373	ARG	NE-CZ-NH1	12.73	126.67	120.30
1	y	301	ARG	NE-CZ-NH2	-12.73	113.94	120.30
1	J	152	ARG	NE-CZ-NH2	-12.73	113.94	120.30
1	Y	312	ARG	NE-CZ-NH2	12.73	126.66	120.30
1	x	373	ARG	NE-CZ-NH2	12.71	126.66	120.30
1	G	498	TYR	CB-CG-CD2	-12.72	113.37	121.00
1	c	405	ARG	NE-CZ-NH2	-12.71	113.94	120.30
1	9	174	ARG	NE-CZ-NH1	12.70	126.65	120.30
1	Y	316	TYR	CB-CG-CD1	-12.70	113.38	121.00
1	O	695	ARG	NE-CZ-NH2	-12.69	113.95	120.30
1	X	108	ARG	NE-CZ-NH2	-12.67	113.96	120.30
1	H	689	ARG	NE-CZ-NH1	12.67	126.63	120.30
1	u	405	ARG	NE-CZ-NH1	12.66	126.63	120.30
1	Z	357	ARG	NE-CZ-NH2	-12.65	113.97	120.30
1	y	357	ARG	NE-CZ-NH1	12.65	126.62	120.30
1	p	655	ARG	NE-CZ-NH1	12.64	126.62	120.30
1	w	698	ARG	NE-CZ-NH1	12.64	126.62	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	145	ARG	NE-CZ-NH1	12.64	126.62	120.30
1	O	695	ARG	NE-CZ-NH1	12.63	126.62	120.30
1	s	369	ARG	NE-CZ-NH1	12.63	126.61	120.30
1	T	394	ARG	NE-CZ-NH2	-12.61	114.00	120.30
1	i	357	ARG	NE-CZ-NH1	12.60	126.60	120.30
1	I	301	ARG	NE-CZ-NH1	12.60	126.60	120.30
1	V	655	ARG	NE-CZ-NH1	12.60	126.60	120.30
1	l	444	ARG	NE-CZ-NH2	-12.58	114.01	120.30
1	x	652	PHE	CB-CG-CD1	-12.57	112.00	120.80
1	A	697	TYR	CB-CG-CD2	-12.56	113.46	121.00
1	n	202	ARG	NE-CZ-NH1	12.55	126.58	120.30
1	w	709	PHE	CB-CG-CD1	-12.54	112.02	120.80
1	D	231	ARG	NE-CZ-NH1	12.54	126.57	120.30
1	s	623	PHE	CB-CG-CD2	-12.53	112.03	120.80
1	z	698	ARG	NE-CZ-NH2	-12.53	114.04	120.30
1	A	703	ARG	NE-CZ-NH1	12.52	126.56	120.30
1	K	394	ARG	NE-CZ-NH2	-12.52	114.04	120.30
1	o	623	PHE	CB-CG-CD1	-12.51	112.04	120.80
1	U	674	ARG	NE-CZ-NH1	12.51	126.55	120.30
1	f	674	ARG	NE-CZ-NH2	-12.51	114.05	120.30
1	Q	145	ARG	NE-CZ-NH2	-12.51	114.05	120.30
1	f	369	ARG	NE-CZ-NH1	12.50	126.55	120.30
1	f	698	ARG	NE-CZ-NH1	12.50	126.55	120.30
1	c	239	ARG	NE-CZ-NH1	12.49	126.55	120.30
1	M	573	ARG	NE-CZ-NH1	12.49	126.54	120.30
1	O	597	PHE	CB-CG-CD1	12.49	129.54	120.80
1	U	449	ARG	NE-CZ-NH1	12.48	126.54	120.30
1	g	444	ARG	NE-CZ-NH2	-12.48	114.06	120.30
1	q	655	ARG	NE-CZ-NH2	-12.47	114.07	120.30
1	N	655	ARG	NE-CZ-NH1	12.46	126.53	120.30
1	c	640	ARG	NE-CZ-NH1	12.45	126.53	120.30
1	P	145	ARG	NE-CZ-NH1	12.45	126.53	120.30
1	Y	145	ARG	NE-CZ-NH1	12.45	126.53	120.30
1	Q	312	ARG	NE-CZ-NH1	12.45	126.52	120.30
1	R	703	ARG	NE-CZ-NH1	-12.45	114.08	120.30
1	x	239	ARG	NE-CZ-NH2	12.44	126.52	120.30
1	p	152	ARG	NE-CZ-NH2	-12.44	114.08	120.30
1	5	394	ARG	NE-CZ-NH1	-12.44	114.08	120.30
1	4	457	ASP	CB-CG-OD2	12.43	129.49	118.30
1	w	674	ARG	NE-CZ-NH1	12.43	126.51	120.30
1	9	350	PHE	CB-CG-CD1	12.42	129.49	120.80
1	C	655	ARG	NE-CZ-NH2	-12.41	114.09	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	444	ARG	NE-CZ-NH1	12.41	126.51	120.30
1	5	695	ARG	NE-CZ-NH1	12.41	126.50	120.30
1	k	690	ARG	NE-CZ-NH2	-12.41	114.09	120.30
1	p	690	ARG	NE-CZ-NH1	12.41	126.50	120.30
1	p	703	ARG	NE-CZ-NH1	12.41	126.50	120.30
1	g	231	ARG	NE-CZ-NH1	12.40	126.50	120.30
1	v	328	ARG	NH1-CZ-NH2	-12.40	105.76	119.40
1	L	444	ARG	NE-CZ-NH1	12.40	126.50	120.30
1	v	451	TYR	CB-CG-CD2	-12.38	113.57	121.00
1	X	634	PHE	CB-CG-CD1	12.37	129.46	120.80
1	k	488	ARG	NE-CZ-NH1	12.37	126.48	120.30
1	m	174	ARG	NE-CZ-NH2	-12.37	114.12	120.30
1	X	328	ARG	NE-CZ-NH2	12.37	126.48	120.30
1	E	255	ARG	NE-CZ-NH1	12.36	126.48	120.30
1	3	449	ARG	NE-CZ-NH2	12.36	126.48	120.30
1	6	152	ARG	NE-CZ-NH2	12.36	126.48	120.30
1	8	152	ARG	NE-CZ-NH2	-12.36	114.12	120.30
1	m	640	ARG	NE-CZ-NH1	12.35	126.48	120.30
1	i	301	ARG	NE-CZ-NH2	-12.34	114.13	120.30
1	n	579	PHE	CB-CG-CD1	-12.33	112.17	120.80
1	C	444	ARG	NE-CZ-NH2	12.32	126.46	120.30
1	3	487	TYR	CB-CG-CD1	12.32	128.39	121.00
1	u	145	ARG	NE-CZ-NH2	-12.31	114.14	120.30
1	t	406	ARG	NE-CZ-NH1	12.31	126.45	120.30
1	M	98	ARG	NE-CZ-NH2	-12.31	114.14	120.30
1	g	488	ARG	NE-CZ-NH2	-12.30	114.15	120.30
1	8	170	ARG	NE-CZ-NH1	12.29	126.44	120.30
1	O	328	ARG	NE-CZ-NH1	12.28	126.44	120.30
1	H	357	ARG	NE-CZ-NH2	-12.28	114.16	120.30
1	G	357	ARG	NE-CZ-NH2	-12.27	114.16	120.30
1	F	405	ARG	NE-CZ-NH1	12.27	126.43	120.30
1	H	697	TYR	CB-CG-CD2	-12.27	113.64	121.00
1	m	695	ARG	NE-CZ-NH2	-12.26	114.17	120.30
1	t	585	TYR	CB-CG-CD1	-12.26	113.64	121.00
1	7	573	ARG	NE-CZ-NH2	-12.26	114.17	120.30
1	G	231	ARG	NE-CZ-NH1	12.25	126.42	120.30
1	z	674	ARG	NE-CZ-NH1	12.24	126.42	120.30
1	p	328	ARG	NE-CZ-NH2	-12.24	114.18	120.30
1	k	288	ARG	NE-CZ-NH1	12.23	126.42	120.30
1	V	675	TYR	CB-CG-CD2	12.23	128.34	121.00
1	s	508	TYR	CB-CG-CD2	12.23	128.34	121.00
1	U	455	ARG	NE-CZ-NH1	12.23	126.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	108	ARG	NE-CZ-NH1	12.22	126.41	120.30
1	T	640	ARG	NE-CZ-NH1	12.22	126.41	120.30
1	d	405	ARG	NE-CZ-NH1	12.22	126.41	120.30
1	6	301	ARG	NE-CZ-NH1	12.22	126.41	120.30
1	l	231	ARG	NE-CZ-NH1	12.21	126.41	120.30
1	r	488	ARG	NE-CZ-NH1	12.21	126.41	120.30
1	J	449	ARG	NE-CZ-NH1	-12.21	114.19	120.30
1	G	288	ARG	NE-CZ-NH1	12.20	126.40	120.30
1	h	152	ARG	NE-CZ-NH1	12.20	126.40	120.30
1	5	593	ARG	NE-CZ-NH1	12.19	126.40	120.30
1	k	444	ARG	NE-CZ-NH1	12.19	126.40	120.30
1	M	674	ARG	NE-CZ-NH1	12.18	126.39	120.30
1	T	312	ARG	NE-CZ-NH1	12.18	126.39	120.30
1	q	487	TYR	CB-CG-CD1	12.17	128.30	121.00
1	a	108	ARG	NE-CZ-NH1	12.17	126.38	120.30
1	s	406	ARG	NE-CZ-NH2	-12.16	114.22	120.30
1	A	93	TYR	CB-CG-CD2	12.15	128.29	121.00
1	Q	357	ARG	NE-CZ-NH1	12.15	126.38	120.30
1	l	640	ARG	NE-CZ-NH2	-12.14	114.23	120.30
1	q	495	PHE	CB-CG-CD2	-12.14	112.30	120.80
1	X	349	PHE	CB-CG-CD1	-12.14	112.30	120.80
1	5	170	ARG	NE-CZ-NH1	12.13	126.37	120.30
1	2	483	TYR	CB-CG-CD1	-12.13	113.72	121.00
1	g	394	ARG	NE-CZ-NH2	-12.13	114.24	120.30
1	q	487	TYR	CB-CG-CD2	-12.13	113.72	121.00
1	j	690	ARG	NE-CZ-NH2	-12.12	114.24	120.30
1	n	174	ARG	NE-CZ-NH1	12.12	126.36	120.30
1	V	170	ARG	NE-CZ-NH2	12.12	126.36	120.30
1	l	356	PHE	CB-CG-CD1	-12.12	112.32	120.80
1	B	152	ARG	NE-CZ-NH1	12.12	126.36	120.30
1	s	170	ARG	NE-CZ-NH1	12.11	126.36	120.30
1	2	328	ARG	NE-CZ-NH1	12.10	126.35	120.30
1	y	498	TYR	CB-CG-CD2	-12.10	113.74	121.00
1	s	252	TYR	CB-CG-CD1	-12.10	113.74	121.00
1	f	444	ARG	NE-CZ-NH1	12.09	126.34	120.30
1	L	655	ARG	NE-CZ-NH2	-12.09	114.26	120.30
1	S	695	ARG	NE-CZ-NH2	-12.08	114.26	120.30
1	A	573	ARG	NE-CZ-NH2	-12.08	114.26	120.30
1	l	239	ARG	NE-CZ-NH1	12.07	126.34	120.30
1	t	394	ARG	NE-CZ-NH2	-12.07	114.26	120.30
1	e	572	PHE	CB-CG-CD2	12.07	129.25	120.80
1	L	239	ARG	NE-CZ-NH1	12.06	126.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	690	ARG	NE-CZ-NH1	12.06	126.33	120.30
1	L	487	TYR	CB-CG-CD2	-12.06	113.76	121.00
1	z	239	ARG	NE-CZ-NH1	12.06	126.33	120.30
1	g	405	ARG	NE-CZ-NH2	-12.06	114.27	120.30
1	t	231	ARG	NE-CZ-NH2	-12.05	114.28	120.30
1	b	585	TYR	CB-CG-CD1	-12.04	113.78	121.00
1	Y	98	ARG	NE-CZ-NH1	-12.04	114.28	120.30
1	q	444	ARG	NE-CZ-NH1	12.04	126.32	120.30
1	O	301	ARG	NE-CZ-NH2	-12.03	114.29	120.30
1	R	316	TYR	CB-CG-CD2	-12.03	113.78	121.00
1	X	449	ARG	NE-CZ-NH2	-12.02	114.29	120.30
1	c	373	ARG	NE-CZ-NH1	12.02	126.31	120.30
1	T	255	ARG	NE-CZ-NH1	12.02	126.31	120.30
1	l	350	PHE	CB-CG-CD2	-12.01	112.39	120.80
1	N	444	ARG	NE-CZ-NH1	12.01	126.31	120.30
1	s	449	ARG	NE-CZ-NH2	12.01	126.30	120.30
1	C	495	PHE	CB-CG-CD1	12.01	129.21	120.80
1	C	152	ARG	NE-CZ-NH1	12.00	126.30	120.30
1	S	357	ARG	NE-CZ-NH2	12.00	126.30	120.30
1	W	108	ARG	NE-CZ-NH1	12.00	126.30	120.30
1	D	655	ARG	NE-CZ-NH1	11.99	126.30	120.30
1	t	531	PHE	CB-CG-CD2	11.99	129.19	120.80
1	D	405	ARG	NE-CZ-NH1	11.99	126.30	120.30
1	e	255	ARG	NE-CZ-NH1	11.98	126.29	120.30
1	m	634	PHE	CB-CG-CD2	-11.96	112.42	120.80
1	Q	336	ARG	NE-CZ-NH2	-11.96	114.32	120.30
1	O	690	ARG	NE-CZ-NH2	-11.95	114.32	120.30
1	7	108	ARG	NE-CZ-NH1	11.95	126.27	120.30
1	F	269	ASP	CB-CG-OD2	11.94	129.04	118.30
1	u	357	ARG	NE-CZ-NH1	11.93	126.26	120.30
1	T	170	ARG	NE-CZ-NH1	11.92	126.26	120.30
1	0	531	PHE	CB-CG-CD2	11.91	129.14	120.80
1	w	145	ARG	NE-CZ-NH2	-11.91	114.35	120.30
1	u	170	ARG	NE-CZ-NH1	11.90	126.25	120.30
1	z	394	ARG	NE-CZ-NH1	11.89	126.25	120.30
1	T	690	ARG	NE-CZ-NH1	11.89	126.24	120.30
1	I	406	ARG	NE-CZ-NH2	-11.88	114.36	120.30
1	f	498	TYR	CB-CG-CD1	-11.88	113.87	121.00
1	C	239	ARG	NE-CZ-NH2	-11.87	114.37	120.30
1	K	703	ARG	NE-CZ-NH1	11.87	126.23	120.30
1	V	336	ARG	NE-CZ-NH1	11.87	126.23	120.30
1	v	152	ARG	NE-CZ-NH2	-11.86	114.37	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	633	TYR	CB-CG-CD1	-11.87	113.88	121.00
1	q	488	ARG	NE-CZ-NH1	11.86	126.23	120.30
1	e	336	ARG	NE-CZ-NH2	-11.85	114.37	120.30
1	E	328	ARG	NE-CZ-NH2	-11.85	114.38	120.30
1	Z	488	ARG	NE-CZ-NH1	11.85	126.23	120.30
1	v	689	ARG	NE-CZ-NH1	11.84	126.22	120.30
1	9	394	ARG	NE-CZ-NH1	11.84	126.22	120.30
1	v	573	ARG	NE-CZ-NH2	-11.84	114.38	120.30
1	t	674	ARG	NE-CZ-NH2	-11.82	114.39	120.30
1	h	406	ARG	NE-CZ-NH1	11.82	126.21	120.30
1	m	405	ARG	NE-CZ-NH1	11.81	126.21	120.30
1	2	655	ARG	NE-CZ-NH1	11.81	126.21	120.30
1	K	405	ARG	NE-CZ-NH1	11.81	126.20	120.30
1	A	697	TYR	CB-CG-CD1	11.80	128.08	121.00
1	e	336	ARG	NE-CZ-NH1	11.79	126.20	120.30
1	5	698	ARG	NE-CZ-NH1	11.79	126.20	120.30
1	J	405	ARG	NE-CZ-NH1	11.78	126.19	120.30
1	N	239	ARG	NE-CZ-NH2	-11.78	114.41	120.30
1	Q	349	PHE	CB-CG-CD2	11.78	129.04	120.80
1	e	655	ARG	NE-CZ-NH2	-11.77	114.42	120.30
1	n	406	ARG	NE-CZ-NH1	11.77	126.18	120.30
1	y	651	TYR	CB-CG-CD2	-11.77	113.94	121.00
1	i	145	ARG	NE-CZ-NH2	-11.76	114.42	120.30
1	n	312	ARG	NE-CZ-NH1	11.76	126.18	120.30
1	F	202	ARG	NE-CZ-NH2	-11.75	114.43	120.30
1	R	145	ARG	NE-CZ-NH2	-11.74	114.43	120.30
1	A	420	PHE	CB-CG-CD1	-11.74	112.58	120.80
1	g	647	PHE	CB-CG-CD1	-11.73	112.58	120.80
1	W	220	ASP	CB-CG-OD1	11.73	128.86	118.30
1	q	655	ARG	NE-CZ-NH1	11.72	126.16	120.30
1	m	255	ARG	NE-CZ-NH1	11.72	126.16	120.30
1	9	593	ARG	NE-CZ-NH2	-11.71	114.44	120.30
1	p	495	PHE	CB-CG-CD2	-11.71	112.60	120.80
1	v	355	TYR	CB-CG-CD1	-11.71	113.97	121.00
1	V	444	ARG	NE-CZ-NH1	11.71	126.15	120.30
1	p	406	ARG	NE-CZ-NH2	-11.70	114.45	120.30
1	M	269	ASP	CB-CG-OD2	11.69	128.82	118.30
1	3	458	PHE	CB-CG-CD1	11.69	128.98	120.80
1	C	255	ARG	NE-CZ-NH1	11.69	126.14	120.30
1	E	173	TYR	CB-CG-CD1	-11.68	113.99	121.00
1	t	406	ARG	NE-CZ-NH2	-11.68	114.46	120.30
1	y	698	ARG	NE-CZ-NH2	11.68	126.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	593	ARG	NE-CZ-NH1	11.68	126.14	120.30
1	t	703	ARG	NE-CZ-NH1	11.68	126.14	120.30
1	D	498	TYR	CB-CG-CD2	-11.68	113.99	121.00
1	m	170	ARG	NE-CZ-NH2	-11.66	114.47	120.30
1	E	373	ARG	NE-CZ-NH1	11.66	126.13	120.30
1	o	301	ARG	NE-CZ-NH1	11.66	126.13	120.30
1	t	451	TYR	CB-CG-CD1	11.65	127.99	121.00
1	F	675	TYR	CB-CG-CD1	-11.65	114.01	121.00
1	T	328	ARG	NE-CZ-NH2	-11.65	114.47	120.30
1	v	703	ARG	NE-CZ-NH1	11.65	126.12	120.30
1	8	98	ARG	NE-CZ-NH1	11.64	126.12	120.30
1	9	312	ARG	NE-CZ-NH1	11.64	126.12	120.30
1	V	674	ARG	NE-CZ-NH2	-11.64	114.48	120.30
1	x	675	TYR	CB-CG-CD1	-11.64	114.02	121.00
1	t	405	ARG	NE-CZ-NH1	11.64	126.12	120.30
1	n	357	ARG	NE-CZ-NH2	-11.63	114.48	120.30
1	2	336	ARG	NE-CZ-NH2	-11.63	114.49	120.30
1	Z	501	PHE	CB-CG-CD2	11.63	128.94	120.80
1	y	573	ARG	NE-CZ-NH1	11.62	126.11	120.30
1	P	488	ARG	NE-CZ-NH2	-11.61	114.49	120.30
1	o	152	ARG	NE-CZ-NH1	11.61	126.11	120.30
1	Z	170	ARG	NE-CZ-NH2	-11.61	114.50	120.30
1	J	202	ARG	NE-CZ-NH1	11.60	126.10	120.30
1	u	355	TYR	CB-CG-CD1	-11.58	114.05	121.00
1	C	145	ARG	NE-CZ-NH2	-11.58	114.51	120.30
1	L	174	ARG	NE-CZ-NH2	-11.57	114.51	120.30
1	s	355	TYR	CG-CD1-CE1	-11.57	112.04	121.30
1	y	444	ARG	NE-CZ-NH2	-11.57	114.51	120.30
1	Q	202	ARG	NE-CZ-NH2	-11.57	114.51	120.30
1	z	170	ARG	NE-CZ-NH1	11.55	126.08	120.30
1	j	174	ARG	NE-CZ-NH2	11.55	126.08	120.30
1	Z	231	ARG	NE-CZ-NH1	11.55	126.08	120.30
1	L	301	ARG	NE-CZ-NH1	11.55	126.08	120.30
1	4	449	ARG	NE-CZ-NH1	11.54	126.07	120.30
1	W	406	ARG	NE-CZ-NH2	-11.53	114.53	120.30
1	l	98	ARG	NE-CZ-NH1	11.53	126.07	120.30
1	E	695	ARG	NE-CZ-NH2	11.52	126.06	120.30
1	R	328	ARG	NE-CZ-NH1	11.52	126.06	120.30
1	j	690	ARG	NE-CZ-NH1	11.51	126.06	120.30
1	u	98	ARG	NE-CZ-NH2	-11.51	114.55	120.30
1	2	675	TYR	CB-CG-CD2	11.50	127.90	121.00
1	k	406	ARG	NE-CZ-NH1	11.50	126.05	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	n	579	PHE	CB-CG-CD2	11.49	128.84	120.80
1	Z	690	ARG	NE-CZ-NH2	-11.48	114.56	120.30
1	W	355	TYR	CB-CG-CD2	-11.48	114.11	121.00
1	U	336	ARG	NE-CZ-NH1	11.47	126.04	120.30
1	v	640	ARG	NE-CZ-NH2	-11.47	114.56	120.30
1	8	145	ARG	NE-CZ-NH1	11.47	126.03	120.30
1	3	145	ARG	NE-CZ-NH1	-11.46	114.57	120.30
1	Q	695	ARG	NE-CZ-NH2	-11.46	114.57	120.30
1	5	356	PHE	CB-CG-CD2	11.45	128.82	120.80
1	H	145	ARG	NE-CZ-NH1	11.45	126.03	120.30
1	R	406	ARG	NE-CZ-NH1	11.45	126.02	120.30
1	I	336	ARG	NH1-CZ-NH2	-11.44	106.82	119.40
1	s	239	ARG	NE-CZ-NH2	-11.44	114.58	120.30
1	u	369	ARG	NE-CZ-NH1	11.44	126.02	120.30
1	S	170	ARG	NE-CZ-NH1	11.44	126.02	120.30
1	P	690	ARG	NE-CZ-NH1	11.43	126.02	120.30
1	A	108	ARG	NE-CZ-NH1	11.43	126.01	120.30
1	D	698	ARG	NE-CZ-NH2	-11.43	114.59	120.30
1	i	429	PHE	CB-CG-CD1	11.41	128.79	120.80
1	a	255	ARG	NE-CZ-NH2	-11.41	114.59	120.30
1	S	508	TYR	CB-CG-CD1	-11.40	114.16	121.00
1	k	357	ARG	NE-CZ-NH1	11.40	126.00	120.30
1	l	689	ARG	NE-CZ-NH1	11.40	126.00	120.30
1	G	255	ARG	NE-CZ-NH2	-11.40	114.60	120.30
1	6	451	TYR	CB-CG-CD2	11.38	127.83	121.00
1	e	444	ARG	NE-CZ-NH2	-11.38	114.61	120.30
1	Q	287	ASP	CB-CG-OD2	11.38	128.54	118.30
1	G	98	ARG	NE-CZ-NH2	-11.37	114.61	120.30
1	9	300	ASP	CB-CG-OD1	11.37	128.53	118.30
1	q	328	ARG	NE-CZ-NH1	11.37	125.98	120.30
1	Z	501	PHE	CB-CG-CD1	-11.36	112.85	120.80
1	x	455	ARG	NE-CZ-NH1	11.36	125.98	120.30
1	l	356	PHE	CB-CG-CD2	11.35	128.75	120.80
1	6	690	ARG	NE-CZ-NH2	-11.35	114.62	120.30
1	t	543	PHE	CB-CG-CD1	11.34	128.74	120.80
1	9	640	ARG	NE-CZ-NH2	-11.34	114.63	120.30
1	D	231	ARG	NE-CZ-NH2	-11.33	114.63	120.30
1	9	698	ARG	NE-CZ-NH1	11.33	125.96	120.30
1	9	288	ARG	NE-CZ-NH1	11.32	125.96	120.30
1	f	508	TYR	CB-CG-CD2	-11.31	114.21	121.00
1	S	170	ARG	NE-CZ-NH2	-11.31	114.64	120.30
1	l	488	ARG	NE-CZ-NH1	11.31	125.95	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	t	451	TYR	CB-CG-CD2	-11.31	114.22	121.00
1	t	458	PHE	CB-CG-CD2	-11.31	112.88	120.80
1	K	255	ARG	NE-CZ-NH1	11.31	125.95	120.30
1	n	145	ARG	NE-CZ-NH1	11.30	125.95	120.30
1	k	328	ARG	NE-CZ-NH2	-11.29	114.66	120.30
1	j	170	ARG	NE-CZ-NH1	11.29	125.94	120.30
1	Q	483	TYR	CB-CG-CD2	-11.28	114.23	121.00
1	Q	695	ARG	NE-CZ-NH1	11.27	125.94	120.30
1	l	312	ARG	NE-CZ-NH1	11.27	125.94	120.30
1	o	444	ARG	NE-CZ-NH2	-11.26	114.67	120.30
1	E	405	ARG	NE-CZ-NH1	11.26	125.93	120.30
1	L	455	ARG	NE-CZ-NH2	11.25	125.92	120.30
1	l	357	ARG	NE-CZ-NH2	-11.24	114.68	120.30
1	9	350	PHE	CB-CG-CD2	-11.24	112.93	120.80
1	3	593	ARG	NE-CZ-NH1	11.23	125.92	120.30
1	H	455	ARG	NE-CZ-NH2	11.23	125.92	120.30
1	S	301	ARG	NE-CZ-NH2	-11.23	114.68	120.30
1	H	328	ARG	NE-CZ-NH2	-11.23	114.69	120.30
1	R	539	PHE	CB-CG-CD1	-11.22	112.94	120.80
1	o	655	ARG	NE-CZ-NH1	11.22	125.91	120.30
1	W	174	ARG	NE-CZ-NH1	11.22	125.91	120.30
1	a	202	ARG	NE-CZ-NH1	11.22	125.91	120.30
1	j	328	ARG	NE-CZ-NH1	11.22	125.91	120.30
1	P	173	TYR	CB-CG-CD1	-11.21	114.27	121.00
1	j	689	ARG	NE-CZ-NH1	-11.21	114.70	120.30
1	N	394	ARG	NE-CZ-NH1	11.20	125.90	120.30
1	i	655	ARG	NE-CZ-NH2	11.19	125.89	120.30
1	m	451	TYR	CB-CG-CD2	11.19	127.71	121.00
1	x	593	ARG	NE-CZ-NH1	11.19	125.89	120.30
1	v	336	ARG	NE-CZ-NH1	11.19	125.89	120.30
1	m	322	TYR	CB-CG-CD2	-11.18	114.29	121.00
1	y	145	ARG	NE-CZ-NH2	-11.18	114.71	120.30
1	l	312	ARG	NE-CZ-NH1	11.18	125.89	120.30
1	d	695	ARG	NE-CZ-NH2	11.18	125.89	120.30
1	y	336	ARG	NE-CZ-NH1	11.18	125.89	120.30
1	d	674	ARG	NE-CZ-NH1	11.17	125.88	120.30
1	p	483	TYR	CB-CG-CD2	-11.16	114.30	121.00
1	g	170	ARG	NE-CZ-NH1	11.16	125.88	120.30
1	o	652	PHE	CB-CG-CD1	-11.16	112.99	120.80
1	H	488	ARG	NE-CZ-NH2	-11.16	114.72	120.30
1	r	508	TYR	CB-CG-CD2	-11.16	114.30	121.00
1	J	674	ARG	NE-CZ-NH2	-11.15	114.72	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	T	288	ARG	NE-CZ-NH2	11.15	125.88	120.30
1	O	357	ARG	NE-CZ-NH2	-11.15	114.73	120.30
1	K	355	TYR	CB-CG-CD1	11.14	127.68	121.00
1	R	449	ARG	NE-CZ-NH2	11.13	125.86	120.30
1	H	355	TYR	CB-CG-CD1	-11.13	114.32	121.00
1	U	573	ARG	NE-CZ-NH2	-11.12	114.74	120.30
1	s	405	ARG	NE-CZ-NH1	11.12	125.86	120.30
1	H	355	TYR	CB-CG-CD2	11.12	127.67	121.00
1	k	674	ARG	NE-CZ-NH1	11.12	125.86	120.30
1	P	350	PHE	CB-CG-CD1	11.12	128.58	120.80
1	a	597	PHE	CB-CG-CD2	-11.12	113.02	120.80
1	B	690	ARG	NE-CZ-NH1	11.11	125.86	120.30
1	W	449	ARG	NE-CZ-NH1	11.12	125.86	120.30
1	j	301	ARG	NE-CZ-NH1	11.11	125.86	120.30
1	A	531	PHE	CB-CG-CD1	11.11	128.58	120.80
1	l	406	ARG	NE-CZ-NH1	11.11	125.85	120.30
1	m	647	PHE	CB-CG-CD1	11.10	128.57	120.80
1	r	357	ARG	NE-CZ-NH1	11.09	125.85	120.30
1	H	410	ASP	CB-CG-OD2	11.09	128.28	118.30
1	3	539	PHE	CB-CG-CD1	-11.09	113.04	120.80
1	z	488	ARG	NE-CZ-NH2	-11.08	114.76	120.30
1	v	697	TYR	CB-CG-CD1	-11.07	114.36	121.00
1	M	173	TYR	CB-CG-CD2	11.07	127.64	121.00
1	P	651	TYR	CG-CD2-CE2	-11.06	112.45	121.30
1	3	349	PHE	CB-CG-CD1	-11.06	113.06	120.80
1	P	174	ARG	NE-CZ-NH1	11.05	125.83	120.30
1	4	357	ARG	NE-CZ-NH2	-11.05	114.78	120.30
1	u	458	PHE	CB-CG-CD1	11.05	128.53	120.80
1	o	202	ARG	NE-CZ-NH1	11.05	125.82	120.30
1	R	585	TYR	CB-CG-CD1	-11.04	114.37	121.00
1	D	301	ARG	NE-CZ-NH1	11.04	125.82	120.30
1	M	689	ARG	NE-CZ-NH2	-11.04	114.78	120.30
1	r	394	ARG	NE-CZ-NH1	11.04	125.82	120.30
1	f	640	ARG	NE-CZ-NH2	-11.03	114.78	120.30
1	G	455	ARG	NE-CZ-NH1	11.03	125.82	120.30
1	g	93	TYR	CB-CG-CD1	-11.02	114.39	121.00
1	Q	373	ARG	NE-CZ-NH2	-11.02	114.79	120.30
1	V	689	ARG	NE-CZ-NH2	11.02	125.81	120.30
1	H	449	ARG	NE-CZ-NH1	11.01	125.80	120.30
1	F	369	ARG	NE-CZ-NH1	11.00	125.80	120.30
1	A	573	ARG	NE-CZ-NH1	11.00	125.80	120.30
1	X	593	ARG	NE-CZ-NH2	-10.99	114.80	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	690	ARG	NE-CZ-NH2	-10.99	114.81	120.30
1	R	455	ARG	NE-CZ-NH1	10.99	125.80	120.30
1	b	288	ARG	NE-CZ-NH1	10.99	125.79	120.30
1	M	170	ARG	NE-CZ-NH1	10.99	125.79	120.30
1	a	357	ARG	NE-CZ-NH2	-10.98	114.81	120.30
1	a	573	ARG	NE-CZ-NH2	-10.98	114.81	120.30
1	B	429	PHE	CB-CG-CD1	10.98	128.48	120.80
1	P	675	TYR	CB-CG-CD2	-10.98	114.41	121.00
1	y	174	ARG	NE-CZ-NH1	10.97	125.79	120.30
1	F	698	ARG	NE-CZ-NH2	-10.97	114.81	120.30
1	E	93	TYR	CB-CG-CD1	10.96	127.58	121.00
1	l	152	ARG	NE-CZ-NH1	10.95	125.78	120.30
1	g	689	ARG	NE-CZ-NH1	10.95	125.78	120.30
1	c	640	ARG	NE-CZ-NH2	-10.95	114.82	120.30
1	i	405	ARG	NE-CZ-NH2	-10.95	114.82	120.30
1	Q	231	ARG	NE-CZ-NH1	10.95	125.78	120.30
1	P	449	ARG	NE-CZ-NH2	-10.93	114.84	120.30
1	k	640	ARG	NE-CZ-NH1	10.93	125.76	120.30
1	T	312	ARG	NE-CZ-NH2	-10.93	114.84	120.30
1	S	455	ARG	NE-CZ-NH1	10.92	125.76	120.30
1	J	444	ARG	NE-CZ-NH1	10.92	125.76	120.30
1	H	301	ARG	NE-CZ-NH1	10.92	125.76	120.30
1	z	455	ARG	NE-CZ-NH1	10.91	125.75	120.30
1	6	449	ARG	NE-CZ-NH1	10.91	125.75	120.30
1	e	288	ARG	NE-CZ-NH1	10.90	125.75	120.30
1	A	394	ARG	NE-CZ-NH1	10.90	125.75	120.30
1	8	231	ARG	NE-CZ-NH2	-10.89	114.86	120.30
1	M	239	ARG	NE-CZ-NH1	10.89	125.74	120.30
1	g	231	ARG	NE-CZ-NH2	-10.88	114.86	120.30
1	g	634	PHE	CB-CG-CD2	-10.88	113.19	120.80
1	m	394	ARG	NE-CZ-NH1	10.87	125.74	120.30
1	F	145	ARG	NH1-CZ-NH2	-10.87	107.44	119.40
1	c	689	ARG	NH1-CZ-NH2	-10.87	107.44	119.40
1	d	405	ARG	NE-CZ-NH2	-10.87	114.87	120.30
1	0	288	ARG	NE-CZ-NH1	10.86	125.73	120.30
1	v	488	ARG	NE-CZ-NH2	-10.86	114.87	120.30
1	p	239	ARG	NE-CZ-NH2	-10.86	114.87	120.30
1	R	697	TYR	CB-CG-CD2	10.86	127.51	121.00
1	D	312	ARG	NE-CZ-NH2	10.85	125.72	120.30
1	R	170	ARG	NE-CZ-NH2	-10.85	114.88	120.30
1	I	239	ARG	NE-CZ-NH1	10.84	125.72	120.30
1	X	357	ARG	NE-CZ-NH2	-10.84	114.88	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	508	TYR	CB-CG-CD1	-10.84	114.50	121.00
1	o	444	ARG	NE-CZ-NH1	10.84	125.72	120.30
1	z	410	ASP	CB-CG-OD2	10.84	128.05	118.30
1	l	301	ARG	NE-CZ-NH1	10.83	125.72	120.30
1	x	170	ARG	NE-CZ-NH2	-10.83	114.89	120.30
1	C	698	ARG	NE-CZ-NH1	10.83	125.71	120.30
1	Z	231	ARG	NE-CZ-NH2	-10.83	114.89	120.30
1	p	429	PHE	CB-CG-CD2	10.82	128.37	120.80
1	D	633	TYR	CB-CG-CD1	-10.82	114.51	121.00
1	G	108	ARG	NE-CZ-NH2	-10.82	114.89	120.30
1	q	543	PHE	CB-CG-CD1	10.82	128.37	120.80
1	0	640	ARG	NE-CZ-NH2	10.81	125.70	120.30
1	5	690	ARG	NE-CZ-NH2	-10.81	114.90	120.30
1	8	444	ARG	NE-CZ-NH1	10.81	125.70	120.30
1	f	698	ARG	NE-CZ-NH2	-10.81	114.90	120.30
1	0	655	ARG	NE-CZ-NH2	10.80	125.70	120.30
1	m	231	ARG	NE-CZ-NH1	10.80	125.70	120.30
1	g	542	PHE	CB-CG-CD1	-10.80	113.24	120.80
1	4	429	PHE	CB-CG-CD2	-10.79	113.24	120.80
1	j	458	PHE	CB-CG-CD1	10.79	128.36	120.80
1	o	174	ARG	NE-CZ-NH1	10.79	125.69	120.30
1	C	357	ARG	NE-CZ-NH1	10.79	125.69	120.30
1	A	170	ARG	NE-CZ-NH1	10.78	125.69	120.30
1	K	394	ARG	NE-CZ-NH1	10.78	125.69	120.30
1	K	316	TYR	CB-CG-CD1	10.77	127.46	121.00
1	t	173	TYR	CB-CG-CD2	-10.76	114.55	121.00
1	R	674	ARG	NE-CZ-NH1	10.76	125.68	120.30
1	y	255	ARG	NE-CZ-NH2	-10.73	114.93	120.30
1	U	255	ARG	NE-CZ-NH2	-10.73	114.94	120.30
1	O	105	ASP	CB-CG-OD2	-10.72	108.65	118.30
1	f	655	ARG	NE-CZ-NH2	-10.72	114.94	120.30
1	R	145	ARG	NE-CZ-NH1	10.72	125.66	120.30
1	h	373	ARG	NE-CZ-NH2	-10.72	114.94	120.30
1	T	239	ARG	NE-CZ-NH1	10.72	125.66	120.30
1	A	690	ARG	NE-CZ-NH1	10.71	125.65	120.30
1	2	597	PHE	CB-CG-CD1	-10.70	113.31	120.80
1	E	202	ARG	NE-CZ-NH1	10.70	125.65	120.30
1	T	394	ARG	NE-CZ-NH1	10.70	125.65	120.30
1	j	240	ASP	CB-CG-OD1	10.69	127.92	118.30
1	c	674	ARG	NE-CZ-NH1	10.68	125.64	120.30
1	4	640	ARG	NE-CZ-NH2	-10.67	114.96	120.30
1	a	483	TYR	CB-CG-CD2	-10.67	114.60	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	170	ARG	NE-CZ-NH2	-10.66	114.97	120.30
1	2	98	ARG	NE-CZ-NH1	10.66	125.63	120.30
1	t	444	ARG	NE-CZ-NH2	10.66	125.63	120.30
1	v	369	ARG	NE-CZ-NH2	10.66	125.63	120.30
1	3	488	ARG	NE-CZ-NH2	-10.65	114.97	120.30
1	i	698	ARG	NE-CZ-NH2	-10.65	114.97	120.30
1	u	328	ARG	NE-CZ-NH2	-10.65	114.97	120.30
1	P	350	PHE	CB-CG-CD2	-10.65	113.35	120.80
1	9	498	TYR	CB-CG-CD2	-10.64	114.61	121.00
1	k	652	PHE	CB-CG-CD1	10.64	128.25	120.80
1	5	405	ARG	NE-CZ-NH2	-10.64	114.98	120.30
1	g	689	ARG	NE-CZ-NH2	-10.64	114.98	120.30
1	z	174	ARG	NE-CZ-NH2	10.64	125.62	120.30
1	b	394	ARG	NE-CZ-NH2	-10.62	114.99	120.30
1	S	405	ARG	NE-CZ-NH2	-10.62	114.99	120.30
1	2	634	PHE	CB-CG-CD2	-10.61	113.37	120.80
1	6	488	ARG	NE-CZ-NH2	-10.61	114.99	120.30
1	2	495	PHE	CB-CG-CD2	-10.60	113.38	120.80
1	X	239	ARG	NE-CZ-NH2	-10.60	115.00	120.30
1	H	152	ARG	NE-CZ-NH1	10.60	125.60	120.30
1	S	373	ARG	NE-CZ-NH2	-10.59	115.00	120.30
1	q	336	ARG	NE-CZ-NH2	-10.58	115.01	120.30
1	d	350	PHE	CB-CG-CD1	10.58	128.20	120.80
1	a	98	ARG	NE-CZ-NH1	10.57	125.59	120.30
1	l	495	PHE	CB-CG-CD2	-10.57	113.40	120.80
1	H	674	ARG	NE-CZ-NH2	10.57	125.58	120.30
1	Y	328	ARG	NE-CZ-NH1	10.56	125.58	120.30
1	U	593	ARG	NE-CZ-NH1	10.56	125.58	120.30
1	o	674	ARG	NE-CZ-NH1	10.54	125.57	120.30
1	1	690	ARG	NH1-CZ-NH2	-10.53	107.81	119.40
1	2	597	PHE	CB-CG-CD2	10.53	128.17	120.80
1	r	487	TYR	CB-CG-CD1	-10.53	114.68	121.00
1	b	357	ARG	NE-CZ-NH2	-10.52	115.04	120.30
1	n	98	ARG	NE-CZ-NH1	10.52	125.56	120.30
1	z	444	ARG	NE-CZ-NH1	10.52	125.56	120.30
1	w	501	PHE	CB-CG-CD1	-10.52	113.44	120.80
1	I	585	TYR	CB-CG-CD2	-10.51	114.69	121.00
1	8	239	ARG	NE-CZ-NH1	10.51	125.55	120.30
1	c	174	ARG	NH1-CZ-NH2	-10.50	107.85	119.40
1	o	231	ARG	NE-CZ-NH2	-10.50	115.05	120.30
1	N	373	ARG	NE-CZ-NH2	10.50	125.55	120.30
1	A	152	ARG	NE-CZ-NH2	10.49	125.55	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	593	ARG	NH1-CZ-NH2	-10.49	107.86	119.40
1	5	369	ARG	NE-CZ-NH1	-10.49	115.06	120.30
1	r	394	ARG	NE-CZ-NH2	-10.49	115.06	120.30
1	Z	173	TYR	CB-CG-CD2	-10.48	114.71	121.00
1	s	421	PHE	CB-CG-CD1	-10.48	113.47	120.80
1	9	231	ARG	NE-CZ-NH1	-10.46	115.07	120.30
1	d	573	ARG	NE-CZ-NH1	10.46	125.53	120.30
1	S	355	TYR	CB-CG-CD2	-10.46	114.72	121.00
1	3	623	PHE	CB-CG-CD1	10.46	128.12	120.80
1	T	689	ARG	NE-CZ-NH1	10.45	125.53	120.30
1	h	98	ARG	NE-CZ-NH2	-10.45	115.08	120.30
1	l	420	PHE	CB-CG-CD1	10.44	128.11	120.80
1	4	585	TYR	CB-CG-CD1	-10.44	114.73	121.00
1	g	240	ASP	CB-CG-OD1	10.44	127.70	118.30
1	M	373	ARG	NE-CZ-NH1	10.44	125.52	120.30
1	b	488	ARG	NE-CZ-NH1	-10.44	115.08	120.30
1	T	531	PHE	CB-CG-CD1	10.43	128.10	120.80
1	E	328	ARG	NE-CZ-NH1	10.43	125.52	120.30
1	9	406	ARG	NE-CZ-NH1	10.43	125.52	120.30
1	N	690	ARG	NE-CZ-NH1	10.43	125.51	120.30
1	j	145	ARG	NE-CZ-NH2	-10.42	115.09	120.30
1	U	689	ARG	NE-CZ-NH1	10.41	125.51	120.30
1	k	703	ARG	NE-CZ-NH2	10.40	125.50	120.30
1	P	202	ARG	NE-CZ-NH1	10.40	125.50	120.30
1	K	357	ARG	NE-CZ-NH2	-10.40	115.10	120.30
1	l	357	ARG	NE-CZ-NH2	-10.40	115.10	120.30
1	o	675	TYR	CB-CG-CD2	-10.40	114.76	121.00
1	r	531	PHE	CB-CG-CD2	10.39	128.07	120.80
1	r	674	ARG	NE-CZ-NH1	-10.38	115.11	120.30
1	S	349	PHE	CB-CG-CD1	10.38	128.07	120.80
1	L	174	ARG	NE-CZ-NH1	10.38	125.49	120.30
1	9	239	ARG	NE-CZ-NH1	10.38	125.49	120.30
1	y	698	ARG	NH1-CZ-NH2	-10.38	107.99	119.40
1	z	405	ARG	NE-CZ-NH1	10.37	125.49	120.30
1	B	531	PHE	CB-CG-CD1	-10.37	113.54	120.80
1	l	539	PHE	CB-CG-CD1	-10.37	113.55	120.80
1	A	98	ARG	NE-CZ-NH2	-10.37	115.12	120.30
1	z	488	ARG	NE-CZ-NH1	10.36	125.48	120.30
1	n	455	ARG	NE-CZ-NH2	-10.36	115.12	120.30
1	o	288	ARG	NH1-CZ-NH2	-10.35	108.01	119.40
1	y	355	TYR	CB-CG-CD2	10.35	127.21	121.00
1	F	406	ARG	NE-CZ-NH2	-10.34	115.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	695	ARG	NE-CZ-NH2	-10.34	115.13	120.30
1	3	633	TYR	CB-CG-CD1	-10.33	114.80	121.00
1	3	633	TYR	CB-CG-CD2	10.33	127.20	121.00
1	b	202	ARG	NE-CZ-NH2	-10.33	115.13	120.30
1	p	174	ARG	NE-CZ-NH1	10.33	125.47	120.30
1	u	255	ARG	NE-CZ-NH1	10.33	125.47	120.30
1	W	483	TYR	CB-CG-CD2	-10.33	114.80	121.00
1	Q	444	ARG	NE-CZ-NH2	-10.32	115.14	120.30
1	c	357	ARG	NE-CZ-NH1	10.32	125.46	120.30
1	t	202	ARG	NE-CZ-NH2	-10.32	115.14	120.30
1	Y	288	ARG	NE-CZ-NH1	10.31	125.45	120.30
1	Z	675	TYR	CB-CG-CD1	-10.31	114.81	121.00
1	A	173	TYR	CB-CG-CD2	10.31	127.18	121.00
1	I	394	ARG	NE-CZ-NH2	-10.31	115.15	120.30
1	B	429	PHE	CB-CG-CD2	-10.29	113.59	120.80
1	F	655	ARG	NE-CZ-NH2	-10.29	115.15	120.30
1	j	697	TYR	CB-CG-CD1	-10.29	114.83	121.00
1	4	674	ARG	NE-CZ-NH2	-10.29	115.16	120.30
1	O	394	ARG	NE-CZ-NH1	10.29	125.44	120.30
1	Q	455	ARG	NE-CZ-NH1	10.29	125.44	120.30
1	M	312	ARG	NE-CZ-NH1	10.28	125.44	120.30
1	X	202	ARG	NE-CZ-NH1	10.28	125.44	120.30
1	j	255	ARG	NE-CZ-NH1	10.28	125.44	120.30
1	n	572	PHE	CB-CG-CD1	-10.28	113.61	120.80
1	z	336	ARG	NE-CZ-NH2	-10.28	115.16	120.30
1	S	655	ARG	NE-CZ-NH2	10.27	125.44	120.30
1	D	373	ARG	NE-CZ-NH2	-10.27	115.16	120.30
1	6	174	ARG	NE-CZ-NH2	-10.27	115.17	120.30
1	D	444	ARG	NE-CZ-NH2	-10.26	115.17	120.30
1	x	369	ARG	NE-CZ-NH2	-10.26	115.17	120.30
1	3	674	ARG	NE-CZ-NH1	10.26	125.43	120.30
1	g	301	ARG	NE-CZ-NH1	10.26	125.43	120.30
1	G	322	TYR	CB-CG-CD1	10.26	127.16	121.00
1	v	316	TYR	CB-CG-CD2	-10.26	114.85	121.00
1	b	152	ARG	NE-CZ-NH1	10.25	125.43	120.30
1	u	633	TYR	CB-CG-CD2	10.25	127.15	121.00
1	U	322	TYR	CG-CD1-CE1	-10.25	113.10	121.30
1	r	328	ARG	NE-CZ-NH2	-10.24	115.18	120.30
1	d	145	ARG	NH1-CZ-NH2	-10.24	108.13	119.40
1	f	98	ARG	NH1-CZ-NH2	-10.24	108.13	119.40
1	l	695	ARG	NE-CZ-NH2	-10.24	115.18	120.30
1	j	202	ARG	NE-CZ-NH2	-10.24	115.18	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	350	PHE	CB-CG-CD2	10.24	127.97	120.80
1	q	173	TYR	CB-CG-CD2	10.24	127.14	121.00
1	T	531	PHE	CB-CG-CD2	-10.24	113.63	120.80
1	D	202	ARG	NE-CZ-NH1	10.23	125.42	120.30
1	w	647	PHE	CB-CG-CD1	-10.22	113.64	120.80
1	E	623	PHE	CB-CG-CD2	10.22	127.95	120.80
1	j	498	TYR	CB-CG-CD2	10.22	127.13	121.00
1	E	239	ARG	NE-CZ-NH2	-10.22	115.19	120.30
1	t	429	PHE	CB-CG-CD1	10.21	127.95	120.80
1	B	652	PHE	CB-CG-CD1	10.21	127.95	120.80
1	t	336	ARG	NE-CZ-NH1	10.21	125.41	120.30
1	W	231	ARG	NE-CZ-NH1	10.21	125.40	120.30
1	Q	349	PHE	CB-CG-CD1	-10.21	113.66	120.80
1	G	647	PHE	CB-CG-CD2	10.19	127.93	120.80
1	i	373	ARG	NE-CZ-NH1	10.18	125.39	120.30
1	m	336	ARG	NE-CZ-NH2	-10.18	115.21	120.30
1	O	689	ARG	NE-CZ-NH2	-10.18	115.21	120.30
1	z	695	ARG	NE-CZ-NH2	-10.18	115.21	120.30
1	9	255	ARG	NE-CZ-NH2	-10.17	115.22	120.30
1	j	531	PHE	CB-CG-CD2	10.17	127.92	120.80
1	E	152	ARG	NE-CZ-NH1	10.16	125.38	120.30
1	6	410	ASP	CB-CG-OD1	10.16	127.44	118.30
1	t	288	ARG	NE-CZ-NH2	10.16	125.38	120.30
1	l	350	PHE	CB-CG-CD1	10.15	127.91	120.80
1	w	655	ARG	NE-CZ-NH2	-10.15	115.22	120.30
1	2	369	ARG	NE-CZ-NH2	10.15	125.38	120.30
1	h	255	ARG	NE-CZ-NH2	-10.15	115.23	120.30
1	f	170	ARG	NE-CZ-NH1	10.14	125.37	120.30
1	o	235	ASP	CB-CG-OD1	10.14	127.43	118.30
1	i	303	THR	CA-CB-CG2	-10.14	98.20	112.40
1	Y	349	PHE	CB-CG-CD1	-10.14	113.70	120.80
1	E	444	ARG	NE-CZ-NH2	-10.14	115.23	120.30
1	2	695	ARG	NE-CZ-NH1	10.14	125.37	120.30
1	S	640	ARG	NE-CZ-NH2	-10.14	115.23	120.30
1	N	640	ARG	NE-CZ-NH1	10.13	125.37	120.30
1	6	373	ARG	NE-CZ-NH2	-10.12	115.24	120.30
1	T	488	ARG	NE-CZ-NH2	-10.12	115.24	120.30
1	d	231	ARG	NE-CZ-NH1	10.12	125.36	120.30
1	J	573	ARG	NE-CZ-NH1	10.11	125.36	120.30
1	a	202	ARG	NE-CZ-NH2	-10.11	115.25	120.30
1	0	420	PHE	CB-CG-CD1	10.11	127.87	120.80
1	d	593	ARG	NE-CZ-NH2	10.11	125.35	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	l	633	TYR	CB-CG-CD2	10.11	127.06	121.00
1	R	288	ARG	NE-CZ-NH1	10.10	125.35	120.30
1	l	410	ASP	CB-CG-OD2	-10.10	109.21	118.30
1	y	539	PHE	CB-CG-CD2	-10.10	113.73	120.80
1	H	593	ARG	NE-CZ-NH2	10.10	125.35	120.30
1	m	239	ARG	NE-CZ-NH2	-10.09	115.26	120.30
1	i	690	ARG	NE-CZ-NH1	10.08	125.34	120.30
1	o	108	ARG	NE-CZ-NH1	10.08	125.34	120.30
1	R	197	MET	CG-SD-CE	-10.08	84.08	100.20
1	Y	231	ARG	NE-CZ-NH1	10.08	125.34	120.30
1	6	98	ARG	NE-CZ-NH2	-10.07	115.27	120.30
1	i	152	ARG	NE-CZ-NH1	10.06	125.33	120.30
1	a	98	ARG	NE-CZ-NH2	-10.05	115.27	120.30
1	Q	593	ARG	NE-CZ-NH2	-10.06	115.27	120.30
1	I	336	ARG	NE-CZ-NH2	10.05	125.33	120.30
1	8	655	ARG	NE-CZ-NH1	10.05	125.33	120.30
1	t	312	ARG	NE-CZ-NH2	-10.05	115.28	120.30
1	V	449	ARG	NE-CZ-NH2	-10.05	115.28	120.30
1	f	202	ARG	NE-CZ-NH2	-10.04	115.28	120.30
1	m	152	ARG	NE-CZ-NH1	10.04	125.32	120.30
1	I	488	ARG	NE-CZ-NH2	-10.04	115.28	120.30
1	h	444	ARG	NE-CZ-NH1	10.04	125.32	120.30
1	i	449	ARG	NE-CZ-NH2	-10.04	115.28	120.30
1	l	394	ARG	NE-CZ-NH2	10.03	125.31	120.30
1	S	640	ARG	NE-CZ-NH1	10.03	125.32	120.30
1	i	406	ARG	NE-CZ-NH1	10.03	125.31	120.30
1	A	622	SER	N-CA-CB	10.03	125.54	110.50
1	a	220	ASP	CB-CG-OD1	10.03	127.32	118.30
1	7	336	ARG	NE-CZ-NH1	10.02	125.31	120.30
1	E	312	ARG	NE-CZ-NH1	10.02	125.31	120.30
1	A	373	ARG	NE-CZ-NH1	10.01	125.30	120.30
1	r	709	PHE	CB-CG-CD1	-10.01	113.80	120.80
1	w	108	ARG	NE-CZ-NH1	10.00	125.30	120.30
1	7	322	TYR	CB-CG-CD1	-9.99	115.00	121.00
1	j	373	ARG	NE-CZ-NH1	-9.98	115.31	120.30
1	2	255	ARG	NE-CZ-NH2	-9.98	115.31	120.30
1	e	689	ARG	NE-CZ-NH1	9.98	125.29	120.30
1	t	695	ARG	NH1-CZ-NH2	-9.98	108.42	119.40
1	B	231	ARG	NE-CZ-NH1	9.98	125.29	120.30
1	4	308	MET	CG-SD-CE	-9.97	84.24	100.20
1	o	623	PHE	CB-CG-CD2	9.97	127.78	120.80
1	D	252	TYR	CB-CG-CD2	9.97	126.98	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	483	TYR	CB-CG-CD2	-9.96	115.02	121.00
1	D	593	ARG	NH1-CZ-NH2	-9.96	108.44	119.40
1	w	455	ARG	NE-CZ-NH1	9.96	125.28	120.30
1	R	173	TYR	CB-CG-CD1	-9.96	115.03	121.00
1	J	508	TYR	CB-CG-CD1	-9.95	115.03	121.00
1	0	444	ARG	NH1-CZ-NH2	-9.95	108.45	119.40
1	B	655	ARG	NE-CZ-NH2	-9.95	115.33	120.30
1	k	239	ARG	NE-CZ-NH1	9.95	125.27	120.30
1	f	312	ARG	NH1-CZ-NH2	-9.95	108.46	119.40
1	l	255	ARG	NE-CZ-NH2	-9.95	115.33	120.30
1	3	652	PHE	CB-CG-CD2	9.94	127.76	120.80
1	V	405	ARG	NE-CZ-NH2	9.94	125.27	120.30
1	B	483	TYR	CB-CG-CD1	9.93	126.96	121.00
1	8	220	ASP	CB-CG-OD2	9.93	127.24	118.30
1	I	108	ARG	NE-CZ-NH1	9.93	125.26	120.30
1	K	355	TYR	CB-CG-CD2	-9.93	115.05	121.00
1	H	695	ARG	NE-CZ-NH2	-9.92	115.34	120.30
1	Q	640	ARG	NE-CZ-NH1	9.92	125.26	120.30
1	h	108	ARG	NE-CZ-NH2	-9.91	115.34	120.30
1	B	98	ARG	NE-CZ-NH1	9.91	125.26	120.30
1	I	231	ARG	NE-CZ-NH1	9.91	125.26	120.30
1	R	297	ASP	CB-CG-OD1	9.91	127.22	118.30
1	L	640	ARG	NE-CZ-NH2	-9.91	115.34	120.30
1	K	301	ARG	NE-CZ-NH1	9.90	125.25	120.30
1	n	231	ARG	NE-CZ-NH2	-9.89	115.35	120.30
1	i	406	ARG	NE-CZ-NH2	-9.89	115.36	120.30
1	V	698	ARG	NE-CZ-NH1	9.89	125.25	120.30
1	9	308	MET	CG-SD-CE	-9.89	84.38	100.20
1	0	152	ARG	NE-CZ-NH1	9.89	125.24	120.30
1	n	394	ARG	NE-CZ-NH1	-9.89	115.36	120.30
1	A	501	PHE	CB-CG-CD2	9.89	127.72	120.80
1	g	108	ARG	NE-CZ-NH2	-9.88	115.36	120.30
1	v	255	ARG	NE-CZ-NH1	-9.88	115.36	120.30
1	V	328	ARG	NE-CZ-NH2	-9.87	115.37	120.30
1	A	406	ARG	NE-CZ-NH1	9.87	125.23	120.30
1	4	703	ARG	NE-CZ-NH2	9.86	125.23	120.30
1	o	487	TYR	CB-CG-CD2	9.86	126.92	121.00
1	Q	406	ARG	NE-CZ-NH1	9.86	125.23	120.30
1	V	312	ARG	NE-CZ-NH1	9.86	125.23	120.30
1	V	355	TYR	CB-CG-CD2	9.86	126.92	121.00
1	s	373	ARG	NE-CZ-NH2	-9.85	115.37	120.30
1	L	690	ARG	NE-CZ-NH2	9.85	125.23	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	633	TYR	CB-CG-CD1	-9.85	115.09	121.00
1	b	373	ARG	NE-CZ-NH2	9.85	125.22	120.30
1	q	695	ARG	NE-CZ-NH2	-9.84	115.38	120.30
1	w	488	ARG	NE-CZ-NH2	-9.84	115.38	120.30
1	q	432	ASP	CB-CG-OD2	9.83	127.15	118.30
1	y	695	ARG	NE-CZ-NH1	9.83	125.22	120.30
1	s	623	PHE	CB-CG-CD1	9.83	127.68	120.80
1	I	288	ARG	NE-CZ-NH2	9.83	125.22	120.30
1	l	695	ARG	NE-CZ-NH1	9.83	125.21	120.30
1	l	647	PHE	CB-CG-CD2	-9.81	113.93	120.80
1	Y	174	ARG	NE-CZ-NH2	9.81	125.21	120.30
1	y	301	ARG	NE-CZ-NH1	9.81	125.20	120.30
1	I	488	ARG	NE-CZ-NH1	9.80	125.20	120.30
1	J	355	TYR	CB-CG-CD1	9.80	126.88	121.00
1	W	573	ARG	NE-CZ-NH1	9.80	125.20	120.30
1	D	288	ARG	NE-CZ-NH1	-9.80	115.40	120.30
1	i	451	TYR	CB-CG-CD1	9.79	126.88	121.00
1	V	647	PHE	CB-CG-CD1	-9.79	113.94	120.80
1	5	488	ARG	NE-CZ-NH2	-9.79	115.40	120.30
1	m	585	TYR	CB-CG-CD1	9.79	126.88	121.00
1	A	406	ARG	NE-CZ-NH2	-9.79	115.40	120.30
1	U	455	ARG	NE-CZ-NH2	-9.79	115.41	120.30
1	u	312	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	7	698	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	8	356	PHE	CB-CG-CD2	9.78	127.65	120.80
1	5	231	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	e	170	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	d	108	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	o	487	TYR	CB-CG-CD1	-9.78	115.13	121.00
1	d	170	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	D	255	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	d	458	PHE	CB-CG-CD1	9.77	127.64	120.80
1	j	406	ARG	NE-CZ-NH1	9.77	125.19	120.30
1	G	373	ARG	NE-CZ-NH1	9.77	125.19	120.30
1	C	483	TYR	CB-CG-CD2	-9.77	115.14	121.00
1	0	640	ARG	NH1-CZ-NH2	-9.76	108.67	119.40
1	4	174	ARG	NE-CZ-NH1	9.76	125.18	120.30
1	l	231	ARG	NE-CZ-NH2	-9.76	115.42	120.30
1	Q	202	ARG	NE-CZ-NH1	9.76	125.18	120.30
1	u	675	TYR	CB-CG-CD1	9.75	126.85	121.00
1	z	655	ARG	NE-CZ-NH1	9.75	125.18	120.30
1	t	369	ARG	NE-CZ-NH1	9.75	125.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	j	451	TYR	CB-CG-CD1	-9.75	115.15	121.00
1	P	597	PHE	CB-CG-CD1	-9.74	113.98	120.80
1	F	336	ARG	NE-CZ-NH1	9.74	125.17	120.30
1	u	675	TYR	CB-CG-CD2	-9.73	115.16	121.00
1	n	640	ARG	NE-CZ-NH2	-9.72	115.44	120.30
1	X	328	ARG	NH1-CZ-NH2	-9.71	108.71	119.40
1	F	288	ARG	NH1-CZ-NH2	-9.71	108.72	119.40
1	d	373	ARG	NE-CZ-NH2	-9.71	115.44	120.30
1	A	231	ARG	NE-CZ-NH2	9.71	125.16	120.30
1	K	357	ARG	NE-CZ-NH1	9.71	125.15	120.30
1	f	336	ARG	NE-CZ-NH2	-9.71	115.45	120.30
1	S	406	ARG	NE-CZ-NH1	9.70	125.15	120.30
1	e	369	ARG	NE-CZ-NH1	-9.70	115.45	120.30
1	H	356	PHE	CB-CG-CD2	-9.70	114.01	120.80
1	8	451	TYR	CB-CG-CD2	-9.69	115.18	121.00
1	W	312	ARG	NE-CZ-NH2	-9.70	115.45	120.30
1	q	451	TYR	CB-CG-CD2	-9.69	115.19	121.00
1	r	483	TYR	CB-CG-CD1	9.69	126.81	121.00
1	T	239	ARG	NH1-CZ-NH2	-9.69	108.74	119.40
1	x	301	ARG	NE-CZ-NH2	-9.69	115.46	120.30
1	V	695	ARG	NE-CZ-NH1	9.69	125.14	120.30
1	I	449	ARG	NE-CZ-NH2	-9.69	115.46	120.30
1	g	328	ARG	NE-CZ-NH2	-9.68	115.46	120.30
1	l	145	ARG	NE-CZ-NH2	-9.67	115.47	120.30
1	s	483	TYR	CB-CG-CD1	9.67	126.80	121.00
1	X	674	ARG	NH1-CZ-NH2	-9.66	108.78	119.40
1	J	498	TYR	CB-CG-CD1	9.66	126.79	121.00
1	n	574	MET	CG-SD-CE	-9.65	84.76	100.20
1	P	582	ASP	CB-CG-OD1	9.65	126.99	118.30
1	p	420	PHE	CB-CG-CD1	-9.63	114.06	120.80
1	8	235	ASP	CB-CG-OD2	9.63	126.96	118.30
1	m	328	ARG	NE-CZ-NH2	-9.62	115.49	120.30
1	U	328	ARG	NE-CZ-NH1	9.62	125.11	120.30
1	I	633	TYR	CB-CG-CD2	9.62	126.77	121.00
1	p	458	PHE	CB-CG-CD1	9.61	127.53	120.80
1	O	531	PHE	CB-CG-CD2	9.61	127.53	120.80
1	u	593	ARG	NE-CZ-NH1	9.60	125.10	120.30
1	k	689	ARG	NE-CZ-NH1	9.60	125.10	120.30
1	F	458	PHE	CB-CG-CD1	9.60	127.52	120.80
1	E	652	PHE	CB-CG-CD2	-9.59	114.09	120.80
1	s	655	ARG	NE-CZ-NH1	9.59	125.09	120.30
1	x	328	ARG	NE-CZ-NH1	9.59	125.09	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	336	ARG	NE-CZ-NH1	9.59	125.09	120.30
1	q	369	ARG	NE-CZ-NH1	9.58	125.09	120.30
1	b	357	ARG	NE-CZ-NH1	9.58	125.09	120.30
1	W	301	ARG	NE-CZ-NH2	-9.58	115.51	120.30
1	b	640	ARG	NE-CZ-NH1	9.57	125.09	120.30
1	h	449	ARG	NH1-CZ-NH2	-9.57	108.87	119.40
1	5	301	ARG	NE-CZ-NH1	-9.57	115.52	120.30
1	z	312	ARG	NE-CZ-NH2	-9.57	115.51	120.30
1	s	350	PHE	CB-CG-CD1	-9.56	114.11	120.80
1	L	655	ARG	NE-CZ-NH1	9.56	125.08	120.30
1	Q	300	ASP	CB-CG-OD1	9.56	126.91	118.30
1	V	373	ARG	NE-CZ-NH2	9.56	125.08	120.30
1	4	487	TYR	CB-CG-CD2	-9.56	115.26	121.00
1	f	328	ARG	NE-CZ-NH2	-9.56	115.52	120.30
1	m	560	HIS	CA-CB-CG	-9.56	97.35	113.60
1	b	703	ARG	CD-NE-CZ	9.56	136.98	123.60
1	B	174	ARG	NE-CZ-NH1	9.55	125.08	120.30
1	c	336	ARG	NE-CZ-NH2	-9.55	115.53	120.30
1	b	689	ARG	NE-CZ-NH1	9.55	125.08	120.30
1	y	373	ARG	NE-CZ-NH1	9.55	125.07	120.30
1	0	640	ARG	NE-CZ-NH1	9.54	125.07	120.30
1	C	573	ARG	NE-CZ-NH2	-9.54	115.53	120.30
1	1	197	MET	CG-SD-CE	-9.54	84.94	100.20
1	s	316	TYR	CB-CG-CD2	9.53	126.72	121.00
1	w	406	ARG	NE-CZ-NH2	-9.53	115.54	120.30
1	Q	675	TYR	CB-CG-CD1	9.53	126.72	121.00
1	V	152	ARG	NE-CZ-NH1	9.53	125.06	120.30
1	Z	698	ARG	NE-CZ-NH1	9.52	125.06	120.30
1	q	455	ARG	NE-CZ-NH2	-9.52	115.54	120.30
1	w	640	ARG	NE-CZ-NH2	-9.52	115.54	120.30
1	E	444	ARG	NE-CZ-NH1	9.52	125.06	120.30
1	O	108	ARG	NE-CZ-NH1	9.52	125.06	120.30
1	J	252	TYR	CB-CG-CD1	-9.52	115.29	121.00
1	r	695	ARG	NE-CZ-NH1	9.51	125.06	120.30
1	S	543	PHE	CB-CG-CD1	-9.51	114.14	120.80
1	h	145	ARG	NE-CZ-NH2	9.51	125.05	120.30
1	P	108	ARG	NE-CZ-NH1	9.51	125.05	120.30
1	A	336	ARG	NE-CZ-NH1	9.50	125.05	120.30
1	w	501	PHE	CB-CG-CD2	9.50	127.45	120.80
1	3	174	ARG	NE-CZ-NH1	9.49	125.05	120.30
1	1	108	ARG	NE-CZ-NH2	-9.49	115.56	120.30
1	f	597	PHE	CB-CG-CD2	9.49	127.44	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	d	174	ARG	NE-CZ-NH2	-9.49	115.56	120.30
1	H	406	ARG	NE-CZ-NH1	9.49	125.04	120.30
1	j	531	PHE	CB-CG-CD1	-9.48	114.16	120.80
1	n	449	ARG	NE-CZ-NH2	-9.48	115.56	120.30
1	e	647	PHE	CB-CG-CD2	9.48	127.43	120.80
1	l	420	PHE	CB-CG-CD2	-9.47	114.17	120.80
1	3	498	TYR	CD1-CE1-CZ	-9.47	111.28	119.80
1	z	674	ARG	NE-CZ-NH2	-9.47	115.56	120.30
1	O	703	ARG	NH1-CZ-NH2	-9.47	108.98	119.40
1	o	357	ARG	NE-CZ-NH1	9.46	125.03	120.30
1	z	623	PHE	CB-CG-CD2	-9.46	114.17	120.80
1	R	498	TYR	CB-CG-CD1	9.46	126.68	121.00
1	I	585	TYR	CB-CG-CD1	9.46	126.67	121.00
1	O	357	ARG	NE-CZ-NH1	9.46	125.03	120.30
1	4	444	ARG	NE-CZ-NH2	9.45	125.02	120.30
1	5	174	ARG	NE-CZ-NH1	9.45	125.02	120.30
1	K	115	ASP	CB-CG-OD1	9.45	126.80	118.30
1	4	336	ARG	NE-CZ-NH2	9.44	125.02	120.30
1	M	689	ARG	NE-CZ-NH1	9.44	125.02	120.30
1	f	483	TYR	CG-CD2-CE2	9.44	128.85	121.30
1	W	93	TYR	CB-CG-CD1	-9.44	115.34	121.00
1	Q	316	TYR	CB-CG-CD2	-9.44	115.34	121.00
1	8	695	ARG	NE-CZ-NH2	-9.43	115.58	120.30
1	W	93	TYR	CB-CG-CD2	9.43	126.66	121.00
1	M	542	PHE	CB-CG-CD1	-9.43	114.20	120.80
1	A	647	PHE	CB-CG-CD2	-9.43	114.20	120.80
1	S	240	ASP	CB-CG-OD2	9.43	126.78	118.30
1	o	498	TYR	CB-CG-CD2	9.42	126.65	121.00
1	r	255	ARG	NE-CZ-NH1	9.42	125.01	120.30
1	E	674	ARG	NE-CZ-NH1	9.42	125.01	120.30
1	8	301	ARG	NE-CZ-NH1	9.42	125.01	120.30
1	6	573	ARG	NE-CZ-NH1	9.42	125.01	120.30
1	2	634	PHE	CB-CG-CD1	9.41	127.39	120.80
1	N	572	PHE	CB-CG-CD1	-9.41	114.21	120.80
1	g	651	TYR	CB-CG-CD1	-9.41	115.36	121.00
1	5	145	ARG	NE-CZ-NH1	9.40	125.00	120.30
1	6	674	ARG	NE-CZ-NH2	-9.40	115.60	120.30
1	S	531	PHE	CB-CG-CD1	-9.40	114.22	120.80
1	W	355	TYR	CB-CG-CD1	9.40	126.64	121.00
1	v	357	ARG	NE-CZ-NH2	-9.40	115.60	120.30
1	6	593	ARG	NE-CZ-NH2	-9.40	115.60	120.30
1	U	432	ASP	CB-CG-OD1	-9.40	109.84	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	l	593	ARG	NE-CZ-NH1	9.40	125.00	120.30
1	z	655	ARG	NH1-CZ-NH2	-9.39	109.06	119.40
1	R	579	PHE	CB-CG-CD1	-9.39	114.22	120.80
1	6	170	ARG	NE-CZ-NH1	9.39	125.00	120.30
1	a	231	ARG	NE-CZ-NH2	-9.39	115.61	120.30
1	S	145	ARG	NE-CZ-NH2	9.39	125.00	120.30
1	d	202	ARG	NE-CZ-NH2	-9.38	115.61	120.30
1	p	301	ARG	NE-CZ-NH1	9.38	124.99	120.30
1	v	458	PHE	CB-CG-CD2	-9.38	114.23	120.80
1	w	697	TYR	CB-CG-CD2	-9.38	115.37	121.00
1	c	674	ARG	NE-CZ-NH2	9.37	124.99	120.30
1	E	336	ARG	NE-CZ-NH1	9.37	124.99	120.30
1	u	674	ARG	NE-CZ-NH2	-9.37	115.62	120.30
1	N	336	ARG	NE-CZ-NH1	9.37	124.98	120.30
1	A	449	ARG	NE-CZ-NH2	-9.37	115.62	120.30
1	z	202	ARG	NE-CZ-NH1	9.36	124.98	120.30
1	G	152	ARG	NE-CZ-NH1	9.36	124.98	120.30
1	C	690	ARG	NE-CZ-NH1	9.36	124.98	120.30
1	E	173	TYR	CB-CG-CD2	9.35	126.61	121.00
1	q	539	PHE	CB-CG-CD2	-9.35	114.25	120.80
1	P	582	ASP	CB-CG-OD2	-9.35	109.88	118.30
1	s	98	ARG	NE-CZ-NH1	9.35	124.97	120.30
1	H	444	ARG	NE-CZ-NH1	9.35	124.97	120.30
1	T	597	PHE	CB-CG-CD1	-9.34	114.26	120.80
1	Z	93	TYR	CB-CG-CD1	-9.34	115.39	121.00
1	U	659	ASP	CB-CG-OD2	9.34	126.71	118.30
1	u	202	ARG	NE-CZ-NH2	-9.34	115.63	120.30
1	D	498	TYR	CB-CG-CD1	9.34	126.60	121.00
1	x	458	PHE	CB-CG-CD1	9.34	127.34	120.80
1	N	336	ARG	NE-CZ-NH2	-9.34	115.63	120.30
1	o	239	ARG	NE-CZ-NH2	9.34	124.97	120.30
1	o	380	MET	CG-SD-CE	-9.34	85.26	100.20
1	u	655	ARG	NE-CZ-NH2	9.34	124.97	120.30
1	B	231	ARG	NE-CZ-NH2	-9.33	115.63	120.30
1	E	690	ARG	NE-CZ-NH1	9.33	124.96	120.30
1	2	640	ARG	NE-CZ-NH2	-9.32	115.64	120.30
1	l	573	ARG	NE-CZ-NH2	-9.32	115.64	120.30
1	z	145	ARG	NE-CZ-NH2	9.32	124.96	120.30
1	R	108	ARG	NE-CZ-NH1	9.32	124.96	120.30
1	9	98	ARG	NE-CZ-NH1	9.31	124.96	120.30
1	P	405	ARG	NE-CZ-NH2	-9.31	115.64	120.30
1	x	239	ARG	NH1-CZ-NH2	-9.31	109.16	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	675	TYR	CB-CG-CD1	9.31	126.59	121.00
1	F	239	ARG	NE-CZ-NH1	9.31	124.95	120.30
1	d	255	ARG	NE-CZ-NH1	-9.31	115.65	120.30
1	F	623	PHE	CB-CG-CD1	9.30	127.31	120.80
1	W	202	ARG	NE-CZ-NH2	-9.30	115.65	120.30
1	M	174	ARG	NE-CZ-NH2	9.30	124.95	120.30
1	h	239	ARG	NE-CZ-NH2	9.29	124.95	120.30
1	R	288	ARG	NE-CZ-NH2	-9.29	115.65	120.30
1	A	655	ARG	NE-CZ-NH1	9.29	124.94	120.30
1	l	633	TYR	CB-CG-CD1	-9.28	115.43	121.00
1	V	145	ARG	NE-CZ-NH1	9.28	124.94	120.30
1	V	703	ARG	NE-CZ-NH2	-9.28	115.66	120.30
1	6	659	ASP	CB-CG-OD1	9.28	126.65	118.30
1	l	202	ARG	NE-CZ-NH1	9.28	124.94	120.30
1	4	369	ARG	NE-CZ-NH2	-9.28	115.66	120.30
1	r	231	ARG	NE-CZ-NH2	9.28	124.94	120.30
1	I	357	ARG	NE-CZ-NH2	-9.28	115.66	120.30
1	L	585	TYR	CB-CG-CD2	-9.28	115.44	121.00
1	6	316	TYR	CB-CG-CD1	-9.27	115.44	121.00
1	M	369	ARG	NE-CZ-NH1	9.27	124.94	120.30
1	U	531	PHE	CB-CG-CD2	9.27	127.29	120.80
1	C	405	ARG	NE-CZ-NH1	9.27	124.94	120.30
1	F	478	GLU	OE1-CD-OE2	-9.26	112.18	123.30
1	n	406	ARG	NE-CZ-NH2	-9.26	115.67	120.30
1	d	703	ARG	NE-CZ-NH2	9.25	124.92	120.30
1	n	697	TYR	CB-CG-CD1	-9.25	115.45	121.00
1	X	350	PHE	CB-CG-CD2	9.24	127.27	120.80
1	n	593	ARG	NE-CZ-NH2	9.24	124.92	120.30
1	Z	585	TYR	CB-CG-CD1	-9.24	115.45	121.00
1	f	623	PHE	CB-CG-CD2	9.24	127.27	120.80
1	p	231	ARG	NE-CZ-NH2	9.24	124.92	120.30
1	X	322	TYR	CB-CG-CD1	-9.23	115.46	121.00
1	H	539	PHE	CB-CG-CD2	9.23	127.26	120.80
1	0	597	PHE	CB-CG-CD2	-9.23	114.34	120.80
1	p	593	ARG	NE-CZ-NH1	9.23	124.91	120.30
1	B	444	ARG	NE-CZ-NH1	9.23	124.91	120.30
1	X	417	ASP	CB-CG-OD2	9.22	126.60	118.30
1	e	152	ARG	NE-CZ-NH1	9.22	124.91	120.30
1	R	634	PHE	CB-CG-CD2	-9.22	114.35	120.80
1	m	373	ARG	NE-CZ-NH1	9.22	124.91	120.30
1	z	287	ASP	CB-CG-OD2	9.22	126.60	118.30
1	B	357	ARG	NE-CZ-NH2	-9.22	115.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	394	ARG	NE-CZ-NH1	9.21	124.91	120.30
1	O	312	ARG	NE-CZ-NH1	9.21	124.91	120.30
1	2	108	ARG	NE-CZ-NH1	9.21	124.91	120.30
1	T	582	ASP	CB-CG-OD2	9.21	126.58	118.30
1	A	593	ARG	NH1-CZ-NH2	-9.20	109.28	119.40
1	m	455	ARG	NE-CZ-NH2	-9.20	115.70	120.30
1	n	572	PHE	CB-CG-CD2	9.20	127.24	120.80
1	9	483	TYR	CB-CG-CD2	9.19	126.51	121.00
1	m	703	ARG	NE-CZ-NH2	-9.19	115.70	120.30
1	L	355	TYR	CB-CG-CD1	-9.19	115.49	121.00
1	k	369	ARG	NE-CZ-NH2	-9.19	115.71	120.30
1	l	301	ARG	NE-CZ-NH2	-9.19	115.71	120.30
1	u	695	ARG	NE-CZ-NH1	9.19	124.89	120.30
1	X	349	PHE	CB-CG-CD2	9.19	127.23	120.80
1	3	288	ARG	NE-CZ-NH2	-9.19	115.71	120.30
1	5	357	ARG	NE-CZ-NH1	9.18	124.89	120.30
1	B	239	ARG	NE-CZ-NH2	-9.18	115.71	120.30
1	X	255	ARG	NE-CZ-NH1	9.18	124.89	120.30
1	l	652	PHE	CB-CG-CD2	-9.18	114.38	120.80
1	1	394	ARG	NE-CZ-NH1	-9.17	115.71	120.30
1	V	406	ARG	NE-CZ-NH2	-9.17	115.71	120.30
1	7	674	ARG	NE-CZ-NH1	9.17	124.89	120.30
1	F	394	ARG	NE-CZ-NH1	-9.17	115.72	120.30
1	G	93	TYR	CB-CG-CD2	-9.17	115.50	121.00
1	c	301	ARG	NE-CZ-NH2	-9.16	115.72	120.30
1	J	145	ARG	NE-CZ-NH1	9.16	124.88	120.30
1	L	97	VAL	CA-CB-CG2	9.16	124.65	110.90
1	L	145	ARG	NH1-CZ-NH2	-9.16	109.32	119.40
1	2	394	ARG	NE-CZ-NH2	-9.16	115.72	120.30
1	B	170	ARG	NE-CZ-NH2	9.16	124.88	120.30
1	8	451	TYR	CG-CD1-CE1	-9.16	113.97	121.30
1	0	695	ARG	NE-CZ-NH1	-9.16	115.72	120.30
1	G	597	PHE	CB-CG-CD1	9.15	127.21	120.80
1	w	647	PHE	CB-CG-CD2	9.15	127.20	120.80
1	j	410	ASP	CB-CG-OD2	9.15	126.53	118.30
1	d	231	ARG	NE-CZ-NH2	-9.14	115.73	120.30
1	g	255	ARG	NE-CZ-NH2	-9.14	115.73	120.30
1	u	108	ARG	NE-CZ-NH1	9.14	124.87	120.30
1	B	301	ARG	NE-CZ-NH1	9.14	124.87	120.30
1	z	145	ARG	NE-CZ-NH1	9.14	124.87	120.30
1	a	703	ARG	NE-CZ-NH2	-9.13	115.73	120.30
1	c	421	PHE	CB-CG-CD2	9.13	127.19	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	288	ARG	NE-CZ-NH1	9.12	124.86	120.30
1	c	674	ARG	NH1-CZ-NH2	-9.12	109.36	119.40
1	d	373	ARG	NE-CZ-NH1	9.12	124.86	120.30
1	P	322	TYR	CB-CG-CD2	-9.12	115.53	121.00
1	y	449	ARG	NE-CZ-NH1	9.11	124.86	120.30
1	E	623	PHE	CB-CG-CD1	-9.10	114.43	120.80
1	4	634	PHE	CB-CG-CD1	9.10	127.17	120.80
1	X	444	ARG	NE-CZ-NH1	9.10	124.85	120.30
1	n	695	ARG	NE-CZ-NH1	9.08	124.84	120.30
1	R	498	TYR	CB-CG-CD2	-9.08	115.55	121.00
1	Y	255	ARG	NE-CZ-NH1	9.08	124.84	120.30
1	V	108	ARG	NE-CZ-NH1	9.07	124.84	120.30
1	a	394	ARG	NE-CZ-NH1	9.07	124.83	120.30
1	h	573	ARG	NE-CZ-NH1	9.07	124.83	120.30
1	M	695	ARG	NE-CZ-NH1	9.06	124.83	120.30
1	P	174	ARG	NH1-CZ-NH2	-9.06	109.43	119.40
1	7	444	ARG	NE-CZ-NH2	9.06	124.83	120.30
1	m	312	ARG	NE-CZ-NH2	-9.05	115.77	120.30
1	k	655	ARG	NE-CZ-NH1	9.05	124.82	120.30
1	B	623	PHE	CB-CG-CD2	-9.04	114.47	120.80
1	J	420	PHE	CB-CG-CD1	-9.04	114.47	120.80
1	M	328	ARG	NE-CZ-NH1	9.04	124.82	120.30
1	S	698	ARG	NE-CZ-NH2	9.04	124.82	120.30
1	V	356	PHE	CB-CG-CD2	9.03	127.12	120.80
1	q	288	ARG	NE-CZ-NH1	9.03	124.82	120.30
1	c	695	ARG	NE-CZ-NH2	9.03	124.81	120.30
1	h	488	ARG	NE-CZ-NH1	9.03	124.81	120.30
1	l	675	TYR	CB-CG-CD2	9.02	126.41	121.00
1	W	640	ARG	NE-CZ-NH1	9.02	124.81	120.30
1	g	406	ARG	NE-CZ-NH2	-9.02	115.79	120.30
1	k	543	PHE	CB-CG-CD2	-9.01	114.49	120.80
1	q	633	TYR	CB-CG-CD1	-9.01	115.59	121.00
1	f	202	ARG	NE-CZ-NH1	9.01	124.80	120.30
1	p	420	PHE	CB-CG-CD2	9.00	127.10	120.80
1	P	220	ASP	CB-CG-OD2	9.00	126.40	118.30
1	o	145	ARG	NE-CZ-NH2	-9.00	115.80	120.30
1	m	336	ARG	NE-CZ-NH1	9.00	124.80	120.30
1	3	651	TYR	CB-CG-CD2	-9.00	115.60	121.00
1	b	685	THR	CA-CB-CG2	-9.00	99.80	112.40
1	K	145	ARG	NH1-CZ-NH2	-8.99	109.51	119.40
1	w	312	ARG	NE-CZ-NH1	8.99	124.80	120.30
1	D	301	ARG	NE-CZ-NH2	-8.99	115.81	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	449	ARG	NE-CZ-NH2	-8.98	115.81	120.30
1	F	501	PHE	CB-CG-CD1	-8.98	114.51	120.80
1	N	542	PHE	CB-CG-CD1	8.98	127.08	120.80
1	9	369	ARG	NE-CZ-NH1	8.97	124.79	120.30
1	C	170	ARG	NE-CZ-NH1	8.97	124.79	120.30
1	r	108	ARG	NE-CZ-NH1	8.97	124.78	120.30
1	8	689	ARG	NE-CZ-NH1	8.96	124.78	120.30
1	3	366	THR	CA-CB-CG2	-8.96	99.86	112.40
1	r	98	ARG	NE-CZ-NH1	8.96	124.78	120.30
1	l	170	ARG	NE-CZ-NH1	8.95	124.78	120.30
1	m	501	PHE	CB-CG-CD1	-8.95	114.53	120.80
1	v	350	PHE	CB-CG-CD2	-8.95	114.53	120.80
1	P	239	ARG	NE-CZ-NH1	8.95	124.78	120.30
1	k	145	ARG	NE-CZ-NH1	8.95	124.77	120.30
1	T	674	ARG	NE-CZ-NH1	8.94	124.77	120.30
1	H	633	TYR	CB-CG-CD1	-8.94	115.64	121.00
1	g	585	TYR	CB-CG-CD2	-8.94	115.64	121.00
1	M	255	ARG	NE-CZ-NH2	-8.94	115.83	120.30
1	T	709	PHE	CB-CG-CD1	-8.93	114.55	120.80
1	F	405	ARG	NE-CZ-NH2	-8.93	115.84	120.30
1	P	373	ARG	NE-CZ-NH1	8.93	124.76	120.30
1	t	531	PHE	CB-CG-CD1	-8.92	114.56	120.80
1	Y	508	TYR	CG-CD2-CE2	-8.92	114.16	121.30
1	0	690	ARG	NE-CZ-NH1	8.91	124.76	120.30
1	7	98	ARG	NE-CZ-NH2	-8.91	115.84	120.30
1	0	235	ASP	CB-CG-OD1	8.91	126.32	118.30
1	C	369	ARG	NE-CZ-NH1	8.91	124.76	120.30
1	O	231	ARG	NE-CZ-NH2	-8.91	115.84	120.30
1	h	640	ARG	NE-CZ-NH2	-8.91	115.85	120.30
1	j	488	ARG	NE-CZ-NH2	-8.91	115.85	120.30
1	S	577	MET	CG-SD-CE	-8.91	85.95	100.20
1	E	573	ARG	NE-CZ-NH1	8.90	124.75	120.30
1	8	145	ARG	NE-CZ-NH2	-8.90	115.85	120.30
1	p	369	ARG	NE-CZ-NH2	8.90	124.75	120.30
1	x	458	PHE	CB-CG-CD2	-8.89	114.57	120.80
1	k	405	ARG	NE-CZ-NH2	-8.89	115.86	120.30
1	f	531	PHE	CB-CG-CD2	-8.88	114.58	120.80
1	j	356	PHE	CB-CG-CD2	8.88	127.01	120.80
1	J	647	PHE	CB-CG-CD1	-8.87	114.59	120.80
1	2	697	TYR	CB-CG-CD2	-8.87	115.68	121.00
1	u	170	ARG	NE-CZ-NH2	-8.87	115.86	120.30
1	V	406	ARG	NE-CZ-NH1	8.87	124.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	647	PHE	CB-CG-CD2	-8.86	114.60	120.80
1	A	698	ARG	NE-CZ-NH1	8.86	124.73	120.30
1	2	690	ARG	NE-CZ-NH2	-8.85	115.87	120.30
1	a	312	ARG	NH1-CZ-NH2	8.85	129.14	119.40
1	E	488	ARG	NE-CZ-NH2	-8.85	115.87	120.30
1	8	235	ASP	CB-CG-OD1	-8.85	110.34	118.30
1	V	709	PHE	CB-CG-CD2	-8.85	114.61	120.80
1	2	455	ARG	NE-CZ-NH1	-8.85	115.88	120.30
1	9	514	GLU	OE1-CD-OE2	-8.84	112.69	123.30
1	I	93	TYR	CB-CG-CD2	-8.84	115.70	121.00
1	P	152	ARG	NE-CZ-NH1	8.84	124.72	120.30
1	2	700	THR	CA-CB-CG2	8.84	124.77	112.40
1	c	703	ARG	NE-CZ-NH2	8.84	124.72	120.30
1	i	498	TYR	CB-CG-CD1	8.84	126.30	121.00
1	w	288	ARG	NE-CZ-NH1	8.84	124.72	120.30
1	U	597	PHE	CB-CG-CD2	8.83	126.98	120.80
1	V	235	ASP	CB-CG-OD1	8.83	126.25	118.30
1	5	585	TYR	CD1-CE1-CZ	-8.83	111.86	119.80
1	J	597	PHE	CB-CG-CD2	-8.83	114.62	120.80
1	J	449	ARG	NE-CZ-NH2	8.82	124.71	120.30
1	R	659	ASP	CB-CG-OD2	8.82	126.24	118.30
1	7	689	ARG	NE-CZ-NH1	8.82	124.71	120.30
1	L	449	ARG	NE-CZ-NH2	-8.82	115.89	120.30
1	H	173	TYR	CB-CG-CD2	-8.82	115.71	121.00
1	v	98	ARG	NE-CZ-NH1	8.82	124.71	120.30
1	l	357	ARG	NE-CZ-NH1	8.81	124.70	120.30
1	h	455	ARG	NE-CZ-NH1	8.80	124.70	120.30
1	B	634	PHE	CB-CG-CD1	-8.80	114.64	120.80
1	w	98	ARG	NH1-CZ-NH2	-8.80	109.72	119.40
1	c	689	ARG	NE-CZ-NH1	8.79	124.70	120.30
1	g	572	PHE	CB-CG-CD2	-8.79	114.64	120.80
1	U	336	ARG	NE-CZ-NH2	-8.80	115.90	120.30
1	t	585	TYR	CB-CG-CD2	8.79	126.28	121.00
1	p	634	PHE	CB-CG-CD1	8.79	126.95	120.80
1	T	145	ARG	NE-CZ-NH2	-8.78	115.91	120.30
1	2	483	TYR	CB-CG-CD2	8.78	126.27	121.00
1	b	698	ARG	NE-CZ-NH1	-8.78	115.91	120.30
1	a	582	ASP	CB-CG-OD2	8.78	126.20	118.30
1	z	145	ARG	NH1-CZ-NH2	-8.78	109.74	119.40
1	o	301	ARG	NE-CZ-NH2	-8.77	115.91	120.30
1	B	202	ARG	NE-CZ-NH1	8.77	124.69	120.30
1	F	689	ARG	NE-CZ-NH1	8.77	124.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	524	MET	CG-SD-CE	-8.77	86.16	100.20
1	u	458	PHE	CB-CG-CD2	-8.77	114.66	120.80
1	7	444	ARG	NE-CZ-NH1	8.77	124.69	120.30
1	Y	455	ARG	NE-CZ-NH2	-8.77	115.92	120.30
1	c	420	PHE	CB-CG-CD1	8.77	126.94	120.80
1	A	420	PHE	CB-CG-CD2	8.77	126.94	120.80
1	H	373	ARG	NE-CZ-NH1	8.77	124.68	120.30
1	0	369	ARG	NE-CZ-NH1	8.76	124.68	120.30
1	0	651	TYR	CB-CG-CD1	-8.76	115.74	121.00
1	0	698	ARG	NE-CZ-NH2	8.76	124.68	120.30
1	o	406	ARG	NE-CZ-NH2	-8.76	115.92	120.30
1	A	695	ARG	NE-CZ-NH2	-8.75	115.92	120.30
1	O	633	TYR	CB-CG-CD1	-8.75	115.75	121.00
1	b	690	ARG	NE-CZ-NH1	8.75	124.67	120.30
1	L	572	PHE	CB-CG-CD2	-8.75	114.68	120.80
1	S	105	ASP	CB-CG-OD1	8.75	126.17	118.30
1	A	579	PHE	CB-CG-CD1	-8.74	114.68	120.80
1	D	633	TYR	CB-CG-CD2	8.74	126.25	121.00
1	1	231	ARG	NE-CZ-NH2	-8.74	115.93	120.30
1	9	508	TYR	CB-CG-CD2	8.74	126.25	121.00
1	v	322	TYR	CB-CG-CD2	-8.74	115.75	121.00
1	t	633	TYR	CB-CG-CD2	-8.74	115.75	121.00
1	M	633	TYR	CB-CG-CD1	8.74	126.25	121.00
1	S	488	ARG	NE-CZ-NH1	8.74	124.67	120.30
1	W	458	PHE	CB-CG-CD1	8.74	126.92	120.80
1	f	328	ARG	NE-CZ-NH1	8.74	124.67	120.30
1	G	498	TYR	CB-CG-CD1	8.73	126.24	121.00
1	9	483	TYR	CB-CG-CD1	-8.73	115.76	121.00
1	d	349	PHE	CB-CG-CD2	-8.73	114.69	120.80
1	D	357	ARG	NE-CZ-NH1	8.73	124.66	120.30
1	Z	690	ARG	NE-CZ-NH1	8.72	124.66	120.30
1	b	406	ARG	NE-CZ-NH1	8.72	124.66	120.30
1	q	695	ARG	NE-CZ-NH1	8.72	124.66	120.30
1	w	703	ARG	NE-CZ-NH2	-8.72	115.94	120.30
1	G	145	ARG	NE-CZ-NH2	-8.71	115.94	120.30
1	l	689	ARG	NE-CZ-NH1	8.71	124.66	120.30
1	h	690	ARG	NE-CZ-NH1	8.71	124.66	120.30
1	n	444	ARG	NE-CZ-NH1	8.71	124.66	120.30
1	p	455	ARG	NH1-CZ-NH2	-8.71	109.82	119.40
1	a	405	ARG	NE-CZ-NH2	-8.71	115.95	120.30
1	7	108	ARG	NH1-CZ-NH2	-8.70	109.83	119.40
1	J	640	ARG	NE-CZ-NH1	8.70	124.65	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	y	373	ARG	NE-CZ-NH2	-8.70	115.95	120.30
1	E	120	ALA	N-CA-CB	8.70	122.28	110.10
1	e	573	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	s	458	PHE	CB-CG-CD2	-8.70	114.71	120.80
1	D	202	ARG	NE-CZ-NH2	-8.70	115.95	120.30
1	N	288	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	f	98	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	n	697	TYR	CB-CG-CD2	8.70	126.22	121.00
1	v	695	ARG	NE-CZ-NH1	8.70	124.65	120.30
1	J	406	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	Z	655	ARG	NE-CZ-NH1	8.69	124.65	120.30
1	0	495	PHE	CB-CG-CD1	8.69	126.88	120.80
1	i	108	ARG	NH1-CZ-NH2	-8.69	109.84	119.40
1	9	593	ARG	NE-CZ-NH1	8.68	124.64	120.30
1	6	501	PHE	CB-CG-CD2	8.68	126.88	120.80
1	d	105	ASP	CB-CG-OD1	-8.68	110.49	118.30
1	o	689	ARG	NE-CZ-NH1	8.68	124.64	120.30
1	B	634	PHE	CZ-CE2-CD2	-8.68	109.69	120.10
1	N	410	ASP	CB-CG-OD2	-8.68	110.49	118.30
1	X	108	ARG	NE-CZ-NH1	8.68	124.64	120.30
1	D	174	ARG	NE-CZ-NH1	8.67	124.64	120.30
1	K	369	ARG	NE-CZ-NH1	-8.67	115.97	120.30
1	V	421	PHE	CB-CG-CD2	8.67	126.87	120.80
1	8	369	ARG	NE-CZ-NH2	-8.67	115.97	120.30
1	z	301	ARG	NE-CZ-NH1	8.67	124.63	120.30
1	6	288	ARG	NE-CZ-NH2	-8.66	115.97	120.30
1	e	695	ARG	NE-CZ-NH1	8.66	124.63	120.30
1	I	405	ARG	NE-CZ-NH2	-8.66	115.97	120.30
1	h	240	ASP	CB-CG-OD2	-8.66	110.51	118.30
1	z	173	TYR	CB-CG-CD1	-8.66	115.80	121.00
1	c	239	ARG	NE-CZ-NH2	-8.66	115.97	120.30
1	z	202	ARG	NE-CZ-NH2	-8.65	115.97	120.30
1	T	697	TYR	CB-CG-CD2	8.65	126.19	121.00
1	Y	593	ARG	NE-CZ-NH1	8.65	124.62	120.30
1	A	312	ARG	NE-CZ-NH1	8.65	124.62	120.30
1	D	543	PHE	CB-CG-CD1	8.65	126.85	120.80
1	W	690	ARG	NE-CZ-NH1	8.65	124.62	120.30
1	r	675	TYR	CB-CG-CD2	-8.64	115.81	121.00
1	z	420	PHE	CB-CG-CD1	8.64	126.85	120.80
1	9	312	ARG	NE-CZ-NH2	-8.63	115.98	120.30
1	v	105	ASP	CB-CG-OD2	8.63	126.07	118.30
1	w	336	ARG	NH1-CZ-NH2	-8.63	109.90	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	U	703	ARG	NH1-CZ-NH2	-8.63	109.90	119.40
1	h	336	ARG	NE-CZ-NH1	8.63	124.61	120.30
1	M	357	ARG	NE-CZ-NH1	8.63	124.61	120.30
1	l	355	TYR	CB-CG-CD1	-8.63	115.83	121.00
1	k	301	ARG	NE-CZ-NH2	-8.62	115.99	120.30
1	R	152	ARG	NE-CZ-NH2	-8.62	115.99	120.30
1	i	573	ARG	NE-CZ-NH1	8.62	124.61	120.30
1	1	98	ARG	NE-CZ-NH1	8.62	124.61	120.30
1	8	508	TYR	CB-CG-CD2	-8.61	115.83	121.00
1	b	458	PHE	CB-CG-CD2	-8.61	114.77	120.80
1	f	651	TYR	CB-CG-CD1	-8.61	115.83	121.00
1	X	174	ARG	NE-CZ-NH1	8.61	124.61	120.30
1	m	145	ARG	NE-CZ-NH2	-8.61	116.00	120.30
1	O	577	MET	CG-SD-CE	-8.61	86.43	100.20
1	n	98	ARG	NH1-CZ-NH2	-8.60	109.94	119.40
1	m	593	ARG	NE-CZ-NH2	-8.60	116.00	120.30
1	L	703	ARG	NE-CZ-NH1	8.60	124.60	120.30
1	c	312	ARG	NE-CZ-NH2	-8.60	116.00	120.30
1	i	429	PHE	CB-CG-CD2	-8.59	114.79	120.80
1	y	322	TYR	CB-CG-CD1	-8.59	115.85	121.00
1	6	451	TYR	CB-CG-CD1	-8.59	115.85	121.00
1	r	145	ARG	NE-CZ-NH1	8.59	124.59	120.30
1	T	647	PHE	CB-CG-CD1	8.59	126.81	120.80
1	8	288	ARG	NH1-CZ-NH2	-8.58	109.96	119.40
1	H	697	TYR	CG-CD2-CE2	-8.58	114.43	121.30
1	0	120	ALA	N-CA-CB	8.58	122.11	110.10
1	Z	93	TYR	CB-CG-CD2	8.58	126.15	121.00
1	6	698	ARG	NE-CZ-NH1	8.57	124.59	120.30
1	z	655	ARG	NE-CZ-NH2	8.57	124.59	120.30
1	w	633	TYR	CB-CG-CD1	8.57	126.14	121.00
1	c	252	TYR	CB-CG-CD1	-8.57	115.86	121.00
1	s	449	ARG	NH1-CZ-NH2	-8.57	109.97	119.40
1	U	255	ARG	NE-CZ-NH1	8.57	124.58	120.30
1	W	252	TYR	CB-CG-CD1	8.57	126.14	121.00
1	D	495	PHE	CB-CG-CD2	-8.56	114.80	120.80
1	l	167	TRP	CB-CG-CD1	8.56	138.13	127.00
1	c	690	ARG	NE-CZ-NH1	8.56	124.58	120.30
1	6	316	TYR	CB-CG-CD2	8.56	126.14	121.00
1	6	394	ARG	NE-CZ-NH2	8.55	124.58	120.30
1	1	573	ARG	NE-CZ-NH2	-8.55	116.02	120.30
1	r	336	ARG	NH1-CZ-NH2	-8.55	109.99	119.40
1	U	288	ARG	NE-CZ-NH2	8.55	124.58	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	g	269	ASP	CB-CG-OD1	8.55	126.00	118.30
1	L	93	TYR	CB-CG-CD2	8.55	126.13	121.00
1	o	299	MET	CG-SD-CE	-8.55	86.52	100.20
1	5	508	TYR	CB-CG-CD1	-8.55	115.87	121.00
1	X	444	ARG	NE-CZ-NH2	-8.55	116.03	120.30
1	I	449	ARG	NE-CZ-NH1	8.54	124.57	120.30
1	0	255	ARG	NE-CZ-NH1	8.54	124.57	120.30
1	Q	709	PHE	CB-CG-CD1	-8.54	114.82	120.80
1	4	593	ARG	NE-CZ-NH2	-8.54	116.03	120.30
1	W	202	ARG	NE-CZ-NH1	8.54	124.57	120.30
1	7	167	TRP	CB-CG-CD2	8.53	137.69	126.60
1	Y	308	MET	CG-SD-CE	-8.54	86.55	100.20
1	l	455	ARG	NE-CZ-NH2	-8.53	116.03	120.30
1	h	508	TYR	CB-CG-CD2	-8.53	115.88	121.00
1	n	328	ARG	NE-CZ-NH1	8.53	124.57	120.30
1	F	458	PHE	CB-CG-CD2	-8.53	114.83	120.80
1	z	373	ARG	NE-CZ-NH1	8.53	124.56	120.30
1	S	288	ARG	NE-CZ-NH1	8.53	124.56	120.30
1	h	567	MET	CG-SD-CE	-8.53	86.56	100.20
1	w	349	PHE	CB-CG-CD1	8.53	126.77	120.80
1	9	451	TYR	CB-CG-CD2	8.52	126.11	121.00
1	j	173	TYR	CB-CG-CD2	8.52	126.11	121.00
1	k	202	ARG	NE-CZ-NH1	8.52	124.56	120.30
1	O	420	PHE	CB-CG-CD1	8.52	126.77	120.80
1	I	624	THR	CA-CB-CG2	-8.52	100.47	112.40
1	S	336	ARG	NE-CZ-NH1	-8.52	116.04	120.30
1	o	349	PHE	CB-CG-CD1	8.52	126.76	120.80
1	c	675	TYR	CB-CG-CD2	-8.51	115.89	121.00
1	D	593	ARG	NE-CZ-NH2	8.51	124.55	120.30
1	s	483	TYR	CB-CG-CD2	-8.50	115.90	121.00
1	s	633	TYR	CB-CG-CD2	8.50	126.10	121.00
1	A	689	ARG	NE-CZ-NH1	8.50	124.55	120.30
1	8	355	TYR	CB-CG-CD2	-8.50	115.90	121.00
1	4	301	ARG	NE-CZ-NH1	8.49	124.55	120.30
1	B	455	ARG	NE-CZ-NH2	-8.49	116.06	120.30
1	V	487	TYR	CG-CD1-CE1	8.49	128.09	121.30
1	5	698	ARG	NH1-CZ-NH2	-8.49	110.07	119.40
1	3	585	TYR	CB-CG-CD2	-8.48	115.91	121.00
1	n	690	ARG	NE-CZ-NH2	-8.48	116.06	120.30
1	L	508	TYR	CB-CG-CD1	8.48	126.09	121.00
1	z	174	ARG	NH1-CZ-NH2	-8.48	110.08	119.40
1	o	689	ARG	NE-CZ-NH2	-8.47	116.06	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	255	ARG	NE-CZ-NH2	-8.47	116.06	120.30
1	0	373	ARG	NE-CZ-NH2	-8.47	116.06	120.30
1	g	357	ARG	NE-CZ-NH1	8.47	124.54	120.30
1	q	542	PHE	CB-CG-CD2	8.47	126.73	120.80
1	h	231	ARG	NE-CZ-NH2	8.47	124.53	120.30
1	l	449	ARG	NE-CZ-NH2	-8.47	116.07	120.30
1	l	349	PHE	CB-CG-CD1	-8.47	114.87	120.80
1	T	410	ASP	CB-CG-OD1	8.47	125.92	118.30
1	b	108	ARG	NE-CZ-NH1	8.46	124.53	120.30
1	i	458	PHE	CB-CG-CD2	-8.46	114.88	120.80
1	l	252	TYR	CB-CG-CD2	-8.46	115.92	121.00
1	Q	152	ARG	NE-CZ-NH2	-8.46	116.07	120.30
1	l	167	TRP	CB-CG-CD2	-8.46	115.61	126.60
1	o	145	ARG	NE-CZ-NH1	8.46	124.53	120.30
1	G	179	GLU	OE1-CD-OE2	-8.46	113.15	123.30
1	G	488	ARG	NE-CZ-NH1	8.46	124.53	120.30
1	H	542	PHE	CB-CG-CD1	-8.45	114.88	120.80
1	Y	301	ARG	NE-CZ-NH2	8.45	124.53	120.30
1	l	697	TYR	CB-CG-CD1	8.45	126.07	121.00
1	4	483	TYR	CD1-CE1-CZ	-8.45	112.20	119.80
1	C	697	TYR	CB-CG-CD2	-8.45	115.93	121.00
1	1	336	ARG	NE-CZ-NH2	-8.44	116.08	120.30
1	2	457	ASP	CB-CG-OD1	-8.44	110.70	118.30
1	Z	698	ARG	NE-CZ-NH2	-8.44	116.08	120.30
1	n	255	ARG	NE-CZ-NH1	8.44	124.52	120.30
1	S	698	ARG	NE-CZ-NH1	-8.44	116.08	120.30
1	q	239	ARG	NE-CZ-NH1	8.43	124.52	120.30
1	v	483	TYR	CB-CG-CD2	-8.43	115.94	121.00
1	K	449	ARG	NE-CZ-NH2	8.43	124.52	120.30
1	b	455	ARG	O-C-N	-8.43	109.21	122.70
1	U	579	PHE	CB-CG-CD1	8.43	126.70	120.80
1	h	369	ARG	NE-CZ-NH2	-8.43	116.09	120.30
1	w	283	ASP	CB-CG-OD1	-8.43	110.71	118.30
1	V	356	PHE	CB-CG-CD1	-8.43	114.90	120.80
1	7	593	ARG	NE-CZ-NH1	8.43	124.51	120.30
1	T	695	ARG	NE-CZ-NH2	-8.43	116.09	120.30
1	X	698	ARG	NE-CZ-NH2	-8.43	116.09	120.30
1	C	585	TYR	CB-CG-CD1	8.43	126.06	121.00
1	h	444	ARG	NE-CZ-NH2	-8.42	116.09	120.30
1	j	369	ARG	NE-CZ-NH2	8.42	124.51	120.30
1	s	455	ARG	NE-CZ-NH2	-8.42	116.09	120.30
1	X	451	TYR	CB-CG-CD1	-8.42	115.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	f	488	ARG	NE-CZ-NH1	8.42	124.51	120.30
1	9	703	ARG	NE-CZ-NH1	8.41	124.50	120.30
1	3	675	TYR	CB-CG-CD1	-8.40	115.96	121.00
1	8	634	PHE	CB-CG-CD2	-8.40	114.92	120.80
1	8	690	ARG	NE-CZ-NH2	-8.40	116.10	120.30
1	2	690	ARG	NE-CZ-NH1	8.40	124.50	120.30
1	c	312	ARG	NE-CZ-NH1	8.40	124.50	120.30
1	8	312	ARG	NE-CZ-NH1	8.40	124.50	120.30
1	S	623	PHE	CB-CG-CD1	8.40	126.68	120.80
1	Y	283	ASP	CB-CG-OD1	8.40	125.86	118.30
1	o	312	ARG	NE-CZ-NH2	-8.39	116.10	120.30
1	H	698	ARG	NE-CZ-NH2	-8.39	116.10	120.30
1	B	357	ARG	NE-CZ-NH1	8.39	124.50	120.30
1	T	373	ARG	NE-CZ-NH2	-8.39	116.11	120.30
1	W	679	LEU	CB-CG-CD1	-8.39	96.74	111.00
1	I	394	ARG	NE-CZ-NH1	8.39	124.50	120.30
1	g	235	ASP	CB-CG-OD2	-8.39	110.75	118.30
1	I	451	TYR	CB-CG-CD2	8.38	126.03	121.00
1	8	322	TYR	CB-CG-CD2	-8.38	115.97	121.00
1	t	126	ASP	CB-CG-OD2	-8.38	110.76	118.30
1	F	255	ARG	NE-CZ-NH2	8.38	124.49	120.30
1	P	288	ARG	NE-CZ-NH2	-8.38	116.11	120.30
1	n	508	TYR	CB-CG-CD2	-8.38	115.97	121.00
1	X	697	TYR	CB-CG-CD2	8.38	126.03	121.00
1	l	145	ARG	NE-CZ-NH1	8.37	124.49	120.30
1	W	458	PHE	CB-CG-CD2	-8.37	114.94	120.80
1	p	567	MET	CG-SD-CE	-8.37	86.81	100.20
1	i	531	PHE	CB-CG-CD2	-8.37	114.94	120.80
1	Z	108	ARG	NE-CZ-NH1	8.37	124.48	120.30
1	D	349	PHE	CB-CG-CD2	-8.37	114.94	120.80
1	u	451	TYR	CB-CG-CD2	-8.36	115.98	121.00
1	y	355	TYR	CB-CG-CD1	-8.36	115.98	121.00
1	S	508	TYR	CB-CG-CD2	8.36	126.02	121.00
1	2	451	TYR	CB-CG-CD2	-8.36	115.98	121.00
1	o	455	ARG	NE-CZ-NH1	8.36	124.48	120.30
1	G	170	ARG	NE-CZ-NH1	8.35	124.48	120.30
1	H	574	MET	CG-SD-CE	-8.35	86.84	100.20
1	Q	108	ARG	NE-CZ-NH2	8.35	124.48	120.30
1	Z	255	ARG	NE-CZ-NH1	8.35	124.48	120.30
1	7	458	PHE	CB-CG-CD1	8.35	126.64	120.80
1	Y	449	ARG	NE-CZ-NH2	8.35	124.47	120.30
1	b	349	PHE	CB-CG-CD1	-8.35	114.96	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	u	421	PHE	CB-CG-CD1	8.35	126.64	120.80
1	c	231	ARG	NH1-CZ-NH2	-8.34	110.23	119.40
1	f	288	ARG	NE-CZ-NH1	8.34	124.47	120.30
1	w	674	ARG	NE-CZ-NH2	-8.34	116.13	120.30
1	p	108	ARG	NH1-CZ-NH2	-8.34	110.23	119.40
1	H	316	TYR	CB-CG-CD2	-8.34	116.00	121.00
1	g	634	PHE	CB-CG-CD1	8.33	126.63	120.80
1	r	455	ARG	NE-CZ-NH1	8.33	124.47	120.30
1	F	623	PHE	CB-CG-CD2	-8.33	114.97	120.80
1	s	640	ARG	NE-CZ-NH1	8.33	124.47	120.30
1	U	380	MET	CG-SD-CE	-8.33	86.87	100.20
1	O	406	ARG	NE-CZ-NH1	8.33	124.47	120.30
1	X	365	ALA	N-CA-CB	8.33	121.76	110.10
1	7	449	ARG	NE-CZ-NH1	8.33	124.46	120.30
1	F	287	ASP	CB-CG-OD2	-8.33	110.81	118.30
1	M	394	ARG	NE-CZ-NH2	-8.33	116.14	120.30
1	N	572	PHE	CB-CG-CD2	8.33	126.63	120.80
1	m	674	ARG	NE-CZ-NH1	8.32	124.46	120.30
1	8	170	ARG	NE-CZ-NH2	-8.32	116.14	120.30
1	Y	647	PHE	CB-CG-CD1	8.32	126.63	120.80
1	m	573	ARG	NE-CZ-NH2	-8.32	116.14	120.30
1	U	312	ARG	NE-CZ-NH1	8.32	124.46	120.30
1	7	145	ARG	NH1-CZ-NH2	-8.31	110.25	119.40
1	m	303	THR	CA-CB-CG2	-8.31	100.76	112.40
1	S	287	ASP	CB-CG-OD1	8.31	125.78	118.30
1	i	458	PHE	CB-CG-CD1	8.31	126.62	120.80
1	6	235	ASP	CB-CG-OD2	-8.31	110.82	118.30
1	c	202	ARG	NE-CZ-NH1	8.31	124.45	120.30
1	K	498	TYR	CG-CD1-CE1	8.31	127.95	121.30
1	g	444	ARG	NE-CZ-NH1	8.30	124.45	120.30
1	i	674	ARG	NE-CZ-NH2	-8.30	116.15	120.30
1	t	231	ARG	NE-CZ-NH1	8.30	124.45	120.30
1	a	444	ARG	NE-CZ-NH2	-8.30	116.15	120.30
1	n	336	ARG	NE-CZ-NH2	-8.30	116.15	120.30
1	j	288	ARG	NH1-CZ-NH2	-8.29	110.28	119.40
1	L	623	PHE	CB-CG-CD2	-8.29	115.00	120.80
1	E	593	ARG	NE-CZ-NH2	-8.29	116.16	120.30
1	a	709	PHE	CB-CG-CD2	-8.28	115.00	120.80
1	w	579	PHE	CB-CG-CD2	-8.28	115.00	120.80
1	S	312	ARG	NE-CZ-NH1	8.28	124.44	120.30
1	J	633	TYR	CB-CG-CD1	-8.28	116.03	121.00
1	N	690	ARG	NE-CZ-NH2	-8.28	116.16	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	202	ARG	NE-CZ-NH1	8.28	124.44	120.30
1	h	405	ARG	NE-CZ-NH2	-8.28	116.16	120.30
1	r	531	PHE	CB-CG-CD1	-8.28	115.01	120.80
1	F	586	SER	N-CA-CB	8.27	122.90	110.50
1	I	647	PHE	CB-CG-CD2	-8.27	115.01	120.80
1	j	455	ARG	NE-CZ-NH2	-8.26	116.17	120.30
1	U	495	PHE	CB-CG-CD1	-8.26	115.02	120.80
1	R	202	ARG	NE-CZ-NH2	8.26	124.43	120.30
1	g	495	PHE	CB-CG-CD1	-8.25	115.02	120.80
1	8	239	ARG	NE-CZ-NH2	-8.25	116.17	120.30
1	F	555	ASP	CB-CG-OD2	8.25	125.72	118.30
1	H	336	ARG	NE-CZ-NH1	8.25	124.42	120.30
1	W	543	PHE	CB-CG-CD1	-8.25	115.03	120.80
1	W	231	ARG	NH1-CZ-NH2	-8.24	110.33	119.40
1	k	698	ARG	NE-CZ-NH2	8.24	124.42	120.30
1	x	369	ARG	NE-CZ-NH1	8.24	124.42	120.30
1	K	655	ARG	NE-CZ-NH1	8.24	124.42	120.30
1	b	252	TYR	CB-CG-CD1	8.24	125.94	121.00
1	D	152	ARG	NE-CZ-NH2	-8.24	116.18	120.30
1	0	222	THR	N-CA-CB	8.23	125.95	110.30
1	h	174	ARG	NE-CZ-NH2	-8.23	116.18	120.30
1	y	394	ARG	NE-CZ-NH2	-8.23	116.18	120.30
1	O	444	ARG	NE-CZ-NH2	-8.23	116.18	120.30
1	W	170	ARG	NE-CZ-NH1	8.23	124.42	120.30
1	L	111	GLY	O-C-N	-8.23	109.53	122.70
1	p	288	ARG	NE-CZ-NH2	-8.23	116.19	120.30
1	k	681	GLU	OE1-CD-OE2	-8.23	113.43	123.30
1	E	458	PHE	CB-CG-CD1	8.23	126.56	120.80
1	l	689	ARG	NE-CZ-NH2	-8.22	116.19	120.30
1	t	633	TYR	CD1-CG-CD2	8.22	126.94	117.90
1	H	703	ARG	NE-CZ-NH2	-8.21	116.19	120.30
1	t	633	TYR	CG-CD2-CE2	-8.21	114.73	121.30
1	T	449	ARG	NE-CZ-NH1	8.21	124.41	120.30
1	2	373	ARG	NE-CZ-NH2	-8.21	116.20	120.30
1	Q	709	PHE	CB-CG-CD2	8.21	126.54	120.80
1	A	455	ARG	NE-CZ-NH2	8.20	124.40	120.30
1	A	640	ARG	NE-CZ-NH2	8.20	124.40	120.30
1	w	531	PHE	CB-CG-CD2	-8.20	115.06	120.80
1	B	406	ARG	NE-CZ-NH1	8.20	124.40	120.30
1	y	406	ARG	NE-CZ-NH2	-8.20	116.20	120.30
1	V	675	TYR	CB-CG-CD1	-8.20	116.08	121.00
1	5	634	PHE	CB-CG-CD2	-8.20	115.06	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	640	ARG	NE-CZ-NH2	-8.19	116.21	120.30
1	S	689	ARG	NE-CZ-NH2	-8.19	116.21	120.30
1	s	355	TYR	CD1-CG-CD2	8.19	126.90	117.90
1	S	108	ARG	NE-CZ-NH2	8.19	124.39	120.30
1	U	634	PHE	CB-CG-CD2	-8.18	115.07	120.80
1	i	652	PHE	CB-CG-CD2	-8.18	115.08	120.80
1	f	498	TYR	CB-CG-CD2	8.17	125.90	121.00
1	q	145	ARG	NE-CZ-NH2	-8.17	116.21	120.30
1	t	698	ARG	NE-CZ-NH1	8.17	124.39	120.30
1	z	449	ARG	NE-CZ-NH1	8.17	124.39	120.30
1	C	495	PHE	CB-CG-CD2	-8.17	115.08	120.80
1	M	455	ARG	NE-CZ-NH1	8.17	124.39	120.30
1	t	655	ARG	NE-CZ-NH1	8.17	124.39	120.30
1	R	698	ARG	NE-CZ-NH1	8.17	124.39	120.30
1	S	312	ARG	NE-CZ-NH2	-8.17	116.22	120.30
1	4	623	PHE	CB-CG-CD2	-8.17	115.08	120.80
1	U	394	ARG	NE-CZ-NH2	-8.17	116.22	120.30
1	0	170	ARG	NE-CZ-NH2	-8.16	116.22	120.30
1	S	394	ARG	NE-CZ-NH2	-8.16	116.22	120.30
1	5	585	TYR	CB-CG-CD1	8.16	125.90	121.00
1	q	690	ARG	NE-CZ-NH2	8.16	124.38	120.30
1	7	488	ARG	NE-CZ-NH1	8.16	124.38	120.30
1	x	357	ARG	NE-CZ-NH2	-8.16	116.22	120.30
1	B	703	ARG	NE-CZ-NH2	8.16	124.38	120.30
1	q	429	PHE	CB-CG-CD1	-8.15	115.09	120.80
1	S	105	ASP	CB-CG-OD2	-8.15	110.96	118.30
1	o	674	ARG	NE-CZ-NH2	-8.15	116.22	120.30
1	H	98	ARG	NE-CZ-NH2	8.14	124.37	120.30
1	N	357	ARG	NE-CZ-NH1	8.14	124.37	120.30
1	d	357	ARG	NE-CZ-NH2	-8.14	116.23	120.30
1	S	655	ARG	NH1-CZ-NH2	-8.14	110.44	119.40
1	5	108	ARG	NH1-CZ-NH2	-8.14	110.45	119.40
1	5	647	PHE	CB-CG-CD1	-8.14	115.10	120.80
1	X	255	ARG	NE-CZ-NH2	-8.14	116.23	120.30
1	j	388	LEU	CB-CG-CD1	8.13	124.82	111.00
1	F	152	ARG	NE-CZ-NH2	-8.13	116.23	120.30
1	y	315	THR	CA-CB-CG2	-8.13	101.02	112.40
1	M	278	MET	CG-SD-CE	-8.13	87.19	100.20
1	s	145	ARG	NE-CZ-NH1	-8.13	116.24	120.30
1	v	322	TYR	CB-CG-CD1	8.13	125.88	121.00
1	L	108	ARG	NE-CZ-NH2	-8.13	116.24	120.30
1	P	202	ARG	NE-CZ-NH2	-8.13	116.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Z	703	ARG	NE-CZ-NH2	-8.13	116.24	120.30
1	l	98	ARG	NH1-CZ-NH2	-8.12	110.46	119.40
1	V	444	ARG	NE-CZ-NH2	-8.12	116.24	120.30
1	0	394	ARG	NH1-CZ-NH2	-8.12	110.47	119.40
1	1	405	ARG	NE-CZ-NH1	8.12	124.36	120.30
1	h	695	ARG	NE-CZ-NH2	-8.12	116.24	120.30
1	m	451	TYR	CB-CG-CD1	-8.12	116.13	121.00
1	5	703	ARG	NE-CZ-NH1	8.12	124.36	120.30
1	i	449	ARG	NE-CZ-NH1	8.12	124.36	120.30
1	p	287	ASP	CB-CG-OD2	8.12	125.61	118.30
1	L	176	THR	CA-CB-CG2	-8.12	101.03	112.40
1	n	488	ARG	NE-CZ-NH1	8.12	124.36	120.30
1	y	689	ARG	NH1-CZ-NH2	-8.12	110.47	119.40
1	R	252	TYR	CG-CD1-CE1	8.12	127.79	121.30
1	t	567	MET	CG-SD-CE	-8.11	87.22	100.20
1	w	675	TYR	CB-CG-CD1	8.11	125.86	121.00
1	1	288	ARG	NE-CZ-NH1	8.11	124.35	120.30
1	7	444	ARG	NH1-CZ-NH2	-8.11	110.48	119.40
1	4	252	TYR	CG-CD1-CE1	-8.11	114.82	121.30
1	t	498	TYR	CZ-CE2-CD2	-8.11	112.50	119.80
1	J	455	ARG	NH1-CZ-NH2	-8.11	110.48	119.40
1	j	567	MET	CG-SD-CE	-8.10	87.24	100.20
1	x	373	ARG	NH1-CZ-NH2	-8.10	110.49	119.40
1	D	170	ARG	NE-CZ-NH1	8.10	124.35	120.30
1	q	357	ARG	NE-CZ-NH2	-8.10	116.25	120.30
1	r	429	PHE	CB-CG-CD1	-8.10	115.13	120.80
1	v	495	PHE	CB-CG-CD2	-8.10	115.13	120.80
1	f	593	ARG	NH1-CZ-NH2	-8.10	110.49	119.40
1	0	455	ARG	NE-CZ-NH2	-8.09	116.25	120.30
1	8	567	MET	CG-SD-CE	-8.09	87.25	100.20
1	8	283	ASP	CB-CG-OD1	-8.09	111.02	118.30
1	0	108	ARG	NE-CZ-NH2	-8.09	116.26	120.30
1	k	659	ASP	CB-CG-OD1	-8.09	111.02	118.30
1	T	429	PHE	CB-CG-CD2	8.09	126.46	120.80
1	C	369	ARG	NE-CZ-NH2	-8.08	116.26	120.30
1	j	350	PHE	CB-CG-CD1	8.08	126.46	120.80
1	p	357	ARG	NE-CZ-NH1	8.08	124.34	120.30
1	q	312	ARG	NE-CZ-NH1	8.08	124.34	120.30
1	S	647	PHE	CB-CG-CD1	8.07	126.45	120.80
1	R	417	ASP	CB-CG-OD1	8.07	125.57	118.30
1	g	633	TYR	CB-CG-CD2	8.07	125.84	121.00
1	4	585	TYR	CB-CG-CD2	8.07	125.84	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	455	ARG	NE-CZ-NH2	-8.06	116.27	120.30
1	8	357	ARG	NE-CZ-NH1	8.06	124.33	120.30
1	H	394	ARG	NE-CZ-NH1	8.06	124.33	120.30
1	B	652	PHE	CB-CG-CD2	-8.06	115.16	120.80
1	I	695	ARG	NE-CZ-NH1	8.06	124.33	120.30
1	s	355	TYR	CB-CG-CD2	-8.06	116.17	121.00
1	a	406	ARG	NE-CZ-NH2	-8.06	116.27	120.30
1	e	444	ARG	NE-CZ-NH1	8.05	124.33	120.30
1	H	369	ARG	NE-CZ-NH2	-8.05	116.28	120.30
1	e	640	ARG	NE-CZ-NH1	8.05	124.32	120.30
1	E	220	ASP	CB-CG-OD2	8.05	125.54	118.30
1	5	405	ARG	NE-CZ-NH1	8.04	124.32	120.30
1	6	449	ARG	NH1-CZ-NH2	-8.04	110.56	119.40
1	g	455	ARG	NH1-CZ-NH2	-8.04	110.56	119.40
1	X	182	ASP	CB-CG-OD2	-8.04	111.07	118.30
1	9	545	LEU	CB-CG-CD1	8.03	124.66	111.00
1	e	685	THR	CA-CB-CG2	-8.04	101.15	112.40
1	d	461	TRP	CE3-CZ3-CH2	8.03	130.04	121.20
1	d	647	PHE	CB-CG-CD1	8.03	126.42	120.80
1	Y	647	PHE	CB-CG-CD2	-8.03	115.18	120.80
1	Q	357	ARG	NE-CZ-NH2	-8.03	116.28	120.30
1	C	449	ARG	NE-CZ-NH2	8.03	124.31	120.30
1	d	444	ARG	NE-CZ-NH2	-8.02	116.29	120.30
1	n	369	ARG	NE-CZ-NH2	-8.02	116.29	120.30
1	v	690	ARG	NH1-CZ-NH2	-8.02	110.58	119.40
1	f	410	ASP	CB-CG-OD2	8.01	125.51	118.30
1	s	323	MET	CG-SD-CE	-8.01	87.38	100.20
1	J	252	TYR	CB-CG-CD2	8.01	125.81	121.00
1	5	501	PHE	CB-CG-CD2	-8.01	115.20	120.80
1	v	508	TYR	CB-CG-CD1	8.01	125.80	121.00
1	C	288	ARG	NE-CZ-NH1	8.01	124.30	120.30
1	y	421	PHE	CB-CG-CD1	-8.01	115.20	120.80
1	e	386	LEU	CB-CG-CD2	-8.00	97.39	111.00
1	C	412	PRO	N-CA-CB	-8.00	93.70	103.30
1	D	98	ARG	NE-CZ-NH2	8.00	124.30	120.30
1	7	230	THR	CA-CB-CG2	-8.00	101.20	112.40
1	e	394	ARG	NE-CZ-NH2	-8.00	116.30	120.30
1	U	622	SER	N-CA-CB	8.00	122.49	110.50
1	z	579	PHE	CB-CG-CD1	-8.00	115.20	120.80
1	K	255	ARG	NE-CZ-NH2	-8.00	116.30	120.30
1	L	487	TYR	CG-CD2-CE2	-8.00	114.90	121.30
1	e	421	PHE	CB-CG-CD2	-7.99	115.20	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	312	ARG	NE-CZ-NH2	-7.99	116.30	120.30
1	j	126	ASP	CB-CG-OD2	7.99	125.49	118.30
1	w	488	ARG	NE-CZ-NH1	7.99	124.30	120.30
1	N	652	PHE	CB-CG-CD2	-7.99	115.21	120.80
1	w	709	PHE	CB-CG-CD2	7.99	126.39	120.80
1	z	573	ARG	NE-CZ-NH2	7.99	124.30	120.30
1	g	531	PHE	CB-CG-CD1	-7.99	115.21	120.80
1	t	287	ASP	CB-CG-OD2	7.99	125.49	118.30
1	O	240	ASP	CB-CG-OD2	7.99	125.49	118.30
1	4	524	MET	CG-SD-CE	-7.98	87.43	100.20
1	4	357	ARG	NE-CZ-NH1	7.98	124.29	120.30
1	f	239	ARG	O-C-N	-7.98	109.93	122.70
1	z	410	ASP	CB-CG-OD1	-7.98	111.12	118.30
1	K	695	ARG	NE-CZ-NH2	-7.98	116.31	120.30
1	V	579	PHE	CB-CG-CD2	-7.98	115.21	120.80
1	H	623	PHE	CB-CG-CD2	-7.98	115.21	120.80
1	Q	316	TYR	CG-CD1-CE1	-7.98	114.92	121.30
1	6	369	ARG	NE-CZ-NH2	-7.98	116.31	120.30
1	I	508	TYR	CB-CG-CD2	7.98	125.79	121.00
1	R	173	TYR	CB-CG-CD2	7.98	125.79	121.00
1	R	152	ARG	NE-CZ-NH1	7.97	124.29	120.30
1	g	105	ASP	CB-CG-OD2	-7.97	111.13	118.30
1	k	675	TYR	CB-CG-CD1	7.97	125.78	121.00
1	2	513	VAL	CA-CB-CG2	-7.97	98.95	110.90
1	i	350	PHE	CB-CG-CD1	-7.97	115.22	120.80
1	u	349	PHE	CB-CG-CD2	-7.97	115.22	120.80
1	0	252	TYR	CB-CG-CD1	-7.96	116.22	121.00
1	t	634	PHE	CB-CG-CD1	7.96	126.38	120.80
1	B	301	ARG	NE-CZ-NH2	-7.96	116.32	120.30
1	U	492	LEU	C-N-CA	7.96	141.61	121.70
1	T	695	ARG	NE-CZ-NH1	7.96	124.28	120.30
1	A	145	ARG	NE-CZ-NH2	-7.96	116.32	120.30
1	9	322	TYR	CB-CG-CD2	-7.96	116.22	121.00
1	a	297	ASP	CB-CG-OD1	-7.96	111.14	118.30
1	a	597	PHE	CB-CG-CD1	7.96	126.37	120.80
1	c	577	MET	CG-SD-CE	-7.96	87.47	100.20
1	e	689	ARG	NH1-CZ-NH2	-7.96	110.65	119.40
1	0	239	ARG	NE-CZ-NH1	7.96	124.28	120.30
1	N	239	ARG	NE-CZ-NH1	7.95	124.28	120.30
1	P	675	TYR	CB-CG-CD1	7.95	125.77	121.00
1	s	174	ARG	NH1-CZ-NH2	-7.95	110.66	119.40
1	Y	357	ARG	NE-CZ-NH2	-7.95	116.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	r	458	PHE	CB-CG-CD2	-7.94	115.24	120.80
1	Q	252	TYR	CD1-CE1-CZ	7.94	126.95	119.80
1	z	316	TYR	CG-CD1-CE1	7.94	127.65	121.30
1	d	597	PHE	CB-CG-CD1	-7.94	115.24	120.80
1	H	531	PHE	CB-CG-CD1	-7.94	115.24	120.80
1	P	498	TYR	CB-CG-CD1	7.94	125.76	121.00
1	x	698	ARG	NE-CZ-NH1	7.94	124.27	120.30
1	V	488	ARG	NE-CZ-NH1	7.94	124.27	120.30
1	X	355	TYR	CB-CG-CD2	7.94	125.76	121.00
1	Y	655	ARG	NE-CZ-NH1	7.94	124.27	120.30
1	5	652	PHE	CB-CG-CD2	7.94	126.36	120.80
1	Y	698	ARG	NE-CZ-NH1	7.93	124.27	120.30
1	y	655	ARG	NH1-CZ-NH2	-7.93	110.68	119.40
1	d	690	ARG	NE-CZ-NH2	-7.93	116.33	120.30
1	j	322	TYR	CB-CG-CD1	-7.93	116.24	121.00
1	c	483	TYR	CB-CG-CD1	7.93	125.75	121.00
1	P	174	ARG	NE-CZ-NH2	7.92	124.26	120.30
1	W	301	ARG	NE-CZ-NH1	7.92	124.26	120.30
1	d	336	ARG	NE-CZ-NH2	-7.92	116.34	120.30
1	j	455	ARG	NE-CZ-NH1	7.92	124.26	120.30
1	l	674	ARG	NE-CZ-NH2	-7.92	116.34	120.30
1	g	449	ARG	NH1-CZ-NH2	-7.92	110.69	119.40
1	J	239	ARG	NE-CZ-NH2	-7.92	116.34	120.30
1	O	597	PHE	CB-CG-CD2	-7.92	115.26	120.80
1	8	623	PHE	CB-CG-CD1	-7.92	115.26	120.80
1	U	406	ARG	NE-CZ-NH1	7.92	124.26	120.30
1	d	675	TYR	CG-CD2-CE2	-7.91	114.97	121.30
1	z	174	ARG	NE-CZ-NH1	7.91	124.26	120.30
1	o	98	ARG	NE-CZ-NH2	-7.91	116.34	120.30
1	e	373	ARG	NE-CZ-NH2	7.91	124.25	120.30
1	G	647	PHE	CB-CG-CD1	-7.91	115.27	120.80
1	T	647	PHE	CB-CG-CD2	-7.91	115.27	120.80
1	l	410	ASP	CB-CG-OD1	7.90	125.41	118.30
1	f	349	PHE	CB-CG-CD1	-7.90	115.27	120.80
1	b	633	TYR	CB-CG-CD2	-7.90	116.26	121.00
1	D	145	ARG	NH1-CZ-NH2	-7.90	110.71	119.40
1	O	239	ARG	NE-CZ-NH2	-7.90	116.35	120.30
1	A	488	ARG	NE-CZ-NH2	-7.90	116.35	120.30
1	9	531	PHE	CB-CG-CD1	7.90	126.33	120.80
1	Y	405	ARG	NE-CZ-NH1	7.90	124.25	120.30
1	g	369	ARG	NH1-CZ-NH2	-7.90	110.72	119.40
1	x	239	ARG	NE-CZ-NH1	7.89	124.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	451	TYR	CB-CG-CD1	-7.89	116.26	121.00
1	m	498	TYR	CB-CG-CD2	7.89	125.74	121.00
1	I	255	ARG	NE-CZ-NH1	7.89	124.25	120.30
1	X	98	ARG	NE-CZ-NH1	7.89	124.25	120.30
1	2	531	PHE	CB-CG-CD1	-7.89	115.28	120.80
1	4	93	TYR	CG-CD1-CE1	7.89	127.61	121.30
1	g	145	ARG	NE-CZ-NH2	-7.89	116.36	120.30
1	r	458	PHE	CB-CG-CD1	7.89	126.32	120.80
1	I	697	TYR	CB-CG-CD2	-7.89	116.27	121.00
1	3	634	PHE	CB-CG-CD1	7.88	126.32	120.80
1	d	698	ARG	NE-CZ-NH1	7.88	124.24	120.30
1	i	634	PHE	CB-CG-CD2	-7.88	115.28	120.80
1	J	369	ARG	NE-CZ-NH1	7.88	124.24	120.30
1	D	322	TYR	CB-CG-CD2	-7.88	116.27	121.00
1	L	98	ARG	NE-CZ-NH1	7.88	124.24	120.30
1	1	308	MET	CG-SD-CE	-7.88	87.60	100.20
1	I	145	ARG	NE-CZ-NH2	-7.88	116.36	120.30
1	6	202	ARG	NE-CZ-NH2	-7.87	116.36	120.30
1	t	350	PHE	CB-CG-CD1	7.87	126.31	120.80
1	K	498	TYR	CB-CG-CD2	7.87	125.72	121.00
1	L	93	TYR	CB-CG-CD1	-7.87	116.28	121.00
1	E	152	ARG	NE-CZ-NH2	-7.87	116.37	120.30
1	Z	421	PHE	CB-CG-CD1	7.87	126.31	120.80
1	0	514	GLU	OE1-CD-OE2	-7.86	113.86	123.30
1	1	675	TYR	CB-CG-CD1	-7.86	116.28	121.00
1	c	432	ASP	CB-CG-OD2	7.86	125.38	118.30
1	q	239	ARG	NE-CZ-NH2	-7.86	116.37	120.30
1	C	457	ASP	CB-CG-OD2	7.86	125.38	118.30
1	W	488	ARG	NE-CZ-NH2	7.86	124.23	120.30
1	2	373	ARG	NE-CZ-NH1	7.86	124.23	120.30
1	i	239	ARG	NE-CZ-NH1	7.86	124.23	120.30
1	d	239	ARG	NE-CZ-NH1	7.86	124.23	120.30
1	t	316	TYR	CB-CG-CD2	-7.86	116.28	121.00
1	i	483	TYR	CB-CG-CD2	7.86	125.72	121.00
1	l	455	ARG	NE-CZ-NH2	-7.86	116.37	120.30
1	G	495	PHE	CB-CG-CD1	-7.86	115.30	120.80
1	G	420	PHE	CB-CG-CD1	7.85	126.30	120.80
1	9	675	TYR	CB-CG-CD1	7.85	125.71	121.00
1	5	239	ARG	NE-CZ-NH1	7.85	124.23	120.30
1	s	689	ARG	NE-CZ-NH2	-7.85	116.38	120.30
1	t	689	ARG	NE-CZ-NH2	-7.85	116.38	120.30
1	f	394	ARG	NE-CZ-NH1	7.85	124.22	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	g	451	TYR	CB-CG-CD2	-7.85	116.29	121.00
1	h	703	ARG	NE-CZ-NH1	7.85	124.22	120.30
1	H	675	TYR	CB-CG-CD1	-7.84	116.29	121.00
1	Y	449	ARG	NE-CZ-NH1	7.84	124.22	120.30
1	4	567	MET	CG-SD-CE	-7.84	87.65	100.20
1	g	597	PHE	CB-CG-CD2	-7.84	115.31	120.80
1	m	126	ASP	CB-CG-OD1	7.84	125.36	118.30
1	k	98	ARG	NE-CZ-NH1	7.84	124.22	120.30
1	r	385	SER	N-CA-CB	7.84	122.25	110.50
1	r	697	TYR	CB-CG-CD2	7.84	125.70	121.00
1	A	501	PHE	CB-CG-CD1	-7.84	115.31	120.80
1	X	115	ASP	CB-CG-OD1	-7.84	111.25	118.30
1	l	316	TYR	CG-CD1-CE1	-7.83	115.03	121.30
1	r	126	ASP	CB-CG-OD1	-7.83	111.25	118.30
1	9	316	TYR	CG-CD1-CE1	-7.83	115.03	121.30
1	n	98	ARG	NE-CZ-NH2	7.83	124.22	120.30
1	K	269	ASP	CB-CG-OD2	7.83	125.35	118.30
1	T	174	ARG	NH1-CZ-NH2	-7.83	110.78	119.40
1	s	252	TYR	CG-CD1-CE1	-7.83	115.03	121.30
1	x	652	PHE	CB-CG-CD2	7.83	126.28	120.80
1	A	355	TYR	CB-CG-CD1	-7.83	116.30	121.00
1	F	451	TYR	CG-CD1-CE1	-7.83	115.04	121.30
1	H	394	ARG	NE-CZ-NH2	-7.83	116.39	120.30
1	w	585	TYR	CB-CG-CD1	-7.83	116.30	121.00
1	e	357	ARG	NE-CZ-NH1	-7.83	116.39	120.30
1	B	287	ASP	CB-CG-OD2	-7.83	111.26	118.30
1	r	455	ARG	NE-CZ-NH2	-7.82	116.39	120.30
1	T	174	ARG	NE-CZ-NH2	7.82	124.21	120.30
1	7	288	ARG	NE-CZ-NH1	7.82	124.21	120.30
1	9	93	TYR	CB-CG-CD1	-7.82	116.31	121.00
1	T	458	PHE	CB-CG-CD1	7.82	126.27	120.80
1	u	405	ARG	NE-CZ-NH2	-7.82	116.39	120.30
1	8	449	ARG	NE-CZ-NH1	7.82	124.21	120.30
1	f	451	TYR	CB-CG-CD1	-7.82	116.31	121.00
1	Q	170	ARG	NE-CZ-NH1	7.82	124.21	120.30
1	G	297	ASP	CB-CG-OD1	-7.82	111.27	118.30
1	N	176	THR	CA-CB-CG2	-7.82	101.46	112.40
1	6	405	ARG	NE-CZ-NH1	7.81	124.21	120.30
1	V	501	PHE	CB-CG-CD2	-7.81	115.33	120.80
1	9	623	PHE	CB-CG-CD1	7.81	126.27	120.80
1	0	498	TYR	CB-CG-CD1	-7.81	116.31	121.00
1	j	342	ALA	N-CA-CB	-7.81	99.17	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	405	ARG	NE-CZ-NH2	-7.81	116.40	120.30
1	M	695	ARG	NE-CZ-NH2	-7.81	116.40	120.30
1	f	429	PHE	CB-CG-CD2	-7.80	115.34	120.80
1	O	240	ASP	CB-CG-OD1	-7.80	111.28	118.30
1	6	555	ASP	CB-CG-OD1	7.80	125.32	118.30
1	T	170	ARG	NE-CZ-NH2	-7.80	116.40	120.30
1	u	651	TYR	CB-CG-CD2	-7.80	116.32	121.00
1	A	675	TYR	CZ-CE2-CD2	7.80	126.82	119.80
1	1	689	ARG	NE-CZ-NH2	-7.80	116.40	120.30
1	R	695	ARG	NH1-CZ-NH2	-7.80	110.82	119.40
1	Z	634	PHE	CB-CG-CD2	-7.79	115.34	120.80
1	8	495	PHE	CB-CG-CD2	7.79	126.26	120.80
1	k	458	PHE	CB-CG-CD1	7.79	126.26	120.80
1	v	269	ASP	CB-CG-OD2	7.79	125.31	118.30
1	U	633	TYR	CB-CG-CD2	-7.79	116.32	121.00
1	5	674	ARG	NE-CZ-NH1	7.79	124.20	120.30
1	i	652	PHE	CB-CG-CD1	7.79	126.25	120.80
1	9	444	ARG	NE-CZ-NH1	7.79	124.19	120.30
1	K	651	TYR	CB-CG-CD2	-7.79	116.33	121.00
1	6	634	PHE	CB-CG-CD2	-7.79	115.35	120.80
1	r	597	PHE	CB-CG-CD2	-7.79	115.35	120.80
1	U	495	PHE	CB-CG-CD2	7.78	126.25	120.80
1	4	231	ARG	NE-CZ-NH2	-7.78	116.41	120.30
1	4	652	PHE	CB-CG-CD2	-7.78	115.35	120.80
1	G	174	ARG	NH1-CZ-NH2	-7.78	110.84	119.40
1	n	394	ARG	NH1-CZ-NH2	7.78	127.95	119.40
1	u	597	PHE	CB-CG-CD1	-7.78	115.36	120.80
1	9	455	ARG	NE-CZ-NH1	7.77	124.19	120.30
1	S	429	PHE	CB-CG-CD2	7.77	126.24	120.80
1	U	458	PHE	CB-CG-CD2	-7.77	115.36	120.80
1	e	328	ARG	NE-CZ-NH1	-7.77	116.42	120.30
1	6	689	ARG	NH1-CZ-NH2	-7.77	110.85	119.40
1	A	698	ARG	NE-CZ-NH2	-7.77	116.42	120.30
1	k	369	ARG	NE-CZ-NH1	7.77	124.18	120.30
1	r	151	THR	CA-CB-CG2	-7.77	101.53	112.40
1	t	458	PHE	CB-CG-CD1	7.77	126.24	120.80
1	v	239	ARG	NE-CZ-NH2	-7.77	116.42	120.30
1	i	152	ARG	NE-CZ-NH2	-7.76	116.42	120.30
1	d	487	TYR	CB-CG-CD2	-7.76	116.34	121.00
1	C	202	ARG	NE-CZ-NH1	7.76	124.18	120.30
1	0	655	ARG	NE-CZ-NH1	-7.76	116.42	120.30
1	D	239	ARG	O-C-N	-7.75	110.30	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	573	ARG	NE-CZ-NH1	7.75	124.17	120.30
1	I	93	TYR	CB-CG-CD1	7.75	125.65	121.00
1	W	689	ARG	NH1-CZ-NH2	-7.75	110.88	119.40
1	0	462	VAL	CA-CB-CG2	-7.75	99.28	110.90
1	J	102	ASP	CB-CG-OD1	-7.75	111.33	118.30
1	Y	173	TYR	CB-CG-CD2	-7.75	116.35	121.00
1	l	323	MET	CG-SD-CE	-7.75	87.81	100.20
1	9	501	PHE	CB-CG-CD1	-7.74	115.38	120.80
1	M	593	ARG	NE-CZ-NH1	7.74	124.17	120.30
1	V	380	MET	CG-SD-CE	-7.74	87.81	100.20
1	k	287	ASP	CB-CG-OD1	7.74	125.27	118.30
1	9	697	TYR	CB-CG-CD2	-7.74	116.36	121.00
1	o	97	VAL	CA-CB-CG1	-7.74	99.29	110.90
1	u	567	MET	CG-SD-CE	-7.74	87.82	100.20
1	q	255	ARG	NE-CZ-NH2	-7.73	116.43	120.30
1	F	117	ALA	N-CA-CB	-7.73	99.27	110.10
1	t	301	ARG	NE-CZ-NH2	-7.73	116.43	120.30
1	2	531	PHE	CB-CG-CD2	7.73	126.21	120.80
1	j	240	ASP	CB-CG-OD2	-7.73	111.34	118.30
1	r	686	ALA	N-CA-CB	-7.73	99.28	110.10
1	u	202	ARG	NE-CZ-NH1	7.73	124.17	120.30
1	m	698	ARG	NE-CZ-NH1	7.73	124.17	120.30
1	H	255	ARG	NE-CZ-NH1	7.73	124.17	120.30
1	s	170	ARG	NE-CZ-NH2	-7.73	116.44	120.30
1	N	328	ARG	NE-CZ-NH2	7.73	124.16	120.30
1	l	640	ARG	NE-CZ-NH1	7.72	124.16	120.30
1	j	710	SER	N-CA-CB	7.72	122.09	110.50
1	r	508	TYR	CB-CG-CD1	7.72	125.64	121.00
1	3	301	ARG	NE-CZ-NH2	-7.72	116.44	120.30
1	8	310	VAL	CA-CB-CG2	-7.72	99.32	110.90
1	5	288	ARG	NE-CZ-NH2	-7.72	116.44	120.30
1	3	369	ARG	NE-CZ-NH1	7.71	124.16	120.30
1	5	531	PHE	CB-CG-CD1	7.71	126.20	120.80
1	a	279	ALA	N-CA-CB	-7.71	99.30	110.10
1	P	458	PHE	CB-CG-CD1	-7.71	115.40	120.80
1	p	299	MET	CG-SD-CE	-7.71	87.86	100.20
1	p	406	ARG	NE-CZ-NH1	7.71	124.16	120.30
1	7	698	ARG	NE-CZ-NH2	-7.71	116.45	120.30
1	q	394	ARG	NE-CZ-NH1	7.71	124.16	120.30
1	R	480	VAL	CA-CB-CG1	7.71	122.46	110.90
1	r	369	ARG	NE-CZ-NH1	7.71	124.15	120.30
1	y	593	ARG	NE-CZ-NH2	-7.71	116.45	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	597	PHE	CB-CG-CD1	-7.71	115.41	120.80
1	C	539	PHE	CB-CG-CD1	7.71	126.19	120.80
1	4	695	ARG	NE-CZ-NH2	7.70	124.15	120.30
1	s	173	TYR	CB-CG-CD1	-7.70	116.38	121.00
1	x	297	ASP	CB-CG-OD2	-7.70	111.37	118.30
1	H	405	ARG	NE-CZ-NH2	7.70	124.15	120.30
1	d	652	PHE	CB-CG-CD2	7.70	126.19	120.80
1	u	647	PHE	CB-CG-CD1	-7.70	115.41	120.80
1	u	695	ARG	NE-CZ-NH2	-7.70	116.45	120.30
1	O	105	ASP	CB-CG-OD1	7.70	125.23	118.30
1	l	297	ASP	CB-CG-OD1	7.70	125.23	118.30
1	Z	303	THR	CA-CB-CG2	-7.70	101.63	112.40
1	Z	651	TYR	CG-CD2-CE2	7.69	127.45	121.30
1	d	394	ARG	NE-CZ-NH2	-7.69	116.45	120.30
1	N	675	TYR	CB-CG-CD1	7.69	125.61	121.00
1	R	623	PHE	CB-CG-CD2	-7.69	115.42	120.80
1	k	283	ASP	CB-CG-OD2	-7.69	111.38	118.30
1	F	675	TYR	CB-CG-CD2	7.69	125.61	121.00
1	b	457	ASP	CB-CG-OD1	7.69	125.22	118.30
1	S	303	THR	CA-CB-CG2	-7.69	101.64	112.40
1	P	369	ARG	NE-CZ-NH2	-7.69	116.46	120.30
1	p	145	ARG	NE-CZ-NH2	-7.68	116.46	120.30
1	q	698	ARG	NE-CZ-NH1	7.68	124.14	120.30
1	t	116	LEU	CB-CG-CD1	7.68	124.06	111.00
1	M	279	ALA	O-C-N	-7.68	110.41	122.70
1	v	659	ASP	CB-CG-OD1	7.68	125.21	118.30
1	X	483	TYR	CB-CG-CD1	-7.68	116.39	121.00
1	y	105	ASP	CB-CG-OD1	7.68	125.21	118.30
1	5	356	PHE	CB-CG-CD1	-7.68	115.42	120.80
1	9	634	PHE	CB-CG-CD1	7.68	126.18	120.80
1	e	488	ARG	NE-CZ-NH1	7.68	124.14	120.30
1	y	406	ARG	NE-CZ-NH1	7.68	124.14	120.30
1	R	255	ARG	NE-CZ-NH1	7.68	124.14	120.30
1	G	225	ASP	CB-CG-OD1	7.67	125.20	118.30
1	R	634	PHE	CB-CG-CD1	7.67	126.17	120.80
1	b	655	ARG	NE-CZ-NH1	7.67	124.14	120.30
1	b	356	PHE	CB-CG-CD1	-7.67	115.43	120.80
1	z	633	TYR	CZ-CE2-CD2	-7.67	112.90	119.80
1	T	301	ARG	NE-CZ-NH1	7.67	124.13	120.30
1	l	328	ARG	NH1-CZ-NH2	-7.67	110.97	119.40
1	9	239	ARG	O-C-N	-7.67	110.44	122.70
1	O	449	ARG	NE-CZ-NH2	7.66	124.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	U	597	PHE	CB-CG-CD1	-7.66	115.44	120.80
1	T	336	ARG	NE-CZ-NH2	-7.66	116.47	120.30
1	a	542	PHE	CB-CG-CD1	7.66	126.16	120.80
1	a	685	THR	CA-CB-CG2	-7.66	101.68	112.40
1	v	152	ARG	NE-CZ-NH1	7.66	124.13	120.30
1	U	231	ARG	NE-CZ-NH1	-7.66	116.47	120.30
1	j	443	VAL	CA-CB-CG1	7.65	122.38	110.90
1	U	524	MET	CA-CB-CG	7.65	126.31	113.30
1	u	451	TYR	CB-CG-CD1	7.65	125.59	121.00
1	A	255	ARG	NH1-CZ-NH2	-7.65	110.98	119.40
1	R	494	GLY	O-C-N	-7.65	110.46	122.70
1	G	373	ARG	NH1-CZ-NH2	-7.65	110.99	119.40
1	d	455	ARG	NE-CZ-NH1	7.65	124.12	120.30
1	D	405	ARG	NH1-CZ-NH2	-7.65	110.99	119.40
1	P	596	ILE	O-C-N	-7.65	110.46	122.70
1	5	640	ARG	NE-CZ-NH1	7.64	124.12	120.30
1	C	633	TYR	CB-CG-CD1	-7.64	116.41	121.00
1	W	451	TYR	CZ-CE2-CD2	7.64	126.67	119.80
1	5	593	ARG	NH1-CZ-NH2	-7.64	111.00	119.40
1	5	573	ARG	NE-CZ-NH2	-7.63	116.48	120.30
1	E	640	ARG	NH1-CZ-NH2	-7.63	111.00	119.40
1	t	179	GLU	OE1-CD-OE2	-7.63	114.14	123.30
1	L	444	ARG	NE-CZ-NH2	-7.63	116.48	120.30
1	U	301	ARG	NE-CZ-NH2	-7.63	116.48	120.30
1	7	709	PHE	CB-CG-CD1	7.63	126.14	120.80
1	O	531	PHE	CB-CG-CD1	-7.63	115.46	120.80
1	W	145	ARG	NE-CZ-NH2	-7.63	116.49	120.30
1	A	675	TYR	CG-CD2-CE2	-7.62	115.20	121.30
1	E	633	TYR	CB-CG-CD1	-7.62	116.43	121.00
1	Z	655	ARG	NE-CZ-NH2	-7.62	116.49	120.30
1	9	487	TYR	CG-CD2-CE2	-7.62	115.20	121.30
1	w	597	PHE	CB-CG-CD2	7.62	126.13	120.80
1	x	322	TYR	CG-CD1-CE1	-7.62	115.20	121.30
1	H	689	ARG	NH1-CZ-NH2	-7.62	111.02	119.40
1	N	488	ARG	NE-CZ-NH1	7.62	124.11	120.30
1	y	633	TYR	CB-CG-CD1	-7.62	116.43	121.00
1	q	250	LYS	CB-CA-C	7.62	125.63	110.40
1	9	394	ARG	NE-CZ-NH2	-7.61	116.49	120.30
1	a	690	ARG	NE-CZ-NH2	-7.61	116.50	120.30
1	u	126	ASP	CB-CG-OD2	7.60	125.14	118.30
1	2	163	PRO	N-CA-CB	-7.60	94.18	103.30
1	M	429	PHE	CB-CG-CD1	-7.60	115.48	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	405	ARG	NE-CZ-NH2	-7.60	116.50	120.30
1	z	173	TYR	CB-CG-CD2	7.60	125.56	121.00
1	p	531	PHE	CB-CG-CD2	7.59	126.12	120.80
1	6	145	ARG	NE-CZ-NH1	7.59	124.10	120.30
1	r	633	TYR	CB-CG-CD2	-7.59	116.44	121.00
1	4	312	ARG	NE-CZ-NH1	7.59	124.09	120.30
1	v	508	TYR	CB-CG-CD2	-7.59	116.45	121.00
1	Y	405	ARG	NE-CZ-NH2	-7.59	116.50	120.30
1	s	531	PHE	CB-CG-CD2	-7.59	115.49	120.80
1	4	322	TYR	CB-CG-CD2	7.59	125.55	121.00
1	g	300	ASP	CB-CG-OD2	-7.59	111.47	118.30
1	x	651	TYR	CB-CG-CD2	7.59	125.55	121.00
1	T	322	TYR	CB-CG-CD1	-7.58	116.45	121.00
1	l	288	ARG	NE-CZ-NH2	-7.58	116.51	120.30
1	L	455	ARG	NH1-CZ-NH2	-7.58	111.06	119.40
1	O	640	ARG	NH1-CZ-NH2	-7.58	111.06	119.40
1	r	659	ASP	CB-CG-OD2	7.58	125.12	118.30
1	v	105	ASP	CB-CG-OD1	-7.58	111.48	118.30
1	r	239	ARG	NE-CZ-NH2	7.57	124.09	120.30
1	S	647	PHE	CB-CG-CD2	-7.57	115.50	120.80
1	C	640	ARG	NH1-CZ-NH2	-7.57	111.07	119.40
1	l	400	ALA	CB-CA-C	7.57	121.45	110.10
1	q	705	ALA	N-CA-CB	7.57	120.70	110.10
1	L	97	VAL	CG1-CB-CG2	-7.57	98.79	110.90
1	c	651	TYR	CB-CG-CD1	-7.57	116.46	121.00
1	G	689	ARG	NE-CZ-NH2	7.57	124.08	120.30
1	5	255	ARG	NE-CZ-NH2	-7.56	116.52	120.30
1	w	487	TYR	CB-CG-CD2	-7.56	116.46	121.00
1	P	655	ARG	NH1-CZ-NH2	-7.56	111.08	119.40
1	q	410	ASP	CB-CG-OD2	7.56	125.11	118.30
1	N	357	ARG	NE-CZ-NH2	-7.56	116.52	120.30
1	4	145	ARG	NH1-CZ-NH2	7.56	127.71	119.40
1	7	501	PHE	CB-CG-CD1	-7.56	115.51	120.80
1	9	370	LEU	CB-CG-CD1	7.56	123.85	111.00
1	x	173	TYR	CB-CG-CD2	-7.56	116.47	121.00
1	Q	501	PHE	CB-CG-CD2	7.56	126.09	120.80
1	l	488	ARG	NH1-CZ-NH2	-7.55	111.09	119.40
1	4	634	PHE	CB-CG-CD2	-7.55	115.51	120.80
1	z	170	ARG	NE-CZ-NH2	-7.55	116.52	120.30
1	k	488	ARG	NE-CZ-NH2	-7.55	116.52	120.30
1	a	316	TYR	CB-CG-CD1	-7.55	116.47	121.00
1	f	582	ASP	CB-CG-OD2	7.55	125.09	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	n	595	GLU	OE1-CD-OE2	-7.55	114.25	123.30
1	G	288	ARG	NH1-CZ-NH2	-7.54	111.10	119.40
1	Z	152	ARG	NE-CZ-NH1	7.54	124.07	120.30
1	2	322	TYR	CG-CD2-CE2	-7.53	115.27	121.30
1	p	573	ARG	NE-CZ-NH1	7.53	124.07	120.30
1	E	449	ARG	NE-CZ-NH1	7.53	124.07	120.30
1	7	394	ARG	NE-CZ-NH2	-7.53	116.53	120.30
1	e	689	ARG	NE-CZ-NH2	7.53	124.06	120.30
1	r	202	ARG	NE-CZ-NH2	-7.53	116.53	120.30
1	E	495	PHE	CB-CG-CD1	7.53	126.07	120.80
1	H	655	ARG	NE-CZ-NH2	-7.53	116.53	120.30
1	U	170	ARG	NE-CZ-NH1	7.53	124.06	120.30
1	0	488	ARG	NE-CZ-NH1	7.53	124.06	120.30
1	e	567	MET	CG-SD-CE	-7.53	88.16	100.20
1	y	316	TYR	CB-CG-CD1	7.53	125.52	121.00
1	D	152	ARG	NE-CZ-NH1	7.53	124.06	120.30
1	G	458	PHE	CB-CG-CD1	7.53	126.07	120.80
1	X	235	ASP	CB-CG-OD1	7.53	125.07	118.30
1	X	655	ARG	NE-CZ-NH1	7.52	124.06	120.30
1	p	255	ARG	NE-CZ-NH2	-7.52	116.54	120.30
1	R	231	ARG	NE-CZ-NH1	-7.52	116.54	120.30
1	d	182	ASP	CB-CG-OD2	7.52	125.07	118.30
1	D	573	ARG	NE-CZ-NH2	7.52	124.06	120.30
1	i	252	TYR	CB-CG-CD2	-7.51	116.49	121.00
1	o	170	ARG	NE-CZ-NH2	-7.51	116.54	120.30
1	t	174	ARG	NH1-CZ-NH2	-7.51	111.14	119.40
1	Q	220	ASP	CB-CG-OD2	-7.51	111.54	118.30
1	D	182	ASP	CB-CG-OD1	7.51	125.06	118.30
1	S	531	PHE	CB-CG-CD2	7.51	126.06	120.80
1	z	555	ASP	CB-CG-OD1	-7.50	111.55	118.30
1	R	455	ARG	NE-CZ-NH2	-7.50	116.55	120.30
1	O	410	ASP	CB-CG-OD2	7.50	125.05	118.30
1	b	349	PHE	CB-CG-CD2	7.50	126.05	120.80
1	r	494	GLY	O-C-N	-7.50	110.70	122.70
1	C	623	PHE	CB-CG-CD1	7.50	126.05	120.80
1	X	316	TYR	CB-CG-CD1	-7.50	116.50	121.00
1	s	421	PHE	CB-CG-CD2	7.50	126.05	120.80
1	F	108	ARG	NE-CZ-NH2	-7.50	116.55	120.30
1	7	336	ARG	NE-CZ-NH2	-7.50	116.55	120.30
1	f	301	ARG	NH1-CZ-NH2	-7.50	111.15	119.40
1	g	572	PHE	CB-CG-CD1	7.50	126.05	120.80
1	5	167	TRP	CE3-CZ3-CH2	-7.49	112.96	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	417	ASP	CB-CG-OD1	7.49	125.04	118.30
1	z	367	VAL	CA-CB-CG1	-7.49	99.66	110.90
1	l	647	PHE	CB-CG-CD1	-7.49	115.56	120.80
1	p	647	PHE	CB-CG-CD2	7.48	126.04	120.80
1	O	421	PHE	CB-CG-CD1	7.48	126.04	120.80
1	U	573	ARG	NE-CZ-NH1	7.48	124.04	120.30
1	f	695	ARG	NH1-CZ-NH2	-7.48	111.17	119.40
1	q	458	PHE	CB-CG-CD1	7.48	126.04	120.80
1	6	686	ALA	CB-CA-C	-7.48	98.88	110.10
1	b	336	ARG	NH1-CZ-NH2	-7.48	111.17	119.40
1	O	217	GLU	OE1-CD-OE2	-7.48	114.33	123.30
1	6	108	ARG	NE-CZ-NH1	7.48	124.04	120.30
1	T	703	ARG	NE-CZ-NH2	7.48	124.04	120.30
1	U	288	ARG	NH1-CZ-NH2	-7.48	111.17	119.40
1	T	373	ARG	NE-CZ-NH1	7.48	124.04	120.30
1	b	652	PHE	CB-CG-CD1	-7.47	115.57	120.80
1	H	93	TYR	CB-CG-CD2	-7.47	116.52	121.00
1	K	582	ASP	CB-CG-OD2	-7.47	111.58	118.30
1	N	709	PHE	CB-CG-CD1	7.47	126.03	120.80
1	O	300	ASP	CB-CG-OD2	7.47	125.03	118.30
1	e	455	ARG	CD-NE-CZ	7.47	134.06	123.60
1	7	173	TYR	CG-CD1-CE1	-7.47	115.33	121.30
1	v	202	ARG	NH1-CZ-NH2	-7.47	111.18	119.40
1	B	255	ARG	NE-CZ-NH2	-7.47	116.57	120.30
1	O	444	ARG	NE-CZ-NH1	7.47	124.03	120.30
1	C	642	ALA	O-C-N	-7.47	110.75	122.70
1	0	455	ARG	NH1-CZ-NH2	-7.46	111.19	119.40
1	1	487	TYR	CB-CG-CD2	-7.46	116.52	121.00
1	L	573	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	O	690	ARG	NE-CZ-NH1	7.46	124.03	120.30
1	i	698	ARG	NE-CZ-NH1	7.46	124.03	120.30
1	p	697	TYR	CB-CG-CD2	-7.46	116.53	121.00
1	w	173	TYR	CB-CG-CD2	-7.46	116.52	121.00
1	J	336	ARG	NH1-CZ-NH2	-7.46	111.20	119.40
1	U	174	ARG	NE-CZ-NH2	-7.46	116.57	120.30
1	F	93	TYR	CB-CG-CD2	-7.46	116.53	121.00
1	d	494	GLY	O-C-N	-7.45	110.77	122.70
1	n	597	PHE	CB-CG-CD2	7.45	126.02	120.80
1	6	170	ARG	NE-CZ-NH2	-7.45	116.58	120.30
1	6	588	VAL	CA-CB-CG2	-7.45	99.72	110.90
1	C	239	ARG	NE-CZ-NH1	7.45	124.03	120.30
1	W	597	PHE	CB-CG-CD2	-7.45	115.58	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	573	ARG	NE-CZ-NH1	7.45	124.03	120.30
1	e	573	ARG	NE-CZ-NH1	7.45	124.03	120.30
1	q	336	ARG	NE-CZ-NH1	7.45	124.02	120.30
1	y	364	SER	N-CA-CB	7.45	121.67	110.50
1	G	105	ASP	CB-CG-OD2	-7.45	111.60	118.30
1	Y	115	ASP	CB-CG-OD1	7.45	125.00	118.30
1	l	703	ARG	NH1-CZ-NH2	-7.45	111.21	119.40
1	3	498	TYR	CB-CG-CD2	7.45	125.47	121.00
1	E	322	TYR	CG-CD2-CE2	-7.45	115.34	121.30
1	v	444	ARG	NH1-CZ-NH2	-7.44	111.21	119.40
1	v	458	PHE	CG-CD2-CE2	-7.44	112.61	120.80
1	y	432	ASP	CB-CG-OD2	7.44	125.00	118.30
1	x	182	ASP	CB-CG-OD2	7.44	125.00	118.30
1	s	573	ARG	NE-CZ-NH2	-7.44	116.58	120.30
1	e	531	PHE	CB-CG-CD1	7.43	126.00	120.80
1	E	663	LYS	O-C-N	-7.43	110.81	122.70
1	M	405	ARG	NE-CZ-NH2	-7.43	116.58	120.30
1	V	289	THR	CA-CB-CG2	-7.43	101.99	112.40
1	a	488	ARG	NE-CZ-NH2	-7.43	116.58	120.30
1	T	174	ARG	NE-CZ-NH1	7.43	124.02	120.30
1	N	220	ASP	CB-CG-OD1	7.43	124.98	118.30
1	K	288	ARG	NH1-CZ-NH2	-7.43	111.23	119.40
1	M	703	ARG	NE-CZ-NH1	7.42	124.01	120.30
1	W	152	ARG	NE-CZ-NH2	-7.42	116.59	120.30
1	9	369	ARG	NE-CZ-NH2	-7.42	116.59	120.30
1	q	252	TYR	CB-CG-CD1	-7.42	116.55	121.00
1	e	579	PHE	CB-CG-CD2	7.42	125.99	120.80
1	f	417	ASP	CB-CG-OD1	7.42	124.98	118.30
1	m	362	GLU	OE1-CD-OE2	-7.42	114.40	123.30
1	7	666	MET	CG-SD-CE	-7.42	88.34	100.20
1	r	170	ARG	NE-CZ-NH2	-7.42	116.59	120.30
1	N	98	ARG	NE-CZ-NH2	-7.42	116.59	120.30
1	5	695	ARG	NE-CZ-NH2	-7.41	116.59	120.30
1	C	703	ARG	NE-CZ-NH1	7.41	124.01	120.30
1	Y	449	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
1	w	108	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
1	l	174	ARG	NE-CZ-NH1	7.41	124.00	120.30
1	b	108	ARG	NE-CZ-NH2	-7.41	116.60	120.30
1	j	554	GLU	OE1-CD-OE2	-7.41	114.41	123.30
1	m	577	MET	CG-SD-CE	-7.41	88.35	100.20
1	o	369	ARG	NE-CZ-NH2	-7.41	116.60	120.30
1	H	518	SER	N-CA-CB	7.41	121.61	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	j	573	ARG	NH1-CZ-NH2	7.40	127.54	119.40
1	j	444	ARG	NE-CZ-NH1	7.40	124.00	120.30
1	w	301	ARG	NE-CZ-NH1	7.40	124.00	120.30
1	R	323	MET	CG-SD-CE	-7.40	88.36	100.20
1	H	297	ASP	CB-CG-OD1	7.40	124.96	118.30
1	z	703	ARG	NE-CZ-NH1	7.40	124.00	120.30
1	S	301	ARG	NE-CZ-NH1	7.39	124.00	120.30
1	t	336	ARG	NE-CZ-NH2	-7.39	116.61	120.30
1	T	328	ARG	NE-CZ-NH1	7.39	124.00	120.30
1	w	420	PHE	CB-CG-CD2	-7.39	115.63	120.80
1	e	232	VAL	CA-CB-CG1	-7.39	99.82	110.90
1	S	498	TYR	CB-CG-CD2	-7.38	116.57	121.00
1	a	168	ALA	CB-CA-C	-7.38	99.03	110.10
1	t	640	ARG	NE-CZ-NH1	7.38	123.99	120.30
1	4	151	THR	CA-CB-CG2	-7.38	102.06	112.40
1	4	405	ARG	NE-CZ-NH2	-7.38	116.61	120.30
1	x	239	ARG	O-C-N	-7.38	110.89	122.70
1	C	173	TYR	CB-CG-CD2	-7.38	116.57	121.00
1	X	145	ARG	NE-CZ-NH1	7.38	123.99	120.30
1	2	240	ASP	CB-CG-OD1	7.38	124.94	118.30
1	9	449	ARG	NH1-CZ-NH2	-7.37	111.29	119.40
1	i	457	ASP	CB-CG-OD1	-7.37	111.67	118.30
1	u	674	ARG	NE-CZ-NH1	7.37	123.99	120.30
1	S	239	ARG	NE-CZ-NH1	-7.37	116.61	120.30
1	2	487	TYR	CB-CG-CD2	7.37	125.42	121.00
1	T	444	ARG	NH1-CZ-NH2	-7.37	111.30	119.40
1	d	634	PHE	CB-CG-CD1	7.37	125.96	120.80
1	i	288	ARG	NE-CZ-NH1	7.37	123.98	120.30
1	d	675	TYR	CB-CG-CD2	7.36	125.42	121.00
1	z	303	THR	CA-CB-CG2	-7.36	102.09	112.40
1	4	152	ARG	NE-CZ-NH2	7.36	123.98	120.30
1	d	451	TYR	CB-CG-CD1	-7.36	116.58	121.00
1	K	301	ARG	NE-CZ-NH2	-7.36	116.62	120.30
1	Z	695	ARG	NE-CZ-NH2	-7.36	116.62	120.30
1	e	573	ARG	NH1-CZ-NH2	-7.36	111.31	119.40
1	L	457	ASP	CB-CG-OD2	-7.36	111.68	118.30
1	n	508	TYR	CG-CD2-CE2	-7.35	115.42	121.30
1	M	312	ARG	NE-CZ-NH2	-7.35	116.62	120.30
1	f	373	ARG	NE-CZ-NH1	-7.35	116.62	120.30
1	t	697	TYR	CB-CG-CD1	7.35	125.41	121.00
1	h	394	ARG	NE-CZ-NH1	7.35	123.97	120.30
1	E	269	ASP	CB-CG-OD1	-7.35	111.69	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	g	405	ARG	NE-CZ-NH1	7.35	123.97	120.30
1	D	350	PHE	CB-CG-CD1	-7.35	115.66	120.80
1	6	597	PHE	CB-CG-CD1	7.34	125.94	120.80
1	h	593	ARG	NE-CZ-NH2	-7.34	116.63	120.30
1	a	689	ARG	NE-CZ-NH2	-7.34	116.63	120.30
1	v	542	PHE	CB-CG-CD2	-7.34	115.66	120.80
1	d	170	ARG	NH1-CZ-NH2	-7.33	111.33	119.40
1	i	196	VAL	CA-CB-CG1	7.33	121.90	110.90
1	q	170	ARG	NH1-CZ-NH2	7.33	127.47	119.40
1	Y	494	GLY	O-C-N	-7.33	110.97	122.70
1	S	444	ARG	NE-CZ-NH2	-7.33	116.64	120.30
1	5	674	ARG	NH1-CZ-NH2	7.33	127.46	119.40
1	6	328	ARG	NE-CZ-NH2	-7.33	116.64	120.30
1	R	432	ASP	CB-CG-OD1	7.33	124.89	118.30
1	W	255	ARG	NE-CZ-NH1	7.33	123.96	120.30
1	b	551	SER	N-CA-CB	7.32	121.48	110.50
1	O	98	ARG	CD-NE-CZ	7.32	133.85	123.60
1	n	218	VAL	CG1-CB-CG2	-7.32	99.19	110.90
1	2	495	PHE	CB-CG-CD1	7.32	125.92	120.80
1	8	421	PHE	CB-CG-CD1	-7.32	115.68	120.80
1	F	709	PHE	CB-CG-CD2	-7.31	115.68	120.80
1	V	93	TYR	CB-CG-CD1	-7.31	116.61	121.00
1	C	417	ASP	CB-CG-OD2	-7.31	111.72	118.30
1	i	444	ARG	NH1-CZ-NH2	-7.31	111.36	119.40
1	l	634	PHE	CB-CG-CD2	-7.31	115.68	120.80
1	D	255	ARG	NE-CZ-NH2	-7.31	116.64	120.30
1	y	93	TYR	CB-CG-CD1	-7.31	116.61	121.00
1	u	182	ASP	CB-CG-OD2	7.31	124.88	118.30
1	c	235	ASP	CB-CG-OD1	7.31	124.88	118.30
1	7	655	ARG	NE-CZ-NH1	7.30	123.95	120.30
1	5	151	THR	CA-CB-CG2	-7.30	102.18	112.40
1	o	697	TYR	CB-CG-CD1	-7.30	116.62	121.00
1	t	539	PHE	CB-CG-CD1	7.30	125.91	120.80
1	G	623	PHE	CB-CG-CD1	7.30	125.91	120.80
1	V	255	ARG	NE-CZ-NH1	7.30	123.95	120.30
1	l	697	TYR	CB-CG-CD2	-7.30	116.62	121.00
1	p	312	ARG	NE-CZ-NH1	7.30	123.95	120.30
1	O	698	ARG	NE-CZ-NH2	-7.30	116.65	120.30
1	q	640	ARG	NH1-CZ-NH2	-7.29	111.38	119.40
1	Z	675	TYR	CG-CD1-CE1	-7.29	115.46	121.30
1	2	93	TYR	CB-CG-CD1	-7.29	116.62	121.00
1	f	405	ARG	NE-CZ-NH2	7.29	123.95	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	x	322	TYR	CB-CG-CD1	-7.29	116.62	121.00
1	A	582	ASP	CB-CG-OD1	7.29	124.86	118.30
1	O	405	ARG	NE-CZ-NH1	7.29	123.95	120.30
1	d	539	PHE	CB-CG-CD2	7.29	125.90	120.80
1	x	406	ARG	NE-CZ-NH1	7.29	123.94	120.30
1	x	675	TYR	CG-CD1-CE1	-7.29	115.47	121.30
1	y	501	PHE	CB-CG-CD2	7.29	125.90	120.80
1	4	299	MET	CG-SD-CE	-7.29	88.54	100.20
1	6	336	ARG	NH1-CZ-NH2	-7.29	111.39	119.40
1	A	182	ASP	CB-CG-OD1	7.29	124.86	118.30
1	c	698	ARG	NE-CZ-NH2	-7.28	116.66	120.30
1	j	126	ASP	CB-CG-OD1	-7.28	111.75	118.30
1	a	93	TYR	CB-CG-CD1	-7.28	116.63	121.00
1	O	449	ARG	NE-CZ-NH1	7.28	123.94	120.30
1	3	405	ARG	NH1-CZ-NH2	-7.28	111.39	119.40
1	c	421	PHE	CB-CG-CD1	-7.28	115.70	120.80
1	L	145	ARG	NE-CZ-NH2	7.28	123.94	120.30
1	y	690	ARG	NE-CZ-NH1	-7.28	116.66	120.30
1	T	674	ARG	O-C-N	-7.28	111.06	122.70
1	6	633	TYR	CB-CG-CD2	7.27	125.36	121.00
1	x	98	ARG	NE-CZ-NH2	7.27	123.94	120.30
1	N	655	ARG	NE-CZ-NH2	-7.27	116.67	120.30
1	U	322	TYR	CD1-CE1-CZ	7.27	126.34	119.80
1	e	170	ARG	CD-NE-CZ	7.27	133.78	123.60
1	l	675	TYR	CB-CG-CD1	7.27	125.36	121.00
1	L	145	ARG	NE-CZ-NH1	7.27	123.94	120.30
1	4	483	TYR	CB-CG-CD1	-7.27	116.64	121.00
1	b	316	TYR	CB-CG-CD1	-7.27	116.64	121.00
1	w	366	THR	CA-CB-CG2	-7.27	102.23	112.40
1	P	98	ARG	CG-CD-NE	-7.27	96.54	111.80
1	h	420	PHE	CB-CG-CD1	7.26	125.88	120.80
1	N	240	ASP	CB-CG-OD2	7.26	124.84	118.30
1	M	328	ARG	NE-CZ-NH2	-7.26	116.67	120.30
1	N	481	GLU	OE1-CD-OE2	-7.26	114.59	123.30
1	5	539	PHE	CB-CG-CD1	-7.26	115.72	120.80
1	n	531	PHE	CB-CG-CD2	-7.26	115.72	120.80
1	1	444	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
1	g	288	ARG	NH1-CZ-NH2	-7.25	111.42	119.40
1	f	419	MET	CA-CB-CG	7.25	125.62	113.30
1	F	438	GLU	O-C-N	-7.25	110.88	123.20
1	z	677	TRP	CB-CG-CD1	7.25	136.42	127.00
1	e	235	ASP	CB-CG-OD1	7.25	124.82	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	689	ARG	NE-CZ-NH2	-7.24	116.68	120.30
1	u	542	PHE	CB-CG-CD1	-7.24	115.73	120.80
1	e	355	TYR	CB-CG-CD2	-7.24	116.66	121.00
1	l	597	PHE	CB-CG-CD1	7.24	125.87	120.80
1	y	98	ARG	CD-NE-CZ	7.24	133.74	123.60
1	f	301	ARG	CD-NE-CZ	7.24	133.73	123.60
1	p	202	ARG	NE-CZ-NH1	7.24	123.92	120.30
1	N	93	TYR	CB-CG-CD2	-7.24	116.66	121.00
1	Y	108	ARG	NH1-CZ-NH2	-7.24	111.44	119.40
1	u	189	GLU	OE1-CD-OE2	-7.24	114.61	123.30
1	0	336	ARG	NH1-CZ-NH2	-7.24	111.44	119.40
1	5	597	PHE	CB-CG-CD1	-7.24	115.73	120.80
1	M	597	PHE	CB-CG-CD1	7.24	125.86	120.80
1	7	231	ARG	CD-NE-CZ	7.23	133.73	123.60
1	a	297	ASP	CB-CG-OD2	7.23	124.81	118.30
1	N	402	GLU	OE1-CD-OE2	-7.23	114.62	123.30
1	6	420	PHE	CB-CG-CD2	7.23	125.86	120.80
1	a	221	LEU	CB-CG-CD1	7.23	123.29	111.00
1	t	93	TYR	CB-CG-CD2	-7.23	116.66	121.00
1	A	573	ARG	CD-NE-CZ	-7.23	113.48	123.60
1	W	231	ARG	NE-CZ-NH2	7.23	123.91	120.30
1	n	394	ARG	NE-CZ-NH2	-7.23	116.69	120.30
1	r	231	ARG	NE-CZ-NH1	-7.23	116.69	120.30
1	w	349	PHE	CB-CG-CD2	-7.23	115.74	120.80
1	T	651	TYR	CB-CG-CD1	-7.23	116.66	121.00
1	9	501	PHE	CB-CG-CD2	7.22	125.86	120.80
1	y	483	TYR	CB-CG-CD2	-7.22	116.67	121.00
1	B	449	ARG	NH1-CZ-NH2	-7.22	111.45	119.40
1	d	145	ARG	NE-CZ-NH2	7.22	123.91	120.30
1	p	298	LEU	O-C-N	-7.22	111.15	122.70
1	J	487	TYR	CB-CG-CD1	7.22	125.33	121.00
1	6	483	TYR	CG-CD1-CE1	-7.22	115.53	121.30
1	b	519	MET	CG-SD-CE	-7.22	88.65	100.20
1	K	108	ARG	NE-CZ-NH2	7.22	123.91	120.30
1	d	174	ARG	NH1-CZ-NH2	-7.21	111.46	119.40
1	O	698	ARG	NH1-CZ-NH2	-7.21	111.46	119.40
1	z	689	ARG	NE-CZ-NH2	7.21	123.91	120.30
1	a	239	ARG	NE-CZ-NH1	-7.21	116.69	120.30
1	C	328	ARG	CD-NE-CZ	7.21	133.69	123.60
1	M	239	ARG	NE-CZ-NH2	-7.21	116.70	120.30
1	r	108	ARG	NH1-CZ-NH2	-7.21	111.47	119.40
1	L	488	ARG	NE-CZ-NH2	-7.20	116.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	202	ARG	NE-CZ-NH2	-7.20	116.70	120.30
1	g	312	ARG	NE-CZ-NH1	7.20	123.90	120.30
1	V	322	TYR	CB-CG-CD1	7.20	125.32	121.00
1	G	312	ARG	NE-CZ-NH2	-7.20	116.70	120.30
1	7	255	ARG	NE-CZ-NH2	7.20	123.90	120.30
1	s	585	TYR	CB-CG-CD1	-7.20	116.68	121.00
1	l	698	ARG	NE-CZ-NH2	-7.19	116.70	120.30
1	o	593	ARG	NE-CZ-NH2	-7.19	116.70	120.30
1	r	634	PHE	CB-CG-CD2	-7.19	115.77	120.80
1	G	698	ARG	NH1-CZ-NH2	-7.19	111.49	119.40
1	L	640	ARG	NH1-CZ-NH2	-7.19	111.49	119.40
1	7	202	ARG	NH1-CZ-NH2	-7.19	111.50	119.40
1	3	428	MET	CG-SD-CE	-7.18	88.70	100.20
1	c	597	PHE	CB-CG-CD2	-7.18	115.77	120.80
1	3	297	ASP	CB-CG-OD2	-7.18	111.83	118.30
1	I	689	ARG	NH1-CZ-NH2	-7.18	111.50	119.40
1	H	526	ILE	O-C-N	-7.18	111.21	122.70
1	T	102	ASP	CB-CG-OD2	7.18	124.76	118.30
1	7	322	TYR	CB-CG-CD2	7.18	125.31	121.00
1	j	674	ARG	NE-CZ-NH2	-7.18	116.71	120.30
1	t	152	ARG	NE-CZ-NH2	-7.18	116.71	120.30
1	d	690	ARG	NE-CZ-NH1	7.17	123.89	120.30
1	l	182	ASP	CB-CG-OD2	7.17	124.76	118.30
1	S	501	PHE	CB-CG-CD1	7.17	125.82	120.80
1	7	218	VAL	CG1-CB-CG2	7.17	122.37	110.90
1	A	269	ASP	CB-CG-OD1	-7.17	111.85	118.30
1	c	283	ASP	CB-CG-OD2	-7.17	111.85	118.30
1	7	487	TYR	CB-CG-CD2	7.17	125.30	121.00
1	E	380	MET	CG-SD-CE	7.17	111.67	100.20
1	k	695	ARG	NE-CZ-NH1	7.17	123.88	120.30
1	z	356	PHE	CB-CG-CD2	7.17	125.82	120.80
1	0	703	ARG	NE-CZ-NH1	7.16	123.88	120.30
1	y	173	TYR	CB-CG-CD2	-7.16	116.70	121.00
1	A	278	MET	CG-SD-CE	-7.16	88.74	100.20
1	A	709	PHE	CB-CG-CD2	-7.16	115.79	120.80
1	K	174	ARG	NE-CZ-NH1	7.16	123.88	120.30
1	m	633	TYR	CG-CD2-CE2	-7.16	115.57	121.30
1	n	240	ASP	CB-CG-OD1	7.16	124.75	118.30
1	N	197	MET	CG-SD-CE	-7.16	88.74	100.20
1	W	115	ASP	CB-CG-OD1	7.16	124.74	118.30
1	W	703	ARG	NE-CZ-NH2	-7.16	116.72	120.30
1	P	689	ARG	NE-CZ-NH2	-7.16	116.72	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	T	457	ASP	CB-CG-OD2	7.16	124.74	118.30
1	3	356	PHE	CB-CG-CD2	7.15	125.81	120.80
1	M	690	ARG	NE-CZ-NH1	7.15	123.88	120.30
1	6	487	TYR	CB-CG-CD2	-7.15	116.71	121.00
1	m	98	ARG	NH1-CZ-NH2	-7.15	111.53	119.40
1	M	483	TYR	CB-CG-CD2	-7.15	116.71	121.00
1	5	205	SER	N-CA-CB	7.15	121.22	110.50
1	t	444	ARG	NH1-CZ-NH2	-7.15	111.54	119.40
1	W	690	ARG	NE-CZ-NH2	-7.15	116.73	120.30
1	m	350	PHE	CB-CG-CD1	-7.14	115.80	120.80
1	t	173	TYR	CB-CG-CD1	7.14	125.29	121.00
1	d	455	ARG	NE-CZ-NH2	-7.14	116.73	120.30
1	E	322	TYR	CB-CG-CD2	-7.14	116.72	121.00
1	r	633	TYR	CZ-CE2-CD2	7.14	126.22	119.80
1	f	323	MET	CG-SD-CE	-7.14	88.78	100.20
1	u	225	ASP	CB-CG-OD2	7.14	124.72	118.30
1	S	132	SER	N-CA-CB	-7.14	99.80	110.50
1	k	288	ARG	NH1-CZ-NH2	-7.13	111.55	119.40
1	t	102	ASP	CB-CG-OD2	7.13	124.72	118.30
1	N	202	ARG	NE-CZ-NH1	-7.13	116.73	120.30
1	4	429	PHE	CB-CG-CD1	7.13	125.79	120.80
1	w	495	PHE	CB-CG-CD1	7.13	125.79	120.80
1	G	498	TYR	CG-CD1-CE1	-7.13	115.59	121.30
1	H	498	TYR	CB-CG-CD2	-7.13	116.72	121.00
1	f	152	ARG	NE-CZ-NH1	7.13	123.86	120.30
1	J	394	ARG	NE-CZ-NH1	7.12	123.86	120.30
1	H	593	ARG	NE-CZ-NH1	-7.12	116.74	120.30
1	x	459	LYS	N-CA-CB	-7.12	97.78	110.60
1	D	689	ARG	NE-CZ-NH1	7.12	123.86	120.30
1	X	405	ARG	NE-CZ-NH2	7.12	123.86	120.30
1	9	524	MET	CA-CB-CG	7.12	125.40	113.30
1	D	328	ARG	NE-CZ-NH2	-7.12	116.74	120.30
1	U	449	ARG	NH1-CZ-NH2	-7.12	111.57	119.40
1	8	108	ARG	NE-CZ-NH2	7.12	123.86	120.30
1	c	659	ASP	CB-CG-OD2	7.12	124.70	118.30
1	e	108	ARG	NE-CZ-NH2	-7.12	116.74	120.30
1	D	328	ARG	NE-CZ-NH1	7.12	123.86	120.30
1	b	98	ARG	NH1-CZ-NH2	-7.11	111.58	119.40
1	O	170	ARG	NE-CZ-NH2	-7.11	116.74	120.30
1	C	623	PHE	CB-CG-CD2	-7.11	115.82	120.80
1	W	316	TYR	CB-CG-CD2	7.11	125.27	121.00
1	5	308	MET	CA-CB-CG	7.11	125.39	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	197	MET	CG-SD-CE	-7.11	88.83	100.20
1	C	697	TYR	CB-CG-CD1	7.11	125.27	121.00
1	K	597	PHE	CB-CG-CD1	7.11	125.78	120.80
1	V	573	ARG	NH1-CZ-NH2	-7.11	111.58	119.40
1	5	271	ALA	N-CA-CB	7.11	120.05	110.10
1	a	483	TYR	CB-CG-CD1	7.11	125.27	121.00
1	G	252	TYR	CA-CB-CG	-7.11	99.89	113.40
1	M	255	ARG	NE-CZ-NH1	7.11	123.85	120.30
1	n	288	ARG	NE-CZ-NH1	-7.11	116.75	120.30
1	8	356	PHE	CB-CG-CD1	-7.10	115.83	120.80
1	W	531	PHE	CB-CG-CD2	-7.10	115.83	120.80
1	Y	316	TYR	CB-CG-CD2	7.10	125.26	121.00
1	z	593	ARG	NE-CZ-NH1	7.10	123.85	120.30
1	L	406	ARG	NE-CZ-NH2	-7.10	116.75	120.30
1	8	640	ARG	NE-CZ-NH2	7.10	123.85	120.30
1	g	508	TYR	CD1-CE1-CZ	7.10	126.19	119.80
1	p	170	ARG	NE-CZ-NH1	7.10	123.85	120.30
1	K	105	ASP	CB-CG-OD1	7.10	124.69	118.30
1	7	328	ARG	NE-CZ-NH1	7.10	123.85	120.30
1	h	170	ARG	NE-CZ-NH2	-7.10	116.75	120.30
1	y	651	TYR	CB-CG-CD1	7.10	125.26	121.00
1	A	675	TYR	CB-CG-CD2	-7.10	116.74	121.00
1	f	624	THR	CA-CB-CG2	7.10	122.33	112.40
1	P	593	ARG	NE-CZ-NH1	7.10	123.85	120.30
1	X	573	ARG	NE-CZ-NH2	7.10	123.85	120.30
1	5	357	ARG	NE-CZ-NH2	-7.09	116.75	120.30
1	r	331	GLN	CG-CD-OE1	7.09	135.79	121.60
1	x	312	ARG	CD-NE-CZ	7.09	133.53	123.60
1	x	634	PHE	CB-CG-CD2	-7.09	115.84	120.80
1	r	328	ARG	NE-CZ-NH1	7.09	123.84	120.30
1	S	651	TYR	CB-CG-CD2	-7.09	116.75	121.00
1	a	458	PHE	CB-CG-CD2	-7.09	115.84	120.80
1	t	647	PHE	CB-CG-CD1	7.09	125.76	120.80
1	I	282	VAL	CG1-CB-CG2	7.09	122.24	110.90
1	Y	239	ARG	NE-CZ-NH1	7.09	123.84	120.30
1	p	483	TYR	CG-CD1-CE1	-7.08	115.63	121.30
1	u	117	ALA	N-CA-CB	-7.08	100.18	110.10
1	H	709	PHE	CB-CG-CD2	7.08	125.76	120.80
1	q	632	ALA	CB-CA-C	7.08	120.72	110.10
1	H	356	PHE	CB-CG-CD1	7.08	125.75	120.80
1	s	432	ASP	CB-CG-OD1	-7.08	111.93	118.30
1	c	674	ARG	CD-NE-CZ	7.07	133.50	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	e	93	TYR	CB-CG-CD1	7.07	125.24	121.00
1	N	698	ARG	NE-CZ-NH2	-7.07	116.76	120.30
1	o	142	ALA	CB-CA-C	7.07	120.71	110.10
1	x	501	PHE	CB-CG-CD2	-7.07	115.85	120.80
1	K	593	ARG	NH1-CZ-NH2	-7.07	111.62	119.40
1	4	310	VAL	CA-CB-CG2	-7.07	100.30	110.90
1	w	634	PHE	CB-CG-CD2	-7.07	115.85	120.80
1	V	689	ARG	NH1-CZ-NH2	-7.07	111.62	119.40
1	s	633	TYR	CB-CG-CD1	-7.07	116.76	121.00
1	Q	597	PHE	N-CA-C	7.07	130.08	111.00
1	F	98	ARG	NE-CZ-NH1	7.06	123.83	120.30
1	J	633	TYR	CB-CG-CD2	7.06	125.24	121.00
1	L	278	MET	CG-SD-CE	-7.06	88.90	100.20
1	8	283	ASP	CB-CG-OD2	7.06	124.65	118.30
1	y	674	ARG	NE-CZ-NH2	-7.06	116.77	120.30
1	M	577	MET	CG-SD-CE	-7.06	88.91	100.20
1	5	328	ARG	NE-CZ-NH1	7.06	123.83	120.30
1	q	323	MET	CG-SD-CE	-7.06	88.91	100.20
1	c	200	ASN	N-CA-CB	7.05	123.30	110.60
1	A	585	TYR	CB-CG-CD2	-7.05	116.77	121.00
1	M	498	TYR	CB-CG-CD2	7.05	125.23	121.00
1	7	640	ARG	NE-CZ-NH2	-7.05	116.77	120.30
1	p	640	ARG	NE-CZ-NH1	7.05	123.83	120.30
1	x	519	MET	CG-SD-CE	-7.05	88.92	100.20
1	D	322	TYR	CG-CD2-CE2	-7.05	115.66	121.30
1	I	640	ARG	NH1-CZ-NH2	-7.05	111.64	119.40
1	1	380	MET	CG-SD-CE	-7.05	88.92	100.20
1	h	703	ARG	NE-CZ-NH2	-7.05	116.78	120.30
1	u	156	VAL	CA-CB-CG2	-7.05	100.33	110.90
1	T	585	TYR	CZ-CE2-CD2	-7.05	113.46	119.80
1	5	283	ASP	CB-CG-OD2	-7.05	111.96	118.30
1	h	231	ARG	N-CA-CB	7.04	123.28	110.60
1	H	93	TYR	CB-CG-CD1	7.04	125.22	121.00
1	R	98	ARG	NE-CZ-NH2	-7.04	116.78	120.30
1	t	301	ARG	NE-CZ-NH1	7.04	123.82	120.30
1	3	297	ASP	CB-CG-OD1	7.04	124.64	118.30
1	k	255	ARG	NH1-CZ-NH2	-7.04	111.66	119.40
1	z	487	TYR	CZ-CE2-CD2	7.04	126.13	119.80
1	C	316	TYR	CB-CG-CD1	7.04	125.22	121.00
1	E	207	GLU	OE1-CD-OE2	-7.04	114.86	123.30
1	J	508	TYR	CB-CG-CD2	7.04	125.22	121.00
1	Q	152	ARG	NE-CZ-NH1	7.04	123.82	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	d	703	ARG	NH1-CZ-NH2	-7.03	111.66	119.40
1	A	585	TYR	CG-CD2-CE2	-7.03	115.67	121.30
1	H	634	PHE	CB-CG-CD1	7.03	125.72	120.80
1	y	562	ALA	N-CA-CB	-7.03	100.26	110.10
1	A	328	ARG	NE-CZ-NH1	7.03	123.81	120.30
1	t	225	ASP	CB-CG-OD2	7.03	124.62	118.30
1	j	406	ARG	NH1-CZ-NH2	-7.02	111.67	119.40
1	f	174	ARG	NE-CZ-NH1	7.02	123.81	120.30
1	x	252	TYR	CB-CG-CD2	7.02	125.21	121.00
1	6	235	ASP	CB-CG-OD1	7.02	124.62	118.30
1	A	174	ARG	NE-CZ-NH1	7.02	123.81	120.30
1	T	322	TYR	CB-CG-CD2	7.02	125.21	121.00
1	y	539	PHE	CB-CG-CD1	7.02	125.71	120.80
1	f	173	TYR	CB-CG-CD2	-7.02	116.79	121.00
1	O	355	TYR	CZ-CE2-CD2	7.02	126.11	119.80
1	X	287	ASP	CB-CG-OD1	7.02	124.61	118.30
1	v	574	MET	CG-SD-CE	-7.01	88.98	100.20
1	z	349	PHE	CB-CG-CD2	7.01	125.71	120.80
1	K	373	ARG	NE-CZ-NH1	7.01	123.81	120.30
1	J	698	ARG	NE-CZ-NH1	-7.01	116.80	120.30
1	9	531	PHE	CB-CG-CD2	-7.01	115.89	120.80
1	A	647	PHE	CB-CG-CD1	7.01	125.70	120.80
1	c	174	ARG	NE-CZ-NH2	7.00	123.80	120.30
1	h	523	ALA	N-CA-CB	-7.00	100.30	110.10
1	M	487	TYR	CZ-CE2-CD2	7.00	126.10	119.80
1	k	428	MET	CG-SD-CE	7.00	111.40	100.20
1	w	373	ARG	NE-CZ-NH2	-7.00	116.80	120.30
1	O	312	ARG	NE-CZ-NH2	-7.00	116.80	120.30
1	P	455	ARG	NE-CZ-NH2	7.00	123.80	120.30
1	r	695	ARG	NH1-CZ-NH2	-7.00	111.70	119.40
1	I	275	ALA	N-CA-CB	-7.00	100.30	110.10
1	Z	623	PHE	CB-CG-CD2	-7.00	115.90	120.80
1	1	573	ARG	NH1-CZ-NH2	-6.99	111.71	119.40
1	Q	435	LYS	O-C-N	-6.99	111.51	122.70
1	q	495	PHE	CB-CG-CD1	6.99	125.69	120.80
1	Y	573	ARG	NH1-CZ-NH2	-6.99	111.71	119.40
1	4	189	GLU	CB-CA-C	6.99	124.38	110.40
1	5	444	ARG	CD-NE-CZ	6.99	133.39	123.60
1	X	498	TYR	CG-CD1-CE1	6.99	126.89	121.30
1	0	369	ARG	NE-CZ-NH2	-6.99	116.81	120.30
1	F	357	ARG	NE-CZ-NH2	-6.99	116.81	120.30
1	s	167	TRP	CB-CG-CD2	6.99	135.68	126.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	312	ARG	NH1-CZ-NH2	-6.99	111.72	119.40
1	S	240	ASP	CB-CG-OD1	-6.99	112.01	118.30
1	S	322	TYR	CB-CG-CD2	-6.99	116.81	121.00
1	6	369	ARG	NE-CZ-NH1	6.98	123.79	120.30
1	s	167	TRP	CB-CG-CD1	-6.98	117.92	127.00
1	C	695	ARG	NE-CZ-NH1	6.98	123.79	120.30
1	1	624	THR	CA-CB-CG2	-6.98	102.63	112.40
1	l	577	MET	CG-SD-CE	-6.98	89.03	100.20
1	H	369	ARG	NE-CZ-NH1	6.98	123.79	120.30
1	K	103	LEU	CB-CA-C	-6.98	96.94	110.20
1	3	252	TYR	CD1-CE1-CZ	-6.98	113.52	119.80
1	k	239	ARG	NH1-CZ-NH2	-6.98	111.72	119.40
1	L	316	TYR	CB-CG-CD1	6.98	125.19	121.00
1	p	126	ASP	CB-CG-OD1	6.98	124.58	118.30
1	H	405	ARG	NE-CZ-NH1	6.97	123.79	120.30
1	T	255	ARG	NE-CZ-NH2	-6.97	116.81	120.30
1	A	695	ARG	NE-CZ-NH1	6.97	123.78	120.30
1	3	449	ARG	NH1-CZ-NH2	-6.97	111.73	119.40
1	p	145	ARG	NH1-CZ-NH2	-6.97	111.73	119.40
1	r	442	VAL	CA-CB-CG1	6.97	121.35	110.90
1	8	652	PHE	CB-CG-CD2	-6.97	115.92	120.80
1	g	562	ALA	N-CA-CB	-6.97	100.35	110.10
1	S	136	GLU	OE1-CD-OE2	-6.97	114.94	123.30
1	7	394	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	f	255	ARG	NE-CZ-NH2	6.96	123.78	120.30
1	J	369	ARG	NH1-CZ-NH2	-6.96	111.74	119.40
1	O	152	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	S	709	PHE	CB-CG-CD2	6.96	125.67	120.80
1	H	150	VAL	CA-CB-CG2	-6.96	100.46	110.90
1	E	108	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	8	638	SER	N-CA-CB	6.96	120.94	110.50
1	O	167	TRP	CH2-CZ2-CE2	6.96	124.36	117.40
1	o	375	THR	CA-CB-CG2	-6.96	102.66	112.40
1	3	98	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	g	366	THR	CA-CB-CG2	-6.96	102.66	112.40
1	v	674	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	E	355	TYR	CB-CG-CD2	-6.96	116.83	121.00
1	S	357	ARG	NH1-CZ-NH2	-6.96	111.75	119.40
1	A	299	MET	CG-SD-CE	-6.96	89.07	100.20
1	V	449	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	V	703	ARG	NE-CZ-NH1	6.96	123.78	120.30
1	t	288	ARG	NH1-CZ-NH2	-6.95	111.75	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	623	PHE	CB-CG-CD1	-6.95	115.93	120.80
1	6	176	THR	CA-CB-CG2	6.95	122.13	112.40
1	f	659	ASP	CB-CG-OD1	6.95	124.56	118.30
1	r	582	ASP	CB-CG-OD2	6.95	124.56	118.30
1	X	478	GLU	OE1-CD-OE2	-6.95	114.96	123.30
1	q	305	LYS	O-C-N	-6.95	111.58	122.70
1	A	498	TYR	CB-CG-CD2	6.95	125.17	121.00
1	G	202	ARG	NH1-CZ-NH2	-6.95	111.76	119.40
1	J	239	ARG	NE-CZ-NH1	6.95	123.77	120.30
1	5	239	ARG	C-N-CA	6.95	139.07	121.70
1	6	394	ARG	NE-CZ-NH1	-6.95	116.83	120.30
1	q	152	ARG	NE-CZ-NH2	-6.95	116.83	120.30
1	C	281	GLU	OE1-CD-OE2	-6.95	114.97	123.30
1	9	126	ASP	CB-CG-OD2	6.94	124.55	118.30
1	l	647	PHE	CG-CD1-CE1	-6.94	113.16	120.80
1	3	419	MET	CA-CB-CG	6.94	125.10	113.30
1	z	152	ARG	NE-CZ-NH2	-6.94	116.83	120.30
1	G	666	MET	CG-SD-CE	-6.94	89.09	100.20
1	N	145	ARG	NH1-CZ-NH2	-6.94	111.77	119.40
1	m	558	VAL	CG1-CB-CG2	-6.94	99.80	110.90
1	w	93	TYR	CG-CD1-CE1	-6.94	115.75	121.30
1	W	624	THR	CA-CB-CG2	-6.94	102.69	112.40
1	h	504	ILE	O-C-N	-6.93	111.60	122.70
1	Y	698	ARG	NE-CZ-NH2	-6.93	116.83	120.30
1	K	93	TYR	CZ-CE2-CD2	-6.93	113.56	119.80
1	o	406	ARG	NE-CZ-NH1	6.93	123.77	120.30
1	N	278	MET	CG-SD-CE	-6.93	89.11	100.20
1	S	487	TYR	CB-CG-CD2	6.93	125.16	121.00
1	7	503	ILE	O-C-N	-6.93	111.61	122.70
1	e	356	PHE	CB-CG-CD1	-6.93	115.95	120.80
1	C	488	ARG	NE-CZ-NH2	6.93	123.76	120.30
1	l	498	TYR	CB-CG-CD2	-6.93	116.84	121.00
1	i	703	ARG	NE-CZ-NH2	6.92	123.76	120.30
1	Q	508	TYR	CZ-CE2-CD2	-6.92	113.57	119.80
1	T	437	VAL	CA-CB-CG2	-6.92	100.51	110.90
1	N	633	TYR	CB-CG-CD2	-6.92	116.85	121.00
1	3	357	ARG	NE-CZ-NH1	-6.92	116.84	120.30
1	h	369	ARG	NE-CZ-NH1	6.92	123.76	120.30
1	U	542	PHE	CB-CG-CD2	6.92	125.64	120.80
1	3	322	TYR	CG-CD1-CE1	6.92	126.83	121.30
1	m	488	ARG	NE-CZ-NH1	6.92	123.76	120.30
1	h	255	ARG	NE-CZ-NH1	6.92	123.76	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	w	451	TYR	CG-CD2-CE2	-6.91	115.77	121.30
1	w	542	PHE	CB-CG-CD2	-6.91	115.96	120.80
1	D	220	ASP	CB-CG-OD2	6.91	124.52	118.30
1	n	410	ASP	O-C-N	-6.91	111.64	122.70
1	p	682	GLN	O-C-N	-6.91	111.65	122.70
1	f	449	ARG	NE-CZ-NH1	6.91	123.75	120.30
1	i	93	TYR	CZ-CE2-CD2	6.91	126.02	119.80
1	t	689	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
1	m	651	TYR	CG-CD2-CE2	6.91	126.83	121.30
1	x	110	LEU	O-C-N	-6.91	111.46	123.20
1	a	665	MET	CG-SD-CE	-6.90	89.16	100.20
1	O	455	ARG	NE-CZ-NH1	6.90	123.75	120.30
1	f	255	ARG	NE-CZ-NH1	-6.90	116.85	120.30
1	R	255	ARG	NE-CZ-NH2	-6.90	116.85	120.30
1	a	336	ARG	NH1-CZ-NH2	-6.90	111.81	119.40
1	Q	231	ARG	NE-CZ-NH2	-6.90	116.85	120.30
1	v	108	ARG	NE-CZ-NH2	-6.90	116.85	120.30
1	N	577	MET	CG-SD-CE	-6.90	89.17	100.20
1	O	651	TYR	CB-CG-CD2	-6.89	116.86	121.00
1	p	394	ARG	NE-CZ-NH2	-6.89	116.86	120.30
1	C	300	ASP	CB-CG-OD2	6.89	124.50	118.30
1	H	336	ARG	NE-CZ-NH2	-6.89	116.86	120.30
1	9	105	ASP	CB-CG-OD2	6.89	124.50	118.30
1	Y	352	THR	CA-CB-CG2	-6.89	102.75	112.40
1	o	579	PHE	CB-CG-CD2	6.89	125.62	120.80
1	N	674	ARG	NE-CZ-NH2	-6.89	116.86	120.30
1	S	655	ARG	NE-CZ-NH1	6.89	123.74	120.30
1	2	316	TYR	CB-CG-CD1	6.89	125.13	121.00
1	9	328	ARG	NH1-CZ-NH2	-6.89	111.83	119.40
1	h	455	ARG	NE-CZ-NH2	-6.89	116.86	120.30
1	E	336	ARG	NE-CZ-NH2	-6.89	116.86	120.30
1	H	455	ARG	NH1-CZ-NH2	-6.88	111.83	119.40
1	a	287	ASP	CB-CG-OD2	6.88	124.50	118.30
1	w	543	PHE	O-C-N	-6.88	111.69	122.70
1	l	582	ASP	CB-CG-OD1	6.88	124.49	118.30
1	F	674	ARG	NE-CZ-NH1	6.88	123.74	120.30
1	i	675	TYR	CB-CG-CD1	-6.88	116.87	121.00
1	N	543	PHE	CB-CG-CD2	6.88	125.61	120.80
1	B	695	ARG	NE-CZ-NH2	-6.88	116.86	120.30
1	N	675	TYR	CB-CG-CD2	-6.88	116.87	121.00
1	l	624	THR	CA-CB-CG2	-6.87	102.78	112.40
1	L	350	PHE	CB-CG-CD2	-6.87	115.99	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	303	THR	CA-CB-CG2	-6.87	102.78	112.40
1	5	348	THR	CA-CB-CG2	6.87	122.02	112.40
1	7	495	PHE	CB-CG-CD1	6.87	125.61	120.80
1	m	198	ALA	N-CA-CB	-6.87	100.48	110.10
1	W	623	PHE	CB-CG-CD2	6.87	125.61	120.80
1	l	494	GLY	C-N-CA	6.87	138.86	121.70
1	F	690	ARG	NE-CZ-NH2	-6.87	116.87	120.30
1	D	419	MET	CG-SD-CE	-6.86	89.22	100.20
1	K	640	ARG	CD-NE-CZ	6.86	133.21	123.60
1	u	152	ARG	NE-CZ-NH2	-6.86	116.87	120.30
1	s	675	TYR	CB-CG-CD2	-6.86	116.88	121.00
1	W	376	THR	CA-CB-CG2	-6.86	102.80	112.40
1	u	461	TRP	CB-CG-CD1	-6.86	118.09	127.00
1	H	573	ARG	NH1-CZ-NH2	-6.86	111.86	119.40
1	6	597	PHE	CB-CG-CD2	-6.86	116.00	120.80
1	o	655	ARG	NE-CZ-NH2	-6.86	116.87	120.30
1	L	316	TYR	CB-CG-CD2	-6.86	116.89	121.00
1	z	531	PHE	CB-CG-CD2	6.85	125.60	120.80
1	D	488	ARG	NE-CZ-NH2	-6.85	116.87	120.30
1	0	597	PHE	CB-CG-CD1	6.85	125.60	120.80
1	y	698	ARG	NE-CZ-NH1	6.85	123.72	120.30
1	k	316	TYR	CB-CG-CD2	-6.85	116.89	121.00
1	G	312	ARG	NE-CZ-NH1	6.85	123.72	120.30
1	Y	703	ARG	CG-CD-NE	-6.85	97.42	111.80
1	i	413	SER	O-C-N	-6.85	111.74	122.70
1	p	543	PHE	CB-CG-CD1	-6.85	116.01	120.80
1	U	659	ASP	CB-CG-OD1	-6.85	112.14	118.30
1	s	355	TYR	CB-CG-CD1	-6.84	116.89	121.00
1	x	674	ARG	NE-CZ-NH2	-6.84	116.88	120.30
1	d	220	ASP	CB-CG-OD2	6.84	124.46	118.30
1	P	677	TRP	CB-CG-CD1	6.84	135.89	127.00
1	Z	355	TYR	CZ-CE2-CD2	-6.84	113.64	119.80
1	4	457	ASP	CB-CG-OD1	-6.84	112.14	118.30
1	7	487	TYR	CB-CG-CD1	-6.84	116.90	121.00
1	B	167	TRP	CH2-CZ2-CE2	6.84	124.24	117.40
1	Y	524	MET	CG-SD-CE	-6.84	89.26	100.20
1	4	451	TYR	CB-CG-CD1	6.84	125.10	121.00
1	w	322	TYR	CB-CG-CD2	6.84	125.10	121.00
1	8	543	PHE	CB-CG-CD2	-6.84	116.02	120.80
1	Z	322	TYR	CB-CG-CD2	-6.84	116.90	121.00
1	A	417	ASP	CB-CG-OD2	-6.83	112.15	118.30
1	0	356	PHE	CB-CG-CD1	-6.83	116.02	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	444	ARG	CG-CD-NE	-6.83	97.45	111.80
1	m	652	PHE	CB-CG-CD1	6.83	125.58	120.80
1	v	539	PHE	CB-CG-CD2	6.83	125.58	120.80
1	Q	288	ARG	NH1-CZ-NH2	-6.83	111.89	119.40
1	o	172	SER	N-CA-CB	6.83	120.74	110.50
1	D	288	ARG	NE-CZ-NH2	6.83	123.71	120.30
1	d	483	TYR	CB-CG-CD2	-6.83	116.91	121.00
1	u	495	PHE	N-CA-CB	6.83	122.89	110.60
1	l	429	PHE	CB-CG-CD1	-6.82	116.02	120.80
1	A	294	THR	CA-CB-CG2	6.82	121.95	112.40
1	L	579	PHE	CB-CG-CD1	-6.82	116.02	120.80
1	a	577	MET	CG-SD-CE	-6.82	89.28	100.20
1	9	225	ASP	CB-CG-OD1	6.82	124.44	118.30
1	g	698	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
1	t	145	ARG	NH1-CZ-NH2	-6.82	111.90	119.40
1	R	417	ASP	CB-CG-OD2	-6.82	112.16	118.30
1	E	703	ARG	CD-NE-CZ	6.82	133.15	123.60
1	T	420	PHE	CB-CG-CD2	6.82	125.57	120.80
1	8	406	ARG	NE-CZ-NH2	-6.82	116.89	120.30
1	s	220	ASP	CB-CG-OD2	6.82	124.44	118.30
1	u	449	ARG	NE-CZ-NH1	6.82	123.71	120.30
1	i	444	ARG	NE-CZ-NH2	-6.82	116.89	120.30
1	M	401	THR	CA-CB-CG2	-6.81	102.86	112.40
1	R	174	ARG	NE-CZ-NH2	6.81	123.71	120.30
1	J	170	ARG	CD-NE-CZ	6.81	133.13	123.60
1	j	405	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
1	U	640	ARG	NE-CZ-NH2	-6.81	116.90	120.30
1	G	355	TYR	CB-CG-CD1	6.81	125.08	121.00
1	H	444	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
1	V	655	ARG	NH1-CZ-NH2	-6.81	111.91	119.40
1	6	457	ASP	CB-CG-OD1	6.80	124.42	118.30
1	e	511	GLN	O-C-N	-6.80	111.81	122.70
1	g	170	ARG	NH1-CZ-NH2	-6.80	111.92	119.40
1	Y	234	VAL	CG1-CB-CG2	-6.80	100.01	110.90
1	8	495	PHE	CB-CG-CD1	-6.80	116.04	120.80
1	K	102	ASP	CB-CG-OD1	6.80	124.42	118.30
1	a	574	MET	CG-SD-CE	-6.80	89.32	100.20
1	i	240	ASP	CB-CG-OD1	6.80	124.42	118.30
1	F	239	ARG	CD-NE-CZ	6.80	133.12	123.60
1	y	170	ARG	NE-CZ-NH1	-6.80	116.90	120.30
1	F	651	TYR	CB-CG-CD2	6.80	125.08	121.00
1	q	145	ARG	NE-CZ-NH1	6.79	123.70	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	633	TYR	CB-CG-CD1	6.79	125.08	121.00
1	O	449	ARG	NH1-CZ-NH2	-6.79	111.93	119.40
1	3	695	ARG	NE-CZ-NH1	6.79	123.70	120.30
1	E	145	ARG	NE-CZ-NH1	6.79	123.70	120.30
1	E	690	ARG	NE-CZ-NH2	-6.79	116.91	120.30
1	c	542	PHE	CB-CG-CD1	6.79	125.55	120.80
1	B	152	ARG	NE-CZ-NH2	-6.79	116.91	120.30
1	M	597	PHE	CB-CG-CD2	-6.79	116.05	120.80
1	s	586	SER	N-CA-CB	6.79	120.68	110.50
1	u	517	LEU	CB-CG-CD1	-6.79	99.46	111.00
1	H	623	PHE	CB-CG-CD1	6.79	125.55	120.80
1	P	170	ARG	NE-CZ-NH1	6.79	123.69	120.30
1	6	357	ARG	NE-CZ-NH1	6.78	123.69	120.30
1	d	543	PHE	CB-CG-CD2	6.78	125.55	120.80
1	H	202	ARG	NE-CZ-NH2	-6.78	116.91	120.30
1	Q	574	MET	CG-SD-CE	-6.78	89.35	100.20
1	X	573	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
1	a	675	TYR	CG-CD1-CE1	-6.78	115.88	121.30
1	h	410	ASP	O-C-N	-6.78	111.85	122.70
1	n	582	ASP	CB-CG-OD1	6.78	124.40	118.30
1	q	288	ARG	NH1-CZ-NH2	-6.78	111.94	119.40
1	P	283	ASP	CB-CG-OD1	6.78	124.40	118.30
1	8	269	ASP	CB-CG-OD2	6.78	124.40	118.30
1	f	567	MET	CG-SD-CE	-6.78	89.35	100.20
1	c	287	ASP	CB-CG-OD1	-6.78	112.20	118.30
1	y	501	PHE	CB-CG-CD1	-6.78	116.06	120.80
1	d	105	ASP	CB-CG-OD2	6.78	124.40	118.30
1	H	405	ARG	NH1-CZ-NH2	-6.78	111.95	119.40
1	N	634	PHE	CB-CG-CD2	-6.78	116.06	120.80
1	n	174	ARG	NE-CZ-NH2	-6.77	116.91	120.30
1	6	357	ARG	NE-CZ-NH2	-6.77	116.92	120.30
1	j	703	ARG	NE-CZ-NH2	-6.77	116.92	120.30
1	k	421	PHE	CB-CG-CD1	-6.77	116.06	120.80
1	3	173	TYR	CB-CG-CD1	-6.77	116.94	121.00
1	x	695	ARG	NE-CZ-NH1	6.77	123.68	120.30
1	Q	288	ARG	NE-CZ-NH2	-6.77	116.92	120.30
1	m	640	ARG	NH1-CZ-NH2	-6.77	111.96	119.40
1	f	582	ASP	CB-CG-OD1	-6.76	112.21	118.30
1	Q	285	GLU	OE1-CD-OE2	-6.76	115.19	123.30
1	r	674	ARG	NE-CZ-NH2	6.76	123.68	120.30
1	v	524	MET	CG-SD-CE	-6.76	89.38	100.20
1	A	451	TYR	CG-CD2-CE2	6.76	126.71	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	655	ARG	NE-CZ-NH2	-6.76	116.92	120.30
1	V	322	TYR	CB-CG-CD2	-6.76	116.94	121.00
1	7	155	LEU	N-CA-CB	-6.76	96.88	110.40
1	m	369	ARG	NE-CZ-NH1	6.76	123.68	120.30
1	L	239	ARG	O-C-N	-6.76	111.89	122.70
1	0	501	PHE	CB-CG-CD2	-6.76	116.07	120.80
1	4	120	ALA	CB-CA-C	-6.76	99.97	110.10
1	c	455	ARG	NE-CZ-NH2	-6.76	116.92	120.30
1	p	495	PHE	CB-CG-CD1	6.76	125.53	120.80
1	M	182	ASP	CB-CG-OD2	6.76	124.38	118.30
1	R	671	GLU	OE1-CD-OE2	-6.76	115.19	123.30
1	O	316	TYR	CB-CG-CD2	-6.75	116.95	121.00
1	0	312	ARG	NE-CZ-NH2	-6.75	116.92	120.30
1	N	255	ARG	NE-CZ-NH2	-6.75	116.92	120.30
1	G	488	ARG	NE-CZ-NH2	-6.75	116.92	120.30
1	I	173	TYR	CB-CG-CD2	-6.75	116.95	121.00
1	U	356	PHE	CB-CG-CD1	6.75	125.53	120.80
1	w	114	GLN	N-CA-CB	6.75	122.75	110.60
1	Q	220	ASP	CB-CG-OD1	6.75	124.37	118.30
1	O	505	VAL	CA-CB-CG1	6.75	121.02	110.90
1	m	239	ARG	NE-CZ-NH1	6.74	123.67	120.30
1	s	703	ARG	NE-CZ-NH2	6.74	123.67	120.30
1	f	137	ALA	N-CA-CB	-6.74	100.66	110.10
1	9	406	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
1	n	652	PHE	CB-CG-CD1	6.74	125.52	120.80
1	Y	369	ARG	NE-CZ-NH2	-6.74	116.93	120.30
1	k	283	ASP	CB-CG-OD1	6.74	124.36	118.30
1	q	703	ARG	NE-CZ-NH1	6.74	123.67	120.30
1	Z	334	THR	CA-CB-CG2	-6.74	102.97	112.40
1	W	115	ASP	CB-CG-OD2	-6.74	112.24	118.30
1	4	539	PHE	CB-CG-CD1	-6.74	116.08	120.80
1	X	654	LEU	CB-CA-C	6.74	123.00	110.20
1	K	451	TYR	CG-CD1-CE1	6.73	126.69	121.30
1	g	576	GLN	CB-CA-C	6.73	123.86	110.40
1	x	202	ARG	NE-CZ-NH2	-6.73	116.93	120.30
1	9	428	MET	CG-SD-CE	-6.73	89.43	100.20
1	y	369	ARG	NE-CZ-NH2	-6.73	116.93	120.30
1	l	405	ARG	NE-CZ-NH2	-6.73	116.94	120.30
1	i	405	ARG	NE-CZ-NH1	6.73	123.67	120.30
1	o	531	PHE	CB-CG-CD1	6.73	125.51	120.80
1	f	108	ARG	NE-CZ-NH1	6.73	123.66	120.30
1	U	405	ARG	NE-CZ-NH1	6.73	123.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	593	ARG	NE-CZ-NH1	6.73	123.66	120.30
1	Y	288	ARG	NH1-CZ-NH2	-6.72	112.00	119.40
1	n	487	TYR	CB-CG-CD2	6.72	125.03	121.00
1	p	633	TYR	CG-CD1-CE1	-6.72	115.92	121.30
1	v	324	ILE	C-N-CA	6.72	138.50	121.70
1	m	595	GLU	O-C-N	-6.72	111.95	122.70
1	C	513	VAL	O-C-N	-6.72	111.95	122.70
1	c	651	TYR	CG-CD1-CE1	-6.72	115.92	121.30
1	g	316	TYR	CG-CD2-CE2	-6.72	115.93	121.30
1	U	288	ARG	NE-CZ-NH1	6.72	123.66	120.30
1	x	196	VAL	O-C-N	-6.71	111.95	122.70
1	z	508	TYR	CZ-CE2-CD2	-6.71	113.76	119.80
1	g	651	TYR	CG-CD2-CE2	-6.71	115.93	121.30
1	u	98	ARG	NH1-CZ-NH2	-6.71	112.02	119.40
1	I	350	PHE	CB-CG-CD1	-6.71	116.10	120.80
1	9	322	TYR	CB-CG-CD1	6.71	125.03	121.00
1	a	494	GLY	O-C-N	-6.71	111.97	122.70
1	t	523	ALA	CB-CA-C	6.71	120.16	110.10
1	A	458	PHE	CB-CG-CD1	6.71	125.50	120.80
1	M	417	ASP	CB-CG-OD1	6.71	124.34	118.30
1	Z	585	TYR	CB-CG-CD2	6.71	125.02	121.00
1	7	531	PHE	CB-CG-CD2	6.71	125.49	120.80
1	k	487	TYR	CB-CG-CD1	-6.71	116.98	121.00
1	m	585	TYR	CB-CG-CD2	-6.71	116.98	121.00
1	3	93	TYR	CG-CD2-CE2	-6.70	115.94	121.30
1	8	690	ARG	NE-CZ-NH1	6.70	123.65	120.30
1	P	659	ASP	CB-CG-OD2	6.70	124.33	118.30
1	Q	287	ASP	CB-CG-OD1	-6.70	112.27	118.30
1	0	695	ARG	NE-CZ-NH2	6.70	123.65	120.30
1	u	421	PHE	CB-CG-CD2	-6.70	116.11	120.80
1	C	126	ASP	CB-CG-OD1	-6.70	112.27	118.30
1	j	409	ALA	CB-CA-C	6.70	120.15	110.10
1	t	634	PHE	CD1-CE1-CZ	-6.70	112.06	120.10
1	I	562	ALA	N-CA-CB	-6.70	100.72	110.10
1	9	198	ALA	N-CA-CB	-6.70	100.73	110.10
1	c	401	THR	CA-CB-CG2	-6.70	103.03	112.40
1	H	709	PHE	CB-CG-CD1	-6.69	116.11	120.80
1	b	573	ARG	NH1-CZ-NH2	-6.69	112.04	119.40
1	G	498	TYR	CZ-CE2-CD2	-6.69	113.78	119.80
1	J	369	ARG	NE-CZ-NH2	6.69	123.65	120.30
1	Z	451	TYR	CB-CG-CD1	-6.69	116.99	121.00
1	M	491	GLU	OE1-CD-OE2	-6.69	115.27	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	690	ARG	NE-CZ-NH1	6.69	123.64	120.30
1	6	531	PHE	CB-CG-CD1	-6.68	116.12	120.80
1	r	651	TYR	CB-CG-CD2	-6.68	116.99	121.00
1	Q	572	PHE	CB-CG-CD2	-6.68	116.12	120.80
1	a	230	THR	CA-CB-CG2	-6.68	103.05	112.40
1	e	579	PHE	CB-CG-CD1	-6.68	116.12	120.80
1	i	451	TYR	CB-CG-CD2	-6.68	116.99	121.00
1	V	336	ARG	NH1-CZ-NH2	-6.68	112.05	119.40
1	L	697	TYR	CB-CG-CD2	-6.68	116.99	121.00
1	R	428	MET	CG-SD-CE	-6.68	89.51	100.20
1	1	298	LEU	CB-CG-CD2	6.68	122.35	111.00
1	N	167	TRP	CG-CD2-CE3	-6.68	127.89	133.90
1	W	105	ASP	CB-CG-OD1	6.68	124.31	118.30
1	k	401	THR	CA-CB-CG2	-6.68	103.05	112.40
1	m	390	GLU	O-C-N	-6.68	111.85	123.20
1	e	298	LEU	CB-CG-CD1	-6.67	99.65	111.00
1	l	655	ARG	NE-CZ-NH2	6.67	123.64	120.30
1	x	357	ARG	NE-CZ-NH1	6.67	123.64	120.30
1	z	539	PHE	CB-CG-CD2	6.67	125.47	120.80
1	2	233	ALA	N-CA-CB	6.67	119.44	110.10
1	2	337	LEU	C-N-CA	6.67	138.38	121.70
1	q	483	TYR	CB-CG-CD2	6.67	125.00	121.00
1	r	457	ASP	CB-CG-OD1	6.67	124.31	118.30
1	E	498	TYR	CB-CG-CD1	-6.67	117.00	121.00
1	E	498	TYR	CG-CD1-CE1	-6.67	115.96	121.30
1	G	651	TYR	CB-CG-CD1	6.67	125.00	121.00
1	M	429	PHE	CG-CD2-CE2	-6.67	113.46	120.80
1	v	182	ASP	CB-CG-OD2	6.67	124.30	118.30
1	9	288	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
1	j	170	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
1	n	297	ASP	CB-CG-OD1	6.67	124.30	118.30
1	K	488	ARG	NE-CZ-NH2	-6.67	116.97	120.30
1	L	698	ARG	NE-CZ-NH1	6.67	123.63	120.30
1	Z	301	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
1	u	288	ARG	NE-CZ-NH2	6.67	123.63	120.30
1	V	293	LEU	O-C-N	-6.67	112.03	122.70
1	r	640	ARG	NE-CZ-NH2	-6.66	116.97	120.30
1	P	213	ILE	CB-CA-C	-6.66	98.28	111.60
1	G	689	ARG	NH1-CZ-NH2	-6.66	112.07	119.40
1	E	531	PHE	CB-CG-CD2	6.66	125.46	120.80
1	m	449	ARG	NH1-CZ-NH2	-6.66	112.08	119.40
1	4	288	ARG	NH1-CZ-NH2	-6.66	112.08	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	531	PHE	CB-CG-CD1	-6.66	116.14	120.80
1	5	662	GLN	O-C-N	-6.66	112.05	122.70
1	J	647	PHE	N-CA-CB	6.66	122.58	110.60
1	4	336	ARG	NH1-CZ-NH2	-6.65	112.08	119.40
1	i	488	ARG	NE-CZ-NH1	6.65	123.63	120.30
1	t	573	ARG	NE-CZ-NH2	-6.65	116.97	120.30
1	H	231	ARG	N-CA-CB	6.65	122.58	110.60
1	Q	328	ARG	NE-CZ-NH2	-6.65	116.97	120.30
1	4	416	ALA	N-CA-CB	-6.65	100.79	110.10
1	D	356	PHE	CB-CG-CD2	6.65	125.46	120.80
1	F	396	SER	N-CA-CB	6.65	120.48	110.50
1	V	297	ASP	CB-CG-OD1	6.65	124.28	118.30
1	l	223	ILE	O-C-N	-6.65	112.06	122.70
1	m	438	GLU	OE1-CD-OE2	-6.65	115.32	123.30
1	u	287	ASP	CB-CG-OD2	-6.65	112.32	118.30
1	Q	108	ARG	NH1-CZ-NH2	-6.65	112.09	119.40
1	Z	579	PHE	CB-CG-CD1	-6.65	116.15	120.80
1	r	651	TYR	CG-CD1-CE1	-6.65	115.98	121.30
1	v	214	THR	N-CA-CB	6.65	122.93	110.30
1	R	674	ARG	NE-CZ-NH2	-6.65	116.98	120.30
1	j	429	PHE	CB-CG-CD1	-6.64	116.15	120.80
1	u	369	ARG	NE-CZ-NH2	-6.64	116.98	120.30
1	L	357	ARG	CG-CD-NE	-6.64	97.85	111.80
1	S	174	ARG	NE-CZ-NH1	6.64	123.62	120.30
1	k	585	TYR	CG-CD2-CE2	-6.64	115.98	121.30
1	z	420	PHE	CB-CG-CD2	-6.64	116.15	120.80
1	Y	622	SER	O-C-N	-6.64	112.07	122.70
1	Z	373	ARG	NE-CZ-NH2	-6.64	116.98	120.30
1	4	508	TYR	CB-CG-CD2	-6.64	117.02	121.00
1	h	93	TYR	CB-CG-CD1	-6.64	117.02	121.00
1	x	449	ARG	NH1-CZ-NH2	-6.64	112.09	119.40
1	L	316	TYR	CG-CD1-CE1	6.64	126.61	121.30
1	l	265	PRO	N-CA-CB	6.64	111.27	103.30
1	N	429	PHE	CB-CG-CD1	-6.64	116.15	120.80
1	k	585	TYR	CB-CG-CD2	-6.64	117.02	121.00
1	2	173	TYR	CB-CG-CD1	-6.64	117.02	121.00
1	R	707	CYS	N-CA-CB	6.64	122.55	110.60
1	U	173	TYR	CB-CG-CD1	6.64	124.98	121.00
1	k	315	THR	O-C-N	-6.63	112.08	122.70
1	q	108	ARG	NE-CZ-NH2	6.63	123.62	120.30
1	M	126	ASP	CB-CG-OD1	6.63	124.27	118.30
1	O	175	ASN	N-CA-CB	6.63	122.54	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	S	350	PHE	CB-CG-CD1	-6.63	116.16	120.80
1	3	356	PHE	CB-CG-CD1	-6.63	116.16	120.80
1	4	655	ARG	NH1-CZ-NH2	-6.63	112.11	119.40
1	e	496	VAL	CG1-CB-CG2	-6.63	100.29	110.90
1	g	316	TYR	CB-CG-CD1	-6.63	117.02	121.00
1	i	488	ARG	NE-CZ-NH2	-6.63	116.98	120.30
1	M	356	PHE	CB-CG-CD2	-6.63	116.16	120.80
1	G	336	ARG	NE-CZ-NH1	6.63	123.61	120.30
1	l	405	ARG	NE-CZ-NH1	6.63	123.61	120.30
1	I	170	ARG	NE-CZ-NH2	6.63	123.61	120.30
1	9	255	ARG	NE-CZ-NH1	6.62	123.61	120.30
1	c	98	ARG	NE-CZ-NH2	-6.62	116.99	120.30
1	b	487	TYR	CZ-CE2-CD2	6.62	125.76	119.80
1	A	417	ASP	CB-CG-OD1	6.62	124.26	118.30
1	d	574	MET	CG-SD-CE	6.62	110.80	100.20
1	n	580	CYS	N-CA-CB	6.62	122.52	110.60
1	s	542	PHE	CB-CG-CD1	-6.62	116.16	120.80
1	F	260	ASN	CB-CG-OD1	6.62	134.84	121.60
1	L	689	ARG	NE-CZ-NH2	-6.62	116.99	120.30
1	N	202	ARG	NE-CZ-NH2	6.62	123.61	120.30
1	8	406	ARG	CD-NE-CZ	6.62	132.87	123.60
1	L	661	LEU	O-C-N	-6.62	112.11	122.70
1	W	224	ILE	O-C-N	-6.62	112.11	122.70
1	0	406	ARG	CD-NE-CZ	6.62	132.87	123.60
1	p	220	ASP	CB-CG-OD2	6.62	124.26	118.30
1	O	543	PHE	N-CA-CB	-6.62	98.69	110.60
1	m	102	ASP	CB-CG-OD1	6.62	124.25	118.30
1	B	593	ARG	NE-CZ-NH1	6.62	123.61	120.30
1	n	297	ASP	CB-CG-OD2	-6.62	112.35	118.30
1	B	531	PHE	CB-CG-CD2	6.62	125.43	120.80
1	0	656	GLU	OE1-CD-OE2	-6.61	115.36	123.30
1	m	282	VAL	CA-CB-CG1	-6.61	100.98	110.90
1	D	483	TYR	CD1-CE1-CZ	-6.61	113.85	119.80
1	R	449	ARG	NH1-CZ-NH2	-6.61	112.13	119.40
1	W	655	ARG	NE-CZ-NH1	6.61	123.61	120.30
1	7	108	ARG	NE-CZ-NH2	6.61	123.61	120.30
1	f	239	ARG	C-N-CA	6.61	138.23	121.70
1	Q	487	TYR	CB-CG-CD2	-6.61	117.03	121.00
1	7	410	ASP	CB-CG-OD2	6.61	124.25	118.30
1	d	349	PHE	CB-CG-CD1	6.61	125.43	120.80
1	Y	128	SER	N-CA-CB	6.61	120.42	110.50
1	3	703	ARG	NE-CZ-NH2	6.61	123.61	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	V	231	ARG	NE-CZ-NH2	-6.61	117.00	120.30
1	e	406	ARG	NE-CZ-NH1	6.61	123.60	120.30
1	Y	202	ARG	NE-CZ-NH2	-6.61	117.00	120.30
1	f	587	VAL	CG1-CB-CG2	6.61	121.47	110.90
1	i	455	ARG	NH1-CZ-NH2	-6.61	112.13	119.40
1	l	515	PRO	N-CA-CB	6.60	111.22	103.30
1	l	336	ARG	NE-CZ-NH1	6.60	123.60	120.30
1	o	519	MET	CG-SD-CE	-6.60	89.64	100.20
1	C	93	TYR	CG-CD1-CE1	-6.60	116.02	121.30
1	H	523	ALA	O-C-N	-6.60	112.14	122.70
1	U	93	TYR	CB-CG-CD1	-6.60	117.04	121.00
1	4	328	ARG	N-CA-CB	6.60	122.48	110.60
1	w	189	GLU	O-C-N	-6.60	112.14	122.70
1	z	287	ASP	CB-CG-OD1	-6.60	112.36	118.30
1	N	355	TYR	CB-CG-CD1	6.60	124.96	121.00
1	t	373	ARG	NE-CZ-NH2	-6.59	117.00	120.30
1	N	349	PHE	CB-CG-CD1	-6.59	116.18	120.80
1	S	102	ASP	CB-CG-OD2	-6.59	112.37	118.30
1	6	705	ALA	CB-CA-C	6.59	119.98	110.10
1	9	689	ARG	NE-CZ-NH2	-6.59	117.00	120.30
1	K	695	ARG	NE-CZ-NH1	6.59	123.59	120.30
1	M	640	ARG	CD-NE-CZ	6.59	132.83	123.60
1	W	405	ARG	NE-CZ-NH1	6.59	123.59	120.30
1	y	647	PHE	CB-CG-CD1	6.58	125.41	120.80
1	u	501	PHE	N-CA-CB	-6.58	98.75	110.60
1	Z	444	ARG	NE-CZ-NH1	6.58	123.59	120.30
1	M	487	TYR	CB-CG-CD2	-6.58	117.05	121.00
1	S	697	TYR	CB-CG-CD1	6.58	124.95	121.00
1	X	166	ALA	CB-CA-C	-6.58	100.23	110.10
1	0	577	MET	N-CA-CB	6.58	122.44	110.60
1	1	421	PHE	CB-CG-CD2	6.58	125.41	120.80
1	5	170	ARG	NE-CZ-NH2	-6.58	117.01	120.30
1	6	498	TYR	CB-CG-CD1	-6.58	117.05	121.00
1	h	316	TYR	CD1-CE1-CZ	-6.58	113.88	119.80
1	p	309	ASN	N-CA-CB	-6.58	98.76	110.60
1	x	428	MET	CG-SD-CE	-6.58	89.68	100.20
1	J	573	ARG	NE-CZ-NH2	-6.58	117.01	120.30
1	f	455	ARG	NE-CZ-NH2	6.58	123.59	120.30
1	l	187	GLU	OE1-CD-OE2	-6.58	115.41	123.30
1	K	444	ARG	NE-CZ-NH1	-6.58	117.01	120.30
1	L	457	ASP	CB-CG-OD1	6.58	124.22	118.30
1	X	136	GLU	N-CA-CB	6.58	122.44	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	108	ARG	NE-CZ-NH1	6.57	123.59	120.30
1	e	675	TYR	CB-CG-CD2	-6.57	117.06	121.00
1	q	300	ASP	CB-CG-OD2	6.57	124.22	118.30
1	C	394	ARG	NE-CZ-NH1	6.57	123.59	120.30
1	U	640	ARG	NH1-CZ-NH2	-6.57	112.17	119.40
1	l	583	GLN	O-C-N	-6.57	112.19	122.70
1	r	495	PHE	CB-CG-CD1	6.57	125.40	120.80
1	d	582	ASP	CB-CG-OD2	-6.57	112.39	118.30
1	l	674	ARG	NE-CZ-NH1	6.57	123.58	120.30
1	C	572	PHE	CG-CD1-CE1	6.57	128.03	120.80
1	K	336	ARG	NE-CZ-NH2	6.57	123.58	120.30
1	p	577	MET	CG-SD-CE	-6.57	89.69	100.20
1	P	356	PHE	CD1-CE1-CZ	6.57	127.98	120.10
1	m	151	THR	CA-CB-CG2	-6.57	103.21	112.40
1	Z	355	TYR	CG-CD1-CE1	-6.57	116.05	121.30
1	t	572	PHE	CB-CG-CD2	6.56	125.39	120.80
1	B	93	TYR	CB-CG-CD1	6.56	124.94	121.00
1	c	655	ARG	NH1-CZ-NH2	-6.56	112.18	119.40
1	n	122	ALA	N-CA-CB	6.56	119.29	110.10
1	G	651	TYR	CB-CG-CD2	-6.56	117.06	121.00
1	2	549	VAL	CA-CB-CG2	-6.56	101.06	110.90
1	f	237	GLN	CB-CA-C	6.56	123.52	110.40
1	l	574	MET	CG-SD-CE	-6.56	89.71	100.20
1	M	488	ARG	NE-CZ-NH1	6.56	123.58	120.30
1	V	373	ARG	NH1-CZ-NH2	-6.56	112.19	119.40
1	7	301	ARG	NE-CZ-NH2	-6.56	117.02	120.30
1	g	653	MET	CG-SD-CE	-6.56	89.71	100.20
1	v	328	ARG	NE-CZ-NH2	6.56	123.58	120.30
1	p	689	ARG	NE-CZ-NH1	6.55	123.58	120.30
1	A	365	ALA	N-CA-CB	6.55	119.28	110.10
1	Q	225	ASP	CB-CG-OD1	6.55	124.20	118.30
1	u	167	TRP	CB-CG-CD1	6.55	135.52	127.00
1	G	300	ASP	CB-CG-OD1	6.55	124.20	118.30
1	m	483	TYR	CB-CG-CD2	-6.55	117.07	121.00
1	M	647	PHE	CG-CD2-CE2	-6.55	113.60	120.80
1	J	531	PHE	CB-CG-CD1	6.55	125.38	120.80
1	O	652	PHE	CB-CG-CD1	-6.55	116.22	120.80
1	3	495	PHE	N-CA-CB	6.54	122.37	110.60
1	f	636	GLU	OE1-CD-OE2	-6.54	115.45	123.30
1	i	447	GLU	OE1-CD-OE2	-6.54	115.45	123.30
1	x	420	PHE	CB-CG-CD2	6.54	125.38	120.80
1	7	472	VAL	CA-CB-CG1	6.54	120.71	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	h	361	GLU	O-C-N	-6.54	112.24	122.70
1	G	373	ARG	NE-CZ-NH2	6.54	123.57	120.30
1	3	444	ARG	NH1-CZ-NH2	-6.54	112.21	119.40
1	c	597	PHE	O-C-N	-6.54	112.24	122.70
1	e	652	PHE	CB-CG-CD2	-6.54	116.23	120.80
1	j	357	ARG	NE-CZ-NH1	6.54	123.57	120.30
1	a	308	MET	CA-CB-CG	6.53	124.41	113.30
1	u	703	ARG	NE-CZ-NH2	6.53	123.57	120.30
1	b	685	THR	N-CA-CB	6.53	122.71	110.30
1	s	429	PHE	CB-CG-CD2	6.53	125.37	120.80
1	v	451	TYR	CG-CD1-CE1	-6.53	116.08	121.30
1	N	373	ARG	NH1-CZ-NH2	-6.53	112.22	119.40
1	7	695	ARG	NE-CZ-NH1	6.53	123.56	120.30
1	t	674	ARG	CG-CD-NE	-6.53	98.09	111.80
1	6	247	ALA	CB-CA-C	-6.53	100.31	110.10
1	9	366	THR	CA-CB-CG2	-6.53	103.27	112.40
1	W	494	GLY	O-C-N	-6.53	112.26	122.70
1	E	297	ASP	CB-CG-OD1	6.52	124.17	118.30
1	A	239	ARG	NE-CZ-NH2	6.52	123.56	120.30
1	J	487	TYR	CG-CD2-CE2	6.52	126.52	121.30
1	q	252	TYR	CG-CD1-CE1	-6.52	116.08	121.30
1	T	558	VAL	CG1-CB-CG2	-6.52	100.47	110.90
1	V	458	PHE	CB-CG-CD1	6.52	125.36	120.80
1	h	239	ARG	NH1-CZ-NH2	-6.52	112.23	119.40
1	w	531	PHE	CB-CG-CD1	6.52	125.36	120.80
1	E	458	PHE	CB-CG-CD2	-6.52	116.24	120.80
1	K	455	ARG	NE-CZ-NH1	6.52	123.56	120.30
1	b	406	ARG	NH1-CZ-NH2	-6.52	112.23	119.40
1	P	300	ASP	CB-CG-OD1	6.52	124.16	118.30
1	c	675	TYR	CG-CD2-CE2	-6.51	116.09	121.30
1	n	420	PHE	CB-CG-CD1	6.51	125.36	120.80
1	r	240	ASP	N-CA-CB	-6.51	98.88	110.60
1	F	239	ARG	NH1-CZ-NH2	-6.51	112.23	119.40
1	w	573	ARG	NE-CZ-NH1	6.51	123.56	120.30
1	Q	683	SER	O-C-N	-6.51	112.28	122.70
1	Q	689	ARG	NH1-CZ-NH2	-6.51	112.24	119.40
1	j	585	TYR	O-C-N	-6.51	112.29	122.70
1	8	577	MET	CG-SD-CE	-6.51	89.79	100.20
1	m	634	PHE	CB-CG-CD1	6.51	125.36	120.80
1	p	98	ARG	NH1-CZ-NH2	-6.51	112.24	119.40
1	G	306	SER	N-CA-CB	6.51	120.26	110.50
1	8	593	ARG	NE-CZ-NH2	-6.50	117.05	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	r	219	PRO	N-CD-CG	6.50	112.95	103.20
1	C	367	VAL	CA-CB-CG2	-6.50	101.15	110.90
1	M	461	TRP	CB-CG-CD1	-6.50	118.54	127.00
1	a	458	PHE	CB-CG-CD1	6.50	125.35	120.80
1	j	483	TYR	CB-CG-CD2	-6.50	117.10	121.00
1	I	444	ARG	NE-CZ-NH1	6.50	123.55	120.30
1	0	690	ARG	NH1-CZ-NH2	-6.50	112.25	119.40
1	f	97	VAL	CG1-CB-CG2	6.50	121.30	110.90
1	h	548	THR	CA-CB-CG2	-6.50	103.30	112.40
1	J	373	ARG	NE-CZ-NH1	6.50	123.55	120.30
1	9	487	TYR	CB-CG-CD1	-6.50	117.10	121.00
1	s	659	ASP	CB-CG-OD2	6.50	124.15	118.30
1	h	541	GLU	O-C-N	-6.49	112.31	122.70
1	l	487	TYR	CB-CG-CD2	6.49	124.90	121.00
1	V	458	PHE	CB-CG-CD2	-6.49	116.25	120.80
1	h	633	TYR	CB-CG-CD2	6.49	124.89	121.00
1	M	93	TYR	CB-CG-CD1	-6.49	117.11	121.00
1	Q	665	MET	CG-SD-CE	-6.49	89.81	100.20
1	B	677	TRP	CB-CG-CD1	-6.49	118.57	127.00
1	G	582	ASP	CB-CG-OD1	6.49	124.14	118.30
1	i	231	ARG	NE-CZ-NH2	-6.49	117.06	120.30
1	j	494	GLY	C-N-CA	6.49	137.91	121.70
1	m	508	TYR	CD1-CE1-CZ	6.49	125.64	119.80
1	s	350	PHE	CB-CG-CD2	6.49	125.34	120.80
1	I	421	PHE	CB-CG-CD2	6.49	125.34	120.80
1	L	173	TYR	CB-CG-CD2	-6.48	117.11	121.00
1	w	579	PHE	CB-CG-CD1	6.48	125.34	120.80
1	z	278	MET	CG-SD-CE	-6.48	89.83	100.20
1	A	350	PHE	CB-CG-CD1	-6.48	116.26	120.80
1	k	582	ASP	CB-CG-OD2	6.48	124.13	118.30
1	y	109	ALA	CB-CA-C	-6.48	100.38	110.10
1	G	293	LEU	CB-CG-CD1	-6.48	99.98	111.00
1	G	623	PHE	CB-CG-CD2	-6.48	116.26	120.80
1	P	675	TYR	CG-CD1-CE1	-6.48	116.11	121.30
1	O	115	ASP	CB-CG-OD1	-6.48	112.47	118.30
1	c	334	THR	N-CA-CB	6.48	122.61	110.30
1	n	334	THR	CA-CB-CG2	-6.48	103.33	112.40
1	9	498	TYR	CB-CG-CD1	6.48	124.89	121.00
1	B	235	ASP	CB-CG-OD1	6.48	124.13	118.30
1	D	102	ASP	CB-CG-OD2	6.48	124.13	118.30
1	O	151	THR	CA-CB-CG2	-6.48	103.33	112.40
1	U	651	TYR	CB-CG-CD2	-6.48	117.11	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	93	TYR	CD1-CE1-CZ	-6.47	113.97	119.80
1	w	231	ARG	NH1-CZ-NH2	-6.47	112.28	119.40
1	E	461	TRP	CG-CD1-NE1	-6.47	103.63	110.10
1	d	652	PHE	CG-CD1-CE1	6.47	127.92	120.80
1	s	664	ALA	CB-CA-C	6.47	119.81	110.10
1	L	700	THR	CA-CB-CG2	-6.47	103.34	112.40
1	X	674	ARG	NE-CZ-NH2	6.47	123.53	120.30
1	v	675	TYR	CG-CD2-CE2	-6.47	116.13	121.30
1	v	682	GLN	O-C-N	-6.47	112.35	122.70
1	w	562	ALA	CB-CA-C	6.47	119.80	110.10
1	C	449	ARG	NH1-CZ-NH2	-6.47	112.28	119.40
1	0	573	ARG	NE-CZ-NH2	-6.47	117.07	120.30
1	c	579	PHE	CB-CG-CD2	-6.47	116.27	120.80
1	l	436	LEU	CB-CG-CD2	6.47	121.99	111.00
1	o	239	ARG	NH1-CZ-NH2	-6.47	112.29	119.40
1	r	703	ARG	NE-CZ-NH2	-6.47	117.07	120.30
1	v	555	ASP	N-CA-CB	-6.47	98.96	110.60
1	A	541	GLU	N-CA-CB	-6.47	98.96	110.60
1	B	167	TRP	CD1-CG-CD2	6.47	111.47	106.30
1	v	572	PHE	CB-CG-CD1	-6.46	116.28	120.80
1	B	134	VAL	CA-CB-CG1	6.46	120.60	110.90
1	Q	197	MET	CG-SD-CE	-6.46	89.86	100.20
1	X	683	SER	N-CA-CB	-6.46	100.80	110.50
1	g	136	GLU	CB-CA-C	6.46	123.33	110.40
1	b	455	ARG	NE-CZ-NH1	6.46	123.53	120.30
1	R	328	ARG	NE-CZ-NH2	-6.46	117.07	120.30
1	k	455	ARG	NE-CZ-NH2	6.46	123.53	120.30
1	W	539	PHE	CB-CG-CD2	-6.46	116.28	120.80
1	3	350	PHE	CB-CG-CD2	-6.46	116.28	120.80
1	x	316	TYR	CB-CG-CD1	-6.46	117.13	121.00
1	l	495	PHE	CB-CG-CD1	6.46	125.32	120.80
1	z	534	VAL	CA-CB-CG2	-6.45	101.22	110.90
1	D	632	ALA	CB-CA-C	6.45	119.78	110.10
1	c	638	SER	CB-CA-C	-6.45	97.84	110.10
1	g	573	ARG	NE-CZ-NH1	-6.45	117.08	120.30
1	H	255	ARG	NH1-CZ-NH2	-6.45	112.31	119.40
1	8	167	TRP	NE1-CE2-CZ2	-6.45	123.31	130.40
1	Q	481	GLU	OE1-CD-OE2	-6.45	115.56	123.30
1	U	498	TYR	CB-CG-CD1	6.45	124.87	121.00
1	2	334	THR	CA-CB-CG2	-6.45	103.38	112.40
1	8	455	ARG	NH1-CZ-NH2	-6.45	112.31	119.40
1	F	451	TYR	CB-CG-CD1	-6.45	117.13	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Y	543	PHE	CB-CG-CD2	-6.45	116.29	120.80
1	Z	239	ARG	NE-CZ-NH2	-6.44	117.08	120.30
1	0	145	ARG	C-N-CA	6.44	135.83	122.30
1	I	637	THR	CA-CB-CG2	6.44	121.42	112.40
1	4	703	ARG	NH1-CZ-NH2	-6.44	112.31	119.40
1	f	432	ASP	O-C-N	-6.44	112.40	122.70
1	G	703	ARG	N-CA-CB	6.44	122.19	110.60
1	2	152	ARG	NE-CZ-NH2	6.44	123.52	120.30
1	3	498	TYR	CZ-CE2-CD2	-6.44	114.01	119.80
1	m	446	ASN	N-CA-CB	6.44	122.19	110.60
1	H	697	TYR	CB-CG-CD1	6.44	124.86	121.00
1	Q	316	TYR	CD1-CG-CD2	6.44	124.98	117.90
1	I	126	ASP	CB-CG-OD2	-6.43	112.51	118.30
1	L	239	ARG	NH1-CZ-NH2	-6.43	112.32	119.40
1	M	519	MET	CG-SD-CE	-6.43	89.91	100.20
1	R	266	CYS	CA-CB-SG	6.43	125.58	114.00
1	b	93	TYR	CG-CD2-CE2	-6.43	116.16	121.30
1	l	252	TYR	CB-CG-CD1	6.43	124.86	121.00
1	C	573	ARG	NE-CZ-NH1	6.43	123.52	120.30
1	8	582	ASP	CB-CG-OD2	6.43	124.09	118.30
1	e	690	ARG	NE-CZ-NH1	-6.43	117.08	120.30
1	Q	239	ARG	C-N-CA	6.43	137.77	121.70
1	C	483	TYR	CB-CG-CD1	6.43	124.86	121.00
1	J	421	PHE	CB-CG-CD1	6.43	125.30	120.80
1	p	449	ARG	NE-CZ-NH1	6.43	123.51	120.30
1	T	651	TYR	CB-CA-C	6.43	123.25	110.40
1	7	239	ARG	O-C-N	-6.42	112.42	122.70
1	L	369	ARG	NE-CZ-NH2	-6.42	117.09	120.30
1	N	449	ARG	NE-CZ-NH1	6.42	123.51	120.30
1	c	252	TYR	CB-CG-CD2	6.42	124.85	121.00
1	g	539	PHE	CB-CG-CD2	-6.42	116.31	120.80
1	O	488	ARG	NE-CZ-NH1	6.42	123.51	120.30
1	Q	674	ARG	CD-NE-CZ	6.42	132.59	123.60
1	0	269	ASP	C-N-CA	6.42	137.75	121.70
1	9	239	ARG	NE-CZ-NH2	-6.42	117.09	120.30
1	p	405	ARG	NE-CZ-NH1	6.42	123.51	120.30
1	q	328	ARG	NH1-CZ-NH2	-6.42	112.34	119.40
1	9	505	VAL	CG1-CB-CG2	6.42	121.17	110.90
1	p	261	LEU	O-C-N	-6.42	112.43	122.70
1	t	252	TYR	CG-CD1-CE1	-6.42	116.17	121.30
1	y	579	PHE	CB-CG-CD1	-6.42	116.31	120.80
1	P	597	PHE	CB-CG-CD2	6.42	125.29	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	488	ARG	NH1-CZ-NH2	-6.41	112.34	119.40
1	c	173	TYR	CB-CG-CD1	-6.41	117.15	121.00
1	I	180	LEU	C-N-CA	6.41	137.73	121.70
1	R	585	TYR	CB-CG-CD2	6.41	124.85	121.00
1	W	659	ASP	CB-CG-OD2	6.41	124.07	118.30
1	p	573	ARG	NE-CZ-NH2	6.41	123.51	120.30
1	x	419	MET	CG-SD-CE	-6.41	89.94	100.20
1	2	308	MET	CA-CB-CG	6.41	124.20	113.30
1	8	343	THR	CA-CB-CG2	6.41	121.38	112.40
1	t	152	ARG	CD-NE-CZ	6.41	132.57	123.60
1	Y	369	ARG	NE-CZ-NH1	6.41	123.50	120.30
1	R	350	PHE	CB-CG-CD2	-6.41	116.31	120.80
1	a	416	ALA	N-CA-CB	-6.41	101.13	110.10
1	b	309	ASN	O-C-N	-6.41	112.45	122.70
1	P	406	ARG	NE-CZ-NH2	6.41	123.50	120.30
1	W	373	ARG	NE-CZ-NH2	-6.41	117.10	120.30
1	k	573	ARG	NE-CZ-NH2	-6.41	117.10	120.30
1	t	300	ASP	CB-CG-OD1	6.41	124.07	118.30
1	y	255	ARG	NE-CZ-NH1	6.41	123.50	120.30
1	G	240	ASP	CB-CG-OD1	6.41	124.07	118.30
1	i	255	ARG	NE-CZ-NH2	-6.40	117.10	120.30
1	B	476	ILE	O-C-N	-6.40	112.45	122.70
1	m	579	PHE	CB-CG-CD2	6.40	125.28	120.80
1	8	338	SER	O-C-N	-6.40	112.46	122.70
1	d	419	MET	CA-CB-CG	6.40	124.18	113.30
1	H	108	ARG	NE-CZ-NH2	-6.40	117.10	120.30
1	I	516	ALA	O-C-N	-6.40	112.46	122.70
1	N	531	PHE	CB-CG-CD1	-6.40	116.32	120.80
1	p	705	ALA	O-C-N	-6.40	112.46	122.70
1	s	539	PHE	CB-CG-CD2	-6.40	116.32	120.80
1	x	483	TYR	CG-CD2-CE2	-6.40	116.18	121.30
1	C	108	ARG	NH1-CZ-NH2	-6.40	112.36	119.40
1	Q	145	ARG	NE-CZ-NH1	6.40	123.50	120.30
1	e	299	MET	CG-SD-CE	-6.40	89.97	100.20
1	h	671	GLU	OE1-CD-OE2	-6.39	115.63	123.30
1	y	174	ARG	CD-NE-CZ	6.39	132.55	123.60
1	B	316	TYR	CB-CG-CD1	6.39	124.84	121.00
1	5	365	ALA	CB-CA-C	6.39	119.69	110.10
1	f	443	VAL	CG1-CB-CG2	-6.39	100.67	110.90
1	p	405	ARG	NE-CZ-NH2	-6.39	117.10	120.30
1	K	178	LEU	CB-CG-CD1	6.39	121.87	111.00
1	2	350	PHE	CB-CG-CD1	-6.39	116.33	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	l	441	GLU	N-CA-CB	6.39	122.10	110.60
1	4	239	ARG	NE-CZ-NH2	-6.39	117.11	120.30
1	p	373	ARG	NE-CZ-NH1	6.39	123.50	120.30
1	C	240	ASP	N-CA-CB	6.39	122.10	110.60
1	i	483	TYR	CB-CG-CD1	-6.39	117.17	121.00
1	s	231	ARG	NE-CZ-NH2	-6.39	117.11	120.30
1	G	597	PHE	CB-CG-CD2	-6.39	116.33	120.80
1	P	176	THR	CA-CB-CG2	-6.39	103.46	112.40
1	l	483	TYR	CZ-CE2-CD2	-6.39	114.05	119.80
1	d	697	TYR	CB-CG-CD1	6.39	124.83	121.00
1	J	647	PHE	CB-CG-CD2	6.39	125.27	120.80
1	L	410	ASP	O-C-N	-6.38	112.48	122.70
1	R	264	VAL	CA-CB-CG1	-6.38	101.33	110.90
1	i	380	MET	CG-SD-CE	6.38	110.41	100.20
1	8	497	ASN	N-CA-CB	-6.38	99.12	110.60
1	R	355	TYR	CB-CG-CD2	6.38	124.83	121.00
1	c	235	ASP	CB-CA-C	6.38	123.15	110.40
1	D	449	ARG	NE-CZ-NH1	6.38	123.49	120.30
1	9	102	ASP	CB-CG-OD2	6.38	124.04	118.30
1	y	232	VAL	CA-CB-CG1	6.38	120.46	110.90
1	p	530	ALA	CB-CA-C	6.37	119.66	110.10
1	H	633	TYR	CG-CD1-CE1	-6.37	116.20	121.30
1	t	108	ARG	NE-CZ-NH1	6.37	123.48	120.30
1	D	356	PHE	CG-CD1-CE1	6.37	127.81	120.80
1	l	697	TYR	CB-CG-CD1	6.37	124.82	121.00
1	w	206	HIS	CA-CB-CG	6.37	124.43	113.60
1	M	202	ARG	NE-CZ-NH1	6.37	123.48	120.30
1	y	182	ASP	CB-CG-OD1	-6.37	112.57	118.30
1	Q	173	TYR	CG-CD1-CE1	6.37	126.39	121.30
1	l	115	ASP	CB-CG-OD1	6.37	124.03	118.30
1	s	322	TYR	CB-CG-CD1	-6.37	117.18	121.00
1	F	455	ARG	NE-CZ-NH1	6.37	123.48	120.30
1	p	573	ARG	NH1-CZ-NH2	-6.37	112.40	119.40
1	v	240	ASP	CB-CG-OD1	-6.37	112.57	118.30
1	G	588	VAL	CA-CB-CG2	-6.37	101.35	110.90
1	0	240	ASP	N-CA-CB	6.36	122.05	110.60
1	8	369	ARG	NE-CZ-NH1	6.36	123.48	120.30
1	t	252	TYR	CB-CG-CD2	6.36	124.82	121.00
1	H	675	TYR	CG-CD2-CE2	-6.36	116.21	121.30
1	s	483	TYR	CD1-CE1-CZ	6.36	125.53	119.80
1	o	677	TRP	CD1-CG-CD2	-6.36	101.21	106.30
1	A	386	LEU	CB-CA-C	6.36	122.28	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	u	187	GLU	OE1-CD-OE2	-6.36	115.67	123.30
1	w	394	ARG	NE-CZ-NH1	6.36	123.48	120.30
1	B	321	GLY	CA-C-O	6.36	132.04	120.60
1	y	235	ASP	CB-CG-OD2	-6.36	112.58	118.30
1	R	585	TYR	CG-CD1-CE1	-6.36	116.22	121.30
1	X	182	ASP	CB-CG-OD1	6.36	124.02	118.30
1	a	689	ARG	NE-CZ-NH1	6.35	123.48	120.30
1	P	689	ARG	CD-NE-CZ	6.35	132.50	123.60
1	l	406	ARG	NH1-CZ-NH2	-6.35	112.41	119.40
1	h	675	TYR	CB-CG-CD2	6.35	124.81	121.00
1	N	102	ASP	CB-CG-OD2	6.35	124.02	118.30
1	T	698	ARG	NE-CZ-NH1	6.35	123.48	120.30
1	3	93	TYR	CB-CG-CD2	-6.35	117.19	121.00
1	S	572	PHE	CB-CG-CD2	6.35	125.25	120.80
1	8	406	ARG	NE-CZ-NH1	6.35	123.47	120.30
1	b	461	TRP	CE2-CD2-CG	-6.35	102.22	107.30
1	g	336	ARG	NE-CZ-NH2	-6.35	117.12	120.30
1	g	381	HIS	O-C-N	-6.35	112.54	122.70
1	k	312	ARG	NE-CZ-NH2	-6.35	117.12	120.30
1	l	336	ARG	CD-NE-CZ	6.35	132.49	123.60
1	J	539	PHE	CB-CG-CD2	-6.35	116.36	120.80
1	M	647	PHE	CB-CG-CD1	-6.35	116.36	120.80
1	R	409	ALA	O-C-N	-6.35	112.54	122.70
1	R	640	ARG	NE-CZ-NH1	6.35	123.47	120.30
1	h	98	ARG	NH1-CZ-NH2	-6.35	112.42	119.40
1	n	173	TYR	CG-CD2-CE2	-6.35	116.22	121.30
1	n	703	ARG	NE-CZ-NH1	6.35	123.47	120.30
1	T	405	ARG	CG-CD-NE	-6.35	98.47	111.80
1	c	429	PHE	CB-CA-C	6.34	123.09	110.40
1	S	349	PHE	CB-CG-CD2	-6.34	116.36	120.80
1	o	447	GLU	OE1-CD-OE2	-6.34	115.69	123.30
1	U	239	ARG	C-N-CA	6.34	137.56	121.70
1	l	597	PHE	CB-CG-CD2	-6.34	116.36	120.80
1	o	364	SER	N-CA-CB	6.34	120.01	110.50
1	Z	363	GLY	O-C-N	-6.34	112.56	122.70
1	z	126	ASP	CB-CG-OD1	6.34	124.00	118.30
1	P	376	THR	O-C-N	-6.34	112.56	122.70
1	g	137	ALA	CB-CA-C	6.34	119.61	110.10
1	D	377	GLU	OE1-CD-OE2	-6.33	115.70	123.30
1	b	419	MET	CG-SD-CE	-6.33	90.07	100.20
1	o	350	PHE	CB-CG-CD1	-6.33	116.37	120.80
1	L	231	ARG	CG-CD-NE	-6.33	98.50	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	n	322	TYR	CB-CG-CD1	-6.33	117.20	121.00
1	B	660	SER	N-CA-CB	6.33	120.00	110.50
1	C	592	VAL	CB-CA-C	6.33	123.43	111.40
1	R	373	ARG	NE-CZ-NH2	-6.33	117.13	120.30
1	Z	322	TYR	CG-CD2-CE2	-6.33	116.24	121.30
1	y	240	ASP	N-CA-CB	6.33	121.99	110.60
1	Z	316	TYR	CB-CG-CD1	6.33	124.80	121.00
1	l	174	ARG	NH1-CZ-NH2	-6.33	112.44	119.40
1	f	170	ARG	NE-CZ-NH2	-6.33	117.14	120.30
1	y	420	PHE	CB-CG-CD1	-6.33	116.37	120.80
1	R	572	PHE	CB-CG-CD1	-6.33	116.37	120.80
1	Y	488	ARG	NE-CZ-NH1	6.33	123.46	120.30
1	b	640	ARG	NE-CZ-NH2	-6.33	117.14	120.30
1	d	695	ARG	CG-CD-NE	-6.33	98.52	111.80
1	g	133	SER	N-CA-CB	6.33	119.99	110.50
1	n	582	ASP	CB-CG-OD2	-6.32	112.61	118.30
1	H	316	TYR	CB-CG-CD1	6.32	124.79	121.00
1	J	370	LEU	O-C-N	-6.32	112.58	122.70
1	Q	655	ARG	NH1-CZ-NH2	-6.32	112.44	119.40
1	Y	488	ARG	NE-CZ-NH2	-6.32	117.14	120.30
1	M	334	THR	CA-CB-OG1	6.32	122.28	109.00
1	E	557	LYS	CB-CA-C	6.32	123.04	110.40
1	T	428	MET	CG-SD-CE	-6.32	90.09	100.20
1	o	689	ARG	CG-CD-NE	-6.32	98.53	111.80
1	D	690	ARG	NH1-CZ-NH2	-6.32	112.45	119.40
1	8	108	ARG	NH1-CZ-NH2	-6.32	112.45	119.40
1	P	543	PHE	CG-CD1-CE1	-6.32	113.85	120.80
1	b	703	ARG	NE-CZ-NH1	-6.32	117.14	120.30
1	g	394	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	V	498	TYR	CB-CG-CD1	-6.32	117.21	121.00
1	V	555	ASP	O-C-N	-6.32	112.59	122.70
1	0	220	ASP	CB-CG-OD2	6.31	123.98	118.30
1	4	508	TYR	CB-CG-CD1	6.31	124.79	121.00
1	e	577	MET	CG-SD-CE	-6.31	90.10	100.20
1	h	301	ARG	NE-CZ-NH2	6.31	123.46	120.30
1	Y	300	ASP	CB-CG-OD1	6.31	123.98	118.30
1	Y	685	THR	CA-CB-CG2	-6.31	103.56	112.40
1	O	705	ALA	CB-CA-C	6.31	119.57	110.10
1	U	633	TYR	CB-CG-CD1	6.31	124.79	121.00
1	3	410	ASP	CB-CG-OD1	6.31	123.98	118.30
1	f	677	TRP	CH2-CZ2-CE2	6.31	123.71	117.40
1	B	416	ALA	N-CA-CB	6.31	118.93	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	394	ARG	NE-CZ-NH1	6.31	123.45	120.30
1	R	508	TYR	CB-CG-CD1	-6.31	117.22	121.00
1	V	585	TYR	CB-CG-CD2	-6.31	117.21	121.00
1	8	515	PRO	N-CD-CG	6.31	112.66	103.20
1	e	380	MET	CG-SD-CE	-6.31	90.11	100.20
1	f	700	THR	N-CA-CB	6.31	122.28	110.30
1	h	294	THR	O-C-N	-6.31	112.61	122.70
1	q	498	TYR	CB-CG-CD1	6.31	124.78	121.00
1	d	406	ARG	NE-CZ-NH1	6.30	123.45	120.30
1	j	325	VAL	CA-CB-CG1	6.30	120.36	110.90
1	t	352	THR	N-CA-CB	6.30	122.28	110.30
1	P	252	TYR	CB-CG-CD1	-6.30	117.22	121.00
1	S	705	ALA	N-CA-CB	6.30	118.93	110.10
1	g	574	MET	CG-SD-CE	-6.30	90.12	100.20
1	5	458	PHE	CB-CG-CD2	-6.30	116.39	120.80
1	7	582	ASP	CB-CG-OD1	6.30	123.97	118.30
1	W	404	LEU	CB-CG-CD1	6.30	121.71	111.00
1	7	508	TYR	CB-CG-CD1	-6.30	117.22	121.00
1	m	552	THR	CA-CB-CG2	6.30	121.22	112.40
1	Y	357	ARG	NE-CZ-NH1	6.30	123.45	120.30
1	Y	634	PHE	CB-CG-CD1	6.30	125.21	120.80
1	0	182	ASP	CB-CG-OD2	-6.30	112.63	118.30
1	c	647	PHE	CG-CD1-CE1	6.30	127.73	120.80
1	v	231	ARG	NE-CZ-NH2	-6.30	117.15	120.30
1	A	675	TYR	CG-CD1-CE1	-6.30	116.26	121.30
1	Z	407	CYS	O-C-N	-6.30	112.50	123.20
1	5	373	ARG	NE-CZ-NH2	6.29	123.45	120.30
1	b	651	TYR	CG-CD2-CE2	-6.29	116.27	121.30
1	p	173	TYR	CG-CD1-CE1	-6.29	116.27	121.30
1	S	573	ARG	CG-CD-NE	-6.29	98.58	111.80
1	3	516	ALA	N-CA-CB	-6.29	101.29	110.10
1	e	328	ARG	CG-CD-NE	-6.29	98.59	111.80
1	s	307	VAL	O-C-N	-6.29	112.64	122.70
1	x	703	ARG	NE-CZ-NH1	6.29	123.45	120.30
1	D	287	ASP	CB-CG-OD2	-6.29	112.64	118.30
1	F	197	MET	CG-SD-CE	-6.29	90.13	100.20
1	N	455	ARG	NE-CZ-NH1	6.29	123.45	120.30
1	P	674	ARG	NE-CZ-NH1	6.29	123.44	120.30
1	X	98	ARG	NE-CZ-NH2	-6.29	117.15	120.30
1	X	406	ARG	NE-CZ-NH2	-6.29	117.16	120.30
1	S	516	ALA	N-CA-CB	-6.29	101.29	110.10
1	2	145	ARG	NE-CZ-NH1	6.29	123.44	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	i	531	PHE	CB-CG-CD1	6.29	125.20	120.80
1	v	349	PHE	CB-CG-CD1	-6.29	116.40	120.80
1	C	349	PHE	CB-CG-CD1	-6.29	116.40	120.80
1	Q	436	LEU	CB-CG-CD2	-6.29	100.31	111.00
1	9	438	GLU	OE1-CD-OE2	-6.29	115.75	123.30
1	j	355	TYR	CB-CG-CD1	-6.29	117.23	121.00
1	t	623	PHE	CB-CG-CD2	-6.29	116.40	120.80
1	f	457	ASP	O-C-N	-6.29	112.64	122.70
1	o	283	ASP	CB-CG-OD2	-6.29	112.64	118.30
1	E	369	ARG	NE-CZ-NH1	6.29	123.44	120.30
1	U	247	ALA	CB-CA-C	-6.29	100.67	110.10
1	V	170	ARG	NE-CZ-NH1	-6.29	117.16	120.30
1	H	282	VAL	CA-CB-CG1	-6.28	101.47	110.90
1	c	685	THR	CA-CB-CG2	-6.28	103.61	112.40
1	l	173	TYR	CB-CG-CD1	-6.28	117.23	121.00
1	n	640	ARG	NE-CZ-NH1	6.28	123.44	120.30
1	T	263	VAL	CB-CA-C	6.28	123.33	111.40
1	w	406	ARG	NH1-CZ-NH2	6.28	126.31	119.40
1	7	196	VAL	CG1-CB-CG2	-6.28	100.86	110.90
1	o	187	GLU	OE1-CD-OE2	6.28	130.83	123.30
1	O	355	TYR	CG-CD2-CE2	-6.28	116.28	121.30
1	j	479	GLU	O-C-N	-6.27	112.66	122.70
1	N	451	TYR	CB-CG-CD1	-6.27	117.23	121.00
1	4	640	ARG	NH1-CZ-NH2	-6.27	112.50	119.40
1	6	145	ARG	CD-NE-CZ	6.27	132.38	123.60
1	l	592	VAL	CA-CB-CG1	6.27	120.31	110.90
1	q	301	ARG	NH1-CZ-NH2	6.27	126.30	119.40
1	t	703	ARG	NH1-CZ-NH2	-6.27	112.50	119.40
1	x	365	ALA	O-C-N	-6.27	112.66	122.70
1	y	231	ARG	NE-CZ-NH2	6.27	123.44	120.30
1	C	102	ASP	CB-CG-OD1	6.27	123.94	118.30
1	X	373	ARG	NE-CZ-NH2	-6.27	117.16	120.30
1	w	120	ALA	N-CA-CB	6.27	118.88	110.10
1	6	307	VAL	CG1-CB-CG2	-6.27	100.87	110.90
1	w	332	GLU	O-C-N	-6.27	112.67	122.70
1	Y	508	TYR	CB-CG-CD1	-6.27	117.24	121.00
1	3	263	VAL	CA-CB-CG1	-6.27	101.50	110.90
1	7	572	PHE	CB-CG-CD1	-6.27	116.41	120.80
1	l	457	ASP	CB-CG-OD1	6.27	123.94	118.30
1	q	444	ARG	NE-CZ-NH2	-6.27	117.17	120.30
1	u	269	ASP	CB-CG-OD2	-6.27	112.66	118.30
1	U	495	PHE	N-CA-CB	6.27	121.88	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	449	ARG	NE-CZ-NH2	-6.26	117.17	120.30
1	c	258	THR	N-CA-CB	6.26	122.20	110.30
1	v	316	TYR	CB-CG-CD1	6.26	124.76	121.00
1	A	336	ARG	O-C-N	-6.26	112.68	122.70
1	R	650	GLN	O-C-N	-6.26	112.68	122.70
1	U	698	ARG	NE-CZ-NH2	6.26	123.43	120.30
1	V	328	ARG	NH1-CZ-NH2	6.26	126.29	119.40
1	0	417	ASP	CB-CG-OD1	6.26	123.94	118.30
1	g	531	PHE	CB-CG-CD2	6.26	125.18	120.80
1	O	432	ASP	CB-CG-OD2	6.26	123.94	118.30
1	5	508	TYR	CD1-CE1-CZ	6.26	125.43	119.80
1	n	213	ILE	O-C-N	-6.26	112.69	122.70
1	r	585	TYR	CB-CG-CD1	-6.26	117.24	121.00
1	F	652	PHE	CB-CG-CD2	6.26	125.18	120.80
1	K	542	PHE	CB-CG-CD2	6.26	125.18	120.80
1	c	624	THR	CA-CB-CG2	-6.26	103.64	112.40
1	h	225	ASP	CB-CG-OD1	-6.26	112.67	118.30
1	m	202	ARG	NE-CZ-NH1	6.26	123.43	120.30
1	G	564	ALA	N-CA-CB	-6.26	101.34	110.10
1	I	405	ARG	CG-CD-NE	-6.26	98.66	111.80
1	G	558	VAL	CA-CB-CG1	6.25	120.28	110.90
1	0	530	ALA	CB-CA-C	-6.25	100.72	110.10
1	9	300	ASP	CB-CG-OD2	-6.25	112.67	118.30
1	a	234	VAL	CA-CB-CG1	6.25	120.28	110.90
1	q	287	ASP	N-CA-CB	-6.25	99.34	110.60
1	t	366	THR	CA-CB-CG2	-6.25	103.64	112.40
1	B	369	ARG	CD-NE-CZ	6.25	132.35	123.60
1	L	105	ASP	CB-CG-OD1	6.25	123.93	118.30
1	g	626	ILE	CA-CB-CG1	6.25	122.88	111.00
1	H	451	TYR	CB-CG-CD2	-6.25	117.25	121.00
1	Z	560	HIS	CA-CB-CG	-6.25	102.97	113.60
1	4	186	VAL	O-C-N	-6.25	112.70	122.70
1	j	221	LEU	CB-CA-C	6.25	122.07	110.20
1	1	630	LEU	O-C-N	-6.25	112.71	122.70
1	C	636	GLU	OE1-CD-OE2	-6.25	115.81	123.30
1	D	327	CYS	CB-CA-C	-6.25	97.91	110.40
1	Z	106	SER	N-CA-CB	6.25	119.87	110.50
1	B	690	ARG	NH1-CZ-NH2	-6.25	112.53	119.40
1	v	419	MET	CA-CB-CG	6.24	123.92	113.30
1	M	108	ARG	NH1-CZ-NH2	-6.24	112.53	119.40
1	T	357	ARG	NE-CZ-NH1	-6.24	117.18	120.30
1	0	486	GLN	CA-CB-CG	6.24	127.13	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	179	GLU	CG-CD-OE1	6.24	130.78	118.30
1	B	307	VAL	CA-CB-CG2	-6.24	101.54	110.90
1	K	406	ARG	NE-CZ-NH2	-6.24	117.18	120.30
1	d	513	VAL	CA-CB-CG2	-6.24	101.54	110.90
1	g	539	PHE	CB-CG-CD1	6.24	125.17	120.80
1	C	451	TYR	CG-CD1-CE1	-6.24	116.31	121.30
1	2	674	ARG	NE-CZ-NH1	6.24	123.42	120.30
1	L	495	PHE	CB-CG-CD2	6.24	125.17	120.80
1	r	451	TYR	CB-CG-CD1	-6.24	117.26	121.00
1	Q	300	ASP	CB-CG-OD2	-6.24	112.69	118.30
1	p	306	SER	N-CA-CB	6.24	119.86	110.50
1	t	675	TYR	CB-CG-CD2	6.24	124.74	121.00
1	x	299	MET	CG-SD-CE	-6.24	90.22	100.20
1	C	572	PHE	CD1-CE1-CZ	-6.24	112.62	120.10
1	H	255	ARG	NE-CZ-NH2	6.24	123.42	120.30
1	d	695	ARG	NH1-CZ-NH2	-6.23	112.54	119.40
1	k	573	ARG	CG-CD-NE	-6.23	98.71	111.80
1	N	409	ALA	N-CA-CB	-6.23	101.37	110.10
1	3	359	LEU	O-C-N	-6.23	112.73	122.70
1	c	437	VAL	CA-CB-CG1	6.23	120.25	110.90
1	a	494	GLY	C-N-CA	6.23	137.28	121.70
1	f	269	ASP	CB-CG-OD1	6.23	123.91	118.30
1	U	120	ALA	CB-CA-C	-6.23	100.75	110.10
1	8	483	TYR	CG-CD2-CE2	-6.23	116.32	121.30
1	b	362	GLU	OE1-CD-OE2	-6.23	115.83	123.30
1	h	336	ARG	NH1-CZ-NH2	-6.23	112.55	119.40
1	3	311	VAL	CA-CB-CG1	6.23	120.24	110.90
1	i	307	VAL	CA-CB-CG2	-6.23	101.56	110.90
1	H	349	PHE	CB-CG-CD2	-6.23	116.44	120.80
1	L	689	ARG	NE-CZ-NH1	6.23	123.41	120.30
1	i	633	TYR	CB-CG-CD2	-6.23	117.26	121.00
1	Z	498	TYR	CB-CG-CD1	-6.23	117.26	121.00
1	5	484	GLU	N-CA-CB	-6.22	99.40	110.60
1	7	585	TYR	CG-CD1-CE1	-6.22	116.32	121.30
1	H	651	TYR	CB-CG-CD1	-6.22	117.27	121.00
1	Q	412	PRO	N-CA-CB	-6.22	95.75	102.60
1	1	174	ARG	NE-CZ-NH2	6.22	123.41	120.30
1	1	231	ARG	N-CA-CB	6.22	121.80	110.60
1	8	499	LYS	CB-CA-C	6.22	122.84	110.40
1	c	690	ARG	NE-CZ-NH2	-6.22	117.19	120.30
1	j	98	ARG	NH1-CZ-NH2	-6.22	112.56	119.40
1	A	449	ARG	NE-CZ-NH1	6.22	123.41	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	698	ARG	NE-CZ-NH1	6.22	123.41	120.30
1	Z	478	GLU	OE1-CD-OE2	-6.22	115.83	123.30
1	r	575	GLU	O-C-N	-6.22	112.75	122.70
1	y	671	GLU	OE1-CD-OE2	-6.22	115.83	123.30
1	A	355	TYR	CG-CD1-CE1	-6.22	116.32	121.30
1	l	640	ARG	NE-CZ-NH1	6.22	123.41	120.30
1	U	697	TYR	CG-CD1-CE1	6.22	126.27	121.30
1	V	174	ARG	NE-CZ-NH2	-6.22	117.19	120.30
1	c	394	ARG	NE-CZ-NH2	-6.22	117.19	120.30
1	d	255	ARG	CD-NE-CZ	6.22	132.30	123.60
1	i	374	LEU	CB-CG-CD2	6.22	121.57	111.00
1	o	698	ARG	NE-CZ-NH1	6.22	123.41	120.30
1	P	651	TYR	CD1-CG-CD2	6.22	124.74	117.90
1	R	528	GLN	O-C-N	-6.22	112.75	122.70
1	U	108	ARG	NE-CZ-NH2	-6.22	117.19	120.30
1	h	659	ASP	CB-CG-OD2	-6.21	112.71	118.30
1	v	309	ASN	O-C-N	-6.21	112.76	122.70
1	T	674	ARG	NE-CZ-NH2	-6.21	117.19	120.30
1	P	239	ARG	NH1-CZ-NH2	-6.21	112.57	119.40
1	6	455	ARG	NE-CZ-NH2	-6.21	117.19	120.30
1	m	255	ARG	NE-CZ-NH2	-6.21	117.19	120.30
1	T	338	SER	O-C-N	-6.21	112.76	122.70
1	Z	579	PHE	CB-CG-CD2	6.21	125.15	120.80
1	D	417	ASP	CB-CG-OD1	6.21	123.89	118.30
1	u	582	ASP	CB-CG-OD2	-6.21	112.71	118.30
1	I	560	HIS	CA-CB-CG	-6.21	103.05	113.60
1	L	539	PHE	CZ-CE2-CD2	-6.21	112.65	120.10
1	V	697	TYR	CB-CG-CD2	6.21	124.72	121.00
1	l	322	TYR	CB-CG-CD1	-6.21	117.28	121.00
1	j	651	TYR	CB-CG-CD2	6.21	124.72	121.00
1	8	488	ARG	NE-CZ-NH1	6.20	123.40	120.30
1	d	646	PRO	CA-N-CD	-6.20	102.82	111.50
1	R	316	TYR	CB-CG-CD1	6.20	124.72	121.00
1	W	197	MET	CG-SD-CE	-6.20	90.28	100.20
1	b	487	TYR	CD1-CE1-CZ	6.20	125.38	119.80
1	i	202	ARG	NE-CZ-NH1	6.20	123.40	120.30
1	l	508	TYR	CB-CG-CD1	-6.20	117.28	121.00
1	p	322	TYR	CG-CD2-CE2	-6.20	116.34	121.30
1	V	205	SER	CB-CA-C	6.20	121.88	110.10
1	T	665	MET	CG-SD-CE	-6.20	90.28	100.20
1	6	567	MET	CG-SD-CE	-6.20	90.29	100.20
1	a	505	VAL	CA-CB-CG2	-6.20	101.61	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	k	373	ARG	NH1-CZ-NH2	-6.20	112.59	119.40
1	B	165	GLU	OE1-CD-OE2	-6.20	115.86	123.30
1	B	188	LYS	O-C-N	-6.20	112.79	122.70
1	a	198	ALA	CB-CA-C	-6.19	100.81	110.10
1	e	539	PHE	CB-CG-CD2	6.19	125.14	120.80
1	I	252	TYR	O-C-N	-6.19	112.79	122.70
1	0	674	ARG	NE-CZ-NH1	6.19	123.40	120.30
1	1	501	PHE	CB-CG-CD1	-6.19	116.47	120.80
1	6	455	ARG	NE-CZ-NH1	6.19	123.40	120.30
1	8	508	TYR	CB-CG-CD1	6.19	124.72	121.00
1	c	282	VAL	CA-CB-CG1	-6.19	101.61	110.90
1	q	519	MET	CG-SD-CE	-6.19	90.29	100.20
1	x	108	ARG	NE-CZ-NH2	-6.19	117.20	120.30
1	I	455	ARG	NE-CZ-NH1	6.19	123.40	120.30
1	6	458	PHE	CB-CG-CD1	6.19	125.13	120.80
1	9	105	ASP	CB-CG-OD1	-6.19	112.73	118.30
1	i	518	SER	N-CA-CB	6.19	119.79	110.50
1	D	451	TYR	CB-CG-CD1	6.19	124.72	121.00
1	8	322	TYR	CG-CD2-CE2	-6.19	116.35	121.30
1	c	232	VAL	O-C-N	-6.19	112.80	122.70
1	B	444	ARG	NE-CZ-NH2	-6.19	117.21	120.30
1	M	154	PRO	N-CA-CB	6.19	110.72	103.30
1	f	498	TYR	CG-CD1-CE1	-6.19	116.35	121.30
1	h	568	ILE	O-C-N	-6.19	112.80	122.70
1	4	697	TYR	CB-CG-CD2	-6.18	117.29	121.00
1	t	154	PRO	N-CA-CB	-6.18	95.80	102.60
1	w	195	ASN	O-C-N	-6.18	112.80	122.70
1	Q	698	ARG	NE-CZ-NH2	-6.18	117.21	120.30
1	3	566	ASN	N-CA-CB	-6.18	99.47	110.60
1	c	145	ARG	NE-CZ-NH1	-6.18	117.21	120.30
1	g	98	ARG	NE-CZ-NH1	6.18	123.39	120.30
1	h	449	ARG	NE-CZ-NH2	-6.18	117.21	120.30
1	J	689	ARG	NH1-CZ-NH2	-6.18	112.60	119.40
1	K	674	ARG	NE-CZ-NH1	6.18	123.39	120.30
1	P	560	HIS	CA-CB-CG	-6.18	103.09	113.60
1	c	280	HIS	CA-CB-CG	6.18	124.11	113.60
1	v	93	TYR	CB-CG-CD2	-6.18	117.29	121.00
1	I	340	ALA	CB-CA-C	-6.18	100.83	110.10
1	J	683	SER	N-CA-CB	6.18	119.77	110.50
1	P	633	TYR	CG-CD2-CE2	-6.18	116.36	121.30
1	R	649	ILE	O-C-N	-6.18	112.81	122.70
1	3	451	TYR	CB-CG-CD1	6.18	124.71	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	3	531	PHE	CB-CG-CD2	6.18	125.13	120.80
1	i	501	PHE	O-C-N	-6.18	112.81	122.70
1	o	573	ARG	NE-CZ-NH1	6.18	123.39	120.30
1	t	396	SER	N-CA-CB	6.18	119.77	110.50
1	u	93	TYR	CB-CG-CD2	-6.18	117.29	121.00
1	N	167	TRP	CE2-CD2-CG	6.18	112.24	107.30
1	V	558	VAL	CA-CB-CG2	6.18	120.17	110.90
1	9	574	MET	CG-SD-CE	-6.18	90.32	100.20
1	h	161	LYS	O-C-N	-6.18	112.82	122.70
1	s	102	ASP	CB-CG-OD2	-6.18	112.74	118.30
1	E	665	MET	CG-SD-CE	-6.18	90.32	100.20
1	z	632	ALA	O-C-N	-6.17	112.82	122.70
1	B	498	TYR	CZ-CE2-CD2	6.17	125.36	119.80
1	Q	483	TYR	CB-CG-CD1	6.17	124.70	121.00
1	a	539	PHE	CB-CG-CD2	-6.17	116.48	120.80
1	Q	685	THR	CA-CB-CG2	-6.17	103.76	112.40
1	U	652	PHE	CB-CG-CD1	-6.17	116.48	120.80
1	o	583	GLN	O-C-N	-6.17	112.83	122.70
1	P	410	ASP	CB-CG-OD2	6.17	123.85	118.30
1	3	289	THR	N-CA-CB	6.17	122.02	110.30
1	m	539	PHE	CB-CG-CD1	-6.17	116.48	120.80
1	P	651	TYR	CB-CG-CD1	-6.17	117.30	121.00
1	j	409	ALA	C-N-CA	6.17	137.12	121.70
1	m	126	ASP	CB-CG-OD2	-6.17	112.75	118.30
1	t	633	TYR	CB-CG-CD1	-6.17	117.30	121.00
1	v	455	ARG	NE-CZ-NH2	-6.17	117.22	120.30
1	O	471	LYS	CB-CG-CD	6.17	127.64	111.60
1	4	451	TYR	CG-CD1-CE1	-6.17	116.37	121.30
1	9	480	VAL	CA-CB-CG1	6.17	120.15	110.90
1	B	108	ARG	NE-CZ-NH2	6.17	123.38	120.30
1	E	132	SER	N-CA-CB	6.17	119.75	110.50
1	y	369	ARG	NE-CZ-NH1	6.17	123.38	120.30
1	s	260	ASN	CB-CA-C	-6.16	98.07	110.40
1	B	442	VAL	CA-CB-CG1	6.16	120.15	110.90
1	I	370	LEU	CB-CG-CD1	6.16	121.48	111.00
1	j	703	ARG	NE-CZ-NH1	6.16	123.38	120.30
1	n	695	ARG	NH1-CZ-NH2	-6.16	112.62	119.40
1	5	182	ASP	CB-CG-OD1	6.16	123.84	118.30
1	d	312	ARG	NE-CZ-NH1	-6.16	117.22	120.30
1	f	356	PHE	CG-CD1-CE1	6.16	127.57	120.80
1	L	659	ASP	CB-CG-OD2	6.16	123.84	118.30
1	n	228	GLY	O-C-N	-6.16	112.85	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	t	495	PHE	CB-CG-CD2	-6.16	116.49	120.80
1	7	167	TRP	CB-CG-CD1	-6.15	119.00	127.00
1	K	316	TYR	CB-CG-CD2	-6.15	117.31	121.00
1	5	640	ARG	NE-CZ-NH2	-6.15	117.22	120.30
1	6	501	PHE	CB-CG-CD1	-6.15	116.49	120.80
1	m	355	TYR	CB-CG-CD2	6.15	124.69	121.00
1	t	380	MET	CG-SD-CE	-6.15	90.36	100.20
1	x	174	ARG	NE-CZ-NH2	6.15	123.38	120.30
1	J	444	ARG	NH1-CZ-NH2	-6.15	112.63	119.40
1	Q	108	ARG	NE-CZ-NH1	6.15	123.38	120.30
1	R	487	TYR	CZ-CE2-CD2	6.15	125.34	119.80
1	2	514	GLU	CB-CA-C	6.15	122.70	110.40
1	w	108	ARG	NE-CZ-NH2	6.15	123.38	120.30
1	I	395	GLU	OE1-CD-OE2	-6.15	115.92	123.30
1	U	129	SER	N-CA-CB	6.15	119.73	110.50
1	4	112	VAL	CA-CB-CG2	-6.15	101.68	110.90
1	v	461	TRP	O-C-N	-6.15	112.86	122.70
1	c	358	VAL	CA-CB-CG2	-6.15	101.68	110.90
1	e	695	ARG	O-C-N	-6.14	112.87	122.70
1	Z	462	VAL	CG1-CB-CG2	-6.14	101.07	110.90
1	N	220	ASP	CB-CA-C	-6.14	98.11	110.40
1	6	574	MET	CG-SD-CE	-6.14	90.37	100.20
1	A	432	ASP	CB-CG-OD1	-6.14	112.77	118.30
1	C	539	PHE	CB-CG-CD2	-6.14	116.50	120.80
1	N	300	ASP	CB-CG-OD1	6.14	123.83	118.30
1	f	232	VAL	CG1-CB-CG2	-6.14	101.08	110.90
1	y	401	THR	N-CA-CB	6.14	121.97	110.30
1	y	647	PHE	CZ-CE2-CD2	6.14	127.47	120.10
1	R	461	TRP	CE2-CD2-CG	-6.14	102.39	107.30
1	W	357	ARG	NE-CZ-NH1	6.14	123.37	120.30
1	i	145	ARG	NE-CZ-NH1	6.14	123.37	120.30
1	J	483	TYR	CB-CG-CD2	-6.14	117.32	121.00
1	Z	369	ARG	NH1-CZ-NH2	-6.14	112.65	119.40
1	p	446	ASN	O-C-N	-6.14	112.88	122.70
1	L	661	LEU	CB-CG-CD2	-6.14	100.57	111.00
1	R	432	ASP	CB-CG-OD2	-6.14	112.78	118.30
1	Q	633	TYR	CB-CG-CD2	-6.13	117.32	121.00
1	v	652	PHE	O-C-N	-6.13	112.89	122.70
1	V	375	THR	N-CA-CB	6.13	121.95	110.30
1	5	122	ALA	N-CA-CB	6.13	118.68	110.10
1	k	484	GLU	OE1-CD-OE2	-6.13	115.94	123.30
1	K	356	PHE	CB-CG-CD2	6.13	125.09	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	167	TRP	CB-CG-CD1	-6.13	119.03	127.00
1	A	94	GLU	N-CA-C	6.13	127.55	111.00
1	A	534	VAL	CG1-CB-CG2	-6.13	101.09	110.90
1	f	523	ALA	O-C-N	-6.13	112.90	122.70
1	p	129	SER	N-CA-CB	6.13	119.69	110.50
1	p	252	TYR	CB-CG-CD2	-6.13	117.32	121.00
1	B	572	PHE	CB-CG-CD1	6.13	125.09	120.80
1	N	495	PHE	CB-CG-CD1	-6.13	116.51	120.80
1	j	696	ILE	O-C-N	-6.12	112.90	122.70
1	y	235	ASP	CB-CG-OD1	6.12	123.81	118.30
1	D	93	TYR	CB-CG-CD1	-6.12	117.33	121.00
1	J	247	ALA	N-CA-CB	-6.12	101.53	110.10
1	R	419	MET	CG-SD-CE	-6.12	90.40	100.20
1	Y	432	ASP	CB-CG-OD1	6.12	123.81	118.30
1	7	498	TYR	CB-CG-CD2	-6.12	117.33	121.00
1	9	458	PHE	CB-CG-CD2	-6.12	116.52	120.80
1	f	255	ARG	N-CA-CB	6.12	121.62	110.60
1	h	689	ARG	NE-CZ-NH2	-6.12	117.24	120.30
1	i	132	SER	N-CA-CB	6.12	119.68	110.50
1	i	638	SER	CB-CA-C	-6.12	98.47	110.10
1	x	487	TYR	CB-CG-CD1	-6.12	117.33	121.00
1	H	210	SER	N-CA-CB	6.12	119.68	110.50
1	O	674	ARG	NE-CZ-NH1	6.12	123.36	120.30
1	3	543	PHE	CB-CG-CD1	-6.12	116.52	120.80
1	B	523	ALA	O-C-N	-6.12	112.91	122.70
1	g	110	LEU	O-C-N	-6.12	112.81	123.20
1	H	698	ARG	NE-CZ-NH1	6.12	123.36	120.30
1	j	328	ARG	O-C-N	-6.11	112.81	123.20
1	p	301	ARG	NE-CZ-NH2	-6.11	117.24	120.30
1	E	593	ARG	NE-CZ-NH1	6.11	123.36	120.30
1	L	98	ARG	CG-CD-NE	-6.11	98.96	111.80
1	3	585	TYR	CB-CG-CD1	6.11	124.67	121.00
1	x	585	TYR	CB-CG-CD1	-6.11	117.33	121.00
1	X	219	PRO	N-CA-CB	-6.11	95.88	102.60
1	m	577	MET	CB-CA-C	6.11	122.62	110.40
1	v	472	VAL	CA-CB-CG1	6.11	120.07	110.90
1	D	675	TYR	CB-CG-CD2	-6.11	117.33	121.00
1	E	472	VAL	O-C-N	-6.11	112.92	122.70
1	F	240	ASP	CB-CG-OD2	6.11	123.80	118.30
1	V	235	ASP	CB-CG-OD2	-6.11	112.80	118.30
1	Y	495	PHE	CB-CG-CD1	6.11	125.08	120.80
1	a	508	TYR	CB-CG-CD1	-6.11	117.33	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	280	HIS	CA-CB-CG	6.11	123.99	113.60
1	4	690	ARG	NE-CZ-NH1	6.11	123.35	120.30
1	o	647	PHE	CB-CG-CD1	6.11	125.08	120.80
1	X	542	PHE	CB-CG-CD2	6.11	125.08	120.80
1	t	597	PHE	N-CA-CB	6.11	121.59	110.60
1	p	419	MET	O-C-N	-6.10	112.93	122.70
1	b	573	ARG	NE-CZ-NH2	-6.10	117.25	120.30
1	j	386	LEU	CB-CG-CD2	6.10	121.37	111.00
1	D	252	TYR	CB-CG-CD1	-6.10	117.34	121.00
1	D	698	ARG	NH1-CZ-NH2	6.10	126.11	119.40
1	J	486	GLN	O-C-N	-6.10	112.94	122.70
1	O	655	ARG	NE-CZ-NH2	-6.10	117.25	120.30
1	Z	682	GLN	N-CA-C	6.10	127.47	111.00
1	3	205	SER	N-CA-CB	6.10	119.64	110.50
1	L	572	PHE	CB-CG-CD1	6.10	125.07	120.80
1	L	693	LYS	O-C-N	6.10	132.46	122.70
1	N	369	ARG	NE-CZ-NH2	6.10	123.35	120.30
1	Q	373	ARG	NH1-CZ-NH2	6.10	126.11	119.40
1	W	574	MET	CG-SD-CE	-6.10	90.44	100.20
1	6	573	ARG	CB-CG-CD	6.10	127.45	111.60
1	m	325	VAL	CA-CB-CG1	-6.10	101.76	110.90
1	G	297	ASP	CB-CG-OD2	6.10	123.79	118.30
1	b	120	ALA	N-CA-CB	6.09	118.63	110.10
1	g	675	TYR	CZ-CE2-CD2	6.09	125.28	119.80
1	t	410	ASP	N-CA-C	6.09	127.45	111.00
1	z	349	PHE	CB-CG-CD1	-6.09	116.53	120.80
1	K	624	THR	CA-CB-CG2	-6.09	103.87	112.40
1	3	182	ASP	N-CA-CB	-6.09	99.64	110.60
1	9	152	ARG	CG-CD-NE	-6.09	99.01	111.80
1	r	651	TYR	CD1-CE1-CZ	6.09	125.28	119.80
1	v	644	GLN	N-CA-CB	-6.09	99.64	110.60
1	W	674	ARG	NE-CZ-NH1	6.09	123.35	120.30
1	Z	451	TYR	CG-CD1-CE1	-6.09	116.43	121.30
1	q	366	THR	N-CA-CB	6.09	121.87	110.30
1	O	567	MET	O-C-N	-6.09	112.96	122.70
1	U	458	PHE	CB-CG-CD1	6.09	125.06	120.80
1	W	173	TYR	CZ-CE2-CD2	-6.09	114.32	119.80
1	j	655	ARG	NE-CZ-NH2	6.09	123.34	120.30
1	u	709	PHE	CB-CG-CD1	-6.09	116.54	120.80
1	z	677	TRP	CB-CG-CD2	-6.09	118.69	126.60
1	5	455	ARG	NE-CZ-NH1	-6.09	117.26	120.30
1	n	303	THR	CA-CB-CG2	-6.09	103.88	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	105	ASP	CB-CG-OD2	-6.09	112.82	118.30
1	t	126	ASP	CB-CG-OD1	6.08	123.78	118.30
1	v	572	PHE	CB-CG-CD2	6.08	125.06	120.80
1	x	414	GLN	C-N-CA	6.08	136.91	121.70
1	7	269	ASP	CB-CG-OD1	6.08	123.78	118.30
1	h	549	VAL	O-C-N	-6.08	112.97	122.70
1	m	240	ASP	CB-CG-OD2	-6.08	112.83	118.30
1	y	116	LEU	N-CA-CB	6.08	122.57	110.40
1	I	508	TYR	CB-CG-CD1	-6.08	117.35	121.00
1	X	281	GLU	OE1-CD-OE2	-6.08	116.00	123.30
1	Y	457	ASP	CB-CG-OD2	6.08	123.78	118.30
1	8	669	LEU	O-C-N	-6.08	112.97	122.70
1	q	665	MET	CG-SD-CE	6.08	109.93	100.20
1	G	202	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	O	588	VAL	CA-CB-CG2	-6.08	101.78	110.90
1	h	315	THR	N-CA-CB	6.08	121.85	110.30
1	M	322	TYR	CB-CG-CD1	-6.08	117.35	121.00
1	S	173	TYR	CB-CG-CD1	-6.08	117.35	121.00
1	0	113	GLU	OE1-CD-OE2	-6.08	116.01	123.30
1	l	182	ASP	CB-CG-OD1	6.08	123.77	118.30
1	j	695	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	k	405	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	t	593	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	z	301	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	G	677	TRP	CG-CD1-NE1	-6.08	104.02	110.10
1	N	573	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	3	336	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	o	698	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	w	280	HIS	CA-CB-CG	6.08	123.93	113.60
1	B	534	VAL	CA-CB-CG1	6.08	120.01	110.90
1	F	109	ALA	O-C-N	-6.08	112.98	122.70
1	F	278	MET	N-CA-C	6.08	127.40	111.00
1	L	357	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	S	555	ASP	CB-CG-OD1	-6.08	112.83	118.30
1	7	167	TRP	CD1-CG-CD2	-6.07	101.44	106.30
1	m	281	GLU	OE1-CD-OE2	-6.07	116.01	123.30
1	o	460	ASN	O-C-N	-6.07	112.98	122.70
1	K	573	ARG	NH1-CZ-NH2	-6.07	112.72	119.40
1	M	564	ALA	N-CA-CB	-6.07	101.60	110.10
1	S	145	ARG	NH1-CZ-NH2	-6.07	112.72	119.40
1	l	361	GLU	OE1-CD-OE2	-6.07	116.02	123.30
1	s	480	VAL	O-C-N	-6.07	112.99	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	239	ARG	C-N-CA	6.07	136.88	121.70
1	W	247	ALA	CB-CA-C	-6.07	100.99	110.10
1	e	355	TYR	CB-CG-CD1	6.07	124.64	121.00
1	R	452	ASN	O-C-N	-6.07	112.99	122.70
1	j	316	TYR	CB-CG-CD2	-6.07	117.36	121.00
1	x	312	ARG	NE-CZ-NH2	-6.07	117.27	120.30
1	A	539	PHE	CB-CG-CD2	-6.07	116.55	120.80
1	l	595	GLU	OE1-CD-OE2	-6.07	116.02	123.30
1	r	633	TYR	CG-CD2-CE2	-6.07	116.45	121.30
1	t	190	ILE	O-C-N	-6.07	113.00	122.70
1	y	487	TYR	CB-CG-CD2	6.07	124.64	121.00
1	u	301	ARG	CD-NE-CZ	6.06	132.09	123.60
1	I	451	TYR	CA-CB-CG	-6.06	101.88	113.40
1	n	357	ARG	NH1-CZ-NH2	6.06	126.07	119.40
1	o	417	ASP	CB-CG-OD1	6.06	123.76	118.30
1	z	579	PHE	CB-CG-CD2	6.06	125.04	120.80
1	F	350	PHE	CB-CG-CD1	6.06	125.04	120.80
1	L	458	PHE	CD1-CE1-CZ	6.06	127.38	120.10
1	x	93	TYR	O-C-N	-6.06	113.00	122.70
1	0	495	PHE	CB-CG-CD2	-6.06	116.56	120.80
1	c	652	PHE	CB-CG-CD2	6.06	125.04	120.80
1	g	174	ARG	NE-CZ-NH2	6.06	123.33	120.30
1	i	182	ASP	CB-CG-OD2	-6.06	112.85	118.30
1	m	623	PHE	CB-CG-CD1	-6.06	116.56	120.80
1	D	394	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	N	170	ARG	NE-CZ-NH1	6.06	123.33	120.30
1	9	442	VAL	CA-CB-CG2	-6.06	101.81	110.90
1	l	131	LYS	O-C-N	-6.06	113.01	122.70
1	y	488	ARG	NE-CZ-NH1	-6.06	117.27	120.30
1	C	443	VAL	C-N-CA	6.06	136.84	121.70
1	R	573	ARG	CD-NE-CZ	6.06	132.08	123.60
1	W	697	TYR	CB-CG-CD1	6.06	124.63	121.00
1	o	640	ARG	NE-CZ-NH2	-6.06	117.27	120.30
1	5	299	MET	CA-CB-CG	6.05	123.59	113.30
1	6	651	TYR	CG-CD1-CE1	-6.05	116.46	121.30
1	e	634	PHE	CB-CG-CD1	6.05	125.04	120.80
1	h	373	ARG	NE-CZ-NH1	6.05	123.33	120.30
1	j	671	GLU	CA-CB-CG	6.05	126.72	113.40
1	W	372	GLU	CG-CD-OE2	6.05	130.41	118.30
1	Y	632	ALA	O-C-N	-6.05	113.01	122.70
1	b	669	LEU	CB-CG-CD2	6.05	121.29	111.00
1	e	173	TYR	CB-CG-CD1	-6.05	117.37	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	449	ARG	NH1-CZ-NH2	-6.05	112.74	119.40
1	C	695	ARG	NE-CZ-NH2	-6.05	117.27	120.30
1	E	174	ARG	NH1-CZ-NH2	-6.05	112.74	119.40
1	E	287	ASP	CB-CG-OD2	6.05	123.75	118.30
1	N	451	TYR	CG-CD1-CE1	-6.05	116.46	121.30
1	Y	283	ASP	CB-CG-OD2	-6.05	112.85	118.30
1	3	426	ILE	CA-CB-CG2	6.05	123.00	110.90
1	c	542	PHE	CB-CG-CD2	-6.05	116.56	120.80
1	F	350	PHE	CB-CG-CD2	-6.05	116.57	120.80
1	G	387	PRO	N-CA-CB	6.05	110.56	103.30
1	J	698	ARG	CD-NE-CZ	6.05	132.07	123.60
1	z	252	TYR	CB-CG-CD2	6.05	124.63	121.00
1	0	255	ARG	NE-CZ-NH2	-6.05	117.28	120.30
1	4	493	LEU	N-CA-CB	6.05	122.50	110.40
1	5	316	TYR	CB-CG-CD2	-6.05	117.37	121.00
1	6	508	TYR	CB-CG-CD2	6.04	124.63	121.00
1	j	651	TYR	CB-CG-CD1	-6.04	117.37	121.00
1	v	288	ARG	NE-CZ-NH1	6.04	123.32	120.30
1	E	679	LEU	CB-CG-CD2	6.04	121.27	111.00
1	O	700	THR	CA-CB-CG2	6.04	120.86	112.40
1	L	524	MET	O-C-N	-6.04	113.03	122.70
1	4	410	ASP	CB-CG-OD1	6.04	123.74	118.30
1	g	218	VAL	CA-CB-CG1	-6.04	101.84	110.90
1	V	575	GLU	OE1-CD-OE2	-6.04	116.05	123.30
1	c	154	PRO	N-CA-CB	6.04	110.55	103.30
1	f	623	PHE	CB-CG-CD1	-6.04	116.57	120.80
1	h	252	TYR	CB-CG-CD2	-6.04	117.38	121.00
1	o	492	LEU	CB-CA-C	6.04	121.67	110.20
1	u	288	ARG	NH1-CZ-NH2	-6.04	112.76	119.40
1	M	141	VAL	CA-CB-CG2	6.04	119.96	110.90
1	R	238	PRO	N-CD-CG	6.04	112.26	103.20
1	n	173	TYR	O-C-N	6.04	132.36	122.70
1	r	461	TRP	CD1-CG-CD2	6.04	111.13	106.30
1	W	93	TYR	CD1-CE1-CZ	-6.04	114.37	119.80
1	2	458	PHE	CB-CG-CD1	6.04	125.03	120.80
1	i	316	TYR	CG-CD2-CE2	-6.03	116.47	121.30
1	T	593	ARG	NE-CZ-NH1	6.03	123.32	120.30
1	X	225	ASP	N-CA-CB	-6.03	99.74	110.60
1	1	496	VAL	CG1-CB-CG2	-6.03	101.25	110.90
1	2	689	ARG	NE-CZ-NH1	6.03	123.32	120.30
1	5	167	TRP	CZ3-CH2-CZ2	6.03	128.84	121.60
1	c	287	ASP	CB-CG-OD2	6.03	123.73	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	c	357	ARG	NH1-CZ-NH2	-6.03	112.77	119.40
1	l	484	GLU	CA-CB-CG	6.03	126.67	113.40
1	r	152	ARG	NE-CZ-NH1	6.03	123.32	120.30
1	x	421	PHE	CB-CG-CD2	6.03	125.02	120.80
1	U	438	GLU	OE1-CD-OE2	-6.03	116.06	123.30
1	V	710	SER	O-C-N	-6.03	113.05	122.70
1	o	567	MET	O-C-N	-6.03	113.05	122.70
1	x	322	TYR	CD1-CG-CD2	6.03	124.53	117.90
1	J	288	ARG	NH1-CZ-NH2	-6.03	112.77	119.40
1	l	290	ILE	N-CA-CB	6.03	124.66	110.80
1	n	122	ALA	CB-CA-C	-6.03	101.06	110.10
1	s	698	ARG	NE-CZ-NH1	6.03	123.31	120.30
1	z	665	MET	CG-SD-CE	-6.03	90.56	100.20
1	B	153	CYS	CB-CA-C	-6.03	98.35	110.40
1	C	651	TYR	CG-CD2-CE2	-6.03	116.48	121.30
1	l	695	ARG	NH1-CZ-NH2	-6.03	112.77	119.40
1	a	709	PHE	CB-CG-CD1	6.03	125.02	120.80
1	E	173	TYR	O-C-N	-6.03	113.06	122.70
1	H	494	GLY	O-C-N	-6.03	113.06	122.70
1	H	423	ILE	CA-CB-CG2	6.02	122.95	110.90
1	2	633	TYR	CB-CG-CD1	-6.02	117.39	121.00
1	9	367	VAL	CA-CB-CG2	-6.02	101.86	110.90
1	c	588	VAL	CA-CB-CG2	-6.02	101.87	110.90
1	n	101	ILE	CA-CB-CG2	-6.02	98.86	110.90
1	t	306	SER	N-CA-CB	6.02	119.53	110.50
1	u	543	PHE	CB-CG-CD2	-6.02	116.58	120.80
1	v	455	ARG	NH1-CZ-NH2	-6.02	112.78	119.40
1	L	307	VAL	CG1-CB-CG2	6.02	120.54	110.90
1	O	653	MET	CG-SD-CE	-6.02	90.56	100.20
1	W	488	ARG	NE-CZ-NH1	-6.02	117.29	120.30
1	7	172	SER	N-CA-CB	6.02	119.53	110.50
1	d	316	TYR	CB-CG-CD1	-6.02	117.39	121.00
1	P	476	ILE	O-C-N	-6.02	113.07	122.70
1	7	675	TYR	CB-CG-CD1	-6.02	117.39	121.00
1	d	316	TYR	CB-CG-CD2	6.02	124.61	121.00
1	z	382	ILE	N-CA-CB	6.02	124.64	110.80
1	K	498	TYR	CD1-CE1-CZ	-6.02	114.38	119.80
1	9	572	PHE	CB-CG-CD1	-6.02	116.59	120.80
1	a	498	TYR	CB-CG-CD2	-6.02	117.39	121.00
1	k	255	ARG	NE-CZ-NH1	6.02	123.31	120.30
1	p	535	ALA	N-CA-CB	-6.02	101.67	110.10
1	v	112	VAL	CG1-CB-CG2	-6.02	101.27	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	179	GLU	OE1-CD-OE2	-6.02	116.08	123.30
1	K	146	GLY	O-C-N	-6.02	113.07	122.70
1	6	498	TYR	CB-CG-CD2	6.01	124.61	121.00
1	a	342	ALA	N-CA-CB	-6.01	101.68	110.10
1	d	357	ARG	NE-CZ-NH1	6.01	123.31	120.30
1	h	461	TRP	CB-CG-CD2	-6.01	118.78	126.60
1	A	373	ARG	NE-CZ-NH2	-6.01	117.29	120.30
1	A	394	ARG	NH1-CZ-NH2	-6.01	112.78	119.40
1	K	488	ARG	NE-CZ-NH1	6.01	123.31	120.30
1	e	143	LEU	CB-CG-CD1	6.01	121.22	111.00
1	N	100	CYS	O-C-N	-6.01	113.08	122.70
1	X	357	ARG	NE-CZ-NH1	6.01	123.31	120.30
1	0	375	THR	O-C-N	-6.01	113.08	122.70
1	0	448	THR	CA-CB-CG2	-6.01	103.99	112.40
1	8	651	TYR	CG-CD1-CE1	-6.01	116.49	121.30
1	f	577	MET	O-C-N	-6.01	113.09	122.70
1	g	104	ILE	CA-CB-CG1	6.01	122.42	111.00
1	w	255	ARG	NE-CZ-NH2	-6.01	117.30	120.30
1	K	585	TYR	CB-CG-CD1	-6.01	117.39	121.00
1	N	491	GLU	N-CA-CB	6.01	121.42	110.60
1	Z	543	PHE	CB-CG-CD1	-6.01	116.59	120.80
1	8	410	ASP	CB-CG-OD2	6.01	123.70	118.30
1	c	697	TYR	CG-CD2-CE2	-6.01	116.50	121.30
1	e	174	ARG	CG-CD-NE	-6.01	99.19	111.80
1	Q	93	TYR	CD1-CE1-CZ	6.01	125.21	119.80
1	I	534	VAL	CG1-CB-CG2	-6.00	101.29	110.90
1	2	108	ARG	NH1-CZ-NH2	-6.00	112.80	119.40
1	3	406	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	j	322	TYR	CG-CD2-CE2	-6.00	116.50	121.30
1	L	432	ASP	CB-CG-OD2	6.00	123.70	118.30
1	n	170	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	z	634	PHE	CB-CG-CD2	-6.00	116.60	120.80
1	J	240	ASP	CB-CG-OD1	6.00	123.70	118.30
1	3	405	ARG	NE-CZ-NH2	-6.00	117.30	120.30
1	f	232	VAL	CA-CB-CG2	6.00	119.90	110.90
1	i	287	ASP	N-CA-CB	-6.00	99.80	110.60
1	6	174	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	9	709	PHE	CB-CG-CD2	6.00	125.00	120.80
1	z	597	PHE	CB-CG-CD1	-6.00	116.60	120.80
1	A	699	LEU	CB-CG-CD1	-6.00	100.81	111.00
1	Q	207	GLU	OE1-CD-OE2	-6.00	116.11	123.30
1	X	115	ASP	CB-CG-OD2	6.00	123.70	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	5	480	VAL	CA-CB-CG2	-6.00	101.91	110.90
1	o	355	TYR	CD1-CE1-CZ	6.00	125.20	119.80
1	y	239	ARG	C-N-CA	6.00	136.69	121.70
1	O	634	PHE	CD1-CE1-CZ	6.00	127.29	120.10
1	k	636	GLU	OE1-CD-OE2	-5.99	116.11	123.30
1	g	706	LEU	CB-CG-CD1	5.99	121.19	111.00
1	B	666	MET	CG-SD-CE	-5.99	90.61	100.20
1	O	406	ARG	CD-NE-CZ	5.99	131.99	123.60
1	d	689	ARG	NE-CZ-NH2	-5.99	117.31	120.30
1	B	703	ARG	NE-CZ-NH1	-5.99	117.31	120.30
1	K	269	ASP	CB-CG-OD1	-5.99	112.91	118.30
1	l	371	ALA	N-CA-CB	-5.99	101.72	110.10
1	o	652	PHE	CG-CD1-CE1	-5.99	114.22	120.80
1	q	173	TYR	CG-CD2-CE2	-5.99	116.51	121.30
1	z	703	ARG	NH1-CZ-NH2	-5.98	112.82	119.40
1	e	174	ARG	NE-CZ-NH1	5.98	123.29	120.30
1	y	498	TYR	CB-CG-CD1	5.98	124.59	121.00
1	y	634	PHE	CD1-CE1-CZ	5.98	127.28	120.10
1	M	112	VAL	CA-CB-CG2	-5.98	101.92	110.90
1	U	239	ARG	NE-CZ-NH1	-5.98	117.31	120.30
1	o	695	ARG	NE-CZ-NH1	5.98	123.29	120.30
1	B	239	ARG	NE-CZ-NH1	5.98	123.29	120.30
1	B	373	ARG	NH1-CZ-NH2	-5.98	112.82	119.40
1	9	655	ARG	NE-CZ-NH1	5.98	123.29	120.30
1	g	181	GLN	O-C-N	-5.98	113.14	122.70
1	l	582	ASP	CB-CG-OD2	-5.98	112.92	118.30
1	7	157	LEU	CB-CG-CD2	-5.98	100.84	111.00
1	v	429	PHE	CB-CG-CD2	5.98	124.98	120.80
1	v	697	TYR	CB-CG-CD2	5.98	124.59	121.00
1	C	677	TRP	CB-CG-CD1	-5.98	119.23	127.00
1	D	661	LEU	CB-CG-CD1	5.98	121.16	111.00
1	6	141	VAL	CA-CB-CG1	-5.97	101.94	110.90
1	h	380	MET	CG-SD-CE	-5.97	90.64	100.20
1	O	115	ASP	CB-CG-OD2	5.97	123.68	118.30
1	V	677	TRP	CA-CB-CG	5.97	125.05	113.70
1	O	165	GLU	O-C-N	-5.97	113.14	122.70
1	Q	698	ARG	NH1-CZ-NH2	-5.97	112.83	119.40
1	2	695	ARG	NH1-CZ-NH2	-5.97	112.83	119.40
1	l	593	ARG	NE-CZ-NH1	5.97	123.29	120.30
1	J	255	ARG	NE-CZ-NH1	5.97	123.29	120.30
1	2	240	ASP	O-C-N	-5.97	113.15	122.70
1	c	647	PHE	CB-CG-CD1	5.97	124.98	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	419	MET	CG-SD-CE	-5.97	90.65	100.20
1	0	115	ASP	CB-CG-OD1	5.97	123.67	118.30
1	e	674	ARG	NE-CZ-NH1	5.97	123.28	120.30
1	1	301	ARG	CD-NE-CZ	5.97	131.95	123.60
1	K	325	VAL	CG1-CB-CG2	5.97	120.45	110.90
1	Q	93	TYR	CG-CD1-CE1	-5.97	116.53	121.30
1	8	300	ASP	CB-CG-OD1	-5.96	112.93	118.30
1	b	477	HIS	CA-CB-CG	5.96	123.74	113.60
1	P	703	ARG	NE-CZ-NH1	5.96	123.28	120.30
1	R	122	ALA	CB-CA-C	-5.96	101.16	110.10
1	V	99	PRO	N-CD-CG	5.96	112.15	103.20
1	V	369	ARG	NE-CZ-NH1	5.96	123.28	120.30
1	Y	697	TYR	CA-CB-CG	-5.96	102.07	113.40
1	e	455	ARG	NE-CZ-NH1	-5.96	117.32	120.30
1	p	300	ASP	CB-CG-OD1	-5.96	112.93	118.30
1	w	574	MET	CG-SD-CE	-5.96	90.66	100.20
1	L	541	GLU	OE1-CD-OE2	-5.96	116.14	123.30
1	S	429	PHE	CB-CG-CD1	-5.96	116.63	120.80
1	F	498	TYR	CB-CG-CD1	-5.96	117.42	121.00
1	J	174	ARG	NH1-CZ-NH2	-5.96	112.84	119.40
1	V	187	GLU	OE1-CD-OE2	-5.96	116.15	123.30
1	a	578	VAL	CA-CB-CG1	-5.96	101.96	110.90
1	C	420	PHE	CB-CG-CD1	5.96	124.97	120.80
1	F	451	TYR	CD1-CG-CD2	5.96	124.46	117.90
1	J	675	TYR	CB-CG-CD1	-5.96	117.42	121.00
1	5	197	MET	CG-SD-CE	-5.96	90.67	100.20
1	5	585	TYR	CB-CG-CD2	-5.96	117.43	121.00
1	n	692	LEU	CB-CG-CD2	5.96	121.13	111.00
1	p	543	PHE	CB-CG-CD2	5.96	124.97	120.80
1	R	442	VAL	CA-CB-CG1	5.96	119.84	110.90
1	g	193	ALA	O-C-N	-5.96	113.17	122.70
1	w	444	ARG	NE-CZ-NH2	-5.96	117.32	120.30
1	0	181	GLN	O-C-N	-5.95	113.17	122.70
1	7	134	VAL	CG1-CB-CG2	-5.95	101.37	110.90
1	7	278	MET	CG-SD-CE	-5.95	90.68	100.20
1	x	498	TYR	CB-CG-CD1	-5.95	117.43	121.00
1	H	174	ARG	NE-CZ-NH1	5.95	123.28	120.30
1	A	234	VAL	CA-CB-CG2	-5.95	101.97	110.90
1	J	564	ALA	O-C-N	-5.95	113.18	122.70
1	1	134	VAL	CA-CB-CG2	-5.95	101.97	110.90
1	3	298	LEU	O-C-N	-5.95	113.18	122.70
1	r	152	ARG	NE-CZ-NH2	-5.95	117.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	651	TYR	CB-CG-CD2	-5.95	117.43	121.00
1	g	225	ASP	CB-CG-OD2	5.95	123.65	118.30
1	z	336	ARG	O-C-N	-5.95	113.18	122.70
1	F	517	LEU	O-C-N	-5.95	113.18	122.70
1	J	516	ALA	O-C-N	-5.95	113.18	122.70
1	i	322	TYR	CB-CG-CD2	-5.95	117.43	121.00
1	Z	145	ARG	NE-CZ-NH1	5.95	123.27	120.30
1	2	282	VAL	CA-CB-CG2	5.95	119.82	110.90
1	4	520	LEU	O-C-N	-5.95	113.19	122.70
1	p	269	ASP	CB-CG-OD2	5.95	123.65	118.30
1	t	334	THR	CA-CB-CG2	-5.95	104.08	112.40
1	B	316	TYR	CG-CD1-CE1	5.95	126.06	121.30
1	E	544	ASN	O-C-N	-5.95	113.19	122.70
1	G	124	ILE	O-C-N	-5.95	113.09	123.20
1	I	436	LEU	CB-CG-CD2	-5.95	100.89	111.00
1	3	328	ARG	NE-CZ-NH1	5.94	123.27	120.30
1	a	322	TYR	CB-CG-CD2	-5.94	117.43	121.00
1	l	406	ARG	CG-CD-NE	-5.94	99.32	111.80
1	r	483	TYR	CB-CG-CD2	-5.94	117.43	121.00
1	G	197	MET	O-C-N	-5.94	113.19	122.70
1	F	635	LEU	CB-CG-CD2	5.94	121.10	111.00
1	I	352	THR	CA-CB-CG2	-5.94	104.08	112.40
1	T	709	PHE	CB-CG-CD2	5.94	124.96	120.80
1	c	123	VAL	CG1-CB-CG2	-5.94	101.39	110.90
1	m	340	ALA	CB-CA-C	5.94	119.01	110.10
1	t	564	ALA	CB-CA-C	-5.94	101.19	110.10
1	C	669	LEU	O-C-N	-5.94	113.19	122.70
1	0	366	THR	CA-CB-CG2	-5.94	104.08	112.40
1	e	322	TYR	CD1-CG-CD2	5.94	124.43	117.90
1	p	93	TYR	CZ-CE2-CD2	5.94	125.14	119.80
1	P	488	ARG	NH1-CZ-NH2	5.94	125.93	119.40
1	7	651	TYR	O-C-N	-5.94	113.20	122.70
1	a	677	TRP	CH2-CZ2-CE2	5.94	123.34	117.40
1	p	697	TYR	CB-CG-CD1	5.94	124.56	121.00
1	y	457	ASP	CB-CG-OD2	5.94	123.64	118.30
1	L	409	ALA	O-C-N	-5.94	113.20	122.70
1	L	512	LEU	CB-CA-C	-5.94	98.92	110.20
1	Q	170	ARG	NE-CZ-NH2	-5.94	117.33	120.30
1	S	297	ASP	CB-CG-OD2	-5.94	112.96	118.30
1	Y	312	ARG	NE-CZ-NH1	-5.94	117.33	120.30
1	Z	573	ARG	NE-CZ-NH1	5.94	123.27	120.30
1	7	252	TYR	CZ-CE2-CD2	5.94	125.14	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	k	215	SER	N-CA-CB	5.94	119.40	110.50
1	k	240	ASP	CB-CG-OD2	5.94	123.64	118.30
1	F	494	GLY	O-C-N	-5.94	113.20	122.70
1	G	675	TYR	CB-CA-C	-5.94	98.53	110.40
1	W	310	VAL	CA-CB-CG2	-5.94	102.00	110.90
1	W	342	ALA	N-CA-CB	5.94	118.41	110.10
1	W	652	PHE	CB-CG-CD1	-5.94	116.64	120.80
1	k	635	LEU	CB-CG-CD2	5.93	121.09	111.00
1	v	429	PHE	CB-CG-CD1	-5.93	116.65	120.80
1	G	468	ASN	O-C-N	-5.93	113.20	122.70
1	M	328	ARG	CD-NE-CZ	5.93	131.91	123.60
1	V	215	SER	CB-CA-C	-5.93	98.83	110.10
1	k	93	TYR	CB-CG-CD2	5.93	124.56	121.00
1	m	597	PHE	CB-CG-CD1	-5.93	116.65	120.80
1	r	487	TYR	O-C-N	-5.93	113.21	122.70
1	z	334	THR	N-CA-CB	5.93	121.57	110.30
1	S	458	PHE	CB-CG-CD2	-5.93	116.65	120.80
1	2	573	ARG	NE-CZ-NH1	5.93	123.27	120.30
1	i	170	ARG	NE-CZ-NH2	-5.93	117.33	120.30
1	V	496	VAL	O-C-N	-5.93	113.21	122.70
1	Z	508	TYR	CB-CG-CD2	-5.93	117.44	121.00
1	k	102	ASP	CB-CG-OD2	-5.93	112.97	118.30
1	L	568	ILE	O-C-N	-5.93	113.22	122.70
1	P	451	TYR	CD1-CE1-CZ	-5.93	114.47	119.80
1	3	328	ARG	NE-CZ-NH2	-5.93	117.34	120.30
1	r	555	ASP	CB-CG-OD1	-5.93	112.97	118.30
1	W	709	PHE	N-CA-CB	-5.93	99.93	110.60
1	1	674	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	3	349	PHE	CB-CG-CD2	5.92	124.95	120.80
1	8	572	PHE	CB-CG-CD2	-5.92	116.65	120.80
1	I	674	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	X	167	TRP	CD1-NE1-CE2	5.92	114.33	109.00
1	X	413	SER	O-C-N	-5.92	113.22	122.70
1	9	652	PHE	CB-CG-CD1	-5.92	116.65	120.80
1	T	105	ASP	CB-CG-OD2	5.92	123.63	118.30
1	8	451	TYR	CD1-CE1-CZ	5.92	125.13	119.80
1	m	202	ARG	NE-CZ-NH2	5.92	123.26	120.30
1	o	498	TYR	CB-CG-CD1	-5.92	117.45	121.00
1	J	593	ARG	NE-CZ-NH2	-5.92	117.34	120.30
1	P	583	GLN	N-CA-C	5.92	126.98	111.00
1	R	655	ARG	NE-CZ-NH2	5.92	123.26	120.30
1	T	405	ARG	NE-CZ-NH2	5.92	123.26	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	508	TYR	CB-CG-CD2	5.92	124.55	121.00
1	l	93	TYR	CB-CG-CD2	-5.92	117.45	121.00
1	p	239	ARG	C-N-CA	5.92	136.50	121.70
1	g	458	PHE	CG-CD1-CE1	5.92	127.31	120.80
1	m	709	PHE	CB-CG-CD2	5.92	124.94	120.80
1	U	488	ARG	NE-CZ-NH1	5.92	123.26	120.30
1	v	554	GLU	O-C-N	-5.92	113.23	122.70
1	g	355	TYR	CD1-CE1-CZ	5.92	125.12	119.80
1	f	697	TYR	CB-CG-CD2	5.91	124.55	121.00
1	k	698	ARG	NH1-CZ-NH2	-5.91	112.89	119.40
1	y	300	ASP	CB-CG-OD2	5.91	123.62	118.30
1	J	357	ARG	NH1-CZ-NH2	-5.91	112.89	119.40
1	J	677	TRP	CD1-CG-CD2	5.91	111.03	106.30
1	P	341	GLU	OE1-CD-OE2	-5.91	116.20	123.30
1	T	356	PHE	CB-CG-CD1	-5.91	116.66	120.80
1	l	683	SER	CB-CA-C	5.91	121.33	110.10
1	b	164	CYS	N-CA-CB	5.91	121.24	110.60
1	n	362	GLU	CG-CD-OE2	5.91	130.12	118.30
1	u	366	THR	CA-CB-CG2	-5.91	104.12	112.40
1	r	322	TYR	CB-CG-CD1	-5.91	117.45	121.00
1	u	581	GLN	CA-CB-CG	5.91	126.40	113.40
1	Q	585	TYR	CB-CG-CD2	5.91	124.55	121.00
1	4	572	PHE	CB-CG-CD2	-5.91	116.66	120.80
1	D	327	CYS	CA-CB-SG	-5.91	103.37	114.00
1	8	126	ASP	CB-CG-OD1	5.91	123.62	118.30
1	K	113	GLU	N-CA-CB	5.91	121.23	110.60
1	0	267	ASN	N-CA-CB	5.91	121.23	110.60
1	3	637	THR	CA-CB-CG2	-5.91	104.13	112.40
1	3	683	SER	O-C-N	-5.91	113.25	122.70
1	8	174	ARG	NH1-CZ-NH2	-5.91	112.90	119.40
1	8	205	SER	N-CA-CB	5.91	119.36	110.50
1	f	664	ALA	O-C-N	-5.91	113.25	122.70
1	i	469	THR	CA-CB-CG2	-5.91	104.13	112.40
1	t	577	MET	CG-SD-CE	-5.91	90.75	100.20
1	x	693	LYS	O-C-N	-5.91	113.25	122.70
1	H	410	ASP	CB-CG-OD1	-5.91	112.98	118.30
1	K	152	ARG	NE-CZ-NH2	-5.91	117.35	120.30
1	O	252	TYR	CB-CG-CD1	-5.91	117.46	121.00
1	5	680	GLN	CG-CD-OE1	-5.90	109.79	121.60
1	a	633	TYR	CG-CD1-CE1	5.90	126.02	121.30
1	s	328	ARG	NE-CZ-NH2	-5.90	117.35	120.30
1	U	365	ALA	O-C-N	-5.90	113.25	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	v	630	LEU	CB-CG-CD2	5.90	121.03	111.00
1	T	586	SER	N-CA-CB	5.90	119.35	110.50
1	8	300	ASP	CB-CG-OD2	5.90	123.61	118.30
1	k	543	PHE	CB-CG-CD1	5.90	124.93	120.80
1	E	410	ASP	CB-CG-OD2	-5.90	112.99	118.30
1	G	530	ALA	CB-CA-C	5.90	118.95	110.10
1	O	150	VAL	O-C-N	-5.90	113.26	122.70
1	S	437	VAL	CG1-CB-CG2	-5.90	101.46	110.90
1	f	451	TYR	CB-CG-CD2	5.90	124.54	121.00
1	0	170	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	4	93	TYR	O-C-N	-5.90	113.26	122.70
1	r	269	ASP	CB-CG-OD1	5.90	123.61	118.30
1	t	449	ARG	CD-NE-CZ	5.90	131.85	123.60
1	v	361	GLU	OE1-CD-OE2	-5.90	116.22	123.30
1	S	498	TYR	CB-CG-CD1	5.90	124.54	121.00
1	X	492	LEU	CB-CA-C	5.90	121.41	110.20
1	Y	572	PHE	CB-CG-CD1	-5.90	116.67	120.80
1	Z	142	ALA	O-C-N	-5.90	113.26	122.70
1	o	542	PHE	CB-CG-CD1	-5.90	116.67	120.80
1	Z	697	TYR	CB-CG-CD1	-5.90	117.46	121.00
1	b	675	TYR	CB-CG-CD1	-5.89	117.46	121.00
1	m	539	PHE	CB-CG-CD2	5.89	124.93	120.80
1	L	695	ARG	NE-CZ-NH2	-5.89	117.35	120.30
1	O	579	PHE	CB-CG-CD1	5.89	124.93	120.80
1	U	451	TYR	CG-CD2-CE2	5.89	126.02	121.30
1	U	572	PHE	CB-CG-CD2	5.89	124.93	120.80
1	6	449	ARG	NE-CZ-NH2	5.89	123.25	120.30
1	o	310	VAL	CA-CB-CG1	5.89	119.74	110.90
1	u	585	TYR	CB-CG-CD2	5.89	124.54	121.00
1	I	116	LEU	CB-CG-CD1	5.89	121.02	111.00
1	T	108	ARG	CG-CD-NE	-5.89	99.42	111.80
1	V	633	TYR	CG-CD2-CE2	-5.89	116.59	121.30
1	W	170	ARG	CB-CA-C	5.89	122.18	110.40
1	6	496	VAL	CA-CB-CG2	-5.89	102.06	110.90
1	8	458	PHE	CB-CG-CD1	5.89	124.92	120.80
1	R	579	PHE	CB-CG-CD2	5.89	124.92	120.80
1	5	152	ARG	NE-CZ-NH2	5.89	123.24	120.30
1	5	280	HIS	O-C-N	-5.89	113.28	122.70
1	j	487	TYR	CD1-CE1-CZ	-5.89	114.50	119.80
1	n	322	TYR	CB-CG-CD2	5.89	124.53	121.00
1	t	477	HIS	CA-CB-CG	-5.89	103.59	113.60
1	Y	400	ALA	N-CA-CB	-5.89	101.86	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	525	GLU	OE1-CD-OE2	-5.89	116.23	123.30
1	W	310	VAL	CA-CB-CG1	5.89	119.73	110.90
1	g	585	TYR	CD1-CE1-CZ	5.89	125.10	119.80
1	r	235	ASP	CB-CG-OD1	5.89	123.60	118.30
1	t	239	ARG	NE-CZ-NH2	-5.89	117.36	120.30
1	S	136	GLU	O-C-N	-5.89	113.28	122.70
1	U	457	ASP	CB-CG-OD1	-5.89	113.00	118.30
1	0	697	TYR	CB-CG-CD2	5.88	124.53	121.00
1	a	288	ARG	NE-CZ-NH2	-5.88	117.36	120.30
1	o	690	ARG	NE-CZ-NH1	5.88	123.24	120.30
1	u	394	ARG	NE-CZ-NH2	-5.88	117.36	120.30
1	U	531	PHE	CB-CG-CD1	-5.88	116.68	120.80
1	v	423	ILE	O-C-N	-5.88	113.29	122.70
1	H	231	ARG	CD-NE-CZ	5.88	131.84	123.60
1	X	331	GLN	O-C-N	-5.88	113.29	122.70
1	8	584	ILE	O-C-N	-5.88	113.29	122.70
1	u	336	ARG	NE-CZ-NH2	5.88	123.24	120.30
1	X	108	ARG	CD-NE-CZ	5.88	131.83	123.60
1	2	316	TYR	CB-CG-CD2	-5.88	117.47	121.00
1	k	220	ASP	O-C-N	-5.88	113.29	122.70
1	d	387	PRO	N-CD-CG	5.88	112.02	103.20
1	i	356	PHE	CB-CG-CD2	5.88	124.91	120.80
1	n	677	TRP	CG-CD2-CE3	5.88	139.19	133.90
1	v	167	TRP	CG-CD1-NE1	-5.88	104.22	110.10
1	G	703	ARG	NE-CZ-NH1	5.88	123.24	120.30
1	d	417	ASP	CB-CG-OD2	-5.88	113.01	118.30
1	u	573	ARG	NE-CZ-NH1	5.88	123.24	120.30
1	v	310	VAL	N-CA-CB	5.88	124.43	111.50
1	L	697	TYR	CB-CG-CD1	5.88	124.53	121.00
1	4	166	ALA	N-CA-CB	-5.88	101.88	110.10
1	9	274	GLU	OE1-CD-OE2	-5.88	116.25	123.30
1	h	632	ALA	O-C-N	-5.88	113.30	122.70
1	m	697	TYR	CG-CD2-CE2	-5.88	116.60	121.30
1	D	173	TYR	CB-CG-CD1	5.88	124.53	121.00
1	N	588	VAL	CA-CB-CG2	-5.88	102.09	110.90
1	R	542	PHE	CB-CG-CD1	-5.88	116.69	120.80
1	5	655	ARG	NE-CZ-NH1	-5.87	117.36	120.30
1	L	690	ARG	NE-CZ-NH1	-5.87	117.36	120.30
1	N	597	PHE	CB-CG-CD1	-5.87	116.69	120.80
1	O	597	PHE	CG-CD1-CE1	5.87	127.26	120.80
1	T	697	TYR	CD1-CE1-CZ	-5.87	114.51	119.80
1	9	597	PHE	CB-CG-CD1	-5.87	116.69	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	455	ARG	NE-CZ-NH2	-5.87	117.36	120.30
1	k	417	ASP	CB-CG-OD1	5.87	123.58	118.30
1	v	355	TYR	CB-CG-CD2	5.87	124.52	121.00
1	N	294	THR	O-C-N	-5.87	113.30	122.70
1	2	709	PHE	CB-CG-CD1	-5.87	116.69	120.80
1	9	478	GLU	OE1-CD-OE2	-5.87	116.26	123.30
1	e	640	ARG	NH1-CZ-NH2	-5.87	112.94	119.40
1	E	597	PHE	CB-CG-CD2	5.87	124.91	120.80
1	J	217	GLU	OE1-CD-OE2	-5.87	116.26	123.30
1	X	274	GLU	OE1-CD-OE2	-5.87	116.26	123.30
1	9	152	ARG	NH1-CZ-NH2	-5.87	112.94	119.40
1	v	225	ASP	CB-CG-OD1	5.87	123.58	118.30
1	G	487	TYR	N-CA-CB	5.87	121.16	110.60
1	T	429	PHE	CB-CG-CD1	-5.87	116.69	120.80
1	X	301	ARG	NE-CZ-NH1	5.87	123.23	120.30
1	f	666	MET	CG-SD-CE	-5.87	90.81	100.20
1	o	535	ALA	N-CA-CB	-5.87	101.89	110.10
1	i	448	THR	O-C-N	-5.87	113.31	122.70
1	Q	525	GLU	OE1-CD-OE2	-5.87	116.26	123.30
1	D	567	MET	CG-SD-CE	-5.86	90.82	100.20
1	E	152	ARG	CD-NE-CZ	5.86	131.81	123.60
1	G	508	TYR	CB-CG-CD1	-5.86	117.48	121.00
1	U	451	TYR	CG-CD1-CE1	-5.86	116.61	121.30
1	l	297	ASP	CB-CG-OD1	5.86	123.58	118.30
1	M	301	ARG	NE-CZ-NH2	-5.86	117.37	120.30
1	O	564	ALA	CB-CA-C	5.86	118.89	110.10
1	l	394	ARG	NE-CZ-NH1	-5.86	117.37	120.30
1	B	420	PHE	O-C-N	-5.86	113.33	122.70
1	F	574	MET	CG-SD-CE	5.86	109.57	100.20
1	0	174	ARG	NE-CZ-NH2	-5.86	117.37	120.30
1	8	695	ARG	NE-CZ-NH1	5.86	123.23	120.30
1	m	651	TYR	CZ-CE2-CD2	-5.86	114.53	119.80
1	M	664	ALA	N-CA-CB	5.86	118.30	110.10
1	R	419	MET	N-CA-CB	5.86	121.14	110.60
1	d	380	MET	CG-SD-CE	-5.86	90.83	100.20
1	f	349	PHE	CB-CG-CD2	5.86	124.90	120.80
1	g	167	TRP	CE3-CZ3-CH2	-5.86	114.76	121.20
1	k	588	VAL	CA-CB-CG2	-5.86	102.12	110.90
1	s	128	SER	N-CA-CB	5.86	119.28	110.50
1	V	391	GLY	O-C-N	5.86	132.07	122.70
1	X	173	TYR	CB-CG-CD2	5.86	124.51	121.00
1	e	93	TYR	CB-CG-CD2	-5.85	117.49	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	642	ALA	N-CA-CB	5.85	118.30	110.10
1	f	494	GLY	C-N-CA	5.85	136.33	121.70
1	l	501	PHE	O-C-N	-5.85	113.33	122.70
1	m	349	PHE	CB-CG-CD1	-5.85	116.70	120.80
1	H	440	GLU	O-C-N	-5.85	113.34	122.70
1	e	494	GLY	O-C-N	-5.85	113.34	122.70
1	B	367	VAL	CA-CB-CG1	-5.85	102.12	110.90
1	9	272	THR	O-C-N	-5.85	113.34	122.70
1	9	488	ARG	NE-CZ-NH2	5.85	123.22	120.30
1	h	315	THR	CA-CB-CG2	-5.85	104.21	112.40
1	i	566	ASN	CA-CB-CG	-5.85	100.53	113.40
1	H	406	ARG	NH1-CZ-NH2	-5.85	112.97	119.40
1	2	235	ASP	CB-CG-OD1	5.85	123.56	118.30
1	7	647	PHE	N-CA-CB	5.85	121.12	110.60
1	i	678	LEU	CB-CG-CD2	5.85	120.94	111.00
1	S	703	ARG	NE-CZ-NH1	5.85	123.22	120.30
1	X	689	ARG	NE-CZ-NH1	-5.85	117.38	120.30
1	F	593	ARG	NE-CZ-NH1	5.85	123.22	120.30
1	T	652	PHE	CB-CG-CD1	5.85	124.89	120.80
1	c	120	ALA	N-CA-CB	5.84	118.28	110.10
1	d	366	THR	CA-CB-CG2	-5.84	104.22	112.40
1	K	543	PHE	CB-CG-CD1	5.84	124.89	120.80
1	l	698	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
1	v	114	GLN	N-CA-CB	5.84	121.12	110.60
1	H	220	ASP	CB-CG-OD2	5.84	123.56	118.30
1	J	421	PHE	CB-CG-CD2	-5.84	116.71	120.80
1	n	593	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
1	B	496	VAL	CA-CB-CG1	-5.84	102.14	110.90
1	s	647	PHE	CB-CG-CD1	5.84	124.89	120.80
1	x	422	LEU	CB-CG-CD2	5.84	120.93	111.00
1	Q	651	TYR	CB-CG-CD1	5.84	124.50	121.00
1	S	410	ASP	CB-CG-OD1	5.84	123.56	118.30
1	T	690	ARG	NH1-CZ-NH2	-5.84	112.98	119.40
1	U	354	PRO	CB-CA-C	5.84	126.60	112.00
1	7	179	GLU	OE1-CD-OE2	-5.84	116.30	123.30
1	j	571	GLN	O-C-N	-5.84	113.36	122.70
1	t	582	ASP	N-CA-CB	-5.84	100.09	110.60
1	l	483	TYR	CG-CD1-CE1	-5.84	116.63	121.30
1	E	355	TYR	CG-CD2-CE2	-5.84	116.63	121.30
1	E	706	LEU	O-C-N	-5.84	113.36	122.70
1	M	175	ASN	N-CA-CB	5.84	121.11	110.60
1	d	429	PHE	O-C-N	-5.83	113.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	s	169	GLY	O-C-N	-5.83	113.36	122.70
1	Q	573	ARG	NE-CZ-NH1	5.83	123.22	120.30
1	Q	659	ASP	CB-CG-OD1	-5.83	113.05	118.30
1	3	593	ARG	NE-CZ-NH2	-5.83	117.38	120.30
1	6	677	TRP	CB-CG-CD1	-5.83	119.42	127.00
1	7	369	ARG	NE-CZ-NH1	5.83	123.22	120.30
1	c	312	ARG	CD-NE-CZ	5.83	131.77	123.60
1	k	634	PHE	N-CA-CB	5.83	121.10	110.60
1	t	493	LEU	CB-CG-CD1	5.83	120.92	111.00
1	u	483	TYR	CD1-CE1-CZ	5.83	125.05	119.80
1	I	572	PHE	CG-CD1-CE1	5.83	127.22	120.80
1	0	498	TYR	CG-CD1-CE1	-5.83	116.63	121.30
1	a	623	PHE	CB-CG-CD2	-5.83	116.72	120.80
1	d	93	TYR	CB-CG-CD2	5.83	124.50	121.00
1	p	698	ARG	NH1-CZ-NH2	-5.83	112.98	119.40
1	W	652	PHE	CB-CG-CD2	5.83	124.88	120.80
1	Z	507	GLN	N-CA-CB	5.83	121.10	110.60
1	8	543	PHE	CB-CG-CD1	5.83	124.88	120.80
1	w	152	ARG	CD-NE-CZ	5.83	131.76	123.60
1	J	180	LEU	CB-CG-CD1	5.83	120.91	111.00
1	Q	252	TYR	CG-CD2-CE2	-5.83	116.64	121.30
1	T	473	LYS	O-C-N	-5.83	113.37	122.70
1	p	542	PHE	CB-CG-CD1	-5.83	116.72	120.80
1	u	261	LEU	O-C-N	-5.83	113.37	122.70
1	u	573	ARG	NE-CZ-NH2	-5.83	117.39	120.30
1	D	531	PHE	CB-CG-CD1	5.83	124.88	120.80
1	M	452	ASN	N-CA-CB	-5.83	100.11	110.60
1	Q	506	HIS	CB-CA-C	-5.83	98.74	110.40
1	4	698	ARG	NH1-CZ-NH2	-5.83	112.99	119.40
1	g	508	TYR	CG-CD1-CE1	-5.83	116.64	121.30
1	v	655	ARG	NH1-CZ-NH2	-5.83	112.99	119.40
1	T	536	LYS	N-CA-CB	-5.83	100.11	110.60
1	Y	196	VAL	CA-CB-CG1	5.83	119.64	110.90
1	9	308	MET	CA-CB-CG	5.83	123.20	113.30
1	b	458	PHE	CB-CG-CD1	5.83	124.88	120.80
1	A	252	TYR	CB-CG-CD2	5.83	124.50	121.00
1	F	231	ARG	NE-CZ-NH1	5.83	123.21	120.30
1	L	234	VAL	C-N-CA	5.83	136.26	121.70
1	R	373	ARG	NE-CZ-NH1	5.83	123.21	120.30
1	Y	695	ARG	NE-CZ-NH1	5.83	123.21	120.30
1	2	572	PHE	CB-CG-CD1	-5.82	116.72	120.80
1	b	93	TYR	CG-CD1-CE1	-5.82	116.64	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	e	483	TYR	CB-CG-CD1	-5.82	117.51	121.00
1	H	301	ARG	NE-CZ-NH2	-5.82	117.39	120.30
1	T	128	SER	O-C-N	-5.82	113.38	122.70
1	T	582	ASP	CB-CG-OD1	-5.82	113.06	118.30
1	Z	498	TYR	CZ-CE2-CD2	-5.82	114.56	119.80
1	3	543	PHE	CB-CG-CD2	5.82	124.87	120.80
1	r	593	ARG	CD-NE-CZ	5.82	131.75	123.60
1	G	323	MET	CG-SD-CE	5.82	109.51	100.20
1	K	349	PHE	N-CA-CB	-5.82	100.12	110.60
1	U	592	VAL	O-C-N	-5.82	113.39	122.70
1	F	640	ARG	CD-NE-CZ	5.82	131.75	123.60
1	8	328	ARG	CD-NE-CZ	5.82	131.75	123.60
1	j	443	VAL	CG1-CB-CG2	-5.82	101.59	110.90
1	r	108	ARG	NE-CZ-NH2	5.82	123.21	120.30
1	E	689	ARG	NH1-CZ-NH2	-5.82	113.00	119.40
1	K	366	THR	CA-CB-CG2	-5.82	104.26	112.40
1	L	440	GLU	OE1-CD-OE2	-5.82	116.32	123.30
1	9	322	TYR	CZ-CE2-CD2	5.81	125.03	119.80
1	V	239	ARG	C-N-CA	5.81	136.24	121.70
1	9	547	GLN	CG-CD-OE1	-5.81	109.97	121.60
1	j	220	ASP	CB-CG-OD1	5.81	123.53	118.30
1	p	651	TYR	CG-CD1-CE1	5.81	125.95	121.30
1	D	699	LEU	CB-CG-CD1	5.81	120.88	111.00
1	6	555	ASP	CB-CG-OD2	-5.81	113.07	118.30
1	N	355	TYR	CB-CG-CD2	-5.81	117.51	121.00
1	3	141	VAL	CA-CB-CG2	-5.81	102.19	110.90
1	4	695	ARG	NH1-CZ-NH2	-5.81	113.01	119.40
1	8	167	TRP	CD2-CE2-CZ2	5.81	129.27	122.30
1	g	373	ARG	NE-CZ-NH2	-5.81	117.40	120.30
1	x	573	ARG	NE-CZ-NH2	-5.81	117.40	120.30
1	A	134	VAL	CG1-CB-CG2	-5.81	101.61	110.90
1	M	255	ARG	CG-CD-NE	-5.81	99.60	111.80
1	0	214	THR	N-CA-CB	5.81	121.33	110.30
1	F	587	VAL	CA-CB-CG1	5.81	119.61	110.90
1	F	655	ARG	NH1-CZ-NH2	-5.81	113.01	119.40
1	S	677	TRP	CG-CD2-CE3	-5.81	128.68	133.90
1	k	444	ARG	NE-CZ-NH2	-5.80	117.40	120.30
1	r	272	THR	CA-CB-CG2	5.80	120.53	112.40
1	E	97	VAL	CA-CB-CG1	-5.80	102.19	110.90
1	E	461	TRP	CD1-NE1-CE2	5.80	114.22	109.00
1	X	394	ARG	NE-CZ-NH1	5.80	123.20	120.30
1	2	458	PHE	O-C-N	-5.80	113.42	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	t	697	TYR	CB-CG-CD2	-5.80	117.52	121.00
1	B	316	TYR	CG-CD2-CE2	5.80	125.94	121.30
1	S	591	LYS	O-C-N	-5.80	113.42	122.70
1	0	375	THR	CA-CB-CG2	5.80	120.52	112.40
1	7	440	GLU	OE1-CD-OE2	-5.80	116.34	123.30
1	A	357	ARG	NE-CZ-NH1	5.80	123.20	120.30
1	N	449	ARG	NH1-CZ-NH2	-5.80	113.02	119.40
1	e	495	PHE	N-CA-CB	5.80	121.04	110.60
1	w	480	VAL	CA-CB-CG1	5.80	119.60	110.90
1	k	703	ARG	NE-CZ-NH1	-5.80	117.40	120.30
1	g	349	PHE	CB-CG-CD2	-5.80	116.74	120.80
1	s	652	PHE	CB-CG-CD2	-5.80	116.74	120.80
1	I	585	TYR	CD1-CE1-CZ	5.80	125.02	119.80
1	P	351	GLN	O-C-N	-5.80	113.43	122.70
1	r	429	PHE	CB-CA-C	5.79	121.99	110.40
1	X	634	PHE	CB-CG-CD2	-5.79	116.74	120.80
1	7	539	PHE	CB-CG-CD1	-5.79	116.75	120.80
1	c	336	ARG	NH1-CZ-NH2	-5.79	113.03	119.40
1	i	336	ARG	NE-CZ-NH1	5.79	123.20	120.30
1	G	252	TYR	CG-CD1-CE1	5.79	125.94	121.30
1	I	334	THR	CA-CB-CG2	-5.79	104.29	112.40
1	S	167	TRP	CG-CD2-CE3	5.79	139.11	133.90
1	3	300	ASP	CB-CG-OD2	5.79	123.51	118.30
1	7	328	ARG	NH1-CZ-NH2	-5.79	113.03	119.40
1	d	669	LEU	CB-CA-C	-5.79	99.19	110.20
1	h	252	TYR	CA-CB-CG	-5.79	102.39	113.40
1	K	210	SER	CB-CA-C	-5.79	99.09	110.10
1	X	585	TYR	CB-CG-CD1	-5.79	117.53	121.00
1	Y	342	ALA	CB-CA-C	-5.79	101.41	110.10
1	Z	288	ARG	NE-CZ-NH1	-5.79	117.40	120.30
1	6	216	PRO	N-CD-CG	5.79	111.88	103.20
1	9	458	PHE	CB-CG-CD1	5.79	124.85	120.80
1	H	146	GLY	O-C-N	-5.79	113.44	122.70
1	0	628	ILE	O-C-N	-5.79	113.44	122.70
1	4	379	ILE	O-C-N	-5.79	113.44	122.70
1	t	292	ILE	O-C-N	-5.79	113.44	122.70
1	8	339	LEU	CB-CG-CD2	5.79	120.83	111.00
1	e	202	ARG	CD-NE-CZ	5.79	131.70	123.60
1	g	303	THR	CA-CB-CG2	-5.79	104.30	112.40
1	t	455	ARG	NE-CZ-NH2	5.79	123.19	120.30
1	A	288	ARG	NH1-CZ-NH2	-5.79	113.04	119.40
1	E	655	ARG	NE-CZ-NH1	5.79	123.19	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	535	ALA	CB-CA-C	5.79	118.78	110.10
1	R	494	GLY	C-N-CA	5.79	136.16	121.70
1	W	325	VAL	CA-CB-CG2	-5.79	102.22	110.90
1	e	531	PHE	CB-CG-CD2	-5.78	116.75	120.80
1	o	558	VAL	CG1-CB-CG2	-5.78	101.65	110.90
1	P	356	PHE	CG-CD1-CE1	-5.78	114.44	120.80
1	T	108	ARG	NE-CZ-NH1	5.78	123.19	120.30
1	g	167	TRP	CB-CG-CD1	-5.78	119.48	127.00
1	E	633	TYR	CB-CG-CD2	5.78	124.47	121.00
1	3	239	ARG	NE-CZ-NH1	5.78	123.19	120.30
1	4	187	GLU	O-C-N	-5.78	113.45	122.70
1	g	417	ASP	CB-CG-OD1	-5.78	113.10	118.30
1	s	394	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	x	588	VAL	CA-CB-CG1	5.78	119.57	110.90
1	y	659	ASP	CB-CG-OD2	5.78	123.50	118.30
1	0	659	ASP	CB-CG-OD1	5.78	123.50	118.30
1	m	652	PHE	CB-CG-CD2	-5.78	116.75	120.80
1	n	365	ALA	N-CA-CB	5.78	118.19	110.10
1	p	671	GLU	OE1-CD-OE2	-5.78	116.37	123.30
1	p	679	LEU	O-C-N	-5.78	113.46	122.70
1	r	567	MET	CG-SD-CE	-5.78	90.96	100.20
1	M	336	ARG	NE-CZ-NH2	5.78	123.19	120.30
1	S	297	ASP	CB-CG-OD1	5.78	123.50	118.30
1	X	483	TYR	CG-CD2-CE2	-5.78	116.68	121.30
1	Z	235	ASP	CB-CG-OD2	5.78	123.50	118.30
1	Z	433	ILE	O-C-N	-5.78	113.46	122.70
1	9	322	TYR	CG-CD2-CE2	-5.78	116.68	121.30
1	k	355	TYR	CG-CD1-CE1	5.78	125.92	121.30
1	n	369	ARG	NE-CZ-NH1	5.78	123.19	120.30
1	t	190	ILE	CA-C-O	5.78	132.23	120.10
1	x	449	ARG	CD-NE-CZ	5.78	131.69	123.60
1	A	675	TYR	CD1-CE1-CZ	5.78	125.00	119.80
1	O	558	VAL	CA-CB-CG1	5.78	119.56	110.90
1	W	543	PHE	CB-CG-CD2	5.77	124.84	120.80
1	1	698	ARG	NE-CZ-NH1	5.77	123.19	120.30
1	4	358	VAL	CA-CB-CG2	-5.77	102.24	110.90
1	5	671	GLU	OE1-CD-OE2	-5.77	116.37	123.30
1	r	674	ARG	CD-NE-CZ	5.77	131.68	123.60
1	s	308	MET	O-C-N	-5.77	113.47	122.70
1	F	535	ALA	C-N-CA	5.77	136.13	121.70
1	P	98	ARG	NE-CZ-NH2	5.77	123.19	120.30
1	Q	404	LEU	CB-CG-CD1	5.77	120.81	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	f	394	ARG	NH1-CZ-NH2	-5.77	113.05	119.40
1	o	120	ALA	N-CA-CB	5.77	118.18	110.10
1	q	197	MET	CG-SD-CE	-5.77	90.97	100.20
1	0	145	ARG	NE-CZ-NH1	5.77	123.19	120.30
1	D	508	TYR	CA-CB-CG	5.77	124.36	113.40
1	U	366	THR	CA-CB-CG2	-5.77	104.32	112.40
1	v	690	ARG	NE-CZ-NH2	-5.77	117.42	120.30
1	I	501	PHE	CB-CG-CD2	-5.77	116.76	120.80
1	T	542	PHE	CB-CG-CD1	5.77	124.84	120.80
1	e	709	PHE	O-C-N	-5.77	113.47	122.70
1	P	634	PHE	CB-CG-CD1	5.77	124.84	120.80
1	X	455	ARG	NE-CZ-NH1	-5.77	117.42	120.30
1	r	585	TYR	CB-CG-CD2	5.76	124.46	121.00
1	u	128	SER	N-CA-CB	5.76	119.15	110.50
1	x	540	GLY	O-C-N	-5.76	113.48	122.70
1	J	677	TRP	CB-CG-CD1	-5.76	119.51	127.00
1	Y	364	SER	N-CA-CB	5.76	119.15	110.50
1	6	677	TRP	CE2-CD2-CG	-5.76	102.69	107.30
1	w	525	GLU	OE1-CD-OE2	-5.76	116.39	123.30
1	O	585	TYR	CB-CG-CD2	-5.76	117.54	121.00
1	5	173	TYR	CB-CG-CD1	5.76	124.46	121.00
1	7	432	ASP	CB-CG-OD2	5.76	123.48	118.30
1	q	293	LEU	CB-CG-CD1	5.76	120.79	111.00
1	U	572	PHE	CB-CG-CD1	-5.76	116.77	120.80
1	9	356	PHE	CB-CG-CD1	-5.76	116.77	120.80
1	c	373	ARG	NH1-CZ-NH2	-5.76	113.07	119.40
1	m	202	ARG	NH1-CZ-NH2	-5.76	113.06	119.40
1	p	133	SER	N-CA-CB	5.76	119.14	110.50
1	w	126	ASP	CB-CG-OD1	5.76	123.48	118.30
1	X	136	GLU	OE1-CD-OE2	-5.76	116.39	123.30
1	2	406	ARG	NH1-CZ-NH2	-5.76	113.07	119.40
1	p	422	LEU	CB-CG-CD1	5.76	120.79	111.00
1	w	405	ARG	NE-CZ-NH2	-5.76	117.42	120.30
1	V	493	LEU	CB-CG-CD1	5.76	120.79	111.00
1	m	401	THR	N-CA-CB	5.76	121.24	110.30
1	m	709	PHE	CB-CG-CD1	-5.76	116.77	120.80
1	K	697	TYR	CB-CG-CD2	5.76	124.45	121.00
1	N	349	PHE	CB-CG-CD2	5.76	124.83	120.80
1	T	633	TYR	CZ-CE2-CD2	5.75	124.98	119.80
1	c	659	ASP	CB-CG-OD1	-5.75	113.12	118.30
1	r	289	THR	OG1-CB-CG2	-5.75	96.77	110.00
1	x	444	ARG	NE-CZ-NH2	5.75	123.18	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	523	ALA	N-CA-CB	-5.75	102.05	110.10
1	J	239	ARG	C-N-CA	5.75	136.08	121.70
1	J	545	LEU	CB-CA-C	5.75	121.13	110.20
1	O	534	VAL	CG1-CB-CG2	-5.75	101.70	110.90
1	X	398	GLN	CA-CB-CG	5.75	126.06	113.40
1	X	406	ARG	NE-CZ-NH1	5.75	123.18	120.30
1	d	349	PHE	CG-CD1-CE1	-5.75	114.47	120.80
1	h	588	VAL	CA-CB-CG1	5.75	119.53	110.90
1	v	98	ARG	NE-CZ-NH2	-5.75	117.42	120.30
1	A	421	PHE	CB-CG-CD1	-5.75	116.77	120.80
1	M	420	PHE	CB-CA-C	-5.75	98.90	110.40
1	9	202	ARG	NE-CZ-NH1	5.75	123.17	120.30
1	b	239	ARG	C-N-CA	5.75	136.07	121.70
1	h	108	ARG	NE-CZ-NH1	5.75	123.17	120.30
1	D	542	PHE	CB-CG-CD2	-5.75	116.78	120.80
1	o	633	TYR	CG-CD1-CE1	5.75	125.90	121.30
1	P	263	VAL	CA-CB-CG2	-5.75	102.28	110.90
1	5	316	TYR	CB-CG-CD1	5.75	124.45	121.00
1	5	703	ARG	CD-NE-CZ	5.75	131.65	123.60
1	d	467	THR	O-C-N	-5.75	113.51	122.70
1	p	709	PHE	CB-CG-CD2	5.75	124.82	120.80
1	x	312	ARG	NE-CZ-NH1	5.75	123.17	120.30
1	E	349	PHE	CB-CG-CD2	-5.75	116.78	120.80
1	R	519	MET	CG-SD-CE	-5.75	91.01	100.20
1	X	95	GLN	CA-CB-CG	5.75	126.04	113.40
1	0	350	PHE	O-C-N	-5.75	113.51	122.70
1	4	539	PHE	CG-CD1-CE1	-5.75	114.48	120.80
1	5	634	PHE	CG-CD1-CE1	-5.75	114.48	120.80
1	6	539	PHE	CD1-CE1-CZ	-5.75	113.21	120.10
1	l	239	ARG	NE-CZ-NH2	-5.75	117.43	120.30
1	U	457	ASP	CB-CG-OD2	5.75	123.47	118.30
1	9	139	SER	N-CA-CB	-5.74	101.88	110.50
1	g	543	PHE	CB-CG-CD2	5.74	124.82	120.80
1	r	357	ARG	NH1-CZ-NH2	5.74	125.72	119.40
1	0	483	TYR	CB-CG-CD2	-5.74	117.56	121.00
1	5	176	THR	CA-CB-CG2	-5.74	104.36	112.40
1	d	487	TYR	CB-CG-CD1	5.74	124.44	121.00
1	l	152	ARG	NE-CZ-NH2	-5.74	117.43	120.30
1	E	483	TYR	CD1-CE1-CZ	-5.74	114.63	119.80
1	F	303	THR	CA-CB-CG2	-5.74	104.36	112.40
1	O	98	ARG	NE-CZ-NH2	-5.74	117.43	120.30
1	Y	339	LEU	CB-CG-CD1	5.74	120.76	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	y	253	ILE	O-C-N	-5.74	113.52	122.70
1	V	592	VAL	CA-CB-CG1	-5.74	102.29	110.90
1	7	500	THR	CA-CB-CG2	-5.74	104.37	112.40
1	p	518	SER	O-C-N	-5.74	113.52	122.70
1	t	117	ALA	N-CA-CB	-5.74	102.07	110.10
1	U	167	TRP	CD1-NE1-CE2	5.74	114.16	109.00
1	c	367	VAL	CG1-CB-CG2	-5.74	101.72	110.90
1	e	623	PHE	CB-CG-CD2	-5.74	116.78	120.80
1	v	409	ALA	C-N-CA	5.74	136.04	121.70
1	M	531	PHE	CB-CG-CD2	5.74	124.81	120.80
1	P	428	MET	CG-SD-CE	-5.74	91.02	100.20
1	T	369	ARG	NH1-CZ-NH2	5.74	125.71	119.40
1	9	552	THR	CB-CA-C	-5.73	96.12	111.60
1	p	417	ASP	CB-CG-OD2	5.73	123.46	118.30
1	t	527	ILE	O-C-N	-5.73	113.53	122.70
1	w	202	ARG	CD-NE-CZ	5.73	131.62	123.60
1	z	299	MET	CG-SD-CE	-5.73	91.03	100.20
1	D	119	PRO	C-N-CA	5.73	136.03	121.70
1	I	266	CYS	CA-CB-SG	-5.73	103.68	114.00
1	W	698	ARG	NH1-CZ-NH2	-5.73	113.09	119.40
1	0	484	GLU	CA-CB-CG	5.73	126.01	113.40
1	6	535	ALA	CB-CA-C	-5.73	101.50	110.10
1	k	419	MET	CG-SD-CE	-5.73	91.03	100.20
1	q	419	MET	O-C-N	-5.73	113.53	122.70
1	F	409	ALA	O-C-N	-5.73	113.53	122.70
1	I	405	ARG	NE-CZ-NH1	5.73	123.17	120.30
1	J	415	GLU	OE1-CD-OE2	-5.73	116.42	123.30
1	f	400	ALA	N-CA-CB	5.73	118.12	110.10
1	D	336	ARG	NE-CZ-NH1	5.73	123.17	120.30
1	4	93	TYR	CB-CA-C	5.73	121.86	110.40
1	6	410	ASP	OD1-CG-OD2	-5.73	112.42	123.30
1	f	449	ARG	NE-CZ-NH2	-5.73	117.44	120.30
1	w	264	VAL	CA-CB-CG2	-5.73	102.31	110.90
1	w	287	ASP	CB-CG-OD2	-5.73	113.14	118.30
1	w	355	TYR	CB-CG-CD2	-5.73	117.56	121.00
1	z	698	ARG	CD-NE-CZ	5.73	131.62	123.60
1	N	303	THR	CA-CB-OG1	5.73	121.03	109.00
1	V	233	ALA	N-CA-CB	5.73	118.12	110.10
1	Z	648	ILE	O-C-N	-5.73	113.54	122.70
1	f	150	VAL	CB-CA-C	5.73	122.28	111.40
1	g	262	VAL	O-C-N	-5.73	113.54	122.70
1	H	308	MET	CA-CB-CG	5.73	123.03	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	b	145	ARG	NH1-CZ-NH2	-5.72	113.10	119.40
1	o	275	ALA	N-CA-CB	-5.72	102.09	110.10
1	E	435	LYS	CA-CB-CG	-5.72	100.81	113.40
1	I	675	TYR	CG-CD2-CE2	5.72	125.88	121.30
1	K	328	ARG	NE-CZ-NH1	-5.72	117.44	120.30
1	U	160	LYS	O-C-N	-5.72	113.54	122.70
1	8	483	TYR	CB-CG-CD2	-5.72	117.57	121.00
1	c	677	TRP	CB-CA-C	5.72	121.85	110.40
1	g	503	ILE	O-C-N	-5.72	113.54	122.70
1	D	472	VAL	CA-CB-CG2	-5.72	102.32	110.90
1	M	655	ARG	NH1-CZ-NH2	-5.72	113.11	119.40
1	P	173	TYR	CG-CD2-CE2	5.72	125.88	121.30
1	P	100	CYS	O-C-N	-5.72	113.55	122.70
1	X	577	MET	CG-SD-CE	-5.72	91.05	100.20
1	q	123	VAL	CB-CA-C	-5.72	100.53	111.40
1	O	328	ARG	CG-CD-NE	-5.72	99.79	111.80
1	Z	205	SER	N-CA-CB	5.72	119.08	110.50
1	Z	593	ARG	NH1-CZ-NH2	-5.72	113.11	119.40
1	u	709	PHE	CB-CG-CD2	5.72	124.80	120.80
1	2	690	ARG	CG-CD-NE	-5.72	99.79	111.80
1	z	406	ARG	NE-CZ-NH1	5.72	123.16	120.30
1	z	703	ARG	NE-CZ-NH2	5.72	123.16	120.30
1	2	283	ASP	CB-CG-OD2	-5.71	113.16	118.30
1	7	211	LEU	O-C-N	-5.71	113.56	122.70
1	c	368	PRO	N-CA-CB	5.71	110.16	103.30
1	J	634	PHE	N-CA-CB	5.71	120.89	110.60
1	L	421	PHE	CB-CG-CD1	5.71	124.80	120.80
1	O	94	GLU	OE1-CD-OE2	-5.71	116.44	123.30
1	O	455	ARG	NE-CZ-NH2	-5.71	117.44	120.30
1	1	448	THR	CA-CB-OG1	5.71	121.00	109.00
1	l	98	ARG	NE-CZ-NH2	5.71	123.16	120.30
1	Q	252	TYR	CG-CD1-CE1	-5.71	116.73	121.30
1	Y	231	ARG	NE-CZ-NH2	-5.71	117.44	120.30
1	Y	564	ALA	O-C-N	-5.71	113.56	122.70
1	t	634	PHE	CZ-CE2-CD2	-5.71	113.25	120.10
1	M	100	CYS	N-CA-CB	5.71	120.88	110.60
1	N	365	ALA	N-CA-CB	5.71	118.10	110.10
1	Q	115	ASP	CB-CG-OD1	5.71	123.44	118.30
1	V	480	VAL	CG1-CB-CG2	5.71	120.04	110.90
1	B	300	ASP	CB-CG-OD2	-5.71	113.16	118.30
1	H	357	ARG	N-CA-CB	-5.71	100.32	110.60
1	O	99	PRO	N-CA-CB	5.71	110.15	103.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Y	297	ASP	CB-CG-OD2	-5.71	113.16	118.30
1	8	501	PHE	O-C-N	-5.71	113.56	122.70
1	j	702	ALA	N-CA-CB	-5.71	102.11	110.10
1	F	410	ASP	CB-CG-OD2	5.71	123.44	118.30
1	L	410	ASP	CB-CG-OD1	5.71	123.44	118.30
1	1	145	ARG	NH1-CZ-NH2	-5.71	113.12	119.40
1	9	641	LEU	CB-CG-CD1	-5.71	101.30	111.00
1	x	686	ALA	CB-CA-C	-5.71	101.54	110.10
1	y	165	GLU	OE1-CD-OE2	-5.71	116.45	123.30
1	S	508	TYR	CG-CD1-CE1	-5.71	116.73	121.30
1	6	106	SER	N-CA-CB	5.71	119.06	110.50
1	e	220	ASP	CB-CG-OD1	5.71	123.43	118.30
1	q	476	ILE	CG1-CB-CG2	-5.71	98.85	111.40
1	M	659	ASP	CB-CG-OD2	5.71	123.44	118.30
1	5	585	TYR	CG-CD1-CE1	5.70	125.86	121.30
1	6	659	ASP	CB-CG-OD2	-5.70	113.17	118.30
1	f	524	MET	CG-SD-CE	-5.70	91.07	100.20
1	l	593	ARG	NH1-CZ-NH2	-5.70	113.13	119.40
1	t	542	PHE	CB-CG-CD1	-5.70	116.81	120.80
1	W	451	TYR	CG-CD2-CE2	-5.70	116.74	121.30
1	c	651	TYR	CG-CD2-CE2	-5.70	116.74	121.30
1	c	684	GLU	O-C-N	-5.70	113.58	122.70
1	q	308	MET	CG-SD-CE	-5.70	91.08	100.20
1	v	188	LYS	O-C-N	-5.70	113.58	122.70
1	y	322	TYR	CB-CG-CD2	5.70	124.42	121.00
1	7	695	ARG	CG-CD-NE	-5.70	99.83	111.80
1	9	584	ILE	O-C-N	-5.70	113.58	122.70
1	b	494	GLY	C-N-CA	5.70	135.95	121.70
1	c	311	VAL	CB-CA-C	5.70	122.23	111.40
1	e	652	PHE	CG-CD1-CE1	-5.70	114.53	120.80
1	f	677	TRP	CZ3-CH2-CZ2	-5.70	114.76	121.60
1	Y	543	PHE	O-C-N	-5.70	113.58	122.70
1	2	114	GLN	CG-CD-OE1	5.70	133.00	121.60
1	t	698	ARG	NH1-CZ-NH2	-5.70	113.13	119.40
1	B	685	THR	CA-CB-CG2	-5.70	104.42	112.40
1	P	417	ASP	CB-CG-OD1	5.70	123.43	118.30
1	u	225	ASP	CB-CG-OD1	-5.70	113.17	118.30
1	v	93	TYR	CB-CG-CD1	5.70	124.42	121.00
1	M	582	ASP	CB-CG-OD2	5.70	123.43	118.30
1	Y	170	ARG	NE-CZ-NH2	-5.70	117.45	120.30
1	f	106	SER	N-CA-CB	5.70	119.04	110.50
1	n	357	ARG	CD-NE-CZ	5.69	131.57	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	o	690	ARG	NE-CZ-NH2	-5.69	117.45	120.30
1	C	444	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	V	312	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	8	410	ASP	C-N-CA	5.69	135.93	121.70
1	n	682	GLN	C-N-CA	5.69	135.93	121.70
1	T	508	TYR	CB-CG-CD2	-5.69	117.58	121.00
1	f	588	VAL	CB-CA-C	5.69	122.21	111.40
1	h	494	GLY	O-C-N	-5.69	113.60	122.70
1	n	451	TYR	CD1-CE1-CZ	5.69	124.92	119.80
1	p	690	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	s	119	PRO	N-CD-CG	5.69	111.73	103.20
1	R	690	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	T	558	VAL	CA-CB-CG2	5.69	119.44	110.90
1	j	301	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	S	487	TYR	CB-CG-CD1	-5.69	117.59	121.00
1	0	158	LYS	N-CA-C	-5.69	95.64	111.00
1	2	711	SER	N-CA-CB	5.69	119.03	110.50
1	7	695	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	u	349	PHE	CB-CG-CD1	5.69	124.78	120.80
1	J	350	PHE	CB-CG-CD2	5.69	124.78	120.80
1	P	709	PHE	N-CA-CB	-5.69	100.36	110.60
1	U	689	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
1	d	365	ALA	N-CA-CB	5.69	118.06	110.10
1	N	513	VAL	CA-CB-CG2	-5.68	102.37	110.90
1	T	368	PRO	N-CA-CB	-5.68	96.35	102.60
1	6	638	SER	N-CA-CB	5.68	119.02	110.50
1	9	345	LYS	N-CA-CB	5.68	120.83	110.60
1	v	498	TYR	CB-CG-CD1	-5.68	117.59	121.00
1	v	585	TYR	CB-CG-CD2	-5.68	117.59	121.00
1	y	585	TYR	CG-CD1-CE1	5.68	125.85	121.30
1	I	574	MET	CG-SD-CE	-5.68	91.11	100.20
1	n	512	LEU	N-CA-CB	-5.68	99.04	110.40
1	K	336	ARG	NH1-CZ-NH2	-5.68	113.15	119.40
1	8	584	ILE	CA-CB-CG1	5.68	121.79	111.00
1	p	699	LEU	CB-CG-CD2	5.68	120.66	111.00
1	v	541	GLU	OE1-CD-OE2	-5.68	116.48	123.30
1	X	518	SER	N-CA-CB	5.68	119.02	110.50
1	2	380	MET	CG-SD-CE	5.68	109.28	100.20
1	7	677	TRP	CZ3-CH2-CZ2	-5.68	114.79	121.60
1	a	340	ALA	N-CA-CB	5.68	118.05	110.10
1	f	703	ARG	NH1-CZ-NH2	-5.68	113.15	119.40
1	r	655	ARG	NE-CZ-NH2	5.68	123.14	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	255	ARG	NE-CZ-NH1	5.68	123.14	120.30
1	S	311	VAL	CA-CB-CG2	-5.68	102.38	110.90
1	Y	313	ASN	N-CA-CB	-5.68	100.38	110.60
1	e	672	LYS	N-CA-C	5.68	126.33	111.00
1	v	568	ILE	O-C-N	-5.68	113.62	122.70
1	w	326	LYS	N-CA-CB	-5.68	100.38	110.60
1	I	597	PHE	CG-CD1-CE1	-5.68	114.56	120.80
1	0	458	PHE	CB-CG-CD1	5.67	124.77	120.80
1	6	429	PHE	CB-CG-CD2	-5.67	116.83	120.80
1	9	498	TYR	CG-CD1-CE1	-5.67	116.76	121.30
1	g	239	ARG	NE-CZ-NH2	5.67	123.14	120.30
1	l	303	THR	O-C-N	-5.67	113.62	122.70
1	o	505	VAL	CA-CB-CG1	5.67	119.41	110.90
1	t	495	PHE	N-CA-CB	5.67	120.82	110.60
1	v	255	ARG	NE-CZ-NH2	5.67	123.14	120.30
1	y	543	PHE	CB-CA-C	5.67	121.75	110.40
1	N	682	GLN	O-C-N	-5.67	113.62	122.70
1	d	567	MET	CG-SD-CE	-5.67	91.12	100.20
1	l	399	LYS	O-C-N	-5.67	113.62	122.70
1	v	593	ARG	NE-CZ-NH1	5.67	123.14	120.30
1	1	369	ARG	NE-CZ-NH2	-5.67	117.47	120.30
1	4	532	ILE	O-C-N	-5.67	113.63	122.70
1	6	531	PHE	CG-CD1-CE1	-5.67	114.56	120.80
1	n	166	ALA	N-CA-CB	-5.67	102.16	110.10
1	n	275	ALA	N-CA-CB	-5.67	102.16	110.10
1	x	341	GLU	OE1-CD-OE2	-5.67	116.49	123.30
1	G	593	ARG	NE-CZ-NH2	-5.67	117.46	120.30
1	g	585	TYR	CG-CD2-CE2	5.67	125.84	121.30
1	1	328	ARG	NE-CZ-NH2	-5.67	117.47	120.30
1	4	317	PRO	O-C-N	-5.67	113.63	122.70
1	6	634	PHE	CB-CG-CD1	5.67	124.77	120.80
1	9	357	ARG	NE-CZ-NH2	-5.67	117.47	120.30
1	f	429	PHE	CB-CG-CD1	5.67	124.77	120.80
1	A	322	TYR	CB-CG-CD2	-5.67	117.60	121.00
1	Y	570	LEU	O-C-N	-5.67	113.63	122.70
1	6	429	PHE	CB-CG-CD1	5.67	124.77	120.80
1	A	501	PHE	N-CA-CB	-5.67	100.40	110.60
1	G	322	TYR	CB-CG-CD2	-5.67	117.60	121.00
1	y	384	LYS	N-CA-CB	-5.67	100.40	110.60
1	3	498	TYR	CB-CG-CD1	-5.66	117.60	121.00
1	h	312	ARG	NE-CZ-NH1	-5.66	117.47	120.30
1	h	573	ARG	NH1-CZ-NH2	-5.66	113.17	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	l	202	ARG	NE-CZ-NH2	-5.66	117.47	120.30
1	A	567	MET	CG-SD-CE	-5.66	91.14	100.20
1	P	455	ARG	NH1-CZ-NH2	-5.66	113.17	119.40
1	Q	582	ASP	CB-CG-OD1	-5.66	113.20	118.30
1	T	633	TYR	CB-CG-CD2	-5.66	117.60	121.00
1	a	489	GLY	O-C-N	5.66	131.76	122.70
1	c	478	GLU	OE1-CD-OE2	-5.66	116.51	123.30
1	T	510	GLN	O-C-N	-5.66	113.64	122.70
1	W	703	ARG	NE-CZ-NH1	5.66	123.13	120.30
1	b	405	ARG	NH1-CZ-NH2	-5.66	113.17	119.40
1	c	627	GLY	O-C-N	-5.66	113.64	122.70
1	e	422	LEU	CB-CG-CD2	-5.66	101.38	111.00
1	i	495	PHE	CB-CG-CD2	5.66	124.76	120.80
1	J	297	ASP	CB-CG-OD2	5.66	123.39	118.30
1	L	112	VAL	O-C-N	-5.66	113.64	122.70
1	L	508	TYR	CB-CG-CD2	-5.66	117.60	121.00
1	8	173	TYR	CB-CG-CD1	5.66	124.39	121.00
1	c	350	PHE	CB-CG-CD2	5.66	124.76	120.80
1	t	409	ALA	O-C-N	-5.66	113.65	122.70
1	D	543	PHE	CB-CG-CD2	-5.66	116.84	120.80
1	V	111	GLY	O-C-N	-5.66	113.64	122.70
1	8	651	TYR	CD1-CE1-CZ	5.66	124.89	119.80
1	m	152	ARG	NE-CZ-NH2	-5.66	117.47	120.30
1	y	375	THR	O-C-N	-5.66	113.65	122.70
1	R	567	MET	CG-SD-CE	-5.66	91.15	100.20
1	5	108	ARG	NE-CZ-NH2	-5.66	117.47	120.30
1	d	597	PHE	CB-CG-CD2	5.66	124.76	120.80
1	r	98	ARG	NE-CZ-NH2	-5.66	117.47	120.30
1	I	483	TYR	CB-CG-CD2	-5.66	117.61	121.00
1	M	159	LEU	CB-CG-CD2	5.66	120.62	111.00
1	U	580	CYS	N-CA-CB	5.66	120.78	110.60
1	l	697	TYR	CG-CD2-CE2	-5.65	116.78	121.30
1	A	355	TYR	CD1-CG-CD2	5.65	124.12	117.90
1	H	118	LEU	N-CA-C	5.65	126.26	111.00
1	m	428	MET	CG-SD-CE	-5.65	91.16	100.20
1	y	585	TYR	CD1-CE1-CZ	-5.65	114.71	119.80
1	C	112	VAL	CA-CB-CG1	5.65	119.38	110.90
1	S	225	ASP	CB-CG-OD2	5.65	123.39	118.30
1	X	152	ARG	NE-CZ-NH1	5.65	123.13	120.30
1	b	373	ARG	NH1-CZ-NH2	-5.65	113.19	119.40
1	v	173	TYR	CB-CG-CD2	-5.65	117.61	121.00
1	U	152	ARG	NH1-CZ-NH2	-5.65	113.19	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	315	THR	N-CA-CB	5.65	121.03	110.30
1	9	675	TYR	CA-CB-CG	-5.65	102.67	113.40
1	g	491	GLU	OE1-CD-OE2	-5.65	116.52	123.30
1	m	355	TYR	CB-CG-CD1	-5.65	117.61	121.00
1	m	400	ALA	CB-CA-C	5.65	118.57	110.10
1	H	702	ALA	N-CA-CB	-5.65	102.19	110.10
1	5	587	VAL	CG1-CB-CG2	-5.65	101.86	110.90
1	d	519	MET	CG-SD-CE	-5.65	91.16	100.20
1	I	397	HIS	CB-CA-C	-5.65	99.11	110.40
1	K	240	ASP	N-CA-CB	5.65	120.77	110.60
1	X	665	MET	CA-CB-CG	-5.65	103.70	113.30
1	Z	444	ARG	NH1-CZ-NH2	-5.65	113.19	119.40
1	p	150	VAL	CA-CB-CG1	5.65	119.37	110.90
1	t	682	GLN	N-CA-C	5.65	126.24	111.00
1	0	328	ARG	NE-CZ-NH1	5.64	123.12	120.30
1	0	689	ARG	NE-CZ-NH1	5.64	123.12	120.30
1	1	123	VAL	CA-CB-CG1	5.64	119.37	110.90
1	7	578	VAL	CG1-CB-CG2	-5.64	101.87	110.90
1	9	115	ASP	CB-CG-OD1	5.64	123.38	118.30
1	c	269	ASP	CB-CG-OD1	5.64	123.38	118.30
1	n	98	ARG	CG-CD-NE	-5.64	99.95	111.80
1	P	353	HIS	O-C-N	-5.64	110.38	121.10
1	S	642	ALA	O-C-N	-5.64	113.67	122.70
1	W	262	VAL	CG1-CB-CG2	5.64	119.93	110.90
1	2	187	GLU	OE1-CD-OE2	-5.64	116.53	123.30
1	i	239	ARG	O-C-N	-5.64	113.67	122.70
1	i	492	LEU	CB-CA-C	5.64	120.92	110.20
1	i	513	VAL	CA-CB-CG1	5.64	119.36	110.90
1	z	531	PHE	CB-CG-CD1	-5.64	116.85	120.80
1	B	274	GLU	OE1-CD-OE2	-5.64	116.53	123.30
1	W	675	TYR	CB-CG-CD2	5.64	124.39	121.00
1	X	234	VAL	CA-CB-CG1	5.64	119.36	110.90
1	g	646	PRO	O-C-N	-5.64	113.67	122.70
1	l	220	ASP	CB-CG-OD1	-5.64	113.22	118.30
1	E	689	ARG	NE-CZ-NH2	-5.64	117.48	120.30
1	9	252	TYR	CB-CG-CD1	5.64	124.38	121.00
1	q	469	THR	OG1-CB-CG2	-5.64	97.03	110.00
1	w	634	PHE	CB-CG-CD1	5.64	124.75	120.80
1	y	457	ASP	CB-CG-OD1	-5.64	113.22	118.30
1	D	234	VAL	CG1-CB-CG2	-5.64	101.88	110.90
1	a	176	THR	CA-CB-CG2	5.64	120.29	112.40
1	d	498	TYR	CB-CG-CD1	5.64	124.38	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	196	VAL	CG1-CB-CG2	-5.64	101.88	110.90
1	q	547	GLN	N-CA-CB	-5.64	100.45	110.60
1	C	640	ARG	CB-CA-C	-5.64	99.13	110.40
1	D	115	ASP	CB-CG-OD2	5.64	123.37	118.30
1	Y	126	ASP	CB-CG-OD1	5.64	123.37	118.30
1	Y	420	PHE	CB-CG-CD1	5.64	124.75	120.80
1	9	295	LYS	O-C-N	-5.63	110.39	121.10
1	n	567	MET	CG-SD-CE	-5.63	91.18	100.20
1	J	287	ASP	CB-CG-OD1	5.63	123.37	118.30
1	1	498	TYR	CG-CD2-CE2	-5.63	116.79	121.30
1	u	539	PHE	O-C-N	-5.63	113.62	123.20
1	X	542	PHE	CB-CG-CD1	-5.63	116.86	120.80
1	2	578	VAL	CA-CB-CG1	-5.63	102.45	110.90
1	5	102	ASP	CB-CG-OD2	-5.63	113.23	118.30
1	h	562	ALA	N-CA-CB	-5.63	102.22	110.10
1	K	336	ARG	NE-CZ-NH1	5.63	123.11	120.30
1	c	483	TYR	CB-CG-CD2	-5.63	117.62	121.00
1	w	94	GLU	O-C-N	-5.63	113.69	122.70
1	y	204	ILE	O-C-N	-5.63	113.69	122.70
1	z	328	ARG	NE-CZ-NH2	-5.63	117.48	120.30
1	G	97	VAL	CG1-CB-CG2	-5.63	101.89	110.90
1	J	483	TYR	CB-CG-CD1	5.63	124.38	121.00
1	L	578	VAL	CG1-CB-CG2	-5.63	101.89	110.90
1	X	651	TYR	CB-CG-CD1	-5.63	117.62	121.00
1	9	703	ARG	NE-CZ-NH2	-5.63	117.49	120.30
1	w	94	GLU	OE1-CD-OE2	-5.63	116.55	123.30
1	C	255	ARG	NE-CZ-NH2	-5.63	117.49	120.30
1	M	551	SER	N-CA-CB	5.63	118.94	110.50
1	0	362	GLU	OE1-CD-OE2	-5.63	116.55	123.30
1	0	498	TYR	CB-CG-CD2	5.63	124.38	121.00
1	3	451	TYR	CG-CD2-CE2	5.63	125.80	121.30
1	L	405	ARG	NE-CZ-NH1	5.63	123.11	120.30
1	X	312	ARG	NE-CZ-NH2	-5.63	117.49	120.30
1	e	418	LYS	O-C-N	-5.62	113.70	122.70
1	w	470	GLN	CG-CD-OE1	5.62	132.85	121.60
1	R	477	HIS	N-CA-CB	5.62	120.72	110.60
1	5	218	VAL	CA-CB-CG1	-5.62	102.46	110.90
1	6	298	LEU	CB-CG-CD1	5.62	120.56	111.00
1	m	623	PHE	CD1-CE1-CZ	-5.62	113.35	120.10
1	B	417	ASP	CB-CG-OD2	5.62	123.36	118.30
1	C	312	ARG	NE-CZ-NH1	5.62	123.11	120.30
1	G	137	ALA	CB-CA-C	-5.62	101.67	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	301	ARG	CD-NE-CZ	5.62	131.47	123.60
1	S	149	ILE	O-C-N	-5.62	113.70	122.70
1	1	409	ALA	N-CA-CB	-5.62	102.23	110.10
1	e	121	ILE	CA-CB-CG2	5.62	122.14	110.90
1	s	674	ARG	NE-CZ-NH1	5.62	123.11	120.30
1	l	536	LYS	O-C-N	-5.62	113.71	122.70
1	l	697	TYR	CZ-CE2-CD2	5.62	124.86	119.80
1	5	115	ASP	CB-CG-OD1	5.62	123.36	118.30
1	7	669	LEU	CB-CG-CD2	5.62	120.55	111.00
1	7	695	ARG	NE-CZ-NH2	5.62	123.11	120.30
1	9	108	ARG	NE-CZ-NH2	-5.62	117.49	120.30
1	b	567	MET	CG-SD-CE	-5.62	91.21	100.20
1	t	255	ARG	CD-NE-CZ	-5.62	115.73	123.60
1	H	272	THR	CA-CB-CG2	-5.62	104.53	112.40
1	M	105	ASP	O-C-N	-5.62	113.71	122.70
1	4	652	PHE	CG-CD2-CE2	-5.62	114.62	120.80
1	n	253	ILE	O-C-N	-5.62	113.71	122.70
1	2	633	TYR	CG-CD1-CE1	-5.62	116.81	121.30
1	3	628	ILE	CA-CB-CG1	5.62	121.67	111.00
1	C	501	PHE	CB-CG-CD1	5.62	124.73	120.80
1	G	451	TYR	CB-CG-CD1	-5.62	117.63	121.00
1	K	703	ARG	NH1-CZ-NH2	-5.62	113.22	119.40
1	O	555	ASP	CB-CG-OD2	-5.62	113.25	118.30
1	f	483	TYR	CB-CG-CD1	5.61	124.37	121.00
1	h	542	PHE	CD1-CE1-CZ	5.61	126.84	120.10
1	k	275	ALA	N-CA-CB	-5.61	102.24	110.10
1	m	655	ARG	NE-CZ-NH1	5.61	123.11	120.30
1	t	235	ASP	CB-CG-OD2	5.61	123.35	118.30
1	O	578	VAL	CG1-CB-CG2	-5.61	101.92	110.90
1	Q	678	LEU	CB-CG-CD1	-5.61	101.46	111.00
1	d	710	SER	C-N-CA	5.61	135.73	121.70
1	W	336	ARG	NH1-CZ-NH2	-5.61	113.23	119.40
1	1	120	ALA	N-CA-CB	5.61	117.95	110.10
1	2	208	LEU	CB-CG-CD2	5.61	120.54	111.00
1	C	279	ALA	N-CA-CB	-5.61	102.25	110.10
1	E	225	ASP	CB-CG-OD1	5.61	123.35	118.30
1	P	515	PRO	N-CA-CB	5.61	110.03	103.30
1	R	196	VAL	O-C-N	-5.61	113.72	122.70
1	V	191	HIS	N-CA-CB	-5.61	100.50	110.60
1	9	573	ARG	NE-CZ-NH2	-5.61	117.50	120.30
1	w	288	ARG	NH1-CZ-NH2	-5.61	113.23	119.40
1	Y	538	HIS	CA-CB-CG	-5.61	104.06	113.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	5	93	TYR	CB-CG-CD1	-5.61	117.64	121.00
1	e	337	LEU	CB-CG-CD2	5.61	120.53	111.00
1	g	202	ARG	NE-CZ-NH1	5.61	123.10	120.30
1	J	300	ASP	CB-CG-OD2	5.61	123.35	118.30
1	S	697	TYR	CB-CG-CD2	-5.61	117.64	121.00
1	T	534	VAL	CG1-CB-CG2	-5.61	101.93	110.90
1	f	495	PHE	N-CA-CB	5.61	120.69	110.60
1	D	582	ASP	CB-CG-OD2	-5.61	113.25	118.30
1	c	577	MET	N-CA-CB	5.60	120.69	110.60
1	j	386	LEU	CB-CG-CD1	-5.60	101.47	111.00
1	D	322	TYR	CD1-CG-CD2	5.60	124.06	117.90
1	Z	522	LYS	N-CA-CB	-5.60	100.51	110.60
1	1	108	ARG	NE-CZ-NH1	5.60	123.10	120.30
1	1	633	TYR	CB-CG-CD2	5.60	124.36	121.00
1	7	312	ARG	NE-CZ-NH1	5.60	123.10	120.30
1	8	94	GLU	OE1-CD-OE2	-5.60	116.58	123.30
1	c	434	GLU	OE1-CD-OE2	-5.60	116.58	123.30
1	g	98	ARG	CG-CD-NE	-5.60	100.03	111.80
1	x	145	ARG	O-C-N	-5.60	113.67	123.20
1	y	244	GLN	CG-CD-OE1	5.60	132.81	121.60
1	z	567	MET	CG-SD-CE	-5.60	91.24	100.20
1	z	640	ARG	NE-CZ-NH1	5.60	123.10	120.30
1	B	122	ALA	CB-CA-C	-5.60	101.70	110.10
1	Q	235	ASP	CB-CG-OD1	5.60	123.34	118.30
1	S	577	MET	CA-CB-CG	5.60	122.82	113.30
1	r	252	TYR	CD1-CE1-CZ	-5.60	114.76	119.80
1	A	640	ARG	NH1-CZ-NH2	-5.60	113.24	119.40
1	I	202	ARG	NE-CZ-NH1	5.60	123.10	120.30
1	h	102	ASP	O-C-N	-5.60	113.74	122.70
1	U	312	ARG	NE-CZ-NH2	-5.60	117.50	120.30
1	8	516	ALA	N-CA-CB	-5.60	102.26	110.10
1	e	675	TYR	CD1-CE1-CZ	-5.60	114.76	119.80
1	f	633	TYR	CG-CD2-CE2	-5.60	116.82	121.30
1	k	373	ARG	CG-CD-NE	-5.60	100.05	111.80
1	w	561	THR	N-CA-CB	5.60	120.94	110.30
1	X	495	PHE	CB-CG-CD1	5.60	124.72	120.80
1	j	210	SER	CB-CA-C	5.60	120.73	110.10
1	F	312	ARG	CD-NE-CZ	5.60	131.44	123.60
1	R	347	ILE	O-C-N	-5.60	113.75	122.70
1	g	457	ASP	CB-CG-OD2	-5.59	113.26	118.30
1	i	299	MET	CA-CB-CG	5.59	122.81	113.30
1	p	545	LEU	CB-CG-CD1	5.59	120.51	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	G	585	TYR	O-C-N	5.59	131.65	122.70
1	T	93	TYR	CD1-CE1-CZ	-5.59	114.77	119.80
1	T	278	MET	CG-SD-CE	-5.59	91.25	100.20
1	W	449	ARG	NH1-CZ-NH2	-5.59	113.25	119.40
1	H	379	ILE	O-C-N	-5.59	113.75	122.70
1	a	495	PHE	O-C-N	-5.59	113.75	122.70
1	G	584	ILE	CA-CB-CG1	5.59	121.62	111.00
1	K	437	VAL	CG1-CB-CG2	-5.59	101.95	110.90
1	P	551	SER	O-C-N	-5.59	113.75	122.70
1	R	698	ARG	CD-NE-CZ	5.59	131.43	123.60
1	S	151	THR	CA-CB-CG2	-5.59	104.57	112.40
1	T	655	ARG	NE-CZ-NH2	5.59	123.09	120.30
1	U	358	VAL	CA-CB-CG2	-5.59	102.51	110.90
1	U	567	MET	CG-SD-CE	-5.59	91.25	100.20
1	A	689	ARG	CG-CD-NE	-5.59	100.06	111.80
1	N	695	ARG	NE-CZ-NH1	-5.59	117.50	120.30
1	V	341	GLU	CB-CA-C	-5.59	99.22	110.40
1	p	663	LYS	O-C-N	-5.59	113.76	122.70
1	w	311	VAL	CA-CB-CG2	-5.59	102.52	110.90
1	F	328	ARG	NE-CZ-NH2	-5.59	117.51	120.30
1	P	483	TYR	CG-CD1-CE1	-5.59	116.83	121.30
1	a	480	VAL	CB-CA-C	5.59	122.01	111.40
1	n	180	LEU	CB-CG-CD2	5.59	120.50	111.00
1	q	697	TYR	CB-CG-CD2	5.59	124.35	121.00
1	G	362	GLU	OE1-CD-OE2	-5.59	116.60	123.30
1	W	591	LYS	N-CA-CB	5.59	120.66	110.60
1	A	325	VAL	CA-CB-CG2	-5.58	102.52	110.90
1	V	323	MET	CG-SD-CE	-5.58	91.26	100.20
1	V	652	PHE	CB-CG-CD1	-5.58	116.89	120.80
1	9	674	ARG	NH1-CZ-NH2	-5.58	113.26	119.40
1	j	307	VAL	CA-CB-CG2	-5.58	102.52	110.90
1	M	338	SER	O-C-N	-5.58	113.77	122.70
1	3	690	ARG	NH1-CZ-NH2	-5.58	113.26	119.40
1	6	173	TYR	CG-CD1-CE1	5.58	125.77	121.30
1	b	508	TYR	CD1-CE1-CZ	5.58	124.82	119.80
1	m	377	GLU	OE1-CD-OE2	5.58	130.00	123.30
1	q	350	PHE	CB-CG-CD2	5.58	124.71	120.80
1	z	252	TYR	CB-CG-CD1	-5.58	117.65	121.00
1	Q	676	SER	CB-CA-C	-5.58	99.49	110.10
1	V	508	TYR	CZ-CE2-CD2	5.58	124.82	119.80
1	Y	583	GLN	O-C-N	-5.58	113.77	122.70
1	U	656	GLU	OE1-CD-OE2	-5.58	116.60	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1	312	ARG	NH1-CZ-NH2	-5.58	113.26	119.40
1	c	253	ILE	O-C-N	-5.58	113.78	122.70
1	c	541	GLU	CB-CA-C	-5.58	99.24	110.40
1	g	112	VAL	CA-CB-CG2	5.58	119.27	110.90
1	o	405	ARG	NE-CZ-NH1	5.58	123.09	120.30
1	y	108	ARG	NE-CZ-NH1	5.58	123.09	120.30
1	2	233	ALA	CB-CA-C	-5.58	101.73	110.10
1	i	266	CYS	CA-CB-SG	5.58	124.04	114.00
1	V	640	ARG	CD-NE-CZ	5.58	131.41	123.60
1	7	93	TYR	CB-CG-CD2	5.58	124.34	121.00
1	g	373	ARG	CG-CD-NE	-5.58	100.09	111.80
1	H	170	ARG	NE-CZ-NH2	-5.58	117.51	120.30
1	T	458	PHE	CB-CG-CD2	-5.58	116.90	120.80
1	4	394	ARG	NE-CZ-NH1	5.57	123.09	120.30
1	a	402	GLU	O-C-N	-5.57	113.78	122.70
1	B	225	ASP	CB-CG-OD1	5.57	123.32	118.30
1	T	409	ALA	O-C-N	-5.57	113.78	122.70
1	7	709	PHE	CB-CG-CD2	-5.57	116.90	120.80
1	g	167	TRP	CB-CG-CD2	5.57	133.84	126.60
1	j	156	VAL	CA-CB-CG2	-5.57	102.54	110.90
1	u	167	TRP	CB-CG-CD2	-5.57	119.36	126.60
1	K	417	ASP	CB-CG-OD1	5.57	123.31	118.30
1	S	573	ARG	NE-CZ-NH1	-5.57	117.51	120.30
1	1	152	ARG	NE-CZ-NH2	-5.57	117.52	120.30
1	9	349	PHE	CB-CG-CD1	-5.57	116.90	120.80
1	9	444	ARG	NE-CZ-NH2	-5.57	117.52	120.30
1	q	582	ASP	O-C-N	5.57	131.61	122.70
1	t	357	ARG	NH1-CZ-NH2	5.57	125.53	119.40
1	H	567	MET	CG-SD-CE	-5.57	91.29	100.20
1	O	182	ASP	O-C-N	-5.57	110.52	121.10
1	P	655	ARG	NE-CZ-NH2	-5.57	117.52	120.30
1	W	531	PHE	CG-CD2-CE2	-5.57	114.67	120.80
1	5	440	GLU	OE1-CD-OE2	-5.57	116.62	123.30
1	k	542	PHE	CB-CG-CD2	5.57	124.70	120.80
1	r	275	ALA	N-CA-CB	5.57	117.90	110.10
1	B	472	VAL	CA-CB-CG2	-5.57	102.55	110.90
1	Q	655	ARG	NE-CZ-NH1	5.57	123.08	120.30
1	W	297	ASP	CB-CG-OD2	5.57	123.31	118.30
1	0	572	PHE	N-CA-CB	5.57	120.62	110.60
1	3	677	TRP	O-C-N	-5.57	113.79	122.70
1	a	357	ARG	CD-NE-CZ	5.57	131.39	123.60
1	a	690	ARG	O-C-N	-5.57	113.79	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	h	690	ARG	NE-CZ-NH2	-5.57	117.52	120.30
1	r	695	ARG	NE-CZ-NH2	5.57	123.08	120.30
1	K	558	VAL	CG1-CB-CG2	-5.57	101.99	110.90
1	S	328	ARG	NE-CZ-NH2	-5.57	117.52	120.30
1	8	647	PHE	CB-CG-CD2	-5.57	116.90	120.80
1	h	469	THR	N-CA-CB	5.57	120.88	110.30
1	q	496	VAL	CG1-CB-CG2	-5.57	102.00	110.90
1	r	689	ARG	NE-CZ-NH2	5.57	123.08	120.30
1	P	361	GLU	OE1-CD-OE2	-5.57	116.62	123.30
1	7	339	LEU	O-C-N	-5.56	113.80	122.70
1	d	573	ARG	NH1-CZ-NH2	-5.56	113.28	119.40
1	x	190	ILE	O-C-N	-5.56	113.80	122.70
1	x	355	TYR	CB-CG-CD2	5.56	124.34	121.00
1	H	419	MET	CG-SD-CE	-5.56	91.30	100.20
1	M	495	PHE	CB-CG-CD1	5.56	124.69	120.80
1	R	406	ARG	NE-CZ-NH2	-5.56	117.52	120.30
1	1	309	ASN	CA-CB-CG	5.56	125.64	113.40
1	5	579	PHE	CB-CG-CD1	-5.56	116.91	120.80
1	c	585	TYR	CB-CG-CD1	-5.56	117.66	121.00
1	i	585	TYR	CB-CG-CD2	5.56	124.34	121.00
1	l	656	GLU	OE1-CD-OE2	-5.56	116.62	123.30
1	x	160	LYS	N-CA-CB	5.56	120.61	110.60
1	A	505	VAL	CG1-CB-CG2	-5.56	102.00	110.90
1	G	703	ARG	NE-CZ-NH2	5.56	123.08	120.30
1	7	656	GLU	CB-CA-C	5.56	121.52	110.40
1	f	695	ARG	CD-NE-CZ	-5.56	115.81	123.60
1	f	534	VAL	CG1-CB-CG2	-5.56	102.00	110.90
1	x	145	ARG	NE-CZ-NH2	-5.56	117.52	120.30
1	H	240	ASP	CB-CG-OD2	-5.56	113.30	118.30
1	J	173	TYR	CZ-CE2-CD2	5.56	124.80	119.80
1	R	505	VAL	CA-CB-CG2	-5.56	102.56	110.90
1	2	322	TYR	CB-CG-CD2	-5.56	117.67	121.00
1	a	419	MET	CG-SD-CE	-5.56	91.31	100.20
1	y	400	ALA	O-C-N	-5.56	113.81	122.70
1	I	493	LEU	O-C-N	-5.56	113.75	123.20
1	k	587	VAL	CA-CB-CG2	5.56	119.23	110.90
1	o	181	GLN	N-CA-CB	5.56	120.60	110.60
1	t	633	TYR	O-C-N	-5.56	113.81	122.70
1	I	456	GLU	OE1-CD-OE2	-5.56	116.63	123.30
1	Q	457	ASP	CB-CG-OD2	5.56	123.30	118.30
1	V	215	SER	N-CA-CB	5.56	118.83	110.50
1	k	187	GLU	OE1-CD-OE2	5.55	129.97	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	555	ASP	CB-CG-OD2	5.55	123.30	118.30
1	A	174	ARG	NE-CZ-NH2	-5.55	117.52	120.30
1	S	554	GLU	OE1-CD-OE2	-5.55	116.64	123.30
1	V	655	ARG	CB-CG-CD	5.55	126.04	111.60
1	X	572	PHE	CB-CG-CD1	5.55	124.69	120.80
1	A	549	VAL	N-CA-CB	-5.55	99.28	111.50
1	l	150	VAL	CA-CB-CG1	5.55	119.23	110.90
1	4	656	GLU	N-CA-CB	5.55	120.59	110.60
1	e	96	LYS	O-C-N	-5.55	113.82	122.70
1	f	633	TYR	CB-CG-CD1	-5.55	117.67	121.00
1	A	231	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
1	A	517	LEU	O-C-N	-5.55	113.82	122.70
1	L	703	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
1	e	438	GLU	CG-CD-OE1	5.55	129.40	118.30
1	e	483	TYR	CB-CA-C	5.55	121.50	110.40
1	g	103	LEU	O-C-N	-5.55	113.82	122.70
1	h	498	TYR	CG-CD1-CE1	-5.55	116.86	121.30
1	C	205	SER	N-CA-CB	5.55	118.82	110.50
1	L	389	LEU	CB-CG-CD2	5.55	120.43	111.00
1	T	407	CYS	CB-CA-C	-5.55	99.30	110.40
1	a	514	GLU	OE1-CD-OE2	-5.55	116.64	123.30
1	L	394	ARG	NH1-CZ-NH2	-5.55	113.30	119.40
1	M	406	ARG	NE-CZ-NH1	5.55	123.07	120.30
1	Z	458	PHE	CB-CG-CD1	5.55	124.68	120.80
1	l	451	TYR	CB-CG-CD1	-5.55	117.67	121.00
1	q	122	ALA	N-CA-CB	5.55	117.86	110.10
1	r	488	ARG	NH1-CZ-NH2	-5.55	113.30	119.40
1	t	690	ARG	NE-CZ-NH2	5.55	123.07	120.30
1	l	653	MET	CG-SD-CE	-5.54	91.33	100.20
1	8	663	LYS	O-C-N	-5.54	113.83	122.70
1	r	336	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	x	367	VAL	CA-CB-CG1	5.54	119.22	110.90
1	z	207	GLU	OE1-CD-OE2	-5.54	116.65	123.30
1	0	214	THR	CA-CB-OG1	5.54	120.64	109.00
1	2	420	PHE	CG-CD1-CE1	-5.54	114.70	120.80
1	8	355	TYR	CG-CD2-CE2	-5.54	116.87	121.30
1	c	458	PHE	CB-CG-CD2	5.54	124.68	120.80
1	g	328	ARG	CG-CD-NE	-5.54	100.16	111.80
1	l	691	ILE	O-C-N	-5.54	113.83	122.70
1	9	206	HIS	CA-CB-CG	5.54	123.02	113.60
1	v	467	THR	CA-CB-OG1	5.54	120.64	109.00
1	R	118	LEU	N-CA-CB	5.54	121.48	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	R	429	PHE	CZ-CE2-CD2	-5.54	113.45	120.10
1	0	483	TYR	CG-CD1-CE1	-5.54	116.87	121.30
1	e	236	ASN	CB-CA-C	-5.54	99.32	110.40
1	h	365	ALA	N-CA-CB	5.54	117.86	110.10
1	0	356	PHE	CB-CG-CD2	5.54	124.68	120.80
1	5	495	PHE	N-CA-CB	5.54	120.57	110.60
1	d	93	TYR	CZ-CE2-CD2	5.54	124.78	119.80
1	p	451	TYR	CG-CD2-CE2	5.54	125.73	121.30
1	R	338	SER	O-C-N	-5.54	113.84	122.70
1	4	168	ALA	N-CA-CB	-5.54	102.35	110.10
1	w	484	GLU	O-C-N	-5.54	113.84	122.70
1	7	276	LEU	CB-CG-CD1	5.54	120.41	111.00
1	7	473	LYS	CA-CB-CG	5.54	125.58	113.40
1	d	419	MET	N-CA-CB	-5.54	100.64	110.60
1	f	207	GLU	O-C-N	-5.54	113.84	122.70
1	i	369	ARG	NE-CZ-NH1	-5.54	117.53	120.30
1	n	255	ARG	NH1-CZ-NH2	-5.54	113.31	119.40
1	r	524	MET	CA-CB-CG	5.54	122.71	113.30
1	I	453	LYS	O-C-N	-5.54	113.84	122.70
1	8	654	LEU	O-C-N	-5.53	113.85	122.70
1	a	659	ASP	CB-CG-OD2	5.53	123.28	118.30
1	g	235	ASP	CB-CG-OD1	5.53	123.28	118.30
1	v	239	ARG	NH1-CZ-NH2	-5.53	113.31	119.40
1	C	181	GLN	O-C-N	-5.53	113.85	122.70
1	R	449	ARG	CD-NE-CZ	5.53	131.35	123.60
1	U	542	PHE	N-CA-CB	-5.53	100.64	110.60
1	b	652	PHE	CB-CG-CD2	5.53	124.67	120.80
1	N	406	ARG	O-C-N	-5.53	113.85	122.70
1	f	287	ASP	CB-CG-OD2	5.53	123.28	118.30
1	j	684	GLU	CB-CA-C	-5.53	99.34	110.40
1	p	682	GLN	CA-C-N	5.53	129.37	117.20
1	A	472	VAL	O-C-N	-5.53	113.85	122.70
1	S	631	ASN	N-CA-CB	-5.53	100.64	110.60
1	Q	659	ASP	N-CA-CB	-5.53	100.65	110.60
1	Y	129	SER	N-CA-CB	5.53	118.79	110.50
1	c	173	TYR	CZ-CE2-CD2	-5.53	114.83	119.80
1	c	202	ARG	NE-CZ-NH2	-5.53	117.54	120.30
1	f	321	GLY	N-CA-C	5.53	126.92	113.10
1	i	577	MET	N-CA-CB	5.53	120.55	110.60
1	m	226	LEU	CA-C-N	5.53	132.58	117.10
1	p	689	ARG	CD-NE-CZ	5.53	131.34	123.60
1	s	531	PHE	CB-CG-CD1	5.53	124.67	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	u	585	TYR	CD1-CG-CD2	-5.53	111.82	117.90
1	H	438	GLU	O-C-N	-5.53	113.80	123.20
1	s	560	HIS	CB-CA-C	5.53	121.45	110.40
1	v	369	ARG	NH1-CZ-NH2	-5.53	113.32	119.40
1	A	328	ARG	NE-CZ-NH2	-5.53	117.54	120.30
1	L	539	PHE	CA-CB-CG	-5.53	100.64	113.90
1	9	580	CYS	CB-CA-C	-5.52	99.35	110.40
1	R	659	ASP	CB-CA-C	5.52	121.45	110.40
1	l	537	LYS	O-C-N	-5.52	113.86	122.70
1	s	108	ARG	NE-CZ-NH2	-5.52	117.54	120.30
1	u	97	VAL	CA-CB-CG2	5.52	119.18	110.90
1	u	418	LYS	N-CA-CB	5.52	120.54	110.60
1	x	623	PHE	CB-CG-CD2	5.52	124.67	120.80
1	P	145	ARG	NE-CZ-NH2	-5.52	117.54	120.30
1	Q	282	VAL	CA-CB-CG1	-5.52	102.62	110.90
1	W	339	LEU	O-C-N	-5.52	113.86	122.70
1	w	239	ARG	NE-CZ-NH1	5.52	123.06	120.30
1	V	239	ARG	O-C-N	-5.52	113.87	122.70
1	3	555	ASP	CB-CG-OD1	5.52	123.27	118.30
1	4	623	PHE	N-CA-CB	-5.52	100.66	110.60
1	y	287	ASP	CB-CG-OD1	-5.52	113.33	118.30
1	A	264	VAL	O-C-N	-5.52	110.61	121.10
1	N	239	ARG	C-N-CA	5.52	135.50	121.70
1	N	488	ARG	NH1-CZ-NH2	-5.52	113.33	119.40
1	Q	478	GLU	OE1-CD-OE2	-5.52	116.68	123.30
1	3	474	ASN	CB-CG-OD1	5.52	132.64	121.60
1	c	208	LEU	CB-CG-CD1	5.52	120.38	111.00
1	d	464	ILE	CA-CB-CG1	-5.52	100.52	111.00
1	e	222	THR	CA-CB-CG2	-5.52	104.67	112.40
1	e	633	TYR	CB-CG-CD1	5.52	124.31	121.00
1	l	695	ARG	NH1-CZ-NH2	-5.52	113.33	119.40
1	t	470	GLN	O-C-N	-5.52	113.87	122.70
1	x	293	LEU	CB-CG-CD1	-5.52	101.62	111.00
1	B	309	ASN	N-CA-CB	-5.52	100.67	110.60
1	I	451	TYR	CZ-CE2-CD2	-5.52	114.83	119.80
1	O	93	TYR	CB-CG-CD2	5.52	124.31	121.00
1	V	238	PRO	O-C-N	-5.52	113.87	122.70
1	6	214	THR	O-C-N	-5.52	113.88	122.70
1	G	294	THR	CA-C-N	-5.52	105.06	117.20
1	U	545	LEU	CB-CA-C	5.52	120.68	110.20
1	u	659	ASP	CB-CG-OD2	-5.51	113.34	118.30
1	w	315	THR	N-CA-CB	5.51	120.78	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	I	173	TYR	O-C-N	-5.51	113.88	122.70
1	I	265	PRO	O-C-N	-5.51	113.88	122.70
1	I	460	ASN	N-CA-CB	5.51	120.53	110.60
1	1	437	VAL	CG1-CB-CG2	-5.51	102.08	110.90
1	6	480	VAL	CA-CB-CG2	-5.51	102.63	110.90
1	d	563	LYS	O-C-N	-5.51	113.88	122.70
1	k	520	LEU	CB-CG-CD1	5.51	120.37	111.00
1	n	357	ARG	CB-CA-C	-5.51	99.37	110.40
1	i	655	ARG	NH1-CZ-NH2	-5.51	113.34	119.40
1	n	402	GLU	OE1-CD-OE2	-5.51	116.69	123.30
1	o	710	SER	CB-CA-C	-5.51	99.63	110.10
1	I	697	TYR	CG-CD2-CE2	-5.51	116.89	121.30
1	T	516	ALA	CB-CA-C	-5.51	101.83	110.10
1	c	108	ARG	NE-CZ-NH2	-5.51	117.55	120.30
1	f	675	TYR	CB-CG-CD2	5.51	124.31	121.00
1	i	105	ASP	CB-CG-OD1	5.51	123.26	118.30
1	j	312	ARG	CA-CB-CG	5.51	125.52	113.40
1	x	361	GLU	OE1-CD-OE2	-5.51	116.69	123.30
1	B	117	ALA	N-CA-CB	-5.51	102.39	110.10
1	I	95	GLN	N-CA-C	5.51	125.88	111.00
1	K	424	GLU	OE1-CD-OE2	-5.51	116.69	123.30
1	U	173	TYR	CB-CG-CD2	-5.51	117.69	121.00
1	W	240	ASP	CB-CG-OD1	5.51	123.26	118.30
1	5	432	ASP	CB-CG-OD2	5.51	123.25	118.30
1	7	542	PHE	CB-CG-CD2	5.51	124.66	120.80
1	f	174	ARG	CG-CD-NE	-5.51	100.23	111.80
1	h	555	ASP	CB-CG-OD1	5.51	123.25	118.30
1	n	357	ARG	NE-CZ-NH1	-5.51	117.55	120.30
1	p	349	PHE	CB-CG-CD1	-5.51	116.95	120.80
1	K	202	ARG	NH1-CZ-NH2	5.51	125.46	119.40
1	d	428	MET	CA-CB-CG	5.50	122.66	113.30
1	f	690	ARG	NE-CZ-NH2	-5.50	117.55	120.30
1	h	633	TYR	CG-CD2-CE2	-5.50	116.90	121.30
1	N	695	ARG	NE-CZ-NH2	5.50	123.05	120.30
1	c	170	ARG	NE-CZ-NH1	-5.50	117.55	120.30
1	i	677	TRP	CH2-CZ2-CE2	-5.50	111.90	117.40
1	L	384	LYS	CB-CA-C	-5.50	99.39	110.40
1	P	307	VAL	CG1-CB-CG2	-5.50	102.09	110.90
1	W	444	ARG	NE-CZ-NH1	5.50	123.05	120.30
1	4	365	ALA	CB-CA-C	5.50	118.35	110.10
1	b	255	ARG	N-CA-CB	-5.50	100.70	110.60
1	h	664	ALA	O-C-N	-5.50	113.90	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	i	182	ASP	CB-CG-OD1	5.50	123.25	118.30
1	q	500	THR	N-CA-CB	5.50	120.75	110.30
1	A	699	LEU	CB-CG-CD2	5.50	120.35	111.00
1	t	592	VAL	CA-CB-CG2	-5.50	102.65	110.90
1	N	480	VAL	CA-CB-CG2	-5.50	102.65	110.90
1	6	640	ARG	NH1-CZ-NH2	-5.50	113.35	119.40
1	f	105	ASP	N-CA-CB	-5.50	100.70	110.60
1	j	355	TYR	CB-CG-CD2	5.50	124.30	121.00
1	r	141	VAL	O-C-N	-5.50	113.90	122.70
1	t	285	GLU	C-N-CA	5.50	133.85	122.30
1	D	105	ASP	CB-CG-OD2	5.50	123.25	118.30
1	L	186	VAL	CG1-CB-CG2	-5.50	102.10	110.90
1	W	477	HIS	CA-CB-CG	5.50	122.95	113.60
1	X	294	THR	N-CA-CB	5.50	120.75	110.30
1	j	633	TYR	CD1-CE1-CZ	-5.50	114.85	119.80
1	k	429	PHE	CD1-CE1-CZ	5.50	126.69	120.10
1	y	460	ASN	N-CA-CB	5.50	120.50	110.60
1	z	108	ARG	N-CA-CB	-5.50	100.71	110.60
1	F	650	GLN	N-CA-CB	5.50	120.49	110.60
1	e	310	VAL	CG1-CB-CG2	-5.50	102.11	110.90
1	k	432	ASP	CB-CG-OD1	5.50	123.25	118.30
1	B	226	LEU	CB-CG-CD2	5.50	120.34	111.00
1	3	318	LEU	CB-CG-CD2	5.49	120.34	111.00
1	c	488	ARG	NE-CZ-NH1	5.49	123.05	120.30
1	l	580	CYS	CA-CB-SG	5.49	123.89	114.00
1	m	698	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
1	q	321	GLY	N-CA-C	5.49	126.83	113.10
1	y	174	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
1	S	322	TYR	CB-CG-CD1	5.49	124.30	121.00
1	V	487	TYR	CB-CG-CD1	5.49	124.30	121.00
1	X	697	TYR	CB-CG-CD1	-5.49	117.70	121.00
1	q	118	LEU	O-C-N	-5.49	110.66	121.10
1	y	349	PHE	CB-CG-CD2	5.49	124.64	120.80
1	B	170	ARG	NH1-CZ-NH2	-5.49	113.36	119.40
1	S	280	HIS	CA-CB-CG	5.49	122.94	113.60
1	2	687	THR	CA-CB-CG2	-5.49	104.71	112.40
1	4	498	TYR	CB-CG-CD1	5.49	124.29	121.00
1	8	550	GLN	N-CA-CB	5.49	120.48	110.60
1	8	588	VAL	CG1-CB-CG2	-5.49	102.12	110.90
1	x	174	ARG	CG-CD-NE	-5.49	100.27	111.80
1	J	255	ARG	NE-CZ-NH2	-5.49	117.55	120.30
1	P	495	PHE	CB-CG-CD1	5.49	124.64	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	336	ARG	NE-CZ-NH2	5.49	123.04	120.30
1	e	588	VAL	CA-CB-CG1	5.49	119.13	110.90
1	J	655	ARG	NE-CZ-NH2	5.49	123.04	120.30
1	W	328	ARG	N-CA-CB	5.49	120.48	110.60
1	Y	102	ASP	N-CA-CB	5.49	120.48	110.60
1	4	675	TYR	CB-CG-CD1	5.49	124.29	121.00
1	b	505	VAL	O-C-N	-5.49	113.92	122.70
1	S	420	PHE	CB-CG-CD2	5.49	124.64	120.80
1	V	397	HIS	CA-CB-CG	5.49	122.93	113.60
1	e	677	TRP	CH2-CZ2-CE2	5.49	122.89	117.40
1	x	175	ASN	N-CA-CB	5.49	120.47	110.60
1	c	269	ASP	CB-CG-OD2	-5.48	113.36	118.30
1	C	220	ASP	CB-CG-OD1	-5.48	113.36	118.30
1	V	354	PRO	N-CD-CG	5.48	111.43	103.20
1	5	623	PHE	CB-CG-CD2	-5.48	116.96	120.80
1	8	167	TRP	CB-CA-C	5.48	121.36	110.40
1	f	336	ARG	NH1-CZ-NH2	-5.48	113.37	119.40
1	h	406	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	p	689	ARG	CA-CB-CG	5.48	125.46	113.40
1	r	366	THR	CA-CB-CG2	-5.48	104.72	112.40
1	t	134	VAL	CA-CB-CG1	-5.48	102.68	110.90
1	w	152	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	H	318	LEU	N-CA-CB	5.48	121.37	110.40
1	U	406	ARG	NE-CZ-NH2	-5.48	117.56	120.30
1	Z	543	PHE	N-CA-CB	-5.48	100.73	110.60
1	2	634	PHE	CZ-CE2-CD2	-5.48	113.52	120.10
1	e	573	ARG	CD-NE-CZ	5.48	131.27	123.60
1	v	111	GLY	O-C-N	-5.48	113.93	122.70
1	x	225	ASP	CB-CG-OD2	5.48	123.23	118.30
1	M	297	ASP	CB-CG-OD2	5.48	123.23	118.30
1	R	651	TYR	CD1-CE1-CZ	5.48	124.73	119.80
1	k	300	ASP	CB-CG-OD1	5.48	123.23	118.30
1	r	94	GLU	OE1-CD-OE2	-5.48	116.72	123.30
1	V	640	ARG	N-CA-CB	5.48	120.46	110.60
1	5	580	CYS	N-CA-C	-5.48	96.21	111.00
1	m	189	GLU	O-C-N	-5.48	113.94	122.70
1	v	533	ASN	O-C-N	-5.48	113.94	122.70
1	w	287	ASP	CB-CG-OD1	5.48	123.23	118.30
1	A	179	GLU	O-C-N	-5.48	113.94	122.70
1	G	93	TYR	CG-CD1-CE1	-5.48	116.92	121.30
1	G	690	ARG	NH1-CZ-NH2	-5.48	113.38	119.40
1	S	593	ARG	NE-CZ-NH1	5.48	123.04	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	457	ASP	CB-CG-OD2	5.48	123.23	118.30
1	X	572	PHE	CB-CG-CD2	-5.48	116.97	120.80
1	Z	225	ASP	CB-CG-OD2	5.48	123.23	118.30
1	Z	457	ASP	CB-CG-OD2	-5.48	113.37	118.30
1	q	401	THR	CA-CB-CG2	-5.48	104.73	112.40
1	E	279	ALA	N-CA-CB	-5.48	102.43	110.10
1	e	647	PHE	CG-CD2-CE2	5.47	126.82	120.80
1	z	166	ALA	N-CA-CB	5.47	117.76	110.10
1	F	369	ARG	NH1-CZ-NH2	-5.47	113.38	119.40
1	K	634	PHE	CB-CG-CD1	5.47	124.63	120.80
1	W	498	TYR	CB-CG-CD1	-5.47	117.72	121.00
1	5	231	ARG	N-CA-CB	5.47	120.45	110.60
1	a	535	ALA	N-CA-CB	5.47	117.76	110.10
1	o	542	PHE	CG-CD1-CE1	-5.47	114.78	120.80
1	V	709	PHE	CB-CG-CD1	5.47	124.63	120.80
1	Y	372	GLU	OE1-CD-OE2	-5.47	116.73	123.30
1	l	308	MET	CG-SD-CE	-5.47	91.45	100.20
1	B	488	ARG	NH1-CZ-NH2	-5.47	113.38	119.40
1	P	677	TRP	CB-CG-CD2	-5.47	119.49	126.60
1	1	297	ASP	CB-CG-OD2	-5.47	113.38	118.30
1	7	112	VAL	N-CA-CB	5.47	123.53	111.50
1	u	461	TRP	CD1-CG-CD2	5.47	110.68	106.30
1	x	261	LEU	CB-CG-CD1	5.47	120.30	111.00
1	M	340	ALA	O-C-N	-5.47	113.95	122.70
1	N	380	MET	CG-SD-CE	-5.47	91.45	100.20
1	6	645	ILE	CB-CA-C	5.47	122.54	111.60
1	b	498	TYR	CB-CG-CD2	-5.47	117.72	121.00
1	i	443	VAL	CA-CB-CG1	-5.47	102.70	110.90
1	k	367	VAL	CA-CB-CG1	-5.47	102.70	110.90
1	l	241	ILE	CA-CB-CG1	5.47	121.39	111.00
1	B	232	VAL	CG1-CB-CG2	5.47	119.65	110.90
1	B	316	TYR	CD1-CG-CD2	-5.47	111.89	117.90
1	Q	377	GLU	N-CA-CB	-5.47	100.76	110.60
1	U	524	MET	CG-SD-CE	-5.47	91.45	100.20
1	I	583	GLN	CB-CG-CD	5.47	125.81	111.60
1	S	287	ASP	N-CA-CB	5.47	120.44	110.60
1	c	511	GLN	N-CA-CB	5.46	120.44	110.60
1	d	515	PRO	N-CA-CB	-5.46	96.59	102.60
1	m	244	GLN	O-C-N	-5.46	113.96	122.70
1	n	179	GLU	OE1-CD-OE2	-5.46	116.74	123.30
1	q	525	GLU	OE1-CD-OE2	-5.46	116.74	123.30
1	t	108	ARG	NH1-CZ-NH2	-5.46	113.39	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	577	MET	CA-CB-CG	5.46	122.59	113.30
1	H	580	CYS	CA-CB-SG	-5.46	104.17	114.00
1	L	449	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	M	190	ILE	O-C-N	-5.46	113.96	122.70
1	O	623	PHE	CB-CG-CD1	5.46	124.62	120.80
1	2	278	MET	CG-SD-CE	-5.46	91.46	100.20
1	w	147	SER	N-CA-CB	5.46	118.69	110.50
1	Q	113	GLU	OE1-CD-OE2	-5.46	116.74	123.30
1	l	652	PHE	CB-CG-CD1	-5.46	116.98	120.80
1	f	111	GLY	O-C-N	-5.46	113.96	122.70
1	u	173	TYR	CG-CD1-CE1	-5.46	116.93	121.30
1	x	542	PHE	CB-CG-CD1	5.46	124.62	120.80
1	C	537	LYS	O-C-N	-5.46	113.96	122.70
1	D	572	PHE	N-CA-CB	5.46	120.43	110.60
1	O	630	LEU	CB-CG-CD2	-5.46	101.72	111.00
1	P	362	GLU	OE1-CD-OE2	-5.46	116.75	123.30
1	S	325	VAL	CA-CB-CG2	5.46	119.09	110.90
1	T	661	LEU	O-C-N	-5.46	113.96	122.70
1	A	369	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	V	585	TYR	N-CA-CB	-5.46	100.77	110.60
1	9	709	PHE	CB-CG-CD1	-5.46	116.98	120.80
1	k	565	GLU	OE1-CD-OE2	5.46	129.85	123.30
1	v	322	TYR	CG-CD1-CE1	-5.46	116.93	121.30
1	H	167	TRP	CB-CG-CD2	5.46	133.70	126.60
1	Z	419	MET	CA-CB-CG	5.46	122.58	113.30
1	0	288	ARG	CD-NE-CZ	5.46	131.24	123.60
1	3	703	ARG	O-C-N	-5.46	113.97	122.70
1	6	665	MET	CG-SD-CE	-5.46	91.47	100.20
1	k	512	LEU	CB-CG-CD1	-5.46	101.72	111.00
1	t	115	ASP	CB-CG-OD2	5.46	123.21	118.30
1	t	483	TYR	CG-CD1-CE1	-5.46	116.94	121.30
1	z	698	ARG	NH1-CZ-NH2	5.46	125.40	119.40
1	B	173	TYR	CB-CG-CD2	-5.46	117.73	121.00
1	G	703	ARG	NH1-CZ-NH2	-5.46	113.40	119.40
1	M	675	TYR	CB-CG-CD2	5.46	124.27	121.00
1	p	186	VAL	CA-CB-CG2	5.46	119.08	110.90
1	A	322	TYR	CD1-CE1-CZ	-5.46	114.89	119.80
1	A	461	TRP	CH2-CZ2-CE2	5.46	122.86	117.40
1	B	707	CYS	CB-CA-C	5.46	121.31	110.40
1	0	258	THR	N-CA-CB	5.45	120.66	110.30
1	3	651	TYR	CB-CG-CD1	5.45	124.27	121.00
1	5	110	LEU	O-C-N	-5.45	113.93	123.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	7	362	GLU	OE1-CD-OE2	-5.45	116.76	123.30
1	e	424	GLU	OE1-CD-OE2	-5.45	116.76	123.30
1	h	288	ARG	NE-CZ-NH1	5.45	123.03	120.30
1	J	309	ASN	N-CA-CB	5.45	120.42	110.60
1	P	455	ARG	NE-CZ-NH1	5.45	123.03	120.30
1	3	244	GLN	O-C-N	-5.45	113.98	122.70
1	H	563	LYS	CB-CA-C	-5.45	99.50	110.40
1	c	498	TYR	CB-CG-CD2	5.45	124.27	121.00
1	u	703	ARG	NE-CZ-NH1	-5.45	117.58	120.30
1	H	239	ARG	O-C-N	-5.45	113.98	122.70
1	U	338	SER	N-CA-CB	5.45	118.67	110.50
1	f	674	ARG	NE-CZ-NH1	5.45	123.03	120.30
1	i	239	ARG	NH1-CZ-NH2	-5.45	113.41	119.40
1	q	326	LYS	CA-CB-CG	5.45	125.39	113.40
1	z	625	GLU	O-C-N	-5.45	113.98	122.70
1	C	646	PRO	N-CD-CG	5.45	111.37	103.20
1	F	373	ARG	NE-CZ-NH1	5.45	123.02	120.30
1	L	349	PHE	CB-CG-CD2	-5.45	116.99	120.80
1	T	697	TYR	CB-CG-CD1	-5.45	117.73	121.00
1	t	152	ARG	NE-CZ-NH1	5.45	123.02	120.30
1	0	299	MET	CG-SD-CE	-5.45	91.49	100.20
1	5	283	ASP	CB-CG-OD1	5.45	123.20	118.30
1	6	709	PHE	CB-CG-CD2	-5.45	116.99	120.80
1	b	173	TYR	CB-CG-CD1	-5.45	117.73	121.00
1	l	235	ASP	CB-CG-OD1	5.45	123.20	118.30
1	x	480	VAL	CA-CB-CG1	5.45	119.07	110.90
1	D	137	ALA	N-CA-CB	-5.45	102.48	110.10
1	G	451	TYR	CG-CD2-CE2	-5.45	116.94	121.30
1	K	694	GLU	CA-CB-CG	5.45	125.38	113.40
1	i	176	THR	N-CA-CB	5.44	120.64	110.30
1	C	392	GLN	O-C-N	-5.44	113.99	122.70
1	P	230	THR	CA-CB-CG2	-5.44	104.78	112.40
1	p	234	VAL	CG1-CB-CG2	-5.44	102.19	110.90
1	w	369	ARG	NE-CZ-NH1	5.44	123.02	120.30
1	E	98	ARG	CA-CB-CG	-5.44	101.42	113.40
1	E	293	LEU	CB-CG-CD2	5.44	120.25	111.00
1	V	145	ARG	NH1-CZ-NH2	-5.44	113.41	119.40
1	X	330	GLN	CB-CG-CD	5.44	125.75	111.60
1	l	375	THR	O-C-N	-5.44	114.00	122.70
1	j	462	VAL	O-C-N	-5.44	113.95	123.20
1	O	239	ARG	NE-CZ-NH1	5.44	123.02	120.30
1	v	542	PHE	CB-CG-CD1	5.44	124.61	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	669	LEU	CB-CG-CD1	-5.44	101.75	111.00
1	H	488	ARG	NE-CZ-NH1	5.44	123.02	120.30
1	b	144	PRO	N-CA-CB	-5.44	96.62	102.60
1	t	170	ARG	CD-NE-CZ	5.44	131.21	123.60
1	F	253	ILE	CA-CB-CG1	5.44	121.33	111.00
1	M	461	TRP	CD2-CE2-CZ2	-5.44	115.77	122.30
1	R	164	CYS	O-C-N	-5.44	114.00	122.70
1	V	543	PHE	CZ-CE2-CD2	-5.44	113.58	120.10
1	X	264	VAL	CA-CB-CG2	-5.44	102.75	110.90
1	i	247	ALA	N-CA-CB	-5.44	102.49	110.10
1	l	353	HIS	N-CA-CB	5.44	120.39	110.60
1	V	93	TYR	CB-CA-C	5.44	121.27	110.40
1	l	118	LEU	CB-CG-CD1	5.43	120.24	111.00
1	q	421	PHE	CD1-CE1-CZ	5.43	126.62	120.10
1	D	263	VAL	CA-CB-CG1	-5.43	102.75	110.90
1	W	272	THR	C-N-CA	5.43	135.29	121.70
1	e	202	ARG	N-CA-CB	5.43	120.38	110.60
1	n	697	TYR	CG-CD1-CE1	-5.43	116.95	121.30
1	G	231	ARG	NH1-CZ-NH2	-5.43	113.42	119.40
1	L	252	TYR	O-C-N	-5.43	114.01	122.70
1	Q	394	ARG	NE-CZ-NH2	-5.43	117.58	120.30
1	U	96	LYS	N-CA-CB	5.43	120.38	110.60
1	J	322	TYR	CB-CG-CD1	5.43	124.26	121.00
1	3	689	ARG	NE-CZ-NH2	-5.43	117.58	120.30
1	e	472	VAL	O-C-N	-5.43	114.01	122.70
1	k	424	GLU	OE1-CD-OE2	-5.43	116.78	123.30
1	A	334	THR	O-C-N	-5.43	114.01	122.70
1	A	351	GLN	N-CA-CB	5.43	120.37	110.60
1	C	524	MET	O-C-N	-5.43	114.01	122.70
1	E	180	LEU	CB-CA-C	-5.43	99.88	110.20
1	P	394	ARG	NH1-CZ-NH2	5.43	125.37	119.40
1	P	651	TYR	CZ-CE2-CD2	5.43	124.69	119.80
1	M	173	TYR	CD1-CG-CD2	-5.43	111.93	117.90
1	Z	494	GLY	C-N-CA	5.43	135.27	121.70
1	v	107	LEU	CB-CG-CD1	5.43	120.22	111.00
1	x	509	ILE	CA-CB-CG1	5.43	121.31	111.00
1	D	592	VAL	CG1-CB-CG2	5.43	119.58	110.90
1	I	178	LEU	CB-CG-CD2	5.43	120.22	111.00
1	K	593	ARG	NE-CZ-NH2	-5.43	117.59	120.30
1	N	542	PHE	CG-CD2-CE2	5.43	126.77	120.80
1	O	543	PHE	O-C-N	-5.43	114.02	122.70
1	U	127	GLN	CG-CD-OE1	-5.43	110.75	121.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	345	LYS	N-CA-CB	-5.42	100.84	110.60
1	b	682	GLN	CA-CB-CG	5.42	125.34	113.40
1	k	593	ARG	NH1-CZ-NH2	-5.42	113.43	119.40
1	q	390	GLU	CG-CD-OE1	-5.42	107.45	118.30
1	A	495	PHE	N-CA-CB	5.42	120.36	110.60
1	B	230	THR	CA-CB-OG1	5.42	120.39	109.00
1	K	465	LEU	CB-CG-CD1	5.42	120.22	111.00
1	O	240	ASP	N-CA-CB	5.42	120.36	110.60
1	v	495	PHE	CG-CD2-CE2	-5.42	114.83	120.80
1	t	164	CYS	CA-CB-SG	-5.42	104.24	114.00
1	v	410	ASP	C-N-CA	5.42	135.25	121.70
1	w	316	TYR	CB-CG-CD2	-5.42	117.75	121.00
1	w	542	PHE	CG-CD2-CE2	-5.42	114.84	120.80
1	z	585	TYR	CB-CG-CD1	-5.42	117.75	121.00
1	T	634	PHE	CB-CG-CD2	-5.42	117.00	120.80
1	O	527	ILE	O-C-N	-5.42	114.03	122.70
1	W	249	ILE	CG1-CB-CG2	-5.42	99.48	111.40
1	7	585	TYR	CD1-CE1-CZ	5.42	124.68	119.80
1	h	696	ILE	CA-CB-CG1	5.42	121.30	111.00
1	k	623	PHE	CB-CG-CD2	5.42	124.59	120.80
1	s	634	PHE	CB-CG-CD2	-5.42	117.01	120.80
1	w	698	ARG	NE-CZ-NH2	-5.42	117.59	120.30
1	X	145	ARG	NH1-CZ-NH2	-5.42	113.44	119.40
1	Y	543	PHE	CB-CG-CD1	5.42	124.59	120.80
1	9	243	LEU	CB-CG-CD1	5.42	120.21	111.00
1	f	222	THR	N-CA-CB	5.42	120.59	110.30
1	w	318	LEU	O-C-N	-5.42	114.03	122.70
1	H	465	LEU	CB-CG-CD2	5.42	120.21	111.00
1	Q	369	ARG	NE-CZ-NH1	5.42	123.01	120.30
1	S	666	MET	CG-SD-CE	-5.42	91.53	100.20
1	U	253	ILE	O-C-N	-5.42	114.03	122.70
1	W	150	VAL	O-C-N	-5.42	114.03	122.70
1	m	240	ASP	CB-CG-OD1	5.42	123.17	118.30
1	s	405	ARG	NH1-CZ-NH2	-5.42	113.44	119.40
1	Q	454	ILE	CB-CA-C	-5.42	100.77	111.60
1	U	519	MET	CG-SD-CE	-5.42	91.54	100.20
1	y	115	ASP	CB-CG-OD1	5.41	123.17	118.30
1	I	355	TYR	CZ-CE2-CD2	5.41	124.67	119.80
1	L	579	PHE	CB-CG-CD2	5.41	124.59	120.80
1	0	709	PHE	CZ-CE2-CD2	-5.41	113.61	120.10
1	h	585	TYR	CB-CG-CD1	5.41	124.25	121.00
1	C	122	ALA	N-CA-CB	-5.41	102.52	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	9	495	PHE	CB-CG-CD1	5.41	124.59	120.80
1	c	141	VAL	CA-CB-CG2	5.41	119.02	110.90
1	m	180	LEU	CB-CG-CD2	5.41	120.20	111.00
1	v	405	ARG	CD-NE-CZ	5.41	131.17	123.60
1	y	695	ARG	CG-CD-NE	-5.41	100.44	111.80
1	A	120	ALA	N-CA-CB	-5.41	102.53	110.10
1	2	521	GLN	N-CA-CB	5.41	120.33	110.60
1	3	421	PHE	CB-CG-CD2	-5.41	117.01	120.80
1	d	336	ARG	NH1-CZ-NH2	-5.41	113.45	119.40
1	g	489	GLY	CA-C-N	-5.41	105.30	117.20
1	M	675	TYR	CB-CG-CD1	-5.41	117.75	121.00
1	W	633	TYR	CB-CG-CD2	-5.41	117.75	121.00
1	Z	167	TRP	CA-CB-CG	5.41	123.98	113.70
1	e	705	ALA	N-CA-CB	-5.41	102.53	110.10
1	h	679	LEU	O-C-N	-5.41	114.05	122.70
1	z	655	ARG	CD-NE-CZ	5.41	131.17	123.60
1	I	623	PHE	CB-CG-CD2	5.41	124.58	120.80
1	L	312	ARG	CG-CD-NE	-5.41	100.45	111.80
1	p	572	PHE	CB-CG-CD1	-5.41	117.02	120.80
1	r	186	VAL	CG1-CB-CG2	-5.41	102.25	110.90
1	r	315	THR	CA-C-O	5.41	131.45	120.10
1	M	573	ARG	NE-CZ-NH2	-5.41	117.60	120.30
1	1	113	GLU	N-CA-CB	-5.40	100.87	110.60
1	9	434	GLU	OE1-CD-OE2	-5.40	116.81	123.30
1	V	453	LYS	O-C-N	-5.40	114.05	122.70
1	5	624	THR	CA-CB-CG2	-5.40	104.84	112.40
1	6	420	PHE	CB-CG-CD1	-5.40	117.02	120.80
1	l	241	ILE	O-C-N	-5.40	114.02	123.20
1	m	580	CYS	O-C-N	-5.40	114.06	122.70
1	n	666	MET	O-C-N	-5.40	114.06	122.70
1	t	315	THR	N-CA-CB	5.40	120.56	110.30
1	X	405	ARG	NE-CZ-NH1	-5.40	117.60	120.30
1	e	145	ARG	NE-CZ-NH2	-5.40	117.60	120.30
1	h	468	ASN	CA-CB-CG	-5.40	101.52	113.40
1	i	539	PHE	CB-CG-CD1	5.40	124.58	120.80
1	C	410	ASP	CB-CG-OD1	-5.40	113.44	118.30
1	H	210	SER	CB-CA-C	-5.40	99.84	110.10
1	P	523	ALA	N-CA-CB	5.40	117.66	110.10
1	T	350	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	7	421	PHE	O-C-N	-5.40	114.06	122.70
1	n	634	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	I	105	ASP	CB-CG-OD1	5.40	123.16	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	495	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	d	543	PHE	CB-CG-CD1	-5.40	117.02	120.80
1	e	709	PHE	CB-CG-CD2	-5.40	117.02	120.80
1	s	624	THR	CA-CB-CG2	-5.40	104.84	112.40
1	w	510	GLN	CA-CB-CG	5.40	125.27	113.40
1	z	695	ARG	N-CA-CB	5.40	120.32	110.60
1	B	660	SER	O-C-N	-5.40	114.06	122.70
1	O	451	TYR	CB-CG-CD1	5.40	124.24	121.00
1	U	177	GLU	CA-CB-CG	5.40	125.28	113.40
1	V	334	THR	CA-CB-OG1	5.40	120.34	109.00
1	u	173	TYR	CB-CG-CD1	-5.40	117.76	121.00
1	w	167	TRP	CB-CG-CD2	5.40	133.62	126.60
1	L	444	ARG	O-C-N	-5.40	114.07	122.70
1	5	177	GLU	CA-CB-CG	5.39	125.27	113.40
1	6	483	TYR	CD1-CE1-CZ	5.39	124.66	119.80
1	v	373	ARG	NH1-CZ-NH2	-5.39	113.47	119.40
1	B	288	ARG	NE-CZ-NH2	-5.39	117.60	120.30
1	H	386	LEU	CA-C-N	5.39	132.21	117.10
1	a	145	ARG	NE-CZ-NH2	-5.39	117.60	120.30
1	g	240	ASP	N-CA-CB	5.39	120.31	110.60
1	m	593	ARG	CG-CD-NE	-5.39	100.48	111.80
1	p	409	ALA	O-C-N	-5.39	114.07	122.70
1	I	466	ALA	CB-CA-C	5.39	118.19	110.10
1	K	537	LYS	O-C-N	-5.39	114.07	122.70
1	O	539	PHE	CB-CG-CD2	5.39	124.57	120.80
1	P	698	ARG	NH1-CZ-NH2	5.39	125.33	119.40
1	5	130	GLY	O-C-N	-5.39	114.08	122.70
1	e	483	TYR	CG-CD1-CE1	-5.39	116.99	121.30
1	z	300	ASP	CB-CG-OD1	5.39	123.15	118.30
1	V	120	ALA	N-CA-CB	5.39	117.65	110.10
1	e	377	GLU	O-C-N	-5.39	114.08	122.70
1	i	577	MET	O-C-N	-5.39	114.08	122.70
1	o	239	ARG	C-N-CA	5.39	135.17	121.70
1	A	170	ARG	CD-NE-CZ	5.39	131.15	123.60
1	A	312	ARG	CG-CD-NE	-5.39	100.48	111.80
1	B	135	LEU	CB-CG-CD1	-5.39	101.84	111.00
1	B	142	ALA	N-CA-CB	5.39	117.65	110.10
1	E	443	VAL	CA-CB-CG1	-5.39	102.82	110.90
1	E	542	PHE	CB-CG-CD2	-5.39	117.03	120.80
1	G	308	MET	O-C-N	-5.39	114.08	122.70
1	R	476	ILE	CA-CB-CG2	5.39	121.68	110.90
1	U	508	TYR	CZ-CE2-CD2	-5.39	114.95	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	c	365	ALA	CB-CA-C	5.39	118.18	110.10
1	7	570	LEU	CB-CG-CD2	5.39	120.16	111.00
1	d	108	ARG	N-CA-CB	-5.39	100.90	110.60
1	P	543	PHE	CD1-CE1-CZ	5.39	126.56	120.10
1	S	166	ALA	O-C-N	-5.39	114.08	122.70
1	0	572	PHE	CZ-CE2-CD2	-5.38	113.64	120.10
1	3	409	ALA	N-CA-CB	5.38	117.64	110.10
1	4	301	ARG	NE-CZ-NH2	-5.38	117.61	120.30
1	8	487	TYR	CB-CG-CD1	-5.38	117.77	121.00
1	f	483	TYR	CD1-CE1-CZ	5.38	124.64	119.80
1	h	707	CYS	O-C-N	-5.38	114.09	122.70
1	D	546	ASN	O-C-N	-5.38	114.08	122.70
1	9	342	ALA	CB-CA-C	-5.38	102.03	110.10
1	d	349	PHE	CD1-CE1-CZ	5.38	126.56	120.10
1	p	502	GLU	OE1-CD-OE2	-5.38	116.84	123.30
1	S	493	LEU	C-N-CA	5.38	133.60	122.30
1	5	494	GLY	C-N-CA	5.38	135.15	121.70
1	8	432	ASP	CB-CG-OD1	5.38	123.14	118.30
1	x	255	ARG	O-C-N	-5.38	114.09	122.70
1	E	328	ARG	CD-NE-CZ	5.38	131.13	123.60
1	R	252	TYR	CZ-CE2-CD2	5.38	124.64	119.80
1	S	366	THR	N-CA-CB	5.38	120.52	110.30
1	Z	355	TYR	CG-CD2-CE2	5.38	125.61	121.30
1	7	210	SER	N-CA-CB	5.38	118.57	110.50
1	A	394	ARG	CB-CA-C	5.38	121.16	110.40
1	T	688	LYS	CB-CA-C	5.38	121.16	110.40
1	0	159	LEU	CB-CG-CD1	-5.38	101.86	111.00
1	c	582	ASP	CB-CG-OD1	5.38	123.14	118.30
1	t	219	PRO	O-C-N	-5.38	114.09	122.70
1	H	236	ASN	N-CA-C	5.38	125.52	111.00
1	T	660	SER	N-CA-CB	5.38	118.57	110.50
1	Z	395	GLU	O-C-N	-5.38	114.09	122.70
1	3	637	THR	O-C-N	-5.38	114.10	122.70
1	9	167	TRP	CA-CB-CG	5.38	123.92	113.70
1	a	98	ARG	CG-CD-NE	-5.38	100.51	111.80
1	b	362	GLU	CG-CD-OE1	5.38	129.05	118.30
1	b	381	HIS	O-C-N	-5.38	114.10	122.70
1	s	235	ASP	CB-CG-OD2	5.38	123.14	118.30
1	y	193	ALA	O-C-N	-5.38	114.10	122.70
1	d	689	ARG	CG-CD-NE	-5.38	100.51	111.80
1	n	587	VAL	O-C-N	-5.38	114.10	122.70
1	p	111	GLY	C-N-CA	5.38	135.14	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	99	PRO	N-CA-CB	5.38	109.75	103.30
1	D	174	ARG	NH1-CZ-NH2	-5.38	113.49	119.40
1	I	373	ARG	NH1-CZ-NH2	5.38	125.31	119.40
1	Q	683	SER	CB-CA-C	-5.38	99.89	110.10
1	W	510	GLN	O-C-N	-5.38	114.10	122.70
1	d	484	GLU	N-CA-CB	5.37	120.27	110.60
1	i	213	ILE	O-C-N	-5.37	114.10	122.70
1	v	174	ARG	NE-CZ-NH1	5.37	122.99	120.30
1	l	508	TYR	CB-CG-CD1	5.37	124.22	121.00
1	8	138	LEU	CB-CG-CD2	-5.37	101.87	111.00
1	c	327	CYS	N-CA-CB	-5.37	100.93	110.60
1	o	312	ARG	CD-NE-CZ	5.37	131.12	123.60
1	G	478	GLU	OE1-CD-OE2	-5.37	116.85	123.30
1	M	248	LEU	O-C-N	-5.37	114.11	122.70
1	V	277	SER	N-CA-CB	5.37	118.56	110.50
1	V	690	ARG	NE-CZ-NH1	5.37	122.99	120.30
1	p	633	TYR	CB-CG-CD2	-5.37	117.78	121.00
1	v	233	ALA	N-CA-CB	-5.37	102.58	110.10
1	z	666	MET	CG-SD-CE	-5.37	91.61	100.20
1	P	641	LEU	CB-CG-CD2	5.37	120.13	111.00
1	e	109	ALA	O-C-N	-5.37	114.11	122.70
1	h	582	ASP	CB-CG-OD1	5.37	123.13	118.30
1	l	436	LEU	CB-CA-C	5.37	120.40	110.20
1	o	447	GLU	CB-CA-C	-5.37	99.66	110.40
1	t	108	ARG	NE-CZ-NH2	5.37	122.98	120.30
1	E	429	PHE	CB-CG-CD1	-5.37	117.04	120.80
1	W	369	ARG	NE-CZ-NH1	5.37	122.98	120.30
1	3	107	LEU	CB-CG-CD2	-5.37	101.88	111.00
1	5	651	TYR	CD1-CE1-CZ	5.37	124.63	119.80
1	n	231	ARG	N-CA-CB	5.37	120.26	110.60
1	r	430	ASN	N-CA-CB	5.37	120.26	110.60
1	x	540	GLY	CA-C-O	5.37	130.26	120.60
1	F	697	TYR	CB-CG-CD1	5.37	124.22	121.00
1	R	483	TYR	CB-CG-CD1	5.37	124.22	121.00
1	7	703	ARG	NE-CZ-NH2	-5.37	117.62	120.30
1	w	653	MET	CA-CB-CG	5.37	122.42	113.30
1	y	104	ILE	N-CA-CB	5.37	123.14	110.80
1	E	119	PRO	N-CA-C	5.37	126.05	112.10
1	H	508	TYR	CB-CG-CD1	5.37	124.22	121.00
1	U	134	VAL	CG1-CB-CG2	5.37	119.48	110.90
1	U	674	ARG	NE-CZ-NH2	-5.37	117.62	120.30
1	0	457	ASP	O-C-N	-5.36	114.12	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	3	352	THR	CA-CB-CG2	5.36	119.91	112.40
1	b	697	TYR	CB-CG-CD2	5.36	124.22	121.00
1	t	633	TYR	CG-CD1-CE1	-5.36	117.01	121.30
1	G	239	ARG	NE-CZ-NH2	-5.36	117.62	120.30
1	H	312	ARG	NH1-CZ-NH2	-5.36	113.50	119.40
1	O	471	LYS	N-CA-CB	5.36	120.25	110.60
1	P	625	GLU	OE1-CD-OE2	-5.36	116.86	123.30
1	Q	243	LEU	CB-CG-CD2	5.36	120.12	111.00
1	Q	356	PHE	CB-CG-CD2	5.36	124.56	120.80
1	U	444	ARG	O-C-N	-5.36	114.12	122.70
1	n	495	PHE	CD1-CE1-CZ	-5.36	113.67	120.10
1	v	570	LEU	CA-CB-CG	5.36	127.63	115.30
1	B	495	PHE	CB-CG-CD2	-5.36	117.05	120.80
1	C	634	PHE	CB-CG-CD1	5.36	124.55	120.80
1	O	409	ALA	N-CA-CB	5.36	117.61	110.10
1	0	167	TRP	CE2-CD2-CG	5.36	111.59	107.30
1	1	682	GLN	C-N-CA	5.36	135.10	121.70
1	d	126	ASP	CB-CG-OD2	5.36	123.12	118.30
1	n	651	TYR	CB-CG-CD2	-5.36	117.78	121.00
1	p	410	ASP	C-N-CA	5.36	135.10	121.70
1	x	402	GLU	OE1-CD-OE2	-5.36	116.87	123.30
1	F	677	TRP	CE2-CD2-CE3	5.36	125.13	118.70
1	H	457	ASP	CB-CG-OD2	-5.36	113.47	118.30
1	X	395	GLU	OE1-CD-OE2	-5.36	116.87	123.30
1	Z	495	PHE	CD1-CE1-CZ	-5.36	113.67	120.10
1	f	369	ARG	NE-CZ-NH2	-5.36	117.62	120.30
1	n	213	ILE	N-CA-CB	5.36	123.12	110.80
1	v	633	TYR	CG-CD1-CE1	5.36	125.59	121.30
1	d	287	ASP	CB-CG-OD2	5.36	123.12	118.30
1	O	543	PHE	CB-CG-CD1	-5.36	117.05	120.80
1	R	483	TYR	CB-CG-CD2	-5.36	117.79	121.00
1	U	94	GLU	CA-CB-CG	5.36	125.19	113.40
1	Z	252	TYR	CG-CD2-CE2	5.36	125.59	121.30
1	Z	410	ASP	CB-CG-OD1	5.36	123.12	118.30
1	c	633	TYR	CB-CG-CD2	5.36	124.21	121.00
1	z	655	ARG	CG-CD-NE	-5.36	100.56	111.80
1	B	437	VAL	CA-CB-CG2	-5.36	102.87	110.90
1	P	449	ARG	CD-NE-CZ	5.36	131.10	123.60
1	p	488	ARG	NE-CZ-NH2	-5.35	117.62	120.30
1	C	366	THR	CA-CB-CG2	-5.35	104.90	112.40
1	H	474	ASN	O-C-N	-5.35	114.13	122.70
1	a	137	ALA	O-C-N	-5.35	114.14	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	i	483	TYR	CB-CA-C	5.35	121.11	110.40
1	o	154	PRO	N-CA-CB	5.35	109.72	103.30
1	v	531	PHE	CB-CG-CD2	-5.35	117.05	120.80
1	w	355	TYR	CG-CD1-CE1	-5.35	117.02	121.30
1	L	308	MET	CA-CB-CG	5.35	122.40	113.30
1	5	202	ARG	NE-CZ-NH1	5.35	122.98	120.30
1	8	128	SER	C-N-CA	5.35	135.08	121.70
1	y	179	GLU	CG-CD-OE2	5.35	129.00	118.30
1	Q	705	ALA	N-CA-CB	-5.35	102.61	110.10
1	1	240	ASP	N-CA-CB	-5.35	100.98	110.60
1	4	168	ALA	O-C-N	-5.35	114.11	123.20
1	6	261	LEU	CB-CA-C	5.35	120.36	110.20
1	z	297	ASP	CB-CG-OD2	5.35	123.11	118.30
1	O	581	GLN	CB-CA-C	5.35	121.09	110.40
1	Q	683	SER	N-CA-CB	5.35	118.52	110.50
1	T	336	ARG	NE-CZ-NH1	5.35	122.97	120.30
1	U	297	ASP	CB-CG-OD2	-5.35	113.49	118.30
1	m	437	VAL	CA-CB-CG2	-5.35	102.88	110.90
1	t	196	VAL	O-C-N	-5.35	114.15	122.70
1	y	451	TYR	CB-CG-CD2	5.35	124.21	121.00
1	P	141	VAL	CG1-CB-CG2	-5.35	102.35	110.90
1	5	126	ASP	CB-CA-C	-5.34	99.71	110.40
1	z	689	ARG	NH1-CZ-NH2	-5.34	113.52	119.40
1	G	593	ARG	CA-CB-CG	-5.34	101.64	113.40
1	H	126	ASP	O-C-N	-5.34	114.15	122.70
1	X	120	ALA	CB-CA-C	-5.34	102.08	110.10
1	4	235	ASP	CB-CA-C	5.34	121.08	110.40
1	j	312	ARG	NE-CZ-NH2	-5.34	117.63	120.30
1	m	307	VAL	CA-CB-CG2	-5.34	102.89	110.90
1	t	631	ASN	N-CA-CB	-5.34	100.98	110.60
1	y	213	ILE	CA-CB-CG1	5.34	121.15	111.00
1	n	105	ASP	CB-CG-OD1	5.34	123.11	118.30
1	s	449	ARG	N-CA-CB	5.34	120.22	110.60
1	t	365	ALA	CB-CA-C	5.34	118.11	110.10
1	u	351	GLN	N-CA-CB	5.34	120.21	110.60
1	w	659	ASP	CB-CG-OD1	5.34	123.11	118.30
1	V	167	TRP	CB-CG-CD2	5.34	133.54	126.60
1	2	140	GLY	CA-C-O	-5.34	110.99	120.60
1	q	690	ARG	NH1-CZ-NH2	-5.34	113.53	119.40
1	s	264	VAL	CA-CB-CG1	-5.34	102.89	110.90
1	u	287	ASP	CB-CG-OD1	5.34	123.11	118.30
1	G	651	TYR	CD1-CE1-CZ	5.34	124.61	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	L	701	GLN	CA-CB-CG	-5.34	101.65	113.40
1	O	303	THR	CA-CB-OG1	5.34	120.21	109.00
1	h	214	THR	CA-CB-CG2	5.34	119.87	112.40
1	v	531	PHE	CB-CG-CD1	5.34	124.54	120.80
1	4	488	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	u	461	TRP	CE3-CZ3-CH2	5.34	127.07	121.20
1	A	232	VAL	CA-CB-CG1	-5.34	102.90	110.90
1	E	182	ASP	CB-CG-OD2	5.34	123.10	118.30
1	E	703	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	V	174	ARG	NE-CZ-NH1	5.34	122.97	120.30
1	5	233	ALA	CB-CA-C	5.33	118.10	110.10
1	7	640	ARG	NE-CZ-NH1	5.33	122.97	120.30
1	e	301	ARG	NH1-CZ-NH2	-5.33	113.53	119.40
1	U	484	GLU	OE1-CD-OE2	-5.33	116.90	123.30
1	0	168	ALA	N-CA-CB	-5.33	102.63	110.10
1	g	105	ASP	CB-CG-OD1	5.33	123.10	118.30
1	h	711	SER	N-CA-CB	5.33	118.50	110.50
1	t	645	ILE	CB-CA-C	5.33	122.27	111.60
1	v	398	GLN	N-CA-C	5.33	125.40	111.00
1	N	622	SER	N-CA-CB	5.33	118.50	110.50
1	Q	461	TRP	CA-CB-CG	5.33	123.83	113.70
1	Y	93	TYR	CB-CA-C	5.33	121.07	110.40
1	4	282	VAL	CA-CB-CG1	-5.33	102.90	110.90
1	s	310	VAL	CA-CB-CG2	-5.33	102.90	110.90
1	t	238	PRO	O-C-N	-5.33	114.17	122.70
1	C	655	ARG	O-C-N	-5.33	114.17	122.70
1	G	641	LEU	O-C-N	-5.33	114.17	122.70
1	O	498	TYR	N-CA-CB	-5.33	101.00	110.60
1	T	148	GLY	C-N-CA	5.33	135.03	121.70
1	0	545	LEU	CB-CG-CD2	-5.33	101.94	111.00
1	p	578	VAL	CG1-CB-CG2	-5.33	102.37	110.90
1	w	421	PHE	CB-CA-C	5.33	121.06	110.40
1	H	498	TYR	CB-CG-CD1	5.33	124.20	121.00
1	I	328	ARG	NE-CZ-NH1	5.33	122.97	120.30
1	U	444	ARG	CD-NE-CZ	5.33	131.06	123.60
1	1	581	GLN	CA-CB-CG	5.33	125.12	113.40
1	i	231	ARG	CG-CD-NE	-5.33	100.61	111.80
1	p	126	ASP	CB-CG-OD2	-5.33	113.50	118.30
1	q	546	ASN	O-C-N	-5.33	114.17	122.70
1	T	640	ARG	NH1-CZ-NH2	-5.33	113.54	119.40
1	U	461	TRP	CD2-CE2-CZ2	-5.33	115.91	122.30
1	W	451	TYR	CB-CG-CD1	-5.33	117.80	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	526	ILE	CA-CB-CG2	5.33	121.56	110.90
1	q	93	TYR	CZ-CE2-CD2	5.33	124.59	119.80
1	A	538	HIS	N-CA-CB	-5.33	101.01	110.60
1	7	555	ASP	CB-CG-OD1	5.33	123.09	118.30
1	a	629	HIS	N-CA-CB	5.33	120.18	110.60
1	j	334	THR	CA-CB-CG2	-5.33	104.94	112.40
1	B	253	ILE	O-C-N	-5.33	114.18	122.70
1	C	528	GLN	N-CA-C	5.33	125.38	111.00
1	F	112	VAL	CG1-CB-CG2	-5.33	102.38	110.90
1	W	510	GLN	CA-C-O	5.33	131.28	120.10
1	v	106	SER	N-CA-CB	5.32	118.48	110.50
1	G	448	THR	CA-CB-CG2	5.32	119.85	112.40
1	I	647	PHE	CB-CG-CD1	5.32	124.53	120.80
1	J	238	PRO	C-N-CA	5.32	135.01	121.70
1	P	357	ARG	NH1-CZ-NH2	5.32	125.26	119.40
1	7	355	TYR	CG-CD1-CE1	-5.32	117.04	121.30
1	a	543	PHE	CB-CG-CD2	5.32	124.53	120.80
1	b	478	GLU	O-C-N	-5.32	114.19	122.70
1	h	690	ARG	O-C-N	-5.32	114.18	122.70
1	r	308	MET	CG-SD-CE	-5.32	91.69	100.20
1	3	506	HIS	O-C-N	-5.32	114.19	122.70
1	6	173	TYR	CB-CG-CD2	5.32	124.19	121.00
1	b	246	LYS	CB-CA-C	-5.32	99.76	110.40
1	d	120	ALA	CB-CA-C	-5.32	102.12	110.10
1	p	156	VAL	CA-CB-CG2	-5.32	102.92	110.90
1	W	300	ASP	CB-CG-OD1	-5.32	113.51	118.30
1	j	649	ILE	O-C-N	-5.32	114.19	122.70
1	l	263	VAL	CA-CB-CG2	-5.32	102.92	110.90
1	I	234	VAL	CG1-CB-CG2	-5.32	102.39	110.90
1	L	645	ILE	CA-C-N	5.32	131.99	117.10
1	N	702	ALA	N-CA-CB	5.32	117.55	110.10
1	O	640	ARG	NE-CZ-NH2	-5.32	117.64	120.30
1	8	115	ASP	CB-CG-OD2	5.32	123.09	118.30
1	j	108	ARG	CG-CD-NE	-5.32	100.64	111.80
1	p	495	PHE	N-CA-CB	5.32	120.17	110.60
1	q	702	ALA	N-CA-CB	-5.32	102.66	110.10
1	u	112	VAL	CG1-CB-CG2	-5.32	102.39	110.90
1	x	365	ALA	CA-C-O	5.32	131.26	120.10
1	Q	355	TYR	CB-CG-CD1	-5.32	117.81	121.00
1	S	167	TRP	CA-CB-CG	5.32	123.80	113.70
1	X	491	GLU	OE1-CD-OE2	-5.32	116.92	123.30
1	Z	659	ASP	CB-CG-OD2	-5.32	113.52	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	404	LEU	CB-CG-CD1	5.32	120.04	111.00
1	k	239	ARG	NE-CZ-NH2	5.32	122.96	120.30
1	y	336	ARG	NH1-CZ-NH2	-5.32	113.55	119.40
1	I	370	LEU	CB-CG-CD2	-5.32	101.96	111.00
1	P	231	ARG	N-CA-CB	5.32	120.17	110.60
1	Z	480	VAL	CA-CB-CG1	5.32	118.87	110.90
1	9	494	GLY	C-N-CA	5.31	134.99	121.70
1	l	409	ALA	O-C-N	-5.31	114.20	122.70
1	s	273	THR	N-CA-CB	5.31	120.40	110.30
1	u	655	ARG	N-CA-CB	-5.31	101.03	110.60
1	F	486	GLN	O-C-N	-5.31	114.20	122.70
1	I	128	SER	N-CA-CB	5.31	118.47	110.50
1	4	640	ARG	CD-NE-CZ	5.31	131.04	123.60
1	8	478	GLU	N-CA-CB	-5.31	101.04	110.60
1	8	695	ARG	CA-CB-CG	5.31	125.09	113.40
1	d	394	ARG	NH1-CZ-NH2	-5.31	113.56	119.40
1	f	282	VAL	O-C-N	-5.31	114.20	122.70
1	n	694	GLU	O-C-N	-5.31	114.20	122.70
1	o	483	TYR	CG-CD1-CE1	5.31	125.55	121.30
1	p	332	GLU	OE1-CD-OE2	-5.31	116.92	123.30
1	r	111	GLY	O-C-N	-5.31	114.20	122.70
1	s	352	THR	CA-CB-CG2	-5.31	104.96	112.40
1	z	573	ARG	CG-CD-NE	-5.31	100.64	111.80
1	A	487	TYR	CG-CD2-CE2	-5.31	117.05	121.30
1	T	567	MET	O-C-N	-5.31	114.20	122.70
1	C	585	TYR	CB-CG-CD2	-5.31	117.81	121.00
1	H	682	GLN	N-CA-C	5.31	125.34	111.00
1	P	501	PHE	CB-CG-CD2	-5.31	117.08	120.80
1	e	674	ARG	CG-CD-NE	-5.31	100.65	111.80
1	m	322	TYR	CG-CD1-CE1	-5.31	117.05	121.30
1	q	280	HIS	O-C-N	-5.31	114.21	122.70
1	q	563	LYS	N-CA-CB	5.31	120.16	110.60
1	z	425	LYS	CB-CA-C	-5.31	99.78	110.40
1	A	298	LEU	CB-CG-CD2	5.31	120.03	111.00
1	C	374	LEU	CB-CG-CD1	5.31	120.03	111.00
1	I	508	TYR	CG-CD1-CE1	5.31	125.55	121.30
1	O	287	ASP	CB-CG-OD1	5.31	123.08	118.30
1	P	472	VAL	N-CA-CB	-5.31	99.82	111.50
1	W	676	SER	N-CA-CB	5.31	118.47	110.50
1	d	230	THR	OG1-CB-CG2	-5.31	97.80	110.00
1	f	487	TYR	CB-CG-CD1	-5.31	117.82	121.00
1	p	118	LEU	CB-CA-C	5.31	120.28	110.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	z	582	ASP	CB-CG-OD1	5.31	123.08	118.30
1	D	675	TYR	O-C-N	-5.31	114.21	122.70
1	L	451	TYR	CG-CD1-CE1	-5.31	117.05	121.30
1	U	498	TYR	CB-CG-CD2	-5.31	117.82	121.00
1	V	496	VAL	CA-C-O	5.31	131.25	120.10
1	I	300	ASP	CB-CG-OD1	5.31	123.08	118.30
1	5	208	LEU	CB-CG-CD2	5.30	120.02	111.00
1	h	417	ASP	O-C-N	-5.30	114.21	122.70
1	v	444	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	z	580	CYS	N-CA-CB	5.30	120.15	110.60
1	K	688	LYS	N-CA-CB	-5.30	101.05	110.60
1	X	234	VAL	O-C-N	-5.30	114.21	122.70
1	Y	537	LYS	N-CA-CB	5.30	120.15	110.60
1	c	220	ASP	CB-CG-OD2	5.30	123.07	118.30
1	h	167	TRP	NE1-CE2-CD2	5.30	112.60	107.30
1	z	97	VAL	CG1-CB-CG2	-5.30	102.42	110.90
1	O	316	TYR	CG-CD1-CE1	-5.30	117.06	121.30
1	W	323	MET	CG-SD-CE	-5.30	91.72	100.20
1	W	533	ASN	N-CA-CB	-5.30	101.05	110.60
1	4	494	GLY	C-N-CA	5.30	134.95	121.70
1	5	239	ARG	NH1-CZ-NH2	-5.30	113.57	119.40
1	b	360	LEU	CB-CG-CD1	5.30	120.01	111.00
1	m	328	ARG	NE-CZ-NH1	5.30	122.95	120.30
1	n	312	ARG	CA-CB-CG	5.30	125.06	113.40
1	n	633	TYR	CB-CG-CD1	5.30	124.18	121.00
1	p	556	ILE	O-C-N	-5.30	114.22	122.70
1	H	642	ALA	CB-CA-C	-5.30	102.15	110.10
1	V	252	TYR	CB-CG-CD1	5.30	124.18	121.00
1	5	492	LEU	CB-CG-CD1	5.30	120.01	111.00
1	8	312	ARG	CG-CD-NE	-5.30	100.67	111.80
1	9	306	SER	N-CA-CB	5.30	118.45	110.50
1	9	675	TYR	CB-CG-CD2	-5.30	117.82	121.00
1	g	229	ILE	O-C-N	-5.30	114.22	122.70
1	m	462	VAL	CA-CB-CG1	5.30	118.85	110.90
1	q	292	ILE	CA-CB-CG1	5.30	121.07	111.00
1	u	230	THR	CA-CB-CG2	-5.30	104.98	112.40
1	A	434	GLU	OE1-CD-OE2	-5.30	116.94	123.30
1	D	497	ASN	CB-CA-C	5.30	121.00	110.40
1	X	252	TYR	CB-CG-CD2	-5.30	117.82	121.00
1	6	591	LYS	CB-CG-CD	5.30	125.38	111.60
1	a	585	TYR	N-CA-C	5.30	125.31	111.00
1	F	545	LEU	CB-CG-CD2	5.30	120.01	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	U	585	TYR	CG-CD2-CE2	-5.30	117.06	121.30
1	W	657	ASN	N-CA-CB	-5.30	101.06	110.60
1	0	709	PHE	O-C-N	-5.30	114.23	122.70
1	4	220	ASP	CB-CG-OD2	5.30	123.07	118.30
1	a	209	ILE	N-CA-CB	5.30	122.98	110.80
1	f	697	TYR	CG-CD1-CE1	5.30	125.54	121.30
1	j	338	SER	O-C-N	-5.30	114.22	122.70
1	q	409	ALA	N-CA-CB	5.30	117.52	110.10
1	A	405	ARG	NE-CZ-NH1	5.30	122.95	120.30
1	D	196	VAL	O-C-N	-5.30	114.23	122.70
1	Q	182	ASP	CB-CG-OD1	5.30	123.07	118.30
1	e	381	HIS	N-CA-CB	5.29	120.13	110.60
1	w	671	GLU	O-C-N	-5.29	114.23	122.70
1	O	406	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	6	570	LEU	CB-CG-CD1	5.29	120.00	111.00
1	i	455	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	l	369	ARG	NE-CZ-NH1	5.29	122.95	120.30
1	o	389	LEU	O-C-N	-5.29	114.23	122.70
1	w	695	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	B	369	ARG	NE-CZ-NH1	5.29	122.95	120.30
1	U	145	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	V	487	TYR	CD1-CG-CD2	-5.29	112.08	117.90
1	W	105	ASP	CB-CG-OD2	-5.29	113.54	118.30
1	1	288	ARG	NE-CZ-NH2	-5.29	117.65	120.30
1	6	167	TRP	CD1-NE1-CE2	5.29	113.76	109.00
1	7	145	ARG	NE-CZ-NH2	5.29	122.94	120.30
1	8	243	LEU	CB-CG-CD2	5.29	119.99	111.00
1	k	478	GLU	OE1-CD-OE2	-5.29	116.95	123.30
1	k	504	ILE	CA-CB-CG1	5.29	121.05	111.00
1	B	633	TYR	CB-CG-CD2	-5.29	117.83	121.00
1	C	482	LYS	O-C-N	-5.29	114.23	122.70
1	D	469	THR	O-C-N	-5.29	114.23	122.70
1	L	207	GLU	OE1-CD-OE2	-5.29	116.95	123.30
1	L	513	VAL	O-C-N	-5.29	114.23	122.70
1	P	704	HIS	O-C-N	-5.29	114.23	122.70
1	U	478	GLU	OE1-CD-OE2	-5.29	116.95	123.30
1	8	116	LEU	CB-CG-CD2	5.29	119.99	111.00
1	m	277	SER	N-CA-CB	5.29	118.43	110.50
1	B	533	ASN	CB-CA-C	5.29	120.98	110.40
1	S	420	PHE	CD1-CG-CD2	-5.29	111.42	118.30
1	3	239	ARG	C-N-CA	5.29	134.92	121.70
1	3	654	LEU	CB-CG-CD1	-5.29	102.01	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	586	SER	N-CA-CB	5.29	118.43	110.50
1	y	252	TYR	CB-CG-CD1	5.29	124.17	121.00
1	M	239	ARG	O-C-N	-5.29	114.24	122.70
1	N	560	HIS	N-CA-CB	5.29	120.12	110.60
1	O	252	TYR	CG-CD2-CE2	-5.29	117.07	121.30
1	l	456	GLU	N-CA-C	5.29	125.28	111.00
1	s	550	GLN	N-CA-CB	-5.29	101.08	110.60
1	N	409	ALA	O-C-N	-5.29	114.24	122.70
1	X	573	ARG	N-CA-CB	5.29	120.12	110.60
1	5	490	LYS	CB-CA-C	-5.29	99.83	110.40
1	a	534	VAL	O-C-N	-5.29	114.24	122.70
1	b	597	PHE	CD1-CE1-CZ	5.29	126.44	120.10
1	d	634	PHE	CB-CG-CD2	-5.29	117.10	120.80
1	y	652	PHE	CD1-CE1-CZ	5.29	126.44	120.10
1	U	297	ASP	CB-CG-OD1	5.29	123.06	118.30
1	W	240	ASP	CB-CG-OD2	-5.29	113.54	118.30
1	1	483	TYR	CG-CD1-CE1	-5.28	117.07	121.30
1	3	461	TRP	CG-CD2-CE3	5.28	138.66	133.90
1	a	93	TYR	CZ-CE2-CD2	-5.28	115.05	119.80
1	l	455	ARG	CD-NE-CZ	5.28	131.00	123.60
1	r	167	TRP	CB-CG-CD2	5.28	133.47	126.60
1	s	643	ASN	O-C-N	-5.28	114.25	122.70
1	t	352	THR	CA-CB-CG2	5.28	119.80	112.40
1	O	170	ARG	NH1-CZ-NH2	5.28	125.21	119.40
1	O	398	GLN	CA-CB-CG	5.28	125.03	113.40
1	0	352	THR	CA-CB-CG2	-5.28	105.00	112.40
1	h	141	VAL	CG1-CB-CG2	5.28	119.35	110.90
1	u	359	LEU	O-C-N	-5.28	114.25	122.70
1	v	397	HIS	CA-CB-CG	5.28	122.58	113.60
1	M	420	PHE	CB-CG-CD2	5.28	124.50	120.80
1	O	366	THR	O-C-N	-5.28	114.25	122.70
1	R	390	GLU	C-N-CA	5.28	133.39	122.30
1	T	578	VAL	CA-CB-CG1	5.28	118.82	110.90
1	0	545	LEU	CB-CG-CD1	5.28	119.97	111.00
1	4	572	PHE	CZ-CE2-CD2	5.28	126.43	120.10
1	d	151	THR	CA-CB-CG2	-5.28	105.01	112.40
1	k	142	ALA	N-CA-CB	5.28	117.49	110.10
1	y	181	GLN	N-CA-CB	5.28	120.10	110.60
1	L	373	ARG	NE-CZ-NH2	-5.28	117.66	120.30
1	R	641	LEU	CB-CG-CD2	-5.28	102.03	111.00
1	0	202	ARG	NE-CZ-NH2	5.28	122.94	120.30
1	q	212	GLU	OE1-CD-OE2	-5.28	116.97	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	255	ARG	NE-CZ-NH1	5.28	122.94	120.30
1	B	417	ASP	CB-CG-OD1	-5.28	113.55	118.30
1	7	301	ARG	NE-CZ-NH1	5.28	122.94	120.30
1	8	629	HIS	N-CA-CB	5.28	120.10	110.60
1	r	150	VAL	O-C-N	-5.28	114.26	122.70
1	B	209	ILE	O-C-N	-5.28	114.26	122.70
1	I	504	ILE	CG1-CB-CG2	5.27	123.00	111.40
1	Z	394	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
1	1	252	TYR	CD1-CE1-CZ	5.27	124.55	119.80
1	5	461	TRP	O-C-N	-5.27	114.26	122.70
1	6	452	ASN	N-CA-CB	-5.27	101.11	110.60
1	a	405	ARG	CD-NE-CZ	5.27	130.98	123.60
1	h	318	LEU	CB-CG-CD1	-5.27	102.04	111.00
1	k	391	GLY	CA-C-O	-5.27	111.11	120.60
1	k	496	VAL	CG1-CB-CG2	-5.27	102.46	110.90
1	R	539	PHE	CG-CD2-CE2	-5.27	115.00	120.80
1	9	538	HIS	N-CA-CB	-5.27	101.11	110.60
1	i	413	SER	CA-C-O	5.27	131.17	120.10
1	E	98	ARG	NE-CZ-NH1	5.27	122.94	120.30
1	E	322	TYR	CZ-CE2-CD2	5.27	124.54	119.80
1	J	354	PRO	N-CA-CB	-5.27	96.80	102.60
1	J	559	LYS	N-CA-CB	-5.27	101.11	110.60
1	Z	417	ASP	CB-CG-OD1	5.27	123.04	118.30
1	6	98	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
1	9	655	ARG	NE-CZ-NH2	-5.27	117.67	120.30
1	a	597	PHE	CZ-CE2-CD2	-5.27	113.78	120.10
1	a	677	TRP	CD2-CE2-CZ2	-5.27	115.98	122.30
1	i	694	GLU	OE1-CD-OE2	-5.27	116.98	123.30
1	j	406	ARG	NE-CZ-NH2	5.27	122.94	120.30
1	m	498	TYR	CG-CD1-CE1	5.27	125.52	121.30
1	G	138	LEU	CB-CA-C	-5.27	100.19	110.20
1	P	457	ASP	CB-CG-OD1	5.27	123.04	118.30
1	8	534	VAL	CA-CB-CG1	5.27	118.80	110.90
1	9	319	LYS	CA-CB-CG	5.27	124.99	113.40
1	b	183	PRO	N-CD-CG	5.27	111.10	103.20
1	g	458	PHE	CB-CG-CD2	5.27	124.49	120.80
1	i	322	TYR	CZ-CE2-CD2	5.27	124.54	119.80
1	u	502	GLU	N-CA-CB	5.27	120.08	110.60
1	I	424	GLU	O-C-N	-5.27	114.27	122.70
1	P	585	TYR	CB-CG-CD1	-5.27	117.84	121.00
1	p	374	LEU	CB-CG-CD1	-5.27	102.05	111.00
1	J	198	ALA	N-CA-C	5.27	125.22	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	700	THR	O-C-N	-5.27	114.28	122.70
1	0	665	MET	O-C-N	-5.26	114.28	122.70
1	h	135	LEU	CB-CG-CD2	5.26	119.95	111.00
1	l	97	VAL	CA-CB-CG1	-5.26	103.00	110.90
1	o	182	ASP	CB-CG-OD1	-5.26	113.56	118.30
1	v	177	GLU	CB-CA-C	5.26	120.93	110.40
1	z	572	PHE	CG-CD1-CE1	5.26	126.59	120.80
1	n	234	VAL	CG1-CB-CG2	-5.26	102.48	110.90
1	n	458	PHE	O-C-N	-5.26	114.28	122.70
1	p	501	PHE	CG-CD2-CE2	-5.26	115.01	120.80
1	r	414	GLN	O-C-N	-5.26	114.28	122.70
1	Y	197	MET	CG-SD-CE	-5.26	91.78	100.20
1	0	564	ALA	CB-CA-C	-5.26	102.21	110.10
1	4	401	THR	N-CA-CB	5.26	120.30	110.30
1	g	593	ARG	CD-NE-CZ	5.26	130.97	123.60
1	j	577	MET	CG-SD-CE	-5.26	91.78	100.20
1	r	634	PHE	CB-CG-CD1	5.26	124.48	120.80
1	v	697	TYR	CD1-CE1-CZ	5.26	124.53	119.80
1	N	443	VAL	CG1-CB-CG2	-5.26	102.48	110.90
1	T	231	ARG	CD-NE-CZ	5.26	130.97	123.60
1	V	316	TYR	CB-CG-CD2	-5.26	117.84	121.00
1	7	328	ARG	NE-CZ-NH2	5.26	122.93	120.30
1	a	406	ARG	CA-CB-CG	-5.26	101.83	113.40
1	f	278	MET	CB-CA-C	5.26	120.92	110.40
1	o	399	LYS	CB-CG-CD	5.26	125.27	111.60
1	r	481	GLU	OE1-CD-OE2	-5.26	116.99	123.30
1	s	574	MET	CG-SD-CE	-5.26	91.79	100.20
1	s	581	GLN	CA-CB-CG	5.26	124.97	113.40
1	w	491	GLU	OE1-CD-OE2	-5.26	116.99	123.30
1	z	675	TYR	CB-CG-CD2	-5.26	117.84	121.00
1	A	258	THR	O-C-N	-5.26	114.29	122.70
1	X	288	ARG	NE-CZ-NH2	5.26	122.93	120.30
1	Y	585	TYR	CG-CD1-CE1	-5.26	117.09	121.30
1	c	579	PHE	CB-CG-CD1	5.26	124.48	120.80
1	h	461	TRP	CB-CG-CD1	5.26	133.84	127.00
1	n	677	TRP	CD1-CG-CD2	5.26	110.51	106.30
1	q	483	TYR	CG-CD1-CE1	-5.26	117.09	121.30
1	v	635	LEU	CB-CG-CD2	-5.26	102.06	111.00
1	M	628	ILE	O-C-N	-5.26	114.29	122.70
1	X	336	ARG	CG-CD-NE	-5.26	100.76	111.80
1	Z	208	LEU	CB-CG-CD2	5.26	119.94	111.00
1	q	288	ARG	NE-CZ-NH2	5.26	122.93	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	559	LYS	O-C-N	-5.26	114.29	122.70
1	G	449	ARG	NE-CZ-NH2	5.26	122.93	120.30
1	N	554	GLU	OE1-CD-OE2	-5.26	116.99	123.30
1	h	702	ALA	N-CA-CB	-5.25	102.74	110.10
1	v	709	PHE	CB-CG-CD1	5.25	124.48	120.80
1	O	438	GLU	OE1-CD-OE2	-5.25	116.99	123.30
1	P	698	ARG	CD-NE-CZ	5.25	130.96	123.60
1	f	520	LEU	CB-CG-CD1	5.25	119.93	111.00
1	j	697	TYR	CB-CG-CD2	5.25	124.15	121.00
1	t	212	GLU	OE1-CD-OE2	-5.25	117.00	123.30
1	u	497	ASN	O-C-N	-5.25	114.30	122.70
1	A	449	ARG	N-CA-CB	5.25	120.06	110.60
1	B	145	ARG	NH1-CZ-NH2	-5.25	113.62	119.40
1	Q	655	ARG	NE-CZ-NH2	5.25	122.93	120.30
1	0	331	GLN	CB-CG-CD	5.25	125.25	111.60
1	9	585	TYR	CG-CD2-CE2	-5.25	117.10	121.30
1	a	376	THR	N-CA-CB	5.25	120.28	110.30
1	d	167	TRP	CZ3-CH2-CZ2	-5.25	115.30	121.60
1	f	356	PHE	CD1-CE1-CZ	-5.25	113.80	120.10
1	u	299	MET	CG-SD-CE	-5.25	91.80	100.20
1	Q	98	ARG	O-C-N	-5.25	111.12	121.10
1	Q	574	MET	CA-CB-CG	5.25	122.23	113.30
1	1	524	MET	CG-SD-CE	-5.25	91.80	100.20
1	8	316	TYR	CZ-CE2-CD2	5.25	124.53	119.80
1	o	631	ASN	CB-CA-C	-5.25	99.90	110.40
1	q	171	ILE	CA-CB-CG2	-5.25	100.40	110.90
1	t	311	VAL	CA-CB-CG1	5.25	118.78	110.90
1	w	429	PHE	CB-CG-CD2	-5.25	117.12	120.80
1	U	410	ASP	CB-CG-OD2	5.25	123.03	118.30
1	V	451	TYR	CD1-CE1-CZ	-5.25	115.08	119.80
1	7	108	ARG	CA-CB-CG	5.25	124.95	113.40
1	b	127	GLN	O-C-N	-5.25	114.30	122.70
1	c	369	ARG	NE-CZ-NH2	-5.25	117.67	120.30
1	f	689	ARG	NE-CZ-NH2	5.25	122.92	120.30
1	z	208	LEU	CA-C-O	5.25	131.12	120.10
1	A	239	ARG	C-N-CA	5.25	134.82	121.70
1	A	589	LEU	CB-CG-CD1	5.25	119.92	111.00
1	H	498	TYR	CA-CB-CG	-5.25	103.43	113.40
1	T	689	ARG	NE-CZ-NH2	-5.25	117.67	120.30
1	V	355	TYR	CG-CD2-CE2	-5.25	117.10	121.30
1	X	622	SER	N-CA-CB	5.25	118.37	110.50
1	Z	101	ILE	N-CA-CB	5.25	122.87	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Z	444	ARG	NE-CZ-NH2	5.25	122.92	120.30
1	0	431	GLN	O-C-N	-5.25	114.31	122.70
1	0	709	PHE	CG-CD1-CE1	-5.25	115.03	120.80
1	2	557	LYS	O-C-N	-5.25	114.31	122.70
1	8	651	TYR	CB-CG-CD2	-5.25	117.85	121.00
1	l	180	LEU	CB-CG-CD2	5.25	119.92	111.00
1	o	677	TRP	CD1-NE1-CE2	5.25	113.72	109.00
1	r	385	SER	CB-CA-C	-5.25	100.13	110.10
1	F	651	TYR	CG-CD1-CE1	5.25	125.50	121.30
1	N	440	GLU	O-C-N	-5.25	114.31	122.70
1	O	254	GLN	N-CA-CB	5.25	120.04	110.60
1	S	220	ASP	CB-CG-OD1	5.25	123.02	118.30
1	U	224	ILE	O-C-N	-5.25	114.31	122.70
1	W	102	ASP	CB-CG-OD1	5.25	123.02	118.30
1	Z	500	THR	OG1-CB-CG2	-5.25	97.93	110.00
1	8	655	ARG	NH1-CZ-NH2	-5.25	113.63	119.40
1	l	366	THR	CA-CB-CG2	-5.25	105.06	112.40
1	N	328	ARG	NH1-CZ-NH2	-5.25	113.63	119.40
1	R	419	MET	O-C-N	-5.25	114.31	122.70
1	T	655	ARG	CG-CD-NE	-5.25	100.79	111.80
1	l	277	SER	N-CA-CB	5.24	118.37	110.50
1	6	243	LEU	CB-CG-CD1	5.24	119.92	111.00
1	a	421	PHE	CB-CG-CD2	-5.24	117.13	120.80
1	c	472	VAL	O-C-N	-5.24	114.31	122.70
1	m	449	ARG	CG-CD-NE	-5.24	100.79	111.80
1	t	420	PHE	CB-CG-CD2	5.24	124.47	120.80
1	C	202	ARG	NE-CZ-NH2	-5.24	117.68	120.30
1	F	209	ILE	O-C-N	-5.24	114.31	122.70
1	R	348	THR	CA-CB-CG2	-5.24	105.06	112.40
1	T	356	PHE	CG-CD2-CE2	-5.24	115.03	120.80
1	Z	443	VAL	CA-CB-CG1	5.24	118.76	110.90
1	4	458	PHE	CB-CG-CD2	-5.24	117.13	120.80
1	F	669	LEU	CB-CG-CD1	-5.24	102.09	111.00
1	T	573	ARG	NE-CZ-NH1	5.24	122.92	120.30
1	4	194	GLN	N-CA-CB	-5.24	101.17	110.60
1	b	697	TYR	CB-CG-CD1	-5.24	117.86	121.00
1	e	322	TYR	CG-CD1-CE1	-5.24	117.11	121.30
1	g	351	GLN	N-CA-CB	5.24	120.03	110.60
1	y	572	PHE	CZ-CE2-CD2	-5.24	113.81	120.10
1	Z	481	GLU	N-CA-CB	-5.24	101.17	110.60
1	0	230	THR	N-CA-CB	5.24	120.25	110.30
1	6	551	SER	N-CA-CB	5.24	118.36	110.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	f	153	CYS	CB-CA-C	5.24	120.88	110.40
1	j	150	VAL	CA-CB-CG2	-5.24	103.04	110.90
1	L	328	ARG	NE-CZ-NH2	-5.24	117.68	120.30
1	5	651	TYR	CB-CG-CD1	5.24	124.14	121.00
1	q	657	ASN	N-CA-CB	-5.24	101.17	110.60
1	r	288	ARG	CD-NE-CZ	5.24	130.93	123.60
1	s	231	ARG	CD-NE-CZ	5.24	130.93	123.60
1	H	371	ALA	N-CA-CB	-5.24	102.77	110.10
1	J	288	ARG	NE-CZ-NH2	5.24	122.92	120.30
1	P	483	TYR	CD1-CE1-CZ	5.24	124.51	119.80
1	R	153	CYS	CA-CB-SG	5.24	123.43	114.00
1	b	498	TYR	CG-CD2-CE2	-5.24	117.11	121.30
1	i	532	ILE	CA-CB-CG1	-5.24	101.05	111.00
1	n	392	GLN	CG-CD-OE1	5.24	132.07	121.60
1	o	390	GLU	OE1-CD-OE2	-5.24	117.02	123.30
1	x	110	LEU	CA-C-O	5.24	131.09	120.10
1	y	269	ASP	CB-CG-OD1	5.24	123.01	118.30
1	z	326	LYS	N-CA-CB	-5.24	101.18	110.60
1	C	160	LYS	CB-CA-C	-5.24	99.93	110.40
1	E	105	ASP	CB-CG-OD2	-5.24	113.59	118.30
1	M	349	PHE	CB-CG-CD1	-5.24	117.14	120.80
1	f	168	ALA	N-CA-CB	-5.23	102.77	110.10
1	i	288	ARG	NE-CZ-NH2	-5.23	117.68	120.30
1	p	505	VAL	O-C-N	-5.23	114.33	122.70
1	L	520	LEU	CB-CA-C	5.23	120.14	110.20
1	V	487	TYR	CD1-CE1-CZ	-5.23	115.09	119.80
1	Z	488	ARG	NH1-CZ-NH2	-5.23	113.64	119.40
1	9	248	LEU	O-C-N	-5.23	114.33	122.70
1	k	365	ALA	CB-CA-C	-5.23	102.25	110.10
1	F	519	MET	CG-SD-CE	-5.23	91.83	100.20
1	2	303	THR	CA-CB-CG2	-5.23	105.08	112.40
1	a	239	ARG	C-N-CA	5.23	134.78	121.70
1	a	417	ASP	O-C-N	-5.23	114.33	122.70
1	c	651	TYR	CD1-CE1-CZ	5.23	124.51	119.80
1	g	582	ASP	CA-CB-CG	-5.23	101.89	113.40
1	r	430	ASN	CB-CA-C	-5.23	99.94	110.40
1	u	539	PHE	C-N-CA	5.23	133.28	122.30
1	C	219	PRO	C-N-CA	5.23	134.78	121.70
1	D	221	LEU	CB-CG-CD1	-5.23	102.11	111.00
1	D	390	GLU	CB-CA-C	5.23	120.86	110.40
1	L	483	TYR	CB-CG-CD1	5.23	124.14	121.00
1	0	625	GLU	OE1-CD-OE2	-5.23	117.03	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	5	531	PHE	CB-CG-CD2	-5.23	117.14	120.80
1	7	655	ARG	N-CA-C	5.23	125.11	111.00
1	d	450	LEU	O-C-N	-5.23	114.34	122.70
1	h	268	VAL	CA-CB-CG1	-5.23	103.06	110.90
1	h	669	LEU	O-C-N	-5.23	114.34	122.70
1	k	207	GLU	CB-CA-C	5.23	120.86	110.40
1	l	394	ARG	NE-CZ-NH2	5.23	122.91	120.30
1	p	697	TYR	CA-CB-CG	5.23	123.33	113.40
1	t	623	PHE	CA-C-O	5.23	131.08	120.10
1	v	703	ARG	CD-NE-CZ	-5.23	116.28	123.60
1	F	421	PHE	CB-CG-CD1	-5.23	117.14	120.80
1	P	336	ARG	NE-CZ-NH1	5.23	122.91	120.30
1	b	469	THR	CA-CB-CG2	5.23	119.72	112.40
1	e	524	MET	CA-CB-CG	5.23	122.18	113.30
1	4	135	LEU	CB-CG-CD2	5.22	119.88	111.00
1	a	394	ARG	NH1-CZ-NH2	5.22	125.15	119.40
1	a	526	ILE	O-C-N	-5.22	114.34	122.70
1	b	585	TYR	CD1-CE1-CZ	5.22	124.50	119.80
1	l	276	LEU	CB-CG-CD1	5.22	119.88	111.00
1	o	589	LEU	CB-CA-C	5.22	120.13	110.20
1	s	525	GLU	OE1-CD-OE2	-5.22	117.03	123.30
1	t	117	ALA	CB-CA-C	5.22	117.94	110.10
1	P	93	TYR	CB-CG-CD1	5.22	124.14	121.00
1	T	132	SER	N-CA-CB	5.22	118.34	110.50
1	e	325	VAL	CA-CB-CG1	-5.22	103.07	110.90
1	g	343	THR	OG1-CB-CG2	-5.22	97.99	110.00
1	r	113	GLU	O-C-N	-5.22	114.34	122.70
1	r	458	PHE	O-C-N	-5.22	114.34	122.70
1	s	402	GLU	OE1-CD-OE2	-5.22	117.03	123.30
1	y	93	TYR	CB-CG-CD2	5.22	124.13	121.00
1	A	445	GLU	OE1-CD-OE2	-5.22	117.03	123.30
1	E	221	LEU	CB-CG-CD1	5.22	119.88	111.00
1	O	451	TYR	CB-CG-CD2	-5.22	117.87	121.00
1	8	358	VAL	CA-CB-CG1	-5.22	103.07	110.90
1	a	445	GLU	C-N-CA	5.22	134.75	121.70
1	l	709	PHE	CB-CG-CD1	5.22	124.45	120.80
1	m	686	ALA	CB-CA-C	-5.22	102.27	110.10
1	r	255	ARG	NH1-CZ-NH2	-5.22	113.66	119.40
1	t	555	ASP	CB-CG-OD1	5.22	123.00	118.30
1	y	300	ASP	CB-CG-OD1	-5.22	113.60	118.30
1	e	299	MET	CA-CB-CG	5.22	122.17	113.30
1	S	341	GLU	OE1-CD-OE2	-5.22	117.04	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	W	328	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	Y	652	PHE	CB-CG-CD2	-5.22	117.15	120.80
1	l	239	ARG	C-N-CA	5.22	134.74	121.70
1	b	130	GLY	CA-C-O	-5.22	111.21	120.60
1	i	263	VAL	CA-CB-CG2	-5.22	103.07	110.90
1	p	394	ARG	NE-CZ-NH1	5.22	122.91	120.30
1	z	444	ARG	NH1-CZ-NH2	-5.22	113.66	119.40
1	S	484	GLU	OE1-CD-OE2	-5.22	117.04	123.30
1	v	366	THR	N-CA-CB	5.22	120.21	110.30
1	0	322	TYR	CG-CD2-CE2	-5.21	117.13	121.30
1	7	174	ARG	NE-CZ-NH1	5.21	122.91	120.30
1	a	170	ARG	CG-CD-NE	-5.21	100.85	111.80
1	a	436	LEU	CB-CA-C	-5.21	100.29	110.20
1	l	209	ILE	O-C-N	-5.21	114.36	122.70
1	n	312	ARG	NE-CZ-NH2	-5.21	117.69	120.30
1	o	669	LEU	O-C-N	-5.21	114.36	122.70
1	I	189	GLU	OE1-CD-OE2	-5.21	117.04	123.30
1	P	572	PHE	CB-CG-CD2	-5.21	117.15	120.80
1	8	289	THR	CA-CB-OG1	5.21	119.95	109.00
1	e	500	THR	O-C-N	-5.21	114.36	122.70
1	g	458	PHE	CD1-CE1-CZ	-5.21	113.84	120.10
1	s	494	GLY	C-N-CA	5.21	134.73	121.70
1	J	662	GLN	O-C-N	-5.21	114.36	122.70
1	Q	155	LEU	N-CA-CB	5.21	120.83	110.40
1	b	644	GLN	O-C-N	-5.21	114.36	122.70
1	y	667	GLN	CB-CG-CD	5.21	125.15	111.60
1	Q	425	LYS	CA-CB-CG	5.21	124.86	113.40
1	V	592	VAL	CG1-CB-CG2	-5.21	102.56	110.90
1	W	198	ALA	CA-C-N	5.21	126.62	116.20
1	W	459	LYS	O-C-N	-5.21	114.36	122.70
1	8	209	ILE	O-C-N	-5.21	114.36	122.70
1	9	419	MET	O-C-N	-5.21	114.36	122.70
1	v	166	ALA	N-CA-C	5.21	125.07	111.00
1	D	336	ARG	NE-CZ-NH2	-5.21	117.69	120.30
1	I	368	PRO	N-CA-CB	5.21	109.55	103.30
1	L	316	TYR	CD1-CE1-CZ	-5.21	115.11	119.80
1	3	309	ASN	CB-CA-C	5.21	120.82	110.40
1	4	449	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
1	7	369	ARG	NH1-CZ-NH2	5.21	125.13	119.40
1	h	240	ASP	N-CA-CB	-5.21	101.22	110.60
1	p	365	ALA	N-CA-CB	5.21	117.39	110.10
1	H	437	VAL	CG1-CB-CG2	-5.21	102.56	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	406	ARG	CD-NE-CZ	5.21	130.89	123.60
1	P	581	GLN	C-N-CA	5.21	134.72	121.70
1	R	663	LYS	O-C-N	-5.21	114.37	122.70
1	U	294	THR	CA-CB-CG2	5.21	119.69	112.40
1	V	240	ASP	CB-CA-C	5.21	120.82	110.40
1	0	105	ASP	CB-CG-OD1	5.21	122.99	118.30
1	z	591	LYS	CA-CB-CG	5.21	124.85	113.40
1	P	703	ARG	CG-CD-NE	-5.21	100.86	111.80
1	T	102	ASP	CB-CA-C	5.21	120.81	110.40
1	U	531	PHE	CZ-CE2-CD2	-5.21	113.85	120.10
1	X	140	GLY	O-C-N	-5.21	114.37	122.70
1	2	496	VAL	CA-CB-CG2	-5.21	103.09	110.90
1	o	165	GLU	OE1-CD-OE2	-5.21	117.06	123.30
1	G	336	ARG	NH1-CZ-NH2	-5.21	113.67	119.40
1	T	173	TYR	CD1-CE1-CZ	5.21	124.48	119.80
1	b	674	ARG	NE-CZ-NH1	5.20	122.90	120.30
1	c	629	HIS	O-C-N	-5.20	114.38	122.70
1	l	257	GLN	O-C-N	-5.20	114.37	122.70
1	m	315	THR	C-N-CA	5.20	134.71	121.70
1	n	210	SER	N-CA-CB	5.20	118.30	110.50
1	p	108	ARG	NE-CZ-NH2	5.20	122.90	120.30
1	H	486	GLN	O-C-N	-5.20	114.37	122.70
1	O	684	GLU	OE1-CD-OE2	-5.20	117.06	123.30
1	V	212	GLU	C-N-CA	5.20	134.71	121.70
1	5	659	ASP	CB-CG-OD2	-5.20	113.62	118.30
1	U	450	LEU	CB-CG-CD1	5.20	119.84	111.00
1	4	173	TYR	CZ-CE2-CD2	5.20	124.48	119.80
1	c	314	LEU	O-C-N	-5.20	114.38	122.70
1	d	152	ARG	NH1-CZ-NH2	-5.20	113.68	119.40
1	e	108	ARG	NH1-CZ-NH2	-5.20	113.68	119.40
1	h	498	TYR	CD1-CE1-CZ	5.20	124.48	119.80
1	r	495	PHE	N-CA-CB	5.20	119.96	110.60
1	G	388	LEU	N-CA-CB	-5.20	100.00	110.40
1	L	252	TYR	CG-CD2-CE2	-5.20	117.14	121.30
1	Y	252	TYR	CB-CG-CD1	5.20	124.12	121.00
1	4	265	PRO	C-N-CA	5.20	134.69	121.70
1	d	424	GLU	O-C-N	-5.20	114.38	122.70
1	p	655	ARG	NE-CZ-NH2	-5.20	117.70	120.30
1	v	262	VAL	CA-CB-CG1	-5.20	103.10	110.90
1	G	677	TRP	CD1-NE1-CE2	5.20	113.68	109.00
1	S	300	ASP	CB-CG-OD2	5.20	122.98	118.30
1	S	652	PHE	CB-CG-CD2	5.20	124.44	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	519	MET	CG-SD-CE	-5.20	91.88	100.20
1	5	397	HIS	CA-CB-CG	5.20	122.43	113.60
1	q	175	ASN	CB-CA-C	5.20	120.80	110.40
1	z	422	LEU	CB-CG-CD1	5.20	119.84	111.00
1	D	542	PHE	CB-CG-CD1	5.20	124.44	120.80
1	T	505	VAL	CA-CB-CG2	-5.20	103.10	110.90
1	r	220	ASP	CB-CG-OD2	5.20	122.98	118.30
1	O	147	SER	N-CA-CB	5.20	118.29	110.50
1	O	494	GLY	C-N-CA	5.20	134.69	121.70
1	O	587	VAL	CG1-CB-CG2	-5.20	102.59	110.90
1	S	501	PHE	CB-CG-CD2	-5.20	117.16	120.80
1	T	211	LEU	CB-CA-C	5.20	120.07	110.20
1	2	187	GLU	N-CA-CB	-5.19	101.25	110.60
1	n	289	THR	CA-CB-CG2	-5.19	105.13	112.40
1	G	196	VAL	CA-CB-CG2	-5.19	103.11	110.90
1	Z	283	ASP	CB-CG-OD1	5.19	122.97	118.30
1	Z	336	ARG	CB-CG-CD	5.19	125.11	111.60
1	0	689	ARG	NE-CZ-NH2	5.19	122.90	120.30
1	j	506	HIS	CA-CB-CG	5.19	122.43	113.60
1	s	496	VAL	CB-CA-C	-5.19	101.53	111.40
1	s	695	ARG	CD-NE-CZ	5.19	130.87	123.60
1	B	176	THR	CA-CB-CG2	-5.19	105.13	112.40
1	F	695	ARG	CD-NE-CZ	5.19	130.87	123.60
1	R	227	PRO	N-CA-CB	-5.19	96.89	102.60
1	4	404	LEU	CB-CG-CD2	5.19	119.82	111.00
1	7	93	TYR	CG-CD2-CE2	5.19	125.45	121.30
1	8	420	PHE	CB-CG-CD1	5.19	124.43	120.80
1	k	147	SER	O-C-N	-5.19	114.38	123.20
1	p	170	ARG	NE-CZ-NH2	-5.19	117.70	120.30
1	r	167	TRP	CB-CG-CD1	-5.19	120.25	127.00
1	w	581	GLN	CG-CD-OE1	5.19	131.98	121.60
1	l	651	TYR	CG-CD1-CE1	-5.19	117.15	121.30
1	c	570	LEU	CB-CG-CD2	-5.19	102.18	111.00
1	h	474	ASN	O-C-N	-5.19	114.40	122.70
1	o	183	PRO	N-CD-CG	5.19	110.98	103.20
1	F	316	TYR	CG-CD1-CE1	-5.19	117.15	121.30
1	j	145	ARG	NE-CZ-NH1	5.19	122.89	120.30
1	q	697	TYR	CA-CB-CG	5.19	123.25	113.40
1	s	356	PHE	CB-CG-CD2	-5.19	117.17	120.80
1	V	350	PHE	CB-CG-CD2	-5.19	117.17	120.80
1	9	587	VAL	CA-CB-CG1	5.18	118.68	110.90
1	b	302	GLY	CA-C-O	5.18	129.93	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	e	703	ARG	CD-NE-CZ	5.18	130.86	123.60
1	i	235	ASP	CB-CG-OD2	-5.18	113.64	118.30
1	v	202	ARG	NE-CZ-NH1	5.18	122.89	120.30
1	w	697	TYR	CG-CD2-CE2	-5.18	117.15	121.30
1	A	509	ILE	CA-C-N	-5.18	105.80	117.20
1	L	429	PHE	CB-CG-CD2	5.18	124.43	120.80
1	O	110	LEU	O-C-N	-5.18	114.39	123.20
1	R	170	ARG	CB-CA-C	5.18	120.77	110.40
1	8	328	ARG	NE-CZ-NH2	-5.18	117.71	120.30
1	i	669	LEU	CB-CG-CD1	5.18	119.81	111.00
1	l	221	LEU	CB-CA-C	5.18	120.05	110.20
1	n	239	ARG	NE-CZ-NH2	5.18	122.89	120.30
1	s	689	ARG	NE-CZ-NH1	5.18	122.89	120.30
1	A	636	GLU	N-CA-CB	5.18	119.93	110.60
1	C	634	PHE	CB-CG-CD2	-5.18	117.17	120.80
1	F	498	TYR	CZ-CE2-CD2	-5.18	115.14	119.80
1	G	635	LEU	CB-CG-CD1	5.18	119.81	111.00
1	J	299	MET	CB-CA-C	-5.18	100.03	110.40
1	U	677	TRP	O-C-N	-5.18	114.41	122.70
1	W	420	PHE	CB-CG-CD2	5.18	124.43	120.80
1	F	255	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
1	G	284	PRO	N-CA-CB	5.18	109.52	103.30
1	b	651	TYR	CB-CG-CD2	-5.18	117.89	121.00
1	A	703	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
1	B	277	SER	O-C-N	-5.18	114.41	122.70
1	D	338	SER	CB-CA-C	5.18	119.94	110.10
1	G	154	PRO	N-CD-CG	5.18	110.97	103.20
1	J	258	THR	N-CA-CB	5.18	120.14	110.30
1	J	334	THR	CA-CB-CG2	-5.18	105.15	112.40
1	T	419	MET	CG-SD-CE	5.18	108.49	100.20
1	N	451	TYR	CD1-CG-CD2	5.18	123.60	117.90
1	O	674	ARG	CD-NE-CZ	5.18	130.85	123.60
1	Q	173	TYR	CD1-CE1-CZ	-5.18	115.14	119.80
1	T	513	VAL	CA-CB-CG1	-5.18	103.13	110.90
1	1	300	ASP	CB-CG-OD2	5.18	122.96	118.30
1	2	152	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
1	4	387	PRO	N-CA-CB	5.18	109.51	103.30
1	8	488	ARG	CG-CD-NE	-5.18	100.93	111.80
1	8	689	ARG	O-C-N	-5.18	114.42	122.70
1	e	337	LEU	CB-CG-CD1	-5.18	102.20	111.00
1	o	283	ASP	CB-CG-OD1	5.18	122.96	118.30
1	p	647	PHE	N-CA-CB	5.18	119.92	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	s	675	TYR	CB-CG-CD1	5.18	124.11	121.00
1	u	328	ARG	NE-CZ-NH1	5.18	122.89	120.30
1	G	329	GLY	O-C-N	-5.18	114.42	122.70
1	I	483	TYR	CB-CG-CD1	5.18	124.11	121.00
1	R	152	ARG	CB-CA-C	-5.18	100.05	110.40
1	R	336	ARG	NE-CZ-NH1	5.18	122.89	120.30
1	Y	394	ARG	NE-CZ-NH1	5.18	122.89	120.30
1	5	167	TRP	CB-CG-CD1	5.17	133.73	127.00
1	d	93	TYR	CB-CG-CD1	-5.17	117.89	121.00
1	k	255	ARG	NE-CZ-NH2	5.17	122.89	120.30
1	r	122	ALA	CB-CA-C	-5.17	102.34	110.10
1	r	405	ARG	NE-CZ-NH1	5.17	122.89	120.30
1	A	136	GLU	CB-CG-CD	-5.17	100.23	114.20
1	A	633	TYR	CB-CG-CD1	-5.17	117.89	121.00
1	D	531	PHE	CB-CG-CD2	-5.17	117.18	120.80
1	G	355	TYR	CB-CG-CD2	-5.17	117.89	121.00
1	J	200	ASN	N-CA-CB	5.17	119.91	110.60
1	M	669	LEU	O-C-N	-5.17	114.42	122.70
1	Q	292	ILE	CA-C-O	5.17	130.97	120.10
1	S	384	LYS	N-CA-CB	-5.17	101.29	110.60
1	T	152	ARG	CD-NE-CZ	5.17	130.84	123.60
1	1	309	ASN	O-C-N	-5.17	114.42	122.70
1	1	383	GLN	CB-CG-CD	5.17	125.05	111.60
1	6	405	ARG	CD-NE-CZ	5.17	130.84	123.60
1	H	585	TYR	CB-CG-CD2	-5.17	117.90	121.00
1	W	239	ARG	C-N-CA	5.17	134.63	121.70
1	7	501	PHE	CB-CG-CD2	5.17	124.42	120.80
1	g	181	GLN	CB-CA-C	5.17	120.74	110.40
1	q	651	TYR	CZ-CE2-CD2	5.17	124.45	119.80
1	x	695	ARG	NH1-CZ-NH2	-5.17	113.71	119.40
1	E	420	PHE	CG-CD1-CE1	-5.17	115.11	120.80
1	F	367	VAL	CA-CB-CG1	-5.17	103.14	110.90
1	F	703	ARG	NE-CZ-NH1	5.17	122.89	120.30
1	I	675	TYR	O-C-N	-5.17	114.43	122.70
1	b	695	ARG	CD-NE-CZ	5.17	130.84	123.60
1	e	417	ASP	CB-CG-OD2	5.17	122.95	118.30
1	g	316	TYR	CD1-CE1-CZ	-5.17	115.15	119.80
1	n	428	MET	N-CA-CB	-5.17	101.29	110.60
1	r	444	ARG	NH1-CZ-NH2	-5.17	113.71	119.40
1	J	524	MET	CG-SD-CE	-5.17	91.93	100.20
1	L	542	PHE	CB-CG-CD2	-5.17	117.18	120.80
1	M	519	MET	N-CA-CB	5.17	119.91	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	173	TYR	CZ-CE2-CD2	-5.17	115.15	119.80
1	b	593	ARG	NH1-CZ-NH2	-5.17	113.72	119.40
1	p	166	ALA	N-CA-CB	5.17	117.34	110.10
1	E	686	ALA	CB-CA-C	-5.17	102.35	110.10
1	N	120	ALA	N-CA-CB	-5.17	102.86	110.10
1	S	239	ARG	NE-CZ-NH2	5.17	122.88	120.30
1	T	278	MET	CB-CA-C	-5.17	100.06	110.40
1	V	211	LEU	CB-CG-CD1	5.17	119.79	111.00
1	b	528	GLN	O-C-N	-5.17	114.43	122.70
1	r	116	LEU	CB-CG-CD2	-5.17	102.22	111.00
1	v	406	ARG	O-C-N	5.17	130.97	122.70
1	D	451	TYR	CB-CG-CD2	-5.17	117.90	121.00
1	F	660	SER	CB-CA-C	5.17	119.92	110.10
1	G	316	TYR	CB-CG-CD1	-5.17	117.90	121.00
1	U	579	PHE	CB-CG-CD2	-5.17	117.18	120.80
1	k	192	LYS	CB-CA-C	-5.17	100.07	110.40
1	F	307	VAL	CG1-CB-CG2	-5.17	102.64	110.90
1	h	301	ARG	NH1-CZ-NH2	-5.16	113.72	119.40
1	k	505	VAL	CA-CB-CG2	-5.16	103.16	110.90
1	q	281	GLU	N-CA-C	5.16	124.94	111.00
1	K	451	TYR	CD1-CE1-CZ	-5.16	115.15	119.80
1	K	665	MET	CG-SD-CE	-5.16	91.94	100.20
1	O	349	PHE	CB-CG-CD2	-5.16	117.19	120.80
1	P	294	THR	O-C-N	-5.16	114.44	122.70
1	6	365	ALA	CB-CA-C	5.16	117.84	110.10
1	s	596	ILE	CA-CB-CG1	5.16	120.81	111.00
1	T	446	ASN	C-N-CA	5.16	134.60	121.70
1	V	429	PHE	CB-CG-CD2	5.16	124.41	120.80
1	4	406	ARG	NE-CZ-NH2	-5.16	117.72	120.30
1	d	410	ASP	CB-CG-OD2	5.16	122.94	118.30
1	g	432	ASP	CB-CG-OD1	-5.16	113.66	118.30
1	l	488	ARG	NE-CZ-NH2	5.16	122.88	120.30
1	p	115	ASP	CB-CG-OD1	-5.16	113.66	118.30
1	y	632	ALA	N-CA-CB	5.16	117.32	110.10
1	K	586	SER	N-CA-CB	5.16	118.24	110.50
1	U	301	ARG	NE-CZ-NH1	5.16	122.88	120.30
1	0	555	ASP	CB-CG-OD1	-5.16	113.66	118.30
1	3	297	ASP	N-CA-CB	-5.16	101.32	110.60
1	8	444	ARG	NE-CZ-NH2	-5.16	117.72	120.30
1	b	93	TYR	CD1-CG-CD2	5.16	123.58	117.90
1	b	400	ALA	O-C-N	-5.16	114.45	122.70
1	s	421	PHE	CB-CA-C	5.16	120.72	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	F	369	ARG	N-CA-CB	5.16	119.88	110.60
1	I	357	ARG	NH1-CZ-NH2	-5.16	113.73	119.40
1	M	508	TYR	CG-CD2-CE2	-5.16	117.17	121.30
1	N	356	PHE	CB-CG-CD1	-5.16	117.19	120.80
1	V	252	TYR	CB-CG-CD2	-5.16	117.91	121.00
1	u	141	VAL	CA-CB-CG1	-5.16	103.16	110.90
1	A	269	ASP	CB-CG-OD2	5.16	122.94	118.30
1	A	690	ARG	O-C-N	-5.16	114.45	122.70
1	f	410	ASP	O-C-N	-5.16	114.45	122.70
1	n	644	GLN	O-C-N	-5.16	114.45	122.70
1	D	458	PHE	CB-CG-CD2	-5.16	117.19	120.80
1	E	340	ALA	O-C-N	-5.16	114.45	122.70
1	G	558	VAL	CA-CB-CG2	-5.16	103.17	110.90
1	N	386	LEU	N-CA-C	5.16	124.92	111.00
1	W	202	ARG	CA-CB-CG	5.16	124.74	113.40
1	Z	585	TYR	CZ-CE2-CD2	-5.16	115.16	119.80
1	0	152	ARG	NE-CZ-NH2	-5.15	117.72	120.30
1	2	432	ASP	CB-CG-OD2	-5.15	113.66	118.30
1	4	542	PHE	CB-CG-CD2	-5.15	117.19	120.80
1	h	585	TYR	CG-CD2-CE2	5.15	125.42	121.30
1	l	448	THR	CA-CB-CG2	5.15	119.62	112.40
1	R	184	GLY	O-C-N	-5.15	114.45	122.70
1	1	255	ARG	NE-CZ-NH2	-5.15	117.72	120.30
1	9	193	ALA	CB-CA-C	5.15	117.83	110.10
1	b	501	PHE	CB-CG-CD2	5.15	124.41	120.80
1	o	486	GLN	CA-C-O	5.15	130.92	120.10
1	G	455	ARG	NH1-CZ-NH2	-5.15	113.73	119.40
1	G	625	GLU	N-CA-CB	5.15	119.87	110.60
1	J	473	LYS	CD-CE-NZ	-5.15	99.85	111.70
1	Y	378	LEU	CB-CA-C	-5.15	100.41	110.20
1	1	666	MET	CG-SD-CE	-5.15	91.96	100.20
1	4	579	PHE	CB-CG-CD1	5.15	124.41	120.80
1	b	118	LEU	CB-CG-CD1	-5.15	102.24	111.00
1	d	127	GLN	CA-CB-CG	5.15	124.73	113.40
1	o	182	ASP	N-CA-CB	-5.15	101.33	110.60
1	o	469	THR	O-C-N	-5.15	114.46	122.70
1	q	552	THR	CA-CB-OG1	5.15	119.82	109.00
1	E	173	TYR	CG-CD1-CE1	-5.15	117.18	121.30
1	R	467	THR	O-C-N	-5.15	114.46	122.70
1	V	508	TYR	CG-CD2-CE2	-5.15	117.18	121.30
1	0	697	TYR	CB-CG-CD1	-5.15	117.91	121.00
1	f	580	CYS	N-CA-CB	-5.15	101.33	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	r	466	ALA	CB-CA-C	5.15	117.82	110.10
1	C	585	TYR	CG-CD2-CE2	5.15	125.42	121.30
1	6	273	THR	CA-CB-CG2	-5.15	105.19	112.40
1	7	543	PHE	N-CA-CB	5.15	119.87	110.60
1	h	539	PHE	CB-CG-CD2	5.15	124.40	120.80
1	i	470	GLN	C-N-CA	5.15	134.57	121.70
1	m	378	LEU	O-C-N	-5.15	114.46	122.70
1	O	93	TYR	CB-CG-CD1	-5.15	117.91	121.00
1	R	458	PHE	CB-CG-CD1	-5.15	117.20	120.80
1	U	596	ILE	O-C-N	-5.15	114.46	122.70
1	V	659	ASP	CB-CG-OD2	-5.15	113.67	118.30
1	2	451	TYR	CB-CG-CD1	5.15	124.09	121.00
1	5	307	VAL	CA-CB-CG2	-5.15	103.18	110.90
1	h	697	TYR	CB-CG-CD2	5.15	124.09	121.00
1	w	483	TYR	CB-CG-CD2	-5.15	117.91	121.00
1	A	694	GLU	OE1-CD-OE2	-5.15	117.12	123.30
1	U	395	GLU	CA-CB-CG	5.15	124.72	113.40
1	i	574	MET	CG-SD-CE	-5.14	91.97	100.20
1	l	557	LYS	CA-CB-CG	5.14	124.72	113.40
1	r	316	TYR	CA-C-O	-5.14	109.30	120.10
1	z	457	ASP	O-C-N	-5.14	114.47	122.70
1	H	229	ILE	O-C-N	-5.14	114.47	122.70
1	Y	98	ARG	NH1-CZ-NH2	5.14	125.06	119.40
1	Y	565	GLU	O-C-N	-5.14	114.47	122.70
1	Z	269	ASP	N-CA-CB	-5.14	101.34	110.60
1	2	127	GLN	CG-CD-OE1	5.14	131.88	121.60
1	4	406	ARG	NE-CZ-NH1	5.14	122.87	120.30
1	f	198	ALA	CB-CA-C	-5.14	102.39	110.10
1	l	678	LEU	C-N-CA	5.14	134.56	121.70
1	o	579	PHE	CB-CG-CD1	-5.14	117.20	120.80
1	y	365	ALA	N-CA-CB	-5.14	102.90	110.10
1	S	690	ARG	NE-CZ-NH1	5.14	122.87	120.30
1	Y	689	ARG	NE-CZ-NH1	5.14	122.87	120.30
1	l	127	GLN	O-C-N	-5.14	114.47	122.70
1	g	659	ASP	O-C-N	-5.14	114.47	122.70
1	s	225	ASP	CB-CG-OD1	5.14	122.93	118.30
1	Y	465	LEU	O-C-N	-5.14	114.47	122.70
1	r	322	TYR	CG-CD2-CE2	-5.14	117.19	121.30
1	y	225	ASP	CB-CG-OD2	5.14	122.92	118.30
1	A	301	ARG	NH1-CZ-NH2	-5.14	113.75	119.40
1	B	194	GLN	N-CA-CB	-5.14	101.35	110.60
1	D	367	VAL	CA-CB-CG1	-5.14	103.19	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	702	ALA	N-CA-CB	-5.14	102.90	110.10
1	N	652	PHE	CD1-CG-CD2	5.14	124.98	118.30
1	T	435	LYS	O-C-N	-5.14	114.48	122.70
1	u	134	VAL	O-C-N	-5.14	114.48	122.70
1	K	182	ASP	CB-CG-OD1	5.14	122.92	118.30
1	N	523	ALA	O-C-N	-5.14	114.48	122.70
1	3	202	ARG	CG-CD-NE	-5.14	101.01	111.80
1	o	478	GLU	N-CA-CB	5.14	119.84	110.60
1	B	634	PHE	CG-CD1-CE1	-5.14	115.15	120.80
1	E	483	TYR	CB-CG-CD1	5.14	124.08	121.00
1	L	195	ASN	CB-CG-OD1	-5.14	111.33	121.60
1	Q	155	LEU	CB-CA-C	-5.14	100.44	110.20
1	0	695	ARG	CG-CD-NE	-5.13	101.02	111.80
1	g	487	TYR	CB-CG-CD2	-5.13	117.92	121.00
1	u	288	ARG	NE-CZ-NH1	5.13	122.87	120.30
1	y	561	THR	CA-CB-OG1	5.13	119.78	109.00
1	B	586	SER	CB-CA-C	5.13	119.86	110.10
1	Q	349	PHE	CD1-CE1-CZ	-5.13	113.94	120.10
1	V	531	PHE	CB-CG-CD2	5.13	124.39	120.80
1	Z	255	ARG	NE-CZ-NH2	-5.13	117.73	120.30
1	c	381	HIS	CA-CB-CG	-5.13	104.87	113.60
1	0	651	TYR	CB-CG-CD2	5.13	124.08	121.00
1	n	271	ALA	N-CA-CB	-5.13	102.92	110.10
1	z	204	ILE	CB-CA-C	5.13	121.86	111.60
1	M	461	TRP	CB-CG-CD2	5.13	133.27	126.60
1	M	701	GLN	CA-CB-CG	5.13	124.69	113.40
1	V	101	ILE	O-C-N	-5.13	114.49	122.70
1	W	231	ARG	O-C-N	-5.13	114.49	122.70
1	W	444	ARG	CD-NE-CZ	5.13	130.78	123.60
1	w	376	THR	N-CA-CB	5.13	120.05	110.30
1	B	220	ASP	CB-CG-OD2	5.13	122.92	118.30
1	a	225	ASP	O-C-N	-5.13	114.49	122.70
1	g	647	PHE	CB-CG-CD2	5.13	124.39	120.80
1	h	697	TYR	CB-CG-CD1	-5.13	117.92	121.00
1	z	501	PHE	CB-CG-CD2	-5.13	117.21	120.80
1	L	653	MET	CG-SD-CE	5.13	108.41	100.20
1	2	167	TRP	CZ3-CH2-CZ2	5.13	127.75	121.60
1	e	483	TYR	CD1-CE1-CZ	5.13	124.41	119.80
1	e	697	TYR	CB-CG-CD2	5.13	124.08	121.00
1	w	220	ASP	N-CA-CB	-5.13	101.37	110.60
1	x	269	ASP	CB-CG-OD1	5.13	122.91	118.30
1	V	664	ALA	N-CA-CB	-5.13	102.92	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	351	GLN	CA-CB-CG	5.12	124.67	113.40
1	f	674	ARG	O-C-N	-5.12	114.50	122.70
1	l	357	ARG	CG-CD-NE	-5.12	101.04	111.80
1	l	655	ARG	NH1-CZ-NH2	-5.12	113.76	119.40
1	B	394	ARG	NH1-CZ-NH2	5.12	125.04	119.40
1	H	252	TYR	O-C-N	-5.12	114.50	122.70
1	Z	123	VAL	CA-CB-CG1	-5.12	103.21	110.90
1	2	287	ASP	CB-CG-OD2	5.12	122.91	118.30
1	4	134	VAL	CA-CB-CG2	-5.12	103.22	110.90
1	a	655	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	d	230	THR	CA-CB-OG1	5.12	119.76	109.00
1	e	202	ARG	NE-CZ-NH2	-5.12	117.74	120.30
1	z	498	TYR	CB-CG-CD2	-5.12	117.93	121.00
1	E	436	LEU	CB-CG-CD2	-5.12	102.29	111.00
1	F	443	VAL	O-C-N	-5.12	114.50	122.70
1	H	652	PHE	CZ-CE2-CD2	5.12	126.25	120.10
1	S	362	GLU	N-CA-CB	-5.12	101.38	110.60
1	a	300	ASP	CB-CG-OD2	-5.12	113.69	118.30
1	b	231	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	p	483	TYR	CD1-CG-CD2	5.12	123.53	117.90
1	s	134	VAL	O-C-N	-5.12	114.51	122.70
1	B	298	LEU	CA-CB-CG	5.12	127.08	115.30
1	B	562	ALA	CB-CA-C	-5.12	102.42	110.10
1	L	419	MET	CA-CB-CG	5.12	122.01	113.30
1	X	231	ARG	N-CA-CB	5.12	119.82	110.60
1	l	697	TYR	CB-CG-CD2	-5.12	117.93	121.00
1	n	487	TYR	CG-CD1-CE1	5.12	125.40	121.30
1	p	633	TYR	CG-CD2-CE2	-5.12	117.20	121.30
1	t	421	PHE	N-CA-CB	-5.12	101.38	110.60
1	B	461	TRP	CH2-CZ2-CE2	5.12	122.52	117.40
1	W	356	PHE	CB-CG-CD2	5.12	124.38	120.80
1	l	597	PHE	CZ-CE2-CD2	5.12	126.24	120.10
1	9	405	ARG	CG-CD-NE	-5.12	101.05	111.80
1	h	250	LYS	O-C-N	-5.12	114.51	122.70
1	u	152	ARG	NH1-CZ-NH2	-5.12	113.77	119.40
1	C	543	PHE	CB-CG-CD2	-5.12	117.22	120.80
1	N	703	ARG	NH1-CZ-NH2	-5.12	113.77	119.40
1	W	179	GLU	O-C-N	-5.12	114.51	122.70
1	2	583	GLN	O-C-N	-5.12	114.51	122.70
1	n	481	GLU	OE1-CD-OE2	-5.12	117.16	123.30
1	s	585	TYR	CG-CD2-CE2	-5.12	117.21	121.30
1	z	282	VAL	CA-CB-CG1	-5.12	103.22	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	8	401	THR	N-CA-CB	5.12	120.02	110.30
1	o	593	ARG	NH1-CZ-NH2	5.12	125.03	119.40
1	q	100	CYS	CA-C-O	5.12	130.84	120.10
1	t	429	PHE	CB-CG-CD2	-5.12	117.22	120.80
1	A	93	TYR	CB-CA-C	5.12	120.63	110.40
1	D	570	LEU	O-C-N	-5.12	114.52	122.70
1	K	365	ALA	N-CA-CB	5.12	117.26	110.10
1	W	389	LEU	CB-CG-CD2	5.12	119.70	111.00
1	0	651	TYR	CD1-CE1-CZ	5.11	124.40	119.80
1	5	513	VAL	CA-CB-CG2	-5.11	103.23	110.90
1	6	587	VAL	CA-CB-CG2	5.11	118.57	110.90
1	7	220	ASP	CB-CG-OD1	5.11	122.90	118.30
1	8	262	VAL	CA-CB-CG1	5.11	118.57	110.90
1	e	152	ARG	NH1-CZ-NH2	-5.11	113.77	119.40
1	g	700	THR	CA-CB-CG2	5.11	119.56	112.40
1	m	98	ARG	CG-CD-NE	-5.11	101.06	111.80
1	m	447	GLU	O-C-N	-5.11	114.52	122.70
1	n	554	GLU	O-C-N	-5.11	114.52	122.70
1	o	501	PHE	CA-C-O	5.11	130.84	120.10
1	t	558	VAL	CG1-CB-CG2	5.11	119.08	110.90
1	B	198	ALA	N-CA-C	5.11	124.81	111.00
1	L	202	ARG	NE-CZ-NH2	5.11	122.86	120.30
1	1	141	VAL	CG1-CB-CG2	5.11	119.08	110.90
1	g	538	HIS	N-CA-CB	5.11	119.80	110.60
1	g	597	PHE	CG-CD1-CE1	-5.11	115.18	120.80
1	m	634	PHE	CG-CD1-CE1	-5.11	115.18	120.80
1	T	593	ARG	NE-CZ-NH2	-5.11	117.74	120.30
1	2	659	ASP	CB-CG-OD2	5.11	122.90	118.30
1	q	375	THR	N-CA-CB	5.11	120.01	110.30
1	u	448	THR	CA-CB-OG1	5.11	119.73	109.00
1	R	170	ARG	CD-NE-CZ	5.11	130.75	123.60
1	V	336	ARG	CD-NE-CZ	5.11	130.75	123.60
1	I	313	ASN	N-CA-CB	5.11	119.80	110.60
1	0	327	CYS	C-N-CA	5.11	134.47	121.70
1	2	443	VAL	CA-CB-CG1	-5.11	103.24	110.90
1	g	674	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
1	n	95	GLN	CA-CB-CG	5.11	124.64	113.40
1	r	410	ASP	C-N-CA	5.11	134.47	121.70
1	s	508	TYR	N-CA-CB	-5.11	101.41	110.60
1	t	308	MET	CA-CB-CG	5.11	121.98	113.30
1	v	544	ASN	CB-CG-OD1	-5.11	111.38	121.60
1	z	108	ARG	NE-CZ-NH1	5.11	122.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	152	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
1	7	428	MET	CA-CB-CG	5.11	121.98	113.30
1	a	274	GLU	OE1-CD-OE2	-5.11	117.17	123.30
1	e	205	SER	CB-CA-C	5.11	119.80	110.10
1	j	301	ARG	O-C-N	-5.11	114.52	123.20
1	r	500	THR	CA-CB-CG2	-5.11	105.25	112.40
1	x	533	ASN	O-C-N	-5.11	114.53	122.70
1	x	690	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
1	K	697	TYR	CD1-CE1-CZ	5.11	124.39	119.80
1	M	703	ARG	NH1-CZ-NH2	-5.11	113.78	119.40
1	b	592	VAL	CG1-CB-CG2	-5.10	102.73	110.90
1	i	102	ASP	CB-CG-OD1	5.10	122.89	118.30
1	w	632	ALA	N-CA-CB	-5.10	102.95	110.10
1	y	458	PHE	CB-CG-CD1	-5.10	117.23	120.80
1	N	430	ASN	CA-CB-CG	-5.10	102.17	113.40
1	P	420	PHE	CB-CG-CD1	-5.10	117.23	120.80
1	3	401	THR	CA-CB-CG2	5.10	119.54	112.40
1	9	295	LYS	CA-C-N	5.10	131.39	117.10
1	9	465	LEU	CB-CG-CD2	-5.10	102.33	111.00
1	d	640	ARG	CD-NE-CZ	5.10	130.74	123.60
1	o	457	ASP	CB-CA-C	-5.10	100.19	110.40
1	B	593	ARG	CD-NE-CZ	5.10	130.74	123.60
1	D	507	GLN	O-C-N	-5.10	114.53	122.70
1	E	451	TYR	CZ-CE2-CD2	-5.10	115.21	119.80
1	J	675	TYR	CG-CD2-CE2	-5.10	117.22	121.30
1	N	530	ALA	N-CA-CB	-5.10	102.96	110.10
1	U	357	ARG	NE-CZ-NH1	-5.10	117.75	120.30
1	Z	483	TYR	CD1-CE1-CZ	5.10	124.39	119.80
1	a	201	GLY	O-C-N	-5.10	114.54	122.70
1	t	364	SER	O-C-N	5.10	130.86	122.70
1	S	567	MET	CA-CB-CG	5.10	121.97	113.30
1	0	480	VAL	CA-CB-CG2	-5.10	103.25	110.90
1	k	643	ASN	O-C-N	-5.10	114.54	122.70
1	u	676	SER	CB-CA-C	-5.10	100.41	110.10
1	x	682	GLN	O-C-N	-5.10	114.54	122.70
1	C	368	PRO	N-CD-CG	5.10	110.85	103.20
1	T	331	GLN	O-C-N	-5.10	114.54	122.70
1	Z	359	LEU	CB-CG-CD2	-5.10	102.33	111.00
1	3	365	ALA	N-CA-CB	5.10	117.23	110.10
1	c	585	TYR	CB-CG-CD2	5.10	124.06	121.00
1	g	179	GLU	OE1-CD-OE2	-5.10	117.18	123.30
1	i	293	LEU	CB-CG-CD1	-5.10	102.33	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	j	666	MET	CG-SD-CE	-5.10	92.05	100.20
1	l	593	ARG	NE-CZ-NH2	5.10	122.85	120.30
1	F	252	TYR	CB-CG-CD2	-5.10	117.94	121.00
1	G	262	VAL	CG1-CB-CG2	-5.10	102.74	110.90
1	c	677	TRP	CE3-CZ3-CH2	5.10	126.81	121.20
1	k	98	ARG	NE-CZ-NH2	-5.10	117.75	120.30
1	D	202	ARG	C-N-CA	5.10	133.00	122.30
1	G	93	TYR	CB-CG-CD1	5.10	124.06	121.00
1	J	706	LEU	CB-CG-CD1	-5.10	102.34	111.00
1	l	356	PHE	CG-CD2-CE2	5.09	126.40	120.80
1	6	117	ALA	C-N-CA	5.09	134.44	121.70
1	9	697	TYR	CB-CA-C	5.09	120.59	110.40
1	d	307	VAL	CA-CB-CG1	5.09	118.54	110.90
1	f	118	LEU	CB-CG-CD1	-5.09	102.34	111.00
1	f	226	LEU	CB-CA-C	5.09	119.88	110.20
1	l	147	SER	N-CA-CB	-5.09	102.86	110.50
1	S	507	GLN	O-C-N	-5.09	114.55	122.70
1	0	102	ASP	CB-CG-OD2	-5.09	113.72	118.30
1	2	333	ILE	CG1-CB-CG2	-5.09	100.20	111.40
1	3	655	ARG	CG-CD-NE	-5.09	101.11	111.80
1	k	476	ILE	O-C-N	-5.09	114.55	122.70
1	o	531	PHE	CB-CG-CD2	-5.09	117.23	120.80
1	p	287	ASP	CB-CG-OD1	-5.09	113.72	118.30
1	r	152	ARG	CB-CG-CD	5.09	124.84	111.60
1	2	392	GLN	O-C-N	-5.09	114.56	122.70
1	6	176	THR	OG1-CB-CG2	-5.09	98.29	110.00
1	e	304	GLU	OE1-CD-OE2	-5.09	117.19	123.30
1	n	152	ARG	CD-NE-CZ	5.09	130.73	123.60
1	w	112	VAL	CA-CB-CG2	-5.09	103.26	110.90
1	w	126	ASP	CB-CG-OD2	-5.09	113.72	118.30
1	E	290	ILE	N-CA-CB	5.09	122.51	110.80
1	G	543	PHE	CB-CG-CD1	5.09	124.36	120.80
1	e	511	GLN	CA-C-N	5.09	128.40	117.20
1	n	296	PRO	N-CA-CB	-5.09	97.00	102.60
1	D	307	VAL	O-C-N	-5.09	114.56	122.70
1	D	484	GLU	CB-CA-C	5.09	120.58	110.40
1	H	555	ASP	N-CA-CB	-5.09	101.44	110.60
1	O	566	ASN	CB-CA-C	5.09	120.58	110.40
1	S	149	ILE	CA-C-O	5.09	130.79	120.10
1	S	581	GLN	CA-CB-CG	5.09	124.60	113.40
1	T	542	PHE	CB-CG-CD2	-5.09	117.24	120.80
1	m	410	ASP	CB-CG-OD1	5.09	122.88	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	697	TYR	CB-CG-CD2	-5.09	117.95	121.00
1	3	635	LEU	O-C-N	-5.09	114.56	122.70
1	4	514	GLU	CA-C-O	-5.09	109.42	120.10
1	g	494	GLY	C-N-CA	5.09	134.41	121.70
1	j	474	ASN	O-C-N	-5.09	114.56	122.70
1	k	367	VAL	N-CA-C	-5.09	97.27	111.00
1	q	539	PHE	CB-CG-CD1	5.09	124.36	120.80
1	s	336	ARG	CB-CA-C	5.09	120.57	110.40
1	B	240	ASP	CB-CG-OD1	5.09	122.88	118.30
1	D	677	TRP	CE2-CD2-CG	-5.09	103.23	107.30
1	E	483	TYR	CA-CB-CG	5.09	123.06	113.40
1	G	420	PHE	CB-CG-CD2	-5.09	117.24	120.80
1	I	268	VAL	CB-CA-C	5.09	121.07	111.40
1	I	274	GLU	O-C-N	-5.09	114.56	122.70
1	P	577	MET	CG-SD-CE	-5.09	92.06	100.20
1	9	413	SER	N-CA-CB	5.08	118.13	110.50
1	l	515	PRO	N-CD-CG	5.08	110.83	103.20
1	F	325	VAL	CG1-CB-CG2	-5.08	102.76	110.90
1	F	342	ALA	CB-CA-C	5.08	117.73	110.10
1	o	247	ALA	N-CA-CB	-5.08	102.98	110.10
1	r	124	ILE	O-C-N	-5.08	114.56	123.20
1	B	596	ILE	N-CA-CB	5.08	122.49	110.80
1	H	119	PRO	N-CA-CB	5.08	109.40	103.30
1	K	674	ARG	NE-CZ-NH2	-5.08	117.76	120.30
1	W	451	TYR	CB-CG-CD2	5.08	124.05	121.00
1	Y	470	GLN	O-C-N	-5.08	114.57	122.70
1	5	429	PHE	CB-CG-CD1	5.08	124.36	120.80
1	c	206	HIS	CA-CB-CG	5.08	122.24	113.60
1	e	134	VAL	CA-CB-CG1	5.08	118.52	110.90
1	h	252	TYR	CB-CG-CD1	5.08	124.05	121.00
1	o	453	LYS	CB-CA-C	-5.08	100.24	110.40
1	N	466	ALA	N-CA-CB	-5.08	102.99	110.10
1	N	501	PHE	CB-CG-CD1	-5.08	117.24	120.80
1	N	689	ARG	NE-CZ-NH2	5.08	122.84	120.30
1	j	349	PHE	CB-CG-CD1	-5.08	117.24	120.80
1	w	565	GLU	CA-CB-CG	5.08	124.58	113.40
1	z	165	GLU	OE1-CD-OE2	-5.08	117.20	123.30
1	H	364	SER	C-N-CA	5.08	134.40	121.70
1	j	647	PHE	CB-CG-CD2	-5.08	117.25	120.80
1	l	677	TRP	CB-CG-CD1	5.08	133.60	127.00
1	q	578	VAL	CG1-CB-CG2	-5.08	102.77	110.90
1	J	589	LEU	CB-CG-CD1	5.08	119.63	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	4	394	ARG	NE-CZ-NH2	-5.08	117.76	120.30
1	6	677	TRP	CG-CD2-CE3	5.08	138.47	133.90
1	b	582	ASP	CA-C-O	-5.08	109.44	120.10
1	q	657	ASN	CB-CA-C	5.08	120.56	110.40
1	x	457	ASP	CB-CG-OD2	5.08	122.87	118.30
1	z	572	PHE	CB-CG-CD2	5.08	124.35	120.80
1	I	145	ARG	NE-CZ-NH1	5.08	122.84	120.30
1	N	356	PHE	CB-CG-CD2	5.08	124.35	120.80
1	Z	445	GLU	OE1-CD-OE2	-5.08	117.21	123.30
1	2	160	LYS	C-N-CA	5.08	134.39	121.70
1	3	683	SER	CA-C-O	5.08	130.76	120.10
1	i	317	PRO	O-C-N	-5.08	114.58	122.70
1	q	289	THR	C-N-CA	5.08	134.39	121.70
1	v	451	TYR	CD1-CG-CD2	5.08	123.48	117.90
1	B	421	PHE	CB-CG-CD2	5.08	124.35	120.80
1	Q	307	VAL	CA-CB-CG1	5.08	118.51	110.90
1	T	313	ASN	CB-CG-OD1	-5.08	111.45	121.60
1	U	660	SER	CB-CA-C	5.08	119.74	110.10
1	Z	355	TYR	CB-CG-CD2	-5.08	117.95	121.00
1	7	406	ARG	NE-CZ-NH2	-5.07	117.76	120.30
1	d	365	ALA	CB-CA-C	5.07	117.71	110.10
1	h	385	SER	O-C-N	-5.07	114.58	122.70
1	O	109	ALA	N-CA-CB	-5.07	103.00	110.10
1	Y	159	LEU	CB-CG-CD1	-5.07	102.38	111.00
1	p	252	TYR	CA-CB-CG	-5.07	103.76	113.40
1	q	689	ARG	NH1-CZ-NH2	-5.07	113.82	119.40
1	v	96	LYS	O-C-N	-5.07	114.58	122.70
1	4	695	ARG	NE-CZ-NH1	5.07	122.84	120.30
1	f	123	VAL	CA-CB-CG2	-5.07	103.30	110.90
1	f	285	GLU	OE1-CD-OE2	5.07	129.39	123.30
1	h	239	ARG	C-N-CA	5.07	134.37	121.70
1	h	255	ARG	CG-CD-NE	-5.07	101.15	111.80
1	j	420	PHE	CB-CG-CD2	-5.07	117.25	120.80
1	j	531	PHE	CD1-CE1-CZ	-5.07	114.01	120.10
1	m	301	ARG	CG-CD-NE	-5.07	101.15	111.80
1	A	355	TYR	CA-CB-CG	5.07	123.03	113.40
1	J	405	ARG	NH1-CZ-NH2	-5.07	113.82	119.40
1	P	367	VAL	CG1-CB-CG2	-5.07	102.79	110.90
1	S	517	LEU	CB-CG-CD2	5.07	119.62	111.00
1	e	492	LEU	CB-CG-CD1	5.07	119.62	111.00
1	v	633	TYR	CB-CG-CD1	5.07	124.04	121.00
1	A	346	GLU	CG-CD-OE1	5.07	128.44	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	P	261	LEU	CB-CG-CD1	-5.07	102.38	111.00
1	Q	579	PHE	CD1-CE1-CZ	-5.07	114.02	120.10
1	9	98	ARG	NH1-CZ-NH2	-5.07	113.83	119.40
1	k	355	TYR	CD1-CE1-CZ	-5.07	115.24	119.80
1	s	685	THR	N-CA-CB	5.07	119.93	110.30
1	y	432	ASP	CB-CG-OD1	-5.07	113.74	118.30
1	y	677	TRP	CH2-CZ2-CE2	-5.07	112.33	117.40
1	B	207	GLU	N-CA-CB	5.07	119.72	110.60
1	N	338	SER	N-CA-CB	5.07	118.10	110.50
1	O	420	PHE	CG-CD2-CE2	5.07	126.37	120.80
1	R	109	ALA	N-CA-CB	-5.07	103.01	110.10
1	S	659	ASP	CB-CG-OD1	5.07	122.86	118.30
1	V	473	LYS	O-C-N	-5.07	114.59	122.70
1	Y	438	GLU	OE1-CD-OE2	-5.07	117.22	123.30
1	Z	567	MET	CA-CB-CG	5.07	121.92	113.30
1	0	631	ASN	N-CA-CB	-5.07	101.48	110.60
1	g	287	ASP	CB-CG-OD2	5.07	122.86	118.30
1	i	220	ASP	CB-CG-OD1	-5.07	113.74	118.30
1	j	583	GLN	O-C-N	-5.07	114.60	122.70
1	A	678	LEU	O-C-N	-5.07	114.60	122.70
1	E	506	HIS	CA-CB-CG	5.07	122.21	113.60
1	F	451	TYR	CG-CD2-CE2	-5.07	117.25	121.30
1	M	265	PRO	N-CD-CG	-5.07	95.60	103.20
1	M	484	GLU	OE1-CD-OE2	-5.07	117.22	123.30
1	P	651	TYR	CB-CG-CD2	-5.07	117.96	121.00
1	S	131	LYS	CA-CB-CG	5.07	124.54	113.40
1	4	252	TYR	CD1-CG-CD2	5.06	123.47	117.90
1	Z	410	ASP	C-N-CA	5.06	134.36	121.70
1	5	369	ARG	NH1-CZ-NH2	5.06	124.97	119.40
1	a	283	ASP	CB-CG-OD2	5.06	122.86	118.30
1	c	283	ASP	CB-CA-C	5.06	120.53	110.40
1	d	461	TRP	CD2-CE3-CZ3	-5.06	112.22	118.80
1	h	677	TRP	CD1-NE1-CE2	5.06	113.56	109.00
1	s	512	LEU	CB-CG-CD2	5.06	119.61	111.00
1	t	682	GLN	O-C-N	-5.06	114.60	122.70
1	w	303	THR	CA-CB-OG1	5.06	119.63	109.00
1	A	697	TYR	O-C-N	-5.06	114.60	122.70
1	F	419	MET	CG-SD-CE	-5.06	92.10	100.20
1	U	334	THR	CA-CB-CG2	5.06	119.49	112.40
1	4	633	TYR	CG-CD1-CE1	-5.06	117.25	121.30
1	m	592	VAL	CA-CB-CG2	-5.06	103.31	110.90
1	w	653	MET	CG-SD-CE	-5.06	92.10	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	647	PHE	N-CA-CB	5.06	119.71	110.60
1	0	689	ARG	NH1-CZ-NH2	-5.06	113.83	119.40
1	9	260	ASN	CB-CG-OD1	5.06	131.72	121.60
1	a	105	ASP	CB-CG-OD1	-5.06	113.75	118.30
1	e	624	THR	N-CA-CB	5.06	119.91	110.30
1	f	572	PHE	CB-CG-CD2	5.06	124.34	120.80
1	l	549	VAL	O-C-N	-5.06	114.60	122.70
1	p	653	MET	CG-SD-CE	-5.06	92.10	100.20
1	x	421	PHE	CG-CD2-CE2	5.06	126.36	120.80
1	z	137	ALA	CB-CA-C	-5.06	102.51	110.10
1	G	640	ARG	NH1-CZ-NH2	-5.06	113.83	119.40
1	M	327	CYS	CB-CA-C	5.06	120.52	110.40
1	W	570	LEU	O-C-N	-5.06	114.61	122.70
1	Y	159	LEU	O-C-N	-5.06	114.60	122.70
1	1	428	MET	CG-SD-CE	-5.06	92.11	100.20
1	c	322	TYR	CG-CD2-CE2	5.06	125.35	121.30
1	l	461	TRP	CD1-NE1-CE2	5.06	113.55	109.00
1	v	364	SER	C-N-CA	5.06	134.34	121.70
1	w	503	ILE	CA-CB-CG2	5.06	121.02	110.90
1	C	443	VAL	CA-CB-CG2	-5.06	103.31	110.90
1	J	279	ALA	N-CA-CB	5.06	117.18	110.10
1	O	386	LEU	CA-C-O	-5.06	109.48	120.10
1	P	626	ILE	CG1-CB-CG2	5.06	122.53	111.40
1	Q	573	ARG	NH1-CZ-NH2	5.06	124.96	119.40
1	4	705	ALA	O-C-N	-5.06	114.61	122.70
1	9	681	GLU	OE1-CD-OE2	-5.06	117.23	123.30
1	H	180	LEU	CB-CG-CD2	5.06	119.60	111.00
1	0	135	LEU	O-C-N	-5.05	114.61	122.70
1	6	675	TYR	CB-CG-CD2	-5.05	117.97	121.00
1	b	278	MET	CG-SD-CE	-5.05	92.11	100.20
1	o	183	PRO	N-CA-CB	5.05	109.37	103.30
1	G	429	PHE	CB-CG-CD1	-5.05	117.26	120.80
1	J	409	ALA	O-C-N	-5.05	114.61	122.70
1	M	98	ARG	CG-CD-NE	-5.05	101.19	111.80
1	N	105	ASP	CB-CG-OD2	5.05	122.85	118.30
1	S	513	VAL	CA-CB-CG1	5.05	118.48	110.90
1	V	665	MET	CA-CB-CG	5.05	121.89	113.30
1	3	186	VAL	CA-CB-CG1	5.05	118.48	110.90
1	j	174	ARG	NH1-CZ-NH2	-5.05	113.84	119.40
1	o	675	TYR	CG-CD1-CE1	-5.05	117.26	121.30
1	y	542	PHE	C-N-CA	5.05	134.33	121.70
1	3	337	LEU	N-CA-CB	-5.05	100.30	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	e	93	TYR	CA-CB-CG	5.05	123.00	113.40
1	h	246	LYS	O-C-N	-5.05	114.62	122.70
1	o	319	LYS	CB-CA-C	-5.05	100.30	110.40
1	z	555	ASP	N-CA-CB	-5.05	101.51	110.60
1	C	571	GLN	CG-CD-OE1	5.05	131.70	121.60
1	D	491	GLU	N-CA-CB	5.05	119.69	110.60
1	J	477	HIS	CA-CB-CG	5.05	122.19	113.60
1	N	111	GLY	O-C-N	-5.05	114.62	122.70
1	P	278	MET	CG-SD-CE	-5.05	92.12	100.20
1	Q	697	TYR	CB-CA-C	5.05	120.50	110.40
1	S	267	ASN	CB-CG-OD1	5.05	131.70	121.60
1	V	228	GLY	O-C-N	-5.05	114.62	122.70
1	W	390	GLU	CA-CB-CG	5.05	124.51	113.40
1	Y	406	ARG	NE-CZ-NH1	5.05	122.83	120.30
1	0	486	GLN	N-CA-CB	-5.05	101.51	110.60
1	1	487	TYR	CD1-CE1-CZ	5.05	124.34	119.80
1	4	329	GLY	N-CA-C	5.05	125.72	113.10
1	7	350	PHE	CB-CG-CD1	5.05	124.33	120.80
1	e	235	ASP	OD1-CG-OD2	-5.05	113.71	123.30
1	n	551	SER	O-C-N	-5.05	114.62	122.70
1	s	168	ALA	CB-CA-C	5.05	117.67	110.10
1	z	241	ILE	CG1-CB-CG2	5.05	122.51	111.40
1	A	449	ARG	CD-NE-CZ	5.05	130.67	123.60
1	R	480	VAL	CG1-CB-CG2	-5.05	102.82	110.90
1	Z	427	LYS	CB-CA-C	-5.05	100.30	110.40
1	j	237	GLN	N-CA-C	5.05	124.63	111.00
1	q	406	ARG	NH1-CZ-NH2	-5.05	113.85	119.40
1	w	240	ASP	CB-CA-C	5.05	120.50	110.40
1	A	421	PHE	CB-CA-C	5.05	120.50	110.40
1	D	647	PHE	CD1-CE1-CZ	-5.05	114.04	120.10
1	K	623	PHE	CB-CG-CD1	-5.05	117.27	120.80
1	2	252	TYR	CB-CG-CD1	5.05	124.03	121.00
1	5	416	ALA	CB-CA-C	-5.05	102.53	110.10
1	f	198	ALA	N-CA-CB	-5.05	103.04	110.10
1	q	703	ARG	CD-NE-CZ	5.05	130.66	123.60
1	w	165	GLU	OE1-CD-OE2	-5.05	117.24	123.30
1	y	169	GLY	O-C-N	-5.05	114.62	122.70
1	z	498	TYR	CA-CB-CG	5.05	122.99	113.40
1	A	151	THR	CA-CB-OG1	5.05	119.60	109.00
1	E	468	ASN	N-CA-CB	5.05	119.69	110.60
1	F	112	VAL	C-N-CA	5.05	134.31	121.70
1	K	449	ARG	NE-CZ-NH1	-5.05	117.78	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	O	150	VAL	CA-CB-CG1	5.05	118.47	110.90
1	W	215	SER	N-CA-CB	-5.05	102.93	110.50
1	Z	634	PHE	CB-CG-CD1	5.05	124.33	120.80
1	t	374	LEU	CB-CG-CD1	-5.04	102.42	111.00
1	G	525	GLU	OE1-CD-OE2	-5.04	117.25	123.30
1	U	444	ARG	NE-CZ-NH2	5.04	122.82	120.30
1	Z	124	ILE	O-C-N	-5.04	114.62	123.20
1	5	479	GLU	N-CA-C	5.04	124.62	111.00
1	d	360	LEU	N-CA-C	5.04	124.62	111.00
1	d	517	LEU	CB-CG-CD2	5.04	119.57	111.00
1	h	173	TYR	O-C-N	-5.04	114.63	122.70
1	n	697	TYR	CZ-CE2-CD2	-5.04	115.26	119.80
1	p	365	ALA	C-N-CA	5.04	134.31	121.70
1	q	577	MET	O-C-N	-5.04	114.63	122.70
1	J	702	ALA	CB-CA-C	-5.04	102.53	110.10
1	Q	325	VAL	CA-CB-CG2	5.04	118.47	110.90
1	U	448	THR	N-CA-CB	5.04	119.88	110.30
1	b	194	GLN	O-C-N	-5.04	114.63	122.70
1	b	634	PHE	CB-CG-CD2	-5.04	117.27	120.80
1	c	107	LEU	CB-CG-CD2	-5.04	102.43	111.00
1	l	325	VAL	CA-CB-CG2	5.04	118.46	110.90
1	v	481	GLU	CA-CB-CG	5.04	124.49	113.40
1	y	181	GLN	CB-CA-C	5.04	120.48	110.40
1	z	582	ASP	CB-CG-OD2	-5.04	113.76	118.30
1	H	568	ILE	O-C-N	-5.04	114.63	122.70
1	K	186	VAL	N-CA-C	5.04	124.61	111.00
1	W	571	GLN	CB-CA-C	5.04	120.48	110.40
1	0	486	GLN	O-C-N	-5.04	114.64	122.70
1	I	664	ALA	N-CA-CB	-5.04	103.04	110.10
1	O	198	ALA	N-CA-CB	-5.04	103.04	110.10
1	Q	690	ARG	NE-CZ-NH1	5.04	122.82	120.30
1	Z	697	TYR	CD1-CE1-CZ	-5.04	115.26	119.80
1	2	346	GLU	OE1-CD-OE2	5.04	129.35	123.30
1	2	417	ASP	CB-CG-OD1	5.04	122.83	118.30
1	b	364	SER	CB-CA-C	-5.04	100.53	110.10
1	c	639	LYS	CA-CB-CG	5.04	124.49	113.40
1	k	309	ASN	N-CA-CB	-5.04	101.53	110.60
1	m	283	ASP	CB-CG-OD1	5.04	122.83	118.30
1	o	698	ARG	CG-CD-NE	-5.04	101.22	111.80
1	t	543	PHE	CB-CG-CD2	-5.04	117.27	120.80
1	v	697	TYR	CG-CD1-CE1	-5.04	117.27	121.30
1	A	480	VAL	CA-CB-CG2	-5.04	103.34	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	491	GLU	N-CA-CB	-5.04	101.53	110.60
1	l	372	GLU	OE1-CD-OE2	-5.04	117.25	123.30
1	7	581	GLN	N-CA-CB	5.04	119.67	110.60
1	v	332	GLU	CA-CB-CG	5.04	124.48	113.40
1	X	429	PHE	CB-CG-CD1	-5.04	117.27	120.80
1	j	94	GLU	OE1-CD-OE2	-5.04	117.26	123.30
1	p	461	TRP	CZ3-CH2-CZ2	-5.04	115.56	121.60
1	q	451	TYR	CD1-CE1-CZ	5.04	124.33	119.80
1	w	170	ARG	NE-CZ-NH1	5.04	122.82	120.30
1	A	624	THR	CA-CB-CG2	-5.04	105.35	112.40
1	B	320	LYS	N-CA-CB	-5.04	101.54	110.60
1	I	349	PHE	CB-CG-CD1	5.04	124.33	120.80
1	P	179	GLU	OE1-CD-OE2	-5.04	117.26	123.30
1	P	421	PHE	CB-CG-CD1	5.04	124.33	120.80
1	R	593	ARG	O-C-N	-5.04	114.64	122.70
1	U	248	LEU	CB-CG-CD2	-5.04	102.44	111.00
1	l	274	GLU	O-C-N	-5.03	114.65	122.70
1	g	339	LEU	CB-CG-CD2	5.03	119.56	111.00
1	i	105	ASP	O-C-N	-5.03	114.64	122.70
1	l	478	GLU	OE1-CD-OE2	-5.03	117.26	123.30
1	m	208	LEU	CB-CA-C	-5.03	100.64	110.20
1	G	115	ASP	CB-CG-OD2	-5.03	113.77	118.30
1	P	697	TYR	CG-CD2-CE2	5.03	125.33	121.30
1	Z	239	ARG	C-N-CA	5.03	134.28	121.70
1	2	186	VAL	CG1-CB-CG2	-5.03	102.85	110.90
1	0	173	TYR	O-C-N	-5.03	114.65	122.70
1	b	677	TRP	CH2-CZ2-CE2	5.03	122.43	117.40
1	O	225	ASP	CB-CG-OD1	5.03	122.83	118.30
1	P	381	HIS	O-C-N	-5.03	114.65	122.70
1	S	281	GLU	OE1-CD-OE2	-5.03	117.26	123.30
1	2	472	VAL	CA-CB-CG2	-5.03	103.36	110.90
1	j	709	PHE	CB-CG-CD1	-5.03	117.28	120.80
1	r	373	ARG	NE-CZ-NH1	5.03	122.81	120.30
1	B	230	THR	N-CA-CB	5.03	119.86	110.30
1	5	420	PHE	CB-CG-CD2	-5.03	117.28	120.80
1	j	206	HIS	CA-CB-CG	5.03	122.15	113.60
1	o	141	VAL	CA-CB-CG2	-5.03	103.36	110.90
1	q	507	GLN	CB-CA-C	-5.03	100.34	110.40
1	x	337	LEU	CB-CG-CD1	5.03	119.55	111.00
1	A	362	GLU	OE1-CD-OE2	-5.03	117.27	123.30
1	D	572	PHE	CG-CD1-CE1	-5.03	115.27	120.80
1	F	451	TYR	CB-CG-CD2	-5.03	117.98	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	M	350	PHE	CB-CG-CD2	-5.03	117.28	120.80
1	P	315	THR	O-C-N	-5.03	114.66	122.70
1	0	657	ASN	N-CA-CB	-5.03	101.55	110.60
1	l	540	GLY	O-C-N	-5.03	114.66	122.70
1	o	577	MET	CB-CA-C	-5.03	100.35	110.40
1	s	553	ILE	CA-C-O	-5.03	109.55	120.10
1	t	281	GLU	O-C-N	-5.03	114.66	122.70
1	v	119	PRO	N-CD-CG	5.03	110.74	103.20
1	A	336	ARG	CB-CA-C	5.03	120.45	110.40
1	A	441	GLU	O-C-N	-5.03	114.66	122.70
1	D	695	ARG	NE-CZ-NH1	5.03	122.81	120.30
1	E	507	GLN	CA-CB-CG	-5.03	102.34	113.40
1	H	390	GLU	OE1-CD-OE2	-5.03	117.27	123.30
1	M	525	GLU	N-CA-C	5.03	124.57	111.00
1	M	651	TYR	CB-CG-CD1	-5.03	117.98	121.00
1	7	263	VAL	CA-CB-CG2	-5.02	103.36	110.90
1	t	348	THR	CA-CB-OG1	5.02	119.55	109.00
1	J	655	ARG	NH1-CZ-NH2	-5.02	113.87	119.40
1	O	182	ASP	CA-C-N	5.02	131.17	117.10
1	c	667	GLN	O-C-N	-5.02	114.67	122.70
1	k	97	VAL	CA-CB-CG1	-5.02	103.36	110.90
1	k	518	SER	N-CA-CB	5.02	118.03	110.50
1	n	689	ARG	NE-CZ-NH1	5.02	122.81	120.30
1	r	288	ARG	NH1-CZ-NH2	-5.02	113.88	119.40
1	O	328	ARG	NH1-CZ-NH2	-5.02	113.88	119.40
1	Q	240	ASP	CB-CG-OD2	-5.02	113.78	118.30
1	W	314	LEU	CB-CA-C	5.02	119.74	110.20
1	3	316	TYR	CB-CG-CD1	-5.02	117.99	121.00
1	a	117	ALA	N-CA-CB	-5.02	103.07	110.10
1	a	341	GLU	OE1-CD-OE2	5.02	129.32	123.30
1	X	126	ASP	CB-CG-OD2	5.02	122.82	118.30
1	5	301	ARG	CA-CB-CG	5.02	124.44	113.40
1	h	162	GLN	O-C-N	-5.02	111.56	121.10
1	s	458	PHE	CB-CG-CD1	5.02	124.31	120.80
1	z	283	ASP	CB-CG-OD1	5.02	122.82	118.30
1	F	699	LEU	CB-CA-C	5.02	119.74	110.20
1	L	562	ALA	O-C-N	-5.02	114.67	122.70
1	O	294	THR	N-CA-CB	5.02	119.83	110.30
1	P	460	ASN	N-CA-CB	5.02	119.64	110.60
1	P	567	MET	CG-SD-CE	-5.02	92.17	100.20
1	U	373	ARG	NE-CZ-NH1	5.02	122.81	120.30
1	9	195	ASN	CB-CG-OD1	5.02	131.63	121.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	e	230	THR	OG1-CB-CG2	-5.02	98.46	110.00
1	e	352	THR	CA-CB-CG2	-5.02	105.38	112.40
1	x	682	GLN	C-N-CA	5.02	134.24	121.70
1	F	124	ILE	N-CA-C	-5.02	97.45	111.00
1	S	405	ARG	NE-CZ-NH1	5.02	122.81	120.30
1	3	459	LYS	CB-CA-C	5.02	120.43	110.40
1	5	327	CYS	O-C-N	-5.02	114.67	122.70
1	8	451	TYR	CB-CG-CD1	5.02	124.01	121.00
1	9	297	ASP	CB-CG-OD1	5.02	122.81	118.30
1	s	225	ASP	CB-CG-OD2	-5.02	113.79	118.30
1	v	145	ARG	NE-CZ-NH1	-5.02	117.79	120.30
1	4	428	MET	CG-SD-CE	5.01	108.22	100.20
1	g	152	ARG	NE-CZ-NH2	5.01	122.81	120.30
1	i	98	ARG	N-CA-CB	-5.01	101.57	110.60
1	u	93	TYR	CB-CG-CD1	5.01	124.01	121.00
1	v	238	PRO	O-C-N	-5.01	114.68	122.70
1	v	682	GLN	C-N-CA	5.01	134.24	121.70
1	x	239	ARG	CA-C-N	5.01	128.23	117.20
1	L	314	LEU	CB-CG-CD2	5.01	119.52	111.00
1	O	378	LEU	CA-CB-CG	5.01	126.83	115.30
1	R	262	VAL	CB-CA-C	5.01	120.93	111.40
1	d	215	SER	CB-CA-C	-5.01	100.58	110.10
1	i	277	SER	O-C-N	-5.01	114.68	122.70
1	i	505	VAL	O-C-N	-5.01	114.68	122.70
1	i	539	PHE	CB-CG-CD2	-5.01	117.29	120.80
1	E	175	ASN	O-C-N	-5.01	114.68	122.70
1	K	145	ARG	C-N-CA	5.01	132.83	122.30
1	T	309	ASN	CA-CB-CG	5.01	124.43	113.40
1	Z	498	TYR	CG-CD1-CE1	-5.01	117.29	121.30
1	4	699	LEU	O-C-N	-5.01	114.68	122.70
1	b	115	ASP	CB-CA-C	5.01	120.42	110.40
1	d	449	ARG	NE-CZ-NH2	5.01	122.81	120.30
1	j	277	SER	O-C-N	-5.01	114.68	122.70
1	n	198	ALA	N-CA-CB	-5.01	103.08	110.10
1	q	446	ASN	N-CA-CB	5.01	119.62	110.60
1	G	637	THR	OG1-CB-CG2	-5.01	98.47	110.00
1	L	624	THR	CA-CB-CG2	-5.01	105.38	112.40
1	S	312	ARG	CD-NE-CZ	-5.01	116.58	123.60
1	Y	505	VAL	CA-CB-CG2	-5.01	103.38	110.90
1	Z	269	ASP	CB-CG-OD2	5.01	122.81	118.30
1	Z	357	ARG	NH1-CZ-NH2	5.01	124.91	119.40
1	j	93	TYR	CD1-CE1-CZ	5.01	124.31	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	o	633	TYR	CD1-CE1-CZ	-5.01	115.29	119.80
1	r	126	ASP	CB-CG-OD2	5.01	122.81	118.30
1	t	328	ARG	CG-CD-NE	-5.01	101.28	111.80
1	x	428	MET	CA-CB-CG	5.01	121.81	113.30
1	z	633	TYR	CG-CD2-CE2	5.01	125.31	121.30
1	B	649	ILE	O-C-N	-5.01	114.68	122.70
1	E	365	ALA	N-CA-CB	5.01	117.11	110.10
1	E	695	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
1	P	301	ARG	NE-CZ-NH2	-5.01	117.80	120.30
1	S	238	PRO	O-C-N	-5.01	114.69	122.70
1	4	255	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
1	8	217	GLU	CG-CD-OE2	-5.01	108.28	118.30
1	a	210	SER	N-CA-C	-5.01	97.48	111.00
1	p	349	PHE	CB-CG-CD2	5.01	124.31	120.80
1	A	503	ILE	CA-C-N	5.01	128.22	117.20
1	B	297	ASP	CB-CG-OD2	-5.01	113.79	118.30
1	T	123	VAL	CA-CB-CG1	5.01	118.41	110.90
1	i	498	TYR	CZ-CE2-CD2	5.01	124.31	119.80
1	s	542	PHE	O-C-N	-5.01	114.69	122.70
1	I	578	VAL	CA-CB-CG2	-5.01	103.39	110.90
1	L	350	PHE	CB-CG-CD1	5.01	124.31	120.80
1	O	371	ALA	CB-CA-C	-5.01	102.59	110.10
1	r	297	ASP	O-C-N	-5.00	114.69	122.70
1	u	461	TRP	CE2-CD2-CG	-5.00	103.30	107.30
1	I	150	VAL	C-N-CA	5.00	134.21	121.70
1	S	129	SER	CB-CA-C	-5.00	100.59	110.10
1	Z	122	ALA	CB-CA-C	5.00	117.61	110.10
1	1	349	PHE	N-CA-CB	-5.00	101.59	110.60
1	2	569	GLN	CA-C-O	5.00	130.61	120.10
1	a	237	GLN	N-CA-CB	5.00	119.61	110.60
1	h	496	VAL	CA-CB-CG2	5.00	118.41	110.90
1	n	356	PHE	CB-CG-CD1	5.00	124.30	120.80
1	y	697	TYR	CG-CD2-CE2	-5.00	117.30	121.30
1	J	145	ARG	NH1-CZ-NH2	-5.00	113.90	119.40
1	J	445	GLU	OE1-CD-OE2	-5.00	117.30	123.30
1	O	139	SER	N-CA-CB	5.00	118.00	110.50
1	O	206	HIS	CA-CB-CG	5.00	122.11	113.60
1	4	102	ASP	CB-CG-OD2	-5.00	113.80	118.30
1	8	371	ALA	CB-CA-C	5.00	117.60	110.10
1	8	623	PHE	CB-CG-CD2	5.00	124.30	120.80
1	d	214	THR	CA-CB-OG1	5.00	119.50	109.00
1	i	634	PHE	CB-CG-CD1	5.00	124.30	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	o	110	LEU	CB-CG-CD2	5.00	119.50	111.00
1	p	150	VAL	O-C-N	-5.00	114.70	122.70
1	s	692	LEU	O-C-N	-5.00	114.70	122.70
1	w	409	ALA	N-CA-CB	5.00	117.10	110.10
1	I	529	GLN	CA-CB-CG	5.00	124.41	113.40
1	J	380	MET	CG-SD-CE	-5.00	92.20	100.20
1	Q	316	TYR	CG-CD2-CE2	-5.00	117.30	121.30

There are no chirality outliers.

All (1091) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	0	170	ARG	Sidechain
1	0	239	ARG	Sidechain
1	0	255	ARG	Sidechain
1	0	369	ARG	Sidechain
1	0	373	ARG	Sidechain
1	0	488	ARG	Sidechain
1	0	508	TYR	Sidechain
1	0	690	ARG	Sidechain
1	0	98	ARG	Sidechain
1	1	191	HIS	Sidechain
1	1	255	ARG	Sidechain
1	1	301	ARG	Sidechain
1	1	312	ARG	Sidechain
1	1	322	TYR	Sidechain
1	1	373	ARG	Sidechain
1	1	483	TYR	Sidechain
1	1	697	TYR	Sidechain
1	1	703	ARG	Sidechain
1	1	98	ARG	Sidechain
1	2	152	ARG	Sidechain
1	2	202	ARG	Sidechain
1	2	252	TYR	Sidechain
1	2	301	ARG	Sidechain
1	2	316	TYR	Sidechain
1	2	321	GLY	Peptide
1	2	328	ARG	Sidechain
1	2	336	ARG	Sidechain
1	2	355	TYR	Sidechain
1	2	397	HIS	Sidechain
1	2	406	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	2	444	ARG	Sidechain
1	2	455	ARG	Sidechain
1	2	487	TYR	Sidechain
1	2	495	PHE	Sidechain
1	2	573	ARG	Sidechain
1	2	634	PHE	Sidechain
1	2	655	ARG	Sidechain
1	2	674	ARG	Sidechain
1	2	690	ARG	Sidechain
1	2	697	TYR	Sidechain
1	2	98	ARG	Sidechain
1	3	105	ASP	Mainchain
1	3	173	TYR	Sidechain
1	3	202	ARG	Sidechain
1	3	252	TYR	Sidechain
1	3	316	TYR	Peptide
1	3	328	ARG	Sidechain
1	3	336	ARG	Sidechain
1	3	349	PHE	Sidechain
1	3	357	ARG	Sidechain
1	3	394	ARG	Sidechain
1	3	417	ASP	Sidechain
1	3	449	ARG	Sidechain
1	3	498	TYR	Sidechain
1	3	572	PHE	Sidechain
1	3	630	LEU	Mainchain
1	3	651	TYR	Sidechain
1	3	674	ARG	Sidechain
1	3	675	TYR	Sidechain
1	3	689	ARG	Sidechain
1	3	695	ARG	Sidechain
1	3	93	TYR	Sidechain
1	3	98	ARG	Sidechain
1	4	108	ARG	Sidechain
1	4	170	ARG	Sidechain
1	4	312	ARG	Sidechain
1	4	336	ARG	Sidechain
1	4	373	ARG	Sidechain
1	4	405	ARG	Sidechain
1	4	455	ARG	Sidechain
1	4	477	HIS	Sidechain
1	4	483	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	4	487	TYR	Sidechain
1	4	498	TYR	Sidechain
1	4	593	ARG	Sidechain
1	4	640	ARG	Sidechain
1	4	93	TYR	Sidechain
1	5	170	ARG	Sidechain
1	5	206	HIS	Sidechain
1	5	231	ARG	Sidechain
1	5	237	GLN	Peptide
1	5	252	TYR	Sidechain
1	5	312	ARG	Sidechain
1	5	316	TYR	Peptide
1	5	357	ARG	Sidechain
1	5	369	ARG	Sidechain
1	5	394	ARG	Sidechain
1	5	487	TYR	Sidechain
1	5	498	TYR	Sidechain
1	5	508	TYR	Sidechain
1	5	539	PHE	Sidechain
1	5	695	ARG	Sidechain
1	5	698	ARG	Sidechain
1	5	98	ARG	Sidechain
1	6	316	TYR	Peptide
1	6	328	ARG	Sidechain
1	6	397	HIS	Sidechain
1	6	429	PHE	Sidechain
1	6	455	ARG	Sidechain
1	6	483	TYR	Sidechain
1	6	495	PHE	Sidechain
1	6	585	TYR	Sidechain
1	6	698	ARG	Sidechain
1	6	703	ARG	Sidechain
1	6	98	ARG	Sidechain
1	7	145	ARG	Sidechain
1	7	152	ARG	Sidechain
1	7	231	ARG	Sidechain
1	7	255	ARG	Sidechain
1	7	316	TYR	Sidechain
1	7	355	TYR	Sidechain
1	7	369	ARG	Sidechain
1	7	405	ARG	Sidechain
1	7	406	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	7	498	TYR	Sidechain
1	7	622	SER	Peptide
1	7	623	PHE	Sidechain
1	7	651	TYR	Sidechain
1	7	695	ARG	Sidechain
1	7	98	ARG	Sidechain
1	8	108	ARG	Sidechain
1	8	202	ARG	Sidechain
1	8	231	ARG	Sidechain
1	8	288	ARG	Sidechain
1	8	301	ARG	Sidechain
1	8	316	TYR	Sidechain
1	8	322	TYR	Sidechain
1	8	336	ARG	Sidechain
1	8	406	ARG	Sidechain
1	8	451	TYR	Sidechain
1	8	455	ARG	Sidechain
1	8	477	HIS	Sidechain
1	8	483	TYR	Sidechain
1	8	498	TYR	Sidechain
1	8	573	ARG	Sidechain
1	8	634	PHE	Sidechain
1	8	690	ARG	Sidechain
1	9	108	ARG	Sidechain
1	9	152	ARG	Sidechain
1	9	288	ARG	Sidechain
1	9	328	ARG	Sidechain
1	9	336	ARG	Sidechain
1	9	406	ARG	Sidechain
1	9	444	ARG	Sidechain
1	9	449	ARG	Sidechain
1	9	451	TYR	Sidechain
1	9	455	ARG	Sidechain
1	9	477	HIS	Sidechain
1	9	487	TYR	Sidechain
1	9	488	ARG	Sidechain
1	9	579	PHE	Sidechain
1	9	585	TYR	Sidechain
1	9	593	ARG	Sidechain
1	9	633	TYR	Sidechain
1	9	697	TYR	Sidechain
1	9	98	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	A	130	GLY	Peptide
1	A	170	ARG	Sidechain
1	A	173	TYR	Sidechain
1	A	218	VAL	Peptide
1	A	231	ARG	Sidechain
1	A	301	ARG	Sidechain
1	A	316	TYR	Sidechain
1	A	355	TYR	Sidechain
1	A	369	ARG	Sidechain
1	A	405	ARG	Sidechain
1	A	483	TYR	Sidechain
1	A	488	ARG	Sidechain
1	A	494	GLY	Peptide
1	A	498	TYR	Sidechain
1	A	501	PHE	Sidechain
1	A	506	HIS	Sidechain
1	A	629	HIS	Sidechain
1	A	633	TYR	Sidechain
1	A	640	ARG	Sidechain
1	A	651	TYR	Sidechain
1	A	675	TYR	Sidechain
1	A	690	ARG	Sidechain
1	A	98	ARG	Sidechain
1	B	152	ARG	Sidechain
1	B	153	CYS	Peptide
1	B	231	ARG	Sidechain
1	B	336	ARG	Sidechain
1	B	356	PHE	Sidechain
1	B	365	ALA	Mainchain
1	B	405	ARG	Sidechain
1	B	449	ARG	Sidechain
1	B	451	TYR	Sidechain
1	B	495	PHE	Sidechain
1	B	634	PHE	Sidechain
1	B	640	ARG	Sidechain
1	B	651	TYR	Sidechain
1	B	674	ARG	Sidechain
1	B	695	ARG	Sidechain
1	B	93	TYR	Sidechain
1	B	98	ARG	Sidechain
1	C	108	ARG	Sidechain
1	C	145	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	C	152	ARG	Sidechain
1	C	170	ARG	Sidechain
1	C	231	ARG	Sidechain
1	C	252	TYR	Sidechain
1	C	397	HIS	Sidechain
1	C	444	ARG	Peptide,Sidechain
1	C	483	TYR	Sidechain
1	C	488	ARG	Sidechain
1	C	508	TYR	Sidechain
1	C	572	PHE	Sidechain
1	C	573	ARG	Sidechain
1	C	640	ARG	Sidechain
1	C	697	TYR	Sidechain
1	C	98	ARG	Sidechain
1	D	108	ARG	Sidechain
1	D	190	ILE	Mainchain
1	D	231	ARG	Sidechain
1	D	288	ARG	Sidechain
1	D	336	ARG	Sidechain
1	D	355	TYR	Sidechain
1	D	394	ARG	Sidechain
1	D	405	ARG	Sidechain
1	D	444	ARG	Sidechain
1	D	449	ARG	Sidechain
1	D	487	TYR	Sidechain
1	D	495	PHE	Sidechain
1	D	597	PHE	Sidechain
1	D	629	HIS	Sidechain
1	D	651	TYR	Sidechain
1	D	697	TYR	Sidechain
1	D	98	ARG	Sidechain
1	E	145	ARG	Sidechain
1	E	170	ARG	Sidechain
1	E	202	ARG	Sidechain
1	E	206	HIS	Sidechain
1	E	328	ARG	Sidechain
1	E	336	ARG	Sidechain
1	E	356	PHE	Sidechain
1	E	373	ARG	Sidechain
1	E	483	TYR	Sidechain
1	E	494	GLY	Peptide
1	E	495	PHE	Sidechain

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Mol	Chain	Res	Type	Group
1	E	573	ARG	Sidechain
1	E	633	TYR	Sidechain
1	E	675	TYR	Sidechain
1	E	690	ARG	Sidechain
1	E	695	ARG	Sidechain
1	E	698	ARG	Sidechain
1	E	704	HIS	Sidechain
1	F	170	ARG	Sidechain
1	F	173	TYR	Sidechain
1	F	202	ARG	Sidechain
1	F	218	VAL	Peptide
1	F	231	ARG	Sidechain
1	F	252	TYR	Sidechain
1	F	337	LEU	Peptide
1	F	353	HIS	Sidechain
1	F	355	TYR	Sidechain
1	F	357	ARG	Sidechain
1	F	369	ARG	Sidechain
1	F	405	ARG	Sidechain
1	F	406	ARG	Sidechain
1	F	444	ARG	Sidechain
1	F	449	ARG	Sidechain
1	F	487	TYR	Sidechain
1	F	498	TYR	Sidechain
1	F	508	TYR	Sidechain
1	F	539	PHE	Sidechain
1	F	572	PHE	Sidechain
1	F	640	ARG	Sidechain
1	F	651	TYR	Sidechain
1	F	690	ARG	Sidechain
1	F	695	ARG	Sidechain
1	F	698	ARG	Sidechain
1	F	709	PHE	Sidechain
1	F	98	ARG	Sidechain
1	G	174	ARG	Sidechain
1	G	231	ARG	Sidechain
1	G	252	TYR	Sidechain
1	G	283	ASP	Peptide
1	G	288	ARG	Sidechain
1	G	301	ARG	Sidechain
1	G	312	ARG	Sidechain
1	G	322	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	G	336	ARG	Sidechain
1	G	355	TYR	Sidechain
1	G	373	ARG	Sidechain
1	G	406	ARG	Sidechain
1	G	483	TYR	Sidechain
1	G	487	TYR	Sidechain
1	G	488	ARG	Sidechain
1	G	498	TYR	Sidechain
1	G	690	ARG	Sidechain
1	G	697	TYR	Sidechain
1	G	703	ARG	Sidechain
1	H	152	ARG	Sidechain
1	H	153	CYS	Peptide
1	H	173	TYR	Sidechain
1	H	255	ARG	Sidechain
1	H	328	ARG	Sidechain
1	H	356	PHE	Sidechain
1	H	394	ARG	Sidechain
1	H	406	ARG	Sidechain
1	H	429	PHE	Sidechain
1	H	444	ARG	Sidechain
1	H	455	ARG	Sidechain
1	H	483	TYR	Sidechain
1	H	488	ARG	Sidechain
1	H	573	ARG	Sidechain
1	H	633	TYR	Sidechain
1	H	640	ARG	Sidechain
1	H	674	ARG	Sidechain
1	H	675	TYR	Sidechain
1	H	698	ARG	Sidechain
1	H	93	TYR	Sidechain
1	I	108	ARG	Sidechain
1	I	170	ARG	Sidechain
1	I	301	ARG	Sidechain
1	I	316	TYR	Sidechain
1	I	336	ARG	Sidechain
1	I	353	HIS	Sidechain
1	I	355	TYR	Sidechain
1	I	443	VAL	Peptide
1	I	444	ARG	Sidechain
1	I	455	ARG	Sidechain
1	I	498	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	I	573	ARG	Sidechain
1	I	579	PHE	Sidechain
1	I	633	TYR	Sidechain
1	I	651	TYR	Sidechain
1	I	674	ARG	Sidechain
1	I	675	TYR	Sidechain
1	I	698	ARG	Sidechain
1	J	108	ARG	Sidechain
1	J	231	ARG	Sidechain
1	J	255	ARG	Sidechain
1	J	288	ARG	Sidechain
1	J	301	ARG	Sidechain
1	J	397	HIS	Sidechain
1	J	414	GLN	Peptide
1	J	439	GLY	Peptide
1	J	449	ARG	Sidechain
1	J	451	TYR	Sidechain
1	J	593	ARG	Sidechain
1	J	597	PHE	Sidechain
1	J	633	TYR	Sidechain
1	J	698	ARG	Sidechain
1	J	98	ARG	Sidechain
1	K	108	ARG	Sidechain
1	K	152	ARG	Sidechain
1	K	170	ARG	Sidechain
1	K	173	TYR	Sidechain
1	K	174	ARG	Sidechain
1	K	206	HIS	Sidechain
1	K	252	TYR	Sidechain
1	K	322	TYR	Sidechain
1	K	355	TYR	Sidechain
1	K	369	ARG	Sidechain
1	K	373	ARG	Sidechain
1	K	538	HIS	Sidechain
1	K	582	ASP	Sidechain
1	K	593	ARG	Sidechain
1	K	633	TYR	Sidechain
1	K	674	ARG	Sidechain
1	K	690	ARG	Sidechain
1	K	695	ARG	Sidechain
1	L	152	ARG	Sidechain
1	L	239	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	L	252	TYR	Sidechain
1	L	255	ARG	Sidechain
1	L	312	ARG	Sidechain
1	L	322	TYR	Sidechain
1	L	336	ARG	Sidechain
1	L	355	TYR	Sidechain
1	L	357	ARG	Sidechain
1	L	429	PHE	Sidechain
1	L	483	TYR	Sidechain
1	L	498	TYR	Sidechain
1	L	542	PHE	Sidechain
1	L	543	PHE	Sidechain
1	L	647	PHE	Sidechain
1	L	651	TYR	Sidechain
1	L	655	ARG	Sidechain
1	L	689	ARG	Sidechain
1	L	690	ARG	Sidechain
1	L	695	ARG	Sidechain
1	L	697	TYR	Sidechain
1	L	704	HIS	Sidechain
1	L	98	ARG	Sidechain
1	M	202	ARG	Sidechain
1	M	231	ARG	Sidechain
1	M	255	ARG	Sidechain
1	M	322	TYR	Sidechain
1	M	336	ARG	Sidechain
1	M	449	ARG	Sidechain
1	M	451	TYR	Sidechain
1	M	487	TYR	Sidechain
1	M	488	ARG	Sidechain
1	M	542	PHE	Sidechain
1	M	597	PHE	Sidechain
1	M	674	ARG	Sidechain
1	M	698	ARG	Sidechain
1	N	111	GLY	Peptide
1	N	174	ARG	Sidechain
1	N	202	ARG	Sidechain
1	N	231	ARG	Sidechain
1	N	322	TYR	Sidechain
1	N	328	ARG	Sidechain
1	N	349	PHE	Sidechain
1	N	350	PHE	Sidechain

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Mol	Chain	Res	Type	Group
1	N	355	TYR	Sidechain
1	N	357	ARG	Sidechain
1	N	449	ARG	Sidechain
1	N	483	TYR	Sidechain
1	N	498	TYR	Sidechain
1	N	508	TYR	Sidechain
1	N	640	ARG	Sidechain
1	N	647	PHE	Sidechain
1	N	674	ARG	Sidechain
1	N	697	TYR	Sidechain
1	N	703	ARG	Sidechain
1	N	94	GLU	Mainchain
1	N	98	ARG	Sidechain
1	O	152	ARG	Sidechain
1	O	173	TYR	Sidechain
1	O	288	ARG	Sidechain
1	O	312	ARG	Sidechain
1	O	328	ARG	Sidechain
1	O	350	PHE	Sidechain
1	O	373	ARG	Sidechain
1	O	487	TYR	Sidechain
1	O	498	TYR	Sidechain
1	O	543	PHE	Sidechain
1	O	573	ARG	Sidechain
1	O	585	TYR	Sidechain
1	O	647	PHE	Sidechain
1	O	697	TYR	Sidechain
1	O	698	ARG	Sidechain
1	O	98	ARG	Sidechain
1	P	152	ARG	Sidechain
1	P	255	ARG	Sidechain
1	P	320	LYS	Mainchain
1	P	328	ARG	Sidechain
1	P	355	TYR	Sidechain
1	P	410	ASP	Peptide
1	P	421	PHE	Sidechain
1	P	444	ARG	Sidechain
1	P	449	ARG	Sidechain
1	P	451	TYR	Sidechain
1	P	487	TYR	Sidechain
1	P	539	PHE	Sidechain
1	P	597	PHE	Sidechain

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Mol	Chain	Res	Type	Group
1	P	633	TYR	Sidechain
1	P	640	ARG	Sidechain
1	P	674	ARG	Sidechain
1	P	695	ARG	Sidechain
1	P	93	TYR	Sidechain
1	P	98	ARG	Sidechain
1	Q	145	ARG	Sidechain
1	Q	152	ARG	Sidechain
1	Q	173	TYR	Sidechain
1	Q	231	ARG	Sidechain
1	Q	316	TYR	Sidechain
1	Q	328	ARG	Sidechain
1	Q	394	ARG	Sidechain
1	Q	397	HIS	Sidechain
1	Q	406	ARG	Sidechain
1	Q	420	PHE	Sidechain
1	Q	458	PHE	Sidechain
1	Q	483	TYR	Sidechain
1	Q	487	TYR	Sidechain
1	Q	492	LEU	Peptide
1	Q	508	TYR	Sidechain
1	Q	651	TYR	Sidechain
1	Q	690	ARG	Sidechain
1	Q	697	TYR	Sidechain
1	Q	98	ARG	Sidechain
1	R	191	HIS	Sidechain
1	R	218	VAL	Peptide
1	R	239	ARG	Sidechain
1	R	255	ARG	Sidechain
1	R	316	TYR	Sidechain
1	R	410	ASP	Peptide
1	R	451	TYR	Sidechain
1	R	458	PHE	Sidechain
1	R	483	TYR	Sidechain
1	R	675	TYR	Sidechain
1	R	697	TYR	Sidechain
1	R	703	ARG	Sidechain
1	R	98	ARG	Sidechain
1	S	202	ARG	Sidechain
1	S	252	TYR	Sidechain
1	S	369	ARG	Sidechain
1	S	397	HIS	Sidechain

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Mol	Chain	Res	Type	Group
1	S	451	TYR	Sidechain
1	S	498	TYR	Sidechain
1	S	542	PHE	Sidechain
1	S	543	PHE	Sidechain
1	S	573	ARG	Sidechain
1	S	586	SER	Mainchain
1	S	651	TYR	Sidechain
1	S	674	ARG	Sidechain
1	S	690	ARG	Sidechain
1	S	698	ARG	Sidechain
1	S	93	TYR	Sidechain
1	S	98	ARG	Sidechain
1	T	145	ARG	Sidechain
1	T	170	ARG	Sidechain
1	T	202	ARG	Sidechain
1	T	252	TYR	Sidechain
1	T	254	GLN	Peptide
1	T	328	ARG	Sidechain
1	T	336	ARG	Sidechain
1	T	355	TYR	Sidechain
1	T	410	ASP	Peptide
1	T	451	TYR	Sidechain
1	T	508	TYR	Sidechain
1	T	531	PHE	Sidechain
1	T	593	ARG	Sidechain
1	T	698	ARG	Sidechain
1	T	93	TYR	Sidechain
1	T	98	ARG	Sidechain
1	U	152	ARG	Sidechain
1	U	218	VAL	Peptide
1	U	231	ARG	Sidechain
1	U	239	ARG	Peptide
1	U	288	ARG	Sidechain
1	U	301	ARG	Sidechain
1	U	336	ARG	Sidechain
1	U	355	TYR	Sidechain
1	U	381	HIS	Sidechain
1	U	394	ARG	Sidechain
1	U	420	PHE	Sidechain
1	U	421	PHE	Sidechain
1	U	483	TYR	Sidechain
1	U	488	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	U	498	TYR	Sidechain
1	U	501	PHE	Sidechain
1	U	675	TYR	Sidechain
1	V	173	TYR	Sidechain
1	V	206	HIS	Sidechain
1	V	231	ARG	Sidechain
1	V	239	ARG	Sidechain
1	V	312	ARG	Sidechain
1	V	315	THR	Peptide
1	V	350	PHE	Sidechain
1	V	353	HIS	Peptide
1	V	355	TYR	Sidechain
1	V	410	ASP	Peptide
1	V	444	ARG	Sidechain
1	V	449	ARG	Sidechain
1	V	455	ARG	Sidechain
1	V	501	PHE	Sidechain
1	V	531	PHE	Sidechain
1	V	585	TYR	Sidechain
1	V	597	PHE	Sidechain
1	V	633	TYR	Sidechain
1	V	640	ARG	Sidechain
1	V	698	ARG	Sidechain
1	W	173	TYR	Sidechain
1	W	316	TYR	Sidechain
1	W	355	TYR	Sidechain
1	W	356	PHE	Sidechain
1	W	373	ARG	Sidechain
1	W	394	ARG	Sidechain
1	W	498	TYR	Sidechain
1	W	506	HIS	Sidechain
1	W	508	TYR	Sidechain
1	W	539	PHE	Sidechain
1	W	542	PHE	Peptide
1	W	634	PHE	Sidechain
1	W	651	TYR	Sidechain
1	W	655	ARG	Sidechain
1	W	674	ARG	Sidechain
1	W	675	TYR	Sidechain
1	W	98	ARG	Sidechain
1	X	152	ARG	Sidechain
1	X	170	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	X	174	ARG	Sidechain
1	X	231	ARG	Sidechain
1	X	252	TYR	Sidechain
1	X	322	TYR	Sidechain
1	X	330	GLN	Peptide
1	X	336	ARG	Sidechain
1	X	353	HIS	Sidechain
1	X	357	ARG	Sidechain
1	X	406	ARG	Sidechain
1	X	444	ARG	Sidechain
1	X	455	ARG	Sidechain
1	X	488	ARG	Sidechain
1	X	539	PHE	Sidechain
1	X	651	TYR	Sidechain
1	X	695	ARG	Sidechain
1	X	709	PHE	Sidechain
1	X	93	TYR	Sidechain
1	X	98	ARG	Sidechain
1	Y	170	ARG	Sidechain
1	Y	173	TYR	Sidechain
1	Y	231	ARG	Sidechain
1	Y	280	HIS	Sidechain
1	Y	312	ARG	Sidechain
1	Y	355	TYR	Sidechain
1	Y	366	THR	Peptide
1	Y	449	ARG	Sidechain
1	Y	483	TYR	Sidechain
1	Y	633	TYR	Sidechain
1	Y	651	TYR	Sidechain
1	Y	689	ARG	Sidechain
1	Z	145	ARG	Sidechain
1	Z	170	ARG	Sidechain
1	Z	231	ARG	Sidechain
1	Z	239	ARG	Sidechain
1	Z	252	TYR	Sidechain
1	Z	288	ARG	Sidechain
1	Z	301	ARG	Sidechain
1	Z	336	ARG	Sidechain
1	Z	355	TYR	Sidechain
1	Z	363	GLY	Peptide
1	Z	369	ARG	Sidechain
1	Z	397	HIS	Sidechain

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Mol	Chain	Res	Type	Group
1	Z	477	HIS	Sidechain
1	Z	488	ARG	Sidechain
1	Z	508	TYR	Sidechain
1	Z	573	ARG	Sidechain
1	Z	623	PHE	Sidechain
1	Z	633	TYR	Sidechain
1	Z	640	ARG	Sidechain
1	a	152	ARG	Sidechain
1	a	202	ARG	Sidechain
1	a	206	HIS	Sidechain
1	a	231	ARG	Sidechain
1	a	312	ARG	Sidechain
1	a	531	PHE	Sidechain
1	a	573	ARG	Sidechain
1	a	640	ARG	Sidechain
1	a	651	TYR	Sidechain
1	a	675	TYR	Sidechain
1	a	690	ARG	Sidechain
1	a	695	ARG	Sidechain
1	a	93	TYR	Sidechain
1	a	98	ARG	Sidechain
1	b	202	ARG	Sidechain
1	b	231	ARG	Sidechain
1	b	252	TYR	Sidechain
1	b	316	TYR	Sidechain
1	b	350	PHE	Sidechain
1	b	373	ARG	Sidechain
1	b	440	GLU	Peptide
1	b	455	ARG	Peptide
1	b	487	TYR	Sidechain
1	b	488	ARG	Sidechain
1	b	506	HIS	Sidechain
1	b	531	PHE	Sidechain
1	b	573	ARG	Sidechain
1	b	674	ARG	Sidechain
1	b	675	TYR	Sidechain
1	b	689	ARG	Sidechain
1	b	698	ARG	Sidechain
1	b	709	PHE	Sidechain
1	b	98	ARG	Sidechain
1	c	145	ARG	Sidechain
1	c	152	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	c	170	ARG	Sidechain
1	c	218	VAL	Peptide
1	c	231	ARG	Sidechain
1	c	252	TYR	Sidechain
1	c	328	ARG	Sidechain
1	c	353	HIS	Peptide
1	c	406	ARG	Sidechain
1	c	449	ARG	Sidechain
1	c	488	ARG	Sidechain
1	c	508	TYR	Sidechain
1	c	674	ARG	Sidechain
1	c	697	TYR	Sidechain
1	c	698	ARG	Sidechain
1	c	98	ARG	Sidechain
1	d	123	VAL	Mainchain
1	d	170	ARG	Sidechain
1	d	173	TYR	Sidechain
1	d	202	ARG	Sidechain
1	d	231	ARG	Sidechain
1	d	255	ARG	Sidechain
1	d	312	ARG	Sidechain
1	d	357	ARG	Sidechain
1	d	455	ARG	Sidechain
1	d	483	TYR	Sidechain
1	d	487	TYR	Sidechain
1	d	539	PHE	Sidechain
1	d	572	PHE	Sidechain
1	d	593	ARG	Sidechain
1	d	640	ARG	Sidechain
1	d	651	TYR	Sidechain
1	d	652	PHE	Sidechain
1	d	674	ARG	Sidechain
1	d	697	TYR	Sidechain
1	d	698	ARG	Sidechain
1	d	98	ARG	Sidechain
1	e	145	ARG	Sidechain
1	e	152	ARG	Sidechain
1	e	173	TYR	Sidechain
1	e	301	ARG	Sidechain
1	e	322	TYR	Sidechain
1	e	336	ARG	Sidechain
1	e	357	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	e	406	ARG	Sidechain
1	e	451	TYR	Sidechain
1	e	488	ARG	Sidechain
1	e	508	TYR	Sidechain
1	e	540	GLY	Mainchain
1	e	542	PHE	Sidechain
1	e	674	ARG	Sidechain
1	e	690	ARG	Sidechain
1	e	697	TYR	Sidechain
1	e	703	ARG	Sidechain
1	e	709	PHE	Sidechain
1	f	152	ARG	Sidechain
1	f	255	ARG	Sidechain
1	f	288	ARG	Sidechain
1	f	301	ARG	Sidechain
1	f	322	TYR	Sidechain
1	f	353	HIS	Peptide
1	f	405	ARG	Sidechain
1	f	449	ARG	Sidechain
1	f	487	TYR	Sidechain
1	f	506	HIS	Sidechain
1	f	508	TYR	Sidechain
1	f	531	PHE	Sidechain
1	f	579	PHE	Peptide
1	f	640	ARG	Sidechain
1	f	651	TYR	Sidechain
1	f	675	TYR	Sidechain
1	f	695	ARG	Sidechain
1	f	698	ARG	Sidechain
1	g	145	ARG	Sidechain
1	g	170	ARG	Sidechain
1	g	280	HIS	Sidechain
1	g	324	ILE	Mainchain
1	g	355	TYR	Sidechain
1	g	369	ARG	Sidechain
1	g	373	ARG	Sidechain
1	g	397	HIS	Sidechain
1	g	488	ARG	Sidechain
1	g	498	TYR	Sidechain
1	g	593	ARG	Sidechain
1	g	633	TYR	Sidechain
1	g	690	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	g	93	TYR	Sidechain
1	h	108	ARG	Sidechain
1	h	231	ARG	Sidechain
1	h	239	ARG	Sidechain
1	h	288	ARG	Sidechain
1	h	301	ARG	Sidechain
1	h	322	TYR	Sidechain
1	h	420	PHE	Sidechain
1	h	483	TYR	Sidechain
1	h	488	ARG	Sidechain
1	h	498	TYR	Sidechain
1	h	501	PHE	Sidechain
1	h	508	TYR	Sidechain
1	h	593	ARG	Sidechain
1	h	647	PHE	Sidechain
1	h	651	TYR	Sidechain
1	h	709	PHE	Sidechain
1	h	93	TYR	Sidechain
1	i	130	GLY	Peptide
1	i	208	LEU	Peptide
1	i	312	ARG	Sidechain
1	i	349	PHE	Sidechain
1	i	394	ARG	Sidechain
1	i	487	TYR	Sidechain
1	i	495	PHE	Sidechain
1	i	514	GLU	Mainchain
1	i	579	PHE	Sidechain
1	i	585	TYR	Sidechain
1	i	640	ARG	Sidechain
1	i	674	ARG	Sidechain
1	i	690	ARG	Sidechain
1	i	697	TYR	Sidechain
1	i	703	ARG	Sidechain
1	j	152	ARG	Sidechain
1	j	170	ARG	Sidechain
1	j	202	ARG	Sidechain
1	j	231	ARG	Sidechain
1	j	237	GLN	Peptide
1	j	239	ARG	Sidechain
1	j	248	LEU	Mainchain
1	j	252	TYR	Sidechain
1	j	288	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	j	316	TYR	Peptide,Sidechain
1	j	350	PHE	Sidechain
1	j	355	TYR	Sidechain
1	j	356	PHE	Sidechain
1	j	357	ARG	Sidechain
1	j	369	ARG	Sidechain
1	j	373	ARG	Sidechain
1	j	405	ARG	Sidechain
1	j	449	ARG	Sidechain
1	j	451	TYR	Sidechain
1	j	455	ARG	Sidechain
1	j	483	TYR	Sidechain
1	j	498	TYR	Sidechain
1	j	633	TYR	Sidechain
1	j	695	ARG	Sidechain
1	j	93	TYR	Sidechain
1	j	98	ARG	Sidechain
1	k	108	ARG	Sidechain
1	k	152	ARG	Sidechain
1	k	174	ARG	Sidechain
1	k	202	ARG	Sidechain
1	k	264	VAL	Peptide
1	k	301	ARG	Sidechain
1	k	336	ARG	Sidechain
1	k	356	PHE	Sidechain
1	k	394	ARG	Sidechain
1	k	405	ARG	Sidechain
1	k	444	ARG	Sidechain
1	k	495	PHE	Sidechain
1	k	572	PHE	Sidechain
1	k	651	TYR	Sidechain
1	k	674	ARG	Sidechain
1	k	675	TYR	Sidechain
1	l	173	TYR	Sidechain
1	l	202	ARG	Sidechain
1	l	231	ARG	Sidechain
1	l	237	GLN	Peptide
1	l	255	ARG	Sidechain
1	l	278	MET	Mainchain
1	l	322	TYR	Sidechain
1	l	355	TYR	Sidechain
1	l	410	ASP	Peptide

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Mol	Chain	Res	Type	Group
1	l	444	ARG	Sidechain
1	l	455	ARG	Sidechain
1	l	634	PHE	Sidechain
1	l	640	ARG	Sidechain
1	l	647	PHE	Sidechain
1	l	651	TYR	Sidechain
1	l	695	ARG	Sidechain
1	l	697	TYR	Sidechain
1	l	98	ARG	Sidechain
1	m	202	ARG	Sidechain
1	m	239	ARG	Peptide
1	m	336	ARG	Sidechain
1	m	353	HIS	Sidechain
1	m	355	TYR	Sidechain
1	m	373	ARG	Sidechain
1	m	406	ARG	Sidechain
1	m	455	ARG	Sidechain
1	m	486	GLN	Peptide
1	m	498	TYR	Sidechain
1	m	501	PHE	Sidechain
1	m	573	ARG	Sidechain
1	m	597	PHE	Sidechain
1	m	633	TYR	Sidechain
1	m	675	TYR	Sidechain
1	m	698	ARG	Sidechain
1	m	93	TYR	Sidechain
1	n	108	ARG	Sidechain
1	n	202	ARG	Sidechain
1	n	208	LEU	Peptide
1	n	231	ARG	Sidechain
1	n	255	ARG	Sidechain
1	n	322	TYR	Sidechain
1	n	336	ARG	Sidechain
1	n	394	ARG	Sidechain
1	n	455	ARG	Sidechain
1	n	488	ARG	Sidechain
1	n	506	HIS	Sidechain
1	n	597	PHE	Sidechain
1	n	634	PHE	Sidechain
1	n	674	ARG	Sidechain
1	n	93	TYR	Sidechain
1	n	98	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	o	108	ARG	Sidechain
1	o	202	ARG	Sidechain
1	o	239	ARG	Sidechain
1	o	301	ARG	Sidechain
1	o	322	TYR	Sidechain
1	o	336	ARG	Sidechain
1	o	355	TYR	Sidechain
1	o	365	ALA	Peptide
1	o	381	HIS	Sidechain
1	o	405	ARG	Sidechain
1	o	538	HIS	Sidechain
1	o	634	PHE	Sidechain
1	o	697	TYR	Sidechain
1	o	703	ARG	Sidechain
1	p	152	ARG	Sidechain
1	p	170	ARG	Sidechain
1	p	218	VAL	Peptide
1	p	231	ARG	Sidechain
1	p	239	ARG	Sidechain
1	p	252	TYR	Sidechain
1	p	322	TYR	Sidechain
1	p	369	ARG	Sidechain
1	p	449	ARG	Sidechain
1	p	483	TYR	Sidechain
1	p	498	TYR	Sidechain
1	p	585	TYR	Sidechain
1	p	629	HIS	Sidechain
1	p	675	TYR	Sidechain
1	p	704	HIS	Sidechain
1	p	93	TYR	Sidechain
1	p	98	ARG	Sidechain
1	q	170	ARG	Sidechain
1	q	218	VAL	Peptide
1	q	231	ARG	Sidechain
1	q	239	ARG	Sidechain
1	q	301	ARG	Sidechain
1	q	322	TYR	Sidechain
1	q	328	ARG	Sidechain
1	q	336	ARG	Sidechain
1	q	394	ARG	Sidechain
1	q	397	HIS	Sidechain
1	q	488	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	q	494	GLY	Peptide
1	q	498	TYR	Sidechain
1	q	508	TYR	Sidechain
1	q	629	HIS	Sidechain
1	q	674	ARG	Sidechain
1	q	690	ARG	Sidechain
1	q	695	ARG	Sidechain
1	q	697	TYR	Sidechain
1	q	698	ARG	Sidechain
1	r	231	ARG	Sidechain
1	r	288	ARG	Sidechain
1	r	349	PHE	Sidechain
1	r	353	HIS	Peptide,Sidechain
1	r	397	HIS	Sidechain
1	r	449	ARG	Sidechain
1	r	487	TYR	Sidechain
1	r	488	ARG	Sidechain
1	r	498	TYR	Sidechain
1	r	508	TYR	Sidechain
1	r	543	PHE	Sidechain
1	r	651	TYR	Sidechain
1	r	689	ARG	Sidechain
1	r	690	ARG	Sidechain
1	r	695	ARG	Sidechain
1	r	98	ARG	Sidechain
1	s	173	TYR	Sidechain
1	s	191	HIS	Sidechain
1	s	301	ARG	Sidechain
1	s	336	ARG	Sidechain
1	s	357	ARG	Sidechain
1	s	406	ARG	Sidechain
1	s	444	ARG	Sidechain
1	s	449	ARG	Sidechain
1	s	477	HIS	Sidechain
1	s	483	TYR	Sidechain
1	s	487	TYR	Sidechain
1	s	488	ARG	Sidechain
1	s	493	LEU	Peptide
1	s	498	TYR	Sidechain
1	s	508	TYR	Sidechain
1	s	585	TYR	Sidechain
1	s	651	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	s	695	ARG	Sidechain
1	s	697	TYR	Sidechain
1	s	98	ARG	Sidechain
1	t	231	ARG	Sidechain
1	t	252	TYR	Sidechain
1	t	255	ARG	Sidechain
1	t	312	ARG	Sidechain
1	t	316	TYR	Peptide,Sidechain
1	t	322	TYR	Sidechain
1	t	369	ARG	Sidechain
1	t	405	ARG	Sidechain
1	t	420	PHE	Sidechain
1	t	449	ARG	Sidechain
1	t	455	ARG	Sidechain
1	t	498	TYR	Sidechain
1	t	674	ARG	Sidechain
1	t	695	ARG	Sidechain
1	t	93	TYR	Sidechain
1	t	98	ARG	Sidechain
1	u	170	ARG	Sidechain
1	u	173	TYR	Sidechain
1	u	226	LEU	Peptide
1	u	239	ARG	Peptide
1	u	312	ARG	Sidechain
1	u	328	ARG	Sidechain
1	u	356	PHE	Sidechain
1	u	449	ARG	Sidechain
1	u	487	TYR	Sidechain
1	u	498	TYR	Sidechain
1	u	539	PHE	Sidechain
1	u	623	PHE	Sidechain
1	u	629	HIS	Sidechain
1	u	634	PHE	Sidechain
1	u	655	ARG	Sidechain
1	u	98	ARG	Sidechain
1	v	108	ARG	Sidechain
1	v	152	ARG	Sidechain
1	v	170	ARG	Sidechain
1	v	202	ARG	Sidechain
1	v	231	ARG	Sidechain
1	v	237	GLN	Peptide
1	v	239	ARG	Sidechain

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Mol	Chain	Res	Type	Group
1	v	252	TYR	Sidechain
1	v	280	HIS	Sidechain
1	v	373	ARG	Sidechain
1	v	449	ARG	Sidechain
1	v	451	TYR	Sidechain
1	v	483	TYR	Sidechain
1	v	572	PHE	Peptide
1	v	579	PHE	Peptide
1	v	585	TYR	Sidechain
1	v	633	TYR	Sidechain
1	v	640	ARG	Sidechain
1	v	675	TYR	Sidechain
1	v	703	ARG	Sidechain
1	v	98	ARG	Sidechain
1	w	108	ARG	Sidechain
1	w	109	ALA	Peptide
1	w	125	GLY	Peptide
1	w	255	ARG	Sidechain
1	w	312	ARG	Sidechain
1	w	357	ARG	Sidechain
1	w	405	ARG	Sidechain
1	w	449	ARG	Sidechain
1	w	506	HIS	Sidechain
1	w	508	TYR	Sidechain
1	w	640	ARG	Sidechain
1	w	674	ARG	Sidechain
1	x	145	ARG	Sidechain
1	x	170	ARG	Sidechain
1	x	231	ARG	Sidechain
1	x	252	TYR	Sidechain
1	x	288	ARG	Sidechain
1	x	336	ARG	Sidechain
1	x	373	ARG	Sidechain
1	x	394	ARG	Sidechain
1	x	405	ARG	Sidechain
1	x	421	PHE	Sidechain
1	x	444	ARG	Sidechain
1	x	455	ARG	Sidechain
1	x	483	TYR	Sidechain
1	x	487	TYR	Sidechain
1	x	488	ARG	Sidechain
1	x	494	GLY	Peptide

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Mol	Chain	Res	Type	Group
1	x	498	TYR	Sidechain
1	x	542	PHE	Sidechain
1	x	572	PHE	Sidechain
1	x	651	TYR	Sidechain
1	x	655	ARG	Sidechain
1	x	674	ARG	Sidechain
1	x	689	ARG	Sidechain
1	x	698	ARG	Sidechain
1	x	98	ARG	Sidechain
1	y	145	ARG	Sidechain
1	y	202	ARG	Sidechain
1	y	206	HIS	Sidechain
1	y	239	ARG	Sidechain
1	y	301	ARG	Sidechain
1	y	357	ARG	Sidechain
1	y	367	VAL	Peptide
1	y	498	TYR	Sidechain
1	y	539	PHE	Sidechain
1	y	579	PHE	Sidechain
1	y	597	PHE	Sidechain
1	y	634	PHE	Sidechain
1	y	640	ARG	Sidechain
1	y	651	TYR	Sidechain
1	y	674	ARG	Sidechain
1	y	698	ARG	Sidechain
1	y	704	HIS	Sidechain
1	y	93	TYR	Sidechain
1	z	170	ARG	Sidechain
1	z	174	ARG	Sidechain
1	z	231	ARG	Sidechain
1	z	237	GLN	Peptide
1	z	239	ARG	Sidechain
1	z	252	TYR	Sidechain
1	z	255	ARG	Sidechain
1	z	316	TYR	Sidechain
1	z	322	TYR	Sidechain
1	z	369	ARG	Sidechain
1	z	381	HIS	Sidechain
1	z	483	TYR	Sidechain
1	z	487	TYR	Sidechain
1	z	488	ARG	Sidechain
1	z	498	TYR	Sidechain

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Mol	Chain	Res	Type	Group
1	z	572	PHE	Sidechain
1	z	583	GLN	Mainchain
1	z	585	TYR	Sidechain
1	z	623	PHE	Sidechain
1	z	647	PHE	Sidechain
1	z	93	TYR	Sidechain
1	z	98	ARG	Sidechain

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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	0	592/619 (96%)	556 (94%)	30 (5%)	6 (1%)	15	54
1	1	592/619 (96%)	556 (94%)	27 (5%)	9 (2%)	10	46
1	2	592/619 (96%)	555 (94%)	33 (6%)	4 (1%)	22	62
1	3	592/619 (96%)	561 (95%)	27 (5%)	4 (1%)	22	62
1	4	592/619 (96%)	554 (94%)	27 (5%)	11 (2%)	8	40
1	5	592/619 (96%)	541 (91%)	38 (6%)	13 (2%)	6	37
1	6	592/619 (96%)	550 (93%)	34 (6%)	8 (1%)	11	47
1	7	592/619 (96%)	550 (93%)	34 (6%)	8 (1%)	11	47
1	8	592/619 (96%)	554 (94%)	31 (5%)	7 (1%)	13	50
1	9	592/619 (96%)	550 (93%)	36 (6%)	6 (1%)	15	54
1	A	592/619 (96%)	547 (92%)	33 (6%)	12 (2%)	7	40
1	B	592/619 (96%)	553 (93%)	31 (5%)	8 (1%)	11	47
1	C	592/619 (96%)	546 (92%)	36 (6%)	10 (2%)	9	43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	D	592/619 (96%)	542 (92%)	40 (7%)	10 (2%)	9	43
1	E	592/619 (96%)	555 (94%)	29 (5%)	8 (1%)	11	47
1	F	592/619 (96%)	551 (93%)	29 (5%)	12 (2%)	7	40
1	G	592/619 (96%)	551 (93%)	31 (5%)	10 (2%)	9	43
1	H	592/619 (96%)	551 (93%)	32 (5%)	9 (2%)	10	46
1	I	592/619 (96%)	546 (92%)	37 (6%)	9 (2%)	10	46
1	J	592/619 (96%)	549 (93%)	33 (6%)	10 (2%)	9	43
1	K	592/619 (96%)	549 (93%)	30 (5%)	13 (2%)	6	37
1	L	592/619 (96%)	547 (92%)	33 (6%)	12 (2%)	7	40
1	M	592/619 (96%)	553 (93%)	34 (6%)	5 (1%)	19	60
1	N	592/619 (96%)	552 (93%)	33 (6%)	7 (1%)	13	50
1	O	592/619 (96%)	551 (93%)	35 (6%)	6 (1%)	15	54
1	P	592/619 (96%)	552 (93%)	31 (5%)	9 (2%)	10	46
1	Q	592/619 (96%)	547 (92%)	38 (6%)	7 (1%)	13	50
1	R	592/619 (96%)	552 (93%)	35 (6%)	5 (1%)	19	60
1	S	592/619 (96%)	545 (92%)	36 (6%)	11 (2%)	8	40
1	T	592/619 (96%)	549 (93%)	36 (6%)	7 (1%)	13	50
1	U	592/619 (96%)	547 (92%)	35 (6%)	10 (2%)	9	43
1	V	592/619 (96%)	550 (93%)	36 (6%)	6 (1%)	15	54
1	W	592/619 (96%)	556 (94%)	30 (5%)	6 (1%)	15	54
1	X	592/619 (96%)	550 (93%)	30 (5%)	12 (2%)	7	40
1	Y	592/619 (96%)	550 (93%)	37 (6%)	5 (1%)	19	60
1	Z	592/619 (96%)	550 (93%)	28 (5%)	14 (2%)	6	36
1	a	592/619 (96%)	551 (93%)	35 (6%)	6 (1%)	15	54
1	b	592/619 (96%)	555 (94%)	31 (5%)	6 (1%)	15	54
1	c	592/619 (96%)	554 (94%)	29 (5%)	9 (2%)	10	46
1	d	592/619 (96%)	552 (93%)	31 (5%)	9 (2%)	10	46
1	e	592/619 (96%)	555 (94%)	31 (5%)	6 (1%)	15	54
1	f	592/619 (96%)	548 (93%)	35 (6%)	9 (2%)	10	46
1	g	592/619 (96%)	554 (94%)	29 (5%)	9 (2%)	10	46
1	h	592/619 (96%)	559 (94%)	25 (4%)	8 (1%)	11	47

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	i	592/619 (96%)	558 (94%)	27 (5%)	7 (1%)	13	50
1	j	592/619 (96%)	552 (93%)	29 (5%)	11 (2%)	8	40
1	k	592/619 (96%)	560 (95%)	23 (4%)	9 (2%)	10	46
1	l	592/619 (96%)	557 (94%)	27 (5%)	8 (1%)	11	47
1	m	592/619 (96%)	550 (93%)	35 (6%)	7 (1%)	13	50
1	n	592/619 (96%)	543 (92%)	38 (6%)	11 (2%)	8	40
1	o	592/619 (96%)	550 (93%)	35 (6%)	7 (1%)	13	50
1	p	592/619 (96%)	539 (91%)	39 (7%)	14 (2%)	6	36
1	q	592/619 (96%)	549 (93%)	31 (5%)	12 (2%)	7	40
1	r	592/619 (96%)	555 (94%)	29 (5%)	8 (1%)	11	47
1	s	592/619 (96%)	553 (93%)	36 (6%)	3 (0%)	29	68
1	t	592/619 (96%)	554 (94%)	27 (5%)	11 (2%)	8	40
1	u	592/619 (96%)	561 (95%)	22 (4%)	9 (2%)	10	46
1	v	592/619 (96%)	551 (93%)	33 (6%)	8 (1%)	11	47
1	w	592/619 (96%)	552 (93%)	30 (5%)	10 (2%)	9	43
1	x	592/619 (96%)	558 (94%)	27 (5%)	7 (1%)	13	50
1	y	592/619 (96%)	553 (93%)	32 (5%)	7 (1%)	13	50
1	z	592/619 (96%)	553 (93%)	33 (6%)	6 (1%)	15	54
All	All	36704/38378 (96%)	34194 (93%)	1984 (5%)	526 (1%)	15	47

All (526) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	495	PHE
1	4	175	ASN
1	4	414	GLN
1	6	200	ASN
1	8	413	SER
1	8	414	GLN
1	b	441	GLU
1	c	165	GLU
1	e	412	PRO
1	g	314	LEU
1	g	412	PRO
1	i	412	PRO
1	k	114	GLN

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Mol	Chain	Res	Type
1	k	412	PRO
1	m	414	GLN
1	n	149	ILE
1	n	580	CYS
1	o	578	VAL
1	q	328	ARG
1	q	412	PRO
1	r	580	CYS
1	s	412	PRO
1	v	150	VAL
1	w	412	PRO
1	z	120	ALA
1	z	150	VAL
1	A	219	PRO
1	A	239	ARG
1	A	365	ALA
1	A	412	PRO
1	C	444	ARG
1	D	150	VAL
1	E	365	ALA
1	E	412	PRO
1	F	364	SER
1	G	200	ASN
1	G	364	SER
1	I	412	PRO
1	L	493	LEU
1	N	490	LYS
1	P	582	ASP
1	Q	412	PRO
1	Q	682	GLN
1	T	149	ILE
1	T	150	VAL
1	T	175	ASN
1	U	443	VAL
1	U	492	LEU
1	W	412	PRO
1	X	200	ASN
1	Z	364	SER
1	0	146	GLY
1	1	150	VAL
1	1	365	ALA
1	1	494	GLY

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Mol	Chain	Res	Type
1	2	328	ARG
1	4	494	GLY
1	5	150	VAL
1	6	314	LEU
1	8	364	SER
1	9	365	ALA
1	9	444	ARG
1	a	181	GLN
1	a	221	LEU
1	a	412	PRO
1	a	585	TYR
1	b	165	GLU
1	c	200	ASN
1	c	412	PRO
1	c	441	GLU
1	d	141	VAL
1	e	146	GLY
1	f	149	ILE
1	f	150	VAL
1	f	364	SER
1	f	583	GLN
1	g	365	ALA
1	h	445	GLU
1	h	582	ASP
1	i	495	PHE
1	j	314	LEU
1	k	364	SER
1	l	231	ARG
1	l	300	ASP
1	m	328	ARG
1	n	165	GLU
1	n	175	ASN
1	n	235	ASP
1	o	300	ASP
1	p	150	VAL
1	p	494	GLY
1	q	114	GLN
1	q	495	PHE
1	q	578	VAL
1	r	321	GLY
1	s	175	ASN
1	t	112	VAL

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Mol	Chain	Res	Type
1	t	317	PRO
1	u	338	SER
1	u	414	GLN
1	v	476	ILE
1	v	581	GLN
1	w	204	ILE
1	x	183	PRO
1	y	240	ASP
1	z	314	LEU
1	A	240	ASP
1	A	495	PHE
1	B	150	VAL
1	B	364	SER
1	C	146	GLY
1	C	175	ASN
1	C	364	SER
1	D	675	TYR
1	E	165	GLU
1	E	495	PHE
1	G	300	ASP
1	H	300	ASP
1	H	494	GLY
1	H	580	CYS
1	H	581	GLN
1	I	219	PRO
1	I	495	PHE
1	J	314	LEU
1	J	494	GLY
1	K	364	SER
1	K	410	ASP
1	K	412	PRO
1	L	120	ALA
1	L	149	ILE
1	L	581	GLN
1	L	680	GLN
1	M	408	GLY
1	M	495	PHE
1	N	150	VAL
1	N	165	GLU
1	O	165	GLU
1	O	175	ASN
1	O	412	PRO

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Mol	Chain	Res	Type
1	P	147	SER
1	P	314	LEU
1	P	486	GLN
1	Q	496	VAL
1	R	112	VAL
1	R	150	VAL
1	S	181	GLN
1	S	328	ARG
1	S	364	SER
1	S	414	GLN
1	S	495	PHE
1	S	580	CYS
1	U	364	SER
1	U	580	CYS
1	X	231	ARG
1	X	493	LEU
1	Z	141	VAL
1	Z	150	VAL
1	Z	164	CYS
1	Z	314	LEU
1	Z	332	GLU
1	0	240	ASP
1	1	105	ASP
1	1	131	LYS
1	1	231	ARG
1	2	364	SER
1	3	150	VAL
1	4	412	PRO
1	5	112	VAL
1	5	495	PHE
1	6	148	GLY
1	6	175	ASN
1	7	231	ARG
1	7	364	SER
1	7	493	LEU
1	a	300	ASP
1	c	328	ARG
1	d	120	ALA
1	d	150	VAL
1	e	495	PHE
1	f	495	PHE
1	g	164	CYS

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Mol	Chain	Res	Type
1	g	300	ASP
1	h	231	ARG
1	i	321	GLY
1	j	112	VAL
1	j	127	GLN
1	j	441	GLU
1	l	181	GLN
1	m	165	GLU
1	m	580	CYS
1	m	581	GLN
1	n	200	ASN
1	n	314	LEU
1	o	414	GLN
1	p	235	ASP
1	p	314	LEU
1	q	235	ASP
1	s	446	ASN
1	t	166	ALA
1	t	314	LEU
1	u	364	SER
1	u	412	PRO
1	v	181	GLN
1	v	314	LEU
1	v	409	ALA
1	w	300	ASP
1	y	181	GLN
1	y	299	MET
1	z	411	ILE
1	z	417	ASP
1	A	200	ASN
1	A	368	PRO
1	B	300	ASP
1	C	200	ASN
1	C	321	GLY
1	C	495	PHE
1	E	493	LEU
1	F	111	GLY
1	F	486	GLN
1	G	493	LEU
1	G	495	PHE
1	H	165	GLU
1	H	236	ASN

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Mol	Chain	Res	Type
1	I	235	ASP
1	I	240	ASP
1	I	273	THR
1	I	368	PRO
1	J	150	VAL
1	J	181	GLN
1	J	441	GLU
1	K	221	LEU
1	K	328	ARG
1	K	581	GLN
1	L	150	VAL
1	L	409	ALA
1	L	495	PHE
1	L	679	LEU
1	M	329	GLY
1	N	115	ASP
1	N	314	LEU
1	Q	328	ARG
1	S	165	GLU
1	T	231	ARG
1	T	364	SER
1	T	446	ASN
1	U	175	ASN
1	U	221	LEU
1	U	300	ASP
1	V	165	GLU
1	V	314	LEU
1	V	365	ALA
1	V	495	PHE
1	W	235	ASP
1	W	651	TYR
1	X	337	LEU
1	X	409	ALA
1	Z	495	PHE
1	0	492	LEU
1	1	441	GLU
1	2	227	PRO
1	2	338	SER
1	4	364	SER
1	5	99	PRO
1	5	165	GLU
1	7	492	LEU

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Mol	Chain	Res	Type
1	7	581	GLN
1	8	146	GLY
1	8	328	ARG
1	8	354	PRO
1	b	150	VAL
1	b	231	ARG
1	c	144	PRO
1	d	165	GLU
1	e	235	ASP
1	e	338	SER
1	f	492	LEU
1	g	118	LEU
1	h	118	LEU
1	i	219	PRO
1	i	328	ARG
1	i	492	LEU
1	j	150	VAL
1	j	231	ARG
1	j	365	ALA
1	k	120	ALA
1	k	328	ARG
1	k	411	ILE
1	k	495	PHE
1	l	409	ALA
1	l	495	PHE
1	m	364	SER
1	p	118	LEU
1	p	284	PRO
1	p	300	ASP
1	q	181	GLN
1	q	411	ILE
1	q	491	GLU
1	r	112	VAL
1	r	150	VAL
1	r	581	GLN
1	t	126	ASP
1	t	581	GLN
1	u	139	SER
1	u	328	ARG
1	u	495	PHE
1	w	411	ILE
1	w	491	GLU

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Mol	Chain	Res	Type
1	z	492	LEU
1	A	118	LEU
1	A	328	ARG
1	B	154	PRO
1	B	231	ARG
1	C	577	MET
1	D	200	ASN
1	D	231	ARG
1	D	314	LEU
1	D	495	PHE
1	E	288	ARG
1	F	238	PRO
1	G	446	ASN
1	J	231	ARG
1	K	119	PRO
1	K	200	ASN
1	K	314	LEU
1	K	492	LEU
1	K	624	THR
1	L	231	ARG
1	N	118	LEU
1	O	200	ASN
1	P	495	PHE
1	Q	175	ASN
1	R	181	GLN
1	R	300	ASP
1	U	200	ASN
1	U	219	PRO
1	V	150	VAL
1	W	495	PHE
1	X	150	VAL
1	X	494	GLY
1	X	681	GLU
1	Z	181	GLN
1	Z	321	GLY
1	Z	365	ALA
1	0	139	SER
1	0	314	LEU
1	1	581	GLN
1	4	118	LEU
1	4	146	GLY
1	4	495	PHE

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Mol	Chain	Res	Type
1	5	492	LEU
1	5	655	ARG
1	6	655	ARG
1	7	481	GLU
1	9	219	PRO
1	9	493	LEU
1	9	580	CYS
1	c	300	ASP
1	d	178	LEU
1	d	300	ASP
1	d	495	PHE
1	e	446	ASN
1	g	200	ASN
1	g	328	ARG
1	g	411	ILE
1	h	112	VAL
1	h	150	VAL
1	h	300	ASP
1	j	144	PRO
1	n	119	PRO
1	n	127	GLN
1	n	150	VAL
1	o	118	LEU
1	o	181	GLN
1	p	149	ILE
1	p	317	PRO
1	p	368	PRO
1	p	409	ALA
1	q	175	ASN
1	q	318	LEU
1	q	364	SER
1	r	118	LEU
1	r	365	ALA
1	t	493	LEU
1	u	413	SER
1	v	231	ARG
1	w	120	ALA
1	w	144	PRO
1	w	328	ARG
1	w	495	PHE
1	x	112	VAL
1	x	576	GLN

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Mol	Chain	Res	Type
1	y	493	LEU
1	A	140	GLY
1	B	166	ALA
1	B	495	PHE
1	C	328	ARG
1	E	413	SER
1	F	181	GLN
1	F	183	PRO
1	F	365	ALA
1	G	492	LEU
1	G	583	GLN
1	H	112	VAL
1	H	150	VAL
1	I	295	LYS
1	J	578	VAL
1	K	175	ASN
1	K	495	PHE
1	N	284	PRO
1	P	149	ILE
1	P	150	VAL
1	P	441	GLU
1	S	492	LEU
1	V	181	GLN
1	W	493	LEU
1	X	181	GLN
1	X	495	PHE
1	Y	328	ARG
1	Y	495	PHE
1	Y	655	ARG
1	Z	118	LEU
1	3	486	GLN
1	4	411	ILE
1	5	283	ASP
1	5	364	SER
1	5	649	ILE
1	6	227	PRO
1	6	408	GLY
1	7	411	ILE
1	9	150	VAL
1	b	112	VAL
1	c	118	LEU
1	d	365	ALA

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Mol	Chain	Res	Type
1	f	365	ALA
1	h	411	ILE
1	j	364	SER
1	j	495	PHE
1	k	165	GLU
1	k	265	PRO
1	l	150	VAL
1	n	115	ASP
1	o	412	PRO
1	p	578	VAL
1	p	581	GLN
1	r	219	PRO
1	t	446	ASN
1	t	553	ILE
1	u	200	ASN
1	w	146	GLY
1	x	227	PRO
1	y	314	LEU
1	y	328	ARG
1	y	443	VAL
1	A	411	ILE
1	C	187	GLU
1	D	149	ILE
1	D	151	THR
1	F	112	VAL
1	F	300	ASP
1	F	409	ALA
1	G	284	PRO
1	G	328	ARG
1	H	118	LEU
1	J	580	CYS
1	M	596	ILE
1	R	227	PRO
1	S	154	PRO
1	T	447	GLU
1	W	175	ASN
1	X	115	ASP
1	X	269	ASP
1	Z	131	LYS
1	Z	200	ASN
1	Z	582	ASP
1	3	317	PRO

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Mol	Chain	Res	Type
1	f	154	PRO
1	f	284	PRO
1	v	227	PRO
1	x	186	VAL
1	I	163	PRO
1	J	154	PRO
1	L	317	PRO
1	Q	408	GLY
1	Q	411	ILE
1	S	118	LEU
1	Y	494	GLY
1	4	408	GLY
1	5	219	PRO
1	a	229	ILE
1	b	99	PRO
1	d	408	GLY
1	l	149	ILE
1	B	227	PRO
1	D	496	VAL
1	F	284	PRO
1	L	203	GLY
1	P	227	PRO
1	U	144	PRO
1	0	442	VAL
1	4	229	ILE
1	5	149	ILE
1	8	412	PRO
1	j	317	PRO
1	o	411	ILE
1	p	112	VAL
1	t	150	VAL
1	x	119	PRO
1	x	411	ILE
1	F	358	VAL
1	O	408	GLY
1	S	149	ILE
1	3	119	PRO
1	5	592	VAL
1	6	118	LEU
1	c	154	PRO
1	l	494	GLY
1	m	144	PRO

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Mol	Chain	Res	Type
1	t	411	ILE
1	D	321	GLY
1	E	411	ILE
1	J	368	PRO
1	M	163	PRO
1	O	411	ILE
1	Y	354	PRO
1	7	112	VAL
1	i	144	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	0	533/555 (96%)	516 (97%)	17 (3%)	39	62
1	1	533/555 (96%)	516 (97%)	17 (3%)	39	62
1	2	533/555 (96%)	510 (96%)	23 (4%)	29	54
1	3	533/555 (96%)	516 (97%)	17 (3%)	39	62
1	4	533/555 (96%)	518 (97%)	15 (3%)	43	65
1	5	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	6	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	7	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	8	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	9	533/555 (96%)	516 (97%)	17 (3%)	39	62
1	A	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	B	533/555 (96%)	511 (96%)	22 (4%)	30	56
1	C	533/555 (96%)	521 (98%)	12 (2%)	50	70
1	D	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	E	533/555 (96%)	512 (96%)	21 (4%)	32	57
1	F	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	G	533/555 (96%)	511 (96%)	22 (4%)	30	56

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	H	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	I	533/555 (96%)	522 (98%)	11 (2%)	53	72
1	J	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	K	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	L	533/555 (96%)	513 (96%)	20 (4%)	33	58
1	M	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	N	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	O	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	P	533/555 (96%)	512 (96%)	21 (4%)	32	57
1	Q	533/555 (96%)	521 (98%)	12 (2%)	50	70
1	R	533/555 (96%)	516 (97%)	17 (3%)	39	62
1	S	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	T	533/555 (96%)	511 (96%)	22 (4%)	30	56
1	U	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	V	533/555 (96%)	515 (97%)	18 (3%)	37	60
1	W	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	X	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	Y	533/555 (96%)	518 (97%)	15 (3%)	43	65
1	Z	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	a	533/555 (96%)	518 (97%)	15 (3%)	43	65
1	b	533/555 (96%)	513 (96%)	20 (4%)	33	58
1	c	533/555 (96%)	515 (97%)	18 (3%)	37	60
1	d	533/555 (96%)	510 (96%)	23 (4%)	29	54
1	e	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	f	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	g	533/555 (96%)	518 (97%)	15 (3%)	43	65
1	h	533/555 (96%)	513 (96%)	20 (4%)	33	58
1	i	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	j	533/555 (96%)	521 (98%)	12 (2%)	50	70
1	k	533/555 (96%)	512 (96%)	21 (4%)	32	57
1	l	533/555 (96%)	514 (96%)	19 (4%)	35	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	m	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	n	533/555 (96%)	510 (96%)	23 (4%)	29	54
1	o	533/555 (96%)	522 (98%)	11 (2%)	53	72
1	p	533/555 (96%)	524 (98%)	9 (2%)	60	78
1	q	533/555 (96%)	519 (97%)	14 (3%)	46	67
1	r	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	s	533/555 (96%)	525 (98%)	8 (2%)	65	80
1	t	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	u	533/555 (96%)	509 (96%)	24 (4%)	27	53
1	v	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	w	533/555 (96%)	517 (97%)	16 (3%)	41	63
1	x	533/555 (96%)	514 (96%)	19 (4%)	35	59
1	y	533/555 (96%)	520 (98%)	13 (2%)	49	69
1	z	533/555 (96%)	513 (96%)	20 (4%)	33	58
All	All	33046/34410 (96%)	32003 (97%)	1043 (3%)	42	62

All (1043) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	113	GLU
1	0	151	THR
1	0	182	ASP
1	0	183	PRO
1	0	188	LYS
1	0	288	ARG
1	0	312	ARG
1	0	395	GLU
1	0	401	THR
1	0	404	LEU
1	0	444	ARG
1	0	462	VAL
1	0	470	GLN
1	0	511	GLN
1	0	515	PRO
1	0	581	GLN
1	0	700	THR
1	1	113	GLU

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Mol	Chain	Res	Type
1	1	145	ARG
1	1	268	VAL
1	1	272	THR
1	1	301	ARG
1	1	308	MET
1	1	315	THR
1	1	333	ILE
1	1	366	THR
1	1	454	ILE
1	1	486	GLN
1	1	488	ARG
1	1	528	GLN
1	1	537	LYS
1	1	581	GLN
1	1	591	LYS
1	1	624	THR
1	2	113	GLU
1	2	114	GLN
1	2	126	ASP
1	2	131	LYS
1	2	152	ARG
1	2	163	PRO
1	2	177	GLU
1	2	221	LEU
1	2	236	ASN
1	2	241	ILE
1	2	303	THR
1	2	351	GLN
1	2	401	THR
1	2	419	MET
1	2	441	GLU
1	2	444	ARG
1	2	455	ARG
1	2	492	LEU
1	2	581	GLN
1	2	624	THR
1	2	657	ASN
1	2	672	LYS
1	2	700	THR
1	3	113	GLU
1	3	145	ARG
1	3	149	ILE

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Mol	Chain	Res	Type
1	3	151	THR
1	3	170	ARG
1	3	190	ILE
1	3	301	ARG
1	3	366	THR
1	3	375	THR
1	3	406	ARG
1	3	419	MET
1	3	486	GLN
1	3	488	ARG
1	3	581	GLN
1	3	646	PRO
1	3	647	PHE
1	3	657	ASN
1	4	95	GLN
1	4	101	ILE
1	4	113	GLU
1	4	151	THR
1	4	221	LEU
1	4	258	THR
1	4	373	ARG
1	4	392	GLN
1	4	401	THR
1	4	441	GLU
1	4	444	ARG
1	4	472	VAL
1	4	483	TYR
1	4	581	GLN
1	4	592	VAL
1	5	93	TYR
1	5	113	GLU
1	5	133	SER
1	5	145	ARG
1	5	175	ASN
1	5	208	LEU
1	5	227	PRO
1	5	288	ARG
1	5	301	ARG
1	5	303	THR
1	5	309	ASN
1	5	339	LEU
1	5	401	THR

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Mol	Chain	Res	Type
1	5	419	MET
1	5	455	ARG
1	5	581	GLN
1	5	588	VAL
1	5	673	ASN
1	5	703	ARG
1	6	99	PRO
1	6	113	GLU
1	6	126	ASP
1	6	167	TRP
1	6	230	THR
1	6	269	ASP
1	6	297	ASP
1	6	301	ARG
1	6	351	GLN
1	6	444	ARG
1	6	455	ARG
1	6	515	PRO
1	6	581	GLN
1	6	591	LYS
1	6	624	THR
1	6	631	ASN
1	7	108	ARG
1	7	112	VAL
1	7	113	GLU
1	7	131	LYS
1	7	145	ARG
1	7	164	CYS
1	7	170	ARG
1	7	173	TYR
1	7	176	THR
1	7	227	PRO
1	7	230	THR
1	7	301	ARG
1	7	324	ILE
1	7	366	THR
1	7	419	MET
1	7	476	ILE
1	7	581	GLN
1	7	591	LYS
1	7	684	GLU
1	8	113	GLU

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Mol	Chain	Res	Type
1	8	150	VAL
1	8	221	LEU
1	8	272	THR
1	8	323	MET
1	8	351	GLN
1	8	388	LEU
1	8	444	ARG
1	8	454	ILE
1	8	462	VAL
1	8	555	ASP
1	8	578	VAL
1	8	581	GLN
1	8	587	VAL
1	8	646	PRO
1	8	700	THR
1	9	113	GLU
1	9	170	ARG
1	9	214	THR
1	9	269	ASP
1	9	288	ARG
1	9	300	ASP
1	9	301	ARG
1	9	308	MET
1	9	377	GLU
1	9	415	GLU
1	9	419	MET
1	9	441	GLU
1	9	524	MET
1	9	528	GLN
1	9	581	GLN
1	9	646	PRO
1	9	670	GLN
1	a	119	PRO
1	a	126	ASP
1	a	153	CYS
1	a	176	THR
1	a	221	LEU
1	a	308	MET
1	a	312	ARG
1	a	373	ARG
1	a	412	PRO
1	a	415	GLU

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Mol	Chain	Res	Type
1	a	444	ARG
1	a	557	LYS
1	a	581	GLN
1	a	625	GLU
1	a	700	THR
1	b	95	GLN
1	b	127	GLN
1	b	145	ARG
1	b	237	GLN
1	b	254	GLN
1	b	273	THR
1	b	296	PRO
1	b	301	ARG
1	b	316	TYR
1	b	379	ILE
1	b	419	MET
1	b	440	GLU
1	b	500	THR
1	b	545	LEU
1	b	547	GLN
1	b	565	GLU
1	b	581	GLN
1	b	591	LYS
1	b	681	GLU
1	b	704	HIS
1	c	93	TYR
1	c	101	ILE
1	c	113	GLU
1	c	151	THR
1	c	171	ILE
1	c	248	LEU
1	c	301	ARG
1	c	318	LEU
1	c	444	ARG
1	c	498	TYR
1	c	506	HIS
1	c	521	GLN
1	c	557	LYS
1	c	561	THR
1	c	591	LYS
1	c	657	ASN
1	c	694	GLU

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Mol	Chain	Res	Type
1	c	700	THR
1	d	95	GLN
1	d	113	GLU
1	d	124	ILE
1	d	127	GLN
1	d	145	ARG
1	d	151	THR
1	d	244	GLN
1	d	264	VAL
1	d	285	GLU
1	d	301	ARG
1	d	303	THR
1	d	305	LYS
1	d	316	TYR
1	d	370	LEU
1	d	419	MET
1	d	448	THR
1	d	480	VAL
1	d	486	GLN
1	d	629	HIS
1	d	631	ASN
1	d	646	PRO
1	d	667	GLN
1	d	684	GLU
1	e	93	TYR
1	e	151	THR
1	e	197	MET
1	e	273	THR
1	e	301	ARG
1	e	303	THR
1	e	308	MET
1	e	323	MET
1	e	325	VAL
1	e	333	ILE
1	e	444	ARG
1	e	455	ARG
1	e	474	ASN
1	e	557	LYS
1	e	578	VAL
1	e	581	GLN
1	e	584	ILE
1	e	631	ASN

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Mol	Chain	Res	Type
1	e	700	THR
1	f	95	GLN
1	f	113	GLU
1	f	145	ARG
1	f	150	VAL
1	f	151	THR
1	f	301	ARG
1	f	315	THR
1	f	375	THR
1	f	418	LYS
1	f	441	GLU
1	f	444	ARG
1	f	472	VAL
1	f	578	VAL
1	f	581	GLN
1	g	119	PRO
1	g	176	THR
1	g	240	ASP
1	g	294	THR
1	g	308	MET
1	g	312	ARG
1	g	313	ASN
1	g	368	PRO
1	g	444	ARG
1	g	472	VAL
1	g	511	GLN
1	g	581	GLN
1	g	583	GLN
1	g	629	HIS
1	g	700	THR
1	h	113	GLU
1	h	124	ILE
1	h	127	GLN
1	h	145	ARG
1	h	151	THR
1	h	235	ASP
1	h	257	GLN
1	h	288	ARG
1	h	301	ARG
1	h	331	GLN
1	h	375	THR
1	h	455	ARG

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Mol	Chain	Res	Type
1	h	579	PHE
1	h	581	GLN
1	h	584	ILE
1	h	585	TYR
1	h	590	LYS
1	h	646	PRO
1	h	657	ASN
1	h	689	ARG
1	i	110	LEU
1	i	113	GLU
1	i	126	ASP
1	i	143	LEU
1	i	150	VAL
1	i	161	LYS
1	i	211	LEU
1	i	276	LEU
1	i	297	ASP
1	i	308	MET
1	i	412	PRO
1	i	444	ARG
1	i	455	ARG
1	i	557	LYS
1	i	581	GLN
1	i	656	GLU
1	j	113	GLU
1	j	135	LEU
1	j	145	ARG
1	j	151	THR
1	j	288	ARG
1	j	301	ARG
1	j	378	LEU
1	j	419	MET
1	j	488	ARG
1	j	578	VAL
1	j	581	GLN
1	j	709	PHE
1	k	93	TYR
1	k	141	VAL
1	k	161	LYS
1	k	221	LEU
1	k	308	MET
1	k	333	ILE

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Mol	Chain	Res	Type
1	k	351	GLN
1	k	368	PRO
1	k	410	ASP
1	k	411	ILE
1	k	412	PRO
1	k	444	ARG
1	k	470	GLN
1	k	504	ILE
1	k	524	MET
1	k	581	GLN
1	k	585	TYR
1	k	624	THR
1	k	647	PHE
1	k	669	LEU
1	k	700	THR
1	l	95	GLN
1	l	113	GLU
1	l	144	PRO
1	l	145	ARG
1	l	151	THR
1	l	152	ARG
1	l	158	LYS
1	l	230	THR
1	l	301	ARG
1	l	419	MET
1	l	430	ASN
1	l	448	THR
1	l	492	LEU
1	l	503	ILE
1	l	510	GLN
1	l	557	LYS
1	l	581	GLN
1	l	593	ARG
1	l	624	THR
1	m	131	LYS
1	m	206	HIS
1	m	221	LEU
1	m	258	THR
1	m	308	MET
1	m	312	ARG
1	m	325	VAL
1	m	390	GLU

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Mol	Chain	Res	Type
1	m	444	ARG
1	m	450	LEU
1	m	455	ARG
1	m	536	LYS
1	m	581	GLN
1	m	682	GLN
1	n	95	GLN
1	n	113	GLU
1	n	124	ILE
1	n	127	GLN
1	n	144	PRO
1	n	145	ARG
1	n	151	THR
1	n	180	LEU
1	n	224	ILE
1	n	227	PRO
1	n	288	ARG
1	n	296	PRO
1	n	301	ARG
1	n	306	SER
1	n	355	TYR
1	n	395	GLU
1	n	397	HIS
1	n	419	MET
1	n	426	ILE
1	n	440	GLU
1	n	448	THR
1	n	460	ASN
1	n	581	GLN
1	o	112	VAL
1	o	126	ASP
1	o	143	LEU
1	o	318	LEU
1	o	368	PRO
1	o	401	THR
1	o	410	ASP
1	o	444	ARG
1	o	515	PRO
1	o	581	GLN
1	o	708	GLN
1	p	95	GLN
1	p	145	ARG

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Mol	Chain	Res	Type
1	p	151	THR
1	p	170	ARG
1	p	301	ARG
1	p	419	MET
1	p	447	GLU
1	p	451	TYR
1	p	488	ARG
1	q	202	ARG
1	q	221	LEU
1	q	276	LEU
1	q	301	ARG
1	q	311	VAL
1	q	323	MET
1	q	333	ILE
1	q	351	GLN
1	q	444	ARG
1	q	485	LYS
1	q	500	THR
1	q	581	GLN
1	q	624	THR
1	q	685	THR
1	r	113	GLU
1	r	127	GLN
1	r	176	THR
1	r	178	LEU
1	r	197	MET
1	r	268	VAL
1	r	298	LEU
1	r	301	ARG
1	r	309	ASN
1	r	316	TYR
1	r	366	THR
1	r	367	VAL
1	r	375	THR
1	r	414	GLN
1	r	442	VAL
1	r	480	VAL
1	r	500	THR
1	r	581	GLN
1	r	591	LYS
1	s	239	ARG
1	s	325	VAL

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Mol	Chain	Res	Type
1	s	392	GLN
1	s	455	ARG
1	s	500	THR
1	s	581	GLN
1	s	591	LYS
1	s	685	THR
1	t	95	GLN
1	t	113	GLU
1	t	145	ARG
1	t	151	THR
1	t	177	GLU
1	t	227	PRO
1	t	272	THR
1	t	297	ASP
1	t	301	ARG
1	t	315	THR
1	t	319	LYS
1	t	334	THR
1	t	441	GLU
1	t	448	THR
1	t	455	ARG
1	t	581	GLN
1	u	108	ARG
1	u	126	ASP
1	u	131	LYS
1	u	150	VAL
1	u	197	MET
1	u	221	LEU
1	u	273	THR
1	u	280	HIS
1	u	288	ARG
1	u	308	MET
1	u	317	PRO
1	u	351	GLN
1	u	399	LYS
1	u	444	ARG
1	u	455	ARG
1	u	515	PRO
1	u	528	GLN
1	u	569	GLN
1	u	591	LYS
1	u	592	VAL

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Mol	Chain	Res	Type
1	u	624	THR
1	u	640	ARG
1	u	657	ASN
1	u	708	GLN
1	v	95	GLN
1	v	112	VAL
1	v	113	GLU
1	v	145	ARG
1	v	151	THR
1	v	161	LYS
1	v	188	LYS
1	v	230	THR
1	v	235	ASP
1	v	288	ARG
1	v	301	ARG
1	v	380	MET
1	v	406	ARG
1	v	414	GLN
1	v	498	TYR
1	v	551	SER
1	v	581	GLN
1	v	582	ASP
1	v	591	LYS
1	w	113	GLU
1	w	170	ARG
1	w	219	PRO
1	w	288	ARG
1	w	323	MET
1	w	334	THR
1	w	339	LEU
1	w	355	TYR
1	w	390	GLU
1	w	444	ARG
1	w	455	ARG
1	w	506	HIS
1	w	548	THR
1	w	557	LYS
1	w	581	GLN
1	w	582	ASP
1	x	95	GLN
1	x	113	GLU
1	x	145	ARG

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Mol	Chain	Res	Type
1	x	161	LYS
1	x	219	PRO
1	x	255	ARG
1	x	288	ARG
1	x	301	ARG
1	x	315	THR
1	x	316	TYR
1	x	379	ILE
1	x	383	GLN
1	x	412	PRO
1	x	451	TYR
1	x	528	GLN
1	x	581	GLN
1	x	591	LYS
1	x	657	ASN
1	x	689	ARG
1	y	113	GLU
1	y	154	PRO
1	y	206	HIS
1	y	288	ARG
1	y	323	MET
1	y	444	ARG
1	y	455	ARG
1	y	470	GLN
1	y	566	ASN
1	y	581	GLN
1	y	657	ASN
1	y	666	MET
1	y	688	LYS
1	z	95	GLN
1	z	113	GLU
1	z	145	ARG
1	z	151	THR
1	z	154	PRO
1	z	301	ARG
1	z	303	THR
1	z	339	LEU
1	z	355	TYR
1	z	366	THR
1	z	375	THR
1	z	392	GLN
1	z	414	GLN

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Mol	Chain	Res	Type
1	z	451	TYR
1	z	488	ARG
1	z	547	GLN
1	z	585	TYR
1	z	591	LYS
1	z	669	LEU
1	z	672	LYS
1	A	93	TYR
1	A	113	GLU
1	A	131	LYS
1	A	151	THR
1	A	221	LEU
1	A	288	ARG
1	A	308	MET
1	A	380	MET
1	A	441	GLU
1	A	444	ARG
1	A	450	LEU
1	A	498	TYR
1	A	507	GLN
1	A	581	GLN
1	A	588	VAL
1	A	672	LYS
1	B	113	GLU
1	B	144	PRO
1	B	145	ARG
1	B	149	ILE
1	B	150	VAL
1	B	170	ARG
1	B	237	GLN
1	B	258	THR
1	B	288	ARG
1	B	301	ARG
1	B	366	THR
1	B	383	GLN
1	B	422	LEU
1	B	441	GLU
1	B	442	VAL
1	B	476	ILE
1	B	581	GLN
1	B	585	TYR
1	B	591	LYS

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Mol	Chain	Res	Type
1	B	625	GLU
1	B	646	PRO
1	B	663	LYS
1	C	150	VAL
1	C	183	PRO
1	C	221	LEU
1	C	323	MET
1	C	412	PRO
1	C	441	GLU
1	C	444	ARG
1	C	557	LYS
1	C	581	GLN
1	C	643	ASN
1	C	645	ILE
1	C	647	PHE
1	D	95	GLN
1	D	133	SER
1	D	250	LYS
1	D	294	THR
1	D	301	ARG
1	D	306	SER
1	D	355	TYR
1	D	375	THR
1	D	388	LEU
1	D	410	ASP
1	D	419	MET
1	D	432	ASP
1	D	488	ARG
1	D	515	PRO
1	D	581	GLN
1	D	588	VAL
1	E	108	ARG
1	E	113	GLU
1	E	126	ASP
1	E	131	LYS
1	E	143	LEU
1	E	158	LYS
1	E	188	LYS
1	E	204	ILE
1	E	221	LEU
1	E	303	THR
1	E	331	GLN

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Mol	Chain	Res	Type
1	E	344	LYS
1	E	390	GLU
1	E	444	ARG
1	E	483	TYR
1	E	485	LYS
1	E	557	LYS
1	E	581	GLN
1	E	631	ASN
1	E	647	PHE
1	E	697	TYR
1	F	95	GLN
1	F	112	VAL
1	F	113	GLU
1	F	145	ARG
1	F	155	LEU
1	F	163	PRO
1	F	223	ILE
1	F	250	LYS
1	F	296	PRO
1	F	301	ARG
1	F	303	THR
1	F	323	MET
1	F	334	THR
1	F	419	MET
1	F	441	GLU
1	F	488	ARG
1	F	503	ILE
1	F	581	GLN
1	F	685	THR
1	G	93	TYR
1	G	97	VAL
1	G	113	GLU
1	G	126	ASP
1	G	131	LYS
1	G	152	ARG
1	G	176	THR
1	G	204	ILE
1	G	290	ILE
1	G	313	ASN
1	G	318	LEU
1	G	358	VAL
1	G	398	GLN

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Mol	Chain	Res	Type
1	G	444	ARG
1	G	448	THR
1	G	483	TYR
1	G	492	LEU
1	G	515	PRO
1	G	537	LYS
1	G	551	SER
1	G	582	ASP
1	G	700	THR
1	H	95	GLN
1	H	133	SER
1	H	145	ARG
1	H	151	THR
1	H	167	TRP
1	H	208	LEU
1	H	236	ASN
1	H	273	THR
1	H	301	ARG
1	H	370	LEU
1	H	388	LEU
1	H	419	MET
1	H	455	ARG
1	H	591	LYS
1	I	113	GLU
1	I	124	ILE
1	I	126	ASP
1	I	131	LYS
1	I	187	GLU
1	I	412	PRO
1	I	444	ARG
1	I	455	ARG
1	I	566	ASN
1	I	581	GLN
1	I	700	THR
1	J	113	GLU
1	J	124	ILE
1	J	145	ARG
1	J	154	PRO
1	J	214	THR
1	J	301	ARG
1	J	303	THR
1	J	419	MET

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Mol	Chain	Res	Type
1	J	451	TYR
1	J	581	GLN
1	J	591	LYS
1	J	624	THR
1	J	625	GLU
1	J	646	PRO
1	J	666	MET
1	J	680	GLN
1	K	113	GLU
1	K	151	THR
1	K	176	THR
1	K	216	PRO
1	K	308	MET
1	K	322	TYR
1	K	352	THR
1	K	368	PRO
1	K	430	ASN
1	K	444	ARG
1	K	518	SER
1	K	591	LYS
1	K	592	VAL
1	K	657	ASN
1	L	145	ARG
1	L	154	PRO
1	L	176	THR
1	L	224	ILE
1	L	264	VAL
1	L	301	ARG
1	L	355	TYR
1	L	366	THR
1	L	379	ILE
1	L	380	MET
1	L	410	ASP
1	L	419	MET
1	L	455	ARG
1	L	471	LYS
1	L	524	MET
1	L	546	ASN
1	L	581	GLN
1	L	589	LEU
1	L	591	LYS
1	L	624	THR

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Mol	Chain	Res	Type
1	M	172	SER
1	M	221	LEU
1	M	323	MET
1	M	331	GLN
1	M	351	GLN
1	M	368	PRO
1	M	380	MET
1	M	405	ARG
1	M	415	GLU
1	M	444	ARG
1	M	455	ARG
1	M	472	VAL
1	M	532	ILE
1	M	581	GLN
1	M	591	LYS
1	M	691	ILE
1	N	95	GLN
1	N	113	GLU
1	N	145	ARG
1	N	170	ARG
1	N	176	THR
1	N	248	LEU
1	N	301	ARG
1	N	403	GLU
1	N	419	MET
1	N	474	ASN
1	N	476	ILE
1	N	581	GLN
1	N	591	LYS
1	N	657	ASN
1	O	93	TYR
1	O	143	LEU
1	O	244	GLN
1	O	288	ARG
1	O	308	MET
1	O	312	ARG
1	O	368	PRO
1	O	444	ARG
1	O	455	ARG
1	O	480	VAL
1	O	492	LEU
1	O	581	GLN

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Mol	Chain	Res	Type
1	O	585	TYR
1	O	672	LYS
1	O	685	THR
1	O	700	THR
1	P	113	GLU
1	P	127	GLN
1	P	145	ARG
1	P	167	TRP
1	P	170	ARG
1	P	180	LEU
1	P	209	ILE
1	P	224	ILE
1	P	248	LEU
1	P	258	THR
1	P	272	THR
1	P	301	ARG
1	P	415	GLU
1	P	419	MET
1	P	451	TYR
1	P	577	MET
1	P	581	GLN
1	P	591	LYS
1	P	598	ASN
1	P	624	THR
1	P	629	HIS
1	Q	126	ASP
1	Q	131	LYS
1	Q	155	LEU
1	Q	197	MET
1	Q	303	THR
1	Q	339	LEU
1	Q	410	ASP
1	Q	412	PRO
1	Q	441	GLU
1	Q	581	GLN
1	Q	657	ASN
1	Q	672	LYS
1	R	95	GLN
1	R	113	GLU
1	R	144	PRO
1	R	145	ARG
1	R	170	ARG

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Mol	Chain	Res	Type
1	R	227	PRO
1	R	259	ILE
1	R	301	ARG
1	R	309	ASN
1	R	412	PRO
1	R	419	MET
1	R	428	MET
1	R	451	TYR
1	R	454	ILE
1	R	524	MET
1	R	581	GLN
1	R	646	PRO
1	S	112	VAL
1	S	200	ASN
1	S	255	ARG
1	S	292	ILE
1	S	308	MET
1	S	312	ARG
1	S	361	GLU
1	S	374	LEU
1	S	444	ARG
1	S	498	TYR
1	S	521	GLN
1	S	577	MET
1	S	581	GLN
1	S	684	GLU
1	T	93	TYR
1	T	95	GLN
1	T	144	PRO
1	T	145	ARG
1	T	151	THR
1	T	288	ARG
1	T	294	THR
1	T	301	ARG
1	T	336	ARG
1	T	347	ILE
1	T	355	TYR
1	T	419	MET
1	T	442	VAL
1	T	495	PHE
1	T	528	GLN
1	T	557	LYS

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Mol	Chain	Res	Type
1	T	577	MET
1	T	581	GLN
1	T	591	LYS
1	T	631	ASN
1	T	685	THR
1	T	694	GLU
1	U	101	ILE
1	U	113	GLU
1	U	176	THR
1	U	204	ILE
1	U	312	ARG
1	U	351	GLN
1	U	444	ARG
1	U	492	LEU
1	U	541	GLU
1	U	570	LEU
1	U	581	GLN
1	U	646	PRO
1	U	685	THR
1	U	700	THR
1	V	95	GLN
1	V	145	ARG
1	V	151	THR
1	V	170	ARG
1	V	192	LYS
1	V	227	PRO
1	V	230	THR
1	V	270	ILE
1	V	301	ARG
1	V	398	GLN
1	V	441	GLU
1	V	487	TYR
1	V	510	GLN
1	V	529	GLN
1	V	557	LYS
1	V	581	GLN
1	V	624	THR
1	V	657	ASN
1	W	113	GLU
1	W	119	PRO
1	W	153	CYS
1	W	167	TRP

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Mol	Chain	Res	Type
1	W	301	ARG
1	W	303	THR
1	W	308	MET
1	W	366	THR
1	W	394	ARG
1	W	444	ARG
1	W	455	ARG
1	W	477	HIS
1	W	581	GLN
1	W	639	LYS
1	W	647	PHE
1	W	708	GLN
1	X	95	GLN
1	X	112	VAL
1	X	113	GLU
1	X	127	GLN
1	X	145	ARG
1	X	151	THR
1	X	219	PRO
1	X	288	ARG
1	X	301	ARG
1	X	330	GLN
1	X	419	MET
1	X	546	ASN
1	X	581	GLN
1	X	677	TRP
1	X	681	GLU
1	X	694	GLU
1	Y	112	VAL
1	Y	113	GLU
1	Y	182	ASP
1	Y	236	ASN
1	Y	303	THR
1	Y	308	MET
1	Y	312	ARG
1	Y	366	THR
1	Y	444	ARG
1	Y	455	ARG
1	Y	581	GLN
1	Y	624	THR
1	Y	646	PRO
1	Y	666	MET

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Mol	Chain	Res	Type
1	Y	700	THR
1	Z	95	GLN
1	Z	113	GLU
1	Z	127	GLN
1	Z	145	ARG
1	Z	149	ILE
1	Z	151	THR
1	Z	224	ILE
1	Z	268	VAL
1	Z	301	ARG
1	Z	307	VAL
1	Z	387	PRO
1	Z	395	GLU
1	Z	419	MET
1	Z	582	ASP
1	Z	591	LYS
1	Z	690	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (174) such sidechains are listed below:

Mol	Chain	Res	Type
1	0	546	ASN
1	1	430	ASN
1	2	114	GLN
1	2	470	GLN
1	2	629	HIS
1	3	353	HIS
1	3	657	ASN
1	5	206	HIS
1	5	546	ASN
1	6	254	GLN
1	7	185	GLN
1	7	353	HIS
1	7	383	GLN
1	7	680	GLN
1	8	254	GLN
1	8	460	ASN
1	8	546	ASN
1	8	569	GLN
1	9	244	GLN
1	9	631	ASN
1	a	538	HIS

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Mol	Chain	Res	Type
1	a	701	GLN
1	a	708	GLN
1	e	468	ASN
1	e	560	HIS
1	e	581	GLN
1	f	381	HIS
1	f	383	GLN
1	g	236	ASN
1	g	529	GLN
1	g	682	GLN
1	h	313	ASN
1	h	353	HIS
1	i	114	GLN
1	i	195	ASN
1	i	560	HIS
1	j	194	GLN
1	j	398	GLN
1	j	497	ASN
1	j	576	GLN
1	k	351	GLN
1	k	569	GLN
1	l	383	GLN
1	l	430	ASN
1	m	206	HIS
1	m	335	ASN
1	m	569	GLN
1	n	191	HIS
1	n	200	ASN
1	n	309	ASN
1	n	330	GLN
1	n	381	HIS
1	o	236	ASN
1	o	280	HIS
1	o	330	GLN
1	o	547	GLN
1	p	191	HIS
1	p	313	ASN
1	p	330	GLN
1	p	383	GLN
1	p	446	ASN
1	p	538	HIS
1	q	701	GLN

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Mol	Chain	Res	Type
1	r	191	HIS
1	r	195	ASN
1	r	309	ASN
1	s	392	GLN
1	t	127	GLN
1	t	477	HIS
1	u	657	ASN
1	v	181	GLN
1	v	185	GLN
1	v	280	HIS
1	v	569	GLN
1	w	569	GLN
1	w	629	HIS
1	x	95	GLN
1	x	195	ASN
1	x	657	ASN
1	y	566	ASN
1	y	650	GLN
1	y	657	ASN
1	y	704	HIS
1	y	708	GLN
1	z	206	HIS
1	z	644	GLN
1	A	200	ASN
1	A	701	GLN
1	B	237	GLN
1	B	313	ASN
1	B	383	GLN
1	B	430	ASN
1	B	474	ASN
1	C	162	GLN
1	C	506	HIS
1	C	547	GLN
1	C	569	GLN
1	C	704	HIS
1	D	309	ASN
1	D	353	HIS
1	D	383	GLN
1	D	477	HIS
1	D	510	GLN
1	D	576	GLN
1	D	644	GLN

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Mol	Chain	Res	Type
1	E	351	GLN
1	E	550	GLN
1	F	309	ASN
1	F	497	ASN
1	F	581	GLN
1	F	583	GLN
1	G	200	ASN
1	G	254	GLN
1	G	506	HIS
1	G	566	ASN
1	G	571	GLN
1	H	468	ASN
1	H	644	GLN
1	I	175	ASN
1	I	313	ASN
1	I	351	GLN
1	I	546	ASN
1	J	191	HIS
1	J	383	GLN
1	J	538	HIS
1	K	547	GLN
1	K	571	GLN
1	K	644	GLN
1	L	383	GLN
1	L	392	GLN
1	L	571	GLN
1	L	644	GLN
1	M	280	HIS
1	M	550	GLN
1	M	560	HIS
1	N	351	GLN
1	N	474	ASN
1	N	538	HIS
1	N	598	ASN
1	O	114	GLN
1	O	431	GLN
1	O	460	ASN
1	O	546	ASN
1	O	550	GLN
1	O	629	HIS
1	P	629	HIS
1	P	704	HIS

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Mol	Chain	Res	Type
1	Q	576	GLN
1	R	95	GLN
1	R	206	HIS
1	R	309	ASN
1	R	477	HIS
1	R	533	ASN
1	R	704	HIS
1	S	446	ASN
1	S	521	GLN
1	S	546	ASN
1	T	528	GLN
1	T	546	ASN
1	T	631	ASN
1	T	704	HIS
1	T	708	GLN
1	U	708	GLN
1	V	474	ASN
1	V	657	ASN
1	V	667	GLN
1	W	206	HIS
1	X	581	GLN
1	X	631	ASN
1	Y	280	HIS
1	Z	181	GLN
1	Z	309	ASN
1	Z	468	ASN
1	Z	569	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

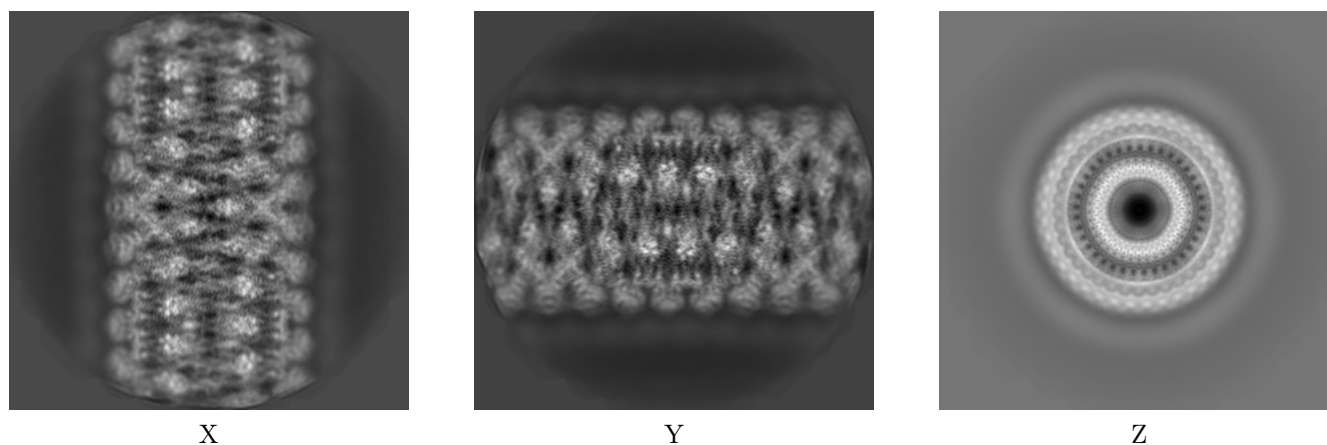
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-8577. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections [i](#)

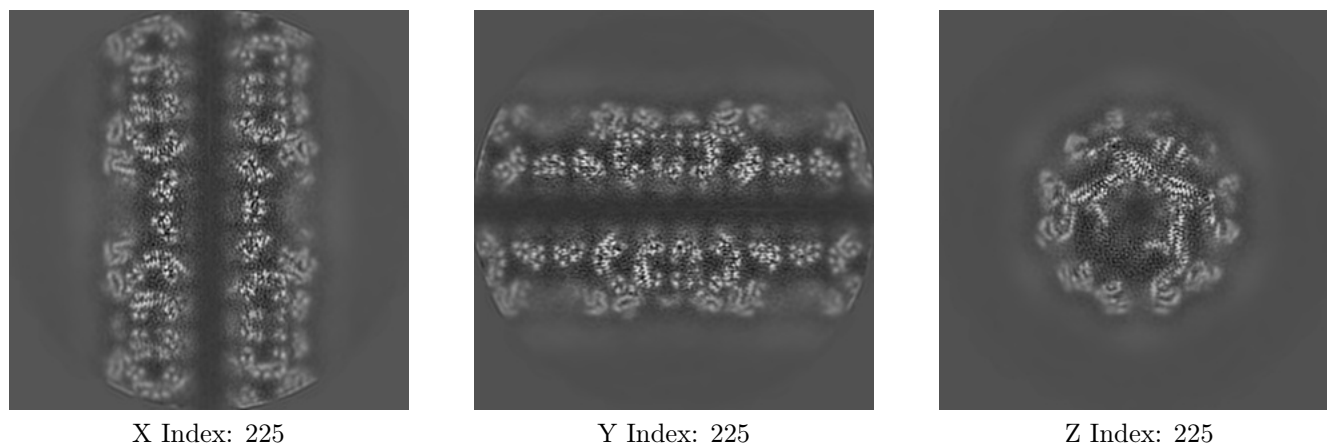
6.1.1 Primary map



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

6.2 Central slices [i](#)

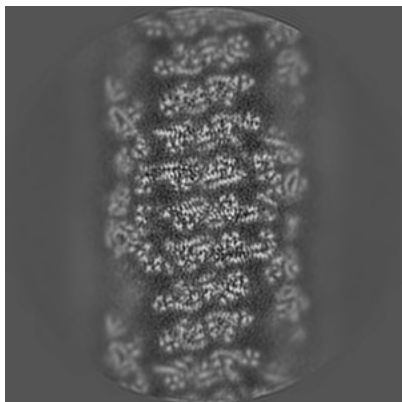
6.2.1 Primary map



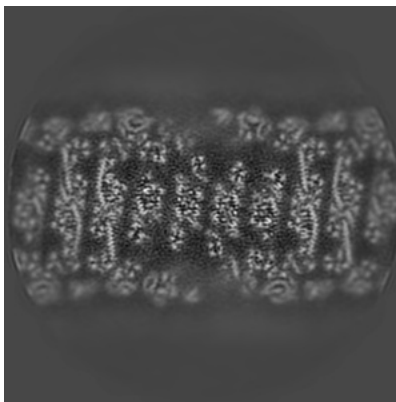
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

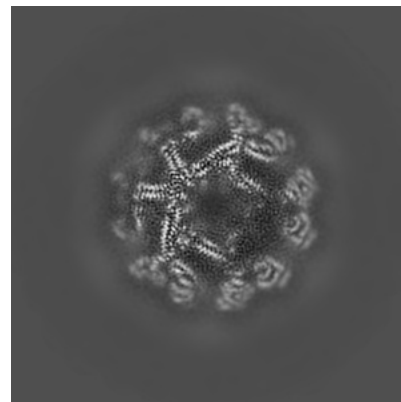
6.3.1 Primary map



X Index: 264



Y Index: 178



Z Index: 236

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

6.4 Orthogonal surface views [i](#)

6.4.1 Primary map

X

Y

Z

The images above show the 3D surface view of the map at the recommended contour level 4.5. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

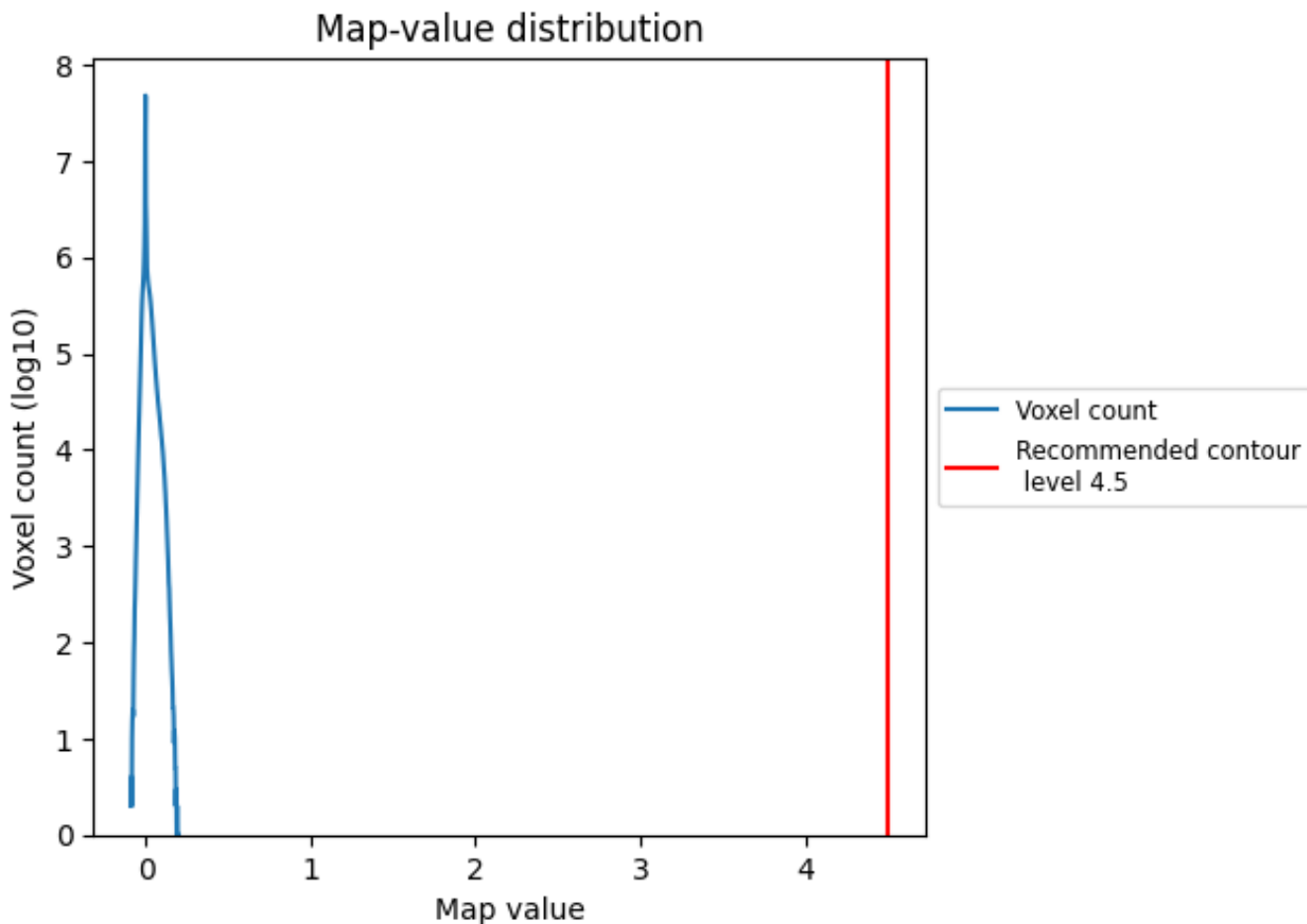
6.5 Mask visualisation

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

7 Map analysis [i](#)

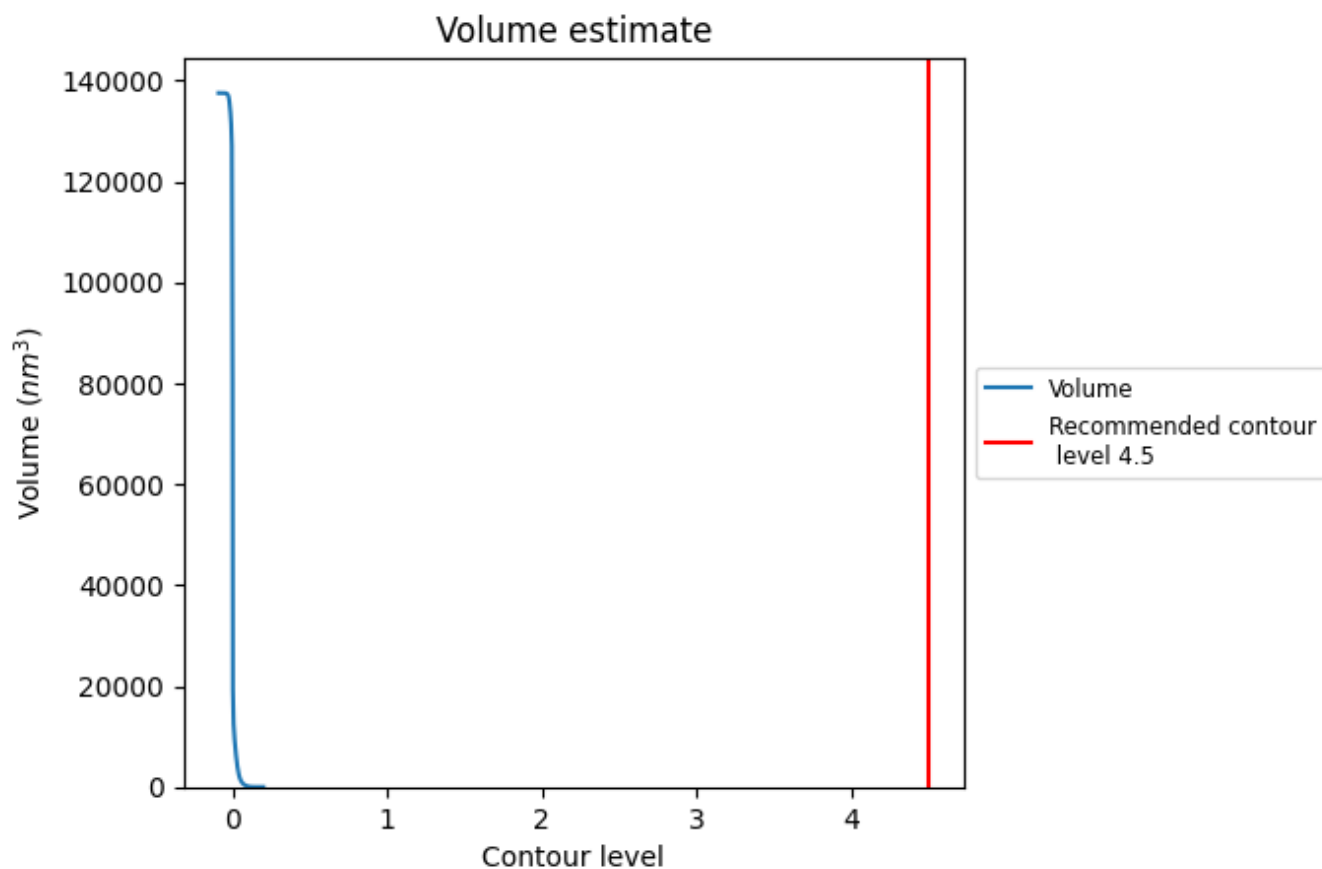
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



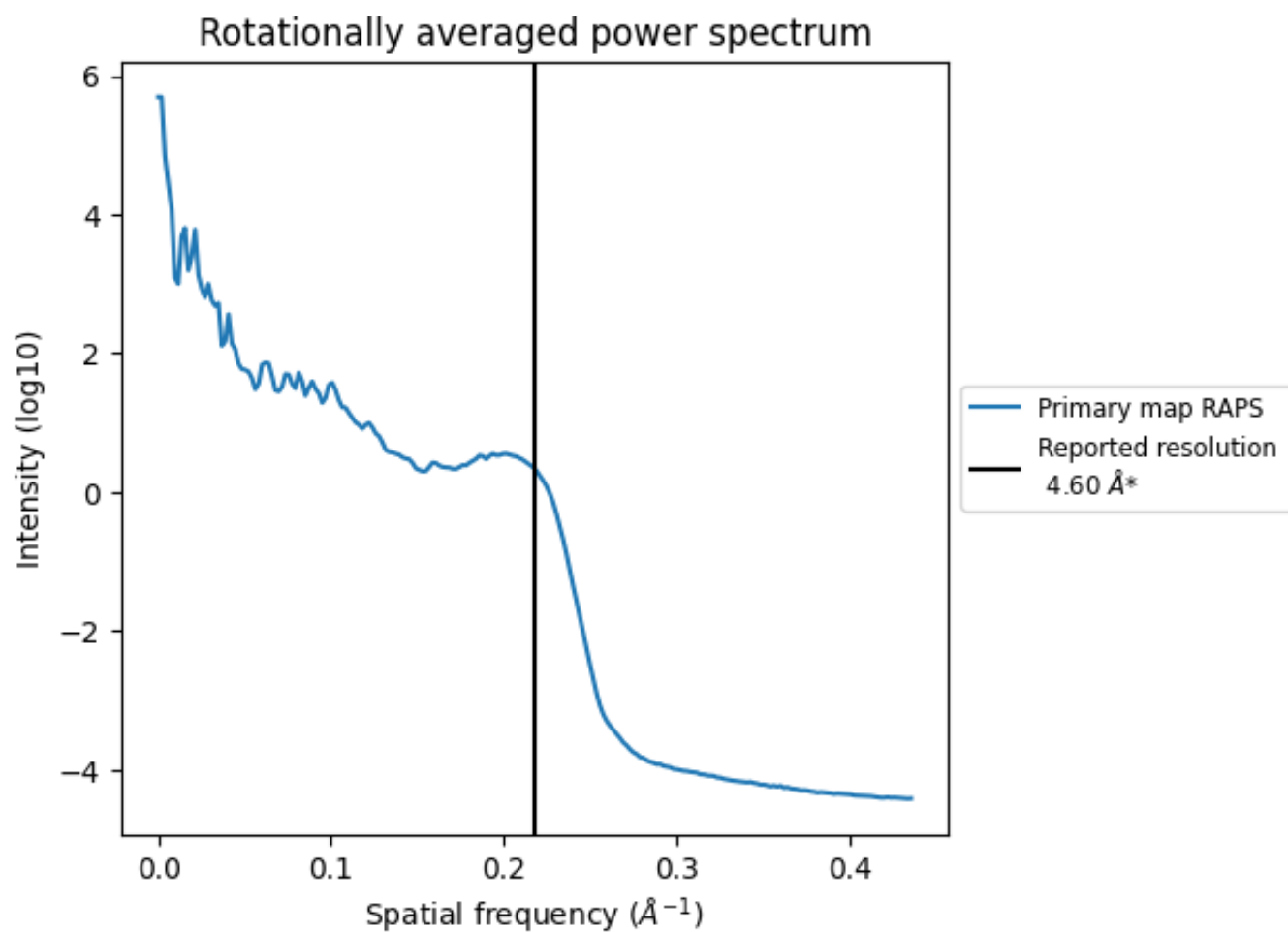
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate [i](#)



The volume 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](#)

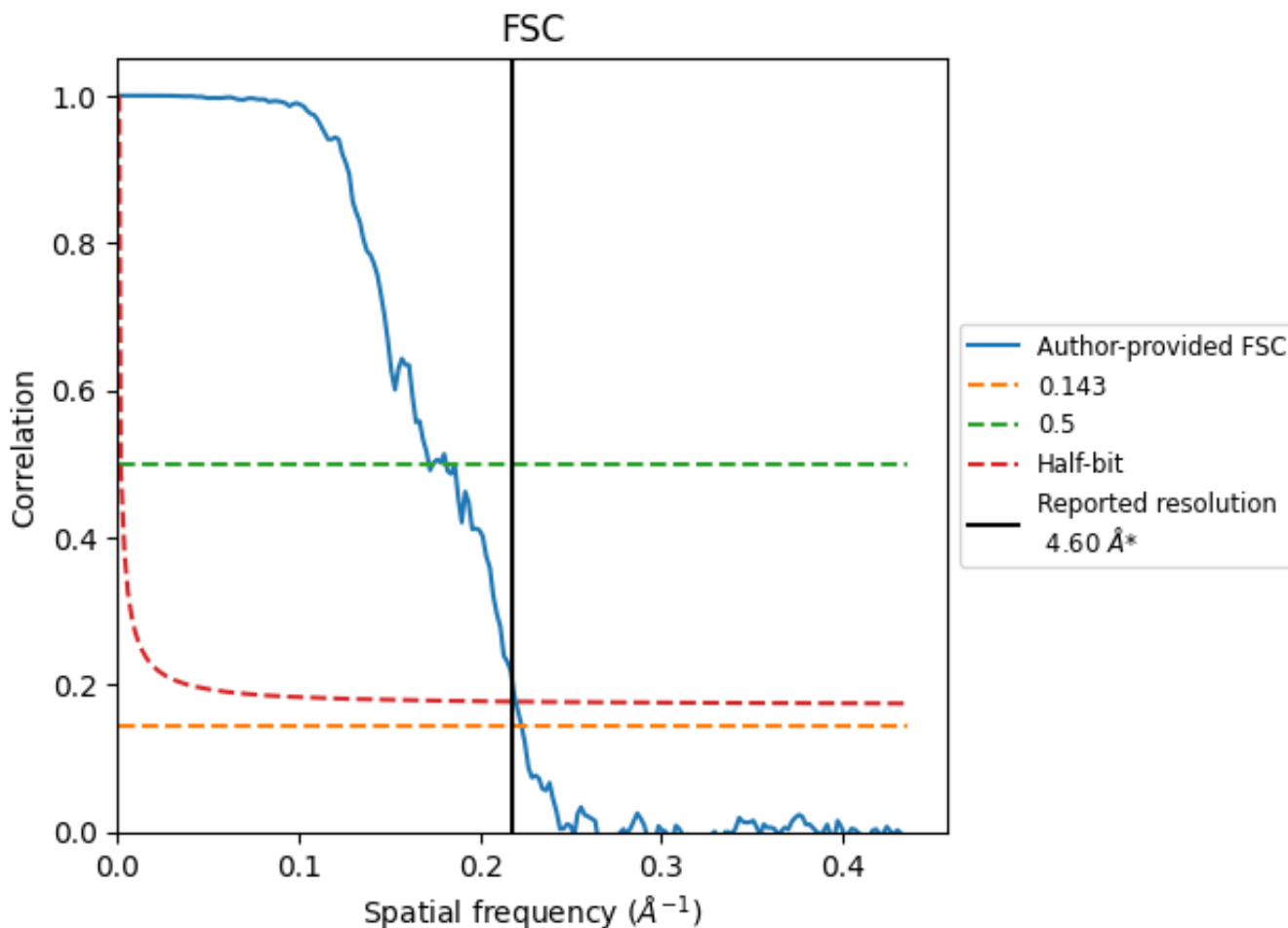


*Reported resolution corresponds to spatial frequency of 0.217 Å⁻¹

8 Fourier-Shell correlation [i](#)

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 [i](#)



*Reported resolution corresponds to spatial frequency of 0.217 Å⁻¹

8.2 Resolution estimates [i](#)

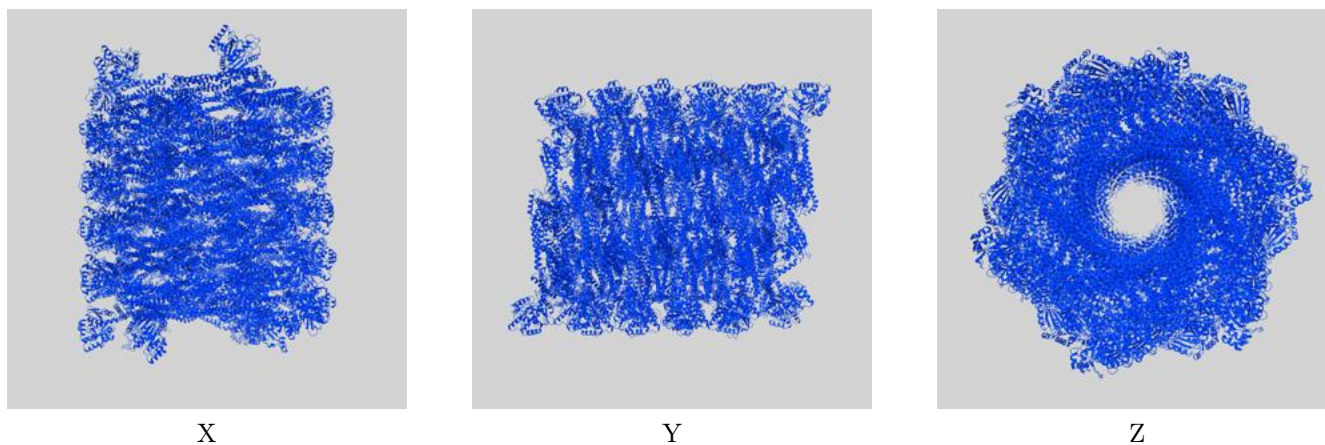
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	4.60	-	-
Author-provided FSC curve	4.49	5.82	4.55
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

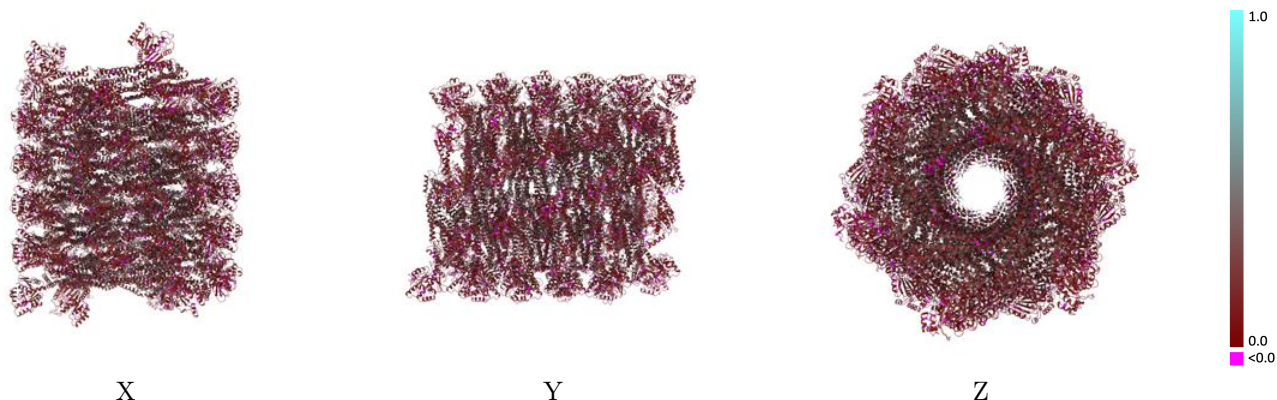
This section contains information regarding the fit between EMDB map EMD-8577 and PDB model 5UOT. Per-residue inclusion information can be found in section [3](#) on page [10](#).

9.1 Map-model overlay [i](#)



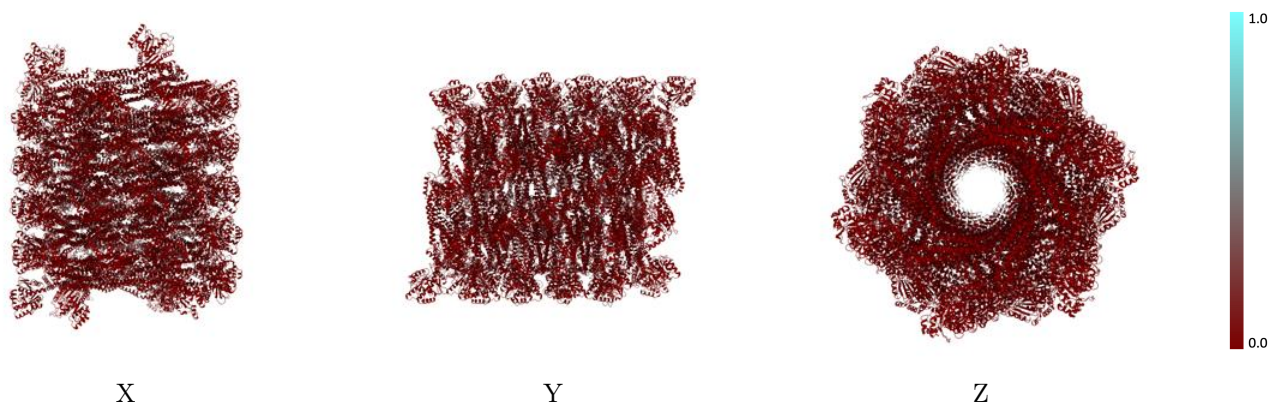
The images above show the 3D surface view of the map at the recommended contour level 4.5 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



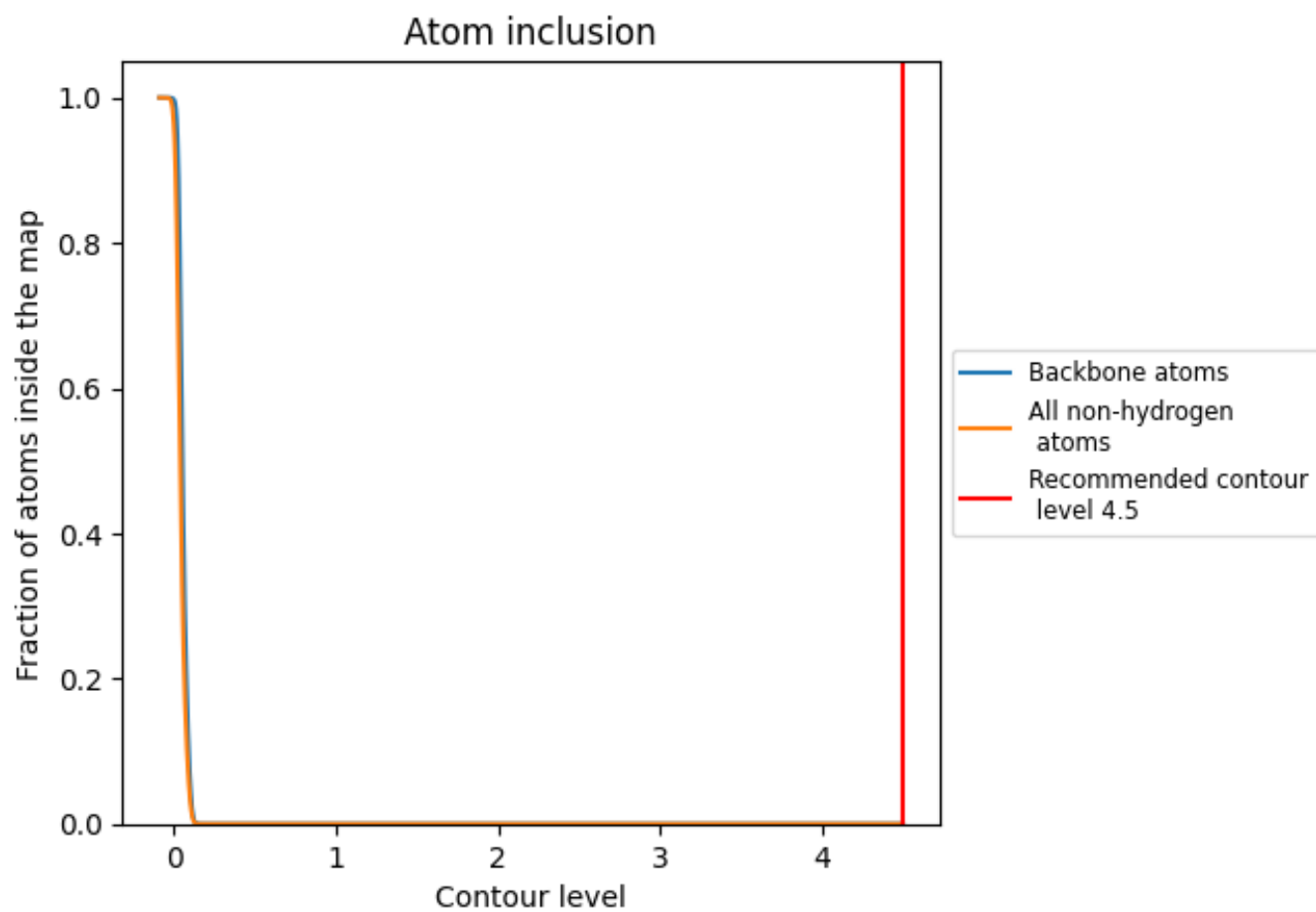
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (4.5).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 0% of all backbone atoms, 0% 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 (4.5) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.0000	 0.1970
0	 0.0000	 0.1820
1	 0.0000	 0.1840
2	 0.0000	 0.1960
3	 0.0000	 0.1880
4	 0.0000	 0.2080
5	 0.0000	 0.1910
6	 0.0000	 0.2090
7	 0.0000	 0.2050
8	 0.0000	 0.1880
9	 0.0000	 0.2100
A	 0.0000	 0.2020
B	 0.0000	 0.2020
C	 0.0000	 0.2030
D	 0.0000	 0.1980
E	 0.0000	 0.2040
F	 0.0000	 0.2010
G	 0.0000	 0.2040
H	 0.0000	 0.2050
I	 0.0000	 0.1940
J	 0.0000	 0.2030
K	 0.0000	 0.1910
L	 0.0000	 0.2020
M	 0.0000	 0.1930
N	 0.0000	 0.1900
O	 0.0000	 0.1900
P	 0.0000	 0.1880
Q	 0.0000	 0.1900
R	 0.0000	 0.1910
S	 0.0000	 0.1940
T	 0.0000	 0.1810
U	 0.0000	 0.1800
V	 0.0000	 0.1870
W	 0.0000	 0.1740
X	 0.0000	 0.1820



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Chain	Atom inclusion	Q-score
Y	■ 0.0000	■ 0.1800
Z	■ 0.0000	■ 0.1680
a	■ 0.0000	■ 0.1910
b	■ 0.0000	■ 0.2130
c	■ 0.0000	■ 0.1960
d	■ 0.0000	■ 0.1880
e	■ 0.0000	■ 0.1930
f	■ 0.0000	■ 0.1960
g	■ 0.0000	■ 0.2170
h	■ 0.0000	■ 0.2080
i	■ 0.0000	■ 0.2120
j	■ 0.0000	■ 0.2010
k	■ 0.0000	■ 0.1890
l	■ 0.0000	■ 0.2100
m	■ 0.0000	■ 0.1940
n	■ 0.0000	■ 0.2120
o	■ 0.0000	■ 0.1970
p	■ 0.0000	■ 0.1910
q	■ 0.0000	■ 0.2110
r	■ 0.0000	■ 0.1920
s	■ 0.0000	■ 0.2120
t	■ 0.0000	■ 0.2090
u	■ 0.0000	■ 0.2170
v	■ 0.0000	■ 0.2030
w	■ 0.0000	■ 0.1910
x	■ 0.0000	■ 0.2170
y	■ 0.0000	■ 0.1890
z	■ 0.0000	■ 0.2150