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*******************************************************   !BIOSYM archive 3
PBC=OFF
NEWLOOP10_2_FIN::
!DATE
N       52.340950012   34.541168213   12.155929565 VAL  169    NT      N  -0.300
CA      50.599311829   39.418621063   13.824480057 VAL  169    CT      C   0.150
HA      51.078361511   38.577079773   13.325940132 VAL  169    HA      H   0.050
CB      49.861141205   40.325290680   12.819510460 VAL  169    CT      C  -0.050
HB      50.599449158   40.621379852   12.073470116 VAL  169    HA      H   0.050
CG1     48.739978790   39.589351654   12.069519997 VAL  169    CT      C  -0.150
C       49.701438904   38.885429382   14.950590134 VAL  169    C       C   0.600
O       49.095710754   37.823879242   14.851719856 VAL  169    O       O  -0.550
HG11    49.127109528   38.728191376   11.526049614 VAL  169    HA      H   0.050
HG12    47.965099335   39.234081268   12.748250008 VAL  169    HA      H   0.050
HG13    48.262569427   40.244380951   11.340220451 VAL  169    HA      H   0.050
CG2     49.343288422   41.621009827   13.463890076 VAL  169    CT      C  -0.150
HG21    48.543861389   41.426288605   14.177929878 VAL  169    HA      H   0.050
HG22    50.140571594   42.150451660   13.986430168 VAL  169    HA      H   0.050
HG23    48.941341400   42.297428131   12.708869934 VAL  169    HA      H   0.050
HT1     52.719909668   33.603431702   11.895179749 VAL  169    HC      H   0.350
HT2     51.945228577   34.446048737   13.118289948 VAL  169    HC      H   0.350
HT3     53.149398804   35.194679260   12.231670380 VAL  169    HC      H   0.350
N       49.669288635   39.699981689   16.025310516 TYR  170    NP      N  -0.400
HN      50.188461304   40.552211761   15.982020378 TYR  170    H       H   0.250
CA      48.928428650   39.382179260   17.243299484 TYR  170    CT      C   0.050
HA      48.967571259   40.293628693   17.838380814 TYR  170    HA      H   0.050
C       49.628238678   38.251178741   18.025880814 TYR  170    C       C   0.600
O       49.500080109   37.088520050   17.666919708 TYR  170    O       O  -0.550
CB      47.457759857   39.002109528   16.949979782 TYR  170    CT      C  -0.100
HB1     47.393199921   38.028961182   16.463800430 TYR  170    HA      H   0.050
HB2     46.902469635   38.878551483   17.875299454 TYR  170    HA      H   0.050
CG      46.725101471   40.024398804   16.123460770 TYR  170    C6R     C   0.000
CD1     46.656330109   41.349861145   16.535909653 TYR  170    C6R     C  -0.130
HD1     47.160430908   41.673278809   17.433759689 TYR  170    HA      H   0.130
CD2     46.083618164   39.654018402   14.945529938 TYR  170    C6R     C  -0.130
HD2     46.141258240   38.634479523   14.593779564 TYR  170    HA      H   0.130
CE1     45.929569244   42.279911041   15.809690475 TYR  170    C6R     C  -0.130
HE1     45.906288147   43.295158386   16.174470901 TYR  170    HA      H   0.130
CE2     45.354061127   40.584228516   14.216560364 TYR  170    C6R     C  -0.130
HE2     44.850090027   40.287158966   13.308930397 TYR  170    HA      H   0.130
CZ      45.249130249   41.894050598   14.660790443 TYR  170    C6R     C   0.250
OH      44.434188843   42.773040771   13.970399857 TYR  170    OT      O  -0.650
HH      44.196018219   43.511131287   14.538880348 TYR  170    HO      H   0.400
N       50.331180573   38.694469452   19.093179703 ILE  171    NP      N  -0.400
HN      50.360271454   39.688961029   19.231359482 ILE  171    H       H   0.250
CA      50.923400879   37.957839966   20.219469070 ILE  171    CT      C   0.050
HA      50.099830627   37.469501495   20.740779877 ILE  171    HA      H   0.050
C       51.506568909   39.067840576   21.118040085 ILE  171    C       C   0.600
O       52.144618988   39.991149902   20.621509552 ILE  171    O       O  -0.550
CB      52.054698944   36.939418793   19.873790741 ILE  171    CT      C  -0.050
HB      52.785289764   37.466648102   19.261920929 ILE  171    HA      H   0.050
CG1     51.552021027   35.717189789   19.068050385 ILE  171    CT      C  -0.100
HG11    50.555870056   35.436618805   19.404640198 ILE  171    HA      H   0.050
HG12    51.471431732   35.990520477   18.018329620 ILE  171    HA      H   0.050
CG2     52.804298401   36.463451385   21.143699646 ILE  171    CT      C  -0.150
HG21    53.238941193   37.281791687   21.715129852 ILE  171    HA      H   0.050
HG22    52.141448975   35.907100677   21.807640076 ILE  171    HA      H   0.050
HG23    53.649211884   35.822048187   20.893840790 ILE  171    HA      H   0.050
CD1     52.437049866   34.463348389   19.134189606 ILE  171    CT      C  -0.150
HD11    53.455379486   34.678108215   18.815959930 ILE  171    HA      H   0.050
HD12    52.477489471   34.050701141   20.141439438 ILE  171    HA      H   0.050
HD13    52.049278259   33.678470612   18.486440659 ILE  171    HA      H   0.050
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N	51.270839691	38.939018250	22.437980652	GLY	172	NP	N	-0.400
HN	50.776439667	38.149650574	22.815870285	GLY	172	H	H	0.250
CA	51.794528961	39.930938721	23.368049622	GLY	172	CT	C	0.000
HA1	52.750591278	40.304000854	22.998800278	GLY	172	HA	H	0.050
HA2	51.069591522	40.741661072	23.419429779	GLY	172	HA	H	0.050
C	51.963989258	39.286579132	24.741170883	GLY	172	C	C	0.600
O	51.137130737	38.487461090	25.158929825	GLY	172	O	O	-0.550
N	53.074459076	39.649608612	25.408590317	ALA	173	NP	N	-0.400
HN	53.676479340	40.376720428	25.061100006	ALA	173	H	H	0.250
CA	53.408058167	39.020030975	26.683240891	ALA	173	CT	C	0.050
HA	52.501758575	38.595340729	27.121179581	ALA	173	HA	H	0.050
C	53.955490112	40.092041016	27.627920151	ALA	173	C	C	0.600
O	54.679168701	40.989330292	27.213830948	ALA	173	O	O	-0.550
CB	54.455390930	37.922000885	26.457380295	ALA	173	CT	C	-0.150
HB1	55.374221802	38.329071045	26.034130096	ALA	173	HA	H	0.050
HB2	54.709201813	37.421581268	27.392650604	ALA	173	HA	H	0.050
HB3	54.081390381	37.162899017	25.770280838	ALA	173	HA	H	0.050
N	53.557548523	39.938030243	28.904010773	LEU	174	NP	N	-0.400
HN	53.032241821	39.130661011	29.177410126	LEU	174	H	H	0.250
CA	54.028400421	40.816699982	29.965919495	LEU	174	CT	C	0.050
HA	54.594688416	41.641929626	29.538860321	LEU	174	HA	H	0.050
C	54.914531708	39.972358704	30.875570297	LEU	174	C	C	0.600
O	54.534938812	38.863498688	31.229690552	LEU	174	O	O	-0.550
CB	52.844848633	41.327781677	30.799499512	LEU	174	CT	C	-0.100
HB1	52.333091736	40.475921631	31.252099991	LEU	174	HA	H	0.050
HB2	53.218311310	41.923191071	31.628250122	LEU	174	HA	H	0.050
CG	51.820770264	42.163120270	30.023889542	LEU	174	CT	C	-0.050
HG	51.454769135	41.556110382	29.204219818	LEU	174	HA	H	0.050
CD1	50.635620117	42.499008179	30.934919357	LEU	174	CT	C	-0.150
HD11	50.910060883	43.280231476	31.639160156	LEU	174	HA	H	0.050
HD12	49.773418427	42.835418701	30.359909058	LEU	174	HA	H	0.050
HD13	50.327831268	41.636379242	31.524129868	LEU	174	HA	H	0.050
CD2	52.426300049	43.436599731	29.418830872	LEU	174	CT	C	-0.150
HD21	52.854969025	44.076530457	30.190700531	LEU	174	HA	H	0.050
HD22	53.211971283	43.200668335	28.701000214	LEU	174	HA	H	0.050
HD23	51.668769836	44.012981415	28.887529373	LEU	174	HA	H	0.050
N	56.077529907	40.538410187	31.248949051	PHE	175	NP	N	-0.400
HN	56.318859100	41.431541443	30.863670349	PHE	175	H	H	0.250
CA	56.963031769	39.864471436	32.196971893	PHE	175	CT	C	0.050
HA	56.554061890	38.888549805	32.459831238	PHE	175	HA	H	0.050
C	57.073719025	40.674049377	33.504531860	PHE	175	C	C	0.600
O	58.012870789	41.446281433	33.691791534	PHE	175	O	O	-0.550
CB	58.371849060	39.660339355	31.603759766	PHE	175	CT	C	-0.100
HB1	58.813568115	40.632720947	31.381629944	PHE	175	HA	H	0.050
HB2	59.017910004	39.198890686	32.352130890	PHE	175	HA	H	0.050
CG	58.445270538	38.812358856	30.354429245	PHE	175	C6R	C	0.000
CD1	57.451519012	37.900630951	29.993299484	PHE	175	C6R	C	-0.130
HD1	56.590099335	37.730030060	30.619989395	PHE	175	HA	H	0.130
CD2	59.556610107	38.939819336	29.527750015	PHE	175	C6R	C	-0.130
HD2	60.354709625	39.618530273	29.791339874	PHE	175	HA	H	0.130
CE1	57.547229767	37.171531677	28.815959930	PHE	175	C6R	C	-0.130
HE1	56.763130188	36.479999542	28.545799255	PHE	175	HA	H	0.130
CE2	59.662780762	38.200290680	28.359619141	PHE	175	C6R	C	-0.130
HE2	60.538940430	38.305309296	27.735960007	PHE	175	HA	H	0.130
CZ	58.650081635	37.329170227	27.992229462	PHE	175	C6R	C	-0.130
HZ	58.727600098	36.775291443	27.067520142	PHE	175	HA	H	0.130
N	56.103698730	40.404930115	34.428909302	PRO	176	NX	N	-0.250
CA	56.368900299	40.417049408	35.870399475	PRO	176	CT	C	0.050
HA	56.482398987	41.440010071	36.203239441	PRO	176	HA	H	0.050
C	57.666229248	39.653209686	36.210079193	PRO	176	C	C	0.600
O	57.906608582	38.567268372	35.695949554	PRO	176	O	O	-0.550
CB	55.097709656	39.805328369	36.479591370	PRO	176	CT	C	-0.100

HB1	55.203338623	38.729301453	36.595829010	PRO	176	HA	H	0.050
HB2	54.846359253	40.226528168	37.451019287	PRO	176	HA	H	0.050
CG	54.001560211	40.060848236	35.446540833	PRO	176	CT	C	-0.100
HG1	53.183250427	39.343711853	35.509151459	PRO	176	HA	H	0.050
HG2	53.584739685	41.058631897	35.592418671	PRO	176	HA	H	0.050
CD	54.730381012	40.006389618	34.107158661	PRO	176	CT	C	0.000
HD1	54.708900452	38.999038696	33.696418762	PRO	176	HA	H	0.050
HD2	54.265209198	40.682968140	33.393409729	PRO	176	HA	H	0.050
N	58.527851105	40.337768555	36.987838745	MET	177	NP	N	-0.400
HN	58.141040802	41.030750275	37.599060059	MET	177	H	H	0.250
CA	59.956741333	40.028709412	36.977439880	MET	177	CT	C	0.050
HA	60.097351074	39.060420990	36.495529175	MET	177	HA	H	0.050
C	60.472881317	39.905849457	38.424789429	MET	177	C	C	0.600
O	59.743930817	39.540729523	39.337001801	MET	177	O	O	-0.550
CB	60.682849884	41.105998993	36.147258759	MET	177	CT	C	-0.100
HB1	59.995708466	41.483539581	35.390281677	MET	177	HA	H	0.050
HB2	60.947528839	41.963291168	36.767238617	MET	177	HA	H	0.050
CG	61.913200378	40.575328827	35.400791168	MET	177	CT	C	-0.050
HG1	62.597530365	40.030418396	36.049839020	MET	177	HA	H	0.050
HG2	61.588439941	39.863891602	34.642101288	MET	177	HA	H	0.050
SD	62.820800781	41.896888733	34.580730438	MET	177	SE	S	-0.100
CE	63.952339172	40.875888824	33.618991852	MET	177	CT	C	-0.100
HE1	64.391769409	40.104438782	34.252071381	MET	177	HA	H	0.050
HE2	63.418758392	40.379211426	32.808700562	MET	177	HA	H	0.050
HE3	64.761131287	41.481040955	33.210388184	MET	177	HA	H	0.050
N	61.771568298	40.213981628	38.584098816	SER	178	NP	N	-0.400
HN	62.293289185	40.663860321	37.858100891	SER	178	H	H	0.250
CA	62.482238770	40.008411407	39.835990906	SER	178	CT	C	0.050
HA	62.468868256	38.942630768	40.069610596	SER	178	HA	H	0.050
C	61.855339050	40.835479736	40.970329285	SER	178	C	C	0.600
O	61.940208435	42.058269501	40.956920624	SER	178	O	O	-0.550
CB	63.901809692	40.534759521	39.588241577	SER	178	CT	C	0.050
HB1	64.499649048	40.581138611	40.505489349	SER	178	HA	H	0.100
HB2	64.435859680	39.878250122	38.902580261	SER	178	HA	H	0.100
OG	63.833698273	41.810680389	38.973808289	SER	178	OT	O	-0.650
HG	63.276981354	42.379219055	39.516540527	SER	178	HO	H	0.400
N	61.259449005	40.111938477	41.938728333	GLY	179	NP	N	-0.400
HN	61.164241791	39.119041443	41.869678497	GLY	179	H	H	0.250
CA	60.658908844	40.790359497	43.083019257	GLY	179	CT	C	0.000
HA1	60.580471039	40.059940338	43.886119843	GLY	179	HA	H	0.050
HA2	61.321178436	41.593208313	43.410781860	GLY	179	HA	H	0.050
C	59.270069122	41.353618622	42.750240326	GLY	179	C	C	0.600
O	58.740779877	42.205989838	43.449821472	GLY	179	O	O	-0.550
N	58.718700409	40.836608887	41.639270782	GLY	180	NP	N	-0.400
HN	59.211669922	40.159729004	41.088279724	GLY	180	H	H	0.250
CA	57.422191620	41.286289215	41.163700104	GLY	180	CT	C	0.000
HA1	56.764911652	41.482761383	42.012828827	GLY	180	HA	H	0.050
HA2	57.575340271	42.200649261	40.590579987	GLY	180	HA	H	0.050
C	56.833118439	40.196170807	40.280410767	GLY	180	C	C	0.600
O	56.563369751	40.388851166	39.101299286	GLY	180	O	O	-0.550
N	56.679199219	39.030860901	40.941478729	TRP	181	NP	N	-0.400
HN	56.978858948	39.003719330	41.895889282	TRP	181	H	H	0.250
CA	56.164508820	37.825408936	40.296848297	TRP	181	CT	C	0.050
HA	56.226181030	37.028320312	41.030769348	TRP	181	HA	H	0.050
C	57.019821167	37.411701202	39.083930969	TRP	181	C	C	0.600
O	56.539779663	37.424530029	37.960559845	TRP	181	O	O	-0.550
CB	54.688751221	37.978488922	39.881179810	TRP	181	CT	C	-0.100
HB1	54.570140839	38.758670807	39.130390167	TRP	181	HA	H	0.050
HB2	54.325351715	37.055938721	39.426868439	TRP	181	HA	H	0.050
CG	53.826660156	38.288921356	41.084400177	TRP	181	C5R	C	-0.030
CD1	53.435909271	37.380489349	42.072681427	TRP	181	C5R	C	-0.040
HD1	53.706508636	36.335231781	42.104339600	TRP	181	HA	H	0.100

CD2	53.243511200	39.559608459	41.437831879	TRP	181	CR56	C	0.100
HE1	52.264678955	37.613658905	43.782871246	TRP	181	H	H	0.300
NE1	52.664680481	38.020851135	42.984558105	TRP	181	N5R	N	-0.360
CE2	52.520030975	39.356628418	42.636131287	TRP	181	CR56	C	-0.040
CE3	53.275119781	40.799068451	40.856220245	TRP	181	C6R	C	-0.130
HE3	53.829868317	40.952800751	39.941860199	TRP	181	HA	H	0.100
CZ2	51.850788116	40.398780823	43.217430115	TRP	181	C6R	C	-0.130
HZ2	51.300891876	40.240539551	44.133621216	TRP	181	HA	H	0.130
CZ3	52.592300415	41.863391876	41.445861816	TRP	181	C6R	C	-0.130
HZ3	52.611911774	42.840808868	40.986740112	TRP	181	HA	H	0.130
CH2	51.879840851	41.663169861	42.628391266	TRP	181	C6R	C	-0.130
HH2	51.351200104	42.485801697	43.087799072	TRP	181	HA	H	0.130
N	58.288211823	36.969638824	39.329010010	PRO	182	NX	N	-0.250
CA	59.172100067	36.565788269	38.230850220	PRO	182	CT	C	0.050
HA	59.255729675	37.381599426	37.518341064	PRO	182	HA	H	0.050
C	58.679840088	35.344909668	37.431140900	PRO	182	C	C	0.600
O	59.215579987	34.997341156	36.387798309	PRO	182	O	O	-0.550
CB	60.532409668	36.311309814	38.900100708	PRO	182	CT	C	-0.100
HB1	61.075561523	35.460700989	38.487560272	PRO	182	HA	H	0.050
HB2	61.167148590	37.186378479	38.763801575	PRO	182	HA	H	0.050
CG	60.231060028	36.134689331	40.390930176	PRO	182	CT	C	-0.100
HG1	60.073028564	35.080101013	40.597339630	PRO	182	HA	H	0.050
HG2	61.039760590	36.486110687	41.032108307	PRO	182	HA	H	0.050
CD	58.918441772	36.874290466	40.642929077	PRO	182	CT	C	0.000
HD1	58.302089691	36.324619293	41.351089478	PRO	182	HA	H	0.050
HD2	59.105308533	37.874210358	41.031589508	PRO	182	HA	H	0.050
N	57.581409454	34.757320404	37.939910889	GLY	183	NP	N	-0.400
HN	57.257259369	35.033218384	38.841239929	GLY	183	H	H	0.250
CA	56.826908112	33.784278870	37.169780731	GLY	183	CT	C	0.000
HA1	57.460750580	32.908710480	37.029491425	GLY	183	HA	H	0.050
HA2	55.962779999	33.512550354	37.773750305	GLY	183	HA	H	0.050
C	56.355529785	34.335720062	35.809349060	GLY	183	C	C	0.600
O	56.279930115	33.616611481	34.824218750	GLY	183	O	O	-0.550
N	56.081588745	35.653278351	35.791988373	GLY	184	NP	N	-0.400
HN	56.165340424	36.203918457	36.624511719	GLY	184	H	H	0.250
CA	55.752429962	36.304958344	34.529220581	GLY	184	CT	C	0.000
HA1	54.832950592	35.865661621	34.139961243	GLY	184	HA	H	0.050
HA2	55.592468262	37.355880737	34.754638672	GLY	184	HA	H	0.050
C	56.894111633	36.154361725	33.515598297	GLY	184	C	C	0.600
O	56.713878632	35.751289368	32.374179840	GLY	184	O	O	-0.550
N	58.099521637	36.454570770	34.022960663	GLN	185	NP	N	-0.400
HN	58.161739349	36.841800690	34.945690155	GLN	185	H	H	0.250
CA	59.284568787	36.287940979	33.198398590	GLN	185	CT	C	0.050
HA	59.062831879	36.762828827	32.242008209	GLN	185	HA	H	0.050
C	59.568050385	34.798561096	32.923919678	GLN	185	C	C	0.600
O	60.164859772	34.449661255	31.920160294	GLN	185	O	O	-0.550
CB	60.486610413	36.988059998	33.835220337	GLN	185	CT	C	-0.100
HB1	60.186210632	37.957290649	34.234039307	GLN	185	HA	H	0.050
HB2	60.838809967	36.405731201	34.688629150	GLN	185	HA	H	0.050
CG	61.603420258	37.197269440	32.799549103	GLN	185	CT	C	-0.100
HG1	61.763290405	36.294551849	32.209800720	GLN	185	HA	H	0.050
HG2	61.338760376	37.987998962	32.097610474	GLN	185	HA	H	0.050
CD	62.931720734	37.542049408	33.461940765	GLN	185	C	C	0.550
OE1	63.011009216	37.857929230	34.644481659	GLN	185	O	O	-0.550
NE2	63.958839417	37.442241669	32.617519379	GLN	185	NP	N	-0.600
HE21	64.900619507	37.580600739	32.934158325	GLN	185	H	H	0.300
HE22	63.801208496	37.200618744	31.654249191	GLN	185	H	H	0.300
N	59.049850464	33.924308777	33.804901123	ALA	186	NP	N	-0.400
HN	58.681671143	34.280601501	34.665161133	ALA	186	H	H	0.250
CA	59.141811371	32.491241455	33.528659821	ALA	186	CT	C	0.050
HA	60.190608978	32.290840149	33.297321320	ALA	186	HA	H	0.050
C	58.298908234	32.068908691	32.299049377	ALA	186	C	C	0.600

O	58.459239960	30.970350266	31.780569077	ALA	186	O	O	-0.550
CB	58.753761292	31.684549332	34.769798279	ALA	186	CT	C	-0.150
HB1	59.304538727	32.038459778	35.638931274	ALA	186	HA	H	0.050
HB2	57.693649292	31.766389847	34.993228912	ALA	186	HA	H	0.050
HB3	58.978378296	30.627059937	34.631858826	ALA	186	HA	H	0.050
N	57.438949585	32.998630524	31.823640823	CYS	187	NP	N	-0.400
HN	57.212581635	33.817230225	32.359390259	CYS	187	H	H	0.250
CA	56.824409485	32.809230804	30.510179520	CYS	187	CT	C	0.050
HA	56.497230530	31.769090652	30.450540543	CYS	187	HA	H	0.050
C	57.829380035	33.065929413	29.365539551	CYS	187	C	C	0.600
O	57.694320679	32.517601013	28.282049179	CYS	187	O	O	-0.550
CB	55.609058380	33.728111267	30.342189789	CYS	187	CT	C	0.100
HB1	55.909240723	34.775558472	30.354080200	CYS	187	HA	H	0.050
HB2	55.155818939	33.555850983	29.367380142	CYS	187	HA	H	0.050
SG	54.339031219	33.468379974	31.604179382	CYS	187	ST	S	-0.300
HG	53.936859131	32.195438385	31.579439163	CYS	187	H	H	0.100
N	58.844409943	33.906818390	29.639490128	GLN	188	NP	N	-0.400
HN	58.922039032	34.315799713	30.548080444	GLN	188	H	H	0.250
CA	59.896598816	34.200988770	28.661579132	GLN	188	CT	C	0.050
HA	59.391048431	34.777061462	27.890489578	GLN	188	HA	H	0.050
C	60.434341431	32.947429657	27.938240051	GLN	188	C	C	0.600
O	60.296791077	32.845630646	26.725379944	GLN	188	O	O	-0.550
CB	61.028640747	35.061119080	29.259010315	GLN	188	CT	C	-0.100
HB1	60.596290588	35.913040161	29.784120560	GLN	188	HA	H	0.050
HB2	61.590358734	34.509899139	30.009740829	GLN	188	HA	H	0.050
CG	62.002319336	35.562789917	28.182929993	GLN	188	CT	C	-0.100
HG1	62.459300995	34.723331451	27.657529831	GLN	188	HA	H	0.050
HG2	61.466400146	36.148128510	27.437639236	GLN	188	HA	H	0.050
CD	63.130508423	36.426300049	28.760400772	GLN	188	C	C	0.550
OE1	63.116409302	36.849658966	29.911329269	GLN	188	O	O	-0.550
NE2	64.114280701	36.641990662	27.882310867	GLN	188	NP	N	-0.600
HE21	64.948036194	37.122829437	28.139310837	GLN	188	H	H	0.300
HE22	64.015022278	36.300991058	26.938240051	GLN	188	H	H	0.300
N	61.021938324	31.964090347	28.678920746	PRO	189	NX	N	-0.250
CA	61.547531128	30.777620316	28.005659103	PRO	189	CT	C	0.050
HA	62.336181641	31.052320480	27.303020477	PRO	189	HA	H	0.050
C	60.474620819	29.973070145	27.250890732	PRO	189	C	C	0.600
O	60.776710510	29.249490738	26.313999176	PRO	189	O	O	-0.550
CB	62.106449127	29.929729462	29.157489777	PRO	189	CT	C	-0.100
HB1	61.989551544	28.861249924	29.005950928	PRO	189	HA	H	0.050
HB2	63.172168732	30.132459641	29.278829575	PRO	189	HA	H	0.050
CG	61.354099274	30.417829514	30.394390106	PRO	189	CT	C	-0.100
HG1	60.370590210	29.950929642	30.425790787	PRO	189	HA	H	0.050
HG2	61.852031708	30.184219360	31.334150314	PRO	189	HA	H	0.050
CD	61.191040039	31.911010742	30.131990433	PRO	189	CT	C	0.000
HD1	60.356468201	32.318168640	30.685729980	PRO	189	HA	H	0.050
HD2	62.096340179	32.447429657	30.416450500	PRO	189	HA	H	0.050
N	59.206909180	30.162319183	27.669649124	ALA	190	NP	N	-0.400
HN	59.007331848	30.819309235	28.396669388	ALA	190	H	H	0.250
CA	58.116798401	29.494539261	26.973709106	ALA	190	CT	C	0.050
HA	58.387428284	28.442789078	26.885980606	ALA	190	HA	H	0.050
C	57.969261169	30.096380234	25.568889618	ALA	190	C	C	0.600
O	58.043930054	29.420299530	24.547679901	ALA	190	O	O	-0.550
CB	56.822280884	29.636299133	27.786060333	ALA	190	CT	C	-0.150
HB1	56.464580536	30.658870697	27.861669540	ALA	190	HA	H	0.050
HB2	56.014251709	29.075630188	27.335729599	ALA	190	HA	H	0.050
HB3	56.960788727	29.257640839	28.795089722	ALA	190	HA	H	0.050
N	57.781459808	31.430170059	25.608909607	VAL	191	NP	N	-0.400
HN	57.814571381	31.883140564	26.503179550	VAL	191	H	H	0.250
CA	57.605709076	32.223320007	24.400690079	VAL	191	CT	C	0.050
HA	56.688648224	31.873960495	23.929519653	VAL	191	HA	H	0.050
C	58.766811371	31.968240738	23.432800293	VAL	191	C	C	0.600

O	58.579551697	31.566150665	22.293840408	VAL	191	O	O	-0.550
CB	57.490428925	33.724159241	24.764089584	VAL	191	CT	C	-0.050
HB	58.370979309	34.008079529	25.343339920	VAL	191	HA	H	0.050
CG1	57.435031891	34.634140015	23.524009705	VAL	191	CT	C	-0.150
HG11	56.590770721	34.379070282	22.882770538	VAL	191	HA	H	0.050
HG12	57.333248138	35.681568146	23.809579849	VAL	191	HA	H	0.050
HG13	58.340721130	34.552280426	22.925870895	VAL	191	HA	H	0.050
CG2	56.260021210	33.992881775	25.637269974	VAL	191	CT	C	-0.150
HG21	55.347831726	33.783538818	25.080160141	VAL	191	HA	H	0.050
HG22	56.251171112	33.379261017	26.536010742	VAL	191	HA	H	0.050
HG23	56.224220276	35.035800934	25.953840256	VAL	191	HA	H	0.050
N	59.967838287	32.251060486	23.955739975	GLU	192	NP	N	-0.400
HN	60.040531158	32.518859863	24.918899536	GLU	192	H	H	0.250
CA	61.125690460	32.358219147	23.085039139	GLU	192	CT	C	0.050
HA	60.771980286	32.783981323	22.144020081	GLU	192	HA	H	0.050
C	61.711479187	30.975700378	22.738309860	GLU	192	C	C	0.600
O	62.377021790	30.814329147	21.721799850	GLU	192	O	O	-0.550
CB	62.115409851	33.361141205	23.697000504	GLU	192	CT	C	-0.100
HB1	62.619930267	32.931999207	24.564449310	GLU	192	HA	H	0.050
HB2	62.894199371	33.573719025	22.963159561	GLU	192	HA	H	0.050
CG	61.390819550	34.662441254	24.112379074	GLU	192	CT	C	-0.250
HG1	60.618991852	34.925201416	23.390840530	GLU	192	HA	H	0.050
HG2	60.872879028	34.527061462	25.061279297	GLU	192	HA	H	0.050
CD	62.345508575	35.851089478	24.255809784	GLU	192	C	C	0.350
OE1	62.554340363	36.541721344	23.261150360	GLU	192	OC	O	-0.600
OE2	62.854938507	36.080341339	25.344350815	GLU	192	OC	O	-0.600
N	61.390449524	29.951210022	23.568590164	MET	193	NP	N	-0.400
HN	60.923999786	30.086919785	24.446449280	MET	193	H	H	0.250
CA	61.696899414	28.602260590	23.088380814	MET	193	CT	C	0.050
HA	62.742908478	28.609640121	22.789960861	MET	193	HA	H	0.050
C	60.815540314	28.288959503	21.862730026	MET	193	C	C	0.600
O	61.310611725	28.037769318	20.767210007	MET	193	O	O	-0.550
CB	61.543861389	27.508150101	24.157949448	MET	193	CT	C	-0.100
HB1	62.110271454	27.783700943	25.047090530	MET	193	HA	H	0.050
HB2	60.501659393	27.429819107	24.469270706	MET	193	HA	H	0.050
CG	62.066841125	26.144269943	23.669450760	MET	193	CT	C	-0.050
HG1	61.818828583	25.954309464	22.625270844	MET	193	HA	H	0.050
HG2	63.156509399	26.142299652	23.709600449	MET	193	HA	H	0.050
SD	61.446369171	24.784280777	24.677719116	MET	193	SE	S	-0.100
CE	60.291858673	24.067129135	23.492359161	MET	193	CT	C	-0.100
HE1	60.796440125	23.337600708	22.860839844	MET	193	HA	H	0.050
HE2	59.470329285	23.580930710	24.015769958	MET	193	HA	H	0.050
HE3	59.855239868	24.841409683	22.861200333	MET	193	HA	H	0.050
N	59.492568970	28.317890167	22.126459122	ALA	194	NP	N	-0.400
HN	59.172519684	28.635269165	23.025680542	ALA	194	H	H	0.250
CA	58.533111572	27.851089478	21.130659103	ALA	194	CT	C	0.050
HA	58.787841797	26.813659668	20.907300949	ALA	194	HA	H	0.050
C	58.610038757	28.658069611	19.827129364	ALA	194	C	C	0.600
O	58.630580902	28.108760834	18.734079361	ALA	194	O	O	-0.550
CB	57.112838745	27.937829971	21.703489304	ALA	194	CT	C	-0.150
HB1	57.003791809	27.272449493	22.555299759	ALA	194	HA	H	0.050
HB2	56.875869751	28.949060440	22.039350510	ALA	194	HA	H	0.050
HB3	56.365211487	27.642669678	20.965950012	ALA	194	HA	H	0.050
N	58.620300293	29.987209320	20.016410828	LEU	195	NP	N	-0.400
HN	58.678459167	30.336069107	20.952350616	LEU	195	H	H	0.250
CA	58.427898407	30.908819199	18.907339096	LEU	195	CT	C	0.050
HA	57.463928223	30.652370453	18.471559525	LEU	195	HA	H	0.050
C	59.500400543	30.736959457	17.828809738	LEU	195	C	C	0.600
O	59.195209503	30.421070099	16.688619614	LEU	195	O	O	-0.550
CB	58.334560394	32.347881317	19.410850525	LEU	195	CT	C	-0.100
HB1	57.531318665	32.379791260	20.148199081	LEU	195	HA	H	0.050
HB2	59.234138489	32.633548737	19.956090927	LEU	195	HA	H	0.050

CG 58.034431458 33.349140167 18.279609680 LEU 195 CT C -0.050
HG 57.601978302 32.824890137 17.425489426 LEU 195 HA H 0.050
CD1 56.998008728 34.362930298 18.741989136 LEU 195 CT C -0.150
HD11 56.018959045 33.906978607 18.891599655 LEU 195 HA H 0.050
HD12 57.309478760 34.810729980 19.678419113 LEU 195 HA H 0.050
HD13 56.896789551 35.151611328 18.006099701 LEU 195 HA H 0.050
CD2 59.300979614 34.069019318 17.798219681 LEU 195 CT C -0.150
HD21 59.763488770 34.624580383 18.610010147 LEU 195 HA H 0.050
HD22 60.046669006 33.377361298 17.410749435 LEU 195 HA H 0.050
HD23 59.074890137 34.773548126 16.997520447 LEU 195 HA H 0.050
N 60.769981384 30.928310394 18.227899551 GLU 196 NP N -0.400
HN 60.973018646 31.322299957 19.129020691 GLU 196 H H 0.250
CA 61.826511383 30.820749283 17.225959778 GLU 196 CT C 0.050
HA 61.570110321 31.527479172 16.435520172 GLU 196 HA H 0.050
C 61.858959198 29.413820267 16.582950592 GLU 196 C C 0.600
O 62.235210419 29.249290466 15.427020073 GLU 196 O O -0.550
CB 63.189571381 31.218540192 17.816799164 GLU 196 CT C -0.100
HB1 63.378810883 30.695619583 18.750490189 GLU 196 HA H 0.050
HB2 63.968189240 30.888799667 17.127059937 GLU 196 HA H 0.050
CG 63.367729187 32.738338470 18.002859116 GLU 196 CT C -0.250
HG1 64.427963257 32.979148865 17.912689209 GLU 196 HA H 0.050
HG2 62.867080688 33.288211823 17.205219269 GLU 196 HA H 0.050
CD 62.881881714 33.283939362 19.355239868 GLU 196 C C 0.350
OE1 63.663520813 33.925251007 20.055610657 GLU 196 OC O -0.600
OE2 61.714771271 33.118690491 19.706480026 GLU 196 OC O -0.600
N 61.401939392 28.418769836 17.371229172 ASP 197 NP N -0.400
HN 61.077278137 28.621490479 18.295669556 ASP 197 H H 0.250
CA 61.272960663 27.060550690 16.849239349 ASP 197 CT C 0.050
HA 62.261798859 26.784339905 16.476329803 ASP 197 HA H 0.050
C 60.294158936 27.031660080 15.656169891 ASP 197 C C 0.600
O 60.621440887 26.618799210 14.548339844 ASP 197 O O -0.550
CB 60.800388336 26.122249603 17.985189438 ASP 197 CT C -0.250
HB1 60.657100677 26.671390533 18.912559509 ASP 197 HA H 0.050
HB2 59.833011627 25.664310455 17.769870758 ASP 197 HA H 0.050
CG 61.814701080 25.017099380 18.265850067 ASP 197 C C 0.350
OD1 62.933021545 25.310310364 18.675409317 ASP 197 OC O -0.600
OD2 61.510108948 23.845710754 18.075300217 ASP 197 OC O -0.600
N 59.072471619 27.518470764 15.939040184 VAL 198 NP N -0.400
HN 58.896179199 27.871259689 16.863159180 VAL 198 H H 0.250
CA 58.031890869 27.488040924 14.914529800 VAL 198 CT C 0.050
HA 58.040168762 26.473070145 14.516920090 VAL 198 HA H 0.050
C 58.360919952 28.433479309 13.737050056 VAL 198 C C 0.600
O 58.027408600 28.162979126 12.590430260 VAL 198 O O -0.550
CB 56.646678925 27.739419937 15.530550003 VAL 198 CT C -0.050
HB 55.929828644 27.780889511 14.714520454 VAL 198 HA H 0.050
CG1 56.248661041 26.573850632 16.449380875 VAL 198 CT C -0.150
HG11 56.250690460 25.627319336 15.908880234 VAL 198 HA H 0.050
HG12 56.940589905 26.478389740 17.287439346 VAL 198 HA H 0.050
HG13 55.253540039 26.714250565 16.867439270 VAL 198 HA H 0.050
CG2 56.559959412 29.069360733 16.282260895 VAL 198 CT C -0.150
HG21 56.951019287 29.902420044 15.702500343 VAL 198 HA H 0.050
HG22 55.535411835 29.317810059 16.539129257 VAL 198 HA H 0.050
HG23 57.118659973 29.015550613 17.207509995 VAL 198 HA H 0.050
N 59.101379395 29.506399155 14.059439659 ASN 199 NP N -0.400
HN 59.264598846 29.695690155 15.028229713 ASN 199 H H 0.250
CA 59.625770569 30.368139267 13.004070282 ASN 199 CT C 0.050
HA 58.775508881 30.725410461 12.421199799 ASN 199 HA H 0.050
C 60.543659210 29.541530609 12.073100090 ASN 199 C C 0.600
O 60.448101044 29.599710464 10.854100227 ASN 199 O O -0.550
CB 60.418640137 31.550760269 13.592049599 ASN 199 CT C -0.100
HB1 61.222640991 31.187660217 14.229069710 ASN 199 HA H 0.050
HB2 60.904750824 32.095821381 12.782199860 ASN 199 HA H 0.050

CG	59.626621246	32.603851318	14.394009590	ASN	199	C	C	0.550
OD1	60.208148956	33.579189301	14.843640327	ASN	199	O	O	-0.550
ND2	58.304870605	32.428649902	14.531590462	ASN	199	NP	N	-0.600
HD21	57.827060699	33.178470612	14.999290466	ASN	199	H	H	0.300
HD22	57.786010742	31.625980377	14.219659805	ASN	199	H	H	0.300
N	61.409481049	28.735630035	12.724729538	SER	200	NP	N	-0.400
HN	61.404209137	28.729789734	13.727689743	SER	200	H	H	0.250
CA	62.342380524	27.879440308	11.988510132	SER	200	CT	C	0.050
HA	62.880210876	28.529020309	11.295849800	SER	200	HA	H	0.050
C	61.616851807	26.792699814	11.162830353	SER	200	C	C	0.600
O	62.090808868	26.350250244	10.125989914	SER	200	O	O	-0.550
CB	63.336318970	27.230079651	12.962140083	SER	200	CT	C	0.050
HB1	62.849491119	26.508409500	13.627320290	SER	200	HA	H	0.100
HB2	64.078079224	26.662790298	12.396309853	SER	200	HA	H	0.100
OG	64.040756226	28.197710037	13.720120430	SER	200	OT	O	-0.650
HG	63.431930542	28.697160721	14.268039703	SER	200	HO	H	0.400
N	60.423480988	26.420690536	11.662229538	ARG	201	NP	N	-0.400
HN	60.190158844	26.756040573	12.578399658	ARG	201	H	H	0.250
CA	59.534660339	25.499319077	10.949740410	ARG	201	CT	C	0.050
HA	60.129180908	24.626010895	10.677200317	ARG	201	HA	H	0.050
C	58.973438263	26.120119095	9.639559746	ARG	201	C	C	0.600
O	58.305931091	25.440309525	8.867079735	ARG	201	O	O	-0.550
CB	58.417728424	25.088460922	11.941929817	ARG	201	CT	C	-0.100
HB1	58.862621307	24.503389359	12.747719765	ARG	201	HA	H	0.050
HB2	58.037948608	25.976030350	12.417469978	ARG	201	HA	H	0.050
CG	57.195041656	24.339300156	11.386619568	ARG	201	CT	C	-0.100
HG1	56.757190704	24.878229141	10.549579620	ARG	201	HA	H	0.050
HG2	57.511928558	23.370050430	11.000080109	ARG	201	HA	H	0.050
CD	56.084598541	24.151399612	12.433699608	ARG	201	CT	C	0.000
HD1	55.303058624	23.516410828	12.013119698	ARG	201	HA	H	0.050
HD2	56.466411591	23.686840057	13.344369888	ARG	201	HA	H	0.050
NE	55.482181549	25.437549591	12.810020447	ARG	201	NP	N	-0.400
HE	56.004409790	26.268690109	12.607859612	ARG	201	H	H	0.300
CZ	54.277530670	25.527790070	13.430339813	ARG	201	C	C	0.500
NH1	53.629199982	24.410970688	13.757229805	ARG	201	NC	N	-0.450
HH11	54.043201447	23.531240463	13.535329819	ARG	201	HC	H	0.350
HH12	52.732189178	24.386529922	14.225090027	ARG	201	HC	H	0.350
NH2	53.746498108	26.716859818	13.714389801	ARG	201	NC	N	-0.450
HH21	54.207660675	27.590200424	13.485380173	ARG	201	HC	H	0.350
HH22	52.863121033	26.790529251	14.172329903	ARG	201	HC	H	0.350
N	59.224861145	27.433509827	9.433930397	ARG	202	NP	N	-0.400
HN	59.819801331	27.950820923	10.052820206	ARG	202	H	H	0.250
CA	58.570018768	28.200229645	8.366109848	ARG	202	CT	C	0.050
HA	59.022811890	29.187429428	8.468239784	ARG	202	HA	H	0.050
C	57.071651459	28.441509247	8.723059654	ARG	202	C	C	0.600
O	56.213630676	28.759210587	7.909279823	ARG	202	O	O	-0.550
CB	58.989128113	27.658189774	6.962930202	ARG	202	CT	C	-0.100
HB1	59.730808258	28.361499786	6.581679821	ARG	202	HA	H	0.050
HB2	59.556690216	26.733160019	7.064249992	ARG	202	HA	H	0.050
CG	57.942729950	27.471059799	5.844059944	ARG	202	CT	C	-0.100
HG1	57.164230347	28.229280472	5.884399891	ARG	202	HA	H	0.050
HG2	58.447299957	27.678890228	4.899429798	ARG	202	HA	H	0.050
CD	57.370681763	26.041620255	5.724780083	ARG	202	CT	C	0.000
HD1	57.622020721	25.612360001	4.754230022	ARG	202	HA	H	0.050
HD2	57.757568359	25.351650238	6.474659920	ARG	202	HA	H	0.050
NE	55.912128448	26.066980362	5.773489952	ARG	202	NP	N	-0.400
HE	55.446769714	26.211729050	4.900509834	ARG	202	H	H	0.300
CZ	55.246238708	26.100790024	6.946569920	ARG	202	C	C	0.500
NH1	55.854648590	25.836799622	8.090049744	ARG	202	NC	N	-0.450
HH11	56.813808441	25.526079178	8.132639885	ARG	202	HC	H	0.350
HH12	55.348861694	25.994970322	8.945249557	ARG	202	HC	H	0.350
NH2	53.963878632	26.431919098	6.988890171	ARG	202	NC	N	-0.450

HH21	53.410560608	26.551460266	6.167769909	ARG	202	HC	H	0.350
HH22	53.568191528	26.588809967	7.903039932	ARG	202	HC	H	0.350
N	56.859539032	28.261629105	10.040220261	ASP	203	NP	N	-0.400
HN	57.640090942	28.071260452	10.637599945	ASP	203	H	H	0.250
CA	55.674438477	28.552009583	10.824310303	ASP	203	CT	C	0.050
HA	55.794338226	27.848539352	11.643380165	ASP	203	HA	H	0.050
C	54.311660767	28.183229446	10.193860054	ASP	203	C	C	0.600
O	54.148059845	27.152439117	9.540980339	ASP	203	O	O	-0.550
CB	55.799308777	29.989089966	11.372190475	ASP	203	CT	C	-0.250
HB1	56.839561462	30.308839798	11.307490349	ASP	203	HA	H	0.050
HB2	55.235000610	30.723459244	10.796990395	ASP	203	HA	H	0.050
CG	55.402530670	30.039030075	12.850779533	ASP	203	C	C	0.350
OD1	54.506980896	29.290510178	13.244050026	ASP	203	OC	O	-0.600
OD2	56.018161774	30.797620773	13.594639778	ASP	203	OC	O	-0.600
N	53.336719513	29.055810928	10.493040085	ILE	204	NP	N	-0.400
HN	53.584510803	29.859840393	11.037400246	ILE	204	H	H	0.250
CA	51.941421509	28.880779266	10.129579544	ILE	204	CT	C	0.050
HA	51.801349640	27.855739594	9.781399727	ILE	204	HA	H	0.050
C	51.618709564	29.858360291	8.994029999	ILE	204	C	C	0.600
O	51.943801880	31.033319473	9.073360443	ILE	204	O	O	-0.550
CB	51.066051483	29.138330460	11.376810074	ILE	204	CT	C	-0.050
HB	51.342609406	28.381420135	12.111940384	ILE	204	HA	H	0.050
CG1	49.576560974	28.936870575	11.051719666	ILE	204	CT	C	-0.100
HG11	49.243751526	29.671850204	10.319239616	ILE	204	HA	H	0.050
HG12	49.441928864	27.956640244	10.592329979	ILE	204	HA	H	0.050
CG2	51.322418213	30.509460449	12.037079811	ILE	204	CT	C	-0.150
HG21	52.369350433	30.654439926	12.303669930	ILE	204	HA	H	0.050
HG22	51.032360077	31.334230423	11.386349678	ILE	204	HA	H	0.050
HG23	50.760330200	30.612630844	12.964389801	ILE	204	HA	H	0.050
CD1	48.672618866	29.033170700	12.277669907	ILE	204	CT	C	-0.150
HD11	48.550121307	30.065580368	12.604240417	ILE	204	HA	H	0.050
HD12	47.688579559	28.634269714	12.039310455	ILE	204	HA	H	0.050
HD13	49.081680298	28.467979431	13.112190247	ILE	204	HA	H	0.050
N	50.972389221	29.308679581	7.936649799	LEU	205	NP	N	-0.400
HN	50.738571167	28.339630127	7.972740173	LEU	205	H	H	0.250
CA	50.519168854	30.120969772	6.797760010	LEU	205	CT	C	0.050
HA	50.351799011	29.432910919	5.970680237	LEU	205	HA	H	0.050
C	51.604099274	31.143510818	6.378139973	LEU	205	C	C	0.600
O	51.370521545	32.341350555	6.356609821	LEU	205	O	O	-0.550
CB	49.209548950	30.843000412	7.177040100	LEU	205	CT	C	-0.100
HB1	49.413898468	31.513299942	8.014419556	LEU	205	HA	H	0.050
HB2	48.892250061	31.489139557	6.356679916	LEU	205	HA	H	0.050
CG	48.049221039	29.901180267	7.555459976	LEU	205	CT	C	-0.050
HG	48.398948669	29.178829193	8.291939735	LEU	205	HA	H	0.050
CD1	46.905670166	30.688049316	8.209580421	LEU	205	CT	C	-0.150
HD11	47.246368408	31.198459625	9.111100197	LEU	205	HA	H	0.050
HD12	46.506519318	31.441610336	7.529890060	LEU	205	HA	H	0.050
HD13	46.087791443	30.026359558	8.492819786	LEU	205	HA	H	0.050
CD2	47.534488678	29.115610123	6.342179775	LEU	205	CT	C	-0.150
HD21	47.184688568	29.787340164	5.557690144	LEU	205	HA	H	0.050
HD22	48.309520721	28.479339600	5.916609764	LEU	205	HA	H	0.050
HD23	46.701808929	28.469009399	6.620389938	LEU	205	HA	H	0.050
N	52.809680939	30.582010269	6.102009773	PRO	206	NX	N	-0.250
CA	54.123531342	31.055900574	6.554790020	PRO	206	CT	C	0.050
HA	54.392250061	30.346540451	7.338250160	PRO	206	HA	H	0.050
C	54.463169098	32.396541595	7.255330086	PRO	206	C	C	0.600
O	55.631008148	32.765480042	7.314380169	PRO	206	O	O	-0.550
CB	55.030548096	30.718139648	5.374919891	PRO	206	CT	C	-0.100
HB1	54.968830109	31.506179810	4.623489857	PRO	206	HA	H	0.050
HB2	56.075920105	30.610050201	5.668260098	PRO	206	HA	H	0.050
CG	54.434028625	29.410600662	4.831409931	PRO	206	CT	C	-0.100
HG1	54.616180420	29.285539627	3.763780117	PRO	206	HA	H	0.050

HG2	54.901309967	28.573959351	5.347179890	PRO	206	HA	H	0.050
CD	52.936191559	29.455659866	5.179349899	PRO	206	CT	C	0.000
HD1	52.338161469	29.638019562	4.284619808	PRO	206	HA	H	0.050
HD2	52.595008850	28.531579971	5.644179821	PRO	206	HA	H	0.050
N	53.462989807	33.094200134	7.820660114	ASP	207	NP	N	-0.400
HN	52.507400513	32.806381226	7.753210068	ASP	207	H	H	0.250
CA	53.786369324	34.182929993	8.728409767	ASP	207	CT	C	0.050
HA	54.506000519	34.837921143	8.231909752	ASP	207	HA	H	0.050
C	54.397960663	33.584289551	10.004170418	ASP	207	C	C	0.600
O	53.723560333	32.934059143	10.797630310	ASP	207	O	O	-0.550
CB	52.526580811	34.970359802	9.144570351	ASP	207	CT	C	-0.250
HB1	51.769939423	34.291610718	9.542090416	ASP	207	HA	H	0.050
HB2	52.781391144	35.679401398	9.931079865	ASP	207	HA	H	0.050
CG	51.903411865	35.809379578	8.024609566	ASP	207	C	C	0.350
OD1	52.645618439	36.363811493	7.215489864	ASP	207	OC	O	-0.600
OD2	50.677730560	35.918678284	7.997560024	ASP	207	OC	O	-0.600
N	55.686119080	33.903060913	10.199290276	TYR	208	NP	N	-0.400
HN	56.178661346	34.297500610	9.425789833	TYR	208	H	H	0.250
CA	56.313648224	33.689731598	11.501979828	TYR	208	CT	C	0.050
HA	56.374759674	32.611160278	11.638469696	TYR	208	HA	H	0.050
C	55.430938721	34.296878815	12.620730400	TYR	208	C	C	0.600
O	54.767440796	35.314098358	12.424329758	TYR	208	O	O	-0.550
CB	57.730609894	34.298580170	11.493149757	TYR	208	CT	C	-0.100
HB1	58.275650024	33.974739075	12.377790451	TYR	208	HA	H	0.050
HB2	58.294361115	33.917221069	10.641400337	TYR	208	HA	H	0.050
CG	57.730560303	35.806938171	11.455760002	TYR	208	C6R	C	0.000
CD1	57.881198883	36.535888672	12.631649971	TYR	208	C6R	C	-0.130
HD1	58.029300690	36.023818970	13.571860313	TYR	208	HA	H	0.130
CD2	57.568149567	36.494529724	10.256380081	TYR	208	C6R	C	-0.130
HD2	57.469429016	35.952278137	9.327960014	TYR	208	HA	H	0.130
CE1	57.842891693	37.922931671	12.612999916	TYR	208	C6R	C	-0.130
HE1	57.953819275	38.479560852	13.531259537	TYR	208	HA	H	0.130
CE2	57.530700684	37.883010864	10.232399940	TYR	208	C6R	C	-0.130
HE2	57.403369904	38.367469788	9.275019646	TYR	208	HA	H	0.130
CZ	57.660621643	38.601459503	11.417909622	TYR	208	C6R	C	0.250
OH	57.613288879	39.982429504	11.444230080	TYR	208	OT	O	-0.650
HH	57.196670532	40.331470490	10.668339729	TYR	208	HO	H	0.400
N	55.413249969	33.622940063	13.778450012	GLU	209	NP	N	-0.400
HN	55.826728821	32.712268829	13.839790344	GLU	209	H	H	0.250
CA	54.806728363	34.239910126	14.949330330	GLU	209	CT	C	0.050
HA	53.902919769	34.762779236	14.634149551	GLU	209	HA	H	0.050
C	55.798610687	35.252929688	15.525199890	GLU	209	C	C	0.600
O	57.004581451	35.039020538	15.513030052	GLU	209	O	O	-0.550
CB	54.456790924	33.181190491	15.998809814	GLU	209	CT	C	-0.100
HB1	55.354629517	32.624149323	16.271629333	GLU	209	HA	H	0.050
HB2	54.114849091	33.669128418	16.911489487	GLU	209	HA	H	0.050
CG	53.377281189	32.196460724	15.533860207	GLU	209	CT	C	-0.250
HG1	53.716548920	31.622230530	14.670989990	GLU	209	HA	H	0.050
HG2	53.200160980	31.485189438	16.333839417	GLU	209	HA	H	0.050
CD	52.044139862	32.876541138	15.201740265	GLU	209	C	C	0.350
OE1	51.694190979	32.984169006	14.032349586	GLU	209	OC	O	-0.600
OE2	51.328071594	33.295158386	16.103260040	GLU	209	OC	O	-0.600
N	55.195209503	36.356079102	15.997870445	LEU	210	NP	N	-0.400
HN	54.197410583	36.359928131	15.991700172	LEU	210	H	H	0.250
CA	55.896179199	37.477550507	16.613319397	LEU	210	CT	C	0.050
HA	56.962741852	37.356929779	16.412269592	LEU	210	HA	H	0.050
C	55.666728973	37.418628693	18.132049561	LEU	210	C	C	0.600
O	54.917800903	36.582431793	18.615680695	LEU	210	O	O	-0.550
CB	55.381851196	38.790321350	15.988149643	LEU	210	CT	C	-0.100
HB1	56.107601166	39.577800751	16.195320129	LEU	210	HA	H	0.050
HB2	55.380088806	38.679050446	14.902759552	LEU	210	HA	H	0.050
CG	53.993091583	39.282718658	16.457700729	LEU	210	CT	C	-0.050

HG	54.066829681	39.553081512	17.511360168	LEU	210	HA	H	0.050
CD1	53.592708588	40.548038483	15.688579559	LEU	210	CT	C	-0.150
HD11	54.367549896	41.311580658	15.757639885	LEU	210	HA	H	0.050
HD12	53.439300537	40.333229065	14.630559921	LEU	210	HA	H	0.050
HD13	52.670089722	40.974960327	16.082469940	LEU	210	HA	H	0.050
CD2	52.883678436	38.230751038	16.338499069	LEU	210	CT	C	-0.150
HD21	52.780738831	37.863048553	15.317410469	LEU	210	HA	H	0.050
HD22	53.047359467	37.382068634	16.998960495	LEU	210	HA	H	0.050
HD23	51.934669495	38.658538818	16.642059326	LEU	210	HA	H	0.050
N	56.333869934	38.332641602	18.859279633	LYS	211	NP	N	-0.400
HN	56.943820953	38.986820221	18.413240433	LYS	211	H	H	0.250
CA	56.193370819	38.333618164	20.313919067	LYS	211	CT	C	0.050
HA	55.168449402	38.045509338	20.557470322	LYS	211	HA	H	0.050
C	56.404399872	39.752948761	20.844959259	LYS	211	C	C	0.600
O	57.522769928	40.185939789	21.090660095	LYS	211	O	O	-0.550
CB	57.177909851	37.341388702	20.971979141	LYS	211	CT	C	-0.100
HB1	57.244888306	37.541339874	22.041610718	LYS	211	HA	H	0.050
HB2	56.742240906	36.347728729	20.910039902	LYS	211	HA	H	0.050
CG	58.596359253	37.330978394	20.362289429	LYS	211	CT	C	-0.100
HG1	58.548191071	37.086799622	19.300680161	LYS	211	HA	H	0.050
HG2	59.029968262	38.328758240	20.432420731	LYS	211	HA	H	0.050
CD	59.534629822	36.326049805	21.047140121	LYS	211	CT	C	-0.100
HD1	59.544879913	36.515968323	22.119470596	LYS	211	HA	H	0.050
HD2	59.143131256	35.317359924	20.914020538	LYS	211	HA	H	0.050
CE	60.973800659	36.385860443	20.512649536	LYS	211	CT	C	0.050
HE1	60.995441437	36.275440216	19.428359985	LYS	211	HA	H	0.100
HE2	61.432529449	37.345569611	20.755899429	LYS	211	HA	H	0.100
NZ	61.823238373	35.341831207	21.074199677	LYS	211	NT	N	-0.300
HZ1	61.471450806	34.382011414	20.857450485	LYS	211	HC	H	0.350
HZ2	62.776809692	35.319190979	20.646959305	LYS	211	HC	H	0.350
HZ3	61.953571320	35.469791412	22.101430893	LYS	211	HC	H	0.350
N	55.267871857	40.452499390	21.037719727	LEU	212	NP	N	-0.400
HN	54.366798401	40.086811066	20.790010452	LEU	212	H	H	0.250
CA	55.351638794	41.781288147	21.634740829	LEU	212	CT	C	0.050
HA	56.266380310	42.264251709	21.282260895	LEU	212	HA	H	0.050
C	55.449760437	41.631580353	23.165370941	LEU	212	C	C	0.600
O	54.491611481	41.794231415	23.916509628	LEU	212	O	O	-0.550
CB	54.155620575	42.639389038	21.199520111	LEU	212	CT	C	-0.100
HB1	53.226409912	42.084659576	21.320529938	LEU	212	HA	H	0.050
HB2	54.090370178	43.499279022	21.867599487	LEU	212	HA	H	0.050
CG	54.267829895	43.185920715	19.763849258	LEU	212	CT	C	-0.050
HG	55.222221375	43.706531525	19.672679901	LEU	212	HA	H	0.050
CD1	54.216800690	42.094638824	18.686210632	LEU	212	CT	C	-0.150
HD11	53.341110229	41.456520081	18.808940887	LEU	212	HA	H	0.050
HD12	54.165740967	42.541141510	17.693700790	LEU	212	HA	H	0.050
HD13	55.105579376	41.465721130	18.700939178	LEU	212	HA	H	0.050
CD2	53.164478302	44.213310242	19.507259369	LEU	212	CT	C	-0.150
HD21	53.163719177	44.993980408	20.268739700	LEU	212	HA	H	0.050
HD22	53.300418854	44.698379517	18.540990829	LEU	212	HA	H	0.050
HD23	52.186740875	43.731430054	19.511579514	LEU	212	HA	H	0.050
N	56.690189362	41.301620483	23.552970886	ILE	213	NP	N	-0.400
HN	57.374641418	41.147129059	22.835969925	ILE	213	H	H	0.250
CA	57.083618164	41.218761444	24.950180054	ILE	213	CT	C	0.050
HA	56.308891296	40.664749146	25.480339050	ILE	213	HA	H	0.050
C	57.185058594	42.646430969	25.517679214	ILE	213	C	C	0.600
O	57.590431213	43.572860718	24.827159882	ILE	213	O	O	-0.550
CB	58.435871124	40.468688965	25.013700485	ILE	213	CT	C	-0.050
HB	59.079788208	40.874458313	24.231550217	ILE	213	HA	H	0.050
CG1	58.225299835	38.967479706	24.725030899	ILE	213	CT	C	-0.100
HG11	57.677528381	38.513328552	25.550079346	ILE	213	HA	H	0.050
HG12	57.590141296	38.850570679	23.848030090	ILE	213	HA	H	0.050
CG2	59.170959473	40.684989929	26.347450256	ILE	213	CT	C	-0.150

HG21	58.546768188	40.384418488	27.188419342	ILE	213	HA	H	0.050
HG22	60.104579926	40.127639771	26.383359909	ILE	213	HA	H	0.050
HG23	59.445499420	41.729198456	26.495500565	ILE	213	HA	H	0.050
CD1	59.520729065	38.181991577	24.475090027	ILE	213	CT	C	-0.150
HD11	60.057380676	38.566921234	23.607650757	ILE	213	HA	H	0.050
HD12	60.199169159	38.215999603	25.325939178	ILE	213	HA	H	0.050
HD13	59.303901672	37.130298615	24.289510727	ILE	213	HA	H	0.050
N	56.831840515	42.754680634	26.812429428	HIS	214	NP	N	-0.400
HN	56.366291046	41.993228912	27.274019241	HIS	214	H	H	0.250
CA	57.078369141	43.981231689	27.557399750	HIS	214	CT	C	0.050
HA	57.982540131	44.439548492	27.150049210	HIS	214	HA	H	0.050
C	57.322891235	43.595638275	29.024520874	HIS	214	C	C	0.600
O	56.668979645	42.709148407	29.556749344	HIS	214	O	O	-0.550
CB	55.863601685	44.912780762	27.412210464	HIS	214	CT	C	-0.100
HB1	55.504478455	44.893959045	26.384769440	HIS	214	HA	H	0.050
HB2	55.031761169	44.595321655	28.042139053	HIS	214	HA	H	0.050
CG	56.248371124	46.339721680	27.725349426	HIS	214	C5R	C	0.100
ND1	56.309318542	46.863189697	28.967250824	HIS	214	N5R	N	-0.400
HD1	56.131320953	46.412731171	29.823900223	HIS	214	H	H	0.300
CD2	56.601978302	47.343341827	26.808519363	HIS	214	C5R	C	0.000
HD2	56.650409698	47.236000061	25.734310150	HIS	214	HA	H	0.100
CE1	56.687080383	48.142288208	28.813579559	HIS	214	C5R	C	0.200
HE1	56.829391479	48.831451416	29.633319855	HIS	214	HA	H	0.100
NE2	56.871070862	48.461269379	27.520479202	HIS	214	N5R	N	-0.400
N	58.295860291	44.284690857	29.650909424	HIS	215	NP	N	-0.400
HN	58.772201538	45.012168884	29.160020828	HIS	215	H	H	0.250
CA	58.511959076	44.095581055	31.086139679	HIS	215	CT	C	0.050
HA	58.496841431	43.022338867	31.288410187	HIS	215	HA	H	0.050
C	57.344928741	44.768489838	31.837699890	HIS	215	C	C	0.600
O	56.799579620	45.769660950	31.389459610	HIS	215	O	O	-0.550
CB	59.882438660	44.682910919	31.467550278	HIS	215	CT	C	-0.100
HB1	60.688610077	44.079608917	31.049940109	HIS	215	HA	H	0.050
HB2	59.984470367	45.685569763	31.050649643	HIS	215	HA	H	0.050
CG	60.054691315	44.776958466	32.969131470	HIS	215	C5R	C	0.100
ND1	59.741878510	43.801090240	33.854980469	HIS	215	N5R	N	-0.400
HD1	59.388118744	42.895851135	33.686401367	HIS	215	H	H	0.300
CD2	60.517398834	45.892368317	33.686740875	HIS	215	C5R	C	0.000
HD2	60.842170715	46.833698273	33.268589020	HIS	215	HA	H	0.100
CE1	60.000999451	44.319961548	35.068580627	HIS	215	C5R	C	0.200
HE1	59.827808380	43.799911499	35.998401642	HIS	215	HA	H	0.100
NE2	60.472099304	45.576610565	34.997810364	HIS	215	N5R	N	-0.400
N	56.970569611	44.134738922	32.961139679	ASP	216	NP	N	-0.400
HN	57.502479553	43.381160736	33.357749939	ASP	216	H	H	0.250
CA	55.768978119	44.508460999	33.685218811	ASP	216	CT	C	0.050
HA	55.666530609	45.595100403	33.659740448	ASP	216	HA	H	0.050
C	55.976421356	44.050548553	35.138759613	ASP	216	C	C	0.600
O	57.027290344	43.519809723	35.473758698	ASP	216	O	O	-0.550
CB	54.601921082	43.793838501	32.979400635	ASP	216	CT	C	-0.250
HB1	54.532920837	44.124130249	31.942899704	ASP	216	HA	H	0.050
HB2	54.805778503	42.725570679	32.950870514	ASP	216	HA	H	0.050
CG	53.241600037	44.031471252	33.631889343	ASP	216	C	C	0.350
OD1	52.468879700	43.092910767	33.756710052	ASP	216	OC	O	-0.600
OD2	52.955310822	45.149051666	34.047611237	ASP	216	OC	O	-0.600
N	54.935791016	44.262248993	35.964839935	SER	217	NP	N	-0.400
HN	54.173858643	44.797138214	35.590248108	SER	217	H	H	0.250
CA	54.868110657	43.662940979	37.292129517	SER	217	CT	C	0.050
HA	55.027809143	42.593811035	37.176910400	SER	217	HA	H	0.050
C	53.456310272	43.840061188	37.870929718	SER	217	C	C	0.600
O	53.305320740	44.145000458	39.049751282	SER	217	O	O	-0.550
CB	55.934600830	44.269580841	38.231269836	SER	217	CT	C	0.050
HB1	56.933940887	44.045078278	37.855670929	SER	217	HA	H	0.100
HB2	55.858688354	45.361480713	38.258701324	SER	217	HA	H	0.100

OG	55.867469788	43.758239746	39.551780701	SER	217	OT	O	-0.650
HG	54.965488434	43.853981018	39.866569519	SER	217	HO	H	0.400
N	52.440750122	43.639999390	36.998878479	LYS	218	NP	N	-0.400
HN	52.665271759	43.447570801	36.040161133	LYS	218	H	H	0.250
CA	51.062870026	43.851688385	37.463249207	LYS	218	CT	C	0.050
HA	51.029018402	43.581020355	38.521049500	LYS	218	HA	H	0.050
C	50.047641754	42.908481598	36.762748718	LYS	218	C	C	0.600
O	48.970340729	42.655311584	37.285858154	LYS	218	O	O	-0.550
CB	50.727779388	45.356910706	37.309368134	LYS	218	CT	C	-0.100
HB1	51.565078735	45.921298981	37.722061157	LYS	218	HA	H	0.050
HB2	50.710281372	45.636718750	36.255069733	LYS	218	HA	H	0.050
CG	49.454460144	45.839378357	38.047241211	LYS	218	CT	C	-0.100
HG1	49.079410553	45.053749084	38.705211639	LYS	218	HA	H	0.050
HG2	49.723739624	46.664661407	38.707801819	LYS	218	HA	H	0.050
CD	48.331668854	46.321838379	37.109989166	LYS	218	CT	C	-0.100
HD1	47.504581451	46.727920532	37.693290710	LYS	218	HA	H	0.050
HD2	48.705459595	47.131439209	36.481319427	LYS	218	HA	H	0.050
CE	47.847190857	45.162971497	36.247390747	LYS	218	CT	C	0.050
HE1	48.732719421	44.748989105	35.790229797	LYS	218	HA	H	0.100
HE2	47.385761261	44.381111145	36.853210449	LYS	218	HA	H	0.100
NZ	46.976589203	45.432651520	35.117568970	LYS	218	NT	N	-0.300
HZ1	46.020618439	45.716121674	35.403308868	LYS	218	HC	H	0.350
HZ2	47.420139313	46.148361206	34.498359680	LYS	218	HC	H	0.350
HZ3	46.974098206	44.533100128	34.578960419	LYS	218	HC	H	0.350
N	50.422668457	42.432708740	35.557968140	CYS	219	NP	N	-0.350
HN	51.294628143	42.722988129	35.169990540	CYS	219	H	H	0.250
CA	49.658859253	41.458271027	34.772251129	CYS	219	CT	C	0.050
HA	50.368900299	41.132381439	34.010791779	CYS	219	HA	H	0.050
C	48.453628540	42.102699280	34.023620605	CYS	219	C	C	0.550
O	48.025508881	43.222591400	34.292018890	CYS	219	O	O	-0.550
CB	49.281108856	40.233951569	35.626239777	CYS	219	CT	C	0.100
HB1	48.481410980	40.513870239	36.301570892	CYS	219	HA	H	0.050
HB2	48.907489777	39.419929504	35.004531860	CYS	219	HA	H	0.050
SG	50.653419495	39.627529144	36.649631500	CYS	219	ST	S	-0.200
N	47.978038788	41.326549530	33.033218384	ASP	220	NP	N	-0.400
HN	48.396858215	40.419921875	32.946350098	ASP	220	H	H	0.250
CA	47.006259918	41.688980103	31.989379883	ASP	220	CT	C	0.050
HA	47.638408661	41.773971558	31.107160568	ASP	220	HA	H	0.050
C	46.316841125	43.095321655	32.066040039	ASP	220	C	C	0.600
O	46.695541382	43.987281799	31.313940048	ASP	220	O	O	-0.550
CB	46.071960449	40.488540649	31.721590042	ASP	220	CT	C	-0.250
HB1	46.680229187	39.628711700	31.463119507	ASP	220	HA	H	0.050
HB2	45.499931335	40.183441162	32.590518951	ASP	220	HA	H	0.050
CG	45.098510742	40.711811066	30.563140869	ASP	220	C	C	0.350
OD1	45.283481598	40.094131470	29.518789291	ASP	220	OC	O	-0.600
OD2	44.168048859	41.496280670	30.721780777	ASP	220	OC	O	-0.600
N	45.287200928	43.288558960	32.949188232	PRO	221	NX	N	-0.250
CA	44.132381439	44.166870117	32.662181854	PRO	221	CT	C	0.050
HA	43.621520996	43.739311218	31.798509598	PRO	221	HA	H	0.050
C	44.265499115	45.674358368	32.355468750	PRO	221	C	C	0.600
O	43.261768341	46.362411499	32.209178925	PRO	221	O	O	-0.550
CB	43.215038300	43.995620728	33.883270264	PRO	221	CT	C	-0.100
HB1	43.405960083	44.768131256	34.629848480	PRO	221	HA	H	0.050
HB2	42.159629822	44.053668976	33.615909576	PRO	221	HA	H	0.050
CG	43.600269318	42.642059326	34.470008850	PRO	221	CT	C	-0.100
HG1	43.371509552	42.552909851	35.530811310	PRO	221	HA	H	0.050
HG2	43.054538727	41.860519409	33.943931580	PRO	221	HA	H	0.050
CD	45.093391418	42.523620605	34.174739838	PRO	221	CT	C	0.000
HD1	45.663101196	42.993511200	34.973918915	PRO	221	HA	H	0.050
HD2	45.417568207	41.493118286	34.098289490	PRO	221	HA	H	0.050
N	45.509090424	46.169799805	32.283691406	GLY	222	NP	N	-0.400
HN	46.261871338	45.514720917	32.320121765	GLY	222	H	H	0.250

CA	45.746559143	47.547828674	31.853950500	GLY	222	CT	C	0.000
HA1	44.807941437	48.075000763	31.675769806	GLY	222	HA	H	0.050
HA2	46.286121368	48.049240112	32.657108307	GLY	222	HA	H	0.050
C	46.593849182	47.553218842	30.579669952	GLY	222	C	C	0.600
O	46.305519104	48.212280273	29.589929581	GLY	222	O	O	-0.550
N	47.667209625	46.763431549	30.693569183	GLN	223	NP	N	-0.400
HN	47.736919403	46.194728851	31.509130478	GLN	223	H	H	0.250
CA	48.740200043	46.727569580	29.721040726	GLN	223	CT	C	0.050
HA	48.958450317	47.760711670	29.444200516	GLN	223	HA	H	0.050
C	48.256771088	45.970008850	28.472360611	GLN	223	C	C	0.600
O	48.430259705	46.398029327	27.337699890	GLN	223	O	O	-0.550
CB	49.976490021	46.075519562	30.375549316	GLN	223	CT	C	-0.100
HB1	49.840339661	44.998958588	30.442850113	GLN	223	HA	H	0.050
HB2	50.826221466	46.219768524	29.707109451	GLN	223	HA	H	0.050
CG	50.344688416	46.631969452	31.774620056	GLN	223	CT	C	-0.100
HG1	51.406501770	46.464839935	31.963039398	GLN	223	HA	H	0.050
HG2	50.190128326	47.709980011	31.817590714	GLN	223	HA	H	0.050
CD	49.553798676	45.963218689	32.920368195	GLN	223	C	C	0.550
OE1	48.426990509	46.328460693	33.247138977	GLN	223	O	O	-0.550
NE2	50.153278351	44.911949158	33.464931488	GLN	223	NP	N	-0.600
HE21	49.641361237	44.260570526	34.020278931	GLN	223	H	H	0.300
HE22	51.134128571	44.724319458	33.334201813	GLN	223	H	H	0.300
N	47.578861237	44.844539642	28.773090363	ALA	224	NP	N	-0.400
HN	47.496681213	44.563011169	29.730569839	ALA	224	H	H	0.250
CA	46.895099640	44.078388214	27.739990234	ALA	224	CT	C	0.050
HA	47.647129059	43.783081055	27.007890701	ALA	224	HA	H	0.050
C	45.837100983	44.952339172	27.054119110	ALA	224	C	C	0.600
O	45.780441284	45.064029694	25.838710785	ALA	224	O	O	-0.550
CB	46.234020233	42.847728729	28.366100311	ALA	224	CT	C	-0.150
HB1	45.470428467	43.127128601	29.092649460	ALA	224	HA	H	0.050
HB2	45.755619049	42.223079681	27.610809326	ALA	224	HA	H	0.050
HB3	46.962711334	42.227020264	28.885070801	ALA	224	HA	H	0.050
N	45.035461426	45.607040405	27.912149429	THR	225	NP	N	-0.400
HN	45.025249481	45.410518646	28.893619537	THR	225	H	H	0.250
CA	43.997589111	46.510269165	27.434930801	THR	225	CT	C	0.050
HA	43.289630890	45.880161285	26.896520615	THR	225	HA	H	0.050
C	44.553871155	47.563728333	26.458429337	THR	225	C	C	0.600
O	43.978858948	47.818641663	25.408720016	THR	225	O	O	-0.550
CB	43.315879822	47.139179230	28.656509399	THR	225	CT	C	0.150
HB	43.931228638	47.966098785	29.030269623	THR	225	HA	H	0.100
OG1	43.274681091	46.107608795	29.628570557	THR	225	OT	O	-0.650
HG1	42.880920410	46.418529510	30.448219299	THR	225	HO	H	0.400
CG2	41.905338287	47.648090363	28.321989059	THR	225	CT	C	-0.150
HG21	41.262989044	46.827381134	28.001619339	THR	225	HA	H	0.050
HG22	41.434261322	48.131351471	29.178209305	THR	225	HA	H	0.050
HG23	41.935379028	48.377170563	27.511400223	THR	225	HA	H	0.050
N	45.726848602	48.119079590	26.836339951	LYS	226	NP	N	-0.400
HN	46.109619141	47.904281616	27.736940384	LYS	226	H	H	0.250
CA	46.423839569	49.021778107	25.927370071	LYS	226	CT	C	0.050
HA	45.736980438	49.844509125	25.733259201	LYS	226	HA	H	0.050
C	46.708431244	48.314949036	24.588769913	LYS	226	C	C	0.600
O	46.298999786	48.780899048	23.533670425	LYS	226	O	O	-0.550
CB	47.699939728	49.601848602	26.564680099	LYS	226	CT	C	-0.100
HB1	47.422451019	50.173450470	27.450939178	LYS	226	HA	H	0.050
HB2	48.357158661	48.803878784	26.908620834	LYS	226	HA	H	0.050
CG	48.460708618	50.504940033	25.579429626	LYS	226	CT	C	-0.100
HG1	48.884719849	49.878459930	24.795059204	LYS	226	HA	H	0.050
HG2	47.752990723	51.173290253	25.087570190	LYS	226	HA	H	0.050
CD	49.589889526	51.333370209	26.203519821	LYS	226	CT	C	-0.100
HD1	49.172828674	52.107730865	26.848400116	LYS	226	HA	H	0.050
HD2	50.199069977	50.692798615	26.842760086	LYS	226	HA	H	0.050
CE	50.485679626	51.951488495	25.119400024	LYS	226	CT	C	0.050

HE1	51.293689728	52.541988373	25.553739548	LYS	226	HA	H	0.100
HE2	50.952808380	51.150871277	24.541040421	LYS	226	HA	H	0.100
NZ	49.761318207	52.791931152	24.166660309	LYS	226	NT	N	-0.300
HZ1	48.868270874	52.326560974	23.877960205	LYS	226	HC	H	0.350
HZ2	49.567070007	53.753658295	24.498180389	LYS	226	HC	H	0.350
HZ3	50.273490906	52.796588898	23.250659943	LYS	226	HC	H	0.350
N	47.400028229	47.158679962	24.698810577	TYR	227	NP	N	-0.400
HN	47.647960663	46.846210480	25.619840622	TYR	227	H	H	0.250
CA	47.753238678	46.345729828	23.527290344	TYR	227	CT	C	0.050
HA	48.534629822	46.887260437	22.993730545	TYR	227	HA	H	0.050
C	46.562049866	46.176151276	22.556079865	TYR	227	C	C	0.600
O	46.725650787	46.229259491	21.340290070	TYR	227	O	O	-0.550
CB	48.258079529	44.950740814	23.961109161	TYR	227	CT	C	-0.100
HB1	47.810531616	44.646411896	24.900569916	TYR	227	HA	H	0.050
HB2	47.942729950	44.193019867	23.242200851	TYR	227	HA	H	0.050
CG	49.750541687	44.832649231	24.124570847	TYR	227	C6R	C	0.000
CD1	50.480670929	45.727851868	24.901210785	TYR	227	C6R	C	-0.130
HD1	49.986289978	46.555351257	25.387880325	TYR	227	HA	H	0.130
CD2	50.419788361	43.779678345	23.511259079	TYR	227	C6R	C	-0.130
HD2	49.873531342	43.072990417	22.906949997	TYR	227	HA	H	0.130
CE1	51.850589752	45.558750153	25.070569992	TYR	227	C6R	C	-0.130
HE1	52.414348602	46.252258301	25.676359177	TYR	227	HA	H	0.130
CE2	51.783779144	43.606708527	23.680290222	TYR	227	C6R	C	-0.130
HE2	52.255378723	42.771289825	23.188760757	TYR	227	HA	H	0.130
CZ	52.504798889	44.493968964	24.467969894	TYR	227	C6R	C	0.250
OH	53.861141205	44.332859039	24.664739609	TYR	227	OT	O	-0.650
HH	54.108959198	43.413158417	24.591379166	TYR	227	HO	H	0.400
N	45.367240906	45.972431183	23.162649155	LEU	228	NP	N	-0.400
HN	45.347270966	45.910110474	24.164289474	LEU	228	H	H	0.250
CA	44.147491455	45.796791077	22.374380112	LEU	228	CT	C	0.050
HA	44.316589355	44.907360077	21.781560898	LEU	228	HA	H	0.050
C	43.941551208	46.952011108	21.379739761	LEU	228	C	C	0.600
O	43.617099762	46.726520538	20.219509125	LEU	228	O	O	-0.550
CB	42.891681671	45.588119507	23.244199753	LEU	228	CT	C	-0.100
HB1	42.677268982	46.501449585	23.800090790	LEU	228	HA	H	0.050
HB2	42.033920288	45.434108734	22.587879181	LEU	228	HA	H	0.050
CG	42.967601776	44.403518677	24.226690292	LEU	228	CT	C	-0.050
HG	43.772079468	44.597488403	24.924730301	LEU	228	HA	H	0.050
CD1	41.689189911	44.293548584	25.063129425	LEU	228	CT	C	-0.150
HD11	41.456478119	45.239738464	25.551839828	LEU	228	HA	H	0.050
HD12	40.840450287	44.013019562	24.441289902	LEU	228	HA	H	0.050
HD13	41.795169830	43.538711548	25.842189789	LEU	228	HA	H	0.050
CD2	43.261581421	43.066398621	23.535280228	LEU	228	CT	C	-0.150
HD21	44.247680664	43.062599182	23.071640015	LEU	228	HA	H	0.050
HD22	43.242481232	42.249221802	24.255559921	LEU	228	HA	H	0.050
HD23	42.520370483	42.843898773	22.768749237	LEU	228	HA	H	0.050
N	44.187419891	48.177860260	21.890430450	TYR	229	NP	N	-0.400
HN	44.497539520	48.257350922	22.841320038	TYR	229	H	H	0.250
CA	44.193241119	49.348979950	21.017839432	TYR	229	CT	C	0.050
HA	43.257209778	49.338279724	20.456539154	TYR	229	HA	H	0.050
C	45.358661652	49.252750397	20.021499634	TYR	229	C	C	0.600
O	45.155349731	49.245410919	18.815429688	TYR	229	O	O	-0.550
CB	44.330039978	50.667541504	21.804660797	TYR	229	CT	C	-0.100
HB1	45.246440887	50.678329468	22.396450043	TYR	229	HA	H	0.050
HB2	44.425598145	51.502521515	21.108360291	TYR	229	HA	H	0.050
CG	43.165218353	50.953548431	22.711269379	TYR	229	C6R	C	0.000
CD1	42.052810669	51.649909973	22.249740601	TYR	229	C6R	C	-0.130
HD1	42.011489868	51.973239899	21.219549179	TYR	229	HA	H	0.130
CD2	43.197509766	50.543701172	24.035949707	TYR	229	C6R	C	-0.130
HD2	44.049781799	49.993381500	24.398059845	TYR	229	HA	H	0.130
CE1	40.993930817	51.941520691	23.102760315	TYR	229	C6R	C	-0.130
HE1	40.157909393	52.491539001	22.695400238	TYR	229	HA	H	0.130

CE2	42.147129059	50.831138611	24.893409729	TYR	229	C6R	C	-0.130
HE2	42.188091278	50.505519867	25.921810150	TYR	229	HA	H	0.130
CZ	41.040889740	51.528598785	24.433280945	TYR	229	C6R	C	0.250
OH	40.013099670	51.780071259	25.322999954	TYR	229	OT	O	-0.650
HH	39.234569550	52.091720581	24.883209229	TYR	229	HO	H	0.400
N	46.580448151	49.191898346	20.598260880	GLU	230	NP	N	-0.400
HN	46.628658295	49.153118134	21.600559235	GLU	230	H	H	0.250
CA	47.813819885	49.368450165	19.824630737	GLU	230	CT	C	0.050
HA	47.864479065	50.431838989	19.587379456	GLU	230	HA	H	0.050
C	47.819610596	48.576358795	18.496980667	GLU	230	C	C	0.600
O	48.157859802	49.094989777	17.440870285	GLU	230	O	O	-0.550
CB	49.052528381	48.950889587	20.642019272	GLU	230	CT	C	-0.100
HB1	49.040439606	47.872440338	20.780460358	GLU	230	HA	H	0.050
HB2	49.954650879	49.181888580	20.073080063	GLU	230	HA	H	0.050
CG	49.184139252	49.549068451	22.044429779	GLU	230	CT	C	-0.250
HG1	48.393199921	49.170928955	22.677530289	GLU	230	HA	H	0.050
HG2	50.113941193	49.206420898	22.499389648	GLU	230	HA	H	0.050
CD	49.162399292	51.074909210	22.092479706	GLU	230	C	C	0.350
OE1	48.142318726	51.650039673	22.467639923	GLU	230	OC	O	-0.600
OE2	50.192260742	51.707820892	21.864559174	GLU	230	OC	O	-0.600
N	47.451900482	47.285911560	18.630020142	LEU	231	NP	N	-0.400
HN	47.181701660	46.962398529	19.541879654	LEU	231	H	H	0.250
CA	47.521091461	46.386199951	17.478319168	LEU	231	CT	C	0.050
HA	48.208839417	46.796249390	16.737470627	LEU	231	HA	H	0.050
C	46.151580811	46.226459503	16.799419403	LEU	231	C	C	0.600
O	46.068698883	45.643299103	15.727060318	LEU	231	O	O	-0.550
CB	47.991828918	44.987609863	17.921379089	LEU	231	CT	C	-0.100
HB1	47.374729156	44.678718567	18.759469986	LEU	231	HA	H	0.050
HB2	47.794059753	44.265769958	17.127729416	LEU	231	HA	H	0.050
CG	49.480281830	44.847019196	18.288370132	LEU	231	CT	C	-0.050
HG	49.621719360	43.812160492	18.601930618	LEU	231	HA	H	0.050
CD1	50.387001038	45.070938110	17.071029663	LEU	231	CT	C	-0.150
HD11	50.082908630	44.443119049	16.232919693	LEU	231	HA	H	0.050
HD12	50.359970093	46.108421326	16.737449646	LEU	231	HA	H	0.050
HD13	51.422859192	44.828510284	17.301399231	LEU	231	HA	H	0.050
CD2	49.890678406	45.730339050	19.470329285	LEU	231	CT	C	-0.150
HD21	49.161441803	45.675640106	20.278909683	LEU	231	HA	H	0.050
HD22	50.851398468	45.435939789	19.883270264	LEU	231	HA	H	0.050
HD23	49.990379333	46.767848969	19.156000137	LEU	231	HA	H	0.050
N	45.091079712	46.692569733	17.492090225	LEU	232	NP	N	-0.400
HN	45.219501495	47.322261810	18.261180878	LEU	232	H	H	0.250
CA	43.726028442	46.320960999	17.118349075	LEU	232	CT	C	0.050
HA	43.084491730	46.731708527	17.895059586	LEU	232	HA	H	0.050
C	43.574920654	44.785869598	17.155830383	LEU	232	C	C	0.600
O	43.481250763	44.110050201	16.133939743	LEU	232	O	O	-0.550
CB	43.313888550	46.920898438	15.759869576	LEU	232	CT	C	-0.100
HB1	43.898078918	46.459129333	14.963179588	LEU	232	HA	H	0.050
HB2	42.276321411	46.656768799	15.551159859	LEU	232	HA	H	0.050
CG	43.477569580	48.450901031	15.682290077	LEU	232	CT	C	-0.050
HG	44.514621735	48.703170776	15.908690453	LEU	232	HA	H	0.050
CD1	43.191551208	48.950031281	14.260569572	LEU	232	CT	C	-0.150
HD11	43.852531433	48.471618652	13.537320137	LEU	232	HA	H	0.050
HD12	42.163551331	48.736389160	13.966770172	LEU	232	HA	H	0.050
HD13	43.344131470	50.026859283	14.184690475	LEU	232	HA	H	0.050
CD2	42.584751129	49.180461884	16.696889877	LEU	232	CT	C	-0.150
HD21	41.532928467	48.936988831	16.546379089	LEU	232	HA	H	0.050
HD22	42.847221375	48.922359467	17.722570419	LEU	232	HA	H	0.050
HD23	42.694309235	50.261039734	16.604179382	LEU	232	HA	H	0.050
N	43.603721619	44.288429260	18.412700653	TYR	233	NP	N	-0.400
HN	43.623588562	44.955921173	19.161340714	TYR	233	H	H	0.250
CA	43.525070190	42.842769623	18.631740570	TYR	233	CT	C	0.050
HA	44.262348175	42.400688171	17.961769104	TYR	233	HA	H	0.050

C	42.158821106	42.300319672	18.179649353	TYR	233	C	C	0.600
O	41.195110321	43.028518677	17.985469818	TYR	233	O	O	-0.550
CB	43.873508453	42.461280823	20.080400467	TYR	233	CT	C	-0.100
HB1	43.592708588	43.261810303	20.756830215	TYR	233	HA	H	0.050
HB2	43.297031403	41.594398499	20.408689499	TYR	233	HA	H	0.050
CG	45.335781097	42.112098694	20.216339111	TYR	233	C6R	C	0.000
CD1	45.752510071	40.810440063	19.986530304	TYR	233	C6R	C	-0.130
HD1	45.022880554	40.067131042	19.709150314	TYR	233	HA	H	0.130
CD2	46.294010162	43.059829712	20.551610947	TYR	233	C6R	C	-0.130
HD2	45.994060516	44.079231262	20.721250534	TYR	233	HA	H	0.130
CE1	47.091220856	40.459918976	20.092369080	TYR	233	C6R	C	-0.130
HE1	47.398708344	39.438610077	19.935230255	TYR	233	HA	H	0.130
CE2	47.641769409	42.721858978	20.642789841	TYR	233	C6R	C	-0.130
HE2	48.338321686	43.508640289	20.894170761	TYR	233	HA	H	0.130
CZ	48.047058105	41.412860870	20.396369934	TYR	233	C6R	C	0.250
OH	49.373569489	41.015640259	20.414180756	TYR	233	OT	O	-0.650
HH	49.965858459	41.731800079	20.607589722	TYR	233	HO	H	0.400
N	42.207290649	40.980739594	17.922210693	ASN	234	NP	N	-0.400
HN	42.882778168	40.402118683	18.374919891	ASN	234	H	H	0.250
CA	41.413330078	40.409240723	16.844249725	ASN	234	CT	C	0.050
HA	40.462501526	40.945178986	16.797609329	ASN	234	HA	H	0.050
C	41.139171600	38.934879303	17.196559906	ASN	234	C	C	0.600
O	41.052078247	38.591201782	18.369029999	ASN	234	O	O	-0.550
CB	42.261268616	40.609111786	15.571269989	ASN	234	CT	C	-0.100
HB1	42.745361328	41.581859589	15.628470421	ASN	234	HA	H	0.050
HB2	43.052410126	39.862998962	15.508040428	ASN	234	HA	H	0.050
CG	41.458099365	40.603061676	14.271860123	ASN	234	C	C	0.550
OD1	40.451919556	39.923488617	14.145190239	ASN	234	O	O	-0.550
ND2	41.969051361	41.388950348	13.316499710	ASN	234	NP	N	-0.600
HD21	41.501239777	41.442539215	12.436770439	ASN	234	H	H	0.300
HD22	42.808200836	41.923950195	13.469090462	ASN	234	H	H	0.300
N	41.048038483	38.090068817	16.147909164	ASP	235	NP	N	-0.400
HN	41.085350037	38.461868286	15.219690323	ASP	235	H	H	0.250
CA	40.587608337	36.709629059	16.280550003	ASP	235	CT	C	0.050
HA	40.247489929	36.550060272	17.301729202	ASP	235	HA	H	0.050
C	41.688259125	35.650108337	15.973159790	ASP	235	C	C	0.600
O	41.563800812	34.890861511	15.030469894	ASP	235	O	O	-0.550
CB	39.402458191	36.607868195	15.284330368	ASP	235	CT	C	-0.250
HB1	38.694850922	37.414768219	15.475440025	ASP	235	HA	H	0.050
HB2	39.762908936	36.752338409	14.264430046	ASP	235	HA	H	0.050
CG	38.603889465	35.296630859	15.339099884	ASP	235	C	C	0.350
OD1	38.383449554	34.782611847	16.428739548	ASP	235	OC	O	-0.600
OD2	38.209739685	34.783248901	14.289839745	ASP	235	OC	O	-0.600
N	42.783870697	35.557628632	16.771989822	PRO	236	NX	N	-0.250
CA	43.657901764	34.378791809	16.684400558	PRO	236	CT	C	0.050
HA	43.676620483	33.937950134	15.686220169	PRO	236	HA	H	0.050
C	43.163150787	33.323520660	17.708349228	PRO	236	C	C	0.600
O	41.980491638	33.260719299	18.012399673	PRO	236	O	O	-0.550
CB	45.015079498	34.989818573	17.064270020	PRO	236	CT	C	-0.100
HB1	45.763099670	34.294380188	17.443590164	PRO	236	HA	H	0.050
HB2	45.446269989	35.449798584	16.174669266	PRO	236	HA	H	0.050
CG	44.667839050	36.097000122	18.064359665	PRO	236	CT	C	-0.100
HG1	44.654258728	35.694381714	19.076240540	PRO	236	HA	H	0.050
HG2	45.383029938	36.913719177	18.014959335	PRO	236	HA	H	0.050
CD	43.269470215	36.578800201	17.688659668	PRO	236	CT	C	0.000
HD1	42.615898132	36.674839020	18.556560516	PRO	236	HA	H	0.050
HD2	43.353939056	37.535480499	17.176570892	PRO	236	HA	H	0.050
N	44.125690460	32.581130981	18.300260544	ILE	237	NP	N	-0.400
HN	45.055091858	32.603881836	17.939119339	ILE	237	H	H	0.250
CA	43.918109894	31.985139847	19.620300293	ILE	237	CT	C	0.050
HA	43.014629364	32.442428589	20.024429321	ILE	237	HA	H	0.050
C	45.073471069	32.515411377	20.496849060	ILE	237	C	C	0.600

O 45.480411530 33.647918701 20.302299500 ILE 237 O O -0.550
CB 43.676620483 30.452800751 19.570020676 ILE 237 CT C -0.050
HB 42.962959290 30.289670944 18.763090134 ILE 237 HA H 0.050
CG1 42.961120605 29.957620621 20.852180481 ILE 237 CT C -0.100
HG11 43.465660095 30.308500290 21.747440338 ILE 237 HA H 0.050
HG12 41.964958191 30.400369644 20.880569458 ILE 237 HA H 0.050
CG2 44.926319122 29.636760712 19.199420929 ILE 237 CT C -0.150
HG21 45.441230774 30.073249817 18.343130112 ILE 237 HA H 0.050
HG22 45.631320953 29.568199158 20.023889542 ILE 237 HA H 0.050
HG23 44.661010742 28.616210938 18.923770905 ILE 237 HA H 0.050
CD1 42.794540405 28.443210602 20.980970383 ILE 237 CT C -0.150
HD11 42.238510132 28.033000946 20.141090393 ILE 237 HA H 0.050
HD12 43.763008118 27.949890137 21.048429489 ILE 237 HA H 0.050
HD13 42.235839844 28.195949554 21.884609222 ILE 237 HA H 0.050
N 45.554538727 31.709829330 21.467720032 LYS 238 NP N -0.400
HN 45.260829926 30.756759644 21.463619232 LYS 238 H H 0.250
CA 46.365451813 32.205638885 22.586629868 LYS 238 CT C 0.050
HA 45.666538239 32.749919891 23.224300385 LYS 238 HA H 0.050
C 47.498268127 33.179019928 22.165199280 LYS 238 C C 0.600
O 48.518989563 32.790649414 21.612789154 LYS 238 O O -0.550
CB 46.931419373 31.014720917 23.377899170 LYS 238 CT C -0.100
HB1 47.504028320 30.362930298 22.715869904 LYS 238 HA H 0.050
HB2 47.634071350 31.382219315 24.127380371 LYS 238 HA H 0.050
CG 45.828308105 30.220090866 24.094020844 LYS 238 CT C -0.100
HG1 45.288501740 30.905019760 24.746919632 LYS 238 HA H 0.050
HG2 45.108928680 29.839429855 23.369249344 LYS 238 HA H 0.050
CD 46.371799469 29.053140640 24.926080704 LYS 238 CT C -0.100
HD1 46.905311584 28.379339218 24.257949829 LYS 238 HA H 0.050
HD2 47.082839966 29.438310623 25.655309677 LYS 238 HA H 0.050
CE 45.280418396 28.280839920 25.674570084 LYS 238 CT C 0.050
HE1 44.713661194 28.960920334 26.309429169 LYS 238 HA H 0.100
HE2 44.575958252 27.823869705 24.976709366 LYS 238 HA H 0.100
NZ 45.790470123 27.229820251 26.551359177 LYS 238 NT N -0.300
HZ1 46.403549194 26.545900345 26.066270828 LYS 238 HC H 0.350
HZ2 46.292079926 27.643749237 27.368619919 LYS 238 HC H 0.350
HZ3 44.969230652 26.708139420 26.935729980 LYS 238 HC H 0.350
N 47.223300934 34.456989288 22.502319336 ILE 239 NP N -0.400
HN 46.318740845 34.623809814 22.886829376 ILE 239 H H 0.250
CA 48.060531616 35.591270447 22.114770889 ILE 239 CT C 0.050
HA 48.928279877 35.214260101 21.569059372 ILE 239 HA H 0.050
C 48.607860565 36.340011597 23.335519791 ILE 239 C C 0.600
O 49.794509888 36.622108459 23.446790695 ILE 239 O O -0.550
CB 47.231788635 36.574588776 21.250879288 ILE 239 CT C -0.050
HB 47.632209778 37.581489563 21.387380600 ILE 239 HA H 0.050
CG1 45.726211548 36.602600098 21.626319885 ILE 239 CT C -0.100
HG11 45.241260529 35.697128296 21.277870178 ILE 239 HA H 0.050
HG12 45.575180054 36.613651276 22.702629089 ILE 239 HA H 0.050
CG2 47.442539215 36.245048523 19.773090363 ILE 239 CT C -0.150
HG21 46.922641754 35.338531494 19.473100662 ILE 239 HA H 0.050
HG22 47.121051788 37.065368652 19.140729904 ILE 239 HA H 0.050
HG23 48.494911194 36.082378387 19.562999725 ILE 239 HA H 0.050
CD1 44.956539154 37.797870636 21.074369431 ILE 239 CT C -0.150
HD11 45.088081360 37.895759583 20.000389099 ILE 239 HA H 0.050
HD12 43.888721466 37.704738617 21.272190094 ILE 239 HA H 0.050
HD13 45.286670685 38.714229584 21.555269241 ILE 239 HA H 0.050
N 47.642501831 36.703468323 24.193059921 ILE 240 NP N -0.400
HN 46.716220856 36.359989166 24.069580078 ILE 240 H H 0.250
CA 47.874881744 37.632671356 25.283430099 ILE 240 CT C 0.050
HA 48.687858582 38.302261353 24.998470306 ILE 240 HA H 0.050
C 48.314628601 36.800128937 26.491109848 ILE 240 C C 0.600
O 47.527141571 36.393241882 27.337209702 ILE 240 O O -0.550
CB 46.579589844 38.456569672 25.476520538 ILE 240 CT C -0.050

HB	45.748809814	37.751541138	25.529710770	ILE	240	HA	H	0.050
CG1	46.370819092	39.378761292	24.256149292	ILE	240	CT	C	-0.100
HG11	47.116680145	40.174468994	24.268869400	ILE	240	HA	H	0.050
HG12	46.551448822	38.830169678	23.334470749	ILE	240	HA	H	0.050
CG2	46.560268402	39.289718628	26.768089294	ILE	240	CT	C	-0.150
HG21	47.327621460	40.058269501	26.755699158	ILE	240	HA	H	0.050
HG22	45.608318329	39.800918579	26.902219772	ILE	240	HA	H	0.050
HG23	46.700729370	38.676879883	27.656930923	ILE	240	HA	H	0.050
CD1	44.972190857	39.997791290	24.171319962	ILE	240	CT	C	-0.150
HD11	44.202140808	39.228538513	24.128940582	ILE	240	HA	H	0.050
HD12	44.764289856	40.639141083	25.026929855	ILE	240	HA	H	0.050
HD13	44.877269745	40.606998444	23.272239685	ILE	240	HA	H	0.050
N	49.637870789	36.568168640	26.506120682	LEU	241	NP	N	-0.400
HN	50.188919067	36.978950500	25.772409439	LEU	241	H	H	0.250
CA	50.267440796	35.741348267	27.526300430	LEU	241	CT	C	0.050
HA	49.544910431	34.967918396	27.784990311	LEU	241	HA	H	0.050
C	50.571971893	36.598350525	28.777210236	LEU	241	C	C	0.600
O	51.689548492	36.668029785	29.275039673	LEU	241	O	O	-0.550
CB	51.533210754	35.110198975	26.915550232	LEU	241	CT	C	-0.100
HB1	51.340068817	34.844230652	25.875209808	LEU	241	HA	H	0.050
HB2	52.323699951	35.861610413	26.879039764	LEU	241	HA	H	0.050
CG	52.033290863	33.851928711	27.650119781	LEU	241	CT	C	-0.050
HG	52.090480804	34.070018768	28.716520309	LEU	241	HA	H	0.050
CD1	51.098850250	32.650909424	27.431070328	LEU	241	CT	C	-0.150
HD11	51.063411713	32.368930817	26.378219604	LEU	241	HA	H	0.050
HD12	51.443458557	31.781389236	27.992589951	LEU	241	HA	H	0.050
HD13	50.078128815	32.860061646	27.744810104	LEU	241	HA	H	0.050
CD2	53.445289612	33.487831116	27.187080383	LEU	241	CT	C	-0.150
HD21	54.135471344	34.314388275	27.357269287	LEU	241	HA	H	0.050
HD22	53.825538635	32.616249084	27.719989777	LEU	241	HA	H	0.050
HD23	53.452419281	33.252109528	26.122970581	LEU	241	HA	H	0.050
N	49.491001129	37.250370026	29.240230560	MET	242	NP	N	-0.400
HN	48.607509613	37.033760071	28.820089340	MET	242	H	H	0.250
CA	49.569049835	38.340408325	30.205919266	MET	242	CT	C	0.050
HA	50.623001099	38.516979218	30.430740356	MET	242	HA	H	0.050
C	48.857910156	38.117359161	31.577569962	MET	242	C	C	0.600
O	49.233058929	38.769668579	32.546909332	MET	242	O	O	-0.550
CB	49.005218506	39.596481323	29.528289795	MET	242	CT	C	-0.100
HB1	47.928230286	39.505619049	29.384849548	MET	242	HA	H	0.050
HB2	49.141540527	40.440780640	30.195959091	MET	242	HA	H	0.050
CG	49.676940918	39.910789490	28.183719635	MET	242	CT	C	-0.050
HG1	50.756259918	39.776908875	28.231639862	MET	242	HA	H	0.050
HG2	49.322719574	39.217338562	27.424860001	MET	242	HA	H	0.050
SD	49.305839539	41.598628998	27.667610168	MET	242	SE	S	-0.100
CE	49.635089874	41.460979462	25.905120850	MET	242	CT	C	-0.100
HE1	49.421649933	40.456508636	25.543539047	MET	242	HA	H	0.050
HE2	48.979999542	42.141078949	25.362060547	MET	242	HA	H	0.050
HE3	50.673500061	41.714168549	25.694959641	MET	242	HA	H	0.050
N	47.802040100	37.248600006	31.690849304	PRO	243	NX	N	-0.250
CA	46.972080231	37.241748810	32.909759521	PRO	243	CT	C	0.050
HA	46.742061615	38.259788513	33.223411560	PRO	243	HA	H	0.050
C	47.562648773	36.529708862	34.146068573	PRO	243	C	C	0.600
O	46.860229492	36.304771423	35.122329712	PRO	243	O	O	-0.550
CB	45.683750153	36.539859772	32.457580566	PRO	243	CT	C	-0.100
HB1	45.124359131	36.052619934	33.259090424	PRO	243	HA	H	0.050
HB2	45.025348663	37.267539978	31.984590530	PRO	243	HA	H	0.050
CG	46.161178589	35.577739716	31.381689072	PRO	243	CT	C	-0.100
HG1	46.602611542	34.715480804	31.877859116	PRO	243	HA	H	0.050
HG2	45.371120453	35.228401184	30.717819214	PRO	243	HA	H	0.050
CD	47.265430450	36.348709106	30.663459778	PRO	243	CT	C	0.000
HD1	48.006721497	35.645019531	30.295740128	PRO	243	HA	H	0.050
HD2	46.855091095	36.930801392	29.836399078	PRO	243	HA	H	0.050

N	48.859569550	36.172191620	34.045970917	GLY	244	NP	N	-0.400
HN	49.371040344	36.422439575	33.220859528	GLY	244	H	H	0.250
CA	49.565299988	35.354228973	35.032440186	GLY	244	CT	C	0.000
HA1	49.461280823	34.321838379	34.701198578	GLY	244	HA	H	0.050
HA2	50.617919922	35.629570007	34.974311829	GLY	244	HA	H	0.050
C	49.085369110	35.438709259	36.496810913	GLY	244	C	C	0.600
O	48.556400299	34.476310730	37.033988953	GLY	244	O	O	-0.550
N	49.362380981	36.593471527	37.138568878	CYS	245	NP	N	-0.350
HN	49.672080994	37.395828247	36.629261017	CYS	245	H	H	0.250
CA	49.361801147	36.611080170	38.605091095	CYS	245	CT	C	0.050
HA	49.886928558	35.704181671	38.916271210	CYS	245	HA	H	0.050
C	47.950599670	36.540939331	39.249340057	CYS	245	C	C	0.550
O	47.367820740	37.534240723	39.669628143	CYS	245	O	O	-0.550
CB	50.197219849	37.794109344	39.121509552	CYS	245	CT	C	0.100
HB1	50.143310547	37.815208435	40.211349487	CYS	245	HA	H	0.050
HB2	51.246479034	37.599098206	38.896949768	CYS	245	HA	H	0.050
SG	49.829799652	39.469120026	38.518558502	CYS	245	ST	S	-0.200
N	47.489429474	35.277618408	39.349559784	SER	246	NP	N	-0.400
HN	48.010070801	34.578750610	38.851600647	SER	246	H	H	0.250
CA	46.388851166	34.812438965	40.186538696	SER	246	CT	C	0.050
HA	46.060501099	33.891220093	39.709339142	SER	246	HA	H	0.050
C	45.158950806	35.739269257	40.215068817	SER	246	C	C	0.600
O	44.254871368	35.621330261	39.397991180	SER	246	O	O	-0.550
CB	46.943931580	34.504581451	41.584758759	SER	246	CT	C	0.050
HB1	47.183280945	35.428131104	42.110748291	SER	246	HA	H	0.100
HB2	46.222789764	33.961429596	42.202720642	SER	246	HA	H	0.100
OG	48.157531738	33.787910461	41.513019562	SER	246	OT	O	-0.650
HG	48.054668427	33.015869141	40.948310852	SER	246	HO	H	0.400
N	45.165569305	36.640121460	41.214481354	SER	247	NP	N	-0.400
HN	45.973220825	36.798038483	41.784099579	SER	247	H	H	0.250
CA	44.059749603	37.532291412	41.527820587	SER	247	CT	C	0.050
HA	43.236328125	36.910579681	41.869770050	SER	247	HA	H	0.050
C	43.641918182	38.344749451	40.297100067	SER	247	C	C	0.600
O	42.479728699	38.617179871	40.021911621	SER	247	O	O	-0.550
CB	44.572360992	38.463199615	42.634498596	SER	247	CT	C	0.050
HB1	45.045818329	39.351181030	42.209350586	SER	247	HA	H	0.100
HB2	43.749130249	38.835788727	43.258098602	SER	247	HA	H	0.100
OG	45.587650299	37.795021057	43.376350403	SER	247	OT	O	-0.650
HG	45.208511353	37.318241119	44.122459412	SER	247	HO	H	0.400
N	44.701210022	38.695278168	39.546409607	VAL	248	NP	N	-0.400
HN	45.625301361	38.395179749	39.802070618	VAL	248	H	H	0.250
CA	44.485389709	39.480880737	38.350120544	VAL	248	CT	C	0.050
HA	43.983398438	40.392559052	38.681350708	VAL	248	HA	H	0.050
C	43.553569794	38.746959686	37.367759705	VAL	248	C	C	0.600
O	42.738529205	39.350688934	36.686359406	VAL	248	O	O	-0.550
CB	45.844841003	39.820968628	37.718891144	VAL	248	CT	C	-0.050
HB	46.535598755	40.083198547	38.522010803	VAL	248	HA	H	0.050
CG1	46.454978943	38.638950348	36.941589355	VAL	248	CT	C	-0.150
HG11	46.297809601	37.690330505	37.450038910	VAL	248	HA	H	0.050
HG12	46.017608643	38.546821594	35.946868896	VAL	248	HA	H	0.050
HG13	47.528930664	38.734031677	36.828659058	VAL	248	HA	H	0.050
CG2	45.675979614	41.054321289	36.834911346	VAL	248	CT	C	-0.150
HG21	45.326488495	41.909500122	37.413211823	VAL	248	HA	H	0.050
HG22	46.596729279	41.350330353	36.340450287	VAL	248	HA	H	0.050
HG23	44.926368713	40.840240479	36.076969147	VAL	248	HA	H	0.050
N	43.715770721	37.411941528	37.349220276	SER	249	NP	N	-0.400
HN	44.326450348	36.976238251	38.012660980	SER	249	H	H	0.250
CA	42.978401184	36.587291718	36.410049438	SER	249	CT	C	0.050
HA	43.129268646	37.032661438	35.426658630	SER	249	HA	H	0.050
C	41.477390289	36.603839874	36.740081787	SER	249	C	C	0.600
O	40.641548157	36.484710693	35.855789185	SER	249	O	O	-0.550
CB	43.544170380	35.166828156	36.408489227	SER	249	CT	C	0.050

HB1	44.637958527	35.213508606	36.358909607	SER	249	HA	H	0.100
HB2	43.273971558	34.670921326	37.347431183	SER	249	HA	H	0.100
OG	43.050800323	34.454990387	35.278568268	SER	249	OT	O	-0.650
HG	43.280059814	33.526279449	35.345970154	SER	249	HO	H	0.400
N	41.163440704	36.822490692	38.034721375	THR	250	NP	N	-0.400
HN	41.830329895	36.843479156	38.784469604	THR	250	H	H	0.250
CA	39.773880005	37.068279266	38.404911041	THR	250	CT	C	0.050
HA	39.214908600	36.173278809	38.128429413	THR	250	HA	H	0.050
C	39.223220825	38.286098480	37.628368378	THR	250	C	C	0.600
O	38.144309998	38.269348145	37.045909882	THR	250	O	O	-0.550
CB	39.713081360	37.314331055	39.922290802	THR	250	CT	C	0.150
HB	40.036998749	38.347049713	40.121829987	THR	250	HA	H	0.100
OG1	40.603610992	36.403739929	40.550281525	THR	250	OT	O	-0.650
HG1	40.723079681	36.678188324	41.466621399	THR	250	HO	H	0.400
CG2	38.295188904	37.120990753	40.478618622	THR	250	CT	C	-0.150
HG21	37.961349487	36.092090607	40.344528198	THR	250	HA	H	0.050
HG22	38.249000549	37.352088928	41.543449402	THR	250	HA	H	0.050
HG23	37.582550049	37.772209167	39.972450256	THR	250	HA	H	0.050
N	40.069038391	39.336658478	37.633789062	LEU	251	NP	N	-0.400
HN	40.963771820	39.228389740	38.074249268	LEU	251	H	H	0.250
CA	39.732910156	40.578308105	36.945850372	LEU	251	CT	C	0.050
HA	38.766429901	40.894081116	37.342559814	LEU	251	HA	H	0.050
C	39.588920593	40.316089630	35.434249878	LEU	251	C	C	0.600
O	38.637821198	40.745559692	34.799449921	LEU	251	O	O	-0.550
CB	40.808681488	41.639308929	37.252750397	LEU	251	CT	C	-0.100
HB1	41.173660278	41.470409393	38.267009735	LEU	251	HA	H	0.050
HB2	41.675540924	41.502128601	36.607349396	LEU	251	HA	H	0.050
CG	40.327598572	43.100719452	37.167869568	LEU	251	CT	C	-0.050
HG	39.496810913	43.224639893	37.864189148	LEU	251	HA	H	0.050
CD1	41.443130493	44.054958344	37.615928650	LEU	251	CT	C	-0.150
HD11	42.303001404	44.001750946	36.948940277	LEU	251	HA	H	0.050
HD12	41.095081329	45.088199615	37.626098633	LEU	251	HA	H	0.050
HD13	41.785820007	43.814430237	38.622879028	LEU	251	HA	H	0.050
CD2	39.826328278	43.486541748	35.769691467	LEU	251	CT	C	-0.150
HD21	40.534618378	43.191051483	34.996150970	LEU	251	HA	H	0.050
HD22	38.868129730	43.018169403	35.550628662	LEU	251	HA	H	0.050
HD23	39.672229767	44.562728882	35.688350677	LEU	251	HA	H	0.050
N	40.557849884	39.551269531	34.899848938	VAL	252	NP	N	-0.400
HN	41.318138123	39.269958496	35.488021851	VAL	252	H	H	0.250
CA	40.523788452	39.192371368	33.482448578	VAL	252	CT	C	0.050
HA	40.515769958	40.131908417	32.927009583	VAL	252	HA	H	0.050
C	39.225940704	38.428291321	33.142131805	VAL	252	C	C	0.600
O	38.616058350	38.653800964	32.108390808	VAL	252	O	O	-0.550
CB	41.780731201	38.377048492	33.107460022	VAL	252	CT	C	-0.050
HB	41.781059265	37.466518402	33.707229614	VAL	252	HA	H	0.050
CG1	41.797550201	37.959648132	31.627050400	VAL	252	CT	C	-0.150
HG11	40.916278839	37.380901337	31.353860855	VAL	252	HA	H	0.050
HG12	41.836490631	38.831840515	30.973270416	VAL	252	HA	H	0.050
HG13	42.671619415	37.346660614	31.409099579	VAL	252	HA	H	0.050
CG2	43.066631317	39.159278870	33.410968781	VAL	252	CT	C	-0.150
HG21	43.185810089	39.985260010	32.710300446	VAL	252	HA	H	0.050
HG22	43.086620331	39.578239441	34.411411285	VAL	252	HA	H	0.050
HG23	43.943260193	38.523231506	33.325721741	VAL	252	HA	H	0.050
N	38.834468842	37.533889771	34.066600800	ALA	253	NP	N	-0.400
HN	39.401531219	37.404529572	34.880741119	ALA	253	H	H	0.250
CA	37.654109955	36.696208954	33.885040283	ALA	253	CT	C	0.050
HA	37.735179901	36.241241455	32.896400452	ALA	253	HA	H	0.050
C	36.353969574	37.519908905	33.949459076	ALA	253	C	C	0.600
O	35.339008331	37.153671265	33.364528656	ALA	253	O	O	-0.550
CB	37.643680573	35.606109619	34.963218689	ALA	253	CT	C	-0.150
HB1	38.567501068	35.029651642	34.937889099	ALA	253	HA	H	0.050
HB2	37.555950165	36.033271790	35.962581635	ALA	253	HA	H	0.050

HB3	36.814781189	34.912368774	34.819351196	ALA	253	HA	H	0.050
N	36.452758789	38.645900726	34.683158875	GLU	254	NP	N	-0.400
HN	37.286029816	38.793621063	35.222579956	GLU	254	H	H	0.250
CA	35.357688904	39.606201172	34.763519287	GLU	254	CT	C	0.050
HA	34.443828583	39.022941589	34.840160370	GLU	254	HA	H	0.050
C	35.297229767	40.443939209	33.467479706	GLU	254	C	C	0.600
O	34.386169434	40.331970215	32.651050568	GLU	254	O	O	-0.550
CB	35.544181824	40.453819275	36.040828705	GLU	254	CT	C	-0.100
HB1	35.433460236	39.799388885	36.906330109	GLU	254	HA	H	0.050
HB2	36.565788269	40.826931000	36.094100952	GLU	254	HA	H	0.050
CG	34.590511322	41.655628204	36.197799683	GLU	254	CT	C	-0.250
HG1	34.761928558	42.136161804	37.161041260	GLU	254	HA	H	0.050
HG2	34.805229187	42.407588959	35.437740326	GLU	254	HA	H	0.050
CD	33.101799011	41.291568756	36.113121033	GLU	254	C	C	0.350
OE1	32.736301422	40.133670807	36.298759460	GLU	254	OC	O	-0.600
OE2	32.290550232	42.163570404	35.821659088	GLU	254	OC	O	-0.600
N	36.362010956	41.258399963	33.322658539	ALA	255	NP	N	-0.400
HN	37.047569275	41.222949982	34.050731659	ALA	255	H	H	0.250
CA	36.561279297	42.175941467	32.200359344	ALA	255	CT	C	0.050
HA	35.721908569	42.871620178	32.218070984	ALA	255	HA	H	0.050
C	36.571571350	41.453041077	30.838010788	ALA	255	C	C	0.600
O	36.413700104	42.051761627	29.776899338	ALA	255	O	O	-0.550
CB	37.881721497	42.926528931	32.407619476	ALA	255	CT	C	-0.150
HB1	37.872070312	43.474311829	33.349960327	ALA	255	HA	H	0.050
HB2	38.729091644	42.239391327	32.435249329	ALA	255	HA	H	0.050
HB3	38.057018280	43.648410797	31.609039307	ALA	255	HA	H	0.050
N	36.710700989	40.119880676	30.932470322	ALA	256	NP	N	-0.400
HN	37.052268982	39.737068176	31.793029785	ALA	256	H	H	0.250
CA	36.479698181	39.200721741	29.832469940	ALA	256	CT	C	0.050
HA	37.405071259	39.190528870	29.273189545	ALA	256	HA	H	0.050
C	35.287689209	39.639469147	28.959449768	ALA	256	C	C	0.600
O	35.395999908	39.771720886	27.742670059	ALA	256	O	O	-0.550
CB	36.208240509	37.808578491	30.388139725	ALA	256	CT	C	-0.150
HB1	35.416500092	37.886020660	31.125019073	ALA	256	HA	H	0.050
HB2	35.898529053	37.112201691	29.610090256	ALA	256	HA	H	0.050
HB3	37.082519531	37.379371643	30.872400284	ALA	256	HA	H	0.050
N	34.181758881	39.900028229	29.678630829	ARG	257	NP	N	-0.400
HN	34.243289948	39.879020691	30.681419373	ARG	257	H	H	0.250
CA	32.893440247	40.115940094	29.033449173	ARG	257	CT	C	0.050
HA	32.791561127	39.346298218	28.265069962	ARG	257	HA	H	0.050
C	32.775039673	41.488250732	28.345020294	ARG	257	C	C	0.600
O	31.777210236	41.760761261	27.689989090	ARG	257	O	O	-0.550
CB	31.778339386	39.954990387	30.077880859	ARG	257	CT	C	-0.100
HB1	31.778799057	40.803630829	30.763889313	ARG	257	HA	H	0.050
HB2	30.813890457	39.966648102	29.567670822	ARG	257	HA	H	0.050
CG	31.924140930	38.656120300	30.879869461	ARG	257	CT	C	-0.100
HG1	32.177268982	37.856731415	30.195880890	ARG	257	HA	H	0.050
HG2	32.774570465	38.730560303	31.555379868	ARG	257	HA	H	0.050
CD	30.656410217	38.265460968	31.650360107	ARG	257	CT	C	0.000
HD1	29.823200226	38.103149414	30.965789795	ARG	257	HA	H	0.050
HD2	30.789979935	37.348369598	32.227081299	ARG	257	HA	H	0.050
NE	30.242309570	39.332851410	32.553871155	ARG	257	NP	N	-0.400
HE	29.439300537	39.866001129	32.287139893	ARG	257	H	H	0.300
CZ	30.936920166	39.642829895	33.670978546	ARG	257	C	C	0.500
NH1	32.003009796	38.939498901	34.022251129	ARG	257	NC	N	-0.450
HH11	32.355350494	38.196418762	33.457168579	ARG	257	HC	H	0.350
HH12	32.475948334	39.181278229	34.881828308	ARG	257	HC	H	0.350
NH2	30.560920715	40.665378571	34.426349640	ARG	257	NC	N	-0.450
HH21	29.733110428	41.193191528	34.257278442	ARG	257	HC	H	0.350
HH22	31.156839371	40.947299957	35.202098846	ARG	257	HC	H	0.350
N	33.815578461	42.327899933	28.524919510	MET	258	NP	N	-0.400
HN	34.599781036	42.046958923	29.079349518	MET	258	H	H	0.250

CA	33.821941376	43.651599884	27.912109375	MET	258	CT	C	0.050
HA	32.797851562	44.030448914	27.928529739	MET	258	HA	H	0.050
C	34.256511688	43.538440704	26.434680939	MET	258	C	C	0.600
O	33.441020966	43.407451630	25.532270432	MET	258	O	O	-0.550
CB	34.721168518	44.591770172	28.738849640	MET	258	CT	C	-0.100
HB1	35.743129730	44.216960907	28.778450012	MET	258	HA	H	0.050
HB2	34.769550323	45.568668365	28.256050110	MET	258	HA	H	0.050
CG	34.225189209	44.767021179	30.179630280	MET	258	CT	C	-0.050
HG1	33.224960327	45.200828552	30.191200256	MET	258	HA	H	0.050
HG2	34.140308380	43.807960510	30.690519333	MET	258	HA	H	0.050
SD	35.340389252	45.813339233	31.133760452	MET	258	SE	S	-0.100
CE	34.673450470	47.422050476	30.673290253	MET	258	CT	C	-0.100
HE1	33.625820160	47.492080688	30.966060638	MET	258	HA	H	0.050
HE2	35.233509064	48.220600128	31.159519196	MET	258	HA	H	0.050
HE3	34.725090027	47.557250977	29.593139648	MET	258	HA	H	0.050
N	35.590911865	43.578758240	26.238059998	TRP	259	NP	N	-0.400
HN	36.174030304	43.708370209	27.035879135	TRP	259	H	H	0.250
CA	36.153060913	43.600769043	24.885040283	TRP	259	CT	C	0.050
HA	35.776229858	44.499420166	24.393150330	TRP	259	HA	H	0.050
C	35.722499847	42.386089325	24.045490265	TRP	259	C	C	0.600
O	35.503711700	42.485160828	22.848909378	TRP	259	O	O	-0.550
CB	37.689910889	43.615390778	24.951250076	TRP	259	CT	C	-0.100
HB1	38.066650391	42.862709045	25.639169693	TRP	259	HA	H	0.050
HB2	38.118671417	43.372138977	23.976280212	TRP	259	HA	H	0.050
CG	38.202369690	44.976211548	25.366369247	TRP	259	C5R	C	-0.030
CD1	38.239158630	45.501670837	26.662179947	TRP	259	C5R	C	-0.040
HD1	37.888801575	45.008991241	27.556949615	TRP	259	HA	H	0.100
CD2	38.778240204	45.974628448	24.500730515	TRP	259	CR56	C	0.100
HE1	38.935188293	47.318000793	27.402200699	TRP	259	H	H	0.300
NE1	38.796321869	46.736888885	26.624729156	TRP	259	N5R	N	-0.360
CE2	39.144371033	47.066020966	25.320430756	TRP	259	CR56	C	-0.040
CE3	39.010261536	46.016841888	23.151739120	TRP	259	C6R	C	-0.130
HE3	38.724960327	45.183349609	22.527549744	TRP	259	HA	H	0.100
CZ2	39.736141205	48.166130066	24.763420105	TRP	259	C6R	C	-0.130
HZ2	40.014808655	48.999549866	25.390680313	TRP	259	HA	H	0.130
CZ3	39.614078522	47.135978699	22.580919266	TRP	259	C6R	C	-0.130
HZ3	39.800731659	47.167968750	21.517009735	TRP	259	HA	H	0.130
CH2	39.978939056	48.211399078	23.389230728	TRP	259	C6R	C	-0.130
HH2	40.453990936	49.074180603	22.947559357	TRP	259	HA	H	0.130
N	35.671630859	41.238578796	24.749420166	ASN	260	NP	N	-0.400
HN	35.702529907	41.291709900	25.743949890	ASN	260	H	H	0.250
CA	35.477920532	39.940021515	24.109079361	ASN	260	CT	C	0.050
HA	35.715728760	39.224658966	24.894920349	ASN	260	HA	H	0.050
C	36.483959198	39.717758179	22.955949783	ASN	260	C	C	0.600
O	36.139568329	39.653789520	21.784040451	ASN	260	O	O	-0.550
CB	34.026458740	39.727489471	23.641130447	ASN	260	CT	C	-0.100
HB1	33.704181671	40.530719757	22.977750778	ASN	260	HA	H	0.050
HB2	33.944221497	38.800361633	23.072889328	ASN	260	HA	H	0.050
CG	33.071701050	39.614070892	24.834619522	ASN	260	C	C	0.550
OD1	32.804878235	38.537670135	25.354019165	ASN	260	O	O	-0.550
ND2	32.570499420	40.786849976	25.234029770	ASN	260	NP	N	-0.600
HD21	31.920059204	40.841960907	25.994129181	ASN	260	H	H	0.300
HD22	32.835739136	41.669841766	24.836709976	ASN	260	H	H	0.300
N	37.748779297	39.603260040	23.401599884	LEU	261	NP	N	-0.400
HN	37.923488617	39.620258331	24.383459091	LEU	261	H	H	0.250
CA	38.876911163	39.232990265	22.556249619	LEU	261	CT	C	0.050
HA	38.507801056	38.758991241	21.647649765	LEU	261	HA	H	0.050
C	39.659069061	38.213638306	23.381929398	LEU	261	C	C	0.600
O	39.799999237	38.392509460	24.585639954	LEU	261	O	O	-0.550
CB	39.767410278	40.456260681	22.264989853	LEU	261	CT	C	-0.100
HB1	40.073581696	40.905910492	23.210899353	LEU	261	HA	H	0.050
HB2	40.687900543	40.128570557	21.778469086	LEU	261	HA	H	0.050

CG 39.107879639 41.533729553 21.385929108 LEU 261 CT C -0.050
HG 38.157459259 41.824871063 21.835630417 LEU 261 HA H 0.050
CD1 39.990970612 42.787761688 21.323400497 LEU 261 CT C -0.150
HD11 40.165191650 43.198169708 22.317569733 LEU 261 HA H 0.050
HD12 40.960781097 42.565349579 20.878820419 LEU 261 HA H 0.050
HD13 39.524890900 43.567390442 20.720060349 LEU 261 HA H 0.050
CD2 38.825649261 41.013801575 19.969219208 LEU 261 CT C -0.150
HD21 39.735801697 40.650108337 19.491739273 LEU 261 HA H 0.050
HD22 38.103210449 40.198501587 19.979379654 LEU 261 HA H 0.050
HD23 38.413341522 41.801620483 19.338319778 LEU 261 HA H 0.050
N 40.132968903 37.138000488 22.733480453 ILE 262 NP N -0.400
HN 40.010711670 37.055709839 21.743780136 ILE 262 H H 0.250
CA 40.720428467 36.058139801 23.526569366 ILE 262 CT C 0.050
HA 39.901660919 35.684440613 24.145050049 ILE 262 HA H 0.050
C 41.867359161 36.534851074 24.458040237 ILE 262 C C 0.600
O 42.824478149 37.181259155 24.051080704 ILE 262 O O -0.550
CB 41.209400177 34.905891418 22.628999710 ILE 262 CT C -0.050
HB 40.342258453 34.522651672 22.091169357 ILE 262 HA H 0.050
CG1 41.759498596 33.751869202 23.496419907 ILE 262 CT C -0.100
HG11 42.544410706 34.091609955 24.170549393 ILE 262 HA H 0.050
HG12 40.960208893 33.370189667 24.131830215 ILE 262 HA H 0.050
CG2 42.220520020 35.374118805 21.567020416 ILE 262 CT C -0.150
HG21 41.852439880 36.225940704 20.995349884 ILE 262 HA H 0.050
HG22 43.158618927 35.664230347 22.034460068 ILE 262 HA H 0.050
HG23 42.439300537 34.587879181 20.844720840 ILE 262 HA H 0.050
CD1 42.362758636 32.622959137 22.679740906 ILE 262 CT C -0.150
HD11 41.690940857 32.324600220 21.875989914 ILE 262 HA H 0.050
HD12 43.297080994 32.960788727 22.249120712 ILE 262 HA H 0.050
HD13 42.581058502 31.756650925 23.302129745 ILE 262 HA H 0.050
N 41.705478668 36.081848145 25.715410233 VAL 263 NP N -0.400
HN 40.853008270 35.629039764 25.980989456 VAL 263 H H 0.250
CA 42.788139343 35.949790955 26.676370621 VAL 263 CT C 0.050
HA 43.732070923 35.895370483 26.129350662 VAL 263 HA H 0.050
C 42.499828339 34.602630615 27.354429245 VAL 263 C C 0.600
O 41.338779449 34.259178162 27.536539078 VAL 263 O O -0.550
CB 42.777351379 37.121238708 27.683959961 VAL 263 CT C -0.050
HB 41.823711395 37.115100861 28.215030670 VAL 263 HA H 0.050
CG1 43.895858765 36.987689972 28.730850220 VAL 263 CT C -0.150
HG11 43.769340515 36.096511841 29.343900681 VAL 263 HA H 0.050
HG12 44.878269196 36.938549042 28.258760452 VAL 263 HA H 0.050
HG13 43.904609680 37.843948364 29.406379700 VAL 263 HA H 0.050
CG2 42.899280548 38.475738525 26.971290588 VAL 263 CT C -0.150
HG21 42.073028564 38.655559540 26.287279129 VAL 263 HA H 0.050
HG22 42.928089142 39.298351288 27.687559128 VAL 263 HA H 0.050
HG23 43.813480377 38.519279480 26.384140015 VAL 263 HA H 0.050
N 43.579631805 33.863700867 27.674419403 LEU 264 NP N -0.400
HN 44.509410858 34.220401764 27.556919098 LEU 264 H H 0.250
CA 43.480148315 32.592521667 28.390230179 LEU 264 CT C 0.050
HA 42.583999634 32.612869263 29.012569427 LEU 264 HA H 0.050
C 44.697189331 32.555488586 29.315999985 LEU 264 C C 0.600
O 45.723388672 33.143741608 28.999080658 LEU 264 O O -0.550
CB 43.500911713 31.382459641 27.429649353 LEU 264 CT C -0.100
HB1 44.408611298 31.424699783 26.826929092 LEU 264 HA H 0.050
HB2 43.573101044 30.467760086 28.018070221 LEU 264 HA H 0.050
CG 42.277519226 31.259740829 26.498849869 LEU 264 CT C -0.050
HG 42.209648132 32.162391663 25.891809464 LEU 264 HA H 0.050
CD1 42.407390594 30.059440613 25.551500320 LEU 264 CT C -0.150
HD11 42.472160339 29.122209549 26.105579376 LEU 264 HA H 0.050
HD12 41.544349670 29.980119705 24.896230698 LEU 264 HA H 0.050
HD13 43.277488708 30.145120621 24.908889771 LEU 264 HA H 0.050
CD2 40.974948883 31.112369537 27.284370422 LEU 264 CT C -0.150
HD21 40.969741821 30.186250687 27.855070114 LEU 264 HA H 0.050

HD22	40.819431305	31.939170837	27.971309662	LEU	264	HA	H	0.050
HD23	40.122749329	31.090690613	26.608619690	LEU	264	HA	H	0.050
N	44.518821716	31.894760132	30.476310730	SER	265	NP	N	-0.400
HN	43.687301636	31.358230591	30.638669968	SER	265	H	H	0.250
CA	45.470760345	32.052299500	31.569049835	SER	265	CT	C	0.050
HA	46.237789154	32.757488251	31.253099442	SER	265	HA	H	0.050
C	46.172279358	30.731859207	31.932399750	SER	265	C	C	0.600
O	45.597660065	29.781719208	32.446990967	SER	265	O	O	-0.550
CB	44.754070282	32.641239166	32.787681580	SER	265	CT	C	0.050
HB1	44.223171234	33.552188873	32.492179871	SER	265	HA	H	0.100
HB2	44.003528595	31.927980423	33.146488190	SER	265	HA	H	0.100
OG	45.712089539	32.954509735	33.794910431	SER	265	OT	O	-0.650
HG	45.274990082	33.261749268	34.596759796	SER	265	HO	H	0.400
N	47.494911194	30.809690475	31.701059341	TYR	266	NP	N	-0.400
HN	47.801780701	31.603160858	31.181459427	TYR	266	H	H	0.250
CA	48.471618652	29.903249741	32.299449921	TYR	266	CT	C	0.050
HA	48.134948730	28.889190674	32.115509033	TYR	266	HA	H	0.050
C	48.543621063	30.108730316	33.821670532	TYR	266	C	C	0.600
O	49.007720947	29.247699738	34.560409546	TYR	266	O	O	-0.550
CB	49.859580994	30.120790482	31.662139893	TYR	266	CT	C	-0.100
HB1	50.619850159	29.520229340	32.166000366	TYR	266	HA	H	0.050
HB2	49.836418152	29.770130157	30.630580902	TYR	266	HA	H	0.050
CG	50.253879547	31.574939728	31.674930573	TYR	266	C6R	C	0.000
CD1	50.974121094	32.125080109	32.731151581	TYR	266	C6R	C	-0.130
HD1	51.308090210	31.494070053	33.541938782	TYR	266	HA	H	0.130
CD2	49.856578827	32.402851105	30.634399414	TYR	266	C6R	C	-0.130
HD2	49.322990417	31.992809296	29.788970947	TYR	266	HA	H	0.130
CE1	51.254741669	33.487888336	32.760440826	TYR	266	C6R	C	-0.130
HE1	51.816181183	33.908710480	33.580940247	TYR	266	HA	H	0.130
CE2	50.117881775	33.759590149	30.674520493	TYR	266	C6R	C	-0.130
HE2	49.756778717	34.366809845	29.867929459	TYR	266	HA	H	0.130
CZ	50.808868408	34.313640594	31.738710403	TYR	266	C6R	C	0.250
OH	51.030040741	35.676891327	31.786790848	TYR	266	OT	O	-0.650
HH	51.548381805	35.951068878	31.026180267	TYR	266	HO	H	0.400
N	48.087791443	31.297140121	34.254280090	GLY	267	NP	N	-0.400
HN	47.602550507	31.939319611	33.657909393	GLY	267	H	H	0.250
CA	48.069789886	31.581550598	35.674678802	GLY	267	CT	C	0.000
HA1	48.973468781	31.204229355	36.152259827	GLY	267	HA	H	0.050
HA2	48.040271759	32.662860870	35.753368378	GLY	267	HA	H	0.050
C	46.809131622	30.985580444	36.289428711	GLY	267	C	C	0.600
O	46.062850952	30.274639130	35.621620178	GLY	267	O	O	-0.550
N	39.939918518	28.455650330	41.664630890	PRO	271	NX	N	-0.250
CA	38.842609406	27.574390411	41.268871307	PRO	271	CT	C	0.050
HA	39.235408783	26.739650726	40.687271118	PRO	271	HA	H	0.050
C	37.741989136	28.291349411	40.452098846	PRO	271	C	C	0.600
O	37.220958710	29.326770782	40.844280243	PRO	271	O	O	-0.550
CB	38.287410736	27.054040909	42.599849701	PRO	271	CT	C	-0.100
HB1	37.221420288	26.830619812	42.565261841	PRO	271	HA	H	0.050
HB2	38.804080963	26.131450653	42.867530823	PRO	271	HA	H	0.050
CG	38.632179260	28.134679794	43.627929688	PRO	271	CT	C	-0.100
HG1	37.814128876	28.854740143	43.677471161	PRO	271	HA	H	0.050
HG2	38.777450562	27.729600906	44.630050659	PRO	271	HA	H	0.050
CD	39.885589600	28.827270508	43.082420349	PRO	271	CT	C	0.000
HD1	39.799320221	29.905780792	43.219139099	PRO	271	HA	H	0.050
HD2	40.786998749	28.471729279	43.585170746	PRO	271	HA	H	0.050
N	37.426719666	27.656480789	39.306030273	ALA	272	NP	N	-0.400
HN	37.900768280	26.792169571	39.125381470	ALA	272	H	H	0.250
CA	36.233200073	27.965610504	38.525821686	ALA	272	CT	C	0.050
HA	36.333740234	27.365840912	37.621929169	ALA	272	HA	H	0.050
C	36.094409943	29.442150116	38.090431213	ALA	272	C	C	0.600
O	35.079238892	30.083179474	38.335220337	ALA	272	O	O	-0.550
CB	34.982658386	27.510959625	39.293498993	ALA	272	CT	C	-0.150

HB1	35.064411163	26.468360901	39.592639923	ALA	272	HA	H	0.050
HB2	34.836219788	28.104259491	40.196979523	ALA	272	HA	H	0.050
HB3	34.084178925	27.612749100	38.684089661	ALA	272	HA	H	0.050
N	37.107238770	29.923460007	37.338840485	LEU	273	NP	N	-0.400
HN	37.963611603	29.413049698	37.285610199	LEU	273	H	H	0.250
CA	36.877029419	31.138080597	36.542900085	LEU	273	CT	C	0.050
HA	36.228309631	31.805969238	37.111209869	LEU	273	HA	H	0.050
C	36.124710083	30.758279800	35.243190765	LEU	273	C	C	0.600
O	36.606998444	30.930330276	34.129711151	LEU	273	O	O	-0.550
CB	38.203060150	31.862400055	36.233131409	LEU	273	CT	C	-0.100
HB1	38.859970093	31.187259674	35.684551239	LEU	273	HA	H	0.050
HB2	38.003890991	32.696388245	35.558589935	LEU	273	HA	H	0.050
CG	38.944698334	32.404830933	37.472751617	LEU	273	CT	C	-0.050
HG	39.189338684	31.562139511	38.118320465	LEU	273	HA	H	0.050
CD1	40.259220123	33.090641022	37.068679810	LEU	273	CT	C	-0.150
HD11	40.077499390	33.955219269	36.430389404	LEU	273	HA	H	0.050
HD12	40.805721283	33.441200256	37.944969177	LEU	273	HA	H	0.050
HD13	40.917549133	32.413791656	36.528888702	LEU	273	HA	H	0.050
CD2	38.089290619	33.382759094	38.291759491	LEU	273	CT	C	-0.150
HD21	37.726200104	34.203788757	37.673168182	LEU	273	HA	H	0.050
HD22	37.228778839	32.887870789	38.741371155	LEU	273	HA	H	0.050
HD23	38.668849945	33.816791534	39.107799530	LEU	273	HA	H	0.050
N	34.915370941	30.209880829	35.463428497	SER	274	NP	N	-0.400
HN	34.579868317	30.127950668	36.406650543	SER	274	H	H	0.250
CA	34.137279510	29.553800583	34.420631409	SER	274	CT	C	0.050
HA	34.827110291	29.000310898	33.780220032	SER	274	HA	H	0.050
C	33.338928223	30.559789658	33.570468903	SER	274	C	C	0.600
O	32.112541199	30.495170593	33.502189636	SER	274	O	O	-0.550
CB	33.166660309	28.602329254	35.139678955	SER	274	CT	C	0.050
HB1	32.368530273	29.170719147	35.622699738	SER	274	HA	H	0.100
HB2	32.667018890	27.925579071	34.436218262	SER	274	HA	H	0.100
OG	33.823520660	27.883680344	36.169769287	SER	274	OT	O	-0.650
HG	34.445011139	27.265129089	35.780300140	SER	274	HO	H	0.400
N	34.079868317	31.492679596	32.938598633	ASN	275	NP	N	-0.400
HN	35.080818176	31.433000565	32.995311737	ASN	275	H	H	0.250
CA	33.424690247	32.503791809	32.110630035	ASN	275	CT	C	0.050
HA	32.370719910	32.520229340	32.384490967	ASN	275	HA	H	0.050
C	33.531780243	32.122520447	30.623769760	ASN	275	C	C	0.600
O	34.574180603	31.743869781	30.112270355	ASN	275	O	O	-0.550
CB	33.977310181	33.911708832	32.372768402	ASN	275	CT	C	-0.100
HB1	33.916088104	34.161949158	33.432060242	ASN	275	HA	H	0.050
HB2	35.025878906	33.981220245	32.078121185	ASN	275	HA	H	0.050
CG	33.143329620	34.932250977	31.578649521	ASN	275	C	C	0.550
OD1	32.007610321	34.677200317	31.189699173	ASN	275	O	O	-0.550
ND2	33.813861847	36.031410217	31.261980057	ASN	275	NP	N	-0.600
HD21	33.559120178	36.587238312	30.465909958	ASN	275	H	H	0.300
HD22	34.608459473	36.311191559	31.810199738	ASN	275	H	H	0.300
N	32.361450195	32.259170532	29.986270905	ARG	276	NP	N	-0.400
HN	31.623859406	32.682468414	30.510959625	ARG	276	H	H	0.250
CA	32.158329010	31.932390213	28.587770462	ARG	276	CT	C	0.050
HA	32.901180267	31.196479797	28.302799225	ARG	276	HA	H	0.050
C	32.355628967	33.202770233	27.750659943	ARG	276	C	C	0.600
O	32.900810242	33.201461792	26.655429840	ARG	276	O	O	-0.550
CB	30.733449936	31.384010315	28.373479843	ARG	276	CT	C	-0.100
HB1	30.002330780	32.185680389	28.444299698	ARG	276	HA	H	0.050
HB2	30.660079956	31.040340424	27.341390610	ARG	276	HA	H	0.050
CG	30.311550140	30.216829300	29.291849136	ARG	276	CT	C	-0.100
HG1	29.357629776	29.838340759	28.922809601	ARG	276	HA	H	0.050
HG2	31.014440536	29.389900208	29.180669785	ARG	276	HA	H	0.050
CD	30.143180847	30.553699493	30.787530899	ARG	276	CT	C	0.000
HD1	29.477960587	29.842840195	31.279840469	ARG	276	HA	H	0.050
HD2	31.103080750	30.515779495	31.299339294	ARG	276	HA	H	0.050

NE	29.575059891	31.888929367	30.964359283	ARG	276	NP	N	-0.400
HE	29.220649719	32.374401093	30.159450531	ARG	276	H	H	0.300
CZ	29.513669968	32.542999268	32.143390656	ARG	276	C	C	0.500
NH1	29.975849152	31.997100830	33.266021729	ARG	276	NC	N	-0.450
HH11	30.517120361	31.143089294	33.236888885	ARG	276	HC	H	0.350
HH12	29.834560394	32.421058655	34.158618927	ARG	276	HC	H	0.350
NH2	28.997180939	33.765968323	32.146049500	ARG	276	NC	N	-0.450
HH21	28.763809204	34.178668976	31.252590179	ARG	276	HC	H	0.350
HH22	28.851970673	34.294281006	32.980438232	ARG	276	HC	H	0.350
N	31.848899841	34.293228149	28.351589203	GLN	277	NP	N	-0.400
HN	31.515409470	34.245258331	29.295419693	GLN	277	H	H	0.250
CA	31.812400818	35.582859039	27.688890457	GLN	277	CT	C	0.050
HA	31.482820511	35.423851013	26.659599304	GLN	277	HA	H	0.050
C	33.234008789	36.185600281	27.667270660	GLN	277	C	C	0.600
O	33.643081665	36.939590454	28.543069839	GLN	277	O	O	-0.550
CB	30.791809082	36.466979980	28.428979874	GLN	277	CT	C	-0.100
HB1	30.917980194	36.344268799	29.503589630	GLN	277	HA	H	0.050
HB2	30.993469238	37.515861511	28.205329895	GLN	277	HA	H	0.050
CG	29.321020126	36.186878204	28.069389343	GLN	277	CT	C	-0.100
HG1	28.678329468	36.893699646	28.593950272	GLN	277	HA	H	0.050
HG2	29.164749146	36.357940674	27.003829956	GLN	277	HA	H	0.050
CD	28.851030350	34.768768311	28.442169189	GLN	277	C	C	0.550
OE1	29.008260727	34.296180725	29.564960480	GLN	277	O	O	-0.550
NE2	28.262849808	34.114429474	27.433439255	GLN	277	NP	N	-0.600
HE21	27.909240723	33.191078186	27.570699692	GLN	277	H	H	0.300
HE22	28.164680481	34.537609100	26.533319473	GLN	277	H	H	0.300
N	33.926040649	35.775928497	26.593059540	ARG	278	NP	N	-0.400
HN	33.491798401	35.032341003	26.080669403	ARG	278	H	H	0.250
CA	35.182121277	36.362190247	26.143730164	ARG	278	CT	C	0.050
HA	35.153739929	37.425338745	26.385839462	ARG	278	HA	H	0.050
C	35.244949341	36.210670471	24.617769241	ARG	278	C	C	0.600
O	35.659950256	37.112918854	23.908489227	ARG	278	O	O	-0.550
CB	36.391479492	35.659141541	26.794910431	ARG	278	CT	C	-0.100
HB1	36.341709137	35.752418518	27.878839493	ARG	278	HA	H	0.050
HB2	36.299499512	34.588920593	26.597700119	ARG	278	HA	H	0.050
CG	37.781200409	36.117099762	26.286180496	ARG	278	CT	C	-0.100
HG1	38.452121735	35.261589050	26.379489899	ARG	278	HA	H	0.050
HG2	37.772899628	36.346431732	25.220809937	ARG	278	HA	H	0.050
CD	38.435108185	37.270938873	27.061840057	ARG	278	CT	C	0.000
HD1	38.427608490	37.064640045	28.133329391	ARG	278	HA	H	0.050
HD2	39.478908539	37.358921051	26.764369965	ARG	278	HA	H	0.050
NE	37.752441406	38.558719635	26.883350372	ARG	278	NP	N	-0.400
HE	36.750110626	38.557849884	26.962259293	ARG	278	H	H	0.300
CZ	38.411098480	39.748199463	26.945970535	ARG	278	C	C	0.500
NH1	39.705299377	39.832309723	26.677850723	ARG	278	NC	N	-0.450
HH11	40.105010986	39.059009552	26.164569855	ARG	278	HC	H	0.350
HH12	40.278839111	40.613380432	26.919689178	ARG	278	HC	H	0.350
NH2	37.747760773	40.842689514	27.294260025	ARG	278	NC	N	-0.450
HH21	36.767471313	40.756431580	27.511610031	ARG	278	HC	H	0.350
HH22	38.186931610	41.736209869	27.369949341	ARG	278	HC	H	0.350
N	34.841529846	35.009620667	24.163650513	PHE	279	NP	N	-0.400
HN	34.570880890	34.260459900	24.774219513	PHE	279	H	H	0.250
CA	34.941719055	34.643409729	22.754880905	PHE	279	CT	C	0.050
HA	34.391971588	35.387130737	22.179349899	PHE	279	HA	H	0.050
C	34.225448608	33.283668518	22.654180527	PHE	279	C	C	0.600
O	33.812160492	32.746101379	23.674209595	PHE	279	O	O	-0.550
CB	36.446529388	34.503108978	22.395530701	PHE	279	CT	C	-0.100
HB1	37.075778961	34.724388123	23.258129120	PHE	279	HA	H	0.050
HB2	36.662128448	33.467670441	22.158470154	PHE	279	HA	H	0.050
CG	36.957370758	35.332019806	21.244289398	PHE	279	C6R	C	0.000
CD1	36.452720642	36.595058441	20.944910049	PHE	279	C6R	C	-0.130
HD1	35.666538239	37.041271210	21.534749985	PHE	279	HA	H	0.130

CD2	37.987369537	34.823070526	20.457729340	PHE	279	C6R	C	-0.130
HD2	38.400688171	33.845531464	20.658840179	PHE	279	HA	H	0.130
CE1	36.961788177	37.327190399	19.881799698	PHE	279	C6R	C	-0.130
HE1	36.557209015	38.305770874	19.664739609	PHE	279	HA	H	0.130
CE2	38.503509521	35.556171417	19.401519775	PHE	279	C6R	C	-0.130
HE2	39.298488617	35.139629364	18.798900604	PHE	279	HA	H	0.130
CZ	37.989631653	36.810611725	19.109699249	PHE	279	C6R	C	-0.130
HZ	38.383438110	37.380748749	18.280410767	PHE	279	HA	H	0.130
N	34.121791840	32.705448151	21.421869278	PRO	280	NX	N	-0.250
CA	33.725669861	31.297130585	21.292789459	PRO	280	CT	C	0.050
HA	32.729099274	31.158170700	21.713949203	PRO	280	HA	H	0.050
C	34.720470428	30.364349365	22.016159058	PRO	280	C	C	0.600
O	34.367309570	29.362270355	22.626340866	PRO	280	O	O	-0.550
CB	33.725669861	31.051940918	19.773349762	PRO	280	CT	C	-0.100
HB1	34.658550262	30.588279724	19.445270538	PRO	280	HA	H	0.050
HB2	32.912528992	30.398439407	19.456689835	PRO	280	HA	H	0.050
CG	33.632591248	32.449260712	19.150419235	PRO	280	CT	C	-0.100
HG1	34.053131104	32.493721008	18.148330688	PRO	280	HA	H	0.050
HG2	32.584831238	32.743671417	19.079690933	PRO	280	HA	H	0.050
CD	34.351520538	33.366718292	20.140899658	PRO	280	CT	C	0.000
HD1	35.419708252	33.396610260	19.926870346	PRO	280	HA	H	0.050
HD2	33.953800201	34.382160187	20.121860504	PRO	280	HA	H	0.050
N	35.969871521	30.870239258	22.002910614	THR	281	NP	N	-0.400
HN	36.214759827	31.550609589	21.314630508	THR	281	H	H	0.250
CA	36.924781799	30.566949844	23.051940918	THR	281	CT	C	0.050
HA	36.944389343	29.486499786	23.186719894	THR	281	HA	H	0.050
C	36.440349579	31.227720261	24.351539612	THR	281	C	C	0.600
O	36.660758972	32.407478333	24.604309082	THR	281	O	O	-0.550
CB	38.306728363	31.112619400	22.632709503	THR	281	CT	C	0.150
HB	38.218090057	32.169071198	22.395200729	THR	281	HA	H	0.100
OG1	38.748481750	30.491849899	21.445030212	THR	281	OT	O	-0.650
HG1	38.927391052	29.566989899	21.629430771	THR	281	HO	H	0.400
CG2	39.383419037	31.038459778	23.718050003	THR	281	CT	C	-0.150
HG21	39.548530579	30.031919479	24.070199966	THR	281	HA	H	0.050
HG22	40.330219269	31.374759674	23.320760727	THR	281	HA	H	0.050
HG23	39.141918182	31.664260864	24.577100754	THR	281	HA	H	0.050
N	35.796470642	30.371940613	25.162549973	PHE	282	NP	N	-0.400
HN	35.593139648	29.444929123	24.836519241	PHE	282	H	H	0.250
CA	35.487068176	30.729789734	26.538230896	PHE	282	CT	C	0.050
HA	34.928020477	31.666870117	26.529750824	PHE	282	HA	H	0.050
C	36.817501068	30.930089951	27.261680603	PHE	282	C	C	0.600
O	37.837219238	30.412099838	26.817729950	PHE	282	O	O	-0.550
CB	34.715961456	29.580490112	27.213869095	PHE	282	CT	C	-0.100
HB1	35.347499847	28.691190720	27.248050690	PHE	282	HA	H	0.050
HB2	34.518749237	29.821659088	28.258300781	PHE	282	HA	H	0.050
CG	33.413570404	29.199989319	26.546180725	PHE	282	C6R	C	0.000
CD1	32.780288696	30.009279251	25.600889206	PHE	282	C6R	C	-0.130
HD1	33.194969177	30.962619781	25.305379868	PHE	282	HA	H	0.130
CD2	32.817138672	27.991590500	26.889039993	PHE	282	C6R	C	-0.130
HD2	33.287860870	27.352790833	27.620439529	PHE	282	HA	H	0.130
CE1	31.590429306	29.610439301	25.007789612	PHE	282	C6R	C	-0.130
HE1	31.123380661	30.246780396	24.270269394	PHE	282	HA	H	0.130
CE2	31.624729156	27.592039108	26.302579880	PHE	282	C6R	C	-0.130
HE2	31.180339813	26.648490906	26.581869125	PHE	282	HA	H	0.130
CZ	31.009859085	28.400579453	25.358350754	PHE	282	C6R	C	-0.130
HZ	30.084299088	28.088069916	24.897249222	PHE	282	HA	H	0.130
N	36.745800018	31.699899673	28.361970901	PHE	283	NP	N	-0.400
HN	35.847389221	31.957000732	28.722770691	PHE	283	H	H	0.250
CA	37.922550201	31.949829102	29.179410934	PHE	283	CT	C	0.050
HA	38.723789215	32.243560791	28.501789093	PHE	283	HA	H	0.050
C	38.289039612	30.652429581	29.917350769	PHE	283	C	C	0.600
O	37.419521332	29.873460770	30.288179398	PHE	283	O	O	-0.550

CB	37.612609863	33.078659058	30.177579880	PHE	283	CT	C	-0.100
HB1	37.260650635	33.960159302	29.640430450	PHE	283	HA	H	0.050
HB2	36.801288605	32.783668518	30.844779968	PHE	283	HA	H	0.050
CG	38.820579529	33.464359283	30.990989685	PHE	283	C6R	C	0.000
CD1	39.843208313	34.208198547	30.411399841	PHE	283	C6R	C	-0.130
HD1	39.769989014	34.515098572	29.377599716	PHE	283	HA	H	0.130
CD2	38.938518524	33.077301025	32.323978424	PHE	283	C6R	C	-0.130
HD2	38.159980774	32.491821289	32.794391632	PHE	283	HA	H	0.130
CE1	40.965881348	34.560840607	31.147720337	PHE	283	C6R	C	-0.130
HE1	41.755680084	35.133178711	30.683509827	PHE	283	HA	H	0.130
CE2	40.059169769	33.433959961	33.063949585	PHE	283	C6R	C	-0.130
HE2	40.145908356	33.134521484	34.098628998	PHE	283	HA	H	0.130
CZ	41.071800232	34.179550171	32.477519989	PHE	283	C6R	C	-0.130
HZ	41.936038971	34.466991425	33.060050964	PHE	283	HA	H	0.130
N	39.610378265	30.464670181	30.094919205	ARG	284	NP	N	-0.400
HN	40.278320312	31.160039902	29.828519821	ARG	284	H	H	0.250
CA	40.094791412	29.320629120	30.847089767	ARG	284	CT	C	0.050
HA	39.342170715	29.098520279	31.605539322	ARG	284	HA	H	0.050
C	41.368881226	29.712570190	31.577779770	ARG	284	C	C	0.600
O	42.086730957	30.635910034	31.210060120	ARG	284	O	O	-0.550
CB	40.401359558	28.088920593	29.965749741	ARG	284	CT	C	-0.100
HB1	41.059268951	28.350379944	29.136880875	ARG	284	HA	H	0.050
HB2	40.973709106	27.370340347	30.551120758	ARG	284	HA	H	0.050
CG	39.141998291	27.360630035	29.480880737	ARG	284	CT	C	-0.100
HG1	39.284679413	26.280990601	29.512529373	ARG	284	HA	H	0.050
HG2	38.311740875	27.558710098	30.158880234	ARG	284	HA	H	0.050
CD	38.772148132	27.786869049	28.071310043	ARG	284	CT	C	0.000
HD1	37.734989166	27.544660568	27.837520599	ARG	284	HA	H	0.050
HD2	38.930850983	28.853780746	27.970369339	ARG	284	HA	H	0.050
NE	39.637588501	27.131250381	27.100940704	ARG	284	NP	N	-0.400
HE	40.327011108	26.466819763	27.399179459	ARG	284	H	H	0.300
CZ	39.491699219	27.354299545	25.782749176	ARG	284	C	C	0.500
NH1	38.614868164	28.242319107	25.346410751	ARG	284	NC	N	-0.450
HH11	38.105808258	28.843290329	25.976530075	ARG	284	HC	H	0.350
HH12	38.467800140	28.319639206	24.351739883	ARG	284	HC	H	0.350
NH2	40.224311829	26.673860550	24.914890289	ARG	284	NC	N	-0.450
HH21	40.910850525	26.017200470	25.253490448	ARG	284	HC	H	0.350
HH22	40.072669983	26.779920578	23.918619156	ARG	284	HC	H	0.350
N	41.573158264	28.895719528	32.612308502	THR	285	NP	N	-0.400
HN	40.911708832	28.175760269	32.841808319	THR	285	H	H	0.250
CA	42.769969940	28.814079285	33.405628204	THR	285	CT	C	0.050
HA	43.405971527	29.667449951	33.180969238	THR	285	HA	H	0.050
C	43.440971375	27.491230011	32.982929230	THR	285	C	C	0.600
O	42.835258484	26.687110901	32.277179718	THR	285	O	O	-0.550
CB	42.281768799	28.827760696	34.855598450	THR	285	CT	C	0.150
HB	43.137550354	28.654899597	35.523731232	THR	285	HA	H	0.100
OG1	41.278511047	27.829439163	34.970390320	THR	285	OT	O	-0.650
HG1	41.180419922	27.548770905	35.878890991	THR	285	HO	H	0.400
CG2	41.599830627	30.159799576	35.191440582	THR	285	CT	C	-0.150
HG21	40.707389832	30.319530487	34.586978912	THR	285	HA	H	0.050
HG22	41.286170959	30.187440872	36.232021332	THR	285	HA	H	0.050
HG23	42.263710022	31.001970291	35.008159637	THR	285	HA	H	0.050
N	44.713668823	27.299709320	33.375099182	HIS	286	NP	N	-0.400
HN	45.190189362	28.092670441	33.761680603	HIS	286	H	H	0.250
CA	45.442939758	26.088489532	32.959270477	HIS	286	CT	C	0.050
HA	44.757820129	25.453310013	32.394859314	HIS	286	HA	H	0.050
C	45.894191742	25.180549622	34.130508423	HIS	286	C	C	0.600
O	45.746559143	23.969230652	34.024269104	HIS	286	O	O	-0.550
CB	46.607498169	26.424049377	32.007038116	HIS	286	CT	C	-0.100
HB1	47.379619598	26.985809326	32.526451111	HIS	286	HA	H	0.050
HB2	47.079120636	25.504180908	31.657579422	HIS	286	HA	H	0.050
CG	46.120071411	27.198480606	30.792509079	HIS	286	C5R	C	0.100

ND1	44.826889038	27.278629303	30.406469345	HIS	286	N5R	N	-0.400
HD1	44.048999786	26.850980759	30.830850601	HIS	286	H	H	0.300
CD2	46.883949280	27.946359634	29.876779556	HIS	286	C5R	C	0.000
HD2	47.957328796	28.075710297	29.903369904	HIS	286	HA	H	0.100
CE1	44.799530029	28.049150467	29.314889908	HIS	286	C5R	C	0.200
HE1	43.886398315	28.301370621	28.794900894	HIS	286	HA	H	0.100
NE2	46.029960632	28.466920853	28.960750580	HIS	286	N5R	N	-0.400
N	46.455799103	25.753400803	35.240859985	PRO	287	NX	N	-0.250
CA	47.006679535	24.918600082	36.311069489	PRO	287	CT	C	0.050
HA	47.599029541	24.118209839	35.879760742	PRO	287	HA	H	0.050
C	45.869831085	24.275640488	37.137020111	PRO	287	C	C	0.600
O	45.055301666	23.543809891	36.592109680	PRO	287	O	O	-0.550
CB	47.947521210	25.858169556	37.074218750	PRO	287	CT	C	-0.100
HB1	48.068019867	25.649019241	38.136650085	PRO	287	HA	H	0.050
HB2	48.942089081	25.758079529	36.639049530	PRO	287	HA	H	0.050
CG	47.439029694	27.267990112	36.781631470	PRO	287	CT	C	-0.100
HG1	46.820301056	27.631710052	37.603698730	PRO	287	HA	H	0.050
HG2	48.271358490	27.945600510	36.645408630	PRO	287	HA	H	0.050
CD	46.621040344	27.182989120	35.494220734	PRO	287	CT	C	0.000
HD1	45.658958435	27.671760559	35.648330688	PRO	287	HA	H	0.050
HD2	47.136100769	27.661819458	34.663230896	PRO	287	HA	H	0.050
N	45.799030304	24.576219559	38.446571350	SER	288	NP	N	-0.400
HN	46.446849823	25.148550034	38.949558258	SER	288	H	H	0.250
CA	44.664218903	24.055419922	39.194339752	SER	288	CT	C	0.050
HA	43.763629913	24.211179733	38.599571228	SER	288	HA	H	0.050
C	44.526649475	24.836700439	40.486759186	SER	288	C	C	0.600
O	45.450748444	25.507160187	40.930950165	SER	288	O	O	-0.550
CB	44.841201782	22.559839249	39.499790192	SER	288	CT	C	0.050
HB1	43.899410248	22.126270294	39.849918365	SER	288	HA	H	0.100
HB2	45.067611694	22.040239334	38.568969727	SER	288	HA	H	0.100
OG	45.881801605	22.273920059	40.426231384	SER	288	OT	O	-0.650
HG	45.654579163	22.637269974	41.291728973	SER	288	HO	H	0.400
N	43.335708618	24.629770279	41.072608948	ALA	289	NP	N	-0.400
HN	42.615890503	24.158529282	40.568008423	ALA	289	H	H	0.250
CA	43.147850037	24.921920776	42.481491089	ALA	289	CT	C	0.050
HA	43.686218262	25.840499878	42.721031189	ALA	289	HA	H	0.050
C	43.774368286	23.766880035	43.285091400	ALA	289	C	C	0.600
O	44.604949951	23.008600235	42.783531189	ALA	289	O	O	-0.550
CB	41.642230988	25.099800110	42.738090515	ALA	289	CT	C	-0.150
HB1	41.240791321	25.888780594	42.102210999	ALA	289	HA	H	0.050
HB2	41.087551117	24.186410904	42.521270752	ALA	289	HA	H	0.050
HB3	41.430988312	25.386980057	43.768379211	ALA	289	HA	H	0.050
N	43.315731049	23.684770584	44.543319702	THR	290	NP	N	-0.400
HN	42.611728668	24.303020477	44.894489288	THR	290	H	H	0.250
CA	43.874130249	22.789150238	45.538681030	THR	290	CT	C	0.050
HA	44.917728424	23.085699081	45.643108368	THR	290	HA	H	0.050
C	43.854660034	21.301290512	45.116809845	THR	290	C	C	0.600
O	44.669059753	20.529230118	45.597301483	THR	290	O	O	-0.550
CB	43.136291504	23.066230774	46.864700317	THR	290	CT	C	0.150
HB	42.080009460	22.806209564	46.745891571	THR	290	HA	H	0.100
OG1	43.230659485	24.471549988	47.065021515	THR	290	OT	O	-0.650
HG1	42.988491058	24.711050034	47.962051392	THR	290	HO	H	0.400
CG2	43.712219238	22.272939682	48.050621033	THR	290	CT	C	-0.150
HG21	43.116779327	22.425559998	48.948978424	THR	290	HA	H	0.050
HG22	43.698638916	21.201139450	47.857089996	THR	290	HA	H	0.050
HG23	44.741279602	22.564069748	48.256771088	THR	290	HA	H	0.050
N	42.942638397	20.922000885	44.198329926	LEU	291	NP	N	-0.400
HN	42.254791260	21.613880157	43.964660645	LEU	291	H	H	0.250
CA	42.586109161	19.510969162	43.969860077	LEU	291	CT	C	0.050
HA	42.308090210	19.138050079	44.955329895	LEU	291	HA	H	0.050
C	43.717559814	18.558469772	43.520629883	LEU	291	C	C	0.600
O	43.508781433	17.354419708	43.440879822	LEU	291	O	O	-0.550

CB	41.338459015	19.385700226	43.065830231	LEU	291	CT	C	-0.100
HB1	41.210628510	18.352489471	42.736679077	LEU	291	HA	H	0.050
HB2	40.460460663	19.584230423	43.678009033	LEU	291	HA	H	0.050
CG	41.277908325	20.329219818	41.849918365	LEU	291	CT	C	-0.050
HG	41.418010712	21.358440399	42.180740356	LEU	291	HA	H	0.050
CD1	42.356288910	20.001150131	40.818210602	LEU	291	CT	C	-0.150
HD11	42.306869507	18.950490952	40.530059814	LEU	291	HA	H	0.050
HD12	42.227088928	20.594669342	39.913368225	LEU	291	HA	H	0.050
HD13	43.351791382	20.203620911	41.210708618	LEU	291	HA	H	0.050
CD2	39.892269135	20.262439728	41.200679779	LEU	291	CT	C	-0.150
HD21	39.114158630	20.469940186	41.933330536	LEU	291	HA	H	0.050
HD22	39.800769806	20.996959686	40.401969910	LEU	291	HA	H	0.050
HD23	39.702770233	19.272850037	40.784118652	LEU	291	HA	H	0.050
N	44.924858093	19.103900909	43.284969330	HIS	292	NP	N	-0.400
HN	44.984840393	20.101150513	43.328109741	HIS	292	H	H	0.250
CA	46.083801270	18.248960495	42.999240875	HIS	292	CT	C	0.050
HA	45.733779907	17.242969513	42.766750336	HIS	292	HA	H	0.050
C	46.999141693	18.057130814	44.233551025	HIS	292	C	C	0.600
O	47.706409454	17.051839828	44.362388611	HIS	292	O	O	-0.550
CB	46.789550781	18.833539963	41.772220612	HIS	292	CT	C	-0.100
HB1	47.057430267	19.877630234	41.941791534	HIS	292	HA	H	0.050
HB2	47.712379456	18.300779343	41.553878784	HIS	292	HA	H	0.050
CG	45.847961426	18.731769562	40.585159302	HIS	292	C5R	C	0.100
ND1	45.699001312	19.688919067	39.648780823	HIS	292	N5R	N	-0.400
HD1	46.146049500	20.570060730	39.600631714	HIS	292	H	H	0.300
CD2	44.985809326	17.672060013	40.246051788	HIS	292	C5R	C	0.000
HD2	44.825839996	16.761449814	40.799270630	HIS	292	HA	H	0.100
CE1	44.787158966	19.226209641	38.773860931	HIS	292	C5R	C	0.200
HE1	44.455848694	19.770099640	37.901138306	HIS	292	HA	H	0.100
NE2	44.341678619	18.007810593	39.110340118	HIS	292	N5R	N	-0.400
N	46.895961761	19.043960571	45.147468567	ASN	293	NP	N	-0.400
HN	46.272331238	19.806299210	44.970199585	ASN	293	H	H	0.250
CA	47.533851624	18.998119354	46.463020325	ASN	293	CT	C	0.050
HA	48.603641510	18.933050156	46.254909515	ASN	293	HA	H	0.050
C	47.172611237	17.730850220	47.273918152	ASN	293	C	C	0.600
O	48.069408417	17.155490875	47.874118805	ASN	293	O	O	-0.550
CB	47.264850616	20.255220413	47.317928314	ASN	293	CT	C	-0.100
HB1	46.217178345	20.316829681	47.607330322	ASN	293	HA	H	0.050
HB2	47.834800720	20.204929352	48.246189117	ASN	293	HA	H	0.050
CG	47.621288300	21.583410263	46.638401031	ASN	293	C	C	0.550
OD1	46.985778809	22.598150253	46.876220703	ASN	293	O	O	-0.550
ND2	48.631618500	21.546590805	45.766891479	ASN	293	NP	N	-0.600
HD21	48.801231384	22.360679626	45.217960358	ASN	293	H	H	0.300
HD22	49.280788422	20.796060562	45.594429016	ASN	293	H	H	0.300
N	45.879058838	17.258930206	47.278518677	PRO	294	NX	N	-0.250
CA	45.500400543	15.959019661	47.853668213	PRO	294	CT	C	0.050
HA	45.271720886	16.105970383	48.904548645	PRO	294	HA	H	0.050
C	46.428699493	14.740229607	47.710090637	PRO	294	C	C	0.600
O	46.305500031	13.768260002	48.444988251	PRO	294	O	O	-0.550
CB	44.163349152	15.662599564	47.171779633	PRO	294	CT	C	-0.100
HB1	44.315769196	15.263959885	46.166759491	PRO	294	HA	H	0.050
HB2	43.533241272	14.963020325	47.717929840	PRO	294	HA	H	0.050
CG	43.529960632	17.039720535	47.075901031	PRO	294	CT	C	-0.100
HG1	42.742870331	17.094589233	46.323108673	PRO	294	HA	H	0.050
HG2	43.110919952	17.288619995	48.046920776	PRO	294	HA	H	0.050
CD	44.700489044	17.974729538	46.799648285	PRO	294	CT	C	0.000
HD1	44.759609222	18.120260239	45.735969543	PRO	294	HA	H	0.050
HD2	44.569660187	18.925649643	47.313270569	PRO	294	HA	H	0.050
N	47.368549347	14.845299721	46.757480621	THR	295	NP	N	-0.400
HN	47.429538727	15.695469856	46.238731384	THR	295	H	H	0.250
CA	48.350959778	13.793020248	46.570629120	THR	295	CT	C	0.050
HA	47.839118958	12.842559814	46.710269928	THR	295	HA	H	0.050

C	49.468788147	13.886240005	47.625991821	THR	295	C	C	0.600
O	49.925838470	12.885450363	48.166320801	THR	295	O	O	-0.550
CB	48.912059784	13.900730133	45.145938873	THR	295	CT	C	0.150
HB	49.718078613	14.638449669	45.116088867	THR	295	HA	H	0.100
OG1	47.902908325	14.280449867	44.221618652	THR	295	OT	O	-0.650
HG1	47.502708435	15.112350464	44.470470428	THR	295	HO	H	0.400
CG2	49.486301422	12.562120438	44.684909821	THR	295	CT	C	-0.150
HG21	48.717731476	11.792110443	44.675598145	THR	295	HA	H	0.050
HG22	49.888359070	12.631540298	43.676910400	THR	295	HA	H	0.050
HG23	50.295188904	12.236200333	45.339550018	THR	295	HA	H	0.050
N	49.873630524	15.140810013	47.880630493	ARG	296	NP	N	-0.400
HN	49.418918610	15.906430244	47.423530579	ARG	296	H	H	0.250
CA	50.957099915	15.441069603	48.810459137	ARG	296	CT	C	0.050
HA	51.629341125	14.583749771	48.793720245	ARG	296	HA	H	0.050
C	50.409568787	15.604109764	50.242668152	ARG	296	C	C	0.600
O	51.070869446	15.310440063	51.229339600	ARG	296	O	O	-0.550
CB	51.684638977	16.703119278	48.307949066	ARG	296	CT	C	-0.100
HB1	51.358390808	16.908540726	47.288719177	ARG	296	HA	H	0.050
HB2	51.395759583	17.589679718	48.874969482	ARG	296	HA	H	0.050
CG	53.213710785	16.551660538	48.293628693	ARG	296	CT	C	-0.100
HG1	53.616451263	16.715709686	49.291351318	ARG	296	HA	H	0.050
HG2	53.485260010	15.528929710	48.028938293	ARG	296	HA	H	0.050
CD	53.883270264	17.470199585	47.266628265	ARG	296	CT	C	0.000
HD1	54.970569611	17.398540497	47.290149689	ARG	296	HA	H	0.050
HD2	53.578449249	17.197809219	46.260379791	ARG	296	HA	H	0.050
NE	53.447959900	18.853740692	47.394588470	ARG	296	NP	N	-0.400
HE	52.569198608	19.111070633	46.973541260	ARG	296	H	H	0.300
CZ	54.245838165	19.843690872	47.832141876	ARG	296	C	C	0.500
NH1	55.416458130	19.584899902	48.396549225	ARG	296	NC	N	-0.450
HH11	55.728549957	18.634889603	48.460269928	ARG	296	HC	H	0.350
HH12	56.012718201	20.319370270	48.741851807	ARG	296	HC	H	0.350
NH2	53.841548920	21.087610245	47.659339905	ARG	296	NC	N	-0.450
HH21	52.915660858	21.235649109	47.284500122	ARG	296	HC	H	0.350
HH22	54.420738220	21.892530441	47.822910309	ARG	296	HC	H	0.350
N	49.137741089	16.044979095	50.280891418	VAL	297	NP	N	-0.400
HN	48.730609894	16.326210022	49.410881042	VAL	297	H	H	0.250
CA	48.357288361	16.253829956	51.500839233	VAL	297	CT	C	0.050
HA	48.776241302	17.128599167	51.981479645	VAL	297	HA	H	0.050
C	48.476478577	15.091690063	52.506610870	VAL	297	C	C	0.600
O	48.516929626	15.301799774	53.713550568	VAL	297	O	O	-0.550
CB	46.906879425	16.541870117	51.067581177	VAL	297	CT	C	-0.050
HB	46.731819153	15.860239983	50.243461609	VAL	297	HA	H	0.050
CG1	45.823249817	16.229049683	52.103851318	VAL	297	CT	C	-0.150
HG11	45.809291840	15.163299561	52.322410583	VAL	297	HA	H	0.050
HG12	45.983261108	16.788230896	53.026618958	VAL	297	HA	H	0.050
HG13	44.832519531	16.481330872	51.723358154	VAL	297	HA	H	0.050
CG2	46.746269226	17.991519928	50.582099915	VAL	297	CT	C	-0.150
HG21	47.575580597	18.309270859	49.952941895	VAL	297	HA	H	0.050
HG22	45.822139740	18.122789383	50.019851685	VAL	297	HA	H	0.050
HG23	46.707500458	18.679229736	51.425979614	VAL	297	HA	H	0.050
N	48.537921906	13.854990005	51.974231720	LYS	298	NP	N	-0.400
HN	48.486431122	13.742349625	50.982570648	LYS	298	H	H	0.250
CA	48.659759521	12.723890305	52.893398285	LYS	298	CT	C	0.050
HA	47.810291290	12.803970337	53.570869446	LYS	298	HA	H	0.050
C	49.926048279	12.831399918	53.775650024	LYS	298	C	C	0.600
O	49.896770477	12.531640053	54.961269379	LYS	298	O	O	-0.550
CB	48.538658142	11.381219864	52.152130127	LYS	298	CT	C	-0.100
HB1	48.590709686	10.568389893	52.878410339	LYS	298	HA	H	0.050
HB2	47.542648315	11.321269989	51.711578369	LYS	298	HA	H	0.050
CG	49.578620911	11.143569946	51.047389984	LYS	298	CT	C	-0.100
HG1	49.529708862	11.952839851	50.322570801	LYS	298	HA	H	0.050
HG2	50.578540802	11.162570000	51.475200653	LYS	298	HA	H	0.050

CD	49.362030029	9.796159744	50.344291687	LYS	298	CT	C	-0.100
HD1	49.453231812	8.999469757	51.083930969	LYS	298	HA	H	0.050
HD2	48.341079712	9.744250298	49.968311310	LYS	298	HA	H	0.050
CE	50.349700928	9.524589539	49.199878693	LYS	298	CT	C	0.050
HE1	51.376598358	9.732410431	49.507049561	LYS	298	HA	H	0.100
HE2	50.303939819	8.473130226	48.912418365	LYS	298	HA	H	0.100
NZ	50.062259674	10.308409691	48.003089905	LYS	298	NT	N	-0.300
HZ1	50.150630951	11.322770119	48.216209412	LYS	298	HC	H	0.350
HZ2	50.735378265	10.089859962	47.235641479	LYS	298	HC	H	0.350
HZ3	49.087409973	10.133390427	47.672389984	LYS	298	HC	H	0.350
N	51.015201569	13.323349953	53.155418396	LEU	299	NP	N	-0.400
HN	50.956478119	13.668129921	52.217201233	LEU	299	H	H	0.250
CA	52.286880493	13.453559875	53.862110138	LEU	299	CT	C	0.050
HA	52.440208435	12.533769608	54.428581238	LEU	299	HA	H	0.050
C	52.284320831	14.621279716	54.873409271	LEU	299	C	C	0.600
O	53.250881195	14.804220200	55.601200104	LEU	299	O	O	-0.550
CB	53.455379486	13.662699699	52.874481201	LEU	299	CT	C	-0.100
HB1	53.344699860	14.620989799	52.364818573	LEU	299	HA	H	0.050
HB2	54.370250702	13.752559662	53.463428497	LEU	299	HA	H	0.050
CG	53.692390442	12.550140381	51.831001282	LEU	299	CT	C	-0.050
HG	54.746059418	12.614620209	51.554008484	LEU	299	HA	H	0.050
CD1	53.483921051	11.137809753	52.394168854	LEU	299	CT	C	-0.150
HD11	54.080078125	10.990340233	53.294731140	LEU	299	HA	H	0.050
HD12	52.443290710	10.952019691	52.652919769	LEU	299	HA	H	0.050
HD13	53.784709930	10.379850388	51.670608521	LEU	299	HA	H	0.050
CD2	52.920650482	12.785129547	50.525688171	LEU	299	CT	C	-0.150
HD21	53.211410522	13.739979744	50.087459564	LEU	299	HA	H	0.050
HD22	53.143951416	12.009860039	49.792308807	LEU	299	HA	H	0.050
HD23	51.844020844	12.804550171	50.674041748	LEU	299	HA	H	0.050
N	51.183189392	15.407690048	54.892028809	PHE	300	NP	N	-0.400
HN	50.411499023	15.239930153	54.277149200	PHE	300	H	H	0.250
CA	51.136341095	16.525220871	55.833011627	PHE	300	CT	C	0.050
HA	52.083351135	17.058349609	55.744991302	PHE	300	HA	H	0.050
C	51.025798798	15.975489616	57.271579742	PHE	300	C	C	0.600
O	51.956508636	16.013240814	58.068241119	PHE	300	O	O	-0.550
CB	49.944549561	17.470539093	55.541271210	PHE	300	CT	C	-0.100
HB1	49.006309509	16.916139603	55.549301147	PHE	300	HA	H	0.050
HB2	49.859920502	18.202070236	56.345481873	PHE	300	HA	H	0.050
CG	49.976898193	18.245100021	54.245300293	PHE	300	C6R	C	0.000
CD1	51.010650635	18.149070740	53.313339233	PHE	300	C6R	C	-0.130
HD1	51.868469238	17.515909195	53.484508514	PHE	300	HA	H	0.130
CD2	48.906711578	19.090940475	53.964351654	PHE	300	C6R	C	-0.130
HD2	48.094688416	19.184560776	54.671051025	PHE	300	HA	H	0.130
CE1	50.958530426	18.869419098	52.125808716	PHE	300	C6R	C	-0.130
HE1	51.754280090	18.769849777	51.404228210	PHE	300	HA	H	0.130
CE2	48.858898163	19.818279266	52.783458710	PHE	300	C6R	C	-0.130
HE2	48.017101288	20.467290878	52.590450287	PHE	300	HA	H	0.130
CZ	49.885379791	19.706010818	51.858108521	PHE	300	C6R	C	-0.130
HZ	49.849460602	20.265750885	50.934028625	PHE	300	HA	H	0.130
N	49.807468414	15.467280388	57.536239624	GLU	301	NP	N	-0.400
HN	49.115798950	15.523810387	56.818580627	GLU	301	H	H	0.250
CA	49.458049774	14.975399971	58.863780975	GLU	301	CT	C	0.050
HA	50.176410675	15.368989944	59.582511902	GLU	301	HA	H	0.050
C	49.513458252	13.440329552	58.904411316	GLU	301	C	C	0.600
O	49.921581268	12.813699722	59.872821808	GLU	301	O	O	-0.550
CB	48.033218384	15.451439857	59.221851349	GLU	301	CT	C	-0.100
HB1	47.277320862	14.888930321	58.676338196	GLU	301	HA	H	0.050
HB2	47.858238220	15.214619637	60.270370483	GLU	301	HA	H	0.050
CG	47.791210175	16.951839447	58.951179504	GLU	301	CT	C	-0.250
HG1	48.718570709	17.505369186	59.085369110	GLU	301	HA	H	0.050
HG2	47.485111237	17.113090515	57.917648315	GLU	301	HA	H	0.050
CD	46.739028931	17.586799622	59.882190704	GLU	301	C	C	0.350

OE1	45.924278259	16.893100739	60.484600067	GLU	301	OC	O	-0.600
OE2	46.756130219	18.793659210	60.063861847	GLU	301	OC	O	-0.600
N	48.999389648	12.900739670	57.788921356	LYS	302	NP	N	-0.400
HN	49.023151398	13.427539825	56.941699982	LYS	302	H	H	0.250
CA	48.324691772	11.606840134	57.769569397	LYS	302	CT	C	0.050
HA	47.772621155	11.525699615	58.707939148	LYS	302	HA	H	0.050
C	49.359901428	10.474379539	57.712329865	LYS	302	C	C	0.600
O	49.194358826	9.392820358	58.258419037	LYS	302	O	O	-0.550
CB	47.336940765	11.601799965	56.578239441	LYS	302	CT	C	-0.100
HB1	47.830760956	11.260709763	55.667221069	LYS	302	HA	H	0.050
HB2	46.538921356	10.885609627	56.777118683	LYS	302	HA	H	0.050
CG	46.751991272	13.007049561	56.326931000	LYS	302	CT	C	-0.100
HG1	46.431838989	13.435009956	57.276309967	LYS	302	HA	H	0.050
HG2	47.533679962	13.657449722	55.932121277	LYS	302	HA	H	0.050
CD	45.576648712	13.095820427	55.356929779	LYS	302	CT	C	-0.100
HD1	45.783031464	12.535670280	54.445011139	LYS	302	HA	H	0.050
HD2	44.695190430	12.641670227	55.811721802	LYS	302	HA	H	0.050
CE	45.313568115	14.571669579	55.021980286	LYS	302	CT	C	0.050
HE1	45.214439392	15.167650223	55.928970337	LYS	302	HA	H	0.100
HE2	46.153789520	14.994509697	54.474418640	LYS	302	HA	H	0.100
NZ	44.098709106	14.779680252	54.251781464	LYS	302	NT	N	-0.300
HZ1	44.122848511	14.289290428	53.331809998	LYS	302	HC	H	0.350
HZ2	43.300621033	14.419480324	54.819931030	LYS	302	HC	H	0.350
HZ3	43.942348480	15.798609734	54.086509705	LYS	302	HC	H	0.350
N	50.453861237	10.852560043	57.039409637	TRP	303	NP	N	-0.400
HN	50.406318665	11.717089653	56.538120270	TRP	303	H	H	0.250
CA	51.699470520	10.118309975	57.001651764	TRP	303	CT	C	0.050
HA	51.698631287	9.390199661	57.815788269	TRP	303	HA	H	0.050
C	52.801528931	11.162460327	57.242389679	TRP	303	C	C	0.600
O	53.725551605	11.328989983	56.457939148	TRP	303	O	O	-0.550
CB	51.811668396	9.440790176	55.625331879	TRP	303	CT	C	-0.100
HB1	50.858150482	8.984339714	55.357650757	TRP	303	HA	H	0.050
HB2	52.036289215	10.165969849	54.842800140	TRP	303	HA	H	0.050
CG	52.868679047	8.358309746	55.646400452	TRP	303	C5R	C	-0.030
CD1	54.207698822	8.497679710	55.272861481	TRP	303	C5R	C	-0.040
HD1	54.663230896	9.415619850	54.929851532	TRP	303	HA	H	0.100
CD2	52.695079803	6.984429836	56.045730591	TRP	303	CR56	C	0.100
HE1	55.786838531	7.150279999	55.225028992	TRP	303	H	H	0.300
NE1	54.839099884	7.306799889	55.419410706	TRP	303	N5R	N	-0.360
CE2	53.949409485	6.348929882	55.890998840	TRP	303	CR56	C	-0.040
CE3	51.616630554	6.276669979	56.503890991	TRP	303	C6R	C	-0.130
HE3	50.663398743	6.770510197	56.625740051	TRP	303	HA	H	0.100
CZ2	54.084690094	5.021679878	56.198341370	TRP	303	C6R	C	-0.130
HZ2	55.041290283	4.534220219	56.081081390	TRP	303	HA	H	0.130
CZ3	51.751239777	4.924250126	56.818260193	TRP	303	C6R	C	-0.130
HZ3	50.900241852	4.366260052	57.181369781	TRP	303	HA	H	0.130
CH2	52.987529755	4.295929909	56.664508820	TRP	303	C6R	C	-0.130
HH2	53.095531464	3.248630047	56.907211304	TRP	303	HA	H	0.130
N	52.592109680	11.893989563	58.353889465	GLY	304	NP	N	-0.400
HN	51.831039429	11.687310219	58.973209381	GLY	304	H	H	0.250
CA	53.470199585	13.007820129	58.680629730	GLY	304	CT	C	0.000
HA1	54.503688812	12.704710007	58.505859375	GLY	304	HA	H	0.050
HA2	53.216548920	13.836389542	58.019031525	GLY	304	HA	H	0.050
C	53.288261414	13.383680344	60.153499603	GLY	304	C	C	0.600
O	53.333358765	12.531649590	61.031131744	GLY	304	O	O	-0.550
N	53.078788757	14.695619583	60.371978760	TRP	305	NP	N	-0.400
HN	52.956661224	15.314029694	59.588039398	TRP	305	H	H	0.250
CA	52.914558411	15.228249550	61.720649719	TRP	305	CT	C	0.050
HA	52.623638153	14.421669960	62.397659302	TRP	305	HA	H	0.050
C	51.799720764	16.271589279	61.679588318	TRP	305	C	C	0.600
O	51.942798615	17.323650360	61.076091766	TRP	305	O	O	-0.550
CB	54.203411102	15.923379898	62.185428619	TRP	305	CT	C	-0.100

HB1	54.672641754	16.461700439	61.360748291	TRP	305	HA	H	0.050
HB2	53.977500916	16.658439636	62.957241058	TRP	305	HA	H	0.050
CG	55.176219940	14.936309814	62.786708832	TRP	305	C5R	C	-0.030
CD1	56.305320740	14.396639824	62.166828156	TRP	305	C5R	C	-0.040
HD1	56.621391296	14.606909752	61.155040741	TRP	305	HA	H	0.100
CD2	55.134338379	14.388099670	64.119102478	TRP	305	CR56	C	0.100
HE1	57.752838135	13.066370010	62.834739685	TRP	305	H	H	0.300
NE1	56.936920166	13.570219994	63.037738800	TRP	305	N5R	N	-0.360
CE2	56.254261017	13.535019875	64.248107910	TRP	305	CR56	C	-0.040
CE3	54.267208099	14.549969673	65.166816711	TRP	305	C6R	C	-0.130
HE3	53.409118652	15.196209908	65.057189941	TRP	305	HA	H	0.100
CZ2	56.473430634	12.870550156	65.424873352	TRP	305	C6R	C	-0.130
HZ2	57.326900482	12.215410233	65.523918152	TRP	305	HA	H	0.130
CZ3	54.486560822	13.872909546	66.367027283	TRP	305	C6R	C	-0.130
HZ3	53.795341492	13.986289978	67.189956665	TRP	305	HA	H	0.130
CH2	55.592990875	13.032460213	66.495788574	TRP	305	C6R	C	-0.130
HH2	55.766361237	12.498450279	67.419601440	TRP	305	HA	H	0.130
N	50.692058563	15.940190315	62.370498657	LYS	306	NP	N	-0.400
HN	50.659809113	15.061820030	62.845859528	LYS	306	H	H	0.250
CA	49.479541779	16.740589142	62.217041016	LYS	306	CT	C	0.050
HA	49.327438354	16.822990417	61.143341064	LYS	306	HA	H	0.050
C	49.603530884	18.182039261	62.740261078	LYS	306	C	C	0.600
O	48.763698578	19.025140762	62.445491791	LYS	306	O	O	-0.550
CB	48.274368286	15.992239952	62.817459106	LYS	306	CT	C	-0.100
HB1	47.369281769	16.277629852	62.295211792	LYS	306	HA	H	0.050
HB2	48.388828278	14.931010246	62.593120575	LYS	306	HA	H	0.050
CG	48.029998779	16.154289246	64.326271057	LYS	306	CT	C	-0.100
HG1	47.354911804	15.355939865	64.637451172	LYS	306	HA	H	0.050
HG2	48.957309723	15.984910011	64.874359131	LYS	306	HA	H	0.050
CD	47.398010254	17.493139267	64.763610840	LYS	306	CT	C	-0.100
HD1	47.123638153	17.375219345	65.812828064	LYS	306	HA	H	0.050
HD2	48.118148804	18.307779312	64.780441284	LYS	306	HA	H	0.050
CE	46.127029419	17.923339844	64.003982544	LYS	306	CT	C	0.050
HE1	45.423721313	17.095100403	63.905239105	LYS	306	HA	H	0.100
HE2	45.623779297	18.668800354	64.622222900	LYS	306	HA	H	0.100
NZ	46.266769409	18.550079346	62.680988312	LYS	306	NT	N	-0.300
HZ1	47.129760742	19.122259140	62.550720215	LYS	306	HC	H	0.350
HZ2	46.239810944	17.890220642	61.869819641	LYS	306	HC	H	0.350
HZ3	45.454589844	19.197179794	62.525009155	LYS	306	HC	H	0.350
N	50.650489807	18.441640854	63.549560547	LYS	307	NP	N	-0.400
HN	51.324138641	17.726160049	63.716308594	LYS	307	H	H	0.250
CA	50.829551697	19.797399521	64.069442749	LYS	307	CT	C	0.050
HA	49.836891174	20.232620239	64.209426880	LYS	307	HA	H	0.050
C	51.591171265	20.641590118	63.024658203	LYS	307	C	C	0.600
O	52.738250732	21.048099518	63.189559937	LYS	307	O	O	-0.550
CB	51.529220581	19.757209778	65.434196472	LYS	307	CT	C	-0.100
HB1	51.187778473	18.888959885	65.998596191	LYS	307	HA	H	0.050
HB2	52.601390839	19.624799728	65.307113647	LYS	307	HA	H	0.050
CG	51.230091095	21.015729904	66.259872437	LYS	307	CT	C	-0.100
HG1	51.253299713	21.897069931	65.616058350	LYS	307	HA	H	0.050
HG2	50.215339661	20.952840805	66.655082703	LYS	307	HA	H	0.050
CD	52.234008789	21.222629547	67.393608093	LYS	307	CT	C	-0.100
HD1	52.391311646	20.294429779	67.944038391	LYS	307	HA	H	0.050
HD2	53.188678741	21.470010757	66.932022095	LYS	307	HA	H	0.050
CE	51.809230804	22.332599640	68.364479065	LYS	307	CT	C	0.050
HE1	51.243980408	23.107229233	67.842163086	LYS	307	HA	H	0.100
HE2	51.169391632	21.930410385	69.151222229	LYS	307	HA	H	0.100
NZ	52.955970764	22.990539551	68.980766296	LYS	307	NT	N	-0.300
HZ1	53.710098267	22.325700760	69.281303406	LYS	307	HC	H	0.350
HZ2	53.435428619	23.554779053	68.242683411	LYS	307	HC	H	0.350
HZ3	52.716060638	23.624830246	69.764091492	LYS	307	HC	H	0.350
N	50.854530334	20.827299118	61.924880981	ILE	308	NP	N	-0.400

HN	49.906299591	20.504829407	61.919898987	ILE	308	H	H	0.250
CA	51.359489441	21.473110199	60.734008789	ILE	308	CT	C	0.050
HA	52.408058167	21.194000244	60.616191864	ILE	308	HA	H	0.050
C	51.252449036	22.993219376	60.903598785	ILE	308	C	C	0.600
O	50.609550476	23.482789993	61.822368622	ILE	308	O	O	-0.550
CB	50.501991272	20.970880508	59.552158356	ILE	308	CT	C	-0.050
HB	50.850151062	21.473440170	58.648670197	ILE	308	HA	H	0.050
CG1	49.004600525	21.288549423	59.719718933	ILE	308	CT	C	-0.100
HG11	48.533451080	20.559429169	60.378288269	ILE	308	HA	H	0.050
HG12	48.867198944	22.242380142	60.215461731	ILE	308	HA	H	0.050
CG2	50.671161652	19.455379486	59.368698120	ILE	308	CT	C	-0.150
HG21	51.716709137	19.153070450	59.379440308	ILE	308	HA	H	0.050
HG22	50.176681519	18.903570175	60.164539337	ILE	308	HA	H	0.050
HG23	50.229778290	19.119579315	58.432868958	ILE	308	HA	H	0.050
CD1	48.263450623	21.323759079	58.382801056	ILE	308	CT	C	-0.150
HD11	48.387691498	20.383020401	57.848709106	ILE	308	HA	H	0.050
HD12	47.196640015	21.482959747	58.537200928	ILE	308	HA	H	0.050
HD13	48.636909485	22.127170563	57.747421265	ILE	308	HA	H	0.050
N	51.869689941	23.690759659	59.936798096	ALA	309	NP	N	-0.400
HN	52.502658844	23.253799438	59.293548584	ALA	309	H	H	0.250
CA	51.539558411	25.084569931	59.692638397	ALA	309	CT	C	0.050
HA	50.708530426	25.372549057	60.331600189	ALA	309	HA	H	0.050
C	51.131549835	25.188310623	58.221298218	ALA	309	C	C	0.600
O	51.671100616	24.472740173	57.388450623	ALA	309	O	O	-0.550
CB	52.766330719	25.957099915	59.972740173	ALA	309	CT	C	-0.150
HB1	53.622959137	25.634719849	59.379219055	ALA	309	HA	H	0.050
HB2	52.571151733	27.004989624	59.743320465	ALA	309	HA	H	0.050
HB3	53.043190002	25.893430710	61.023918152	ALA	309	HA	H	0.050
N	50.202838898	26.116489410	57.937461853	THR	310	NP	N	-0.400
HN	49.706310272	26.541130066	58.699020386	THR	310	H	H	0.250
CA	49.917438507	26.472209930	56.547149658	THR	310	CT	C	0.050
HA	50.686031342	26.029029846	55.916648865	THR	310	HA	H	0.050
C	50.001911163	27.998630524	56.409439087	THR	310	C	C	0.600
O	49.191761017	28.748079300	56.947799683	THR	310	O	O	-0.550
CB	48.558559418	25.917110443	56.093849182	THR	310	CT	C	0.150
HB	47.777851105	26.340499878	56.738731384	THR	310	HA	H	0.100
OG1	48.614540100	24.508140564	56.254318237	THR	310	OT	O	-0.650
HG1	47.786529541	24.105979919	56.005100250	THR	310	HO	H	0.400
CG2	48.263320923	26.252689362	54.620971680	THR	310	CT	C	-0.150
HG21	48.994560242	25.802669525	53.951229095	THR	310	HA	H	0.050
HG22	47.274890900	25.905109406	54.322910309	THR	310	HA	H	0.050
HG23	48.296630859	27.326770782	54.443149567	THR	310	HA	H	0.050
N	51.045879364	28.409250259	55.672439575	ILE	311	NP	N	-0.400
HN	51.596710205	27.728479385	55.188369751	ILE	311	H	H	0.250
CA	51.240291595	29.812410355	55.363430023	ILE	311	CT	C	0.050
HA	50.756748199	30.384870529	56.154579163	ILE	311	HA	H	0.050
C	50.512271881	30.107620239	54.045101166	ILE	311	C	C	0.600
O	50.312351227	29.252510071	53.189701080	ILE	311	O	O	-0.550
CB	52.745399475	30.141300201	55.350078583	ILE	311	CT	C	-0.050
HB	53.161998749	29.684619904	56.246040344	ILE	311	HA	H	0.050
CG1	53.036911011	31.647029877	55.466991425	ILE	311	CT	C	-0.100
HG11	54.109458923	31.803169250	55.353900909	ILE	311	HA	H	0.050
HG12	52.559661865	32.185161591	54.653869629	ILE	311	HA	H	0.050
CG2	53.475139618	29.538469315	54.136260986	ILE	311	CT	C	-0.150
HG21	53.083889008	29.925199509	53.195701599	ILE	311	HA	H	0.050
HG22	54.538619995	29.777030945	54.157699585	ILE	311	HA	H	0.050
HG23	53.381511688	28.454210281	54.113628387	ILE	311	HA	H	0.050
CD1	52.604488373	32.280971527	56.791439056	ILE	311	CT	C	-0.150
HD11	53.013290405	31.739810944	57.644878387	ILE	311	HA	H	0.050
HD12	52.954040527	33.312850952	56.851158142	ILE	311	HA	H	0.050
HD13	51.520801544	32.309379578	56.879398346	ILE	311	HA	H	0.050
N	50.090629578	31.371049881	53.978378296	GLN	312	NP	N	-0.400

HN	50.402420044	32.046478271	54.648681641	GLN	312	H	H	0.250
CA	49.130329132	31.823530197	52.996150970	GLN	312	CT	C	0.050
HA	49.255619049	31.250719070	52.074550629	GLN	312	HA	H	0.050
C	49.500480652	33.279838562	52.758960724	GLN	312	C	C	0.600
O	49.865638733	33.965778351	53.704658508	GLN	312	O	O	-0.550
CB	47.735969543	31.639070511	53.635421753	GLN	312	CT	C	-0.100
HB1	47.381408691	30.626869202	53.447219849	GLN	312	HA	H	0.050
HB2	47.841289520	31.696960449	54.720260620	GLN	312	HA	H	0.050
CG	46.663898468	32.680320740	53.274921417	GLN	312	CT	C	-0.100
HG1	45.767139435	32.509559631	53.870098114	GLN	312	HA	H	0.050
HG2	47.031459808	33.667758942	53.538440704	GLN	312	HA	H	0.050
CD	46.228900909	32.731170654	51.815509796	GLN	312	C	C	0.550
OE1	45.600738525	33.685329437	51.377750397	GLN	312	O	O	-0.550
NE2	46.557899475	31.650560379	51.104148865	GLN	312	NP	N	-0.600
HE21	46.140129089	31.530799866	50.202499390	GLN	312	H	H	0.300
HE22	47.137348175	30.920139313	51.459571838	GLN	312	H	H	0.300
N	49.419898987	33.693679810	51.477661133	GLN	313	NP	N	-0.400
HN	49.133018494	33.060611725	50.761341095	GLN	313	H	H	0.250
CA	49.703548431	35.085990906	51.146308899	GLN	313	CT	C	0.050
HA	50.427909851	35.443588257	51.875980377	GLN	313	HA	H	0.050
C	48.427101135	35.917110443	51.355651855	GLN	313	C	C	0.600
O	48.042091370	36.170211792	52.489410400	GLN	313	O	O	-0.550
CB	50.372978210	35.211341858	49.765399933	GLN	313	CT	C	-0.100
HB1	49.683090210	34.975360870	48.958740234	GLN	313	HA	H	0.050
HB2	50.678840637	36.249351501	49.616809845	GLN	313	HA	H	0.050
CG	51.596950531	34.286689758	49.683441162	GLN	313	CT	C	-0.100
HG1	52.189590454	34.393630981	50.589988708	GLN	313	HA	H	0.050
HG2	51.290309906	33.244670868	49.619201660	GLN	313	HA	H	0.050
CD	52.514919281	34.590480804	48.499309540	GLN	313	C	C	0.550
OE1	52.484989166	33.951248169	47.456848145	GLN	313	O	O	-0.550
NE2	53.383140564	35.560161591	48.758560181	GLN	313	NP	N	-0.600
HE21	54.121459961	35.749591827	48.107421875	GLN	313	H	H	0.300
HE22	53.354091644	36.110988617	49.594589233	GLN	313	H	H	0.300
N	47.796161652	36.327590942	50.245109558	THR	314	NP	N	-0.400
HN	48.088390350	36.082309723	49.319339752	THR	314	H	H	0.250
CA	46.622028351	37.181190491	50.349529266	THR	314	CT	C	0.050
HA	45.922481537	36.685749054	51.025878906	THR	314	HA	H	0.050
C	45.982570648	37.221519470	48.962860107	THR	314	C	C	0.600
O	46.553188324	36.719009399	48.002681732	THR	314	O	O	-0.550
CB	47.003540039	38.585601807	50.876930237	THR	314	CT	C	0.150
HB	47.324188232	38.450271606	51.918758392	THR	314	HA	H	0.100
OG1	45.865051270	39.438018799	50.827339172	THR	314	OT	O	-0.650
HG1	46.008968353	40.222831726	51.349300385	THR	314	HO	H	0.400
CG2	48.156070709	39.229080200	50.083850861	THR	314	CT	C	-0.150
HG21	48.444660187	40.191410065	50.505889893	THR	314	HA	H	0.050
HG22	49.049640656	38.604911804	50.091228485	THR	314	HA	H	0.050
HG23	47.877208710	39.392261505	49.043071747	THR	314	HA	H	0.050
N	44.787891388	37.840450287	48.948089600	THR	315	NP	N	-0.400
HN	44.597999573	38.299789429	49.820838928	THR	315	H	H	0.250
CA	43.849498749	37.959968567	47.833248138	THR	315	CT	C	0.050
HA	43.237720490	38.815898895	48.119510651	THR	315	HA	H	0.050
C	42.898860931	36.748241425	47.793239594	THR	315	C	C	0.600
O	43.068950653	35.757061005	48.500118256	THR	315	O	O	-0.550
CB	44.490631104	38.285499573	46.463989258	THR	315	CT	C	0.150
HB	43.679798126	38.557430267	45.784648895	THR	315	HA	H	0.100
OG1	45.130088806	37.171241760	45.876888275	THR	315	OT	O	-0.650
HG1	45.865699768	36.939498901	46.444519043	THR	315	HO	H	0.400
CG2	45.433670044	39.499378204	46.508148193	THR	315	CT	C	-0.150
HG21	45.814819336	39.726390839	45.512130737	THR	315	HA	H	0.050
HG22	44.908161163	40.383800507	46.867858887	THR	315	HA	H	0.050
HG23	46.292579651	39.344139099	47.160720825	THR	315	HA	H	0.050
N	41.861320496	36.927150726	46.954418182	GLU	316	NP	N	-0.400

HN	41.897628784	37.639331818	46.249980927	GLU	316	H	H	0.250
CA	40.719978333	36.030841827	46.886951447	GLU	316	CT	C	0.050
HA	40.317119598	36.004768372	47.900581360	GLU	316	HA	H	0.050
C	41.144748688	34.601840973	46.524200439	GLU	316	C	C	0.600
O	40.762458801	33.640319824	47.180400848	GLU	316	O	O	-0.550
CB	39.642059326	36.605751038	45.937038422	GLU	316	CT	C	-0.100
HB1	38.703128815	36.103908539	46.174671173	GLU	316	HA	H	0.050
HB2	39.473861694	37.655929565	46.179450989	GLU	316	HA	H	0.050
CG	39.853080750	36.465690613	44.408771515	GLU	316	CT	C	-0.250
HG1	39.990421295	35.425300598	44.117248535	GLU	316	HA	H	0.050
HG2	38.929279327	36.773281097	43.916519165	GLU	316	HA	H	0.050
CD	40.997318268	37.302848816	43.806129456	GLU	316	C	C	0.350
OE1	42.123538971	37.227348328	44.288368225	GLU	316	OC	O	-0.600
OE2	40.759998322	38.002960205	42.828639984	GLU	316	OC	O	-0.600
N	41.979328156	34.521278381	45.470088959	VAL	317	NP	N	-0.400
HN	42.189128876	35.383140564	44.998310089	VAL	317	H	H	0.250
CA	42.432800293	33.230529785	44.957611084	VAL	317	CT	C	0.050
HA	41.539840698	32.683609009	44.649761200	VAL	317	HA	H	0.050
C	43.116729736	32.429691315	46.071861267	VAL	317	C	C	0.600
O	42.805030823	31.275339127	46.342529297	VAL	317	O	O	-0.550
CB	43.373809814	33.456821442	43.751758575	VAL	317	CT	C	-0.050
HB	44.170810699	34.140148163	44.048999786	VAL	317	HA	H	0.050
CG1	44.048591614	32.159408569	43.273578644	VAL	317	CT	C	-0.150
HG11	43.321258545	31.360340118	43.155910492	VAL	317	HA	H	0.050
HG12	44.559120178	32.296291351	42.320110321	VAL	317	HA	H	0.050
HG13	44.795211792	31.811529160	43.988769531	VAL	317	HA	H	0.050
CG2	42.610389709	34.129089355	42.604808807	VAL	317	CT	C	-0.150
HG21	41.680408478	33.606719971	42.385841370	VAL	317	HA	H	0.050
HG22	42.341449738	35.146961212	42.867038727	VAL	317	HA	H	0.050
HG23	43.203529358	34.180019379	41.691799164	VAL	317	HA	H	0.050
N	44.063140869	33.140720367	46.699558258	PHE	318	NP	N	-0.400
HN	44.166629791	34.104408264	46.456241608	PHE	318	H	H	0.250
CA	44.904098511	32.537891388	47.719760895	PHE	318	CT	C	0.050
HA	45.366729736	31.650859833	47.283531189	PHE	318	HA	H	0.050
C	44.059368134	32.104579926	48.920841217	PHE	318	C	C	0.600
O	44.238410950	31.022970200	49.466751099	PHE	318	O	O	-0.550
CB	45.959880829	33.558551788	48.149478912	PHE	318	CT	C	-0.100
HB1	45.499488831	34.534549713	48.296001434	PHE	318	HA	H	0.050
HB2	46.391471863	33.293708801	49.109710693	PHE	318	HA	H	0.050
CG	47.089439392	33.666011810	47.165920258	PHE	318	C6R	C	0.000
CD1	48.340858459	33.157890320	47.495021820	PHE	318	C6R	C	-0.130
HD1	48.500339508	32.653018951	48.435420990	PHE	318	HA	H	0.130
CD2	46.915058136	34.284751892	45.931648254	PHE	318	C6R	C	-0.130
HD2	45.949108124	34.658439636	45.634628296	PHE	318	HA	H	0.130
CE1	49.407028198	33.295810699	46.622718811	PHE	318	C6R	C	-0.130
HE1	50.376838684	32.905338287	46.895500183	PHE	318	HA	H	0.130
CE2	47.981918335	34.425659180	45.059368134	PHE	318	C6R	C	-0.130
HE2	47.853588104	34.918380737	44.109939575	PHE	318	HA	H	0.130
CZ	49.228450775	33.936290741	45.406860352	PHE	318	C6R	C	-0.130
HZ	50.054580688	34.054878235	44.723510742	PHE	318	HA	H	0.130
N	43.125251770	33.006290436	49.270408630	THR	319	NP	N	-0.400
HN	43.079231262	33.866359711	48.759788513	THR	319	H	H	0.250
CA	42.220020294	32.745010376	50.381401062	THR	319	CT	C	0.050
HA	42.842979431	32.573318481	51.261341095	THR	319	HA	H	0.050
C	41.389900208	31.475730896	50.118110657	THR	319	C	C	0.600
O	41.252899170	30.612789154	50.971870422	THR	319	O	O	-0.550
CB	41.326580048	33.981620789	50.595310211	THR	319	CT	C	0.150
HB	40.753860474	34.196338654	49.685009003	THR	319	HA	H	0.100
OG1	42.131748199	35.100051880	50.927909851	THR	319	OT	O	-0.650
HG1	42.730838776	35.304050446	50.207340240	THR	319	HO	H	0.400
CG2	40.315181732	33.802989960	51.733268738	THR	319	CT	C	-0.150
HG21	39.762821198	34.726009369	51.909099579	THR	319	HA	H	0.050

HG22	39.587051392	33.023719788	51.505428314	THR	319	HA	H	0.050
HG23	40.809310913	33.529689789	52.662841797	THR	319	HA	H	0.050
N	40.863250732	31.409709930	48.882259369	SER	320	NP	N	-0.400
HN	41.086231232	32.132678986	48.228519440	SER	320	H	H	0.250
CA	39.982250214	30.307540894	48.512508392	SER	320	CT	C	0.050
HA	39.192848206	30.259559631	49.265708923	SER	320	HA	H	0.050
C	40.749141693	28.973379135	48.511550903	SER	320	C	C	0.600
O	40.319728851	27.964700699	49.056930542	SER	320	O	O	-0.550
CB	39.383220673	30.592830658	47.126178741	SER	320	CT	C	0.050
HB1	40.137458801	30.536830902	46.332019806	SER	320	HA	H	0.100
HB2	38.635158539	29.834220886	46.887901306	SER	320	HA	H	0.100
OG	38.734390259	31.852569580	47.088920593	SER	320	OT	O	-0.650
HG	39.365318298	32.556758881	47.242610931	SER	320	HO	H	0.400
N	41.931030273	29.056230545	47.871028900	THR	321	NP	N	-0.400
HN	42.214721680	29.949630737	47.523128510	THR	321	H	H	0.250
CA	42.787189484	27.883159637	47.733341217	THR	321	CT	C	0.050
HA	42.195629120	27.127950668	47.212558746	THR	321	HA	H	0.050
C	43.171138763	27.341489792	49.128311157	THR	321	C	C	0.600
O	43.163890839	26.141170502	49.379360199	THR	321	O	O	-0.550
CB	44.026550293	28.259399414	46.893600464	THR	321	CT	C	0.150
HB	44.644371033	28.973440170	47.450458527	THR	321	HA	H	0.100
OG1	43.643291473	28.832889557	45.653720856	THR	321	OT	O	-0.650
HG1	43.149410248	29.638719559	45.797309875	THR	321	HO	H	0.400
CG2	44.900470734	27.050939560	46.541038513	THR	321	CT	C	-0.150
HG21	45.780948639	27.361330032	45.978981018	THR	321	HA	H	0.050
HG22	45.244400024	26.523120880	47.430778503	THR	321	HA	H	0.050
HG23	44.352001190	26.341470718	45.921398163	THR	321	HA	H	0.050
N	43.472499847	28.319530487	50.011508942	LEU	322	NP	N	-0.400
HN	43.462158203	29.274219513	49.705589294	LEU	322	H	H	0.250
CA	43.832530975	28.048610687	51.397941589	LEU	322	CT	C	0.050
HA	44.674789429	27.357730865	51.368610382	LEU	322	HA	H	0.050
C	42.674221039	27.399080276	52.155990601	LEU	322	C	C	0.600
O	42.855140686	26.412490845	52.851039886	LEU	322	O	O	-0.550
CB	44.246929169	29.367639542	52.067131042	LEU	322	CT	C	-0.100
HB1	45.060199738	29.760839462	51.468170166	LEU	322	HA	H	0.050
HB2	43.444961548	30.102100372	51.991329193	LEU	322	HA	H	0.050
CG	44.730209351	29.290790558	53.530380249	LEU	322	CT	C	-0.050
HG	45.137771606	30.274969101	53.756500244	LEU	322	HA	H	0.050
CD1	43.607391357	29.063169479	54.553161621	LEU	322	CT	C	-0.150
HD11	42.708889008	29.619800568	54.289249420	LEU	322	HA	H	0.050
HD12	43.332679749	28.012990952	54.642200470	LEU	322	HA	H	0.050
HD13	43.924530029	29.381889343	55.546249390	LEU	322	HA	H	0.050
CD2	45.856601715	28.272649765	53.719551086	LEU	322	CT	C	-0.150
HD21	46.668430328	28.435470581	53.010890961	LEU	322	HA	H	0.050
HD22	46.267578125	28.342300415	54.726921082	LEU	322	HA	H	0.050
HD23	45.490791321	27.254640579	53.581069946	LEU	322	HA	H	0.050
N	41.488079071	28.006799698	51.995079041	ASP	323	NP	N	-0.400
HN	41.418209076	28.809570312	51.400791168	ASP	323	H	H	0.250
CA	40.304508209	27.562780380	52.724620819	ASP	323	CT	C	0.050
HA	40.521888733	27.704679489	53.784870148	ASP	323	HA	H	0.050
C	40.054729462	26.062240601	52.466960907	ASP	323	C	C	0.600
O	39.993759155	25.232160568	53.368400574	ASP	323	O	O	-0.550
CB	39.129688263	28.454069138	52.284740448	ASP	323	CT	C	-0.250
HB1	39.407451630	29.504129410	52.375179291	ASP	323	HA	H	0.050
HB2	38.882431030	28.290470123	51.234828949	ASP	323	HA	H	0.050
CG	37.881141663	28.239570618	53.149230957	ASP	323	C	C	0.350
OD1	37.960628510	28.459600449	54.356319427	ASP	323	OC	O	-0.600
OD2	36.843181610	27.871349335	52.604198456	ASP	323	OC	O	-0.600
N	40.014408112	25.762899399	51.155849457	ASP	324	NP	N	-0.400
HN	40.049968719	26.508649826	50.483959198	ASP	324	H	H	0.250
CA	39.858860016	24.370359421	50.752590179	ASP	324	CT	C	0.050
HA	38.963138580	24.002109528	51.259849548	ASP	324	HA	H	0.050

C	41.059169769	23.504360199	51.214019775	ASP	324	C	C	0.600
O	40.902828217	22.385370255	51.678089142	ASP	324	O	O	-0.550
CB	39.645999908	24.307859421	49.237548828	ASP	324	CT	C	-0.250
HB1	38.798728943	24.928640366	48.944938660	ASP	324	HA	H	0.050
HB2	40.514919281	24.678499222	48.695251465	ASP	324	HA	H	0.050
CG	39.360820770	22.861150742	48.838001251	ASP	324	C	C	0.350
OD1	38.201381683	22.453430176	48.882190704	ASP	324	OC	O	-0.600
OD2	40.310440063	22.156509399	48.510440826	ASP	324	OC	O	-0.600
N	42.269309998	24.083660126	51.126861572	LEU	325	NP	N	-0.400
HN	42.338718414	24.986289978	50.697189331	LEU	325	H	H	0.250
CA	43.457828522	23.388389587	51.635231018	LEU	325	CT	C	0.050
HA	43.521259308	22.449970245	51.086750031	LEU	325	HA	H	0.050
C	43.320549011	23.044290543	53.143371582	LEU	325	C	C	0.600
O	43.824928284	22.034870148	53.623870850	LEU	325	O	O	-0.550
CB	44.687019348	24.260810852	51.328781128	LEU	325	CT	C	-0.100
HB1	44.691131592	24.505260468	50.266819000	LEU	325	HA	H	0.050
HB2	44.577991486	25.204620361	51.854011536	LEU	325	HA	H	0.050
CG	46.060729980	23.676349640	51.688388824	LEU	325	CT	C	-0.050
HG	46.051700592	23.366899490	52.734161377	LEU	325	HA	H	0.050
CD1	46.412658691	22.459779739	50.820388794	LEU	325	CT	C	-0.150
HD11	45.697048187	21.648920059	50.956859589	LEU	325	HA	H	0.050
HD12	46.427780151	22.722679138	49.762199402	LEU	325	HA	H	0.050
HD13	47.400550842	22.075599670	51.069641113	LEU	325	HA	H	0.050
CD2	47.122760773	24.774169922	51.533370972	LEU	325	CT	C	-0.150
HD21	46.869251251	25.655799866	52.121059418	LEU	325	HA	H	0.050
HD22	48.100860596	24.431989670	51.862308502	LEU	325	HA	H	0.050
HD23	47.204929352	25.093050003	50.494338989	LEU	325	HA	H	0.050
N	42.571880341	23.911720276	53.847690582	GLU	326	NP	N	-0.400
HN	42.218929291	24.733520508	53.393680573	GLU	326	H	H	0.250
CA	42.231620789	23.682340622	55.245231628	GLU	326	CT	C	0.050
HA	43.162761688	23.401340485	55.736450195	GLU	326	HA	H	0.050
C	41.239868164	22.496889114	55.345878601	GLU	326	C	C	0.600
O	41.317230225	21.664110184	56.247238159	GLU	326	O	O	-0.550
CB	41.706848145	24.998619080	55.863441467	GLU	326	CT	C	-0.100
HB1	41.921260834	25.818590164	55.177341461	GLU	326	HA	H	0.050
HB2	40.618431091	24.990749359	55.950038910	GLU	326	HA	H	0.050
CG	42.360279083	25.367979050	57.211448669	GLU	326	CT	C	-0.250
HG1	43.448020935	25.322710037	57.141571045	GLU	326	HA	H	0.050
HG2	42.106571198	26.395120621	57.475509644	GLU	326	HA	H	0.050
CD	41.874469757	24.457269669	58.338691711	GLU	326	C	C	0.350
OE1	40.717540741	24.565469742	58.738201141	GLU	326	OC	O	-0.600
OE2	42.618648529	23.591960907	58.799549103	GLU	326	OC	O	-0.600
N	40.340599060	22.414230347	54.345020294	GLU	327	NP	N	-0.400
HN	40.261810303	23.170549393	53.687759399	GLU	327	H	H	0.250
CA	39.513828278	21.213699341	54.190910339	GLU	327	CT	C	0.050
HA	39.046199799	21.042900085	55.148979187	GLU	327	HA	H	0.050
C	40.354198456	19.946310043	53.922111511	GLU	327	C	C	0.600
O	40.055438995	18.883609772	54.452861786	GLU	327	O	O	-0.550
CB	38.367309570	21.403999329	53.190429688	GLU	327	CT	C	-0.100
HB1	38.733589172	21.752670288	52.228359222	GLU	327	HA	H	0.050
HB2	37.899330139	20.434400558	53.008468628	GLU	327	HA	H	0.050
CG	37.299060822	22.380779266	53.706008911	GLU	327	CT	C	-0.250
HG1	37.034809113	22.156789780	54.740039825	GLU	327	HA	H	0.050
HG2	37.670040131	23.406759262	53.682319641	GLU	327	HA	H	0.050
CD	36.037078857	22.278390884	52.842460632	GLU	327	C	C	0.350
OE1	36.044281006	22.750459671	51.709918976	GLU	327	OC	O	-0.600
OE2	35.040260315	21.702150345	53.281848907	GLU	327	OC	O	-0.600
N	41.458568573	20.100820541	53.168361664	ARG	328	NP	N	-0.400
HN	41.587291718	20.983430862	52.709960938	ARG	328	H	H	0.250
CA	42.360038757	18.962549210	52.939289093	ARG	328	CT	C	0.050
HA	41.728679657	18.146110535	52.594928741	ARG	328	HA	H	0.050
C	43.026889801	18.446250916	54.235820770	ARG	328	C	C	0.600

O	43.594970703	17.354379654	54.249519348	ARG	328	O	O	-0.550
CB	43.406181335	19.283630371	51.849048615	ARG	328	CT	C	-0.100
HB1	43.702800751	20.327909470	51.914791107	ARG	328	HA	H	0.050
HB2	44.319561005	18.714490891	52.020790100	ARG	328	HA	H	0.050
CG	42.923290253	18.964750290	50.423439026	ARG	328	CT	C	-0.100
HG1	43.678340912	19.286989212	49.705818176	ARG	328	HA	H	0.050
HG2	42.828620911	17.884679794	50.312461853	ARG	328	HA	H	0.050
CD	41.587959290	19.641029358	50.101421356	ARG	328	CT	C	0.000
HD1	40.775871277	19.256660461	50.715801239	ARG	328	HA	H	0.050
HD2	41.664829254	20.710910797	50.273910522	ARG	328	HA	H	0.050
NE	41.197158813	19.522859573	48.705039978	ARG	328	NP	N	-0.400
HE	41.134201050	20.394939423	48.196090698	ARG	328	H	H	0.300
CZ	40.733299255	18.397460938	48.128379822	ARG	328	C	C	0.500
NH1	40.621589661	17.247789383	48.787628174	ARG	328	NC	N	-0.450
HH11	40.791820526	17.151519775	49.780010223	ARG	328	HC	H	0.350
HH12	40.349449158	16.429500580	48.263809204	ARG	328	HC	H	0.350
NH2	40.376968384	18.432249069	46.855438232	ARG	328	NC	N	-0.450
HH21	40.405830383	19.306930542	46.349998474	ARG	328	HC	H	0.350
HH22	40.085800171	17.576490402	46.406269073	ARG	328	HC	H	0.350
N	42.902381897	19.243040085	55.320201874	VAL	329	NP	N	-0.400
HN	42.576309204	20.182559967	55.200351715	VAL	329	H	H	0.250
CA	43.279090881	18.768369675	56.652469635	VAL	329	CT	C	0.050
HA	43.590091705	17.725370407	56.569988251	VAL	329	HA	H	0.050
C	42.073951721	18.736610413	57.617031097	VAL	329	C	C	0.600
O	42.224590302	18.391929626	58.779529572	VAL	329	O	O	-0.550
CB	44.474090576	19.567510605	57.202571869	VAL	329	CT	C	-0.050
HB	44.701850891	19.192359924	58.202831268	VAL	329	HA	H	0.050
CG1	45.718379974	19.330410004	56.335098267	VAL	329	CT	C	-0.150
HG11	45.954448700	18.268150330	56.268749237	VAL	329	HA	H	0.050
HG12	45.579551697	19.708030701	55.321441650	VAL	329	HA	H	0.050
HG13	46.585151672	19.833259583	56.756328583	VAL	329	HA	H	0.050
CG2	44.178100586	21.066280365	57.323120117	VAL	329	CT	C	-0.150
HG21	43.291278839	21.251140594	57.926628113	VAL	329	HA	H	0.050
HG22	45.006118774	21.593820572	57.794898987	VAL	329	HA	H	0.050
HG23	44.022670746	21.511129379	56.341999054	VAL	329	HA	H	0.050
N	40.863220215	19.041770935	57.099311829	LYS	330	NP	N	-0.400
HN	40.799419403	19.432300568	56.181591034	LYS	330	H	H	0.250
CA	39.660850525	18.501949310	57.743991852	LYS	330	CT	C	0.050
HA	39.770179749	18.602830887	58.821838379	LYS	330	HA	H	0.050
C	39.594779968	16.994279861	57.460170746	LYS	330	C	C	0.600
O	39.136978149	16.209709167	58.280250549	LYS	330	O	O	-0.550
CB	38.358150482	19.178979874	57.283611298	LYS	330	CT	C	-0.100
HB1	38.250431061	19.075780869	56.202999115	LYS	330	HA	H	0.050
HB2	37.515449524	18.631629944	57.709918976	LYS	330	HA	H	0.050
CG	38.185890198	20.658420563	57.668380737	LYS	330	CT	C	-0.100
HG1	38.856571198	21.296709061	57.106891632	LYS	330	HA	H	0.050
HG2	37.188018799	20.956190109	57.342170715	LYS	330	HA	H	0.050
CD	38.317588806	20.984090805	59.163928986	LYS	330	CT	C	-0.100
HD1	37.730899811	21.883960724	59.356189728	LYS	330	HA	H	0.050
HD2	37.865779877	20.201620102	59.774841309	LYS	330	HA	H	0.050
CE	39.757640839	21.268619537	59.616619110	LYS	330	CT	C	0.050
HE1	39.737949371	21.847259521	60.537448883	LYS	330	HA	H	0.100
HE2	40.312889099	20.356340408	59.822368622	LYS	330	HA	H	0.100
NZ	40.519958496	22.046779633	58.650791168	LYS	330	NT	N	-0.300
HZ1	40.652820587	21.581699371	57.727100372	LYS	330	HC	H	0.350
HZ2	40.077709198	22.980779648	58.485939026	LYS	330	HC	H	0.350
HZ3	41.464599609	22.336019516	58.989921570	LYS	330	HC	H	0.350
N	40.174430847	16.633510590	56.298530579	GLU	331	NP	N	-0.400
HN	40.334220886	17.340419769	55.603870392	GLU	331	H	H	0.250
CA	40.525318146	15.245739937	56.018558502	GLU	331	CT	C	0.050
HA	39.653568268	14.623160362	56.226749420	GLU	331	HA	H	0.050
C	41.738540649	14.777339935	56.876659393	GLU	331	C	C	0.600

O	42.694610596	14.237369537	56.326740265	GLU	331	O	O	-0.550
CB	40.959178925	15.133660316	54.544971466	GLU	331	CT	C	-0.100
HB1	41.844940186	15.746410370	54.405628204	GLU	331	HA	H	0.050
HB2	41.246810913	14.099189758	54.345039368	GLU	331	HA	H	0.050
CG	39.956371307	15.569290161	53.467529297	GLU	331	CT	C	-0.250
HG1	39.045188904	14.972669601	53.513641357	GLU	331	HA	H	0.050
HG2	39.670639038	16.614610672	53.580421448	GLU	331	HA	H	0.050
CD	40.620868683	15.361109734	52.092571259	GLU	331	C	C	0.350
OE1	41.024120331	14.235429764	51.812648773	GLU	331	OC	O	-0.600
OE2	40.774219513	16.312299728	51.328258514	GLU	331	OC	O	-0.600
N	41.673099518	15.031590462	58.200241089	ALA	332	NP	N	-0.400
HN	40.809139252	15.380310059	58.569221497	ALA	332	H	H	0.250
CA	42.729381561	14.718079567	59.162281036	ALA	332	CT	C	0.050
HA	42.702751160	13.634679794	59.282871246	ALA	332	HA	H	0.050
C	42.352409363	15.337220192	60.522598267	ALA	332	C	C	0.600
O	41.695171356	14.696969986	61.331970215	ALA	332	O	O	-0.550
CB	44.134239197	15.144619942	58.705780029	ALA	332	CT	C	-0.150
HB1	44.460418701	14.562979698	57.849811554	ALA	332	HA	H	0.050
HB2	44.188098907	16.201879501	58.443878174	ALA	332	HA	H	0.050
HB3	44.864341736	14.943960190	59.488868713	ALA	332	HA	H	0.050
N	42.773689270	16.600189209	60.736358643	GLY	333	NP	N	-0.400
HN	43.308330536	17.081199646	60.037349701	GLY	333	H	H	0.250
CA	42.349620819	17.272180557	61.958179474	GLY	333	CT	C	0.000
HA1	41.265041351	17.382820129	61.917369843	GLY	333	HA	H	0.050
HA2	42.607948303	16.632539749	62.803798676	GLY	333	HA	H	0.050
C	43.004081726	18.646120071	62.151870728	GLY	333	C	C	0.600
O	43.752681732	18.854629517	63.096630096	GLY	333	O	O	-0.550
N	42.631591797	19.578319550	61.253551483	ILE	334	NP	N	-0.400
HN	42.194961548	19.231149673	60.423641205	ILE	334	H	H	0.250
CA	42.842521667	21.018129349	61.455711365	ILE	334	CT	C	0.050
HA	42.319221497	21.494590759	60.629680634	ILE	334	HA	H	0.050
C	44.340950012	21.391849518	61.355751038	ILE	334	C	C	0.600
O	45.204959869	20.694709778	61.874359131	ILE	334	O	O	-0.550
CB	42.250038147	21.509710312	62.809700012	ILE	334	CT	C	-0.050
HB	42.897720337	21.130329132	63.602169037	ILE	334	HA	H	0.050
CG1	40.823841095	20.987249374	63.103088379	ILE	334	CT	C	-0.100
HG11	40.086769104	21.601249695	62.591190338	ILE	334	HA	H	0.050
HG12	40.677509308	19.973049164	62.736721039	ILE	334	HA	H	0.050
CG2	42.263771057	23.046909332	62.906288147	ILE	334	CT	C	-0.150
HG21	41.723781586	23.501609802	62.074611664	ILE	334	HA	H	0.050
HG22	41.802238464	23.396219254	63.829078674	ILE	334	HA	H	0.050
HG23	43.276798248	23.444160461	62.901580811	ILE	334	HA	H	0.050
CD1	40.493289948	20.982530594	64.600166321	ILE	334	CT	C	-0.150
HD11	41.188381195	20.349340439	65.152236938	ILE	334	HA	H	0.050
HD12	40.540889740	21.983869553	65.027076721	ILE	334	HA	H	0.050
HD13	39.487339020	20.599710464	64.773162842	ILE	334	HA	H	0.050
N	44.579601288	22.553689957	60.708309174	GLU	335	NP	N	-0.400
HN	43.846080780	23.015069962	60.203701019	GLU	335	H	H	0.250
CA	45.865718842	23.230529785	60.842781067	GLU	335	CT	C	0.050
HA	46.635601044	22.457509995	60.833740234	GLU	335	HA	H	0.050
C	45.899501801	23.917530060	62.225189209	GLU	335	C	C	0.600
O	45.965248108	23.256170273	63.254199982	GLU	335	O	O	-0.550
CB	46.083271027	24.178300858	59.640838623	GLU	335	CT	C	-0.100
HB1	45.938850403	23.580970764	58.740280151	GLU	335	HA	H	0.050
HB2	45.304061890	24.940219879	59.581470490	GLU	335	HA	H	0.050
CG	47.502620697	24.791149139	59.556388855	GLU	335	CT	C	-0.250
HG1	48.217258453	24.181320190	60.101718903	GLU	335	HA	H	0.050
HG2	47.832469940	24.782400131	58.523101807	GLU	335	HA	H	0.050
CD	47.649429321	26.234279633	60.054351807	GLU	335	C	C	0.350
OE1	46.719921112	27.022579193	59.960628510	GLU	335	OC	O	-0.600
OE2	48.711620331	26.594030380	60.539001465	GLU	335	OC	O	-0.600
N	45.835571289	25.261039734	62.202648163	ILE	336	NP	N	-0.400

HN	45.799991608	25.725700378	61.315238953	ILE	336	H	H	0.250
CA	45.929351807	26.046560287	63.426349640	ILE	336	CT	C	0.050
HA	45.552669525	25.434629440	64.248413086	ILE	336	HA	H	0.050
C	44.984851837	27.253370285	63.304740906	ILE	336	C	C	0.600
O	44.072410583	27.428070068	64.105842590	ILE	336	O	O	-0.550
CB	47.397750854	26.459310532	63.708599091	ILE	336	CT	C	-0.050
HB	47.727321625	27.103660583	62.897369385	ILE	336	HA	H	0.050
CG1	48.339790344	25.234340668	63.731868744	ILE	336	CT	C	-0.100
HG11	47.975399017	24.501789093	64.452667236	ILE	336	HA	H	0.050
HG12	48.335678101	24.741100311	62.759979248	ILE	336	HA	H	0.050
CG2	47.515171051	27.268999100	65.013473511	ILE	336	CT	C	-0.150
HG21	46.858051300	28.136569977	65.013099670	ILE	336	HA	H	0.050
HG22	47.259460449	26.659219742	65.879867554	ILE	336	HA	H	0.050
HG23	48.522300720	27.658309937	65.156860352	ILE	336	HA	H	0.050
CD1	49.800041199	25.567609787	64.041893005	ILE	336	CT	C	-0.150
HD11	49.909019470	26.001089096	65.033988953	ILE	336	HA	H	0.050
HD12	50.415000916	24.668220520	64.010856628	ILE	336	HA	H	0.050
HD13	50.197570801	26.263469696	63.304328918	ILE	336	HA	H	0.050
N	45.249160767	28.093399048	62.285079956	THR	337	NP	N	-0.400
HN	45.944210052	27.894069672	61.587600708	THR	337	H	H	0.250
CA	44.464801788	29.314239502	62.131809235	THR	337	CT	C	0.050
HA	43.413108826	29.029720306	62.210639954	THR	337	HA	H	0.050
C	44.717361450	29.888690948	60.733238220	THR	337	C	C	0.600
O	45.811981201	29.781070709	60.192939758	THR	337	O	O	-0.550
CB	44.859741211	30.364810944	63.204200745	THR	337	CT	C	0.150
HB	45.819808960	30.806430817	62.924449921	THR	337	HA	H	0.100
OG1	45.058540344	29.807010651	64.487876892	THR	337	OT	O	-0.650
HG1	44.387920380	29.140449524	64.646911621	THR	337	HO	H	0.400
CG2	43.834239960	31.498769760	63.336658478	THR	337	CT	C	-0.150
HG21	44.124099731	32.186958313	64.130760193	THR	337	HA	H	0.050
HG22	43.761028290	32.081539154	62.418598175	THR	337	HA	H	0.050
HG23	42.841388702	31.116159439	63.573291779	THR	337	HA	H	0.050
N	43.654361725	30.535070419	60.203601837	PHE	338	NP	N	-0.400
HN	42.792331696	30.548349380	60.706340790	PHE	338	H	H	0.250
CA	43.803840637	31.333589554	58.989959717	PHE	338	CT	C	0.050
HA	44.111888885	30.638700485	58.205951691	PHE	338	HA	H	0.050
C	44.910781860	32.385208130	59.209548950	PHE	338	C	C	0.600
O	45.142471313	32.844459534	60.321891785	PHE	338	O	O	-0.550
CB	42.462760925	31.997409821	58.633411407	PHE	338	CT	C	-0.100
HB1	41.674621582	31.243839264	58.608768463	PHE	338	HA	H	0.050
HB2	42.174289703	32.717941284	59.400318146	PHE	338	HA	H	0.050
CG	42.513099670	32.675640106	57.288631439	PHE	338	C6R	C	0.000
CD1	42.335319519	31.934200287	56.125549316	PHE	338	C6R	C	-0.130
HD1	42.133468628	30.874610901	56.190448761	PHE	338	HA	H	0.130
CD2	42.750839233	34.043640137	57.186340332	PHE	338	C6R	C	-0.130
HD2	42.887290955	34.638828278	58.077869415	PHE	338	HA	H	0.130
CE1	42.408569336	32.542240143	54.879039764	PHE	338	C6R	C	-0.130
HE1	42.270671844	31.956840515	53.980541229	PHE	338	HA	H	0.130
CE2	42.819400787	34.655628204	55.941329956	PHE	338	C6R	C	-0.130
HE2	43.002231598	35.717628479	55.867591858	PHE	338	HA	H	0.130
CZ	42.652359009	33.904731750	54.786338806	PHE	338	C6R	C	-0.130
HZ	42.707950592	34.380218506	53.815818787	PHE	338	HA	H	0.130
N	45.606430054	32.674800873	58.098430634	ARG	339	NP	N	-0.400
HN	45.263938904	32.431468964	57.188838959	ARG	339	H	H	0.250
CA	46.900760651	33.329048157	58.163829803	ARG	339	CT	C	0.050
HA	46.886779785	34.037460327	58.994770050	ARG	339	HA	H	0.050
C	47.049869537	34.089370728	56.841308594	ARG	339	C	C	0.600
O	46.328960419	33.807250977	55.892528534	ARG	339	O	O	-0.550
CB	47.938331604	32.208770752	58.369869232	ARG	339	CT	C	-0.100
HB1	47.544311523	31.546819687	59.139801025	ARG	339	HA	H	0.050
HB2	48.023620605	31.602249146	57.466541290	ARG	339	HA	H	0.050
CG	49.324001312	32.670558929	58.830211639	ARG	339	CT	C	-0.100

HG1	49.770610809	33.292549133	58.054069519	ARG	339	HA	H	0.050
HG2	49.232521057	33.302139282	59.714538574	ARG	339	HA	H	0.050
CD	50.264171600	31.491140366	59.136138916	ARG	339	CT	C	0.000
HD1	50.306468964	30.767709732	58.321910858	ARG	339	HA	H	0.050
HD2	51.278240204	31.858989716	59.293140411	ARG	339	HA	H	0.050
NE	49.922901154	30.799039841	60.378799438	ARG	339	NP	N	-0.400
HE	50.358489990	31.163080215	61.210758209	ARG	339	H	H	0.300
CZ	49.171981812	29.671939850	60.455059052	ARG	339	C	C	0.500
NH1	48.544361115	29.153879166	59.406829834	ARG	339	NC	N	-0.450
HH11	48.690029144	29.467590332	58.461818695	ARG	339	HC	H	0.350
HH12	47.894901276	28.389610291	59.555019379	ARG	339	HC	H	0.350
NH2	49.074260712	29.016099930	61.600101471	ARG	339	NC	N	-0.450
HH21	49.457061768	29.332679749	62.479499817	ARG	339	HC	H	0.350
HH22	48.626388550	28.111539841	61.564128876	ARG	339	HC	H	0.350
N	47.965141296	35.075351715	56.830829620	GLN	340	NP	N	-0.400
HN	48.585121155	35.235679626	57.600528717	GLN	340	H	H	0.250
CA	48.168479919	35.922641754	55.658870697	GLN	340	CT	C	0.050
HA	47.952140808	35.338169098	54.764919281	GLN	340	HA	H	0.050
C	49.648231506	36.317359924	55.642120361	GLN	340	C	C	0.600
O	50.303661346	36.316879272	56.675991058	GLN	340	O	O	-0.550
CB	47.304790497	37.199150085	55.748931885	GLN	340	CT	C	-0.100
HB1	47.468929291	37.663448334	56.722129822	GLN	340	HA	H	0.050
HB2	47.644348145	37.932468414	55.013980865	GLN	340	HA	H	0.050
CG	45.793598175	36.984401703	55.552139282	GLN	340	CT	C	-0.100
HG1	45.412528992	36.172290802	56.168750763	GLN	340	HA	H	0.050
HG2	45.258338928	37.881881714	55.861209869	GLN	340	HA	H	0.050
CD	45.444271088	36.744850159	54.076740265	GLN	340	C	C	0.550
OE1	45.289150238	37.677520752	53.302211761	GLN	340	O	O	-0.550
NE2	45.333618164	35.458038330	53.743461609	GLN	340	NP	N	-0.600
HE21	45.172271729	35.175861359	52.793819427	GLN	340	H	H	0.300
HE22	45.452091217	34.750530243	54.446159363	GLN	340	H	H	0.300
N	50.105709076	36.650150299	54.423000336	SER	341	NP	N	-0.400
HN	49.475090027	36.593700409	53.643768311	SER	341	H	H	0.250
CA	51.451259613	37.136001587	54.157680511	SER	341	CT	C	0.050
HA	51.759529114	37.736091614	55.016059875	SER	341	HA	H	0.050
C	51.354621887	38.018779755	52.906501770	SER	341	C	C	0.600
O	50.431121826	37.885391235	52.112728119	SER	341	O	O	-0.550
CB	52.425338745	35.963130951	53.907459259	SER	341	CT	C	0.050
HB1	52.430030823	35.643131256	52.859230042	SER	341	HA	H	0.100
HB2	53.448619843	36.282611847	54.111541748	SER	341	HA	H	0.100
OG	52.152488708	34.845851898	54.734161377	SER	341	OT	O	-0.650
HG	51.229770660	34.610401154	54.628520966	SER	341	HO	H	0.400
N	52.347011566	38.909381866	52.775909424	PHE	342	NP	N	-0.400
HN	53.051261902	38.961868286	53.480758667	PHE	342	H	H	0.250
CA	52.493659973	39.672370911	51.540889740	PHE	342	CT	C	0.050
HA	51.496589661	39.905929565	51.161788940	PHE	342	HA	H	0.050
C	53.231739044	38.787960052	50.516139984	PHE	342	C	C	0.600
O	53.358741760	37.582740784	50.697380066	PHE	342	O	O	-0.550
CB	53.271129608	40.967929840	51.843288422	PHE	342	CT	C	-0.100
HB1	54.322731018	40.748519897	52.033260345	PHE	342	HA	H	0.050
HB2	53.252449036	41.639228821	50.984020233	PHE	342	HA	H	0.050
CG	52.697128296	41.697608948	53.028968811	PHE	342	C6R	C	0.000
CD1	51.509929657	42.413539886	52.909801483	PHE	342	C6R	C	-0.130
HD1	50.995819092	42.453601837	51.960468292	PHE	342	HA	H	0.130
CD2	53.341629028	41.660110474	54.262310028	PHE	342	C6R	C	-0.130
HD2	54.262550354	41.108860016	54.371520996	PHE	342	HA	H	0.130
CE1	50.974178314	43.078418732	54.005458832	PHE	342	C6R	C	-0.130
HE1	50.050830841	43.629539490	53.901958466	PHE	342	HA	H	0.130
CE2	52.809391022	42.324268341	55.359580994	PHE	342	C6R	C	-0.130
HE2	53.318061829	42.288169861	56.312080383	PHE	342	HA	H	0.130
CZ	51.623531342	43.034118652	55.231658936	PHE	342	C6R	C	-0.130
HZ	51.206531525	43.551120758	56.083950043	PHE	342	HA	H	0.130

N	53.732299805	39.468059540	49.468139648	PHE	343	NP	N	-0.400
HN	53.600379944	40.456211090	49.408100128	PHE	343	H	H	0.250
CA	54.698299408	38.894470215	48.537998199	PHE	343	CT	C	0.050
HA	54.794460297	37.824291229	48.724151611	PHE	343	HA	H	0.050
C	56.013031006	39.601119995	48.873008728	PHE	343	C	C	0.600
O	56.026390076	40.815551758	49.024448395	PHE	343	O	O	-0.550
CB	54.271171570	39.178478241	47.086868286	PHE	343	CT	C	-0.100
HB1	54.205581665	40.252941132	46.909221649	PHE	343	HA	H	0.050
HB2	55.029411316	38.800121307	46.400341034	PHE	343	HA	H	0.050
CG	52.948238373	38.539730072	46.749359131	PHE	343	C6R	C	0.000
CD1	52.903961182	37.260780334	46.204429626	PHE	343	C6R	C	-0.130
HD1	53.824440002	36.725090027	46.015411377	PHE	343	HA	H	0.130
CD2	51.750831604	39.210819244	46.985931396	PHE	343	C6R	C	-0.130
HD2	51.764339447	40.206989288	47.402389526	PHE	343	HA	H	0.130
CE1	51.686019897	36.656570435	45.918018341	PHE	343	C6R	C	-0.130
HE1	51.664440155	35.652801514	45.520011902	PHE	343	HA	H	0.130
CE2	50.531810760	38.610290527	46.696640015	PHE	343	C6R	C	-0.130
HE2	49.607898712	39.136089325	46.889831543	PHE	343	HA	H	0.130
CZ	50.498321533	37.330089569	46.164100647	PHE	343	C6R	C	-0.130
HZ	49.549770355	36.857719421	45.949008942	PHE	343	HA	H	0.130
N	57.077438354	38.795940399	49.066898346	SER	344	NP	N	-0.400
HN	56.987819672	37.833061218	48.802360535	SER	344	H	H	0.250
CA	58.267440796	39.311420441	49.760189056	SER	344	CT	C	0.050
HA	58.903259277	38.450790405	49.959209442	SER	344	HA	H	0.050
C	57.895881653	39.906421661	51.142330170	SER	344	C	C	0.600
O	58.261951447	41.019668579	51.499969482	SER	344	O	O	-0.550
CB	59.065670013	40.307399750	48.897769928	SER	344	CT	C	0.050
HB1	58.424129486	41.045841217	48.404678345	SER	344	HA	H	0.100
HB2	59.735721588	40.888229370	49.535011292	SER	344	HA	H	0.100
OG	59.903690338	39.638999939	47.969100952	SER	344	OT	O	-0.650
HG	59.408500671	39.272121429	47.228858948	SER	344	HO	H	0.400
N	57.144031525	39.078361511	51.893131256	ASP	345	NP	N	-0.400
HN	56.925949097	38.146621704	51.593669891	ASP	345	H	H	0.250
CA	56.724380493	39.454898834	53.238689423	ASP	345	CT	C	0.050
HA	56.358871460	40.476779938	53.159999847	ASP	345	HA	H	0.050
C	57.941818237	39.364891052	54.195358276	ASP	345	C	C	0.600
O	58.894260406	38.651081085	53.893608093	ASP	345	O	O	-0.550
CB	55.591129303	38.500831604	53.666809082	ASP	345	CT	C	-0.250
HB1	55.124000549	38.837429047	54.592758179	ASP	345	HA	H	0.050
HB2	54.826999664	38.481609344	52.896141052	ASP	345	HA	H	0.050
CG	56.096439362	37.064548492	53.845611572	ASP	345	C	C	0.350
OD1	56.565799713	36.461498260	52.890411377	ASP	345	OC	O	-0.600
OD2	56.101951599	36.552539825	54.954761505	ASP	345	OC	O	-0.600
N	57.893280029	40.084960938	55.356349945	PRO	346	NX	N	-0.250
CA	58.986530304	40.017078400	56.338539124	PRO	346	CT	C	0.050
HA	59.916351318	40.308250427	55.847831726	PRO	346	HA	H	0.050
C	59.194290161	38.628410339	57.003711700	PRO	346	C	C	0.600
O	58.860229492	37.584491730	56.457649231	PRO	346	O	O	-0.550
CB	58.584598541	41.074558258	57.394229889	PRO	346	CT	C	-0.100
HB1	58.092681885	40.622398376	58.256729126	PRO	346	HA	H	0.050
HB2	59.440170288	41.640110016	57.764629364	PRO	346	HA	H	0.050
CG	57.548221588	41.969661713	56.716419220	PRO	346	CT	C	-0.100
HG1	56.849018097	42.422241211	57.420219421	PRO	346	HA	H	0.050
HG2	58.058990479	42.777301788	56.190158844	PRO	346	HA	H	0.050
CD	56.860401154	41.062011719	55.700920105	PRO	346	CT	C	0.000
HD1	56.003261566	40.547630310	56.137451172	PRO	346	HA	H	0.050
HD2	56.531421661	41.651859283	54.846710205	PRO	346	HA	H	0.050
N	59.695850372	38.669769287	58.255878448	ALA	347	NP	N	-0.400
HN	59.923931122	39.553810120	58.660030365	ALA	347	H	H	0.250
CA	59.988258362	37.439258575	58.993911743	ALA	347	CT	C	0.050
HA	60.303611755	36.682121277	58.271728516	ALA	347	HA	H	0.050
C	58.749771118	36.914348602	59.755268097	ALA	347	C	C	0.600

O 58.857101440 36.218070984 60.759078979 ALA 347 O O -0.550
CB 61.137931824 37.710128784 59.971691132 ALA 347 CT C -0.150
HB1 62.026870728 38.048919678 59.439289093 ALA 347 HA H 0.050
HB2 60.870498657 38.473518372 60.702728271 ALA 347 HA H 0.050
HB3 61.411239624 36.807338715 60.519008636 ALA 347 HA H 0.050
N 57.563251495 37.272689819 59.226688385 VAL 348 NP N -0.400
HN 57.523700714 37.738731384 58.344791412 VAL 348 H H 0.250
CA 56.325080872 36.868141174 59.878528595 VAL 348 CT C 0.050
HA 56.443828583 37.182540894 60.917560577 VAL 348 HA H 0.050
C 56.117061615 35.327781677 59.950599670 VAL 348 C C 0.600
O 55.625030518 34.834468842 60.963500977 VAL 348 O O -0.550
CB 55.111980438 37.646209717 59.318950653 VAL 348 CT C -0.050
HB 54.235271454 37.337741852 59.891101837 VAL 348 HA H 0.050
CG1 55.284278870 39.156749725 59.540271759 VAL 348 CT C -0.150
HG11 55.473960876 39.383609772 60.589721680 VAL 348 HA H 0.050
HG12 56.113628387 39.555210114 58.956321716 VAL 348 HA H 0.050
HG13 54.386039734 39.699661255 59.244800568 VAL 348 HA H 0.050
CG2 54.808010101 37.371509552 57.840339661 VAL 348 CT C -0.150
HG21 54.581039429 36.320629120 57.660839081 VAL 348 HA H 0.050
HG22 53.937091827 37.938339233 57.510070801 VAL 348 HA H 0.050
HG23 55.641250610 37.664070129 57.201568604 VAL 348 HA H 0.050
N 56.491409302 34.531349182 58.898338318 PRO 349 NX N -0.250
CA 56.197441101 33.105400085 58.982078552 PRO 349 CT C 0.050
HA 55.180740356 32.928169250 59.336738586 PRO 349 HA H 0.050
C 57.184070587 32.404319763 59.929908752 PRO 349 C C 0.600
O 56.881549835 31.382589340 60.526550293 PRO 349 O O -0.550
CB 56.353069305 32.615139008 57.536701202 PRO 349 CT C -0.100
HB1 56.672470093 31.578369141 57.449440002 PRO 349 HA H 0.050
HB2 55.390399933 32.699748993 57.034111023 PRO 349 HA H 0.050
CG 57.329990387 33.588970184 56.877151489 PRO 349 CT C -0.100
HG1 58.350921631 33.223770142 57.000591278 PRO 349 HA H 0.050
HG2 57.149330139 33.703639984 55.807540894 PRO 349 HA H 0.050
CD 57.163749695 34.901599884 57.645580292 PRO 349 CT C 0.000
HD1 58.150531769 35.327678680 57.805839539 PRO 349 HA H 0.050
HD2 56.558799744 35.605129242 57.088729858 PRO 349 HA H 0.050
N 58.354251862 33.048679352 60.095829010 VAL 350 NP N -0.400
HN 58.508300781 33.909530640 59.612510681 VAL 350 H H 0.250
CA 59.443218231 32.466869354 60.872219086 VAL 350 CT C 0.050
HA 59.757911682 31.568960190 60.338771820 VAL 350 HA H 0.050
C 58.971199036 32.061088562 62.275878906 VAL 350 C C 0.600
O 59.163681030 30.948009491 62.749469757 VAL 350 O O -0.550
CB 60.595600128 33.489448547 60.966880798 VAL 350 CT C -0.050
HB 60.279560089 34.348339081 61.559978485 VAL 350 HA H 0.050
CG1 61.822860718 32.878868103 61.643638611 VAL 350 CT C -0.150
HG11 62.146911621 31.987909317 61.106269836 VAL 350 HA H 0.050
HG12 62.658649445 33.578529358 61.671081543 VAL 350 HA H 0.050
HG13 61.601390839 32.597068787 62.670410156 VAL 350 HA H 0.050
CG2 60.988418579 34.012809753 59.587699890 VAL 350 CT C -0.150
HG21 61.229019165 33.176948547 58.941989899 VAL 350 HA H 0.050
HG22 60.195140839 34.575519562 59.102100372 VAL 350 HA H 0.050
HG23 61.863971710 34.660820007 59.631999969 VAL 350 HA H 0.050
N 58.341728210 33.064758301 62.909908295 LYS 351 NP N -0.400
HN 58.194389343 33.920989990 62.411018372 LYS 351 H H 0.250
CA 57.982139587 32.896278381 64.309112549 LYS 351 CT C 0.050
HA 58.806728363 32.349720001 64.767211914 LYS 351 HA H 0.050
C 56.735149384 32.004371643 64.452178955 LYS 351 C C 0.600
O 56.572761536 31.298130035 65.439521790 LYS 351 O O -0.550
CB 57.857498169 34.286010742 64.956001282 LYS 351 CT C -0.100
HB1 58.446319580 35.002849579 64.382102966 LYS 351 HA H 0.050
HB2 56.829578400 34.646259308 64.887557983 LYS 351 HA H 0.050
CG 58.343288422 34.347591400 66.414627075 LYS 351 CT C -0.100
HG1 58.274219513 35.382480621 66.752182007 LYS 351 HA H 0.050

HG2	57.655948639	33.784168243	67.043243408	LYS	351	HA	H	0.050
CD	59.780239105	33.836360931	66.657241821	LYS	351	CT	C	-0.100
HD1	60.089988708	34.147281647	67.655708313	LYS	351	HA	H	0.050
HD2	59.777290344	32.745830536	66.682487488	LYS	351	HA	H	0.050
CE	60.817161560	34.311870575	65.622718811	LYS	351	CT	C	0.050
HE1	60.587841034	33.898361206	64.639053345	LYS	351	HA	H	0.100
HE2	60.811149597	35.398681641	65.524681091	LYS	351	HA	H	0.100
NZ	62.179519653	33.892780304	65.951751709	LYS	351	NT	N	-0.300
HZ1	62.213130951	32.872089386	66.176467896	LYS	351	HC	H	0.350
HZ2	62.811931610	33.931179047	65.115936279	LYS	351	HC	H	0.350
HZ3	62.600330353	34.427650452	66.733238220	LYS	351	HC	H	0.350
N	55.901691437	32.016510010	63.386238098	ASN	352	NP	N	-0.400
HN	56.112331390	32.619689941	62.616859436	ASN	352	H	H	0.250
CA	54.812370300	31.035570145	63.296649933	ASN	352	CT	C	0.050
HA	54.176189423	31.167749405	64.174118042	ASN	352	HA	H	0.050
C	55.396919250	29.608390808	63.345809937	ASN	352	C	C	0.600
O	54.908100128	28.719589233	64.033073425	ASN	352	O	O	-0.550
CB	54.007808685	31.210199356	61.986099243	ASN	352	CT	C	-0.100
HB1	54.646411896	31.458660126	61.143909454	ASN	352	HA	H	0.050
HB2	53.512641907	30.278610229	61.712581635	ASN	352	HA	H	0.050
CG	52.893161774	32.254768372	62.088489532	ASN	352	C	C	0.550
OD1	51.730518341	31.918460846	62.268871307	ASN	352	O	O	-0.550
ND2	53.288631439	33.525009155	61.938869476	ASN	352	NP	N	-0.600
HD21	52.592720032	34.236930847	62.016269684	ASN	352	H	H	0.300
HD22	54.228008270	33.819850922	61.742221832	ASN	352	H	H	0.300
N	56.496559143	29.461759567	62.590110779	LEU	353	NP	N	-0.400
HN	56.857070923	30.246759415	62.078548431	LEU	353	H	H	0.250
CA	57.136920929	28.168889999	62.366001129	LEU	353	CT	C	0.050
HA	56.352409363	27.417200089	62.357711792	LEU	353	HA	H	0.050
C	58.132740021	27.798629761	63.486370087	LEU	353	C	C	0.600
O	58.996391296	26.934480667	63.330291748	LEU	353	O	O	-0.550
CB	57.824718475	28.236600876	60.997058868	LEU	353	CT	C	-0.100
HB1	58.558921814	29.042879105	61.028999329	LEU	353	HA	H	0.050
HB2	58.385448456	27.322019577	60.796569824	LEU	353	HA	H	0.050
CG	56.826499939	28.496339798	59.852058411	LEU	353	CT	C	-0.050
HG	56.090839386	29.235490799	60.160461426	LEU	353	HA	H	0.050
CD1	57.526321411	29.085939407	58.626049042	LEU	353	CT	C	-0.150
HD11	58.130691528	28.341350555	58.120399475	LEU	353	HA	H	0.050
HD12	56.796741486	29.464199066	57.914249420	LEU	353	HA	H	0.050
HD13	58.177490234	29.916370392	58.896011353	LEU	353	HA	H	0.050
CD2	56.034400940	27.237360001	59.502368927	LEU	353	CT	C	-0.150
HD21	56.693561554	26.418039322	59.216259003	LEU	353	HA	H	0.050
HD22	55.432819366	26.912109375	60.346870422	LEU	353	HA	H	0.050
HD23	55.345748901	27.432729721	58.684989929	LEU	353	HA	H	0.050
N	57.943119049	28.495279312	64.623657227	LYS	354	NP	N	-0.400
HN	57.244861603	29.207899094	64.637817383	LYS	354	H	H	0.250
CA	58.706310272	28.244699478	65.831977844	LYS	354	CT	C	0.050
HA	59.247680664	27.305009842	65.708938599	LYS	354	HA	H	0.050
C	57.721401215	28.070339203	66.999656677	LYS	354	C	C	0.600
O	57.679439545	27.041109085	67.657699585	LYS	354	O	O	-0.550
CB	59.679988861	29.417530060	66.040817261	LYS	354	CT	C	-0.100
HB1	60.192501068	29.626619339	65.099952698	LYS	354	HA	H	0.050
HB2	59.128280640	30.329210281	66.273521423	LYS	354	HA	H	0.050
CG	60.737918854	29.163129807	67.123550415	LYS	354	CT	C	-0.100
HG1	61.294620514	30.086839676	67.269088745	LYS	354	HA	H	0.050
HG2	60.260391235	28.954969406	68.081809998	LYS	354	HA	H	0.050
CD	61.702411652	28.021230698	66.757720947	LYS	354	CT	C	-0.100
HD1	61.218818665	27.069770813	66.983329773	LYS	354	HA	H	0.050
HD2	61.888198853	28.009420395	65.683593750	LYS	354	HA	H	0.050
CE	63.039539337	28.105159760	67.506759644	LYS	354	CT	C	0.050
HE1	62.875938416	28.305080414	68.567077637	LYS	354	HA	H	0.100
HE2	63.575908661	27.157440186	67.431533813	LYS	354	HA	H	0.100

NZ	63.916889191	29.143350601	66.967536926	LYS	354	NT	N	-0.300
HZ1	63.417098999	30.054740906	66.871482849	LYS	354	HC	H	0.350
HZ2	64.772758484	29.276689529	67.538131714	LYS	354	HC	H	0.350
HZ3	64.229217529	28.886970520	66.006752014	LYS	354	HC	H	0.350
N	56.917770386	29.130599976	67.210983276	ARG	355	NP	N	-0.400
HN	56.980758667	29.928560257	66.609756470	ARG	355	H	H	0.250
CA	56.012058258	29.178819656	68.356712341	ARG	355	CT	C	0.050
HA	56.609619141	28.962930679	69.244323730	ARG	355	HA	H	0.050
C	54.897941589	28.120510101	68.273521423	ARG	355	C	C	0.600
O	54.411540985	27.630380630	69.283432007	ARG	355	O	O	-0.550
CB	55.390960693	30.578720093	68.464591980	ARG	355	CT	C	-0.100
HB1	54.874328613	30.828819275	67.536163330	ARG	355	HA	H	0.050
HB2	54.629829407	30.563430786	69.246002197	ARG	355	HA	H	0.050
CG	56.429019928	31.662820816	68.789741516	ARG	355	CT	C	-0.100
HG1	56.961109161	31.387069702	69.699623108	ARG	355	HA	H	0.050
HG2	57.182308197	31.696540833	68.001899719	ARG	355	HA	H	0.050
CD	55.803081512	33.058498383	68.940162659	ARG	355	CT	C	0.000
HD1	56.537059784	33.816928864	69.217567444	ARG	355	HA	H	0.050
HD2	55.352260590	33.373840332	67.997970581	ARG	355	HA	H	0.050
NE	54.723548889	33.067768097	69.926223755	ARG	355	NP	N	-0.400
HE	53.796340942	33.091068268	69.548110962	ARG	355	H	H	0.300
CZ	54.932319641	33.033088684	71.262863159	ARG	355	C	C	0.500
NH1	56.171791077	33.006008148	71.745841980	ARG	355	NC	N	-0.450
HH11	56.939701080	33.014579773	71.106407166	ARG	355	HC	H	0.350
HH12	56.362819672	32.976299286	72.726707458	ARG	355	HC	H	0.350
NH2	53.889568329	33.024398804	72.090408325	ARG	355	NC	N	-0.450
HH21	52.956249237	33.040351868	71.730621338	ARG	355	HC	H	0.350
HH22	54.009868622	33.001010895	73.083122253	ARG	355	HC	H	0.350
N	54.525268555	27.789289474	67.023063660	GLN	356	NP	N	-0.400
HN	54.925678253	28.240680695	66.222053528	GLN	356	H	H	0.250
CA	53.504779816	26.760059357	66.838539124	GLN	356	CT	C	0.050
HA	52.762470245	26.854940414	67.633659363	GLN	356	HA	H	0.050
C	54.121170044	25.345359802	66.893417358	GLN	356	C	C	0.600
O	53.423698425	24.341169357	66.794036865	GLN	356	O	O	-0.550
CB	52.835548401	26.972190857	65.473716736	GLN	356	CT	C	-0.100
HB1	53.578269958	26.804880142	64.693367004	GLN	356	HA	H	0.050
HB2	52.078788757	26.203159332	65.326141357	GLN	356	HA	H	0.050
CG	52.189170837	28.368009567	65.332283020	GLN	356	CT	C	-0.100
HG1	51.408981323	28.497589111	66.082290649	GLN	356	HA	H	0.050
HG2	52.915439606	29.164430618	65.490516663	GLN	356	HA	H	0.050
CD	51.557090759	28.582870483	63.950378418	GLN	356	C	C	0.550
OE1	50.421321869	29.018720627	63.818599701	GLN	356	O	O	-0.550
NE2	52.342411041	28.224449158	62.929569244	GLN	356	NP	N	-0.600
HE21	51.983570099	28.205179214	61.998111725	GLN	356	H	H	0.300
HE22	53.294250488	27.981809616	63.130249023	GLN	356	H	H	0.300
N	55.459980011	25.322839737	66.996070862	ASP	357	NP	N	-0.400
HN	55.967449188	26.117849350	67.330497742	ASP	357	H	H	0.250
CA	56.300498962	24.247249603	66.485900879	ASP	357	CT	C	0.050
HA	57.288368225	24.463439941	66.893600464	ASP	357	HA	H	0.050
C	56.365478516	24.442390442	64.965789795	ASP	357	C	C	0.600
O	57.312698364	24.998029709	64.428901672	ASP	357	O	O	-0.550
CB	55.917739868	22.777910233	66.839851379	ASP	357	CT	C	-0.250
HB1	55.074600220	22.426719666	66.247642517	ASP	357	HA	H	0.050
HB2	56.755180359	22.132539749	66.574028015	ASP	357	HA	H	0.050
CG	55.547359467	22.483489990	68.295669556	ASP	357	C	C	0.350
OD1	55.518810272	23.374429703	69.132362366	ASP	357	OC	O	-0.600
OD2	55.158409119	21.353719711	68.587989807	ASP	357	OC	O	-0.600
N	55.284320831	23.943330765	64.331878662	ALA	358	NP	N	-0.400
HN	54.523330688	23.651979446	64.914962769	ALA	358	H	H	0.250
CA	55.230129242	23.667160034	62.903400421	ALA	358	CT	C	0.050
HA	54.199771881	23.360380173	62.715099335	ALA	358	HA	H	0.050
C	56.171550751	22.496219635	62.584808350	ALA	358	C	C	0.600

O	57.385009766	22.642440796	62.461040497	ALA	358	O	O	-0.550
CB	55.544708252	24.892700195	62.042999268	ALA	358	CT	C	-0.150
HB1	54.921520233	25.734289169	62.341541290	ALA	358	HA	H	0.050
HB2	56.590270996	25.190740585	62.117099762	ALA	358	HA	H	0.050
HB3	55.344879150	24.683380127	60.991939545	ALA	358	HA	H	0.050
N	55.523590088	21.324989319	62.482269287	ARG	359	NP	N	-0.400
HN	54.537689209	21.290580750	62.669609070	ARG	359	H	H	0.250
CA	56.236579895	20.102779388	62.133991241	ARG	359	CT	C	0.050
HA	57.235141754	20.156030655	62.571430206	ARG	359	HA	H	0.050
C	56.394371033	20.000429153	60.605068207	ARG	359	C	C	0.600
O	57.298130035	19.350570679	60.092868805	ARG	359	O	O	-0.550
CB	55.480499268	18.900880814	62.712909698	ARG	359	CT	C	-0.100
HB1	54.546409607	18.770830154	62.162860870	ARG	359	HA	H	0.050
HB2	56.067279816	17.995769501	62.551311493	ARG	359	HA	H	0.050
CG	55.147228241	19.044870377	64.209053040	ARG	359	CT	C	-0.100
HG1	54.501770020	19.907079697	64.357360840	ARG	359	HA	H	0.050
HG2	54.565040588	18.180990219	64.527290344	ARG	359	HA	H	0.050
CD	56.371231079	19.207399368	65.118431091	ARG	359	CT	C	0.000
HD1	57.061519623	18.365100861	65.053413391	ARG	359	HA	H	0.050
HD2	56.927898407	20.110490799	64.866706848	ARG	359	HA	H	0.050
NE	55.944770813	19.380790710	66.505279541	ARG	359	NP	N	-0.400
HE	55.873500824	20.314590454	66.875701904	ARG	359	H	H	0.300
CZ	55.608230591	18.360399246	67.321342468	ARG	359	C	C	0.500
NH1	55.664928436	17.101980209	66.889961243	ARG	359	NC	N	-0.450
HH11	55.954700470	16.922449112	65.949623108	ARG	359	HC	H	0.350
HH12	55.427360535	16.323659897	67.470291138	ARG	359	HC	H	0.350
NH2	55.218471527	18.643209457	68.559082031	ARG	359	NC	N	-0.450
HH21	55.183700562	19.617319107	68.830596924	ARG	359	HC	H	0.350
HH22	54.959758759	17.944770813	69.224006653	ARG	359	HC	H	0.350
N	55.486591339	20.725849152	59.919910431	ILE	360	NP	N	-0.400
HN	54.770538330	21.238550186	60.392768860	ILE	360	H	H	0.250
CA	55.618278503	20.991199493	58.493949890	ILE	360	CT	C	0.050
HA	56.670009613	20.879880905	58.239719391	ILE	360	HA	H	0.050
C	55.207149506	22.457870483	58.312751770	ILE	360	C	C	0.600
O	54.598461151	23.036260605	59.208248138	ILE	360	O	O	-0.550
CB	54.737258911	20.035209656	57.639331818	ILE	360	CT	C	-0.050
HB	55.181690216	20.013900757	56.644931793	ILE	360	HA	H	0.050
CG1	53.288959503	20.540290833	57.459220886	ILE	360	CT	C	-0.100
HG11	52.883701324	20.757780075	58.441169739	ILE	360	HA	H	0.050
HG12	53.274368286	21.481639862	56.913089752	ILE	360	HA	H	0.050
CG2	54.760429382	18.594860077	58.187408447	ILE	360	CT	C	-0.150
HG21	55.778079987	18.255350113	58.372230530	ILE	360	HA	H	0.050
HG22	54.205291748	18.510820389	59.122550964	ILE	360	HA	H	0.050
HG23	54.315761566	17.888580322	57.486709595	ILE	360	HA	H	0.050
CD1	52.359649658	19.590389252	56.703041077	ILE	360	CT	C	-0.150
HD11	52.737430573	19.362020493	55.709880829	ILE	360	HA	H	0.050
HD12	52.233520508	18.654949188	57.243061066	ILE	360	HA	H	0.050
HD13	51.372730255	20.036130905	56.579589844	ILE	360	HA	H	0.050
N	55.486679077	22.978090286	57.103450775	ILE	361	NP	N	-0.400
HN	56.035079956	22.436859131	56.458820343	ILE	361	H	H	0.250
CA	54.698738098	24.091409683	56.582401276	ILE	361	CT	C	0.050
HA	53.915740967	24.316389084	57.300849915	ILE	361	HA	H	0.050
C	54.077861786	23.585449219	55.280788422	ILE	361	C	C	0.600
O	54.666790009	22.761709213	54.594608307	ILE	361	O	O	-0.550
CB	55.545360565	25.360010147	56.349018097	ILE	361	CT	C	-0.050
HB	56.133529663	25.501710892	57.253528595	ILE	361	HA	H	0.050
CG1	54.691158295	26.628219604	56.181331635	ILE	361	CT	C	-0.100
HG11	54.033168793	26.540580750	55.319900513	ILE	361	HA	H	0.050
HG12	54.038890839	26.745510101	57.047000885	ILE	361	HA	H	0.050
CG2	56.522621155	25.230079651	55.176219940	ILE	361	CT	C	-0.150
HG21	56.022350311	25.077190399	54.220058441	ILE	361	HA	H	0.050
HG22	57.142948151	26.117710114	55.080379486	ILE	361	HA	H	0.050

HG23	57.194099426	24.403879166	55.357631683	ILE	361	HA	H	0.050
CD1	55.568908691	27.875360489	56.011760712	ILE	361	CT	C	-0.150
HD11	56.482460022	27.782220840	56.594181061	ILE	361	HA	H	0.050
HD12	55.867870331	28.007839203	54.971698761	ILE	361	HA	H	0.050
HD13	55.063961029	28.780929565	56.335998535	ILE	361	HA	H	0.050
N	52.903079987	24.136550903	54.967060089	VAL	362	NP	N	-0.400
HN	52.415901184	24.687829971	55.648071289	VAL	362	H	H	0.250
CA	52.344280243	24.062469482	53.630111694	VAL	362	CT	C	0.050
HA	53.035030365	23.520700455	52.987129211	VAL	362	HA	H	0.050
C	52.259548187	25.523160934	53.184070587	VAL	362	C	C	0.600
O	51.968788147	26.378810883	54.008560181	VAL	362	O	O	-0.550
CB	50.966648102	23.378620148	53.681831360	VAL	362	CT	C	-0.050
HB	50.266750336	24.049419403	54.179351807	VAL	362	HA	H	0.050
CG1	50.448841095	23.099060059	52.264789581	VAL	362	CT	C	-0.150
HG11	50.372680664	24.016290665	51.681621552	VAL	362	HA	H	0.050
HG12	51.117458344	22.425119400	51.728069305	VAL	362	HA	H	0.050
HG13	49.460449219	22.642139435	52.290920258	VAL	362	HA	H	0.050
CG2	50.989620209	22.089849472	54.520210266	VAL	362	CT	C	-0.150
HG21	51.674858093	21.349390030	54.107769012	VAL	362	HA	H	0.050
HG22	51.280380249	22.280580521	55.553451538	VAL	362	HA	H	0.050
HG23	49.997478485	21.645200729	54.564250946	VAL	362	HA	H	0.050
N	52.568618774	25.797460556	51.903430939	GLY	363	NP	N	-0.400
HN	52.778629303	25.049100876	51.267288208	GLY	363	H	H	0.250
CA	52.706859589	27.211370468	51.555358887	GLY	363	CT	C	0.000
HA1	52.016731262	27.814720154	52.147480011	GLY	363	HA	H	0.050
HA2	53.726428986	27.503129959	51.808929443	GLY	363	HA	H	0.050
C	52.460540771	27.482019424	50.076480865	GLY	363	C	C	0.600
O	53.289299011	27.201000214	49.222949982	GLY	363	O	O	-0.550
N	51.299221039	28.100179672	49.808959961	LEU	364	NP	N	-0.400
HN	50.660659790	28.272420883	50.557250977	LEU	364	H	H	0.250
CA	51.096698761	28.673450470	48.481071472	LEU	364	CT	C	0.050
HA	51.596290588	28.025030136	47.756641388	LEU	364	HA	H	0.050
C	51.802021027	30.045349121	48.424690247	LEU	364	C	C	0.600
O	51.182468414	31.099050522	48.475311279	LEU	364	O	O	-0.550
CB	49.606628418	28.700040817	48.079269409	LEU	364	CT	C	-0.100
HB1	49.556491852	29.161630630	47.091670990	LEU	364	HA	H	0.050
HB2	49.269680023	27.673440933	47.926750183	LEU	364	HA	H	0.050
CG	48.593818665	29.413089752	49.006500244	LEU	364	CT	C	-0.050
HG	48.987888336	30.383630753	49.306140900	LEU	364	HA	H	0.050
CD1	47.304710388	29.668140411	48.212100983	LEU	364	CT	C	-0.150
HD11	47.488910675	30.304029465	47.345790863	LEU	364	HA	H	0.050
HD12	46.886280060	28.729089737	47.850658417	LEU	364	HA	H	0.050
HD13	46.544879913	30.153139114	48.820880890	LEU	364	HA	H	0.050
CD2	48.250061035	28.610290527	50.275070190	LEU	364	CT	C	-0.150
HD21	48.088298798	27.556409836	50.045829773	LEU	364	HA	H	0.050
HD22	49.022590637	28.680709839	51.037338257	LEU	364	HA	H	0.050
HD23	47.334899902	28.978660583	50.737220764	LEU	364	HA	H	0.050
N	53.144100189	29.924709320	48.352600098	PHE	365	NP	N	-0.400
HN	53.528831482	29.000820160	48.284160614	PHE	365	H	H	0.250
CA	54.086601257	31.040800095	48.349079132	PHE	365	CT	C	0.050
HA	53.538200378	31.965299606	48.524471283	PHE	365	HA	H	0.050
C	54.698108673	31.120100021	46.942531586	PHE	365	C	C	0.600
O	55.248428345	30.149820328	46.437698364	PHE	365	O	O	-0.550
CB	55.165321350	30.781370163	49.429710388	PHE	365	CT	C	-0.100
HB1	55.221408844	29.719619751	49.668659210	PHE	365	HA	H	0.050
HB2	56.148620605	31.050420761	49.039749146	PHE	365	HA	H	0.050
CG	54.968849182	31.562770844	50.707870483	PHE	365	C6R	C	0.000
CD1	53.709590912	31.971069336	51.141891479	PHE	365	C6R	C	-0.130
HD1	52.818550110	31.681880951	50.605358124	PHE	365	HA	H	0.130
CD2	56.079200745	31.922430038	51.467418671	PHE	365	C6R	C	-0.130
HD2	57.065589905	31.605459213	51.166179657	PHE	365	HA	H	0.130
CE1	53.575580597	32.769660950	52.268520355	PHE	365	C6R	C	-0.130

HE1	52.598178864	33.104351044	52.581668854	PHE	365	HA	H	0.130
CE2	55.946720123	32.715888977	52.598930359	PHE	365	C6R	C	-0.130
HE2	56.819530487	33.008518219	53.162681580	PHE	365	HA	H	0.130
CZ	54.693290710	33.153499603	52.992820740	PHE	365	C6R	C	-0.130
HZ	54.584751129	33.794681549	53.858230591	PHE	365	HA	H	0.130
N	54.502738953	32.306339264	46.337051392	TYR	366	NP	N	-0.400
HN	54.120491028	33.061481476	46.875640869	TYR	366	H	H	0.250
CA	54.713771820	32.487178802	44.907890320	TYR	366	CT	C	0.050
HA	54.618881226	31.515220642	44.425159454	TYR	366	HA	H	0.050
C	56.125251770	32.986858368	44.571601868	TYR	366	C	C	0.600
O	56.922740936	32.270061493	43.979888916	TYR	366	O	O	-0.550
CB	53.646541595	33.453620911	44.347751617	TYR	366	CT	C	-0.100
HB1	53.368938446	34.195938110	45.095588684	TYR	366	HA	H	0.050
HB2	54.051200867	34.020439148	43.506690979	TYR	366	HA	H	0.050
CG	52.410179138	32.744018555	43.857959747	TYR	366	C6R	C	0.000
CD1	51.754520416	31.794820786	44.637138367	TYR	366	C6R	C	-0.130
HD1	52.106380463	31.563629150	45.630691528	TYR	366	HA	H	0.130
CD2	51.906051636	33.030750275	42.594390869	TYR	366	C6R	C	-0.130
HD2	52.386920929	33.769050598	41.970779419	TYR	366	HA	H	0.130
CE1	50.630119324	31.135690689	44.154411316	TYR	366	C6R	C	-0.130
HE1	50.130771637	30.398990631	44.765499115	TYR	366	HA	H	0.130
CE2	50.785568237	32.373268127	42.106819153	TYR	366	C6R	C	-0.130
HE2	50.463821411	32.625949860	41.107120514	TYR	366	HA	H	0.130
CZ	50.141998291	31.414209366	42.886928558	TYR	366	C6R	C	0.250
OH	49.036708832	30.711429596	42.440849304	TYR	366	OT	O	-0.650
HH	48.832809448	30.927619934	41.527671814	TYR	366	HO	H	0.400
N	56.324798584	34.293460846	44.841270447	GLU	367	NP	N	-0.400
HN	55.916229248	34.676021576	45.677608490	GLU	367	H	H	0.250
CA	57.233249664	35.067928314	44.005611420	GLU	367	CT	C	0.050
HA	57.075080872	34.688079834	42.996738434	GLU	367	HA	H	0.050
C	58.703029633	34.732711792	44.328090668	GLU	367	C	C	0.600
O	59.388889313	34.109268188	43.525821686	GLU	367	O	O	-0.550
CB	56.784240723	36.549129486	43.935821533	GLU	367	CT	C	-0.100
HB1	56.998901367	36.932960510	42.945770264	GLU	367	HA	H	0.050
HB2	55.696758270	36.574131012	44.006980896	GLU	367	HA	H	0.050
CG	57.348949432	37.567001343	44.938201904	GLU	367	CT	C	-0.250
HG1	56.757381439	38.480819702	44.887828827	GLU	367	HA	H	0.050
HG2	57.266639709	37.209770203	45.961589813	GLU	367	HA	H	0.050
CD	58.799198151	37.969848633	44.645210266	GLU	367	C	C	0.350
OE1	59.274971008	37.788539886	43.523658752	GLU	367	OC	O	-0.600
OE2	59.458549500	38.438850403	45.561309814	GLU	367	OC	O	-0.600
N	59.143241882	35.144039154	45.528099060	THR	368	NP	N	-0.400
HN	58.514278412	35.755981445	46.008941650	THR	368	H	H	0.250
CA	60.496208191	34.833400726	46.009189606	THR	368	CT	C	0.050
HA	60.778221130	33.867008209	45.587471008	THR	368	HA	H	0.050
C	60.509250641	34.655731201	47.547039032	THR	368	C	C	0.600
O	61.501068115	34.259948730	48.153480530	THR	368	O	O	-0.550
CB	61.483280182	35.920989990	45.528289795	THR	368	CT	C	0.150
HB	61.251708984	36.872539520	46.027591705	THR	368	HA	H	0.100
OG1	61.389198303	36.046989441	44.106971741	THR	368	OT	O	-0.650
HG1	60.608619690	36.584098816	43.905281067	THR	368	HO	H	0.400
CG2	62.941768646	35.622570038	45.898479462	THR	368	CT	C	-0.150
HG21	63.618968964	36.288471222	45.364410400	THR	368	HA	H	0.050
HG22	63.112678528	35.778739929	46.963871002	THR	368	HA	H	0.050
HG23	63.224529266	34.596019745	45.684291840	THR	368	HA	H	0.050
N	59.339248657	34.936588287	48.146690369	GLU	369	NP	N	-0.400
HN	58.518379211	35.136398315	47.615230560	GLU	369	H	H	0.250
CA	59.153591156	34.731998444	49.576850891	GLU	369	CT	C	0.050
HA	60.030738831	35.168861389	50.054588318	GLU	369	HA	H	0.050
C	59.121028900	33.233280182	49.930221558	GLU	369	C	C	0.600
O	59.324268341	32.843101501	51.072368622	GLU	369	O	O	-0.550
CB	57.913780212	35.487670898	50.076568604	GLU	369	CT	C	-0.100

HB1	57.925201416	35.463779449	51.162418365	GLU	369	HA	H	0.050
HB2	58.025638580	36.528770447	49.804939270	GLU	369	HA	H	0.050
CG	56.532390594	34.999961853	49.607669830	GLU	369	CT	C	-0.250
HG1	56.312129974	34.028610229	50.032478333	GLU	369	HA	H	0.050
HG2	55.764221191	35.673759460	49.988281250	GLU	369	HA	H	0.050
CD	56.402229309	34.883350372	48.092288971	GLU	369	C	C	0.350
OE1	55.949058533	35.827049255	47.453880310	GLU	369	OC	O	-0.600
OE2	56.786109924	33.850669861	47.553890228	GLU	369	OC	O	-0.600
N	58.927909851	32.422710419	48.875270844	ALA	370	NP	N	-0.400
HN	58.495189667	32.835769653	48.069271088	ALA	370	H	H	0.250
CA	59.237968445	31.001010895	48.929481506	ALA	370	CT	C	0.050
HA	58.583488464	30.573570251	49.684509277	ALA	370	HA	H	0.050
C	60.707790375	30.762920380	49.365688324	ALA	370	C	C	0.600
O	60.968009949	30.285589218	50.464969635	ALA	370	O	O	-0.550
CB	58.915981293	30.395339966	47.563400269	ALA	370	CT	C	-0.150
HB1	59.402729034	30.962699890	46.774711609	ALA	370	HA	H	0.050
HB2	59.238361359	29.356449127	47.488609314	ALA	370	HA	H	0.050
HB3	57.844871521	30.429290771	47.362079620	ALA	370	HA	H	0.050
N	61.650230408	31.160299301	48.478599548	ARG	371	NP	N	-0.400
HN	61.359039307	31.331289291	47.534881592	ARG	371	H	H	0.250
CA	63.094638824	31.078769684	48.747680664	ARG	371	CT	C	0.050
HA	63.366088867	30.029880524	48.664928436	ARG	371	HA	H	0.050
C	63.441230774	31.554899216	50.167610168	ARG	371	C	C	0.600
O	64.207359314	30.932489395	50.899730682	ARG	371	O	O	-0.550
CB	63.887050629	31.865900040	47.685859680	ARG	371	CT	C	-0.100
HB1	63.712619781	31.389049530	46.724170685	ARG	371	HA	H	0.050
HB2	63.491161346	32.876148224	47.582321167	ARG	371	HA	H	0.050
CG	65.410026550	31.909530640	47.931529999	ARG	371	CT	C	-0.100
HG1	65.707450867	31.103349686	48.604091644	ARG	371	HA	H	0.050
HG2	65.925010681	31.702840805	46.994319916	ARG	371	HA	H	0.050
CD	65.866691589	33.268051147	48.491699219	ARG	371	CT	C	0.000
HD1	65.742736816	34.074691772	47.766670227	ARG	371	HA	H	0.050
HD2	65.283729553	33.538318634	49.372329712	ARG	371	HA	H	0.050
NE	67.258880615	33.250438690	48.937751770	ARG	371	NP	N	-0.400
HE	67.400650024	33.250740051	49.927780151	ARG	371	H	H	0.300
CZ	68.312767029	33.267978668	48.088939667	ARG	371	C	C	0.500
NH1	68.122619629	33.222171783	46.782520294	ARG	371	NC	N	-0.450
HH11	67.203178406	33.208320618	46.404659271	ARG	371	HC	H	0.350
HH12	68.915771484	33.176319122	46.154109955	ARG	371	HC	H	0.350
NH2	69.551269531	33.327598572	48.557868958	ARG	371	NC	N	-0.450
HH21	69.758583069	33.379631042	49.530338287	ARG	371	HC	H	0.350
HH22	70.332962036	33.319530487	47.909591675	ARG	371	HC	H	0.350
N	62.800098419	32.690158844	50.501449585	LYS	372	NP	N	-0.400
HN	62.241321564	33.134700775	49.795230865	LYS	372	H	H	0.250
CA	62.918941498	33.219551086	51.850891113	LYS	372	CT	C	0.050
HA	63.975219727	33.447929382	52.001331329	LYS	372	HA	H	0.050
C	62.496639252	32.169910431	52.906909943	LYS	372	C	C	0.600
O	63.303848267	31.762649536	53.729541779	LYS	372	O	O	-0.550
CB	62.086410522	34.501399994	51.971179962	LYS	372	CT	C	-0.100
HB1	62.365871429	35.209529877	51.190441132	LYS	372	HA	H	0.050
HB2	61.050750732	34.249118805	51.782840729	LYS	372	HA	H	0.050
CG	62.212768555	35.175170898	53.344711304	LYS	372	CT	C	-0.100
HG1	62.313640594	34.425041199	54.123889923	LYS	372	HA	H	0.050
HG2	63.134120941	35.756649017	53.384109497	LYS	372	HA	H	0.050
CD	61.017761230	36.062061310	53.705070496	LYS	372	CT	C	-0.100
HD1	61.230041504	36.532909393	54.666908264	LYS	372	HA	H	0.050
HD2	60.921360016	36.873161316	52.982120514	LYS	372	HA	H	0.050
CE	59.692928314	35.287788391	53.811889648	LYS	372	CT	C	0.050
HE1	59.331138611	34.979221344	52.832038879	LYS	372	HA	H	0.100
HE2	59.787418365	34.390018463	54.421611786	LYS	372	HA	H	0.100
NZ	58.672008514	36.132190704	54.405338287	LYS	372	NT	N	-0.300
HZ1	58.674160004	37.053199768	53.920681000	LYS	372	HC	H	0.350

HZ2	57.682788849	35.796558380	54.300048828	LYS	372	HC	H	0.350
HZ3	58.855560303	36.347568512	55.408180237	LYS	372	HC	H	0.350
N	61.208530426	31.764280319	52.863880157	VAL	373	NP	N	-0.400
HN	60.639560699	32.003898621	52.074760437	VAL	373	H	H	0.250
CA	60.655071259	30.970769882	53.963489532	VAL	373	CT	C	0.050
HA	60.891368866	31.537910461	54.865638733	VAL	373	HA	H	0.050
C	61.348861694	29.602209091	54.090988159	VAL	373	C	C	0.600
O	61.326648712	28.983160019	55.148368835	VAL	373	O	O	-0.550
CB	59.117568970	30.842479706	53.874069214	VAL	373	CT	C	-0.050
HB	58.734668732	31.834339142	53.634639740	VAL	373	HA	H	0.050
CG1	58.642261505	29.883890152	52.771709442	VAL	373	CT	C	-0.150
HG11	59.007759094	28.868700027	52.923900604	VAL	373	HA	H	0.050
HG12	57.554180145	29.831579208	52.739768982	VAL	373	HA	H	0.050
HG13	58.983379364	30.217830658	51.796760559	VAL	373	HA	H	0.050
CG2	58.501331329	30.446010590	55.226928711	VAL	373	CT	C	-0.150
HG21	58.817581177	31.128049850	56.016269684	VAL	373	HA	H	0.050
HG22	57.411880493	30.472509384	55.185001373	VAL	373	HA	H	0.050
HG23	58.796550751	29.439369202	55.524501801	VAL	373	HA	H	0.050
N	61.992328644	29.163209915	52.987060547	PHE	374	NP	N	-0.400
HN	61.842609406	29.628309250	52.109130859	PHE	374	H	H	0.250
CA	62.982158661	28.103649139	53.167919159	PHE	374	CT	C	0.050
HA	62.512531281	27.296350479	53.721321106	PHE	374	HA	H	0.050
C	64.149711609	28.647300720	54.022769928	PHE	374	C	C	0.600
O	64.329391479	28.324979782	55.194671631	PHE	374	O	O	-0.550
CB	63.508129120	27.546720505	51.827350616	PHE	374	CT	C	-0.100
HB1	63.990249634	28.325939178	51.235530853	PHE	374	HA	H	0.050
HB2	64.280128479	26.804479599	52.032318115	PHE	374	HA	H	0.050
CG	62.464881897	26.872579575	50.973838806	PHE	374	C6R	C	0.000
CD1	61.995178223	27.496339798	49.825790405	PHE	374	C6R	C	-0.130
HD1	62.359470367	28.472059250	49.566349030	PHE	374	HA	H	0.130
CD2	61.976100922	25.609420776	51.290031433	PHE	374	C6R	C	-0.130
HD2	62.321449280	25.103719711	52.179779053	PHE	374	HA	H	0.130
CE1	61.066181183	26.884590149	48.999519348	PHE	374	C6R	C	-0.130
HE1	60.720539093	27.398439407	48.112861633	PHE	374	HA	H	0.130
CE2	61.047580719	24.987930298	50.461471558	PHE	374	C6R	C	-0.130
HE2	60.680400848	24.002830505	50.696601868	PHE	374	HA	H	0.130
CZ	60.590370178	25.622610092	49.316440582	PHE	374	C6R	C	-0.130
HZ	59.869041443	25.136539459	48.675178528	PHE	374	HA	H	0.130
N	64.949790955	29.478040695	53.334949493	CYS	375	NP	N	-0.350
HN	64.608200073	29.870889664	52.475589752	CYS	375	H	H	0.250
CA	66.320358276	29.694290161	53.764869690	CYS	375	CT	C	0.050
HA	66.751121521	28.695880890	53.848079681	CYS	375	HA	H	0.050
C	66.434143066	30.370159149	55.141410828	CYS	375	C	C	0.550
O	67.387123108	30.117870331	55.871650696	CYS	375	O	O	-0.550
CB	67.072273254	30.486080170	52.689128876	CYS	375	CT	C	0.100
HB1	66.862060547	30.038759232	51.716270447	CYS	375	HA	H	0.050
HB2	66.698921204	31.509820938	52.634948730	CYS	375	HA	H	0.050
SG	68.879142761	30.514949799	52.901290894	CYS	375	ST	S	-0.200
N	65.447647095	31.230909348	55.465099335	GLU	376	NP	N	-0.400
HN	64.688117981	31.383270264	54.830520630	GLU	376	H	H	0.250
CA	65.481681824	31.961500168	56.729381561	GLU	376	CT	C	0.050
HA	66.508773804	32.306320190	56.861148834	GLU	376	HA	H	0.050
C	65.147506714	31.019590378	57.901348114	GLU	376	C	C	0.600
O	65.824928284	30.985429764	58.924190521	GLU	376	O	O	-0.550
CB	64.556068420	33.201820374	56.678009033	GLU	376	CT	C	-0.100
HB1	64.820503235	33.868518829	57.500038147	GLU	376	HA	H	0.050
HB2	64.759407043	33.762619019	55.764839172	GLU	376	HA	H	0.050
CG	63.044570923	32.905120850	56.765510559	GLU	376	CT	C	-0.250
HG1	62.748561859	32.206718445	55.987770081	GLU	376	HA	H	0.050
HG2	62.823650360	32.438350677	57.720619202	GLU	376	HA	H	0.050
CD	62.137729645	34.146018982	56.677551270	GLU	376	C	C	0.350
OE1	62.625549316	35.264671326	56.818901062	GLU	376	OC	O	-0.600

OE2	60.934459686	33.973068237	56.481658936	GLU	376	OC	O	-0.600
N	64.062461853	30.244369507	57.696678162	VAL	377	NP	N	-0.400
HN	63.601978302	30.261430740	56.807559967	VAL	377	H	H	0.250
CA	63.506149292	29.517400742	58.833591461	VAL	377	CT	C	0.050
HA	63.539588928	30.211599350	59.675571442	VAL	377	HA	H	0.050
C	64.396797180	28.311620712	59.184291840	VAL	377	C	C	0.600
O	64.445068359	27.875879288	60.326641083	VAL	377	O	O	-0.550
CB	62.036689758	29.113340378	58.621570587	VAL	377	CT	C	-0.050
HB	62.025279999	28.234979630	57.979339600	VAL	377	HA	H	0.050
CG1	61.373939514	28.767599106	59.966079712	VAL	377	CT	C	-0.150
HG11	61.299221039	29.645410538	60.608829498	VAL	377	HA	H	0.050
HG12	60.365039825	28.389089584	59.811439514	VAL	377	HA	H	0.050
HG13	61.932159424	28.012840271	60.517028809	VAL	377	HA	H	0.050
CG2	61.199649811	30.197349548	57.929180145	VAL	377	CT	C	-0.150
HG21	61.612350464	30.497489929	56.969959259	VAL	377	HA	H	0.050
HG22	60.190361023	29.836029053	57.735618591	VAL	377	HA	H	0.050
HG23	61.119461060	31.085500717	58.549430847	VAL	377	HA	H	0.050
N	65.168777466	27.851190567	58.172538757	TYR	378	NP	N	-0.400
HN	64.965896606	28.154060364	57.235721588	TYR	378	H	H	0.250
CA	66.300041199	26.956769943	58.459438324	TYR	378	CT	C	0.050
HA	65.887130737	25.979440689	58.713840485	TYR	378	HA	H	0.050
C	67.124496460	27.477439880	59.668128967	TYR	378	C	C	0.600
O	67.467338562	26.748609543	60.589118958	TYR	378	O	O	-0.550
CB	67.225097656	26.887599945	57.224948883	TYR	378	CT	C	-0.100
HB1	67.072921753	27.765249252	56.597408295	TYR	378	HA	H	0.050
HB2	68.276931763	26.935779572	57.514518738	TYR	378	HA	H	0.050
CG	67.063491821	25.662139893	56.360839844	TYR	378	C6R	C	0.000
CD1	68.040710449	24.669979095	56.363220215	TYR	378	C6R	C	-0.130
HD1	68.871788025	24.728979111	57.050220490	TYR	378	HA	H	0.130
CD2	65.982391357	25.529020309	55.496139526	TYR	378	C6R	C	-0.130
HD2	65.183311462	26.248889923	55.512458801	TYR	378	HA	H	0.130
CE1	67.981033325	23.615940094	55.460880280	TYR	378	C6R	C	-0.130
HE1	68.749610901	22.858329773	55.453941345	TYR	378	HA	H	0.130
CE2	65.923149109	24.480640411	54.587219238	TYR	378	C6R	C	-0.130
HE2	65.087669373	24.403209686	53.907131195	TYR	378	HA	H	0.130
CZ	66.946800232	23.546550751	54.542011261	TYR	378	C6R	C	0.250
OH	66.977478027	22.580989838	53.558528900	TYR	378	OT	O	-0.650
HH	66.248977661	21.958360672	53.677410126	TYR	378	HO	H	0.400
N	67.408859253	28.792390823	59.587860107	LYS	379	NP	N	-0.400
HN	66.978698730	29.346160889	58.872848511	LYS	379	H	H	0.250
CA	68.288436890	29.445230484	60.552539825	LYS	379	CT	C	0.050
HA	69.118301392	28.757080078	60.726558685	LYS	379	HA	H	0.050
C	67.558181763	29.655290604	61.888748169	LYS	379	C	C	0.600
O	68.134063721	29.512880325	62.957878113	LYS	379	O	O	-0.550
CB	68.841072083	30.761379242	59.970989227	LYS	379	CT	C	-0.100
HB1	68.142578125	31.582269669	60.143619537	LYS	379	HA	H	0.050
HB2	69.758438110	31.025049210	60.498908997	LYS	379	HA	H	0.050
CG	69.101577759	30.655889511	58.460781097	LYS	379	CT	C	-0.100
HG1	69.538063049	29.683509827	58.228839874	LYS	379	HA	H	0.050
HG2	68.135780334	30.699499130	57.965988159	LYS	379	HA	H	0.050
CD	69.997123718	31.755069733	57.877460480	LYS	379	CT	C	-0.100
HD1	69.703819275	32.727069855	58.277038574	LYS	379	HA	H	0.050
HD2	71.024070740	31.588809967	58.205718994	LYS	379	HA	H	0.050
CE	69.933296204	31.803630829	56.340400696	LYS	379	CT	C	0.050
HE1	69.026443481	32.323818207	56.025161743	LYS	379	HA	H	0.100
HE2	70.780967712	32.360591888	55.937461853	LYS	379	HA	H	0.100
NZ	69.902809143	30.481340408	55.713111877	LYS	379	NT	N	-0.300
HZ1	70.696861267	29.885709763	56.016841888	LYS	379	HC	H	0.350
HZ2	69.001312256	30.019470215	55.976928711	LYS	379	HC	H	0.350
HZ3	69.896476746	30.545619965	54.672760010	LYS	379	HC	H	0.350
N	66.241676331	29.926469803	61.774658203	GLU	380	NP	N	-0.400
HN	65.880027771	30.128219604	60.860809326	GLU	380	H	H	0.250

CA	65.392829895	29.937780380	62.971969604	GLU	380	CT	C	0.050
HA	65.800010681	30.699110031	63.639701843	GLU	380	HA	H	0.050
C	65.428611755	28.572799683	63.696041107	GLU	380	C	C	0.600
O	65.309379578	28.484689713	64.914909363	GLU	380	O	O	-0.550
CB	63.952350616	30.294559479	62.571949005	GLU	380	CT	C	-0.100
HB1	63.970558167	31.248069763	62.046131134	GLU	380	HA	H	0.050
HB2	63.587150574	29.561639786	61.854938507	GLU	380	HA	H	0.050
CG	62.938739777	30.355619431	63.733898163	GLU	380	CT	C	-0.250
HG1	61.933650970	30.481319427	63.330341339	GLU	380	HA	H	0.050
HG2	62.919269562	29.410619736	64.272781372	GLU	380	HA	H	0.050
CD	63.193668365	31.505859375	64.717987061	GLU	380	C	C	0.350
OE1	62.938808441	31.344949722	65.911102295	GLU	380	OC	O	-0.600
OE2	63.609031677	32.587650299	64.313179016	GLU	380	OC	O	-0.600
N	65.604797363	27.523260117	62.874618530	ARG	381	NP	N	-0.400
HN	65.602012634	27.673870087	61.882030487	ARG	381	H	H	0.250
CA	65.714080811	26.155149460	63.366210938	ARG	381	CT	C	0.050
HA	65.221733093	26.101249695	64.337272644	ARG	381	HA	H	0.050
C	67.179313660	25.725839615	63.611919403	ARG	381	C	C	0.600
O	67.468193054	24.552289963	63.835300446	ARG	381	O	O	-0.550
CB	65.005622864	25.229150772	62.371921539	ARG	381	CT	C	-0.100
HB1	65.430938721	25.357879639	61.375740051	ARG	381	HA	H	0.050
HB2	65.217666626	24.201740265	62.646320343	ARG	381	HA	H	0.050
CG	63.480918884	25.440820694	62.310188293	ARG	381	CT	C	-0.100
HG1	63.253059387	26.381620407	61.810779572	ARG	381	HA	H	0.050
HG2	63.056949615	24.660369873	61.679691315	ARG	381	HA	H	0.050
CD	62.798091888	25.435270309	63.689758301	ARG	381	CT	C	0.000
HD1	63.146148682	24.621139526	64.327217102	ARG	381	HA	H	0.050
HD2	62.991088867	26.368520737	64.219192505	ARG	381	HA	H	0.050
NE	61.346759796	25.343540192	63.559059143	ARG	381	NP	N	-0.400
HE	60.784851074	26.179510117	63.568370819	ARG	381	H	H	0.300
CZ	60.702171326	24.176729202	63.343929291	ARG	381	C	C	0.500
NH1	61.376731873	23.029970169	63.277709961	ARG	381	NC	N	-0.450
HH11	62.375930786	23.013050079	63.426689148	ARG	381	HC	H	0.350
HH12	60.959571838	22.141010284	63.066669464	ARG	381	HC	H	0.350
NH2	59.387821198	24.205600739	63.184291840	ARG	381	NC	N	-0.450
HH21	58.877220154	25.063840866	63.364830017	ARG	381	HC	H	0.350
HH22	58.824199677	23.415510178	62.907440186	ARG	381	HC	H	0.350
N	68.052291870	26.754009247	63.618869781	LEU	382	NP	N	-0.400
HN	67.752243042	27.647260666	63.286911011	LEU	382	H	H	0.250
CA	69.413619995	26.725389481	64.140319824	LEU	382	CT	C	0.050
HA	69.927787781	27.523090363	63.605998993	LEU	382	HA	H	0.050
C	70.176498413	25.429130554	63.800128937	LEU	382	C	C	0.600
O	70.753532410	25.279720306	62.731369019	LEU	382	O	O	-0.550
CB	69.395759583	27.040390015	65.652740479	LEU	382	CT	C	-0.100
HB1	68.760673523	26.313169479	66.159957886	LEU	382	HA	H	0.050
HB2	70.395637512	26.919580460	66.072662354	LEU	382	HA	H	0.050
CG	68.891487122	28.455070496	65.995246887	LEU	382	CT	C	-0.050
HG	67.964393616	28.642839432	65.452598572	LEU	382	HA	H	0.050
CD1	68.571708679	28.566160202	67.491722107	LEU	382	CT	C	-0.150
HD11	67.814292908	27.840089798	67.787300110	LEU	382	HA	H	0.050
HD12	69.460510254	28.387229919	68.097846985	LEU	382	HA	H	0.050
HD13	68.195068359	29.558900833	67.739349365	LEU	382	HA	H	0.050
CD2	69.907371521	29.534019470	65.592407227	LEU	382	CT	C	-0.150
HD21	70.111007690	29.520709991	64.522476196	LEU	382	HA	H	0.050
HD22	69.533576965	30.529529572	65.832679749	LEU	382	HA	H	0.050
HD23	70.855766296	29.399110794	66.113121033	LEU	382	HA	H	0.050
N	70.178108215	24.513240814	64.784469604	PHE	383	NP	N	-0.400
HN	69.552642822	24.653240204	65.549133301	PHE	383	H	H	0.250
CA	71.102317810	23.384290695	64.787117004	PHE	383	CT	C	0.050
HA	72.029449463	23.711759567	64.312011719	PHE	383	HA	H	0.050
C	70.531883240	22.195600510	63.993698120	PHE	383	C	C	0.600
O	70.607452393	21.046539307	64.423561096	PHE	383	O	O	-0.550

CB	71.371498108	22.984380722	66.250106812	PHE	383	CT	C	-0.100
HB1	70.519676208	22.438699722	66.659072876	PHE	383	HA	H	0.050
HB2	72.225059509	22.307470322	66.305580139	PHE	383	HA	H	0.050
CG	71.636932373	24.188669205	67.116966248	PHE	383	C6R	C	0.000
CD1	72.794998169	24.941019058	66.944801331	PHE	383	C6R	C	-0.130
HD1	73.520980835	24.654180527	66.197959900	PHE	383	HA	H	0.130
CD2	70.719017029	24.576490402	68.090751648	PHE	383	C6R	C	-0.130
HD2	69.816337585	24.004650116	68.248153687	PHE	383	HA	H	0.130
CE1	73.027526855	26.067199707	67.723678589	PHE	383	C6R	C	-0.130
HE1	73.928062439	26.646829605	67.580558777	PHE	383	HA	H	0.130
CE2	70.949729919	25.701910019	68.870956421	PHE	383	C6R	C	-0.130
HE2	70.232521057	25.996419907	69.623451233	PHE	383	HA	H	0.130
CZ	72.103912354	26.449590683	68.686248779	PHE	383	C6R	C	-0.130
HZ	72.285003662	27.326250076	69.291702271	PHE	383	HA	H	0.130
N	69.927589417	22.533679962	62.838821411	GLY	384	NP	N	-0.400
HN	69.972778320	23.490280151	62.540988922	GLY	384	H	H	0.250
CA	69.265792847	21.534479141	62.011928558	GLY	384	CT	C	0.000
HA1	68.862083435	22.049329758	61.140048981	GLY	384	HA	H	0.050
HA2	70.017829895	20.814880371	61.685649872	GLY	384	HA	H	0.050
C	68.141998291	20.821340561	62.774219513	GLY	384	C	C	0.600
O	68.160476685	19.607490540	62.954368591	GLY	384	O	O	-0.550
N	67.176422119	21.640979767	63.228969574	LYS	385	NP	N	-0.400
HN	67.297088623	22.636619568	63.151828766	LYS	385	H	H	0.250
CA	65.949272156	21.118839264	63.836589813	LYS	385	CT	C	0.050
HA	65.937973022	20.034149170	63.741058350	LYS	385	HA	H	0.050
C	64.777091980	21.611339569	62.980751038	LYS	385	C	C	0.600
O	63.935939789	22.406740189	63.389331818	LYS	385	O	O	-0.550
CB	65.878440857	21.543609619	65.323539734	LYS	385	CT	C	-0.100
HB1	66.698440552	22.226749420	65.546676636	LYS	385	HA	H	0.050
HB2	64.983512878	22.135129929	65.521171570	LYS	385	HA	H	0.050
CG	65.893592834	20.368549347	66.327003479	LYS	385	CT	C	-0.100
HG1	65.993919373	20.769960403	67.336082458	LYS	385	HA	H	0.050
HG2	64.919380188	19.878480911	66.300468445	LYS	385	HA	H	0.050
CD	66.977447510	19.297199249	66.093887329	LYS	385	CT	C	-0.100
HD1	66.909568787	18.541580200	66.877677917	LYS	385	HA	H	0.050
HD2	66.758567810	18.759290695	65.172332764	LYS	385	HA	H	0.050
CE	68.407829285	19.850530624	66.046897888	LYS	385	CT	C	0.050
HE1	68.415313721	20.857149124	65.632003784	LYS	385	HA	H	0.100
HE2	68.843399048	19.922340393	67.044670105	LYS	385	HA	H	0.100
NZ	69.291007996	19.049169540	65.200271606	LYS	385	NT	N	-0.300
HZ1	68.836418152	18.928510666	64.265403748	LYS	385	HC	H	0.350
HZ2	70.165000916	19.597759247	65.023399353	LYS	385	HC	H	0.350
HZ3	69.511756897	18.121599197	65.609901428	LYS	385	HC	H	0.350
N	64.831520081	21.108739853	61.731040955	LYS	386	NP	N	-0.400
HN	65.502159119	20.398950577	61.523689270	LYS	386	H	H	0.250
CA	63.944820404	21.608600616	60.692718506	LYS	386	CT	C	0.050
HA	64.031486511	22.696699142	60.699478149	LYS	386	HA	H	0.050
C	62.478431702	21.214809418	60.971698761	LYS	386	C	C	0.600
O	62.072189331	20.762960434	62.036411285	LYS	386	O	O	-0.550
CB	64.346023560	21.052480698	59.303741455	LYS	386	CT	C	-0.100
HB1	64.026947021	20.012149811	59.213359833	LYS	386	HA	H	0.050
HB2	63.813991547	21.610769272	58.534481049	LYS	386	HA	H	0.050
CG	65.820457458	21.134389877	58.919929504	LYS	386	CT	C	-0.100
HG1	66.224342346	22.107019424	59.204399109	LYS	386	HA	H	0.050
HG2	66.394096375	20.384290695	59.465129852	LYS	386	HA	H	0.050
CD	66.000282288	20.944410324	57.401420593	LYS	386	CT	C	-0.100
HD1	65.603469849	21.809680939	56.869438171	LYS	386	HA	H	0.050
HD2	67.070251465	20.943210602	57.189899445	LYS	386	HA	H	0.050
CE	65.385169983	19.647960663	56.827510834	LYS	386	CT	C	0.050
HE1	65.955619812	19.368000031	55.939479828	LYS	386	HA	H	0.100
HE2	65.488693237	18.813640594	57.522830963	LYS	386	HA	H	0.100
NZ	63.981838226	19.704639435	56.390388489	LYS	386	NT	N	-0.300

HZ1	63.283821106	20.022230148	57.095981598	LYS	386	HC	H	0.350
HZ2	63.886821747	20.318740845	55.545528412	LYS	386	HC	H	0.350
HZ3	63.694881439	18.754629135	56.064140320	LYS	386	HC	H	0.350
N	61.742649078	21.406209946	59.881099701	TYR	387	NP	N	-0.400
HN	62.137741089	21.881769180	59.095718384	TYR	387	H	H	0.250
CA	60.477550507	20.785379410	59.593631744	TYR	387	CT	C	0.050
HA	60.386959076	19.875310898	60.189949036	TYR	387	HA	H	0.050
C	60.633888245	20.389429092	58.119918823	TYR	387	C	C	0.600
O	61.748600006	20.426509857	57.594139099	TYR	387	O	O	-0.550
CB	59.341018677	21.776380539	59.907890320	TYR	387	CT	C	-0.100
HB1	58.390609741	21.389589310	59.558570862	TYR	387	HA	H	0.050
HB2	59.244560242	21.867750168	60.988960266	TYR	387	HA	H	0.050
CG	59.525939941	23.158359528	59.338211060	TYR	387	C6R	C	0.000
CD1	60.409069061	24.063909531	59.918251038	TYR	387	C6R	C	-0.130
HD1	61.000858307	23.773349762	60.765628815	TYR	387	HA	H	0.130
CD2	58.794990540	23.561019897	58.229858398	TYR	387	C6R	C	-0.130
HD2	58.111351013	22.879190445	57.750179291	TYR	387	HA	H	0.130
CE1	60.556320190	25.344549179	59.413379669	TYR	387	C6R	C	-0.130
HE1	61.249629974	26.031139374	59.869651794	TYR	387	HA	H	0.130
CE2	58.938518524	24.843179703	57.727260590	TYR	387	C6R	C	-0.130
HE2	58.367279053	25.148849487	56.874259949	TYR	387	HA	H	0.130
CZ	59.818431854	25.734779358	58.311809540	TYR	387	C6R	C	0.250
OH	59.972579956	26.999019623	57.789878845	TYR	387	OT	O	-0.650
HH	60.016658783	26.952489853	56.840450287	TYR	387	HO	H	0.400
N	59.501819611	20.038709641	57.496208191	VAL	388	NP	N	-0.400
HN	58.644439697	19.978019714	58.010448456	VAL	388	H	H	0.250
CA	59.467060089	19.828449249	56.053901672	VAL	388	CT	C	0.050
HA	60.458480835	20.020420074	55.637031555	VAL	388	HA	H	0.050
C	58.495151520	20.867340088	55.483150482	VAL	388	C	C	0.600
O	57.480201721	21.191699982	56.090080261	VAL	388	O	O	-0.550
CB	59.060840607	18.374910355	55.739879608	VAL	388	CT	C	-0.050
HB	59.873519897	17.736440659	56.089500427	VAL	388	HA	H	0.050
CG1	57.798358917	17.941110611	56.497299194	VAL	388	CT	C	-0.150
HG11	56.975410461	18.624040604	56.300571442	VAL	388	HA	H	0.050
HG12	57.483310699	16.940660477	56.199771881	VAL	388	HA	H	0.050
HG13	57.961841583	17.920650482	57.575080872	VAL	388	HA	H	0.050
CG2	58.921180725	18.120399475	54.229778290	VAL	388	CT	C	-0.150
HG21	59.827850342	18.404340744	53.693790436	VAL	388	HA	H	0.050
HG22	58.742790222	17.063379288	54.034530640	VAL	388	HA	H	0.050
HG23	58.087139130	18.673770905	53.795921326	VAL	388	HA	H	0.050
N	58.881618500	21.393520355	54.310981750	TRP	389	NP	N	-0.400
HN	59.705421448	21.046360016	53.862030029	TRP	389	H	H	0.250
CA	58.042629242	22.364250183	53.633319855	TRP	389	CT	C	0.050
HA	57.307281494	22.751539230	54.326820374	TRP	389	HA	H	0.050
C	57.282440186	21.613189697	52.541210175	TRP	389	C	C	0.600
O	57.826198578	20.725450516	51.901321411	TRP	389	O	O	-0.550
CB	58.871170044	23.472890854	52.953739166	TRP	389	CT	C	-0.100
HB1	59.558048248	23.021600723	52.249099731	TRP	389	HA	H	0.050
HB2	58.196678162	24.067100525	52.339191437	TRP	389	HA	H	0.050
CG	59.632999420	24.457719803	53.840988159	TRP	389	C5R	C	-0.030
CD1	59.448040009	25.844009399	53.787220001	TRP	389	C5R	C	-0.040
HD1	58.723079681	26.357379913	53.179050446	TRP	389	HA	H	0.100
CD2	60.721809387	24.257480621	54.781898499	TRP	389	CR56	C	0.100
HE1	60.412029266	27.442440033	54.707939148	TRP	389	H	H	0.300
NE1	60.327739716	26.469079971	54.596359253	TRP	389	N5R	N	-0.360
CE2	61.135490417	25.539690018	55.221359253	TRP	389	CR56	C	-0.040
CE3	61.373180389	23.161880493	55.272850037	TRP	389	C6R	C	-0.130
HE3	61.099231720	22.175550461	54.954029083	TRP	389	HA	H	0.100
CZ2	62.175640106	25.681739807	56.102050781	TRP	389	C6R	C	-0.130
HZ2	62.504688263	26.667480469	56.400531769	TRP	389	HA	H	0.130
CZ3	62.424991608	23.296670914	56.178440094	TRP	389	C6R	C	-0.130
HZ3	62.932949066	22.414930344	56.534130096	TRP	389	HA	H	0.130

CH2	62.832851410	24.559139252	56.593471527	TRP	389	C6R	C	-0.130
HH2	63.657341003	24.666490555	57.283130646	TRP	389	HA	H	0.130
N	56.026710510	22.052749634	52.366539001	PHE	390	NP	N	-0.400
HN	55.654930115	22.686840057	53.044788361	PHE	390	H	H	0.250
CA	55.159648895	21.631200790	51.282001495	PHE	390	CT	C	0.050
HA	55.732288361	21.020599365	50.592231750	PHE	390	HA	H	0.050
C	54.669158936	22.898660660	50.566368103	PHE	390	C	C	0.600
O	53.510871887	23.290170670	50.667900085	PHE	390	O	O	-0.550
CB	53.974758148	20.817140579	51.822330475	PHE	390	CT	C	-0.100
HB1	53.446128845	21.375789642	52.593780518	PHE	390	HA	H	0.050
HB2	53.250518799	20.642780304	51.025421143	PHE	390	HA	H	0.050
CG	54.396541595	19.483650208	52.380851746	PHE	390	C6R	C	0.000
CD1	54.623500824	19.326410294	53.742630005	PHE	390	C6R	C	-0.130
HD1	54.525798798	20.177579880	54.401760101	PHE	390	HA	H	0.130
CD2	54.544731140	18.381589890	51.544818878	PHE	390	C6R	C	-0.130
HD2	54.366790771	18.480239868	50.488349915	PHE	390	HA	H	0.130
CE1	54.968219757	18.084129333	54.259860992	PHE	390	C6R	C	-0.130
HE1	55.118209839	17.960010529	55.320178986	PHE	390	HA	H	0.130
CE2	54.906150818	17.142580032	52.055099487	PHE	390	C6R	C	-0.130
HE2	55.027400970	16.298099518	51.390121460	PHE	390	HA	H	0.130
CZ	55.112140656	16.991540909	53.418190002	PHE	390	C6R	C	-0.130
HZ	55.381778717	16.027809143	53.826908112	PHE	390	HA	H	0.130
N	55.611911774	23.535669327	49.841239929	LEU	391	NP	N	-0.400
HN	56.513568878	23.110380173	49.722290039	LEU	391	H	H	0.250
CA	55.203910828	24.733470917	49.102539062	LEU	391	CT	C	0.050
HA	54.487491608	25.262620926	49.729930878	LEU	391	HA	H	0.050
C	54.484428406	24.283710480	47.829109192	LEU	391	C	C	0.600
O	54.930038452	23.377859116	47.134208679	LEU	391	O	O	-0.550
CB	56.378929138	25.678340912	48.787559509	LEU	391	CT	C	-0.100
HB1	57.310619354	25.121400833	48.684909821	LEU	391	HA	H	0.050
HB2	56.213481903	26.152580261	47.817260742	LEU	391	HA	H	0.050
CG	56.512699127	26.805620193	49.827930450	LEU	391	CT	C	-0.050
HG	55.530170441	27.242870331	49.994888306	LEU	391	HA	H	0.050
CD1	57.014640808	26.286539078	51.173740387	LEU	391	CT	C	-0.150
HD11	58.019271851	25.878440857	51.067108154	LEU	391	HA	H	0.050
HD12	57.046981812	27.094200134	51.905391693	LEU	391	HA	H	0.050
HD13	56.365631104	25.508539200	51.575649261	LEU	391	HA	H	0.050
CD2	57.398601532	27.943349838	49.317150116	LEU	391	CT	C	-0.150
HD21	56.988090515	28.380790710	48.405899048	LEU	391	HA	H	0.050
HD22	57.469299316	28.734340668	50.062519073	LEU	391	HA	H	0.050
HD23	58.405738831	27.596590042	49.098171234	LEU	391	HA	H	0.050
N	53.324680328	24.914409637	47.599578857	ILE	392	NP	N	-0.400
HN	53.096080780	25.704610825	48.168060303	ILE	392	H	H	0.250
CA	52.435081482	24.513429642	46.520050049	ILE	392	CT	C	0.050
HA	52.556838989	23.442110062	46.362281799	ILE	392	HA	H	0.050
C	52.874259949	25.248949051	45.243370056	ILE	392	C	C	0.600
O	52.226898193	26.168830872	44.761009216	ILE	392	O	O	-0.550
CB	50.968799591	24.772939682	46.936668396	ILE	392	CT	C	-0.050
HB	50.867599487	25.824869156	47.205951691	ILE	392	HA	H	0.050
CG1	50.606079102	23.918090820	48.172000885	ILE	392	CT	C	-0.100
HG11	50.540500641	22.868049622	47.881649017	ILE	392	HA	H	0.050
HG12	51.395908356	23.969800949	48.921768188	ILE	392	HA	H	0.050
CG2	49.997161865	24.483320236	45.778060913	ILE	392	CT	C	-0.150
HG21	50.043239594	25.253499985	45.009708405	ILE	392	HA	H	0.050
HG22	50.247951508	23.537279129	45.300750732	ILE	392	HA	H	0.050
HG23	48.959930420	24.439929962	46.106159210	ILE	392	HA	H	0.050
CD1	49.303180695	24.346319199	48.857139587	ILE	392	CT	C	-0.150
HD11	49.364181519	25.377180099	49.206939697	ILE	392	HA	H	0.050
HD12	48.441909790	24.267719269	48.195011139	ILE	392	HA	H	0.050
HD13	49.099090576	23.711860657	49.719058990	ILE	392	HA	H	0.050
N	54.026611328	24.778110504	44.739040375	GLY	393	NP	N	-0.400
HN	54.535820007	24.080909729	45.247959137	GLY	393	H	H	0.250

CA	54.554149628	25.319929123	43.497909546	GLY	393	CT	C	0.000
HA1	54.221950531	24.668220520	42.691978455	GLY	393	HA	H	0.050
HA2	54.141300201	26.310119629	43.327011108	GLY	393	HA	H	0.050
C	56.077461243	25.434610367	43.558071136	GLY	393	C	C	0.600
O	56.670291901	25.593479156	44.620761871	GLY	393	O	O	-0.550
N	56.645168304	25.369869232	42.336841583	TRP	394	NP	N	-0.400
HN	56.078449249	25.007860184	41.597118378	TRP	394	H	H	0.250
CA	58.065979004	25.603370667	42.085559845	TRP	394	CT	C	0.050
HA	58.484001160	26.090139389	42.962001801	TRP	394	HA	H	0.050
C	58.170318604	26.585220337	40.903118134	TRP	394	C	C	0.600
O	58.966178894	26.430259705	39.987701416	TRP	394	O	O	-0.550
CB	58.706241608	24.229970932	41.769371033	TRP	394	CT	C	-0.100
HB1	58.216201782	23.444660187	42.342220306	TRP	394	HA	H	0.050
HB2	58.533409119	23.970439911	40.724681854	TRP	394	HA	H	0.050
CG	60.196689606	24.127769470	42.054958344	TRP	394	C5R	C	-0.030
CD1	61.124221802	23.524370193	41.197441101	TRP	394	C5R	C	-0.040
HD1	60.897388458	23.080020905	40.238140106	TRP	394	HA	H	0.100
CD2	60.945079803	24.552349091	43.221931458	TRP	394	CR56	C	0.100
HE1	63.167381287	23.175119400	41.358528137	TRP	394	H	H	0.300
NE1	62.355438232	23.558479309	41.759708405	TRP	394	N5R	N	-0.360
CE2	62.294651031	24.179410934	42.998611450	TRP	394	CR56	C	-0.040
CE3	60.608680725	25.182870865	44.393520355	TRP	394	C6R	C	-0.130
HE3	59.589550018	25.464830399	44.597068787	TRP	394	HA	H	0.100
CZ2	63.250148773	24.454229355	43.939521790	TRP	394	C6R	C	-0.130
HZ2	64.278297424	24.180110931	43.765220642	TRP	394	HA	H	0.130
CZ3	61.580799103	25.462280273	45.353050232	TRP	394	C6R	C	-0.130
HZ3	61.309520721	25.966009140	46.267898560	TRP	394	HA	H	0.130
CH2	62.905311584	25.099300385	45.125049591	TRP	394	C6R	C	-0.130
HH2	63.667049408	25.328720093	45.856159210	TRP	394	HA	H	0.130
N	57.247920990	27.565179825	40.958480835	TYR	395	NP	N	-0.400
HN	56.791080475	27.687189102	41.838180542	TYR	395	H	H	0.250
CA	56.897369385	28.379810333	39.797508240	TYR	395	CT	C	0.050
HA	57.092399597	27.793409348	38.898948669	TYR	395	HA	H	0.050
C	57.760669708	29.648500443	39.679088593	TYR	395	C	C	0.600
O	58.741348267	29.688480377	38.948101044	TYR	395	O	O	-0.550
CB	55.403789520	28.717500687	39.903179169	TYR	395	CT	C	-0.100
HB1	55.139488220	28.870349884	40.946949005	TYR	395	HA	H	0.050
HB2	55.165138245	29.646270752	39.381790161	TYR	395	HA	H	0.050
CG	54.542919159	27.643369675	39.303680420	TYR	395	C6R	C	0.000
CD1	54.063350677	26.571510315	40.045989990	TYR	395	C6R	C	-0.130
HD1	54.302360535	26.499879837	41.092918396	TYR	395	HA	H	0.130
CD2	54.214611053	27.724639893	37.962818146	TYR	395	C6R	C	-0.130
HD2	54.557121277	28.558710098	37.383831024	TYR	395	HA	H	0.130
CE1	53.263969421	25.604080200	39.446739197	TYR	395	C6R	C	-0.130
HE1	52.884490967	24.772470474	40.023059845	TYR	395	HA	H	0.130
CE2	53.433929443	26.763509750	37.354091644	TYR	395	C6R	C	-0.130
HE2	53.245529175	26.876659393	36.297798157	TYR	395	HA	H	0.130
CZ	52.944389343	25.701950073	38.099300385	TYR	395	C6R	C	0.250
OH	52.146930695	24.739709854	37.521938324	TYR	395	OT	O	-0.650
HH	51.902721405	24.960460663	36.622661591	TYR	395	HO	H	0.400
N	57.305438995	30.701200485	40.389118195	ALA	396	NP	N	-0.400
HN	56.524818420	30.580499649	41.000469208	ALA	396	H	H	0.250
CA	57.979969025	31.995260239	40.297740936	ALA	396	CT	C	0.050
HA	58.271800995	32.149631500	39.257320404	ALA	396	HA	H	0.050
C	59.256988525	31.990070343	41.153041840	ALA	396	C	C	0.600
O	60.189250946	32.765361786	40.942729950	ALA	396	O	O	-0.550
CB	57.016311646	33.103851318	40.730018616	ALA	396	CT	C	-0.150
HB1	56.165828705	33.168498993	40.052768707	ALA	396	HA	H	0.050
HB2	56.618000031	32.912349701	41.722869873	ALA	396	HA	H	0.050
HB3	57.511028290	34.075450897	40.745540619	ALA	396	HA	H	0.050
N	59.252899170	31.035589218	42.099159241	ASP	397	NP	N	-0.400
HN	58.432460785	30.499160767	42.288978577	ASP	397	H	H	0.250

CA	60.460060120	30.642440796	42.793968201	ASP	397	CT	C	0.050
HA	61.281929016	31.229940414	42.396049500	ASP	397	HA	H	0.050
C	60.743980408	29.174409866	42.472179413	ASP	397	C	C	0.600
O	59.844890594	28.395269394	42.187881470	ASP	397	O	O	-0.550
CB	60.299621582	30.858970642	44.301208496	ASP	397	CT	C	-0.250
HB1	60.027359009	31.889360428	44.523128510	ASP	397	HA	H	0.050
HB2	59.496768951	30.225780487	44.682521820	ASP	397	HA	H	0.050
CG	61.610160828	30.528930664	45.023349762	ASP	397	C	C	0.350
OD1	62.659568787	30.941789627	44.539779663	ASP	397	OC	O	-0.600
OD2	61.576171875	29.845319748	46.037250519	ASP	397	OC	O	-0.600
N	62.056461334	28.898149490	42.505889893	ASN	398	NP	N	-0.400
HN	62.660320282	29.593490601	42.910888672	ASN	398	H	H	0.250
CA	62.690979004	27.629350662	42.186550140	ASN	398	CT	C	0.050
HA	62.557701111	27.014139175	43.071140289	ASN	398	HA	H	0.050
C	64.178352356	27.963590622	42.061138153	ASN	398	C	C	0.600
O	64.636299133	28.947820663	42.627849579	ASN	398	O	O	-0.550
CB	62.112579346	26.935289383	40.928508759	ASN	398	CT	C	-0.100
HB1	62.617641449	25.993049622	40.725379944	ASN	398	HA	H	0.050
HB2	61.076030731	26.663429260	41.102508545	ASN	398	HA	H	0.050
CG	62.210861206	27.801019669	39.666728973	ASN	398	C	C	0.550
OD1	63.290500641	28.094800949	39.169509888	ASN	398	O	O	-0.550
ND2	61.032268524	28.216840744	39.208248138	ASN	398	NP	N	-0.600
HD21	60.960121155	28.877040863	38.462471008	ASN	398	H	H	0.300
HD22	60.173851013	27.890169144	39.616638184	ASN	398	H	H	0.300
N	64.883209229	27.169370651	41.235870361	TRP	399	NP	N	-0.400
HN	64.405036926	26.415269852	40.789859772	TRP	399	H	H	0.250
CA	66.293861389	27.371480942	40.916339874	TRP	399	CT	C	0.050
HA	66.830039978	27.240940094	41.854801178	TRP	399	HA	H	0.050
C	66.626983643	28.795070648	40.406299591	TRP	399	C	C	0.600
O	67.785507202	29.183799744	40.363819122	TRP	399	O	O	-0.550
CB	66.728858948	26.308530807	39.887500763	TRP	399	CT	C	-0.100
HB1	66.334281921	26.551200867	38.899990082	TRP	399	HA	H	0.050
HB2	67.814849854	26.278310776	39.798271179	TRP	399	HA	H	0.050
CG	66.219108582	24.936389923	40.287078857	TRP	399	C5R	C	-0.030
CD1	65.376991272	24.115190506	39.528621674	TRP	399	C5R	C	-0.040
HD1	64.995780945	24.344690323	38.543941498	TRP	399	HA	H	0.100
CD2	66.473320007	24.230310440	41.519531250	TRP	399	CR56	C	0.100
HE1	64.587982178	22.206310272	39.904949188	TRP	399	H	H	0.300
NE1	65.114402771	22.981670380	40.224609375	TRP	399	N5R	N	-0.360
CE2	65.760482788	23.012639999	41.453479767	TRP	399	CR56	C	-0.040
CE3	67.220336914	24.523830414	42.624889374	TRP	399	C6R	C	-0.130
HE3	67.798263550	25.432790756	42.648780823	TRP	399	HA	H	0.100
CZ2	65.806846619	22.134380341	42.503429413	TRP	399	C6R	C	-0.130
HZ2	65.264892578	21.201539993	42.446441650	TRP	399	HA	H	0.130
CZ3	67.270477295	23.635999680	43.698299408	TRP	399	C6R	C	-0.130
HZ3	67.864021301	23.882799149	44.565898895	TRP	399	HA	H	0.130
CH2	66.557746887	22.438369751	43.639198303	TRP	399	C6R	C	-0.130
HH2	66.589996338	21.745889664	44.467628479	TRP	399	HA	H	0.130
N	65.576751709	29.570619583	40.062461853	PHE	400	NP	N	-0.400
HN	64.675659180	29.144880295	39.955898285	PHE	400	H	H	0.250
CA	65.755302429	31.000259399	39.814220428	PHE	400	CT	C	0.050
HA	66.377059937	31.079420090	38.928241730	PHE	400	HA	H	0.050
C	66.496200562	31.715950012	40.964649200	PHE	400	C	C	0.600
O	67.337760925	32.574531555	40.735130310	PHE	400	O	O	-0.550
CB	64.401573181	31.711290359	39.631328583	PHE	400	CT	C	-0.100
HB1	63.816139221	31.616289139	40.546749115	PHE	400	HA	H	0.050
HB2	64.572540283	32.778079987	39.476509094	PHE	400	HA	H	0.050
CG	63.549579620	31.248489380	38.480331421	PHE	400	C6R	C	0.000
CD1	64.080513000	30.616870880	37.359100342	PHE	400	C6R	C	-0.130
HD1	65.137413025	30.415229797	37.283409119	PHE	400	HA	H	0.130
CD2	62.179828644	31.487110138	38.528820038	PHE	400	C6R	C	-0.130
HD2	61.750938416	31.965400696	39.393650055	PHE	400	HA	H	0.130

CE1	63.251388550	30.241590500	36.313220978	PHE	400	C6R	C	-0.130
HE1	63.652641296	29.726869583	35.458061218	PHE	400	HA	H	0.130
CE2	61.352870941	31.128389359	37.476421356	PHE	400	C6R	C	-0.130
HE2	60.291709900	31.323110580	37.537521362	PHE	400	HA	H	0.130
CZ	61.894271851	30.512939453	36.359691620	PHE	400	C6R	C	-0.130
HZ	61.269309998	30.236930847	35.522251129	PHE	400	HA	H	0.130
N	66.107749939	31.333669662	42.200069427	LYS	401	NP	N	-0.400
HN	65.425468445	30.603570938	42.267738342	LYS	401	H	H	0.250
CA	66.681900024	31.950710297	43.394050598	LYS	401	CT	C	0.050
HA	67.527801514	32.574588776	43.097820282	LYS	401	HA	H	0.050
C	67.254547119	30.899299622	44.359428406	LYS	401	C	C	0.600
O	68.271293640	31.148309708	44.995990753	LYS	401	O	O	-0.550
CB	65.646087646	32.815349579	44.129398346	LYS	401	CT	C	-0.100
HB1	64.757087708	32.227870941	44.344570160	LYS	401	HA	H	0.050
HB2	66.044578552	33.066951752	45.108760834	LYS	401	HA	H	0.050
CG	65.323211670	34.163379669	43.452388763	LYS	401	CT	C	-0.100
HG1	65.074539185	34.876258850	44.237770081	LYS	401	HA	H	0.050
HG2	66.216690063	34.567790985	42.974300385	LYS	401	HA	H	0.050
CD	64.154701233	34.162559509	42.454971313	LYS	401	CT	C	-0.100
HD1	63.886371613	35.199539185	42.248790741	LYS	401	HA	H	0.050
HD2	64.477539062	33.747779846	41.502109528	LYS	401	HA	H	0.050
CE	62.928588867	33.399860382	42.970069885	LYS	401	CT	C	0.050
HE1	62.982170105	32.373771667	42.616489410	LYS	401	HA	H	0.100
HE2	62.922588348	33.356609344	44.055721283	LYS	401	HA	H	0.100
NZ	61.638790131	33.962871552	42.598201752	LYS	401	NT	N	-0.300
HZ1	61.574501038	34.959560394	42.907611847	LYS	401	HC	H	0.350
HZ2	61.383579254	33.834270477	41.594329834	LYS	401	HC	H	0.350
HZ3	60.855979919	33.495460510	43.110000610	LYS	401	HC	H	0.350
N	66.588737488	29.733600616	44.478340149	THR	402	NP	N	-0.400
HN	65.751243591	29.528779984	43.968460083	THR	402	H	H	0.250
CA	67.060691833	28.718460083	45.420730591	THR	402	CT	C	0.050
HA	67.437240601	29.228530884	46.310161591	THR	402	HA	H	0.050
C	68.202308655	27.898979187	44.790298462	THR	402	C	C	0.600
O	68.093528748	26.692100525	44.617519379	THR	402	O	O	-0.550
CB	65.898139954	27.786489487	45.825038910	THR	402	CT	C	0.150
HB	66.241203308	27.129270554	46.633731842	THR	402	HA	H	0.100
OG1	65.456367493	26.999679565	44.731811523	THR	402	OT	O	-0.650
HG1	66.199218750	26.482330322	44.412761688	THR	402	HO	H	0.400
CG2	64.688903809	28.558029175	46.358428955	THR	402	CT	C	-0.150
HG21	64.246246338	29.190639496	45.590179443	THR	402	HA	H	0.050
HG22	63.908931732	27.877250671	46.699489594	THR	402	HA	H	0.050
HG23	64.969886780	29.189729691	47.199031830	THR	402	HA	H	0.050
N	69.273612976	28.629440308	44.441318512	TYR	403	NP	N	-0.400
HN	69.236442566	29.602100372	44.664360046	TYR	403	H	H	0.250
CA	70.461997986	28.059539795	43.821399689	TYR	403	CT	C	0.050
HA	70.431869507	26.981279373	43.990211487	TYR	403	HA	H	0.050
C	71.700813293	28.628929138	44.536510468	TYR	403	C	C	0.600
O	72.640472412	27.910869598	44.850021362	TYR	403	O	O	-0.550
CB	70.454353333	28.400310516	42.315818787	TYR	403	CT	C	-0.100
HB1	69.418609619	28.548719406	42.012958527	TYR	403	HA	H	0.050
HB2	70.953880310	29.348840714	42.113998413	TYR	403	HA	H	0.050
CG	71.025703430	27.335449219	41.406181335	TYR	403	C6R	C	0.000
CD1	72.004898071	26.433280945	41.823551178	TYR	403	C6R	C	-0.130
HD1	72.405342102	26.473110199	42.825599670	TYR	403	HA	H	0.130
CD2	70.556533813	27.245979309	40.097808838	TYR	403	C6R	C	-0.130
HD2	69.803970337	27.938789368	39.748229980	TYR	403	HA	H	0.130
CE1	72.487396240	25.459110260	40.956760406	TYR	403	C6R	C	-0.130
HE1	73.236488342	24.758579254	41.295860291	TYR	403	HA	H	0.130
CE2	71.039726257	26.277040482	39.228828430	TYR	403	C6R	C	-0.130
HE2	70.659461975	26.219560623	38.219841003	TYR	403	HA	H	0.130
CZ	72.003791809	25.380189896	39.659679413	TYR	403	C6R	C	0.250
OH	72.476646423	24.409559250	38.799598694	TYR	403	OT	O	-0.650

HH	73.247436523	24.753759384	38.360710144	TYR	403	HO	H	0.400
N	71.631408691	29.956270218	44.797351837	ASP	404	NP	N	-0.400
HN	70.861053467	30.517940521	44.497909546	ASP	404	H	H	0.250
CA	72.711120605	30.624639511	45.521011353	ASP	404	CT	C	0.050
HA	73.626106262	30.264390945	45.046909332	ASP	404	HA	H	0.050
C	72.830108643	30.230720520	47.023078918	ASP	404	C	C	0.600
O	73.942916870	30.075569153	47.515930176	ASP	404	O	O	-0.550
CB	72.683341980	32.153759003	45.299949646	ASP	404	CT	C	-0.250
HB1	73.669410706	32.565441132	45.519699097	ASP	404	HA	H	0.050
HB2	72.488456726	32.382438660	44.251651764	ASP	404	HA	H	0.050
CG	71.670463562	32.897598267	46.179660797	ASP	404	C	C	0.350
OD1	71.956863403	33.148258209	47.346870422	ASP	404	OC	O	-0.600
OD2	70.581817627	33.215381622	45.714859009	ASP	404	OC	O	-0.600
N	71.695228577	30.073570251	47.780368805	PRO	405	NX	N	-0.250
CA	71.820610046	29.835599899	49.209289551	PRO	405	CT	C	0.050
HA	72.547492981	30.516590118	49.656078339	PRO	405	HA	H	0.050
C	72.262527466	28.382320404	49.408351898	PRO	405	C	C	0.600
O	71.681579590	27.461639404	48.847671509	PRO	405	O	O	-0.550
CB	70.416938782	30.086450577	49.769390106	PRO	405	CT	C	-0.100
HB1	70.192993164	29.491859436	50.653480530	PRO	405	HA	H	0.050
HB2	70.332382202	31.133239746	50.056968689	PRO	405	HA	H	0.050
CG	69.467231750	29.805040359	48.604240417	PRO	405	CT	C	-0.100
HG1	69.163566589	28.756860733	48.635780334	PRO	405	HA	H	0.050
HG2	68.558998108	30.406549454	48.639770508	PRO	405	HA	H	0.050
CD	70.297561646	30.054950714	47.339469910	PRO	405	CT	C	0.000
HD1	70.131813049	29.222290039	46.667568207	PRO	405	HA	H	0.050
HD2	70.019088745	30.984470367	46.851631165	PRO	405	HA	H	0.050
N	73.332702637	28.242130280	50.213829041	SER	406	NP	N	-0.400
HN	73.710731506	29.053529739	50.655658722	SER	406	H	H	0.250
CA	73.928459167	26.949020386	50.525470734	SER	406	CT	C	0.050
HA	74.593132019	26.682849884	49.702899933	SER	406	HA	H	0.050
C	72.848037720	25.874469757	50.741371155	SER	406	C	C	0.600
O	72.029136658	26.030199051	51.638099670	SER	406	O	O	-0.550
CB	74.683998108	27.128639221	51.852779388	SER	406	CT	C	0.050
HB1	75.086868286	26.181179047	52.226100922	SER	406	HA	H	0.100
HB2	75.539741516	27.790330887	51.710838318	SER	406	HA	H	0.100
OG	73.844970703	27.718509674	52.835578918	SER	406	OT	O	-0.650
HG	72.985397339	27.284269333	52.791301727	SER	406	HO	H	0.400
N	72.935729980	24.821279526	49.893558502	ILE	407	NP	N	-0.400
HN	73.595771790	24.943979263	49.155620575	ILE	407	H	H	0.250
CA	72.136123657	23.585809708	49.841030121	ILE	407	CT	C	0.050
HA	71.538108826	23.679620743	48.934139252	ILE	407	HA	H	0.050
C	71.140769958	23.410770416	51.012531281	ILE	407	C	C	0.600
O	69.942527771	23.231250763	50.822719574	ILE	407	O	O	-0.550
CB	73.102249146	22.382450104	49.703369141	ILE	407	CT	C	-0.050
HB	73.734680176	22.351940155	50.592151642	ILE	407	HA	H	0.050
CG1	74.031669617	22.561309814	48.481529236	ILE	407	CT	C	-0.100
HG11	73.435539246	22.786340714	47.597160339	ILE	407	HA	H	0.050
HG12	74.679443359	23.424249649	48.633628845	ILE	407	HA	H	0.050
CG2	72.351631165	21.041809082	49.639221191	ILE	407	CT	C	-0.150
HG21	71.698753357	20.991010666	48.767341614	ILE	407	HA	H	0.050
HG22	73.045959473	20.205259323	49.595821381	ILE	407	HA	H	0.050
HG23	71.744361877	20.877679825	50.528079987	ILE	407	HA	H	0.050
CD1	74.936203003	21.356830597	48.188709259	ILE	407	CT	C	-0.150
HD11	74.359130859	20.496240616	47.850360870	ILE	407	HA	H	0.050
HD12	75.647186279	21.596950531	47.397850037	ILE	407	HA	H	0.050
HD13	75.503639221	21.068059921	49.073101044	ILE	407	HA	H	0.050
N	71.727790833	23.488779068	52.218429565	ASN	408	NP	N	-0.400
HN	72.724479675	23.589450836	52.206058502	ASN	408	H	H	0.250
CA	71.047172546	23.669330597	53.504238129	ASN	408	CT	C	0.050
HA	70.367408752	22.828130722	53.629600525	ASN	408	HA	H	0.050
C	70.229049683	24.993049622	53.602951050	ASN	408	C	C	0.600

O	70.436393738	25.804719925	54.499610901	ASN	408	O	O	-0.550
CB	72.131439209	23.651510239	54.601890564	ASN	408	CT	C	-0.100
HB1	71.719001770	23.886959076	55.584098816	ASN	408	HA	H	0.050
HB2	72.562500000	22.653360367	54.675498962	ASN	408	HA	H	0.050
CG	73.276329041	24.625429153	54.260089874	ASN	408	C	C	0.550
OD1	74.203956604	24.276479721	53.541469574	ASN	408	O	O	-0.550
ND2	73.142196655	25.855220795	54.762168884	ASN	408	NP	N	-0.600
HD21	73.846336365	26.545780182	54.582790375	ASN	408	H	H	0.300
HD22	72.299827576	26.086559296	55.254920959	ASN	408	H	H	0.300
N	69.275108337	25.130050659	52.668670654	CYS	409	NP	N	-0.350
HN	69.227523804	24.441469193	51.949981689	CYS	409	H	H	0.250
CA	68.332832336	26.239509583	52.614398956	CYS	409	CT	C	0.050
HA	67.879379272	26.331670761	53.599338531	CYS	409	HA	H	0.050
C	67.218421936	25.901809692	51.599460602	CYS	409	C	C	0.550
O	66.541549683	26.791820526	51.095600128	CYS	409	O	O	-0.550
CB	69.050651550	27.555120468	52.230949402	CYS	409	CT	C	0.100
HB1	70.007263184	27.352649689	51.751808167	CYS	409	HA	H	0.050
HB2	68.478782654	28.116340637	51.491470337	CYS	409	HA	H	0.050
SG	69.307128906	28.661169052	53.648880005	CYS	409	ST	S	-0.200
N	67.100830078	24.592340469	51.280708313	THR	410	NP	N	-0.400
HN	67.404907227	23.894399643	51.936538696	THR	410	H	H	0.250
CA	66.341857910	24.169780731	50.099491119	THR	410	CT	C	0.050
HA	65.330726624	24.564439774	50.220760345	THR	410	HA	H	0.050
C	66.242446899	22.630739212	50.049789429	THR	410	C	C	0.600
O	65.236358643	22.067480087	49.641700745	THR	410	O	O	-0.550
CB	66.993469238	24.670970917	48.775108337	THR	410	CT	C	0.150
HB	67.904266357	24.093320847	48.597019196	THR	410	HA	H	0.100
OG1	67.407463074	26.023920059	48.790340424	THR	410	OT	O	-0.650
HG1	66.804466248	26.526350021	49.339241028	THR	410	HO	H	0.400
CG2	66.071571350	24.486930847	47.561241150	THR	410	CT	C	-0.150
HG21	66.564056396	24.814079285	46.645511627	THR	410	HA	H	0.050
HG22	65.792037964	23.442289352	47.422321320	THR	410	HA	H	0.050
HG23	65.152618408	25.062259674	47.674320221	THR	410	HA	H	0.050
N	67.356231689	21.992380142	50.457401276	VAL	411	NP	N	-0.400
HN	68.158218384	22.506380081	50.764091492	VAL	411	H	H	0.250
CA	67.464286804	20.539089203	50.375209808	VAL	411	CT	C	0.050
HA	67.306419373	20.289779663	49.322921753	VAL	411	HA	H	0.050
C	66.384613037	19.833120346	51.224399567	VAL	411	C	C	0.600
O	66.032752991	20.277679443	52.306121826	VAL	411	O	O	-0.550
CB	68.886711121	20.128530502	50.797870636	VAL	411	CT	C	-0.050
HB	69.564659119	20.687959671	50.154098511	VAL	411	HA	H	0.050
CG1	69.211761475	20.497270584	52.254520416	VAL	411	CT	C	-0.150
HG11	69.010536194	21.547500610	52.454330444	VAL	411	HA	H	0.050
HG12	68.611183167	19.916770935	52.955760956	VAL	411	HA	H	0.050
HG13	70.260963440	20.311929703	52.482711792	VAL	411	HA	H	0.050
CG2	69.150146484	18.642139435	50.540309906	VAL	411	CT	C	-0.150
HG21	68.572677612	18.007150650	51.213050842	VAL	411	HA	H	0.050
HG22	68.869499207	18.385690689	49.519920349	VAL	411	HA	H	0.050
HG23	70.203193665	18.398870468	50.678359985	VAL	411	HA	H	0.050
N	65.907562256	18.723499298	50.630771637	GLU	412	NP	N	-0.400
HN	66.254608154	18.554149628	49.707229614	GLU	412	H	H	0.250
CA	64.857788086	17.799850464	51.064918518	GLU	412	CT	C	0.050
HA	64.946228027	17.001260757	50.327888489	GLU	412	HA	H	0.050
C	63.440780640	18.373739243	50.860298157	GLU	412	C	C	0.600
O	62.527980804	17.681930542	50.411090851	GLU	412	O	O	-0.550
CB	65.100830078	17.148740768	52.447010040	GLU	412	CT	C	-0.100
HB1	64.656898499	16.152450562	52.427928925	GLU	412	HA	H	0.050
HB2	66.170921326	16.991050720	52.585830688	GLU	412	HA	H	0.050
CG	64.517036438	17.889650345	53.665058136	GLU	412	CT	C	-0.250
HG1	64.963623047	18.873050690	53.773128510	GLU	412	HA	H	0.050
HG2	63.444538116	18.042079926	53.539009094	GLU	412	HA	H	0.050
CD	64.749023438	17.134979248	54.981021881	GLU	412	C	C	0.350

OE1	63.828350067	17.095619202	55.798938751	GLU	412	OC	O	-0.600
OE2	65.851097107	16.644760132	55.206211090	GLU	412	OC	O	-0.600
N	63.330471039	19.666500092	51.223300934	GLU	413	NP	N	-0.400
HN	64.133201599	20.119440079	51.613418579	GLU	413	H	H	0.250
CA	62.060539246	20.376710892	51.285221100	GLU	413	CT	C	0.050
HA	61.504989624	19.884790421	52.084980011	GLU	413	HA	H	0.050
C	61.259300232	20.241289139	49.972858429	GLU	413	C	C	0.600
O	61.809299469	20.165180206	48.879581451	GLU	413	O	O	-0.550
CB	62.296371460	21.855169296	51.643131256	GLU	413	CT	C	-0.100
HB1	62.420490265	22.435440063	50.727691650	GLU	413	HA	H	0.050
HB2	61.410331726	22.232179642	52.137691498	GLU	413	HA	H	0.050
CG	63.507289886	22.169860840	52.537300110	GLU	413	CT	C	-0.250
HG1	64.416801453	22.027370453	51.964080811	GLU	413	HA	H	0.050
HG2	63.487060547	23.225500107	52.800559998	GLU	413	HA	H	0.050
CD	63.620208740	21.371690750	53.844650269	GLU	413	C	C	0.350
OE1	62.747119904	20.578420639	54.188289642	GLU	413	OC	O	-0.600
OE2	64.598937988	21.549539566	54.562301636	GLU	413	OC	O	-0.600
N	59.929031372	20.158769608	50.159458160	MET	414	NP	N	-0.400
HN	59.497600555	20.375520706	51.036998749	MET	414	H	H	0.250
CA	59.076229095	19.561939240	49.143650055	MET	414	CT	C	0.050
HA	59.715129852	19.132749557	48.379390717	MET	414	HA	H	0.050
C	58.191818237	20.614440918	48.461631775	MET	414	C	C	0.600
O	57.411220551	21.332010269	49.081348419	MET	414	O	O	-0.550
CB	58.257678986	18.432350159	49.792350769	MET	414	CT	C	-0.100
HB1	57.549449921	18.836360931	50.514190674	MET	414	HA	H	0.050
HB2	57.662208557	17.934190750	49.029781342	MET	414	HA	H	0.050
CG	59.157051086	17.395610809	50.484790802	MET	414	CT	C	-0.050
HG1	59.783199310	16.894029617	49.748310089	MET	414	HA	H	0.050
HG2	59.844020844	17.861520767	51.191078186	MET	414	HA	H	0.050
SD	58.217189789	16.158899307	51.393169403	MET	414	SE	S	-0.100
CE	59.606391907	15.156729698	51.949390411	MET	414	CT	C	-0.100
HE1	60.279888153	15.758170128	52.560779572	MET	414	HA	H	0.050
HE2	59.256420135	14.305120468	52.532539368	MET	414	HA	H	0.050
HE3	60.179298401	14.796270370	51.094680786	MET	414	HA	H	0.050
N	58.315288544	20.621770859	47.128818512	THR	415	NP	N	-0.400
HN	58.800559998	19.852249146	46.708011627	THR	415	H	H	0.250
CA	57.558921814	21.527040482	46.277530670	THR	415	CT	C	0.050
HA	56.960689545	22.180370331	46.910388947	THR	415	HA	H	0.050
C	56.598068237	20.671850204	45.428440094	THR	415	C	C	0.600
O	56.358451843	19.504079819	45.716030121	THR	415	O	O	-0.550
CB	58.565189362	22.365520477	45.460090637	THR	415	CT	C	0.150
HB	59.247180939	22.869890213	46.155708313	THR	415	HA	H	0.100
OG1	57.908988953	23.327890396	44.654670715	THR	415	OT	O	-0.650
HG1	57.521591187	24.047519684	45.164138794	THR	415	HO	H	0.400
CG2	59.429698944	21.512210846	44.517879486	THR	415	CT	C	-0.150
HG21	58.860569000	21.194169998	43.645168304	THR	415	HA	H	0.050
HG22	60.282058716	22.078540802	44.148941040	THR	415	HA	H	0.050
HG23	59.834499359	20.625259399	45.004779816	THR	415	HA	H	0.050
N	56.074909210	21.306350708	44.375591278	GLU	416	NP	N	-0.400
HN	56.362270355	22.248659134	44.175048828	GLU	416	H	H	0.250
CA	55.271289825	20.618120193	43.382099152	GLU	416	CT	C	0.050
HA	55.839458466	19.731760025	43.091400146	GLU	416	HA	H	0.050
C	55.231498718	21.560779572	42.180091858	GLU	416	C	C	0.600
O	55.477828979	22.754610062	42.309268951	GLU	416	O	O	-0.550
CB	53.887950897	20.200159073	43.924240112	GLU	416	CT	C	-0.100
HB1	53.344829559	19.651620865	43.154571533	GLU	416	HA	H	0.050
HB2	54.038730621	19.480989456	44.728599548	GLU	416	HA	H	0.050
CG	53.020519257	21.353530884	44.451938629	GLU	416	CT	C	-0.250
HG1	53.572010040	21.915239334	45.201679230	GLU	416	HA	H	0.050
HG2	52.782230377	22.058029175	43.656108856	GLU	416	HA	H	0.050
CD	51.709148407	20.811660767	45.054439545	GLU	416	C	C	0.350
OE1	50.825958252	20.406829834	44.305858612	GLU	416	OC	O	-0.600

OE2	51.575321198	20.791280746	46.277500153	GLU	416	OC	O	-0.600
N	55.005699158	20.958530426	41.007961273	ALA	417	NP	N	-0.400
HN	54.696128845	20.005439758	40.989101410	ALA	417	H	H	0.250
CA	55.349220276	21.630739212	39.768959045	ALA	417	CT	C	0.050
HA	54.951461792	22.646780014	39.805809021	ALA	417	HA	H	0.050
C	54.661991119	20.865230560	38.632499695	ALA	417	C	C	0.600
O	53.585861206	20.307500839	38.790069580	ALA	417	O	O	-0.550
CB	56.890598297	21.614139557	39.642910004	ALA	417	CT	C	-0.150
HB1	57.355899811	22.055889130	40.522109985	ALA	417	HA	H	0.050
HB2	57.274028778	20.595220566	39.563320160	ALA	417	HA	H	0.050
HB3	57.256401062	22.174829483	38.785060883	ALA	417	HA	H	0.050
N	55.381278992	20.832609177	37.508228302	VAL	418	NP	N	-0.400
HN	56.285511017	21.255159378	37.496170044	VAL	418	H	H	0.250
CA	55.141078949	19.918909073	36.412220001	VAL	418	CT	C	0.050
HA	54.214809418	19.368700027	36.583881378	VAL	418	HA	H	0.050
C	56.355949402	19.011169434	36.495849609	VAL	418	C	C	0.600
O	57.394588470	19.461330414	36.969081879	VAL	418	O	O	-0.550
CB	55.136810303	20.706809998	35.087799072	VAL	418	CT	C	-0.050
HB	54.865421295	20.020469666	34.283748627	VAL	418	HA	H	0.050
CG1	54.061901093	21.807830811	35.114780426	VAL	418	CT	C	-0.150
HG11	54.132820129	22.448730469	35.990768433	VAL	418	HA	H	0.050
HG12	54.122081757	22.460969925	34.249061584	VAL	418	HA	H	0.050
HG13	53.068309784	21.363449097	35.115898132	VAL	418	HA	H	0.050
CG2	56.534881592	21.259260178	34.739398956	VAL	418	CT	C	-0.150
HG21	57.022689819	21.739009857	35.584320068	VAL	418	HA	H	0.050
HG22	57.200241089	20.465890884	34.398349762	VAL	418	HA	H	0.050
HG23	56.490089417	21.983589172	33.940029144	VAL	418	HA	H	0.050
N	56.232509613	17.755210876	36.038089752	GLU	419	NP	N	-0.400
HN	55.399761200	17.379709244	35.633899689	GLU	419	H	H	0.250
CA	57.436439514	16.948009491	36.152801514	GLU	419	CT	C	0.050
HA	57.851451874	17.135620117	37.136768341	GLU	419	HA	H	0.050
C	58.489780426	17.362230301	35.111480713	GLU	419	C	C	0.600
O	59.691818237	17.338859558	35.354370117	GLU	419	O	O	-0.550
CB	57.128658295	15.460160255	36.139339447	GLU	419	CT	C	-0.100
HB1	58.037719727	14.995280266	36.513748169	GLU	419	HA	H	0.050
HB2	56.355861664	15.229410172	36.872219086	GLU	419	HA	H	0.050
CG	56.750820160	14.826660156	34.792190552	GLU	419	CT	C	-0.250
HG1	55.668941498	14.757740021	34.674659729	GLU	419	HA	H	0.050
HG2	57.127079010	15.383600235	33.937850952	GLU	419	HA	H	0.050
CD	57.360530853	13.424249649	34.763900757	GLU	419	C	C	0.350
OE1	57.131950378	12.684350014	35.716461182	GLU	419	OC	O	-0.600
OE2	58.083160400	13.101180077	33.824138641	GLU	419	OC	O	-0.600
N	57.931568146	17.766139984	33.950958252	GLY	420	NP	N	-0.400
HN	56.934299469	17.777469635	33.899860382	GLY	420	H	H	0.250
CA	58.629909515	17.776969910	32.674049377	GLY	420	CT	C	0.000
HA1	59.058338165	16.790950775	32.542991638	GLY	420	HA	H	0.050
HA2	57.858398438	17.909130096	31.921150208	GLY	420	HA	H	0.050
C	59.732120514	18.824699402	32.473838806	GLY	420	C	C	0.600
O	60.085620880	19.139640808	31.342069626	GLY	420	O	O	-0.550
N	60.268089294	19.309959412	33.602649689	HIS	421	NP	N	-0.400
HN	59.877529144	19.011669159	34.470718384	HIS	421	H	H	0.250
CA	61.569198608	19.952239990	33.629821777	HIS	421	CT	C	0.050
HA	61.971530914	19.992450714	32.614971161	HIS	421	HA	H	0.050
C	62.497558594	19.019939423	34.416000366	HIS	421	C	C	0.600
O	62.977748871	18.025999069	33.887771606	HIS	421	O	O	-0.550
CB	61.438270569	21.374710083	34.199260712	HIS	421	CT	C	-0.100
HB1	60.849559784	21.395679474	35.116870880	HIS	421	HA	H	0.050
HB2	62.418369293	21.797019958	34.420608521	HIS	421	HA	H	0.050
CG	60.782821655	22.228149414	33.140800476	HIS	421	C5R	C	0.100
ND1	61.369121552	22.499490738	31.958730698	HIS	421	N5R	N	-0.400
HD1	62.277030945	22.218769073	31.696180344	HIS	421	H	H	0.300
CD2	59.515869141	22.829040527	33.156608582	HIS	421	C5R	C	0.000

HD2	58.801490784	22.795070648	33.964809418	HIS	421	HA	H	0.100
CE1	60.486419678	23.235160828	31.267759323	HIS	421	C5R	C	0.200
HE1	60.651409149	23.591709137	30.262420654	HIS	421	HA	H	0.100
NE2	59.359169006	23.453830719	31.966360092	HIS	421	N5R	N	-0.400
N	62.714851379	19.373929977	35.697559357	ILE	422	NP	N	-0.400
HN	62.247161865	20.160949707	36.097629547	ILE	422	H	H	0.250
CA	63.732139587	18.699510574	36.502490997	ILE	422	CT	C	0.050
HA	64.247550964	17.975690842	35.870048523	ILE	422	HA	H	0.050
C	63.047679901	17.885330200	37.637760162	ILE	422	C	C	0.600
O	63.680431366	17.475309372	38.603908539	ILE	422	O	O	-0.550
CB	64.775657654	19.760730743	36.957401276	ILE	422	CT	C	-0.050
HB	64.280601501	20.440830231	37.647789001	ILE	422	HA	H	0.050
CG1	65.276786804	20.617620468	35.766658783	ILE	422	CT	C	-0.100
HG11	65.821487427	19.991319656	35.059291840	ILE	422	HA	H	0.050
HG12	64.442687988	21.034999847	35.205608368	ILE	422	HA	H	0.050
CG2	65.981689453	19.138040543	37.687530518	ILE	422	CT	C	-0.150
HG21	65.688499451	18.642059326	38.608768463	ILE	422	HA	H	0.050
HG22	66.498001099	18.413829803	37.057411194	ILE	422	HA	H	0.050
HG23	66.702873230	19.895219803	37.989868164	ILE	422	HA	H	0.050
CD1	66.147148132	21.811189651	36.181659698	ILE	422	CT	C	-0.150
HD11	65.649322510	22.410339355	36.944419861	ILE	422	HA	H	0.050
HD12	67.112716675	21.496049881	36.575309753	ILE	422	HA	H	0.050
HD13	66.336257935	22.456140518	35.324691772	ILE	422	HA	H	0.050
N	61.735580444	17.623519897	37.436080933	THR	423	NP	N	-0.400
HN	61.306461334	17.808900833	36.549331665	THR	423	H	H	0.250
CA	60.893310547	16.938909531	38.419551849	THR	423	CT	C	0.050
HA	61.497978210	16.690700531	39.286270142	THR	423	HA	H	0.050
C	60.461238861	15.556529999	37.860641479	THR	423	C	C	0.600
O	60.920391083	15.111820221	36.813659668	THR	423	O	O	-0.550
CB	59.780448914	17.948549271	38.818630219	THR	423	CT	C	0.150
HB	59.326931000	18.372089386	37.919921875	THR	423	HA	H	0.100
OG1	60.319141388	19.014280319	39.574680328	THR	423	OT	O	-0.650
HG1	61.071891785	19.433099747	39.144710541	THR	423	HO	H	0.400
CG2	58.664989471	17.425100327	39.736568451	THR	423	CT	C	-0.150
HG21	58.050781250	18.252069473	40.094371796	THR	423	HA	H	0.050
HG22	57.981838226	16.743339539	39.235061646	THR	423	HA	H	0.050
HG23	59.077648163	16.922040939	40.611099243	THR	423	HA	H	0.050
N	59.621749878	14.871850014	38.658351898	THR	424	NP	N	-0.400
HN	59.201339722	15.304900169	39.454940796	THR	424	H	H	0.250
CA	59.187648773	13.503020287	38.405570984	THR	424	CT	C	0.050
HA	59.257038116	13.308429718	37.334121704	THR	424	HA	H	0.050
C	57.705829620	13.425649643	38.826850891	THR	424	C	C	0.600
O	57.070369720	14.447380066	39.055328369	THR	424	O	O	-0.550
CB	60.101459503	12.541029930	39.205299377	THR	424	CT	C	0.150
HB	61.115680695	12.692480087	38.828048706	THR	424	HA	H	0.100
OG1	59.725631714	11.195710182	38.950099945	THR	424	OT	O	-0.650
HG1	60.296958923	10.578729630	39.396308899	THR	424	HO	H	0.400
CG2	60.102359772	12.838029861	40.717929840	THR	424	CT	C	-0.150
HG21	60.762290955	12.165369987	41.265361786	THR	424	HA	H	0.050
HG22	60.446029663	13.852089882	40.923770905	THR	424	HA	H	0.050
HG23	59.103778839	12.742639542	41.144081116	THR	424	HA	H	0.050
N	57.241580963	12.168919563	38.963821411	GLU	425	NP	N	-0.400
HN	57.896591187	11.467249870	38.674510956	GLU	425	H	H	0.250
CA	56.012950897	11.751589775	39.636581421	GLU	425	CT	C	0.050
HA	56.360279083	10.923150063	40.251701355	GLU	425	HA	H	0.050
C	55.007019043	11.144459724	38.638820648	GLU	425	C	C	0.600
O	54.286838531	10.208290100	38.965518951	GLU	425	O	O	-0.550
CB	55.395248413	12.807350159	40.578678131	GLU	425	CT	C	-0.100
HB1	56.183551788	13.360460281	41.093040466	GLU	425	HA	H	0.050
HB2	54.856349945	13.546600342	39.994251251	GLU	425	HA	H	0.050
CG	54.471111298	12.203780174	41.649131775	GLU	425	CT	C	-0.250
HG1	53.914199829	12.993619919	42.153808594	GLU	425	HA	H	0.050

HG2	53.736831665	11.533510208	41.202121735	GLU	425	HA	H	0.050
CD	55.297611237	11.449790001	42.701858521	GLU	425	C	C	0.350
OE1	55.927448273	12.094790459	43.531860352	GLU	425	OC	O	-0.600
OE2	55.302150726	10.221940041	42.704120636	GLU	425	OC	O	-0.600
N	55.024799347	11.647859573	37.383941650	ILE	426	NP	N	-0.350
HN	55.632911682	12.407810211	37.134201050	ILE	426	H	H	0.250
CA	54.344699860	10.874389648	36.338211060	ILE	426	CT	C	0.050
HA	53.364459991	10.587670326	36.724098206	ILE	426	HA	H	0.050
C	55.178459167	9.604700089	36.098789215	ILE	426	C	C	0.550
O	54.716480255	8.473150253	36.196098328	ILE	426	O	O	-0.550
CB	54.168079376	11.695280075	35.052219391	ILE	426	CT	C	-0.050
HB	55.116401672	11.894490242	34.556991577	ILE	426	HA	H	0.050
CG	53.190330505	11.065449715	34.057170868	ILE	426	CT	C	-0.150
CG1	51.237060547	22.141189575	36.957218170	ILE	426	CT	C	-0.100
HG1	52.182849884	11.013790131	34.470439911	ILE	426	HA	H	0.050
HG11	51.555030823	21.966070175	37.983749390	ILE	426	HA	H	0.050
HG12	51.220001221	21.186870575	36.435440063	ILE	426	HA	H	0.050
HG2	53.148380280	11.655440331	33.144371033	ILE	426	HA	H	0.050
HG3	53.499130249	10.056369781	33.781791687	ILE	426	HA	H	0.050
CD1	49.874858856	22.833019257	36.909439087	ILE	426	CT	C	-0.150
HD1	49.661289215	23.190950394	35.902969360	ILE	426	HA	H	0.050
HD2	49.081741333	22.153709412	37.214721680	ILE	426	HA	H	0.050
HD3	49.843410492	23.686479568	37.585491180	ILE	426	HA	H	0.050
N	56.483001709	9.890080452	35.944591522	VAL	427	NP	N	-0.400
HN	56.754360199	10.844169617	35.807178497	VAL	427	H	H	0.250
CA	57.520530701	8.873109818	35.940521240	VAL	427	CT	C	0.050
HA	57.124099731	8.032859802	35.372261047	VAL	427	HA	H	0.050
C	57.819961548	8.357970238	37.369731903	VAL	427	C	C	0.600
O	58.950000763	8.039950371	37.711990356	VAL	427	O	O	-0.550
CB	58.774681091	9.417519569	35.222549438	VAL	427	CT	C	-0.050
HB	59.469959259	8.589909554	35.112739563	VAL	427	HA	H	0.050
CG1	58.451900482	9.898799896	33.798580170	VAL	427	CT	C	-0.150
HG11	57.691959381	10.677490234	33.790679932	VAL	427	HA	H	0.050
HG12	59.337070465	10.298100471	33.304039001	VAL	427	HA	H	0.050
HG13	58.084190369	9.086359978	33.177268982	VAL	427	HA	H	0.050
CG2	59.511489868	10.501999855	36.024768829	VAL	427	CT	C	-0.150
HG21	58.824920654	11.184080124	36.517379761	VAL	427	HA	H	0.050
HG22	60.131969452	10.051289558	36.797309875	VAL	427	HA	H	0.050
HG23	60.168689728	11.097720146	35.395469666	VAL	427	HA	H	0.050
N	56.733760834	8.224430084	38.154880524	MET	428	NP	N	-0.400
HN	55.866889954	8.662750244	37.927169800	MET	428	H	H	0.250
CA	56.684638977	7.230209827	39.211608887	MET	428	CT	C	0.050
HA	57.681610107	7.141149998	39.647590637	MET	428	HA	H	0.050
C	56.283538818	5.890999794	38.559230804	MET	428	C	C	0.600
O	56.816688538	4.833040237	38.865608215	MET	428	O	O	-0.550
CB	55.669071198	7.697899818	40.269088745	MET	428	CT	C	-0.100
HB1	55.892311096	8.732999802	40.521549225	MET	428	HA	H	0.050
HB2	54.660079956	7.724639893	39.860809326	MET	428	HA	H	0.050
CG	55.695739746	6.886119843	41.570259094	MET	428	CT	C	-0.050
HG1	56.714889526	6.773340225	41.937068939	MET	428	HA	H	0.050
HG2	55.157749176	7.433549881	42.345699310	MET	428	HA	H	0.050
SD	54.946571350	5.254680157	41.401679993	MET	428	SE	S	-0.100
CE	53.216228485	5.743440151	41.486671448	MET	428	CT	C	-0.100
HE1	52.974178314	6.396059990	40.649089813	MET	428	HA	H	0.050
HE2	52.566570282	4.869160175	41.460781097	MET	428	HA	H	0.050
HE3	53.027599335	6.297790051	42.405830383	MET	428	HA	H	0.050
N	55.332698822	6.020030022	37.606811523	LEU	429	NP	N	-0.400
HN	54.972118378	6.924479961	37.366691589	LEU	429	H	H	0.250
CA	54.807891846	4.857649803	36.901870728	LEU	429	CT	C	0.050
HA	54.659988403	4.064430237	37.636108398	LEU	429	HA	H	0.050
C	55.829898834	4.346970081	35.868938446	LEU	429	C	C	0.600
O	56.203891754	3.181999922	35.847141266	LEU	429	O	O	-0.550

CB	53.475440979	5.212510109	36.205589294	LEU	429	CT	C	-0.100
HB1	53.631069183	6.010819912	35.477088928	LEU	429	HA	H	0.050
HB2	53.160881042	4.344639778	35.623600006	LEU	429	HA	H	0.050
CG	52.300941467	5.597829819	37.133678436	LEU	429	CT	C	-0.050
HG	51.398860931	5.515429974	36.525669098	LEU	429	HA	H	0.050
CD1	52.126731873	4.627580166	38.308948517	LEU	429	CT	C	-0.150
HD11	52.023750305	3.600280046	37.959358215	LEU	429	HA	H	0.050
HD12	52.978031158	4.666570187	38.986980438	LEU	429	HA	H	0.050
HD13	51.236198425	4.873770237	38.888549805	LEU	429	HA	H	0.050
CD2	52.340309143	7.057720184	37.609241486	LEU	429	CT	C	-0.150
HD21	52.419349670	7.744900227	36.767078400	LEU	429	HA	H	0.050
HD22	51.427150726	7.310029984	38.147140503	LEU	429	HA	H	0.050
HD23	53.170341492	7.253809929	38.283248901	LEU	429	HA	H	0.050
N	56.260021210	5.289539814	35.012039185	ASN	430	NP	N	-0.400
HN	55.858299255	6.208849907	35.070690155	ASN	430	H	H	0.250
CA	57.136409760	4.967959881	33.879261017	ASN	430	CT	C	0.050
HA	56.503639221	4.377160072	33.214981079	ASN	430	HA	H	0.050
C	58.344741821	4.053170204	34.234580994	ASN	430	C	C	0.600
O	58.543460846	3.028290033	33.585350037	ASN	430	O	O	-0.550
CB	57.566249847	6.235680103	33.113090515	ASN	430	CT	C	-0.100
HB1	58.211868286	6.867680073	33.716850281	ASN	430	HA	H	0.050
HB2	58.139728546	5.970149994	32.224208832	ASN	430	HA	H	0.050
CG	56.339950562	7.067540169	32.697788239	ASN	430	C	C	0.550
OD1	55.512500763	7.429560184	33.521671295	ASN	430	O	O	-0.550
ND2	56.250778198	7.344560146	31.396610260	ASN	430	NP	N	-0.600
HD21	55.473041534	7.875740051	31.067480087	ASN	430	H	H	0.300
HD22	56.951438904	7.049870014	30.740709305	ASN	430	H	H	0.300
N	59.160331726	4.408160210	35.276161194	PRO	431	NX	N	-0.250
CA	60.307140350	3.572900057	35.629051208	PRO	431	CT	C	0.050
HA	60.907001495	3.401560068	34.741249084	PRO	431	HA	H	0.050
C	59.972648621	2.205909967	36.251960754	PRO	431	C	C	0.600
O	60.843578339	1.358039975	36.399429321	PRO	431	O	O	-0.550
CB	61.105930328	4.412529945	36.630428314	PRO	431	CT	C	-0.100
HB1	61.593418121	3.827559948	37.411048889	PRO	431	HA	H	0.050
HB2	61.880100250	4.962240219	36.098449707	PRO	431	HA	H	0.050
CG	60.103088379	5.402180195	37.206901550	PRO	431	CT	C	-0.100
HG1	59.603279114	4.961100101	38.070831299	PRO	431	HA	H	0.050
HG2	60.583808899	6.322999954	37.536338806	PRO	431	HA	H	0.050
CD	59.082469940	5.618989944	36.089630127	PRO	431	CT	C	0.000
HD1	58.099121094	5.780310154	36.515098572	PRO	431	HA	H	0.050
HD2	59.366409302	6.477719784	35.487758636	PRO	431	HA	H	0.050
N	58.675891876	1.997490048	36.566909790	ALA	432	NP	N	-0.400
HN	57.982021332	2.708669901	36.430698395	ALA	432	H	H	0.250
CA	58.265308380	0.711430013	37.132240295	ALA	432	CT	C	0.050
HA	58.830509186	0.584609985	38.056980133	ALA	432	HA	H	0.050
C	58.607429504	-0.460240006	36.188720703	ALA	432	C	C	0.600
O	58.782581329	-1.597390056	36.607898712	ALA	432	O	O	-0.550
CB	56.763481140	0.728850007	37.436920166	ALA	432	CT	C	-0.150
HB1	56.503589630	1.577600002	38.070709229	ALA	432	HA	H	0.050
HB2	56.170978546	0.801649988	36.524288177	ALA	432	HA	H	0.050
HB3	56.459201813	-0.180140004	37.956829071	ALA	432	HA	H	0.050
N	58.735099792	-0.099990003	34.896198273	ASN	433	NP	N	-0.400
HN	58.537101746	0.851090014	34.657958984	ASN	433	H	H	0.250
CA	59.196269989	-1.030889988	33.870578766	ASN	433	CT	C	0.050
HA	58.702541351	-1.990550041	34.038520813	ASN	433	HA	H	0.050
C	60.727748871	-1.227769971	33.954010010	ASN	433	C	C	0.600
O	61.448650360	-0.945190012	33.005748749	ASN	433	O	O	-0.550
CB	58.834598541	-0.467739999	32.482688904	ASN	433	CT	C	-0.100
HB1	59.324478149	0.492460012	32.312500000	ASN	433	HA	H	0.050
HB2	59.180850983	-1.142670035	31.698980331	ASN	433	HA	H	0.050
CG	57.320861816	-0.302740008	32.313278198	ASN	433	C	C	0.550
OD1	56.605060577	-1.239809990	31.995470047	ASN	433	O	O	-0.550

ND2	56.872081757	0.938210011	32.538700104	ASN	433	NP	N	-0.600
HD21	55.891960144	1.101989985	32.446979523	ASN	433	H	H	0.300
HD22	57.478458405	1.694059968	32.798038483	ASN	433	H	H	0.300
N	61.176280975	-1.717659950	35.129291534	THR	434	NP	N	-0.400
HN	60.493110657	-1.908089995	35.835491180	THR	434	H	H	0.250
CA	62.573970795	-2.095380068	35.348339081	THR	434	CT	C	0.050
HA	62.665260315	-2.240339994	36.424938202	THR	434	HA	H	0.050
C	63.558490753	-0.975839972	34.933990479	THR	434	C	C	0.600
O	64.476058960	-1.175150037	34.147651672	THR	434	O	O	-0.550
CB	62.844589233	-3.415649891	34.595798492	THR	434	CT	C	0.150
HB	62.970081329	-3.188999891	33.533489227	THR	434	HA	H	0.100
OG1	61.721038818	-4.274219990	34.679851532	THR	434	OT	O	-0.650
HG1	61.533908844	-4.464819908	35.591159821	THR	434	HO	H	0.400
CG2	64.104537964	-4.147900105	35.084339142	THR	434	CT	C	-0.150
HG21	64.233581543	-5.090809822	34.552829742	THR	434	HA	H	0.050
HG22	64.998619080	-3.549750090	34.907299042	THR	434	HA	H	0.050
HG23	64.063247681	-4.366670132	36.151550293	THR	434	HA	H	0.050
N	63.281539917	0.214819998	35.489780426	ARG	435	NP	N	-0.400
HN	62.569038391	0.337469995	36.188838959	ARG	435	H	H	0.250
CA	63.855091095	1.444669962	34.966621399	ARG	435	CT	C	0.050
HA	64.882270813	1.248890042	34.653129578	ARG	435	HA	H	0.050
C	63.881679535	2.432909966	36.149650574	ARG	435	C	C	0.600
O	63.436210632	2.098010063	37.239391327	ARG	435	O	O	-0.550
CB	62.949748993	1.806550026	33.769798279	ARG	435	CT	C	-0.100
HB1	63.093490601	1.041859984	33.004878998	ARG	435	HA	H	0.050
HB2	61.909599304	1.692379951	34.069461823	ARG	435	HA	H	0.050
CG	63.139118195	3.168479919	33.097740173	ARG	435	CT	C	-0.100
HG1	63.025169373	3.963030100	33.830261230	ARG	435	HA	H	0.050
HG2	64.147758484	3.247669935	32.690910339	ARG	435	HA	H	0.050
CD	62.094268799	3.350090027	31.987300873	ARG	435	CT	C	0.000
HD1	62.208660126	2.595870018	31.206809998	ARG	435	HA	H	0.050
HD2	61.085918427	3.277220011	32.400058746	ARG	435	HA	H	0.050
NE	62.239921570	4.653960228	31.354249954	ARG	435	NP	N	-0.400
HE	63.087650299	5.165740013	31.506019592	ARG	435	H	H	0.300
CZ	61.280780792	5.202449799	30.574930191	ARG	435	C	C	0.500
NH1	60.136398315	4.574059963	30.330440521	ARG	435	NC	N	-0.450
HH11	59.972370148	3.642280102	30.647180557	ARG	435	HC	H	0.350
HH12	59.408241272	5.068009853	29.825939178	ARG	435	HC	H	0.350
NH2	61.476360321	6.396399975	30.049360275	ARG	435	NC	N	-0.450
HH21	62.234428406	7.002190113	30.325180054	ARG	435	HC	H	0.350
HH22	60.825660706	6.746449947	29.361509323	ARG	435	HC	H	0.350
N	64.442039490	3.636909962	35.926139832	SER	436	NP	N	-0.400
HN	64.809150696	3.912379980	35.038078308	SER	436	H	H	0.250
CA	64.562812805	4.584070206	37.030609131	SER	436	CT	C	0.050
HA	63.707500458	4.462870121	37.696449280	SER	436	HA	H	0.050
C	64.522140503	6.005010128	36.466571808	SER	436	C	C	0.600
O	64.428001404	6.212059975	35.261409760	SER	436	O	O	-0.550
CB	65.873748779	4.308579922	37.790691376	SER	436	CT	C	0.050
HB1	65.941802979	4.899290085	38.711990356	SER	436	HA	H	0.100
HB2	65.881622314	3.267790079	38.118831635	SER	436	HA	H	0.100
OG	67.024017334	4.499599934	36.981449127	SER	436	OT	O	-0.650
HG	67.182853699	5.439509869	36.842258453	SER	436	HO	H	0.400
N	64.639793396	6.955729961	37.411731720	ILE	437	NP	N	-0.400
HN	64.640983582	6.697519779	38.375160217	ILE	437	H	H	0.250
CA	65.029609680	8.317580223	37.068408966	ILE	437	CT	C	0.050
HA	64.477043152	8.607720375	36.177600861	ILE	437	HA	H	0.050
C	66.532630920	8.243129730	36.727111816	ILE	437	C	C	0.600
O	67.176132202	7.239299774	37.023719788	ILE	437	O	O	-0.550
CB	64.709220886	9.275279999	38.247180939	ILE	437	CT	C	-0.050
HB	65.447822571	9.104669571	39.032798767	ILE	437	HA	H	0.050
CG1	63.315158844	9.011590004	38.868179321	ILE	437	CT	C	-0.100
HG11	62.530910492	9.243709564	38.146018982	ILE	437	HA	H	0.050

HG12	63.192699432	7.957789898	39.113590240	ILE	437	HA	H	0.050
CG2	64.806770325	10.745140076	37.806159973	ILE	437	CT	C	-0.150
HG21	65.814666748	11.027050018	37.506259918	ILE	437	HA	H	0.050
HG22	64.134086609	10.936209679	36.970359802	ILE	437	HA	H	0.050
HG23	64.532112122	11.423640251	38.609489441	ILE	437	HA	H	0.050
CD1	63.077579498	9.784609795	40.174060822	ILE	437	CT	C	-0.150
HD11	63.907730103	9.638050079	40.864868164	ILE	437	HA	H	0.050
HD12	62.966259003	10.855959892	40.008689880	ILE	437	HA	H	0.050
HD13	62.180530548	9.430350304	40.681339264	ILE	437	HA	H	0.050
N	67.044059753	9.303000450	36.072559357	SER	438	NP	N	-0.400
HN	66.496520996	10.127719879	35.917259216	SER	438	H	H	0.250
CA	68.466880798	9.351759911	35.752281189	SER	438	CT	C	0.050
HA	68.967933655	8.472680092	36.161979675	SER	438	HA	H	0.050
C	69.055107117	10.589639664	36.443370819	SER	438	C	C	0.600
O	68.450721741	11.156760216	37.343280792	SER	438	O	O	-0.550
CB	68.627990723	9.375820160	34.220260620	SER	438	CT	C	0.050
HB1	69.665809631	9.175609589	33.949710846	SER	438	HA	H	0.100
HB2	68.050697327	8.569140434	33.756629944	SER	438	HA	H	0.100
OG	68.276222229	10.615920067	33.633808136	SER	438	OT	O	-0.650
HG	67.383659363	10.867580414	33.894119263	SER	438	HO	H	0.400
N	70.232788086	11.006999969	35.930389404	ASN	439	NP	N	-0.400
HN	70.671630859	10.464429855	35.216941833	ASN	439	H	H	0.250
CA	70.802459717	12.296250343	36.325649261	ASN	439	CT	C	0.050
HA	70.801750183	12.321479797	37.417541504	ASN	439	HA	H	0.050
C	69.921791077	13.451889992	35.795108795	ASN	439	C	C	0.600
O	70.006202698	14.581939697	36.256271362	ASN	439	O	O	-0.550
CB	72.241813660	12.392780304	35.778629303	ASN	439	CT	C	-0.100
HB1	72.754508972	11.444800377	35.941791534	ASN	439	HA	H	0.050
HB2	72.244750977	12.562199593	34.701290131	ASN	439	HA	H	0.050
CG	73.104698181	13.474479675	36.456600189	ASN	439	C	C	0.550
OD1	74.095222473	13.179169655	37.112178802	ASN	439	O	O	-0.550
ND2	72.736282349	14.736900330	36.220619202	ASN	439	NP	N	-0.600
HD21	73.363563538	15.463379860	36.501731873	ASN	439	H	H	0.300
HD22	71.852790833	14.983309746	35.815738678	ASN	439	H	H	0.300
N	69.085769653	13.097120285	34.797901154	MET	440	NP	N	-0.400
HN	69.086730957	12.165080070	34.429389954	MET	440	H	H	0.250
CA	68.024383545	13.971130371	34.322620392	MET	440	CT	C	0.050
HA	68.155899048	14.960849762	34.765171051	MET	440	HA	H	0.050
C	66.691108704	13.365440369	34.794948578	MET	440	C	C	0.600
O	66.453216553	12.163450241	34.681541443	MET	440	O	O	-0.550
CB	68.105079651	14.055020332	32.788120270	MET	440	CT	C	-0.100
HB1	69.120109558	14.333979607	32.504730225	MET	440	HA	H	0.050
HB2	67.932640076	13.069390297	32.353740692	MET	440	HA	H	0.050
CG	67.131118774	15.061579704	32.158679962	MET	440	CT	C	-0.050
HG1	67.258079529	15.041819572	31.076389313	MET	440	HA	H	0.050
HG2	66.100349426	14.776969910	32.355701447	MET	440	HA	H	0.050
SD	67.449653625	16.745349884	32.728370667	MET	440	SE	S	-0.100
CE	65.819648743	17.173410416	33.373409271	MET	440	CT	C	-0.100
HE1	65.029350281	16.675689697	32.810951233	MET	440	HA	H	0.050
HE2	65.733612061	16.902530670	34.424579620	MET	440	HA	H	0.050
HE3	65.651626587	18.245859146	33.270030975	MET	440	HA	H	0.050
N	65.856369019	14.263939857	35.339069366	THR	441	NP	N	-0.400
HN	66.126197815	15.204039574	35.551460266	THR	441	H	H	0.250
CA	64.497100830	13.919859886	35.719711304	THR	441	CT	C	0.050
HA	64.534378052	12.911170006	36.127361298	THR	441	HA	H	0.050
C	63.606468201	13.892919540	34.461608887	THR	441	C	C	0.600
O	64.103813171	13.989720345	33.348831177	THR	441	O	O	-0.550
CB	64.030586243	14.923620224	36.789951324	THR	441	CT	C	0.150
HB	63.216609955	15.528590202	36.377628326	THR	441	HA	H	0.100
OG1	65.111763000	15.787269592	37.109649658	THR	441	OT	O	-0.650
HG1	64.856468201	16.335039139	37.856868744	THR	441	HO	H	0.400
CG2	63.551048279	14.183790207	38.049011230	THR	441	CT	C	-0.150

HG21	64.386169434	13.699190140	38.552108765	THR	441	HA	H	0.050
HG22	63.072418213	14.848910332	38.768428802	THR	441	HA	H	0.050
HG23	62.830348969	13.414190292	37.781471252	THR	441	HA	H	0.050
N	62.285198212	13.716640472	34.696319580	SER	442	NP	N	-0.400
HN	61.917018890	13.852499962	35.620159149	SER	442	H	H	0.250
CA	61.314998627	13.457969666	33.628589630	SER	442	CT	C	0.050
HA	60.509311676	12.939359665	34.144218445	SER	442	HA	H	0.050
C	61.890430450	12.503520012	32.557479858	SER	442	C	C	0.600
O	62.207271576	12.862819672	31.429489136	SER	442	O	O	-0.550
CB	60.802791595	14.780460358	33.035221100	SER	442	CT	C	0.050
HB1	60.508388519	15.464099884	33.838371277	SER	442	HA	H	0.100
HB2	61.609371185	15.276749611	32.491950989	SER	442	HA	H	0.100
OG	59.715011597	14.611399651	32.138050079	SER	442	OT	O	-0.650
HG	59.024238586	14.089269638	32.562610626	SER	442	HO	H	0.400
N	62.051879883	11.260629654	33.038700104	GLN	443	NP	N	-0.400
HN	61.593658447	11.060270309	33.901191711	GLN	443	H	H	0.250
CA	62.980640411	10.302829742	32.446880341	GLN	443	CT	C	0.050
HA	63.860809326	10.871919632	32.139499664	GLN	443	HA	H	0.050
C	62.441650391	9.597539902	31.181880951	GLN	443	C	C	0.600
O	62.821578979	8.462499619	30.897829056	GLN	443	O	O	-0.550
CB	63.399658203	9.303400040	33.548431396	GLN	443	CT	C	-0.100
HB1	64.064071655	8.538000107	33.143840790	GLN	443	HA	H	0.050
HB2	64.006401062	9.857879639	34.265148163	GLN	443	HA	H	0.050
CG	62.240348816	8.648449898	34.332439423	GLN	443	CT	C	-0.100
HG1	62.612670898	8.199179649	35.250820160	GLN	443	HA	H	0.050
HG2	61.508281708	9.380339622	34.655231476	GLN	443	HA	H	0.050
CD	61.517208099	7.548679829	33.550579071	GLN	443	C	C	0.550
OE1	60.544460297	7.769969940	32.846881866	GLN	443	O	O	-0.550
NE2	62.021690369	6.336040020	33.762699127	GLN	443	NP	N	-0.600
HE21	61.544189453	5.545460224	33.387489319	GLN	443	H	H	0.300
HE22	62.866058350	6.234290123	34.293331146	GLN	443	H	H	0.300
N	61.561691284	10.305850029	30.443950653	GLU	444	NP	N	-0.400
HN	61.418411255	11.275139809	30.651039124	GLU	444	H	H	0.250
CA	60.986671448	9.768770218	29.216480255	GLU	444	CT	C	0.050
HA	61.252220154	8.721300125	29.169479370	GLU	444	HA	H	0.050
C	61.660930634	10.392569542	27.997140884	GLU	444	C	C	0.600
O	62.381389618	11.376130104	28.070949554	GLU	444	O	O	-0.550
CB	59.453281403	9.951789856	29.176959991	GLU	444	CT	C	-0.100
HB1	59.185119629	10.891030312	29.663370132	GLU	444	HA	H	0.050
HB2	59.093219757	10.050519943	28.151279449	GLU	444	HA	H	0.050
CG	58.678379059	8.786020279	29.822010040	GLU	444	CT	C	-0.250
HG1	58.972091675	8.675129890	30.866960526	GLU	444	HA	H	0.050
HG2	57.614521027	9.021719933	29.811950684	GLU	444	HA	H	0.050
CD	58.879940033	7.431930065	29.107589722	GLU	444	C	C	0.350
OE1	59.657211304	7.346600056	28.156110764	GLU	444	OC	O	-0.600
OE2	58.317981720	6.432189941	29.548179626	GLU	444	OC	O	-0.600
N	61.374568939	9.732549667	26.859569550	PHE	445	NP	N	-0.400
HN	60.718101501	8.977519989	26.945770264	PHE	445	H	H	0.250
CA	62.080280304	10.002459526	25.605699539	PHE	445	CT	C	0.050
HA	63.142318726	9.909930229	25.839780807	PHE	445	HA	H	0.050
C	61.861171722	11.429860115	25.047479630	PHE	445	C	C	0.600
O	62.480548859	11.823690414	24.059389114	PHE	445	O	O	-0.550
CB	61.702098846	8.933899879	24.562990189	PHE	445	CT	C	-0.100
HB1	62.342361450	9.032039642	23.685350418	PHE	445	HA	H	0.050
HB2	61.898288727	7.939770222	24.966039658	PHE	445	HA	H	0.050
CG	60.259658813	9.009369850	24.127080917	PHE	445	C6R	C	0.000
CD1	59.264369965	8.344440460	24.838090897	PHE	445	C6R	C	-0.130
HD1	59.512668610	7.753890038	25.707809448	PHE	445	HA	H	0.130
CD2	59.901599884	9.747699738	23.002010345	PHE	445	C6R	C	-0.130
HD2	60.658771515	10.271750450	22.437040329	PHE	445	HA	H	0.130
CE1	57.936611176	8.424739838	24.441310883	PHE	445	C6R	C	-0.130
HE1	57.175369263	7.909530163	25.009950638	PHE	445	HA	H	0.130

CE2	58.574748993	9.824410439	22.598209381	PHE	445	C6R	C	-0.130
HE2	58.306838989	10.400670052	21.724760056	PHE	445	HA	H	0.130
CZ	57.590019226	9.165550232	23.320470810	PHE	445	C6R	C	-0.130
HZ	56.555938721	9.230509758	23.013719559	PHE	445	HA	H	0.130
N	60.965469360	12.185509682	25.712209702	VAL	446	NP	N	-0.400
HN	60.479240417	11.811070442	26.500560760	VAL	446	H	H	0.250
CA	60.708938599	13.568710327	25.334409714	VAL	446	CT	C	0.050
HA	61.112438202	13.724140167	24.332759857	VAL	446	HA	H	0.050
C	61.480998993	14.526450157	26.277450562	VAL	446	C	C	0.600
O	61.154300690	15.701860428	26.398269653	VAL	446	O	O	-0.550
CB	59.184051514	13.824870110	25.260480881	VAL	446	CT	C	-0.050
HB	58.780700684	13.847970009	26.269319534	VAL	446	HA	H	0.050
CG1	58.850440979	15.158209801	24.566280365	VAL	446	CT	C	-0.150
HG11	59.325889587	15.222909927	23.587820053	VAL	446	HA	H	0.050
HG12	57.776088715	15.258890152	24.410469055	VAL	446	HA	H	0.050
HG13	59.168689728	16.019439697	25.151540756	VAL	446	HA	H	0.050
CG2	58.445980072	12.689740181	24.533700943	VAL	446	CT	C	-0.150
HG21	58.824989319	12.561820030	23.520349503	VAL	446	HA	H	0.050
HG22	58.538089752	11.737420082	25.056329727	VAL	446	HA	H	0.050
HG23	57.378398895	12.904459953	24.464799881	VAL	446	HA	H	0.050
N	62.592201233	14.021550179	26.866729736	GLU	447	NP	N	-0.400
HN	62.823890686	13.044309616	26.807489395	GLU	447	H	H	0.250
CA	63.481319427	14.839810371	27.710859299	GLU	447	CT	C	0.050
HA	62.826980591	15.352279663	28.411859512	GLU	447	HA	H	0.050
C	64.269439697	15.928830147	26.926570892	GLU	447	C	C	0.600
O	65.330017090	16.397880554	27.332790375	GLU	447	O	O	-0.550
CB	64.408317566	13.918359756	28.535379410	GLU	447	CT	C	-0.100
HB1	64.719360352	14.454640388	29.433219910	GLU	447	HA	H	0.050
HB2	63.817668915	13.084779739	28.913490295	GLU	447	HA	H	0.050
CG	65.682853699	13.367639542	27.853040695	GLU	447	CT	C	-0.250
HG1	66.497848511	14.071649551	28.004959106	GLU	447	HA	H	0.050
HG2	65.992607117	12.449049950	28.352369308	GLU	447	HA	H	0.050
CD	65.540977478	13.073390007	26.353809357	GLU	447	C	C	0.350
OE1	64.729667664	12.247719765	25.957529068	GLU	447	OC	O	-0.600
OE2	66.238502502	13.688909531	25.548019409	GLU	447	OC	O	-0.600
N	63.703830719	16.301549911	25.770029068	LYS	448	NP	N	-0.400
HN	62.818241119	15.938690186	25.507089615	LYS	448	H	H	0.250
CA	64.223640442	17.319349289	24.894239426	LYS	448	CT	C	0.050
HA	65.308326721	17.223300934	24.874769211	LYS	448	HA	H	0.050
C	63.853870392	18.698429108	25.453350067	LYS	448	C	C	0.600
O	64.626602173	19.639110565	25.340349197	LYS	448	O	O	-0.550
CB	63.617980957	17.106599808	23.491590500	LYS	448	CT	C	-0.100
HB1	62.567798615	17.404579163	23.500469208	LYS	448	HA	H	0.050
HB2	64.110229492	17.768869400	22.778110504	LYS	448	HA	H	0.050
CG	63.685821533	15.649609566	22.987480164	LYS	448	CT	C	-0.100
HG1	63.135589600	14.990550041	23.659019470	LYS	448	HA	H	0.050
HG2	63.166149139	15.585880280	22.030740738	LYS	448	HA	H	0.050
CD	65.119613647	15.134440422	22.808069229	LYS	448	CT	C	-0.100
HD1	65.617279053	15.737270355	22.047479630	LYS	448	HA	H	0.050
HD2	65.686889648	15.284230232	23.724309921	LYS	448	HA	H	0.050
CE	65.189933777	13.653699875	22.403030396	LYS	448	CT	C	0.050
HE1	64.597129822	13.464810371	21.506689072	LYS	448	HA	H	0.100
HE2	66.223487854	13.395460129	22.167400360	LYS	448	HA	H	0.100
NZ	64.746192932	12.728899956	23.445600510	LYS	448	NT	N	-0.300
HZ1	63.725360870	12.789050102	23.654859543	LYS	448	HC	H	0.350
HZ2	64.925842285	11.736740112	23.208940506	LYS	448	HC	H	0.350
HZ3	65.223449707	12.907699585	24.362699509	LYS	448	HC	H	0.350
N	62.639381409	18.764160156	26.058750153	LEU	449	NP	N	-0.400
HN	62.094959259	17.928419113	26.163520813	LEU	449	H	H	0.250
CA	62.076099396	20.057630539	26.462160110	LEU	449	CT	C	0.050
HA	61.897991180	20.600849152	25.533599854	LEU	449	HA	H	0.050
C	63.063060760	20.874799728	27.310480118	LEU	449	C	C	0.600

O	63.330818176	22.031360626	27.028770447	LEU	449	O	O	-0.550
CB	60.757408142	19.889039993	27.244789124	LEU	449	CT	C	-0.100
HB1	60.093299866	19.196920395	26.725349426	LEU	449	HA	H	0.050
HB2	60.975109100	19.416030884	28.202650070	LEU	449	HA	H	0.050
CG	60.021080017	21.231069565	27.481220245	LEU	449	CT	C	-0.050
HG	60.746818542	22.000789642	27.745559692	LEU	449	HA	H	0.050
CD1	59.296939850	21.701950073	26.214139938	LEU	449	CT	C	-0.150
HD11	58.527481079	20.992790222	25.909650803	LEU	449	HA	H	0.050
HD12	58.814350128	22.666870117	26.373369217	LEU	449	HA	H	0.050
HD13	59.991901398	21.815879822	25.383420944	LEU	449	HA	H	0.050
CD2	59.048458099	21.156280518	28.662910461	LEU	449	CT	C	-0.150
HD21	59.579341888	20.956680298	29.593420029	LEU	449	HA	H	0.050
HD22	58.514148712	22.097610474	28.795490265	LEU	449	HA	H	0.050
HD23	58.308540344	20.372409821	28.519229889	LEU	449	HA	H	0.050
N	63.574710846	20.196929932	28.351650238	THR	450	NP	N	-0.400
HN	63.261299133	19.259260178	28.489019394	THR	450	H	H	0.250
CA	64.477790833	20.814699173	29.320020676	THR	450	CT	C	0.050
HA	63.882160187	21.578319550	29.820070267	THR	450	HA	H	0.050
C	65.646492004	21.556499481	28.619850159	THR	450	C	C	0.600
O	65.815200806	22.769739151	28.703390121	THR	450	O	O	-0.550
CB	64.921920776	19.727760315	30.343160629	THR	450	CT	C	0.150
HB	64.083580017	19.538480759	31.027650833	THR	450	HA	H	0.100
OG1	66.062278748	20.110589981	31.088819504	THR	450	OT	O	-0.650
HG1	65.847717285	20.876890182	31.638019562	THR	450	HO	H	0.400
CG2	65.266998291	18.359159470	29.732589722	THR	450	CT	C	-0.150
HG21	66.120468140	18.405029297	29.060749054	THR	450	HA	H	0.050
HG22	65.532493591	17.657489777	30.523540497	THR	450	HA	H	0.050
HG23	64.427589417	17.915620804	29.199380875	THR	450	HA	H	0.050
N	66.426086426	20.745149612	27.888439178	LYS	451	NP	N	-0.400
HN	66.156776428	19.788019180	27.823650360	LYS	451	H	H	0.250
CA	67.630867004	21.266649246	27.256999969	LYS	451	CT	C	0.050
HA	68.152191162	21.851470947	28.018209457	LYS	451	HA	H	0.050
C	67.296913147	22.245080948	26.113100052	LYS	451	C	C	0.600
O	68.013481140	23.206529617	25.871570587	LYS	451	O	O	-0.550
CB	68.552513123	20.109479904	26.824069977	LYS	451	CT	C	-0.100
HB1	69.325759888	20.490440369	26.154449463	LYS	451	HA	H	0.050
HB2	69.083938599	19.762109756	27.711040497	LYS	451	HA	H	0.050
CG	67.856086731	18.891010284	26.186759949	LYS	451	CT	C	-0.100
HG1	67.142356873	18.459640503	26.887630463	LYS	451	HA	H	0.050
HG2	67.282966614	19.198919296	25.311050415	LYS	451	HA	H	0.050
CD	68.879966736	17.813320160	25.793630600	LYS	451	CT	C	-0.100
HD1	69.480979919	18.190990448	24.964990616	LYS	451	HA	H	0.050
HD2	69.578361511	17.647380829	26.615299225	LYS	451	HA	H	0.050
CE	68.249107361	16.473560333	25.391170502	LYS	451	CT	C	0.050
HE1	67.476768494	16.617490768	24.635080338	LYS	451	HA	H	0.100
HE2	69.006011963	15.822959900	24.949230194	LYS	451	HA	H	0.100
NZ	67.660797119	15.749659538	26.516950607	LYS	451	NT	N	-0.300
HZ1	66.873908997	16.286329269	26.944110870	LYS	451	HC	H	0.350
HZ2	67.241920471	14.852000237	26.185680389	LYS	451	HC	H	0.350
HZ3	68.357940674	15.534999847	27.254749298	LYS	451	HC	H	0.350
N	66.165130615	21.967020035	25.439260483	ARG	452	NP	N	-0.400
HN	65.609687805	21.177230835	25.703870773	ARG	452	H	H	0.250
CA	65.753952026	22.818260193	24.326459885	ARG	452	CT	C	0.050
HA	66.632438660	22.942560196	23.690340042	ARG	452	HA	H	0.050
C	65.325767517	24.209100723	24.827009201	ARG	452	C	C	0.600
O	65.595596313	25.226490021	24.200180054	ARG	452	O	O	-0.550
CB	64.633537292	22.132110596	23.530269623	ARG	452	CT	C	-0.100
HB1	64.925941467	21.099010468	23.342649460	ARG	452	HA	H	0.050
HB2	63.717521667	22.086650848	24.122350693	ARG	452	HA	H	0.050
CG	64.368530273	22.811019897	22.179349899	ARG	452	CT	C	-0.100
HG1	63.992458344	23.823770523	22.334199905	ARG	452	HA	H	0.050
HG2	65.314949036	22.918350220	21.649150848	ARG	452	HA	H	0.050

CD	63.378688812	22.021799088	21.314060211	ARG	452	CT	C	0.000
HD1	63.637950897	20.964660645	21.238199234	ARG	452	HA	H	0.050
HD2	62.370189667	22.078720093	21.723539352	ARG	452	HA	H	0.050
NE	63.313430786	22.584890366	19.969570160	ARG	452	NP	N	-0.400
HE	62.574829102	23.230949402	19.730089188	ARG	452	H	H	0.300
CZ	64.201988220	22.311590195	18.990339279	ARG	452	C	C	0.500
NH1	65.220916748	21.486610413	19.211109161	ARG	452	NC	N	-0.450
HH11	65.321243286	21.083549500	20.120000839	ARG	452	HC	H	0.350
HH12	65.884506226	21.264400482	18.498270035	ARG	452	HC	H	0.350
NH2	64.039413452	22.886480331	17.807510376	ARG	452	NC	N	-0.450
HH21	63.252761841	23.523860931	17.725160599	ARG	452	HC	H	0.350
HH22	64.629478455	22.737819672	17.018110275	ARG	452	HC	H	0.350
N	64.677993774	24.194059372	26.009010315	LEU	453	NP	N	-0.400
HN	64.482650757	23.318670273	26.451650620	LEU	453	H	H	0.250
CA	64.288002014	25.430770874	26.675189972	LEU	453	CT	C	0.050
HA	63.657211304	25.982440948	25.979080200	LEU	453	HA	H	0.050
C	65.533790588	26.263059616	26.947769165	LEU	453	C	C	0.600
O	65.568023682	27.457069397	26.699100494	LEU	453	O	O	-0.550
CB	63.511531830	25.130819321	27.970460892	LEU	453	CT	C	-0.100
HB1	62.664909363	24.499700546	27.697370529	LEU	453	HA	H	0.050
HB2	64.109771729	24.530899048	28.656679153	LEU	453	HA	H	0.050
CG	62.983310699	26.388950348	28.696149826	LEU	453	CT	C	-0.050
HG	62.664260864	27.103450775	27.936050415	LEU	453	HA	H	0.050
CD1	61.751678467	26.052259445	29.541870117	LEU	453	CT	C	-0.150
HD11	62.012718201	25.344860077	30.324010849	LEU	453	HA	H	0.050
HD12	61.354381561	26.940769196	30.030279160	LEU	453	HA	H	0.050
HD13	60.954559326	25.621170044	28.935749054	LEU	453	HA	H	0.050
CD2	64.039916992	27.061349869	29.595220566	LEU	453	CT	C	-0.150
HD21	64.554237366	26.331069946	30.216459274	LEU	453	HA	H	0.050
HD22	64.790283203	27.610679626	29.030099869	LEU	453	HA	H	0.050
HD23	63.582199097	27.788139343	30.266029358	LEU	453	HA	H	0.050
N	66.568626404	25.545730591	27.418949127	LYS	454	NP	N	-0.400
HN	66.429527283	24.572929382	27.622610092	LYS	454	H	H	0.250
CA	67.846687317	26.181709290	27.721040726	LYS	454	CT	C	0.050
HA	67.619293213	27.159519196	28.152759552	LYS	454	HA	H	0.050
C	68.703506470	26.474700928	26.465290070	LYS	454	C	C	0.600
O	69.909408569	26.662410736	26.557550430	LYS	454	O	O	-0.550
CB	68.571113586	25.341100693	28.784410477	LYS	454	CT	C	-0.100
HB1	68.586692810	24.291839600	28.486600876	LYS	454	HA	H	0.050
HB2	69.611122131	25.657659531	28.876789093	LYS	454	HA	H	0.050
CG	67.877952576	25.516029358	30.142950058	LYS	454	CT	C	-0.100
HG1	67.956901550	26.566139221	30.429939270	LYS	454	HA	H	0.050
HG2	66.810707092	25.312210083	30.040510178	LYS	454	HA	H	0.050
CD	68.426177979	24.637809753	31.274539948	LYS	454	CT	C	-0.100
HD1	68.114608765	23.606750488	31.098520279	LYS	454	HA	H	0.050
HD2	69.516746521	24.643970490	31.277519226	LYS	454	HA	H	0.050
CE	67.893920898	25.145370483	32.621860504	LYS	454	CT	C	0.050
HE1	68.484008789	25.991720200	32.977508545	LYS	454	HA	H	0.100
HE2	66.879592896	25.509750366	32.482769012	LYS	454	HA	H	0.100
NZ	67.799522400	24.172849655	33.701629639	LYS	454	NT	N	-0.300
HZ1	67.201019287	23.380130768	33.377571106	LYS	454	HC	H	0.350
HZ2	68.726181030	23.817150116	34.000438690	LYS	454	HC	H	0.350
HZ3	67.307418823	24.652320862	34.493110657	LYS	454	HC	H	0.350
N	68.010147095	26.609849930	25.311830521	ARG	455	NP	N	-0.400
HN	67.095481873	26.215499878	25.210170746	ARG	455	H	H	0.250
CA	68.514099121	27.493959427	24.261800766	ARG	455	CT	C	0.050
HA	69.553756714	27.221679688	24.071529388	ARG	455	HA	H	0.050
C	68.452697754	28.960409164	24.754560471	ARG	455	C	C	0.600
O	69.290481567	29.788770676	24.426729202	ARG	455	O	O	-0.550
CB	67.659393311	27.313100815	22.991859436	ARG	455	CT	C	-0.100
HB1	67.638038635	26.254409790	22.731769562	ARG	455	HA	H	0.050
HB2	66.625312805	27.584280014	23.204549789	ARG	455	HA	H	0.050

CG	68.179206848	28.112409592	21.781719208	ARG	455	CT	C	-0.100
HG1	68.253288269	29.172769547	22.027439117	ARG	455	HA	H	0.050
HG2	69.195251465	27.785100937	21.558370590	ARG	455	HA	H	0.050
CD	67.311561584	27.944089890	20.526620865	ARG	455	CT	C	0.000
HD1	67.798843384	28.380870819	19.653860092	ARG	455	HA	H	0.050
HD2	67.134582520	26.886949539	20.329490662	ARG	455	HA	H	0.050
NE	66.046417236	28.661199570	20.688270569	ARG	455	NP	N	-0.400
HE	66.084022522	29.557149887	21.141809464	ARG	455	H	H	0.300
CZ	64.836509705	28.210470200	20.286510468	ARG	455	C	C	0.500
NH1	64.724548340	27.046689987	19.655960083	ARG	455	NC	N	-0.450
HH11	65.546958923	26.526290894	19.445720673	ARG	455	HC	H	0.350
HH12	63.838710785	26.648960114	19.370100021	ARG	455	HC	H	0.350
NH2	63.754451752	28.934570312	20.535209656	ARG	455	NC	N	-0.450
HH21	63.782859802	29.843130112	20.986389160	ARG	455	HC	H	0.350
HH22	62.833541870	28.593189240	20.307819366	ARG	455	HC	H	0.350
N	67.402496338	29.189420700	25.565629959	HIS	456	NP	N	-0.400
HN	66.774147034	28.438650131	25.760499954	HIS	456	H	H	0.250
CA	67.086959839	30.458749771	26.205570221	HIS	456	CT	C	0.050
HA	67.753982544	31.229480743	25.820169449	HIS	456	HA	H	0.050
C	67.237159729	30.312860489	27.735260010	HIS	456	C	C	0.600
O	66.266220093	30.046720505	28.434690475	HIS	456	O	O	-0.550
CB	65.618629456	30.802539825	25.891439438	HIS	456	CT	C	-0.100
HB1	64.960296631	29.967830658	26.136739731	HIS	456	HA	H	0.050
HB2	65.266517639	31.651990891	26.472879410	HIS	456	HA	H	0.050
CG	65.476570129	31.142190933	24.431819916	HIS	456	C5R	C	0.100
ND1	65.622879028	32.383960724	23.926469803	HIS	456	N5R	N	-0.400
HD1	65.832580566	33.203170776	24.443300247	HIS	456	H	H	0.300
CD2	65.190467834	30.260850906	23.381320953	HIS	456	C5R	C	0.000
HD2	65.015876770	29.200649261	23.485309601	HIS	456	HA	H	0.100
CE1	65.432067871	32.262348175	22.600280762	HIS	456	C5R	C	0.200
HE1	65.472648621	33.089340210	21.904939651	HIS	456	HA	H	0.100
NE2	65.170646667	30.987060547	22.241149902	HIS	456	N5R	N	-0.400
N	68.480690002	30.487979889	28.262859344	PRO	457	NX	N	-0.250
CA	68.673439026	30.476280212	29.713640213	PRO	457	CT	C	0.050
HA	68.086883545	29.687149048	30.187139511	PRO	457	HA	H	0.050
C	68.321258545	31.823089600	30.385610580	PRO	457	C	C	0.600
O	68.097938538	31.882480621	31.584850311	PRO	457	O	O	-0.550
CB	70.176773071	30.202959061	29.850549698	PRO	457	CT	C	-0.100
HB1	70.616821289	30.582590103	30.773630142	PRO	457	HA	H	0.050
HB2	70.342628479	29.125329971	29.838020325	PRO	457	HA	H	0.050
CG	70.797828674	30.814130783	28.588979721	PRO	457	CT	C	-0.100
HG1	70.985328674	31.875879288	28.754339218	PRO	457	HA	H	0.050
HG2	71.745948792	30.348659515	28.318870544	PRO	457	HA	H	0.050
CD	69.725311279	30.642759323	27.508140564	PRO	457	CT	C	0.000
HD1	69.690071106	31.497739792	26.831800461	PRO	457	HA	H	0.050
HD2	69.916931152	29.738740921	26.930620193	PRO	457	HA	H	0.050
N	68.273979187	32.867950439	29.532279968	GLU	458	NP	N	-0.400
HN	68.442817688	32.691520691	28.559700012	GLU	458	H	H	0.250
CA	67.856208801	34.252140045	29.780809402	GLU	458	CT	C	0.050
HA	68.464141846	34.844440460	29.096870422	GLU	458	HA	H	0.050
C	68.119880676	34.780078888	31.209960938	GLU	458	C	C	0.600
O	67.255508423	35.401798248	31.818279266	GLU	458	O	O	-0.550
CB	66.369041443	34.425411224	29.406099319	GLU	458	CT	C	-0.100
HB1	65.743011475	34.103900909	30.240560532	GLU	458	HA	H	0.050
HB2	66.160430908	35.486499786	29.272050858	GLU	458	HA	H	0.050
CG	65.900932312	33.641860962	28.164360046	GLU	458	CT	C	-0.250
HG1	65.916847229	32.576988220	28.383129120	GLU	458	HA	H	0.050
HG2	64.856231689	33.878761292	27.960170746	GLU	458	HA	H	0.050
CD	66.724639893	33.902240753	26.887680054	GLU	458	C	C	0.350
OE1	67.886680603	33.502979279	26.838850021	GLU	458	OC	O	-0.600
OE2	66.189620972	34.469730377	25.938890457	GLU	458	OC	O	-0.600
N	69.336486816	34.495220184	31.713130951	GLU	459	NP	N	-0.400

HN	70.007270813	34.061061859	31.115489960	GLU	459	H	H	0.250
CA	69.591133118	34.491210938	33.154998779	GLU	459	CT	C	0.050
HA	68.860816956	33.803298950	33.566730499	GLU	459	HA	H	0.050
C	69.393218994	35.861309052	33.851631165	GLU	459	C	C	0.600
O	70.331268311	36.609191895	34.095539093	GLU	459	O	O	-0.550
CB	70.986518860	33.906681061	33.418781281	GLU	459	CT	C	-0.100
HB1	71.760391235	34.591300964	33.068111420	GLU	459	HA	H	0.050
HB2	71.130256653	33.807239532	34.496158600	GLU	459	HA	H	0.050
CG	71.170219421	32.533161163	32.748050690	GLU	459	CT	C	-0.250
HG1	70.318717957	31.887620926	32.967681885	GLU	459	HA	H	0.050
HG2	71.226600647	32.629161835	31.664300919	GLU	459	HA	H	0.050
CD	72.450119019	31.841690063	33.235469818	GLU	459	C	C	0.350
OE1	73.531768799	32.223751068	32.790000916	GLU	459	OC	O	-0.600
OE2	72.347480774	30.926410675	34.051860809	GLU	459	OC	O	-0.600
N	68.112449646	36.107780457	34.184680939	THR	460	NP	N	-0.400
HN	67.411483765	35.472198486	33.855121613	THR	460	H	H	0.250
CA	67.643280029	37.319389343	34.834930420	THR	460	CT	C	0.050
HA	68.367271423	37.601779938	35.601001740	THR	460	HA	H	0.050
C	66.285606384	36.983020782	35.481941223	THR	460	C	C	0.600
O	65.466529846	36.315429688	34.871391296	THR	460	O	O	-0.550
CB	67.450653076	38.421020508	33.766761780	THR	460	CT	C	0.150
HB	66.874313354	39.234809875	34.212768555	THR	460	HA	H	0.100
OG1	66.699600220	37.951549530	32.665309906	THR	460	OT	O	-0.650
HG1	67.062461853	37.114440918	32.361740112	THR	460	HO	H	0.400
CG2	68.760200500	39.034450531	33.252731323	THR	460	CT	C	-0.150
HG21	68.555488586	39.901851654	32.625270844	THR	460	HA	H	0.050
HG22	69.390846252	39.363151550	34.078701019	THR	460	HA	H	0.050
HG23	69.340110779	38.336418152	32.650249481	THR	460	HA	H	0.050
N	66.085952759	37.459941864	36.727710724	GLY	461	NP	N	-0.400
HN	66.840522766	37.915870667	37.195419312	GLY	461	H	H	0.250
CA	64.770683289	37.378700256	37.374240875	GLY	461	CT	C	0.000
HA1	64.903877258	37.752609253	38.387470245	GLY	461	HA	H	0.050
HA2	64.093650818	38.048110962	36.842849731	GLY	461	HA	H	0.050
C	64.191192627	35.951259613	37.455970764	GLY	461	C	C	0.600
O	64.534500122	35.173809052	38.338588715	GLY	461	O	O	-0.550
N	63.288551331	35.669799805	36.498458862	GLY	462	NP	N	-0.400
HN	63.165401459	36.346038818	35.765209198	GLY	462	H	H	0.250
CA	62.705440521	34.343650818	36.325149536	GLY	462	CT	C	0.000
HA1	63.182651520	33.634731293	37.000640869	GLY	462	HA	H	0.050
HA2	61.641990662	34.411548615	36.545490265	GLY	462	HA	H	0.050
C	62.908958435	33.943378448	34.867088318	GLY	462	C	C	0.600
O	62.339439392	34.545631409	33.970840454	GLY	462	O	O	-0.550
N	63.801101685	32.950931549	34.684928894	PHE	463	NP	N	-0.400
HN	64.090118408	32.416358948	35.476871490	PHE	463	H	H	0.250
CA	64.522399902	32.842540741	33.418701172	PHE	463	CT	C	0.050
HA	64.044860840	33.501491547	32.689250946	PHE	463	HA	H	0.050
C	64.452262878	31.445669174	32.787311554	PHE	463	C	C	0.600
O	63.894309998	31.270790100	31.715389252	PHE	463	O	O	-0.550
CB	65.966911316	33.331199646	33.609970093	PHE	463	CT	C	-0.100
HB1	66.549247742	33.107231140	32.723011017	PHE	463	HA	H	0.050
HB2	65.930427551	34.413860321	33.648689270	PHE	463	HA	H	0.050
CG	66.694183350	32.847061157	34.847290039	PHE	463	C6R	C	0.000
CD1	66.471870422	33.450599670	36.080150604	PHE	463	C6R	C	-0.130
HD1	65.748657227	34.243751526	36.159961700	PHE	463	HA	H	0.130
CD2	67.635162354	31.822849274	34.775451660	PHE	463	C6R	C	-0.130
HD2	67.839630127	31.340410233	33.832260132	PHE	463	HA	H	0.130
CE1	67.174263000	33.057170868	37.209609985	PHE	463	C6R	C	-0.130
HE1	66.987052917	33.539939880	38.159618378	PHE	463	HA	H	0.130
CE2	68.346191406	31.425050735	35.899730682	PHE	463	C6R	C	-0.130
HE2	69.087593079	30.642210007	35.820629120	PHE	463	HA	H	0.130
CZ	68.117279053	32.044010162	37.119140625	PHE	463	C6R	C	-0.130
HZ	68.670097351	31.740619659	37.997760773	PHE	463	HA	H	0.130

N	65.084739685	30.477649689	33.471691132	GLN	464	NP	N	-0.400
HN	65.498733521	30.720760345	34.345581055	GLN	464	H	H	0.250
CA	65.234527588	29.144889832	32.893608093	GLN	464	CT	C	0.050
HA	65.296432495	29.269510269	31.809320450	GLN	464	HA	H	0.050
C	63.972000122	28.287719727	33.159141541	GLN	464	C	C	0.600
O	62.878749847	28.801420212	33.360668182	GLN	464	O	O	-0.550
CB	66.586151123	28.558149338	33.361961365	GLN	464	CT	C	-0.100
HB1	66.790969849	27.628719330	32.839019775	GLN	464	HA	H	0.050
HB2	67.359840393	29.236339569	32.999881744	GLN	464	HA	H	0.050
CG	66.797653198	28.394380569	34.884761810	GLN	464	CT	C	-0.100
HG1	67.865928650	28.349330902	35.096881866	GLN	464	HA	H	0.050
HG2	66.409568787	29.249290466	35.436859131	GLN	464	HA	H	0.050
CD	66.184623718	27.097690582	35.425628662	GLN	464	C	C	0.550
OE1	66.487777710	26.002500534	34.958450317	GLN	464	O	O	-0.550
NE2	65.245193481	27.292999268	36.354591370	GLN	464	NP	N	-0.600
HE21	64.578369141	26.563199997	36.530189514	GLN	464	H	H	0.300
HE22	65.092239380	28.145879745	36.851051331	GLN	464	H	H	0.300
N	64.184951782	26.959009171	33.143169403	GLU	465	NP	N	-0.400
HN	65.112167358	26.607440948	33.043758392	GLU	465	H	H	0.250
CA	63.101169586	25.999330521	33.313350677	GLU	465	CT	C	0.050
HA	62.448070526	26.101760864	32.446018219	GLU	465	HA	H	0.050
C	62.296409607	26.235609055	34.605461121	GLU	465	C	C	0.600
O	62.838241577	26.339050293	35.699268341	GLU	465	O	O	-0.550
CB	63.699440002	24.593040466	33.395820618	GLU	465	CT	C	-0.100
HB1	64.457107544	24.565799713	34.181320190	GLU	465	HA	H	0.050
HB2	62.927398682	23.891159058	33.708698273	GLU	465	HA	H	0.050
CG	64.293731689	24.100610733	32.073589325	GLU	465	CT	C	-0.250
HG1	63.533420563	24.050430298	31.295780182	GLU	465	HA	H	0.050
HG2	65.072639465	24.760129929	31.702730179	GLU	465	HA	H	0.050
CD	64.865142822	22.704790115	32.292530060	GLU	465	C	C	0.350
OE1	64.104133606	21.745679855	32.284629822	GLU	465	OC	O	-0.600
OE2	66.070388794	22.571969986	32.474830627	GLU	465	OC	O	-0.600
N	60.970928192	26.254579544	34.407821655	ALA	466	NP	N	-0.400
HN	60.574478149	26.170709610	33.492519379	ALA	466	H	H	0.250
CA	60.056560516	26.320520401	35.529869080	ALA	466	CT	C	0.050
HA	60.448471069	25.678010941	36.320831299	ALA	466	HA	H	0.050
C	58.719799042	25.780820847	35.031349182	ALA	466	C	C	0.600
O	58.426189423	25.848649979	33.842971802	ALA	466	O	O	-0.550
CB	59.918029785	27.777549744	35.984420776	ALA	466	CT	C	-0.150
HB1	59.683490753	28.433629990	35.145809174	ALA	466	HA	H	0.050
HB2	59.150230408	27.919929504	36.744159698	ALA	466	HA	H	0.050
HB3	60.862159729	28.099790573	36.416168213	ALA	466	HA	H	0.050
N	57.885501862	25.267749786	35.969860077	PRO	467	NX	N	-0.250
CA	56.576339722	24.741579056	35.600028992	PRO	467	CT	C	0.050
HA	56.688808441	23.950809479	34.862819672	PRO	467	HA	H	0.050
C	55.631561279	25.793279648	35.000141144	PRO	467	C	C	0.600
O	54.631549835	25.462560654	34.380630493	PRO	467	O	O	-0.550
CB	56.025920868	24.192569733	36.922691345	PRO	467	CT	C	-0.100
HB1	54.944999695	24.268020630	37.024318695	PRO	467	HA	H	0.050
HB2	56.274211884	23.141500473	36.989948273	PRO	467	HA	H	0.050
CG	56.794418335	24.925659180	38.020690918	PRO	467	CT	C	-0.100
HG1	56.301208496	25.870069504	38.223121643	PRO	467	HA	H	0.050
HG2	56.848819733	24.378660202	38.961128235	PRO	467	HA	H	0.050
CD	58.161071777	25.199159622	37.401081085	PRO	467	CT	C	0.000
HD1	58.588550568	26.127689362	37.765991211	PRO	467	HA	H	0.050
HD2	58.856620789	24.384029388	37.605659485	PRO	467	HA	H	0.050
N	56.029411316	27.071289062	35.165069580	LEU	468	NP	N	-0.400
HN	56.811748505	27.262710571	35.753929138	LEU	468	H	H	0.250
CA	55.305999756	28.147310257	34.501281738	LEU	468	CT	C	0.050
HA	54.243789673	27.919319153	34.589668274	LEU	468	HA	H	0.050
C	55.657749176	28.187059402	33.013149261	LEU	468	C	C	0.600
O	54.818309784	28.423330307	32.157058716	LEU	468	O	O	-0.550

CB	55.633468628	29.489009857	35.169578552	LEU	468	CT	C	-0.100
HB1	56.011440277	29.314680099	36.174991608	LEU	468	HA	H	0.050
HB2	56.471179962	29.977920532	34.672180176	LEU	468	HA	H	0.050
CG	54.414730072	30.430170059	35.217018127	LEU	468	CT	C	-0.050
HG	53.500408173	29.848560333	35.339691162	LEU	468	HA	H	0.050
CD1	54.498748779	31.356689453	36.429191589	LEU	468	CT	C	-0.150
HD11	55.483081818	31.806640625	36.462421417	LEU	468	HA	H	0.050
HD12	53.751228333	32.149501801	36.388130188	LEU	468	HA	H	0.050
HD13	54.354351044	30.814950943	37.363178253	LEU	468	HA	H	0.050
CD2	54.292430878	31.230550766	33.915550232	LEU	468	CT	C	-0.150
HD21	55.236770630	31.706029892	33.649578094	LEU	468	HA	H	0.050
HD22	53.995800018	30.593999863	33.082580566	LEU	468	HA	H	0.050
HD23	53.549449921	32.020519257	34.008598328	LEU	468	HA	H	0.050
N	56.950279236	27.919099808	32.743820190	ALA	469	NP	N	-0.400
HN	57.582710266	27.642580032	33.467170715	ALA	469	H	H	0.250
CA	57.380798340	27.877029419	31.353769302	ALA	469	CT	C	0.050
HA	57.119411469	28.843559265	30.921989441	ALA	469	HA	H	0.050
C	56.616561890	26.764179230	30.616809845	ALA	469	C	C	0.600
O	56.157810211	26.923700333	29.497030258	ALA	469	O	O	-0.550
CB	58.895088196	27.656539917	31.270700455	ALA	469	CT	C	-0.150
HB1	59.429271698	28.397180557	31.866739273	ALA	469	HA	H	0.050
HB2	59.186950684	26.668260574	31.626850128	ALA	469	HA	H	0.050
HB3	59.235778809	27.752920151	30.239459991	ALA	469	HA	H	0.050
N	56.468929291	25.651290894	31.358730316	TYR	470	NP	N	-0.400
HN	56.965240479	25.614629745	32.230300903	TYR	470	H	H	0.250
CA	55.679458618	24.511810303	30.897930145	TYR	470	CT	C	0.050
HA	56.112209320	24.198459625	29.947059631	TYR	470	HA	H	0.050
C	54.192390442	24.898870468	30.670150757	TYR	470	C	C	0.600
O	53.679279327	24.806140900	29.559900284	TYR	470	O	O	-0.550
CB	55.862140656	23.405050278	31.943849564	TYR	470	CT	C	-0.100
HB1	56.919090271	23.316410065	32.176498413	TYR	470	HA	H	0.050
HB2	55.387359619	23.699129105	32.877178192	TYR	470	HA	H	0.050
CG	55.357780457	22.035490036	31.565019608	TYR	470	C6R	C	0.000
CD1	56.231281281	21.019309998	31.172819138	TYR	470	C6R	C	-0.130
HD1	57.289340973	21.222789764	31.082279205	TYR	470	HA	H	0.130
CD2	54.006031036	21.746229172	31.666530609	TYR	470	C6R	C	-0.130
HD2	53.296081543	22.507869720	31.957019806	TYR	470	HA	H	0.130
CE1	55.757320404	19.733890533	30.913330078	TYR	470	C6R	C	-0.130
HE1	56.443889618	18.958049774	30.608259201	TYR	470	HA	H	0.130
CE2	53.543308258	20.468820572	31.411090851	TYR	470	C6R	C	-0.130
HE2	52.495128632	20.249689102	31.479770660	TYR	470	HA	H	0.130
CZ	54.401218414	19.459690094	31.037849426	TYR	470	C6R	C	0.250
OH	53.851139069	18.218479156	30.788570404	TYR	470	OT	O	-0.650
HH	54.407539368	17.526679993	31.163410187	TYR	470	HO	H	0.400
N	53.516731262	25.334039688	31.763610840	ASP	471	NP	N	-0.400
HN	53.971160889	25.439989090	32.650188446	ASP	471	H	H	0.250
CA	52.066318512	25.557470322	31.672019958	ASP	471	CT	C	0.050
HA	51.702541351	24.731050491	31.058710098	ASP	471	HA	H	0.050
C	51.692600250	26.829919815	30.875709534	ASP	471	C	C	0.600
O	50.527130127	27.060710907	30.562160492	ASP	471	O	O	-0.550
CB	51.322380066	25.373760223	33.017601013	ASP	471	CT	C	-0.250
HB1	50.256061554	25.277820587	32.809120178	ASP	471	HA	H	0.050
HB2	51.621711731	24.415630341	33.445331573	ASP	471	HA	H	0.050
CG	51.451210022	26.441070557	34.124469757	ASP	471	C	C	0.350
OD1	51.780590057	27.602539062	33.877429962	ASP	471	OC	O	-0.600
OD2	51.175930023	26.110389709	35.280620575	ASP	471	OC	O	-0.600
N	52.750011444	27.579809189	30.496290207	ALA	472	NP	N	-0.400
HN	53.614208221	27.459800720	30.988500595	ALA	472	H	H	0.250
CA	52.649990082	28.610469818	29.470409393	ALA	472	CT	C	0.050
HA	51.649509430	29.039670944	29.526979446	ALA	472	HA	H	0.050
C	52.836219788	28.030490875	28.049829483	ALA	472	C	C	0.600
O	51.993659973	28.227329254	27.185670853	ALA	472	O	O	-0.550

CB	53.683509827	29.713270187	29.737379074	ALA	472	CT	C	-0.150
HB1	54.700649261	29.320379257	29.728099823	ALA	472	HA	H	0.050
HB2	53.622718811	30.505180359	28.990089417	ALA	472	HA	H	0.050
HB3	53.517108917	30.169269562	30.713319778	ALA	472	HA	H	0.050
N	53.981109619	27.349479675	27.819309235	ILE	473	NP	N	-0.400
HN	54.556079865	27.085369110	28.596080780	ILE	473	H	H	0.250
CA	54.487201691	27.147350311	26.450510025	ILE	473	CT	C	0.050
HA	54.611629486	28.150819778	26.042629242	ILE	473	HA	H	0.050
C	53.481548309	26.449119568	25.527849197	ILE	473	C	C	0.600
O	53.345729828	26.771610260	24.349340439	ILE	473	O	O	-0.550
CB	55.857620239	26.421659470	26.443550110	ILE	473	CT	C	-0.050
HB	56.509750366	26.951450348	27.134439468	ILE	473	HA	H	0.050
CG1	56.522281647	26.513120651	25.060499191	ILE	473	CT	C	-0.100
HG11	55.948440552	25.946840286	24.326360703	ILE	473	HA	H	0.050
HG12	56.492248535	27.550689697	24.730480194	ILE	473	HA	H	0.050
CG2	55.789188385	24.965290070	26.930849075	ILE	473	CT	C	-0.150
HG21	55.297100067	24.901739120	27.895299911	ILE	473	HA	H	0.050
HG22	55.249591827	24.324119568	26.234399796	ILE	473	HA	H	0.050
HG23	56.785171509	24.543519974	27.062690735	ILE	473	HA	H	0.050
CD1	57.978118896	26.034069061	25.042430878	ILE	473	CT	C	-0.150
HD11	58.580581665	26.548460007	25.789440155	ILE	473	HA	H	0.050
HD12	58.048320770	24.965019226	25.237039566	ILE	473	HA	H	0.050
HD13	58.432460785	26.225549698	24.071269989	ILE	473	HA	H	0.050
N	52.768398285	25.485589981	26.137929916	TRP	474	NP	N	-0.400
HN	52.957859039	25.301900864	27.104949951	TRP	474	H	H	0.250
CA	51.824520111	24.700069427	25.354660034	TRP	474	CT	C	0.050
HA	52.414249420	24.211650848	24.581520081	TRP	474	HA	H	0.050
C	50.754978180	25.569049835	24.672740936	TRP	474	C	C	0.600
O	50.179691315	25.185310364	23.664760590	TRP	474	O	O	-0.550
CB	51.177818298	23.626970291	26.222330093	TRP	474	CT	C	-0.100
HB1	50.708171844	22.872449875	25.589879990	TRP	474	HA	H	0.050
HB2	51.936569214	23.110910416	26.811000824	TRP	474	HA	H	0.050
CG	50.139369965	24.216329575	27.151660919	TRP	474	C5R	C	-0.030
CD1	50.383739471	24.813350677	28.385770798	TRP	474	C5R	C	-0.040
HD1	51.363468170	24.971830368	28.807819366	TRP	474	HA	H	0.100
CD2	48.709178925	24.199789047	26.979209900	TRP	474	CR56	C	0.100
HE1	49.152809143	25.588529587	29.845430374	TRP	474	H	H	0.300
NE1	49.205558777	25.138629913	28.970289230	TRP	474	N5R	N	-0.360
CE2	48.146499634	24.764930725	28.147230148	TRP	474	CR56	C	-0.040
CE3	47.900588989	23.750669479	25.971050262	TRP	474	C6R	C	-0.130
HE3	48.336071014	23.335849762	25.073650360	TRP	474	HA	H	0.100
CZ2	46.784828186	24.819570541	28.280300140	TRP	474	C6R	C	-0.130
HZ2	46.338748932	25.193790436	29.185350418	TRP	474	HA	H	0.130
CZ3	46.516761780	23.824590683	26.102790833	TRP	474	C6R	C	-0.130
HZ3	45.875259399	23.473979950	25.309900284	TRP	474	HA	H	0.130
CH2	45.957851410	24.344179153	27.264650345	TRP	474	C6R	C	-0.130
HH2	44.883911133	24.353559494	27.381820679	TRP	474	HA	H	0.130
N	50.537658691	26.759529114	25.272300720	ALA	475	NP	N	-0.400
HN	51.036941528	26.987529755	26.110889435	ALA	475	H	H	0.250
CA	49.633388519	27.740449905	24.702899933	ALA	475	CT	C	0.050
HA	48.640388489	27.303710938	24.784179688	ALA	475	HA	H	0.050
C	49.957229614	27.974939346	23.223039627	ALA	475	C	C	0.600
O	49.160511017	27.694879532	22.339189529	ALA	475	O	O	-0.550
CB	49.738628387	29.058120728	25.485969543	ALA	475	CT	C	-0.150
HB1	50.758529663	29.443229675	25.497900009	ALA	475	HA	H	0.050
HB2	49.119930267	29.837820053	25.044530869	ALA	475	HA	H	0.050
HB3	49.428798676	28.923900604	26.522769928	ALA	475	HA	H	0.050
N	51.184158325	28.488010406	23.022579193	LEU	476	NP	N	-0.400
HN	51.798820496	28.580909729	23.806959152	LEU	476	H	H	0.250
CA	51.613891602	28.829809189	21.674329758	LEU	476	CT	C	0.050
HA	50.806098938	29.392389297	21.206079483	LEU	476	HA	H	0.050
C	51.845371246	27.549169540	20.858989716	LEU	476	C	C	0.600

O	51.397968292	27.407079697	19.726850510	LEU	476	O	O	-0.550
CB	52.890720367	29.686569214	21.725570679	LEU	476	CT	C	-0.100
HB1	53.715148926	29.093660355	22.126260757	LEU	476	HA	H	0.050
HB2	53.179420471	29.953319550	20.707420349	LEU	476	HA	H	0.050
CG	52.757751465	30.973730087	22.562879562	LEU	476	CT	C	-0.050
HG	52.573101044	30.695680618	23.601379395	LEU	476	HA	H	0.050
CD1	54.073631287	31.761470795	22.532470703	LEU	476	CT	C	-0.150
HD11	54.905109406	31.134040833	22.852880478	LEU	476	HA	H	0.050
HD12	54.298698425	32.121410370	21.527719498	LEU	476	HA	H	0.050
HD13	54.033870697	32.626140594	23.195699692	LEU	476	HA	H	0.050
CD2	51.589561462	31.855989456	22.097539902	LEU	476	CT	C	-0.150
HD21	51.660400391	32.079418182	21.033109665	LEU	476	HA	H	0.050
HD22	50.627868652	31.372890472	22.270679474	LEU	476	HA	H	0.050
HD23	51.570251465	32.804260254	22.635799408	LEU	476	HA	H	0.050
N	52.566230774	26.620559692	21.521709442	ALA	477	NP	N	-0.400
HN	52.838001251	26.795560837	22.472740173	ALA	477	H	H	0.250
CA	53.015541077	25.409690857	20.842330933	ALA	477	CT	C	0.050
HA	53.654319763	25.741020203	20.021980286	ALA	477	HA	H	0.050
C	51.847030640	24.604419708	20.244470596	ALA	477	C	C	0.600
O	51.970729828	24.018100739	19.177330017	ALA	477	O	O	-0.550
CB	53.826190948	24.541999817	21.809410095	ALA	477	CT	C	-0.150
HB1	53.198318481	24.140979767	22.601789474	ALA	477	HA	H	0.050
HB2	54.281150818	23.697969437	21.290269852	ALA	477	HA	H	0.050
HB3	54.626960754	25.117189407	22.275209427	ALA	477	HA	H	0.050
N	50.719028473	24.622690201	20.983919144	LEU	478	NP	N	-0.400
HN	50.721149445	25.084079742	21.873210907	LEU	478	H	H	0.250
CA	49.489170074	24.013750076	20.492460251	LEU	478	CT	C	0.050
HA	49.766941071	23.113639832	19.946849823	LEU	478	HA	H	0.050
C	48.783958435	24.961069107	19.518159866	LEU	478	C	C	0.600
O	48.396430969	24.567350388	18.422870636	LEU	478	O	O	-0.550
CB	48.553958893	23.663509369	21.665620804	LEU	478	CT	C	-0.100
HB1	49.068889618	22.995780945	22.355989456	LEU	478	HA	H	0.050
HB2	48.342311859	24.568250656	22.236839294	LEU	478	HA	H	0.050
CG	47.207969666	23.041059494	21.242349625	LEU	478	CT	C	-0.050
HG	46.674198151	23.766170502	20.628990173	LEU	478	HA	H	0.050
CD1	47.367050171	21.763029099	20.409660339	LEU	478	CT	C	-0.150
HD11	47.993648529	21.911279678	19.530799866	LEU	478	HA	H	0.050
HD12	47.782920837	20.945890427	20.998340607	LEU	478	HA	H	0.050
HD13	46.393989563	21.439470291	20.050609589	LEU	478	HA	H	0.050
CD2	46.332759857	22.765909195	22.466619492	LEU	478	CT	C	-0.150
HD21	46.825809479	22.069799423	23.146360397	LEU	478	HA	H	0.050
HD22	46.124721527	23.683519363	23.015619278	LEU	478	HA	H	0.050
HD23	45.376399994	22.325830460	22.181369781	LEU	478	HA	H	0.050
N	48.618278503	26.218050003	19.995639801	ALA	479	NP	N	-0.400
HN	49.026260376	26.453140259	20.881429672	ALA	479	H	H	0.250
CA	47.802299500	27.235549927	19.328540802	ALA	479	CT	C	0.050
HA	46.767028809	27.021640778	19.596239090	ALA	479	HA	H	0.050
C	47.919738770	27.174760818	17.809400558	ALA	479	C	C	0.600
O	46.932769775	27.070159912	17.101209641	ALA	479	O	O	-0.550
CB	48.188510895	28.652540207	19.780139923	ALA	479	CT	C	-0.150
HB1	49.264301300	28.808980942	19.721220016	ALA	479	HA	H	0.050
HB2	47.722358704	29.417289734	19.157770157	ALA	479	HA	H	0.050
HB3	47.866939545	28.847099304	20.801189423	ALA	479	HA	H	0.050
N	49.173641205	27.247070312	17.346639633	LEU	480	NP	N	-0.400
HN	49.918300629	27.269609451	18.020559311	LEU	480	H	H	0.250
CA	49.398078918	27.401029587	15.911899567	LEU	480	CT	C	0.050
HA	48.828788757	28.276809692	15.596420288	LEU	480	HA	H	0.050
C	48.883510590	26.194200516	15.108189583	LEU	480	C	C	0.600
O	48.407730103	26.316699982	13.986630440	LEU	480	O	O	-0.550
CB	50.891460419	27.628559113	15.657369614	LEU	480	CT	C	-0.100
HB1	51.432388306	26.694599152	15.819769859	LEU	480	HA	H	0.050
HB2	51.043781281	27.903520584	14.612350464	LEU	480	HA	H	0.050

CG	51.489109039	28.711059570	16.570159912	LEU	480	CT	C	-0.050
HG	51.393020630	28.398120880	17.605800629	LEU	480	HA	H	0.050
CD1	52.986930847	28.852819443	16.325300217	LEU	480	CT	C	-0.150
HD11	53.484741211	27.886180878	16.354379654	LEU	480	HA	H	0.050
HD12	53.189918518	29.312870026	15.359299660	LEU	480	HA	H	0.050
HD13	53.436061859	29.472940445	17.100219727	LEU	480	HA	H	0.050
CD2	50.764900208	30.056320190	16.432329178	LEU	480	CT	C	-0.150
HD21	49.713859558	29.985990524	16.709989548	LEU	480	HA	H	0.050
HD22	51.208030701	30.804519653	17.089220047	LEU	480	HA	H	0.050
HD23	50.817989349	30.427150726	15.408940315	LEU	480	HA	H	0.050
N	48.990131378	25.020439148	15.739660263	ASN	481	NP	N	-0.400
HN	49.278568268	25.005599976	16.700450897	ASN	481	H	H	0.250
CA	48.614311218	23.790409088	15.045249939	ASN	481	CT	C	0.050
HA	48.925521851	23.883810043	14.002880096	ASN	481	HA	H	0.050
C	47.083118439	23.647359848	15.089839935	ASN	481	C	C	0.600
O	46.427158356	23.273490906	14.124919891	ASN	481	O	O	-0.550
CB	49.347770691	22.598600388	15.677749634	ASN	481	CT	C	-0.100
HB1	48.935630798	22.376449585	16.664230347	ASN	481	HA	H	0.050
HB2	49.235450745	21.703140259	15.066360474	ASN	481	HA	H	0.050
CG	50.845829010	22.924419403	15.820269585	ASN	481	C	C	0.550
OD1	51.466201782	23.565200806	14.975319862	ASN	481	O	O	-0.550
ND2	51.339881897	22.573329926	17.004199982	ASN	481	NP	N	-0.600
HD21	52.164001465	22.981939316	17.399730682	ASN	481	H	H	0.300
HD22	50.847278595	21.939489365	17.605520248	ASN	481	H	H	0.300
N	46.568470001	24.057449341	16.264410019	LYS	482	NP	N	-0.400
HN	47.207771301	24.309700012	16.994010925	LYS	482	H	H	0.250
CA	45.137218475	24.196500778	16.511220932	LYS	482	CT	C	0.050
HA	44.701091766	23.209039688	16.371370316	LYS	482	HA	H	0.050
C	44.501209259	25.183530807	15.502280235	LYS	482	C	C	0.600
O	43.375869751	25.008909225	15.063850403	LYS	482	O	O	-0.550
CB	44.975078583	24.674419403	17.966829300	LYS	482	CT	C	-0.100
HB1	45.749450684	24.205440521	18.574169159	LYS	482	HA	H	0.050
HB2	45.172931671	25.744550705	18.021589279	LYS	482	HA	H	0.050
CG	43.626018524	24.381320953	18.644439697	LYS	482	CT	C	-0.100
HG1	42.799079895	24.710710526	18.016479492	LYS	482	HA	H	0.050
HG2	43.498828888	23.307489395	18.776290894	LYS	482	HA	H	0.050
CD	43.584148407	25.093790054	20.005649567	LYS	482	CT	C	-0.100
HD1	44.477180481	24.825429916	20.572050095	LYS	482	HA	H	0.050
HD2	43.655799866	26.164449692	19.826629639	LYS	482	HA	H	0.050
CE	42.361011505	24.797910690	20.883039474	LYS	482	CT	C	0.050
HE1	42.288631439	23.732410431	21.107820511	LYS	482	HA	H	0.100
HE2	42.464210510	25.318939209	21.836490631	LYS	482	HA	H	0.100
NZ	41.089809418	25.218069077	20.310060501	LYS	482	NT	N	-0.300
HZ1	41.109371185	26.166770935	19.871389389	LYS	482	HC	H	0.350
HZ2	40.792579651	24.559799194	19.559829712	LYS	482	HC	H	0.350
HZ3	40.347881317	25.245870590	21.044830322	LYS	482	HC	H	0.350
N	45.309631348	26.203809738	15.150870323	THR	483	NP	N	-0.400
HN	46.190101624	26.250860214	15.619729996	THR	483	H	H	0.250
CA	44.936401367	27.238479614	14.188110352	THR	483	CT	C	0.050
HA	43.913379669	27.538600922	14.403790474	THR	483	HA	H	0.050
C	44.979869843	26.676509857	12.756270409	THR	483	C	C	0.600
O	44.109230042	26.920360565	11.930120468	THR	483	O	O	-0.550
CB	45.902458191	28.437040329	14.345270157	THR	483	CT	C	0.150
HB	46.922039032	28.125680923	14.114629745	THR	483	HA	H	0.100
OG1	45.880119324	28.979860306	15.650369644	THR	483	OT	O	-0.650
HG1	46.028278351	28.287630081	16.289859772	THR	483	HO	H	0.400
CG2	45.568691254	29.609159470	13.428620338	THR	483	CT	C	-0.150
HG21	46.278568268	30.425689697	13.558300018	THR	483	HA	H	0.050
HG22	45.574871063	29.321159363	12.378620148	THR	483	HA	H	0.050
HG23	44.581989288	29.988899231	13.672050476	THR	483	HA	H	0.050
N	46.054130554	25.900350571	12.517760277	SER	484	NP	N	-0.400
HN	46.709331512	25.744529724	13.256939888	SER	484	H	H	0.250

CA	46.256259918	25.314039230	11.198280334	SER	484	CT	C	0.050
HA	46.267738342	26.139039993	10.483570099	SER	484	HA	H	0.050
C	45.095760345	24.370790482	10.828729630	SER	484	C	C	0.600
O	44.628360748	24.343009949	9.698900223	SER	484	O	O	-0.550
CB	47.601509094	24.575609207	11.170660019	SER	484	CT	C	0.050
HB1	47.613559723	23.732019424	11.869119644	SER	484	HA	H	0.100
HB2	47.765411377	24.152019501	10.177659988	SER	484	HA	H	0.100
OG	48.689121246	25.443979263	11.441080093	SER	484	OT	O	-0.650
HG	48.551330566	25.897480011	12.273850441	SER	484	HO	H	0.400
N	44.649131775	23.628200531	11.860409737	GLY	485	NP	N	-0.400
HN	45.142360687	23.654409409	12.733559608	GLY	485	H	H	0.250
CA	43.441139221	22.829849243	11.692250252	GLY	485	CT	C	0.000
HA1	43.534191132	22.234800339	10.782299995	GLY	485	HA	H	0.050
HA2	43.370090485	22.162649155	12.550800323	GLY	485	HA	H	0.050
C	42.197330475	23.726400375	11.620909691	GLY	485	C	C	0.600
O	41.381561279	23.637929916	10.711959839	GLY	485	O	O	-0.550
N	42.118938446	24.592830658	12.644379616	GLY	486	NP	N	-0.400
HN	42.853588104	24.636520386	13.320440292	GLY	486	H	H	0.250
CA	40.946891785	25.420610428	12.888380051	GLY	486	CT	C	0.000
HA1	40.058719635	24.823410034	12.701069832	GLY	486	HA	H	0.050
HA2	40.969200134	25.701129913	13.940360069	GLY	486	HA	H	0.050
C	40.892341614	26.675170898	12.018469810	GLY	486	C	C	0.600
O	40.871498108	27.800319672	12.494580269	GLY	486	O	O	-0.550
N	40.823429108	26.403150558	10.703680038	GLY	487	NP	N	-0.400
HN	40.926399231	25.445550919	10.426070213	GLY	487	H	H	0.250
CA	40.389591217	27.407709122	9.742970467	GLY	487	CT	C	0.000
HA1	40.322280884	26.906019211	8.778380394	GLY	487	HA	H	0.050
HA2	39.387508392	27.722169876	10.034500122	GLY	487	HA	H	0.050
C	41.305011749	28.636690140	9.611450195	GLY	487	C	C	0.600
O	40.881179810	29.656940460	9.073329926	GLY	487	O	O	-0.550
N	42.560279846	28.492469788	10.079710007	GLY	488	NP	N	-0.400
HN	42.801189423	27.703380585	10.652370453	GLY	488	H	H	0.250
CA	43.521968842	29.583139420	9.974630356	GLY	488	CT	C	0.000
HA1	44.510620117	29.125410080	9.966620445	GLY	488	HA	H	0.050
HA2	43.363330841	30.125680923	9.041060448	GLY	488	HA	H	0.050
C	43.393630981	30.506999969	11.187370300	GLY	488	C	C	0.600
O	42.770439148	30.162229538	12.179619789	GLY	488	O	O	-0.550
N	44.029541016	31.692779541	11.075340271	ARG	489	NP	N	-0.400
HN	44.464691162	31.934129715	10.209859848	ARG	489	H	H	0.250
CA	44.065471649	32.628829956	12.204759598	ARG	489	CT	C	0.050
HA	44.228740692	32.041961670	13.108400345	ARG	489	HA	H	0.050
C	42.700290680	33.344718933	12.327569962	ARG	489	C	C	0.600
O	42.531299591	34.490978241	11.934260368	ARG	489	O	O	-0.550
CB	45.255550385	33.597740173	12.020350456	ARG	489	CT	C	-0.100
HB1	46.067939758	33.054351807	11.536689758	ARG	489	HA	H	0.050
HB2	44.987289429	34.398399353	11.329079628	ARG	489	HA	H	0.050
CG	45.817810059	34.191879272	13.329239845	ARG	489	CT	C	-0.100
HG1	45.035919189	34.745349884	13.850810051	ARG	489	HA	H	0.050
HG2	46.118358612	33.379211426	13.991169930	ARG	489	HA	H	0.050
CD	47.018489838	35.119121552	13.055159569	ARG	489	CT	C	0.000
HD1	47.724121094	34.673809052	12.351690292	ARG	489	HA	H	0.050
HD2	46.679721832	36.052799225	12.604579926	ARG	489	HA	H	0.050
NE	47.757350922	35.498691559	14.264389992	ARG	489	NP	N	-0.400
HE	47.664340973	36.429351807	14.631460190	ARG	489	H	H	0.300
CZ	48.775569916	34.772289276	14.782509804	ARG	489	C	C	0.500
NH1	49.084941864	33.586208344	14.280520439	ARG	489	NC	N	-0.450
HH11	48.516651154	33.150489807	13.587690353	ARG	489	HC	H	0.350
HH12	49.936878204	33.132209778	14.597510338	ARG	489	HC	H	0.350
NH2	49.503158569	35.243591309	15.785829544	ARG	489	NC	N	-0.450
HH21	49.342231750	36.143890381	16.215950012	ARG	489	HC	H	0.350
HH22	50.266059875	34.681770325	16.134809494	ARG	489	HC	H	0.350
N	41.753730774	32.559089661	12.873689651	SER	490	NP	N	-0.400

HN	41.987628937	31.606689453	13.085470200	SER	490	H	H	0.250
CA	40.386768341	32.979301453	13.128049850	SER	490	CT	C	0.050
HA	40.408618927	34.023891449	13.413379669	SER	490	HA	H	0.050
C	39.856769562	32.085628510	14.262290001	SER	490	C	C	0.600
O	39.386169434	30.978710175	14.034580231	SER	490	O	O	-0.550
CB	39.550201416	32.845691681	11.849670410	SER	490	CT	C	0.050
HB1	40.031211853	33.413120270	11.050559998	SER	490	HA	H	0.100
HB2	39.576969147	31.798200607	11.551980019	SER	490	HA	H	0.100
OG	38.187500000	33.260948181	11.917079926	SER	490	OT	O	-0.650
HG	38.076408386	33.866851807	12.662010193	SER	490	HO	H	0.400
N	39.988048553	32.625408173	15.483610153	GLY	491	NP	N	-0.400
HN	40.287830353	33.580780029	15.510100365	GLY	491	H	H	0.250
CA	39.613849640	31.998039246	16.747369766	GLY	491	CT	C	0.000
HA1	40.394008636	31.289699554	17.007669449	GLY	491	HA	H	0.050
HA2	39.609878540	32.786350250	17.498859406	GLY	491	HA	H	0.050
C	38.234668732	31.326879501	16.726980209	GLY	491	C	C	0.600
O	38.032428741	30.260669708	17.298009872	GLY	491	O	O	-0.550
N	37.302009583	31.987430573	16.014070511	VAL	492	NP	N	-0.400
HN	37.557998657	32.901348114	15.674799919	VAL	492	H	H	0.250
CA	35.945480347	31.448020935	15.880490303	VAL	492	CT	C	0.050
HA	35.532558441	31.433740616	16.888750076	VAL	492	HA	H	0.050
C	35.935070038	29.985500336	15.359129906	VAL	492	C	C	0.600
O	35.076370239	29.192060471	15.717720032	VAL	492	O	O	-0.550
CB	35.098690033	32.372531891	14.974740028	VAL	492	CT	C	-0.050
HB	35.564750671	32.397090912	13.988129616	VAL	492	HA	H	0.050
CG1	33.657520294	31.863399506	14.800869942	VAL	492	CT	C	-0.150
HG11	33.158248901	31.762599945	15.764980316	VAL	492	HA	H	0.050
HG12	33.069759369	32.550510406	14.192079544	VAL	492	HA	H	0.050
HG13	33.625469208	30.891889572	14.307330132	VAL	492	HA	H	0.050
CG2	35.060249329	33.815811157	15.501130104	VAL	492	CT	C	-0.150
HG21	36.051399231	34.255889893	15.562239647	VAL	492	HA	H	0.050
HG22	34.473049164	34.455841064	14.842769623	VAL	492	HA	H	0.050
HG23	34.618480682	33.870479584	16.494630814	VAL	492	HA	H	0.050
N	36.927730560	29.689489365	14.500160217	ARG	493	NP	N	-0.400
HN	37.640380859	30.371660233	14.325880051	ARG	493	H	H	0.250
CA	37.025230408	28.406360626	13.804579735	ARG	493	CT	C	0.050
HA	36.028018951	27.968910217	13.727580070	ARG	493	HA	H	0.050
C	37.965038300	27.433940887	14.549659729	ARG	493	C	C	0.600
O	38.464019775	26.473600388	13.974459648	ARG	493	O	O	-0.550
CB	37.640460968	28.659650803	12.411649704	ARG	493	CT	C	-0.100
HB1	38.706169128	28.859439850	12.532710075	ARG	493	HA	H	0.050
HB2	37.569679260	27.753469467	11.808429718	ARG	493	HA	H	0.050
CG	37.051860809	29.851419449	11.643770218	ARG	493	CT	C	-0.100
HG1	35.988380432	29.701650620	11.456040382	ARG	493	HA	H	0.050
HG2	37.136318207	30.748420715	12.258540154	ARG	493	HA	H	0.050
CD	37.803310394	30.107379913	10.330340385	ARG	493	CT	C	0.000
HD1	38.872070312	29.952060699	10.472970009	ARG	493	HA	H	0.050
HD2	37.450370789	29.471670151	9.517330170	ARG	493	HA	H	0.050
NE	37.622268677	31.501089096	9.952110291	ARG	493	NP	N	-0.400
HE	37.104961395	32.066810608	10.602370262	ARG	493	H	H	0.300
CZ	38.293151855	32.119918823	8.959219933	ARG	493	C	C	0.500
NH1	39.201820374	31.474050522	8.234169960	ARG	493	NC	N	-0.450
HH11	39.525169373	30.560390472	8.521240234	ARG	493	HC	H	0.350
HH12	39.617321014	31.872829437	7.419909954	ARG	493	HC	H	0.350
NH2	38.052730560	33.409179688	8.741499901	ARG	493	NC	N	-0.450
HH21	37.417720795	33.892559052	9.346529961	ARG	493	HC	H	0.350
HH22	38.498710632	33.917331696	8.006509781	ARG	493	HC	H	0.350
N	38.258758545	27.796159744	15.814720154	LEU	494	NP	N	-0.400
HN	37.739490509	28.522619247	16.269910812	LEU	494	H	H	0.250
CA	39.528190613	27.390140533	16.406810760	LEU	494	CT	C	0.050
HA	39.971649170	26.595439911	15.805130005	LEU	494	HA	H	0.050
C	39.331581116	26.852359772	17.832149506	LEU	494	C	C	0.600

O	40.255481720	26.856489182	18.644720078	LEU	494	O	O	-0.550
CB	40.416538239	28.647600174	16.406040192	LEU	494	CT	C	-0.100
HB1	40.007511139	29.350160599	15.682490349	LEU	494	HA	H	0.050
HB2	40.366851807	29.156339645	17.369699478	LEU	494	HA	H	0.050
CG	41.874450684	28.425960541	16.003770828	LEU	494	CT	C	-0.050
HG	41.881290436	27.879060745	15.059949875	LEU	494	HA	H	0.050
CD1	42.555309296	29.780340195	15.767450333	LEU	494	CT	C	-0.150
HD11	42.121658325	30.286529541	14.904789925	LEU	494	HA	H	0.050
HD12	42.452758789	30.440670013	16.626289368	LEU	494	HA	H	0.050
HD13	43.616531372	29.660339355	15.580109596	LEU	494	HA	H	0.050
CD2	42.624488831	27.604560852	17.051889420	LEU	494	CT	C	-0.150
HD21	42.533798218	28.059719086	18.033779144	LEU	494	HA	H	0.050
HD22	42.224918365	26.594039917	17.101930618	LEU	494	HA	H	0.050
HD23	43.682819366	27.530860901	16.822999954	LEU	494	HA	H	0.050
N	38.091449738	26.396219254	18.108829498	GLU	495	NP	N	-0.400
HN	37.429039001	26.346160889	17.353590012	GLU	495	H	H	0.250
CA	37.788791656	25.954330444	19.474519730	GLU	495	CT	C	0.050
HA	38.726749420	25.665559769	19.932750702	GLU	495	HA	H	0.050
C	36.962989807	24.671859741	19.483589172	GLU	495	C	C	0.600
O	37.218429565	23.754770279	20.255170822	GLU	495	O	O	-0.550
CB	37.134059906	27.071840286	20.294990540	GLU	495	CT	C	-0.100
HB1	37.599411011	28.026660919	20.048940659	GLU	495	HA	H	0.050
HB2	36.084918976	27.178220749	20.015810013	GLU	495	HA	H	0.050
CG	37.252658844	26.816339493	21.806520462	GLU	495	CT	C	-0.250
HG1	36.644271851	27.538970947	22.346729279	GLU	495	HA	H	0.050
HG2	36.862480164	25.832780838	22.069169998	GLU	495	HA	H	0.050
CD	38.708320618	26.926769257	22.283180237	GLU	495	C	C	0.350
OE1	39.124748230	28.008819580	22.679489136	GLU	495	OC	O	-0.600
OE2	39.435779572	25.933990479	22.287090302	GLU	495	OC	O	-0.600
N	36.025291443	24.648920059	18.524499893	ASP	496	NP	N	-0.400
HN	35.839420319	25.469110489	17.981710434	ASP	496	H	H	0.250
CA	35.446781158	23.416820526	17.998750687	ASP	496	CT	C	0.050
HA	34.835151672	22.991699219	18.794679642	ASP	496	HA	H	0.050
C	36.570320129	22.415729523	17.647760391	ASP	496	C	C	0.600
O	36.546878815	21.243080139	18.006729126	ASP	496	O	O	-0.550
CB	34.582260132	23.774429321	16.770069122	ASP	496	CT	C	-0.250
HB1	34.127948761	22.870529175	16.361589432	ASP	496	HA	H	0.050
HB2	33.760448456	24.423299789	17.072059631	ASP	496	HA	H	0.050
CG	35.360000610	24.497629166	15.646769524	ASP	496	C	C	0.350
OD1	36.159648895	25.388669968	15.948120117	ASP	496	OC	O	-0.600
OD2	35.177989960	24.146259308	14.486619949	ASP	496	OC	O	-0.600
N	37.607570648	22.997959137	17.016780853	PHE	497	NP	N	-0.400
HN	37.436878204	23.907049179	16.626810074	PHE	497	H	H	0.250
CA	38.915138245	22.360200882	16.978380203	PHE	497	CT	C	0.050
HA	38.766639709	21.315170288	16.696590424	PHE	497	HA	H	0.050
C	39.526279449	22.410089493	18.388589859	PHE	497	C	C	0.600
O	40.300189972	23.292499542	18.749139786	PHE	497	O	O	-0.550
CB	39.807319641	23.054880142	15.940299988	PHE	497	CT	C	-0.100
HB1	39.736991882	24.139940262	16.029489517	PHE	497	HA	H	0.050
HB2	40.856670380	22.802450180	16.102800369	PHE	497	HA	H	0.050
CG	39.420051575	22.628589630	14.550359726	PHE	497	C6R	C	0.000
CD1	38.353610992	23.233129501	13.894049644	PHE	497	C6R	C	-0.130
HD1	37.798660278	24.032279968	14.365790367	PHE	497	HA	H	0.130
CD2	40.117858887	21.611610413	13.905449867	PHE	497	C6R	C	-0.130
HD2	40.941238403	21.124780655	14.404060364	PHE	497	HA	H	0.130
CE1	37.987880707	22.830930710	12.617830276	PHE	497	C6R	C	-0.130
HE1	37.151889801	23.315790176	12.134090424	PHE	497	HA	H	0.130
CE2	39.758911133	21.209459305	12.625209808	PHE	497	C6R	C	-0.130
HE2	40.307140350	20.422060013	12.129300117	PHE	497	HA	H	0.130
CZ	38.692348480	21.819850922	11.979780197	PHE	497	C6R	C	-0.130
HZ	38.411811829	21.511709213	10.983539581	PHE	497	HA	H	0.130
N	39.102821350	21.389339447	19.153640747	ASN	498	NP	N	-0.400

HN	38.348381042	20.838699341	18.786090851	ASN	498	H	H	0.250
CA	39.596210480	21.137649536	20.502059937	ASN	498	CT	C	0.050
HA	40.291301727	21.936840057	20.768610001	ASN	498	HA	H	0.050
C	40.353321075	19.801439285	20.521850586	ASN	498	C	C	0.600
O	40.597110748	19.219219208	21.570529938	ASN	498	O	O	-0.550
CB	38.389209747	21.066080093	21.464519501	ASN	498	CT	C	-0.100
HB1	37.514240265	21.548089981	21.031360626	ASN	498	HA	H	0.050
HB2	38.078388214	20.039720535	21.666679382	ASN	498	HA	H	0.050
CG	38.708339691	21.752939224	22.794660568	ASN	498	C	C	0.550
OD1	39.118358612	21.128389359	23.766689301	ASN	498	O	O	-0.550
ND2	38.513061523	23.075939178	22.757289886	ASN	498	NP	N	-0.600
HD21	38.739841461	23.679090500	23.527910233	ASN	498	H	H	0.300
HD22	38.118888855	23.504070282	21.937030792	ASN	498	H	H	0.300
N	40.648498535	19.318370819	19.304260254	TYR	499	NP	N	-0.400
HN	40.677799225	19.947410583	18.523580551	TYR	499	H	H	0.250
CA	41.043060303	17.930339813	19.089500427	TYR	499	CT	C	0.050
HA	41.190570831	17.441900253	20.054670334	TYR	499	HA	H	0.050
C	42.385391235	17.963890076	18.374870300	TYR	499	C	C	0.600
O	42.577541351	17.498310089	17.259929657	TYR	499	O	O	-0.550
CB	39.941730499	17.212739944	18.296270370	TYR	499	CT	C	-0.100
HB1	39.832370758	17.652790070	17.303749084	TYR	499	HA	H	0.050
HB2	40.201480865	16.163839340	18.147369385	TYR	499	HA	H	0.050
CG	38.638050079	17.305669785	19.044269562	TYR	499	C6R	C	0.000
CD1	38.420749664	16.519039154	20.170339584	TYR	499	C6R	C	-0.130
HD1	39.172080994	15.810770035	20.487289429	TYR	499	HA	H	0.130
CD2	37.650890350	18.203649521	18.648759842	TYR	499	C6R	C	-0.130
HD2	37.792140961	18.819120407	17.771490097	TYR	499	HA	H	0.130
CE1	37.247489929	16.644729614	20.900899887	TYR	499	C6R	C	-0.130
HE1	37.085071564	16.037279129	21.778530121	TYR	499	HA	H	0.130
CE2	36.477008820	18.335109711	19.378959656	TYR	499	C6R	C	-0.130
HE2	35.754459381	19.063800812	19.037319183	TYR	499	HA	H	0.130
CZ	36.275531769	17.554210663	20.513530731	TYR	499	C6R	C	0.250
OH	35.132129669	17.657800674	21.281070709	TYR	499	OT	O	-0.650
HH	34.423698425	18.055519104	20.793439865	TYR	499	HO	H	0.400
N	43.269260406	18.636709213	19.120660782	ASN	500	NP	N	-0.400
HN	43.032409668	18.882150650	20.061700821	ASN	500	H	H	0.250
CA	44.567150116	19.059259415	18.644710541	ASN	500	CT	C	0.050
HA	44.880451202	18.405319214	17.828090668	ASN	500	HA	H	0.050
C	45.458999634	18.879869461	19.865949631	ASN	500	C	C	0.600
O	45.133548737	19.394109726	20.928649902	ASN	500	O	O	-0.550
CB	44.495349884	20.545150757	18.233219147	ASN	500	CT	C	-0.100
HB1	44.303909302	21.168550491	19.107149124	ASN	500	HA	H	0.050
HB2	45.441570282	20.879720688	17.806800842	ASN	500	HA	H	0.050
CG	43.353981018	20.813020706	17.238620758	ASN	500	C	C	0.550
OD1	42.218460083	21.074069977	17.618650436	ASN	500	O	O	-0.550
ND2	43.713470459	20.735799789	15.953000069	ASN	500	NP	N	-0.600
HD21	43.008701324	20.890190125	15.263930321	ASN	500	H	H	0.300
HD22	44.642238617	20.515329361	15.661120415	ASN	500	H	H	0.300
N	46.537719727	18.095710754	19.690349579	ASN	501	NP	N	-0.400
HN	46.807388306	17.777200699	18.782339096	ASN	501	H	H	0.250
CA	47.288951874	17.612319946	20.844430923	ASN	501	CT	C	0.050
HA	46.993698120	18.173179626	21.729770660	ASN	501	HA	H	0.050
C	48.779548645	17.819370270	20.584230423	ASN	501	C	C	0.600
O	49.302181244	17.388809204	19.564970016	ASN	501	O	O	-0.550
CB	47.044738770	16.105510712	21.052860260	ASN	501	CT	C	-0.100
HB1	47.229949951	15.556659698	20.128990173	ASN	501	HA	H	0.050
HB2	47.740409851	15.711600304	21.796220779	ASN	501	HA	H	0.050
CG	45.611579895	15.801890373	21.510969162	ASN	501	C	C	0.550
OD1	44.635639191	16.112720490	20.842580795	ASN	501	O	O	-0.550
ND2	45.536178589	15.158769608	22.682199478	ASN	501	NP	N	-0.600
HD21	44.629371643	14.915109634	23.019760132	ASN	501	H	H	0.300
HD22	46.349250793	14.916179657	23.208169937	ASN	501	H	H	0.300

N	49.427448273	18.456979752	21.573820114	GLN	502	NP	N	-0.400
HN	48.893341064	18.801019669	22.348909378	GLN	502	H	H	0.250
CA	50.881328583	18.423000336	21.659589767	GLN	502	CT	C	0.050
HA	51.295410156	18.203979492	20.672979355	GLN	502	HA	H	0.050
C	51.251758575	17.295209885	22.625329971	GLN	502	C	C	0.600
O	50.432571411	16.857580185	23.425540924	GLN	502	O	O	-0.550
CB	51.420368195	19.759899139	22.204790115	GLN	502	CT	C	-0.100
HB1	51.080848694	19.901689529	23.230739594	GLN	502	HA	H	0.050
HB2	52.509651184	19.721099854	22.258640289	GLN	502	HA	H	0.050
CG	50.989391327	20.985490799	21.386659622	GLN	502	CT	C	-0.100
HG1	49.913970947	21.120769501	21.461669922	GLN	502	HA	H	0.050
HG2	51.450489044	21.893159866	21.776309967	GLN	502	HA	H	0.050
CD	51.344669342	20.842830658	19.905500412	GLN	502	C	C	0.550
OE1	50.486061096	20.837890625	19.034360886	GLN	502	O	O	-0.550
NE2	52.654071808	20.708610535	19.671609879	GLN	502	NP	N	-0.600
HE21	52.955791473	20.573320389	18.729890823	GLN	502	H	H	0.300
HE22	53.324329376	20.740869522	20.410669327	GLN	502	H	H	0.300
N	52.529541016	16.892530441	22.526239395	THR	503	NP	N	-0.400
HN	53.153018951	17.311969757	21.866849899	THR	503	H	H	0.250
CA	53.153198242	16.078819275	23.559949875	THR	503	CT	C	0.050
HA	52.467971802	16.022230148	24.396810532	THR	503	HA	H	0.050
C	54.362541199	16.874250412	24.043060303	THR	503	C	C	0.600
O	54.767810822	17.846710205	23.413320541	THR	503	O	O	-0.550
CB	53.479869843	14.656649590	23.057029724	THR	503	CT	C	0.150
HB	52.545101166	14.174240112	22.753719330	THR	503	HA	H	0.100
OG1	54.093170166	13.848310471	24.047849655	THR	503	OT	O	-0.650
HG1	53.600891113	13.867600441	24.874080658	THR	503	HO	H	0.400
CG2	54.410488129	14.655059814	21.838340759	THR	503	CT	C	-0.150
HG21	54.605518341	13.635020256	21.507070541	THR	503	HA	H	0.050
HG22	53.976551056	15.196809769	20.998380661	THR	503	HA	H	0.050
HG23	55.372348785	15.110619545	22.074619293	THR	503	HA	H	0.050
N	54.849628448	16.441320419	25.212520599	ILE	504	NP	N	-0.400
HN	54.545158386	15.562689781	25.594779968	ILE	504	H	H	0.250
CA	55.852149963	17.169549942	25.967029572	ILE	504	CT	C	0.050
HA	56.561168671	17.585409164	25.248729706	ILE	504	HA	H	0.050
C	56.584541321	16.104530334	26.797380447	ILE	504	C	C	0.600
O	56.337860107	14.920660019	26.610330582	ILE	504	O	O	-0.550
CB	55.137378693	18.289920807	26.759920120	ILE	504	CT	C	-0.050
HB	54.550151825	18.843009949	26.025590897	ILE	504	HA	H	0.050
CG1	56.110179901	19.311590195	27.374069214	ILE	504	CT	C	-0.100
HG11	56.508579254	18.933259964	28.313249588	ILE	504	HA	H	0.050
HG12	56.963459015	19.447259903	26.709539413	ILE	504	HA	H	0.050
CG2	54.143779755	17.733520508	27.793409348	ILE	504	CT	C	-0.150
HG21	54.653919220	17.152820587	28.561580658	ILE	504	HA	H	0.050
HG22	53.600681305	18.536079407	28.290260315	ILE	504	HA	H	0.050
HG23	53.401039124	17.085479736	27.329450607	ILE	504	HA	H	0.050
CD1	55.467590332	20.684299469	27.611700058	ILE	504	CT	C	-0.150
HD11	54.631721497	20.617189407	28.304809570	ILE	504	HA	H	0.050
HD12	56.186550140	21.386409760	28.033470154	ILE	504	HA	H	0.050
HD13	55.096359253	21.112440109	26.680719376	ILE	504	HA	H	0.050
N	57.494499207	16.559740067	27.680580139	THR	505	NP	N	-0.400
HN	57.631481171	17.534179688	27.862689972	THR	505	H	H	0.250
CA	58.463138580	15.706430435	28.368209839	THR	505	CT	C	0.050
HA	59.215301514	15.488080025	27.621320724	THR	505	HA	H	0.050
C	57.873840332	14.369489670	28.864879608	THR	505	C	C	0.600
O	58.413990021	13.289480209	28.650220871	THR	505	O	O	-0.550
CB	59.084430695	16.516210556	29.521610260	THR	505	CT	C	0.150
HB	58.546070099	16.278110504	30.445959091	THR	505	HA	H	0.100
OG1	58.914890289	17.896850586	29.224180222	THR	505	OT	O	-0.650
HG1	59.345470428	18.424470901	29.901279449	THR	505	HO	H	0.400
CG2	60.574169159	16.195499420	29.700519562	THR	505	CT	C	-0.150
HG21	60.980461121	16.638109207	30.610309601	THR	505	HA	H	0.050

HG22	60.738601685	15.118789673	29.766950607	THR	505	HA	H	0.050
HG23	61.142200470	16.579650879	28.855180740	THR	505	HA	H	0.050
N	56.726520538	14.563730240	29.531650543	ASP	506	NP	N	-0.400
HN	56.423721313	15.505780220	29.681449890	ASP	506	H	H	0.250
CA	55.978141785	13.500630379	30.176670074	ASP	506	CT	C	0.050
HA	56.643249512	12.642609596	30.295419693	ASP	506	HA	H	0.050
C	54.792469025	13.040320396	29.301250458	ASP	506	C	C	0.600
O	54.719211578	11.883930206	28.906230927	ASP	506	O	O	-0.550
CB	55.559970856	13.997220039	31.575439453	ASP	506	CT	C	-0.250
HB1	54.880088806	13.310190201	32.075958252	ASP	506	HA	H	0.050
HB2	56.447650909	14.021599770	32.198410034	ASP	506	HA	H	0.050
CG	54.984840393	15.419610023	31.559339523	ASP	506	C	C	0.350
OD1	55.757190704	16.373229980	31.643550873	ASP	506	OC	O	-0.600
OD2	53.777111053	15.581919670	31.414310455	ASP	506	OC	O	-0.600
N	53.848781586	13.978679657	29.063219070	GLN	507	NP	N	-0.400
HN	53.999061584	14.886199951	29.459030151	GLN	507	H	H	0.250
CA	52.518928528	13.600839615	28.574739456	GLN	507	CT	C	0.050
HA	52.551269531	12.566280365	28.228559494	GLN	507	HA	H	0.050
C	52.096881866	14.463620186	27.356100082	GLN	507	C	C	0.600
O	52.815689087	14.568329811	26.364599228	GLN	507	O	O	-0.550
CB	51.532531738	13.717599869	29.753780365	GLN	507	CT	C	-0.100
HB1	51.485950470	14.765379906	30.038110733	GLN	507	HA	H	0.050
HB2	50.529010773	13.418009758	29.450029373	GLN	507	HA	H	0.050
CG	51.920269012	12.883779526	30.984270096	GLN	507	CT	C	-0.100
HG1	51.813598633	11.818189621	30.782640457	GLN	507	HA	H	0.050
HG2	52.950111389	13.051480293	31.276079178	GLN	507	HA	H	0.050
CD	51.057361603	13.254619598	32.190151215	GLN	507	C	C	0.550
OE1	50.339859009	12.435270309	32.743328094	GLN	507	O	O	-0.550
NE2	51.161300659	14.536529541	32.557918549	GLN	507	NP	N	-0.600
HE21	50.622718811	14.900719643	33.311859131	GLN	507	H	H	0.300
HE22	51.795280457	15.168190002	32.089309692	GLN	507	H	H	0.300
N	50.869380951	15.031749725	27.469049454	ILE	508	NP	N	-0.400
HN	50.368831635	14.998080254	28.331699371	ILE	508	H	H	0.250
CA	50.178859711	15.661990166	26.350549698	ILE	508	CT	C	0.050
HA	50.950538635	16.068399429	25.707759857	ILE	508	HA	H	0.050
C	49.339698792	16.858289719	26.824180603	ILE	508	C	C	0.600
O	48.911769867	16.957950592	27.969770432	ILE	508	O	O	-0.550
CB	49.300689697	14.653309822	25.565729141	ILE	508	CT	C	-0.050
HB	48.976638794	15.172419548	24.662109375	ILE	508	HA	H	0.050
CG1	48.000091553	14.217390060	26.279609680	ILE	508	CT	C	-0.100
HG11	47.329669952	15.070960045	26.385000229	ILE	508	HA	H	0.050
HG12	47.470329285	13.513449669	25.636890411	ILE	508	HA	H	0.050
CG2	50.100421906	13.440890312	25.067739487	ILE	508	CT	C	-0.150
HG21	50.973899841	13.761280060	24.501930237	ILE	508	HA	H	0.050
HG22	50.443710327	12.808739662	25.885850906	ILE	508	HA	H	0.050
HG23	49.496391296	12.818479538	24.407619476	ILE	508	HA	H	0.050
CD1	48.191101074	13.570509911	27.657539368	ILE	508	CT	C	-0.150
HD11	48.915538788	12.756959915	27.625009537	ILE	508	HA	H	0.050
HD12	48.519111633	14.297490120	28.399330139	ILE	508	HA	H	0.050
HD13	47.249740601	13.156459808	28.018949509	ILE	508	HA	H	0.050
N	49.126419067	17.739240646	25.834779739	TYR	509	NP	N	-0.400
HN	49.516040802	17.536310196	24.932340622	TYR	509	H	H	0.250
CA	48.314701080	18.931940079	25.995769501	TYR	509	CT	C	0.050
HA	47.780979156	18.883699417	26.944280624	TYR	509	HA	H	0.050
C	47.301769257	18.972560883	24.854219437	TYR	509	C	C	0.600
O	47.672721863	19.176649094	23.705789566	TYR	509	O	O	-0.550
CB	49.215141296	20.171480179	25.902120590	TYR	509	CT	C	-0.100
HB1	50.051948547	19.994369507	25.227380753	TYR	509	HA	H	0.050
HB2	48.669021606	21.014450073	25.475700378	TYR	509	HA	H	0.050
CG	49.713451385	20.618659973	27.243209839	TYR	509	C6R	C	0.000
CD1	48.842411041	21.255899429	28.114240646	TYR	509	C6R	C	-0.130
HD1	47.808971405	21.398309708	27.837150574	TYR	509	HA	H	0.130

CD2	51.039028168	20.450420380	27.619400024	TYR	509	C6R	C	-0.130
HD2	51.735431671	19.948150635	26.963529587	TYR	509	HA	H	0.130
CE1	49.284660339	21.750070572	29.329879761	TYR	509	C6R	C	-0.130
HE1	48.582759857	22.283460617	29.952249527	TYR	509	HA	H	0.130
CE2	51.482368469	20.945829391	28.837720871	TYR	509	C6R	C	-0.130
HE2	52.520519257	20.834840775	29.094659805	TYR	509	HA	H	0.130
CZ	50.608478546	21.595840454	29.701370239	TYR	509	C6R	C	0.250
OH	51.057769775	22.087720871	30.911750793	TYR	509	OT	O	-0.650
HH	50.330921173	22.240360260	31.515050888	TYR	509	HO	H	0.400
N	46.025058746	18.782419205	25.244710922	ARG	510	NP	N	-0.400
HN	45.844329834	18.594619751	26.208429337	ARG	510	H	H	0.250
CA	44.912380219	19.050609589	24.339649200	ARG	510	CT	C	0.050
HA	45.312259674	19.135450363	23.328599930	ARG	510	HA	H	0.050
C	44.347839355	20.433179855	24.729650497	ARG	510	C	C	0.600
O	45.096279144	21.395399094	24.780939102	ARG	510	O	O	-0.550
CB	43.908039093	17.884410858	24.380119324	ARG	510	CT	C	-0.100
HB1	44.462009430	16.946710587	24.386339188	ARG	510	HA	H	0.050
HB2	43.354988098	17.900880814	25.319250107	ARG	510	HA	H	0.050
CG	42.971820831	17.875780106	23.155990601	ARG	510	CT	C	-0.100
HG1	42.495208740	18.847890854	23.056659698	ARG	510	HA	H	0.050
HG2	43.567161560	17.776889801	22.249500275	ARG	510	HA	H	0.050
CD	41.912750244	16.753780365	23.180500031	ARG	510	CT	C	0.000
HD1	41.176071167	16.858030319	22.382310867	ARG	510	HA	H	0.050
HD2	42.387191772	15.779299736	23.062559128	ARG	510	HA	H	0.050
NE	41.204639435	16.708650589	24.458389282	ARG	510	NP	N	-0.400
HE	41.388229370	15.921270370	25.047439575	ARG	510	H	H	0.300
CZ	40.491451263	17.762699127	24.911289215	ARG	510	C	C	0.500
NH1	40.175689697	18.761760712	24.097080231	ARG	510	NC	N	-0.450
HH11	40.401451111	18.714679718	23.116750717	ARG	510	HC	H	0.350
HH12	39.716888428	19.610769272	24.402570724	ARG	510	HC	H	0.350
NH2	40.146091461	17.823139191	26.189729691	ARG	510	NC	N	-0.450
HH21	40.216140747	17.047719955	26.814340591	ARG	510	HC	H	0.350
HH22	39.842399597	18.718620300	26.543750763	ARG	510	HC	H	0.350
N	43.036010742	20.509040833	25.022359848	ALA	511	NP	N	-0.400
HN	42.450119019	19.700260162	25.052619934	ALA	511	H	H	0.250
CA	42.413219452	21.789100647	25.349130630	ALA	511	CT	C	0.050
HA	43.058898926	22.315799713	26.055259705	ALA	511	HA	H	0.050
C	41.075710297	21.484159470	26.032390594	ALA	511	C	C	0.600
O	40.730430603	20.327159882	26.238939285	ALA	511	O	O	-0.550
CB	42.201950073	22.600679398	24.057939529	ALA	511	CT	C	-0.150
HB1	41.591068268	22.051170349	23.341260910	ALA	511	HA	H	0.050
HB2	41.709770203	23.553960800	24.252180099	ALA	511	HA	H	0.050
HB3	43.155868530	22.821710587	23.579019547	ALA	511	HA	H	0.050
N	40.335411072	22.552150726	26.345659256	MET	512	NP	N	-0.400
HN	40.694431305	23.474760056	26.176490784	MET	512	H	H	0.250
CA	38.933959961	22.406459808	26.720119476	MET	512	CT	C	0.050
HA	38.525959015	21.516719818	26.237030029	MET	512	HA	H	0.050
C	38.223289490	23.624479294	26.133480072	MET	512	C	C	0.600
O	38.785259247	24.338899612	25.314220428	MET	512	O	O	-0.550
CB	38.774570465	22.346149445	28.251750946	MET	512	CT	C	-0.100
HB1	39.216430664	23.236209869	28.698829651	MET	512	HA	H	0.050
HB2	37.721939087	22.375169754	28.520729065	MET	512	HA	H	0.050
CG	39.352619171	21.082380295	28.896829605	MET	512	CT	C	-0.050
HG1	40.423778534	20.986660004	28.721460342	MET	512	HA	H	0.050
HG2	39.223121643	21.148279190	29.977119446	MET	512	HA	H	0.050
SD	38.518810272	19.588600159	28.330589294	MET	512	SE	S	-0.100
CE	39.285991669	18.422300339	29.467630386	MET	512	CT	C	-0.100
HE1	40.357730865	18.364719391	29.281299591	MET	512	HA	H	0.050
HE2	39.148159027	18.758340836	30.495449066	MET	512	HA	H	0.050
HE3	38.841041565	17.433040619	29.362569809	MET	512	HA	H	0.050
N	36.992370605	23.848850250	26.622419357	ASN	513	NP	N	-0.400
HN	36.579410553	23.163900375	27.222900391	ASN	513	H	H	0.250

CA	36.346641541	25.139799118	26.429399490	ASN	513	CT	C	0.050
HA	37.132720947	25.891839981	26.497659683	ASN	513	HA	H	0.050
C	35.414089203	25.346099854	27.629859924	ASN	513	C	C	0.600
O	35.696029663	26.094259262	28.557680130	ASN	513	O	O	-0.550
CB	35.650318146	25.217929840	25.053770065	ASN	513	CT	C	-0.100
HB1	36.329559326	24.861499786	24.279020309	ASN	513	HA	H	0.050
HB2	34.757850647	24.595069885	25.001649857	ASN	513	HA	H	0.050
CG	35.302501678	26.670129776	24.702369690	ASN	513	C	C	0.550
OD1	35.948360443	27.605180740	25.152339935	ASN	513	O	O	-0.550
ND2	34.277729034	26.812770844	23.857730865	ASN	513	NP	N	-0.600
HD21	34.063991547	27.742750168	23.540800095	ASN	513	H	H	0.300
HD22	33.729240417	26.053789139	23.515970230	ASN	513	H	H	0.300
N	34.322460175	24.567140579	27.599319458	SER	514	NP	N	-0.400
HN	34.036838531	24.084400177	26.771629333	SER	514	H	H	0.250
CA	33.392311096	24.490690231	28.715509415	SER	514	CT	C	0.050
HA	33.161930084	25.509780884	29.029369354	SER	514	HA	H	0.050
C	33.988391876	23.692550659	29.896730423	SER	514	C	C	0.600
O	33.581241608	22.567279816	30.165060043	SER	514	O	O	-0.550
CB	32.139198303	23.790050507	28.171350479	SER	514	CT	C	0.050
HB1	32.296760559	22.704450607	28.133050919	SER	514	HA	H	0.100
HB2	31.285749435	23.981399536	28.830850601	SER	514	HA	H	0.100
OG	31.895109177	24.281839371	26.857320786	SER	514	OT	O	-0.650
HG	31.134149551	23.855819702	26.464199066	SER	514	HO	H	0.400
N	34.970241547	24.311569214	30.584159851	SER	515	NP	N	-0.400
HN	35.307361603	25.173049927	30.201150894	SER	515	H	H	0.250
CA	35.573509216	23.607049942	31.720840454	SER	515	CT	C	0.050
HA	34.760810852	23.125509262	32.270168304	SER	515	HA	H	0.050
C	36.264030457	24.534549713	32.733188629	SER	515	C	C	0.600
O	36.583110809	24.113180161	33.837551117	SER	515	O	O	-0.550
CB	36.580608368	22.550369263	31.220630646	SER	515	CT	C	0.050
HB1	37.506938934	23.029609680	30.895139694	SER	515	HA	H	0.100
HB2	36.867031097	21.871120453	32.029548645	SER	515	HA	H	0.100
OG	36.094661713	21.794620514	30.123249054	SER	515	OT	O	-0.650
HG	35.158958435	21.613500595	30.244220734	SER	515	HO	H	0.400
N	36.494419098	25.801820755	32.345531464	SER	516	NP	N	-0.400
HN	36.175849915	26.139799118	31.462440491	SER	516	H	H	0.250
CA	37.332099915	26.696979523	33.150199890	SER	516	CT	C	0.050
HA	37.248088837	27.655380249	32.635421753	SER	516	HA	H	0.050
C	38.808929443	26.277950287	33.053070068	SER	516	C	C	0.600
O	39.585380554	26.924430847	32.376548767	SER	516	O	O	-0.550
CB	36.874698639	26.894420624	34.615390778	SER	516	CT	C	0.050
HB1	37.599258423	26.508180618	35.341571808	SER	516	HA	H	0.100
HB2	36.834739685	27.964679718	34.824169159	SER	516	HA	H	0.100
OG	35.592159271	26.354000092	34.884761810	SER	516	OT	O	-0.650
HG	35.632560730	25.401960373	34.749881744	SER	516	HO	H	0.400
N	39.164611816	25.176099777	33.737480164	PHE	517	NP	N	-0.400
HN	38.454528809	24.619600296	34.172740936	PHE	517	H	H	0.250
CA	40.539329529	24.697509766	33.624580383	PHE	517	CT	C	0.050
HA	41.192031860	25.556179047	33.474128723	PHE	517	HA	H	0.050
C	40.636878967	23.769470215	32.402908325	PHE	517	C	C	0.600
O	39.867511749	22.823650360	32.262271881	PHE	517	O	O	-0.550
CB	40.971549988	23.978050232	34.910579681	PHE	517	CT	C	-0.100
HB1	40.185321808	23.318759918	35.280479431	PHE	517	HA	H	0.050
HB2	41.832000732	23.342880249	34.700550079	PHE	517	HA	H	0.050
CG	41.383571625	24.958969116	35.977481842	PHE	517	C6R	C	0.000
CD1	40.461700439	25.467409134	36.884429932	PHE	517	C6R	C	-0.130
HD1	39.430828094	25.175369263	36.824489594	PHE	517	HA	H	0.130
CD2	42.705009460	25.382959366	36.064159393	PHE	517	C6R	C	-0.130
HD2	43.434299469	24.998710632	35.367591858	PHE	517	HA	H	0.130
CE1	40.849628448	26.364620209	37.867378235	PHE	517	C6R	C	-0.130
HE1	40.126388550	26.743339539	38.572498322	PHE	517	HA	H	0.130
CE2	43.096389771	26.293590546	37.037319183	PHE	517	C6R	C	-0.130

HE2	44.121540070	26.629320145	37.099601746	PHE	517	HA	H	0.130
CZ	42.169219971	26.780189514	37.943859100	PHE	517	C6R	C	-0.130
HZ	42.476650238	27.483270645	38.704780579	PHE	517	HA	H	0.130
N	41.617900848	24.081480026	31.530399323	GLU	518	NP	N	-0.400
HN	42.160438538	24.912620544	31.683660507	GLU	518	H	H	0.250
CA	41.865699768	23.183900833	30.404100418	GLU	518	CT	C	0.050
HA	40.895160675	22.905790329	30.002819061	GLU	518	HA	H	0.050
C	42.581161499	21.911159515	30.896020889	GLU	518	C	C	0.600
O	43.796051025	21.872159958	30.992439270	GLU	518	O	O	-0.550
CB	42.670829773	23.877830505	29.287509918	GLU	518	CT	C	-0.100
HB1	43.675708771	24.125730515	29.633560181	GLU	518	HA	H	0.050
HB2	42.796398163	23.167930603	28.467639923	GLU	518	HA	H	0.050
CG	41.974628448	25.146139145	28.769140244	GLU	518	CT	C	-0.250
HG1	40.898441315	24.982669830	28.729579926	GLU	518	HA	H	0.050
HG2	42.152210236	25.969360352	29.458200455	GLU	518	HA	H	0.050
CD	42.445400238	25.550939560	27.366210938	GLU	518	C	C	0.350
OE1	41.858440399	25.083330154	26.395469666	GLU	518	OC	O	-0.600
OE2	43.370121002	26.348949432	27.245149612	GLU	518	OC	O	-0.600
N	41.760631561	20.881740570	31.185880661	GLY	519	NP	N	-0.400
HN	40.780250549	21.081060410	31.202230453	GLY	519	H	H	0.250
CA	42.280269623	19.589189529	31.636629105	GLY	519	CT	C	0.000
HA1	42.794231415	19.762990952	32.578399658	GLY	519	HA	H	0.050
HA2	41.420631409	18.946399689	31.821510315	GLY	519	HA	H	0.050
C	43.213809967	18.921779633	30.604459763	GLY	519	C	C	0.600
O	42.818229675	18.636470795	29.479610443	GLY	519	O	O	-0.550
N	44.468540192	18.713100433	31.056270599	VAL	520	NP	N	-0.400
HN	44.675449371	18.872970581	32.021160126	VAL	520	H	H	0.250
CA	45.597541809	18.333549500	30.204299927	VAL	520	CT	C	0.050
HA	45.249618530	17.568149567	29.508949280	VAL	520	HA	H	0.050
C	46.680789948	17.712409973	31.124099731	VAL	520	C	C	0.600
O	46.358589172	17.288080215	32.227378845	VAL	520	O	O	-0.550
CB	46.114978790	19.592029572	29.466220856	VAL	520	CT	C	-0.050
HB	47.007461548	19.315610886	28.910900116	VAL	520	HA	H	0.050
CG1	45.131168365	20.119930267	28.405540466	VAL	520	CT	C	-0.150
HG11	44.736110687	19.310930252	27.792060852	VAL	520	HA	H	0.050
HG12	44.284931183	20.636859894	28.854249954	VAL	520	HA	H	0.050
HG13	45.611179352	20.835739136	27.738460541	VAL	520	HA	H	0.050
CG2	46.502681732	20.698799133	30.460920334	VAL	520	CT	C	-0.150
HG21	45.784168243	20.802949905	31.266000748	VAL	520	HA	H	0.050
HG22	47.459121704	20.491470337	30.940980911	VAL	520	HA	H	0.050
HG23	46.548168182	21.670709610	29.972579956	VAL	520	HA	H	0.050
N	47.951511383	17.713319778	30.640069962	SER	521	NP	N	-0.400
HN	48.110580444	17.910299301	29.670179367	SER	521	H	H	0.250
CA	49.120738983	17.350639343	31.452249527	SER	521	CT	C	0.050
HA	48.923778534	16.355850220	31.849670410	SER	521	HA	H	0.050
C	49.296760559	18.317770004	32.654350281	SER	521	C	C	0.600
O	48.493480682	18.336330414	33.577991486	SER	521	O	O	-0.550
CB	50.381130219	17.304950714	30.559080124	SER	521	CT	C	0.050
HB1	50.265579224	16.520669937	29.813150406	SER	521	HA	H	0.100
HB2	50.509349823	18.251579285	30.021369934	SER	521	HA	H	0.100
OG	51.517101288	17.019830704	31.365379333	SER	521	OT	O	-0.650
HG	52.364490509	17.111650467	30.900049210	SER	521	HO	H	0.400
N	50.383998871	19.122339249	32.588348389	GLY	522	NP	N	-0.400
HN	51.080139160	18.867319107	31.916959763	GLY	522	H	H	0.250
CA	50.630268097	20.176509857	33.565261841	GLY	522	CT	C	0.000
HA1	50.855461121	19.688520432	34.515281677	GLY	522	HA	H	0.050
HA2	51.501190186	20.752529144	33.268199921	GLY	522	HA	H	0.050
C	49.406539917	21.087060928	33.659698486	GLY	522	C	C	0.600
O	49.066280365	21.845699310	32.756828308	GLY	522	O	O	-0.550
N	48.769111633	20.836349487	34.801410675	HIS	523	NP	N	-0.400
HN	49.284999847	20.283359528	35.463249207	HIS	523	H	H	0.250
CA	47.383979797	21.111270905	35.123931885	HIS	523	CT	C	0.050

HA	47.303741455	22.162780762	35.371719360	HIS	523	HA	H	0.050
C	47.176651001	20.294420242	36.394741058	HIS	523	C	C	0.600
O	46.882850647	20.814809799	37.461669922	HIS	523	O	O	-0.550
CB	46.411029816	20.742860794	33.987060547	HIS	523	CT	C	-0.100
HB1	46.396961212	21.541000366	33.245418549	HIS	523	HA	H	0.050
HB2	46.704540253	19.829889297	33.474628448	HIS	523	HA	H	0.050
CG	45.023658752	20.548639297	34.546371460	HIS	523	C5R	C	0.100
ND1	44.266761780	21.541759491	35.046848297	HIS	523	N5R	N	-0.400
HD1	44.527908325	22.494020462	35.111968994	HIS	523	H	H	0.300
CD2	44.330219269	19.339490891	34.695610046	HIS	523	C5R	C	0.000
HD2	44.690238953	18.366870880	34.392181396	HIS	523	HA	H	0.100
CE1	43.141761780	20.958330154	35.494880676	HIS	523	C5R	C	0.200
HE1	42.333091736	21.486520767	35.979961395	HIS	523	HA	H	0.100
NE2	43.151901245	19.626960754	35.293628693	HIS	523	N5R	N	-0.400
N	47.497718811	18.992069244	36.219600677	VAL	524	NP	N	-0.400
HN	47.683181763	18.645919800	35.295318604	VAL	524	H	H	0.250
CA	47.922050476	18.225519180	37.382019043	VAL	524	CT	C	0.050
HA	47.199970245	18.409580231	38.168411255	VAL	524	HA	H	0.050
C	49.277858734	18.797510147	37.817550659	VAL	524	C	C	0.600
O	50.127910614	19.090990067	36.984550476	VAL	524	O	O	-0.550
CB	47.950229645	16.707050323	37.108890533	VAL	524	CT	C	-0.050
HB	48.140148163	16.217729568	38.064838409	VAL	524	HA	H	0.050
CG1	46.582378387	16.223760605	36.609401703	VAL	524	CT	C	-0.150
HG11	45.791801453	16.498569489	37.307479858	VAL	524	HA	H	0.050
HG12	46.337741852	16.656330109	35.638748169	VAL	524	HA	H	0.050
HG13	46.557308197	15.142840385	36.494621277	VAL	524	HA	H	0.050
CG2	49.065868378	16.252429962	36.157810211	VAL	524	CT	C	-0.150
HG21	50.044380188	16.600000381	36.485630035	VAL	524	HA	H	0.050
HG22	49.116161346	15.165659904	36.120178223	VAL	524	HA	H	0.050
HG23	48.905139923	16.611640930	35.144519806	VAL	524	HA	H	0.050
N	49.391971588	18.986129761	39.141960144	VAL	525	NP	N	-0.400
HN	48.621311188	18.762359619	39.734310150	VAL	525	H	H	0.250
CA	50.604030609	19.543060303	39.723560333	VAL	525	CT	C	0.050
HA	51.190399170	20.006229401	38.930709839	VAL	525	HA	H	0.050
C	51.380489349	18.366359711	40.328590393	VAL	525	C	C	0.600
O	50.967838287	17.802900314	41.333080292	VAL	525	O	O	-0.550
CB	50.232330322	20.596790314	40.791500092	VAL	525	CT	C	-0.050
HB	49.843910217	20.083810806	41.673671722	VAL	525	HA	H	0.050
CG1	51.467208862	21.400590897	41.219299316	VAL	525	CT	C	-0.150
HG11	52.243309021	20.746309280	41.609580994	VAL	525	HA	H	0.050
HG12	51.892948151	21.954830170	40.382431030	VAL	525	HA	H	0.050
HG13	51.213310242	22.115499496	42.001838684	VAL	525	HA	H	0.050
CG2	49.131950378	21.560340881	40.315940857	VAL	525	CT	C	-0.150
HG21	49.461399078	22.132329941	39.451610565	VAL	525	HA	H	0.050
HG22	48.209178925	21.048059464	40.045379639	VAL	525	HA	H	0.050
HG23	48.876529694	22.274780273	41.098781586	VAL	525	HA	H	0.050
N	52.478008270	17.986799240	39.656318665	PHE	526	NP	N	-0.400
HN	52.806518555	18.592300415	38.929000854	PHE	526	H	H	0.250
CA	53.248760223	16.823419571	40.084239960	PHE	526	CT	C	0.050
HA	52.533668518	16.040489197	40.343959808	PHE	526	HA	H	0.050
C	54.071449280	17.164789200	41.342109680	PHE	526	C	C	0.600
O	54.653411865	18.234670639	41.464538574	PHE	526	O	O	-0.550
CB	54.147010803	16.351560593	38.933231354	PHE	526	CT	C	-0.100
HB1	54.697071075	17.192050934	38.508239746	PHE	526	HA	H	0.050
HB2	54.904739380	15.662400246	39.305679321	PHE	526	HA	H	0.050
CG	53.364078522	15.634969711	37.860900879	PHE	526	C6R	C	0.000
CD1	52.820819855	14.376729965	38.109718323	PHE	526	C6R	C	-0.130
HD1	52.924720764	13.918129921	39.081008911	PHE	526	HA	H	0.130
CD2	53.185329437	16.202070236	36.602661133	PHE	526	C6R	C	-0.130
HD2	53.563640594	17.188520432	36.395160675	PHE	526	HA	H	0.130
CE1	52.139308929	13.688220024	37.116828918	PHE	526	C6R	C	-0.130
HE1	51.730628967	12.710559845	37.323299408	PHE	526	HA	H	0.130

CE2	52.514961243	15.511280060	35.601310730	PHE	526	C6R	C	-0.130
HE2	52.407501221	15.955209732	34.621311188	PHE	526	HA	H	0.130
CZ	51.993591309	14.250220299	35.858489990	PHE	526	C6R	C	-0.130
HZ	51.480808258	13.696920395	35.085800171	PHE	526	HA	H	0.130
N	54.033229828	16.195989609	42.269889832	ASP	527	NP	N	-0.400
HN	53.582538605	15.325429916	42.070869446	ASP	527	H	H	0.250
CA	54.576988220	16.341569901	43.615489960	ASP	527	CT	C	0.050
HA	54.281120300	17.324169159	43.983860016	ASP	527	HA	H	0.050
C	56.119251251	16.242610931	43.555381775	ASP	527	C	C	0.600
O	56.652000427	15.536290169	42.709621429	ASP	527	O	O	-0.550
CB	53.943550110	15.213829994	44.458049774	ASP	527	CT	C	-0.250
HB1	54.303489685	14.245260239	44.107929230	ASP	527	HA	H	0.050
HB2	54.205009460	15.288089752	45.508178711	ASP	527	HA	H	0.050
CG	52.412780762	15.227439880	44.342109680	ASP	527	C	C	0.350
OD1	51.855018616	14.477789879	43.548820496	ASP	527	OC	O	-0.600
OD2	51.744689941	16.019849777	44.999389648	ASP	527	OC	O	-0.600
N	56.818168640	16.986249924	44.453308105	ALA	528	NP	N	-0.400
HN	56.380348206	17.593360901	45.122631073	ALA	528	H	H	0.250
CA	58.281311035	17.024250031	44.365879059	ALA	528	CT	C	0.050
HA	58.616291046	16.073720932	43.951961517	ALA	528	HA	H	0.050
C	58.963748932	17.220840454	45.743030548	ALA	528	C	C	0.600
O	58.449588776	17.879880905	46.637599945	ALA	528	O	O	-0.550
CB	58.667018890	18.176139832	43.434478760	ALA	528	CT	C	-0.150
HB1	58.266048431	18.016790390	42.435180664	ALA	528	HA	H	0.050
HB2	58.255489349	19.114040375	43.797641754	ALA	528	HA	H	0.050
HB3	59.746730804	18.289859772	43.349361420	ALA	528	HA	H	0.050
N	60.175540924	16.632669449	45.825229645	SER	529	NP	N	-0.400
HN	60.454410553	16.052749634	45.058280945	SER	529	H	H	0.250
CA	61.147750854	16.870149612	46.893470764	SER	529	CT	C	0.050
HA	60.739059448	17.590719223	47.592350006	SER	529	HA	H	0.050
C	62.414409637	17.435419083	46.242668152	SER	529	C	C	0.600
O	62.973770142	16.818479538	45.347198486	SER	529	O	O	-0.550
CB	61.491050720	15.550180435	47.610958099	SER	529	CT	C	0.050
HB1	60.606391907	15.125160217	48.084411621	SER	529	HA	H	0.100
HB2	61.811878204	14.808799744	46.876148224	SER	529	HA	H	0.100
OG	62.531101227	15.654890060	48.573699951	SER	529	OT	O	-0.650
HG	62.347160339	16.351320267	49.212020874	SER	529	HO	H	0.400
N	62.850811005	18.616800308	46.714778900	GLY	530	NP	N	-0.400
HN	62.391059875	19.079950333	47.476669312	GLY	530	H	H	0.250
CA	64.129119873	19.130670547	46.234001160	GLY	530	CT	C	0.000
HA1	64.143173218	19.111379623	45.142948151	GLY	530	HA	H	0.050
HA2	64.208747864	20.161590576	46.578498840	GLY	530	HA	H	0.050
C	65.259696960	18.293079376	46.840869904	GLY	530	C	C	0.600
O	65.531631470	18.382579803	48.027988434	GLY	530	O	O	-0.550
N	65.870422363	17.442979813	45.994331360	SER	531	NP	N	-0.400
HN	65.652023315	17.441400528	45.015258789	SER	531	H	H	0.250
CA	66.828941345	16.473920822	46.516021729	SER	531	CT	C	0.050
HA	66.468696594	16.162479401	47.498821259	SER	531	HA	H	0.050
C	68.205047607	17.140369415	46.697990417	SER	531	C	C	0.600
O	68.309097290	18.307460785	47.053150177	SER	531	O	O	-0.550
CB	66.869621277	15.261690140	45.569160461	SER	531	CT	C	0.050
HB1	65.849609375	14.993229866	45.278518677	SER	531	HA	H	0.100
HB2	67.378158569	15.519470215	44.637519836	SER	531	HA	H	0.100
OG	67.549606323	14.145600319	46.132438660	SER	531	OT	O	-0.650
HG	67.028923035	13.757650375	46.833549500	SER	531	HO	H	0.400
N	69.253601074	16.332490921	46.441761017	ARG	532	NP	N	-0.400
HN	69.049201965	15.384610176	46.180728912	ARG	532	H	H	0.250
CA	70.611152649	16.833129883	46.608009338	ARG	532	CT	C	0.050
HA	70.618637085	17.878269196	46.293598175	ARG	532	HA	H	0.050
C	71.599197388	16.058139801	45.720050812	ARG	532	C	C	0.600
O	72.764068604	15.869750023	46.073951721	ARG	532	O	O	-0.550
CB	71.024276733	16.684530258	48.080150604	ARG	532	CT	C	-0.100

HB1	70.183166504	16.906330109	48.731140137	ARG	532	HA	H	0.050
HB2	71.263046265	15.639969826	48.287719727	ARG	532	HA	H	0.050
CG	72.195121765	17.604759216	48.445510864	ARG	532	CT	C	-0.100
HG1	72.660301208	17.982940674	47.536289215	ARG	532	HA	H	0.050
HG2	71.810951233	18.487270355	48.953269958	ARG	532	HA	H	0.050
CD	73.243606567	16.898389816	49.311798096	ARG	532	CT	C	0.000
HD1	72.927139282	16.856300354	50.354648590	ARG	532	HA	H	0.050
HD2	73.430847168	15.873200417	48.985801697	ARG	532	HA	H	0.050
NE	74.513580322	17.614089966	49.276378632	ARG	532	NP	N	-0.400
HE	74.740623474	18.131759644	50.102619171	ARG	532	H	H	0.300
CZ	75.344688416	17.551370621	48.208549500	ARG	532	C	C	0.500
NH1	75.000389099	16.873340607	47.112831116	ARG	532	NC	N	-0.450
HH11	74.087730408	16.441009521	47.038421631	ARG	532	HC	H	0.350
HH12	75.617187500	16.775560379	46.335521698	ARG	532	HC	H	0.350
NH2	76.517196655	18.178760529	48.261291504	ARG	532	NC	N	-0.450
HH21	76.782173157	18.686250687	49.081321716	ARG	532	HC	H	0.350
HH22	77.154647827	18.158439636	47.491489410	ARG	532	HC	H	0.350
N	71.068367004	15.605790138	44.570251465	MET	533	NP	N	-0.400
HN	70.161918640	15.941989899	44.300201416	MET	533	H	H	0.250
CA	71.776252747	14.685390472	43.683921814	MET	533	CT	C	0.050
HA	72.342460632	13.991530418	44.308208466	MET	533	HA	H	0.050
C	72.759536743	15.436090469	42.765621185	MET	533	C	C	0.600
O	72.673263550	15.380279541	41.546279907	MET	533	O	O	-0.550
CB	70.744140625	13.911379814	42.847568512	MET	533	CT	C	-0.100
HB1	70.173820496	14.603230476	42.225730896	MET	533	HA	H	0.050
HB2	71.261932373	13.238599777	42.162071228	MET	533	HA	H	0.050
CG	69.778289795	13.095109940	43.712280273	MET	533	CT	C	-0.050
HG1	70.342498779	12.456370354	44.392040253	MET	533	HA	H	0.050
HG2	69.157341003	13.738260269	44.333839417	MET	533	HA	H	0.050
SD	68.709617615	12.053039551	42.705589294	MET	533	SE	S	-0.100
CE	68.065101624	11.003919601	44.019908905	MET	533	CT	C	-0.100
HE1	67.670303345	11.619750023	44.827930450	MET	533	HA	H	0.050
HE2	67.263237000	10.368800163	43.644248962	MET	533	HA	H	0.050
HE3	68.859878540	10.383419991	44.432979584	MET	533	HA	H	0.050
N	73.702819824	16.126649857	43.438961029	ALA	534	NP	N	-0.400
HN	73.654861450	16.078340530	44.434471130	ALA	534	H	H	0.250
CA	74.679779053	16.983819962	42.773960114	ALA	534	CT	C	0.050
HA	75.201019287	17.500560760	43.578891754	ALA	534	HA	H	0.050
C	73.952171326	18.050689697	41.931480408	ALA	534	C	C	0.600
O	72.762878418	18.282529831	42.105358124	ALA	534	O	O	-0.550
CB	75.678970337	16.134239197	41.968048096	ALA	534	CT	C	-0.150
HB1	76.126617432	15.366519928	42.598720551	ALA	534	HA	H	0.050
HB2	75.193000793	15.625539780	41.135551453	ALA	534	HA	H	0.050
HB3	76.494369507	16.732740402	41.562339783	ALA	534	HA	H	0.050
N	74.726768494	18.676059723	41.022129059	TRP	535	NP	N	-0.400
HN	75.692031860	18.431810379	40.962341309	TRP	535	H	H	0.250
CA	74.171577454	19.622659683	40.054641724	TRP	535	CT	C	0.050
HA	75.032112122	20.151569366	39.645858765	TRP	535	HA	H	0.050
C	73.260002136	20.671810150	40.747661591	TRP	535	C	C	0.600
O	73.594619751	21.225530624	41.786651611	TRP	535	O	O	-0.550
CB	73.449028015	18.843069077	38.932868958	TRP	535	CT	C	-0.100
HB1	72.514373779	18.417600632	39.302219391	TRP	535	HA	H	0.050
HB2	73.199150085	19.499940872	38.098300934	TRP	535	HA	H	0.050
CG	74.300338745	17.703350067	38.415599823	TRP	535	C5R	C	-0.030
CD1	74.071632385	16.345609665	38.651210785	TRP	535	C5R	C	-0.040
HD1	73.267112732	15.937769890	39.246131897	TRP	535	HA	H	0.100
CD2	75.471801758	17.781070709	37.578269958	TRP	535	CR56	C	0.100
HE1	75.039619446	14.624899864	38.000549316	TRP	535	H	H	0.300
NE1	75.014541626	15.612819672	38.012599945	TRP	535	N5R	N	-0.360
CE2	75.896202087	16.451370239	37.342899323	TRP	535	CR56	C	-0.040
CE3	76.162460327	18.828710556	37.031288147	TRP	535	C6R	C	-0.130
HE3	75.832740784	19.841089249	37.211540222	TRP	535	HA	H	0.100

CZ2	76.997871399	16.211999893	36.567249298	TRP	535	C6R	C	-0.130
HZ2	77.318862915	15.196080208	36.387760162	TRP	535	HA	H	0.130
CZ3	77.286582947	18.588420868	36.240478516	TRP	535	C6R	C	-0.130
HZ3	77.830871582	19.415729523	35.808128357	TRP	535	HA	H	0.130
CH2	77.704719543	17.277469635	36.008228302	TRP	535	C6R	C	-0.130
HH2	78.574501038	17.086469650	35.396198273	TRP	535	HA	H	0.130
N	72.076087952	20.853040695	40.139118195	THR	536	NP	N	-0.400
HN	71.909080505	20.470300674	39.230930328	THR	536	H	H	0.250
CA	71.024360657	21.739559174	40.610748291	THR	536	CT	C	0.050
HA	71.497741699	22.655630112	40.966880798	THR	536	HA	H	0.050
C	70.189323425	21.126689911	41.760509491	THR	536	C	C	0.600
O	69.058807373	21.525289536	41.986179352	THR	536	O	O	-0.550
CB	70.161132812	21.990640640	39.355949402	THR	536	CT	C	0.150
HB	69.600608826	21.080690384	39.128509521	THR	536	HA	H	0.100
OG1	71.021072388	22.193649292	38.250728607	THR	536	OT	O	-0.650
HG1	71.516876221	23.002859116	38.399841309	THR	536	HO	H	0.400
CG2	69.138610840	23.126789093	39.481479645	THR	536	CT	C	-0.150
HG21	68.736732483	23.408679962	38.508399963	THR	536	HA	H	0.050
HG22	68.296516418	22.804180145	40.088871002	THR	536	HA	H	0.050
HG23	69.558547974	24.013509750	39.951820374	THR	536	HA	H	0.050
N	70.767562866	20.131790161	42.460098267	LEU	537	NP	N	-0.400
HN	71.689392090	19.828720093	42.216358185	LEU	537	H	H	0.250
CA	70.135803223	19.425710678	43.578048706	LEU	537	CT	C	0.050
HA	70.939163208	18.809680939	43.978969574	LEU	537	HA	H	0.050
C	69.065307617	18.415349960	43.111400604	LEU	537	C	C	0.600
O	69.072723389	17.268039703	43.542530060	LEU	537	O	O	-0.550
CB	69.640647888	20.367309570	44.691650391	LEU	537	CT	C	-0.100
HB1	68.786056519	20.939100266	44.337238312	LEU	537	HA	H	0.050
HB2	69.265602112	19.768119812	45.516799927	LEU	537	HA	H	0.050
CG	70.708290100	21.336280823	45.235431671	LEU	537	CT	C	-0.050
HG	71.000839233	22.011049271	44.429939270	LEU	537	HA	H	0.050
CD1	70.125381470	22.194000244	46.368030548	LEU	537	CT	C	-0.150
HD11	69.250297546	22.748970032	46.031620026	LEU	537	HA	H	0.050
HD12	69.818458557	21.576929092	47.213600159	LEU	537	HA	H	0.050
HD13	70.855453491	22.918369293	46.729198456	LEU	537	HA	H	0.050
CD2	71.969322205	20.606229782	45.721549988	LEU	537	CT	C	-0.150
HD21	71.733390808	19.901390076	46.517711639	LEU	537	HA	H	0.050
HD22	72.460716248	20.062799454	44.915031433	LEU	537	HA	H	0.050
HD23	72.698829651	21.313970566	46.110031128	LEU	537	HA	H	0.050
N	68.212486267	18.887939453	42.178169250	ILE	538	NP	N	-0.400
HN	68.176300049	19.880750656	42.050720215	ILE	538	H	H	0.250
CA	67.347541809	18.044439316	41.355129242	ILE	538	CT	C	0.050
HA	66.999221802	18.715070724	40.568611145	ILE	538	HA	H	0.050
C	66.120140076	17.585239410	42.169361115	ILE	538	C	C	0.600
O	66.232017517	17.006780624	43.243160248	ILE	538	O	O	-0.550
CB	68.120521545	16.863349915	40.704299927	ILE	538	CT	C	-0.050
HB	68.400428772	16.159790039	41.489170074	ILE	538	HA	H	0.050
CG1	69.411437988	17.345769882	40.001960754	ILE	538	CT	C	-0.100
HG11	69.158279419	18.106679916	39.262889862	ILE	538	HA	H	0.050
HG12	70.082099915	17.826419830	40.713310242	ILE	538	HA	H	0.050
CG2	67.237342834	16.096540451	39.706970215	ILE	538	CT	C	-0.150
HG21	66.260070801	15.851799965	40.119949341	ILE	538	HA	H	0.050
HG22	67.094032288	16.687000275	38.804218292	ILE	538	HA	H	0.050
HG23	67.693313599	15.151679993	39.412609100	ILE	538	HA	H	0.050
CD1	70.201530457	16.223890305	39.316761017	ILE	538	CT	C	-0.150
HD11	70.495079041	15.453100204	40.029190063	ILE	538	HA	H	0.050
HD12	69.629150391	15.750809669	38.519500732	ILE	538	HA	H	0.050
HD13	71.108322144	16.617309570	38.861831665	ILE	538	HA	H	0.050
N	64.937278748	17.874919891	41.604831696	GLU	539	NP	N	-0.400
HN	64.865859985	18.392240524	40.747268677	GLU	539	H	H	0.250
CA	63.708370209	17.459320068	42.260150909	GLU	539	CT	C	0.050
HA	63.815898895	17.707479477	43.314968109	GLU	539	HA	H	0.050

C	63.537181854	15.932439804	42.098388672	GLU	539	C	C	0.600
O	64.030563354	15.325489998	41.154739380	GLU	539	O	O	-0.550
CB	62.507068634	18.219089508	41.682250977	GLU	539	CT	C	-0.100
HB1	62.316688538	17.858999252	40.681549072	GLU	539	HA	H	0.050
HB2	61.624000549	17.958940506	42.263019562	GLU	539	HA	H	0.050
CG	62.645240784	19.754440308	41.644771576	GLU	539	CT	C	-0.250
HG1	61.657371521	20.208639145	41.737358093	GLU	539	HA	H	0.050
HG2	63.225349426	20.117959976	42.492370605	GLU	539	HA	H	0.050
CD	63.265701294	20.248279572	40.324199677	GLU	539	C	C	0.350
OE1	62.531639099	20.611940384	39.405590057	GLU	539	OC	O	-0.600
OE2	64.487388611	20.275909424	40.221641541	GLU	539	OC	O	-0.600
N	62.843540192	15.350879669	43.089828491	GLN	540	NP	N	-0.400
HN	62.471000671	15.942950249	43.805210114	GLN	540	H	H	0.250
CA	62.646148682	13.913339615	43.222198486	GLN	540	CT	C	0.050
HA	62.654548645	13.478380203	42.221549988	GLN	540	HA	H	0.050
C	61.239440918	13.688309669	43.809989929	GLN	540	C	C	0.600
O	60.443679810	14.612159729	43.899059296	GLN	540	O	O	-0.550
CB	63.765628815	13.325010300	44.108158112	GLN	540	CT	C	-0.100
HB1	63.831008911	13.910129547	45.026401520	GLN	540	HA	H	0.050
HB2	63.530250549	12.309080124	44.425670624	GLN	540	HA	H	0.050
CG	65.142379761	13.285889626	43.420879364	GLN	540	CT	C	-0.100
HG1	65.453559875	14.268010139	43.065689087	GLN	540	HA	H	0.050
HG2	65.897453308	12.963470459	44.136108398	GLN	540	HA	H	0.050
CD	65.157051086	12.275329590	42.267681122	GLN	540	C	C	0.550
OE1	65.140502930	11.071789742	42.478511810	GLN	540	O	O	-0.550
NE2	65.207771301	12.817819595	41.048839569	GLN	540	NP	N	-0.600
HE21	65.352119446	12.225150108	40.260459900	GLN	540	H	H	0.300
HE22	65.093620300	13.808420181	40.925209045	GLN	540	H	H	0.300
N	60.980789185	12.412819862	44.152389526	LEU	541	NP	N	-0.400
HN	61.748600006	11.776539803	44.181991577	LEU	541	H	H	0.250
CA	59.627769470	11.895230293	44.351661682	LEU	541	CT	C	0.050
HA	59.036750793	12.258199692	43.508979797	LEU	541	HA	H	0.050
C	58.968608856	12.386340141	45.668960571	LEU	541	C	C	0.600
O	59.586730957	12.980520248	46.549171448	LEU	541	O	O	-0.550
CB	59.738491058	10.353219986	44.327579498	LEU	541	CT	C	-0.100
HB1	60.601570129	10.057880402	43.729228973	LEU	541	HA	H	0.050
HB2	59.958900452	9.991669655	45.333721161	LEU	541	HA	H	0.050
CG	58.517810822	9.607359886	43.757038116	LEU	541	CT	C	-0.050
HG	57.602870941	9.986280441	44.208148956	LEU	541	HA	H	0.050
CD1	58.409900665	9.794870377	42.237701416	LEU	541	CT	C	-0.150
HD11	59.324108124	9.489789963	41.729660034	LEU	541	HA	H	0.050
HD12	57.594680786	9.197850227	41.834388733	LEU	541	HA	H	0.050
HD13	58.200679779	10.831219673	41.976261139	LEU	541	HA	H	0.050
CD2	58.590278625	8.116789818	44.107460022	LEU	541	CT	C	-0.150
HD21	58.666069031	7.969170094	45.184848785	LEU	541	HA	H	0.050
HD22	57.694438934	7.595459938	43.772850037	LEU	541	HA	H	0.050
HD23	59.452278137	7.639959812	43.640640259	LEU	541	HA	H	0.050
N	57.667270660	12.047060013	45.731910706	GLN	542	NP	N	-0.400
HN	57.256149292	11.710490227	44.881549835	GLN	542	H	H	0.250
CA	56.811668396	12.199970245	46.904239655	GLN	542	CT	C	0.050
HA	57.447620392	12.259590149	47.787048340	GLN	542	HA	H	0.050
C	55.921531677	10.951979637	47.070178986	GLN	542	C	C	0.600
O	55.866031647	10.352080345	48.136051178	GLN	542	O	O	-0.550
CB	55.924388885	13.445699692	46.741790771	GLN	542	CT	C	-0.100
HB1	55.415138245	13.371959686	45.783260345	GLN	542	HA	H	0.050
HB2	55.134559631	13.457380295	47.495880127	GLN	542	HA	H	0.050
CG	56.690929413	14.774900436	46.790691376	GLN	542	CT	C	-0.100
HG1	57.579559326	14.757869720	46.161338806	GLN	542	HA	H	0.050
HG2	56.062320709	15.580160141	46.428508759	GLN	542	HA	H	0.050
CD	57.058658600	15.147720337	48.220939636	GLN	542	C	C	0.550
OE1	56.349040985	15.888819695	48.890209198	GLN	542	O	O	-0.550
NE2	58.188880920	14.577890396	48.645450592	GLN	542	NP	N	-0.600

HE21	58.495010376	14.749400139	49.579589844	GLN	542	H	H	0.300
HE22	58.719829559	13.985790253	48.028739929	GLN	542	H	H	0.300
N	55.221260071	10.610790253	45.970539093	GLY	543	NP	N	-0.400
HN	55.326488495	11.143730164	45.125770569	GLY	543	H	H	0.250
CA	54.305709839	9.473320007	45.959869385	GLY	543	CT	C	0.000
HA1	54.730941772	8.728260040	45.286430359	GLY	543	HA	H	0.050
HA2	54.222068787	9.042200089	46.958709717	GLY	543	HA	H	0.050
C	52.921249390	9.912599564	45.469779968	GLY	543	C	C	0.600
O	51.989078522	10.125120163	46.245788574	GLY	543	O	O	-0.550
N	52.856338501	10.022589684	44.136100769	GLY	544	NP	N	-0.400
HN	53.662590027	9.792429924	43.585750580	GLY	544	H	H	0.250
CA	51.686538696	10.500260353	43.423961639	GLY	544	CT	C	0.000
HA1	50.799411774	10.340000153	44.035999298	GLY	544	HA	H	0.050
HA2	51.840751648	11.563830376	43.236270905	GLY	544	HA	H	0.050
C	51.545738220	9.724699974	42.116001129	GLY	544	C	C	0.600
O	51.911888123	8.559189796	42.034698486	GLY	544	O	O	-0.550
N	50.971279144	10.430669785	41.127590179	SER	545	NP	N	-0.400
HN	50.757198334	11.401289940	41.259868622	SER	545	H	H	0.250
CA	50.628841400	9.909859657	39.807170868	SER	545	CT	C	0.050
HA	51.555221558	9.617799759	39.308700562	SER	545	HA	H	0.050
C	49.997398376	11.098050117	39.065208435	SER	545	C	C	0.600
O	49.950031281	12.201789856	39.596920013	SER	545	O	O	-0.550
CB	49.604930878	8.748570442	39.917289734	SER	545	CT	C	0.050
HB1	48.776859283	9.027649879	40.576049805	SER	545	HA	H	0.100
HB2	49.142990112	8.536959648	38.952228546	SER	545	HA	H	0.100
OG	50.158309937	7.518849850	40.348960876	SER	545	OT	O	-0.650
HG	50.790340424	7.688139915	41.046321869	SER	545	HO	H	0.400
N	49.466400146	10.810190201	37.855651855	TYR	546	NP	N	-0.400
HN	49.628158569	9.917750359	37.439418793	TYR	546	H	H	0.250
CA	48.484169006	11.720890045	37.268108368	TYR	546	CT	C	0.050
HA	48.952438354	12.706999779	37.227279663	TYR	546	HA	H	0.050
C	47.257221222	11.760230064	38.202068329	TYR	546	C	C	0.600
O	46.958618164	10.788780212	38.887008667	TYR	546	O	O	-0.550
CB	48.100570679	11.238220215	35.861061096	TYR	546	CT	C	-0.100
HB1	49.005210876	11.042599678	35.282970428	TYR	546	HA	H	0.050
HB2	47.559860229	10.291870117	35.909950256	TYR	546	HA	H	0.050
CG	47.280509949	12.257140160	35.112499237	TYR	546	C6R	C	0.000
CD1	45.891498566	12.185509682	35.082050323	TYR	546	C6R	C	-0.130
HD1	45.375251770	11.399749756	35.613971710	TYR	546	HA	H	0.130
CD2	47.911888123	13.291150093	34.433448792	TYR	546	C6R	C	-0.130
HD2	48.988891602	13.360529900	34.455181122	TYR	546	HA	H	0.130
CE1	45.154331207	13.125490189	34.372539520	TYR	546	C6R	C	-0.130
HE1	44.076580048	13.066160202	34.352958679	TYR	546	HA	H	0.130
CE2	47.181709290	14.233440399	33.723049164	TYR	546	C6R	C	-0.130
HE2	47.725421906	15.013899803	33.212291718	TYR	546	HA	H	0.130
CZ	45.794071198	14.147749901	33.686519623	TYR	546	C6R	C	0.250
OH	45.027801514	15.052590370	32.978271484	TYR	546	OT	O	-0.650
HH	45.526660919	15.841019630	32.776100159	TYR	546	HO	H	0.400
N	46.630138397	12.948109627	38.245658875	LYS	547	NP	N	-0.400
HN	46.801948547	13.615389824	37.523868561	LYS	547	H	H	0.250
CA	45.783958435	13.301529884	39.378749847	LYS	547	CT	C	0.050
HA	45.793720245	12.484140396	40.103580475	LYS	547	HA	H	0.050
C	44.328140259	13.536849976	38.951530457	LYS	547	C	C	0.600
O	43.967048645	13.524629593	37.780620575	LYS	547	O	O	-0.550
CB	46.359611511	14.566510201	40.024169922	LYS	547	CT	C	-0.100
HB1	46.276561737	15.407580376	39.336620331	LYS	547	HA	H	0.050
HB2	45.773731232	14.813440323	40.909130096	LYS	547	HA	H	0.050
CG	47.818359375	14.406999588	40.455291748	LYS	547	CT	C	-0.100
HG1	47.900768280	13.514109612	41.077339172	LYS	547	HA	H	0.050
HG2	48.467731476	14.245229721	39.594219208	LYS	547	HA	H	0.050
CD	48.307491302	15.627300262	41.236621857	LYS	547	CT	C	-0.100
HD1	48.448051453	16.471410751	40.561641693	LYS	547	HA	H	0.050

HD2	47.539718628	15.915019989	41.953128815	LYS	547	HA	H	0.050
CE	49.601108551	15.325889587	41.987888336	LYS	547	CT	C	0.050
HE1	49.532081604	14.349229813	42.458518982	LYS	547	HA	H	0.100
HE2	50.453548431	15.276789665	41.309398651	LYS	547	HA	H	0.100
NZ	49.910610199	16.288150787	43.040828705	LYS	547	NT	N	-0.300
HZ1	49.096069336	16.486040115	43.658771515	LYS	547	HC	H	0.350
HZ2	50.693199158	15.894020081	43.614570618	LYS	547	HC	H	0.350
HZ3	50.262840271	17.174709320	42.621009827	LYS	547	HC	H	0.350
N	43.524490356	13.763950348	40.010040283	LYS	548	NP	N	-0.400
HN	43.930210114	13.786129951	40.922050476	LYS	548	H	H	0.250
CA	42.101970673	14.043700218	39.871959686	LYS	548	CT	C	0.050
HA	41.696430206	13.330269814	39.151779175	LYS	548	HA	H	0.050
C	41.891059875	15.476530075	39.350769043	LYS	548	C	C	0.600
O	41.627719879	16.413179398	40.093490601	LYS	548	O	O	-0.550
CB	41.434329987	13.845230103	41.242008209	LYS	548	CT	C	-0.100
HB1	41.665721893	12.843270302	41.604648590	LYS	548	HA	H	0.050
HB2	41.874801636	14.537170410	41.962810516	LYS	548	HA	H	0.050
CG	39.907131195	14.030139923	41.235771179	LYS	548	CT	C	-0.100
HG1	39.657550812	15.044919968	40.922660828	LYS	548	HA	H	0.050
HG2	39.450828552	13.358229637	40.508251190	LYS	548	HA	H	0.050
CD	39.322021484	13.773360252	42.627441406	LYS	548	CT	C	-0.100
HD1	39.503238678	12.734450340	42.906299591	LYS	548	HA	H	0.050
HD2	39.871551514	14.382459641	43.346881866	LYS	548	HA	H	0.050
CE	37.826709747	14.095970154	42.743778229	LYS	548	CT	C	0.050
HE1	37.658599854	15.165390015	42.603851318	LYS	548	HA	H	0.100
HE2	37.241859436	13.563540459	41.992279053	LYS	548	HA	H	0.100
NZ	37.320709229	13.727490425	44.063018799	LYS	548	NT	N	-0.300
HZ1	37.951118469	14.124879837	44.793720245	LYS	548	HC	H	0.350
HZ2	36.350860596	14.067620277	44.261390686	LYS	548	HC	H	0.350
HZ3	37.329689026	12.700599670	44.199829102	LYS	548	HC	H	0.350
N	41.989051819	15.553580284	38.015380859	ILE	549	NP	N	-0.400
HN	42.351539612	14.759010315	37.524188995	ILE	549	H	H	0.250
CA	41.650508881	16.770719528	37.294479370	ILE	549	CT	C	0.050
HA	42.347778320	17.529680252	37.650451660	ILE	549	HA	H	0.050
C	40.218238831	17.241720200	37.613059998	ILE	549	C	C	0.600
O	39.308841705	16.451580048	37.836009979	ILE	549	O	O	-0.550
CB	41.854228973	16.556240082	35.781860352	ILE	549	CT	C	-0.050
HB	41.702419281	17.528450012	35.311611176	ILE	549	HA	H	0.050
CG1	40.851959229	15.600210190	35.095638275	ILE	549	CT	C	-0.100
HG11	39.840911865	15.999239922	35.182750702	ILE	549	HA	H	0.050
HG12	41.068408966	15.590490341	34.026718140	ILE	549	HA	H	0.050
CG2	43.302799225	16.161720276	35.483051300	ILE	549	CT	C	-0.150
HG21	43.990821838	16.855630875	35.961250305	ILE	549	HA	H	0.050
HG22	43.551151276	15.163459778	35.839290619	ILE	549	HA	H	0.050
HG23	43.484970093	16.193109512	34.411628723	ILE	549	HA	H	0.050
CD1	40.856948853	14.150790215	35.602218628	ILE	549	CT	C	-0.150
HD11	41.858219147	13.720840454	35.604179382	ILE	549	HA	H	0.050
HD12	40.446891785	14.077679634	36.609001160	ILE	549	HA	H	0.050
HD13	40.234779358	13.523489952	34.964149475	ILE	549	HA	H	0.050
N	40.092590332	18.578620911	37.599338531	GLY	550	NP	N	-0.400
HN	40.877311707	19.177780151	37.419910431	GLY	550	H	H	0.250
CA	38.817550659	19.230100632	37.838489532	GLY	550	CT	C	0.000
HA1	38.114238739	18.903789520	37.071411133	GLY	550	HA	H	0.050
HA2	38.462959290	18.946269989	38.830108643	GLY	550	HA	H	0.050
C	39.064239502	20.732170105	37.749759674	GLY	550	C	C	0.600
O	40.186031342	21.156250000	37.496219635	GLY	550	O	O	-0.550
N	37.978569031	21.502420425	37.973480225	TYR	551	NP	N	-0.400
HN	37.089809418	21.067840576	38.112079620	TYR	551	H	H	0.250
CA	38.082420349	22.963239670	37.902511597	TYR	551	CT	C	0.050
HA	39.133491516	23.218750000	37.773399353	TYR	551	HA	H	0.050
C	37.653110504	23.652690887	39.210849762	TYR	551	C	C	0.600
O	37.758129120	24.867790222	39.348140717	TYR	551	O	O	-0.550

CB	37.292980194	23.489349365	36.691398621	TYR	551	CT	C	-0.100
HB1	37.440769196	24.561819077	36.584728241	TYR	551	HA	H	0.050
HB2	37.686969757	23.037109375	35.781051636	TYR	551	HA	H	0.050
CG	35.809169769	23.246730804	36.764209747	TYR	551	C6R	C	0.000
CD1	35.245201111	22.109809875	36.195808411	TYR	551	C6R	C	-0.130
HD1	35.874851227	21.383340836	35.703041077	TYR	551	HA	H	0.130
CD2	34.978210449	24.175430298	37.382621765	TYR	551	C6R	C	-0.130
HD2	35.403518677	25.064989090	37.823429108	TYR	551	HA	H	0.130
CE1	33.872169495	21.908170700	36.243309021	TYR	551	C6R	C	-0.130
HE1	33.435741425	21.026250839	35.797859192	TYR	551	HA	H	0.130
CE2	33.605121613	23.978809357	37.431808472	TYR	551	C6R	C	-0.130
HE2	32.989768982	24.728260040	37.908771515	TYR	551	HA	H	0.130
CZ	33.050300598	22.840280533	36.859230042	TYR	551	C6R	C	0.250
OH	31.688940048	22.619169235	36.884571075	TYR	551	OT	O	-0.650
HH	31.326240540	22.856609344	37.727569580	TYR	551	HO	H	0.400
N	37.168529510	22.813770294	40.145259857	TYR	552	NP	N	-0.400
HN	37.136219025	21.824199677	40.007080078	TYR	552	H	H	0.250
CA	36.743438721	23.264560699	41.460170746	TYR	552	CT	C	0.050
HA	37.423538208	24.057020187	41.780769348	TYR	552	HA	H	0.050
C	36.904689789	22.058370590	42.401500702	TYR	552	C	C	0.600
O	36.546360016	20.935590744	42.061618805	TYR	552	O	O	-0.550
CB	35.279960632	23.769439697	41.426681519	TYR	552	CT	C	-0.100
HB1	35.238998413	24.779619217	41.022968292	TYR	552	HA	H	0.050
HB2	34.682598114	23.141609192	40.764221191	TYR	552	HA	H	0.050
CG	34.672508240	23.748939514	42.806221008	TYR	552	C6R	C	0.000
CD1	35.115970612	24.635360718	43.782901764	TYR	552	C6R	C	-0.130
HD1	35.814140320	25.418140411	43.533111572	TYR	552	HA	H	0.130
CD2	33.729011536	22.782230377	43.145938873	TYR	552	C6R	C	-0.130
HD2	33.347881317	22.106140137	42.394939423	TYR	552	HA	H	0.130
CE1	34.700519562	24.494579315	45.098979950	TYR	552	C6R	C	-0.130
HE1	35.080001831	25.158739090	45.861778259	TYR	552	HA	H	0.130
CE2	33.305278778	22.645950317	44.460540771	TYR	552	C6R	C	-0.130
HE2	32.597190857	21.877630234	44.733089447	TYR	552	HA	H	0.130
CZ	33.829128265	23.472309113	45.441791534	TYR	552	C6R	C	0.250
OH	33.543628693	23.231039047	46.765361786	TYR	552	OT	O	-0.650
HH	34.333118439	22.815679550	47.114139557	TYR	552	HO	H	0.400
N	37.458030701	22.365339279	43.585910797	ASP	553	NP	N	-0.400
HN	37.804378510	23.280679703	43.783561707	ASP	553	H	H	0.250
CA	37.602371216	21.374269485	44.637428284	ASP	553	CT	C	0.050
HA	37.976631165	20.449979782	44.191558838	ASP	553	HA	H	0.050
C	36.256950378	21.099260330	45.326381683	ASP	553	C	C	0.600
O	35.908649445	21.703519821	46.338001251	ASP	553	O	O	-0.550
CB	38.578319550	21.902339935	45.697521210	ASP	553	CT	C	-0.250
HB1	38.367221832	22.939619064	45.959808350	ASP	553	HA	H	0.050
HB2	38.468669891	21.329830170	46.620811462	ASP	553	HA	H	0.050
CG	40.031230927	21.772970200	45.258079529	ASP	553	C	C	0.350
OD1	40.475521088	22.519369125	44.384521484	ASP	553	OC	O	-0.600
OD2	40.713809967	20.903709412	45.795619965	ASP	553	OC	O	-0.600
N	35.548610687	20.084280014	44.789348602	SER	554	NP	N	-0.400
HN	35.808200836	19.738569260	43.886341095	SER	554	H	H	0.250
CA	34.601570129	19.440179825	45.695060730	SER	554	CT	C	0.050
HA	34.077301025	20.218090057	46.255268097	SER	554	HA	H	0.050
C	35.399658203	18.566469193	46.665920258	SER	554	C	C	0.600
O	35.598541260	17.378229141	46.455749512	SER	554	O	O	-0.550
CB	33.529590607	18.584169388	45.012660980	SER	554	CT	C	0.050
HB1	32.983219147	19.184419632	44.278678894	SER	554	HA	H	0.100
HB2	33.979598999	17.727390289	44.498611450	SER	554	HA	H	0.100
OG	32.648700714	18.142499924	46.043819427	SER	554	OT	O	-0.650
HG	31.931350708	17.599029541	45.689678192	SER	554	HO	H	0.400
N	35.768718719	19.222539902	47.776348114	THR	555	NP	N	-0.400
HN	35.738830566	20.226299286	47.832000732	THR	555	H	H	0.250
CA	36.259799957	18.505580902	48.940059662	THR	555	CT	C	0.050

HA	37.086818695	17.880819321	48.600799561	THR	555	HA	H	0.050
C	35.183170319	17.563339233	49.518398285	THR	555	C	C	0.600
O	35.465469360	16.707679749	50.343238831	THR	555	O	O	-0.550
CB	36.741348267	19.551019669	49.970458984	THR	555	CT	C	0.150
HB	36.455051422	19.249149323	50.981979370	THR	555	HA	H	0.100
OG1	36.106479645	20.802810669	49.711471558	THR	555	OT	O	-0.650
HG1	36.776950836	21.493059158	49.582820892	THR	555	HO	H	0.400
CG2	38.272048950	19.607959747	49.950141907	THR	555	CT	C	-0.150
HG21	38.628540039	19.885280609	48.958690643	THR	555	HA	H	0.050
HG22	38.680889130	20.321479797	50.661609650	THR	555	HA	H	0.050
HG23	38.684520721	18.631509781	50.201938629	THR	555	HA	H	0.050
N	33.931880951	17.781299591	49.055061340	LYS	556	NP	N	-0.400
HN	33.750251770	18.430679321	48.319149017	LYS	556	H	H	0.250
CA	32.817108154	17.007230759	49.563468933	LYS	556	CT	C	0.050
HA	32.955181122	16.913150787	50.642501831	LYS	556	HA	H	0.050
C	32.889598846	15.605480194	48.925708771	LYS	556	C	C	0.600
O	32.721549988	14.582750320	49.576519012	LYS	556	O	O	-0.550
CB	31.470819473	17.713600159	49.271278381	LYS	556	CT	C	-0.100
HB1	31.044889450	17.305089951	48.352008820	LYS	556	HA	H	0.050
HB2	30.758810043	17.442979813	50.051540375	LYS	556	HA	H	0.050
CG	31.482339859	19.252099991	49.092380524	LYS	556	CT	C	-0.100
HG1	32.040691376	19.521200180	48.194629669	LYS	556	HA	H	0.050
HG2	30.454940796	19.536130905	48.860740662	LYS	556	HA	H	0.050
CD	31.933599472	20.123769760	50.289028168	LYS	556	CT	C	-0.100
HD1	31.448179245	21.095100403	50.186378479	LYS	556	HA	H	0.050
HD2	31.578630447	19.708410263	51.232810974	LYS	556	HA	H	0.050
CE	33.451000214	20.357360840	50.321418762	LYS	556	CT	C	0.050
HE1	33.943981171	19.540510178	50.845470428	LYS	556	HA	H	0.100
HE2	33.821788788	20.380170822	49.297420502	LYS	556	HA	H	0.100
NZ	33.955860138	21.581190109	50.929660797	LYS	556	NT	N	-0.300
HZ1	33.542160034	22.456689835	50.565040588	LYS	556	HC	H	0.350
HZ2	33.937038422	21.585550308	51.975730896	LYS	556	HC	H	0.350
HZ3	34.994178772	21.638500214	50.742961884	LYS	556	HC	H	0.350
N	33.192199707	15.653229713	47.611068726	ASP	557	NP	N	-0.400
HN	33.292060852	16.542919159	47.158370972	ASP	557	H	H	0.250
CA	33.316570282	14.449190140	46.797130585	ASP	557	CT	C	0.050
HA	32.864860535	13.609860420	47.329959869	ASP	557	HA	H	0.050
C	34.804519653	14.142219543	46.539321899	ASP	557	C	C	0.600
O	35.210678101	13.917499542	45.399040222	ASP	557	O	O	-0.550
CB	32.608459473	14.659410477	45.440830231	ASP	557	CT	C	-0.250
HB1	33.113098145	15.431269646	44.858570099	ASP	557	HA	H	0.050
HB2	32.663700104	13.746959686	44.845928192	ASP	557	HA	H	0.050
CG	31.125890732	15.030679703	45.591670990	ASP	557	C	C	0.350
OD1	30.790800095	16.201810837	45.408340454	ASP	557	OC	O	-0.600
OD2	30.321960449	14.145970345	45.877799988	ASP	557	OC	O	-0.600
N	35.619350433	14.147199631	47.617900848	ASP	558	NP	N	-0.400
HN	35.281490326	14.308759689	48.548561096	ASP	558	H	H	0.250
CA	37.048851013	13.917690277	47.400531769	ASP	558	CT	C	0.050
HA	37.123489380	13.105369568	46.675109863	ASP	558	HA	H	0.050
C	37.731189728	13.422320366	48.682758331	ASP	558	C	C	0.600
O	37.247749329	13.634929657	49.785060883	ASP	558	O	O	-0.550
CB	37.719150543	15.205730438	46.880538940	ASP	558	CT	C	-0.250
HB1	37.154640198	15.623250008	46.049221039	ASP	558	HA	H	0.050
HB2	37.734741211	15.965849876	47.661659241	ASP	558	HA	H	0.050
CG	39.136810303	14.947990417	46.379619598	ASP	558	C	C	0.350
OD1	39.336910248	13.912460327	45.751091003	ASP	558	OC	O	-0.600
OD2	40.008460999	15.775309563	46.608909607	ASP	558	OC	O	-0.600
N	38.857528687	12.720569611	48.435630798	LEU	559	NP	N	-0.400
HN	39.231140137	12.734430313	47.502578735	LEU	559	H	H	0.250
CA	39.699100494	12.130909920	49.466739655	LEU	559	CT	C	0.050
HA	39.543930054	12.679860115	50.396709442	LEU	559	HA	H	0.050
C	41.157699585	12.310509682	49.007579803	LEU	559	C	C	0.600

O	41.458690643	12.300040245	47.820980072	LEU	559	O	O	-0.550
CB	39.442241669	10.613080025	49.625919342	LEU	559	CT	C	-0.100
HB1	39.514938354	10.126199722	48.652221680	LEU	559	HA	H	0.050
HB2	40.260349274	10.194450378	50.215579987	LEU	559	HA	H	0.050
CG	38.138969421	10.172920227	50.325931549	LEU	559	CT	C	-0.050
HG	38.282299042	9.118160248	50.565399170	LEU	559	HA	H	0.050
CD1	37.907939911	10.891019821	51.662158966	LEU	559	CT	C	-0.150
HD11	38.786788940	10.823699951	52.303508759	LEU	559	HA	H	0.050
HD12	37.682380676	11.947070122	51.518081665	LEU	559	HA	H	0.050
HD13	37.068748474	10.451539993	52.201381683	LEU	559	HA	H	0.050
CD2	36.897701263	10.214730263	49.423198700	LEU	559	CT	C	-0.150
HD21	37.102268219	9.780059814	48.444801331	LEU	559	HA	H	0.050
HD22	36.080909729	9.647689819	49.870159149	LEU	559	HA	H	0.050
HD23	36.527519226	11.225310326	49.274471283	LEU	559	HA	H	0.050
N	42.040901184	12.430850029	50.014278412	SER	560	NP	N	-0.400
HN	41.642681122	12.545760155	50.926158905	SER	560	H	H	0.250
CA	43.476921082	12.520739555	49.773578644	SER	560	CT	C	0.050
HA	43.639091492	13.411370277	49.169399261	SER	560	HA	H	0.050
C	43.980968475	11.277779579	49.010059357	SER	560	C	C	0.600
O	43.684299469	10.141830444	49.363708496	SER	560	O	O	-0.550
CB	44.187549591	12.661270142	51.129871368	SER	560	CT	C	0.050
HB1	44.066501617	11.747059822	51.717830658	SER	560	HA	H	0.100
HB2	45.260238647	12.792149544	50.968841553	SER	560	HA	H	0.100
OG	43.729431152	13.759519577	51.906299591	SER	560	OT	O	-0.650
HG	42.826400757	13.988380432	51.642898560	SER	560	HO	H	0.400
N	44.741851807	11.555660248	47.935409546	TRP	561	NP	N	-0.400
HN	45.048511505	12.497750282	47.796779633	TRP	561	H	H	0.250
CA	45.165390015	10.496640205	47.029869080	TRP	561	CT	C	0.050
HA	44.296230316	9.850460052	46.883178711	TRP	561	HA	H	0.050
C	46.307701111	9.684140205	47.675411224	TRP	561	C	C	0.600
O	47.493560791	9.980629921	47.529361725	TRP	561	O	O	-0.550
CB	45.568199158	11.110349655	45.676368713	TRP	561	CT	C	-0.100
HB1	44.886520386	11.921600342	45.418128967	TRP	561	HA	H	0.050
HB2	46.565818787	11.540459633	45.697601318	TRP	561	HA	H	0.050
CG	45.486389160	10.070830345	44.579399109	TRP	561	C5R	C	-0.030
CD1	44.345371246	9.779150009	43.827770233	TRP	561	C5R	C	-0.040
HD1	43.386428833	10.263839722	43.942298889	TRP	561	HA	H	0.100
CD2	46.530529022	9.197409630	44.098251343	TRP	561	CR56	C	0.100
HE1	43.999889374	8.420260429	42.293689728	TRP	561	H	H	0.300
NE1	44.633628845	8.799090385	42.938449860	TRP	561	N5R	N	-0.360
CE2	45.960979462	8.411439896	43.068370819	TRP	561	CR56	C	-0.040
CE3	47.845581055	9.024809837	44.441440582	TRP	561	C6R	C	-0.130
HE3	48.280570984	9.624340057	45.224781036	TRP	561	HA	H	0.100
CZ2	46.723030090	7.479090214	42.418018341	TRP	561	C6R	C	-0.130
HZ2	46.292720795	6.878540039	41.629970551	TRP	561	HA	H	0.130
CZ3	48.625789642	8.076029778	43.780250549	TRP	561	C6R	C	-0.130
HZ3	49.665050507	7.940879822	44.045101166	TRP	561	HA	H	0.130
CH2	48.061161041	7.301539898	42.767570496	TRP	561	C6R	C	-0.130
HH2	48.657688141	6.565380096	42.247211456	TRP	561	HA	H	0.130
N	45.856689453	8.637439728	48.391830444	N-M	562	NP	N	-0.350
HN	44.867820740	8.612899780	48.563789368	N-M	562	H	H	0.250
CA	46.757171631	7.671080112	49.006469727	N-M	562	CT	C	-0.050
HA1	46.270820618	6.696219921	48.971359253	N-M	562	HA	H	0.050
HA2	47.701389313	7.634319782	48.460079193	N-M	562	HA	H	0.050
HA3	46.919441223	7.967510223	50.042640686	N-M	562	HA	H	0.050
CA	50.459468842	36.238361359	11.844710350	ACE	563	CT	C	-0.150
HA1	50.797389984	37.020481110	11.164600372	ACE	563	HA	H	0.050
HA2	49.975868225	35.456241608	11.258700371	ACE	563	HA	H	0.050
HA3	49.735481262	36.657329559	12.542619705	ACE	563	HA	H	0.050
C	51.651710510	35.666801453	12.608400345	ACE	563	C	C	0.550
O	51.891208649	36.016349792	13.752639771	ACE	563	O	O	-0.550
N	46.439208984	31.646690369	37.397418976	SER	101	NP	N	-0.400

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HN      47.203540802   31.986150742   37.954700470 SER  101    H       H   0.250
CA      45.169750214   31.380540848   38.059928894 SER  101    CT      C   0.050
HA      45.171649933   32.049339294   38.919330597 SER  101    HA      H   0.050
C       45.066791534   29.940059662   38.603179932 SER  101    C       C   0.600
O       44.513080597   29.047210693   37.972351074 SER  101    O       O  -0.550
CB      43.958209991   31.743770599   37.173538208 SER  101    CT      C   0.050
HB1     43.273681641   30.898689270   37.068298340 SER  101    HA      H   0.100
HB2     43.367561340   32.503711700   37.685451508 SER  101    HA      H   0.100
OG      44.302391052   32.234081268   35.883159637 SER  101    OT      O  -0.650
HG      44.844020844   31.553689957   35.467781067 SER  101    HO      H   0.400
N       45.534339905   29.807979584   39.857299805 SER  102    NP      N  -0.400
HN      46.268180847   30.405559540   40.197219849 SER  102    H       H   0.250
CA      45.143360138   28.663900375   40.678600311 SER  102    CT      C   0.050
HA      45.390190125   27.770610809   40.104671478 SER  102    HA      H   0.050
C       43.626911163   28.675840378   40.995010376 SER  102    C       C   0.600
O       43.016571045   27.661539078   41.293689728 SER  102    O       O  -0.550
CB      45.963100433   28.724250793   41.973419189 SER  102    CT      C   0.050
HB1     45.562641144   29.497329712   42.641811371 SER  102    HA      H   0.100
HB2     45.917251587   27.763399124   42.495990753 SER  102    HA      H   0.100
OG      47.304550171   29.007459641   41.602001190 SER  102    OT      O  -0.650
HG      47.833011627   29.366380692   42.324748993 SER  102    HO      H   0.400
N       43.064140320   29.896379471   40.904800415 SER  103    NP      N  -0.400
HN      43.627441406   30.649349213   40.572010040 SER  103    H       H   0.250
CA      41.664688110   30.202230453   41.186119080 SER  103    CT      C   0.050
HA      41.594310760   30.405429840   42.250331879 SER  103    HA      H   0.050
C       40.687850952   29.087760925   40.716751099 SER  103    C       C   0.600
O       40.487510681   28.943090439   39.513538361 SER  103    O       O  -0.550
CB      41.366298676   31.456869125   40.352531433 SER  103    CT      C   0.050
HB1     40.313251495   31.756219864   40.402999878 SER  103    HA      H   0.100
HB2     41.951610565   32.300941467   40.710800171 SER  103    HA      H   0.100
OG      41.753749847   31.233270645   39.009269714 SER  103    OT      O  -0.650
HG      41.391571045   30.381689072   38.746780396 SER  103    HO      H   0.400
C1      51.159145355   29.154600143   37.347206116 CO2M 2      ?       C   0.000
C2      50.335365295   28.747680664   38.583656311 CO2M 2      ?       C   0.000
C3      48.963615417   29.450309753   38.665664673 CO2M 2      ?       C   0.000
C       49.064807892   30.985771179   38.763153076 CO2M 2      ?       C   0.000
O       49.047256470   31.511510849   39.876106262 CO2M 2      ?       O   0.000
O1      49.150856018   31.639070511   37.723445892 CO2M 2      ?       O   0.000
N7      50.476215363   28.839559555   36.098396301 AMIN 1      ?       N   0.000
H8      51.072727203   29.123090744   35.295223236 AMIN 1      ?       H   0.000
H9      50.292728424   27.817029953   36.052959442 AMIN 1      ?       H   0.000
H10     52.112586975   28.626039505   37.334293365 CO2M 2      ?       H   0.000
H11     51.378185272   30.221401215   37.331436157 CO2M 2      ?       H   0.000
H12     50.317085266   27.078500748   40.716228485 PHE  3      ?       H   0.000
H13     50.129138947   27.682600021   38.467117310 CO2M 2      ?       H   0.000
H14     48.366287231   29.198789597   37.788246155 CO2M 2      ?       H   0.000
H15     48.404758453   29.077091217   39.525234222 CO2M 2      ?       H   0.000
H16     49.574405670   29.356491089   36.062244415 AMIN 1      ?       H   0.000
C       51.113246918   28.888099670   39.874626160 PHE  3      ?       C   0.000
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C3      52.503238678   29.114959717   42.271434784 PHE  3      ?       C   0.000
C4      52.656745911   30.093790054   41.300384521 PHE  3      ?       C   0.000
C5      51.959156036   29.974901199   40.105484009 PHE  3      ?       C   0.000
H23     51.540897369   27.265670776   42.827030182 PHE  3      ?       H   0.000
CL24    53.368808746   29.257761002   43.768554688 PHE  3      ?       Cl  0.000
H25     53.303806305   30.945249557   41.457176208 PHE  3      ?       H   0.000
H26     52.074195862   30.749200821   39.362396240 PHE  3      ?       H   0.000
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CA	50.660449982	39.562408447	13.872500420	VAL	169	CT	C	0.150
HA	51.109008789	38.741508484	13.316220284	VAL	169	HA	H	0.050
CB	49.988769531	40.579120636	12.927749634	VAL	169	CT	C	-0.050
HB	50.762088776	40.907230377	12.232330322	VAL	169	HA	H	0.050
CG1	48.869499207	39.949340820	12.085140228	VAL	169	CT	C	-0.150
C	49.719329834	38.990829468	14.943739891	VAL	169	C	C	0.600
O	49.098129272	37.945739746	14.780360222	VAL	169	O	O	-0.550
HG11	49.246448517	39.123310089	11.482979774	VAL	169	HA	H	0.050
HG12	48.063270569	39.564811707	12.708970070	VAL	169	HA	H	0.050
HG13	48.436241150	40.679679871	11.401169777	VAL	169	HA	H	0.050
CG2	49.495128632	41.837360382	13.660079956	VAL	169	CT	C	-0.150
HG21	48.654670715	41.618949890	14.317950249	VAL	169	HA	H	0.050
HG22	50.287658691	42.284278870	14.261070251	VAL	169	HA	H	0.050
HG23	49.157199860	42.593208313	12.950369835	VAL	169	HA	H	0.050
HT1	52.548629761	33.932628632	11.844449997	VAL	169	HC	H	0.350
HT2	51.876289368	34.869789124	13.019330025	VAL	169	HC	H	0.350
HT3	53.200160980	35.445228577	12.163969994	VAL	169	HC	H	0.350
N	49.670391083	39.759899139	16.049650192	TYR	170	NP	N	-0.400
HN	50.211200714	40.599548340	16.058160782	TYR	170	H	H	0.250
CA	48.885501862	39.415199280	17.230489731	TYR	170	CT	C	0.050
HA	48.904090881	40.313159943	17.845529556	TYR	170	HA	H	0.050
C	49.561019897	38.268218994	18.003839493	TYR	170	C	C	0.600
O	49.415828705	37.111309052	17.634569168	TYR	170	O	O	-0.550
CB	47.424640656	39.038951874	16.890230179	TYR	170	CT	C	-0.100
HB1	47.374149323	38.069999695	16.393880844	TYR	170	HA	H	0.050
HB2	46.846809387	38.909141541	17.801830292	TYR	170	HA	H	0.050
CG	46.717769623	40.067901611	16.049850464	TYR	170	C6R	C	0.000
CD1	46.623699188	41.386661530	16.477359772	TYR	170	C6R	C	-0.130
HD1	47.088401794	41.698619843	17.399950027	TYR	170	HA	H	0.130
CD2	46.127349854	39.710418701	14.841750145	TYR	170	C6R	C	-0.130
HD2	46.206390381	38.696521759	14.478179932	TYR	170	HA	H	0.130
CE1	45.922939301	42.323078156	15.733750343	TYR	170	C6R	C	-0.130
HE1	45.879428864	43.332489014	16.112560272	TYR	170	HA	H	0.130
CE2	45.423320770	40.646480560	14.095709801	TYR	170	C6R	C	-0.130
HE2	44.958938599	40.359020233	13.164299965	TYR	170	HA	H	0.130
CZ	45.293411255	41.949901581	14.551770210	TYR	170	C6R	C	0.250
OH	44.503818512	42.832721710	13.836700439	TYR	170	OT	O	-0.650
HH	44.259220123	43.578880310	14.392120361	TYR	170	HO	H	0.400
N	50.264270782	38.690738678	19.075460434	ILE	171	NP	N	-0.400
HN	50.294151306	39.683101654	19.231019974	ILE	171	H	H	0.250
CA	50.844261169	37.936679840	20.193349838	ILE	171	CT	C	0.050
HA	50.021091461	37.416820526	20.683200836	ILE	171	HA	H	0.050
C	51.365760803	39.043880463	21.132419586	ILE	171	C	C	0.600
O	51.802471161	40.089801788	20.663110733	ILE	171	O	O	-0.550
CB	51.995998383	36.950290680	19.822490692	ILE	171	CT	C	-0.050
HB	52.716838837	37.503749847	19.222019196	ILE	171	HA	H	0.050
CG1	51.501831055	35.745399475	18.984930038	ILE	171	CT	C	-0.100
HG11	50.514431000	35.438919067	19.325550079	ILE	171	HA	H	0.050
HG12	51.401439667	36.051189423	17.946519852	ILE	171	HA	H	0.050
CG2	52.761390686	36.455249786	21.073259354	ILE	171	CT	C	-0.150
HG21	53.222839355	37.268829346	21.630239487	ILE	171	HA	H	0.050
HG22	52.104381561	35.907859802	21.750289917	ILE	171	HA	H	0.050
HG23	53.590740204	35.800720215	20.807359695	ILE	171	HA	H	0.050
CD1	52.403461456	34.503318787	18.990549088	ILE	171	CT	C	-0.150
HD11	53.416030884	34.744361877	18.673240662	ILE	171	HA	H	0.050
HD12	52.455791473	34.049648285	19.979249954	ILE	171	HA	H	0.050
HD13	52.019321442	33.742511749	18.311899185	ILE	171	HA	H	0.050
N	51.302490234	38.784099579	22.452320099	GLY	172	NP	N	-0.400
HN	50.913871765	37.929489136	22.811279297	GLY	172	H	H	0.250

CA	51.850639343	39.747539520	23.396690369	GLY	172	CT	C	0.000
HA1	52.800830841	40.120311737	23.010889053	GLY	172	HA	H	0.050
HA2	51.134338379	40.562900543	23.481039047	GLY	172	HA	H	0.050
C	52.052688599	39.070621490	24.751010895	GLY	172	C	C	0.600
O	51.253448486	38.237548828	25.158020020	GLY	172	O	O	-0.550
N	53.161590576	39.453109741	25.411209106	ALA	173	NP	N	-0.400
HN	53.742931366	40.199008942	25.068479538	ALA	173	H	H	0.250
CA	53.527580261	38.830280304	26.679090500	ALA	173	CT	C	0.050
HA	52.637538910	38.381641388	27.126359940	ALA	173	HA	H	0.050
C	54.059440613	39.919811249	27.614110947	ALA	173	C	C	0.600
O	54.788269043	40.811748505	27.197710037	ALA	173	O	O	-0.550
CB	54.600421906	37.759620667	26.439659119	ALA	173	CT	C	-0.150
HB1	55.496261597	38.186931610	25.987720490	ALA	173	HA	H	0.050
HB2	54.892971039	37.278030396	27.373750687	ALA	173	HA	H	0.050
HB3	54.230098724	36.981220245	25.772310257	ALA	173	HA	H	0.050
N	53.641578674	39.789829254	28.885320663	LEU	174	NP	N	-0.400
HN	53.124229431	38.981548309	29.170169830	LEU	174	H	H	0.250
CA	54.102138519	40.689151764	29.933769226	LEU	174	CT	C	0.050
HA	54.668529510	41.508350372	29.495710373	LEU	174	HA	H	0.050
C	54.986080170	39.859001160	30.857580185	LEU	174	C	C	0.600
O	54.651111603	38.717418671	31.146610260	LEU	174	O	O	-0.550
CB	52.912288666	41.212379456	30.750329971	LEU	174	CT	C	-0.100
HB1	52.402690887	40.368160248	31.219419479	LEU	174	HA	H	0.050
HB2	53.278011322	41.829788208	31.565700531	LEU	174	HA	H	0.050
CG	51.888809204	42.028308868	29.953990936	LEU	174	CT	C	-0.050
HG	51.535789490	41.407089233	29.139450073	LEU	174	HA	H	0.050
CD1	50.692371368	42.365768433	30.850479126	LEU	174	CT	C	-0.150
HD11	50.948089600	43.171810150	31.534210205	LEU	174	HA	H	0.050
HD12	49.827140808	42.667789459	30.261140823	LEU	174	HA	H	0.050
HD13	50.396350861	41.515129089	31.463060379	LEU	174	HA	H	0.050
CD2	52.489700317	43.299968719	29.338479996	LEU	174	CT	C	-0.150
HD21	52.907859802	43.950920105	30.106880188	LEU	174	HA	H	0.050
HD22	53.283878326	43.064308167	28.629280090	LEU	174	HA	H	0.050
HD23	51.731800079	43.866180420	28.796489716	LEU	174	HA	H	0.050
N	56.092250824	40.474819183	31.318019867	PHE	175	NP	N	-0.400
HN	56.307510376	41.388351440	30.966770172	PHE	175	H	H	0.250
CA	56.955791473	39.823398590	32.301799774	PHE	175	CT	C	0.050
HA	56.579730988	38.823478699	32.515491486	PHE	175	HA	H	0.050
C	56.952068329	40.602710724	33.634948730	PHE	175	C	C	0.600
O	57.875759125	41.363201141	33.920379639	PHE	175	O	O	-0.550
CB	58.408088684	39.709640503	31.792190552	PHE	175	CT	C	-0.100
HB1	58.810310364	40.708080292	31.620119095	PHE	175	HA	H	0.050
HB2	59.030788422	39.266128540	32.569900513	PHE	175	HA	H	0.050
CG	58.617038727	38.899768829	30.533630371	PHE	175	C6R	C	0.000
CD1	57.687538147	37.973281860	30.058490753	PHE	175	C6R	C	-0.130
HD1	56.778388977	37.762248993	30.599130630	PHE	175	HA	H	0.130
CD2	59.796478271	39.080249786	29.818109512	PHE	175	C6R	C	-0.130
HD2	60.545299530	39.774101257	30.171329498	PHE	175	HA	H	0.130
CE1	57.913768768	37.280670166	28.877090454	PHE	175	C6R	C	-0.130
HE1	57.178218842	36.578819275	28.513139725	PHE	175	HA	H	0.130
CE2	60.035018921	38.374221802	28.649110794	PHE	175	C6R	C	-0.130
HE2	60.962261200	38.516529083	28.112169266	PHE	175	HA	H	0.130
CZ	59.085990906	37.486900330	28.167789459	PHE	175	C6R	C	-0.130
HZ	59.267818451	36.956241608	27.244190216	PHE	175	HA	H	0.130
N	55.902278900	40.330120087	34.467189789	PRO	176	NX	N	-0.250
CA	56.030090332	40.381919861	35.927120209	PRO	176	CT	C	0.050
HA	56.107799530	41.414890289	36.241119385	PRO	176	HA	H	0.050
C	57.279800415	39.612529755	36.416221619	PRO	176	C	C	0.600
O	57.478740692	38.452171326	36.077808380	PRO	176	O	O	-0.550
CB	54.708438873	39.781379700	36.437091827	PRO	176	CT	C	-0.100
HB1	54.818378448	38.721099854	36.652580261	PRO	176	HA	H	0.050
HB2	54.344299316	40.260490417	37.344261169	PRO	176	HA	H	0.050

CG	53.715591431	39.939178467	35.285808563	PRO	176	CT	C	-0.100
HG1	52.957599640	39.156879425	35.274318695	PRO	176	HA	H	0.050
HG2	53.206401825	40.900180817	35.372371674	PRO	176	HA	H	0.050
CD	54.565971375	39.927730560	34.020610809	PRO	176	CT	C	0.000
HD1	54.583728790	38.940261841	33.566501617	PRO	176	HA	H	0.050
HD2	54.155620575	40.623451233	33.294231415	PRO	176	HA	H	0.050
N	58.143669128	40.349720001	37.137348175	MET	177	NP	N	-0.400
HN	57.805889130	41.196640015	37.547649384	MET	177	H	H	0.250
CA	59.526481628	39.919818878	37.349941254	MET	177	CT	C	0.050
HA	59.689689636	38.980171204	36.818679810	MET	177	HA	H	0.050
C	59.744449615	39.684310913	38.853031158	MET	177	C	C	0.600
O	58.814029694	39.748081207	39.640838623	MET	177	O	O	-0.550
CB	60.449958801	41.011688232	36.778999329	MET	177	CT	C	-0.100
HB1	59.926540375	41.500961304	35.958518982	MET	177	HA	H	0.050
HB2	60.645679474	41.785831451	37.522979736	MET	177	HA	H	0.050
CG	61.760559082	40.479499817	36.190929413	MET	177	CT	C	-0.050
HG1	62.305438995	39.830799103	36.873661041	MET	177	HA	H	0.050
HG2	61.522060394	39.875869751	35.316341400	MET	177	HA	H	0.050
SD	62.847370148	41.818939209	35.671360016	MET	177	SE	S	-0.100
CE	64.010627747	40.851181030	34.692329407	MET	177	CT	C	-0.100
HE1	64.392311096	40.015411377	35.278629303	MET	177	HA	H	0.050
HE2	63.511749268	40.436168671	33.816581726	MET	177	HA	H	0.050
HE3	64.851692200	41.466899872	34.375061035	MET	177	HA	H	0.050
N	61.008380890	39.420959473	39.223140717	SER	178	NP	N	-0.400
HN	61.774379730	39.433799744	38.581520081	SER	178	H	H	0.250
CA	61.364540100	39.255111694	40.626808167	SER	178	CT	C	0.050
HA	60.774528503	38.446941376	41.048240662	SER	178	HA	H	0.050
C	61.095661163	40.561138153	41.385768890	SER	178	C	C	0.600
O	61.557350159	41.614070892	40.961238861	SER	178	O	O	-0.550
CB	62.866199493	38.959640503	40.638378143	SER	178	CT	C	0.050
HB1	63.306888580	39.045009613	41.637771606	SER	178	HA	H	0.100
HB2	63.048789978	37.936408997	40.305671692	SER	178	HA	H	0.100
OG	63.516368866	39.830108643	39.725631714	SER	178	OT	O	-0.650
HG	63.264080048	40.735439301	39.927379608	SER	178	HO	H	0.400
N	60.328479767	40.438610077	42.489231110	GLY	179	NP	N	-0.400
HN	60.044090271	39.548408508	42.867019653	GLY	179	H	H	0.250
CA	59.846851349	41.631931305	43.180751801	GLY	179	CT	C	0.000
HA1	59.824359894	41.407829285	44.245628357	GLY	179	HA	H	0.050
HA2	60.539409637	42.460281372	43.022571564	GLY	179	HA	H	0.050
C	58.439468384	42.027568817	42.710971832	GLY	179	C	C	0.600
O	57.866008759	43.002269745	43.177238464	GLY	179	O	O	-0.550
N	57.915988922	41.226840973	41.764999390	GLY	180	NP	N	-0.400
HN	58.437950134	40.466419220	41.374008179	GLY	180	H	H	0.250
CA	56.634620667	41.541030884	41.154930115	GLY	180	CT	C	0.000
HA1	55.916740417	41.802021027	41.934299469	GLY	180	HA	H	0.050
HA2	56.793201447	42.392688751	40.495651245	GLY	180	HA	H	0.050
C	56.133029938	40.345531464	40.345989227	GLY	180	C	C	0.600
O	55.825298309	40.447818756	39.165218353	GLY	180	O	O	-0.550
N	56.073608398	39.212100983	41.073661804	TRP	181	NP	N	-0.400
HN	56.405681610	39.260288239	42.015201569	TRP	181	H	H	0.250
CA	55.553699493	37.951419830	40.544441223	TRP	181	CT	C	0.050
HA	55.627441406	37.239280701	41.363338470	TRP	181	HA	H	0.050
C	56.379570007	37.412208557	39.347850800	TRP	181	C	C	0.600
O	55.882389069	37.357189178	38.231731415	TRP	181	O	O	-0.550
CB	54.065151215	38.069080353	40.160789490	TRP	181	CT	C	-0.100
HB1	53.925361633	38.752738953	39.322189331	TRP	181	HA	H	0.050
HB2	53.681350708	37.100528717	39.838779449	TRP	181	HA	H	0.050
CG	53.257621765	38.536449432	41.352859497	TRP	181	C5R	C	-0.030
CD1	52.920410156	37.765998840	42.469749451	TRP	181	C5R	C	-0.040
HD1	53.190658569	36.731380463	42.624149323	TRP	181	HA	H	0.100
CD2	52.695991516	39.847019196	41.572490692	TRP	181	CR56	C	0.100
HE1	51.854141235	38.223640442	44.200649261	TRP	181	H	H	0.300

NE1	52.202930450	38.524738312	43.333419800	TRP	181	N5R	N	-0.360
CE2	52.041019440	39.805801392	42.825679779	TRP	181	CR56	C	-0.040
CE3	52.698169708	41.002681732	40.837921143	TRP	181	C6R	C	-0.130
HE3	53.199440002	41.032711029	39.881221771	TRP	181	HA	H	0.100
CZ2	51.409820557	40.920158386	43.307250977	TRP	181	C6R	C	-0.130
HZ2	50.912490845	40.885658264	44.265510559	TRP	181	HA	H	0.130
CZ3	52.054740906	42.140209198	41.325870514	TRP	181	C6R	C	-0.130
HZ3	52.053901672	43.051998138	40.748001099	TRP	181	HA	H	0.130
CH2	51.410198212	42.099361420	42.562320709	TRP	181	C6R	C	-0.130
HH2	50.913619995	42.980171204	42.942749023	TRP	181	HA	H	0.130
N	57.633449554	36.937351227	39.616668701	PRO	182	NX	N	-0.250
CA	58.529361725	36.415958405	38.572280884	PRO	182	CT	C	0.050
HA	58.751529694	37.222591400	37.877021790	PRO	182	HA	H	0.050
C	58.018421173	35.246299744	37.706470490	PRO	182	C	C	0.600
O	58.660388947	34.836948395	36.747211456	PRO	182	O	O	-0.550
CB	59.819431305	36.016361237	39.315460205	PRO	182	CT	C	-0.100
HB1	60.188861847	35.025089264	39.049091339	PRO	182	HA	H	0.050
HB2	60.613380432	36.723121643	39.075569153	PRO	182	HA	H	0.050
CG	59.494209290	36.083740234	40.809661865	PRO	182	CT	C	-0.100
HG1	59.243949890	35.098701477	41.182510376	PRO	182	HA	H	0.050
HG2	60.327548981	36.429130554	41.417591095	PRO	182	HA	H	0.050
CD	58.249938965	36.955341339	40.935321808	PRO	182	CT	C	0.000
HD1	57.590969086	36.561351776	41.703971863	PRO	182	HA	H	0.050
HD2	58.510318756	37.979530334	41.192428589	PRO	182	HA	H	0.050
N	56.817169189	34.753280640	38.054561615	GLY	183	NP	N	-0.400
HN	56.356788635	35.112541199	38.862400055	GLY	183	H	H	0.250
CA	56.125949860	33.823291779	37.174991608	GLY	183	CT	C	0.000
HA1	56.742961884	32.930828094	37.068668365	GLY	183	HA	H	0.050
HA2	55.190860748	33.558368683	37.666851044	GLY	183	HA	H	0.050
C	55.839588165	34.456359863	35.800109863	GLY	183	C	C	0.600
O	55.806289673	33.790729523	34.775440216	GLY	183	O	O	-0.550
N	55.674240112	35.789508820	35.828109741	GLY	184	NP	N	-0.400
HN	55.724731445	36.300540924	36.689601898	GLY	184	H	H	0.250
CA	55.510551453	36.516658783	34.579460144	GLY	184	CT	C	0.000
HA1	54.585659027	36.191471100	34.101200104	GLY	184	HA	H	0.050
HA2	55.436691284	37.560340881	34.857749939	GLY	184	HA	H	0.050
C	56.708221436	36.316448212	33.643230438	GLY	184	C	C	0.600
O	56.576358795	35.953559875	32.482959747	GLY	184	O	O	-0.550
N	57.899250031	36.540519714	34.221801758	GLN	185	NP	N	-0.400
HN	57.931869507	36.877601624	35.164989471	GLN	185	H	H	0.250
CA	59.109371185	36.342918396	33.438030243	GLN	185	CT	C	0.050
HA	58.927059174	36.805740356	32.467338562	GLN	185	HA	H	0.050
C	59.358058929	34.841331482	33.180301666	GLN	185	C	C	0.600
O	60.007831573	34.471538544	32.215721130	GLN	185	O	O	-0.550
CB	60.303878784	37.054721832	34.083309174	GLN	185	CT	C	-0.100
HB1	60.016700745	38.063930511	34.379840851	GLN	185	HA	H	0.050
HB2	60.579879761	36.546321869	35.007278442	GLN	185	HA	H	0.050
CG	61.488590240	37.141418457	33.101058960	GLN	185	CT	C	-0.100
HG1	61.681728363	36.175041199	32.636291504	GLN	185	HA	H	0.050
HG2	61.269100189	37.838760376	32.292659760	GLN	185	HA	H	0.050
CD	62.785190582	37.566070557	33.784809113	GLN	185	C	C	0.550
OE1	62.818538666	37.935188293	34.952861786	GLN	185	O	O	-0.550
NE2	63.847831726	37.456108093	32.983528137	GLN	185	NP	N	-0.600
HE21	64.777839661	37.601940155	33.334980011	GLN	185	H	H	0.300
HE22	63.733940125	37.190990448	32.020641327	GLN	185	H	H	0.300
N	58.737030029	33.983108521	34.014431000	ALA	186	NP	N	-0.400
HN	58.347751617	34.339248657	34.866050720	ALA	186	H	H	0.250
CA	58.743949890	32.552379608	33.697868347	ALA	186	CT	C	0.050
HA	59.792289734	32.277778625	33.560550690	ALA	186	HA	H	0.050
C	57.994720459	32.227851868	32.379428864	ALA	186	C	C	0.600
O	58.166759491	31.157379150	31.808219910	ALA	186	O	O	-0.550
CB	58.167781830	31.732189178	34.856578827	ALA	186	CT	C	-0.150

HB1	58.638221741	32.000061035	35.799171448	ALA	186	HA	H	0.050
HB2	57.099498749	31.879020691	34.976779938	ALA	186	HA	H	0.050
HB3	58.325958252	30.668289185	34.686038971	ALA	186	HA	H	0.050
N	57.194530487	33.204719543	31.894920349	CYS	187	NP	N	-0.400
HN	56.959640503	34.008571625	32.449108124	CYS	187	H	H	0.250
CA	56.654518127	33.080448151	30.541479111	CYS	187	CT	C	0.050
HA	56.208698273	32.087078094	30.460710526	CYS	187	HA	H	0.050
C	57.760429382	33.208469391	29.476430893	CYS	187	C	C	0.600
O	57.652591705	32.653419495	28.393320084	CYS	187	O	O	-0.550
CB	55.587268829	34.148330688	30.267339706	CYS	187	CT	C	0.100
HB1	56.015529633	35.148109436	30.330249786	CYS	187	HA	H	0.050
HB2	55.222049713	34.045478821	29.246610641	CYS	187	HA	H	0.050
SG	54.162338257	34.053268433	31.373100281	CYS	187	ST	S	-0.300
HG	53.527618408	32.895149231	31.177570343	CYS	187	H	H	0.100
N	58.818489075	33.965579987	29.819110870	GLN	188	NP	N	-0.400
HN	58.883670807	34.350971222	30.739160538	GLN	188	H	H	0.250
CA	59.918441772	34.220870972	28.889730453	GLN	188	CT	C	0.050
HA	59.466918945	34.831501007	28.110830307	GLN	188	HA	H	0.050
C	60.419120789	32.954429626	28.162830353	GLN	188	C	C	0.600
O	60.317150116	32.879940033	26.943950653	GLN	188	O	O	-0.550
CB	61.053398132	35.029201508	29.545780182	GLN	188	CT	C	-0.100
HB1	60.625728607	35.887168884	30.065380096	GLN	188	HA	H	0.050
HB2	61.565509796	34.451118469	30.312370300	GLN	188	HA	H	0.050
CG	62.072521210	35.516998291	28.506809235	GLN	188	CT	C	-0.100
HG1	62.564231873	34.672771454	28.023689270	GLN	188	HA	H	0.050
HG2	61.563301086	36.074100494	27.722639084	GLN	188	HA	H	0.050
CD	63.150119781	36.422908783	29.111780167	GLN	188	C	C	0.550
OE1	63.139209747	36.770050049	30.287319183	GLN	188	O	O	-0.550
NE2	64.080841064	36.779869080	28.222290039	GLN	188	NP	N	-0.600
HE21	64.870681763	37.324069977	28.491510391	GLN	188	H	H	0.300
HE22	63.982749939	36.483139038	27.263669968	GLN	188	H	H	0.300
N	60.928939819	31.929710388	28.903999329	PRO	189	NX	N	-0.250
CA	61.392288208	30.720180511	28.226339340	PRO	189	CT	C	0.050
HA	62.215389252	30.954130173	27.548700333	PRO	189	HA	H	0.050
C	60.295280457	29.993940353	27.429220200	PRO	189	C	C	0.600
O	60.583248138	29.289279938	26.474880219	PRO	189	O	O	-0.550
CB	61.869560242	29.817859650	29.372930527	PRO	189	CT	C	-0.100
HB1	61.661548615	28.762750626	29.209810257	PRO	189	HA	H	0.050
HB2	62.947849274	29.927349091	29.499229431	PRO	189	HA	H	0.050
CG	61.158069611	30.356580734	30.613330841	PRO	189	CT	C	-0.100
HG1	60.147838593	29.953569412	30.652969360	PRO	189	HA	H	0.050
HG2	61.651371002	30.088439941	31.545959473	PRO	189	HA	H	0.050
CD	61.078781128	31.858949661	30.358430862	PRO	189	CT	C	0.000
HD1	60.262878418	32.313011169	30.908349991	PRO	189	HA	H	0.050
HD2	62.010860443	32.342350006	30.651470184	PRO	189	HA	H	0.050
N	59.027061462	30.225080490	27.825170517	ALA	190	NP	N	-0.400
HN	58.838809967	30.869100571	28.567129135	ALA	190	H	H	0.250
CA	57.930961609	29.610549927	27.085409164	ALA	190	CT	C	0.050
HA	58.165981293	28.551370621	26.983320236	ALA	190	HA	H	0.050
C	57.842880249	30.237710953	25.684780121	ALA	190	C	C	0.600
O	57.884349823	29.569719315	24.657150269	ALA	190	O	O	-0.550
CB	56.616100311	29.778089523	27.861330032	ALA	190	CT	C	-0.150
HB1	56.320049286	30.817190170	27.981269836	ALA	190	HA	H	0.050
HB2	55.794990540	29.283670425	27.353080750	ALA	190	HA	H	0.050
HB3	56.697471619	29.340150833	28.853960037	ALA	190	HA	H	0.050
N	57.744861603	31.579149246	25.732839584	VAL	191	NP	N	-0.400
HN	57.796718597	32.021560669	26.631050110	VAL	191	H	H	0.250
CA	57.629108429	32.386299133	24.526330948	VAL	191	CT	C	0.050
HA	56.720458984	32.067031860	24.019479752	VAL	191	HA	H	0.050
C	58.814769745	32.108898163	23.591829300	VAL	191	C	C	0.600
O	58.654361725	31.736610413	22.437440872	VAL	191	O	O	-0.550
CB	57.537418365	33.885181427	24.902900696	VAL	191	CT	C	-0.050

HB	58.417720795	34.146320343	25.493659973	VAL	191	HA	H	0.050
CG1	57.513538361	34.802558899	23.669309616	VAL	191	CT	C	-0.150
HG11	56.667968750	34.571578979	23.020910263	VAL	191	HA	H	0.050
HG12	57.433658600	35.849479675	23.962799072	VAL	191	HA	H	0.050
HG13	58.421550751	34.700958252	23.077999115	VAL	191	HA	H	0.050
CG2	56.303409576	34.175811768	25.766239166	VAL	191	CT	C	-0.150
HG21	55.386871338	33.989601135	25.207149506	VAL	191	HA	H	0.050
HG22	56.277011871	33.558738708	26.661390305	VAL	191	HA	H	0.050
HG23	56.288368225	35.217121124	26.089410782	VAL	191	HA	H	0.050
N	60.006748199	32.339199066	24.161149979	GLU	192	NP	N	-0.400
HN	60.058330536	32.587718964	25.130920410	GLU	192	H	H	0.250
CA	61.200210571	32.407459259	23.334360123	GLU	192	CT	C	0.050
HA	60.900249481	32.856098175	22.385059357	GLU	192	HA	H	0.050
C	61.738990784	31.004690170	22.994340897	GLU	192	C	C	0.600
O	62.435470581	30.821910858	22.002569199	GLU	192	O	O	-0.550
CB	62.208080292	33.360988617	23.994100571	GLU	192	CT	C	-0.100
HB1	62.654029846	32.906700134	24.880590439	GLU	192	HA	H	0.050
HB2	63.027389526	33.538738251	23.295930862	GLU	192	HA	H	0.050
CG	61.525291443	34.692401886	24.383939743	GLU	192	CT	C	-0.250
HG1	60.774890900	34.971248627	23.646459579	GLU	192	HA	H	0.050
HG2	60.987800598	34.586360931	25.325979233	GLU	192	HA	H	0.050
CD	62.515399933	35.853771210	24.517410278	GLU	192	C	C	0.350
OE1	62.860969543	36.429618835	23.488410950	GLU	192	OC	O	-0.600
OE2	62.913169861	36.180168152	25.629159927	GLU	192	OC	O	-0.600
N	61.337371826	29.991529465	23.800750732	MET	193	NP	N	-0.400
HN	60.850551605	30.146270752	24.663999557	MET	193	H	H	0.250
CA	61.566219330	28.629440308	23.316810608	MET	193	CT	C	0.050
HA	62.616630554	28.566360474	23.041080475	MET	193	HA	H	0.050
C	60.694831848	28.389789581	22.069709778	MET	193	C	C	0.600
O	61.200370789	28.127229691	20.982080460	MET	193	O	O	-0.550
CB	61.308509827	27.548290253	24.379629135	MET	193	CT	C	-0.100
HB1	61.908519745	27.761440277	25.264390945	MET	193	HA	H	0.050
HB2	60.266441345	27.580110550	24.697179794	MET	193	HA	H	0.050
CG	61.670200348	26.134059906	23.892639160	MET	193	CT	C	-0.050
HG1	61.262050629	25.939699173	22.901149750	MET	193	HA	H	0.050
HG2	62.754951477	26.050500870	23.812299728	MET	193	HA	H	0.050
SD	61.073719025	24.878530502	25.041870117	MET	193	SE	S	-0.100
CE	60.122249603	23.864879608	23.897590637	MET	193	CT	C	-0.100
HE1	60.785999298	23.250980377	23.290000916	MET	193	HA	H	0.050
HE2	59.431491852	23.230640411	24.449350357	MET	193	HA	H	0.050
HE3	59.530929565	24.495149612	23.233259201	MET	193	HA	H	0.050
N	59.370010376	28.494789124	22.305009842	ALA	194	NP	N	-0.400
HN	59.049148560	28.819120407	23.201339722	ALA	194	H	H	0.250
CA	58.399971008	28.087879181	21.294109344	ALA	194	CT	C	0.050
HA	58.570610046	27.026460648	21.107070923	ALA	194	HA	H	0.050
C	58.585098267	28.844549179	19.970979691	ALA	194	C	C	0.600
O	58.665298462	28.253290176	18.902170181	ALA	194	O	O	-0.550
CB	56.977859497	28.310129166	21.826240540	ALA	194	CT	C	-0.150
HB1	56.797889709	27.692680359	22.702520370	ALA	194	HA	H	0.050
HB2	56.814201355	29.349449158	22.116830826	ALA	194	HA	H	0.050
HB3	56.226001740	28.044809341	21.081739426	ALA	194	HA	H	0.050
N	58.619541168	30.180870056	20.115739822	LEU	195	NP	N	-0.400
HN	58.633071899	30.561420441	21.041320801	LEU	195	H	H	0.250
CA	58.530681610	31.065090179	18.963239670	LEU	195	CT	C	0.050
HA	57.574829102	30.840349197	18.491449356	LEU	195	HA	H	0.050
C	59.634910583	30.790180206	17.941629410	LEU	195	C	C	0.600
O	59.357151031	30.450839996	16.801509857	LEU	195	O	O	-0.550
CB	58.510021210	32.532718658	19.393419266	LEU	195	CT	C	-0.100
HB1	57.674098969	32.659019470	20.082950592	LEU	195	HA	H	0.050
HB2	59.398029327	32.784599304	19.973510742	LEU	195	HA	H	0.050
CG	58.347839355	33.489151001	18.193109512	LEU	195	CT	C	-0.050
HG	57.908840179	32.951648712	17.350519180	LEU	195	HA	H	0.050

CD1 57.385028839 34.613929749 18.535810471 LEU 195 CT C -0.150
HD11 56.367691040 34.252059937 18.688789368 LEU 195 HA H 0.050
HD12 57.710971832 35.114940643 19.437780380 LEU 195 HA H 0.050
HD13 57.376659393 35.344478607 17.735040665 LEU 195 HA H 0.050
CD2 59.686008453 34.082511902 17.729679108 LEU 195 CT C -0.150
HD21 60.172798157 34.627071381 18.535869598 LEU 195 HA H 0.050
HD22 60.382251740 33.322620392 17.381799698 LEU 195 HA H 0.050
HD23 59.538490295 34.776000977 16.900979996 LEU 195 HA H 0.050
N 60.896060944 30.933889389 18.385990143 GLU 196 NP N -0.400
HN 61.083419800 31.341220856 19.284370422 GLU 196 H H 0.250
CA 61.980808258 30.756910324 17.425739288 GLU 196 CT C 0.050
HA 61.778751373 31.448329926 16.606790543 GLU 196 HA H 0.050
C 61.978099823 29.332780838 16.824630737 GLU 196 C C 0.600
O 62.368759155 29.124820709 15.680419922 GLU 196 O O -0.550
CB 63.339290619 31.122310638 18.047430038 GLU 196 CT C -0.100
HB1 63.478221893 30.626909256 19.004129410 GLU 196 HA H 0.050
HB2 64.125526428 30.737949371 17.395589828 GLU 196 HA H 0.050
CG 63.572181702 32.639701843 18.186899185 GLU 196 CT C -0.250
HG1 64.642311096 32.836349487 18.106090546 GLU 196 HA H 0.050
HG2 63.105651855 33.182819366 17.364479065 GLU 196 HA H 0.050
CD 63.089229584 33.247249603 19.513500214 GLU 196 C C 0.350
OE1 63.873111725 33.923191071 20.177389145 GLU 196 OC O -0.600
OE2 61.925708771 33.090091705 19.881219864 GLU 196 OC O -0.600
N 61.477989197 28.374620438 17.633630753 ASP 197 NP N -0.400
HN 61.121749878 28.616550446 18.537309647 ASP 197 H H 0.250
CA 61.343250275 27.002599716 17.149480820 ASP 197 CT C 0.050
HA 62.339889526 26.701370239 16.818750381 ASP 197 HA H 0.050
C 60.403949738 26.954830170 15.928469658 ASP 197 C C 0.600
O 60.755081177 26.501520157 14.843839645 ASP 197 O O -0.550
CB 60.815639496 26.100900650 18.290060043 ASP 197 CT C -0.250
HB1 60.698291779 26.663850784 19.212240219 ASP 197 HA H 0.050
HB2 59.825199127 25.693569183 18.078100204 ASP 197 HA H 0.050
CG 61.771999359 24.945070267 18.569599152 ASP 197 C C 0.350
OD1 62.834781647 25.166200638 19.139070511 ASP 197 OC O -0.600
OD2 61.479118347 23.808809280 18.217430115 ASP 197 OC O -0.600
N 59.186920166 27.478029251 16.160839081 VAL 198 NP N -0.400
HN 58.987709045 27.864759445 17.066450119 VAL 198 H H 0.250
CA 58.187839508 27.438110352 15.100000381 VAL 198 CT C 0.050
HA 58.182060242 26.409030914 14.738240242 VAL 198 HA H 0.050
C 58.605579376 28.319530487 13.903949738 VAL 198 C C 0.600
O 58.392688751 27.967390060 12.753170013 VAL 198 O O -0.550
CB 56.785358429 27.745870590 15.647839546 VAL 198 CT C -0.050
HB 56.107170105 27.752080917 14.799300194 VAL 198 HA H 0.050
CG1 56.328861237 26.632429123 16.602979660 VAL 198 CT C -0.150
HG11 56.342899323 25.660249710 16.110120773 VAL 198 HA H 0.050
HG12 56.979339600 26.571020126 17.476669312 VAL 198 HA H 0.050
HG13 55.317150116 26.804870605 16.964849472 VAL 198 HA H 0.050
CG2 56.680351257 29.113670349 16.329580307 VAL 198 CT C -0.150
HG21 57.108558655 29.912010193 15.727959633 VAL 198 HA H 0.050
HG22 55.643661499 29.381330490 16.518930435 VAL 198 HA H 0.050
HG23 57.193138123 29.108049393 17.284189224 VAL 198 HA H 0.050
N 59.288520813 29.431159973 14.214750290 ASN 199 NP N -0.400
HN 59.380069733 29.675489426 15.179739952 ASN 199 H H 0.250
CA 59.863918304 30.248880386 13.149200439 ASN 199 CT C 0.050
HA 59.039421082 30.575099945 12.511930466 ASN 199 HA H 0.050
C 60.831348419 29.396530151 12.287940025 ASN 199 C C 0.600
O 60.844371796 29.482149124 11.067230225 ASN 199 O O -0.550
CB 60.621448517 31.459260941 13.727549553 ASN 199 CT C -0.100
HB1 61.358100891 31.126739502 14.456080437 ASN 199 HA H 0.050
HB2 61.188991547 31.941940308 12.931050301 ASN 199 HA H 0.050
CG 59.782478333 32.580909729 14.377200127 ASN 199 C C 0.550
OD1 60.330501556 33.616001129 14.723679543 ASN 199 O O -0.550

ND2	58.462020874	32.392688751	14.510000229	ASN	199	NP	N	-0.600
HD21	57.956829071	33.166728973	14.902050018	ASN	199	H	H	0.300
HD22	57.952980042	31.564109802	14.255260468	ASN	199	H	H	0.300
N	61.608188629	28.538679123	12.985540390	SER	200	NP	N	-0.400
HN	61.538040161	28.516170502	13.986020088	SER	200	H	H	0.250
CA	62.547729492	27.648830414	12.296190262	SER	200	CT	C	0.050
HA	63.135219574	28.277330399	11.624509811	SER	200	HA	H	0.050
C	61.833198547	26.576730728	11.439319611	SER	200	C	C	0.600
O	62.364551544	26.094190598	10.449099541	SER	200	O	O	-0.550
CB	63.485359192	26.978500366	13.311070442	SER	200	CT	C	0.050
HB1	62.955291748	26.275779724	13.962349892	SER	200	HA	H	0.100
HB2	64.230117798	26.385440826	12.776559830	SER	200	HA	H	0.100
OG	64.190429688	27.929050446	14.089309692	SER	200	OT	O	-0.650
HG	63.573600769	28.469789505	14.586660385	SER	200	HO	H	0.400
N	60.588638306	26.262649536	11.848070145	ARG	201	NP	N	-0.400
HN	60.280479431	26.641290665	12.724169731	ARG	201	H	H	0.250
CA	59.709609985	25.389320374	11.060819626	ARG	201	CT	C	0.050
HA	60.299140930	24.521379471	10.760860443	ARG	201	HA	H	0.050
C	59.217521667	26.089189529	9.760740280	ARG	201	C	C	0.600
O	58.527400970	25.491340637	8.938679695	ARG	201	O	O	-0.550
CB	58.552101135	24.935930252	11.992970467	ARG	201	CT	C	-0.100
HB1	58.935501099	24.173149109	12.671369553	ARG	201	HA	H	0.050
HB2	58.268959045	25.752290726	12.640520096	ARG	201	HA	H	0.050
CG	57.260509491	24.419359207	11.332739830	ARG	201	CT	C	-0.100
HG1	56.877750397	25.141990662	10.613599777	ARG	201	HA	H	0.050
HG2	57.484790802	23.511659622	10.771510124	ARG	201	HA	H	0.050
CD	56.131660461	24.147460938	12.339710236	ARG	201	CT	C	0.000
HD1	55.319591522	23.623750687	11.832209587	ARG	201	HA	H	0.050
HD2	56.474750519	23.544059753	13.181599617	ARG	201	HA	H	0.050
NE	55.597270966	25.404840469	12.873299599	ARG	201	NP	N	-0.400
HE	56.163360596	26.220130920	12.745559692	ARG	201	H	H	0.300
CZ	54.391410828	25.489320755	13.489740372	ARG	201	C	C	0.500
NH1	53.699428558	24.374980927	13.719240189	ARG	201	NC	N	-0.450
HH11	54.077991486	23.503210068	13.416629791	ARG	201	HC	H	0.350
HH12	52.803169250	24.349229813	14.188039780	ARG	201	HC	H	0.350
NH2	53.900810242	26.671030045	13.864649773	ARG	201	NC	N	-0.450
HH21	54.381191254	27.544389725	13.679599762	ARG	201	HC	H	0.350
HH22	53.027660370	26.736059189	14.342769623	ARG	201	HC	H	0.350
N	59.553188324	27.392419815	9.628569603	ARG	202	NP	N	-0.400
HN	60.174961090	27.844980240	10.269980431	ARG	202	H	H	0.250
CA	58.920551300	28.246049881	8.619950294	ARG	202	CT	C	0.050
HA	59.349151611	29.228080750	8.824279785	ARG	202	HA	H	0.050
C	57.407459259	28.418909073	8.958499908	ARG	202	C	C	0.600
O	56.547218323	28.717960358	8.140780449	ARG	202	O	O	-0.550
CB	59.403701782	27.829729080	7.197639942	ARG	202	CT	C	-0.100
HB1	60.184040070	28.540910721	6.923550129	ARG	202	HA	H	0.050
HB2	59.938411713	26.880630493	7.242819786	ARG	202	HA	H	0.050
CG	58.410411835	27.775419235	6.021590233	ARG	202	CT	C	-0.100
HG1	57.618038177	28.514299393	6.122610092	ARG	202	HA	H	0.050
HG2	58.945869446	28.095609665	5.126679897	ARG	202	HA	H	0.050
CD	57.867000580	26.362350464	5.730060101	ARG	202	CT	C	0.000
HD1	58.217498779	26.010229111	4.759309769	ARG	202	HA	H	0.050
HD2	58.182720184	25.615730286	6.459169865	ARG	202	HA	H	0.050
NE	56.411849976	26.387060165	5.641129971	ARG	202	NP	N	-0.400
HE	56.030971527	26.629470825	4.749509811	ARG	202	H	H	0.300
CZ	55.623199463	26.252510071	6.729100227	ARG	202	C	C	0.500
NH1	56.133140564	25.877849579	7.893229961	ARG	202	NC	N	-0.450
HH11	57.104820251	25.628940582	8.004269600	ARG	202	HC	H	0.350
HH12	55.551940918	25.880540848	8.715359688	ARG	202	HC	H	0.350
NH2	54.325759888	26.518100739	6.629740238	ARG	202	NC	N	-0.450
HH21	53.907421112	26.739469528	5.752900124	ARG	202	HC	H	0.350
HH22	53.727581024	26.528060913	7.446589947	ARG	202	HC	H	0.350

N	57.203628540	28.211290359	10.274129868	ASP	203	NP	N	-0.400
HN	57.993659973	28.027189255	10.859689713	ASP	203	H	H	0.250
CA	56.007228851	28.408620834	11.065500259	ASP	203	CT	C	0.050
HA	56.242488861	27.828670502	11.950619698	ASP	203	HA	H	0.050
C	54.727439880	27.745990753	10.530349731	ASP	203	C	C	0.600
O	54.751911163	26.699239731	9.892800331	ASP	203	O	O	-0.550
CB	55.895290375	29.889429092	11.465740204	ASP	203	CT	C	-0.250
HB1	56.856849670	30.382089615	11.312979698	ASP	203	HA	H	0.050
HB2	55.173900604	30.433029175	10.853469849	ASP	203	HA	H	0.050
CG	55.541320801	30.007289886	12.952420235	ASP	203	C	C	0.350
OD1	54.682178497	29.252569199	13.408499718	ASP	203	OC	O	-0.600
OD2	56.150070190	30.822879791	13.638520241	ASP	203	OC	O	-0.600
N	53.610469818	28.388860703	10.903690338	ILE	204	NP	N	-0.400
HN	53.758281708	29.198919296	11.474129677	ILE	204	H	H	0.250
CA	52.270481110	27.953680038	10.549759865	ILE	204	CT	C	0.050
HA	52.219860077	26.888889313	10.784740448	ILE	204	HA	H	0.050
C	52.103858948	28.079399109	9.020609856	ILE	204	C	C	0.600
O	52.409561157	27.166749954	8.259510040	ILE	204	O	O	-0.550
CB	51.247329712	28.715690613	11.441089630	ILE	204	CT	C	-0.050
HB	51.333610535	28.241870880	12.418760300	ILE	204	HA	H	0.050
CG1	49.791389465	28.498210907	10.989319801	ILE	204	CT	C	-0.100
HG11	49.578868866	29.031360626	10.065600395	ILE	204	HA	H	0.050
HG12	49.649028778	27.442470551	10.762530327	ILE	204	HA	H	0.050
CG2	51.566600800	30.210260391	11.699029922	ILE	204	CT	C	-0.150
HG21	52.540100098	30.355880737	12.166469574	ILE	204	HA	H	0.050
HG22	51.544651031	30.829330444	10.804840088	ILE	204	HA	H	0.050
HG23	50.852539062	30.644220352	12.398079872	ILE	204	HA	H	0.050
CD1	48.763549805	28.929199219	12.036729813	ILE	204	CT	C	-0.150
HD11	48.693038940	30.014429092	12.104080200	ILE	204	HA	H	0.050
HD12	47.777488708	28.547189713	11.775509834	ILE	204	HA	H	0.050
HD13	49.026931763	28.553039551	13.023619652	ILE	204	HA	H	0.050
N	51.659278870	29.276689529	8.625269890	LEU	205	NP	N	-0.400
HN	51.405040741	29.937660217	9.324399948	LEU	205	H	H	0.250
CA	51.889881134	29.772180557	7.281040192	LEU	205	CT	C	0.050
HA	51.897861481	28.933849335	6.584219933	LEU	205	HA	H	0.050
C	53.282100677	30.427789688	7.351580143	LEU	205	C	C	0.600
O	53.835628510	30.543270111	8.438879967	LEU	205	O	O	-0.550
CB	50.779541016	30.793920517	6.967559814	LEU	205	CT	C	-0.100
HB1	50.832641602	31.601020813	7.699009895	LEU	205	HA	H	0.050
HB2	50.944820404	31.266139984	6.002099991	LEU	205	HA	H	0.050
CG	49.353431702	30.213119507	6.984200001	LEU	205	CT	C	-0.050
HG	49.175029755	29.737039566	7.947309971	LEU	205	HA	H	0.050
CD1	48.320030212	31.338420868	6.841080189	LEU	205	CT	C	-0.150
HD11	48.422080994	32.069759369	7.643760204	LEU	205	HA	H	0.050
HD12	48.445838928	31.869419098	5.896790028	LEU	205	HA	H	0.050
HD13	47.302150726	30.949390411	6.873779774	LEU	205	HA	H	0.050
CD2	49.151428223	29.154619217	5.891620159	LEU	205	CT	C	-0.150
HD21	49.337600708	29.570329666	4.901000023	LEU	205	HA	H	0.050
HD22	49.815589905	28.302059174	6.030059814	LEU	205	HA	H	0.050
HD23	48.130279541	28.772649765	5.904230118	LEU	205	HA	H	0.050
N	53.840221405	30.882169724	6.192629814	PRO	206	NX	N	-0.250
CA	55.100421906	31.634189606	6.218850136	PRO	206	CT	C	0.050
HA	55.889179230	30.980030060	6.594379902	PRO	206	HA	H	0.050
C	55.064968109	32.909759521	7.093739986	PRO	206	C	C	0.600
O	56.087921143	33.486560822	7.446569920	PRO	206	O	O	-0.550
CB	55.353199005	31.980600357	4.742290020	PRO	206	CT	C	-0.100
HB1	54.977169037	32.979030609	4.510359764	PRO	206	HA	H	0.050
HB2	56.412738800	31.963270187	4.485710144	PRO	206	HA	H	0.050
CG	54.533760071	30.955610275	3.950949907	PRO	206	CT	C	-0.100
HG1	54.253150940	31.313180923	2.959569931	PRO	206	HA	H	0.050
HG2	55.119579315	30.044670105	3.824090004	PRO	206	HA	H	0.050
CD	53.325000763	30.666120529	4.842189789	PRO	206	CT	C	0.000

HD1	52.535720825	31.386810303	4.630889893	PRO	206	HA	H	0.050
HD2	52.940959930	29.656059265	4.699079990	PRO	206	HA	H	0.050
N	53.819519043	33.259689331	7.470160007	ASP	207	NP	N	-0.400
HN	53.021751404	32.914291382	6.971350193	ASP	207	H	H	0.250
CA	53.514450073	34.162239075	8.565899849	ASP	207	CT	C	0.050
HA	53.970710754	35.124439240	8.328760147	ASP	207	HA	H	0.050
C	54.078861237	33.608428955	9.889670372	ASP	207	C	C	0.600
O	53.354499817	33.075519562	10.725749969	ASP	207	O	O	-0.550
CB	51.981178284	34.290130615	8.716640472	ASP	207	CT	C	-0.250
HB1	51.544719696	33.348571777	9.052350044	ASP	207	HA	H	0.050
HB2	51.741718292	35.031681061	9.478730202	ASP	207	HA	H	0.050
CG	51.270931244	34.681159973	7.414760113	ASP	207	C	C	0.350
OD1	50.733608246	35.783901215	7.348710060	ASP	207	OC	O	-0.600
OD2	51.251541138	33.866638184	6.490600109	ASP	207	OC	O	-0.600
N	55.391731262	33.817909241	10.066550255	TYR	208	NP	N	-0.400
HN	55.918441772	34.129741669	9.274109840	TYR	208	H	H	0.250
CA	56.030158997	33.483440399	11.334250450	TYR	208	CT	C	0.050
HA	55.834560394	32.427978516	11.491740227	TYR	208	HA	H	0.050
C	55.367729187	34.265609741	12.486550331	TYR	208	C	C	0.600
O	54.812908173	35.346038818	12.292690277	TYR	208	O	O	-0.550
CB	57.548900604	33.709251404	11.236940384	TYR	208	CT	C	-0.100
HB1	58.043651581	33.244220734	12.087530136	TYR	208	HA	H	0.050
HB2	57.941680908	33.202850342	10.354689598	TYR	208	HA	H	0.050
CG	57.928470612	35.166011810	11.183679581	TYR	208	C6R	C	0.000
CD1	58.331981659	35.827278137	12.339699745	TYR	208	C6R	C	-0.130
HD1	58.395908356	35.295379639	13.279129982	TYR	208	HA	H	0.130
CD2	57.873630524	35.873840332	9.986289978	TYR	208	C6R	C	-0.130
HD2	57.575210571	35.375629425	9.074790001	TYR	208	HA	H	0.130
CE1	58.658180237	37.175441742	12.303319931	TYR	208	C6R	C	-0.130
HE1	58.965351105	37.680999756	13.206489563	TYR	208	HA	H	0.130
CE2	58.198791504	37.223949432	9.946470261	TYR	208	C6R	C	-0.130
HE2	58.128910065	37.742931366	9.001759529	TYR	208	HA	H	0.130
CZ	58.591129303	37.877490997	11.109999657	TYR	208	C6R	C	0.250
OH	58.914630890	39.219779968	11.106570244	TYR	208	OT	O	-0.650
HH	59.360088348	39.457450867	10.304719925	TYR	208	HO	H	0.400
N	55.395420074	33.645301819	13.672889709	GLU	209	NP	N	-0.400
HN	55.789051056	32.725868225	13.745710373	GLU	209	H	H	0.250
CA	54.824131012	34.288558960	14.846949577	GLU	209	CT	C	0.050
HA	53.951648712	34.864189148	14.531629562	GLU	209	HA	H	0.050
C	55.853771210	35.250469208	15.449740410	GLU	209	C	C	0.600
O	57.057041168	35.091251373	15.283619881	GLU	209	O	O	-0.550
CB	54.398891449	33.220531464	15.857529640	GLU	209	CT	C	-0.100
HB1	55.267421722	32.627269745	16.149209976	GLU	209	HA	H	0.050
HB2	54.034709930	33.693569183	16.769119263	GLU	209	HA	H	0.050
CG	53.313480377	32.282440186	15.310919762	GLU	209	CT	C	-0.250
HG1	53.657749176	31.749729156	14.423379898	GLU	209	HA	H	0.050
HG2	53.110008240	31.526229858	16.061340332	GLU	209	HA	H	0.050
CD	51.999980927	33.009628296	14.996210098	GLU	209	C	C	0.350
OE1	51.698799133	33.252418518	13.831379890	GLU	209	OC	O	-0.600
OE2	51.251289368	33.333099365	15.910400391	GLU	209	OC	O	-0.600
N	55.272640228	36.256370544	16.129009247	LEU	210	NP	N	-0.400
HN	54.293651581	36.175209045	16.304859161	LEU	210	H	H	0.250
CA	55.978469849	37.391811371	16.715959549	LEU	210	CT	C	0.050
HA	57.043190002	37.269489288	16.507200241	LEU	210	HA	H	0.050
C	55.759769440	37.358299255	18.237350464	LEU	210	C	C	0.600
O	54.925918579	36.608551025	18.722890854	LEU	210	O	O	-0.550
CB	55.460380554	38.696731567	16.075929642	LEU	210	CT	C	-0.100
HB1	56.179199219	39.489078522	16.288970947	LEU	210	HA	H	0.050
HB2	55.474651337	38.579181671	14.991450310	LEU	210	HA	H	0.050
CG	54.061870575	39.187160492	16.520929337	LEU	210	CT	C	-0.050
HG	54.109210968	39.433361053	17.581619263	LEU	210	HA	H	0.050
CD1	53.688011169	40.470329285	15.767499924	LEU	210	CT	C	-0.150

HD11	54.463928223	41.228801727	15.871600151	LEU	210	HA	H	0.050
HD12	53.560508728	40.277851105	14.701809883	LEU	210	HA	H	0.050
HD13	52.757068634	40.893360138	16.145910263	LEU	210	HA	H	0.050
CD2	52.949760437	38.146091461	16.345689774	LEU	210	CT	C	-0.150
HD21	52.903221130	37.780170441	15.320630074	LEU	210	HA	H	0.050
HD22	53.079139709	37.296958923	17.011770248	LEU	210	HA	H	0.050
HD23	51.983280182	38.574691772	16.595960617	LEU	210	HA	H	0.050
N	56.536239624	38.186569214	18.963640213	LYS	211	NP	N	-0.400
HN	57.209228516	38.772830963	18.513359070	LYS	211	H	H	0.250
CA	56.412311554	38.214229584	20.422109604	LYS	211	CT	C	0.050
HA	55.399028778	37.905208588	20.688669205	LYS	211	HA	H	0.050
C	56.592041016	39.648300171	20.930360794	LYS	211	C	C	0.600
O	57.698139191	40.117961884	21.162260056	LYS	211	O	O	-0.550
CB	57.417709351	37.255821228	21.096160889	LYS	211	CT	C	-0.100
HB1	57.443740845	37.450901031	22.167900085	LYS	211	HA	H	0.050
HB2	57.025661469	36.243900299	21.018259048	LYS	211	HA	H	0.050
CG	58.856559753	37.307449341	20.539119720	LYS	211	CT	C	-0.100
HG1	58.855049133	37.133899689	19.462999344	LYS	211	HA	H	0.050
HG2	59.274070740	38.302989960	20.689779282	LYS	211	HA	H	0.050
CD	59.775028229	36.270999908	21.202930450	LYS	211	CT	C	-0.100
HD1	59.756420135	36.421699524	22.280399323	LYS	211	HA	H	0.050
HD2	59.383831024	35.269180298	21.020929337	LYS	211	HA	H	0.050
CE	61.228141785	36.343299866	20.714199066	LYS	211	CT	C	0.050
HE1	61.280509949	36.242469788	19.629980087	LYS	211	HA	H	0.100
HE2	61.676551819	37.301841736	20.980310440	LYS	211	HA	H	0.100
NZ	62.062969208	35.295249939	21.290479660	LYS	211	NT	N	-0.300
HZ1	61.714160919	34.338500977	21.054670334	LYS	211	HC	H	0.350
HZ2	63.022380829	35.278530121	20.876169205	LYS	211	HC	H	0.350
HZ3	62.178829193	35.414680481	22.321069717	LYS	211	HC	H	0.350
N	55.436218262	40.312229156	21.127389908	LEU	212	NP	N	-0.400
HN	54.557598114	39.903591156	20.878639221	LEU	212	H	H	0.250
CA	55.465560913	41.639968872	21.732210159	LEU	212	CT	C	0.050
HA	56.354080200	42.165851593	21.374519348	LEU	212	HA	H	0.050
C	55.575359344	41.486091614	23.261629105	LEU	212	C	C	0.600
O	54.617561340	41.636978149	24.016529083	LEU	212	O	O	-0.550
CB	54.220439911	42.441608429	21.328060150	LEU	212	CT	C	-0.100
HB1	53.322788239	41.843410492	21.475639343	LEU	212	HA	H	0.050
HB2	54.134109497	43.296848297	22.000200272	LEU	212	HA	H	0.050
CG	54.255298615	42.995529175	19.892580032	LEU	212	CT	C	-0.050
HG	55.177551270	43.564800262	19.767879486	LEU	212	HA	H	0.050
CD1	54.219501495	41.905899048	18.814189911	LEU	212	CT	C	-0.150
HD11	53.376789093	41.230060577	18.961780548	LEU	212	HA	H	0.050
HD12	54.116439819	42.354190826	17.826839447	LEU	212	HA	H	0.050
HD13	55.135860443	41.317718506	18.798250198	LEU	212	HA	H	0.050
CD2	53.088169098	43.962459564	19.685270309	LEU	212	CT	C	-0.150
HD21	53.102001190	44.761810303	20.426979065	LEU	212	HA	H	0.050
HD22	53.131118774	44.426818848	18.700319290	LEU	212	HA	H	0.050
HD23	52.134601593	43.440311432	19.770999908	LEU	212	HA	H	0.050
N	56.821590424	41.169151306	23.642400742	ILE	213	NP	N	-0.400
HN	57.506538391	41.032829285	22.922210693	ILE	213	H	H	0.250
CA	57.221050262	41.092540741	25.038230896	ILE	213	CT	C	0.050
HA	56.457389832	40.527240753	25.570240021	ILE	213	HA	H	0.050
C	57.305660248	42.522621155	25.601919174	ILE	213	C	C	0.600
O	57.704250336	43.449161530	24.907289505	ILE	213	O	O	-0.550
CB	58.583339691	40.360710144	25.100519180	ILE	213	CT	C	-0.050
HB	59.213848114	40.760059357	24.304279327	ILE	213	HA	H	0.050
CG1	58.389980316	38.851978302	24.844299316	ILE	213	CT	C	-0.100
HG11	57.866031647	38.404510498	25.688730240	ILE	213	HA	H	0.050
HG12	57.738891602	38.709480286	23.983150482	ILE	213	HA	H	0.050
CG2	59.330768585	40.608558655	26.421670914	ILE	213	CT	C	-0.150
HG21	58.718070984	40.319530487	27.275150299	ILE	213	HA	H	0.050
HG22	60.268268585	40.057968140	26.458200455	ILE	213	HA	H	0.050

HG23	59.599258423	41.657421112	26.545860291	ILE	213	HA	H	0.050
CD1	59.694660187	38.084980011	24.585239410	ILE	213	CT	C	-0.150
HD11	60.202629089	38.456050873	23.694869995	ILE	213	HA	H	0.050
HD12	60.393150330	38.155998230	25.417959213	ILE	213	HA	H	0.050
HD13	59.494430542	37.024589539	24.435920715	ILE	213	HA	H	0.050
N	56.953300476	42.635768890	26.896959305	HIS	214	NP	N	-0.400
HN	56.475990295	41.881431580	27.358629227	HIS	214	H	H	0.250
CA	57.240188599	43.858970642	27.635650635	HIS	214	CT	C	0.050
HA	58.193561554	44.244258881	27.266460419	HIS	214	HA	H	0.050
C	57.393669128	43.491729736	29.120609283	HIS	214	C	C	0.600
O	56.713859558	42.605819702	29.619029999	HIS	214	O	O	-0.550
CB	56.106819153	44.874649048	27.412349701	HIS	214	CT	C	-0.100
HB1	55.814250946	44.882049561	26.362680435	HIS	214	HA	H	0.050
HB2	55.214660645	44.618499756	27.985759735	HIS	214	HA	H	0.050
CG	56.580429077	46.266849518	27.759939194	HIS	214	C5R	C	0.100
ND1	56.561950684	46.793918610	29.001659393	HIS	214	N5R	N	-0.400
HD1	56.255321503	46.367668152	29.834190369	HIS	214	H	H	0.300
CD2	57.116649628	47.225379944	26.884399414	HIS	214	C5R	C	0.000
HD2	57.264308929	47.103729248	25.820869446	HIS	214	HA	H	0.100
CE1	57.070110321	48.031581879	28.888010025	HIS	214	C5R	C	0.200
HE1	57.191448212	48.712448120	29.718080521	HIS	214	HA	H	0.100
NE2	57.414001465	48.320419312	27.620590210	HIS	214	N5R	N	-0.400
N	58.320781708	44.193878174	29.800849915	HIS	215	NP	N	-0.400
HN	58.813968658	44.925441742	29.332920074	HIS	215	H	H	0.250
CA	58.466308594	44.011260986	31.247159958	HIS	215	CT	C	0.050
HA	58.445899963	42.939498901	31.451040268	HIS	215	HA	H	0.050
C	57.261150360	44.676261902	31.943849564	HIS	215	C	C	0.600
O	56.698440552	45.642730713	31.443790436	HIS	215	O	O	-0.550
CB	59.815929413	44.604549408	31.688699722	HIS	215	CT	C	-0.100
HB1	60.641460419	44.012130737	31.293979645	HIS	215	HA	H	0.050
HB2	59.925548553	45.611671448	31.284540176	HIS	215	HA	H	0.050
CG	59.939418793	44.686069489	33.196540833	HIS	215	C5R	C	0.100
ND1	59.612979889	43.700820923	34.068649292	HIS	215	N5R	N	-0.400
HD1	59.270759583	42.793399811	33.888000488	HIS	215	H	H	0.300
CD2	60.374320984	45.800071716	33.933631897	HIS	215	C5R	C	0.000
HD2	60.702030182	46.746990204	33.530620575	HIS	215	HA	H	0.100
CE1	59.838958740	44.214260101	35.291961670	HIS	215	C5R	C	0.200
HE1	59.652690887	43.690658569	36.217319489	HIS	215	HA	H	0.100
NE2	60.300251007	45.474960327	35.240760803	HIS	215	N5R	N	-0.400
N	56.873878479	44.075149536	33.082290649	ASP	216	NP	N	-0.400
HN	57.410339355	43.351291656	33.525699615	ASP	216	H	H	0.250
CA	55.636379242	44.438899994	33.750110626	ASP	216	CT	C	0.050
HA	55.514431000	45.522441864	33.695621490	ASP	216	HA	H	0.050
C	55.787750244	44.020469666	35.223381042	ASP	216	C	C	0.600
O	56.823848724	43.501590729	35.619709015	ASP	216	O	O	-0.550
CB	54.513248444	43.689849854	33.010658264	ASP	216	CT	C	-0.250
HB1	54.474578857	44.007900238	31.968759537	ASP	216	HA	H	0.050
HB2	54.751281738	42.629600525	33.000991821	ASP	216	HA	H	0.050
CG	53.120201111	43.889881134	33.605640411	ASP	216	C	C	0.350
OD1	52.376091003	42.926071167	33.715820312	ASP	216	OC	O	-0.600
OD2	52.779071808	45.004440308	33.987609863	ASP	216	OC	O	-0.600
N	54.715808868	44.262981415	35.998260498	SER	217	NP	N	-0.400
HN	53.956588745	44.758338928	35.567878723	SER	217	H	H	0.250
CA	54.624538422	43.787170410	37.371681213	SER	217	CT	C	0.050
HA	54.847568512	42.721191406	37.373901367	SER	217	HA	H	0.050
C	53.183750153	43.959648132	37.877159119	SER	217	C	C	0.600
O	52.968738556	44.413311005	38.996959686	SER	217	O	O	-0.550
CB	55.618328094	44.550689697	38.272769928	SER	217	CT	C	0.050
HB1	56.642158508	44.320320129	37.973709106	SER	217	HA	H	0.100
HB2	55.503280640	45.633178711	38.155601501	SER	217	HA	H	0.100
OG	55.499439240	44.210720062	39.643001556	SER	217	OT	O	-0.650
HG	54.580829620	44.311939240	39.904201508	SER	217	HO	H	0.400

N	52.214881897	43.587379456	37.010658264	LYS	218	NP	N	-0.400
HN	52.490959167	43.276359558	36.098518372	LYS	218	H	H	0.250
CA	50.813709259	43.744331360	37.424388885	LYS	218	CT	C	0.050
HA	50.764129639	43.478168488	38.482688904	LYS	218	HA	H	0.050
C	49.871189117	42.749130249	36.698760986	LYS	218	C	C	0.600
O	48.813041687	42.404880524	37.208789825	LYS	218	O	O	-0.550
CB	50.400108337	45.228458405	37.248531342	LYS	218	CT	C	-0.100
HB1	51.193599701	45.847229004	37.669010162	LYS	218	HA	H	0.050
HB2	50.384700775	45.496910095	36.191459656	LYS	218	HA	H	0.050
CG	49.088378906	45.641048431	37.961101532	LYS	218	CT	C	-0.100
HG1	48.746299744	44.837959290	38.615909576	LYS	218	HA	H	0.050
HG2	49.297630310	46.482559204	38.622951508	LYS	218	HA	H	0.050
CD	47.957389832	46.053569794	37.001510620	LYS	218	CT	C	-0.100
HD1	47.097648621	46.413879395	37.567489624	LYS	218	HA	H	0.050
HD2	48.295509338	46.880630493	36.375499725	LYS	218	HA	H	0.050
CE	47.556369781	44.865348816	36.136039734	LYS	218	CT	C	0.050
HE1	48.471019745	44.501369476	35.694381714	LYS	218	HA	H	0.100
HE2	47.129901886	44.058891296	36.735221863	LYS	218	HA	H	0.100
NZ	46.694869995	45.086181641	34.989379883	LYS	218	NT	N	-0.300
HZ1	45.722599030	45.331241608	35.255031586	LYS	218	HC	H	0.350
HZ2	47.124408722	45.817081451	34.377780914	LYS	218	HC	H	0.350
HZ3	46.741199493	44.182579041	34.459529877	LYS	218	HC	H	0.350
N	50.286010742	42.334270477	35.485000610	CYS	219	NP	N	-0.350
HN	51.126640320	42.713829041	35.103561401	CYS	219	H	H	0.250
CA	49.617488861	41.300960541	34.687519073	CYS	219	CT	C	0.050
HA	50.363391876	41.038818359	33.935699463	CYS	219	HA	H	0.050
C	48.376148224	41.846199036	33.925361633	CYS	219	C	C	0.550
O	47.857021332	42.926021576	34.196449280	CYS	219	O	O	-0.550
CB	49.339118958	40.047229767	35.535728455	CYS	219	CT	C	0.100
HB1	48.489841461	40.225898743	36.187271118	CYS	219	HA	H	0.050
HB2	49.092269897	39.191989899	34.906818390	CYS	219	HA	H	0.050
SG	50.750389099	39.634059906	36.594959259	CYS	219	ST	S	-0.200
N	47.981361389	41.045120239	32.919361115	ASP	220	NP	N	-0.400
HN	48.481689453	40.180881500	32.824810028	ASP	220	H	H	0.250
CA	46.983230591	41.346191406	31.880500793	ASP	220	CT	C	0.050
HA	47.605129242	41.449409485	30.992130280	ASP	220	HA	H	0.050
C	46.235729218	42.725841522	31.939039230	ASP	220	C	C	0.600
O	46.600589752	43.629871368	31.194580078	ASP	220	O	O	-0.550
CB	46.110569000	40.099769592	31.623529434	ASP	220	CT	C	-0.250
HB1	46.747001648	39.299591064	31.261940002	ASP	220	HA	H	0.050
HB2	45.649570465	39.705810547	32.522350311	ASP	220	HA	H	0.050
CG	45.028198242	40.317489624	30.564910889	ASP	220	C	C	0.350
OD1	45.255840302	39.947608948	29.418640137	ASP	220	OC	O	-0.600
OD2	43.973400116	40.847061157	30.901239395	ASP	220	OC	O	-0.600
N	45.175468445	42.887489319	32.793319702	PRO	221	NX	N	-0.250
CA	44.013309479	43.745239258	32.471328735	PRO	221	CT	C	0.050
HA	43.546661377	43.316768646	31.582880020	PRO	221	HA	H	0.050
C	44.121799469	45.260620117	32.191970825	PRO	221	C	C	0.600
O	43.108539581	45.930999756	32.030529022	PRO	221	O	O	-0.550
CB	43.053298950	43.543071747	33.652950287	PRO	221	CT	C	-0.100
HB1	43.192958832	44.314201355	34.412361145	PRO	221	HA	H	0.050
HB2	42.009361267	43.576961517	33.339828491	PRO	221	HA	H	0.050
CG	43.446151733	42.195629120	34.246219635	PRO	221	CT	C	-0.100
HG1	43.185020447	42.099670410	35.297660828	PRO	221	HA	H	0.050
HG2	42.929748535	41.409648895	33.697059631	PRO	221	HA	H	0.050
CD	44.951011658	42.104671478	34.005409241	PRO	221	CT	C	0.000
HD1	45.483730316	42.574489594	34.829879761	PRO	221	HA	H	0.050
HD2	45.288139343	41.078151703	33.933910370	PRO	221	HA	H	0.050
N	45.355331421	45.784111023	32.166110992	GLY	222	NP	N	-0.400
HN	46.117610931	45.140079498	32.195579529	GLY	222	H	H	0.250
CA	45.570968628	47.179950714	31.784250259	GLY	222	CT	C	0.000
HA1	44.625720978	47.691280365	31.595409393	GLY	222	HA	H	0.050

HA2	46.076648712	47.669540405	32.616180420	GLY	222	HA	H	0.050
C	46.451381683	47.241718292	30.535150528	GLY	222	C	C	0.600
O	46.175098419	47.920700073	29.555799484	GLY	222	O	O	-0.550
N	47.537879944	46.472839355	30.657300949	GLN	223	NP	N	-0.400
HN	47.606140137	45.893348694	31.465280533	GLN	223	H	H	0.250
CA	48.634208679	46.493358612	29.711820602	GLN	223	CT	C	0.050
HA	48.813220978	47.537338257	29.447399139	GLN	223	HA	H	0.050
C	48.211029053	45.728458405	28.447200775	GLN	223	C	C	0.600
O	48.394218445	46.176059723	27.322540283	GLN	223	O	O	-0.550
CB	49.883129120	45.895011902	30.390150070	GLN	223	CT	C	-0.100
HB1	49.796161652	44.813270569	30.438539505	GLN	223	HA	H	0.050
HB2	50.743320465	46.089191437	29.748159409	GLN	223	HA	H	0.050
CG	50.181259155	46.447830200	31.807090759	GLN	223	CT	C	-0.100
HG1	51.242038727	46.322559357	32.030349731	GLN	223	HA	H	0.050
HG2	49.979301453	47.517608643	31.858520508	GLN	223	HA	H	0.050
CD	49.380268097	45.729129791	32.914211273	GLN	223	C	C	0.550
OE1	48.241111755	46.064441681	33.231849670	GLN	223	O	O	-0.550
NE2	49.985660553	44.666511536	33.428508759	GLN	223	NP	N	-0.600
HE21	49.468349457	44.000091553	33.959739685	GLN	223	H	H	0.300
HE22	50.970420837	44.496189117	33.298740387	GLN	223	H	H	0.300
N	47.564689636	44.575698853	28.714090347	ALA	224	NP	N	-0.400
HN	47.469398499	44.270149231	29.663270950	ALA	224	H	H	0.250
CA	46.925941467	43.817741394	27.644710541	ALA	224	CT	C	0.050
HA	47.705108643	43.550220490	26.929729462	ALA	224	HA	H	0.050
C	45.880149841	44.690090179	26.936559677	ALA	224	C	C	0.600
O	45.850891113	44.809349060	25.720409393	ALA	224	O	O	-0.550
CB	46.262741089	42.564430237	28.225799561	ALA	224	CT	C	-0.150
HB1	45.477111816	42.810188293	28.941730499	ALA	224	HA	H	0.050
HB2	45.810718536	41.956871033	27.441410065	ALA	224	HA	H	0.050
HB3	46.986228943	41.937229156	28.744729996	ALA	224	HA	H	0.050
N	45.058731079	45.336479187	27.781639099	THR	225	NP	N	-0.400
HN	45.027770996	45.134651184	28.761539459	THR	225	H	H	0.250
CA	44.033161163	46.243930817	27.288709641	THR	225	CT	C	0.050
HA	43.353870392	45.621440887	26.708299637	THR	225	HA	H	0.050
C	44.618011475	47.323909760	26.358600616	THR	225	C	C	0.600
O	44.064289093	47.618091583	25.307800293	THR	225	O	O	-0.550
CB	43.291248322	46.831001282	28.495859146	THR	225	CT	C	0.150
HB	43.862598419	47.673698425	28.901639938	THR	225	HA	H	0.100
OG1	43.255058289	45.783168793	29.450910568	THR	225	OT	O	-0.650
HG1	42.811420441	46.061950684	30.256549835	THR	225	HO	H	0.400
CG2	41.875358582	47.294010162	28.121440887	THR	225	CT	C	-0.150
HG21	41.273979187	46.453338623	27.774770737	THR	225	HA	H	0.050
HG22	41.360260010	47.752429962	28.965799332	THR	225	HA	H	0.050
HG23	41.904949188	48.030349731	27.317270279	THR	225	HA	H	0.050
N	45.791389465	47.855388641	26.770650864	LYS	226	NP	N	-0.400
HN	46.151889801	47.622478485	27.676080704	LYS	226	H	H	0.250
CA	46.510509491	48.770519257	25.890220642	LYS	226	CT	C	0.050
HA	45.832080841	49.601909637	25.704629898	LYS	226	HA	H	0.050
C	46.805839539	48.092311859	24.538850784	LYS	226	C	C	0.600
O	46.424079895	48.596958160	23.491090775	LYS	226	O	O	-0.550
CB	47.782009125	49.337638855	26.548709869	LYS	226	CT	C	-0.100
HB1	47.498500824	49.891510010	27.444219589	LYS	226	HA	H	0.050
HB2	48.439048767	48.535011292	26.879980087	LYS	226	HA	H	0.050
CG	48.549049377	50.259948730	25.585519791	LYS	226	CT	C	-0.100
HG1	48.968769073	49.650749207	24.785120010	LYS	226	HA	H	0.050
HG2	47.846050262	50.945041656	25.110069275	LYS	226	HA	H	0.050
CD	49.684360504	51.064819336	26.229129791	LYS	226	CT	C	-0.100
HD1	49.272621155	51.830268860	26.887880325	LYS	226	HA	H	0.050
HD2	50.285388947	50.406101227	26.857589722	LYS	226	HA	H	0.050
CE	50.589920044	51.695381165	25.160150528	LYS	226	CT	C	0.050
HE1	51.398708344	52.274280548	25.608379364	LYS	226	HA	H	0.100
HE2	51.055980682	50.901699066	24.571550369	LYS	226	HA	H	0.100

NZ	49.876140594	52.554630280	24.216419220	LYS	226	NT	N	-0.300
HZ1	48.984588623	52.096450806	23.912330627	LYS	226	HC	H	0.350
HZ2	49.681510925	53.510791779	24.563489914	LYS	226	HC	H	0.350
HZ3	50.395790100	52.574050903	23.304889679	LYS	226	HC	H	0.350
N	47.471668243	46.917068481	24.623489380	TYR	227	NP	N	-0.400
HN	47.689300537	46.564960480	25.538019180	TYR	227	H	H	0.250
CA	47.830471039	46.150909424	23.420679092	TYR	227	CT	C	0.050
HA	48.612030029	46.712730408	22.909360886	TYR	227	HA	H	0.050
C	46.633941650	46.020721436	22.447240829	TYR	227	C	C	0.600
O	46.796169281	46.104381561	21.232690811	TYR	227	O	O	-0.550
CB	48.336471558	44.732978821	23.772390366	TYR	227	CT	C	-0.100
HB1	47.776290894	44.307788849	24.599180222	TYR	227	HA	H	0.050
HB2	48.142780304	44.062858582	22.933629990	TYR	227	HA	H	0.050
CG	49.804428101	44.611461639	24.102909088	TYR	227	C6R	C	0.000
CD1	50.442260742	45.453350067	25.010080338	TYR	227	C6R	C	-0.130
HD1	49.906341553	46.266151428	25.473840714	TYR	227	HA	H	0.130
CD2	50.544738770	43.591758728	23.514289856	TYR	227	C6R	C	-0.130
HD2	50.079200745	42.929550171	22.802299500	TYR	227	HA	H	0.130
CE1	51.778141022	45.252441406	25.343389511	TYR	227	C6R	C	-0.130
HE1	52.263950348	45.901821136	26.056009293	TYR	227	HA	H	0.130
CE2	51.875629425	43.388988495	23.842660904	TYR	227	C6R	C	-0.130
HE2	52.391780853	42.574939728	23.360769272	TYR	227	HA	H	0.130
CZ	52.497661591	44.212749481	24.771739960	TYR	227	C6R	C	0.250
OH	53.813480377	44.015758514	25.145889282	TYR	227	OT	O	-0.650
HH	54.125400543	43.147628784	24.895139694	TYR	227	HO	H	0.400
N	45.436691284	45.818038940	23.052869797	LEU	228	NP	N	-0.400
HN	45.420719147	45.723838806	24.052349091	LEU	228	H	H	0.250
CA	44.211250305	45.683441162	22.263669968	LEU	228	CT	C	0.050
HA	44.367820740	44.804199219	21.654020309	LEU	228	HA	H	0.050
C	44.019718170	46.866458893	21.296739578	LEU	228	C	C	0.600
O	43.679618835	46.675960541	20.133939743	LEU	228	O	O	-0.550
CB	42.949321747	45.471389771	23.124879837	LEU	228	CT	C	-0.100
HB1	42.739620209	46.377681732	23.693569183	LEU	228	HA	H	0.050
HB2	42.092449188	45.337131500	22.462810516	LEU	228	HA	H	0.050
CG	43.008438110	44.271259308	24.089460373	LEU	228	CT	C	-0.050
HG	43.821308136	44.442440033	24.783969879	LEU	228	HA	H	0.050
CD1	41.730590820	44.173679352	24.930709839	LEU	228	CT	C	-0.150
HD11	41.514518738	45.118698120	25.429349899	LEU	228	HA	H	0.050
HD12	40.871868134	43.916488647	24.312990189	LEU	228	HA	H	0.050
HD13	41.827251434	43.409049988	25.701349258	LEU	228	HA	H	0.050
CD2	43.279830933	42.938411713	23.379680634	LEU	228	CT	C	-0.150
HD21	44.257190704	42.931678772	22.897979736	LEU	228	HA	H	0.050
HD22	43.267288208	42.113368988	24.091520309	LEU	228	HA	H	0.050
HD23	42.525138855	42.728488922	22.623519897	LEU	228	HA	H	0.050
N	44.293380737	48.075180054	21.835449219	TYR	229	NP	N	-0.400
HN	44.607219696	48.124900818	22.787149429	TYR	229	H	H	0.250
CA	44.318050385	49.267940521	20.992279053	TYR	229	CT	C	0.050
HA	43.377540588	49.294189453	20.439119339	TYR	229	HA	H	0.050
C	45.474178314	49.170909882	19.985710144	TYR	229	C	C	0.600
O	45.265571594	49.203838348	18.780929565	TYR	229	O	O	-0.550
CB	44.500400543	50.564670563	21.806770325	TYR	229	CT	C	-0.100
HB1	45.415088654	50.530548096	22.400119781	TYR	229	HA	H	0.050
HB2	44.630538940	51.408851624	21.127229691	TYR	229	HA	H	0.050
CG	43.347408295	50.884029388	22.717159271	TYR	229	C6R	C	0.000
CD1	42.279029846	51.657310486	22.273939133	TYR	229	C6R	C	-0.130
HD1	42.257518768	52.008979797	21.252489090	TYR	229	HA	H	0.130
CD2	43.349979401	50.432331085	24.028770447	TYR	229	C6R	C	-0.130
HD2	44.164760590	49.818260193	24.373489380	TYR	229	HA	H	0.130
CE1	41.239120483	51.988731384	23.135309219	TYR	229	C6R	C	-0.130
HE1	40.425090790	52.585678101	22.750249863	TYR	229	HA	H	0.130
CE2	42.318561554	50.760818481	24.894760132	TYR	229	C6R	C	-0.130
HE2	42.335720062	50.402618408	25.913000107	TYR	229	HA	H	0.130

CZ	41.262310028	51.542869568	24.453939438	TYR	229	C6R	C	0.250
OH	40.250728607	51.848888397	25.343170166	TYR	229	OT	O	-0.650
HH	39.866230011	52.691761017	25.143320084	TYR	229	HO	H	0.400
N	46.695869446	49.066020966	20.555679321	GLU	230	NP	N	-0.400
HN	46.746898651	48.994510651	21.556089401	GLU	230	H	H	0.250
CA	47.929481506	49.252460480	19.786270142	GLU	230	CT	C	0.050
HA	47.992641449	50.323101044	19.587520599	GLU	230	HA	H	0.050
C	47.922359467	48.512821198	18.428310394	GLU	230	C	C	0.600
O	48.269859314	49.070999146	17.395700455	GLU	230	O	O	-0.550
CB	49.164340973	48.795021057	20.587799072	GLU	230	CT	C	-0.100
HB1	49.139019012	47.713008881	20.693290710	GLU	230	HA	H	0.050
HB2	50.067588806	49.031909943	20.023130417	GLU	230	HA	H	0.050
CG	49.307941437	49.352088928	22.006879807	GLU	230	CT	C	-0.250
HG1	48.518798828	48.961170197	22.634460449	GLU	230	HA	H	0.050
HG2	50.238288879	48.990951538	22.446149826	GLU	230	HA	H	0.050
CD	49.294410706	50.876258850	22.100700378	GLU	230	C	C	0.350
OE1	48.273971558	51.445819855	22.483669281	GLU	230	OC	O	-0.600
OE2	50.329429626	51.509918213	21.899480820	GLU	230	OC	O	-0.600
N	47.533241272	47.222789764	18.502950668	LEU	231	NP	N	-0.400
HN	47.257789612	46.863948822	19.399999619	LEU	231	H	H	0.250
CA	47.589038849	46.378479004	17.306610107	LEU	231	CT	C	0.050
HA	48.260189056	46.828781128	16.573720932	LEU	231	HA	H	0.050
C	46.207439423	46.241580963	16.643960953	LEU	231	C	C	0.600
O	46.103431702	45.663440704	15.570670128	LEU	231	O	O	-0.550
CB	48.082778931	44.962528229	17.664009094	LEU	231	CT	C	-0.100
HB1	47.466209412	44.591239929	18.475580215	LEU	231	HA	H	0.050
HB2	47.899509430	44.289630890	16.824890137	LEU	231	HA	H	0.050
CG	49.571571350	44.817749023	18.031539917	LEU	231	CT	C	-0.050
HG	49.717430115	43.774410248	18.315130234	LEU	231	HA	H	0.050
CD1	50.483989716	45.083469391	16.827259064	LEU	231	CT	C	-0.150
HD11	50.204479218	44.461078644	15.976670265	LEU	231	HA	H	0.050
HD12	50.431739807	46.125049591	16.509630203	LEU	231	HA	H	0.050
HD13	51.524250031	44.865390778	17.066930771	LEU	231	HA	H	0.050
CD2	49.979118347	45.665939331	19.238679886	LEU	231	CT	C	-0.150
HD21	49.263759613	45.567188263	20.055379868	LEU	231	HA	H	0.050
HD22	50.952449799	45.376228333	19.622169495	LEU	231	HA	H	0.050
HD23	50.058021545	46.715610504	18.961759567	LEU	231	HA	H	0.050
N	45.162231445	46.726741791	17.347120285	LEU	232	NP	N	-0.400
HN	45.315750122	47.340541840	18.124189377	LEU	232	H	H	0.250
CA	43.782341003	46.414081573	16.971849442	LEU	232	CT	C	0.050
HA	43.162460327	46.836311340	17.760810852	LEU	232	HA	H	0.050
C	43.569858551	44.885189056	16.978490829	LEU	232	C	C	0.600
O	43.507938385	44.224758148	15.944279671	LEU	232	O	O	-0.550
CB	43.391601562	47.053119659	15.624739647	LEU	232	CT	C	-0.100
HB1	43.958400726	46.582771301	14.820409775	LEU	232	HA	H	0.050
HB2	42.344921112	46.831401825	15.412260056	LEU	232	HA	H	0.050
CG	43.612548828	48.576999664	15.571200371	LEU	232	CT	C	-0.050
HG	44.657138824	48.787120819	15.805549622	LEU	232	HA	H	0.050
CD1	43.351978302	49.107860565	14.155989647	LEU	232	CT	C	-0.150
HD11	43.997299194	48.615371704	13.428030014	LEU	232	HA	H	0.050
HD12	42.317859650	48.937999725	13.855070114	LEU	232	HA	H	0.050
HD13	43.545780182	50.179111481	14.096699715	LEU	232	HA	H	0.050
CD2	42.742309570	49.324058533	16.592550278	LEU	232	CT	C	-0.150
HD21	41.682731628	49.125518799	16.430870056	LEU	232	HA	H	0.050
HD22	42.986549377	49.037841797	17.615200043	LEU	232	HA	H	0.050
HD23	42.895458221	50.400871277	16.519449234	LEU	232	HA	H	0.050
N	43.511280060	44.372138977	18.226520538	TYR	233	NP	N	-0.400
HN	43.519840240	45.024681091	18.988740921	TYR	233	H	H	0.250
CA	43.407779694	42.925758362	18.423290253	TYR	233	CT	C	0.050
HA	44.166778564	42.484771729	17.777639389	TYR	233	HA	H	0.050
C	42.061561584	42.386959076	17.911720276	TYR	233	C	C	0.600
O	41.116600037	43.116840363	17.646390915	TYR	233	O	O	-0.550

CB	43.706180573	42.530559540	19.877479553	TYR	233	CT	C	-0.100
HB1	43.430309296	43.336551666	20.550279617	TYR	233	HA	H	0.050
HB2	43.098678589	41.678970337	20.189090729	TYR	233	HA	H	0.050
CG	45.155971527	42.145458221	20.039499283	TYR	233	C6R	C	0.000
CD1	45.522998810	40.812450409	19.947200775	TYR	233	C6R	C	-0.130
HD1	44.761741638	40.069950104	19.767900467	TYR	233	HA	H	0.130
CD2	46.150970459	43.090381622	20.257020950	TYR	233	C6R	C	-0.130
HD2	45.890331268	44.134689331	20.306739807	TYR	233	HA	H	0.130
CE1	46.851749420	40.429481506	20.067539215	TYR	233	C6R	C	-0.130
HE1	47.124599457	39.388198853	20.000980377	TYR	233	HA	H	0.130
CE2	47.486469269	42.714988708	20.377180099	TYR	233	C6R	C	-0.130
HE2	48.215320587	43.495670319	20.539960861	TYR	233	HA	H	0.130
CZ	47.842231750	41.374599457	20.266059875	TYR	233	C6R	C	0.250
OH	49.153381348	40.934829712	20.314659119	TYR	233	OT	O	-0.650
HH	49.766731262	41.614509583	20.566190720	TYR	233	HO	H	0.400
N	42.114860535	41.060409546	17.691419601	ASN	234	NP	N	-0.400
HN	42.756908417	40.490440369	18.200920105	ASN	234	H	H	0.250
CA	41.380661011	40.458351135	16.588109970	ASN	234	CT	C	0.050
HA	40.430770874	40.987228394	16.481269836	ASN	234	HA	H	0.050
C	41.100219727	38.991100311	16.964849472	ASN	234	C	C	0.600
O	40.982089996	38.676551819	18.142559052	ASN	234	O	O	-0.550
CB	42.291648865	40.631820679	15.355819702	ASN	234	CT	C	-0.100
HB1	42.770130157	41.607280731	15.415840149	ASN	234	HA	H	0.050
HB2	43.086849213	39.887161255	15.348159790	ASN	234	HA	H	0.050
CG	41.553768158	40.594951630	14.018759727	ASN	234	C	C	0.550
OD1	40.569309235	39.892681122	13.850500107	ASN	234	O	O	-0.550
ND2	42.094879150	41.383178711	13.081640244	ASN	234	NP	N	-0.600
HD21	41.671199799	41.416481018	12.178930283	ASN	234	H	H	0.300
HD22	42.912681580	41.939750671	13.270389557	ASN	234	H	H	0.300
N	41.039501190	38.117931366	15.936590195	ASP	235	NP	N	-0.400
HN	41.111198425	38.462448120	14.999560356	ASP	235	H	H	0.250
CA	40.571659088	36.741539001	16.097290039	ASP	235	CT	C	0.050
HA	40.211639404	36.610118866	17.114999771	ASP	235	HA	H	0.050
C	41.677059174	35.672550201	15.845370293	ASP	235	C	C	0.600
O	41.584621429	34.901241302	14.908280373	ASP	235	O	O	-0.550
CB	39.404781342	36.611068726	15.082420349	ASP	235	CT	C	-0.250
HB1	38.702770233	37.432430267	15.227080345	ASP	235	HA	H	0.050
HB2	39.785991669	36.710330963	14.064609528	ASP	235	HA	H	0.050
CG	38.588638306	35.311981201	15.175180435	ASP	235	C	C	0.350
OD1	38.364028931	34.830619812	16.278949738	ASP	235	OC	O	-0.600
OD2	38.186210632	34.774219513	14.140970230	ASP	235	OC	O	-0.600
N	42.740840912	35.588138580	16.688270569	PRO	236	NX	N	-0.250
CA	43.631099701	34.419239044	16.634679794	PRO	236	CT	C	0.050
HA	43.691711426	33.978149414	15.638400078	PRO	236	HA	H	0.050
C	43.121421814	33.355381012	17.643220901	PRO	236	C	C	0.600
O	41.931961060	33.273761749	17.913860321	PRO	236	O	O	-0.550
CB	44.964710236	35.050468445	17.062940598	PRO	236	CT	C	-0.100
HB1	45.713649750	34.364700317	17.457630157	PRO	236	HA	H	0.050
HB2	45.414688110	35.527351379	16.191570282	PRO	236	HA	H	0.050
CG	44.563838959	36.140239716	18.062740326	PRO	236	CT	C	-0.100
HG1	44.508060455	35.722431183	19.067750931	PRO	236	HA	H	0.050
HG2	45.273220062	36.963619232	18.059379578	PRO	236	HA	H	0.050
CD	43.179931641	36.613368988	17.625120163	PRO	236	CT	C	0.000
HD1	42.487049103	36.709381104	18.462209702	PRO	236	HA	H	0.050
HD2	43.283069611	37.569049835	17.115020752	PRO	236	HA	H	0.050
N	44.079631805	32.627189636	18.259670258	ILE	237	NP	N	-0.400
HN	45.018878937	32.670749664	17.926670074	ILE	237	H	H	0.250
CA	43.851501465	32.021480560	19.571830750	ILE	237	CT	C	0.050
HA	42.959381104	32.500888824	19.975669861	ILE	237	HA	H	0.050
C	45.016769409	32.512779236	20.457000732	ILE	237	C	C	0.600
O	45.463081360	33.630298615	20.260259628	ILE	237	O	O	-0.550
CB	43.575378418	30.495670319	19.503170013	ILE	237	CT	C	-0.050

HB	42.874179840	30.355329514	18.680679321	ILE	237	HA	H	0.050
CG1	42.820240021	30.012620926	20.766719818	ILE	237	CT	C	-0.100
HG11	43.326431274	30.327339172	21.674770355	ILE	237	HA	H	0.050
HG12	41.842899323	30.496519089	20.785549164	ILE	237	HA	H	0.050
CG2	44.814201355	29.651550293	19.152990341	ILE	237	CT	C	-0.150
HG21	45.342201233	30.067880630	18.294609070	ILE	237	HA	H	0.050
HG22	45.514690399	29.578689575	19.980979919	ILE	237	HA	H	0.050
HG23	44.534801483	28.632179260	18.888690948	ILE	237	HA	H	0.050
CD1	42.585418701	28.505750656	20.867300034	ILE	237	CT	C	-0.150
HD11	42.060100555	28.126649857	19.993379593	ILE	237	HA	H	0.050
HD12	43.529930115	27.976650238	20.980899811	ILE	237	HA	H	0.050
HD13	41.971019745	28.271089554	21.737619400	ILE	237	HA	H	0.050
N	45.467018127	31.693660736	21.433689117	LYS	238	NP	N	-0.400
HN	45.134021759	30.753410339	21.438819885	LYS	238	H	H	0.250
CA	46.296249390	32.167278290	22.550239563	LYS	238	CT	C	0.050
HA	45.616161346	32.736850739	23.185949326	LYS	238	HA	H	0.050
C	47.459541321	33.103458405	22.129100800	LYS	238	C	C	0.600
O	48.496658325	32.681369781	21.634359360	LYS	238	O	O	-0.550
CB	46.827781677	30.971900940	23.356189728	LYS	238	CT	C	-0.100
HB1	47.377391815	30.291990280	22.703300476	LYS	238	HA	H	0.050
HB2	47.545539856	31.331460953	24.095209122	LYS	238	HA	H	0.050
CG	45.708431244	30.224020004	24.095260620	LYS	238	CT	C	-0.100
HG1	45.173229218	30.941049576	24.717510223	LYS	238	HA	H	0.050
HG2	44.990570068	29.822959900	23.379520416	LYS	238	HA	H	0.050
CD	46.241138458	29.091470718	24.979890823	LYS	238	CT	C	-0.100
HD1	46.815860748	28.412080765	24.353769302	LYS	238	HA	H	0.050
HD2	46.912441254	29.514009476	25.726129532	LYS	238	HA	H	0.050
CE	45.145809174	28.312389374	25.711109161	LYS	238	CT	C	0.050
HE1	44.566791534	28.987209320	26.338890076	LYS	238	HA	H	0.100
HE2	44.456680298	27.844419479	25.005239487	LYS	238	HA	H	0.100
NZ	45.658241272	27.272270203	26.596889496	LYS	238	NT	N	-0.300
HZ1	46.295951843	26.602449417	26.123870850	LYS	238	HC	H	0.350
HZ2	46.133460999	27.697160721	27.424200058	LYS	238	HC	H	0.350
HZ3	44.838798523	26.733919144	26.961339951	LYS	238	HC	H	0.350
N	47.185329437	34.393569946	22.408000946	ILE	239	NP	N	-0.400
HN	46.259059906	34.578708649	22.727350235	ILE	239	H	H	0.250
CA	48.045471191	35.511589050	22.032449722	ILE	239	CT	C	0.050
HA	48.891071320	35.125221252	21.459329605	ILE	239	HA	H	0.050
C	48.628341675	36.209510803	23.266580582	ILE	239	C	C	0.600
O	49.820709229	36.470321655	23.367210388	ILE	239	O	O	-0.550
CB	47.218441010	36.534240723	21.211530685	ILE	239	CT	C	-0.050
HB	47.640880585	37.529319763	21.366939545	ILE	239	HA	H	0.050
CG1	45.720821381	36.575069427	21.617269516	ILE	239	CT	C	-0.100
HG11	45.217491150	35.686740875	21.249729156	ILE	239	HA	H	0.050
HG12	45.590068817	36.559188843	22.696369171	ILE	239	HA	H	0.050
CG2	47.386451721	36.239440918	19.720470428	ILE	239	CT	C	-0.150
HG21	46.829250336	35.359840393	19.409030914	ILE	239	HA	H	0.050
HG22	47.076549530	37.086059570	19.116010666	ILE	239	HA	H	0.050
HG23	48.427608490	36.044818878	19.483129501	ILE	239	HA	H	0.050
CD1	44.954769135	37.792350769	21.112829208	ILE	239	CT	C	-0.150
HD11	45.055358887	37.907100677	20.037460327	ILE	239	HA	H	0.050
HD12	43.892208099	37.712120056	21.341249466	ILE	239	HA	H	0.050
HD13	45.311878204	38.695079803	21.599889755	ILE	239	HA	H	0.050
N	47.682098389	36.555530548	24.152139664	ILE	240	NP	N	-0.400
HN	46.752201080	36.218841553	24.036420822	ILE	240	H	H	0.250
CA	47.938560486	37.459671021	25.257789612	ILE	240	CT	C	0.050
HA	48.763671875	38.117679596	24.979669571	ILE	240	HA	H	0.050
C	48.373870850	36.601539612	26.449840546	ILE	240	C	C	0.600
O	47.593151093	36.218601227	27.313829422	ILE	240	O	O	-0.550
CB	46.659721375	38.305500031	25.469560623	ILE	240	CT	C	-0.050
HB	45.812400818	37.619121552	25.509880066	ILE	240	HA	H	0.050
CG1	46.468761444	39.257598877	24.269489288	ILE	240	CT	C	-0.100

HG11	47.240451813	40.027999878	24.287340164	ILE	240	HA	H	0.050
HG12	46.622100830	38.719211578	23.337249756	ILE	240	HA	H	0.050
CG2	46.658248901	39.112609863	26.775909424	ILE	240	CT	C	-0.150
HG21	47.447181702	39.857231140	26.781530380	ILE	240	HA	H	0.050
HG22	45.722961426	39.651920319	26.909330368	ILE	240	HA	H	0.050
HG23	46.771259308	38.480739594	27.655220032	ILE	240	HA	H	0.050
CD1	45.090881348	39.925701141	24.211120605	ILE	240	CT	C	-0.150
HD11	44.293178558	39.184341431	24.188850403	ILE	240	HA	H	0.050
HD12	44.921791077	40.579578400	25.066049576	ILE	240	HA	H	0.050
HD13	44.999900818	40.533870697	23.311019897	ILE	240	HA	H	0.050
N	49.688499451	36.323390961	26.433399200	LEU	241	NP	N	-0.400
HN	50.240810394	36.723251343	25.694089890	LEU	241	H	H	0.250
CA	50.309730530	35.491451263	27.454959869	LEU	241	CT	C	0.050
HA	49.569038391	34.746028900	27.742189407	LEU	241	HA	H	0.050
C	50.671741486	36.362560272	28.680719376	LEU	241	C	C	0.600
O	51.808490753	36.417221069	29.135250092	LEU	241	O	O	-0.550
CB	51.542098999	34.805759430	26.835460663	LEU	241	CT	C	-0.100
HB1	51.321819305	34.518520355	25.806209564	LEU	241	HA	H	0.050
HB2	52.354259491	35.531879425	26.764110565	LEU	241	HA	H	0.050
CG	52.013931274	33.553180695	27.598899841	LEU	241	CT	C	-0.050
HG	52.053958893	33.788749695	28.662349701	LEU	241	HA	H	0.050
CD1	51.061840057	32.364318848	27.388219833	LEU	241	CT	C	-0.150
HD11	51.023960114	32.072498322	26.338029861	LEU	241	HA	H	0.050
HD12	51.387218475	31.494300842	27.958900452	LEU	241	HA	H	0.050
HD13	50.044551849	32.594280243	27.700590134	LEU	241	HA	H	0.050
CD2	53.433128357	33.168399811	27.173419952	LEU	241	CT	C	-0.150
HD21	54.108501434	34.011268616	27.310459137	LEU	241	HA	H	0.050
HD22	53.815319061	32.334079742	27.762060165	LEU	241	HA	H	0.050
HD23	53.466178894	32.880321503	26.122669220	LEU	241	HA	H	0.050
N	49.621639252	37.051219940	29.165210724	MET	242	NP	N	-0.400
HN	48.723381042	36.847290039	28.771419525	MET	242	H	H	0.250
CA	49.749248505	38.154979706	30.111560822	MET	242	CT	C	0.050
HA	50.813690186	38.320571899	30.290870667	MET	242	HA	H	0.050
C	49.091381073	37.957931519	31.512180328	MET	242	C	C	0.600
O	49.529541016	38.592220306	32.466850281	MET	242	O	O	-0.550
CB	49.166389465	39.407649994	29.446689606	MET	242	CT	C	-0.100
HB1	48.087810516	39.310359955	29.318830490	MET	242	HA	H	0.050
HB2	49.307308197	40.252910614	30.112819672	MET	242	HA	H	0.050
CG	49.816070557	39.728610992	28.095300674	MET	242	CT	C	-0.050
HG1	50.898471832	39.619609833	28.131410599	MET	242	HA	H	0.050
HG2	49.468750000	39.024429321	27.342639923	MET	242	HA	H	0.050
SD	49.400279999	41.408130646	27.589170456	MET	242	SE	S	-0.100
CE	49.690601349	41.266990662	25.822610855	MET	242	CT	C	-0.100
HE1	49.463520050	40.263748169	25.466230392	MET	242	HA	H	0.050
HE2	49.032619476	41.952720642	25.290250778	MET	242	HA	H	0.050
HE3	50.728820801	41.505619049	25.600070953	MET	242	HA	H	0.050
N	48.011001587	37.130149841	31.668939590	PRO	243	NX	N	-0.250
CA	47.266139984	37.109069824	32.941978455	PRO	243	CT	C	0.050
HA	47.120960236	38.123260498	33.314609528	PRO	243	HA	H	0.050
C	47.910758972	36.307640076	34.095951080	PRO	243	C	C	0.600
O	47.244449615	35.940238953	35.053909302	PRO	243	O	O	-0.550
CB	45.909751892	36.506870270	32.549949646	PRO	243	CT	C	-0.100
HB1	45.385269165	36.001060486	33.362861633	PRO	243	HA	H	0.050
HB2	45.261081696	37.298751831	32.174499512	PRO	243	HA	H	0.050
CG	46.245880127	35.582599640	31.389879227	PRO	243	CT	C	-0.100
HG1	46.653419495	34.662120819	31.801839828	PRO	243	HA	H	0.050
HG2	45.391628265	35.330291748	30.762950897	PRO	243	HA	H	0.050
CD	47.357658386	36.311119080	30.640960693	PRO	243	CT	C	0.000
HD1	48.025299072	35.573318481	30.206520081	PRO	243	HA	H	0.050
HD2	46.946620941	36.951671600	29.858409882	PRO	243	HA	H	0.050
N	49.215801239	36.022861481	33.940799713	GLY	244	NP	N	-0.400
HN	49.718021393	36.394088745	33.157260895	GLY	244	H	H	0.250

CA	49.914379120	35.055400848	34.777881622	GLY	244	CT	C	0.000
HA1	49.607898712	34.069969177	34.429489136	GLY	244	HA	H	0.050
HA2	50.977951050	35.191959381	34.588500977	GLY	244	HA	H	0.050
C	49.667358398	35.108898163	36.292030334	GLY	244	C	C	0.600
O	49.471569061	34.071559906	36.905788422	GLY	244	O	O	-0.550
N	49.747360229	36.315059662	36.891548157	CYS	245	NP	N	-0.350
HN	49.816280365	37.158409119	36.360630035	CYS	245	H	H	0.250
CA	49.811340332	36.333259583	38.356098175	CYS	245	CT	C	0.050
HA	50.426280975	35.482208252	38.661499023	CYS	245	HA	H	0.050
C	48.428108215	36.146591187	39.018890381	CYS	245	C	C	0.550
O	47.765480042	37.099319458	39.412719727	CYS	245	O	O	-0.550
CB	50.542709351	37.584438324	38.862941742	CYS	245	CT	C	0.100
HB1	50.587871552	37.543548584	39.952228546	CYS	245	HA	H	0.050
HB2	51.580631256	37.538261414	38.532669067	CYS	245	HA	H	0.050
SG	49.905158997	39.219360352	38.405998230	CYS	245	ST	S	-0.200
N	48.083541870	34.848079681	39.158191681	SER	246	NP	N	-0.400
HN	48.655090332	34.147491455	38.712749481	SER	246	H	H	0.250
CA	47.013690948	34.322631836	40.002269745	SER	246	CT	C	0.050
HA	46.691261292	33.417098999	39.494480133	SER	246	HA	H	0.050
C	45.764129639	35.232009888	40.094829559	SER	246	C	C	0.600
O	44.845001221	35.152408600	39.287731171	SER	246	O	O	-0.550
CB	47.618091583	33.947948456	41.372341156	SER	246	CT	C	0.050
HB1	47.844139099	34.844570160	41.943000793	SER	246	HA	H	0.100
HB2	46.922279358	33.356830597	41.977539062	SER	246	HA	H	0.100
OG	48.853168488	33.268428802	41.251270294	SER	246	OT	O	-0.650
HG	48.736301422	32.490249634	40.689521790	SER	246	HO	H	0.400
N	45.790149689	36.081939697	41.136188507	SER	247	NP	N	-0.400
HN	46.587501526	36.167728424	41.733898163	SER	247	H	H	0.250
CA	44.707038879	36.955829620	41.554039001	SER	247	CT	C	0.050
HA	43.911338806	36.317008972	41.928100586	SER	247	HA	H	0.050
C	44.166278839	37.828918457	40.417469025	SER	247	C	C	0.600
O	42.980430603	38.114639282	40.316158295	SER	247	O	O	-0.550
CB	45.285511017	37.815719604	42.678630829	SER	247	CT	C	0.050
HB1	45.863159180	38.653339386	42.275310516	SER	247	HA	H	0.100
HB2	44.473018646	38.237861633	43.282711029	SER	247	HA	H	0.100
OG	46.171260834	36.982799530	43.422889709	SER	247	OT	O	-0.650
HG	46.277439117	37.320861816	44.316730499	SER	247	HO	H	0.400
N	45.110950470	38.223949432	39.542240143	VAL	248	NP	N	-0.400
HN	46.059768677	37.912109375	39.650470734	VAL	248	H	H	0.250
CA	44.724090576	39.076648712	38.427738190	VAL	248	CT	C	0.050
HA	44.321281433	39.987571716	38.874721527	VAL	248	HA	H	0.050
C	43.615501404	38.420131683	37.580760956	VAL	248	C	C	0.600
O	42.746101379	39.081180573	37.026580811	VAL	248	O	O	-0.550
CB	45.960140228	39.405158997	37.569931030	VAL	248	CT	C	-0.050
HB	46.772499084	39.679130554	38.245498657	VAL	248	HA	H	0.050
CG1	46.438201904	38.204929352	36.730998993	VAL	248	CT	C	-0.150
HG11	46.476978302	37.289009094	37.318729401	VAL	248	HA	H	0.050
HG12	45.779811859	38.016208649	35.882331848	VAL	248	HA	H	0.050
HG13	47.436759949	38.356990814	36.333721161	VAL	248	HA	H	0.050
CG2	45.666751862	40.622489929	36.688098907	VAL	248	CT	C	-0.150
HG21	45.426219940	41.496158600	37.293998718	VAL	248	HA	H	0.050
HG22	46.510261536	40.885181427	36.055309296	VAL	248	HA	H	0.050
HG23	44.812999725	40.422958374	36.042709351	VAL	248	HA	H	0.050
N	43.710468292	37.078170776	37.522670746	SER	249	NP	N	-0.400
HN	44.394371033	36.606861115	38.084449768	SER	249	H	H	0.250
CA	42.864990234	36.299770355	36.637649536	SER	249	CT	C	0.050
HA	43.042121887	36.692459106	35.639129639	SER	249	HA	H	0.050
C	41.375579834	36.457019806	36.981601715	SER	249	C	C	0.600
O	40.515548706	36.340198517	36.120819092	SER	249	O	O	-0.550
CB	43.292419434	34.836040497	36.679351807	SER	249	CT	C	0.050
HB1	44.386421204	34.781009674	36.670841217	SER	249	HA	H	0.100
HB2	42.948760986	34.378620148	37.614459991	SER	249	HA	H	0.100

OG	42.764999390	34.165271759	35.540409088	SER	249	OT	O	-0.650
HG	42.956520081	33.228038788	35.596088409	SER	249	HO	H	0.400
N	41.106849670	36.778610229	38.260810852	THR	250	NP	N	-0.400
HN	41.791069031	36.807498932	38.996490479	THR	250	H	H	0.250
CA	39.747081757	37.114799500	38.661769867	THR	250	CT	C	0.050
HA	39.136970520	36.227088928	38.486419678	THR	250	HA	H	0.050
C	39.215541840	38.298339844	37.820079803	THR	250	C	C	0.600
O	38.126178741	38.287708282	37.257019043	THR	250	O	O	-0.550
CB	39.809688568	37.472980499	40.155300140	THR	250	CT	C	0.150
HB	40.178329468	38.506000519	40.254188538	THR	250	HA	H	0.100
OG1	40.725311279	36.567451477	40.755729675	THR	250	OT	O	-0.650
HG1	41.035999298	36.938999176	41.590011597	THR	250	HO	H	0.400
CG2	38.443450928	37.362358093	40.841259003	THR	250	CT	C	-0.150
HG21	38.072990417	36.337688446	40.809219360	THR	250	HA	H	0.050
HG22	38.502948761	37.664001465	41.887218475	THR	250	HA	H	0.050
HG23	37.706699371	38.001888275	40.355541229	THR	250	HA	H	0.050
N	40.098270416	39.312839508	37.755748749	LEU	251	NP	N	-0.400
HN	41.016311646	39.176670074	38.135501862	LEU	251	H	H	0.250
CA	39.805648804	40.537769318	37.028980255	LEU	251	CT	C	0.050
HA	38.833648682	40.886718750	37.382141113	LEU	251	HA	H	0.050
C	39.717548370	40.227638245	35.523639679	LEU	251	C	C	0.600
O	38.814090729	40.673629761	34.833240509	LEU	251	O	O	-0.550
CB	40.902549744	41.570209503	37.350849152	LEU	251	CT	C	-0.100
HB1	41.205379486	41.435810089	38.390388489	LEU	251	HA	H	0.050
HB2	41.796710968	41.357200623	36.767681122	LEU	251	HA	H	0.050
CG	40.493419647	43.046070099	37.180618286	LEU	251	CT	C	-0.050
HG	39.699878693	43.259021759	37.898559570	LEU	251	HA	H	0.050
CD1	41.675468445	43.964500427	37.518550873	LEU	251	CT	C	-0.150
HD11	42.504219055	43.813091278	36.827060699	LEU	251	HA	H	0.050
HD12	41.384708405	45.014110565	37.465591431	LEU	251	HA	H	0.050
HD13	42.043418884	43.776111603	38.527641296	LEU	251	HA	H	0.050
CD2	39.946468353	43.368980408	35.784229279	LEU	251	CT	C	-0.150
HD21	40.598808289	42.985500336	35.001289368	LEU	251	HA	H	0.050
HD22	38.955341339	42.940269470	35.641918182	LEU	251	HA	H	0.050
HD23	39.844558716	44.444469452	35.638229370	LEU	251	HA	H	0.050
N	40.676551819	39.403030396	35.060581207	VAL	252	NP	N	-0.400
HN	41.391849518	39.107669830	35.698001862	VAL	252	H	H	0.250
CA	40.689388275	38.996891022	33.652870178	VAL	252	CT	C	0.050
HA	40.794269562	39.912849426	33.068500519	VAL	252	HA	H	0.050
C	39.351371765	38.325641632	33.268161774	VAL	252	C	C	0.600
O	38.776000977	38.600219727	32.225551605	VAL	252	O	O	-0.550
CB	41.880390167	38.052951813	33.372421265	VAL	252	CT	C	-0.050
HB	41.731239319	37.146720886	33.959430695	VAL	252	HA	H	0.050
CG1	41.964099884	37.639469147	31.893520355	VAL	252	CT	C	-0.150
HG11	41.050338745	37.155761719	31.551010132	VAL	252	HA	H	0.050
HG12	42.135871887	38.507568359	31.255079269	VAL	252	HA	H	0.050
HG13	42.787628174	36.943988800	31.731060028	VAL	252	HA	H	0.050
CG2	43.222320557	38.677528381	33.781990051	VAL	252	CT	C	-0.150
HG21	43.534988403	39.417098999	33.048221588	VAL	252	HA	H	0.050
HG22	43.191951752	39.175479889	34.744918823	VAL	252	HA	H	0.050
HG23	44.001739502	37.922260284	33.844638824	VAL	252	HA	H	0.050
N	38.894168854	37.447120667	34.178050995	ALA	253	NP	N	-0.400
HN	39.438671112	37.286010742	35.001678467	ALA	253	H	H	0.250
CA	37.681278229	36.663639069	33.975551605	ALA	253	CT	C	0.050
HA	37.761451721	36.200508118	32.990928650	ALA	253	HA	H	0.050
C	36.416469574	37.541511536	34.014320374	ALA	253	C	C	0.600
O	35.389549255	37.201728821	33.433490753	ALA	253	O	O	-0.550
CB	37.603939056	35.582401276	35.059959412	ALA	253	CT	C	-0.150
HB1	38.495548248	34.956600189	35.046669006	ALA	253	HA	H	0.050
HB2	37.532581329	36.022640228	36.055461884	ALA	253	HA	H	0.050
HB3	36.740379333	34.932598114	34.915031433	ALA	253	HA	H	0.050
N	36.556991577	38.679378510	34.723178864	GLU	254	NP	N	-0.400

HN	37.393268585	38.813159943	35.260009766	GLU	254	H	H	0.250
CA	35.494480133	39.676139832	34.781330109	GLU	254	CT	C	0.050
HA	34.562408447	39.123420715	34.851371765	GLU	254	HA	H	0.050
C	35.476871490	40.503578186	33.478351593	GLU	254	C	C	0.600
O	34.567901611	40.419380188	32.656299591	GLU	254	O	O	-0.550
CB	35.687511444	40.529060364	36.052871704	GLU	254	CT	C	-0.100
HB1	35.570411682	39.880821228	36.922298431	GLU	254	HA	H	0.050
HB2	36.711780548	40.895389557	36.104209900	GLU	254	HA	H	0.050
CG	34.738540649	41.735900879	36.198528290	GLU	254	CT	C	-0.250
HG1	34.903068542	42.218639374	37.161861420	GLU	254	HA	H	0.050
HG2	34.964271545	42.483840942	35.437648773	GLU	254	HA	H	0.050
CD	33.248451233	41.377918243	36.100059509	GLU	254	C	C	0.350
OE1	32.871849060	40.229679108	36.321090698	GLU	254	OC	O	-0.600
OE2	32.447589874	42.243000031	35.762989044	GLU	254	OC	O	-0.600
N	36.573421478	41.275558472	33.335048676	ALA	255	NP	N	-0.400
HN	37.253810883	41.221561432	34.066818237	ALA	255	H	H	0.250
CA	36.817951202	42.167991638	32.202060699	ALA	255	CT	C	0.050
HA	36.014141083	42.904430389	32.211139679	ALA	255	HA	H	0.050
C	36.790561676	41.425769806	30.851020813	ALA	255	C	C	0.600
O	36.619548798	42.011680603	29.784410477	ALA	255	O	O	-0.550
CB	38.174739838	42.853881836	32.399021149	ALA	255	CT	C	-0.150
HB1	38.192859650	43.415409088	33.333030701	ALA	255	HA	H	0.050
HB2	38.986560822	42.125579834	32.437721252	ALA	255	HA	H	0.050
HB3	38.386169434	43.553981781	31.589929581	ALA	255	HA	H	0.050
N	36.912368774	40.091690063	30.965280533	ALA	256	NP	N	-0.400
HN	37.267040253	39.723461151	31.827339172	ALA	256	H	H	0.250
CA	36.629890442	39.154029846	29.892360687	ALA	256	CT	C	0.050
HA	37.545261383	39.092739105	29.319850922	ALA	256	HA	H	0.050
C	35.441841125	39.613571167	29.023180008	ALA	256	C	C	0.600
O	35.548110962	39.747329712	27.806659698	ALA	256	O	O	-0.550
CB	36.317729950	37.787410736	30.488109589	ALA	256	CT	C	-0.150
HB1	35.505981445	37.897491455	31.199680328	ALA	256	HA	H	0.050
HB2	36.018741608	37.071300507	29.724189758	ALA	256	HA	H	0.050
HB3	37.172931671	37.362380981	31.008529663	ALA	256	HA	H	0.050
N	34.342498779	39.891761780	29.744979858	ARG	257	NP	N	-0.400
HN	34.406951904	39.881748199	30.747640610	ARG	257	H	H	0.250
CA	33.053779602	40.115638733	29.103860855	ARG	257	CT	C	0.050
HA	32.949741364	39.355289459	28.326780319	ARG	257	HA	H	0.050
C	32.936588287	41.496109009	28.432390213	ARG	257	C	C	0.600
O	31.936410904	41.780311584	27.785999298	ARG	257	O	O	-0.550
CB	31.940349579	39.944160461	30.148279190	ARG	257	CT	C	-0.100
HB1	31.937919617	40.790138245	30.837730408	ARG	257	HA	H	0.050
HB2	30.975700378	39.954681396	29.638460159	ARG	257	HA	H	0.050
CG	32.090869904	38.643241882	30.946969986	ARG	257	CT	C	-0.100
HG1	32.350830078	37.845458984	30.263050079	ARG	257	HA	H	0.050
HG2	32.938560486	38.721939087	31.625930786	ARG	257	HA	H	0.050
CD	30.821590424	38.245899200	31.712579727	ARG	257	CT	C	0.000
HD1	29.994340897	38.071319580	31.023719788	ARG	257	HA	H	0.050
HD2	30.959810257	37.334449768	32.297080994	ARG	257	HA	H	0.050
NE	30.391029358	39.316509247	32.604740143	ARG	257	NP	N	-0.400
HE	29.584449768	39.839538574	32.329059601	ARG	257	H	H	0.300
CZ	31.082189560	39.648918152	33.717319489	ARG	257	C	C	0.500
NH1	32.149551392	38.955581665	34.083820343	ARG	257	NC	N	-0.450
HH11	32.504741669	38.200641632	33.536090851	ARG	257	HC	H	0.350
HH12	32.619998932	39.218189240	34.938899994	ARG	257	HC	H	0.350
NH2	30.703140259	40.684299469	34.453411102	ARG	257	NC	N	-0.450
HH21	29.871009827	41.203590393	34.279228210	ARG	257	HC	H	0.350
HH22	31.304059982	40.985969543	35.218318939	ARG	257	HC	H	0.350
N	33.981758118	42.328998566	28.616670609	MET	258	NP	N	-0.400
HN	34.768531799	42.035339355	29.160669327	MET	258	H	H	0.250
CA	33.989059448	43.661209106	28.022190094	MET	258	CT	C	0.050
HA	32.966709137	44.043861389	28.051179886	MET	258	HA	H	0.050

C	34.413078308	43.566989899	26.540479660	MET	258	C	C	0.600
O	33.591690063	43.450851440	25.641290665	MET	258	O	O	-0.550
CB	34.898540497	44.586658478	28.854530334	MET	258	CT	C	-0.100
HB1	35.917900085	44.204010010	28.885919571	MET	258	HA	H	0.050
HB2	34.952060699	45.567749023	28.380880356	MET	258	HA	H	0.050
CG	34.409969330	44.752609253	30.298929214	MET	258	CT	C	-0.050
HG1	33.418090820	45.204978943	30.317989349	MET	258	HA	H	0.050
HG2	34.308090210	43.789340973	30.798860550	MET	258	HA	H	0.050
SD	35.546558380	45.767700195	31.261749268	MET	258	SE	S	-0.100
CE	34.923271179	47.394580841	30.803800583	MET	258	CT	C	-0.100
HE1	33.874691010	47.488048553	31.086370468	MET	258	HA	H	0.050
HE2	35.497150421	48.176368713	31.300979614	MET	258	HA	H	0.050
HE3	34.989299774	47.534919739	29.725149155	MET	258	HA	H	0.050
N	35.746009827	43.606330872	26.336259842	TRP	259	NP	N	-0.400
HN	36.336109161	43.717098236	27.132020950	TRP	259	H	H	0.250
CA	36.297401428	43.648128510	24.979619980	TRP	259	CT	C	0.050
HA	35.907680511	44.547798157	24.499589920	TRP	259	HA	H	0.050
C	35.868938446	42.439800262	24.130899429	TRP	259	C	C	0.600
O	35.636348724	42.547779083	22.937490463	TRP	259	O	O	-0.550
CB	37.834049225	43.681919098	25.042789459	TRP	259	CT	C	-0.100
HB1	38.221218109	42.948940277	25.747169495	TRP	259	HA	H	0.050
HB2	38.266418457	43.427280426	24.072299957	TRP	259	HA	H	0.050
CG	38.316459656	45.061588287	25.430799484	TRP	259	C5R	C	-0.030
CD1	38.323398590	45.619628906	26.713249207	TRP	259	C5R	C	-0.040
HD1	37.976528168	45.139518738	27.616130829	TRP	259	HA	H	0.100
CD2	38.872619629	46.054489136	24.546430588	TRP	259	CR56	C	0.100
HE1	38.954078674	47.475280762	27.413639069	TRP	259	H	H	0.300
NE1	38.842990875	46.869991302	26.650260925	TRP	259	N5R	N	-0.360
CE2	39.195251465	47.176979065	25.341650009	TRP	259	CR56	C	-0.040
CE3	39.117088318	46.070770264	23.199169159	TRP	259	C6R	C	-0.130
HE3	38.863971710	45.213771820	22.593580246	TRP	259	HA	H	0.100
CZ2	39.755249023	48.282199860	24.762229919	TRP	259	C6R	C	-0.130
HZ2	39.996448517	49.142410278	25.368930817	TRP	259	HA	H	0.130
CZ3	39.689720154	47.194431305	22.605630875	TRP	259	C6R	C	-0.130
HZ3	39.885688782	47.206459045	21.542970657	TRP	259	HA	H	0.130
CH2	40.009910583	48.301490784	23.389699936	TRP	259	C6R	C	-0.130
HH2	40.457370758	49.170291901	22.931240082	TRP	259	HA	H	0.130
N	35.833488464	41.287151337	24.825689316	ASN	260	NP	N	-0.400
HN	35.880229950	41.332599640	25.819940567	ASN	260	H	H	0.250
CA	35.638610840	39.993900299	24.176969528	ASN	260	CT	C	0.050
HA	35.884601593	39.275100708	24.956739426	ASN	260	HA	H	0.050
C	36.636711121	39.783939362	23.016229630	ASN	260	C	C	0.600
O	36.283401489	39.706501007	21.847850800	ASN	260	O	O	-0.550
CB	34.185760498	39.776538849	23.716939926	ASN	260	CT	C	-0.100
HB1	33.856048584	40.578979492	23.056249619	ASN	260	HA	H	0.050
HB2	34.104778290	38.849201202	23.148729324	ASN	260	HA	H	0.050
CG	33.239528656	39.657409668	24.915910721	ASN	260	C	C	0.550
OD1	32.982261658	38.578998566	25.435979843	ASN	260	O	O	-0.550
ND2	32.734771729	40.827331543	25.319280624	ASN	260	NP	N	-0.600
HD21	32.089599609	40.879531860	26.083969116	ASN	260	H	H	0.300
HD22	32.992401123	41.712490082	24.921670914	ASN	260	H	H	0.300
N	37.906219482	39.691631317	23.451059341	LEU	261	NP	N	-0.400
HN	38.089721680	39.730880737	24.430530548	LEU	261	H	H	0.250
CA	39.025581360	39.316791534	22.597690582	LEU	261	CT	C	0.050
HA	38.645881653	38.820831299	21.704910278	LEU	261	HA	H	0.050
C	39.822769165	38.314701080	23.432069778	LEU	261	C	C	0.600
O	40.024799347	38.538589478	24.619649887	LEU	261	O	O	-0.550
CB	39.891288757	40.546821594	22.260509491	LEU	261	CT	C	-0.100
HB1	40.200851440	41.028411865	23.189470291	LEU	261	HA	H	0.050
HB2	40.811199188	40.222690582	21.770950317	LEU	261	HA	H	0.050
CG	39.194400787	41.584770203	21.360029221	LEU	261	CT	C	-0.050
HG	38.242389679	41.863651276	21.814430237	LEU	261	HA	H	0.050

CD1 40.037670135 42.861339569 21.247959137 LEU 261 CT C -0.150
HD11 40.235431671 43.291141510 22.228410721 LEU 261 HA H 0.050
HD12 40.995250702 42.660358429 20.769920349 LEU 261 HA H 0.050
HD13 39.526699066 43.618278503 20.652219772 LEU 261 HA H 0.050
CD2 38.909111023 41.022911072 19.960189819 LEU 261 CT C -0.150
HD21 39.820968628 40.664981842 19.481639862 LEU 261 HA H 0.050
HD22 38.204151154 40.194561005 19.999689102 LEU 261 HA H 0.050
HD23 38.473159790 41.784790039 19.313550949 LEU 261 HA H 0.050
N 40.222820282 37.196788788 22.804250717 ILE 262 NP N -0.400
HN 40.055240631 37.094661713 21.823219299 ILE 262 H H 0.250
CA 40.776100159 36.095901489 23.593469620 ILE 262 CT C 0.050
HA 39.943740845 35.741989136 24.203969955 ILE 262 HA H 0.050
C 41.933391571 36.527709961 24.534099579 ILE 262 C C 0.600
O 42.913818359 37.145240784 24.138139725 ILE 262 O O -0.550
CB 41.232868195 34.939720154 22.683620453 ILE 262 CT C -0.050
HB 40.358181000 34.592041016 22.133769989 ILE 262 HA H 0.050
CG1 41.741420746 33.751121521 23.532190323 ILE 262 CT C -0.100
HG11 42.475799561 34.062511444 24.272489548 ILE 262 HA H 0.050
HG12 40.908081055 33.329471588 24.094280243 ILE 262 HA H 0.050
CG2 42.260078430 35.397418976 21.632539749 ILE 262 CT C -0.150
HG21 41.919380188 36.269008636 21.073959351 ILE 262 HA H 0.050
HG22 43.202480316 35.652400970 22.110879898 ILE 262 HA H 0.050
HG23 42.460201263 34.619201660 20.896369934 ILE 262 HA H 0.050
CD1 42.419288635 32.671241760 22.707500458 ILE 262 CT C -0.150
HD11 41.795780182 32.389999390 21.861080170 ILE 262 HA H 0.050
HD12 43.364459991 33.049339294 22.334989548 ILE 262 HA H 0.050
HD13 42.629760742 31.787189484 23.307699203 ILE 262 HA H 0.050
N 41.747959137 36.071868896 25.786390305 VAL 263 NP N -0.400
HN 40.884548187 35.631549835 26.037019730 VAL 263 H H 0.250
CA 42.805950165 35.932811737 26.772630692 VAL 263 CT C 0.050
HA 43.762619019 35.862758636 26.250299454 VAL 263 HA H 0.050
C 42.480400085 34.598300934 27.454669952 VAL 263 C C 0.600
O 41.309089661 34.282161713 27.618659973 VAL 263 O O -0.550
CB 42.777431488 37.109958649 27.771390915 VAL 263 CT C -0.050
HB 41.796470642 37.136749268 28.249189377 VAL 263 HA H 0.050
CG1 43.827720642 36.948551178 28.882669449 VAL 263 CT C -0.150
HG11 43.649089813 36.055709839 29.480209351 VAL 263 HA H 0.050
HG12 44.836601257 36.888809204 28.471860886 VAL 263 HA H 0.050
HG13 43.805290222 37.797611237 29.566120148 VAL 263 HA H 0.050
CG2 42.980571747 38.452510834 27.055149078 VAL 263 CT C -0.150
HG21 42.190769196 38.658039093 26.336219788 VAL 263 HA H 0.050
HG22 43.013530731 39.279769897 27.766050339 VAL 263 HA H 0.050
HG23 43.918190002 38.452911377 26.504419327 VAL 263 HA H 0.050
N 43.538738251 33.838691711 27.799179077 LEU 264 NP N -0.400
HN 44.478248596 34.171550751 27.690999985 LEU 264 H H 0.250
CA 43.391441345 32.569389343 28.509399414 LEU 264 CT C 0.050
HA 42.477069855 32.609970093 29.103139877 LEU 264 HA H 0.050
C 44.572639465 32.495059967 29.481489182 LEU 264 C C 0.600
O 45.641189575 33.019680023 29.193410873 LEU 264 O O -0.550
CB 43.402770996 31.365369797 27.540439606 LEU 264 CT C -0.100
HB1 44.331661224 31.377559662 26.968799591 LEU 264 HA H 0.050
HB2 43.419139862 30.446029663 28.124860764 LEU 264 HA H 0.050
CG 42.207489014 31.298549652 26.567010880 LEU 264 CT C -0.050
HG 42.193241119 32.209709167 25.969360352 LEU 264 HA H 0.050
CD1 42.317531586 30.106359482 25.609109879 LEU 264 CT C -0.150
HD11 42.348930359 29.160909653 26.152330399 LEU 264 HA H 0.050
HD12 41.459411621 30.059009552 24.946460724 LEU 264 HA H 0.050
HD13 43.193969727 30.176580429 24.974269867 LEU 264 HA H 0.050
CD2 40.873611450 31.188619614 27.302579880 LEU 264 CT C -0.150
HD21 40.796230316 30.232809067 27.816699982 LEU 264 HA H 0.050
HD22 40.742179871 31.982530594 28.031570435 LEU 264 HA H 0.050
HD23 40.045829773 31.256710052 26.599229813 LEU 264 HA H 0.050

N	44.311069489	31.878339767	30.650379181	SER	265	NP	N	-0.400
HN	43.451660156	31.378780365	30.778099060	SER	265	H	H	0.250
CA	45.227958679	31.999910355	31.777330399	SER	265	CT	C	0.050
HA	45.993919373	32.724540710	31.511699677	SER	265	HA	H	0.050
C	45.928489685	30.672779083	32.110889435	SER	265	C	C	0.600
O	45.345279694	29.699489594	32.569629669	SER	265	O	O	-0.550
CB	44.482089996	32.536930084	33.000621796	SER	265	CT	C	0.050
HB1	43.964748383	33.464229584	32.733261108	SER	265	HA	H	0.100
HB2	43.725128174	31.810510635	33.317340851	SER	265	HA	H	0.100
OG	45.423099518	32.796371460	34.036579132	SER	265	OT	O	-0.650
HG	44.973758698	33.089141846	34.835781097	SER	265	HO	H	0.400
N	47.254310608	30.762269974	31.919309616	TYR	266	NP	N	-0.400
HN	47.580829620	31.584550858	31.460020065	TYR	266	H	H	0.250
CA	48.199489594	29.813589096	32.498348236	TYR	266	CT	C	0.050
HA	47.792411804	28.819330215	32.347610474	TYR	266	HA	H	0.050
C	48.315750122	30.034849167	34.021568298	TYR	266	C	C	0.600
O	48.747550964	29.158739090	34.765781403	TYR	266	O	O	-0.550
CB	49.563201904	29.921520233	31.781770706	TYR	266	CT	C	-0.100
HB1	50.312610626	29.304220200	32.279869080	TYR	266	HA	H	0.050
HB2	49.470520020	29.517520905	30.774370193	TYR	266	HA	H	0.050
CG	50.050109863	31.344089508	31.681280136	TYR	266	C6R	C	0.000
CD1	50.909790039	31.874359131	32.635948181	TYR	266	C6R	C	-0.130
HD1	51.272380829	31.251569748	33.439430237	TYR	266	HA	H	0.130
CD2	49.617298126	32.162120819	30.642789841	TYR	266	C6R	C	-0.130
HD2	48.979080200	31.765230179	29.865970612	TYR	266	HA	H	0.130
CE1	51.295051575	33.207710266	32.573310852	TYR	266	C6R	C	-0.130
HE1	51.970649719	33.610321045	33.312419891	TYR	266	HA	H	0.130
CE2	49.979969025	33.497810364	30.598400116	TYR	266	C6R	C	-0.130
HE2	49.596939087	34.111560822	29.804969788	TYR	266	HA	H	0.130
CZ	50.806770325	34.032760620	31.571680069	TYR	266	C6R	C	0.250
OH	51.115379333	35.380130768	31.563360214	TYR	266	OT	O	-0.650
HH	51.706741333	35.585300446	30.834939957	TYR	266	HO	H	0.400
N	47.901458740	31.244119644	34.448501587	GLY	267	NP	N	-0.400
HN	47.429691315	31.888420105	33.845558167	GLY	267	H	H	0.250
CA	47.875850677	31.539209366	35.870468140	GLY	267	CT	C	0.000
HA1	48.804351807	31.211519241	36.329151154	GLY	267	HA	H	0.050
HA2	47.812110901	32.623229980	35.949630737	GLY	267	HA	H	0.050
C	46.618640900	30.920759201	36.495719910	GLY	267	C	C	0.600
O	45.909381866	30.152599335	35.851608276	GLY	267	O	O	-0.550
N	39.533409119	28.205770493	41.783119202	PRO	271	NX	N	-0.250
CA	38.401279449	27.336799622	41.455398560	PRO	271	CT	C	0.050
HA	38.763229370	26.451160431	40.929950714	PRO	271	HA	H	0.050
C	37.315971375	28.025609970	40.584430695	PRO	271	C	C	0.600
O	36.719699860	29.021350861	40.970989227	PRO	271	O	O	-0.550
CB	37.853008270	26.932630539	42.832450867	PRO	271	CT	C	-0.100
HB1	36.778228760	26.760339737	42.846199036	PRO	271	HA	H	0.050
HB2	38.335029602	26.007520676	43.151039124	PRO	271	HA	H	0.050
CG	38.270591736	28.057229996	43.784370422	PRO	271	CT	C	-0.100
HG1	37.496799469	28.826320648	43.791629791	PRO	271	HA	H	0.050
HG2	38.403350830	27.711549759	44.810188293	PRO	271	HA	H	0.050
CD	39.553890228	28.635540009	43.183719635	PRO	271	CT	C	0.000
HD1	39.558780670	29.722139359	43.278511047	PRO	271	HA	H	0.050
HD2	40.441230774	28.232049942	43.674610138	PRO	271	HA	H	0.050
N	37.098579407	27.410879135	39.401161194	ALA	272	NP	N	-0.400
HN	37.640430450	26.592479706	39.194469452	ALA	272	H	H	0.250
CA	35.972660065	27.710889816	38.517181396	ALA	272	CT	C	0.050
HA	36.170631409	27.132520676	37.615051270	ALA	272	HA	H	0.050
C	35.827121735	29.190559387	38.084720612	ALA	272	C	C	0.600
O	34.793991089	29.813329697	38.297889709	ALA	272	O	O	-0.550
CB	34.669300079	27.208120346	39.153781891	ALA	272	CT	C	-0.150
HB1	34.745548248	26.154619217	39.409770966	ALA	272	HA	H	0.050
HB2	34.435020447	27.760259628	40.064849854	ALA	272	HA	H	0.050

HB3	33.824089050	27.321779251	38.474620819	ALA	272	HA	H	0.050
N	36.854690552	29.694019318	37.365341187	LEU	273	NP	N	-0.400
HN	37.718219757	29.194549561	37.326110840	LEU	273	H	H	0.250
CA	36.639110565	30.920230865	36.579330444	LEU	273	CT	C	0.050
HA	35.968379974	31.573740005	37.138320923	LEU	273	HA	H	0.050
C	35.931369781	30.562879562	35.247669220	LEU	273	C	C	0.600
O	36.454879761	30.747940063	34.154590607	LEU	273	O	O	-0.550
CB	37.968368530	31.658979416	36.315330505	LEU	273	CT	C	-0.100
HB1	38.658988953	30.979209900	35.815551758	LEU	273	HA	H	0.050
HB2	37.793159485	32.475238800	35.612590790	LEU	273	HA	H	0.050
CG	38.641750336	32.244670868	37.573348999	LEU	273	CT	C	-0.050
HG	38.818531036	31.430910110	38.275470734	LEU	273	HA	H	0.050
CD1	39.999530792	32.874931335	37.224781036	LEU	273	CT	C	-0.150
HD11	39.886600494	33.724948883	36.551368713	LEU	273	HA	H	0.050
HD12	40.508960724	33.231540680	38.120658875	LEU	273	HA	H	0.050
HD13	40.661788940	32.158710480	36.743499756	LEU	273	HA	H	0.050
CD2	37.761291504	33.284660339	38.281978607	LEU	273	CT	C	-0.150
HD21	37.479839325	34.091751099	37.605499268	LEU	273	HA	H	0.050
HD22	36.849430084	32.840290070	38.679428101	LEU	273	HA	H	0.050
HD23	38.290271759	33.731369019	39.124820709	LEU	273	HA	H	0.050
N	34.709949493	30.023620605	35.411689758	SER	274	NP	N	-0.400
HN	34.344081879	29.912139893	36.340610504	SER	274	H	H	0.250
CA	33.961921692	29.418630600	34.315849304	SER	274	CT	C	0.050
HA	34.668140411	28.873680115	33.685939789	SER	274	HA	H	0.050
C	33.216930389	30.467910767	33.464668274	SER	274	C	C	0.600
O	31.990779877	30.447820663	33.370491028	SER	274	O	O	-0.550
CB	32.948661804	28.459920883	34.963001251	SER	274	CT	C	0.050
HB1	32.134761810	29.024120331	35.423629761	SER	274	HA	H	0.100
HB2	32.478420258	27.804849625	34.220500946	SER	274	HA	H	0.100
OG	33.549659729	27.709030151	36.003688812	SER	274	OT	O	-0.650
HG	34.203140259	27.114059448	35.630550385	SER	274	HO	H	0.400
N	34.002288818	31.383710861	32.859851837	ASN	275	NP	N	-0.400
HN	34.999069214	31.292430878	32.941989899	ASN	275	H	H	0.250
CA	33.399578094	32.434280396	32.038368225	ASN	275	CT	C	0.050
HA	32.344039917	32.488368988	32.300209045	ASN	275	HA	H	0.050
C	33.506271362	32.075771332	30.543109894	ASN	275	C	C	0.600
O	34.533489227	31.651470184	30.037010193	ASN	275	O	O	-0.550
CB	34.005989075	33.813358307	32.336811066	ASN	275	CT	C	-0.100
HB1	33.941570282	34.041080475	33.400760651	ASN	275	HA	H	0.050
HB2	35.060108185	33.845691681	32.057830811	ASN	275	HA	H	0.050
CG	33.229579926	34.890148163	31.558530807	ASN	275	C	C	0.550
OD1	32.097961426	34.687389374	31.128459930	ASN	275	O	O	-0.550
ND2	33.943199158	35.980720520	31.305559158	ASN	275	NP	N	-0.600
HD21	33.724010468	36.561641693	30.516359329	ASN	275	H	H	0.300
HD22	34.724510193	36.236408234	31.884429932	ASN	275	H	H	0.300
N	32.354488373	32.284790039	29.889850616	ARG	276	NP	N	-0.400
HN	31.632209778	32.737480164	30.411529541	ARG	276	H	H	0.250
CA	32.157951355	31.994529724	28.481100082	ARG	276	CT	C	0.050
HA	32.876789093	31.238279343	28.188020706	ARG	276	HA	H	0.050
C	32.410469055	33.275169373	27.674100876	ARG	276	C	C	0.600
O	32.975738525	33.280071259	26.588819504	ARG	276	O	O	-0.550
CB	30.718589783	31.499990463	28.235759735	ARG	276	CT	C	-0.100
HB1	30.013700485	32.324478149	28.312700272	ARG	276	HA	H	0.050
HB2	30.649560928	31.179420471	27.195789337	ARG	276	HA	H	0.050
CG	30.244729996	30.328910828	29.123409271	ARG	276	CT	C	-0.100
HG1	29.282609940	29.992570877	28.735200882	ARG	276	HA	H	0.050
HG2	30.919509888	29.480270386	29.002149582	ARG	276	HA	H	0.050
CD	30.069730759	30.639030457	30.624080658	ARG	276	CT	C	0.000
HD1	29.372600555	29.942680359	31.092279434	ARG	276	HA	H	0.050
HD2	31.020759583	30.555620193	31.146999359	ARG	276	HA	H	0.050
NE	29.547800064	31.989770889	30.822910309	ARG	276	NP	N	-0.400
HE	29.223609924	32.505088806	30.023860931	ARG	276	H	H	0.300

CZ	29.492450714	32.619930267	32.015098572	ARG	276	C	C	0.500
NH1	29.917949677	32.033489227	33.131500244	ARG	276	NC	N	-0.450
HH11	30.426990509	31.160539627	33.090579987	ARG	276	HC	H	0.350
HH12	29.779979706	32.443149567	34.031211853	ARG	276	HC	H	0.350
NH2	29.020050049	33.860248566	32.037380219	ARG	276	NC	N	-0.450
HH21	28.814180374	34.299751282	31.149990082	ARG	276	HC	H	0.350
HH22	28.881719589	34.375431061	32.881080627	ARG	276	HC	H	0.350
N	31.927509308	34.367729187	28.290069580	GLN	277	NP	N	-0.400
HN	31.576589584	34.310741425	29.226900101	GLN	277	H	H	0.250
CA	31.946989059	35.672958374	27.659360886	GLN	277	CT	C	0.050
HA	31.632999420	35.550651550	26.620290756	GLN	277	HA	H	0.050
C	33.387950897	36.227371216	27.680629730	GLN	277	C	C	0.600
O	33.805938721	36.940788269	28.585960388	GLN	277	O	O	-0.550
CB	30.942459106	36.573329926	28.401739120	GLN	277	CT	C	-0.100
HB1	31.045249939	36.423049927	29.475269318	GLN	277	HA	H	0.050
HB2	31.181869507	37.619758606	28.205659866	GLN	277	HA	H	0.050
CG	29.470310211	36.348789215	28.009990692	GLN	277	CT	C	-0.100
HG1	28.841850281	37.071479797	28.530300140	GLN	277	HA	H	0.050
HG2	29.341680527	36.536571503	26.943500519	GLN	277	HA	H	0.050
CD	28.944629669	34.943840027	28.357030869	GLN	277	C	C	0.550
OE1	29.089460373	34.442169189	29.468799591	GLN	277	O	O	-0.550
NE2	28.325229645	34.334220886	27.339109421	GLN	277	NP	N	-0.600
HE21	27.936700821	33.422508240	27.459060669	GLN	277	H	H	0.300
HE22	28.238529205	34.780689240	26.449169159	GLN	277	H	H	0.300
N	34.084239960	35.828880310	26.604240417	ARG	278	NP	N	-0.400
HN	33.640430450	35.107799530	26.068550110	ARG	278	H	H	0.250
CA	35.349861145	36.411510468	26.176769257	ARG	278	CT	C	0.050
HA	35.317760468	37.473369598	26.423109055	ARG	278	HA	H	0.050
C	35.437728882	36.272930145	24.650520325	ARG	278	C	C	0.600
O	35.886840820	37.175609589	23.962369919	ARG	278	O	O	-0.550
CB	36.551841736	35.710941315	26.844589233	ARG	278	CT	C	-0.100
HB1	36.498058319	35.821811676	27.926519394	ARG	278	HA	H	0.050
HB2	36.452659607	34.638919830	26.662189484	ARG	278	HA	H	0.050
CG	37.947589874	36.151069641	26.334320068	ARG	278	CT	C	-0.100
HG1	38.613048553	35.293758392	26.448249817	ARG	278	HA	H	0.050
HG2	37.944801331	36.357730865	25.264720917	ARG	278	HA	H	0.050
CD	38.610488892	37.318241119	27.082359314	ARG	278	CT	C	0.000
HD1	38.635620117	37.118919373	28.154830933	ARG	278	HA	H	0.050
HD2	39.642780304	37.416141510	26.752319336	ARG	278	HA	H	0.050
NE	37.914459229	38.599681854	26.914480209	ARG	278	NP	N	-0.400
HE	36.911659241	38.586700439	26.985519409	ARG	278	H	H	0.300
CZ	38.562599182	39.791950226	27.021850586	ARG	278	C	C	0.500
NH1	39.857250214	39.896339417	26.763830185	ARG	278	NC	N	-0.450
HH11	40.270450592	39.147750854	26.225109100	ARG	278	HC	H	0.350
HH12	40.421459198	40.673221588	27.038509369	ARG	278	HC	H	0.350
NH2	37.889068604	40.867458344	27.407199860	ARG	278	NC	N	-0.450
HH21	36.909328461	40.766849518	27.620470047	ARG	278	HC	H	0.350
HH22	38.318508148	41.761749268	27.519950867	ARG	278	HC	H	0.350
N	35.020778656	35.087650299	24.165630341	PHE	279	NP	N	-0.400
HN	34.720039368	34.329208374	24.749750137	PHE	279	H	H	0.250
CA	35.137859344	34.764060974	22.746540070	PHE	279	CT	C	0.050
HA	34.603141785	35.536781311	22.195400238	PHE	279	HA	H	0.050
C	34.399650574	33.421451569	22.582170486	PHE	279	C	C	0.600
O	33.961841583	32.856391907	23.576629639	PHE	279	O	O	-0.550
CB	36.646869659	34.632438660	22.398389816	PHE	279	CT	C	-0.100
HB1	37.272048950	34.908489227	23.247669220	PHE	279	HA	H	0.050
HB2	36.883201599	33.590839386	22.213209152	PHE	279	HA	H	0.050
CG	37.131538391	35.432468414	21.216289520	PHE	279	C6R	C	0.000
CD1	36.650260925	36.709331512	20.941360474	PHE	279	C6R	C	-0.130
HD1	35.913669586	37.178810120	21.575799942	PHE	279	HA	H	0.130
CD2	38.100231171	34.889648438	20.375869751	PHE	279	C6R	C	-0.130
HD2	38.496131897	33.901550293	20.559169769	PHE	279	HA	H	0.130

CE1	37.116771698	37.422409058	19.847459793	PHE	279	C6R	C	-0.130
HE1	36.727020264	38.411060333	19.650520325	PHE	279	HA	H	0.130
CE2	38.574169159	35.603500366	19.286350250	PHE	279	C6R	C	-0.130
HE2	39.319900513	35.162509918	18.639490128	PHE	279	HA	H	0.130
CZ	38.080551147	36.871910095	19.018779755	PHE	279	C6R	C	-0.130
HZ	38.439331055	37.429279327	18.165439606	PHE	279	HA	H	0.130
N	34.292148590	32.891788483	21.326959610	PRO	280	NX	N	-0.250
CA	33.826858521	31.510290146	21.137939453	PRO	280	CT	C	0.050
HA	32.820629120	31.403959274	21.545389175	PRO	280	HA	H	0.050
C	34.768959045	30.502529144	21.830110550	PRO	280	C	C	0.600
O	34.367431641	29.499330521	22.409069061	PRO	280	O	O	-0.550
CB	33.832191467	31.323150635	19.609239578	PRO	280	CT	C	-0.100
HB1	34.734809875	30.807659149	19.274179459	PRO	280	HA	H	0.050
HB2	32.980781555	30.739070892	19.259149551	PRO	280	HA	H	0.050
CG	33.843639374	32.743961334	19.033130646	PRO	280	CT	C	-0.100
HG1	34.306621552	32.796848297	18.049179077	PRO	280	HA	H	0.050
HG2	32.818908691	33.104568481	18.937089920	PRO	280	HA	H	0.050
CD	34.582469940	33.583599091	20.075029373	PRO	280	CT	C	0.000
HD1	35.653659821	33.556850433	19.881240845	PRO	280	HA	H	0.050
HD2	34.243438721	34.620250702	20.083890915	PRO	280	HA	H	0.050
N	36.039550781	30.949779510	21.829309464	THR	281	NP	N	-0.400
HN	36.312850952	31.639549255	21.161390305	THR	281	H	H	0.250
CA	36.978118896	30.582309723	22.870769501	THR	281	CT	C	0.050
HA	36.948600769	29.499210358	22.983999252	THR	281	HA	H	0.050
C	36.515541077	31.241569519	24.180040359	THR	281	C	C	0.600
O	36.800060272	32.401069641	24.460149765	THR	281	O	O	-0.550
CB	38.378238678	31.079179764	22.449670792	THR	281	CT	C	0.150
HB	38.323711395	32.138820648	22.216299057	THR	281	HA	H	0.100
OG1	38.791259766	30.450969696	21.255760193	THR	281	OT	O	-0.650
HG1	38.936508179	29.519329071	21.434219360	THR	281	HO	H	0.400
CG2	39.460971832	30.959789276	23.524520874	THR	281	CT	C	-0.150
HG21	39.616569519	29.942079544	23.848949432	THR	281	HA	H	0.050
HG22	40.409420013	31.290269852	23.125089645	THR	281	HA	H	0.050
HG23	39.237819672	31.566289902	24.402120590	THR	281	HA	H	0.050
N	35.803710938	30.411359787	24.961740494	PHE	282	NP	N	-0.400
HN	35.559581757	29.501810074	24.614940643	PHE	282	H	H	0.250
CA	35.460498810	30.770990372	26.329610825	PHE	282	CT	C	0.050
HA	34.923019409	31.719850540	26.307069778	PHE	282	HA	H	0.050
C	36.765121460	30.947139740	27.101289749	PHE	282	C	C	0.600
O	37.796741486	30.430490494	26.683319092	PHE	282	O	O	-0.550
CB	34.648258209	29.633979797	26.977430344	PHE	282	CT	C	-0.100
HB1	35.252468109	28.725950241	27.002679825	PHE	282	HA	H	0.050
HB2	34.448780060	29.859109879	28.024679184	PHE	282	HA	H	0.050
CG	33.341609955	29.308670044	26.290260315	PHE	282	C6R	C	0.000
CD1	32.733978271	30.168670654	25.374050140	PHE	282	C6R	C	-0.130
HD1	33.175891876	31.119800568	25.115459442	PHE	282	HA	H	0.130
CD2	32.713409424	28.103389740	26.583700180	PHE	282	C6R	C	-0.130
HD2	33.164039612	27.423610687	27.290399551	PHE	282	HA	H	0.130
CE1	31.536460876	29.824850082	24.762489319	PHE	282	C6R	C	-0.130
HE1	31.089410782	30.501260757	24.048650742	PHE	282	HA	H	0.130
CE2	31.513450623	27.758199692	25.978239059	PHE	282	C6R	C	-0.130
HE2	31.043779373	26.816629410	26.219530106	PHE	282	HA	H	0.130
CZ	30.923130035	28.618240356	25.064329147	PHE	282	C6R	C	-0.130
HZ	29.991670609	28.348499298	24.588430405	PHE	282	HA	H	0.130
N	36.654659271	31.694040298	28.216100693	PHE	283	NP	N	-0.400
HN	35.745559692	31.934030533	28.562070847	PHE	283	H	H	0.250
CA	37.802368164	31.914339066	29.080810547	PHE	283	CT	C	0.050
HA	38.629039764	32.211280823	28.437320709	PHE	283	HA	H	0.050
C	38.125820160	30.596750259	29.801080704	PHE	283	C	C	0.600
O	37.238391876	29.817640305	30.126440048	PHE	283	O	O	-0.550
CB	37.482711792	33.029048920	30.092500687	PHE	283	CT	C	-0.100
HB1	37.190441132	33.936691284	29.563360214	PHE	283	HA	H	0.050

HB2	36.630451202	32.746021271	30.709930420	PHE	283	HA	H	0.050
CG	38.656909943	33.346530914	30.982559204	PHE	283	C6R	C	0.000
CD1	39.742839813	34.056419373	30.481100082	PHE	283	C6R	C	-0.130
HD1	39.743259430	34.387748718	29.452480316	PHE	283	HA	H	0.130
CD2	38.680191040	32.927558899	32.311138153	PHE	283	C6R	C	-0.130
HD2	37.852321625	32.366340637	32.722751617	PHE	283	HA	H	0.130
CE1	40.834270477	34.343910217	31.289539337	PHE	283	C6R	C	-0.130
HE1	41.673671722	34.889278412	30.883600235	PHE	283	HA	H	0.130
CE2	39.769119263	33.219348907	33.123249054	PHE	283	C6R	C	-0.130
HE2	39.781841278	32.894210815	34.153701782	PHE	283	HA	H	0.130
CZ	40.845260620	33.931869507	32.614601135	PHE	283	C6R	C	-0.130
HZ	41.683708191	34.169368744	33.254688263	PHE	283	HA	H	0.130
N	39.437099457	30.395059586	30.016649246	ARG	284	NP	N	-0.400
HN	40.118381500	31.090629578	29.786849976	ARG	284	H	H	0.250
CA	39.890808105	29.233810425	30.756549835	ARG	284	CT	C	0.050
HA	39.116119385	28.997720718	31.488170624	ARG	284	HA	H	0.050
C	41.143840790	29.613389969	31.523180008	ARG	284	C	C	0.600
O	41.874679565	30.534509659	31.175970078	ARG	284	O	O	-0.550
CB	40.225059509	28.025110245	29.854759216	ARG	284	CT	C	-0.100
HB1	40.906921387	28.309410095	29.052629471	ARG	284	HA	H	0.050
HB2	40.780101776	27.292800903	30.439430237	ARG	284	HA	H	0.050
CG	38.981338501	27.311729431	29.311649323	ARG	284	CT	C	-0.100
HG1	39.121421814	26.231260300	29.319009781	ARG	284	HA	H	0.050
HG2	38.129760742	27.494150162	29.967489243	ARG	284	HA	H	0.050
CD	38.658969879	27.775970459	27.902120590	ARG	284	CT	C	0.000
HD1	37.622810364	27.563390732	27.637260437	ARG	284	HA	H	0.050
HD2	38.845211029	28.840469360	27.826860428	ARG	284	HA	H	0.050
NE	39.534648895	27.120630264	26.940790176	ARG	284	NP	N	-0.400
HE	40.213218689	26.449279785	27.248249054	ARG	284	H	H	0.300
CZ	39.409118652	27.351619720	25.621959686	ARG	284	C	C	0.500
NH1	38.550361633	28.253980637	25.178539276	ARG	284	NC	N	-0.450
HH11	38.047531128	28.862850189	25.806200027	ARG	284	HC	H	0.350
HH12	38.410251617	28.330810547	24.182739258	ARG	284	HC	H	0.350
NH2	40.143798828	26.663379669	24.761619568	ARG	284	NC	N	-0.450
HH21	40.823879242	26.003820419	25.107690811	ARG	284	HC	H	0.350
HH22	39.999458313	26.767400742	23.763879776	ARG	284	HC	H	0.350
N	41.318958282	28.791889191	32.558490753	THR	285	NP	N	-0.400
HN	40.646530151	28.078109741	32.774429321	THR	285	H	H	0.250
CA	42.513580322	28.687740326	33.350830078	THR	285	CT	C	0.050
HA	43.145900726	29.548730850	33.150840759	THR	285	HA	H	0.050
C	43.192890167	27.378959656	32.900951385	THR	285	C	C	0.600
O	42.601039886	26.586219788	32.171569824	THR	285	O	O	-0.550
CB	42.031490326	28.663070679	34.801189423	THR	285	CT	C	0.150
HB	42.880310059	28.423460007	35.455448151	THR	285	HA	H	0.100
OG1	40.987800598	27.703559875	34.881420135	THR	285	OT	O	-0.650
HG1	40.856590271	27.421470642	35.784988403	THR	285	HO	H	0.400
CG2	41.426780701	30.014049530	35.196121216	THR	285	CT	C	-0.150
HG21	40.536880493	30.243019104	34.610008240	THR	285	HA	H	0.050
HG22	41.137119293	30.023080826	36.242778778	THR	285	HA	H	0.050
HG23	42.135448456	30.821680069	35.033901215	THR	285	HA	H	0.050
N	44.459609985	27.188539505	33.308650970	HIS	286	NP	N	-0.400
HN	44.931240082	27.989830017	33.684551239	HIS	286	H	H	0.250
CA	45.201221466	25.977529526	32.924198151	HIS	286	CT	C	0.050
HA	44.519500732	25.321159363	32.379970551	HIS	286	HA	H	0.050
C	45.687049866	25.112400055	34.115509033	HIS	286	C	C	0.600
O	45.604690552	23.894769669	34.024539948	HIS	286	O	O	-0.550
CB	46.363399506	26.307060242	31.967840195	HIS	286	CT	C	-0.100
HB1	47.150230408	26.841560364	32.494678497	HIS	286	HA	H	0.050
HB2	46.814281464	25.385860443	31.595779419	HIS	286	HA	H	0.050
CG	45.885250092	27.122749329	30.778669357	HIS	286	C5R	C	0.100
ND1	44.602031708	27.178499222	30.357830048	HIS	286	N5R	N	-0.400
HD1	43.828041077	26.704019547	30.738290787	HIS	286	H	H	0.300

CD2	46.647510529	27.948310852	29.932510376	HIS	286	C5R	C	0.000
HD2	47.713588715	28.112100601	30.003740311	HIS	286	HA	H	0.100
CE1	44.577751160	28.010520935	29.312149048	HIS	286	C5R	C	0.200
HE1	43.671291351	28.261730194	28.779590607	HIS	286	HA	H	0.100
NE2	45.802120209	28.491249084	29.021539688	HIS	286	N5R	N	-0.400
N	46.210460663	25.724609375	35.224170685	PRO	287	NX	N	-0.250
CA	46.864929199	24.935230255	36.273731232	PRO	287	CT	C	0.050
HA	47.520259857	24.183879852	35.840400696	PRO	287	HA	H	0.050
C	45.785099030	24.244310379	37.139289856	PRO	287	C	C	0.600
O	44.931991577	23.538829803	36.620918274	PRO	287	O	O	-0.550
CB	47.711021423	25.982349396	37.009578705	PRO	287	CT	C	-0.100
HB1	47.990169525	25.733789444	38.033428192	PRO	287	HA	H	0.050
HB2	48.642169952	26.105539322	36.457450867	PRO	287	HA	H	0.050
CG	46.897220612	27.265039444	36.878791809	PRO	287	CT	C	-0.100
HG1	46.146358490	27.301750183	37.668540955	PRO	287	HA	H	0.050
HG2	47.493019104	28.162349701	36.952888489	PRO	287	HA	H	0.050
CD	46.219158173	27.159099579	35.515468597	PRO	287	CT	C	0.000
HD1	45.213779449	27.570009232	35.595741272	PRO	287	HA	H	0.050
HD2	46.773071289	27.695039749	34.745811462	PRO	287	HA	H	0.050
N	45.795330048	24.511680603	38.455379486	SER	288	NP	N	-0.400
HN	46.500579834	25.038080215	38.930820465	SER	288	H	H	0.250
CA	44.666580200	24.073600769	39.259418488	SER	288	CT	C	0.050
HA	43.751430511	24.268669128	38.699989319	SER	288	HA	H	0.050
C	44.650108337	24.910379410	40.522209167	SER	288	C	C	0.600
O	45.651100159	25.510229111	40.895278931	SER	288	O	O	-0.550
CB	44.766738892	22.580549240	39.605499268	SER	288	CT	C	0.050
HB1	43.817909241	22.220190048	40.015949249	SER	288	HA	H	0.100
HB2	44.913619995	22.023670197	38.680191040	SER	288	HA	H	0.100
OG	45.831970215	22.256019592	40.490478516	SER	288	OT	O	-0.650
HG	45.674228668	22.665300369	41.350658417	SER	288	HO	H	0.400
N	43.471179962	24.861770630	41.165149689	ALA	289	NP	N	-0.400
HN	42.686691284	24.423700333	40.730400085	ALA	289	H	H	0.250
CA	43.406730652	25.187320709	42.579139709	ALA	289	CT	C	0.050
HA	44.077960968	26.024530411	42.774501801	ALA	289	HA	H	0.050
C	43.924640656	23.954790115	43.355411530	ALA	289	C	C	0.600
O	44.735881805	23.179920197	42.848999023	ALA	289	O	O	-0.550
CB	41.965049744	25.596019745	42.916770935	ALA	289	CT	C	-0.150
HB1	41.666458130	26.454900742	42.317668915	ALA	289	HA	H	0.050
HB2	41.258579254	24.795539856	42.704288483	ALA	289	HA	H	0.050
HB3	41.854679108	25.887359619	43.961681366	ALA	289	HA	H	0.050
N	43.418079376	23.821350098	44.588371277	THR	290	NP	N	-0.400
HN	42.684898376	24.411050797	44.929538727	THR	290	H	H	0.250
CA	43.950119019	22.889780045	45.566848755	THR	290	CT	C	0.050
HA	44.991378784	23.179580688	45.706951141	THR	290	HA	H	0.050
C	43.931880951	21.413040161	45.117279053	THR	290	C	C	0.600
O	44.759010315	20.637779236	45.570911407	THR	290	O	O	-0.550
CB	43.180381775	23.118600845	46.878829956	THR	290	CT	C	0.150
HB	42.130458832	22.850700378	46.728858948	THR	290	HA	H	0.100
OG1	43.254081726	24.517349243	47.105121613	THR	290	OT	O	-0.650
HG1	43.026790619	24.731290817	48.012611389	THR	290	HO	H	0.400
CG2	43.742389679	22.303459167	48.056629181	THR	290	CT	C	-0.150
HG21	43.118030548	22.418029785	48.940380096	THR	290	HA	H	0.050
HG22	43.759918213	21.237699509	47.834339142	THR	290	HA	H	0.050
HG23	44.758419037	22.611579895	48.299358368	THR	290	HA	H	0.050
N	42.996868134	21.042779922	44.220989227	LEU	291	NP	N	-0.400
HN	42.332939148	21.750059128	43.964588165	LEU	291	H	H	0.250
CA	42.612869263	19.638580322	43.997261047	LEU	291	CT	C	0.050
HA	42.316200256	19.284740448	44.984088898	LEU	291	HA	H	0.050
C	43.725578308	18.654830933	43.557571411	LEU	291	C	C	0.600
O	43.484439850	17.457180023	43.480880737	LEU	291	O	O	-0.550
CB	41.369579315	19.532890320	43.084098816	LEU	291	CT	C	-0.100
HB1	41.206649780	18.496189117	42.783390045	LEU	291	HA	H	0.050

HB2	40.492561340	19.775260925	43.680461884	LEU	291	HA	H	0.050
CG	41.354309082	20.443170547	41.841259003	LEU	291	CT	C	-0.050
HG	41.602691650	21.463909149	42.130378723	LEU	291	HA	H	0.050
CD1	42.362171173	19.984619141	40.789928436	LEU	291	CT	C	-0.150
HD11	42.220088959	18.931890488	40.540760040	LEU	291	HA	H	0.050
HD12	42.257339478	20.556619644	39.867889404	LEU	291	HA	H	0.050
HD13	43.379940033	20.117340088	41.151840210	LEU	291	HA	H	0.050
CD2	39.947078705	20.495780945	41.240238190	LEU	291	CT	C	-0.150
HD21	39.229049683	20.821899414	41.990291595	LEU	291	HA	H	0.050
HD22	39.901420593	21.200460434	40.410839081	LEU	291	HA	H	0.050
HD23	39.634609222	19.515579224	40.881599426	LEU	291	HA	H	0.050
N	44.949718475	19.163549423	43.321788788	HIS	292	NP	N	-0.400
HN	45.041358948	20.157709122	43.371791840	HIS	292	H	H	0.250
CA	46.086208344	18.276159286	43.039241791	HIS	292	CT	C	0.050
HA	45.709831238	17.274749756	42.828220367	HIS	292	HA	H	0.050
C	47.017910004	18.086549759	44.265098572	HIS	292	C	C	0.600
O	47.700450897	17.065120697	44.404430389	HIS	292	O	O	-0.550
CB	46.789520264	18.820760727	41.793048859	HIS	292	CT	C	-0.100
HB1	47.070171356	19.864980698	41.937068939	HIS	292	HA	H	0.050
HB2	47.703769684	18.270709991	41.582950592	HIS	292	HA	H	0.050
CG	45.841140747	18.700469971	40.613128662	HIS	292	C5R	C	0.100
ND1	45.637279510	19.668640137	39.697380066	HIS	292	N5R	N	-0.400
HD1	46.048011780	20.567630768	39.659980774	HIS	292	H	H	0.300
CD2	45.027469635	17.607889175	40.260330200	HIS	292	C5R	C	0.000
HD2	44.920570374	16.680400848	40.798118591	HIS	292	HA	H	0.100
CE1	44.739471436	19.180900574	38.821090698	HIS	292	C5R	C	0.200
HE1	44.374000549	19.726070404	37.962669373	HIS	292	HA	H	0.100
NE2	44.356128693	17.935800552	39.136920929	HIS	292	N5R	N	-0.400
N	46.955650330	19.094030380	45.162239075	ASN	293	NP	N	-0.400
HN	46.353248596	19.870880127	44.976131439	ASN	293	H	H	0.250
CA	47.596778870	19.050050735	46.478309631	ASN	293	CT	C	0.050
HA	48.665840149	18.974479675	46.269149780	ASN	293	HA	H	0.050
C	47.218288422	17.789550781	47.295959473	ASN	293	C	C	0.600
O	48.104808807	17.195430756	47.895648956	ASN	293	O	O	-0.550
CB	47.337429047	20.313430786	47.330699921	ASN	293	CT	C	-0.100
HB1	46.295249939	20.373630524	47.638500214	ASN	293	HA	H	0.050
HB2	47.921920776	20.266729355	48.250179291	ASN	293	HA	H	0.050
CG	47.673828125	21.645839691	46.647388458	ASN	293	C	C	0.550
OD1	47.047611237	22.659690857	46.911579132	ASN	293	O	O	-0.550
ND2	48.658740997	21.611549377	45.748218536	ASN	293	NP	N	-0.600
HD21	48.835880280	22.427770615	45.204738617	ASN	293	H	H	0.300
HD22	49.267040253	20.826269150	45.581119537	ASN	293	H	H	0.300
N	45.913478851	17.345640182	47.303020477	PRO	294	NX	N	-0.250
CA	45.507148743	16.053949356	47.877750397	PRO	294	CT	C	0.050
HA	45.289939880	16.204599380	48.930728912	PRO	294	HA	H	0.050
C	46.406711578	14.813240051	47.728691101	PRO	294	C	C	0.600
O	46.253059387	13.839010239	48.454391479	PRO	294	O	O	-0.550
CB	44.156978607	15.790690422	47.206401825	PRO	294	CT	C	-0.100
HB1	44.291049957	15.383689880	46.202190399	PRO	294	HA	H	0.050
HB2	43.510768890	15.111820221	47.759971619	PRO	294	HA	H	0.050
CG	43.556831360	17.182249069	47.109008789	PRO	294	CT	C	-0.100
HG1	42.765991211	17.254440308	46.361061096	PRO	294	HA	H	0.050
HG2	43.148521423	17.443759918	48.080741882	PRO	294	HA	H	0.050
CD	44.748600006	18.086679459	46.824291229	PRO	294	CT	C	0.000
HD1	44.804039001	18.223169327	45.759738922	PRO	294	HA	H	0.050
HD2	44.639869690	19.044769287	47.328678131	PRO	294	HA	H	0.050
N	47.359050751	14.897680283	46.786331177	THR	295	NP	N	-0.400
HN	47.453388214	15.749130249	46.273979187	THR	295	H	H	0.250
CA	48.317119598	13.819419861	46.617881775	THR	295	CT	C	0.050
HA	47.778179169	12.882369995	46.746498108	THR	295	HA	H	0.050
C	49.418331146	13.887649536	47.692768097	THR	295	C	C	0.600
O	49.825668335	12.880419731	48.261329651	THR	295	O	O	-0.550

CB	48.910839081	13.911860466	45.205799103	THR	295	CT	C	0.150
HB	49.720920563	14.645460129	45.191219330	THR	295	HA	H	0.100
OG1	47.926658630	14.294079781	44.256839752	THR	295	OT	O	-0.650
HG1	47.504531860	15.113800049	44.509521484	THR	295	HO	H	0.400
CG2	49.491149902	12.567040443	44.767848969	THR	295	CT	C	-0.150
HG21	48.717601776	11.803509712	44.725570679	THR	295	HA	H	0.050
HG22	49.938961029	12.628000259	43.778350830	THR	295	HA	H	0.050
HG23	50.266601562	12.236399651	45.459060669	THR	295	HA	H	0.050
N	49.872291565	15.130009651	47.927509308	ARG	296	NP	N	-0.400
HN	49.447738647	15.908160210	47.461360931	ARG	296	H	H	0.250
CA	50.964809418	15.395110130	48.857711792	ARG	296	CT	C	0.050
HA	51.617069244	14.522279739	48.831748962	ARG	296	HA	H	0.050
C	50.423278809	15.567990303	50.287559509	ARG	296	C	C	0.600
O	51.072551727	15.249859810	51.274070740	ARG	296	O	O	-0.550
CB	51.719581604	16.646240234	48.375991821	ARG	296	CT	C	-0.100
HB1	51.443958282	16.840290070	47.341369629	ARG	296	HA	H	0.050
HB2	51.401630402	17.540489197	48.915019989	ARG	296	HA	H	0.050
CG	53.246650696	16.491800308	48.445251465	ARG	296	CT	C	-0.100
HG1	53.589389801	16.651630402	49.466228485	ARG	296	HA	H	0.050
HG2	53.534141541	15.471449852	48.188598633	ARG	296	HA	H	0.050
CD	53.966648102	17.425529480	47.468509674	ARG	296	CT	C	0.000
HD1	55.049510956	17.384710312	47.575561523	ARG	296	HA	H	0.050
HD2	53.739250183	17.151260376	46.441608429	ARG	296	HA	H	0.050
NE	53.473888397	18.789230347	47.581130981	ARG	296	NP	N	-0.400
HE	52.557750702	18.981420517	47.207099915	ARG	296	H	H	0.300
CZ	54.218261719	19.836870193	47.974399567	ARG	296	C	C	0.500
NH1	55.451148987	19.678520203	48.438678741	ARG	296	NC	N	-0.450
HH11	55.845691681	18.758529663	48.458801270	ARG	296	HC	H	0.350
HH12	56.017288208	20.453050613	48.747589111	ARG	296	HC	H	0.350
NH2	53.689720154	21.037990570	47.858589172	ARG	296	NC	N	-0.450
HH21	52.733409882	21.113590240	47.541690826	ARG	296	HC	H	0.350
HH22	54.212768555	21.881429672	48.009960175	ARG	296	HC	H	0.350
N	49.168651581	16.052179337	50.319831848	VAL	297	NP	N	-0.400
HN	48.777309418	16.355659485	49.449031830	VAL	297	H	H	0.250
CA	48.384201050	16.278900146	51.532241821	VAL	297	CT	C	0.050
HA	48.810859680	17.154079437	52.004261017	VAL	297	HA	H	0.050
C	48.488250732	15.131469727	52.558238983	VAL	297	C	C	0.600
O	48.529308319	15.361539841	53.761631012	VAL	297	O	O	-0.550
CB	46.943450928	16.578790665	51.075599670	VAL	297	CT	C	-0.050
HB	46.782871246	15.914210320	50.234409332	VAL	297	HA	H	0.050
CG1	45.837570190	16.245920181	52.079769135	VAL	297	CT	C	-0.150
HG11	45.826419830	15.176529884	52.278930664	VAL	297	HA	H	0.050
HG12	45.972610474	16.791549683	53.014541626	VAL	297	HA	H	0.050
HG13	44.854751587	16.496660233	51.678291321	VAL	297	HA	H	0.050
CG2	46.798641205	18.036689758	50.610458374	VAL	297	CT	C	-0.150
HG21	47.635959625	18.355520248	49.991950989	VAL	297	HA	H	0.050
HG22	45.881690979	18.183809280	50.041049957	VAL	297	HA	H	0.050
HG23	46.757801056	18.712690353	51.463569641	VAL	297	HA	H	0.050
N	48.535671234	13.885049820	52.048061371	LYS	298	NP	N	-0.400
HN	48.490829468	13.757369995	51.057838440	LYS	298	H	H	0.250
CA	48.639198303	12.767379761	52.985839844	LYS	298	CT	C	0.050
HA	47.784339905	12.865710258	53.653228760	LYS	298	HA	H	0.050
C	49.898719788	12.872759819	53.877960205	LYS	298	C	C	0.600
O	49.853458405	12.595990181	55.068859100	LYS	298	O	O	-0.550
CB	48.514850616	11.416609764	52.261859894	LYS	298	CT	C	-0.100
HB1	48.539760590	10.613050461	52.999778748	LYS	298	HA	H	0.050
HB2	47.528461456	11.364119530	51.799308777	LYS	298	HA	H	0.050
CG	49.578369141	11.153129578	51.186550140	LYS	298	CT	C	-0.100
HG1	49.568260193	11.961339951	50.458671570	LYS	298	HA	H	0.050
HG2	50.566810608	11.150739670	51.641319275	LYS	298	HA	H	0.050
CD	49.351810455	9.810130119	50.480419159	LYS	298	CT	C	-0.100
HD1	49.415111542	9.010919571	51.220241547	LYS	298	HA	H	0.050

HD2	48.338161469	9.776579857	50.083038330	LYS	298	HA	H	0.050
CE	50.357589722	9.528920174	49.355808258	LYS	298	CT	C	0.050
HE1	51.381080627	9.721719742	49.683338165	LYS	298	HA	H	0.100
HE2	50.303611755	8.479920387	49.060920715	LYS	298	HA	H	0.100
NZ	50.102119446	10.324190140	48.159858704	LYS	298	NT	N	-0.300
HZ1	50.179279327	11.339070320	48.378681183	LYS	298	HC	H	0.350
HZ2	50.796558380	10.107560158	47.411849976	LYS	298	HC	H	0.350
HZ3	49.138229370	10.149829865	47.799678802	LYS	298	HC	H	0.350
N	51.001369476	13.334620476	53.258411407	LEU	299	NP	N	-0.400
HN	50.954341888	13.658570290	52.312198639	LEU	299	H	H	0.250
CA	52.270599365	13.458600044	53.970741272	LEU	299	CT	C	0.050
HA	52.419380188	12.533659935	54.529590607	LEU	299	HA	H	0.050
C	52.265880585	14.618120193	54.991008759	LEU	299	C	C	0.600
O	53.227008820	14.792209625	55.728179932	LEU	299	O	O	-0.550
CB	53.443290710	13.678540230	52.989448547	LEU	299	CT	C	-0.100
HB1	53.330280304	14.637499809	52.480899811	LEU	299	HA	H	0.050
HB2	54.353981018	13.773500443	53.584030151	LEU	299	HA	H	0.050
CG	53.696891785	12.568719864	51.946998596	LEU	299	CT	C	-0.050
HG	54.749389648	12.649840355	51.669799805	LEU	299	HA	H	0.050
CD1	53.510459900	11.155409813	52.514381409	LEU	299	CT	C	-0.150
HD11	54.109500885	11.022069931	53.415031433	LEU	299	HA	H	0.050
HD12	52.472888947	10.954710007	52.774829865	LEU	299	HA	H	0.050
HD13	53.822921753	10.399439812	51.793750763	LEU	299	HA	H	0.050
CD2	52.921009064	12.786640167	50.641441345	LEU	299	CT	C	-0.150
HD21	53.182781219	13.752090454	50.208198547	LEU	299	HA	H	0.050
HD22	53.168579102	12.021659851	49.905128479	LEU	299	HA	H	0.050
HD23	51.844379425	12.771490097	50.788700104	LEU	299	HA	H	0.050
N	51.169700623	15.410909653	55.003658295	PHE	300	NP	N	-0.400
HN	50.398780823	15.249950409	54.385761261	PHE	300	H	H	0.250
CA	51.132221222	16.533809662	55.937038422	PHE	300	CT	C	0.050
HA	52.093120575	17.042009354	55.860801697	PHE	300	HA	H	0.050
C	50.987491608	15.996379852	57.376468658	PHE	300	C	C	0.600
O	51.909198761	16.015369415	58.184310913	PHE	300	O	O	-0.550
CB	49.974971771	17.508920670	55.612411499	PHE	300	CT	C	-0.100
HB1	49.019500732	16.984569550	55.625110626	PHE	300	HA	H	0.050
HB2	49.908210754	18.263380051	56.396789551	PHE	300	HA	H	0.050
CG	50.047748566	18.245859146	54.295970917	PHE	300	C6R	C	0.000
CD1	51.106769562	18.117309570	53.396148682	PHE	300	C6R	C	-0.130
HD1	51.956188202	17.485279083	53.608440399	PHE	300	HA	H	0.130
CD2	48.992408752	19.090850830	53.962051392	PHE	300	C6R	C	-0.130
HD2	48.161449432	19.210069656	54.642551422	PHE	300	HA	H	0.130
CE1	51.094501495	18.804100037	52.188159943	PHE	300	C6R	C	-0.130
HE1	51.910858154	18.678630829	51.493629456	PHE	300	HA	H	0.130
CE2	48.984771729	19.786079407	52.761020660	PHE	300	C6R	C	-0.130
HE2	48.154731750	20.436719894	52.527168274	PHE	300	HA	H	0.130
CZ	50.035728455	19.640529633	51.867771149	PHE	300	C6R	C	-0.130
HZ	50.029499054	20.174959183	50.928050995	PHE	300	HA	H	0.130
N	49.754779816	15.518110275	57.630630493	GLU	301	NP	N	-0.400
HN	49.068840027	15.589249611	56.908828735	GLU	301	H	H	0.250
CA	49.389850616	15.030340195	58.955951691	GLU	301	CT	C	0.050
HA	50.108181000	15.415069580	59.679649353	GLU	301	HA	H	0.050
C	49.428730011	13.495369911	59.002208710	GLU	301	C	C	0.600
O	49.792598724	12.871689796	59.989841461	GLU	301	O	O	-0.550
CB	47.967269897	15.517649651	59.306808472	GLU	301	CT	C	-0.100
HB1	47.212169647	14.971349716	58.743068695	GLU	301	HA	H	0.050
HB2	47.778720856	15.264809608	60.349201202	GLU	301	HA	H	0.050
CG	47.744670868	17.024969101	59.060909271	GLU	301	CT	C	-0.250
HG1	48.690288544	17.557559967	59.150169373	GLU	301	HA	H	0.050
HG2	47.388679504	17.202640533	58.046321869	GLU	301	HA	H	0.050
CD	46.757369995	17.671609879	60.052700043	GLU	301	C	C	0.350
OE1	45.892971039	17.002799988	60.616809845	GLU	301	OC	O	-0.600
OE2	46.878990173	18.856290817	60.323150635	GLU	301	OC	O	-0.600

N	48.949771881	12.951379776	57.872619629	LYS	302	NP	N	-0.400
HN	49.004150391	13.467559814	57.019680023	LYS	302	H	H	0.250
CA	48.270690918	11.659740448	57.849498749	LYS	302	CT	C	0.050
HA	47.705760956	11.583310127	58.780719757	LYS	302	HA	H	0.050
C	49.303348541	10.523329735	57.812431335	LYS	302	C	C	0.600
O	49.133079529	9.452520370	58.377971649	LYS	302	O	O	-0.550
CB	47.296428680	11.649069786	56.647331238	LYS	302	CT	C	-0.100
HB1	47.800418854	11.299730301	55.745048523	LYS	302	HA	H	0.050
HB2	46.495441437	10.935059547	56.842071533	LYS	302	HA	H	0.050
CG	46.714309692	13.052020073	56.375259399	LYS	302	CT	C	-0.100
HG1	46.374748230	13.490590096	57.313648224	LYS	302	HA	H	0.050
HG2	47.504550934	13.699029922	55.992031097	LYS	302	HA	H	0.050
CD	45.559028625	13.124609947	55.377658844	LYS	302	CT	C	-0.100
HD1	45.770309448	12.522179604	54.494308472	LYS	302	HA	H	0.050
HD2	44.661178589	12.704950333	55.833408356	LYS	302	HA	H	0.050
CE	45.329029083	14.588899612	54.973400116	LYS	302	CT	C	0.050
HE1	45.238319397	15.227479935	55.850948334	LYS	302	HA	H	0.100
HE2	46.183940887	14.967390060	54.417659760	LYS	302	HA	H	0.100
NZ	44.126060486	14.796219826	54.182731628	LYS	302	NT	N	-0.300
HZ1	44.156650543	14.302370071	53.264499664	LYS	302	HC	H	0.350
HZ2	43.316448212	14.445759773	54.739231110	LYS	302	HC	H	0.350
HZ3	43.977058411	15.815759659	54.012660980	LYS	302	HC	H	0.350
N	50.400798798	10.882490158	57.133979797	TRP	303	NP	N	-0.400
HN	50.361858368	11.741060257	56.621879578	TRP	303	H	H	0.250
CA	51.642990112	10.139880180	57.122299194	TRP	303	CT	C	0.050
HA	51.637168884	9.440409660	57.961219788	TRP	303	HA	H	0.050
C	52.748970032	11.184519768	57.333068848	TRP	303	C	C	0.600
O	53.648349762	11.358130455	56.521991730	TRP	303	O	O	-0.550
CB	51.762371063	9.411170006	55.773239136	TRP	303	CT	C	-0.100
HB1	50.819519043	8.919039726	55.532649994	TRP	303	HA	H	0.050
HB2	51.963859558	10.110190392	54.960739136	TRP	303	HA	H	0.050
CG	52.849128723	8.359470367	55.832950592	TRP	303	C5R	C	-0.030
CD1	54.170700073	8.505880356	55.403739929	TRP	303	C5R	C	-0.040
HD1	54.588848114	9.407759666	54.980701447	TRP	303	HA	H	0.100
CD2	52.728668213	7.014609814	56.336891174	TRP	303	CR56	C	0.100
HE1	55.785820007	7.200300217	55.399730682	TRP	303	H	H	0.300
NE1	54.840759277	7.346230030	55.614269257	TRP	303	N5R	N	-0.360
CE2	53.995140076	6.402790070	56.185150146	TRP	303	CR56	C	-0.040
CE3	51.687068939	6.314559937	56.883361816	TRP	303	C6R	C	-0.130
HE3	50.724319458	6.790490150	57.001869202	TRP	303	HA	H	0.100
CZ2	54.179229736	5.106239796	56.584270477	TRP	303	C6R	C	-0.130
HZ2	55.145229340	4.637100220	56.469520569	TRP	303	HA	H	0.130
CZ3	51.871459961	4.993360043	57.291431427	TRP	303	C6R	C	-0.130
HZ3	51.049350739	4.441860199	57.724128723	TRP	303	HA	H	0.130
CH2	53.119770050	4.388309956	57.140960693	TRP	303	C6R	C	-0.130
HH2	53.266418457	3.365309954	57.456211090	TRP	303	HA	H	0.130
N	52.570320129	11.907580376	58.453678131	GLY	304	NP	N	-0.400
HN	51.828220367	11.692859650	59.092330933	GLY	304	H	H	0.250
CA	53.458259583	13.017760277	58.762161255	GLY	304	CT	C	0.000
HA1	54.487720490	12.708600044	58.574691772	GLY	304	HA	H	0.050
HA2	53.198829651	13.845430374	58.101848602	GLY	304	HA	H	0.050
C	53.295478821	13.398719788	60.234439850	GLY	304	C	C	0.600
O	53.321918488	12.546580315	61.112701416	GLY	304	O	O	-0.550
N	53.120429993	14.715100288	60.450599670	TRP	305	NP	N	-0.400
HN	52.995689392	15.331000328	59.665081024	TRP	305	H	H	0.250
CA	52.978809357	15.253950119	61.798400879	TRP	305	CT	C	0.050
HA	52.689910889	14.454429626	62.484558105	TRP	305	HA	H	0.050
C	51.873600006	16.306549072	61.763790131	TRP	305	C	C	0.600
O	52.039531708	17.374919891	61.197029114	TRP	305	O	O	-0.550
CB	54.279338837	15.940529823	62.242908478	TRP	305	CT	C	-0.100
HB1	54.732830048	16.485830307	61.413970947	TRP	305	HA	H	0.050
HB2	54.070621490	16.668390274	63.026508331	TRP	305	HA	H	0.050

CG	55.263130188	14.945969582	62.813251495	TRP	305	C5R	C	-0.030
CD1	56.371448517	14.402310371	62.159961700	TRP	305	C5R	C	-0.040
HD1	56.660610199	14.614520073	61.140510559	TRP	305	HA	H	0.100
CD2	55.256340027	14.394200325	64.144668579	TRP	305	CR56	C	0.100
HE1	57.830871582	13.063079834	62.783538818	TRP	305	H	H	0.300
NE1	57.023101807	13.570059776	63.010311127	TRP	305	N5R	N	-0.360
CE2	56.374851227	13.534879684	64.239540100	TRP	305	CR56	C	-0.040
CE3	54.420249939	14.557709694	65.217193604	TRP	305	C6R	C	-0.130
HE3	53.563259125	15.209259987	65.133560181	TRP	305	HA	H	0.100
CZ2	56.624008179	12.866169930	65.407897949	TRP	305	C6R	C	-0.130
HZ2	57.476608276	12.206529617	65.481147766	TRP	305	HA	H	0.130
CZ3	54.670070648	13.876270294	66.408851624	TRP	305	C6R	C	-0.130
HZ3	54.002990723	13.990989685	67.251319885	TRP	305	HA	H	0.130
CH2	55.775260925	13.029689789	66.503921509	TRP	305	C6R	C	-0.130
HH2	55.972068787	12.492449760	67.421119690	TRP	305	HA	H	0.130
N	50.749668121	15.965740204	62.421691895	LYS	306	NP	N	-0.400
HN	50.702579498	15.072930336	62.868339539	LYS	306	H	H	0.250
CA	49.544380188	16.780160904	62.279949188	LYS	306	CT	C	0.050
HA	49.391281128	16.880340576	61.207511902	LYS	306	HA	H	0.050
C	49.678150177	18.214849472	62.827121735	LYS	306	C	C	0.600
O	48.832328796	19.063880920	62.569240570	LYS	306	O	O	-0.550
CB	48.339389801	16.023929596	62.869659424	LYS	306	CT	C	-0.100
HB1	47.428241730	16.340150833	62.376411438	LYS	306	HA	H	0.050
HB2	48.437808990	14.971750259	62.599220276	LYS	306	HA	H	0.050
CG	48.131690979	16.121099472	64.389228821	LYS	306	CT	C	-0.100
HG1	47.456161499	15.316089630	64.681800842	LYS	306	HA	H	0.050
HG2	49.069908142	15.919810295	64.907180786	LYS	306	HA	H	0.050
CD	47.524608612	17.445419312	64.897186279	LYS	306	CT	C	-0.100
HD1	47.283081055	17.292049408	65.949851990	LYS	306	HA	H	0.050
HD2	48.251049042	18.254520416	64.916252136	LYS	306	HA	H	0.050
CE	46.234611511	17.906749725	64.191627502	LYS	306	CT	C	0.050
HE1	45.522239685	17.086610794	64.091133118	LYS	306	HA	H	0.100
HE2	45.753131866	18.641180038	64.839813232	LYS	306	HA	H	0.100
NZ	46.347579956	18.562950134	62.882110596	LYS	306	NT	N	-0.300
HZ1	47.199909210	19.151140213	62.747909546	LYS	306	HC	H	0.350
HZ2	46.318000793	17.928100586	62.051120758	LYS	306	HC	H	0.350
HZ3	45.523239136	19.200920105	62.756439209	LYS	306	HC	H	0.350
N	50.745059967	18.464580536	63.611301422	LYS	307	NP	N	-0.400
HN	51.425441742	17.749679565	63.750068665	LYS	307	H	H	0.250
CA	50.951889038	19.820640564	64.116477966	LYS	307	CT	C	0.050
HA	49.969909668	20.274770737	64.270919800	LYS	307	HA	H	0.050
C	51.710350037	20.639829636	63.049259186	LYS	307	C	C	0.600
O	52.868778229	21.023120880	63.194248199	LYS	307	O	O	-0.550
CB	51.675609589	19.774309158	65.468757629	LYS	307	CT	C	-0.100
HB1	51.326450348	18.915460587	66.042800903	LYS	307	HA	H	0.050
HB2	52.741970062	19.618770599	65.323463440	LYS	307	HA	H	0.050
CG	51.417049408	21.040239334	66.296188354	LYS	307	CT	C	-0.100
HG1	51.469749451	21.921840668	65.654586792	LYS	307	HA	H	0.050
HG2	50.399688721	21.008159637	66.688468933	LYS	307	HA	H	0.050
CD	52.422809601	21.211090088	67.435432434	LYS	307	CT	C	-0.100
HD1	52.564708710	20.270360947	67.968559265	LYS	307	HA	H	0.050
HD2	53.383548737	21.453409195	66.982582092	LYS	307	HA	H	0.050
CE	52.009281158	22.306589127	68.427886963	LYS	307	CT	C	0.050
HE1	51.452381134	23.096839905	67.920410156	LYS	307	HA	H	0.100
HE2	51.364738464	21.896249771	69.206588745	LYS	307	HA	H	0.100
NZ	53.161899567	22.940959930	69.057502747	LYS	307	NT	N	-0.300
HZ1	53.905788422	22.261999130	69.350997925	LYS	307	HC	H	0.350
HZ2	53.652690887	23.507699966	68.328758240	LYS	307	HC	H	0.350
HZ3	52.928810120	23.568450928	69.848281860	LYS	307	HC	H	0.350
N	50.960838318	20.835910797	61.955978394	ILE	308	NP	N	-0.400
HN	50.007728577	20.526609421	61.962158203	ILE	308	H	H	0.250
CA	51.473358154	21.479619980	60.763401031	ILE	308	CT	C	0.050

HA 52.525421143 21.205469131 60.666061401 ILE 308 HA H 0.050
C 51.367679596 22.999040604 60.937019348 ILE 308 C C 0.600
O 50.674709320 23.487590790 61.820049286 ILE 308 O O -0.550
CB 50.656009674 20.965650558 59.553161621 ILE 308 CT C -0.050
HB 51.086410522 21.399919510 58.650409698 ILE 308 HA H 0.050
CG1 49.177860260 21.392839432 59.586330414 ILE 308 CT C -0.100
HG11 48.673091888 20.980430603 60.461120605 ILE 308 HA H 0.050
HG12 49.122669220 22.472080231 59.673641205 ILE 308 HA H 0.050
CG2 50.759399414 19.436220169 59.452068329 ILE 308 CT C -0.150
HG21 51.790538788 19.097360611 59.534751892 ILE 308 HA H 0.050
HG22 50.190349579 18.946710587 60.239158630 ILE 308 HA H 0.050
HG23 50.370029449 19.067979813 58.505809784 ILE 308 HA H 0.050
CD1 48.408138275 20.997840881 58.324348450 ILE 308 CT C -0.150
HD11 48.334560394 19.914899826 58.233619690 ILE 308 HA H 0.050
HD12 47.392589569 21.389749527 58.360740662 ILE 308 HA H 0.050
HD13 48.888500214 21.386709213 57.426090240 ILE 308 HA H 0.050
N 52.057479858 23.696550369 60.018989563 ALA 309 NP N -0.400
HN 52.724029541 23.252380371 59.415771484 ALA 309 H H 0.250
CA 51.760898590 25.097009659 59.766571045 ALA 309 CT C 0.050
HA 50.977668762 25.428289413 60.443828583 ALA 309 HA H 0.050
C 51.282711029 25.193809509 58.315540314 ALA 309 C C 0.600
O 51.846729279 24.549709320 57.443008423 ALA 309 O O -0.550
CB 53.026748657 25.932130814 59.970329285 ALA 309 CT C -0.150
HB1 53.850719452 25.551469803 59.365879059 ALA 309 HA H 0.050
HB2 52.864448547 26.976810455 59.703330994 ALA 309 HA H 0.050
HB3 53.334259033 25.901739120 61.013858795 ALA 309 HA H 0.050
N 50.254508972 26.026319504 58.093318939 THR 310 NP N -0.400
HN 49.779449463 26.422300339 58.883129120 THR 310 H H 0.250
CA 49.824501038 26.322559357 56.727420807 THR 310 CT C 0.050
HA 50.531608582 25.872919083 56.030139923 THR 310 HA H 0.050
C 49.865951538 27.845619202 56.543460846 THR 310 C C 0.600
O 49.068279266 28.595340729 57.099628448 THR 310 O O -0.550
CB 48.439258575 25.718860626 56.448631287 THR 310 CT C 0.150
HB 47.713539124 26.182699203 57.129718781 THR 310 HA H 0.100
OG1 48.536888123 24.328250885 56.711971283 THR 310 OT O -0.650
HG1 47.694950104 23.901979446 56.577411652 THR 310 HO H 0.400
CG2 48.011169434 25.923210144 54.984748840 THR 310 CT C -0.150
HG21 48.649021149 25.360849380 54.303520203 THR 310 HA H 0.050
HG22 46.980068207 25.612039566 54.812870026 THR 310 HA H 0.050
HG23 48.087760925 26.968950272 54.695110321 THR 310 HA H 0.050
N 50.874980927 28.255939484 55.761348724 ILE 311 NP N -0.400
HN 51.409030914 27.576269150 55.257770538 ILE 311 H H 0.250
CA 51.080120087 29.662010193 55.478111267 ILE 311 CT C 0.050
HA 50.611190796 30.227600098 56.283428192 ILE 311 HA H 0.050
C 50.351688385 29.997320175 54.172889709 ILE 311 C C 0.600
O 50.079631805 29.153850555 53.326480865 ILE 311 O O -0.550
CB 52.589321136 29.972799301 55.453330994 ILE 311 CT C -0.050
HB 53.010131836 29.521680832 56.350990295 ILE 311 HA H 0.050
CG1 52.901138306 31.473369598 55.539581299 ILE 311 CT C -0.100
HG11 53.977439880 31.596780777 55.442821503 ILE 311 HA H 0.050
HG12 52.463439941 31.999629974 54.697780609 ILE 311 HA H 0.050
CG2 53.308979034 29.354690552 54.243888855 ILE 311 CT C -0.150
HG21 52.895389557 29.708599091 53.299751282 ILE 311 HA H 0.050
HG22 54.367179871 29.615640640 54.239700317 ILE 311 HA H 0.050
HG23 53.240280151 28.270029068 54.257408142 ILE 311 HA H 0.050
CD1 52.451171875 32.143421173 56.838840485 ILE 311 CT C -0.150
HD11 52.815540314 31.598009109 57.709030151 ILE 311 HA H 0.050
HD12 52.836128235 33.162048340 56.901908875 ILE 311 HA H 0.050
HD13 51.366889954 32.208660126 56.889728546 ILE 311 HA H 0.050
N 50.038089752 31.291730881 54.098739624 GLN 312 NP N -0.400
HN 50.398300171 31.941219330 54.770198822 GLN 312 H H 0.250
CA 49.196758270 31.837589264 53.060100555 GLN 312 CT C 0.050

HA	49.290660858	31.225839615	52.160289764	GLN	312	HA	H	0.050
C	49.751770020	33.226131439	52.802108765	GLN	312	C	C	0.600
O	50.257369995	33.860179901	53.719741821	GLN	312	O	O	-0.550
CB	47.765781403	31.870569229	53.624160767	GLN	312	CT	C	-0.100
HB1	47.355251312	30.866279602	53.587688446	GLN	312	HA	H	0.050
HB2	47.821800232	32.106231689	54.686820984	GLN	312	HA	H	0.050
CG	46.792449951	32.887691498	53.001331329	GLN	312	CT	C	-0.100
HG1	45.829681396	32.830169678	53.509128571	GLN	312	HA	H	0.050
HG2	47.174499512	33.891918182	53.166458130	GLN	312	HA	H	0.050
CD	46.532398224	32.742229462	51.502101898	GLN	312	C	C	0.550
OE1	46.061939240	33.661918640	50.849929810	GLN	312	O	O	-0.550
NE2	46.845119476	31.548269272	50.994350433	GLN	312	NP	N	-0.600
HE21	46.571491241	31.337259293	50.054508209	GLN	312	H	H	0.300
HE22	47.278598785	30.831430435	51.537620544	GLN	312	H	H	0.300
N	49.641410828	33.635318756	51.524139404	GLN	313	NP	N	-0.400
HN	49.242378235	33.030670166	50.836471558	GLN	313	H	H	0.250
CA	49.967269897	35.004520416	51.158439636	GLN	313	CT	C	0.050
HA	50.745559692	35.352321625	51.837051392	GLN	313	HA	H	0.050
C	48.724361420	35.871601105	51.418151855	GLN	313	C	C	0.600
O	48.377109528	36.140338898	52.560871124	GLN	313	O	O	-0.550
CB	50.529129028	35.057071686	49.723400116	GLN	313	CT	C	-0.100
HB1	49.777679443	34.780540466	48.982761383	GLN	313	HA	H	0.050
HB2	50.824501038	36.085289001	49.502849579	GLN	313	HA	H	0.050
CG	51.734859467	34.114101410	49.579620361	GLN	313	CT	C	-0.100
HG1	52.347599030	34.164649963	50.478340149	GLN	313	HA	H	0.050
HG2	51.407459259	33.081329346	49.471660614	GLN	313	HA	H	0.050
CD	52.639820099	34.468158722	48.398258209	GLN	313	C	C	0.550
OE1	52.639041901	33.844291687	47.345581055	GLN	313	O	O	-0.550
NE2	53.470081329	35.468429565	48.676948547	GLN	313	NP	N	-0.600
HE21	54.227890015	35.683841705	48.055568695	GLN	313	H	H	0.300
HE22	53.411441803	36.013938904	49.517009735	GLN	313	H	H	0.300
N	48.074409485	36.282039642	50.325069427	THR	314	NP	N	-0.400
HN	48.325080872	35.997268677	49.398811340	THR	314	H	H	0.250
CA	46.914379120	37.147659302	50.432090759	THR	314	CT	C	0.050
HA	46.219409943	36.680728912	51.132518768	THR	314	HA	H	0.050
C	46.272819519	37.135738373	49.048370361	THR	314	C	C	0.600
O	46.797981262	36.514480591	48.132968903	THR	314	O	O	-0.550
CB	47.331470490	38.559200287	50.911678314	THR	314	CT	C	0.150
HB	47.652061462	38.446441650	51.956611633	THR	314	HA	H	0.100
OG1	46.217639923	39.441848755	50.838951111	THR	314	OT	O	-0.650
HG1	46.384330750	40.236480713	51.339321136	THR	314	HO	H	0.400
CG2	48.499839783	39.145851135	50.096881866	THR	314	CT	C	-0.150
HG21	48.793838501	40.128078461	50.466129303	THR	314	HA	H	0.050
HG22	49.387580872	38.515201569	50.151519775	THR	314	HA	H	0.050
HG23	48.234500885	39.251590729	49.045299530	THR	314	HA	H	0.050
N	45.142848969	37.854980469	48.961441040	THR	315	NP	N	-0.400
HN	44.958820343	38.390960693	49.790370941	THR	315	H	H	0.250
CA	44.276039124	37.951591492	47.790969849	THR	315	CT	C	0.050
HA	43.547069550	38.702339172	48.097221375	THR	315	HA	H	0.050
C	43.460201263	36.656150818	47.595809937	THR	315	C	C	0.600
O	43.706428528	35.620899200	48.210750580	THR	315	O	O	-0.550
CB	44.985431671	38.508491516	46.530090332	THR	315	CT	C	0.150
HB	44.227451324	38.653430939	45.755939484	THR	315	HA	H	0.100
OG1	45.956478119	37.656471252	45.965431213	THR	315	OT	O	-0.650
HG1	46.535160065	37.354740143	46.663909912	THR	315	HO	H	0.400
CG2	45.634311676	39.874099731	46.795970917	THR	315	CT	C	-0.150
HG21	46.085819244	40.271591187	45.886821747	THR	315	HA	H	0.050
HG22	44.893501282	40.596359253	47.139041901	THR	315	HA	H	0.050
HG23	46.413909912	39.817840576	47.556011200	THR	315	HA	H	0.050
N	42.410400391	36.828048706	46.772628784	GLU	316	NP	N	-0.400
HN	42.402450562	37.559410095	46.087261200	GLU	316	H	H	0.250
CA	41.271961212	35.924568176	46.751399994	GLU	316	CT	C	0.050

HA	40.942638397	35.858699799	47.789340973	GLU	316	HA	H	0.050
C	41.655971527	34.507808685	46.309238434	GLU	316	C	C	0.600
O	41.243690491	33.533340454	46.921588898	GLU	316	O	O	-0.550
CB	40.115409851	36.518451691	45.917999268	GLU	316	CT	C	-0.100
HB1	39.205600739	35.982749939	46.191501617	GLU	316	HA	H	0.050
HB2	39.944580078	37.551090240	46.223640442	GLU	316	HA	H	0.050
CG	40.235958099	36.457038879	44.379570007	GLU	316	CT	C	-0.250
HG1	40.375209808	35.434509277	44.030361176	GLU	316	HA	H	0.050
HG2	39.285678864	36.776588440	43.950191498	GLU	316	HA	H	0.050
CD	41.345149994	37.340789795	43.787109375	GLU	316	C	C	0.350
OE1	42.512870789	37.120880127	44.091060638	GLU	316	OC	O	-0.600
OE2	41.035579681	38.225349426	42.997268677	GLU	316	OC	O	-0.600
N	42.469440460	34.432880402	45.240928650	VAL	317	NP	N	-0.400
HN	42.703029633	35.297809601	44.787891388	VAL	317	H	H	0.250
CA	42.831268311	33.131988525	44.678718567	VAL	317	CT	C	0.050
HA	41.895019531	32.609390259	44.472438812	VAL	317	HA	H	0.050
C	43.598060608	32.295860291	45.720199585	VAL	317	C	C	0.600
O	43.272350311	31.144849777	45.999721527	VAL	317	O	O	-0.550
CB	43.606491089	33.343990326	43.359001160	VAL	317	CT	C	-0.050
HB	44.432720184	34.033828735	43.541721344	VAL	317	HA	H	0.050
CG1	44.205299377	32.045318604	42.801628113	VAL	317	CT	C	-0.150
HG11	43.440731049	31.276529312	42.702259064	VAL	317	HA	H	0.050
HG12	44.652908325	32.204761505	41.820640564	VAL	317	HA	H	0.050
HG13	44.989250183	31.657060623	43.451698303	VAL	317	HA	H	0.050
CG2	42.685791016	33.977481842	42.307670593	VAL	317	CT	C	-0.150
HG21	41.807029724	33.359519958	42.130039215	VAL	317	HA	H	0.050
HG22	42.324951172	34.949390411	42.633140564	VAL	317	HA	H	0.050
HG23	43.197990417	34.118991852	41.355510712	VAL	317	HA	H	0.050
N	44.605850220	32.968971252	46.305500031	PHE	318	NP	N	-0.400
HN	44.764400482	33.918109894	46.039710999	PHE	318	H	H	0.250
CA	45.425258636	32.328521729	47.328701019	PHE	318	CT	C	0.050
HA	45.858291626	31.436239243	46.874279022	PHE	318	HA	H	0.050
C	44.553081512	31.901800156	48.520450592	PHE	318	C	C	0.600
O	44.684871674	30.808599472	49.056030273	PHE	318	O	O	-0.550
CB	46.523841858	33.287830353	47.813381195	PHE	318	CT	C	-0.100
HB1	46.084461212	34.234558105	48.125850677	PHE	318	HA	H	0.050
HB2	47.016429901	32.881740570	48.694141388	PHE	318	HA	H	0.050
CG	47.589321136	33.532718658	46.780941010	PHE	318	C6R	C	0.000
CD1	48.805259705	32.859951019	46.857620239	PHE	318	C6R	C	-0.130
HD1	49.000949860	32.160648346	47.657108307	PHE	318	HA	H	0.130
CD2	47.384811401	34.436119080	45.743560791	PHE	318	C6R	C	-0.130
HD2	46.454929352	34.978199005	45.671970367	PHE	318	HA	H	0.130
CE1	49.793769836	33.078250885	45.910301208	PHE	318	C6R	C	-0.130
HE1	50.737068176	32.558269501	45.995140076	PHE	318	HA	H	0.130
CE2	48.372379303	34.655929565	44.794651031	PHE	318	C6R	C	-0.130
HE2	48.204780579	35.371158600	44.004890442	PHE	318	HA	H	0.130
CZ	49.574829102	33.968521118	44.869560242	PHE	318	C6R	C	-0.130
HZ	50.338958740	34.122169495	44.120899200	PHE	318	HA	H	0.130
N	43.646938324	32.827491760	48.877529144	THR	319	NP	N	-0.400
HN	43.635768890	33.698940277	48.383338928	THR	319	H	H	0.250
CA	42.751049042	32.591091156	50.002380371	THR	319	CT	C	0.050
HA	43.380748749	32.353069305	50.861911774	THR	319	HA	H	0.050
C	41.824031830	31.388139725	49.740768433	THR	319	C	C	0.600
O	41.586418152	30.568849564	50.614559174	THR	319	O	O	-0.550
CB	41.960029602	33.881671906	50.277210236	THR	319	CT	C	0.150
HB	41.394519806	34.172870636	49.384918213	THR	319	HA	H	0.100
OG1	42.857360840	34.920410156	50.632999420	THR	319	OT	O	-0.650
HG1	43.481601715	35.073871613	49.919719696	THR	319	HO	H	0.400
CG2	40.953109741	33.736690521	51.423110962	THR	319	CT	C	-0.150
HG21	40.503089905	34.697921753	51.670639038	THR	319	HA	H	0.050
HG22	40.145179749	33.052791595	51.161720276	THR	319	HA	H	0.050
HG23	41.431270599	33.348751068	52.318950653	THR	319	HA	H	0.050

N	41.326671600	31.314430237	48.494861603	SER	320	NP	N	-0.400
HN	41.624359131	31.988849640	47.820938110	SER	320	H	H	0.250
CA	40.391731262	30.253400803	48.135829926	SER	320	CT	C	0.050
HA	39.587890625	30.260889053	48.874801636	SER	320	HA	H	0.050
C	41.100269318	28.894220352	48.183219910	SER	320	C	C	0.600
O	40.616161346	27.914289474	48.736099243	SER	320	O	O	-0.550
CB	39.834758759	30.520809174	46.728530884	SER	320	CT	C	0.050
HB1	40.610290527	30.446069717	45.956920624	SER	320	HA	H	0.100
HB2	39.085819244	29.765960693	46.481060028	SER	320	HA	H	0.100
OG	39.201000214	31.784580231	46.650039673	SER	320	OT	O	-0.650
HG	39.824871063	32.478061676	46.868968964	SER	320	HO	H	0.400
N	42.305709839	28.933280945	47.580978394	THR	321	NP	N	-0.400
HN	42.623390198	29.805469513	47.206981659	THR	321	H	H	0.250
CA	43.141281128	27.742469788	47.527099609	THR	321	CT	C	0.050
HA	42.560119629	26.994939804	46.985851288	THR	321	HA	H	0.050
C	43.422729492	27.237430573	48.968578339	THR	321	C	C	0.600
O	43.299781799	26.059749603	49.286739349	THR	321	O	O	-0.550
CB	44.436111450	28.073120117	46.749618530	THR	321	CT	C	0.150
HB	45.042709351	28.765710831	47.341590881	THR	321	HA	H	0.100
OG1	44.174640656	28.662910461	45.483459473	THR	321	OT	O	-0.650
HG1	43.653190613	29.459800720	45.586498260	THR	321	HO	H	0.400
CG2	45.276538849	26.825460434	46.456710815	THR	321	CT	C	-0.150
HG21	46.188308716	27.088310242	45.920898438	THR	321	HA	H	0.050
HG22	45.563610077	26.306030273	47.371688843	THR	321	HA	H	0.050
HG23	44.722930908	26.121889114	45.835269928	THR	321	HA	H	0.050
N	43.770671844	28.228979111	49.816078186	LEU	322	NP	N	-0.400
HN	43.837829590	29.161449432	49.455718994	LEU	322	H	H	0.250
CA	44.078731537	28.005960464	51.225841522	LEU	322	CT	C	0.050
HA	44.922428131	27.316659927	51.252391815	LEU	322	HA	H	0.050
C	42.895671844	27.390230179	51.975669861	LEU	322	C	C	0.600
O	43.042690277	26.415399551	52.695781708	LEU	322	O	O	-0.550
CB	44.456878662	29.355379105	51.854221344	LEU	322	CT	C	-0.100
HB1	45.233009338	29.768390656	51.222831726	LEU	322	HA	H	0.050
HB2	43.624591827	30.054079056	51.784049988	LEU	322	HA	H	0.050
CG	44.976051331	29.345390320	53.306011200	LEU	322	CT	C	-0.050
HG	45.256660461	30.376960754	53.514720917	LEU	322	HA	H	0.050
CD1	43.917819977	28.993179321	54.361339569	LEU	322	CT	C	-0.150
HD11	42.957431793	29.455579758	54.135311127	LEU	322	HA	H	0.050
HD12	43.761890411	27.918899536	54.446269989	LEU	322	HA	H	0.050
HD13	44.232261658	29.335720062	55.347320557	LEU	322	HA	H	0.050
CD2	46.225860596	28.476779938	53.473400116	LEU	322	CT	C	-0.150
HD21	46.994880676	28.724880219	52.742481232	LEU	322	HA	H	0.050
HD22	46.652301788	28.619140625	54.466438293	LEU	322	HA	H	0.050
HD23	45.986438751	27.419170380	53.360260010	LEU	322	HA	H	0.050
N	41.729091644	28.025789261	51.789009094	ASP	323	NP	N	-0.400
HN	41.684959412	28.799659729	51.155338287	ASP	323	H	H	0.250
CA	40.539279938	27.661710739	52.549839020	ASP	323	CT	C	0.050
HA	40.769359589	27.853849411	53.599441528	ASP	323	HA	H	0.050
C	40.240219116	26.159860611	52.374320984	ASP	323	C	C	0.600
O	40.190841675	25.371580124	53.313838959	ASP	323	O	O	-0.550
CB	39.393798828	28.567430496	52.065559387	ASP	323	CT	C	-0.250
HB1	39.705261230	29.611330032	52.105640411	ASP	323	HA	H	0.050
HB2	39.141330719	28.362499237	51.023891449	ASP	323	HA	H	0.050
CG	38.140869141	28.433269501	52.939010620	ASP	323	C	C	0.350
OD1	38.234619141	28.689149857	54.138198853	ASP	323	OC	O	-0.600
OD2	37.087059021	28.089689255	52.408351898	ASP	323	OC	O	-0.600
N	40.143478394	25.808580399	51.079841614	ASP	324	NP	N	-0.400
HN	40.195960999	26.521879196	50.375110626	ASP	324	H	H	0.250
CA	39.928310394	24.408590317	50.739669800	ASP	324	CT	C	0.050
HA	39.040290833	24.089410782	51.290641785	ASP	324	HA	H	0.050
C	41.114009857	23.522659302	51.204181671	ASP	324	C	C	0.600
O	40.928329468	22.422040939	51.701850891	ASP	324	O	O	-0.550

CB	39.651409149	24.305900574	49.236450195	ASP	324	CT	C	-0.250
HB1	38.775699615	24.897350311	48.967960358	ASP	324	HA	H	0.050
HB2	40.486499786	24.696670532	48.655090332	ASP	324	HA	H	0.050
CG	39.399108887	22.848409653	48.854141235	ASP	324	C	C	0.350
OD1	38.269741058	22.376300812	48.986419678	ASP	324	OC	O	-0.600
OD2	40.350429535	22.199180603	48.439361572	ASP	324	OC	O	-0.600
N	42.341579437	24.064599991	51.081951141	LEU	325	NP	N	-0.400
HN	42.430938721	24.958190918	50.636348724	LEU	325	H	H	0.250
CA	43.524948120	23.352380753	51.582168579	LEU	325	CT	C	0.050
HA	43.553340912	22.398500443	51.058368683	LEU	325	HA	H	0.050
C	43.420959473	23.048660278	53.099018097	LEU	325	C	C	0.600
O	43.904170990	22.030830383	53.583129883	LEU	325	O	O	-0.550
CB	44.780208588	24.174249649	51.240951538	LEU	325	CT	C	-0.100
HB1	44.788539886	24.394090652	50.173919678	LEU	325	HA	H	0.050
HB2	44.709030151	25.134500504	51.741718292	LEU	325	HA	H	0.050
CG	46.131908417	23.544660568	51.613811493	LEU	325	CT	C	-0.050
HG	46.086288452	23.168460846	52.636188507	LEU	325	HA	H	0.050
CD1	46.491611481	22.377250671	50.683471680	LEU	325	CT	C	-0.150
HD11	45.743721008	21.585439682	50.728019714	LEU	325	HA	H	0.050
HD12	46.570041656	22.709369659	49.647689819	LEU	325	HA	H	0.050
HD13	47.452049255	21.942129135	50.955299377	LEU	325	HA	H	0.050
CD2	47.217330933	24.628589630	51.575931549	LEU	325	CT	C	-0.150
HD21	46.988651276	25.438289642	52.268920898	LEU	325	HA	H	0.050
HD22	48.188209534	24.228460312	51.854938507	LEU	325	HA	H	0.050
HD23	47.301139832	25.063140869	50.579860687	LEU	325	HA	H	0.050
N	42.733501434	23.952100754	53.819278717	GLU	326	NP	N	-0.400
HN	42.382648468	24.780199051	53.373008728	GLU	326	H	H	0.250
CA	42.462650299	23.718980789	55.233028412	GLU	326	CT	C	0.050
HA	43.410110474	23.406480789	55.673458099	GLU	326	HA	H	0.050
C	41.449440002	22.556520462	55.369918823	GLU	326	C	C	0.600
O	41.533489227	21.719680786	56.267208099	GLU	326	O	O	-0.550
CB	42.008731842	25.039110184	55.893379211	GLU	326	CT	C	-0.100
HB1	42.300041199	25.866920471	55.245231628	GLU	326	HA	H	0.050
HB2	40.919940948	25.100139618	55.948261261	GLU	326	HA	H	0.050
CG	42.648971558	25.308509827	57.273101807	GLU	326	CT	C	-0.250
HG1	43.733379364	25.200139999	57.224361420	GLU	326	HA	H	0.050
HG2	42.452949524	26.338159561	57.573810577	GLU	326	HA	H	0.050
CD	42.085960388	24.389959335	58.360019684	GLU	326	C	C	0.350
OE1	40.904708862	24.499889374	58.679161072	GLU	326	OC	O	-0.600
OE2	42.798179626	23.525539398	58.873451233	GLU	326	OC	O	-0.600
N	40.523391724	22.494760513	54.393390656	GLU	327	NP	N	-0.400
HN	40.442878723	23.245550156	53.730239868	GLU	327	H	H	0.250
CA	39.672470093	21.310140610	54.278770447	GLU	327	CT	C	0.050
HA	39.310161591	21.112180710	55.275798798	GLU	327	HA	H	0.050
C	40.456489563	20.029470444	53.913131714	GLU	327	C	C	0.600
O	40.101940155	18.951419830	54.371749878	GLU	327	O	O	-0.550
CB	38.421379089	21.542980194	53.422828674	GLU	327	CT	C	-0.100
HB1	38.677021027	21.898719788	52.425319672	GLU	327	HA	H	0.050
HB2	37.927558899	20.577800751	53.292839050	GLU	327	HA	H	0.050
CG	37.427810669	22.515520096	54.083961487	GLU	327	CT	C	-0.250
HG1	37.391300201	22.362899780	55.162658691	GLU	327	HA	H	0.050
HG2	37.731479645	23.550710678	53.917888641	GLU	327	HA	H	0.050
CD	36.014469147	22.283500671	53.533611298	GLU	327	C	C	0.350
OE1	35.551708221	23.044179916	52.687580109	GLU	327	OC	O	-0.600
OE2	35.369781494	21.307899475	53.924499512	GLU	327	OC	O	-0.600
N	41.578861237	20.169889450	53.181728363	ARG	328	NP	N	-0.400
HN	41.743190765	21.062120438	52.754451752	ARG	328	H	H	0.250
CA	42.451831818	19.005470276	52.951259613	ARG	328	CT	C	0.050
HA	41.803081512	18.205890656	52.595661163	ARG	328	HA	H	0.050
C	43.090938568	18.466220856	54.254020691	ARG	328	C	C	0.600
O	43.652099609	17.370170593	54.262870789	ARG	328	O	O	-0.550
CB	43.525329590	19.293140411	51.875591278	ARG	328	CT	C	-0.100

HB1	43.862079620	20.323499680	51.950378418	ARG	328	HA	H	0.050
HB2	44.414741516	18.691400528	52.057189941	ARG	328	HA	H	0.050
CG	43.055801392	19.004770279	50.439159393	ARG	328	CT	C	-0.100
HG1	43.817440033	19.338230133	49.733978271	ARG	328	HA	H	0.050
HG2	42.947891235	17.928649902	50.303478241	ARG	328	HA	H	0.050
CD	41.729778290	19.698429108	50.134521484	ARG	328	CT	C	0.000
HD1	40.914798737	19.270750046	50.712219238	ARG	328	HA	H	0.050
HD2	41.802150726	20.753179550	50.381408691	ARG	328	HA	H	0.050
NE	41.358230591	19.687639236	48.729709625	ARG	328	NP	N	-0.400
HE	41.352268219	20.588850021	48.279701233	ARG	328	H	H	0.300
CZ	40.794170380	18.659290314	48.073650360	ARG	328	C	C	0.500
NH1	40.632259369	17.464839935	48.635910034	ARG	328	NC	N	-0.450
HH11	40.817649841	17.279960632	49.613418579	ARG	328	HC	H	0.350
HH12	40.311328888	16.710279465	48.048038483	ARG	328	HC	H	0.350
NH2	40.391300201	18.841360092	46.824440002	ARG	328	NC	N	-0.450
HH21	40.416919708	19.758020401	46.394088745	ARG	328	HC	H	0.350
HH22	40.056610107	18.042980194	46.305919647	ARG	328	HC	H	0.350
N	42.948810577	19.247520447	55.349040985	VAL	329	NP	N	-0.400
HN	42.643630981	20.195669174	55.240039825	VAL	329	H	H	0.250
CA	43.276889801	18.744390488	56.684230804	VAL	329	CT	C	0.050
HA	43.521450043	17.685279846	56.592548370	VAL	329	HA	H	0.050
C	42.053951263	18.780450821	57.630931854	VAL	329	C	C	0.600
O	42.172451019	18.516130447	58.819221497	VAL	329	O	O	-0.550
CB	44.514450073	19.464670181	57.252361298	VAL	329	CT	C	-0.050
HB	44.725009918	19.044830322	58.238521576	VAL	329	HA	H	0.050
CG1	45.743129730	19.193569183	56.370899200	VAL	329	CT	C	-0.150
HG11	45.910900116	18.123199463	56.249488831	VAL	329	HA	H	0.050
HG12	45.628940582	19.629199982	55.377651215	VAL	329	HA	H	0.050
HG13	46.641548157	19.618219376	56.812358856	VAL	329	HA	H	0.050
CG2	44.295391083	20.972259521	57.427608490	VAL	329	CT	C	-0.150
HG21	43.426700592	21.175910950	58.050731659	VAL	329	HA	H	0.050
HG22	45.152271271	21.442459106	57.908878326	VAL	329	HA	H	0.050
HG23	44.147178650	21.463510513	56.467060089	VAL	329	HA	H	0.050
N	40.862678528	19.057319641	57.057270050	LYS	330	NP	N	-0.400
HN	40.835170746	19.393020630	56.117778778	LYS	330	H	H	0.250
CA	39.636669159	18.524700165	57.659950256	LYS	330	CT	C	0.050
HA	39.737190247	18.551500320	58.743659973	LYS	330	HA	H	0.050
C	39.525161743	17.037420273	57.287708282	LYS	330	C	C	0.600
O	38.997291565	16.230979919	58.040439606	LYS	330	O	O	-0.550
CB	38.364841461	19.283819199	57.244029999	LYS	330	CT	C	-0.100
HB1	38.255100250	19.262340546	56.158828735	LYS	330	HA	H	0.050
HB2	37.503028870	18.736019135	57.629581451	LYS	330	HA	H	0.050
CG	38.240581512	20.736360550	57.743759155	LYS	330	CT	C	-0.100
HG1	38.869831085	21.416360855	57.182510376	LYS	330	HA	H	0.050
HG2	37.224838257	21.061780930	57.512908936	LYS	330	HA	H	0.050
CD	38.485729218	20.958759308	59.244510651	LYS	330	CT	C	-0.100
HD1	37.942489624	21.860069275	59.533271790	LYS	330	HA	H	0.050
HD2	38.049919128	20.151350021	59.834228516	LYS	330	HA	H	0.050
CE	39.961589813	21.173000336	59.618728638	LYS	330	CT	C	0.050
HE1	40.017360687	21.701740265	60.566871643	LYS	330	HA	H	0.100
HE2	40.495399475	20.234279633	59.749198914	LYS	330	HA	H	0.100
NZ	40.699348450	21.975660324	58.653160095	LYS	330	NT	N	-0.300
HZ1	40.804218292	21.537609100	57.712959290	LYS	330	HC	H	0.350
HZ2	40.260871887	22.916460037	58.522678375	LYS	330	HC	H	0.350
HZ3	41.656959534	22.245149612	58.971790314	LYS	330	HC	H	0.350
N	40.156658173	16.704229355	56.144329071	GLU	331	NP	N	-0.400
HN	40.360179901	17.423460007	55.476398468	GLU	331	H	H	0.250
CA	40.513591766	15.319999695	55.851169586	GLU	331	CT	C	0.050
HA	39.638931274	14.693960190	56.036170959	GLU	331	HA	H	0.050
C	41.705810547	14.852519989	56.738620758	GLU	331	C	C	0.600
O	42.670501709	14.296750069	56.222061157	GLU	331	O	O	-0.550
CB	40.972599030	15.220219612	54.383129120	GLU	331	CT	C	-0.100

HB1	41.870449066	15.818160057	54.262500763	GLU	331	HA	H	0.050
HB2	41.248920441	14.184149742	54.176738739	GLU	331	HA	H	0.050
CG	39.988658905	15.684740067	53.298080444	GLU	331	CT	C	-0.250
HG1	39.065490723	15.106160164	53.333641052	GLU	331	HA	H	0.050
HG2	39.721061707	16.733850479	53.418018341	GLU	331	HA	H	0.050
CD	40.652320862	15.477259636	51.922389984	GLU	331	C	C	0.350
OE1	41.028499603	14.344710350	51.632621765	GLU	331	OC	O	-0.600
OE2	40.827209473	16.433649063	51.167030334	GLU	331	OC	O	-0.600
N	41.612419128	15.141180038	58.051338196	ALA	332	NP	N	-0.400
HN	40.728279114	15.451820374	58.411960602	ALA	332	H	H	0.250
CA	42.652019501	14.926170349	59.055690765	ALA	332	CT	C	0.050
HA	42.661048889	13.852549553	59.244880676	ALA	332	HA	H	0.050
C	42.156970978	15.622130394	60.334949493	ALA	332	C	C	0.600
O	41.062679291	15.318079948	60.789619446	ALA	332	O	O	-0.550
CB	44.052848816	15.389800072	58.621021271	ALA	332	CT	C	-0.150
HB1	44.394710541	14.839189529	57.751651764	ALA	332	HA	H	0.050
HB2	44.089199066	16.455099106	58.394901276	ALA	332	HA	H	0.050
HB3	44.783149719	15.180729866	59.401588440	ALA	332	HA	H	0.050
N	42.953578949	16.564100266	60.885051727	GLY	333	NP	N	-0.400
HN	43.859458923	16.774780273	60.504039764	GLY	333	H	H	0.250
CA	42.472160339	17.240470886	62.084918976	GLY	333	CT	C	0.000
HA1	41.390769958	17.378200531	62.017799377	GLY	333	HA	H	0.050
HA2	42.691719055	16.591520309	62.932819366	GLY	333	HA	H	0.050
C	43.121940613	18.607389450	62.300979614	GLY	333	C	C	0.600
O	43.833889008	18.817670822	63.274078369	GLY	333	O	O	-0.550
N	42.776039124	19.529529572	61.381259918	ILE	334	NP	N	-0.400
HN	42.381290436	19.170459747	60.534271240	ILE	334	H	H	0.250
CA	42.938701630	20.973419189	61.591869354	ILE	334	CT	C	0.050
HA	42.449890137	21.439519882	60.738979340	ILE	334	HA	H	0.050
C	44.429931641	21.377119064	61.576179504	ILE	334	C	C	0.600
O	45.270988464	20.713300705	62.170009613	ILE	334	O	O	-0.550
CB	42.270320892	21.446039200	62.916999817	ILE	334	CT	C	-0.050
HB	42.891811371	21.080509186	63.736660004	ILE	334	HA	H	0.050
CG1	40.845798492	20.888210297	63.149299622	ILE	334	CT	C	-0.100
HG11	40.109298706	21.514739990	62.650821686	ILE	334	HA	H	0.050
HG12	40.723049164	19.890640259	62.731918335	ILE	334	HA	H	0.050
CG2	42.242691040	22.982210159	63.019180298	ILE	334	CT	C	-0.150
HG21	41.726119995	23.427070618	62.167671204	ILE	334	HA	H	0.050
HG22	41.733749390	23.313570023	63.923789978	ILE	334	HA	H	0.050
HG23	43.245410919	23.404050827	63.056591034	ILE	334	HA	H	0.050
CD1	40.482490540	20.811870575	64.636611938	ILE	334	CT	C	-0.150
HD11	41.170669556	20.158939362	65.174240112	ILE	334	HA	H	0.050
HD12	40.514888763	21.793819427	65.108032227	ILE	334	HA	H	0.050
HD13	39.476009369	20.414930344	64.770217896	ILE	334	HA	H	0.050
N	44.697261810	22.523050308	60.914241791	GLU	335	NP	N	-0.400
HN	43.999580383	22.970500946	60.348060608	GLU	335	H	H	0.250
CA	45.976490021	23.188430786	61.138710022	GLU	335	CT	C	0.050
HA	46.738700867	22.409769058	61.216098785	GLU	335	HA	H	0.050
C	45.915699005	23.920549393	62.498619080	GLU	335	C	C	0.600
O	45.902549744	23.296680450	63.552799225	GLU	335	O	O	-0.550
CB	46.331859589	24.090990067	59.939239502	GLU	335	CT	C	-0.100
HB1	46.278388977	23.469129562	59.045330048	GLU	335	HA	H	0.050
HB2	45.577728271	24.862630844	59.776340485	GLU	335	HA	H	0.050
CG	47.765571594	24.667829514	60.023719788	GLU	335	CT	C	-0.250
HG1	48.346290588	24.120290756	60.765838623	GLU	335	HA	H	0.050
HG2	48.275688171	24.514289856	59.078121185	GLU	335	HA	H	0.050
CD	47.885719299	26.158290863	60.361480713	GLU	335	C	C	0.350
OE1	46.936939240	26.916109085	60.212749481	GLU	335	OC	O	-0.600
OE2	48.951919556	26.583890915	60.778400421	GLU	335	OC	O	-0.600
N	45.882678986	25.263259888	62.424308777	ILE	336	NP	N	-0.400
HN	45.906879425	25.692789078	61.519039154	ILE	336	H	H	0.250
CA	45.969478607	26.091699600	63.620250702	ILE	336	CT	C	0.050

HA	45.583450317	25.514190674	64.462547302	ILE	336	HA	H	0.050
C	45.036510468	27.300960541	63.444801331	ILE	336	C	C	0.600
O	44.124370575	27.520000458	64.235542297	ILE	336	O	O	-0.550
CB	47.440238953	26.504360199	63.892318726	ILE	336	CT	C	-0.050
HB	47.773040771	27.118980408	63.059730530	ILE	336	HA	H	0.050
CG1	48.379409790	25.278219223	63.960048676	ILE	336	CT	C	-0.100
HG11	48.054000854	24.604469299	64.753181458	ILE	336	HA	H	0.050
HG12	48.327869415	24.710020065	63.033248901	ILE	336	HA	H	0.050
CG2	47.560840607	27.356670380	65.168930054	ILE	336	CT	C	-0.150
HG21	46.918571472	28.234830856	65.131233215	ILE	336	HA	H	0.050
HG22	47.286090851	26.782089233	66.053390503	ILE	336	HA	H	0.050
HG23	48.573898315	27.730920792	65.309593201	ILE	336	HA	H	0.050
CD1	49.855831146	25.628259659	64.149078369	ILE	336	CT	C	-0.150
HD11	50.029220581	26.137500763	65.094772339	ILE	336	HA	H	0.050
HD12	50.468818665	24.726619720	64.139511108	ILE	336	HA	H	0.050
HD13	50.201408386	26.265159607	63.335601807	ILE	336	HA	H	0.050
N	45.310741425	28.090589523	62.387409210	THR	337	NP	N	-0.400
HN	46.018329620	27.859779358	61.712810516	THR	337	H	H	0.250
CA	44.529338837	29.302410126	62.163558960	THR	337	CT	C	0.050
HA	43.476898193	29.022480011	62.248241425	THR	337	HA	H	0.050
C	44.795570374	29.804590225	60.738868713	THR	337	C	C	0.600
O	45.894710541	29.668670654	60.214759827	THR	337	O	O	-0.550
CB	44.914550781	30.407459259	63.183811188	THR	337	CT	C	0.150
HB	45.865528107	30.851270676	62.877658844	THR	337	HA	H	0.100
OG1	45.130870819	29.911470413	64.490081787	THR	337	OT	O	-0.650
HG1	44.460189819	29.255239487	64.687843323	THR	337	HO	H	0.400
CG2	43.870910645	31.529760361	63.268821716	THR	337	CT	C	-0.150
HG21	44.156009674	32.262939453	64.023361206	THR	337	HA	H	0.050
HG22	43.778579712	32.062648773	62.322658539	THR	337	HA	H	0.050
HG23	42.886779785	31.143600464	63.534488678	THR	337	HA	H	0.050
N	43.740348816	30.427240372	60.167091370	PHE	338	NP	N	-0.400
HN	42.868099213	30.453430176	60.651390076	PHE	338	H	H	0.250
CA	43.910430908	31.190019608	58.932479858	PHE	338	CT	C	0.050
HA	44.238201141	30.476530075	58.173690796	PHE	338	HA	H	0.050
C	45.007080078	32.254390717	59.145931244	PHE	338	C	C	0.600
O	45.228019714	32.722270966	60.256900787	PHE	338	O	O	-0.550
CB	42.572448730	31.836719513	58.534240723	PHE	338	CT	C	-0.100
HB1	41.795639038	31.073139191	58.478019714	PHE	338	HA	H	0.050
HB2	42.249309540	32.548778534	59.295139313	PHE	338	HA	H	0.050
CG	42.661788940	32.526821136	57.198169708	PHE	338	C6R	C	0.000
CD1	42.541648865	31.793289185	56.022811890	PHE	338	C6R	C	-0.130
HD1	42.352428436	30.730039597	56.068298340	PHE	338	HA	H	0.130
CD2	42.884510040	33.899059296	57.118549347	PHE	338	C6R	C	-0.130
HD2	42.974720001	34.487258911	58.020530701	PHE	338	HA	H	0.130
CE1	42.658870697	32.414688110	54.786720276	PHE	338	C6R	C	-0.130
HE1	42.565238953	31.834819794	53.879070282	PHE	338	HA	H	0.130
CE2	42.999599457	34.523891449	55.883861542	PHE	338	C6R	C	-0.130
HE2	43.174980164	35.588470459	55.828319550	PHE	338	HA	H	0.130
CZ	42.890419006	33.781040192	54.717010498	PHE	338	C6R	C	-0.130
HZ	42.981769562	34.266361237	53.755031586	PHE	338	HA	H	0.130
N	45.709159851	32.550819397	58.038459778	ARG	339	NP	N	-0.400
HN	45.377799988	32.307468414	57.125000000	ARG	339	H	H	0.250
CA	46.991168976	33.227508545	58.130268097	ARG	339	CT	C	0.050
HA	46.944961548	33.933181763	58.962528229	ARG	339	HA	H	0.050
C	47.174030304	34.007900238	56.821601868	ARG	339	C	C	0.600
O	46.440921783	33.793109894	55.863098145	ARG	339	O	O	-0.550
CB	48.048881531	32.131809235	58.366569519	ARG	339	CT	C	-0.100
HB1	47.631278992	31.431970596	59.088821411	ARG	339	HA	H	0.050
HB2	48.213588715	31.557039261	57.453399658	ARG	339	HA	H	0.050
CG	49.381999969	32.626861572	58.935279846	ARG	339	CT	C	-0.100
HG1	49.864471436	33.276569366	58.205280304	ARG	339	HA	H	0.050
HG2	49.207561493	33.239879608	59.820209503	ARG	339	HA	H	0.050

CD	50.333728790	31.472309113	59.290760040	ARG	339	CT	C	0.000
HD1	50.412239075	30.730020523	58.495719910	ARG	339	HA	H	0.050
HD2	51.335170746	31.864389420	59.468269348	ARG	339	HA	H	0.050
NE	49.973011017	30.804819107	60.539829254	ARG	339	NP	N	-0.400
HE	50.378528595	31.189819336	61.376960754	ARG	339	H	H	0.300
CZ	49.251010895	29.661609650	60.629409790	ARG	339	C	C	0.500
NH1	48.646869659	29.104200363	59.587741852	ARG	339	NC	N	-0.450
HH11	48.765419006	29.408170700	58.636268616	ARG	339	HC	H	0.350
HH12	48.034191132	28.312719345	59.747390747	ARG	339	HC	H	0.350
NH2	49.162570953	29.029060364	61.787879944	ARG	339	NC	N	-0.450
HH21	49.538978577	29.367330551	62.662231445	ARG	339	HC	H	0.350
HH22	48.736091614	28.113830566	61.770748138	ARG	339	HC	H	0.350
N	48.149269104	34.934951782	56.841461182	GLN	340	NP	N	-0.400
HN	48.772861481	35.031311035	57.618968964	GLN	340	H	H	0.250
CA	48.417881012	35.805469513	55.701839447	GLN	340	CT	C	0.050
HA	48.164840698	35.267879486	54.787708282	GLN	340	HA	H	0.050
C	49.922271729	36.098819733	55.707698822	GLN	340	C	C	0.600
O	50.579139709	35.956920624	56.731201172	GLN	340	O	O	-0.550
CB	47.649059296	37.136951447	55.844150543	GLN	340	CT	C	-0.100
HB1	47.865821838	37.560459137	56.825698853	GLN	340	HA	H	0.050
HB2	48.025749207	37.865280151	55.122329712	GLN	340	HA	H	0.050
CG	46.122570038	37.038219452	55.679809570	GLN	340	CT	C	-0.100
HG1	45.693489075	36.238529205	56.281749725	GLN	340	HA	H	0.050
HG2	45.662540436	37.963459015	56.026100159	GLN	340	HA	H	0.050
CD	45.725578308	36.869609833	54.208259583	GLN	340	C	C	0.550
OE1	45.627979279	37.831241608	53.460510254	GLN	340	O	O	-0.550
NE2	45.491409302	35.608951569	53.844818115	GLN	340	NP	N	-0.600
HE21	45.235748291	35.411098480	52.898509979	GLN	340	H	H	0.300
HE22	45.599918365	34.860080719	54.506019592	GLN	340	H	H	0.300
N	50.395721436	36.517848969	54.521869659	SER	341	NP	N	-0.400
HN	49.763099670	36.564331055	53.743091583	SER	341	H	H	0.250
CA	51.753131866	36.984481812	54.286479950	SER	341	CT	C	0.050
HA	52.053211212	37.563591003	55.160198212	SER	341	HA	H	0.050
C	51.674549103	37.898029327	53.061889648	SER	341	C	C	0.600
O	50.696090698	37.874080658	52.324760437	SER	341	O	O	-0.550
CB	52.721340179	35.814079285	54.009719849	SER	341	CT	C	0.050
HB1	52.672840118	35.472751617	52.968929291	SER	341	HA	H	0.100
HB2	53.753379822	36.138969421	54.158210754	SER	341	HA	H	0.100
OG	52.490421295	34.716701508	54.871120453	SER	341	OT	O	-0.650
HG	51.568351746	34.463901520	54.789539337	SER	341	HO	H	0.400
N	52.742740631	38.687580109	52.885749817	PHE	342	NP	N	-0.400
HN	53.515529633	38.634899139	53.514640808	PHE	342	H	H	0.250
CA	52.838241577	39.497978210	51.679389954	PHE	342	CT	C	0.050
HA	51.832649231	39.787418365	51.365921021	PHE	342	HA	H	0.050
C	53.475219727	38.629768372	50.584331512	PHE	342	C	C	0.600
O	53.651348114	37.426010132	50.743499756	PHE	342	O	O	-0.550
CB	53.677330017	40.752269745	51.980770111	PHE	342	CT	C	-0.100
HB1	54.714488983	40.478630066	52.172500610	PHE	342	HA	H	0.050
HB2	53.696178436	41.424819946	51.122341156	PHE	342	HA	H	0.050
CG	53.131580353	41.509361267	53.162300110	PHE	342	C6R	C	0.000
CD1	52.043560028	42.363220215	53.011848450	PHE	342	C6R	C	-0.130
HD1	51.586128235	42.490409851	52.041610718	PHE	342	HA	H	0.130
CD2	53.702541351	41.361198425	54.422290802	PHE	342	C6R	C	-0.130
HD2	54.543281555	40.699459076	54.551628113	PHE	342	HA	H	0.130
CE1	51.534629822	43.055980682	54.102989197	PHE	342	C6R	C	-0.130
HE1	50.688579559	43.715309143	53.974899292	PHE	342	HA	H	0.130
CE2	53.198131561	42.052448273	55.515800476	PHE	342	C6R	C	-0.130
HE2	53.650318146	41.929740906	56.489288330	PHE	342	HA	H	0.130
CZ	52.111621857	42.901149750	55.356170654	PHE	342	C6R	C	-0.130
HZ	51.715408325	43.440029144	56.204650879	PHE	342	HA	H	0.130
N	53.835979462	39.328838348	49.496238708	PHE	343	NP	N	-0.400
HN	53.648868561	40.308288574	49.450420380	PHE	343	H	H	0.250

CA	54.748779297	38.780609131	48.507030487	PHE	343	CT	C	0.050
HA	54.770278931	37.697578430	48.602771759	PHE	343	HA	H	0.050
C	56.117469788	39.359748840	48.874469757	PHE	343	C	C	0.600
O	56.261260986	40.571128845	48.968940735	PHE	343	O	O	-0.550
CB	54.285179138	39.195598602	47.100860596	PHE	343	CT	C	-0.100
HB1	54.257541656	40.281940460	47.005348206	PHE	343	HA	H	0.050
HB2	54.993598938	38.836978912	46.356178284	PHE	343	HA	H	0.050
CG	52.929279327	38.619239807	46.783538818	PHE	343	C6R	C	0.000
CD1	52.820209503	37.313739777	46.318908691	PHE	343	C6R	C	-0.130
HD1	53.709999084	36.721008301	46.164939880	PHE	343	HA	H	0.130
CD2	51.767578125	39.364868164	46.967159271	PHE	343	C6R	C	-0.130
HD2	51.830440521	40.384319305	47.317939758	PHE	343	HA	H	0.130
CE1	51.577049255	36.750598907	46.067550659	PHE	343	C6R	C	-0.130
HE1	51.517711639	35.724971771	45.733409882	PHE	343	HA	H	0.130
CE2	50.520660400	38.806869507	46.709491730	PHE	343	C6R	C	-0.130
HE2	49.624080658	39.390518188	46.861438751	PHE	343	HA	H	0.130
CZ	50.423751831	37.496051788	46.264060974	PHE	343	C6R	C	-0.130
HZ	49.454879761	37.054359436	46.076950073	PHE	343	HA	H	0.130
N	57.065330505	38.446250916	49.163700104	SER	344	NP	N	-0.400
HN	56.882831573	37.494400024	48.902629852	SER	344	H	H	0.250
CA	58.329059601	38.842769623	49.794681549	SER	344	CT	C	0.050
HA	58.869968414	37.925170898	50.015899658	SER	344	HA	H	0.050
C	58.091091156	39.568599701	51.140518188	SER	344	C	C	0.600
O	58.411060333	40.736778259	51.319770813	SER	344	O	O	-0.550
CB	59.182800293	39.634761810	48.802360535	SER	344	CT	C	0.050
HB1	58.646450043	40.527000427	48.453491211	SER	344	HA	H	0.100
HB2	60.109230042	39.970279694	49.274700165	SER	344	HA	H	0.100
OG	59.504318237	38.723918915	47.757251740	SER	344	OT	O	-0.650
HG	59.595970154	39.166179657	46.905338287	SER	344	HO	H	0.400
N	57.506900787	38.782768250	52.073810577	ASP	345	NP	N	-0.400
HN	57.301971436	37.824150085	51.879451752	ASP	345	H	H	0.250
CA	57.185478210	39.307819366	53.399761200	ASP	345	CT	C	0.050
HA	56.635910034	40.229080200	53.217960358	ASP	345	HA	H	0.050
C	58.480621338	39.612541199	54.200588226	ASP	345	C	C	0.600
O	59.545459747	39.103378296	53.872009277	ASP	345	O	O	-0.550
CB	56.290298462	38.286830902	54.148620605	ASP	345	CT	C	-0.250
HB1	55.753601074	38.774349213	54.960788727	ASP	345	HA	H	0.050
HB2	55.531021118	37.881919861	53.479019165	ASP	345	HA	H	0.050
CG	57.098178864	37.125858307	54.760421753	ASP	345	C	C	0.350
OD1	57.242618561	36.082588196	54.137081146	ASP	345	OC	O	-0.600
OD2	57.626140594	37.275428772	55.860298157	ASP	345	OC	O	-0.600
N	58.329509735	40.419181824	55.293750763	PRO	346	NX	N	-0.250
CA	59.330818176	40.504169464	56.363239288	PRO	346	CT	C	0.050
HA	60.212089539	40.991630554	55.944259644	PRO	346	HA	H	0.050
C	59.800621033	39.126041412	56.912750244	PRO	346	C	C	0.600
O	60.560398102	38.416049957	56.265758514	PRO	346	O	O	-0.550
CB	58.684329987	41.451091766	57.400108337	PRO	346	CT	C	-0.100
HB1	58.102710724	40.926738739	58.155239105	PRO	346	HA	H	0.050
HB2	59.417449951	42.071418762	57.916439056	PRO	346	HA	H	0.050
CG	57.678668976	42.270999908	56.592929840	PRO	346	CT	C	-0.100
HG1	56.870910645	42.678531647	57.201549530	PRO	346	HA	H	0.050
HG2	58.190528870	43.106548309	56.113361359	PRO	346	HA	H	0.050
CD	57.182598114	41.297180176	55.525699615	PRO	346	CT	C	0.000
HD1	56.346790314	40.710880280	55.904289246	PRO	346	HA	H	0.050
HD2	56.878559113	41.829978943	54.623901367	PRO	346	HA	H	0.050
N	59.337661743	38.775341034	58.130371094	ALA	347	NP	N	-0.400
HN	58.742858887	39.386150360	58.646018982	ALA	347	H	H	0.250
CA	59.637329102	37.464019775	58.700790405	ALA	347	CT	C	0.050
HA	59.914779663	36.780490875	57.895599365	ALA	347	HA	H	0.050
C	58.376438141	36.899280548	59.375419617	ALA	347	C	C	0.600
O	58.432571411	36.235649109	60.406051636	ALA	347	O	O	-0.550
CB	60.787940979	37.597808838	59.706348419	ALA	347	CT	C	-0.150

HB1	61.685901642	37.972728729	59.214920044	ALA	347	HA	H	0.050
HB2	60.534309387	38.285068512	60.513839722	ALA	347	HA	H	0.050
HB3	61.037811279	36.635871887	60.153968811	ALA	347	HA	H	0.050
N	57.228839874	37.205551147	58.736709595	VAL	348	NP	N	-0.400
HN	57.269771576	37.587280273	57.808639526	VAL	348	H	H	0.250
CA	55.948131561	36.850139618	59.340431213	VAL	348	CT	C	0.050
HA	56.002670288	37.291648865	60.337688446	VAL	348	HA	H	0.050
C	55.766918182	35.325931549	59.595100403	VAL	348	C	C	0.600
O	55.280300140	34.941730499	60.656280518	VAL	348	O	O	-0.550
CB	54.748180389	37.540031433	58.645301819	VAL	348	CT	C	-0.050
HB	53.902259827	37.448108673	59.328651428	VAL	348	HA	H	0.050
CG1	55.010040283	39.042198181	58.448280334	VAL	348	CT	C	-0.150
HG11	55.300098419	39.519550323	59.384471893	VAL	348	HA	H	0.050
HG12	55.803550720	39.217998505	57.721038818	VAL	348	HA	H	0.050
HG13	54.116321564	39.548698425	58.082611084	VAL	348	HA	H	0.050
CG2	54.294471741	36.912181854	57.320049286	VAL	348	CT	C	-0.150
HG21	54.073890686	35.848949432	57.417251587	VAL	348	HA	H	0.050
HG22	53.378089905	37.387218475	56.971881866	VAL	348	HA	H	0.050
HG23	55.038520813	37.045940399	56.538700104	VAL	348	HA	H	0.050
N	56.166809082	34.425361633	58.643768311	PRO	349	NX	N	-0.250
CA	55.923221588	33.007461548	58.891578674	PRO	349	CT	C	0.050
HA	54.915760040	32.832988739	59.273120880	PRO	349	HA	H	0.050
C	56.944629669	32.413158417	59.875301361	PRO	349	C	C	0.600
O	56.708690643	31.397159576	60.512771606	PRO	349	O	O	-0.550
CB	56.092708588	32.384189606	57.502571106	PRO	349	CT	C	-0.100
HB1	56.391071320	31.339979172	57.506240845	PRO	349	HA	H	0.050
HB2	55.139759064	32.447940826	56.986339569	PRO	349	HA	H	0.050
CG	57.087558746	33.285568237	56.776088715	PRO	349	CT	C	-0.100
HG1	58.108089447	32.986919403	57.021198273	PRO	349	HA	H	0.050
HG2	56.984649658	33.248588562	55.691390991	PRO	349	HA	H	0.050
CD	56.810558319	34.675071716	57.343940735	PRO	349	CT	C	0.000
HD1	57.752689362	35.209510803	57.426658630	PRO	349	HA	H	0.050
HD2	56.141799927	35.214408875	56.679851532	PRO	349	HA	H	0.050
N	58.081249237	33.118621826	59.998939514	VAL	350	NP	N	-0.400
HN	58.163848877	34.009239197	59.551830292	VAL	350	H	H	0.250
CA	59.239219666	32.540248871	60.669281006	VAL	350	CT	C	0.050
HA	59.479148865	31.620569229	60.133991241	VAL	350	HA	H	0.050
C	58.905570984	32.173858643	62.121379852	VAL	350	C	C	0.600
O	59.174671173	31.083419800	62.608638763	VAL	350	O	O	-0.550
CB	60.411689758	33.535751343	60.580631256	VAL	350	CT	C	-0.050
HB	60.193420410	34.410511017	61.195400238	VAL	350	HA	H	0.050
CG1	61.716670990	32.915889740	61.092079163	VAL	350	CT	C	-0.150
HG11	61.975788116	32.021369934	60.526168823	VAL	350	HA	H	0.050
HG12	62.549060822	33.614868164	61.006881714	VAL	350	HA	H	0.050
HG13	61.635131836	32.637939453	62.141201019	VAL	350	HA	H	0.050
CG2	60.594810486	34.027919769	59.142398834	VAL	350	CT	C	-0.150
HG21	60.612751007	33.190219879	58.452148438	VAL	350	HA	H	0.050
HG22	59.787761688	34.674678802	58.812538147	VAL	350	HA	H	0.050
HG23	61.522701263	34.588451385	59.025459290	VAL	350	HA	H	0.050
N	58.278381348	33.166751862	62.774520874	LYS	351	NP	N	-0.400
HN	58.076419830	34.009941101	62.272811890	LYS	351	H	H	0.250
CA	57.976131439	32.993728638	64.188278198	LYS	351	CT	C	0.050
HA	58.843288422	32.493980408	64.620796204	LYS	351	HA	H	0.050
C	56.776050568	32.046398163	64.388458252	LYS	351	C	C	0.600
O	56.673580170	31.359329224	65.397018433	LYS	351	O	O	-0.550
CB	57.799369812	34.380161285	64.830307007	LYS	351	CT	C	-0.100
HB1	58.358989716	35.117008209	64.252792358	LYS	351	HA	H	0.050
HB2	56.758148193	34.699920654	64.762260437	LYS	351	HA	H	0.050
CG	58.282619476	34.464790344	66.288711548	LYS	351	CT	C	-0.100
HG1	58.167648315	35.495479584	66.626617432	LYS	351	HA	H	0.050
HG2	57.625789642	33.869350433	66.920112610	LYS	351	HA	H	0.050
CD	59.741130829	34.019931793	66.525901794	LYS	351	CT	C	-0.100

HD1	60.042530060	34.343101501	67.523063660	LYS	351	HA	H	0.050
HD2	59.787998199	32.930240631	66.547912598	LYS	351	HA	H	0.050
CE	60.746101379	34.543968201	65.484863281	LYS	351	CT	C	0.050
HE1	60.524120331	34.125999451	64.501281738	LYS	351	HA	H	0.100
HE2	60.697071075	35.630218506	65.392898560	LYS	351	HA	H	0.100
NZ	62.125350952	34.173931122	65.795303345	LYS	351	NT	N	-0.300
HZ1	62.188751221	33.157730103	66.032928467	LYS	351	HC	H	0.350
HZ2	62.729770660	34.210178375	64.939270020	LYS	351	HC	H	0.350
HZ3	62.549171448	34.735660553	66.555923462	LYS	351	HC	H	0.350
N	55.905811310	31.997209549	63.353309631	ASN	352	NP	N	-0.400
HN	56.082431793	32.562061310	62.547721863	ASN	352	H	H	0.250
CA	54.832370758	30.994449615	63.342468262	ASN	352	CT	C	0.050
HA	54.242469788	31.134370804	64.250526428	ASN	352	HA	H	0.050
C	55.446250916	29.578420639	63.391998291	ASN	352	C	C	0.600
O	54.979888916	28.683670044	64.088020325	ASN	352	O	O	-0.550
CB	53.947860718	31.128009796	62.078830719	ASN	352	CT	C	-0.100
HB1	54.528518677	31.324399948	61.183879852	ASN	352	HA	H	0.050
HB2	53.424468994	30.193279266	61.882320404	ASN	352	HA	H	0.050
CG	52.854259491	32.192901611	62.201698303	ASN	352	C	C	0.550
OD1	51.710739136	31.883960724	62.506431580	ASN	352	O	O	-0.550
ND2	53.233470917	33.445510864	61.919578552	ASN	352	NP	N	-0.600
HD21	52.543319702	34.162139893	62.005359650	ASN	352	H	H	0.300
HD22	54.144748688	33.737411499	61.615840912	ASN	352	H	H	0.300
N	56.545490265	29.452079773	62.629249573	LEU	353	NP	N	-0.400
HN	56.865341187	30.236770630	62.090091705	LEU	353	H	H	0.250
CA	57.231769562	28.176710129	62.433128357	LEU	353	CT	C	0.050
HA	56.473171234	27.398740768	62.430820465	LEU	353	HA	H	0.050
C	58.234970093	27.855449677	63.562801361	LEU	353	C	C	0.600
O	59.099788666	26.987110138	63.437870026	LEU	353	O	O	-0.550
CB	57.931190491	28.243909836	61.071578979	LEU	353	CT	C	-0.100
HB1	58.640548706	29.072189331	61.095890045	LEU	353	HA	H	0.050
HB2	58.521041870	27.343090057	60.893508911	LEU	353	HA	H	0.050
CG	56.938110352	28.450239182	59.913558960	LEU	353	CT	C	-0.050
HG	56.156810760	29.146240234	60.210121155	LEU	353	HA	H	0.050
CD1	57.622531891	29.078699112	58.701248169	LEU	353	CT	C	-0.150
HD11	58.314689636	28.388040543	58.235191345	LEU	353	HA	H	0.050
HD12	56.889629364	29.365470886	57.954540253	LEU	353	HA	H	0.050
HD13	58.175731659	29.975210190	58.976238251	LEU	353	HA	H	0.050
CD2	56.230339050	27.147420883	59.549148560	LEU	353	CT	C	-0.150
HD21	56.937290192	26.377000809	59.241191864	LEU	353	HA	H	0.050
HD22	55.661621094	26.772790909	60.394500732	LEU	353	HA	H	0.050
HD23	55.521160126	27.310800552	58.743560791	LEU	353	HA	H	0.050
N	58.051479340	28.600509644	64.669937134	LYS	354	NP	N	-0.400
HN	57.363208771	29.323350906	64.655006409	LYS	354	H	H	0.250
CA	58.811641693	28.395650864	65.888969421	LYS	354	CT	C	0.050
HA	59.390319824	27.475940704	65.786651611	LYS	354	HA	H	0.050
C	57.818359375	28.202989578	67.047096252	LYS	354	C	C	0.600
O	57.787399292	27.174310684	67.707031250	LYS	354	O	O	-0.550
CB	59.736858368	29.609640121	66.082168579	LYS	354	CT	C	-0.100
HB1	60.249061584	29.817359924	65.140907288	LYS	354	HA	H	0.050
HB2	59.150409698	30.505420685	66.290176392	LYS	354	HA	H	0.050
CG	60.795749664	29.420209885	67.175910950	LYS	354	CT	C	-0.100
HG1	61.328071594	30.363059998	67.289337158	LYS	354	HA	H	0.050
HG2	60.320388794	29.233900070	68.139808655	LYS	354	HA	H	0.050
CD	61.790008545	28.291149139	66.853149414	LYS	354	CT	C	-0.100
HD1	61.345798492	27.338420868	67.144836426	LYS	354	HA	H	0.050
HD2	61.954101562	28.221860886	65.777328491	LYS	354	HA	H	0.050
CE	63.139160156	28.468389511	67.561309814	LYS	354	CT	C	0.050
HE1	62.995361328	28.722209930	68.613006592	LYS	354	HA	H	0.100
HE2	63.713630676	27.540920258	67.522720337	LYS	354	HA	H	0.100
NZ	63.952640533	29.509849548	66.936378479	LYS	354	NT	N	-0.300
HZ1	63.411361694	30.393339157	66.806976318	LYS	354	HC	H	0.350

HZ2	64.820823669	29.707490921	67.468261719	LYS	354	HC	H	0.350
HZ3	64.237762451	29.209280014	65.980270386	LYS	354	HC	H	0.350
N	56.990879059	29.249170303	67.236518860	ARG	355	NP	N	-0.400
HN	57.063331604	30.041839600	66.629638672	ARG	355	H	H	0.250
CA	56.040008545	29.302549362	68.345329285	ARG	355	CT	C	0.050
HA	56.619338989	29.234140396	69.267417908	ARG	355	HA	H	0.050
C	55.036251068	28.136089325	68.319847107	ARG	355	C	C	0.600
O	54.618888855	27.627180099	69.350997925	ARG	355	O	O	-0.550
CB	55.266700745	30.629180908	68.281486511	ARG	355	CT	C	-0.100
HB1	54.803070068	30.733070374	67.298606873	ARG	355	HA	H	0.050
HB2	54.449958801	30.601629257	69.004699707	ARG	355	HA	H	0.050
CG	56.143989563	31.855909348	68.570381165	ARG	355	CT	C	-0.100
HG1	56.527198792	31.790220261	69.588371277	ARG	355	HA	H	0.050
HG2	57.019168854	31.847309113	67.920242310	ARG	355	HA	H	0.050
CD	55.389320374	33.178779602	68.363128662	ARG	355	CT	C	0.000
HD1	55.982608795	34.049110413	68.648170471	ARG	355	HA	H	0.050
HD2	55.125141144	33.299278259	67.311286926	ARG	355	HA	H	0.050
NE	54.126609802	33.205520630	69.099220276	ARG	355	NP	N	-0.400
HE	53.304309845	33.047309875	68.549858093	ARG	355	H	H	0.300
CZ	54.043460846	33.417060852	70.432739258	ARG	355	C	C	0.500
NH1	55.145709991	33.631401062	71.146018982	ARG	355	NC	N	-0.450
HH11	56.029781342	33.629039764	70.680076599	ARG	355	HC	H	0.350
HH12	55.121410370	33.793540955	72.132316589	ARG	355	HC	H	0.350
NH2	52.851860046	33.407741547	71.026008606	ARG	355	NC	N	-0.450
HH21	52.022178650	33.234558105	70.494033813	ARG	355	HC	H	0.350
HH22	52.755588531	33.570331573	72.008422852	ARG	355	HC	H	0.350
N	54.664009094	27.754299164	67.085021973	GLN	356	NP	N	-0.400
HN	55.033668518	28.206480026	66.269691467	GLN	356	H	H	0.250
CA	53.667430878	26.698789597	66.933578491	GLN	356	CT	C	0.050
HA	52.943279266	26.779819489	67.746757507	GLN	356	HA	H	0.050
C	54.316291809	25.299970627	66.978012085	GLN	356	C	C	0.600
O	53.640499115	24.281980515	66.869132996	GLN	356	O	O	-0.550
CB	52.962810516	26.897720337	65.584976196	GLN	356	CT	C	-0.100
HB1	53.690410614	26.734899521	64.789398193	GLN	356	HA	H	0.050
HB2	52.208999634	26.121500015	65.457771301	GLN	356	HA	H	0.050
CG	52.305938721	28.290910721	65.456199646	GLN	356	CT	C	-0.100
HG1	51.540260315	28.414119720	66.222038269	GLN	356	HA	H	0.050
HG2	53.028549194	29.092899323	65.601531982	GLN	356	HA	H	0.050
CD	51.644779205	28.509880066	64.089218140	GLN	356	C	C	0.550
OE1	50.523059845	28.987539291	63.985179901	GLN	356	O	O	-0.550
NE2	52.382621765	28.101310730	63.051559448	GLN	356	NP	N	-0.600
HE21	51.983978271	28.050750732	62.137409210	GLN	356	H	H	0.300
HE22	53.338970184	27.852970123	63.221328735	GLN	356	H	H	0.300
N	55.655040741	25.304000854	67.082176208	ASP	357	NP	N	-0.400
HN	56.144668579	26.112909317	67.412063599	ASP	357	H	H	0.250
CA	56.509479523	24.238630295	66.571281433	ASP	357	CT	C	0.050
HA	57.496078491	24.473640442	66.971443176	ASP	357	HA	H	0.050
C	56.559310913	24.426649094	65.049148560	ASP	357	C	C	0.600
O	57.493450165	24.992910385	64.500717163	ASP	357	O	O	-0.550
CB	56.154258728	22.762140274	66.932388306	ASP	357	CT	C	-0.250
HB1	55.331451416	22.383430481	66.328422546	ASP	357	HA	H	0.050
HB2	57.011341095	22.133739471	66.688880920	ASP	357	HA	H	0.050
CG	55.759738922	22.467119217	68.381378174	ASP	357	C	C	0.350
OD1	55.727329254	23.355590820	69.220291138	ASP	357	OC	O	-0.600
OD2	55.356208801	21.339380264	68.664062500	ASP	357	OC	O	-0.600
N	55.480319977	23.908100128	64.427619934	ALA	358	NP	N	-0.400
HN	54.729660034	23.612890244	65.022262573	ALA	358	H	H	0.250
CA	55.409759521	23.626300812	63.001041412	ALA	358	CT	C	0.050
HA	54.376430511	23.321489334	62.826179504	ALA	358	HA	H	0.050
C	56.344390869	22.453329086	62.671730042	ALA	358	C	C	0.600
O	57.559459686	22.592260361	62.552688599	ALA	358	O	O	-0.550
CB	55.715690613	24.846399307	62.132190704	ALA	358	CT	C	-0.150

HB1	55.093399048	25.688119888	62.432060242	ALA	358	HA	H	0.050
HB2	56.761180878	25.148239136	62.193801880	ALA	358	HA	H	0.050
HB3	55.505809784	24.627119064	61.084991455	ALA	358	HA	H	0.050
N	55.687450409	21.288669586	62.553291321	ARG	359	NP	N	-0.400
HN	54.698249817	21.258680344	62.726409912	ARG	359	H	H	0.250
CA	56.397510529	20.062219620	62.214401245	ARG	359	CT	C	0.050
HA	57.394008636	20.111980438	62.656719208	ARG	359	HA	H	0.050
C	56.566680908	19.946989059	60.688259125	ARG	359	C	C	0.600
O	57.457511902	19.269689560	60.189849854	ARG	359	O	O	-0.550
CB	55.631301880	18.869859695	62.797729492	ARG	359	CT	C	-0.100
HB1	54.694271088	18.750059128	62.250671387	ARG	359	HA	H	0.050
HB2	56.207370758	17.957599640	62.637248993	ARG	359	HA	H	0.050
CG	55.305450439	19.024879456	64.294082642	ARG	359	CT	C	-0.100
HG1	54.662689209	19.890600204	64.438018799	ARG	359	HA	H	0.050
HG2	54.723030090	18.164239883	64.621002197	ARG	359	HA	H	0.050
CD	56.537780762	19.189479828	65.192543030	ARG	359	CT	C	0.000
HD1	57.228099823	18.347639084	65.121658325	ARG	359	HA	H	0.050
HD2	57.091850281	20.092500687	64.934852600	ARG	359	HA	H	0.050
NE	56.126720428	19.364999771	66.583312988	ARG	359	NP	N	-0.400
HE	56.058681488	20.299949646	66.951469421	ARG	359	H	H	0.300
CZ	55.803840637	18.345319748	67.405647278	ARG	359	C	C	0.500
NH1	55.858249664	17.086109161	66.976287842	ARG	359	NC	N	-0.450
HH11	56.138278961	16.904880524	66.033218384	ARG	359	HC	H	0.350
HH12	55.628318787	16.308839798	67.560966492	ARG	359	HC	H	0.350
NH2	55.429920197	18.629890442	68.647750854	ARG	359	NC	N	-0.450
HH21	55.396869659	19.604499817	68.917266846	ARG	359	HC	H	0.350
HH22	55.181400299	17.932500839	69.317497253	ARG	359	HC	H	0.350
N	55.684120178	20.688779831	59.989448547	ILE	360	NP	N	-0.400
HN	54.974731445	21.220790863	60.451370239	ILE	360	H	H	0.250
CA	55.824989319	20.936500549	58.561038971	ILE	360	CT	C	0.050
HA	56.877811432	20.825309753	58.310588837	ILE	360	HA	H	0.050
C	55.403759003	22.399250031	58.365520477	ILE	360	C	C	0.600
O	54.798198700	22.980339050	59.262489319	ILE	360	O	O	-0.550
CB	54.947311401	19.966949463	57.719928741	ILE	360	CT	C	-0.050
HB	55.362319946	19.964139938	56.712249756	ILE	360	HA	H	0.050
CG1	53.482849121	20.436050415	57.596240997	ILE	360	CT	C	-0.100
HG11	53.103111267	20.611629486	58.596759796	ILE	360	HA	H	0.050
HG12	53.425189972	21.390020370	57.075191498	ILE	360	HA	H	0.050
CG2	55.017929077	18.523500443	58.254451752	ILE	360	CT	C	-0.150
HG21	56.047218323	18.204860687	58.407138824	ILE	360	HA	H	0.050
HG22	54.492061615	18.420579910	59.204429626	ILE	360	HA	H	0.050
HG23	54.566818237	17.813819885	57.561580658	ILE	360	HA	H	0.050
CD1	52.559841156	19.475650787	56.847801208	ILE	360	CT	C	-0.150
HD11	52.938011169	19.243440628	55.855678558	ILE	360	HA	H	0.050
HD12	52.443988800	18.544589996	57.398559570	ILE	360	HA	H	0.050
HD13	51.569900513	19.913049698	56.721199036	ILE	360	HA	H	0.050
N	55.665641785	22.914989471	57.148071289	ILE	361	NP	N	-0.400
HN	56.204498291	22.369630814	56.498771667	ILE	361	H	H	0.250
CA	54.836391449	24.005029678	56.635360718	ILE	361	CT	C	0.050
HA	54.063411713	24.206699371	57.370681763	ILE	361	HA	H	0.050
C	54.185558319	23.470050812	55.361038208	ILE	361	C	C	0.600
O	54.733100891	22.597000122	54.701889038	ILE	361	O	O	-0.550
CB	55.622859955	25.311719894	56.376438141	ILE	361	CT	C	-0.050
HB	56.266948700	25.456390381	57.242160797	ILE	361	HA	H	0.050
CG1	54.709129333	26.548650742	56.302429199	ILE	361	CT	C	-0.100
HG11	53.998329163	26.460210800	55.484100342	ILE	361	HA	H	0.050
HG12	54.110050201	26.615100861	57.210319519	ILE	361	HA	H	0.050
CG2	56.517501831	25.262100220	55.131290436	ILE	361	CT	C	-0.150
HG21	55.951068878	25.128770828	54.209438324	ILE	361	HA	H	0.050
HG22	57.104179382	26.172079086	55.025520325	ILE	361	HA	H	0.050
HG23	57.226898193	24.456649780	55.221920013	ILE	361	HA	H	0.050
CD1	55.521461487	27.836910248	56.116508484	ILE	361	CT	C	-0.150

HD11	56.469299316	27.769449234	56.646129608	ILE	361	HA	H	0.050
HD12	55.759990692	28.003549576	55.066040039	ILE	361	HA	H	0.050
HD13	54.992549896	28.711790085	56.487308502	ILE	361	HA	H	0.050
N	53.032550812	24.060169220	55.040428162	VAL	362	NP	N	-0.400
HN	52.581199646	24.661800385	55.703891754	VAL	362	H	H	0.250
CA	52.443378448	23.967100143	53.720489502	VAL	362	CT	C	0.050
HA	53.135669708	23.448869705	53.060359955	VAL	362	HA	H	0.050
C	52.290920258	25.424329758	53.290489197	VAL	362	C	C	0.600
O	51.920299530	26.246170044	54.117488861	VAL	362	O	O	-0.550
CB	51.082859039	23.254480362	53.804809570	VAL	362	CT	C	-0.050
HB	50.379848480	23.910520554	54.320831299	VAL	362	HA	H	0.050
CG1	50.538879395	22.976070404	52.397888184	VAL	362	CT	C	-0.150
HG11	50.445869446	23.893970490	51.818450928	VAL	362	HA	H	0.050
HG12	51.201530457	22.308929443	51.845821381	VAL	362	HA	H	0.050
HG13	49.553009033	22.516490936	52.443099976	VAL	362	HA	H	0.050
CG2	51.153118134	21.961639404	54.633941650	VAL	362	CT	C	-0.150
HG21	51.842041016	21.237859726	54.198600769	VAL	362	HA	H	0.050
HG22	51.467651367	22.152170181	55.660198212	VAL	362	HA	H	0.050
HG23	50.171451569	21.497190475	54.699981689	VAL	362	HA	H	0.050
N	52.624599457	25.735399246	52.024650574	GLY	363	NP	N	-0.400
HN	52.906711578	25.013849258	51.385070801	GLY	363	H	H	0.250
CA	52.663940430	27.161260605	51.703170776	GLY	363	CT	C	0.000
HA1	51.836578369	27.674699783	52.198520660	GLY	363	HA	H	0.050
HA2	53.606140137	27.548990250	52.091148376	GLY	363	HA	H	0.050
C	52.607238770	27.428789139	50.205421448	GLY	363	C	C	0.600
O	53.546909332	27.171030045	49.468250275	GLY	363	O	O	-0.550
N	51.470279694	28.005010605	49.788719177	LEU	364	NP	N	-0.400
HN	50.733371735	28.148170471	50.445369720	LEU	364	H	H	0.250
CA	51.379299164	28.518850327	48.426628113	LEU	364	CT	C	0.050
HA	51.940250397	27.843750000	47.776840210	LEU	364	HA	H	0.050
C	52.067520142	29.896909714	48.349098206	LEU	364	C	C	0.600
O	51.434448242	30.939479828	48.255191803	LEU	364	O	O	-0.550
CB	49.923221588	28.524120331	47.926059723	LEU	364	CT	C	-0.100
HB1	49.936241150	28.934850693	46.914340973	LEU	364	HA	H	0.050
HB2	49.583488464	27.495460510	47.804901123	LEU	364	HA	H	0.050
CG	48.869060516	29.286739349	48.759651184	LEU	364	CT	C	-0.050
HG	49.245849609	30.273420334	49.024921417	LEU	364	HA	H	0.050
CD1	47.631969452	29.493959427	47.883659363	LEU	364	CT	C	-0.150
HD11	47.864601135	30.062149048	46.982608795	LEU	364	HA	H	0.050
HD12	47.224048615	28.533990860	47.570709229	LEU	364	HA	H	0.050
HD13	46.857818604	30.030019760	48.425109863	LEU	364	HA	H	0.050
CD2	48.454341888	28.564409256	50.055870056	LEU	364	CT	C	-0.150
HD21	48.370208740	27.487619400	49.905078888	LEU	364	HA	H	0.050
HD22	49.147571564	28.747760773	50.874771118	LEU	364	HA	H	0.050
HD23	47.481540680	28.911369324	50.403068542	LEU	364	HA	H	0.050
N	53.408859253	29.804279327	48.413650513	PHE	365	NP	N	-0.400
HN	53.812229156	28.887199402	48.466148376	PHE	365	H	H	0.250
CA	54.311721802	30.947509766	48.350269318	PHE	365	CT	C	0.050
HA	53.742351532	31.864889145	48.497859955	PHE	365	HA	H	0.050
C	54.904541016	30.986249924	46.935180664	PHE	365	C	C	0.600
O	55.509529114	30.026350021	46.475399017	PHE	365	O	O	-0.550
CB	55.408630371	30.769819260	49.424339294	PHE	365	CT	C	-0.100
HB1	55.632900238	29.714599609	49.582710266	PHE	365	HA	H	0.050
HB2	56.333370209	31.222410202	49.062938690	PHE	365	HA	H	0.050
CG	55.105319977	31.430849075	50.749908447	PHE	365	C6R	C	0.000
CD1	53.814121246	31.788139343	51.136138916	PHE	365	C6R	C	-0.130
HD1	52.958560944	31.530080795	50.531768799	PHE	365	HA	H	0.130
CD2	56.160690308	31.750619888	51.600070953	PHE	365	C6R	C	-0.130
HD2	57.167781830	31.468870163	51.336090088	PHE	365	HA	H	0.130
CE1	53.599658966	32.506008148	52.304080963	PHE	365	C6R	C	-0.130
HE1	52.599960327	32.805698395	52.579040527	PHE	365	HA	H	0.130
CE2	55.948440552	32.464481354	52.770408630	PHE	365	C6R	C	-0.130

HE2	56.780609131	32.733089447	53.403839111	PHE	365	HA	H	0.130
CZ	54.667198181	32.856338501	53.115909576	PHE	365	C6R	C	-0.130
HZ	54.502151489	33.436191559	54.014190674	PHE	365	HA	H	0.130
N	54.638999939	32.123229980	46.264930725	TYR	366	NP	N	-0.400
HN	54.179481506	32.868019104	46.755081177	TYR	366	H	H	0.250
CA	54.920749664	32.258159637	44.842041016	TYR	366	CT	C	0.050
HA	55.066131592	31.260799408	44.420478821	TYR	366	HA	H	0.050
C	56.228839874	33.021869659	44.584808350	TYR	366	C	C	0.600
O	57.156921387	32.476131439	44.001701355	TYR	366	O	O	-0.550
CB	53.729801178	32.945880890	44.138519287	TYR	366	CT	C	-0.100
HB1	53.213981628	33.623661041	44.820518494	TYR	366	HA	H	0.050
HB2	54.084720612	33.570041656	43.315959930	TYR	366	HA	H	0.050
CG	52.739730835	31.961019516	43.565128326	TYR	366	C6R	C	0.000
CD1	52.239360809	30.905670166	44.325809479	TYR	366	C6R	C	-0.130
HD1	52.543380737	30.775350571	45.353240967	TYR	366	HA	H	0.130
CD2	52.309970856	32.096401215	42.247409821	TYR	366	C6R	C	-0.130
HD2	52.673938751	32.908069611	41.635791779	TYR	366	HA	H	0.130
CE1	51.334159851	30.005310059	43.779079437	TYR	366	C6R	C	-0.130
HE1	50.951560974	29.188150406	44.373111725	TYR	366	HA	H	0.130
CE2	51.406169891	31.198289871	41.698158264	TYR	366	C6R	C	-0.130
HE2	51.098381042	31.326559067	40.670711517	TYR	366	HA	H	0.130
CZ	50.914779663	30.151380539	42.466350555	TYR	366	C6R	C	0.250
OH	50.017551422	29.246259689	41.940670013	TYR	366	OT	O	-0.650
HH	49.330421448	29.722600937	41.470249176	TYR	366	HO	H	0.400
N	56.205940247	34.326759338	44.938930511	GLU	367	NP	N	-0.400
HN	55.693130493	34.583030701	45.762481689	GLU	367	H	H	0.250
CA	57.126998901	35.278079987	44.317989349	GLU	367	CT	C	0.050
HA	57.042251587	35.071571350	43.250709534	GLU	367	HA	H	0.050
C	58.582778931	34.935619354	44.676139832	GLU	367	C	C	0.600
O	59.332328796	34.458450317	43.833389282	GLU	367	O	O	-0.550
CB	56.644329071	36.746299744	44.521991730	GLU	367	CT	C	-0.100
HB1	56.412319183	37.176239014	43.548439026	GLU	367	HA	H	0.050
HB2	55.684310913	36.715270996	45.034538269	GLU	367	HA	H	0.050
CG	57.527950287	37.766529083	45.280048370	GLU	367	CT	C	-0.250
HG1	56.948600769	38.675151825	45.434841156	GLU	367	HA	H	0.050
HG2	57.771938324	37.411018372	46.278610229	GLU	367	HA	H	0.050
CD	58.813861847	38.210239410	44.561691284	GLU	367	C	C	0.350
OE1	59.146991730	37.681819916	43.509220123	GLU	367	OC	O	-0.600
OE2	59.499031067	39.091640472	45.063159943	GLU	367	OC	O	-0.600
N	58.945701599	35.193531036	45.940788269	THR	368	NP	N	-0.400
HN	58.166069031	35.453380585	46.516799927	THR	368	H	H	0.250
CA	60.326831818	34.987228394	46.396751404	THR	368	CT	C	0.050
HA	60.639930725	34.026180267	45.984451294	THR	368	HA	H	0.050
C	60.381771088	34.824661255	47.933319092	THR	368	C	C	0.600
O	61.344570160	34.299949646	48.487060547	THR	368	O	O	-0.550
CB	61.281360626	36.093349457	45.879280090	THR	368	CT	C	0.150
HB	60.998428345	37.059509277	46.320259094	THR	368	HA	H	0.100
OG1	61.256038666	36.158668518	44.454158783	THR	368	OT	O	-0.650
HG1	60.428649902	36.581790924	44.189140320	THR	368	HO	H	0.400
CG2	62.743591309	35.843650818	46.272209167	THR	368	CT	C	-0.150
HG21	63.403831482	36.554641724	45.775859833	THR	368	HA	H	0.050
HG22	62.890628815	35.961711884	47.345691681	THR	368	HA	H	0.050
HG23	63.066799164	34.839118958	46.007911682	THR	368	HA	H	0.050
N	59.266819000	35.213890076	48.587310791	GLU	369	NP	N	-0.400
HN	58.564201355	35.762889862	48.136421204	GLU	369	H	H	0.250
CA	59.001411438	34.772399902	49.957130432	GLU	369	CT	C	0.050
HA	59.790019989	35.226150513	50.552970886	GLU	369	HA	H	0.050
C	59.088531494	33.237701416	50.112258911	GLU	369	C	C	0.600
O	59.323509216	32.736560822	51.199268341	GLU	369	O	O	-0.550
CB	57.645980835	35.278888702	50.487869263	GLU	369	CT	C	-0.100
HB1	57.559261322	35.011901855	51.542881012	GLU	369	HA	H	0.050
HB2	57.632808685	36.357879639	50.485031128	GLU	369	HA	H	0.050

CG	56.384490967	34.780841827	49.766830444	GLU	369	CT	C	-0.250
HG1	56.196849823	33.746231079	50.017181396	GLU	369	HA	H	0.050
HG2	55.524501801	35.340171814	50.131481171	GLU	369	HA	H	0.050
CD	56.458400726	34.867240906	48.244739532	GLU	369	C	C	0.350
OE1	56.236221313	35.940269470	47.695991516	GLU	369	OC	O	-0.600
OE2	56.771549225	33.864730835	47.614379883	GLU	369	OC	O	-0.600
N	58.929069519	32.526958466	48.983020782	ALA	370	NP	N	-0.400
HN	58.496829987	33.004741669	48.213699341	ALA	370	H	H	0.250
CA	59.246791840	31.105279922	48.916591644	ALA	370	CT	C	0.050
HA	58.593151093	30.616659164	49.634811401	ALA	370	HA	H	0.050
C	60.717689514	30.818189621	49.321640015	ALA	370	C	C	0.600
O	60.985721588	30.256250381	50.378391266	ALA	370	O	O	-0.550
CB	58.928958893	30.619529724	47.503910065	ALA	370	CT	C	-0.150
HB1	59.420551300	31.256750107	46.773029327	ALA	370	HA	H	0.050
HB2	59.253089905	29.590959549	47.341411591	ALA	370	HA	H	0.050
HB3	57.859531403	30.668039322	47.302398682	ALA	370	HA	H	0.050
N	61.656490326	31.266389847	48.456378937	ARG	371	NP	N	-0.400
HN	61.358898163	31.508739471	47.531658173	ARG	371	H	H	0.250
CA	63.098438263	31.127830505	48.709838867	ARG	371	CT	C	0.050
HA	63.335399628	30.080980301	48.563961029	ARG	371	HA	H	0.050
C	63.451000214	31.526990891	50.147689819	ARG	371	C	C	0.600
O	64.200798035	30.872619629	50.869178772	ARG	371	O	O	-0.550
CB	63.908931732	31.967840195	47.703979492	ARG	371	CT	C	-0.100
HB1	63.746650696	31.546289444	46.715240479	ARG	371	HA	H	0.050
HB2	63.513130188	32.983181000	47.653930664	ARG	371	HA	H	0.050
CG	65.429351807	31.995479584	47.978538513	ARG	371	CT	C	-0.100
HG1	65.710380554	31.183670044	48.650821686	ARG	371	HA	H	0.050
HG2	65.963813782	31.786979675	47.054180145	ARG	371	HA	H	0.050
CD	65.889396667	33.344169617	48.558948517	ARG	371	CT	C	0.000
HD1	65.756309509	34.164821625	47.851581573	ARG	371	HA	H	0.050
HD2	65.314567566	33.594520569	49.450870514	ARG	371	HA	H	0.050
NE	67.286750793	33.318008423	48.989318848	ARG	371	NP	N	-0.400
HE	67.440330505	33.271251678	49.976268768	ARG	371	H	H	0.300
CZ	68.331649780	33.384120941	48.131420135	ARG	371	C	C	0.500
NH1	68.127693176	33.411960602	46.827320099	ARG	371	NC	N	-0.450
HH11	67.205513000	33.408699036	46.457668304	ARG	371	HC	H	0.350
HH12	68.912536621	33.409759521	46.188671112	ARG	371	HC	H	0.350
NH2	69.576026917	33.417198181	48.587711334	ARG	371	NC	N	-0.450
HH21	69.794311523	33.416778564	49.559051514	ARG	371	HC	H	0.350
HH22	70.349342346	33.441028595	47.929931641	ARG	371	HC	H	0.350
N	62.823318481	32.659111023	50.488979340	LYS	372	NP	N	-0.400
HN	62.253631592	33.105701447	49.792209625	LYS	372	H	H	0.250
CA	62.954360962	33.217590332	51.814010620	LYS	372	CT	C	0.050
HA	64.014320374	33.436851501	51.951370239	LYS	372	HA	H	0.050
C	62.510120392	32.206871033	52.895671844	LYS	372	C	C	0.600
O	63.284881592	31.882350922	53.778450012	LYS	372	O	O	-0.550
CB	62.135871887	34.504680634	51.838069916	LYS	372	CT	C	-0.100
HB1	62.269828796	35.046211243	50.900478363	LYS	372	HA	H	0.050
HB2	61.088821411	34.230690002	51.882259369	LYS	372	HA	H	0.050
CG	62.487400055	35.444599152	52.990200043	LYS	372	CT	C	-0.100
HG1	62.500198364	34.896759033	53.926719666	LYS	372	HA	H	0.050
HG2	63.500061035	35.823009491	52.849510193	LYS	372	HA	H	0.050
CD	61.507438660	36.618591309	53.070850372	LYS	372	CT	C	-0.100
HD1	61.894180298	37.387191772	53.741909027	LYS	372	HA	H	0.050
HD2	61.444648743	37.090030670	52.089080811	LYS	372	HA	H	0.050
CE	60.099800110	36.204551697	53.522209167	LYS	372	CT	C	0.050
HE1	59.376960754	36.901790619	53.103160858	LYS	372	HA	H	0.100
HE2	59.795879364	35.217529297	53.177051544	LYS	372	HA	H	0.100
NZ	59.926788330	36.232059479	54.966930389	LYS	372	NT	N	-0.300
HZ1	60.229278564	37.160549164	55.329189301	LYS	372	HC	H	0.350
HZ2	58.903331757	36.134788513	55.178558350	LYS	372	HC	H	0.350
HZ3	60.485359192	35.483959198	55.450508118	LYS	372	HC	H	0.350

N	61.260871887	31.706329346	52.794319153	VAL	373	NP	N	-0.400
HN	60.724540710	31.871669769	51.966480255	VAL	373	H	H	0.250
CA	60.694049835	30.912359238	53.886371613	VAL	373	CT	C	0.050
HA	60.872688293	31.499879837	54.784961700	VAL	373	HA	H	0.050
C	61.440338135	29.585929871	54.064380646	VAL	373	C	C	0.600
O	61.429828644	28.998090744	55.139598846	VAL	373	O	O	-0.550
CB	59.167091370	30.712039948	53.759990692	VAL	373	CT	C	-0.050
HB	58.752700806	31.677299500	53.472400665	VAL	373	HA	H	0.050
CG1	58.755531311	29.685569763	52.692691803	VAL	373	CT	C	-0.150
HG11	59.184650421	28.702369690	52.880409241	VAL	373	HA	H	0.050
HG12	57.673061371	29.562349319	52.664451599	VAL	373	HA	H	0.050
HG13	59.070808411	30.002580643	51.704151154	VAL	373	HA	H	0.050
CG2	58.533821106	30.347219467	55.114078522	VAL	373	CT	C	-0.150
HG21	58.805721283	31.073749542	55.879718781	VAL	373	HA	H	0.050
HG22	57.445381165	30.330949783	55.048160553	VAL	373	HA	H	0.050
HG23	58.860561371	29.366369247	55.460498810	VAL	373	HA	H	0.050
N	62.117248535	29.147769928	52.981109619	PHE	374	NP	N	-0.400
HN	61.968898773	29.586580276	52.089061737	PHE	374	H	H	0.250
CA	63.130538940	28.123249054	53.217781067	PHE	374	CT	C	0.050
HA	62.668579102	27.321809769	53.787319183	PHE	374	HA	H	0.050
C	64.259498596	28.732589722	54.075119019	PHE	374	C	C	0.600
O	64.430961609	28.449779510	55.257930756	PHE	374	O	O	-0.550
CB	63.701671600	27.533609390	51.912509918	PHE	374	CT	C	-0.100
HB1	64.225769043	28.290319443	51.327350616	PHE	374	HA	H	0.050
HB2	64.449211121	26.777790070	52.157520294	PHE	374	HA	H	0.050
CG	62.672161102	26.881889343	51.028888702	PHE	374	C6R	C	0.000
CD1	62.276161194	27.506599426	49.855068207	PHE	374	C6R	C	-0.130
HD1	62.681098938	28.469860077	49.610340118	PHE	374	HA	H	0.130
CD2	62.122898102	25.643890381	51.343559265	PHE	374	C6R	C	-0.130
HD2	62.407169342	25.143449783	52.257450104	PHE	374	HA	H	0.130
CE1	61.368148804	26.913400650	48.993488312	PHE	374	C6R	C	-0.130
HE1	61.082351685	27.426189423	48.084869385	PHE	374	HA	H	0.130
CE2	61.210498810	25.042819977	50.483181000	PHE	374	C6R	C	-0.130
HE2	60.789100647	24.079620361	50.719501495	PHE	374	HA	H	0.130
CZ	60.835140228	25.672750473	49.306270599	PHE	374	C6R	C	-0.130
HZ	60.129028320	25.200580597	48.638141632	PHE	374	HA	H	0.130
N	65.037002563	29.577020645	53.379108429	CYS	375	NP	N	-0.350
HN	64.701858521	29.918159485	52.495239258	CYS	375	H	H	0.250
CA	66.391433716	29.844690323	53.831249237	CYS	375	CT	C	0.050
HA	66.839881897	28.861570358	53.979969025	CYS	375	HA	H	0.050
C	66.452293396	30.592639923	55.175811768	CYS	375	C	C	0.550
O	67.420799255	30.447650909	55.912479401	CYS	375	O	O	-0.550
CB	67.155830383	30.583950043	52.726871490	CYS	375	CT	C	0.100
HB1	66.954338074	30.091310501	51.774150848	CYS	375	HA	H	0.050
HB2	66.786392212	31.605009079	52.621448517	CYS	375	HA	H	0.050
SG	68.959968567	30.615390778	52.952758789	CYS	375	ST	S	-0.200
N	65.395820618	31.379819870	55.460758209	GLU	376	NP	N	-0.400
HN	64.642486572	31.422639847	54.808300018	GLU	376	H	H	0.250
CA	65.300521851	32.168178558	56.686088562	GLU	376	CT	C	0.050
HA	66.292213440	32.592590332	56.851169586	GLU	376	HA	H	0.050
C	64.980491638	31.240879059	57.875331879	GLU	376	C	C	0.600
O	65.645477295	31.251909256	58.906898499	GLU	376	O	O	-0.550
CB	64.286872864	33.337078094	56.515911102	GLU	376	CT	C	-0.100
HB1	64.496971130	34.100288391	57.266151428	GLU	376	HA	H	0.050
HB2	64.462478638	33.816688538	55.551979065	GLU	376	HA	H	0.050
CG	62.793628693	32.958080292	56.628501892	GLU	376	CT	C	-0.250
HG1	62.589469910	32.102901459	55.993389130	GLU	376	HA	H	0.050
HG2	62.575531006	32.655441284	57.650241852	GLU	376	HA	H	0.050
CD	61.793331146	34.076648712	56.258281708	GLU	376	C	C	0.350
OE1	62.092628479	35.257129669	56.397361755	GLU	376	OC	O	-0.600
OE2	60.680961609	33.778800964	55.831218719	GLU	376	OC	O	-0.600
N	63.934078217	30.413299561	57.669670105	VAL	377	NP	N	-0.400

HN	63.481788635	30.400289536	56.776119232	VAL	377	H	H	0.250
CA	63.418308258	29.639699936	58.795700073	VAL	377	CT	C	0.050
HA	63.419788361	30.321889877	59.647010803	VAL	377	HA	H	0.050
C	64.368148804	28.475189209	59.130401611	VAL	377	C	C	0.600
O	64.440162659	28.026430130	60.266750336	VAL	377	O	O	-0.550
CB	61.970169067	29.165719986	58.578441620	VAL	377	CT	C	-0.050
HB	61.989170074	28.299829483	57.918758392	VAL	377	HA	H	0.050
CG1	61.328361511	28.763719559	59.916149139	VAL	377	CT	C	-0.150
HG11	61.203479767	29.625669479	60.572849274	VAL	377	HA	H	0.050
HG12	60.343200684	28.332210541	59.751018524	VAL	377	HA	H	0.050
HG13	61.926860809	28.031009674	60.454330444	VAL	377	HA	H	0.050
CG2	61.086700439	30.227140427	57.914100647	VAL	377	CT	C	-0.150
HG21	61.463298798	30.537759781	56.945270538	VAL	377	HA	H	0.050
HG22	60.083740234	29.842130661	57.742141724	VAL	377	HA	H	0.050
HG23	61.006809235	31.109420776	58.541591644	VAL	377	HA	H	0.050
N	65.158927917	28.067310333	58.112628937	TYR	378	NP	N	-0.400
HN	64.937606812	28.365020752	57.178329468	TYR	378	H	H	0.250
CA	66.328872681	27.221769333	58.381099701	TYR	378	CT	C	0.050
HA	65.956039429	26.228870392	58.637451172	TYR	378	HA	H	0.050
C	67.138458252	27.770380020	59.588119507	TYR	378	C	C	0.600
O	67.518066406	27.046579361	60.498378754	TYR	378	O	O	-0.550
CB	67.231590271	27.186510086	57.127548218	TYR	378	CT	C	-0.100
HB1	66.991439819	28.024290085	56.473491669	TYR	378	HA	H	0.050
HB2	68.280860901	27.334480286	57.390579224	TYR	378	HA	H	0.050
CG	67.149559021	25.919929504	56.310100555	TYR	378	C6R	C	0.000
CD1	68.195259094	25.000669479	56.332370758	TYR	378	C6R	C	-0.130
HD1	69.034606934	25.149580002	56.995368958	TYR	378	HA	H	0.130
CD2	66.067550659	25.672389984	55.471240997	TYR	378	C6R	C	-0.130
HD2	65.218841553	26.333339691	55.469310760	TYR	378	HA	H	0.130
CE1	68.191558838	23.902299881	55.481361389	TYR	378	C6R	C	-0.130
HE1	69.012351990	23.201709747	55.493160248	TYR	378	HA	H	0.130
CE2	66.064140320	24.580400467	54.612728119	TYR	378	C6R	C	-0.130
HE2	65.221229553	24.419879913	53.956359863	TYR	378	HA	H	0.130
CZ	67.146308899	23.712650299	54.591541290	TYR	378	C6R	C	0.250
OH	67.222221375	22.691350937	53.666561127	TYR	378	OT	O	-0.650
HH	66.443572998	22.125009537	53.726799011	TYR	378	HO	H	0.400
N	67.360977173	29.100469589	59.529209137	LYS	379	NP	N	-0.400
HN	66.911773682	29.649909973	58.821929932	LYS	379	H	H	0.250
CA	68.207252502	29.767610550	60.517169952	LYS	379	CT	C	0.050
HA	69.045356750	29.094049454	60.709270477	LYS	379	HA	H	0.050
C	67.445793152	29.960359573	61.838348389	LYS	379	C	C	0.600
O	68.010429382	29.858160019	62.918548584	LYS	379	O	O	-0.550
CB	68.759002686	31.096340179	59.963550568	LYS	379	CT	C	-0.100
HB1	68.067382812	31.916679382	60.165199280	LYS	379	HA	H	0.050
HB2	69.682792664	31.341220856	60.489421844	LYS	379	HA	H	0.050
CG	69.002372742	31.032089233	58.449710846	LYS	379	CT	C	-0.100
HG1	69.364067078	30.040710449	58.174079895	LYS	379	HA	H	0.050
HG2	68.034797668	31.170339584	57.975448608	LYS	379	HA	H	0.050
CD	69.977462769	32.077751160	57.896938324	LYS	379	CT	C	-0.100
HD1	69.729080200	33.064308167	58.290958405	LYS	379	HA	H	0.050
HD2	70.983398438	31.851179123	58.253009796	LYS	379	HA	H	0.050
CE	69.960853577	32.127479553	56.358650208	LYS	379	CT	C	0.050
HE1	69.068702698	32.656639099	56.017120361	LYS	379	HA	H	0.100
HE2	70.826179504	32.675788879	55.982139587	LYS	379	HA	H	0.100
NZ	69.937568665	30.804399490	55.731109619	LYS	379	NT	N	-0.300
HZ1	70.723716736	30.206329346	56.050628662	LYS	379	HC	H	0.350
HZ2	69.030220032	30.348569870	55.984008789	LYS	379	HC	H	0.350
HZ3	69.950668335	30.867879868	54.691368103	LYS	379	HC	H	0.350
N	66.119689941	30.169929504	61.701698303	GLU	380	NP	N	-0.400
HN	65.761703491	30.358039856	60.783271790	GLU	380	H	H	0.250
CA	65.255271912	30.152059555	62.887889862	GLU	380	CT	C	0.050
HA	65.621276855	30.938100815	63.550628662	GLU	380	HA	H	0.050

C	65.351387024	28.796020508	63.625568390	GLU	380	C	C	0.600
O	65.222160339	28.711870193	64.843582153	GLU	380	O	O	-0.550
CB	63.801071167	30.438289642	62.474800110	GLU	380	CT	C	-0.100
HB1	63.777599335	31.359329224	61.893180847	GLU	380	HA	H	0.050
HB2	63.455028534	29.651590347	61.806690216	GLU	380	HA	H	0.050
CG	62.797031403	30.539880753	63.641521454	GLU	380	CT	C	-0.250
HG1	61.786968231	30.640459061	63.242858887	GLU	380	HA	H	0.050
HG2	62.795829773	29.620269775	64.223670959	GLU	380	HA	H	0.050
CD	63.053981781	31.737300873	64.566452026	GLU	380	C	C	0.350
OE1	62.878559113	31.613229752	65.778862000	GLU	380	OC	O	-0.600
OE2	63.400478363	32.817081451	64.096389771	GLU	380	OC	O	-0.600
N	65.598022461	27.752929688	62.813068390	ARG	381	NP	N	-0.400
HN	65.595153809	27.900220871	61.820140839	ARG	381	H	H	0.250
CA	65.777351379	26.392389297	63.304790497	ARG	381	CT	C	0.050
HA	65.315437317	26.320720673	64.289466858	ARG	381	HA	H	0.050
C	67.265487671	26.026020050	63.509429932	ARG	381	C	C	0.600
O	67.619728088	24.861640930	63.680618286	ARG	381	O	O	-0.550
CB	65.080589294	25.439279556	62.328720093	ARG	381	CT	C	-0.100
HB1	65.473030090	25.587280273	61.321491241	ARG	381	HA	H	0.050
HB2	65.339797974	24.420560837	62.594711304	ARG	381	HA	H	0.050
CG	63.548149109	25.593399048	62.311538696	ARG	381	CT	C	-0.100
HG1	63.271869659	26.532300949	61.832340240	ARG	381	HA	H	0.050
HG2	63.136280060	24.805950165	61.681228638	ARG	381	HA	H	0.050
CD	62.908241272	25.541809082	63.711318970	ARG	381	CT	C	0.000
HD1	63.311950684	24.736650467	64.327247620	ARG	381	HA	H	0.050
HD2	63.074569702	26.476459503	64.247779846	ARG	381	HA	H	0.050
NE	61.459438324	25.384950638	63.623779297	ARG	381	NP	N	-0.400
HE	60.862369537	26.194969177	63.669021606	ARG	381	H	H	0.300
CZ	60.866088867	24.193109512	63.400230408	ARG	381	C	C	0.500
NH1	61.594070435	23.081960678	63.293621063	ARG	381	NC	N	-0.450
HH11	62.596408844	23.110609055	63.418781281	ARG	381	HC	H	0.350
HH12	61.218109131	22.176210403	63.074581146	ARG	381	HC	H	0.350
NH2	59.547779083	24.161060333	63.273300171	ARG	381	NC	N	-0.450
HH21	58.995620728	24.984680176	63.489269257	ARG	381	HC	H	0.350
HH22	59.017158508	23.351819992	62.986389160	ARG	381	HC	H	0.350
N	68.081886292	27.097690582	63.547489166	LEU	382	NP	N	-0.400
HN	67.731567383	27.987119675	63.258209229	LEU	382	H	H	0.250
CA	69.444931030	27.112289429	64.061546326	LEU	382	CT	C	0.050
HA	69.906463623	27.978370667	63.589099884	LEU	382	HA	H	0.050
C	70.275627136	25.892210007	63.612529755	LEU	382	C	C	0.600
O	70.744918823	25.811109543	62.485080719	LEU	382	O	O	-0.550
CB	69.413459778	27.311870575	65.593299866	LEU	382	CT	C	-0.100
HB1	68.856002808	26.491340637	66.046897888	LEU	382	HA	H	0.050
HB2	70.425178528	27.259759903	65.998901367	LEU	382	HA	H	0.050
CG	68.774421692	28.640220642	66.041549683	LEU	382	CT	C	-0.050
HG	67.824470520	28.772560120	65.522491455	LEU	382	HA	H	0.050
CD1	68.469116211	28.608699799	67.544769287	LEU	382	CT	C	-0.150
HD11	67.788932800	27.793029785	67.790916443	LEU	382	HA	H	0.050
HD12	69.380371094	28.470689774	68.128013611	LEU	382	HA	H	0.050
HD13	68.003303528	29.538820267	67.870651245	LEU	382	HA	H	0.050
CD2	69.668571472	29.842960358	65.708747864	LEU	382	CT	C	-0.150
HD21	69.851211548	29.928010941	64.638343811	LEU	382	HA	H	0.050
HD22	69.202011108	30.775209427	66.027542114	LEU	382	HA	H	0.050
HD23	70.635696411	29.766559601	66.206451416	LEU	382	HA	H	0.050
N	70.457641602	24.959970474	64.565132141	PHE	383	NP	N	-0.400
HN	69.941711426	25.045019150	65.414558411	PHE	383	H	H	0.250
CA	71.443122864	23.894649506	64.417602539	PHE	383	CT	C	0.050
HA	72.273628235	24.285900116	63.826179504	PHE	383	HA	H	0.050
C	70.840026855	22.686510086	63.681701660	PHE	383	C	C	0.600
O	70.973312378	21.543029785	64.111862183	PHE	383	O	O	-0.550
CB	71.939216614	23.496889114	65.819908142	PHE	383	CT	C	-0.100
HB1	71.179817200	22.911930084	66.341117859	PHE	383	HA	H	0.050

HB2	72.820198059	22.858379364	65.742362976	PHE	383	HA	H	0.050
CG	72.277137756	24.708290100	66.650688171	PHE	383	C6R	C	0.000
CD1	73.351699829	25.522809982	66.305709839	PHE	383	C6R	C	-0.130
HD1	73.962890625	25.279159546	65.448806763	PHE	383	HA	H	0.130
CD2	71.508628845	25.040990829	67.764030457	PHE	383	C6R	C	-0.130
HD2	70.674591064	24.420289993	68.056678772	PHE	383	HA	H	0.130
CE1	73.646720886	26.656349182	67.051963806	PHE	383	C6R	C	-0.130
HE1	74.480720520	27.284479141	66.773788452	PHE	383	HA	H	0.130
CE2	71.802062988	26.173740387	68.511970520	PHE	383	C6R	C	-0.130
HE2	71.200157166	26.425340652	69.373283386	PHE	383	HA	H	0.130
CZ	72.870536804	26.983789444	68.154792786	PHE	383	C6R	C	-0.130
HZ	73.099327087	27.866329193	68.735031128	PHE	383	HA	H	0.130
N	70.149162292	23.006040573	62.570949554	GLY	384	NP	N	-0.400
HN	70.128997803	23.967950821	62.286281586	GLY	384	H	H	0.250
CA	69.482521057	21.989290237	61.769561768	GLY	384	CT	C	0.000
HA1	69.002632141	22.498750687	60.933769226	GLY	384	HA	H	0.050
HA2	70.244918823	21.311330795	61.383808136	GLY	384	HA	H	0.050
C	68.441406250	21.210660934	62.582920074	GLY	384	C	C	0.600
O	68.547210693	20.002269745	62.769580841	GLY	384	O	O	-0.550
N	67.441116333	21.968549728	63.067329407	LYS	385	NP	N	-0.400
HN	67.498069763	22.969430923	62.984439850	LYS	385	H	H	0.250
CA	66.269401550	21.374300003	63.716159821	LYS	385	CT	C	0.050
HA	66.319198608	20.290899277	63.617309570	LYS	385	HA	H	0.050
C	65.041099548	21.799659729	62.902530670	LYS	385	C	C	0.600
O	64.174827576	22.552610397	63.338069916	LYS	385	O	O	-0.550
CB	66.229179382	21.792360306	65.205909729	LYS	385	CT	C	-0.100
HB1	67.013389587	22.524650574	65.400001526	LYS	385	HA	H	0.050
HB2	65.307067871	22.326559067	65.438652039	LYS	385	HA	H	0.050
CG	66.356483459	20.620029449	66.204498291	LYS	385	CT	C	-0.100
HG1	66.469223022	21.026229858	67.210342407	LYS	385	HA	H	0.050
HG2	65.414657593	20.069709778	66.212936401	LYS	385	HA	H	0.050
CD	67.495559692	19.618600845	65.927932739	LYS	385	CT	C	-0.100
HD1	67.502197266	18.858419418	66.710182190	LYS	385	HA	H	0.050
HD2	67.277343750	19.070550919	65.012207031	LYS	385	HA	H	0.050
CE	68.887466431	20.257469177	65.832771301	LYS	385	CT	C	0.050
HE1	68.822212219	21.258279800	65.408432007	LYS	385	HA	H	0.100
HE2	69.347740173	20.365089417	66.816040039	LYS	385	HA	H	0.100
NZ	69.790023804	19.499700546	64.966667175	LYS	385	NT	N	-0.300
HZ1	69.316917419	19.354400635	64.044593811	LYS	385	HC	H	0.350
HZ2	70.630142212	20.090360641	64.763816833	LYS	385	HC	H	0.350
HZ3	70.067916870	18.585519791	65.371498108	LYS	385	HC	H	0.350
N	65.079826355	21.293539047	61.653518677	LYS	386	NP	N	-0.400
HN	65.780776978	20.619529724	61.427860260	LYS	386	H	H	0.250
CA	64.147819519	21.748590469	60.634201050	LYS	386	CT	C	0.050
HA	64.190406799	22.839519501	60.632129669	LYS	386	HA	H	0.050
C	62.703208923	21.298660278	60.946060181	LYS	386	C	C	0.600
O	62.333209991	20.851860046	62.026058197	LYS	386	O	O	-0.550
CB	64.543151855	21.197639465	59.240879059	LYS	386	CT	C	-0.100
HB1	64.255691528	20.147390366	59.159061432	LYS	386	HA	H	0.050
HB2	63.979740143	21.735750198	58.480678558	LYS	386	HA	H	0.050
CG	66.007118225	21.322799683	58.828990936	LYS	386	CT	C	-0.100
HG1	66.387977600	22.305950165	59.109031677	LYS	386	HA	H	0.050
HG2	66.612541199	20.588300705	59.360889435	LYS	386	HA	H	0.050
CD	66.164459229	21.142370224	57.306549072	LYS	386	CT	C	-0.100
HD1	65.730491638	21.997159958	56.787200928	LYS	386	HA	H	0.050
HD2	67.229690552	21.177539825	57.075019836	LYS	386	HA	H	0.050
CE	65.581863403	19.828529358	56.736038208	LYS	386	CT	C	0.050
HE1	66.148948669	19.567260742	55.839801788	LYS	386	HA	H	0.100
HE2	65.718132019	18.996009827	57.427749634	LYS	386	HA	H	0.100
NZ	64.172729492	19.844839096	56.314849854	LYS	386	NT	N	-0.300
HZ1	63.474498749	20.130630493	57.033500671	LYS	386	HC	H	0.350
HZ2	64.050460815	20.463159561	55.476310730	LYS	386	HC	H	0.350

HZ3	63.911739349	18.889600754	55.982799530	LYS	386	HC	H	0.350
N	61.942649841	21.434749603	59.863460541	TYR	387	NP	N	-0.400
HN	62.301231384	21.918300629	59.065391541	TYR	387	H	H	0.250
CA	60.702468872	20.752639771	59.603641510	TYR	387	CT	C	0.050
HA	60.670291901	19.839109421	60.200458527	TYR	387	HA	H	0.050
C	60.841800690	20.369670868	58.122989655	TYR	387	C	C	0.600
O	61.940361023	20.466800690	57.571868896	TYR	387	O	O	-0.550
CB	59.530769348	21.691320419	59.943340302	TYR	387	CT	C	-0.100
HB1	58.593288422	21.261400223	59.612579346	TYR	387	HA	H	0.050
HB2	59.450088501	21.785339355	61.025939941	TYR	387	HA	H	0.050
CG	59.651569366	23.072359085	59.356998444	TYR	387	C6R	C	0.000
CD1	60.468639374	24.031969070	59.944339752	TYR	387	C6R	C	-0.130
HD1	61.047920227	23.785989761	60.813930511	TYR	387	HA	H	0.130
CD2	58.934299469	23.415130615	58.220821381	TYR	387	C6R	C	-0.130
HD2	58.299560547	22.689950943	57.740509033	TYR	387	HA	H	0.130
CE1	60.566669464	25.307029724	59.415050507	TYR	387	C6R	C	-0.130
HE1	61.209030151	26.037309647	59.877811432	TYR	387	HA	H	0.130
CE2	59.029029846	24.689649582	57.689540863	TYR	387	C6R	C	-0.130
HE2	58.467239380	24.934970856	56.808811188	TYR	387	HA	H	0.130
CZ	59.847190857	25.636209488	58.281421661	TYR	387	C6R	C	0.250
OH	59.963451385	26.895870209	57.739479065	TYR	387	OT	O	-0.650
HH	60.016399384	26.834070206	56.791740417	TYR	387	HO	H	0.400
N	59.716159821	19.963130951	57.519241333	VAL	388	NP	N	-0.400
HN	58.870731354	19.859260559	58.046009064	VAL	388	H	H	0.250
CA	59.667808533	19.763040543	56.074649811	VAL	388	CT	C	0.050
HA	60.652770996	19.967590332	55.647518158	VAL	388	HA	H	0.050
C	58.678371429	20.793079376	55.517799377	VAL	388	C	C	0.600
O	57.641159058	21.067800522	56.112239838	VAL	388	O	O	-0.550
CB	59.273170471	18.308330536	55.751338959	VAL	388	CT	C	-0.050
HB	60.092639923	17.674499512	56.093570709	VAL	388	HA	H	0.050
CG1	58.015579224	17.855239868	56.506050110	VAL	388	CT	C	-0.150
HG11	57.180259705	18.523670197	56.308528900	VAL	388	HA	H	0.050
HG12	57.716918945	16.850519180	56.206268311	VAL	388	HA	H	0.050
HG13	58.179328918	17.834749222	57.583648682	VAL	388	HA	H	0.050
CG2	59.131748199	18.065969467	54.239700317	VAL	388	CT	C	-0.150
HG21	60.034881592	18.360960007	53.703678131	VAL	388	HA	H	0.050
HG22	58.960369110	17.009319305	54.036708832	VAL	388	HA	H	0.050
HG23	58.292781830	18.617389679	53.812721252	VAL	388	HA	H	0.050
N	59.073211670	21.369430542	54.371700287	TRP	389	NP	N	-0.400
HN	59.916709900	21.065750122	53.927268982	TRP	389	H	H	0.250
CA	58.211139679	22.330339432	53.708980560	TRP	389	CT	C	0.050
HA	57.484508514	22.703020096	54.420101166	TRP	389	HA	H	0.050
C	57.451160431	21.574390411	52.620948792	TRP	389	C	C	0.600
O	58.015251160	20.730779648	51.940181732	TRP	389	O	O	-0.550
CB	59.010871887	23.451490402	53.013580322	TRP	389	CT	C	-0.100
HB1	59.707878113	23.009429932	52.312030792	TRP	389	HA	H	0.050
HB2	58.324081421	24.030550003	52.395748138	TRP	389	HA	H	0.050
CG	59.754848480	24.455850601	53.890869141	TRP	389	C5R	C	-0.030
CD1	59.531749725	25.836330414	53.841190338	TRP	389	C5R	C	-0.040
HD1	58.781261444	26.325220108	53.242931366	TRP	389	HA	H	0.100
CD2	60.859088898	24.280460358	54.816158295	TRP	389	CR56	C	0.100
HE1	60.472110748	27.458269119	54.750980377	TRP	389	H	H	0.300
NE1	60.407699585	26.482469559	54.639568329	TRP	389	N5R	N	-0.360
CE2	61.246028900	25.571460724	55.252910614	TRP	389	CR56	C	-0.040
CE3	61.541328430	23.199449539	55.296920776	TRP	389	C6R	C	-0.130
HE3	61.282981873	22.207420349	54.982189178	TRP	389	HA	H	0.100
CZ2	62.290130615	25.736360550	56.124191284	TRP	389	C6R	C	-0.130
HZ2	62.592708588	26.729579926	56.424968719	TRP	389	HA	H	0.130
CZ3	62.598808289	23.357770920	56.190990448	TRP	389	C6R	C	-0.130
HZ3	63.131481171	22.487270355	56.536128998	TRP	389	HA	H	0.130
CH2	62.979530334	24.628679276	56.606159210	TRP	389	C6R	C	-0.130
HH2	63.807239532	24.754459381	57.288619995	TRP	389	HA	H	0.130

N	56.174171448	21.963930130	52.489540100	PHE	390	NP	N	-0.400
HN	55.786151886	22.557090759	53.194980621	PHE	390	H	H	0.250
CA	55.318729401	21.559930801	51.389259338	PHE	390	CT	C	0.050
HA	55.900108337	20.957149506	50.699279785	PHE	390	HA	H	0.050
C	54.841308594	22.837190628	50.682140350	PHE	390	C	C	0.600
O	53.685199738	23.237970352	50.776081085	PHE	390	O	O	-0.550
CB	54.130439758	20.732919693	51.899269104	PHE	390	CT	C	-0.100
HB1	53.585208893	21.278839111	52.668411255	PHE	390	HA	H	0.050
HB2	53.420898438	20.561399460	51.088760376	PHE	390	HA	H	0.050
CG	54.560501099	19.397720337	52.447170258	PHE	390	C6R	C	0.000
CD1	54.762649536	19.226299286	53.811050415	PHE	390	C6R	C	-0.130
HD1	54.635818481	20.066570282	54.478851318	PHE	390	HA	H	0.130
CD2	54.747280121	18.309949875	51.599578857	PHE	390	C6R	C	-0.130
HD2	54.594490051	18.416139603	50.539680481	PHE	390	HA	H	0.130
CE1	55.123260498	17.985139847	54.319438934	PHE	390	C6R	C	-0.130
HE1	55.258510590	17.852880478	55.381038666	PHE	390	HA	H	0.130
CE2	55.122108459	17.071510315	52.101509094	PHE	390	C6R	C	-0.130
HE2	55.272819519	16.239040375	51.427200317	PHE	390	HA	H	0.130
CZ	55.304828644	16.906770706	53.466510773	PHE	390	C6R	C	-0.130
HZ	55.586658478	15.943570137	53.867599487	PHE	390	HA	H	0.130
N	55.792930603	23.465679169	49.962409973	LEU	391	NP	N	-0.400
HN	56.691970825	23.033319473	49.850990295	LEU	391	H	H	0.250
CA	55.397411346	24.652149200	49.203601837	LEU	391	CT	C	0.050
HA	54.770530701	25.245429993	49.868221283	LEU	391	HA	H	0.050
C	54.557678223	24.195379257	48.008029938	LEU	391	C	C	0.600
O	54.906429291	23.246379852	47.318199158	LEU	391	O	O	-0.550
CB	56.601741791	25.492399216	48.736011505	LEU	391	CT	C	-0.100
HB1	57.499778748	24.877939224	48.662761688	LEU	391	HA	H	0.050
HB2	56.421798706	25.863630295	47.723918915	LEU	391	HA	H	0.050
CG	56.841499329	26.719839096	49.631591797	LEU	391	CT	C	-0.050
HG	55.889610291	27.220340729	49.800739288	LEU	391	HA	H	0.050
CD1	57.395931244	26.328260422	51.001739502	LEU	391	CT	C	-0.150
HD11	58.369758606	25.849380493	50.906101227	LEU	391	HA	H	0.050
HD12	57.512939453	27.212299347	51.628219604	LEU	391	HA	H	0.050
HD13	56.727451324	25.642599106	51.522830963	LEU	391	HA	H	0.050
CD2	57.737411499	27.749370575	48.939308167	LEU	391	CT	C	-0.150
HD21	57.239948273	28.179719925	48.068580627	LEU	391	HA	H	0.050
HD22	57.980400085	28.562860489	49.619518280	LEU	391	HA	H	0.050
HD23	58.668720245	27.304729462	48.598770142	LEU	391	HA	H	0.050
N	53.417808533	24.873189926	47.841129303	ILE	392	NP	N	-0.400
HN	53.265449524	25.682889938	48.407100677	ILE	392	H	H	0.250
CA	52.512458801	24.571239471	46.746860504	ILE	392	CT	C	0.050
HA	52.636978149	23.527069092	46.460498810	ILE	392	HA	H	0.050
C	52.934719086	25.477849960	45.585891724	ILE	392	C	C	0.600
O	52.705951691	26.681159973	45.601200104	ILE	392	O	O	-0.550
CB	51.058940887	24.787990570	47.213321686	ILE	392	CT	C	-0.050
HB	50.994659424	25.779180527	47.657928467	ILE	392	HA	H	0.050
CG1	50.684089661	23.755950928	48.297481537	ILE	392	CT	C	-0.100
HG11	50.591819763	22.766849518	47.846771240	ILE	392	HA	H	0.050
HG12	51.482109070	23.675849915	49.036579132	ILE	392	HA	H	0.050
CG2	50.072410583	24.732149124	46.033950806	ILE	392	CT	C	-0.150
HG21	50.229080200	25.562879562	45.345390320	ILE	392	HA	H	0.050
HG22	50.198699951	23.809419632	45.469181061	ILE	392	HA	H	0.050
HG23	49.035228729	24.789190292	46.362678528	ILE	392	HA	H	0.050
CD1	49.394279480	24.101020813	49.048229218	ILE	392	CT	C	-0.150
HD11	49.476100922	25.070800781	49.539508820	ILE	392	HA	H	0.050
HD12	48.528659821	24.131349564	48.387649536	ILE	392	HA	H	0.050
HD13	49.185920715	23.353599548	49.813098907	ILE	392	HA	H	0.050
N	53.586059570	24.820970535	44.609989166	GLY	393	NP	N	-0.400
HN	53.743770599	23.834499359	44.668178558	GLY	393	H	H	0.250
CA	54.192520142	25.534019470	43.499710083	GLY	393	CT	C	0.000
HA1	53.869838715	25.030420303	42.588508606	GLY	393	HA	H	0.050

HA2	53.840339661	26.566820145	43.470680237	GLY	393	HA	H	0.050
C	55.719478607	25.506019592	43.635719299	GLY	393	C	C	0.600
O	56.280841827	25.512460709	44.727741241	GLY	393	O	O	-0.550
N	56.327659607	25.504779816	42.434059143	TRP	394	NP	N	-0.400
HN	55.753181458	25.307149887	41.640708923	TRP	394	H	H	0.250
CA	57.760490417	25.722719193	42.228271484	TRP	394	CT	C	0.050
HA	58.173370361	26.119720459	43.151119232	TRP	394	HA	H	0.050
C	57.882080078	26.803270340	41.136100769	TRP	394	C	C	0.600
O	58.744201660	26.779460907	40.267669678	TRP	394	O	O	-0.550
CB	58.375358582	24.369619370	41.800598145	TRP	394	CT	C	-0.100
HB1	57.888610840	23.558069229	42.338001251	TRP	394	HA	H	0.050
HB2	58.161449432	24.185449600	40.748008728	TRP	394	HA	H	0.050
CG	59.873668671	24.208440781	42.020568848	TRP	394	C5R	C	-0.030
CD1	60.731750488	23.593750000	41.100788116	TRP	394	C5R	C	-0.040
HD1	60.437419891	23.202550888	40.137168884	TRP	394	HA	H	0.100
CD2	60.697280884	24.553579330	43.165409088	TRP	394	CR56	C	0.100
HE1	62.759479523	23.138109207	41.149059296	TRP	394	H	H	0.300
NE1	61.987571716	23.543380737	41.603691101	TRP	394	N5R	N	-0.360
CE2	62.014961243	24.119369507	42.865348816	TRP	394	CR56	C	-0.040
CE3	60.452579498	25.157140732	44.373771667	TRP	394	C6R	C	-0.130
HE3	59.462371826	25.486219406	44.639221191	TRP	394	HA	H	0.100
CZ2	63.027961731	24.305500031	43.767818451	TRP	394	C6R	C	-0.130
HZ2	64.029380798	23.978750229	43.532539368	TRP	394	HA	H	0.130
CZ3	61.483428955	25.347610474	45.294258118	TRP	394	C6R	C	-0.130
HZ3	61.283370972	25.832309723	46.237628937	TRP	394	HA	H	0.130
CH2	62.774879456	24.922409058	44.991420746	TRP	394	C6R	C	-0.130
HH2	63.579490662	25.082439423	45.696201324	TRP	394	HA	H	0.130
N	56.873981476	27.701709747	41.210239410	TYR	395	NP	N	-0.400
HN	56.358989716	27.721279144	42.064979553	TYR	395	H	H	0.250
CA	56.515010834	28.585590363	40.108390808	TYR	395	CT	C	0.050
HA	56.633090973	28.006980896	39.194118500	TYR	395	HA	H	0.050
C	57.497509003	29.764400482	39.984348297	TYR	395	C	C	0.600
O	58.495349884	29.699430466	39.279880524	TYR	395	O	O	-0.550
CB	55.054519653	29.074810028	40.299568176	TYR	395	CT	C	-0.100
HB1	54.846111298	29.261940002	41.354259491	TYR	395	HA	H	0.050
HB2	54.899818420	30.029180527	39.793121338	TYR	395	HA	H	0.050
CG	53.996898651	28.174119949	39.716190338	TYR	395	C6R	C	0.000
CD1	52.868270874	27.811199188	40.446590424	TYR	395	C6R	C	-0.130
HD1	52.763870239	28.109199524	41.480548859	TYR	395	HA	H	0.130
CD2	54.099788666	27.747779846	38.399318695	TYR	395	C6R	C	-0.130
HD2	54.972850800	27.997320175	37.820781708	TYR	395	HA	H	0.130
CE1	51.838611603	27.095710754	39.844158173	TYR	395	C6R	C	-0.130
HE1	50.949180603	26.855859756	40.410179138	TYR	395	HA	H	0.130
CE2	53.087509155	27.021350861	37.798099518	TYR	395	C6R	C	-0.130
HE2	53.208080292	26.728170395	36.765159607	TYR	395	HA	H	0.130
CZ	51.934951782	26.727529526	38.509471893	TYR	395	C6R	C	0.250
OH	50.862388611	26.135059357	37.867691040	TYR	395	OT	O	-0.650
HH	51.169620514	25.523069382	37.189170837	TYR	395	HO	H	0.400
N	57.124618530	30.863119125	40.669071198	ALA	396	NP	N	-0.400
HN	56.337841034	30.818149567	41.282459259	ALA	396	H	H	0.250
CA	57.854969025	32.116859436	40.520759583	ALA	396	CT	C	0.050
HA	58.156379700	32.202030182	39.474601746	ALA	396	HA	H	0.050
C	59.138061523	32.102680206	41.378429413	ALA	396	C	C	0.600
O	60.009700775	32.962661743	41.268730164	ALA	396	O	O	-0.550
CB	56.899959564	33.268100739	40.856380463	ALA	396	CT	C	-0.150
HB1	56.023399353	33.236751556	40.209918976	ALA	396	HA	H	0.050
HB2	56.538940430	33.214130402	41.877880096	ALA	396	HA	H	0.050
HB3	57.370651245	34.237281799	40.721218109	ALA	396	HA	H	0.050
N	59.226959229	31.039850235	42.194839478	ASP	397	NP	N	-0.400
HN	58.468208313	30.403200150	42.322391510	ASP	397	H	H	0.250
CA	60.464920044	30.678649902	42.849399567	ASP	397	CT	C	0.050
HA	61.276901245	31.218389511	42.364238739	ASP	397	HA	H	0.050

C	60.693359375	29.182529449	42.621021271	ASP	397	C	C	0.600
O	59.763229370	28.409709930	42.433349609	ASP	397	O	O	-0.550
CB	60.382659912	31.007530212	44.341030121	ASP	397	CT	C	-0.250
HB1	60.213821411	32.071041107	44.503890991	ASP	397	HA	H	0.050
HB2	59.535858154	30.474229813	44.774658203	ASP	397	HA	H	0.050
CG	61.675281525	30.588949203	45.048969269	ASP	397	C	C	0.350
OD1	62.746829987	30.916030884	44.547710419	ASP	397	OC	O	-0.600
OD2	61.601631165	29.913770676	46.065361023	ASP	397	OC	O	-0.600
N	61.998920441	28.879840851	42.611068726	ASN	398	NP	N	-0.400
HN	62.624328613	29.573820114	42.984058380	ASN	398	H	H	0.250
CA	62.606048584	27.598270416	42.302921295	ASN	398	CT	C	0.050
HA	62.454391479	26.986619949	43.186271667	ASN	398	HA	H	0.050
C	64.099182129	27.919509888	42.194881439	ASN	398	C	C	0.600
O	64.570533752	28.853069305	42.830890656	ASN	398	O	O	-0.550
CB	62.011760712	26.928899765	41.038780212	ASN	398	CT	C	-0.100
HB1	62.510478973	25.987070084	40.818759918	ASN	398	HA	H	0.050
HB2	60.969539642	26.673950195	41.209541321	ASN	398	HA	H	0.050
CG	62.109760284	27.809419632	39.791149139	ASN	398	C	C	0.550
OD1	63.171051025	27.957399368	39.196189880	ASN	398	O	O	-0.550
ND2	60.967208862	28.417339325	39.465358734	ASN	398	NP	N	-0.600
HD21	60.924388885	29.127830505	38.763778687	ASN	398	H	H	0.300
HD22	60.098178864	28.187149048	39.921119690	ASN	398	H	H	0.300
N	64.798507690	27.202690125	41.296718597	TRP	399	NP	N	-0.400
HN	64.333312988	26.481330872	40.785568237	TRP	399	H	H	0.250
CA	66.191757202	27.510740280	40.970489502	TRP	399	CT	C	0.050
HA	66.747123718	27.394069672	41.899810791	TRP	399	HA	H	0.050
C	66.396400452	28.981399536	40.510799408	TRP	399	C	C	0.600
O	67.509727478	29.486469269	40.475559235	TRP	399	O	O	-0.550
CB	66.698158264	26.511680603	39.909240723	TRP	399	CT	C	-0.100
HB1	66.322166443	26.783189774	38.924270630	TRP	399	HA	H	0.050
HB2	67.786247253	26.538000107	39.847671509	TRP	399	HA	H	0.050
CG	66.248207092	25.093990326	40.224220276	TRP	399	C5R	C	-0.030
CD1	65.516242981	24.249670029	39.379390717	TRP	399	C5R	C	-0.040
HD1	65.185462952	24.494949341	38.380588531	TRP	399	HA	H	0.100
CD2	66.468948364	24.350500107	41.441020966	TRP	399	CR56	C	0.100
HE1	64.833122253	22.274620056	39.636230469	TRP	399	H	H	0.300
NE1	65.289299011	23.069290161	40.010528564	TRP	399	N5R	N	-0.360
CE2	65.851676941	23.090330124	41.279018402	TRP	399	CR56	C	-0.040
CE3	67.120620728	24.642059326	42.605358124	TRP	399	C6R	C	-0.130
HE3	67.626319885	25.586509705	42.702590942	TRP	399	HA	H	0.100
CZ2	65.897178650	22.169870377	42.291690826	TRP	399	C6R	C	-0.130
HZ2	65.436477661	21.203029633	42.156799316	TRP	399	HA	H	0.130
CZ3	67.168518066	23.712369919	43.641708374	TRP	399	C6R	C	-0.130
HZ3	67.686042786	23.961309433	44.555679321	TRP	399	HA	H	0.130
CH2	66.551239014	22.471790314	43.486038208	TRP	399	C6R	C	-0.130
HH2	66.583999634	21.745149612	44.284210205	TRP	399	HA	H	0.130
N	65.258338928	29.647979736	40.217681885	PHE	400	NP	N	-0.400
HN	64.425621033	29.105850220	40.097728729	PHE	400	H	H	0.250
CA	65.185287476	31.102609634	40.083839417	PHE	400	CT	C	0.050
HA	65.639572144	31.345510483	39.128479004	PHE	400	HA	H	0.050
C	65.973518372	31.840690613	41.194110870	PHE	400	C	C	0.600
O	66.747627258	32.747520447	40.917839050	PHE	400	O	O	-0.550
CB	63.715030670	31.572610855	40.131149292	PHE	400	CT	C	-0.100
HB1	63.197360992	31.091129303	40.961151123	PHE	400	HA	H	0.050
HB2	63.684608459	32.643508911	40.327339172	PHE	400	HA	H	0.050
CG	62.904041290	31.373060226	38.874698639	PHE	400	C6R	C	0.000
CD1	63.284721375	30.506099701	37.856651306	PHE	400	C6R	C	-0.130
HD1	64.198020935	29.938829422	37.920558929	PHE	400	HA	H	0.130
CD2	61.717090607	32.083038330	38.726730347	PHE	400	C6R	C	-0.130
HD2	61.413990021	32.778648376	39.489589691	PHE	400	HA	H	0.130
CE1	62.486000061	30.340589523	36.737911224	PHE	400	C6R	C	-0.130
HE1	62.774478912	29.640600204	35.973251343	PHE	400	HA	H	0.130

CE2	60.920749664	31.932760239	37.602188110	PHE	400	C6R	C	-0.130
HE2	60.007911682	32.504009247	37.508960724	PHE	400	HA	H	0.130
CZ	61.308528900	31.056690216	36.601970673	PHE	400	C6R	C	-0.130
HZ	60.707389832	30.924850464	35.713970184	PHE	400	HA	H	0.130
N	65.710487366	31.428930283	42.454750061	LYS	401	NP	N	-0.400
HN	65.077247620	30.662889481	42.585651398	LYS	401	H	H	0.250
CA	66.398551941	32.051498413	43.588470459	LYS	401	CT	C	0.050
HA	67.243499756	32.631080627	43.210880280	LYS	401	HA	H	0.050
C	67.019149780	31.005599976	44.531818390	LYS	401	C	C	0.600
O	68.069389343	31.265359879	45.108268738	LYS	401	O	O	-0.550
CB	65.476608276	32.984138489	44.393108368	LYS	401	CT	C	-0.100
HB1	64.576919556	32.458881378	44.694339752	LYS	401	HA	H	0.050
HB2	65.967643738	33.219131470	45.331420898	LYS	401	HA	H	0.050
CG	65.175849915	34.352138519	43.751319885	LYS	401	CT	C	-0.100
HG1	64.936019897	35.047019958	44.556411743	LYS	401	HA	H	0.050
HG2	66.075752258	34.753761292	43.283351898	LYS	401	HA	H	0.050
CD	64.008537292	34.397430420	42.756568909	LYS	401	CT	C	-0.100
HD1	63.735538483	35.443660736	42.610649109	LYS	401	HA	H	0.050
HD2	64.340431213	34.049461365	41.781028748	LYS	401	HA	H	0.050
CE	62.783439636	33.600978851	43.225139618	LYS	401	CT	C	0.050
HE1	62.839141846	32.586959839	42.838920593	LYS	401	HA	H	0.100
HE2	62.750358582	33.530731201	44.311199188	LYS	401	HA	H	0.100
NZ	61.507701874	34.175659180	42.833759308	LYS	401	NT	N	-0.300
HZ1	61.440410614	35.163459778	43.167819977	LYS	401	HC	H	0.350
HZ2	61.262611389	34.068450928	41.826129913	LYS	401	HC	H	0.350
HZ3	60.709739685	33.708148956	43.320438385	LYS	401	HC	H	0.350
N	66.367202759	29.837209702	44.702648163	THR	402	NP	N	-0.400
HN	65.497077942	29.616659164	44.254318237	THR	402	H	H	0.250
CA	66.939247131	28.825599670	45.592170715	THR	402	CT	C	0.050
HA	67.369163513	29.334440231	46.457939148	THR	402	HA	H	0.050
C	68.049797058	28.049369812	44.863861084	THR	402	C	C	0.600
O	67.917167664	26.862659454	44.596511841	THR	402	O	O	-0.550
CB	65.849647522	27.845470428	46.073390961	THR	402	CT	C	0.150
HB	66.299011230	27.170669556	46.808429718	THR	402	HA	H	0.100
OG1	65.304008484	27.078420639	45.014358521	THR	402	OT	O	-0.650
HG1	66.024887085	26.643100739	44.554401398	THR	402	HO	H	0.400
CG2	64.697731018	28.558910370	46.777420044	THR	402	CT	C	-0.150
HG21	64.176353455	29.239290237	46.104839325	THR	402	HA	H	0.050
HG22	63.963871002	27.843349457	47.148151398	THR	402	HA	H	0.050
HG23	65.069557190	29.129789352	47.626091003	THR	402	HA	H	0.050
N	69.124618530	28.789449692	44.549919128	TYR	403	NP	N	-0.400
HN	69.102577209	29.747169495	44.835010529	TYR	403	H	H	0.250
CA	70.274147034	28.246240616	43.841350555	TYR	403	CT	C	0.050
HA	70.261886597	27.165029526	43.991760254	TYR	403	HA	H	0.050
C	71.556739807	28.809610367	44.480640411	TYR	403	C	C	0.600
O	72.511680603	28.085990906	44.728118896	TYR	403	O	O	-0.550
CB	70.148719788	28.612829208	42.348751068	TYR	403	CT	C	-0.100
HB1	69.088783264	28.617830276	42.096649170	TYR	403	HA	H	0.050
HB2	70.499473572	29.627880096	42.157741547	TYR	403	HA	H	0.050
CG	70.808700562	27.665430069	41.372169495	TYR	403	C6R	C	0.000
CD1	71.761222839	26.718690872	41.751800537	TYR	403	C6R	C	-0.130
HD1	72.090309143	26.631269455	42.776050568	TYR	403	HA	H	0.130
CD2	70.440536499	27.734029770	40.030948639	TYR	403	C6R	C	-0.130
HD2	69.708717346	28.465129852	39.713890076	TYR	403	HA	H	0.130
CE1	72.313407898	25.854700089	40.814449310	TYR	403	C6R	C	-0.130
HE1	73.043373108	25.119779587	41.120109558	TYR	403	HA	H	0.130
CE2	70.992813110	26.874559402	39.090259552	TYR	403	C6R	C	-0.130
HE2	70.673446655	26.952489853	38.060619354	TYR	403	HA	H	0.130
CZ	71.928199768	25.927349091	39.485149384	TYR	403	C6R	C	0.250
OH	72.471839905	25.043420792	38.573848724	TYR	403	OT	O	-0.650
HH	72.774116516	25.530960083	37.814521790	TYR	403	HO	H	0.400
N	71.511260986	30.133970261	44.759918213	ASP	404	NP	N	-0.400

HN	70.728576660	30.703500748	44.510810852	ASP	404	H	H	0.250
CA	72.641036987	30.778650284	45.429450989	ASP	404	CT	C	0.050
HA	73.523330688	30.412759781	44.900588989	ASP	404	HA	H	0.050
C	72.841262817	30.365119934	46.917819977	ASP	404	C	C	0.600
O	73.979049683	30.200929642	47.346790314	ASP	404	O	O	-0.550
CB	72.627609253	32.310520172	45.231941223	ASP	404	CT	C	-0.250
HB1	73.623199463	32.707889557	45.434471130	ASP	404	HA	H	0.050
HB2	72.410209656	32.556610107	44.192031860	ASP	404	HA	H	0.050
CG	71.643417358	33.050590515	46.145370483	ASP	404	C	C	0.350
OD1	71.951278687	33.267070770	47.314208984	ASP	404	OC	O	-0.600
OD2	70.555198669	33.399971008	45.703769684	ASP	404	OC	O	-0.600
N	71.750282288	30.201190948	47.735511780	PRO	405	NX	N	-0.250
CA	71.955421448	29.936239243	49.150661469	PRO	405	CT	C	0.050
HA	72.717773438	30.598480225	49.565441132	PRO	405	HA	H	0.050
C	72.386741638	28.472879410	49.299259186	PRO	405	C	C	0.600
O	71.769142151	27.571630478	48.746219635	PRO	405	O	O	-0.550
CB	70.590827942	30.199260712	49.795181274	PRO	405	CT	C	-0.100
HB1	70.411842346	29.599800110	50.686679840	PRO	405	HA	H	0.050
HB2	70.538589478	31.244890213	50.095188141	PRO	405	HA	H	0.050
CG	69.571273804	29.942239761	48.684150696	PRO	405	CT	C	-0.100
HG1	69.258079529	28.897029877	48.722171783	PRO	405	HA	H	0.050
HG2	68.673477173	30.552499771	48.780139923	PRO	405	HA	H	0.050
CD	70.329399109	30.197040558	47.374950409	PRO	405	CT	C	0.000
HD1	70.121299744	29.367879868	46.710628510	PRO	405	HA	H	0.050
HD2	70.029670715	31.130479813	46.905590057	PRO	405	HA	H	0.050
N	73.491348267	28.301889420	50.050579071	SER	406	NP	N	-0.400
HN	73.899887085	29.098150253	50.492858887	SER	406	H	H	0.250
CA	74.083992004	26.995119095	50.307708740	SER	406	CT	C	0.050
HA	74.710380554	26.740169525	49.452171326	SER	406	HA	H	0.050
C	73.003059387	25.926519394	50.548030853	SER	406	C	C	0.600
O	72.211196899	26.081640244	51.469371796	SER	406	O	O	-0.550
CB	74.895446777	27.134979248	51.606311798	SER	406	CT	C	0.050
HB1	75.295806885	26.173490524	51.945621490	SER	406	HA	H	0.100
HB2	75.756317139	27.785049438	51.443420410	SER	406	HA	H	0.100
OG	74.105560303	27.719240189	52.632110596	SER	406	OT	O	-0.650
HG	73.239570618	27.296020508	52.618808746	SER	406	HO	H	0.400
N	73.063560486	24.875610352	49.694789886	ILE	407	NP	N	-0.400
HN	73.699043274	24.997869492	48.935409546	ILE	407	H	H	0.250
CA	72.273986816	23.633020401	49.678581238	ILE	407	CT	C	0.050
HA	71.670158386	23.698820114	48.773250580	ILE	407	HA	H	0.050
C	71.289382935	23.482040405	50.862018585	ILE	407	C	C	0.600
O	70.084037781	23.335800171	50.690368652	ILE	407	O	O	-0.550
CB	73.246498108	22.431529999	49.567970276	ILE	407	CT	C	-0.050
HB	73.869506836	22.412509918	50.463668823	ILE	407	HA	H	0.050
CG1	74.194198608	22.598390579	48.358341217	ILE	407	CT	C	-0.100
HG11	73.615798950	22.831100464	47.464389801	ILE	407	HA	H	0.050
HG12	74.849227905	23.454019547	48.521598816	ILE	407	HA	H	0.050
CG2	72.495697021	21.090169907	49.514530182	ILE	407	CT	C	-0.150
HG21	71.837463379	21.036529541	48.647048950	ILE	407	HA	H	0.050
HG22	73.185920715	20.249959946	49.474239349	ILE	407	HA	H	0.050
HG23	71.891632080	20.934190750	50.406860352	ILE	407	HA	H	0.050
CD1	75.088829041	21.383399963	48.079101562	ILE	407	CT	C	-0.150
HD11	74.505859375	20.532140732	47.727409363	ILE	407	HA	H	0.050
HD12	75.817749023	21.616260529	47.302509308	ILE	407	HA	H	0.050
HD13	75.635520935	21.084720612	48.973350525	ILE	407	HA	H	0.050
N	71.899513245	23.539350510	52.057319641	ASN	408	NP	N	-0.400
HN	72.897583008	23.620210648	52.023860931	ASN	408	H	H	0.250
CA	71.253463745	23.716129303	53.360580444	ASN	408	CT	C	0.050
HA	70.565620422	22.882759094	53.496891022	ASN	408	HA	H	0.050
C	70.456169128	25.048219681	53.494300842	ASN	408	C	C	0.600
O	70.694290161	25.843540192	54.397598267	ASN	408	O	O	-0.550
CB	72.367080688	23.676000595	54.428050995	ASN	408	CT	C	-0.100

HB1	71.984687805	23.906099319	55.423580170	ASN	408	HA	H	0.050
HB2	72.789001465	22.672580719	54.480110168	ASN	408	HA	H	0.050
CG	73.513107300	24.640979767	54.063838959	ASN	408	C	C	0.550
OD1	74.415771484	24.288679123	53.315788269	ASN	408	O	O	-0.550
ND2	73.408500671	25.867010117	54.581779480	ASN	408	NP	N	-0.600
HD21	74.116287231	26.550479889	54.390018463	ASN	408	H	H	0.300
HD22	72.583839417	26.104869843	55.100700378	ASN	408	H	H	0.300
N	69.481948853	25.211589813	52.586349487	CYS	409	NP	N	-0.350
HN	69.421699524	24.548120499	51.845458984	CYS	409	H	H	0.250
CA	68.533470154	26.317430496	52.593589783	CYS	409	CT	C	0.050
HA	68.091659546	26.358570099	53.586860657	CYS	409	HA	H	0.050
C	67.409126282	26.008850098	51.578201294	CYS	409	C	C	0.550
O	66.740997314	26.913240433	51.088619232	CYS	409	O	O	-0.550
CB	69.240341187	27.657300949	52.271518707	CYS	409	CT	C	0.100
HB1	70.235153198	27.481100082	51.864368439	CYS	409	HA	H	0.050
HB2	68.711387634	28.206310272	51.491889954	CYS	409	HA	H	0.050
SG	69.378059387	28.763160706	53.710178375	CYS	409	ST	S	-0.200
N	67.275848389	24.703800201	51.242828369	THR	410	NP	N	-0.400
HN	67.594657898	23.998279572	51.882221222	THR	410	H	H	0.250
CA	66.512939453	24.301509857	50.055118561	THR	410	CT	C	0.050
HA	65.505798340	24.706779480	50.174949646	THR	410	HA	H	0.050
C	66.396209717	22.764640808	49.980068207	THR	410	C	C	0.600
O	65.383522034	22.216579437	49.567390442	THR	410	O	O	-0.550
CB	67.181617737	24.804929733	48.740848541	THR	410	CT	C	0.150
HB	68.104690552	24.239969254	48.586071014	THR	410	HA	H	0.100
OG1	67.576469421	26.163690567	48.756580353	THR	410	OT	O	-0.650
HG1	66.989807129	26.652349472	49.334388733	THR	410	HO	H	0.400
CG2	66.291549683	24.592929840	47.507278442	THR	410	CT	C	-0.150
HG21	66.796127319	24.934749603	46.603870392	THR	410	HA	H	0.050
HG22	66.048553467	23.540399551	47.360408783	THR	410	HA	H	0.050
HG23	65.351562500	25.138380051	47.596698761	THR	410	HA	H	0.050
N	67.507926941	22.111520767	50.366798401	VAL	411	NP	N	-0.400
HN	68.315376282	22.615140915	50.675609589	VAL	411	H	H	0.250
CA	67.614898682	20.661350250	50.245258331	VAL	411	CT	C	0.050
HA	67.438301086	20.436319351	49.190528870	VAL	411	HA	H	0.050
C	66.552047729	19.937639236	51.099258423	VAL	411	C	C	0.600
O	66.218986511	20.365610123	52.193210602	VAL	411	O	O	-0.550
CB	69.046302795	20.249769211	50.634948730	VAL	411	CT	C	-0.050
HB	69.709838867	20.840309143	50.004261017	VAL	411	HA	H	0.050
CG1	69.384948730	20.569450378	52.100639343	VAL	411	CT	C	-0.150
HG11	69.166801453	21.607610703	52.344181061	VAL	411	HA	H	0.050
HG12	68.804969788	19.951259613	52.786861420	VAL	411	HA	H	0.050
HG13	70.440101624	20.394479752	52.308780670	VAL	411	HA	H	0.050
CG2	69.325538635	18.778539658	50.315868378	VAL	411	CT	C	-0.150
HG21	68.752609253	18.109809875	50.958969116	VAL	411	HA	H	0.050
HG22	69.052299500	18.562919617	49.284118652	VAL	411	HA	H	0.050
HG23	70.380996704	18.540819168	50.446170807	VAL	411	HA	H	0.050
N	66.065017700	18.835859299	50.499191284	GLU	412	NP	N	-0.400
HN	66.392921448	18.673349380	49.567321777	GLU	412	H	H	0.250
CA	65.027038574	17.907470703	50.952110291	GLU	412	CT	C	0.050
HA	65.114898682	17.100990295	50.223598480	GLU	412	HA	H	0.050
C	63.605899811	18.474430084	50.753448486	GLU	412	C	C	0.600
O	62.697601318	17.784080505	50.294040680	GLU	412	O	O	-0.550
CB	65.288948059	17.277189255	52.341758728	GLU	412	CT	C	-0.100
HB1	64.883308411	16.264650345	52.332180023	GLU	412	HA	H	0.050
HB2	66.363861084	17.161249161	52.484710693	GLU	412	HA	H	0.050
CG	64.673728943	18.007419586	53.551528931	GLU	412	CT	C	-0.250
HG1	65.064292908	19.016210556	53.636791229	GLU	412	HA	H	0.050
HG2	63.593368530	18.097549438	53.432151794	GLU	412	HA	H	0.050
CD	64.959266663	17.299970627	54.882751465	GLU	412	C	C	0.350
OE1	64.051147461	17.233379364	55.712921143	GLU	412	OC	O	-0.600
OE2	66.088409424	16.876209259	55.108520508	GLU	412	OC	O	-0.600

N 63.490119934 19.761119843 51.135120392 GLU 413 NP N -0.400
HN 64.294517517 20.205339432 51.532470703 GLU 413 H H 0.250
CA 62.223758698 20.478439331 51.205780029 GLU 413 CT C 0.050
HA 61.676670074 20.000379562 52.019470215 GLU 413 HA H 0.050
C 61.398040771 20.335699081 49.907039642 GLU 413 C C 0.600
O 61.930641174 20.261989594 48.804828644 GLU 413 O O -0.550
CB 62.483539581 21.958520889 51.540740967 GLU 413 CT C -0.100
HB1 62.623630524 22.519569397 50.615501404 GLU 413 HA H 0.050
HB2 61.601020813 22.361879349 52.020229340 GLU 413 HA H 0.050
CG 63.695220947 22.269220352 52.437770844 GLU 413 CT C -0.250
HG1 64.609512329 22.102920532 51.879558563 GLU 413 HA H 0.050
HG2 63.691448212 23.329509735 52.681148529 GLU 413 HA H 0.050
CD 63.793689728 21.494209290 53.758308411 GLU 413 C C 0.350
OE1 62.926849365 20.693700790 54.100238800 GLU 413 OC O -0.600
OE2 64.759216309 21.695440292 54.486789703 GLU 413 OC O -0.600
N 60.069248199 20.246870041 50.113800049 MET 414 NP N -0.400
HN 59.652618408 20.455610275 51.000511169 MET 414 H H 0.250
CA 59.203029633 19.636100769 49.114658356 MET 414 CT C 0.050
HA 59.830268860 19.232759476 48.326869965 MET 414 HA H 0.050
C 58.264251709 20.665430069 48.470268250 MET 414 C C 0.600
O 57.499668121 21.368179321 49.124458313 MET 414 O O -0.550
CB 58.430320740 18.481910706 49.776058197 MET 414 CT C -0.100
HB1 57.726501465 18.865110397 50.513561249 MET 414 HA H 0.050
HB2 57.831581116 17.970769882 49.024250031 MET 414 HA H 0.050
CG 59.370979309 17.469980240 50.449878693 MET 414 CT C -0.050
HG1 59.997058868 16.986839294 49.701148987 MET 414 HA H 0.050
HG2 60.058219910 17.954040527 51.143428802 MET 414 HA H 0.050
SD 58.483081818 16.209569931 51.377811432 MET 414 SE S -0.100
CE 59.909488678 15.242910385 51.901180267 MET 414 CT C -0.100
HE1 60.587070465 15.865059853 52.486759186 MET 414 HA H 0.050
HE2 59.595729828 14.390709877 52.503608704 MET 414 HA H 0.050
HE3 60.464481354 14.886349678 51.033149719 MET 414 HA H 0.050
N 58.323650360 20.672719955 47.131908417 THR 415 NP N -0.400
HN 58.802768707 19.911409378 46.689140320 THR 415 H H 0.250
CA 57.512420654 21.564609528 46.314468384 THR 415 CT C 0.050
HA 56.941989899 22.212099075 46.975841522 THR 415 HA H 0.050
C 56.527839661 20.696010590 45.506809235 THR 415 C C 0.600
O 56.363601685 19.508050919 45.764579773 THR 415 O O -0.550
CB 58.459079742 22.413619995 45.440048218 THR 415 CT C 0.150
HB 59.168041229 22.935010910 46.093788147 THR 415 HA H 0.100
OG1 57.755210876 23.363389969 44.657211304 THR 415 OT O -0.650
HG1 57.329868317 24.049329758 45.183868408 THR 415 HO H 0.400
CG2 59.283420563 21.554439545 44.468521118 THR 415 CT C -0.150
HG21 58.673751831 21.220840454 43.629840851 THR 415 HA H 0.050
HG22 60.113208771 22.117740631 44.051261902 THR 415 HA H 0.050
HG23 59.717781067 20.677850723 44.948310852 THR 415 HA H 0.050
N 55.901168823 21.345470428 44.518840790 GLU 416 NP N -0.400
HN 56.120510101 22.311670303 44.352489471 GLU 416 H H 0.250
CA 55.099971771 20.645830154 43.531639099 GLU 416 CT C 0.050
HA 55.710628510 19.806150436 43.192428589 GLU 416 HA H 0.050
C 54.947391510 21.618129730 42.359760284 GLU 416 C C 0.600
O 54.977851868 22.831340790 42.533969879 GLU 416 O O -0.550
CB 53.771808624 20.118679047 44.109611511 GLU 416 CT C -0.100
HB1 53.248390198 19.543149948 43.345680237 GLU 416 HA H 0.050
HB2 54.000518799 19.402439117 44.897861481 GLU 416 HA H 0.050
CG 52.839069366 21.195230484 44.682418823 GLU 416 CT C -0.250
HG1 53.366649628 21.775920868 45.434009552 GLU 416 HA H 0.050
HG2 52.532649994 21.899469376 43.910961151 GLU 416 HA H 0.050
CD 51.584110260 20.544340134 45.293579102 GLU 416 C C 0.350
OE1 50.768760681 20.001459122 44.553249359 GLU 416 OC O -0.600
OE2 51.424171448 20.582429886 46.513339996 GLU 416 OC O -0.600
N 54.885608673 21.013650894 41.166889191 ALA 417 NP N -0.400

HN	54.705631256	20.029090881	41.131759644	ALA	417	H	H	0.250
CA	55.213378906	21.717590332	39.941509247	ALA	417	CT	C	0.050
HA	54.818290710	22.733179092	40.004741669	ALA	417	HA	H	0.050
C	54.521488190	20.976829529	38.790199280	ALA	417	C	C	0.600
O	53.441028595	20.427789688	38.939819336	ALA	417	O	O	-0.550
CB	56.751541138	21.694580078	39.808448792	ALA	417	CT	C	-0.150
HB1	57.219280243	22.107749939	40.699531555	ALA	417	HA	H	0.050
HB2	57.127998352	20.675329208	39.701831818	ALA	417	HA	H	0.050
HB3	57.116451263	22.272079468	38.960441589	ALA	417	HA	H	0.050
N	55.235591888	20.952220917	37.661651611	VAL	418	NP	N	-0.400
HN	56.142070770	21.370800018	37.644840240	VAL	418	H	H	0.250
CA	54.991619110	20.030799866	36.570590973	VAL	418	CT	C	0.050
HA	54.064559937	19.484270096	36.747608185	VAL	418	HA	H	0.050
C	56.203369141	19.115659714	36.662281036	VAL	418	C	C	0.600
O	57.245269775	19.563320160	37.131378174	VAL	418	O	O	-0.550
CB	54.980239868	20.805379868	35.237991333	VAL	418	CT	C	-0.050
HB	54.757801056	20.101770401	34.433860779	VAL	418	HA	H	0.050
CG1	53.863288879	21.862909317	35.228431702	VAL	418	CT	C	-0.150
HG11	53.918498993	22.534540176	36.082611084	VAL	418	HA	H	0.050
HG12	53.903221130	22.486940384	34.338871002	VAL	418	HA	H	0.050
HG13	52.884479523	21.384929657	35.246349335	VAL	418	HA	H	0.050
CG2	56.357368469	21.420749664	34.925369263	VAL	418	CT	C	-0.150
HG21	56.776409149	21.944559097	35.779830933	VAL	418	HA	H	0.050
HG22	57.078380585	20.657480240	34.631450653	VAL	418	HA	H	0.050
HG23	56.309391022	22.129379272	34.110111237	VAL	418	HA	H	0.050
N	56.070819855	17.851230621	36.227058411	GLU	419	NP	N	-0.400
HN	55.244579315	17.478729248	35.807449341	GLU	419	H	H	0.250
CA	57.260440826	17.028409958	36.381401062	GLU	419	CT	C	0.050
HA	57.657821655	17.240089417	37.369148254	GLU	419	HA	H	0.050
C	58.329200745	17.395940781	35.337009430	GLU	419	C	C	0.600
O	59.529708862	17.279279709	35.561321259	GLU	419	O	O	-0.550
CB	56.942211151	15.540840149	36.397010803	GLU	419	CT	C	-0.100
HB1	57.846851349	15.083510399	36.792881012	GLU	419	HA	H	0.050
HB2	56.166568756	15.323300362	37.130409241	GLU	419	HA	H	0.050
CG	56.578689575	14.886899948	35.053188324	GLU	419	CT	C	-0.250
HG1	55.504039764	14.719659805	34.975189209	GLU	419	HA	H	0.050
HG2	56.862659454	15.491399765	34.194770813	GLU	419	HA	H	0.050
CD	57.307559967	13.543049812	34.971370697	GLU	419	C	C	0.350
OE1	57.166858673	12.760199547	35.905048370	GLU	419	OC	O	-0.600
OE2	58.026851654	13.301659584	34.006519318	GLU	419	OC	O	-0.600
N	57.793018341	17.866470337	34.192428589	GLY	420	NP	N	-0.400
HN	56.798400879	17.931339264	34.135929108	GLY	420	H	H	0.250
CA	58.518581390	17.909490585	32.934150696	GLY	420	CT	C	0.000
HA1	59.006809235	16.951040268	32.810531616	GLY	420	HA	H	0.050
HA2	57.758670807	18.005739212	32.165100098	GLY	420	HA	H	0.050
C	59.561790466	19.018859863	32.770969391	GLY	420	C	C	0.600
O	59.772319794	19.516139984	31.669160843	GLY	420	O	O	-0.550
N	60.222469330	19.331979752	33.895839691	HIS	421	NP	N	-0.400
HN	59.922489166	18.904960632	34.745700836	HIS	421	H	H	0.250
CA	61.502769470	20.016050339	33.888778687	HIS	421	CT	C	0.050
HA	61.770069122	20.249450684	32.858139038	HIS	421	HA	H	0.050
C	62.536548615	19.008710861	34.407558441	HIS	421	C	C	0.600
O	62.942821503	18.095319748	33.701438904	HIS	421	O	O	-0.550
CB	61.417831421	21.299369812	34.732109070	HIS	421	CT	C	-0.100
HB1	61.037170410	21.101839066	35.735179901	HIS	421	HA	H	0.050
HB2	62.401710510	21.760009766	34.833389282	HIS	421	HA	H	0.050
CG	60.501010895	22.277820587	34.044048309	HIS	421	C5R	C	0.100
ND1	60.709968567	22.738500595	32.793899536	HIS	421	N5R	N	-0.400
HD1	61.480598450	22.506719589	32.221820831	HIS	421	H	H	0.300
CD2	59.329158783	22.858720779	34.546329498	HIS	421	C5R	C	0.000
HD2	58.907371521	22.694059372	35.526248932	HIS	421	HA	H	0.100
CE1	59.691768646	23.574760437	32.538158417	HIS	421	C5R	C	0.200

HE1	59.562141418	24.114200592	31.611829758	HIS	421	HA	H	0.100
NE2	58.843120575	23.665830612	33.578678131	HIS	421	N5R	N	-0.400
N	62.906360626	19.204610825	35.688079834	ILE	422	NP	N	-0.400
HN	62.535110474	19.958709717	36.230651855	ILE	422	H	H	0.250
CA	63.917221069	18.388549805	36.347511292	ILE	422	CT	C	0.050
HA	64.257987976	17.621120453	35.650108337	ILE	422	HA	H	0.050
C	63.238391876	17.647409439	37.534160614	ILE	422	C	C	0.600
O	63.875209808	17.233299255	38.495250702	ILE	422	O	O	-0.550
CB	65.112693787	19.324640274	36.690311432	ILE	422	CT	C	-0.050
HB	64.740470886	20.119609833	37.333488464	ILE	422	HA	H	0.050
CG1	65.665283203	20.004739761	35.413761139	ILE	422	CT	C	-0.100
HG11	66.077796936	19.249759674	34.745651245	ILE	422	HA	H	0.050
HG12	64.865646362	20.490499496	34.854808807	ILE	422	HA	H	0.050
CG2	66.253822327	18.616849899	37.441661835	ILE	422	CT	C	-0.150
HG21	65.931541443	18.267509460	38.418571472	ILE	422	HA	H	0.050
HG22	66.643089294	17.773429871	36.871631622	ILE	422	HA	H	0.050
HG23	67.082618713	19.290729523	37.647518158	ILE	422	HA	H	0.050
CD1	66.726593018	21.079339981	35.679458618	ILE	422	CT	C	-0.150
HD11	66.351013184	21.840589523	36.363998413	ILE	422	HA	H	0.050
HD12	67.638801575	20.659639359	36.100929260	ILE	422	HA	H	0.050
HD13	67.001846313	21.562129974	34.743648529	ILE	422	HA	H	0.050
N	61.907920837	17.454359055	37.372631073	THR	423	NP	N	-0.400
HN	61.460380554	17.663600922	36.501609802	THR	423	H	H	0.250
CA	61.054958344	16.810499191	38.371379852	THR	423	CT	C	0.050
HA	61.658210754	16.559909821	39.239448547	THR	423	HA	H	0.050
C	60.578929901	15.440279961	37.826141357	THR	423	C	C	0.600
O	60.983081818	14.996609688	36.756290436	THR	423	O	O	-0.550
CB	59.954788208	17.842960358	38.745880127	THR	423	CT	C	0.150
HB	59.439739227	18.184000015	37.846248627	THR	423	HA	H	0.100
OG1	60.506931305	18.982139587	39.371559143	THR	423	OT	O	-0.650
HG1	61.247459412	19.344539642	38.876171112	THR	423	HO	H	0.400
CG2	58.911750793	17.377389908	39.770389557	THR	423	CT	C	-0.150
HG21	58.306278229	18.222040176	40.100639343	THR	423	HA	H	0.050
HG22	58.211738586	16.650880814	39.366130829	THR	423	HA	H	0.050
HG23	59.389728546	16.947330475	40.650669098	THR	423	HA	H	0.050
N	59.764980316	14.768549919	38.660640717	THR	424	NP	N	-0.400
HN	59.399780273	15.204270363	39.482868195	THR	424	H	H	0.250
CA	59.263919830	13.423029900	38.407718658	THR	424	CT	C	0.050
HA	59.267780304	13.256469727	37.329959869	THR	424	HA	H	0.050
C	57.805130005	13.395859718	38.907329559	THR	424	C	C	0.600
O	57.227901459	14.436140060	39.198818207	THR	424	O	O	-0.550
CB	60.174808502	12.402739525	39.136520386	THR	424	CT	C	0.150
HB	61.171051025	12.514559746	38.705688477	THR	424	HA	H	0.100
OG1	59.724830627	11.078220367	38.887840271	THR	424	OT	O	-0.650
HG1	60.306171417	10.427399635	39.269840240	THR	424	HO	H	0.400
CG2	60.277400970	12.675180435	40.648719788	THR	424	CT	C	-0.150
HG21	60.942348480	11.971240044	41.149391174	THR	424	HA	H	0.050
HG22	60.668529510	13.673749924	40.842418671	THR	424	HA	H	0.050
HG23	59.301860809	12.613490105	41.128711700	THR	424	HA	H	0.050
N	57.291088104	12.157409668	39.028598785	GLU	425	NP	N	-0.400
HN	57.903999329	11.439550400	38.690528870	GLU	425	H	H	0.250
CA	56.063079834	11.774530411	39.722259521	GLU	425	CT	C	0.050
HA	56.396339417	10.937740326	40.332321167	GLU	425	HA	H	0.050
C	55.029830933	11.194519997	38.736450195	GLU	425	C	C	0.600
O	54.284568787	10.280550003	39.069900513	GLU	425	O	O	-0.550
CB	55.489109039	12.848099709	40.672298431	GLU	425	CT	C	-0.100
HB1	56.300678253	13.349439621	41.203029633	GLU	425	HA	H	0.050
HB2	54.996379852	13.625000000	40.095100403	GLU	425	HA	H	0.050
CG	54.525081635	12.279809952	41.725330353	GLU	425	CT	C	-0.250
HG1	54.014751434	13.090109825	42.245651245	GLU	425	HA	H	0.050
HG2	53.753089905	11.668199539	41.259361267	GLU	425	HA	H	0.050
CD	55.297698975	11.447059631	42.759449005	GLU	425	C	C	0.350

OE1	55.906070709	12.024709702	43.653388977	GLU	425	OC	O	-0.600
OE2	55.281951904	10.222129822	42.679889679	GLU	425	OC	O	-0.600
N	55.055179596	11.700200081	37.483230591	ILE	426	NP	N	-0.350
HN	55.677108765	12.451259613	37.241920471	ILE	426	H	H	0.250
CA	54.372200012	10.942090034	36.430301666	ILE	426	CT	C	0.050
HA	53.392169952	10.650210381	36.812698364	ILE	426	HA	H	0.050
C	55.203800201	9.678139687	36.171951294	ILE	426	C	C	0.550
O	54.743591309	8.547510147	36.282981873	ILE	426	O	O	-0.550
CB	54.199378967	11.772089958	35.150501251	ILE	426	CT	C	-0.050
HB	55.151771545	11.992899895	34.673000336	ILE	426	HA	H	0.050
CG	53.255458832	11.126629829	34.133541107	ILE	426	CT	C	-0.150
CG1	51.277828217	22.657060623	37.504489899	ILE	426	CT	C	-0.100
HG1	52.236980438	11.068349838	34.517978668	ILE	426	HA	H	0.050
HG11	51.402030945	22.559700012	38.581718445	ILE	426	HA	H	0.050
HG12	51.606220245	21.717679977	37.060890198	ILE	426	HA	H	0.050
HG2	53.237300873	11.710639954	33.216960907	ILE	426	HA	H	0.050
HG3	53.580200195	10.118740082	33.871768951	ILE	426	HA	H	0.050
CD1	49.817539215	22.935459137	37.142520905	ILE	426	CT	C	-0.150
HD1	49.721801758	23.199529648	36.089370728	ILE	426	HA	H	0.050
HD2	49.199890137	22.058950424	37.334110260	ILE	426	HA	H	0.050
HD3	49.409179688	23.751569748	37.737049103	ILE	426	HA	H	0.050
N	56.504291534	9.959509850	35.971279144	VAL	427	NP	N	-0.400
HN	56.783168793	10.912199974	35.834079742	VAL	427	H	H	0.250
CA	57.529380798	8.930870056	35.901218414	VAL	427	CT	C	0.050
HA	57.094860077	8.108360291	35.334571838	VAL	427	HA	H	0.050
C	57.884078979	8.377010345	37.303848267	VAL	427	C	C	0.600
O	59.024681091	8.046369553	37.596580505	VAL	427	O	O	-0.550
CB	58.754901886	9.471670151	35.132530212	VAL	427	CT	C	-0.050
HB	59.422008514	8.631710052	34.958961487	VAL	427	HA	H	0.050
CG1	58.363201141	10.009389877	33.746269226	VAL	427	CT	C	-0.150
HG11	57.670581818	10.846619606	33.812259674	VAL	427	HA	H	0.050
HG12	59.237300873	10.350709915	33.192378998	VAL	427	HA	H	0.050
HG13	57.885738373	9.241169930	33.142578125	VAL	427	HA	H	0.050
CG2	59.559078217	10.515230179	35.923290253	VAL	427	CT	C	-0.150
HG21	58.911701202	11.206979752	36.452919006	VAL	427	HA	H	0.050
HG22	60.196811676	10.033510208	36.662281036	VAL	427	HA	H	0.050
HG23	60.207359314	11.103520393	35.278530121	VAL	427	HA	H	0.050
N	56.823780060	8.227510452	38.119819641	MET	428	NP	N	-0.400
HN	55.952358246	8.664349556	37.910259247	MET	428	H	H	0.250
CA	56.793731689	7.225240231	39.168319702	MET	428	CT	C	0.050
HA	57.806549072	7.102530003	39.556819916	MET	428	HA	H	0.050
C	56.318859100	5.905960083	38.525470734	MET	428	C	C	0.600
O	56.833850861	4.829110146	38.794609070	MET	428	O	O	-0.550
CB	55.837799072	7.715489864	40.269550323	MET	428	CT	C	-0.100
HB1	56.077861786	8.752909660	40.491260529	MET	428	HA	H	0.050
HB2	54.808708191	7.743259907	39.914680481	MET	428	HA	H	0.050
CG	55.929878235	6.924560070	41.580448151	MET	428	CT	C	-0.050
HG1	56.966648102	6.803780079	41.892360687	MET	428	HA	H	0.050
HG2	55.443908691	7.490709782	42.376510620	MET	428	HA	H	0.050
SD	55.148498535	5.303380013	41.479568481	MET	428	SE	S	-0.100
CE	53.437141418	5.824059963	41.681991577	MET	428	CT	C	-0.100
HE1	53.164100647	6.510139942	40.881530762	MET	428	HA	H	0.050
HE2	52.766498566	4.965640068	41.660709381	MET	428	HA	H	0.050
HE3	53.313529968	6.352960110	42.626968384	MET	428	HA	H	0.050
N	55.323711395	6.074090004	37.625801086	LEU	429	NP	N	-0.400
HN	54.980220795	6.991449833	37.412189484	LEU	429	H	H	0.250
CA	54.729068756	4.939340115	36.931968689	LEU	429	CT	C	0.050
HA	54.606361389	4.134150028	37.658020020	LEU	429	HA	H	0.050
C	55.673938751	4.432660103	35.827259064	LEU	429	C	C	0.600
O	56.022148132	3.261559963	35.755790710	LEU	429	O	O	-0.550
CB	53.366050720	5.338260174	36.324108124	LEU	429	CT	C	-0.100
HB1	53.499099731	6.123779774	35.577400208	LEU	429	HA	H	0.050

HB2	52.981971741	4.477069855	35.774948120	LEU	429	HA	H	0.050
CG	52.273441315	5.777629852	37.324798584	LEU	429	CT	C	-0.050
HG	51.325469971	5.691649914	36.791728973	LEU	429	HA	H	0.050
CD1	52.174880981	4.855070114	38.546169281	LEU	429	CT	C	-0.150
HD11	52.017501831	3.819289923	38.245498657	LEU	429	HA	H	0.050
HD12	53.081809998	4.894509792	39.147628784	LEU	429	HA	H	0.050
HD13	51.343219757	5.146560192	39.189048767	LEU	429	HA	H	0.050
CD2	52.375259399	7.252960205	37.739158630	LEU	429	CT	C	-0.150
HD21	52.409458160	7.906779766	36.867729187	LEU	429	HA	H	0.050
HD22	51.506351471	7.543340206	38.327411652	LEU	429	HA	H	0.050
HD23	53.253379822	7.456429958	38.347251892	LEU	429	HA	H	0.050
N	56.068538666	5.389369965	34.968219757	ASN	430	NP	N	-0.400
HN	55.689788818	6.314400196	35.075748444	ASN	430	H	H	0.250
CA	56.871898651	5.085149765	33.778381348	ASN	430	CT	C	0.050
HA	56.189418793	4.526869774	33.135608673	ASN	430	HA	H	0.050
C	58.077049255	4.135839939	34.040710449	ASN	430	C	C	0.600
O	58.212600708	3.121530056	33.359039307	ASN	430	O	O	-0.550
CB	57.285591125	6.365640163	33.022499084	ASN	430	CT	C	-0.100
HB1	57.989768982	6.962080002	33.596851349	ASN	430	HA	H	0.050
HB2	57.789569855	6.111330032	32.089248657	ASN	430	HA	H	0.050
CG	56.058879852	7.242780209	32.712741852	ASN	430	C	C	0.550
OD1	55.289611816	7.591989994	33.595638275	ASN	430	O	O	-0.550
ND2	55.900520325	7.573629856	31.431339264	ASN	430	NP	N	-0.600
HD21	55.117660522	8.135279655	31.171930313	ASN	430	H	H	0.300
HD22	56.550819397	7.292620182	30.720249176	ASN	430	H	H	0.300
N	58.960491180	4.448550224	35.039688110	PRO	431	NX	N	-0.250
CA	60.110698700	3.584039927	35.298240662	PRO	431	CT	C	0.050
HA	60.663108826	3.446969986	34.374580383	PRO	431	HA	H	0.050
C	59.791568756	2.193690062	35.875728607	PRO	431	C	C	0.600
O	60.655239105	1.327430010	35.929161072	PRO	431	O	O	-0.550
CB	60.970790863	4.369160175	36.292289734	PRO	431	CT	C	-0.100
HB1	61.483100891	3.744899988	37.025241852	PRO	431	HA	H	0.050
HB2	61.727760315	4.926290035	35.743900299	PRO	431	HA	H	0.050
CG	60.017189026	5.354549885	36.952709198	PRO	431	CT	C	-0.100
HG1	59.546451569	4.889190197	37.820220947	PRO	431	HA	H	0.050
HG2	60.533779144	6.250289917	37.296100616	PRO	431	HA	H	0.050
CD	58.954078674	5.636240005	35.891258240	PRO	431	CT	C	0.000
HD1	57.997150421	5.813379765	36.367221832	PRO	431	HA	H	0.050
HD2	59.235610962	6.504980087	35.302070618	PRO	431	HA	H	0.050
N	58.512290955	1.989019990	36.257560730	ALA	432	NP	N	-0.400
HN	57.824501038	2.716629982	36.198059082	ALA	432	H	H	0.250
CA	58.112171173	0.681750000	36.779640198	ALA	432	CT	C	0.050
HA	58.724060059	0.500259995	37.664669037	ALA	432	HA	H	0.050
C	58.383678436	-0.444240004	35.760871887	ALA	432	C	C	0.600
O	58.573871613	-1.601709962	36.112270355	ALA	432	O	O	-0.550
CB	56.629020691	0.704349995	37.164779663	ALA	432	CT	C	-0.150
HB1	56.417919159	1.520320058	37.856948853	ALA	432	HA	H	0.050
HB2	55.990829468	0.837100029	36.290428162	ALA	432	HA	H	0.050
HB3	56.336219788	-0.227479994	37.649711609	ALA	432	HA	H	0.050
N	58.433120728	-0.021500001	34.482051849	ASN	433	NP	N	-0.400
HN	58.237461090	0.943130016	34.302661896	ASN	433	H	H	0.250
CA	58.811908722	-0.907459974	33.385478973	ASN	433	CT	C	0.050
HA	58.321819305	-1.870630026	33.543880463	ASN	433	HA	H	0.050
C	60.343059540	-1.118330002	33.353168488	ASN	433	C	C	0.600
O	60.999969482	-0.795159996	32.371929169	ASN	433	O	O	-0.550
CB	58.359508514	-0.280050009	32.053009033	ASN	433	CT	C	-0.100
HB1	58.844318390	0.684319973	31.892339706	ASN	433	HA	H	0.050
HB2	58.644649506	-0.920440018	31.217430115	ASN	433	HA	H	0.050
CG	56.839130402	-0.099639997	31.997470856	ASN	433	C	C	0.550
OD1	56.095901489	-1.013319969	31.674339294	ASN	433	O	O	-0.550
ND2	56.417060852	1.127969980	32.325370789	ASN	433	NP	N	-0.600
HD21	55.434680939	1.302909970	32.310249329	ASN	433	H	H	0.300

HD22	57.048370361	1.862450004	32.586219788	ASN	433	H	H	0.300
N	60.865871429	-1.668519974	34.469589233	THR	434	NP	N	-0.400
HN	60.231071472	-1.884490013	35.212741852	THR	434	H	H	0.250
CA	62.269828796	-2.073040009	34.568470001	THR	434	CT	C	0.050
HA	62.434181213	-2.278290033	35.626419067	THR	434	HA	H	0.050
C	63.239540100	-0.943159997	34.146690369	THR	434	C	C	0.600
O	64.099769592	-1.110190034	33.291069031	THR	434	O	O	-0.550
CB	62.467041016	-3.352699995	33.727741241	THR	434	CT	C	0.150
HB	62.521530151	-3.069000006	32.673141479	THR	434	HA	H	0.100
OG1	61.339118958	-4.201789856	33.843811035	THR	434	OT	O	-0.650
HG1	61.212280273	-4.439030170	34.754550934	THR	434	HO	H	0.400
CG2	63.746520996	-4.125539780	34.085189819	THR	434	CT	C	-0.150
HG21	63.823310852	-5.038819790	33.495029449	THR	434	HA	H	0.050
HG22	64.635208130	-3.528970003	33.878280640	THR	434	HA	H	0.050
HG23	63.776531219	-4.402949810	35.139049530	THR	434	HA	H	0.050
N	63.016078949	0.219730005	34.780109406	ARG	435	NP	N	-0.400
HN	62.355388641	0.310939997	35.532920837	ARG	435	H	H	0.250
CA	63.566749573	1.471339941	34.283718109	ARG	435	CT	C	0.050
HA	64.571258545	1.285799980	33.898788452	ARG	435	HA	H	0.050
C	63.672229767	2.395050049	35.514919281	ARG	435	C	C	0.600
O	63.301681519	1.993720055	36.610401154	ARG	435	O	O	-0.550
CB	62.591331482	1.891770005	33.163600922	ARG	435	CT	C	-0.100
HB1	62.675758362	1.158480048	32.360069275	ARG	435	HA	H	0.050
HB2	61.571109772	1.774649978	33.524570465	ARG	435	HA	H	0.050
CG	62.755710602	3.276550055	32.534301758	ARG	435	CT	C	-0.100
HG1	62.717288971	4.038449764	33.306930542	ARG	435	HA	H	0.050
HG2	63.731090546	3.354899883	32.053058624	ARG	435	HA	H	0.050
CD	61.630580902	3.520770073	31.517530441	ARG	435	CT	C	0.000
HD1	61.666259766	2.791960001	30.705820084	ARG	435	HA	H	0.050
HD2	60.656570435	3.452209949	32.006599426	ARG	435	HA	H	0.050
NE	61.749511719	4.843589783	30.917579651	ARG	435	NP	N	-0.400
HE	62.603229523	5.353260040	31.040319443	ARG	435	H	H	0.300
CZ	60.751590729	5.413139820	30.203939438	ARG	435	C	C	0.500
NH1	59.594768524	4.791069984	30.007429123	ARG	435	NC	N	-0.450
HH11	59.448089600	3.850450039	30.306140900	ARG	435	HC	H	0.350
HH12	58.841041565	5.300129890	29.559410095	ARG	435	HC	H	0.350
NH2	60.920238495	6.619100094	29.695039749	ARG	435	NC	N	-0.450
HH21	61.699619293	7.212279797	29.937789917	ARG	435	HC	H	0.350
HH22	60.230068207	6.990330219	29.057380676	ARG	435	HC	H	0.350
N	64.213996887	3.615420103	35.330581665	SER	436	NP	N	-0.400
HN	64.527290344	3.947649956	34.441478729	SER	436	H	H	0.250
CA	64.417411804	4.478889942	36.492149353	SER	436	CT	C	0.050
HA	63.607688904	4.311719894	37.203140259	SER	436	HA	H	0.050
C	64.356239319	5.944159985	36.052318573	SER	436	C	C	0.600
O	64.227340698	6.254630089	34.872879028	SER	436	O	O	-0.550
CB	65.769706726	4.135320187	37.144218445	SER	436	CT	C	0.050
HB1	65.903503418	4.655020237	38.100570679	SER	436	HA	H	0.100
HB2	65.785179138	3.072799921	37.392990112	SER	436	HA	H	0.100
OG	66.868019104	4.377620220	36.278961182	SER	436	OT	O	-0.650
HG	67.026489258	5.324639797	36.202869415	SER	436	HO	H	0.400
N	64.496322632	6.807240009	37.077079773	ILE	437	NP	N	-0.400
HN	64.509407043	6.456630230	38.010688782	ILE	437	H	H	0.250
CA	64.894920349	8.195650101	36.870079041	ILE	437	CT	C	0.050
HA	64.327171326	8.588170052	36.028030396	ILE	437	HA	H	0.050
C	66.394126892	8.139439583	36.498050690	ILE	437	C	C	0.600
O	67.014472961	7.086150169	36.622509003	ILE	437	O	O	-0.550
CB	64.609382629	9.013150215	38.161579132	ILE	437	CT	C	-0.050
HB	65.344772339	8.721039772	38.913539886	ILE	437	HA	H	0.050
CG1	63.211498260	8.712980270	38.757160187	ILE	437	CT	C	-0.100
HG11	62.432991028	9.015700340	38.055320740	ILE	437	HA	H	0.050
HG12	63.078140259	7.642549992	38.906909943	ILE	437	HA	H	0.050
CG2	64.750808716	10.527139664	37.926219940	ILE	437	CT	C	-0.150

HG21	65.756103516	10.818209648	37.630901337	ILE	437	HA	H	0.050
HG22	64.055076599	10.867859840	37.159950256	ILE	437	HA	H	0.050
HG23	64.540580750	11.085709572	38.835060120	ILE	437	HA	H	0.050
CD1	62.972789764	9.375289917	40.124061584	ILE	437	CT	C	-0.150
HD11	63.794738770	9.166350365	40.809909821	ILE	437	HA	H	0.050
HD12	62.876171112	10.458080292	40.049289703	ILE	437	HA	H	0.050
HD13	62.062580109	8.995050430	40.587978363	ILE	437	HA	H	0.050
N	66.940887451	9.275469780	36.028331757	SER	438	NP	N	-0.400
HN	66.418388367	10.127799988	35.961578369	SER	438	H	H	0.250
CA	68.373619080	9.334509850	35.762588501	SER	438	CT	C	0.050
HA	68.873359680	8.523389816	36.296131134	SER	438	HA	H	0.050
C	68.895851135	10.656439781	36.336509705	SER	438	C	C	0.600
O	68.213478088	11.323579788	37.102581024	SER	438	O	O	-0.550
CB	68.607513428	9.207269669	34.245239258	SER	438	CT	C	0.050
HB1	69.659149170	8.997980118	34.044288635	SER	438	HA	H	0.100
HB2	68.061088562	8.350469589	33.837310791	SER	438	HA	H	0.100
OG	68.271202087	10.381310463	33.527160645	SER	438	OT	O	-0.650
HG	67.364646912	10.642020226	33.724140167	SER	438	HO	H	0.400
N	70.111007690	11.020919800	35.872070312	ASN	439	NP	N	-0.400
HN	70.602493286	10.400110245	35.264389038	ASN	439	H	H	0.250
CA	70.654640198	12.348150253	36.162689209	ASN	439	CT	C	0.050
HA	70.623268127	12.466959953	37.247871399	ASN	439	HA	H	0.050
C	69.772781372	13.439109802	35.512641907	ASN	439	C	C	0.600
O	69.781890869	14.592280388	35.921779633	ASN	439	O	O	-0.550
CB	72.106651306	12.417980194	35.645301819	ASN	439	CT	C	-0.100
HB1	72.616119385	11.481610298	35.872928619	ASN	439	HA	H	0.050
HB2	72.136779785	12.526940346	34.560611725	ASN	439	HA	H	0.050
CG	72.955101013	13.535090446	36.283111572	ASN	439	C	C	0.550
OD1	73.984123230	13.277480125	36.893669128	ASN	439	O	O	-0.550
ND2	72.523170471	14.782819748	36.075790405	ASN	439	NP	N	-0.600
HD21	73.123359680	15.531149864	36.358871460	ASN	439	H	H	0.300
HD22	71.627571106	15.003689766	35.682598114	ASN	439	H	H	0.300
N	69.018043518	13.000060081	34.483051300	MET	440	NP	N	-0.400
HN	69.076911926	12.051050186	34.163799286	MET	440	H	H	0.250
CA	67.926246643	13.796540260	33.943950653	MET	440	CT	C	0.050
HA	68.024803162	14.823769569	34.301319122	MET	440	HA	H	0.050
C	66.620422363	13.179920197	34.472328186	MET	440	C	C	0.600
O	66.359542847	11.989399910	34.308368683	MET	440	O	O	-0.550
CB	67.988487244	13.761710167	32.407028198	MET	440	CT	C	-0.100
HB1	68.992950439	14.040410042	32.088058472	MET	440	HA	H	0.050
HB2	67.834396362	12.741390228	32.053211212	MET	440	HA	H	0.050
CG	66.981178284	14.693849564	31.716150284	MET	440	CT	C	-0.050
HG1	67.066001892	14.565119743	30.637399673	MET	440	HA	H	0.050
HG2	65.953323364	14.429490089	31.953390121	MET	440	HA	H	0.050
SD	67.298049927	16.434450150	32.083721161	MET	440	SE	S	-0.100
CE	65.935562134	16.791870117	33.214809418	MET	440	CT	C	-0.100
HE1	65.084251404	16.134340286	33.042770386	MET	440	HA	H	0.050
HE2	66.260177612	16.714960098	34.251941681	MET	440	HA	H	0.050
HE3	65.581047058	17.808670044	33.043128967	MET	440	HA	H	0.050
N	65.834487915	14.051670074	35.120769501	THR	441	NP	N	-0.400
HN	66.137466431	14.964579582	35.397060394	THR	441	H	H	0.250
CA	64.488586426	13.696749687	35.534591675	THR	441	CT	C	0.050
HA	64.532241821	12.667010307	35.890541077	THR	441	HA	H	0.050
C	63.552581787	13.746540070	34.308948517	THR	441	C	C	0.600
O	64.014907837	13.838540077	33.180728912	THR	441	O	O	-0.550
CB	64.072547913	14.652429581	36.667121887	THR	441	CT	C	0.150
HB	63.295169830	15.324700356	36.291110992	THR	441	HA	H	0.100
OG1	65.195579529	15.432149887	37.050289154	THR	441	OT	O	-0.650
HG1	64.955581665	15.968999863	37.811611176	THR	441	HO	H	0.400
CG2	63.545310974	13.859910011	37.869930267	THR	441	CT	C	-0.150
HG21	64.347457886	13.286439896	38.328720093	THR	441	HA	H	0.050
HG22	63.110450745	14.500149727	38.638591766	THR	441	HA	H	0.050

HG23	62.781269073	13.159199715	37.542179108	THR	441	HA	H	0.050
N	62.231781006	13.649419785	34.585330963	SER	442	NP	N	-0.400
HN	61.899818420	13.763139725	35.525619507	SER	442	H	H	0.250
CA	61.206298828	13.500120163	33.549938202	SER	442	CT	C	0.050
HA	60.410350800	12.974639893	34.071739197	SER	442	HA	H	0.050
C	61.687030792	12.595600128	32.395221710	SER	442	C	C	0.600
O	61.906688690	13.000320435	31.260000229	SER	442	O	O	-0.550
CB	60.715648651	14.875820160	33.068298340	SER	442	CT	C	0.050
HB1	60.498661041	15.520910263	33.927028656	SER	442	HA	H	0.100
HB2	61.505989075	15.373709679	32.503009796	SER	442	HA	H	0.100
OG	59.568149567	14.798219681	32.234828949	SER	442	OT	O	-0.650
HG	58.882560730	14.290780067	32.684719086	SER	442	HO	H	0.400
N	61.883979797	11.336629868	32.814090729	GLN	443	NP	N	-0.400
HN	61.514598846	11.113559723	33.712398529	GLN	443	H	H	0.250
CA	62.735038757	10.390310287	32.102691650	GLN	443	CT	C	0.050
HA	63.591991425	10.957750320	31.733030319	GLN	443	HA	H	0.050
C	62.061431885	9.743269920	30.872959137	GLN	443	C	C	0.600
O	62.407550812	8.624930382	30.493440628	GLN	443	O	O	-0.550
CB	63.234390259	9.342729568	33.122230530	GLN	443	CT	C	-0.100
HB1	63.837779999	8.579500198	32.627849579	GLN	443	HA	H	0.050
HB2	63.920539856	9.853799820	33.799079895	GLN	443	HA	H	0.050
CG	62.138359070	8.683759689	33.987861633	GLN	443	CT	C	-0.100
HG1	62.589279175	8.199700356	34.850898743	GLN	443	HA	H	0.050
HG2	61.454189301	9.414580345	34.403858185	GLN	443	HA	H	0.050
CD	61.323661804	7.624269962	33.241039276	GLN	443	C	C	0.550
OE1	60.336540222	7.895249844	32.575260162	GLN	443	O	O	-0.550
NE2	61.772998810	6.387979984	33.437400818	GLN	443	NP	N	-0.600
HE21	61.245750427	5.621099949	33.079570770	GLN	443	H	H	0.300
HE22	62.629001617	6.249579906	33.941471100	GLN	443	H	H	0.300
N	61.103530884	10.480090141	30.273210526	GLU	444	NP	N	-0.400
HN	60.979240417	11.436599731	30.540700912	GLU	444	H	H	0.250
CA	60.442291260	10.010990143	29.063369751	GLU	444	CT	C	0.050
HA	60.663928986	8.958250046	28.968530655	GLU	444	HA	H	0.050
C	61.092689514	10.646189690	27.841159821	GLU	444	C	C	0.600
O	61.883239746	11.572099686	27.926090240	GLU	444	O	O	-0.550
CB	58.916519165	10.245499611	29.103620529	GLU	444	CT	C	-0.100
HB1	58.699981689	11.160059929	29.657819748	GLU	444	HA	H	0.050
HB2	58.517101288	10.419230461	28.102849960	GLU	444	HA	H	0.050
CG	58.134529114	9.062990189	29.709419250	GLU	444	CT	C	-0.250
HG1	58.450691223	8.901960373	30.741270065	GLU	444	HA	H	0.050
HG2	57.074188232	9.314390182	29.733409882	GLU	444	HA	H	0.050
CD	58.301338196	7.737080097	28.933790207	GLU	444	C	C	0.350
OE1	59.007640839	7.695049763	27.925689697	GLU	444	OC	O	-0.600
OE2	57.789821625	6.713220119	29.381000519	GLU	444	OC	O	-0.600
N	60.716899872	10.060950279	26.690660477	PHE	445	NP	N	-0.400
HN	60.022148132	9.340829849	26.777059555	PHE	445	H	H	0.250
CA	61.408630371	10.327650070	25.429359436	PHE	445	CT	C	0.050
HA	62.458110809	10.097249985	25.620849609	PHE	445	HA	H	0.050
C	61.350929260	11.804710388	24.967140198	PHE	445	C	C	0.600
O	62.060859680	12.201350212	24.043310165	PHE	445	O	O	-0.550
CB	60.882560730	9.373240471	24.340999603	PHE	445	CT	C	-0.100
HB1	61.509769440	9.447549820	23.451770782	PHE	445	HA	H	0.050
HB2	60.970909119	8.341529846	24.683080673	PHE	445	HA	H	0.050
CG	59.448410034	9.634960175	23.952869415	PHE	445	C6R	C	0.000
CD1	58.399120331	9.091620445	24.690040588	PHE	445	C6R	C	-0.130
HD1	58.596160889	8.464260101	25.547679901	PHE	445	HA	H	0.130
CD2	59.152500153	10.425180435	22.844930649	PHE	445	C6R	C	-0.130
HD2	59.951709747	10.856209755	22.259620667	PHE	445	HA	H	0.130
CE1	57.080669403	9.342709541	24.335260391	PHE	445	C6R	C	-0.130
HE1	56.277648926	8.921389580	24.923229218	PHE	445	HA	H	0.130
CE2	57.833950043	10.671999931	22.483480453	PHE	445	C6R	C	-0.130
HE2	57.612888336	11.288499832	21.624530792	PHE	445	HA	H	0.130

CZ	56.796360016	10.133959770	23.231420517	PHE	445	C6R	C	-0.130
HZ	55.769889832	10.333430290	22.958589554	PHE	445	HA	H	0.130
N	60.490070343	12.594779968	25.639860153	VAL	446	NP	N	-0.400
HN	59.939449310	12.215189934	26.383209229	VAL	446	H	H	0.250
CA	60.360141754	14.015279770	25.334039688	VAL	446	CT	C	0.050
HA	60.769458771	14.179400444	24.336029053	VAL	446	HA	H	0.050
C	61.215038300	14.858559608	26.314519882	VAL	446	C	C	0.600
O	61.051681519	16.068119049	26.421949387	VAL	446	O	O	-0.550
CB	58.866020203	14.411359787	25.293090820	VAL	446	CT	C	-0.050
HB	58.478488922	14.406299591	26.307540894	VAL	446	HA	H	0.050
CG1	58.642551422	15.808850288	24.686960220	VAL	446	CT	C	-0.150
HG11	59.133621216	15.901470184	23.718549728	VAL	446	HA	H	0.050
HG12	57.581031799	15.999990463	24.529750824	VAL	446	HA	H	0.050
HG13	59.016769409	16.602359772	25.331750870	VAL	446	HA	H	0.050
CG2	58.026519775	13.392430305	24.510120392	VAL	446	CT	C	-0.150
HG21	58.383869171	13.294750214	23.485839844	VAL	446	HA	H	0.050
HG22	58.035930634	12.407030106	24.975629807	VAL	446	HA	H	0.050
HG23	56.982830048	13.703619957	24.468540192	VAL	446	HA	H	0.050
N	62.210231781	14.197870255	26.958120346	GLU	447	NP	N	-0.400
HN	62.300399780	13.196459770	26.922639847	GLU	447	H	H	0.250
CA	63.174720764	14.906729698	27.813819885	GLU	447	CT	C	0.050
HA	62.569728851	15.481169701	28.512020111	GLU	447	HA	H	0.050
C	64.051757812	15.913490295	27.026500702	GLU	447	C	C	0.600
O	64.929100037	16.587680817	27.557350159	GLU	447	O	O	-0.550
CB	64.008689880	13.900810242	28.637910843	GLU	447	CT	C	-0.100
HB1	64.334251404	14.393980026	29.555290222	GLU	447	HA	H	0.050
HB2	63.348640442	13.107319832	28.985759735	GLU	447	HA	H	0.050
CG	65.257598877	13.271340370	27.978019714	GLU	447	CT	C	-0.250
HG1	66.120796204	13.903309822	28.174249649	GLU	447	HA	H	0.050
HG2	65.478790283	12.319270134	28.461700439	GLU	447	HA	H	0.050
CD	65.143501282	13.024700165	26.468080521	GLU	447	C	C	0.350
OE1	64.310363770	12.246489525	26.025499344	GLU	447	OC	O	-0.600
OE2	65.890167236	13.631830215	25.701589584	GLU	447	OC	O	-0.600
N	63.763500214	15.987600327	25.718620300	LYS	448	NP	N	-0.400
HN	63.194778442	15.263759613	25.341669083	LYS	448	H	H	0.250
CA	64.198852539	17.065729141	24.854000092	LYS	448	CT	C	0.050
HA	65.284263611	17.015190125	24.808389664	LYS	448	HA	H	0.050
C	63.792449951	18.435329437	25.432769775	LYS	448	C	C	0.600
O	64.568916321	19.380029678	25.422330856	LYS	448	O	O	-0.550
CB	63.572830200	16.870649338	23.455810547	LYS	448	CT	C	-0.100
HB1	62.520500183	17.160379410	23.481550217	LYS	448	HA	H	0.050
HB2	64.051200867	17.549539566	22.748600006	LYS	448	HA	H	0.050
CG	63.638690948	15.428050041	22.918300629	LYS	448	CT	C	-0.100
HG1	63.051048279	14.766309738	23.553869247	LYS	448	HA	H	0.050
HG2	63.148738861	15.392410278	21.944469452	LYS	448	HA	H	0.050
CD	65.069503784	14.892780304	22.773420334	LYS	448	CT	C	-0.100
HD1	65.581619263	15.450240135	21.988260269	LYS	448	HA	H	0.050
HD2	65.636352539	15.076180458	23.684160233	LYS	448	HA	H	0.050
CE	65.114959717	13.392990112	22.451530457	LYS	448	CT	C	0.050
HE1	64.570838928	13.174759865	21.531269073	LYS	448	HA	H	0.100
HE2	66.150077820	13.082539558	22.301340103	LYS	448	HA	H	0.100
NZ	64.559700012	12.559109688	23.516380310	LYS	448	NT	N	-0.300
HZ1	63.534999847	12.703900337	23.650609970	LYS	448	HC	H	0.350
HZ2	64.701438904	11.546380043	23.352010727	LYS	448	HC	H	0.350
HZ3	64.984336853	12.779450417	24.451509476	LYS	448	HC	H	0.350
N	62.532039642	18.482509613	25.917179108	LEU	449	NP	N	-0.400
HN	61.998409271	17.635160446	25.984970093	LEU	449	H	H	0.250
CA	61.888530731	19.759109497	26.216419220	LEU	449	CT	C	0.050
HA	61.830928802	20.287509918	25.263339996	LEU	449	HA	H	0.050
C	62.701808929	20.620590210	27.196559906	LEU	449	C	C	0.600
O	62.935230255	21.793939590	26.954629898	LEU	449	O	O	-0.550
CB	60.473678589	19.541439056	26.775030136	LEU	449	CT	C	-0.100

HB1	59.981731415	18.729190826	26.238109589	LEU	449	HA	H	0.050
HB2	60.536788940	19.189750671	27.805770874	LEU	449	HA	H	0.050
CG	59.614830017	20.823919296	26.688159943	LEU	449	CT	C	-0.050
HG	60.267421722	21.690109253	26.566450119	LEU	449	HA	H	0.050
CD1	58.696079254	20.780860901	25.459680557	LEU	449	CT	C	-0.150
HD11	58.079540253	19.882829666	25.451210022	LEU	449	HA	H	0.050
HD12	58.030258179	21.643850327	25.431940079	LEU	449	HA	H	0.050
HD13	59.280750275	20.779869080	24.539560318	LEU	449	HA	H	0.050
CD2	58.828338623	21.079460144	27.979290009	LEU	449	CT	C	-0.150
HD21	59.501201630	21.212690353	28.827289581	LEU	449	HA	H	0.050
HD22	58.216041565	21.978260040	27.901189804	LEU	449	HA	H	0.050
HD23	58.169891357	20.248640060	28.212459564	LEU	449	HA	H	0.050
N	63.108058929	19.969490051	28.301240921	THR	450	NP	N	-0.400
HN	62.859149933	19.007089615	28.388000488	THR	450	H	H	0.250
CA	63.826099396	20.652690887	29.379629135	THR	450	CT	C	0.050
HA	63.142189026	21.419780731	29.744789124	THR	450	HA	H	0.050
C	65.071907043	21.395709991	28.832529068	THR	450	C	C	0.600
O	65.203781128	22.615060806	28.885740280	THR	450	O	O	-0.550
CB	64.132041931	19.636610031	30.520919800	THR	450	CT	C	0.150
HB	63.233261108	19.533800125	31.143299103	THR	450	HA	H	0.100
OG1	65.223861694	20.029140472	31.333749771	THR	450	OT	O	-0.650
HG1	65.011093140	20.857700348	31.785999298	THR	450	HO	H	0.400
CG2	64.470230103	18.215639114	30.044849396	THR	450	CT	C	-0.150
HG21	65.364128113	18.194650650	29.425510406	THR	450	HA	H	0.050
HG22	64.663482666	17.571640015	30.901720047	THR	450	HA	H	0.050
HG23	63.651950836	17.748670578	29.498710632	THR	450	HA	H	0.050
N	65.962738037	20.579790115	28.247900009	LYS	451	NP	N	-0.400
HN	65.754066467	19.604740143	28.240629196	LYS	451	H	H	0.250
CA	67.205200195	21.133199692	27.720510483	LYS	451	CT	C	0.050
HA	67.643516541	21.722839355	28.528699875	LYS	451	HA	H	0.050
C	66.951057434	22.115949631	26.555849075	LYS	451	C	C	0.600
O	67.663528442	23.096149445	26.386959076	LYS	451	O	O	-0.550
CB	68.187522888	20.001430511	27.364179611	LYS	451	CT	C	-0.100
HB1	69.033309937	20.412370682	26.810150146	LYS	451	HA	H	0.050
HB2	68.606880188	19.624559402	28.297979355	LYS	451	HA	H	0.050
CG	67.585189819	18.807800293	26.599969864	LYS	451	CT	C	-0.100
HG1	66.763732910	18.378540039	27.171920776	LYS	451	HA	H	0.050
HG2	67.159820557	19.142789841	25.653060913	LYS	451	HA	H	0.050
CD	68.640838623	17.719100952	26.347059250	LYS	451	CT	C	-0.100
HD1	69.375358582	18.101289749	25.636449814	LYS	451	HA	H	0.050
HD2	69.192436218	17.517129898	27.266550064	LYS	451	HA	H	0.050
CE	68.053039551	16.406480789	25.813880920	LYS	451	CT	C	0.050
HE1	67.441703796	16.586429596	24.929319382	LYS	451	HA	H	0.100
HE2	68.854713440	15.730520248	25.510499954	LYS	451	HA	H	0.100
NZ	67.239051819	15.703499794	26.804389954	LYS	451	NT	N	-0.300
HZ1	66.451637268	16.301820755	27.139890671	LYS	451	HC	H	0.350
HZ2	66.812530518	14.847080231	26.382890701	LYS	451	HC	H	0.350
HZ3	67.799926758	15.416660309	27.629169464	LYS	451	HC	H	0.350
N	65.887283325	21.821149826	25.783439636	ARG	452	NP	N	-0.400
HN	65.345329285	21.002780914	25.983669281	ARG	452	H	H	0.250
CA	65.530746460	22.684579849	24.658809662	ARG	452	CT	C	0.050
HA	66.444511414	22.833570480	24.080749512	ARG	452	HA	H	0.050
C	65.038673401	24.062639236	25.143419266	ARG	452	C	C	0.600
O	65.299209595	25.089149475	24.527379990	ARG	452	O	O	-0.550
CB	64.472343445	21.987609863	23.789310455	ARG	452	CT	C	-0.100
HB1	64.804412842	20.969480515	23.588809967	ARG	452	HA	H	0.050
HB2	63.532218933	21.901039124	24.336549759	ARG	452	HA	H	0.050
CG	64.240821838	22.686429977	22.442710876	ARG	452	CT	C	-0.100
HG1	63.858760834	23.696180344	22.601909637	ARG	452	HA	H	0.050
HG2	65.199348450	22.801029205	21.936290741	ARG	452	HA	H	0.050
CD	63.267478943	21.907199860	21.549200058	ARG	452	CT	C	0.000
HD1	63.525451660	20.850000381	21.469770432	ARG	452	HA	H	0.050

HD2	62.250858307	21.963489532	21.939090729	ARG	452	HA	H	0.050
NE	63.229068756	22.482000351	20.208850861	ARG	452	NP	N	-0.400
HE	62.513710022	23.153600693	19.967580795	ARG	452	H	H	0.300
CZ	64.129966736	22.209770203	19.241199493	ARG	452	C	C	0.500
NH1	65.141830444	21.379470825	19.473880768	ARG	452	NC	N	-0.450
HH11	65.223243713	20.968439102	20.381299973	ARG	452	HC	H	0.350
HH12	65.818199158	21.160879135	18.772159576	ARG	452	HC	H	0.350
NH2	63.987068176	22.790580750	18.058120728	ARG	452	NC	N	-0.450
HH21	63.195049286	23.417749405	17.959440231	ARG	452	HC	H	0.350
HH22	64.596473694	22.652360916	17.281370163	ARG	452	HC	H	0.350
N	64.339408875	24.029689789	26.293180466	LEU	453	NP	N	-0.400
HN	64.160423279	23.151359558	26.739620209	LEU	453	H	H	0.250
CA	63.865051270	25.251060486	26.931989670	LEU	453	CT	C	0.050
HA	63.299659729	25.806140900	26.184820175	LEU	453	HA	H	0.050
C	65.067779541	26.101020813	27.328319550	LEU	453	C	C	0.600
O	65.094940186	27.304420471	27.123319626	LEU	453	O	O	-0.550
CB	62.963500977	24.893280029	28.127099991	LEU	453	CT	C	-0.100
HB1	62.168830872	24.250120163	27.747089386	LEU	453	HA	H	0.050
HB2	63.502529144	24.283279419	28.851119995	LEU	453	HA	H	0.050
CG	62.323169708	26.096080780	28.850919724	LEU	453	CT	C	-0.050
HG	61.995269775	26.817920685	28.101009369	LEU	453	HA	H	0.050
CD1	61.070018768	25.646640778	29.613330841	LEU	453	CT	C	-0.150
HD11	61.313331604	24.873889923	30.339929581	LEU	453	HA	H	0.050
HD12	60.614269257	26.479339600	30.147850037	LEU	453	HA	H	0.050
HD13	60.320468903	25.239959717	28.933879852	LEU	453	HA	H	0.050
CD2	63.305511475	26.796220779	29.811019897	LEU	453	CT	C	-0.150
HD21	63.949649811	26.080970764	30.316589355	LEU	453	HA	H	0.050
HD22	63.946708679	27.507699966	29.291929245	LEU	453	HA	H	0.050
HD23	62.782661438	27.361429214	30.583049774	LEU	453	HA	H	0.050
N	66.089859009	25.389600754	27.834390640	LYS	454	NP	N	-0.400
HN	65.952507019	24.410449982	28.011209488	LYS	454	H	H	0.250
CA	67.352951050	26.042360306	28.169990540	LYS	454	CT	C	0.050
HA	67.106597900	27.026479721	28.576089859	LYS	454	HA	H	0.050
C	68.248367310	26.320539474	26.938709259	LYS	454	C	C	0.600
O	69.454261780	26.489669800	27.064630508	LYS	454	O	O	-0.550
CB	68.057037354	25.232860565	29.269149780	LYS	454	CT	C	-0.100
HB1	68.057960510	24.173049927	29.011070251	LYS	454	HA	H	0.050
HB2	69.101608276	25.534769058	29.359600067	LYS	454	HA	H	0.050
CG	67.361839294	25.472160339	30.614810944	LYS	454	CT	C	-0.100
HG1	67.476272583	26.525209427	30.877309799	LYS	454	HA	H	0.050
HG2	66.289909363	25.303190231	30.505279541	LYS	454	HA	H	0.050
CD	67.874359131	24.600460052	31.766279221	LYS	454	CT	C	-0.100
HD1	67.546707153	23.573989868	31.594810486	LYS	454	HA	H	0.050
HD2	68.964691162	24.581369400	31.780359268	LYS	454	HA	H	0.050
CE	67.344818115	25.127889633	33.107948303	LYS	454	CT	C	0.050
HE1	68.034172058	25.853439331	33.544219971	LYS	454	HA	H	0.100
HE2	66.408699036	25.655689240	32.945270538	LYS	454	HA	H	0.100
NZ	67.049942017	24.112749100	34.110488892	LYS	454	NT	N	-0.300
HZ1	66.370376587	23.429069519	33.706008911	LYS	454	HC	H	0.350
HZ2	67.904212952	23.611719131	34.416301727	LYS	454	HC	H	0.350
HZ3	66.594856262	24.594339371	34.921409607	LYS	454	HC	H	0.350
N	67.590362549	26.467790604	25.765869141	ARG	455	NP	N	-0.400
HN	66.676406860	26.084009171	25.627780914	ARG	455	H	H	0.250
CA	68.140800476	27.354549408	24.743450165	ARG	455	CT	C	0.050
HA	69.193687439	27.096549988	24.615169525	ARG	455	HA	H	0.050
C	68.034080505	28.816490173	25.235080719	ARG	455	C	C	0.600
O	68.889762878	29.647640228	24.967510223	ARG	455	O	O	-0.550
CB	67.375579834	27.169639587	23.418899536	ARG	455	CT	C	-0.100
HB1	67.357810974	26.108669281	23.168329239	ARG	455	HA	H	0.050
HB2	66.333030701	27.459840775	23.550979614	ARG	455	HA	H	0.050
CG	68.004089355	27.946550369	22.245910645	ARG	455	CT	C	-0.100
HG1	68.090209961	29.005599976	22.493700027	ARG	455	HA	H	0.050

HG2	69.024299622	27.590209961	22.099109650	ARG	455	HA	H	0.050
CD	67.228347778	27.799119949	20.930030823	ARG	455	CT	C	0.000
HD1	67.792091370	28.220529556	20.096710205	ARG	455	HA	H	0.050
HD2	67.036628723	26.747989655	20.716760635	ARG	455	HA	H	0.050
NE	65.980270386	28.558660507	20.999750137	ARG	455	NP	N	-0.400
HE	66.039016724	29.481830597	21.391820908	ARG	455	H	H	0.300
CZ	64.765220642	28.113689423	20.609739304	ARG	455	C	C	0.500
NH1	64.635147095	26.916700363	20.050819397	ARG	455	NC	N	-0.450
HH11	65.446960449	26.362159729	19.894079208	ARG	455	HC	H	0.350
HH12	63.745208740	26.525129318	19.770420074	ARG	455	HC	H	0.350
NH2	63.696960449	28.875730515	20.799770355	ARG	455	NC	N	-0.450
HH21	63.739009857	29.800889969	21.214719772	ARG	455	HC	H	0.350
HH22	62.772769928	28.549749374	20.563619614	ARG	455	HC	H	0.350
N	66.932373047	29.041860580	25.980859756	HIS	456	NP	N	-0.400
HN	66.286727905	28.296310425	26.142570496	HIS	456	H	H	0.250
CA	66.611808777	30.318769455	26.607000351	HIS	456	CT	C	0.050
HA	67.385360718	31.041500092	26.351369858	HIS	456	HA	H	0.050
C	66.525726318	30.146659851	28.138290405	HIS	456	C	C	0.600
O	65.438262939	30.066879272	28.698030472	HIS	456	O	O	-0.550
CB	65.238807678	30.798000336	26.102800369	HIS	456	CT	C	-0.100
HB1	64.478828430	30.029100418	26.251409531	HIS	456	HA	H	0.050
HB2	64.899269104	31.681100845	26.643039703	HIS	456	HA	H	0.050
CG	65.320587158	31.144519806	24.640670776	HIS	456	C5R	C	0.100
ND1	65.623397827	32.369701385	24.165859222	HIS	456	N5R	N	-0.400
HD1	65.838516235	33.170158386	24.707460403	HIS	456	H	H	0.300
CD2	65.105590820	30.285329819	23.556970596	HIS	456	C5R	C	0.000
HD2	64.842376709	29.241340637	23.632429123	HIS	456	HA	H	0.100
CE1	65.592468262	32.259761810	22.825780869	HIS	456	C5R	C	0.200
HE1	65.782920837	33.079319000	22.146799088	HIS	456	HA	H	0.100
NE2	65.283508301	31.007640839	22.428030014	HIS	456	N5R	N	-0.400
N	67.698303223	30.100179672	28.828399658	PRO	457	NX	N	-0.250
CA	67.690513611	30.093309402	30.291320801	PRO	457	CT	C	0.050
HA	66.906639099	29.444049835	30.685039520	PRO	457	HA	H	0.050
C	67.515319824	31.507020950	30.894460678	PRO	457	C	C	0.600
O	67.171287537	31.651130676	32.058479309	PRO	457	O	O	-0.550
CB	69.083061218	29.547159195	30.630170822	PRO	457	CT	C	-0.100
HB1	69.456901550	29.856050491	31.607120514	PRO	457	HA	H	0.050
HB2	69.044906616	28.457460403	30.632919312	PRO	457	HA	H	0.050
CG	69.970832825	30.008930206	29.468250275	PRO	457	CT	C	-0.100
HG1	70.330192566	31.019660950	29.665630341	PRO	457	HA	H	0.050
HG2	70.842453003	29.369829178	29.325199127	PRO	457	HA	H	0.050
CD	69.040588379	30.021339417	28.250080109	PRO	457	CT	C	0.000
HD1	69.246963501	30.861949921	27.585880280	PRO	457	HA	H	0.050
HD2	69.146606445	29.092079163	27.691949844	PRO	457	HA	H	0.050
N	67.760169983	32.509170532	30.020069122	GLU	458	NP	N	-0.400
HN	68.006553650	32.278411865	29.075889587	GLU	458	H	H	0.250
CA	67.570327759	33.952308655	30.194869995	GLU	458	CT	C	0.050
HA	68.325988770	34.406459808	29.554090500	GLU	458	HA	H	0.050
C	67.821868896	34.468151093	31.624950409	GLU	458	C	C	0.600
O	67.003166199	35.180198669	32.198680878	GLU	458	O	O	-0.550
CB	66.172630310	34.361499786	29.687459946	GLU	458	CT	C	-0.100
HB1	65.428810120	34.157108307	30.459640503	GLU	458	HA	H	0.050
HB2	66.153152466	35.440399170	29.533399582	GLU	458	HA	H	0.050
CG	65.711479187	33.645748138	28.402130127	GLU	458	CT	C	-0.250
HG1	65.534416199	32.594409943	28.612459183	GLU	458	HA	H	0.050
HG2	64.746513367	34.042900085	28.090789795	GLU	458	HA	H	0.050
CD	66.692939758	33.760768890	27.220399857	GLU	458	C	C	0.350
OE1	67.802742004	33.239078522	27.316299438	GLU	458	OC	O	-0.600
OE2	66.331138611	34.345020294	26.202499390	GLU	458	OC	O	-0.600
N	68.986022949	34.061679840	32.170940399	GLU	459	NP	N	-0.400
HN	69.629508972	33.540641785	31.613809586	GLU	459	H	H	0.250
CA	69.163391113	34.076099396	33.621269226	GLU	459	CT	C	0.050

HA	68.283576965	33.575569153	33.993549347	GLU	459	HA	H	0.050
C	69.176841736	35.488548279	34.250759125	GLU	459	C	C	0.600
O	70.213401794	36.101879120	34.468921661	GLU	459	O	O	-0.550
CB	70.364791870	33.209079742	34.023239136	GLU	459	CT	C	-0.100
HB1	71.304466248	33.684940338	33.740341187	GLU	459	HA	H	0.050
HB2	70.379219055	33.124008179	35.111469269	GLU	459	HA	H	0.050
CG	70.275970459	31.804960251	33.392730713	GLU	459	CT	C	-0.250
HG1	69.241111755	31.467210770	33.374710083	GLU	459	HA	H	0.050
HG2	70.619102478	31.821069717	32.358501434	GLU	459	HA	H	0.050
CD	71.092872620	30.762630463	34.168159485	GLU	459	C	C	0.350
OE1	72.316352844	30.874109268	34.192161560	GLU	459	OC	O	-0.600
OE2	70.493949890	29.847610474	34.735260010	GLU	459	OC	O	-0.600
N	67.940460205	35.933670044	34.544109344	THR	460	NP	N	-0.400
HN	67.161331177	35.379211426	34.244571686	THR	460	H	H	0.250
CA	67.635276794	37.236698151	35.106140137	THR	460	CT	C	0.050
HA	68.410408020	37.495128632	35.829521179	THR	460	HA	H	0.050
C	66.266342163	37.116291046	35.800849915	THR	460	C	C	0.600
O	65.344429016	36.555198669	35.232830048	THR	460	O	O	-0.550
CB	67.531661987	38.257408142	33.950019836	THR	460	CT	C	0.150
HB	67.106292725	39.182270050	34.346210480	THR	460	HA	H	0.100
OG1	66.648193359	37.809379578	32.939758301	THR	460	OT	O	-0.650
HG1	66.891876221	36.918788910	32.671859741	THR	460	HO	H	0.400
CG2	68.883018494	38.619758606	33.317928314	THR	460	CT	C	-0.150
HG21	68.765090942	39.433361053	32.602291107	THR	460	HA	H	0.050
HG22	69.594772339	38.945278168	34.076560974	THR	460	HA	H	0.050
HG23	69.331840515	37.784118652	32.781970978	THR	460	HA	H	0.050
N	66.162429810	37.654651642	37.030879974	GLY	461	NP	N	-0.400
HN	66.974639893	38.015750885	37.484710693	GLY	461	H	H	0.250
CA	64.850601196	37.804950714	37.671829224	GLY	461	CT	C	0.000
HA1	65.033073425	38.325939178	38.609680176	GLY	461	HA	H	0.050
HA2	64.234046936	38.442478180	37.037788391	GLY	461	HA	H	0.050
C	64.127319336	36.474040985	37.972229004	GLY	461	C	C	0.600
O	64.258003235	35.901958466	39.048049927	GLY	461	O	O	-0.550
N	63.345279694	36.032939911	36.971260071	GLY	462	NP	N	-0.400
HN	63.367790222	36.550128937	36.108089447	GLY	462	H	H	0.250
CA	62.642379761	34.757450104	37.016559601	GLY	462	CT	C	0.000
HA1	63.156311035	34.096988678	37.714580536	GLY	462	HA	H	0.050
HA2	61.623428345	34.951129913	37.345329285	GLY	462	HA	H	0.050
C	62.632511139	34.168399811	35.605430603	GLY	462	C	C	0.600
O	61.980381012	34.686759949	34.714008331	GLY	462	O	O	-0.550
N	63.450069427	33.112480164	35.434829712	PHE	463	NP	N	-0.400
HN	63.763950348	32.603698730	36.234870911	PHE	463	H	H	0.250
CA	64.096862793	32.929458618	34.137630463	PHE	463	CT	C	0.050
HA	63.602951050	33.572380066	33.404399872	PHE	463	HA	H	0.050
C	63.974979401	31.514200211	33.544628143	PHE	463	C	C	0.600
O	63.402820587	31.338159561	32.479930878	PHE	463	O	O	-0.550
CB	65.549659729	33.404758453	34.258701324	PHE	463	CT	C	-0.100
HB1	66.101997375	33.139648438	33.365859985	PHE	463	HA	H	0.050
HB2	65.534080505	34.488788605	34.252319336	PHE	463	HA	H	0.050
CG	66.298919678	32.950321198	35.492938995	PHE	463	C6R	C	0.000
CD1	66.207817078	33.664901733	36.681819916	PHE	463	C6R	C	-0.130
HD1	65.568733215	34.529670715	36.734889984	PHE	463	HA	H	0.130
CD2	67.137168884	31.840480804	35.451171875	PHE	463	C6R	C	-0.130
HD2	67.247657776	31.293060303	34.528030396	PHE	463	HA	H	0.130
CE1	66.940872192	33.289478302	37.797569275	PHE	463	C6R	C	-0.130
HE1	66.861869812	33.858058929	38.713909149	PHE	463	HA	H	0.130
CE2	67.873558044	31.455549240	36.562500000	PHE	463	C6R	C	-0.130
HE2	68.536148071	30.602159500	36.499221802	PHE	463	HA	H	0.130
CZ	67.775627136	32.181961060	37.739879608	PHE	463	C6R	C	-0.130
HZ	68.343147278	31.887180328	38.612129211	PHE	463	HA	H	0.130
N	64.583457947	30.533159256	34.235958099	GLN	464	NP	N	-0.400
HN	64.987228394	30.764270782	35.117748260	GLN	464	H	H	0.250

CA	64.782630920	29.221509933	33.617748260	GLN	464	CT	C	0.050
HA	64.955818176	29.398759842	32.553169250	GLN	464	HA	H	0.050
C	63.505168915	28.347190857	33.710689545	GLN	464	C	C	0.600
O	62.385311127	28.834260941	33.798591614	GLN	464	O	O	-0.550
CB	66.076881409	28.595359802	34.192718506	GLN	464	CT	C	-0.100
HB1	66.339233398	27.695470810	33.642780304	GLN	464	HA	H	0.050
HB2	66.893836975	29.273679733	33.951419830	GLN	464	HA	H	0.050
CG	66.113342285	28.339790344	35.718349457	GLN	464	CT	C	-0.100
HG1	67.148590088	28.341100693	36.060539246	GLN	464	HA	H	0.050
HG2	65.604202271	29.127269745	36.271549225	GLN	464	HA	H	0.050
CD	65.531173706	26.966209412	36.075538635	GLN	464	C	C	0.550
OE1	65.902458191	25.952089310	35.491928101	GLN	464	O	O	-0.550
NE2	64.535453796	26.988880157	36.965240479	GLN	464	NP	N	-0.600
HE21	63.928749084	26.190200806	37.015960693	GLN	464	H	H	0.300
HE22	64.275253296	27.739599228	37.577178955	GLN	464	H	H	0.300
N	63.740009308	27.024440765	33.693840027	GLU	465	NP	N	-0.400
HN	64.677680969	26.685739517	33.683650970	GLU	465	H	H	0.250
CA	62.663978577	26.048910141	33.780471802	GLU	465	CT	C	0.050
HA	62.009750366	26.202190399	32.919799805	GLU	465	HA	H	0.050
C	61.855880737	26.180469513	35.086048126	GLU	465	C	C	0.600
O	62.284751892	25.754909515	36.152450562	GLU	465	O	O	-0.550
CB	63.291290283	24.655040741	33.751708984	GLU	465	CT	C	-0.100
HB1	64.085952759	24.582000732	34.494281769	GLU	465	HA	H	0.050
HB2	62.549060822	23.925699234	34.062538147	GLU	465	HA	H	0.050
CG	63.815811157	24.269319534	32.369178772	GLU	465	CT	C	-0.250
HG1	63.034381866	24.379980087	31.619329453	GLU	465	HA	H	0.050
HG2	64.645050049	24.896459579	32.057361603	GLU	465	HA	H	0.050
CD	64.249168396	22.812070847	32.399730682	GLU	465	C	C	0.350
OE1	63.418170929	21.948730469	32.153980255	GLU	465	OC	O	-0.600
OE2	65.410667419	22.537820816	32.684341431	GLU	465	OC	O	-0.600
N	60.651180267	26.743900299	34.919681549	ALA	466	NP	N	-0.400
HN	60.402900696	27.111419678	34.023059845	ALA	466	H	H	0.250
CA	59.667060852	26.764820099	35.988201141	ALA	466	CT	C	0.050
HA	60.018169403	26.137699127	36.809448242	ALA	466	HA	H	0.050
C	58.365631104	26.207189560	35.411918640	ALA	466	C	C	0.600
O	58.097770691	26.362499237	34.226428986	ALA	466	O	O	-0.550
CB	59.460151672	28.209199905	36.440921783	ALA	466	CT	C	-0.150
HB1	59.220169067	28.856870651	35.599048615	ALA	466	HA	H	0.050
HB2	58.665710449	28.305650711	37.179931641	ALA	466	HA	H	0.050
HB3	60.374679565	28.574920654	36.895229340	ALA	466	HA	H	0.050
N	57.531551361	25.582750320	36.286289215	PRO	467	NX	N	-0.250
CA	56.292148590	24.956039429	35.835731506	PRO	467	CT	C	0.050
HA	56.529018402	24.157800674	35.134288788	PRO	467	HA	H	0.050
C	55.304229736	25.894020081	35.125499725	PRO	467	C	C	0.600
O	54.422630310	25.448629379	34.406101227	PRO	467	O	O	-0.550
CB	55.675670624	24.382539749	37.124408722	PRO	467	CT	C	-0.100
HB1	54.593769073	24.504409790	37.198928833	PRO	467	HA	H	0.050
HB2	55.872779846	23.318620682	37.155029297	PRO	467	HA	H	0.050
CG	56.419929504	25.032739639	38.293590546	PRO	467	CT	C	-0.100
HG1	55.883529663	25.910650253	38.633331299	PRO	467	HA	H	0.050
HG2	56.515129089	24.380210876	39.158931732	PRO	467	HA	H	0.050
CD	57.766349792	25.458049774	37.719501495	PRO	467	CT	C	0.000
HD1	58.092929840	26.405439377	38.135890961	PRO	467	HA	H	0.050
HD2	58.531150818	24.702709198	37.906230927	PRO	467	HA	H	0.050
N	55.522911072	27.211530685	35.318729401	LEU	468	NP	N	-0.400
HN	56.262790680	27.494049072	35.924808502	LEU	468	H	H	0.250
CA	54.719421387	28.184589386	34.588741302	LEU	468	CT	C	0.050
HA	53.679870605	27.860620499	34.655509949	LEU	468	HA	H	0.050
C	55.130889893	28.186859131	33.114578247	LEU	468	C	C	0.600
O	54.305141449	28.269300461	32.220748901	LEU	468	O	O	-0.550
CB	54.867790222	29.577810287	35.216770172	LEU	468	CT	C	-0.100
HB1	54.672561646	29.486469269	36.282100677	LEU	468	HA	H	0.050

HB2	55.896930695	29.928989410	35.141349792	LEU	468	HA	H	0.050
CG	53.892860413	30.625690460	34.645210266	LEU	468	CT	C	-0.050
HG	52.960498810	30.125509262	34.382259369	LEU	468	HA	H	0.050
CD1	53.562480927	31.681930542	35.706569672	LEU	468	CT	C	-0.150
HD11	54.474258423	32.161449432	36.041778564	LEU	468	HA	H	0.050
HD12	52.893928528	32.450508118	35.318508148	LEU	468	HA	H	0.050
HD13	53.094429016	31.252710342	36.589839935	LEU	468	HA	H	0.050
CD2	54.443569183	31.310359955	33.384979248	LEU	468	CT	C	-0.150
HD21	55.451530457	31.684419632	33.542018890	LEU	468	HA	H	0.050
HD22	54.470420837	30.655029297	32.518878937	LEU	468	HA	H	0.050
HD23	53.828701019	32.162921906	33.112400055	LEU	468	HA	H	0.050
N	56.453548431	28.068979263	32.895881653	ALA	469	NP	N	-0.400
HN	57.083370209	27.908979416	33.656421661	ALA	469	H	H	0.250
CA	56.952869415	28.027750015	31.526979446	ALA	469	CT	C	0.050
HA	56.658050537	28.970739365	31.064329147	ALA	469	HA	H	0.050
C	56.305278778	26.860910416	30.757770538	ALA	469	C	C	0.600
O	55.907218933	26.987569809	29.610719681	ALA	469	O	O	-0.550
CB	58.479778290	27.894559860	31.528900146	ALA	469	CT	C	-0.150
HB1	58.937320709	28.675189972	32.137081146	ALA	469	HA	H	0.050
HB2	58.806560516	26.933130264	31.925920486	ALA	469	HA	H	0.050
HB3	58.874580383	27.987779617	30.516710281	ALA	469	HA	H	0.050
N	56.187961578	25.737140656	31.490350723	TYR	470	NP	N	-0.400
HN	56.584381104	25.744720459	32.411251068	TYR	470	H	H	0.250
CA	55.504371643	24.549970627	30.978960037	TYR	470	CT	C	0.050
HA	55.986209869	24.288429260	30.035940170	TYR	470	HA	H	0.050
C	54.005828857	24.841850281	30.707759857	TYR	470	C	C	0.600
O	53.530090332	24.728950500	29.582839966	TYR	470	O	O	-0.550
CB	55.735008240	23.435670853	32.010948181	TYR	470	CT	C	-0.100
HB1	56.803981781	23.350099564	32.191730499	TYR	470	HA	H	0.050
HB2	55.298919678	23.728279114	32.963878632	TYR	470	HA	H	0.050
CG	55.213500977	22.062459946	31.664379120	TYR	470	C6R	C	0.000
CD1	56.083858490	21.019300461	31.341009140	TYR	470	C6R	C	-0.130
HD1	57.148319244	21.198520660	31.279630661	TYR	470	HA	H	0.130
CD2	53.852680206	21.794090271	31.727329254	TYR	470	C6R	C	-0.130
HD2	53.134799957	22.563720703	31.970289230	TYR	470	HA	H	0.130
CE1	55.600521088	19.732139587	31.114089966	TYR	470	C6R	C	-0.130
HE1	56.288761139	18.939369202	30.859699249	TYR	470	HA	H	0.130
CE2	53.381519318	20.515590668	31.499839783	TYR	470	C6R	C	-0.130
HE2	52.330501556	20.308719635	31.540189743	TYR	470	HA	H	0.130
CZ	54.237251282	19.480960846	31.202190399	TYR	470	C6R	C	0.250
OH	53.677310944	18.237270355	30.994539261	TYR	470	OT	O	-0.650
HH	54.253669739	17.552909851	31.350540161	TYR	470	HO	H	0.400
N	53.278858185	25.220260620	31.786220551	ASP	471	NP	N	-0.400
HN	53.710960388	25.353830338	32.681388855	ASP	471	H	H	0.250
CA	51.820510864	25.348579407	31.663900375	ASP	471	CT	C	0.050
HA	51.512611389	24.508829117	31.038249969	ASP	471	HA	H	0.050
C	51.384609222	26.620569229	30.891220093	ASP	471	C	C	0.600
O	50.204059601	26.826459885	30.618780136	ASP	471	O	O	-0.550
CB	51.094020844	25.126550674	33.010070801	ASP	471	CT	C	-0.250
HB1	50.025318146	25.014829636	32.823188782	ASP	471	HA	H	0.050
HB2	51.423091888	24.178060532	33.437381744	ASP	471	HA	H	0.050
CG	51.249061584	26.218130112	34.081680298	ASP	471	C	C	0.350
OD1	51.320278168	27.403499603	33.773159027	ASP	471	OC	O	-0.600
OD2	51.252971649	25.902030945	35.270660400	ASP	471	OC	O	-0.600
N	52.408180237	27.402849197	30.489009857	ALA	472	NP	N	-0.400
HN	53.285480499	27.289209366	30.956680298	ALA	472	H	H	0.250
CA	52.268081665	28.470880508	29.509950638	ALA	472	CT	C	0.050
HA	51.232318878	28.810800552	29.530870438	ALA	472	HA	H	0.050
C	52.576358795	27.976839066	28.081930161	ALA	472	C	C	0.600
O	51.786811829	28.193370819	27.174949646	ALA	472	O	O	-0.550
CB	53.191841125	29.639310837	29.877799988	ALA	472	CT	C	-0.150
HB1	54.239261627	29.334350586	29.895290375	ALA	472	HA	H	0.050

HB2	53.096000671	30.462240219	29.169799805	ALA	472	HA	H	0.050
HB3	52.941379547	30.026229858	30.865600586	ALA	472	HA	H	0.050
N	53.753349304	27.339170456	27.889909744	ILE	473	NP	N	-0.400
HN	54.307830811	27.071659088	28.680339813	ILE	473	H	H	0.250
CA	54.304729462	27.181119919	26.533210754	ILE	473	CT	C	0.050
HA	54.396800995	28.196100235	26.145299911	ILE	473	HA	H	0.050
C	53.348831177	26.454919815	25.576709747	ILE	473	C	C	0.600
O	53.224060059	26.798099518	24.403209686	ILE	473	O	O	-0.550
CB	55.705448151	26.517440796	26.541229248	ILE	473	CT	C	-0.050
HB	56.322811127	27.073839188	27.244049072	ILE	473	HA	H	0.050
CG1	56.377979279	26.646720886	25.163290024	ILE	473	CT	C	-0.100
HG11	55.807758331	26.105009079	24.408309937	ILE	473	HA	H	0.050
HG12	56.349849701	27.694349289	24.867919922	ILE	473	HA	H	0.050
CG2	55.693111420	25.056600571	27.019279480	ILE	473	CT	C	-0.150
HG21	55.189270020	24.965429306	27.975370407	ILE	473	HA	H	0.050
HG22	55.193290710	24.396539688	26.310749054	ILE	473	HA	H	0.050
HG23	56.704730988	24.678859711	27.165019989	ILE	473	HA	H	0.050
CD1	57.831310272	26.162080765	25.127529144	ILE	473	CT	C	-0.150
HD11	58.434749603	26.646619797	25.893800735	ILE	473	HA	H	0.050
HD12	57.897468567	25.085840225	25.281980515	ILE	473	HA	H	0.050
HD13	58.285301208	26.383319855	24.161680222	ILE	473	HA	H	0.050
N	52.660091400	25.449569702	26.150350571	TRP	474	NP	N	-0.400
HN	52.844989777	25.246929169	27.114559174	TRP	474	H	H	0.250
CA	51.746841431	24.653739929	25.337339401	TRP	474	CT	C	0.050
HA	52.362979889	24.186559677	24.571199417	TRP	474	HA	H	0.050
C	50.674629211	25.513790131	24.642559052	TRP	474	C	C	0.600
O	50.139720917	25.139839172	23.609199524	TRP	474	O	O	-0.550
CB	51.091201782	23.559089661	26.177690506	TRP	474	CT	C	-0.100
HB1	50.633220673	22.810630798	25.529260635	TRP	474	HA	H	0.050
HB2	51.836620331	23.034519196	26.776870728	TRP	474	HA	H	0.050
CG	50.034969330	24.141670227	27.089790344	TRP	474	C5R	C	-0.030
CD1	50.259769440	24.719129562	28.335609436	TRP	474	C5R	C	-0.040
HD1	51.232860565	24.850460052	28.781459808	TRP	474	HA	H	0.100
CD2	48.609138489	24.156959534	26.880580902	TRP	474	CR56	C	0.100
HE1	49.008110046	25.509220123	29.770200729	TRP	474	H	H	0.300
NE1	49.074390411	25.064880371	28.892009735	TRP	474	N5R	N	-0.360
CE2	48.029228210	24.724359512	28.039449692	TRP	474	CR56	C	-0.040
CE3	47.815349579	23.732620239	25.849630356	TRP	474	C6R	C	-0.130
HE3	48.262619019	23.312290192	24.960470200	TRP	474	HA	H	0.100
CZ2	46.667221069	24.809440613	28.142620087	TRP	474	C6R	C	-0.130
HZ2	46.212001801	25.192310333	29.040569305	TRP	474	HA	H	0.130
CZ3	46.430591583	23.835859299	25.951040268	TRP	474	C6R	C	-0.130
HZ3	45.798789978	23.506340027	25.141969681	TRP	474	HA	H	0.130
CH2	45.855091095	24.358730316	27.103759766	TRP	474	C6R	C	-0.130
HH2	44.779029846	24.385999680	27.194730759	TRP	474	HA	H	0.130
N	50.404479980	26.684619904	25.260370255	ALA	475	NP	N	-0.400
HN	50.870830536	26.909540176	26.118370056	ALA	475	H	H	0.250
CA	49.497200012	27.655019760	24.675569534	ALA	475	CT	C	0.050
HA	48.513038635	27.190330505	24.688720703	ALA	475	HA	H	0.050
C	49.893638611	27.950050354	23.227050781	ALA	475	C	C	0.600
O	49.133518219	27.741760254	22.293870926	ALA	475	O	O	-0.550
CB	49.531299591	28.955930710	25.492210388	ALA	475	CT	C	-0.150
HB1	50.536788940	29.372039795	25.551969528	ALA	475	HA	H	0.050
HB2	48.916671753	29.729499817	25.036579132	ALA	475	HA	H	0.050
HB3	49.181449890	28.792379379	26.511749268	ALA	475	HA	H	0.050
N	51.142150879	28.432359695	23.117490768	LEU	476	NP	N	-0.400
HN	51.721298218	28.438610077	23.934730530	LEU	476	H	H	0.250
CA	51.662708282	28.848630905	21.825300217	LEU	476	CT	C	0.050
HA	50.912448883	29.485090256	21.354070663	LEU	476	HA	H	0.050
C	51.879131317	27.614410400	20.938919067	LEU	476	C	C	0.600
O	51.440578461	27.540729523	19.797300339	LEU	476	O	O	-0.550
CB	52.980548859	29.616380692	22.034719467	LEU	476	CT	C	-0.100

HB1	53.727458954	28.944540024	22.462270737	LEU	476	HA	H	0.050
HB2	53.377201080	29.928310394	21.067129135	LEU	476	HA	H	0.050
CG	52.852840424	30.848690033	22.951900482	LEU	476	CT	C	-0.050
HG	52.449871063	30.535509109	23.915819168	LEU	476	HA	H	0.050
CD1	54.236801147	31.449279785	23.225379944	LEU	476	CT	C	-0.150
HD11	54.892440796	30.713619232	23.693420410	LEU	476	HA	H	0.050
HD12	54.715850830	31.783660889	22.304460526	LEU	476	HA	H	0.050
HD13	54.170600891	32.305618286	23.896350861	LEU	476	HA	H	0.050
CD2	51.907051086	31.908630371	22.368270874	LEU	476	CT	C	-0.150
HD21	52.231410980	32.220909119	21.375959396	LEU	476	HA	H	0.050
HD22	50.885768890	31.536550522	22.283769608	LEU	476	HA	H	0.050
HD23	51.872058868	32.796241760	23.001070023	LEU	476	HA	H	0.050
N	52.576530457	26.642040253	21.561500549	ALA	477	NP	N	-0.400
HN	52.833148956	26.773389816	22.523340225	ALA	477	H	H	0.250
CA	53.013278961	25.452959061	20.839540482	ALA	477	CT	C	0.050
HA	53.681308746	25.802700043	20.050859451	ALA	477	HA	H	0.050
C	51.838500977	24.708200455	20.182130814	ALA	477	C	C	0.600
O	51.953350067	24.207920074	19.071380615	ALA	477	O	O	-0.550
CB	53.771389008	24.522510529	21.791379929	ALA	477	CT	C	-0.150
HB1	53.111438751	24.113849640	22.554079056	ALA	477	HA	H	0.050
HB2	54.210800171	23.683359146	21.251369476	ALA	477	HA	H	0.050
HB3	54.578990936	25.052589417	22.297309875	ALA	477	HA	H	0.050
N	50.715339661	24.675230026	20.927850723	LEU	478	NP	N	-0.400
HN	50.718601227	25.087009430	21.840610504	LEU	478	H	H	0.250
CA	49.494560242	24.071710587	20.410680771	LEU	478	CT	C	0.050
HA	49.788959503	23.191989899	19.842109680	LEU	478	HA	H	0.050
C	48.783851624	25.034009933	19.458639145	LEU	478	C	C	0.600
O	48.392238617	24.653789520	18.361740112	LEU	478	O	O	-0.550
CB	48.548419952	23.669319153	21.556900024	LEU	478	CT	C	-0.100
HB1	49.064388275	22.984849930	22.229349136	LEU	478	HA	H	0.050
HB2	48.313648224	24.549480438	22.156749725	LEU	478	HA	H	0.050
CG	47.219680786	23.041780472	21.087129593	LEU	478	CT	C	-0.050
HG	46.664810181	23.795469284	20.528909683	LEU	478	HA	H	0.050
CD1	47.415298462	21.837989807	20.157669067	LEU	478	CT	C	-0.150
HD11	47.984130859	22.090860367	19.263320923	LEU	478	HA	H	0.050
HD12	47.916778564	21.013040543	20.660530090	LEU	478	HA	H	0.050
HD13	46.448318481	21.475839615	19.821720123	LEU	478	HA	H	0.050
CD2	46.349819183	22.652370453	22.283449173	LEU	478	CT	C	-0.150
HD21	46.855949402	21.924100876	22.918130875	LEU	478	HA	H	0.050
HD22	46.113700867	23.523340225	22.893180847	LEU	478	HA	H	0.050
HD23	45.405731201	22.210350037	21.962150574	LEU	478	HA	H	0.050
N	48.613288879	26.284059525	19.949979782	ALA	479	NP	N	-0.400
HN	49.028518677	26.515769958	20.833110809	ALA	479	H	H	0.250
CA	47.780231476	27.296409607	19.294519424	ALA	479	CT	C	0.050
HA	46.747039795	27.050489426	19.542360306	ALA	479	HA	H	0.050
C	47.917648315	27.271020889	17.774320602	ALA	479	C	C	0.600
O	46.939479828	27.199979782	17.048740387	ALA	479	O	O	-0.550
CB	48.124641418	28.709720612	19.790079117	ALA	479	CT	C	-0.150
HB1	49.200630188	28.884670258	19.784589767	ALA	479	HA	H	0.050
HB2	47.667961121	29.480810165	19.168190002	ALA	479	HA	H	0.050
HB3	47.757648468	28.872480392	20.801519394	ALA	479	HA	H	0.050
N	49.180099487	27.325939178	17.334569931	LEU	480	NP	N	-0.400
HN	49.911888123	27.337600708	18.021919250	LEU	480	H	H	0.250
CA	49.441440582	27.466110229	15.905699730	LEU	480	CT	C	0.050
HA	48.889701843	28.344930649	15.568550110	LEU	480	HA	H	0.050
C	48.927608490	26.257900238	15.097669601	LEU	480	C	C	0.600
O	48.433490753	26.382539749	13.984199524	LEU	480	O	O	-0.550
CB	50.945758820	27.679349899	15.702079773	LEU	480	CT	C	-0.100
HB1	51.474479675	26.747230530	15.908550262	LEU	480	HA	H	0.050
HB2	51.137878418	27.924230576	14.657409668	LEU	480	HA	H	0.050
CG	51.518558502	28.786439896	16.605400085	LEU	480	CT	C	-0.050
HG	51.385288239	28.504749298	17.646490097	LEU	480	HA	H	0.050

CD1 53.025829315 28.919769287 16.404079437 LEU 480 CT C -0.150
HD11 53.523719788 27.959810257 16.520589828 LEU 480 HA H 0.050
HD12 53.256580353 29.306110382 15.412969589 LEU 480 HA H 0.050
HD13 53.454608917 29.601640701 17.138580322 LEU 480 HA H 0.050
CD2 50.804019928 30.129560471 16.404199600 LEU 480 CT C -0.150
HD21 49.744468689 30.071039200 16.650360107 LEU 480 HA H 0.050
HD22 51.228279114 30.896179199 17.052679062 LEU 480 HA H 0.050
HD23 50.891708374 30.471069336 15.372550011 LEU 480 HA H 0.050
N 49.049770355 25.080739975 15.719900131 ASN 481 NP N -0.400
HN 49.349990845 25.065820694 16.676849365 ASN 481 H H 0.250
CA 48.667751312 23.847320557 15.031379700 ASN 481 CT C 0.050
HA 48.992698669 23.927230835 13.993359566 ASN 481 HA H 0.050
C 47.133079529 23.708799362 15.059679985 ASN 481 C C 0.600
O 46.486110687 23.295330048 14.104419708 ASN 481 O O -0.550
CB 49.389869690 22.656639099 15.677639961 ASN 481 CT C -0.100
HB1 48.982570648 22.456110001 16.670799255 ASN 481 HA H 0.050
HB2 49.261531830 21.753040314 15.081620216 ASN 481 HA H 0.050
CG 50.893310547 22.966199875 15.801210403 ASN 481 C C 0.550
OD1 51.512889862 23.592710495 14.945210457 ASN 481 O O -0.550
ND2 51.396831512 22.618270874 16.981409073 ASN 481 NP N -0.600
HD21 52.232009888 23.022480011 17.356529236 ASN 481 H H 0.300
HD22 50.899700165 22.000949860 17.596000671 ASN 481 H H 0.300
N 46.602001190 24.164930344 16.207990646 LYS 482 NP N -0.400
HN 47.231700897 24.441219330 16.935699463 LYS 482 H H 0.250
CA 45.168190002 24.305879593 16.429620743 LYS 482 CT C 0.050
HA 44.735809326 23.315620422 16.300159454 LYS 482 HA H 0.050
C 44.550758362 25.274259567 15.393480301 LYS 482 C C 0.600
O 43.441291809 25.081529617 14.923089981 LYS 482 O O -0.550
CB 44.978481293 24.810150146 17.871879578 LYS 482 CT C -0.100
HB1 45.765701294 24.387430191 18.496160507 LYS 482 HA H 0.050
HB2 45.131538391 25.888679504 17.905469894 LYS 482 HA H 0.050
CG 43.637111664 24.473060608 18.541650772 LYS 482 CT C -0.100
HG1 42.803100586 24.756420135 17.900239944 LYS 482 HA H 0.050
HG2 43.554191589 23.397439957 18.692249298 LYS 482 HA H 0.050
CD 43.553218842 25.207389832 19.887720108 LYS 482 CT C -0.100
HD1 44.452449799 24.990720749 20.466569901 LYS 482 HA H 0.050
HD2 43.577030182 26.276170731 19.685979843 LYS 482 HA H 0.050
CE 42.335289001 24.871610641 20.756580353 LYS 482 CT C 0.050
HE1 42.303199768 23.806869507 20.993539810 LYS 482 HA H 0.100
HE2 42.404148102 25.409500122 21.703750610 LYS 482 HA H 0.100
NZ 41.058059692 25.233060837 20.159389496 LYS 482 NT N -0.300
HZ1 41.049331665 26.184160233 19.725830078 LYS 482 HC H 0.350
HZ2 40.803081512 24.563940048 19.403120041 LYS 482 HC H 0.350
HZ3 40.303668976 25.227779388 20.881780624 LYS 482 HC H 0.350
N 45.358459473 26.300519943 15.057740211 THR 483 NP N -0.400
HN 46.224018097 26.365570068 15.552370071 THR 483 H H 0.250
CA 45.005130768 27.315069199 14.065629959 THR 483 CT C 0.050
HA 43.978870392 27.622440338 14.257399559 THR 483 HA H 0.050
C 45.073120117 26.721509933 12.646360397 THR 483 C C 0.600
O 44.252918243 26.999670029 11.780099869 THR 483 O O -0.550
CB 45.972000122 28.513750076 14.216810226 THR 483 CT C 0.150
HB 46.994159698 28.198429108 14.006290436 THR 483 HA H 0.100
OG1 45.926380157 29.077430725 15.512900352 THR 483 OT O -0.650
HG1 46.070339203 28.398170471 16.167160034 THR 483 HO H 0.400
CG2 45.660888672 29.671539307 13.275210381 THR 483 CT C -0.150
HG21 46.381278992 30.480480194 13.395090103 THR 483 HA H 0.050
HG22 45.671661377 29.363519669 12.230870247 THR 483 HA H 0.050
HG23 44.677669525 30.067310333 13.508069992 THR 483 HA H 0.050
N 46.106838226 25.875900269 12.469949722 SER 484 NP N -0.400
HN 46.723049164 25.707519531 13.239500046 SER 484 H H 0.250
CA 46.318969727 25.234369278 11.177869797 SER 484 CT C 0.050
HA 46.398319244 26.031610489 10.436450005 SER 484 HA H 0.050

C 45.123008728 24.338680267 10.805540085 SER 484 C C 0.600
O 44.650371552 24.332130432 9.677470207 SER 484 O O -0.550
CB 47.621429443 24.422729492 11.225549698 SER 484 CT C 0.050
HB1 47.549438477 23.578489304 11.917329788 SER 484 HA H 0.100
HB2 47.820438385 23.992580414 10.241840363 SER 484 HA H 0.100
OG 48.740329742 25.219430923 11.571189880 SER 484 OT O -0.650
HG 48.537780762 25.769199371 12.329119682 SER 484 HO H 0.400
N 44.653831482 23.606220245 11.834650040 GLY 485 NP N -0.400
HN 45.144729614 23.621379852 12.709850311 GLY 485 H H 0.250
CA 43.430099487 22.834339142 11.650469780 GLY 485 CT C 0.000
HA1 43.530281067 22.221759796 10.753009796 GLY 485 HA H 0.050
HA2 43.320888519 22.184099197 12.517860413 GLY 485 HA H 0.050
C 42.211471558 23.759639740 11.532670021 GLY 485 C C 0.600
O 41.400600433 23.660829544 10.620389938 GLY 485 O O -0.550
N 42.152439117 24.665939331 12.521499634 GLY 486 NP N -0.400
HN 42.886520386 24.710849762 13.197939873 GLY 486 H H 0.250
CA 40.998611450 25.525829315 12.733610153 GLY 486 CT C 0.000
HA1 40.098129272 24.942550659 12.561980247 GLY 486 HA H 0.050
HA2 41.025180817 25.837179184 13.776470184 GLY 486 HA H 0.050
C 40.972579956 26.755229950 11.827480316 GLY 486 C C 0.600
O 40.923080444 27.891199112 12.274140358 GLY 486 O O -0.550
N 40.961711884 26.452020645 10.517809868 GLY 487 NP N -0.400
HN 41.072608948 25.488069534 10.266770363 GLY 487 H H 0.250
CA 40.563159943 27.431409836 9.516110420 GLY 487 CT C 0.000
HA1 40.577148438 26.917360306 8.555769920 GLY 487 HA H 0.050
HA2 39.534160614 27.716869354 9.736129761 GLY 487 HA H 0.050
C 41.443321228 28.690130234 9.430230141 GLY 487 C C 0.600
O 40.998210907 29.709320068 8.907400131 GLY 487 O O -0.550
N 42.694568634 28.572160721 9.917369843 GLY 488 NP N -0.400
HN 42.951061249 27.778949738 10.477680206 GLY 488 H H 0.250
CA 43.627830505 29.690010071 9.836990356 GLY 488 CT C 0.000
HA1 44.629821777 29.261560440 9.824090004 GLY 488 HA H 0.050
HA2 43.459300995 30.243040085 8.911310196 GLY 488 HA H 0.050
C 43.468830109 30.594549179 11.061300278 GLY 488 C C 0.600
O 42.839771271 30.228759766 12.042260170 GLY 488 O O -0.550
N 44.086658478 31.791540146 10.970060349 ARG 489 NP N -0.400
HN 44.532649994 32.046081543 10.113960266 ARG 489 H H 0.250
CA 44.091579437 32.716709137 12.108329773 ARG 489 CT C 0.050
HA 44.252861023 32.124328613 13.009030342 ARG 489 HA H 0.050
C 42.716060638 33.411758423 12.218500137 ARG 489 C C 0.600
O 42.536350250 34.559661865 11.834039688 ARG 489 O O -0.550
CB 45.263591766 33.709308624 11.947489738 ARG 489 CT C -0.100
HB1 46.096328735 33.184108734 11.478779793 ARG 489 HA H 0.050
HB2 44.991901398 34.505821228 11.252770424 ARG 489 HA H 0.050
CG 45.785449982 34.311378479 13.268170357 ARG 489 CT C -0.100
HG1 44.979671478 34.834739685 13.784749985 ARG 489 HA H 0.050
HG2 46.103340149 33.503108978 13.927410126 ARG 489 HA H 0.050
CD 46.956588745 35.279491425 13.014679909 ARG 489 CT C 0.000
HD1 47.662849426 34.877441406 12.286649704 ARG 489 HA H 0.050
HD2 46.589809418 36.221118927 12.604479790 ARG 489 HA H 0.050
NE 47.703430176 35.625751495 14.227700233 ARG 489 NP N -0.400
HE 47.613430023 36.544750214 14.623240471 ARG 489 H H 0.300
CZ 48.724510193 34.881748199 14.712360382 ARG 489 C C 0.500
NH1 49.035190582 33.715721130 14.164879799 ARG 489 NC N -0.450
HH11 48.462070465 33.302181244 13.462249756 ARG 489 HC H 0.350
HH12 49.891899109 33.257068634 14.461930275 ARG 489 HC H 0.350
NH2 49.454818726 35.314731598 15.729129791 ARG 489 NC N -0.450
HH21 49.294090271 36.195549011 16.196449280 ARG 489 HC H 0.350
HH22 50.219058990 34.738590240 16.050100327 ARG 489 HC H 0.350
N 41.774860382 32.608589172 12.745109558 SER 490 NP N -0.400
HN 42.017311096 31.656139374 12.947690010 SER 490 H H 0.250
CA 40.403221130 33.016040802 12.989660263 SER 490 CT C 0.050

HA	40.411621094	34.060718536	13.278240204	SER	490	HA	H	0.050
C	39.874759674	32.115550995	14.117890358	SER	490	C	C	0.600
O	39.425399780	31.001670837	13.883509636	SER	490	O	O	-0.550
CB	39.582000732	32.870979309	11.702280045	SER	490	CT	C	0.050
HB1	40.064479828	33.443851471	10.907919884	SER	490	HA	H	0.100
HB2	39.625991821	31.823650360	11.405329704	SER	490	HA	H	0.100
OG	38.213508606	33.267971039	11.753680229	SER	490	OT	O	-0.650
HG	38.086120605	33.872009277	12.497650146	SER	490	HO	H	0.400
N	39.979198456	32.657001495	15.341540337	GLY	491	NP	N	-0.400
HN	40.274219513	33.613559723	15.374779701	GLY	491	H	H	0.250
CA	39.580520630	32.026828766	16.596609116	GLY	491	CT	C	0.000
HA1	40.355949402	31.317989349	16.870220184	GLY	491	HA	H	0.050
HA2	39.561580658	32.813411713	17.349739075	GLY	491	HA	H	0.050
C	38.200370789	31.358070374	16.542249680	GLY	491	C	C	0.600
O	37.981948853	30.288780212	17.101249695	GLY	491	O	O	-0.550
N	37.290878296	32.027431488	15.807559967	VAL	492	NP	N	-0.400
HN	37.561740875	32.943321228	15.484470367	VAL	492	H	H	0.250
CA	35.939289093	31.500379562	15.595509529	VAL	492	CT	C	0.050
HA	35.452209473	31.516719818	16.570310593	VAL	492	HA	H	0.050
C	35.943370819	30.027399063	15.105970383	VAL	492	C	C	0.600
O	35.072189331	29.241840363	15.451589584	VAL	492	O	O	-0.550
CB	35.186840057	32.421920776	14.606940269	VAL	492	CT	C	-0.050
HB	35.777988434	32.483440399	13.691499710	VAL	492	HA	H	0.050
CG1	33.795570374	31.886190414	14.227000237	VAL	492	CT	C	-0.150
HG11	33.177669525	31.736459732	15.112850189	VAL	492	HA	H	0.050
HG12	33.273639679	32.582748413	13.570739746	VAL	492	HA	H	0.050
HG13	33.855701447	30.934329987	13.698869705	VAL	492	HA	H	0.050
CG2	35.040691376	33.847229004	15.162409782	VAL	492	CT	C	-0.150
HG21	35.997840881	34.284221649	15.436360359	VAL	492	HA	H	0.050
HG22	34.589210510	34.508979797	14.423379898	VAL	492	HA	H	0.050
HG23	34.409049988	33.864269257	16.049339294	VAL	492	HA	H	0.050
N	36.960960388	29.717750549	14.283140182	ARG	493	NP	N	-0.400
HN	37.678138733	30.398090363	14.122559547	ARG	493	H	H	0.250
CA	37.074268341	28.431390762	13.597929955	ARG	493	CT	C	0.050
HA	36.080928802	27.987699509	13.507889748	ARG	493	HA	H	0.050
C	38.008819580	27.469160080	14.362079620	ARG	493	C	C	0.600
O	38.518791199	26.508140564	13.798660278	ARG	493	O	O	-0.550
CB	37.710628510	28.683229446	12.214240074	ARG	493	CT	C	-0.100
HB1	38.768920898	28.904779434	12.356610298	ARG	493	HA	H	0.050
HB2	37.669868469	27.771490097	11.616550446	ARG	493	HA	H	0.050
CG	37.118991852	29.858940125	11.424380302	ARG	493	CT	C	-0.100
HG1	36.063789368	29.687540054	11.210229874	ARG	493	HA	H	0.050
HG2	37.169368744	30.760309219	12.036359787	ARG	493	HA	H	0.050
CD	37.899440765	30.122600555	10.128809929	ARG	493	CT	C	0.000
HD1	38.965789795	29.967649460	10.291379929	ARG	493	HA	H	0.050
HD2	37.564411163	29.490489960	9.305419922	ARG	493	HA	H	0.050
NE	37.723960876	31.518400192	9.754130363	ARG	493	NP	N	-0.400
HE	37.207019806	32.083618164	10.405679703	ARG	493	H	H	0.300
CZ	38.392509460	32.136680603	8.759759903	ARG	493	C	C	0.500
NH1	39.301498413	31.491230011	8.035400391	ARG	493	NC	N	-0.450
HH11	39.633419037	30.583219528	8.330619812	ARG	493	HC	H	0.350
HH12	39.709159851	31.884859085	7.214690208	ARG	493	HC	H	0.350
NH2	38.148208618	33.424518585	8.538269997	ARG	493	NC	N	-0.450
HH21	37.507019043	33.906658173	9.137749672	ARG	493	HC	H	0.350
HH22	38.596721649	33.932590485	7.804609776	ARG	493	HC	H	0.350
N	38.286640167	27.837799072	15.629110336	LEU	494	NP	N	-0.400
HN	37.758071899	28.564020157	16.074329376	LEU	494	H	H	0.250
CA	39.549579620	27.433210373	16.238519669	LEU	494	CT	C	0.050
HA	40.005180359	26.643789291	15.639349937	LEU	494	HA	H	0.050
C	39.336570740	26.882770538	17.656770706	LEU	494	C	C	0.600
O	40.248039246	26.888570786	18.483140945	LEU	494	O	O	-0.550
CB	40.434898376	28.692779541	16.258069992	LEU	494	CT	C	-0.100

HB1	40.028049469	29.400770187	15.539389610	LEU	494	HA	H	0.050
HB2	40.375549316	29.191949844	17.226259232	LEU	494	HA	H	0.050
CG	41.897190094	28.480039597	15.862759590	LEU	494	CT	C	-0.050
HG	41.915119171	27.935029984	14.917799950	LEU	494	HA	H	0.050
CD1	42.574169159	29.837530136	15.630120277	LEU	494	CT	C	-0.150
HD11	42.125381470	30.352710724	14.780719757	LEU	494	HA	H	0.050
HD12	42.484828949	30.488119125	16.498300552	LEU	494	HA	H	0.050
HD13	43.632129669	29.720399857	15.418459892	LEU	494	HA	H	0.050
CD2	42.644409180	27.661760330	16.915229797	LEU	494	CT	C	-0.150
HD21	42.527721405	28.103919983	17.900529861	LEU	494	HA	H	0.050
HD22	42.262210846	26.643690109	16.949359894	LEU	494	HA	H	0.050
HD23	43.708091736	27.612169266	16.703239441	LEU	494	HA	H	0.050
N	38.096988678	26.413480759	17.911529541	GLU	495	NP	N	-0.400
HN	37.446899414	26.363740921	17.145620346	GLU	495	H	H	0.250
CA	37.777709961	25.959289551	19.269449234	GLU	495	CT	C	0.050
HA	38.710311890	25.668979645	19.737180710	GLU	495	HA	H	0.050
C	36.955089569	24.674520493	19.256710052	GLU	495	C	C	0.600
O	37.201450348	23.752359390	20.025379181	GLU	495	O	O	-0.550
CB	37.111370087	27.070169449	20.089460373	GLU	495	CT	C	-0.100
HB1	37.580028534	28.026449203	19.856370926	GLU	495	HA	H	0.050
HB2	36.066749573	27.178920746	19.794870377	GLU	495	HA	H	0.050
CG	37.205329895	26.807119370	21.601579666	GLU	495	CT	C	-0.250
HG1	36.599769592	27.538690567	22.133249283	GLU	495	HA	H	0.050
HG2	36.797618866	25.828069687	21.854249954	GLU	495	HA	H	0.050
CD	38.653301239	26.897560120	22.104629517	GLU	495	C	C	0.350
OE1	39.075729370	27.972330093	22.511730194	GLU	495	OC	O	-0.600
OE2	39.369468689	25.897470474	22.117099762	GLU	495	OC	O	-0.600
N	36.032810211	24.655090332	18.282529831	ASP	496	NP	N	-0.400
HN	35.852371216	25.477790833	17.741699219	ASP	496	H	H	0.250
CA	35.468528748	23.423669815	17.739730835	ASP	496	CT	C	0.050
HA	34.844841003	22.991849899	18.522569656	ASP	496	HA	H	0.050
C	36.601989746	22.428699493	17.403169632	ASP	496	C	C	0.600
O	36.578609467	21.255329132	17.759689331	ASP	496	O	O	-0.550
CB	34.623710632	23.784109116	16.498229980	ASP	496	CT	C	-0.250
HB1	34.178859711	22.880849838	16.078140259	ASP	496	HA	H	0.050
HB2	33.795181274	24.429609299	16.788890839	ASP	496	HA	H	0.050
CG	35.418670654	24.513940811	15.391790390	ASP	496	C	C	0.350
OD1	36.209098816	25.406480789	15.711429596	ASP	496	OC	O	-0.600
OD2	35.259338379	24.166269302	14.227290154	ASP	496	OC	O	-0.600
N	37.646099091	23.016080856	16.788490295	PHE	497	NP	N	-0.400
HN	37.479469299	23.925439835	16.397520065	PHE	497	H	H	0.250
CA	38.955219269	22.381309509	16.767229080	PHE	497	CT	C	0.050
HA	38.811889648	21.336050034	16.483350754	PHE	497	HA	H	0.050
C	39.546951294	22.430240631	18.185390472	PHE	497	C	C	0.600
O	40.307739258	23.317489624	18.562189102	PHE	497	O	O	-0.550
CB	39.858669281	23.075120926	15.739130020	PHE	497	CT	C	-0.100
HB1	39.784370422	24.160409927	15.823280334	PHE	497	HA	H	0.050
HB2	40.906459808	22.825540543	15.914899826	PHE	497	HA	H	0.050
CG	39.487869263	22.640420914	14.347510338	PHE	497	C6R	C	0.000
CD1	38.440429688	23.253030777	13.668629646	PHE	497	C6R	C	-0.130
HD1	37.887981415	24.063230515	14.124830246	PHE	497	HA	H	0.130
CD2	40.180778503	21.606319427	13.724780083	PHE	497	C6R	C	-0.130
HD2	40.988071442	21.111530304	14.241849899	PHE	497	HA	H	0.130
CE1	38.089828491	22.843309402	12.390620232	PHE	497	C6R	C	-0.130
HE1	37.269031525	23.334970474	11.888159752	PHE	497	HA	H	0.130
CE2	39.836189270	21.195930481	12.443240166	PHE	497	C6R	C	-0.130
HE2	40.380081177	20.395149231	11.964280128	PHE	497	HA	H	0.130
CZ	38.789459229	21.815460205	11.774410248	PHE	497	C6R	C	-0.130
HZ	38.520690918	21.501579285	10.776740074	PHE	497	HA	H	0.130
N	39.121181488	21.400089264	18.936170578	ASN	498	NP	N	-0.400
HN	38.373699188	20.849899292	18.553850174	ASN	498	H	H	0.250
CA	39.598949432	21.134679794	20.287389755	ASN	498	CT	C	0.050

HA	40.285671234	21.935089111	20.571550369	ASN	498	HA	H	0.050
C	40.365051270	19.801589966	20.300060272	ASN	498	C	C	0.600
O	40.614219666	19.212299347	21.344379425	ASN	498	O	O	-0.550
CB	38.376560211	21.048610687	21.228530884	ASN	498	CT	C	-0.100
HB1	37.506008148	21.527849197	20.782949448	ASN	498	HA	H	0.050
HB2	38.070461273	20.018499374	21.418500900	ASN	498	HA	H	0.050
CG	38.666099548	21.730520248	22.567560196	ASN	498	C	C	0.550
OD1	39.060489655	21.102310181	23.543249130	ASN	498	O	O	-0.550
ND2	38.465381622	23.052820206	22.535030365	ASN	498	NP	N	-0.600
HD21	38.670978546	23.655239105	23.312269211	ASN	498	H	H	0.300
HD22	38.086231232	23.484920502	21.709840775	ASN	498	H	H	0.300
N	40.664070129	19.332910538	19.077629089	TYR	499	NP	N	-0.400
HN	40.689750671	19.972179413	18.305389404	TYR	499	H	H	0.250
CA	41.083461761	17.956279755	18.842220306	TYR	499	CT	C	0.050
HA	41.208190918	17.446500778	19.799869537	TYR	499	HA	H	0.050
C	42.443359375	18.027280807	18.162170410	TYR	499	C	C	0.600
O	42.667018890	17.596290588	17.039190292	TYR	499	O	O	-0.550
CB	40.017528534	17.246070862	17.995389938	TYR	499	CT	C	-0.100
HB1	39.935108185	17.710590363	17.011409760	TYR	499	HA	H	0.050
HB2	40.297229767	16.205259323	17.826980591	TYR	499	HA	H	0.050
CG	38.686588287	17.299989700	18.697759628	TYR	499	C6R	C	0.000
CD1	38.432430267	16.465099335	19.780239105	TYR	499	C6R	C	-0.130
HD1	39.177299500	15.749790192	20.096580505	TYR	499	HA	H	0.130
CD2	37.707000732	18.205600739	18.301149368	TYR	499	C6R	C	-0.130
HD2	37.876731873	18.858070374	17.456359863	TYR	499	HA	H	0.130
CE1	37.229160309	16.549539566	20.466899872	TYR	499	C6R	C	-0.130
HE1	37.037231445	15.903160095	21.310079575	TYR	499	HA	H	0.130
CE2	36.502849579	18.295829773	18.987209320	TYR	499	C6R	C	-0.130
HE2	35.788528442	19.030160904	18.640579224	TYR	499	HA	H	0.130
CZ	36.263458252	17.466129303	20.079809189	TYR	499	C6R	C	0.250
OH	35.090110779	17.523330688	20.807350159	TYR	499	OT	O	-0.650
HH	34.445808411	18.079540253	20.391750336	TYR	499	HO	H	0.400
N	43.303188324	18.690500259	18.944250107	ASN	500	NP	N	-0.400
HN	43.049140930	18.907600403	19.888210297	ASN	500	H	H	0.250
CA	44.601680756	19.149850845	18.502059937	ASN	500	CT	C	0.050
HA	44.948688507	18.511480331	17.686780930	ASN	500	HA	H	0.050
C	45.468471527	18.973249435	19.741159439	ASN	500	C	C	0.600
O	45.033088684	19.323799133	20.831649780	ASN	500	O	O	-0.550
CB	44.509380341	20.639030457	18.107089996	ASN	500	CT	C	-0.100
HB1	44.292610168	21.246660233	18.986240387	ASN	500	HA	H	0.050
HB2	45.456710815	20.994939804	17.700880051	ASN	500	HA	H	0.050
CG	43.382408142	20.903369904	17.095289230	ASN	500	C	C	0.550
OD1	42.233089447	21.125410080	17.457639694	ASN	500	O	O	-0.550
ND2	43.770458221	20.873870850	15.815950394	ASN	500	NP	N	-0.600
HD21	43.076408386	21.034709930	15.117589951	ASN	500	H	H	0.300
HD22	44.710060120	20.685369492	15.535770416	ASN	500	H	H	0.300
N	46.660488129	18.379940033	19.551130295	ASN	501	NP	N	-0.400
HN	47.040748596	18.214370728	18.640960693	ASN	501	H	H	0.250
CA	47.415340424	17.901529312	20.703800201	ASN	501	CT	C	0.050
HA	47.108768463	18.464239120	21.586509705	ASN	501	HA	H	0.050
C	48.899360657	18.147010803	20.473449707	ASN	501	C	C	0.600
O	49.384399414	18.109880447	19.351070404	ASN	501	O	O	-0.550
CB	47.216209412	16.386070251	20.877689362	ASN	501	CT	C	-0.100
HB1	47.361370087	15.866720200	19.929979324	ASN	501	HA	H	0.050
HB2	47.947738647	15.973219872	21.575370789	ASN	501	HA	H	0.050
CG	45.822048187	16.049400330	21.403879166	ASN	501	C	C	0.550
OD1	44.864490509	15.887370110	20.660980225	ASN	501	O	O	-0.550
ND2	45.781169891	15.899889946	22.728080750	ASN	501	NP	N	-0.600
HD21	44.968601227	15.506349564	23.150869370	ASN	501	H	H	0.300
HD22	46.556449890	16.215360641	23.281530380	ASN	501	H	H	0.300
N	49.571289062	18.357299805	21.618659973	GLN	502	NP	N	-0.400
HN	49.062210083	18.303840637	22.482419968	GLN	502	H	H	0.250

CA	51.026428223	18.392759323	21.677310944	GLN	502	CT	C	0.050
HA	51.438308716	18.163799286	20.692110062	GLN	502	HA	H	0.050
C	51.433368683	17.306209564	22.668529510	GLN	502	C	C	0.600
O	50.662418365	16.983049393	23.562950134	GLN	502	O	O	-0.550
CB	51.513721466	19.755830765	22.209030151	GLN	502	CT	C	-0.100
HB1	51.190910339	19.881490707	23.243909836	GLN	502	HA	H	0.050
HB2	52.604431152	19.764720917	22.242910385	GLN	502	HA	H	0.050
CG	51.006500244	20.966220856	21.409849167	GLN	502	CT	C	-0.100
HG1	49.927181244	21.047189713	21.509580612	GLN	502	HA	H	0.050
HG2	51.428440094	21.891149521	21.803529739	GLN	502	HA	H	0.050
CD	51.337631226	20.872940063	19.918399811	GLN	502	C	C	0.550
OE1	50.474159241	20.984100342	19.060319901	GLN	502	O	O	-0.550
NE2	52.631210327	20.661140442	19.655799866	GLN	502	NP	N	-0.600
HE21	52.908271790	20.561740875	18.701869965	GLN	502	H	H	0.300
HE22	53.311119080	20.597759247	20.384029388	GLN	502	H	H	0.300
N	52.665271759	16.794309616	22.488790512	THR	503	NP	N	-0.400
HN	53.243198395	17.112630844	21.739709854	THR	503	H	H	0.250
CA	53.314990997	16.059579849	23.570379257	THR	503	CT	C	0.050
HA	52.566528320	15.834630013	24.320989609	THR	503	HA	H	0.050
C	54.325218201	17.023500443	24.196620941	THR	503	C	C	0.600
O	54.632968903	18.068969727	23.631849289	THR	503	O	O	-0.550
CB	53.932289124	14.730270386	23.084730148	THR	503	CT	C	0.150
HB	53.133968353	14.112110138	22.662630081	THR	503	HA	H	0.100
OG1	54.550590515	13.992710114	24.126329422	THR	503	OT	O	-0.650
HG1	53.985141754	13.920519829	24.901840210	THR	503	HO	H	0.400
CG2	54.992080688	14.923709869	21.993450165	THR	503	CT	C	-0.150
HG21	55.388420105	13.960519791	21.671609879	THR	503	HA	H	0.050
HG22	54.582469940	15.422050476	21.115449905	THR	503	HA	H	0.050
HG23	55.832328796	15.514849663	22.358369827	THR	503	HA	H	0.050
N	54.772129059	16.625600815	25.393659592	ILE	504	NP	N	-0.400
HN	54.546119690	15.711039543	25.746719360	ILE	504	H	H	0.250
CA	55.660648346	17.427059174	26.213449478	ILE	504	CT	C	0.050
HA	56.367328644	17.916519165	25.540729523	ILE	504	HA	H	0.050
C	56.434131622	16.408510208	27.066579819	ILE	504	C	C	0.600
O	56.191928864	15.217399597	26.928150177	ILE	504	O	O	-0.550
CB	54.811008453	18.462110519	26.983640671	ILE	504	CT	C	-0.050
HB	54.181011200	18.953760147	26.241060257	ILE	504	HA	H	0.050
CG1	55.676048279	19.571119308	27.600030899	ILE	504	CT	C	-0.100
HG11	56.162361145	19.211669922	28.504079819	ILE	504	HA	H	0.050
HG12	56.467880249	19.818740845	26.898199081	ILE	504	HA	H	0.050
CG2	53.870269775	17.797449112	28.000299454	ILE	504	CT	C	-0.150
HG21	54.426170349	17.242990494	28.755630493	ILE	504	HA	H	0.050
HG22	53.259441376	18.534200668	28.515720367	ILE	504	HA	H	0.050
HG23	53.189788818	17.100549698	27.513469696	ILE	504	HA	H	0.050
CD1	54.915981293	20.869659424	27.891050339	ILE	504	CT	C	-0.150
HD11	54.143051147	20.719869614	28.638309479	ILE	504	HA	H	0.050
HD12	55.591220856	21.636100769	28.272489548	ILE	504	HA	H	0.050
HD13	54.442779541	21.263059616	26.991430283	ILE	504	HA	H	0.050
N	57.376781464	16.900669098	27.900020599	THR	505	NP	N	-0.400
HN	57.488380432	17.880479813	28.074140549	THR	505	H	H	0.250
CA	58.409259796	16.081489563	28.544160843	THR	505	CT	C	0.050
HA	59.158920288	15.941579819	27.774900436	THR	505	HA	H	0.050
C	57.915668488	14.685999870	28.993679047	THR	505	C	C	0.600
O	58.475440979	13.646759987	28.658769608	THR	505	O	O	-0.550
CB	59.012550354	16.880830765	29.716609955	THR	505	CT	C	0.150
HB	58.493499756	16.593349457	30.636320114	THR	505	HA	H	0.100
OG1	58.783679962	18.261850357	29.465549469	THR	505	OT	O	-0.650
HG1	59.194858551	18.796030045	30.152259827	THR	505	HO	H	0.400
CG2	60.514171600	16.604930878	29.880739212	THR	505	CT	C	-0.150
HG21	60.918849945	17.064640045	30.783140182	THR	505	HA	H	0.050
HG22	60.702678680	15.532790184	29.957769394	THR	505	HA	H	0.050
HG23	61.069019318	16.989950180	29.025829315	THR	505	HA	H	0.050

N	56.816120148	14.786769867	29.754640579	ASP	506	NP	N	-0.400
HN	56.489459991	15.702249527	29.993770599	ASP	506	H	H	0.250
CA	56.114269257	13.655249596	30.332130432	ASP	506	CT	C	0.050
HA	56.838798523	12.850040436	30.469730377	ASP	506	HA	H	0.050
C	55.014091492	13.134309769	29.381900787	ASP	506	C	C	0.600
O	55.052669525	11.993559837	28.938470840	ASP	506	O	O	-0.550
CB	55.568458557	14.084210396	31.711240768	ASP	506	CT	C	-0.250
HB1	54.895088196	13.347299576	32.143539429	ASP	506	HA	H	0.050
HB2	56.400638580	14.135629654	32.401309967	ASP	506	HA	H	0.050
CG	54.923530579	15.476309776	31.698329926	ASP	506	C	C	0.350
OD1	55.643299103	16.462959290	31.844940186	ASP	506	OC	O	-0.600
OD2	53.717941284	15.584870338	31.493370056	ASP	506	OC	O	-0.600
N	54.008968353	14.004529953	29.144920349	GLN	507	NP	N	-0.400
HN	54.084861755	14.912380219	29.560340881	GLN	507	H	H	0.250
CA	52.728328705	13.555919647	28.595350266	GLN	507	CT	C	0.050
HA	52.834041595	12.527299881	28.245920181	GLN	507	HA	H	0.050
C	52.319000244	14.407290459	27.367439270	GLN	507	C	C	0.600
O	53.039508820	14.496979713	26.375570297	GLN	507	O	O	-0.550
CB	51.683200836	13.613490105	29.728580475	GLN	507	CT	C	-0.100
HB1	51.590160370	14.652669907	30.038879395	GLN	507	HA	H	0.050
HB2	50.704349518	13.294139862	29.369789124	GLN	507	HA	H	0.050
CG	52.035449982	12.751059532	30.949220657	GLN	507	CT	C	-0.100
HG1	51.943450928	11.690480232	30.716459274	GLN	507	HA	H	0.050
HG2	53.055339813	12.917420387	31.273180008	GLN	507	HA	H	0.050
CD	51.128009796	13.084850311	32.134559631	GLN	507	C	C	0.550
OE1	50.376960754	12.255760193	32.624778748	GLN	507	O	O	-0.550
NE2	51.231479645	14.350239754	32.554031372	GLN	507	NP	N	-0.600
HE21	50.655101776	14.702050209	33.284599304	GLN	507	H	H	0.300
HE22	51.893871307	14.993040085	32.146911621	GLN	507	H	H	0.300
N	51.096710205	14.982999802	27.474269867	ILE	508	NP	N	-0.400
HN	50.591190338	14.974639893	28.335470200	ILE	508	H	H	0.250
CA	50.424880981	15.623780251	26.355850220	ILE	508	CT	C	0.050
HA	51.201549530	16.119520187	25.783050537	ILE	508	HA	H	0.050
C	49.495170593	16.732980728	26.863210678	ILE	508	C	C	0.600
O	49.142768860	16.825189590	28.034530640	ILE	508	O	O	-0.550
CB	49.633430481	14.608440399	25.483179092	ILE	508	CT	C	-0.050
HB	49.315280914	15.152139664	24.592359543	ILE	508	HA	H	0.050
CG1	48.329231262	14.073349953	26.118789673	ILE	508	CT	C	-0.100
HG11	47.609058380	14.884389877	26.230640411	ILE	508	HA	H	0.050
HG12	47.864921570	13.373740196	25.422760010	ILE	508	HA	H	0.050
CG2	50.501388550	13.457989693	24.952110291	ILE	508	CT	C	-0.150
HG21	51.374458313	13.839119911	24.425949097	ILE	508	HA	H	0.050
HG22	50.846561432	12.798879623	25.747579575	ILE	508	HA	H	0.050
HG23	49.942878723	12.844900131	24.244810104	ILE	508	HA	H	0.050
CD1	48.498168945	13.374890327	27.473779678	ILE	508	CT	C	-0.150
HD11	49.267490387	12.603910446	27.437070847	ILE	508	HA	H	0.050
HD12	48.755058289	14.084400177	28.259330750	ILE	508	HA	H	0.050
HD13	47.566909790	12.895130157	27.774940491	ILE	508	HA	H	0.050
N	49.113090515	17.541330338	25.866470337	TYR	509	NP	N	-0.400
HN	49.459320068	17.349540710	24.944599152	TYR	509	H	H	0.250
CA	48.139759064	18.602710724	26.015979767	TYR	509	CT	C	0.050
HA	47.634780884	18.494230270	26.977199554	TYR	509	HA	H	0.050
C	47.116741180	18.425020218	24.898899078	TYR	509	C	C	0.600
O	47.427089691	17.893480301	23.837200165	TYR	509	O	O	-0.550
CB	48.841400146	19.960809708	25.876249313	TYR	509	CT	C	-0.100
HB1	49.649280548	19.909559250	25.145309448	TYR	509	HA	H	0.050
HB2	48.149509430	20.718879700	25.502929688	TYR	509	HA	H	0.050
CG	49.370159149	20.439449310	27.196750641	TYR	509	C6R	C	0.000
CD1	48.568031311	21.234470367	28.000780106	TYR	509	C6R	C	-0.130
HD1	47.572158813	21.499420166	27.682239532	TYR	509	HA	H	0.130
CD2	50.648548126	20.117000580	27.634710312	TYR	509	C6R	C	-0.130
HD2	51.293041229	19.494800568	27.030399323	TYR	509	HA	H	0.130

CE1	49.028888702	21.722719193	29.211330414	TYR	509	C6R	C	-0.130
HE1	48.382461548	22.374919891	29.779600143	TYR	509	HA	H	0.130
CE2	51.105880737	20.595930099	28.856010437	TYR	509	C6R	C	-0.130
HE2	52.095500946	20.340459824	29.188339233	TYR	509	HA	H	0.130
CZ	50.300018311	21.400699615	29.649509430	TYR	509	C6R	C	0.250
OH	50.764381409	21.874950409	30.859569550	TYR	509	OT	O	-0.650
HH	50.036918640	22.091150284	31.441299438	TYR	509	HO	H	0.400
N	45.903850555	18.908819199	25.225339890	ARG	510	NP	N	-0.400
HN	45.788871765	19.305660248	26.135259628	ARG	510	H	H	0.250
CA	44.829681396	19.090410233	24.259090424	ARG	510	CT	C	0.050
HA	45.288421631	19.123949051	23.269470215	ARG	510	HA	H	0.050
C	44.244960785	20.487239838	24.546489716	ARG	510	C	C	0.600
O	44.987628937	21.454799652	24.563869476	ARG	510	O	O	-0.550
CB	43.814990997	17.932350159	24.338380814	ARG	510	CT	C	-0.100
HB1	44.348518372	16.997039795	24.488910675	ARG	510	HA	H	0.050
HB2	43.194648743	18.035169601	25.228500366	ARG	510	HA	H	0.050
CG	42.971858978	17.823030472	23.050590515	ARG	510	CT	C	-0.100
HG1	42.502780914	18.783100128	22.846939087	ARG	510	HA	H	0.050
HG2	43.630809784	17.659650803	22.198160172	ARG	510	HA	H	0.050
CD	41.913139343	16.701339722	23.069509506	ARG	510	CT	C	0.000
HD1	41.213718414	16.777929306	22.234840393	ARG	510	HA	H	0.050
HD2	42.393039703	15.724080086	23.007940292	ARG	510	HA	H	0.050
NE	41.148460388	16.696430206	24.314220428	ARG	510	NP	N	-0.400
HE	41.298149109	15.921910286	24.929550171	ARG	510	H	H	0.300
CZ	40.422588348	17.764720917	24.708040237	ARG	510	C	C	0.500
NH1	40.153018951	18.749399185	23.860630035	ARG	510	NC	N	-0.450
HH11	40.420841217	18.685880661	22.891490936	ARG	510	HC	H	0.350
HH12	39.683589935	19.603609085	24.134149551	ARG	510	HC	H	0.350
NH2	40.016128540	17.854440689	25.966199875	ARG	510	NC	N	-0.450
HH21	40.050388336	17.091539383	26.609079361	ARG	510	HC	H	0.350
HH22	39.702068329	18.758810043	26.286409378	ARG	510	HC	H	0.350
N	42.927429199	20.565740585	24.808950424	ALA	511	NP	N	-0.400
HN	42.341358185	19.756879807	24.840269089	ALA	511	H	H	0.250
CA	42.292251587	21.840269089	25.128360748	ALA	511	CT	C	0.050
HA	42.928871155	22.373479843	25.837850571	ALA	511	HA	H	0.050
C	40.956901550	21.516580582	25.807720184	ALA	511	C	C	0.600
O	40.624919891	20.353969574	26.006870270	ALA	511	O	O	-0.550
CB	42.081451416	22.650560379	23.837120056	ALA	511	CT	C	-0.150
HB1	41.486389160	22.093460083	23.113380432	ALA	511	HA	H	0.050
HB2	41.574081421	23.596450806	24.029680252	ALA	511	HA	H	0.050
HB3	43.037399292	22.884969711	23.368659973	ALA	511	HA	H	0.050
N	40.207260132	22.574789047	26.128200531	MET	512	NP	N	-0.400
HN	40.561370850	23.500450134	25.967599869	MET	512	H	H	0.250
CA	38.807998657	22.421199799	26.504890442	MET	512	CT	C	0.050
HA	38.403961182	21.531099319	26.019050598	MET	512	HA	H	0.050
C	38.096549988	23.640340805	25.919059753	MET	512	C	C	0.600
O	38.657649994	24.345350266	25.091180801	MET	512	O	O	-0.550
CB	38.656070709	22.354610443	28.037139893	MET	512	CT	C	-0.100
HB1	39.100250244	23.242109299	28.487289429	MET	512	HA	H	0.050
HB2	37.604339600	22.381320953	28.308370590	MET	512	HA	H	0.050
CG	39.242820740	21.091510773	28.677339554	MET	512	CT	C	-0.050
HG1	40.313411713	21.002210617	28.494279861	MET	512	HA	H	0.050
HG2	39.123939514	21.153169632	29.759260178	MET	512	HA	H	0.050
SD	38.416980743	19.591609955	28.117710114	MET	512	SE	S	-0.100
CE	39.261119843	18.425239563	29.199220657	MET	512	CT	C	-0.100
HE1	40.323669434	18.392709732	28.960479736	MET	512	HA	H	0.050
HE2	39.168090820	18.744560242	30.237400055	MET	512	HA	H	0.050
HE3	38.831020355	17.428590775	29.102840424	MET	512	HA	H	0.050
N	36.869709015	23.879760742	26.412239075	ASN	513	NP	N	-0.400
HN	36.453861237	23.209680557	27.027759552	ASN	513	H	H	0.250
CA	36.237339020	25.176519394	26.203109741	ASN	513	CT	C	0.050
HA	37.030601501	25.919710159	26.283010483	ASN	513	HA	H	0.050

C	35.289718628	25.399599075	27.388250351	ASN	513	C	C	0.600
O	35.577438354	26.131210327	28.327360153	ASN	513	O	O	-0.550
CB	35.563289642	25.266019821	24.815200806	ASN	513	CT	C	-0.100
HB1	36.249111176	24.899580002	24.051069260	ASN	513	HA	H	0.050
HB2	34.662258148	24.657260895	24.747390747	ASN	513	HA	H	0.050
CG	35.243621826	26.725379944	24.459260941	ASN	513	C	C	0.550
OD1	35.887229919	27.648849487	24.934740067	ASN	513	O	O	-0.550
ND2	34.248279572	26.890600204	23.583019257	ASN	513	NP	N	-0.600
HD21	34.057910919	27.826589584	23.267269135	ASN	513	H	H	0.300
HD22	33.700660706	26.141420364	23.218629837	ASN	513	H	H	0.300
N	34.174919128	24.656299591	27.333309174	SER	514	NP	N	-0.400
HN	33.885730743	24.186670303	26.499229431	SER	514	H	H	0.250
CA	33.231468201	24.602670670	28.439270020	SER	514	CT	C	0.050
HA	33.035610199	25.626380920	28.761859894	SER	514	HA	H	0.050
C	33.791130066	23.770980835	29.615869522	SER	514	C	C	0.600
O	33.360431671	22.647109985	29.851379395	SER	514	O	O	-0.550
CB	31.958250046	23.954099655	27.876100540	SER	514	CT	C	0.050
HB1	32.071159363	22.862899780	27.838220596	SER	514	HA	H	0.100
HB2	31.104679108	24.179899216	28.524349213	SER	514	HA	H	0.100
OG	31.750270844	24.456239700	26.559480667	SER	514	OT	O	-0.650
HG	30.980009079	24.058490753	26.155010223	SER	514	HO	H	0.400
N	34.770900726	24.356489182	30.336410522	SER	515	NP	N	-0.400
HN	35.136619568	25.216030121	29.975070953	SER	515	H	H	0.250
CA	35.342838287	23.604270935	31.459970474	SER	515	CT	C	0.050
HA	34.513809204	23.114980698	31.977149963	SER	515	HA	H	0.050
C	36.030048370	24.480890274	32.518928528	SER	515	C	C	0.600
O	36.343250275	24.006839752	33.603790283	SER	515	O	O	-0.550
CB	36.344879150	22.552669525	30.939699173	SER	515	CT	C	0.050
HB1	37.285781860	23.029800415	30.655199051	SER	515	HA	H	0.100
HB2	36.601661682	21.836839676	31.726919174	SER	515	HA	H	0.100
OG	35.871860504	21.851259232	29.801429749	SER	515	OT	O	-0.650
HG	34.933990479	21.669050217	29.902429581	SER	515	HO	H	0.400
N	36.265419006	25.763639450	32.191890717	SER	516	NP	N	-0.400
HN	35.951541901	26.142490387	31.323789597	SER	516	H	H	0.250
CA	37.114109039	26.608760834	33.036998749	SER	516	CT	C	0.050
HA	37.041778564	27.591880798	32.569118500	SER	516	HA	H	0.050
C	38.583541870	26.172779083	32.912101746	SER	516	C	C	0.600
O	39.354160309	26.812419891	32.222721100	SER	516	O	O	-0.550
CB	36.658699036	26.740890503	34.511138916	SER	516	CT	C	0.050
HB1	37.374080658	26.310400009	35.221740723	SER	516	HA	H	0.100
HB2	36.633029938	27.800079346	34.771438599	SER	516	HA	H	0.100
OG	35.367748260	26.206460953	34.750080109	SER	516	OT	O	-0.650
HG	35.395648956	25.262220383	34.565700531	SER	516	HO	H	0.400
N	38.938480377	25.066129684	33.588790894	PHE	517	NP	N	-0.400
HN	38.223979950	24.501970291	34.006858826	PHE	517	H	H	0.250
CA	40.317268372	24.596799850	33.486221313	PHE	517	CT	C	0.050
HA	40.965930939	25.461610794	33.357730865	PHE	517	HA	H	0.050
C	40.437149048	23.684139252	32.254940033	PHE	517	C	C	0.600
O	39.675270081	22.735960007	32.092540741	PHE	517	O	O	-0.550
CB	40.737388611	23.860670090	34.766750336	PHE	517	CT	C	-0.100
HB1	39.950279236	23.188089371	35.108150482	PHE	517	HA	H	0.050
HB2	41.605911255	23.233650208	34.561958313	PHE	517	HA	H	0.050
CG	41.119750977	24.824939728	35.860420227	PHE	517	C6R	C	0.000
CD1	40.169181824	25.333669662	36.737781525	PHE	517	C6R	C	-0.130
HD1	39.133388519	25.063299179	36.639549255	PHE	517	HA	H	0.130
CD2	42.442638397	25.229320526	36.006919861	PHE	517	C6R	C	-0.130
HD2	43.196369171	24.845209122	35.336250305	PHE	517	HA	H	0.130
CE1	40.530731201	26.205789566	37.751571655	PHE	517	C6R	C	-0.130
HE1	39.776908875	26.565469742	38.434471130	PHE	517	HA	H	0.130
CE2	42.806629181	26.119989395	37.009208679	PHE	517	C6R	C	-0.130
HE2	43.833778381	26.436889648	37.115909576	PHE	517	HA	H	0.130
CZ	41.851291656	26.605329514	37.887119293	PHE	517	C6R	C	-0.130

HZ	42.139110565	27.291570663	38.670558929	PHE	517	HA	H	0.130
N	41.431999207	24.007669449	31.402870178	GLU	518	NP	N	-0.400
HN	41.960620880	24.844640732	31.569759369	GLU	518	H	H	0.250
CA	41.722270966	23.111110687	30.285959244	GLU	518	CT	C	0.050
HA	40.765628815	22.811010361	29.867710114	GLU	518	HA	H	0.050
C	42.457439423	21.859220505	30.807329178	GLU	518	C	C	0.600
O	43.671360016	21.849769592	30.927520752	GLU	518	O	O	-0.550
CB	42.530979156	23.821029663	29.180490494	GLU	518	CT	C	-0.100
HB1	43.526451111	24.085960388	29.540880203	GLU	518	HA	H	0.050
HB2	42.680770874	23.115699768	28.360799789	GLU	518	HA	H	0.050
CG	41.820171356	25.079549789	28.655170441	GLU	518	CT	C	-0.250
HG1	40.748699188	24.896169662	28.588060379	GLU	518	HA	H	0.050
HG2	41.963138580	25.897659302	29.357740402	GLU	518	HA	H	0.050
CD	42.315158844	25.517410278	27.269620895	GLU	518	C	C	0.350
OE1	41.749950409	25.070659637	26.275730133	GLU	518	OC	O	-0.600
OE2	43.235660553	26.324829102	27.184650421	GLU	518	OC	O	-0.600
N	41.654861450	20.816980362	31.105489731	GLY	519	NP	N	-0.400
HN	40.668769836	20.984159470	31.080310822	GLY	519	H	H	0.250
CA	42.196788788	19.556169510	31.618629456	GLY	519	CT	C	0.000
HA1	42.716999054	19.783859253	32.546829224	GLY	519	HA	H	0.050
HA2	41.347949982	18.910900116	31.841419220	GLY	519	HA	H	0.050
C	43.131759644	18.853830338	30.611940384	GLY	519	C	C	0.600
O	42.746921539	18.560020447	29.485780716	GLY	519	O	O	-0.550
N	44.377120972	18.631629944	31.083169937	VAL	520	NP	N	-0.400
HN	44.572658539	18.774169922	32.053218842	VAL	520	H	H	0.250
CA	45.518581390	18.257650375	30.245529175	VAL	520	CT	C	0.050
HA	45.184318542	17.484529495	29.551969528	VAL	520	HA	H	0.050
C	46.596549988	17.650449753	31.181859970	VAL	520	C	C	0.600
O	46.262359619	17.209129333	32.275638580	VAL	520	O	O	-0.550
CB	46.027679443	19.517839432	29.502819061	VAL	520	CT	C	-0.050
HB	46.932250977	19.251440048	28.960639954	VAL	520	HA	H	0.050
CG1	45.048488617	20.016099930	28.423269272	VAL	520	CT	C	-0.150
HG11	44.670841217	19.190729141	27.820180893	VAL	520	HA	H	0.050
HG12	44.191661835	20.530220032	28.854219437	VAL	520	HA	H	0.050
HG13	45.521400452	20.729520798	27.750509262	VAL	520	HA	H	0.050
CG2	46.377460480	20.642610550	30.493400574	VAL	520	CT	C	-0.150
HG21	45.650241852	20.734600067	31.293149948	VAL	520	HA	H	0.050
HG22	47.338291168	20.468219757	30.977649689	VAL	520	HA	H	0.050
HG23	46.397171021	21.612899780	30.000900269	VAL	520	HA	H	0.050
N	47.878318787	17.678359985	30.727199554	SER	521	NP	N	-0.400
HN	48.067729950	17.910160065	29.771959305	SER	521	H	H	0.250
CA	49.019828796	17.333639145	31.584579468	SER	521	CT	C	0.050
HA	48.791328430	16.367349625	32.027610779	SER	521	HA	H	0.050
C	49.169929504	18.357799530	32.738651276	SER	521	C	C	0.600
O	48.351879120	18.405389786	33.647228241	SER	521	O	O	-0.550
CB	50.306640625	17.198740005	30.743810654	SER	521	CT	C	0.050
HB1	50.202819824	16.350189209	30.067430496	SER	521	HA	H	0.100
HB2	50.463359833	18.093599319	30.131809235	SER	521	HA	H	0.100
OG	51.412460327	16.971439362	31.608240128	SER	521	OT	O	-0.650
HG	52.271610260	17.027830124	31.158859253	SER	521	HO	H	0.400
N	50.243259430	19.177349091	32.655639648	GLY	522	NP	N	-0.400
HN	50.952991486	18.910129547	32.003089905	GLY	522	H	H	0.250
CA	50.447071075	20.268030167	33.605758667	GLY	522	CT	C	0.000
HA1	50.676471710	19.812170029	34.570659637	GLY	522	HA	H	0.050
HA2	51.305389404	20.860240936	33.302791595	GLY	522	HA	H	0.050
C	49.195808411	21.149400711	33.670459747	GLY	522	C	C	0.600
O	48.800830841	21.816019058	32.718818665	GLY	522	O	O	-0.550
N	48.600090027	20.983680725	34.849929810	HIS	523	NP	N	-0.400
HN	49.158168793	20.535820007	35.555908203	HIS	523	H	H	0.250
CA	47.199058533	21.180080414	35.170509338	HIS	523	CT	C	0.050
HA	47.060241699	22.226339340	35.414379120	HIS	523	HA	H	0.050
C	47.045700073	20.362369537	36.446701050	HIS	523	C	C	0.600

O	46.744571686	20.875980377	37.514759064	HIS	523	O	O	-0.550
CB	46.231571198	20.747289658	34.048820496	HIS	523	CT	C	-0.100
HB1	46.192081451	21.519229889	33.281150818	HIS	523	HA	H	0.050
HB2	46.544239044	19.827720642	33.562000275	HIS	523	HA	H	0.050
CG	44.850238800	20.534400940	34.619148254	HIS	523	C5R	C	0.100
ND1	44.090129852	21.519039154	35.130489349	HIS	523	N5R	N	-0.400
HD1	44.346351624	22.471849442	35.196071625	HIS	523	H	H	0.300
CD2	44.163940430	19.319820404	34.765121460	HIS	523	C5R	C	0.000
HD2	44.527370453	18.352289200	34.451038361	HIS	523	HA	H	0.100
CE1	42.971439362	20.927240372	35.582298279	HIS	523	C5R	C	0.200
HE1	42.164760590	21.452959061	36.073501587	HIS	523	HA	H	0.100
NE2	42.987201691	19.596359253	35.372768402	HIS	523	N5R	N	-0.400
N	47.423591614	19.075639725	36.272819519	VAL	524	NP	N	-0.400
HN	47.601539612	18.732259750	35.347118378	VAL	524	H	H	0.250
CA	47.896839142	18.330659866	37.429241180	VAL	524	CT	C	0.050
HA	47.164459229	18.469869614	38.213260651	VAL	524	HA	H	0.050
C	49.215091705	18.975839615	37.883270264	VAL	524	C	C	0.600
O	49.989471436	19.470960617	37.069469452	VAL	524	O	O	-0.550
CB	48.006359100	16.816560745	37.155769348	VAL	524	CT	C	-0.050
HB	48.197681427	16.337230682	38.116451263	VAL	524	HA	H	0.050
CG1	46.678359985	16.260540009	36.621261597	VAL	524	CT	C	-0.150
HG11	45.845531464	16.528869629	37.271881104	VAL	524	HA	H	0.050
HG12	46.459270477	16.645349503	35.624641418	VAL	524	HA	H	0.050
HG13	46.701171875	15.174610138	36.552898407	VAL	524	HA	H	0.050
CG2	49.171398163	16.424449921	36.237991333	VAL	524	CT	C	-0.150
HG21	50.118721008	16.820920944	36.600078583	VAL	524	HA	H	0.050
HG22	49.276359558	15.341699600	36.194950104	VAL	524	HA	H	0.050
HG23	49.026611328	16.782850266	35.222499847	VAL	524	HA	H	0.050
N	49.375968933	18.975839615	39.215209961	VAL	525	NP	N	-0.400
HN	48.666030884	18.568529129	39.784709930	VAL	525	H	H	0.250
CA	50.542850494	19.564430237	39.851581573	VAL	525	CT	C	0.050
HA	51.127311707	20.089879990	39.096698761	VAL	525	HA	H	0.050
C	51.345188141	18.395200729	40.441680908	VAL	525	C	C	0.600
O	50.936771393	17.808160782	41.433261871	VAL	525	O	O	-0.550
CB	50.080501556	20.547859192	40.950408936	VAL	525	CT	C	-0.050
HB	49.641548157	19.976520538	41.770690918	VAL	525	HA	H	0.050
CG1	51.266128540	21.337129593	41.518161774	VAL	525	CT	C	-0.150
HG11	52.011699677	20.667390823	41.940120697	VAL	525	HA	H	0.050
HG12	51.758361816	21.933549881	40.750709534	VAL	525	HA	H	0.050
HG13	50.940078735	22.010429382	42.310791016	VAL	525	HA	H	0.050
CG2	48.996601105	21.520809174	40.456058502	VAL	525	CT	C	-0.150
HG21	49.373268127	22.160970688	39.662181854	VAL	525	HA	H	0.050
HG22	48.112991333	21.009969711	40.075229645	VAL	525	HA	H	0.050
HG23	48.660800934	22.170919418	41.264030457	VAL	525	HA	H	0.050
N	52.456680298	18.044200897	39.776508331	PHE	526	NP	N	-0.400
HN	52.780799866	18.668470383	39.063949585	PHE	526	H	H	0.250
CA	53.236900330	16.878810883	40.187759399	PHE	526	CT	C	0.050
HA	52.530090332	16.082359314	40.428180695	PHE	526	HA	H	0.050
C	54.059570312	17.200469971	41.452251434	PHE	526	C	C	0.600
O	54.653320312	18.263040543	41.582088470	PHE	526	O	O	-0.550
CB	54.144580841	16.439699173	39.031978607	PHE	526	CT	C	-0.100
HB1	54.675319672	17.297389984	38.617908478	PHE	526	HA	H	0.050
HB2	54.919479370	15.762450218	39.394569397	PHE	526	HA	H	0.050
CG	53.379859924	15.718729973	37.950000763	PHE	526	C6R	C	0.000
CD1	52.935939789	14.415889740	38.158481598	PHE	526	C6R	C	-0.130
HD1	53.092288971	13.929639816	39.109008789	PHE	526	HA	H	0.130
CD2	53.126258850	16.322210312	36.721328735	PHE	526	C6R	C	-0.130
HD2	53.417568207	17.344280243	36.548961639	PHE	526	HA	H	0.130
CE1	52.288791656	13.717309952	37.150539398	PHE	526	C6R	C	-0.130
HE1	51.959579468	12.704239845	37.325649261	PHE	526	HA	H	0.130
CE2	52.491348267	15.621540070	35.703548431	PHE	526	C6R	C	-0.130
HE2	52.324649811	16.091590881	34.743679047	PHE	526	HA	H	0.130

CZ	52.078109741	14.314160347	35.917961121	PHE	526	C6R	C	-0.130
HZ	51.602378845	13.751999855	35.129531860	PHE	526	HA	H	0.130
N	54.017120361	16.222949982	42.372058868	ASP	527	NP	N	-0.400
HN	53.551971436	15.360890388	42.169738770	ASP	527	H	H	0.250
CA	54.586631775	16.343639374	43.710819244	ASP	527	CT	C	0.050
HA	54.301689148	17.320240021	44.101478577	ASP	527	HA	H	0.050
C	56.125278473	16.233329773	43.624988556	ASP	527	C	C	0.600
O	56.634651184	15.481260300	42.805061340	ASP	527	O	O	-0.550
CB	53.973369598	15.202509880	44.550498962	ASP	527	CT	C	-0.250
HB1	54.336078644	14.238240242	44.191921234	ASP	527	HA	H	0.050
HB2	54.247928619	15.268400192	45.597808838	ASP	527	HA	H	0.050
CG	52.443061829	15.209389687	44.453899384	ASP	527	C	C	0.350
OD1	51.876430511	14.446550369	43.680629730	ASP	527	OC	O	-0.600
OD2	51.784439087	16.011550903	45.105991364	ASP	527	OC	O	-0.600
N	56.848781586	17.010219574	44.474601746	ALA	528	NP	N	-0.400
HN	56.429599762	17.648420334	45.126678467	ALA	528	H	H	0.250
CA	58.310001373	17.022809982	44.349178314	ALA	528	CT	C	0.050
HA	58.617568970	16.040769577	43.991638184	ALA	528	HA	H	0.050
C	59.036098480	17.290319443	45.690959930	ALA	528	C	C	0.600
O	58.528560638	17.946800232	46.591529846	ALA	528	O	O	-0.550
CB	58.689010620	18.103189468	43.333950043	ALA	528	CT	C	-0.150
HB1	58.207901001	17.912260056	42.376510620	ALA	528	HA	H	0.050
HB2	58.352268219	19.080179214	43.672149658	ALA	528	HA	H	0.050
HB3	59.765148163	18.146930695	43.166660309	ALA	528	HA	H	0.050
N	60.273338318	16.754779816	45.733081818	SER	529	NP	N	-0.400
HN	60.553249359	16.194009781	44.952091217	SER	529	H	H	0.250
CA	61.267200470	17.014329910	46.774360657	SER	529	CT	C	0.050
HA	60.860748291	17.722150803	47.487541199	SER	529	HA	H	0.050
C	62.502849579	17.607509613	46.091308594	SER	529	C	C	0.600
O	63.006820679	17.037900925	45.133819580	SER	529	O	O	-0.550
CB	61.663879395	15.696590424	47.467880249	SER	529	CT	C	0.050
HB1	60.805591583	15.241920471	47.961368561	SER	529	HA	H	0.100
HB2	61.981651306	14.971679688	46.715530396	SER	529	HA	H	0.100
OG	62.729511261	15.818909645	48.399341583	SER	529	OT	O	-0.650
HG	62.537391663	16.490810394	49.060909271	SER	529	HO	H	0.400
N	62.983791351	18.750579834	46.611389160	GLY	530	NP	N	-0.400
HN	62.553588867	19.190830231	47.403820038	GLY	530	H	H	0.250
CA	64.269950867	19.241790771	46.128208160	GLY	530	CT	C	0.000
HA1	64.276161194	19.242630005	45.036529541	GLY	530	HA	H	0.050
HA2	64.378837585	20.263500214	46.491710663	GLY	530	HA	H	0.050
C	65.382110596	18.362539291	46.711128235	GLY	530	C	C	0.600
O	65.669006348	18.428649902	47.896759033	GLY	530	O	O	-0.550
N	65.960777283	17.506700516	45.846168518	SER	531	NP	N	-0.400
HN	65.737510681	17.526760101	44.868251801	SER	531	H	H	0.250
CA	66.911537170	16.516719818	46.343479156	SER	531	CT	C	0.050
HA	66.553680420	16.191770554	47.322769165	SER	531	HA	H	0.050
C	68.295722961	17.166109085	46.525291443	SER	531	C	C	0.600
O	68.415466309	18.332740784	46.877090454	SER	531	O	O	-0.550
CB	66.939598083	15.322179794	45.372589111	SER	531	CT	C	0.050
HB1	65.919281006	15.075249672	45.065471649	SER	531	HA	H	0.100
HB2	67.461997986	15.588700294	44.451271057	SER	531	HA	H	0.100
OG	67.596900940	14.184390068	45.918491364	SER	531	OT	O	-0.650
HG	67.064491272	13.791720390	46.608081818	SER	531	HO	H	0.400
N	69.332901001	16.345300674	46.265731812	ARG	532	NP	N	-0.400
HN	69.118659973	15.397660255	46.011920929	ARG	532	H	H	0.250
CA	70.694450378	16.844659805	46.392601013	ARG	532	CT	C	0.050
HA	70.697700500	17.877759933	46.041210175	ARG	532	HA	H	0.050
C	71.661392212	16.039739609	45.508621216	ARG	532	C	C	0.600
O	72.824806213	15.832810402	45.856708527	ARG	532	O	O	-0.550
CB	71.135078430	16.748359680	47.861160278	ARG	532	CT	C	-0.100
HB1	70.308479309	17.001659393	48.519779205	ARG	532	HA	H	0.050
HB2	71.371650696	15.710539818	48.102088928	ARG	532	HA	H	0.050

CG	72.319129944	17.673460007	48.167419434	ARG	532	CT	C	-0.100
HG1	72.774696350	18.003379822	47.234798431	ARG	532	HA	H	0.050
HG2	71.951568604	18.584110260	48.636699677	ARG	532	HA	H	0.050
CD	73.373016357	16.998380661	49.051818848	ARG	532	CT	C	0.000
HD1	73.073219299	17.012620926	50.100349426	ARG	532	HA	H	0.050
HD2	73.543586731	15.956009865	48.774871826	ARG	532	HA	H	0.050
NE	74.650123596	17.695829391	48.959720612	ARG	532	NP	N	-0.400
HE	74.898391724	18.249370575	49.756031036	ARG	532	H	H	0.300
CZ	75.459129333	17.574689865	47.879878998	ARG	532	C	C	0.500
NH1	75.087066650	16.849679947	46.823951721	ARG	532	NC	N	-0.450
HH11	74.169296265	16.423330307	46.786300659	ARG	532	HC	H	0.350
HH12	75.687477112	16.710470200	46.040279388	ARG	532	HC	H	0.350
NH2	76.637977600	18.192390442	47.880199432	ARG	532	NC	N	-0.450
HH21	76.923286438	18.736200333	48.669368744	ARG	532	HC	H	0.350
HH22	77.260330200	18.129230499	47.100399017	ARG	532	HC	H	0.350
N	71.115791321	15.588500023	44.365161896	MET	533	NP	N	-0.400
HN	70.213829041	15.941430092	44.101638794	MET	533	H	H	0.250
CA	71.811630249	14.668279648	43.469039917	MET	533	CT	C	0.050
HA	72.382278442	13.970589638	44.084850311	MET	533	HA	H	0.050
C	72.785987854	15.422470093	42.543498993	MET	533	C	C	0.600
O	72.696372986	15.357749939	41.325191498	MET	533	O	O	-0.550
CB	70.771842957	13.900950432	42.635459900	MET	533	CT	C	-0.100
HB1	70.202438354	14.598019600	42.019641876	MET	533	HA	H	0.050
HB2	71.283363342	13.229720116	41.943691254	MET	533	HA	H	0.050
CG	69.803863525	13.083620071	43.496299744	MET	533	CT	C	-0.050
HG1	70.363830566	12.422630310	44.158031464	MET	533	HA	H	0.050
HG2	69.199882507	13.724860191	44.136161804	MET	533	HA	H	0.050
SD	68.707336426	12.080929756	42.479030609	MET	533	SE	S	-0.100
CE	68.034019470	11.032790184	43.779708862	MET	533	CT	C	-0.100
HE1	67.727531433	11.643589973	44.628959656	MET	533	HA	H	0.050
HE2	67.160453796	10.490550041	43.418228149	MET	533	HA	H	0.050
HE3	68.787780762	10.327110291	44.127708435	MET	533	HA	H	0.050
N	73.724800110	16.127099991	43.207038879	ALA	534	NP	N	-0.400
HN	73.684196472	16.085489273	44.203159332	ALA	534	H	H	0.250
CA	74.690429688	16.986370087	42.528831482	ALA	534	CT	C	0.050
HA	75.221366882	17.502279282	43.327949524	ALA	534	HA	H	0.050
C	73.951263428	18.056570053	41.699069977	ALA	534	C	C	0.600
O	72.770408630	18.308340073	41.906700134	ALA	534	O	O	-0.550
CB	75.682708740	16.139959335	41.710479736	ALA	534	CT	C	-0.150
HB1	76.130340576	15.365050316	42.332401276	ALA	534	HA	H	0.050
HB2	75.191932678	15.640339851	40.875221252	ALA	534	HA	H	0.050
HB3	76.499076843	16.739080429	41.307651520	ALA	534	HA	H	0.050
N	74.711112976	18.665210724	40.764221191	TRP	535	NP	N	-0.400
HN	75.666343689	18.394269943	40.669921875	TRP	535	H	H	0.250
CA	74.158599854	19.650510788	39.833690643	TRP	535	CT	C	0.050
HA	75.021987915	20.156860352	39.402439117	TRP	535	HA	H	0.050
C	73.314521790	20.711820602	40.586009979	TRP	535	C	C	0.600
O	73.661270142	21.147790909	41.676219940	TRP	535	O	O	-0.550
CB	73.364303589	18.923040390	38.726860046	TRP	535	CT	C	-0.100
HB1	72.444847107	18.494520187	39.130268097	TRP	535	HA	H	0.050
HB2	73.077781677	19.612060547	37.931060791	TRP	535	HA	H	0.050
CG	74.181716919	17.803789139	38.118179321	TRP	535	C5R	C	-0.030
CD1	74.044479370	16.443429947	38.402919769	TRP	535	C5R	C	-0.040
HD1	73.346130371	16.017030716	39.107860565	TRP	535	HA	H	0.100
CD2	75.222923279	17.910129547	37.126338959	TRP	535	CR56	C	0.100
HE1	74.984161377	14.749300003	37.649169922	TRP	535	H	H	0.300
NE1	74.920303345	15.735449791	37.651260376	TRP	535	N5R	N	-0.360
CE2	75.665786743	16.593860626	36.853771210	TRP	535	CR56	C	-0.040
CE3	75.787193298	18.972860336	36.473800659	TRP	535	C6R	C	-0.130
HE3	75.444389343	19.975179672	36.684070587	TRP	535	HA	H	0.100
CZ2	76.658599854	16.382099152	35.936038971	TRP	535	C6R	C	-0.130
HZ2	76.993698120	15.376210213	35.728271484	TRP	535	HA	H	0.130

CZ3	76.800148010	18.760919571	35.537940979	TRP	535	C6R	C	-0.130
HZ3	77.243568420	19.600639343	35.022220612	TRP	535	HA	H	0.130
CH2	77.236282349	17.462989807	35.268711090	TRP	535	C6R	C	-0.130
HH2	78.020042419	17.293960571	34.544349670	TRP	535	HA	H	0.130
N	72.163848877	21.037279129	39.976230621	THR	536	NP	N	-0.400
HN	71.990493774	20.763820648	39.030548096	THR	536	H	H	0.250
CA	71.166770935	21.934999466	40.538440704	THR	536	CT	C	0.050
HA	71.694473267	22.772590637	40.997920990	THR	536	HA	H	0.050
C	70.281913757	21.243539810	41.607528687	THR	536	C	C	0.600
O	69.114013672	21.567020416	41.751529694	THR	536	O	O	-0.550
CB	70.338722229	22.389909744	39.318611145	THR	536	CT	C	0.150
HB	69.723350525	21.551599503	38.983039856	THR	536	HA	H	0.100
OG1	71.223960876	22.662410736	38.247898102	THR	536	OT	O	-0.650
HG1	71.714927673	23.463130951	38.450370789	THR	536	HO	H	0.400
CG2	69.386428833	23.564350128	39.580448151	THR	536	CT	C	-0.150
HG21	69.030952454	24.007209778	38.650100708	THR	536	HA	H	0.050
HG22	68.510147095	23.214769363	40.119098663	THR	536	HA	H	0.050
HG23	69.842559814	24.345100403	40.185298920	THR	536	HA	H	0.050
N	70.868309021	20.270320892	42.333911896	LEU	537	NP	N	-0.400
HN	71.818153381	20.012710571	42.146228790	LEU	537	H	H	0.250
CA	70.213592529	19.531629562	43.416828156	LEU	537	CT	C	0.050
HA	71.020172119	18.939050674	43.844841003	LEU	537	HA	H	0.050
C	69.194801331	18.483650208	42.916019440	LEU	537	C	C	0.600
O	69.208686829	17.349559784	43.380718231	LEU	537	O	O	-0.550
CB	69.642646790	20.448730469	44.514400482	LEU	537	CT	C	-0.100
HB1	68.818222046	21.032320023	44.111549377	LEU	537	HA	H	0.050
HB2	69.205429077	19.833150864	45.295658112	LEU	537	HA	H	0.050
CG	70.670768738	21.399610519	45.157718658	LEU	537	CT	C	-0.050
HG	71.032188416	22.084459305	44.389488220	LEU	537	HA	H	0.050
CD1	70.006698608	22.241369247	46.257198334	LEU	537	CT	C	-0.150
HD11	69.161369324	22.805299759	45.865409851	LEU	537	HA	H	0.050
HD12	69.636199951	21.611400604	47.067340851	LEU	537	HA	H	0.050
HD13	70.709503174	22.956720352	46.684291840	LEU	537	HA	H	0.050
CD2	71.880996704	20.650430679	45.734378815	LEU	537	CT	C	-0.150
HD21	71.569396973	19.927400589	46.486770630	LEU	537	HA	H	0.050
HD22	72.442680359	20.125539780	44.962509155	LEU	537	HA	H	0.050
HD23	72.573066711	21.342609406	46.209129333	LEU	537	HA	H	0.050
N	68.367813110	18.905210495	41.935848236	ILE	538	NP	N	-0.400
HN	68.325531006	19.889490128	41.758491516	ILE	538	H	H	0.250
CA	67.500953674	18.022319794	41.156829834	ILE	538	CT	C	0.050
HA	67.168670654	18.647449493	40.327419281	ILE	538	HA	H	0.050
C	66.259712219	17.637519836	41.988178253	ILE	538	C	C	0.600
O	66.352378845	17.109899521	43.089530945	ILE	538	O	O	-0.550
CB	68.267036438	16.795520782	40.586498260	ILE	538	CT	C	-0.050
HB	68.569381714	16.159370422	41.417869568	ILE	538	HA	H	0.050
CG1	69.536430359	17.240549088	39.824810028	ILE	538	CT	C	-0.100
HG11	69.265266418	17.991260529	39.081611633	ILE	538	HA	H	0.050
HG12	70.236686707	17.725870132	40.505218506	ILE	538	HA	H	0.050
CG2	67.379753113	15.927920341	39.679229736	ILE	538	CT	C	-0.150
HG21	66.403038025	15.733839989	40.116909027	ILE	538	HA	H	0.050
HG22	67.236099243	16.407239914	38.714149475	ILE	538	HA	H	0.050
HG23	67.835891724	14.955670357	39.493091583	ILE	538	HA	H	0.050
CD1	70.279479980	16.097759247	39.121040344	ILE	538	CT	C	-0.150
HD11	70.590156555	15.329360008	39.828159332	ILE	538	HA	H	0.050
HD12	69.667221069	15.625760078	38.352699280	ILE	538	HA	H	0.050
HD13	71.171096802	16.474020004	38.623958588	ILE	538	HA	H	0.050
N	65.087631226	17.933389664	41.404941559	GLU	539	NP	N	-0.400
HN	65.036071777	18.407030106	40.521118164	GLU	539	H	H	0.250
CA	63.844451904	17.564989090	42.062999725	GLU	539	CT	C	0.050
HA	63.949661255	17.838640213	43.112079620	GLU	539	HA	H	0.050
C	63.643558502	16.036979675	41.930320740	GLU	539	C	C	0.600
O	64.121528625	15.411549568	40.991260529	GLU	539	O	O	-0.550

CB	62.666690826	18.335109711	41.449321747	GLU	539	CT	C	-0.100
HB1	62.442779541	17.901550293	40.486721039	GLU	539	HA	H	0.050
HB2	61.783321381	18.166439056	42.064388275	GLU	539	HA	H	0.050
CG	62.869499207	19.853919983	41.269878387	GLU	539	CT	C	-0.250
HG1	61.899990082	20.353130341	41.306400299	GLU	539	HA	H	0.050
HG2	63.448860168	20.267950058	42.093231201	GLU	539	HA	H	0.050
CD	63.522369385	20.202779770	39.915500641	GLU	539	C	C	0.350
OE1	62.808200836	20.383819580	38.927391052	GLU	539	OC	O	-0.600
OE2	64.745292664	20.295799255	39.856220245	GLU	539	OC	O	-0.600
N	62.947879791	15.470910072	42.930980682	GLN	540	NP	N	-0.400
HN	62.570308685	16.073730469	43.634681702	GLN	540	H	H	0.250
CA	62.728321075	14.034429550	43.061218262	GLN	540	CT	C	0.050
HA	62.703800201	13.607390404	42.057540894	GLN	540	HA	H	0.050
C	61.332130432	13.826299667	43.683319092	GLN	540	C	C	0.600
O	60.546440125	14.757809639	43.779430389	GLN	540	O	O	-0.550
CB	63.860179901	13.411160469	43.907150269	GLN	540	CT	C	-0.100
HB1	63.953868866	13.972279549	44.837509155	GLN	540	HA	H	0.050
HB2	63.619380951	12.390720367	44.204818726	GLN	540	HA	H	0.050
CG	65.219970703	13.365059853	43.187381744	GLN	540	CT	C	-0.100
HG1	65.545028687	14.352860451	42.861999512	GLN	540	HA	H	0.050
HG2	65.982841492	13.004579544	43.875438690	GLN	540	HA	H	0.050
CD	65.190063477	12.396650314	41.995830536	GLN	540	C	C	0.550
OE1	65.048530579	11.192749977	42.154968262	GLN	540	O	O	-0.550
NE2	65.363990784	12.974670410	40.805961609	GLN	540	NP	N	-0.600
HE21	65.540138245	12.409680367	40.004039764	GLN	540	H	H	0.300
HE22	65.298339844	13.972880363	40.714790344	GLN	540	H	H	0.300
N	61.071819305	12.556650162	44.047580719	LEU	541	NP	N	-0.400
HN	61.836921692	11.917119980	44.067821503	LEU	541	H	H	0.250
CA	59.725101471	12.038129807	44.286350250	LEU	541	CT	C	0.050
HA	59.111240387	12.388070107	43.455150604	LEU	541	HA	H	0.050
C	59.099658966	12.541569710	45.614139557	LEU	541	C	C	0.600
O	59.734470367	13.174650192	46.454238892	LEU	541	O	O	-0.550
CB	59.850948334	10.496489525	44.283279419	LEU	541	CT	C	-0.100
HB1	60.692039490	10.202589989	43.653488159	LEU	541	HA	H	0.050
HB2	60.117881775	10.153630257	45.284671783	LEU	541	HA	H	0.050
CG	58.620979309	9.721619606	43.775798798	LEU	541	CT	C	-0.050
HG	57.721710205	10.065099716	44.283611298	LEU	541	HA	H	0.050
CD1	58.420558929	9.923580170	42.269309998	LEU	541	CT	C	-0.150
HD11	59.320480347	9.679699898	41.705921173	LEU	541	HA	H	0.050
HD12	57.619670868	9.285799980	41.904010773	LEU	541	HA	H	0.050
HD13	58.135688782	10.948860168	42.038528442	LEU	541	HA	H	0.050
CD2	58.759399414	8.229180336	44.098388672	LEU	541	CT	C	-0.150
HD21	58.894649506	8.068829536	45.168140411	LEU	541	HA	H	0.050
HD22	57.865489960	7.682620049	43.799430847	LEU	541	HA	H	0.050
HD23	59.611938477	7.788239956	43.581501007	LEU	541	HA	H	0.050
N	57.811790466	12.165419579	45.738510132	GLN	542	NP	N	-0.400
HN	57.365238190	11.805800438	44.915340424	GLN	542	H	H	0.250
CA	57.016330719	12.301930428	46.954719543	GLN	542	CT	C	0.050
HA	57.696849823	12.405010223	47.799221039	GLN	542	HA	H	0.050
C	56.198608398	11.019149780	47.198421478	GLN	542	C	C	0.600
O	56.290069580	10.398530006	48.249649048	GLN	542	O	O	-0.550
CB	56.066421509	13.505049706	46.823089600	GLN	542	CT	C	-0.100
HB1	55.521839142	13.407589912	45.885791779	GLN	542	HA	H	0.050
HB2	55.309139252	13.487010002	47.609741211	GLN	542	HA	H	0.050
CG	56.778881073	14.863369942	46.840721130	GLN	542	CT	C	-0.100
HG1	57.631210327	14.879639626	46.163421631	GLN	542	HA	H	0.050
HG2	56.101299286	15.647470474	46.520530701	GLN	542	HA	H	0.050
CD	57.216968536	15.233420372	48.251960754	GLN	542	C	C	0.550
OE1	56.509330750	15.914939880	48.983051300	GLN	542	O	O	-0.550
NE2	58.407161713	14.732250214	48.587699890	GLN	542	NP	N	-0.600
HE21	58.767990112	14.915049553	49.499740601	GLN	542	H	H	0.300
HE22	58.926521301	14.176139832	47.929439545	GLN	542	H	H	0.300

N	55.379581451	10.678139687	46.185691833	GLY	543	NP	N	-0.400
HN	55.391571045	11.217659950	45.338760376	GLY	543	H	H	0.250
CA	54.476558685	9.535510063	46.281749725	GLY	543	CT	C	0.000
HA1	54.893600464	8.740229607	45.663059235	GLY	543	HA	H	0.050
HA2	54.409759521	9.190870285	47.315059662	GLY	543	HA	H	0.050
C	53.085208893	9.932880402	45.782188416	GLY	543	C	C	0.600
O	52.133518219	10.091779709	46.546131134	GLY	543	O	O	-0.550
N	53.041801453	10.084589958	44.453701019	GLY	544	NP	N	-0.400
HN	53.860790253	9.887530327	43.909839630	GLY	544	H	H	0.250
CA	51.870021820	10.547860146	43.734851837	GLY	544	CT	C	0.000
HA1	50.982028961	10.384030342	44.344299316	GLY	544	HA	H	0.050
HA2	52.013561249	11.611909866	43.540599823	GLY	544	HA	H	0.050
C	51.736339569	9.759209633	42.434558868	GLY	544	C	C	0.600
O	52.033969879	8.571980476	42.388820648	GLY	544	O	O	-0.550
N	51.242008209	10.479029655	41.412300110	SER	545	NP	N	-0.400
HN	51.086048126	11.464380264	41.513481140	SER	545	H	H	0.250
CA	50.921878815	9.945469856	40.092018127	SER	545	CT	C	0.050
HA	51.851211548	9.603590012	39.633571625	SER	545	HA	H	0.050
C	50.369110107	11.136540413	39.294048309	SER	545	C	C	0.600
O	50.328578949	12.256389618	39.792938232	SER	545	O	O	-0.550
CB	49.849689484	8.826239586	40.192760468	SER	545	CT	C	0.050
HB1	49.034469604	9.127409935	40.858829498	SER	545	HA	H	0.100
HB2	49.373241425	8.641719818	39.229240417	SER	545	HA	H	0.100
OG	50.365139008	7.573450089	40.605030060	SER	545	OT	O	-0.650
HG	50.963310242	7.712120056	41.338371277	SER	545	HO	H	0.400
N	49.888458252	10.823390007	38.069408417	TYR	546	NP	N	-0.400
HN	50.064998627	9.918069839	37.688671112	TYR	546	H	H	0.250
CA	48.912071228	11.701869965	37.426830292	TYR	546	CT	C	0.050
HA	49.359600067	12.696849823	37.378730774	TYR	546	HA	H	0.050
C	47.653888702	11.738080025	38.318378448	TYR	546	C	C	0.600
O	47.402301788	10.807820320	39.075729370	TYR	546	O	O	-0.550
CB	48.585311890	11.171790123	36.021728516	TYR	546	CT	C	-0.100
HB1	49.509399414	11.019539833	35.461841583	TYR	546	HA	H	0.050
HB2	48.097949982	10.197360039	36.078678131	TYR	546	HA	H	0.050
CG	47.720130920	12.130680084	35.247238159	TYR	546	C6R	C	0.000
CD1	46.343540192	11.951930046	35.158119202	TYR	546	C6R	C	-0.130
HD1	45.870838165	11.115349770	35.651210785	TYR	546	HA	H	0.130
CD2	48.295700073	13.222319603	34.612548828	TYR	546	C6R	C	-0.130
HD2	49.363780975	13.363820076	34.666900635	TYR	546	HA	H	0.130
CE1	45.563240051	12.850720406	34.441989899	TYR	546	C6R	C	-0.130
HE1	44.494949341	12.709710121	34.378570557	TYR	546	HA	H	0.130
CE2	47.521190643	14.124790192	33.899158478	TYR	546	C6R	C	-0.130
HE2	48.020389557	14.956310272	33.429981232	TYR	546	HA	H	0.130
CZ	46.147209167	13.937049866	33.807338715	TYR	546	C6R	C	0.250
OH	45.340599060	14.800869942	33.093261719	TYR	546	OT	O	-0.650
HH	45.775230408	15.634300232	32.920681000	TYR	546	HO	H	0.400
N	46.935619354	12.873820305	38.242038727	LYS	547	NP	N	-0.400
HN	47.071430206	13.494839668	37.471588135	LYS	547	H	H	0.250
CA	46.017578125	13.235099792	39.315399170	LYS	547	CT	C	0.050
HA	45.991489410	12.429220200	40.052551270	LYS	547	HA	H	0.050
C	44.586078644	13.440110207	38.802268982	LYS	547	C	C	0.600
O	44.297088623	13.474599838	37.611728668	LYS	547	O	O	-0.550
CB	46.530311584	14.516469955	39.982620239	LYS	547	CT	C	-0.100
HB1	46.453918457	15.357890129	39.294540405	LYS	547	HA	H	0.050
HB2	45.896041870	14.745690346	40.838401794	LYS	547	HA	H	0.050
CG	47.971111298	14.390080452	40.482170105	LYS	547	CT	C	-0.100
HG1	48.044830322	13.494020462	41.100898743	LYS	547	HA	H	0.050
HG2	48.665088654	14.248769760	39.652511597	LYS	547	HA	H	0.050
CD	48.398521423	15.612549782	41.296218872	LYS	547	CT	C	-0.100
HD1	48.549358368	16.466150284	40.636089325	LYS	547	HA	H	0.050
HD2	47.596981049	15.877659798	41.984668732	LYS	547	HA	H	0.050
CE	49.669128418	15.325180054	42.091579437	LYS	547	CT	C	0.050

HE1	49.594459534	14.345660210	42.554969788	LYS	547	HA	H	0.100
HE2	50.542961121	15.282810211	41.440879822	LYS	547	HA	H	0.100
NZ	49.940330505	16.285860062	43.157569885	LYS	547	NT	N	-0.300
HZ1	49.106090546	16.475200653	43.751338959	LYS	547	HC	H	0.350
HZ2	50.711479187	15.896400452	43.748901367	LYS	547	HC	H	0.350
HZ3	50.294071198	17.179510117	42.753330231	LYS	547	HC	H	0.350
N	43.718681335	13.588540077	39.822589874	LYS	548	NP	N	-0.400
HN	44.078178406	13.568409920	40.753818512	LYS	548	H	H	0.250
CA	42.302368164	13.857660294	39.626731873	LYS	548	CT	C	0.050
HA	41.930690765	13.145279884	38.887710571	LYS	548	HA	H	0.050
C	42.105419159	15.294440269	39.112400055	LYS	548	C	C	0.600
O	41.864070892	16.228860855	39.864799500	LYS	548	O	O	-0.550
CB	41.587169647	13.656789780	40.972999573	LYS	548	CT	C	-0.100
HB1	41.784309387	12.647640228	41.335819244	LYS	548	HA	H	0.050
HB2	42.025039673	14.333219528	41.709930420	LYS	548	HA	H	0.050
CG	40.065559387	13.884169579	40.931991577	LYS	548	CT	C	-0.100
HG1	39.847301483	14.881480217	40.547931671	LYS	548	HA	H	0.050
HG2	39.596431732	13.178230286	40.246181488	LYS	548	HA	H	0.050
CD	39.459739685	13.750989914	42.332241058	LYS	548	CT	C	-0.100
HD1	39.584171295	12.726409912	42.684928894	LYS	548	HA	H	0.050
HD2	40.036388397	14.379540443	43.012798309	LYS	548	HA	H	0.050
CE	37.984821320	14.163849831	42.413608551	LYS	548	CT	C	0.050
HE1	37.865600586	15.210189819	42.126491547	LYS	548	HA	H	0.100
HE2	37.362491608	13.559840202	41.751621246	LYS	548	HA	H	0.100
NZ	37.490550995	14.012220383	43.778621674	LYS	548	NT	N	-0.300
HZ1	38.131359100	14.515099525	44.432540894	LYS	548	HC	H	0.350
HZ2	36.518619537	14.368900299	43.934970856	LYS	548	HC	H	0.350
HZ3	37.503799438	13.019029617	44.073089600	LYS	548	HC	H	0.350
N	42.181411743	15.379610062	37.774791718	ILE	549	NP	N	-0.400
HN	42.546260834	14.591839790	37.274848938	ILE	549	H	H	0.250
CA	41.809268951	16.597480774	37.068630219	ILE	549	CT	C	0.050
HA	42.536781311	17.350490570	37.375709534	ILE	549	HA	H	0.050
C	40.398811340	17.071439743	37.480289459	ILE	549	C	C	0.600
O	39.496021271	16.276269913	37.713790894	ILE	549	O	O	-0.550
CB	41.908821106	16.369400024	35.545070648	ILE	549	CT	C	-0.050
HB	41.789981842	17.349229813	35.081520081	ILE	549	HA	H	0.050
CG1	40.805751801	15.480050087	34.926410675	ILE	549	CT	C	-0.100
HG11	39.833091736	15.957099915	35.049850464	ILE	549	HA	H	0.050
HG12	40.967468262	15.430800438	33.848979950	ILE	549	HA	H	0.050
CG2	43.304599762	15.875630379	35.148548126	ILE	549	CT	C	-0.150
HG21	44.081039429	16.498319626	35.588310242	ILE	549	HA	H	0.050
HG22	43.495441437	14.853019714	35.470550537	ILE	549	HA	H	0.050
HG23	43.417701721	15.910030365	34.066448212	ILE	549	HA	H	0.050
CD1	40.724861145	14.047329903	35.471820831	ILE	549	CT	C	-0.150
HD11	41.682838440	13.531940460	35.409530640	ILE	549	HA	H	0.050
HD12	40.390998840	14.031990051	36.508930206	ILE	549	HA	H	0.050
HD13	40.002849579	13.464059830	34.900638580	ILE	549	HA	H	0.050
N	40.272331238	18.406419754	37.541759491	GLY	550	NP	N	-0.400
HN	41.046108246	19.020879745	37.367591858	GLY	550	H	H	0.250
CA	39.000179291	19.010419846	37.897880554	GLY	550	CT	C	0.000
HA1	38.241291046	18.655170441	37.199150085	GLY	550	HA	H	0.050
HA2	38.749599457	18.711820602	38.916221619	GLY	550	HA	H	0.050
C	39.170631409	20.520360947	37.798210144	GLY	550	C	C	0.600
O	40.291511536	21.012950897	37.766139984	GLY	550	O	O	-0.550
N	38.017311096	21.217880249	37.722850800	TYR	551	NP	N	-0.400
HN	37.144260406	20.733310699	37.752170563	TYR	551	H	H	0.250
CA	38.041671753	22.669059753	37.520801544	TYR	551	CT	C	0.050
HA	39.069690704	22.954370499	37.304958344	TYR	551	HA	H	0.050
C	37.619400024	23.445280075	38.785419464	TYR	551	C	C	0.600
O	37.683368683	24.671150208	38.836521149	TYR	551	O	O	-0.550
CB	37.165870667	23.040430069	36.308860779	TYR	551	CT	C	-0.100
HB1	37.360481262	24.069040298	36.014358521	TYR	551	HA	H	0.050

HB2	37.443309784	22.431940079	35.447399139	TYR	551	HA	H	0.050
CG	35.685100555	22.911579132	36.556690216	TYR	551	C6R	C	0.000
CD1	35.013771057	21.727840424	36.271499634	TYR	551	C6R	C	-0.130
HD1	35.551261902	20.883579254	35.865139008	TYR	551	HA	H	0.130
CD2	34.965160370	23.988859177	37.065990448	TYR	551	C6R	C	-0.130
HD2	35.471321106	24.915630341	37.295238495	TYR	551	HA	H	0.130
CE1	33.647178650	21.624599457	36.496509552	TYR	551	C6R	C	-0.130
HE1	33.126918793	20.704710007	36.273681641	TYR	551	HA	H	0.130
CE2	33.599018097	23.891639709	37.289070129	TYR	551	C6R	C	-0.130
HE2	33.077518463	24.756740570	37.673938751	TYR	551	HA	H	0.130
CZ	32.937690735	22.702049255	37.006320953	TYR	551	C6R	C	0.250
OH	31.581110001	22.566909790	37.218818665	TYR	551	OT	O	-0.650
HH	31.306240082	23.054359436	37.983680725	TYR	551	HO	H	0.400
N	37.153800964	22.662790298	39.775928497	TYR	552	NP	N	-0.400
HN	37.204029083	21.665929794	39.727828979	TYR	552	H	H	0.250
CA	36.579761505	23.219680786	40.987251282	TYR	552	CT	C	0.050
HA	37.054798126	24.182640076	41.189270020	TYR	552	HA	H	0.050
C	36.892269135	22.244909286	42.125961304	TYR	552	C	C	0.600
O	36.659370422	21.046630859	42.010799408	TYR	552	O	O	-0.550
CB	35.054821014	23.366960526	40.821140289	TYR	552	CT	C	-0.100
HB1	34.827278137	24.092269897	40.043800354	TYR	552	HA	H	0.050
HB2	34.614311218	22.422510147	40.497558594	TYR	552	HA	H	0.050
CG	34.420608521	23.797889709	42.115699768	TYR	552	C6R	C	0.000
CD1	34.478000641	25.126989365	42.519798279	TYR	552	C6R	C	-0.130
HD1	34.911571503	25.871320724	41.868568420	TYR	552	HA	H	0.130
CD2	33.822391510	22.858749390	42.951080322	TYR	552	C6R	C	-0.130
HD2	33.754211426	21.824819565	42.644298553	TYR	552	HA	H	0.130
CE1	33.999610901	25.501550674	43.768539429	TYR	552	C6R	C	-0.130
HE1	34.062278748	26.529609680	44.093158722	TYR	552	HA	H	0.130
CE2	33.340579987	23.231620789	44.197509766	TYR	552	C6R	C	-0.130
HE2	32.895908356	22.492160797	44.847301483	TYR	552	HA	H	0.130
CZ	33.453128815	24.548980713	44.615161896	TYR	552	C6R	C	0.250
OH	33.043869019	24.908250809	45.879341125	TYR	552	OT	O	-0.650
HH	33.613540649	24.475669861	46.507148743	TYR	552	HO	H	0.400
N	37.416549683	22.826070786	43.217521667	ASP	553	NP	N	-0.400
HN	37.604961395	23.804920197	43.251461029	ASP	553	H	H	0.250
CA	37.644771576	22.044450760	44.420188904	ASP	553	CT	C	0.050
HA	38.013248444	21.058010101	44.124210358	ASP	553	HA	H	0.050
C	36.321590424	21.858369827	45.171081543	ASP	553	C	C	0.600
O	35.901908875	22.673339844	45.983829498	ASP	553	O	O	-0.550
CB	38.672798157	22.747200012	45.320041656	ASP	553	CT	C	-0.250
HB1	38.607471466	23.832939148	45.246990204	ASP	553	HA	H	0.050
HB2	38.497058868	22.501880646	46.367088318	ASP	553	HA	H	0.050
CG	40.083930969	22.274269104	44.980049133	ASP	553	C	C	0.350
OD1	40.725349426	22.881269455	44.125629425	ASP	553	OC	O	-0.600
OD2	40.529460907	21.285459518	45.564949036	ASP	553	OC	O	-0.600
N	35.720611572	20.692289352	44.881179810	SER	554	NP	N	-0.400
HN	36.059589386	20.177150726	44.092670441	SER	554	H	H	0.250
CA	34.870510101	20.097360611	45.897048950	SER	554	CT	C	0.050
HA	34.424190521	20.882989883	46.511608124	SER	554	HA	H	0.050
C	35.775791168	19.210309982	46.745071411	SER	554	C	C	0.600
O	36.221931458	18.160949707	46.302501678	SER	554	O	O	-0.550
CB	33.753658295	19.236999512	45.293529510	SER	554	CT	C	0.050
HB1	33.123138428	19.860250473	44.650180817	SER	554	HA	H	0.100
HB2	34.178581238	18.436069489	44.677299500	SER	554	HA	H	0.100
OG	32.985908508	18.677650452	46.356609344	SER	554	OT	O	-0.650
HG	32.229038239	18.187370300	46.004310608	SER	554	HO	H	0.400
N	35.966259003	19.650819778	47.999130249	THR	555	NP	N	-0.400
HN	35.757331848	20.589260101	48.276718140	THR	555	H	H	0.250
CA	36.492561340	18.721429825	48.986400604	THR	555	CT	C	0.050
HA	37.358028412	18.225969315	48.541759491	THR	555	HA	H	0.050
C	35.450828552	17.633550644	49.325469971	THR	555	C	C	0.600

O	35.768688202	16.635719299	49.953430176	THR	555	O	O	-0.550
CB	36.906608582	19.495010376	50.258750916	THR	555	CT	C	0.150
HB	36.515178680	18.994449615	51.148399353	THR	555	HA	H	0.100
OG1	36.360149384	20.808599472	50.268539429	THR	555	OT	O	-0.650
HG1	36.969100952	21.401079178	49.804878235	THR	555	HO	H	0.400
CG2	38.426639557	19.479419708	50.430309296	THR	555	CT	C	-0.150
HG21	38.921180725	19.924240112	49.569290161	THR	555	HA	H	0.050
HG22	38.750389099	20.023399353	51.311611176	THR	555	HA	H	0.050
HG23	38.786918640	18.455339432	50.533149719	THR	555	HA	H	0.050
N	34.180801392	17.898450851	48.935649872	LYS	556	NP	N	-0.400
HN	33.955909729	18.601169586	48.257648468	LYS	556	H	H	0.250
CA	33.106098175	17.060100555	49.450199127	LYS	556	CT	C	0.050
HA	33.316978455	16.872270584	50.505130768	LYS	556	HA	H	0.050
C	33.143341064	15.719679832	48.694961548	LYS	556	C	C	0.600
O	32.998538971	14.641019821	49.254291534	LYS	556	O	O	-0.550
CB	31.726049423	17.748849869	49.324378967	LYS	556	CT	C	-0.100
HB1	31.280090332	17.486209869	48.363140106	LYS	556	HA	H	0.050
HB2	31.054460526	17.317300797	50.067359924	LYS	556	HA	H	0.050
CG	31.676679611	19.292089462	49.422878265	LYS	556	CT	C	-0.100
HG1	32.195541382	19.736749649	48.572818756	LYS	556	HA	H	0.050
HG2	30.632930756	19.575370789	49.280391693	LYS	556	HA	H	0.050
CD	32.152969360	19.947349548	50.739440918	LYS	556	CT	C	-0.100
HD1	31.688659668	20.932159424	50.804649353	LYS	556	HA	H	0.050
HD2	31.800260544	19.387420654	51.606208801	LYS	556	HA	H	0.050
CE	33.673931122	20.134050369	50.782821655	LYS	556	CT	C	0.050
HE1	34.148029327	19.209949493	51.107700348	LYS	556	HA	H	0.100
HE2	34.025089264	20.359119415	49.776828766	LYS	556	HA	H	0.100
NZ	34.229141235	21.191219330	51.618278503	LYS	556	NT	N	-0.300
HZ1	33.847290039	22.147300720	51.492000580	LYS	556	HC	H	0.350
HZ2	34.252960205	21.002239227	52.646888733	LYS	556	HC	H	0.350
HZ3	35.248081207	21.295719147	51.383438110	LYS	556	HC	H	0.350
N	33.390720367	15.893389702	47.383491516	ASP	557	NP	N	-0.400
HN	33.459770203	16.827999115	47.029048920	ASP	557	H	H	0.250
CA	33.465641022	14.782739639	46.444820404	ASP	557	CT	C	0.050
HA	32.940170288	13.923959732	46.867790222	ASP	557	HA	H	0.050
C	34.939300537	14.410590172	46.197689056	ASP	557	C	C	0.600
O	35.352420807	14.191519737	45.058681488	ASP	557	O	O	-0.550
CB	32.817611694	15.209190369	45.110740662	ASP	557	CT	C	-0.250
HB1	33.379608154	16.024250031	44.652809143	ASP	557	HA	H	0.050
HB2	32.839500427	14.382430077	44.399440765	ASP	557	HA	H	0.050
CG	31.358039856	15.654549599	45.284511566	ASP	557	C	C	0.350
OD1	31.127340317	16.851360321	45.462440491	ASP	557	OC	O	-0.600
OD2	30.470310211	14.806039810	45.231079102	ASP	557	OC	O	-0.600
N	35.738281250	14.378529549	47.287960052	ASP	558	NP	N	-0.400
HN	35.394790649	14.509409904	48.222148895	ASP	558	H	H	0.250
CA	37.173179626	14.190629959	47.084278107	ASP	558	CT	C	0.050
HA	37.278499603	13.414719582	46.324581146	ASP	558	HA	H	0.050
C	37.845130920	13.650799751	48.353828430	ASP	558	C	C	0.600
O	37.319648743	13.771710396	49.450260162	ASP	558	O	O	-0.550
CB	37.802150726	15.524519920	46.637420654	ASP	558	CT	C	-0.250
HB1	37.214160919	15.976400375	45.839870453	ASP	558	HA	H	0.050
HB2	37.804279327	16.237850189	47.462768555	ASP	558	HA	H	0.050
CG	39.219451904	15.340800285	46.106189728	ASP	558	C	C	0.350
OD1	39.464599609	14.316450119	45.472881317	ASP	558	OC	O	-0.600
OD2	40.047481537	16.215200424	46.317401886	ASP	558	OC	O	-0.600
N	39.007099152	13.009739876	48.105781555	LEU	559	NP	N	-0.400
HN	39.419578552	13.100130081	47.193660736	LEU	559	H	H	0.250
CA	39.802188873	12.352660179	49.134918213	LEU	559	CT	C	0.050
HA	39.604988098	12.842809677	50.089538574	LEU	559	HA	H	0.050
C	41.284568787	12.545920372	48.766410828	LEU	559	C	C	0.600
O	41.655101776	12.600859642	47.600818634	LEU	559	O	O	-0.550
CB	39.537521362	10.827380180	49.187248230	LEU	559	CT	C	-0.100

HB1	39.630550385	10.405819893	48.185241699	LEU	559	HA	H	0.050
HB2	40.341808319	10.365839958	49.764110565	LEU	559	HA	H	0.050
CG	38.222469330	10.340689659	49.832920074	LEU	559	CT	C	-0.050
HG	38.368358612	9.274319649	50.012058258	LEU	559	HA	H	0.050
CD1	37.960090637	10.973999977	51.205879211	LEU	559	CT	C	-0.150
HD11	38.826931000	10.873350143	51.859069824	LEU	559	HA	H	0.050
HD12	37.728679657	12.035289764	51.123161316	LEU	559	HA	H	0.050
HD13	37.114208221	10.496470451	51.700450897	LEU	559	HA	H	0.050
CD2	36.998779297	10.425439835	48.909358978	LEU	559	CT	C	-0.150
HD21	37.226959229	10.052470207	47.910961151	LEU	559	HA	H	0.050
HD22	36.180030823	9.824159622	49.305038452	LEU	559	HA	H	0.050
HD23	36.618869781	11.438639641	48.814529419	LEU	559	HA	H	0.050
N	42.106918335	12.585289955	49.828819275	SER	560	NP	N	-0.400
HN	41.658191681	12.676110268	50.719688416	SER	560	H	H	0.250
CA	43.556240082	12.610790253	49.679969788	SER	560	CT	C	0.050
HA	43.799400330	13.488980293	49.086090088	SER	560	HA	H	0.050
C	44.043209076	11.338080406	48.955570221	SER	560	C	C	0.600
O	43.726829529	10.218600273	49.343471527	SER	560	O	O	-0.550
CB	44.183631897	12.723549843	51.078918457	SER	560	CT	C	0.050
HB1	43.983451843	11.818180084	51.659248352	SER	560	HA	H	0.100
HB2	45.269149780	12.803239822	50.985549927	SER	560	HA	H	0.100
OG	43.729309082	13.846830368	51.821578979	SER	560	OT	O	-0.650
HG	42.837669373	14.089090347	51.530929565	SER	560	HO	H	0.400
N	44.813491821	11.568269730	47.876338959	TRP	561	NP	N	-0.400
HN	45.119571686	12.504770279	47.701789856	TRP	561	H	H	0.250
CA	45.243061066	10.467160225	47.025508881	TRP	561	CT	C	0.050
HA	44.371479034	9.821640015	46.891201019	TRP	561	HA	H	0.050
C	46.367111206	9.676150322	47.726898193	TRP	561	C	C	0.600
O	47.555690765	9.972419739	47.607280731	TRP	561	O	O	-0.550
CB	45.676460266	11.014160156	45.653720856	TRP	561	CT	C	-0.100
HB1	44.985389709	11.792510033	45.328071594	TRP	561	HA	H	0.050
HB2	46.662460327	11.469090462	45.685768127	TRP	561	HA	H	0.050
CG	45.657909393	9.911740303	44.616710663	TRP	561	C5R	C	-0.030
CD1	44.544708252	9.531129837	43.863090515	TRP	561	C5R	C	-0.040
HD1	43.565128326	9.982060432	43.931381226	TRP	561	HA	H	0.100
CD2	46.745159149	9.054770470	44.206439972	TRP	561	CR56	C	0.100
HE1	44.283569336	8.071729660	42.406780243	TRP	561	H	H	0.300
NE1	44.889091492	8.513469696	43.038429260	TRP	561	N5R	N	-0.360
CE2	46.227691650	8.187859535	43.214778900	TRP	561	CR56	C	-0.040
CE3	48.058979034	8.955490112	44.582519531	TRP	561	C6R	C	-0.130
HE3	48.454921722	9.616990089	45.336170197	TRP	561	HA	H	0.100
CZ2	47.038280487	7.250410080	42.634590149	TRP	561	C6R	C	-0.130
HZ2	46.648101807	6.588429928	41.875461578	TRP	561	HA	H	0.130
CZ3	48.888580322	8.001680374	43.992668152	TRP	561	C6R	C	-0.130
HZ3	49.927238464	7.924540043	44.282428741	TRP	561	HA	H	0.130
CH2	48.374889374	7.147079945	43.017879486	TRP	561	C6R	C	-0.130
HH2	49.009101868	6.405580044	42.553131104	TRP	561	HA	H	0.130
N	45.897071838	8.648920059	48.458690643	N-M	562	NP	N	-0.350
HN	44.904239655	8.629810333	48.604488373	N-M	562	H	H	0.250
CA	46.779350281	7.698560238	49.122711182	N-M	562	CT	C	-0.050
HA1	46.300510406	6.720059872	49.085269928	N-M	562	HA	H	0.050
HA2	47.743930817	7.658979893	48.613349915	N-M	562	HA	H	0.050
HA3	46.900279999	8.013059616	50.159210205	N-M	562	HA	H	0.050
CA	50.257518768	36.435600281	11.823789597	ACE	563	CT	C	-0.150
HA1	50.576469421	37.163619995	11.078100204	ACE	563	HA	H	0.050
HA2	49.753990173	35.613788605	11.314849854	ACE	563	HA	H	0.050
HA3	49.556850433	36.911178589	12.508529663	ACE	563	HA	H	0.050
C	51.471260071	35.913890839	12.589539528	ACE	563	C	C	0.550
O	51.731159210	36.309860229	13.713629723	ACE	563	O	O	-0.550
N	46.242618561	31.527509689	37.632709503	SER	101	NP	N	-0.400
HN	47.023590088	31.882829666	38.153141022	SER	101	H	H	0.250
CA	44.983379364	31.247369766	38.320541382	SER	101	CT	C	0.050

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HA      44.956199646   31.973619461   39.132900238 SER  101    HA      H   0.050
C       44.911678314   29.838970184   38.958271027 SER  101    C       C   0.600
O       44.372188568   28.908590317   38.368389130 SER  101    O       O  -0.550
CB      43.753448486   31.490379333   37.410720825 SER  101    CT      C   0.050
HB1     43.144039154   30.588819504   37.286941528 SER  101    HA      H   0.100
HB2     43.084850311   32.188339233   37.915679932 SER  101    HA      H   0.100
OG      44.068710327   32.014118195   36.125358582 SER  101    OT      O  -0.650
HG      44.630748749   31.364700317   35.686630249 SER  101    HO      H   0.400
N       45.345401764   29.746429443   40.235599518 SER  102    NP      N  -0.400
HN      46.002529144   30.409349442   40.605400085 SER  102    H       H   0.250
CA      44.960189819   28.578840256   41.041770935 SER  102    CT      C   0.050
HA      44.974811554   27.716239929   40.376991272 SER  102    HA      H   0.050
C       43.529041290   28.745870590   41.606269836 SER  102    C       C   0.600
O       43.261161804   28.498779297   42.774700165 SER  102    O       O  -0.550
CB      45.976238251   28.363910675   42.180938721 SER  102    CT      C   0.050
HB1     45.970149994   27.319499969   42.513481140 SER  102    HA      H   0.100
HB2     46.985610962   28.531639099   41.803668976 SER  102    HA      H   0.100
OG      45.781631470   29.234319687   43.287471771 SER  102    OT      O  -0.650
HG      45.001110077   28.959339142   43.794410706 SER  102    HO      H   0.400
N       42.640979767   29.242940903   40.731430054 SER  103    NP      N  -0.400
HN      42.855289459   29.304790497   39.755710602 SER  103    H       H   0.250
CA      41.360958099   29.782810211   41.152488708 SER  103    CT      C   0.050
HA      41.395980835   30.026279449   42.214168549 SER  103    HA      H   0.050
C       40.259918213   28.772289276   40.785648346 SER  103    C       C   0.600
O       40.021671295   28.567270279   39.600059509 SER  103    O       O  -0.550
CB      41.172508240   31.040779114   40.292819977 SER  103    CT      C   0.050
HB1     40.184379578   31.496089935   40.424259186 SER  103    HA      H   0.100
HB2     41.908020020   31.796600342   40.568828583 SER  103    HA      H   0.100
OG      41.395351410   30.721580505   38.929409027 SER  103    OT      O  -0.650
HG      40.861259460   29.949970245   38.720298767 SER  103    HO      H   0.400
C1      51.166099548   29.411350250   36.587978363 CO2M 2      CT      C  -0.100
H11     52.237228394   29.234310150   36.521469116 CO2M 2      HA      H   0.050
H12     50.923099518   30.116300583   35.792320251 CO2M 2      HA      H   0.050
C2      50.815399170   30.027460098   37.957180023 CO2M 2      CT      C  -0.100
H21     50.952869415   31.106639862   37.871238708 CO2M 2      HA      H   0.050
H22     51.533611298   29.713800430   38.712669373 CO2M 2      HA      H   0.050
C3      49.396041870   29.692140579   38.455539703 CO2M 2      CT      C  -0.100
H31     49.384880066   28.755769730   39.014629364 CO2M 2      HA      H   0.050
H32     48.746948242   29.553119659   37.605628967 CO2M 2      HA      H   0.050
C       48.759971619   30.821390152   39.281688690 CO2M 2      C       C   0.200
O       48.154479980   30.568370819   40.316181183 CO2M 2      OC      O  -0.600
O1      48.843559265   31.971530914   38.873840332 CO2M 2      OC      O  -0.600
N7      50.497310638   28.157489777   36.242279053 AMIN 1      NT      N  -0.050
H71     50.974929810   27.688840866   35.435951233 AMIN 1      HC      H   0.350
H72     50.485298157   27.462520599   37.018821716 AMIN 1      HC      H   0.350
H73     49.527851105   28.349779129   35.916988373 AMIN 1      HC      H   0.350
CA1     47.900688171   31.253599167   43.642139435 METH 1B     MCA     Ca  0.000
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end
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