

A sodium channel inhibitor ISTX-I with novel structure provides a new hint at the evolutionary link between two toxin folds

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Supplementary methods

Recombinant expression and purification

The DNA fragment encoding ISTX-I was PCR-amplified and cloned into a modified pET-32a (+) vector. The construct yields a Trx-His₆-tagged protein with a TEV site between the tag and the ISTX-I. The Trx-His₆-tagged ISTX-I was overexpressed in *Escherichia coli* BL21(DE3) cells. Cultures were grown in LB medium at 37 °C until the O.D. 600 reached 0.6. Cells were induced with 0.6 mM isopropyl-thiogalactopyranoside (IPTG) at 37 °C for 4 h and harvested by centrifugation. Recombinant ISTX-I was isolated from the lysate via Ni-NTA purification and digested with TEV protease at room temperature overnight to remove the tag. The ISTX-I protein was further purified with a Sephadex G-50 (Superfine, Amersham Biosciences, 2.6×100 cm) gel filtration column, an AKTA Mono Q (1ml volume, Amersham Biosciences) anion exchange column and a C18 reverse phase high performance liquid chromatography column (Hypersil BDS C18, 30×0.46 cm). Finally, the purified ISTX-I was examined by MALDI-TOF mass spectrometry to confirm its purity and molecular mass.

Mass spectrometry

Matrix-assisted laser desorption ionization time-of-flight (MALDI-TOF) mass spectrometry (Bruker Proflex III) was used to detect the purity and molecular mass of the ISTX-I and its intermediates. MALDI-TOF was performed on a Finnegan Lasermat, and the absorbing matrix used was α -acyano-4-hydroxy-cinnamic acid. All masses reported are for the monoisotopic M+H⁺ ions.

Electrophysiological studies.

Currents were recorded from experimental cells using whole-cell patch clamp technique at room temperature (22–25 °C). The patch pipettes were fabricated from borosilicate glass tubing using a two-stage vertical microelectrode puller (PC-10, Narishige, Japan). After establishing the whole-cell recording configuration, the resting potential was held at –80 mV for at least 5 min to allow adequate equilibration between the micropipette solution and the cell interior. The micropipette solution of sodium currents for dorsal root ganglion neurons contained (in mM): 105 CsF, 35 NaCl, 10 HEPES, 10 EGTA (pH 7.4). The external solution contained (in mM): 50 NaCl, 100 TEA.Cl, 2 KCl, 1.5 CaCl₂, 10 HEPES, 1 MgCl₂, and 5 glucose (pH 7.4). K⁺ currents were recorded using an internal solution containing the followings (in mM): KCl 140, MgCl₂ 2.5, HEPES 10, and EGTA 11 (pH 7.2). The external bathing solution contained the followings (in mM): NaCl 150, KCl 5, CaCl₂ 25, MgCl₂ 12, HEPES 10, and D-glucose 10 (pH 7.2). Calcium channel currents were measured using Ba²⁺ as the charge carrier. The external solution contained (in mM): 160 TEA-Cl, 10 HEPES, 2 BaCl₂, 10 glucoses, adjusted to pH 7.4 with TEA-OH. The internal solution contained (in mM): 120 CsCl, 5 Mg-ATP, 0.4 Na₂-GTP, 10 EGTA, 20 HEPES-CsOH, and adjusted to pH 7.2 with CsOH (Lewis et al., 2000). Ionic currents were filtered at 3 kHz and sampled at 20 kHz on EPC-9 patch clamp amplifier (HEKA, Lambrecht, Germany).

Supplementary Figure legends

Figure S1. Expression, purification and molecular mass determination of recombinant ISTX-I. A: Separation of ISTX-I by Sephadex G-50 gel filtration. The absorbance of the elution was monitored at 280 nm. Inset: Expression of ISTX-I fusion protein in *E.coli* Rosetta–gami (DE3) and analysis by SDS-PAGE (12%). M, protein molecular weight marker; lanes 1&2, ISTX-I/pET-32a(+) uninduced and induced cells, respectively. B: The protein peak (indicated by an arrow) from Sephadex G-50 gel filtration was subjected to AKTA Resource Q anion exchange chromatography. C: The elution peak (marked by arrow) after Resource Q anion

exchange chromatography was further purified by C₁₈ RP-HPLC. The elution was performed with a gradient of acetonitrile in 0.1% (v/v) trifluoroacetic acid in water at a flow rate of 0.7 ml/min. D: MALDI-TOF mass spectrometry analysis of recombinant ISTX-I after the TEV digestion and purification.

Figure S2. Mass spectrometry of partially reduced intermediates of ISTX-I.A:

Molecular mass of intact ISTX-I (peak 1). Molecular mass of peak 2 (B) peak3 (C) and peak 4(D). Molecular mass of alkylated peak 2 (E) and 3 (F).

Figure S3. Effects of ISTX-I on subtypes of sodium channel expressed in HEK293 cells.

Cells were held at -80 mV for over 4 min and then the current traces were evoked using a 50 ms step depolarization to -10 mV every second. No effect on the hNav1.1 (A), hNav1.2 (B), hNav1.3 (C), hNav1.4 (D), hNav1.5 (E) and hNav1.6 (F), (G)hNav1.8.

Figure S4. Effects of ISTX-I on Kv currents and Cav currents of DRG neurons.

For record Kv currents, cell were evoked by a 500 ms depolarized potential of +10 mV from a holding potential same as recording Nav currents. For record Cav currents, cells were activated by a 150 ms step depolarization to +10 mV from a holding potential of -90 mV. No effects were detected on potassium channel (A) and calcium channel (B).

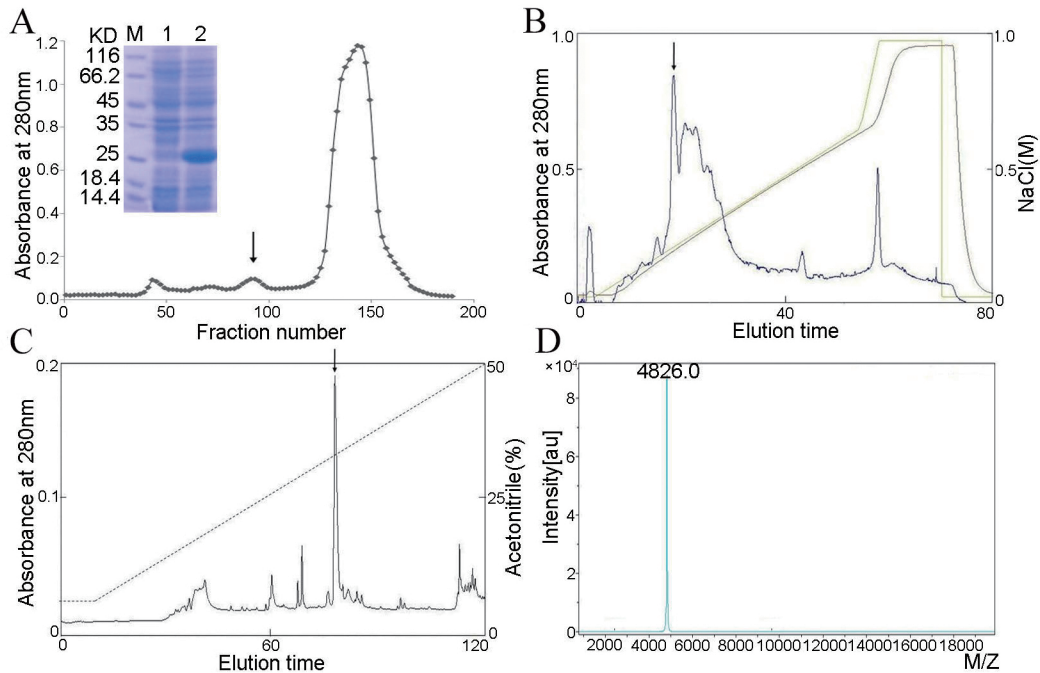
Fig S1

Fig S2

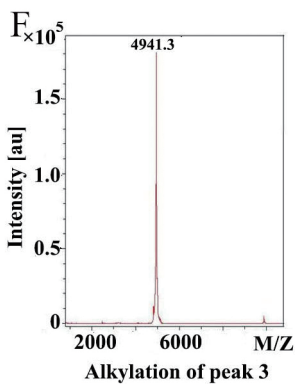
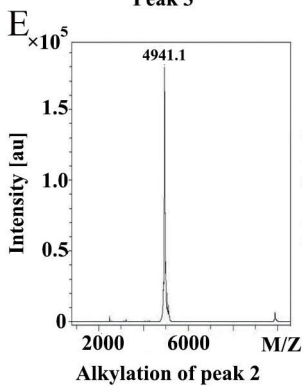
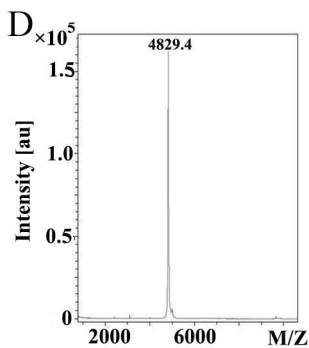
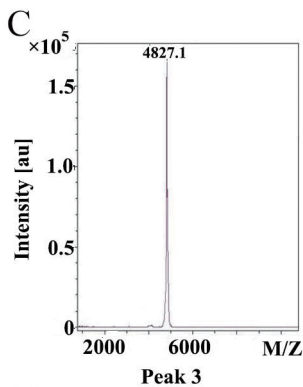
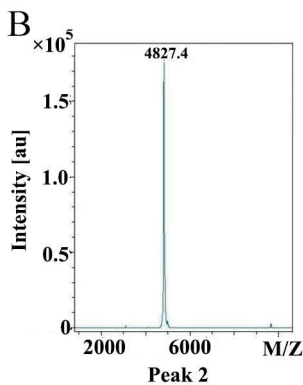
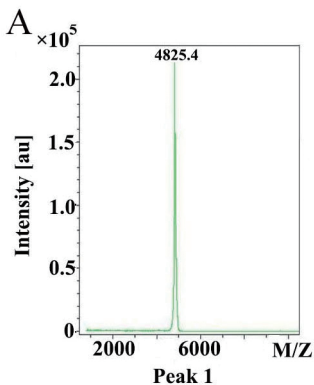
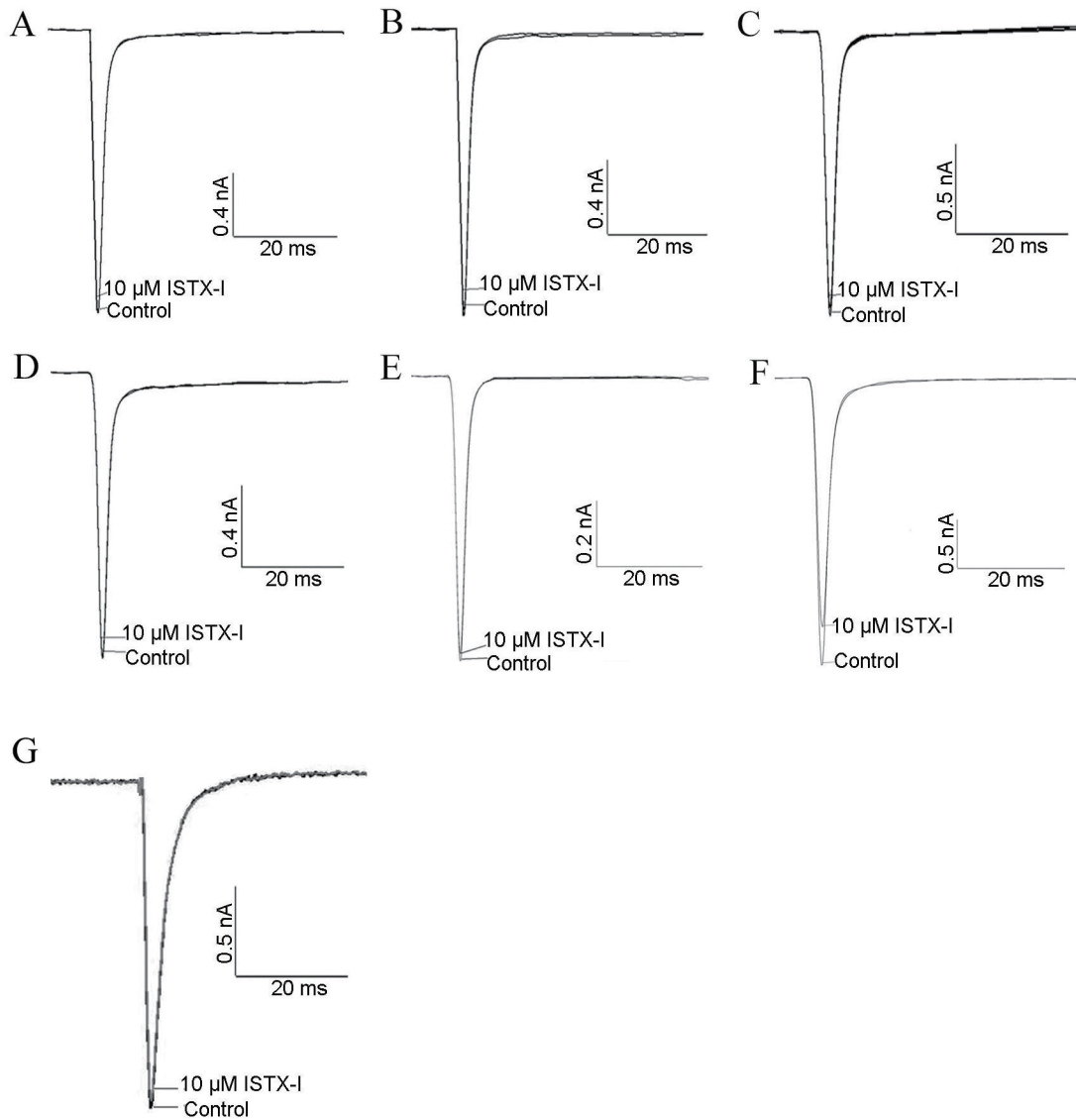
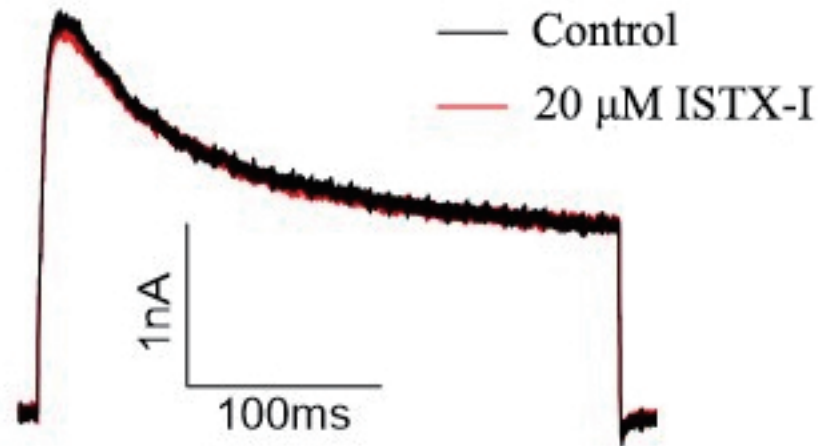
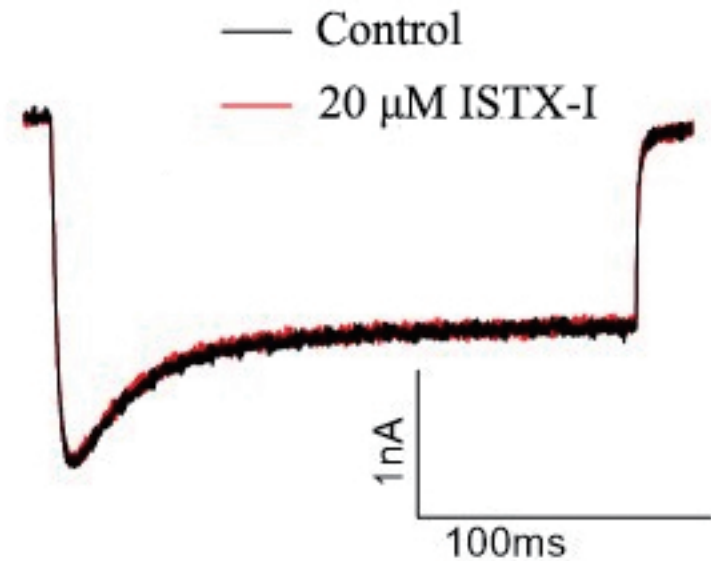


Fig S3



A**B**

Supplementary table 1

Name of toxin	Sequence
mu-theraphotoxin-Hhn1b	ECLGFGKGCNPSNDQCCKSSNLVCSRKHWRWCKYEI
mu-theraphotoxin-Hhn1c	ECLGFGKGCNPSNDQCCKSSNLVCSRKHRRCKYEIGK
mu-theraphotoxin-Hhn1a	ECLGFGKGCNPSNDQCCKSANLVCSRKHWRWCKYEI
mu-theraphotoxin-Hs2a	ACNPSNDQCCKSSKLVCSRKTRWCKYQIGK
beta-theraphotoxin-Cm1a	DCLGWFKSCDPKNDKCKKNYTCRRDRWCKYDL
beta-theraphotoxin-Cm1b	DCLGWFKSCDPKNDKCKKNYTCRRDRWCKYYL
beta-theraphotoxin-Ps1a	DCLGFLWKCNPNDKCCRPNLVCSRKDKWCKYQI
omega-theraphotoxin-Gr2a	DCLGFMKCPDNDKCCRPNLVCSRTHKWCKYVF
beta-theraphotoxin-Cg2a	YCQKWMWTCDSEKACCEGLRCKLWCRKIIG
beta-theraphotoxin-Tp2a	YCQKWMWTCDSEKCCCEGMVCRLWCKKLLW
beta-theraphotoxin-Gr1a	YCQKWMWTCDSEKRCCEDMVCQLWCKKRL
beta-theraphotoxin-Gr1c	YCQKWMWTCDSEKRCCEDMVCQLWCKKRLG
beta-theraphotoxin-Gr1d	YCQKWLWTCDSEKCCCEDMVCRLWCKKRLG
beta-theraphotoxin-Gr1b	YCQKWLWTCDSEKCCCEDMVCRLWCKKRL
beta-hexatoxin-Mr1a	GCKLTFWKCKNKKECCGWNACALGICMPR
beta/kappa-theraphotoxin-Cg1a	ECGGFWWKCGRGKPPCKGYACSKTWGWC AVEAP
mu-theraphotoxin-Hhn2b	ECKGFGKSCVPGKNECCSGYACNSRDKWCKVLL
mu-theraphotoxin-Hhn2a	GCKGFGDSCTPGKNECCPNYACSSKHKWCKVYL
mu-theraphotoxin-Hhn2h	GCKGFGDSCTPGKNECCPNYACSSKHKWCKVYSGK
mu-theraphotoxin-Hhn2o	GCKGFGDSCTPGKNECCPNHACSNKHKWCKAYLGK
mu(omega)-theraphotoxin-Hs1c	ACKGVFDCTPGKNECCSNRVCSDKHKWCKWKL
mu(omega)-theraphotoxin-Hs1b	ACKGVFGACTPGKNECCPNRVCSDKHKWCKWKL
mu(omega)-theraphotoxin-Hs1d	ACKGVFDCTPGKNECCPNRVCSDKHKWCKWKL
mu(omega)-theraphotoxin-Hs1a	ACKGVFDCTPGKNECCPNRVCSDKHKWCKWKL
beta/omega-theraphotoxin-Tp1a	ECRYWLGGSAGQTCCKHLVCSRHRGWCVWDGTF
mu-theraphotoxin-Cg1a	ACREWLGGCSKDADCAHLECRKKWPYHCVWDWTVRK
mu-theraphotoxin-Cg2a	ECTKFLGGCSEDECCPHLGCKDVLYYCAWDGTFGK
beta-theraphotoxin-Cm2a	GVDKEGCRKLLGGCTIDDDCCPHLGCNKKYWHCGWDGTF
beta-theraphotoxin-Cg1a	ECRKMFGGCSVSDCAHLGCKPTLYCAWDGTFGK
ISTX-I	LCSNGDCAAECCVDTVFEEDMVTRSCETTGNFTECPGLTPIA
Alpha-toxin Ac1	DGYIVYPNNVCYHCPACDGLCKKNGGTS GSCSFLIGSGIACWCKDLP DNVPIKDPSQKCT
alpha-toxin Acra4	VRDGYIVDDKNCVYHCIPPCDGLCKKNGGKSGSCSFLVPSGLACWCK ALPDNVPIKDPSYKCHK
BmKBT	KKSGYPTDHEGCKNWCVLNHSCGILCEGYGGSGYCYFWKLACWCD DIHNWVPTWSRATNKCRK
Toxin CsEv2	EGYLVNKSTGCKYGCLKLGNEGCDKECKAKNQGGSYGYCYAFAC WCEGLPESTPTYPLPNKSCS
Beta-toxin Cn5	EGYLVNKSTGCKYGCLLLGKNEGCDKECKAKNQGGSYGYCYAFGC WCEGLPESTPTYPLPNKSCS
Neurotoxin Cex1	EGCDKECKAPNQGGGYGYCHAFACWCENLPESTPTYPIPGKSC

Beta-toxin BmKAs1	DNGYLLNKYTGCKIWCVINNESCNSECKLRRGNYGYCYFWKLACYC EGAPKSELWAYETNKCNGKM
Toxin Cn1	DGYLVDAKGCKKNCYKLGKNDYCNRECRMKHRGGSYGYCYGFGC YCEGLSDSTPTWPLPNKTCSGK
Toxin Acra1	ADVPGNYPLDSSGNKYPCTVLGDNQSCIDVCKKHGVKYGYCYSFKC WCEFLEDKNVSI
Beta-toxin Cn4	EGYLVNSYTGCKYECLKLDNDYCLRECKQQYGKGAGGYCYAFGC WCTHLYEQAVVWPLKNKTCNGK
Beta-mammal toxin Css2	KEGYLVSKSTGCKYECLKLDNDYCLRECKQQYGKSSGGYCYAFAC WCTHLYEQAVVWPLPNKTCN
Toxin CngtIII	KEGYLVNKSTGCKYGFVLGKNEGCDKECKAKNQGGSYGYCYAFG CWCEGLPESTPTYPLPNKTCSSK
BmKa1	DGYIADDKNCYPFCGRNAYCDDECKKNGAESGYCQWAGVYGNAC WCYKLPDKVPIRVPKCGNGG
Lqh4	GVRDAYIADDKNCVYTCGANSYCNTECTKNGAESGYCQWFGKYGN ACWCIKLPDKVPIRIPGKCR
Alpha-mammal toxin Bot3	VKDGYIVDDRNTYFCGRNAYCNEECTKLKGESGYCQWASPYGNAC YCYKVPDHRVTKGPGRCN
Toxin Tst1	GKEGYLMDHEGCKLSCFIRPSGYCGRECTLKKGSSGYCAWPACYCY GLPNWVKVWDRATNKC
Toxin To1	KKEGYLVGNDGCKYGCITRPHQYCVHECELKKGTDGYCAYWLACY CYNMPDWVKTWSSATNCK
Toxin To4	DGYLMEYGGCKMSCLMKGTFCABEECTRMKGKDGICYAWLACYC YNMPDWVKIWNRATNKCGKRK
Tz1	DGYLVGNDGCKYSCFTRPGTYCANECRSRVKKGKDGICYAWMACYCY SMPNWKVKTWDRATNRCGRGK

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7.54			C					
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ATOM	102	CB	CYS	9	16.348	-1.719	22.600	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.047	-1.147	22.526	1.00
10.91			S					

ATOM	104	HN	CYS	9	16.295	-1.190	20.121	1.00
6.51		H						
ATOM	105	HA	CYS	9	16.923	-3.506	21.604	1.00
11.12		H						
ATOM	106	HB1	CYS	9	16.157	-2.147	23.572	1.00
11.28		H						
ATOM	107	HB2	CYS	9	15.686	-0.883	22.436	1.00
5.04		H						
ATOM	108	N	ALA	10	13.738	-2.760	21.290	1.00
16.26		N						
ATOM	109	CA	ALA	10	12.379	-3.272	21.408	1.00
32.04		C						
ATOM	110	C	ALA	10	11.418	-2.380	20.626	1.00
45.47		C						
ATOM	111	O	ALA	10	11.789	-1.289	20.191	
1.00119.04		O						
ATOM	112	CB	ALA	10	11.960	-3.328	22.881	1.00
30.10		C						
ATOM	113	HN	ALA	10	13.885	-1.885	20.874	1.00
12.81		H						
ATOM	114	HA	ALA	10	12.345	-4.270	20.996	1.00
47.14		H						
ATOM	115	HB1	ALA	10	11.143	-4.025	22.996	1.00
84.37		H						
ATOM	116	HB2	ALA	10	11.647	-2.349	23.207	
1.00118.20		H						
ATOM	117	HB3	ALA	10	12.798	-3.656	23.480	
1.00117.32		H						
ATOM	118	N	ALA	11	10.189	-2.847	20.445	1.00
30.62		N						
ATOM	119	CA	ALA	11	9.196	-2.074	19.708	1.00
35.24		C						
ATOM	120	C	ALA	11	8.927	-0.736	20.394	1.00
22.78		C						
ATOM	121	O	ALA	11	8.811	0.297	19.733	1.00
53.33		O						
ATOM	122	CB	ALA	11	7.891	-2.866	19.604	1.00
60.49		C						
ATOM	123	HN	ALA	11	9.946	-3.723	20.810	1.00
50.37		H						
ATOM	124	HA	ALA	11	9.567	-1.887	18.711	1.00
41.70		H						
ATOM	125	HB1	ALA	11	7.589	-3.190	20.589	
1.00157.06		H						
ATOM	126	HB2	ALA	11	8.041	-3.727	18.971	
1.00148.83		H						
ATOM	127	HB3	ALA	11	7.122	-2.237	19.181	
1.00137.06		H						
ATOM	128	N	ASP	12	8.828	-0.760	21.720	1.00
18.98		N						
ATOM	129	CA	ASP	12	8.568	0.460	22.484	1.00
31.05		C						

ATOM	130	C	ASP	12	9.859	1.238	22.730	1.00
22.98			C					
ATOM	131	O	ASP	12	9.850	2.467	22.804	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.925	0.107	23.825	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.511	-0.422	23.602	
1.00104.83			C					
ATOM	134	OD1	ASP	12	5.965	-1.001	24.527	
1.00258.73			O					
ATOM	135	OD2	ASP	12	5.997	-0.240	22.512	
1.00213.46			O1-					
ATOM	136	HN	ASP	12	8.927	-1.612	22.195	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.885	1.085	21.928	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.883	0.989	24.447	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.517	-0.651	24.317	1.00
54.37			H					
ATOM	140	N	GLU	13	10.965	0.514	22.863	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.260	1.145	23.109	1.00
12.01			C					
ATOM	142	C	GLU	13	12.801	1.793	21.838	1.00
10.07			C					
ATOM	143	O	GLU	13	12.294	1.552	20.742	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.253	0.102	23.624	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.786	-0.412	24.987	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.681	-1.556	25.450	
1.00142.36			C					
ATOM	147	OE1	GLU	13	14.889	-1.395	25.396	
1.00339.06			O					
ATOM	148	OE2	GLU	13	13.146	-2.576	25.851	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.910	-0.462	22.800	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.138	1.907	23.863	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.228	0.554	23.726	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.307	-0.720	22.924	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.769	-0.763	24.910	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.834	0.392	25.707	1.00
56.23			H					
ATOM	155	N	CYS	14	13.833	2.622	21.998	1.00
9.12			N					

ATOM	156	CA	CYS	14	14.451	3.320	20.865	1.00
10.69			C					
ATOM	157	C	CYS	14	15.967	3.159	20.897	1.00
9.56			C					
ATOM	158	O	CYS	14	16.577	3.148	21.965	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.103	4.807	20.910	1.00
13.96			C					
ATOM	160	SG	CYS	14	14.971	5.664	19.572	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.187	2.774	22.900	1.00
9.76			H					
ATOM	162	HA	CYS	14	14.078	2.905	19.938	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.406	5.218	21.861	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.036	4.932	20.788	1.00
46.13			H					
ATOM	165	N	CYS	15	16.567	3.042	19.713	1.00
9.60			N					
ATOM	166	CA	CYS	15	18.015	2.887	19.591	1.00
9.28			C					
ATOM	167	C	CYS	15	18.525	3.792	18.484	1.00
9.92			C					
ATOM	168	O	CYS	15	17.900	3.902	17.429	1.00
13.31			O					
ATOM	169	CB	CYS	15	18.369	1.442	19.244	1.00
12.90			C					
ATOM	170	SG	CYS	15	20.159	1.219	19.390	1.00
39.11			S					
ATOM	171	HN	CYS	15	16.025	3.069	18.899	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.496	3.156	20.523	1.00
8.26			H					
ATOM	173	HB1	CYS	15	18.062	1.233	18.231	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.862	0.770	19.917	1.00
27.31			H					
ATOM	175	N	VAL	16	19.659	4.441	18.716	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.222	5.331	17.710	1.00
11.99			C					
ATOM	177	C	VAL	16	21.742	5.334	17.795	1.00
7.73			C					
ATOM	178	O	VAL	16	22.319	5.701	18.818	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.668	6.746	17.912	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.279	7.385	19.167	1.00
39.61			C					
ATOM	181	CG2	VAL	16	19.991	7.596	16.683	
1.00115.21			C					

ATOM	182	HN	VAL	16	20.125	4.320	19.573	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.935	4.985	16.725	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.596	6.689	18.032	1.00
52.63		H						
ATOM	185	HG11	VAL	16	21.258	7.781	18.937	
1.00128.07		H						
ATOM	186	HG12	VAL	16	20.363	6.642	19.946	
1.00154.13		H						
ATOM	187	HG13	VAL	16	19.639	8.187	19.507	
1.00135.74		H						
ATOM	188	HG21	VAL	16	19.352	7.295	15.866	
1.00229.05		H						
ATOM	189	HG22	VAL	16	21.025	7.451	16.406	
1.00261.82		H						
ATOM	190	HG23	VAL	16	19.820	8.637	16.910	
1.00210.07		H						
ATOM	191	N	ASP	17	22.386	4.904	16.716	1.00
14.34		N						
ATOM	192	CA	ASP	17	23.840	4.847	16.684	1.00
11.90		C						
ATOM	193	C	ASP	17	24.440	6.238	16.513	1.00
13.15		C						
ATOM	194	O	ASP	17	24.215	6.903	15.501	1.00
25.96		O						
ATOM	195	CB	ASP	17	24.303	3.961	15.529	1.00
20.80		C						
ATOM	196	CG	ASP	17	23.727	2.560	15.676	1.00
28.72		C						
ATOM	197	OD1	ASP	17	23.227	2.043	14.692	
1.00135.42		O						
ATOM	198	OD2	ASP	17	23.794	2.024	16.771	
1.00114.17		O1-						
ATOM	199	HN	ASP	17	21.873	4.606	15.933	1.00
28.29		H						
ATOM	200	HA	ASP	17	24.194	4.425	17.612	1.00
10.49		H						
ATOM	201	HB1	ASP	17	25.382	3.906	15.532	1.00
22.42		H						
ATOM	202	HB2	ASP	17	23.970	4.389	14.595	1.00
29.52		H						
ATOM	203	N	THR	18	25.228	6.659	17.497	1.00
11.55		N						
ATOM	204	CA	THR	18	25.892	7.960	17.446	1.00
17.10		C						
ATOM	205	C	THR	18	27.320	7.778	16.954	1.00
10.63		C						
ATOM	206	O	THR	18	27.864	6.678	17.022	1.00
6.49		O						
ATOM	207	CB	THR	18	25.908	8.606	18.832	1.00
28.52		C						

ATOM	208	CG2	THR	18	24.514	9.122	19.181	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.319	7.648	19.793	1.00
26.49			O					
ATOM	210	HN	THR	18	25.384	6.074	18.268	1.00
13.96			H					
ATOM	211	HA	THR	18	25.363	8.611	16.761	1.00
26.43			H					
ATOM	212	HB	THR	18	26.601	9.433	18.835	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.574	7.070	19.973	1.00
71.62			H					
ATOM	214	HG21	THR	18	23.778	8.376	18.922	
1.00100.44								H
ATOM	215	HG22	THR	18	24.320	10.030	18.629	
1.00129.42								H
ATOM	216	HG23	THR	18	24.463	9.327	20.239	
1.00156.21								H
ATOM	217	N	VAL	19	27.923	8.858	16.476	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.281	8.819	15.988	1.00
13.34			C					
ATOM	219	C	VAL	19	29.676	10.195	15.503	1.00
25.88			C					
ATOM	220	O	VAL	19	29.085	10.754	14.579	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.448	7.804	14.856	1.00
15.48			C					
ATOM	222	CG1	VAL	19	28.403	8.052	13.765	1.00
29.06			C					
ATOM	223	CG2	VAL	19	30.856	7.951	14.264	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.452	9.711	16.465	1.00
26.89			H					
ATOM	225	HA	VAL	19	29.931	8.538	16.804	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.329	6.811	15.252	1.00
11.49			H					
ATOM	227	HG11	VAL	19	27.439	8.230	14.219	
1.00137.43								H
ATOM	228	HG12	VAL	19	28.342	7.185	13.123	1.00
93.29			H					
ATOM	229	HG13	VAL	19	28.689	8.913	13.178	
1.00108.69								H
ATOM	230	HG21	VAL	19	30.894	8.837	13.645	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.091	7.083	13.668	
1.00111.36								H
ATOM	232	HG23	VAL	19	31.577	8.046	15.067	1.00
77.11			H					
ATOM	233	N	PHE	20	30.672	10.732	16.161	1.00
24.58			N					

ATOM	234	CA	PHE	20	31.184	12.056	15.859	1.00
40.34			C					
ATOM	235	C	PHE	20	32.490	11.982	15.086	1.00
40.37			C					
ATOM	236	O	PHE	20	32.615	12.565	14.010	1.00
66.02			O					
ATOM	237	CB	PHE	20	31.397	12.825	17.171	1.00
48.79			C					
ATOM	238	CG	PHE	20	31.868	11.897	18.282	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.017	10.895	18.797	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.152	12.055	18.820	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.459	10.067	19.832	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.589	11.220	19.855	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.743	10.228	20.361	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.061	10.223	16.892	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.461	12.594	15.258	1.00
59.91			H					
ATOM	246	HB1	PHE	20	30.474	13.268	17.461	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.128	13.609	17.022	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.022	10.754	18.395	1.00
33.34			H					
ATOM	249	HD2	PHE	20	33.808	12.818	18.433	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.805	9.303	20.223	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.579	11.343	20.266	1.00
61.27			H					
ATOM	252	HZ	PHE	20	33.081	9.586	21.161	1.00
52.66			H					
ATOM	253	N	GLU	21	33.478	11.298	15.657	1.00
41.31			N					
ATOM	254	CA	GLU	21	34.781	11.195	15.045	1.00
56.16			C					
ATOM	255	C	GLU	21	35.089	9.769	14.609	1.00
58.61			C					
ATOM	256	O	GLU	21	34.238	8.882	14.682	
1.00201.19			O					
ATOM	257	CB	GLU	21	35.780	11.665	16.075	1.00
57.37			C					
ATOM	258	CG	GLU	21	35.804	10.687	17.248	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.625	11.273	18.392	
1.00304.62			C					

ATOM	260	OE1	GLU	21	36.667	10.657	19.444	
1.00451.81								O
ATOM	261	OE2	GLU	21	37.201	12.332	18.199	
1.00442.88								O1-
ATOM	262	HN	GLU	21	33.344	10.883	16.532	1.00
50.82			H					
ATOM	263	HA	GLU	21	34.842	11.847	14.184	1.00
85.72			H					
ATOM	264	HB1	GLU	21	35.475	12.635	16.430	1.00
46.37			H					
ATOM	265	HB2	GLU	21	36.751	11.725	15.631	
1.00131.81								H
ATOM	266	HG1	GLU	21	36.244	9.759	16.929	
1.00314.91								H
ATOM	267	HG2	GLU	21	34.796	10.505	17.582	
1.00266.92								H
ATOM	268	N	GLY	22	36.316	9.570	14.140	1.00
86.70			N					
ATOM	269	CA	GLY	22	36.755	8.254	13.666	
1.00104.66								C
ATOM	270	C	GLY	22	37.491	7.473	14.753	1.00
71.50			C					
ATOM	271	O	GLY	22	37.779	6.288	14.585	1.00
89.87			O					
ATOM	272	HN	GLY	22	36.936	10.330	14.105	
1.00214.64								H
ATOM	273	HA1	GLY	22	37.419	8.391	12.826	
1.00152.47								H
ATOM	274	HA2	GLY	22	35.895	7.682	13.344	
1.00118.15								H
ATOM	275	N	ASP	23	37.800	8.136	15.860	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.511	7.478	16.953	1.00
43.33			C					
ATOM	277	C	ASP	23	37.700	6.312	17.503	1.00
37.55			C					
ATOM	278	O	ASP	23	38.245	5.252	17.808	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.786	8.478	18.076	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.842	9.486	17.634	
1.00141.86								C
ATOM	281	OD1	ASP	23	40.488	9.234	16.630	
1.00328.18								O
ATOM	282	OD2	ASP	23	39.989	10.493	18.305	
1.00304.58								O1-
ATOM	283	HN	ASP	23	37.556	9.081	15.942	1.00
40.86			H					
ATOM	284	HA	ASP	23	39.451	7.105	16.582	1.00
72.12			H					
ATOM	285	HB1	ASP	23	39.142	7.948	18.947	1.00
94.15			H					

ATOM	286	HB2	ASP	23	37.873	8.997	18.323	1.00
93.26		H						
ATOM	287	N	MET	24	36.397	6.519	17.631	1.00
23.24		N						
ATOM	288	CA	MET	24	35.517	5.478	18.150	1.00
32.50		C						
ATOM	289	C	MET	24	34.060	5.783	17.818	1.00
25.13		C						
ATOM	290	O	MET	24	33.730	6.880	17.366	1.00
54.40		O						
ATOM	291	CB	MET	24	35.689	5.357	19.666	1.00
47.36		C						
ATOM	292	CG	MET	24	35.315	6.680	20.337	
1.00151.73			C					
ATOM	293	SD	MET	24	35.637	6.565	22.115	
1.00209.23			S					
ATOM	294	CE	MET	24	35.098	8.235	22.556	
1.00243.29			C					
ATOM	295	HN	MET	24	36.021	7.386	17.374	1.00
17.32		H						
ATOM	296	HA	MET	24	35.787	4.537	17.695	1.00
48.94		H						
ATOM	297	HB1	MET	24	36.718	5.120	19.893	
1.00124.40			H					
ATOM	298	HB2	MET	24	35.048	4.571	20.038	
1.00166.96			H					
ATOM	299	HG1	MET	24	34.267	6.883	20.174	
1.00331.71			H					
ATOM	300	HG2	MET	24	35.907	7.478	19.915	
1.00302.30			H					
ATOM	301	HE1	MET	24	35.664	8.582	23.408	
1.00340.44			H					
ATOM	302	HE2	MET	24	34.049	8.221	22.805	
1.00373.88			H					
ATOM	303	HE3	MET	24	35.258	8.897	21.716	
1.00386.81			H					
ATOM	304	N	VAL	25	33.191	4.800	18.048	1.00
22.44		N						
ATOM	305	CA	VAL	25	31.758	4.949	17.776	1.00
15.37		C						
ATOM	306	C	VAL	25	30.952	4.789	19.059	1.00
17.47		C						
ATOM	307	O	VAL	25	31.291	3.985	19.928	1.00
29.52		O						
ATOM	308	CB	VAL	25	31.304	3.905	16.751	1.00
23.36		C						
ATOM	309	CG1	VAL	25	29.776	3.959	16.598	1.00
58.39		C						
ATOM	310	CG2	VAL	25	31.969	4.199	15.403	1.00
55.25		C						
ATOM	311	HN	VAL	25	33.519	3.949	18.409	1.00
48.11		H						

ATOM	312	HA	VAL	25	31.566	5.939	17.373	1.00
9.25		H						
ATOM	313	HB	VAL	25	31.595	2.920	17.090	1.00
52.45		H						
ATOM	314	HG11	VAL	25	29.443	4.986	16.649	
1.00171.07			H					
ATOM	315	HG12	VAL	25	29.317	3.396	17.398	
1.00166.22			H					
ATOM	316	HG13	VAL	25	29.488	3.532	15.648	
1.00134.76			H					
ATOM	317	HG21	VAL	25	31.499	5.060	14.951	
1.00141.88			H					
ATOM	318	HG22	VAL	25	31.858	3.345	14.752	
1.00184.50			H					
ATOM	319	HG23	VAL	25	33.019	4.401	15.555	
1.00133.90			H					
ATOM	320	N	THR	26	29.888	5.579	19.169	1.00
13.60		N						
ATOM	321	CA	THR	26	29.021	5.559	20.347	1.00
21.19		C						
ATOM	322	C	THR	26	27.603	5.124	19.981	1.00
16.55		C						
ATOM	323	O	THR	26	27.050	5.555	18.970	1.00
11.43		O						
ATOM	324	CB	THR	26	28.986	6.960	20.954	1.00
27.07		C						
ATOM	325	CG2	THR	26	28.058	6.982	22.173	1.00
44.39		C						
ATOM	326	OG1	THR	26	30.299	7.325	21.354	1.00
34.75		O						
ATOM	327	HN	THR	26	29.684	6.203	18.442	1.00
10.81		H						
ATOM	328	HA	THR	26	29.419	4.873	21.084	1.00
33.16		H						
ATOM	329	HB	THR	26	28.627	7.658	20.210	1.00
20.60		H						
ATOM	330	HG1	THR	26	30.917	6.959	20.716	1.00
77.72		H						
ATOM	331	HG21	THR	26	28.346	6.198	22.856	
1.00126.99			H					
ATOM	332	HG22	THR	26	27.039	6.827	21.858	
1.00108.32			H					
ATOM	333	HG23	THR	26	28.140	7.937	22.668	
1.00151.99			H					
ATOM	334	N	ARG	27	27.021	4.268	20.823	1.00
22.38		N						
ATOM	335	CA	ARG	27	25.659	3.766	20.610	1.00
20.21		C						
ATOM	336	C	ARG	27	24.817	4.030	21.856	1.00
16.96		C						
ATOM	337	O	ARG	27	25.360	4.173	22.952	1.00
20.06		O						

ATOM	338	CB	ARG	27	25.698	2.262	20.333	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.549	1.990	19.090	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.775	0.484	18.947	
1.00109.38			C					
ATOM	341	NE	ARG	27	27.556	-0.016	20.073	
1.00227.73			N					
ATOM	342	CZ	ARG	27	27.809	-1.313	20.211	
1.00426.12			C					
ATOM	343	NH1	ARG	27	28.512	-1.735	21.225	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	27.353	-2.165	19.333	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.518	3.969	21.612	1.00
30.75			H					
ATOM	346	HA	ARG	27	25.208	4.270	19.765	1.00
23.13			H					
ATOM	347	HB1	ARG	27	24.694	1.901	20.164	1.00
87.46			H					
ATOM	348	HB2	ARG	27	26.126	1.751	21.182	
1.00103.36			H					
ATOM	349	HG1	ARG	27	27.503	2.487	19.191	
1.00281.97			H					
ATOM	350	HG2	ARG	27	26.038	2.363	18.215	
1.00276.19			H					
ATOM	351	HD1	ARG	27	27.305	0.290	18.026	
1.00183.60			H					
ATOM	352	HD2	ARG	27	25.821	-0.019	18.924	
1.00142.93			H					
ATOM	353	HE	ARG	27	27.901	0.615	20.738	
1.00372.53			H					
ATOM	354	HH11	ARG	27	28.860	-1.083	21.899	
1.00910.59			H					
ATOM	355	HH12	ARG	27	28.702	-2.711	21.330	
1.00999.99			H					
ATOM	356	HH21	ARG	27	26.814	-1.840	18.555	
1.00532.54			H					
ATOM	357	HH22	ARG	27	27.544	-3.140	19.438	
1.00948.84			H					
ATOM	358	N	SER	28	23.493	4.100	21.696	1.00
14.60			N					
ATOM	359	CA	SER	28	22.616	4.358	22.841	1.00
14.92			C					
ATOM	360	C	SER	28	21.270	3.662	22.674	1.00
12.12			C					
ATOM	361	O	SER	28	20.862	3.317	21.566	1.00
13.41			O					
ATOM	362	CB	SER	28	22.396	5.862	22.997	1.00
23.26			C					
ATOM	363	OG	SER	28	21.680	6.351	21.872	
1.00146.32			O					

ATOM	364	HN	SER	28	23.102	3.986	20.802	1.00
15.23			H					
ATOM	365	HA	SER	28	23.086	3.984	23.740	1.00
15.44			H					
ATOM	366	HB1	SER	28	23.355	6.359	23.070	1.00
88.73			H					
ATOM	367	HB2	SER	28	21.827	6.054	23.891	
1.00124.68								H
ATOM	368	HG	SER	28	20.812	5.941	21.872	
1.00242.47								H
ATOM	369	N	CYS	29	20.584	3.468	23.798	1.00
10.48			N					
ATOM	370	CA	CYS	29	19.278	2.822	23.803	1.00
9.97			C					
ATOM	371	C	CYS	29	18.705	2.859	25.218	1.00
11.60			C					
ATOM	372	O	CYS	29	19.427	2.627	26.189	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.399	1.370	23.315	1.00
9.52			C					
ATOM	374	SG	CYS	29	17.849	0.854	22.574	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.964	3.776	24.647	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.617	3.363	23.142	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.617	0.711	24.142	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.183	1.293	22.580	1.00
10.78			H					
ATOM	379	N	GLU	30	17.412	3.159	25.336	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.763	3.234	26.649	1.00
17.41			C					
ATOM	381	C	GLU	30	15.779	2.085	26.837	1.00
10.81			C					
ATOM	382	O	GLU	30	14.988	1.777	25.946	1.00
23.22			O					
ATOM	383	CB	GLU	30	16.025	4.567	26.780	1.00
37.83			C					
ATOM	384	CG	GLU	30	17.030	5.714	26.659	
1.00108.13								C
ATOM	385	CD	GLU	30	17.929	5.750	27.890	
1.00240.52								C
ATOM	386	OE1	GLU	30	17.580	5.119	28.873	
1.00422.56								O
ATOM	387	OE2	GLU	30	18.954	6.410	27.831	
1.00410.81								O1-
ATOM	388	HN	GLU	30	16.886	3.343	24.529	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.510	3.180	27.429	1.00
24.60			H					

ATOM	390	HB1	GLU	30	15.538	4.617	27.742	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.285	4.648	25.995	1.00
56.47			H					
ATOM	392	HG1	GLU	30	16.498	6.650	26.576	
1.00196.66			H					
ATOM	393	HG2	GLU	30	17.636	5.567	25.778	
1.00140.67			H					
ATOM	394	N	LYS	31	15.833	1.460	28.010	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.941	0.347	28.320	1.00
11.40			C					
ATOM	396	C	LYS	31	13.630	0.881	28.885	1.00
10.99			C					
ATOM	397	O	LYS	31	13.626	1.835	29.662	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.596	-0.579	29.352	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.033	-0.920	28.932	1.00
57.81			C					
ATOM	400	CD	LYS	31	17.034	-1.734	27.633	
1.00115.52			C					
ATOM	401	CE	LYS	31	18.440	-2.282	27.383	
1.00250.23			C					
ATOM	402	NZ	LYS	31	18.451	-3.056	26.109	
1.00462.10			N1+					
ATOM	403	HN	LYS	31	16.483	1.755	28.682	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.732	-0.212	27.423	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.022	-1.491	29.428	1.00
37.63			H					
ATOM	406	HB2	LYS	31	15.612	-0.087	30.313	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.506	-1.497	29.713	
1.00126.32			H					
ATOM	408	HG2	LYS	31	17.587	-0.005	28.780	
1.00114.19			H					
ATOM	409	HD1	LYS	31	16.751	-1.099	26.808	
1.00198.45			H					
ATOM	410	HD2	LYS	31	16.334	-2.552	27.718	
1.00200.14			H					
ATOM	411	HE1	LYS	31	18.725	-2.929	28.199	
1.00374.64			H					
ATOM	412	HE2	LYS	31	19.138	-1.463	27.312	
1.00403.27			H					
ATOM	413	HZ1	LYS	31	18.341	-4.068	26.316	
1.00627.38			H					
ATOM	414	HZ2	LYS	31	19.355	-2.898	25.616	
1.00622.26			H					
ATOM	415	HZ3	LYS	31	17.667	-2.742	25.504	
1.00619.20			H					

ATOM	416	N	THR	32	12.517	0.267	28.490	1.00
15.51			N					
ATOM	417	CA	THR	32	11.206	0.702	28.967	1.00
22.44			C					
ATOM	418	C	THR	32	10.827	-0.036	30.247	1.00
26.60			C					
ATOM	419	O	THR	32	10.412	-1.195	30.211	1.00
57.43			O					
ATOM	420	CB	THR	32	10.148	0.437	27.892	1.00
56.28			C					
ATOM	421	CG2	THR	32	8.781	0.908	28.391	
1.00102.70								C
ATOM	422	OG1	THR	32	10.492	1.146	26.709	
1.00111.17								O
ATOM	423	HN	THR	32	12.578	-0.487	27.867	1.00
18.79			H					
ATOM	424	HA	THR	32	11.233	1.763	29.170	1.00
19.67			H					
ATOM	425	HB	THR	32	10.104	-0.620	27.680	1.00
84.25			H					
ATOM	426	HG1	THR	32	9.680	1.463	26.306	
1.00205.03								H
ATOM	427	HG21	THR	32	8.407	0.210	29.126	
1.00220.71								H
ATOM	428	HG22	THR	32	8.093	0.959	27.560	
1.00174.67								H
ATOM	429	HG23	THR	32	8.878	1.885	28.839	
1.00217.44								H
ATOM	430	N	THR	33	10.964	0.654	31.377	1.00
22.47			N					
ATOM	431	CA	THR	33	10.627	0.077	32.679	1.00
41.60			C					
ATOM	432	C	THR	33	9.903	1.088	33.517	1.00
38.03			C					
ATOM	433	O	THR	33	10.377	2.202	33.732	1.00
52.73			O					
ATOM	434	CB	THR	33	11.887	-0.377	33.408	1.00
63.25			C					
ATOM	435	CG2	THR	33	11.495	-1.193	34.641	
1.00121.65								C
ATOM	436	OG1	THR	33	12.676	-1.179	32.540	1.00
96.20			O					
ATOM	437	HN	THR	33	11.292	1.576	31.335	1.00
23.82			H					
ATOM	438	HA	THR	33	9.968	-0.761	32.560	1.00
67.12			H					
ATOM	439	HB	THR	33	12.446	0.486	33.719	
1.00107.59								H
ATOM	440	HG1	THR	33	12.111	-1.487	31.827	
1.00176.27								H
ATOM	441	HG21	THR	33	10.931	-0.571	35.320	
1.00255.23								H

ATOM	442	HG22	THR	33	12.388	-1.549	35.135	
	1.00245.37							H
ATOM	443	HG23	THR	33	10.891	-2.036	34.338	
	1.00185.78							H
ATOM	444	N	GLY	34	8.750	0.677	33.999	1.00
	40.93		N					
ATOM	445	CA	GLY	34	7.960	1.542	34.825	1.00
	45.59		C					
ATOM	446	C	GLY	34	7.496	2.761	34.037	1.00
	40.97		C					
ATOM	447	O	GLY	34	6.319	2.887	33.699	1.00
	82.17		O					
ATOM	448	HN	GLY	34	8.438	-0.226	33.797	1.00
	54.00		H					
ATOM	449	HA1	GLY	34	8.579	1.854	35.633	1.00
	54.41		H					
ATOM	450	HA2	GLY	34	7.104	1.001	35.205	1.00
	62.09		H					
ATOM	451	N	ASN	35	8.441	3.652	33.733	1.00
	32.51		N					
ATOM	452	CA	ASN	35	8.147	4.865	32.965	1.00
	33.20		C					
ATOM	453	C	ASN	35	8.813	4.783	31.595	1.00
	23.17		C					
ATOM	454	O	ASN	35	9.927	4.276	31.467	1.00
	27.01		O					
ATOM	455	CB	ASN	35	8.668	6.094	33.713	1.00
	54.51		C					
ATOM	456	CG	ASN	35	7.979	6.211	35.068	1.00
	80.73		C					
ATOM	457	ND2	ASN	35	8.676	6.552	36.118	
	1.00220.46							N
ATOM	458	OD1	ASN	35	6.774	5.985	35.175	
	1.00117.80							O
ATOM	459	HN	ASN	35	9.360	3.486	34.024	1.00
	51.15		H					
ATOM	460	HA	ASN	35	7.078	4.963	32.831	1.00
	47.21		H					
ATOM	461	HB1	ASN	35	8.463	6.980	33.131	1.00
	68.31		H					
ATOM	462	HB2	ASN	35	9.734	5.998	33.858	1.00
	57.75		H					
ATOM	463	HD21	ASN	35	9.636	6.731	36.030	
	1.00405.39							H
ATOM	464	HD22	ASN	35	8.240	6.629	36.992	
	1.00245.64							H
ATOM	465	N	PHE	36	8.124	5.280	30.573	1.00
	35.72		N					
ATOM	466	CA	PHE	36	8.659	5.250	29.220	1.00
	33.41		C					
ATOM	467	C	PHE	36	9.816	6.233	29.073	1.00
	28.51		C					

ATOM	468	O	PHE	36	9.804	7.315	29.661	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.553	5.603	28.230	1.00
67.53			C					
ATOM	470	CG	PHE	36	6.562	4.466	28.153	1.00
86.71			C					
ATOM	471	CD1	PHE	36	5.492	4.409	29.054	
1.00106.51			C					
ATOM	472	CD2	PHE	36	6.713	3.469	27.182	1.00
99.48			C					
ATOM	473	CE1	PHE	36	4.573	3.355	28.983	
1.00134.48			C					
ATOM	474	CE2	PHE	36	5.795	2.416	27.111	
1.00134.27			C					
ATOM	475	CZ	PHE	36	4.723	2.359	28.012	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.240	5.668	30.728	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.016	4.253	29.005	1.00
28.53			H					
ATOM	478	HB1	PHE	36	7.982	5.771	27.259	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.047	6.500	28.559	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.377	5.178	29.804	
1.00110.20			H					
ATOM	481	HD2	PHE	36	7.540	3.512	26.487	1.00
93.07			H					
ATOM	482	HE1	PHE	36	3.747	3.312	29.678	
1.00155.06			H					
ATOM	483	HE2	PHE	36	5.911	1.647	26.361	
1.00159.46			H					
ATOM	484	HZ	PHE	36	4.015	1.546	27.956	
1.00183.25			H					
ATOM	485	N	THR	37	10.816	5.848	28.282	1.00
20.06			N					
ATOM	486	CA	THR	37	11.983	6.694	28.054	1.00
27.18			C					
ATOM	487	C	THR	37	12.514	6.489	26.639	1.00
41.87			C					
ATOM	488	O	THR	37	12.944	5.394	26.278	
1.00169.86			O					
ATOM	489	CB	THR	37	13.080	6.355	29.067	1.00
26.52			C					
ATOM	490	CG2	THR	37	12.550	6.571	30.485	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.467	4.999	28.906	1.00
81.95			O					
ATOM	492	HN	THR	37	10.767	4.975	27.840	1.00
18.47			H					
ATOM	493	HA	THR	37	11.703	7.731	28.175	1.00
38.80			H					

ATOM	494	HB	THR	37	13.932	6.996	28.904	1.00
81.60			H					
ATOM	495	HG1	THR	37	14.358	4.901	29.251	
1.00188.80			H					
ATOM	496	HG21	THR	37	13.376	6.580	31.181	
1.00196.98			H					
ATOM	497	HG22	THR	37	11.871	5.771	30.742	
1.00196.23			H					
ATOM	498	HG23	THR	37	12.027	7.515	30.535	
1.00168.92			H					
ATOM	499	N	GLU	38	12.476	7.552	25.845	1.00
26.53			N					
ATOM	500	CA	GLU	38	12.951	7.487	24.465	1.00
30.29			C					
ATOM	501	C	GLU	38	14.469	7.623	24.403	1.00
25.39			C					
ATOM	502	O	GLU	38	15.102	8.096	25.347	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.303	8.600	23.638	1.00
54.82			C					
ATOM	504	CG	GLU	38	10.804	8.330	23.504	
1.00165.84			C					
ATOM	505	CD	GLU	38	10.137	9.458	22.724	
1.00292.92			C					
ATOM	506	OE1	GLU	38	8.968	9.322	22.407	
1.00414.19			O					
ATOM	507	OE2	GLU	38	10.807	10.443	22.457	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	12.118	8.393	26.191	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.669	6.535	24.042	1.00
32.15			H					
ATOM	510	HB1	GLU	38	12.752	8.626	22.656	
1.00144.82			H					
ATOM	511	HB2	GLU	38	12.457	9.549	24.130	
1.00106.49			H					
ATOM	512	HG1	GLU	38	10.362	8.265	24.487	
1.00303.31			H					
ATOM	513	HG2	GLU	38	10.654	7.396	22.981	
1.00323.99			H					
ATOM	514	N	CYS	39	15.043	7.207	23.278	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.488	7.284	23.084	1.00
14.30			C					
ATOM	516	C	CYS	39	16.943	8.747	23.083	1.00
22.31			C					
ATOM	517	O	CYS	39	16.182	9.631	22.689	1.00
32.92			O					
ATOM	518	CB	CYS	39	16.853	6.629	21.749	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.785	7.295	20.447	1.00
17.41			S					

ATOM	520	HN	CYS	39	14.484	6.846	22.562	1.00
24.87			H					
ATOM	521	HA	CYS	39	16.975	6.747	23.881	1.00
14.60			H					
ATOM	522	HB1	CYS	39	16.714	5.561	21.818	1.00
27.71			H					
ATOM	523	HB2	CYS	39	17.884	6.843	21.511	1.00
34.91			H					
ATOM	524	N	PRO	40	18.154	9.030	23.509	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.676	10.427	23.541	1.00
47.66			C					
ATOM	526	C	PRO	40	19.039	10.928	22.145	1.00
71.54			C					
ATOM	527	O	PRO	40	19.635	10.205	21.346	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.915	10.321	24.438	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.409	8.928	24.226	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.159	8.070	24.001	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.954	11.085	23.997	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.644	10.464	25.473	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.665	11.045	24.141	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.942	8.579	25.098	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.054	8.892	23.355	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.830	7.627	24.928	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.352	7.310	23.259	1.00
26.94			H					
ATOM	538	N	GLY	41	18.675	12.174	21.866	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.959	12.791	20.569	
1.00147.55			C					
ATOM	540	C	GLY	41	20.150	13.737	20.669	
1.00161.74			C					
ATOM	541	O	GLY	41	20.460	14.462	19.723	
1.00244.37			O					
ATOM	542	HN	GLY	41	18.205	12.692	22.548	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.094	13.350	20.247	
1.00184.40			H					
ATOM	544	HA2	GLY	41	19.177	12.023	19.838	
1.00157.34			H					
ATOM	545	N	LEU	42	20.812	13.732	21.826	
1.00162.48			N					

ATOM	546	CA	LEU	42	21.970	14.600	22.055
1.00191.48			C				
ATOM	547	C	LEU	42	23.259	13.784	22.067
1.00166.66			C				
ATOM	548	O	LEU	42	23.271	12.629	22.492
1.00251.38			O				
ATOM	549	CB	LEU	42	21.815	15.321	23.395
1.00307.99			C				
ATOM	550	CG	LEU	42	20.438	15.991	23.467
1.00452.28			C				
ATOM	551	CD1	LEU	42	20.306	16.733	24.799
1.00681.24			C				
ATOM	552	CD2	LEU	42	20.274	16.981	22.303
1.00527.46			C				
ATOM	553	HN	LEU	42	20.514	13.135	22.544
1.00195.47			H				
ATOM	554	HA	LEU	42	22.035	15.338	21.268
1.00229.77			H				
ATOM	555	HB1	LEU	42	22.583	16.075	23.488
1.00342.49			H				
ATOM	556	HB2	LEU	42	21.910	14.607	24.200
1.00335.33			H				
ATOM	557	HG	LEU	42	19.670	15.233	23.405
1.00427.79			H				
ATOM	558	HD11	LEU	42	19.370	17.270	24.820
1.00909.71			H				
ATOM	559	HD12	LEU	42	21.124	17.430	24.905
1.00706.80			H				
ATOM	560	HD13	LEU	42	20.331	16.021	25.611
1.00858.82			H				
ATOM	561	HD21	LEU	42	19.500	17.696	22.540
1.00631.69			H				
ATOM	562	HD22	LEU	42	19.996	16.441	21.409
1.00628.06			H				
ATOM	563	HD23	LEU	42	21.206	17.502	22.134
1.00656.75			H				
ATOM	564	N	THR	43	24.345	14.399	21.597
1.00178.52			N				
ATOM	565	CA	THR	43	25.648	13.734	21.551
1.00240.84			C				
ATOM	566	C	THR	43	26.766	14.705	21.928
1.00372.31			C				
ATOM	567	O	THR	43	27.590	15.075	21.091
1.00500.13			O				
ATOM	568	CB	THR	43	25.895	13.177	20.153
1.00354.13			C				
ATOM	569	CG2	THR	43	25.579	14.241	19.097
1.00463.04			C				
ATOM	570	OG1	THR	43	27.249	12.765	20.040
1.00508.50			O				
ATOM	571	HN	THR	43	24.268	15.321	21.274
1.00229.59			H				

ATOM	572	HA	THR	43	25.654	12.908	22.247
1.00249.90				H			
ATOM	573	HB	THR	43	25.251	12.328	20.006
1.00481.58				H			
ATOM	574	HG1	THR	43	27.257	11.842	19.780
1.00624.31				H			
ATOM	575	HG21	THR	43	24.510	14.301	18.956
1.00650.95				H			
ATOM	576	HG22	THR	43	26.050	13.970	18.164
1.00580.73				H			
ATOM	577	HG23	THR	43	25.953	15.200	19.422
1.00571.99				H			
ATOM	578	N	PRO	44	26.805	15.116	23.167
1.00488.39				N			
ATOM	579	CA	PRO	44	27.841	16.063	23.674
1.00760.13				C			
ATOM	580	C	PRO	44	29.185	15.368	23.883
1.00735.36				C			
ATOM	581	O	PRO	44	30.199	16.019	24.140
1.00999.99				O			
ATOM	582	CB	PRO	44	27.248	16.554	24.999
1.00999.99				C			
ATOM	583	CG	PRO	44	26.420	15.408	25.486
1.00856.94				C			
ATOM	584	CD	PRO	44	25.866	14.719	24.232
1.00548.09				C			
ATOM	585	HA	PRO	44	27.953	16.893	22.996
1.00939.00				H			
ATOM	586	HB1	PRO	44	26.621	17.418	24.833
1.00999.99				H			
ATOM	587	HB2	PRO	44	28.035	16.789	25.706
1.00999.99				H			
ATOM	588	HG1	PRO	44	25.604	15.765	26.098
1.00999.99				H			
ATOM	589	HG2	PRO	44	27.036	14.719	26.052
1.00853.53				H			
ATOM	590	HD1	PRO	44	24.873	15.075	24.004
1.00602.45				H			
ATOM	591	HD2	PRO	44	25.867	13.644	24.357
1.00463.32				H			
ATOM	592	N	ILE	45	29.179	14.043	23.780
1.00518.33				N			
ATOM	593	CA	ILE	45	30.398	13.268	23.967
1.00582.79				C			
ATOM	594	C	ILE	45	31.375	13.518	22.822
1.00795.93				C			
ATOM	595	O	ILE	45	31.013	13.414	21.651
1.00898.75				O			
ATOM	596	CB	ILE	45	30.062	11.778	24.033
1.00474.41				C			
ATOM	597	CG1	ILE	45	29.167	11.512	25.247
1.00516.90				C			

ATOM	598	CG2	ILE	45	31.354	10.968	24.166
1.00760.75			C				
ATOM	599	CD1	ILE	45	28.616	10.086	25.174
1.00566.81			C				
ATOM	600	HN	ILE	45	28.339	13.581	23.579
1.00395.72			H				
ATOM	601	HA	ILE	45	30.859	13.563	24.896
1.00711.06			H				
ATOM	602	HB	ILE	45	29.544	11.484	23.132
1.00477.81			H				
ATOM	603	HG11	ILE	45	28.346	12.213	25.250
1.00624.28			H				
ATOM	604	HG12	ILE	45	29.745	11.629	26.153
1.00744.84			H				
ATOM	605	HG21	ILE	45	31.969	11.399	24.942
1.00920.57			H				
ATOM	606	HG22	ILE	45	31.889	10.990	23.229
1.00999.99			H				
ATOM	607	HG23	ILE	45	31.114	9.947	24.422
1.00865.46			H				
ATOM	608	HD11	ILE	45	27.879	9.944	25.951
1.00658.89			H				
ATOM	609	HD12	ILE	45	29.423	9.381	25.309
1.00734.30			H				
ATOM	610	HD13	ILE	45	28.157	9.927	24.209
1.00675.84			H				
ATOM	611	N	ALA	46	32.614	13.849	23.170
1.00999.99			N				
ATOM	612	CA	ALA	46	33.636	14.113	22.164
1.00999.99			C				
ATOM	613	C	ALA	46	35.023	14.126	22.798
1.00999.99			C				
ATOM	614	CB	ALA	46	33.369	15.459	21.487
1.00999.99			C				
ATOM	615	OT1	ALA	46	35.098	14.266	24.008
1.00999.99			O				
ATOM	616	OT2	ALA	46	35.990	13.997	22.065
1.00999.99			O				
ATOM	617	HN	ALA	46	32.845	13.918	24.120
1.00999.99			H				
ATOM	618	HA	ALA	46	33.600	13.334	21.416
1.00999.99			H				
ATOM	619	HB1	ALA	46	33.655	16.259	22.153
1.00999.99			H				
ATOM	620	HB2	ALA	46	32.318	15.542	21.254
1.00999.99			H				
ATOM	621	HB3	ALA	46	33.946	15.524	20.575
1.00999.99			H				
ENDMDL							
TER							
MODEL	2						
ATOM	1	N	GLY	1	23.748	-0.455	11.093

1.00999.99				N				
ATOM	2	CA	GLY		1	24.412	-0.156	12.392
1.00999.99				C				
ATOM	3	C	GLY		1	23.820	-1.040	13.483
1.00999.99				C				
ATOM	4	O	GLY		1	23.080	-1.983	13.199
1.00999.99				O				
ATOM	5	HA1	GLY		1	24.255	0.880	12.648
1.00999.99				H				
ATOM	6	HA2	GLY		1	25.473	-0.349	12.306
1.00999.99				H				
ATOM	7	HT1	GLY		1	23.780	-1.478	10.913
1.00999.99				H				
ATOM	8	HT2	GLY		1	24.242	0.047	10.327
1.00999.99				H				
ATOM	9	HT3	GLY		1	22.757	-0.143	11.129
1.00999.99				H				
ATOM	10	N	LEU		2	24.149	-0.731	14.734
1.00999.99				N				
ATOM	11	CA	LEU		2	23.645	-1.505	15.861
1.00895.59				C				
ATOM	12	C	LEU		2	22.125	-1.408	15.940
1.00532.27				C				
ATOM	13	O	LEU		2	21.447	-2.390	16.238
1.00625.21				O				
ATOM	14	CB	LEU		2	24.266	-0.999	17.168
1.00999.99				C				
ATOM	15	CG	LEU		2	25.721	-1.469	17.269
1.00999.99				C				
ATOM	16	CD1	LEU		2	26.550	-0.865	16.129
1.00999.99				C				
ATOM	17	CD2	LEU		2	26.299	-1.025	18.616
1.00999.99				C				
ATOM	18	HN	LEU		2	24.743	0.032	14.899
1.00999.99				H				
ATOM	19	HA	LEU		2	23.918	-2.536	15.723
1.00890.87				H				
ATOM	20	HB1	LEU		2	23.706	-1.388	18.006
1.00924.07				H				
ATOM	21	HB2	LEU		2	24.235	0.081	17.186
1.00999.99				H				
ATOM	22	HG	LEU		2	25.754	-2.548	17.202
1.00999.99				H				
ATOM	23	HD11	LEU		2	26.384	-1.428	15.224
1.00999.99				H				
ATOM	24	HD12	LEU		2	27.600	-0.900	16.385
1.00999.99				H				
ATOM	25	HD13	LEU		2	26.255	0.163	15.972
1.00999.99				H				
ATOM	26	HD21	LEU		2	26.458	0.042	18.604
1.00999.99				H				
ATOM	27	HD22	LEU		2	27.239	-1.529	18.788

74.72			O						
ATOM	54	CB	GLU	5	13.994	-0.459	13.312	1.00	
49.24			C						
ATOM	55	CG	GLU	5	13.737	-1.149	14.645	1.00	
55.48			C						
ATOM	56	CD	GLU	5	12.526	-2.071	14.533	1.00	
92.06			C						
ATOM	57	OE1	GLU	5	11.950	-2.133	13.459		
1.00206.49									O
ATOM	58	OE2	GLU	5	12.194	-2.702	15.523		
1.00197.24									O1-
ATOM	59	HN	GLU	5	16.533	-0.868	14.679	1.00	
45.52			H						
ATOM	60	HA	GLU	5	15.536	0.706	12.420	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	14.029	-1.198	12.526	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	13.205	0.242	13.111	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	13.550	-0.404	15.405	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	14.607	-1.723	14.911	1.00	
57.77			H						
ATOM	65	N	ASN	6	14.153	2.143	14.404	1.00	
50.73			N						
ATOM	66	CA	ASN	6	13.982	3.236	15.353	1.00	
71.04			C						
ATOM	67	C	ASN	6	14.023	2.704	16.781	1.00	
65.17			C						
ATOM	68	O	ASN	6	14.600	3.328	17.671	1.00	
94.86			O						
ATOM	69	CB	ASN	6	12.648	3.942	15.106	1.00	
94.83			C						
ATOM	70	CG	ASN	6	12.715	4.743	13.809		
1.00160.94									C
ATOM	71	ND2	ASN	6	11.609	5.086	13.208		
1.00244.88									N
ATOM	72	OD1	ASN	6	13.802	5.063	13.331		
1.00219.73									O
ATOM	73	HN	ASN	6	13.448	1.955	13.750	1.00	
72.81			H						
ATOM	74	HA	ASN	6	14.784	3.946	15.220	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	12.439	4.612	15.927		
1.00111.09									H
ATOM	76	HB2	ASN	6	11.861	3.207	15.033	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	10.742	4.830	13.590		
1.00272.43									H
ATOM	78	HD22	ASN	6	11.643	5.600	12.375		
1.00336.78									H
ATOM	79	N	GLY	7	13.410	1.538	16.989	1.00	

51.80			N						
ATOM	80	CA	GLY	7	13.378	0.908	18.313	1.00	
71.47			C						
ATOM	81	C	GLY	7	13.973	-0.493	18.255	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.280	-1.485	18.468	1.00	
44.54			O						
ATOM	83	HN	GLY	7	12.972	1.090	16.237	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.360	0.838	18.646		
1.00103.52									H
ATOM	85	HA2	GLY	7	13.943	1.504	19.018		
1.00108.67									H
ATOM	86	N	ASP	8	15.265	-0.559	17.961	1.00	
27.00			N						
ATOM	87	CA	ASP	8	15.955	-1.842	17.872	1.00	
14.15			C						
ATOM	88	C	ASP	8	15.900	-2.573	19.206	1.00	
9.37			C						
ATOM	89	O	ASP	8	15.681	-3.783	19.254	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.413	-1.627	17.465	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.096	-2.975	17.256	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	17.493	-3.981	17.588		
1.00119.56									O
ATOM	93	OD2	ASP	8	19.214	-2.980	16.766		
1.00133.27									O1-
ATOM	94	HN	ASP	8	15.760	0.269	17.801	1.00	
35.63			H						
ATOM	95	HA	ASP	8	15.471	-2.445	17.125	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	17.926	-1.085	18.244	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.450	-1.059	16.547	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.095	-1.830	20.288	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.059	-2.418	21.620	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.685	-3.020	21.892	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.567	-4.108	22.454	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.382	-1.359	22.665	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.135	-0.958	22.541	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.259	-0.870	20.186	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.808	-3.190	21.678	1.00	

11.12			H					
ATOM	106	HB1	CYS	9	16.171	-1.737	23.652	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.792	-0.473	22.481	1.00
5.04			H					
ATOM	108	N	ALA	10	13.653	-2.300	21.472	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.279	-2.756	21.649	1.00
32.04			C					
ATOM	110	C	ALA	10	11.332	-1.896	20.812	1.00
45.47			C					
ATOM	111	O	ALA	10	11.719	-0.840	20.315	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.883	-2.690	23.131	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.819	-1.446	21.022	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.208	-3.779	21.313	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.743	-2.921	23.741	1.00
84.37			H					
ATOM	116	HB2	ALA	10	11.100	-3.409	23.327	
1.00118.20			H					
ATOM	117	HB3	ALA	10	11.527	-1.701	23.371	
1.00117.32			H					
ATOM	118	N	ALA	11	10.098	-2.359	20.653	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.116	-1.619	19.866	1.00
35.24			C					
ATOM	120	C	ALA	11	8.862	-0.238	20.469	1.00
22.78			C					
ATOM	121	O	ALA	11	8.748	0.751	19.745	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.803	-2.400	19.806	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.843	-3.209	21.067	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.493	-1.497	18.862	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.979	-3.367	19.359	
1.00157.06			H					
ATOM	126	HB2	ALA	11	7.086	-1.854	19.211	
1.00148.83			H					
ATOM	127	HB3	ALA	11	7.415	-2.530	20.807	
1.00137.06			H					
ATOM	128	N	ASP	12	8.769	-0.179	21.795	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.521	1.089	22.482	1.00
31.05			C					
ATOM	130	C	ASP	12	9.824	1.846	22.723	1.00
22.98			C					
ATOM	131	O	ASP	12	9.837	3.076	22.773	1.00

37.14			O						
ATOM	132	CB	ASP	12	7.832	0.823	23.821	1.00	
48.35			C						
ATOM	133	CG	ASP	12	6.417	0.303	23.586		
1.00104.83			C						
ATOM	134	OD1	ASP	12	5.935	0.439	22.474		
1.00258.73			O						
ATOM	135	OD2	ASP	12	5.837	-0.223	24.521		
1.00213.46			O1-						
ATOM	136	HN	ASP	12	8.864	-1.001	22.320	1.00	
36.19			H						
ATOM	137	HA	ASP	12	7.870	1.699	21.875	1.00	
49.76			H						
ATOM	138	HB1	ASP	12	7.784	1.741	24.388	1.00	
95.71			H						
ATOM	139	HB2	ASP	12	8.396	0.088	24.376	1.00	
54.37			H						
ATOM	140	N	GLU	13	10.918	1.106	22.878	1.00	
17.60			N						
ATOM	141	CA	GLU	13	12.221	1.723	23.121	1.00	
12.01			C						
ATOM	142	C	GLU	13	12.796	2.317	21.839	1.00	
10.07			C						
ATOM	143	O	GLU	13	12.395	1.949	20.735	1.00	
12.81			O						
ATOM	144	CB	GLU	13	13.190	0.686	23.687	1.00	
11.74			C						
ATOM	145	CG	GLU	13	12.697	0.221	25.059	1.00	
13.49			C						
ATOM	146	CD	GLU	13	12.862	1.343	26.078		
1.00142.36			C						
ATOM	147	OE1	GLU	13	13.575	2.285	25.780		
1.00339.06			O						
ATOM	148	OE2	GLU	13	12.272	1.243	27.140		
1.00335.28			O1-						
ATOM	149	HN	GLU	13	10.849	0.130	22.833	1.00	
28.36			H						
ATOM	150	HA	GLU	13	12.100	2.511	23.847	1.00	
13.06			H						
ATOM	151	HB1	GLU	13	14.169	1.128	23.788	1.00	
13.76			H						
ATOM	152	HB2	GLU	13	13.245	-0.159	23.016	1.00	
9.94			H						
ATOM	153	HG1	GLU	13	13.269	-0.636	25.376	1.00	
66.02			H						
ATOM	154	HG2	GLU	13	11.652	-0.047	24.993	1.00	
56.23			H						
ATOM	155	N	CYS	14	13.745	3.243	21.999	1.00	
9.12			N						
ATOM	156	CA	CYS	14	14.390	3.901	20.860	1.00	
10.69			C						
ATOM	157	C	CYS	14	15.838	3.440	20.731	1.00	

9.56			C					
ATOM	158	O	CYS	14	16.458	3.050	21.717	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.360	5.420	21.050	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.319	6.212	19.733	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.020	3.490	22.908	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.861	3.655	19.949	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.788	5.669	22.008	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.338	5.767	21.011	1.00
46.13			H					
ATOM	165	N	CYS	15	16.370	3.490	19.511	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.751	3.080	19.260	1.00
9.28			C					
ATOM	167	C	CYS	15	18.350	3.970	18.182	1.00
9.92			C					
ATOM	168	O	CYS	15	17.771	4.126	17.107	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.793	1.619	18.799	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.499	1.006	18.848	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.825	3.816	18.764	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.331	3.182	20.166	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.418	1.554	17.788	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.178	1.020	19.450	1.00
27.31			H					
ATOM	175	N	VAL	16	19.505	4.562	18.468	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.155	5.441	17.502	1.00
11.99			C					
ATOM	177	C	VAL	16	21.670	5.358	17.636	1.00
7.73			C					
ATOM	178	O	VAL	16	22.216	5.500	18.731	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.685	6.878	17.725	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.154	7.367	19.098	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.265	7.777	16.633	
1.00115.21			C					
ATOM	182	HN	VAL	16	19.927	4.409	19.341	1.00
9.76			H					
ATOM	183	HA	VAL	16	19.880	5.138	16.500	1.00

17.27			H						
ATOM	184	HB	VAL	16	18.607	6.912	17.683	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	19.980	6.597	19.834		
1.00128.07			H						
ATOM	186	HG12	VAL	16	19.602	8.255	19.370		
1.00154.13			H						
ATOM	187	HG13	VAL	16	21.209	7.598	19.060		
1.00135.74			H						
ATOM	188	HG21	VAL	16	19.884	8.780	16.754		
1.00229.05			H						
ATOM	189	HG22	VAL	16	19.977	7.396	15.665		
1.00261.82			H						
ATOM	190	HG23	VAL	16	21.342	7.789	16.710		
1.00210.07			H						
ATOM	191	N	ASP	17	22.344	5.121	16.513	1.00	
14.34			N						
ATOM	192	CA	ASP	17	23.802	5.017	16.502	1.00	
11.90			C						
ATOM	193	C	ASP	17	24.432	6.323	16.038	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.029	6.897	15.026	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.235	3.889	15.563	1.00	
20.80			C						
ATOM	196	CG	ASP	17	23.840	2.540	16.150	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	23.839	1.572	15.407		
1.00135.42			O						
ATOM	198	OD2	ASP	17	23.540	2.494	17.332		
1.00114.17			O1-						
ATOM	199	HN	ASP	17	21.850	5.013	15.673	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.155	4.791	17.500	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.310	3.922	15.438	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	23.758	4.019	14.603	1.00	
29.52			H						
ATOM	203	N	THR	18	25.440	6.777	16.779	1.00	
11.55			N						
ATOM	204	CA	THR	18	26.155	8.009	16.446	1.00	
17.10			C						
ATOM	205	C	THR	18	27.633	7.706	16.270	1.00	
10.63			C						
ATOM	206	O	THR	18	28.120	6.682	16.741	1.00	
6.49			O						
ATOM	207	CB	THR	18	25.980	9.044	17.557	1.00	
28.52			C						
ATOM	208	CG2	THR	18	24.544	9.566	17.559	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.276	8.448	18.809	1.00	

26.49			O						
ATOM	210	HN	THR	18	25.718	6.263	17.567	1.00	
13.96			H						
ATOM	211	HA	THR	18	25.769	8.417	15.522	1.00	
26.43			H						
ATOM	212	HB	THR	18	26.654	9.869	17.386	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.994	7.529	18.773	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.368	10.132	16.655		
1.00100.44				H					
ATOM	215	HG22	THR	18	24.396	10.203	18.417		
1.00129.42				H					
ATOM	216	HG23	THR	18	23.858	8.733	17.603		
1.00156.21				H					
ATOM	217	N	VAL	19	28.340	8.606	15.602	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.755	8.444	15.374	1.00	
13.34			C						
ATOM	219	C	VAL	19	30.268	9.621	14.572	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.846	9.875	13.445	1.00	
42.11			O						
ATOM	221	CB	VAL	19	30.068	7.141	14.642	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	29.181	7.004	13.399	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.544	7.146	14.222	1.00	
20.67			C						
ATOM	224	HN	VAL	19	27.907	9.412	15.267	1.00	
26.89			H						
ATOM	225	HA	VAL	19	30.256	8.431	16.331	1.00	
8.08			H						
ATOM	226	HB	VAL	19	29.888	6.312	15.306	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	29.253	5.995	13.017		
1.00137.43				H					
ATOM	228	HG12	VAL	19	29.511	7.698	12.642	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	28.156	7.215	13.660		
1.00108.69				H					
ATOM	230	HG21	VAL	19	31.855	6.144	13.973	1.00	
99.42			H						
ATOM	231	HG22	VAL	19	32.149	7.521	15.040		
1.00111.36				H					
ATOM	232	HG23	VAL	19	31.670	7.789	13.364	1.00	
77.11			H						
ATOM	233	N	PHE	20	31.172	10.331	15.191	1.00	
24.58			N						
ATOM	234	CA	PHE	20	31.780	11.509	14.600	1.00	
40.34			C						
ATOM	235	C	PHE	20	33.133	11.174	13.985	1.00	

40.37			C					
ATOM	236	O	PHE	20	33.325	11.312	12.777	1.00
66.02			O					
ATOM	237	CB	PHE	20	31.942	12.596	15.680	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.118	11.976	17.060	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.068	11.254	17.667	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.329	12.140	17.747	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.243	10.705	18.941	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.498	11.586	19.021	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.455	10.869	19.617	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.429	10.061	16.087	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.135	11.892	13.818	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.070	13.206	15.685	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.798	13.217	15.453	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.127	11.112	17.152	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.137	12.692	17.290	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.439	10.154	19.401	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.434	11.712	19.545	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.587	10.443	20.602	1.00
52.66			H					
ATOM	253	N	GLU	21	34.077	10.769	14.825	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.415	10.457	14.373	1.00
56.16			C					
ATOM	255	C	GLU	21	35.695	8.961	14.449	1.00
58.61			C					
ATOM	256	O	GLU	21	34.802	8.160	14.722	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.370	11.219	15.263	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.278	10.677	16.687	
1.00193.56			C					
ATOM	259	CD	GLU	21	37.025	11.601	17.644	
1.00304.62			C					
ATOM	260	OE1	GLU	21	37.664	12.524	17.167	
1.00451.81			O					
ATOM	261	OE2	GLU	21	36.942	11.376	18.840	

1.00442.88				O1-					
ATOM	262	HN	GLU	21	33.886	10.705	15.781	1.00	
50.82			H						
ATOM	263	HA	GLU	21	35.551	10.791	13.353	1.00	
85.72			H						
ATOM	264	HB1	GLU	21	36.087	12.260	15.262	1.00	
46.37			H						
ATOM	265	HB2	GLU	21	37.369	11.110	14.896		
1.00131.81				H					
ATOM	266	HG1	GLU	21	36.716	9.696	16.722		
1.00314.91				H					
ATOM	267	HG2	GLU	21	35.244	10.613	16.980		
1.00266.92				H					
ATOM	268	N	GLY	22	36.946	8.598	14.190	1.00	
86.70			N						
ATOM	269	CA	GLY	22	37.359	7.191	14.209		
1.00104.66				C					
ATOM	270	C	GLY	22	37.944	6.788	15.562	1.00	
71.50			C						
ATOM	271	O	GLY	22	38.152	5.603	15.824	1.00	
89.87			O						
ATOM	272	HN	GLY	22	37.606	9.292	13.973		
1.00214.64				H					
ATOM	273	HA1	GLY	22	38.107	7.036	13.446		
1.00152.47				H					
ATOM	274	HA2	GLY	22	36.504	6.564	13.995		
1.00118.15				H					
ATOM	275	N	ASP	23	38.216	7.770	16.411	1.00	
44.68			N						
ATOM	276	CA	ASP	23	38.789	7.489	17.726	1.00	
43.33			C						
ATOM	277	C	ASP	23	37.852	6.618	18.554	1.00	
37.55			C						
ATOM	278	O	ASP	23	38.296	5.717	19.266	1.00	
61.37			O						
ATOM	279	CB	ASP	23	39.058	8.796	18.475	1.00	
40.74			C						
ATOM	280	CG	ASP	23	40.222	9.540	17.827		
1.00141.86				C					
ATOM	281	OD1	ASP	23	40.920	8.931	17.032		
1.00328.18				O					
ATOM	282	OD2	ASP	23	40.398	10.706	18.135		
1.00304.58				O1-					
ATOM	283	HN	ASP	23	38.041	8.697	16.149	1.00	
40.86			H						
ATOM	284	HA	ASP	23	39.721	6.968	17.593	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	39.306	8.573	19.501	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	38.175	9.414	18.448	1.00	
93.26			H						
ATOM	287	N	MET	24	36.557	6.897	18.464	1.00	

23.24			N						
ATOM	288	CA	MET	24	35.569	6.133	19.220	1.00	
32.50			C						
ATOM	289	C	MET	24	34.182	6.265	18.597	1.00	
25.13			C						
ATOM	290	O	MET	24	33.950	7.118	17.742	1.00	
54.40			O						
ATOM	291	CB	MET	24	35.531	6.622	20.670	1.00	
47.36			C						
ATOM	292	CG	MET	24	35.113	8.094	20.707		
1.00151.73			C						
ATOM	293	SD	MET	24	35.199	8.710	22.409		
1.00209.23			S						
ATOM	294	CE	MET	24	33.783	7.799	23.075		
1.00243.29			C						
ATOM	295	HN	MET	24	36.264	7.629	17.885	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.853	5.090	19.214	1.00	
48.94			H						
ATOM	297	HB1	MET	24	36.512	6.519	21.110		
1.00124.40			H						
ATOM	298	HB2	MET	24	34.821	6.031	21.230		
1.00166.96			H						
ATOM	299	HG1	MET	24	34.102	8.194	20.339		
1.00331.71			H						
ATOM	300	HG2	MET	24	35.778	8.673	20.082		
1.00302.30			H						
ATOM	301	HE1	MET	24	33.432	8.289	23.972		
1.00340.44			H						
ATOM	302	HE2	MET	24	34.080	6.791	23.313		
1.00373.88			H						
ATOM	303	HE3	MET	24	32.991	7.773	22.338		
1.00386.81			H						
ATOM	304	N	VAL	25	33.260	5.407	19.041	1.00	
22.44			N						
ATOM	305	CA	VAL	25	31.884	5.417	18.537	1.00	
15.37			C						
ATOM	306	C	VAL	25	30.895	5.600	19.683	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.096	5.093	20.786	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.577	4.107	17.801	1.00	
23.36			C						
ATOM	309	CG1	VAL	25	30.078	4.046	17.451	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.409	4.045	16.515	1.00	
55.25			C						
ATOM	311	HN	VAL	25	33.511	4.753	19.726	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.758	6.242	17.843	1.00	
9.25			H						
ATOM	313	HB	VAL	25	31.831	3.271	18.436	1.00	

52.45			H							
ATOM	314	HG11	VAL	25	29.720	5.037	17.209			
1.00171.07			H							
ATOM	315	HG12	VAL	25	29.527	3.668	18.298			
1.00166.22			H							
ATOM	316	HG13	VAL	25	29.924	3.391	16.604			
1.00134.76			H							
ATOM	317	HG21	VAL	25	32.089	3.202	15.920			
1.00141.88			H							
ATOM	318	HG22	VAL	25	33.453	3.933	16.766			
1.00184.50			H							
ATOM	319	HG23	VAL	25	32.268	4.956	15.951			
1.00133.90			H							
ATOM	320	N	THR	26	29.827	6.343	19.405	1.00		
13.60			N							
ATOM	321	CA	THR	26	28.790	6.623	20.397	1.00		
21.19			C							
ATOM	322	C	THR	26	27.440	6.062	19.951	1.00		
16.55			C							
ATOM	323	O	THR	26	27.048	6.207	18.793	1.00		
11.43			O							
ATOM	324	CB	THR	26	28.682	8.135	20.580	1.00		
27.07			C							
ATOM	325	CG2	THR	26	27.555	8.464	21.563	1.00		
44.39			C							
ATOM	326	OG1	THR	26	29.914	8.629	21.084	1.00		
34.75			O							
ATOM	327	HN	THR	26	29.735	6.721	18.506	1.00		
10.81			H							
ATOM	328	HA	THR	26	29.058	6.177	21.344	1.00		
33.16			H							
ATOM	329	HB	THR	26	28.473	8.591	19.621	1.00		
20.60			H							
ATOM	330	HG1	THR	26	30.128	8.134	21.877	1.00		
77.72			H							
ATOM	331	HG21	THR	26	27.592	9.515	21.811			
1.00126.99			H							
ATOM	332	HG22	THR	26	27.681	7.878	22.462			
1.00108.32			H							
ATOM	333	HG23	THR	26	26.602	8.234	21.115			
1.00151.99			H							
ATOM	334	N	ARG	27	26.735	5.421	20.883	1.00		
22.38			N							
ATOM	335	CA	ARG	27	25.422	4.836	20.591	1.00		
20.21			C							
ATOM	336	C	ARG	27	24.492	5.016	21.787	1.00		
16.96			C							
ATOM	337	O	ARG	27	24.952	5.158	22.920	1.00		
20.06			O							
ATOM	338	CB	ARG	27	25.578	3.346	20.278	1.00		
22.14			C							
ATOM	339	CG	ARG	27	26.050	2.604	21.533			

1.00124.30				C						
ATOM	340	CD	ARG	27	26.438	1.171	21.163			
1.00109.38				C						
ATOM	341	NE	ARG	27	26.819	0.425	22.358			
1.00227.73				N						
ATOM	342	CZ	ARG	27	28.036	0.536	22.880			
1.00426.12				C						
ATOM	343	NH1	ARG	27	28.352	-0.144	23.947			
1.00767.09				N1+						
ATOM	344	NH2	ARG	27	28.915	1.325	22.325			
1.00581.78				N						
ATOM	345	HN	ARG	27	27.102	5.340	21.787	1.00		
30.75				H						
ATOM	346	HA	ARG	27	24.989	5.332	19.732	1.00		
23.13				H						
ATOM	347	HB1	ARG	27	26.306	3.216	19.492	1.00		
87.46				H						
ATOM	348	HB2	ARG	27	24.628	2.944	19.958			
1.00103.36				H						
ATOM	349	HG1	ARG	27	25.252	2.578	22.261			
1.00281.97				H						
ATOM	350	HG2	ARG	27	26.905	3.113	21.952			
1.00276.19				H						
ATOM	351	HD1	ARG	27	27.269	1.194	20.473			
1.00183.60				H						
ATOM	352	HD2	ARG	27	25.599	0.684	20.692			
1.00142.93				H						
ATOM	353	HE	ARG	27	26.165	-0.168	22.782			
1.00372.53				H						
ATOM	354	HH11	ARG	27	27.679	-0.749	24.372			
1.00910.59				H						
ATOM	355	HH12	ARG	27	29.268	-0.062	24.339			
1.00999.99				H						
ATOM	356	HH21	ARG	27	28.673	1.846	21.506			
1.00532.54				H						
ATOM	357	HH22	ARG	27	29.831	1.407	22.717			
1.00948.84				H						
ATOM	358	N	SER	28	23.180	5.017	21.535	1.00		
14.60				N						
ATOM	359	CA	SER	28	22.203	5.188	22.613	1.00		
14.92				C						
ATOM	360	C	SER	28	20.991	4.286	22.401	1.00		
12.12				C						
ATOM	361	O	SER	28	20.608	3.994	21.268	1.00		
13.41				O						
ATOM	362	CB	SER	28	21.748	6.647	22.671	1.00		
23.26				C						
ATOM	363	OG	SER	28	22.867	7.477	22.952			
1.00146.32				O						
ATOM	364	HN	SER	28	22.864	4.903	20.612	1.00		
15.23				H						
ATOM	365	HA	SER	28	22.661	4.932	23.558	1.00		

15.44			H						
ATOM	366	HB1	SER	28	20.999	6.759	23.445	1.00	
88.73			H						
ATOM	367	HB2	SER	28	21.323	6.932	21.724		
1.00124.68									H
ATOM	368	HG	SER	28	23.650	7.046	22.601		
1.00242.47									H
ATOM	369	N	CYS	29	20.385	3.861	23.505	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.207	3.005	23.446	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.617	2.840	24.845	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.266	2.293	25.738	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.567	1.633	22.850	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.152	0.968	21.957	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.731	4.139	24.378	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.471	3.479	22.814	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.836	0.941	23.639	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.397	1.739	22.171	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.394	3.324	25.037	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.742	3.232	26.340	1.00	
17.41			C						
ATOM	381	C	GLU	30	16.104	1.860	26.533	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.683	1.220	25.571	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.675	4.320	26.464	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.334	5.695	26.326		
1.00108.13									C
ATOM	385	CD	GLU	30	17.256	5.951	27.513		
1.00240.52									C
ATOM	386	OE1	GLU	30	17.084	5.294	28.526		
1.00422.56									O
ATOM	387	OE2	GLU	30	18.122	6.803	27.390		
1.00410.81									O1-
ATOM	388	HN	GLU	30	16.923	3.758	24.291	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.480	3.382	27.114	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.196	4.247	27.428	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	14.939	4.194	25.683	1.00	

56.47			H						
ATOM	392	HG1	GLU	30	15.569	6.453	26.296		
1.00196.66			H						
ATOM	393	HG2	GLU	30	16.907	5.726	25.411		
1.00140.67			H						
ATOM	394	N	LYS	31	16.036	1.417	27.787	1.00	
11.96			N						
ATOM	395	CA	LYS	31	15.447	0.117	28.116	1.00	
11.40			C						
ATOM	396	C	LYS	31	14.158	0.317	28.908	1.00	
10.99			C						
ATOM	397	O	LYS	31	14.070	1.210	29.750	1.00	
12.86			O						
ATOM	398	CB	LYS	31	16.430	-0.707	28.954	1.00	
21.40			C						
ATOM	399	CG	LYS	31	17.812	-0.737	28.284	1.00	
57.81			C						
ATOM	400	CD	LYS	31	17.749	-1.518	26.966		
1.00115.52			C						
ATOM	401	CE	LYS	31	19.171	-1.773	26.463		
1.00250.23			C						
ATOM	402	NZ	LYS	31	19.115	-2.525	25.177		
1.00462.10			N1+						
ATOM	403	HN	LYS	31	16.391	1.976	28.510	1.00	
26.13			H						
ATOM	404	HA	LYS	31	15.213	-0.423	27.209	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	16.059	-1.717	29.049	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	16.518	-0.266	29.935	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	18.519	-1.214	28.946		
1.00126.32			H						
ATOM	408	HG2	LYS	31	18.136	0.274	28.085		
1.00114.19			H						
ATOM	409	HD1	LYS	31	17.214	-0.942	26.229		
1.00198.45			H						
ATOM	410	HD2	LYS	31	17.247	-2.460	27.127		
1.00200.14			H						
ATOM	411	HE1	LYS	31	19.714	-2.352	27.195		
1.00374.64			H						
ATOM	412	HE2	LYS	31	19.672	-0.830	26.306		
1.00403.27			H						
ATOM	413	HZ1	LYS	31	18.128	-2.591	24.857		
1.00627.38			H						
ATOM	414	HZ2	LYS	31	19.500	-3.480	25.318		
1.00622.26			H						
ATOM	415	HZ3	LYS	31	19.677	-2.026	24.458		
1.00619.20			H						
ATOM	416	N	THR	32	13.162	-0.517	28.632	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.885	-0.417	29.325	1.00	

22.44			C						
ATOM	418	C	THR	32	12.035	-0.831	30.785	1.00	
26.60			C						
ATOM	419	O	THR	32	12.536	-1.915	31.088	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.847	-1.309	28.640	1.00	
56.28			C						
ATOM	421	CG2	THR	32	9.506	-1.192	29.367		
1.00102.70				C					
ATOM	422	OG1	THR	32	10.691	-0.896	27.289		
1.00111.17				O					
ATOM	423	HN	THR	32	13.287	-1.209	27.951	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.545	0.607	29.287	1.00	
19.67			H						
ATOM	425	HB	THR	32	11.178	-2.334	28.667	1.00	
84.25			H						
ATOM	426	HG1	THR	32	10.149	-1.549	26.841		
1.00205.03				H					
ATOM	427	HG21	THR	32	8.747	-1.719	28.809		
1.00220.71				H					
ATOM	428	HG22	THR	32	9.233	-0.151	29.453		
1.00174.67				H					
ATOM	429	HG23	THR	32	9.592	-1.625	30.353		
1.00217.44				H					
ATOM	430	N	THR	33	11.596	0.043	31.682	1.00	
22.47			N						
ATOM	431	CA	THR	33	11.676	-0.224	33.116	1.00	
41.60			C						
ATOM	432	C	THR	33	10.566	0.483	33.845	1.00	
38.03			C						
ATOM	433	O	THR	33	10.718	1.616	34.302	1.00	
52.73			O						
ATOM	434	CB	THR	33	13.030	0.221	33.670	1.00	
63.25			C						
ATOM	435	CG2	THR	33	14.131	-0.698	33.140		
1.00121.65				C					
ATOM	436	OG1	THR	33	13.289	1.558	33.264	1.00	
96.20			O						
ATOM	437	HN	THR	33	11.207	0.888	31.373	1.00	
23.82			H						
ATOM	438	HA	THR	33	11.548	-1.274	33.297	1.00	
67.12			H						
ATOM	439	HB	THR	33	13.011	0.169	34.748		
1.00107.59				H					
ATOM	440	HG1	THR	33	14.162	1.581	32.865		
1.00176.27				H					
ATOM	441	HG21	THR	33	15.051	-0.499	33.670		
1.00255.23				H					
ATOM	442	HG22	THR	33	14.277	-0.515	32.086		
1.00245.37				H					
ATOM	443	HG23	THR	33	13.845	-1.728	33.290		

67.53			C						
ATOM	470	CG	PHE	36	7.332	2.224	27.755	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	6.226	1.860	28.532		
1.00106.51			C						
ATOM	472	CD2	PHE	36	8.039	1.249	27.041	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	5.824	0.520	28.593		
1.00134.48			C						
ATOM	474	CE2	PHE	36	7.637	-0.090	27.101		
1.00134.27			C						
ATOM	475	CZ	PHE	36	6.529	-0.455	27.878		
1.00149.48			C						
ATOM	476	HN	PHE	36	7.119	3.924	30.126	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.562	3.232	28.745	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	8.218	3.866	26.739	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	6.896	4.308	27.810	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.683	2.613	29.085		
1.00110.20			H						
ATOM	481	HD2	PHE	36	8.892	1.530	26.443	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	4.971	0.238	29.191		
1.00155.06			H						
ATOM	483	HE2	PHE	36	8.181	-0.842	26.550		
1.00159.46			H						
ATOM	484	HZ	PHE	36	6.220	-1.488	27.924		
1.00183.25			H						
ATOM	485	N	THR	37	10.486	5.443	27.961	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.147	6.724	27.722	1.00	
27.18			C						
ATOM	487	C	THR	37	11.489	6.863	26.244	1.00	
41.87			C						
ATOM	488	O	THR	37	10.756	6.387	25.377		
1.00169.86			O						
ATOM	489	CB	THR	37	12.428	6.813	28.555	1.00	
26.52			C						
ATOM	490	CG2	THR	37	12.108	6.511	30.019	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.373	5.869	28.071	1.00	
81.95			O						
ATOM	492	HN	THR	37	10.902	4.627	27.617	1.00	
18.47			H						
ATOM	493	HA	THR	37	10.488	7.533	28.005	1.00	
38.80			H						
ATOM	494	HB	THR	37	12.840	7.807	28.479	1.00	
81.60			H						
ATOM	495	HG1	THR	37	13.814	5.477	28.827		

1.00188.80				H					
ATOM	496	HG21	THR		37	11.717	5.509	30.103	
1.00196.98				H					
ATOM	497	HG22	THR		37	11.372	7.217	30.380	
1.00196.23				H					
ATOM	498	HG23	THR		37	13.008	6.597	30.609	
1.00168.92				H					
ATOM	499	N	GLU		38	12.607	7.518	25.964	1.00
26.53			N						
ATOM	500	CA	GLU		38	13.041	7.717	24.585	1.00
30.29			C						
ATOM	501	C	GLU		38	14.526	8.064	24.528	1.00
25.39			C						
ATOM	502	O	GLU		38	15.085	8.604	25.482	1.00
51.60			O						
ATOM	503	CB	GLU		38	12.224	8.838	23.939	1.00
54.82			C						
ATOM	504	CG	GLU		38	12.438	10.142	24.711	
1.00165.84				C					
ATOM	505	CD	GLU		38	11.538	11.236	24.149	
1.00292.92				C					
ATOM	506	OE1	GLU		38	11.592	12.342	24.660	
1.00414.19				O					
ATOM	507	OE2	GLU		38	10.805	10.951	23.215	
1.00537.65				O1-					
ATOM	508	HN	GLU		38	13.149	7.872	26.698	1.00
84.50			H						
ATOM	509	HA	GLU		38	12.875	6.805	24.032	1.00
32.15			H						
ATOM	510	HB1	GLU		38	11.177	8.579	23.960	
1.00144.82				H					
ATOM	511	HB2	GLU		38	12.541	8.969	22.915	
1.00106.49				H					
ATOM	512	HG1	GLU		38	13.471	10.447	24.619	
1.00303.31				H					
ATOM	513	HG2	GLU		38	12.203	9.984	25.754	
1.00323.99				H					
ATOM	514	N	CYS		39	15.153	7.758	23.397	1.00
15.84			N						
ATOM	515	CA	CYS		39	16.571	8.046	23.216	1.00
14.30			C						
ATOM	516	C	CYS		39	16.799	9.561	23.179	1.00
22.31			C						
ATOM	517	O	CYS		39	15.920	10.306	22.746	1.00
32.92			O						
ATOM	518	CB	CYS		39	17.054	7.416	21.906	1.00
18.08			C						
ATOM	519	SG	CYS		39	15.973	7.940	20.552	1.00
17.41			S						
ATOM	520	HN	CYS		39	14.653	7.335	22.669	1.00
24.87			H						
ATOM	521	HA	CYS		39	17.118	7.611	24.036	1.00

14.60			H					
ATOM	522	HB1	CYS	39	17.028	6.339	21.991	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.064	7.735	21.702	1.00
34.91			H					
ATOM	524	N	PRO	40	17.942	10.038	23.618	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.244	11.497	23.619	1.00
47.66			C					
ATOM	526	C	PRO	40	18.555	12.014	22.216	1.00
71.54			C					
ATOM	527	O	PRO	40	19.289	11.383	21.456	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.465	11.607	24.538	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.170	10.301	24.375	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.073	9.255	24.154	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.420	12.048	24.043	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.153	11.733	25.565	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.102	12.429	24.234	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.732	10.061	25.266	1.00
65.91			H					
ATOM	535	HG2	PRO	40	20.831	10.341	23.516	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.794	8.791	25.088	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.396	8.515	23.439	1.00
26.94			H					
ATOM	538	N	GLY	41	17.992	13.168	21.888	
1.00105.24				N				
ATOM	539	CA	GLY	41	18.210	13.773	20.580	
1.00147.55				C				
ATOM	540	C	GLY	41	19.679	14.134	20.383	
1.00161.74				C				
ATOM	541	O	GLY	41	20.234	13.957	19.298	
1.00244.37				O				
ATOM	542	HN	GLY	41	17.421	13.621	22.539	
1.00121.79				H				
ATOM	543	HA1	GLY	41	17.615	14.670	20.499	
1.00184.40				H				
ATOM	544	HA2	GLY	41	17.911	13.078	19.814	
1.00157.34				H				
ATOM	545	N	LEU	42	20.299	14.643	21.444	
1.00162.48				N				
ATOM	546	CA	LEU	42	21.710	15.039	21.400	
1.00191.48				C				
ATOM	547	C	LEU	42	22.556	14.092	22.244	

1.00166.66				C				
ATOM	548	O	LEU	42	22.113	13.608	23.286	
1.00251.38				O				
ATOM	549	CB	LEU	42	21.862	16.465	21.936	
1.00307.99				C				
ATOM	550	CG	LEU	42	20.951	17.420	21.156	
1.00452.28				C				
ATOM	551	CD1	LEU	42	21.081	18.830	21.743	
1.00681.24				C				
ATOM	552	CD2	LEU	42	21.353	17.440	19.672	
1.00527.46				C				
ATOM	553	HN	LEU	42	19.796	14.759	22.276	
1.00195.47				H				
ATOM	554	HA	LEU	42	22.068	15.010	20.380	
1.00229.77				H				
ATOM	555	HB1	LEU	42	22.889	16.782	21.825	
1.00342.49				H				
ATOM	556	HB2	LEU	42	21.593	16.485	22.983	
1.00335.33				H				
ATOM	557	HG	LEU	42	19.926	17.089	21.250	
1.00427.79				H				
ATOM	558	HD11	LEU	42	20.608	18.860	22.713	
1.00909.71				H				
ATOM	559	HD12	LEU	42	20.598	19.538	21.086	
1.00706.80				H				
ATOM	560	HD13	LEU	42	22.125	19.084	21.842	
1.00858.82				H				
ATOM	561	HD21	LEU	42	21.008	18.357	19.213	
1.00631.69				H				
ATOM	562	HD22	LEU	42	20.902	16.600	19.165	
1.00628.06				H				
ATOM	563	HD23	LEU	42	22.429	17.377	19.584	
1.00656.75				H				
ATOM	564	N	THR	43	23.777	13.831	21.787	
1.00178.52				N				
ATOM	565	CA	THR	43	24.679	12.940	22.509	
1.00240.84				C				
ATOM	566	C	THR	43	25.145	13.598	23.814	
1.00372.31				C				
ATOM	567	O	THR	43	25.250	14.822	23.886	
1.00500.13				O				
ATOM	568	CB	THR	43	25.887	12.619	21.623	
1.00354.13				C				
ATOM	569	CG2	THR	43	25.417	11.899	20.359	
1.00463.04				C				
ATOM	570	OG1	THR	43	26.543	13.828	21.266	
1.00508.50				O				
ATOM	571	HN	THR	43	24.075	14.246	20.951	
1.00229.59				H				
ATOM	572	HA	THR	43	24.153	12.026	22.727	
1.00249.90				H				
ATOM	573	HB	THR	43	26.572	11.984	22.159	

1.00481.58				H				
ATOM	574	HG1	THR	H	43	25.914	14.546	21.363
1.00624.31				H				
ATOM	575	HG21	THR	H	43	25.105	10.897	20.610
1.00650.95				H				
ATOM	576	HG22	THR	H	43	26.228	11.856	19.647
1.00580.73				H				
ATOM	577	HG23	THR	H	43	24.586	12.437	19.925
1.00571.99				H				
ATOM	578	N	PRO	N	44	25.423	12.825	24.845
1.00488.39				N				
ATOM	579	CA	PRO	N	44	25.880	13.376	26.158
1.00760.13				C				
ATOM	580	C	PRO	C	44	27.335	13.845	26.119
1.00735.36				C				
ATOM	581	O	PRO	C	44	27.815	14.484	27.054
1.00999.99				O				
ATOM	582	CB	PRO	O	44	25.702	12.193	27.116
1.00999.99				C				
ATOM	583	CG	PRO	C	44	25.908	10.989	26.261
1.00856.94				C				
ATOM	584	CD	PRO	C	44	25.336	11.348	24.886
1.00548.09				C				
ATOM	585	HA	PRO	C	44	25.238	14.187	26.465
1.00939.00				H				
ATOM	586	HB1	PRO	H	44	24.703	12.187	27.527
1.00999.99				H				
ATOM	587	HB2	PRO	H	44	26.438	12.231	27.913
1.00999.99				H				
ATOM	588	HG1	PRO	H	44	25.380	10.140	26.668
1.00999.99				H				
ATOM	589	HG2	PRO	H	44	26.967	10.767	26.181
1.00853.53				H				
ATOM	590	HD1	PRO	H	44	24.306	11.034	24.810
1.00602.45				H				
ATOM	591	HD2	PRO	H	44	25.932	10.905	24.101
1.00463.32				H				
ATOM	592	N	ILE	N	45	28.035	13.512	25.039
1.00518.33				N				
ATOM	593	CA	ILE	N	45	29.436	13.898	24.906
1.00582.79				C				
ATOM	594	C	ILE	C	45	29.603	15.400	25.119
1.00795.93				C				
ATOM	595	O	ILE	C	45	30.638	15.855	25.609
1.00898.75				O				
ATOM	596	CB	ILE	O	45	29.958	13.509	23.518
1.00474.41				C				
ATOM	597	CG1	ILE	C	45	31.482	13.669	23.479
1.00516.90				C				
ATOM	598	CG2	ILE	C	45	29.323	14.412	22.453
1.00760.75				C				
ATOM	599	CD1	ILE	C	45	32.027	13.045	22.193

1.00566.81				C				
ATOM	600	HN	ILE		45	27.607	12.995	24.326
1.00395.72				H				
ATOM	601	HA	ILE		45	30.010	13.372	25.653
1.00711.06				H				
ATOM	602	HB	ILE		45	29.697	12.481	23.314
1.00477.81				H				
ATOM	603	HG11	ILE		45	31.919	13.170	24.331
1.00624.28				H				
ATOM	604	HG12	ILE		45	31.734	14.719	23.506
1.00744.84				H				
ATOM	605	HG21	ILE		45	29.813	15.375	22.453
1.00920.57				H				
ATOM	606	HG22	ILE		45	28.275	14.545	22.671
1.00999.99				H				
ATOM	607	HG23	ILE		45	29.432	13.953	21.481
1.00865.46				H				
ATOM	608	HD11	ILE		45	31.788	11.991	22.175
1.00658.89				H				
ATOM	609	HD12	ILE		45	33.099	13.171	22.159
1.00734.30				H				
ATOM	610	HD13	ILE		45	31.579	13.530	21.338
1.00675.84				H				
ATOM	611	N	ALA		46	28.582	16.164	24.752
1.00999.99				N				
ATOM	612	CA	ALA		46	28.628	17.613	24.908
1.00999.99				C				
ATOM	613	C	ALA		46	27.240	18.219	24.716
1.00999.99				C				
ATOM	614	CB	ALA		46	29.596	18.219	23.891
1.00999.99				C				
ATOM	615	OT1	ALA		46	26.302	17.458	24.545
1.00999.99				O				
ATOM	616	OT2	ALA		46	27.137	19.433	24.743
1.00999.99				O				
ATOM	617	HN	ALA		46	27.781	15.746	24.368
1.00999.99				H				
ATOM	618	HA	ALA		46	28.976	17.847	25.903
1.00999.99				H				
ATOM	619	HB1	ALA		46	30.502	17.632	23.864
1.00999.99				H				
ATOM	620	HB2	ALA		46	29.832	19.233	24.177
1.00999.99				H				
ATOM	621	HB3	ALA		46	29.137	18.217	22.914
1.00999.99				H				
ENDMDL								
TER								
MODEL		3						
ATOM	1	N	GLY		1	26.201	-3.594	19.145
1.00999.99				N				
ATOM	2	CA	GLY		1	24.825	-3.158	19.516
1.00999.99				C				

ATOM	3	C	GLY	1	24.307	-2.166	18.480
1.00999.99			C				
ATOM	4	O	GLY	1	23.805	-1.097	18.828
1.00999.99			O				
ATOM	5	HA1	GLY	1	24.845	-2.684	20.485
1.00999.99			H				
ATOM	6	HA2	GLY	1	24.172	-4.020	19.549
1.00999.99			H				
ATOM	7	HT1	GLY	1	26.784	-2.759	18.935
1.00999.99			H				
ATOM	8	HT2	GLY	1	26.155	-4.206	18.305
1.00999.99			H				
ATOM	9	HT3	GLY	1	26.623	-4.119	19.936
1.00999.99			H				
ATOM	10	N	LEU	2	24.434	-2.527	17.208
1.00999.99			N				
ATOM	11	CA	LEU	2	23.976	-1.659	16.128
1.00895.59			C				
ATOM	12	C	LEU	2	22.451	-1.629	16.084
1.00532.27			C				
ATOM	13	O	LEU	2	21.790	-2.600	16.451
1.00625.21			O				
ATOM	14	CB	LEU	2	24.517	-2.161	14.787
1.00999.99			C				
ATOM	15	CG	LEU	2	26.050	-2.195	14.820
1.00999.99			C				
ATOM	16	CD1	LEU	2	26.567	-2.786	13.504
1.00999.99			C				
ATOM	17	CD2	LEU	2	26.611	-0.771	15.003
1.00999.99			C				
ATOM	18	HN	LEU	2	24.842	-3.391	16.990
1.00999.99			H				
ATOM	19	HA	LEU	2	24.338	-0.660	16.303
1.00890.87			H				
ATOM	20	HB1	LEU	2	24.192	-1.499	13.999
1.00924.07			H				
ATOM	21	HB2	LEU	2	24.140	-3.156	14.598
1.00999.99			H				
ATOM	22	HG	LEU	2	26.375	-2.818	15.642
1.00999.99			H				
ATOM	23	HD11	LEU	2	26.220	-3.803	13.405
1.00999.99			H				
ATOM	24	HD12	LEU	2	27.647	-2.773	13.504
1.00999.99			H				
ATOM	25	HD13	LEU	2	26.200	-2.197	12.677
1.00999.99			H				
ATOM	26	HD21	LEU	2	26.632	-0.525	16.055
1.00999.99			H				
ATOM	27	HD22	LEU	2	25.985	-0.061	14.481
1.00999.99			H				
ATOM	28	HD23	LEU	2	27.616	-0.719	14.606
1.00999.99			H				

ATOM	29	N	CYS	3	21.898	-0.503	15.637	
1.00271.28			N					
ATOM	30	CA	CYS	3	20.447	-0.355	15.555	
1.00104.50			C					
ATOM	31	C	CYS	3	19.917	-0.937	14.249	1.00
90.98			C					
ATOM	32	O	CYS	3	20.058	-0.335	13.186	
1.00207.28			O					
ATOM	33	CB	CYS	3	20.070	1.127	15.635	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.561	1.791	17.245	1.00
81.56			S					
ATOM	35	HN	CYS	3	22.475	0.239	15.361	
1.00296.55			H					
ATOM	36	HA	CYS	3	19.990	-0.873	16.384	
1.00166.45			H					
ATOM	37	HB1	CYS	3	19.003	1.233	15.512	1.00
40.38			H					
ATOM	38	HB2	CYS	3	20.578	1.670	14.853	1.00
98.45			H					
ATOM	39	N	SER	4	19.294	-2.107	14.341	1.00
85.31			N					
ATOM	40	CA	SER	4	18.733	-2.757	13.163	1.00
92.94			C					
ATOM	41	C	SER	4	17.648	-1.881	12.564	1.00
67.37			C					
ATOM	42	O	SER	4	17.543	-1.731	11.347	
1.00102.28			O					
ATOM	43	CB	SER	4	18.103	-4.092	13.549	
1.00123.83			C					
ATOM	44	OG	SER	4	17.674	-4.766	12.374	
1.00178.89			O					
ATOM	45	HN	SER	4	19.204	-2.538	15.217	
1.00163.03			H					
ATOM	46	HA	SER	4	19.509	-2.924	12.434	
1.00129.78			H					
ATOM	47	HB1	SER	4	17.251	-3.905	14.195	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.823	-4.702	14.070	
1.00156.87			H					
ATOM	49	HG	SER	4	18.434	-5.213	11.992	
1.00218.16			H					
ATOM	50	N	GLU	5	16.826	-1.325	13.448	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.715	-0.476	13.046	1.00
41.21			C					
ATOM	52	C	GLU	5	15.537	0.666	14.040	1.00
41.92			C					
ATOM	53	O	GLU	5	16.369	0.864	14.924	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.442	-1.315	12.987	1.00
49.24			C					

ATOM	55	CG	GLU	5	14.181	-1.911	14.362	1.00
55.48			C					
ATOM	56	CD	GLU	5	13.071	-2.955	14.280	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.569	-3.171	13.189	
1.00206.49			O					
ATOM	58	OE2	GLU	5	12.741	-3.522	15.308	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	16.963	-1.507	14.402	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.907	-0.069	12.073	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.566	-2.110	12.268	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.615	-0.694	12.699	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.884	-1.127	15.043	1.00
58.03			H					
ATOM	64	HG2	GLU	5	15.086	-2.371	14.719	1.00
57.77			H					
ATOM	65	N	ASN	6	14.449	1.415	13.893	1.00
50.73			N					
ATOM	66	CA	ASN	6	14.183	2.533	14.790	1.00
71.04			C					
ATOM	67	C	ASN	6	14.064	2.039	16.228	1.00
65.17			C					
ATOM	68	O	ASN	6	14.548	2.684	17.160	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.889	3.238	14.380	1.00
94.83			C					
ATOM	70	CG	ASN	6	13.103	4.003	13.079	
1.00160.94			C					
ATOM	71	ND2	ASN	6	12.071	4.337	12.353	
1.00244.88			N					
ATOM	72	OD1	ASN	6	14.238	4.307	12.716	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.817	1.213	13.171	1.00
72.81			H					
ATOM	74	HA	ASN	6	15.000	3.236	14.726	1.00
96.02			H					
ATOM	75	HB1	ASN	6	12.596	3.927	15.157	
1.00111.09			H					
ATOM	76	HB2	ASN	6	12.110	2.502	14.241	1.00
98.13			H					
ATOM	77	HD21	ASN	6	11.167	4.096	12.645	
1.00272.43			H					
ATOM	78	HD22	ASN	6	12.201	4.829	11.516	
1.00336.78			H					
ATOM	79	N	GLY	7	13.421	0.885	16.402	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.240	0.291	17.730	1.00
71.47			C					

ATOM	81	C	GLY	7	13.916	-1.071	17.805	1.00
41.04			C					
ATOM	82	O	GLY	7	13.260	-2.094	17.998	1.00
44.54			O					
ATOM	83	HN	GLY	7	13.062	0.416	15.619	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.191	0.168	17.920	
1.00103.52								H
ATOM	85	HA2	GLY	7	13.665	0.940	18.485	
1.00108.67								H
ATOM	86	N	ASP	8	15.232	-1.072	17.644	1.00
27.00			N					
ATOM	87	CA	ASP	8	15.997	-2.313	17.687	1.00
14.15			C					
ATOM	88	C	ASP	8	15.841	-2.997	19.039	1.00
9.37			C					
ATOM	89	O	ASP	8	15.601	-4.203	19.114	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.476	-2.025	17.425	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.262	-3.331	17.391	1.00
21.22			C					
ATOM	92	OD1	ASP	8	17.680	-4.357	17.697	
1.00119.56								O
ATOM	93	OD2	ASP	8	19.436	-3.284	17.060	
1.00133.27								O1-
ATOM	94	HN	ASP	8	15.693	-0.226	17.488	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.631	-2.975	16.921	1.00
20.92			H					
ATOM	96	HB1	ASP	8	17.862	-1.396	18.212	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.579	-1.519	16.476	1.00
44.14			H					
ATOM	98	N	CYS	9	15.976	-2.220	20.104	1.00
5.93			N					
ATOM	99	CA	CYS	9	15.843	-2.762	21.450	1.00
7.54			C					
ATOM	100	C	CYS	9	14.431	-3.297	21.668	1.00
14.60			C					
ATOM	101	O	CYS	9	14.237	-4.366	22.245	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.152	-1.680	22.476	1.00
6.63			C					
ATOM	103	SG	CYS	9	17.917	-1.330	22.415	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.162	-1.268	19.980	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.556	-3.559	21.575	1.00
11.12			H					
ATOM	106	HB1	CYS	9	15.891	-2.028	23.463	1.00
11.28			H					

ATOM	107	HB2	CYS	9	15.593	-0.786	22.245	1.00
5.04		H						
ATOM	108	N	ALA	10	13.456	-2.539	21.183	1.00
16.26		N						
ATOM	109	CA	ALA	10	12.053	-2.919	21.301	1.00
32.04		C						
ATOM	110	C	ALA	10	11.193	-1.966	20.473	1.00
45.47		C						
ATOM	111	O	ALA	10	11.649	-0.890	20.087	
1.00119.04		O						
ATOM	112	CB	ALA	10	11.613	-2.889	22.772	1.00
30.10		C						
ATOM	113	HN	ALA	10	13.686	-1.704	20.729	1.00
12.81		H						
ATOM	114	HA	ALA	10	11.929	-3.922	20.918	1.00
47.14		H						
ATOM	115	HB1	ALA	10	10.772	-3.555	22.909	1.00
84.37		H						
ATOM	116	HB2	ALA	10	11.323	-1.886	23.048	
1.00118.20		H						
ATOM	117	HB3	ALA	10	12.430	-3.212	23.398	
1.00117.32		H						
ATOM	118	N	ALA	11	9.953	-2.360	20.198	1.00
30.62		N						
ATOM	119	CA	ALA	11	9.066	-1.514	19.409	1.00
35.24		C						
ATOM	120	C	ALA	11	8.855	-0.171	20.103	1.00
22.78		C						
ATOM	121	O	ALA	11	8.935	0.884	19.472	1.00
53.33		O						
ATOM	122	CB	ALA	11	7.717	-2.209	19.216	1.00
60.49		C						
ATOM	123	HN	ALA	11	9.635	-3.227	20.526	1.00
50.37		H						
ATOM	124	HA	ALA	11	9.511	-1.343	18.442	1.00
41.70		H						
ATOM	125	HB1	ALA	11	7.837	-3.048	18.546	
1.00157.06		H						
ATOM	126	HB2	ALA	11	7.009	-1.510	18.795	
1.00148.83		H						
ATOM	127	HB3	ALA	11	7.352	-2.560	20.170	
1.00137.06		H						
ATOM	128	N	ASP	12	8.596	-0.214	21.406	1.00
18.98		N						
ATOM	129	CA	ASP	12	8.389	1.006	22.177	1.00
31.05		C						
ATOM	130	C	ASP	12	9.705	1.760	22.347	1.00
22.98		C						
ATOM	131	O	ASP	12	9.742	2.991	22.299	1.00
37.14		O						
ATOM	132	CB	ASP	12	7.810	0.664	23.552	1.00
48.35		C						

ATOM	133	CG	ASP	12	6.366	0.193	23.406	
1.00104.83				C				
ATOM	134	OD1	ASP	12	5.844	-0.355	24.362	
1.00258.73				O				
ATOM	135	OD2	ASP	12	5.805	0.388	22.341	
1.00213.46				O1-				
ATOM	136	HN	ASP	12	8.551	-1.083	21.858	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.688	1.638	21.652	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.837	1.543	24.179	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.400	-0.118	24.004	1.00
54.37			H					
ATOM	140	N	GLU	13	10.780	1.008	22.555	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.103	1.597	22.742	1.00
12.01			C					
ATOM	142	C	GLU	13	12.686	2.038	21.403	1.00
10.07			C					
ATOM	143	O	GLU	13	12.300	1.521	20.354	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.025	0.565	23.395	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.510	0.242	24.800	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.174	-1.026	25.327	
1.00142.36				C				
ATOM	147	OE1	GLU	13	12.985	-1.329	26.492	
1.00339.06				O				
ATOM	148	OE2	GLU	13	13.853	-1.678	24.553	
1.00335.28				O1-				
ATOM	149	HN	GLU	13	10.682	0.033	22.588	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.020	2.452	23.394	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.024	0.968	23.463	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.040	-0.334	22.797	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.440	0.098	24.766	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.738	1.065	25.462	1.00
56.23			H					
ATOM	155	N	CYS	14	13.619	2.993	21.441	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.253	3.493	20.214	1.00
10.69			C					
ATOM	157	C	CYS	14	15.695	3.003	20.129	1.00
9.56			C					
ATOM	158	O	CYS	14	16.223	2.441	21.087	1.00
13.62			O					

ATOM	159	CB	CYS	14	14.216	5.036	20.181	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.628	5.728	21.087	1.00
42.96			S					
ATOM	161	HN	CYS	14	13.892	3.365	22.308	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.713	3.119	19.353	1.00
15.54			H					
ATOM	163	HB1	CYS	14	13.297	5.378	20.637	1.00
50.72			H					
ATOM	164	HB2	CYS	14	14.252	5.373	19.156	1.00
46.13			H					
ATOM	165	N	CYS	15	16.329	3.231	18.984	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.714	2.820	18.789	1.00
9.28			C					
ATOM	167	C	CYS	15	18.346	3.680	17.706	1.00
9.92			C					
ATOM	168	O	CYS	15	17.800	3.812	16.611	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.777	1.346	18.382	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.471	0.731	18.576	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.859	3.693	18.258	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.260	2.956	19.712	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.473	1.243	17.351	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.113	0.771	19.011	1.00
27.31			H					
ATOM	175	N	VAL	16	19.494	4.273	18.014	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.179	5.127	17.049	1.00
11.99			C					
ATOM	177	C	VAL	16	21.681	5.100	17.290	1.00
7.73			C					
ATOM	178	O	VAL	16	22.147	5.296	18.413	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.653	6.559	17.167	1.00
18.37			C					
ATOM	180	CG1	VAL	16	19.852	7.065	18.597	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.413	7.460	16.195	
1.00115.21			C					
ATOM	182	HN	VAL	16	19.886	4.141	18.904	1.00
9.76			H					
ATOM	183	HA	VAL	16	19.982	4.764	16.050	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.600	6.573	16.925	1.00
52.63			H					

ATOM	185	HG11	VAL	16	19.279	7.970	18.740	
1.00128.07								H
ATOM	186	HG12	VAL	16	20.897	7.271	18.762	
1.00154.13								H
ATOM	187	HG13	VAL	16	19.514	6.314	19.296	
1.00135.74								H
ATOM	188	HG21	VAL	16	20.456	6.988	15.225	
1.00229.05								H
ATOM	189	HG22	VAL	16	21.415	7.620	16.561	
1.00261.82								H
ATOM	190	HG23	VAL	16	19.904	8.408	16.112	
1.00210.07								H
ATOM	191	N	ASP	17	22.439	4.846	16.225	1.00
14.34			N					
ATOM	192	CA	ASP	17	23.896	4.782	16.321	1.00
11.90			C					
ATOM	193	C	ASP	17	24.525	6.123	15.963	1.00
13.15			C					
ATOM	194	O	ASP	17	24.364	6.620	14.848	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.428	3.707	15.373	1.00
20.80			C					
ATOM	196	CG	ASP	17	24.057	2.322	15.893	1.00
28.72			C					
ATOM	197	OD1	ASP	17	24.166	1.376	15.130	
1.00135.42								O
ATOM	198	OD2	ASP	17	23.668	2.228	17.046	
1.00114.17								O1-
ATOM	199	HN	ASP	17	22.009	4.691	15.358	1.00
28.29			H					
ATOM	200	HA	ASP	17	24.178	4.522	17.332	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.505	3.787	15.310	1.00
22.42			H					
ATOM	202	HB2	ASP	17	24.000	3.849	14.393	1.00
29.52			H					
ATOM	203	N	THR	18	25.262	6.695	16.913	1.00
11.55			N					
ATOM	204	CA	THR	18	25.941	7.972	16.701	1.00
17.10			C					
ATOM	205	C	THR	18	27.430	7.732	16.494	1.00
10.63			C					
ATOM	206	O	THR	18	27.937	6.654	16.799	1.00
6.49			O					
ATOM	207	CB	THR	18	25.732	8.889	17.909	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.305	9.434	17.906	1.00
45.38			C					
ATOM	209	OG1	THR	18	25.962	8.157	19.101	1.00
26.49			O					
ATOM	210	HN	THR	18	25.361	6.240	17.776	1.00
13.96			H					

ATOM	211	HA	THR	18	25.539	8.455	15.821	1.00
26.43			H					
ATOM	212	HB	THR	18	26.425	9.715	17.856	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.276	7.491	19.178	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.193	10.149	18.707	
1.00100.44			H					
ATOM	215	HG22	THR	18	23.608	8.621	18.049	
1.00129.42			H					
ATOM	216	HG23	THR	18	24.106	9.917	16.962	
1.00156.21			H					
ATOM	217	N	VAL	19	28.124	8.748	15.985	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.543	8.657	15.745	1.00
13.34			C					
ATOM	219	C	VAL	19	30.020	9.943	15.098	1.00
25.88			C					
ATOM	220	O	VAL	19	29.578	10.328	14.016	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.894	7.461	14.853	1.00
15.48			C					
ATOM	222	CG1	VAL	19	28.976	7.428	13.628	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.354	7.588	14.393	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.675	9.585	15.780	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.047	8.540	16.694	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.777	6.549	15.420	1.00
11.49			H					
ATOM	227	HG11	VAL	19	29.123	6.501	13.094	
1.00137.43			H					
ATOM	228	HG12	VAL	19	29.210	8.257	12.979	1.00
93.29			H					
ATOM	229	HG13	VAL	19	27.946	7.499	13.946	
1.00108.69			H					
ATOM	230	HG21	VAL	19	31.428	8.359	13.639	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.688	6.650	13.981	
1.00111.36			H					
ATOM	232	HG23	VAL	19	31.972	7.859	15.240	1.00
77.11			H					
ATOM	233	N	PHE	20	30.922	10.591	15.788	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.500	11.848	15.338	1.00
40.34			C					
ATOM	235	C	PHE	20	32.850	11.620	14.668	1.00
40.37			C					
ATOM	236	O	PHE	20	33.009	11.878	13.474	1.00
66.02			O					

ATOM	237	CB	PHE	20	31.662	12.803	16.539	1.00
48.79			C					
ATOM	238	CG	PHE	20	31.848	12.018	17.826	1.00
35.75			C					
ATOM	239	CD1	PHE	20	30.799	11.235	18.340	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.069	12.076	18.511	1.00
40.95			C					
ATOM	241	CE1	PHE	20	30.977	10.517	19.526	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.244	11.356	19.698	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.200	10.576	20.205	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.200	10.213	16.638	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.835	12.310	14.617	1.00
59.91			H					
ATOM	246	HB1	PHE	20	30.784	13.403	16.623	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.514	13.451	16.386	1.00
58.17			H					
ATOM	248	HD1	PHE	20	29.851	11.183	17.821	1.00
33.34			H					
ATOM	249	HD2	PHE	20	33.876	12.677	18.122	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.173	9.915	19.914	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.188	11.401	20.222	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.336	10.020	21.120	1.00
52.66			H					
ATOM	253	N	GLU	21	33.830	11.170	15.446	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.166	10.952	14.936	1.00
56.16			C					
ATOM	255	C	GLU	21	35.490	9.467	14.831	1.00
58.61			C					
ATOM	256	O	GLU	21	34.620	8.612	15.003	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.119	11.631	15.895	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.082	10.913	17.241	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.795	11.749	18.298	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.740	11.375	19.458	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.386	12.751	17.932	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.665	11.009	16.396	1.00
50.82			H					

ATOM	263	HA	GLU	21	35.272	11.408	13.962	1.00
85.72			H					
ATOM	264	HB1	GLU	21	35.804	12.653	16.031	1.00
46.37			H					
ATOM	265	HB2	GLU	21	37.111	11.603	15.495	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.570	9.960	17.148	
1.00314.91			H					
ATOM	267	HG2	GLU	21	35.058	10.755	17.536	
1.00266.92			H					
ATOM	268	N	GLY	22	36.751	9.172	14.530	1.00
86.70			N					
ATOM	269	CA	GLY	22	37.205	7.786	14.383	
1.00104.66			C					
ATOM	270	C	GLY	22	37.822	7.247	15.672	1.00
71.50			C					
ATOM	271	O	GLY	22	38.037	6.043	15.807	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.391	9.907	14.402	
1.00214.64			H					
ATOM	273	HA1	GLY	22	37.945	7.742	13.598	
1.00152.47			H					
ATOM	274	HA2	GLY	22	36.365	7.162	14.107	
1.00118.15			H					
ATOM	275	N	ASP	23	38.112	8.139	16.614	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.713	7.726	17.880	1.00
43.33			C					
ATOM	277	C	ASP	23	37.798	6.758	18.621	1.00
37.55			C					
ATOM	278	O	ASP	23	38.256	5.768	19.192	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.967	8.950	18.762	1.00
40.74			C					
ATOM	280	CG	ASP	23	40.105	9.784	18.182	
1.00141.86			C					
ATOM	281	OD1	ASP	23	40.804	9.279	17.319	
1.00328.18			O					
ATOM	282	OD2	ASP	23	40.261	10.916	18.610	
1.00304.58			O1-					
ATOM	283	HN	ASP	23	37.928	9.086	16.453	1.00
40.86			H					
ATOM	284	HA	ASP	23	39.652	7.238	17.680	1.00
72.12			H					
ATOM	285	HB1	ASP	23	39.234	8.625	19.755	1.00
94.15			H					
ATOM	286	HB2	ASP	23	38.071	9.548	18.811	1.00
93.26			H					
ATOM	287	N	MET	24	36.508	7.054	18.605	1.00
23.24			N					
ATOM	288	CA	MET	24	35.528	6.208	19.277	1.00
32.50			C					

ATOM	289	C	MET	24	34.134	6.476	18.736	1.00
25.13			C					
ATOM	290	O	MET	24	33.890	7.501	18.100	1.00
54.40			O					
ATOM	291	CB	MET	24	35.558	6.464	20.787	1.00
47.36			C					
ATOM	292	CG	MET	24	35.186	7.921	21.071	
1.00151.73			C					
ATOM	293	SD	MET	24	35.351	8.253	22.845	
1.00209.23			S					
ATOM	294	CE	MET	24	37.156	8.143	22.954	
1.00243.29			C					
ATOM	295	HN	MET	24	36.206	7.856	18.131	1.00
17.32			H					
ATOM	296	HA	MET	24	35.771	5.172	19.094	1.00
48.94			H					
ATOM	297	HB1	MET	24	36.551	6.268	21.163	
1.00124.40			H					
ATOM	298	HB2	MET	24	34.854	5.809	21.276	
1.00166.96			H					
ATOM	299	HG1	MET	24	34.164	8.095	20.769	
1.00331.71			H					
ATOM	300	HG2	MET	24	35.840	8.576	20.515	
1.00302.30			H					
ATOM	301	HE1	MET	24	37.597	8.464	22.021	
1.00340.44			H					
ATOM	302	HE2	MET	24	37.444	7.123	23.152	
1.00373.88			H					
ATOM	303	HE3	MET	24	37.505	8.775	23.759	
1.00386.81			H					
ATOM	304	N	VAL	25	33.226	5.535	18.978	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.861	5.645	18.506	1.00
15.37			C					
ATOM	306	C	VAL	25	30.880	5.628	19.669	1.00
17.47			C					
ATOM	307	O	VAL	25	31.214	5.201	20.776	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.587	4.476	17.575	1.00
23.36			C					
ATOM	309	CG1	VAL	25	32.415	4.631	16.297	1.00
58.39			C					
ATOM	310	CG2	VAL	25	31.970	3.168	18.273	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.482	4.734	19.470	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.731	6.568	17.958	1.00
9.25			H					
ATOM	313	HB	VAL	25	30.551	4.460	17.335	1.00
52.45			H					
ATOM	314	HG11	VAL	25	32.356	5.651	15.947	
1.00171.07			H					

ATOM	315	HG12	VAL	25	32.030	3.969	15.536	
1.00166.22								H
ATOM	316	HG13	VAL	25	33.445	4.383	16.502	
1.00134.76								H
ATOM	317	HG21	VAL	25	31.622	2.332	17.685	
1.00141.88								H
ATOM	318	HG22	VAL	25	31.515	3.133	19.251	
1.00184.50								H
ATOM	319	HG23	VAL	25	33.044	3.115	18.372	
1.00133.90								H
ATOM	320	N	THR	26	29.670	6.116	19.411	1.00
13.60			N					
ATOM	321	CA	THR	26	28.628	6.187	20.433	1.00
21.19			C					
ATOM	322	C	THR	26	27.320	5.580	19.932	1.00
16.55			C					
ATOM	323	O	THR	26	26.921	5.793	18.786	1.00
11.43			O					
ATOM	324	CB	THR	26	28.403	7.651	20.808	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.259	7.761	21.819	1.00
44.39			C					
ATOM	326	OG1	THR	26	29.595	8.175	21.375	1.00
34.75			O					
ATOM	327	HN	THR	26	29.476	6.453	18.510	1.00
10.81			H					
ATOM	328	HA	THR	26	28.945	5.649	21.315	1.00
33.16			H					
ATOM	329	HB	THR	26	28.153	8.210	19.917	1.00
20.60			H					
ATOM	330	HG1	THR	26	29.562	8.027	22.323	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.225	8.766	22.213	
1.00126.99								H
ATOM	332	HG22	THR	26	27.424	7.064	22.626	
1.00108.32								H
ATOM	333	HG23	THR	26	26.322	7.535	21.334	
1.00151.99								H
ATOM	334	N	ARG	27	26.655	4.824	20.807	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.381	4.181	20.472	1.00
20.21			C					
ATOM	336	C	ARG	27	24.338	4.517	21.532	1.00
16.96			C					
ATOM	337	O	ARG	27	24.682	4.814	22.676	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.569	2.663	20.402	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.549	2.319	19.279	
1.00124.30								C
ATOM	340	CD	ARG	27	26.553	0.808	19.048	
1.00109.38								C

ATOM	341	NE	ARG	27	27.004	0.114	20.252		
	1.00227.73			N					
ATOM	342	CZ	ARG	27	28.298	-0.091	20.488		
	1.00426.12			C					
ATOM	343	NH1	ARG	27	28.672	-0.715	21.571		
	1.00767.09			N1+					
ATOM	344	NH2	ARG	27	29.191	0.332	19.637		
	1.00581.78			N					
ATOM	345	HN	ARG	27	27.029	4.698	21.704	1.00	
	30.75		H						
ATOM	346	HA	ARG	27	25.034	4.535	19.511	1.00	
	23.13		H						
ATOM	347	HB1	ARG	27	24.619	2.192	20.205	1.00	
	87.46		H						
ATOM	348	HB2	ARG	27	25.960	2.306	21.343		
	1.00103.36			H					
ATOM	349	HG1	ARG	27	27.542	2.640	19.555		
	1.00281.97			H					
ATOM	350	HG2	ARG	27	26.247	2.822	18.372		
	1.00276.19			H					
ATOM	351	HD1	ARG	27	27.212	0.572	18.225		
	1.00183.60			H					
ATOM	352	HD2	ARG	27	25.552	0.483	18.806		
	1.00142.93			H					
ATOM	353	HE	ARG	27	26.342	-0.207	20.898		
	1.00372.53			H					
ATOM	354	HH11	ARG	27	27.986	-1.039	22.225		
	1.00910.59			H					
ATOM	355	HH12	ARG	27	29.644	-0.869	21.749		
	1.00999.99			H					
ATOM	356	HH21	ARG	27	28.905	0.811	18.807		
	1.00532.54			H					
ATOM	357	HH22	ARG	27	30.163	0.177	19.815		
	1.00948.84			H					
ATOM	358	N	SER	28	23.058	4.478	21.154	1.00	
	14.60		N						
ATOM	359	CA	SER	28	21.980	4.792	22.095	1.00	
	14.92		C						
ATOM	360	C	SER	28	20.781	3.878	21.870	1.00	
	12.12		C						
ATOM	361	O	SER	28	20.511	3.449	20.747	1.00	
	13.41		O						
ATOM	362	CB	SER	28	21.549	6.250	21.925	1.00	
	23.26		C						
ATOM	363	OG	SER	28	20.498	6.536	22.838		
	1.00146.32			O					
ATOM	364	HN	SER	28	22.834	4.240	20.228	1.00	
	15.23		H						
ATOM	365	HA	SER	28	22.334	4.652	23.107	1.00	
	15.44		H						
ATOM	366	HB1	SER	28	21.211	6.407	20.911	1.00	
	88.73		H						

ATOM	367	HB2	SER	28	22.384	6.899	22.128	
1.00124.	68							H
ATOM	368	HG	SER	28	20.854	7.092	23.536	
1.00242.	47							H
ATOM	369	N	CYS	29	20.067	3.586	22.952	1.00
10.48			N					
ATOM	370	CA	CYS	29	18.896	2.723	22.885	1.00
9.97			C					
ATOM	371	C	CYS	29	18.178	2.738	24.235	1.00
11.60			C					
ATOM	372	O	CYS	29	18.617	2.089	25.184	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.319	1.291	22.516	1.00
9.52			C					
ATOM	374	SG	CYS	29	18.014	0.491	21.566	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.334	3.965	23.816	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.226	3.102	22.127	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.500	0.709	23.412	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.217	1.319	21.923	1.00
10.78			H					
ATOM	379	N	GLU	30	17.090	3.496	24.322	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.349	3.596	25.566	1.00
17.41			C					
ATOM	381	C	GLU	30	15.821	2.244	26.005	1.00
10.81			C					
ATOM	382	O	GLU	30	15.749	1.299	25.220	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.181	4.562	25.403	1.00
37.83			C					
ATOM	384	CG	GLU	30	14.417	4.220	24.126	
1.00108.	13							C
ATOM	385	CD	GLU	30	13.214	5.145	23.971	
1.00240.	52							C
ATOM	386	OE1	GLU	30	12.308	5.046	24.780	
1.00422.	56							O
ATOM	387	OE2	GLU	30	13.216	5.937	23.042	
1.00410.	81							O1-
ATOM	388	HN	GLU	30	16.788	4.003	23.543	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.006	3.979	26.333	1.00
24.60			H					
ATOM	390	HB1	GLU	30	15.553	5.566	25.347	1.00
72.67			H					
ATOM	391	HB2	GLU	30	14.523	4.472	26.250	1.00
56.47			H					
ATOM	392	HG1	GLU	30	14.078	3.199	24.177	
1.00196.	66							H

ATOM	393	HG2	GLU	30	15.070	4.338	23.278	
1.00140.67								
ATOM	394	N	LYS	31	15.440	2.180	27.274	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.897	0.956	27.862	1.00
11.40			C					
ATOM	396	C	LYS	31	13.682	1.283	28.721	1.00
10.99			C					
ATOM	397	O	LYS	31	13.647	2.316	29.389	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.963	0.273	28.719	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.145	-0.133	27.831	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.115	-1.026	28.615	
1.00115.52								C
ATOM	401	CE	LYS	31	18.887	-0.194	29.646	
1.00250.23								C
ATOM	402	NZ	LYS	31	19.987	-1.018	30.222	
1.00462.10								N1+
ATOM	403	HN	LYS	31	15.517	2.986	27.828	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.595	0.279	27.074	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.543	-0.607	29.184	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.298	0.960	29.481	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.663	0.753	27.500	
1.00126.32								H
ATOM	408	HG2	LYS	31	16.775	-0.674	26.972	
1.00114.19								H
ATOM	409	HD1	LYS	31	18.815	-1.482	27.931	
1.00198.45								H
ATOM	410	HD2	LYS	31	17.559	-1.799	29.126	
1.00200.14								H
ATOM	411	HE1	LYS	31	18.220	0.114	30.436	
1.00374.64								H
ATOM	412	HE2	LYS	31	19.305	0.680	29.166	
1.00403.27								H
ATOM	413	HZ1	LYS	31	20.083	-1.899	29.678	
1.00627.38								H
ATOM	414	HZ2	LYS	31	19.766	-1.245	31.213	
1.00622.26								H
ATOM	415	HZ3	LYS	31	20.879	-0.487	30.177	
1.00619.20								H
ATOM	416	N	THR	32	12.686	0.399	28.700	1.00
15.51			N					
ATOM	417	CA	THR	32	11.464	0.601	29.482	1.00
22.44			C					
ATOM	418	C	THR	32	11.364	-0.428	30.605	1.00
26.60			C					

ATOM	419	O	THR	32	11.373	-1.634	30.360	1.00
57.43		O						
ATOM	420	CB	THR	32	10.239	0.480	28.571	1.00
56.28		C						
ATOM	421	CG2	THR	32	8.967	0.685	29.393	
1.00102.70								C
ATOM	422	OG1	THR	32	10.312	1.468	27.552	
1.00111.17								O
ATOM	423	HN	THR	32	12.773	-0.405	28.145	1.00
18.79		H						
ATOM	424	HA	THR	32	11.471	1.591	29.918	1.00
19.67		H						
ATOM	425	HB	THR	32	10.219	-0.499	28.122	1.00
84.25		H						
ATOM	426	HG1	THR	32	9.941	1.095	26.750	
1.00205.03								H
ATOM	427	HG21	THR	32	9.071	1.570	30.003	
1.00220.71								H
ATOM	428	HG22	THR	32	8.807	-0.173	30.030	
1.00174.67								H
ATOM	429	HG23	THR	32	8.123	0.801	28.730	
1.00217.44								H
ATOM	430	N	THR	33	11.260	0.064	31.836	1.00
22.47		N						
ATOM	431	CA	THR	33	11.147	-0.809	33.001	1.00
41.60		C						
ATOM	432	C	THR	33	10.439	-0.098	34.119	1.00
38.03		C						
ATOM	433	O	THR	33	11.059	0.466	35.019	1.00
52.73		O						
ATOM	434	CB	THR	33	12.524	-1.271	33.475	1.00
63.25		C						
ATOM	435	CG2	THR	33	13.128	-2.238	32.456	
1.00121.65								C
ATOM	436	OG1	THR	33	13.374	-0.143	33.626	1.00
96.20		O						
ATOM	437	HN	THR	33	11.252	1.034	31.964	1.00
23.82		H						
ATOM	438	HA	THR	33	10.552	-1.667	32.751	1.00
67.12		H						
ATOM	439	HB	THR	33	12.419	-1.774	34.423	
1.00107.59								H
ATOM	440	HG1	THR	33	14.268	-0.463	33.768	
1.00176.27								H
ATOM	441	HG21	THR	33	12.394	-2.981	32.183	
1.00255.23								H
ATOM	442	HG22	THR	33	13.988	-2.726	32.890	
1.00245.37								H
ATOM	443	HG23	THR	33	13.432	-1.690	31.575	
1.00185.78								H
ATOM	444	N	GLY	34	9.123	-0.147	34.052	1.00
40.93		N						

ATOM	445	CA	GLY	34	8.307	0.477	35.062	1.00
45.59			C					
ATOM	446	C	GLY	34	8.226	1.979	34.827	1.00
40.97			C					
ATOM	447	O	GLY	34	7.497	2.692	35.515	1.00
82.17			O					
ATOM	448	HN	GLY	34	8.699	-0.626	33.313	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.754	0.284	36.017	1.00
54.41			H					
ATOM	450	HA2	GLY	34	7.313	0.049	35.035	1.00
62.09			H					
ATOM	451	N	ASN	35	8.984	2.446	33.837	1.00
32.51			N					
ATOM	452	CA	ASN	35	9.008	3.862	33.488	1.00
33.20			C					
ATOM	453	C	ASN	35	9.414	4.031	32.026	1.00
23.17			C					
ATOM	454	O	ASN	35	10.167	3.221	31.487	1.00
27.01			O					
ATOM	455	CB	ASN	35	9.995	4.613	34.381	1.00
54.51			C					
ATOM	456	CG	ASN	35	9.606	4.455	35.846	1.00
80.73			C					
ATOM	457	ND2	ASN	35	10.490	4.025	36.704	
1.00220.46			N					
ATOM	458	OD1	ASN	35	8.465	4.729	36.220	
1.00117.80			O					
ATOM	459	HN	ASN	35	9.537	1.820	33.325	1.00
51.15			H					
ATOM	460	HA	ASN	35	8.020	4.279	33.629	1.00
47.21			H					
ATOM	461	HB1	ASN	35	9.985	5.661	34.120	1.00
68.31			H					
ATOM	462	HB2	ASN	35	10.989	4.215	34.229	1.00
57.75			H					
ATOM	463	HD21	ASN	35	11.398	3.806	36.405	
1.00405.39			H					
ATOM	464	HD22	ASN	35	10.247	3.920	37.647	
1.00245.64			H					
ATOM	465	N	PHE	36	8.908	5.083	31.387	1.00
35.72			N					
ATOM	466	CA	PHE	36	9.211	5.351	29.989	1.00
33.41			C					
ATOM	467	C	PHE	36	10.238	6.471	29.859	1.00
28.51			C					
ATOM	468	O	PHE	36	10.222	7.435	30.625	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.924	5.752	29.282	1.00
67.53			C					
ATOM	470	CG	PHE	36	6.985	4.572	29.252	1.00
86.71			C					

ATOM	471	CD1	PHE	36	6.061	4.388	30.287	
1.00106.51								C
ATOM	472	CD2	PHE	36	7.039	3.658	28.192	1.00
99.48								C
ATOM	473	CE1	PHE	36	5.189	3.294	30.262	
1.00134.48								C
ATOM	474	CE2	PHE	36	6.168	2.562	28.167	
1.00134.27								C
ATOM	475	CZ	PHE	36	5.242	2.381	29.201	
1.00149.48								C
ATOM	476	HN	PHE	36	8.307	5.691	31.859	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.601	4.457	29.521	1.00
28.53			H					
ATOM	478	HB1	PHE	36	8.150	6.059	28.281	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.460	6.569	29.814	1.00
88.42			H					
ATOM	480	HD1	PHE	36	6.021	5.094	31.105	
1.00110.20								H
ATOM	481	HD2	PHE	36	7.755	3.796	27.394	1.00
93.07			H					
ATOM	482	HE1	PHE	36	4.476	3.153	31.060	
1.00155.06								H
ATOM	483	HE2	PHE	36	6.210	1.859	27.349	
1.00159.46								H
ATOM	484	HZ	PHE	36	4.570	1.536	29.182	
1.00183.25								H
ATOM	485	N	THR	37	11.127	6.339	28.879	1.00
20.06			N					
ATOM	486	CA	THR	37	12.156	7.342	28.643	1.00
27.18			C					
ATOM	487	C	THR	37	12.617	7.288	27.192	1.00
41.87			C					
ATOM	488	O	THR	37	13.030	6.241	26.697	
1.00169.86								O
ATOM	489	CB	THR	37	13.349	7.102	29.575	1.00
26.52			C					
ATOM	490	CG2	THR	37	13.961	5.726	29.293	1.00
75.69			C					
ATOM	491	OG1	THR	37	14.327	8.109	29.357	1.00
81.95			O					
ATOM	492	HN	THR	37	11.087	5.556	28.296	1.00
18.47			H					
ATOM	493	HA	THR	37	11.749	8.322	28.845	1.00
38.80			H					
ATOM	494	HB	THR	37	13.017	7.138	30.601	1.00
81.60			H					
ATOM	495	HG1	THR	37	14.699	8.350	30.209	
1.00188.80								H
ATOM	496	HG21	THR	37	14.566	5.424	30.134	
1.00196.98								H

ATOM	497	HG22	THR	37	14.577	5.781	28.409	
	1.00196.23							H
ATOM	498	HG23	THR	37	13.173	5.003	29.140	
	1.00168.92							H
ATOM	499	N	GLU	38	12.533	8.425	26.517	1.00
	26.53		N					
ATOM	500	CA	GLU	38	12.933	8.513	25.115	1.00
	30.29		C					
ATOM	501	C	GLU	38	14.445	8.678	24.992	1.00
	25.39		C					
ATOM	502	O	GLU	38	15.114	9.099	25.937	1.00
	51.60		O					
ATOM	503	CB	GLU	38	12.237	9.701	24.447	1.00
	54.82		C					
ATOM	504	CG	GLU	38	10.717	9.483	24.441	
	1.00165.84		C					
ATOM	505	CD	GLU	38	10.124	9.834	25.803	
	1.00292.92		C					
ATOM	506	OE1	GLU	38	10.876	10.253	26.668	
	1.00414.19		O					
ATOM	507	OE2	GLU	38	8.924	9.678	25.962	
	1.00537.65		O1-					
ATOM	508	HN	GLU	38	12.187	9.220	26.968	1.00
	84.50		H					
ATOM	509	HA	GLU	38	12.639	7.606	24.607	1.00
	32.15		H					
ATOM	510	HB1	GLU	38	12.586	9.793	23.429	
	1.00144.82		H					
ATOM	511	HB2	GLU	38	12.471	10.607	24.987	
	1.00106.49		H					
ATOM	512	HG1	GLU	38	10.500	8.449	24.213	
	1.00303.31		H					
ATOM	513	HG2	GLU	38	10.271	10.113	23.685	
	1.00323.99		H					
ATOM	514	N	CYS	39	14.977	8.349	23.814	1.00
	15.84		N					
ATOM	515	CA	CYS	39	16.414	8.470	23.565	1.00
	14.30		C					
ATOM	516	C	CYS	39	16.922	9.805	24.134	1.00
	22.31		C					
ATOM	517	O	CYS	39	16.130	10.718	24.366	1.00
	32.92		O					
ATOM	518	CB	CYS	39	16.693	8.386	22.042	1.00
	18.08		C					
ATOM	519	SG	CYS	39	15.249	7.709	21.181	1.00
	17.41		S					
ATOM	520	HN	CYS	39	14.391	8.026	23.102	1.00
	24.87		H					
ATOM	521	HA	CYS	39	16.924	7.656	24.065	1.00
	14.60		H					
ATOM	522	HB1	CYS	39	17.541	7.739	21.862	1.00
	27.71		H					

ATOM	523	HB2	CYS	39	16.910	9.369	21.648	1.00
34.91			H					
ATOM	524	N	PRO	40	18.204	9.940	24.370	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.777	11.196	24.929	1.00
47.66			C					
ATOM	526	C	PRO	40	18.846	12.307	23.881	1.00
71.54			C					
ATOM	527	O	PRO	40	19.294	12.087	22.756	1.00
87.70			O					
ATOM	528	CB	PRO	40	20.174	10.772	25.396	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.552	9.648	24.486	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.246	8.926	24.127	1.00
25.70			C					
ATOM	531	HA	PRO	40	18.196	11.523	25.776	1.00
58.04			H					
ATOM	532	HB1	PRO	40	20.137	10.422	26.419	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.873	11.594	25.305	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.222	8.964	24.988	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.024	10.040	23.591	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.092	8.072	24.766	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.256	8.631	23.091	1.00
26.94			H					
ATOM	538	N	GLY	41	18.396	13.493	24.264	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.404	14.637	23.359	
1.00147.55			C					
ATOM	540	C	GLY	41	19.825	15.015	22.961	
1.00161.74			C					
ATOM	541	O	GLY	41	20.089	15.352	21.808	
1.00244.37			O					
ATOM	542	HN	GLY	41	18.050	13.603	25.174	
1.00121.79			H					
ATOM	543	HA1	GLY	41	17.939	15.480	23.847	
1.00184.40			H					
ATOM	544	HA2	GLY	41	17.844	14.388	22.472	
1.00157.34			H					
ATOM	545	N	LEU	42	20.735	14.960	23.930	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.140	15.303	23.691	
1.00191.48			C					
ATOM	547	C	LEU	42	23.027	14.071	23.851	
1.00166.66			C					
ATOM	548	O	LEU	42	22.758	13.204	24.681	
1.00251.38			O					

ATOM	549	CB	LEU	42	22.588	16.377	24.687
1.00307.99				C			
ATOM	550	CG	LEU	42	21.665	17.599	24.592
1.00452.28				C			
ATOM	551	CD1	LEU	42	22.096	18.635	25.633
1.00681.24				C			
ATOM	552	CD2	LEU	42	21.748	18.215	23.184
1.00527.46				C			
ATOM	553	HN	LEU	42	20.455	14.688	24.829
1.00195.47				H			
ATOM	554	HA	LEU	42	22.260	15.687	22.688
1.00229.77				H			
ATOM	555	HB1	LEU	42	23.599	16.676	24.460
1.00342.49				H			
ATOM	556	HB2	LEU	42	22.549	15.974	25.689
1.00335.33				H			
ATOM	557	HG	LEU	42	20.648	17.294	24.792
1.00427.79				H			
ATOM	558	HD11	LEU	42	21.591	19.571	25.440
1.00909.71				H			
ATOM	559	HD12	LEU	42	23.164	18.784	25.573
1.00706.80				H			
ATOM	560	HD13	LEU	42	21.836	18.283	26.621
1.00858.82				H			
ATOM	561	HD21	LEU	42	21.088	17.678	22.517
1.00631.69				H			
ATOM	562	HD22	LEU	42	22.761	18.150	22.815
1.00628.06				H			
ATOM	563	HD23	LEU	42	21.446	19.252	23.221
1.00656.75				H			
ATOM	564	N	THR	43	24.083	14.005	23.048
1.00178.52				N			
ATOM	565	CA	THR	43	25.008	12.878	23.105
1.00240.84				C			
ATOM	566	C	THR	43	25.923	13.023	24.327
1.00372.31				C			
ATOM	567	O	THR	43	25.869	14.043	25.014
1.00500.13				O			
ATOM	568	CB	THR	43	25.841	12.830	21.818
1.00354.13				C			
ATOM	569	CG2	THR	43	24.997	13.328	20.641
1.00463.04				C			
ATOM	570	OG1	THR	43	26.983	13.663	21.962
1.00508.50				O			
ATOM	571	HN	THR	43	24.247	14.729	22.407
1.00229.59				H			
ATOM	572	HA	THR	43	24.433	11.970	23.191
1.00249.90				H			
ATOM	573	HB	THR	43	26.153	11.816	21.620
1.00481.58				H			
ATOM	574	HG1	THR	43	27.748	13.098	22.088
1.00624.31				H			

ATOM	575	HG21	THR	43	25.488	13.073	19.714
1.00650.95				H			
ATOM	576	HG22	THR	43	24.886	14.400	20.707
1.00580.73				H			
ATOM	577	HG23	THR	43	24.025	12.861	20.674
1.00571.99				H			
ATOM	578	N	PRO	44	26.750	12.043	24.630
1.00488.39				N			
ATOM	579	CA	PRO	44	27.661	12.114	25.814
1.00760.13				C			
ATOM	580	C	PRO	44	28.653	13.270	25.692
1.00735.36				C			
ATOM	581	O	PRO	44	29.205	13.735	26.689
1.00999.99				O			
ATOM	582	CB	PRO	44	28.379	10.747	25.814
1.00999.99				C			
ATOM	583	CG	PRO	44	27.532	9.863	24.962
1.00856.94				C			
ATOM	584	CD	PRO	44	26.937	10.777	23.903
1.00548.09				C			
ATOM	585	HA	PRO	44	27.081	12.219	26.716
1.00939.00				H			
ATOM	586	HB1	PRO	44	28.431	10.350	26.815
1.00999.99				H			
ATOM	587	HB2	PRO	44	29.374	10.836	25.394
1.00999.99				H			
ATOM	588	HG1	PRO	44	26.739	9.418	25.546
1.00999.99				H			
ATOM	589	HG2	PRO	44	28.137	9.092	24.501
1.00853.53				H			
ATOM	590	HD1	PRO	44	26.000	10.390	23.559
1.00602.45				H			
ATOM	591	HD2	PRO	44	27.637	10.901	23.086
1.00463.32				H			
ATOM	592	N	ILE	45	28.875	13.719	24.462
1.00518.33				N			
ATOM	593	CA	ILE	45	29.803	14.813	24.216
1.00582.79				C			
ATOM	594	C	ILE	45	29.353	16.069	24.954
1.00795.93				C			
ATOM	595	O	ILE	45	30.157	16.750	25.591
1.00898.75				O			
ATOM	596	CB	ILE	45	29.890	15.094	22.712
1.00474.41				C			
ATOM	597	CG1	ILE	45	30.559	13.910	22.012
1.00516.90				C			
ATOM	598	CG2	ILE	45	30.719	16.359	22.467
1.00760.75				C			
ATOM	599	CD1	ILE	45	30.400	14.053	20.498
1.00566.81				C			
ATOM	600	HN	ILE	45	28.408	13.305	23.707
1.00395.72				H			

ATOM	601	HA	ILE	45	30.777	14.527	24.573
1.00711.06			H				
ATOM	602	HB	ILE	45	28.894	15.234	22.315
1.00477.81			H				
ATOM	603	HG11	ILE	45	30.091	12.991	22.334
1.00624.28			H				
ATOM	604	HG12	ILE	45	31.609	13.886	22.266
1.00744.84			H				
ATOM	605	HG21	ILE	45	31.620	16.319	23.060
1.00920.57			H				
ATOM	606	HG22	ILE	45	30.141	17.227	22.747
1.00999.99			H				
ATOM	607	HG23	ILE	45	30.978	16.424	21.421
1.00865.46			H				
ATOM	608	HD11	ILE	45	30.803	15.005	20.182
1.00658.89			H				
ATOM	609	HD12	ILE	45	29.353	14.001	20.238
1.00734.30			H				
ATOM	610	HD13	ILE	45	30.934	13.256	20.003
1.00675.84			H				
ATOM	611	N	ALA	46	28.065	16.367	24.862
1.00999.99			N				
ATOM	612	CA	ALA	46	27.511	17.542	25.522
1.00999.99			C				
ATOM	613	C	ALA	46	27.752	17.476	27.027
1.00999.99			C				
ATOM	614	CB	ALA	46	26.009	17.637	25.249
1.00999.99			C				
ATOM	615	OT1	ALA	46	27.025	18.133	27.753
1.00999.99			O				
ATOM	616	OT2	ALA	46	28.661	16.769	27.430
1.00999.99			O				
ATOM	617	HN	ALA	46	27.476	15.784	24.340
1.00999.99			H				
ATOM	618	HA	ALA	46	27.993	18.425	25.129
1.00999.99			H				
ATOM	619	HB1	ALA	46	25.659	18.627	25.498
1.00999.99			H				
ATOM	620	HB2	ALA	46	25.487	16.908	25.850
1.00999.99			H				
ATOM	621	HB3	ALA	46	25.821	17.441	24.204
1.00999.99			H				
ENDMDL							
TER							
MODEL	4						
ATOM	1	N	GLY	1	26.757	-0.733	13.713
1.00999.99			N				
ATOM	2	CA	GLY	1	26.717	0.553	12.959
1.00999.99			C				
ATOM	3	C	GLY	1	25.397	1.265	13.234
1.00999.99			C				
ATOM	4	O	GLY	1	25.254	1.958	14.239

1.00999.99				O				
ATOM	5	HA1	GLY		1	26.802	0.354	11.902
1.00999.99				H				
ATOM	6	HA2	GLY		1	27.540	1.180	13.275
1.00999.99				H				
ATOM	7	HT1	GLY		1	26.871	-1.522	13.047
1.00999.99				H				
ATOM	8	HT2	GLY		1	25.869	-0.850	14.244
1.00999.99				H				
ATOM	9	HT3	GLY		1	27.559	-0.721	14.376
1.00999.99				H				
ATOM	10	N	LEU		2	24.436	1.087	12.330
1.00999.99				N				
ATOM	11	CA	LEU		2	23.120	1.715	12.473
1.00895.59				C				
ATOM	12	C	LEU		2	22.134	0.741	13.108
1.00532.27				C				
ATOM	13	O	LEU		2	22.277	-0.475	12.979
1.00625.21				O				
ATOM	14	CB	LEU		2	22.595	2.143	11.101
1.00999.99				C				
ATOM	15	CG	LEU		2	23.610	3.066	10.414
1.00999.99				C				
ATOM	16	CD1	LEU		2	23.091	3.432	9.021
1.00999.99				C				
ATOM	17	CD2	LEU		2	23.807	4.346	11.245
1.00999.99				C				
ATOM	18	HN	LEU		2	24.612	0.523	11.548
1.00999.99				H				
ATOM	19	HA	LEU		2	23.203	2.588	13.104
1.00890.87				H				
ATOM	20	HB1	LEU		2	21.661	2.669	11.223
1.00924.07				H				
ATOM	21	HB2	LEU		2	22.437	1.266	10.489
1.00999.99				H				
ATOM	22	HG	LEU		2	24.554	2.548	10.318
1.00999.99				H				
ATOM	23	HD11	LEU		2	22.758	2.539	8.514
1.00999.99				H				
ATOM	24	HD12	LEU		2	23.884	3.895	8.452
1.00999.99				H				
ATOM	25	HD13	LEU		2	22.266	4.122	9.114
1.00999.99				H				
ATOM	26	HD21	LEU		2	24.523	4.157	12.031
1.00999.99				H				
ATOM	27	HD22	LEU		2	22.865	4.647	11.681
1.00999.99				H				
ATOM	28	HD23	LEU		2	24.177	5.139	10.611
1.00999.99				H				
ATOM	29	N	CYS		3	21.132	1.282	13.795
1.00271.28				N				
ATOM	30	CA	CYS		3	20.128	0.446	14.444

1.00104.50				C					
ATOM	31	C	CYS		3	19.344	-0.344	13.401	1.00
90.98			C						
ATOM	32	O	CYS		3	19.132	0.125	12.283	
1.00207.28				O					
ATOM	33	CB	CYS		3	19.165	1.317	15.257	1.00
37.83			C						
ATOM	34	SG	CYS		3	20.062	2.108	16.617	1.00
81.56			S						
ATOM	35	HN	CYS		3	21.066	2.257	13.864	
1.00296.55				H					
ATOM	36	HA	CYS		3	20.623	-0.244	15.110	
1.00166.45				H					
ATOM	37	HB1	CYS		3	18.375	0.700	15.658	1.00
40.38			H						
ATOM	38	HB2	CYS		3	18.740	2.076	14.617	1.00
98.45			H						
ATOM	39	N	SER		4	18.918	-1.546	13.773	1.00
85.31			N						
ATOM	40	CA	SER		4	18.160	-2.395	12.860	1.00
92.94			C						
ATOM	41	C	SER		4	16.876	-1.701	12.443	1.00
67.37			C						
ATOM	42	O	SER		4	16.482	-1.737	11.276	
1.00102.28				O					
ATOM	43	CB	SER		4	17.786	-3.703	13.549	
1.00123.83				C					
ATOM	44	OG	SER		4	17.181	-4.575	12.603	
1.00178.89				O					
ATOM	45	HN	SER		4	19.118	-1.870	14.676	
1.00163.03				H					
ATOM	46	HA	SER		4	18.756	-2.609	11.987	
1.00129.78				H					
ATOM	47	HB1	SER		4	17.085	-3.489	14.350	
1.00105.26				H					
ATOM	48	HB2	SER		4	18.667	-4.170	13.955	
1.00156.87				H					
ATOM	49	HG	SER		4	17.142	-5.452	12.990	
1.00218.16				H					
ATOM	50	N	GLU		5	16.216	-1.091	13.418	1.00
41.67			N						
ATOM	51	CA	GLU		5	14.954	-0.406	13.179	1.00
41.21			C						
ATOM	52	C	GLU		5	14.814	0.799	14.103	1.00
41.92			C						
ATOM	53	O	GLU		5	15.763	1.179	14.789	1.00
74.72			O						
ATOM	54	CB	GLU		5	13.806	-1.379	13.421	1.00
49.24			C						
ATOM	55	CG	GLU		5	13.881	-1.887	14.855	1.00
55.48			C						
ATOM	56	CD	GLU		5	12.907	-3.045	15.054	1.00

92.06			C						
ATOM	57	OE1	GLU	5	12.851	-3.562	16.157		
1.00206.49			O						
ATOM	58	OE2	GLU	5	12.235	-3.398	14.099		
1.00197.24			O1-						
ATOM	59	HN	GLU	5	16.579	-1.119	14.328	1.00	
45.52			H						
ATOM	60	HA	GLU	5	14.915	-0.073	12.161	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	13.887	-2.214	12.741	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	12.869	-0.877	13.266	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	13.627	-1.085	15.533	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	14.885	-2.219	15.052	1.00	
57.77			H						
ATOM	65	N	ASN	6	13.629	1.397	14.117	1.00	
50.73			N						
ATOM	66	CA	ASN	6	13.384	2.558	14.963	1.00	
71.04			C						
ATOM	67	C	ASN	6	13.605	2.198	16.427	1.00	
65.17			C						
ATOM	68	O	ASN	6	14.156	2.986	17.195	1.00	
94.86			O						
ATOM	69	CB	ASN	6	11.951	3.058	14.767	1.00	
94.83			C						
ATOM	70	CG	ASN	6	11.808	3.710	13.397		
1.00160.94			C						
ATOM	71	ND2	ASN	6	10.623	3.843	12.867		
1.00244.88			N						
ATOM	72	OD1	ASN	6	12.803	4.111	12.793		
1.00219.73			O						
ATOM	73	HN	ASN	6	12.907	1.053	13.550	1.00	
72.81			H						
ATOM	74	HA	ASN	6	14.070	3.346	14.687	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	11.716	3.780	15.534		
1.00111.09			H						
ATOM	76	HB2	ASN	6	11.268	2.223	14.840	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	9.832	3.523	13.350		
1.00272.43			H						
ATOM	78	HD22	ASN	6	10.524	4.261	11.988		
1.00336.78			H						
ATOM	79	N	GLY	7	13.176	0.995	16.807	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.332	0.518	18.183	1.00	
71.47			C						
ATOM	81	C	GLY	7	14.015	-0.843	18.205	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.376	-1.869	18.429	1.00	

44.54			O						
ATOM	83	HN	GLY	7	12.749	0.411	16.146	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.361	0.429	18.639		
1.00103.52			H						
ATOM	85	HA2	GLY	7	13.928	1.222	18.751		
1.00108.67			H						
ATOM	86	N	ASP	8	15.321	-0.838	17.970	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.091	-2.077	17.962	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.024	-2.759	19.322	1.00	
9.37			C						
ATOM	89	O	ASP	8	15.843	-3.973	19.412	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.550	-1.783	17.606	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.337	-3.085	17.517	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	17.780	-4.116	17.858		
1.00119.56			O						
ATOM	93	OD2	ASP	8	19.486	-3.033	17.108		
1.00133.27			O1-						
ATOM	94	HN	ASP	8	15.772	0.012	17.799	1.00	
35.63			H						
ATOM	95	HA	ASP	8	15.679	-2.738	17.220	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	17.985	-1.155	18.370	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.591	-1.273	16.656	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.167	-1.967	20.375	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.118	-2.500	21.731	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.750	-3.111	22.007	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.641	-4.180	22.609	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.402	-1.388	22.730	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.138	-0.936	22.590	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.306	-1.008	20.237	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.879	-3.255	21.837	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.204	-1.734	23.732	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.782	-0.531	22.510	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.714	-2.420	21.553	1.00	

16.26			N						
ATOM	109	CA	ALA	10	12.346	-2.884	21.734	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.390	-2.035	20.901	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.746	-0.945	20.454		
1.00119.04									O
ATOM	112	CB	ALA	10	11.954	-2.818	23.214	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.875	-1.580	21.076	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.279	-3.910	21.403	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	11.128	-3.487	23.400	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	11.662	-1.809	23.468		
1.00118.20									H
ATOM	117	HB3	ALA	10	12.797	-3.111	23.822		
1.00117.32									H
ATOM	118	N	ALA	11	10.181	-2.540	20.691	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.189	-1.815	19.904	1.00	
35.24			C						
ATOM	120	C	ALA	11	8.859	-0.470	20.546	1.00	
22.78			C						
ATOM	121	O	ALA	11	8.676	0.531	19.853	1.00	
53.33			O						
ATOM	122	CB	ALA	11	7.911	-2.648	19.784	1.00	
60.49			C						
ATOM	123	HN	ALA	11	9.952	-3.413	21.069	1.00	
50.37			H						
ATOM	124	HA	ALA	11	9.585	-1.643	18.915	1.00	
41.70			H						
ATOM	125	HB1	ALA	11	8.169	-3.673	19.564		
1.00157.06									H
ATOM	126	HB2	ALA	11	7.297	-2.251	18.990		
1.00148.83									H
ATOM	127	HB3	ALA	11	7.365	-2.605	20.716		
1.00137.06									H
ATOM	128	N	ASP	12	8.772	-0.457	21.875	1.00	
18.98			N						
ATOM	129	CA	ASP	12	8.448	0.766	22.610	1.00	
31.05			C						
ATOM	130	C	ASP	12	9.712	1.524	23.019	1.00	
22.98			C						
ATOM	131	O	ASP	12	9.650	2.458	23.819	1.00	
37.14			O						
ATOM	132	CB	ASP	12	7.638	0.416	23.859	1.00	
48.35			C						
ATOM	133	CG	ASP	12	8.451	-0.497	24.771		
1.00104.83									C
ATOM	134	OD1	ASP	12	9.510	-0.929	24.350		

1.00258.73				O					
ATOM	135	OD2	ASP	12	8.001	-0.751	25.876		
1.00213.46				O1-					
ATOM	136	HN	ASP	12	8.920	-1.287	22.372	1.00	
36.19			H						
ATOM	137	HA	ASP	12	7.848	1.410	21.982	1.00	
49.76			H						
ATOM	138	HB1	ASP	12	6.730	-0.090	23.565	1.00	
95.71			H						
ATOM	139	HB2	ASP	12	7.387	1.322	24.390	1.00	
54.37			H						
ATOM	140	N	GLU	13	10.860	1.120	22.469	1.00	
17.60			N						
ATOM	141	CA	GLU	13	12.140	1.770	22.784	1.00	
12.01			C						
ATOM	142	C	GLU	13	12.772	2.370	21.533	1.00	
10.07			C						
ATOM	143	O	GLU	13	12.446	1.986	20.410	1.00	
12.81			O						
ATOM	144	CB	GLU	13	13.102	0.758	23.406	1.00	
11.74			C						
ATOM	145	CG	GLU	13	12.612	0.385	24.808	1.00	
13.49			C						
ATOM	146	CD	GLU	13	12.798	1.567	25.752		
1.00142.36				C					
ATOM	147	OE1	GLU	13	13.476	2.503	25.369		
1.00339.06				O					
ATOM	148	OE2	GLU	13	12.253	1.521	26.842		
1.00335.28				O1-					
ATOM	149	HN	GLU	13	10.848	0.369	21.839	1.00	
28.36			H						
ATOM	150	HA	GLU	13	11.973	2.566	23.498	1.00	
13.06			H						
ATOM	151	HB1	GLU	13	14.086	1.192	23.474	1.00	
13.76			H						
ATOM	152	HB2	GLU	13	13.141	-0.128	22.788	1.00	
9.94			H						
ATOM	153	HG1	GLU	13	13.181	-0.457	25.175	1.00	
66.02			H						
ATOM	154	HG2	GLU	13	11.567	0.124	24.765	1.00	
56.23			H						
ATOM	155	N	CYS	14	13.681	3.326	21.743	1.00	
9.12			N						
ATOM	156	CA	CYS	14	14.369	4.001	20.639	1.00	
10.69			C						
ATOM	157	C	CYS	14	15.799	3.489	20.503	1.00	
9.56			C						
ATOM	158	O	CYS	14	16.389	3.005	21.467	1.00	
13.62			O						
ATOM	159	CB	CYS	14	14.397	5.508	20.897	1.00	
13.96			C						
ATOM	160	SG	CYS	14	15.318	6.332	19.572	1.00	

42.96			S						
ATOM	161	HN	CYS	14	13.893	3.588	22.664	1.00	
9.76			H						
ATOM	162	HA	CYS	14	13.839	3.818	19.714	1.00	
15.54			H						
ATOM	163	HB1	CYS	14	14.881	5.698	21.843	1.00	
50.72			H						
ATOM	164	HB2	CYS	14	13.387	5.887	20.924	1.00	
46.13			H						
ATOM	165	N	CYS	15	16.352	3.607	19.297	1.00	
9.60			N						
ATOM	166	CA	CYS	15	17.719	3.164	19.031	1.00	
9.28			C						
ATOM	167	C	CYS	15	18.358	4.083	18.001	1.00	
9.92			C						
ATOM	168	O	CYS	15	17.790	4.314	16.933	1.00	
13.31			O						
ATOM	169	CB	CYS	15	17.710	1.728	18.501	1.00	
12.90			C						
ATOM	170	SG	CYS	15	19.414	1.149	18.275	1.00	
39.11			S						
ATOM	171	HN	CYS	15	15.833	4.010	18.569	1.00	
13.12			H						
ATOM	172	HA	CYS	15	18.297	3.201	19.944	1.00	
8.26			H						
ATOM	173	HB1	CYS	15	17.193	1.698	17.552	1.00	
24.82			H						
ATOM	174	HB2	CYS	15	17.205	1.086	19.207	1.00	
27.31			H						
ATOM	175	N	VAL	16	19.536	4.612	18.316	1.00	
9.56			N						
ATOM	176	CA	VAL	16	20.220	5.509	17.394	1.00	
11.99			C						
ATOM	177	C	VAL	16	21.726	5.425	17.594	1.00	
7.73			C						
ATOM	178	O	VAL	16	22.219	5.502	18.720	1.00	
8.83			O						
ATOM	179	CB	VAL	16	19.732	6.942	17.614	1.00	
18.37			C						
ATOM	180	CG1	VAL	16	20.062	7.389	19.039	1.00	
39.61			C						
ATOM	181	CG2	VAL	16	20.415	7.872	16.613		
1.00115.21									C
ATOM	182	HN	VAL	16	19.954	4.400	19.184	1.00	
9.76			H						
ATOM	183	HA	VAL	16	19.992	5.217	16.377	1.00	
17.27			H						
ATOM	184	HB	VAL	16	18.663	6.981	17.467	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	19.548	8.315	19.254		
1.00128.07									H
ATOM	186	HG12	VAL	16	21.127	7.539	19.134		

1.00154.13				H					
ATOM	187	HG13	VAL		16	19.740	6.630	19.737	
1.00135.74				H					
ATOM	188	HG21	VAL		16	20.307	7.467	15.618	
1.00229.05				H					
ATOM	189	HG22	VAL		16	21.463	7.957	16.857	
1.00261.82				H					
ATOM	190	HG23	VAL		16	19.954	8.847	16.656	
1.00210.07				H					
ATOM	191	N	ASP		17	22.456	5.252	16.494	1.00
14.34				N					
ATOM	192	CA	ASP		17	23.914	5.141	16.552	1.00
11.90				C					
ATOM	193	C	ASP		17	24.581	6.404	16.023	1.00
13.15				C					
ATOM	194	O	ASP		17	24.360	6.807	14.880	1.00
25.96				O					
ATOM	195	CB	ASP		17	24.373	3.940	15.722	1.00
20.80				C					
ATOM	196	CG	ASP		17	23.743	2.662	16.266	1.00
28.72				C					
ATOM	197	OD1	ASP		17	23.230	1.894	15.471	
1.00135.42				O					
ATOM	198	OD2	ASP		17	23.786	2.470	17.470	
1.00114.17				O1-					
ATOM	199	HN	ASP		17	22.005	5.189	15.626	1.00
28.29				H					
ATOM	200	HA	ASP		17	24.224	4.989	17.574	1.00
10.49				H					
ATOM	201	HB1	ASP		17	25.449	3.860	15.775	1.00
22.42				H					
ATOM	202	HB2	ASP		17	24.073	4.079	14.694	1.00
29.52				H					
ATOM	203	N	THR		18	25.419	7.010	16.860	1.00
11.55				N					
ATOM	204	CA	THR		18	26.152	8.218	16.486	1.00
17.10				C					
ATOM	205	C	THR		18	27.629	7.891	16.337	1.00
10.63				C					
ATOM	206	O	THR		18	28.097	6.872	16.845	1.00
6.49				O					
ATOM	207	CB	THR		18	25.974	9.301	17.553	1.00
28.52				C					
ATOM	208	CG2	THR		18	24.566	9.885	17.469	1.00
45.38				C					
ATOM	209	OG1	THR		18	26.184	8.736	18.838	1.00
26.49				O					
ATOM	210	HN	THR		18	25.561	6.625	17.750	1.00
13.96				H					
ATOM	211	HA	THR		18	25.780	8.593	15.540	1.00
26.43				H					
ATOM	212	HB	THR		18	26.692	10.089	17.387	1.00

37.43			H						
ATOM	213	HG1	THR	18	26.187	7.780	18.744	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.352	10.438	18.371		
1.00100.44									H
ATOM	215	HG22	THR	18	23.849	9.086	17.357		
1.00129.42									H
ATOM	216	HG23	THR	18	24.502	10.548	16.617		
1.00156.21									H
ATOM	217	N	VAL	19	28.360	8.763	15.657	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.773	8.570	15.456	1.00	
13.34			C						
ATOM	219	C	VAL	19	30.341	9.740	14.685	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.983	10.000	13.537	1.00	
42.11			O						
ATOM	221	CB	VAL	19	30.068	7.271	14.708	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	29.257	7.212	13.407	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.567	7.216	14.385	1.00	
20.67			C						
ATOM	224	HN	VAL	19	27.945	9.566	15.291	1.00	
26.89			H						
ATOM	225	HA	VAL	19	30.253	8.526	16.423	1.00	
8.08			H						
ATOM	226	HB	VAL	19	29.803	6.435	15.334	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	29.229	6.194	13.048		
1.00137.43									H
ATOM	228	HG12	VAL	19	29.722	7.842	12.662	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	28.251	7.556	13.591		
1.00108.69									H
ATOM	230	HG21	VAL	19	31.843	6.210	14.107	1.00	
99.42			H						
ATOM	231	HG22	VAL	19	32.134	7.521	15.255		
1.00111.36									H
ATOM	232	HG23	VAL	19	31.782	7.889	13.568	1.00	
77.11			H						
ATOM	233	N	PHE	20	31.227	10.437	15.347	1.00	
24.58			N						
ATOM	234	CA	PHE	20	31.885	11.601	14.782	1.00	
40.34			C						
ATOM	235	C	PHE	20	33.254	11.232	14.232	1.00	
40.37			C						
ATOM	236	O	PHE	20	33.545	11.464	13.058	1.00	
66.02			O						
ATOM	237	CB	PHE	20	32.025	12.682	15.864	1.00	
48.79			C						
ATOM	238	CG	PHE	20	32.212	12.056	17.237	1.00	

35.75			C					
ATOM	239	CD1	PHE	20	31.162	11.344	17.850	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.431	12.206	17.911	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.343	10.789	19.121	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.607	11.646	19.181	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.564	10.939	19.785	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.437	10.161	16.254	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.284	11.995	13.971	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.140	13.272	15.873	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.868	13.321	15.640	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.215	11.216	17.342	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.240	12.751	17.446	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.538	10.245	19.588	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.550	11.762	19.695	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.700	10.510	20.767	1.00
52.66			H					
ATOM	253	N	GLU	21	34.105	10.687	15.096	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.450	10.325	14.715	1.00
56.16			C					
ATOM	255	C	GLU	21	35.673	8.824	14.822	1.00
58.61			C					
ATOM	256	O	GLU	21	34.759	8.063	15.136	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.386	11.059	15.646	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.239	10.513	17.067	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.927	11.449	18.056	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.795	11.223	19.247	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.576	12.380	17.606	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.837	10.554	16.023	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.651	10.641	13.700	1.00
85.72			H					
ATOM	264	HB1	GLU	21	36.128	12.103	15.638	1.00

46.37			H							
ATOM	265	HB2	GLU	21	37.391	10.929	15.311			
1.00131.81								H		
ATOM	266	HG1	GLU	21	36.694	9.539	17.122			
1.00314.91								H		
ATOM	267	HG2	GLU	21	35.194	10.430	17.313			
1.00266.92								H		
ATOM	268	N	GLY	22	36.905	8.416	14.553	1.00		
86.70			N							
ATOM	269	CA	GLY	22	37.273	6.999	14.609			
1.00104.66								C		
ATOM	270	C	GLY	22	37.848	6.636	15.974	1.00		
71.50			C							
ATOM	271	O	GLY	22	38.014	5.460	16.296	1.00		
89.87			O							
ATOM	272	HN	GLY	22	37.581	9.086	14.311			
1.00214.64								H		
ATOM	273	HA1	GLY	22	38.018	6.799	13.852			
1.00152.47								H		
ATOM	274	HA2	GLY	22	36.400	6.390	14.417			
1.00118.15								H		
ATOM	275	N	ASP	23	38.156	7.655	16.767	1.00		
44.68			N							
ATOM	276	CA	ASP	23	38.719	7.439	18.094	1.00		
43.33			C							
ATOM	277	C	ASP	23	37.755	6.663	18.982	1.00		
37.55			C							
ATOM	278	O	ASP	23	38.152	5.740	19.693	1.00		
61.37			O							
ATOM	279	CB	ASP	23	39.034	8.786	18.746	1.00		
40.74			C							
ATOM	280	CG	ASP	23	39.790	8.571	20.052			
1.00141.86								C		
ATOM	281	OD1	ASP	23	39.862	7.436	20.491			
1.00328.18								O		
ATOM	282	OD2	ASP	23	40.285	9.545	20.594			
1.00304.58								O1-		
ATOM	283	HN	ASP	23	38.008	8.568	16.450	1.00		
40.86			H							
ATOM	284	HA	ASP	23	39.632	6.879	18.000	1.00		
72.12			H							
ATOM	285	HB1	ASP	23	38.109	9.305	18.950	1.00		
94.15			H							
ATOM	286	HB2	ASP	23	39.635	9.379	18.073	1.00		
93.26			H							
ATOM	287	N	MET	24	36.485	7.051	18.944	1.00		
23.24			N							
ATOM	288	CA	MET	24	35.464	6.394	19.758	1.00		
32.50			C							
ATOM	289	C	MET	24	34.085	6.540	19.124	1.00		
25.13			C							
ATOM	290	O	MET	24	33.772	7.566	18.521	1.00		

54.40			O						
ATOM	291	CB	MET	24	35.452	7.006	21.162	1.00	
47.36			C						
ATOM	292	CG	MET	24	34.404	6.297	22.025		
1.00151.73			C						
ATOM	293	SD	MET	24	34.517	6.902	23.730		
1.00209.23			S						
ATOM	294	CE	MET	24	33.888	8.575	23.434		
1.00243.29			C						
ATOM	295	HN	MET	24	36.232	7.799	18.363	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.701	5.342	19.841	1.00	
48.94			H						
ATOM	297	HB1	MET	24	35.208	8.055	21.093		
1.00124.40			H						
ATOM	298	HB2	MET	24	36.427	6.892	21.613		
1.00166.96			H						
ATOM	299	HG1	MET	24	34.586	5.233	22.010		
1.00331.71			H						
ATOM	300	HG2	MET	24	33.417	6.499	21.637		
1.00302.30			H						
ATOM	301	HE1	MET	24	33.503	8.982	24.359		
1.00340.44			H						
ATOM	302	HE2	MET	24	33.099	8.544	22.701		
1.00373.88			H						
ATOM	303	HE3	MET	24	34.692	9.202	23.069		
1.00386.81			H						
ATOM	304	N	VAL	25	33.259	5.502	19.274	1.00	
22.44			N						
ATOM	305	CA	VAL	25	31.900	5.509	18.722	1.00	
15.37			C						
ATOM	306	C	VAL	25	30.872	5.669	19.837	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.041	5.146	20.939	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.627	4.207	17.963	1.00	
23.36			C						
ATOM	309	CG1	VAL	25	30.152	4.158	17.532	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.527	4.148	16.724	1.00	
55.25			C						
ATOM	311	HN	VAL	25	33.568	4.716	19.769	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.794	6.340	18.034	1.00	
9.25			H						
ATOM	313	HB	VAL	25	31.841	3.365	18.606	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.551	3.807	18.357		
1.00171.07			H						
ATOM	315	HG12	VAL	25	30.035	3.487	16.693		
1.00166.22			H						
ATOM	316	HG13	VAL	25	29.823	5.149	17.247		

1.00134.76				H						
ATOM	317	HG21	VAL		25	32.154	4.830	15.975		
1.00141.88				H						
ATOM	318	HG22	VAL		25	32.528	3.144	16.327		
1.00184.50				H						
ATOM	319	HG23	VAL		25	33.535	4.428	16.996		
1.00133.90				H						
ATOM	320	N	THR		26	29.808	6.410	19.536	1.00	
13.60			N							
ATOM	321	CA	THR		26	28.739	6.667	20.504	1.00	
21.19			C							
ATOM	322	C	THR		26	27.421	6.041	20.047	1.00	
16.55			C							
ATOM	323	O	THR		26	27.014	6.195	18.896	1.00	
11.43			O							
ATOM	324	CB	THR		26	28.561	8.174	20.655	1.00	
27.07			C							
ATOM	325	CG2	THR		26	27.393	8.470	21.596	1.00	
44.39			C							
ATOM	326	OG1	THR		26	29.755	8.732	21.185	1.00	
34.75			O							
ATOM	327	HN	THR		26	29.741	6.803	18.641	1.00	
10.81			H							
ATOM	328	HA	THR		26	29.008	6.251	21.464	1.00	
33.16			H							
ATOM	329	HB	THR		26	28.364	8.606	19.683	1.00	
20.60			H							
ATOM	330	HG1	THR		26	30.483	8.469	20.617	1.00	
77.72			H							
ATOM	331	HG21	THR		26	27.497	7.882	22.496		
1.00126.99				H						
ATOM	332	HG22	THR		26	26.462	8.219	21.109		
1.00108.32				H						
ATOM	333	HG23	THR		26	27.393	9.519	21.850		
1.00151.99				H						
ATOM	334	N	ARG		27	26.758	5.337	20.967	1.00	
22.38			N							
ATOM	335	CA	ARG		27	25.476	4.687	20.674	1.00	
20.21			C							
ATOM	336	C	ARG		27	24.472	4.994	21.781	1.00	
16.96			C							
ATOM	337	O	ARG		27	24.861	5.284	22.912	1.00	
20.06			O							
ATOM	338	CB	ARG		27	25.676	3.172	20.574	1.00	
22.14			C							
ATOM	339	CG	ARG		27	26.646	2.856	19.434		
1.00124.30				C						
ATOM	340	CD	ARG		27	26.806	1.340	19.306		
1.00109.38				C						
ATOM	341	NE	ARG		27	27.792	1.021	18.280		
1.00227.73				N						
ATOM	342	CZ	ARG		27	27.466	1.004	16.992		

1.00426.12				C					
ATOM	343	NH1	ARG		27	28.367	0.714	16.094	
1.00767.09				N1+					
ATOM	344	NH2	ARG		27	26.244	1.279	16.625	
1.00581.78				N					
ATOM	345	HN	ARG		27	27.137	5.258	21.868	1.00
30.75				H					
ATOM	346	HA	ARG		27	25.087	5.052	19.736	1.00
23.13				H					
ATOM	347	HB1	ARG		27	24.727	2.696	20.380	1.00
87.46				H					
ATOM	348	HB2	ARG		27	26.080	2.800	21.505	
1.00103.36				H					
ATOM	349	HG1	ARG		27	27.607	3.300	19.644	
1.00281.97				H					
ATOM	350	HG2	ARG		27	26.258	3.257	18.510	
1.00276.19				H					
ATOM	351	HD1	ARG		27	25.854	0.901	19.041	
1.00183.60				H					
ATOM	352	HD2	ARG		27	27.132	0.933	20.251	
1.00142.93				H					
ATOM	353	HE	ARG		27	28.713	0.814	18.546	
1.00372.53				H					
ATOM	354	HH11	ARG		27	29.304	0.505	16.375	
1.00910.59				H					
ATOM	355	HH12	ARG		27	28.121	0.703	15.125	
1.00999.99				H					
ATOM	356	HH21	ARG		27	25.554	1.501	17.314	
1.00532.54				H					
ATOM	357	HH22	ARG		27	25.998	1.267	15.656	
1.00948.84				H					
ATOM	358	N	SER		28	23.176	4.931	21.459	1.00
14.60				N					
ATOM	359	CA	SER		28	22.140	5.210	22.455	1.00
14.92				C					
ATOM	360	C	SER		28	20.926	4.316	22.235	1.00
12.12				C					
ATOM	361	O	SER		28	20.588	3.974	21.100	1.00
13.41				O					
ATOM	362	CB	SER		28	21.718	6.677	22.377	1.00
23.26				C					
ATOM	363	OG	SER		28	20.679	6.917	23.317	
1.00146.32				O					
ATOM	364	HN	SER		28	22.910	4.695	20.542	1.00
15.23				H					
ATOM	365	HA	SER		28	22.533	5.017	23.443	1.00
15.44				H					
ATOM	366	HB1	SER		28	21.372	6.897	21.378	1.00
88.73				H					
ATOM	367	HB2	SER		28	22.558	7.306	22.610	
1.00124.68				H					
ATOM	368	HG	SER		28	20.886	7.726	23.789	

1.00242.47				H					
ATOM	369	N	CYS	29	20.279	3.943	23.330	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.103	3.086	23.267	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.483	2.955	24.657	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.118	2.441	25.580	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.493	1.699	22.731	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.083	0.953	21.900	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.598	4.255	24.203	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.380	3.531	22.600	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.794	1.053	23.546	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.306	1.793	22.030	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.251	3.430	24.806	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.570	3.365	26.098	1.00	
17.41			C						
ATOM	381	C	GLU	30	15.884	2.016	26.284	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.537	1.343	25.315	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.539	4.487	26.197	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.254	5.838	26.123		
1.00108.13				C					
ATOM	385	CD	GLU	30	17.088	6.055	27.382		
1.00240.52				C					
ATOM	386	OE1	GLU	30	16.846	5.363	28.356		
1.00422.56				O					
ATOM	387	OE2	GLU	30	17.959	6.910	27.349		
1.00410.81				O1-					
ATOM	388	HN	GLU	30	16.791	3.834	24.040	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.298	3.495	26.885	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.013	4.411	27.134	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	14.838	4.407	25.379	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	15.521	6.626	26.040		
1.00196.66				H					
ATOM	393	HG2	GLU	30	16.899	5.853	25.257		
1.00140.67				H					
ATOM	394	N	LYS	31	15.691	1.630	27.545	1.00	

11.96			N						
ATOM	395	CA	LYS	31	15.039	0.359	27.873	1.00	
11.40			C						
ATOM	396	C	LYS	31	13.809	0.615	28.737	1.00	
10.99			C						
ATOM	397	O	LYS	31	13.804	1.520	29.570	1.00	
12.86			O						
ATOM	398	CB	LYS	31	16.014	-0.544	28.631	1.00	
21.40			C						
ATOM	399	CG	LYS	31	17.205	-0.879	27.730	1.00	
57.81			C						
ATOM	400	CD	LYS	31	18.181	-1.782	28.486		
1.00115.52				C					
ATOM	401	CE	LYS	31	19.373	-2.111	27.586		
1.00250.23				C					
ATOM	402	NZ	LYS	31	20.328	-2.985	28.325		
1.00462.10				N1+					
ATOM	403	HN	LYS	31	15.990	2.213	28.272	1.00	
26.13			H						
ATOM	404	HA	LYS	31	14.732	-0.142	26.966	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	15.513	-1.457	28.915	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	16.362	-0.034	29.517	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	17.708	0.033	27.446		
1.00126.32				H					
ATOM	408	HG2	LYS	31	16.853	-1.387	26.844		
1.00114.19				H					
ATOM	409	HD1	LYS	31	17.681	-2.697	28.766		
1.00198.45				H					
ATOM	410	HD2	LYS	31	18.528	-1.274	29.375		
1.00200.14				H					
ATOM	411	HE1	LYS	31	19.870	-1.196	27.299		
1.00374.64				H					
ATOM	412	HE2	LYS	31	19.025	-2.625	26.702		
1.00403.27				H					
ATOM	413	HZ1	LYS	31	20.029	-3.062	29.318		
1.00627.38				H					
ATOM	414	HZ2	LYS	31	21.281	-2.572	28.281		
1.00622.26				H					
ATOM	415	HZ3	LYS	31	20.338	-3.931	27.895		
1.00619.20				H					
ATOM	416	N	THR	32	12.762	-0.181	28.526	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.525	-0.020	29.287	1.00	
22.44			C						
ATOM	418	C	THR	32	11.568	-0.845	30.569	1.00	
26.60			C						
ATOM	419	O	THR	32	11.685	-2.070	30.530	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.329	-0.462	28.437	1.00	

56.28			C						
ATOM	421	CG2	THR	32	9.040	-0.295	29.243		
1.00102.70								C	
ATOM	422	OG1	THR	32	10.261	0.336	27.265		
1.00111.17								O	
ATOM	423	HN	THR	32	12.822	-0.881	27.844	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.398	1.021	29.547	1.00	
19.67			H						
ATOM	425	HB	THR	32	10.444	-1.498	28.162	1.00	
84.25			H						
ATOM	426	HG1	THR	32	9.760	1.128	27.474		
1.00205.03								H	
ATOM	427	HG21	THR	32	8.190	-0.431	28.590		
1.00220.71								H	
ATOM	428	HG22	THR	32	9.010	0.695	29.672		
1.00174.67								H	
ATOM	429	HG23	THR	32	9.011	-1.033	30.031		
1.00217.44								H	
ATOM	430	N	THR	33	11.464	-0.161	31.704	1.00	
22.47			N						
ATOM	431	CA	THR	33	11.482	-0.827	33.003	1.00	
41.60			C						
ATOM	432	C	THR	33	10.729	-0.019	34.021	1.00	
38.03			C						
ATOM	433	O	THR	33	11.310	0.726	34.810	1.00	
52.73			O						
ATOM	434	CB	THR	33	12.912	-1.055	33.483	1.00	
63.25			C						
ATOM	435	CG2	THR	33	13.595	-2.103	32.605		
1.00121.65								C	
ATOM	436	OG1	THR	33	13.632	0.168	33.418	1.00	
96.20			O						
ATOM	437	HN	THR	33	11.367	0.815	31.669	1.00	
23.82			H						
ATOM	438	HA	THR	33	10.982	-1.776	32.926	1.00	
67.12			H						
ATOM	439	HB	THR	33	12.887	-1.407	34.501		
1.00107.59								H	
ATOM	440	HG1	THR	33	13.072	0.820	32.993		
1.00176.27								H	
ATOM	441	HG21	THR	33	14.522	-2.410	33.066		
1.00255.23								H	
ATOM	442	HG22	THR	33	13.800	-1.680	31.632		
1.00245.37								H	
ATOM	443	HG23	THR	33	12.947	-2.960	32.495		
1.00185.78								H	
ATOM	444	N	GLY	34	9.424	-0.197	34.003	1.00	
40.93			N						
ATOM	445	CA	GLY	34	8.567	0.494	34.935	1.00	
45.59			C						
ATOM	446	C	GLY	34	8.339	1.935	34.499	1.00	

40.97			C						
ATOM	447	O	GLY	34	7.564	2.668	35.115	1.00	
82.17			O						
ATOM	448	HN	GLY	34	9.037	-0.820	33.358	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	9.045	0.479	35.895	1.00	
54.41			H						
ATOM	450	HA2	GLY	34	7.619	-0.021	34.995	1.00	
62.09			H						
ATOM	451	N	ASN	35	9.017	2.333	33.425	1.00	
32.51			N						
ATOM	452	CA	ASN	35	8.885	3.686	32.898	1.00	
33.20			C						
ATOM	453	C	ASN	35	9.324	3.733	31.437	1.00	
23.17			C						
ATOM	454	O	ASN	35	10.200	2.976	31.020	1.00	
27.01			O						
ATOM	455	CB	ASN	35	9.736	4.658	33.716	1.00	
54.51			C						
ATOM	456	CG	ASN	35	9.341	4.598	35.180	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	8.152	4.973	35.538		
1.00220.46				N					
ATOM	458	OD1	ASN	35	10.145	4.203	36.025		
1.00117.80				O					
ATOM	459	HN	ASN	35	9.614	1.699	32.975	1.00	
51.15			H						
ATOM	460	HA	ASN	35	7.850	3.990	32.962	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	9.588	5.662	33.347	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	10.771	4.392	33.624	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	7.515	5.294	34.865		
1.00405.39				H					
ATOM	464	HD22	ASN	35	7.897	4.938	36.474		
1.00245.64				H					
ATOM	465	N	PHE	36	8.706	4.622	30.663	1.00	
35.72			N						
ATOM	466	CA	PHE	36	9.024	4.766	29.251	1.00	
33.41			C						
ATOM	467	C	PHE	36	9.884	6.006	29.017	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.661	7.051	29.628	1.00	
45.23			O						
ATOM	469	CB	PHE	36	7.722	4.892	28.472	1.00	
67.53			C						
ATOM	470	CG	PHE	36	6.925	3.619	28.624	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	5.974	3.510	29.646		
1.00106.51				C					
ATOM	472	CD2	PHE	36	7.136	2.548	27.746	1.00	

99.48			C						
ATOM	473	CE1	PHE	36	5.233	2.331	29.790		
1.00134.48			C						
ATOM	474	CE2	PHE	36	6.394	1.370	27.890		
1.00134.27			C						
ATOM	475	CZ	PHE	36	5.444	1.261	28.911		
1.00149.48			C						
ATOM	476	HN	PHE	36	8.013	5.193	31.044	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.558	3.893	28.902	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	7.942	5.059	27.439	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.151	5.724	28.859	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.814	4.336	30.324		
1.00110.20			H						
ATOM	481	HD2	PHE	36	7.871	2.630	26.958	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	4.501	2.249	30.579		
1.00155.06			H						
ATOM	483	HE2	PHE	36	6.554	0.544	27.213		
1.00159.46			H						
ATOM	484	HZ	PHE	36	4.871	0.352	29.023		
1.00183.25			H						
ATOM	485	N	THR	37	10.865	5.883	28.128	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.751	6.998	27.818	1.00	
27.18			C						
ATOM	487	C	THR	37	12.427	6.782	26.467	1.00	
41.87			C						
ATOM	488	O	THR	37	13.073	5.760	26.238		
1.00169.86			O						
ATOM	489	CB	THR	37	12.814	7.142	28.914	1.00	
26.52			C						
ATOM	490	CG2	THR	37	13.237	5.758	29.414	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.943	7.827	28.389	1.00	
81.95			O						
ATOM	492	HN	THR	37	10.995	5.029	27.668	1.00	
18.47			H						
ATOM	493	HA	THR	37	11.168	7.907	27.775	1.00	
38.80			H						
ATOM	494	HB	THR	37	12.405	7.706	29.740	1.00	
81.60			H						
ATOM	495	HG1	THR	37	14.342	7.269	27.717		
1.00188.80			H						
ATOM	496	HG21	THR	37	14.198	5.829	29.901		
1.00196.98			H						
ATOM	497	HG22	THR	37	13.307	5.076	28.581		
1.00196.23			H						
ATOM	498	HG23	THR	37	12.505	5.390	30.118		

1.00168.92				H					
ATOM	499	N	GLU	38	12.265	7.754	25.578	1.00	
26.53			N						
ATOM	500	CA	GLU	38	12.852	7.677	24.241	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.314	8.112	24.259	1.00	
25.39			C						
ATOM	502	O	GLU	38	14.786	8.709	25.227	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.067	8.570	23.277	1.00	
54.82			C						
ATOM	504	CG	GLU	38	10.624	8.061	23.146		
1.00165.84				C					
ATOM	505	CD	GLU	38	9.788	8.523	24.337		
1.00292.92				C					
ATOM	506	OE1	GLU	38	10.324	9.226	25.179		
1.00414.19				O					
ATOM	507	OE2	GLU	38	8.623	8.166	24.391		
1.00537.65				O1-					
ATOM	508	HN	GLU	38	11.734	8.539	25.823	1.00	
84.50			H						
ATOM	509	HA	GLU	38	12.797	6.656	23.893	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.539	8.549	22.307		
1.00144.82				H					
ATOM	511	HB2	GLU	38	12.062	9.585	23.650		
1.00106.49				H					
ATOM	512	HG1	GLU	38	10.623	6.980	23.108		
1.00303.31				H					
ATOM	513	HG2	GLU	38	10.192	8.450	22.237		
1.00323.99				H					
ATOM	514	N	CYS	39	15.023	7.813	23.174	1.00	
15.84			N						
ATOM	515	CA	CYS	39	16.433	8.176	23.056	1.00	
14.30			C						
ATOM	516	C	CYS	39	16.588	9.700	23.093	1.00	
22.31			C						
ATOM	517	O	CYS	39	15.683	10.422	22.678	1.00	
32.92			O						
ATOM	518	CB	CYS	39	16.989	7.629	21.738	1.00	
18.08			C						
ATOM	519	SG	CYS	39	15.889	8.096	20.379	1.00	
17.41			S						
ATOM	520	HN	CYS	39	14.588	7.343	22.434	1.00	
24.87			H						
ATOM	521	HA	CYS	39	16.975	7.732	23.876	1.00	
14.60			H						
ATOM	522	HB1	CYS	39	17.057	6.554	21.794	1.00	
27.71			H						
ATOM	523	HB2	CYS	39	17.970	8.042	21.561	1.00	
34.91			H						
ATOM	524	N	PRO	40	17.700	10.211	23.577	1.00	

27.27									
ATOM	525	CA	PRO	40	17.928	11.682	23.651	1.00	
47.66			C						
ATOM	526	C	PRO	40	18.265	12.277	22.286	1.00	
71.54			C						
ATOM	527	O	PRO	40	18.992	11.677	21.495	1.00	
87.70			O						
ATOM	528	CB	PRO	40	19.108	11.807	24.622	1.00	
53.85			C						
ATOM	529	CG	PRO	40	19.890	10.551	24.417	1.00	
46.04			C						
ATOM	530	CD	PRO	40	18.859	9.461	24.098	1.00	
25.70			C						
ATOM	531	HA	PRO	40	17.065	12.173	24.069	1.00	
58.04			H						
ATOM	532	HB1	PRO	40	18.755	11.860	25.640	1.00	
67.93			H						
ATOM	533	HB2	PRO	40	19.709	12.677	24.386	1.00	
70.99			H						
ATOM	534	HG1	PRO	40	20.433	10.294	25.315	1.00	
65.91			H						
ATOM	535	HG2	PRO	40	20.578	10.675	23.588	1.00	
54.99			H						
ATOM	536	HD1	PRO	40	18.586	8.925	24.993	1.00	
24.22			H						
ATOM	537	HD2	PRO	40	19.244	8.788	23.350	1.00	
26.94			H						
ATOM	538	N	GLY	41	17.733	13.462	22.024		
1.00105.24									N
ATOM	539	CA	GLY	41	17.982	14.141	20.758		
1.00147.55									C
ATOM	540	C	GLY	41	19.462	14.462	20.596		
1.00161.74									C
ATOM	541	O	GLY	41	20.024	14.326	19.509		
1.00244.37									O
ATOM	542	HN	GLY	41	17.168	13.889	22.697		
1.00121.79									H
ATOM	543	HA1	GLY	41	17.416	15.060	20.730		
1.00184.40									H
ATOM	544	HA2	GLY	41	17.667	13.504	19.947		
1.00157.34									H
ATOM	545	N	LEU	42	20.087	14.890	21.690		
1.00162.48									N
ATOM	546	CA	LEU	42	21.511	15.237	21.684		
1.00191.48									C
ATOM	547	C	LEU	42	22.294	14.266	22.563		
1.00166.66									C
ATOM	548	O	LEU	42	21.808	13.828	23.606		
1.00251.38									O
ATOM	549	CB	LEU	42	21.702	16.662	22.212		
1.00307.99									C
ATOM	550	CG	LEU	42	20.867	17.645	21.382		

1.00452.28				C				
ATOM	551	CD1	LEU	42	21.026	19.053	21.964	
1.00681.24				C				
ATOM	552	CD2	LEU	42	21.341	17.635	19.918	
1.00527.46				C				
ATOM	553	HN	LEU	42	19.579	14.975	22.522	
1.00195.47				H				
ATOM	554	HA	LEU	42	21.899	15.182	20.677	
1.00229.77				H				
ATOM	555	HB1	LEU	42	22.744	16.932	22.143	
1.00342.49				H				
ATOM	556	HB2	LEU	42	21.387	16.707	23.244	
1.00335.33				H				
ATOM	557	HG	LEU	42	19.827	17.355	21.426	
1.00427.79				H				
ATOM	558	HD11	LEU	42	22.073	19.316	21.991	
1.00909.71				H				
ATOM	559	HD12	LEU	42	20.624	19.076	22.965	
1.00706.80				H				
ATOM	560	HD13	LEU	42	20.493	19.761	21.346	
1.00858.82				H				
ATOM	561	HD21	LEU	42	20.873	16.813	19.395	
1.00631.69				H				
ATOM	562	HD22	LEU	42	22.415	17.521	19.882	
1.00628.06				H				
ATOM	563	HD23	LEU	42	21.063	18.564	19.439	
1.00656.75				H				
ATOM	564	N	THR	43	23.507	13.933	22.136	
1.00178.52				N				
ATOM	565	CA	THR	43	24.346	13.012	22.890	
1.00240.84				C				
ATOM	566	C	THR	43	24.836	13.674	24.184	
1.00372.31				C				
ATOM	567	O	THR	43	25.020	14.890	24.223	
1.00500.13				O				
ATOM	568	CB	THR	43	25.549	12.603	22.032	
1.00354.13				C				
ATOM	569	CG2	THR	43	25.054	12.017	20.709	
1.00463.04				C				
ATOM	570	OG1	THR	43	26.352	13.746	21.774	
1.00508.50				O				
ATOM	571	HN	THR	43	23.841	14.313	21.296	
1.00229.59				H				
ATOM	572	HA	THR	43	23.769	12.135	23.125	
1.00249.90				H				
ATOM	573	HB	THR	43	26.134	11.864	22.550	
1.00481.58				H				
ATOM	574	HG1	THR	43	26.899	13.905	22.547	
1.00624.31				H				
ATOM	575	HG21	THR	43	24.293	11.277	20.904	
1.00650.95				H				
ATOM	576	HG22	THR	43	25.881	11.554	20.190	

1.00580.73				H				
ATOM	577	HG23	THR	H	43	24.642	12.805	20.097
1.00571.99				H				
ATOM	578	N	PRO	H	44	25.057	12.914	25.237
1.00488.39				N				
ATOM	579	CA	PRO	N	44	25.542	13.473	26.536
1.00760.13				C				
ATOM	580	C	PRO	C	44	27.018	13.866	26.473
1.00735.36				C				
ATOM	581	O	PRO	C	44	27.578	14.370	27.447
1.00999.99				O				
ATOM	582	CB	PRO	O	44	25.311	12.323	27.526
1.00999.99				C				
ATOM	583	CG	PRO	C	44	25.430	11.087	26.696
1.00856.94				C				
ATOM	584	CD	PRO	C	44	24.869	11.451	25.320
1.00548.09				C				
ATOM	585	HA	PRO	C	44	24.944	14.322	26.825
1.00939.00				H				
ATOM	586	HB1	PRO	H	44	24.320	12.387	27.951
1.00999.99				H				
ATOM	587	HB2	PRO	H	44	26.060	12.335	28.308
1.00999.99				H				
ATOM	588	HG1	PRO	H	44	24.851	10.285	27.129
1.00999.99				H				
ATOM	589	HG2	PRO	H	44	26.470	10.796	26.614
1.00853.53				H				
ATOM	590	HD1	PRO	H	44	23.819	11.207	25.261
1.00602.45				H				
ATOM	591	HD2	PRO	H	44	25.422	10.944	24.543
1.00463.32				H				
ATOM	592	N	ILE	H	45	27.641	13.625	25.324
1.00518.33				N				
ATOM	593	CA	ILE	N	45	29.051	13.951	25.148
1.00582.79				C				
ATOM	594	C	ILE	C	45	29.316	15.411	25.502
1.00795.93				C				
ATOM	595	O	ILE	C	45	28.612	16.309	25.041
1.00898.75				O				
ATOM	596	CB	ILE	O	45	29.468	13.698	23.700
1.00474.41				C				
ATOM	597	CG1	ILE	C	45	29.304	12.212	23.373
1.00516.90				C				
ATOM	598	CG2	ILE	C	45	30.932	14.100	23.511
1.00760.75				C				
ATOM	599	CD1	ILE	C	45	29.457	12.002	21.865
1.00566.81				C				
ATOM	600	HN	ILE	C	45	27.145	13.218	24.583
1.00395.72				H				
ATOM	601	HA	ILE	H	45	29.642	13.319	25.796
1.00711.06				H				
ATOM	602	HB	ILE	H	45	28.847	14.286	23.040

1.00477.81				H				
ATOM	603	HG11	ILE	H	45	28.324	11.881	23.680
1.00624.28				H				
ATOM	604	HG12	ILE	H	45	30.058	11.642	23.895
1.00744.84				H				
ATOM	605	HG21	ILE	H	45	31.014	15.176	23.527
1.00920.57				H				
ATOM	606	HG22	ILE	H	45	31.291	13.726	22.564
1.00999.99				H				
ATOM	607	HG23	ILE	H	45	31.525	13.683	24.312
1.00865.46				H				
ATOM	608	HD11	ILE	H	45	30.476	12.211	21.574
1.00658.89				H				
ATOM	609	HD12	ILE	H	45	28.790	12.669	21.339
1.00734.30				H				
ATOM	610	HD13	ILE	H	45	29.214	10.980	21.616
1.00675.84				H				
ATOM	611	N	ALA	N	46	30.338	15.639	26.321
1.00999.99				N				
ATOM	612	CA	ALA	C	46	30.690	16.993	26.732
1.00999.99				C				
ATOM	613	C	ALA	C	46	30.974	17.865	25.512
1.00999.99				C				
ATOM	614	CB	ALA	C	46	31.923	16.960	27.636
1.00999.99				C				
ATOM	615	OT1	ALA	O	46	30.676	19.047	25.571
1.00999.99				O				
ATOM	616	OT2	ALA	O	46	31.484	17.337	24.538
1.00999.99				O				
ATOM	617	HN	ALA	H	46	30.864	14.882	26.656
1.00999.99				H				
ATOM	618	HA	ALA	H	46	29.865	17.418	27.283
1.00999.99				H				
ATOM	619	HB1	ALA	H	46	32.759	16.550	27.090
1.00999.99				H				
ATOM	620	HB2	ALA	H	46	31.720	16.343	28.499
1.00999.99				H				
ATOM	621	HB3	ALA	H	46	32.160	17.963	27.958
1.00999.99				H				
ENDMDL								
TER								
MODEL		5						
ATOM	1	N	GLY	N	1	25.247	-2.355	20.648
1.00999.99				N				
ATOM	2	CA	GLY	C	1	24.976	-2.957	19.311
1.00999.99				C				
ATOM	3	C	GLY	C	1	24.380	-1.901	18.387
1.00999.99				C				
ATOM	4	O	GLY	O	1	23.826	-0.901	18.844
1.00999.99				O				
ATOM	5	HA1	GLY	H	1	24.277	-3.772	19.418
1.00999.99				H				

ATOM	6	HA2	GLY	1	25.900	-3.327	18.890	
1.00999.99								H
ATOM	7	HT1	GLY	1	24.579	-2.743	21.343	
1.00999.99								H
ATOM	8	HT2	GLY	1	25.130	-1.322	20.593	
1.00999.99								H
ATOM	9	HT3	GLY	1	26.218	-2.581	20.940	
1.00999.99								H
ATOM	10	N	LEU	2	24.496	-2.131	17.084	
1.00999.99								N
ATOM	11	CA	LEU	2	23.964	-1.194	16.100	
1.00895.59								C
ATOM	12	C	LEU	2	22.440	-1.230	16.107	
1.00532.27								C
ATOM	13	O	LEU	2	21.835	-2.267	16.384	
1.00625.21								O
ATOM	14	CB	LEU	2	24.476	-1.557	14.703	
1.00999.99								C
ATOM	15	CG	LEU	2	26.010	-1.540	14.681	
1.00999.99								C
ATOM	16	CD1	LEU	2	26.496	-2.003	13.304	
1.00999.99								C
ATOM	17	CD2	LEU	2	26.529	-0.117	14.959	
1.00999.99								C
ATOM	18	HN	LEU	2	24.946	-2.946	16.777	
1.00999.99								H
ATOM	19	HA	LEU	2	24.290	-0.197	16.348	
1.00890.87								H
ATOM	20	HB1	LEU	2	24.101	-0.840	13.987	
1.00924.07								H
ATOM	21	HB2	LEU	2	24.124	-2.544	14.440	
1.00999.99								H
ATOM	22	HG	LEU	2	26.385	-2.215	15.438	
1.00999.99								H
ATOM	23	HD11	LEU	2	26.324	-1.220	12.580	
1.00999.99								H
ATOM	24	HD12	LEU	2	25.954	-2.889	13.011	
1.00999.99								H
ATOM	25	HD13	LEU	2	27.553	-2.224	13.351	
1.00999.99								H
ATOM	26	HD21	LEU	2	26.564	0.052	16.025	
1.00999.99								H
ATOM	27	HD22	LEU	2	25.870	0.609	14.503	
1.00999.99								H
ATOM	28	HD23	LEU	2	27.523	-0.004	14.550	
1.00999.99								H
ATOM	29	N	CYS	3	21.821	-0.093	15.797	
1.00271.28								N
ATOM	30	CA	CYS	3	20.363	-0.013	15.773	
1.00104.50								C
ATOM	31	C	CYS	3	19.822	-0.555	14.454	1.00
90.98			C					

ATOM	32	O	CYS	3	19.977	0.070	13.404	
1.00207.28			O					
ATOM	33	CB	CYS	3	19.912	1.440	15.945	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.471	2.068	17.547	1.00
81.56			S					
ATOM	35	HN	CYS	3	22.351	0.703	15.584	
1.00296.55			H					
ATOM	36	HA	CYS	3	19.962	-0.600	16.586	
1.00166.45			H					
ATOM	37	HB1	CYS	3	18.834	1.489	15.895	1.00
40.38			H					
ATOM	38	HB2	CYS	3	20.335	2.043	15.156	1.00
98.45			H					
ATOM	39	N	SER	4	19.180	-1.717	14.515	1.00
85.31			N					
ATOM	40	CA	SER	4	18.614	-2.330	13.319	1.00
92.94			C					
ATOM	41	C	SER	4	17.552	-1.422	12.727	1.00
67.37			C					
ATOM	42	O	SER	4	17.462	-1.248	11.512	
1.00102.28			O					
ATOM	43	CB	SER	4	17.956	-3.661	13.673	
1.00123.83			C					
ATOM	44	OG	SER	4	17.535	-4.307	12.478	
1.00178.89			O					
ATOM	45	HN	SER	4	19.083	-2.168	15.381	
1.00163.03			H					
ATOM	46	HA	SER	4	19.393	-2.499	12.593	
1.00129.78			H					
ATOM	47	HB1	SER	4	17.096	-3.470	14.309	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.656	-4.291	14.195	
1.00156.87			H					
ATOM	49	HG	SER	4	18.022	-5.130	12.398	
1.00218.16			H					
ATOM	50	N	GLU	5	16.733	-0.866	13.613	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.642	0.013	13.211	1.00
41.21			C					
ATOM	52	C	GLU	5	15.475	1.144	14.218	1.00
41.92			C					
ATOM	53	O	GLU	5	16.338	1.361	15.069	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.354	-0.801	13.123	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.078	-1.443	14.476	1.00
55.48			C					
ATOM	56	CD	GLU	5	12.950	-2.462	14.355	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.453	-2.639	13.255	
1.00206.49			O					

ATOM	58	OE2	GLU	5	12.599	-3.051	15.364	
1.00197.24								O1-
ATOM	59	HN	GLU	5	16.855	-1.065	14.564	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.854	0.430	12.247	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.462	-1.572	12.377	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.538	-0.155	12.859	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.795	-0.679	15.185	1.00
58.03			H					
ATOM	64	HG2	GLU	5	14.974	-1.933	14.817	1.00
57.77			H					
ATOM	65	N	ASN	6	14.363	1.864	14.120	1.00
50.73			N					
ATOM	66	CA	ASN	6	14.105	2.972	15.033	1.00
71.04			C					
ATOM	67	C	ASN	6	14.059	2.469	16.473	1.00
65.17			C					
ATOM	68	O	ASN	6	14.563	3.125	17.385	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.776	3.641	14.681	1.00
94.83			C					
ATOM	70	CG	ASN	6	12.914	4.418	13.375	
1.00160.94								C
ATOM	71	ND2	ASN	6	11.844	4.725	12.693	
1.00244.88								N
ATOM	72	OD1	ASN	6	14.026	4.754	12.965	
1.00219.73								O
ATOM	73	HN	ASN	6	13.708	1.649	13.423	1.00
72.81			H					
ATOM	74	HA	ASN	6	14.899	3.697	14.939	1.00
96.02			H					
ATOM	75	HB1	ASN	6	12.496	4.321	15.472	
1.00111.09								H
ATOM	76	HB2	ASN	6	12.013	2.886	14.569	1.00
98.13			H					
ATOM	77	HD21	ASN	6	10.961	4.457	13.021	
1.00272.43								H
ATOM	78	HD22	ASN	6	11.925	5.224	11.853	
1.00336.78								H
ATOM	79	N	GLY	7	13.456	1.297	16.669	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.347	0.696	18.001	1.00
71.47			C					
ATOM	81	C	GLY	7	13.985	-0.686	18.019	1.00
41.04			C					
ATOM	82	O	GLY	7	13.307	-1.694	18.214	1.00
44.54			O					
ATOM	83	HN	GLY	7	13.079	0.822	15.899	1.00
45.49			H					

ATOM	84	HA1	GLY	7	12.309	0.602	18.261	
1.00103.52								H
ATOM	85	HA2	GLY	7	13.841	1.325	18.732	
1.00108.67								H
ATOM	86	N	ASP	8	15.294	-0.723	17.813	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.023	-1.987	17.804	1.00
14.15			C					
ATOM	88	C	ASP	8	15.896	-2.690	19.149	1.00
9.37			C					
ATOM	89	O	ASP	8	15.642	-3.892	19.210	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.500	-1.738	17.493	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.243	-3.066	17.394	1.00
21.22			C					
ATOM	92	OD1	ASP	8	17.640	-4.083	17.695	
1.00119.56								O
ATOM	93	OD2	ASP	8	19.403	-3.048	17.019	
1.00133.27								O1-
ATOM	94	HN	ASP	8	15.775	0.115	17.662	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.610	-2.622	17.040	1.00
20.92			H					
ATOM	96	HB1	ASP	8	17.936	-1.144	18.282	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.584	-1.210	16.556	1.00
44.14			H					
ATOM	98	N	CYS	9	16.067	-1.930	20.222	1.00
5.93			N					
ATOM	99	CA	CYS	9	15.962	-2.489	21.564	1.00
7.54			C					
ATOM	100	C	CYS	9	14.556	-3.022	21.802	1.00
14.60			C					
ATOM	101	O	CYS	9	14.369	-4.094	22.377	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.292	-1.423	22.598	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.059	-1.084	22.515	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.262	-0.978	20.107	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.674	-3.291	21.663	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.042	-1.777	23.585	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.737	-0.521	22.382	1.00
5.04			H					
ATOM	108	N	ALA	10	13.573	-2.259	21.342	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.174	-2.639	21.485	1.00
32.04			C					

ATOM	110	C	ALA	10	11.292	-1.689	20.677	1.00
45.47			C					
ATOM	111	O	ALA	10	11.745	-0.631	20.244	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.765	-2.609	22.963	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.796	-1.420	20.887	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.045	-3.642	21.106	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.591	-2.946	23.571	1.00
84.37			H					
ATOM	116	HB2	ALA	10	10.918	-3.263	23.117	
1.00118.20			H					
ATOM	117	HB3	ALA	10	11.497	-1.603	23.246	
1.00117.32			H					
ATOM	118	N	ALA	11	10.039	-2.073	20.472	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.117	-1.239	19.710	1.00
35.24			C					
ATOM	120	C	ALA	11	8.928	0.118	20.385	1.00
22.78			C					
ATOM	121	O	ALA	11	8.882	1.150	19.716	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.763	-1.943	19.584	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.730	-2.929	20.837	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.521	-1.086	18.721	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.899	-2.903	19.110	
1.00157.06			H					
ATOM	126	HB2	ALA	11	7.097	-1.337	18.988	
1.00148.83			H					
ATOM	127	HB3	ALA	11	7.338	-2.082	20.567	
1.00137.06			H					
ATOM	128	N	ASP	12	8.814	0.108	21.711	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.625	1.346	22.465	1.00
31.05			C					
ATOM	130	C	ASP	12	9.958	2.038	22.737	1.00
22.98			C					
ATOM	131	O	ASP	12	10.027	3.266	22.805	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.930	1.041	23.794	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.488	0.613	23.540	
1.00104.83			C					
ATOM	134	OD1	ASP	12	6.013	0.828	22.437	
1.00258.73			O					
ATOM	135	OD2	ASP	12	5.881	0.077	24.453	
1.00213.46			O1-					

ATOM	136	HN	ASP	12	8.855	-0.745	22.191	1.00
36.19		H						
ATOM	137	HA	ASP	12	7.997	2.012	21.894	1.00
49.76		H						
ATOM	138	HB1	ASP	12	7.937	1.925	24.412	1.00
95.71		H						
ATOM	139	HB2	ASP	12	8.456	0.246	24.299	1.00
54.37		H						
ATOM	140	N	GLU	13	11.013	1.248	22.902	1.00
17.60		N						
ATOM	141	CA	GLU	13	12.337	1.800	23.178	1.00
12.01		C						
ATOM	142	C	GLU	13	12.946	2.427	21.925	1.00
10.07		C						
ATOM	143	O	GLU	13	12.618	2.044	20.802	1.00
12.81		O						
ATOM	144	CB	GLU	13	13.262	0.701	23.702	1.00
11.74		C						
ATOM	145	CG	GLU	13	12.740	0.200	25.050	1.00
13.49		C						
ATOM	146	CD	GLU	13	12.921	1.279	26.111	
1.00142.36								C
ATOM	147	OE1	GLU	13	13.681	2.201	25.866	
1.00339.06								O
ATOM	148	OE2	GLU	13	12.295	1.170	27.151	
1.00335.28								O1-
ATOM	149	HN	GLU	13	10.899	0.275	22.845	1.00
28.36		H						
ATOM	150	HA	GLU	13	12.242	2.560	23.938	1.00
13.06		H						
ATOM	151	HB1	GLU	13	14.257	1.099	23.829	1.00
13.76		H						
ATOM	152	HB2	GLU	13	13.287	-0.116	22.996	1.00
9.94		H						
ATOM	153	HG1	GLU	13	13.289	-0.684	25.343	1.00
66.02		H						
ATOM	154	HG2	GLU	13	11.691	-0.042	24.963	1.00
56.23		H						
ATOM	155	N	CYS	14	13.842	3.395	22.133	1.00
9.12		N						
ATOM	156	CA	CYS	14	14.511	4.083	21.025	1.00
10.69		C						
ATOM	157	C	CYS	14	15.916	3.529	20.831	1.00
9.56		C						
ATOM	158	O	CYS	14	16.506	2.977	21.759	1.00
13.62		O						
ATOM	159	CB	CYS	14	14.596	5.583	21.317	1.00
13.96		C						
ATOM	160	SG	CYS	14	15.403	6.424	19.928	1.00
42.96		S						
ATOM	161	HN	CYS	14	14.064	3.650	23.053	1.00
9.76		H						

ATOM	162	HA	CYS	14	13.946	3.936	20.114	1.00
15.54			H					
ATOM	163	HB1	CYS	14	15.172	5.741	22.216	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.601	5.981	21.450	1.00
46.13			H					
ATOM	165	N	CYS	15	16.454	3.682	19.623	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.797	3.198	19.320	1.00
9.28			C					
ATOM	167	C	CYS	15	18.409	4.062	18.227	1.00
9.92			C					
ATOM	168	O	CYS	15	17.783	4.298	17.193	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.741	1.741	18.852	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.402	1.017	18.903	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.939	4.136	18.923	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.412	3.262	20.206	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.363	1.703	17.839	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.085	1.181	19.500	1.00
27.31			H					
ATOM	175	N	VAL	16	19.628	4.542	18.454	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.292	5.387	17.468	1.00
11.99			C					
ATOM	177	C	VAL	16	21.806	5.233	17.561	1.00
7.73			C					
ATOM	178	O	VAL	16	22.382	5.291	18.648	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.896	6.847	17.698	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.327	7.284	19.100	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.575	7.730	16.652	
1.00115.21								C
ATOM	182	HN	VAL	16	20.086	4.331	19.298	1.00
9.76			H					
ATOM	183	HA	VAL	16	19.976	5.095	16.477	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.824	6.943	17.608	1.00
52.63			H					
ATOM	185	HG11	VAL	16	19.879	8.239	19.333	
1.00128.07								H
ATOM	186	HG12	VAL	16	21.403	7.374	19.135	
1.00154.13								H
ATOM	187	HG13	VAL	16	20.002	6.549	19.821	
1.00135.74								H

ATOM	188	HG21	VAL	16	21.641	7.730	16.818	
1.00229.05								H
ATOM	189	HG22	VAL	16	20.198	8.738	16.733	
1.00261.82								H
ATOM	190	HG23	VAL	16	20.363	7.345	15.667	
1.00210.07								H
ATOM	191	N	ASP	17	22.444	5.028	16.411	1.00
14.34			N					
ATOM	192	CA	ASP	17	23.894	4.859	16.362	1.00
11.90			C					
ATOM	193	C	ASP	17	24.579	6.183	16.045	1.00
13.15			C					
ATOM	194	O	ASP	17	24.347	6.779	14.992	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.259	3.831	15.288	1.00
20.80			C					
ATOM	196	CG	ASP	17	23.814	2.440	15.725	1.00
28.72			C					
ATOM	197	OD1	ASP	17	23.538	2.271	16.902	
1.00135.42								O
ATOM	198	OD2	ASP	17	23.752	1.566	14.877	
1.00114.17								O1-
ATOM	199	HN	ASP	17	21.928	4.986	15.578	1.00
28.29			H					
ATOM	200	HA	ASP	17	24.249	4.500	17.319	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.328	3.833	15.138	1.00
22.42			H					
ATOM	202	HB2	ASP	17	23.767	4.092	14.362	1.00
29.52			H					
ATOM	203	N	THR	18	25.434	6.632	16.960	1.00
11.55			N					
ATOM	204	CA	THR	18	26.171	7.885	16.782	1.00
17.10			C					
ATOM	205	C	THR	18	27.634	7.592	16.477	1.00
10.63			C					
ATOM	206	O	THR	18	28.121	6.495	16.740	1.00
6.49			O					
ATOM	207	CB	THR	18	26.074	8.738	18.051	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.697	9.391	18.138	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.285	7.912	19.185	1.00
26.49			O					
ATOM	210	HN	THR	18	25.581	6.106	17.774	1.00
13.96			H					
ATOM	211	HA	THR	18	25.748	8.441	15.955	1.00
26.43			H					
ATOM	212	HB	THR	18	26.831	9.509	18.026	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.439	7.788	19.622	1.00
71.62			H					

ATOM	214	HG21	THR	18	23.938	8.664	17.893	
1.00100.44								H
ATOM	215	HG22	THR	18	24.648	10.215	17.440	
1.00129.42								H
ATOM	216	HG23	THR	18	24.536	9.757	19.140	
1.00156.21								H
ATOM	217	N	VAL	19	28.323	8.591	15.935	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.721	8.468	15.600	1.00
13.34			C					
ATOM	219	C	VAL	19	30.184	9.751	14.936	1.00
25.88			C					
ATOM	220	O	VAL	19	29.671	10.170	13.898	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.985	7.273	14.687	1.00
15.48			C					
ATOM	222	CG1	VAL	19	28.996	7.277	13.517	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.420	7.362	14.148	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.884	9.444	15.770	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.284	8.336	16.515	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.870	6.366	15.257	1.00
11.49			H					
ATOM	227	HG11	VAL	19	27.988	7.362	13.897	
1.00137.43								H
ATOM	228	HG12	VAL	19	29.094	6.356	12.961	1.00
93.29			H					
ATOM	229	HG13	VAL	19	29.208	8.112	12.868	
1.00108.69								H
ATOM	230	HG21	VAL	19	31.464	8.103	13.364	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.721	6.402	13.757	
1.00111.36								H
ATOM	232	HG23	VAL	19	32.086	7.652	14.950	1.00
77.11			H					
ATOM	233	N	PHE	20	31.139	10.364	15.581	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.709	11.624	15.136	1.00
40.34			C					
ATOM	235	C	PHE	20	32.950	11.402	14.275	1.00
40.37			C					
ATOM	236	O	PHE	20	32.862	11.232	13.060	1.00
66.02			O					
ATOM	237	CB	PHE	20	32.067	12.477	16.375	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.368	11.590	17.577	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.344	10.833	18.180	1.00
30.20			C					

ATOM	240	CD2	PHE	20	33.666	11.538	18.100	1.00
40.95		C						
ATOM	241	CE1	PHE	20	31.629	10.033	19.290	1.00
30.41		C						
ATOM	242	CE2	PHE	20	33.946	10.736	19.211	1.00
45.84		C						
ATOM	243	CZ	PHE	20	32.929	9.982	19.805	1.00
40.81		C						
ATOM	244	HN	PHE	20	31.456	9.963	16.405	1.00
16.73		H						
ATOM	245	HA	PHE	20	30.975	12.159	14.549	1.00
59.91		H						
ATOM	246	HB1	PHE	20	31.241	13.104	16.613	1.00
67.15		H						
ATOM	247	HB2	PHE	20	32.925	13.100	16.165	1.00
58.17		H						
ATOM	248	HD1	PHE	20	30.337	10.858	17.782	1.00
33.34		H						
ATOM	249	HD2	PHE	20	34.450	12.120	17.647	1.00
49.35		H						
ATOM	250	HE1	PHE	20	30.845	9.456	19.750	1.00
30.61		H						
ATOM	251	HE2	PHE	20	34.950	10.695	19.609	1.00
61.27		H						
ATOM	252	HZ	PHE	20	33.146	9.363	20.663	1.00
52.66		H						
ATOM	253	N	GLU	21	34.099	11.442	14.924	1.00
41.31		N						
ATOM	254	CA	GLU	21	35.377	11.285	14.246	1.00
56.16		C						
ATOM	255	C	GLU	21	35.686	9.808	13.979	1.00
58.61		C						
ATOM	256	O	GLU	21	36.523	9.489	13.136	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.457	11.946	15.123	1.00
57.37		C						
ATOM	258	CG	GLU	21	37.842	11.332	14.873	
1.00193.56			C					
ATOM	259	CD	GLU	21	38.914	12.178	15.550	
1.00304.62			C					
ATOM	260	OE1	GLU	21	40.025	12.206	15.047	
1.00451.81			O					
ATOM	261	OE2	GLU	21	38.610	12.785	16.563	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	34.091	11.603	15.890	1.00
50.82		H						
ATOM	263	HA	GLU	21	35.335	11.805	13.299	1.00
85.72		H						
ATOM	264	HB1	GLU	21	36.182	11.819	16.159	1.00
46.37		H						
ATOM	265	HB2	GLU	21	36.496	13.005	14.899	
1.00131.81			H					

ATOM	266	HG1	GLU	21	38.032	11.296	13.810	
	1.00314.91							H
ATOM	267	HG2	GLU	21	37.869	10.331	15.278	
	1.00266.92							H
ATOM	268	N	GLY	22	35.011	8.916	14.696	1.00
	86.70		N					
ATOM	269	CA	GLY	22	35.230	7.480	14.519	
	1.00104.66							C
ATOM	270	C	GLY	22	36.271	6.956	15.501	1.00
	71.50		C					
ATOM	271	O	GLY	22	36.469	5.747	15.619	1.00
	89.87		O					
ATOM	272	HN	GLY	22	34.354	9.226	15.356	
	1.00214.64							H
ATOM	273	HA1	GLY	22	35.568	7.287	13.511	
	1.00152.47							H
ATOM	274	HA2	GLY	22	34.298	6.960	14.683	
	1.00118.15							H
ATOM	275	N	ASP	23	36.926	7.867	16.215	1.00
	44.68		N					
ATOM	276	CA	ASP	23	37.931	7.466	17.192	1.00
	43.33		C					
ATOM	277	C	ASP	23	37.287	6.571	18.241	1.00
	37.55		C					
ATOM	278	O	ASP	23	37.850	5.553	18.643	1.00
	61.37		O					
ATOM	279	CB	ASP	23	38.533	8.703	17.863	1.00
	40.74		C					
ATOM	280	CG	ASP	23	39.624	8.289	18.844	
	1.00141.86							C
ATOM	281	OD1	ASP	23	40.299	9.168	19.353	
	1.00328.18							O
ATOM	282	OD2	ASP	23	39.769	7.099	19.072	
	1.00304.58							O1-
ATOM	283	HN	ASP	23	36.724	8.818	16.089	1.00
	40.86		H					
ATOM	284	HA	ASP	23	38.714	6.920	16.691	1.00
	72.12		H					
ATOM	285	HB1	ASP	23	37.757	9.235	18.395	1.00
	94.15		H					
ATOM	286	HB2	ASP	23	38.956	9.349	17.109	1.00
	93.26		H					
ATOM	287	N	MET	24	36.089	6.960	18.661	1.00
	23.24		N					
ATOM	288	CA	MET	24	35.328	6.201	19.650	1.00
	32.50		C					
ATOM	289	C	MET	24	33.849	6.247	19.290	1.00
	25.13		C					
ATOM	290	O	MET	24	33.189	7.268	19.483	1.00
	54.40		O					
ATOM	291	CB	MET	24	35.542	6.795	21.044	1.00
	47.36		C					

ATOM	292	CG	MET	24	34.742	5.992	22.073	
1.00151.73								C
ATOM	293	SD	MET	24	35.146	6.574	23.740	
1.00209.23								S
ATOM	294	CE	MET	24	34.346	8.197	23.633	
1.00243.29								C
ATOM	295	HN	MET	24	35.698	7.775	18.285	1.00
17.32			H					
ATOM	296	HA	MET	24	35.658	5.170	19.650	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.207	7.820	21.051	
1.00124.40								H
ATOM	298	HB2	MET	24	36.592	6.757	21.294	
1.00166.96								H
ATOM	299	HG1	MET	24	34.995	4.946	21.986	
1.00331.71								H
ATOM	300	HG2	MET	24	33.687	6.123	21.891	
1.00302.30								H
ATOM	301	HE1	MET	24	35.005	8.887	23.126	
1.00340.44								H
ATOM	302	HE2	MET	24	34.142	8.563	24.626	
1.00373.88								H
ATOM	303	HE3	MET	24	33.419	8.106	23.087	
1.00386.81								H
ATOM	304	N	VAL	25	33.333	5.146	18.755	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.930	5.099	18.362	1.00
15.37			C					
ATOM	306	C	VAL	25	31.021	5.169	19.580	1.00
17.47			C					
ATOM	307	O	VAL	25	31.360	4.680	20.658	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.623	3.830	17.565	1.00
23.36			C					
ATOM	309	CG1	VAL	25	30.125	3.794	17.238	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.431	3.836	16.266	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.903	4.363	18.612	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.724	5.953	17.733	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.884	2.962	18.155	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.574	3.474	18.109	
1.00171.07								H
ATOM	315	HG12	VAL	25	29.946	3.105	16.426	
1.00166.22								H
ATOM	316	HG13	VAL	25	29.793	4.785	16.950	
1.00134.76								H
ATOM	317	HG21	VAL	25	33.465	4.058	16.484	
1.00141.88								H

ATOM	318	HG22	VAL	25	32.034	4.588	15.599	
1.00184.50								H
ATOM	319	HG23	VAL	25	32.362	2.866	15.795	
1.00133.90								H
ATOM	320	N	THR	26	29.865	5.797	19.392	1.00
13.60			N					
ATOM	321	CA	THR	26	28.884	5.964	20.464	1.00
21.19			C					
ATOM	322	C	THR	26	27.520	5.421	20.045	1.00
16.55			C					
ATOM	323	O	THR	26	27.048	5.682	18.939	1.00
11.43			O					
ATOM	324	CB	THR	26	28.771	7.449	20.792	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.691	7.673	21.856	1.00
44.39			C					
ATOM	326	OG1	THR	26	30.021	7.911	21.281	1.00
34.75			O					
ATOM	327	HN	THR	26	29.666	6.170	18.507	1.00
10.81			H					
ATOM	328	HA	THR	26	29.215	5.437	21.348	1.00
33.16			H					
ATOM	329	HB	THR	26	28.514	7.990	19.890	1.00
20.60			H					
ATOM	330	HG1	THR	26	30.715	7.411	20.842	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.872	7.016	22.694	
1.00126.99								H
ATOM	332	HG22	THR	26	26.720	7.464	21.438	
1.00108.32								H
ATOM	333	HG23	THR	26	27.725	8.700	22.190	
1.00151.99								H
ATOM	334	N	ARG	27	26.890	4.665	20.945	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.571	4.080	20.683	1.00
20.21			C					
ATOM	336	C	ARG	27	24.627	4.388	21.841	1.00
16.96			C					
ATOM	337	O	ARG	27	25.054	4.455	22.994	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.703	2.564	20.527	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.589	2.247	19.320	
1.00124.30								C
ATOM	340	CD	ARG	27	26.818	0.738	19.238	
1.00109.38								C
ATOM	341	NE	ARG	27	27.709	0.420	18.130	
1.00227.73								N
ATOM	342	CZ	ARG	27	28.129	-0.824	17.921	
1.00426.12								C
ATOM	343	NH1	ARG	27	28.928	-1.085	16.922	
1.00767.09								N1+

ATOM	344	NH2	ARG	27	27.745	-1.784	18.716	
1.00581.78								N
ATOM	345	HN	ARG	27	27.320	4.498	21.811	1.00
30.75		H						
ATOM	346	HA	ARG	27	25.161	4.494	19.773	1.00
23.13		H						
ATOM	347	HB1	ARG	27	24.726	2.131	20.376	1.00
87.46		H						
ATOM	348	HB2	ARG	27	26.148	2.149	21.419	
1.00103.36								H
ATOM	349	HG1	ARG	27	27.539	2.749	19.430	
1.00281.97								H
ATOM	350	HG2	ARG	27	26.103	2.589	18.418	
1.00276.19								H
ATOM	351	HD1	ARG	27	25.870	0.242	19.092	
1.00183.60								H
ATOM	352	HD2	ARG	27	27.261	0.393	20.161	
1.00142.93								H
ATOM	353	HE	ARG	27	28.004	1.135	17.528	
1.00372.53								H
ATOM	354	HH11	ARG	27	29.223	-0.348	16.313	
1.00910.59								H
ATOM	355	HH12	ARG	27	29.244	-2.020	16.766	
1.00999.99								H
ATOM	356	HH21	ARG	27	27.134	-1.585	19.482	
1.00532.54								H
ATOM	357	HH22	ARG	27	28.060	-2.719	18.559	
1.00948.84								H
ATOM	358	N	SER	28	23.340	4.576	21.536	1.00
14.60			N					
ATOM	359	CA	SER	28	22.349	4.878	22.573	1.00
14.92			C					
ATOM	360	C	SER	28	21.100	4.027	22.386	1.00
12.12			C					
ATOM	361	O	SER	28	20.700	3.732	21.261	1.00
13.41			O					
ATOM	362	CB	SER	28	21.972	6.358	22.518	1.00
23.26			C					
ATOM	363	OG	SER	28	23.124	7.147	22.780	
1.00146.32								O
ATOM	364	HN	SER	28	23.049	4.512	20.600	1.00
15.23			H					
ATOM	365	HA	SER	28	22.769	4.665	23.549	1.00
15.44			H					
ATOM	366	HB1	SER	28	21.206	6.561	23.255	1.00
88.73			H					
ATOM	367	HB2	SER	28	21.595	6.598	21.537	
1.00124.68								H
ATOM	368	HG	SER	28	23.897	6.591	22.663	
1.00242.47								H
ATOM	369	N	CYS	29	20.483	3.643	23.500	1.00
10.48			N					

ATOM	370	CA	CYS	29	19.272	2.833	23.452	1.00
9.97			C					
ATOM	371	C	CYS	29	18.684	2.690	24.853	1.00
11.60			C					
ATOM	372	O	CYS	29	19.310	2.115	25.743	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.583	1.448	22.856	1.00
9.52			C					
ATOM	374	SG	CYS	29	18.151	0.843	21.946	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.844	3.917	24.368	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.552	3.333	22.822	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.813	0.743	23.646	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.423	1.518	22.186	1.00
10.78			H					
ATOM	379	N	GLU	30	17.482	3.223	25.045	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.826	3.152	26.345	1.00
17.41			C					
ATOM	381	C	GLU	30	16.178	1.789	26.552	1.00
10.81			C					
ATOM	382	O	GLU	30	15.811	1.112	25.592	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.764	4.247	26.451	1.00
37.83			C					
ATOM	384	CG	GLU	30	16.433	5.614	26.303	
1.00108.13			C					
ATOM	385	CD	GLU	30	17.329	5.887	27.504	
1.00240.52			C					
ATOM	386	OE1	GLU	30	17.151	5.227	28.516	
1.00422.56			O					
ATOM	387	OE2	GLU	30	18.182	6.754	27.398	
1.00410.81			O1-					
ATOM	388	HN	GLU	30	17.028	3.673	24.300	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.562	3.310	27.118	1.00
24.60			H					
ATOM	390	HB1	GLU	30	15.279	4.188	27.414	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.032	4.117	25.668	1.00
56.47			H					
ATOM	392	HG1	GLU	30	15.674	6.378	26.241	
1.00196.66			H					
ATOM	393	HG2	GLU	30	17.027	5.624	25.401	
1.00140.67			H					
ATOM	394	N	LYS	31	16.038	1.394	27.816	1.00
11.96			N					
ATOM	395	CA	LYS	31	15.429	0.107	28.160	1.00
11.40			C					

ATOM	396	C	LYS	31	14.144	0.332	28.949	1.00
10.99			C					
ATOM	397	O	LYS	31	14.061	1.246	29.769	1.00
12.86			O					
ATOM	398	CB	LYS	31	16.402	-0.721	29.003	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.661	-1.015	28.186	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.634	-1.842	29.027	
1.00115.52			C					
ATOM	401	CE	LYS	31	19.898	-2.130	28.213	
1.00250.23			C					
ATOM	402	NZ	LYS	31	20.849	-2.928	29.037	
1.00462.10			N1+					
ATOM	403	HN	LYS	31	16.350	1.980	28.536	1.00
26.13			H					
ATOM	404	HA	LYS	31	15.195	-0.441	27.257	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.932	-1.651	29.284	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.666	-0.167	29.891	1.00
47.19			H					
ATOM	407	HG1	LYS	31	18.134	-0.086	27.903	
1.00126.32			H					
ATOM	408	HG2	LYS	31	17.392	-1.568	27.296	
1.00114.19			H					
ATOM	409	HD1	LYS	31	18.168	-2.777	29.304	
1.00198.45			H					
ATOM	410	HD2	LYS	31	18.897	-1.293	29.919	
1.00200.14			H					
ATOM	411	HE1	LYS	31	20.363	-1.196	27.930	
1.00374.64			H					
ATOM	412	HE2	LYS	31	19.636	-2.686	27.325	
1.00403.27			H					
ATOM	413	HZ1	LYS	31	21.740	-2.404	29.144	
1.00627.38			H					
ATOM	414	HZ2	LYS	31	21.035	-3.838	28.568	
1.00622.26			H					
ATOM	415	HZ3	LYS	31	20.436	-3.099	29.975	
1.00619.20			H					
ATOM	416	N	THR	32	13.145	-0.503	28.694	1.00
15.51			N					
ATOM	417	CA	THR	32	11.870	-0.380	29.385	1.00
22.44			C					
ATOM	418	C	THR	32	12.030	-0.729	30.860	1.00
26.60			C					
ATOM	419	O	THR	32	12.530	-1.798	31.209	1.00
57.43			O					
ATOM	420	CB	THR	32	10.835	-1.305	28.737	1.00
56.28			C					
ATOM	421	CG2	THR	32	9.484	-1.139	29.435	
1.00102.70			C					

ATOM	422	OG1	THR	32	10.700	-0.970	27.363	
1.00111.17								O
ATOM	423	HN	THR	32	13.268	-1.210	28.029	1.00
18.79			H					
ATOM	424	HA	THR	32	11.524	0.639	29.304	1.00
19.67			H					
ATOM	425	HB	THR	32	11.158	-2.328	28.829	1.00
84.25			H					
ATOM	426	HG1	THR	32	11.578	-0.932	26.979	
1.00205.03								H
ATOM	427	HG21	THR	32	9.566	-1.454	30.464	
1.00220.71								H
ATOM	428	HG22	THR	32	8.744	-1.745	28.932	
1.00174.67								H
ATOM	429	HG23	THR	32	9.186	-0.101	29.398	
1.00217.44								H
ATOM	430	N	THR	33	11.597	0.186	31.722	1.00
22.47			N					
ATOM	431	CA	THR	33	11.687	-0.017	33.165	1.00
41.60			C					
ATOM	432	C	THR	33	10.588	0.727	33.872	1.00
38.03			C					
ATOM	433	O	THR	33	10.756	1.873	34.290	1.00
52.73			O					
ATOM	434	CB	THR	33	13.047	0.450	33.687	1.00
63.25			C					
ATOM	435	CG2	THR	33	14.144	-0.487	33.179	
1.00121.65								C
ATOM	436	OG1	THR	33	13.301	1.771	33.232	1.00
96.20			O					
ATOM	437	HN	THR	33	11.207	1.017	31.377	1.00
23.82			H					
ATOM	438	HA	THR	33	11.560	-1.057	33.393	1.00
67.12			H					
ATOM	439	HB	THR	33	13.039	0.435	34.765	
1.00107.59								H
ATOM	440	HG1	THR	33	13.865	2.204	33.877	
1.00176.27								H
ATOM	441	HG21	THR	33	13.857	-1.512	33.363	
1.00255.23								H
ATOM	442	HG22	THR	33	15.067	-0.274	33.697	
1.00245.37								H
ATOM	443	HG23	THR	33	14.282	-0.337	32.119	
1.00185.78								H
ATOM	444	N	GLY	34	9.465	0.049	34.021	1.00
40.93			N					
ATOM	445	CA	GLY	34	8.339	0.638	34.701	1.00
45.59			C					
ATOM	446	C	GLY	34	7.680	1.709	33.839	1.00
40.97			C					
ATOM	447	O	GLY	34	6.460	1.729	33.681	1.00
82.17			O					

ATOM	448	HN	GLY	34	9.402	-0.866	33.679	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.701	1.079	35.609	1.00
54.41			H					
ATOM	450	HA2	GLY	34	7.619	-0.133	34.936	1.00
62.09			H					
ATOM	451	N	ASN	35	8.502	2.597	33.278	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.003	3.674	32.419	1.00
33.20			C					
ATOM	453	C	ASN	35	8.843	3.765	31.148	1.00
23.17			C					
ATOM	454	O	ASN	35	10.067	3.642	31.193	1.00
27.01			O					
ATOM	455	CB	ASN	35	8.064	5.007	33.166	1.00
54.51			C					
ATOM	456	CG	ASN	35	7.212	4.937	34.428	1.00
80.73			C					
ATOM	457	ND2	ASN	35	7.670	5.437	35.543	
1.00220.46								N
ATOM	458	OD1	ASN	35	6.099	4.412	34.398	
1.00117.80								O
ATOM	459	HN	ASN	35	9.464	2.523	33.439	1.00
51.15			H					
ATOM	460	HA	ASN	35	6.976	3.474	32.145	1.00
47.21			H					
ATOM	461	HB1	ASN	35	7.691	5.792	32.526	1.00
68.31			H					
ATOM	462	HB2	ASN	35	9.088	5.219	33.436	1.00
57.75			H					
ATOM	463	HD21	ASN	35	8.555	5.854	35.565	
1.00405.39								H
ATOM	464	HD22	ASN	35	7.127	5.396	36.358	
1.00245.64								H
ATOM	465	N	PHE	36	8.176	3.974	30.018	1.00
35.72			N					
ATOM	466	CA	PHE	36	8.861	4.073	28.739	1.00
33.41			C					
ATOM	467	C	PHE	36	9.397	5.488	28.525	1.00
28.51			C					
ATOM	468	O	PHE	36	8.786	6.464	28.958	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.882	3.722	27.623	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.479	2.271	27.745	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.382	1.919	28.541	
1.00106.51								C
ATOM	472	CD2	PHE	36	8.194	1.280	27.061	1.00
99.48			C					
ATOM	473	CE1	PHE	36	6.000	0.578	28.654	
1.00134.48								C

ATOM	474	CE2	PHE	36	7.813	-0.061	27.174	
	1.00134.27							C
ATOM	475	CZ	PHE	36	6.716	-0.413	27.971	
	1.00149.48							C
ATOM	476	HN	PHE	36	7.203	4.058	30.040	1.00
	62.87		H					
ATOM	477	HA	PHE	36	9.683	3.374	28.718	1.00
	28.53		H					
ATOM	478	HB1	PHE	36	8.354	3.884	26.672	1.00
	73.56		H					
ATOM	479	HB2	PHE	36	7.006	4.346	27.702	1.00
	88.42		H					
ATOM	480	HD1	PHE	36	5.832	2.685	29.069	
	1.00110.20							H
ATOM	481	HD2	PHE	36	9.042	1.550	26.449	1.00
	93.07		H					
ATOM	482	HE1	PHE	36	5.155	0.307	29.268	
	1.00155.06							H
ATOM	483	HE2	PHE	36	8.364	-0.825	26.647	
	1.00159.46							H
ATOM	484	HZ	PHE	36	6.421	-1.448	28.057	
	1.00183.25							H
ATOM	485	N	THR	37	10.543	5.589	27.850	1.00
	20.06		N					
ATOM	486	CA	THR	37	11.162	6.885	27.576	1.00
	27.18		C					
ATOM	487	C	THR	37	11.588	6.964	26.115	1.00
	41.87		C					
ATOM	488	O	THR	37	10.918	6.429	25.232	
	1.00169.86							O
ATOM	489	CB	THR	37	12.383	7.081	28.478	1.00
	26.52		C					
ATOM	490	CG2	THR	37	11.987	6.832	29.933	1.00
	75.69		C					
ATOM	491	OG1	THR	37	13.400	6.164	28.098	1.00
	81.95		O					
ATOM	492	HN	THR	37	10.983	4.778	27.529	1.00
	18.47		H					
ATOM	493	HA	THR	37	10.452	7.677	27.775	1.00
	38.80		H					
ATOM	494	HB	THR	37	12.750	8.090	28.375	1.00
	81.60		H					
ATOM	495	HG1	THR	37	13.453	6.160	27.140	
	1.00188.80							H
ATOM	496	HG21	THR	37	11.098	7.398	30.167	
	1.00196.98							H
ATOM	497	HG22	THR	37	12.792	7.143	30.584	
	1.00196.23							H
ATOM	498	HG23	THR	37	11.793	5.781	30.081	
	1.00168.92							H
ATOM	499	N	GLU	38	12.704	7.637	25.870	1.00
	26.53		N					

ATOM	500	CA	GLU	38	13.219	7.787	24.512	1.00
30.29			C					
ATOM	501	C	GLU	38	14.712	8.102	24.532	1.00
25.39			C					
ATOM	502	O	GLU	38	15.244	8.575	25.536	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.465	8.907	23.790	1.00
54.82			C					
ATOM	504	CG	GLU	38	12.671	10.228	24.534	
1.00165.84			C					
ATOM	505	CD	GLU	38	11.820	11.322	23.898	
1.00292.92			C					
ATOM	506	OE1	GLU	38	11.872	12.441	24.380	
1.00414.19			O					
ATOM	507	OE2	GLU	38	11.130	11.025	22.936	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	13.193	8.040	26.618	1.00
84.50			H					
ATOM	509	HA	GLU	38	13.065	6.863	23.975	1.00
32.15			H					
ATOM	510	HB1	GLU	38	11.412	8.672	23.762	
1.00144.82			H					
ATOM	511	HB2	GLU	38	12.841	9.000	22.780	
1.00106.49			H					
ATOM	512	HG1	GLU	38	13.711	10.511	24.482	
1.00303.31			H					
ATOM	513	HG2	GLU	38	12.382	10.106	25.568	
1.00323.99			H					
ATOM	514	N	CYS	39	15.380	7.842	23.411	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.811	8.102	23.306	1.00
14.30			C					
ATOM	516	C	CYS	39	17.099	9.581	23.602	1.00
22.31			C					
ATOM	517	O	CYS	39	16.240	10.435	23.384	1.00
32.92			O					
ATOM	518	CB	CYS	39	17.292	7.736	21.897	1.00
18.08			C					
ATOM	519	SG	CYS	39	16.018	8.191	20.693	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.902	7.470	22.642	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.326	7.484	24.023	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.474	6.673	21.840	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.207	8.268	21.671	1.00
34.91			H					
ATOM	524	N	PRO	40	18.274	9.902	24.099	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.643	11.309	24.428	1.00
47.66			C					

ATOM	526	C	PRO	40	18.929	12.139	23.179	1.00
71.54			C					
ATOM	527	O	PRO	40	19.626	11.694	22.267	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.899	11.151	25.293	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.534	9.894	24.798	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.379	8.973	24.395	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.860	11.772	25.010	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.630	11.045	26.334	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.565	11.996	25.160	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.117	9.431	25.581	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.164	10.108	23.942	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.111	8.320	25.211	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.639	8.403	23.517	1.00
26.94			H					
ATOM	538	N	GLY	41	18.391	13.349	23.158	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.592	14.253	22.032	
1.00147.55			C					
ATOM	540	C	GLY	41	20.061	14.637	21.905	
1.00161.74			C					
ATOM	541	O	GLY	41	20.594	14.742	20.801	
1.00244.37			O					
ATOM	542	HN	GLY	41	17.852	13.642	23.920	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.004	15.147	22.182	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.272	13.766	21.125	
1.00157.34			H					
ATOM	545	N	LEU	42	20.703	14.852	23.049	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.117	15.233	23.083	
1.00191.48			C					
ATOM	547	C	LEU	42	22.977	14.040	23.488	
1.00166.66			C					
ATOM	548	O	LEU	42	22.574	13.223	24.314	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.324	16.368	24.089	
1.00307.99			C					
ATOM	550	CG	LEU	42	21.389	17.538	23.757	
1.00452.28			C					
ATOM	551	CD1	LEU	42	21.586	18.648	24.794	
1.00681.24			C					

ATOM	552	CD2	LEU	42	21.704	18.081	22.351
1.00527.46			C				
ATOM	553	HN	LEU	42	20.215	14.755	23.893
1.00195.47			H				
ATOM	554	HA	LEU	42	22.428	15.571	22.104
1.00229.77			H				
ATOM	555	HB1	LEU	42	23.348	16.704	24.044
1.00342.49			H				
ATOM	556	HB2	LEU	42	22.108	16.008	25.085
1.00335.33			H				
ATOM	557	HG	LEU	42	20.365	17.196	23.790
1.00427.79			H				
ATOM	558	HD11	LEU	42	20.823	19.400	24.665
1.00909.71			H				
ATOM	559	HD12	LEU	42	22.560	19.097	24.661
1.00706.80			H				
ATOM	560	HD13	LEU	42	21.515	18.229	25.787
1.00858.82			H				
ATOM	561	HD21	LEU	42	21.357	19.102	22.269
1.00631.69			H				
ATOM	562	HD22	LEU	42	21.200	17.477	21.611
1.00628.06			H				
ATOM	563	HD23	LEU	42	22.771	18.049	22.177
1.00656.75			H				
ATOM	564	N	THR	43	24.166	13.949	22.899
1.00178.52			N				
ATOM	565	CA	THR	43	25.078	12.852	23.203
1.00240.84			C				
ATOM	566	C	THR	43	25.449	12.864	24.693
1.00372.31			C				
ATOM	567	O	THR	43	25.614	13.935	25.277
1.00500.13			O				
ATOM	568	CB	THR	43	26.347	12.988	22.358
1.00354.13			C				
ATOM	569	CG2	THR	43	27.113	14.240	22.783
1.00463.04			C				
ATOM	570	OG1	THR	43	27.164	11.841	22.544
1.00508.50			O				
ATOM	571	HN	THR	43	24.433	14.630	22.249
1.00229.59			H				
ATOM	572	HA	THR	43	24.590	11.927	22.953
1.00249.90			H				
ATOM	573	HB	THR	43	26.078	13.073	21.316
1.00481.58			H				
ATOM	574	HG1	THR	43	26.880	11.169	21.918
1.00624.31			H				
ATOM	575	HG21	THR	43	27.883	14.455	22.056
1.00650.95			H				
ATOM	576	HG22	THR	43	27.567	14.076	23.749
1.00580.73			H				
ATOM	577	HG23	THR	43	26.432	15.077	22.843
1.00571.99			H				

ATOM	578	N	PRO	44	25.581	11.716	25.325
1.00488.39				N			
ATOM	579	CA	PRO	44	25.938	11.642	26.774
1.00760.13				C			
ATOM	580	C	PRO	44	27.406	11.983	27.004
1.00735.36				C			
ATOM	581	O	PRO	44	27.844	12.169	28.140
1.00999.99				O			
ATOM	582	CB	PRO	44	25.634	10.186	27.143
1.00999.99				C			
ATOM	583	CG	PRO	44	25.855	9.428	25.876
1.00856.94				C			
ATOM	584	CD	PRO	44	25.425	10.365	24.745
1.00548.09				C			
ATOM	585	HA	PRO	44	25.307	12.302	27.348
1.00939.00				H			
ATOM	586	HB1	PRO	44	24.606	10.085	27.461
1.00999.99				H			
ATOM	587	HB2	PRO	44	26.305	9.841	27.921
1.00999.99				H			
ATOM	588	HG1	PRO	44	25.250	8.532	25.862
1.00999.99				H			
ATOM	589	HG2	PRO	44	26.904	9.172	25.777
1.00853.53				H			
ATOM	590	HD1	PRO	44	24.394	10.191	24.478
1.00602.45				H			
ATOM	591	HD2	PRO	44	26.071	10.243	23.885
1.00463.32				H			
ATOM	592	N	ILE	45	28.162	12.061	25.914
1.00518.33				N			
ATOM	593	CA	ILE	45	29.582	12.374	26.000
1.00582.79				C			
ATOM	594	C	ILE	45	29.782	13.747	26.632
1.00795.93				C			
ATOM	595	O	ILE	45	30.635	13.925	27.501
1.00898.75				O			
ATOM	596	CB	ILE	45	30.209	12.346	24.602
1.00474.41				C			
ATOM	597	CG1	ILE	45	30.211	10.908	24.076
1.00516.90				C			
ATOM	598	CG2	ILE	45	31.649	12.861	24.667
1.00760.75				C			
ATOM	599	CD1	ILE	45	30.567	10.906	22.589
1.00566.81				C			
ATOM	600	HN	ILE	45	27.758	11.899	25.036
1.00395.72				H			
ATOM	601	HA	ILE	45	30.062	11.633	26.613
1.00711.06				H			
ATOM	602	HB	ILE	45	29.633	12.973	23.936
1.00477.81				H			
ATOM	603	HG11	ILE	45	29.233	10.473	24.213
1.00624.28				H			

ATOM	604	HG12	ILE	45	30.942	10.329	24.624
1.00744.84			H				
ATOM	605	HG21	ILE	45	32.159	12.400	25.501
1.00920.57			H				
ATOM	606	HG22	ILE	45	31.643	13.933	24.800
1.00999.99			H				
ATOM	607	HG23	ILE	45	32.163	12.616	23.751
1.00865.46			H				
ATOM	608	HD11	ILE	45	29.724	11.267	22.018
1.00658.89			H				
ATOM	609	HD12	ILE	45	30.808	9.900	22.278
1.00734.30			H				
ATOM	610	HD13	ILE	45	31.419	11.548	22.422
1.00675.84			H				
ATOM	611	N	ALA	46	28.989	14.711	26.188
1.00999.99			N				
ATOM	612	CA	ALA	46	29.080	16.070	26.711
1.00999.99			C				
ATOM	613	C	ALA	46	27.937	16.927	26.176
1.00999.99			C				
ATOM	614	CB	ALA	46	30.418	16.695	26.313
1.00999.99			C				
ATOM	615	OT1	ALA	46	26.953	17.074	26.881
1.00999.99			O				
ATOM	616	OT2	ALA	46	28.065	17.425	25.070
1.00999.99			O				
ATOM	617	HN	ALA	46	28.329	14.504	25.495
1.00999.99			H				
ATOM	618	HA	ALA	46	29.019	16.035	27.788
1.00999.99			H				
ATOM	619	HB1	ALA	46	31.226	16.084	26.689
1.00999.99			H				
ATOM	620	HB2	ALA	46	30.491	17.687	26.732
1.00999.99			H				
ATOM	621	HB3	ALA	46	30.482	16.752	25.237
1.00999.99			H				
ENDMDL							
TER							
MODEL	6						
ATOM	1	N	GLY	1	25.876	-2.630	12.500
1.00999.99			N				
ATOM	2	CA	GLY	1	25.932	-2.082	13.885
1.00999.99			C				
ATOM	3	C	GLY	1	24.884	-0.985	14.042
1.00999.99			C				
ATOM	4	O	GLY	1	24.421	-0.710	15.148
1.00999.99			O				
ATOM	5	HA1	GLY	1	26.912	-1.668	14.070
1.00999.99			H				
ATOM	6	HA2	GLY	1	25.736	-2.874	14.594
1.00999.99			H				
ATOM	7	HT1	GLY	1	25.209	-3.426	12.470

1.00999.99										
ATOM	8	HT2	GLY	H	1	26.822	-2.959	12.219		
1.00999.99										
ATOM	9	HT3	GLY	H	1	25.559	-1.888	11.846		
1.00999.99										
ATOM	10	N	LEU	H	2	24.517	-0.361	12.927		
1.00999.99										
ATOM	11	CA	LEU	N	2	23.523	0.706	12.952		
1.00895.59										
ATOM	12	C	LEU	C	2	22.134	0.130	13.210		
1.00532.27										
ATOM	13	O	LEU	C	2	21.787	-0.930	12.689		
1.00625.21										
ATOM	14	CB	LEU	O	2	23.520	1.443	11.608		
1.00999.99										
ATOM	15	CG	LEU	C	2	24.920	1.996	11.306		
1.00999.99										
ATOM	16	CD1	LEU	C	2	24.916	2.630	9.912		
1.00999.99										
ATOM	17	CD2	LEU	C	2	25.307	3.056	12.352		
1.00999.99										
ATOM	18	HN	LEU	C	2	24.921	-0.623	12.074		
1.00999.99										
ATOM	19	HA	LEU	H	2	23.766	1.402	13.736		
1.00890.87										
ATOM	20	HB1	LEU	H	2	22.814	2.258	11.648		
1.00924.07										
ATOM	21	HB2	LEU	H	2	23.231	0.757	10.825		
1.00999.99										
ATOM	22	HG	LEU	H	2	25.636	1.187	11.327		
1.00999.99										
ATOM	23	HD11	LEU	H	2	24.227	3.463	9.896		
1.00999.99										
ATOM	24	HD12	LEU	H	2	24.609	1.897	9.182		
1.00999.99										
ATOM	25	HD13	LEU	H	2	25.909	2.982	9.675		
1.00999.99										
ATOM	26	HD21	LEU	H	2	26.068	3.707	11.945		
1.00999.99										
ATOM	27	HD22	LEU	H	2	25.696	2.567	13.233		
1.00999.99										
ATOM	28	HD23	LEU	H	2	24.439	3.642	12.618		
1.00999.99										
ATOM	29	N	CYS	H	3	21.338	0.835	14.011		
1.00271.28										
ATOM	30	CA	CYS	N	3	19.987	0.373	14.315		
1.00104.50										
ATOM	31	C	CYS	C	3	19.060	0.640	13.131	1.00	
90.98										
ATOM	32	O	CYS	C	3	18.835	1.788	12.750		
1.00207.28										
ATOM	33	CB	CYS	O	3	19.457	1.072	15.582	1.00	

37.83			C						
ATOM	34	SG	CYS	3	19.910	0.100	17.043	1.00	
81.56			S						
ATOM	35	HN	CYS	3	21.660	1.675	14.397		
1.00296.55									H
ATOM	36	HA	CYS	3	20.018	-0.691	14.494		
1.00166.45									H
ATOM	37	HB1	CYS	3	18.380	1.161	15.532	1.00	
40.38			H						
ATOM	38	HB2	CYS	3	19.894	2.057	15.658	1.00	
98.45			H						
ATOM	39	N	SER	4	18.530	-0.434	12.557	1.00	
85.31			N						
ATOM	40	CA	SER	4	17.630	-0.316	11.416	1.00	
92.94			C						
ATOM	41	C	SER	4	16.397	0.478	11.800	1.00	
67.37			C						
ATOM	42	O	SER	4	15.923	1.328	11.047		
1.00102.28									O
ATOM	43	CB	SER	4	17.175	-1.702	10.968		
1.00123.83									C
ATOM	44	OG	SER	4	16.394	-1.579	9.787		
1.00178.89									O
ATOM	45	HN	SER	4	18.748	-1.323	12.907		
1.00163.03									H
ATOM	46	HA	SER	4	18.138	0.174	10.600		
1.00129.78									H
ATOM	47	HB1	SER	4	16.577	-2.146	11.758		
1.00105.26									H
ATOM	48	HB2	SER	4	18.032	-2.324	10.770		
1.00156.87									H
ATOM	49	HG	SER	4	15.572	-2.056	9.924		
1.00218.16									H
ATOM	50	N	GLU	5	15.867	0.165	12.976	1.00	
41.67			N						
ATOM	51	CA	GLU	5	14.663	0.816	13.469	1.00	
41.21			C						
ATOM	52	C	GLU	5	14.659	0.864	14.993	1.00	
41.92			C						
ATOM	53	O	GLU	5	15.521	0.278	15.646	1.00	
74.72			O						
ATOM	54	CB	GLU	5	13.442	0.051	12.970	1.00	
49.24			C						
ATOM	55	CG	GLU	5	13.537	-1.396	13.435	1.00	
55.48			C						
ATOM	56	CD	GLU	5	12.461	-2.238	12.758	1.00	
92.06			C						
ATOM	57	OE1	GLU	5	12.419	-3.430	13.018		
1.00206.49									O
ATOM	58	OE2	GLU	5	11.695	-1.679	11.991		
1.00197.24									O1-
ATOM	59	HN	GLU	5	16.285	-0.538	13.516	1.00	

45.52			H						
ATOM	60	HA	GLU	5	14.620	1.817	13.086	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	13.411	0.078	11.891	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	12.551	0.498	13.368	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	13.405	-1.438	14.505	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	14.511	-1.778	13.179	1.00	
57.77			H						
ATOM	65	N	ASN	6	13.681	1.570	15.550	1.00	
50.73			N						
ATOM	66	CA	ASN	6	13.569	1.693	16.998	1.00	
71.04			C						
ATOM	67	C	ASN	6	13.259	0.337	17.625	1.00	
65.17			C						
ATOM	68	O	ASN	6	13.388	0.156	18.835	1.00	
94.86			O						
ATOM	69	CB	ASN	6	12.457	2.685	17.346	1.00	
94.83			C						
ATOM	70	CG	ASN	6	12.900	4.105	17.005		
1.00160.94			C						
ATOM	71	ND2	ASN	6	12.003	5.038	16.841		
1.00244.88			N						
ATOM	72	OD1	ASN	6	14.097	4.370	16.883		
1.00219.73			O						
ATOM	73	HN	ASN	6	13.024	2.015	14.976	1.00	
72.81			H						
ATOM	74	HA	ASN	6	14.502	2.061	17.394	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	12.239	2.625	18.402		
1.00111.09			H						
ATOM	76	HB2	ASN	6	11.570	2.442	16.781	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	11.052	4.825	16.937		
1.00272.43			H						
ATOM	78	HD22	ASN	6	12.281	5.952	16.621		
1.00336.78			H						
ATOM	79	N	GLY	7	12.848	-0.609	16.790	1.00	
51.80			N						
ATOM	80	CA	GLY	7	12.518	-1.948	17.262	1.00	
71.47			C						
ATOM	81	C	GLY	7	13.761	-2.694	17.738	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.661	-3.771	18.325	1.00	
44.54			O						
ATOM	83	HN	GLY	7	12.764	-0.403	15.835	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.063	-2.505	16.455		
1.00103.52			H						
ATOM	85	HA2	GLY	7	11.817	-1.872	18.078		

1.00108.67																H
ATOM	86	N	ASP	8	14.936	-2.121	17.480	1.00								
27.00			N													
ATOM	87	CA	ASP	8	16.183	-2.756	17.891	1.00								
14.15			C													
ATOM	88	C	ASP	8	16.103	-3.197	19.348	1.00								
9.37			C													
ATOM	89	O	ASP	8	15.917	-4.379	19.636	1.00								
14.61			O													
ATOM	90	CB	ASP	8	17.351	-1.786	17.706	1.00								
15.06			C													
ATOM	91	CG	ASP	8	18.639	-2.416	18.224	1.00								
21.22			C													
ATOM	92	OD1	ASP	8	19.104	-3.358	17.603									
1.00119.56																O
ATOM	93	OD2	ASP	8	19.141	-1.947	19.231									
1.00133.27																O1-
ATOM	94	HN	ASP	8	14.961	-1.263	17.006	1.00								
35.63			H													
ATOM	95	HA	ASP	8	16.351	-3.623	17.277	1.00								
20.92			H													
ATOM	96	HB1	ASP	8	17.151	-0.878	18.254	1.00								
29.39			H													
ATOM	97	HB2	ASP	8	17.460	-1.555	16.655	1.00								
44.14			H													
ATOM	98	N	CYS	9	16.227	-2.244	20.262	1.00								
5.93			N													
ATOM	99	CA	CYS	9	16.148	-2.562	21.684	1.00								
7.54			C													
ATOM	100	C	CYS	9	14.770	-3.122	22.013	1.00								
14.60			C													
ATOM	101	O	CYS	9	14.639	-4.111	22.736	1.00								
25.78			O													
ATOM	102	CB	CYS	9	16.407	-1.318	22.523	1.00								
6.63			C													
ATOM	103	SG	CYS	9	18.160	-0.910	22.419	1.00								
10.91			S													
ATOM	104	HN	CYS	9	16.363	-1.319	19.976	1.00								
6.51			H													
ATOM	105	HA	CYS	9	16.901	-3.295	21.922	1.00								
11.12			H													
ATOM	106	HB1	CYS	9	16.142	-1.511	23.551	1.00								
11.28			H													
ATOM	107	HB2	CYS	9	15.820	-0.494	22.145	1.00								
5.04			H													
ATOM	108	N	ALA	10	13.750	-2.478	21.460	1.00								
16.26			N													
ATOM	109	CA	ALA	10	12.369	-2.897	21.669	1.00								
32.04			C													
ATOM	110	C	ALA	10	11.434	-2.055	20.801	1.00								
45.47			C													
ATOM	111	O	ALA	10	11.835	-1.019	20.272									

1.00119.04				O					
ATOM	112	CB	ALA		10	11.985	-2.756	23.146	1.00
30.10			C						
ATOM	113	HN	ALA		10	13.932	-1.703	20.890	1.00
12.81			H						
ATOM	114	HA	ALA		10	12.273	-3.934	21.380	1.00
47.14			H						
ATOM	115	HB1	ALA		10	11.167	-3.423	23.372	1.00
84.37			H						
ATOM	116	HB2	ALA		10	11.683	-1.739	23.347	
1.00118.20				H					
ATOM	117	HB3	ALA		10	12.834	-3.006	23.764	
1.00117.32				H					
ATOM	118	N	ALA		11	10.193	-2.505	20.655	1.00
30.62			N						
ATOM	119	CA	ALA		11	9.223	-1.779	19.844	1.00
35.24			C						
ATOM	120	C	ALA		11	8.977	-0.378	20.404	1.00
22.78			C						
ATOM	121	O	ALA		11	8.872	0.589	19.650	1.00
53.33			O						
ATOM	122	CB	ALA		11	7.902	-2.549	19.802	1.00
60.49			C						
ATOM	123	HN	ALA		11	9.927	-3.338	21.097	1.00
50.37			H						
ATOM	124	HA	ALA		11	9.605	-1.691	18.838	1.00
41.70			H						
ATOM	125	HB1	ALA		11	8.091	-3.572	19.508	
1.00157.06				H					
ATOM	126	HB2	ALA		11	7.238	-2.086	19.086	
1.00148.83				H					
ATOM	127	HB3	ALA		11	7.444	-2.534	20.779	
1.00137.06				H					
ATOM	128	N	ASP		12	8.877	-0.278	21.726	1.00
18.98			N						
ATOM	129	CA	ASP		12	8.633	1.011	22.374	1.00
31.05			C						
ATOM	130	C	ASP		12	9.933	1.790	22.572	1.00
22.98			C						
ATOM	131	O	ASP		12	9.936	3.020	22.555	1.00
37.14			O						
ATOM	132	CB	ASP		12	7.964	0.790	23.733	1.00
48.35			C						
ATOM	133	CG	ASP		12	6.546	0.264	23.535	
1.00104.83				C					
ATOM	134	OD1	ASP		12	5.978	-0.225	24.498	
1.00258.73				O					
ATOM	135	OD2	ASP		12	6.049	0.358	22.425	
1.00213.46				O1-					
ATOM	136	HN	ASP		12	8.963	-1.083	22.279	1.00
36.19			H						
ATOM	137	HA	ASP		12	7.968	1.596	21.755	1.00

49.76			H					
ATOM	138	HB1	ASP	12	7.926	1.726	24.270	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.537	0.072	24.301	1.00
54.37			H					
ATOM	140	N	GLU	13	11.031	1.068	22.768	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.327	1.705	22.983	1.00
12.01			C					
ATOM	142	C	GLU	13	12.895	2.264	21.680	1.00
10.07			C					
ATOM	143	O	GLU	13	12.538	1.815	20.590	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.306	0.699	23.586	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.810	0.277	24.972	1.00
13.49			C					
ATOM	146	CD	GLU	13	12.916	1.447	25.942	
1.00142.36			C					
ATOM	147	OE1	GLU	13	12.296	1.380	26.992	
1.00339.06			O					
ATOM	148	OE2	GLU	13	13.607	2.396	25.620	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.967	0.090	22.781	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.199	2.520	23.678	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.280	1.155	23.676	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.372	-0.167	22.945	1.00
9.94			H					
ATOM	153	HG1	GLU	13	13.411	-0.543	25.334	1.00
66.02			H					
ATOM	154	HG2	GLU	13	11.779	-0.034	24.904	1.00
56.23			H					
ATOM	155	N	CYS	14	13.784	3.254	21.807	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.412	3.894	20.645	1.00
10.69			C					
ATOM	157	C	CYS	14	15.880	3.497	20.549	1.00
9.56			C					
ATOM	158	O	CYS	14	16.489	3.106	21.542	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.305	5.416	20.775	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.334	6.209	19.515	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.024	3.563	22.708	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.905	3.585	19.741	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.640	5.714	21.757	1.00

50.72			H					
ATOM	164	HB2	CYS	14	13.275	5.714	20.640	1.00
46.13			H					
ATOM	165	N	CYS	15	16.448	3.610	19.347	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.851	3.269	19.130	1.00
9.28			C					
ATOM	167	C	CYS	15	18.447	4.185	18.076	1.00
9.92			C					
ATOM	168	O	CYS	15	17.844	4.404	17.025	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.988	1.822	18.654	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.747	1.389	18.590	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.915	3.939	18.592	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.402	3.388	20.053	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.558	1.726	17.667	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.473	1.165	19.335	1.00
27.31			H					
ATOM	175	N	VAL	16	19.631	4.718	18.350	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.283	5.602	17.398	1.00
11.99			C					
ATOM	177	C	VAL	16	21.791	5.563	17.605	1.00
7.73			C					
ATOM	178	O	VAL	16	22.293	5.911	18.673	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.745	7.026	17.568	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.073	7.555	18.969	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.370	7.933	16.509	
1.00115.21				C				
ATOM	182	HN	VAL	16	20.077	4.509	19.203	1.00
9.76			H					
ATOM	183	HA	VAL	16	20.065	5.266	16.394	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.672	7.015	17.438	1.00
52.63			H					
ATOM	185	HG11	VAL	16	19.923	6.770	19.694	
1.00128.07				H				
ATOM	186	HG12	VAL	16	19.422	8.385	19.200	
1.00154.13				H				
ATOM	187	HG13	VAL	16	21.100	7.887	19.002	
1.00135.74				H				
ATOM	188	HG21	VAL	16	20.157	7.535	15.529	
1.00229.05				H				
ATOM	189	HG22	VAL	16	21.438	7.976	16.658	

1.00261.82				H					
ATOM	190	HG23	VAL		16	19.953	8.924	16.595	
1.00210.07				H					
ATOM	191	N	ASP		17	22.510	5.114	16.579	1.00
14.34			N						
ATOM	192	CA	ASP		17	23.965	5.010	16.660	1.00
11.90			C						
ATOM	193	C	ASP		17	24.637	6.244	16.077	1.00
13.15			C						
ATOM	194	O	ASP		17	24.497	6.542	14.892	1.00
25.96			O						
ATOM	195	CB	ASP		17	24.440	3.770	15.902	1.00
20.80			C						
ATOM	196	CG	ASP		17	24.021	2.511	16.654	1.00
28.72			C						
ATOM	197	OD1	ASP		17	23.649	2.632	17.810	
1.00135.42				O					
ATOM	198	OD2	ASP		17	24.077	1.446	16.064	
1.00114.17				O1-					
ATOM	199	HN	ASP		17	22.053	4.832	15.757	1.00
28.29			H						
ATOM	200	HA	ASP		17	24.259	4.912	17.695	1.00
10.49			H						
ATOM	201	HB1	ASP		17	25.516	3.793	15.817	1.00
22.42			H						
ATOM	202	HB2	ASP		17	24.002	3.764	14.915	1.00
29.52			H						
ATOM	203	N	THR		18	25.387	6.946	16.921	1.00
11.55			N						
ATOM	204	CA	THR		18	26.115	8.140	16.497	1.00
17.10			C						
ATOM	205	C	THR		18	27.590	7.807	16.338	1.00
10.63			C						
ATOM	206	O	THR		18	28.057	6.787	16.843	1.00
6.49			O						
ATOM	207	CB	THR		18	25.949	9.256	17.531	1.00
28.52			C						
ATOM	208	CG2	THR		18	24.536	9.832	17.448	1.00
45.38			C						
ATOM	209	OG1	THR		18	26.177	8.733	18.830	1.00
26.49			O						
ATOM	210	HN	THR		18	25.470	6.643	17.849	1.00
13.96			H						
ATOM	211	HA	THR		18	25.728	8.484	15.547	1.00
26.43			H						
ATOM	212	HB	THR		18	26.663	10.039	17.331	1.00
37.43			H						
ATOM	213	HG1	THR		18	26.568	7.861	18.734	1.00
71.62			H						
ATOM	214	HG21	THR		18	24.441	10.647	18.150	
1.00100.44				H					
ATOM	215	HG22	THR		18	23.819	9.063	17.689	

1.00129.42				H					
ATOM	216	HG23	THR		18	24.356	10.196	16.448	
1.00156.21				H					
ATOM	217	N	VAL		19	28.318	8.673	15.646	1.00
16.32			N						
ATOM	218	CA	VAL		19	29.731	8.473	15.433	1.00
13.34			C						
ATOM	219	C	VAL		19	30.288	9.631	14.634	1.00
25.88			C						
ATOM	220	O	VAL		19	29.903	9.877	13.490	1.00
42.11			O						
ATOM	221	CB	VAL		19	30.012	7.157	14.708	1.00
15.48			C						
ATOM	222	CG1	VAL		19	29.152	7.053	13.443	1.00
29.06			C						
ATOM	223	CG2	VAL		19	31.498	7.109	14.327	1.00
20.67			C						
ATOM	224	HN	VAL		19	27.904	9.476	15.283	1.00
26.89			H						
ATOM	225	HA	VAL		19	30.222	8.448	16.395	1.00
8.08			H						
ATOM	226	HB	VAL		19	29.783	6.334	15.365	1.00
11.49			H						
ATOM	227	HG11	VAL		19	29.163	6.033	13.085	
1.00137.43				H					
ATOM	228	HG12	VAL		19	29.550	7.704	12.680	1.00
93.29			H						
ATOM	229	HG13	VAL		19	28.136	7.341	13.670	
1.00108.69				H					
ATOM	230	HG21	VAL		19	31.776	6.096	14.079	1.00
99.42			H						
ATOM	231	HG22	VAL		19	32.094	7.455	15.162	
1.00111.36				H					
ATOM	232	HG23	VAL		19	31.670	7.752	13.476	1.00
77.11			H						
ATOM	233	N	PHE		20	31.188	10.338	15.268	1.00
24.58			N						
ATOM	234	CA	PHE		20	31.831	11.499	14.677	1.00
40.34			C						
ATOM	235	C	PHE		20	33.222	11.153	14.164	1.00
40.37			C						
ATOM	236	O	PHE		20	33.494	11.259	12.968	1.00
66.02			O						
ATOM	237	CB	PHE		20	31.924	12.615	15.730	1.00
48.79			C						
ATOM	238	CG	PHE		20	32.137	12.031	17.118	1.00
35.75			C						
ATOM	239	CD1	PHE		20	31.117	11.294	17.749	1.00
30.20			C						
ATOM	240	CD2	PHE		20	33.350	12.245	17.784	1.00
40.95			C						
ATOM	241	CE1	PHE		20	31.321	10.773	19.031	1.00

30.41			C					
ATOM	242	CE2	PHE	20	33.549	11.722	19.067	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.536	10.988	19.690	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.412	10.076	16.176	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.236	11.857	13.846	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.016	13.168	15.724	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.740	13.281	15.488	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.175	11.119	17.248	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.136	12.812	17.306	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.538	10.207	19.511	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.486	11.887	19.577	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.691	10.585	20.680	1.00
52.66			H					
ATOM	253	N	GLU	21	34.109	10.779	15.078	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.476	10.465	14.726	1.00
56.16			C					
ATOM	255	C	GLU	21	35.751	8.970	14.801	1.00
58.61			C					
ATOM	256	O	GLU	21	34.858	8.168	15.072	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.369	11.212	15.692	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.236	10.620	17.097	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.899	11.544	18.113	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.744	11.300	19.297	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.555	12.482	17.691	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.851	10.744	16.019	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.688	10.812	13.726	1.00
85.72			H					
ATOM	264	HB1	GLU	21	36.063	12.243	15.712	1.00
46.37			H					
ATOM	265	HB2	GLU	21	37.385	11.142	15.365	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.713	9.657	17.125	
1.00314.91			H					
ATOM	267	HG2	GLU	21	35.192	10.505	17.340	

1.00266.92				H					
ATOM	268	N	GLY		22	37.003	8.617	14.546	1.00
86.70			N						
ATOM	269	CA	GLY		22	37.429	7.214	14.569	
1.00104.66				C					
ATOM	270	C	GLY		22	37.995	6.828	15.931	1.00
71.50			C						
ATOM	271	O	GLY		22	38.206	5.650	16.215	1.00
89.87			O						
ATOM	272	HN	GLY		22	37.657	9.318	14.338	
1.00214.64				H					
ATOM	273	HA1	GLY		22	38.191	7.066	13.819	
1.00152.47				H					
ATOM	274	HA2	GLY		22	36.583	6.577	14.342	
1.00118.15				H					
ATOM	275	N	ASP		23	38.244	7.830	16.765	1.00
44.68			N						
ATOM	276	CA	ASP		23	38.791	7.590	18.095	1.00
43.33			C						
ATOM	277	C	ASP		23	37.856	6.712	18.917	1.00
37.55			C						
ATOM	278	O	ASP		23	38.295	5.800	19.615	1.00
61.37			O						
ATOM	279	CB	ASP		23	39.002	8.921	18.816	1.00
40.74			C						
ATOM	280	CG	ASP		23	39.727	8.690	20.137	
1.00141.86				C					
ATOM	281	OD1	ASP		23	40.139	9.666	20.743	
1.00328.18				O					
ATOM	282	OD2	ASP		23	39.860	7.540	20.525	
1.00304.58				O1-					
ATOM	283	HN	ASP		23	38.062	8.747	16.478	1.00
40.86			H						
ATOM	284	HA	ASP		23	39.741	7.092	17.997	1.00
72.12			H						
ATOM	285	HB1	ASP		23	38.042	9.373	19.011	1.00
94.15			H						
ATOM	286	HB2	ASP		23	39.588	9.578	18.191	1.00
93.26			H						
ATOM	287	N	MET		24	36.563	7.001	18.832	1.00
23.24			N						
ATOM	288	CA	MET		24	35.565	6.238	19.576	1.00
32.50			C						
ATOM	289	C	MET		24	34.197	6.343	18.910	1.00
25.13			C						
ATOM	290	O	MET		24	33.982	7.186	18.039	1.00
54.40			O						
ATOM	291	CB	MET		24	35.476	6.760	21.013	1.00
47.36			C						
ATOM	292	CG	MET		24	34.978	8.208	21.006	
1.00151.73				C					
ATOM	293	SD	MET		24	35.116	8.908	22.670	

1.00209.23				S					
ATOM	294	CE	MET		24	36.855	9.411	22.584	
1.00243.29				C					
ATOM	295	HN	MET		24	36.276	7.743	18.262	1.00
17.32			H						
ATOM	296	HA	MET		24	35.860	5.200	19.603	1.00
48.94			H						
ATOM	297	HB1	MET		24	36.452	6.718	21.472	
1.00124.40				H					
ATOM	298	HB2	MET		24	34.787	6.144	21.576	
1.00166.96				H					
ATOM	299	HG1	MET		24	33.945	8.230	20.691	
1.00331.71				H					
ATOM	300	HG2	MET		24	35.574	8.789	20.319	
1.00302.30				H					
ATOM	301	HE1	MET		24	37.366	8.831	21.828	
1.00340.44				H					
ATOM	302	HE2	MET		24	37.326	9.243	23.539	
1.00373.88				H					
ATOM	303	HE3	MET		24	36.913	10.462	22.339	
1.00386.81				H					
ATOM	304	N	VAL		25	33.272	5.477	19.329	1.00
22.44			N						
ATOM	305	CA	VAL		25	31.915	5.464	18.775	1.00
15.37			C						
ATOM	306	C	VAL		25	30.879	5.620	19.883	1.00
17.47			C						
ATOM	307	O	VAL		25	31.025	5.064	20.973	1.00
29.52			O						
ATOM	308	CB	VAL		25	31.664	4.154	18.021	1.00
23.36			C						
ATOM	309	CG1	VAL		25	30.193	4.083	17.579	1.00
58.39			C						
ATOM	310	CG2	VAL		25	32.576	4.100	16.790	1.00
55.25			C						
ATOM	311	HN	VAL		25	33.508	4.831	20.027	1.00
48.11			H						
ATOM	312	HA	VAL		25	31.799	6.291	18.081	1.00
9.25			H						
ATOM	313	HB	VAL		25	31.884	3.319	18.671	1.00
52.45			H						
ATOM	314	HG11	VAL		25	29.854	5.067	17.286	
1.00171.07				H					
ATOM	315	HG12	VAL		25	29.590	3.731	18.401	
1.00166.22				H					
ATOM	316	HG13	VAL		25	30.094	3.404	16.744	
1.00134.76				H					
ATOM	317	HG21	VAL		25	33.600	3.972	17.107	
1.00141.88				H					
ATOM	318	HG22	VAL		25	32.484	5.021	16.233	
1.00184.50				H					
ATOM	319	HG23	VAL		25	32.287	3.270	16.164	

1.00133.90				H					
ATOM	320	N	THR		26	29.838	6.396	19.593	1.00
13.60				N					
ATOM	321	CA	THR		26	28.766	6.655	20.554	1.00
21.19				C					
ATOM	322	C	THR		26	27.464	5.985	20.120	1.00
16.55				C					
ATOM	323	O	THR		26	27.040	6.111	18.971	1.00
11.43				O					
ATOM	324	CB	THR		26	28.553	8.163	20.658	1.00
27.07				C					
ATOM	325	CG2	THR		26	27.372	8.460	21.584	1.00
44.39				C					
ATOM	326	OG1	THR		26	29.730	8.768	21.176	1.00
34.75				O					
ATOM	327	HN	THR		26	29.793	6.815	18.708	1.00
10.81				H					
ATOM	328	HA	THR		26	29.049	6.277	21.527	1.00
33.16				H					
ATOM	329	HB	THR		26	28.348	8.560	19.674	1.00
20.60				H					
ATOM	330	HG1	THR		26	29.722	8.660	22.130	1.00
77.72				H					
ATOM	331	HG21	THR		26	27.349	9.515	21.811	
1.00126.99				H					
ATOM	332	HG22	THR		26	27.481	7.896	22.499	
1.00108.32				H					
ATOM	333	HG23	THR		26	26.450	8.178	21.097	
1.00151.99				H					
ATOM	334	N	ARG		27	26.830	5.274	21.056	1.00
22.38				N					
ATOM	335	CA	ARG		27	25.567	4.581	20.785	1.00
20.21				C					
ATOM	336	C	ARG		27	24.560	4.878	21.894	1.00
16.96				C					
ATOM	337	O	ARG		27	24.942	5.057	23.050	1.00
20.06				O					
ATOM	338	CB	ARG		27	25.808	3.071	20.715	1.00
22.14				C					
ATOM	339	CG	ARG		27	26.780	2.759	19.575	
1.00124.30				C					
ATOM	340	CD	ARG		27	27.093	1.261	19.571	
1.00109.38				C					
ATOM	341	NE	ARG		27	25.893	0.495	19.254	
1.00227.73				N					
ATOM	342	CZ	ARG		27	25.505	0.311	17.996	
1.00426.12				C					
ATOM	343	NH1	ARG		27	24.423	-0.371	17.739	
1.00767.09				N1+					
ATOM	344	NH2	ARG		27	26.208	0.812	17.017	
1.00581.78				N					
ATOM	345	HN	ARG		27	27.220	5.217	21.954	1.00

30.75			H						
ATOM	346	HA	ARG	27	25.161	4.917	19.842	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	24.872	2.565	20.536	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	26.228	2.730	21.650		
1.00103.36				H					
ATOM	349	HG1	ARG	27	27.693	3.316	19.718		
1.00281.97				H					
ATOM	350	HG2	ARG	27	26.330	3.036	18.633		
1.00276.19				H					
ATOM	351	HD1	ARG	27	27.458	0.971	20.547		
1.00183.60				H					
ATOM	352	HD2	ARG	27	27.854	1.058	18.833		
1.00142.93				H					
ATOM	353	HE	ARG	27	25.361	0.109	19.981		
1.00372.53				H					
ATOM	354	HH11	ARG	27	23.886	-0.757	18.488		
1.00910.59				H					
ATOM	355	HH12	ARG	27	24.131	-0.510	16.792		
1.00999.99				H					
ATOM	356	HH21	ARG	27	27.040	1.333	17.213		
1.00532.54				H					
ATOM	357	HH22	ARG	27	25.917	0.674	16.070		
1.00948.84				H					
ATOM	358	N	SER	28	23.270	4.935	21.544	1.00	
14.60			N						
ATOM	359	CA	SER	28	22.230	5.216	22.538	1.00	
14.92			C						
ATOM	360	C	SER	28	21.025	4.305	22.331	1.00	
12.12			C						
ATOM	361	O	SER	28	20.691	3.943	21.204	1.00	
13.41			O						
ATOM	362	CB	SER	28	21.796	6.678	22.435	1.00	
23.26			C						
ATOM	363	OG	SER	28	22.896	7.519	22.751		
1.00146.32				O					
ATOM	364	HN	SER	28	23.010	4.786	20.606	1.00	
15.23			H						
ATOM	365	HA	SER	28	22.625	5.044	23.530	1.00	
15.44			H						
ATOM	366	HB1	SER	28	20.980	6.860	23.123	1.00	
88.73			H						
ATOM	367	HB2	SER	28	21.467	6.888	21.432		
1.00124.68				H					
ATOM	368	HG	SER	28	22.550	8.361	23.051		
1.00242.47				H					
ATOM	369	N	CYS	29	20.373	3.948	23.433	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.197	3.089	23.380	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.597	2.956	24.777	1.00	

11.60			C						
ATOM	372	O	CYS	29	19.248	2.456	25.695	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.564	1.701	22.819	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.163	1.033	21.904	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.683	4.282	24.301	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.466	3.548	22.732	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.807	1.022	23.625	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.410	1.786	22.158	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.364	3.418	24.937	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.694	3.358	26.233	1.00	
17.41			C						
ATOM	381	C	GLU	30	16.055	1.994	26.460	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.735	1.279	25.511	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.626	4.446	26.304	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.296	5.817	26.202		
1.00108.13			C						
ATOM	385	CD	GLU	30	17.091	6.105	27.471		
1.00240.52			C						
ATOM	386	OE1	GLU	30	16.873	5.415	28.451		
1.00422.56			O						
ATOM	387	OE2	GLU	30	17.906	7.012	27.442		
1.00410.81			O1-						
ATOM	388	HN	GLU	30	16.894	3.816	24.171	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.420	3.536	27.012	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.095	4.374	27.241	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	14.935	4.321	25.484	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	15.541	6.578	26.071		
1.00196.66			H						
ATOM	393	HG2	GLU	30	16.963	5.823	25.352		
1.00140.67			H						
ATOM	394	N	LYS	31	15.866	1.643	27.732	1.00	
11.96			N						
ATOM	395	CA	LYS	31	15.254	0.365	28.101	1.00	
11.40			C						
ATOM	396	C	LYS	31	13.962	0.612	28.868	1.00	
10.99			C						
ATOM	397	O	LYS	31	13.861	1.567	29.638	1.00	

12.86			O						
ATOM	398	CB	LYS	31	16.218	-0.439	28.975	1.00	
21.40			C						
ATOM	399	CG	LYS	31	17.479	-0.775	28.175	1.00	
57.81			C						
ATOM	400	CD	LYS	31	18.440	-1.579	29.050		
1.00115.52			C						
ATOM	401	CE	LYS	31	19.702	-1.911	28.253		
1.00250.23			C						
ATOM	402	NZ	LYS	31	20.644	-2.685	29.111		
1.00462.10			N1+						
ATOM	403	HN	LYS	31	16.140	2.262	28.441	1.00	
26.13			H						
ATOM	404	HA	LYS	31	15.030	-0.206	27.210	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	15.741	-1.354	29.290	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	16.488	0.144	29.844	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	17.960	0.139	27.859		
1.00126.32			H						
ATOM	408	HG2	LYS	31	17.207	-1.358	27.305		
1.00114.19			H						
ATOM	409	HD1	LYS	31	17.964	-2.494	29.363		
1.00198.45			H						
ATOM	410	HD2	LYS	31	18.707	-0.995	29.921		
1.00200.14			H						
ATOM	411	HE1	LYS	31	20.177	-0.995	27.933		
1.00374.64			H						
ATOM	412	HE2	LYS	31	19.437	-2.501	27.387		
1.00403.27			H						
ATOM	413	HZ1	LYS	31	20.554	-3.698	28.897		
1.00627.38			H						
ATOM	414	HZ2	LYS	31	20.416	-2.519	30.113		
1.00622.26			H						
ATOM	415	HZ3	LYS	31	21.618	-2.379	28.922		
1.00619.20			H						
ATOM	416	N	THR	32	12.971	-0.247	28.651	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.687	-0.099	29.326	1.00	
22.44			C						
ATOM	418	C	THR	32	11.759	-0.646	30.748	1.00	
26.60			C						
ATOM	419	O	THR	32	12.105	-1.807	30.964	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.597	-0.837	28.546	1.00	
56.28			C						
ATOM	421	CG2	THR	32	9.257	-0.685	29.270		
1.00102.70			C						
ATOM	422	OG1	THR	32	10.497	-0.288	27.240		
1.00111.17			O						
ATOM	423	HN	THR	32	13.105	-0.987	28.022	1.00	

18.79			H						
ATOM	424	HA	THR	32	11.432	0.950	29.369	1.00	
19.67			H						
ATOM	425	HB	THR	32	10.848	-1.883	28.479	1.00	
84.25			H						
ATOM	426	HG1	THR	32	11.076	-0.791	26.662		
1.00205.03				H					
ATOM	427	HG21	THR	32	9.093	0.355	29.508		
1.00220.71				H					
ATOM	428	HG22	THR	32	9.273	-1.265	30.181		
1.00174.67				H					
ATOM	429	HG23	THR	32	8.461	-1.040	28.632		
1.00217.44				H					
ATOM	430	N	THR	33	11.423	0.204	31.715	1.00	
22.47			N						
ATOM	431	CA	THR	33	11.444	-0.188	33.120	1.00	
41.60			C						
ATOM	432	C	THR	33	10.458	0.630	33.907	1.00	
38.03			C						
ATOM	433	O	THR	33	10.789	1.686	34.449	1.00	
52.73			O						
ATOM	434	CB	THR	33	12.848	-0.018	33.706	1.00	
63.25			C						
ATOM	435	CG2	THR	33	13.795	-1.050	33.091		
1.00121.65				C					
ATOM	436	OG1	THR	33	13.322	1.290	33.424	1.00	
96.20			O						
ATOM	437	HN	THR	33	11.154	1.116	31.477	1.00	
23.82			H						
ATOM	438	HA	THR	33	11.145	-1.214	33.214	1.00	
67.12			H						
ATOM	439	HB	THR	33	12.810	-0.163	34.775		
1.00107.59				H					
ATOM	440	HG1	THR	33	13.960	1.227	32.707		
1.00176.27				H					
ATOM	441	HG21	THR	33	13.334	-2.026	33.121		
1.00255.23				H					
ATOM	442	HG22	THR	33	14.718	-1.072	33.653		
1.00245.37				H					
ATOM	443	HG23	THR	33	14.005	-0.782	32.067		
1.00185.78				H					
ATOM	444	N	GLY	34	9.242	0.121	33.979	1.00	
40.93			N						
ATOM	445	CA	GLY	34	8.207	0.798	34.717	1.00	
45.59			C						
ATOM	446	C	GLY	34	7.745	2.048	33.978	1.00	
40.97			C						
ATOM	447	O	GLY	34	6.550	2.333	33.906	1.00	
82.17			O						
ATOM	448	HN	GLY	34	9.043	-0.730	33.535	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	8.613	1.074	35.670	1.00	

54.41			H						
ATOM	450	HA2	GLY	34	7.370	0.129	34.861	1.00	
62.09			H						
ATOM	451	N	ASN	35	8.704	2.785	33.421	1.00	
32.51			N						
ATOM	452	CA	ASN	35	8.405	4.007	32.670	1.00	
33.20			C						
ATOM	453	C	ASN	35	9.197	4.028	31.368	1.00	
23.17			C						
ATOM	454	O	ASN	35	10.364	3.638	31.335	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.763	5.236	33.504	1.00	
54.51			C						
ATOM	456	CG	ASN	35	7.955	5.243	34.797	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	8.543	5.551	35.921		
1.00220.46				N					
ATOM	458	OD1	ASN	35	6.757	4.959	34.783		
1.00117.80				O					
ATOM	459	HN	ASN	35	9.638	2.498	33.509	1.00	
51.15			H						
ATOM	460	HA	ASN	35	7.350	4.038	32.435	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	8.539	6.128	32.939	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	9.816	5.215	33.738	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	9.495	5.774	35.930		
1.00405.39				H					
ATOM	464	HD22	ASN	35	8.030	5.556	36.757		
1.00245.64				H					
ATOM	465	N	PHE	36	8.555	4.477	30.295	1.00	
35.72			N						
ATOM	466	CA	PHE	36	9.199	4.537	28.993	1.00	
33.41			C						
ATOM	467	C	PHE	36	10.018	5.818	28.850	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.662	6.860	29.400	1.00	
45.23			O						
ATOM	469	CB	PHE	36	8.129	4.485	27.907	1.00	
67.53			C						
ATOM	470	CG	PHE	36	7.459	3.132	27.935	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	6.344	2.925	28.757		
1.00106.51				C					
ATOM	472	CD2	PHE	36	7.947	2.087	27.142	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	5.719	1.672	28.785		
1.00134.48				C					
ATOM	474	CE2	PHE	36	7.322	0.835	27.171		
1.00134.27				C					
ATOM	475	CZ	PHE	36	6.208	0.627	27.992		

1.00149.48				C					
ATOM	476	HN	PHE	36	7.625	4.768	30.376	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.853	3.685	28.879	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	8.586	4.639	26.948	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.395	5.256	28.087	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.967	3.731	29.371		
1.00110.20				H					
ATOM	481	HD2	PHE	36	8.809	2.247	26.510	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	4.859	1.512	29.420		
1.00155.06				H					
ATOM	483	HE2	PHE	36	7.699	0.029	26.559		
1.00159.46				H					
ATOM	484	HZ	PHE	36	5.726	-0.338	28.015		
1.00183.25				H					
ATOM	485	N	THR	37	11.117	5.729	28.103	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.989	6.877	27.878	1.00	
27.18			C						
ATOM	487	C	THR	37	12.604	6.796	26.486	1.00	
41.87			C						
ATOM	488	O	THR	37	13.304	5.841	26.161		
1.00169.86				O					
ATOM	489	CB	THR	37	13.101	6.904	28.929	1.00	
26.52			C						
ATOM	490	CG2	THR	37	12.485	7.026	30.324	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.857	5.703	28.847	1.00	
81.95			O						
ATOM	492	HN	THR	37	11.344	4.875	27.686	1.00	
18.47			H						
ATOM	493	HA	THR	37	11.412	7.788	27.955	1.00	
38.80			H						
ATOM	494	HB	THR	37	13.746	7.749	28.752	1.00	
81.60			H						
ATOM	495	HG1	THR	37	14.764	5.939	28.637		
1.00188.80				H					
ATOM	496	HG21	THR	37	12.047	6.079	30.609		
1.00196.98				H					
ATOM	497	HG22	THR	37	11.719	7.786	30.315		
1.00196.23				H					
ATOM	498	HG23	THR	37	13.251	7.295	31.035		
1.00168.92				H					
ATOM	499	N	GLU	38	12.326	7.801	25.670	1.00	
26.53			N						
ATOM	500	CA	GLU	38	12.846	7.837	24.305	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.336	8.173	24.292	1.00	

25.39			C						
ATOM	502	O	GLU	38	14.860	8.759	25.239	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.080	8.877	23.484	1.00	
54.82			C						
ATOM	504	CG	GLU	38	10.635	8.409	23.290		
1.00165.84				C					
ATOM	505	CD	GLU	38	9.837	9.475	22.548		
1.00292.92				C					
ATOM	506	OE1	GLU	38	10.361	10.561	22.367		
1.00414.19				O					
ATOM	507	OE2	GLU	38	8.712	9.191	22.173		
1.00537.65				O1-					
ATOM	508	HN	GLU	38	11.754	8.528	25.986	1.00	
84.50			H						
ATOM	509	HA	GLU	38	12.704	6.867	23.853	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.551	8.993	22.520		
1.00144.82				H					
ATOM	511	HB2	GLU	38	12.086	9.823	24.006		
1.00106.49				H					
ATOM	512	HG1	GLU	38	10.184	8.230	24.253		
1.00303.31				H					
ATOM	513	HG2	GLU	38	10.630	7.494	22.716		
1.00323.99				H					
ATOM	514	N	CYS	39	15.008	7.801	23.205	1.00	
15.84			N						
ATOM	515	CA	CYS	39	16.436	8.067	23.062	1.00	
14.30			C						
ATOM	516	C	CYS	39	16.686	9.579	23.002	1.00	
22.31			C						
ATOM	517	O	CYS	39	15.830	10.325	22.526	1.00	
32.92			O						
ATOM	518	CB	CYS	39	16.953	7.403	21.782	1.00	
18.08			C						
ATOM	519	SG	CYS	39	15.942	7.935	20.377	1.00	
17.41			S						
ATOM	520	HN	CYS	39	14.533	7.343	22.482	1.00	
24.87			H						
ATOM	521	HA	CYS	39	16.954	7.645	23.908	1.00	
14.60			H						
ATOM	522	HB1	CYS	39	16.893	6.330	21.883	1.00	
27.71			H						
ATOM	523	HB2	CYS	39	17.979	7.691	21.614	1.00	
34.91			H						
ATOM	524	N	PRO	40	17.822	10.052	23.467	1.00	
27.27			N						
ATOM	525	CA	PRO	40	18.142	11.509	23.446	1.00	
47.66			C						
ATOM	526	C	PRO	40	18.523	11.992	22.049	1.00	
71.54			C						
ATOM	527	O	PRO	40	19.250	11.315	21.321	1.00	

87.70			O					
ATOM	528	CB	PRO	40	19.320	11.625	24.418	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.022	10.312	24.308	1.00
46.04			C					
ATOM	530	CD	PRO	40	18.926	9.270	24.055	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.306	12.078	23.821	1.00
58.04			H					
ATOM	532	HB1	PRO	40	18.962	11.769	25.429	1.00
67.93			H					
ATOM	533	HB2	PRO	40	19.976	12.438	24.131	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.542	10.083	25.227	1.00
65.91			H					
ATOM	535	HG2	PRO	40	20.721	10.335	23.479	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.612	8.817	24.981	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.273	8.521	23.359	1.00
26.94			H					
ATOM	538	N	GLY	41	18.034	13.169	21.691	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.329	13.748	20.386	
1.00147.55			C					
ATOM	540	C	GLY	41	19.821	14.022	20.242	
1.00161.74			C					
ATOM	541	O	GLY	41	20.408	13.802	19.183	
1.00244.37			O					
ATOM	542	HN	GLY	41	17.467	13.660	22.319	
1.00121.79			H					
ATOM	543	HA1	GLY	41	17.789	14.676	20.277	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.020	13.061	19.615	
1.00157.34			H					
ATOM	545	N	LEU	42	20.429	14.507	21.324	
1.00162.48			N					
ATOM	546	CA	LEU	42	21.860	14.821	21.336	
1.00191.48			C					
ATOM	547	C	LEU	42	22.600	13.875	22.275	
1.00166.66			C					
ATOM	548	O	LEU	42	22.069	13.469	23.309	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.072	16.263	21.804	
1.00307.99			C					
ATOM	550	CG	LEU	42	21.275	17.226	20.917	
1.00452.28			C					
ATOM	551	CD1	LEU	42	21.449	18.654	21.442	
1.00681.24			C					
ATOM	552	CD2	LEU	42	21.777	17.145	19.465	
1.00527.46			C					
ATOM	553	HN	LEU	42	19.901	14.658	22.135	

1.00195.47				H				
ATOM	554	HA	LEU	42	22.268	14.712	20.342	
1.00229.77				H				
ATOM	555	HB1	LEU	42	23.121	16.510	21.743	
1.00342.49				H				
ATOM	556	HB2	LEU	42	21.739	16.360	22.828	
1.00335.33				H				
ATOM	557	HG	LEU	42	20.227	16.958	20.952	
1.00427.79				H				
ATOM	558	HD11	LEU	42	20.766	19.314	20.926	
1.00909.71				H				
ATOM	559	HD12	LEU	42	22.463	18.980	21.269	
1.00706.80				H				
ATOM	560	HD13	LEU	42	21.239	18.676	22.501	
1.00858.82				H				
ATOM	561	HD21	LEU	42	21.523	18.055	18.939	
1.00631.69				H				
ATOM	562	HD22	LEU	42	21.311	16.308	18.968	
1.00628.06				H				
ATOM	563	HD23	LEU	42	22.851	17.016	19.457	
1.00656.75				H				
ATOM	564	N	THR	43	23.830	13.526	21.909	
1.00178.52				N				
ATOM	565	CA	THR	43	24.632	12.624	22.727	
1.00240.84				C				
ATOM	566	C	THR	43	25.043	13.314	24.036	
1.00372.31				C				
ATOM	567	O	THR	43	25.211	14.532	24.066	
1.00500.13				O				
ATOM	568	CB	THR	43	25.880	12.206	21.944	
1.00354.13				C				
ATOM	569	CG2	THR	43	25.462	11.451	20.682	
1.00463.04				C				
ATOM	570	OG1	THR	43	26.618	13.365	21.581	
1.00508.50				O				
ATOM	571	HN	THR	43	24.202	13.880	21.074	
1.00229.59				H				
ATOM	572	HA	THR	43	24.046	11.747	22.945	
1.00249.90				H				
ATOM	573	HB	THR	43	26.496	11.566	22.554	
1.00481.58				H				
ATOM	574	HG1	THR	43	26.511	14.015	22.280	
1.00624.31				H				
ATOM	575	HG21	THR	43	24.949	12.124	20.011	
1.00650.95				H				
ATOM	576	HG22	THR	43	24.803	10.638	20.950	
1.00580.73				H				
ATOM	577	HG23	THR	43	26.339	11.055	20.191	
1.00571.99				H				
ATOM	578	N	PRO	44	25.207	12.574	25.114	
1.00488.39				N				
ATOM	579	CA	PRO	44	25.604	13.156	26.432	

1.00760.13				C				
ATOM	580	C	PRO	44	27.082	13.549	26.471	
1.00735.36				C				
ATOM	581	O	PRO	44	27.532	14.209	27.409	
1.00999.99				O				
ATOM	582	CB	PRO	44	25.304	12.025	27.422	
1.00999.99				C				
ATOM	583	CG	PRO	44	25.499	10.776	26.629	
1.00856.94				C				
ATOM	584	CD	PRO	44	25.036	11.107	25.207	
1.00548.09				C				
ATOM	585	HA	PRO	44	24.987	14.010	26.663	
1.00939.00				H				
ATOM	586	HB1	PRO	44	24.282	12.087	27.767	
1.00999.99				H				
ATOM	587	HB2	PRO	44	25.988	12.058	28.262	
1.00999.99				H				
ATOM	588	HG1	PRO	44	24.900	9.973	27.033	
1.00999.99				H				
ATOM	589	HG2	PRO	44	26.546	10.496	26.629	
1.00853.53				H				
ATOM	590	HD1	PRO	44	23.996	10.843	25.075	
1.00602.45				H				
ATOM	591	HD2	PRO	44	25.655	10.599	24.481	
1.00463.32				H				
ATOM	592	N	ILE	45	27.830	13.135	25.455	
1.00518.33				N				
ATOM	593	CA	ILE	45	29.255	13.444	25.398	
1.00582.79				C				
ATOM	594	C	ILE	45	29.488	14.942	25.571	
1.00795.93				C				
ATOM	595	O	ILE	45	30.514	15.363	26.107	
1.00898.75				O				
ATOM	596	CB	ILE	45	29.838	12.978	24.059	
1.00474.41				C				
ATOM	597	CG1	ILE	45	31.368	13.049	24.113	
1.00516.90				C				
ATOM	598	CG2	ILE	45	29.325	13.876	22.928	
1.00760.75				C				
ATOM	599	CD1	ILE	45	31.954	12.360	22.880	
1.00566.81				C				
ATOM	600	HN	ILE	45	27.423	12.606	24.740	
1.00395.72				H				
ATOM	601	HA	ILE	45	29.754	12.917	26.197	
1.00711.06				H				
ATOM	602	HB	ILE	45	29.533	11.958	23.872	
1.00477.81				H				
ATOM	603	HG11	ILE	45	31.723	12.551	25.003	
1.00624.28				H				
ATOM	604	HG12	ILE	45	31.680	14.083	24.131	
1.00744.84				H				
ATOM	605	HG21	ILE	45	28.274	14.077	23.074	

1.00920.57				H				
ATOM	606	HG22	ILE		45	29.466	13.376	21.980
1.00999.99				H				
ATOM	607	HG23	ILE		45	29.871	14.808	22.928
1.00865.46				H				
ATOM	608	HD11	ILE		45	31.706	11.309	22.902
1.00658.89				H				
ATOM	609	HD12	ILE		45	33.028	12.476	22.879
1.00734.30				H				
ATOM	610	HD13	ILE		45	31.544	12.808	21.987
1.00675.84				H				
ATOM	611	N	ALA		46	28.530	15.742	25.113
1.00999.99				N				
ATOM	612	CA	ALA		46	28.642	17.192	25.224
1.00999.99				C				
ATOM	613	C	ALA		46	27.318	17.861	24.875
1.00999.99				C				
ATOM	614	CB	ALA		46	29.737	17.704	24.286
1.00999.99				C				
ATOM	615	OT1	ALA		46	27.215	19.063	25.062
1.00999.99				O				
ATOM	616	OT2	ALA		46	26.423	17.163	24.427
1.00999.99				O				
ATOM	617	HN	ALA		46	27.735	15.351	24.696
1.00999.99				H				
ATOM	618	HA	ALA		46	28.907	17.447	26.239
1.00999.99				H				
ATOM	619	HB1	ALA		46	29.427	17.563	23.261
1.00999.99				H				
ATOM	620	HB2	ALA		46	30.650	17.156	24.464
1.00999.99				H				
ATOM	621	HB3	ALA		46	29.907	18.755	24.469
1.00999.99				H				
ENDMDL								
TER								
MODEL		7						
ATOM	1	N	GLY		1	23.879	-4.071	19.872
1.00999.99				N				
ATOM	2	CA	GLY		1	24.684	-2.819	19.959
1.00999.99				C				
ATOM	3	C	GLY		1	24.188	-1.822	18.918
1.00999.99				C				
ATOM	4	O	GLY		1	23.674	-0.757	19.260
1.00999.99				O				
ATOM	5	HA1	GLY		1	25.722	-3.046	19.770
1.00999.99				H				
ATOM	6	HA2	GLY		1	24.582	-2.393	20.946
1.00999.99				H				
ATOM	7	HT1	GLY		1	24.057	-4.657	20.712
1.00999.99				H				
ATOM	8	HT2	GLY		1	24.149	-4.598	19.016
1.00999.99				H				

ATOM	9	HT3	GLY	1	22.869	-3.832	19.828	
1.00999.99			H					
ATOM	10	N	LEU	2	24.343	-2.174	17.646	
1.00999.99			N					
ATOM	11	CA	LEU	2	23.904	-1.301	16.564	
1.00895.59			C					
ATOM	12	C	LEU	2	22.382	-1.293	16.474	
1.00532.27			C					
ATOM	13	O	LEU	2	21.727	-2.284	16.794	
1.00625.21			O					
ATOM	14	CB	LEU	2	24.492	-1.784	15.234	
1.00999.99			C					
ATOM	15	CG	LEU	2	26.023	-1.817	15.319	
1.00999.99			C					
ATOM	16	CD1	LEU	2	26.584	-2.388	14.014	
1.00999.99			C					
ATOM	17	CD2	LEU	2	26.573	-0.396	15.542	
1.00999.99			C					
ATOM	18	HN	LEU	2	24.758	-3.037	17.432	
1.00999.99			H					
ATOM	19	HA	LEU	2	24.249	-0.298	16.756	
1.00890.87			H					
ATOM	20	HB1	LEU	2	24.192	-1.109	14.445	
1.00924.07			H					
ATOM	21	HB2	LEU	2	24.121	-2.775	15.018	
1.00999.99			H					
ATOM	22	HG	LEU	2	26.320	-2.453	16.142	
1.00999.99			H					
ATOM	23	HD11	LEU	2	26.049	-3.290	13.754	
1.00999.99			H					
ATOM	24	HD12	LEU	2	27.632	-2.616	14.140	
1.00999.99			H					
ATOM	25	HD13	LEU	2	26.467	-1.662	13.222	
1.00999.99			H					
ATOM	26	HD21	LEU	2	25.972	0.319	15.000	
1.00999.99			H					
ATOM	27	HD22	LEU	2	27.596	-0.342	15.190	
1.00999.99			H					
ATOM	28	HD23	LEU	2	26.550	-0.162	16.595	
1.00999.99			H					
ATOM	29	N	CYS	3	21.824	-0.164	16.042	
1.00271.28			N					
ATOM	30	CA	CYS	3	20.373	-0.036	15.921	
1.00104.50			C					
ATOM	31	C	CYS	3	19.896	-0.562	14.572	1.00
90.98			C					
ATOM	32	O	CYS	3	20.106	0.071	13.537	
1.00207.28			O					
ATOM	33	CB	CYS	3	19.966	1.432	16.060	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.465	2.048	17.687	1.00
81.56			S					

ATOM	35	HN	CYS	3	22.396	0.596	15.803	
1.00296.55								H
ATOM	36	HA	CYS	3	19.899	-0.604	16.707	
1.00166.45								H
ATOM	37	HB1	CYS	3	18.895	1.519	15.956	1.00
40.38			H					
ATOM	38	HB2	CYS	3	20.450	2.015	15.291	1.00
98.45			H					
ATOM	39	N	SER	4	19.242	-1.719	14.593	1.00
85.31			N					
ATOM	40	CA	SER	4	18.726	-2.316	13.365	1.00
92.94			C					
ATOM	41	C	SER	4	17.696	-1.392	12.742	1.00
67.37			C					
ATOM	42	O	SER	4	17.659	-1.200	11.527	
1.00102.28			O					
ATOM	43	CB	SER	4	18.046	-3.646	13.675	
1.00123.83			C					
ATOM	44	OG	SER	4	17.672	-4.277	12.458	
1.00178.89			O					
ATOM	45	HN	SER	4	19.097	-2.175	15.447	
1.00163.03			H					
ATOM	46	HA	SER	4	19.536	-2.479	12.672	
1.00129.78			H					
ATOM	47	HB1	SER	4	17.161	-3.457	14.276	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.722	-4.286	14.219	
1.00156.87			H					
ATOM	49	HG	SER	4	17.603	-3.598	11.781	
1.00218.16			H					
ATOM	50	N	GLU	5	16.843	-0.844	13.599	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.776	0.047	13.168	1.00
41.21			C					
ATOM	52	C	GLU	5	15.546	1.138	14.210	1.00
41.92			C					
ATOM	53	O	GLU	5	16.356	1.318	15.118	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.497	-0.761	12.972	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.144	-1.458	14.278	1.00
55.48			C					
ATOM	56	CD	GLU	5	13.025	-2.467	14.050	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.576	-2.578	12.921	
1.00206.49			O					
ATOM	58	OE2	GLU	5	12.631	-3.114	15.008	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	16.926	-1.058	14.552	1.00
45.52			H					
ATOM	60	HA	GLU	5	16.044	0.502	12.235	1.00
60.63			H					

ATOM	61	HB1	GLU	5	14.653	-1.503	12.202	1.00
61.59		H						
ATOM	62	HB2	GLU	5	13.697	-0.106	12.685	1.00
63.66		H						
ATOM	63	HG1	GLU	5	13.823	-0.723	15.001	1.00
58.03		H						
ATOM	64	HG2	GLU	5	15.018	-1.965	14.649	1.00
57.77		H						
ATOM	65	N	ASN	6	14.440	1.861	14.076	1.00
50.73		N						
ATOM	66	CA	ASN	6	14.128	2.929	15.020	1.00
71.04		C						
ATOM	67	C	ASN	6	14.001	2.362	16.431	1.00
65.17		C						
ATOM	68	O	ASN	6	14.454	2.972	17.400	1.00
94.86		O						
ATOM	69	CB	ASN	6	12.820	3.616	14.623	1.00
94.83		C						
ATOM	70	CG	ASN	6	13.030	4.448	13.362	
1.00160.94			C					
ATOM	71	ND2	ASN	6	12.001	4.785	12.634	
1.00244.88			N					
ATOM	72	OD1	ASN	6	14.163	4.798	13.030	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.827	1.677	13.335	1.00
72.81		H						
ATOM	74	HA	ASN	6	14.925	3.657	15.005	1.00
96.02		H						
ATOM	75	HB1	ASN	6	12.495	4.261	15.424	
1.00111.09			H					
ATOM	76	HB2	ASN	6	12.064	2.866	14.436	1.00
98.13		H						
ATOM	77	HD21	ASN	6	11.101	4.505	12.900	
1.00272.43			H					
ATOM	78	HD22	ASN	6	12.128	5.320	11.822	
1.00336.78			H					
ATOM	79	N	GLY	7	13.386	1.184	16.535	1.00
51.80		N						
ATOM	80	CA	GLY	7	13.204	0.518	17.828	1.00
71.47		C						
ATOM	81	C	GLY	7	13.900	-0.836	17.830	1.00
41.04		C						
ATOM	82	O	GLY	7	13.260	-1.877	17.974	1.00
44.54		O						
ATOM	83	HN	GLY	7	13.054	0.747	15.724	1.00
45.49		H						
ATOM	84	HA1	GLY	7	12.155	0.368	18.002	
1.00103.52			H					
ATOM	85	HA2	GLY	7	13.613	1.130	18.621	
1.00108.67			H					
ATOM	86	N	ASP	8	15.214	-0.810	17.662	1.00
27.00		N						

ATOM	87	CA	ASP	8	16.001	-2.039	17.635	1.00
14.15			C					
ATOM	88	C	ASP	8	15.864	-2.798	18.947	1.00
9.37			C					
ATOM	89	O	ASP	8	15.663	-4.013	18.954	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.473	-1.713	17.382	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.281	-3.001	17.277	1.00
21.22			C					
ATOM	92	OD1	ASP	8	19.446	-2.919	16.927	
1.00119.56			O					
ATOM	93	OD2	ASP	8	17.722	-4.051	17.549	
1.00133.27			O1-					
ATOM	94	HN	ASP	8	15.662	0.053	17.547	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.642	-2.662	16.836	1.00
20.92			H					
ATOM	96	HB1	ASP	8	17.854	-1.118	18.200	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.564	-1.155	16.461	1.00
44.14			H					
ATOM	98	N	CYS	9	15.974	-2.078	20.054	1.00
5.93			N					
ATOM	99	CA	CYS	9	15.858	-2.700	21.367	1.00
7.54			C					
ATOM	100	C	CYS	9	14.471	-3.304	21.543	1.00
14.60			C					
ATOM	101	O	CYS	9	14.316	-4.410	22.059	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.105	-1.670	22.457	1.00
6.63			C					
ATOM	103	SG	CYS	9	17.849	-1.223	22.436	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.131	-1.114	19.985	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.603	-3.471	21.455	1.00
11.12			H					
ATOM	106	HB1	CYS	9	15.855	-2.089	23.417	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.502	-0.792	22.273	1.00
5.04			H					
ATOM	108	N	ALA	10	13.467	-2.558	21.098	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.082	-3.001	21.189	1.00
32.04			C					
ATOM	110	C	ALA	10	11.181	-2.054	20.399	1.00
45.47			C					
ATOM	111	O	ALA	10	11.611	-0.976	19.990	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.636	-3.048	22.654	1.00
30.10			C					

ATOM	113	HN	ALA	10	13.666	-1.688	20.694	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.002	-3.991	20.767	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.445	-3.420	23.263	1.00
84.37			H					
ATOM	116	HB2	ALA	10	10.782	-3.704	22.749	
1.00118.20								H
ATOM	117	HB3	ALA	10	11.364	-2.056	22.983	
1.00117.32								H
ATOM	118	N	ALA	11	9.936	-2.461	20.182	1.00
30.62			N					
ATOM	119	CA	ALA	11	8.997	-1.632	19.434	1.00
35.24			C					
ATOM	120	C	ALA	11	8.778	-0.293	20.136	1.00
22.78			C					
ATOM	121	O	ALA	11	8.727	0.753	19.491	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.660	-2.359	19.291	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.644	-3.330	20.527	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.400	-1.449	18.450	1.00
41.70			H					
ATOM	125	HB1	ALA	11	6.952	-1.717	18.787	
1.00157.06								H
ATOM	126	HB2	ALA	11	7.281	-2.614	20.269	
1.00148.83								H
ATOM	127	HB3	ALA	11	7.800	-3.262	18.715	
1.00137.06								H
ATOM	128	N	ASP	12	8.648	-0.334	21.460	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.431	0.883	22.238	1.00
31.05			C					
ATOM	130	C	ASP	12	9.749	1.604	22.509	1.00
22.98			C					
ATOM	131	O	ASP	12	9.799	2.833	22.550	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.757	0.537	23.568	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.325	0.073	23.322	
1.00104.83								C
ATOM	134	OD1	ASP	12	5.743	-0.496	24.230	
1.00258.73								O
ATOM	135	OD2	ASP	12	5.833	0.292	22.227	
1.00213.46								O1-
ATOM	136	HN	ASP	12	8.696	-1.198	21.921	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.780	1.544	21.683	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.745	1.410	24.202	1.00
95.71			H					

ATOM	139	HB2	ASP	12	8.311	-0.253	24.054	1.00
54.37		H						
ATOM	140	N	GLU	13	10.813	0.830	22.701	1.00
17.60		N						
ATOM	141	CA	GLU	13	12.128	1.403	22.976	1.00
12.01		C						
ATOM	142	C	GLU	13	12.715	2.046	21.721	1.00
10.07		C						
ATOM	143	O	GLU	13	12.411	1.637	20.601	1.00
12.81		O						
ATOM	144	CB	GLU	13	13.071	0.311	23.484	1.00
11.74		C						
ATOM	145	CG	GLU	13	12.566	-0.206	24.833	1.00
13.49		C						
ATOM	146	CD	GLU	13	13.416	-1.384	25.294	
1.00142.36				C				
ATOM	147	OE1	GLU	13	12.842	-2.378	25.706	
1.00339.06				O				
ATOM	148	OE2	GLU	13	14.628	-1.276	25.226	
1.00335.28				O1-				
ATOM	149	HN	GLU	13	10.712	-0.144	22.662	1.00
28.36		H						
ATOM	150	HA	GLU	13	12.026	2.154	23.744	1.00
13.06		H						
ATOM	151	HB1	GLU	13	14.063	0.719	23.604	1.00
13.76		H						
ATOM	152	HB2	GLU	13	13.098	-0.502	22.771	1.00
9.94		H						
ATOM	153	HG1	GLU	13	11.539	-0.522	24.736	1.00
66.02		H						
ATOM	154	HG2	GLU	13	12.628	0.586	25.565	1.00
56.23		H						
ATOM	155	N	CYS	14	13.569	3.054	21.919	1.00
9.12		N						
ATOM	156	CA	CYS	14	14.212	3.753	20.805	1.00
10.69		C						
ATOM	157	C	CYS	14	15.666	3.318	20.692	1.00
9.56		C						
ATOM	158	O	CYS	14	16.262	2.897	21.677	1.00
13.62		O						
ATOM	159	CB	CYS	14	14.154	5.267	21.026	1.00
13.96		C						
ATOM	160	SG	CYS	14	15.151	6.096	19.761	1.00
42.96		S						
ATOM	161	HN	CYS	14	13.779	3.328	22.836	1.00
9.76		H						
ATOM	162	HA	CYS	14	13.702	3.516	19.881	1.00
15.54		H						
ATOM	163	HB1	CYS	14	14.544	5.504	22.004	1.00
50.72		H						
ATOM	164	HB2	CYS	14	13.130	5.602	20.955	1.00
46.13		H						

ATOM	165	N	CYS	15	16.229	3.418	19.491	1.00
9.60		N						
ATOM	166	CA	CYS	15	17.622	3.027	19.270	1.00
9.28		C						
ATOM	167	C	CYS	15	18.239	3.913	18.195	1.00
9.92		C						
ATOM	168	O	CYS	15	17.660	4.093	17.124	1.00
13.31		O						
ATOM	169	CB	CYS	15	17.688	1.562	18.827	1.00
12.90		C						
ATOM	170	SG	CYS	15	19.386	0.948	18.993	1.00
39.11		S						
ATOM	171	HN	CYS	15	15.704	3.762	18.740	1.00
13.12		H						
ATOM	172	HA	CYS	15	18.182	3.144	20.189	1.00
8.26		H						
ATOM	173	HB1	CYS	15	17.379	1.485	17.795	1.00
24.82		H						
ATOM	174	HB2	CYS	15	17.031	0.969	19.444	1.00
27.31		H						
ATOM	175	N	VAL	16	19.414	4.470	18.482	1.00
9.56		N						
ATOM	176	CA	VAL	16	20.088	5.340	17.520	1.00
11.99		C						
ATOM	177	C	VAL	16	21.601	5.221	17.662	1.00
7.73		C						
ATOM	178	O	VAL	16	22.138	5.288	18.767	1.00
8.83		O						
ATOM	179	CB	VAL	16	19.658	6.790	17.747	1.00
18.37		C						
ATOM	180	CG1	VAL	16	20.206	7.287	19.086	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.201	7.663	16.615	
1.00115.21			C					
ATOM	182	HN	VAL	16	19.836	4.295	19.352	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.811	5.047	16.517	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.580	6.845	17.759	1.00
52.63		H						
ATOM	185	HG11	VAL	16	19.706	8.203	19.361	
1.00128.07			H					
ATOM	186	HG12	VAL	16	21.268	7.470	18.995	
1.00154.13			H					
ATOM	187	HG13	VAL	16	20.034	6.539	19.845	
1.00135.74			H					
ATOM	188	HG21	VAL	16	19.848	8.675	16.742	
1.00229.05			H					
ATOM	189	HG22	VAL	16	19.855	7.277	15.667	
1.00261.82			H					
ATOM	190	HG23	VAL	16	21.280	7.651	16.637	
1.00210.07			H					

ATOM	191	N	ASP	17	22.284	5.044	16.532	1.00
14.34			N					
ATOM	192	CA	ASP	17	23.741	4.915	16.532	1.00
11.90			C					
ATOM	193	C	ASP	17	24.394	6.231	16.127	1.00
13.15			C					
ATOM	194	O	ASP	17	24.163	6.739	15.029	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.166	3.822	15.551	1.00
20.80			C					
ATOM	196	CG	ASP	17	23.754	2.453	16.083	1.00
28.72			C					
ATOM	197	OD1	ASP	17	23.420	2.372	17.254	
1.00135.42			O					
ATOM	198	OD2	ASP	17	23.779	1.508	15.312	
1.00114.17			O1-					
ATOM	199	HN	ASP	17	21.799	4.998	15.682	1.00
28.29			H					
ATOM	200	HA	ASP	17	24.082	4.645	17.522	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.238	3.849	15.427	1.00
22.42			H					
ATOM	202	HB2	ASP	17	23.692	3.994	14.595	1.00
29.52			H					
ATOM	203	N	THR	18	25.225	6.773	17.016	1.00
11.55			N					
ATOM	204	CA	THR	18	25.930	8.027	16.746	1.00
17.10			C					
ATOM	205	C	THR	18	27.403	7.749	16.491	1.00
10.63			C					
ATOM	206	O	THR	18	27.901	6.671	16.808	1.00
6.49			O					
ATOM	207	CB	THR	18	25.800	8.978	17.936	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.361	9.480	18.046	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.163	8.297	19.126	1.00
26.49			O					
ATOM	210	HN	THR	18	25.376	6.314	17.868	1.00
13.96			H					
ATOM	211	HA	THR	18	25.508	8.502	15.871	1.00
26.43			H					
ATOM	212	HB	THR	18	26.458	9.822	17.793	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.607	8.622	19.837	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.315	10.275	18.774	
1.00100.44			H					
ATOM	215	HG22	THR	18	23.720	8.669	18.355	
1.00129.42			H					
ATOM	216	HG23	THR	18	24.036	9.852	17.086	
1.00156.21			H					

ATOM	217	N	VAL	19	28.091	8.736	15.935	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.500	8.618	15.649	1.00
13.34			C					
ATOM	219	C	VAL	19	29.984	9.884	14.977	1.00
25.88			C					
ATOM	220	O	VAL	19	29.548	10.249	13.885	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.806	7.409	14.763	1.00
15.48			C					
ATOM	222	CG1	VAL	19	28.884	7.402	13.539	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.270	7.484	14.308	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.646	9.578	15.726	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.028	8.500	16.586	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.655	6.507	15.332	1.00
11.49			H					
ATOM	227	HG11	VAL	19	28.944	6.439	13.051	
1.00137.43			H					
ATOM	228	HG12	VAL	19	29.194	8.172	12.849	1.00
93.29			H					
ATOM	229	HG13	VAL	19	27.866	7.584	13.848	
1.00108.69			H					
ATOM	230	HG21	VAL	19	31.363	8.220	13.522	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.585	6.520	13.941	
1.00111.36			H					
ATOM	232	HG23	VAL	19	31.892	7.776	15.146	1.00
77.11			H					
ATOM	233	N	PHE	20	30.884	10.544	15.660	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.467	11.787	15.187	1.00
40.34			C					
ATOM	235	C	PHE	20	32.816	11.530	14.532	1.00
40.37			C					
ATOM	236	O	PHE	20	33.047	11.929	13.390	1.00
66.02			O					
ATOM	237	CB	PHE	20	31.632	12.755	16.371	1.00
48.79			C					
ATOM	238	CG	PHE	20	31.907	11.992	17.659	1.00
35.75			C					
ATOM	239	CD1	PHE	20	30.913	11.180	18.238	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.155	12.112	18.285	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.176	10.498	19.428	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.413	11.424	19.476	1.00
45.84			C					

ATOM	243	CZ	PHE	20	32.424	10.618	20.047	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.158	10.183	16.518	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.809	12.239	14.456	1.00
59.91			H					
ATOM	246	HB1	PHE	20	30.733	13.311	16.485	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.445	13.441	16.176	1.00
58.17			H					
ATOM	248	HD1	PHE	20	29.944	11.075	17.767	1.00
33.34			H					
ATOM	249	HD2	PHE	20	33.921	12.733	17.847	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.414	9.877	19.868	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.375	11.516	19.955	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.623	10.088	20.967	1.00
52.66			H					
ATOM	253	N	GLU	21	33.715	10.894	15.275	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.046	10.618	14.793	1.00
56.16			C					
ATOM	255	C	GLU	21	35.314	9.124	14.728	1.00
58.61			C					
ATOM	256	O	GLU	21	34.438	8.305	15.004	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.010	11.280	15.750	1.00
57.37			C					
ATOM	258	CG	GLU	21	35.948	10.585	17.112	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.671	11.429	18.156	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.600	11.081	19.323	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.286	12.411	17.774	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.493	10.629	16.186	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.185	11.046	13.810	1.00
85.72			H					
ATOM	264	HB1	GLU	21	35.725	12.310	15.865	1.00
46.37			H					
ATOM	265	HB2	GLU	21	36.999	11.215	15.357	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.421	9.621	17.041	
1.00314.91			H					
ATOM	267	HG2	GLU	21	34.918	10.455	17.401	
1.00266.92			H					
ATOM	268	N	GLY	22	36.538	8.784	14.353	1.00
86.70			N					

ATOM	269	CA	GLY	22	36.945	7.382	14.239	
1.00104.66								C
ATOM	270	C	GLY	22	37.592	6.891	15.529	1.00
71.50			C					
ATOM	271	O	GLY	22	37.805	5.692	15.713	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.182	9.496	14.149	
1.00214.64								H
ATOM	273	HA1	GLY	22	37.657	7.285	13.431	
1.00152.47								H
ATOM	274	HA2	GLY	22	36.079	6.770	14.021	
1.00118.15								H
ATOM	275	N	ASP	23	37.911	7.825	16.414	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.542	7.485	17.683	1.00
43.33			C					
ATOM	277	C	ASP	23	37.640	6.590	18.523	1.00
37.55			C					
ATOM	278	O	ASP	23	38.094	5.607	19.108	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.858	8.761	18.463	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.679	8.425	19.704	
1.00141.86								C
ATOM	281	OD1	ASP	23	40.168	9.348	20.334	
1.00328.18								O
ATOM	282	OD2	ASP	23	39.806	7.250	20.005	
1.00304.58								O1-
ATOM	283	HN	ASP	23	37.724	8.765	16.208	1.00
40.86			H					
ATOM	284	HA	ASP	23	39.462	6.964	17.485	1.00
72.12			H					
ATOM	285	HB1	ASP	23	37.933	9.231	18.764	1.00
94.15			H					
ATOM	286	HB2	ASP	23	39.415	9.438	17.833	1.00
93.26			H					
ATOM	287	N	MET	24	36.362	6.944	18.589	1.00
23.24			N					
ATOM	288	CA	MET	24	35.400	6.173	19.374	1.00
32.50			C					
ATOM	289	C	MET	24	33.985	6.356	18.835	1.00
25.13			C					
ATOM	290	O	MET	24	33.617	7.439	18.380	1.00
54.40			O					
ATOM	291	CB	MET	24	35.451	6.622	20.836	1.00
47.36			C					
ATOM	292	CG	MET	24	34.467	5.797	21.667	
1.00151.73								C
ATOM	293	SD	MET	24	34.653	6.219	23.419	
1.00209.23								S
ATOM	294	CE	MET	24	33.971	7.895	23.338	
1.00243.29								C

ATOM	295	HN	MET	24	36.063	7.742	18.107	1.00
17.32			H					
ATOM	296	HA	MET	24	35.660	5.125	19.324	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.186	7.666	20.899	
1.00124.40			H					
ATOM	298	HB2	MET	24	36.451	6.482	21.219	
1.00166.96			H					
ATOM	299	HG1	MET	24	34.672	4.745	21.528	
1.00331.71			H					
ATOM	300	HG2	MET	24	33.456	6.009	21.352	
1.00302.30			H					
ATOM	301	HE1	MET	24	33.622	8.188	24.319	
1.00340.44			H					
ATOM	302	HE2	MET	24	33.147	7.920	22.645	
1.00373.88			H					
ATOM	303	HE3	MET	24	34.740	8.581	23.007	
1.00386.81			H					
ATOM	304	N	VAL	25	33.190	5.287	18.900	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.804	5.323	18.428	1.00
15.37			C					
ATOM	306	C	VAL	25	30.844	5.396	19.610	1.00
17.47			C					
ATOM	307	O	VAL	25	31.118	4.865	20.686	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.494	4.078	17.591	1.00
23.36			C					
ATOM	309	CG1	VAL	25	29.990	4.035	17.258	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.312	4.128	16.297	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.542	4.455	19.280	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.656	6.201	17.809	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.762	3.194	18.153	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.623	5.040	17.105	
1.00171.07			H					
ATOM	315	HG12	VAL	25	29.455	3.582	18.078	
1.00166.22			H					
ATOM	316	HG13	VAL	25	29.831	3.454	16.361	
1.00134.76			H					
ATOM	317	HG21	VAL	25	31.951	4.933	15.674	
1.00141.88			H					
ATOM	318	HG22	VAL	25	32.212	3.191	15.770	
1.00184.50			H					
ATOM	319	HG23	VAL	25	33.353	4.299	16.534	
1.00133.90			H					
ATOM	320	N	THR	26	29.719	6.079	19.402	1.00
13.60			N					

ATOM	321	CA	THR	26	28.708	6.251	20.447	1.00
21.19			C					
ATOM	322	C	THR	26	27.343	5.749	19.987	1.00
16.55			C					
ATOM	323	O	THR	26	26.942	5.959	18.841	1.00
11.43			O					
ATOM	324	CB	THR	26	28.611	7.732	20.802	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.507	7.950	21.840	1.00
44.39			C					
ATOM	326	OG1	THR	26	29.856	8.162	21.335	1.00
34.75			O					
ATOM	327	HN	THR	26	29.567	6.488	18.524	1.00
10.81			H					
ATOM	328	HA	THR	26	29.000	5.703	21.332	1.00
33.16			H					
ATOM	329	HB	THR	26	28.385	8.296	19.907	1.00
20.60			H					
ATOM	330	HG1	THR	26	30.221	7.442	21.855	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.565	8.960	22.219	
1.00126.99			H					
ATOM	332	HG22	THR	26	27.636	7.254	22.654	
1.00108.32			H					
ATOM	333	HG23	THR	26	26.542	7.793	21.382	
1.00151.99			H					
ATOM	334	N	ARG	27	26.629	5.088	20.897	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.299	4.557	20.600	1.00
20.21			C					
ATOM	336	C	ARG	27	24.421	4.636	21.846	1.00
16.96			C					
ATOM	337	O	ARG	27	24.930	4.758	22.960	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.408	3.102	20.137	1.00
22.14			C					
ATOM	339	CG	ARG	27	25.925	2.237	21.288	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.299	0.852	20.758	
1.00109.38			C					
ATOM	341	NE	ARG	27	27.454	0.945	19.873	
1.00227.73			N					
ATOM	342	CZ	ARG	27	27.841	-0.092	19.138	
1.00426.12			C					
ATOM	343	NH1	ARG	27	28.878	0.015	18.352	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	27.184	-1.216	19.199	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.004	4.960	21.793	1.00
30.75			H					
ATOM	346	HA	ARG	27	24.844	5.142	19.813	1.00
23.13			H					

ATOM	347	HB1	ARG	27	26.095	3.040	19.306	1.00
87.46		H						
ATOM	348	HB2	ARG	27	24.436	2.750	19.828	
1.00103.36		H						
ATOM	349	HG1	ARG	27	25.154	2.137	22.037	
1.00281.97		H						
ATOM	350	HG2	ARG	27	26.796	2.703	21.726	
1.00276.19		H						
ATOM	351	HD1	ARG	27	25.461	0.440	20.215	
1.00183.60		H						
ATOM	352	HD2	ARG	27	26.536	0.204	21.588	
1.00142.93		H						
ATOM	353	HE	ARG	27	27.953	1.787	19.819	
1.00372.53		H						
ATOM	354	HH11	ARG	27	29.382	0.879	18.305	
1.00910.59		H						
ATOM	355	HH12	ARG	27	29.169	-0.764	17.799	
1.00999.99		H						
ATOM	356	HH21	ARG	27	26.388	-1.300	19.800	
1.00532.54		H						
ATOM	357	HH22	ARG	27	27.474	-1.998	18.645	
1.00948.84		H						
ATOM	358	N	SER	28	23.103	4.574	21.658	1.00
14.60		N						
ATOM	359	CA	SER	28	22.177	4.650	22.788	1.00
14.92		C						
ATOM	360	C	SER	28	20.904	3.868	22.498	1.00
12.12		C						
ATOM	361	O	SER	28	20.597	3.563	21.346	1.00
13.41		O						
ATOM	362	CB	SER	28	21.826	6.110	23.073	1.00
23.26		C						
ATOM	363	OG	SER	28	21.094	6.639	21.975	
1.00146.32		O						
ATOM	364	HN	SER	28	22.746	4.482	20.747	1.00
15.23		H						
ATOM	365	HA	SER	28	22.650	4.231	23.665	1.00
15.44		H						
ATOM	366	HB1	SER	28	22.736	6.677	23.216	1.00
88.73		H						
ATOM	367	HB2	SER	28	21.222	6.171	23.963	
1.00124.68		H						
ATOM	368	HG	SER	28	20.159	6.596	22.193	
1.00242.47		H						
ATOM	369	N	CYS	29	20.163	3.550	23.555	1.00
10.48		N						
ATOM	370	CA	CYS	29	18.919	2.808	23.407	1.00
9.97		C						
ATOM	371	C	CYS	29	18.157	2.798	24.731	1.00
11.60		C						
ATOM	372	O	CYS	29	18.709	2.449	25.774	1.00
15.64		O						

ATOM	373	CB	CYS	29	19.216	1.370	22.949	1.00
9.52			C					
ATOM	374	SG	CYS	29	17.828	0.738	21.996	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.454	3.826	24.448	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.312	3.295	22.662	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.372	0.729	23.805	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.100	1.361	22.330	1.00
10.78			H					
ATOM	379	N	GLU	30	16.890	3.195	24.682	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.067	3.240	25.885	1.00
17.41			C					
ATOM	381	C	GLU	30	15.627	1.842	26.303	1.00
10.81			C					
ATOM	382	O	GLU	30	15.482	0.949	25.470	1.00
23.22			O					
ATOM	383	CB	GLU	30	14.830	4.102	25.643	1.00
37.83			C					
ATOM	384	CG	GLU	30	15.257	5.523	25.283	
1.00108.13			C					
ATOM	385	CD	GLU	30	15.909	6.192	26.488	
1.00240.52			C					
ATOM	386	OE1	GLU	30	15.760	5.672	27.582	
1.00422.56			O					
ATOM	387	OE2	GLU	30	16.545	7.216	26.302	
1.00410.81			O1-					
ATOM	388	HN	GLU	30	16.504	3.470	23.824	1.00
15.61			H					
ATOM	389	HA	GLU	30	16.642	3.678	26.686	1.00
24.60			H					
ATOM	390	HB1	GLU	30	14.226	4.125	26.538	1.00
72.67			H					
ATOM	391	HB2	GLU	30	14.252	3.682	24.831	1.00
56.47			H					
ATOM	392	HG1	GLU	30	14.390	6.090	24.984	
1.00196.66			H					
ATOM	393	HG2	GLU	30	15.963	5.489	24.466	
1.00140.67			H					
ATOM	394	N	LYS	31	15.403	1.671	27.605	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.961	0.387	28.149	1.00
11.40			C					
ATOM	396	C	LYS	31	13.720	0.587	29.008	1.00
10.99			C					
ATOM	397	O	LYS	31	13.629	1.548	29.770	1.00
12.86			O					
ATOM	398	CB	LYS	31	16.067	-0.235	29.001	1.00
21.40			C					

ATOM	399	CG	LYS	31	17.314	-0.457	28.140	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.338	-1.311	28.899	
1.00115.52			C					
ATOM	401	CE	LYS	31	18.968	-0.494	30.031	
1.00250.23			C					
ATOM	402	NZ	LYS	31	20.118	-1.250	30.604	
1.00462.10			N1+					
ATOM	403	HN	LYS	31	15.528	2.428	28.214	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.720	-0.290	27.343	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.728	-1.181	29.396	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.299	0.432	29.815	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.754	0.497	27.895	
1.00126.32			H					
ATOM	408	HG2	LYS	31	17.032	-0.965	27.227	
1.00114.19			H					
ATOM	409	HD1	LYS	31	19.111	-1.631	28.218	
1.00198.45			H					
ATOM	410	HD2	LYS	31	17.845	-2.177	29.313	
1.00200.14			H					
ATOM	411	HE1	LYS	31	18.235	-0.322	30.806	
1.00374.64			H					
ATOM	412	HE2	LYS	31	19.316	0.453	29.645	
1.00403.27			H					
ATOM	413	HZ1	LYS	31	19.917	-1.491	31.594	
1.00627.38			H					
ATOM	414	HZ2	LYS	31	20.976	-0.662	30.557	
1.00622.26			H					
ATOM	415	HZ3	LYS	31	20.265	-2.123	30.060	
1.00619.20			H					
ATOM	416	N	THR	32	12.769	-0.326	28.880	1.00
15.51			N					
ATOM	417	CA	THR	32	11.534	-0.239	29.651	1.00
22.44			C					
ATOM	418	C	THR	32	11.801	-0.555	31.119	1.00
26.60			C					
ATOM	419	O	THR	32	11.378	-1.592	31.630	1.00
57.43			O					
ATOM	420	CB	THR	32	10.496	-1.214	29.092	1.00
56.28			C					
ATOM	421	CG2	THR	32	10.397	-1.045	27.576	
1.00102.70			C					
ATOM	422	OG1	THR	32	10.884	-2.546	29.400	
1.00111.17			O					
ATOM	423	HN	THR	32	12.898	-1.068	28.255	1.00
18.79			H					
ATOM	424	HA	THR	32	11.147	0.767	29.575	1.00
19.67			H					

ATOM	425	HB	THR	32	9.534	-1.008	29.536	1.00
84.25			H					
ATOM	426	HG1	THR	32	10.258	-3.141	28.982	
1.00205.03			H					
ATOM	427	HG21	THR	32	11.366	-1.219	27.131	
1.00220.71			H					
ATOM	428	HG22	THR	32	10.071	-0.042	27.346	
1.00174.67			H					
ATOM	429	HG23	THR	32	9.686	-1.755	27.180	
1.00217.44			H					
ATOM	430	N	THR	33	12.502	0.352	31.792	1.00
22.47			N					
ATOM	431	CA	THR	33	12.819	0.172	33.206	1.00
41.60			C					
ATOM	432	C	THR	33	11.626	0.508	34.050	1.00
38.03			C					
ATOM	433	O	THR	33	11.721	1.195	35.066	1.00
52.73			O					
ATOM	434	CB	THR	33	13.992	1.062	33.592	1.00
63.25			C					
ATOM	435	CG2	THR	33	14.624	0.572	34.899	
1.00121.65			C					
ATOM	436	OG1	THR	33	14.964	1.038	32.555	1.00
96.20			O					
ATOM	437	HN	THR	33	12.807	1.162	31.332	1.00
23.82			H					
ATOM	438	HA	THR	33	13.064	-0.854	33.394	1.00
67.12			H					
ATOM	439	HB	THR	33	13.630	2.066	33.723	
1.00107.59			H					
ATOM	440	HG1	THR	33	15.136	0.122	32.330	
1.00176.27			H					
ATOM	441	HG21	THR	33	13.915	0.680	35.706	
1.00255.23			H					
ATOM	442	HG22	THR	33	15.505	1.158	35.114	
1.00245.37			H					
ATOM	443	HG23	THR	33	14.899	-0.468	34.798	
1.00185.78			H					
ATOM	444	N	GLY	34	10.502	0.003	33.614	1.00
40.93			N					
ATOM	445	CA	GLY	34	9.266	0.223	34.323	1.00
45.59			C					
ATOM	446	C	GLY	34	8.677	1.574	33.943	1.00
40.97			C					
ATOM	447	O	GLY	34	7.603	1.956	34.410	1.00
82.17			O					
ATOM	448	HN	GLY	34	10.513	-0.531	32.803	1.00
54.00			H					
ATOM	449	HA1	GLY	34	9.477	0.201	35.376	1.00
54.41			H					
ATOM	450	HA2	GLY	34	8.565	-0.563	34.076	1.00
62.09			H					

ATOM	451	N	ASN	35	9.394	2.284	33.075	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.957	3.593	32.602	1.00
33.20			C					
ATOM	453	C	ASN	35	9.463	3.823	31.183	1.00
23.17			C					
ATOM	454	O	ASN	35	10.575	3.419	30.838	1.00
27.01			O					
ATOM	455	CB	ASN	35	9.490	4.693	33.521	1.00
54.51			C					
ATOM	456	CG	ASN	35	8.988	4.472	34.944	1.00
80.73			C					
ATOM	457	ND2	ASN	35	9.825	4.561	35.942	
1.00220.46			N					
ATOM	458	OD1	ASN	35	7.804	4.208	35.152	
1.00117.80			O					
ATOM	459	HN	ASN	35	10.235	1.913	32.739	1.00
51.15			H					
ATOM	460	HA	ASN	35	7.877	3.631	32.600	1.00
47.21			H					
ATOM	461	HB1	ASN	35	9.143	5.652	33.165	1.00
68.31			H					
ATOM	462	HB2	ASN	35	10.569	4.674	33.512	1.00
57.75			H					
ATOM	463	HD21	ASN	35	10.768	4.769	35.773	
1.00405.39			H					
ATOM	464	HD22	ASN	35	9.511	4.420	36.859	
1.00245.64			H					
ATOM	465	N	PHE	36	8.639	4.467	30.359	1.00
35.72			N					
ATOM	466	CA	PHE	36	9.003	4.740	28.976	1.00
33.41			C					
ATOM	467	C	PHE	36	9.627	6.126	28.848	1.00
28.51			C					
ATOM	468	O	PHE	36	9.144	7.092	29.439	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.746	4.664	28.117	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.226	3.248	28.115	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.330	2.834	29.106	
1.00106.51			C					
ATOM	472	CD2	PHE	36	7.638	2.350	27.123	1.00
99.48			C					
ATOM	473	CE1	PHE	36	5.844	1.521	29.107	
1.00134.48			C					
ATOM	474	CE2	PHE	36	7.152	1.038	27.124	
1.00134.27			C					
ATOM	475	CZ	PHE	36	6.255	0.623	28.115	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.765	4.759	30.683	1.00
62.87			H					

ATOM	477	HA	PHE	36	9.708	3.998	28.630	1.00
	28.53		H					
ATOM	478	HB1	PHE	36	7.982	4.963	27.115	1.00
	73.56		H					
ATOM	479	HB2	PHE	36	6.994	5.325	28.523	1.00
	88.42		H					
ATOM	480	HD1	PHE	36	6.013	3.528	29.873	
	1.00110.20		H					
ATOM	481	HD2	PHE	36	8.330	2.670	26.359	1.00
	93.07		H					
ATOM	482	HE1	PHE	36	5.150	1.201	29.871	
	1.00155.06		H					
ATOM	483	HE2	PHE	36	7.469	0.344	26.359	
	1.00159.46		H					
ATOM	484	HZ	PHE	36	5.880	-0.390	28.114	
	1.00183.25		H					
ATOM	485	N	THR	37	10.706	6.216	28.070	1.00
	20.06		N					
ATOM	486	CA	THR	37	11.399	7.480	27.859	1.00
	27.18		C					
ATOM	487	C	THR	37	11.694	7.662	26.377	1.00
	41.87		C					
ATOM	488	O	THR	37	10.958	7.174	25.521	
	1.00169.86		O					
ATOM	489	CB	THR	37	12.710	7.491	28.649	1.00
	26.52		C					
ATOM	490	CG2	THR	37	12.451	7.007	30.076	1.00
	75.69		C					
ATOM	491	OG1	THR	37	13.646	6.629	28.018	1.00
	81.95		O					
ATOM	492	HN	THR	37	11.046	5.417	27.625	1.00
	18.47		H					
ATOM	493	HA	THR	37	10.779	8.299	28.196	1.00
	38.80		H					
ATOM	494	HB	THR	37	13.104	8.494	28.678	1.00
	81.60		H					
ATOM	495	HG1	THR	37	13.454	6.621	27.078	
	1.00188.80		H					
ATOM	496	HG21	THR	37	13.332	7.174	30.678	
	1.00196.98		H					
ATOM	497	HG22	THR	37	12.219	5.953	30.062	
	1.00196.23		H					
ATOM	498	HG23	THR	37	11.620	7.554	30.498	
	1.00168.92		H					
ATOM	499	N	GLU	38	12.777	8.368	26.086	1.00
	26.53		N					
ATOM	500	CA	GLU	38	13.181	8.621	24.701	1.00
	30.29		C					
ATOM	501	C	GLU	38	14.702	8.630	24.574	1.00
	25.39		C					
ATOM	502	O	GLU	38	15.407	9.119	25.457	1.00
	51.60		O					

ATOM	503	CB	GLU	38	12.630	9.970	24.229	1.00
54.82			C					
ATOM	504	CG	GLU	38	11.102	9.912	24.157	
1.00165.84			C					
ATOM	505	CD	GLU	38	10.555	11.242	23.650	
1.00292.92			C					
ATOM	506	OE1	GLU	38	11.342	12.160	23.485	
1.00414.19			O					
ATOM	507	OE2	GLU	38	9.356	11.324	23.436	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	13.318	8.720	26.817	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.784	7.843	24.063	1.00
32.15			H					
ATOM	510	HB1	GLU	38	13.025	10.198	23.252	
1.00144.82			H					
ATOM	511	HB2	GLU	38	12.927	10.741	24.926	
1.00106.49			H					
ATOM	512	HG1	GLU	38	10.704	9.715	25.140	
1.00303.31			H					
ATOM	513	HG2	GLU	38	10.804	9.121	23.484	
1.00323.99			H					
ATOM	514	N	CYS	39	15.199	8.098	23.460	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.635	8.060	23.214	1.00
14.30			C					
ATOM	516	C	CYS	39	17.170	9.488	23.071	1.00
22.31			C					
ATOM	517	O	CYS	39	16.441	10.379	22.636	1.00
32.92			O					
ATOM	518	CB	CYS	39	16.911	7.267	21.934	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.772	7.810	20.636	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.589	7.733	22.789	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.118	7.567	24.045	1.00
14.60			H					
ATOM	522	HB1	CYS	39	16.768	6.215	22.124	1.00
27.71			H					
ATOM	523	HB2	CYS	39	17.927	7.441	21.615	1.00
34.91			H					
ATOM	524	N	PRO	40	18.409	9.735	23.426	1.00
27.27			N					
ATOM	525	CA	PRO	40	19.003	11.100	23.325	1.00
47.66			C					
ATOM	526	C	PRO	40	19.290	11.494	21.879	1.00
71.54			C					
ATOM	527	O	PRO	40	19.910	10.741	21.126	1.00
87.70			O					
ATOM	528	CB	PRO	40	20.294	10.992	24.145	1.00
53.85			C					

ATOM	529	CG	PRO	40	20.689	9.554	24.038	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.380	8.761	23.957	1.00
25.70			C					
ATOM	531	HA	PRO	40	18.346	11.825	23.781	1.00
58.04			H					
ATOM	532	HB1	PRO	40	20.106	11.248	25.177	1.00
67.93			H					
ATOM	533	HB2	PRO	40	21.064	11.634	23.732	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.247	9.250	24.911	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.281	9.398	23.144	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.073	8.426	24.935	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.485	7.925	23.281	1.00
26.94			H					
ATOM	538	N	GLY	41	18.838	12.680	21.508	
1.00105.24			N					
ATOM	539	CA	GLY	41	19.046	13.186	20.156	
1.00147.55			C					
ATOM	540	C	GLY	41	20.525	13.428	19.886	
1.00161.74			C					
ATOM	541	O	GLY	41	21.024	13.143	18.798	
1.00244.37			O					
ATOM	542	HN	GLY	41	18.358	13.230	22.159	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.510	14.116	20.039	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.669	12.467	19.448	
1.00157.34			H					
ATOM	545	N	LEU	42	21.219	13.964	20.888	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.649	14.261	20.771	
1.00191.48			C					
ATOM	547	C	LEU	42	23.449	13.467	21.801	
1.00166.66			C					
ATOM	548	O	LEU	42	22.956	13.164	22.886	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.887	15.758	20.994	
1.00307.99			C					
ATOM	550	CG	LEU	42	22.048	16.576	20.005	
1.00452.28			C					
ATOM	551	CD1	LEU	42	22.245	18.067	20.294	
1.00681.24			C					
ATOM	552	CD2	LEU	42	22.481	16.268	18.562	
1.00527.46			C					
ATOM	553	HN	LEU	42	20.756	14.170	21.727	
1.00195.47			H					
ATOM	554	HA	LEU	42	23.000	13.996	19.783	
1.00229.77			H					

ATOM	555	HB1	LEU	42	23.933	15.981	20.844
1.00342.49				H			
ATOM	556	HB2	LEU	42	22.606	16.017	22.005
1.00335.33				H			
ATOM	557	HG	LEU	42	21.003	16.325	20.130
1.00427.79				H			
ATOM	558	HD11	LEU	42	21.851	18.649	19.474
1.00909.71				H			
ATOM	559	HD12	LEU	42	23.299	18.275	20.407
1.00706.80				H			
ATOM	560	HD13	LEU	42	21.727	18.329	21.204
1.00858.82				H			
ATOM	561	HD21	LEU	42	22.206	17.090	17.915
1.00631.69				H			
ATOM	562	HD22	LEU	42	21.988	15.370	18.221
1.00628.06				H			
ATOM	563	HD23	LEU	42	23.552	16.127	18.524
1.00656.75				H			
ATOM	564	N	THR	43	24.687	13.137	21.446
1.00178.52				N			
ATOM	565	CA	THR	43	25.557	12.380	22.338
1.00240.84				C			
ATOM	566	C	THR	43	25.957	13.245	23.540
1.00372.31				C			
ATOM	567	O	THR	43	26.035	14.468	23.419
1.00500.13				O			
ATOM	568	CB	THR	43	26.810	11.951	21.568
1.00354.13				C			
ATOM	569	CG2	THR	43	26.398	11.191	20.308
1.00463.04				C			
ATOM	570	OG1	THR	43	27.556	13.103	21.203
1.00508.50				O			
ATOM	571	HN	THR	43	25.022	13.409	20.566
1.00229.59				H			
ATOM	572	HA	THR	43	25.032	11.503	22.678
1.00249.90				H			
ATOM	573	HB	THR	43	27.418	11.311	22.183
1.00481.58				H			
ATOM	574	HG1	THR	43	27.324	13.332	20.300
1.00624.31				H			
ATOM	575	HG21	THR	43	27.280	10.863	19.780
1.00650.95				H			
ATOM	576	HG22	THR	43	25.817	11.840	19.669
1.00580.73				H			
ATOM	577	HG23	THR	43	25.804	10.332	20.583
1.00571.99				H			
ATOM	578	N	PRO	44	26.221	12.654	24.686
1.00488.39				N			
ATOM	579	CA	PRO	44	26.627	13.423	25.900
1.00760.13				C			
ATOM	580	C	PRO	44	28.064	13.926	25.791
1.00735.36				C			

ATOM	581	O	PRO	44	28.537	14.681	26.641
1.00999.99			O				
ATOM	582	CB	PRO	44	26.468	12.407	27.036
1.00999.99			C				
ATOM	583	CG	PRO	44	26.708	11.082	26.393
1.00856.94			C				
ATOM	584	CD	PRO	44	26.167	11.201	24.963
1.00548.09			C				
ATOM	585	HA	PRO	44	25.955	14.252	26.057
1.00939.00			H				
ATOM	586	HB1	PRO	44	25.467	12.447	27.439
1.00999.99			H				
ATOM	587	HB2	PRO	44	27.196	12.591	27.818
1.00999.99			H				
ATOM	588	HG1	PRO	44	26.177	10.303	26.920
1.00999.99			H				
ATOM	589	HG2	PRO	44	27.770	10.864	26.376
1.00853.53			H				
ATOM	590	HD1	PRO	44	25.148	10.850	24.909
1.00602.45			H				
ATOM	591	HD2	PRO	44	26.797	10.654	24.278
1.00463.32			H				
ATOM	592	N	ILE	45	28.753	13.496	24.738
1.00518.33			N				
ATOM	593	CA	ILE	45	30.135	13.902	24.524
1.00582.79			C				
ATOM	594	C	ILE	45	30.230	15.420	24.391
1.00795.93			C				
ATOM	595	O	ILE	45	29.509	16.030	23.602
1.00898.75			O				
ATOM	596	CB	ILE	45	30.681	13.250	23.250
1.00474.41			C				
ATOM	597	CG1	ILE	45	30.499	11.724	23.322
1.00516.90			C				
ATOM	598	CG2	ILE	45	32.164	13.591	23.086
1.00760.75			C				
ATOM	599	CD1	ILE	45	31.163	11.152	24.582
1.00566.81			C				
ATOM	600	HN	ILE	45	28.324	12.893	24.096
1.00395.72			H				
ATOM	601	HA	ILE	45	30.730	13.585	25.365
1.00711.06			H				
ATOM	602	HB	ILE	45	30.136	13.633	22.399
1.00477.81			H				
ATOM	603	HG11	ILE	45	30.947	11.272	22.448
1.00624.28			H				
ATOM	604	HG12	ILE	45	29.445	11.493	23.341
1.00744.84			H				
ATOM	605	HG21	ILE	45	32.669	13.466	24.032
1.00920.57			H				
ATOM	606	HG22	ILE	45	32.263	14.616	22.758
1.00999.99			H				

ATOM	607	HG23	ILE	45	32.606	12.934	22.351
1.00865.46				H			
ATOM	608	HD11	ILE	45	30.490	11.259	25.421
1.00658.89				H			
ATOM	609	HD12	ILE	45	32.081	11.680	24.788
1.00734.30				H			
ATOM	610	HD13	ILE	45	31.378	10.106	24.429
1.00675.84				H			
ATOM	611	N	ALA	46	31.125	16.021	25.167
1.00999.99				N			
ATOM	612	CA	ALA	46	31.307	17.467	25.129
1.00999.99				C			
ATOM	613	C	ALA	46	32.053	17.880	23.864
1.00999.99				C			
ATOM	614	CB	ALA	46	32.090	17.926	26.359
1.00999.99				C			
ATOM	615	OT1	ALA	46	31.833	17.255	22.840
1.00999.99				O			
ATOM	616	OT2	ALA	46	32.831	18.816	23.940
1.00999.99				O			
ATOM	617	HN	ALA	46	31.673	15.483	25.776
1.00999.99				H			
ATOM	618	HA	ALA	46	30.338	17.942	25.136
1.00999.99				H			
ATOM	619	HB1	ALA	46	31.579	17.599	27.253
1.00999.99				H			
ATOM	620	HB2	ALA	46	32.163	19.003	26.359
1.00999.99				H			
ATOM	621	HB3	ALA	46	33.082	17.498	26.336
1.00999.99				H			
ENDMDL							
TER							
MODEL	8						
ATOM	1	N	GLY	1	26.106	-2.123	20.562
1.00999.99				N			
ATOM	2	CA	GLY	1	25.055	-2.779	19.732
1.00999.99				C			
ATOM	3	C	GLY	1	24.440	-1.755	18.786
1.00999.99				C			
ATOM	4	O	GLY	1	23.801	-0.797	19.222
1.00999.99				O			
ATOM	5	HA1	GLY	1	24.286	-3.179	20.375
1.00999.99				H			
ATOM	6	HA2	GLY	1	25.498	-3.580	19.157
1.00999.99				H			
ATOM	7	HT1	GLY	1	26.529	-1.338	20.029
1.00999.99				H			
ATOM	8	HT2	GLY	1	26.844	-2.819	20.800
1.00999.99				H			
ATOM	9	HT3	GLY	1	25.679	-1.757	21.435
1.00999.99				H			
ATOM	10	N	LEU	2	24.636	-1.963	17.488

1.00999.99				N					
ATOM	11	CA	LEU	2	24.094	-1.049	16.489		
1.00895.59				C					
ATOM	12	C	LEU	2	22.574	-1.161	16.441		
1.00532.27				C					
ATOM	13	O	LEU	2	22.014	-2.230	16.681		
1.00625.21				O					
ATOM	14	CB	LEU	2	24.675	-1.379	15.111		
1.00999.99				C					
ATOM	15	CG	LEU	2	26.207	-1.296	15.154		
1.00999.99				C					
ATOM	16	CD1	LEU	2	26.770	-1.710	13.791		
1.00999.99				C					
ATOM	17	CD2	LEU	2	26.650	0.143	15.481		
1.00999.99				C					
ATOM	18	HN	LEU	2	25.152	-2.743	17.198		
1.00999.99				H					
ATOM	19	HA	LEU	2	24.360	-0.039	16.752		
1.00890.87				H					
ATOM	20	HB1	LEU	2	24.299	-0.673	14.386		
1.00924.07				H					
ATOM	21	HB2	LEU	2	24.378	-2.379	14.827		
1.00999.99				H					
ATOM	22	HG	LEU	2	26.579	-1.968	15.913		
1.00999.99				H					
ATOM	23	HD11	LEU	2	27.845	-1.799	13.857		
1.00999.99				H					
ATOM	24	HD12	LEU	2	26.516	-0.964	13.053		
1.00999.99				H					
ATOM	25	HD13	LEU	2	26.347	-2.661	13.501		
1.00999.99				H					
ATOM	26	HD21	LEU	2	26.639	0.287	16.551		
1.00999.99				H					
ATOM	27	HD22	LEU	2	25.975	0.848	15.015		
1.00999.99				H					
ATOM	28	HD23	LEU	2	27.651	0.309	15.110		
1.00999.99				H					
ATOM	29	N	CYS	3	21.911	-0.050	16.135		
1.00271.28				N					
ATOM	30	CA	CYS	3	20.453	-0.036	16.066		
1.00104.50				C					
ATOM	31	C	CYS	3	19.974	-0.574	14.721	1.00	
90.98			C						
ATOM	32	O	CYS	3	20.199	0.042	13.679		
1.00207.28				O					
ATOM	33	CB	CYS	3	19.932	1.391	16.250	1.00	
37.83			C						
ATOM	34	SG	CYS	3	20.461	2.028	17.860	1.00	
81.56			S						
ATOM	35	HN	CYS	3	22.409	0.777	15.957		
1.00296.55				H					
ATOM	36	HA	CYS	3	20.056	-0.657	16.855		

1.00166.45										H
ATOM	37	HB1	CYS	3	18.854	1.388	16.201	1.00		
40.38			H							
ATOM	38	HB2	CYS	3	20.326	2.022	15.468	1.00		
98.45			H							
ATOM	39	N	SER	4	19.302	-1.720	14.754	1.00		
85.31			N							
ATOM	40	CA	SER	4	18.784	-2.326	13.532	1.00		
92.94			C							
ATOM	41	C	SER	4	17.772	-1.396	12.890	1.00		
67.37			C							
ATOM	42	O	SER	4	17.745	-1.218	11.673			
1.00102.28										O
ATOM	43	CB	SER	4	18.084	-3.642	13.855			
1.00123.83										C
ATOM	44	OG	SER	4	17.707	-4.281	12.642			
1.00178.89										O
ATOM	45	HN	SER	4	19.145	-2.162	15.614			
1.00163.03										H
ATOM	46	HA	SER	4	19.596	-2.509	12.845			
1.00129.78										H
ATOM	47	HB1	SER	4	17.199	-3.432	14.448			
1.00105.26										H
ATOM	48	HB2	SER	4	18.746	-4.285	14.411			
1.00156.87										H
ATOM	49	HG	SER	4	16.885	-3.887	12.341			
1.00218.16										H
ATOM	50	N	GLU	5	16.923	-0.824	13.737	1.00		
41.67			N							
ATOM	51	CA	GLU	5	15.871	0.078	13.290	1.00		
41.21			C							
ATOM	52	C	GLU	5	15.693	1.218	14.287	1.00		
41.92			C							
ATOM	53	O	GLU	5	16.563	1.460	15.125	1.00		
74.72			O							
ATOM	54	CB	GLU	5	14.568	-0.702	13.150	1.00		
49.24			C							
ATOM	55	CG	GLU	5	14.237	-1.365	14.481	1.00		
55.48			C							
ATOM	56	CD	GLU	5	13.081	-2.345	14.307	1.00		
92.06			C							
ATOM	57	OE1	GLU	5	12.705	-2.967	15.286			
1.00206.49										O
ATOM	58	OE2	GLU	5	12.590	-2.460	13.194			
1.00197.24										O1-
ATOM	59	HN	GLU	5	16.997	-1.028	14.691	1.00		
45.52			H							
ATOM	60	HA	GLU	5	16.133	0.487	12.334	1.00		
60.63			H							
ATOM	61	HB1	GLU	5	14.679	-1.461	12.390	1.00		
61.59			H							
ATOM	62	HB2	GLU	5	13.774	-0.031	12.876	1.00		

63.66			H						
ATOM	63	HG1	GLU	5	13.959	-0.609	15.199	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	15.107	-1.890	14.832	1.00	
57.77			H						
ATOM	65	N	ASN	6	14.568	1.917	14.197	1.00	
50.73			N						
ATOM	66	CA	ASN	6	14.303	3.029	15.102	1.00	
71.04			C						
ATOM	67	C	ASN	6	14.282	2.544	16.548	1.00	
65.17			C						
ATOM	68	O	ASN	6	14.785	3.218	17.447	1.00	
94.86			O						
ATOM	69	CB	ASN	6	12.961	3.675	14.759	1.00	
94.83			C						
ATOM	70	CG	ASN	6	13.072	4.444	13.446		
1.00160.94			C						
ATOM	71	ND2	ASN	6	11.990	4.730	12.774		
1.00244.88			N						
ATOM	72	OD1	ASN	6	14.175	4.794	13.024		
1.00219.73			O						
ATOM	73	HN	ASN	6	13.909	1.684	13.510	1.00	
72.81			H						
ATOM	74	HA	ASN	6	15.085	3.766	14.991	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	12.678	4.357	15.548		
1.00111.09			H						
ATOM	76	HB2	ASN	6	12.207	2.907	14.662	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	11.115	4.451	13.112		
1.00272.43			H						
ATOM	78	HD22	ASN	6	12.055	5.223	11.930		
1.00336.78			H						
ATOM	79	N	GLY	7	13.699	1.365	16.763	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.614	0.779	18.105	1.00	
71.47			C						
ATOM	81	C	GLY	7	14.209	-0.622	18.121	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.501	-1.607	18.333	1.00	
44.54			O						
ATOM	83	HN	GLY	7	13.319	0.875	16.005	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.581	0.722	18.400		
1.00103.52			H						
ATOM	85	HA2	GLY	7	14.150	1.399	18.812		
1.00108.67			H						
ATOM	86	N	ASP	8	15.511	-0.700	17.895	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.201	-1.986	17.883	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.082	-2.671	19.239	1.00	

9.37			C						
ATOM	89	O	ASP	8	15.853	-3.878	19.319	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.675	-1.794	17.532	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.359	-3.150	17.391	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	17.733	-4.144	17.719		
1.00119.56									O
ATOM	93	OD2	ASP	8	19.500	-3.174	16.959		
1.00133.27									O1-
ATOM	94	HN	ASP	8	16.017	0.121	17.733	1.00	
35.63			H						
ATOM	95	HA	ASP	8	15.745	-2.616	17.137	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	18.158	-1.232	18.316	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.756	-1.252	16.601	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.235	-1.893	20.303	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.136	-2.438	21.651	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.748	-3.024	21.873	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.595	-4.107	22.440	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.399	-1.346	22.677	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.144	-0.903	22.610	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.411	-0.937	20.177	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.881	-3.206	21.773	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.161	-1.712	23.664	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.794	-0.481	22.453	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.742	-2.295	21.405	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.355	-2.725	21.525	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.467	-1.861	20.629	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.885	-0.798	20.173		
1.00119.04									O
ATOM	112	CB	ALA	10	11.889	-2.635	22.989	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.941	-1.447	20.956	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.282	-3.753	21.197	1.00	

47.14			H					
ATOM	115	HB1	ALA	10	12.728	-2.823	23.642	1.00
84.37			H					
ATOM	116	HB2	ALA	10	11.121	-3.373	23.170	
1.00118.20				H				
ATOM	117	HB3	ALA	10	11.492	-1.651	23.189	
1.00117.32				H				
ATOM	118	N	ALA	11	10.250	-2.325	20.374	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.326	-1.584	19.522	1.00
35.24			C					
ATOM	120	C	ALA	11	9.016	-0.207	20.111	1.00
22.78			C					
ATOM	121	O	ALA	11	8.939	0.783	19.383	1.00
53.33			O					
ATOM	122	CB	ALA	11	8.027	-2.372	19.356	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.969	-3.181	20.759	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.778	-1.453	18.550	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.316	-1.782	18.796	
1.00157.06				H				
ATOM	126	HB2	ALA	11	7.616	-2.600	20.329	
1.00148.83				H				
ATOM	127	HB3	ALA	11	8.228	-3.290	18.827	
1.00137.06				H				
ATOM	128	N	ASP	12	8.828	-0.152	21.427	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.514	1.111	22.097	1.00
31.05			C					
ATOM	130	C	ASP	12	9.783	1.880	22.461	1.00
22.98			C					
ATOM	131	O	ASP	12	9.775	3.110	22.523	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.709	0.833	23.369	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.329	0.299	23.004	
1.00104.83				C				
ATOM	134	OD1	ASP	12	5.678	-0.252	23.878	
1.00258.73				O				
ATOM	135	OD2	ASP	12	5.942	0.449	21.857	
1.00213.46				O1-				
ATOM	136	HN	ASP	12	8.893	-0.975	21.957	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.913	1.719	21.438	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.602	1.746	23.933	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.229	0.100	23.970	1.00
54.37			H					
ATOM	140	N	GLU	13	10.866	1.155	22.709	1.00

17.60			N					
ATOM	141	CA	GLU	13	12.131	1.784	23.077	1.00
12.01			C					
ATOM	142	C	GLU	13	12.790	2.440	21.865	1.00
10.07			C					
ATOM	143	O	GLU	13	12.484	2.100	20.722	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.068	0.741	23.680	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.469	0.236	24.996	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.201	-1.017	25.464	
1.00142.36			C					
ATOM	147	OE1	GLU	13	12.770	-1.598	26.446	
1.00339.06			O					
ATOM	148	OE2	GLU	13	14.179	-1.377	24.835	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.814	0.178	22.651	1.00
28.36			H					
ATOM	150	HA	GLU	13	11.939	2.544	23.820	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.031	1.188	23.874	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.187	-0.082	22.991	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.424	0.003	24.848	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.561	1.005	25.749	1.00
56.23			H					
ATOM	155	N	CYS	14	13.691	3.387	22.127	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.395	4.100	21.057	1.00
10.69			C					
ATOM	157	C	CYS	14	15.810	3.563	20.908	1.00
9.56			C					
ATOM	158	O	CYS	14	16.411	3.112	21.879	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.461	5.593	21.381	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.308	6.465	20.036	1.00
42.96			S					
ATOM	161	HN	CYS	14	13.893	3.613	23.060	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.867	3.968	20.123	1.00
15.54			H					
ATOM	163	HB1	CYS	14	15.008	5.734	22.301	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.460	5.983	21.491	1.00
46.13			H					
ATOM	165	N	CYS	15	16.339	3.627	19.691	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.694	3.158	19.427	1.00

9.28			C						
ATOM	167	C	CYS	15	18.292	3.976	18.296	1.00	
9.92			C						
ATOM	168	O	CYS	15	17.712	4.072	17.215	1.00	
13.31			O						
ATOM	169	CB	CYS	15	17.681	1.674	19.043	1.00	
12.90			C						
ATOM	170	SG	CYS	15	19.354	0.995	19.197	1.00	
39.11			S						
ATOM	171	HN	CYS	15	15.815	4.010	18.957	1.00	
13.12			H						
ATOM	172	HA	CYS	15	18.300	3.287	20.314	1.00	
8.26			H						
ATOM	173	HB1	CYS	15	17.342	1.569	18.023	1.00	
24.82			H						
ATOM	174	HB2	CYS	15	17.012	1.139	19.700	1.00	
27.31			H						
ATOM	175	N	VAL	16	19.448	4.577	18.551	1.00	
9.56			N						
ATOM	176	CA	VAL	16	20.106	5.400	17.542	1.00	
11.99			C						
ATOM	177	C	VAL	16	21.619	5.280	17.663	1.00	
7.73			C						
ATOM	178	O	VAL	16	22.177	5.380	18.755	1.00	
8.83			O						
ATOM	179	CB	VAL	16	19.672	6.855	17.719	1.00	
18.37			C						
ATOM	180	CG1	VAL	16	20.055	7.341	19.119	1.00	
39.61			C						
ATOM	181	CG2	VAL	16	20.359	7.721	16.668		
1.00115.21			C						
ATOM	182	HN	VAL	16	19.864	4.473	19.434	1.00	
9.76			H						
ATOM	183	HA	VAL	16	19.810	5.067	16.557	1.00	
17.27			H						
ATOM	184	HB	VAL	16	18.600	6.924	17.600	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	21.129	7.438	19.188		
1.00128.07			H						
ATOM	186	HG12	VAL	16	19.709	6.630	19.856		
1.00154.13			H						
ATOM	187	HG13	VAL	16	19.595	8.301	19.305		
1.00135.74			H						
ATOM	188	HG21	VAL	16	19.947	8.719	16.699		
1.00229.05			H						
ATOM	189	HG22	VAL	16	20.194	7.295	15.689		
1.00261.82			H						
ATOM	190	HG23	VAL	16	21.418	7.763	16.870		
1.00210.07			H						
ATOM	191	N	ASP	17	22.278	5.053	16.528	1.00	
14.34			N						
ATOM	192	CA	ASP	17	23.733	4.910	16.506	1.00	

11.90			C						
ATOM	193	C	ASP	17	24.401	6.236	16.159	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.165	6.801	15.093	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.131	3.858	15.470	1.00	
20.80			C						
ATOM	196	CG	ASP	17	23.724	2.469	15.953	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	23.419	2.337	17.127		
1.00135.42			O						
ATOM	198	OD2	ASP	17	23.722	1.559	15.140		
1.00114.17			O1-						
ATOM	199	HN	ASP	17	21.777	4.976	15.690	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.077	4.586	17.478	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.201	3.885	15.325	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	23.636	4.071	14.535	1.00	
29.52			H						
ATOM	203	N	THR	18	25.248	6.716	17.066	1.00	
11.55			N						
ATOM	204	CA	THR	18	25.971	7.972	16.857	1.00	
17.10			C						
ATOM	205	C	THR	18	27.424	7.683	16.510	1.00	
10.63			C						
ATOM	206	O	THR	18	27.905	6.572	16.714	1.00	
6.49			O						
ATOM	207	CB	THR	18	25.921	8.829	18.123	1.00	
28.52			C						
ATOM	208	CG2	THR	18	24.495	9.316	18.373	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.364	8.058	19.228	1.00	
26.49			O						
ATOM	210	HN	THR	18	25.399	6.211	17.893	1.00	
13.96			H						
ATOM	211	HA	THR	18	25.516	8.524	16.044	1.00	
26.43			H						
ATOM	212	HB	THR	18	26.570	9.683	18.002	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.730	8.171	19.940	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.398	9.627	19.402		
1.00100.44			H						
ATOM	215	HG22	THR	18	23.797	8.516	18.170		
1.00129.42			H						
ATOM	216	HG23	THR	18	24.285	10.152	17.724		
1.00156.21			H						
ATOM	217	N	VAL	19	28.113	8.699	16.004	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.506	8.577	15.644	1.00	

13.34			C						
ATOM	219	C	VAL	19	29.973	9.872	15.013	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.468	10.308	13.978	1.00	
42.11			O						
ATOM	221	CB	VAL	19	29.752	7.417	14.681	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	28.784	7.497	13.496	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.198	7.493	14.169	1.00	
20.67			C						
ATOM	224	HN	VAL	19	27.681	9.566	15.889	1.00	
26.89			H						
ATOM	225	HA	VAL	19	30.078	8.406	16.544	1.00	
8.08			H						
ATOM	226	HB	VAL	19	29.610	6.488	15.204	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	27.784	7.690	13.858		
1.00137.43				H					
ATOM	228	HG12	VAL	19	28.795	6.560	12.958	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	29.087	8.294	12.833		
1.00108.69				H					
ATOM	230	HG21	VAL	19	31.480	6.547	13.733	1.00	
99.42			H						
ATOM	231	HG22	VAL	19	31.860	7.726	14.994		
1.00111.36				H					
ATOM	232	HG23	VAL	19	31.274	8.273	13.423	1.00	
77.11			H						
ATOM	233	N	PHE	20	30.932	10.473	15.666	1.00	
24.58			N						
ATOM	234	CA	PHE	20	31.503	11.734	15.226	1.00	
40.34			C						
ATOM	235	C	PHE	20	32.798	11.503	14.455	1.00	
40.37			C						
ATOM	236	O	PHE	20	32.896	11.848	13.278	1.00	
66.02			O						
ATOM	237	CB	PHE	20	31.767	12.634	16.450	1.00	
48.79			C						
ATOM	238	CG	PHE	20	32.031	11.799	17.697	1.00	
35.75			C						
ATOM	239	CD1	PHE	20	31.015	10.997	18.255	1.00	
30.20			C						
ATOM	240	CD2	PHE	20	33.291	11.844	18.309	1.00	
40.95			C						
ATOM	241	CE1	PHE	20	31.270	10.249	19.408	1.00	
30.41			C						
ATOM	242	CE2	PHE	20	33.541	11.091	19.462	1.00	
45.84			C						
ATOM	243	CZ	PHE	20	32.531	10.294	20.011	1.00	
40.81			C						
ATOM	244	HN	PHE	20	31.256	10.060	16.484	1.00	

16.73			H						
ATOM	245	HA	PHE	20	30.802	12.236	14.572	1.00	
59.91			H						
ATOM	246	HB1	PHE	20	30.909	13.242	16.618	1.00	
67.15			H						
ATOM	247	HB2	PHE	20	32.616	13.276	16.261	1.00	
58.17			H						
ATOM	248	HD1	PHE	20	30.036	10.948	17.795	1.00	
33.34			H						
ATOM	249	HD2	PHE	20	34.074	12.456	17.889	1.00	
49.35			H						
ATOM	250	HE1	PHE	20	30.491	9.636	19.831	1.00	
30.61			H						
ATOM	251	HE2	PHE	20	34.514	11.125	19.929	1.00	
61.27			H						
ATOM	252	HZ	PHE	20	32.724	9.715	20.902	1.00	
52.66			H						
ATOM	253	N	GLU	21	33.798	10.950	15.134	1.00	
41.31			N						
ATOM	254	CA	GLU	21	35.089	10.714	14.527	1.00	
56.16			C						
ATOM	255	C	GLU	21	35.366	9.225	14.369	1.00	
58.61			C						
ATOM	256	O	GLU	21	34.495	8.388	14.606		
1.00201.19			O						
ATOM	257	CB	GLU	21	36.123	11.349	15.428	1.00	
57.37			C						
ATOM	258	CG	GLU	21	36.150	10.617	16.765		
1.00193.56			C						
ATOM	259	CD	GLU	21	36.983	11.401	17.774		
1.00304.62			C						
ATOM	260	OE1	GLU	21	37.593	12.379	17.375		
1.00451.81			O						
ATOM	261	OE2	GLU	21	36.996	11.015	18.930		
1.00442.88			O1-						
ATOM	262	HN	GLU	21	33.682	10.723	16.075	1.00	
50.82			H						
ATOM	263	HA	GLU	21	35.137	11.188	13.556	1.00	
85.72			H						
ATOM	264	HB1	GLU	21	35.851	12.380	15.595	1.00	
46.37			H						
ATOM	265	HB2	GLU	21	37.084	11.295	14.963		
1.00131.81			H						
ATOM	266	HG1	GLU	21	36.579	9.641	16.626		
1.00314.91			H						
ATOM	267	HG2	GLU	21	35.143	10.508	17.135		
1.00266.92			H						
ATOM	268	N	GLY	22	36.587	8.908	13.953	1.00	
86.70			N						
ATOM	269	CA	GLY	22	36.989	7.514	13.742		
1.00104.66			C						
ATOM	270	C	GLY	22	37.678	6.927	14.972	1.00	

71.50			C						
ATOM	271	O	GLY	22	37.891	5.717	15.052	1.00	
89.87			O						
ATOM	272	HN	GLY	22	37.227	9.630	13.777		
1.00214.64				H					
ATOM	273	HA1	GLY	22	37.674	7.472	12.907		
1.00152.47				H					
ATOM	274	HA2	GLY	22	36.117	6.919	13.509		
1.00118.15				H					
ATOM	275	N	ASP	23	38.033	7.783	15.923	1.00	
44.68			N						
ATOM	276	CA	ASP	23	38.706	7.323	17.134	1.00	
43.33			C						
ATOM	277	C	ASP	23	37.827	6.350	17.913	1.00	
37.55			C						
ATOM	278	O	ASP	23	38.313	5.362	18.460	1.00	
61.37			O						
ATOM	279	CB	ASP	23	39.056	8.513	18.031	1.00	
40.74			C						
ATOM	280	CG	ASP	23	40.172	9.335	17.397		
1.00141.86				C					
ATOM	281	OD1	ASP	23	40.791	8.841	16.468		
1.00328.18				O					
ATOM	282	OD2	ASP	23	40.392	10.448	17.848		
1.00304.58				O1-					
ATOM	283	HN	ASP	23	37.849	8.738	15.806	1.00	
40.86			H						
ATOM	284	HA	ASP	23	39.615	6.821	16.856	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	39.385	8.150	18.993	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	38.181	9.131	18.164	1.00	
93.26			H						
ATOM	287	N	MET	24	36.531	6.641	17.963	1.00	
23.24			N						
ATOM	288	CA	MET	24	35.594	5.785	18.685	1.00	
32.50			C						
ATOM	289	C	MET	24	34.170	5.978	18.174	1.00	
25.13			C						
ATOM	290	O	MET	24	33.886	6.917	17.432	1.00	
54.40			O						
ATOM	291	CB	MET	24	35.651	6.102	20.183	1.00	
47.36			C						
ATOM	292	CG	MET	24	35.217	7.552	20.422		
1.00151.73				C					
ATOM	293	SD	MET	24	35.420	7.969	22.175		
1.00209.23				S					
ATOM	294	CE	MET	24	37.217	8.208	22.178		
1.00243.29				C					
ATOM	295	HN	MET	24	36.203	7.445	17.511	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.877	4.753	18.540	1.00	

48.94			H						
ATOM	297	HB1	MET	24	36.659	5.966	20.539		
1.00124.40			H						
ATOM	298	HB2	MET	24	34.988	5.436	20.716		
1.00166.96			H						
ATOM	299	HG1	MET	24	34.179	7.667	20.147		
1.00331.71			H						
ATOM	300	HG2	MET	24	35.821	8.213	19.820		
1.00302.30			H						
ATOM	301	HE1	MET	24	37.501	8.759	23.064		
1.00340.44			H						
ATOM	302	HE2	MET	24	37.512	8.769	21.304		
1.00373.88			H						
ATOM	303	HE3	MET	24	37.710	7.247	22.171		
1.00386.81			H						
ATOM	304	N	VAL	25	33.275	5.077	18.583	1.00	
22.44			N						
ATOM	305	CA	VAL	25	31.869	5.136	18.175	1.00	
15.37			C						
ATOM	306	C	VAL	25	30.960	5.172	19.398	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.271	4.590	20.438	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.513	3.925	17.306	1.00	
23.36			C						
ATOM	309	CG1	VAL	25	30.000	3.922	17.019	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.291	4.011	15.989	1.00	
55.25			C						
ATOM	311	HN	VAL	25	33.568	4.354	19.177	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.698	6.040	17.599	1.00	
9.25			H						
ATOM	313	HB	VAL	25	31.781	3.019	17.828	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.801	3.369	16.113		
1.00171.07			H						
ATOM	315	HG12	VAL	25	29.648	4.938	16.904		
1.00166.22			H						
ATOM	316	HG13	VAL	25	29.482	3.457	17.843		
1.00134.76			H						
ATOM	317	HG21	VAL	25	33.351	4.000	16.194		
1.00141.88			H						
ATOM	318	HG22	VAL	25	32.033	4.926	15.476		
1.00184.50			H						
ATOM	319	HG23	VAL	25	32.037	3.166	15.365		
1.00133.90			H						
ATOM	320	N	THR	26	29.840	5.879	19.265	1.00	
13.60			N						
ATOM	321	CA	THR	26	28.878	6.027	20.356	1.00	
21.19			C						
ATOM	322	C	THR	26	27.479	5.594	19.922	1.00	

16.55			C						
ATOM	323	O	THR	26	27.063	5.839	18.790	1.00	
11.43			O						
ATOM	324	CB	THR	26	28.851	7.491	20.784	1.00	
27.07			C						
ATOM	325	CG2	THR	26	27.805	7.698	21.880	1.00	
44.39			C						
ATOM	326	OG1	THR	26	30.134	7.851	21.277	1.00	
34.75			O						
ATOM	327	HN	THR	26	29.665	6.328	18.411	1.00	
10.81			H						
ATOM	328	HA	THR	26	29.185	5.425	21.199	1.00	
33.16			H						
ATOM	329	HB	THR	26	28.608	8.104	19.925	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.198	7.547	22.185	1.00	
77.72			H						
ATOM	331	HG21	THR	26	27.906	8.693	22.288		
1.00126.99				H					
ATOM	332	HG22	THR	26	27.958	6.971	22.665		
1.00108.32				H					
ATOM	333	HG23	THR	26	26.816	7.580	21.468		
1.00151.99				H					
ATOM	334	N	ARG	27	26.755	4.947	20.838	1.00	
22.38			N						
ATOM	335	CA	ARG	27	25.395	4.479	20.557	1.00	
20.21			C						
ATOM	336	C	ARG	27	24.482	4.764	21.748	1.00	
16.96			C						
ATOM	337	O	ARG	27	24.948	4.876	22.881	1.00	
20.06			O						
ATOM	338	CB	ARG	27	25.415	2.974	20.271	1.00	
22.14			C						
ATOM	339	CG	ARG	27	25.853	2.215	21.527		
1.00124.30				C					
ATOM	340	CD	ARG	27	26.068	0.741	21.184		
1.00109.38				C					
ATOM	341	NE	ARG	27	26.423	-0.010	22.383		
1.00227.73				N					
ATOM	342	CZ	ARG	27	27.670	-0.020	22.846		
1.00426.12				C					
ATOM	343	NH1	ARG	27	27.960	-0.700	23.921		
1.00767.09				N1+					
ATOM	344	NH2	ARG	27	28.602	0.650	22.226		
1.00581.78				N					
ATOM	345	HN	ARG	27	27.142	4.784	21.722	1.00	
30.75			H						
ATOM	346	HA	ARG	27	25.005	4.994	19.688	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	26.109	2.771	19.470	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	24.426	2.650	19.980		

1.00103.36				H						
ATOM	349	HG1	ARG		27	25.088	2.297	22.285		
1.00281.97				H						
ATOM	350	HG2	ARG		27	26.775	2.638	21.899		
1.00276.19				H						
ATOM	351	HD1	ARG		27	26.864	0.657	20.456		
1.00183.60				H						
ATOM	352	HD2	ARG		27	25.161	0.337	20.767		
1.00142.93				H						
ATOM	353	HE	ARG		27	25.731	-0.516	22.856		
1.00372.53				H						
ATOM	354	HH11	ARG		27	27.245	-1.214	24.397		
1.00910.59				H						
ATOM	355	HH12	ARG		27	28.897	-0.709	24.269		
1.00999.99				H						
ATOM	356	HH21	ARG		27	28.380	1.171	21.403		
1.00532.54				H						
ATOM	357	HH22	ARG		27	29.540	0.642	22.575		
1.00948.84				H						
ATOM	358	N	SER		28	23.178	4.889	21.486	1.00	
14.60			N							
ATOM	359	CA	SER		28	22.207	5.171	22.549	1.00	
14.92			C							
ATOM	360	C	SER		28	20.984	4.265	22.427	1.00	
12.12			C							
ATOM	361	O	SER		28	20.609	3.850	21.331	1.00	
13.41			O							
ATOM	362	CB	SER		28	21.767	6.633	22.474	1.00	
23.26			C							
ATOM	363	OG	SER		28	22.893	7.474	22.687		
1.00146.32				O						
ATOM	364	HN	SER		28	22.861	4.795	20.562	1.00	
15.23			H							
ATOM	365	HA	SER		28	22.668	4.999	23.512	1.00	
15.44			H							
ATOM	366	HB1	SER		28	21.017	6.821	23.231	1.00	
88.73			H							
ATOM	367	HB2	SER		28	21.352	6.838	21.503		
1.00124.68				H						
ATOM	368	HG	SER		28	22.693	8.060	23.420		
1.00242.47				H						
ATOM	369	N	CYS		29	20.365	3.972	23.568	1.00	
10.48			N							
ATOM	370	CA	CYS		29	19.178	3.123	23.604	1.00	
9.97			C							
ATOM	371	C	CYS		29	18.653	3.054	25.038	1.00	
11.60			C							
ATOM	372	O	CYS		29	19.411	2.776	25.968	1.00	
15.64			O							
ATOM	373	CB	CYS		29	19.513	1.707	23.081	1.00	
9.52			C							
ATOM	374	SG	CYS		29	18.115	1.053	22.150	1.00	

10.40			S						
ATOM	375	HN	CYS	29	20.709	4.343	24.407	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.417	3.564	22.978	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.722	1.038	23.907	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.373	1.750	22.435	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.360	3.329	25.222	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.760	3.311	26.561	1.00	
17.41			C						
ATOM	381	C	GLU	30	15.854	2.100	26.746	1.00	
10.81			C						
ATOM	382	O	GLU	30	14.993	1.822	25.914	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.951	4.590	26.770	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.884	5.798	26.673		
1.00108.13			C						
ATOM	385	CD	GLU	30	16.094	7.085	26.879		
1.00240.52			C						
ATOM	386	OE1	GLU	30	14.895	6.994	27.088		
1.00422.56			O						
ATOM	387	OE2	GLU	30	16.698	8.144	26.825		
1.00410.81			O1-						
ATOM	388	HN	GLU	30	16.800	3.557	24.447	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.543	3.276	27.308	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.490	4.570	27.747	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	15.185	4.661	26.010	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	17.347	5.815	25.697		
1.00196.66			H						
ATOM	393	HG2	GLU	30	17.648	5.721	27.432		
1.00140.67			H						
ATOM	394	N	LYS	31	16.053	1.388	27.852	1.00	
11.96			N						
ATOM	395	CA	LYS	31	15.249	0.206	28.153	1.00	
11.40			C						
ATOM	396	C	LYS	31	13.976	0.602	28.895	1.00	
10.99			C						
ATOM	397	O	LYS	31	13.956	1.590	29.629	1.00	
12.86			O						
ATOM	398	CB	LYS	31	16.059	-0.768	29.011	1.00	
21.40			C						
ATOM	399	CG	LYS	31	17.263	-1.271	28.213	1.00	
57.81			C						
ATOM	400	CD	LYS	31	18.075	-2.244	29.069		

1.00115.52				C					
ATOM	401	CE	LYS	31	19.301	-2.715	28.283		
1.00250.23				C					
ATOM	402	NZ	LYS	31	18.856	-3.466	27.075		
1.00462.10				N1+					
ATOM	403	HN	LYS	31	16.752	1.665	28.479	1.00	
26.13			H						
ATOM	404	HA	LYS	31	14.979	-0.286	27.231	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	15.437	-1.607	29.287	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	16.401	-0.264	29.903	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	17.886	-0.434	27.934		
1.00126.32				H					
ATOM	408	HG2	LYS	31	16.919	-1.776	27.322		
1.00114.19				H					
ATOM	409	HD1	LYS	31	17.464	-3.097	29.325		
1.00198.45				H					
ATOM	410	HD2	LYS	31	18.397	-1.747	29.974		
1.00200.14				H					
ATOM	411	HE1	LYS	31	19.903	-3.359	28.908		
1.00374.64				H					
ATOM	412	HE2	LYS	31	19.884	-1.859	27.980		
1.00403.27				H					
ATOM	413	HZ1	LYS	31	19.470	-4.293	26.935		
1.00627.38				H					
ATOM	414	HZ2	LYS	31	18.913	-2.845	26.242		
1.00622.26				H					
ATOM	415	HZ3	LYS	31	17.874	-3.782	27.205		
1.00619.20				H					
ATOM	416	N	THR	32	12.915	-0.178	28.701	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.635	0.092	29.356	1.00	
22.44			C						
ATOM	418	C	THR	32	11.509	-0.727	30.637	1.00	
26.60			C						
ATOM	419	O	THR	32	11.599	-1.954	30.611	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.484	-0.264	28.412	1.00	
56.28			C						
ATOM	421	CG2	THR	32	9.149	-0.010	29.112		
1.00102.70				C					
ATOM	422	OG1	THR	32	10.569	0.538	27.242		
1.00111.17				O					
ATOM	423	HN	THR	32	12.994	-0.952	28.105	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.568	1.144	29.601	1.00	
19.67			H						
ATOM	425	HB	THR	32	10.550	-1.305	28.140	1.00	
84.25			H						
ATOM	426	HG1	THR	32	10.302	1.431	27.474		

1.00205.03				H					
ATOM	427	HG21	THR		32	8.999	-0.752	29.882	
1.00220.71				H					
ATOM	428	HG22	THR		32	8.347	-0.074	28.392	
1.00174.67				H					
ATOM	429	HG23	THR		32	9.156	0.973	29.557	
1.00217.44				H					
ATOM	430	N	THR		33	11.297	-0.040	31.759	1.00
22.47			N						
ATOM	431	CA	THR		33	11.156	-0.711	33.051	1.00
41.60			C						
ATOM	432	C	THR		33	10.179	0.018	33.929	1.00
38.03			C						
ATOM	433	O	THR		33	10.554	0.821	34.784	1.00
52.73			O						
ATOM	434	CB	THR		33	12.506	-0.813	33.756	1.00
63.25			C						
ATOM	435	CG2	THR		33	13.403	-1.798	33.006	
1.00121.65				C					
ATOM	436	OG1	THR		33	13.121	0.468	33.785	1.00
96.20			O						
ATOM	437	HN	THR		33	11.233	0.937	31.718	1.00
23.82			H						
ATOM	438	HA	THR		33	10.763	-1.700	32.904	1.00
67.12			H						
ATOM	439	HB	THR		33	12.352	-1.166	34.762	
1.00107.59				H					
ATOM	440	HG1	THR		33	13.674	0.550	33.005	
1.00176.27				H					
ATOM	441	HG21	THR		33	12.887	-2.741	32.895	
1.00255.23				H					
ATOM	442	HG22	THR		33	14.316	-1.949	33.563	
1.00245.37				H					
ATOM	443	HG23	THR		33	13.638	-1.400	32.030	
1.00185.78				H					
ATOM	444	N	GLY		34	8.916	-0.293	33.720	1.00
40.93			N						
ATOM	445	CA	GLY		34	7.862	0.305	34.502	1.00
45.59			C						
ATOM	446	C	GLY		34	7.554	1.714	34.015	1.00
40.97			C						
ATOM	447	O	GLY		34	6.610	2.352	34.479	1.00
82.17			O						
ATOM	448	HN	GLY		34	8.693	-0.956	33.035	1.00
54.00			H						
ATOM	449	HA1	GLY		34	8.189	0.341	35.523	1.00
54.41			H						
ATOM	450	HA2	GLY		34	6.974	-0.305	34.431	1.00
62.09			H						
ATOM	451	N	ASN		35	8.357	2.189	33.066	1.00
32.51			N						
ATOM	452	CA	ASN		35	8.171	3.523	32.504	1.00

33.20			C						
ATOM	453	C	ASN	35	8.779	3.597	31.108	1.00	
23.17			C						
ATOM	454	O	ASN	35	9.761	2.917	30.812	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.830	4.574	33.400	1.00	
54.51			C						
ATOM	456	CG	ASN	35	8.222	4.529	34.798	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	9.002	4.389	35.834		
1.00220.46				N					
ATOM	458	OD1	ASN	35	7.005	4.629	34.950		
1.00117.80				O					
ATOM	459	HN	ASN	35	9.090	1.628	32.735	1.00	
51.15			H						
ATOM	460	HA	ASN	35	7.114	3.734	32.437	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	8.674	5.553	32.973	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	9.890	4.374	33.463	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	9.971	4.311	35.711		
1.00405.39				H					
ATOM	464	HD22	ASN	35	8.619	4.361	36.736		
1.00245.64				H					
ATOM	465	N	PHE	36	8.189	4.426	30.251	1.00	
35.72			N						
ATOM	466	CA	PHE	36	8.669	4.589	28.888	1.00	
33.41			C						
ATOM	467	C	PHE	36	9.517	5.851	28.767	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.170	6.897	29.314	1.00	
45.23			O						
ATOM	469	CB	PHE	36	7.467	4.688	27.959	1.00	
67.53			C						
ATOM	470	CG	PHE	36	6.712	3.382	27.984	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	5.643	3.212	28.872		
1.00106.51				C					
ATOM	472	CD2	PHE	36	7.080	2.342	27.125	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	4.941	2.002	28.898		
1.00134.48				C					
ATOM	474	CE2	PHE	36	6.378	1.131	27.151		
1.00134.27				C					
ATOM	475	CZ	PHE	36	5.309	0.961	28.037		
1.00149.48				C					
ATOM	476	HN	PHE	36	7.409	4.940	30.538	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.261	3.732	28.602	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	7.802	4.891	26.963	1.00	

73.56			H					
ATOM	479	HB2	PHE	36	6.818	5.487	28.291	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.361	4.016	29.537	
1.00110.20			H					
ATOM	481	HD2	PHE	36	7.909	2.471	26.443	1.00
93.07			H					
ATOM	482	HE1	PHE	36	4.115	1.871	29.582	
1.00155.06			H					
ATOM	483	HE2	PHE	36	6.663	0.328	26.487	
1.00159.46			H					
ATOM	484	HZ	PHE	36	4.767	0.027	28.056	
1.00183.25			H					
ATOM	485	N	THR	37	10.630	5.746	28.043	1.00
20.06			N					
ATOM	486	CA	THR	37	11.522	6.884	27.857	1.00
27.18			C					
ATOM	487	C	THR	37	12.258	6.772	26.525	1.00
41.87			C					
ATOM	488	O	THR	37	13.001	5.818	26.292	
1.00169.86			O					
ATOM	489	CB	THR	37	12.539	6.944	28.999	1.00
26.52			C					
ATOM	490	CG2	THR	37	11.811	7.193	30.321	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.244	5.713	29.068	1.00
81.95			O					
ATOM	492	HN	THR	37	10.855	4.889	27.629	1.00
18.47			H					
ATOM	493	HA	THR	37	10.943	7.797	27.857	1.00
38.80			H					
ATOM	494	HB	THR	37	13.236	7.749	28.819	1.00
81.60			H					
ATOM	495	HG1	THR	37	14.049	5.803	28.553	
1.00188.80			H					
ATOM	496	HG21	THR	37	11.095	7.991	30.193	
1.00196.98			H					
ATOM	497	HG22	THR	37	12.528	7.472	31.079	
1.00196.23			H					
ATOM	498	HG23	THR	37	11.298	6.293	30.625	
1.00168.92			H					
ATOM	499	N	GLU	38	12.046	7.755	25.662	1.00
26.53			N					
ATOM	500	CA	GLU	38	12.694	7.769	24.355	1.00
30.29			C					
ATOM	501	C	GLU	38	14.161	8.155	24.494	1.00
25.39			C					
ATOM	502	O	GLU	38	14.569	8.724	25.509	1.00
51.60			O					
ATOM	503	CB	GLU	38	11.987	8.762	23.431	1.00
54.82			C					
ATOM	504	CG	GLU	38	10.581	8.251	23.114	

1.00165.84				C					
ATOM	505	CD	GLU	38	9.836	9.270	22.257		
1.00292.92				C					
ATOM	506	OE1	GLU	38	10.353	10.361	22.086		
1.00414.19				O					
ATOM	507	OE2	GLU	38	8.758	8.943	21.786		
1.00537.65				O1-					
ATOM	508	HN	GLU	38	11.445	8.486	25.908	1.00	
84.50				H					
ATOM	509	HA	GLU	38	12.631	6.782	23.921	1.00	
32.15				H					
ATOM	510	HB1	GLU	38	12.547	8.861	22.513		
1.00144.82				H					
ATOM	511	HB2	GLU	38	11.920	9.722	23.919		
1.00106.49				H					
ATOM	512	HG1	GLU	38	10.040	8.093	24.034		
1.00303.31				H					
ATOM	513	HG2	GLU	38	10.652	7.315	22.576		
1.00323.99				H					
ATOM	514	N	CYS	39	14.952	7.850	23.472	1.00	
15.84				N					
ATOM	515	CA	CYS	39	16.371	8.177	23.496	1.00	
14.30				C					
ATOM	516	C	CYS	39	16.548	9.663	23.837	1.00	
22.31				C					
ATOM	517	O	CYS	39	15.622	10.449	23.639	1.00	
32.92				O					
ATOM	518	CB	CYS	39	16.993	7.864	22.129	1.00	
18.08				C					
ATOM	519	SG	CYS	39	15.801	8.260	20.825	1.00	
17.41				S					
ATOM	520	HN	CYS	39	14.573	7.402	22.687	1.00	
24.87				H					
ATOM	521	HA	CYS	39	16.845	7.569	24.246	1.00	
14.60				H					
ATOM	522	HB1	CYS	39	17.243	6.813	22.077	1.00	
27.71				H					
ATOM	523	HB2	CYS	39	17.888	8.452	21.990	1.00	
34.91				H					
ATOM	524	N	PRO	40	17.692	10.080	24.344	1.00	
27.27				N					
ATOM	525	CA	PRO	40	17.915	11.514	24.697	1.00	
47.66				C					
ATOM	526	C	PRO	40	17.669	12.452	23.525	1.00	
71.54				C					
ATOM	527	O	PRO	40	17.643	12.039	22.365	1.00	
87.70				O					
ATOM	528	CB	PRO	40	19.385	11.582	25.136	1.00	
53.85				C					
ATOM	529	CG	PRO	40	19.739	10.191	25.520	1.00	
46.04				C					
ATOM	530	CD	PRO	40	18.890	9.266	24.640	1.00	

25.70									
ATOM	531	HA	PRO	40	17.280	11.789	25.526	1.00	
58.04									
ATOM	532	HB1	PRO	40	19.497	12.244	25.985	1.00	
67.93									
ATOM	533	HB2	PRO	40	20.012	11.919	24.316	1.00	
70.99									
ATOM	534	HG1	PRO	40	19.509	10.016	26.562	1.00	
65.91									
ATOM	535	HG2	PRO	40	20.788	10.024	25.340	1.00	
54.99									
ATOM	536	HD1	PRO	40	18.625	8.380	25.188	1.00	
24.22									
ATOM	537	HD2	PRO	40	19.421	9.015	23.731	1.00	
26.94									
ATOM	538	N	GLY	41	17.508	13.721	23.854		
1.00105.24									N
ATOM	539	CA	GLY	41	17.283	14.746	22.842		
1.00147.55									C
ATOM	540	C	GLY	41	18.551	14.987	22.037		
1.00161.74									C
ATOM	541	O	GLY	41	18.510	15.155	20.818		
1.00244.37									O
ATOM	542	HN	GLY	41	17.565	13.972	24.798		
1.00121.79									H
ATOM	543	HA1	GLY	41	16.989	15.665	23.324		
1.00184.40									H
ATOM	544	HA2	GLY	41	16.495	14.422	22.178		
1.00157.34									H
ATOM	545	N	LEU	42	19.682	14.999	22.739		
1.00162.48									N
ATOM	546	CA	LEU	42	20.988	15.218	22.115		
1.00191.48									C
ATOM	547	C	LEU	42	21.914	14.043	22.415		
1.00166.66									C
ATOM	548	O	LEU	42	21.700	13.306	23.376		
1.00251.38									O
ATOM	549	CB	LEU	42	21.613	16.506	22.655		
1.00307.99									C
ATOM	550	CG	LEU	42	20.652	17.683	22.450		
1.00452.28									C
ATOM	551	CD1	LEU	42	21.270	18.947	23.054		
1.00681.24									C
ATOM	552	CD2	LEU	42	20.396	17.900	20.950		
1.00527.46									C
ATOM	553	HN	LEU	42	19.637	14.856	23.707		
1.00195.47									H
ATOM	554	HA	LEU	42	20.873	15.306	21.043		
1.00229.77									H
ATOM	555	HB1	LEU	42	22.536	16.704	22.132		
1.00342.49									H
ATOM	556	HB2	LEU	42	21.818	16.389	23.709		

1.00335.33				H				
ATOM	557	HG	LEU	42	19.717	17.469	22.949	
1.00427.79				H				
ATOM	558	HD11	LEU	42	22.280	19.064	22.690	
1.00909.71				H				
ATOM	559	HD12	LEU	42	21.283	18.863	24.131	
1.00706.80				H				
ATOM	560	HD13	LEU	42	20.682	19.807	22.768	
1.00858.82				H				
ATOM	561	HD21	LEU	42	21.307	17.726	20.395	
1.00631.69				H				
ATOM	562	HD22	LEU	42	20.061	18.914	20.780	
1.00628.06				H				
ATOM	563	HD23	LEU	42	19.633	17.216	20.611	
1.00656.75				H				
ATOM	564	N	THR	43	22.938	13.871	21.587	
1.00178.52				N				
ATOM	565	CA	THR	43	23.882	12.778	21.780	
1.00240.84				C				
ATOM	566	C	THR	43	24.591	12.921	23.137	
1.00372.31				C				
ATOM	567	O	THR	43	24.795	14.038	23.613	
1.00500.13				O				
ATOM	568	CB	THR	43	24.906	12.785	20.642	
1.00354.13				C				
ATOM	569	CG2	THR	43	24.194	12.552	19.306	
1.00463.04				C				
ATOM	570	OG1	THR	43	25.563	14.043	20.611	
1.00508.50				O				
ATOM	571	HN	THR	43	23.060	14.488	20.834	
1.00229.59				H				
ATOM	572	HA	THR	43	23.335	11.851	21.754	
1.00249.90				H				
ATOM	573	HB	THR	43	25.630	12.002	20.800	
1.00481.58				H				
ATOM	574	HG1	THR	43	26.395	13.931	20.146	
1.00624.31				H				
ATOM	575	HG21	THR	43	23.708	13.463	18.992	
1.00650.95				H				
ATOM	576	HG22	THR	43	23.454	11.772	19.419	
1.00580.73				H				
ATOM	577	HG23	THR	43	24.917	12.256	18.560	
1.00571.99				H				
ATOM	578	N	PRO	44	24.956	11.826	23.778	
1.00488.39				N				
ATOM	579	CA	PRO	44	25.635	11.863	25.114	
1.00760.13				C				
ATOM	580	C	PRO	44	27.104	12.285	25.031	
1.00735.36				C				
ATOM	581	O	PRO	44	27.710	12.639	26.042	
1.00999.99				O				
ATOM	582	CB	PRO	44	25.505	10.417	25.608	

1.00999.99				C				
ATOM	583	CG	PRO	44	25.507	9.599	24.361	
1.00856.94				C				
ATOM	584	CD	PRO	44	24.768	10.436	23.312	
1.00548.09				C				
ATOM	585	HA	PRO	44	25.101	12.519	25.782	
1.00939.00				H				
ATOM	586	HB1	PRO	44	24.571	10.282	26.137	
1.00999.99				H				
ATOM	587	HB2	PRO	44	26.341	10.151	26.244	
1.00999.99				H				
ATOM	588	HG1	PRO	44	24.987	8.667	24.520	
1.00999.99				H				
ATOM	589	HG2	PRO	44	26.526	9.410	24.044	
1.00853.53				H				
ATOM	590	HD1	PRO	44	23.719	10.185	23.300	
1.00602.45				H				
ATOM	591	HD2	PRO	44	25.210	10.294	22.335	
1.00463.32				H				
ATOM	592	N	ILE	45	27.677	12.234	23.833	
1.00518.33				N				
ATOM	593	CA	ILE	45	29.074	12.597	23.651	
1.00582.79				C				
ATOM	594	C	ILE	45	29.415	13.867	24.429	
1.00795.93				C				
ATOM	595	O	ILE	45	28.546	14.698	24.692	
1.00898.75				O				
ATOM	596	CB	ILE	45	29.358	12.798	22.159	
1.00474.41				C				
ATOM	597	CG1	ILE	45	28.593	14.019	21.636	
1.00516.90				C				
ATOM	598	CG2	ILE	45	28.915	11.552	21.390	
1.00760.75				C				
ATOM	599	CD1	ILE	45	28.846	14.175	20.135	
1.00566.81				C				
ATOM	600	HN	ILE	45	27.158	11.935	23.059	
1.00395.72				H				
ATOM	601	HA	ILE	45	29.691	11.792	24.014	
1.00711.06				H				
ATOM	602	HB	ILE	45	30.413	12.944	22.020	
1.00477.81				H				
ATOM	603	HG11	ILE	45	28.933	14.908	22.144	
1.00624.28				H				
ATOM	604	HG12	ILE	45	27.539	13.883	21.815	
1.00744.84				H				
ATOM	605	HG21	ILE	45	27.838	11.489	21.398	
1.00920.57				H				
ATOM	606	HG22	ILE	45	29.331	10.673	21.858	
1.00999.99				H				
ATOM	607	HG23	ILE	45	29.265	11.614	20.370	
1.00865.46				H				
ATOM	608	HD11	ILE	45	29.902	14.065	19.935	

1.00658.89				H			
ATOM	609	HD12	ILE		45	28.518	15.152 19.814
1.00734.30				H			
ATOM	610	HD13	ILE		45	28.298	13.415 19.596
1.00675.84				H			
ATOM	611	N	ALA		46	30.686	14.007 24.794
1.00999.99				N			
ATOM	612	CA	ALA		46	31.130	15.179 25.541
1.00999.99				C			
ATOM	613	C	ALA		46	32.649	15.180 25.683
1.00999.99				C			
ATOM	614	CB	ALA		46	30.485	15.192 26.928
1.00999.99				C			
ATOM	615	OT1	ALA		46	33.319	15.089 24.667
1.00999.99				O			
ATOM	616	OT2	ALA		46	33.120	15.271 26.805
1.00999.99				O			
ATOM	617	HN	ALA		46	31.334	13.312 24.556
1.00999.99				H			
ATOM	618	HA	ALA		46	30.828	16.068 25.010
1.00999.99				H			
ATOM	619	HB1	ALA		46	30.960	15.946 27.538
1.00999.99				H			
ATOM	620	HB2	ALA		46	30.609	14.224 27.392
1.00999.99				H			
ATOM	621	HB3	ALA		46	29.434	15.414 26.834
1.00999.99				H			
ENDMDL							
TER							
MODEL		9					
ATOM	1	N	GLY		1	24.545	-4.470 18.883
1.00999.99				N			
ATOM	2	CA	GLY		1	24.924	-3.104 19.343
1.00999.99				C			
ATOM	3	C	GLY		1	24.376	-2.066 18.367
1.00999.99				C			
ATOM	4	O	GLY		1	23.873	-1.021 18.776
1.00999.99				O			
ATOM	5	HA1	GLY		1	25.999	-3.022 19.383
1.00999.99				H			
ATOM	6	HA2	GLY		1	24.512	-2.927 20.325
1.00999.99				H			
ATOM	7	HT1	GLY		1	24.693	-4.544 17.857
1.00999.99				H			
ATOM	8	HT2	GLY		1	23.542	-4.643 19.103
1.00999.99				H			
ATOM	9	HT3	GLY		1	25.134	-5.175 19.369
1.00999.99				H			
ATOM	10	N	LEU		2	24.477	-2.366 17.077
1.00999.99				N			
ATOM	11	CA	LEU		2	23.990	-1.450 16.052
1.00895.59				C			

ATOM	12	C	LEU	2	22.466	-1.406	16.060	
1.00532.27			C					
ATOM	13	O	LEU	2	21.808	-2.400	16.368	
1.00625.21			O					
ATOM	14	CB	LEU	2	24.476	-1.902	14.671	
1.00999.99			C					
ATOM	15	CG	LEU	2	26.008	-1.956	14.645	
1.00999.99			C					
ATOM	16	CD1	LEU	2	26.465	-2.490	13.283	
1.00999.99			C					
ATOM	17	CD2	LEU	2	26.595	-0.551	14.872	
1.00999.99			C					
ATOM	18	HN	LEU	2	24.887	-3.214	16.809	
1.00999.99			H					
ATOM	19	HA	LEU	2	24.367	-0.461	16.252	
1.00890.87			H					
ATOM	20	HB1	LEU	2	24.132	-1.202	13.925	
1.00924.07			H					
ATOM	21	HB2	LEU	2	24.077	-2.882	14.455	
1.00999.99			H					
ATOM	22	HG	LEU	2	26.355	-2.622	15.423	
1.00999.99			H					
ATOM	23	HD11	LEU	2	27.544	-2.494	13.241	
1.00999.99			H					
ATOM	24	HD12	LEU	2	26.077	-1.856	12.500	
1.00999.99			H					
ATOM	25	HD13	LEU	2	26.095	-3.496	13.149	
1.00999.99			H					
ATOM	26	HD21	LEU	2	26.655	-0.354	15.933	
1.00999.99			H					
ATOM	27	HD22	LEU	2	25.963	0.190	14.404	
1.00999.99			H					
ATOM	28	HD23	LEU	2	27.587	-0.496	14.446	
1.00999.99			H					
ATOM	29	N	CYS	3	21.907	-0.247	15.721	
1.00271.28			N					
ATOM	30	CA	CYS	3	20.456	-0.085	15.694	
1.00104.50			C					
ATOM	31	C	CYS	3	19.894	-0.550	14.354	1.00
90.98			C					
ATOM	32	O	CYS	3	20.072	0.114	13.332	
1.00207.28			O					
ATOM	33	CB	CYS	3	20.087	1.383	15.914	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.711	1.936	17.521	1.00
81.56			S					
ATOM	35	HN	CYS	3	22.480	0.513	15.486	
1.00296.55			H					
ATOM	36	HA	CYS	3	20.018	-0.675	16.484	
1.00166.45			H					
ATOM	37	HB1	CYS	3	19.013	1.492	15.889	1.00
40.38			H					

ATOM	38	HB2	CYS	3	20.528	1.986	15.132	1.00
98.45			H					
ATOM	39	N	SER	4	19.211	-1.688	14.367	1.00
85.31			N					
ATOM	40	CA	SER	4	18.621	-2.229	13.147	1.00
92.94			C					
ATOM	41	C	SER	4	17.600	-1.253	12.594	1.00
67.37			C					
ATOM	42	O	SER	4	17.524	-1.017	11.389	
1.00102.28			O					
ATOM	43	CB	SER	4	17.906	-3.543	13.446	
1.00123.83			C					
ATOM	44	OG	SER	4	17.445	-4.114	12.228	
1.00178.89			O					
ATOM	45	HN	SER	4	19.097	-2.174	15.212	
1.00163.03			H					
ATOM	46	HA	SER	4	19.393	-2.400	12.414	
1.00129.78			H					
ATOM	47	HB1	SER	4	17.060	-3.342	14.098	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.583	-4.228	13.931	
1.00156.87			H					
ATOM	49	HG	SER	4	17.558	-5.066	12.286	
1.00218.16			H					
ATOM	50	N	GLU	5	16.801	-0.706	13.501	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.750	0.232	13.143	1.00
41.21			C					
ATOM	52	C	GLU	5	15.610	1.304	14.218	1.00
41.92			C					
ATOM	53	O	GLU	5	16.473	1.437	15.085	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.434	-0.523	12.988	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.123	-1.251	14.288	1.00
55.48			C					
ATOM	56	CD	GLU	5	12.952	-2.208	14.089	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.589	-2.877	15.044	
1.00206.49			O					
ATOM	58	OE2	GLU	5	12.432	-2.256	12.987	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	16.912	-0.955	14.443	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.991	0.702	12.208	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.522	-1.243	12.187	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.644	0.169	12.764	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.872	-0.531	15.052	1.00
58.03			H					

ATOM	64	HG2	GLU	5	14.994	-1.806	14.593	1.00
57.77			H					
ATOM	65	N	ASN	6	14.523	2.064	14.162	1.00
50.73			N					
ATOM	66	CA	ASN	6	14.296	3.115	15.144	1.00
71.04			C					
ATOM	67	C	ASN	6	14.227	2.514	16.545	1.00
65.17			C					
ATOM	68	O	ASN	6	14.748	3.086	17.504	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.991	3.852	14.836	1.00
94.83			C					
ATOM	70	CG	ASN	6	13.161	4.709	13.586	
1.00160.94			C					
ATOM	71	ND2	ASN	6	12.105	5.107	12.930	
1.00244.88			N					
ATOM	72	OD1	ASN	6	14.285	5.027	13.198	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.864	1.916	13.451	1.00
72.81			H					
ATOM	74	HA	ASN	6	15.114	3.818	15.103	1.00
96.02			H					
ATOM	75	HB1	ASN	6	12.731	4.485	15.671	
1.00111.09			H					
ATOM	76	HB2	ASN	6	12.204	3.131	14.672	1.00
98.13			H					
ATOM	77	HD21	ASN	6	11.211	4.853	13.241	
1.00272.43			H					
ATOM	78	HD22	ASN	6	12.207	5.659	12.127	
1.00336.78			H					
ATOM	79	N	GLY	7	13.587	1.351	16.651	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.454	0.656	17.936	1.00
71.47			C					
ATOM	81	C	GLY	7	14.106	-0.719	17.874	1.00
41.04			C					
ATOM	82	O	GLY	7	13.441	-1.744	18.028	1.00
44.54			O					
ATOM	83	HN	GLY	7	13.200	0.945	15.849	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.412	0.535	18.164	
1.00103.52			H					
ATOM	85	HA2	GLY	7	13.925	1.236	18.719	
1.00108.67			H					
ATOM	86	N	ASP	8	15.411	-0.730	17.642	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.153	-1.984	17.553	1.00
14.15			C					
ATOM	88	C	ASP	8	16.054	-2.757	18.862	1.00
9.37			C					
ATOM	89	O	ASP	8	15.843	-3.970	18.864	1.00
14.61			O					

ATOM	90	CB	ASP	8	17.623	-1.705	17.233	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.374	-3.021	17.055	1.00
21.22			C					
ATOM	92	OD1	ASP	8	17.791	-4.056	17.335	
1.00119.56			O					
ATOM	93	OD2	ASP	8	19.520	-2.974	16.643	
1.00133.27			O1-					
ATOM	94	HN	ASP	8	15.881	0.120	17.524	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.733	-2.583	16.765	1.00
20.92			H					
ATOM	96	HB1	ASP	8	18.067	-1.147	18.043	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.687	-1.129	16.321	1.00
44.14			H					
ATOM	98	N	CYS	9	16.199	-2.047	19.972	1.00
5.93			N					
ATOM	99	CA	CYS	9	16.116	-2.677	21.282	1.00
7.54			C					
ATOM	100	C	CYS	9	14.733	-3.285	21.480	1.00
14.60			C					
ATOM	101	O	CYS	9	14.590	-4.392	22.001	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.392	-1.652	22.373	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.142	-1.228	22.326	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.359	-1.083	19.907	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.863	-3.450	21.347	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.149	-2.070	23.337	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.798	-0.767	22.200	1.00
5.04			H					
ATOM	108	N	ALA	10	13.718	-2.546	21.047	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.336	-2.997	21.155	1.00
32.04			C					
ATOM	110	C	ALA	10	11.424	-2.070	20.356	1.00
45.47			C					
ATOM	111	O	ALA	10	11.841	-0.992	19.933	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.901	-3.030	22.627	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.906	-1.678	20.636	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.263	-3.995	20.747	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.736	-3.329	23.240	1.00
84.37			H					

ATOM	116	HB2	ALA	10	11.094	-3.738	22.749	
	1.00118.20							H
ATOM	117	HB3	ALA	10	11.566	-2.050	22.930	
	1.00117.32							H
ATOM	118	N	ALA	11	10.181	-2.493	20.146	1.00
	30.62		N					
ATOM	119	CA	ALA	11	9.233	-1.681	19.390	1.00
	35.24		C					
ATOM	120	C	ALA	11	9.001	-0.337	20.076	1.00
	22.78		C					
ATOM	121	O	ALA	11	8.929	0.700	19.417	1.00
	53.33		O					
ATOM	122	CB	ALA	11	7.902	-2.424	19.258	1.00
	60.49		C					
ATOM	123	HN	ALA	11	9.900	-3.361	20.502	1.00
	50.37		H					
ATOM	124	HA	ALA	11	9.633	-1.507	18.403	1.00
	41.70		H					
ATOM	125	HB1	ALA	11	7.281	-1.922	18.532	
	1.00157.06							H
ATOM	126	HB2	ALA	11	7.401	-2.437	20.214	
	1.00148.83							H
ATOM	127	HB3	ALA	11	8.087	-3.438	18.934	
	1.00137.06							H
ATOM	128	N	ASP	12	8.882	-0.361	21.401	1.00
	18.98		N					
ATOM	129	CA	ASP	12	8.654	0.866	22.165	1.00
	31.05		C					
ATOM	130	C	ASP	12	9.969	1.582	22.457	1.00
	22.98		C					
ATOM	131	O	ASP	12	10.015	2.810	22.531	1.00
	37.14		O					
ATOM	132	CB	ASP	12	7.955	0.530	23.485	1.00
	48.35		C					
ATOM	133	CG	ASP	12	6.529	0.060	23.213	
	1.00104.83							C
ATOM	134	OD1	ASP	12	5.932	-0.508	24.113	
	1.00258.73							O
ATOM	135	OD2	ASP	12	6.056	0.275	22.110	
	1.00213.46							O1-
ATOM	136	HN	ASP	12	8.946	-1.218	21.874	1.00
	36.19		H					
ATOM	137	HA	ASP	12	8.016	1.523	21.594	1.00
	49.76		H					
ATOM	138	HB1	ASP	12	7.928	1.410	24.109	1.00
	95.71		H					
ATOM	139	HB2	ASP	12	8.501	-0.252	23.990	1.00
	54.37		H					
ATOM	140	N	GLU	13	11.036	0.808	22.631	1.00
	17.60		N					
ATOM	141	CA	GLU	13	12.347	1.379	22.924	1.00
	12.01		C					

ATOM	142	C	GLU	13	12.938	2.048	21.687	1.00
10.07			C					
ATOM	143	O	GLU	13	12.550	1.745	20.559	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.290	0.282	23.419	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.785	-0.253	24.761	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.596	-1.478	25.173	
1.00142.36			C					
ATOM	147	OE1	GLU	13	12.987	-2.480	25.510	
1.00339.06			O					
ATOM	148	OE2	GLU	13	14.812	-1.393	25.149	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.937	-0.166	22.566	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.237	2.118	23.702	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.281	0.688	23.546	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.319	-0.521	22.697	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.745	-0.524	24.674	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.893	0.515	25.514	1.00
56.23			H					
ATOM	155	N	CYS	14	13.883	2.965	21.909	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.539	3.688	20.816	1.00
10.69			C					
ATOM	157	C	CYS	14	15.998	3.264	20.707	1.00
9.56			C					
ATOM	158	O	CYS	14	16.635	2.960	21.711	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.470	5.195	21.070	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.336	6.070	19.742	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.148	3.160	22.833	1.00
9.76			H					
ATOM	162	HA	CYS	14	14.038	3.469	19.882	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.939	5.420	22.016	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.437	5.510	21.095	1.00
46.13			H					
ATOM	165	N	CYS	15	16.522	3.251	19.482	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.915	2.867	19.250	1.00
9.28			C					
ATOM	167	C	CYS	15	18.505	3.766	18.176	1.00
9.92			C					

ATOM	168	O	CYS	15	17.920	3.930	17.105	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.989	1.407	18.793	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.704	0.820	18.873	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.967	3.512	18.718	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.484	2.984	20.161	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.630	1.331	17.777	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.372	0.797	19.436	1.00
27.31			H					
ATOM	175	N	VAL	16	19.662	4.355	18.460	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.305	5.240	17.499	1.00
11.99			C					
ATOM	177	C	VAL	16	21.820	5.168	17.641	1.00
7.73			C					
ATOM	178	O	VAL	16	22.357	5.248	18.746	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.816	6.673	17.719	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.280	7.180	19.086	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.371	7.575	16.618	
1.00115.21			C					
ATOM	182	HN	VAL	16	20.089	4.194	19.332	1.00
9.76			H					
ATOM	183	HA	VAL	16	20.040	4.933	16.496	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.736	6.689	17.682	1.00
52.63			H					
ATOM	185	HG11	VAL	16	21.347	7.340	19.069	
1.00128.07			H					
ATOM	186	HG12	VAL	16	20.037	6.447	19.840	
1.00154.13			H					
ATOM	187	HG13	VAL	16	19.781	8.110	19.313	
1.00135.74			H					
ATOM	188	HG21	VAL	16	20.027	8.586	16.776	
1.00229.05			H					
ATOM	189	HG22	VAL	16	20.025	7.222	15.659	
1.00261.82			H					
ATOM	190	HG23	VAL	16	21.450	7.552	16.644	
1.00210.07			H					
ATOM	191	N	ASP	17	22.505	5.001	16.511	1.00
14.34			N					
ATOM	192	CA	ASP	17	23.963	4.902	16.509	1.00
11.90			C					
ATOM	193	C	ASP	17	24.600	6.249	16.188	1.00
13.15			C					

ATOM	194	O	ASP	17	24.362	6.824	15.127	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.409	3.875	15.467	1.00
20.80			C					
ATOM	196	CG	ASP	17	24.034	2.471	15.925	1.00
28.72			C					
ATOM	197	OD1	ASP	17	23.719	2.315	17.093	
1.00135.42			O					
ATOM	198	OD2	ASP	17	24.063	1.574	15.099	
1.00114.17			O1-					
ATOM	199	HN	ASP	17	22.018	4.932	15.663	1.00
28.29			H					
ATOM	200	HA	ASP	17	24.305	4.575	17.482	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.479	3.936	15.339	1.00
22.42			H					
ATOM	202	HB2	ASP	17	23.924	4.088	14.525	1.00
29.52			H					
ATOM	203	N	THR	18	25.426	6.737	17.111	1.00
11.55			N					
ATOM	204	CA	THR	18	26.123	8.012	16.927	1.00
17.10			C					
ATOM	205	C	THR	18	27.579	7.757	16.562	1.00
10.63			C					
ATOM	206	O	THR	18	28.077	6.644	16.718	1.00
6.49			O					
ATOM	207	CB	THR	18	26.054	8.843	18.214	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.661	9.452	18.367	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.338	8.009	19.326	1.00
26.49			O					
ATOM	210	HN	THR	18	25.583	6.223	17.930	1.00
13.96			H					
ATOM	211	HA	THR	18	25.656	8.569	16.126	1.00
26.43			H					
ATOM	212	HB	THR	18	26.783	9.638	18.167	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.632	7.361	19.396	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.525	9.780	19.388	
1.00100.44			H					
ATOM	215	HG22	THR	18	23.914	8.711	18.123	
1.00129.42			H					
ATOM	216	HG23	THR	18	24.565	10.296	17.702	
1.00156.21			H					
ATOM	217	N	VAL	19	28.253	8.801	16.094	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.643	8.711	15.716	1.00
13.34			C					
ATOM	219	C	VAL	19	30.099	10.052	15.182	1.00
25.88			C					

ATOM	220	O	VAL	19	29.569	10.579	14.203	1.00
42.11		O						
ATOM	221	CB	VAL	19	29.881	7.621	14.671	1.00
15.48		C						
ATOM	222	CG1	VAL	19	28.897	7.782	13.509	1.00
29.06		C						
ATOM	223	CG2	VAL	19	31.320	7.738	14.152	1.00
20.67		C						
ATOM	224	HN	VAL	19	27.812	9.665	16.012	1.00
26.89		H						
ATOM	225	HA	VAL	19	30.226	8.479	16.598	1.00
8.08		H						
ATOM	226	HB	VAL	19	29.744	6.657	15.133	1.00
11.49		H						
ATOM	227	HG11	VAL	19	29.168	8.649	12.924	
1.00137.43								H
ATOM	228	HG12	VAL	19	27.897	7.906	13.895	1.00
93.29		H						
ATOM	229	HG13	VAL	19	28.935	6.903	12.883	
1.00108.69								H
ATOM	230	HG21	VAL	19	31.597	6.826	13.645	1.00
99.42		H						
ATOM	231	HG22	VAL	19	31.989	7.911	14.983	
1.00111.36								H
ATOM	232	HG23	VAL	19	31.387	8.569	13.464	1.00
77.11		H						
ATOM	233	N	PHE	20	31.072	10.591	15.866	1.00
24.58		N						
ATOM	234	CA	PHE	20	31.641	11.887	15.540	1.00
40.34		C						
ATOM	235	C	PHE	20	32.872	11.743	14.651	1.00
40.37		C						
ATOM	236	O	PHE	20	32.774	11.665	13.426	1.00
66.02		O						
ATOM	237	CB	PHE	20	32.016	12.615	16.852	1.00
48.79		C						
ATOM	238	CG	PHE	20	32.324	11.616	17.961	1.00
35.75		C						
ATOM	239	CD1	PHE	20	31.304	10.805	18.495	1.00
30.20		C						
ATOM	240	CD2	PHE	20	33.625	11.517	18.468	1.00
40.95		C						
ATOM	241	CE1	PHE	20	31.596	9.902	19.523	1.00
30.41		C						
ATOM	242	CE2	PHE	20	33.912	10.612	19.497	1.00
45.84		C						
ATOM	243	CZ	PHE	20	32.899	9.804	20.024	1.00
40.81		C						
ATOM	244	HN	PHE	20	31.405	10.104	16.637	1.00
16.73		H						
ATOM	245	HA	PHE	20	30.903	12.478	15.014	1.00
59.91		H						

ATOM	246	HB1	PHE	20	31.196	13.217	17.158	1.00
67.15		H						
ATOM	247	HB2	PHE	20	32.873	13.254	16.695	1.00
58.17		H						
ATOM	248	HD1	PHE	20	30.296	10.866	18.109	1.00
33.34		H						
ATOM	249	HD2	PHE	20	34.407	12.140	18.069	1.00
49.35		H						
ATOM	250	HE1	PHE	20	30.814	9.283	19.930	1.00
30.61		H						
ATOM	251	HE2	PHE	20	34.919	10.535	19.883	1.00
61.27		H						
ATOM	252	HZ	PHE	20	33.121	9.107	20.817	1.00
52.66		H						
ATOM	253	N	GLU	21	34.024	11.734	15.293	1.00
41.31		N						
ATOM	254	CA	GLU	21	35.296	11.634	14.600	1.00
56.16		C						
ATOM	255	C	GLU	21	35.545	10.205	14.109	1.00
58.61		C						
ATOM	256	O	GLU	21	36.238	9.998	13.113	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.390	12.109	15.568	1.00
57.37		C						
ATOM	258	CG	GLU	21	37.758	11.517	15.202	
1.00193.56			C					
ATOM	259	CD	GLU	21	38.857	12.218	15.994	
1.00304.62			C					
ATOM	260	OE1	GLU	21	38.595	12.592	17.126	
1.00451.81			O					
ATOM	261	OE2	GLU	21	39.942	12.368	15.458	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	34.020	11.815	16.269	1.00
50.82		H						
ATOM	263	HA	GLU	21	35.279	12.294	13.745	1.00
85.72		H						
ATOM	264	HB1	GLU	21	36.116	11.810	16.569	1.00
46.37		H						
ATOM	265	HB2	GLU	21	36.453	13.189	15.530	
1.00131.81			H					
ATOM	266	HG1	GLU	21	37.937	11.653	14.147	
1.00314.91			H					
ATOM	267	HG2	GLU	21	37.766	10.462	15.436	
1.00266.92			H					
ATOM	268	N	GLY	22	34.977	9.226	14.808	1.00
86.70		N						
ATOM	269	CA	GLY	22	35.144	7.820	14.428	
1.00104.66			C					
ATOM	270	C	GLY	22	36.188	7.131	15.301	1.00
71.50		C						
ATOM	271	O	GLY	22	36.279	5.903	15.314	1.00
89.87		O						

ATOM	272	HN	GLY	22	34.433	9.449	15.593	
1.00214.64								H
ATOM	273	HA1	GLY	22	35.455	7.756	13.394	
1.00152.47								H
ATOM	274	HA2	GLY	22	34.201	7.312	14.543	
1.00118.15								H
ATOM	275	N	ASP	23	36.965	7.917	16.038	1.00
44.68			N					
ATOM	276	CA	ASP	23	37.981	7.346	16.914	1.00
43.33			C					
ATOM	277	C	ASP	23	37.317	6.451	17.952	1.00
37.55			C					
ATOM	278	O	ASP	23	37.825	5.382	18.289	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.764	8.458	17.617	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.687	9.155	16.624	
1.00141.86								C
ATOM	281	OD1	ASP	23	39.854	8.636	15.533	
1.00328.18								O
ATOM	282	OD2	ASP	23	40.215	10.200	16.970	
1.00304.58								O1-
ATOM	283	HN	ASP	23	36.848	8.890	16.000	1.00
40.86			H					
ATOM	284	HA	ASP	23	38.664	6.754	16.323	1.00
72.12			H					
ATOM	285	HB1	ASP	23	39.354	8.032	18.414	1.00
94.15			H					
ATOM	286	HB2	ASP	23	38.070	9.177	18.028	1.00
93.26			H					
ATOM	287	N	MET	24	36.165	6.900	18.441	1.00
23.24			N					
ATOM	288	CA	MET	24	35.398	6.153	19.435	1.00
32.50			C					
ATOM	289	C	MET	24	33.917	6.201	19.080	1.00
25.13			C					
ATOM	290	O	MET	24	33.248	7.207	19.322	1.00
54.40			O					
ATOM	291	CB	MET	24	35.607	6.766	20.820	1.00
47.36			C					
ATOM	292	CG	MET	24	37.099	6.774	21.155	
1.00151.73								C
ATOM	293	SD	MET	24	37.347	7.508	22.792	
1.00209.23								S
ATOM	294	CE	MET	24	36.890	9.209	22.368	
1.00243.29								C
ATOM	295	HN	MET	24	35.816	7.758	18.119	1.00
17.32			H					
ATOM	296	HA	MET	24	35.724	5.121	19.452	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.078	6.181	21.557	
1.00124.40								H

ATOM	298	HB2	MET	24	35.230	7.778	20.825	
1.00166.96								H
ATOM	299	HG1	MET	24	37.633	7.351	20.414	
1.00331.71								H
ATOM	300	HG2	MET	24	37.471	5.761	21.156	
1.00302.30								H
ATOM	301	HE1	MET	24	35.821	9.332	22.472	
1.00340.44								H
ATOM	302	HE2	MET	24	37.176	9.421	21.350	
1.00373.88								H
ATOM	303	HE3	MET	24	37.403	9.893	23.030	
1.00386.81								H
ATOM	304	N	VAL	25	33.407	5.123	18.497	1.00
22.44			N					
ATOM	305	CA	VAL	25	32.003	5.083	18.112	1.00
15.37			C					
ATOM	306	C	VAL	25	31.107	5.027	19.340	1.00
17.47			C					
ATOM	307	O	VAL	25	31.476	4.461	20.370	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.715	3.885	17.211	1.00
23.36			C					
ATOM	309	CG1	VAL	25	30.223	3.881	16.853	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.551	3.996	15.932	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.982	4.350	18.319	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.775	5.985	17.563	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.965	2.972	17.733	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.657	3.497	17.687	
1.00171.07								H
ATOM	315	HG12	VAL	25	30.060	3.257	15.989	
1.00166.22								H
ATOM	316	HG13	VAL	25	29.900	4.892	16.635	
1.00134.76								H
ATOM	317	HG21	VAL	25	32.301	3.184	15.266	
1.00141.88								H
ATOM	318	HG22	VAL	25	33.600	3.944	16.183	
1.00184.50								H
ATOM	319	HG23	VAL	25	32.343	4.937	15.446	
1.00133.90								H
ATOM	320	N	THR	26	29.930	5.638	19.227	1.00
13.60			N					
ATOM	321	CA	THR	26	28.970	5.687	20.330	1.00
21.19			C					
ATOM	322	C	THR	26	27.600	5.161	19.905	1.00
16.55			C					
ATOM	323	O	THR	26	27.119	5.451	18.810	1.00
11.43			O					

ATOM	324	CB	THR	26	28.840	7.134	20.797	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.762	7.243	21.880	1.00
44.39			C					
ATOM	326	OG1	THR	26	30.088	7.564	21.324	1.00
34.75			O					
ATOM	327	HN	THR	26	29.705	6.081	18.382	1.00
10.81			H					
ATOM	328	HA	THR	26	29.332	5.089	21.155	1.00
33.16			H					
ATOM	329	HB	THR	26	28.574	7.756	19.953	1.00
20.60			H					
ATOM	330	HG1	THR	26	30.783	7.217	20.759	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.930	6.487	22.632	
1.00126.99			H					
ATOM	332	HG22	THR	26	26.789	7.102	21.438	
1.00108.32			H					
ATOM	333	HG23	THR	26	27.811	8.221	22.339	
1.00151.99			H					
ATOM	334	N	ARG	27	26.975	4.390	20.797	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.648	3.816	20.543	1.00
20.21			C					
ATOM	336	C	ARG	27	24.721	4.139	21.712	1.00
16.96			C					
ATOM	337	O	ARG	27	25.169	4.227	22.855	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.765	2.299	20.394	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.631	1.967	19.177	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.937	0.469	19.163	
1.00109.38			C					
ATOM	341	NE	ARG	27	27.768	0.131	18.015	
1.00227.73			N					
ATOM	342	CZ	ARG	27	28.317	-1.074	17.897	
1.00426.12			C					
ATOM	343	NH1	ARG	27	29.058	-1.356	16.860	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	28.117	-1.974	18.820	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.414	4.206	21.654	1.00
30.75			H					
ATOM	346	HA	ARG	27	25.234	4.233	19.634	1.00
23.13			H					
ATOM	347	HB1	ARG	27	24.782	1.873	20.259	1.00
87.46			H					
ATOM	348	HB2	ARG	27	26.218	1.883	21.283	
1.00103.36			H					
ATOM	349	HG1	ARG	27	27.556	2.521	19.231	
1.00281.97			H					

ATOM	350	HG2	ARG	27	26.101	2.237	18.274	
	1.00276							H
ATOM	351	HD1	ARG	27	26.009	-0.083	19.110	
	1.00183							H
ATOM	352	HD2	ARG	27	27.458	0.203	20.071	
	1.00142							H
ATOM	353	HE	ARG	27	27.926	0.803	17.319	
	1.00372							H
ATOM	354	HH11	ARG	27	29.213	-0.665	16.154	
	1.00910							H
ATOM	355	HH12	ARG	27	29.471	-2.261	16.772	
	1.00999							H
ATOM	356	HH21	ARG	27	27.550	-1.758	19.615	
	1.00532							H
ATOM	357	HH22	ARG	27	28.530	-2.881	18.731	
	1.00948							H
ATOM	358	N	SER	28	23.427	4.325	21.430	1.00
	14.60		N					
ATOM	359	CA	SER	28	22.461	4.647	22.487	1.00
	14.92		C					
ATOM	360	C	SER	28	21.194	3.809	22.351	1.00
	12.12		C					
ATOM	361	O	SER	28	20.778	3.461	21.244	1.00
	13.41		O					
ATOM	362	CB	SER	28	22.100	6.132	22.424	1.00
	23.26		C					
ATOM	363	OG	SER	28	23.264	6.908	22.679	
	1.00146							O
ATOM	364	HN	SER	28	23.116	4.250	20.502	1.00
	15.23		H					
ATOM	365	HA	SER	28	22.902	4.443	23.454	1.00
	15.44		H					
ATOM	366	HB1	SER	28	21.340	6.349	23.163	1.00
	88.73		H					
ATOM	367	HB2	SER	28	21.725	6.371	21.444	
	1.00124							H
ATOM	368	HG	SER	28	22.981	7.785	22.950	
	1.00242							H
ATOM	369	N	CYS	29	20.581	3.499	23.490	1.00
	10.48		N					
ATOM	370	CA	CYS	29	19.351	2.714	23.513	1.00
	9.97		C					
ATOM	371	C	CYS	29	18.837	2.626	24.950	1.00
	11.60		C					
ATOM	372	O	CYS	29	19.598	2.322	25.869	1.00
	15.64		O					
ATOM	373	CB	CYS	29	19.599	1.302	22.937	1.00
	9.52		C					
ATOM	374	SG	CYS	29	18.149	0.758	22.015	1.00
	10.40		S					
ATOM	375	HN	CYS	29	20.957	3.819	24.336	1.00
	11.10		H					

ATOM	376	HA	CYS	29	18.614	3.219	22.911	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.787	0.596	23.736	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.448	1.322	22.273	1.00
10.78			H					
ATOM	379	N	GLU	30	17.549	2.914	25.146	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.953	2.885	26.482	1.00
17.41			C					
ATOM	381	C	GLU	30	16.021	1.684	26.636	1.00
10.81			C					
ATOM	382	O	GLU	30	15.663	1.030	25.655	1.00
23.22			O					
ATOM	383	CB	GLU	30	16.175	4.190	26.718	1.00
37.83			C					
ATOM	384	CG	GLU	30	15.564	4.669	25.399	
1.00108.13			C					
ATOM	385	CD	GLU	30	14.714	3.561	24.790	
1.00240.52			C					
ATOM	386	OE1	GLU	30	15.258	2.777	24.030	
1.00422.56			O					
ATOM	387	OE2	GLU	30	13.533	3.512	25.092	
1.00410.81			O1-					
ATOM	388	HN	GLU	30	16.988	3.166	24.383	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.736	2.809	27.227	1.00
24.60			H					
ATOM	390	HB1	GLU	30	16.847	4.948	27.093	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.390	4.022	27.437	1.00
56.47			H					
ATOM	392	HG1	GLU	30	16.351	4.936	24.712	
1.00196.66			H					
ATOM	393	HG2	GLU	30	14.946	5.534	25.587	
1.00140.67			H					
ATOM	394	N	LYS	31	15.634	1.405	27.882	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.742	0.284	28.184	1.00
11.40			C					
ATOM	396	C	LYS	31	13.561	0.758	29.026	1.00
10.99			C					
ATOM	397	O	LYS	31	13.691	1.685	29.827	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.510	-0.797	28.947	1.00
21.40			C					
ATOM	399	CG	LYS	31	16.625	-1.351	28.058	1.00
57.81			C					
ATOM	400	CD	LYS	31	17.398	-2.429	28.818	
1.00115.52			C					
ATOM	401	CE	LYS	31	18.517	-2.975	27.930	
1.00250.23			C					

ATOM	402	NZ	LYS	31	19.279	-4.018	28.673	
1.00462.10				N1+				
ATOM	403	HN	LYS	31	15.957	1.967	28.617	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.364	-0.139	27.264	1.00
13.87			H					
ATOM	405	HB1	LYS	31	14.837	-1.596	29.216	1.00
37.63			H					
ATOM	406	HB2	LYS	31	15.939	-0.369	29.841	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.299	-0.552	27.786	
1.00126.32				H				
ATOM	408	HG2	LYS	31	16.194	-1.778	27.164	
1.00114.19				H				
ATOM	409	HD1	LYS	31	16.729	-3.233	29.084	
1.00198.45				H				
ATOM	410	HD2	LYS	31	17.824	-2.002	29.715	
1.00200.14				H				
ATOM	411	HE1	LYS	31	19.184	-2.170	27.656	
1.00374.64				H				
ATOM	412	HE2	LYS	31	18.090	-3.409	27.038	
1.00403.27				H				
ATOM	413	HZ1	LYS	31	19.229	-4.919	28.157	
1.00627.38				H				
ATOM	414	HZ2	LYS	31	18.866	-4.139	29.621	
1.00622.26				H				
ATOM	415	HZ3	LYS	31	20.272	-3.726	28.762	
1.00619.20				H				
ATOM	416	N	THR	32	12.411	0.118	28.840	1.00
15.51			N					
ATOM	417	CA	THR	32	11.206	0.481	29.586	1.00
22.44			C					
ATOM	418	C	THR	32	11.121	-0.315	30.885	1.00
26.60			C					
ATOM	419	O	THR	32	11.117	-1.545	30.871	1.00
57.43			O					
ATOM	420	CB	THR	32	9.967	0.201	28.735	1.00
56.28			C					
ATOM	421	CG2	THR	32	8.709	0.566	29.525	
1.00102.70				C				
ATOM	422	OG1	THR	32	10.024	0.979	27.547	
1.00111.17				O				
ATOM	423	HN	THR	32	12.367	-0.612	28.187	1.00
18.79			H					
ATOM	424	HA	THR	32	11.234	1.536	29.819	1.00
19.67			H					
ATOM	425	HB	THR	32	9.934	-0.847	28.480	1.00
84.25			H					
ATOM	426	HG1	THR	32	10.076	1.903	27.800	
1.00205.03				H				
ATOM	427	HG21	THR	32	8.572	-0.142	30.329	
1.00220.71				H				

ATOM	428	HG22	THR	32	7.852	0.538	28.870	
1.00174.67								H
ATOM	429	HG23	THR	32	8.819	1.559	29.935	
1.00217.44								H
ATOM	430	N	THR	33	11.048	0.397	32.008	1.00
22.47			N					
ATOM	431	CA	THR	33	10.954	-0.249	33.318	1.00
41.60			C					
ATOM	432	C	THR	33	10.131	0.580	34.263	1.00
38.03			C					
ATOM	433	O	THR	33	10.653	1.351	35.069	1.00
52.73			O					
ATOM	434	CB	THR	33	12.343	-0.475	33.908	1.00
63.25			C					
ATOM	435	CG2	THR	33	13.075	-1.549	33.102	
1.00121.65								C
ATOM	436	OG1	THR	33	13.080	0.739	33.868	1.00
96.20			O					
ATOM	437	HN	THR	33	11.050	1.375	31.956	1.00
23.82			H					
ATOM	438	HA	THR	33	10.457	-1.195	33.219	1.00
67.12			H					
ATOM	439	HB	THR	33	12.242	-0.804	34.929	
1.00107.59								H
ATOM	440	HG1	THR	33	12.484	1.438	33.590	
1.00176.27								H
ATOM	441	HG21	THR	33	13.276	-1.178	32.108	
1.00255.23								H
ATOM	442	HG22	THR	33	12.460	-2.435	33.040	
1.00245.37								H
ATOM	443	HG23	THR	33	14.008	-1.792	33.590	
1.00185.78								H
ATOM	444	N	GLY	34	8.830	0.389	34.169	1.00
40.93			N					
ATOM	445	CA	GLY	34	7.910	1.093	35.028	1.00
45.59			C					
ATOM	446	C	GLY	34	7.696	2.521	34.541	1.00
40.97			C					
ATOM	447	O	GLY	34	6.863	3.254	35.074	1.00
82.17			O					
ATOM	448	HN	GLY	34	8.487	-0.255	33.518	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.327	1.109	36.016	1.00
54.41			H					
ATOM	450	HA2	GLY	34	6.964	0.571	35.044	1.00
62.09			H					
ATOM	451	N	ASN	35	8.454	2.903	33.517	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.349	4.240	32.944	1.00
33.20			C					
ATOM	453	C	ASN	35	8.836	4.231	31.498	1.00
23.17			C					

ATOM	454	O	ASN	35	9.685	3.421	31.127	1.00
27.01			O					
ATOM	455	CB	ASN	35	9.186	5.231	33.755	1.00
54.51			C					
ATOM	456	CG	ASN	35	8.710	5.256	35.203	1.00
80.73			C					
ATOM	457	ND2	ASN	35	9.565	5.034	36.163	
1.00220.46								N
ATOM	458	OD1	ASN	35	7.528	5.483	35.467	
1.00117.80								O
ATOM	459	HN	ASN	35	9.095	2.268	33.134	1.00
51.15			H					
ATOM	460	HA	ASN	35	7.316	4.555	32.962	1.00
47.21			H					
ATOM	461	HB1	ASN	35	9.082	6.218	33.329	1.00
68.31			H					
ATOM	462	HB2	ASN	35	10.223	4.934	33.723	1.00
57.75			H					
ATOM	463	HD21	ASN	35	10.503	4.853	35.950	
1.00405.39								H
ATOM	464	HD22	ASN	35	9.267	5.047	37.097	
1.00245.64								H
ATOM	465	N	PHE	36	8.290	5.130	30.684	1.00
35.72			N					
ATOM	466	CA	PHE	36	8.663	5.221	29.282	1.00
33.41			C					
ATOM	467	C	PHE	36	9.649	6.361	29.052	1.00
28.51			C					
ATOM	468	O	PHE	36	9.530	7.430	29.653	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.405	5.457	28.458	1.00
67.53			C					
ATOM	470	CG	PHE	36	6.515	4.242	28.552	1.00
86.71			C					
ATOM	471	CD1	PHE	36	5.503	4.192	29.517	
1.00106.51								C
ATOM	472	CD2	PHE	36	6.702	3.166	27.677	1.00
99.48			C					
ATOM	473	CE1	PHE	36	4.676	3.066	29.606	
1.00134.48								C
ATOM	474	CE2	PHE	36	5.875	2.040	27.765	
1.00134.27								C
ATOM	475	CZ	PHE	36	4.860	1.990	28.730	
1.00149.48								C
ATOM	476	HN	PHE	36	7.614	5.745	31.028	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.117	4.292	28.962	1.00
28.53			H					
ATOM	478	HB1	PHE	36	7.675	5.628	27.437	1.00
73.56			H					
ATOM	479	HB2	PHE	36	6.880	6.319	28.844	1.00
88.42			H					

ATOM	480	HD1	PHE	36	5.361	5.022	30.195	
1.00110.20			H					
ATOM	481	HD2	PHE	36	7.486	3.204	26.934	1.00
93.07			H					
ATOM	482	HE1	PHE	36	3.895	3.028	30.351	
1.00155.06			H					
ATOM	483	HE2	PHE	36	6.018	1.210	27.089	
1.00159.46			H					
ATOM	484	HZ	PHE	36	4.223	1.122	28.798	
1.00183.25			H					
ATOM	485	N	THR	37	10.619	6.128	28.173	1.00
20.06			N					
ATOM	486	CA	THR	37	11.618	7.133	27.862	1.00
27.18			C					
ATOM	487	C	THR	37	12.299	6.794	26.541	1.00
41.87			C					
ATOM	488	O	THR	37	12.729	5.661	26.326	
1.00169.86			O					
ATOM	489	CB	THR	37	12.661	7.204	28.979	1.00
26.52			C					
ATOM	490	CG2	THR	37	13.420	5.880	29.057	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.570	8.261	28.708	1.00
81.95			O					
ATOM	492	HN	THR	37	10.659	5.263	27.720	1.00
18.47			H					
ATOM	493	HA	THR	37	11.135	8.094	27.771	1.00
38.80			H					
ATOM	494	HB	THR	37	12.167	7.387	29.921	1.00
81.60			H					
ATOM	495	HG1	THR	37	13.071	9.080	28.668	
1.00188.80			H					
ATOM	496	HG21	THR	37	12.722	5.059	29.001	
1.00196.98			H					
ATOM	497	HG22	THR	37	13.961	5.829	29.991	
1.00196.23			H					
ATOM	498	HG23	THR	37	14.118	5.817	28.236	
1.00168.92			H					
ATOM	499	N	GLU	38	12.378	7.781	25.663	1.00
26.53			N					
ATOM	500	CA	GLU	38	12.999	7.597	24.351	1.00
30.29			C					
ATOM	501	C	GLU	38	14.508	7.824	24.422	1.00
25.39			C					
ATOM	502	O	GLU	38	15.029	8.306	25.427	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.387	8.573	23.346	1.00
54.82			C					
ATOM	504	CG	GLU	38	10.934	8.183	23.074	
1.00165.84			C					
ATOM	505	CD	GLU	38	10.275	9.219	22.170	
1.00292.92			C					

ATOM	506	OE1	GLU	38	9.174	8.963	21.712	
1.00414	.19		O					
ATOM	507	OE2	GLU	38	10.881	10.254	21.950	
1.00537	.65		O1-					
ATOM	508	HN	GLU	38	12.004	8.651	25.898	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.814	6.588	24.010	1.00
32.15			H					
ATOM	510	HB1	GLU	38	12.945	8.538	22.422	
1.00144	.82		H					
ATOM	511	HB2	GLU	38	12.422	9.575	23.749	
1.00106	.49		H					
ATOM	512	HG1	GLU	38	10.396	8.130	24.009	
1.00303	.31		H					
ATOM	513	HG2	GLU	38	10.907	7.216	22.590	
1.00323	.99		H					
ATOM	514	N	CYS	39	15.201	7.475	23.340	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.649	7.644	23.272	1.00
14.30			C					
ATOM	516	C	CYS	39	17.014	9.118	23.477	1.00
22.31			C					
ATOM	517	O	CYS	39	16.213	10.001	23.166	1.00
32.92			O					
ATOM	518	CB	CYS	39	17.150	7.166	21.906	1.00
18.08			C					
ATOM	519	SG	CYS	39	16.028	7.758	20.614	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.727	7.101	22.569	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.106	7.045	24.042	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.180	6.087	21.890	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.141	7.555	21.724	1.00
34.91			H					
ATOM	524	N	PRO	40	18.187	9.412	23.993	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.617	10.820	24.233	1.00
47.66			C					
ATOM	526	C	PRO	40	19.024	11.524	22.941	1.00
71.54			C					
ATOM	527	O	PRO	40	19.752	10.967	22.119	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.808	10.664	25.186	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.407	9.346	24.819	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.233	8.453	24.401	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.832	11.371	24.725	1.00
58.04			H					

ATOM	532	HB1	PRO	40	19.471	10.645	26.212	1.00
67.93		H						
ATOM	533	HB2	PRO	40	20.524	11.466	25.039	1.00
70.99		H						
ATOM	534	HG1	PRO	40	20.914	8.912	25.669	1.00
65.91		H						
ATOM	535	HG2	PRO	40	21.099	9.471	23.995	1.00
54.99		H						
ATOM	536	HD1	PRO	40	18.892	7.858	25.233	1.00
24.22		H						
ATOM	537	HD2	PRO	40	19.516	7.823	23.572	1.00
26.94		H						
ATOM	538	N	GLY	41	18.553	12.753	22.778	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.875	13.536	21.589	
1.00147.55			C					
ATOM	540	C	GLY	41	20.368	13.829	21.519	
1.00161.74			C					
ATOM	541	O	GLY	41	20.970	13.795	20.447	
1.00244.37			O					
ATOM	542	HN	GLY	41	17.983	13.141	23.471	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.333	14.469	21.621	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.581	12.983	20.712	
1.00157.34			H					
ATOM	545	N	LEU	42	20.956	14.126	22.676	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.386	14.436	22.760	
1.00191.48			C					
ATOM	547	C	LEU	42	23.132	13.319	23.482	
1.00166.66			C					
ATOM	548	O	LEU	42	22.630	12.743	24.448	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.587	15.746	23.526	
1.00307.99			C					
ATOM	550	CG	LEU	42	21.784	16.871	22.861	
1.00452.28			C					
ATOM	551	CD1	LEU	42	21.937	18.152	23.686	
1.00681.24			C					
ATOM	552	CD2	LEU	42	22.301	17.115	21.433	
1.00527.46			C					
ATOM	553	HN	LEU	42	20.415	14.139	23.492	
1.00195.47			H					
ATOM	554	HA	LEU	42	22.798	14.543	21.767	
1.00229.77			H					
ATOM	555	HB1	LEU	42	23.635	16.005	23.521	
1.00342.49			H					
ATOM	556	HB2	LEU	42	22.254	15.621	24.546	
1.00335.33			H					
ATOM	557	HG	LEU	42	20.741	16.592	22.825	
1.00427.79			H					

ATOM	558	HD11	LEU	42	21.665	17.954	24.712
1.00909.71				H			
ATOM	559	HD12	LEU	42	21.291	18.918	23.284
1.00706.80				H			
ATOM	560	HD13	LEU	42	22.962	18.487	23.645
1.00858.82				H			
ATOM	561	HD21	LEU	42	21.854	16.398	20.761
1.00631.69				H			
ATOM	562	HD22	LEU	42	23.376	17.008	21.410
1.00628.06				H			
ATOM	563	HD23	LEU	42	22.035	18.113	21.115
1.00656.75				H			
ATOM	564	N	THR	43	24.338	13.026	23.010
1.00178.52				N			
ATOM	565	CA	THR	43	25.155	11.983	23.617
1.00240.84				C			
ATOM	566	C	THR	43	25.644	12.433	25.000
1.00372.31				C			
ATOM	567	O	THR	43	25.812	13.629	25.237
1.00500.13				O			
ATOM	568	CB	THR	43	26.346	11.681	22.703
1.00354.13				C			
ATOM	569	CG2	THR	43	25.859	10.941	21.457
1.00463.04				C			
ATOM	570	OG1	THR	43	26.964	12.902	22.319
1.00508.50				O			
ATOM	571	HN	THR	43	24.687	13.522	22.241
1.00229.59				H			
ATOM	572	HA	THR	43	24.557	11.092	23.717
1.00249.90				H			
ATOM	573	HB	THR	43	27.058	11.066	23.227
1.00481.58				H			
ATOM	574	HG1	THR	43	27.439	12.749	21.501
1.00624.31				H			
ATOM	575	HG21	THR	43	26.690	10.778	20.787
1.00650.95				H			
ATOM	576	HG22	THR	43	25.104	11.531	20.958
1.00580.73				H			
ATOM	577	HG23	THR	43	25.438	9.988	21.746
1.00571.99				H			
ATOM	578	N	PRO	44	25.863	11.517	25.923
1.00488.39				N			
ATOM	579	CA	PRO	44	26.324	11.863	27.303
1.00760.13				C			
ATOM	580	C	PRO	44	27.802	12.251	27.353
1.00735.36				C			
ATOM	581	O	PRO	44	28.275	12.781	28.359
1.00999.99				O			
ATOM	582	CB	PRO	44	26.061	10.574	28.093
1.00999.99				C			
ATOM	583	CG	PRO	44	26.224	9.485	27.086
1.00856.94				C			

ATOM	584	CD	PRO	44	25.706	10.055	25.761
1.00548.09				C			
ATOM	585	HA	PRO	44	25.719	12.660	27.706
1.00939.00				H			
ATOM	586	HB1	PRO	44	25.053	10.570	28.480
1.00999.99				H			
ATOM	587	HB2	PRO	44	26.777	10.466	28.898
1.00999.99				H			
ATOM	588	HG1	PRO	44	25.642	8.620	27.367
1.00999.99				H			
ATOM	589	HG2	PRO	44	27.271	9.216	26.998
1.00853.53				H			
ATOM	590	HD1	PRO	44	24.665	9.804	25.623
1.00602.45				H			
ATOM	591	HD2	PRO	44	26.301	9.693	24.937
1.00463.32				H			
ATOM	592	N	ILE	45	28.529	11.977	26.276
1.00518.33				N			
ATOM	593	CA	ILE	45	29.945	12.295	26.231
1.00582.79				C			
ATOM	594	C	ILE	45	30.179	13.764	26.571
1.00795.93				C			
ATOM	595	O	ILE	45	31.268	14.146	26.998
1.00898.75				O			
ATOM	596	CB	ILE	45	30.495	11.987	24.839
1.00474.41				C			
ATOM	597	CG1	ILE	45	29.768	12.836	23.794
1.00516.90				C			
ATOM	598	CG2	ILE	45	30.286	10.504	24.525
1.00760.75				C			
ATOM	599	CD1	ILE	45	30.333	12.537	22.405
1.00566.81				C			
ATOM	600	HN	ILE	45	28.111	11.548	25.502
1.00395.72				H			
ATOM	601	HA	ILE	45	30.460	11.682	26.951
1.00711.06				H			
ATOM	602	HB	ILE	45	31.547	12.210	24.818
1.00477.81				H			
ATOM	603	HG11	ILE	45	29.909	13.884	24.014
1.00624.28				H			
ATOM	604	HG12	ILE	45	28.717	12.604	23.815
1.00744.84				H			
ATOM	605	HG21	ILE	45	30.815	10.251	23.619
1.00920.57				H			
ATOM	606	HG22	ILE	45	29.232	10.310	24.394
1.00999.99				H			
ATOM	607	HG23	ILE	45	30.663	9.906	25.342
1.00865.46				H			
ATOM	608	HD11	ILE	45	29.950	13.258	21.698
1.00658.89				H			
ATOM	609	HD12	ILE	45	30.038	11.543	22.101
1.00734.30				H			

ATOM	610	HD13	ILE	45	31.411	12.599	22.433
1.00675.84			H				
ATOM	611	N	ALA	46	29.148	14.581	26.377
1.00999.99			N				
ATOM	612	CA	ALA	46	29.248	16.006	26.667
1.00999.99			C				
ATOM	613	C	ALA	46	29.791	16.232	28.074
1.00999.99			C				
ATOM	614	CB	ALA	46	27.874	16.662	26.538
1.00999.99			C				
ATOM	615	OT1	ALA	46	30.099	15.254	28.733
1.00999.99			O				
ATOM	616	OT2	ALA	46	29.886	17.382	28.474
1.00999.99			O				
ATOM	617	HN	ALA	46	28.305	14.217	26.034
1.00999.99			H				
ATOM	618	HA	ALA	46	29.919	16.462	25.953
1.00999.99			H				
ATOM	619	HB1	ALA	46	27.582	16.692	25.499
1.00999.99			H				
ATOM	620	HB2	ALA	46	27.916	17.668	26.930
1.00999.99			H				
ATOM	621	HB3	ALA	46	27.149	16.089	27.099
1.00999.99			H				
ENDMDL							
TER							
MODEL	10						
ATOM	1	N	GLY	1	27.510	-3.058	16.368
1.00999.99			N				
ATOM	2	CA	GLY	1	26.501	-2.714	17.410
1.00999.99			C				
ATOM	3	C	GLY	1	25.561	-1.641	16.875
1.00999.99			C				
ATOM	4	O	GLY	1	25.109	-0.770	17.619
1.00999.99			O				
ATOM	5	HA1	GLY	1	27.005	-2.340	18.289
1.00999.99			H				
ATOM	6	HA2	GLY	1	25.934	-3.597	17.666
1.00999.99			H				
ATOM	7	HT1	GLY	1	28.021	-3.919	16.650
1.00999.99			H				
ATOM	8	HT2	GLY	1	28.184	-2.273	16.263
1.00999.99			H				
ATOM	9	HT3	GLY	1	27.030	-3.226	15.462
1.00999.99			H				
ATOM	10	N	LEU	2	25.268	-1.710	15.580
1.00999.99			N				
ATOM	11	CA	LEU	2	24.377	-0.738	14.956
1.00895.59			C				
ATOM	12	C	LEU	2	22.926	-1.041	15.313
1.00532.27			C				
ATOM	13	O	LEU	2	22.542	-2.202	15.454

1.00625.21				O						
ATOM	14	CB	LEU		2	24.543	-0.778	13.434		
1.00999.99				C						
ATOM	15	CG	LEU		2	26.003	-0.497	13.054		
1.00999.99				C						
ATOM	16	CD1	LEU		2	26.158	-0.625	11.536		
1.00999.99				C						
ATOM	17	CD2	LEU		2	26.402	0.922	13.496		
1.00999.99				C						
ATOM	18	HN	LEU		2	25.657	-2.426	15.035		
1.00999.99				H						
ATOM	19	HA	LEU		2	24.626	0.250	15.311		
1.00890.87				H						
ATOM	20	HB1	LEU		2	23.909	-0.029	12.984		
1.00924.07				H						
ATOM	21	HB2	LEU		2	24.259	-1.753	13.068		
1.00999.99				H						
ATOM	22	HG	LEU		2	26.643	-1.221	13.540		
1.00999.99				H						
ATOM	23	HD11	LEU		2	25.531	0.105	11.046		
1.00999.99				H						
ATOM	24	HD12	LEU		2	25.863	-1.618	11.227		
1.00999.99				H						
ATOM	25	HD13	LEU		2	27.189	-0.456	11.264		
1.00999.99				H						
ATOM	26	HD21	LEU		2	26.704	0.905	14.533		
1.00999.99				H						
ATOM	27	HD22	LEU		2	25.563	1.593	13.377		
1.00999.99				H						
ATOM	28	HD23	LEU		2	27.228	1.274	12.893		
1.00999.99				H						
ATOM	29	N	CYS		3	22.123	0.008	15.460		
1.00271.28				N						
ATOM	30	CA	CYS		3	20.717	-0.163	15.802		
1.00104.50				C						
ATOM	31	C	CYS		3	19.988	-0.933	14.709	1.00	
90.98			C							
ATOM	32	O	CYS		3	19.152	-1.792	14.991		
1.00207.28				O						
ATOM	33	CB	CYS		3	20.048	1.201	15.992	1.00	
37.83			C							
ATOM	34	SG	CYS		3	20.654	1.969	17.516	1.00	
81.56			S							
ATOM	35	HN	CYS		3	22.482	0.912	15.336		
1.00296.55				H						
ATOM	36	HA	CYS		3	20.647	-0.713	16.723		
1.00166.45				H						
ATOM	37	HB1	CYS		3	18.979	1.071	16.056	1.00	
40.38			H							
ATOM	38	HB2	CYS		3	20.283	1.837	15.152	1.00	
98.45			H							
ATOM	39	N	SER		4	20.306	-0.617	13.460	1.00	

85.31			N						
ATOM	40	CA	SER	4	19.671	-1.280	12.323	1.00	
92.94			C						
ATOM	41	C	SER	4	18.260	-0.739	12.120	1.00	
67.37			C						
ATOM	42	O	SER	4	17.767	-0.659	10.995		
1.00102.28									O
ATOM	43	CB	SER	4	19.614	-2.796	12.559		
1.00123.83									C
ATOM	44	OG	SER	4	19.690	-3.467	11.308		
1.00178.89									O
ATOM	45	HN	SER	4	20.977	0.077	13.300		
1.00163.03									H
ATOM	46	HA	SER	4	20.253	-1.086	11.435		
1.00129.78									H
ATOM	47	HB1	SER	4	18.687	-3.056	13.065		
1.00105.26									H
ATOM	48	HB2	SER	4	20.447	-3.097	13.172		
1.00156.87									H
ATOM	49	HG	SER	4	18.823	-3.832	11.115		
1.00218.16									H
ATOM	50	N	GLU	5	17.616	-0.381	13.226	1.00	
41.67			N						
ATOM	51	CA	GLU	5	16.256	0.138	13.182	1.00	
41.21			C						
ATOM	52	C	GLU	5	15.992	1.042	14.383	1.00	
41.92			C						
ATOM	53	O	GLU	5	16.724	1.004	15.372	1.00	
74.72			O						
ATOM	54	CB	GLU	5	15.266	-1.023	13.172	1.00	
49.24			C						
ATOM	55	CG	GLU	5	15.489	-1.874	14.414	1.00	
55.48			C						
ATOM	56	CD	GLU	5	14.697	-3.173	14.309	1.00	
92.06			C						
ATOM	57	OE1	GLU	5	14.024	-3.355	13.309		
1.00206.49									O
ATOM	58	OE2	GLU	5	14.776	-3.968	15.233		
1.00197.24									O1-
ATOM	59	HN	GLU	5	18.063	-0.480	14.092	1.00	
45.52			H						
ATOM	60	HA	GLU	5	16.127	0.707	12.283	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	15.424	-1.626	12.291	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	14.260	-0.640	13.172	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	15.166	-1.327	15.286	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	16.539	-2.096	14.498	1.00	
57.77			H						
ATOM	65	N	ASN	6	14.950	1.859	14.288	1.00	

50.73			N						
ATOM	66	CA	ASN	6	14.608	2.776	15.371	1.00	
71.04			C						
ATOM	67	C	ASN	6	14.279	2.014	16.651	1.00	
65.17			C						
ATOM	68	O	ASN	6	14.663	2.428	17.746	1.00	
94.86			O						
ATOM	69	CB	ASN	6	13.409	3.635	14.966	1.00	
94.83			C						
ATOM	70	CG	ASN	6	13.823	4.641	13.897		
1.00160.94									C
ATOM	71	ND2	ASN	6	12.914	5.176	13.130		
1.00244.88									N
ATOM	72	OD1	ASN	6	15.008	4.945	13.758		
1.00219.73									O
ATOM	73	HN	ASN	6	14.405	1.852	13.473	1.00	
72.81			H						
ATOM	74	HA	ASN	6	15.450	3.425	15.558	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	13.038	4.164	15.831		
1.00111.09									H
ATOM	76	HB2	ASN	6	12.630	2.997	14.575	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	11.973	4.931	13.242		
1.00272.43									H
ATOM	78	HD22	ASN	6	13.172	5.823	12.441		
1.00336.78									H
ATOM	79	N	GLY	7	13.561	0.901	16.509	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.177	0.081	17.663	1.00	
71.47			C						
ATOM	81	C	GLY	7	14.029	-1.177	17.745	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.509	-2.285	17.879	1.00	
44.54			O						
ATOM	83	HN	GLY	7	13.282	0.623	15.611	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.146	-0.205	17.560		
1.00103.52									H
ATOM	85	HA2	GLY	7	13.296	0.652	18.574		
1.00108.67									H
ATOM	86	N	ASP	8	15.339	-1.001	17.661	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.255	-2.134	17.721	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.122	-2.859	19.052	1.00	
9.37			C						
ATOM	89	O	ASP	8	15.970	-4.081	19.094	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.695	-1.653	17.549	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.619	-2.849	17.337	1.00	

21.22			C						
ATOM	92	OD1	ASP	8	19.799	-2.717	17.615		
1.00119.56								O	
ATOM	93	OD2	ASP	8	18.131	-3.877	16.900		
1.00133.27								O1-	
ATOM	94	HN	ASP	8	15.693	-0.095	17.550	1.00	
35.63			H						
ATOM	95	HA	ASP	8	16.018	-2.817	16.926	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	18.003	-1.117	18.433	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.754	-0.995	16.694	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.174	-2.099	20.136	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.051	-2.679	21.465	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.666	-3.285	21.646	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.511	-4.371	22.203	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.284	-1.610	22.524	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.020	-1.140	22.488	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.292	-1.133	20.036	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.800	-3.444	21.584	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.040	-2.005	23.495	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.671	-0.747	22.314	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.665	-2.562	21.158	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.279	-3.006	21.244	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.387	-2.086	20.414	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.819	-1.018	19.980		
1.00119.04								O	
ATOM	112	CB	ALA	10	11.814	-3.013	22.705	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.864	-1.708	20.722	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.209	-4.010	20.851	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	12.621	-3.350	23.338	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	10.972	-3.681	22.811		
1.00118.20								H	
ATOM	117	HB3	ALA	10	11.521	-2.017	22.998		

1.00117.32				H					
ATOM	118	N	ALA		11	10.148	-2.503	20.192	1.00
30.62			N						
ATOM	119	CA	ALA		11	9.216	-1.702	19.404	1.00
35.24			C						
ATOM	120	C	ALA		11	8.969	-0.345	20.061	1.00
22.78			C						
ATOM	121	O	ALA		11	8.908	0.680	19.380	1.00
53.33			O						
ATOM	122	CB	ALA		11	7.888	-2.446	19.255	1.00
60.49			C						
ATOM	123	HN	ALA		11	9.854	-3.364	20.557	1.00
50.37			H						
ATOM	124	HA	ALA		11	9.636	-1.543	18.423	1.00
41.70			H						
ATOM	125	HB1	ALA		11	7.408	-2.521	20.220	
1.00157.06				H					
ATOM	126	HB2	ALA		11	8.072	-3.436	18.865	
1.00148.83				H					
ATOM	127	HB3	ALA		11	7.246	-1.905	18.575	
1.00137.06				H					
ATOM	128	N	ASP		12	8.820	-0.341	21.383	1.00
18.98			N						
ATOM	129	CA	ASP		12	8.570	0.898	22.118	1.00
31.05			C						
ATOM	130	C	ASP		12	9.875	1.624	22.439	1.00
22.98			C						
ATOM	131	O	ASP		12	9.908	2.853	22.524	1.00
37.14			O						
ATOM	132	CB	ASP		12	7.827	0.590	23.418	1.00
48.35			C						
ATOM	133	CG	ASP		12	6.409	0.120	23.111	
1.00104.83				C					
ATOM	134	OD1	ASP		12	5.974	0.313	21.987	
1.00258.73				O					
ATOM	135	OD2	ASP		12	5.779	-0.425	24.002	
1.00213.46				O1-					
ATOM	136	HN	ASP		12	8.873	-1.188	21.874	1.00
36.19			H						
ATOM	137	HA	ASP		12	7.951	1.548	21.514	1.00
49.76			H						
ATOM	138	HB1	ASP		12	7.783	1.482	24.027	1.00
95.71			H						
ATOM	139	HB2	ASP		12	8.353	-0.185	23.956	1.00
54.37			H						
ATOM	140	N	GLU		13	10.944	0.859	22.625	1.00
17.60			N						
ATOM	141	CA	GLU		13	12.244	1.441	22.946	1.00
12.01			C						
ATOM	142	C	GLU		13	12.871	2.090	21.716	1.00
10.07			C						
ATOM	143	O	GLU		13	12.510	1.771	20.582	1.00

12.81			O					
ATOM	144	CB	GLU	13	13.171	0.355	23.497	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.598	-0.170	24.816	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.349	-1.422	25.255	
1.00142.36			C					
ATOM	147	OE1	GLU	13	14.566	-1.409	25.197	
1.00339.06			O					
ATOM	148	OE2	GLU	13	12.695	-2.374	25.644	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.858	-0.114	22.551	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.108	2.196	23.705	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.151	0.775	23.673	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.246	-0.452	22.784	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.553	-0.406	24.684	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.699	0.591	25.576	1.00
56.23			H					
ATOM	155	N	CYS	14	13.806	3.013	21.948	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.485	3.723	20.858	1.00
10.69			C					
ATOM	157	C	CYS	14	15.956	3.337	20.802	1.00
9.56			C					
ATOM	158	O	CYS	14	16.588	3.127	21.833	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.370	5.231	21.071	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.335	6.094	19.803	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.050	3.226	22.876	1.00
9.76			H					
ATOM	162	HA	CYS	14	14.022	3.469	19.914	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.750	5.485	22.048	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.334	5.528	20.999	1.00
46.13			H					
ATOM	165	N	CYS	15	16.496	3.258	19.588	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.903	2.906	19.389	1.00
9.28			C					
ATOM	167	C	CYS	15	18.495	3.802	18.313	1.00
9.92			C					
ATOM	168	O	CYS	15	17.935	3.927	17.223	1.00
13.31			O					
ATOM	169	CB	CYS	15	18.023	1.441	18.960	1.00

12.90			C						
ATOM	170	SG	CYS	15	19.761	0.926	18.999	1.00	
39.11			S						
ATOM	171	HN	CYS	15	15.940	3.449	18.803	1.00	
13.12			H						
ATOM	172	HA	CYS	15	18.451	3.052	20.312	1.00	
8.26			H						
ATOM	173	HB1	CYS	15	17.636	1.329	17.958	1.00	
24.82			H						
ATOM	174	HB2	CYS	15	17.451	0.822	19.636	1.00	
27.31			H						
ATOM	175	N	VAL	16	19.624	4.434	18.619	1.00	
9.56			N						
ATOM	176	CA	VAL	16	20.270	5.327	17.661	1.00	
11.99			C						
ATOM	177	C	VAL	16	21.788	5.209	17.758	1.00	
7.73			C						
ATOM	178	O	VAL	16	22.354	5.221	18.851	1.00	
8.83			O						
ATOM	179	CB	VAL	16	19.837	6.768	17.940	1.00	
18.37			C						
ATOM	180	CG1	VAL	16	20.462	7.260	19.248	1.00	
39.61			C						
ATOM	181	CG2	VAL	16	20.282	7.665	16.786		
1.00115.21									C
ATOM	182	HN	VAL	16	20.025	4.303	19.504	1.00	
9.76			H						
ATOM	183	HA	VAL	16	19.967	5.061	16.658	1.00	
17.27			H						
ATOM	184	HB	VAL	16	18.760	6.804	18.026	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	19.986	8.179	19.552		
1.00128.07									H
ATOM	186	HG12	VAL	16	21.518	7.432	19.101		
1.00154.13									H
ATOM	187	HG13	VAL	16	20.323	6.512	20.017		
1.00135.74									H
ATOM	188	HG21	VAL	16	20.135	8.700	17.058		
1.00229.05									H
ATOM	189	HG22	VAL	16	19.695	7.436	15.909		
1.00261.82									H
ATOM	190	HG23	VAL	16	21.327	7.491	16.578		
1.00210.07									H
ATOM	191	N	ASP	17	22.439	5.088	16.604	1.00	
14.34			N						
ATOM	192	CA	ASP	17	23.894	4.959	16.559	1.00	
11.90			C						
ATOM	193	C	ASP	17	24.555	6.326	16.401	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.302	7.041	15.432	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.299	4.071	15.380	1.00	

20.80			C						
ATOM	196	CG	ASP	17	23.695	2.681	15.542	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	23.574	2.236	16.671		
1.00135.42			O						
ATOM	198	OD2	ASP	17	23.361	2.083	14.532		
1.00114.17			O1-						
ATOM	199	HN	ASP	17	21.931	5.079	15.766	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.244	4.503	17.473	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.375	3.991	15.345	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	23.941	4.513	14.461	1.00	
29.52			H						
ATOM	203	N	THR	18	25.418	6.671	17.354	1.00	
11.55			N						
ATOM	204	CA	THR	18	26.138	7.945	17.316	1.00	
17.10			C						
ATOM	205	C	THR	18	27.558	7.724	16.816	1.00	
10.63			C						
ATOM	206	O	THR	18	28.046	6.596	16.794	1.00	
6.49			O						
ATOM	207	CB	THR	18	26.185	8.572	18.711	1.00	
28.52			C						
ATOM	208	CG2	THR	18	24.817	9.150	19.067	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.547	7.582	19.659	1.00	
26.49			O						
ATOM	210	HN	THR	18	25.587	6.050	18.094	1.00	
13.96			H						
ATOM	211	HA	THR	18	25.633	8.626	16.644	1.00	
26.43			H						
ATOM	212	HB	THR	18	26.918	9.366	18.726	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.997	7.697	20.435	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.046	8.445	18.801		
1.00100.44			H						
ATOM	215	HG22	THR	18	24.668	10.073	18.526		
1.00129.42			H						
ATOM	216	HG23	THR	18	24.777	9.347	20.128		
1.00156.21			H						
ATOM	217	N	VAL	19	28.215	8.815	16.435	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.575	8.766	15.950	1.00	
13.34			C						
ATOM	219	C	VAL	19	29.993	10.157	15.519	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.389	10.780	14.646	1.00	
42.11			O						
ATOM	221	CB	VAL	19	29.731	7.782	14.792	1.00	

15.48			C					
ATOM	222	CG1	VAL	19	28.636	8.021	13.747	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.110	7.981	14.147	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.781	9.685	16.497	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.218	8.450	16.760	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.655	6.776	15.173	1.00
11.49			H					
ATOM	227	HG11	VAL	19	27.670	8.028	14.228	
1.00137.43				H				
ATOM	228	HG12	VAL	19	28.665	7.233	13.010	1.00
93.29			H					
ATOM	229	HG13	VAL	19	28.804	8.972	13.261	
1.00108.69				H				
ATOM	230	HG21	VAL	19	31.854	8.099	14.923	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.094	8.871	13.533	
1.00111.36				H				
ATOM	232	HG23	VAL	19	31.353	7.124	13.538	1.00
77.11			H					
ATOM	233	N	PHE	20	31.019	10.626	16.178	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.566	11.951	15.945	1.00
40.34			C					
ATOM	235	C	PHE	20	32.738	11.908	14.968	1.00
40.37			C					
ATOM	236	O	PHE	20	32.560	11.972	13.751	1.00
66.02			O					
ATOM	237	CB	PHE	20	32.023	12.548	17.297	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.420	11.448	18.272	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.452	10.563	18.791	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.755	11.321	18.678	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.827	9.568	19.694	1.00
30.41			C					
ATOM	242	CE2	PHE	20	34.126	10.322	19.584	1.00
45.84			C					
ATOM	243	CZ	PHE	20	33.163	9.444	20.091	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.409	10.065	16.867	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.795	12.588	15.530	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.222	13.103	17.718	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.862	13.213	17.145	1.00

58.17			H					
ATOM	248	HD1	PHE	20	30.415	10.642	18.484	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.498	11.998	18.293	1.00
49.35			H					
ATOM	250	HE1	PHE	20	31.084	8.893	20.088	1.00
30.61			H					
ATOM	251	HE2	PHE	20	35.157	10.226	19.890	1.00
61.27			H					
ATOM	252	HZ	PHE	20	33.450	8.674	20.791	1.00
52.66			H					
ATOM	253	N	GLU	21	33.931	11.832	15.526	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.155	11.816	14.740	1.00
56.16			C					
ATOM	255	C	GLU	21	35.398	10.436	14.122	1.00
58.61			C					
ATOM	256	O	GLU	21	36.127	10.314	13.137	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.308	12.241	15.666	1.00
57.37			C					
ATOM	258	CG	GLU	21	37.656	11.687	15.179	
1.00193.56			C					
ATOM	259	CD	GLU	21	38.796	12.342	15.950	
1.00304.62			C					
ATOM	260	OE1	GLU	21	39.846	12.543	15.362	
1.00451.81			O					
ATOM	261	OE2	GLU	21	38.602	12.636	17.119	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.993	11.805	16.504	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.065	12.540	13.944	1.00
85.72			H					
ATOM	264	HB1	GLU	21	36.102	11.875	16.660	1.00
46.37			H					
ATOM	265	HB2	GLU	21	36.362	13.322	15.693	
1.00131.81			H					
ATOM	266	HG1	GLU	21	37.770	11.896	14.126	
1.00314.91			H					
ATOM	267	HG2	GLU	21	37.686	10.619	15.340	
1.00266.92			H					
ATOM	268	N	GLY	22	34.787	9.405	14.697	1.00
86.70			N					
ATOM	269	CA	GLY	22	34.951	8.044	14.183	
1.00104.66			C					
ATOM	270	C	GLY	22	36.060	7.302	14.923	1.00
71.50			C					
ATOM	271	O	GLY	22	36.233	6.097	14.745	1.00
89.87			O					
ATOM	272	HN	GLY	22	34.217	9.559	15.479	
1.00214.64			H					
ATOM	273	HA1	GLY	22	35.194	8.080	13.130	

1.00152.47				H					
ATOM	274	HA2	GLY		22	34.024	7.506	14.311	
1.00118.15				H					
ATOM	275	N	ASP		23	36.803	8.021	15.759	1.00
44.68			N						
ATOM	276	CA	ASP		23	37.877	7.396	16.522	1.00
43.33			C						
ATOM	277	C	ASP		23	37.298	6.293	17.396	1.00
37.55			C						
ATOM	278	O	ASP		23	37.853	5.198	17.494	1.00
61.37			O						
ATOM	279	CB	ASP		23	38.580	8.437	17.397	1.00
40.74			C						
ATOM	280	CG	ASP		23	39.759	7.796	18.121	
1.00141.86				C					
ATOM	281	OD1	ASP		23	39.896	6.587	18.035	
1.00328.18				O					
ATOM	282	OD2	ASP		23	40.507	8.525	18.753	
1.00304.58				O1-					
ATOM	283	HN	ASP		23	36.619	8.977	15.873	1.00
40.86			H						
ATOM	284	HA	ASP		23	38.593	6.967	15.838	1.00
72.12			H						
ATOM	285	HB1	ASP		23	37.881	8.824	18.123	1.00
94.15			H						
ATOM	286	HB2	ASP		23	38.936	9.245	16.775	1.00
93.26			H						
ATOM	287	N	MET		24	36.160	6.594	18.011	1.00
23.24			N						
ATOM	288	CA	MET		24	35.459	5.641	18.868	1.00
32.50			C						
ATOM	289	C	MET		24	33.958	5.790	18.656	1.00
25.13			C						
ATOM	290	O	MET		24	33.372	6.809	19.021	1.00
54.40			O						
ATOM	291	CB	MET		24	35.805	5.901	20.337	1.00
47.36			C						
ATOM	292	CG	MET		24	35.075	4.889	21.224	
1.00151.73				C					
ATOM	293	SD	MET		24	35.610	5.091	22.943	
1.00209.23				S					
ATOM	294	CE	MET		24	34.818	6.689	23.258	
1.00243.29				C					
ATOM	295	HN	MET		24	35.769	7.481	17.872	1.00
17.32			H						
ATOM	296	HA	MET		24	35.755	4.633	18.607	1.00
48.94			H						
ATOM	297	HB1	MET		24	35.496	6.900	20.607	
1.00124.40				H					
ATOM	298	HB2	MET		24	36.870	5.804	20.480	
1.00166.96				H					
ATOM	299	HG1	MET		24	35.306	3.887	20.891	

1.00331.71				H						
ATOM	300	HG2	MET		24	34.009	5.051	21.156		
1.00302.30				H						
ATOM	301	HE1	MET		24	35.443	7.482	22.875		
1.00340.44				H						
ATOM	302	HE2	MET		24	34.686	6.823	24.321		
1.00373.88				H						
ATOM	303	HE3	MET		24	33.852	6.716	22.773		
1.00386.81				H						
ATOM	304	N	VAL		25	33.339	4.780	18.053	1.00	
22.44			N							
ATOM	305	CA	VAL		25	31.907	4.840	17.792	1.00	
15.37			C							
ATOM	306	C	VAL		25	31.111	4.743	19.084	1.00	
17.47			C							
ATOM	307	O	VAL		25	31.548	4.129	20.057	1.00	
29.52			O							
ATOM	308	CB	VAL		25	31.476	3.725	16.843	1.00	
23.36			C							
ATOM	309	CG1	VAL		25	29.962	3.826	16.614	1.00	
58.39			C							
ATOM	310	CG2	VAL		25	32.211	3.878	15.508	1.00	
55.25			C							
ATOM	311	HN	VAL		25	33.852	3.995	17.771	1.00	
48.11			H							
ATOM	312	HA	VAL		25	31.685	5.789	17.325	1.00	
9.25			H							
ATOM	313	HB	VAL		25	31.711	2.766	17.282	1.00	
52.45			H							
ATOM	314	HG11	VAL		25	29.443	3.412	17.464		
1.00171.07				H						
ATOM	315	HG12	VAL		25	29.691	3.277	15.724		
1.00166.22				H						
ATOM	316	HG13	VAL		25	29.682	4.866	16.494		
1.00134.76				H						
ATOM	317	HG21	VAL		25	31.880	4.781	15.016		
1.00141.88				H						
ATOM	318	HG22	VAL		25	31.997	3.027	14.880		
1.00184.50				H						
ATOM	319	HG23	VAL		25	33.275	3.935	15.687		
1.00133.90				H						
ATOM	320	N	THR		26	29.941	5.375	19.084	1.00	
13.60			N							
ATOM	321	CA	THR		26	29.068	5.393	20.255	1.00	
21.19			C							
ATOM	322	C	THR		26	27.627	5.067	19.870	1.00	
16.55			C							
ATOM	323	O	THR		26	27.154	5.457	18.802	1.00	
11.43			O							
ATOM	324	CB	THR		26	29.131	6.779	20.889	1.00	
27.07			C							
ATOM	325	CG2	THR		26	28.185	6.852	22.093	1.00	

44.39									
ATOM	326	OG1	THR	26	30.461	7.029	21.321	1.00	
34.75			O						
ATOM	327	HN	THR	26	29.662	5.857	18.277	1.00	
10.81			H						
ATOM	328	HA	THR	26	29.410	4.665	20.977	1.00	
33.16			H						
ATOM	329	HB	THR	26	28.844	7.518	20.151	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.433	7.249	22.254	1.00	
77.72			H						
ATOM	331	HG21	THR	26	28.333	7.789	22.607		
1.00126.99									H
ATOM	332	HG22	THR	26	28.397	6.035	22.766		
1.00108.32									H
ATOM	333	HG23	THR	26	27.161	6.786	21.758		
1.00151.99									H
ATOM	334	N	ARG	27	26.934	4.348	20.756	1.00	
22.38			N						
ATOM	335	CA	ARG	27	25.537	3.966	20.523	1.00	
20.21			C						
ATOM	336	C	ARG	27	24.697	4.270	21.759	1.00	
16.96			C						
ATOM	337	O	ARG	27	25.236	4.488	22.844	1.00	
20.06			O						
ATOM	338	CB	ARG	27	25.456	2.470	20.194	1.00	
22.14			C						
ATOM	339	CG	ARG	27	25.939	1.647	21.391		
1.00124.30									C
ATOM	340	CD	ARG	27	25.972	0.166	21.011		
1.00109.38									C
ATOM	341	NE	ARG	27	26.411	-0.637	22.146		
1.00227.73									N
ATOM	342	CZ	ARG	27	26.557	-1.953	22.041		
1.00426.12									C
ATOM	343	NH1	ARG	27	26.953	-2.651	23.071		
1.00767.09									N1+
ATOM	344	NH2	ARG	27	26.308	-2.549	20.908		
1.00581.78									N
ATOM	345	HN	ARG	27	27.370	4.072	21.589	1.00	
30.75			H						
ATOM	346	HA	ARG	27	25.142	4.528	19.687	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	26.079	2.257	19.338	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	24.432	2.209	19.967		
1.00103.36									H
ATOM	349	HG1	ARG	27	25.265	1.787	22.223		
1.00281.97									H
ATOM	350	HG2	ARG	27	26.930	1.970	21.674		
1.00276.19									H
ATOM	351	HD1	ARG	27	26.652	0.025	20.185		

1.00183.60				H						
ATOM	352	HD2	ARG		27	24.982	-0.148	20.715		
1.00142.93				H						
ATOM	353	HE	ARG		27	26.601	-0.198	23.002		
1.00372.53				H						
ATOM	354	HH11	ARG		27	27.144	-2.194	23.939		
1.00910.59				H						
ATOM	355	HH12	ARG		27	27.062	-3.641	22.990		
1.00999.99				H						
ATOM	356	HH21	ARG		27	26.005	-2.015	20.118		
1.00532.54				H						
ATOM	357	HH22	ARG		27	26.418	-3.540	20.827		
1.00948.84				H						
ATOM	358	N	SER		28	23.374	4.292	21.594	1.00	
14.60			N							
ATOM	359	CA	SER		28	22.476	4.583	22.712	1.00	
14.92			C							
ATOM	360	C	SER		28	21.149	3.847	22.556	1.00	
12.12			C							
ATOM	361	O	SER		28	20.696	3.586	21.441	1.00	
13.41			O							
ATOM	362	CB	SER		28	22.216	6.087	22.793	1.00	
23.26			C							
ATOM	363	OG	SER		28	21.359	6.356	23.894		
1.00146.32				O						
ATOM	364	HN	SER		28	22.995	4.117	20.706	1.00	
15.23			H							
ATOM	365	HA	SER		28	22.941	4.263	23.634	1.00	
15.44			H							
ATOM	366	HB1	SER		28	21.755	6.422	21.874	1.00	
88.73			H							
ATOM	367	HB2	SER		28	23.149	6.609	22.934		
1.00124.68				H						
ATOM	368	HG	SER		28	21.830	6.929	24.504		
1.00242.47				H						
ATOM	369	N	CYS		29	20.530	3.524	23.687	1.00	
10.48			N							
ATOM	370	CA	CYS		29	19.251	2.823	23.688	1.00	
9.97			C							
ATOM	371	C	CYS		29	18.687	2.803	25.108	1.00	
11.60			C							
ATOM	372	O	CYS		29	19.415	2.540	26.064	1.00	
15.64			O							
ATOM	373	CB	CYS		29	19.438	1.389	23.157	1.00	
9.52			C							
ATOM	374	SG	CYS		29	17.959	0.860	22.282	1.00	
10.40			S							
ATOM	375	HN	CYS		29	20.939	3.767	24.543	1.00	
11.10			H							
ATOM	376	HA	CYS		29	18.564	3.351	23.045	1.00	
11.08			H							
ATOM	377	HB1	CYS		29	19.620	0.705	23.976	1.00	

9.33			H					
ATOM	378	HB2	CYS	29	20.276	1.359	22.480	1.00
10.78			H					
ATOM	379	N	GLU	30	17.393	3.100	25.247	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.753	3.130	26.569	1.00
17.41			C					
ATOM	381	C	GLU	30	15.733	2.007	26.717	1.00
10.81			C					
ATOM	382	O	GLU	30	14.933	1.754	25.815	1.00
23.22			O					
ATOM	383	CB	GLU	30	16.055	4.477	26.768	1.00
37.83			C					
ATOM	384	CG	GLU	30	17.091	5.599	26.690	
1.00108.13				C				
ATOM	385	CD	GLU	30	17.997	5.561	27.916	
1.00240.52				C				
ATOM	386	OE1	GLU	30	19.033	6.203	27.883	
1.00422.56				O				
ATOM	387	OE2	GLU	30	17.640	4.892	28.871	
1.00410.81				O1-				
ATOM	388	HN	GLU	30	16.859	3.314	24.451	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.504	3.016	27.339	1.00
24.60			H					
ATOM	390	HB1	GLU	30	15.581	4.495	27.738	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.312	4.615	25.998	1.00
56.47			H					
ATOM	392	HG1	GLU	30	16.585	6.552	26.646	
1.00196.66				H				
ATOM	393	HG2	GLU	30	17.690	5.470	25.800	
1.00140.67				H				
ATOM	394	N	LYS	31	15.765	1.342	27.870	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.838	0.251	28.152	1.00
11.40			C					
ATOM	396	C	LYS	31	13.563	0.794	28.781	1.00
10.99			C					
ATOM	397	O	LYS	31	13.600	1.760	29.545	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.490	-0.755	29.102	1.00
21.40			C					
ATOM	399	CG	LYS	31	16.696	-1.398	28.417	1.00
57.81			C					
ATOM	400	CD	LYS	31	17.348	-2.404	29.369	
1.00115.52				C				
ATOM	401	CE	LYS	31	18.557	-3.044	28.684	
1.00250.23				C				
ATOM	402	NZ	LYS	31	19.197	-4.016	29.615	
1.00462.10				N1+				
ATOM	403	HN	LYS	31	16.423	1.599	28.551	1.00

26.13			H						
ATOM	404	HA	LYS	31	14.589	-0.253	27.230	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	14.774	-1.520	29.362	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	15.813	-0.244	29.998	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	17.413	-0.634	28.158		
1.00126.32									H
ATOM	408	HG2	LYS	31	16.372	-1.906	27.521		
1.00114.19									H
ATOM	409	HD1	LYS	31	16.634	-3.172	29.625		
1.00198.45									H
ATOM	410	HD2	LYS	31	17.669	-1.895	30.265		
1.00200.14									H
ATOM	411	HE1	LYS	31	19.269	-2.276	28.420		
1.00374.64									H
ATOM	412	HE2	LYS	31	18.233	-3.559	27.791		
1.00403.27									H
ATOM	413	HZ1	LYS	31	19.400	-4.900	29.106		
1.00627.38									H
ATOM	414	HZ2	LYS	31	18.553	-4.211	30.407		
1.00622.26									H
ATOM	415	HZ3	LYS	31	20.084	-3.616	29.977		
1.00619.20									H
ATOM	416	N	THR	32	12.430	0.175	28.458	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.144	0.612	29.001	1.00	
22.44			C						
ATOM	418	C	THR	32	10.797	-0.176	30.259	1.00	
26.60			C						
ATOM	419	O	THR	32	10.361	-1.326	30.185	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.045	0.415	27.955	1.00	
56.28			C						
ATOM	421	CG2	THR	32	8.704	0.868	28.531		
1.00102.70									C
ATOM	422	OG1	THR	32	10.351	1.182	26.799		
1.00111.17									O
ATOM	423	HN	THR	32	12.457	-0.589	27.843	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.198	1.663	29.251	1.00	
19.67			H						
ATOM	425	HB	THR	32	9.982	-0.629	27.688	1.00	
84.25			H						
ATOM	426	HG1	THR	32	10.233	2.110	27.019		
1.00205.03									H
ATOM	427	HG21	THR	32	8.816	1.841	28.987		
1.00220.71									H
ATOM	428	HG22	THR	32	8.372	0.158	29.275		
1.00174.67									H
ATOM	429	HG23	THR	32	7.971	0.925	27.738		

1.00217.44				H					
ATOM	430	N	THR	33	10.982	0.459	31.413	1.00	
22.47			N						
ATOM	431	CA	THR	33	10.677	-0.173	32.698	1.00	
41.60			C						
ATOM	432	C	THR	33	10.047	0.822	33.625	1.00	
38.03			C						
ATOM	433	O	THR	33	10.594	1.892	33.887	1.00	
52.73			O						
ATOM	434	CB	THR	33	11.943	-0.733	33.337	1.00	
63.25			C						
ATOM	435	CG2	THR	33	11.567	-1.615	34.528		
1.00121.65				C					
ATOM	436	OG1	THR	33	12.656	-1.508	32.382	1.00	
96.20			O						
ATOM	437	HN	THR	33	11.323	1.376	31.403	1.00	
23.82			H						
ATOM	438	HA	THR	33	9.971	-0.968	32.564	1.00	
67.12			H						
ATOM	439	HB	THR	33	12.556	0.080	33.680		
1.00107.59				H					
ATOM	440	HG1	THR	33	12.549	-2.433	32.610		
1.00176.27				H					
ATOM	441	HG21	THR	33	10.969	-2.446	34.187		
1.00255.23				H					
ATOM	442	HG22	THR	33	11.000	-1.034	35.242		
1.00245.37				H					
ATOM	443	HG23	THR	33	12.465	-1.986	34.999		
1.00185.78				H					
ATOM	444	N	GLY	34	8.892	0.446	34.131	1.00	
40.93			N						
ATOM	445	CA	GLY	34	8.183	1.295	35.044	1.00	
45.59			C						
ATOM	446	C	GLY	34	7.660	2.539	34.333	1.00	
40.97			C						
ATOM	447	O	GLY	34	6.451	2.737	34.209	1.00	
82.17			O						
ATOM	448	HN	GLY	34	8.523	-0.426	33.889	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	8.870	1.583	35.806	1.00	
54.41			H						
ATOM	450	HA2	GLY	34	7.359	0.750	35.482	1.00	
62.09			H						
ATOM	451	N	ASN	35	8.586	3.373	33.855	1.00	
32.51			N						
ATOM	452	CA	ASN	35	8.231	4.601	33.140	1.00	
33.20			C						
ATOM	453	C	ASN	35	8.860	4.595	31.749	1.00	
23.17			C						
ATOM	454	O	ASN	35	9.950	4.056	31.555	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.727	5.820	33.918	1.00	

54.51			C						
ATOM	456	CG	ASN	35	8.077	5.858	35.298	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	8.804	6.145	36.343		
1.00220.46									N
ATOM	458	OD1	ASN	35	6.878	5.618	35.426		
1.00117.80									O
ATOM	459	HN	ASN	35	9.533	3.155	33.981	1.00	
51.15			H						
ATOM	460	HA	ASN	35	7.157	4.666	33.036	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	8.469	6.720	33.377	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	9.800	5.762	34.028	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	9.759	6.335	36.239		
1.00405.39									H
ATOM	464	HD22	ASN	35	8.393	6.171	37.232		
1.00245.64									H
ATOM	465	N	PHE	36	8.168	5.191	30.785	1.00	
35.72			N						
ATOM	466	CA	PHE	36	8.666	5.245	29.420	1.00	
33.41			C						
ATOM	467	C	PHE	36	9.818	6.237	29.300	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.841	7.262	29.981	1.00	
45.23			O						
ATOM	469	CB	PHE	36	7.531	5.653	28.483	1.00	
67.53			C						
ATOM	470	CG	PHE	36	6.535	4.522	28.373	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	5.462	4.447	29.268		
1.00106.51									C
ATOM	472	CD2	PHE	36	6.686	3.549	27.378	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	4.539	3.399	29.169		
1.00134.48									C
ATOM	474	CE2	PHE	36	5.764	2.502	27.277		
1.00134.27									C
ATOM	475	CZ	PHE	36	4.690	2.427	28.173		
1.00149.48									C
ATOM	476	HN	PHE	36	7.304	5.602	30.993	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.016	4.263	29.135	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	7.933	5.873	27.510	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.039	6.530	28.875	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.346	5.197	30.038		
1.00110.20									H
ATOM	481	HD2	PHE	36	7.515	3.607	26.687	1.00	

93.07			H						
ATOM	482	HE1	PHE	36	3.710	3.341	29.860		
1.00155.06			H						
ATOM	483	HE2	PHE	36	5.879	1.752	26.509		
1.00159.46			H						
ATOM	484	HZ	PHE	36	3.977	1.619	28.096		
1.00183.25			H						
ATOM	485	N	THR	37	10.771	5.926	28.424	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.924	6.794	28.212	1.00	
27.18			C						
ATOM	487	C	THR	37	12.505	6.575	26.819	1.00	
41.87			C						
ATOM	488	O	THR	37	12.887	5.462	26.456		
1.00169.86			O						
ATOM	489	CB	THR	37	12.994	6.512	29.271	1.00	
26.52			C						
ATOM	490	CG2	THR	37	13.131	5.003	29.483	1.00	
75.69			C						
ATOM	491	OG1	THR	37	14.236	7.052	28.845	1.00	
81.95			O						
ATOM	492	HN	THR	37	10.696	5.099	27.907	1.00	
18.47			H						
ATOM	493	HA	THR	37	11.611	7.824	28.300	1.00	
38.80			H						
ATOM	494	HB	THR	37	12.704	6.975	30.204	1.00	
81.60			H						
ATOM	495	HG1	THR	37	14.065	7.640	28.104		
1.00188.80			H						
ATOM	496	HG21	THR	37	13.381	4.527	28.547		
1.00196.98			H						
ATOM	497	HG22	THR	37	12.197	4.604	29.851		
1.00196.23			H						
ATOM	498	HG23	THR	37	13.913	4.811	30.204		
1.00168.92			H						
ATOM	499	N	GLU	38	12.562	7.650	26.039	1.00	
26.53			N						
ATOM	500	CA	GLU	38	13.090	7.583	24.678	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.602	7.799	24.669	1.00	
25.39			C						
ATOM	502	O	GLU	38	15.179	8.266	25.651	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.420	8.651	23.810	1.00	
54.82			C						
ATOM	504	CG	GLU	38	10.908	8.422	23.793		
1.00165.84			C						
ATOM	505	CD	GLU	38	10.587	7.108	23.090		
1.00292.92			C						
ATOM	506	OE1	GLU	38	9.503	6.591	23.309		
1.00414.19			O						
ATOM	507	OE2	GLU	38	11.430	6.637	22.343		

1.00537.65				O1-					
ATOM	508	HN	GLU	38	12.234	8.504	26.386	1.00	
84.50			H						
ATOM	509	HA	GLU	38	12.872	6.612	24.259	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.804	8.588	22.802		
1.00144.82				H					
ATOM	511	HB2	GLU	38	12.633	9.630	24.215		
1.00106.49				H					
ATOM	512	HG1	GLU	38	10.428	9.234	23.266		
1.00303.31				H					
ATOM	513	HG2	GLU	38	10.540	8.387	24.808		
1.00323.99				H					
ATOM	514	N	CYS	39	15.231	7.461	23.549	1.00	
15.84			N						
ATOM	515	CA	CYS	39	16.675	7.625	23.407	1.00	
14.30			C						
ATOM	516	C	CYS	39	17.043	9.111	23.489	1.00	
22.31			C						
ATOM	517	O	CYS	39	16.242	9.966	23.113	1.00	
32.92			O						
ATOM	518	CB	CYS	39	17.121	7.054	22.058	1.00	
18.08			C						
ATOM	519	SG	CYS	39	16.069	7.725	20.746	1.00	
17.41			S						
ATOM	520	HN	CYS	39	14.716	7.102	22.799	1.00	
24.87			H						
ATOM	521	HA	CYS	39	17.165	7.081	24.198	1.00	
14.60			H						
ATOM	522	HB1	CYS	39	17.035	5.979	22.075	1.00	
27.71			H						
ATOM	523	HB2	CYS	39	18.148	7.329	21.871	1.00	
34.91			H						
ATOM	524	N	PRO	40	18.222	9.445	23.970	1.00	
27.27			N						
ATOM	525	CA	PRO	40	18.655	10.867	24.084	1.00	
47.66			C						
ATOM	526	C	PRO	40	19.034	11.456	22.727	1.00	
71.54			C						
ATOM	527	O	PRO	40	19.686	10.805	21.912	1.00	
87.70			O						
ATOM	528	CB	PRO	40	19.866	10.794	25.021	1.00	
53.85			C						
ATOM	529	CG	PRO	40	20.452	9.444	24.765	1.00	
46.04			C						
ATOM	530	CD	PRO	40	19.268	8.523	24.447	1.00	
25.70			C						
ATOM	531	HA	PRO	40	17.878	11.458	24.541	1.00	
58.04			H						
ATOM	532	HB1	PRO	40	19.551	10.870	26.051	1.00	
67.93			H						
ATOM	533	HB2	PRO	40	20.580	11.574	24.787	1.00	

70.99			H					
ATOM	534	HG1	PRO	40	20.971	9.085	25.642	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.133	9.490	23.923	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.937	8.010	25.337	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.534	7.820	23.674	1.00
26.94			H					
ATOM	538	N	GLY	41	18.622	12.697	22.501	
1.00105.24				N				
ATOM	539	CA	GLY	41	18.917	13.390	21.247	
1.00147.55				C				
ATOM	540	C	GLY	41	20.184	14.227	21.372	
1.00161.74				C				
ATOM	541	O	GLY	41	20.594	14.894	20.422	
1.00244.37				O				
ATOM	542	HN	GLY	41	18.111	13.159	23.195	
1.00121.79				H				
ATOM	543	HA1	GLY	41	18.091	14.040	21.000	
1.00184.40				H				
ATOM	544	HA2	GLY	41	19.045	12.664	20.455	
1.00157.34				H				
ATOM	545	N	LEU	42	20.802	14.189	22.553	
1.00162.48				N				
ATOM	546	CA	LEU	42	22.027	14.954	22.807	
1.00191.48				C				
ATOM	547	C	LEU	42	23.206	14.014	23.036	
1.00166.66				C				
ATOM	548	O	LEU	42	23.054	12.938	23.614	
1.00251.38				O				
ATOM	549	CB	LEU	42	21.838	15.840	24.040	
1.00307.99				C				
ATOM	550	CG	LEU	42	20.586	16.710	23.873	
1.00452.28				C				
ATOM	551	CD1	LEU	42	20.416	17.592	25.111	
1.00681.24				C				
ATOM	552	CD2	LEU	42	20.720	17.593	22.620	
1.00527.46				C				
ATOM	553	HN	LEU	42	20.424	13.642	23.273	
1.00195.47				H				
ATOM	554	HA	LEU	42	22.250	15.584	21.956	
1.00229.77				H				
ATOM	555	HB1	LEU	42	22.703	16.479	24.158	
1.00342.49				H				
ATOM	556	HB2	LEU	42	21.729	15.218	24.915	
1.00335.33				H				
ATOM	557	HG	LEU	42	19.721	16.069	23.771	
1.00427.79				H				
ATOM	558	HD11	LEU	42	19.517	18.182	25.012	
1.00909.71				H				
ATOM	559	HD12	LEU	42	21.269	18.248	25.207	

1.00706.80				H				
ATOM	560	HD13	LEU		42	20.342	16.969	25.991
1.00858.82				H				
ATOM	561	HD21	LEU		42	21.742	17.930	22.518
1.00631.69				H				
ATOM	562	HD22	LEU		42	20.068	18.449	22.708
1.00628.06				H				
ATOM	563	HD23	LEU		42	20.442	17.021	21.746
1.00656.75				H				
ATOM	564	N	THR		43	24.386	14.434	22.579
1.00178.52				N				
ATOM	565	CA	THR		43	25.599	13.631	22.736
1.00240.84				C				
ATOM	566	C	THR		43	26.815	14.527	22.959
1.00372.31				C				
ATOM	567	O	THR		43	27.738	14.556	22.144
1.00500.13				O				
ATOM	568	CB	THR		43	25.808	12.770	21.496
1.00354.13				C				
ATOM	569	CG2	THR		43	25.682	13.625	20.233
1.00463.04				C				
ATOM	570	OG1	THR		43	27.094	12.167	21.548
1.00508.50				O				
ATOM	571	HN	THR		43	24.442	15.301	22.130
1.00229.59				H				
ATOM	572	HA	THR		43	25.487	12.976	23.586
1.00249.90				H				
ATOM	573	HB	THR		43	25.056	12.002	21.482
1.00481.58				H				
ATOM	574	HG1	THR		43	27.044	11.412	22.138
1.00624.31				H				
ATOM	575	HG21	THR		43	26.193	14.566	20.378
1.00650.95				H				
ATOM	576	HG22	THR		43	24.639	13.813	20.028
1.00580.73				H				
ATOM	577	HG23	THR		43	26.124	13.101	19.397
1.00571.99				H				
ATOM	578	N	PRO		44	26.828	15.249	24.048
1.00488.39				N				
ATOM	579	CA	PRO		44	27.950	16.167	24.400
1.00760.13				C				
ATOM	580	C	PRO		44	29.177	15.393	24.875
1.00735.36				C				
ATOM	581	O	PRO		44	30.277	15.937	24.956
1.00999.99				O				
ATOM	582	CB	PRO		44	27.360	17.030	25.523
1.00999.99				C				
ATOM	583	CG	PRO		44	26.351	16.148	26.183
1.00856.94				C				
ATOM	584	CD	PRO		44	25.770	15.265	25.073
1.00548.09				C				
ATOM	585	HA	PRO		44	28.203	16.788	23.556

1.00939.00				H				
ATOM	586	HB1	PRO	H	44	26.875	17.902	25.110
1.00999.99				H				
ATOM	587	HB2	PRO	H	44	28.132	17.323	26.224
1.00999.99				H				
ATOM	588	HG1	PRO	H	44	25.567	16.740	26.630
1.00999.99				H				
ATOM	589	HG2	PRO	H	44	26.832	15.536	26.939
1.00853.53				H				
ATOM	590	HD1	PRO	H	44	24.867	15.698	24.670
1.00602.45				H				
ATOM	591	HD2	PRO	H	44	25.584	14.264	25.441
1.00463.32				H				
ATOM	592	N	ILE	N	45	28.971	14.119	25.191
1.00518.33				N				
ATOM	593	CA	ILE	N	45	30.052	13.272	25.661
1.00582.79				C				
ATOM	594	C	ILE	C	45	31.168	13.191	24.624
1.00795.93				C				
ATOM	595	O	ILE	C	45	32.310	12.866	24.949
1.00898.75				O				
ATOM	596	CB	ILE	O	45	29.506	11.877	25.958
1.00474.41				C				
ATOM	597	CG1	ILE	C	45	28.816	11.313	24.709
1.00516.90				C				
ATOM	598	CG2	ILE	C	45	28.495	11.961	27.101
1.00760.75				C				
ATOM	599	CD1	ILE	C	45	28.472	9.838	24.934
1.00566.81				C				
ATOM	600	HN	ILE	C	45	28.073	13.740	25.109
1.00395.72				H				
ATOM	601	HA	ILE	H	45	30.448	13.690	26.573
1.00711.06				H				
ATOM	602	HB	ILE	H	45	30.317	11.230	26.245
1.00477.81				H				
ATOM	603	HG11	ILE	H	45	29.474	11.397	23.858
1.00624.28				H				
ATOM	604	HG12	ILE	H	45	27.910	11.869	24.518
1.00744.84				H				
ATOM	605	HG21	ILE	H	45	28.996	12.279	28.002
1.00920.57				H				
ATOM	606	HG22	ILE	H	45	28.046	10.992	27.259
1.00999.99				H				
ATOM	607	HG23	ILE	H	45	27.726	12.676	26.847
1.00865.46				H				
ATOM	608	HD11	ILE	H	45	27.836	9.492	24.134
1.00658.89				H				
ATOM	609	HD12	ILE	H	45	27.957	9.727	25.877
1.00734.30				H				
ATOM	610	HD13	ILE	H	45	29.381	9.256	24.950
1.00675.84				H				
ATOM	611	N	ALA	H	46	30.826	13.487	23.374

1.00999.99				N				
ATOM	612	CA	ALA		46	31.804	13.445	22.295
1.00999.99				C				
ATOM	613	C	ALA		46	31.276	14.175	21.063
1.00999.99				C				
ATOM	614	CB	ALA		46	32.120	11.992	21.932
1.00999.99				C				
ATOM	615	OT1	ALA		46	31.639	15.325	20.881
1.00999.99				O				
ATOM	616	OT2	ALA		46	30.516	13.574	20.323
1.00999.99				O				
ATOM	617	HN	ALA		46	29.900	13.739	23.176
1.00999.99				H				
ATOM	618	HA	ALA		46	32.713	13.926	22.625
1.00999.99				H				
ATOM	619	HB1	ALA		46	31.197	11.441	21.819
1.00999.99				H				
ATOM	620	HB2	ALA		46	32.713	11.546	22.715
1.00999.99				H				
ATOM	621	HB3	ALA		46	32.670	11.965	21.003
1.00999.99				H				
ENDMDL								
TER								
MODEL	11							
ATOM	1	N	GLY		1	27.745	-2.434	17.602
1.00999.99				N				
ATOM	2	CA	GLY		1	26.306	-2.800	17.742
1.00999.99				C				
ATOM	3	C	GLY		1	25.439	-1.671	17.200
1.00999.99				C				
ATOM	4	O	GLY		1	24.973	-0.818	17.957
1.00999.99				O				
ATOM	5	HA1	GLY		1	26.076	-2.961	18.783
1.00999.99				H				
ATOM	6	HA2	GLY		1	26.111	-3.705	17.184
1.00999.99				H				
ATOM	7	HT1	GLY		1	28.177	-2.356	18.543
1.00999.99				H				
ATOM	8	HT2	GLY		1	27.823	-1.521	17.107
1.00999.99				H				
ATOM	9	HT3	GLY		1	28.239	-3.169	17.057
1.00999.99				H				
ATOM	10	N	LEU		2	25.222	-1.672	15.890
1.00999.99				N				
ATOM	11	CA	LEU		2	24.406	-0.640	15.260
1.00895.59				C				
ATOM	12	C	LEU		2	22.928	-0.886	15.544
1.00532.27				C				
ATOM	13	O	LEU		2	22.490	-2.030	15.657
1.00625.21				O				
ATOM	14	CB	LEU		2	24.641	-0.639	13.747
1.00999.99				C				

ATOM	15	CG	LEU	2	26.127	-0.405	13.445	
1.00999.99								C
ATOM	16	CD1	LEU	2	26.350	-0.489	11.931	
1.00999.99								C
ATOM	17	CD2	LEU	2	26.562	0.981	13.956	
1.00999.99								C
ATOM	18	HN	LEU	2	25.619	-2.378	15.337	
1.00999.99								H
ATOM	19	HA	LEU	2	24.683	0.321	15.660	
1.00890.87								H
ATOM	20	HB1	LEU	2	24.058	0.151	13.295	
1.00924.07								H
ATOM	21	HB2	LEU	2	24.336	-1.590	13.335	
1.00999.99								H
ATOM	22	HG	LEU	2	26.713	-1.171	13.934	
1.00999.99								H
ATOM	23	HD11	LEU	2	25.900	-1.395	11.552	
1.00999.99								H
ATOM	24	HD12	LEU	2	27.410	-0.499	11.724	
1.00999.99								H
ATOM	25	HD13	LEU	2	25.897	0.366	11.453	
1.00999.99								H
ATOM	26	HD21	LEU	2	25.753	1.688	13.829	
1.00999.99								H
ATOM	27	HD22	LEU	2	27.424	1.321	13.400	
1.00999.99								H
ATOM	28	HD23	LEU	2	26.819	0.913	15.002	
1.00999.99								H
ATOM	29	N	CYS	3	22.164	0.196	15.665	
1.00271.28								N
ATOM	30	CA	CYS	3	20.737	0.082	15.942	
1.00104.50								C
ATOM	31	C	CYS	3	20.025	-0.661	14.817	1.00
90.98			C					
ATOM	32	O	CYS	3	19.166	-1.506	15.064	
1.00207.28								O
ATOM	33	CB	CYS	3	20.116	1.472	16.099	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.690	2.229	17.640	1.00
81.56			S					
ATOM	35	HN	CYS	3	22.566	1.084	15.569	
1.00296.55								H
ATOM	36	HA	CYS	3	20.603	-0.463	16.859	
1.00166.45								H
ATOM	37	HB1	CYS	3	19.040	1.385	16.120	1.00
40.38			H					
ATOM	38	HB2	CYS	3	20.410	2.092	15.264	1.00
98.45			H					
ATOM	39	N	SER	4	20.385	-0.335	13.584	1.00
85.31			N					
ATOM	40	CA	SER	4	19.765	-0.971	12.424	1.00
92.94			C					

ATOM	41	C	SER	4	18.351	-0.432	12.221	1.00
67.37			C					
ATOM	42	O	SER	4	17.891	-0.266	11.092	
1.00102.28			O					
ATOM	43	CB	SER	4	19.716	-2.493	12.621	
1.00123.83			C					
ATOM	44	OG	SER	4	19.793	-3.130	11.352	
1.00178.89			O					
ATOM	45	HN	SER	4	21.072	0.348	13.450	
1.00163.03			H					
ATOM	46	HA	SER	4	20.355	-0.751	11.546	
1.00129.78			H					
ATOM	47	HB1	SER	4	18.789	-2.769	13.119	
1.00105.26			H					
ATOM	48	HB2	SER	4	20.551	-2.806	13.225	
1.00156.87			H					
ATOM	49	HG	SER	4	20.567	-2.790	10.896	
1.00218.16			H					
ATOM	50	N	GLU	5	17.669	-0.171	13.332	1.00
41.67			N					
ATOM	51	CA	GLU	5	16.305	0.339	13.295	1.00
41.21			C					
ATOM	52	C	GLU	5	16.026	1.204	14.521	1.00
41.92			C					
ATOM	53	O	GLU	5	16.747	1.132	15.517	1.00
74.72			O					
ATOM	54	CB	GLU	5	15.323	-0.830	13.244	1.00
49.24			C					
ATOM	55	CG	GLU	5	15.543	-1.712	14.465	1.00
55.48			C					
ATOM	56	CD	GLU	5	14.762	-3.013	14.319	1.00
92.06			C					
ATOM	57	OE1	GLU	5	14.844	-3.835	15.217	
1.00206.49			O					
ATOM	58	OE2	GLU	5	14.092	-3.171	13.310	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	18.093	-0.333	14.202	1.00
45.52			H					
ATOM	60	HA	GLU	5	16.176	0.934	12.412	1.00
60.63			H					
ATOM	61	HB1	GLU	5	15.494	-1.407	12.349	1.00
61.59			H					
ATOM	62	HB2	GLU	5	14.314	-0.454	13.245	1.00
63.66			H					
ATOM	63	HG1	GLU	5	15.208	-1.191	15.348	1.00
58.03			H					
ATOM	64	HG2	GLU	5	16.594	-1.928	14.552	1.00
57.77			H					
ATOM	65	N	ASN	6	14.987	2.027	14.440	1.00
50.73			N					
ATOM	66	CA	ASN	6	14.635	2.910	15.549	1.00
71.04			C					

ATOM	67	C	ASN	6	14.285	2.109	16.800	1.00
65.17			C					
ATOM	68	O	ASN	6	14.663	2.482	17.911	1.00
94.86			O					
ATOM	69	CB	ASN	6	13.446	3.788	15.156	1.00
94.83			C					
ATOM	70	CG	ASN	6	13.872	4.806	14.105	
1.00160.94			C					
ATOM	71	ND2	ASN	6	14.801	5.676	14.392	
1.00244.88			N					
ATOM	72	OD1	ASN	6	13.346	4.807	12.992	
1.00219.73			O					
ATOM	73	HN	ASN	6	14.452	2.049	13.620	1.00
72.81			H					
ATOM	74	HA	ASN	6	15.478	3.548	15.768	1.00
96.02			H					
ATOM	75	HB1	ASN	6	13.081	4.308	16.030	
1.00111.09			H					
ATOM	76	HB2	ASN	6	12.659	3.165	14.755	1.00
98.13			H					
ATOM	77	HD21	ASN	6	15.218	5.673	15.278	
1.00272.43			H					
ATOM	78	HD22	ASN	6	15.081	6.334	13.721	
1.00336.78			H					
ATOM	79	N	GLY	7	13.559	1.008	16.615	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.157	0.156	17.738	1.00
71.47			C					
ATOM	81	C	GLY	7	14.029	-1.089	17.816	1.00
41.04			C					
ATOM	82	O	GLY	7	13.527	-2.206	17.945	1.00
44.54			O					
ATOM	83	HN	GLY	7	13.287	0.763	15.706	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.134	-0.145	17.598	
1.00103.52			H					
ATOM	85	HA2	GLY	7	13.239	0.708	18.665	
1.00108.67			H					
ATOM	86	N	ASP	8	15.335	-0.890	17.731	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.272	-2.007	17.784	1.00
14.15			C					
ATOM	88	C	ASP	8	16.156	-2.743	19.114	1.00
9.37			C					
ATOM	89	O	ASP	8	16.025	-3.966	19.150	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.703	-1.499	17.612	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.646	-2.672	17.361	1.00
21.22			C					
ATOM	92	OD1	ASP	8	18.177	-3.691	16.882	
1.00119.56			O					

ATOM	93	OD2	ASP	8	19.821	-2.534	17.655	
1.00133.27								O1-
ATOM	94	HN	ASP	8	15.675	0.021	17.623	1.00
35.63			H					
ATOM	95	HA	ASP	8	16.046	-2.691	16.988	1.00
20.92			H					
ATOM	96	HB1	ASP	8	18.009	-0.983	18.509	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.741	-0.816	16.776	1.00
44.14			H					
ATOM	98	N	CYS	9	16.202	-1.987	20.199	1.00
5.93			N					
ATOM	99	CA	CYS	9	16.095	-2.575	21.528	1.00
7.54			C					
ATOM	100	C	CYS	9	14.723	-3.205	21.715	1.00
14.60			C					
ATOM	101	O	CYS	9	14.591	-4.296	22.272	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.318	-1.508	22.590	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.048	-1.016	22.554	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.304	-1.018	20.105	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.859	-3.327	21.639	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.080	-1.907	23.561	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.695	-0.650	22.385	1.00
5.04			H					
ATOM	108	N	ALA	10	13.706	-2.502	21.234	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.329	-2.975	21.330	1.00
32.04			C					
ATOM	110	C	ALA	10	11.408	-2.056	20.531	1.00
45.47			C					
ATOM	111	O	ALA	10	11.818	-0.979	20.098	
1.00119.04								O
ATOM	112	CB	ALA	10	11.886	-3.020	22.796	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.885	-1.644	20.799	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.272	-3.972	20.917	1.00
47.14			H					
ATOM	115	HB1	ALA	10	11.589	-2.032	23.115	1.00
84.37			H					
ATOM	116	HB2	ALA	10	12.705	-3.363	23.409	
1.00118.20								H
ATOM	117	HB3	ALA	10	11.052	-3.697	22.898	
1.00117.32								H
ATOM	118	N	ALA	11	10.167	-2.486	20.334	1.00
30.62			N					

ATOM	119	CA	ALA	11	9.207	-1.685	19.580	1.00
35.24			C					
ATOM	120	C	ALA	11	8.967	-0.339	20.259	1.00
22.78			C					
ATOM	121	O	ALA	11	8.877	0.693	19.594	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.883	-2.440	19.457	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.893	-3.353	20.697	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.601	-1.511	18.589	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.248	-1.936	18.743	
1.00157.06				H				
ATOM	126	HB2	ALA	11	7.395	-2.468	20.419	
1.00148.83				H				
ATOM	127	HB3	ALA	11	8.075	-3.449	19.119	
1.00137.06				H				
ATOM	128	N	ASP	12	8.854	-0.355	21.585	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.613	0.872	22.343	1.00
31.05			C					
ATOM	130	C	ASP	12	9.922	1.604	22.636	1.00
22.98			C					
ATOM	131	O	ASP	12	9.949	2.831	22.728	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.912	0.538	23.662	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.493	0.054	23.388	
1.00104.83				C				
ATOM	134	OD1	ASP	12	6.021	0.258	22.283	
1.00258.73				O				
ATOM	135	OD2	ASP	12	5.898	-0.514	24.291	
1.00213.46				O1-				
ATOM	136	HN	ASP	12	8.929	-1.208	22.063	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.971	1.523	21.767	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.877	1.421	24.283	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.464	-0.237	24.173	1.00
54.37			H					
ATOM	140	N	GLU	13	11.001	0.844	22.789	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.306	1.431	23.081	1.00
12.01			C					
ATOM	142	C	GLU	13	12.901	2.087	21.839	1.00
10.07			C					
ATOM	143	O	GLU	13	12.553	1.736	20.711	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.249	0.349	23.607	1.00
11.74			C					

ATOM	145	CG	GLU	13	12.710	-0.184	24.937	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.502	-1.414	25.370	
1.00142.36			C					
ATOM	147	OE1	GLU	13	12.878	-2.410	25.697	
1.00339.06			O					
ATOM	148	OE2	GLU	13	14.718	-1.341	25.371	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.918	-0.129	22.711	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.184	2.184	23.847	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.231	0.770	23.761	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.309	-0.457	22.890	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.670	-0.449	24.823	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.803	0.584	25.691	1.00
56.23			H					
ATOM	155	N	CYS	14	13.803	3.047	22.056	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.452	3.766	20.954	1.00
10.69			C					
ATOM	157	C	CYS	14	15.937	3.432	20.900	1.00
9.56			C					
ATOM	158	O	CYS	14	16.578	3.251	21.933	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.286	5.275	21.147	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.138	6.148	19.807	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.039	3.281	22.979	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.997	3.483	20.015	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.712	5.564	22.094	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.237	5.527	21.131	1.00
46.13			H					
ATOM	165	N	CYS	15	16.480	3.360	19.686	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.897	3.056	19.491	1.00
9.28			C					
ATOM	167	C	CYS	15	18.456	3.985	18.426	1.00
9.92			C					
ATOM	168	O	CYS	15	17.898	4.094	17.334	1.00
13.31			O					
ATOM	169	CB	CYS	15	18.064	1.601	19.045	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.816	1.136	19.097	1.00
39.11			S					

ATOM	171	HN	CYS	15	15.917	3.526	18.900	1.00
13.12		H						
ATOM	172	HA	CYS	15	18.437	3.209	20.415	1.00
8.26		H						
ATOM	173	HB1	CYS	15	17.692	1.488	18.037	1.00
24.82		H						
ATOM	174	HB2	CYS	15	17.503	0.958	19.708	1.00
27.31		H						
ATOM	175	N	VAL	16	19.548	4.673	18.747	1.00
9.56		N						
ATOM	176	CA	VAL	16	20.152	5.609	17.802	1.00
11.99		C						
ATOM	177	C	VAL	16	21.671	5.480	17.807	1.00
7.73		C						
ATOM	178	O	VAL	16	22.305	5.486	18.862	1.00
8.83		O						
ATOM	179	CB	VAL	16	19.742	7.035	18.176	1.00
18.37		C						
ATOM	180	CG1	VAL	16	20.444	7.461	19.468	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.119	7.985	17.042	
1.00115.21			C					
ATOM	182	HN	VAL	16	19.947	4.560	19.637	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.793	5.398	16.803	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.671	7.067	18.328	1.00
52.63		H						
ATOM	185	HG11	VAL	16	21.485	7.661	19.263	
1.00128.07			H					
ATOM	186	HG12	VAL	16	20.367	6.669	20.199	
1.00154.13			H					
ATOM	187	HG13	VAL	16	19.976	8.354	19.855	
1.00135.74			H					
ATOM	188	HG21	VAL	16	19.471	7.807	16.196	
1.00229.05			H					
ATOM	189	HG22	VAL	16	21.144	7.812	16.753	
1.00261.82			H					
ATOM	190	HG23	VAL	16	20.005	9.005	17.374	
1.00210.07			H					
ATOM	191	N	ASP	17	22.247	5.357	16.612	1.00
14.34		N						
ATOM	192	CA	ASP	17	23.694	5.220	16.470	1.00
11.90		C						
ATOM	193	C	ASP	17	24.350	6.579	16.248	1.00
13.15		C						
ATOM	194	O	ASP	17	23.847	7.408	15.491	1.00
25.96		O						
ATOM	195	CB	ASP	17	24.013	4.316	15.277	1.00
20.80		C						
ATOM	196	CG	ASP	17	23.611	2.879	15.583	1.00
28.72		C						

ATOM	197	OD1	ASP	17	23.392	2.579	16.746	
	1.00135.42							O
ATOM	198	OD2	ASP	17	23.524	2.099	14.649	
	1.00114.17							O1-
ATOM	199	HN	ASP	17	21.684	5.353	15.810	1.00
	28.29		H					
ATOM	200	HA	ASP	17	24.105	4.772	17.364	1.00
	10.49		H					
ATOM	201	HB1	ASP	17	25.075	4.354	15.074	1.00
	22.42		H					
ATOM	202	HB2	ASP	17	23.470	4.662	14.410	1.00
	29.52		H					
ATOM	203	N	THR	18	25.490	6.788	16.903	1.00
	11.55		N					
ATOM	204	CA	THR	18	26.244	8.035	16.771	1.00
	17.10		C					
ATOM	205	C	THR	18	27.692	7.728	16.424	1.00
	10.63		C					
ATOM	206	O	THR	18	28.174	6.625	16.673	1.00
	6.49		O					
ATOM	207	CB	THR	18	26.191	8.832	18.076	1.00
	28.52		C					
ATOM	208	CG2	THR	18	24.803	9.438	18.259	1.00
	45.38		C					
ATOM	209	OG1	THR	18	26.488	7.975	19.164	1.00
	26.49		O					
ATOM	210	HN	THR	18	25.843	6.077	17.479	1.00
	13.96		H					
ATOM	211	HA	THR	18	25.817	8.635	15.979	1.00
	26.43		H					
ATOM	212	HB	THR	18	26.920	9.627	18.038	1.00
	37.43		H					
ATOM	213	HG1	THR	18	25.686	7.859	19.679	1.00
	71.62		H					
ATOM	214	HG21	THR	18	24.052	8.697	18.032	
	1.00100.44							H
ATOM	215	HG22	THR	18	24.692	10.282	17.594	
	1.00129.42							H
ATOM	216	HG23	THR	18	24.689	9.768	19.281	
	1.00156.21							H
ATOM	217	N	VAL	19	28.377	8.715	15.865	1.00
	16.32		N					
ATOM	218	CA	VAL	19	29.763	8.573	15.489	1.00
	13.34		C					
ATOM	219	C	VAL	19	30.228	9.866	14.853	1.00
	25.88		C					
ATOM	220	O	VAL	19	29.687	10.328	13.848	1.00
	42.11		O					
ATOM	221	CB	VAL	19	29.975	7.401	14.534	1.00
	15.48		C					
ATOM	222	CG1	VAL	19	28.973	7.477	13.378	1.00
	29.06		C					

ATOM	223	CG2	VAL	19	31.404	7.460	13.981	1.00
20.67		C						
ATOM	224	HN	VAL	19	27.947	9.575	15.712	1.00
26.89		H						
ATOM	225	HA	VAL	19	30.348	8.402	16.385	1.00
8.08		H						
ATOM	226	HB	VAL	19	29.836	6.478	15.075	1.00
11.49		H						
ATOM	227	HG11	VAL	19	27.976	7.613	13.771	
1.00137.43								H
ATOM	228	HG12	VAL	19	29.012	6.561	12.808	1.00
93.29		H						
ATOM	229	HG13	VAL	19	29.224	8.309	12.738	
1.00108.69								H
ATOM	230	HG21	VAL	19	31.661	6.510	13.538	1.00
99.42		H						
ATOM	231	HG22	VAL	19	32.091	7.684	14.787	
1.00111.36								H
ATOM	232	HG23	VAL	19	31.467	8.238	13.233	1.00
77.11		H						
ATOM	233	N	PHE	20	31.207	10.449	15.491	1.00
24.58		N						
ATOM	234	CA	PHE	20	31.773	11.723	15.076	1.00
40.34		C						
ATOM	235	C	PHE	20	33.057	11.547	14.264	1.00
40.37		C						
ATOM	236	O	PHE	20	33.018	11.430	13.039	1.00
66.02		O						
ATOM	237	CB	PHE	20	32.044	12.566	16.335	1.00
48.79		C						
ATOM	238	CG	PHE	20	32.406	11.671	17.513	1.00
35.75		C						
ATOM	239	CD1	PHE	20	31.433	10.841	18.106	1.00
30.20		C						
ATOM	240	CD2	PHE	20	33.709	11.686	18.027	1.00
40.95		C						
ATOM	241	CE1	PHE	20	31.773	10.035	19.196	1.00
30.41		C						
ATOM	242	CE2	PHE	20	34.045	10.875	19.117	1.00
45.84		C						
ATOM	243	CZ	PHE	20	33.077	10.050	19.702	1.00
40.81		C						
ATOM	244	HN	PHE	20	31.539	10.022	16.297	1.00
16.73		H						
ATOM	245	HA	PHE	20	31.052	12.247	14.461	1.00
59.91		H						
ATOM	246	HB1	PHE	20	31.157	13.117	16.580	1.00
67.15		H						
ATOM	247	HB2	PHE	20	32.850	13.261	16.148	1.00
58.17		H						
ATOM	248	HD1	PHE	20	30.423	10.813	17.717	1.00
33.34		H						

ATOM	249	HD2	PHE	20	34.458	12.320	17.580	1.00
49.35		H						
ATOM	250	HE1	PHE	20	31.025	9.402	19.648	1.00
30.61		H						
ATOM	251	HE2	PHE	20	35.052	10.886	19.508	1.00
61.27		H						
ATOM	252	HZ	PHE	20	33.336	9.426	20.545	1.00
52.66		H						
ATOM	253	N	GLU	21	34.189	11.565	14.953	1.00
41.31		N						
ATOM	254	CA	GLU	21	35.483	11.446	14.291	1.00
56.16		C						
ATOM	255	C	GLU	21	35.694	10.030	13.760	1.00
58.61		C						
ATOM	256	O	GLU	21	36.304	9.829	12.710	
1.00201.19		O						
ATOM	257	CB	GLU	21	36.575	11.856	15.291	1.00
57.37		C						
ATOM	258	CG	GLU	21	37.102	10.653	16.077	
1.00193.56		C						
ATOM	259	CD	GLU	21	37.879	11.130	17.300	
1.00304.62		C						
ATOM	260	OE1	GLU	21	37.248	11.599	18.233	
1.00451.81		O						
ATOM	261	OE2	GLU	21	39.094	11.021	17.286	
1.00442.88		O1-						
ATOM	262	HN	GLU	21	34.156	11.682	15.925	1.00
50.82		H						
ATOM	263	HA	GLU	21	35.504	12.132	13.456	1.00
85.72		H						
ATOM	264	HB1	GLU	21	36.137	12.554	15.984	1.00
46.37		H						
ATOM	265	HB2	GLU	21	37.393	12.331	14.769	
1.00131.81		H						
ATOM	266	HG1	GLU	21	37.758	10.075	15.444	
1.00314.91		H						
ATOM	267	HG2	GLU	21	36.271	10.043	16.398	
1.00266.92		H						
ATOM	268	N	GLY	22	35.162	9.060	14.490	1.00
86.70		N						
ATOM	269	CA	GLY	22	35.265	7.646	14.095	
1.00104.66		C						
ATOM	270	C	GLY	22	36.272	6.888	14.953	1.00
71.50		C						
ATOM	271	O	GLY	22	36.328	5.659	14.915	1.00
89.87		O						
ATOM	272	HN	GLY	22	34.683	9.302	15.313	
1.00214.64		H						
ATOM	273	HA1	GLY	22	35.570	7.581	13.059	
1.00152.47		H						
ATOM	274	HA2	GLY	22	34.296	7.183	14.204	
1.00118.15		H						

ATOM	275	N	ASP	23	37.053	7.619	15.732	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.043	6.999	16.603	1.00
43.33			C					
ATOM	277	C	ASP	23	37.343	6.074	17.589	1.00
37.55			C					
ATOM	278	O	ASP	23	37.793	4.958	17.844	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.813	8.078	17.364	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.895	7.436	18.226	
1.00141.86				C				
ATOM	281	OD1	ASP	23	40.828	6.889	17.661	
1.00328.18				O				
ATOM	282	OD2	ASP	23	39.776	7.501	19.437	
1.00304.58				O1-				
ATOM	283	HN	ASP	23	36.958	8.588	15.728	1.00
40.86			H					
ATOM	284	HA	ASP	23	38.732	6.425	16.005	1.00
72.12			H					
ATOM	285	HB1	ASP	23	38.131	8.627	17.997	1.00
94.15			H					
ATOM	286	HB2	ASP	23	39.272	8.756	16.658	1.00
93.26			H					
ATOM	287	N	MET	24	36.226	6.554	18.123	1.00
23.24			N					
ATOM	288	CA	MET	24	35.427	5.785	19.075	1.00
32.50			C					
ATOM	289	C	MET	24	33.948	5.965	18.753	1.00
25.13			C					
ATOM	290	O	MET	24	33.420	7.074	18.832	1.00
54.40			O					
ATOM	291	CB	MET	24	35.707	6.268	20.500	1.00
47.36			C					
ATOM	292	CG	MET	24	34.871	5.461	21.495	
1.00151.73				C				
ATOM	293	SD	MET	24	35.311	5.942	23.185	
1.00209.23				S				
ATOM	294	CE	MET	24	34.599	7.607	23.157	
1.00243.29				C				
ATOM	295	HN	MET	24	35.924	7.448	17.863	1.00
17.32			H					
ATOM	296	HA	MET	24	35.679	4.736	19.001	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.449	7.314	20.581	
1.00124.40				H				
ATOM	298	HB2	MET	24	36.756	6.140	20.724	
1.00166.96				H				
ATOM	299	HG1	MET	24	35.069	4.408	21.360	
1.00331.71				H				
ATOM	300	HG2	MET	24	33.821	5.651	21.328	
1.00302.30				H				

ATOM	301	HE1	MET	24	35.301	8.292	22.702	
1.00340.44								H
ATOM	302	HE2	MET	24	34.392	7.928	24.166	
1.00373.88								H
ATOM	303	HE3	MET	24	33.678	7.599	22.592	
1.00386.81								H
ATOM	304	N	VAL	25	33.282	4.877	18.383	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.865	4.948	18.047	1.00
15.37			C					
ATOM	306	C	VAL	25	31.017	5.056	19.306	1.00
17.47			C					
ATOM	307	O	VAL	25	31.387	4.560	20.370	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.432	3.724	17.242	1.00
23.36			C					
ATOM	309	CG1	VAL	25	29.926	3.806	16.975	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.186	3.699	15.909	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.750	4.017	18.331	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.699	5.833	17.446	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.653	2.827	17.802	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.665	4.818	16.694	
1.00171.07								H
ATOM	315	HG12	VAL	25	29.388	3.533	17.870	
1.00166.22								H
ATOM	316	HG13	VAL	25	29.661	3.130	16.176	
1.00134.76								H
ATOM	317	HG21	VAL	25	32.146	4.677	15.455	
1.00141.88								H
ATOM	318	HG22	VAL	25	31.725	2.977	15.250	
1.00184.50								H
ATOM	319	HG23	VAL	25	33.215	3.422	16.082	
1.00133.90								H
ATOM	320	N	THR	26	29.877	5.728	19.170	1.00
13.60			N					
ATOM	321	CA	THR	26	28.958	5.935	20.286	1.00
21.19			C					
ATOM	322	C	THR	26	27.538	5.518	19.908	1.00
16.55			C					
ATOM	323	O	THR	26	27.097	5.730	18.779	1.00
11.43			O					
ATOM	324	CB	THR	26	28.981	7.413	20.671	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.970	7.682	21.789	1.00
44.39			C					
ATOM	326	OG1	THR	26	30.285	7.753	21.120	1.00
34.75			O					

ATOM	327	HN	THR	26	29.652	6.106	18.295	1.00
10.81			H					
ATOM	328	HA	THR	26	29.279	5.350	21.138	1.00
33.16			H					
ATOM	329	HB	THR	26	28.733	8.007	19.802	1.00
20.60			H					
ATOM	330	HG1	THR	26	30.790	6.940	21.207	1.00
77.72			H					
ATOM	331	HG21	THR	26	28.131	6.981	22.595	
1.00126.99			H					
ATOM	332	HG22	THR	26	26.967	7.566	21.409	
1.00108.32			H					
ATOM	333	HG23	THR	26	28.101	8.688	22.156	
1.00151.99			H					
ATOM	334	N	ARG	27	26.828	4.923	20.867	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.452	4.473	20.642	1.00
20.21			C					
ATOM	336	C	ARG	27	24.630	4.645	21.917	1.00
16.96			C					
ATOM	337	O	ARG	27	25.187	4.795	23.005	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.445	3.003	20.212	1.00
22.14			C					
ATOM	339	CG	ARG	27	25.954	2.126	21.358	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.133	0.691	20.862	
1.00109.38			C					
ATOM	341	NE	ARG	27	26.564	-0.172	21.958	
1.00227.73			N					
ATOM	342	CZ	ARG	27	27.839	-0.225	22.332	
1.00426.12			C					
ATOM	343	NH1	ARG	27	28.198	-1.004	23.314	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	28.730	0.504	21.717	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.237	4.783	21.747	1.00
30.75			H					
ATOM	346	HA	ARG	27	25.005	5.069	19.858	1.00
23.13			H					
ATOM	347	HB1	ARG	27	26.088	2.877	19.354	1.00
87.46			H					
ATOM	348	HB2	ARG	27	24.438	2.709	19.954	
1.00103.36			H					
ATOM	349	HG1	ARG	27	25.238	2.136	22.167	
1.00281.97			H					
ATOM	350	HG2	ARG	27	26.902	2.507	21.711	
1.00276.19			H					
ATOM	351	HD1	ARG	27	26.877	0.675	20.078	
1.00183.60			H					
ATOM	352	HD2	ARG	27	25.195	0.328	20.472	
1.00142.93			H					

ATOM	353	HE	ARG	27	25.902	-0.723	22.425		
1.00372.53								H	
ATOM	354	HH11	ARG	27	27.515	-1.563	23.786		
1.00910.59								H	
ATOM	355	HH12	ARG	27	29.157	-1.044	23.597		
1.00999.99								H	
ATOM	356	HH21	ARG	27	28.454	1.100	20.964		
1.00532.54								H	
ATOM	357	HH22	ARG	27	29.689	0.463	22.000		
1.00948.84								H	
ATOM	358	N	SER	28	23.304	4.632	21.783	1.00	
14.60			N						
ATOM	359	CA	SER	28	22.425	4.799	22.941	1.00	
14.92			C						
ATOM	360	C	SER	28	21.110	4.052	22.741	1.00	
12.12			C						
ATOM	361	O	SER	28	20.663	3.848	21.613	1.00	
13.41			O						
ATOM	362	CB	SER	28	22.140	6.283	23.169	1.00	
23.26			C						
ATOM	363	OG	SER	28	21.317	6.429	24.318		
1.00146.32								O	
ATOM	364	HN	SER	28	22.909	4.517	20.892	1.00	
15.23			H						
ATOM	365	HA	SER	28	22.916	4.403	23.819	1.00	
15.44			H						
ATOM	366	HB1	SER	28	21.641	6.690	22.300	1.00	
88.73			H						
ATOM	367	HB2	SER	28	23.066	6.810	23.326		
1.00124.68								H	
ATOM	368	HG	SER	28	21.121	5.553	24.657		
1.00242.47								H	
ATOM	369	N	CYS	29	20.495	3.653	23.851	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.228	2.934	23.805	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.633	2.862	25.211	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.328	2.524	26.170	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.443	1.522	23.236	1.00	
9.52			C						
ATOM	374	SG	CYS	29	17.965	0.985	22.362	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.898	3.856	24.720	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.546	3.474	23.165	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.646	0.821	24.036	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.275	1.529	22.552	1.00	
10.78			H						

ATOM	379	N	GLU	30	17.349	3.196	25.333	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.676	3.182	26.635	1.00
17.41			C					
ATOM	381	C	GLU	30	15.789	1.951	26.788	1.00
10.81			C					
ATOM	382	O	GLU	30	15.245	1.437	25.810	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.829	4.445	26.783	1.00
37.83			C					
ATOM	384	CG	GLU	30	16.739	5.672	26.717	
1.00108.13				C				
ATOM	385	CD	GLU	30	17.586	5.760	27.982	
1.00240.52				C				
ATOM	386	OE1	GLU	30	17.270	5.064	28.933	
1.00422.56				O				
ATOM	387	OE2	GLU	30	18.538	6.523	27.982	
1.00410.81				O1-				
ATOM	388	HN	GLU	30	16.846	3.469	24.537	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.416	3.174	27.424	1.00
24.60			H					
ATOM	390	HB1	GLU	30	15.317	4.428	27.733	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.104	4.487	25.982	1.00
56.47			H					
ATOM	392	HG1	GLU	30	16.137	6.563	26.627	
1.00196.66				H				
ATOM	393	HG2	GLU	30	17.390	5.586	25.859	
1.00140.67				H				
ATOM	394	N	LYS	31	15.650	1.487	28.030	1.00
11.96			N					
ATOM	395	CA	LYS	31	14.826	0.312	28.330	1.00
11.40			C					
ATOM	396	C	LYS	31	13.544	0.732	29.042	1.00
10.99			C					
ATOM	397	O	LYS	31	13.538	1.691	29.814	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.609	-0.653	29.222	1.00
21.40			C					
ATOM	399	CG	LYS	31	16.832	-1.171	28.464	1.00
57.81			C					
ATOM	400	CD	LYS	31	17.617	-2.137	29.354	
1.00115.52				C				
ATOM	401	CE	LYS	31	18.841	-2.652	28.596	
1.00250.23				C				
ATOM	402	NZ	LYS	31	19.608	-3.586	29.468	
1.00462.10				N1+				
ATOM	403	HN	LYS	31	16.110	1.945	28.764	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.567	-0.195	27.413	1.00
13.87			H					

ATOM	405	HB1	LYS	31	14.979	-1.486	29.493	1.00
37.63			H					
ATOM	406	HB2	LYS	31	15.930	-0.138	30.116	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.468	-0.340	28.192	
1.00126.32			H					
ATOM	408	HG2	LYS	31	16.511	-1.685	27.570	
1.00114.19			H					
ATOM	409	HD1	LYS	31	16.985	-2.970	29.622	
1.00198.45			H					
ATOM	410	HD2	LYS	31	17.935	-1.624	30.249	
1.00200.14			H					
ATOM	411	HE1	LYS	31	19.470	-1.818	28.321	
1.00374.64			H					
ATOM	412	HE2	LYS	31	18.522	-3.171	27.705	
1.00403.27			H					
ATOM	413	HZ1	LYS	31	20.627	-3.419	29.344	
1.00627.38			H					
ATOM	414	HZ2	LYS	31	19.383	-4.568	29.205	
1.00622.26			H					
ATOM	415	HZ3	LYS	31	19.352	-3.425	30.462	
1.00619.20			H					
ATOM	416	N	THR	32	12.459	0.009	28.775	1.00
15.51			N					
ATOM	417	CA	THR	32	11.167	0.312	29.391	1.00
22.44			C					
ATOM	418	C	THR	32	10.941	-0.560	30.624	1.00
26.60			C					
ATOM	419	O	THR	32	10.953	-1.788	30.538	1.00
57.43			O					
ATOM	420	CB	THR	32	10.042	0.066	28.384	1.00
56.28			C					
ATOM	421	CG2	THR	32	8.692	0.369	29.038	
1.00102.70			C					
ATOM	422	OG1	THR	32	10.225	0.912	27.258	
1.00111.17			O					
ATOM	423	HN	THR	32	12.526	-0.742	28.150	1.00
18.79			H					
ATOM	424	HA	THR	32	11.143	1.352	29.689	1.00
19.67			H					
ATOM	425	HB	THR	32	10.060	-0.965	28.067	1.00
84.25			H					
ATOM	426	HG1	THR	32	10.449	0.360	26.505	
1.00205.03			H					
ATOM	427	HG21	THR	32	7.923	0.395	28.281	
1.00220.71			H					
ATOM	428	HG22	THR	32	8.741	1.326	29.535	
1.00174.67			H					
ATOM	429	HG23	THR	32	8.462	-0.401	29.759	
1.00217.44			H					
ATOM	430	N	THR	33	10.733	0.086	31.768	1.00
22.47			N					

ATOM	431	CA	THR	33	10.498	-0.632	33.020	1.00
41.60			C					
ATOM	432	C	THR	33	9.622	0.175	33.936	1.00
38.03			C					
ATOM	433	O	THR	33	10.098	0.889	34.819	1.00
52.73			O					
ATOM	434	CB	THR	33	11.818	-0.953	33.716	1.00
63.25			C					
ATOM	435	CG2	THR	33	12.578	-2.012	32.917	
1.00121.65			C					
ATOM	436	OG1	THR	33	12.601	0.228	33.813	1.00
96.20			O					
ATOM	437	HN	THR	33	10.731	1.067	31.772	1.00
23.82			H					
ATOM	438	HA	THR	33	9.976	-1.547	32.818	1.00
67.12			H					
ATOM	439	HB	THR	33	11.612	-1.333	34.704	
1.00107.59			H					
ATOM	440	HG1	THR	33	13.210	0.243	33.070	
1.00176.27			H					
ATOM	441	HG21	THR	33	13.428	-2.354	33.490	
1.00255.23			H					
ATOM	442	HG22	THR	33	12.921	-1.584	31.987	
1.00245.37			H					
ATOM	443	HG23	THR	33	11.925	-2.846	32.711	
1.00185.78			H					
ATOM	444	N	GLY	34	8.329	0.036	33.723	1.00
40.93			N					
ATOM	445	CA	GLY	34	7.363	0.732	34.536	1.00
45.59			C					
ATOM	446	C	GLY	34	7.245	2.188	34.105	1.00
40.97			C					
ATOM	447	O	GLY	34	6.416	2.937	34.619	1.00
82.17			O					
ATOM	448	HN	GLY	34	8.022	-0.562	33.012	1.00
54.00			H					
ATOM	449	HA1	GLY	34	7.692	0.684	35.556	1.00
54.41			H					
ATOM	450	HA2	GLY	34	6.400	0.247	34.445	1.00
62.09			H					
ATOM	451	N	ASN	35	8.082	2.574	33.147	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.077	3.937	32.629	1.00
33.20			C					
ATOM	453	C	ASN	35	8.704	3.972	31.241	1.00
23.17			C					
ATOM	454	O	ASN	35	9.582	3.167	30.928	1.00
27.01			O					
ATOM	455	CB	ASN	35	8.858	4.862	33.565	1.00
54.51			C					
ATOM	456	CG	ASN	35	8.295	4.784	34.973	1.00
80.73			C					

ATOM	457	ND2	ASN	35	7.083	5.190	35.198	
1.00220.46			N					
ATOM	458	OD1	ASN	35	8.982	4.345	35.895	
1.00117.80			O					
ATOM	459	HN	ASN	35	8.715	1.925	32.776	1.00
51.15			H					
ATOM	460	HA	ASN	35	7.057	4.287	32.564	1.00
47.21			H					
ATOM	461	HB1	ASN	35	8.786	5.878	33.206	1.00
68.31			H					
ATOM	462	HB2	ASN	35	9.889	4.562	33.586	1.00
57.75			H					
ATOM	463	HD21	ASN	35	6.538	5.542	34.464	
1.00405.39			H					
ATOM	464	HD22	ASN	35	6.719	5.142	36.099	
1.00245.64			H					
ATOM	465	N	PHE	36	8.248	4.902	30.407	1.00
35.72			N					
ATOM	466	CA	PHE	36	8.760	5.033	29.052	1.00
33.41			C					
ATOM	467	C	PHE	36	9.815	6.131	28.976	1.00
28.51			C					
ATOM	468	O	PHE	36	9.670	7.191	29.584	1.00
45.23			O					
ATOM	469	CB	PHE	36	7.601	5.369	28.123	1.00
67.53			C					
ATOM	470	CG	PHE	36	6.645	4.203	28.083	1.00
86.71			C					
ATOM	471	CD1	PHE	36	5.543	4.174	28.947	
1.00106.51			C					
ATOM	472	CD2	PHE	36	6.858	3.150	27.186	1.00
99.48			C					
ATOM	473	CE1	PHE	36	4.654	3.093	28.913	
1.00134.48			C					
ATOM	474	CE2	PHE	36	5.971	2.069	27.152	
1.00134.27			C					
ATOM	475	CZ	PHE	36	4.869	2.040	28.015	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.543	5.513	30.704	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.199	4.097	28.735	1.00
28.53			H					
ATOM	478	HB1	PHE	36	7.978	5.560	27.139	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.087	6.246	28.490	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.381	4.987	29.641	
1.00110.20			H					
ATOM	481	HD2	PHE	36	7.711	3.172	26.522	1.00
93.07			H					
ATOM	482	HE1	PHE	36	3.805	3.071	29.578	
1.00155.06			H					

ATOM	483	HE2	PHE	36	6.135	1.256	26.460	
1.00159.46			H					
ATOM	484	HZ	PHE	36	4.183	1.206	27.988	
1.00183.25			H					
ATOM	485	N	THR	37	10.880	5.868	28.219	1.00
20.06			N					
ATOM	486	CA	THR	37	11.963	6.835	28.056	1.00
27.18			C					
ATOM	487	C	THR	37	12.563	6.718	26.661	1.00
41.87			C					
ATOM	488	O	THR	37	13.097	5.675	26.286	
1.00169.86			O					
ATOM	489	CB	THR	37	13.049	6.585	29.106	1.00
26.52			C					
ATOM	490	CG2	THR	37	12.475	6.824	30.503	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.505	5.243	29.001	1.00
81.95			O					
ATOM	492	HN	THR	37	10.936	5.009	27.756	1.00
18.47			H					
ATOM	493	HA	THR	37	11.574	7.835	28.187	1.00
38.80			H					
ATOM	494	HB	THR	37	13.873	7.260	28.939	1.00
81.60			H					
ATOM	495	HG1	THR	37	13.195	4.764	29.774	
1.00188.80			H					
ATOM	496	HG21	THR	37	11.953	7.769	30.522	
1.00196.98			H					
ATOM	497	HG22	THR	37	13.280	6.843	31.224	
1.00196.23			H					
ATOM	498	HG23	THR	37	11.789	6.028	30.751	
1.00168.92			H					
ATOM	499	N	GLU	38	12.466	7.797	25.896	1.00
26.53			N					
ATOM	500	CA	GLU	38	12.998	7.814	24.538	1.00
30.29			C					
ATOM	501	C	GLU	38	14.517	7.951	24.551	1.00
25.39			C					
ATOM	502	O	GLU	38	15.104	8.388	25.541	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.386	8.980	23.755	1.00
54.82			C					
ATOM	504	CG	GLU	38	10.895	8.720	23.536	
1.00165.84			C					
ATOM	505	CD	GLU	38	10.255	9.917	22.840	
1.00292.92			C					
ATOM	506	OE1	GLU	38	9.108	9.802	22.443	
1.00414.19			O					
ATOM	507	OE2	GLU	38	10.922	10.931	22.714	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	12.025	8.594	26.251	1.00
84.50			H					

ATOM	509	HA	GLU	38	12.734	6.891	24.047	1.00
32.15			H					
ATOM	510	HB1	GLU	38	12.879	9.068	22.800	
1.00144.82			H					
ATOM	511	HB2	GLU	38	12.516	9.895	24.314	
1.00106.49			H					
ATOM	512	HG1	GLU	38	10.414	8.563	24.490	
1.00303.31			H					
ATOM	513	HG2	GLU	38	10.771	7.841	22.923	
1.00323.99			H					
ATOM	514	N	CYS	39	15.147	7.577	23.441	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.598	7.665	23.326	1.00
14.30			C					
ATOM	516	C	CYS	39	17.051	9.119	23.504	1.00
22.31			C					
ATOM	517	O	CYS	39	16.304	10.043	23.183	1.00
32.92			O					
ATOM	518	CB	CYS	39	17.034	7.147	21.952	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.915	7.797	20.685	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.625	7.244	22.684	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.044	7.047	24.088	1.00
14.60			H					
ATOM	522	HB1	CYS	39	16.995	6.067	21.946	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.041	7.472	21.744	1.00
34.91			H					
ATOM	524	N	PRO	40	18.244	9.348	24.007	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.765	10.730	24.222	1.00
47.66			C					
ATOM	526	C	PRO	40	19.185	11.391	22.911	1.00
71.54			C					
ATOM	527	O	PRO	40	19.870	10.787	22.087	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.967	10.513	25.147	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.470	9.154	24.788	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.230	8.333	24.422	1.00
25.70			C					
ATOM	531	HA	PRO	40	18.025	11.333	24.723	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.654	10.530	26.181	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.728	11.264	24.969	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.973	8.702	25.630	1.00
65.91			H					

ATOM	535	HG2	PRO	40	21.143	9.219	23.941	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.868	7.789	25.281	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.448	7.661	23.605	1.00
26.94			H					
ATOM	538	N	GLY	41	18.775	12.640	22.736	
1.00105.24			N					
ATOM	539	CA	GLY	41	19.117	13.387	21.532	
1.00147.55			C					
ATOM	540	C	GLY	41	20.622	13.594	21.432	
1.00161.74			C					
ATOM	541	O	GLY	41	21.204	13.499	20.351	
1.00244.37			O					
ATOM	542	HN	GLY	41	18.237	13.067	23.433	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.630	14.350	21.560	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.774	12.840	20.668	
1.00157.34			H					
ATOM	545	N	LEU	42	21.246	13.878	22.573	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.694	14.105	22.632	
1.00191.48			C					
ATOM	547	C	LEU	42	23.361	13.039	23.494	
1.00166.66			C					
ATOM	548	O	LEU	42	22.777	12.555	24.464	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.976	15.486	23.229	
1.00307.99			C					
ATOM	550	CG	LEU	42	22.252	16.568	22.419	
1.00452.28			C					
ATOM	551	CD1	LEU	42	22.498	17.932	23.071	
1.00681.24			C					
ATOM	552	CD2	LEU	42	22.777	16.585	20.973	
1.00527.46			C					
ATOM	553	HN	LEU	42	20.719	13.938	23.396	
1.00195.47			H					
ATOM	554	HA	LEU	42	23.113	14.060	21.637	
1.00229.77			H					
ATOM	555	HB1	LEU	42	24.041	15.674	23.204	
1.00342.49			H					
ATOM	556	HB2	LEU	42	22.633	15.512	24.253	
1.00335.33			H					
ATOM	557	HG	LEU	42	21.191	16.359	22.416	
1.00427.79			H					
ATOM	558	HD11	LEU	42	22.276	17.872	24.126	
1.00909.71			H					
ATOM	559	HD12	LEU	42	21.859	18.671	22.611	
1.00706.80			H					
ATOM	560	HD13	LEU	42	23.532	18.214	22.937	
1.00858.82			H					

ATOM	561	HD21	LEU	42	22.270	15.825	20.397
1.00631.69			H				
ATOM	562	HD22	LEU	42	23.840	16.391	20.967
1.00628.06			H				
ATOM	563	HD23	LEU	42	22.588	17.552	20.528
1.00656.75			H				
ATOM	564	N	THR	43	24.589	12.679	23.135
1.00178.52			N				
ATOM	565	CA	THR	43	25.327	11.670	23.886
1.00240.84			C				
ATOM	566	C	THR	43	25.695	12.207	25.275
1.00372.31			C				
ATOM	567	O	THR	43	25.899	13.411	25.436
1.00500.13			O				
ATOM	568	CB	THR	43	26.599	11.296	23.117
1.00354.13			C				
ATOM	569	CG2	THR	43	26.221	10.735	21.745
1.00463.04			C				
ATOM	570	OG1	THR	43	27.405	12.454	22.949
1.00508.50			O				
ATOM	571	HN	THR	43	25.006	13.099	22.355
1.00229.59			H				
ATOM	572	HA	THR	43	24.708	10.794	23.987
1.00249.90			H				
ATOM	573	HB	THR	43	27.152	10.552	23.666
1.00481.58			H				
ATOM	574	HG1	THR	43	27.050	12.959	22.213
1.00624.31			H				
ATOM	575	HG21	THR	43	25.805	9.746	21.864
1.00650.95			H				
ATOM	576	HG22	THR	43	27.102	10.682	21.122
1.00580.73			H				
ATOM	577	HG23	THR	43	25.490	11.380	21.282
1.00571.99			H				
ATOM	578	N	PRO	44	25.787	11.359	26.276
1.00488.39			N				
ATOM	579	CA	PRO	44	26.138	11.794	27.663
1.00760.13			C				
ATOM	580	C	PRO	44	27.613	12.181	27.789
1.00735.36			C				
ATOM	581	O	PRO	44	28.024	12.775	28.786
1.00999.99			O				
ATOM	582	CB	PRO	44	25.806	10.564	28.518
1.00999.99			C				
ATOM	583	CG	PRO	44	25.993	9.405	27.597
1.00856.94			C				
ATOM	584	CD	PRO	44	25.569	9.897	26.211
1.00548.09			C				
ATOM	585	HA	PRO	44	25.513	12.620	27.961
1.00939.00			H				
ATOM	586	HB1	PRO	44	24.779	10.606	28.855
1.00999.99			H				

ATOM	587	HB2	PRO	44	26.477	10.493	29.365
1.00999.99				H			
ATOM	588	HG1	PRO	44	25.369	8.577	27.899
1.00999.99				H			
ATOM	589	HG2	PRO	44	27.034	9.103	27.587
1.00853.53				H			
ATOM	590	HD1	PRO	44	24.525	9.684	26.034
1.00602.45				H			
ATOM	591	HD2	PRO	44	26.186	9.449	25.445
1.00463.32				H			
ATOM	592	N	ILE	45	28.402	11.836	26.776
1.00518.33				N			
ATOM	593	CA	ILE	45	29.829	12.146	26.788
1.00582.79				C			
ATOM	594	C	ILE	45	30.077	13.556	27.321
1.00795.93				C			
ATOM	595	O	ILE	45	29.337	14.488	27.004
1.00898.75				O			
ATOM	596	CB	ILE	45	30.399	12.027	25.372
1.00474.41				C			
ATOM	597	CG1	ILE	45	31.926	12.135	25.424
1.00516.90				C			
ATOM	598	CG2	ILE	45	29.839	13.148	24.492
1.00760.75				C			
ATOM	599	CD1	ILE	45	32.513	11.751	24.064
1.00566.81				C			
ATOM	600	HN	ILE	45	28.020	11.362	26.009
1.00395.72				H			
ATOM	601	HA	ILE	45	30.333	11.437	27.427
1.00711.06				H			
ATOM	602	HB	ILE	45	30.120	11.070	24.953
1.00477.81				H			
ATOM	603	HG11	ILE	45	32.311	11.466	26.179
1.00624.28				H			
ATOM	604	HG12	ILE	45	32.207	13.150	25.666
1.00744.84				H			
ATOM	605	HG21	ILE	45	30.001	12.906	23.453
1.00920.57				H			
ATOM	606	HG22	ILE	45	30.339	14.077	24.728
1.00999.99				H			
ATOM	607	HG23	ILE	45	28.780	13.256	24.677
1.00865.46				H			
ATOM	608	HD11	ILE	45	33.592	11.749	24.126
1.00658.89				H			
ATOM	609	HD12	ILE	45	32.198	12.469	23.322
1.00734.30				H			
ATOM	610	HD13	ILE	45	32.166	10.767	23.786
1.00675.84				H			
ATOM	611	N	ALA	46	31.121	13.703	28.129
1.00999.99				N			
ATOM	612	CA	ALA	46	31.457	15.002	28.699
1.00999.99				C			

ATOM	613	C	ALA	46	31.765	16.009	27.596
1.00999.99				C			
ATOM	614	CB	ALA	46	32.667	14.869	29.626
1.00999.99				C			
ATOM	615	OT1	ALA	46	32.931	16.173	27.279
1.00999.99				O			
ATOM	616	OT2	ALA	46	30.829	16.601	27.084
1.00999.99				O			
ATOM	617	HN	ALA	46	31.675	12.925	28.345
1.00999.99				H			
ATOM	618	HA	ALA	46	30.616	15.360	29.275
1.00999.99				H			
ATOM	619	HB1	ALA	46	33.502	14.467	29.071
1.00999.99				H			
ATOM	620	HB2	ALA	46	32.425	14.206	30.443
1.00999.99				H			
ATOM	621	HB3	ALA	46	32.930	15.842	30.016
1.00999.99				H			
ENDMDL							
TER							
MODEL	12						
ATOM	1	N	GLY	1	26.359	-2.764	18.853
1.00999.99				N			
ATOM	2	CA	GLY	1	26.472	-2.687	17.369
1.00999.99				C			
ATOM	3	C	GLY	1	25.533	-1.607	16.842
1.00999.99				C			
ATOM	4	O	GLY	1	25.083	-0.742	17.592
1.00999.99				O			
ATOM	5	HA1	GLY	1	26.199	-3.638	16.937
1.00999.99				H			
ATOM	6	HA2	GLY	1	27.490	-2.445	17.098
1.00999.99				H			
ATOM	7	HT1	GLY	1	27.308	-2.729	19.276
1.00999.99				H			
ATOM	8	HT2	GLY	1	25.893	-3.656	19.119
1.00999.99				H			
ATOM	9	HT3	GLY	1	25.798	-1.961	19.200
1.00999.99				H			
ATOM	10	N	LEU	2	25.244	-1.665	15.545
1.00999.99				N			
ATOM	11	CA	LEU	2	24.355	-0.686	14.928
1.00895.59				C			
ATOM	12	C	LEU	2	22.905	-0.968	15.307
1.00532.27				C			
ATOM	13	O	LEU	2	22.506	-2.123	15.452
1.00625.21				O			
ATOM	14	CB	LEU	2	24.502	-0.736	13.405
1.00999.99				C			
ATOM	15	CG	LEU	2	25.959	-0.469	13.006
1.00999.99				C			
ATOM	16	CD1	LEU	2	26.098	-0.611	11.487

1.00999.99				C						
ATOM	17	CD2	LEU		2	26.374	0.951	13.433		
1.00999.99				C						
ATOM	18	HN	LEU		2	25.632	-2.377	14.997		
1.00999.99				H						
ATOM	19	HA	LEU		2	24.621	0.299	15.274		
1.00890.87				H						
ATOM	20	HB1	LEU		2	23.868	0.014	12.958		
1.00924.07				H						
ATOM	21	HB2	LEU		2	24.208	-1.713	13.050		
1.00999.99				H						
ATOM	22	HG	LEU		2	26.599	-1.193	13.490		
1.00999.99				H						
ATOM	23	HD11	LEU		2	25.902	-1.633	11.202		
1.00999.99				H						
ATOM	24	HD12	LEU		2	27.098	-0.338	11.189		
1.00999.99				H						
ATOM	25	HD13	LEU		2	25.387	0.040	10.998		
1.00999.99				H						
ATOM	26	HD21	LEU		2	27.194	1.294	12.815		
1.00999.99				H						
ATOM	27	HD22	LEU		2	26.693	0.938	14.464		
1.00999.99				H						
ATOM	28	HD23	LEU		2	25.536	1.626	13.324		
1.00999.99				H						
ATOM	29	N	CYS		3	22.122	0.093	15.466		
1.00271.28				N						
ATOM	30	CA	CYS		3	20.717	-0.056	15.828		
1.00104.50				C						
ATOM	31	C	CYS		3	19.961	-0.816	14.744	1.00	
90.98				C						
ATOM	32	O	CYS		3	19.114	-1.658	15.036		
1.00207.28				O						
ATOM	33	CB	CYS		3	20.071	1.316	16.027	1.00	
37.83				C						
ATOM	34	SG	CYS		3	20.703	2.077	17.543	1.00	
81.56				S						
ATOM	35	HN	CYS		3	22.492	0.990	15.339		
1.00296.55				H						
ATOM	36	HA	CYS		3	20.652	-0.607	16.749		
1.00166.45				H						
ATOM	37	HB1	CYS		3	19.001	1.202	16.101	1.00	
40.38				H						
ATOM	38	HB2	CYS		3	20.306	1.949	15.184	1.00	
98.45				H						
ATOM	39	N	SER		4	20.269	-0.505	13.491	1.00	
85.31				N						
ATOM	40	CA	SER		4	19.607	-1.154	12.362	1.00	
92.94				C						
ATOM	41	C	SER		4	18.198	-0.595	12.190	1.00	
67.37				C						
ATOM	42	O	SER		4	17.695	-0.475	11.073		

1.00102.28										
ATOM	43	CB	SER	4	19.538	-2.670	12.591			
1.00123.83										
ATOM	44	OG	SER	4	19.567	-3.333	11.334			
1.00178.89										
ATOM	45	HN	SER	4	20.950	0.179	13.322			
1.00163.03										
ATOM	46	HA	SER	4	20.174	-0.960	11.465			
1.00129.78										
ATOM	47	HB1	SER	4	18.623	-2.923	13.121			
1.00105.26										
ATOM	48	HB2	SER	4	20.385	-2.986	13.176			
1.00156.87										
ATOM	49	HG	SER	4	18.813	-3.032	10.821			
1.00218.16										
ATOM	50	N	GLU	5	17.567	-0.267	13.313	1.00		
41.67			N							
ATOM	51	CA	GLU	5	16.213	0.268	13.299	1.00		
41.21			C							
ATOM	52	C	GLU	5	15.971	1.132	14.533	1.00		
41.92			C							
ATOM	53	O	GLU	5	16.702	1.038	15.519	1.00		
74.72			O							
ATOM	54	CB	GLU	5	15.211	-0.884	13.265	1.00		
49.24			C							
ATOM	55	CG	GLU	5	15.427	-1.762	14.488	1.00		
55.48			C							
ATOM	56	CD	GLU	5	14.628	-3.054	14.355	1.00		
92.06			C							
ATOM	57	OE1	GLU	5	13.955	-3.212	13.350			
1.00206.49										
ATOM	58	OE2	GLU	5	14.700	-3.868	15.263			
1.00197.24										
ATOM	59	HN	GLU	5	18.022	-0.395	14.171	1.00		
45.52			H							
ATOM	60	HA	GLU	5	16.080	0.867	12.421	1.00		
60.63			H							
ATOM	61	HB1	GLU	5	15.362	-1.469	12.371	1.00		
61.59			H							
ATOM	62	HB2	GLU	5	14.209	-0.490	13.274	1.00		
63.66			H							
ATOM	63	HG1	GLU	5	15.108	-1.232	15.372	1.00		
58.03			H							
ATOM	64	HG2	GLU	5	16.477	-1.992	14.569	1.00		
57.77			H							
ATOM	65	N	ASN	6	14.950	1.980	14.469	1.00		
50.73			N							
ATOM	66	CA	ASN	6	14.633	2.862	15.589	1.00		
71.04			C							
ATOM	67	C	ASN	6	14.284	2.053	16.834	1.00		
65.17			C							
ATOM	68	O	ASN	6	14.675	2.408	17.946	1.00		

94.86			O						
ATOM	69	CB	ASN	6	13.457	3.767	15.220	1.00	
94.83			C						
ATOM	70	CG	ASN	6	13.899	4.805	14.195		
1.00160.94				C					
ATOM	71	ND2	ASN	6	13.004	5.402	13.457		
1.00244.88				N					
ATOM	72	OD1	ASN	6	15.092	5.080	14.065		
1.00219.73				O					
ATOM	73	HN	ASN	6	14.405	2.017	13.657	1.00	
72.81			H						
ATOM	74	HA	ASN	6	15.492	3.479	15.803	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	13.099	4.269	16.107		
1.00111.09				H					
ATOM	76	HB2	ASN	6	12.660	3.167	14.803	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	12.056	5.181	13.562		
1.00272.43				H					
ATOM	78	HD22	ASN	6	13.281	6.071	12.795		
1.00336.78				H					
ATOM	79	N	GLY	7	13.540	0.965	16.642	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.136	0.105	17.757	1.00	
71.47			C						
ATOM	81	C	GLY	7	14.016	-1.134	17.839	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.522	-2.252	17.976	1.00	
44.54			O						
ATOM	83	HN	GLY	7	13.257	0.734	15.733	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.116	-0.204	17.608		
1.00103.52				H					
ATOM	85	HA2	GLY	7	13.207	0.654	18.686		
1.00108.67				H					
ATOM	86	N	ASP	8	15.322	-0.929	17.748	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.264	-2.040	17.806	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.148	-2.771	19.137	1.00	
9.37			C						
ATOM	89	O	ASP	8	16.020	-3.995	19.177	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.693	-1.531	17.630	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.642	-2.708	17.430	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	19.811	-2.563	17.749		
1.00119.56				O					
ATOM	93	OD2	ASP	8	18.185	-3.738	16.960		
1.00133.27				O1-					
ATOM	94	HN	ASP	8	15.657	-0.016	17.634	1.00	

35.63			H						
ATOM	95	HA	ASP	8	16.039	-2.729	17.012	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	17.989	-0.980	18.509	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.736	-0.881	16.768	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.189	-2.012	20.222	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.082	-2.599	21.551	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.704	-3.226	21.731	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.569	-4.326	22.269	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.314	-1.532	22.612	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.046	-1.045	22.558	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.289	-1.044	20.125	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.840	-3.356	21.658	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.090	-1.934	23.586	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.690	-0.674	22.416	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.687	-2.512	21.255	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.304	-2.980	21.334	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.382	-2.011	20.598	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.784	-0.900	20.254		
1.00119.04			O						
ATOM	112	CB	ALA	10	11.856	-3.109	22.791	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.873	-1.651	20.829	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.238	-3.950	20.863	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	11.693	-2.126	23.206	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	12.616	-3.620	23.361		
1.00118.20			H						
ATOM	117	HB3	ALA	10	10.936	-3.673	22.835		
1.00117.32			H						
ATOM	118	N	ALA	11	10.148	-2.440	20.356	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.181	-1.600	19.654	1.00	
35.24			C						
ATOM	120	C	ALA	11	8.898	-0.315	20.432	1.00	

22.78			C					
ATOM	121	O	ALA	11	8.753	0.756	19.844	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.876	-2.371	19.454	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.884	-3.336	20.650	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.583	-1.341	18.687	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.280	-1.879	18.700	
1.00157.06				H				
ATOM	126	HB2	ALA	11	7.328	-2.402	20.385	
1.00148.83				H				
ATOM	127	HB3	ALA	11	8.099	-3.379	19.134	
1.00137.06				H				
ATOM	128	N	ASP	12	8.804	-0.433	21.755	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.520	0.723	22.610	1.00
31.05			C					
ATOM	130	C	ASP	12	9.807	1.380	23.106	1.00
22.98			C					
ATOM	131	O	ASP	12	9.779	2.197	24.026	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.676	0.282	23.807	1.00
48.35			C					
ATOM	133	CG	ASP	12	8.433	-0.753	24.630	
1.00104.83				C				
ATOM	134	OD1	ASP	12	9.468	-1.205	24.169	
1.00258.73				O				
ATOM	135	OD2	ASP	12	7.969	-1.081	25.710	
1.00213.46				O1-				
ATOM	136	HN	ASP	12	8.918	-1.315	22.166	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.955	1.451	22.043	1.00
49.76			H					
ATOM	138	HB1	ASP	12	6.751	-0.150	23.455	1.00
95.71			H					
ATOM	139	HB2	ASP	12	7.456	1.140	24.426	1.00
54.37			H					
ATOM	140	N	GLU	13	10.935	1.020	22.494	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.238	1.578	22.879	1.00
12.01			C					
ATOM	142	C	GLU	13	12.903	2.253	21.679	1.00
10.07			C					
ATOM	143	O	GLU	13	12.565	1.965	20.533	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.130	0.458	23.415	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.575	-0.021	24.761	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.220	-1.342	25.160	

1.00142.36				C					
ATOM	147	OE1	GLU	13	13.024	-1.758	26.290		
1.00339.06				O					
ATOM	148	OE2	GLU	13	13.897	-1.920	24.330		
1.00335.28				O1-					
ATOM	149	HN	GLU	13	10.894	0.362	21.767	1.00	
28.36			H						
ATOM	150	HA	GLU	13	12.102	2.314	23.659	1.00	
13.06			H						
ATOM	151	HB1	GLU	13	14.134	0.830	23.554	1.00	
13.76			H						
ATOM	152	HB2	GLU	13	13.142	-0.363	22.712	1.00	
9.94			H						
ATOM	153	HG1	GLU	13	11.506	-0.157	24.679	1.00	
66.02			H						
ATOM	154	HG2	GLU	13	12.783	0.722	25.516	1.00	
56.23			H						
ATOM	155	N	CYS	14	13.843	3.162	21.952	1.00	
9.12			N						
ATOM	156	CA	CYS	14	14.546	3.889	20.889	1.00	
10.69			C						
ATOM	157	C	CYS	14	16.012	3.483	20.839	1.00	
9.56			C						
ATOM	158	O	CYS	14	16.622	3.226	21.873	1.00	
13.62			O						
ATOM	159	CB	CYS	14	14.454	5.395	21.140	1.00	
13.96			C						
ATOM	160	SG	CYS	14	15.363	6.278	19.843	1.00	
42.96			S						
ATOM	161	HN	CYS	14	14.068	3.355	22.888	1.00	
9.76			H						
ATOM	162	HA	CYS	14	14.090	3.670	19.933	1.00	
15.54			H						
ATOM	163	HB1	CYS	14	14.885	5.624	22.102	1.00	
50.72			H						
ATOM	164	HB2	CYS	14	13.417	5.701	21.126	1.00	
46.13			H						
ATOM	165	N	CYS	15	16.571	3.429	19.633	1.00	
9.60			N						
ATOM	166	CA	CYS	15	17.974	3.059	19.449	1.00	
9.28			C						
ATOM	167	C	CYS	15	18.600	3.952	18.388	1.00	
9.92			C						
ATOM	168	O	CYS	15	18.052	4.109	17.298	1.00	
13.31			O						
ATOM	169	CB	CYS	15	18.074	1.594	19.011	1.00	
12.90			C						
ATOM	170	SG	CYS	15	19.806	1.054	19.040	1.00	
39.11			S						
ATOM	171	HN	CYS	15	16.033	3.654	18.844	1.00	
13.12			H						
ATOM	172	HA	CYS	15	18.511	3.186	20.379	1.00	

8.26			H					
ATOM	173	HB1	CYS	15	17.681	1.492	18.010	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.496	0.980	19.686	1.00
27.31			H					
ATOM	175	N	VAL	16	19.745	4.547	18.713	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.425	5.435	17.774	1.00
11.99			C					
ATOM	177	C	VAL	16	21.938	5.302	17.912	1.00
7.73			C					
ATOM	178	O	VAL	16	22.474	5.313	19.021	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.997	6.880	18.044	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.588	7.358	19.373	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.490	7.774	16.908	
1.00115.21			C					
ATOM	182	HN	VAL	16	20.134	4.392	19.599	1.00
9.76			H					
ATOM	183	HA	VAL	16	20.146	5.173	16.763	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.920	6.927	18.096	1.00
52.63			H					
ATOM	185	HG11	VAL	16	20.103	8.276	19.671	
1.00128.07			H					
ATOM	186	HG12	VAL	16	21.647	7.532	19.254	
1.00154.13			H					
ATOM	187	HG13	VAL	16	20.429	6.604	20.130	
1.00135.74			H					
ATOM	188	HG21	VAL	16	21.550	7.622	16.763	
1.00229.05			H					
ATOM	189	HG22	VAL	16	20.303	8.806	17.156	
1.00261.82			H					
ATOM	190	HG23	VAL	16	19.964	7.520	16.000	
1.00210.07			H					
ATOM	191	N	ASP	17	22.623	5.168	16.776	1.00
14.34			N					
ATOM	192	CA	ASP	17	24.079	5.026	16.776	1.00
11.90			C					
ATOM	193	C	ASP	17	24.759	6.383	16.633	1.00
13.15			C					
ATOM	194	O	ASP	17	24.529	7.106	15.663	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.512	4.126	15.617	1.00
20.80			C					
ATOM	196	CG	ASP	17	23.858	2.757	15.744	1.00
28.72			C					
ATOM	197	OD1	ASP	17	23.816	2.240	16.849	
1.00135.42			O					
ATOM	198	OD2	ASP	17	23.410	2.243	14.733	

1.00114.17				01-					
ATOM	199	HN	ASP	17	22.139	5.160	15.925	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.393	4.570	17.703	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.587	4.012	15.637	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	24.216	4.579	14.683	1.00	
29.52			H						
ATOM	203	N	THR	18	25.618	6.710	17.596	1.00	
11.55			N						
ATOM	204	CA	THR	18	26.360	7.973	17.573	1.00	
17.10			C						
ATOM	205	C	THR	18	27.781	7.724	17.084	1.00	
10.63			C						
ATOM	206	O	THR	18	28.287	6.606	17.169	1.00	
6.49			O						
ATOM	207	CB	THR	18	26.398	8.588	18.989	1.00	
28.52			C						
ATOM	208	CG2	THR	18	25.195	9.513	19.205	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.370	7.546	19.950	1.00	
26.49			O						
ATOM	210	HN	THR	18	25.768	6.084	18.335	1.00	
13.96			H						
ATOM	211	HA	THR	18	25.876	8.666	16.896	1.00	
26.43			H						
ATOM	212	HB	THR	18	27.305	9.163	19.116	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.549	7.060	19.838	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.317	9.080	18.751		
1.00100.44				H					
ATOM	215	HG22	THR	18	25.399	10.474	18.755		
1.00129.42				H					
ATOM	216	HG23	THR	18	25.029	9.643	20.263		
1.00156.21				H					
ATOM	217	N	VAL	19	28.420	8.780	16.596	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.780	8.699	16.117	1.00	
13.34			C						
ATOM	219	C	VAL	19	30.222	10.058	15.610	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.673	10.608	14.654	1.00	
42.11			O						
ATOM	221	CB	VAL	19	29.940	7.658	15.009	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	28.925	7.917	13.892	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.367	7.756	14.447	1.00	
20.67			C						
ATOM	224	HN	VAL	19	27.977	9.648	16.580	1.00	

26.89			H						
ATOM	225	HA	VAL	19	30.418	8.418	16.945	1.00	
8.08			H						
ATOM	226	HB	VAL	19	29.784	6.672	15.419	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	29.257	8.747	13.284		
1.00137.43									H
ATOM	228	HG12	VAL	19	27.962	8.150	14.323	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	28.837	7.034	13.275		
1.00108.69									H
ATOM	230	HG21	VAL	19	31.445	8.631	13.817	1.00	
99.42			H						
ATOM	231	HG22	VAL	19	31.591	6.876	13.867		
1.00111.36									H
ATOM	232	HG23	VAL	19	32.071	7.843	15.265	1.00	
77.11			H						
ATOM	233	N	PHE	20	31.216	10.574	16.278	1.00	
24.58			N						
ATOM	234	CA	PHE	20	31.785	11.869	15.957	1.00	
40.34			C						
ATOM	235	C	PHE	20	32.628	11.801	14.680	1.00	
40.37			C						
ATOM	236	O	PHE	20	32.120	11.980	13.574	1.00	
66.02			O						
ATOM	237	CB	PHE	20	32.646	12.357	17.151	1.00	
48.79			C						
ATOM	238	CG	PHE	20	32.962	11.196	18.075	1.00	
35.75			C						
ATOM	239	CD1	PHE	20	31.964	10.683	18.919	1.00	
30.20			C						
ATOM	240	CD2	PHE	20	34.248	10.641	18.096	1.00	
40.95			C						
ATOM	241	CE1	PHE	20	32.255	9.621	19.777	1.00	
30.41			C						
ATOM	242	CE2	PHE	20	34.535	9.574	18.958	1.00	
45.84			C						
ATOM	243	CZ	PHE	20	33.539	9.067	19.799	1.00	
40.81			C						
ATOM	244	HN	PHE	20	31.574	10.066	17.026	1.00	
16.73			H						
ATOM	245	HA	PHE	20	30.978	12.571	15.796	1.00	
59.91			H						
ATOM	246	HB1	PHE	20	32.098	13.091	17.700	1.00	
67.15			H						
ATOM	247	HB2	PHE	20	33.567	12.801	16.805	1.00	
58.17			H						
ATOM	248	HD1	PHE	20	30.966	11.104	18.903	1.00	
33.34			H						
ATOM	249	HD2	PHE	20	35.014	11.028	17.445	1.00	
49.35			H						
ATOM	250	HE1	PHE	20	31.487	9.225	20.422	1.00	

30.61			H						
ATOM	251	HE2	PHE	20	35.526	9.146	18.974	1.00	
61.27			H						
ATOM	252	HZ	PHE	20	33.761	8.245	20.463	1.00	
52.66			H						
ATOM	253	N	GLU	21	33.922	11.566	14.857	1.00	
41.31			N						
ATOM	254	CA	GLU	21	34.857	11.501	13.740	1.00	
56.16			C						
ATOM	255	C	GLU	21	34.973	10.074	13.207	1.00	
58.61			C						
ATOM	256	O	GLU	21	34.595	9.794	12.070		
1.00201.19				O					
ATOM	257	CB	GLU	21	36.217	12.034	14.230	1.00	
57.37			C						
ATOM	258	CG	GLU	21	37.374	11.488	13.380		
1.00193.56				C					
ATOM	259	CD	GLU	21	38.659	12.244	13.700		
1.00304.62				C					
ATOM	260	OE1	GLU	21	39.491	11.689	14.399		
1.00451.81				O					
ATOM	261	OE2	GLU	21	38.790	13.366	13.243		
1.00442.88				O1-					
ATOM	262	HN	GLU	21	34.264	11.451	15.768	1.00	
50.82			H						
ATOM	263	HA	GLU	21	34.505	12.135	12.945	1.00	
85.72			H						
ATOM	264	HB1	GLU	21	36.353	11.741	15.263	1.00	
46.37			H						
ATOM	265	HB2	GLU	21	36.217	13.115	14.171		
1.00131.81				H					
ATOM	266	HG1	GLU	21	37.137	11.608	12.334		
1.00314.91				H					
ATOM	267	HG2	GLU	21	37.514	10.438	13.598		
1.00266.92				H					
ATOM	268	N	GLY	22	35.499	9.183	14.032	1.00	
86.70			N						
ATOM	269	CA	GLY	22	35.659	7.790	13.625		
1.00104.66				C					
ATOM	270	C	GLY	22	36.661	7.062	14.517	1.00	
71.50			C						
ATOM	271	O	GLY	22	36.778	5.837	14.458	1.00	
89.87			O						
ATOM	272	HN	GLY	22	35.784	9.465	14.923		
1.00214.64				H					
ATOM	273	HA1	GLY	22	36.010	7.756	12.605		
1.00152.47				H					
ATOM	274	HA2	GLY	22	34.704	7.291	13.689		
1.00118.15				H					
ATOM	275	N	ASP	23	37.376	7.814	15.348	1.00	
44.68			N						
ATOM	276	CA	ASP	23	38.352	7.208	16.246	1.00	

43.33			C						
ATOM	277	C	ASP	23	37.652	6.214	17.164	1.00	
37.55			C						
ATOM	278	O	ASP	23	38.150	5.117	17.413	1.00	
61.37			O						
ATOM	279	CB	ASP	23	39.039	8.288	17.084	1.00	
40.74			C						
ATOM	280	CG	ASP	23	40.123	7.662	17.954		
1.00141.86			C						
ATOM	281	OD1	ASP	23	40.859	8.409	18.578		
1.00328.18			O						
ATOM	282	OD2	ASP	23	40.201	6.445	17.985		
1.00304.58			O1-						
ATOM	283	HN	ASP	23	37.241	8.784	15.362	1.00	
40.86			H						
ATOM	284	HA	ASP	23	39.095	6.687	15.663	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	38.309	8.772	17.716	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	39.486	9.021	16.427	1.00	
93.26			H						
ATOM	287	N	MET	24	36.482	6.614	17.647	1.00	
23.24			N						
ATOM	288	CA	MET	24	35.679	5.770	18.526	1.00	
32.50			C						
ATOM	289	C	MET	24	34.206	6.029	18.267	1.00	
25.13			C						
ATOM	290	O	MET	24	33.795	7.165	18.037	1.00	
54.40			O						
ATOM	291	CB	MET	24	36.014	6.058	19.992	1.00	
47.36			C						
ATOM	292	CG	MET	24	35.186	5.141	20.893		
1.00151.73			C						
ATOM	293	SD	MET	24	35.731	5.322	22.612		
1.00209.23			S						
ATOM	294	CE	MET	24	35.068	6.980	22.906		
1.00243.29			C						
ATOM	295	HN	MET	24	36.143	7.498	17.394	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.882	4.730	18.314	1.00	
48.94			H						
ATOM	297	HB1	MET	24	35.784	7.088	20.218		
1.00124.40			H						
ATOM	298	HB2	MET	24	37.067	5.879	20.162		
1.00166.96			H						
ATOM	299	HG1	MET	24	35.319	4.115	20.581		
1.00331.71			H						
ATOM	300	HG2	MET	24	34.142	5.407	20.816		
1.00302.30			H						
ATOM	301	HE1	MET	24	35.730	7.716	22.471		
1.00340.44			H						
ATOM	302	HE2	MET	24	34.990	7.155	23.968		

1.00373.88				H					
ATOM	303	HE3	MET		24	34.087	7.062	22.460	
1.00386.81				H					
ATOM	304	N	VAL		25	33.418	4.963	18.277	1.00
22.44			N						
ATOM	305	CA	VAL		25	31.992	5.067	18.017	1.00
15.37			C						
ATOM	306	C	VAL		25	31.194	5.005	19.314	1.00
17.47			C						
ATOM	307	O	VAL		25	31.679	4.521	20.336	1.00
29.52			O						
ATOM	308	CB	VAL		25	31.585	3.931	17.087	1.00
23.36			C						
ATOM	309	CG1	VAL		25	32.058	4.246	15.665	1.00
58.39			C						
ATOM	310	CG2	VAL		25	32.230	2.628	17.563	1.00
55.25			C						
ATOM	311	HN	VAL		25	33.805	4.081	18.444	1.00
48.11			H						
ATOM	312	HA	VAL		25	31.779	6.009	17.528	1.00
9.25			H						
ATOM	313	HB	VAL		25	30.521	3.829	17.097	1.00
52.45			H						
ATOM	314	HG11	VAL		25	32.025	3.349	15.065	
1.00171.07				H					
ATOM	315	HG12	VAL		25	33.071	4.623	15.695	
1.00166.22				H					
ATOM	316	HG13	VAL		25	31.412	4.994	15.231	
1.00134.76				H					
ATOM	317	HG21	VAL		25	33.286	2.644	17.333	
1.00141.88				H					
ATOM	318	HG22	VAL		25	31.765	1.792	17.060	
1.00184.50				H					
ATOM	319	HG23	VAL		25	32.095	2.528	18.630	
1.00133.90				H					
ATOM	320	N	THR		26	29.971	5.526	19.262	1.00
13.60			N						
ATOM	321	CA	THR		26	29.096	5.567	20.430	1.00
21.19			C						
ATOM	322	C	THR		26	27.670	5.166	20.054	1.00
16.55			C						
ATOM	323	O	THR		26	27.202	5.461	18.955	1.00
11.43			O						
ATOM	324	CB	THR		26	29.100	6.983	20.999	1.00
27.07			C						
ATOM	325	CG2	THR		26	28.231	7.048	22.258	1.00
44.39			C						
ATOM	326	OG1	THR		26	30.432	7.346	21.330	1.00
34.75			O						
ATOM	327	HN	THR		26	29.654	5.912	18.417	1.00
10.81			H						
ATOM	328	HA	THR		26	29.462	4.885	21.185	1.00

33.16			H						
ATOM	329	HB	THR	26	28.712	7.668	20.257	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.411	8.213	21.741	1.00	
77.72			H						
ATOM	331	HG21	THR	26	28.285	8.043	22.677		
1.00126.99			H						
ATOM	332	HG22	THR	26	28.596	6.333	22.982		
1.00108.32			H						
ATOM	333	HG23	THR	26	27.209	6.817	22.008		
1.00151.99			H						
ATOM	334	N	ARG	27	26.985	4.494	20.980	1.00	
22.38			N						
ATOM	335	CA	ARG	27	25.605	4.053	20.751	1.00	
20.21			C						
ATOM	336	C	ARG	27	24.748	4.355	21.975	1.00	
16.96			C						
ATOM	337	O	ARG	27	25.268	4.565	23.072	1.00	
20.06			O						
ATOM	338	CB	ARG	27	25.580	2.549	20.465	1.00	
22.14			C						
ATOM	339	CG	ARG	27	26.051	1.783	21.704		
1.00124.30			C						
ATOM	340	CD	ARG	27	26.267	0.312	21.343		
1.00109.38			C						
ATOM	341	NE	ARG	27	25.011	-0.289	20.903		
1.00227.73			N						
ATOM	342	CZ	ARG	27	24.149	-0.804	21.776		
1.00426.12			C						
ATOM	343	NH1	ARG	27	23.035	-1.340	21.354		
1.00767.09			N1+						
ATOM	344	NH2	ARG	27	24.415	-0.774	23.053		
1.00581.78			N						
ATOM	345	HN	ARG	27	27.414	4.291	21.837	1.00	
30.75			H						
ATOM	346	HA	ARG	27	25.195	4.577	19.900	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	26.237	2.328	19.637	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	24.572	2.248	20.216		
1.00103.36			H						
ATOM	349	HG1	ARG	27	25.302	1.855	22.478		
1.00281.97			H						
ATOM	350	HG2	ARG	27	26.979	2.208	22.058		
1.00276.19			H						
ATOM	351	HD1	ARG	27	26.640	-0.217	22.208		
1.00183.60			H						
ATOM	352	HD2	ARG	27	26.990	0.245	20.544		
1.00142.93			H						
ATOM	353	HE	ARG	27	24.799	-0.315	19.947		
1.00372.53			H						
ATOM	354	HH11	ARG	27	22.831	-1.361	20.376		

1.00910.59				H					
ATOM	355	HH12	ARG		27	22.388	-1.728	22.008	
1.00999.99				H					
ATOM	356	HH21	ARG		27	25.266	-0.363	23.376	
1.00532.54				H					
ATOM	357	HH22	ARG		27	23.767	-1.163	23.708	
1.00948.84				H					
ATOM	358	N	SER		28	23.429	4.387	21.784	1.00
14.60			N						
ATOM	359	CA	SER		28	22.508	4.678	22.882	1.00
14.92			C						
ATOM	360	C	SER		28	21.183	3.947	22.687	1.00
12.12			C						
ATOM	361	O	SER		28	20.764	3.687	21.560	1.00
13.41			O						
ATOM	362	CB	SER		28	22.252	6.183	22.963	1.00
23.26			C						
ATOM	363	OG	SER		28	21.363	6.450	24.039	
1.00146.32				O					
ATOM	364	HN	SER		28	23.068	4.220	20.887	1.00
15.23			H						
ATOM	365	HA	SER		28	22.949	4.350	23.814	1.00
15.44			H						
ATOM	366	HB1	SER		28	21.820	6.523	22.032	1.00
88.73			H						
ATOM	367	HB2	SER		28	23.183	6.698	23.134	
1.00124.68				H					
ATOM	368	HG	SER		28	20.478	6.205	23.760	
1.00242.47				H					
ATOM	369	N	CYS		29	20.528	3.622	23.797	1.00
10.48			N						
ATOM	370	CA	CYS		29	19.249	2.925	23.749	1.00
9.97			C						
ATOM	371	C	CYS		29	18.627	2.894	25.144	1.00
11.60			C						
ATOM	372	O	CYS		29	19.287	2.525	26.116	1.00
15.64			O						
ATOM	373	CB	CYS		29	19.450	1.497	23.216	1.00
9.52			C						
ATOM	374	SG	CYS		29	17.969	0.955	22.350	1.00
10.40			S						
ATOM	375	HN	CYS		29	20.908	3.863	24.667	1.00
11.10			H						
ATOM	376	HA	CYS		29	18.586	3.459	23.085	1.00
11.08			H						
ATOM	377	HB1	CYS		29	19.643	0.814	24.033	1.00
9.33			H						
ATOM	378	HB2	CYS		29	20.283	1.477	22.532	1.00
10.78			H						
ATOM	379	N	GLU		30	17.358	3.290	25.241	1.00
13.52			N						
ATOM	380	CA	GLU		30	16.660	3.311	26.531	1.00

17.41			C						
ATOM	381	C	GLU	30	15.644	2.181	26.615	1.00	
10.81			C						
ATOM	382	O	GLU	30	14.932	1.898	25.651	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.949	4.653	26.706	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.986	5.777	26.724		
1.00108.13				C					
ATOM	385	CD	GLU	30	17.795	5.720	28.015		
1.00240.52				C					
ATOM	386	OE1	GLU	30	18.825	6.373	28.076		
1.00422.56				O					
ATOM	387	OE2	GLU	30	17.376	5.024	28.924		
1.00410.81				O1-					
ATOM	388	HN	GLU	30	16.881	3.579	24.434	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.377	3.195	27.334	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.404	4.654	27.638	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	15.263	4.808	25.886	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	16.485	6.731	26.659		
1.00196.66				H					
ATOM	393	HG2	GLU	30	17.652	5.663	25.880		
1.00140.67				H					
ATOM	394	N	LYS	31	15.584	1.535	27.779	1.00	
11.96			N						
ATOM	395	CA	LYS	31	14.658	0.431	27.996	1.00	
11.40			C						
ATOM	396	C	LYS	31	13.379	0.923	28.665	1.00	
10.99			C						
ATOM	397	O	LYS	31	13.314	2.049	29.159	1.00	
12.86			O						
ATOM	398	CB	LYS	31	15.318	-0.638	28.870	1.00	
21.40			C						
ATOM	399	CG	LYS	31	16.074	0.022	30.028	1.00	
57.81			C						
ATOM	400	CD	LYS	31	16.688	-1.060	30.917		
1.00115.52				C					
ATOM	401	CE	LYS	31	17.447	-0.403	32.071		
1.00250.23				C					
ATOM	402	NZ	LYS	31	18.037	-1.459	32.943		
1.00462.10				N1+					
ATOM	403	HN	LYS	31	16.176	1.804	28.507	1.00	
26.13			H						
ATOM	404	HA	LYS	31	14.404	-0.012	27.046	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	16.008	-1.211	28.273	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	14.563	-1.290	29.266	1.00	

47.19			H						
ATOM	407	HG1	LYS	31	15.391	0.621	30.611		
1.00126.32			H						
ATOM	408	HG2	LYS	31	16.861	0.649	29.635		
1.00114.19			H						
ATOM	409	HD1	LYS	31	17.372	-1.660	30.335		
1.00198.45			H						
ATOM	410	HD2	LYS	31	15.904	-1.689	31.312		
1.00200.14			H						
ATOM	411	HE1	LYS	31	16.767	0.203	32.650		
1.00374.64			H						
ATOM	412	HE2	LYS	31	18.237	0.218	31.676		
1.00403.27			H						
ATOM	413	HZ1	LYS	31	18.483	-2.188	32.351		
1.00627.38			H						
ATOM	414	HZ2	LYS	31	17.285	-1.891	33.519		
1.00622.26			H						
ATOM	415	HZ3	LYS	31	18.752	-1.035	33.567		
1.00619.20			H						
ATOM	416	N	THR	32	12.368	0.060	28.677	1.00	
15.51			N						
ATOM	417	CA	THR	32	11.077	0.388	29.290	1.00	
22.44			C						
ATOM	418	C	THR	32	10.837	-0.483	30.520	1.00	
26.60			C						
ATOM	419	O	THR	32	10.867	-1.711	30.439	1.00	
57.43			O						
ATOM	420	CB	THR	32	9.953	0.155	28.277	1.00	
56.28			C						
ATOM	421	CG2	THR	32	8.606	0.490	28.921		
1.00102.70			C						
ATOM	422	OG1	THR	32	10.159	0.987	27.144		
1.00111.17			O						
ATOM	423	HN	THR	32	12.493	-0.823	28.268	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.065	1.429	29.587	1.00	
19.67			H						
ATOM	425	HB	THR	32	9.953	-0.880	27.970	1.00	
84.25			H						
ATOM	426	HG1	THR	32	9.381	0.925	26.585		
1.00205.03			H						
ATOM	427	HG21	THR	32	7.847	0.552	28.155		
1.00220.71			H						
ATOM	428	HG22	THR	32	8.679	1.439	29.434		
1.00174.67			H						
ATOM	429	HG23	THR	32	8.344	-0.283	29.627		
1.00217.44			H						
ATOM	430	N	THR	33	10.594	0.160	31.659	1.00	
22.47			N						
ATOM	431	CA	THR	33	10.344	-0.563	32.905	1.00	
41.60			C						
ATOM	432	C	THR	33	9.460	0.239	33.817	1.00	

38.03			C						
ATOM	433	O	THR	33	9.927	0.948	34.710	1.00	
52.73			O						
ATOM	434	CB	THR	33	11.656	-0.890	33.615	1.00	
63.25			C						
ATOM	435	CG2	THR	33	12.428	-1.943	32.818		
1.00121.65				C					
ATOM	436	OG1	THR	33	12.440	0.290	33.728	1.00	
96.20			O						
ATOM	437	HN	THR	33	10.581	1.141	31.662	1.00	
23.82			H						
ATOM	438	HA	THR	33	9.823	-1.476	32.692	1.00	
67.12			H						
ATOM	439	HB	THR	33	11.441	-1.275	34.597		
1.00107.59				H					
ATOM	440	HG1	THR	33	13.037	0.180	34.472		
1.00176.27				H					
ATOM	441	HG21	THR	33	12.799	-1.505	31.905		
1.00255.23				H					
ATOM	442	HG22	THR	33	11.772	-2.769	32.581		
1.00245.37				H					
ATOM	443	HG23	THR	33	13.258	-2.303	33.408		
1.00185.78				H					
ATOM	444	N	GLY	34	8.168	0.101	33.594	1.00	
40.93			N						
ATOM	445	CA	GLY	34	7.195	0.790	34.403	1.00	
45.59			C						
ATOM	446	C	GLY	34	7.076	2.247	33.976	1.00	
40.97			C						
ATOM	447	O	GLY	34	6.216	2.982	34.458	1.00	
82.17			O						
ATOM	448	HN	GLY	34	7.867	-0.495	32.876	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	7.518	0.739	35.423	1.00	
54.41			H						
ATOM	450	HA2	GLY	34	6.234	0.303	34.303	1.00	
62.09			H						
ATOM	451	N	ASN	35	7.949	2.648	33.056	1.00	
32.51			N						
ATOM	452	CA	ASN	35	7.952	4.014	32.542	1.00	
33.20			C						
ATOM	453	C	ASN	35	8.595	4.047	31.162	1.00	
23.17			C						
ATOM	454	O	ASN	35	9.473	3.239	30.860	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.726	4.933	33.487	1.00	
54.51			C						
ATOM	456	CG	ASN	35	8.099	4.911	34.876	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	8.836	4.613	35.911		
1.00220.46				N					
ATOM	458	OD1	ASN	35	6.904	5.170	35.023		

1.00117.80												O
ATOM	459	HN	ASN	35	8.604	2.008	32.709	1.00				
51.15			H									
ATOM	460	HA	ASN	35	6.933	4.365	32.466	1.00				
47.21			H									
ATOM	461	HB1	ASN	35	8.703	5.942	33.101	1.00				
68.31			H									
ATOM	462	HB2	ASN	35	9.751	4.599	33.550	1.00				
57.75			H									
ATOM	463	HD21	ASN	35	9.786	4.405	35.791					
1.00405.39												H
ATOM	464	HD22	ASN	35	8.439	4.595	36.807					
1.00245.64												H
ATOM	465	N	PHE	36	8.150	4.978	30.324	1.00				
35.72			N									
ATOM	466	CA	PHE	36	8.680	5.107	28.976	1.00				
33.41			C									
ATOM	467	C	PHE	36	9.749	6.193	28.915	1.00				
28.51			C									
ATOM	468	O	PHE	36	9.591	7.270	29.492	1.00				
45.23			O									
ATOM	469	CB	PHE	36	7.538	5.456	28.034	1.00				
67.53			C									
ATOM	470	CG	PHE	36	6.572	4.299	27.976	1.00				
86.71			C									
ATOM	471	CD1	PHE	36	5.464	4.272	28.832					
1.00106.51												C
ATOM	472	CD2	PHE	36	6.784	3.253	27.071	1.00				
99.48			C									
ATOM	473	CE1	PHE	36	4.567	3.199	28.779					
1.00134.48												C
ATOM	474	CE2	PHE	36	5.888	2.179	27.020					
1.00134.27												C
ATOM	475	CZ	PHE	36	4.779	2.153	27.874					
1.00149.48												C
ATOM	476	HN	PHE	36	7.446	5.591	30.612	1.00				
62.87			H									
ATOM	477	HA	PHE	36	9.113	4.167	28.662	1.00				
28.53			H									
ATOM	478	HB1	PHE	36	7.928	5.650	27.056	1.00				
73.56			H									
ATOM	479	HB2	PHE	36	7.026	6.336	28.399	1.00				
88.42			H									
ATOM	480	HD1	PHE	36	5.302	5.080	29.531					
1.00110.20												H
ATOM	481	HD2	PHE	36	7.642	3.273	26.415	1.00				
93.07			H									
ATOM	482	HE1	PHE	36	3.711	3.178	29.439					
1.00155.06												H
ATOM	483	HE2	PHE	36	6.052	1.372	26.322					
1.00159.46												H
ATOM	484	HZ	PHE	36	4.086	1.324	27.834					

1.00183.25				H					
ATOM	485	N	THR		37	10.839	5.903	28.206	1.00
20.06			N						
ATOM	486	CA	THR		37	11.936	6.854	28.062	1.00
27.18			C						
ATOM	487	C	THR		37	12.573	6.713	26.686	1.00
41.87			C						
ATOM	488	O	THR		37	13.120	5.665	26.346	
1.00169.86				O					
ATOM	489	CB	THR		37	12.989	6.604	29.146	1.00
26.52			C						
ATOM	490	CG2	THR		37	12.373	6.848	30.524	1.00
75.69			C						
ATOM	491	OG1	THR		37	13.446	5.260	29.057	1.00
81.95			O						
ATOM	492	HN	THR		37	10.904	5.032	27.765	1.00
18.47			H						
ATOM	493	HA	THR		37	11.557	7.861	28.169	1.00
38.80			H						
ATOM	494	HB	THR		37	13.820	7.278	29.003	1.00
81.60			H						
ATOM	495	HG1	THR		37	12.832	4.775	28.502	
1.00188.80				H					
ATOM	496	HG21	THR		37	11.806	7.767	30.508	
1.00196.98				H					
ATOM	497	HG22	THR		37	13.160	6.923	31.261	
1.00196.23				H					
ATOM	498	HG23	THR		37	11.720	6.025	30.777	
1.00168.92				H					
ATOM	499	N	GLU		38	12.492	7.777	25.898	1.00
26.53			N						
ATOM	500	CA	GLU		38	13.060	7.771	24.553	1.00
30.29			C						
ATOM	501	C	GLU		38	14.571	7.971	24.600	1.00
25.39			C						
ATOM	502	O	GLU		38	15.117	8.425	25.605	1.00
51.60			O						
ATOM	503	CB	GLU		38	12.422	8.880	23.714	1.00
54.82			C						
ATOM	504	CG	GLU		38	10.939	8.571	23.499	
1.00165.84				C					
ATOM	505	CD	GLU		38	10.283	9.692	22.700	
1.00292.92				C					
ATOM	506	OE1	GLU		38	10.944	10.690	22.466	
1.00414.19				O					
ATOM	507	OE2	GLU		38	9.130	9.535	22.335	
1.00537.65				O1-					
ATOM	508	HN	GLU		38	12.039	8.579	26.224	1.00
84.50			H						
ATOM	509	HA	GLU		38	12.846	6.820	24.089	1.00
32.15			H						
ATOM	510	HB1	GLU		38	12.917	8.938	22.757	

1.00144.82				H					
ATOM	511	HB2	GLU		38	12.522	9.824	24.231	
1.00106.49				H					
ATOM	512	HG1	GLU		38	10.449	8.482	24.457	
1.00303.31				H					
ATOM	513	HG2	GLU		38	10.842	7.641	22.959	
1.00323.99				H					
ATOM	514	N	CYS		39	15.239	7.631	23.501	1.00
15.84			N						
ATOM	515	CA	CYS		39	16.687	7.781	23.418	1.00
14.30			C						
ATOM	516	C	CYS		39	17.072	9.253	23.605	1.00
22.31			C						
ATOM	517	O	CYS		39	16.291	10.142	23.267	1.00
32.92			O						
ATOM	518	CB	CYS		39	17.172	7.284	22.054	1.00
18.08			C						
ATOM	519	SG	CYS		39	16.084	7.929	20.760	1.00
17.41			S						
ATOM	520	HN	CYS		39	14.748	7.279	22.733	1.00
24.87			H						
ATOM	521	HA	CYS		39	17.143	7.182	24.191	1.00
14.60			H						
ATOM	522	HB1	CYS		39	17.154	6.205	22.036	1.00
27.71			H						
ATOM	523	HB2	CYS		39	18.179	7.629	21.882	1.00
34.91			H						
ATOM	524	N	PRO		40	18.240	9.535	24.135	1.00
27.27			N						
ATOM	525	CA	PRO		40	18.691	10.940	24.359	1.00
47.66			C						
ATOM	526	C	PRO		40	19.105	11.624	23.057	1.00
71.54			C						
ATOM	527	O	PRO		40	19.845	11.058	22.252	1.00
87.70			O						
ATOM	528	CB	PRO		40	19.883	10.781	25.310	1.00
53.85			C						
ATOM	529	CG	PRO		40	20.455	9.445	24.969	1.00
46.04			C						
ATOM	530	CD	PRO		40	19.261	8.567	24.575	1.00
25.70			C						
ATOM	531	HA	PRO		40	17.912	11.508	24.845	1.00
58.04			H						
ATOM	532	HB1	PRO		40	19.547	10.789	26.337	1.00
67.93			H						
ATOM	533	HB2	PRO		40	20.611	11.565	25.144	1.00
70.99			H						
ATOM	534	HG1	PRO		40	20.958	9.019	25.824	1.00
65.91			H						
ATOM	535	HG2	PRO		40	21.144	9.539	24.138	1.00
54.99			H						
ATOM	536	HD1	PRO		40	18.905	8.008	25.426	1.00

24.22			H					
ATOM	537	HD2	PRO	40	19.530	7.905	23.766	1.00
26.94			H					
ATOM	538	N	GLY	41	18.628	12.846	22.870	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.955	13.614	21.674	
1.00147.55			C					
ATOM	540	C	GLY	41	20.447	13.910	21.612	
1.00161.74			C					
ATOM	541	O	GLY	41	21.059	13.861	20.545	
1.00244.37			O					
ATOM	542	HN	GLY	41	18.050	13.240	23.553	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.411	14.546	21.691	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.669	13.050	20.802	
1.00157.34			H					
ATOM	545	N	LEU	42	21.023	14.222	22.767	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.448	14.534	22.855	
1.00191.48			C					
ATOM	547	C	LEU	42	23.258	13.272	23.132	
1.00166.66			C					
ATOM	548	O	LEU	42	22.724	12.271	23.610	
1.00251.38			O					
ATOM	549	CB	LEU	42	22.688	15.549	23.975	
1.00307.99			C					
ATOM	550	CG	LEU	42	21.729	16.732	23.817	
1.00452.28			C					
ATOM	551	CD1	LEU	42	21.993	17.750	24.929	
1.00681.24			C					
ATOM	552	CD2	LEU	42	21.935	17.395	22.446	
1.00527.46			C					
ATOM	553	HN	LEU	42	20.478	14.245	23.581	
1.00195.47			H					
ATOM	554	HA	LEU	42	22.780	14.963	21.919	
1.00229.77			H					
ATOM	555	HB1	LEU	42	23.707	15.906	23.924	
1.00342.49			H					
ATOM	556	HB2	LEU	42	22.521	15.074	24.931	
1.00335.33			H					
ATOM	557	HG	LEU	42	20.710	16.378	23.894	
1.00427.79			H					
ATOM	558	HD11	LEU	42	23.054	17.935	25.002	
1.00909.71			H					
ATOM	559	HD12	LEU	42	21.630	17.361	25.869	
1.00706.80			H					
ATOM	560	HD13	LEU	42	21.481	18.674	24.701	
1.00858.82			H					
ATOM	561	HD21	LEU	42	21.412	16.828	21.690	
1.00631.69			H					
ATOM	562	HD22	LEU	42	22.988	17.425	22.211	

1.00628.06				H				
ATOM	563	HD23	LEU		42	21.544	18.403	22.468
1.00656.75				H				
ATOM	564	N	THR		43	24.551	13.328	22.829
1.00178.52				N				
ATOM	565	CA	THR		43	25.428	12.186	23.050
1.00240.84				C				
ATOM	566	C	THR		43	25.550	11.894	24.550
1.00372.31				C				
ATOM	567	O	THR		43	25.455	12.809	25.367
1.00500.13				O				
ATOM	568	CB	THR		43	26.813	12.496	22.469
1.00354.13				C				
ATOM	569	CG2	THR		43	26.676	12.866	20.991
1.00463.04				C				
ATOM	570	OG1	THR		43	27.388	13.584	23.179
1.00508.50				O				
ATOM	571	HN	THR		43	24.920	14.154	22.451
1.00229.59				H				
ATOM	572	HA	THR		43	25.017	11.329	22.542
1.00249.90				H				
ATOM	573	HB	THR		43	27.450	11.632	22.560
1.00481.58				H				
ATOM	574	HG1	THR		43	28.342	13.514	23.109
1.00624.31				H				
ATOM	575	HG21	THR		43	27.656	13.005	20.561
1.00650.95				H				
ATOM	576	HG22	THR		43	26.109	13.782	20.901
1.00580.73				H				
ATOM	577	HG23	THR		43	26.163	12.072	20.467
1.00571.99				H				
ATOM	578	N	PRO		44	25.759	10.653	24.937
1.00488.39				N				
ATOM	579	CA	PRO		44	25.894	10.280	26.377
1.00760.13				C				
ATOM	580	C	PRO		44	27.244	10.711	26.943
1.00735.36				C				
ATOM	581	O	PRO		44	27.491	10.600	28.144
1.00999.99				O				
ATOM	582	CB	PRO		44	25.750	8.755	26.365
1.00999.99				C				
ATOM	583	CG	PRO		44	26.269	8.339	25.029
1.00856.94				C				
ATOM	584	CD	PRO		44	25.892	9.468	24.063
1.00548.09				C				
ATOM	585	HA	PRO		44	25.093	10.717	26.952
1.00939.00				H				
ATOM	586	HB1	PRO		44	24.711	8.474	26.462
1.00999.99				H				
ATOM	587	HB2	PRO		44	26.335	8.309	27.160
1.00999.99				H				
ATOM	588	HG1	PRO		44	25.808	7.417	24.713

1.00999.99				H				
ATOM	589	HG2	PRO		44	27.346	8.222	25.071
1.00853.53				H				
ATOM	590	HD1	PRO		44	24.951	9.254	23.578
1.00602.45				H				
ATOM	591	HD2	PRO		44	26.674	9.614	23.333
1.00463.32				H				
ATOM	592	N	ILE		45	28.116	11.197	26.066
1.00518.33				N				
ATOM	593	CA	ILE		45	29.441	11.634	26.481
1.00582.79				C				
ATOM	594	C	ILE		45	29.337	12.784	27.477
1.00795.93				C				
ATOM	595	O	ILE		45	28.635	13.767	27.236
1.00898.75				O				
ATOM	596	CB	ILE		45	30.245	12.088	25.262
1.00474.41				C				
ATOM	597	CG1	ILE		45	30.452	10.900	24.318
1.00516.90				C				
ATOM	598	CG2	ILE		45	31.605	12.621	25.716
1.00760.75				C				
ATOM	599	CD1	ILE		45	31.014	11.397	22.985
1.00566.81				C				
ATOM	600	HN	ILE		45	27.864	11.256	25.120
1.00395.72				H				
ATOM	601	HA	ILE		45	29.952	10.808	26.947
1.00711.06				H				
ATOM	602	HB	ILE		45	29.706	12.870	24.747
1.00477.81				H				
ATOM	603	HG11	ILE		45	29.506	10.409	24.146
1.00624.28				H				
ATOM	604	HG12	ILE		45	31.144	10.203	24.766
1.00744.84				H				
ATOM	605	HG21	ILE		45	32.050	11.924	26.413
1.00920.57				H				
ATOM	606	HG22	ILE		45	31.474	13.578	26.197
1.00999.99				H				
ATOM	607	HG23	ILE		45	32.252	12.735	24.858
1.00865.46				H				
ATOM	608	HD11	ILE		45	31.029	10.585	22.276
1.00658.89				H				
ATOM	609	HD12	ILE		45	32.019	11.766	23.134
1.00734.30				H				
ATOM	610	HD13	ILE		45	30.392	12.195	22.607
1.00675.84				H				
ATOM	611	N	ALA		46	30.040	12.655	28.597
1.00999.99				N				
ATOM	612	CA	ALA		46	30.019	13.691	29.625
1.00999.99				C				
ATOM	613	C	ALA		46	28.586	14.107	29.937
1.00999.99				C				
ATOM	614	CB	ALA		46	30.817	14.908	29.155

1.00999.99				C				
ATOM	615	OT1	ALA		46	27.681	13.405	29.516
1.00999.99				O				
ATOM	616	OT2	ALA		46	28.414	15.121	30.590
1.00999.99				O				
ATOM	617	HN	ALA		46	30.582	11.851	28.735
1.00999.99				H				
ATOM	618	HA	ALA		46	30.475	13.301	30.522
1.00999.99				H				
ATOM	619	HB1	ALA		46	30.293	15.391	28.344
1.00999.99				H				
ATOM	620	HB2	ALA		46	31.791	14.591	28.814
1.00999.99				H				
ATOM	621	HB3	ALA		46	30.931	15.602	29.974
1.00999.99				H				
ENDMDL								
TER								
MODEL	13							
ATOM	1	N	GLY		1	24.379	-4.581	19.094
1.00999.99				N				
ATOM	2	CA	GLY		1	24.678	-3.266	19.730
1.00999.99				C				
ATOM	3	C	GLY		1	24.198	-2.140	18.823
1.00999.99				C				
ATOM	4	O	GLY		1	23.713	-1.112	19.295
1.00999.99				O				
ATOM	5	HA1	GLY		1	25.742	-3.174	19.882
1.00999.99				H				
ATOM	6	HA2	GLY		1	24.171	-3.205	20.683
1.00999.99				H				
ATOM	7	HT1	GLY		1	24.185	-4.441	18.083
1.00999.99				H				
ATOM	8	HT2	GLY		1	23.547	-5.006	19.552
1.00999.99				H				
ATOM	9	HT3	GLY		1	25.196	-5.214	19.204
1.00999.99				H				
ATOM	10	N	LEU		2	24.335	-2.341	17.516
1.00999.99				N				
ATOM	11	CA	LEU		2	23.911	-1.336	16.548
1.00895.59				C				
ATOM	12	C	LEU		2	22.389	-1.299	16.457
1.00532.27				C				
ATOM	13	O	LEU		2	21.721	-2.310	16.679
1.00625.21				O				
ATOM	14	CB	LEU		2	24.498	-1.652	15.170
1.00999.99				C				
ATOM	15	CG	LEU		2	26.031	-1.707	15.254
1.00999.99				C				
ATOM	16	CD1	LEU		2	26.593	-2.106	13.886
1.00999.99				C				
ATOM	17	CD2	LEU		2	26.589	-0.333	15.664
1.00999.99				C				

ATOM	18	HN	LEU	2	24.728	-3.181	17.198	
1.00999.99								H
ATOM	19	HA	LEU	2	24.263	-0.367	16.867	
1.00890.87								H
ATOM	20	HB1	LEU	2	24.207	-0.884	14.470	
1.00924.07								H
ATOM	21	HB2	LEU	2	24.123	-2.607	14.833	
1.00999.99								H
ATOM	22	HG	LEU	2	26.320	-2.449	15.987	
1.00999.99								H
ATOM	23	HD11	LEU	2	26.489	-1.279	13.199	
1.00999.99								H
ATOM	24	HD12	LEU	2	26.049	-2.959	13.507	
1.00999.99								H
ATOM	25	HD13	LEU	2	27.638	-2.360	13.986	
1.00999.99								H
ATOM	26	HD21	LEU	2	25.988	0.452	15.225	
1.00999.99								H
ATOM	27	HD22	LEU	2	27.610	-0.236	15.320	
1.00999.99								H
ATOM	28	HD23	LEU	2	26.568	-0.242	16.739	
1.00999.99								H
ATOM	29	N	CYS	3	21.844	-0.129	16.134	
1.00271.28								N
ATOM	30	CA	CYS	3	20.397	0.025	16.023	
1.00104.50								C
ATOM	31	C	CYS	3	19.906	-0.459	14.662	1.00
90.98			C					
ATOM	32	O	CYS	3	20.109	0.206	13.647	
1.00207.28								O
ATOM	33	CB	CYS	3	20.011	1.494	16.206	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.523	2.059	17.848	1.00
81.56			S					
ATOM	35	HN	CYS	3	22.425	0.643	15.972	
1.00296.55								H
ATOM	36	HA	CYS	3	19.920	-0.560	16.797	
1.00166.45								H
ATOM	37	HB1	CYS	3	18.941	1.600	16.107	1.00
40.38			H					
ATOM	38	HB2	CYS	3	20.502	2.090	15.452	1.00
98.45			H					
ATOM	39	N	SER	4	19.251	-1.614	14.653	1.00
85.31			N					
ATOM	40	CA	SER	4	18.725	-2.174	13.413	1.00
92.94			C					
ATOM	41	C	SER	4	17.683	-1.239	12.827	1.00
67.37			C					
ATOM	42	O	SER	4	17.637	-1.007	11.619	
1.00102.28								O
ATOM	43	CB	SER	4	18.056	-3.518	13.687	
1.00123.83								C

ATOM	44	OG	SER	4	17.673	-4.111	12.453	
1.00178.89			O					
ATOM	45	HN	SER	4	19.114	-2.097	15.496	
1.00163.03			H					
ATOM	46	HA	SER	4	19.529	-2.312	12.707	
1.00129.78			H					
ATOM	47	HB1	SER	4	17.176	-3.353	14.301	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.739	-4.171	14.202	
1.00156.87			H					
ATOM	49	HG	SER	4	18.067	-3.597	11.742	
1.00218.16			H					
ATOM	50	N	GLU	5	16.833	-0.724	13.707	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.755	0.173	13.311	1.00
41.21			C					
ATOM	52	C	GLU	5	15.564	1.269	14.355	1.00
41.92			C					
ATOM	53	O	GLU	5	16.422	1.472	15.215	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.467	-0.630	13.158	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.160	-1.336	14.474	1.00
55.48			C					
ATOM	56	CD	GLU	5	13.027	-2.338	14.281	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.670	-2.991	15.248	
1.00206.49			O					
ATOM	58	OE2	GLU	5	12.532	-2.435	13.171	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	16.923	-0.969	14.652	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.994	0.623	12.369	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.589	-1.367	12.379	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.660	0.029	12.907	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.872	-0.604	15.213	1.00
58.03			H					
ATOM	64	HG2	GLU	5	15.045	-1.849	14.806	1.00
57.77			H					
ATOM	65	N	ASN	6	14.440	1.972	14.276	1.00
50.73			N					
ATOM	66	CA	ASN	6	14.160	3.043	15.225	1.00
71.04			C					
ATOM	67	C	ASN	6	14.120	2.493	16.647	1.00
65.17			C					
ATOM	68	O	ASN	6	14.613	3.124	17.583	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.820	3.701	14.891	1.00
94.83			C					

ATOM	70	CG	ASN	6	12.946	4.520	13.611	
1.00160.94			C					
ATOM	71	ND2	ASN	6	11.873	4.831	12.938	
1.00244.88			N					
ATOM	72	OD1	ASN	6	14.052	4.888	13.214	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.790	1.769	13.571	1.00
72.81			H					
ATOM	74	HA	ASN	6	14.942	3.786	15.157	1.00
96.02			H					
ATOM	75	HB1	ASN	6	12.527	4.351	15.703	
1.00111.09			H					
ATOM	76	HB2	ASN	6	12.069	2.936	14.755	1.00
98.13			H					
ATOM	77	HD21	ASN	6	10.993	4.538	13.256	
1.00272.43			H					
ATOM	78	HD22	ASN	6	11.945	5.356	12.114	
1.00336.78			H					
ATOM	79	N	GLY	7	13.532	1.308	16.800	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.429	0.658	18.109	1.00
71.47			C					
ATOM	81	C	GLY	7	14.064	-0.726	18.070	1.00
41.04			C					
ATOM	82	O	GLY	7	13.381	-1.739	18.214	1.00
44.54			O					
ATOM	83	HN	GLY	7	13.162	0.855	16.014	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.392	0.557	18.374	
1.00103.52			H					
ATOM	85	HA2	GLY	7	13.930	1.257	18.860	
1.00108.67			H					
ATOM	86	N	ASP	8	15.373	-0.755	17.869	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.100	-2.017	17.806	1.00
14.15			C					
ATOM	88	C	ASP	8	15.962	-2.786	19.112	1.00
9.37			C					
ATOM	89	O	ASP	8	15.716	-3.992	19.112	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.580	-1.757	17.518	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.323	-3.080	17.373	1.00
21.22			C					
ATOM	92	OD1	ASP	8	19.488	-3.045	17.008	
1.00119.56			O					
ATOM	93	OD2	ASP	8	17.719	-4.109	17.628	
1.00133.27			O1-					
ATOM	94	HN	ASP	8	15.856	0.088	17.760	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.692	-2.614	17.008	1.00
20.92			H					

ATOM	96	HB1	ASP	8	18.007	-1.195	18.335	1.00
29.39		H						
ATOM	97	HB2	ASP	8	17.672	-1.190	16.604	1.00
44.14		H						
ATOM	98	N	CYS	9	16.117	-2.080	20.224	1.00
5.93		N						
ATOM	99	CA	CYS	9	15.998	-2.711	21.533	1.00
7.54		C						
ATOM	100	C	CYS	9	14.592	-3.270	21.707	1.00
14.60		C						
ATOM	101	O	CYS	9	14.401	-4.385	22.192	1.00
25.78		O						
ATOM	102	CB	CYS	9	16.281	-1.694	22.627	1.00
6.63		C						
ATOM	103	SG	CYS	9	18.029	-1.274	22.580	1.00
10.91		S						
ATOM	104	HN	CYS	9	16.307	-1.123	20.161	1.00
6.51		H						
ATOM	105	HA	CYS	9	16.721	-3.504	21.608	1.00
11.12		H						
ATOM	106	HB1	CYS	9	16.041	-2.119	23.588	1.00
11.28		H						
ATOM	107	HB2	CYS	9	15.686	-0.806	22.463	1.00
5.04		H						
ATOM	108	N	ALA	10	13.616	-2.472	21.292	1.00
16.26		N						
ATOM	109	CA	ALA	10	12.212	-2.856	21.374	1.00
32.04		C						
ATOM	110	C	ALA	10	11.363	-1.837	20.618	1.00
45.47		C						
ATOM	111	O	ALA	10	11.821	-0.729	20.338	
1.00119.04								O
ATOM	112	CB	ALA	10	11.768	-2.929	22.838	1.00
30.10		C						
ATOM	113	HN	ALA	10	13.848	-1.602	20.910	1.00
12.81		H						
ATOM	114	HA	ALA	10	12.086	-3.826	20.918	1.00
47.14		H						
ATOM	115	HB1	ALA	10	11.545	-1.938	23.201	1.00
84.37		H						
ATOM	116	HB2	ALA	10	12.557	-3.362	23.433	
1.00118.20								H
ATOM	117	HB3	ALA	10	10.883	-3.545	22.914	
1.00117.32								H
ATOM	118	N	ALA	11	10.135	-2.209	20.283	1.00
30.62		N						
ATOM	119	CA	ALA	11	9.260	-1.297	19.553	1.00
35.24		C						
ATOM	120	C	ALA	11	9.021	-0.022	20.358	1.00
22.78		C						
ATOM	121	O	ALA	11	9.098	1.083	19.823	1.00
53.33		O						

ATOM	122	CB	ALA	11	7.921	-1.979	19.264	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.814	-3.102	20.525	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.728	-1.039	18.616	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.527	-2.400	20.175	
1.00157.06								H
ATOM	126	HB2	ALA	11	8.067	-2.765	18.537	
1.00148.83								H
ATOM	127	HB3	ALA	11	7.224	-1.253	18.872	
1.00137.06								H
ATOM	128	N	ASP	12	8.736	-0.183	21.646	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.492	0.962	22.515	1.00
31.05			C					
ATOM	130	C	ASP	12	9.788	1.722	22.800	1.00
22.98			C					
ATOM	131	O	ASP	12	9.798	2.951	22.864	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.876	0.494	23.835	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.446	0.019	23.604	
1.00104.83								C
ATOM	134	OD1	ASP	12	5.911	0.305	22.546	
1.00258.73								O
ATOM	135	OD2	ASP	12	5.906	-0.626	24.489	
1.00213.46								O1-
ATOM	136	HN	ASP	12	8.691	-1.089	22.019	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.797	1.631	22.028	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.871	1.313	24.537	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.465	-0.320	24.236	1.00
54.37			H					
ATOM	140	N	GLU	13	10.873	0.976	22.985	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.172	1.577	23.278	1.00
12.01			C					
ATOM	142	C	GLU	13	12.771	2.229	22.033	1.00
10.07			C					
ATOM	143	O	GLU	13	12.367	1.927	20.910	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.118	0.505	23.818	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.550	-0.042	25.130	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.418	-1.183	25.645	
1.00142.36								C
ATOM	147	OE1	GLU	13	14.533	-1.314	25.172	
1.00339.06								O

ATOM	148	OE2	GLU	13	12.953	-1.914	26.504	
1.00335.28				01-				
ATOM	149	HN	GLU	13	10.798	0.000	22.930	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.041	2.332	24.040	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.090	0.938	23.999	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.207	-0.294	23.096	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.546	-0.403	24.965	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.529	0.748	25.866	1.00
56.23			H					
ATOM	155	N	CYS	14	13.737	3.130	22.241	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.392	3.833	21.134	1.00
10.69			C					
ATOM	157	C	CYS	14	15.825	3.344	20.970	1.00
9.56			C					
ATOM	158	O	CYS	14	16.428	2.849	21.918	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.402	5.340	21.404	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.288	6.185	20.066	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.017	3.328	23.160	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.853	3.648	20.215	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.897	5.535	22.343	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.387	5.704	21.450	1.00
46.13			H					
ATOM	165	N	CYS	15	16.364	3.490	19.761	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.735	3.065	19.479	1.00
9.28			C					
ATOM	167	C	CYS	15	18.332	3.956	18.395	1.00
9.92			C					
ATOM	168	O	CYS	15	17.724	4.153	17.343	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.747	1.607	19.011	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.430	0.941	19.128	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.832	3.896	19.045	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.332	3.155	20.376	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.412	1.555	17.984	1.00
24.82			H					

ATOM	174	HB2	CYS	15	17.085	1.024	19.632	1.00
27.31		H						
ATOM	175	N	VAL	16	19.522	4.497	18.651	1.00
9.56		N						
ATOM	176	CA	VAL	16	20.176	5.366	17.677	1.00
11.99		C						
ATOM	177	C	VAL	16	21.690	5.230	17.773	1.00
7.73		C						
ATOM	178	O	VAL	16	22.260	5.278	18.863	1.00
8.83		O						
ATOM	179	CB	VAL	16	19.775	6.820	17.931	1.00
18.37		C						
ATOM	180	CG1	VAL	16	20.342	7.283	19.275	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.325	7.705	16.811	
1.00115.21								C
ATOM	182	HN	VAL	16	19.966	4.309	19.507	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.865	5.090	16.680	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.696	6.896	17.953	1.00
52.63		H						
ATOM	185	HG11	VAL	16	19.855	8.198	19.575	
1.00128.07								H
ATOM	186	HG12	VAL	16	21.405	7.455	19.177	
1.00154.13								H
ATOM	187	HG13	VAL	16	20.169	6.521	20.021	
1.00135.74								H
ATOM	188	HG21	VAL	16	20.031	8.730	16.985	
1.00229.05								H
ATOM	189	HG22	VAL	16	19.930	7.372	15.863	
1.00261.82								H
ATOM	190	HG23	VAL	16	21.402	7.637	16.795	
1.00210.07								H
ATOM	191	N	ASP	17	22.338	5.061	16.620	1.00
14.34		N						
ATOM	192	CA	ASP	17	23.793	4.917	16.576	1.00
11.90		C						
ATOM	193	C	ASP	17	24.444	6.217	16.119	1.00
13.15		C						
ATOM	194	O	ASP	17	24.202	6.687	15.008	1.00
25.96		O						
ATOM	195	CB	ASP	17	24.178	3.796	15.610	1.00
20.80		C						
ATOM	196	CG	ASP	17	23.791	2.443	16.200	1.00
28.72		C						
ATOM	197	OD1	ASP	17	23.799	1.473	15.460	
1.00135.42								O
ATOM	198	OD2	ASP	17	23.492	2.399	17.381	
1.00114.17								O1-
ATOM	199	HN	ASP	17	21.828	5.031	15.785	1.00
28.29		H						

ATOM	200	HA	ASP	17	24.164	4.667	17.562	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.243	3.819	15.441	1.00
22.42			H					
ATOM	202	HB2	ASP	17	23.662	3.939	14.671	1.00
29.52			H					
ATOM	203	N	THR	18	25.282	6.786	16.982	1.00
11.55			N					
ATOM	204	CA	THR	18	25.986	8.030	16.664	1.00
17.10			C					
ATOM	205	C	THR	18	27.447	7.736	16.362	1.00
10.63			C					
ATOM	206	O	THR	18	27.953	6.667	16.698	1.00
6.49			O					
ATOM	207	CB	THR	18	25.899	9.000	17.844	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.475	9.538	17.967	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.263	8.324	19.037	1.00
26.49			O					
ATOM	210	HN	THR	18	25.439	6.356	17.848	1.00
13.96			H					
ATOM	211	HA	THR	18	25.533	8.494	15.798	1.00
26.43			H					
ATOM	212	HB	THR	18	26.576	9.824	17.679	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.891	8.809	19.777	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.397	10.143	18.859	
1.00100.44			H					
ATOM	215	HG22	THR	18	23.782	8.712	18.030	
1.00129.42			H					
ATOM	216	HG23	THR	18	24.242	10.140	17.102	
1.00156.21			H					
ATOM	217	N	VAL	19	28.119	8.698	15.740	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.515	8.559	15.402	1.00
13.34			C					
ATOM	219	C	VAL	19	29.975	9.803	14.669	1.00
25.88			C					
ATOM	220	O	VAL	19	29.484	10.141	13.591	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.773	7.322	14.543	1.00
15.48			C					
ATOM	222	CG1	VAL	19	28.816	7.297	13.347	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.223	7.359	14.041	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.669	9.534	15.517	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.083	8.469	16.317	1.00
8.08			H					

ATOM	226	HB	VAL	19	29.627	6.441	15.142	1.00
11.49			H					
ATOM	227	HG11	VAL	19	29.125	8.035	12.622	
1.00137.43			H					
ATOM	228	HG12	VAL	19	27.813	7.515	13.681	1.00
93.29			H					
ATOM	229	HG13	VAL	19	28.837	6.317	12.892	
1.00108.69			H					
ATOM	230	HG21	VAL	19	31.307	8.080	13.240	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.506	6.383	13.680	
1.00111.36			H					
ATOM	232	HG23	VAL	19	31.877	7.650	14.853	1.00
77.11			H					
ATOM	233	N	PHE	20	30.909	10.478	15.290	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.468	11.711	14.760	1.00
40.34			C					
ATOM	235	C	PHE	20	32.847	11.477	14.169	1.00
40.37			C					
ATOM	236	O	PHE	20	33.073	11.708	12.981	1.00
66.02			O					
ATOM	237	CB	PHE	20	31.559	12.746	15.891	1.00
48.79			C					
ATOM	238	CG	PHE	20	31.912	12.076	17.211	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.000	11.209	17.846	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.150	12.339	17.814	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.333	10.616	19.066	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.477	11.740	19.036	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.571	10.879	19.661	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.219	10.144	16.149	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.820	12.100	13.985	1.00
59.91			H					
ATOM	246	HB1	PHE	20	30.616	13.227	15.991	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.306	13.488	15.651	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.040	10.994	17.396	1.00
33.34			H					
ATOM	249	HD2	PHE	20	33.853	13.001	17.334	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.632	9.951	19.548	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.432	11.943	19.496	1.00
61.27			H					

ATOM	252	HZ	PHE	20	32.824	10.419	20.603	1.00
52.66			H					
ATOM	253	N	GLU	21	33.778	11.057	15.016	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.143	10.839	14.595	1.00
56.16			C					
ATOM	255	C	GLU	21	35.462	9.360	14.448	1.00
58.61			C					
ATOM	256	O	GLU	21	34.606	8.497	14.645	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.040	11.472	15.635	1.00
57.37			C					
ATOM	258	CG	GLU	21	35.957	10.693	16.950	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.664	11.472	18.055	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.577	11.055	19.198	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.284	12.476	17.741	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.553	10.923	15.955	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.319	11.330	13.647	1.00
85.72			H					
ATOM	264	HB1	GLU	21	35.705	12.480	15.800	1.00
46.37			H					
ATOM	265	HB2	GLU	21	37.051	11.477	15.280	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.430	9.734	16.831	
1.00314.91			H					
ATOM	267	HG2	GLU	21	34.922	10.549	17.216	
1.00266.92			H					
ATOM	268	N	GLY	22	36.707	9.088	14.089	1.00
86.70			N					
ATOM	269	CA	GLY	22	37.172	7.713	13.893	
1.00104.66			C					
ATOM	270	C	GLY	22	37.805	7.154	15.163	1.00
71.50			C					
ATOM	271	O	GLY	22	38.088	5.959	15.253	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.328	9.836	13.949	
1.00214.64			H					
ATOM	273	HA1	GLY	22	37.906	7.699	13.102	
1.00152.47			H					
ATOM	274	HA2	GLY	22	36.337	7.087	13.609	
1.00118.15			H					
ATOM	275	N	ASP	23	38.029	8.024	16.139	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.634	7.608	17.398	1.00
43.33			C					
ATOM	277	C	ASP	23	37.770	6.564	18.096	1.00
37.55			C					

ATOM	278	O	ASP	23	38.278	5.565	18.608	1.00
61.37		O						
ATOM	279	CB	ASP	23	38.807	8.818	18.313	1.00
40.74		C						
ATOM	280	CG	ASP	23	39.589	8.421	19.561	
1.00141.86		C						
ATOM	281	OD1	ASP	23	39.968	9.309	20.307	
1.00328.18		O						
ATOM	282	OD2	ASP	23	39.799	7.235	19.754	
1.00304.58		O1-						
ATOM	283	HN	ASP	23	37.788	8.964	16.008	1.00
40.86		H						
ATOM	284	HA	ASP	23	39.601	7.183	17.195	1.00
72.12		H						
ATOM	285	HB1	ASP	23	37.835	9.184	18.604	1.00
94.15		H						
ATOM	286	HB2	ASP	23	39.340	9.594	17.786	1.00
93.26		H						
ATOM	287	N	MET	24	36.468	6.806	18.116	1.00
23.24		N						
ATOM	288	CA	MET	24	35.537	5.882	18.759	1.00
32.50		C						
ATOM	289	C	MET	24	34.117	6.093	18.245	1.00
25.13		C						
ATOM	290	O	MET	24	33.832	7.074	17.559	1.00
54.40		O						
ATOM	291	CB	MET	24	35.572	6.082	20.276	1.00
47.36		C						
ATOM	292	CG	MET	24	35.140	7.510	20.617	
1.00151.73		C						
ATOM	293	SD	MET	24	35.317	7.783	22.398	
1.00209.23		S						
ATOM	294	CE	MET	24	34.729	9.494	22.427	
1.00243.29		C						
ATOM	295	HN	MET	24	36.125	7.619	17.692	1.00
17.32		H						
ATOM	296	HA	MET	24	35.841	4.869	18.538	1.00
48.94		H						
ATOM	297	HB1	MET	24	36.575	5.916	20.639	
1.00124.40		H						
ATOM	298	HB2	MET	24	34.898	5.380	20.745	
1.00166.96		H						
ATOM	299	HG1	MET	24	34.108	7.652	20.333	
1.00331.71		H						
ATOM	300	HG2	MET	24	35.762	8.212	20.081	
1.00302.30		H						
ATOM	301	HE1	MET	24	34.954	9.968	21.482	
1.00340.44		H						
ATOM	302	HE2	MET	24	35.219	10.032	23.223	
1.00373.88		H						
ATOM	303	HE3	MET	24	33.659	9.502	22.594	
1.00386.81		H						

ATOM	304	N	VAL	25	33.227	5.159	18.584	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.824	5.229	18.162	1.00
15.37			C					
ATOM	306	C	VAL	25	30.905	5.324	19.374	1.00
17.47			C					
ATOM	307	O	VAL	25	31.164	4.723	20.416	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.462	3.993	17.334	1.00
23.36			C					
ATOM	309	CG1	VAL	25	29.945	3.974	17.059	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.227	4.035	16.007	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.520	4.403	19.134	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.676	6.114	17.549	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.736	3.103	17.880	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.740	3.396	16.169	
1.00171.07			H					
ATOM	315	HG12	VAL	25	29.587	4.985	16.923	
1.00166.22			H					
ATOM	316	HG13	VAL	25	29.435	3.528	17.900	
1.00134.76			H					
ATOM	317	HG21	VAL	25	31.948	3.184	15.403	
1.00141.88			H					
ATOM	318	HG22	VAL	25	33.289	4.004	16.203	
1.00184.50			H					
ATOM	319	HG23	VAL	25	31.985	4.945	15.480	
1.00133.90			H					
ATOM	320	N	THR	26	29.835	6.101	19.224	1.00
13.60			N					
ATOM	321	CA	THR	26	28.866	6.308	20.300	1.00
21.19			C					
ATOM	322	C	THR	26	27.480	5.805	19.897	1.00
16.55			C					
ATOM	323	O	THR	26	27.030	6.026	18.772	1.00
11.43			O					
ATOM	324	CB	THR	26	28.792	7.797	20.617	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.757	8.043	21.715	1.00
44.39			C					
ATOM	326	OG1	THR	26	30.068	8.245	21.054	1.00
34.75			O					
ATOM	327	HN	THR	26	29.698	6.558	18.368	1.00
10.81			H					
ATOM	328	HA	THR	26	29.185	5.780	21.188	1.00
33.16			H					
ATOM	329	HB	THR	26	28.508	8.335	19.722	1.00
20.60			H					

ATOM	330	HG1	THR	26	30.415	7.594	21.669	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.908	9.024	22.137	
1.00126.99			H					
ATOM	332	HG22	THR	26	27.869	7.300	22.490	
1.00108.32			H					
ATOM	333	HG23	THR	26	26.763	7.980	21.298	
1.00151.99			H					
ATOM	334	N	ARG	27	26.805	5.130	20.827	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.465	4.595	20.572	1.00
20.21			C					
ATOM	336	C	ARG	27	24.631	4.635	21.851	1.00
16.96			C					
ATOM	337	O	ARG	27	25.175	4.745	22.949	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.568	3.155	20.065	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.139	2.261	21.169	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.465	0.882	20.592	
1.00109.38			C					
ATOM	341	NE	ARG	27	26.995	0.011	21.637	
1.00227.73			N					
ATOM	342	CZ	ARG	27	27.504	-1.181	21.345	
1.00426.12			C					
ATOM	343	NH1	ARG	27	27.965	-1.943	22.297	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	27.543	-1.587	20.105	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.216	4.988	21.705	1.00
30.75			H					
ATOM	346	HA	ARG	27	24.977	5.198	19.819	1.00
23.13			H					
ATOM	347	HB1	ARG	27	26.220	3.122	19.205	1.00
87.46			H					
ATOM	348	HB2	ARG	27	24.586	2.800	19.787	
1.00103.36			H					
ATOM	349	HG1	ARG	27	25.413	2.154	21.960	
1.00281.97			H					
ATOM	350	HG2	ARG	27	27.038	2.708	21.565	
1.00276.19			H					
ATOM	351	HD1	ARG	27	27.198	0.989	19.806	
1.00183.60			H					
ATOM	352	HD2	ARG	27	25.567	0.444	20.185	
1.00142.93			H					
ATOM	353	HE	ARG	27	26.973	0.311	22.569	
1.00372.53			H					
ATOM	354	HH11	ARG	27	27.937	-1.630	23.247	
1.00910.59			H					
ATOM	355	HH12	ARG	27	28.349	-2.841	22.078	
1.00999.99			H					

ATOM	356	HH21	ARG	27	27.191	-1.003	19.375	
	1.00532							H
ATOM	357	HH22	ARG	27	27.926	-2.485	19.886	
	1.00948							H
ATOM	358	N	SER	28	23.307	4.549	21.707	1.00
	14.60		N					
ATOM	359	CA	SER	28	22.419	4.582	22.869	1.00
	14.92		C					
ATOM	360	C	SER	28	21.131	3.815	22.590	1.00
	12.12		C					
ATOM	361	O	SER	28	20.795	3.543	21.438	1.00
	13.41		O					
ATOM	362	CB	SER	28	22.080	6.031	23.222	1.00
	23.26		C					
ATOM	363	OG	SER	28	21.310	6.602	22.173	
	1.00146							O
ATOM	364	HN	SER	28	22.921	4.465	20.808	1.00
	15.23		H					
ATOM	365	HA	SER	28	22.918	4.128	23.711	1.00
	15.44		H					
ATOM	366	HB1	SER	28	22.998	6.591	23.354	1.00
	88.73		H					
ATOM	367	HB2	SER	28	21.511	6.058	24.135	
	1.00124							H
ATOM	368	HG	SER	28	20.401	6.311	22.281	
	1.00242							H
ATOM	369	N	CYS	29	20.412	3.472	23.655	1.00
	10.48		N					
ATOM	370	CA	CYS	29	19.160	2.740	23.517	1.00
	9.97		C					
ATOM	371	C	CYS	29	18.411	2.729	24.848	1.00
	11.60		C					
ATOM	372	O	CYS	29	18.987	2.429	25.894	1.00
	15.64		O					
ATOM	373	CB	CYS	29	19.439	1.303	23.050	1.00
	9.52		C					
ATOM	374	SG	CYS	29	18.027	0.685	22.122	1.00
	10.40		S					
ATOM	375	HN	CYS	29	20.728	3.722	24.548	1.00
	11.10		H					
ATOM	376	HA	CYS	29	18.546	3.236	22.781	1.00
	11.08		H					
ATOM	377	HB1	CYS	29	19.605	0.657	23.901	1.00
	9.33		H					
ATOM	378	HB2	CYS	29	20.310	1.289	22.414	1.00
	10.78		H					
ATOM	379	N	GLU	30	17.128	3.066	24.801	1.00
	13.52		N					
ATOM	380	CA	GLU	30	16.311	3.100	26.008	1.00
	17.41		C					
ATOM	381	C	GLU	30	15.895	1.699	26.433	1.00
	10.81		C					

ATOM	382	O	GLU	30	15.803	0.788	25.610	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.057	3.938	25.768	1.00
37.83			C					
ATOM	384	CG	GLU	30	15.457	5.371	25.430	
1.00108.13			C					
ATOM	385	CD	GLU	30	16.042	6.049	26.665	
1.00240.52			C					
ATOM	386	OE1	GLU	30	15.900	5.496	27.744	
1.00422.56			O					
ATOM	387	OE2	GLU	30	16.623	7.112	26.516	
1.00410.81			O1-					
ATOM	388	HN	GLU	30	16.723	3.301	23.940	1.00
15.61			H					
ATOM	389	HA	GLU	30	16.882	3.551	26.804	1.00
24.60			H					
ATOM	390	HB1	GLU	30	14.447	3.938	26.660	1.00
72.67			H					
ATOM	391	HB2	GLU	30	14.494	3.519	24.948	1.00
56.47			H					
ATOM	392	HG1	GLU	30	14.587	5.914	25.102	
1.00196.66			H					
ATOM	393	HG2	GLU	30	16.195	5.359	24.642	
1.00140.67			H					
ATOM	394	N	LYS	31	15.628	1.543	27.727	1.00
11.96			N					
ATOM	395	CA	LYS	31	15.196	0.259	28.278	1.00
11.40			C					
ATOM	396	C	LYS	31	13.840	0.422	28.945	1.00
10.99			C					
ATOM	397	O	LYS	31	13.587	1.413	29.630	1.00
12.86			O					
ATOM	398	CB	LYS	31	16.205	-0.242	29.309	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.563	-0.453	28.640	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.563	-0.981	29.668	
1.00115.52			C					
ATOM	401	CE	LYS	31	19.917	-1.211	28.993	
1.00250.23			C					
ATOM	402	NZ	LYS	31	20.447	0.089	28.492	
1.00462.10			N1+					
ATOM	403	HN	LYS	31	15.710	2.314	28.326	1.00
26.13			H					
ATOM	404	HA	LYS	31	15.114	-0.473	27.485	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.861	-1.178	29.722	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.298	0.486	30.099	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.920	0.487	28.244	
1.00126.32			H					

ATOM	408	HG2	LYS	31	17.461	-1.168	27.835	
1.00114.19								H
ATOM	409	HD1	LYS	31	18.203	-1.916	30.073	
1.00198.45								H
ATOM	410	HD2	LYS	31	18.674	-0.261	30.466	
1.00200.14								H
ATOM	411	HE1	LYS	31	19.795	-1.894	28.166	
1.00374.64								H
ATOM	412	HE2	LYS	31	20.609	-1.631	29.708	
1.00403.27								H
ATOM	413	HZ1	LYS	31	21.474	0.125	28.641	
1.00627.38								H
ATOM	414	HZ2	LYS	31	19.991	0.869	29.008	
1.00622.26								H
ATOM	415	HZ3	LYS	31	20.243	0.177	27.477	
1.00619.20								H
ATOM	416	N	THR	32	12.968	-0.553	28.740	1.00
15.51			N					
ATOM	417	CA	THR	32	11.633	-0.505	29.325	1.00
22.44			C					
ATOM	418	C	THR	32	11.673	-0.933	30.789	1.00
26.60			C					
ATOM	419	O	THR	32	12.120	-2.033	31.114	1.00
57.43			O					
ATOM	420	CB	THR	32	10.687	-1.420	28.548	1.00
56.28			C					
ATOM	421	CG2	THR	32	9.305	-1.404	29.200	
1.00102.70								C
ATOM	422	OG1	THR	32	10.587	-0.962	27.206	
1.00111.17								O
ATOM	423	HN	THR	32	13.226	-1.315	28.184	1.00
18.79			H					
ATOM	424	HA	THR	32	11.261	0.508	29.269	1.00
19.67			H					
ATOM	425	HB	THR	32	11.072	-2.426	28.555	1.00
84.25			H					
ATOM	426	HG1	THR	32	10.548	-1.730	26.633	
1.00205.03								H
ATOM	427	HG21	THR	32	8.593	-1.890	28.549	
1.00220.71								H
ATOM	428	HG22	THR	32	8.997	-0.383	29.370	
1.00174.67								H
ATOM	429	HG23	THR	32	9.345	-1.929	30.143	
1.00217.44								H
ATOM	430	N	THR	33	11.198	-0.054	31.665	1.00
22.47			N					
ATOM	431	CA	THR	33	11.176	-0.341	33.095	1.00
41.60			C					
ATOM	432	C	THR	33	10.098	0.457	33.777	1.00
38.03			C					
ATOM	433	O	THR	33	10.332	1.555	34.280	1.00
52.73			O					

ATOM	434	CB	THR	33	12.531	-0.025	33.730	1.00
63.25			C					
ATOM	435	CG2	THR	33	13.583	-1.020	33.233	
1.00121.65			C					
ATOM	436	OG1	THR	33	12.921	1.294	33.378	1.00
96.20			O					
ATOM	437	HN	THR	33	10.854	0.805	31.343	1.00
23.82			H					
ATOM	438	HA	THR	33	10.945	-1.377	33.253	1.00
67.12			H					
ATOM	439	HB	THR	33	12.450	-0.102	34.804	
1.00107.59			H					
ATOM	440	HG1	THR	33	12.589	1.892	34.053	
1.00176.27			H					
ATOM	441	HG21	THR	33	13.853	-0.778	32.216	
1.00255.23			H					
ATOM	442	HG22	THR	33	13.183	-2.020	33.271	
1.00245.37			H					
ATOM	443	HG23	THR	33	14.459	-0.958	33.861	
1.00185.78			H					
ATOM	444	N	GLY	34	8.911	-0.125	33.806	1.00
40.93			N					
ATOM	445	CA	GLY	34	7.795	0.519	34.447	1.00
45.59			C					
ATOM	446	C	GLY	34	7.291	1.697	33.619	1.00
40.97			C					
ATOM	447	O	GLY	34	6.096	1.807	33.341	1.00
82.17			O					
ATOM	448	HN	GLY	34	8.796	-1.008	33.401	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.127	0.872	35.404	1.00
54.41			H					
ATOM	450	HA2	GLY	34	6.997	-0.196	34.582	1.00
62.09			H					
ATOM	451	N	ASN	35	8.213	2.575	33.223	1.00
32.51			N					
ATOM	452	CA	ASN	35	7.866	3.748	32.416	1.00
33.20			C					
ATOM	453	C	ASN	35	8.811	3.872	31.225	1.00
23.17			C					
ATOM	454	O	ASN	35	10.021	3.690	31.360	1.00
27.01			O					
ATOM	455	CB	ASN	35	7.958	5.012	33.272	1.00
54.51			C					
ATOM	456	CG	ASN	35	6.993	4.917	34.448	1.00
80.73			C					
ATOM	457	ND2	ASN	35	7.386	5.294	35.633	
1.00220.46			N					
ATOM	458	OD1	ASN	35	5.851	4.488	34.283	
1.00117.80			O					
ATOM	459	HN	ASN	35	9.148	2.429	33.472	1.00
51.15			H					

ATOM	460	HA	ASN	35	6.853	3.649	32.047	1.00
47.21			H					
ATOM	461	HB1	ASN	35	7.702	5.871	32.669	1.00
68.31			H					
ATOM	462	HB2	ASN	35	8.966	5.121	33.640	1.00
57.75			H					
ATOM	463	HD21	ASN	35	8.295	5.636	35.762	
1.00405.39			H					
ATOM	464	HD22	ASN	35	6.772	5.237	36.395	
1.00245.64			H					
ATOM	465	N	PHE	36	8.249	4.175	30.061	1.00
35.72			N					
ATOM	466	CA	PHE	36	9.036	4.318	28.848	1.00
33.41			C					
ATOM	467	C	PHE	36	9.629	5.722	28.758	1.00
28.51			C					
ATOM	468	O	PHE	36	9.049	6.682	29.267	1.00
45.23			O					
ATOM	469	CB	PHE	36	8.137	4.062	27.644	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.604	2.650	27.708	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.406	2.388	28.383	
1.00106.51			C					
ATOM	472	CD2	PHE	36	8.303	1.603	27.092	1.00
99.48			C					
ATOM	473	CE1	PHE	36	5.904	1.083	28.440	
1.00134.48			C					
ATOM	474	CE2	PHE	36	7.801	0.298	27.151	
1.00134.27			C					
ATOM	475	CZ	PHE	36	6.603	0.038	27.823	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.281	4.303	30.012	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.836	3.593	28.851	1.00
28.53			H					
ATOM	478	HB1	PHE	36	8.702	4.192	26.742	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.312	4.758	27.657	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.869	3.196	28.859	
1.00110.20			H					
ATOM	481	HD2	PHE	36	9.230	1.802	26.573	1.00
93.07			H					
ATOM	482	HE1	PHE	36	4.979	0.882	28.960	
1.00155.06			H					
ATOM	483	HE2	PHE	36	8.339	-0.509	26.674	
1.00159.46			H					
ATOM	484	HZ	PHE	36	6.215	-0.969	27.868	
1.00183.25			H					
ATOM	485	N	THR	37	10.788	5.839	28.108	1.00
20.06			N					

ATOM	486	CA	THR	37	11.461	7.128	27.955	1.00
27.18			C					
ATOM	487	C	THR	37	11.770	7.392	26.486	1.00
41.87			C					
ATOM	488	O	THR	37	11.007	7.009	25.600	
1.00169.86			O					
ATOM	489	CB	THR	37	12.762	7.134	28.759	1.00
26.52			C					
ATOM	490	CG2	THR	37	12.481	6.680	30.191	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.694	6.250	28.153	1.00
81.95			O					
ATOM	492	HN	THR	37	11.207	5.042	27.725	1.00
18.47			H					
ATOM	493	HA	THR	37	10.821	7.921	28.323	1.00
38.80			H					
ATOM	494	HB	THR	37	13.172	8.133	28.777	1.00
81.60			H					
ATOM	495	HG1	THR	37	13.787	6.501	27.231	
1.00188.80			H					
ATOM	496	HG21	THR	37	11.683	7.275	30.608	
1.00196.98			H					
ATOM	497	HG22	THR	37	13.372	6.802	30.790	
1.00196.23			H					
ATOM	498	HG23	THR	37	12.190	5.641	30.189	
1.00168.92			H					
ATOM	499	N	GLU	38	12.895	8.054	26.239	1.00
26.53			N					
ATOM	500	CA	GLU	38	13.307	8.378	24.873	1.00
30.29			C					
ATOM	501	C	GLU	38	14.830	8.471	24.786	1.00
25.39			C					
ATOM	502	O	GLU	38	15.482	9.012	25.679	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.677	9.709	24.445	1.00
54.82			C					
ATOM	504	CG	GLU	38	13.043	10.029	22.989	
1.00165.84			C					
ATOM	505	CD	GLU	38	12.475	8.965	22.056	
1.00292.92			C					
ATOM	506	OE1	GLU	38	11.545	8.286	22.459	
1.00414.19			O					
ATOM	507	OE2	GLU	38	12.979	8.844	20.951	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	13.456	8.331	26.990	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.968	7.598	24.208	1.00
32.15			H					
ATOM	510	HB1	GLU	38	13.039	10.498	25.085	
1.00144.82			H					
ATOM	511	HB2	GLU	38	11.602	9.639	24.535	
1.00106.49			H					

ATOM	512	HG1	GLU	38	14.117	10.062	22.884	
1.00303.31								H
ATOM	513	HG2	GLU	38	12.631	10.991	22.723	
1.00323.99								H
ATOM	514	N	CYS	39	15.389	7.938	23.700	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.834	7.965	23.500	1.00
14.30			C					
ATOM	516	C	CYS	39	17.347	9.410	23.545	1.00
22.31			C					
ATOM	517	O	CYS	39	16.615	10.338	23.203	1.00
32.92			O					
ATOM	518	CB	CYS	39	17.173	7.328	22.148	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.981	7.889	20.906	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.817	7.521	23.023	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.300	7.388	24.283	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.123	6.253	22.235	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.169	7.618	21.850	1.00
34.91			H					
ATOM	524	N	PRO	40	18.577	9.625	23.960	1.00
27.27			N					
ATOM	525	CA	PRO	40	19.165	10.994	24.047	1.00
47.66			C					
ATOM	526	C	PRO	40	19.537	11.550	22.673	1.00
71.54			C					
ATOM	527	O	PRO	40	19.743	10.802	21.720	1.00
87.70			O					
ATOM	528	CB	PRO	40	20.407	10.790	24.920	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.838	9.395	24.623	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.549	8.600	24.391	1.00
25.70			C					
ATOM	531	HA	PRO	40	18.479	11.663	24.544	1.00
58.04			H					
ATOM	532	HB1	PRO	40	20.154	10.884	25.966	1.00
67.93			H					
ATOM	533	HB2	PRO	40	21.183	11.499	24.655	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.379	8.979	25.460	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.458	9.378	23.733	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.221	8.133	25.306	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.693	7.866	23.612	1.00
26.94			H					

ATOM	538	N	GLY	41	19.625	12.873	22.594
1.00105.24			N				
ATOM	539	CA	GLY	41	19.981	13.547	21.346
1.00147.55			C				
ATOM	540	C	GLY	41	21.480	13.822	21.291
1.00161.74			C				
ATOM	541	O	GLY	41	22.259	12.973	20.858
1.00244.37			O				
ATOM	542	HN	GLY	41	19.453	13.407	23.394
1.00121.79			H				
ATOM	543	HA1	GLY	41	19.451	14.486	21.288
1.00184.40			H				
ATOM	544	HA2	GLY	41	19.697	12.928	20.506
1.00157.34			H				
ATOM	545	N	LEU	42	21.878	15.012	21.733
1.00162.48			N				
ATOM	546	CA	LEU	42	23.289	15.387	21.730
1.00191.48			C				
ATOM	547	C	LEU	42	23.993	14.802	22.952
1.00166.66			C				
ATOM	548	O	LEU	42	23.468	14.847	24.064
1.00251.38			O				
ATOM	549	CB	LEU	42	23.427	16.911	21.746
1.00307.99			C				
ATOM	550	CG	LEU	42	22.686	17.519	20.547
1.00452.28			C				
ATOM	551	CD1	LEU	42	22.771	19.046	20.630
1.00681.24			C				
ATOM	552	CD2	LEU	42	23.322	17.037	19.231
1.00527.46			C				
ATOM	553	HN	LEU	42	21.212	15.647	22.068
1.00195.47			H				
ATOM	554	HA	LEU	42	23.760	14.999	20.840
1.00229.77			H				
ATOM	555	HB1	LEU	42	24.472	17.176	21.690
1.00342.49			H				
ATOM	556	HB2	LEU	42	23.006	17.298	22.662
1.00335.33			H				
ATOM	557	HG	LEU	42	21.648	17.218	20.581
1.00427.79			H				
ATOM	558	HD11	LEU	42	23.803	19.355	20.535
1.00909.71			H				
ATOM	559	HD12	LEU	42	22.381	19.379	21.580
1.00706.80			H				
ATOM	560	HD13	LEU	42	22.191	19.483	19.830
1.00858.82			H				
ATOM	561	HD21	LEU	42	22.919	16.068	18.972
1.00631.69			H				
ATOM	562	HD22	LEU	42	24.393	16.962	19.349
1.00628.06			H				
ATOM	563	HD23	LEU	42	23.097	17.739	18.440
1.00656.75			H				

ATOM	564	N	THR	43	25.184	14.253	22.736
1.00178.52				N			
ATOM	565	CA	THR	43	25.957	13.657	23.825
1.00240.84				C			
ATOM	566	C	THR	43	26.699	14.754	24.606
1.00372.31				C			
ATOM	567	O	THR	43	26.882	15.854	24.083
1.00500.13				O			
ATOM	568	CB	THR	43	26.958	12.648	23.245
1.00354.13				C			
ATOM	569	CG2	THR	43	26.215	11.589	22.422
1.00463.04				C			
ATOM	570	OG1	THR	43	27.885	13.327	22.412
1.00508.50				O			
ATOM	571	HN	THR	43	25.553	14.244	21.827
1.00229.59				H			
ATOM	572	HA	THR	43	25.276	13.140	24.478
1.00249.90				H			
ATOM	573	HB	THR	43	27.488	12.163	24.045
1.00481.58				H			
ATOM	574	HG1	THR	43	28.642	12.751	22.279
1.00624.31				H			
ATOM	575	HG21	THR	43	25.778	10.858	23.087
1.00650.95				H			
ATOM	576	HG22	THR	43	26.909	11.100	21.756
1.00580.73				H			
ATOM	577	HG23	THR	43	25.435	12.058	21.841
1.00571.99				H			
ATOM	578	N	PRO	44	27.135	14.507	25.831
1.00488.39				N			
ATOM	579	CA	PRO	44	27.865	15.543	26.630
1.00760.13				C			
ATOM	580	C	PRO	44	29.124	16.025	25.914
1.00735.36				C			
ATOM	581	O	PRO	44	29.628	17.115	26.185
1.00999.99				O			
ATOM	582	CB	PRO	44	28.217	14.823	27.947
1.00999.99				C			
ATOM	583	CG	PRO	44	27.256	13.687	28.037
1.00856.94				C			
ATOM	584	CD	PRO	44	26.999	13.249	26.599
1.00548.09				C			
ATOM	585	HA	PRO	44	27.215	16.377	26.834
1.00939.00				H			
ATOM	586	HB1	PRO	44	28.081	15.486	28.786
1.00999.99				H			
ATOM	587	HB2	PRO	44	29.235	14.455	27.921
1.00999.99				H			
ATOM	588	HG1	PRO	44	26.331	14.011	28.491
1.00999.99				H			
ATOM	589	HG2	PRO	44	27.689	12.874	28.608
1.00853.53				H			

ATOM	590	HD1	PRO	44	26.008	12.851	26.512
1.00602.45				H			
ATOM	591	HD2	PRO	44	27.741	12.526	26.293
1.00463.32				H			
ATOM	592	N	ILE	45	29.633	15.192	25.010
1.00518.33				N			
ATOM	593	CA	ILE	45	30.842	15.519	24.261
1.00582.79				C			
ATOM	594	C	ILE	45	30.883	17.003	23.894
1.00795.93				C			
ATOM	595	O	ILE	45	29.849	17.611	23.617
1.00898.75				O			
ATOM	596	CB	ILE	45	30.906	14.666	22.987
1.00474.41				C			
ATOM	597	CG1	ILE	45	32.308	14.760	22.371
1.00516.90				C			
ATOM	598	CG2	ILE	45	29.867	15.166	21.972
1.00760.75				C			
ATOM	599	CD1	ILE	45	32.438	13.734	21.244
1.00566.81				C			
ATOM	600	HN	ILE	45	29.188	14.334	24.848
1.00395.72				H			
ATOM	601	HA	ILE	45	31.696	15.287	24.875
1.00711.06				H			
ATOM	602	HB	ILE	45	30.692	13.637	23.236
1.00477.81				H			
ATOM	603	HG11	ILE	45	33.050	14.556	23.128
1.00624.28				H			
ATOM	604	HG12	ILE	45	32.460	15.754	21.974
1.00744.84				H			
ATOM	605	HG21	ILE	45	30.243	16.046	21.470
1.00920.57				H			
ATOM	606	HG22	ILE	45	28.948	15.411	22.485
1.00999.99				H			
ATOM	607	HG23	ILE	45	29.674	14.391	21.243
1.00865.46				H			
ATOM	608	HD11	ILE	45	32.243	12.746	21.634
1.00658.89				H			
ATOM	609	HD12	ILE	45	33.438	13.770	20.838
1.00734.30				H			
ATOM	610	HD13	ILE	45	31.726	13.961	20.465
1.00675.84				H			
ATOM	611	N	ALA	46	32.081	17.576	23.894
1.00999.99				N			
ATOM	612	CA	ALA	46	32.241	18.987	23.558
1.00999.99				C			
ATOM	613	C	ALA	46	33.690	19.290	23.189
1.00999.99				C			
ATOM	614	CB	ALA	46	31.822	19.856	24.745
1.00999.99				C			
ATOM	615	OT1	ALA	46	34.111	18.862	22.128
1.00999.99				O			

ATOM	616	OT2	ALA	46	34.355	19.946	23.973
1.00999.99			O				
ATOM	617	HN	ALA	46	32.871	17.043	24.122
1.00999.99			H				
ATOM	618	HA	ALA	46	31.608	19.222	22.715
1.00999.99			H				
ATOM	619	HB1	ALA	46	31.970	20.897	24.499
1.00999.99			H				
ATOM	620	HB2	ALA	46	32.421	19.601	25.608
1.00999.99			H				
ATOM	621	HB3	ALA	46	30.779	19.684	24.967
1.00999.99			H				
ENDMDL							
TER							
MODEL	14						
ATOM	1	N	GLY	1	28.026	1.545	12.408
1.00999.99			N				
ATOM	2	CA	GLY	1	27.030	0.736	13.167
1.00999.99			C				
ATOM	3	C	GLY	1	25.707	1.489	13.236
1.00999.99			C				
ATOM	4	O	GLY	1	25.623	2.563	13.831
1.00999.99			O				
ATOM	5	HA1	GLY	1	27.393	0.563	14.168
1.00999.99			H				
ATOM	6	HA2	GLY	1	26.882	-0.211	12.668
1.00999.99			H				
ATOM	7	HT1	GLY	1	28.282	2.388	12.961
1.00999.99			H				
ATOM	8	HT2	GLY	1	27.614	1.838	11.499
1.00999.99			H				
ATOM	9	HT3	GLY	1	28.877	0.975	12.237
1.00999.99			H				
ATOM	10	N	LEU	2	24.671	0.917	12.622
1.00999.99			N				
ATOM	11	CA	LEU	2	23.340	1.532	12.609
1.00895.59			C				
ATOM	12	C	LEU	2	22.318	0.588	13.235
1.00532.27			C				
ATOM	13	O	LEU	2	22.456	-0.632	13.152
1.00625.21			O				
ATOM	14	CB	LEU	2	22.924	1.845	11.170
1.00999.99			C				
ATOM	15	CG	LEU	2	23.982	2.728	10.498
1.00999.99			C				
ATOM	16	CD1	LEU	2	23.572	2.983	9.044
1.00999.99			C				
ATOM	17	CD2	LEU	2	24.103	4.069	11.243
1.00999.99			C				
ATOM	18	HN	LEU	2	24.803	0.060	12.165
1.00999.99			H				
ATOM	19	HA	LEU	2	23.356	2.451	13.178

1.00890.87											
ATOM	20	HB1	LEU	H	2	21.977	2.365	11.176			
1.00924.07											
ATOM	21	HB2	LEU	H	2	22.822	0.921	10.617			
1.00999.99											
ATOM	22	HG	LEU	H	2	24.935	2.218	10.514			
1.00999.99											
ATOM	23	HD11	LEU	H	2	23.345	2.042	8.564			
1.00999.99											
ATOM	24	HD12	LEU	H	2	24.384	3.467	8.521			
1.00999.99											
ATOM	25	HD13	LEU	H	2	22.700	3.619	9.022			
1.00999.99											
ATOM	26	HD21	LEU	H	2	24.518	4.817	10.582			
1.00999.99											
ATOM	27	HD22	LEU	H	2	24.754	3.948	12.096			
1.00999.99											
ATOM	28	HD23	LEU	H	2	23.126	4.388	11.578			
1.00999.99											
ATOM	29	N	CYS	N	3	21.293	1.159	13.860			
1.00271.28											
ATOM	30	CA	CYS	C	3	20.255	0.351	14.492			
1.00104.50											
ATOM	31	C	CYS	C	3	19.477	-0.430	13.438	1.00		
90.98											
ATOM	32	O	CYS	O	3	19.280	0.048	12.321			
1.00207.28											
ATOM	33	CB	CYS	C	3	19.293	1.247	15.277	1.00		
37.83											
ATOM	34	SG	CYS	S	3	20.176	2.037	16.648	1.00		
81.56											
ATOM	35	HN	CYS	H	3	21.232	2.138	13.895			
1.00296.55											
ATOM	36	HA	CYS	H	3	20.720	-0.345	15.175			
1.00166.45											
ATOM	37	HB1	CYS	H	3	18.483	0.650	15.667	1.00		
40.38											
ATOM	38	HB2	CYS	H	3	18.895	2.009	14.621	1.00		
98.45											
ATOM	39	N	SER	N	4	19.038	-1.630	13.800	1.00		
85.31											
ATOM	40	CA	SER	C	4	18.281	-2.465	12.875	1.00		
92.94											
ATOM	41	C	SER	C	4	17.009	-1.754	12.452	1.00		
67.37											
ATOM	42	O	SER	O	4	16.621	-1.778	11.283			
1.00102.28											
ATOM	43	CB	SER	C	4	17.888	-3.774	13.552			
1.00123.83											
ATOM	44	OG	SER	O	4	17.277	-4.632	12.596			
1.00178.89											
ATOM	45	HN	SER	O	4	19.224	-1.958	14.704			

1.00244.88				N					
ATOM	72	OD1	ASN		6	13.137	4.163	12.782	
1.00219.73				O					
ATOM	73	HN	ASN		6	13.104	1.100	13.519	1.00
72.81			H						
ATOM	74	HA	ASN		6	14.326	3.336	14.702	1.00
96.02			H						
ATOM	75	HB1	ASN		6	11.971	3.859	15.494	
1.00111.09				H					
ATOM	76	HB2	ASN		6	11.480	2.325	14.778	1.00
98.13			H						
ATOM	77	HD21	ASN		6	10.134	3.688	13.264	
1.00272.43				H					
ATOM	78	HD22	ASN		6	10.885	4.409	11.923	
1.00336.78				H					
ATOM	79	N	GLY		7	13.287	1.009	16.783	1.00
51.80			N						
ATOM	80	CA	GLY		7	13.391	0.518	18.159	1.00
71.47			C						
ATOM	81	C	GLY		7	14.059	-0.850	18.192	1.00
41.04			C						
ATOM	82	O	GLY		7	13.406	-1.871	18.400	1.00
44.54			O						
ATOM	83	HN	GLY		7	12.854	0.448	16.108	1.00
45.49			H						
ATOM	84	HA1	GLY		7	12.404	0.432	18.579	
1.00103.52				H					
ATOM	85	HA2	GLY		7	13.972	1.210	18.755	
1.00108.67				H					
ATOM	86	N	ASP		8	15.369	-0.858	17.981	1.00
27.00			N						
ATOM	87	CA	ASP		8	16.129	-2.102	17.983	1.00
14.15			C						
ATOM	88	C	ASP		8	16.032	-2.787	19.340	1.00
9.37			C						
ATOM	89	O	ASP		8	15.836	-4.000	19.423	1.00
14.61			O						
ATOM	90	CB	ASP		8	17.596	-1.821	17.654	1.00
15.06			C						
ATOM	91	CG	ASP		8	18.373	-3.130	17.578	1.00
21.22			C						
ATOM	92	OD1	ASP		8	19.528	-3.089	17.185	
1.00119.56				O					
ATOM	93	OD2	ASP		8	17.803	-4.156	17.912	
1.00133.27				O1-					
ATOM	94	HN	ASP		8	15.831	-0.011	17.818	1.00
35.63			H						
ATOM	95	HA	ASP		8	15.724	-2.759	17.232	1.00
20.92			H						
ATOM	96	HB1	ASP		8	18.023	-1.197	18.426	1.00
29.39			H						
ATOM	97	HB2	ASP		8	17.659	-1.310	16.705	1.00

44.14			H						
ATOM	98	N	CYS	9	16.169	-2.001	20.397	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.095	-2.537	21.751	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.717	-3.131	22.012	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.589	-4.199	22.611	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.383	-1.432	22.757	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.127	-1.008	22.639	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.321	-1.044	20.264	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.844	-3.301	21.863	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.165	-1.774	23.755	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.780	-0.564	22.528	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.694	-2.428	21.550	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.318	-2.880	21.719	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.377	-2.024	20.874	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.748	-0.942	20.420		
1.00119.04			O						
ATOM	112	CB	ALA	10	11.914	-2.806	23.194	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.867	-1.589	21.077	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.246	-3.906	21.388	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	11.633	-1.794	23.443	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	12.747	-3.110	23.810		
1.00118.20			H						
ATOM	117	HB3	ALA	10	11.077	-3.464	23.371		
1.00117.32			H						
ATOM	118	N	ALA	11	10.163	-2.516	20.663	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.182	-1.788	19.866	1.00	
35.24			C						
ATOM	120	C	ALA	11	8.864	-0.434	20.499	1.00	
22.78			C						
ATOM	121	O	ALA	11	8.702	0.564	19.797	1.00	
53.33			O						
ATOM	122	CB	ALA	11	7.897	-2.607	19.747	1.00	
60.49			C						
ATOM	123	HN	ALA	11	9.922	-3.386	21.047	1.00	

50.37			H						
ATOM	124	HA	ALA	11	9.585	-1.626	18.879	1.00	
41.70			H						
ATOM	125	HB1	ALA	11	7.349	-2.555	20.676		
1.00157.06				H					
ATOM	126	HB2	ALA	11	8.145	-3.637	19.534		
1.00148.83				H					
ATOM	127	HB3	ALA	11	7.289	-2.211	18.948		
1.00137.06				H					
ATOM	128	N	ASP	12	8.765	-0.411	21.825	1.00	
18.98			N						
ATOM	129	CA	ASP	12	8.452	0.823	22.549	1.00	
31.05			C						
ATOM	130	C	ASP	12	9.721	1.567	22.958	1.00	
22.98			C						
ATOM	131	O	ASP	12	9.662	2.522	23.734	1.00	
37.14			O						
ATOM	132	CB	ASP	12	7.628	0.493	23.796	1.00	
48.35			C						
ATOM	133	CG	ASP	12	8.428	-0.410	24.727		
1.00104.83				C					
ATOM	134	OD1	ASP	12	7.972	-0.637	25.837		
1.00258.73				O					
ATOM	135	OD2	ASP	12	9.481	-0.868	24.317		
1.00213.46				O1-					
ATOM	136	HN	ASP	12	8.897	-1.241	22.330	1.00	
36.19			H						
ATOM	137	HA	ASP	12	7.863	1.466	21.911	1.00	
49.76			H						
ATOM	138	HB1	ASP	12	6.720	-0.012	23.502	1.00	
95.71			H						
ATOM	139	HB2	ASP	12	7.378	1.408	24.311	1.00	
54.37			H						
ATOM	140	N	GLU	13	10.868	1.133	22.432	1.00	
17.60			N						
ATOM	141	CA	GLU	13	12.154	1.772	22.748	1.00	
12.01			C						
ATOM	142	C	GLU	13	12.795	2.353	21.492	1.00	
10.07			C						
ATOM	143	O	GLU	13	12.449	1.978	20.373	1.00	
12.81			O						
ATOM	144	CB	GLU	13	13.103	0.757	23.385	1.00	
11.74			C						
ATOM	145	CG	GLU	13	12.602	0.400	24.786	1.00	
13.49			C						
ATOM	146	CD	GLU	13	12.786	1.589	25.721		
1.00142.36				C					
ATOM	147	OE1	GLU	13	13.471	2.520	25.332		
1.00339.06				O					
ATOM	148	OE2	GLU	13	12.236	1.556	26.807		
1.00335.28				O1-					
ATOM	149	HN	GLU	13	10.853	0.370	21.817	1.00	

28.36			H					
ATOM	150	HA	GLU	13	11.993	2.578	23.452	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.092	1.183	23.456	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.140	-0.134	22.774	1.00
9.94			H					
ATOM	153	HG1	GLU	13	13.160	-0.442	25.165	1.00
66.02			H					
ATOM	154	HG2	GLU	13	11.555	0.144	24.738	1.00
56.23			H					
ATOM	155	N	CYS	14	13.729	3.284	21.694	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.426	3.940	20.584	1.00
10.69			C					
ATOM	157	C	CYS	14	15.856	3.424	20.460	1.00
9.56			C					
ATOM	158	O	CYS	14	16.431	2.922	21.425	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.455	5.449	20.821	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.427	6.251	19.520	1.00
42.96			S					
ATOM	161	HN	CYS	14	13.954	3.541	22.614	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.901	3.745	19.658	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.903	5.650	21.783	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.446	5.836	20.808	1.00
46.13			H					
ATOM	165	N	CYS	15	16.425	3.559	19.265	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.793	3.114	19.010	1.00
9.28			C					
ATOM	167	C	CYS	15	18.439	4.024	17.976	1.00
9.92			C					
ATOM	168	O	CYS	15	17.891	4.227	16.892	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.789	1.673	18.493	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.494	1.089	18.298	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.918	3.974	18.535	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.365	3.159	19.928	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.287	1.636	17.537	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.271	1.040	19.196	1.00
27.31			H					
ATOM	175	N	VAL	16	19.603	4.576	18.308	1.00

9.56			N						
ATOM	176	CA	VAL	16	20.299	5.465	17.386	1.00	
11.99			C						
ATOM	177	C	VAL	16	21.801	5.388	17.622	1.00	
7.73			C						
ATOM	178	O	VAL	16	22.264	5.450	18.760	1.00	
8.83			O						
ATOM	179	CB	VAL	16	19.803	6.900	17.579	1.00	
18.37			C						
ATOM	180	CG1	VAL	16	20.101	7.364	19.005	1.00	
39.61			C						
ATOM	181	CG2	VAL	16	20.507	7.818	16.583		
1.00115.21				C					
ATOM	182	HN	VAL	16	20.002	4.385	19.187	1.00	
9.76			H						
ATOM	183	HA	VAL	16	20.093	5.158	16.370	1.00	
17.27			H						
ATOM	184	HB	VAL	16	18.736	6.935	17.408	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	19.599	8.302	19.191		
1.00128.07				H					
ATOM	186	HG12	VAL	16	21.166	7.497	19.126		
1.00154.13				H					
ATOM	187	HG13	VAL	16	19.749	6.622	19.705		
1.00135.74				H					
ATOM	188	HG21	VAL	16	20.382	7.427	15.584		
1.00229.05				H					
ATOM	189	HG22	VAL	16	21.561	7.869	16.819		
1.00261.82				H					
ATOM	190	HG23	VAL	16	20.077	8.806	16.639		
1.00210.07				H					
ATOM	191	N	ASP	17	22.559	5.232	16.539	1.00	
14.34			N						
ATOM	192	CA	ASP	17	24.014	5.126	16.639	1.00	
11.90			C						
ATOM	193	C	ASP	17	24.693	6.439	16.276	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.585	6.919	15.148	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.518	4.022	15.708	1.00	
20.80			C						
ATOM	196	CG	ASP	17	24.106	2.657	16.249	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	24.193	1.695	15.504		
1.00135.42				O					
ATOM	198	OD2	ASP	17	23.711	2.593	17.401		
1.00114.17				O1-					
ATOM	199	HN	ASP	17	22.133	5.174	15.658	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.284	4.866	17.651	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.596	4.071	15.644	1.00	

22.42			H					
ATOM	202	HB2	ASP	17	24.093	4.162	14.724	1.00
29.52			H					
ATOM	203	N	THR	18	25.417	6.999	17.242	1.00
11.55			N					
ATOM	204	CA	THR	18	26.151	8.245	17.031	1.00
17.10			C					
ATOM	205	C	THR	18	27.619	7.925	16.791	1.00
10.63			C					
ATOM	206	O	THR	18	28.081	6.837	17.128	1.00
6.49			O					
ATOM	207	CB	THR	18	26.016	9.154	18.263	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.688	9.908	18.219	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.072	8.360	19.436	1.00
26.49			O					
ATOM	210	HN	THR	18	25.475	6.553	18.111	1.00
13.96			H					
ATOM	211	HA	THR	18	25.757	8.760	16.164	1.00
26.43			H					
ATOM	212	HB	THR	18	26.826	9.870	18.278	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.173	8.211	19.737	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.761	10.720	17.511	
1.00100.44			H					
ATOM	215	HG22	THR	18	24.468	10.304	19.200	
1.00129.42			H					
ATOM	216	HG23	THR	18	23.900	9.235	17.916	
1.00156.21			H					
ATOM	217	N	VAL	19	28.343	8.882	16.226	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.748	8.710	15.954	1.00
13.34			C					
ATOM	219	C	VAL	19	30.282	9.951	15.276	1.00
25.88			C					
ATOM	220	O	VAL	19	29.859	10.326	14.184	1.00
42.11			O					
ATOM	221	CB	VAL	19	30.016	7.493	15.071	1.00
15.48			C					
ATOM	222	CG1	VAL	19	29.145	7.552	13.811	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.500	7.485	14.670	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.930	9.735	16.001	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.267	8.577	16.893	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.791	6.599	15.623	1.00
11.49			H					
ATOM	227	HG11	VAL	19	29.562	8.263	13.113	

1.00137.43				H					
ATOM	228	HG12	VAL		19	28.143	7.852	14.076	1.00
93.29				H					
ATOM	229	HG13	VAL		19	29.116	6.574	13.350	
1.00108.69				H					
ATOM	230	HG21	VAL		19	32.107	7.725	15.534	1.00
99.42				H					
ATOM	231	HG22	VAL		19	31.668	8.228	13.903	
1.00111.36				H					
ATOM	232	HG23	VAL		19	31.769	6.511	14.296	1.00
77.11				H					
ATOM	233	N	PHE		20	31.215	10.571	15.949	1.00
24.58				N					
ATOM	234	CA	PHE		20	31.848	11.778	15.453	1.00
40.34				C					
ATOM	235	C	PHE		20	33.073	11.425	14.622	1.00
40.37				C					
ATOM	236	O	PHE		20	33.135	11.733	13.432	1.00
66.02				O					
ATOM	237	CB	PHE		20	32.239	12.690	16.632	1.00
48.79				C					
ATOM	238	CG	PHE		20	32.454	11.886	17.909	1.00
35.75				C					
ATOM	239	CD1	PHE		20	31.384	11.200	18.519	1.00
30.20				C					
ATOM	240	CD2	PHE		20	33.726	11.851	18.501	1.00
40.95				C					
ATOM	241	CE1	PHE		20	31.597	10.484	19.700	1.00
30.41				C					
ATOM	242	CE2	PHE		20	33.931	11.131	19.682	1.00
45.84				C					
ATOM	243	CZ	PHE		20	32.869	10.448	20.281	1.00
40.81				C					
ATOM	244	HN	PHE		20	31.483	10.202	16.806	1.00
16.73				H					
ATOM	245	HA	PHE		20	31.149	12.309	14.818	1.00
59.91				H					
ATOM	246	HB1	PHE		20	31.453	13.391	16.796	1.00
67.15				H					
ATOM	247	HB2	PHE		20	33.142	13.234	16.393	1.00
58.17				H					
ATOM	248	HD1	PHE		20	30.396	11.211	18.075	1.00
33.34				H					
ATOM	249	HD2	PHE		20	34.547	12.381	18.045	1.00
49.35				H					
ATOM	250	HE1	PHE		20	30.776	9.962	20.163	1.00
30.61				H					
ATOM	251	HE2	PHE		20	34.913	11.102	20.133	1.00
61.27				H					
ATOM	252	HZ	PHE		20	33.028	9.894	21.195	1.00
52.66				H					
ATOM	253	N	GLU		21	34.057	10.796	15.259	1.00

41.31			N						
ATOM	254	CA	GLU	21	35.281	10.427	14.594	1.00	
56.16			C						
ATOM	255	C	GLU	21	35.462	8.916	14.598	1.00	
58.61			C						
ATOM	256	O	GLU	21	34.568	8.172	15.000		
1.00201.19				O					
ATOM	257	CB	GLU	21	36.409	11.089	15.351	1.00	
57.37			C						
ATOM	258	CG	GLU	21	36.485	10.503	16.759		
1.00193.56				C					
ATOM	259	CD	GLU	21	37.379	11.372	17.634		
1.00304.62				C					
ATOM	260	OE1	GLU	21	37.504	11.066	18.809		
1.00451.81				O					
ATOM	261	OE2	GLU	21	37.929	12.332	17.119		
1.00442.88				O1-					
ATOM	262	HN	GLU	21	33.973	10.594	16.211	1.00	
50.82			H						
ATOM	263	HA	GLU	21	35.283	10.787	13.574	1.00	
85.72			H						
ATOM	264	HB1	GLU	21	36.211	12.145	15.417	1.00	
46.37			H						
ATOM	265	HB2	GLU	21	37.329	10.920	14.837		
1.00131.81				H					
ATOM	266	HG1	GLU	21	36.890	9.507	16.703		
1.00314.91				H					
ATOM	267	HG2	GLU	21	35.495	10.459	17.185		
1.00266.92				H					
ATOM	268	N	GLY	22	36.625	8.474	14.142	1.00	
86.70			N						
ATOM	269	CA	GLY	22	36.925	7.044	14.088		
1.00104.66				C					
ATOM	270	C	GLY	22	37.556	6.559	15.390	1.00	
71.50			C						
ATOM	271	O	GLY	22	37.553	5.363	15.684	1.00	
89.87			O						
ATOM	272	HN	GLY	22	37.294	9.124	13.838		
1.00214.64				H					
ATOM	273	HA1	GLY	22	37.612	6.860	13.276		
1.00152.47				H					
ATOM	274	HA2	GLY	22	36.012	6.491	13.909		
1.00118.15				H					
ATOM	275	N	ASP	23	38.107	7.491	16.159	1.00	
44.68			N						
ATOM	276	CA	ASP	23	38.753	7.144	17.421	1.00	
43.33			C						
ATOM	277	C	ASP	23	37.754	6.577	18.424	1.00	
37.55			C						
ATOM	278	O	ASP	23	38.068	5.641	19.161	1.00	
61.37			O						
ATOM	279	CB	ASP	23	39.417	8.383	18.022	1.00	

40.74			C						
ATOM	280	CG	ASP	23	40.637	8.775	17.193		
1.00141.86			C						
ATOM	281	OD1	ASP	23	41.063	7.969	16.384		
1.00328.18			O						
ATOM	282	OD2	ASP	23	41.127	9.877	17.382		
1.00304.58			O1-						
ATOM	283	HN	ASP	23	38.087	8.427	15.870	1.00	
40.86			H						
ATOM	284	HA	ASP	23	39.511	6.405	17.232	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	39.727	8.170	19.033	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	38.711	9.198	18.031	1.00	
93.26			H						
ATOM	287	N	MET	24	36.562	7.163	18.468	1.00	
23.24			N						
ATOM	288	CA	MET	24	35.527	6.724	19.411	1.00	
32.50			C						
ATOM	289	C	MET	24	34.157	6.655	18.748	1.00	
25.13			C						
ATOM	290	O	MET	24	33.876	7.377	17.791	1.00	
54.40			O						
ATOM	291	CB	MET	24	35.457	7.700	20.583	1.00	
47.36			C						
ATOM	292	CG	MET	24	36.729	7.596	21.424		
1.00151.73			C						
ATOM	293	SD	MET	24	36.748	8.928	22.648		
1.00209.23			S						
ATOM	294	CE	MET	24	35.313	8.380	23.606		
1.00243.29			C						
ATOM	295	HN	MET	24	36.379	7.915	17.869	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.777	5.743	19.793	1.00	
48.94			H						
ATOM	297	HB1	MET	24	34.601	7.462	21.199		
1.00124.40			H						
ATOM	298	HB2	MET	24	35.357	8.708	20.206		
1.00166.96			H						
ATOM	299	HG1	MET	24	37.591	7.686	20.782		
1.00331.71			H						
ATOM	300	HG2	MET	24	36.751	6.640	21.926		
1.00302.30			H						
ATOM	301	HE1	MET	24	34.409	8.756	23.144		
1.00340.44			H						
ATOM	302	HE2	MET	24	35.383	8.759	24.612		
1.00373.88			H						
ATOM	303	HE3	MET	24	35.288	7.300	23.631		
1.00386.81			H						
ATOM	304	N	VAL	25	33.297	5.790	19.289	1.00	
22.44			N						
ATOM	305	CA	VAL	25	31.934	5.627	18.782	1.00	

15.37			C						
ATOM	306	C	VAL	25	30.939	5.664	19.935	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.212	5.155	21.023	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.784	4.310	18.020	1.00	
23.36			C						
ATOM	309	CG1	VAL	25	30.313	4.132	17.607	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.670	4.343	16.772	1.00	
55.25			C						
ATOM	311	HN	VAL	25	33.583	5.258	20.060	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.704	6.442	18.107	1.00	
9.25			H						
ATOM	313	HB	VAL	25	32.080	3.488	18.659	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.758	3.712	18.431		
1.00171.07									H
ATOM	315	HG12	VAL	25	30.247	3.470	16.757		
1.00166.22									H
ATOM	316	HG13	VAL	25	29.889	5.094	17.348		
1.00134.76									H
ATOM	317	HG21	VAL	25	32.710	3.355	16.334		
1.00141.88									H
ATOM	318	HG22	VAL	25	33.667	4.654	17.046		
1.00184.50									H
ATOM	319	HG23	VAL	25	32.258	5.038	16.056		
1.00133.90									H
ATOM	320	N	THR	26	29.789	6.284	19.691	1.00	
13.60			N						
ATOM	321	CA	THR	26	28.745	6.413	20.709	1.00	
21.19			C						
ATOM	322	C	THR	26	27.420	5.831	20.220	1.00	
16.55			C						
ATOM	323	O	THR	26	26.994	6.088	19.094	1.00	
11.43			O						
ATOM	324	CB	THR	26	28.567	7.895	21.036	1.00	
27.07			C						
ATOM	325	CG2	THR	26	27.456	8.081	22.073	1.00	
44.39			C						
ATOM	326	OG1	THR	26	29.786	8.400	21.560	1.00	
34.75			O						
ATOM	327	HN	THR	26	29.640	6.678	18.805	1.00	
10.81			H						
ATOM	328	HA	THR	26	29.044	5.893	21.608	1.00	
33.16			H						
ATOM	329	HB	THR	26	28.314	8.428	20.130	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.201	7.701	22.071	1.00	
77.72			H						
ATOM	331	HG21	THR	26	27.670	7.472	22.941		

1.00126.99				H					
ATOM	332	HG22	THR		26	26.508	7.785	21.653	
1.00108.32				H					
ATOM	333	HG23	THR		26	27.411	9.118	22.365	
1.00151.99				H					
ATOM	334	N	ARG		27	26.769	5.051	21.085	1.00
22.38				N					
ATOM	335	CA	ARG		27	25.482	4.431	20.758	1.00
20.21				C					
ATOM	336	C	ARG		27	24.468	4.726	21.860	1.00
16.96				C					
ATOM	337	O	ARG		27	24.836	4.838	23.030	1.00
20.06				O					
ATOM	338	CB	ARG		27	25.654	2.917	20.616	1.00
22.14				C					
ATOM	339	CG	ARG		27	26.624	2.614	19.472	
1.00124.30				C					
ATOM	340	CD	ARG		27	26.681	1.104	19.238	
1.00109.38				C					
ATOM	341	NE	ARG		27	27.597	0.797	18.144	
1.00227.73				N					
ATOM	342	CZ	ARG		27	28.908	0.707	18.346	
1.00426.12				C					
ATOM	343	NH1	ARG		27	29.704	0.433	17.348	
1.00767.09				N1+					
ATOM	344	NH2	ARG		27	29.398	0.892	19.541	
1.00581.78				N					
ATOM	345	HN	ARG		27	27.161	4.893	21.970	1.00
30.75				H					
ATOM	346	HA	ARG		27	25.110	4.830	19.825	1.00
23.13				H					
ATOM	347	HB1	ARG		27	24.697	2.463	20.405	1.00
87.46				H					
ATOM	348	HB2	ARG		27	26.047	2.512	21.538	
1.00103.36				H					
ATOM	349	HG1	ARG		27	27.609	2.973	19.731	
1.00281.97				H					
ATOM	350	HG2	ARG		27	26.284	3.105	18.573	
1.00276.19				H					
ATOM	351	HD1	ARG		27	25.693	0.743	18.991	
1.00183.60				H					
ATOM	352	HD2	ARG		27	27.024	0.614	20.138	
1.00142.93				H					
ATOM	353	HE	ARG		27	27.238	0.657	17.243	
1.00372.53				H					
ATOM	354	HH11	ARG		27	29.329	0.291	16.434	
1.00910.59				H					
ATOM	355	HH12	ARG		27	30.690	0.364	17.501	
1.00999.99				H					
ATOM	356	HH21	ARG		27	28.787	1.102	20.304	
1.00532.54				H					
ATOM	357	HH22	ARG		27	30.384	0.823	19.693	

1.00948.84				H					
ATOM	358	N	SER	28	23.189	4.855	21.491	1.00	
14.60			N						
ATOM	359	CA	SER	28	22.140	5.142	22.475	1.00	
14.92			C						
ATOM	360	C	SER	28	20.936	4.233	22.260	1.00	
12.12			C						
ATOM	361	O	SER	28	20.605	3.877	21.129	1.00	
13.41			O						
ATOM	362	CB	SER	28	21.708	6.603	22.362	1.00	
23.26			C						
ATOM	363	OG	SER	28	22.810	7.445	22.674		
1.00146.32				O					
ATOM	364	HN	SER	28	22.943	4.757	20.544	1.00	
15.23			H						
ATOM	365	HA	SER	28	22.524	4.972	23.472	1.00	
15.44			H						
ATOM	366	HB1	SER	28	20.892	6.791	23.047	1.00	
88.73			H						
ATOM	367	HB2	SER	28	21.383	6.808	21.356		
1.00124.68				H					
ATOM	368	HG	SER	28	22.497	8.141	23.258		
1.00242.47				H					
ATOM	369	N	CYS	29	20.285	3.865	23.358	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.114	3.002	23.294	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.484	2.883	24.681	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.101	2.355	25.606	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.510	1.612	22.770	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.116	0.867	21.912	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.595	4.188	24.230	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.394	3.439	22.619	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.793	0.968	23.594	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.339	1.703	22.087	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.262	3.386	24.825	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.574	3.338	26.111	1.00	
17.41			C						
ATOM	381	C	GLU	30	15.860	2.003	26.300	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.509	1.330	25.331	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.565	4.482	26.200	1.00	

37.83			C						
ATOM	384	CG	GLU	30	16.303	5.819	26.105		
1.00108.13			C						
ATOM	385	CD	GLU	30	17.167	6.027	27.344		
1.00240.52			C						
ATOM	386	OE1	GLU	30	18.070	6.846	27.281		
1.00422.56			O						
ATOM	387	OE2	GLU	30	16.914	5.367	28.338		
1.00410.81			O1-						
ATOM	388	HN	GLU	30	16.817	3.803	24.055	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.299	3.457	26.903	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.042	4.428	27.142	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	14.857	4.404	25.389	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	15.584	6.620	26.032		
1.00196.66			H						
ATOM	393	HG2	GLU	30	16.931	5.818	25.226		
1.00140.67			H						
ATOM	394	N	LYS	31	15.650	1.628	27.563	1.00	
11.96			N						
ATOM	395	CA	LYS	31	14.972	0.371	27.897	1.00	
11.40			C						
ATOM	396	C	LYS	31	13.739	0.659	28.747	1.00	
10.99			C						
ATOM	397	O	LYS	31	13.745	1.569	29.575	1.00	
12.86			O						
ATOM	398	CB	LYS	31	15.923	-0.542	28.672	1.00	
21.40			C						
ATOM	399	CG	LYS	31	17.125	-0.895	27.793	1.00	
57.81			C						
ATOM	400	CD	LYS	31	18.074	-1.812	28.567		
1.00115.52			C						
ATOM	401	CE	LYS	31	19.302	-2.118	27.708		
1.00250.23			C						
ATOM	402	NZ	LYS	31	18.881	-2.853	26.482		
1.00462.10			N1+						
ATOM	403	HN	LYS	31	15.955	2.212	28.289	1.00	
26.13			H						
ATOM	404	HA	LYS	31	14.665	-0.131	26.990	1.00	
13.87			H						
ATOM	405	HB1	LYS	31	15.406	-1.448	28.951	1.00	
37.63			H						
ATOM	406	HB2	LYS	31	16.264	-0.034	29.562	1.00	
47.19			H						
ATOM	407	HG1	LYS	31	17.646	0.009	27.516		
1.00126.32			H						
ATOM	408	HG2	LYS	31	16.783	-1.400	26.902		
1.00114.19			H						
ATOM	409	HD1	LYS	31	17.568	-2.734	28.809		

1.00198.45				H						
ATOM	410	HD2	LYS		31	18.385	-1.321	29.479		
1.00200.14				H						
ATOM	411	HE1	LYS		31	19.994	-2.726	28.272		
1.00374.64				H						
ATOM	412	HE2	LYS		31	19.784	-1.193	27.426		
1.00403.27				H						
ATOM	413	HZ1	LYS		31	18.562	-2.175	25.762		
1.00627.38				H						
ATOM	414	HZ2	LYS		31	18.102	-3.502	26.718		
1.00622.26				H						
ATOM	415	HZ3	LYS		31	19.684	-3.398	26.110		
1.00619.20				H						
ATOM	416	N	THR		32	12.678	-0.116	28.531	1.00	
15.51			N							
ATOM	417	CA	THR		32	11.437	0.074	29.283	1.00	
22.44			C							
ATOM	418	C	THR		32	11.448	-0.754	30.564	1.00	
26.60			C							
ATOM	419	O	THR		32	11.538	-1.982	30.522	1.00	
57.43			O							
ATOM	420	CB	THR		32	10.238	-0.335	28.422	1.00	
56.28			C							
ATOM	421	CG2	THR		32	8.946	-0.130	29.213		
1.00102.70				C						
ATOM	422	OG1	THR		32	10.202	0.462	27.247		
1.00111.17				O						
ATOM	423	HN	THR		32	12.727	-0.822	27.855	1.00	
18.79			H							
ATOM	424	HA	THR		32	11.334	1.118	29.542	1.00	
19.67			H							
ATOM	425	HB	THR		32	10.326	-1.374	28.150	1.00	
84.25			H							
ATOM	426	HG1	THR		32	10.534	-0.071	26.518		
1.00205.03				H						
ATOM	427	HG21	THR		32	8.933	0.866	29.630		
1.00220.71				H						
ATOM	428	HG22	THR		32	8.893	-0.857	30.011		
1.00174.67				H						
ATOM	429	HG23	THR		32	8.099	-0.255	28.556		
1.00217.44				H						
ATOM	430	N	THR		33	11.346	-0.070	31.701	1.00	
22.47			N							
ATOM	431	CA	THR		33	11.335	-0.741	32.997	1.00	
41.60			C							
ATOM	432	C	THR		33	10.571	0.072	34.003	1.00	
38.03			C							
ATOM	433	O	THR		33	11.143	0.808	34.807	1.00	
52.73			O							
ATOM	434	CB	THR		33	12.754	-0.980	33.501	1.00	
63.25			C							
ATOM	435	CG2	THR		33	13.442	-2.038	32.637		

1.00121.65				C					
ATOM	436	OG1	THR		33	13.487	0.235	33.443	1.00
96.20			O						
ATOM	437	HN	THR		33	11.272	0.906	31.665	1.00
23.82			H						
ATOM	438	HA	THR		33	10.829	-1.684	32.908	1.00
67.12			H						
ATOM	439	HB	THR		33	12.708	-1.328	34.520	
1.00107.59				H					
ATOM	440	HG1	THR		33	13.682	0.508	34.344	
1.00176.27				H					
ATOM	441	HG21	THR		33	12.795	-2.897	32.537	
1.00255.23				H					
ATOM	442	HG22	THR		33	14.366	-2.338	33.105	
1.00245.37				H					
ATOM	443	HG23	THR		33	13.647	-1.627	31.661	
1.00185.78				H					
ATOM	444	N	GLY		34	9.265	-0.091	33.957	1.00
40.93			N						
ATOM	445	CA	GLY		34	8.397	0.604	34.876	1.00
45.59			C						
ATOM	446	C	GLY		34	8.194	2.050	34.438	1.00
40.97			C						
ATOM	447	O	GLY		34	7.398	2.782	35.025	1.00
82.17			O						
ATOM	448	HN	GLY		34	8.883	-0.708	33.303	1.00
54.00			H						
ATOM	449	HA1	GLY		34	8.854	0.583	35.844	1.00
54.41			H						
ATOM	450	HA2	GLY		34	7.440	0.100	34.916	1.00
62.09			H						
ATOM	451	N	ASN		35	8.918	2.447	33.395	1.00
32.51			N						
ATOM	452	CA	ASN		35	8.818	3.804	32.866	1.00
33.20			C						
ATOM	453	C	ASN		35	9.262	3.836	31.407	1.00
23.17			C						
ATOM	454	O	ASN		35	10.116	3.051	30.992	1.00
27.01			O						
ATOM	455	CB	ASN		35	9.693	4.757	33.683	1.00
54.51			C						
ATOM	456	CG	ASN		35	9.252	4.753	35.143	1.00
80.73			C						
ATOM	457	ND2	ASN		35	10.123	4.484	36.075	
1.00220.46				N					
ATOM	458	OD1	ASN		35	8.084	5.003	35.439	
1.00117.80				O					
ATOM	459	HN	ASN		35	9.529	1.811	32.967	1.00
51.15			H						
ATOM	460	HA	ASN		35	7.792	4.133	32.926	1.00
47.21			H						
ATOM	461	HB1	ASN		35	9.600	5.755	33.283	1.00

68.31			H						
ATOM	462	HB2	ASN	35	10.725	4.439	33.618	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	11.053	4.286	35.837		
1.00405.39			H						
ATOM	464	HD22	ASN	35	9.848	4.480	37.017		
1.00245.64			H						
ATOM	465	N	PHE	36	8.674	4.742	30.627	1.00	
35.72			N						
ATOM	466	CA	PHE	36	9.002	4.874	29.215	1.00	
33.41			C						
ATOM	467	C	PHE	36	9.885	6.095	28.978	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.671	7.153	29.570	1.00	
45.23			O						
ATOM	469	CB	PHE	36	7.706	5.019	28.432	1.00	
67.53			C						
ATOM	470	CG	PHE	36	6.895	3.752	28.566	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	5.948	3.639	29.591		
1.00106.51			C						
ATOM	472	CD2	PHE	36	7.090	2.694	27.671	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	5.194	2.465	29.718		
1.00134.48			C						
ATOM	474	CE2	PHE	36	6.336	1.522	27.800		
1.00134.27			C						
ATOM	475	CZ	PHE	36	5.388	1.408	28.823		
1.00149.48			C						
ATOM	476	HN	PHE	36	7.997	5.334	31.006	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.519	3.987	28.874	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	7.934	5.193	27.401	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.140	5.854	28.822	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.800	4.455	30.283		
1.00110.20			H						
ATOM	481	HD2	PHE	36	7.822	2.781	26.882	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	4.464	2.378	30.510		
1.00155.06			H						
ATOM	483	HE2	PHE	36	6.486	0.704	27.108		
1.00159.46			H						
ATOM	484	HZ	PHE	36	4.806	0.503	28.922		
1.00183.25			H						
ATOM	485	N	THR	37	10.879	5.940	28.107	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.789	7.035	27.792	1.00	
27.18			C						
ATOM	487	C	THR	37	12.469	6.791	26.448	1.00	

41.87			C						
ATOM	488	O	THR	37	13.100	5.755	26.236		
1.00169.86			O						
ATOM	489	CB	THR	37	12.848	7.168	28.894	1.00	
26.52			C						
ATOM	490	CG2	THR	37	13.251	5.778	29.397	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.987	7.838	28.373	1.00	
81.95			O						
ATOM	492	HN	THR	37	10.999	5.077	27.663	1.00	
18.47			H						
ATOM	493	HA	THR	37	11.226	7.955	27.737	1.00	
38.80			H						
ATOM	494	HB	THR	37	12.442	7.737	29.716	1.00	
81.60			H						
ATOM	495	HG1	THR	37	14.556	8.073	29.110		
1.00188.80			H						
ATOM	496	HG21	THR	37	14.211	5.840	29.890		
1.00196.98			H						
ATOM	497	HG22	THR	37	13.319	5.094	28.565		
1.00196.23			H						
ATOM	498	HG23	THR	37	12.510	5.420	30.096		
1.00168.92			H						
ATOM	499	N	GLU	38	12.325	7.752	25.544	1.00	
26.53			N						
ATOM	500	CA	GLU	38	12.916	7.647	24.212	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.379	8.083	24.223	1.00	
25.39			C						
ATOM	502	O	GLU	38	14.851	8.692	25.184	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.133	8.520	23.227	1.00	
54.82			C						
ATOM	504	CG	GLU	38	10.689	8.011	23.112		
1.00165.84			C						
ATOM	505	CD	GLU	38	9.856	8.507	24.292		
1.00292.92			C						
ATOM	506	OE1	GLU	38	8.690	8.155	24.356		
1.00414.19			O						
ATOM	507	OE2	GLU	38	10.396	9.226	25.115		
1.00537.65			O1-						
ATOM	508	HN	GLU	38	11.804	8.548	25.776	1.00	
84.50			H						
ATOM	509	HA	GLU	38	12.861	6.619	23.884	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.604	8.473	22.256		
1.00144.82			H						
ATOM	511	HB2	GLU	38	12.132	9.543	23.575		
1.00106.49			H						
ATOM	512	HG1	GLU	38	10.684	6.931	23.099		
1.00303.31			H						
ATOM	513	HG2	GLU	38	10.256	8.380	22.193		

1.00323.99										H
ATOM	514	N	CYS	39	15.088	7.767	23.143	1.00		
15.84			N							
ATOM	515	CA	CYS	39	16.496	8.128	23.021	1.00		
14.30			C							
ATOM	516	C	CYS	39	16.651	9.652	23.009	1.00		
22.31			C							
ATOM	517	O	CYS	39	15.746	10.361	22.566	1.00		
32.92			O							
ATOM	518	CB	CYS	39	17.058	7.539	21.721	1.00		
18.08			C							
ATOM	519	SG	CYS	39	15.994	8.012	20.334	1.00		
17.41			S							
ATOM	520	HN	CYS	39	14.652	7.287	22.411	1.00		
24.87			H							
ATOM	521	HA	CYS	39	17.036	7.711	23.856	1.00		
14.60			H							
ATOM	522	HB1	CYS	39	17.093	6.464	21.799	1.00		
27.71			H							
ATOM	523	HB2	CYS	39	18.053	7.918	21.551	1.00		
34.91			H							
ATOM	524	N	PRO	40	17.760	10.179	23.480	1.00		
27.27			N							
ATOM	525	CA	PRO	40	17.988	11.652	23.509	1.00		
47.66			C							
ATOM	526	C	PRO	40	18.305	12.205	22.122	1.00		
71.54			C							
ATOM	527	O	PRO	40	18.994	11.566	21.326	1.00		
87.70			O							
ATOM	528	CB	PRO	40	19.178	11.809	24.463	1.00		
53.85			C							
ATOM	529	CG	PRO	40	19.953	10.545	24.302	1.00		
46.04			C							
ATOM	530	CD	PRO	40	18.918	9.447	24.030	1.00		
25.70			C							
ATOM	531	HA	PRO	40	17.127	12.153	23.920	1.00		
58.04			H							
ATOM	532	HB1	PRO	40	18.833	11.906	25.483	1.00		
67.93			H							
ATOM	533	HB2	PRO	40	19.779	12.668	24.186	1.00		
70.99			H							
ATOM	534	HG1	PRO	40	20.499	10.318	25.207	1.00		
65.91			H							
ATOM	535	HG2	PRO	40	20.638	10.633	23.467	1.00		
54.99			H							
ATOM	536	HD1	PRO	40	18.644	8.947	24.946	1.00		
24.22			H							
ATOM	537	HD2	PRO	40	19.299	8.743	23.310	1.00		
26.94			H							
ATOM	538	N	GLY	41	17.797	13.399	21.849			
1.00105.24										N
ATOM	539	CA	GLY	41	18.019	14.054	20.561			

1.00147.55				C				
ATOM	540	C	GLY	41	19.252	14.950	20.611	
1.00161.74				C				
ATOM	541	O	GLY	41	19.593	15.606	19.627	
1.00244.37				O				
ATOM	542	HN	GLY	41	17.260	13.850	22.530	
1.00121.79				H				
ATOM	543	HA1	GLY	41	17.159	14.657	20.317	
1.00184.40				H				
ATOM	544	HA2	GLY	41	18.157	13.305	19.794	
1.00157.34				H				
ATOM	545	N	LEU	42	19.913	14.978	21.768	
1.00162.48				N				
ATOM	546	CA	LEU	42	21.111	15.803	21.948	
1.00191.48				C				
ATOM	547	C	LEU	42	22.359	14.930	21.993	
1.00166.66				C				
ATOM	548	O	LEU	42	22.352	13.845	22.575	
1.00251.38				O				
ATOM	549	CB	LEU	42	20.999	16.595	23.254	
1.00307.99				C				
ATOM	550	CG	LEU	42	19.660	17.341	23.295	
1.00452.28				C				
ATOM	551	CD1	LEU	42	19.575	18.150	24.590	
1.00681.24				C				
ATOM	552	CD2	LEU	42	19.547	18.282	22.085	
1.00527.46				C				
ATOM	553	HN	LEU	42	19.590	14.436	22.518	
1.00195.47				H				
ATOM	554	HA	LEU	42	21.202	16.499	21.126	
1.00229.77				H				
ATOM	555	HB1	LEU	42	21.807	17.307	23.310	
1.00342.49				H				
ATOM	556	HB2	LEU	42	21.058	15.915	24.091	
1.00335.33				H				
ATOM	557	HG	LEU	42	18.853	16.623	23.270	
1.00427.79				H				
ATOM	558	HD11	LEU	42	19.591	17.479	25.438	
1.00909.71				H				
ATOM	559	HD12	LEU	42	18.655	18.718	24.601	
1.00706.80				H				
ATOM	560	HD13	LEU	42	20.414	18.826	24.650	
1.00858.82				H				
ATOM	561	HD21	LEU	42	19.228	17.717	21.221	
1.00631.69				H				
ATOM	562	HD22	LEU	42	20.506	18.738	21.885	
1.00628.06				H				
ATOM	563	HD23	LEU	42	18.820	19.054	22.293	
1.00656.75				H				
ATOM	564	N	THR	43	23.435	15.413	21.371	
1.00178.52				N				
ATOM	565	CA	THR	43	24.701	14.678	21.335	

1.00240.84				C				
ATOM	566	C	THR	43	25.869	15.613	21.646	
1.00372.31				C				
ATOM	567	O	THR	43	26.723	15.854	20.794	
1.00500.13				O				
ATOM	568	CB	THR	43	24.904	14.064	19.950	
1.00354.13				C				
ATOM	569	CG2	THR	43	23.790	13.055	19.669	
1.00463.04				C				
ATOM	570	OG1	THR	43	24.876	15.091	18.969	
1.00508.50				O				
ATOM	571	HN	THR	43	23.376	16.284	20.925	
1.00229.59				H				
ATOM	572	HA	THR	43	24.682	13.881	22.065	
1.00249.90				H				
ATOM	573	HB	THR	43	25.856	13.559	19.921	
1.00481.58				H				
ATOM	574	HG1	THR	43	25.140	14.707	18.130	
1.00624.31				H				
ATOM	575	HG21	THR	43	23.770	12.312	20.453	
1.00650.95				H				
ATOM	576	HG22	THR	43	23.972	12.572	18.720	
1.00580.73				H				
ATOM	577	HG23	THR	43	22.839	13.568	19.635	
1.00571.99				H				
ATOM	578	N	PRO	44	25.917	16.140	22.842	
1.00488.39				N				
ATOM	579	CA	PRO	44	27.002	17.071	23.267	
1.00760.13				C				
ATOM	580	C	PRO	44	28.315	16.333	23.519	
1.00735.36				C				
ATOM	581	O	PRO	44	29.382	16.945	23.585	
1.00999.99				O				
ATOM	582	CB	PRO	44	26.448	17.697	24.554	
1.00999.99				C				
ATOM	583	CG	PRO	44	25.545	16.650	25.124	
1.00856.94				C				
ATOM	584	CD	PRO	44	24.945	15.904	23.926	
1.00548.09				C				
ATOM	585	HA	PRO	44	27.145	17.840	22.523	
1.00939.00				H				
ATOM	586	HB1	PRO	44	25.881	18.588	24.324	
1.00999.99				H				
ATOM	587	HB2	PRO	44	27.250	17.928	25.243	
1.00999.99				H				
ATOM	588	HG1	PRO	44	24.757	17.107	25.703	
1.00999.99				H				
ATOM	589	HG2	PRO	44	26.115	15.969	25.746	
1.00853.53				H				
ATOM	590	HD1	PRO	44	23.983	16.314	23.658	
1.00602.45				H				
ATOM	591	HD2	PRO	44	24.864	14.847	24.142	

1.00463.32				H				
ATOM	592	N	ILE	45	28.226	15.014	23.659	
1.00518.33				N				
ATOM	593	CA	ILE	45	29.409	14.201	23.905	
1.00582.79				C				
ATOM	594	C	ILE	45	30.476	14.472	22.849	
1.00795.93				C				
ATOM	595	O	ILE	45	30.170	14.609	21.665	
1.00898.75				O				
ATOM	596	CB	ILE	45	29.035	12.717	23.886	
1.00474.41				C				
ATOM	597	CG1	ILE	45	30.249	11.880	24.300	
1.00516.90				C				
ATOM	598	CG2	ILE	45	28.602	12.318	22.474	
1.00760.75				C				
ATOM	599	CD1	ILE	45	29.806	10.441	24.573	
1.00566.81				C				
ATOM	600	HN	ILE	45	27.348	14.583	23.598	
1.00395.72				H				
ATOM	601	HA	ILE	45	29.806	14.447	24.878	
1.00711.06				H				
ATOM	602	HB	ILE	45	28.222	12.542	24.575	
1.00477.81				H				
ATOM	603	HG11	ILE	45	30.684	12.296	25.195	
1.00624.28				H				
ATOM	604	HG12	ILE	45	30.980	11.888	23.504	
1.00744.84				H				
ATOM	605	HG21	ILE	45	29.468	12.279	21.829	
1.00920.57				H				
ATOM	606	HG22	ILE	45	27.902	13.049	22.093	
1.00999.99				H				
ATOM	607	HG23	ILE	45	28.130	11.348	22.502	
1.00865.46				H				
ATOM	608	HD11	ILE	45	30.677	9.819	24.719	
1.00658.89				H				
ATOM	609	HD12	ILE	45	29.237	10.073	23.732	
1.00734.30				H				
ATOM	610	HD13	ILE	45	29.192	10.416	25.461	
1.00675.84				H				
ATOM	611	N	ALA	46	31.728	14.547	23.284	
1.00999.99				N				
ATOM	612	CA	ALA	46	32.832	14.803	22.367	
1.00999.99				C				
ATOM	613	C	ALA	46	33.081	13.591	21.477	
1.00999.99				C				
ATOM	614	CB	ALA	46	34.103	15.130	23.155	
1.00999.99				C				
ATOM	615	OT1	ALA	46	32.214	13.280	20.675	
1.00999.99				O				
ATOM	616	OT2	ALA	46	34.134	12.989	21.608	
1.00999.99				O				
ATOM	617	HN	ALA	46	31.914	14.428	24.240	

1.00999.99				H				
ATOM	618	HA	ALA		46	32.582	15.649	21.745
1.00999.99				H				
ATOM	619	HB1	ALA		46	34.487	14.227	23.607
1.00999.99				H				
ATOM	620	HB2	ALA		46	33.874	15.850	23.927
1.00999.99				H				
ATOM	621	HB3	ALA		46	34.845	15.541	22.486
1.00999.99				H				
ENDMDL								
TER								
MODEL	15							
ATOM	1	N	GLY		1	27.181	0.115	14.390
1.00999.99				N				
ATOM	2	CA	GLY		1	26.672	0.645	13.092
1.00999.99				C				
ATOM	3	C	GLY		1	25.287	1.249	13.297
1.00999.99				C				
ATOM	4	O	GLY		1	24.967	1.741	14.378
1.00999.99				O				
ATOM	5	HA1	GLY		1	26.608	-0.159	12.374
1.00999.99				H				
ATOM	6	HA2	GLY		1	27.347	1.404	12.725
1.00999.99				H				
ATOM	7	HT1	GLY		1	28.175	-0.168	14.282
1.00999.99				H				
ATOM	8	HT2	GLY		1	26.614	-0.711	14.673
1.00999.99				H				
ATOM	9	HT3	GLY		1	27.109	0.852	15.118
1.00999.99				H				
ATOM	10	N	LEU		2	24.470	1.206	12.250
1.00999.99				N				
ATOM	11	CA	LEU		2	23.117	1.753	12.321
1.00895.59				C				
ATOM	12	C	LEU		2	22.173	0.753	12.982
1.00532.27				C				
ATOM	13	O	LEU		2	22.386	-0.458	12.907
1.00625.21				O				
ATOM	14	CB	LEU		2	22.610	2.076	10.912
1.00999.99				C				
ATOM	15	CG	LEU		2	23.579	3.036	10.211
1.00999.99				C				
ATOM	16	CD1	LEU		2	23.080	3.301	8.789
1.00999.99				C				
ATOM	17	CD2	LEU		2	23.664	4.364	10.986
1.00999.99				C				
ATOM	18	HN	LEU		2	24.780	0.802	11.412
1.00999.99				H				
ATOM	19	HA	LEU		2	23.130	2.659	12.906
1.00890.87				H				
ATOM	20	HB1	LEU		2	21.636	2.539	10.980
1.00924.07				H				

ATOM	21	HB2	LEU	2	22.533	1.163	10.341		
1.00999.99								H	
ATOM	22	HG	LEU	2	24.559	2.582	10.165		
1.00999.99								H	
ATOM	23	HD11	LEU	2	23.692	4.064	8.328		
1.00999.99								H	
ATOM	24	HD12	LEU	2	22.054	3.637	8.823		
1.00999.99								H	
ATOM	25	HD13	LEU	2	23.142	2.393	8.209		
1.00999.99								H	
ATOM	26	HD21	LEU	2	22.691	4.615	11.388		
1.00999.99								H	
ATOM	27	HD22	LEU	2	23.991	5.152	10.324		
1.00999.99								H	
ATOM	28	HD23	LEU	2	24.373	4.264	11.793		
1.00999.99								H	
ATOM	29	N	CYS	3	21.128	1.265	13.626		
1.00271.28								N	
ATOM	30	CA	CYS	3	20.160	0.402	14.293		
1.00104.50								C	
ATOM	31	C	CYS	3	19.420	-0.454	13.269	1.00	
90.98			C						
ATOM	32	O	CYS	3	19.179	-0.021	12.142		
1.00207.28								O	
ATOM	33	CB	CYS	3	19.151	1.247	15.076	1.00	
37.83			C						
ATOM	34	SG	CYS	3	19.991	2.089	16.441	1.00	
81.56			S						
ATOM	35	HN	CYS	3	21.007	2.237	13.651		
1.00296.55								H	
ATOM	36	HA	CYS	3	20.682	-0.247	14.980		
1.00166.45								H	
ATOM	37	HB1	CYS	3	18.376	0.608	15.471	1.00	
40.38			H						
ATOM	38	HB2	CYS	3	18.711	1.982	14.419	1.00	
98.45			H						
ATOM	39	N	SER	4	19.061	-1.670	13.668	1.00	
85.31			N						
ATOM	40	CA	SER	4	18.348	-2.578	12.775	1.00	
92.94			C						
ATOM	41	C	SER	4	17.026	-1.963	12.351	1.00	
67.37			C						
ATOM	42	O	SER	4	16.626	-2.044	11.190		
1.00102.28								O	
ATOM	43	CB	SER	4	18.051	-3.890	13.492		
1.00123.83								C	
ATOM	44	OG	SER	4	17.480	-4.810	12.569		
1.00178.89								O	
ATOM	45	HN	SER	4	19.279	-1.961	14.578		
1.00163.03								H	
ATOM	46	HA	SER	4	18.951	-2.775	11.903		
1.00129.78								H	

ATOM	47	HB1	SER	4	17.348	-3.699	14.299	
1.00105.26								H
ATOM	48	HB2	SER	4	18.960	-4.304	13.896	
1.00156.87								H
ATOM	49	HG	SER	4	18.160	-5.056	11.937	
1.00218.16								H
ATOM	50	N	GLU	5	16.343	-1.368	13.323	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.044	-0.754	13.086	1.00
41.21			C					
ATOM	52	C	GLU	5	14.898	0.519	13.912	1.00
41.92			C					
ATOM	53	O	GLU	5	15.859	0.990	14.519	1.00
74.72			O					
ATOM	54	CB	GLU	5	13.948	-1.746	13.465	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.105	-2.115	14.933	1.00
55.48			C					
ATOM	56	CD	GLU	5	13.194	-3.288	15.279	1.00
92.06			C					
ATOM	57	OE1	GLU	5	13.207	-3.706	16.426	
1.00206.49								O
ATOM	58	OE2	GLU	5	12.498	-3.755	14.392	
1.00197.24								O1-
ATOM	59	HN	GLU	5	16.716	-1.358	14.229	1.00
45.52			H					
ATOM	60	HA	GLU	5	14.946	-0.511	12.046	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.039	-2.634	12.859	1.00
61.59			H					
ATOM	62	HB2	GLU	5	12.987	-1.296	13.307	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.842	-1.267	15.547	1.00
58.03			H					
ATOM	64	HG2	GLU	5	15.131	-2.387	15.115	1.00
57.77			H					
ATOM	65	N	ASN	6	13.690	1.074	13.932	1.00
50.73			N					
ATOM	66	CA	ASN	6	13.439	2.294	14.690	1.00
71.04			C					
ATOM	67	C	ASN	6	13.738	2.065	16.167	1.00
65.17			C					
ATOM	68	O	ASN	6	14.292	2.934	16.841	1.00
94.86			O					
ATOM	69	CB	ASN	6	11.982	2.726	14.520	1.00
94.83			C					
ATOM	70	CG	ASN	6	11.754	3.253	13.108	
1.00160.94								C
ATOM	71	ND2	ASN	6	10.542	3.300	12.625	
1.00244.88								N
ATOM	72	OD1	ASN	6	12.706	3.634	12.427	
1.00219.73								O

ATOM	73	HN	ASN	6	12.959	0.657	13.430	1.00
72.81			H					
ATOM	74	HA	ASN	6	14.082	3.077	14.317	1.00
96.02			H					
ATOM	75	HB1	ASN	6	11.752	3.504	15.233	
1.00111.09			H					
ATOM	76	HB2	ASN	6	11.335	1.878	14.695	1.00
98.13			H					
ATOM	77	HD21	ASN	6	9.786	2.997	13.170	
1.00272.43			H					
ATOM	78	HD22	ASN	6	10.390	3.638	11.718	
1.00336.78			H					
ATOM	79	N	GLY	7	13.372	0.884	16.663	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.606	0.528	18.064	1.00
71.47			C					
ATOM	81	C	GLY	7	14.250	-0.849	18.164	1.00
41.04			C					
ATOM	82	O	GLY	7	13.572	-1.849	18.403	1.00
44.54			O					
ATOM	83	HN	GLY	7	12.939	0.233	16.071	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.665	0.513	18.588	
1.00103.52			H					
ATOM	85	HA2	GLY	7	14.258	1.259	18.525	
1.00108.67			H					
ATOM	86	N	ASP	8	15.564	-0.894	17.979	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.295	-2.153	18.049	1.00
14.15			C					
ATOM	88	C	ASP	8	16.156	-2.777	19.431	1.00
9.37			C					
ATOM	89	O	ASP	8	15.945	-3.983	19.562	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.775	-1.919	17.735	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.519	-3.249	17.707	1.00
21.22			C					
ATOM	92	OD1	ASP	8	19.674	-3.251	17.312	
1.00119.56			O					
ATOM	93	OD2	ASP	8	17.925	-4.247	18.079	
1.00133.27			O1-					
ATOM	94	HN	ASP	8	16.049	-0.064	17.792	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.889	-2.833	17.317	1.00
20.92			H					
ATOM	96	HB1	ASP	8	18.204	-1.285	18.497	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.866	-1.435	16.774	1.00
44.14			H					
ATOM	98	N	CYS	9	16.277	-1.946	20.456	1.00
5.93			N					

ATOM	99	CA	CYS	9	16.161	-2.421	21.829	1.00
7.54			C					
ATOM	100	C	CYS	9	14.770	-2.992	22.076	1.00
14.60			C					
ATOM	101	O	CYS	9	14.613	-4.031	22.716	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.437	-1.273	22.791	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.189	-0.873	22.699	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.444	-0.997	20.285	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.900	-3.186	21.994	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.191	-1.566	23.798	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.850	-0.410	22.508	1.00
5.04			H					
ATOM	108	N	ALA	10	13.767	-2.303	21.547	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.380	-2.733	21.688	1.00
32.04			C					
ATOM	110	C	ALA	10	11.477	-1.869	20.810	1.00
45.47			C					
ATOM	111	O	ALA	10	11.869	-0.780	20.391	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.940	-2.636	23.152	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.965	-1.488	21.041	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.300	-3.762	21.365	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.759	-2.925	23.794	1.00
84.37			H					
ATOM	116	HB2	ALA	10	11.101	-3.297	23.322	
1.00118.20			H					
ATOM	117	HB3	ALA	10	11.648	-1.622	23.378	
1.00117.32			H					
ATOM	118	N	ALA	11	10.272	-2.355	20.528	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.343	-1.603	19.693	1.00
35.24			C					
ATOM	120	C	ALA	11	9.013	-0.255	20.331	1.00
22.78			C					
ATOM	121	O	ALA	11	9.034	0.779	19.663	1.00
53.33			O					
ATOM	122	CB	ALA	11	8.054	-2.403	19.496	1.00
60.49			C					
ATOM	123	HN	ALA	11	10.007	-3.229	20.884	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.797	-1.433	18.729	1.00
41.70			H					

ATOM	125	HB1	ALA	11	7.485	-1.978	18.682	
	1.00157.06			H				
ATOM	126	HB2	ALA	11	7.466	-2.368	20.401	
	1.00148.83			H				
ATOM	127	HB3	ALA	11	8.299	-3.430	19.266	
	1.00137.06			H				
ATOM	128	N	ASP	12	8.718	-0.272	21.627	1.00
	18.98		N					
ATOM	129	CA	ASP	12	8.396	0.957	22.344	1.00
	31.05		C					
ATOM	130	C	ASP	12	9.641	1.825	22.504	1.00
	22.98		C					
ATOM	131	O	ASP	12	9.577	3.050	22.410	1.00
	37.14		O					
ATOM	132	CB	ASP	12	7.824	0.624	23.723	1.00
	48.35		C					
ATOM	133	CG	ASP	12	6.427	0.029	23.580	
	1.00104.83			C				
ATOM	134	OD1	ASP	12	5.869	0.131	22.500	
	1.00258.73			O				
ATOM	135	OD2	ASP	12	5.936	-0.519	24.552	
	1.00213.46			O1-				
ATOM	136	HN	ASP	12	8.723	-1.125	22.111	1.00
	36.19		H					
ATOM	137	HA	ASP	12	7.656	1.507	21.783	1.00
	49.76		H					
ATOM	138	HB1	ASP	12	7.769	1.525	24.316	1.00
	95.71		H					
ATOM	139	HB2	ASP	12	8.469	-0.090	24.217	1.00
	54.37		H					
ATOM	140	N	GLU	13	10.772	1.171	22.753	1.00
	17.60		N					
ATOM	141	CA	GLU	13	12.038	1.872	22.935	1.00
	12.01		C					
ATOM	142	C	GLU	13	12.596	2.351	21.597	1.00
	10.07		C					
ATOM	143	O	GLU	13	12.121	1.946	20.535	1.00
	12.81		O					
ATOM	144	CB	GLU	13	13.043	0.940	23.601	1.00
	11.74		C					
ATOM	145	CG	GLU	13	12.497	0.495	24.960	1.00
	13.49		C					
ATOM	146	CD	GLU	13	12.548	1.654	25.948	
	1.00142.36			C				
ATOM	147	OE1	GLU	13	13.150	2.660	25.618	
	1.00339.06			O				
ATOM	148	OE2	GLU	13	11.985	1.519	27.021	
	1.00335.28			O1-				
ATOM	149	HN	GLU	13	10.752	0.194	22.820	1.00
	28.36		H					
ATOM	150	HA	GLU	13	11.882	2.726	23.576	1.00
	13.06		H					

ATOM	151	HB1	GLU	13	13.975	1.462	23.743	1.00
13.76		H						
ATOM	152	HB2	GLU	13	13.206	0.075	22.974	1.00
9.94		H						
ATOM	153	HG1	GLU	13	13.088	-0.323	25.335	1.00
66.02		H						
ATOM	154	HG2	GLU	13	11.473	0.174	24.845	1.00
56.23		H						
ATOM	155	N	CYS	14	13.612	3.215	21.657	1.00
9.12		N						
ATOM	156	CA	CYS	14	14.239	3.752	20.445	1.00
10.69		C						
ATOM	157	C	CYS	14	15.668	3.233	20.313	1.00
9.56		C						
ATOM	158	O	CYS	14	16.203	2.619	21.234	1.00
13.62		O						
ATOM	159	CB	CYS	14	14.264	5.283	20.501	1.00
13.96		C						
ATOM	160	SG	CYS	14	15.504	5.826	21.695	1.00
42.96		S						
ATOM	161	HN	CYS	14	13.948	3.498	22.535	1.00
9.76		H						
ATOM	162	HA	CYS	14	13.675	3.444	19.575	1.00
15.54		H						
ATOM	163	HB1	CYS	14	13.298	5.650	20.803	1.00
50.72		H						
ATOM	164	HB2	CYS	14	14.509	5.675	19.525	1.00
46.13		H						
ATOM	165	N	CYS	15	16.280	3.500	19.163	1.00
9.60		N						
ATOM	166	CA	CYS	15	17.653	3.073	18.911	1.00
9.28		C						
ATOM	167	C	CYS	15	18.306	4.025	17.918	1.00
9.92		C						
ATOM	168	O	CYS	15	17.764	4.276	16.842	1.00
13.31		O						
ATOM	169	CB	CYS	15	17.663	1.653	18.339	1.00
12.90		C						
ATOM	170	SG	CYS	15	19.373	1.106	18.097	1.00
39.11		S						
ATOM	171	HN	CYS	15	15.803	4.003	18.471	1.00
13.12		H						
ATOM	172	HA	CYS	15	18.211	3.085	19.838	1.00
8.26		H						
ATOM	173	HB1	CYS	15	17.146	1.642	17.391	1.00
24.82		H						
ATOM	174	HB2	CYS	15	17.166	0.985	19.027	1.00
27.31		H						
ATOM	175	N	VAL	16	19.468	4.564	18.280	1.00
9.56		N						
ATOM	176	CA	VAL	16	20.168	5.495	17.399	1.00
11.99		C						

ATOM	177	C	VAL	16	21.675	5.382	17.592	1.00
7.73		C						
ATOM	178	O	VAL	16	22.174	5.425	18.717	1.00
8.83		O						
ATOM	179	CB	VAL	16	19.711	6.925	17.698	1.00
18.37		C						
ATOM	180	CG1	VAL	16	20.047	7.280	19.147	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.424	7.894	16.754	
1.00115.21			C					
ATOM	182	HN	VAL	16	19.859	4.337	19.151	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.934	5.263	16.370	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.644	6.996	17.548	1.00
52.63		H						
ATOM	185	HG11	VAL	16	19.764	6.462	19.793	
1.00128.07			H					
ATOM	186	HG12	VAL	16	19.505	8.169	19.435	
1.00154.13			H					
ATOM	187	HG13	VAL	16	21.108	7.461	19.240	
1.00135.74			H					
ATOM	188	HG21	VAL	16	20.287	7.569	15.734	
1.00229.05			H					
ATOM	189	HG22	VAL	16	21.479	7.915	16.988	
1.00261.82			H					
ATOM	190	HG23	VAL	16	20.008	8.884	16.875	
1.00210.07			H					
ATOM	191	N	ASP	17	22.399	5.233	16.481	1.00
14.34		N						
ATOM	192	CA	ASP	17	23.858	5.110	16.523	1.00
11.90		C						
ATOM	193	C	ASP	17	24.520	6.298	15.838	1.00
13.15		C						
ATOM	194	O	ASP	17	24.136	6.690	14.736	1.00
25.96		O						
ATOM	195	CB	ASP	17	24.292	3.819	15.827	1.00
20.80		C						
ATOM	196	CG	ASP	17	23.644	2.618	16.508	1.00
28.72		C						
ATOM	197	OD1	ASP	17	23.717	2.541	17.724	
1.00135.42			O					
ATOM	198	OD2	ASP	17	23.081	1.795	15.804	
1.00114.17			O1-					
ATOM	199	HN	ASP	17	21.943	5.205	15.614	1.00
28.29		H						
ATOM	200	HA	ASP	17	24.191	5.075	17.552	1.00
10.49		H						
ATOM	201	HB1	ASP	17	25.368	3.726	15.886	1.00
22.42		H						
ATOM	202	HB2	ASP	17	23.991	3.851	14.791	1.00
29.52		H						

ATOM	203	N	THR	18	25.534	6.854	16.495	1.00
11.55			N					
ATOM	204	CA	THR	18	26.281	7.990	15.957	1.00
17.10			C					
ATOM	205	C	THR	18	27.766	7.672	15.957	1.00
10.63			C					
ATOM	206	O	THR	18	28.211	6.768	16.661	1.00
6.49			O					
ATOM	207	CB	THR	18	26.031	9.242	16.800	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.618	9.763	16.552	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.194	8.924	18.172	1.00
26.49			O					
ATOM	210	HN	THR	18	25.796	6.483	17.364	1.00
13.96			H					
ATOM	211	HA	THR	18	25.967	8.185	14.940	1.00
26.43			H					
ATOM	212	HB	THR	18	26.742	10.006	16.523	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.433	9.266	18.648	1.00
71.62			H					
ATOM	214	HG21	THR	18	23.924	8.938	16.558	
1.00100.44								H
ATOM	215	HG22	THR	18	24.585	10.258	15.592	
1.00129.42								H
ATOM	216	HG23	THR	18	24.355	10.465	17.329	
1.00156.21								H
ATOM	217	N	VAL	19	28.527	8.426	15.178	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.951	8.233	15.097	1.00
13.34			C					
ATOM	219	C	VAL	19	30.546	9.258	14.155	1.00
25.88			C					
ATOM	220	O	VAL	19	30.245	9.300	12.963	1.00
42.11			O					
ATOM	221	CB	VAL	19	30.304	6.822	14.625	1.00
15.48			C					
ATOM	222	CG1	VAL	19	29.528	6.479	13.349	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.812	6.754	14.344	1.00
20.67			C					
ATOM	224	HN	VAL	19	28.126	9.145	14.656	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.373	8.382	16.081	1.00
8.08			H					
ATOM	226	HB	VAL	19	30.051	6.120	15.401	1.00
11.49			H					
ATOM	227	HG11	VAL	19	28.492	6.757	13.468	
1.00137.43								H
ATOM	228	HG12	VAL	19	29.595	5.417	13.163	1.00
93.29			H					

ATOM	229	HG13	VAL	19	29.951	7.017	12.514	
1.00108.69								
ATOM	230	HG21	VAL	19	32.024	7.249	13.406	1.00
99.42			H					
ATOM	231	HG22	VAL	19	32.124	5.722	14.288	
1.00111.36								
ATOM	232	HG23	VAL	19	32.349	7.253	15.140	1.00
77.11			H					
ATOM	233	N	PHE	20	31.383	10.080	14.727	1.00
24.58			N					
ATOM	234	CA	PHE	20	32.055	11.143	14.004	1.00
40.34			C					
ATOM	235	C	PHE	20	33.456	10.715	13.600	1.00
40.37			C					
ATOM	236	O	PHE	20	33.837	10.822	12.433	1.00
66.02			O					
ATOM	237	CB	PHE	20	32.123	12.396	14.892	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.241	12.016	16.362	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.170	11.388	17.033	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.417	12.315	17.064	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.290	11.064	18.386	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.530	11.985	18.420	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.468	11.361	19.081	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.545	9.975	15.678	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.494	11.379	13.108	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.233	12.961	14.752	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.970	13.003	14.607	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.256	11.147	16.506	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.240	12.796	16.558	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.470	10.582	18.896	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.438	12.214	18.957	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.556	11.108	20.126	1.00
52.66			H					
ATOM	253	N	GLU	21	34.231	10.260	14.576	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.594	9.855	14.341	1.00
56.16			C					

ATOM	255	C	GLU	21	35.812	8.397	14.713	1.00
58.61			C					
ATOM	256	O	GLU	21	34.886	7.695	15.117	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.472	10.744	15.190	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.225	10.455	16.670	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.878	11.538	17.525	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.674	11.522	18.728	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.574	12.367	16.964	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.892	10.227	15.488	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.857	9.998	13.302	1.00
85.72			H					
ATOM	264	HB1	GLU	21	36.223	11.770	14.982	1.00
46.37			H					
ATOM	265	HB2	GLU	21	37.494	10.561	14.952	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.649	9.499	16.924	
1.00314.91			H					
ATOM	267	HG2	GLU	21	35.165	10.436	16.860	
1.00266.92			H					
ATOM	268	N	GLY	22	37.051	7.958	14.564	1.00
86.70			N					
ATOM	269	CA	GLY	22	37.418	6.574	14.875	
1.00104.66			C					
ATOM	270	C	GLY	22	37.912	6.448	16.313	1.00
71.50			C					
ATOM	271	O	GLY	22	38.079	5.341	16.827	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.737	8.580	14.237	
1.00214.64			H					
ATOM	273	HA1	GLY	22	38.206	6.259	14.208	
1.00152.47			H					
ATOM	274	HA2	GLY	22	36.559	5.932	14.737	
1.00118.15			H					
ATOM	275	N	ASP	23	38.149	7.585	16.952	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.632	7.595	18.328	1.00
43.33			C					
ATOM	277	C	ASP	23	37.617	6.961	19.271	1.00
37.55			C					
ATOM	278	O	ASP	23	37.976	6.174	20.147	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.905	9.031	18.773	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.575	9.035	20.142	
1.00141.86			C					

ATOM	281	OD1	ASP	23	39.617	7.985	20.762	
1.00328.18								O
ATOM	282	OD2	ASP	23	40.037	10.088	20.551	
1.00304.58								O1-
ATOM	283	HN	ASP	23	38.005	8.435	16.488	1.00
40.86			H					
ATOM	284	HA	ASP	23	39.550	7.035	18.379	1.00
72.12			H					
ATOM	285	HB1	ASP	23	37.971	9.568	18.833	1.00
94.15			H					
ATOM	286	HB2	ASP	23	39.550	9.515	18.054	1.00
93.26			H					
ATOM	287	N	MET	24	36.352	7.320	19.093	1.00
23.24			N					
ATOM	288	CA	MET	24	35.287	6.791	19.944	1.00
32.50			C					
ATOM	289	C	MET	24	33.943	6.829	19.222	1.00
25.13			C					
ATOM	290	O	MET	24	33.680	7.728	18.421	1.00
54.40			O					
ATOM	291	CB	MET	24	35.201	7.619	21.230	1.00
47.36			C					
ATOM	292	CG	MET	24	34.107	7.056	22.140	
1.00151.73								C
ATOM	293	SD	MET	24	34.115	7.948	23.716	
1.00209.23								S
ATOM	294	CE	MET	24	33.498	9.536	23.099	
1.00243.29								C
ATOM	295	HN	MET	24	36.132	7.957	18.384	1.00
17.32			H					
ATOM	296	HA	MET	24	35.515	5.769	20.204	1.00
48.94			H					
ATOM	297	HB1	MET	24	34.967	8.644	20.980	
1.00124.40								H
ATOM	298	HB2	MET	24	36.150	7.582	21.744	
1.00166.96								H
ATOM	299	HG1	MET	24	34.294	6.007	22.320	
1.00331.71								H
ATOM	300	HG2	MET	24	33.143	7.171	21.665	
1.00302.30								H
ATOM	301	HE1	MET	24	33.045	10.084	23.913	
1.00340.44								H
ATOM	302	HE2	MET	24	32.762	9.367	22.331	
1.00373.88								H
ATOM	303	HE3	MET	24	34.321	10.106	22.689	
1.00386.81								H
ATOM	304	N	VAL	25	33.088	5.849	19.522	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.760	5.767	18.910	1.00
15.37			C					
ATOM	306	C	VAL	25	30.683	6.141	19.924	1.00
17.47			C					

ATOM	307	O	VAL	25	30.783	5.816	21.107	1.00
29.52		O						
ATOM	308	CB	VAL	25	31.495	4.351	18.382	1.00
23.36		C						
ATOM	309	CG1	VAL	25	30.028	4.232	17.932	1.00
58.39		C						
ATOM	310	CG2	VAL	25	32.418	4.078	17.191	1.00
55.25		C						
ATOM	311	HN	VAL	25	33.356	5.166	20.173	1.00
48.11		H						
ATOM	312	HA	VAL	25	31.703	6.462	18.079	1.00
9.25		H						
ATOM	313	HB	VAL	25	31.691	3.633	19.165	1.00
52.45		H						
ATOM	314	HG11	VAL	25	29.713	5.158	17.472	
1.00171.07								H
ATOM	315	HG12	VAL	25	29.407	4.031	18.791	
1.00166.22								H
ATOM	316	HG13	VAL	25	29.928	3.423	17.221	
1.00134.76								H
ATOM	317	HG21	VAL	25	33.441	4.023	17.532	
1.00141.88								H
ATOM	318	HG22	VAL	25	32.321	4.873	16.468	
1.00184.50								H
ATOM	319	HG23	VAL	25	32.142	3.140	16.731	
1.00133.90								H
ATOM	320	N	THR	26	29.656	6.834	19.439	1.00
13.60		N						
ATOM	321	CA	THR	26	28.545	7.276	20.281	1.00
21.19		C						
ATOM	322	C	THR	26	27.235	6.631	19.833	1.00
16.55		C						
ATOM	323	O	THR	26	26.921	6.601	18.643	1.00
11.43		O						
ATOM	324	CB	THR	26	28.429	8.794	20.186	1.00
27.07		C						
ATOM	325	CG2	THR	26	27.220	9.283	20.988	1.00
44.39		C						
ATOM	326	OG1	THR	26	29.613	9.383	20.703	1.00
34.75		O						
ATOM	327	HN	THR	26	29.647	7.061	18.487	1.00
10.81		H						
ATOM	328	HA	THR	26	28.735	7.005	21.311	1.00
33.16		H						
ATOM	329	HB	THR	26	28.312	9.076	19.147	1.00
20.60		H						
ATOM	330	HG1	THR	26	30.026	8.749	21.293	1.00
77.72		H						
ATOM	331	HG21	THR	26	27.234	10.362	21.038	
1.00126.99								H
ATOM	332	HG22	THR	26	27.266	8.877	21.989	
1.00108.32								H

ATOM	333	HG23	THR	26	26.308	8.958	20.511	
1.00151.99			H					
ATOM	334	N	ARG	27	26.473	6.118	20.797	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.193	5.474	20.503	1.00
20.21			C					
ATOM	336	C	ARG	27	24.245	5.610	21.689	1.00
16.96			C					
ATOM	337	O	ARG	27	24.672	5.921	22.801	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.415	3.992	20.192	1.00
22.14			C					
ATOM	339	CG	ARG	27	25.991	3.296	21.425	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.437	1.879	21.052	
1.00109.38			C					
ATOM	341	NE	ARG	27	25.284	1.074	20.661	
1.00227.73			N					
ATOM	342	CZ	ARG	27	24.557	0.421	21.565	
1.00426.12			C					
ATOM	343	NH1	ARG	27	23.535	-0.296	21.186	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	24.865	0.500	22.830	
1.00581.78			N					
ATOM	345	HN	ARG	27	26.777	6.174	21.728	1.00
30.75			H					
ATOM	346	HA	ARG	27	24.747	5.948	19.642	1.00
23.13			H					
ATOM	347	HB1	ARG	27	26.109	3.896	19.370	1.00
87.46			H					
ATOM	348	HB2	ARG	27	24.475	3.535	19.926	
1.00103.36			H					
ATOM	349	HG1	ARG	27	25.236	3.241	22.195	
1.00281.97			H					
ATOM	350	HG2	ARG	27	26.840	3.855	21.792	
1.00276.19			H					
ATOM	351	HD1	ARG	27	26.928	1.424	21.902	
1.00183.60			H					
ATOM	352	HD2	ARG	27	27.130	1.931	20.228	
1.00142.93			H					
ATOM	353	HE	ARG	27	25.041	1.011	19.713	
1.00372.53			H					
ATOM	354	HH11	ARG	27	23.298	-0.356	20.216	
1.00910.59			H					
ATOM	355	HH12	ARG	27	22.989	-0.787	21.864	
1.00999.99			H					
ATOM	356	HH21	ARG	27	25.648	1.050	23.122	
1.00532.54			H					
ATOM	357	HH22	ARG	27	24.320	0.008	23.510	
1.00948.84			H					
ATOM	358	N	SER	28	22.952	5.380	21.449	1.00
14.60			N					

ATOM	359	CA	SER	28	21.955	5.487	22.515	1.00
14.92			C					
ATOM	360	C	SER	28	20.797	4.526	22.272	1.00
12.12			C					
ATOM	361	O	SER	28	20.440	4.238	21.130	1.00
13.41			O					
ATOM	362	CB	SER	28	21.425	6.919	22.594	1.00
23.26			C					
ATOM	363	OG	SER	28	20.449	7.002	23.625	
1.00146.32			O					
ATOM	364	HN	SER	28	22.663	5.138	20.543	1.00
15.23			H					
ATOM	365	HA	SER	28	22.418	5.238	23.460	1.00
15.44			H					
ATOM	366	HB1	SER	28	20.987	7.193	21.645	1.00
88.73			H					
ATOM	367	HB2	SER	28	22.236	7.593	22.818	
1.00124.68			H					
ATOM	368	HG	SER	28	20.872	7.370	24.404	
1.00242.47			H					
ATOM	369	N	CYS	29	20.215	4.036	23.362	1.00
10.48			N					
ATOM	370	CA	CYS	29	19.094	3.108	23.278	1.00
9.97			C					
ATOM	371	C	CYS	29	18.477	2.932	24.663	1.00
11.60			C					
ATOM	372	O	CYS	29	19.124	2.422	25.579	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.568	1.751	22.729	1.00
9.52			C					
ATOM	374	SG	CYS	29	18.222	0.949	21.846	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.543	4.310	24.243	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.349	3.517	22.611	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.877	1.107	23.542	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.395	1.900	22.055	1.00
10.78			H					
ATOM	379	N	GLU	30	17.233	3.370	24.819	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.552	3.268	26.105	1.00
17.41			C					
ATOM	381	C	GLU	30	15.908	1.899	26.284	1.00
10.81			C					
ATOM	382	O	GLU	30	15.670	1.181	25.315	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.491	4.362	26.210	1.00
37.83			C					
ATOM	384	CG	GLU	30	16.178	5.725	26.180	
1.00108.13			C					

ATOM	385	CD	GLU	30	16.947	5.950	27.475	
1.00240.52				C				
ATOM	386	OE1	GLU	30	17.767	6.853	27.506	
1.00422.56				O				
ATOM	387	OE2	GLU	30	16.705	5.216	28.420	
1.00410.81				O1-				
ATOM	388	HN	GLU	30	16.765	3.777	24.055	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.273	3.416	26.896	1.00
24.60			H					
ATOM	390	HB1	GLU	30	14.949	4.253	27.135	1.00
72.67			H					
ATOM	391	HB2	GLU	30	14.809	4.284	25.376	1.00
56.47			H					
ATOM	392	HG1	GLU	30	15.436	6.501	26.064	
1.00196.66				H				
ATOM	393	HG2	GLU	30	16.864	5.758	25.346	
1.00140.67				H				
ATOM	394	N	LYS	31	15.631	1.541	27.540	1.00
11.96			N					
ATOM	395	CA	LYS	31	15.010	0.254	27.859	1.00
11.40			C					
ATOM	396	C	LYS	31	13.736	0.471	28.668	1.00
10.99			C					
ATOM	397	O	LYS	31	13.671	1.365	29.512	1.00
12.86			O					
ATOM	398	CB	LYS	31	15.980	-0.604	28.672	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.225	-0.905	27.834	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.186	-1.779	28.642	
1.00115.52				C				
ATOM	401	CE	LYS	31	19.423	-2.092	27.799	
1.00250.23				C				
ATOM	402	NZ	LYS	31	20.149	-0.828	27.492	
1.00462.10				N1+				
ATOM	403	HN	LYS	31	15.848	2.160	28.268	1.00
26.13			H					
ATOM	404	HA	LYS	31	14.763	-0.270	26.948	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.500	-1.532	28.943	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.266	-0.072	29.566	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.716	0.022	27.575	
1.00126.32				H				
ATOM	408	HG2	LYS	31	16.935	-1.424	26.932	
1.00114.19				H				
ATOM	409	HD1	LYS	31	17.693	-2.700	28.911	
1.00198.45				H				
ATOM	410	HD2	LYS	31	18.484	-1.254	29.538	
1.00200.14				H				

ATOM	411	HE1	LYS	31	19.120	-2.567	26.878	
	1.00374							H
ATOM	412	HE2	LYS	31	20.073	-2.758	28.347	
	1.00403							H
ATOM	413	HZ1	LYS	31	20.251	-0.267	28.362	
	1.00627							H
ATOM	414	HZ2	LYS	31	19.610	-0.283	26.788	
	1.00622							H
ATOM	415	HZ3	LYS	31	21.090	-1.051	27.114	
	1.00619							H
ATOM	416	N	THR	32	12.726	-0.353	28.407	1.00
	15.51		N					
ATOM	417	CA	THR	32	11.456	-0.242	29.124	1.00
	22.44		C					
ATOM	418	C	THR	32	11.522	-1.006	30.442	1.00
	26.60		C					
ATOM	419	O	THR	32	11.767	-2.212	30.463	1.00
	57.43		O					
ATOM	420	CB	THR	32	10.317	-0.799	28.265	1.00
	56.28		C					
ATOM	421	CG2	THR	32	9.002	-0.715	29.040	
	1.00102							C
ATOM	422	OG1	THR	32	10.213	-0.041	27.068	
	1.00111							O
ATOM	423	HN	THR	32	12.836	-1.049	27.726	1.00
	18.79		H					
ATOM	424	HA	THR	32	11.257	0.800	29.332	1.00
	19.67		H					
ATOM	425	HB	THR	32	10.520	-1.828	28.022	1.00
	84.25		H					
ATOM	426	HG1	THR	32	9.988	-0.644	26.355	
	1.00205							H
ATOM	427	HG21	THR	32	9.016	-1.423	29.856	
	1.00220							H
ATOM	428	HG22	THR	32	8.180	-0.947	28.381	
	1.00174							H
ATOM	429	HG23	THR	32	8.878	0.284	29.433	
	1.00217							H
ATOM	430	N	THR	33	11.296	-0.292	31.541	1.00
	22.47		N					
ATOM	431	CA	THR	33	11.327	-0.903	32.867	1.00
	41.60		C					
ATOM	432	C	THR	33	10.458	-0.134	33.825	1.00
	38.03		C					
ATOM	433	O	THR	33	10.912	0.785	34.505	1.00
	52.73		O					
ATOM	434	CB	THR	33	12.763	-0.960	33.398	1.00
	63.25		C					
ATOM	435	CG2	THR	33	13.581	-1.956	32.574	
	1.00121							C
ATOM	436	OG1	THR	33	13.351	0.329	33.305	1.00
	96.20		O					

ATOM	437	HN	THR	33	11.106	0.666	31.460	1.00
23.82			H					
ATOM	438	HA	THR	33	10.930	-1.899	32.814	1.00
67.12			H					
ATOM	439	HB	THR	33	12.751	-1.277	34.430	
1.00107.59			H					
ATOM	440	HG1	THR	33	13.741	0.415	32.432	
1.00176.27			H					
ATOM	441	HG21	THR	33	13.020	-2.870	32.450	
1.00255.23			H					
ATOM	442	HG22	THR	33	14.507	-2.171	33.087	
1.00245.37			H					
ATOM	443	HG23	THR	33	13.796	-1.531	31.606	
1.00185.78			H					
ATOM	444	N	GLY	34	9.201	-0.539	33.885	1.00
40.93			N					
ATOM	445	CA	GLY	34	8.268	0.097	34.779	1.00
45.59			C					
ATOM	446	C	GLY	34	7.885	1.482	34.272	1.00
40.97			C					
ATOM	447	O	GLY	34	6.722	1.883	34.343	1.00
82.17			O					
ATOM	448	HN	GLY	34	8.904	-1.289	33.328	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.741	0.184	35.736	1.00
54.41			H					
ATOM	450	HA2	GLY	34	7.381	-0.514	34.868	1.00
62.09			H					
ATOM	451	N	ASN	35	8.873	2.209	33.751	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.644	3.556	33.218	1.00
33.20			C					
ATOM	453	C	ASN	35	9.343	3.716	31.873	1.00
23.17			C					
ATOM	454	O	ASN	35	10.465	3.246	31.685	1.00
27.01			O					
ATOM	455	CB	ASN	35	9.175	4.602	34.198	1.00
54.51			C					
ATOM	456	CG	ASN	35	8.468	4.467	35.542	1.00
80.73			C					
ATOM	457	ND2	ASN	35	9.167	4.498	36.643	
1.00220.46			N					
ATOM	458	OD1	ASN	35	7.245	4.327	35.589	
1.00117.80			O					
ATOM	459	HN	ASN	35	9.778	1.831	33.718	1.00
51.15			H					
ATOM	460	HA	ASN	35	7.583	3.715	33.079	1.00
47.21			H					
ATOM	461	HB1	ASN	35	8.995	5.589	33.797	1.00
68.31			H					
ATOM	462	HB2	ASN	35	10.238	4.459	34.334	1.00
57.75			H					

ATOM	463	HD21	ASN	35	10.139	4.608	36.602	
1.00405.39								H
ATOM	464	HD22	ASN	35	8.719	4.412	37.511	
1.00245.64								H
ATOM	465	N	PHE	36	8.671	4.377	30.937	1.00
35.72			N					
ATOM	466	CA	PHE	36	9.222	4.592	29.610	1.00
33.41			C					
ATOM	467	C	PHE	36	10.094	5.843	29.577	1.00
28.51			C					
ATOM	468	O	PHE	36	9.864	6.792	30.327	1.00
45.23			O					
ATOM	469	CB	PHE	36	8.075	4.742	28.617	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.301	3.447	28.550	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.227	3.234	29.422	
1.00106.51								C
ATOM	472	CD2	PHE	36	7.650	2.464	27.615	1.00
99.48			C					
ATOM	473	CE1	PHE	36	5.503	2.037	29.361	
1.00134.48								C
ATOM	474	CE2	PHE	36	6.926	1.268	27.555	
1.00134.27								C
ATOM	475	CZ	PHE	36	5.852	1.054	28.428	
1.00149.48								C
ATOM	476	HN	PHE	36	7.779	4.723	31.139	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.819	3.737	29.325	1.00
28.53			H					
ATOM	478	HB1	PHE	36	8.470	4.975	27.646	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.420	5.538	28.941	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.959	3.992	30.144	
1.00110.20								H
ATOM	481	HD2	PHE	36	8.480	2.627	26.943	1.00
93.07			H					
ATOM	482	HE1	PHE	36	4.675	1.872	30.034	
1.00155.06								H
ATOM	483	HE2	PHE	36	7.195	0.510	26.834	
1.00159.46								H
ATOM	484	HZ	PHE	36	5.294	0.132	28.380	
1.00183.25								H
ATOM	485	N	THR	37	11.094	5.839	28.699	1.00
20.06			N					
ATOM	486	CA	THR	37	11.997	6.975	28.562	1.00
27.18			C					
ATOM	487	C	THR	37	12.599	7.001	27.161	1.00
41.87			C					
ATOM	488	O	THR	37	13.225	6.036	26.723	
1.00169.86								O

ATOM	489	CB	THR	37	13.114	6.888	29.608	1.00
26.52			C					
ATOM	490	CG2	THR	37	13.516	5.426	29.820	1.00
75.69			C					
ATOM	491	OG1	THR	37	14.238	7.633	29.162	1.00
81.95			O					
ATOM	492	HN	THR	37	11.224	5.057	28.125	1.00
18.47			H					
ATOM	493	HA	THR	37	11.441	7.889	28.718	1.00
38.80			H					
ATOM	494	HB	THR	37	12.763	7.297	30.545	1.00
81.60			H					
ATOM	495	HG1	THR	37	14.712	7.949	29.934	
1.00188.80			H					
ATOM	496	HG21	THR	37	12.799	4.948	30.471	
1.00196.98			H					
ATOM	497	HG22	THR	37	14.496	5.384	30.274	
1.00196.23			H					
ATOM	498	HG23	THR	37	13.537	4.914	28.870	
1.00168.92			H					
ATOM	499	N	GLU	38	12.389	8.109	26.462	1.00
26.53			N					
ATOM	500	CA	GLU	38	12.897	8.266	25.101	1.00
30.29			C					
ATOM	501	C	GLU	38	14.367	8.680	25.101	1.00
25.39			C					
ATOM	502	O	GLU	38	14.828	9.379	26.004	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.071	9.319	24.359	1.00
54.82			C					
ATOM	504	CG	GLU	38	12.527	9.400	22.900	
1.00165.84			C					
ATOM	505	CD	GLU	38	11.654	10.389	22.135	
1.00292.92			C					
ATOM	506	OE1	GLU	38	10.759	10.953	22.744	
1.00414.19			O					
ATOM	507	OE2	GLU	38	11.894	10.569	20.953	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	11.873	8.835	26.867	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.801	7.323	24.581	1.00
32.15			H					
ATOM	510	HB1	GLU	38	12.206	10.279	24.830	
1.00144.82			H					
ATOM	511	HB2	GLU	38	11.026	9.043	24.394	
1.00106.49			H					
ATOM	512	HG1	GLU	38	12.447	8.425	22.444	
1.00303.31			H					
ATOM	513	HG2	GLU	38	13.556	9.729	22.864	
1.00323.99			H					
ATOM	514	N	CYS	39	15.092	8.248	24.071	1.00
15.84			N					

ATOM	515	CA	CYS	39	16.513	8.576	23.934	1.00
14.30			C					
ATOM	516	C	CYS	39	16.758	10.041	24.324	1.00
22.31			C					
ATOM	517	O	CYS	39	15.818	10.830	24.412	1.00
32.92			O					
ATOM	518	CB	CYS	39	16.982	8.313	22.476	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.575	7.826	21.450	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.661	7.700	23.383	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.076	7.944	24.604	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.707	7.511	22.467	1.00
27.71			H					
ATOM	523	HB2	CYS	39	17.430	9.201	22.055	1.00
34.91			H					
ATOM	524	N	PRO	40	17.993	10.407	24.558	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.353	11.800	24.947	1.00
47.66			C					
ATOM	526	C	PRO	40	18.310	12.751	23.753	1.00
71.54			C					
ATOM	527	O	PRO	40	18.683	12.387	22.640	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.777	11.653	25.499	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.352	10.500	24.743	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.184	9.543	24.472	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.697	12.151	25.727	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.748	11.428	26.555	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.349	12.556	25.320	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.106	10.000	25.334	1.00
65.91			H					
ATOM	535	HG2	PRO	40	20.780	10.847	23.809	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.142	8.771	25.223	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.269	9.115	23.485	1.00
26.94			H					
ATOM	538	N	GLY	41	17.857	13.972	24.002	
1.00105.24								N
ATOM	539	CA	GLY	41	17.771	14.976	22.950	
1.00147.55								C
ATOM	540	C	GLY	41	19.154	15.306	22.400	
1.00161.74								C

ATOM	541	O	GLY	41	19.331	15.486	21.196
1.00244.37			O				
ATOM	542	HN	GLY	41	17.578	14.200	24.910
1.00121.79			H				
ATOM	543	HA1	GLY	41	17.326	15.875	23.350
1.00184.40			H				
ATOM	544	HA2	GLY	41	17.153	14.598	22.150
1.00157.34			H				
ATOM	545	N	LEU	42	20.131	15.385	23.300
1.00162.48			N				
ATOM	546	CA	LEU	42	21.513	15.696	22.919
1.00191.48			C				
ATOM	547	C	LEU	42	22.426	14.512	23.225
1.00166.66			C				
ATOM	548	O	LEU	42	22.195	13.767	24.178
1.00251.38			O				
ATOM	549	CB	LEU	42	22.001	16.925	23.693
1.00307.99			C				
ATOM	550	CG	LEU	42	21.051	18.105	23.454
1.00452.28			C				
ATOM	551	CD1	LEU	42	21.521	19.304	24.284
1.00681.24			C				
ATOM	552	CD2	LEU	42	21.042	18.482	21.963
1.00527.46			C				
ATOM	553	HN	LEU	42	19.920	15.232	24.243
1.00195.47			H				
ATOM	554	HA	LEU	42	21.564	15.907	21.861
1.00229.77			H				
ATOM	555	HB1	LEU	42	22.991	17.190	23.355
1.00342.49			H				
ATOM	556	HB2	LEU	42	22.031	16.695	24.748
1.00335.33			H				
ATOM	557	HG	LEU	42	20.053	17.827	23.763
1.00427.79			H				
ATOM	558	HD11	LEU	42	21.408	19.080	25.334
1.00909.71			H				
ATOM	559	HD12	LEU	42	20.926	20.169	24.034
1.00706.80			H				
ATOM	560	HD13	LEU	42	22.560	19.506	24.068
1.00858.82			H				
ATOM	561	HD21	LEU	42	20.361	17.833	21.432
1.00631.69			H				
ATOM	562	HD22	LEU	42	22.035	18.375	21.552
1.00628.06			H				
ATOM	563	HD23	LEU	42	20.716	19.507	21.848
1.00656.75			H				
ATOM	564	N	THR	43	23.462	14.342	22.409
1.00178.52			N				
ATOM	565	CA	THR	43	24.399	13.243	22.602
1.00240.84			C				
ATOM	566	C	THR	43	25.210	13.452	23.887
1.00372.31			C				

ATOM	567	O	THR	43	25.466	14.592	24.277
1.00500.13			O				
ATOM	568	CB	THR	43	25.345	13.168	21.398
1.00354.13			C				
ATOM	569	CG2	THR	43	24.525	13.013	20.116
1.00463.04			C				
ATOM	570	OG1	THR	43	26.115	14.360	21.329
1.00508.50			O				
ATOM	571	HN	THR	43	23.595	14.966	21.665
1.00229.59			H				
ATOM	572	HA	THR	43	23.842	12.323	22.668
1.00249.90			H				
ATOM	573	HB	THR	43	26.004	12.323	21.501
1.00481.58			H				
ATOM	574	HG1	THR	43	25.774	14.972	21.987
1.00624.31			H				
ATOM	575	HG21	THR	43	23.763	12.261	20.265
1.00650.95			H				
ATOM	576	HG22	THR	43	25.174	12.711	19.307
1.00580.73			H				
ATOM	577	HG23	THR	43	24.057	13.955	19.872
1.00571.99			H				
ATOM	578	N	PRO	44	25.627	12.393	24.548
1.00488.39			N				
ATOM	579	CA	PRO	44	26.429	12.503	25.804
1.00760.13			C				
ATOM	580	C	PRO	44	27.867	12.935	25.522
1.00735.36			C				
ATOM	581	O	PRO	44	28.702	12.981	26.425
1.00999.99			O				
ATOM	582	CB	PRO	44	26.371	11.087	26.390
1.00999.99			C				
ATOM	583	CG	PRO	44	26.223	10.194	25.203
1.00856.94			C				
ATOM	584	CD	PRO	44	25.385	10.979	24.188
1.00548.09			C				
ATOM	585	HA	PRO	44	25.962	13.196	26.485
1.00939.00			H				
ATOM	586	HB1	PRO	44	25.516	10.983	27.042
1.00999.99			H				
ATOM	587	HB2	PRO	44	27.283	10.858	26.931
1.00999.99			H				
ATOM	588	HG1	PRO	44	25.707	9.284	25.476
1.00999.99			H				
ATOM	589	HG2	PRO	44	27.196	9.960	24.788
1.00853.53			H				
ATOM	590	HD1	PRO	44	24.337	10.742	24.296
1.00602.45			H				
ATOM	591	HD2	PRO	44	25.723	10.773	23.183
1.00463.32			H				
ATOM	592	N	ILE	45	28.148	13.246	24.260
1.00518.33			N				

ATOM	593	CA	ILE	45	29.487	13.665	23.865
1.00582.79			C				
ATOM	594	C	ILE	45	29.892	14.923	24.626
1.00795.93			C				
ATOM	595	O	ILE	45	31.010	15.024	25.130
1.00898.75			O				
ATOM	596	CB	ILE	45	29.520	13.940	22.359
1.00474.41			C				
ATOM	597	CG1	ILE	45	29.322	12.627	21.598
1.00516.90			C				
ATOM	598	CG2	ILE	45	30.872	14.546	21.972
1.00760.75			C				
ATOM	599	CD1	ILE	45	29.044	12.925	20.122
1.00566.81			C				
ATOM	600	HN	ILE	45	27.442	13.186	23.581
1.00395.72			H				
ATOM	601	HA	ILE	45	30.181	12.877	24.093
1.00711.06			H				
ATOM	602	HB	ILE	45	28.729	14.631	22.103
1.00477.81			H				
ATOM	603	HG11	ILE	45	28.486	12.089	22.020
1.00624.28			H				
ATOM	604	HG12	ILE	45	30.216	12.025	21.681
1.00744.84			H				
ATOM	605	HG21	ILE	45	30.915	15.574	22.301
1.00920.57			H				
ATOM	606	HG22	ILE	45	30.993	14.507	20.899
1.00999.99			H				
ATOM	607	HG23	ILE	45	31.666	13.986	22.445
1.00865.46			H				
ATOM	608	HD11	ILE	45	28.764	12.012	19.617
1.00658.89			H				
ATOM	609	HD12	ILE	45	29.932	13.333	19.665
1.00734.30			H				
ATOM	610	HD13	ILE	45	28.238	13.640	20.044
1.00675.84			H				
ATOM	611	N	ALA	46	28.976	15.875	24.699
1.00999.99			N				
ATOM	612	CA	ALA	46	29.241	17.127	25.399
1.00999.99			C				
ATOM	613	C	ALA	46	30.530	17.763	24.889
1.00999.99			C				
ATOM	614	CB	ALA	46	29.358	16.869	26.902
1.00999.99			C				
ATOM	615	OT1	ALA	46	31.549	17.595	25.538
1.00999.99			O				
ATOM	616	OT2	ALA	46	30.479	18.409	23.855
1.00999.99			O				
ATOM	617	HN	ALA	46	28.104	15.733	24.276
1.00999.99			H				
ATOM	618	HA	ALA	46	28.422	17.807	25.224
1.00999.99			H				

ATOM	619	HB1	ALA	46	28.444	16.424	27.263
	1.00999.99			H			
ATOM	620	HB2	ALA	46	29.530	17.805	27.416
	1.00999.99			H			
ATOM	621	HB3	ALA	46	30.184	16.200	27.090
	1.00999.99			H			
ENDMDL							
TER							
MODEL	16						
ATOM	1	N	GLY	1	27.053	-1.121	13.325
	1.00999.99			N			
ATOM	2	CA	GLY	1	25.792	-1.801	13.736
	1.00999.99			C			
ATOM	3	C	GLY	1	24.649	-0.791	13.747
	1.00999.99			C			
ATOM	4	O	GLY	1	24.244	-0.309	14.804
	1.00999.99			O			
ATOM	5	HA1	GLY	1	25.911	-2.215	14.724
	1.00999.99			H			
ATOM	6	HA2	GLY	1	25.567	-2.593	13.037
	1.00999.99			H			
ATOM	7	HT1	GLY	1	26.929	-0.697	12.385
	1.00999.99			H			
ATOM	8	HT2	GLY	1	27.826	-1.817	13.292
	1.00999.99			H			
ATOM	9	HT3	GLY	1	27.285	-0.376	14.011
	1.00999.99			H			
ATOM	10	N	LEU	2	24.133	-0.476	12.564
	1.00999.99			N			
ATOM	11	CA	LEU	2	23.035	0.478	12.450
	1.00895.59			C			
ATOM	12	C	LEU	2	21.737	-0.142	12.958
	1.00532.27			C			
ATOM	13	O	LEU	2	21.533	-1.350	12.851
	1.00625.21			O			
ATOM	14	CB	LEU	2	22.859	0.900	10.989
	1.00999.99			C			
ATOM	15	CG	LEU	2	24.165	1.500	10.452
	1.00999.99			C			
ATOM	16	CD1	LEU	2	23.990	1.834	8.967
	1.00999.99			C			
ATOM	17	CD2	LEU	2	24.520	2.779	11.232
	1.00999.99			C			
ATOM	18	HN	LEU	2	24.493	-0.892	11.754
	1.00999.99			H			
ATOM	19	HA	LEU	2	23.260	1.351	13.043
	1.00890.87			H			
ATOM	20	HB1	LEU	2	22.073	1.637	10.919
	1.00924.07			H			
ATOM	21	HB2	LEU	2	22.593	0.034	10.397
	1.00999.99			H			
ATOM	22	HG	LEU	2	24.962	0.777	10.562

1.00999.99				H					
ATOM	23	HD11	LEU		2	24.947	2.090	8.540	
1.00999.99				H					
ATOM	24	HD12	LEU		2	23.316	2.671	8.864	
1.00999.99				H					
ATOM	25	HD13	LEU		2	23.581	0.977	8.451	
1.00999.99				H					
ATOM	26	HD21	LEU		2	25.156	3.409	10.627	
1.00999.99				H					
ATOM	27	HD22	LEU		2	25.044	2.513	12.138	
1.00999.99				H					
ATOM	28	HD23	LEU		2	23.616	3.317	11.482	
1.00999.99				H					
ATOM	29	N	CYS		3	20.861	0.694	13.509	
1.00271.28				N					
ATOM	30	CA	CYS		3	19.586	0.211	14.028	
1.00104.50				C					
ATOM	31	C	CYS		3	18.764	-0.439	12.917	1.00
90.98			C						
ATOM	32	O	CYS		3	18.627	0.115	11.827	
1.00207.28				O					
ATOM	33	CB	CYS		3	18.792	1.372	14.640	1.00
37.83			C						
ATOM	34	SG	CYS		3	19.374	1.695	16.321	1.00
81.56			S						
ATOM	35	HN	CYS		3	21.076	1.650	13.568	
1.00296.55				H					
ATOM	36	HA	CYS		3	19.779	-0.520	14.797	
1.00166.45				H					
ATOM	37	HB1	CYS		3	17.742	1.118	14.673	1.00
40.38			H						
ATOM	38	HB2	CYS		3	18.928	2.258	14.038	1.00
98.45			H						
ATOM	39	N	SER		4	18.206	-1.609	13.211	1.00
85.31			N						
ATOM	40	CA	SER		4	17.385	-2.319	12.238	1.00
92.94			C						
ATOM	41	C	SER		4	16.140	-1.507	11.925	1.00
67.37			C						
ATOM	42	O	SER		4	15.711	-1.410	10.776	
1.00102.28				O					
ATOM	43	CB	SER		4	16.946	-3.666	12.806	
1.00123.83				C					
ATOM	44	OG	SER		4	16.277	-4.405	11.792	
1.00178.89				O					
ATOM	45	HN	SER		4	18.341	-1.996	14.101	
1.00163.03				H					
ATOM	46	HA	SER		4	17.950	-2.480	11.334	
1.00129.78				H					
ATOM	47	HB1	SER		4	16.269	-3.491	13.638	
1.00105.26				H					
ATOM	48	HB2	SER		4	17.804	-4.219	13.149	

1.00156.87											H
ATOM	49	HG	SER	4	15.540	-4.867	12.198				
1.00218.16											H
ATOM	50	N	GLU	5	15.552	-0.948	12.979	1.00			
41.67			N								
ATOM	51	CA	GLU	5	14.332	-0.160	12.857	1.00			
41.21			C								
ATOM	52	C	GLU	5	14.375	1.046	13.793	1.00			
41.92			C								
ATOM	53	O	GLU	5	15.435	1.409	14.302	1.00			
74.72			O								
ATOM	54	CB	GLU	5	13.132	-1.039	13.199	1.00			
49.24			C								
ATOM	55	CG	GLU	5	13.301	-1.581	14.611	1.00			
55.48			C								
ATOM	56	CD	GLU	5	12.257	-2.658	14.887	1.00			
92.06			C								
ATOM	57	OE1	GLU	5	12.260	-3.192	15.985				
1.00206.49											O
ATOM	58	OE2	GLU	5	11.470	-2.935	13.996				
1.00197.24											O1-
ATOM	59	HN	GLU	5	15.941	-1.085	13.868	1.00			
45.52			H								
ATOM	60	HA	GLU	5	14.229	0.186	11.847	1.00			
60.63			H								
ATOM	61	HB1	GLU	5	13.078	-1.861	12.503	1.00			
61.59			H								
ATOM	62	HB2	GLU	5	12.233	-0.457	13.141	1.00			
63.66			H								
ATOM	63	HG1	GLU	5	13.182	-0.777	15.322	1.00			
58.03			H								
ATOM	64	HG2	GLU	5	14.287	-2.001	14.706	1.00			
57.77			H								
ATOM	65	N	ASN	6	13.220	1.665	14.013	1.00			
50.73			N								
ATOM	66	CA	ASN	6	13.146	2.833	14.886	1.00			
71.04			C								
ATOM	67	C	ASN	6	13.594	2.478	16.300	1.00			
65.17			C								
ATOM	68	O	ASN	6	14.288	3.258	16.953	1.00			
94.86			O								
ATOM	69	CB	ASN	6	11.712	3.365	14.924	1.00			
94.83			C								
ATOM	70	CG	ASN	6	11.364	4.024	13.594				
1.00160.94											C
ATOM	71	ND2	ASN	6	10.112	4.181	13.262				
1.00244.88											N
ATOM	72	OD1	ASN	6	12.256	4.407	12.837				
1.00219.73											O
ATOM	73	HN	ASN	6	12.405	1.336	13.577	1.00			
72.81			H								
ATOM	74	HA	ASN	6	13.793	3.605	14.496	1.00			

96.02			H						
ATOM	75	HB1	ASN	6	11.622	4.093	15.717		
1.00111.09									
ATOM	76	HB2	ASN	6	11.031	2.548	15.108	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	9.402	3.875	13.866		
1.00272.43									
ATOM	78	HD22	ASN	6	9.880	4.603	12.408		
1.00336.78			H						
ATOM	79	N	GLY	7	13.197	1.296	16.767	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.563	0.833	18.110	1.00	
71.47			C						
ATOM	81	C	GLY	7	14.284	-0.507	18.041	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.667	-1.565	18.163	1.00	
44.54			O						
ATOM	83	HN	GLY	7	12.648	0.717	16.196	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.668	0.719	18.698		
1.00103.52									
ATOM	85	HA2	GLY	7	14.210	1.560	18.585		
1.00108.67			H						
ATOM	86	N	ASP	8	15.597	-0.455	17.842	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.397	-1.671	17.754	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.346	-2.454	19.061	1.00	
9.37			C						
ATOM	89	O	ASP	8	16.206	-3.678	19.056	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.849	-1.317	17.419	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.673	-2.592	17.272	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	19.824	-2.488	16.879		
1.00119.56			O						
ATOM	93	OD2	ASP	8	18.143	-3.655	17.555		
1.00133.27			O1-						
ATOM	94	HN	ASP	8	16.033	0.417	17.751	1.00	
35.63			H						
ATOM	95	HA	ASP	8	16.002	-2.288	16.968	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	18.263	-0.713	18.210	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.876	-0.766	16.492	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.460	-1.745	20.177	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.426	-2.392	21.485	1.00	
7.54			C						
ATOM	100	C	CYS	9	15.083	-3.081	21.699	1.00	

14.60			C						
ATOM	101	O	CYS	9	15.016	-4.210	22.187	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.643	-1.361	22.581	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.348	-0.793	22.505	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.570	-0.774	20.118	1.00	
6.51			H						
ATOM	105	HA	CYS	9	17.219	-3.116	21.539	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.460	-1.811	23.543	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.975	-0.525	22.436	1.00	
5.04			H						
ATOM	108	N	ALA	10	14.019	-2.384	21.320	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.665	-2.910	21.457	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.692	-2.052	20.651	1.00	
45.47			C						
ATOM	111	O	ALA	10	12.036	-0.952	20.221		
1.00119.04			O						
ATOM	112	CB	ALA	10	12.250	-2.935	22.934	1.00	
30.10			C						
ATOM	113	HN	ALA	10	14.149	-1.493	20.936	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.644	-3.918	21.070	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	13.104	-3.190	23.543	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	11.473	-3.672	23.078		
1.00118.20			H						
ATOM	117	HB3	ALA	10	11.879	-1.963	23.225		
1.00117.32			H						
ATOM	118	N	ALA	11	10.484	-2.560	20.443	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.482	-1.823	19.678	1.00	
35.24			C						
ATOM	120	C	ALA	11	9.151	-0.488	20.344	1.00	
22.78			C						
ATOM	121	O	ALA	11	9.009	0.530	19.669	1.00	
53.33			O						
ATOM	122	CB	ALA	11	8.208	-2.660	19.551	1.00	
60.49			C						
ATOM	123	HN	ALA	11	10.262	-3.444	20.805	1.00	
50.37			H						
ATOM	124	HA	ALA	11	9.870	-1.633	18.689	1.00	
41.70			H						
ATOM	125	HB1	ALA	11	7.412	-2.044	19.155		
1.00157.06			H						
ATOM	126	HB2	ALA	11	7.924	-3.032	20.523		

1.00148.83				H					
ATOM	127	HB3	ALA		11	8.387	-3.489	18.884	
1.00137.06				H					
ATOM	128	N	ASP		12	9.023	-0.501	21.669	1.00
18.98			N						
ATOM	129	CA	ASP		12	8.700	0.719	22.410	1.00
31.05			C						
ATOM	130	C	ASP		12	9.953	1.540	22.699	1.00
22.98			C						
ATOM	131	O	ASP		12	9.903	2.769	22.757	1.00
37.14			O						
ATOM	132	CB	ASP		12	8.017	0.355	23.730	1.00
48.35			C						
ATOM	133	CG	ASP		12	6.632	-0.222	23.459	
1.00104.83				C					
ATOM	134	OD1	ASP		12	6.153	-0.063	22.349	
1.00258.73				O					
ATOM	135	OD2	ASP		12	6.071	-0.813	24.367	
1.00213.46				O1-					
ATOM	136	HN	ASP		12	9.142	-1.342	22.156	1.00
36.19			H						
ATOM	137	HA	ASP		12	8.018	1.318	21.824	1.00
49.76			H						
ATOM	138	HB1	ASP		12	7.922	1.240	24.341	1.00
95.71			H						
ATOM	139	HB2	ASP		12	8.615	-0.379	24.252	1.00
54.37			H						
ATOM	140	N	GLU		13	11.076	0.855	22.890	1.00
17.60			N						
ATOM	141	CA	GLU		13	12.337	1.529	23.184	1.00
12.01			C						
ATOM	142	C	GLU		13	12.920	2.166	21.923	1.00
10.07			C						
ATOM	143	O	GLU		13	12.559	1.792	20.807	1.00
12.81			O						
ATOM	144	CB	GLU		13	13.329	0.524	23.766	1.00
11.74			C						
ATOM	145	CG	GLU		13	12.764	-0.037	25.075	1.00
13.49			C						
ATOM	146	CD	GLU		13	13.595	-1.224	25.542	
1.00142.36				C					
ATOM	147	OE1	GLU		13	14.648	-1.447	24.969	
1.00339.06				O					
ATOM	148	OE2	GLU		13	13.165	-1.898	26.464	
1.00335.28				O1-					
ATOM	149	HN	GLU		13	11.055	-0.124	22.838	1.00
28.36			H						
ATOM	150	HA	GLU		13	12.158	2.302	23.917	1.00
13.06			H						
ATOM	151	HB1	GLU		13	14.268	1.017	23.963	1.00
13.76			H						
ATOM	152	HB2	GLU		13	13.485	-0.280	23.062	1.00

9.94			H					
ATOM	153	HG1	GLU	13	11.745	-0.353	24.917	1.00
66.02			H					
ATOM	154	HG2	GLU	13	12.785	0.734	25.831	1.00
56.23			H					
ATOM	155	N	CYS	14	13.824	3.131	22.110	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.461	3.823	20.983	1.00
10.69			C					
ATOM	157	C	CYS	14	15.955	3.542	20.974	1.00
9.56			C					
ATOM	158	O	CYS	14	16.562	3.340	22.025	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.232	5.332	21.088	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.130	6.161	19.750	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.075	3.383	23.024	1.00
9.76			H					
ATOM	162	HA	CYS	14	14.034	3.472	20.053	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.592	5.688	22.042	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.177	5.544	21.001	1.00
46.13			H					
ATOM	165	N	CYS	15	16.548	3.537	19.782	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.979	3.283	19.641	1.00
9.28			C					
ATOM	167	C	CYS	15	18.582	4.277	18.665	1.00
9.92			C					
ATOM	168	O	CYS	15	17.892	4.791	17.783	1.00
13.31			O					
ATOM	169	CB	CYS	15	18.209	1.865	19.113	1.00
12.90			C					
ATOM	170	SG	CYS	15	17.663	1.777	17.391	1.00
39.11			S					
ATOM	171	HN	CYS	15	16.014	3.712	18.979	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.470	3.386	20.600	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.642	1.163	19.704	1.00
24.82			H					
ATOM	174	HB2	CYS	15	19.259	1.623	19.172	1.00
27.31			H					
ATOM	175	N	VAL	16	19.867	4.545	18.821	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.537	5.481	17.936	1.00
11.99			C					
ATOM	177	C	VAL	16	22.049	5.364	18.081	1.00
7.73			C					
ATOM	178	O	VAL	16	22.601	5.597	19.156	1.00

8.83			O						
ATOM	179	CB	VAL	16	20.072	6.905	18.261	1.00	
18.37			C						
ATOM	180	CG1	VAL	16	20.647	7.360	19.609	1.00	
39.61			C						
ATOM	181	CG2	VAL	16	20.529	7.851	17.150		
1.00115.21				C					
ATOM	182	HN	VAL	16	20.372	4.108	19.540	1.00	
9.76			H						
ATOM	183	HA	VAL	16	20.265	5.253	16.917	1.00	
17.27			H						
ATOM	184	HB	VAL	16	18.992	6.917	18.315	1.00	
52.63			H						
ATOM	185	HG11	VAL	16	20.642	6.531	20.305		
1.00128.07				H					
ATOM	186	HG12	VAL	16	20.041	8.160	20.006		
1.00154.13				H					
ATOM	187	HG13	VAL	16	21.660	7.710	19.475		
1.00135.74				H					
ATOM	188	HG21	VAL	16	21.567	7.663	16.922		
1.00229.05				H					
ATOM	189	HG22	VAL	16	20.410	8.873	17.476		
1.00261.82				H					
ATOM	190	HG23	VAL	16	19.929	7.681	16.268		
1.00210.07				H					
ATOM	191	N	ASP	17	22.718	4.989	16.989	1.00	
14.34			N						
ATOM	192	CA	ASP	17	24.175	4.835	17.001	1.00	
11.90			C						
ATOM	193	C	ASP	17	24.851	6.017	16.317	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.635	6.267	15.131	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.567	3.543	16.283	1.00	
20.80			C						
ATOM	196	CG	ASP	17	24.157	2.337	17.120	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	23.837	2.529	18.282		
1.00135.42				O					
ATOM	198	OD2	ASP	17	24.169	1.239	16.589		
1.00114.17				O1-					
ATOM	199	HN	ASP	17	22.223	4.808	16.163	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.522	4.778	18.024	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.638	3.527	16.135	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	24.071	3.501	15.325	1.00	
29.52			H						
ATOM	203	N	THR	18	25.684	6.728	17.072	1.00	
11.55			N						
ATOM	204	CA	THR	18	26.418	7.879	16.543	1.00	

17.10			C						
ATOM	205	C	THR	18	27.886	7.517	16.367	1.00	
10.63			C						
ATOM	206	O	THR	18	28.347	6.502	16.886	1.00	
6.49			O						
ATOM	207	CB	THR	18	26.294	9.071	17.495	1.00	
28.52			C						
ATOM	208	CG2	THR	18	24.914	9.708	17.358	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.484	8.627	18.829	1.00	
26.49			O						
ATOM	210	HN	THR	18	25.820	6.467	18.007	1.00	
13.96			H						
ATOM	211	HA	THR	18	26.011	8.158	15.580	1.00	
26.43			H						
ATOM	212	HB	THR	18	27.048	9.807	17.254	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.815	9.043	19.378	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.746	10.383	18.184		
1.00100.44				H					
ATOM	215	HG22	THR	18	24.158	8.937	17.362		
1.00129.42				H					
ATOM	216	HG23	THR	18	24.864	10.258	16.429		
1.00156.21				H					
ATOM	217	N	VAL	19	28.612	8.360	15.641	1.00	
16.32			N						
ATOM	218	CA	VAL	19	30.018	8.149	15.398	1.00	
13.34			C						
ATOM	219	C	VAL	19	30.535	9.250	14.496	1.00	
25.88			C						
ATOM	220	O	VAL	19	30.072	9.446	13.372	1.00	
42.11			O						
ATOM	221	CB	VAL	19	30.283	6.780	14.770	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	29.327	6.544	13.597	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.734	6.731	14.271	1.00	
20.67			C						
ATOM	224	HN	VAL	19	28.197	9.160	15.269	1.00	
26.89			H						
ATOM	225	HA	VAL	19	30.542	8.203	16.342	1.00	
8.08			H						
ATOM	226	HB	VAL	19	30.135	6.019	15.517	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	29.432	5.529	13.247		
1.00137.43				H					
ATOM	228	HG12	VAL	19	29.563	7.227	12.796	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	28.309	6.708	13.921		
1.00108.69				H					
ATOM	230	HG21	VAL	19	31.814	7.284	13.346	1.00	

99.42			H						
ATOM	231	HG22	VAL	19	32.027	5.706	14.107		
1.00111.36									
ATOM	232	HG23	VAL	19	32.383	7.182	15.011	1.00	
77.11			H						
ATOM	233	N	PHE	20	31.484	9.971	15.032	1.00	
24.58			N						
ATOM	234	CA	PHE	20	32.102	11.094	14.349	1.00	
40.34			C						
ATOM	235	C	PHE	20	33.373	10.671	13.618	1.00	
40.37			C						
ATOM	236	O	PHE	20	33.335	10.237	12.466	1.00	
66.02			O						
ATOM	237	CB	PHE	20	32.427	12.194	15.385	1.00	
48.79			C						
ATOM	238	CG	PHE	20	32.644	11.593	16.766	1.00	
35.75			C						
ATOM	239	CD1	PHE	20	31.573	11.006	17.468	1.00	
30.20			C						
ATOM	240	CD2	PHE	20	33.914	11.640	17.358	1.00	
40.95			C						
ATOM	241	CE1	PHE	20	31.780	10.472	18.743	1.00	
30.41			C						
ATOM	242	CE2	PHE	20	34.117	11.102	18.634	1.00	
45.84			C						
ATOM	243	CZ	PHE	20	33.052	10.518	19.326	1.00	
40.81			C						
ATOM	244	HN	PHE	20	31.763	9.750	15.937	1.00	
16.73			H						
ATOM	245	HA	PHE	20	31.407	11.496	13.624	1.00	
59.91			H						
ATOM	246	HB1	PHE	20	31.608	12.873	15.435	1.00	
67.15			H						
ATOM	247	HB2	PHE	20	33.310	12.741	15.087	1.00	
58.17			H						
ATOM	248	HD1	PHE	20	30.587	10.957	17.021	1.00	
33.34			H						
ATOM	249	HD2	PHE	20	34.736	12.092	16.828	1.00	
49.35			H						
ATOM	250	HE1	PHE	20	30.958	10.024	19.277	1.00	
30.61			H						
ATOM	251	HE2	PHE	20	35.099	11.137	19.084	1.00	
61.27			H						
ATOM	252	HZ	PHE	20	33.209	10.104	20.310	1.00	
52.66			H						
ATOM	253	N	GLU	21	34.493	10.836	14.297	1.00	
41.31			N						
ATOM	254	CA	GLU	21	35.795	10.515	13.734	1.00	
56.16			C						
ATOM	255	C	GLU	21	36.072	9.010	13.806	1.00	
58.61			C						
ATOM	256	O	GLU	21	36.922	8.495	13.079		

1.00201.19										
ATOM	257	CB	GLU	O	21	36.850	11.328	14.504	1.00	
57.37				C						
ATOM	258	CG	GLU		21	38.228	10.652	14.458		
1.00193.56				C						
ATOM	259	CD	GLU		21	39.293	11.605	14.990		
1.00304.62				C						
ATOM	260	OE1	GLU		21	40.404	11.558	14.489		
1.00451.81				O						
ATOM	261	OE2	GLU		21	38.981	12.367	15.889		
1.00442.88				O1-						
ATOM	262	HN	GLU		21	34.445	11.205	15.203	1.00	
50.82				H						
ATOM	263	HA	GLU		21	35.810	10.819	12.698	1.00	
85.72				H						
ATOM	264	HB1	GLU		21	36.527	11.428	15.529	1.00	
46.37				H						
ATOM	265	HB2	GLU		21	36.928	12.315	14.064		
1.00131.81				H						
ATOM	266	HG1	GLU		21	38.464	10.386	13.438		
1.00314.91				H						
ATOM	267	HG2	GLU		21	38.211	9.760	15.067		
1.00266.92				H						
ATOM	268	N	GLY		22	35.353	8.310	14.678	1.00	
86.70				N						
ATOM	269	CA	GLY		22	35.534	6.866	14.826		
1.00104.66				C						
ATOM	270	C	GLY		22	36.519	6.544	15.944	1.00	
71.50				C						
ATOM	271	O	GLY		22	36.653	5.389	16.349	1.00	
89.87				O						
ATOM	272	HN	GLY		22	34.688	8.770	15.233		
1.00214.64				H						
ATOM	273	HA1	GLY		22	35.905	6.450	13.900		
1.00152.47				H						
ATOM	274	HA2	GLY		22	34.582	6.412	15.058		
1.00118.15				H						
ATOM	275	N	ASP		23	37.200	7.567	16.450	1.00	
44.68				N						
ATOM	276	CA	ASP		23	38.154	7.360	17.534	1.00	
43.33				C						
ATOM	277	C	ASP		23	37.431	6.789	18.744	1.00	
37.55				C						
ATOM	278	O	ASP		23	37.922	5.878	19.411	1.00	
61.37				O						
ATOM	279	CB	ASP		23	38.823	8.684	17.909	1.00	
40.74				C						
ATOM	280	CG	ASP		23	39.870	8.449	18.993		
1.00141.86				C						
ATOM	281	OD1	ASP		23	39.937	7.340	19.494		
1.00328.18				O						
ATOM	282	OD2	ASP		23	40.589	9.384	19.307		

1.00304.58				O1-					
ATOM	283	HN	ASP	23	37.051	8.470	16.100	1.00	
40.86			H						
ATOM	284	HA	ASP	23	38.909	6.661	17.211	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	38.076	9.372	18.277	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	39.300	9.105	17.035	1.00	
93.26			H						
ATOM	287	N	MET	24	36.247	7.333	19.009	1.00	
23.24			N						
ATOM	288	CA	MET	24	35.419	6.888	20.127	1.00	
32.50			C						
ATOM	289	C	MET	24	33.962	6.823	19.684	1.00	
25.13			C						
ATOM	290	O	MET	24	33.277	7.845	19.636	1.00	
54.40			O						
ATOM	291	CB	MET	24	35.550	7.870	21.292	1.00	
47.36			C						
ATOM	292	CG	MET	24	37.024	8.014	21.675		
1.00151.73				C					
ATOM	293	SD	MET	24	37.175	9.161	23.070		
1.00209.23				S					
ATOM	294	CE	MET	24	36.658	10.665	22.203		
1.00243.29				C					
ATOM	295	HN	MET	24	35.916	8.050	18.428	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.735	5.907	20.452	1.00	
48.94			H						
ATOM	297	HB1	MET	24	34.995	7.499	22.140		
1.00124.40				H					
ATOM	298	HB2	MET	24	35.157	8.832	20.996		
1.00166.96				H					
ATOM	299	HG1	MET	24	37.580	8.396	20.831		
1.00331.71				H					
ATOM	300	HG2	MET	24	37.418	7.050	21.957		
1.00302.30				H					
ATOM	301	HE1	MET	24	37.116	11.524	22.674		
1.00340.44				H					
ATOM	302	HE2	MET	24	35.584	10.761	22.255		
1.00373.88				H					
ATOM	303	HE3	MET	24	36.960	10.610	21.168		
1.00386.81				H					
ATOM	304	N	VAL	25	33.493	5.626	19.352	1.00	
22.44			N						
ATOM	305	CA	VAL	25	32.115	5.472	18.905	1.00	
15.37			C						
ATOM	306	C	VAL	25	31.142	5.793	20.029	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.412	5.530	21.201	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.857	4.057	18.390	1.00	

23.36			C						
ATOM	309	CG1	VAL	25	30.376	3.927	18.006	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.731	3.795	17.160	1.00	
55.25			C						
ATOM	311	HN	VAL	25	34.080	4.844	19.400	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.941	6.165	18.096	1.00	
9.25			H						
ATOM	313	HB	VAL	25	32.093	3.341	19.165	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.786	3.779	18.897		
1.00171.07									H
ATOM	315	HG12	VAL	25	30.244	3.084	17.344		
1.00166.22									H
ATOM	316	HG13	VAL	25	30.051	4.832	17.507		
1.00134.76									H
ATOM	317	HG21	VAL	25	32.742	2.735	16.946		
1.00141.88									H
ATOM	318	HG22	VAL	25	33.737	4.135	17.354		
1.00184.50									H
ATOM	319	HG23	VAL	25	32.327	4.328	16.313		
1.00133.90									H
ATOM	320	N	THR	26	30.010	6.379	19.653	1.00	
13.60			N						
ATOM	321	CA	THR	26	28.976	6.767	20.611	1.00	
21.19			C						
ATOM	322	C	THR	26	27.625	6.169	20.228	1.00	
16.55			C						
ATOM	323	O	THR	26	27.243	6.175	19.058	1.00	
11.43			O						
ATOM	324	CB	THR	26	28.877	8.289	20.630	1.00	
27.07			C						
ATOM	325	CG2	THR	26	27.750	8.728	21.568	1.00	
44.39			C						
ATOM	326	OG1	THR	26	30.110	8.828	21.084	1.00	
34.75			O						
ATOM	327	HN	THR	26	29.868	6.567	18.702	1.00	
10.81			H						
ATOM	328	HA	THR	26	29.245	6.423	21.601	1.00	
33.16			H						
ATOM	329	HB	THR	26	28.677	8.641	19.627	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.820	8.357	20.641	1.00	
77.72			H						
ATOM	331	HG21	THR	26	27.865	8.239	22.523		
1.00126.99									H
ATOM	332	HG22	THR	26	26.796	8.461	21.140		
1.00108.32									H
ATOM	333	HG23	THR	26	27.795	9.798	21.705		
1.00151.99									H
ATOM	334	N	ARG	27	26.905	5.656	21.224	1.00	

22.38			N						
ATOM	335	CA	ARG	27	25.592	5.057	20.988	1.00	
20.21			C						
ATOM	336	C	ARG	27	24.695	5.229	22.210	1.00	
16.96			C						
ATOM	337	O	ARG	27	25.179	5.479	23.315	1.00	
20.06			O						
ATOM	338	CB	ARG	27	25.749	3.567	20.665	1.00	
22.14			C						
ATOM	339	CG	ARG	27	26.313	2.832	21.883		
1.00124.30			C						
ATOM	340	CD	ARG	27	26.642	1.388	21.499		
1.00109.38			C						
ATOM	341	NE	ARG	27	27.138	0.658	22.660		
1.00227.73			N						
ATOM	342	CZ	ARG	27	28.404	0.764	23.050		
1.00426.12			C						
ATOM	343	NH1	ARG	27	28.825	0.097	24.091		
1.00767.09			N1+						
ATOM	344	NH2	ARG	27	29.227	1.535	22.394		
1.00581.78			N						
ATOM	345	HN	ARG	27	27.262	5.682	22.136	1.00	
30.75			H						
ATOM	346	HA	ARG	27	25.125	5.547	20.145	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	26.424	3.449	19.831	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	24.785	3.152	20.408		
1.00103.36			H						
ATOM	349	HG1	ARG	27	25.583	2.833	22.677		
1.00281.97			H						
ATOM	350	HG2	ARG	27	27.212	3.330	22.219		
1.00276.19			H						
ATOM	351	HD1	ARG	27	27.396	1.387	20.725		
1.00183.60			H						
ATOM	352	HD2	ARG	27	25.750	0.905	21.130		
1.00142.93			H						
ATOM	353	HE	ARG	27	26.526	0.078	23.162		
1.00372.53			H						
ATOM	354	HH11	ARG	27	28.195	-0.493	24.594		
1.00910.59			H						
ATOM	355	HH12	ARG	27	29.778	0.176	24.383		
1.00999.99			H						
ATOM	356	HH21	ARG	27	28.905	2.045	21.597		
1.00532.54			H						
ATOM	357	HH22	ARG	27	30.180	1.614	22.685		
1.00948.84			H						
ATOM	358	N	SER	28	23.385	5.099	22.005	1.00	
14.60			N						
ATOM	359	CA	SER	28	22.427	5.247	23.099	1.00	
14.92			C						
ATOM	360	C	SER	28	21.163	4.434	22.826	1.00	

12.12			C						
ATOM	361	O	SER	28	20.782	4.226	21.675	1.00	
13.41			O						
ATOM	362	CB	SER	28	22.058	6.721	23.275	1.00	
23.26			C						
ATOM	363	OG	SER	28	21.128	6.848	24.343		
1.00146.32				O					
ATOM	364	HN	SER	28	23.057	4.902	21.103	1.00	
15.23			H						
ATOM	365	HA	SER	28	22.877	4.892	24.015	1.00	
15.44			H						
ATOM	366	HB1	SER	28	21.623	7.094	22.357	1.00	
88.73			H						
ATOM	367	HB2	SER	28	22.944	7.290	23.507		
1.00124.68				H					
ATOM	368	HG	SER	28	21.142	7.760	24.641		
1.00242.47				H					
ATOM	369	N	CYS	29	20.519	3.984	23.898	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.296	3.198	23.778	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.651	3.036	25.151	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.298	2.596	26.102	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.612	1.820	23.174	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.158	1.199	22.319	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.868	4.191	24.789	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.607	3.718	23.125	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.883	1.121	23.956	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.425	1.905	22.473	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.378	3.404	25.251	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.660	3.305	26.519	1.00	
17.41			C						
ATOM	381	C	GLU	30	16.086	1.907	26.714	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.789	1.204	25.749	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.530	4.330	26.552	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.117	5.733	26.392		
1.00108.13				C					
ATOM	385	CD	GLU	30	16.940	6.097	27.622		
1.00240.52				C					
ATOM	386	OE1	GLU	30	17.735	7.017	27.527		

1.00422.56				O					
ATOM	387	OE2	GLU		30	16.763	5.450	28.642	
1.00410.81				O1-					
ATOM	388	HN	GLU		30	16.914	3.754	24.462	1.00
15.61			H						
ATOM	389	HA	GLU		30	17.342	3.517	27.329	1.00
24.60			H						
ATOM	390	HB1	GLU		30	15.009	4.265	27.495	1.00
72.67			H						
ATOM	391	HB2	GLU		30	14.840	4.132	25.743	1.00
56.47			H						
ATOM	392	HG1	GLU		30	15.317	6.446	26.273	
1.00196.66				H					
ATOM	393	HG2	GLU		30	16.751	5.755	25.517	
1.00140.67				H					
ATOM	394	N	LYS		31	15.926	1.512	27.978	1.00
11.96			N						
ATOM	395	CA	LYS		31	15.378	0.197	28.314	1.00
11.40			C						
ATOM	396	C	LYS		31	14.059	0.358	29.060	1.00
10.99			C						
ATOM	397	O	LYS		31	13.901	1.275	29.868	1.00
12.86			O						
ATOM	398	CB	LYS		31	16.364	-0.572	29.193	1.00
21.40			C						
ATOM	399	CG	LYS		31	17.657	-0.821	28.414	1.00
57.81			C						
ATOM	400	CD	LYS		31	18.640	-1.601	29.289	
1.00115.52				C					
ATOM	401	CE	LYS		31	19.923	-1.870	28.503	
1.00250.23				C					
ATOM	402	NZ	LYS		31	20.573	-0.574	28.158	
1.00462.10				N1+					
ATOM	403	HN	LYS		31	16.179	2.123	28.702	1.00
26.13			H						
ATOM	404	HA	LYS		31	15.201	-0.369	27.409	1.00
13.87			H						
ATOM	405	HB1	LYS		31	15.931	-1.519	29.477	1.00
37.63			H						
ATOM	406	HB2	LYS		31	16.580	0.006	30.079	1.00
47.19			H						
ATOM	407	HG1	LYS		31	18.098	0.124	28.136	
1.00126.32				H					
ATOM	408	HG2	LYS		31	17.436	-1.392	27.524	
1.00114.19				H					
ATOM	409	HD1	LYS		31	18.194	-2.541	29.581	
1.00198.45				H					
ATOM	410	HD2	LYS		31	18.872	-1.022	30.173	
1.00200.14				H					
ATOM	411	HE1	LYS		31	19.685	-2.406	27.597	
1.00374.64				H					
ATOM	412	HE2	LYS		31	20.597	-2.461	29.106	

1.00403.27				H						
ATOM	413	HZ1	LYS		31	19.920	0.001	27.591		
1.00627.38				H						
ATOM	414	HZ2	LYS		31	21.440	-0.757	27.611		
1.00622.26				H						
ATOM	415	HZ3	LYS		31	20.815	-0.063	29.030		
1.00619.20				H						
ATOM	416	N	THR		32	13.115	-0.532	28.784	1.00	
15.51			N							
ATOM	417	CA	THR		32	11.813	-0.470	29.435	1.00	
22.44			C							
ATOM	418	C	THR		32	11.928	-0.879	30.900	1.00	
26.60			C							
ATOM	419	O	THR		32	12.421	-1.960	31.219	1.00	
57.43			O							
ATOM	420	CB	THR		32	10.826	-1.393	28.718	1.00	
56.28			C							
ATOM	421	CG2	THR		32	9.461	-1.315	29.402		
1.00102.70				C						
ATOM	422	OG1	THR		32	10.704	-0.989	27.362		
1.00111.17				O						
ATOM	423	HN	THR		32	13.296	-1.237	28.131	1.00	
18.79			H							
ATOM	424	HA	THR		32	11.444	0.543	29.382	1.00	
19.67			H							
ATOM	425	HB	THR		32	11.187	-2.409	28.760	1.00	
84.25			H							
ATOM	426	HG1	THR		32	11.237	-1.580	26.826		
1.00205.03				H						
ATOM	427	HG21	THR		32	9.523	-1.760	30.385		
1.00220.71				H						
ATOM	428	HG22	THR		32	8.731	-1.849	28.811		
1.00174.67				H						
ATOM	429	HG23	THR		32	9.164	-0.280	29.494		
1.00217.44				H						
ATOM	430	N	THR		33	11.467	-0.002	31.784	1.00	
22.47			N							
ATOM	431	CA	THR		33	11.514	-0.267	33.219	1.00	
41.60			C							
ATOM	432	C	THR		33	10.434	0.497	33.932	1.00	
38.03			C							
ATOM	433	O	THR		33	10.639	1.620	34.391	1.00	
52.73			O							
ATOM	434	CB	THR		33	12.882	0.111	33.791	1.00	
63.25			C							
ATOM	435	CG2	THR		33	13.950	-0.852	33.268		
1.00121.65				C						
ATOM	436	OG1	THR		33	13.205	1.438	33.398	1.00	
96.20			O							
ATOM	437	HN	THR		33	11.085	0.842	31.466	1.00	
23.82			H							
ATOM	438	HA	THR		33	11.333	-1.310	33.399	1.00	

67.12			H						
ATOM	439	HB	THR	33	12.848	0.053	34.868		
1.00107.59								H	
ATOM	440	HG1	THR	33	13.684	1.392	32.568		
1.00176.27								H	
ATOM	441	HG21	THR	33	14.157	-0.632	32.231		
1.00255.23								H	
ATOM	442	HG22	THR	33	13.596	-1.867	33.357		
1.00245.37								H	
ATOM	443	HG23	THR	33	14.855	-0.734	33.847		
1.00185.78								H	
ATOM	444	N	GLY	34	9.280	-0.139	34.040	1.00	
40.93			N						
ATOM	445	CA	GLY	34	8.168	0.473	34.720	1.00	
45.59			C						
ATOM	446	C	GLY	34	7.567	1.597	33.883	1.00	
40.97			C						
ATOM	447	O	GLY	34	6.351	1.675	33.711	1.00	
82.17			O						
ATOM	448	HN	GLY	34	9.185	-1.039	33.665	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	8.531	0.871	35.646	1.00	
54.41			H						
ATOM	450	HA2	GLY	34	7.412	-0.276	34.918	1.00	
62.09			H						
ATOM	451	N	ASN	35	8.434	2.463	33.355	1.00	
32.51			N						
ATOM	452	CA	ASN	35	7.993	3.584	32.523	1.00	
33.20			C						
ATOM	453	C	ASN	35	8.875	3.701	31.284	1.00	
23.17			C						
ATOM	454	O	ASN	35	10.094	3.545	31.361	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.059	4.887	33.322	1.00	
54.51			C						
ATOM	456	CG	ASN	35	7.241	4.763	34.593	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	5.970	4.511	34.511		
1.00220.46								N	
ATOM	458	OD1	ASN	35	7.774	4.900	35.694		
1.00117.80								O	
ATOM	459	HN	ASN	35	9.391	2.342	33.526	1.00	
51.15			H						
ATOM	460	HA	ASN	35	6.971	3.421	32.207	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	7.670	5.694	32.722	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	9.080	5.093	33.583	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	5.546	4.403	33.636		
1.00405.39								H	
ATOM	464	HD22	ASN	35	5.442	4.431	35.325		

1.00245.64										H
ATOM	465	N	PHE	36	8.251	3.972	30.143	1.00		
35.72			N							
ATOM	466	CA	PHE	36	8.977	4.103	28.891	1.00		
33.41			C							
ATOM	467	C	PHE	36	9.544	5.513	28.742	1.00		
28.51			C							
ATOM	468	O	PHE	36	8.951	6.482	29.215	1.00		
45.23			O							
ATOM	469	CB	PHE	36	8.029	3.807	27.735	1.00		
67.53			C							
ATOM	470	CG	PHE	36	7.586	2.365	27.806	1.00		
86.71			C							
ATOM	471	CD1	PHE	36	6.443	2.024	28.539			
1.00106.51										C
ATOM	472	CD2	PHE	36	8.312	1.372	27.139	1.00		
99.48			C							
ATOM	473	CE1	PHE	36	6.026	0.689	28.605			
1.00134.48										C
ATOM	474	CE2	PHE	36	7.896	0.037	27.206			
1.00134.27										C
ATOM	475	CZ	PHE	36	6.753	-0.305	27.939			
1.00149.48										C
ATOM	476	HN	PHE	36	7.280	4.081	30.140	1.00		
62.87			H							
ATOM	477	HA	PHE	36	9.788	3.390	28.870	1.00		
28.53			H							
ATOM	478	HB1	PHE	36	8.534	3.982	26.804	1.00		
73.56			H							
ATOM	479	HB2	PHE	36	7.165	4.454	27.802	1.00		
88.42			H							
ATOM	480	HD1	PHE	36	5.883	2.791	29.054			
1.00110.20										H
ATOM	481	HD2	PHE	36	9.195	1.634	26.573	1.00		
93.07			H							
ATOM	482	HE1	PHE	36	5.145	0.426	29.170			
1.00155.06										H
ATOM	483	HE2	PHE	36	8.457	-0.730	26.691			
1.00159.46										H
ATOM	484	HZ	PHE	36	6.433	-1.335	27.989			
1.00183.25										H
ATOM	485	N	THR	37	10.695	5.621	28.076	1.00		
20.06			N							
ATOM	486	CA	THR	37	11.345	6.913	27.862	1.00		
27.18			C							
ATOM	487	C	THR	37	11.611	7.125	26.376	1.00		
41.87			C							
ATOM	488	O	THR	37	10.822	6.711	25.526			
1.00169.86										O
ATOM	489	CB	THR	37	12.666	6.968	28.631	1.00		
26.52			C							
ATOM	490	CG2	THR	37	12.423	6.594	30.094	1.00		

75.69			C						
ATOM	491	OG1	THR	37	13.587	6.055	28.051	1.00	
81.95			O						
ATOM	492	HN	THR	37	11.120	4.814	27.720	1.00	
18.47			H						
ATOM	493	HA	THR	37	10.702	7.709	28.217	1.00	
38.80			H						
ATOM	494	HB	THR	37	13.070	7.967	28.583	1.00	
81.60			H						
ATOM	495	HG1	THR	37	13.129	5.571	27.359		
1.00188.80									H
ATOM	496	HG21	THR	37	12.108	5.561	30.153		
1.00196.98									H
ATOM	497	HG22	THR	37	11.653	7.229	30.505		
1.00196.23									H
ATOM	498	HG23	THR	37	13.336	6.723	30.655		
1.00168.92									H
ATOM	499	N	GLU	38	12.726	7.778	26.070	1.00	
26.53			N						
ATOM	500	CA	GLU	38	13.090	8.047	24.681	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.597	8.269	24.555	1.00	
25.39			C						
ATOM	502	O	GLU	38	15.222	8.859	25.435	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.338	9.287	24.181	1.00	
54.82			C						
ATOM	504	CG	GLU	38	12.642	9.533	22.696		
1.00165.84									C
ATOM	505	CD	GLU	38	12.136	8.366	21.855		
1.00292.92									C
ATOM	506	OE1	GLU	38	11.278	7.644	22.337		
1.00414.19									O
ATOM	507	OE2	GLU	38	12.613	8.213	20.743		
1.00537.65									O1-
ATOM	508	HN	GLU	38	13.312	8.083	26.790	1.00	
84.50			H						
ATOM	509	HA	GLU	38	12.811	7.199	24.073	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.647	10.149	24.754		
1.00144.82									H
ATOM	511	HB2	GLU	38	11.276	9.136	24.308		
1.00106.49									H
ATOM	512	HG1	GLU	38	13.707	9.639	22.557		
1.00303.31									H
ATOM	513	HG2	GLU	38	12.148	10.440	22.379		
1.00323.99									H
ATOM	514	N	CYS	39	15.168	7.797	23.452	1.00	
15.84			N						
ATOM	515	CA	CYS	39	16.599	7.953	23.213	1.00	
14.30			C						
ATOM	516	C	CYS	39	16.957	9.441	23.126	1.00	

22.31			C					
ATOM	517	O	CYS	39	16.134	10.249	22.697	1.00
32.92			O					
ATOM	518	CB	CYS	39	16.972	7.260	21.899	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.870	7.846	20.587	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.617	7.340	22.783	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.141	7.489	24.020	1.00
14.60			H					
ATOM	522	HB1	CYS	39	16.867	6.193	22.011	1.00
27.71			H					
ATOM	523	HB2	CYS	39	17.994	7.498	21.645	1.00
34.91			H					
ATOM	524	N	PRO	40	18.153	9.826	23.515	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.582	11.255	23.462	1.00
47.66			C					
ATOM	526	C	PRO	40	18.919	11.692	22.038	1.00
71.54			C					
ATOM	527	O	PRO	40	19.601	10.980	21.303	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.826	11.280	24.358	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.416	9.916	24.209	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.227	8.963	24.042	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.821	11.891	23.880	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.544	11.452	25.386	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.523	12.040	24.025	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.978	9.650	25.093	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.054	9.882	23.334	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.938	8.545	24.994	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.465	8.181	23.335	1.00
26.94			H					
ATOM	538	N	GLY	41	18.438	12.869	21.661	
1.00105.24				N				
ATOM	539	CA	GLY	41	18.698	13.396	20.327	
1.00147.55				C				
ATOM	540	C	GLY	41	20.189	13.627	20.120	
1.00161.74				C				
ATOM	541	O	GLY	41	20.740	13.305	19.068	
1.00244.37				O				
ATOM	542	HN	GLY	41	17.905	13.393	22.293	

1.00121.79				H				
ATOM	543	HA1	GLY	H	41	18.175	14.331	20.204
1.00184.40				H				
ATOM	544	HA2	GLY	H	41	18.343	12.691	19.593
1.00157.34				H				
ATOM	545	N	LEU	H	42	20.834	14.186	21.141
1.00162.48				N				
ATOM	546	CA	LEU	N	42	22.273	14.467	21.094
1.00191.48				C				
ATOM	547	C	LEU	C	42	22.962	13.863	22.314
1.00166.66				C				
ATOM	548	O	LEU	C	42	22.432	13.914	23.423
1.00251.38				O				
ATOM	549	CB	LEU	O	42	22.507	15.979	21.080
1.00307.99				C				
ATOM	550	CG	LEU	C	42	21.794	16.615	19.880
1.00452.28				C				
ATOM	551	CD1	LEU	C	42	21.942	18.137	19.958
1.00681.24				C				
ATOM	552	CD2	LEU	C	42	22.415	16.106	18.565
1.00527.46				C				
ATOM	553	HN	LEU	C	42	20.331	14.411	21.949
1.00195.47				H				
ATOM	554	HA	LEU	H	42	22.703	14.034	20.202
1.00229.77				H				
ATOM	555	HB1	LEU	H	42	23.567	16.178	21.013
1.00342.49				H				
ATOM	556	HB2	LEU	H	42	22.120	16.408	21.993
1.00335.33				H				
ATOM	557	HG	LEU	H	42	20.745	16.355	19.909
1.00427.79				H				
ATOM	558	HD11	LEU	H	42	21.284	18.601	19.240
1.00909.71				H				
ATOM	559	HD12	LEU	H	42	22.964	18.412	19.741
1.00706.80				H				
ATOM	560	HD13	LEU	H	42	21.683	18.472	20.952
1.00858.82				H				
ATOM	561	HD21	LEU	H	42	23.483	15.998	18.683
1.00631.69				H				
ATOM	562	HD22	LEU	H	42	22.213	16.811	17.771
1.00628.06				H				
ATOM	563	HD23	LEU	H	42	21.982	15.153	18.308
1.00656.75				H				
ATOM	564	N	THR	H	43	24.150	13.294	22.104
1.00178.52				N				
ATOM	565	CA	THR	N	43	24.911	12.683	23.199
1.00240.84				C				
ATOM	566	C	THR	C	43	26.159	13.526	23.515
1.00372.31				C				
ATOM	567	O	THR	C	43	27.042	13.651	22.667
1.00500.13				O				
ATOM	568	CB	THR	O	43	25.361	11.281	22.797

1.00354.13				C				
ATOM	569	CG2	THR	43	26.039	10.602	23.988	
1.00463.04				C				
ATOM	570	OG1	THR	43	24.232	10.518	22.396	
1.00508.50				O				
ATOM	571	HN	THR	43	24.526	13.284	21.199	
1.00229.59				H				
ATOM	572	HA	THR	43	24.282	12.600	24.068	
1.00249.90				H				
ATOM	573	HB	THR	43	26.061	11.352	21.987	
1.00481.58				H				
ATOM	574	HG1	THR	43	23.970	10.814	21.521	
1.00624.31				H				
ATOM	575	HG21	THR	43	26.949	11.128	24.232	
1.00650.95				H				
ATOM	576	HG22	THR	43	26.271	9.579	23.734	
1.00580.73				H				
ATOM	577	HG23	THR	43	25.374	10.619	24.840	
1.00571.99				H				
ATOM	578	N	PRO	44	26.268	14.103	24.694	
1.00488.39				N				
ATOM	579	CA	PRO	44	27.451	14.931	25.069	
1.00760.13				C				
ATOM	580	C	PRO	44	28.621	14.074	25.550	
1.00735.36				C				
ATOM	581	O	PRO	44	29.028	14.160	26.710	
1.00999.99				O				
ATOM	582	CB	PRO	44	26.905	15.803	26.201	
1.00999.99				C				
ATOM	583	CG	PRO	44	25.916	14.923	26.895	
1.00856.94				C				
ATOM	584	CD	PRO	44	25.295	14.039	25.803	
1.00548.09				C				
ATOM	585	HA	PRO	44	27.752	15.554	24.243	
1.00939.00				H				
ATOM	586	HB1	PRO	44	26.408	16.673	25.798	
1.00999.99				H				
ATOM	587	HB2	PRO	44	27.701	16.099	26.874	
1.00999.99				H				
ATOM	588	HG1	PRO	44	25.149	15.517	27.368	
1.00999.99				H				
ATOM	589	HG2	PRO	44	26.422	14.311	27.633	
1.00853.53				H				
ATOM	590	HD1	PRO	44	24.344	14.438	25.485	
1.00602.45				H				
ATOM	591	HD2	PRO	44	25.187	13.018	26.149	
1.00463.32				H				
ATOM	592	N	ILE	45	29.157	13.247	24.658	
1.00518.33				N				
ATOM	593	CA	ILE	45	30.277	12.383	25.015	
1.00582.79				C				
ATOM	594	C	ILE	45	31.533	13.210	25.273	

1.00795.93				C				
ATOM	595	O	ILE	45	31.796	14.193	24.579	
1.00898.75				O				
ATOM	596	CB	ILE	45	30.548	11.381	23.893	
1.00474.41				C				
ATOM	597	CG1	ILE	45	31.629	10.395	24.344	
1.00516.90				C				
ATOM	598	CG2	ILE	45	31.027	12.126	22.644	
1.00760.75				C				
ATOM	599	CD1	ILE	45	31.699	9.225	23.361	
1.00566.81				C				
ATOM	600	HN	ILE	45	28.794	13.217	23.749	
1.00395.72				H				
ATOM	601	HA	ILE	45	30.027	11.841	25.913	
1.00711.06				H				
ATOM	602	HB	ILE	45	29.639	10.842	23.663	
1.00477.81				H				
ATOM	603	HG11	ILE	45	31.388	10.022	25.327	
1.00624.28				H				
ATOM	604	HG12	ILE	45	32.584	10.898	24.374	
1.00744.84				H				
ATOM	605	HG21	ILE	45	31.013	11.455	21.798	
1.00920.57				H				
ATOM	606	HG22	ILE	45	32.034	12.484	22.804	
1.00999.99				H				
ATOM	607	HG23	ILE	45	30.373	12.963	22.452	
1.00865.46				H				
ATOM	608	HD11	ILE	45	31.923	9.598	22.374	
1.00658.89				H				
ATOM	609	HD12	ILE	45	30.750	8.710	23.346	
1.00734.30				H				
ATOM	610	HD13	ILE	45	32.473	8.540	23.672	
1.00675.84				H				
ATOM	611	N	ALA	46	32.307	12.802	26.275	
1.00999.99				N				
ATOM	612	CA	ALA	46	33.535	13.512	26.617	
1.00999.99				C				
ATOM	613	C	ALA	46	34.332	12.729	27.654	
1.00999.99				C				
ATOM	614	CB	ALA	46	33.200	14.898	27.168	
1.00999.99				C				
ATOM	615	OT1	ALA	46	35.492	12.451	27.395	
1.00999.99				O				
ATOM	616	OT2	ALA	46	33.773	12.416	28.692	
1.00999.99				O				
ATOM	617	HN	ALA	46	32.047	12.012	26.792	
1.00999.99				H				
ATOM	618	HA	ALA	46	34.133	13.625	25.726	
1.00999.99				H				
ATOM	619	HB1	ALA	46	32.504	14.802	27.989	
1.00999.99				H				
ATOM	620	HB2	ALA	46	32.756	15.498	26.387	

1.00999.99								
ATOM	621	HB3	ALA	H	46	34.105	15.374	27.518
1.00999.99				H				
ENDMDL								
TER								
MODEL	17							
ATOM	1	N	GLY		1	26.097	-3.915	15.312
1.00999.99				N				
ATOM	2	CA	GLY		1	25.979	-2.924	16.418
1.00999.99				C				
ATOM	3	C	GLY		1	25.032	-1.804	16.002
1.00999.99				C				
ATOM	4	O	GLY		1	24.700	-0.930	16.801
1.00999.99				O				
ATOM	5	HA1	GLY		1	26.952	-2.506	16.632
1.00999.99				H				
ATOM	6	HA2	GLY		1	25.595	-3.413	17.302
1.00999.99				H				
ATOM	7	HT1	GLY		1	27.093	-4.193	15.198
1.00999.99				H				
ATOM	8	HT2	GLY		1	25.752	-3.491	14.427
1.00999.99				H				
ATOM	9	HT3	GLY		1	25.529	-4.756	15.538
1.00999.99				H				
ATOM	10	N	LEU		2	24.601	-1.839	14.745
1.00999.99				N				
ATOM	11	CA	LEU		2	23.690	-0.822	14.232
1.00895.59				C				
ATOM	12	C	LEU		2	22.272	-1.077	14.735
1.00532.27				C				
ATOM	13	O	LEU		2	21.884	-2.222	14.966
1.00625.21				O				
ATOM	14	CB	LEU		2	23.697	-0.834	12.701
1.00999.99				C				
ATOM	15	CG	LEU		2	25.124	-0.618	12.180
1.00999.99				C				
ATOM	16	CD1	LEU		2	25.115	-0.703	10.650
1.00999.99				C				
ATOM	17	CD2	LEU		2	25.645	0.761	12.619
1.00999.99				C				
ATOM	18	HN	LEU		2	24.898	-2.560	14.153
1.00999.99				H				
ATOM	19	HA	LEU		2	24.012	0.148	14.578
1.00890.87				H				
ATOM	20	HB1	LEU		2	23.059	-0.044	12.334
1.00924.07				H				
ATOM	21	HB2	LEU		2	23.326	-1.786	12.350
1.00999.99				H				
ATOM	22	HG	LEU		2	25.768	-1.391	12.576
1.00999.99				H				
ATOM	23	HD11	LEU		2	24.558	0.130	10.247
1.00999.99				H				

ATOM	24	HD12	LEU	2	24.652	-1.628	10.343	
1.00999.99								H
ATOM	25	HD13	LEU	2	26.130	-0.669	10.283	
1.00999.99								H
ATOM	26	HD21	LEU	2	26.428	1.087	11.948	
1.00999.99								H
ATOM	27	HD22	LEU	2	26.046	0.693	13.620	
1.00999.99								H
ATOM	28	HD23	LEU	2	24.837	1.481	12.603	
1.00999.99								H
ATOM	29	N	CYS	3	21.501	-0.006	14.902	
1.00271.28								N
ATOM	30	CA	CYS	3	20.129	-0.139	15.379	
1.00104.50								C
ATOM	31	C	CYS	3	19.297	-0.955	14.398	1.00
90.98			C					
ATOM	32	O	CYS	3	18.487	-1.790	14.799	
1.00207.28								O
ATOM	33	CB	CYS	3	19.496	1.241	15.565	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.239	2.066	16.995	1.00
81.56			S					
ATOM	35	HN	CYS	3	21.860	0.883	14.703	
1.00296.55								H
ATOM	36	HA	CYS	3	20.142	-0.644	16.328	
1.00166.45								H
ATOM	37	HB1	CYS	3	18.434	1.131	15.727	1.00
40.38			H					
ATOM	38	HB2	CYS	3	19.664	1.837	14.680	1.00
98.45			H					
ATOM	39	N	SER	4	19.500	-0.710	13.109	1.00
85.31			N					
ATOM	40	CA	SER	4	18.760	-1.428	12.074	1.00
92.94			C					
ATOM	41	C	SER	4	17.329	-0.910	11.982	1.00
67.37			C					
ATOM	42	O	SER	4	16.724	-0.904	10.910	
1.00102.28								O
ATOM	43	CB	SER	4	18.741	-2.931	12.388	
1.00123.83								C
ATOM	44	OG	SER	4	18.690	-3.663	11.171	
1.00178.89								O
ATOM	45	HN	SER	4	20.159	-0.034	12.851	
1.00163.03								H
ATOM	46	HA	SER	4	19.250	-1.277	11.124	
1.00129.78								H
ATOM	47	HB1	SER	4	17.874	-3.168	13.000	
1.00105.26								H
ATOM	48	HB2	SER	4	19.637	-3.199	12.924	
1.00156.87								H
ATOM	49	HG	SER	4	17.801	-4.010	11.070	
1.00218.16								H

ATOM	50	N	GLU	5	16.790	-0.494	13.123	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.422	0.008	13.185	1.00
41.21			C					
ATOM	52	C	GLU	5	15.277	1.034	14.305	1.00
41.92			C					
ATOM	53	O	GLU	5	16.167	1.183	15.139	1.00
74.72			O					
ATOM	54	CB	GLU	5	14.464	-1.157	13.416	1.00
49.24			C					
ATOM	55	CG	GLU	5	14.867	-1.882	14.693	1.00
55.48			C					
ATOM	56	CD	GLU	5	14.062	-3.168	14.843	1.00
92.06			C					
ATOM	57	OE1	GLU	5	13.249	-3.440	13.975	
1.00206.49			O					
ATOM	58	OE2	GLU	5	14.272	-3.864	15.823	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	17.321	-0.538	13.945	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.175	0.473	12.252	1.00
60.63			H					
ATOM	61	HB1	GLU	5	14.518	-1.842	12.583	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.459	-0.784	13.513	1.00
63.66			H					
ATOM	63	HG1	GLU	5	14.683	-1.243	15.542	1.00
58.03			H					
ATOM	64	HG2	GLU	5	15.916	-2.115	14.641	1.00
57.77			H					
ATOM	65	N	ASN	6	14.155	1.743	14.313	1.00
50.73			N					
ATOM	66	CA	ASN	6	13.915	2.759	15.331	1.00
71.04			C					
ATOM	67	C	ASN	6	13.912	2.142	16.727	1.00
65.17			C					
ATOM	68	O	ASN	6	14.435	2.729	17.674	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.572	3.448	15.077	1.00
94.83			C					
ATOM	70	CG	ASN	6	12.668	4.342	13.847	
1.00160.94			C					
ATOM	71	ND2	ASN	6	11.577	4.702	13.228	
1.00244.88			N					
ATOM	72	OD1	ASN	6	13.766	4.721	13.438	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.480	1.588	13.619	1.00
72.81			H					
ATOM	74	HA	ASN	6	14.699	3.499	15.277	1.00
96.02			H					
ATOM	75	HB1	ASN	6	12.308	4.048	15.936	
1.00111.09			H					

ATOM	76	HB2	ASN	6	11.810	2.698	14.918	1.00
98.13			H					
ATOM	77	HD21	ASN	6	10.705	4.400	13.556	
1.00272.43			H					
ATOM	78	HD22	ASN	6	11.630	5.277	12.436	
1.00336.78			H					
ATOM	79	N	GLY	7	13.318	0.955	16.850	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.248	0.260	18.140	1.00
71.47			C					
ATOM	81	C	GLY	7	14.024	-1.049	18.102	1.00
41.04			C					
ATOM	82	O	GLY	7	13.442	-2.132	18.164	1.00
44.54			O					
ATOM	83	HN	GLY	7	12.917	0.538	16.061	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.219	0.044	18.362	
1.00103.52			H					
ATOM	85	HA2	GLY	7	13.653	0.889	18.922	
1.00108.67			H					
ATOM	86	N	ASP	8	15.340	-0.940	18.002	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.194	-2.123	17.955	1.00
14.15			C					
ATOM	88	C	ASP	8	16.078	-2.920	19.248	1.00
9.37			C					
ATOM	89	O	ASP	8	15.894	-4.137	19.228	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.651	-1.712	17.748	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.515	-2.951	17.538	1.00
21.22			C					
ATOM	92	OD1	ASP	8	18.017	-4.042	17.768	
1.00119.56			O					
ATOM	93	OD2	ASP	8	19.661	-2.795	17.152	
1.00133.27			O1-					
ATOM	94	HN	ASP	8	15.744	-0.050	17.957	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.887	-2.744	17.134	1.00
20.92			H					
ATOM	96	HB1	ASP	8	18.000	-1.179	18.619	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.723	-1.070	16.883	1.00
44.14			H					
ATOM	98	N	CYS	9	16.191	-2.223	20.368	1.00
5.93			N					
ATOM	99	CA	CYS	9	16.099	-2.867	21.671	1.00
7.54			C					
ATOM	100	C	CYS	9	14.706	-3.457	21.862	1.00
14.60			C					
ATOM	101	O	CYS	9	14.545	-4.571	22.364	1.00
25.78			O					

ATOM	102	CB	CYS	9	16.392	-1.850	22.764	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.127	-1.388	22.651	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.336	-1.256	20.316	1.00
6.51			H					
ATOM	105	HA	CYS	9	16.836	-3.650	21.726	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.207	-2.285	23.731	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.772	-0.977	22.630	1.00
5.04			H					
ATOM	108	N	ALA	10	13.707	-2.694	21.437	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.312	-3.114	21.529	1.00
32.04			C					
ATOM	110	C	ALA	10	11.440	-2.139	20.742	1.00
45.47			C					
ATOM	111	O	ALA	10	11.876	-1.036	20.419	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.859	-3.166	22.991	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.915	-1.824	21.038	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.215	-4.099	21.094	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.658	-3.562	23.601	1.00
84.37			H					
ATOM	116	HB2	ALA	10	10.992	-3.805	23.076	
1.00118.20			H					
ATOM	117	HB3	ALA	10	11.606	-2.172	23.332	
1.00117.32			H					
ATOM	118	N	ALA	11	10.216	-2.546	20.425	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.320	-1.679	19.663	1.00
35.24			C					
ATOM	120	C	ALA	11	9.073	-0.371	20.409	1.00
22.78			C					
ATOM	121	O	ALA	11	9.140	0.710	19.821	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.988	-2.391	19.421	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.914	-3.436	20.698	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.775	-1.459	18.709	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.304	-1.717	18.928	
1.00157.06			H					
ATOM	126	HB2	ALA	11	7.569	-2.702	20.367	
1.00148.83			H					
ATOM	127	HB3	ALA	11	8.151	-3.258	18.797	
1.00137.06			H					

ATOM	128	N	ASP	12	8.795	-0.473	21.703	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.548	0.713	22.518	1.00
31.05			C					
ATOM	130	C	ASP	12	9.840	1.494	22.747	1.00
22.98			C					
ATOM	131	O	ASP	12	9.839	2.724	22.769	1.00
37.14			O					
ATOM	132	CB	ASP	12	7.954	0.301	23.866	1.00
48.35			C					
ATOM	133	CG	ASP	12	6.523	-0.194	23.678	
1.00104.83			C					
ATOM	134	OD1	ASP	12	5.997	-0.789	24.602	
1.00258.73			O					
ATOM	135	OD2	ASP	12	5.977	0.030	22.610	
1.00213.46			O1-					
ATOM	136	HN	ASP	12	8.761	-1.359	22.119	1.00
36.19			H					
ATOM	137	HA	ASP	12	7.840	1.347	22.006	1.00
49.76			H					
ATOM	138	HB1	ASP	12	7.952	1.152	24.531	1.00
95.71			H					
ATOM	139	HB2	ASP	12	8.553	-0.488	24.296	1.00
54.37			H					
ATOM	140	N	GLU	13	10.934	0.762	22.931	1.00
17.60			N					
ATOM	141	CA	GLU	13	12.235	1.380	23.179	1.00
12.01			C					
ATOM	142	C	GLU	13	12.796	2.014	21.907	1.00
10.07			C					
ATOM	143	O	GLU	13	12.366	1.691	20.799	1.00
12.81			O					
ATOM	144	CB	GLU	13	13.203	0.320	23.704	1.00
11.74			C					
ATOM	145	CG	GLU	13	12.740	-0.136	25.093	1.00
13.49			C					
ATOM	146	CD	GLU	13	13.457	-1.419	25.494	
1.00142.36			C					
ATOM	147	OE1	GLU	13	14.089	-2.010	24.639	
1.00339.06			O					
ATOM	148	OE2	GLU	13	13.357	-1.795	26.649	
1.00335.28			O1-					
ATOM	149	HN	GLU	13	10.865	-0.214	22.913	1.00
28.36			H					
ATOM	150	HA	GLU	13	12.121	2.146	23.930	1.00
13.06			H					
ATOM	151	HB1	GLU	13	14.194	0.742	23.778	1.00
13.76			H					
ATOM	152	HB2	GLU	13	13.219	-0.523	23.030	1.00
9.94			H					
ATOM	153	HG1	GLU	13	11.675	-0.314	25.075	1.00
66.02			H					

ATOM	154	HG2	GLU	13	12.962	0.637	25.815	1.00
56.23			H					
ATOM	155	N	CYS	14	13.759	2.925	22.078	1.00
9.12			N					
ATOM	156	CA	CYS	14	14.384	3.617	20.947	1.00
10.69			C					
ATOM	157	C	CYS	14	15.832	3.169	20.784	1.00
9.56			C					
ATOM	158	O	CYS	14	16.440	2.664	21.723	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.343	5.130	21.179	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.130	5.978	19.785	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.056	3.138	22.987	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.843	3.391	20.037	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.872	5.368	22.090	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.316	5.454	21.263	1.00
46.13			H					
ATOM	165	N	CYS	15	16.376	3.366	19.585	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.759	2.988	19.297	1.00
9.28			C					
ATOM	167	C	CYS	15	18.337	3.936	18.255	1.00
9.92			C					
ATOM	168	O	CYS	15	17.719	4.173	17.218	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.816	1.554	18.767	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.544	1.034	18.591	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.838	3.779	18.877	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.348	3.056	20.203	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.326	1.507	17.805	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.311	0.895	19.459	1.00
27.31			H					
ATOM	175	N	VAL	16	19.520	4.480	18.527	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.151	5.403	17.588	1.00
11.99			C					
ATOM	177	C	VAL	16	21.666	5.299	17.678	1.00
7.73			C					
ATOM	178	O	VAL	16	22.240	5.351	18.766	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.706	6.833	17.889	1.00
18.37			C					

ATOM	180	CG1	VAL	16	20.223	7.257	19.264	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.262	7.775	16.819	
1.00115.21		C						
ATOM	182	HN	VAL	16	19.977	4.259	19.368	1.00
9.76		H						
ATOM	183	HA	VAL	16	19.848	5.149	16.580	1.00
17.27		H						
ATOM	184	HB	VAL	16	18.626	6.881	17.884	1.00
52.63		H						
ATOM	185	HG11	VAL	16	21.284	7.456	19.203	
1.00128.07		H						
ATOM	186	HG12	VAL	16	20.046	6.465	19.974	
1.00154.13		H						
ATOM	187	HG13	VAL	16	19.707	8.150	19.584	
1.00135.74		H						
ATOM	188	HG21	VAL	16	21.341	7.779	16.869	
1.00229.05		H						
ATOM	189	HG22	VAL	16	19.887	8.774	16.990	
1.00261.82		H						
ATOM	190	HG23	VAL	16	19.947	7.435	15.844	
1.00210.07		H						
ATOM	191	N	ASP	17	22.309	5.144	16.526	1.00
14.34		N						
ATOM	192	CA	ASP	17	23.763	5.023	16.475	1.00
11.90		C						
ATOM	193	C	ASP	17	24.411	6.384	16.255	1.00
13.15		C						
ATOM	194	O	ASP	17	24.183	7.038	15.236	1.00
25.96		O						
ATOM	195	CB	ASP	17	24.162	4.083	15.336	1.00
20.80		C						
ATOM	196	CG	ASP	17	23.520	2.716	15.544	1.00
28.72		C						
ATOM	197	OD1	ASP	17	22.910	2.223	14.609	
1.00135.42		O						
ATOM	198	OD2	ASP	17	23.648	2.182	16.633	
1.00114.17		O1-						
ATOM	199	HN	ASP	17	21.796	5.102	15.690	1.00
28.29		H						
ATOM	200	HA	ASP	17	24.123	4.610	17.406	1.00
10.49		H						
ATOM	201	HB1	ASP	17	25.236	3.974	15.321	1.00
22.42		H						
ATOM	202	HB2	ASP	17	23.829	4.497	14.395	1.00
29.52		H						
ATOM	203	N	THR	18	25.236	6.800	17.215	1.00
11.55		N						
ATOM	204	CA	THR	18	25.939	8.080	17.128	1.00
17.10		C						
ATOM	205	C	THR	18	27.395	7.848	16.756	1.00
10.63		C						

ATOM	206	O	THR	18	27.911	6.743	16.914	1.00
6.49		O						
ATOM	207	CB	THR	18	25.870	8.811	18.472	1.00
28.52		C						
ATOM	208	CG2	THR	18	24.452	9.325	18.708	1.00
45.38		C						
ATOM	209	OG1	THR	18	26.236	7.918	19.511	1.00
26.49		O						
ATOM	210	HN	THR	18	25.382	6.227	17.996	1.00
13.96		H						
ATOM	211	HA	THR	18	25.477	8.699	16.371	1.00
26.43		H						
ATOM	212	HB	THR	18	26.552	9.647	18.459	1.00
37.43		H						
ATOM	213	HG1	THR	18	25.477	7.368	19.710	1.00
71.62		H						
ATOM	214	HG21	THR	18	24.275	10.189	18.085	
1.00100.44				H				
ATOM	215	HG22	THR	18	24.341	9.602	19.745	
1.00129.42				H				
ATOM	216	HG23	THR	18	23.741	8.551	18.463	
1.00156.21				H				
ATOM	217	N	VAL	19	28.052	8.899	16.278	1.00
16.32		N						
ATOM	218	CA	VAL	19	29.442	8.823	15.896	1.00
13.34		C						
ATOM	219	C	VAL	19	29.895	10.173	15.383	1.00
25.88		C						
ATOM	220	O	VAL	19	29.389	10.692	14.387	1.00
42.11		O						
ATOM	221	CB	VAL	19	29.679	7.760	14.824	1.00
15.48		C						
ATOM	222	CG1	VAL	19	28.736	7.982	13.637	1.00
29.06		C						
ATOM	223	CG2	VAL	19	31.136	7.853	14.350	1.00
20.67		C						
ATOM	224	HN	VAL	19	27.596	9.757	16.195	1.00
26.89		H						
ATOM	225	HA	VAL	19	30.026	8.572	16.769	1.00
8.08		H						
ATOM	226	HB	VAL	19	29.503	6.786	15.248	1.00
11.49		H						
ATOM	227	HG11	VAL	19	29.102	8.799	13.031	
1.00137.43				H				
ATOM	228	HG12	VAL	19	27.747	8.220	14.000	1.00
93.29		H						
ATOM	229	HG13	VAL	19	28.694	7.084	13.039	
1.00108.69				H				
ATOM	230	HG21	VAL	19	31.400	6.959	13.807	1.00
99.42		H						
ATOM	231	HG22	VAL	19	31.788	7.963	15.208	
1.00111.36				H				

ATOM	232	HG23	VAL	19	31.249	8.715	13.707	1.00
77.11			H					
ATOM	233	N	PHE	20	30.838	10.733	16.097	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.389	12.039	15.778	1.00
40.34			C					
ATOM	235	C	PHE	20	32.762	11.917	15.138	1.00
40.37			C					
ATOM	236	O	PHE	20	32.970	12.343	14.002	1.00
66.02			O					
ATOM	237	CB	PHE	20	31.493	12.868	17.065	1.00
48.79			C					
ATOM	238	CG	PHE	20	31.873	11.989	18.246	1.00
35.75			C					
ATOM	239	CD1	PHE	20	30.974	11.025	18.743	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.120	12.156	18.864	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.329	10.240	19.843	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.470	11.364	19.964	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.575	10.406	20.452	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.159	10.257	16.881	1.00
16.73			H					
ATOM	245	HA	PHE	20	30.731	12.553	15.087	1.00
59.91			H					
ATOM	246	HB1	PHE	20	30.549	13.317	17.259	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.231	13.648	16.941	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.008	10.882	18.278	1.00
33.34			H					
ATOM	249	HD2	PHE	20	33.813	12.894	18.489	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.638	9.502	20.220	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.430	11.495	20.437	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.848	9.797	21.302	1.00
52.66			H					
ATOM	253	N	GLU	21	33.706	11.372	15.891	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.067	11.238	15.424	1.00
56.16			C					
ATOM	255	C	GLU	21	35.386	9.814	15.002	1.00
58.61			C					
ATOM	256	O	GLU	21	34.532	8.928	15.034	
1.00201.19			O					
ATOM	257	CB	GLU	21	35.974	11.670	16.555	1.00
57.37			C					

ATOM	258	CG	GLU	21	35.899	10.663	17.704	
1.00193.56				C				
ATOM	259	CD	GLU	21	36.618	11.223	18.928	
1.00304.62				C				
ATOM	260	OE1	GLU	21	36.542	10.599	19.975	
1.00451.81				O				
ATOM	261	OE2	GLU	21	37.235	12.266	18.801	
1.00442.88				O1-				
ATOM	262	HN	GLU	21	33.496	11.083	16.800	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.233	11.898	14.583	1.00
85.72			H					
ATOM	264	HB1	GLU	21	35.640	12.631	16.906	1.00
46.37			H					
ATOM	265	HB2	GLU	21	36.981	11.743	16.200	
1.00131.81				H				
ATOM	266	HG1	GLU	21	36.369	9.742	17.404	
1.00314.91				H				
ATOM	267	HG2	GLU	21	34.866	10.472	17.947	
1.00266.92				H				
ATOM	268	N	GLY	22	36.631	9.617	14.592	1.00
86.70			N					
ATOM	269	CA	GLY	22	37.097	8.303	14.141	
1.00104.66				C				
ATOM	270	C	GLY	22	37.745	7.521	15.278	1.00
71.50			C					
ATOM	271	O	GLY	22	38.035	6.333	15.140	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.252	10.378	14.595	
1.00214.64				H				
ATOM	273	HA1	GLY	22	37.823	8.440	13.353	
1.00152.47				H				
ATOM	274	HA2	GLY	22	36.260	7.738	13.754	
1.00118.15				H				
ATOM	275	N	ASP	23	37.975	8.195	16.396	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.596	7.555	17.550	1.00
43.33			C					
ATOM	277	C	ASP	23	37.745	6.397	18.053	1.00
37.55			C					
ATOM	278	O	ASP	23	38.258	5.321	18.362	1.00
61.37			O					
ATOM	279	CB	ASP	23	38.779	8.574	18.673	1.00
40.74			C					
ATOM	280	CG	ASP	23	39.551	7.947	19.827	
1.00141.86				C				
ATOM	281	OD1	ASP	23	39.912	8.674	20.738	
1.00328.18				O				
ATOM	282	OD2	ASP	23	39.771	6.747	19.785	
1.00304.58				O1-				
ATOM	283	HN	ASP	23	37.730	9.141	16.445	1.00
40.86			H					

ATOM	284	HA	ASP	23	39.563	7.177	17.262	1.00
72.12			H					
ATOM	285	HB1	ASP	23	37.808	8.892	19.024	1.00
94.15			H					
ATOM	286	HB2	ASP	23	39.322	9.428	18.297	1.00
93.26			H					
ATOM	287	N	MET	24	36.442	6.628	18.141	1.00
23.24			N					
ATOM	288	CA	MET	24	35.521	5.601	18.618	1.00
32.50			C					
ATOM	289	C	MET	24	34.092	5.899	18.175	1.00
25.13			C					
ATOM	290	O	MET	24	33.801	6.979	17.663	1.00
54.40			O					
ATOM	291	CB	MET	24	35.581	5.516	20.145	1.00
47.36			C					
ATOM	292	CG	MET	24	35.163	6.858	20.752	
1.00151.73			C					
ATOM	293	SD	MET	24	35.345	6.788	22.551	
1.00209.23			S					
ATOM	294	CE	MET	24	34.735	8.454	22.907	
1.00243.29			C					
ATOM	295	HN	MET	24	36.095	7.506	17.885	1.00
17.32			H					
ATOM	296	HA	MET	24	35.820	4.647	18.208	1.00
48.94			H					
ATOM	297	HB1	MET	24	36.589	5.284	20.453	
1.00124.40			H					
ATOM	298	HB2	MET	24	34.912	4.741	20.488	
1.00166.96			H					
ATOM	299	HG1	MET	24	34.131	7.060	20.504	
1.00331.71			H					
ATOM	300	HG2	MET	24	35.789	7.643	20.357	
1.00302.30			H					
ATOM	301	HE1	MET	24	35.190	8.817	23.818	
1.00340.44			H					
ATOM	302	HE2	MET	24	33.664	8.428	23.029	
1.00373.88			H					
ATOM	303	HE3	MET	24	34.986	9.111	22.086	
1.00386.81			H					
ATOM	304	N	VAL	25	33.204	4.926	18.380	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.792	5.069	18.007	1.00
15.37			C					
ATOM	306	C	VAL	25	30.900	4.954	19.238	1.00
17.47			C					
ATOM	307	O	VAL	25	31.184	4.189	20.160	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.405	3.991	16.989	1.00
23.36			C					
ATOM	309	CG1	VAL	25	29.888	4.029	16.740	1.00
58.39			C					

ATOM	310	CG2	VAL	25	32.152	4.252	15.676	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.502	4.090	18.794	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.632	6.044	17.558	1.00
9.25			H					
ATOM	313	HB	VAL	25	31.682	3.019	17.373	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.662	3.593	15.778	
1.00171.07			H					
ATOM	315	HG12	VAL	25	29.541	5.052	16.763	
1.00166.22			H					
ATOM	316	HG13	VAL	25	29.385	3.468	17.514	
1.00134.76			H					
ATOM	317	HG21	VAL	25	31.806	3.561	14.922	
1.00141.88			H					
ATOM	318	HG22	VAL	25	33.212	4.115	15.830	
1.00184.50			H					
ATOM	319	HG23	VAL	25	31.963	5.264	15.350	
1.00133.90			H					
ATOM	320	N	THR	26	29.825	5.738	19.245	1.00
13.60			N					
ATOM	321	CA	THR	26	28.881	5.756	20.363	1.00
21.19			C					
ATOM	322	C	THR	26	27.490	5.298	19.924	1.00
16.55			C					
ATOM	323	O	THR	26	26.973	5.738	18.897	1.00
11.43			O					
ATOM	324	CB	THR	26	28.799	7.178	20.908	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.774	7.245	22.044	1.00
44.39			C					
ATOM	326	OG1	THR	26	30.077	7.563	21.398	1.00
34.75			O					
ATOM	327	HN	THR	26	29.667	6.331	18.482	1.00
10.81			H					
ATOM	328	HA	THR	26	29.233	5.104	21.150	1.00
33.16			H					
ATOM	329	HB	THR	26	28.503	7.847	20.110	1.00
20.60			H					
ATOM	330	HG1	THR	26	29.952	7.986	22.250	1.00
77.72			H					
ATOM	331	HG21	THR	26	26.779	7.121	21.643	
1.00126.99			H					
ATOM	332	HG22	THR	26	27.846	8.203	22.537	
1.00108.32			H					
ATOM	333	HG23	THR	26	27.977	6.459	22.756	
1.00151.99			H					
ATOM	334	N	ARG	27	26.886	4.416	20.723	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.545	3.895	20.438	1.00
20.21			C					

ATOM	336	C	ARG	27	24.641	4.108	21.651	1.00
16.96			C					
ATOM	337	O	ARG	27	25.106	4.066	22.789	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.620	2.399	20.122	1.00
22.14			C					
ATOM	339	CG	ARG	27	26.499	2.176	18.889	
1.00124.30			C					
ATOM	340	CD	ARG	27	26.747	0.678	18.706	
1.00109.38			C					
ATOM	341	NE	ARG	27	27.517	0.152	19.829	
1.00227.73			N					
ATOM	342	CZ	ARG	27	27.790	-1.145	19.928	
1.00426.12			C					
ATOM	343	NH1	ARG	27	28.477	-1.592	20.944	
1.00767.09			N1+					
ATOM	344	NH2	ARG	27	27.372	-1.972	19.008	
1.00581.78			N					
ATOM	345	HN	ARG	27	27.351	4.112	21.531	1.00
30.75			H					
ATOM	346	HA	ARG	27	25.122	4.414	19.588	1.00
23.13			H					
ATOM	347	HB1	ARG	27	24.629	2.022	19.927	1.00
87.46			H					
ATOM	348	HB2	ARG	27	26.046	1.875	20.967	
1.00103.36			H					
ATOM	349	HG1	ARG	27	27.442	2.682	19.022	
1.00281.97			H					
ATOM	350	HG2	ARG	27	25.999	2.568	18.015	
1.00276.19			H					
ATOM	351	HD1	ARG	27	27.295	0.516	17.788	
1.00183.60			H					
ATOM	352	HD2	ARG	27	25.802	0.162	18.652	
1.00142.93			H					
ATOM	353	HE	ARG	27	27.835	0.766	20.523	
1.00372.53			H					
ATOM	354	HH11	ARG	27	28.797	-0.958	21.648	
1.00910.59			H					
ATOM	355	HH12	ARG	27	28.683	-2.567	21.018	
1.00999.99			H					
ATOM	356	HH21	ARG	27	26.845	-1.629	18.231	
1.00532.54			H					
ATOM	357	HH22	ARG	27	27.577	-2.947	19.082	
1.00948.84			H					
ATOM	358	N	SER	28	23.348	4.344	21.409	1.00
14.60			N					
ATOM	359	CA	SER	28	22.400	4.569	22.506	1.00
14.92			C					
ATOM	360	C	SER	28	21.115	3.778	22.280	1.00
12.12			C					
ATOM	361	O	SER	28	20.746	3.484	21.144	1.00
13.41			O					

ATOM	362	CB	SER	28	22.071	6.057	22.612	1.00
23.26			C					
ATOM	363	OG	SER	28	23.266	6.783	22.869	
1.00146.32			O					
ATOM	364	HN	SER	28	23.024	4.372	20.483	1.00
15.23			H					
ATOM	365	HA	SER	28	22.844	4.246	23.439	1.00
15.44			H					
ATOM	366	HB1	SER	28	21.366	6.210	23.418	1.00
88.73			H					
ATOM	367	HB2	SER	28	21.638	6.400	21.689	
1.00124.68			H					
ATOM	368	HG	SER	28	23.546	7.195	22.046	
1.00242.47			H					
ATOM	369	N	CYS	29	20.439	3.441	23.374	1.00
10.48			N					
ATOM	370	CA	CYS	29	19.195	2.687	23.290	1.00
9.97			C					
ATOM	371	C	CYS	29	18.463	2.738	24.630	1.00
11.60			C					
ATOM	372	O	CYS	29	19.062	2.519	25.683	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.488	1.233	22.896	1.00
9.52			C					
ATOM	374	SG	CYS	29	18.064	0.533	22.053	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.781	3.708	24.253	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.566	3.135	22.535	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.692	0.641	23.778	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.340	1.198	22.238	1.00
10.78			H					
ATOM	379	N	GLU	30	17.170	3.037	24.582	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.369	3.126	25.798	1.00
17.41			C					
ATOM	381	C	GLU	30	15.923	1.749	26.273	1.00
10.81			C					
ATOM	382	O	GLU	30	15.819	0.810	25.485	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.135	3.991	25.547	1.00
37.83			C					
ATOM	384	CG	GLU	30	15.566	5.398	25.143	
1.00108.13			C					
ATOM	385	CD	GLU	30	16.211	6.104	26.331	
1.00240.52			C					
ATOM	386	OE1	GLU	30	16.083	5.601	27.435	
1.00422.56			O					
ATOM	387	OE2	GLU	30	16.824	7.138	26.121	
1.00410.81			O1-					

ATOM	388	HN	GLU	30	16.749	3.209	23.715	1.00
15.61			H					
ATOM	389	HA	GLU	30	16.960	3.588	26.574	1.00
24.60			H					
ATOM	390	HB1	GLU	30	14.542	4.042	26.449	1.00
72.67			H					
ATOM	391	HB2	GLU	30	14.546	3.553	24.753	1.00
56.47			H					
ATOM	392	HG1	GLU	30	14.701	5.956	24.823	
1.00196.66			H					
ATOM	393	HG2	GLU	30	16.276	5.337	24.332	
1.00140.67			H					
ATOM	394	N	LYS	31	15.644	1.651	27.572	1.00
11.96			N					
ATOM	395	CA	LYS	31	15.185	0.398	28.174	1.00
11.40			C					
ATOM	396	C	LYS	31	13.855	0.633	28.880	1.00
10.99			C					
ATOM	397	O	LYS	31	13.635	1.691	29.469	1.00
12.86			O					
ATOM	398	CB	LYS	31	16.217	-0.109	29.182	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.528	-0.425	28.458	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.555	-0.946	29.465	
1.00115.52			C					
ATOM	401	CE	LYS	31	19.859	-1.280	28.739	
1.00250.23			C					
ATOM	402	NZ	LYS	31	20.421	-0.039	28.134	
1.00462.10			N1+					
ATOM	403	HN	LYS	31	15.737	2.444	28.140	1.00
26.13			H					
ATOM	404	HA	LYS	31	15.048	-0.349	27.405	1.00
13.87			H					
ATOM	405	HB1	LYS	31	15.845	-1.004	29.658	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.390	0.650	29.931	1.00
47.19			H					
ATOM	407	HG1	LYS	31	17.906	0.471	27.992	
1.00126.32			H					
ATOM	408	HG2	LYS	31	17.348	-1.177	27.703	
1.00114.19			H					
ATOM	409	HD1	LYS	31	18.173	-1.837	29.941	
1.00198.45			H					
ATOM	410	HD2	LYS	31	18.742	-0.189	30.214	
1.00200.14			H					
ATOM	411	HE1	LYS	31	19.663	-2.002	27.960	
1.00374.64			H					
ATOM	412	HE2	LYS	31	20.568	-1.692	29.442	
1.00403.27			H					
ATOM	413	HZ1	LYS	31	20.650	0.640	28.887	
1.00627.38			H					

ATOM	414	HZ2	LYS	31	19.721	0.379	27.489	
1.00622.26								H
ATOM	415	HZ3	LYS	31	21.286	-0.272	27.606	
1.00619.20								H
ATOM	416	N	THR	32	12.967	-0.352	28.813	1.00
15.51			N					
ATOM	417	CA	THR	32	11.655	-0.228	29.446	1.00
22.44			C					
ATOM	418	C	THR	32	11.724	-0.638	30.913	1.00
26.60			C					
ATOM	419	O	THR	32	12.093	-1.766	31.239	1.00
57.43			O					
ATOM	420	CB	THR	32	10.638	-1.106	28.714	1.00
56.28			C					
ATOM	421	CG2	THR	32	9.275	-0.991	29.399	
1.00102.70								C
ATOM	422	OG1	THR	32	10.531	-0.675	27.364	
1.00111.17								O
ATOM	423	HN	THR	32	13.191	-1.171	28.326	1.00
18.79			H					
ATOM	424	HA	THR	32	11.329	0.801	29.387	1.00
19.67			H					
ATOM	425	HB	THR	32	10.962	-2.133	28.739	1.00
84.25			H					
ATOM	426	HG1	THR	32	9.852	-1.203	26.938	
1.00205.03								H
ATOM	427	HG21	THR	32	9.031	0.052	29.543	
1.00220.71								H
ATOM	428	HG22	THR	32	9.312	-1.487	30.357	
1.00174.67								H
ATOM	429	HG23	THR	32	8.521	-1.456	28.782	
1.00217.44								H
ATOM	430	N	THR	33	11.359	0.290	31.791	1.00
22.47			N					
ATOM	431	CA	THR	33	11.374	0.032	33.228	1.00
41.60			C					
ATOM	432	C	THR	33	10.350	0.885	33.925	1.00
38.03			C					
ATOM	433	O	THR	33	10.641	1.990	34.386	1.00
52.73			O					
ATOM	434	CB	THR	33	12.763	0.305	33.810	1.00
63.25			C					
ATOM	435	CG2	THR	33	13.752	-0.748	33.304	
1.00121.65								C
ATOM	436	OG1	THR	33	13.197	1.597	33.406	1.00
96.20			O					
ATOM	437	HN	THR	33	11.073	1.169	31.466	1.00
23.82			H					
ATOM	438	HA	THR	33	11.108	-0.990	33.415	1.00
67.12			H					
ATOM	439	HB	THR	33	12.714	0.260	34.885	
1.00107.59								H

ATOM	440	HG1	THR	33	13.295	1.593	32.452	
	1.00176.27							H
ATOM	441	HG21	THR	33	14.669	-0.678	33.868	
	1.00255.23							H
ATOM	442	HG22	THR	33	13.957	-0.577	32.258	
	1.00245.37							H
ATOM	443	HG23	THR	33	13.326	-1.733	33.431	
	1.00185.78							H
ATOM	444	N	GLY	34	9.147	0.349	34.015	1.00
	40.93		N					
ATOM	445	CA	GLY	34	8.078	1.050	34.677	1.00
	45.59		C					
ATOM	446	C	GLY	34	7.580	2.216	33.829	1.00
	40.97		C					
ATOM	447	O	GLY	34	6.381	2.353	33.585	1.00
	82.17		O					
ATOM	448	HN	GLY	34	8.984	-0.541	33.639	1.00
	54.00		H					
ATOM	449	HA1	GLY	34	8.457	1.421	35.607	1.00
	54.41		H					
ATOM	450	HA2	GLY	34	7.262	0.365	34.865	1.00
	62.09		H					
ATOM	451	N	ASN	35	8.514	3.054	33.375	1.00
	32.51		N					
ATOM	452	CA	ASN	35	8.173	4.212	32.545	1.00
	33.20		C					
ATOM	453	C	ASN	35	9.074	4.270	31.316	1.00
	23.17		C					
ATOM	454	O	ASN	35	10.280	4.040	31.408	1.00
	27.01		O					
ATOM	455	CB	ASN	35	8.337	5.500	33.354	1.00
	54.51		C					
ATOM	456	CG	ASN	35	7.414	5.474	34.568	1.00
	80.73		C					
ATOM	457	ND2	ASN	35	7.869	5.855	35.730	
	1.00220.46							N
ATOM	458	OD1	ASN	35	6.247	5.098	34.454	
	1.00117.80							O
ATOM	459	HN	ASN	35	9.454	2.889	33.600	1.00
	51.15		H					
ATOM	460	HA	ASN	35	7.144	4.136	32.218	1.00
	47.21		H					
ATOM	461	HB1	ASN	35	8.087	6.347	32.733	1.00
	68.31		H					
ATOM	462	HB2	ASN	35	9.361	5.586	33.684	1.00
	57.75		H					
ATOM	463	HD21	ASN	35	8.798	6.154	35.819	
	1.00405.39							H
ATOM	464	HD22	ASN	35	7.283	5.839	36.515	
	1.00245.64							H
ATOM	465	N	PHE	36	8.481	4.573	30.166	1.00
	35.72		N					

ATOM	466	CA	PHE	36	9.226	4.656	28.921	1.00
33.41			C					
ATOM	467	C	PHE	36	9.867	6.034	28.772	1.00
28.51			C					
ATOM	468	O	PHE	36	9.334	7.030	29.262	1.00
45.23			O					
ATOM	469	CB	PHE	36	8.275	4.407	27.757	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.703	3.012	27.858	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.526	2.796	28.586	
1.00106.51			C					
ATOM	472	CD2	PHE	36	8.342	1.939	27.224	1.00
99.48			C					
ATOM	473	CE1	PHE	36	5.986	1.507	28.679	
1.00134.48			C					
ATOM	474	CE2	PHE	36	7.802	0.650	27.318	
1.00134.27			C					
ATOM	475	CZ	PHE	36	6.625	0.435	28.045	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.518	4.742	30.150	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.998	3.902	28.912	1.00
28.53			H					
ATOM	478	HB1	PHE	36	8.809	4.507	26.832	1.00
73.56			H					
ATOM	479	HB2	PHE	36	7.471	5.128	27.788	1.00
88.42			H					
ATOM	480	HD1	PHE	36	6.035	3.623	29.076	
1.00110.20			H					
ATOM	481	HD2	PHE	36	9.251	2.103	26.665	1.00
93.07			H					
ATOM	482	HE1	PHE	36	5.080	1.340	29.239	
1.00155.06			H					
ATOM	483	HE2	PHE	36	8.293	-0.177	26.829	
1.00159.46			H					
ATOM	484	HZ	PHE	36	6.210	-0.560	28.116	
1.00183.25			H					
ATOM	485	N	THR	37	11.013	6.088	28.089	1.00
20.06			N					
ATOM	486	CA	THR	37	11.724	7.349	27.875	1.00
27.18			C					
ATOM	487	C	THR	37	11.958	7.574	26.385	1.00
41.87			C					
ATOM	488	O	THR	37	11.126	7.212	25.554	
1.00169.86			O					
ATOM	489	CB	THR	37	13.068	7.317	28.606	1.00
26.52			C					
ATOM	490	CG2	THR	37	12.846	6.943	30.072	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.915	6.357	27.993	1.00
81.95			O					

ATOM	492	HN	THR	37	11.390	5.265	27.720	1.00
18.47			H					
ATOM	493	HA	THR	37	11.137	8.170	28.263	1.00
38.80			H					
ATOM	494	HB	THR	37	13.530	8.290	28.555	1.00
81.60			H					
ATOM	495	HG1	THR	37	14.602	6.122	28.621	
1.00188.80			H					
ATOM	496	HG21	THR	37	12.071	7.569	30.489	
1.00196.98			H					
ATOM	497	HG22	THR	37	13.762	7.089	30.625	
1.00196.23			H					
ATOM	498	HG23	THR	37	12.546	5.907	30.137	
1.00168.92			H					
ATOM	499	N	GLU	38	13.094	8.178	26.057	1.00
26.53			N					
ATOM	500	CA	GLU	38	13.435	8.456	24.662	1.00
30.29			C					
ATOM	501	C	GLU	38	14.951	8.510	24.475	1.00
25.39			C					
ATOM	502	O	GLU	38	15.671	9.056	25.311	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.819	9.790	24.232	1.00
54.82			C					
ATOM	504	CG	GLU	38	13.104	10.035	22.747	
1.00165.84			C					
ATOM	505	CD	GLU	38	12.413	11.315	22.287	
1.00292.92			C					
ATOM	506	OE1	GLU	38	11.756	11.937	23.106	
1.00414.19			O					
ATOM	507	OE2	GLU	38	12.552	11.653	21.124	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	13.714	8.443	26.766	1.00
84.50			H					
ATOM	509	HA	GLU	38	13.036	7.671	24.037	1.00
32.15			H					
ATOM	510	HB1	GLU	38	13.248	10.591	24.816	
1.00144.82			H					
ATOM	511	HB2	GLU	38	11.750	9.760	24.393	
1.00106.49			H					
ATOM	512	HG1	GLU	38	12.734	9.202	22.169	
1.00303.31			H					
ATOM	513	HG2	GLU	38	14.169	10.130	22.598	
1.00323.99			H					
ATOM	514	N	CYS	39	15.422	7.938	23.371	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.851	7.925	23.075	1.00
14.30			C					
ATOM	516	C	CYS	39	17.393	9.360	23.042	1.00
22.31			C					
ATOM	517	O	CYS	39	16.650	10.296	22.747	1.00
32.92			O					

ATOM	518	CB	CYS	39	17.084	7.240	21.721	1.00
18.08			C					
ATOM	519	SG	CYS	39	15.779	7.727	20.566	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.800	7.521	22.741	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.358	7.362	23.843	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.065	6.168	21.853	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.043	7.536	21.322	1.00
34.91			H					
ATOM	524	N	PRO	40	18.658	9.557	23.340	1.00
27.27			N					
ATOM	525	CA	PRO	40	19.275	10.915	23.343	1.00
47.66			C					
ATOM	526	C	PRO	40	19.502	11.437	21.926	1.00
71.54			C					
ATOM	527	O	PRO	40	19.590	10.666	20.971	1.00
87.70			O					
ATOM	528	CB	PRO	40	20.600	10.703	24.083	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.967	9.287	23.789	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.642	8.521	23.703	1.00
25.70			C					
ATOM	531	HA	PRO	40	18.658	11.604	23.897	1.00
58.04			H					
ATOM	532	HB1	PRO	40	20.462	10.836	25.146	1.00
67.93			H					
ATOM	533	HB2	PRO	40	21.359	11.382	23.713	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.575	8.881	24.582	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.497	9.230	22.845	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.392	8.085	24.658	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.694	7.766	22.937	1.00
26.94			H					
ATOM	538	N	GLY	41	19.595	12.756	21.806	
1.00105.24			N					
ATOM	539	CA	GLY	41	19.811	13.401	20.510	
1.00147.55			C					
ATOM	540	C	GLY	41	21.273	13.793	20.332	
1.00161.74			C					
ATOM	541	O	GLY	41	22.079	13.011	19.829	
1.00244.37			O					
ATOM	542	HN	GLY	41	19.516	13.308	22.608	
1.00121.79			H					
ATOM	543	HA1	GLY	41	19.202	14.290	20.453	
1.00184.40			H					

ATOM	544	HA2	GLY	41	19.524	12.725	19.714
1.00157.34			H				
ATOM	545	N	LEU	42	21.606	15.012	20.742
1.00162.48			N				
ATOM	546	CA	LEU	42	22.975	15.504	20.617
1.00191.48			C				
ATOM	547	C	LEU	42	23.865	14.904	21.702
1.00166.66			C				
ATOM	548	O	LEU	42	23.429	14.702	22.836
1.00251.38			O				
ATOM	549	CB	LEU	42	22.992	17.030	20.732
1.00307.99			C				
ATOM	550	CG	LEU	42	22.056	17.646	19.685
1.00452.28			C				
ATOM	551	CD1	LEU	42	22.056	19.170	19.847
1.00681.24			C				
ATOM	552	CD2	LEU	42	22.531	17.277	18.268
1.00527.46			C				
ATOM	553	HN	LEU	42	20.920	15.594	21.131
1.00195.47			H				
ATOM	554	HA	LEU	42	23.365	15.222	19.652
1.00229.77			H				
ATOM	555	HB1	LEU	42	23.997	17.391	20.570
1.00342.49			H				
ATOM	556	HB2	LEU	42	22.664	17.319	21.721
1.00335.33			H				
ATOM	557	HG	LEU	42	21.054	17.272	19.839
1.00427.79			H				
ATOM	558	HD11	LEU	42	23.016	19.565	19.551
1.00909.71			H				
ATOM	559	HD12	LEU	42	21.866	19.421	20.880
1.00706.80			H				
ATOM	560	HD13	LEU	42	21.283	19.598	19.224
1.00858.82			H				
ATOM	561	HD21	LEU	42	22.150	16.300	18.006
1.00631.69			H				
ATOM	562	HD22	LEU	42	23.612	17.262	18.236
1.00628.06			H				
ATOM	563	HD23	LEU	42	22.161	18.004	17.558
1.00656.75			H				
ATOM	564	N	THR	43	25.114	14.624	21.343
1.00178.52			N				
ATOM	565	CA	THR	43	26.062	14.049	22.290
1.00240.84			C				
ATOM	566	C	THR	43	26.488	15.104	23.318
1.00372.31			C				
ATOM	567	O	THR	43	26.514	16.295	23.006
1.00500.13			O				
ATOM	568	CB	THR	43	27.292	13.546	21.525
1.00354.13			C				
ATOM	569	CG2	THR	43	26.850	12.572	20.431
1.00463.04			C				

ATOM	570	OG1	THR	43	27.964	14.650	20.936
1.00508.50			O				
ATOM	571	HN	THR	43	25.403	14.809	20.426
1.00229.59			H				
ATOM	572	HA	THR	43	25.594	13.219	22.790
1.00249.90			H				
ATOM	573	HB	THR	43	27.961	13.039	22.201
1.00481.58			H				
ATOM	574	HG1	THR	43	28.468	14.325	20.186
1.00624.31			H				
ATOM	575	HG21	THR	43	26.270	11.776	20.872
1.00650.95			H				
ATOM	576	HG22	THR	43	27.719	12.159	19.943
1.00580.73			H				
ATOM	577	HG23	THR	43	26.246	13.098	19.705
1.00571.99			H				
ATOM	578	N	PRO	44	26.829	14.709	24.527
1.00488.39			N				
ATOM	579	CA	PRO	44	27.263	15.670	25.583
1.00760.13			C				
ATOM	580	C	PRO	44	28.692	16.156	25.350
1.00735.36			C				
ATOM	581	O	PRO	44	29.167	17.069	26.025
1.00999.99			O				
ATOM	582	CB	PRO	44	27.154	14.851	26.873
1.00999.99			C				
ATOM	583	CG	PRO	44	27.424	13.447	26.445
1.00856.94			C				
ATOM	584	CD	PRO	44	26.841	13.318	25.031
1.00548.09			C				
ATOM	585	HA	PRO	44	26.586	16.510	25.627
1.00939.00			H				
ATOM	586	HB1	PRO	44	26.158	14.928	27.285
1.00999.99			H				
ATOM	587	HB2	PRO	44	27.889	15.181	27.599
1.00999.99			H				
ATOM	588	HG1	PRO	44	26.933	12.749	27.108
1.00999.99			H				
ATOM	589	HG2	PRO	44	28.490	13.262	26.431
1.00853.53			H				
ATOM	590	HD1	PRO	44	25.837	12.925	25.070
1.00602.45			H				
ATOM	591	HD2	PRO	44	27.475	12.693	24.420
1.00463.32			H				
ATOM	592	N	ILE	45	29.372	15.532	24.393
1.00518.33			N				
ATOM	593	CA	ILE	45	30.747	15.900	24.082
1.00582.79			C				
ATOM	594	C	ILE	45	30.808	17.312	23.510
1.00795.93			C				
ATOM	595	O	ILE	45	30.079	17.649	22.577
1.00898.75			O				

ATOM	596	CB	ILE	45	31.336	14.914	23.071
1.00474.41				C			
ATOM	597	CG1	ILE	45	31.384	13.516	23.692
1.00516.90				C			
ATOM	598	CG2	ILE	45	32.753	15.353	22.696
1.00760.75				C			
ATOM	599	CD1	ILE	45	31.721	12.488	22.611
1.00566.81				C			
ATOM	600	HN	ILE	45	28.942	14.808	23.891
1.00395.72				H			
ATOM	601	HA	ILE	45	31.331	15.861	24.988
1.00711.06				H			
ATOM	602	HB	ILE	45	30.718	14.895	22.184
1.00477.81				H			
ATOM	603	HG11	ILE	45	30.421	13.280	24.123
1.00624.28				H			
ATOM	604	HG12	ILE	45	32.139	13.491	24.463
1.00744.84				H			
ATOM	605	HG21	ILE	45	33.309	15.579	23.594
1.00920.57				H			
ATOM	606	HG22	ILE	45	32.705	16.233	22.071
1.00999.99				H			
ATOM	607	HG23	ILE	45	33.246	14.558	22.158
1.00865.46				H			
ATOM	608	HD11	ILE	45	30.905	12.422	21.908
1.00658.89				H			
ATOM	609	HD12	ILE	45	31.879	11.523	23.070
1.00734.30				H			
ATOM	610	HD13	ILE	45	32.619	12.791	22.093
1.00675.84				H			
ATOM	611	N	ALA	46	31.686	18.135	24.075
1.00999.99				N			
ATOM	612	CA	ALA	46	31.838	19.511	23.615
1.00999.99				C			
ATOM	613	C	ALA	46	32.083	19.549	22.110
1.00999.99				C			
ATOM	614	CB	ALA	46	33.007	20.178	24.341
1.00999.99				C			
ATOM	615	OT1	ALA	46	32.851	18.728	21.633
1.00999.99				O			
ATOM	616	OT2	ALA	46	31.499	20.396	21.455
1.00999.99				O			
ATOM	617	HN	ALA	46	32.242	17.811	24.815
1.00999.99				H			
ATOM	618	HA	ALA	46	30.932	20.056	23.836
1.00999.99				H			
ATOM	619	HB1	ALA	46	33.936	19.742	24.005
1.00999.99				H			
ATOM	620	HB2	ALA	46	32.902	20.031	25.405
1.00999.99				H			
ATOM	621	HB3	ALA	46	33.008	21.237	24.123
1.00999.99				H			


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ENDMDL
TER
MODEL      18
ATOM       1  N   GLY      1      24.815   4.662  10.387
1.00999.99
ATOM       2  CA  GLY      1      24.690   4.279  11.823
1.00999.99
ATOM       3  C   GLY      1      23.215   4.205  12.204
1.00999.99
ATOM       4  O   GLY      1      22.733   4.996  13.015
1.00999.99
ATOM       5  HA1 GLY      1      25.180   5.020  12.436
1.00999.99
ATOM       6  HA2 GLY      1      25.153   3.315  11.980
1.00999.99
ATOM       7  HT1 GLY      1      24.124   4.126   9.823
1.00999.99
ATOM       8  HT2 GLY      1      25.777   4.446  10.054
1.00999.99
ATOM       9  HT3 GLY      1      24.629   5.679  10.281
1.00999.99
ATOM      10  N   LEU      2      22.502   3.248  11.611
1.00999.99
ATOM      11  CA  LEU      2      21.074   3.065  11.888
1.00895.59
ATOM      12  C   LEU      2      20.826   1.701  12.526
1.00532.27
ATOM      13  O   LEU      2      21.483   0.718  12.182
1.00625.21
ATOM      14  CB  LEU      2      20.277   3.163  10.585
1.00999.99
ATOM      15  CG  LEU      2      20.562   4.502   9.893
1.00999.99
ATOM      16  CD1 LEU      2      19.808   4.551   8.562
1.00999.99
ATOM      17  CD2 LEU      2      20.105   5.667  10.789
1.00999.99
ATOM      18  HN  LEU      2      22.945   2.648  10.974
1.00999.99
ATOM      19  HA  LEU      2      20.730   3.832  12.567
1.00890.87
ATOM      20  HB1 LEU      2      19.221   3.093  10.804
1.00924.07
ATOM      21  HB2 LEU      2      20.562   2.353   9.929
1.00999.99
ATOM      22  HG  LEU      2      21.623   4.586   9.705
1.00999.99
ATOM      23  HD11 LEU     2      20.123   5.418   8.001
1.00999.99
ATOM      24  HD12 LEU     2      18.746   4.610   8.751
1.00999.99
ATOM      25  HD13 LEU     2      20.023   3.658   7.993

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1.00999.99										
ATOM	26	HD21	LEU	H	2	19.195	5.396	11.304		
1.00999.99										
ATOM	27	HD22	LEU	H	2	19.925	6.545	10.183		
1.00999.99										
ATOM	28	HD23	LEU	H	2	20.876	5.890	11.512		
1.00999.99										
ATOM	29	N	CYS	H	3	19.873	1.649	13.450		
1.00271.28										
ATOM	30	CA	CYS	N	3	19.545	0.399	14.124		
1.00104.50										
ATOM	31	C	CYS	C	3	18.677	-0.474	13.222	1.00	
90.98			C							
ATOM	32	O	CYS		3	18.394	-0.110	12.080		
1.00207.28										
ATOM	33	CB	CYS	O	3	18.803	0.682	15.433	1.00	
37.83			C							
ATOM	34	SG	CYS		3	19.838	1.714	16.502	1.00	
81.56			S							
ATOM	35	HN	CYS		3	19.380	2.464	13.680		
1.00296.55										
ATOM	36	HA	CYS	H	3	20.459	-0.130	14.348		
1.00166.45										
ATOM	37	HB1	CYS	H	3	18.589	-0.251	15.933	1.00	
40.38			H							
ATOM	38	HB2	CYS		3	17.879	1.195	15.221	1.00	
98.45			H							
ATOM	39	N	SER		4	18.264	-1.627	13.735	1.00	
85.31			N							
ATOM	40	CA	SER		4	17.436	-2.544	12.959	1.00	
92.94			C							
ATOM	41	C	SER		4	16.148	-1.861	12.531	1.00	
67.37			C							
ATOM	42	O	SER		4	15.707	-1.997	11.390		
1.00102.28										
ATOM	43	CB	SER	O	4	17.068	-3.760	13.803		
1.00123.83										
ATOM	44	OG	SER	C	4	16.405	-4.714	12.984		
1.00178.89										
ATOM	45	HN	SER	O	4	18.525	-1.869	14.649		
1.00163.03										
ATOM	46	HA	SER	H	4	17.979	-2.870	12.086		
1.00129.78										
ATOM	47	HB1	SER	H	4	16.406	-3.443	14.603		
1.00105.26										
ATOM	48	HB2	SER	H	4	17.957	-4.200	14.223		
1.00156.87										
ATOM	49	HG	SER	H	4	16.467	-5.569	13.415		
1.00218.16										
ATOM	50	N	GLU	H	5	15.537	-1.148	13.469	1.00	
41.67			N							
ATOM	51	CA	GLU		5	14.279	-0.465	13.203	1.00	

41.21			C						
ATOM	52	C	GLU	5	14.120	0.746	14.107	1.00	
41.92			C						
ATOM	53	O	GLU	5	13.072	0.947	14.721	1.00	
74.72			O						
ATOM	54	CB	GLU	5	13.130	-1.434	13.424	1.00	
49.24			C						
ATOM	55	CG	GLU	5	13.228	-2.026	14.824	1.00	
55.48			C						
ATOM	56	CD	GLU	5	12.202	-3.141	14.994	1.00	
92.06			C						
ATOM	57	OE1	GLU	5	11.472	-3.397	14.051		
1.00206.49			O						
ATOM	58	OE2	GLU	5	12.161	-3.722	16.067		
1.00197.24			O1-						
ATOM	59	HN	GLU	5	15.931	-1.096	14.364	1.00	
45.52			H						
ATOM	60	HA	GLU	5	14.263	-0.143	12.181	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	13.196	-2.221	12.698	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	12.196	-0.916	13.316	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	13.044	-1.254	15.556	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	14.219	-2.424	14.965	1.00	
57.77			H						
ATOM	65	N	ASN	6	15.179	1.538	14.180	1.00	
50.73			N						
ATOM	66	CA	ASN	6	15.197	2.747	15.007	1.00	
71.04			C						
ATOM	67	C	ASN	6	14.967	2.422	16.482	1.00	
65.17			C						
ATOM	68	O	ASN	6	15.056	3.296	17.343	1.00	
94.86			O						
ATOM	69	CB	ASN	6	14.128	3.732	14.529	1.00	
94.83			C						
ATOM	70	CG	ASN	6	14.551	4.369	13.210		
1.00160.94			C						
ATOM	71	ND2	ASN	6	13.650	4.914	12.442		
1.00244.88			N						
ATOM	72	OD1	ASN	6	15.735	4.366	12.870		
1.00219.73			O						
ATOM	73	HN	ASN	6	15.976	1.300	13.663	1.00	
72.81			H						
ATOM	74	HA	ASN	6	16.164	3.217	14.907	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	14.001	4.497	15.273		
1.00111.09			H						
ATOM	76	HB2	ASN	6	13.193	3.213	14.391	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	12.707	4.914	12.714		

1.00272.43				H					
ATOM	78	HD22	ASN		6	13.913	5.326	11.592	
1.00336.78				H					
ATOM	79	N	GLY		7	14.672	1.163	16.759	1.00
51.80			N						
ATOM	80	CA	GLY		7	14.430	0.717	18.128	1.00
71.47			C						
ATOM	81	C	GLY		7	14.700	-0.774	18.257	1.00
41.04			C						
ATOM	82	O	GLY		7	13.808	-1.553	18.593	1.00
44.54			O						
ATOM	83	HN	GLY		7	14.617	0.522	16.032	1.00
45.49			H						
ATOM	84	HA1	GLY		7	13.405	0.911	18.386	
1.00103.52				H					
ATOM	85	HA2	GLY		7	15.079	1.257	18.802	
1.00108.67				H					
ATOM	86	N	ASP		8	15.936	-1.161	17.981	1.00
27.00			N						
ATOM	87	CA	ASP		8	16.327	-2.557	18.059	1.00
14.15			C						
ATOM	88	C	ASP		8	16.150	-3.090	19.477	1.00
9.37			C						
ATOM	89	O	ASP		8	15.893	-4.277	19.675	1.00
14.61			O						
ATOM	90	CB	ASP		8	17.785	-2.703	17.622	1.00
15.06			C						
ATOM	91	CG	ASP		8	18.692	-1.859	18.510	1.00
21.22			C						
ATOM	92	OD1	ASP		8	19.894	-1.906	18.307	
1.00119.56				O					
ATOM	93	OD2	ASP		8	18.173	-1.179	19.378	
1.00133.27				O1-					
ATOM	94	HN	ASP		8	16.597	-0.495	17.715	1.00
35.63			H						
ATOM	95	HA	ASP		8	15.706	-3.132	17.391	1.00
20.92			H						
ATOM	96	HB1	ASP		8	17.884	-2.376	16.598	1.00
29.39			H						
ATOM	97	HB2	ASP		8	18.073	-3.734	17.694	1.00
44.14			H						
ATOM	98	N	CYS		9	16.281	-2.206	20.461	1.00
5.93			N						
ATOM	99	CA	CYS		9	16.121	-2.607	21.853	1.00
7.54			C						
ATOM	100	C	CYS		9	14.707	-3.120	22.086	1.00
14.60			C						
ATOM	101	O	CYS		9	14.496	-4.140	22.744	1.00
25.78			O						
ATOM	102	CB	CYS		9	16.390	-1.416	22.764	1.00
6.63			C						
ATOM	103	SG	CYS		9	18.145	-1.032	22.693	1.00

10.91			S						
ATOM	104	HN	CYS	9	16.480	-1.271	20.248	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.834	-3.379	22.082	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.117	-1.661	23.778	1.00	
11.28			H						
ATOM	107	HB2	CYS	9	15.816	-0.564	22.429	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.746	-2.399	21.522	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.338	-2.756	21.637	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.503	-1.811	20.778	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.973	-0.739	20.392		
1.00119.04			O						
ATOM	112	CB	ALA	10	11.883	-2.677	23.098	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.994	-1.604	21.007	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.202	-3.766	21.280	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	10.994	-3.276	23.231	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	11.667	-1.652	23.356		
1.00118.20			H						
ATOM	117	HB3	ALA	10	12.667	-3.052	23.740		
1.00117.32			H						
ATOM	118	N	ALA	11	10.270	-2.201	20.478	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.405	-1.358	19.661	1.00	
35.24			C						
ATOM	120	C	ALA	11	9.173	-0.011	20.340	1.00	
22.78			C						
ATOM	121	O	ALA	11	9.260	1.040	19.704	1.00	
53.33			O						
ATOM	122	CB	ALA	11	8.061	-2.053	19.431	1.00	
60.49			C						
ATOM	123	HN	ALA	11	9.938	-3.063	20.808	1.00	
50.37			H						
ATOM	124	HA	ALA	11	9.879	-1.191	18.705	1.00	
41.70			H						
ATOM	125	HB1	ALA	11	8.232	-3.090	19.178		
1.00157.06			H						
ATOM	126	HB2	ALA	11	7.537	-1.566	18.624		
1.00148.83			H						
ATOM	127	HB3	ALA	11	7.468	-1.996	20.332		
1.00137.06			H						
ATOM	128	N	ASP	12	8.883	-0.050	21.637	1.00	
18.98			N						
ATOM	129	CA	ASP	12	8.645	1.173	22.397	1.00	

31.05			C						
ATOM	130	C	ASP	12	9.948	1.940	22.621	1.00	
22.98			C						
ATOM	131	O	ASP	12	9.970	3.170	22.580	1.00	
37.14			O						
ATOM	132	CB	ASP	12	8.015	0.832	23.748	1.00	
48.35			C						
ATOM	133	CG	ASP	12	6.581	0.355	23.548		
1.00104.83				C					
ATOM	134	OD1	ASP	12	6.059	0.546	22.461		
1.00258.73				O					
ATOM	135	OD2	ASP	12	6.023	-0.194	24.484		
1.00213.46				O1-					
ATOM	136	HN	ASP	12	8.831	-0.917	22.091	1.00	
36.19			H						
ATOM	137	HA	ASP	12	7.962	1.800	21.845	1.00	
49.76			H						
ATOM	138	HB1	ASP	12	8.014	1.712	24.375	1.00	
95.71			H						
ATOM	139	HB2	ASP	12	8.589	0.051	24.226	1.00	
54.37			H						
ATOM	140	N	GLU	13	11.026	1.203	22.869	1.00	
17.60			N						
ATOM	141	CA	GLU	13	12.329	1.816	23.114	1.00	
12.01			C						
ATOM	142	C	GLU	13	12.924	2.393	21.832	1.00	
10.07			C						
ATOM	143	O	GLU	13	12.561	1.988	20.727	1.00	
12.81			O						
ATOM	144	CB	GLU	13	13.287	0.780	23.700	1.00	
11.74			C						
ATOM	145	CG	GLU	13	12.762	0.311	25.059	1.00	
13.49			C						
ATOM	146	CD	GLU	13	12.891	1.433	26.082		
1.00142.36				C					
ATOM	147	OE1	GLU	13	12.267	1.331	27.125		
1.00339.06				O					
ATOM	148	OE2	GLU	13	13.611	2.378	25.808		
1.00335.28				O1-					
ATOM	149	HN	GLU	13	10.943	0.226	22.898	1.00	
28.36			H						
ATOM	150	HA	GLU	13	12.206	2.614	23.831	1.00	
13.06			H						
ATOM	151	HB1	GLU	13	14.261	1.223	23.825	1.00	
13.76			H						
ATOM	152	HB2	GLU	13	13.358	-0.064	23.029	1.00	
9.94			H						
ATOM	153	HG1	GLU	13	13.334	-0.542	25.390	1.00	
66.02			H						
ATOM	154	HG2	GLU	13	11.722	0.032	24.966	1.00	
56.23			H						
ATOM	155	N	CYS	14	13.847	3.345	21.992	1.00	

9.12			N					
ATOM	156	CA	CYS	14	14.507	3.988	20.852	1.00
10.69			C					
ATOM	157	C	CYS	14	15.927	3.452	20.690	1.00
9.56			C					
ATOM	158	O	CYS	14	16.525	2.958	21.644	1.00
13.62			O					
ATOM	159	CB	CYS	14	14.560	5.501	21.065	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.483	6.267	19.707	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.094	3.620	22.902	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.949	3.783	19.949	1.00
15.54			H					
ATOM	163	HB1	CYS	14	15.051	5.716	22.002	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.555	5.897	21.086	1.00
46.13			H					
ATOM	165	N	CYS	15	16.460	3.556	19.474	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.813	3.081	19.189	1.00
9.28			C					
ATOM	167	C	CYS	15	18.455	3.951	18.118	1.00
9.92			C					
ATOM	168	O	CYS	15	17.870	4.176	17.059	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.765	1.631	18.706	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.446	1.048	18.370	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.936	3.963	18.752	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.410	3.133	20.088	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.176	1.571	17.802	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.317	1.012	19.469	1.00
27.31			H					
ATOM	175	N	VAL	16	19.663	4.440	18.391	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.364	5.283	17.432	1.00
11.99			C					
ATOM	177	C	VAL	16	21.868	5.171	17.633	1.00
7.73			C					
ATOM	178	O	VAL	16	22.358	5.214	18.761	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.913	6.736	17.597	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.302	7.244	18.986	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.580	7.599	16.528	

1.00115.21				C					
ATOM	182	HN	VAL		16	20.092	4.230	19.253	1.00
9.76			H						
ATOM	183	HA	VAL		16	20.123	4.957	16.430	1.00
17.27			H						
ATOM	184	HB	VAL		16	18.840	6.791	17.486	1.00
52.63			H						
ATOM	185	HG11	VAL		16	19.949	6.551	19.734	
1.00128.07				H					
ATOM	186	HG12	VAL		16	19.854	8.212	19.153	
1.00154.13				H					
ATOM	187	HG13	VAL		16	21.377	7.330	19.051	
1.00135.74				H					
ATOM	188	HG21	VAL		16	20.350	7.201	15.552	
1.00229.05				H					
ATOM	189	HG22	VAL		16	21.650	7.594	16.678	
1.00261.82				H					
ATOM	190	HG23	VAL		16	20.210	8.610	16.602	
1.00210.07				H					
ATOM	191	N	ASP		17	22.598	5.012	16.531	1.00
14.34			N						
ATOM	192	CA	ASP		17	24.053	4.879	16.593	1.00
11.90			C						
ATOM	193	C	ASP		17	24.737	6.192	16.233	1.00
13.15			C						
ATOM	194	O	ASP		17	24.582	6.703	15.123	1.00
25.96			O						
ATOM	195	CB	ASP		17	24.513	3.786	15.625	1.00
20.80			C						
ATOM	196	CG	ASP		17	24.098	2.416	16.150	1.00
28.72			C						
ATOM	197	OD1	ASP		17	23.725	2.334	17.309	
1.00135.42				O					
ATOM	198	OD2	ASP		17	24.159	1.468	15.385	
1.00114.17				O1-					
ATOM	199	HN	ASP		17	22.151	4.974	15.661	1.00
28.29			H						
ATOM	200	HA	ASP		17	24.347	4.596	17.594	1.00
10.49			H						
ATOM	201	HB1	ASP		17	25.588	3.821	15.531	1.00
22.42			H						
ATOM	202	HB2	ASP		17	24.063	3.951	14.659	1.00
29.52			H						
ATOM	203	N	THR		18	25.508	6.725	17.179	1.00
11.55			N						
ATOM	204	CA	THR		18	26.238	7.974	16.965	1.00
17.10			C						
ATOM	205	C	THR		18	27.694	7.677	16.640	1.00
10.63			C						
ATOM	206	O	THR		18	28.175	6.569	16.872	1.00
6.49			O						
ATOM	207	CB	THR		18	26.165	8.848	18.220	1.00

28.52			C					
ATOM	208	CG2	THR	18	24.777	9.475	18.339	1.00
45.38			C					
ATOM	209	OG1	THR	18	26.426	8.050	19.362	1.00
26.49			O					
ATOM	210	HN	THR	18	25.598	6.262	18.038	1.00
13.96			H					
ATOM	211	HA	THR	18	25.796	8.515	16.138	1.00
26.43			H					
ATOM	212	HB	THR	18	26.902	9.633	18.156	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.614	7.599	19.602	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.692	10.287	17.632	
1.00100.44				H				
ATOM	215	HG22	THR	18	24.640	9.854	19.341	
1.00129.42				H				
ATOM	216	HG23	THR	18	24.024	8.730	18.128	
1.00156.21				H				
ATOM	217	N	VAL	19	28.388	8.681	16.116	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.783	8.555	15.766	1.00
13.34			C					
ATOM	219	C	VAL	19	30.248	9.848	15.132	1.00
25.88			C					
ATOM	220	O	VAL	19	29.731	10.299	14.111	1.00
42.11			O					
ATOM	221	CB	VAL	19	30.028	7.380	14.820	1.00
15.48			C					
ATOM	222	CG1	VAL	19	29.029	7.421	13.660	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.459	7.469	14.270	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.955	9.542	15.974	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.352	8.393	16.671	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.911	6.458	15.367	1.00
11.49			H					
ATOM	227	HG11	VAL	19	29.113	6.514	13.082	
1.00137.43				H				
ATOM	228	HG12	VAL	19	29.242	8.271	13.029	1.00
93.29			H					
ATOM	229	HG13	VAL	19	28.026	7.506	14.051	
1.00108.69				H				
ATOM	230	HG21	VAL	19	31.743	6.518	13.842	1.00
99.42			H					
ATOM	231	HG22	VAL	19	32.139	7.723	15.072	
1.00111.36				H				
ATOM	232	HG23	VAL	19	31.503	8.236	13.510	1.00
77.11			H					
ATOM	233	N	PHE	20	31.211	10.438	15.787	1.00

24.58			N					
ATOM	234	CA	PHE	20	31.786	11.705	15.376	1.00
40.34			C					
ATOM	235	C	PHE	20	33.030	11.501	14.516	1.00
40.37			C					
ATOM	236	O	PHE	20	32.946	11.338	13.299	1.00
66.02			O					
ATOM	237	CB	PHE	20	32.142	12.523	16.639	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.447	11.602	17.813	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.429	10.824	18.398	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.747	11.542	18.333	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.719	9.994	19.485	1.00
30.41			C					
ATOM	242	CE2	PHE	20	34.034	10.710	19.420	1.00
45.84			C					
ATOM	243	CZ	PHE	20	33.020	9.934	19.996	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.530	10.013	16.598	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.057	12.259	14.799	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.313	13.138	16.895	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.995	13.158	16.446	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.420	10.855	18.006	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.528	12.139	17.895	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.937	9.400	19.931	1.00
30.61			H					
ATOM	251	HE2	PHE	20	35.037	10.662	19.815	1.00
61.27			H					
ATOM	252	HZ	PHE	20	33.242	9.293	20.834	1.00
52.66			H					
ATOM	253	N	GLU	21	34.174	11.541	15.170	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.455	11.396	14.499	1.00
56.16			C					
ATOM	255	C	GLU	21	35.773	9.919	14.251	1.00
58.61			C					
ATOM	256	O	GLU	21	36.571	9.588	13.374	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.520	12.075	15.374	1.00
57.37			C					
ATOM	258	CG	GLU	21	37.927	11.537	15.074	
1.00193.56			C					
ATOM	259	CD	GLU	21	38.208	11.614	13.577	

1.00304.62				C					
ATOM	260	OE1	GLU		21	38.703	10.639	13.035	
1.00451.81				O					
ATOM	261	OE2	GLU		21	37.922	12.647	12.993	
1.00442.88				O1-					
ATOM	262	HN	GLU		21	34.157	11.693	16.139	1.00
50.82			H						
ATOM	263	HA	GLU		21	35.410	11.905	13.547	1.00
85.72			H						
ATOM	264	HB1	GLU		21	36.276	11.903	16.412	1.00
46.37			H						
ATOM	265	HB2	GLU		21	36.506	13.141	15.184	
1.00131.81				H					
ATOM	266	HG1	GLU		21	38.000	10.511	15.401	
1.00314.91				H					
ATOM	267	HG2	GLU		21	38.657	12.132	15.604	
1.00266.92				H					
ATOM	268	N	GLY		22	35.143	9.036	15.019	1.00
86.70			N						
ATOM	269	CA	GLY		22	35.365	7.597	14.864	
1.00104.66				C					
ATOM	270	C	GLY		22	36.418	7.089	15.846	1.00
71.50			C						
ATOM	271	O	GLY		22	36.686	5.889	15.907	1.00
89.87			O						
ATOM	272	HN	GLY		22	34.512	9.353	15.700	
1.00214.64				H					
ATOM	273	HA1	GLY		22	35.695	7.389	13.856	
1.00152.47				H					
ATOM	274	HA2	GLY		22	34.436	7.078	15.045	
1.00118.15				H					
ATOM	275	N	ASP		23	37.002	7.997	16.621	1.00
44.68			N						
ATOM	276	CA	ASP		23	38.010	7.599	17.599	1.00
43.33			C						
ATOM	277	C	ASP		23	37.393	6.613	18.581	1.00
37.55			C						
ATOM	278	O	ASP		23	38.016	5.626	18.972	1.00
61.37			O						
ATOM	279	CB	ASP		23	38.529	8.826	18.353	1.00
40.74			C						
ATOM	280	CG	ASP		23	39.402	9.672	17.434	
1.00141.86				C					
ATOM	281	OD1	ASP		23	39.763	9.184	16.377	
1.00328.18				O					
ATOM	282	OD2	ASP		23	39.697	10.799	17.802	
1.00304.58				O1-					
ATOM	283	HN	ASP		23	36.750	8.940	16.541	1.00
40.86			H						
ATOM	284	HA	ASP		23	38.832	7.124	17.087	1.00
72.12			H						
ATOM	285	HB1	ASP		23	39.111	8.504	19.204	1.00

94.15			H					
ATOM	286	HB2	ASP	23	37.690	9.415	18.695	1.00
93.26			H					
ATOM	287	N	MET	24	36.148	6.885	18.951	1.00
23.24			N					
ATOM	288	CA	MET	24	35.404	6.026	19.864	1.00
32.50			C					
ATOM	289	C	MET	24	33.924	6.100	19.514	1.00
25.13			C					
ATOM	290	O	MET	24	33.263	7.102	19.784	1.00
54.40			O					
ATOM	291	CB	MET	24	35.620	6.475	21.313	1.00
47.36			C					
ATOM	292	CG	MET	24	34.875	5.534	22.268	
1.00151.73				C				
ATOM	293	SD	MET	24	33.133	6.024	22.370	
1.00209.23				S				
ATOM	294	CE	MET	24	33.328	7.489	23.425	
1.00243.29				C				
ATOM	295	HN	MET	24	35.708	7.680	18.582	1.00
17.32			H					
ATOM	296	HA	MET	24	35.743	5.005	19.754	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.245	7.481	21.434	
1.00124.40				H				
ATOM	298	HB2	MET	24	36.677	6.457	21.540	
1.00166.96				H				
ATOM	299	HG1	MET	24	35.322	5.593	23.250	
1.00331.71				H				
ATOM	300	HG2	MET	24	34.941	4.519	21.906	
1.00302.30				H				
ATOM	301	HE1	MET	24	32.872	8.340	22.941	
1.00340.44				H				
ATOM	302	HE2	MET	24	34.374	7.693	23.589	
1.00373.88				H				
ATOM	303	HE3	MET	24	32.846	7.311	24.376	
1.00386.81				H				
ATOM	304	N	VAL	25	33.411	5.044	18.889	1.00
22.44			N					
ATOM	305	CA	VAL	25	32.011	5.027	18.487	1.00
15.37			C					
ATOM	306	C	VAL	25	31.088	5.081	19.694	1.00
17.47			C					
ATOM	307	O	VAL	25	31.395	4.542	20.759	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.696	3.782	17.660	1.00
23.36			C					
ATOM	309	CG1	VAL	25	30.210	3.800	17.279	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.553	3.784	16.392	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.985	4.278	18.680	1.00

48.11			H						
ATOM	312	HA	VAL	25	31.823	5.896	17.875	1.00	
9.25			H						
ATOM	313	HB	VAL	25	31.908	2.896	18.244	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.921	4.805	16.995		
1.00171.07									H
ATOM	315	HG12	VAL	25	29.620	3.485	18.125		
1.00166.22									H
ATOM	316	HG13	VAL	25	30.040	3.130	16.451		
1.00134.76									H
ATOM	317	HG21	VAL	25	32.372	2.878	15.832		
1.00141.88									H
ATOM	318	HG22	VAL	25	33.598	3.836	16.663		
1.00184.50									H
ATOM	319	HG23	VAL	25	32.295	4.639	15.784		
1.00133.90									H
ATOM	320	N	THR	26	29.957	5.755	19.514	1.00	
13.60			N						
ATOM	321	CA	THR	26	28.966	5.920	20.575	1.00	
21.19			C						
ATOM	322	C	THR	26	27.592	5.434	20.119	1.00	
16.55			C						
ATOM	323	O	THR	26	27.150	5.738	19.010	1.00	
11.43			O						
ATOM	324	CB	THR	26	28.893	7.398	20.947	1.00	
27.07			C						
ATOM	325	CG2	THR	26	27.815	7.619	22.012	1.00	
44.39			C						
ATOM	326	OG1	THR	26	30.154	7.811	21.454	1.00	
34.75			O						
ATOM	327	HN	THR	26	29.787	6.167	18.640	1.00	
10.81			H						
ATOM	328	HA	THR	26	29.266	5.356	21.448	1.00	
33.16			H						
ATOM	329	HB	THR	26	28.655	7.973	20.061	1.00	
20.60			H						
ATOM	330	HG1	THR	26	30.171	8.771	21.460	1.00	
77.72			H						
ATOM	331	HG21	THR	26	26.839	7.449	21.583		
1.00126.99									H
ATOM	332	HG22	THR	26	27.874	8.633	22.377		
1.00108.32									H
ATOM	333	HG23	THR	26	27.972	6.933	22.831		
1.00151.99									H
ATOM	334	N	ARG	27	26.918	4.679	20.988	1.00	
22.38			N						
ATOM	335	CA	ARG	27	25.584	4.146	20.684	1.00	
20.21			C						
ATOM	336	C	ARG	27	24.618	4.485	21.817	1.00	
16.96			C						
ATOM	337	O	ARG	27	25.024	4.576	22.976	1.00	

20.06			O						
ATOM	338	CB	ARG	27	25.661	2.627	20.519	1.00	
22.14			C						
ATOM	339	CG	ARG	27	26.606	2.282	19.366		
1.00124.30			C						
ATOM	340	CD	ARG	27	26.867	0.776	19.353		
1.00109.38			C						
ATOM	341	NE	ARG	27	27.583	0.377	20.559		
1.00227.73			N						
ATOM	342	CZ	ARG	27	27.843	-0.901	20.812		
1.00426.12			C						
ATOM	343	NH1	ARG	27	28.490	-1.233	21.898		
1.00767.09			N1+						
ATOM	344	NH2	ARG	27	27.453	-1.825	19.978		
1.00581.78			N						
ATOM	345	HN	ARG	27	27.324	4.475	21.856	1.00	
30.75			H						
ATOM	346	HA	ARG	27	25.216	4.583	19.766	1.00	
23.13			H						
ATOM	347	HB1	ARG	27	24.677	2.238	20.304	1.00	
87.46			H						
ATOM	348	HB2	ARG	27	26.031	2.185	21.433		
1.00103.36			H						
ATOM	349	HG1	ARG	27	27.541	2.806	19.497		
1.00281.97			H						
ATOM	350	HG2	ARG	27	26.154	2.578	18.430		
1.00276.19			H						
ATOM	351	HD1	ARG	27	27.457	0.523	18.484		
1.00183.60			H						
ATOM	352	HD2	ARG	27	25.925	0.250	19.310		
1.00142.93			H						
ATOM	353	HE	ARG	27	27.879	1.064	21.192		
1.00372.53			H						
ATOM	354	HH11	ARG	27	28.790	-0.526	22.537		
1.00910.59			H						
ATOM	355	HH12	ARG	27	28.686	-2.194	22.087		
1.00999.99			H						
ATOM	356	HH21	ARG	27	26.956	-1.570	19.148		
1.00532.54			H						
ATOM	357	HH22	ARG	27	27.649	-2.787	20.170		
1.00948.84			H						
ATOM	358	N	SER	28	23.337	4.672	21.486	1.00	
14.60			N						
ATOM	359	CA	SER	28	22.329	5.001	22.499	1.00	
14.92			C						
ATOM	360	C	SER	28	21.089	4.132	22.327	1.00	
12.12			C						
ATOM	361	O	SER	28	20.700	3.801	21.206	1.00	
13.41			O						
ATOM	362	CB	SER	28	21.941	6.476	22.385	1.00	
23.26			C						
ATOM	363	OG	SER	28	23.079	7.283	22.654		

24.60			H					
ATOM	390	HB1	GLU	30	15.252	4.360	27.337	1.00
72.67			H					
ATOM	391	HB2	GLU	30	15.011	4.255	25.592	1.00
56.47			H					
ATOM	392	HG1	GLU	30	15.615	6.538	26.163	
1.00196.66				H				
ATOM	393	HG2	GLU	30	16.955	5.803	25.287	
1.00140.67				H				
ATOM	394	N	LYS	31	16.064	1.568	27.792	1.00
11.96			N					
ATOM	395	CA	LYS	31	15.476	0.276	28.153	1.00
11.40			C					
ATOM	396	C	LYS	31	14.181	0.484	28.928	1.00
10.99			C					
ATOM	397	O	LYS	31	14.073	1.404	29.740	1.00
12.86			O					
ATOM	398	CB	LYS	31	16.459	-0.520	29.012	1.00
21.40			C					
ATOM	399	CG	LYS	31	17.738	-0.784	28.209	1.00
57.81			C					
ATOM	400	CD	LYS	31	18.635	-1.781	28.955	
1.00115.52				C				
ATOM	401	CE	LYS	31	19.266	-1.110	30.180	
1.00250.23				C				
ATOM	402	NZ	LYS	31	20.316	-2.005	30.746	
1.00462.10				N1+				
ATOM	403	HN	LYS	31	16.378	2.165	28.503	1.00
26.13			H					
ATOM	404	HA	LYS	31	15.259	-0.291	27.256	1.00
13.87			H					
ATOM	405	HB1	LYS	31	16.012	-1.461	29.295	1.00
37.63			H					
ATOM	406	HB2	LYS	31	16.695	0.048	29.897	1.00
47.19			H					
ATOM	407	HG1	LYS	31	18.271	0.144	28.072	
1.00126.32				H				
ATOM	408	HG2	LYS	31	17.475	-1.192	27.244	
1.00114.19				H				
ATOM	409	HD1	LYS	31	19.418	-2.121	28.293	
1.00198.45				H				
ATOM	410	HD2	LYS	31	18.044	-2.626	29.274	
1.00200.14				H				
ATOM	411	HE1	LYS	31	18.508	-0.934	30.928	
1.00374.64				H				
ATOM	412	HE2	LYS	31	19.712	-0.170	29.890	
1.00403.27				H				
ATOM	413	HZ1	LYS	31	19.875	-2.875	31.104	
1.00627.38				H				
ATOM	414	HZ2	LYS	31	20.805	-1.517	31.524	
1.00622.26				H				
ATOM	415	HZ3	LYS	31	21.002	-2.249	30.003	

1.00619.20				H					
ATOM	416	N	THR		32	13.201	-0.374	28.674	1.00
15.51			N						
ATOM	417	CA	THR		32	11.917	-0.272	29.354	1.00
22.44			C						
ATOM	418	C	THR		32	12.054	-0.676	30.817	1.00
26.60			C						
ATOM	419	O	THR		32	12.537	-1.764	31.132	1.00
57.43			O						
ATOM	420	CB	THR		32	10.887	-1.171	28.662	1.00
56.28			C						
ATOM	421	CG2	THR		32	9.536	-1.041	29.367	
1.00102.70				C					
ATOM	422	OG1	THR		32	10.755	-0.775	27.305	
1.00111.17				O					
ATOM	423	HN	THR		32	13.343	-1.085	28.017	1.00
18.79			H						
ATOM	424	HA	THR		32	11.575	0.752	29.303	1.00
19.67			H						
ATOM	425	HB	THR		32	11.216	-2.197	28.710	1.00
84.25			H						
ATOM	426	HG1	THR		32	11.000	0.152	27.239	
1.00205.03				H					
ATOM	427	HG21	THR		32	9.263	0.002	29.430	
1.00220.71				H					
ATOM	428	HG22	THR		32	9.607	-1.456	30.361	
1.00174.67				H					
ATOM	429	HG23	THR		32	8.786	-1.576	28.806	
1.00217.44				H					
ATOM	430	N	THR		33	11.620	0.211	31.706	1.00
22.47			N						
ATOM	431	CA	THR		33	11.689	-0.050	33.141	1.00
41.60			C						
ATOM	432	C	THR		33	10.612	0.709	33.867	1.00
38.03			C						
ATOM	433	O	THR		33	10.814	1.836	34.316	1.00
52.73			O						
ATOM	434	CB	THR		33	13.061	0.340	33.693	1.00
63.25			C						
ATOM	435	CG2	THR		33	14.127	-0.618	33.159	
1.00121.65				C					
ATOM	436	OG1	THR		33	13.370	1.668	33.290	1.00
96.20			O						
ATOM	437	HN	THR		33	11.244	1.058	31.390	1.00
23.82			H						
ATOM	438	HA	THR		33	11.518	-1.093	33.328	1.00
67.12			H						
ATOM	439	HB	THR		33	13.044	0.287	34.770	
1.00107.59				H					
ATOM	440	HG1	THR		33	13.999	1.619	32.567	
1.00176.27				H					
ATOM	441	HG21	THR		33	15.045	-0.478	33.710	

1.00255.23				H					
ATOM	442	HG22	THR		33	14.303	-0.413	32.112	
1.00245.37				H					
ATOM	443	HG23	THR		33	13.788	-1.637	33.274	
1.00185.78				H					
ATOM	444	N	GLY		34	9.465	0.065	33.993	1.00
40.93			N						
ATOM	445	CA	GLY		34	8.357	0.671	34.685	1.00
45.59			C						
ATOM	446	C	GLY		34	7.744	1.792	33.853	1.00
40.97			C						
ATOM	447	O	GLY		34	6.522	1.899	33.740	1.00
82.17			O						
ATOM	448	HN	GLY		34	9.372	-0.838	33.625	1.00
54.00			H						
ATOM	449	HA1	GLY		34	8.728	1.071	35.607	1.00
54.41			H						
ATOM	450	HA2	GLY		34	7.608	-0.079	34.892	1.00
62.09			H						
ATOM	451	N	ASN		35	8.604	2.623	33.265	1.00
32.51			N						
ATOM	452	CA	ASN		35	8.152	3.738	32.431	1.00
33.20			C						
ATOM	453	C	ASN		35	8.998	3.824	31.165	1.00
23.17			C						
ATOM	454	O	ASN		35	10.215	3.642	31.206	1.00
27.01			O						
ATOM	455	CB	ASN		35	8.260	5.051	33.206	1.00
54.51			C						
ATOM	456	CG	ASN		35	7.480	4.957	34.504	1.00
80.73			C						
ATOM	457	ND2	ASN		35	6.207	4.711	34.468	
1.00220.46				N					
ATOM	458	OD1	ASN		35	8.050	5.113	35.585	
1.00117.80				O					
ATOM	459	HN	ASN		35	9.566	2.481	33.391	1.00
51.15			H						
ATOM	460	HA	ASN		35	7.119	3.584	32.148	1.00
47.21			H						
ATOM	461	HB1	ASN		35	7.861	5.854	32.607	1.00
68.31			H						
ATOM	462	HB2	ASN		35	9.290	5.250	33.432	1.00
57.75			H						
ATOM	463	HD21	ASN		35	5.754	4.587	33.608	
1.00405.39				H					
ATOM	464	HD22	ASN		35	5.705	4.650	35.298	
1.00245.64				H					
ATOM	465	N	PHE		36	8.345	4.098	30.041	1.00
35.72			N						
ATOM	466	CA	PHE		36	9.036	4.202	28.765	1.00
33.41			C						
ATOM	467	C	PHE		36	9.638	5.593	28.588	1.00

28.51			C						
ATOM	468	O	PHE	36	9.075	6.585	29.052	1.00	
45.23			O						
ATOM	469	CB	PHE	36	8.045	3.926	27.640	1.00	
67.53			C						
ATOM	470	CG	PHE	36	7.588	2.489	27.718	1.00	
86.71			C						
ATOM	471	CD1	PHE	36	6.468	2.155	28.489		
1.00106.51				C					
ATOM	472	CD2	PHE	36	8.281	1.492	27.020	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	6.040	0.824	28.562		
1.00134.48				C					
ATOM	474	CE2	PHE	36	7.854	0.162	27.094		
1.00134.27				C					
ATOM	475	CZ	PHE	36	6.733	-0.173	27.864		
1.00149.48				C					
ATOM	476	HN	PHE	36	7.376	4.229	30.065	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.825	3.466	28.725	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	8.522	4.099	26.694	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.193	4.582	27.741	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.935	2.926	29.027		
1.00110.20				H					
ATOM	481	HD2	PHE	36	9.147	1.750	26.427	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	5.176	0.567	29.156		
1.00155.06				H					
ATOM	483	HE2	PHE	36	8.388	-0.607	26.555		
1.00159.46				H					
ATOM	484	HZ	PHE	36	6.403	-1.199	27.920		
1.00183.25				H					
ATOM	485	N	THR	37	10.786	5.658	27.913	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.469	6.927	27.672	1.00	
27.18			C						
ATOM	487	C	THR	37	11.769	7.081	26.186	1.00	
41.87			C						
ATOM	488	O	THR	37	11.007	6.622	25.335		
1.00169.86				O					
ATOM	489	CB	THR	37	12.774	6.974	28.467	1.00	
26.52			C						
ATOM	490	CG2	THR	37	12.492	6.653	29.935	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.685	6.021	27.937	1.00	
81.95			O						
ATOM	492	HN	THR	37	11.187	4.836	27.567	1.00	
18.47			H						
ATOM	493	HA	THR	37	10.837	7.747	27.986	1.00	

38.80			H						
ATOM	494	HB	THR	37	13.205	7.962	28.395	1.00	
81.60			H						
ATOM	495	HG1	THR	37	13.326	5.146	28.099		
1.00188.80				H					
ATOM	496	HG21	THR	37	11.653	7.241	30.276		
1.00196.98				H					
ATOM	497	HG22	THR	37	13.363	6.889	30.528		
1.00196.23				H					
ATOM	498	HG23	THR	37	12.262	5.603	30.035		
1.00168.92				H					
ATOM	499	N	GLU	38	12.884	7.730	25.884	1.00	
26.53			N						
ATOM	500	CA	GLU	38	13.284	7.946	24.499	1.00	
30.29			C						
ATOM	501	C	GLU	38	14.772	8.275	24.415	1.00	
25.39			C						
ATOM	502	O	GLU	38	15.335	8.883	25.325	1.00	
51.60			O						
ATOM	503	CB	GLU	38	12.471	9.093	23.894	1.00	
54.82			C						
ATOM	504	CG	GLU	38	12.815	9.242	22.409		
1.00165.84				C					
ATOM	505	CD	GLU	38	11.957	10.334	21.781		
1.00292.92				C					
ATOM	506	OE1	GLU	38	11.157	10.916	22.496		
1.00414.19				O					
ATOM	507	OE2	GLU	38	12.109	10.572	20.595		
1.00537.65				O1-					
ATOM	508	HN	GLU	38	13.448	8.067	26.609	1.00	
84.50			H						
ATOM	509	HA	GLU	38	13.092	7.046	23.934	1.00	
32.15			H						
ATOM	510	HB1	GLU	38	12.705	10.012	24.409		
1.00144.82				H					
ATOM	511	HB2	GLU	38	11.416	8.879	23.998		
1.00106.49				H					
ATOM	512	HG1	GLU	38	12.630	8.305	21.903		
1.00303.31				H					
ATOM	513	HG2	GLU	38	13.859	9.503	22.307		
1.00323.99				H					
ATOM	514	N	CYS	39	15.402	7.872	23.315	1.00	
15.84			N						
ATOM	515	CA	CYS	39	16.823	8.134	23.122	1.00	
14.30			C						
ATOM	516	C	CYS	39	17.075	9.646	23.090	1.00	
22.31			C						
ATOM	517	O	CYS	39	16.202	10.408	22.674	1.00	
32.92			O						
ATOM	518	CB	CYS	39	17.283	7.503	21.805	1.00	
18.08			C						
ATOM	519	SG	CYS	39	16.165	8.009	20.476	1.00	

17.41			S					
ATOM	520	HN	CYS	39	14.901	7.396	22.622	1.00
24.87			H					
ATOM	521	HA	CYS	39	17.371	7.687	23.935	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.273	6.427	21.897	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.285	7.834	21.576	1.00
34.91			H					
ATOM	524	N	PRO	40	18.232	10.103	23.517	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.554	11.558	23.524	1.00
47.66			C					
ATOM	526	C	PRO	40	18.850	12.085	22.122	1.00
71.54			C					
ATOM	527	O	PRO	40	19.590	11.469	21.355	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.792	11.642	24.426	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.475	10.326	24.244	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.357	9.299	24.033	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.746	12.117	23.968	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.498	11.766	25.458	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.437	12.455	24.116	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.045	10.071	25.125	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.123	10.362	23.376	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.084	8.834	24.969	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.657	8.557	23.309	1.00
26.94			H					
ATOM	538	N	GLY	41	18.268	13.233	21.803	
1.00105.24				N				
ATOM	539	CA	GLY	41	18.473	13.850	20.497	
1.00147.55				C				
ATOM	540	C	GLY	41	19.934	14.230	20.300	
1.00161.74				C				
ATOM	541	O	GLY	41	20.488	14.070	19.212	
1.00244.37				O				
ATOM	542	HN	GLY	41	17.694	13.674	22.460	
1.00121.79				H				
ATOM	543	HA1	GLY	41	17.865	14.738	20.425	
1.00184.40				H				
ATOM	544	HA2	GLY	41	18.180	13.154	19.727	
1.00157.34				H				
ATOM	545	N	LEU	42	20.550	14.736	21.363	

1.00162.48				N				
ATOM	546	CA	LEU	42	21.952	15.148	21.316	
1.00191.48				C				
ATOM	547	C	LEU	42	22.853	14.022	21.815	
1.00166.66				C				
ATOM	548	O	LEU	42	22.438	13.196	22.628	
1.00251.38				O				
ATOM	549	CB	LEU	42	22.159	16.387	22.188	
1.00307.99				C				
ATOM	550	CG	LEU	42	21.146	17.470	21.802	
1.00452.28				C				
ATOM	551	CD1	LEU	42	21.373	18.707	22.677	
1.00681.24				C				
ATOM	552	CD2	LEU	42	21.315	17.843	20.321	
1.00527.46				C				
ATOM	553	HN	LEU	42	20.049	14.839	22.199	
1.00195.47				H				
ATOM	554	HA	LEU	42	22.226	15.387	20.298	
1.00229.77				H				
ATOM	555	HB1	LEU	42	23.159	16.766	22.043	
1.00342.49				H				
ATOM	556	HB2	LEU	42	22.023	16.121	23.228	
1.00335.33				H				
ATOM	557	HG	LEU	42	20.145	17.097	21.968	
1.00427.79				H				
ATOM	558	HD11	LEU	42	22.357	19.107	22.488	
1.00909.71				H				
ATOM	559	HD12	LEU	42	21.288	18.432	23.718	
1.00706.80				H				
ATOM	560	HD13	LEU	42	20.629	19.455	22.441	
1.00858.82				H				
ATOM	561	HD21	LEU	42	20.895	18.824	20.143	
1.00631.69				H				
ATOM	562	HD22	LEU	42	20.800	17.120	19.707	
1.00628.06				H				
ATOM	563	HD23	LEU	42	22.365	17.851	20.065	
1.00656.75				H				
ATOM	564	N	THR	43	24.085	13.995	21.319	
1.00178.52				N				
ATOM	565	CA	THR	43	25.036	12.965	21.722	
1.00240.84				C				
ATOM	566	C	THR	43	25.387	13.123	23.206	
1.00372.31				C				
ATOM	567	O	THR	43	25.379	14.237	23.726	
1.00500.13				O				
ATOM	568	CB	THR	43	26.307	13.091	20.875	
1.00354.13				C				
ATOM	569	CG2	THR	43	25.937	13.066	19.392	
1.00463.04				C				
ATOM	570	OG1	THR	43	26.957	14.318	21.181	
1.00508.50				O				
ATOM	571	HN	THR	43	24.361	14.677	20.673	

1.00229.59				H				
ATOM	572	HA	THR	H	43	24.593	11.998	21.550
1.00249.90				H				
ATOM	573	HB	THR	H	43	26.972	12.270	21.089
1.00481.58				H				
ATOM	574	HG1	THR	H	43	27.782	14.346	20.695
1.00624.31				H				
ATOM	575	HG21	THR	H	43	25.322	13.922	19.160
1.00650.95				H				
ATOM	576	HG22	THR	H	43	25.393	12.160	19.171
1.00580.73				H				
ATOM	577	HG23	THR	H	43	26.838	13.098	18.796
1.00571.99				H				
ATOM	578	N	PRO	N	44	25.697	12.047	23.900
1.00488.39				N				
ATOM	579	CA	PRO	N	44	26.055	12.115	25.347
1.00760.13				C				
ATOM	580	C	PRO	C	44	27.460	12.677	25.549
1.00735.36				C				
ATOM	581	O	PRO	C	44	27.867	12.974	26.672
1.00999.99				O				
ATOM	582	CB	PRO	O	44	25.963	10.654	25.806
1.00999.99				C				
ATOM	583	CG	PRO	C	44	26.295	9.860	24.586
1.00856.94				C				
ATOM	584	CD	PRO	C	44	25.745	10.657	23.400
1.00548.09				C				
ATOM	585	HA	PRO	C	44	25.334	12.711	25.884
1.00939.00				H				
ATOM	586	HB1	PRO	H	44	24.959	10.426	26.133
1.00999.99				H				
ATOM	587	HB2	PRO	H	44	26.672	10.457	26.599
1.00999.99				H				
ATOM	588	HG1	PRO	H	44	25.823	8.889	24.628
1.00999.99				H				
ATOM	589	HG2	PRO	H	44	27.370	9.747	24.500
1.00853.53				H				
ATOM	590	HD1	PRO	H	44	24.754	10.319	23.140
1.00602.45				H				
ATOM	591	HD2	PRO	H	44	26.411	10.577	22.551
1.00463.32				H				
ATOM	592	N	ILE	N	45	28.193	12.813	24.449
1.00518.33				N				
ATOM	593	CA	ILE	N	45	29.553	13.333	24.508
1.00582.79				C				
ATOM	594	C	ILE	C	45	29.553	14.753	25.059
1.00795.93				C				
ATOM	595	O	ILE	C	45	30.368	15.100	25.915
1.00898.75				O				
ATOM	596	CB	ILE	O	45	30.173	13.334	23.107
1.00474.41				C				
ATOM	597	CG1	ILE	C	45	30.207	11.903	22.539

1.00516.90				C				
ATOM	598	CG2	ILE		45	31.593	13.901	23.171
1.00760.75				C				
ATOM	599	CD1	ILE		45	30.965	10.950	23.474
1.00566.81				C				
ATOM	600	HN	ILE		45	27.815	12.555	23.583
1.00395.72				H				
ATOM	601	HA	ILE		45	30.139	12.710	25.156
1.00711.06				H				
ATOM	602	HB	ILE		45	29.574	13.959	22.460
1.00477.81				H				
ATOM	603	HG11	ILE		45	30.693	11.916	21.575
1.00624.28				H				
ATOM	604	HG12	ILE		45	29.194	11.547	22.418
1.00744.84				H				
ATOM	605	HG21	ILE		45	32.098	13.713	22.236
1.00920.57				H				
ATOM	606	HG22	ILE		45	32.134	13.427	23.975
1.00999.99				H				
ATOM	607	HG23	ILE		45	31.548	14.966	23.346
1.00865.46				H				
ATOM	608	HD11	ILE		45	30.288	10.568	24.225
1.00658.89				H				
ATOM	609	HD12	ILE		45	31.779	11.471	23.956
1.00734.30				H				
ATOM	610	HD13	ILE		45	31.360	10.126	22.899
1.00675.84				H				
ATOM	611	N	ALA		46	28.634	15.568	24.563
1.00999.99				N				
ATOM	612	CA	ALA		46	28.530	16.952	25.008
1.00999.99				C				
ATOM	613	C	ALA		46	27.896	17.024	26.393
1.00999.99				C				
ATOM	614	CB	ALA		46	27.686	17.758	24.017
1.00999.99				C				
ATOM	615	OT1	ALA		46	28.622	17.270	27.343
1.00999.99				O				
ATOM	616	OT2	ALA		46	26.695	16.830	26.485
1.00999.99				O				
ATOM	617	HN	ALA		46	28.014	15.231	23.885
1.00999.99				H				
ATOM	618	HA	ALA		46	29.519	17.382	25.052
1.00999.99				H				
ATOM	619	HB1	ALA		46	28.245	17.903	23.105
1.00999.99				H				
ATOM	620	HB2	ALA		46	27.443	18.717	24.448
1.00999.99				H				
ATOM	621	HB3	ALA		46	26.775	17.219	23.800
1.00999.99				H				
ENDMDL								
TER								
MODEL					19			

ATOM	1	N	GLY	1	27.688	0.229	15.683
1.00999.99			N				
ATOM	2	CA	GLY	1	26.988	-0.149	14.421
1.00999.99			C				
ATOM	3	C	GLY	1	25.732	0.701	14.262
1.00999.99			C				
ATOM	4	O	GLY	1	25.568	1.716	14.938
1.00999.99			O				
ATOM	5	HA1	GLY	1	26.710	-1.191	14.461
1.00999.99			H				
ATOM	6	HA2	GLY	1	27.647	0.018	13.581
1.00999.99			H				
ATOM	7	HT1	GLY	1	27.899	-0.629	16.232
1.00999.99			H				
ATOM	8	HT2	GLY	1	27.076	0.858	16.243
1.00999.99			H				
ATOM	9	HT3	GLY	1	28.575	0.719	15.454
1.00999.99			H				
ATOM	10	N	LEU	2	24.845	0.277	13.361
1.00999.99			N				
ATOM	11	CA	LEU	2	23.595	0.999	13.108
1.00895.59			C				
ATOM	12	C	LEU	2	22.413	0.226	13.685
1.00532.27			C				
ATOM	13	O	LEU	2	22.396	-1.005	13.658
1.00625.21			O				
ATOM	14	CB	LEU	2	23.397	1.174	11.599
1.00999.99			C				
ATOM	15	CG	LEU	2	24.617	1.871	10.986
1.00999.99			C				
ATOM	16	CD1	LEU	2	24.420	1.992	9.473
1.00999.99			C				
ATOM	17	CD2	LEU	2	24.788	3.272	11.599
1.00999.99			C				
ATOM	18	HN	LEU	2	25.036	-0.541	12.854
1.00999.99			H				
ATOM	19	HA	LEU	2	23.635	1.975	13.571
1.00890.87			H				
ATOM	20	HB1	LEU	2	22.517	1.774	11.421
1.00924.07			H				
ATOM	21	HB2	LEU	2	23.268	0.204	11.141
1.00999.99			H				
ATOM	22	HG	LEU	2	25.501	1.280	11.185
1.00999.99			H				
ATOM	23	HD11	LEU	2	24.072	1.048	9.078
1.00999.99			H				
ATOM	24	HD12	LEU	2	25.358	2.253	9.007
1.00999.99			H				
ATOM	25	HD13	LEU	2	23.689	2.759	9.266
1.00999.99			H				
ATOM	26	HD21	LEU	2	25.314	3.192	12.539
1.00999.99			H				

ATOM	27	HD22	LEU	2	23.818	3.719	11.766	
1.00999.99			H					
ATOM	28	HD23	LEU	2	25.358	3.898	10.925	
1.00999.99			H					
ATOM	29	N	CYS	3	21.427	0.951	14.206	
1.00271.28			N					
ATOM	30	CA	CYS	3	20.250	0.309	14.781	
1.00104.50			C					
ATOM	31	C	CYS	3	19.485	-0.451	13.701	1.00
90.98			C					
ATOM	32	O	CYS	3	19.395	0.001	12.560	
1.00207.28			O					
ATOM	33	CB	CYS	3	19.331	1.358	15.415	1.00
37.83			C					
ATOM	34	SG	CYS	3	20.176	2.154	16.804	1.00
81.56			S					
ATOM	35	HN	CYS	3	21.491	1.929	14.200	
1.00296.55			H					
ATOM	36	HA	CYS	3	20.566	-0.387	15.544	
1.00166.45			H					
ATOM	37	HB1	CYS	3	18.430	0.879	15.769	1.00
40.38			H					
ATOM	38	HB2	CYS	3	19.074	2.103	14.677	1.00
98.45			H					
ATOM	39	N	SER	4	18.938	-1.605	14.067	1.00
85.31			N					
ATOM	40	CA	SER	4	18.185	-2.416	13.115	1.00
92.94			C					
ATOM	41	C	SER	4	16.994	-1.637	12.591	1.00
67.37			C					
ATOM	42	O	SER	4	16.689	-1.662	11.399	
1.00102.28			O					
ATOM	43	CB	SER	4	17.663	-3.676	13.799	
1.00123.83			C					
ATOM	44	OG	SER	4	17.057	-4.519	12.828	
1.00178.89			O					
ATOM	45	HN	SER	4	19.042	-1.917	14.990	
1.00163.03			H					
ATOM	46	HA	SER	4	18.825	-2.697	12.293	
1.00129.78			H					
ATOM	47	HB1	SER	4	16.926	-3.389	14.545	
1.00105.26			H					
ATOM	48	HB2	SER	4	18.474	-4.201	14.276	
1.00156.87			H					
ATOM	49	HG	SER	4	17.749	-4.855	12.254	
1.00218.16			H					
ATOM	50	N	GLU	5	16.310	-0.966	13.509	1.00
41.67			N					
ATOM	51	CA	GLU	5	15.125	-0.193	13.169	1.00
41.21			C					
ATOM	52	C	GLU	5	14.990	1.010	14.096	1.00
41.92			C					

ATOM	53	O	GLU	5	15.939	1.380	14.787	1.00
74.72			O					
ATOM	54	CB	GLU	5	13.893	-1.084	13.290	1.00
49.24			C					
ATOM	55	CG	GLU	5	13.828	-1.654	14.701	1.00
55.48			C					
ATOM	56	CD	GLU	5	12.745	-2.726	14.785	1.00
92.06			C					
ATOM	57	OE1	GLU	5	12.109	-2.978	13.775	
1.00206.49			O					
ATOM	58	OE2	GLU	5	12.568	-3.279	15.858	
1.00197.24			O1-					
ATOM	59	HN	GLU	5	16.601	-1.007	14.443	1.00
45.52			H					
ATOM	60	HA	GLU	5	15.202	0.151	12.157	1.00
60.63			H					
ATOM	61	HB1	GLU	5	13.959	-1.893	12.580	1.00
61.59			H					
ATOM	62	HB2	GLU	5	13.010	-0.505	13.096	1.00
63.66			H					
ATOM	63	HG1	GLU	5	13.603	-0.862	15.399	1.00
58.03			H					
ATOM	64	HG2	GLU	5	14.783	-2.087	14.944	1.00
57.77			H					
ATOM	65	N	ASN	6	13.810	1.618	14.106	1.00
50.73			N					
ATOM	66	CA	ASN	6	13.573	2.778	14.955	1.00
71.04			C					
ATOM	67	C	ASN	6	13.786	2.411	16.419	1.00
65.17			C					
ATOM	68	O	ASN	6	14.347	3.189	17.191	1.00
94.86			O					
ATOM	69	CB	ASN	6	12.146	3.290	14.756	1.00
94.83			C					
ATOM	70	CG	ASN	6	12.013	3.947	13.387	
1.00160.94			C					
ATOM	71	ND2	ASN	6	10.830	4.086	12.852	
1.00244.88			N					
ATOM	72	OD1	ASN	6	13.013	4.342	12.787	
1.00219.73			O					
ATOM	73	HN	ASN	6	13.088	1.282	13.535	1.00
72.81			H					
ATOM	74	HA	ASN	6	14.267	3.560	14.684	1.00
96.02			H					
ATOM	75	HB1	ASN	6	11.914	4.013	15.523	
1.00111.09			H					
ATOM	76	HB2	ASN	6	11.456	2.461	14.824	1.00
98.13			H					
ATOM	77	HD21	ASN	6	10.036	3.770	13.331	
1.00272.43			H					
ATOM	78	HD22	ASN	6	10.736	4.508	11.972	
1.00336.78			H					

ATOM	79	N	GLY	7	13.341	1.211	16.793	1.00
51.80			N					
ATOM	80	CA	GLY	7	13.487	0.726	18.168	1.00
71.47			C					
ATOM	81	C	GLY	7	14.129	-0.655	18.182	1.00
41.04			C					
ATOM	82	O	GLY	7	13.452	-1.665	18.372	1.00
44.54			O					
ATOM	83	HN	GLY	7	12.908	0.636	16.129	1.00
45.49			H					
ATOM	84	HA1	GLY	7	12.516	0.665	18.626	
1.00103.52								H
ATOM	85	HA2	GLY	7	14.105	1.411	18.737	
1.00108.67								H
ATOM	86	N	ASP	8	15.439	-0.689	17.978	1.00
27.00			N					
ATOM	87	CA	ASP	8	16.171	-1.951	17.963	1.00
14.15			C					
ATOM	88	C	ASP	8	16.052	-2.656	19.308	1.00
9.37			C					
ATOM	89	O	ASP	8	15.837	-3.866	19.370	1.00
14.61			O					
ATOM	90	CB	ASP	8	17.646	-1.698	17.648	1.00
15.06			C					
ATOM	91	CG	ASP	8	18.388	-3.024	17.529	1.00
21.22			C					
ATOM	92	OD1	ASP	8	19.238	-3.282	18.366	
1.00119.56								O
ATOM	93	OD2	ASP	8	18.097	-3.764	16.604	
1.00133.27								O1-
ATOM	94	HN	ASP	8	15.921	0.150	17.831	1.00
35.63			H					
ATOM	95	HA	ASP	8	15.756	-2.586	17.200	1.00
20.92			H					
ATOM	96	HB1	ASP	8	18.086	-1.112	18.441	1.00
29.39			H					
ATOM	97	HB2	ASP	8	17.726	-1.157	16.716	1.00
44.14			H					
ATOM	98	N	CYS	9	16.192	-1.889	20.380	1.00
5.93			N					
ATOM	99	CA	CYS	9	16.097	-2.446	21.724	1.00
7.54			C					
ATOM	100	C	CYS	9	14.711	-3.034	21.956	1.00
14.60			C					
ATOM	101	O	CYS	9	14.564	-4.108	22.538	1.00
25.78			O					
ATOM	102	CB	CYS	9	16.383	-1.361	22.752	1.00
6.63			C					
ATOM	103	SG	CYS	9	18.134	-0.953	22.669	1.00
10.91			S					
ATOM	104	HN	CYS	9	16.360	-0.932	20.264	1.00
6.51			H					

ATOM	105	HA	CYS	9	16.838	-3.220	21.832	1.00
11.12			H					
ATOM	106	HB1	CYS	9	16.146	-1.719	23.741	1.00
11.28			H					
ATOM	107	HB2	CYS	9	15.794	-0.484	22.531	1.00
5.04			H					
ATOM	108	N	ALA	10	13.700	-2.316	21.484	1.00
16.26			N					
ATOM	109	CA	ALA	10	12.317	-2.755	21.623	1.00
32.04			C					
ATOM	110	C	ALA	10	11.401	-1.864	20.785	1.00
45.47			C					
ATOM	111	O	ALA	10	11.811	-0.797	20.332	
1.00119.04			O					
ATOM	112	CB	ALA	10	11.892	-2.712	23.094	1.00
30.10			C					
ATOM	113	HN	ALA	10	13.890	-1.472	21.024	1.00
12.81			H					
ATOM	114	HA	ALA	10	12.237	-3.771	21.265	1.00
47.14			H					
ATOM	115	HB1	ALA	10	12.723	-3.012	23.717	1.00
84.37			H					
ATOM	116	HB2	ALA	10	11.064	-3.388	23.252	
1.00118.20			H					
ATOM	117	HB3	ALA	10	11.591	-1.709	23.357	
1.00117.32			H					
ATOM	118	N	ALA	11	10.166	-2.306	20.580	1.00
30.62			N					
ATOM	119	CA	ALA	11	9.218	-1.530	19.790	1.00
35.24			C					
ATOM	120	C	ALA	11	8.972	-0.164	20.428	1.00
22.78			C					
ATOM	121	O	ALA	11	8.916	0.853	19.736	1.00
53.33			O					
ATOM	122	CB	ALA	11	7.892	-2.286	19.677	1.00
60.49			C					
ATOM	123	HN	ALA	11	9.890	-3.165	20.963	1.00
50.37			H					
ATOM	124	HA	ALA	11	9.621	-1.386	18.800	1.00
41.70			H					
ATOM	125	HB1	ALA	11	7.586	-2.626	20.656	
1.00157.06			H					
ATOM	126	HB2	ALA	11	8.018	-3.137	19.024	
1.00148.83			H					
ATOM	127	HB3	ALA	11	7.136	-1.629	19.271	
1.00137.06			H					
ATOM	128	N	ASP	12	8.829	-0.146	21.750	1.00
18.98			N					
ATOM	129	CA	ASP	12	8.590	1.102	22.470	1.00
31.05			C					
ATOM	130	C	ASP	12	9.896	1.863	22.693	1.00
22.98			C					

ATOM	131	O	ASP	12	9.914	3.094	22.700	1.00
37.14		O						
ATOM	132	CB	ASP	12	7.937	0.805	23.821	1.00
48.35		C						
ATOM	133	CG	ASP	12	6.515	0.295	23.613	
1.00104.83				C				
ATOM	134	OD1	ASP	12	5.955	-0.242	24.554	
1.00258.73				O				
ATOM	135	OD2	ASP	12	6.008	0.450	22.514	
1.00213.46				O1-				
ATOM	136	HN	ASP	12	8.883	-0.987	22.251	1.00
36.19		H						
ATOM	137	HA	ASP	12	7.920	1.719	21.891	1.00
49.76		H						
ATOM	138	HB1	ASP	12	7.910	1.708	24.412	1.00
95.71		H						
ATOM	139	HB2	ASP	12	8.514	0.053	24.341	1.00
54.37		H						
ATOM	140	N	GLU	13	10.982	1.121	22.882	1.00
17.60		N						
ATOM	141	CA	GLU	13	12.287	1.733	23.117	1.00
12.01		C						
ATOM	142	C	GLU	13	12.863	2.322	21.831	1.00
10.07		C						
ATOM	143	O	GLU	13	12.481	1.929	20.728	1.00
12.81		O						
ATOM	144	CB	GLU	13	13.252	0.694	23.683	1.00
11.74		C						
ATOM	145	CG	GLU	13	12.753	0.227	25.053	1.00
13.49		C						
ATOM	146	CD	GLU	13	12.899	1.351	26.072	
1.00142.36				C				
ATOM	147	OE1	GLU	13	13.599	2.304	25.775	
1.00339.06				O				
ATOM	148	OE2	GLU	13	12.308	1.243	27.133	
1.00335.28				O1-				
ATOM	149	HN	GLU	13	10.904	0.145	22.873	1.00
28.36		H						
ATOM	150	HA	GLU	13	12.172	2.526	23.841	1.00
13.06		H						
ATOM	151	HB1	GLU	13	14.231	1.133	23.790	1.00
13.76		H						
ATOM	152	HB2	GLU	13	13.308	-0.150	23.011	1.00
9.94		H						
ATOM	153	HG1	GLU	13	13.330	-0.626	25.375	1.00
66.02		H						
ATOM	154	HG2	GLU	13	11.711	-0.051	24.979	1.00
56.23		H						
ATOM	155	N	CYS	14	13.788	3.274	21.986	1.00
9.12		N						
ATOM	156	CA	CYS	14	14.429	3.931	20.842	1.00
10.69		C						

ATOM	157	C	CYS	14	15.874	3.467	20.697	1.00
9.56		C						
ATOM	158	O	CYS	14	16.503	3.057	21.670	1.00
13.62		O						
ATOM	159	CB	CYS	14	14.403	5.448	21.035	1.00
13.96		C						
ATOM	160	SG	CYS	14	15.364	6.239	19.719	1.00
42.96		S						
ATOM	161	HN	CYS	14	14.048	3.540	22.894	1.00
9.76		H						
ATOM	162	HA	CYS	14	13.890	3.688	19.936	1.00
15.54		H						
ATOM	163	HB1	CYS	14	14.832	5.696	21.994	1.00
50.72		H						
ATOM	164	HB2	CYS	14	13.382	5.799	20.996	1.00
46.13		H						
ATOM	165	N	CYS	15	16.397	3.540	19.473	1.00
9.60		N						
ATOM	166	CA	CYS	15	17.777	3.134	19.197	1.00
9.28		C						
ATOM	167	C	CYS	15	18.387	4.070	18.164	1.00
9.92		C						
ATOM	168	O	CYS	15	17.807	4.290	17.101	1.00
13.31		O						
ATOM	169	CB	CYS	15	17.805	1.700	18.658	1.00
12.90		C						
ATOM	170	SG	CYS	15	19.521	1.161	18.440	1.00
39.11		S						
ATOM	171	HN	CYS	15	15.847	3.883	18.737	1.00
13.12		H						
ATOM	172	HA	CYS	15	18.360	3.182	20.106	1.00
8.26		H						
ATOM	173	HB1	CYS	15	17.293	1.664	17.708	1.00
24.82		H						
ATOM	174	HB2	CYS	15	17.309	1.044	19.358	1.00
27.31		H						
ATOM	175	N	VAL	16	19.557	4.622	18.472	1.00
9.56		N						
ATOM	176	CA	VAL	16	20.219	5.531	17.544	1.00
11.99		C						
ATOM	177	C	VAL	16	21.726	5.460	17.736	1.00
7.73		C						
ATOM	178	O	VAL	16	22.225	5.581	18.855	1.00
8.83		O						
ATOM	179	CB	VAL	16	19.721	6.958	17.775	1.00
18.37		C						
ATOM	180	CG1	VAL	16	20.155	7.441	19.160	1.00
39.61		C						
ATOM	181	CG2	VAL	16	20.300	7.879	16.703	
1.00115.21								
ATOM	182	HN	VAL	16	19.987	4.415	19.334	1.00
9.76		H						

ATOM	183	HA	VAL	16	19.985	5.239	16.529	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.641	6.973	17.716	1.00
52.63			H					
ATOM	185	HG11	VAL	16	19.591	8.323	19.427	
1.00128.07			H					
ATOM	186	HG12	VAL	16	21.209	7.679	19.145	
1.00154.13			H					
ATOM	187	HG13	VAL	16	19.971	6.663	19.886	
1.00135.74			H					
ATOM	188	HG21	VAL	16	19.978	7.541	15.729	
1.00229.05			H					
ATOM	189	HG22	VAL	16	21.378	7.858	16.754	
1.00261.82			H					
ATOM	190	HG23	VAL	16	19.951	8.887	16.868	
1.00210.07			H					
ATOM	191	N	ASP	17	22.448	5.247	16.637	1.00
14.34			N					
ATOM	192	CA	ASP	17	23.907	5.142	16.692	1.00
11.90			C					
ATOM	193	C	ASP	17	24.575	6.370	16.090	1.00
13.15			C					
ATOM	194	O	ASP	17	24.428	6.656	14.902	1.00
25.96			O					
ATOM	195	CB	ASP	17	24.362	3.892	15.941	1.00
20.80			C					
ATOM	196	CG	ASP	17	23.758	2.651	16.593	1.00
28.72			C					
ATOM	197	OD1	ASP	17	23.229	1.823	15.872	
1.00135.42			O					
ATOM	198	OD2	ASP	17	23.835	2.549	17.806	
1.00114.17			O1-					
ATOM	199	HN	ASP	17	21.993	5.147	15.775	1.00
28.29			H					
ATOM	200	HA	ASP	17	24.220	5.053	17.719	1.00
10.49			H					
ATOM	201	HB1	ASP	17	25.439	3.826	15.978	1.00
22.42			H					
ATOM	202	HB2	ASP	17	24.040	3.952	14.912	1.00
29.52			H					
ATOM	203	N	THR	18	25.333	7.077	16.926	1.00
11.55			N					
ATOM	204	CA	THR	18	26.060	8.267	16.491	1.00
17.10			C					
ATOM	205	C	THR	18	27.530	7.923	16.306	1.00
10.63			C					
ATOM	206	O	THR	18	27.988	6.876	16.761	1.00
6.49			O					
ATOM	207	CB	THR	18	25.925	9.381	17.533	1.00
28.52			C					
ATOM	208	CG2	THR	18	24.511	9.955	17.496	1.00
45.38			C					

ATOM	209	OG1	THR	18	26.197	8.858	18.823	1.00
26.49			O					
ATOM	210	HN	THR	18	25.418	6.781	17.856	1.00
13.96			H					
ATOM	211	HA	THR	18	25.658	8.617	15.550	1.00
26.43			H					
ATOM	212	HB	THR	18	26.630	10.166	17.309	1.00
37.43			H					
ATOM	213	HG1	THR	18	25.702	8.040	18.921	1.00
71.62			H					
ATOM	214	HG21	THR	18	24.276	10.266	16.489	
1.00100.44								H
ATOM	215	HG22	THR	18	24.452	10.806	18.158	
1.00129.42								H
ATOM	216	HG23	THR	18	23.807	9.200	17.814	
1.00156.21								H
ATOM	217	N	VAL	19	28.264	8.814	15.653	1.00
16.32			N					
ATOM	218	CA	VAL	19	29.672	8.610	15.422	1.00
13.34			C					
ATOM	219	C	VAL	19	30.236	9.792	14.667	1.00
25.88			C					
ATOM	220	O	VAL	19	29.846	10.089	13.538	1.00
42.11			O					
ATOM	221	CB	VAL	19	29.941	7.326	14.637	1.00
15.48			C					
ATOM	222	CG1	VAL	19	29.094	7.297	13.360	1.00
29.06			C					
ATOM	223	CG2	VAL	19	31.431	7.276	14.270	1.00
20.67			C					
ATOM	224	HN	VAL	19	27.856	9.638	15.332	1.00
26.89			H					
ATOM	225	HA	VAL	19	30.170	8.540	16.378	1.00
8.08			H					
ATOM	226	HB	VAL	19	29.695	6.478	15.252	1.00
11.49			H					
ATOM	227	HG11	VAL	19	29.529	7.953	12.621	
1.00137.43								H
ATOM	228	HG12	VAL	19	28.089	7.625	13.584	1.00
93.29			H					
ATOM	229	HG13	VAL	19	29.063	6.289	12.973	
1.00108.69								H
ATOM	230	HG21	VAL	19	32.024	7.577	15.125	1.00
99.42			H					
ATOM	231	HG22	VAL	19	31.621	7.956	13.451	
1.00111.36								H
ATOM	232	HG23	VAL	19	31.700	6.273	13.977	1.00
77.11			H					
ATOM	233	N	PHE	20	31.150	10.459	15.322	1.00
24.58			N					
ATOM	234	CA	PHE	20	31.806	11.629	14.769	1.00
40.34			C					

ATOM	235	C	PHE	20	33.134	11.251	14.127	1.00
40.37			C					
ATOM	236	O	PHE	20	33.328	11.452	12.928	1.00
66.02			O					
ATOM	237	CB	PHE	20	32.027	12.669	15.884	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.191	11.996	17.240	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.115	11.308	17.837	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.416	12.081	17.915	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.277	10.709	19.090	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.573	11.478	19.168	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.505	10.794	19.755	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.382	10.156	16.215	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.171	12.067	14.008	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.181	13.315	15.920	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.906	13.261	15.667	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.162	11.231	17.328	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.243	12.608	17.465	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.454	10.183	19.545	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.521	11.543	19.682	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.628	10.330	20.723	1.00
52.66			H					
ATOM	253	N	GLU	21	34.056	10.732	14.932	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.368	10.366	14.450	1.00
56.16			C					
ATOM	255	C	GLU	21	35.592	8.862	14.544	1.00
58.61			C					
ATOM	256	O	GLU	21	34.670	8.099	14.838	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.371	11.102	15.308	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.298	10.579	16.739	
1.00193.56			C					
ATOM	259	CD	GLU	21	37.080	11.500	17.670	
1.00304.62			C					
ATOM	260	OE1	GLU	21	37.019	11.289	18.869	
1.00451.81			O					

ATOM	261	OE2	GLU	21	37.728	12.404	17.168	
1.00442.88				O1-				
ATOM	262	HN	GLU	21	33.868	10.620	15.883	1.00
50.82			H					
ATOM	263	HA	GLU	21	35.492	10.679	13.422	1.00
85.72			H					
ATOM	264	HB1	GLU	21	36.126	12.153	15.301	1.00
46.37			H					
ATOM	265	HB2	GLU	21	37.354	10.952	14.915	
1.00131.81			H					
ATOM	266	HG1	GLU	21	36.717	9.590	16.775	
1.00314.91			H					
ATOM	267	HG2	GLU	21	35.270	10.537	17.052	
1.00266.92			H					
ATOM	268	N	GLY	22	36.825	8.444	14.277	1.00
86.70			N					
ATOM	269	CA	GLY	22	37.181	7.023	14.314	
1.00104.66			C					
ATOM	270	C	GLY	22	37.774	6.620	15.663	1.00
71.50			C					
ATOM	271	O	GLY	22	37.923	5.433	15.953	1.00
89.87			O					
ATOM	272	HN	GLY	22	37.508	9.109	14.043	
1.00214.64			H					
ATOM	273	HA1	GLY	22	37.908	6.825	13.542	
1.00152.47			H					
ATOM	274	HA2	GLY	22	36.299	6.425	14.126	
1.00118.15			H					
ATOM	275	N	ASP	23	38.122	7.609	16.479	1.00
44.68			N					
ATOM	276	CA	ASP	23	38.711	7.334	17.787	1.00
43.33			C					
ATOM	277	C	ASP	23	37.750	6.544	18.669	1.00
37.55			C					
ATOM	278	O	ASP	23	38.162	5.633	19.388	1.00
61.37			O					
ATOM	279	CB	ASP	23	39.072	8.645	18.486	1.00
40.74			C					
ATOM	280	CG	ASP	23	40.258	9.301	17.786	
1.00141.86			C					
ATOM	281	OD1	ASP	23	40.507	10.465	18.053	
1.00328.18			O					
ATOM	282	OD2	ASP	23	40.898	8.631	16.994	
1.00304.58			O1-					
ATOM	283	HN	ASP	23	37.993	8.536	16.193	1.00
40.86			H					
ATOM	284	HA	ASP	23	39.609	6.758	17.649	1.00
72.12			H					
ATOM	285	HB1	ASP	23	39.332	8.443	19.513	1.00
94.15			H					
ATOM	286	HB2	ASP	23	38.222	9.311	18.459	1.00
93.26			H					

ATOM	287	N	MET	24	36.474	6.903	18.619	1.00
23.24			N					
ATOM	288	CA	MET	24	35.466	6.225	19.431	1.00
32.50			C					
ATOM	289	C	MET	24	34.075	6.392	18.824	1.00
25.13			C					
ATOM	290	O	MET	24	33.805	7.370	18.125	1.00
54.40			O					
ATOM	291	CB	MET	24	35.477	6.791	20.853	1.00
47.36			C					
ATOM	292	CG	MET	24	34.443	6.054	21.707	
1.00151.73			C					
ATOM	293	SD	MET	24	34.603	6.576	23.434	
1.00209.23			S					
ATOM	294	CE	MET	24	33.987	8.268	23.234	
1.00243.29			C					
ATOM	295	HN	MET	24	36.207	7.641	18.033	1.00
17.32			H					
ATOM	296	HA	MET	24	35.700	5.171	19.476	1.00
48.94			H					
ATOM	297	HB1	MET	24	35.233	7.842	20.822	
1.00124.40			H					
ATOM	298	HB2	MET	24	36.460	6.662	21.283	
1.00166.96			H					
ATOM	299	HG1	MET	24	34.612	4.990	21.637	
1.00331.71			H					
ATOM	300	HG2	MET	24	33.450	6.284	21.351	
1.00302.30			H					
ATOM	301	HE1	MET	24	33.643	8.639	24.189	
1.00340.44			H					
ATOM	302	HE2	MET	24	33.168	8.276	22.533	
1.00373.88			H					
ATOM	303	HE3	MET	24	34.783	8.899	22.863	
1.00386.81			H					
ATOM	304	N	VAL	25	33.195	5.427	19.098	1.00
22.44			N					
ATOM	305	CA	VAL	25	31.823	5.458	18.583	1.00
15.37			C					
ATOM	306	C	VAL	25	30.821	5.579	19.727	1.00
17.47			C					
ATOM	307	O	VAL	25	30.993	4.983	20.790	1.00
29.52			O					
ATOM	308	CB	VAL	25	31.530	4.190	17.777	1.00
23.36			C					
ATOM	309	CG1	VAL	25	30.045	4.165	17.371	1.00
58.39			C					
ATOM	310	CG2	VAL	25	32.410	4.179	16.523	1.00
55.25			C					
ATOM	311	HN	VAL	25	33.474	4.676	19.662	1.00
48.11			H					
ATOM	312	HA	VAL	25	31.702	6.317	17.931	1.00
9.25			H					

ATOM	313	HB	VAL	25	31.751	3.322	18.382	1.00
52.45			H					
ATOM	314	HG11	VAL	25	29.459	3.768	18.186	
1.00171.07			H					
ATOM	315	HG12	VAL	25	29.915	3.542	16.499	
1.00166.22			H					
ATOM	316	HG13	VAL	25	29.712	5.170	17.149	
1.00134.76			H					
ATOM	317	HG21	VAL	25	33.446	4.074	16.811	
1.00141.88			H					
ATOM	318	HG22	VAL	25	32.278	5.104	15.983	
1.00184.50			H					
ATOM	319	HG23	VAL	25	32.126	3.349	15.891	
1.00133.90			H					
ATOM	320	N	THR	26	29.778	6.372	19.494	1.00
13.60			N					
ATOM	321	CA	THR	26	28.735	6.607	20.494	1.00
21.19			C					
ATOM	322	C	THR	26	27.410	5.965	20.079	1.00
16.55			C					
ATOM	323	O	THR	26	26.958	6.126	18.946	1.00
11.43			O					
ATOM	324	CB	THR	26	28.545	8.114	20.651	1.00
27.07			C					
ATOM	325	CG2	THR	26	27.365	8.402	21.581	1.00
44.39			C					
ATOM	326	OG1	THR	26	29.730	8.681	21.191	1.00
34.75			O					
ATOM	327	HN	THR	26	29.711	6.823	18.626	1.00
10.81			H					
ATOM	328	HA	THR	26	29.042	6.197	21.446	1.00
33.16			H					
ATOM	329	HB	THR	26	28.351	8.547	19.678	1.00
20.60			H					
ATOM	330	HG1	THR	26	30.262	7.968	21.551	1.00
77.72			H					
ATOM	331	HG21	THR	26	27.442	7.783	22.463	
1.00126.99			H					
ATOM	332	HG22	THR	26	26.439	8.183	21.069	
1.00108.32			H					
ATOM	333	HG23	THR	26	27.379	9.443	21.870	
1.00151.99			H					
ATOM	334	N	ARG	27	26.789	5.242	21.016	1.00
22.38			N					
ATOM	335	CA	ARG	27	25.504	4.580	20.762	1.00
20.21			C					
ATOM	336	C	ARG	27	24.543	4.832	21.922	1.00
16.96			C					
ATOM	337	O	ARG	27	24.973	4.964	23.068	1.00
20.06			O					
ATOM	338	CB	ARG	27	25.717	3.074	20.594	1.00
22.14			C					

ATOM	339	CG	ARG	27	26.631	2.814	19.394	
	1.00124.30							C
ATOM	340	CD	ARG	27	27.013	1.333	19.355	
	1.00109.38							C
ATOM	341	NE	ARG	27	27.805	0.985	20.527	
	1.00227.73							N
ATOM	342	CZ	ARG	27	28.179	-0.270	20.755	
	1.00426.12							C
ATOM	343	NH1	ARG	27	28.885	-0.559	21.813	
	1.00767.09							N1+
ATOM	344	NH2	ARG	27	27.839	-1.213	19.919	
	1.00581.78							N
ATOM	345	HN	ARG	27	27.199	5.159	21.903	1.00
	30.75							H
ATOM	346	HA	ARG	27	25.067	4.975	19.858	1.00
	23.13							H
ATOM	347	HB1	ARG	27	24.765	2.592	20.428	1.00
	87.46							H
ATOM	348	HB2	ARG	27	26.172	2.672	21.488	
	1.00103.36							H
ATOM	349	HG1	ARG	27	27.525	3.411	19.486	
	1.00281.97							H
ATOM	350	HG2	ARG	27	26.114	3.077	18.483	
	1.00276.19							H
ATOM	351	HD1	ARG	27	27.587	1.137	18.461	
	1.00183.60							H
ATOM	352	HD2	ARG	27	26.116	0.733	19.340	
	1.00142.93							H
ATOM	353	HE	ARG	27	28.065	1.687	21.160	
	1.00372.53							H
ATOM	354	HH11	ARG	27	29.145	0.165	22.453	
	1.00910.59							H
ATOM	355	HH12	ARG	27	29.167	-1.502	21.985	
	1.00999.99							H
ATOM	356	HH21	ARG	27	27.298	-0.991	19.108	
	1.00532.54							H
ATOM	357	HH22	ARG	27	28.120	-2.157	20.090	
	1.00948.84							H
ATOM	358	N	SER	28	23.238	4.900	21.628	1.00
	14.60							N
ATOM	359	CA	SER	28	22.239	5.140	22.673	1.00
	14.92							C
ATOM	360	C	SER	28	21.016	4.255	22.465	1.00
	12.12							C
ATOM	361	O	SER	28	20.648	3.940	21.333	1.00
	13.41							O
ATOM	362	CB	SER	28	21.817	6.610	22.661	1.00
	23.26							C
ATOM	363	OG	SER	28	22.945	7.425	22.954	
	1.00146.32							O
ATOM	364	HN	SER	28	22.941	4.788	20.696	1.00
	15.23							H

ATOM	365	HA	SER	28	22.668	4.912	23.640	1.00
15.44			H					
ATOM	366	HB1	SER	28	21.044	6.767	23.401	1.00
88.73			H					
ATOM	367	HB2	SER	28	21.438	6.870	21.688	
1.00124.68								H
ATOM	368	HG	SER	28	23.093	7.396	23.902	
1.00242.47								H
ATOM	369	N	CYS	29	20.387	3.862	23.568	1.00
10.48			N					
ATOM	370	CA	CYS	29	19.200	3.019	23.505	1.00
9.97			C					
ATOM	371	C	CYS	29	18.592	2.872	24.898	1.00
11.60			C					
ATOM	372	O	CYS	29	19.215	2.311	25.799	1.00
15.64			O					
ATOM	373	CB	CYS	29	19.563	1.637	22.934	1.00
9.52			C					
ATOM	374	SG	CYS	29	18.154	0.958	22.043	1.00
10.40			S					
ATOM	375	HN	CYS	29	20.724	4.152	24.441	1.00
11.10			H					
ATOM	376	HA	CYS	29	18.477	3.488	22.856	1.00
11.08			H					
ATOM	377	HB1	CYS	29	19.824	0.956	23.736	1.00
9.33			H					
ATOM	378	HB2	CYS	29	20.397	1.729	22.259	1.00
10.78			H					
ATOM	379	N	GLU	30	17.376	3.381	25.071	1.00
13.52			N					
ATOM	380	CA	GLU	30	16.705	3.300	26.365	1.00
17.41			C					
ATOM	381	C	GLU	30	16.074	1.925	26.558	1.00
10.81			C					
ATOM	382	O	GLU	30	15.721	1.252	25.592	1.00
23.22			O					
ATOM	383	CB	GLU	30	15.627	4.380	26.462	1.00
37.83			C					
ATOM	384	CG	GLU	30	16.278	5.760	26.339	
1.00108.13								C
ATOM	385	CD	GLU	30	17.167	6.027	27.548	
1.00240.52								C
ATOM	386	OE1	GLU	30	18.033	6.881	27.446	
1.00422.56								O
ATOM	387	OE2	GLU	30	16.968	5.377	28.561	
1.00410.81								O1-
ATOM	388	HN	GLU	30	16.923	3.819	24.320	1.00
15.61			H					
ATOM	389	HA	GLU	30	17.431	3.462	27.148	1.00
24.60			H					
ATOM	390	HB1	GLU	30	15.125	4.306	27.415	1.00
72.67			H					

ATOM	391	HB2	GLU	30	14.911	4.248	25.664	1.00
56.47		H						
ATOM	392	HG1	GLU	30	15.509	6.514	26.287	
1.00196.66		H						
ATOM	393	HG2	GLU	30	16.876	5.793	25.440	
1.00140.67		H						
ATOM	394	N	LYS	31	15.937	1.513	27.819	1.00
11.96		N						
ATOM	395	CA	LYS	31	15.345	0.214	28.147	1.00
11.40		C						
ATOM	396	C	LYS	31	14.060	0.407	28.940	1.00
10.99		C						
ATOM	397	O	LYS	31	13.957	1.318	29.762	1.00
12.86		O						
ATOM	398	CB	LYS	31	16.332	-0.611	28.975	1.00
21.40		C						
ATOM	399	CG	LYS	31	17.585	-0.894	28.144	1.00
57.81		C						
ATOM	400	CD	LYS	31	18.568	-1.726	28.969	
1.00115.52		C						
ATOM	401	CE	LYS	31	19.839	-1.973	28.154	
1.00250.23		C						
ATOM	402	NZ	LYS	31	19.503	-2.764	26.936	
1.00462.10		N1+						
ATOM	403	HN	LYS	31	16.240	2.097	28.546	1.00
26.13		H						
ATOM	404	HA	LYS	31	15.119	-0.326	27.237	1.00
13.87		H						
ATOM	405	HB1	LYS	31	15.870	-1.547	29.256	1.00
37.63		H						
ATOM	406	HB2	LYS	31	16.603	-0.062	29.863	1.00
47.19		H						
ATOM	407	HG1	LYS	31	18.052	0.039	27.867	
1.00126.32		H						
ATOM	408	HG2	LYS	31	17.311	-1.438	27.252	
1.00114.19		H						
ATOM	409	HD1	LYS	31	18.116	-2.674	29.221	
1.00198.45		H						
ATOM	410	HD2	LYS	31	18.818	-1.194	29.875	
1.00200.14		H						
ATOM	411	HE1	LYS	31	20.551	-2.520	28.753	
1.00374.64		H						
ATOM	412	HE2	LYS	31	20.267	-1.026	27.861	
1.00403.27		H						
ATOM	413	HZ1	LYS	31	19.970	-2.343	26.108	
1.00627.38		H						
ATOM	414	HZ2	LYS	31	18.471	-2.758	26.793	
1.00622.26		H						
ATOM	415	HZ3	LYS	31	19.831	-3.743	27.057	
1.00619.20		H						
ATOM	416	N	THR	32	13.079	-0.451	28.685	1.00
15.51		N						

ATOM	417	CA	THR	32	11.803	-0.360	29.381	1.00
22.44			C					
ATOM	418	C	THR	32	11.944	-0.845	30.819	1.00
26.60			C					
ATOM	419	O	THR	32	12.396	-1.963	31.068	1.00
57.43			O					
ATOM	420	CB	THR	32	10.751	-1.200	28.649	1.00
56.28			C					
ATOM	421	CG2	THR	32	9.399	-1.068	29.354	
1.00102.70			C					
ATOM	422	OG1	THR	32	10.631	-0.740	27.311	
1.00111.17			O					
ATOM	423	HN	THR	32	13.216	-1.155	28.018	1.00
18.79			H					
ATOM	424	HA	THR	32	11.481	0.671	29.388	1.00
19.67			H					
ATOM	425	HB	THR	32	11.051	-2.235	28.649	1.00
84.25			H					
ATOM	426	HG1	THR	32	10.676	-1.503	26.730	
1.00205.03			H					
ATOM	427	HG21	THR	32	9.470	-1.472	30.354	
1.00220.71			H					
ATOM	428	HG22	THR	32	8.651	-1.613	28.800	
1.00174.67			H					
ATOM	429	HG23	THR	32	9.122	-0.025	29.407	
1.00217.44			H					
ATOM	430	N	THR	33	11.553	0.006	31.761	1.00
22.47			N					
ATOM	431	CA	THR	33	11.634	-0.334	33.178	1.00
41.60			C					
ATOM	432	C	THR	33	10.602	0.428	33.964	1.00
38.03			C					
ATOM	433	O	THR	33	10.859	1.521	34.469	1.00
52.73			O					
ATOM	434	CB	THR	33	13.031	-0.032	33.725	1.00
63.25			C					
ATOM	435	CG2	THR	33	14.048	-0.997	33.111	
1.00121.65			C					
ATOM	436	OG1	THR	33	13.386	1.304	33.396	1.00
96.20			O					
ATOM	437	HN	THR	33	11.202	0.882	31.498	1.00
23.82			H					
ATOM	438	HA	THR	33	11.422	-1.377	33.312	1.00
67.12			H					
ATOM	439	HB	THR	33	13.031	-0.150	34.797	
1.00107.59			H					
ATOM	440	HG1	THR	33	13.928	1.651	34.109	
1.00176.27			H					
ATOM	441	HG21	THR	33	13.663	-2.004	33.158	
1.00255.23			H					
ATOM	442	HG22	THR	33	14.975	-0.941	33.663	
1.00245.37			H					

ATOM	443	HG23	THR	33	14.226	-0.726	32.081	
1.00185.78								H
ATOM	444	N	GLY	34	9.432	-0.175	34.077	1.00
40.93			N					
ATOM	445	CA	GLY	34	8.363	0.437	34.822	1.00
45.59			C					
ATOM	446	C	GLY	34	7.786	1.630	34.070	1.00
40.97			C					
ATOM	447	O	GLY	34	6.571	1.826	34.034	1.00
82.17			O					
ATOM	448	HN	GLY	34	9.295	-1.052	33.664	1.00
54.00			H					
ATOM	449	HA1	GLY	34	8.765	0.765	35.759	1.00
54.41			H					
ATOM	450	HA2	GLY	34	7.585	-0.292	34.997	1.00
62.09			H					
ATOM	451	N	ASN	35	8.670	2.425	33.464	1.00
32.51			N					
ATOM	452	CA	ASN	35	8.252	3.603	32.701	1.00
33.20			C					
ATOM	453	C	ASN	35	8.983	3.655	31.363	1.00
23.17			C					
ATOM	454	O	ASN	35	10.172	3.348	31.281	1.00
27.01			O					
ATOM	455	CB	ASN	35	8.555	4.876	33.494	1.00
54.51			C					
ATOM	456	CG	ASN	35	7.796	4.860	34.817	1.00
80.73			C					
ATOM	457	ND2	ASN	35	8.402	5.234	35.910	
1.00220.46								N
ATOM	458	OD1	ASN	35	6.621	4.496	34.855	
1.00117.80								O
ATOM	459	HN	ASN	35	9.624	2.212	33.528	1.00
51.15			H					
ATOM	460	HA	ASN	35	7.187	3.556	32.513	1.00
47.21			H					
ATOM	461	HB1	ASN	35	8.249	5.736	32.917	1.00
68.31			H					
ATOM	462	HB2	ASN	35	9.616	4.932	33.689	1.00
57.75			H					
ATOM	463	HD21	ASN	35	9.337	5.524	35.878	
1.00405.39								H
ATOM	464	HD22	ASN	35	7.920	5.227	36.764	
1.00245.64								H
ATOM	465	N	PHE	36	8.260	4.040	30.314	1.00
35.72			N					
ATOM	466	CA	PHE	36	8.835	4.128	28.981	1.00
33.41			C					
ATOM	467	C	PHE	36	9.455	5.503	28.753	1.00
28.51			C					
ATOM	468	O	PHE	36	8.941	6.512	29.237	1.00
45.23			O					

ATOM	469	CB	PHE	36	7.733	3.894	27.952	1.00
67.53			C					
ATOM	470	CG	PHE	36	7.203	2.487	28.089	1.00
86.71			C					
ATOM	471	CD1	PHE	36	6.144	2.225	28.967	
1.00106.51			C					
ATOM	472	CD2	PHE	36	7.763	1.448	27.338	1.00
99.48			C					
ATOM	473	CE1	PHE	36	5.644	0.924	29.092	
1.00134.48			C					
ATOM	474	CE2	PHE	36	7.265	0.146	27.464	
1.00134.27			C					
ATOM	475	CZ	PHE	36	6.205	-0.116	28.341	
1.00149.48			C					
ATOM	476	HN	PHE	36	7.318	4.268	30.436	1.00
62.87			H					
ATOM	477	HA	PHE	36	9.594	3.368	28.861	1.00
28.53			H					
ATOM	478	HB1	PHE	36	8.132	4.033	26.966	1.00
73.56			H					
ATOM	479	HB2	PHE	36	6.932	4.599	28.119	1.00
88.42			H					
ATOM	480	HD1	PHE	36	5.713	3.028	29.548	
1.00110.20			H					
ATOM	481	HD2	PHE	36	8.582	1.648	26.662	1.00
93.07			H					
ATOM	482	HE1	PHE	36	4.828	0.722	29.769	
1.00155.06			H					
ATOM	483	HE2	PHE	36	7.696	-0.656	26.884	
1.00159.46			H					
ATOM	484	HZ	PHE	36	5.820	-1.121	28.437	
1.00183.25			H					
ATOM	485	N	THR	37	10.561	5.541	28.007	1.00
20.06			N					
ATOM	486	CA	THR	37	11.244	6.787	27.709	1.00
27.18			C					
ATOM	487	C	THR	37	11.598	6.829	26.231	1.00
41.87			C					
ATOM	488	O	THR	37	10.987	6.146	25.409	
1.00169.86			O					
ATOM	489	CB	THR	37	12.519	6.898	28.547	1.00
26.52			C					
ATOM	490	CG2	THR	37	12.181	6.690	30.024	1.00
75.69			C					
ATOM	491	OG1	THR	37	13.448	5.907	28.127	1.00
81.95			O					
ATOM	492	HN	THR	37	10.927	4.715	27.642	1.00
18.47			H					
ATOM	493	HA	THR	37	10.599	7.623	27.940	1.00
38.80			H					
ATOM	494	HB	THR	37	12.953	7.877	28.416	1.00
81.60			H					

ATOM	495	HG1	THR	37	13.447	5.887	27.167	
1.00188.80								H
ATOM	496	HG21	THR	37	11.503	7.464	30.350	
1.00196.98								H
ATOM	497	HG22	THR	37	13.087	6.733	30.611	
1.00196.23								H
ATOM	498	HG23	THR	37	11.714	5.725	30.154	
1.00168.92								H
ATOM	499	N	GLU	38	12.587	7.640	25.908	1.00
26.53			N					
ATOM	500	CA	GLU	38	13.043	7.793	24.526	1.00
30.29			C					
ATOM	501	C	GLU	38	14.532	8.123	24.484	1.00
25.39			C					
ATOM	502	O	GLU	38	15.083	8.673	25.439	1.00
51.60			O					
ATOM	503	CB	GLU	38	12.266	8.914	23.826	1.00
54.82			C					
ATOM	504	CG	GLU	38	10.799	8.510	23.651	
1.00165.84			C					
ATOM	505	CD	GLU	38	10.056	9.583	22.862	
1.00292.92			C					
ATOM	506	OE1	GLU	38	10.667	10.593	22.554	
1.00414.19			O					
ATOM	507	OE2	GLU	38	8.887	9.380	22.581	
1.00537.65			O1-					
ATOM	508	HN	GLU	38	13.023	8.142	26.618	1.00
84.50			H					
ATOM	509	HA	GLU	38	12.877	6.869	23.991	1.00
32.15			H					
ATOM	510	HB1	GLU	38	12.702	9.100	22.856	
1.00144.82			H					
ATOM	511	HB2	GLU	38	12.321	9.814	24.422	
1.00106.49			H					
ATOM	512	HG1	GLU	38	10.338	8.402	24.620	
1.00303.31			H					
ATOM	513	HG2	GLU	38	10.745	7.571	23.120	
1.00323.99			H					
ATOM	514	N	CYS	39	15.174	7.797	23.367	1.00
15.84			N					
ATOM	515	CA	CYS	39	16.594	8.077	23.203	1.00
14.30			C					
ATOM	516	C	CYS	39	16.821	9.593	23.172	1.00
22.31			C					
ATOM	517	O	CYS	39	15.942	10.337	22.735	1.00
32.92			O					
ATOM	518	CB	CYS	39	17.089	7.450	21.896	1.00
18.08			C					
ATOM	519	SG	CYS	39	16.012	7.971	20.536	1.00
17.41			S					
ATOM	520	HN	CYS	39	14.682	7.372	22.637	1.00
24.87			H					

ATOM	521	HA	CYS	39	17.134	7.642	24.029	1.00
14.60			H					
ATOM	522	HB1	CYS	39	17.068	6.375	21.980	1.00
27.71			H					
ATOM	523	HB2	CYS	39	18.098	7.775	21.697	1.00
34.91			H					
ATOM	524	N	PRO	40	17.957	10.072	23.623	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.249	11.534	23.633	1.00
47.66			C					
ATOM	526	C	PRO	40	18.522	12.071	22.230	1.00
71.54			C					
ATOM	527	O	PRO	40	19.312	11.503	21.475	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.488	11.647	24.531	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.185	10.335	24.376	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.082	9.291	24.166	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.429	12.073	24.081	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.195	11.791	25.560	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.124	12.461	24.204	1.00
70.99			H					
ATOM	534	HG1	PRO	40	20.748	10.098	25.268	1.00
65.91			H					
ATOM	535	HG2	PRO	40	20.845	10.364	23.517	1.00
54.99			H					
ATOM	536	HD1	PRO	40	18.802	8.836	25.104	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.402	8.543	23.458	1.00
26.94			H					
ATOM	538	N	GLY	41	17.861	13.169	21.897	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.029	13.791	20.589	
1.00147.55			C					
ATOM	540	C	GLY	41	19.457	14.282	20.396	
1.00161.74			C					
ATOM	541	O	GLY	41	20.029	14.157	19.313	
1.00244.37			O					
ATOM	542	HN	GLY	41	17.249	13.570	22.545	
1.00121.79			H					
ATOM	543	HA1	GLY	41	17.354	14.630	20.505	
1.00184.40			H					
ATOM	544	HA2	GLY	41	17.795	13.070	19.823	
1.00157.34			H					
ATOM	545	N	LEU	42	20.028	14.846	21.458	
1.00162.48			N					
ATOM	546	CA	LEU	42	21.396	15.367	21.415	
1.00191.48			C					

ATOM	547	C	LEU	42	22.326	14.481	22.238
1.00166.66			C				
ATOM	548	O	LEU	42	21.966	14.024	23.323
1.00251.38			O				
ATOM	549	CB	LEU	42	21.427	16.790	21.980
1.00307.99			C				
ATOM	550	CG	LEU	42	20.437	17.678	21.217
1.00452.28			C				
ATOM	551	CD1	LEU	42	20.436	19.078	21.839
1.00681.24			C				
ATOM	552	CD2	LEU	42	20.844	17.773	19.736
1.00527.46			C				
ATOM	553	HN	LEU	42	19.515	14.916	22.289
1.00195.47			H				
ATOM	554	HA	LEU	42	21.750	15.387	20.395
1.00229.77			H				
ATOM	555	HB1	LEU	42	22.422	17.195	21.876
1.00342.49			H				
ATOM	556	HB2	LEU	42	21.156	16.767	23.025
1.00335.33			H				
ATOM	557	HG	LEU	42	19.445	17.254	21.293
1.00427.79			H				
ATOM	558	HD11	LEU	42	21.451	19.442	21.907
1.00909.71			H				
ATOM	559	HD12	LEU	42	20.003	19.033	22.827
1.00706.80			H				
ATOM	560	HD13	LEU	42	19.854	19.747	21.221
1.00858.82			H				
ATOM	561	HD21	LEU	42	21.921	17.806	19.655
1.00631.69			H				
ATOM	562	HD22	LEU	42	20.425	18.667	19.298
1.00628.06			H				
ATOM	563	HD23	LEU	42	20.470	16.909	19.204
1.00656.75			H				
ATOM	564	N	THR	43	23.526	14.245	21.716
1.00178.52			N				
ATOM	565	CA	THR	43	24.500	13.414	22.411
1.00240.84			C				
ATOM	566	C	THR	43	25.038	14.153	23.643
1.00372.31			C				
ATOM	567	O	THR	43	25.104	15.381	23.644
1.00500.13			O				
ATOM	568	CB	THR	43	25.656	13.084	21.461
1.00354.13			C				
ATOM	569	CG2	THR	43	25.101	12.458	20.181
1.00463.04			C				
ATOM	570	OG1	THR	43	26.356	14.278	21.140
1.00508.50			O				
ATOM	571	HN	THR	43	23.758	14.637	20.849
1.00229.59			H				
ATOM	572	HA	THR	43	24.022	12.498	22.714
1.00249.90			H				

ATOM	573	HB	THR	43	26.330	12.389	21.933
1.00481.58				H			
ATOM	574	HG1	THR	43	26.658	14.210	20.231
1.00624.31				H			
ATOM	575	HG21	THR	43	25.915	12.233	19.509
1.00650.95				H			
ATOM	576	HG22	THR	43	24.422	13.151	19.706
1.00580.73				H			
ATOM	577	HG23	THR	43	24.574	11.547	20.426
1.00571.99				H			
ATOM	578	N	PRO	44	25.430	13.448	24.685
1.00488.39				N			
ATOM	579	CA	PRO	44	25.973	14.093	25.916
1.00760.13				C			
ATOM	580	C	PRO	44	27.418	14.539	25.716
1.00735.36				C			
ATOM	581	O	PRO	44	27.973	15.275	26.532
1.00999.99				O			
ATOM	582	CB	PRO	44	25.869	12.984	26.966
1.00999.99				C			
ATOM	583	CG	PRO	44	26.045	11.720	26.190
1.00856.94				C			
ATOM	584	CD	PRO	44	25.410	11.975	24.817
1.00548.09				C			
ATOM	585	HA	PRO	44	25.357	14.930	26.205
1.00939.00				H			
ATOM	586	HB1	PRO	44	24.895	13.000	27.434
1.00999.99				H			
ATOM	587	HB2	PRO	44	26.648	13.090	27.712
1.00999.99				H			
ATOM	588	HG1	PRO	44	25.540	10.902	26.682
1.00999.99				H			
ATOM	589	HG2	PRO	44	27.101	11.497	26.083
1.00853.53				H			
ATOM	590	HD1	PRO	44	24.394	11.611	24.797
1.00602.45				H			
ATOM	591	HD2	PRO	44	26.001	11.513	24.040
1.00463.32				H			
ATOM	592	N	ILE	45	28.018	14.077	24.624
1.00518.33				N			
ATOM	593	CA	ILE	45	29.398	14.421	24.318
1.00582.79				C			
ATOM	594	C	ILE	45	29.490	15.840	23.765
1.00795.93				C			
ATOM	595	O	ILE	45	28.793	16.192	22.814
1.00898.75				O			
ATOM	596	CB	ILE	45	29.965	13.436	23.295
1.00474.41				C			
ATOM	597	CG1	ILE	45	29.952	12.026	23.889
1.00516.90				C			
ATOM	598	CG2	ILE	45	31.402	13.830	22.948
1.00760.75				C			

ATOM	599	CD1	ILE	45	30.274	11.007	22.795
1.00566.81			C				
ATOM	600	HN	ILE	45	27.523	13.490	24.015
1.00395.72			H				
ATOM	601	HA	ILE	45	29.981	14.356	25.222
1.00711.06			H				
ATOM	602	HB	ILE	45	29.360	13.459	22.400
1.00477.81			H				
ATOM	603	HG11	ILE	45	28.974	11.816	24.295
1.00624.28			H				
ATOM	604	HG12	ILE	45	30.692	11.959	24.673
1.00744.84			H				
ATOM	605	HG21	ILE	45	31.959	13.998	23.859
1.00920.57			H				
ATOM	606	HG22	ILE	45	31.396	14.734	22.358
1.00999.99			H				
ATOM	607	HG23	ILE	45	31.868	13.035	22.384
1.00865.46			H				
ATOM	608	HD11	ILE	45	30.120	10.008	23.175
1.00658.89			H				
ATOM	609	HD12	ILE	45	31.303	11.121	22.489
1.00734.30			H				
ATOM	610	HD13	ILE	45	29.626	11.171	21.947
1.00675.84			H				
ATOM	611	N	ALA	46	30.353	16.650	24.369
1.00999.99			N				
ATOM	612	CA	ALA	46	30.528	18.029	23.929
1.00999.99			C				
ATOM	613	C	ALA	46	31.385	18.085	22.669
1.00999.99			C				
ATOM	614	CB	ALA	46	31.189	18.851	25.036
1.00999.99			C				
ATOM	615	OT1	ALA	46	30.843	18.386	21.618
1.00999.99			O				
ATOM	616	OT2	ALA	46	32.573	17.826	22.773
1.00999.99			O				
ATOM	617	HN	ALA	46	30.882	16.315	25.122
1.00999.99			H				
ATOM	618	HA	ALA	46	29.559	18.453	23.711
1.00999.99			H				
ATOM	619	HB1	ALA	46	32.060	18.328	25.401
1.00999.99			H				
ATOM	620	HB2	ALA	46	30.489	18.994	25.846
1.00999.99			H				
ATOM	621	HB3	ALA	46	31.486	19.813	24.643
1.00999.99			H				
ENDMDL							
TER							
MODEL	20						
ATOM	1	N	GLY	1	27.247	-1.647	14.623
1.00999.99			N				
ATOM	2	CA	GLY	1	26.490	-1.262	15.848

1.00999.99				C				
ATOM	3	C	GLY		1	25.306	-0.384	15.459
1.00999.99				C				
ATOM	4	O	GLY		1	24.737	0.316	16.297
1.00999.99				O				
ATOM	5	HA1	GLY		1	27.137	-0.712	16.514
1.00999.99				H				
ATOM	6	HA2	GLY		1	26.133	-2.152	16.346
1.00999.99				H				
ATOM	7	HT1	GLY		1	26.629	-2.194	13.991
1.00999.99				H				
ATOM	8	HT2	GLY		1	28.068	-2.227	14.892
1.00999.99				H				
ATOM	9	HT3	GLY		1	27.572	-0.792	14.132
1.00999.99				H				
ATOM	10	N	LEU		2	24.938	-0.427	14.182
1.00999.99				N				
ATOM	11	CA	LEU		2	23.818	0.369	13.691
1.00895.59				C				
ATOM	12	C	LEU		2	22.496	-0.228	14.166
1.00532.27				C				
ATOM	13	O	LEU		2	22.356	-1.447	14.261
1.00625.21				O				
ATOM	14	CB	LEU		2	23.839	0.409	12.161
1.00999.99				C				
ATOM	15	CG	LEU		2	25.175	0.982	11.671
1.00999.99				C				
ATOM	16	CD1	LEU		2	25.204	0.950	10.139
1.00999.99				C				
ATOM	17	CD2	LEU		2	25.343	2.433	12.161
1.00999.99				C				
ATOM	18	HN	LEU		2	25.428	-1.004	13.559
1.00999.99				H				
ATOM	19	HA	LEU		2	23.905	1.373	14.069
1.00890.87				H				
ATOM	20	HB1	LEU		2	23.032	1.034	11.808
1.00924.07				H				
ATOM	21	HB2	LEU		2	23.714	-0.592	11.774
1.00999.99				H				
ATOM	22	HG	LEU		2	25.984	0.376	12.055
1.00999.99				H				
ATOM	23	HD11	LEU		2	24.310	1.418	9.753
1.00999.99				H				
ATOM	24	HD12	LEU		2	25.248	-0.075	9.802
1.00999.99				H				
ATOM	25	HD13	LEU		2	26.073	1.485	9.785
1.00999.99				H				
ATOM	26	HD21	LEU		2	24.384	2.931	12.165
1.00999.99				H				
ATOM	27	HD22	LEU		2	26.019	2.964	11.507
1.00999.99				H				
ATOM	28	HD23	LEU		2	25.750	2.429	13.161

1.00999.99				H					
ATOM	29	N	CYS		3	21.527	0.635	14.463	
1.00271.28				N					
ATOM	30	CA	CYS		3	20.225	0.168	14.925	
1.00104.50				C					
ATOM	31	C	CYS		3	19.486	-0.535	13.791	1.00
90.98			C						
ATOM	32	O	CYS		3	19.468	-0.054	12.659	
1.00207.28				O					
ATOM	33	CB	CYS		3	19.382	1.350	15.421	1.00
37.83			C						
ATOM	34	SG	CYS		3	20.194	2.140	16.835	1.00
81.56			S						
ATOM	35	HN	CYS		3	21.691	1.597	14.369	
1.00296.55				H					
ATOM	36	HA	CYS		3	20.368	-0.527	15.739	
1.00166.45				H					
ATOM	37	HB1	CYS		3	18.407	0.993	15.720	1.00
40.38			H						
ATOM	38	HB2	CYS		3	19.271	2.070	14.624	1.00
98.45			H						
ATOM	39	N	SER		4	18.877	-1.674	14.102	1.00
85.31			N						
ATOM	40	CA	SER		4	18.138	-2.431	13.097	1.00
92.94			C						
ATOM	41	C	SER		4	16.992	-1.595	12.556	1.00
67.37			C						
ATOM	42	O	SER		4	16.724	-1.579	11.355	
1.00102.28				O					
ATOM	43	CB	SER		4	17.550	-3.693	13.718	
1.00123.83				C					
ATOM	44	OG	SER		4	16.941	-4.477	12.700	
1.00178.89				O					
ATOM	45	HN	SER		4	18.923	-2.010	15.022	
1.00163.03				H					
ATOM	46	HA	SER		4	18.799	-2.704	12.290	
1.00129.78				H					
ATOM	47	HB1	SER		4	16.803	-3.407	14.453	
1.00105.26				H					
ATOM	48	HB2	SER		4	18.327	-4.265	14.197	
1.00156.87				H					
ATOM	49	HG	SER		4	17.639	-4.859	12.163	
1.00218.16				H					
ATOM	50	N	GLU		5	16.304	-0.924	13.470	1.00
41.67			N						
ATOM	51	CA	GLU		5	15.157	-0.100	13.117	1.00
41.21			C						
ATOM	52	C	GLU		5	15.031	1.075	14.080	1.00
41.92			C						
ATOM	53	O	GLU		5	15.980	1.411	14.789	1.00
74.72			O						
ATOM	54	CB	GLU		5	13.891	-0.954	13.167	1.00

49.24			C						
ATOM	55	CG	GLU	5	13.770	-1.600	14.544	1.00	
55.48			C						
ATOM	56	CD	GLU	5	12.689	-2.675	14.525	1.00	
92.06			C						
ATOM	57	OE1	GLU	5	12.860	-3.646	13.807		
1.00206.49									O
ATOM	58	OE2	GLU	5	11.707	-2.511	15.228		
1.00197.24									O1-
ATOM	59	HN	GLU	5	16.564	-1.000	14.412	1.00	
45.52			H						
ATOM	60	HA	GLU	5	15.282	0.274	12.120	1.00	
60.63			H						
ATOM	61	HB1	GLU	5	13.945	-1.724	12.414	1.00	
61.59			H						
ATOM	62	HB2	GLU	5	13.034	-0.334	12.986	1.00	
63.66			H						
ATOM	63	HG1	GLU	5	13.514	-0.847	15.273	1.00	
58.03			H						
ATOM	64	HG2	GLU	5	14.715	-2.044	14.805	1.00	
57.77			H						
ATOM	65	N	ASN	6	13.857	1.697	14.104	1.00	
50.73			N						
ATOM	66	CA	ASN	6	13.630	2.832	14.989	1.00	
71.04			C						
ATOM	67	C	ASN	6	13.829	2.413	16.442	1.00	
65.17			C						
ATOM	68	O	ASN	6	14.393	3.160	17.243	1.00	
94.86			O						
ATOM	69	CB	ASN	6	12.210	3.367	14.800	1.00	
94.83			C						
ATOM	70	CG	ASN	6	12.092	4.071	13.452		
1.00160.94									C
ATOM	71	ND2	ASN	6	10.914	4.245	12.919		
1.00244.88									N
ATOM	72	OD1	ASN	6	13.100	4.471	12.869		
1.00219.73									O
ATOM	73	HN	ASN	6	13.134	1.388	13.519	1.00	
72.81			H						
ATOM	74	HA	ASN	6	14.334	3.614	14.749	1.00	
96.02			H						
ATOM	75	HB1	ASN	6	11.983	4.068	15.589		
1.00111.09									H
ATOM	76	HB2	ASN	6	11.510	2.546	14.838	1.00	
98.13			H						
ATOM	77	HD21	ASN	6	10.113	3.926	13.386		
1.00272.43									H
ATOM	78	HD22	ASN	6	10.829	4.696	12.053		
1.00336.78									H
ATOM	79	N	GLY	7	13.368	1.207	16.773	1.00	
51.80			N						
ATOM	80	CA	GLY	7	13.499	0.675	18.132	1.00	

71.47			C						
ATOM	81	C	GLY	7	14.145	-0.704	18.106	1.00	
41.04			C						
ATOM	82	O	GLY	7	13.475	-1.720	18.283	1.00	
44.54			O						
ATOM	83	HN	GLY	7	12.932	0.660	16.087	1.00	
45.49			H						
ATOM	84	HA1	GLY	7	12.523	0.594	18.576		
1.00103.52									H
ATOM	85	HA2	GLY	7	14.109	1.340	18.731		
1.00108.67									H
ATOM	86	N	ASP	8	15.452	-0.727	17.880	1.00	
27.00			N						
ATOM	87	CA	ASP	8	16.188	-1.984	17.826	1.00	
14.15			C						
ATOM	88	C	ASP	8	16.097	-2.718	19.157	1.00	
9.37			C						
ATOM	89	O	ASP	8	15.893	-3.931	19.198	1.00	
14.61			O						
ATOM	90	CB	ASP	8	17.656	-1.719	17.490	1.00	
15.06			C						
ATOM	91	CG	ASP	8	18.399	-3.039	17.315	1.00	
21.22			C						
ATOM	92	OD1	ASP	8	19.534	-3.002	16.869		
1.00119.56									O
ATOM	93	OD2	ASP	8	17.822	-4.067	17.630		
1.00133.27									O1-
ATOM	94	HN	ASP	8	15.928	0.117	17.745	1.00	
35.63			H						
ATOM	95	HA	ASP	8	15.763	-2.606	17.057	1.00	
20.92			H						
ATOM	96	HB1	ASP	8	18.110	-1.159	18.292	1.00	
29.39			H						
ATOM	97	HB2	ASP	8	17.717	-1.148	16.574	1.00	
44.14			H						
ATOM	98	N	CYS	9	16.245	-1.972	20.244	1.00	
5.93			N						
ATOM	99	CA	CYS	9	16.175	-2.561	21.575	1.00	
7.54			C						
ATOM	100	C	CYS	9	14.801	-3.177	21.806	1.00	
14.60			C						
ATOM	101	O	CYS	9	14.678	-4.277	22.345	1.00	
25.78			O						
ATOM	102	CB	CYS	9	16.436	-1.496	22.628	1.00	
6.63			C						
ATOM	103	SG	CYS	9	18.172	-1.025	22.547	1.00	
10.91			S						
ATOM	104	HN	CYS	9	16.403	-1.011	20.148	1.00	
6.51			H						
ATOM	105	HA	CYS	9	16.934	-3.320	21.664	1.00	
11.12			H						
ATOM	106	HB1	CYS	9	16.218	-1.892	23.607	1.00	

11.28			H						
ATOM	107	HB2	CYS	9	15.814	-0.634	22.437	1.00	
5.04			H						
ATOM	108	N	ALA	10	13.775	-2.452	21.380	1.00	
16.26			N						
ATOM	109	CA	ALA	10	12.398	-2.910	21.522	1.00	
32.04			C						
ATOM	110	C	ALA	10	11.469	-2.029	20.688	1.00	
45.47			C						
ATOM	111	O	ALA	10	11.870	-0.967	20.215		
1.00119.04			O						
ATOM	112	CB	ALA	10	11.976	-2.875	22.996	1.00	
30.10			C						
ATOM	113	HN	ALA	10	13.949	-1.588	20.955	1.00	
12.81			H						
ATOM	114	HA	ALA	10	12.331	-3.926	21.163	1.00	
47.14			H						
ATOM	115	HB1	ALA	10	12.814	-3.156	23.617	1.00	
84.37			H						
ATOM	116	HB2	ALA	10	11.164	-3.569	23.155		
1.00118.20			H						
ATOM	117	HB3	ALA	10	11.652	-1.879	23.260		
1.00117.32			H						
ATOM	118	N	ALA	11	10.233	-2.477	20.506	1.00	
30.62			N						
ATOM	119	CA	ALA	11	9.268	-1.717	19.720	1.00	
35.24			C						
ATOM	120	C	ALA	11	9.015	-0.343	20.338	1.00	
22.78			C						
ATOM	121	O	ALA	11	8.915	0.657	19.627	1.00	
53.33			O						
ATOM	122	CB	ALA	11	7.950	-2.487	19.632	1.00	
60.49			C						
ATOM	123	HN	ALA	11	9.966	-3.333	20.903	1.00	
50.37			H						
ATOM	124	HA	ALA	11	9.658	-1.584	18.723	1.00	
41.70			H						
ATOM	125	HB1	ALA	11	7.199	-1.865	19.168		
1.00157.06			H						
ATOM	126	HB2	ALA	11	7.625	-2.761	20.625		
1.00148.83			H						
ATOM	127	HB3	ALA	11	8.092	-3.380	19.042		
1.00137.06			H						
ATOM	128	N	ASP	12	8.904	-0.300	21.664	1.00	
18.98			N						
ATOM	129	CA	ASP	12	8.651	0.960	22.367	1.00	
31.05			C						
ATOM	130	C	ASP	12	9.952	1.711	22.644	1.00	
22.98			C						
ATOM	131	O	ASP	12	9.967	2.940	22.706	1.00	
37.14			O						
ATOM	132	CB	ASP	12	7.936	0.678	23.690	1.00	

48.35			C						
ATOM	133	CG	ASP	12	6.520	0.182	23.420		
1.00104.83			C						
ATOM	134	OD1	ASP	12	6.062	0.333	22.300		
1.00258.73			O						
ATOM	135	OD2	ASP	12	5.912	-0.343	24.339		
1.00213.46			O1-						
ATOM	136	HN	ASP	12	8.986	-1.129	22.181	1.00	
36.19			H						
ATOM	137	HA	ASP	12	8.013	1.581	21.756	1.00	
49.76			H						
ATOM	138	HB1	ASP	12	7.892	1.585	24.273	1.00	
95.71			H						
ATOM	139	HB2	ASP	12	8.482	-0.076	24.238	1.00	
54.37			H						
ATOM	140	N	GLU	13	11.038	0.966	22.821	1.00	
17.60			N						
ATOM	141	CA	GLU	13	12.337	1.572	23.104	1.00	
12.01			C						
ATOM	142	C	GLU	13	12.940	2.188	21.842	1.00	
10.07			C						
ATOM	143	O	GLU	13	12.633	1.768	20.726	1.00	
12.81			O						
ATOM	144	CB	GLU	13	13.279	0.514	23.673	1.00	
11.74			C						
ATOM	145	CG	GLU	13	12.718	0.014	25.007	1.00	
13.49			C						
ATOM	146	CD	GLU	13	13.460	-1.238	25.455		
1.00142.36			C						
ATOM	147	OE1	GLU	13	14.658	-1.299	25.243		
1.00339.06			O						
ATOM	148	OE2	GLU	13	12.820	-2.118	26.006		
1.00335.28			O1-						
ATOM	149	HN	GLU	13	10.965	-0.010	22.767	1.00	
28.36			H						
ATOM	150	HA	GLU	13	12.203	2.349	23.842	1.00	
13.06			H						
ATOM	151	HB1	GLU	13	14.254	0.947	23.835	1.00	
13.76			H						
ATOM	152	HB2	GLU	13	13.359	-0.310	22.979	1.00	
9.94			H						
ATOM	153	HG1	GLU	13	11.668	-0.213	24.893	1.00	
66.02			H						
ATOM	154	HG2	GLU	13	12.836	0.786	25.754	1.00	
56.23			H						
ATOM	155	N	CYS	14	13.802	3.193	22.029	1.00	
9.12			N						
ATOM	156	CA	CYS	14	14.450	3.875	20.903	1.00	
10.69			C						
ATOM	157	C	CYS	14	15.904	3.435	20.770	1.00	
9.56			C						
ATOM	158	O	CYS	14	16.556	3.114	21.760	1.00	

13.62			O					
ATOM	159	CB	CYS	14	14.401	5.392	21.110	1.00
13.96			C					
ATOM	160	SG	CYS	14	15.330	6.207	19.784	1.00
42.96			S					
ATOM	161	HN	CYS	14	14.007	3.484	22.944	1.00
9.76			H					
ATOM	162	HA	CYS	14	13.928	3.635	19.987	1.00
15.54			H					
ATOM	163	HB1	CYS	14	14.840	5.640	22.065	1.00
50.72			H					
ATOM	164	HB2	CYS	14	13.375	5.725	21.089	1.00
46.13			H					
ATOM	165	N	CYS	15	16.405	3.428	19.534	1.00
9.60			N					
ATOM	166	CA	CYS	15	17.789	3.035	19.265	1.00
9.28			C					
ATOM	167	C	CYS	15	18.413	4.011	18.278	1.00
9.92			C					
ATOM	168	O	CYS	15	17.886	4.218	17.186	1.00
13.31			O					
ATOM	169	CB	CYS	15	17.827	1.623	18.671	1.00
12.90			C					
ATOM	170	SG	CYS	15	19.549	1.101	18.445	1.00
39.11			S					
ATOM	171	HN	CYS	15	15.835	3.704	18.786	1.00
13.12			H					
ATOM	172	HA	CYS	15	18.360	3.048	20.184	1.00
8.26			H					
ATOM	173	HB1	CYS	15	17.323	1.622	17.716	1.00
24.82			H					
ATOM	174	HB2	CYS	15	17.329	0.939	19.342	1.00
27.31			H					
ATOM	175	N	VAL	16	19.533	4.616	18.664	1.00
9.56			N					
ATOM	176	CA	VAL	16	20.209	5.573	17.793	1.00
11.99			C					
ATOM	177	C	VAL	16	21.718	5.441	17.938	1.00
7.73			C					
ATOM	178	O	VAL	16	22.252	5.472	19.047	1.00
8.83			O					
ATOM	179	CB	VAL	16	19.765	6.995	18.150	1.00
18.37			C					
ATOM	180	CG1	VAL	16	20.355	7.407	19.502	1.00
39.61			C					
ATOM	181	CG2	VAL	16	20.240	7.961	17.065	
1.00115.21				C				
ATOM	182	HN	VAL	16	19.914	4.417	19.548	1.00
9.76			H					
ATOM	183	HA	VAL	16	19.942	5.374	16.763	1.00
17.27			H					
ATOM	184	HB	VAL	16	18.687	7.026	18.209	1.00

52.63			H						
ATOM	185	HG11	VAL	16	21.402	7.644	19.381		
1.00128.07								H	
ATOM	186	HG12	VAL	16	20.248	6.592	20.203		
1.00154.13								H	
ATOM	187	HG13	VAL	16	19.830	8.273	19.874		
1.00135.74								H	
ATOM	188	HG21	VAL	16	19.650	7.815	16.173		
1.00229.05								H	
ATOM	189	HG22	VAL	16	21.281	7.772	16.844		
1.00261.82								H	
ATOM	190	HG23	VAL	16	20.124	8.976	17.411		
1.00210.07								H	
ATOM	191	N	ASP	17	22.403	5.283	16.806	1.00	
14.34			N						
ATOM	192	CA	ASP	17	23.858	5.134	16.805	1.00	
11.90			C						
ATOM	193	C	ASP	17	24.533	6.369	16.225	1.00	
13.15			C						
ATOM	194	O	ASP	17	24.330	6.714	15.060	1.00	
25.96			O						
ATOM	195	CB	ASP	17	24.246	3.905	15.987	1.00	
20.80			C						
ATOM	196	CG	ASP	17	23.608	2.664	16.600	1.00	
28.72			C						
ATOM	197	OD1	ASP	17	22.747	2.086	15.961		
1.00135.42								O	
ATOM	198	OD2	ASP	17	23.993	2.308	17.702		
1.00114.17								O1-	
ATOM	199	HN	ASP	17	21.919	5.260	15.954	1.00	
28.29			H						
ATOM	200	HA	ASP	17	24.209	4.993	17.817	1.00	
10.49			H						
ATOM	201	HB1	ASP	17	25.320	3.794	15.990	1.00	
22.42			H						
ATOM	202	HB2	ASP	17	23.900	4.026	14.970	1.00	
29.52			H						
ATOM	203	N	THR	18	25.350	7.022	17.046	1.00	
11.55			N						
ATOM	204	CA	THR	18	26.080	8.216	16.622	1.00	
17.10			C						
ATOM	205	C	THR	18	27.540	7.870	16.380	1.00	
10.63			C						
ATOM	206	O	THR	18	28.004	6.802	16.775	1.00	
6.49			O						
ATOM	207	CB	THR	18	25.991	9.302	17.695	1.00	
28.52			C						
ATOM	208	CG2	THR	18	24.543	9.767	17.841	1.00	
45.38			C						
ATOM	209	OG1	THR	18	26.455	8.785	18.933	1.00	
26.49			O						
ATOM	210	HN	THR	18	25.476	6.686	17.958	1.00	

13.96			H						
ATOM	211	HA	THR	18	25.653	8.597	15.703	1.00	
26.43			H						
ATOM	212	HB	THR	18	26.604	10.143	17.407	1.00	
37.43			H						
ATOM	213	HG1	THR	18	25.734	8.299	19.341	1.00	
71.62			H						
ATOM	214	HG21	THR	18	24.436	10.322	18.761		
1.00100.44									H
ATOM	215	HG22	THR	18	23.889	8.909	17.858		
1.00129.42									H
ATOM	216	HG23	THR	18	24.285	10.401	17.006		
1.00156.21									H
ATOM	217	N	VAL	19	28.260	8.788	15.750	1.00	
16.32			N						
ATOM	218	CA	VAL	19	29.662	8.596	15.471	1.00	
13.34			C						
ATOM	219	C	VAL	19	30.195	9.804	14.733	1.00	
25.88			C						
ATOM	220	O	VAL	19	29.766	10.133	13.627	1.00	
42.11			O						
ATOM	221	CB	VAL	19	29.916	7.332	14.648	1.00	
15.48			C						
ATOM	222	CG1	VAL	19	29.011	7.314	13.413	1.00	
29.06			C						
ATOM	223	CG2	VAL	19	31.388	7.314	14.210	1.00	
20.67			C						
ATOM	224	HN	VAL	19	27.845	9.627	15.480	1.00	
26.89			H						
ATOM	225	HA	VAL	19	30.188	8.506	16.410	1.00	
8.08			H						
ATOM	226	HB	VAL	19	29.713	6.468	15.259	1.00	
11.49			H						
ATOM	227	HG11	VAL	19	28.006	7.591	13.694		
1.00137.43									H
ATOM	228	HG12	VAL	19	29.003	6.322	12.988	1.00	
93.29			H						
ATOM	229	HG13	VAL	19	29.387	8.014	12.681		
1.00108.69									H
ATOM	230	HG21	VAL	19	31.527	8.012	13.396	1.00	
99.42			H						
ATOM	231	HG22	VAL	19	31.658	6.322	13.888		
1.00111.36									H
ATOM	232	HG23	VAL	19	32.015	7.611	15.043	1.00	
77.11			H						
ATOM	233	N	PHE	20	31.123	10.458	15.381	1.00	
24.58			N						
ATOM	234	CA	PHE	20	31.754	11.654	14.854	1.00	
40.34			C						
ATOM	235	C	PHE	20	33.116	11.330	14.262	1.00	
40.37			C						
ATOM	236	O	PHE	20	33.310	11.384	13.049	1.00	

66.02			O					
ATOM	237	CB	PHE	20	31.906	12.683	15.988	1.00
48.79			C					
ATOM	238	CG	PHE	20	32.126	11.987	17.323	1.00
35.75			C					
ATOM	239	CD1	PHE	20	31.096	11.228	17.918	1.00
30.20			C					
ATOM	240	CD2	PHE	20	33.355	12.117	17.983	1.00
40.95			C					
ATOM	241	CE1	PHE	20	31.306	10.609	19.152	1.00
30.41			C					
ATOM	242	CE2	PHE	20	33.561	11.493	19.219	1.00
45.84			C					
ATOM	243	CZ	PHE	20	32.537	10.740	19.802	1.00
40.81			C					
ATOM	244	HN	PHE	20	31.383	10.129	16.258	1.00
16.73			H					
ATOM	245	HA	PHE	20	31.130	12.080	14.077	1.00
59.91			H					
ATOM	246	HB1	PHE	20	31.020	13.266	16.044	1.00
67.15			H					
ATOM	247	HB2	PHE	20	32.743	13.337	15.781	1.00
58.17			H					
ATOM	248	HD1	PHE	20	30.141	11.113	17.421	1.00
33.34			H					
ATOM	249	HD2	PHE	20	34.147	12.697	17.536	1.00
49.35			H					
ATOM	250	HE1	PHE	20	30.517	10.029	19.602	1.00
30.61			H					
ATOM	251	HE2	PHE	20	34.511	11.593	19.722	1.00
61.27			H					
ATOM	252	HZ	PHE	20	32.696	10.260	20.757	1.00
52.66			H					
ATOM	253	N	GLU	21	34.063	11.026	15.137	1.00
41.31			N					
ATOM	254	CA	GLU	21	35.416	10.731	14.724	1.00
56.16			C					
ATOM	255	C	GLU	21	35.649	9.236	14.582	1.00
58.61			C					
ATOM	256	O	GLU	21	34.738	8.427	14.759	
1.00201.19			O					
ATOM	257	CB	GLU	21	36.346	11.313	15.769	1.00
57.37			C					
ATOM	258	CG	GLU	21	36.204	10.534	17.078	
1.00193.56			C					
ATOM	259	CD	GLU	21	36.891	11.291	18.210	
1.00304.62			C					
ATOM	260	OE1	GLU	21	36.734	10.883	19.348	
1.00451.81			O					
ATOM	261	OE2	GLU	21	37.564	12.266	17.921	
1.00442.88			O1-					
ATOM	262	HN	GLU	21	33.856	11.026	16.093	1.00

50.82			H						
ATOM	263	HA	GLU	21	35.622	11.212	13.778	1.00	
85.72			H						
ATOM	264	HB1	GLU	21	36.068	12.339	15.936	1.00	
46.37			H						
ATOM	265	HB2	GLU	21	37.360	11.261	15.421		
1.00131.81				H					
ATOM	266	HG1	GLU	21	36.659	9.566	16.967		
1.00314.91				H					
ATOM	267	HG2	GLU	21	35.159	10.409	17.309		
1.00266.92				H					
ATOM	268	N	GLY	22	36.885	8.888	14.254	1.00	
86.70			N						
ATOM	269	CA	GLY	22	37.270	7.485	14.074		
1.00104.66				C					
ATOM	270	C	GLY	22	37.872	6.913	15.352	1.00	
71.50			C						
ATOM	271	O	GLY	22	38.085	5.706	15.465	1.00	
89.87			O						
ATOM	272	HN	GLY	22	37.555	9.595	14.132		
1.00214.64				H					
ATOM	273	HA1	GLY	22	38.002	7.420	13.283		
1.00152.47				H					
ATOM	274	HA2	GLY	22	36.401	6.904	13.798		
1.00118.15				H					
ATOM	275	N	ASP	23	38.147	7.790	16.310	1.00	
44.68			N						
ATOM	276	CA	ASP	23	38.732	7.370	17.578	1.00	
43.33			C						
ATOM	277	C	ASP	23	37.819	6.387	18.301	1.00	
37.55			C						
ATOM	278	O	ASP	23	38.277	5.381	18.841	1.00	
61.37			O						
ATOM	279	CB	ASP	23	38.968	8.590	18.468	1.00	
40.74			C						
ATOM	280	CG	ASP	23	39.750	8.184	19.713		
1.00141.86				C					
ATOM	281	OD1	ASP	23	39.949	6.996	19.902		
1.00328.18				O					
ATOM	282	OD2	ASP	23	40.137	9.068	20.460		
1.00304.58				O1-					
ATOM	283	HN	ASP	23	37.962	8.737	16.157	1.00	
40.86			H						
ATOM	284	HA	ASP	23	39.677	6.892	17.386	1.00	
72.12			H						
ATOM	285	HB1	ASP	23	38.015	9.002	18.766	1.00	
94.15			H						
ATOM	286	HB2	ASP	23	39.525	9.335	17.919	1.00	
93.26			H						
ATOM	287	N	MET	24	36.527	6.690	18.313	1.00	
23.24			N						
ATOM	288	CA	MET	24	35.554	5.828	18.982	1.00	

32.50			C						
ATOM	289	C	MET	24	34.145	6.080	18.451	1.00	
25.13			C						
ATOM	290	O	MET	24	33.907	7.042	17.723	1.00	
54.40			O						
ATOM	291	CB	MET	24	35.592	6.075	20.492	1.00	
47.36			C						
ATOM	292	CG	MET	24	35.239	7.534	20.783		
1.00151.73				C					
ATOM	293	SD	MET	24	35.402	7.850	22.558		
1.00209.23				S					
ATOM	294	CE	MET	24	34.926	9.596	22.529		
1.00243.29				C					
ATOM	295	HN	MET	24	36.224	7.507	17.869	1.00	
17.32			H						
ATOM	296	HA	MET	24	35.816	4.797	18.794	1.00	
48.94			H						
ATOM	297	HB1	MET	24	36.582	5.865	20.866		
1.00124.40				H					
ATOM	298	HB2	MET	24	34.878	5.427	20.979		
1.00166.96				H					
ATOM	299	HG1	MET	24	34.222	7.728	20.474		
1.00331.71				H					
ATOM	300	HG2	MET	24	35.910	8.183	20.239		
1.00302.30				H					
ATOM	301	HE1	MET	24	35.463	10.127	23.303		
1.00340.44				H					
ATOM	302	HE2	MET	24	33.867	9.684	22.706		
1.00373.88				H					
ATOM	303	HE3	MET	24	35.165	10.019	21.563		
1.00386.81				H					
ATOM	304	N	VAL	25	33.215	5.197	18.822	1.00	
22.44			N						
ATOM	305	CA	VAL	25	31.818	5.306	18.384	1.00	
15.37			C						
ATOM	306	C	VAL	25	30.886	5.472	19.579	1.00	
17.47			C						
ATOM	307	O	VAL	25	31.134	4.938	20.660	1.00	
29.52			O						
ATOM	308	CB	VAL	25	31.420	4.056	17.591	1.00	
23.36			C						
ATOM	309	CG1	VAL	25	29.910	4.079	17.296	1.00	
58.39			C						
ATOM	310	CG2	VAL	25	32.205	4.027	16.274	1.00	
55.25			C						
ATOM	311	HN	VAL	25	33.474	4.449	19.401	1.00	
48.11			H						
ATOM	312	HA	VAL	25	31.708	6.175	17.740	1.00	
9.25			H						
ATOM	313	HB	VAL	25	31.659	3.175	18.171	1.00	
52.45			H						
ATOM	314	HG11	VAL	25	29.592	5.094	17.106		

1.00171.07				H						
ATOM	315	HG12	VAL		25	29.374	3.693	18.150		
1.00166.22				H						
ATOM	316	HG13	VAL		25	29.696	3.465	16.432		
1.00134.76				H						
ATOM	317	HG21	VAL		25	31.836	3.224	15.653		
1.00141.88				H						
ATOM	318	HG22	VAL		25	33.252	3.869	16.483		
1.00184.50				H						
ATOM	319	HG23	VAL		25	32.078	4.968	15.759		
1.00133.90				H						
ATOM	320	N	THR		26	29.816	6.238	19.370	1.00	
13.60			N							
ATOM	321	CA	THR		26	28.833	6.513	20.418	1.00	
21.19			C							
ATOM	322	C	THR		26	27.434	6.061	19.998	1.00	
16.55			C							
ATOM	323	O	THR		26	27.020	6.269	18.858	1.00	
11.43			O							
ATOM	324	CB	THR		26	28.821	8.014	20.695	1.00	
27.07			C							
ATOM	325	CG2	THR		26	27.716	8.355	21.697	1.00	
44.39			C							
ATOM	326	OG1	THR		26	30.082	8.401	21.221	1.00	
34.75			O							
ATOM	327	HN	THR		26	29.689	6.641	18.486	1.00	
10.81			H							
ATOM	328	HA	THR		26	29.110	5.995	21.327	1.00	
33.16			H							
ATOM	329	HB	THR		26	28.641	8.539	19.766	1.00	
20.60			H							
ATOM	330	HG1	THR		26	30.508	7.618	21.578	1.00	
77.72			H							
ATOM	331	HG21	THR		26	27.854	9.365	22.053		
1.00126.99				H						
ATOM	332	HG22	THR		26	27.763	7.670	22.530		
1.00108.32				H						
ATOM	333	HG23	THR		26	26.753	8.270	21.215		
1.00151.99				H						
ATOM	334	N	ARG		27	26.706	5.449	20.933	1.00	
22.38			N							
ATOM	335	CA	ARG		27	25.347	4.978	20.661	1.00	
20.21			C							
ATOM	336	C	ARG		27	24.507	5.004	21.936	1.00	
16.96			C							
ATOM	337	O	ARG		27	25.046	4.996	23.041	1.00	
20.06			O							
ATOM	338	CB	ARG		27	25.392	3.555	20.096	1.00	
22.14			C							
ATOM	339	CG	ARG		27	25.966	2.600	21.146		
1.00124.30				C						
ATOM	340	CD	ARG		27	26.165	1.218	20.523		

1.00109.38				C					
ATOM	341	NE	ARG	27	26.701	0.291	21.514		
1.00227.73				N					
ATOM	342	CZ	ARG	27	27.040	-0.950	21.179		
1.00426.12				C					
ATOM	343	NH1	ARG	27	27.519	-1.760	22.083		
1.00767.09				N1+					
ATOM	344	NH2	ARG	27	26.896	-1.356	19.949		
1.00581.78				N					
ATOM	345	HN	ARG	27	27.088	5.318	21.826	1.00	
30.75				H					
ATOM	346	HA	ARG	27	24.888	5.629	19.933	1.00	
23.13				H					
ATOM	347	HB1	ARG	27	26.018	3.537	19.216	1.00	
87.46				H					
ATOM	348	HB2	ARG	27	24.392	3.242	19.833		
1.00103.36				H					
ATOM	349	HG1	ARG	27	25.281	2.522	21.976		
1.00281.97				H					
ATOM	350	HG2	ARG	27	26.915	2.978	21.496		
1.00276.19				H					
ATOM	351	HD1	ARG	27	26.852	1.296	19.693		
1.00183.60				H					
ATOM	352	HD2	ARG	27	25.216	0.847	20.166		
1.00142.93				H					
ATOM	353	HE	ARG	27	26.813	0.589	22.440		
1.00372.53				H					
ATOM	354	HH11	ARG	27	27.629	-1.448	23.027		
1.00910.59				H					
ATOM	355	HH12	ARG	27	27.774	-2.694	21.833		
1.00999.99				H					
ATOM	356	HH21	ARG	27	26.530	-0.735	19.256		
1.00532.54				H					
ATOM	357	HH22	ARG	27	27.152	-2.290	19.698		
1.00948.84				H					
ATOM	358	N	SER	28	23.180	5.044	21.777	1.00	
14.60				N					
ATOM	359	CA	SER	28	22.277	5.080	22.932	1.00	
14.92				C					
ATOM	360	C	SER	28	21.025	4.246	22.676	1.00	
12.12				C					
ATOM	361	O	SER	28	20.610	4.059	21.532	1.00	
13.41				O					
ATOM	362	CB	SER	28	21.874	6.525	23.228	1.00	
23.26				C					
ATOM	363	OG	SER	28	23.037	7.282	23.538		
1.00146.32				O					
ATOM	364	HN	SER	28	22.799	5.053	20.871	1.00	
15.23				H					
ATOM	365	HA	SER	28	22.787	4.680	23.797	1.00	
15.44				H					
ATOM	366	HB1	SER	28	21.187	6.542	24.064	1.00	

88.73			H						
ATOM	367	HB2	SER	28	21.393	6.952	22.364		
1.00124.68								H	
ATOM	368	HG	SER	28	22.931	7.638	24.423		
1.00242.47								H	
ATOM	369	N	CYS	29	20.423	3.759	23.757	1.00	
10.48			N						
ATOM	370	CA	CYS	29	19.210	2.955	23.657	1.00	
9.97			C						
ATOM	371	C	CYS	29	18.574	2.811	25.040	1.00	
11.60			C						
ATOM	372	O	CYS	29	19.206	2.314	25.972	1.00	
15.64			O						
ATOM	373	CB	CYS	29	19.537	1.572	23.068	1.00	
9.52			C						
ATOM	374	SG	CYS	29	18.113	0.948	22.160	1.00	
10.40			S						
ATOM	375	HN	CYS	29	20.796	3.953	24.641	1.00	
11.10			H						
ATOM	376	HA	CYS	29	18.513	3.459	23.005	1.00	
11.08			H						
ATOM	377	HB1	CYS	29	19.778	0.874	23.860	1.00	
9.33			H						
ATOM	378	HB2	CYS	29	20.375	1.651	22.397	1.00	
10.78			H						
ATOM	379	N	GLU	30	17.329	3.261	25.173	1.00	
13.52			N						
ATOM	380	CA	GLU	30	16.631	3.188	26.456	1.00	
17.41			C						
ATOM	381	C	GLU	30	15.989	1.822	26.662	1.00	
10.81			C						
ATOM	382	O	GLU	30	15.677	1.117	25.703	1.00	
23.22			O						
ATOM	383	CB	GLU	30	15.552	4.270	26.528	1.00	
37.83			C						
ATOM	384	CG	GLU	30	16.202	5.647	26.410		
1.00108.13								C	
ATOM	385	CD	GLU	30	17.066	5.925	27.636		
1.00240.52								C	
ATOM	386	OE1	GLU	30	16.858	5.268	28.643		
1.00422.56								O	
ATOM	387	OE2	GLU	30	17.922	6.790	27.550		
1.00410.81								O1-	
ATOM	388	HN	GLU	30	16.873	3.657	24.398	1.00	
15.61			H						
ATOM	389	HA	GLU	30	17.341	3.360	27.252	1.00	
24.60			H						
ATOM	390	HB1	GLU	30	15.033	4.198	27.472	1.00	
72.67			H						
ATOM	391	HB2	GLU	30	14.849	4.131	25.719	1.00	
56.47			H						
ATOM	392	HG1	GLU	30	15.433	6.401	26.338		

1.00196.66				H					
ATOM	393	HG2	GLU		30	16.818	5.677	25.524	
1.00140.67				H					
ATOM	394	N	LYS		31	15.790	1.461	27.931	1.00
11.96			N						
ATOM	395	CA	LYS		31	15.175	0.181	28.288	1.00
11.40			C						
ATOM	396	C	LYS		31	13.865	0.419	29.029	1.00
10.99			C						
ATOM	397	O	LYS		31	13.747	1.365	29.809	1.00
12.86			O						
ATOM	398	CB	LYS		31	16.122	-0.623	29.179	1.00
21.40			C						
ATOM	399	CG	LYS		31	17.395	-0.960	28.400	1.00
57.81			C						
ATOM	400	CD	LYS		31	18.341	-1.766	29.292	
1.00115.52				C					
ATOM	401	CE	LYS		31	19.615	-2.099	28.514	
1.00250.23				C					
ATOM	402	NZ	LYS		31	20.541	-2.873	29.386	
1.00462.10				N1+					
ATOM	403	HN	LYS		31	16.057	2.075	28.647	1.00
26.13			H						
ATOM	404	HA	LYS		31	14.973	-0.390	27.392	1.00
13.87			H						
ATOM	405	HB1	LYS		31	15.638	-1.538	29.488	1.00
37.63			H						
ATOM	406	HB2	LYS		31	16.376	-0.039	30.052	1.00
47.19			H						
ATOM	407	HG1	LYS		31	17.882	-0.047	28.094	
1.00126.32				H					
ATOM	408	HG2	LYS		31	17.137	-1.544	27.528	
1.00114.19				H					
ATOM	409	HD1	LYS		31	17.858	-2.681	29.597	
1.00198.45				H					
ATOM	410	HD2	LYS		31	18.595	-1.183	30.166	
1.00200.14				H					
ATOM	411	HE1	LYS		31	20.095	-1.184	28.200	
1.00374.64				H					
ATOM	412	HE2	LYS		31	19.361	-2.688	27.644	
1.00403.27				H					
ATOM	413	HZ1	LYS		31	20.328	-3.888	29.304	
1.00627.38				H					
ATOM	414	HZ2	LYS		31	20.420	-2.571	30.374	
1.00622.26				H					
ATOM	415	HZ3	LYS		31	21.523	-2.703	29.088	
1.00619.20				H					
ATOM	416	N	THR		32	12.881	-0.438	28.779	1.00
15.51			N						
ATOM	417	CA	THR		32	11.584	-0.301	29.430	1.00
22.44			C						
ATOM	418	C	THR		32	11.638	-0.833	30.858	1.00

26.60			C						
ATOM	419	O	THR	32	12.000	-1.986	31.092	1.00	
57.43			O						
ATOM	420	CB	THR	32	10.519	-1.065	28.635	1.00	
56.28			C						
ATOM	421	CG2	THR	32	9.161	-0.929	29.329		
1.00102.70				C					
ATOM	422	OG1	THR	32	10.438	-0.528	27.322		
1.00111.17				O					
ATOM	423	HN	THR	32	13.031	-1.170	28.146	1.00	
18.79			H						
ATOM	424	HA	THR	32	11.313	0.743	29.456	1.00	
19.67			H						
ATOM	425	HB	THR	32	10.788	-2.107	28.581	1.00	
84.25			H						
ATOM	426	HG1	THR	32	9.933	0.287	27.365		
1.00205.03				H					
ATOM	427	HG21	THR	32	9.183	-1.452	30.273		
1.00220.71				H					
ATOM	428	HG22	THR	32	8.394	-1.357	28.701		
1.00174.67				H					
ATOM	429	HG23	THR	32	8.947	0.115	29.500		
1.00217.44				H					
ATOM	430	N	THR	33	11.266	0.018	31.810	1.00	
22.47			N						
ATOM	431	CA	THR	33	11.265	-0.365	33.220	1.00	
41.60			C						
ATOM	432	C	THR	33	10.247	0.438	33.984	1.00	
38.03			C						
ATOM	433	O	THR	33	10.548	1.495	34.540	1.00	
52.73			O						
ATOM	434	CB	THR	33	12.652	-0.166	33.836	1.00	
63.25			C						
ATOM	435	CG2	THR	33	13.633	-1.174	33.234		
1.00121.65				C					
ATOM	436	OG1	THR	33	13.101	1.155	33.570	1.00	
96.20			O						
ATOM	437	HN	THR	33	10.982	0.922	31.560	1.00	
23.82			H						
ATOM	438	HA	THR	33	10.982	-1.396	33.313	1.00	
67.12			H						
ATOM	439	HB	THR	33	12.594	-0.319	34.903		
1.00107.59				H					
ATOM	440	HG1	THR	33	13.670	1.124	32.797		
1.00176.27				H					
ATOM	441	HG21	THR	33	13.865	-0.888	32.219		
1.00255.23				H					
ATOM	442	HG22	THR	33	13.190	-2.158	33.240		
1.00245.37				H					
ATOM	443	HG23	THR	33	14.541	-1.184	33.821		
1.00185.78				H					
ATOM	444	N	GLY	34	9.037	-0.090	34.022	1.00	

40.93			N						
ATOM	445	CA	GLY	34	7.973	0.564	34.740	1.00	
45.59			C						
ATOM	446	C	GLY	34	7.494	1.809	34.003	1.00	
40.97			C						
ATOM	447	O	GLY	34	6.298	2.096	33.962	1.00	
82.17			O						
ATOM	448	HN	GLY	34	8.865	-0.944	33.572	1.00	
54.00			H						
ATOM	449	HA1	GLY	34	8.353	0.841	35.703	1.00	
54.41			H						
ATOM	450	HA2	GLY	34	7.148	-0.125	34.863	1.00	
62.09			H						
ATOM	451	N	ASN	35	8.439	2.545	33.416	1.00	
32.51			N						
ATOM	452	CA	ASN	35	8.115	3.764	32.670	1.00	
33.20			C						
ATOM	453	C	ASN	35	8.891	3.805	31.357	1.00	
23.17			C						
ATOM	454	O	ASN	35	10.057	3.415	31.300	1.00	
27.01			O						
ATOM	455	CB	ASN	35	8.467	4.997	33.504	1.00	
54.51			C						
ATOM	456	CG	ASN	35	7.670	4.994	34.805	1.00	
80.73			C						
ATOM	457	ND2	ASN	35	8.265	5.309	35.924		
1.00220.46									N
ATOM	458	OD1	ASN	35	6.476	4.698	34.803		
1.00117.80									O
ATOM	459	HN	ASN	35	9.375	2.261	33.483	1.00	
51.15			H						
ATOM	460	HA	ASN	35	7.057	3.783	32.449	1.00	
47.21			H						
ATOM	461	HB1	ASN	35	8.228	5.887	32.942	1.00	
68.31			H						
ATOM	462	HB2	ASN	35	9.524	4.987	33.731	1.00	
57.75			H						
ATOM	463	HD21	ASN	35	9.216	5.545	35.923		
1.00405.39									H
ATOM	464	HD22	ASN	35	7.760	5.310	36.764		
1.00245.64									H
ATOM	465	N	PHE	36	8.233	4.279	30.302	1.00	
35.72			N						
ATOM	466	CA	PHE	36	8.853	4.370	28.989	1.00	
33.41			C						
ATOM	467	C	PHE	36	9.538	5.722	28.812	1.00	
28.51			C						
ATOM	468	O	PHE	36	9.066	6.737	29.325	1.00	
45.23			O						
ATOM	469	CB	PHE	36	7.774	4.208	27.924	1.00	
67.53			C						
ATOM	470	CG	PHE	36	7.172	2.827	28.015	1.00	

86.71			C						
ATOM	471	CD1	PHE	36	6.068	2.602	28.846		
1.00106.51			C						
ATOM	472	CD2	PHE	36	7.712	1.772	27.268	1.00	
99.48			C						
ATOM	473	CE1	PHE	36	5.502	1.324	28.929		
1.00134.48			C						
ATOM	474	CE2	PHE	36	7.147	0.494	27.352		
1.00134.27			C						
ATOM	475	CZ	PHE	36	6.041	0.271	28.182		
1.00149.48			C						
ATOM	476	HN	PHE	36	7.306	4.573	30.406	1.00	
62.87			H						
ATOM	477	HA	PHE	36	9.582	3.581	28.875	1.00	
28.53			H						
ATOM	478	HB1	PHE	36	8.209	4.346	26.953	1.00	
73.56			H						
ATOM	479	HB2	PHE	36	7.002	4.948	28.080	1.00	
88.42			H						
ATOM	480	HD1	PHE	36	5.653	3.416	29.424		
1.00110.20			H						
ATOM	481	HD2	PHE	36	8.565	1.943	26.629	1.00	
93.07			H						
ATOM	482	HE1	PHE	36	4.650	1.152	29.570		
1.00155.06			H						
ATOM	483	HE2	PHE	36	7.561	-0.318	26.775		
1.00159.46			H						
ATOM	484	HZ	PHE	36	5.604	-0.715	28.246		
1.00183.25			H						
ATOM	485	N	THR	37	10.648	5.735	28.073	1.00	
20.06			N						
ATOM	486	CA	THR	37	11.390	6.958	27.819	1.00	
27.18			C						
ATOM	487	C	THR	37	11.717	7.055	26.338	1.00	
41.87			C						
ATOM	488	O	THR	37	11.039	6.463	25.496		
1.00169.86			O						
ATOM	489	CB	THR	37	12.685	6.966	28.633	1.00	
26.52			C						
ATOM	490	CG2	THR	37	12.367	6.693	30.104	1.00	
75.69			C						
ATOM	491	OG1	THR	37	13.559	5.960	28.139	1.00	
81.95			O						
ATOM	492	HN	THR	37	10.978	4.906	27.682	1.00	
18.47			H						
ATOM	493	HA	THR	37	10.792	7.815	28.102	1.00	
38.80			H						
ATOM	494	HB	THR	37	13.161	7.930	28.546	1.00	
81.60			H						
ATOM	495	HG1	THR	37	14.039	5.591	28.884		
1.00188.80			H						
ATOM	496	HG21	THR	37	11.554	7.328	30.420		

1.00196.98				H					
ATOM	497	HG22	THR		37	13.240	6.899	30.705	
1.00196.23				H					
ATOM	498	HG23	THR		37	12.083	5.657	30.225	
1.00168.92				H					
ATOM	499	N	GLU		38	12.759	7.805	26.032	1.00
26.53				N					
ATOM	500	CA	GLU		38	13.196	7.994	24.648	1.00
30.29				C					
ATOM	501	C	GLU		38	14.708	8.180	24.582	1.00
25.39				C					
ATOM	502	O	GLU		38	15.327	8.650	25.536	1.00
51.60				O					
ATOM	503	CB	GLU		38	12.517	9.228	24.040	1.00
54.82				C					
ATOM	504	CG	GLU		38	11.010	8.988	23.908	
1.00165.84				C					
ATOM	505	CD	GLU		38	10.353	10.186	23.228	
1.00292.92				C					
ATOM	506	OE1	GLU		38	9.165	10.113	22.963	
1.00414.19				O					
ATOM	507	OE2	GLU		38	11.049	11.157	22.984	
1.00537.65				O1-					
ATOM	508	HN	GLU		38	13.248	8.235	26.756	1.00
84.50				H					
ATOM	509	HA	GLU		38	12.926	7.125	24.065	1.00
32.15				H					
ATOM	510	HB1	GLU		38	12.934	9.422	23.064	
1.00144.82				H					
ATOM	511	HB2	GLU		38	12.688	10.082	24.679	
1.00106.49				H					
ATOM	512	HG1	GLU		38	10.579	8.859	24.887	
1.00303.31				H					
ATOM	513	HG2	GLU		38	10.836	8.100	23.318	
1.00323.99				H					
ATOM	514	N	CYS		39	15.296	7.821	23.445	1.00
15.84				N					
ATOM	515	CA	CYS		39	16.735	7.967	23.261	1.00
14.30				C					
ATOM	516	C	CYS		39	17.106	9.453	23.273	1.00
22.31				C					
ATOM	517	O	CYS		39	16.298	10.294	22.879	1.00
32.92				O					
ATOM	518	CB	CYS		39	17.148	7.337	21.929	1.00
18.08				C					
ATOM	519	SG	CYS		39	16.030	7.908	20.625	1.00
17.41				S					
ATOM	520	HN	CYS		39	14.753	7.462	22.714	1.00
24.87				H					
ATOM	521	HA	CYS		39	17.241	7.455	24.065	1.00
14.60				H					
ATOM	522	HB1	CYS		39	17.094	6.261	22.006	1.00

27.71			H					
ATOM	523	HB2	CYS	39	18.158	7.630	21.689	1.00
34.91			H					
ATOM	524	N	PRO	40	18.293	9.804	23.715	1.00
27.27			N					
ATOM	525	CA	PRO	40	18.728	11.230	23.766	1.00
47.66			C					
ATOM	526	C	PRO	40	19.039	11.786	22.379	1.00
71.54			C					
ATOM	527	O	PRO	40	19.766	11.173	21.596	1.00
87.70			O					
ATOM	528	CB	PRO	40	19.980	11.190	24.649	1.00
53.85			C					
ATOM	529	CG	PRO	40	20.547	9.825	24.437	1.00
46.04			C					
ATOM	530	CD	PRO	40	19.346	8.899	24.207	1.00
25.70			C					
ATOM	531	HA	PRO	40	17.969	11.832	24.242	1.00
58.04			H					
ATOM	532	HB1	PRO	40	19.713	11.322	25.687	1.00
67.93			H					
ATOM	533	HB2	PRO	40	20.688	11.953	24.345	1.00
70.99			H					
ATOM	534	HG1	PRO	40	21.097	9.503	25.309	1.00
65.91			H					
ATOM	535	HG2	PRO	40	21.195	9.823	23.567	1.00
54.99			H					
ATOM	536	HD1	PRO	40	19.038	8.439	25.134	1.00
24.22			H					
ATOM	537	HD2	PRO	40	19.581	8.151	23.466	1.00
26.94			H					
ATOM	538	N	GLY	41	18.480	12.953	22.091	
1.00105.24			N					
ATOM	539	CA	GLY	41	18.695	13.604	20.804	
1.00147.55			C					
ATOM	540	C	GLY	41	20.156	14.001	20.625	
1.00161.74			C					
ATOM	541	O	GLY	41	20.718	13.873	19.538	
1.00244.37			O					
ATOM	542	HN	GLY	41	17.915	13.387	22.761	
1.00121.79			H					
ATOM	543	HA1	GLY	41	18.079	14.488	20.747	
1.00184.40			H					
ATOM	544	HA2	GLY	41	18.414	12.925	20.015	
1.00157.34			H					
ATOM	545	N	LEU	42	20.761	14.493	21.704	
1.00162.48			N					
ATOM	546	CA	LEU	42	22.162	14.923	21.677	
1.00191.48			C					
ATOM	547	C	LEU	42	23.034	13.958	22.471	
1.00166.66			C					
ATOM	548	O	LEU	42	22.586	13.358	23.448	

1.00251.38				O				
ATOM	549	CB	LEU	42	22.288	16.325	22.282	
1.00307.99				C				
ATOM	550	CG	LEU	42	21.361	17.301	21.547	
1.00452.28				C				
ATOM	551	CD1	LEU	42	21.467	18.682	22.202	
1.00681.24				C				
ATOM	552	CD2	LEU	42	21.767	17.398	20.065	
1.00527.46				C				
ATOM	553	HN	LEU	42	20.252	14.572	22.537	
1.00195.47				H				
ATOM	554	HA	LEU	42	22.517	14.952	20.657	
1.00229.77				H				
ATOM	555	HB1	LEU	42	23.309	16.664	22.189	
1.00342.49				H				
ATOM	556	HB2	LEU	42	22.016	16.289	23.327	
1.00335.33				H				
ATOM	557	HG	LEU	42	20.342	16.948	21.620	
1.00427.79				H				
ATOM	558	HD11	LEU	42	20.657	19.307	21.857	
1.00909.71				H				
ATOM	559	HD12	LEU	42	22.410	19.135	21.935	
1.00706.80				H				
ATOM	560	HD13	LEU	42	21.408	18.576	23.275	
1.00858.82				H				
ATOM	561	HD21	LEU	42	21.322	16.582	19.516	
1.00631.69				H				
ATOM	562	HD22	LEU	42	22.843	17.349	19.977	
1.00628.06				H				
ATOM	563	HD23	LEU	42	21.417	18.336	19.652	
1.00656.75				H				
ATOM	564	N	THR	43	24.286	13.818	22.048	
1.00178.52				N				
ATOM	565	CA	THR	43	25.218	12.927	22.729	
1.00240.84				C				
ATOM	566	C	THR	43	25.584	13.499	24.103	
1.00372.31				C				
ATOM	567	O	THR	43	25.602	14.718	24.278	
1.00500.13				O				
ATOM	568	CB	THR	43	26.485	12.771	21.881	
1.00354.13				C				
ATOM	569	CG2	THR	43	26.107	12.290	20.480	
1.00463.04				C				
ATOM	570	OG1	THR	43	27.148	14.024	21.789	
1.00508.50				O				
ATOM	571	HN	THR	43	24.590	14.324	21.265	
1.00229.59				H				
ATOM	572	HA	THR	43	24.752	11.964	22.845	
1.00249.90				H				
ATOM	573	HB	THR	43	27.143	12.050	22.337	
1.00481.58				H				
ATOM	574	HG1	THR	43	28.054	13.861	21.516	

1.00624.31				H				
ATOM	575	HG21	THR		43	25.434	11.449	20.558
1.00650.95				H				
ATOM	576	HG22	THR		43	26.999	11.989	19.949
1.00580.73				H				
ATOM	577	HG23	THR		43	25.622	13.091	19.942
1.00571.99				H				
ATOM	578	N	PRO		44	25.885	12.667	25.077
1.00488.39				N				
ATOM	579	CA	PRO		44	26.261	13.143	26.439
1.00760.13				C				
ATOM	580	C	PRO		44	27.695	13.663	26.468
1.00735.36				C				
ATOM	581	O	PRO		44	28.117	14.310	27.426
1.00999.99				O				
ATOM	582	CB	PRO		44	26.101	11.892	27.307
1.00999.99				C				
ATOM	583	CG	PRO		44	26.413	10.760	26.385
1.00856.94				C				
ATOM	584	CD	PRO		44	25.906	11.190	25.002
1.00548.09				C				
ATOM	585	HA	PRO		44	25.579	13.909	26.772
1.00939.00				H				
ATOM	586	HB1	PRO		44	25.085	11.810	27.665
1.00999.99				H				
ATOM	587	HB2	PRO		44	26.794	11.913	28.139
1.00999.99				H				
ATOM	588	HG1	PRO		44	25.900	9.863	26.701
1.00999.99				H				
ATOM	589	HG2	PRO		44	27.483	10.588	26.358
1.00853.53				H				
ATOM	590	HD1	PRO		44	24.912	10.810	24.827
1.00602.45				H				
ATOM	591	HD2	PRO		44	26.587	10.856	24.233
1.00463.32				H				
ATOM	592	N	ILE		45	28.437	13.365	25.406
1.00518.33				N				
ATOM	593	CA	ILE		45	29.824	13.794	25.309
1.00582.79				C				
ATOM	594	C	ILE		45	29.905	15.295	25.054
1.00795.93				C				
ATOM	595	O	ILE		45	29.267	15.815	24.138
1.00898.75				O				
ATOM	596	CB	ILE		45	30.521	13.044	24.172
1.00474.41				C				
ATOM	597	CG1	ILE		45	30.521	11.545	24.480
1.00516.90				C				
ATOM	598	CG2	ILE		45	31.964	13.537	24.042
1.00760.75				C				
ATOM	599	CD1	ILE		45	30.973	10.769	23.242
1.00566.81				C				
ATOM	600	HN	ILE		45	28.044	12.842	24.676

1.00395.72				H				
ATOM	601	HA	ILE	H	45	30.325	13.565	26.235
1.00711.06				H				
ATOM	602	HB	ILE	H	45	29.995	13.224	23.246
1.00477.81				H				
ATOM	603	HG11	ILE	H	45	29.523	11.233	24.753
1.00624.28				H				
ATOM	604	HG12	ILE	H	45	31.197	11.345	25.299
1.00744.84				H				
ATOM	605	HG21	ILE	H	45	32.430	13.547	25.016
1.00920.57				H				
ATOM	606	HG22	ILE	H	45	31.967	14.537	23.632
1.00999.99				H				
ATOM	607	HG23	ILE	H	45	32.512	12.878	23.387
1.00865.46				H				
ATOM	608	HD11	ILE	H	45	30.933	9.710	23.446
1.00658.89				H				
ATOM	609	HD12	ILE	H	45	31.986	11.050	22.992
1.00734.30				H				
ATOM	610	HD13	ILE	H	45	30.320	11.001	22.413
1.00675.84				H				
ATOM	611	N	ALA	N	46	30.692	15.987	25.871
1.00999.99				N				
ATOM	612	CA	ALA	C	46	30.849	17.430	25.726
1.00999.99				C				
ATOM	613	C	ALA	C	46	31.808	17.752	24.584
1.00999.99				C				
ATOM	614	CB	ALA	C	46	31.382	18.029	27.028
1.00999.99				C				
ATOM	615	OT1	ALA	O	46	31.335	17.957	23.479
1.00999.99				O				
ATOM	616	OT2	ALA	O	46	33.002	17.788	24.832
1.00999.99				O				
ATOM	617	HN	ALA	H	46	31.177	15.519	26.583
1.00999.99				H				
ATOM	618	HA	ALA	H	46	29.886	17.867	25.508
1.00999.99				H				
ATOM	619	HB1	ALA	H	46	31.698	19.047	26.853
1.00999.99				H				
ATOM	620	HB2	ALA	H	46	32.222	17.446	27.375
1.00999.99				H				
ATOM	621	HB3	ALA	H	46	30.601	18.019	27.775
1.00999.99				H				
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